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ANALYTICAL REPORT

Job Number: 280-162622-1

Job Description: Cornhusker (CHAAP)

For:
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Attention: Corey Schwabenlander



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

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.This report has been electronically signed and authorized by the signatory. Electronic signature

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Qualifiers

GC/MS VOA

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

GC VOA

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

HPLC/IC

Qualifier	Qualifier Description
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
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)

Glossary (Continued)

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

CASE NARRATIVE

Client: Brice Environmental Services, Corp

Project: Cornhusker (CHAAP)

Report Number: 280-162622-1

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 5/20/2022 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 7 coolers at receipt time were 0.2º C, 0.5º C, 0.5º C, 1.9º C, 2.0º C, 2.7º C and 4.9º C.

Receipt Exceptions

The SO4/Alk sample container received does not have the sample collection time recorded on the client label. Logged per the COC. PZ020-22A (280-162622-11)

One out of three of the VOA vials received does not have the sample ID recorded on the client label. It was in the same bubble bag as the other two out of three VOA vials. G0311-22A (280-162622-16)

VOLATILE ORGANIC COMPOUNDS (GC/MS)

Samples SHGW02-22A (280-162622-19), SHGW05-22A (280-162622-20), G0053-22A (280-162622-21), G0069-22A (280-162622-22), 5-18 TB (280-162622-23), SHGW04-22A (280-162622-24), SHGW03-22A (280-162622-25) and SAMW1-22A (280-162622-26) were analyzed for volatile organic compounds (GC/MS) in accordance with 8260B. The samples were analyzed on 05/27/2022 and 05/28/2022.

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

DISSOLVED GASES (GC)

Samples G0119-22A (280-162622-1), G0121-22A (280-162622-2), G0101-22A (280-162622-3), G0100-22A (280-162622-4), G0122-22A (280-162622-5), G0066R-22A (280-162622-6), G0024-22A (280-162622-7), G0115-22A (280-162622-8), G0095-22A (280-162622-9), PZ018-22A (280-162622-10), PZ020-22A (280-162622-11), G0077-22A (280-162622-12), G0311-22A (280-162622-16), G0111-22A (280-162622-17), G0123-22A (280-162622-18), SHGW02-22A (280-162622-19), SHGW05-22A (280-162622-20), G0053-22A (280-162622-21), G0069-22A (280-162622-22), SHGW04-22A (280-162622-24), SHGW03-22A (280-162622-25) and SAMW1-22A (280-162622-26) were analyzed for Dissolved Gases (GC) in accordance with RSK_175. The samples were analyzed on 06/01/2022, 06/02/2022 and 06/03/2022.

Sample G0121-22A (280-162622-2)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

The method requirement for no headspace was not met. The following volatile sample was analyzed with significant headspace in the sample container(s): PZ020-22A (280-162622-11). Significant headspace is defined as a bubble greater than 6 mm in diameter.

Reanalysis of the following sample was performed outside of the analytical holding time due to the concentration of methane exceeding calibration in the original analysis : G0121-22A (280-162622-2).

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

DIESEL RANGE ORGANICS (DRO)

Samples G0069-22A (280-162622-13), SHGW03-22A (280-162622-14) and SHGW04-22A (280-162622-15) were analyzed for Diesel Range Organics (DRO) in accordance with 8015C DRO. The samples were prepared on 05/25/2022 and 06/01/2022 and analyzed on 05/30/2022 and 06/03/2022.

Surrogate recovery was outside control limits for the following sample: G0069-22A (280-162622-13), SHGW03-22A (280-162622-14),

SHGW04-22A (280-162622-15), (LCS 280-576113/2-A), (LCSD 280-576113/3-A) and (MB 280-576113/1-A). n-Octacosane had low recoveries in samples 280-162622-B-13 and 280-162622-B-14 as well as in the MB and the LCS/LCSD pair.

Surrogate recovery was outside control limits for the following sample: (LCS 280-576113/2-A) and (LCSD 280-576113/3-A). n-Octacosane recovered at 40 % Rec. in 320-88166-F-1 and the limits are 60-142 % Rec. n-Octacosane Also failed low in the LCS/LCSD as well (46 and 42 % Rec. respectively) Sample is beyond 2x HT.

Surrogate recovery was outside control limits for the following sample: G0069-22A (280-162622-13), SHGW03-22A (280-162622-14), SHGW04-22A (280-162622-15), (LCS 280-576710/2-A), (LCSD 280-576710/3-A) and (MB 280-576710/1-A). Surrogate spike was made incorrectly (when the surrogate was verified it recovered at about 10% Rec). The target analyte C10-C28 recovered in control in the LCS/LCSD pair demonstrating the extraction procedure was done correctly. These samples are re-extracts where surrogate n-Octacosane failed originally around 40-57% Rec in both batch QC (MB/LCS/LCSD) and 2 of the three client samples.

C10-C28 was detected in method blank MB 280-576113/1-A at a level that was below one half the LOQ.

The following sample SHGW04-22A (280-162622-15) was yellow in color, preparation batch 280-576113.

The following samples G0069-22A (280-162622-13) and SHGW04-22A (280-162622-15) were light yellow in color and contained an orange sediment, preparation batch 280-576710.

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

NITROAROMATICS AND NITRAMINES (HPLC)

Samples G0119-22A (280-162622-1), G0121-22A (280-162622-2), G0101-22A (280-162622-3), G0100-22A (280-162622-4), G0122-22A (280-162622-5), G0066R-22A (280-162622-6), G0024-22A (280-162622-7), G0115-22A (280-162622-8), G0095-22A (280-162622-9), PZ018-22A (280-162622-10), PZ020-22A (280-162622-11), G0077-22A (280-162622-12), G0311-22A (280-162622-16), G0111-22A (280-162622-17) and G0123-22A (280-162622-18) were analyzed for Nitroaromatics and Nitramines (HPLC) in accordance with 8330A. The samples were prepared on 05/25/2022 and analyzed on 05/26/2022, 05/27/2022 and 05/28/2022.

The %RPD between the primary and confirmation column exceeded 40% for RDX and HMX for the following samples: G0122-22A (280-162622-5), PZ020-22A (280-162622-11) and G0077-22A (280-162622-12) in preparation batch 280-576154 and analytical batch 280-576310 for method 8330. The results from both columns has been qualified and reported in accordance with the laboratory's QAS.

Surrogate recovery for the following sample in preparation batch 280-576154 and analytical batch 280-576310 for method 8330 was outside the upper control limits: G0111-22A (280-162622-17) and G0123-22A (280-162622-18). 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.

In preparation batch 280-576154, the following samples required filtration to reduce matrix interferences: G0119-22A (280-162622-1), G0121-22A (280-162622-2), G0101-22A (280-162622-3), G0100-22A (280-162622-4), G0122-22A (280-162622-5), G0066R-22A (280-162622-6), G0115-22A (280-162622-8), G0095-22A (280-162622-9), PZ018-22A (280-162622-10) and G0123-22A (280-162622-18).

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

ALKALINITY

Samples G0119-22A (280-162622-1), G0121-22A (280-162622-2), G0101-22A (280-162622-3), G0100-22A (280-162622-4), G0122-22A (280-162622-5), G0066R-22A (280-162622-6), G0024-22A (280-162622-7), G0115-22A (280-162622-8), G0095-22A (280-162622-9), PZ018-22A (280-162622-10), PZ020-22A (280-162622-11), G0077-22A (280-162622-12), G0069-22A (280-162622-13), SHGW03-22A (280-162622-14), SHGW04-22A (280-162622-15), G0311-22A (280-162622-16), G0111-22A (280-162622-17), G0123-22A (280-162622-18), SHGW02-22A (280-162622-19), SHGW05-22A (280-162622-20), G0053-22A (280-162622-21) and SAMW1-22A (280-162622-26) were analyzed for Alkalinity in accordance with SM20 2320B. The samples were analyzed on 05/26/2022.

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

AMMONIA

Samples G0119-22A (280-162622-1), G0121-22A (280-162622-2), G0101-22A (280-162622-3), G0100-22A (280-162622-4), G0122-22A (280-162622-5), G0066R-22A (280-162622-6), G0024-22A (280-162622-7), G0115-22A (280-162622-8), G0095-22A (280-162622-9), PZ018-22A (280-162622-10), PZ020-22A (280-162622-11), G0077-22A (280-162622-12), G0311-22A (280-162622-16), G0111-22A (280-162622-17) and G0123-22A (280-162622-18) were analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 06/08/2022 and 06/09/2022.

Samples G0119-22A (280-162622-1)[2X], G0121-22A (280-162622-2)[20X] and G0100-22A (280-162622-4)[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 G0119-22A (280-162622-1), G0121-22A (280-162622-2), G0101-22A (280-162622-3), G0100-22A (280-162622-4), G0122-22A (280-162622-5), G0066R-22A (280-162622-6), G0024-22A (280-162622-7), G0115-22A (280-162622-8), G0095-22A (280-162622-9),

PZ018-22A (280-162622-10), PZ020-22A (280-162622-11), G0077-22A (280-162622-12), G0311-22A (280-162622-16), G0111-22A (280-162622-17) and G0123-22A (280-162622-18) were analyzed for total kjeldahl nitrogen in accordance with EPA Method 351.2. The samples were prepared on 06/02/2022 and analyzed on 06/03/2022.

Nitrogen, Total Kjeldahl failed the recovery criteria low for the MS of sample PZ020-22AMS (280-162622-11) in batch 280-577123. Nitrogen, Total Kjeldahl failed the recovery criteria low for the MSD of sample PZ020-22AMSD (280-162622-11) in batch 280-577123.

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

NITRATE-NITRITE AS NITROGEN

Samples G0119-22A (280-162622-1), G0121-22A (280-162622-2), G0101-22A (280-162622-3), G0100-22A (280-162622-4), G0122-22A (280-162622-5), G0066R-22A (280-162622-6), G0024-22A (280-162622-7), G0115-22A (280-162622-8), G0095-22A (280-162622-9), PZ018-22A (280-162622-10), PZ020-22A (280-162622-11), G0077-22A (280-162622-12), G0069-22A (280-162622-13), SHGW03-22A (280-162622-14), SHGW04-22A (280-162622-15), G0311-22A (280-162622-16), G0111-22A (280-162622-17), G0123-22A (280-162622-18), SHGW02-22A (280-162622-19), SHGW05-22A (280-162622-20), G0053-22A (280-162622-21) and SAMW1-22A (280-162622-26) were analyzed for nitrate-nitrite as nitrogen in accordance with EPA Method 353.2. The samples were analyzed on 06/07/2022.

Nitrate Nitrite as N failed the recovery criteria low for the MS of sample SHGW02-22AMS (280-162622-19) in batch 280-577382. Nitrate Nitrite as N failed the recovery criteria low for the MSD of sample SHGW02-22AMSD (280-162622-19) in batch 280-577382.

Nitrate Nitrite as N failed the recovery criteria low for the MS of sample G0024-22AMS (280-162622-7) in batch 280-577382. Nitrate Nitrite as N failed the recovery criteria low for the MSD of sample G0024-22AMSD (280-162622-7) in batch 280-577382.

Samples G0024-22A (280-162622-7)[2X], PZ020-22A (280-162622-11)[5X], G0077-22A (280-162622-12)[5X] and G0053-22A (280-162622-21)[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 G0119-22A (280-162622-1), G0121-22A (280-162622-2), G0101-22A (280-162622-3), G0100-22A (280-162622-4), G0122-22A (280-162622-5), G0066R-22A (280-162622-6), G0024-22A (280-162622-7), G0115-22A (280-162622-8), G0095-22A (280-162622-9), PZ018-22A (280-162622-10), PZ020-22A (280-162622-11), G0077-22A (280-162622-12), G0311-22A (280-162622-16), G0111-22A (280-162622-17) and G0123-22A (280-162622-18) were analyzed for sulfide in accordance with EPA SW-846 Method 9034. The samples were prepared and analyzed on 05/24/2022 and 05/25/2022.

Sulfide exceeded the RPD limit for the MSD of sample G0066R-22AMSD (280-162622-6) in batch 280-575993.

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

ANIONS (28 DAYS)

Samples G0119-22A (280-162622-1), G0121-22A (280-162622-2), G0101-22A (280-162622-3), G0100-22A (280-162622-4), G0122-22A (280-162622-5), G0066R-22A (280-162622-6), G0024-22A (280-162622-7), G0115-22A (280-162622-8), G0095-22A (280-162622-9), PZ018-22A (280-162622-10), PZ020-22A (280-162622-11), G0077-22A (280-162622-12), G0069-22A (280-162622-13), SHGW03-22A (280-162622-14), SHGW04-22A (280-162622-15), G0311-22A (280-162622-16), G0111-22A (280-162622-17), G0123-22A (280-162622-18), SHGW02-22A (280-162622-19), SHGW05-22A (280-162622-20), G0053-22A (280-162622-21) and SAMW1-22A (280-162622-26) were analyzed for anions (28 days) in accordance with 9056A (28 Days). The samples were analyzed on 06/01/2022, 06/02/2022 and 06/03/2022.

Samples G0119-22A (280-162622-1)[5X], G0121-22A (280-162622-2)[5X], G0101-22A (280-162622-3)[5X], G0100-22A (280-162622-4)[5X], G0122-22A (280-162622-5)[5X], G0066R-22A (280-162622-6)[5X], G0115-22A (280-162622-8)[5X], G0095-22A (280-162622-9)[5X], PZ020-22A (280-162622-11)[5X], SHGW03-22A (280-162622-14)[5X], G0123-22A (280-162622-18)[5X], SHGW02-22A (280-162622-19)[5X] and SAMW1-22A (280-162622-26)[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.

DISSOLVED ORGANIC CARBON

Samples G0119-22A (280-162622-1), G0121-22A (280-162622-2), G0101-22A (280-162622-3), G0100-22A (280-162622-4), G0122-22A (280-162622-5), G0066R-22A (280-162622-6), G0024-22A (280-162622-7), G0115-22A (280-162622-8), G0095-22A (280-162622-9), PZ018-22A (280-162622-10), PZ020-22A (280-162622-11), G0077-22A (280-162622-12), G0311-22A (280-162622-16), G0111-22A (280-162622-17) and G0123-22A (280-162622-18) were analyzed for dissolved organic carbon in accordance with EPA SW-846 Method 9060A. The samples were analyzed on 05/31/2022.

The following samples were unpreserved in the field: G0119-22A (280-162622-1), G0121-22A (280-162622-2), G0101-22A (280-162622-3), G0100-22A (280-162622-4), G0122-22A (280-162622-5), G0066R-22A (280-162622-6), G0024-22A (280-162622-7), G0115-22A (280-162622-8), G0095-22A (280-162622-9), PZ018-22A (280-162622-10), PZ020-22A (280-162622-11), G0077-22A (280-162622-12), G0311-22A (280-162622-16), G0111-22A (280-162622-17), G0123-22A (280-162622-18), (280-162622-D-1-B MS), (280-162622-D-1-C MSD), (280-162622-D-11-B MS) and (280-162622-D-11-C MSD). The pH measured at the bench was >2, it was reduced to <2 using concentrated Sulfuric acid after filtration prior to analysis.

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

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

Detection Summary

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

Job ID: 280-162622-1

Client Sample ID: G0119-22A — Lab Sample ID: 280-162622-1

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	0.98		0.0050	0.0013	0.00063	mg/L	1		RSK-175	Total/NA
Ammonia	0.56		0.20	0.10	0.058	mg/L	2		350.1	Total/NA
Nitrogen, Total Kjeldahl	1.3		1.0	0.80	0.69	mg/L	1		351.2	Total/NA
Sulfate	740	D	25	13	5.2	mg/L	5		9056A	Total/NA
Total Alkalinity as CaCO3	530		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	5.7		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: G0121-22A — Lab Sample ID: 280-162622-2

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane - DL	19	H D	0.010	0.0026	0.0013	mg/L	2		RSK-175	Total/NA
Ammonia	8.6		2.0	1.0	0.58	mg/L	20		350.1	Total/NA
Nitrogen, Total Kjeldahl	14		5.0	4.0	3.4	mg/L	1		351.2	Total/NA
Sulfide	2.4	J	4.0	2.0	1.6	mg/L	1		9034	Total/NA
Sulfate	290	D M	25	13	5.2	mg/L	5		9056A	Total/NA
Total Alkalinity as CaCO3	640		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	29		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: G0101-22A — Lab Sample ID: 280-162622-3

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	13		0.0050	0.0013	0.00063	mg/L	1		RSK-175	Total/NA
Ammonia	2.1		0.10	0.050	0.029	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	4.0		1.0	0.80	0.69	mg/L	1		351.2	Total/NA
Sulfate	290	D	25	13	5.2	mg/L	5		9056A	Total/NA
Total Alkalinity as CaCO3	830		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	14		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: G0100-22A — Lab Sample ID: 280-162622-4

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	17		0.0050	0.0013	0.00063	mg/L	1		RSK-175	Total/NA
2-Amino-4,6-dinitrotoluene	0.51		0.12	0.11	0.056	ug/L	1		8330A	Total/NA
Ammonia	2.7		0.50	0.25	0.15	mg/L	5		350.1	Total/NA
Nitrogen, Total Kjeldahl	4.4		1.0	0.80	0.69	mg/L	1		351.2	Total/NA
Sulfate	470	D	25	13	5.2	mg/L	5		9056A	Total/NA
Total Alkalinity as CaCO3	720		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	9.8		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: G0122-22A — Lab Sample ID: 280-162622-5

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	18		0.0050	0.0013	0.00063	mg/L	1		RSK-175	Total/NA
RDX	0.86	M J1	0.23	0.22	0.056	ug/L	1		8330A	Total/NA
RDX	1.7	J1 M	0.23	0.22	0.056	ug/L	1		8330A	Total/NA
Ammonia	4.7		0.10	0.050	0.029	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	6.4		1.0	0.80	0.69	mg/L	1		351.2	Total/NA
Sulfate	690	D	25	13	5.2	mg/L	5		9056A	Total/NA
Total Alkalinity as CaCO3	740		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: G0122-22A (Continued) — Lab Sample ID: 280-162622-5

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Dissolved Organic Carbon - Quad	14		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: G0066R-22A — Lab Sample ID: 280-162622-6

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	3.6		0.0050	0.0013	0.00063	mg/L	1		RSK-175	Total/NA
Ammonia	3.1		0.10	0.050	0.029	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	3.6		1.0	0.80	0.69	mg/L	1		351.2	Total/NA
Sulfate	530	D	25	13	5.2	mg/L	5		9056A	Total/NA
Total Alkalinity as CaCO3	600		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	7.2		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: G0024-22A — Lab Sample ID: 280-162622-7

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
2,4,6-Trinitrotoluene	0.18		0.11	0.10	0.047	ug/L	1		8330A	Total/NA
2-Amino-4,6-dinitrotoluene	0.52		0.11	0.10	0.053	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	0.27		0.16	0.13	0.060	ug/L	1		8330A	Total/NA
Nitrate Nitrite as N	11	J1	0.20	0.10	0.088	mg/L	2		353.2	Total/NA
Sulfate	64		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	100		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	3.6		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: G0115-22A — Lab Sample ID: 280-162622-8

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	14		0.0050	0.0013	0.00063	mg/L	1		RSK-175	Total/NA
Ammonia	2.9		0.10	0.050	0.029	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	3.8		1.0	0.80	0.69	mg/L	1		351.2	Total/NA
Sulfate	490	D	25	13	5.2	mg/L	5		9056A	Total/NA
Total Alkalinity as CaCO3	700		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	8.8		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: G0095-22A — Lab Sample ID: 280-162622-9

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	16		0.0050	0.0013	0.00063	mg/L	1		RSK-175	Total/NA
Ammonia	2.2		0.10	0.050	0.029	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	3.7		1.0	0.80	0.69	mg/L	1		351.2	Total/NA
Sulfate	520	D	25	13	5.2	mg/L	5		9056A	Total/NA
Total Alkalinity as CaCO3	780		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	12		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: PZ018-22A — Lab Sample ID: 280-162622-10

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	15		0.0050	0.0013	0.00063	mg/L	1		RSK-175	Total/NA
2,4,6-Trinitrotoluene	3.3		0.12	0.11	0.049	ug/L	1		8330A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: PZ018-22A (Continued) — Lab Sample ID: 280-162622-10

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
2-Amino-4,6-dinitrotoluene	1.3		0.12	0.11	0.055	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	2.1		0.16	0.13	0.062	ug/L	1		8330A	Total/NA
RDX	0.68	M	0.23	0.22	0.056	ug/L	1		8330A	Total/NA
Ammonia	0.93		0.10	0.050	0.029	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	3.0		1.0	0.80	0.69	mg/L	1		351.2	Total/NA
Nitrate Nitrite as N	2.8		0.10	0.050	0.044	mg/L	1		353.2	Total/NA
Sulfate	39		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	390		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	13		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: PZ020-22A — Lab Sample ID: 280-162622-11

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
1,3,5-Trinitrobenzene	2.6	M	0.22	0.21	0.090	ug/L	1		8330A	Total/NA
2,4,6-Trinitrotoluene	5.0		0.12	0.11	0.048	ug/L	1		8330A	Total/NA
2-Amino-4,6-dinitrotoluene	2.8		0.12	0.11	0.054	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	2.1		0.16	0.13	0.062	ug/L	1		8330A	Total/NA
HMX	0.49	M	0.22	0.21	0.094	ug/L	1		8330A	Total/NA
RDX	0.45	M J1	0.22	0.21	0.055	ug/L	1		8330A	Total/NA
RDX	0.23	J1 M	0.22	0.21	0.055	ug/L	1		8330A	Total/NA
Nitrate Nitrite as N	15		0.50	0.25	0.22	mg/L	5		353.2	Total/NA
Sulfate	140	D	25	13	5.2	mg/L	5		9056A	Total/NA
Total Alkalinity as CaCO3	310		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	3.6		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: G0077-22A — Lab Sample ID: 280-162622-12

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	3.3		0.0050	0.0013	0.00063	mg/L	1		RSK-175	Total/NA
1,3,5-Trinitrobenzene	5.4	M	0.22	0.21	0.089	ug/L	1		8330A	Total/NA
2,4,6-Trinitrotoluene	7.7		0.12	0.11	0.048	ug/L	1		8330A	Total/NA
2-Amino-4,6-dinitrotoluene	4.2		0.12	0.11	0.054	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	4.8		0.16	0.13	0.061	ug/L	1		8330A	Total/NA
HMX	0.75	M J1	0.22	0.21	0.093	ug/L	1		8330A	Total/NA
HMX	1.1	J1	0.22	0.21	0.093	ug/L	1		8330A	Total/NA
RDX	1.2	M	0.22	0.21	0.055	ug/L	1		8330A	Total/NA
Nitrate Nitrite as N	12		0.50	0.25	0.22	mg/L	5		353.2	Total/NA
Sulfate	150		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	340		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	4.7		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: G0069-22A — Lab Sample ID: 280-162622-13

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
C10-C28	3400	Q	240	120	31	ug/L	1		8015C DRO	Total/NA
C10-C28 - RE	2900	H Q	240	120	31	ug/L	1		8015C DRO	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: G0069-22A (Continued) — Lab Sample ID: 280-162622-13

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Nitrate Nitrite as N	0.18		0.10	0.050	0.044	mg/L	1		353.2	Total/NA
Sulfate	32	M	5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	100		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA

Client Sample ID: SHGW03-22A — Lab Sample ID: 280-162622-14

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
C10-C28	320	Q	240	110	31	ug/L	1		8015C DRO	Total/NA
C10-C28 - RE	250	H Q	240	110	31	ug/L	1		8015C DRO	Total/NA
Nitrate Nitrite as N	3.7		0.10	0.050	0.044	mg/L	1		353.2	Total/NA
Sulfate	31	D	25	13	5.2	mg/L	5		9056A	Total/NA
Total Alkalinity as CaCO3	160		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA

Client Sample ID: SHGW04-22A — Lab Sample ID: 280-162622-15

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
C10-C28	7200		240	110	31	ug/L	1		8015C DRO	Total/NA
C10-C28 - RE	6300	H Q	240	110	31	ug/L	1		8015C DRO	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

Client Sample ID: G0311-22A — Lab Sample ID: 280-162622-16

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	8.4		0.0050	0.0013	0.00063	mg/L	1		RSK-175	Total/NA
1,3,5-Trinitrobenzene	4.3	M	0.23	0.22	0.092	ug/L	1		8330A	Total/NA
2,4,6-Trinitrotoluene	3.6		0.12	0.11	0.049	ug/L	1		8330A	Total/NA
2,4-Dinitrotoluene	0.65		0.11	0.088	0.030	ug/L	1		8330A	Total/NA
2-Amino-4,6-dinitrotoluene	8.6		0.12	0.11	0.056	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	5.7		0.16	0.13	0.063	ug/L	1		8330A	Total/NA
Ammonia	0.45		0.10	0.050	0.029	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	2.2		1.0	0.80	0.69	mg/L	1		351.2	Total/NA
Sulfate	190		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	900		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	14		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: G0111-22A — Lab Sample ID: 280-162622-17

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	8.3		0.0050	0.0013	0.00063	mg/L	1		RSK-175	Total/NA
1,3,5-Trinitrobenzene	4.6	M Q	0.22	0.21	0.090	ug/L	1		8330A	Total/NA
2,4,6-Trinitrotoluene	4.0	M Q	0.12	0.11	0.048	ug/L	1		8330A	Total/NA
2,4-Dinitrotoluene	0.79	Q	0.11	0.085	0.029	ug/L	1		8330A	Total/NA
2-Amino-4,6-dinitrotoluene	8.8	Q	0.12	0.11	0.054	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	6.0	Q	0.16	0.13	0.061	ug/L	1		8330A	Total/NA
Ammonia	0.44		0.10	0.050	0.029	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	2.5		1.0	0.80	0.69	mg/L	1		351.2	Total/NA
Nitrate Nitrite as N	0.087	J	0.10	0.050	0.044	mg/L	1		353.2	Total/NA
Sulfate	190		5.0	2.5	1.0	mg/L	1		9056A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: G0111-22A (Continued) — Lab Sample ID: 280-162622-17

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Total Alkalinity as CaCO3	900		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	13		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: G0123-22A — Lab Sample ID: 280-162622-18

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	18		0.0050	0.0013	0.00063	mg/L	1		RSK-175	Total/NA
HMX	0.49	M Q	0.21	0.20	0.086	ug/L	1		8330A	Total/NA
Ammonia	1.2		0.10	0.050	0.029	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	2.4		1.0	0.80	0.69	mg/L	1		351.2	Total/NA
Sulfate	410	D	25	13	5.2	mg/L	5		9056A	Total/NA
Total Alkalinity as CaCO3	620		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	6.5		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: SHGW02-22A — Lab Sample ID: 280-162622-19

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
1,1,2-Trichloro-1,2,2-trifluoroethane	3.1		3.0	0.40	0.18	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	41		6.0	4.0	2.0	ug/L	1		8260B	Total/NA
2-Hexanone	60		5.0	4.0	1.7	ug/L	1		8260B	Total/NA
Acetone	40		10	6.4	1.9	ug/L	1		8260B	Total/NA
Methane	8.5		0.0050	0.0013	0.00063	mg/L	1		RSK-175	Total/NA
Nitrate Nitrite as N	0.46	J1	0.10	0.050	0.044	mg/L	1		353.2	Total/NA
Sulfate	21	J D	25	13	5.2	mg/L	5		9056A	Total/NA
Total Alkalinity as CaCO3	210		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA

Client Sample ID: SHGW05-22A — Lab Sample ID: 280-162622-20

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
1,1,2-Trichloro-1,2,2-trifluoroethane	2.6	J	3.0	0.40	0.18	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	38		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	41		10	6.4	1.9	ug/L	1		8260B	Total/NA
Methane	8.5		0.0050	0.0013	0.00063	mg/L	1		RSK-175	Total/NA
Nitrate Nitrite as N	0.51		0.10	0.050	0.044	mg/L	1		353.2	Total/NA
Sulfate	25		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	210		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA

Client Sample ID: G0053-22A — Lab Sample ID: 280-162622-21

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
1,1,2-Trichloro-1,2,2-trifluoroethane	2.9	J	3.0	0.40	0.18	ug/L	1		8260B	Total/NA
Methane	0.0016	J	0.0050	0.0013	0.00063	mg/L	1		RSK-175	Total/NA
Nitrate Nitrite as N	13		0.50	0.25	0.22	mg/L	5		353.2	Total/NA
Sulfate	50		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	140		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

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

Job ID: 280-162622-1

Client Sample ID: G0069-22A — Lab Sample ID: 280-162622-22

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
1,1,2-Trichloro-1,2,2-trifluoroethane	3.5		3.0	0.40	0.18	ug/L	1		8260B	Total/NA
Methane	0.0023	J	0.0050	0.0013	0.00063	mg/L	1		RSK-175	Total/NA

Client Sample ID: 5-18 TB — Lab Sample ID: 280-162622-23

No Detections.

Client Sample ID: SHGW04-22A — Lab Sample ID: 280-162622-24

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
1,1,2-Trichloro-1,2,2-trifluoroethane	2.9	J	3.0	0.40	0.18	ug/L	1		8260B	Total/NA
Acetone	3.8	J	10	6.4	1.9	ug/L	1		8260B	Total/NA
Xylenes, Total	0.62	J	1.0	0.80	0.19	ug/L	1		8260B	Total/NA
Methane	0.25		0.0050	0.0013	0.00063	mg/L	1		RSK-175	Total/NA

Client Sample ID: SHGW03-22A — Lab Sample ID: 280-162622-25

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
1,1,2-Trichloro-1,2,2-trifluoroethane	1.5	J	3.0	0.40	0.18	ug/L	1		8260B	Total/NA
1,1,2-Trichloroethane	4.1		1.0	0.80	0.27	ug/L	1		8260B	Total/NA
Ethylbenzene	0.33	J	1.0	0.40	0.16	ug/L	1		8260B	Total/NA
Xylenes, Total	0.40	J	1.0	0.80	0.19	ug/L	1		8260B	Total/NA
Methane	0.27		0.0050	0.0013	0.00063	mg/L	1		RSK-175	Total/NA

Client Sample ID: SAMW1-22A — Lab Sample ID: 280-162622-26

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
1,1,2-Trichloro-1,2,2-trifluoroethane	2.2	J	3.0	0.40	0.18	ug/L	1		8260B	Total/NA
Methane	0.064		0.0050	0.0013	0.00063	mg/L	1		RSK-175	Total/NA
Nitrate Nitrite as N	0.54		0.10	0.050	0.044	mg/L	1		353.2	Total/NA
Sulfate	26	D	25	13	5.2	mg/L	5		9056A	Total/NA
Total Alkalinity as CaCO3	140		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: G0119-22A
Lab Sample ID: 280-162622-1

Date Collected: 05/19/22 10:50
Matrix: Water
Date Received: 05/20/22 10:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**0.98**		0.0050	0.0013	0.00063	mg/L		06/01/22 10:37	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	0.22	0.20	0.086	ug/L		05/27/22 21:28	1
1,3-Dinitrobenzene	0.10	U M	0.11	0.10	0.038	ug/L		05/26/22 19:46	1
2,4,6-Trinitrotoluene	0.10	U M	0.11	0.10	0.046	ug/L		05/26/22 19:46	1
2,4-Dinitrotoluene	0.082	U	0.10	0.082	0.028	ug/L		05/26/22 19:46	1
2,6-Dinitrotoluene	0.082	U	0.10	0.082	0.041	ug/L		05/26/22 19:46	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.052	ug/L		05/26/22 19:46	1
2-Nitrotoluene	0.20	U	0.22	0.20	0.088	ug/L		05/27/22 21:28	1
3-Nitrotoluene	0.41	U	0.41	0.41	0.20	ug/L		05/26/22 19:46	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.059	ug/L		05/26/22 19:46	1
4-Nitrotoluene	0.41	U	0.42	0.41	0.10	ug/L		05/26/22 19:46	1
HMX	0.20	U	0.22	0.20	0.090	ug/L		05/26/22 19:46	1
MNX	0.41	U	2.0	0.41	0.16	ug/L		05/26/22 19:46	1
Nitrobenzene	0.20	U	0.22	0.20	0.093	ug/L		05/26/22 19:46	1
RDX	0.20	U	0.22	0.20	0.053	ug/L		05/26/22 19:46	1
Tetryl	0.10	U M	0.11	0.10	0.033	ug/L		05/26/22 19:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*99*	*M*	*83 - 119*	*05/25/22 15:23*	*05/26/22 19:46*	*1*
1,2-Dinitrobenzene	*96*		*83 - 119*	*05/25/22 15:23*	*05/27/22 21:28*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**0.56**		0.20	0.10	0.058	mg/L		06/09/22 12:18	2
Nitrogen, Total Kjeldahl	**1.3**		1.0	0.80	0.69	mg/L		06/03/22 18:02	1
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.044	mg/L		06/07/22 14:54	1
Sulfide	2.0	U	4.0	2.0	1.6	mg/L		05/25/22 10:57	1
Sulfate	**740**	**D**	25	13	5.2	mg/L		06/01/22 21:00	5
Total Alkalinity as CaCO3	**530**		10	6.4	3.1	mg/L		05/26/22 13:49	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**5.7**		1.0	0.80	0.35	mg/L		05/31/22 16:39	1

Client Sample ID: G0121-22A
Lab Sample ID: 280-162622-2

Date Collected: 05/19/22 12:05
Matrix: Water
Date Received: 05/20/22 10:00

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**19**	**H D**	0.010	0.0026	0.0013	mg/L		06/03/22 17:56	2

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.19	U	0.20	0.19	0.081	ug/L		05/26/22 20:09	1
1,3-Dinitrobenzene	0.096	U M	0.11	0.096	0.036	ug/L		05/27/22 22:03	1
2,4,6-Trinitrotoluene	0.096	U M	0.11	0.096	0.043	ug/L		05/26/22 20:09	1
2,4-Dinitrotoluene	0.077	U M	0.096	0.077	0.026	ug/L		05/27/22 22:03	1

Client Sample ID: G0121-22A
Lab Sample ID: 280-162622-2

Date Collected: 05/19/22 12:05
Matrix: Water
Date Received: 05/20/22 10:00

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2,6-Dinitrotoluene	0.077	U	0.096	0.077	0.039	ug/L		05/27/22 22:03	1
2-Amino-4,6-dinitrotoluene	0.096	U	0.11	0.096	0.049	ug/L		05/27/22 22:03	1
2-Nitrotoluene	0.19	U M	0.20	0.19	0.082	ug/L		05/26/22 20:09	1
3-Nitrotoluene	0.39	U	0.39	0.39	0.19	ug/L		05/27/22 22:03	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.14	0.12	0.056	ug/L		05/26/22 20:09	1
4-Nitrotoluene	0.39	U M	0.39	0.39	0.096	ug/L		05/26/22 20:09	1
HMX	0.19	U	0.20	0.19	0.084	ug/L		05/26/22 20:09	1
MNX	0.39	U	1.9	0.39	0.15	ug/L		05/27/22 22:03	1
Nitrobenzene	0.19	U M	0.20	0.19	0.088	ug/L		05/26/22 20:09	1
RDX	0.19	U M	0.20	0.19	0.050	ug/L		05/26/22 20:09	1
Tetryl	0.096	U M	0.11	0.096	0.031	ug/L		05/26/22 20:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*100*	*M*	*83 - 119*	*05/25/22 15:23*	*05/26/22 20:09*	*1*
1,2-Dinitrobenzene	*91*		*83 - 119*	*05/25/22 15:23*	*05/27/22 22:03*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**8.6**		2.0	1.0	0.58	mg/L		06/08/22 14:22	20
Nitrogen, Total Kjeldahl	**14**		5.0	4.0	3.4	mg/L		06/03/22 17:59	1
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.044	mg/L		06/07/22 14:56	1
Sulfide	**2.4**	**J**	4.0	2.0	1.6	mg/L		05/25/22 10:57	1
Sulfate	**290**	**D M**	25	13	5.2	mg/L		06/02/22 14:18	5
Total Alkalinity as CaCO3	**640**		10	6.4	3.1	mg/L		05/26/22 13:59	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**29**		1.0	0.80	0.35	mg/L		05/31/22 17:25	1

Client Sample ID: G0101-22A
Lab Sample ID: 280-162622-3

Date Collected: 05/19/22 09:45
Matrix: Water
Date Received: 05/20/22 10:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**13**		0.0050	0.0013	0.00063	mg/L		06/01/22 11:15	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.19	U M	0.20	0.19	0.081	ug/L		05/26/22 20:31	1
1,3-Dinitrobenzene	0.097	U M	0.11	0.097	0.036	ug/L		05/26/22 20:31	1
2,4,6-Trinitrotoluene	0.097	U	0.11	0.097	0.043	ug/L		05/26/22 20:31	1
2,4-Dinitrotoluene	0.077	U	0.097	0.077	0.026	ug/L		05/26/22 20:31	1
2,6-Dinitrotoluene	0.077	U	0.097	0.077	0.039	ug/L		05/26/22 20:31	1
2-Amino-4,6-dinitrotoluene	0.097	U M	0.11	0.097	0.049	ug/L		05/26/22 20:31	1
2-Nitrotoluene	0.19	U	0.20	0.19	0.083	ug/L		05/26/22 20:31	1
3-Nitrotoluene	0.39	U	0.39	0.39	0.19	ug/L		05/26/22 20:31	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.14	0.12	0.056	ug/L		05/26/22 20:31	1
4-Nitrotoluene	0.39	U M	0.40	0.39	0.097	ug/L		05/26/22 20:31	1
HMX	0.19	U	0.20	0.19	0.085	ug/L		05/26/22 20:31	1
MNX	0.39	U M	1.9	0.39	0.15	ug/L		05/26/22 20:31	1

Client Sample ID: G0101-22A
Lab Sample ID: 280-162622-3

Date Collected: 05/19/22 09:45
Matrix: Water
Date Received: 05/20/22 10:00

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrobenzene	0.19	U	0.20	0.19	0.088	ug/L		05/26/22 20:31	1
RDX	0.19	U	0.20	0.19	0.050	ug/L		05/26/22 20:31	1
Tetryl	0.097	U M	0.11	0.097	0.031	ug/L		05/26/22 20:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*116*		*83 - 119*	*05/25/22 15:23*	*05/26/22 20:31*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**2.1**		0.10	0.050	0.029	mg/L		06/08/22 14:24	1
Nitrogen, Total Kjeldahl	**4.0**		1.0	0.80	0.69	mg/L		06/03/22 18:00	1
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.044	mg/L		06/07/22 14:58	1
Sulfide	2.0	U	4.0	2.0	1.6	mg/L		05/25/22 10:57	1
Sulfate	**290**	**D**	25	13	5.2	mg/L		06/02/22 14:34	5
Total Alkalinity as CaCO3	**830**		10	6.4	3.1	mg/L		05/26/22 14:10	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**14**		1.0	0.80	0.35	mg/L		05/31/22 17:42	1

Client Sample ID: G0100-22A
Lab Sample ID: 280-162622-4

Date Collected: 05/19/22 09:50
Matrix: Water
Date Received: 05/20/22 10:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**17**		0.0050	0.0013	0.00063	mg/L		06/01/22 11:29	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	0.093	ug/L		05/26/22 20:54	1
1,3-Dinitrobenzene	0.11	U M	0.12	0.11	0.041	ug/L		05/26/22 20:54	1
2,4,6-Trinitrotoluene	0.11	U M	0.12	0.11	0.050	ug/L		05/26/22 20:54	1
2,4-Dinitrotoluene	0.088	U	0.11	0.088	0.030	ug/L		05/26/22 20:54	1
2,6-Dinitrotoluene	0.088	U	0.11	0.088	0.044	ug/L		05/26/22 20:54	1
2-Amino-4,6-dinitrotoluene	**0.51**		0.12	0.11	0.056	ug/L		05/26/22 20:54	1
2-Nitrotoluene	0.22	U M	0.23	0.22	0.094	ug/L		05/26/22 20:54	1
3-Nitrotoluene	0.44	U	0.44	0.44	0.22	ug/L		05/26/22 20:54	1
4-Amino-2,6-dinitrotoluene	0.13	U	0.17	0.13	0.064	ug/L		05/26/22 20:54	1
4-Nitrotoluene	0.44	U	0.45	0.44	0.11	ug/L		05/26/22 20:54	1
HMX	0.22	U	0.23	0.22	0.097	ug/L		05/26/22 20:54	1
MNX	0.44	U	2.2	0.44	0.17	ug/L		05/26/22 20:54	1
Nitrobenzene	0.22	U	0.23	0.22	0.10	ug/L		05/26/22 20:54	1
RDX	0.22	U	0.23	0.22	0.057	ug/L		05/26/22 20:54	1
Tetryl	0.11	U M	0.12	0.11	0.035	ug/L		05/26/22 20:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*96*	*M*	*83 - 119*	*05/25/22 15:23*	*05/26/22 20:54*	*1*
1,2-Dinitrobenzene	*92*		*83 - 119*	*05/25/22 15:23*	*05/27/22 22:38*	*1*

Client Sample ID: G0100-22A
Lab Sample ID: 280-162622-4

Date Collected: 05/19/22 09:50
Matrix: Water
Date Received: 05/20/22 10:00

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**2.7**		0.50	0.25	0.15	mg/L		06/08/22 14:26	5
Nitrogen, Total Kjeldahl	**4.4**		1.0	0.80	0.69	mg/L		06/03/22 18:01	1
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.044	mg/L		06/07/22 15:00	1
Sulfide	2.0	U	4.0	2.0	1.6	mg/L		05/25/22 10:57	1
Sulfate	**470**	**D**	25	13	5.2	mg/L		06/02/22 14:50	5
Total Alkalinity as CaCO3	**720**		10	6.4	3.1	mg/L		05/26/22 14:20	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**9.8**		1.0	0.80	0.35	mg/L		05/31/22 18:02	1

Client Sample ID: G0122-22A
Lab Sample ID: 280-162622-5

Date Collected: 05/19/22 12:10
Matrix: Water
Date Received: 05/20/22 10:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**18**		0.0050	0.0013	0.00063	mg/L		06/01/22 11:42	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		05/26/22 21:17	1
1,3-Dinitrobenzene	0.11	U M	0.12	0.11	0.040	ug/L		05/26/22 21:17	1
2,4,6-Trinitrotoluene	0.11	U M	0.12	0.11	0.049	ug/L		05/26/22 21:17	1
2,4-Dinitrotoluene	0.086	U	0.11	0.086	0.030	ug/L		05/26/22 21:17	1
2,6-Dinitrotoluene	0.086	U	0.11	0.086	0.043	ug/L		05/26/22 21:17	1
2-Amino-4,6-dinitrotoluene	0.11	U	0.12	0.11	0.055	ug/L		05/26/22 21:17	1
2-Nitrotoluene	0.22	U	0.23	0.22	0.092	ug/L		05/26/22 21:17	1
3-Nitrotoluene	0.43	U	0.43	0.43	0.21	ug/L		05/26/22 21:17	1
4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.062	ug/L		05/26/22 21:17	1
4-Nitrotoluene	0.43	U M	0.44	0.43	0.11	ug/L		05/26/22 21:17	1
HMX	0.22	U	0.23	0.22	0.095	ug/L		05/26/22 21:17	1
MNX	0.43	U	2.2	0.43	0.17	ug/L		05/26/22 21:17	1
Nitrobenzene	0.22	U	0.23	0.22	0.098	ug/L		05/26/22 21:17	1
RDX	**0.86**	**M J1**	0.23	0.22	0.056	ug/L		05/26/22 21:17	1
RDX	**1.7**	**J1 M**	0.23	0.22	0.056	ug/L		05/27/22 23:13	1
Tetryl	0.11	U M	0.12	0.11	0.034	ug/L		05/26/22 21:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*102*	*M*	*83 - 119*	*05/25/22 15:23*	*05/26/22 21:17*	*1*
1,2-Dinitrobenzene	*102*	*M*	*83 - 119*	*05/25/22 15:23*	*05/27/22 23:13*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**4.7**		0.10	0.050	0.029	mg/L		06/08/22 14:28	1
Nitrogen, Total Kjeldahl	**6.4**		1.0	0.80	0.69	mg/L		06/03/22 18:01	1
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.044	mg/L		06/07/22 15:02	1
Sulfide	2.0	U	4.0	2.0	1.6	mg/L		05/25/22 10:57	1
Sulfate	**690**	**D**	25	13	5.2	mg/L		06/01/22 22:04	5
Total Alkalinity as CaCO3	**740**		10	6.4	3.1	mg/L		05/26/22 14:31	1

Client Sample ID: G0122-22A
Lab Sample ID: 280-162622-5

Date Collected: 05/19/22 12:10
Matrix: Water
Date Received: 05/20/22 10:00

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**14**		1.0	0.80	0.35	mg/L		05/31/22 18:19	1

Client Sample ID: G0066R-22A
Lab Sample ID: 280-162622-6

Date Collected: 05/19/22 10:55
Matrix: Water
Date Received: 05/20/22 10:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**3.6**		0.0050	0.0013	0.00063	mg/L		06/01/22 11:55	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.23	U	0.24	0.23	0.096	ug/L		05/26/22 22:26	1
1,3-Dinitrobenzene	0.11	U M	0.13	0.11	0.042	ug/L		05/26/22 22:26	1
2,4,6-Trinitrotoluene	0.11	U M	0.13	0.11	0.051	ug/L		05/26/22 22:26	1
2,4-Dinitrotoluene	0.091	U	0.11	0.091	0.031	ug/L		05/26/22 22:26	1
2,6-Dinitrotoluene	0.091	U	0.11	0.091	0.046	ug/L		05/26/22 22:26	1
2-Amino-4,6-dinitrotoluene	0.11	U	0.13	0.11	0.058	ug/L		05/27/22 23:48	1
2-Nitrotoluene	0.23	U	0.24	0.23	0.098	ug/L		05/26/22 22:26	1
3-Nitrotoluene	0.46	U	0.46	0.46	0.22	ug/L		05/26/22 22:26	1
4-Amino-2,6-dinitrotoluene	0.14	U	0.17	0.14	0.066	ug/L		05/26/22 22:26	1
4-Nitrotoluene	0.46	U	0.47	0.46	0.11	ug/L		05/26/22 22:26	1
HMX	0.23	U	0.24	0.23	0.10	ug/L		05/26/22 22:26	1
MNX	0.46	U	2.3	0.46	0.18	ug/L		05/26/22 22:26	1
Nitrobenzene	0.23	U	0.24	0.23	0.10	ug/L		05/26/22 22:26	1
RDX	0.23	U	0.24	0.23	0.059	ug/L		05/26/22 22:26	1
Tetryl	0.11	U M	0.13	0.11	0.036	ug/L		05/26/22 22:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*102*	*M*	*83 - 119*	*05/25/22 15:23*	*05/26/22 22:26*	*1*
1,2-Dinitrobenzene	*104*		*83 - 119*	*05/25/22 15:23*	*05/27/22 23:48*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**3.1**		0.10	0.050	0.029	mg/L		06/08/22 14:42	1
Nitrogen, Total Kjeldahl	**3.6**		1.0	0.80	0.69	mg/L		06/03/22 18:03	1
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.044	mg/L		06/07/22 15:04	1
Sulfide	2.0	U J1	4.0	2.0	1.6	mg/L		05/24/22 11:10	1
Sulfate	**530**	**D**	25	13	5.2	mg/L		06/01/22 22:20	5
Total Alkalinity as CaCO3	**600**		10	6.4	3.1	mg/L		05/26/22 14:40	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**7.2**		1.0	0.80	0.35	mg/L		05/31/22 19:07	1

Client Sample ID: G0024-22A
Lab Sample ID: 280-162622-7

Date Collected: 05/18/22 14:50
Matrix: Water
Date Received: 05/20/22 10:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	0.0013	U	0.0050	0.0013	0.00063	mg/L		06/01/22 19:54	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	0.088	ug/L		05/26/22 22:49	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.038	ug/L		05/26/22 22:49	1
2,4,6-Trinitrotoluene	**0.18**		0.11	0.10	0.047	ug/L		05/26/22 22:49	1
2,4-Dinitrotoluene	0.083	U	0.10	0.083	0.029	ug/L		05/26/22 22:49	1
2,6-Dinitrotoluene	0.083	U	0.10	0.083	0.042	ug/L		05/26/22 22:49	1
2-Amino-4,6-dinitrotoluene	**0.52**		0.11	0.10	0.053	ug/L		05/26/22 22:49	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.089	ug/L		05/26/22 22:49	1
3-Nitrotoluene	0.42	U	0.42	0.42	0.20	ug/L		05/26/22 22:49	1
4-Amino-2,6-dinitrotoluene	**0.27**		0.16	0.13	0.060	ug/L		05/26/22 22:49	1
4-Nitrotoluene	0.42	U	0.43	0.42	0.10	ug/L		05/26/22 22:49	1
HMX	0.21	U	0.22	0.21	0.091	ug/L		05/26/22 22:49	1
MNX	0.42	U	2.1	0.42	0.16	ug/L		05/26/22 22:49	1
Nitrobenzene	0.21	U	0.22	0.21	0.095	ug/L		05/26/22 22:49	1
RDX	0.21	U	0.22	0.21	0.054	ug/L		05/26/22 22:49	1
Tetryl	0.10	U M	0.11	0.10	0.033	ug/L		05/26/22 22:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*108*	*M*	*83 - 119*	*05/25/22 15:23*	*05/26/22 22:49*	*1*
1,2-Dinitrobenzene	*111*		*83 - 119*	*05/25/22 15:23*	*05/28/22 01:33*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	0.050	U	0.10	0.050	0.029	mg/L		06/08/22 14:44	1
Nitrogen, Total Kjeldahl	0.80	U	1.0	0.80	0.69	mg/L		06/03/22 18:04	1
Nitrate Nitrite as N	**11**	**J1**	0.20	0.10	0.088	mg/L		06/07/22 15:22	2
Sulfide	2.0	U	4.0	2.0	1.6	mg/L		05/24/22 11:10	1
Sulfate	**64**		5.0	2.5	1.0	mg/L		06/01/22 22:36	1
Total Alkalinity as CaCO3	**100**		10	6.4	3.1	mg/L		05/26/22 14:59	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**3.6**		1.0	0.80	0.35	mg/L		05/31/22 19:21	1

Client Sample ID: G0115-22A
Lab Sample ID: 280-162622-8

Date Collected: 05/19/22 08:45
Matrix: Water
Date Received: 05/20/22 10:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**14**		0.0050	0.0013	0.00063	mg/L		06/01/22 12:08	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.19	U	0.20	0.19	0.080	ug/L		05/26/22 23:12	1
1,3-Dinitrobenzene	0.096	U M	0.11	0.096	0.035	ug/L		05/26/22 23:12	1
2,4,6-Trinitrotoluene	0.096	U M	0.11	0.096	0.043	ug/L		05/26/22 23:12	1
2,4-Dinitrotoluene	0.077	U	0.096	0.077	0.026	ug/L		05/26/22 23:12	1

Client Sample ID: G0115-22A
Lab Sample ID: 280-162622-8

Date Collected: 05/19/22 08:45
Matrix: Water
Date Received: 05/20/22 10:00

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2,6-Dinitrotoluene	0.077	U	0.096	0.077	0.038	ug/L		05/26/22 23:12	1
2-Amino-4,6-dinitrotoluene	0.096	U	0.11	0.096	0.049	ug/L		05/26/22 23:12	1
2-Nitrotoluene	0.19	U	0.20	0.19	0.082	ug/L		05/26/22 23:12	1
3-Nitrotoluene	0.38	U	0.38	0.38	0.19	ug/L		05/26/22 23:12	1
4-Amino-2,6-dinitrotoluene	0.11	U	0.14	0.11	0.055	ug/L		05/26/22 23:12	1
4-Nitrotoluene	0.38	U	0.39	0.38	0.096	ug/L		05/26/22 23:12	1
HMX	0.19	U	0.20	0.19	0.084	ug/L		05/26/22 23:12	1
MNX	0.38	U	1.9	0.38	0.15	ug/L		05/26/22 23:12	1
Nitrobenzene	0.19	U	0.20	0.19	0.087	ug/L		05/26/22 23:12	1
RDX	0.19	U	0.20	0.19	0.049	ug/L		05/26/22 23:12	1
Tetryl	0.096	U M	0.11	0.096	0.030	ug/L		05/26/22 23:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*108*	*M*	*83 - 119*	*05/25/22 15:23*	*05/26/22 23:12*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**2.9**		0.10	0.050	0.029	mg/L		06/08/22 14:46	1
Nitrogen, Total Kjeldahl	**3.8**		1.0	0.80	0.69	mg/L		06/03/22 18:04	1
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.044	mg/L		06/07/22 15:28	1
Sulfide	2.0	U	4.0	2.0	1.6	mg/L		05/24/22 11:10	1
Sulfate	**490**	**D**	25	13	5.2	mg/L		06/02/22 15:06	5
Total Alkalinity as CaCO3	**700**		10	6.4	3.1	mg/L		05/26/22 15:09	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**8.8**		1.0	0.80	0.35	mg/L		05/31/22 19:36	1

Client Sample ID: G0095-22A
Lab Sample ID: 280-162622-9

Date Collected: 05/19/22 08:45
Matrix: Water
Date Received: 05/20/22 10:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**16**		0.0050	0.0013	0.00063	mg/L		06/01/22 12:20	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	0.090	ug/L		05/26/22 23:35	1
1,3-Dinitrobenzene	0.11	U M	0.12	0.11	0.039	ug/L		05/26/22 23:35	1
2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.048	ug/L		05/26/22 23:35	1
2,4-Dinitrotoluene	0.085	U	0.11	0.085	0.029	ug/L		05/26/22 23:35	1
2,6-Dinitrotoluene	0.085	U	0.11	0.085	0.043	ug/L		05/26/22 23:35	1
2-Amino-4,6-dinitrotoluene	0.11	U	0.12	0.11	0.054	ug/L		05/26/22 23:35	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.091	ug/L		05/26/22 23:35	1
3-Nitrotoluene	0.43	U	0.43	0.43	0.21	ug/L		05/26/22 23:35	1
4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.062	ug/L		05/26/22 23:35	1
4-Nitrotoluene	0.43	U	0.44	0.43	0.11	ug/L		05/26/22 23:35	1
HMX	0.21	U	0.22	0.21	0.093	ug/L		05/26/22 23:35	1
MNX	0.43	U	2.1	0.43	0.16	ug/L		05/26/22 23:35	1
Nitrobenzene	0.21	U	0.22	0.21	0.097	ug/L		05/26/22 23:35	1

Client Sample ID: G0095-22A

Lab Sample ID: 280-162622-9

Date Collected: 05/19/22 08:45

Matrix: Water

Date Received: 05/20/22 10:00

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
RDX	0.21	U	0.22	0.21	0.055	ug/L		05/26/22 23:35	1
Tetryl	0.11	U M	0.12	0.11	0.034	ug/L		05/26/22 23:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*111*	*M*	*83 - 119*	*05/25/22 15:23*	*05/26/22 23:35*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**2.2**		0.10	0.050	0.029	mg/L		06/08/22 14:48	1
Nitrogen, Total Kjeldahl	**3.7**		1.0	0.80	0.69	mg/L		06/03/22 18:04	1
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.044	mg/L		06/07/22 15:30	1
Sulfide	2.0	U	4.0	2.0	1.6	mg/L		05/24/22 11:10	1
Sulfate	**520**	**D**	25	13	5.2	mg/L		06/02/22 15:54	5
Total Alkalinity as CaCO3	**780**		10	6.4	3.1	mg/L		05/26/22 15:19	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**12**		1.0	0.80	0.35	mg/L		05/31/22 19:55	1

Client Sample ID: PZ018-22A

Lab Sample ID: 280-162622-10

Date Collected: 05/18/22 10:05

Matrix: Water

Date Received: 05/20/22 10:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**15**		0.0050	0.0013	0.00063	mg/L		06/01/22 15:09	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 M	0.23	0.22	0.091	ug/L		05/26/22 23:58	1
1,3-Dinitrobenzene	0.11	U M	0.12	0.11	0.040	ug/L		05/26/22 23:58	1
2,4,6-Trinitrotoluene	**3.3**		0.12	0.11	0.049	ug/L		05/26/22 23:58	1
2,4-Dinitrotoluene	0.086	U M	0.11	0.086	0.030	ug/L		05/26/22 23:58	1
2,6-Dinitrotoluene	0.086	U	0.11	0.086	0.043	ug/L		05/26/22 23:58	1
2-Amino-4,6-dinitrotoluene	**1.3**		0.12	0.11	0.055	ug/L		05/26/22 23:58	1
2-Nitrotoluene	0.22	U	0.23	0.22	0.092	ug/L		05/28/22 02:08	1
3-Nitrotoluene	0.43	U	0.43	0.43	0.21	ug/L		05/26/22 23:58	1
4-Amino-2,6-dinitrotoluene	**2.1**		0.16	0.13	0.062	ug/L		05/26/22 23:58	1
4-Nitrotoluene	0.43	U M	0.44	0.43	0.11	ug/L		05/28/22 02:08	1
HMX	0.22	U	0.23	0.22	0.094	ug/L		05/26/22 23:58	1
MNX	0.43	U M	2.2	0.43	0.17	ug/L		05/26/22 23:58	1
Nitrobenzene	0.22	U	0.23	0.22	0.098	ug/L		05/26/22 23:58	1
RDX	**0.68**	**M**	0.23	0.22	0.056	ug/L		05/26/22 23:58	1
Tetryl	0.11	U M	0.12	0.11	0.034	ug/L		05/26/22 23:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*109*	*M*	*83 - 119*	*05/25/22 15:23*	*05/26/22 23:58*	*1*
1,2-Dinitrobenzene	*97*	*M*	*83 - 119*	*05/25/22 15:23*	*05/28/22 02:08*	*1*

Client Sample ID: PZ018-22A

Date Collected: 05/18/22 10:05
Date Received: 05/20/22 10:00

Lab Sample ID: 280-162622-10

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**0.93**		0.10	0.050	0.029	mg/L		06/08/22 15:22	1
Nitrogen, Total Kjeldahl	**3.0**		1.0	0.80	0.69	mg/L		06/03/22 18:04	1
Nitrate Nitrite as N	**2.8**		0.10	0.050	0.044	mg/L		06/07/22 15:32	1
Sulfide	2.0	U	4.0	2.0	1.6	mg/L		05/24/22 11:10	1
Sulfate	**39**		5.0	2.5	1.0	mg/L		06/02/22 00:44	1
Total Alkalinity as CaCO3	**390**		10	6.4	3.1	mg/L		05/26/22 15:27	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**13**		1.0	0.80	0.35	mg/L		05/31/22 20:09	1

Client Sample ID: PZ020-22A

Date Collected: 05/18/22 13:05
Date Received: 05/20/22 10:00

Lab Sample ID: 280-162622-11

Matrix: Water

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	0.0013	U	0.0050	0.0013	0.00063	mg/L		06/01/22 15:22	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	**2.6**	**M**	0.22	0.21	0.090	ug/L		05/27/22 00:21	1
1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.040	ug/L		05/28/22 02:43	1
2,4,6-Trinitrotoluene	**5.0**		0.12	0.11	0.048	ug/L		05/27/22 00:21	1
2,4-Dinitrotoluene	0.086	U	0.11	0.086	0.029	ug/L		05/28/22 02:43	1
2,6-Dinitrotoluene	0.086	U	0.11	0.086	0.043	ug/L		05/27/22 00:21	1
2-Amino-4,6-dinitrotoluene	**2.8**		0.12	0.11	0.054	ug/L		05/27/22 00:21	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.092	ug/L		05/27/22 00:21	1
3-Nitrotoluene	0.43	U	0.43	0.43	0.21	ug/L		05/27/22 00:21	1
4-Amino-2,6-dinitrotoluene	**2.1**		0.16	0.13	0.062	ug/L		05/27/22 00:21	1
4-Nitrotoluene	0.43	U	0.44	0.43	0.11	ug/L		05/28/22 02:43	1
HMX	**0.49**	**M**	0.22	0.21	0.094	ug/L		05/27/22 00:21	1
MNX	0.43	U M	2.1	0.43	0.16	ug/L		05/27/22 00:21	1
Nitrobenzene	0.21	U	0.22	0.21	0.097	ug/L		05/27/22 00:21	1
RDX	**0.45**	**M J1**	0.22	0.21	0.055	ug/L		05/27/22 00:21	1
RDX	**0.23**	**J1 M**	0.22	0.21	0.055	ug/L		05/28/22 02:43	1
Tetryl	0.11	U M	0.12	0.11	0.034	ug/L		05/27/22 00:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*107*	*M*	*83 - 119*	*05/25/22 15:23*	*05/27/22 00:21*	*1*
1,2-Dinitrobenzene	*106*	*M*	*83 - 119*	*05/25/22 15:23*	*05/28/22 02:43*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	0.050	U	0.10	0.050	0.029	mg/L		06/08/22 15:24	1
Nitrogen, Total Kjeldahl	0.80	U J1	1.0	0.80	0.69	mg/L		06/03/22 18:09	1
Nitrate Nitrite as N	**15**		0.50	0.25	0.22	mg/L		06/07/22 15:34	5
Sulfide	2.0	U	4.0	2.0	1.6	mg/L		05/24/22 11:10	1
Sulfate	**140**	**D**	25	13	5.2	mg/L		06/02/22 21:30	5
Total Alkalinity as CaCO3	**310**		10	6.4	3.1	mg/L		05/26/22 15:35	1

Client Sample ID: PZ020-22A
Lab Sample ID: 280-162622-11
Date Collected: 05/18/22 13:05
Matrix: Water
Date Received: 05/20/22 10:00

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**3.6**		1.0	0.80	0.35	mg/L		05/31/22 20:24	1

Client Sample ID: G0077-22A
Lab Sample ID: 280-162622-12
Date Collected: 05/18/22 16:20
Matrix: Water
Date Received: 05/20/22 10:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**3.3**		0.0050	0.0013	0.00063	mg/L		06/01/22 20:07	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	**5.4**	**M**	0.22	0.21	0.089	ug/L		05/27/22 00:44	1
1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.039	ug/L		05/28/22 03:18	1
2,4,6-Trinitrotoluene	**7.7**		0.12	0.11	0.048	ug/L		05/27/22 00:44	1
2,4-Dinitrotoluene	0.085	U M	0.11	0.085	0.029	ug/L		05/27/22 00:44	1
2,6-Dinitrotoluene	0.085	U	0.11	0.085	0.042	ug/L		05/27/22 00:44	1
2-Amino-4,6-dinitrotoluene	**4.2**		0.12	0.11	0.054	ug/L		05/27/22 00:44	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.091	ug/L		05/27/22 00:44	1
3-Nitrotoluene	0.42	U	0.42	0.42	0.21	ug/L		05/27/22 00:44	1
4-Amino-2,6-dinitrotoluene	**4.8**		0.16	0.13	0.061	ug/L		05/27/22 00:44	1
4-Nitrotoluene	0.42	U	0.43	0.42	0.11	ug/L		05/28/22 03:18	1
HMX	**0.75**	**M J1**	0.22	0.21	0.093	ug/L		05/27/22 00:44	1
HMX	**1.1**	**J1**	0.22	0.21	0.093	ug/L		05/28/22 03:18	1
MNX	0.42	U M	2.1	0.42	0.16	ug/L		05/27/22 00:44	1
Nitrobenzene	0.21	U	0.22	0.21	0.096	ug/L		05/27/22 00:44	1
RDX	**1.2**	**M**	0.22	0.21	0.055	ug/L		05/27/22 00:44	1
Tetryl	0.11	U M	0.12	0.11	0.034	ug/L		05/27/22 00:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*112*	*M*	*83 - 119*	*05/25/22 15:23*	*05/27/22 00:44*	*1*
1,2-Dinitrobenzene	*113*	*M*	*83 - 119*	*05/25/22 15:23*	*05/28/22 03:18*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	0.050	U	0.10	0.050	0.029	mg/L		06/08/22 15:26	1
Nitrogen, Total Kjeldahl	0.80	U	1.0	0.80	0.69	mg/L		06/03/22 18:06	1
Nitrate Nitrite as N	**12**		0.50	0.25	0.22	mg/L		06/07/22 15:36	5
Sulfide	2.0	U	4.0	2.0	1.6	mg/L		05/24/22 11:10	1
Sulfate	**150**		5.0	2.5	1.0	mg/L		06/02/22 22:18	1
Total Alkalinity as CaCO3	**340**		10	6.4	3.1	mg/L		05/26/22 15:42	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**4.7**		1.0	0.80	0.35	mg/L		05/31/22 21:14	1

Client Sample ID: G0069-22A
Lab Sample ID: 280-162622-13

Date Collected: 05/18/22 11:15
Matrix: Water
Date Received: 05/20/22 10:00

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
C10-C28	3400	Q	240	120	31	ug/L		05/30/22 20:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*82*		*56 - 125*	*05/25/22 15:07*	*05/30/22 20:22*	*1*
n-Octacosane	*57*	*Q*	*60 - 142*	*05/25/22 15:07*	*05/30/22 20:22*	*1*

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
C10-C28	2900	H Q	240	120	31	ug/L		06/03/22 19:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*14*	*Q*	*56 - 125*	*06/01/22 12:30*	*06/03/22 19:01*	*1*
n-Octacosane	*26*	*Q*	*60 - 142*	*06/01/22 12:30*	*06/03/22 19:01*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate Nitrite as N	0.18		0.10	0.050	0.044	mg/L		06/07/22 14:24	1
Sulfate	32	M	5.0	2.5	1.0	mg/L		06/02/22 23:21	1
Total Alkalinity as CaCO3	100		10	6.4	3.1	mg/L		05/26/22 15:48	1

Client Sample ID: SHGW03-22A
Lab Sample ID: 280-162622-14

Date Collected: 05/18/22 15:20
Matrix: Water
Date Received: 05/20/22 10:00

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
C10-C28	320	Q	240	110	31	ug/L		05/30/22 20:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*82*		*56 - 125*	*05/25/22 15:07*	*05/30/22 20:45*	*1*
n-Octacosane	*43*	*Q*	*60 - 142*	*05/25/22 15:07*	*05/30/22 20:45*	*1*

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
C10-C28	250	H Q	240	110	31	ug/L		06/03/22 19:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*6*	*Q*	*56 - 125*	*06/01/22 12:30*	*06/03/22 19:24*	*1*
n-Octacosane	*10*	*Q*	*60 - 142*	*06/01/22 12:30*	*06/03/22 19:24*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate Nitrite as N	3.7		0.10	0.050	0.044	mg/L		06/07/22 14:26	1
Sulfate	31	D	25	13	5.2	mg/L		06/03/22 00:25	5
Total Alkalinity as CaCO3	160		10	6.4	3.1	mg/L		05/26/22 15:54	1

Client Sample ID: SHGW04-22A
Lab Sample ID: 280-162622-15
Date Collected: 05/18/22 12:35
Matrix: Water
Date Received: 05/20/22 10:00

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
C10-C28	**7200**		240	110	31	ug/L		05/30/22 21:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*91*		*56 - 125*	*05/25/22 15:07*	*05/30/22 21:07*	*1*
n-Octacosane	*95*		*60 - 142*	*05/25/22 15:07*	*05/30/22 21:07*	*1*

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
C10-C28	**6300**	**H Q**	240	110	31	ug/L		06/03/22 19:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*27*	*Q*	*56 - 125*	*06/01/22 12:30*	*06/03/22 19:47*	*1*
n-Octacosane	*24*	*Q*	*60 - 142*	*06/01/22 12:30*	*06/03/22 19:47*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.044	mg/L		06/07/22 14:28	1
Sulfate	**54**		5.0	2.5	1.0	mg/L		06/03/22 00:41	1
Total Alkalinity as CaCO3	**220**		10	6.4	3.1	mg/L		05/26/22 16:01	1

Client Sample ID: G0311-22A
Lab Sample ID: 280-162622-16
Date Collected: 05/19/22 08:00
Matrix: Water
Date Received: 05/20/22 10:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**8.4**		0.0050	0.0013	0.00063	mg/L		06/02/22 15:32	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**	0.23	0.22	0.092	ug/L		05/27/22 01:07	1
1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.041	ug/L		05/28/22 03:53	1
2,4,6-Trinitrotoluene	**3.6**		0.12	0.11	0.049	ug/L		05/27/22 01:07	1
2,4-Dinitrotoluene	**0.65**		0.11	0.088	0.030	ug/L		05/27/22 01:07	1
2,6-Dinitrotoluene	0.088	U	0.11	0.088	0.044	ug/L		05/27/22 01:07	1
2-Amino-4,6-dinitrotoluene	**8.6**		0.12	0.11	0.056	ug/L		05/27/22 01:07	1
2-Nitrotoluene	0.22	U	0.23	0.22	0.094	ug/L		05/27/22 01:07	1
3-Nitrotoluene	0.44	U	0.44	0.44	0.21	ug/L		05/27/22 01:07	1
4-Amino-2,6-dinitrotoluene	**5.7**		0.16	0.13	0.063	ug/L		05/27/22 01:07	1
4-Nitrotoluene	0.44	U	0.45	0.44	0.11	ug/L		05/28/22 03:53	1
HMX	0.22	U M	0.23	0.22	0.096	ug/L		05/27/22 01:07	1
MNX	0.44	U M	2.2	0.44	0.17	ug/L		05/27/22 01:07	1
Nitrobenzene	0.22	U M	0.23	0.22	0.10	ug/L		05/27/22 01:07	1
RDX	0.22	U M	0.23	0.22	0.057	ug/L		05/27/22 01:07	1
Tetryl	0.11	U M	0.12	0.11	0.035	ug/L		05/27/22 01:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*118*	*M*	*83 - 119*	*05/25/22 15:23*	*05/27/22 01:07*	*1*
1,2-Dinitrobenzene	*97*	*M*	*83 - 119*	*05/25/22 15:23*	*05/28/22 03:53*	*1*

Client Sample ID: G0311-22A
Lab Sample ID: 280-162622-16
Date Collected: 05/19/22 08:00
Matrix: Water
Date Received: 05/20/22 10:00

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**0.45**		0.10	0.050	0.029	mg/L		06/08/22 15:28	1
Nitrogen, Total Kjeldahl	**2.2**		1.0	0.80	0.69	mg/L		06/03/22 18:06	1
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.044	mg/L		06/07/22 15:38	1
Sulfide	2.0	U	4.0	2.0	1.6	mg/L		05/25/22 10:57	1
Sulfate	**190**		5.0	2.5	1.0	mg/L		06/03/22 01:29	1
Total Alkalinity as CaCO3	**900**		10	6.4	3.1	mg/L		05/26/22 16:13	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**14**		1.0	0.80	0.35	mg/L		05/31/22 21:31	1

Client Sample ID: G0111-22A
Lab Sample ID: 280-162622-17
Date Collected: 05/19/22 13:15
Matrix: Water
Date Received: 05/20/22 10:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**8.3**		0.0050	0.0013	0.00063	mg/L		06/02/22 15:45	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	**4.6**	**M Q**	0.22	0.21	0.090	ug/L		05/27/22 01:30	1
1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.039	ug/L		05/28/22 04:28	1
2,4,6-Trinitrotoluene	**4.0**	**M Q**	0.12	0.11	0.048	ug/L		05/27/22 01:30	1
2,4-Dinitrotoluene	**0.79**	**Q**	0.11	0.085	0.029	ug/L		05/27/22 01:30	1
2,6-Dinitrotoluene	0.085	U Q	0.11	0.085	0.043	ug/L		05/27/22 01:30	1
2-Amino-4,6-dinitrotoluene	**8.8**	**Q**	0.12	0.11	0.054	ug/L		05/27/22 01:30	1
2-Nitrotoluene	0.21	U Q	0.22	0.21	0.091	ug/L		05/27/22 01:30	1
3-Nitrotoluene	0.43	U Q	0.43	0.43	0.21	ug/L		05/27/22 01:30	1
4-Amino-2,6-dinitrotoluene	**6.0**	**Q**	0.16	0.13	0.061	ug/L		05/27/22 01:30	1
4-Nitrotoluene	0.43	U M	0.44	0.43	0.11	ug/L		05/28/22 04:28	1
HMX	0.21	U M Q	0.22	0.21	0.093	ug/L		05/27/22 01:30	1
MNX	0.43	U M	2.1	0.43	0.16	ug/L		05/27/22 01:30	1
Nitrobenzene	0.21	U M Q	0.22	0.21	0.097	ug/L		05/27/22 01:30	1
RDX	0.21	U Q	0.22	0.21	0.055	ug/L		05/27/22 01:30	1
Tetryl	0.11	U M Q	0.12	0.11	0.034	ug/L		05/27/22 01:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*128*	*M Q*	*83 - 119*	*05/25/22 15:23*	*05/27/22 01:30*	*1*
1,2-Dinitrobenzene	*101*	*M*	*83 - 119*	*05/25/22 15:23*	*05/28/22 04:28*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**0.44**		0.10	0.050	0.029	mg/L		06/08/22 15:30	1
Nitrogen, Total Kjeldahl	**2.5**		1.0	0.80	0.69	mg/L		06/03/22 18:07	1
Nitrate Nitrite as N	**0.087**	**J**	0.10	0.050	0.044	mg/L		06/07/22 15:40	1
Sulfide	2.0	U	4.0	2.0	1.6	mg/L		05/25/22 10:57	1
Sulfate	**190**		5.0	2.5	1.0	mg/L		06/03/22 01:45	1
Total Alkalinity as CaCO3	**900**		10	6.4	3.1	mg/L		05/26/22 16:49	1

Client Sample ID: G0111-22A
Lab Sample ID: 280-162622-17
Date Collected: 05/19/22 13:15
Matrix: Water
Date Received: 05/20/22 10:00

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**13**		1.0	0.80	0.35	mg/L		05/31/22 22:19	1

Client Sample ID: G0123-22A
Lab Sample ID: 280-162622-18
Date Collected: 05/19/22 13:20
Matrix: Water
Date Received: 05/20/22 10:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**18**		0.0050	0.0013	0.00063	mg/L		06/02/22 15:58	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 Q	0.21	0.20	0.082	ug/L		05/27/22 01:53	1
1,3-Dinitrobenzene	0.098	U M Q	0.11	0.098	0.036	ug/L		05/27/22 01:53	1
2,4,6-Trinitrotoluene	0.098	U M Q	0.11	0.098	0.044	ug/L		05/27/22 01:53	1
2,4-Dinitrotoluene	0.078	U Q	0.098	0.078	0.027	ug/L		05/27/22 01:53	1
2,6-Dinitrotoluene	0.078	U Q	0.098	0.078	0.039	ug/L		05/27/22 01:53	1
2-Amino-4,6-dinitrotoluene	0.098	U M Q	0.11	0.098	0.050	ug/L		05/27/22 01:53	1
2-Nitrotoluene	0.20	U Q	0.21	0.20	0.084	ug/L		05/27/22 01:53	1
3-Nitrotoluene	0.39	U Q	0.39	0.39	0.19	ug/L		05/27/22 01:53	1
4-Amino-2,6-dinitrotoluene	0.12	U Q	0.15	0.12	0.056	ug/L		05/27/22 01:53	1
4-Nitrotoluene	0.39	U Q	0.40	0.39	0.098	ug/L		05/27/22 01:53	1
HMX	**0.49**	**M Q**	0.21	0.20	0.086	ug/L		05/27/22 01:53	1
MNX	0.39	U M	2.0	0.39	0.15	ug/L		05/27/22 01:53	1
Nitrobenzene	0.20	U Q	0.21	0.20	0.089	ug/L		05/27/22 01:53	1
RDX	0.20	U M Q	0.21	0.20	0.050	ug/L		05/27/22 01:53	1
Tetryl	0.098	U M Q	0.11	0.098	0.031	ug/L		05/27/22 01:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*120*	*M Q*	*83 - 119*	*05/25/22 15:23*	*05/27/22 01:53*	*1*
1,2-Dinitrobenzene	*112*		*83 - 119*	*05/25/22 15:23*	*05/28/22 05:03*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**1.2**		0.10	0.050	0.029	mg/L		06/08/22 15:32	1
Nitrogen, Total Kjeldahl	**2.4**		1.0	0.80	0.69	mg/L		06/03/22 18:07	1
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.044	mg/L		06/07/22 15:42	1
Sulfide	2.0	U	4.0	2.0	1.6	mg/L		05/25/22 10:57	1
Sulfate	**410**	**D**	25	13	5.2	mg/L		06/03/22 02:01	5
Total Alkalinity as CaCO3	**620**		10	6.4	3.1	mg/L		05/26/22 17:11	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**6.5**		1.0	0.80	0.35	mg/L		05/31/22 22:33	1

Client Sample ID: SHGW02-22A
Lab Sample ID: 280-162622-19

Date Collected: 05/18/22 09:05
Matrix: Water
Date Received: 05/20/22 10:00

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		05/27/22 23:34	1
1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.21	ug/L		05/27/22 23:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	**3.1**		3.0	0.40	0.18	ug/L		05/27/22 23:34	1
1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.27	ug/L		05/27/22 23:34	1
1,1-Dichloroethane	0.80	U	1.0	0.80	0.22	ug/L		05/27/22 23:34	1
1,1-Dichloroethene	0.80	U	1.0	0.80	0.23	ug/L		05/27/22 23:34	1
1,2,3-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		05/27/22 23:34	1
1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		05/27/22 23:34	1
1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.47	ug/L		05/27/22 23:34	1
1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.15	ug/L		05/27/22 23:34	1
1,2-Dichloroethane	0.40	U	1.0	0.40	0.13	ug/L		05/27/22 23:34	1
1,2-Dichloropropane	0.40	U	1.0	0.40	0.18	ug/L		05/27/22 23:34	1
1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.13	ug/L		05/27/22 23:34	1
1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16	ug/L		05/27/22 23:34	1
2-Butanone (MEK)	**41**		6.0	4.0	2.0	ug/L		05/27/22 23:34	1
2-Hexanone	**60**		5.0	4.0	1.7	ug/L		05/27/22 23:34	1
4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	0.98	ug/L		05/27/22 23:34	1
Acetone	**40**		10	6.4	1.9	ug/L		05/27/22 23:34	1
Benzene	0.40	U	1.0	0.40	0.16	ug/L		05/27/22 23:34	1
Bromochloromethane	0.20	U	1.0	0.20	0.10	ug/L		05/27/22 23:34	1
Bromodichloromethane	0.40	U	1.0	0.40	0.17	ug/L		05/27/22 23:34	1
Bromoform	0.90	U	1.0	0.90	0.46	ug/L		05/27/22 23:34	1
Bromomethane	0.80	U	2.0	0.80	0.21	ug/L		05/27/22 23:34	1
Carbon disulfide	0.80	U	2.0	0.80	0.17	ug/L		05/27/22 23:34	1
Carbon tetrachloride	0.40	U	2.0	0.40	0.19	ug/L		05/27/22 23:34	1
Chlorobenzene	0.40	U	1.0	0.40	0.17	ug/L		05/27/22 23:34	1
Chloroethane	1.6	U	2.0	1.6	0.41	ug/L		05/27/22 23:34	1
Chloroform	0.40	U	1.0	0.40	0.16	ug/L		05/27/22 23:34	1
Chloromethane	0.80	U	2.0	0.80	0.30	ug/L		05/27/22 23:34	1
cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		05/27/22 23:34	1
cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16	ug/L		05/27/22 23:34	1
Cyclohexane	0.80	U	2.0	0.80	0.28	ug/L		05/27/22 23:34	1
Dibromochloromethane	0.40	U	1.0	0.40	0.17	ug/L		05/27/22 23:34	1
Dichlorodifluoromethane	0.80	U Q	2.0	0.80	0.31	ug/L		05/27/22 23:34	1
Ethylbenzene	0.40	U	1.0	0.40	0.16	ug/L		05/27/22 23:34	1
Ethylene Dibromide	0.40	U	1.0	0.40	0.18	ug/L		05/27/22 23:34	1
Isopropylbenzene	0.40	U	1.0	0.40	0.19	ug/L		05/27/22 23:34	1
Methyl acetate	4.0	U	5.0	4.0	1.6	ug/L		05/27/22 23:34	1
Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25	ug/L		05/27/22 23:34	1
Methylcyclohexane	0.40	U	2.0	0.40	0.10	ug/L		05/27/22 23:34	1
Methylene Chloride	2.0	U	5.0	2.0	0.94	ug/L		05/27/22 23:34	1
Styrene	0.80	U	1.0	0.80	0.36	ug/L		05/27/22 23:34	1
Tetrachloroethene	0.40	U	1.0	0.40	0.20	ug/L		05/27/22 23:34	1
Toluene	0.40	U	1.0	0.40	0.17	ug/L		05/27/22 23:34	1
trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		05/27/22 23:34	1
trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19	ug/L		05/27/22 23:34	1
Trichloroethene	0.40	U	1.0	0.40	0.16	ug/L		05/27/22 23:34	1
Trichlorofluoromethane	0.80	U	2.0	0.80	0.29	ug/L		05/27/22 23:34	1
Vinyl chloride	0.20	U	1.5	0.20	0.10	ug/L		05/27/22 23:34	1

Client Sample ID: SHGW02-22A
Lab Sample ID: 280-162622-19

Date Collected: 05/18/22 09:05
Matrix: Water
Date Received: 05/20/22 10:00

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		05/27/22 23:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*81 - 118*		*05/27/22 23:34*	*1*
4-Bromofluorobenzene (Surr)	*109*		*85 - 114*		*05/27/22 23:34*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 119*		*05/27/22 23:34*	*1*
Toluene-d8 (Surr)	*102*		*89 - 112*		*05/27/22 23:34*	*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		06/01/22 12:33	1
Methane	**8.5**		0.0050	0.0013	0.00063	mg/L		06/01/22 12:33	1
Ethylene	0.0014	U	0.0050	0.0014	0.00040	mg/L		06/01/22 12:33	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate Nitrite as N	**0.46**	**J1**	0.10	0.050	0.044	mg/L		06/07/22 14:30	1
Sulfate	**21**	**J D**	25	13	5.2	mg/L		06/03/22 02:17	5
Total Alkalinity as CaCO3	**210**		10	6.4	3.1	mg/L		05/26/22 17:18	1

Client Sample ID: SHGW05-22A
Lab Sample ID: 280-162622-20

Date Collected: 05/18/22 09:20
Matrix: Water
Date Received: 05/20/22 10:00

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		05/27/22 23:55	1
1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.21	ug/L		05/27/22 23:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	**2.6**	**J**	3.0	0.40	0.18	ug/L		05/27/22 23:55	1
1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.27	ug/L		05/27/22 23:55	1
1,1-Dichloroethane	0.80	U	1.0	0.80	0.22	ug/L		05/27/22 23:55	1
1,1-Dichloroethene	0.80	U	1.0	0.80	0.23	ug/L		05/27/22 23:55	1
1,2,3-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		05/27/22 23:55	1
1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		05/27/22 23:55	1
1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.47	ug/L		05/27/22 23:55	1
1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.15	ug/L		05/27/22 23:55	1
1,2-Dichloroethane	0.40	U	1.0	0.40	0.13	ug/L		05/27/22 23:55	1
1,2-Dichloropropane	0.40	U	1.0	0.40	0.18	ug/L		05/27/22 23:55	1
1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.13	ug/L		05/27/22 23:55	1
1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16	ug/L		05/27/22 23:55	1
2-Butanone (MEK)	**38**		6.0	4.0	2.0	ug/L		05/27/22 23:55	1
2-Hexanone	**56**		5.0	4.0	1.7	ug/L		05/27/22 23:55	1
4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	0.98	ug/L		05/27/22 23:55	1
Acetone	**41**		10	6.4	1.9	ug/L		05/27/22 23:55	1
Benzene	0.40	U	1.0	0.40	0.16	ug/L		05/27/22 23:55	1
Bromochloromethane	0.20	U	1.0	0.20	0.10	ug/L		05/27/22 23:55	1
Bromodichloromethane	0.40	U	1.0	0.40	0.17	ug/L		05/27/22 23:55	1
Bromoform	0.90	U	1.0	0.90	0.46	ug/L		05/27/22 23:55	1
Bromomethane	0.80	U	2.0	0.80	0.21	ug/L		05/27/22 23:55	1
Carbon disulfide	0.80	U M	2.0	0.80	0.17	ug/L		05/27/22 23:55	1
Carbon tetrachloride	0.40	U	2.0	0.40	0.19	ug/L		05/27/22 23:55	1

Client Sample ID: SHGW05-22A
Lab Sample ID: 280-162622-20

Date Collected: 05/18/22 09:20
Matrix: Water
Date Received: 05/20/22 10:00

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Chlorobenzene	0.40	U	1.0	0.40	0.17	ug/L		05/27/22 23:55	1
Chloroethane	1.6	U	2.0	1.6	0.41	ug/L		05/27/22 23:55	1
Chloroform	0.40	U	1.0	0.40	0.16	ug/L		05/27/22 23:55	1
Chloromethane	0.80	U	2.0	0.80	0.30	ug/L		05/27/22 23:55	1
cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		05/27/22 23:55	1
cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16	ug/L		05/27/22 23:55	1
Cyclohexane	0.80	U	2.0	0.80	0.28	ug/L		05/27/22 23:55	1
Dibromochloromethane	0.40	U	1.0	0.40	0.17	ug/L		05/27/22 23:55	1
Dichlorodifluoromethane	0.80	U Q	2.0	0.80	0.31	ug/L		05/27/22 23:55	1
Ethylbenzene	0.40	U	1.0	0.40	0.16	ug/L		05/27/22 23:55	1
Ethylene Dibromide	0.40	U	1.0	0.40	0.18	ug/L		05/27/22 23:55	1
Isopropylbenzene	0.40	U	1.0	0.40	0.19	ug/L		05/27/22 23:55	1
Methyl acetate	4.0	U	5.0	4.0	1.6	ug/L		05/27/22 23:55	1
Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25	ug/L		05/27/22 23:55	1
Methylcyclohexane	0.40	U	2.0	0.40	0.10	ug/L		05/27/22 23:55	1
Methylene Chloride	2.0	U	5.0	2.0	0.94	ug/L		05/27/22 23:55	1
Styrene	0.80	U	1.0	0.80	0.36	ug/L		05/27/22 23:55	1
Tetrachloroethene	0.40	U	1.0	0.40	0.20	ug/L		05/27/22 23:55	1
Toluene	0.40	U	1.0	0.40	0.17	ug/L		05/27/22 23:55	1
trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		05/27/22 23:55	1
trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19	ug/L		05/27/22 23:55	1
Trichloroethene	0.40	U	1.0	0.40	0.16	ug/L		05/27/22 23:55	1
Trichlorofluoromethane	0.80	U	2.0	0.80	0.29	ug/L		05/27/22 23:55	1
Vinyl chloride	0.20	U	1.5	0.20	0.10	ug/L		05/27/22 23:55	1
Xylenes, Total	0.80	U	1.0	0.80	0.19	ug/L		05/27/22 23:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*81 - 118*		*05/27/22 23:55*	*1*
4-Bromofluorobenzene (Surr)	*111*		*85 - 114*		*05/27/22 23:55*	*1*
Dibromofluoromethane (Surr)	*98*		*80 - 119*		*05/27/22 23:55*	*1*
Toluene-d8 (Surr)	*101*		*89 - 112*		*05/27/22 23:55*	*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		06/01/22 12:46	1
Methane	**8.5**		0.0050	0.0013	0.00063	mg/L		06/01/22 12:46	1
Ethylene	0.0014	U	0.0050	0.0014	0.00040	mg/L		06/01/22 12:46	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate Nitrite as N	**0.51**		0.10	0.050	0.044	mg/L		06/07/22 14:48	1
Sulfate	**25**		5.0	2.5	1.0	mg/L		06/03/22 02:33	1
Total Alkalinity as CaCO3	**210**		10	6.4	3.1	mg/L		05/26/22 17:24	1

Client Sample ID: G0053-22A
Lab Sample ID: 280-162622-21

Date Collected: 05/18/22 10:10
Matrix: Water
Date Received: 05/20/22 10:00

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		05/28/22 00:16	1

Client Sample ID: G0053-22A
Lab Sample ID: 280-162622-21

Date Collected: 05/18/22 10:10
Matrix: Water
Date Received: 05/20/22 10:00

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.21	ug/L		05/28/22 00:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	**2.9**	**J**	3.0	0.40	0.18	ug/L		05/28/22 00:16	1
1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.27	ug/L		05/28/22 00:16	1
1,1-Dichloroethane	0.80	U	1.0	0.80	0.22	ug/L		05/28/22 00:16	1
1,1-Dichloroethene	0.80	U	1.0	0.80	0.23	ug/L		05/28/22 00:16	1
1,2,3-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		05/28/22 00:16	1
1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		05/28/22 00:16	1
1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.47	ug/L		05/28/22 00:16	1
1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.15	ug/L		05/28/22 00:16	1
1,2-Dichloroethane	0.40	U	1.0	0.40	0.13	ug/L		05/28/22 00:16	1
1,2-Dichloropropane	0.40	U	1.0	0.40	0.18	ug/L		05/28/22 00:16	1
1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.13	ug/L		05/28/22 00:16	1
1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16	ug/L		05/28/22 00:16	1
2-Butanone (MEK)	4.0	U	6.0	4.0	2.0	ug/L		05/28/22 00:16	1
2-Hexanone	4.0	U	5.0	4.0	1.7	ug/L		05/28/22 00:16	1
4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	0.98	ug/L		05/28/22 00:16	1
Acetone	6.4	U	10	6.4	1.9	ug/L		05/28/22 00:16	1
Benzene	0.40	U	1.0	0.40	0.16	ug/L		05/28/22 00:16	1
Bromochloromethane	0.20	U	1.0	0.20	0.10	ug/L		05/28/22 00:16	1
Bromodichloromethane	0.40	U	1.0	0.40	0.17	ug/L		05/28/22 00:16	1
Bromoform	0.90	U	1.0	0.90	0.46	ug/L		05/28/22 00:16	1
Bromomethane	0.80	U	2.0	0.80	0.21	ug/L		05/28/22 00:16	1
Carbon disulfide	0.80	U	2.0	0.80	0.17	ug/L		05/28/22 00:16	1
Carbon tetrachloride	0.40	U	2.0	0.40	0.19	ug/L		05/28/22 00:16	1
Chlorobenzene	0.40	U	1.0	0.40	0.17	ug/L		05/28/22 00:16	1
Chloroethane	1.6	U	2.0	1.6	0.41	ug/L		05/28/22 00:16	1
Chloroform	0.40	U	1.0	0.40	0.16	ug/L		05/28/22 00:16	1
Chloromethane	0.80	U	2.0	0.80	0.30	ug/L		05/28/22 00:16	1
cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		05/28/22 00:16	1
cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16	ug/L		05/28/22 00:16	1
Cyclohexane	0.80	U	2.0	0.80	0.28	ug/L		05/28/22 00:16	1
Dibromochloromethane	0.40	U	1.0	0.40	0.17	ug/L		05/28/22 00:16	1
Dichlorodifluoromethane	0.80	U Q	2.0	0.80	0.31	ug/L		05/28/22 00:16	1
Ethylbenzene	0.40	U	1.0	0.40	0.16	ug/L		05/28/22 00:16	1
Ethylene Dibromide	0.40	U	1.0	0.40	0.18	ug/L		05/28/22 00:16	1
Isopropylbenzene	0.40	U	1.0	0.40	0.19	ug/L		05/28/22 00:16	1
Methyl acetate	4.0	U	5.0	4.0	1.6	ug/L		05/28/22 00:16	1
Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25	ug/L		05/28/22 00:16	1
Methylcyclohexane	0.40	U	2.0	0.40	0.10	ug/L		05/28/22 00:16	1
Methylene Chloride	2.0	U	5.0	2.0	0.94	ug/L		05/28/22 00:16	1
Styrene	0.80	U	1.0	0.80	0.36	ug/L		05/28/22 00:16	1
Tetrachloroethene	0.40	U	1.0	0.40	0.20	ug/L		05/28/22 00:16	1
Toluene	0.40	U	1.0	0.40	0.17	ug/L		05/28/22 00:16	1
trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		05/28/22 00:16	1
trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19	ug/L		05/28/22 00:16	1
Trichloroethene	0.40	U	1.0	0.40	0.16	ug/L		05/28/22 00:16	1
Trichlorofluoromethane	0.80	U	2.0	0.80	0.29	ug/L		05/28/22 00:16	1
Vinyl chloride	0.20	U	1.5	0.20	0.10	ug/L		05/28/22 00:16	1
Xylenes, Total	0.80	U	1.0	0.80	0.19	ug/L		05/28/22 00:16	1

Client Sample ID: G0053-22A
Lab Sample ID: 280-162622-21

Date Collected: 05/18/22 10:10
Matrix: Water
Date Received: 05/20/22 10:00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*81 - 118*		*05/28/22 00:16*	*1*
4-Bromofluorobenzene (Surr)	*110*		*85 - 114*		*05/28/22 00:16*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 119*		*05/28/22 00:16*	*1*
Toluene-d8 (Surr)	*102*		*89 - 112*		*05/28/22 00:16*	*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		06/01/22 13:12	1
Methane	**0.0016**	**J**	0.0050	0.0013	0.00063	mg/L		06/01/22 13:12	1
Ethylene	0.0014	U	0.0050	0.0014	0.00040	mg/L		06/01/22 13:12	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate Nitrite as N	**13**		0.50	0.25	0.22	mg/L		06/07/22 14:50	5
Sulfate	**50**		5.0	2.5	1.0	mg/L		06/03/22 02:49	1
Total Alkalinity as CaCO3	**140**		10	6.4	3.1	mg/L		05/26/22 17:30	1

Client Sample ID: G0069-22A
Lab Sample ID: 280-162622-22

Date Collected: 05/18/22 11:15
Matrix: Water
Date Received: 05/20/22 10:00

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		05/28/22 00:38	1
1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.21	ug/L		05/28/22 00:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	**3.5**		3.0	0.40	0.18	ug/L		05/28/22 00:38	1
1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.27	ug/L		05/28/22 00:38	1
1,1-Dichloroethane	0.80	U	1.0	0.80	0.22	ug/L		05/28/22 00:38	1
1,1-Dichloroethene	0.80	U	1.0	0.80	0.23	ug/L		05/28/22 00:38	1
1,2,3-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		05/28/22 00:38	1
1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		05/28/22 00:38	1
1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.47	ug/L		05/28/22 00:38	1
1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.15	ug/L		05/28/22 00:38	1
1,2-Dichloroethane	0.40	U	1.0	0.40	0.13	ug/L		05/28/22 00:38	1
1,2-Dichloropropane	0.40	U	1.0	0.40	0.18	ug/L		05/28/22 00:38	1
1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.13	ug/L		05/28/22 00:38	1
1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16	ug/L		05/28/22 00:38	1
2-Butanone (MEK)	4.0	U	6.0	4.0	2.0	ug/L		05/28/22 00:38	1
2-Hexanone	4.0	U	5.0	4.0	1.7	ug/L		05/28/22 00:38	1
4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	0.98	ug/L		05/28/22 00:38	1
Acetone	6.4	U	10	6.4	1.9	ug/L		05/28/22 00:38	1
Benzene	0.40	U	1.0	0.40	0.16	ug/L		05/28/22 00:38	1
Bromochloromethane	0.20	U	1.0	0.20	0.10	ug/L		05/28/22 00:38	1
Bromodichloromethane	0.40	U	1.0	0.40	0.17	ug/L		05/28/22 00:38	1
Bromoform	0.90	U	1.0	0.90	0.46	ug/L		05/28/22 00:38	1
Bromomethane	0.80	U	2.0	0.80	0.21	ug/L		05/28/22 00:38	1
Carbon disulfide	0.80	U	2.0	0.80	0.17	ug/L		05/28/22 00:38	1
Carbon tetrachloride	0.40	U	2.0	0.40	0.19	ug/L		05/28/22 00:38	1
Chlorobenzene	0.40	U	1.0	0.40	0.17	ug/L		05/28/22 00:38	1
Chloroethane	1.6	U	2.0	1.6	0.41	ug/L		05/28/22 00:38	1
Chloroform	0.40	U	1.0	0.40	0.16	ug/L		05/28/22 00:38	1

Client Sample ID: G0069-22A
Lab Sample ID: 280-162622-22

Date Collected: 05/18/22 11:15
Matrix: Water
Date Received: 05/20/22 10:00

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Chloromethane	0.80	U	2.0	0.80	0.30	ug/L		05/28/22 00:38	1
cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		05/28/22 00:38	1
cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16	ug/L		05/28/22 00:38	1
Cyclohexane	0.80	U	2.0	0.80	0.28	ug/L		05/28/22 00:38	1
Dibromochloromethane	0.40	U	1.0	0.40	0.17	ug/L		05/28/22 00:38	1
Dichlorodifluoromethane	0.80	U Q	2.0	0.80	0.31	ug/L		05/28/22 00:38	1
Ethylbenzene	0.40	U	1.0	0.40	0.16	ug/L		05/28/22 00:38	1
Ethylene Dibromide	0.40	U	1.0	0.40	0.18	ug/L		05/28/22 00:38	1
Isopropylbenzene	0.40	U	1.0	0.40	0.19	ug/L		05/28/22 00:38	1
Methyl acetate	4.0	U	5.0	4.0	1.6	ug/L		05/28/22 00:38	1
Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25	ug/L		05/28/22 00:38	1
Methylcyclohexane	0.40	U	2.0	0.40	0.10	ug/L		05/28/22 00:38	1
Methylene Chloride	2.0	U	5.0	2.0	0.94	ug/L		05/28/22 00:38	1
Styrene	0.80	U	1.0	0.80	0.36	ug/L		05/28/22 00:38	1
Tetrachloroethene	0.40	U	1.0	0.40	0.20	ug/L		05/28/22 00:38	1
Toluene	0.40	U	1.0	0.40	0.17	ug/L		05/28/22 00:38	1
trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		05/28/22 00:38	1
trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19	ug/L		05/28/22 00:38	1
Trichloroethene	0.40	U	1.0	0.40	0.16	ug/L		05/28/22 00:38	1
Trichlorofluoromethane	0.80	U	2.0	0.80	0.29	ug/L		05/28/22 00:38	1
Vinyl chloride	0.20	U	1.5	0.20	0.10	ug/L		05/28/22 00:38	1
Xylenes, Total	0.80	U	1.0	0.80	0.19	ug/L		05/28/22 00:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*81 - 118*		*05/28/22 00:38*	*1*
4-Bromofluorobenzene (Surr)	*108*		*85 - 114*		*05/28/22 00:38*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 119*		*05/28/22 00:38*	*1*
Toluene-d8 (Surr)	*104*		*89 - 112*		*05/28/22 00:38*	*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		06/01/22 13:25	1
Methane	**0.0023**	**J**	0.0050	0.0013	0.00063	mg/L		06/01/22 13:25	1
Ethylene	0.0014	U	0.0050	0.0014	0.00040	mg/L		06/01/22 13:25	1

Client Sample ID: 5-18 TB
Lab Sample ID: 280-162622-23

Date Collected: 05/18/22 08:00
Matrix: Water
Date Received: 05/20/22 10:00

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		05/27/22 21:27	1
1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.21	ug/L		05/27/22 21:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.40	U	3.0	0.40	0.18	ug/L		05/27/22 21:27	1
1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.27	ug/L		05/27/22 21:27	1
1,1-Dichloroethane	0.80	U	1.0	0.80	0.22	ug/L		05/27/22 21:27	1
1,1-Dichloroethene	0.80	U	1.0	0.80	0.23	ug/L		05/27/22 21:27	1
1,2,3-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		05/27/22 21:27	1
1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		05/27/22 21:27	1
1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.47	ug/L		05/27/22 21:27	1

Client Sample ID: 5-18 TB
Lab Sample ID: 280-162622-23

Date Collected: 05/18/22 08:00
Matrix: Water

Date Received: 05/20/22 10:00

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.15	ug/L		05/27/22 21:27	1
1,2-Dichloroethane	0.40	U	1.0	0.40	0.13	ug/L		05/27/22 21:27	1
1,2-Dichloropropane	0.40	U	1.0	0.40	0.18	ug/L		05/27/22 21:27	1
1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.13	ug/L		05/27/22 21:27	1
1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16	ug/L		05/27/22 21:27	1
2-Butanone (MEK)	4.0	U	6.0	4.0	2.0	ug/L		05/27/22 21:27	1
2-Hexanone	4.0	U	5.0	4.0	1.7	ug/L		05/27/22 21:27	1
4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	0.98	ug/L		05/27/22 21:27	1
Acetone	6.4	U	10	6.4	1.9	ug/L		05/27/22 21:27	1
Benzene	0.40	U	1.0	0.40	0.16	ug/L		05/27/22 21:27	1
Bromochloromethane	0.20	U	1.0	0.20	0.10	ug/L		05/27/22 21:27	1
Bromodichloromethane	0.40	U	1.0	0.40	0.17	ug/L		05/27/22 21:27	1
Bromoform	0.90	U	1.0	0.90	0.46	ug/L		05/27/22 21:27	1
Bromomethane	0.80	U	2.0	0.80	0.21	ug/L		05/27/22 21:27	1
Carbon disulfide	0.80	U	2.0	0.80	0.17	ug/L		05/27/22 21:27	1
Carbon tetrachloride	0.40	U	2.0	0.40	0.19	ug/L		05/27/22 21:27	1
Chlorobenzene	0.40	U	1.0	0.40	0.17	ug/L		05/27/22 21:27	1
Chloroethane	1.6	U	2.0	1.6	0.41	ug/L		05/27/22 21:27	1
Chloroform	0.40	U	1.0	0.40	0.16	ug/L		05/27/22 21:27	1
Chloromethane	0.80	U	2.0	0.80	0.30	ug/L		05/27/22 21:27	1
cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		05/27/22 21:27	1
cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16	ug/L		05/27/22 21:27	1
Cyclohexane	0.80	U	2.0	0.80	0.28	ug/L		05/27/22 21:27	1
Dibromochloromethane	0.40	U	1.0	0.40	0.17	ug/L		05/27/22 21:27	1
Dichlorodifluoromethane	0.80	U Q	2.0	0.80	0.31	ug/L		05/27/22 21:27	1
Ethylbenzene	0.40	U	1.0	0.40	0.16	ug/L		05/27/22 21:27	1
Ethylene Dibromide	0.40	U	1.0	0.40	0.18	ug/L		05/27/22 21:27	1
Isopropylbenzene	0.40	U	1.0	0.40	0.19	ug/L		05/27/22 21:27	1
Methyl acetate	4.0	U	5.0	4.0	1.6	ug/L		05/27/22 21:27	1
Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25	ug/L		05/27/22 21:27	1
Methylcyclohexane	0.40	U	2.0	0.40	0.10	ug/L		05/27/22 21:27	1
Methylene Chloride	2.0	U	5.0	2.0	0.94	ug/L		05/27/22 21:27	1
Styrene	0.80	U	1.0	0.80	0.36	ug/L		05/27/22 21:27	1
Tetrachloroethene	0.40	U	1.0	0.40	0.20	ug/L		05/27/22 21:27	1
Toluene	0.40	U	1.0	0.40	0.17	ug/L		05/27/22 21:27	1
trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		05/27/22 21:27	1
trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19	ug/L		05/27/22 21:27	1
Trichloroethene	0.40	U	1.0	0.40	0.16	ug/L		05/27/22 21:27	1
Trichlorofluoromethane	0.80	U	2.0	0.80	0.29	ug/L		05/27/22 21:27	1
Vinyl chloride	0.20	U	1.5	0.20	0.10	ug/L		05/27/22 21:27	1
Xylenes, Total	0.80	U	1.0	0.80	0.19	ug/L		05/27/22 21:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*81 - 118*		*05/27/22 21:27*	*1*
4-Bromofluorobenzene (Surr)	*108*		*85 - 114*		*05/27/22 21:27*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 119*		*05/27/22 21:27*	*1*
Toluene-d8 (Surr)	*103*		*89 - 112*		*05/27/22 21:27*	*1*

Client Sample ID: SHGW04-22A
Lab Sample ID: 280-162622-24

Date Collected: 05/18/22 12:35
Matrix: Water
Date Received: 05/20/22 10:00

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		05/28/22 00:59	1
1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.21	ug/L		05/28/22 00:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	**2.9**	**J**	3.0	0.40	0.18	ug/L		05/28/22 00:59	1
1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.27	ug/L		05/28/22 00:59	1
1,1-Dichloroethane	0.80	U	1.0	0.80	0.22	ug/L		05/28/22 00:59	1
1,1-Dichloroethene	0.80	U	1.0	0.80	0.23	ug/L		05/28/22 00:59	1
1,2,3-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		05/28/22 00:59	1
1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		05/28/22 00:59	1
1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.47	ug/L		05/28/22 00:59	1
1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.15	ug/L		05/28/22 00:59	1
1,2-Dichloroethane	0.40	U	1.0	0.40	0.13	ug/L		05/28/22 00:59	1
1,2-Dichloropropane	0.40	U	1.0	0.40	0.18	ug/L		05/28/22 00:59	1
1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.13	ug/L		05/28/22 00:59	1
1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16	ug/L		05/28/22 00:59	1
2-Butanone (MEK)	4.0	U	6.0	4.0	2.0	ug/L		05/28/22 00:59	1
2-Hexanone	4.0	U	5.0	4.0	1.7	ug/L		05/28/22 00:59	1
4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	0.98	ug/L		05/28/22 00:59	1
Acetone	**3.8**	**J**	10	6.4	1.9	ug/L		05/28/22 00:59	1
Benzene	0.40	U M	1.0	0.40	0.16	ug/L		05/28/22 00:59	1
Bromochloromethane	0.20	U	1.0	0.20	0.10	ug/L		05/28/22 00:59	1
Bromodichloromethane	0.40	U	1.0	0.40	0.17	ug/L		05/28/22 00:59	1
Bromoform	0.90	U	1.0	0.90	0.46	ug/L		05/28/22 00:59	1
Bromomethane	0.80	U	2.0	0.80	0.21	ug/L		05/28/22 00:59	1
Carbon disulfide	0.80	U	2.0	0.80	0.17	ug/L		05/28/22 00:59	1
Carbon tetrachloride	0.40	U	2.0	0.40	0.19	ug/L		05/28/22 00:59	1
Chlorobenzene	0.40	U	1.0	0.40	0.17	ug/L		05/28/22 00:59	1
Chloroethane	1.6	U	2.0	1.6	0.41	ug/L		05/28/22 00:59	1
Chloroform	0.40	U	1.0	0.40	0.16	ug/L		05/28/22 00:59	1
Chloromethane	0.80	U	2.0	0.80	0.30	ug/L		05/28/22 00:59	1
cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		05/28/22 00:59	1
cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16	ug/L		05/28/22 00:59	1
Cyclohexane	0.80	U	2.0	0.80	0.28	ug/L		05/28/22 00:59	1
Dibromochloromethane	0.40	U	1.0	0.40	0.17	ug/L		05/28/22 00:59	1
Dichlorodifluoromethane	0.80	U Q	2.0	0.80	0.31	ug/L		05/28/22 00:59	1
Ethylbenzene	0.40	U	1.0	0.40	0.16	ug/L		05/28/22 00:59	1
Ethylene Dibromide	0.40	U	1.0	0.40	0.18	ug/L		05/28/22 00:59	1
Isopropylbenzene	0.40	U	1.0	0.40	0.19	ug/L		05/28/22 00:59	1
Methyl acetate	4.0	U	5.0	4.0	1.6	ug/L		05/28/22 00:59	1
Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25	ug/L		05/28/22 00:59	1
Methylcyclohexane	0.40	U	2.0	0.40	0.10	ug/L		05/28/22 00:59	1
Methylene Chloride	2.0	U	5.0	2.0	0.94	ug/L		05/28/22 00:59	1
Styrene	0.80	U	1.0	0.80	0.36	ug/L		05/28/22 00:59	1
Tetrachloroethene	0.40	U	1.0	0.40	0.20	ug/L		05/28/22 00:59	1
Toluene	0.40	U	1.0	0.40	0.17	ug/L		05/28/22 00:59	1
trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		05/28/22 00:59	1
trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19	ug/L		05/28/22 00:59	1
Trichloroethene	0.40	U	1.0	0.40	0.16	ug/L		05/28/22 00:59	1
Trichlorofluoromethane	0.80	U	2.0	0.80	0.29	ug/L		05/28/22 00:59	1
Vinyl chloride	0.20	U	1.5	0.20	0.10	ug/L		05/28/22 00:59	1

Client Sample ID: SHGW04-22A
Lab Sample ID: 280-162622-24

Date Collected: 05/18/22 12:35
Matrix: Water
Date Received: 05/20/22 10:00

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Xylenes, Total	**0.62**	**J**	1.0	0.80	0.19	ug/L		05/28/22 00:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*81 - 118*		*05/28/22 00:59*	*1*
4-Bromofluorobenzene (Surr)	*111*		*85 - 114*		*05/28/22 00:59*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 119*		*05/28/22 00:59*	*1*
Toluene-d8 (Surr)	*102*		*89 - 112*		*05/28/22 00:59*	*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		06/01/22 13:38	1
Methane	**0.25**		0.0050	0.0013	0.00063	mg/L		06/01/22 13:38	1
Ethylene	0.0014	U	0.0050	0.0014	0.00040	mg/L		06/01/22 13:38	1

Client Sample ID: SHGW03-22A
Lab Sample ID: 280-162622-25

Date Collected: 05/18/22 15:20
Matrix: Water
Date Received: 05/20/22 10:00

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		05/28/22 01:20	1
1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.21	ug/L		05/28/22 01:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	**1.5**	**J**	3.0	0.40	0.18	ug/L		05/28/22 01:20	1
1,1,2-Trichloroethane	**4.1**		1.0	0.80	0.27	ug/L		05/28/22 01:20	1
1,1-Dichloroethane	0.80	U	1.0	0.80	0.22	ug/L		05/28/22 01:20	1
1,1-Dichloroethene	0.80	U	1.0	0.80	0.23	ug/L		05/28/22 01:20	1
1,2,3-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		05/28/22 01:20	1
1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		05/28/22 01:20	1
1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.47	ug/L		05/28/22 01:20	1
1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.15	ug/L		05/28/22 01:20	1
1,2-Dichloroethane	0.40	U	1.0	0.40	0.13	ug/L		05/28/22 01:20	1
1,2-Dichloropropane	0.40	U	1.0	0.40	0.18	ug/L		05/28/22 01:20	1
1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.13	ug/L		05/28/22 01:20	1
1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16	ug/L		05/28/22 01:20	1
2-Butanone (MEK)	4.0	U	6.0	4.0	2.0	ug/L		05/28/22 01:20	1
2-Hexanone	4.0	U	5.0	4.0	1.7	ug/L		05/28/22 01:20	1
4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	0.98	ug/L		05/28/22 01:20	1
Acetone	6.4	U	10	6.4	1.9	ug/L		05/28/22 01:20	1
Benzene	0.40	U	1.0	0.40	0.16	ug/L		05/28/22 01:20	1
Bromochloromethane	0.20	U	1.0	0.20	0.10	ug/L		05/28/22 01:20	1
Bromodichloromethane	0.40	U	1.0	0.40	0.17	ug/L		05/28/22 01:20	1
Bromoform	0.90	U	1.0	0.90	0.46	ug/L		05/28/22 01:20	1
Bromomethane	0.80	U	2.0	0.80	0.21	ug/L		05/28/22 01:20	1
Carbon disulfide	0.80	U	2.0	0.80	0.17	ug/L		05/28/22 01:20	1
Carbon tetrachloride	0.40	U	2.0	0.40	0.19	ug/L		05/28/22 01:20	1
Chlorobenzene	0.40	U	1.0	0.40	0.17	ug/L		05/28/22 01:20	1
Chloroethane	1.6	U	2.0	1.6	0.41	ug/L		05/28/22 01:20	1
Chloroform	0.40	U	1.0	0.40	0.16	ug/L		05/28/22 01:20	1
Chloromethane	0.80	U	2.0	0.80	0.30	ug/L		05/28/22 01:20	1
cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		05/28/22 01:20	1

Client Sample ID: SHGW03-22A
Lab Sample ID: 280-162622-25

Date Collected: 05/18/22 15:20
Matrix: Water
Date Received: 05/20/22 10:00

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16	ug/L		05/28/22 01:20	1
Cyclohexane	0.80	U	2.0	0.80	0.28	ug/L		05/28/22 01:20	1
Dibromochloromethane	0.40	U	1.0	0.40	0.17	ug/L		05/28/22 01:20	1
Dichlorodifluoromethane	0.80	U Q	2.0	0.80	0.31	ug/L		05/28/22 01:20	1
Ethylbenzene	**0.33**	**J**	1.0	0.40	0.16	ug/L		05/28/22 01:20	1
Ethylene Dibromide	0.40	U	1.0	0.40	0.18	ug/L		05/28/22 01:20	1
Isopropylbenzene	0.40	U	1.0	0.40	0.19	ug/L		05/28/22 01:20	1
Methyl acetate	4.0	U	5.0	4.0	1.6	ug/L		05/28/22 01:20	1
Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25	ug/L		05/28/22 01:20	1
Methylcyclohexane	0.40	U	2.0	0.40	0.10	ug/L		05/28/22 01:20	1
Methylene Chloride	2.0	U	5.0	2.0	0.94	ug/L		05/28/22 01:20	1
Styrene	0.80	U	1.0	0.80	0.36	ug/L		05/28/22 01:20	1
Tetrachloroethene	0.40	U	1.0	0.40	0.20	ug/L		05/28/22 01:20	1
Toluene	0.40	U	1.0	0.40	0.17	ug/L		05/28/22 01:20	1
trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		05/28/22 01:20	1
trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19	ug/L		05/28/22 01:20	1
Trichloroethene	0.40	U	1.0	0.40	0.16	ug/L		05/28/22 01:20	1
Trichlorofluoromethane	0.80	U	2.0	0.80	0.29	ug/L		05/28/22 01:20	1
Vinyl chloride	0.20	U	1.5	0.20	0.10	ug/L		05/28/22 01:20	1
Xylenes, Total	**0.40**	**J**	1.0	0.80	0.19	ug/L		05/28/22 01:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*81 - 118*		*05/28/22 01:20*	*1*
4-Bromofluorobenzene (Surr)	*110*		*85 - 114*		*05/28/22 01:20*	*1*
Dibromofluoromethane (Surr)	*103*		*80 - 119*		*05/28/22 01:20*	*1*
Toluene-d8 (Surr)	*101*		*89 - 112*		*05/28/22 01:20*	*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		06/01/22 13:51	1
Methane	**0.27**		0.0050	0.0013	0.00063	mg/L		06/01/22 13:51	1
Ethylene	0.0014	U	0.0050	0.0014	0.00040	mg/L		06/01/22 13:51	1

Client Sample ID: SAMW1-22A
Lab Sample ID: 280-162622-26

Date Collected: 05/18/22 14:10
Matrix: Water
Date Received: 05/20/22 10:00

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		05/28/22 01:41	1
1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.21	ug/L		05/28/22 01:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	**2.2**	**J**	3.0	0.40	0.18	ug/L		05/28/22 01:41	1
1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.27	ug/L		05/28/22 01:41	1
1,1-Dichloroethane	0.80	U	1.0	0.80	0.22	ug/L		05/28/22 01:41	1
1,1-Dichloroethene	0.80	U	1.0	0.80	0.23	ug/L		05/28/22 01:41	1
1,2,3-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		05/28/22 01:41	1
1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		05/28/22 01:41	1
1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.47	ug/L		05/28/22 01:41	1
1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.15	ug/L		05/28/22 01:41	1
1,2-Dichloroethane	0.40	U	1.0	0.40	0.13	ug/L		05/28/22 01:41	1

Client Sample ID: SAMW1-22A

Date Collected: 05/18/22 14:10
Date Received: 05/20/22 10:00

Lab Sample ID: 280-162622-26

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,2-Dichloropropane	0.40	U	1.0	0.40	0.18	ug/L		05/28/22 01:41	1
1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.13	ug/L		05/28/22 01:41	1
1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16	ug/L		05/28/22 01:41	1
2-Butanone (MEK)	4.0	U	6.0	4.0	2.0	ug/L		05/28/22 01:41	1
2-Hexanone	4.0	U	5.0	4.0	1.7	ug/L		05/28/22 01:41	1
4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	0.98	ug/L		05/28/22 01:41	1
Acetone	6.4	U	10	6.4	1.9	ug/L		05/28/22 01:41	1
Benzene	0.40	U	1.0	0.40	0.16	ug/L		05/28/22 01:41	1
Bromochloromethane	0.20	U	1.0	0.20	0.10	ug/L		05/28/22 01:41	1
Bromodichloromethane	0.40	U	1.0	0.40	0.17	ug/L		05/28/22 01:41	1
Bromoform	0.90	U	1.0	0.90	0.46	ug/L		05/28/22 01:41	1
Bromomethane	0.80	U	2.0	0.80	0.21	ug/L		05/28/22 01:41	1
Carbon disulfide	0.80	U	2.0	0.80	0.17	ug/L		05/28/22 01:41	1
Carbon tetrachloride	0.40	U	2.0	0.40	0.19	ug/L		05/28/22 01:41	1
Chlorobenzene	0.40	U	1.0	0.40	0.17	ug/L		05/28/22 01:41	1
Chloroethane	1.6	U	2.0	1.6	0.41	ug/L		05/28/22 01:41	1
Chloroform	0.40	U	1.0	0.40	0.16	ug/L		05/28/22 01:41	1
Chloromethane	0.80	U	2.0	0.80	0.30	ug/L		05/28/22 01:41	1
cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		05/28/22 01:41	1
cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16	ug/L		05/28/22 01:41	1
Cyclohexane	0.80	U	2.0	0.80	0.28	ug/L		05/28/22 01:41	1
Dibromochloromethane	0.40	U	1.0	0.40	0.17	ug/L		05/28/22 01:41	1
Dichlorodifluoromethane	0.80	U Q	2.0	0.80	0.31	ug/L		05/28/22 01:41	1
Ethylbenzene	0.40	U	1.0	0.40	0.16	ug/L		05/28/22 01:41	1
Ethylene Dibromide	0.40	U	1.0	0.40	0.18	ug/L		05/28/22 01:41	1
Isopropylbenzene	0.40	U	1.0	0.40	0.19	ug/L		05/28/22 01:41	1
Methyl acetate	4.0	U	5.0	4.0	1.6	ug/L		05/28/22 01:41	1
Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25	ug/L		05/28/22 01:41	1
Methylcyclohexane	0.40	U	2.0	0.40	0.10	ug/L		05/28/22 01:41	1
Methylene Chloride	2.0	U	5.0	2.0	0.94	ug/L		05/28/22 01:41	1
Styrene	0.80	U	1.0	0.80	0.36	ug/L		05/28/22 01:41	1
Tetrachloroethene	0.40	U	1.0	0.40	0.20	ug/L		05/28/22 01:41	1
Toluene	0.40	U	1.0	0.40	0.17	ug/L		05/28/22 01:41	1
trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		05/28/22 01:41	1
trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19	ug/L		05/28/22 01:41	1
Trichloroethene	0.40	U	1.0	0.40	0.16	ug/L		05/28/22 01:41	1
Trichlorofluoromethane	0.80	U	2.0	0.80	0.29	ug/L		05/28/22 01:41	1
Vinyl chloride	0.20	U	1.5	0.20	0.10	ug/L		05/28/22 01:41	1
Xylenes, Total	0.80	U	1.0	0.80	0.19	ug/L		05/28/22 01:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*81 - 118*		*05/28/22 01:41*	*1*
4-Bromofluorobenzene (Surr)	*106*		*85 - 114*		*05/28/22 01:41*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 119*		*05/28/22 01:41*	*1*
Toluene-d8 (Surr)	*104*		*89 - 112*		*05/28/22 01:41*	*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		06/01/22 14:04	1
Methane	**0.064**		0.0050	0.0013	0.00063	mg/L		06/01/22 14:04	1

Client Sample ID: SAMW1-22A
Lab Sample ID: 280-162622-26

Date Collected: 05/18/22 14:10
Matrix: Water
Date Received: 05/20/22 10:00

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethylene	0.0014	U	0.0050	0.0014	0.00040	mg/L		06/01/22 14:04	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate Nitrite as N	**0.54**		0.10	0.050	0.044	mg/L		06/07/22 14:52	1
Sulfate	**26**	**D**	25	13	5.2	mg/L		06/03/22 03:05	5
Total Alkalinity as CaCO3	**140**		10	6.4	3.1	mg/L		05/26/22 17:36	1

Default Detection Limits

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

Job ID: 280-162622-1

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: 280-162622-1

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

General Chemistry

Analyte	LOQ	DL	Units
Ammonia	0.10	0.029	mg/L
Nitrate Nitrite as N	0.10	0.044	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	1.6	mg/L

General Chemistry - Dissolved

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

Surrogate Summary

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

Job ID: 280-162622-1

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)
280-162622-19	SHGW02-22A	101	109	101	102
280-162622-20	SHGW05-22A	98	111	98	101
280-162622-21	G0053-22A	99	110	100	102
280-162622-22	G0069-22A	100	108	99	104
280-162622-23	5-18 TB	101	108	101	103
280-162622-24	SHGW04-22A	98	111	101	102
280-162622-25	SHGW03-22A	101	110	103	101
280-162622-26	SAMW1-22A	101	106	100	104
LCS 280-576482/1002	Lab Control Sample	96	110	97	102
LCSD 280-576482/5	Lab Control Sample Dup	97	108	95	103
MB 280-576482/9	Method Blank	101	108	101	100

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)
280-162622-13	G0069-22A	82	57 Q
280-162622-13 - RE	G0069-22A	14 Q	26 Q
280-162622-14	SHGW03-22A	82	43 Q
280-162622-14 - RE	SHGW03-22A	6 Q	10 Q
280-162622-15	SHGW04-22A	91	95
280-162622-15 - RE	SHGW04-22A	27 Q	24 Q
LCS 280-576113/2-A	Lab Control Sample	94	46 Q
LCS 280-576710/2-A - RE	Lab Control Sample	10 Q	9 Q
LCSD 280-576113/3-A	Lab Control Sample Dup	96	42 Q
LCSD 280-576710/3-A - RE	Lab Control Sample Dup	10 Q	9 Q
MB 280-576113/1-A	Method Blank	78	40 Q
MB 280-576710/1-A - RE	Method Blank	7 Q	7 Q

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)
280-162622-1	G0119-22A	99 M
280-162622-2	G0121-22A	100 M
280-162622-3	G0101-22A	116
280-162622-4	G0100-22A	96 M

Surrogate Summary

Client: Brice Environmental Services, Corp
Job ID: 280-162622-1
Project/Site: Cornhusker (CHAAP)

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

Matrix: Water
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	12DNB1 (83-119)
280-162622-5	G0122-22A	102 M
280-162622-6	G0066R-22A	102 M
280-162622-7	G0024-22A	108 M
280-162622-8	G0115-22A	108 M
280-162622-9	G0095-22A	111 M
280-162622-10	PZ018-22A	109 M
280-162622-11	PZ020-22A	107 M
280-162622-12	G0077-22A	112 M
280-162622-16	G0311-22A	118 M
280-162622-17	G0111-22A	128 M Q
280-162622-18	G0123-22A	120 M Q
LCS 280-576154/2-A	Lab Control Sample	96
LCS 280-576154/4-A	Lab Control Sample	97 M
LCSD 280-576154/3-A	Lab Control Sample Dup	97
LCSD 280-576154/5-A	Lab Control Sample Dup	101 M
MB 280-576154/1-A	Method Blank	103 M

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)
280-162622-1	G0119-22A	96
280-162622-2	G0121-22A	91
280-162622-4	G0100-22A	92
280-162622-5	G0122-22A	102 M
280-162622-6	G0066R-22A	104
280-162622-7	G0024-22A	111
280-162622-10	PZ018-22A	97 M
280-162622-11	PZ020-22A	106 M
280-162622-12	G0077-22A	113 M
280-162622-16	G0311-22A	97 M
280-162622-17	G0111-22A	101 M
280-162622-18	G0123-22A	112

Surrogate Legend

12DNB = 1,2-Dinitrobenzene

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

Lab Sample ID: MB 280-576482/9
Matrix: Water
Analysis Batch: 576482

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		05/27/22 20:24	1
1,1,2,2-Tetrachloroethane	0.80	U	1.0	0.80	0.21	ug/L		05/27/22 20:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.40	U	3.0	0.40	0.18	ug/L		05/27/22 20:24	1
1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.27	ug/L		05/27/22 20:24	1
1,1-Dichloroethane	0.80	U	1.0	0.80	0.22	ug/L		05/27/22 20:24	1
1,1-Dichloroethene	0.80	U	1.0	0.80	0.23	ug/L		05/27/22 20:24	1
1,2,3-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		05/27/22 20:24	1
1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.21	ug/L		05/27/22 20:24	1
1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.47	ug/L		05/27/22 20:24	1
1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.15	ug/L		05/27/22 20:24	1
1,2-Dichloroethane	0.40	U	1.0	0.40	0.13	ug/L		05/27/22 20:24	1
1,2-Dichloropropane	0.40	U	1.0	0.40	0.18	ug/L		05/27/22 20:24	1
1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.13	ug/L		05/27/22 20:24	1
1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16	ug/L		05/27/22 20:24	1
2-Butanone (MEK)	4.0	U	6.0	4.0	2.0	ug/L		05/27/22 20:24	1
2-Hexanone	4.0	U	5.0	4.0	1.7	ug/L		05/27/22 20:24	1
4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	0.98	ug/L		05/27/22 20:24	1
Acetone	6.4	U	10	6.4	1.9	ug/L		05/27/22 20:24	1
Benzene	0.40	U	1.0	0.40	0.16	ug/L		05/27/22 20:24	1
Bromochloromethane	0.20	U	1.0	0.20	0.10	ug/L		05/27/22 20:24	1
Bromodichloromethane	0.40	U	1.0	0.40	0.17	ug/L		05/27/22 20:24	1
Bromoform	0.90	U	1.0	0.90	0.46	ug/L		05/27/22 20:24	1
Bromomethane	0.80	U	2.0	0.80	0.21	ug/L		05/27/22 20:24	1
Carbon disulfide	0.80	U	2.0	0.80	0.17	ug/L		05/27/22 20:24	1
Carbon tetrachloride	0.40	U	2.0	0.40	0.19	ug/L		05/27/22 20:24	1
Chlorobenzene	0.40	U	1.0	0.40	0.17	ug/L		05/27/22 20:24	1
Chloroethane	1.6	U	2.0	1.6	0.41	ug/L		05/27/22 20:24	1
Chloroform	0.40	U	1.0	0.40	0.16	ug/L		05/27/22 20:24	1
Chloromethane	0.80	U	2.0	0.80	0.30	ug/L		05/27/22 20:24	1
cis-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		05/27/22 20:24	1
cis-1,3-Dichloropropene	0.40	U	1.0	0.40	0.16	ug/L		05/27/22 20:24	1
Cyclohexane	0.80	U	2.0	0.80	0.28	ug/L		05/27/22 20:24	1
Dibromochloromethane	0.40	U	1.0	0.40	0.17	ug/L		05/27/22 20:24	1
Dichlorodifluoromethane	0.80	U	2.0	0.80	0.31	ug/L		05/27/22 20:24	1
Ethylbenzene	0.40	U	1.0	0.40	0.16	ug/L		05/27/22 20:24	1
Ethylene Dibromide	0.40	U	1.0	0.40	0.18	ug/L		05/27/22 20:24	1
Isopropylbenzene	0.40	U	1.0	0.40	0.19	ug/L		05/27/22 20:24	1
Methyl acetate	4.0	U	5.0	4.0	1.6	ug/L		05/27/22 20:24	1
Methyl tert-butyl ether	0.80	U	5.0	0.80	0.25	ug/L		05/27/22 20:24	1
Methylcyclohexane	0.40	U	2.0	0.40	0.10	ug/L		05/27/22 20:24	1
Methylene Chloride	2.0	U	5.0	2.0	0.94	ug/L		05/27/22 20:24	1
Styrene	0.80	U	1.0	0.80	0.36	ug/L		05/27/22 20:24	1
Tetrachloroethene	0.40	U	1.0	0.40	0.20	ug/L		05/27/22 20:24	1
Toluene	0.40	U	1.0	0.40	0.17	ug/L		05/27/22 20:24	1
trans-1,2-Dichloroethene	0.40	U	1.0	0.40	0.15	ug/L		05/27/22 20:24	1
trans-1,3-Dichloropropene	0.40	U	1.0	0.40	0.19	ug/L		05/27/22 20:24	1
Trichloroethene	0.40	U	1.0	0.40	0.16	ug/L		05/27/22 20:24	1
Trichlorofluoromethane	0.80	U	2.0	0.80	0.29	ug/L		05/27/22 20:24	1

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

Lab Sample ID: MB 280-576482/9
Matrix: Water
Analysis Batch: 576482

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		05/27/22 20:24	1
Xylenes, Total	0.80	U	1.0	0.80	0.19	ug/L		05/27/22 20:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*81 - 118*		*05/27/22 20:24*	*1*
4-Bromofluorobenzene (Surr)	*108*		*85 - 114*		*05/27/22 20:24*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 119*		*05/27/22 20:24*	*1*
Toluene-d8 (Surr)	*100*		*89 - 112*		*05/27/22 20:24*	*1*

Lab Sample ID: LCS 280-576482/1002
Matrix: Water
Analysis Batch: 576482

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	50.0	46.8		ug/L		94	74 - 131
1,1,2,2-Tetrachloroethane	50.0	48.4		ug/L		97	71 - 121
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	43.2		ug/L		86	70 - 136
1,1,2-Trichloroethane	50.0	50.1		ug/L		100	80 - 119
1,1-Dichloroethane	50.0	44.8		ug/L		90	77 - 125
1,1-Dichloroethene	50.0	43.8		ug/L		88	71 - 131
1,2,3-Trichlorobenzene	50.0	41.3		ug/L		83	69 - 129
1,2,4-Trichlorobenzene	50.0	42.8		ug/L		86	69 - 130
1,2-Dibromo-3-Chloropropane	50.0	43.0		ug/L		86	62 - 128
1,2-Dichlorobenzene	50.0	47.1		ug/L		94	80 - 119
1,2-Dichloroethane	50.0	44.7		ug/L		89	73 - 128
1,2-Dichloropropane	50.0	47.5		ug/L		95	78 - 122
1,3-Dichlorobenzene	50.0	47.6		ug/L		95	80 - 119
1,4-Dichlorobenzene	50.0	46.3		ug/L		93	79 - 118
2-Butanone (MEK)	200	202		ug/L		101	56 - 143
2-Hexanone	200	200		ug/L		100	57 - 139
4-Methyl-2-pentanone (MIBK)	200	204		ug/L		102	67 - 130
Acetone	200	174		ug/L		87	39 - 160
Benzene	50.0	46.7		ug/L		93	79 - 120
Bromochloromethane	50.0	43.3		ug/L		87	78 - 123
Bromodichloromethane	50.0	47.9		ug/L		96	79 - 125
Bromoform	50.0	46.5		ug/L		93	66 - 130
Bromomethane	50.0	53.9		ug/L		108	53 - 141
Carbon disulfide	50.0	42.7		ug/L		85	64 - 133
Carbon tetrachloride	50.0	46.1		ug/L		92	72 - 136
Chlorobenzene	50.0	46.9		ug/L		94	82 - 118
Chloroethane	50.0	54.0		ug/L		108	60 - 138
Chloroform	50.0	46.8		ug/L		94	79 - 124
Chloromethane	50.0	46.1		ug/L		92	50 - 139
cis-1,2-Dichloroethene	50.0	47.7		ug/L		95	78 - 123
cis-1,3-Dichloropropene	50.0	46.4		ug/L		93	75 - 124
Cyclohexane	50.0	45.1		ug/L		90	71 - 130
Dibromochloromethane	50.0	49.7		ug/L		99	74 - 126
Dichlorodifluoromethane	50.0	48.1		ug/L		96	32 - 152

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

Lab Sample ID: LCS 280-576482/1002
Matrix: Water
Analysis Batch: 576482

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Ethylbenzene			50.0	47.0		ug/L		94	79 - 121		
Ethylene Dibromide			50.0	48.5		ug/L		97	77 - 121		
Isopropylbenzene			50.0	52.1		ug/L		104	72 - 131		
Methyl acetate			100	95.1		ug/L		95	56 - 136		
Methyl tert-butyl ether			50.0	52.0		ug/L		104	71 - 124		
Methylcyclohexane			50.0	45.3		ug/L		91	72 - 132		
Methylene Chloride			50.0	43.2		ug/L		86	74 - 124		
Styrene			50.0	51.4		ug/L		103	78 - 123		
Tetrachloroethene			50.0	42.8		ug/L		86	74 - 129		
Toluene			50.0	47.0		ug/L		94	80 - 121		
trans-1,2-Dichloroethene			50.0	46.0		ug/L		92	75 - 124		
trans-1,3-Dichloropropene			50.0	50.1		ug/L		100	73 - 127		
Trichloroethene			50.0	46.5		ug/L		93	79 - 123		
Trichlorofluoromethane			50.0	50.8		ug/L		102	65 - 141		
Vinyl chloride			50.0	45.8		ug/L		92	58 - 137		
Xylenes, Total			100	96.0		ug/L		96	79 - 121		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*81 - 118*
4-Bromofluorobenzene (Surr)	*110*		*85 - 114*
Dibromofluoromethane (Surr)	*97*		*80 - 119*
Toluene-d8 (Surr)	*102*		*89 - 112*

Lab Sample ID: LCSD 280-576482/5
Matrix: Water
Analysis Batch: 576482

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			50.0	52.4		ug/L		105	74 - 131	11	20
1,1,2,2-Tetrachloroethane			50.0	50.0		ug/L		100	71 - 121	3	20
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	52.1		ug/L		104	70 - 136	19	20
1,1,2-Trichloroethane			50.0	48.1		ug/L		96	80 - 119	4	20
1,1-Dichloroethane			50.0	48.1		ug/L		96	77 - 125	7	20
1,1-Dichloroethene			50.0	52.8		ug/L		106	71 - 131	19	20
1,2,3-Trichlorobenzene			50.0	39.3		ug/L		79	69 - 129	5	20
1,2,4-Trichlorobenzene			50.0	44.5		ug/L		89	69 - 130	4	20
1,2-Dibromo-3-Chloropropane			50.0	44.0		ug/L		88	62 - 128	2	20
1,2-Dichlorobenzene			50.0	47.6		ug/L		95	80 - 119	1	20
1,2-Dichloroethane			50.0	44.3		ug/L		89	73 - 128	1	20
1,2-Dichloropropane			50.0	49.2		ug/L		98	78 - 122	3	20
1,3-Dichlorobenzene			50.0	49.9		ug/L		100	80 - 119	5	20
1,4-Dichlorobenzene			50.0	47.7		ug/L		95	79 - 118	3	20
2-Butanone (MEK)			200	189		ug/L		95	56 - 143	6	20
2-Hexanone			200	190		ug/L		95	57 - 139	5	20
4-Methyl-2-pentanone (MIBK)			200	190		ug/L		95	67 - 130	7	20
Acetone			200	164		ug/L		82	39 - 160	6	20
Benzene			50.0	50.7		ug/L		101	79 - 120	8	20
Bromochloromethane			50.0	42.8		ug/L		86	78 - 123	1	20

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

Lab Sample ID: LCSD 280-576482/5
Matrix: Water
Analysis Batch: 576482

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			50.0	48.4		ug/L		97	79 - 125	1	20
Bromoform			50.0	47.2		ug/L		94	66 - 130	2	20
Bromomethane			50.0	52.1		ug/L		104	53 - 141	3	20
Carbon disulfide			50.0	50.6		ug/L		101	64 - 133	17	20
Carbon tetrachloride			50.0	53.1		ug/L		106	72 - 136	14	20
Chlorobenzene			50.0	49.7		ug/L		99	82 - 118	6	20
Chloroethane			50.0	51.4		ug/L		103	60 - 138	5	20
Chloroform			50.0	50.4		ug/L		101	79 - 124	7	20
Chloromethane			50.0	45.1		ug/L		90	50 - 139	2	20
cis-1,2-Dichloroethene			50.0	51.3		ug/L		103	78 - 123	7	20
cis-1,3-Dichloropropene			50.0	49.4		ug/L		99	75 - 124	6	20
Cyclohexane			50.0	54.3		ug/L		109	71 - 130	19	20
Dibromochloromethane			50.0	50.0		ug/L		100	74 - 126	1	20
Dichlorodifluoromethane			50.0	45.8		ug/L		92	32 - 152	5	20
Ethylbenzene			50.0	51.3		ug/L		103	79 - 121	9	20
Ethylene Dibromide			50.0	49.9		ug/L		100	77 - 121	3	20
Isopropylbenzene			50.0	57.0		ug/L		114	72 - 131	9	20
Methyl acetate			100	89.4		ug/L		89	56 - 136	6	20
Methyl tert-butyl ether			50.0	51.9		ug/L		104	71 - 124	0	20
Methylcyclohexane			50.0	55.6		ug/L		111	72 - 132	20	20
Methylene Chloride			50.0	47.1		ug/L		94	74 - 124	9	20
Styrene			50.0	53.6		ug/L		107	78 - 123	4	20
Tetrachloroethene			50.0	49.8		ug/L		100	74 - 129	15	20
Toluene			50.0	51.2		ug/L		102	80 - 121	9	20
trans-1,2-Dichloroethene			50.0	50.6		ug/L		101	75 - 124	9	20
trans-1,3-Dichloropropene			50.0	52.5		ug/L		105	73 - 127	5	20
Trichloroethene			50.0	51.1		ug/L		102	79 - 123	10	20
Trichlorofluoromethane			50.0	50.9		ug/L		102	65 - 141	0	20
Vinyl chloride			50.0	44.3		ug/L		89	58 - 137	3	20
Xylenes, Total			100	104		ug/L		104	79 - 121	8	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*81 - 118*
4-Bromofluorobenzene (Surr)	*108*		*85 - 114*
Dibromofluoromethane (Surr)	*95*		*80 - 119*
Toluene-d8 (Surr)	*103*		*89 - 112*

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 280-576662/5
Matrix: Water
Analysis Batch: 576662

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		06/01/22 10:24	1
Methane	0.0013	U	0.0050	0.0013	0.00063	mg/L		06/01/22 10:24	1
Ethylene	0.0014	U	0.0050	0.0014	0.00040	mg/L		06/01/22 10:24	1

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

Lab Sample ID: LCS 280-576662/3
Matrix: Water
Analysis Batch: 576662

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Ethane			0.123	0.134		mg/L		109	74 - 131		
Methane			0.0657	0.0640		mg/L		97	73 - 125		
Ethylene			0.115	0.118		mg/L		103	72 - 133		

Lab Sample ID: LCSD 280-576662/4
Matrix: Water
Analysis Batch: 576662

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ethane			0.123	0.133		mg/L		108	74 - 131	1	20
Methane			0.0657	0.0640		mg/L		97	73 - 125	0	20
Ethylene			0.115	0.118		mg/L		103	72 - 133	0	20

Lab Sample ID: 280-162622-1 DU
Matrix: Water
Analysis Batch: 576662

Client Sample ID: G0119-22A
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	0.98			0.956		mg/L				2	20
Ethylene	0.0014	U		0.0014	U	mg/L				NC	20

Lab Sample ID: MB 280-576768/61
Matrix: Water
Analysis Batch: 576768

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	0.0013	U M	0.0050	0.0013	0.00063	mg/L		06/01/22 16:13	1

Lab Sample ID: LCS 280-576768/59
Matrix: Water
Analysis Batch: 576768

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Methane			0.0657	0.0648		mg/L		99	73 - 125		

Lab Sample ID: LCSD 280-576768/60
Matrix: Water
Analysis Batch: 576768

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Methane			0.0657	0.0645		mg/L		98	73 - 125	1	20

Lab Sample ID: MB 280-576907/5
Matrix: Water
Analysis Batch: 576907

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	0.0013	U	0.0050	0.0013	0.00063	mg/L		06/02/22 12:31	1

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

Lab Sample ID: LCS 280-576907/3
Matrix: Water
Analysis Batch: 576907

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methane	0.0657	0.0651		mg/L		99	73 - 125

Lab Sample ID: LCSD 280-576907/4
Matrix: Water
Analysis Batch: 576907

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Methane	0.0657	0.0641		mg/L		98	73 - 125	1	20

Lab Sample ID: MB 280-577087/5
Matrix: Water
Analysis Batch: 577087

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	0.0013	U	0.0050	0.0013	0.00063	mg/L		06/03/22 15:07	1

Lab Sample ID: LCS 280-577087/3
Matrix: Water
Analysis Batch: 577087

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methane	0.0657	0.0644		mg/L		98	73 - 125

Lab Sample ID: LCSD 280-577087/4
Matrix: Water
Analysis Batch: 577087

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Methane	0.0657	0.0635		mg/L		97	73 - 125	1	20

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

Lab Sample ID: MB 280-576113/1-A
Matrix: Water
Analysis Batch: 576526

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 576113

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
C10-C28	42.3	J Q	250	120	33	ug/L		05/30/22 18:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl (Surr)	*78*		*56 - 125*	*05/25/22 15:07*	*05/30/22 18:06*	*1*
n-Octacosane	*40*	*Q*	*60 - 142*	*05/25/22 15:07*	*05/30/22 18:06*	*1*

Lab Sample ID: LCS 280-576113/2-A
Matrix: Water
Analysis Batch: 576526

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 576113

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
C10-C28	2000	1450	Q	ug/L		73	36 - 132

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

Lab Sample ID: LCS 280-576113/2-A
Matrix: Water
Analysis Batch: 576526

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 576113

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl (Surr)	94		56 - 125
n-Octacosane	46	Q	60 - 142

Lab Sample ID: LCSD 280-576113/3-A
Matrix: Water
Analysis Batch: 576526

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 576113

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C10-C28			2000	1640	Q	ug/L		82	36 - 132	12	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
o-Terphenyl (Surr)	96		56 - 125
n-Octacosane	42	Q	60 - 142

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

Lab Sample ID: MB 280-576710/1-A
Matrix: Water
Analysis Batch: 577101

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 576710

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
C10-C28 - RE	120	U Q	250	120	33	ug/L		06/03/22 17:54	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr) - RE	7	Q	56 - 125	06/01/22 12:30	06/03/22 17:54	1
n-Octacosane - RE	7	Q	60 - 142	06/01/22 12:30	06/03/22 17:54	1

Lab Sample ID: LCS 280-576710/2-A
Matrix: Water
Analysis Batch: 577101

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 576710

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
C10-C28 - RE			2000	1290	Q	ug/L		65	36 - 132		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl (Surr) - RE	10	Q	56 - 125
n-Octacosane - RE	9	Q	60 - 142

Lab Sample ID: LCSD 280-576710/3-A
Matrix: Water
Analysis Batch: 577101

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 576710

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C10-C28 - RE			2000	1330	Q	ug/L		67	36 - 132	3	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
o-Terphenyl (Surr) - RE	10	Q	56 - 125

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

Lab Sample ID: LCSD 280-576710/3-A
Matrix: Water
Analysis Batch: 577101

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 576710

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
n-Octacosane - RE	*9*	*Q*	*60 - 142*

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Lab Sample ID: MB 280-576154/1-A
Matrix: Water
Analysis Batch: 576310

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 576154

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		05/26/22 17:28	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037	ug/L		05/26/22 17:28	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045	ug/L		05/26/22 17:28	1
2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.027	ug/L		05/26/22 17:28	1
2,6-Dinitrotoluene	0.080	U	0.10	0.080	0.040	ug/L		05/26/22 17:28	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051	ug/L		05/26/22 17:28	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.086	ug/L		05/26/22 17:28	1
3-Nitrotoluene	0.40	U	0.40	0.40	0.20	ug/L		05/26/22 17:28	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.058	ug/L		05/26/22 17:28	1
4-Nitrotoluene	0.40	U	0.41	0.40	0.10	ug/L		05/26/22 17:28	1
HMX	0.20	U	0.21	0.20	0.088	ug/L		05/26/22 17:28	1
MNX	0.40	U	2.0	0.40	0.15	ug/L		05/26/22 17:28	1
Nitrobenzene	0.20	U	0.21	0.20	0.091	ug/L		05/26/22 17:28	1
RDX	0.20	U	0.21	0.20	0.052	ug/L		05/26/22 17:28	1
Tetryl	0.10	U	0.11	0.10	0.032	ug/L		05/26/22 17:28	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dinitrobenzene	*103*	*M*	*83 - 119*	*05/25/22 15:23*	*05/26/22 17:28*	*1*

Lab Sample ID: LCS 280-576154/2-A
Matrix: Water
Analysis Batch: 576310

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 576154

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,3,5-Trinitrobenzene	2.00	2.07		ug/L		103	73 - 125
1,3-Dinitrobenzene	2.00	1.98		ug/L		99	78 - 120
2,4,6-Trinitrotoluene	2.00	1.98		ug/L		99	71 - 123
2,4-Dinitrotoluene	2.00	1.80		ug/L		90	78 - 120
2,6-Dinitrotoluene	2.00	1.90		ug/L		95	77 - 127
2-Amino-4,6-dinitrotoluene	2.00	1.86		ug/L		93	79 - 120
2-Nitrotoluene	2.00	1.62		ug/L		81	70 - 127
3-Nitrotoluene	2.00	1.49		ug/L		75	73 - 125
4-Amino-2,6-dinitrotoluene	2.00	1.76		ug/L		88	76 - 125
4-Nitrotoluene	2.00	1.67		ug/L		84	71 - 127
HMX	2.00	1.92	M	ug/L		96	65 - 135
Nitrobenzene	2.00	1.81		ug/L		90	65 - 134
RDX	2.00	1.92		ug/L		96	68 - 130
Tetryl	2.00	1.88		ug/L		94	64 - 128

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

Lab Sample ID: LCS 280-576154/2-A
Matrix: Water
Analysis Batch: 576310

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 576154

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

Lab Sample ID: LCS 280-576154/4-A
Matrix: Water
Analysis Batch: 576310

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 576154

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
MNX			2.34	2.31	M	ug/L		99	57 - 132		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dinitrobenzene	97	M	83 - 119

Lab Sample ID: LCSD 280-576154/3-A
Matrix: Water
Analysis Batch: 576310

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 576154

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,3,5-Trinitrobenzene			2.00	2.06		ug/L		103	73 - 125	1	30
1,3-Dinitrobenzene			2.00	1.99		ug/L		99	78 - 120	0	30
2,4,6-Trinitrotoluene			2.00	1.98		ug/L		99	71 - 123	0	30
2,4-Dinitrotoluene			2.00	1.82		ug/L		91	78 - 120	1	30
2,6-Dinitrotoluene			2.00	1.91		ug/L		96	77 - 127	1	30
2-Amino-4,6-dinitrotoluene			2.00	1.86		ug/L		93	79 - 120	0	30
2-Nitrotoluene			2.00	1.64		ug/L		82	70 - 127	1	30
3-Nitrotoluene			2.00	1.46		ug/L		73	73 - 125	2	30
4-Amino-2,6-dinitrotoluene			2.00	1.77		ug/L		89	76 - 125	1	30
4-Nitrotoluene			2.00	1.72		ug/L		86	71 - 127	3	30
HMX			2.00	1.93	M	ug/L		96	65 - 135	0	30
Nitrobenzene			2.00	1.77	M	ug/L		88	65 - 134	2	30
RDX			2.00	1.93		ug/L		96	68 - 130	0	30
Tetryl			2.00	1.88		ug/L		94	64 - 128	0	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dinitrobenzene	97		83 - 119

Lab Sample ID: LCSD 280-576154/5-A
Matrix: Water
Analysis Batch: 576310

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 576154

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
MNX			2.34	2.39	M	ug/L		102	57 - 132	3	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dinitrobenzene	101	M	83 - 119

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-577536/20
Matrix: Water
Analysis Batch: 577536

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	0.029	mg/L		06/08/22 13:36	1

Lab Sample ID: MB 280-577536/59
Matrix: Water
Analysis Batch: 577536

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	0.029	mg/L		06/08/22 14:54	1

Lab Sample ID: LCS 280-577536/18
Matrix: Water
Analysis Batch: 577536

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	2.46		mg/L		98	90 - 110

Lab Sample ID: LCS 280-577536/57
Matrix: Water
Analysis Batch: 577536

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	2.56		mg/L		102	90 - 110

Lab Sample ID: LCSD 280-577536/19
Matrix: Water
Analysis Batch: 577536

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	2.53		mg/L		101	90 - 110	3	10

Lab Sample ID: LCSD 280-577536/58
Matrix: Water
Analysis Batch: 577536

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	2.53		mg/L		101	90 - 110	1	10

Lab Sample ID: MB 280-577664/19
Matrix: Water
Analysis Batch: 577664

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	0.029	mg/L		06/09/22 10:10	1

Lab Sample ID: MB 280-577664/56
Matrix: Water
Analysis Batch: 577664

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	0.029	mg/L		06/09/22 11:49	1

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: LCS 280-577664/54
Matrix: Water
Analysis Batch: 577664

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	2.54		mg/L		102	90 - 110		

Lab Sample ID: LCSD 280-577664/55
Matrix: Water
Analysis Batch: 577664

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	2.53		mg/L		101	90 - 110	0	10

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: MB 280-576945/2-A
Matrix: Water
Analysis Batch: 577123

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 576945

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrogen, Total Kjeldahl	0.80	U	1.0	0.80	0.69	mg/L		06/03/22 17:55	1

Lab Sample ID: LCS 280-576945/1-A
Matrix: Water
Analysis Batch: 577123

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 576945

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

Lab Sample ID: 280-162622-1 MS
Matrix: Water
Analysis Batch: 577123

Client Sample ID: G0119-22A
Prep Type: Total/NA
Prep Batch: 576945

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Nitrogen, Total Kjeldahl	1.3		3.00	4.37		mg/L		102	90 - 110		

Lab Sample ID: 280-162622-1 MSD
Matrix: Water
Analysis Batch: 577123

Client Sample ID: G0119-22A
Prep Type: Total/NA
Prep Batch: 576945

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrogen, Total Kjeldahl	1.3		3.00	4.39		mg/L		103	90 - 110	0	25

Lab Sample ID: MB 280-576946/2-A
Matrix: Water
Analysis Batch: 577123

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 576946

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrogen, Total Kjeldahl	0.80	U	1.0	0.80	0.69	mg/L		06/03/22 18:08	1

Method: 351.2 - Nitrogen, Total Kjeldahl (Continued)

Lab Sample ID: LCS 280-576946/1-A
Matrix: Water
Analysis Batch: 577123

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 576946

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Nitrogen, Total Kjeldahl			6.00	6.19		mg/L		103	90 - 110		

Lab Sample ID: 280-162622-11 MS
Matrix: Water
Analysis Batch: 577123

Client Sample ID: PZ020-22A
Prep Type: Total/NA
Prep Batch: 576946

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Nitrogen, Total Kjeldahl	0.80	U J1	3.00	1.73	J1	mg/L		58	90 - 110		

Lab Sample ID: 280-162622-11 MSD
Matrix: Water
Analysis Batch: 577123

Client Sample ID: PZ020-22A
Prep Type: Total/NA
Prep Batch: 576946

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrogen, Total Kjeldahl	0.80	U J1	3.00	1.73	J1	mg/L		58	90 - 110	0	25

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-577382/104
Matrix: Water
Analysis Batch: 577382

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	0.044	mg/L		06/07/22 15:20	1

Lab Sample ID: MB 280-577382/60
Matrix: Water
Analysis Batch: 577382

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	0.044	mg/L		06/07/22 13:52	1

Lab Sample ID: LCS 280-577382/103
Matrix: Water
Analysis Batch: 577382

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	4.73		mg/L		95	90 - 110		

Lab Sample ID: LCS 280-577382/59
Matrix: Water
Analysis Batch: 577382

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	4.87		mg/L		97	90 - 110		

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

Lab Sample ID: 280-162622-7 MS
Matrix: Water
Analysis Batch: 577382

Client Sample ID: G0024-22A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate Nitrite as N	11	J1	8.00	17.7	J1	mg/L		82	90 - 110

Lab Sample ID: 280-162622-7 MSD
Matrix: Water
Analysis Batch: 577382

Client Sample ID: G0024-22A
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	11	J1	8.00	17.6	J1	mg/L		81	90 - 110	1	10

Lab Sample ID: 280-162622-19 MS
Matrix: Water
Analysis Batch: 577382

Client Sample ID: SHGW02-22A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate Nitrite as N	0.46	J1	4.00	3.95	J1	mg/L		87	90 - 110

Lab Sample ID: 280-162622-19 MSD
Matrix: Water
Analysis Batch: 577382

Client Sample ID: SHGW02-22A
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	0.46	J1	4.00	3.97	J1	mg/L		88	90 - 110	0	10

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

Lab Sample ID: MB 280-575967/2-A
Matrix: Water
Analysis Batch: 575993

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 575967

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfide	2.0	U	4.0	2.0	1.6	mg/L		05/24/22 11:10	1

Lab Sample ID: LCS 280-575967/1-A
Matrix: Water
Analysis Batch: 575993

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 575967

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	19.8	16.0		mg/L		81	44 - 110

Lab Sample ID: 280-162622-6 MS
Matrix: Water
Analysis Batch: 575993

Client Sample ID: G0066R-22A
Prep Type: Total/NA
Prep Batch: 575967

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	2.0	U J1	19.8	11.2		mg/L		57	44 - 110

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

Lab Sample ID: 280-162622-6 MSD — **Client Sample ID: G0066R-22A**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 575993 — **Prep Batch: 575967**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfide	2.0	U J1	19.8	16.8	J1	mg/L		85	44 - 110	40	20

Lab Sample ID: MB 280-576110/2-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 576138 — **Prep Batch: 576110**

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfide	2.0	U	4.0	2.0	1.6	mg/L		05/25/22 10:57	1

Lab Sample ID: LCS 280-576110/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 576138 — **Prep Batch: 576110**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	19.8	14.4		mg/L		73	44 - 110

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 280-576720/6 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 576720

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		06/01/22 15:01	1

Lab Sample ID: LCS 280-576720/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 576720

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	100	101	M	mg/L		101	87 - 112

Lab Sample ID: LCSD 280-576720/5 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 576720

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfate	100	101	M	mg/L		101	87 - 112	0	10

Lab Sample ID: MRL 280-576720/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 576720

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	5.00	4.19	J M	mg/L		84	50 - 150

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

Lab Sample ID: 280-162622-7 MS
Matrix: Water
Analysis Batch: 576720

Client Sample ID: G0024-22A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	64		50.0	116		mg/L		104	87 - 112

Lab Sample ID: 280-162622-7 MSD
Matrix: Water
Analysis Batch: 576720

Client Sample ID: G0024-22A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfate	64		50.0	118		mg/L		109	87 - 112	2	10

Lab Sample ID: 280-162622-7 DU
Matrix: Water
Analysis Batch: 576720

Client Sample ID: G0024-22A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sulfate	64		64.2		mg/L		0.05	10

Lab Sample ID: MB 280-576886/52
Matrix: Water
Analysis Batch: 576886

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		06/02/22 23:05	1

Lab Sample ID: MB 280-576886/6
Matrix: Water
Analysis Batch: 576886

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		06/02/22 12:26	1

Lab Sample ID: LCS 280-576886/4
Matrix: Water
Analysis Batch: 576886

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	100	99.1	M	mg/L		99	87 - 112

Lab Sample ID: LCS 280-576886/50
Matrix: Water
Analysis Batch: 576886

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	100	99.7	M	mg/L		100	87 - 112

Lab Sample ID: LCSD 280-576886/5
Matrix: Water
Analysis Batch: 576886

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	99.8		mg/L		100	87 - 112	1	10

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: LCSD 280-576886/51
Matrix: Water
Analysis Batch: 576886

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	99.9	M	mg/L		100	87 - 112	0	10

Lab Sample ID: MRL 280-576886/3
Matrix: Water
Analysis Batch: 576886

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	4.06	J M	mg/L		81	50 - 150		

Lab Sample ID: 280-162622-13 MS
Matrix: Water
Analysis Batch: 576886

Client Sample ID: G0069-22A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Sulfate	32	M	50.0	81.4	M	mg/L		99	87 - 112		

Lab Sample ID: 280-162622-13 MSD
Matrix: Water
Analysis Batch: 576886

Client Sample ID: G0069-22A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfate	32	M	50.0	82.0	M	mg/L		101	87 - 112	1	10

Lab Sample ID: 280-162622-13 DU
Matrix: Water
Analysis Batch: 576886

Client Sample ID: G0069-22A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Sulfate	32	M		31.6	M	mg/L				0.3	10

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

Lab Sample ID: MB 280-576568/2-A
Matrix: Water
Analysis Batch: 576714

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		05/31/22 16:21	1

Lab Sample ID: LCS 280-576568/1-A
Matrix: Water
Analysis Batch: 576714

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	24.7		mg/L		99	88 - 112		

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

Lab Sample ID: 280-162622-1 MS
Matrix: Water
Analysis Batch: 576714

Client Sample ID: G0119-22A
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Dissolved Organic Carbon - Quad	5.7		25.0	30.5		mg/L		99	88 - 112

Lab Sample ID: 280-162622-1 MSD
Matrix: Water
Analysis Batch: 576714

Client Sample ID: G0119-22A
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Dissolved Organic Carbon - Quad	5.7		25.0	30.6		mg/L		100	88 - 112	0	15

Lab Sample ID: 280-162622-11 MS
Matrix: Water
Analysis Batch: 576714

Client Sample ID: PZ020-22A
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Dissolved Organic Carbon - Quad	3.6		25.0	28.2		mg/L		98	88 - 112

Lab Sample ID: 280-162622-11 MSD
Matrix: Water
Analysis Batch: 576714

Client Sample ID: PZ020-22A
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	3.6		25.0	28.0		mg/L		97	88 - 112	1	15

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-576371/32
Matrix: Water
Analysis Batch: 576371

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		05/26/22 16:37	1

Lab Sample ID: MB 280-576371/6
Matrix: Water
Analysis Batch: 576371

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		05/26/22 13:12	1

Lab Sample ID: LCS 280-576371/31
Matrix: Water
Analysis Batch: 576371

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	200		mg/L		100	89 - 109

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: LCS 280-576371/4
Matrix: Water
Analysis Batch: 576371

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	197		mg/L		99	89 - 109		

Lab Sample ID: LCSD 280-576371/5
Matrix: Water
Analysis Batch: 576371

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Alkalinity as CaCO3			200	198		mg/L		99	89 - 109	0	10

Lab Sample ID: 280-162622-17 DU
Matrix: Water
Analysis Batch: 576371

Client Sample ID: G0111-22A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Alkalinity as CaCO3	900			907		mg/L				1	10

GC/MS VOA

Analysis Batch: 576482

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-162622-19	SHGW02-22A	Total/NA	Water	8260B	
280-162622-20	SHGW05-22A	Total/NA	Water	8260B	
280-162622-21	G0053-22A	Total/NA	Water	8260B	
280-162622-22	G0069-22A	Total/NA	Water	8260B	
280-162622-23	5-18 TB	Total/NA	Water	8260B	
280-162622-24	SHGW04-22A	Total/NA	Water	8260B	
280-162622-25	SHGW03-22A	Total/NA	Water	8260B	
280-162622-26	SAMW1-22A	Total/NA	Water	8260B	
MB 280-576482/9	Method Blank	Total/NA	Water	8260B	
LCS 280-576482/1002	Lab Control Sample	Total/NA	Water	8260B	
LCSD 280-576482/5	Lab Control Sample Dup	Total/NA	Water	8260B	

GC VOA

Analysis Batch: 576662

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-162622-1	G0119-22A	Total/NA	Water	RSK-175	
280-162622-3	G0101-22A	Total/NA	Water	RSK-175	
280-162622-4	G0100-22A	Total/NA	Water	RSK-175	
280-162622-5	G0122-22A	Total/NA	Water	RSK-175	
280-162622-6	G0066R-22A	Total/NA	Water	RSK-175	
280-162622-8	G0115-22A	Total/NA	Water	RSK-175	
280-162622-9	G0095-22A	Total/NA	Water	RSK-175	
280-162622-10	PZ018-22A	Total/NA	Water	RSK-175	
280-162622-11	PZ020-22A	Total/NA	Water	RSK-175	
280-162622-19	SHGW02-22A	Total/NA	Water	RSK-175	
280-162622-20	SHGW05-22A	Total/NA	Water	RSK-175	
280-162622-21	G0053-22A	Total/NA	Water	RSK-175	
280-162622-22	G0069-22A	Total/NA	Water	RSK-175	
280-162622-24	SHGW04-22A	Total/NA	Water	RSK-175	
280-162622-25	SHGW03-22A	Total/NA	Water	RSK-175	
280-162622-26	SAMW1-22A	Total/NA	Water	RSK-175	
MB 280-576662/5	Method Blank	Total/NA	Water	RSK-175	
LCS 280-576662/3	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 280-576662/4	Lab Control Sample Dup	Total/NA	Water	RSK-175	
280-162622-1 DU	G0119-22A	Total/NA	Water	RSK-175	

Analysis Batch: 576768

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-162622-7	G0024-22A	Total/NA	Water	RSK-175	
280-162622-12	G0077-22A	Total/NA	Water	RSK-175	
MB 280-576768/61	Method Blank	Total/NA	Water	RSK-175	
LCS 280-576768/59	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 280-576768/60	Lab Control Sample Dup	Total/NA	Water	RSK-175	

Analysis Batch: 576907

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-162622-16	G0311-22A	Total/NA	Water	RSK-175	
280-162622-17	G0111-22A	Total/NA	Water	RSK-175	
280-162622-18	G0123-22A	Total/NA	Water	RSK-175	
MB 280-576907/5	Method Blank	Total/NA	Water	RSK-175	

GC VOA (Continued)

Analysis Batch: 576907 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 280-576907/3	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 280-576907/4	Lab Control Sample Dup	Total/NA	Water	RSK-175	

Analysis Batch: 577087

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-162622-2 - DL	G0121-22A	Total/NA	Water	RSK-175	
MB 280-577087/5	Method Blank	Total/NA	Water	RSK-175	
LCS 280-577087/3	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 280-577087/4	Lab Control Sample Dup	Total/NA	Water	RSK-175	

GC Semi VOA

Prep Batch: 576113

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-162622-13	G0069-22A	Total/NA	Water	3510C	
280-162622-14	SHGW03-22A	Total/NA	Water	3510C	
280-162622-15	SHGW04-22A	Total/NA	Water	3510C	
MB 280-576113/1-A	Method Blank	Total/NA	Water	3510C	
LCS 280-576113/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 280-576113/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 576526

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-162622-13	G0069-22A	Total/NA	Water	8015C DRO	576113
280-162622-14	SHGW03-22A	Total/NA	Water	8015C DRO	576113
280-162622-15	SHGW04-22A	Total/NA	Water	8015C DRO	576113
MB 280-576113/1-A	Method Blank	Total/NA	Water	8015C DRO	576113
LCS 280-576113/2-A	Lab Control Sample	Total/NA	Water	8015C DRO	576113
LCSD 280-576113/3-A	Lab Control Sample Dup	Total/NA	Water	8015C DRO	576113

Prep Batch: 576710

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-162622-13 - RE	G0069-22A	Total/NA	Water	3510C	
280-162622-14 - RE	SHGW03-22A	Total/NA	Water	3510C	
280-162622-15 - RE	SHGW04-22A	Total/NA	Water	3510C	
MB 280-576710/1-A - RE	Method Blank	Total/NA	Water	3510C	
LCS 280-576710/2-A - RE	Lab Control Sample	Total/NA	Water	3510C	
LCSD 280-576710/3-A - RE	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 577101

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-162622-13 - RE	G0069-22A	Total/NA	Water	8015C DRO	576710
280-162622-14 - RE	SHGW03-22A	Total/NA	Water	8015C DRO	576710
280-162622-15 - RE	SHGW04-22A	Total/NA	Water	8015C DRO	576710
MB 280-576710/1-A - RE	Method Blank	Total/NA	Water	8015C DRO	576710
LCS 280-576710/2-A - RE	Lab Control Sample	Total/NA	Water	8015C DRO	576710
LCSD 280-576710/3-A - RE	Lab Control Sample Dup	Total/NA	Water	8015C DRO	576710

HPLC/IC

Prep Batch: 576154

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-162622-1	G0119-22A	Total/NA	Water	3535	
280-162622-2	G0121-22A	Total/NA	Water	3535	
280-162622-3	G0101-22A	Total/NA	Water	3535	
280-162622-4	G0100-22A	Total/NA	Water	3535	
280-162622-5	G0122-22A	Total/NA	Water	3535	
280-162622-6	G0066R-22A	Total/NA	Water	3535	
280-162622-7	G0024-22A	Total/NA	Water	3535	
280-162622-8	G0115-22A	Total/NA	Water	3535	
280-162622-9	G0095-22A	Total/NA	Water	3535	
280-162622-10	PZ018-22A	Total/NA	Water	3535	
280-162622-11	PZ020-22A	Total/NA	Water	3535	
280-162622-12	G0077-22A	Total/NA	Water	3535	
280-162622-16	G0311-22A	Total/NA	Water	3535	
280-162622-17	G0111-22A	Total/NA	Water	3535	
280-162622-18	G0123-22A	Total/NA	Water	3535	
MB 280-576154/1-A	Method Blank	Total/NA	Water	3535	
LCS 280-576154/2-A	Lab Control Sample	Total/NA	Water	3535	
LCS 280-576154/4-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 280-576154/3-A	Lab Control Sample Dup	Total/NA	Water	3535	
LCSD 280-576154/5-A	Lab Control Sample Dup	Total/NA	Water	3535	

Analysis Batch: 576310

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-162622-1	G0119-22A	Total/NA	Water	8330A	576154
280-162622-2	G0121-22A	Total/NA	Water	8330A	576154
280-162622-3	G0101-22A	Total/NA	Water	8330A	576154
280-162622-4	G0100-22A	Total/NA	Water	8330A	576154
280-162622-5	G0122-22A	Total/NA	Water	8330A	576154
280-162622-6	G0066R-22A	Total/NA	Water	8330A	576154
280-162622-7	G0024-22A	Total/NA	Water	8330A	576154
280-162622-8	G0115-22A	Total/NA	Water	8330A	576154
280-162622-9	G0095-22A	Total/NA	Water	8330A	576154
280-162622-10	PZ018-22A	Total/NA	Water	8330A	576154
280-162622-11	PZ020-22A	Total/NA	Water	8330A	576154
280-162622-12	G0077-22A	Total/NA	Water	8330A	576154
280-162622-16	G0311-22A	Total/NA	Water	8330A	576154
280-162622-17	G0111-22A	Total/NA	Water	8330A	576154
280-162622-18	G0123-22A	Total/NA	Water	8330A	576154
MB 280-576154/1-A	Method Blank	Total/NA	Water	8330A	576154
LCS 280-576154/2-A	Lab Control Sample	Total/NA	Water	8330A	576154
LCS 280-576154/4-A	Lab Control Sample	Total/NA	Water	8330A	576154
LCSD 280-576154/3-A	Lab Control Sample Dup	Total/NA	Water	8330A	576154
LCSD 280-576154/5-A	Lab Control Sample Dup	Total/NA	Water	8330A	576154

Analysis Batch: 576448

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-162622-1	G0119-22A	Total/NA	Water	8330A	576154
280-162622-2	G0121-22A	Total/NA	Water	8330A	576154
280-162622-4	G0100-22A	Total/NA	Water	8330A	576154
280-162622-5	G0122-22A	Total/NA	Water	8330A	576154
280-162622-6	G0066R-22A	Total/NA	Water	8330A	576154

HPLC/IC (Continued)

Analysis Batch: 576448 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-162622-7	G0024-22A	Total/NA	Water	8330A	576154
280-162622-10	PZ018-22A	Total/NA	Water	8330A	576154
280-162622-11	PZ020-22A	Total/NA	Water	8330A	576154
280-162622-12	G0077-22A	Total/NA	Water	8330A	576154
280-162622-16	G0311-22A	Total/NA	Water	8330A	576154
280-162622-17	G0111-22A	Total/NA	Water	8330A	576154
280-162622-18	G0123-22A	Total/NA	Water	8330A	576154

General Chemistry

Prep Batch: 575967

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-162622-6	G0066R-22A	Total/NA	Water	9030B	
280-162622-7	G0024-22A	Total/NA	Water	9030B	
280-162622-8	G0115-22A	Total/NA	Water	9030B	
280-162622-9	G0095-22A	Total/NA	Water	9030B	
280-162622-10	PZ018-22A	Total/NA	Water	9030B	
280-162622-11	PZ020-22A	Total/NA	Water	9030B	
280-162622-12	G0077-22A	Total/NA	Water	9030B	
MB 280-575967/2-A	Method Blank	Total/NA	Water	9030B	
LCS 280-575967/1-A	Lab Control Sample	Total/NA	Water	9030B	
280-162622-6 MS	G0066R-22A	Total/NA	Water	9030B	
280-162622-6 MSD	G0066R-22A	Total/NA	Water	9030B	

Analysis Batch: 575993

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-162622-6	G0066R-22A	Total/NA	Water	9034	575967
280-162622-7	G0024-22A	Total/NA	Water	9034	575967
280-162622-8	G0115-22A	Total/NA	Water	9034	575967
280-162622-9	G0095-22A	Total/NA	Water	9034	575967
280-162622-10	PZ018-22A	Total/NA	Water	9034	575967
280-162622-11	PZ020-22A	Total/NA	Water	9034	575967
280-162622-12	G0077-22A	Total/NA	Water	9034	575967
MB 280-575967/2-A	Method Blank	Total/NA	Water	9034	575967
LCS 280-575967/1-A	Lab Control Sample	Total/NA	Water	9034	575967
280-162622-6 MS	G0066R-22A	Total/NA	Water	9034	575967
280-162622-6 MSD	G0066R-22A	Total/NA	Water	9034	575967

Prep Batch: 576110

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-162622-1	G0119-22A	Total/NA	Water	9030B	
280-162622-2	G0121-22A	Total/NA	Water	9030B	
280-162622-3	G0101-22A	Total/NA	Water	9030B	
280-162622-4	G0100-22A	Total/NA	Water	9030B	
280-162622-5	G0122-22A	Total/NA	Water	9030B	
280-162622-16	G0311-22A	Total/NA	Water	9030B	
280-162622-17	G0111-22A	Total/NA	Water	9030B	
280-162622-18	G0123-22A	Total/NA	Water	9030B	
MB 280-576110/2-A	Method Blank	Total/NA	Water	9030B	
LCS 280-576110/1-A	Lab Control Sample	Total/NA	Water	9030B	

General Chemistry

Analysis Batch: 576138

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-162622-1	G0119-22A	Total/NA	Water	9034	576110
280-162622-2	G0121-22A	Total/NA	Water	9034	576110
280-162622-3	G0101-22A	Total/NA	Water	9034	576110
280-162622-4	G0100-22A	Total/NA	Water	9034	576110
280-162622-5	G0122-22A	Total/NA	Water	9034	576110
280-162622-16	G0311-22A	Total/NA	Water	9034	576110
280-162622-17	G0111-22A	Total/NA	Water	9034	576110
280-162622-18	G0123-22A	Total/NA	Water	9034	576110
MB 280-576110/2-A	Method Blank	Total/NA	Water	9034	576110
LCS 280-576110/1-A	Lab Control Sample	Total/NA	Water	9034	576110

Analysis Batch: 576371

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-162622-1	G0119-22A	Total/NA	Water	SM 2320B	
280-162622-2	G0121-22A	Total/NA	Water	SM 2320B	
280-162622-3	G0101-22A	Total/NA	Water	SM 2320B	
280-162622-4	G0100-22A	Total/NA	Water	SM 2320B	
280-162622-5	G0122-22A	Total/NA	Water	SM 2320B	
280-162622-6	G0066R-22A	Total/NA	Water	SM 2320B	
280-162622-7	G0024-22A	Total/NA	Water	SM 2320B	
280-162622-8	G0115-22A	Total/NA	Water	SM 2320B	
280-162622-9	G0095-22A	Total/NA	Water	SM 2320B	
280-162622-10	PZ018-22A	Total/NA	Water	SM 2320B	
280-162622-11	PZ020-22A	Total/NA	Water	SM 2320B	
280-162622-12	G0077-22A	Total/NA	Water	SM 2320B	
280-162622-13	G0069-22A	Total/NA	Water	SM 2320B	
280-162622-14	SHGW03-22A	Total/NA	Water	SM 2320B	
280-162622-15	SHGW04-22A	Total/NA	Water	SM 2320B	
280-162622-16	G0311-22A	Total/NA	Water	SM 2320B	
280-162622-17	G0111-22A	Total/NA	Water	SM 2320B	
280-162622-18	G0123-22A	Total/NA	Water	SM 2320B	
280-162622-19	SHGW02-22A	Total/NA	Water	SM 2320B	
280-162622-20	SHGW05-22A	Total/NA	Water	SM 2320B	
280-162622-21	G0053-22A	Total/NA	Water	SM 2320B	
280-162622-26	SAMW1-22A	Total/NA	Water	SM 2320B	
MB 280-576371/32	Method Blank	Total/NA	Water	SM 2320B	
MB 280-576371/6	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-576371/31	Lab Control Sample	Total/NA	Water	SM 2320B	
LCS 280-576371/4	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 280-576371/5	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
280-162622-17 DU	G0111-22A	Total/NA	Water	SM 2320B	

Filtration Batch: 576568

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-162622-1	G0119-22A	Dissolved	Water	FILTRATION	
280-162622-2	G0121-22A	Dissolved	Water	FILTRATION	
280-162622-3	G0101-22A	Dissolved	Water	FILTRATION	
280-162622-4	G0100-22A	Dissolved	Water	FILTRATION	
280-162622-5	G0122-22A	Dissolved	Water	FILTRATION	
280-162622-6	G0066R-22A	Dissolved	Water	FILTRATION	
280-162622-7	G0024-22A	Dissolved	Water	FILTRATION	

General Chemistry (Continued)

Filtration Batch: 576568 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-162622-8	G0115-22A	Dissolved	Water	FILTRATION	
280-162622-9	G0095-22A	Dissolved	Water	FILTRATION	
280-162622-10	PZ018-22A	Dissolved	Water	FILTRATION	
280-162622-11	PZ020-22A	Dissolved	Water	FILTRATION	
280-162622-12	G0077-22A	Dissolved	Water	FILTRATION	
280-162622-16	G0311-22A	Dissolved	Water	FILTRATION	
280-162622-17	G0111-22A	Dissolved	Water	FILTRATION	
280-162622-18	G0123-22A	Dissolved	Water	FILTRATION	
MB 280-576568/2-A	Method Blank	Dissolved	Water	FILTRATION	
LCS 280-576568/1-A	Lab Control Sample	Dissolved	Water	FILTRATION	
280-162622-1 MS	G0119-22A	Dissolved	Water	FILTRATION	
280-162622-1 MSD	G0119-22A	Dissolved	Water	FILTRATION	
280-162622-11 MS	PZ020-22A	Dissolved	Water	FILTRATION	
280-162622-11 MSD	PZ020-22A	Dissolved	Water	FILTRATION	

Analysis Batch: 576714

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-162622-1	G0119-22A	Dissolved	Water	9060A	576568
280-162622-2	G0121-22A	Dissolved	Water	9060A	576568
280-162622-3	G0101-22A	Dissolved	Water	9060A	576568
280-162622-4	G0100-22A	Dissolved	Water	9060A	576568
280-162622-5	G0122-22A	Dissolved	Water	9060A	576568
280-162622-6	G0066R-22A	Dissolved	Water	9060A	576568
280-162622-7	G0024-22A	Dissolved	Water	9060A	576568
280-162622-8	G0115-22A	Dissolved	Water	9060A	576568
280-162622-9	G0095-22A	Dissolved	Water	9060A	576568
280-162622-10	PZ018-22A	Dissolved	Water	9060A	576568
280-162622-11	PZ020-22A	Dissolved	Water	9060A	576568
280-162622-12	G0077-22A	Dissolved	Water	9060A	576568
280-162622-16	G0311-22A	Dissolved	Water	9060A	576568
280-162622-17	G0111-22A	Dissolved	Water	9060A	576568
280-162622-18	G0123-22A	Dissolved	Water	9060A	576568
MB 280-576568/2-A	Method Blank	Dissolved	Water	9060A	576568
LCS 280-576568/1-A	Lab Control Sample	Dissolved	Water	9060A	576568
280-162622-1 MS	G0119-22A	Dissolved	Water	9060A	576568
280-162622-1 MSD	G0119-22A	Dissolved	Water	9060A	576568
280-162622-11 MS	PZ020-22A	Dissolved	Water	9060A	576568
280-162622-11 MSD	PZ020-22A	Dissolved	Water	9060A	576568

Analysis Batch: 576720

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-162622-1	G0119-22A	Total/NA	Water	9056A	
280-162622-5	G0122-22A	Total/NA	Water	9056A	
280-162622-6	G0066R-22A	Total/NA	Water	9056A	
280-162622-7	G0024-22A	Total/NA	Water	9056A	
280-162622-10	PZ018-22A	Total/NA	Water	9056A	
MB 280-576720/6	Method Blank	Total/NA	Water	9056A	
LCS 280-576720/4	Lab Control Sample	Total/NA	Water	9056A	
LCSD 280-576720/5	Lab Control Sample Dup	Total/NA	Water	9056A	
MRL 280-576720/3	Lab Control Sample	Total/NA	Water	9056A	
280-162622-7 MS	G0024-22A	Total/NA	Water	9056A	

General Chemistry (Continued)

Analysis Batch: 576720 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-162622-7 MSD	G0024-22A	Total/NA	Water	9056A	
280-162622-7 DU	G0024-22A	Total/NA	Water	9056A	

Analysis Batch: 576886

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-162622-2	G0121-22A	Total/NA	Water	9056A	
280-162622-3	G0101-22A	Total/NA	Water	9056A	
280-162622-4	G0100-22A	Total/NA	Water	9056A	
280-162622-8	G0115-22A	Total/NA	Water	9056A	
280-162622-9	G0095-22A	Total/NA	Water	9056A	
280-162622-11	PZ020-22A	Total/NA	Water	9056A	
280-162622-12	G0077-22A	Total/NA	Water	9056A	
280-162622-13	G0069-22A	Total/NA	Water	9056A	
280-162622-14	SHGW03-22A	Total/NA	Water	9056A	
280-162622-15	SHGW04-22A	Total/NA	Water	9056A	
280-162622-16	G0311-22A	Total/NA	Water	9056A	
280-162622-17	G0111-22A	Total/NA	Water	9056A	
280-162622-18	G0123-22A	Total/NA	Water	9056A	
280-162622-19	SHGW02-22A	Total/NA	Water	9056A	
280-162622-20	SHGW05-22A	Total/NA	Water	9056A	
280-162622-21	G0053-22A	Total/NA	Water	9056A	
280-162622-26	SAMW1-22A	Total/NA	Water	9056A	
MB 280-576886/52	Method Blank	Total/NA	Water	9056A	
MB 280-576886/6	Method Blank	Total/NA	Water	9056A	
LCS 280-576886/4	Lab Control Sample	Total/NA	Water	9056A	
LCS 280-576886/50	Lab Control Sample	Total/NA	Water	9056A	
LCSD 280-576886/5	Lab Control Sample Dup	Total/NA	Water	9056A	
LCSD 280-576886/51	Lab Control Sample Dup	Total/NA	Water	9056A	
MRL 280-576886/3	Lab Control Sample	Total/NA	Water	9056A	
280-162622-13 MS	G0069-22A	Total/NA	Water	9056A	
280-162622-13 MSD	G0069-22A	Total/NA	Water	9056A	
280-162622-13 DU	G0069-22A	Total/NA	Water	9056A	

Prep Batch: 576945

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-162622-1	G0119-22A	Total/NA	Water	351.2	
280-162622-2	G0121-22A	Total/NA	Water	351.2	
280-162622-3	G0101-22A	Total/NA	Water	351.2	
280-162622-4	G0100-22A	Total/NA	Water	351.2	
280-162622-5	G0122-22A	Total/NA	Water	351.2	
280-162622-6	G0066R-22A	Total/NA	Water	351.2	
280-162622-7	G0024-22A	Total/NA	Water	351.2	
280-162622-8	G0115-22A	Total/NA	Water	351.2	
280-162622-9	G0095-22A	Total/NA	Water	351.2	
280-162622-10	PZ018-22A	Total/NA	Water	351.2	
280-162622-12	G0077-22A	Total/NA	Water	351.2	
280-162622-16	G0311-22A	Total/NA	Water	351.2	
280-162622-17	G0111-22A	Total/NA	Water	351.2	
280-162622-18	G0123-22A	Total/NA	Water	351.2	
MB 280-576945/2-A	Method Blank	Total/NA	Water	351.2	
LCS 280-576945/1-A	Lab Control Sample	Total/NA	Water	351.2	

General Chemistry (Continued)

Prep Batch: 576945 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-162622-1 MS	G0119-22A	Total/NA	Water	351.2	
280-162622-1 MSD	G0119-22A	Total/NA	Water	351.2	

Prep Batch: 576946

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-162622-11	PZ020-22A	Total/NA	Water	351.2	
MB 280-576946/2-A	Method Blank	Total/NA	Water	351.2	
LCS 280-576946/1-A	Lab Control Sample	Total/NA	Water	351.2	
280-162622-11 MS	PZ020-22A	Total/NA	Water	351.2	
280-162622-11 MSD	PZ020-22A	Total/NA	Water	351.2	

Analysis Batch: 577123

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-162622-1	G0119-22A	Total/NA	Water	351.2	576945
280-162622-2	G0121-22A	Total/NA	Water	351.2	576945
280-162622-3	G0101-22A	Total/NA	Water	351.2	576945
280-162622-4	G0100-22A	Total/NA	Water	351.2	576945
280-162622-5	G0122-22A	Total/NA	Water	351.2	576945
280-162622-6	G0066R-22A	Total/NA	Water	351.2	576945
280-162622-7	G0024-22A	Total/NA	Water	351.2	576945
280-162622-8	G0115-22A	Total/NA	Water	351.2	576945
280-162622-9	G0095-22A	Total/NA	Water	351.2	576945
280-162622-10	PZ018-22A	Total/NA	Water	351.2	576945
280-162622-11	PZ020-22A	Total/NA	Water	351.2	576946
280-162622-12	G0077-22A	Total/NA	Water	351.2	576945
280-162622-16	G0311-22A	Total/NA	Water	351.2	576945
280-162622-17	G0111-22A	Total/NA	Water	351.2	576945
280-162622-18	G0123-22A	Total/NA	Water	351.2	576945
MB 280-576945/2-A	Method Blank	Total/NA	Water	351.2	576945
MB 280-576946/2-A	Method Blank	Total/NA	Water	351.2	576946
LCS 280-576945/1-A	Lab Control Sample	Total/NA	Water	351.2	576945
LCS 280-576946/1-A	Lab Control Sample	Total/NA	Water	351.2	576946
280-162622-1 MS	G0119-22A	Total/NA	Water	351.2	576945
280-162622-1 MSD	G0119-22A	Total/NA	Water	351.2	576945
280-162622-11 MS	PZ020-22A	Total/NA	Water	351.2	576946
280-162622-11 MSD	PZ020-22A	Total/NA	Water	351.2	576946

Analysis Batch: 577382

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-162622-1	G0119-22A	Total/NA	Water	353.2	
280-162622-2	G0121-22A	Total/NA	Water	353.2	
280-162622-3	G0101-22A	Total/NA	Water	353.2	
280-162622-4	G0100-22A	Total/NA	Water	353.2	
280-162622-5	G0122-22A	Total/NA	Water	353.2	
280-162622-6	G0066R-22A	Total/NA	Water	353.2	
280-162622-7	G0024-22A	Total/NA	Water	353.2	
280-162622-8	G0115-22A	Total/NA	Water	353.2	
280-162622-9	G0095-22A	Total/NA	Water	353.2	
280-162622-10	PZ018-22A	Total/NA	Water	353.2	
280-162622-11	PZ020-22A	Total/NA	Water	353.2	
280-162622-12	G0077-22A	Total/NA	Water	353.2	

General Chemistry (Continued)

Analysis Batch: 577382 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-162622-13	G0069-22A	Total/NA	Water	353.2	
280-162622-14	SHGW03-22A	Total/NA	Water	353.2	
280-162622-15	SHGW04-22A	Total/NA	Water	353.2	
280-162622-16	G0311-22A	Total/NA	Water	353.2	
280-162622-17	G0111-22A	Total/NA	Water	353.2	
280-162622-18	G0123-22A	Total/NA	Water	353.2	
280-162622-19	SHGW02-22A	Total/NA	Water	353.2	
280-162622-20	SHGW05-22A	Total/NA	Water	353.2	
280-162622-21	G0053-22A	Total/NA	Water	353.2	
280-162622-26	SAMW1-22A	Total/NA	Water	353.2	
MB 280-577382/104	Method Blank	Total/NA	Water	353.2	
MB 280-577382/60	Method Blank	Total/NA	Water	353.2	
LCS 280-577382/103	Lab Control Sample	Total/NA	Water	353.2	
LCS 280-577382/59	Lab Control Sample	Total/NA	Water	353.2	
280-162622-7 MS	G0024-22A	Total/NA	Water	353.2	
280-162622-7 MSD	G0024-22A	Total/NA	Water	353.2	
280-162622-19 MS	SHGW02-22A	Total/NA	Water	353.2	
280-162622-19 MSD	SHGW02-22A	Total/NA	Water	353.2	

Analysis Batch: 577536

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-162622-2	G0121-22A	Total/NA	Water	350.1	
280-162622-3	G0101-22A	Total/NA	Water	350.1	
280-162622-4	G0100-22A	Total/NA	Water	350.1	
280-162622-5	G0122-22A	Total/NA	Water	350.1	
280-162622-6	G0066R-22A	Total/NA	Water	350.1	
280-162622-7	G0024-22A	Total/NA	Water	350.1	
280-162622-8	G0115-22A	Total/NA	Water	350.1	
280-162622-9	G0095-22A	Total/NA	Water	350.1	
280-162622-10	PZ018-22A	Total/NA	Water	350.1	
280-162622-11	PZ020-22A	Total/NA	Water	350.1	
280-162622-12	G0077-22A	Total/NA	Water	350.1	
280-162622-16	G0311-22A	Total/NA	Water	350.1	
280-162622-17	G0111-22A	Total/NA	Water	350.1	
280-162622-18	G0123-22A	Total/NA	Water	350.1	
MB 280-577536/20	Method Blank	Total/NA	Water	350.1	
MB 280-577536/59	Method Blank	Total/NA	Water	350.1	
LCS 280-577536/18	Lab Control Sample	Total/NA	Water	350.1	
LCS 280-577536/57	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-577536/19	Lab Control Sample Dup	Total/NA	Water	350.1	
LCSD 280-577536/58	Lab Control Sample Dup	Total/NA	Water	350.1	

Analysis Batch: 577664

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-162622-1	G0119-22A	Total/NA	Water	350.1	
MB 280-577664/19	Method Blank	Total/NA	Water	350.1	
MB 280-577664/56	Method Blank	Total/NA	Water	350.1	
LCS 280-577664/54	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-577664/55	Lab Control Sample Dup	Total/NA	Water	350.1	

Client Sample ID: G0119-22A

Date Collected: 05/19/22 10:50
Date Received: 05/20/22 10:00

Lab Sample ID: 280-162622-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	20 mL	20 mL	576662	06/01/22 10:37	CAS	TAL DEN
Total/NA	Prep	3535			487.9 mL	5 mL	576154	05/25/22 15:23	AAA	TAL DEN
Total/NA	Analysis	8330A		1			576310	05/26/22 19:46	JZ	TAL DEN
Total/NA	Prep	3535			487.9 mL	5 mL	576154	05/25/22 15:23	AAA	TAL DEN
Total/NA	Analysis	8330A		1			576448	05/27/22 21:28	JZ	TAL DEN
Total/NA	Analysis	350.1		2	10 mL	10 mL	577664	06/09/22 12:18	MMP	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	576945	06/02/22 15:03	SVC	TAL DEN
Total/NA	Analysis	351.2		1			577123	06/03/22 18:02	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	577382	06/07/22 14:54	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	576110	05/25/22 09:18	ZPM	TAL DEN
Total/NA	Analysis	9034		1			576138	05/25/22 10:57	ZPM	TAL DEN
Total/NA	Analysis	9056A		5	10 mL	10 mL	576720	06/01/22 21:00	RAF	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	576568	05/31/22 09:54	ABW	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	576714	05/31/22 16:39	CAI	TAL DEN
Total/NA	Analysis	SM 2320B		1			576371	05/26/22 13:49	KEG	TAL DEN

Client Sample ID: G0121-22A

Date Collected: 05/19/22 12:05
Date Received: 05/20/22 10:00

Lab Sample ID: 280-162622-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175	DL	2	20 mL	20 mL	577087	06/03/22 17:56	CAS	TAL DEN
Total/NA	Prep	3535			519 mL	5 mL	576154	05/25/22 15:23	AAA	TAL DEN
Total/NA	Analysis	8330A		1			576310	05/26/22 20:09	JZ	TAL DEN
Total/NA	Prep	3535			519 mL	5 mL	576154	05/25/22 15:23	AAA	TAL DEN
Total/NA	Analysis	8330A		1			576448	05/27/22 22:03	JZ	TAL DEN
Total/NA	Analysis	350.1		20	10 mL	10 mL	577536	06/08/22 14:22	MMP	TAL DEN
Total/NA	Prep	351.2			5 mL	25 mL	576945	06/02/22 15:03	SVC	TAL DEN
Total/NA	Analysis	351.2		1			577123	06/03/22 17:59	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	577382	06/07/22 14:56	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	576110	05/25/22 09:18	ZPM	TAL DEN
Total/NA	Analysis	9034		1			576138	05/25/22 10:57	ZPM	TAL DEN
Total/NA	Analysis	9056A		5	10 mL	10 mL	576886	06/02/22 14:18	RAF	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	576568	05/31/22 09:54	ABW	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	576714	05/31/22 17:25	CAI	TAL DEN
Total/NA	Analysis	SM 2320B		1			576371	05/26/22 13:59	KEG	TAL DEN

Client Sample ID: G0101-22A

Date Collected: 05/19/22 09:45
Date Received: 05/20/22 10:00

Lab Sample ID: 280-162622-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	20 mL	20 mL	576662	06/01/22 11:15	CAS	TAL DEN

Client Sample ID: G0101-22A
Lab Sample ID: 280-162622-3

Date Collected: 05/19/22 09:45
Matrix: Water
Date Received: 05/20/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			517.4 mL	5 mL	576154	05/25/22 15:23	AAA	TAL DEN
Total/NA	Analysis	8330A		1			576310	05/26/22 20:31	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	577536	06/08/22 14:24	MMP	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	576945	06/02/22 15:03	SVC	TAL DEN
Total/NA	Analysis	351.2		1			577123	06/03/22 18:00	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	577382	06/07/22 14:58	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	576110	05/25/22 09:18	ZPM	TAL DEN
Total/NA	Analysis	9034		1			576138	05/25/22 10:57	ZPM	TAL DEN
Total/NA	Analysis	9056A		5	10 mL	10 mL	576886	06/02/22 14:34	RAF	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	576568	05/31/22 09:54	ABW	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	576714	05/31/22 17:42	CAI	TAL DEN
Total/NA	Analysis	SM 2320B		1			576371	05/26/22 14:10	KEG	TAL DEN

Client Sample ID: G0100-22A
Lab Sample ID: 280-162622-4

Date Collected: 05/19/22 09:50
Matrix: Water
Date Received: 05/20/22 10:00

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	20 mL	20 mL	576662	06/01/22 11:29	CAS	TAL DEN
Total/NA	Prep	3535			453.1 mL	5 mL	576154	05/25/22 15:23	AAA	TAL DEN
Total/NA	Analysis	8330A		1			576310	05/26/22 20:54	JZ	TAL DEN
Total/NA	Prep	3535			453.1 mL	5 mL	576154	05/25/22 15:23	AAA	TAL DEN
Total/NA	Analysis	8330A		1			576448	05/27/22 22:38	JZ	TAL DEN
Total/NA	Analysis	350.1		5	10 mL	10 mL	577536	06/08/22 14:26	MMP	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	576945	06/02/22 15:03	SVC	TAL DEN
Total/NA	Analysis	351.2		1			577123	06/03/22 18:01	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	577382	06/07/22 15:00	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	576110	05/25/22 09:18	ZPM	TAL DEN
Total/NA	Analysis	9034		1			576138	05/25/22 10:57	ZPM	TAL DEN
Total/NA	Analysis	9056A		5	10 mL	10 mL	576886	06/02/22 14:50	RAF	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	576568	05/31/22 09:54	ABW	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	576714	05/31/22 18:02	CAI	TAL DEN
Total/NA	Analysis	SM 2320B		1			576371	05/26/22 14:20	KEG	TAL DEN

Client Sample ID: G0122-22A
Lab Sample ID: 280-162622-5

Date Collected: 05/19/22 12:10
Matrix: Water
Date Received: 05/20/22 10:00

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	20 mL	20 mL	576662	06/01/22 11:42	CAS	TAL DEN
Total/NA	Prep	3535			463.4 mL	5 mL	576154	05/25/22 15:23	AAA	TAL DEN
Total/NA	Analysis	8330A		1			576310	05/26/22 21:17	JZ	TAL DEN
Total/NA	Prep	3535			463.4 mL	5 mL	576154	05/25/22 15:23	AAA	TAL DEN
Total/NA	Analysis	8330A		1			576448	05/27/22 23:13	JZ	TAL DEN

Client Sample ID: G0122-22A
Lab Sample ID: 280-162622-5

Date Collected: 05/19/22 12:10
Matrix: Water
Date Received: 05/20/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	350.1		1	10 mL	10 mL	577536	06/08/22 14:28	MMP	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	576945	06/02/22 15:03	SVC	TAL DEN
Total/NA	Analysis	351.2		1			577123	06/03/22 18:01	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	577382	06/07/22 15:02	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	576110	05/25/22 09:18	ZPM	TAL DEN
Total/NA	Analysis	9034		1			576138	05/25/22 10:57	ZPM	TAL DEN
Total/NA	Analysis	9056A		5	10 mL	10 mL	576720	06/01/22 22:04	RAF	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	576568	05/31/22 09:54	ABW	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	576714	05/31/22 18:19	CAI	TAL DEN
Total/NA	Analysis	SM 2320B		1			576371	05/26/22 14:31	KEG	TAL DEN

Client Sample ID: G0066R-22A
Lab Sample ID: 280-162622-6

Date Collected: 05/19/22 10:55
Matrix: Water
Date Received: 05/20/22 10:00

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	20 mL	20 mL	576662	06/01/22 11:55	CAS	TAL DEN
Total/NA	Prep	3535			438.1 mL	5 mL	576154	05/25/22 15:23	AAA	TAL DEN
Total/NA	Analysis	8330A		1			576310	05/26/22 22:26	JZ	TAL DEN
Total/NA	Prep	3535			438.1 mL	5 mL	576154	05/25/22 15:23	AAA	TAL DEN
Total/NA	Analysis	8330A		1			576448	05/27/22 23:48	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	577536	06/08/22 14:42	MMP	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	576945	06/02/22 15:03	SVC	TAL DEN
Total/NA	Analysis	351.2		1			577123	06/03/22 18:03	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	577382	06/07/22 15:04	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	575967	05/24/22 09:13	ZPM	TAL DEN
Total/NA	Analysis	9034		1			575993	05/24/22 11:10	ZPM	TAL DEN
Total/NA	Analysis	9056A		5	10 mL	10 mL	576720	06/01/22 22:20	RAF	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	576568	05/31/22 09:54	ABW	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	576714	05/31/22 19:07	CAI	TAL DEN
Total/NA	Analysis	SM 2320B		1			576371	05/26/22 14:40	KEG	TAL DEN

Client Sample ID: G0024-22A
Lab Sample ID: 280-162622-7

Date Collected: 05/18/22 14:50
Matrix: Water
Date Received: 05/20/22 10:00

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	20 mL	20 mL	576768	06/01/22 19:54	CAS	TAL DEN
Total/NA	Prep	3535			479.6 mL	5 mL	576154	05/25/22 15:23	AAA	TAL DEN
Total/NA	Analysis	8330A		1			576310	05/26/22 22:49	JZ	TAL DEN
Total/NA	Prep	3535			479.6 mL	5 mL	576154	05/25/22 15:23	AAA	TAL DEN
Total/NA	Analysis	8330A		1			576448	05/28/22 01:33	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	577536	06/08/22 14:44	MMP	TAL DEN

Client Sample ID: G0024-22A

Date Collected: 05/18/22 14:50
Date Received: 05/20/22 10:00

Lab Sample ID: 280-162622-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	351.2			25 mL	25 mL	576945	06/02/22 15:03	SVC	TAL DEN
Total/NA	Analysis	351.2		1			577123	06/03/22 18:04	SVC	TAL DEN
Total/NA	Analysis	353.2		2	100 mL	100 mL	577382	06/07/22 15:22	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	575967	05/24/22 09:13	ZPM	TAL DEN
Total/NA	Analysis	9034		1			575993	05/24/22 11:10	ZPM	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	576720	06/01/22 22:36	RAF	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	576568	05/31/22 09:54	ABW	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	576714	05/31/22 19:21	CAI	TAL DEN
Total/NA	Analysis	SM 2320B		1			576371	05/26/22 14:59	KEG	TAL DEN

Client Sample ID: G0115-22A

Date Collected: 05/19/22 08:45
Date Received: 05/20/22 10:00

Lab Sample ID: 280-162622-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	20 mL	20 mL	576662	06/01/22 12:08	CAS	TAL DEN
Total/NA	Prep	3535			522.5 mL	5 mL	576154	05/25/22 15:23	AAA	TAL DEN
Total/NA	Analysis	8330A		1			576310	05/26/22 23:12	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	577536	06/08/22 14:46	MMP	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	576945	06/02/22 15:03	SVC	TAL DEN
Total/NA	Analysis	351.2		1			577123	06/03/22 18:04	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	577382	06/07/22 15:28	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	575967	05/24/22 09:13	ZPM	TAL DEN
Total/NA	Analysis	9034		1			575993	05/24/22 11:10	ZPM	TAL DEN
Total/NA	Analysis	9056A		5	10 mL	10 mL	576886	06/02/22 15:06	RAF	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	576568	05/31/22 09:54	ABW	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	576714	05/31/22 19:36	CAI	TAL DEN
Total/NA	Analysis	SM 2320B		1			576371	05/26/22 15:09	KEG	TAL DEN

Client Sample ID: G0095-22A

Date Collected: 05/19/22 08:45
Date Received: 05/20/22 10:00

Lab Sample ID: 280-162622-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	20 mL	20 mL	576662	06/01/22 12:20	CAS	TAL DEN
Total/NA	Prep	3535			468.6 mL	5 mL	576154	05/25/22 15:23	AAA	TAL DEN
Total/NA	Analysis	8330A		1			576310	05/26/22 23:35	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	577536	06/08/22 14:48	MMP	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	576945	06/02/22 15:03	SVC	TAL DEN
Total/NA	Analysis	351.2		1			577123	06/03/22 18:04	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	577382	06/07/22 15:30	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	575967	05/24/22 09:13	ZPM	TAL DEN
Total/NA	Analysis	9034		1			575993	05/24/22 11:10	ZPM	TAL DEN
Total/NA	Analysis	9056A		5	10 mL	10 mL	576886	06/02/22 15:54	RAF	TAL DEN

Client Sample ID: G0095-22A
Lab Sample ID: 280-162622-9

Date Collected: 05/19/22 08:45
Matrix: Water
Date Received: 05/20/22 10:00

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	576568	05/31/22 09:54	ABW	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	576714	05/31/22 19:55	CAI	TAL DEN
Total/NA	Analysis	SM 2320B		1			576371	05/26/22 15:19	KEG	TAL DEN

Client Sample ID: PZ018-22A
Lab Sample ID: 280-162622-10

Date Collected: 05/18/22 10:05
Matrix: Water
Date Received: 05/20/22 10:00

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	20 mL	20 mL	576662	06/01/22 15:09	CAS	TAL DEN
Total/NA	Prep	3535			463.5 mL	5 mL	576154	05/25/22 15:23	AAA	TAL DEN
Total/NA	Analysis	8330A		1			576310	05/26/22 23:58	JZ	TAL DEN
Total/NA	Prep	3535			463.5 mL	5 mL	576154	05/25/22 15:23	AAA	TAL DEN
Total/NA	Analysis	8330A		1			576448	05/28/22 02:08	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	577536	06/08/22 15:22	MMP	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	576945	06/02/22 15:03	SVC	TAL DEN
Total/NA	Analysis	351.2		1			577123	06/03/22 18:04	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	577382	06/07/22 15:32	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	575967	05/24/22 09:13	ZPM	TAL DEN
Total/NA	Analysis	9034		1			575993	05/24/22 11:10	ZPM	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	576720	06/02/22 00:44	RAF	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	576568	05/31/22 09:54	ABW	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	576714	05/31/22 20:09	CAI	TAL DEN
Total/NA	Analysis	SM 2320B		1			576371	05/26/22 15:27	KEG	TAL DEN

Client Sample ID: PZ020-22A
Lab Sample ID: 280-162622-11

Date Collected: 05/18/22 13:05
Matrix: Water
Date Received: 05/20/22 10:00

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	20 mL	20 mL	576662	06/01/22 15:22	CAS	TAL DEN
Total/NA	Prep	3535			466.8 mL	5 mL	576154	05/25/22 15:23	AAA	TAL DEN
Total/NA	Analysis	8330A		1			576310	05/27/22 00:21	JZ	TAL DEN
Total/NA	Prep	3535			466.8 mL	5 mL	576154	05/25/22 15:23	AAA	TAL DEN
Total/NA	Analysis	8330A		1			576448	05/28/22 02:43	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	577536	06/08/22 15:24	MMP	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	576946	06/02/22 15:06	SVC	TAL DEN
Total/NA	Analysis	351.2		1			577123	06/03/22 18:09	SVC	TAL DEN
Total/NA	Analysis	353.2		5	100 mL	100 mL	577382	06/07/22 15:34	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	575967	05/24/22 09:13	ZPM	TAL DEN
Total/NA	Analysis	9034		1			575993	05/24/22 11:10	ZPM	TAL DEN
Total/NA	Analysis	9056A		5	10 mL	10 mL	576886	06/02/22 21:30	RAF	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	576568	05/31/22 09:54	ABW	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	576714	05/31/22 20:24	CAI	TAL DEN

Client Sample ID: PZ020-22A

Lab Sample ID: 280-162622-11

Date Collected: 05/18/22 13:05

Matrix: Water

Date Received: 05/20/22 10:00

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			576371	05/26/22 15:35	KEG	TAL DEN

Client Sample ID: G0077-22A

Lab Sample ID: 280-162622-12

Date Collected: 05/18/22 16:20

Matrix: Water

Date Received: 05/20/22 10:00

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	20 mL	20 mL	576768	06/01/22 20:07	CAS	TAL DEN
Total/NA	Prep	3535			472 mL	5 mL	576154	05/25/22 15:23	AAA	TAL DEN
Total/NA	Analysis	8330A		1			576310	05/27/22 00:44	JZ	TAL DEN
Total/NA	Prep	3535			472 mL	5 mL	576154	05/25/22 15:23	AAA	TAL DEN
Total/NA	Analysis	8330A		1			576448	05/28/22 03:18	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	577536	06/08/22 15:26	MMP	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	576945	06/02/22 15:03	SVC	TAL DEN
Total/NA	Analysis	351.2		1			577123	06/03/22 18:06	SVC	TAL DEN
Total/NA	Analysis	353.2		5	100 mL	100 mL	577382	06/07/22 15:36	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	575967	05/24/22 09:13	ZPM	TAL DEN
Total/NA	Analysis	9034		1			575993	05/24/22 11:10	ZPM	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	576886	06/02/22 22:18	RAF	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	576568	05/31/22 09:54	ABW	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	576714	05/31/22 21:14	CAI	TAL DEN
Total/NA	Analysis	SM 2320B		1			576371	05/26/22 15:42	KEG	TAL DEN

Client Sample ID: G0069-22A

Lab Sample ID: 280-162622-13

Date Collected: 05/18/22 11:15

Matrix: Water

Date Received: 05/20/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			1042.7 mL	1 mL	576113	05/25/22 15:07	KAS	TAL DEN
Total/NA	Analysis	8015C DRO		1			576526	05/30/22 20:22	KSA	TAL DEN
Total/NA	Prep	3510C	RE		1042.9 mL	1 mL	576710	06/01/22 12:30	KAS	TAL DEN
Total/NA	Analysis	8015C DRO	RE	1			577101	06/03/22 19:01	KSA	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	577382	06/07/22 14:24	SVC	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	576886	06/02/22 23:21	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			576371	05/26/22 15:48	KEG	TAL DEN

Client Sample ID: SHGW03-22A

Lab Sample ID: 280-162622-14

Date Collected: 05/18/22 15:20

Matrix: Water

Date Received: 05/20/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			1061.5 mL	1 mL	576113	05/25/22 15:07	KAS	TAL DEN
Total/NA	Analysis	8015C DRO		1			576526	05/30/22 20:45	KSA	TAL DEN

Client Sample ID: SHGW03-22A
Lab Sample ID: 280-162622-14

Date Collected: 05/18/22 15:20
Matrix: Water
Date Received: 05/20/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C	RE		1056.6 mL	1 mL	576710	06/01/22 12:30	KAS	TAL DEN
Total/NA	Analysis	8015C DRO	RE	1			577101	06/03/22 19:24	KSA	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	577382	06/07/22 14:26	SVC	TAL DEN
Total/NA	Analysis	9056A		5	10 mL	10 mL	576886	06/03/22 00:25	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			576371	05/26/22 15:54	KEG	TAL DEN

Client Sample ID: SHGW04-22A
Lab Sample ID: 280-162622-15

Date Collected: 05/18/22 12:35
Matrix: Water
Date Received: 05/20/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			1060.4 mL	1 mL	576113	05/25/22 15:07	KAS	TAL DEN
Total/NA	Analysis	8015C DRO		1			576526	05/30/22 21:07	KSA	TAL DEN
Total/NA	Prep	3510C	RE		1056.2 mL	1 mL	576710	06/01/22 12:30	KAS	TAL DEN
Total/NA	Analysis	8015C DRO	RE	1			577101	06/03/22 19:47	KSA	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	577382	06/07/22 14:28	SVC	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	576886	06/03/22 00:41	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			576371	05/26/22 16:01	KEG	TAL DEN

Client Sample ID: G0311-22A
Lab Sample ID: 280-162622-16

Date Collected: 05/19/22 08:00
Matrix: Water
Date Received: 05/20/22 10:00

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	20 mL	20 mL	576907	06/02/22 15:32	CAS	TAL DEN
Total/NA	Prep	3535			454.8 mL	5 mL	576154	05/25/22 15:23	AAA	TAL DEN
Total/NA	Analysis	8330A		1			576310	05/27/22 01:07	JZ	TAL DEN
Total/NA	Prep	3535			454.8 mL	5 mL	576154	05/25/22 15:23	AAA	TAL DEN
Total/NA	Analysis	8330A		1			576448	05/28/22 03:53	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	577536	06/08/22 15:28	MMP	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	576945	06/02/22 15:03	SVC	TAL DEN
Total/NA	Analysis	351.2		1			577123	06/03/22 18:06	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	577382	06/07/22 15:38	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	576110	05/25/22 09:18	ZPM	TAL DEN
Total/NA	Analysis	9034		1			576138	05/25/22 10:57	ZPM	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	576886	06/03/22 01:29	RAF	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	576568	05/31/22 09:54	ABW	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	576714	05/31/22 21:31	CAI	TAL DEN
Total/NA	Analysis	SM 2320B		1			576371	05/26/22 16:13	KEG	TAL DEN

Client Sample ID: G0111-22A

Date Collected: 05/19/22 13:15
Date Received: 05/20/22 10:00

Lab Sample ID: 280-162622-17

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	20 mL	20 mL	576907	06/02/22 15:45	CAS	TAL DEN
Total/NA	Prep	3535			469.3 mL	5 mL	576154	05/25/22 15:23	AAA	TAL DEN
Total/NA	Analysis	8330A		1			576310	05/27/22 01:30	JZ	TAL DEN
Total/NA	Prep	3535			469.3 mL	5 mL	576154	05/25/22 15:23	AAA	TAL DEN
Total/NA	Analysis	8330A		1			576448	05/28/22 04:28	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	577536	06/08/22 15:30	MMP	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	576945	06/02/22 15:03	SVC	TAL DEN
Total/NA	Analysis	351.2		1			577123	06/03/22 18:07	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	577382	06/07/22 15:40	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	576110	05/25/22 09:18	ZPM	TAL DEN
Total/NA	Analysis	9034		1			576138	05/25/22 10:57	ZPM	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	576886	06/03/22 01:45	RAF	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	576568	05/31/22 09:54	ABW	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	576714	05/31/22 22:19	CAI	TAL DEN
Total/NA	Analysis	SM 2320B		1			576371	05/26/22 16:49	KEG	TAL DEN

Client Sample ID: G0123-22A

Date Collected: 05/19/22 13:20
Date Received: 05/20/22 10:00

Lab Sample ID: 280-162622-18

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	20 mL	20 mL	576907	06/02/22 15:58	CAS	TAL DEN
Total/NA	Prep	3535			510.7 mL	5 mL	576154	05/25/22 15:23	AAA	TAL DEN
Total/NA	Analysis	8330A		1			576310	05/27/22 01:53	JZ	TAL DEN
Total/NA	Prep	3535			510.7 mL	5 mL	576154	05/25/22 15:23	AAA	TAL DEN
Total/NA	Analysis	8330A		1			576448	05/28/22 05:03	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	577536	06/08/22 15:32	MMP	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	576945	06/02/22 15:03	SVC	TAL DEN
Total/NA	Analysis	351.2		1			577123	06/03/22 18:07	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	577382	06/07/22 15:42	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	576110	05/25/22 09:18	ZPM	TAL DEN
Total/NA	Analysis	9034		1			576138	05/25/22 10:57	ZPM	TAL DEN
Total/NA	Analysis	9056A		5	10 mL	10 mL	576886	06/03/22 02:01	RAF	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	576568	05/31/22 09:54	ABW	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	576714	05/31/22 22:33	CAI	TAL DEN
Total/NA	Analysis	SM 2320B		1			576371	05/26/22 17:11	KEG	TAL DEN

Client Sample ID: SHGW02-22A

Date Collected: 05/18/22 09:05
Date Received: 05/20/22 10:00

Lab Sample ID: 280-162622-19

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	576482	05/27/22 23:34	SGB	TAL DEN
Total/NA	Analysis	RSK-175		1	20 mL	20 mL	576662	06/01/22 12:33	CAS	TAL DEN

Client Sample ID: SHGW02-22A
Lab Sample ID: 280-162622-19
Date Collected: 05/18/22 09:05
Matrix: Water
Date Received: 05/20/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	353.2		1	100 mL	100 mL	577382	06/07/22 14:30	SVC	TAL DEN
Total/NA	Analysis	9056A		5	10 mL	10 mL	576886	06/03/22 02:17	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			576371	05/26/22 17:18	KEG	TAL DEN

Client Sample ID: SHGW05-22A
Lab Sample ID: 280-162622-20
Date Collected: 05/18/22 09:20
Matrix: Water
Date Received: 05/20/22 10:00

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	576482	05/27/22 23:55	SGB	TAL DEN
Total/NA	Analysis	RSK-175		1	20 mL	20 mL	576662	06/01/22 12:46	CAS	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	577382	06/07/22 14:48	SVC	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	576886	06/03/22 02:33	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			576371	05/26/22 17:24	KEG	TAL DEN

Client Sample ID: G0053-22A
Lab Sample ID: 280-162622-21
Date Collected: 05/18/22 10:10
Matrix: Water
Date Received: 05/20/22 10:00

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	576482	05/28/22 00:16	SGB	TAL DEN
Total/NA	Analysis	RSK-175		1	20 mL	20 mL	576662	06/01/22 13:12	CAS	TAL DEN
Total/NA	Analysis	353.2		5	100 mL	100 mL	577382	06/07/22 14:50	SVC	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	576886	06/03/22 02:49	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			576371	05/26/22 17:30	KEG	TAL DEN

Client Sample ID: G0069-22A
Lab Sample ID: 280-162622-22
Date Collected: 05/18/22 11:15
Matrix: Water
Date Received: 05/20/22 10:00

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	576482	05/28/22 00:38	SGB	TAL DEN
Total/NA	Analysis	RSK-175		1	20 mL	20 mL	576662	06/01/22 13:25	CAS	TAL DEN

Client Sample ID: 5-18 TB
Lab Sample ID: 280-162622-23
Date Collected: 05/18/22 08:00
Matrix: Water
Date Received: 05/20/22 10:00

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	576482	05/27/22 21:27	SGB	TAL DEN

Client Sample ID: SHGW04-22A
Lab Sample ID: 280-162622-24

Date Collected: 05/18/22 12:35
Matrix: Water
Date Received: 05/20/22 10:00

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	576482	05/28/22 00:59	SGB	TAL DEN
Total/NA	Analysis	RSK-175		1	20 mL	20 mL	576662	06/01/22 13:38	CAS	TAL DEN

Client Sample ID: SHGW03-22A
Lab Sample ID: 280-162622-25

Date Collected: 05/18/22 15:20
Matrix: Water
Date Received: 05/20/22 10:00

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	576482	05/28/22 01:20	SGB	TAL DEN
Total/NA	Analysis	RSK-175		1	20 mL	20 mL	576662	06/01/22 13:51	CAS	TAL DEN

Client Sample ID: SAMW1-22A
Lab Sample ID: 280-162622-26

Date Collected: 05/18/22 14:10
Matrix: Water
Date Received: 05/20/22 10:00

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	576482	05/28/22 01:41	SGB	TAL DEN
Total/NA	Analysis	RSK-175		1	20 mL	20 mL	576662	06/01/22 14:04	CAS	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	577382	06/07/22 14:52	SVC	TAL DEN
Total/NA	Analysis	9056A		5	10 mL	10 mL	576886	06/03/22 03:05	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			576371	05/26/22 17:36	KEG	TAL DEN

Laboratory References:

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

Accreditation/Certification Summary

Client: Brice Environmental Services, Corp
Job ID: 280-162622-1
Project/Site: Cornhusker (CHAAP)

Laboratory: Eurofins Denver

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

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	2907.01	10-31-23

Method Summary

Client: Brice Environmental Services, Corp
Job ID: 280-162622-1
Project/Site: Cornhusker (CHAAP)

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

Protocol References:

EPA = US Environmental Protection Agency

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

None = None

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

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

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

Laboratory References:

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

Sample Summary

Client: Brice Environmental Services, Corp
Job ID: 280-162622-1
Project/Site: Cornhusker (CHAAP)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-162622-1	G0119-22A	Water	05/19/22 10:50	05/20/22 10:00
280-162622-2	G0121-22A	Water	05/19/22 12:05	05/20/22 10:00
280-162622-3	G0101-22A	Water	05/19/22 09:45	05/20/22 10:00
280-162622-4	G0100-22A	Water	05/19/22 09:50	05/20/22 10:00
280-162622-5	G0122-22A	Water	05/19/22 12:10	05/20/22 10:00
280-162622-6	G0066R-22A	Water	05/19/22 10:55	05/20/22 10:00
280-162622-7	G0024-22A	Water	05/18/22 14:50	05/20/22 10:00
280-162622-8	G0115-22A	Water	05/19/22 08:45	05/20/22 10:00
280-162622-9	G0095-22A	Water	05/19/22 08:45	05/20/22 10:00
280-162622-10	PZ018-22A	Water	05/18/22 10:05	05/20/22 10:00
280-162622-11	PZ020-22A	Water	05/18/22 13:05	05/20/22 10:00
280-162622-12	G0077-22A	Water	05/18/22 16:20	05/20/22 10:00
280-162622-13	G0069-22A	Water	05/18/22 11:15	05/20/22 10:00
280-162622-14	SHGW03-22A	Water	05/18/22 15:20	05/20/22 10:00
280-162622-15	SHGW04-22A	Water	05/18/22 12:35	05/20/22 10:00
280-162622-16	G0311-22A	Water	05/19/22 08:00	05/20/22 10:00
280-162622-17	G0111-22A	Water	05/19/22 13:15	05/20/22 10:00
280-162622-18	G0123-22A	Water	05/19/22 13:20	05/20/22 10:00
280-162622-19	SHGW02-22A	Water	05/18/22 09:05	05/20/22 10:00
280-162622-20	SHGW05-22A	Water	05/18/22 09:20	05/20/22 10:00
280-162622-21	G0053-22A	Water	05/18/22 10:10	05/20/22 10:00
280-162622-22	G0069-22A	Water	05/18/22 11:15	05/20/22 10:00
280-162622-23	5-18 TB	Water	05/18/22 08:00	05/20/22 10:00
280-162622-24	SHGW04-22A	Water	05/18/22 12:35	05/20/22 10:00
280-162622-25	SHGW03-22A	Water	05/18/22 15:20	05/20/22 10:00
280-162622-26	SAMW1-22A	Water	05/18/22 14:10	05/20/22 10:00

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: VMS_MS1 Analysis Batch Number: 566025

Lab Sample ID: IC 280-566025/14 Client Sample ID:

Date Analyzed: 02/16/22 14:56 Lab File ID: MS1_2511.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.68	Assign Peak	seifertj	02/17/22 08:21
Vinyl chloride	1.97	Assign Peak	seifertj	02/17/22 08:21
Chloroethane	2.43	Assign Peak	seifertj	02/17/22 08:21
1,2-Dichloroethane	5.59	Assign Peak	seifertj	02/17/22 08:21
1,2-Dichloropropane	6.33	Assign Peak	seifertj	02/17/22 08:21
1,3-Dichloropropane	7.78	Assign Peak	seifertj	02/17/22 08:21
Bromoform	9.33	Assign Peak	seifertj	02/17/22 08:22
1,2,3-Trichloropropane	9.84	Assign Peak	seifertj	02/17/22 08:22
Hexachlorobutadiene	12.94	Assign Peak	seifertj	02/17/22 08:22

Lab Sample ID: IC 280-566025/15 Client Sample ID:

Date Analyzed: 02/16/22 15:18 Lab File ID: MS1_2512.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.68	Assign Peak	seifertj	02/17/22 08:22
Iodomethane	3.37	Assign Peak	seifertj	02/17/22 08:23
Methyl acetate	3.53	Assign Peak	seifertj	02/17/22 08:23
sec-Butyl Alcohol	4.95	Assign Peak	seifertj	02/17/22 08:23
1,2-Dichloroethane	5.59	Assign Peak	seifertj	02/17/22 08:23
Bromoform	9.33	Assign Peak	seifertj	02/17/22 08:23
1,2-Dibromo-3-Chloropropane	11.97	Assign Peak	seifertj	02/17/22 08:23

Lab Sample ID: IC 280-566025/21 Client Sample ID:

Date Analyzed: 02/16/22 17:26 Lab File ID: MS1_2518.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.68	Split Peak	seifertj	02/17/22 08:24

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: VMS_MS1 Analysis Batch Number: 574012

Lab Sample ID: IC 280-574012/35 Client Sample ID:

Date Analyzed: 05/05/22 14:42 Lab File ID: MS1_5803.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acrolein	3.11	Assign Peak	peppinga	05/05/22 18:12
1,2,3-Trichloropropane	9.83	Assign Peak	peppinga	05/05/22 18:15
1-Chlorohexane		Invalid Compound ID	peppinga	05/05/22 18:15
2-Butanone (MEK)		Invalid Compound ID	peppinga	05/05/22 18:13
2-Chloroethyl vinyl ether		Invalid Compound ID	peppinga	05/05/22 18:14
sec-Butyl Alcohol		Invalid Compound ID	peppinga	05/05/22 18:13
1,2-Dibromo-3-Chloropropane	11.97	Assign Peak	peppinga	05/05/22 18:16

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: VMS_MS1 Analysis Batch Number: 576482

Lab Sample ID: 280-162622-20 Client Sample ID: SHGW05-22A

Date Analyzed: 05/27/22 23:55 Lab File ID: MS1_6860.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon disulfide		Invalid Compound ID	sunleec	05/28/22 07:07

Lab Sample ID: 280-162622-24 Client Sample ID: SHGW04-22A

Date Analyzed: 05/28/22 00:59 Lab File ID: MS1_6863.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzene		Invalid Compound ID	sunleec	05/28/22 07:08

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 550959

Lab Sample ID: IC 280-550959/2 Client Sample ID:

Date Analyzed: 09/24/21 13:28 Lab File ID: 004F0201.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.29	Peak assignment corrected	sciannac	09/24/21 13:54
Ethane	1.56	Peak assignment corrected	sciannac	09/24/21 13:54
Ethylene	1.86	Peak assignment corrected	sciannac	09/24/21 13:54
Acetylene	4.18	Peak assignment corrected	sciannac	09/24/21 13:55

Lab Sample ID: IC 280-550959/2 Client Sample ID:

Date Analyzed: 09/24/21 13:28 Lab File ID: 004F0201.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.69	Peak assignment corrected	sciannac	09/24/21 13:54
Ethylene	2.61	Peak assignment corrected	sciannac	09/24/21 13:54
Acetylene	2.76	Peak assignment corrected	sciannac	09/24/21 13:55
Ethane	3.03	Peak assignment corrected	sciannac	09/24/21 13:54

Lab Sample ID: IC 280-550959/4 Client Sample ID:

Date Analyzed: 09/24/21 13:54 Lab File ID: 006F0401.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	4.23	Peak assignment corrected	sciannac	09/24/21 15:50

Lab Sample ID: IC 280-550959/4 Client Sample ID:

Date Analyzed: 09/24/21 13:54 Lab File ID: 006F0401.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	2.75	Peak assignment corrected	sciannac	09/24/21 15:50

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 550959

Lab Sample ID: IC 280-550959/5 Client Sample ID:

Date Analyzed: 09/24/21 14:07 Lab File ID: 007F0501.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	4.23	Split Peak	sciannac	09/24/21 15:50

Lab Sample ID: IC 280-550959/5 Client Sample ID:

Date Analyzed: 09/24/21 14:07 Lab File ID: 007F0501.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	2.75	Split Peak	sciannac	09/24/21 15:50
Ethane	3.03	Split Peak	sciannac	09/24/21 15:50

Lab Sample ID: IC 280-550959/6 Client Sample ID:

Date Analyzed: 09/24/21 14:20 Lab File ID: 008F0601.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	4.23	Peak assignment corrected	sciannac	09/24/21 15:44

Lab Sample ID: IC 280-550959/6 Client Sample ID:

Date Analyzed: 09/24/21 14:20 Lab File ID: 008F0601.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.68	Baseline Smoothing	sciannac	09/29/21 09:21
Acetylene	2.75	Peak assignment corrected	sciannac	09/24/21 15:44

Lab Sample ID: IC 280-550959/7 Client Sample ID:

Date Analyzed: 09/24/21 14:33 Lab File ID: 009F0701.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	4.23	Peak assignment corrected	sciannac	09/24/21 15:46

RSK-175

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 550959

Lab Sample ID: IC 280-550959/7 Client Sample ID:

Date Analyzed: 09/24/21 14:33 Lab File ID: 009F0701.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	2.75	Peak assignment corrected	sciannac	09/24/21 15:46

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 576662

Lab Sample ID: CCVRT 280-576662/2 Client Sample ID:

Date Analyzed: 06/01/22 09:45 Lab File ID: 002F0201.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	1.75	Peak assignment corrected	sciannac	06/01/22 13:17
Acetylene	3.96	Split Peak	sciannac	06/03/22 08:57

Lab Sample ID: CCVRT 280-576662/2 Client Sample ID:

Date Analyzed: 06/01/22 09:45 Lab File ID: 002F0201.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	2.62	Split Peak	sciannac	06/03/22 08:58
Acetylene	2.77	Split Peak	sciannac	06/03/22 08:57

Lab Sample ID: CCV 280-576662/46 Client Sample ID:

Date Analyzed: 06/01/22 12:59 Lab File ID: 017F1701.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	1.83	Peak assignment corrected	sciannac	06/03/22 09:00
Acetylene	4.21	Peak assignment corrected	sciannac	06/03/22 09:00

Lab Sample ID: CCV 280-576662/46 Client Sample ID:

Date Analyzed: 06/01/22 12:59 Lab File ID: 017F1701.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	2.60	Peak assignment corrected	sciannac	06/03/22 09:00
Acetylene	2.75	Peak assignment corrected	sciannac	06/03/22 09:00

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 576662

Lab Sample ID: CCV 280-576662/58 Client Sample ID:

Date Analyzed: 06/01/22 15:34 Lab File ID: 029F2901.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	1.83	Peak assignment corrected	sciannac	06/03/22 09:09
Acetylene	4.21	Peak assignment corrected	sciannac	06/03/22 09:09

Lab Sample ID: CCV 280-576662/58 Client Sample ID:

Date Analyzed: 06/01/22 15:34 Lab File ID: 029F2901.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	2.60	Peak assignment corrected	sciannac	06/03/22 09:09
Acetylene	2.75	Peak assignment corrected	sciannac	06/03/22 09:09

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 576768

Lab Sample ID: CCVRT 280-576768/2 Client Sample ID:

Date Analyzed: 06/01/22 09:45 Lab File ID: 002F0201.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	1.75	Peak assignment corrected	sciannac	06/01/22 13:17
Acetylene	3.96	Split Peak	sciannac	06/03/22 08:57

Lab Sample ID: CCVRT 280-576768/2 Client Sample ID:

Date Analyzed: 06/01/22 09:45 Lab File ID: 002F0201.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	2.62	Split Peak	sciannac	06/03/22 08:58
Acetylene	2.77	Split Peak	sciannac	06/03/22 08:57

Lab Sample ID: CCV 280-576768/58 Client Sample ID:

Date Analyzed: 06/01/22 15:34 Lab File ID: 029F2901.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	1.83	Peak assignment corrected	sciannac	06/03/22 09:09
Acetylene	4.21	Peak assignment corrected	sciannac	06/03/22 09:09

Lab Sample ID: CCV 280-576768/58 Client Sample ID:

Date Analyzed: 06/01/22 15:34 Lab File ID: 029F2901.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	2.60	Peak assignment corrected	sciannac	06/03/22 09:09
Acetylene	2.75	Peak assignment corrected	sciannac	06/03/22 09:09

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 576768

Lab Sample ID: MB 280-576768/61 Client Sample ID:

Date Analyzed: 06/01/22 16:13 Lab File ID: 032F3201.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.26	Peak assignment corrected	sciannac	06/03/22 09:12

Lab Sample ID: MB 280-576768/61 Client Sample ID:

Date Analyzed: 06/01/22 16:13 Lab File ID: 032F3201.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.60	Peak assignment corrected	sciannac	06/03/22 09:12

Lab Sample ID: CCV 280-576768/75 Client Sample ID:

Date Analyzed: 06/01/22 19:15 Lab File ID: 046F4601.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	1.83	Peak not integrated	sciannac	06/03/22 09:17
Acetylene	4.21	Peak not integrated	sciannac	06/03/22 09:17

Lab Sample ID: CCV 280-576768/75 Client Sample ID:

Date Analyzed: 06/01/22 19:15 Lab File ID: 046F4601.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	2.60	Peak not integrated	sciannac	06/03/22 09:17
Acetylene	2.75	Peak not integrated	sciannac	06/03/22 09:17

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 576768

Lab Sample ID: CCV 280-576768/87 Client Sample ID:

Date Analyzed: 06/01/22 21:51 Lab File ID: 058F5801.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	1.84	Peak assignment corrected	sciannac	06/02/22 09:05
Acetylene	4.21	Peak assignment corrected	sciannac	06/02/22 09:05

Lab Sample ID: CCV 280-576768/87 Client Sample ID:

Date Analyzed: 06/01/22 21:51 Lab File ID: 058F5801.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	2.61	Peak assignment corrected	sciannac	06/02/22 09:05
Acetylene	2.76	Peak assignment corrected	sciannac	06/02/22 09:05

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 576907

Lab Sample ID: CCV 280-576907/17 Client Sample ID:

Date Analyzed: 06/02/22 15:07 Lab File ID: 017F1701.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	4.20	Split Peak	sciannac	06/03/22 08:49

Lab Sample ID: CCV 280-576907/17 Client Sample ID:

Date Analyzed: 06/02/22 15:07 Lab File ID: 017F1701.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	2.75	Split Peak	sciannac	06/03/22 08:49

Lab Sample ID: CCV 280-576907/28 Client Sample ID:

Date Analyzed: 06/02/22 17:29 Lab File ID: 028F2801.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	4.20	Peak assignment corrected	sciannac	06/03/22 09:39

Lab Sample ID: CCV 280-576907/28 Client Sample ID:

Date Analyzed: 06/02/22 17:29 Lab File ID: 028F2801.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	2.60	Peak not integrated	sciannac	06/03/22 08:50
Acetylene	2.75	Peak assignment corrected	sciannac	06/03/22 09:39

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 577087

Lab Sample ID: CCV 280-577087/17 Client Sample ID:

Date Analyzed: 06/03/22 18:09 Lab File ID: 019F1901.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	1.83	Peak not integrated	sciannac	06/06/22 15:11
Acetylene	4.20	Peak not integrated	sciannac	06/06/22 15:11

Lab Sample ID: CCV 280-577087/17 Client Sample ID:

Date Analyzed: 06/03/22 18:09 Lab File ID: 019F1901.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	2.60	Peak not integrated	sciannac	06/06/22 15:11
Acetylene	2.75	Peak not integrated	sciannac	06/06/22 15:11

DIESEL RANGE ORGANICS MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: SGC_U2a Analysis Batch Number: 574280

Lab Sample ID: STD7 280-574280/2 IC Client Sample ID:

Date Analyzed: 05/09/22 12:59 Lab File ID: 05090002.D GC Column: RTX-1 (30.32) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
o-Terphenyl (Surr)	7.27	Baseline Smoothing	appenzellerk	05/09/22 15:36

Lab Sample ID: STD2 280-574280/7 IC Client Sample ID:

Date Analyzed: 05/09/22 14:53 Lab File ID: 05090007.D GC Column: RTX-1 (30.32) ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
n-Octacosane	9.90	Baseline Smoothing	appenzellerk	05/09/22 15:39

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 562503

Lab Sample ID: IC 280-562503/11 Client Sample ID:

Date Analyzed: 01/04/22 18:28 Lab File ID: 01040011.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.59	Baseline	zhangji	01/04/22 19:18

Lab Sample ID: IC 280-562503/12 Client Sample ID:

Date Analyzed: 01/04/22 18:51 Lab File ID: 01040012.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.60	Baseline	zhangji	01/04/22 19:18

Lab Sample ID: IC 280-562503/18 Client Sample ID:

Date Analyzed: 01/04/22 21:08 Lab File ID: 01040018.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	7.61	Baseline	zhangji	01/05/22 12:01
Picric acid	7.95	Baseline	zhangji	01/05/22 12:02
PETN	14.74	Baseline	zhangji	01/05/22 12:01

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 562503

Lab Sample ID: IC 280-562503/19 Client Sample ID:

Date Analyzed: 01/04/22 21:31 Lab File ID: 01040019.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.60	Baseline	zhangji	01/05/22 11:59
RDX	7.60	Baseline	zhangji	01/05/22 12:00
Picric acid	7.94	Baseline	zhangji	01/05/22 12:00
2,4,6-Trinitrotoluene	10.95	Baseline	zhangji	01/05/22 12:00
4-Amino-2,6-dinitrotoluene	11.15	Baseline	zhangji	01/05/22 12:00
2-Amino-4,6-dinitrotoluene	11.41	Baseline	zhangji	01/05/22 12:00
2,6-Dinitrotoluene	11.58	Baseline	zhangji	01/05/22 12:00
2,4-Dinitrotoluene	11.75	Baseline	zhangji	01/05/22 12:00
PETN	14.71	Baseline	zhangji	01/05/22 12:00

Lab Sample ID: ICV 280-562503/20 Client Sample ID:

Date Analyzed: 01/04/22 21:54 Lab File ID: 01040020.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	7.60	Baseline	zhangji	01/05/22 11:59
Picric acid	7.92	Baseline	zhangji	01/05/22 11:59

Lab Sample ID: IC 280-562503/30 Client Sample ID:

Date Analyzed: 01/05/22 01:43 Lab File ID: 01040030.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.47	Baseline	zhangji	01/05/22 12:05
DNX	6.79	Baseline	zhangji	01/05/22 12:07
MNX	7.22	Baseline	zhangji	01/05/22 12:07

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 562503

Lab Sample ID: IC 280-562503/31 Client Sample ID:

Date Analyzed: 01/05/22 02:06 Lab File ID: 01040031.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.48	Baseline	zhangji	01/05/22 12:07
DNX	6.80	Baseline	zhangji	01/05/22 12:07
MNX	7.22	Baseline	zhangji	01/05/22 12:07

Lab Sample ID: IC 280-562503/32 Client Sample ID:

Date Analyzed: 01/05/22 02:29 Lab File ID: 01040032.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.48	Baseline	zhangji	01/05/22 12:07
DNX	6.80	Baseline	zhangji	01/05/22 12:07
MNX	7.22	Baseline	zhangji	01/05/22 12:08

Lab Sample ID: IC 280-562503/33 Client Sample ID:

Date Analyzed: 01/05/22 02:52 Lab File ID: 01040033.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.48	Baseline	zhangji	01/05/22 12:07
DNX	6.80	Baseline	zhangji	01/05/22 12:07
MNX	7.22	Baseline	zhangji	01/05/22 12:08

Lab Sample ID: IC 280-562503/34 Client Sample ID:

Date Analyzed: 01/05/22 03:15 Lab File ID: 01040034.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.48	Baseline	zhangji	01/05/22 12:08
DNX	6.80	Baseline	zhangji	01/05/22 12:08
MNX	7.22	Baseline	zhangji	01/05/22 12:08

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 562503

Lab Sample ID: IC 280-562503/35 Client Sample ID:

Date Analyzed: 01/05/22 03:38 Lab File ID: 01040035.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.48	Baseline	zhangji	01/05/22 12:08
DNX	6.80	Baseline	zhangji	01/05/22 12:08
MNX	7.22	Baseline	zhangji	01/05/22 12:08

Lab Sample ID: IC 280-562503/36 Client Sample ID:

Date Analyzed: 01/05/22 04:01 Lab File ID: 01040036.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.48	Baseline	zhangji	01/05/22 12:09
DNX	6.80	Baseline	zhangji	01/05/22 12:09
MNX	7.22	Baseline	zhangji	01/05/22 12:09

Lab Sample ID: IC 280-562503/37 Client Sample ID:

Date Analyzed: 01/05/22 04:24 Lab File ID: 01040037.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.48	Baseline	zhangji	01/05/22 12:09
DNX	6.80	Baseline	zhangji	01/05/22 12:09
MNX	7.22	Baseline	zhangji	01/05/22 12:09

Lab Sample ID: ICV 280-562503/38 Client Sample ID:

Date Analyzed: 01/05/22 04:47 Lab File ID: 01040038.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.48	Baseline	zhangji	01/05/22 12:09
DNX	6.80	Baseline	zhangji	01/05/22 12:09
MNX	7.22	Baseline	zhangji	01/05/22 12:09

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 576310

Lab Sample ID: CCV 280-576310/9 Client Sample ID:

Date Analyzed: 05/26/22 17:05 Lab File ID: 05260009.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.47	Baseline	zhangji	05/26/22 18:04
DNX	6.79	Baseline	zhangji	05/26/22 18:04

Lab Sample ID: MB 280-576154/1-A Client Sample ID:

Date Analyzed: 05/26/22 17:28 Lab File ID: 05260011.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.54	Baseline	zhangji	05/26/22 18:04

Lab Sample ID: LCS 280-576154/2-A Client Sample ID:

Date Analyzed: 05/26/22 17:51 Lab File ID: 05260012.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.59	Baseline	zhangji	05/26/22 18:13

Lab Sample ID: LCS 280-576154/4-A Client Sample ID:

Date Analyzed: 05/26/22 18:37 Lab File ID: 05260014.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.20	Baseline	zhangji	05/26/22 19:04
1,2-Dinitrobenzene	8.54	Baseline	zhangji	05/26/22 19:04

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 576310

Lab Sample ID: LCSD 280-576154/5-A Client Sample ID:

Date Analyzed: 05/26/22 19:00 Lab File ID: 05260015.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.21	Baseline	zhangji	05/26/22 19:46
1,2-Dinitrobenzene	8.54	Baseline	zhangji	05/26/22 19:47

Lab Sample ID: LCSD 280-576154/3-A Client Sample ID:

Date Analyzed: 05/26/22 19:23 Lab File ID: 0526X013.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.59	Baseline	zhangji	05/26/22 19:47
Nitrobenzene	9.68	Baseline	zhangji	05/26/22 19:47

Lab Sample ID: 280-162622-1 Client Sample ID: G0119-22A

Date Analyzed: 05/26/22 19:46 Lab File ID: 05260016.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.54	Baseline	zhangji	05/26/22 20:30
1,3,5-Trinitrobenzene	8.68	Baseline	zhangji	05/26/22 20:30
1,3-Dinitrobenzene		Invalid Compound ID	zhangji	05/26/22 20:30
2,4,6-Trinitrotoluene		Invalid Compound ID	zhangji	05/26/22 20:30
Tetryl		Invalid Compound ID	zhangji	05/26/22 20:30

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 576310

Lab Sample ID: 280-162622-2 Client Sample ID: G0121-22A

Date Analyzed: 05/26/22 20:09 Lab File ID: 05260017.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.25	Baseline	zhangji	05/26/22 20:35
1,2-Dinitrobenzene	8.55	Baseline	zhangji	05/26/22 20:35
1,3-Dinitrobenzene	9.31	Baseline	zhangji	05/26/22 20:35
2,4,6-Trinitrotoluene		Baseline	zhangji	05/26/22 20:35
2-Nitrotoluene		Invalid Compound ID	zhangji	05/26/22 20:35
4-Nitrotoluene		Invalid Compound ID	zhangji	05/26/22 20:35
Nitrobenzene		Invalid Compound ID	zhangji	05/26/22 20:35
RDX		Invalid Compound ID	zhangji	05/26/22 20:35
Tetryl		Invalid Compound ID	zhangji	05/26/22 20:35
2-Amino-4,6-dinitrotoluene	11.41	Baseline	zhangji	05/26/22 20:35
2,6-Dinitrotoluene	11.51	Baseline	zhangji	05/26/22 20:35
2,4-Dinitrotoluene	11.68	Baseline	zhangji	05/26/22 20:35
3-Nitrotoluene	13.59	Baseline	zhangji	05/26/22 20:35

Lab Sample ID: 280-162622-3 Client Sample ID: G0101-22A

Date Analyzed: 05/26/22 20:31 Lab File ID: 05260018.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3,5-Trinitrobenzene		Invalid Compound ID	zhangji	05/26/22 20:54
1,3-Dinitrobenzene		Invalid Compound ID	zhangji	05/26/22 20:54
2-Amino-4,6-dinitrotoluene		Invalid Compound ID	zhangji	05/26/22 20:54
4-Nitrotoluene		Invalid Compound ID	zhangji	05/26/22 20:54
MNX		Invalid Compound ID	zhangji	05/26/22 20:54
Tetryl		Invalid Compound ID	zhangji	05/26/22 20:54

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 576310

Lab Sample ID: 280-162622-4 Client Sample ID: G0100-22A

Date Analyzed: 05/26/22 20:54 Lab File ID: 05260019.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.54	Baseline	zhangji	05/27/22 12:48
1,3-Dinitrobenzene		Invalid Compound ID	zhangji	05/27/22 12:48
2,4,6-Trinitrotoluene		Invalid Compound ID	zhangji	05/27/22 12:48
2-Nitrotoluene		Invalid Compound ID	zhangji	05/27/22 12:49
Tetryl		Invalid Compound ID	zhangji	05/27/22 12:48

Lab Sample ID: 280-162622-5 Client Sample ID: G0122-22A

Date Analyzed: 05/26/22 21:17 Lab File ID: 05260020.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	7.58	Baseline	zhangji	05/27/22 12:49
1,2-Dinitrobenzene	8.54	Baseline	zhangji	05/27/22 12:49
1,3-Dinitrobenzene		Invalid Compound ID	zhangji	05/27/22 12:49
2,4,6-Trinitrotoluene		Invalid Compound ID	zhangji	05/27/22 12:49
4-Nitrotoluene		Invalid Compound ID	zhangji	05/27/22 12:49
MNX		Baseline	zhangji	05/27/22 12:49
Tetryl		Invalid Compound ID	zhangji	05/27/22 12:49

Lab Sample ID: CCV 280-576310/21 Client Sample ID:

Date Analyzed: 05/26/22 21:40 Lab File ID: 05260021.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.59	Baseline	zhangji	05/27/22 12:49

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 576310

Lab Sample ID: CCV 280-576310/22 Client Sample ID:

Date Analyzed: 05/26/22 22:03 Lab File ID: 05260022.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.47	Baseline	zhangji	05/27/22 12:49
DNX	6.79	Baseline	zhangji	05/27/22 12:49

Lab Sample ID: 280-162622-6 Client Sample ID: G0066R-22A

Date Analyzed: 05/26/22 22:26 Lab File ID: 05260023.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.54	Baseline	zhangji	05/27/22 12:50
1,3-Dinitrobenzene		Invalid Compound ID	zhangji	05/27/22 12:50
2,4,6-Trinitrotoluene		Invalid Compound ID	zhangji	05/27/22 12:50
Tetryl		Invalid Compound ID	zhangji	05/27/22 12:50

Lab Sample ID: 280-162622-7 Client Sample ID: G0024-22A

Date Analyzed: 05/26/22 22:49 Lab File ID: 05260024.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.54	Baseline	zhangji	05/27/22 12:50
Tetryl		Invalid Compound ID	zhangji	05/27/22 12:50

Lab Sample ID: 280-162622-8 Client Sample ID: G0115-22A

Date Analyzed: 05/26/22 23:12 Lab File ID: 05260025.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.54	Baseline	zhangji	05/27/22 12:50
1,3-Dinitrobenzene		Invalid Compound ID	zhangji	05/27/22 12:50
2,4,6-Trinitrotoluene		Invalid Compound ID	zhangji	05/27/22 12:50
Tetryl		Invalid Compound ID	zhangji	05/27/22 12:50

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 576310

Lab Sample ID: 280-162622-9 Client Sample ID: G0095-22A

Date Analyzed: 05/26/22 23:35 Lab File ID: 05260026.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.54	Baseline	zhangji	05/27/22 12:56
1,3-Dinitrobenzene		Invalid Compound ID	zhangji	05/27/22 12:56
Tetryl		Invalid Compound ID	zhangji	05/27/22 12:56

Lab Sample ID: 280-162622-10 Client Sample ID: PZ018-22A

Date Analyzed: 05/26/22 23:58 Lab File ID: 05260027.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	7.60	Baseline	zhangji	05/27/22 12:57
1,2-Dinitrobenzene	8.54	Baseline	zhangji	05/27/22 12:57
1,3,5-Trinitrobenzene		Invalid Compound ID	zhangji	05/27/22 12:56
1,3-Dinitrobenzene		Invalid Compound ID	zhangji	05/27/22 12:56
2,4-Dinitrotoluene		Invalid Compound ID	zhangji	05/27/22 12:56
MNX		Invalid Compound ID	zhangji	05/27/22 12:56
Tetryl		Invalid Compound ID	zhangji	05/27/22 12:56
2-Nitrotoluene	12.56	Baseline	zhangji	05/27/22 12:57
4-Nitrotoluene	12.95	Baseline	zhangji	05/27/22 12:57

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 576310

Lab Sample ID: 280-162622-11 Client Sample ID: PZ020-22A

Date Analyzed: 05/27/22 00:21 Lab File ID: 05260028.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.58	Baseline	zhangji	05/27/22 13:08
RDX	7.57	Baseline	zhangji	05/27/22 13:08
1,2-Dinitrobenzene	8.54	Baseline	zhangji	05/27/22 13:08
1,3,5-Trinitrobenzene	8.66	Baseline	zhangji	05/27/22 13:08
1,3-Dinitrobenzene	9.29	Baseline	zhangji	05/27/22 13:08
MNX		Invalid Compound ID	zhangji	05/27/22 13:08
Tetryl		Invalid Compound ID	zhangji	05/27/22 13:08

Lab Sample ID: 280-162622-12 Client Sample ID: G0077-22A

Date Analyzed: 05/27/22 00:44 Lab File ID: 05260029.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.59	Baseline	zhangji	05/27/22 13:09
RDX	7.58	Baseline	zhangji	05/27/22 13:09
1,2-Dinitrobenzene	8.53	Baseline	zhangji	05/27/22 13:09
1,3,5-Trinitrobenzene	8.66	Baseline	zhangji	05/27/22 13:09
1,3-Dinitrobenzene	9.29	Baseline	zhangji	05/27/22 13:09
2,4-Dinitrotoluene		Invalid Compound ID	zhangji	05/27/22 13:09
MNX		Invalid Compound ID	zhangji	05/27/22 13:09
Tetryl		Invalid Compound ID	zhangji	05/27/22 13:09

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 576310

Lab Sample ID: 280-162622-16 Client Sample ID: G0311-22A

Date Analyzed: 05/27/22 01:07 Lab File ID: 05260030.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.54	Baseline	zhangji	05/27/22 13:10
1,3,5-Trinitrobenzene	8.66	Baseline	zhangji	05/27/22 13:10
HMX		Invalid Compound ID	zhangji	05/27/22 13:09
MNX		Invalid Compound ID	zhangji	05/27/22 13:09
Nitrobenzene		Invalid Compound ID	zhangji	05/27/22 13:09
RDX		Invalid Compound ID	zhangji	05/27/22 13:09
Tetryl		Invalid Compound ID	zhangji	05/27/22 13:09

Lab Sample ID: 280-162622-17 Client Sample ID: G0111-22A

Date Analyzed: 05/27/22 01:30 Lab File ID: 05260031.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.54	Baseline	zhangji	05/27/22 13:10
1,3,5-Trinitrobenzene	8.66	Baseline	zhangji	05/27/22 13:10
1,3-Dinitrobenzene	9.31	Baseline	zhangji	05/27/22 13:10
HMX		Invalid Compound ID	zhangji	05/27/22 13:10
MNX		Invalid Compound ID	zhangji	05/27/22 13:10
Nitrobenzene		Invalid Compound ID	zhangji	05/27/22 13:10
Tetryl		Invalid Compound ID	zhangji	05/27/22 13:10
2,4,6-Trinitrotoluene	10.90	Baseline	zhangji	05/27/22 13:10

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 576310

Lab Sample ID: 280-162622-18 Client Sample ID: G0123-22A

Date Analyzed: 05/27/22 01:53 Lab File ID: 05260032.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.57	Baseline	zhangji	05/27/22 13:11
1,2-Dinitrobenzene	8.54	Baseline	zhangji	05/27/22 13:11
1,3-Dinitrobenzene		Invalid Compound ID	zhangji	05/27/22 13:11
2,4,6-Trinitrotoluene		Invalid Compound ID	zhangji	05/27/22 13:11
2-Amino-4,6-dinitrotoluene		Invalid Compound ID	zhangji	05/27/22 13:11
MNX		Invalid Compound ID	zhangji	05/27/22 13:11
RDX		Invalid Compound ID	zhangji	05/27/22 13:11
Tetryl		Invalid Compound ID	zhangji	05/27/22 13:11

Lab Sample ID: CCV 280-576310/33 Client Sample ID:

Date Analyzed: 05/27/22 02:15 Lab File ID: 05260033.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.59	Baseline	zhangji	05/27/22 13:11

Lab Sample ID: CCV 280-576310/34 Client Sample ID:

Date Analyzed: 05/27/22 02:38 Lab File ID: 05260034.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.47	Baseline	zhangji	05/27/22 13:13
DNX	6.78	Baseline	zhangji	05/27/22 13:13

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 567560

Lab Sample ID: IC 280-567560/10 Client Sample ID:

Date Analyzed: 03/02/22 21:22 Lab File ID: 03020010.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Amino-4,6-dinitrotoluene	18.73	Unspecified		
1,3,5-Trinitrobenzene	18.85	Split Peak	zhangji	03/03/22 12:08

Lab Sample ID: IC 280-567560/15 Client Sample ID:

Date Analyzed: 03/03/22 00:17 Lab File ID: 03020015.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PETN	26.21	Baseline Smoothing	zhangji	03/03/22 12:12

Lab Sample ID: IC 280-567560/16 Client Sample ID:

Date Analyzed: 03/03/22 00:53 Lab File ID: 03020016.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitroglycerin	16.07	Baseline Smoothing	zhangji	03/03/22 12:12
PETN	26.22	Baseline Smoothing	zhangji	03/03/22 12:12

Lab Sample ID: IC 280-567560/17 Client Sample ID:

Date Analyzed: 03/03/22 01:28 Lab File ID: 03020017.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitroglycerin	16.06	Baseline Smoothing	zhangji	03/03/22 12:12
2-Amino-4,6-dinitrotoluene	18.76	Baseline Smoothing	zhangji	03/03/22 12:10
1,3,5-Trinitrobenzene	18.96	Baseline Smoothing	zhangji	03/03/22 12:10
PETN	26.22	Baseline Smoothing	zhangji	03/03/22 12:12

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 567560

Lab Sample ID: IC 280-567560/18 Client Sample ID:

Date Analyzed: 03/03/22 02:03 Lab File ID: 03020018.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitroglycerin	16.05	Baseline Smoothing	zhangji	03/03/22 12:12
2-Amino-4,6-dinitrotoluene	18.75	Baseline Smoothing	zhangji	03/03/22 12:11
1,3,5-Trinitrobenzene	18.95	Baseline Smoothing	zhangji	03/03/22 12:11
PETN	26.22	Baseline Smoothing	zhangji	03/03/22 12:11

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 576448

Lab Sample ID: CCV 280-576448/7 Client Sample ID:

Date Analyzed: 05/27/22 17:22 Lab File ID: 05270007.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	8.88	Baseline Smoothing	zhangji	05/27/22 18:08

Lab Sample ID: 280-162622-1 Client Sample ID: G0119-22A

Date Analyzed: 05/27/22 21:28 Lab File ID: 05270015.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.72	Baseline Smoothing	zhangji	05/28/22 13:59
RDX	8.87	Baseline Smoothing	zhangji	05/28/22 13:59
3-Nitrotoluene		Invalid Compound ID	zhangji	05/28/22 13:59
4-Amino-2,6-dinitrotoluene		Invalid Compound ID	zhangji	05/28/22 13:59

Lab Sample ID: 280-162622-2 Client Sample ID: G0121-22A

Date Analyzed: 05/27/22 22:03 Lab File ID: 05270016.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3-Dinitrobenzene		Invalid Compound ID	zhangji	05/28/22 13:59
2,4-Dinitrotoluene		Invalid Compound ID	zhangji	05/28/22 13:59

Lab Sample ID: 280-162622-4 Client Sample ID: G0100-22A

Date Analyzed: 05/27/22 22:38 Lab File ID: 05270017.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	8.90	Baseline Smoothing	zhangji	05/28/22 14:00
2,6-Dinitrotoluene		Invalid Compound ID	zhangji	05/28/22 14:00
4-Nitrotoluene		Invalid Compound ID	zhangji	05/28/22 14:00
HMX		Invalid Compound ID	zhangji	05/28/22 14:00
2-Amino-4,6-dinitrotoluene	18.25	Baseline Smoothing	zhangji	05/28/22 14:00

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HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 576448

Lab Sample ID: 280-162622-5 Client Sample ID: G0122-22A

Date Analyzed: 05/27/22 23:13 Lab File ID: 05270018.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	8.83	Baseline Smoothing	zhangji	05/28/22 14:01
2-Nitrotoluene		Invalid Compound ID	zhangji	05/28/22 14:00
HMX		Invalid Compound ID	zhangji	05/28/22 14:00
1,2-Dinitrobenzene	12.86	Baseline Smoothing	zhangji	05/28/22 14:01

Lab Sample ID: 280-162622-6 Client Sample ID: G0066R-22A

Date Analyzed: 05/27/22 23:48 Lab File ID: 05270019.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.70	Baseline Smoothing	zhangji	05/28/22 14:01
1,3,5-Trinitrobenzene		Invalid Compound ID	zhangji	05/28/22 14:01
4-Amino-2,6-dinitrotoluene	17.21	Baseline Smoothing	zhangji	05/28/22 14:01

Lab Sample ID: CCV 280-576448/20 Client Sample ID:

Date Analyzed: 05/28/22 00:23 Lab File ID: 05270020.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	8.84	Baseline Smoothing	zhangji	05/28/22 14:15

Lab Sample ID: 280-162622-7 Client Sample ID: G0024-22A

Date Analyzed: 05/28/22 01:33 Lab File ID: 05270022.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
3-Nitrotoluene		Invalid Compound ID	zhangji	05/28/22 14:09

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 576448

Lab Sample ID: 280-162622-10 Client Sample ID: PZ018-22A

Date Analyzed: 05/28/22 02:08 Lab File ID: 05270023.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
3-Nitrotoluene		Invalid Compound ID	zhangji	05/28/22 14:09
4-Nitrotoluene		Invalid Compound ID	zhangji	05/28/22 14:09
1,2-Dinitrobenzene	12.78	Baseline Smoothing	zhangji	05/28/22 14:09
2-Amino-4,6-dinitrotoluene	18.13	Baseline Smoothing	zhangji	05/28/22 14:09

Lab Sample ID: 280-162622-11 Client Sample ID: PZ020-22A

Date Analyzed: 05/28/22 02:43 Lab File ID: 05270024.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.67	Baseline Smoothing	zhangji	05/28/22 14:09
RDX	8.77	Baseline Smoothing	zhangji	05/28/22 14:09
1,2-Dinitrobenzene	12.79	Baseline Smoothing	zhangji	05/28/22 14:09

Lab Sample ID: 280-162622-12 Client Sample ID: G0077-22A

Date Analyzed: 05/28/22 03:18 Lab File ID: 05270025.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.39	Baseline Smoothing	zhangji	05/28/22 14:10
2,6-Dinitrotoluene		Invalid Compound ID	zhangji	05/28/22 14:10
1,2-Dinitrobenzene	12.79	Baseline Smoothing	zhangji	05/28/22 14:10

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 576448

Lab Sample ID: 280-162622-16 Client Sample ID: G0311-22A

Date Analyzed: 05/28/22 03:53 Lab File ID: 05270026.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.67	Baseline Smoothing	zhangji	05/28/22 14:10
MNX	7.40	Baseline Smoothing	zhangji	05/28/22 14:10
1,2-Dinitrobenzene	12.79	Baseline Smoothing	zhangji	05/28/22 14:10

Lab Sample ID: 280-162622-17 Client Sample ID: G0111-22A

Date Analyzed: 05/28/22 04:28 Lab File ID: 05270027.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.66	Baseline Smoothing	zhangji	05/28/22 14:11
MNX	7.37	Baseline Smoothing	zhangji	05/28/22 14:11
4-Nitrotoluene		Invalid Compound ID	zhangji	05/28/22 14:11
1,2-Dinitrobenzene	12.79	Baseline Smoothing	zhangji	05/28/22 14:11

Lab Sample ID: 280-162622-18 Client Sample ID: G0123-22A

Date Analyzed: 05/28/22 05:03 Lab File ID: 05270028.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.66	Baseline Smoothing	zhangji	05/28/22 14:11
RDX	8.79	Baseline Smoothing	zhangji	05/28/22 14:11
3-Nitrotoluene		Invalid Compound ID	zhangji	05/28/22 14:11
MNX		Invalid Compound ID	zhangji	05/28/22 14:11

Lab Sample ID: CCV 280-576448/32 Client Sample ID:

Date Analyzed: 05/28/22 07:24 Lab File ID: 05270032.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	8.80	Baseline Smoothing	zhangji	05/28/22 14:15

8330A

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Batch Number: 575123

Lab Sample ID: STD 280-575123/2 IC Client Sample ID:

Date Analyzed: 05/16/22 17:34 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	3.39	Incomplete Integration	jindaratc	05/16/22 19:10
Sulfate	11.53	Baseline Smoothing	mitchellj	05/17/22 09:48

Lab Sample ID: STD 280-575123/3 IC Client Sample ID:

Date Analyzed: 05/16/22 17:50 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	3.40	Baseline Smoothing	mitchellj	05/17/22 09:49
Sulfate	11.59	Baseline Smoothing	mitchellj	05/17/22 09:49

Lab Sample ID: STD 280-575123/4 IC Client Sample ID:

Date Analyzed: 05/16/22 18:06 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	3.39	Baseline Smoothing	mitchellj	05/17/22 09:49
Sulfate	11.53	Baseline Smoothing	mitchellj	05/17/22 09:49

Lab Sample ID: STD 280-575123/5 IC Client Sample ID:

Date Analyzed: 05/16/22 18:22 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	3.00	Peak Tail	jindaratc	05/16/22 19:11
Chloride	4.28	Peak assignment corrected	jindaratc	05/16/22 18:42
Bromide	6.45	Peak assignment corrected	jindaratc	05/16/22 18:42
Sulfate	10.17	Baseline Smoothing	mitchellj	05/17/22 09:50

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Batch Number: 575123

Lab Sample ID: STD 280-575123/6 IC Client Sample ID:

Date Analyzed: 05/16/22 18:38 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloride	4.30	Peak assignment corrected	jindaratc	05/16/22 19:00
Bromide	6.43	Peak assignment corrected	jindaratc	05/16/22 19:00
Sulfate	10.12	Baseline Smoothing	mitchellj	05/17/22 09:51

Lab Sample ID: STD 280-575123/7 IC Client Sample ID:

Date Analyzed: 05/16/22 18:54 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloride	4.33	Incomplete Integration	jindaratc	05/16/22 19:13
Bromide	6.42	Peak assignment corrected	jindaratc	05/16/22 19:12
Sulfate	10.10	Baseline Smoothing	mitchellj	05/17/22 09:51

Lab Sample ID: ICV 280-575123/8 Client Sample ID:

Date Analyzed: 05/16/22 19:10 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	3.00	Baseline Smoothing	mitchellj	05/17/22 09:51
Sulfate	10.13	Baseline Smoothing	mitchellj	05/17/22 09:53

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Batch Number: 576720

Lab Sample ID: CCV 280-576720/1 Client Sample ID:

Date Analyzed: 06/01/22 13:41 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	3.05	Baseline Smoothing	foxr	06/01/22 14:23
Sulfate	10.02	Baseline Smoothing	foxr	06/01/22 14:24

Lab Sample ID: MRL 280-576720/3 Client Sample ID:

Date Analyzed: 06/01/22 14:13 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.07	Baseline Smoothing	foxr	06/01/22 16:02

Lab Sample ID: LCS 280-576720/4 Client Sample ID:

Date Analyzed: 06/01/22 14:29 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.03	Baseline Smoothing	foxr	06/01/22 16:03

Lab Sample ID: LCSD 280-576720/5 Client Sample ID:

Date Analyzed: 06/01/22 14:45 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.04	Baseline Smoothing	foxr	06/01/22 16:03

Lab Sample ID: CCV 280-576720/17 Client Sample ID:

Date Analyzed: 06/01/22 19:40 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	3.05	Baseline Smoothing	foxr	06/02/22 12:25
Sulfate	10.05	Baseline Smoothing	foxr	06/02/22 12:26

9056A

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Batch Number: 576720

Lab Sample ID: CCB 280-576720/18 Client Sample ID:

Date Analyzed: 06/01/22 19:56 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.15	Baseline Smoothing	foxr	06/02/22 12:26

Lab Sample ID: CCV 280-576720/29 Client Sample ID:

Date Analyzed: 06/01/22 22:52 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.04	Baseline Smoothing	foxr	06/02/22 12:28

Lab Sample ID: CCV 280-576720/44 Client Sample ID:

Date Analyzed: 06/02/22 02:04 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	3.05	Baseline Smoothing	foxr	06/02/22 13:31
Sulfate	10.02	Baseline Smoothing	foxr	06/02/22 13:31

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Batch Number: 576886

Lab Sample ID: CCV 280-576886/1 Client Sample ID:

Date Analyzed: 06/02/22 11:06 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.12	Baseline Smoothing	foxr	06/02/22 11:32

Lab Sample ID: MRL 280-576886/3 Client Sample ID:

Date Analyzed: 06/02/22 11:38 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.17	Baseline Smoothing	foxr	06/02/22 11:58

Lab Sample ID: LCS 280-576886/4 Client Sample ID:

Date Analyzed: 06/02/22 11:54 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.14	Baseline Smoothing	foxr	06/02/22 12:11

Lab Sample ID: 280-162622-2 Client Sample ID: G0121-22A

Date Analyzed: 06/02/22 14:18 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.17	Baseline Smoothing	foxr	06/03/22 12:55

Lab Sample ID: CCV 280-576886/17 Client Sample ID:

Date Analyzed: 06/02/22 15:22 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.15	Baseline Smoothing	foxr	06/03/22 12:56

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Batch Number: 576886

Lab Sample ID: CCV 280-576886/29 Client Sample ID:

Date Analyzed: 06/02/22 18:34 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.13	Baseline Smoothing	foxr	06/03/22 12:59

Lab Sample ID: CCV 280-576886/47 Client Sample ID:

Date Analyzed: 06/02/22 21:46 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.12	Baseline Smoothing	foxr	06/03/22 13:02

Lab Sample ID: LCS 280-576886/50 Client Sample ID:

Date Analyzed: 06/02/22 22:34 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.13	Baseline Smoothing	foxr	06/03/22 13:03

Lab Sample ID: LCSD 280-576886/51 Client Sample ID:

Date Analyzed: 06/02/22 22:50 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.14	Baseline Smoothing	foxr	06/03/22 13:03

Lab Sample ID: 280-162622-13 Client Sample ID: G0069-22A

Date Analyzed: 06/02/22 23:21 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.18	Baseline Smoothing	foxr	06/03/22 13:04

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Batch Number: 576886

Lab Sample ID: 280-162622-13 DU Client Sample ID: G0069-22A DU

Date Analyzed: 06/02/22 23:37 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.17	Baseline Smoothing	foxr	06/03/22 13:04

Lab Sample ID: 280-162622-13 MS Client Sample ID: G0069-22A MS

Date Analyzed: 06/02/22 23:53 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.15	Baseline Smoothing	foxr	06/03/22 13:04

Lab Sample ID: 280-162622-13 MSD Client Sample ID: G0069-22A MSD

Date Analyzed: 06/03/22 00:09 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.15	Baseline Smoothing	foxr	06/03/22 13:05

Lab Sample ID: CCV 280-576886/59 Client Sample ID:

Date Analyzed: 06/03/22 00:57 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.12	Baseline Smoothing	foxr	06/03/22 13:05

Lab Sample ID: CCV 280-576886/73 Client Sample ID:

Date Analyzed: 06/03/22 04:09 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.10	Baseline Smoothing	foxr	06/03/22 13:07

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
350.1 cal low_01660	06/10/22	06/09/22	di water, Lot na	100 mL	350.1 cal_00538	10 mL	Ammonia	10 mg/L
.350.1 cal_00538	06/10/22	06/03/22	Di Water, Lot na	100 mL	NH3 CAL STD_00034	10 mL	Ammonia	100 mg/L
..NH3 CAL STD_00034	04/30/23	Ricca, Lot 4008G09			(Purchased Reagent)		Ammonia	1000 mg/L
350.1 cal_00539	06/15/22	06/08/22	Di Water, Lot na	100 mL	NH3 CAL STD_00034	10 mL	Ammonia	100 mg/L
.NH3 CAL STD_00034	04/30/23	Ricca, Lot 4008G09			(Purchased Reagent)		Ammonia	1000 mg/L
350.1 ICV_00525	06/15/22	06/08/22	na, Lot na	100 mL	NH3 ICV STD_00032	10 mL	Ammonia	100.2 mg/L
.NH3 ICV STD_00032	08/01/22	Inorganic Ventures, Lot N2-NH669544			(Purchased Reagent)		Ammonia	1002 mg/L
8015 LCS_00094	05/03/24	05/03/22	ACETONE, Lot Acetone_00695	200 mL	DRO_Fuel2_00190	5 mL	C10-C22	2000 ug/mL
							C10-C24	2000 ug/mL
							C10-C25	2000 ug/mL
							C10-C28	2000 ug/mL
							C10-C32	2000 ug/mL
							C10-C36	2000 ug/mL
					DRO_Fuel2_00192	3 mL	C10-C22	2000 ug/mL
							C10-C24	2000 ug/mL
							C10-C25	2000 ug/mL
							C10-C28	2000 ug/mL
							C10-C32	2000 ug/mL
							C10-C36	2000 ug/mL
.DRO_Fuel2_00190	10/31/28	Restek, Lot A0176616			(Purchased Reagent)		C10-C22	50000 ug/mL
							C10-C24	50000 ug/mL
							C10-C25	50000 ug/mL
							C10-C28	50000 ug/mL
							C10-C32	50000 ug/mL
							C10-C36	50000 ug/mL
.DRO_Fuel2_00192	10/31/28	Restek, Lot A0176616			(Purchased Reagent)		C10-C22	50000 ug/mL
							C10-C24	50000 ug/mL
							C10-C25	50000 ug/mL
							C10-C28	50000 ug/mL
							C10-C32	50000 ug/mL
							C10-C36	50000 ug/mL
8015Surrogate_00212	10/29/22	04/29/22	90:10 Acetone:MeCl2, Lot 90Ace10MeCl2_00072	250 mL	DRO_SURR_00194	1 mL	n-Octacosane	35 ug/mL
							o-Terphenyl (Surr)	35 ug/mL
					DRO_SURR_00196	0.75 mL	n-Octacosane	35 ug/mL
							o-Terphenyl (Surr)	35 ug/mL
.DRO_SURR_00194	07/07/24	Accustandard, Lot 221071062			(Purchased Reagent)		n-Octacosane	5000 ug/mL
							o-Terphenyl (Surr)	5000 ug/mL
.DRO_SURR_00196	07/07/24	Accustandard, Lot 221071062			(Purchased Reagent)		n-Octacosane	5000 ug/mL
							o-Terphenyl (Surr)	5000 ug/mL
8015Surrogate_00213	12/01/22	06/01/22	90:10 Acetone:MeCl2, Lot 90Ace10MeCl2_00072	100 mL	n-Octacosane_00002	0.35 mL	n-Octacosane	35 ug/mL
							n-Octacosane (Surr)	35 ug/mL
					o-Terphenyl_00006	0.35 mL	o- terphenyl (Surr)	35 ug/mL
							o-Terphenyl (Surr)	35 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.n-Octacosane_00002	04/30/29		Restek, Lot A0182548		(Purchased Reagent)		n-Octacosane	10000 ug/mL
							n-Octacosane (Surr)	10000 ug/mL
.o-Terphenyl_00006	04/25/23		Restek, Lot A0177896		(Purchased Reagent)		o- terphenyl (Surr)	10000 ug/mL
							o-Terphenyl (Surr)	10000 ug/mL
8330 DMT_00010	04/30/22	12/02/21	Acetonitrile, Lot 211161	5 mL	MNX,TNX,DNX_00057	1 mL	DNX	20.02 ug/mL
							MNX	23.34 ug/mL
							TNX	20.02 ug/mL
.MNX,TNX,DNX_00057	04/30/22		Agilent, Lot 0006594482		(Purchased Reagent)		DNX	100.1 ug/mL
							MNX	116.7 ug/mL
							TNX	100.1 ug/mL
8330 DMT_00011	10/29/22	04/29/22	Acetonitrile, Lot 211161	5 mL	MNX,TNX,DNX_00066	1 mL	MNX	23.4 ug/mL
.MNX,TNX,DNX_00066	02/28/23		Agilent, Lot 0006659035		(Purchased Reagent)		MNX	117 ug/mL
8330 LCS_00111	05/12/22	11/12/21	Acetonitrile, Lot Acetonitrile_00059	100 mL	8330LCSMix1_00129	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_00028	1 mL	2,6-Dinitrotoluene	10 ug/mL
							2-Amino-4,6-dinitrotoluene	10 ug/mL
							2-Nitrotoluene	10 ug/mL
							3-Nitrotoluene	10 ug/mL
							4-Amino-2,6-dinitrotoluene	10 ug/mL
							4-Nitrotoluene	10 ug/mL
							Tetryl	10 ug/mL
.8330LCSMix1_00129	04/30/26		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
							RDX	1000 ug/mL
.8330LCSmix2_00028	04/30/26		Restek, Lot A0171368		(Purchased Reagent)		2,6-Dinitrotoluene	1000 ug/mL
							2-Amino-4,6-dinitrotoluene	1000 ug/mL
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1000 ug/mL
							4-Amino-2,6-dinitrotoluene	1000 ug/mL
							4-Nitrotoluene	1000 ug/mL
							Tetryl	1000 ug/mL
8330 LCS_00113	09/01/22	03/01/22	Acetonitrile, Lot Acetonitrile_00055	100 mL	8330 LCSMix2_00112	1 mL	2,6-Dinitrotoluene	10 ug/mL
							2-Amino-4,6-dinitrotoluene	10 ug/mL
							2-Nitrotoluene	10 ug/mL

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							3-Nitrotoluene	10 ug/mL
							4-Amino-2,6-dinitrotoluene	10 ug/mL
							4-Nitrotoluene	10 ug/mL
							Tetryl	10 ug/mL
					8330_NG_Stk_00096	1 mL	Nitroglycerin	100 ug/mL
					8330_NG_Stk_00098	1 mL	Nitroglycerin	100 ug/mL
					8330_PETN_Stk_00111	1.1 mL	PETN	100 ug/mL
					8330_PETN_Stk_00113	0.9 mL	PETN	100 ug/mL
					8330LCSMix1_00126	1 mL	1,3,5-Trinitrobenzene	10 ug/mL
							1,3-Dinitrobenzene	10 ug/mL
							2,4,6-Trinitrotoluene	10 ug/mL
							2,4-Dinitrotoluene	10 ug/mL
							HMX	10 ug/mL
							Nitrobenzene	10 ug/mL
							RDX	10 ug/mL
					PicricARestek_00102	1 mL	2,4,6-Trinitrophenol	10 ug/mL
.8330 LCSMix2_00112	03/01/23		Restek, Lot A0171386		(Purchased Reagent)		2,6-Dinitrotoluene	1000 ug/mL
							2-Amino-4,6-dinitrotoluene	1000 ug/mL
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1000 ug/mL
							4-Amino-2,6-dinitrotoluene	1000 ug/mL
							4-Nitrotoluene	1000 ug/mL
							Tetryl	1000 ug/mL
.8330_NG_Stk_00096	03/01/23		Restek, Lot A0161480		(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_NG_Stk_00098	03/01/23		Restek, Lot A0161480		(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_PETN_Stk_00111	03/01/23		Restek, Lot A0172687		(Purchased Reagent)		PETN	5000 ug/mL
.8330_PETN_Stk_00113	03/01/23		Restek, Lot A0172687		(Purchased Reagent)		PETN	5000 ug/mL
.8330LCSMix1_00126	03/01/23		Restek, Lot A0171502		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							2,4,6-Trinitrotoluene	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							RDX	1000 ug/mL
.PicricARestek_00102	03/01/23		Restek, Lot A0175186		(Purchased Reagent)		2,4,6-Trinitrophenol	1000 ug/mL
8330_OP_DMT_00012	04/30/22	09/23/21	Acetonitrile, Lot Acetonitrile_00056	10 mL	MNX,TNX,DNX_00063	1 mL	MNX	11.67 ug/mL
.MNX,TNX,DNX_00063	04/30/22		Agilent, Lot 0006599273		(Purchased Reagent)		MNX	116.7 ug/mL
8330_OP_DMT_00014	02/28/23	05/05/22	Acetonitrile, Lot Acetonitrile_00065	10 mL	MNX,TNX,DNX_00067	1 mL	DNX	10.04 ug/mL
							MNX	11.7 ug/mL
							TNX	10 ug/mL
.MNX,TNX,DNX_00067	02/28/23		Agilent, Lot 0006659035		(Purchased Reagent)		DNX	100.4 ug/mL
							MNX	117 ug/mL
							TNX	100 ug/mL
8330IntermStk_00070	03/31/22	01/04/22	Acetonitrile, Lot ACN_238	10 mL	8330_NG1000_00006	1 mL	Nitroglycerin	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					8330_PETN1000_00006	1 mL	PETN	100 ug/mL
					8330ICALStock_00032	1 mL	1,3,5-Trinitrobenzene	10.02 ug/mL
							1,3-Dinitrobenzene	10.02 ug/mL
							2,4,6-Trinitrotoluene	10.04 ug/mL
							2,4-Dinitrotoluene	10.04 ug/mL
							2,6-Dinitrotoluene	10.04 ug/mL
							2-Amino-4,6-dinitrotoluene	10.04 ug/mL
							2-Nitrotoluene	10 ug/mL
							3-Nitrotoluene	10.01 ug/mL
							4-Amino-2,6-dinitrotoluene	10.01 ug/mL
							4-Nitrotoluene	10.02 ug/mL
							HMX	10 ug/mL
							Nitrobenzene	10.04 ug/mL
							RDX	10 ug/mL
							Tetryl	10.02 ug/mL
							1,2-Dinitrobenzene	10 ug/mL
					8330PAStkPS_00067	1 mL	2,4,6-Trinitrophenol	10 ug/mL
.8330_NG1000_00006	01/04/23		Restek, Lot A0175997		(Purchased Reagent)		Nitroglycerin	1000 ug/mL
.8330_PETN1000_00006	01/04/23		Restek, Lot A0175907		(Purchased Reagent)		PETN	1000 ug/mL
.8330ICALStock_00032	03/31/22	01/04/22	Acetonitrile, Lot ACN_238	10 mL	8330 Stock_TS_00019	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_00169	1 mL	1,2-Dinitrobenzene	100 ug/mL
..8330 Stock_TS_00019	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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Tetryl	1002 ug/mL
..8330SurrStock_00169	01/04/23	AccuStandard, Lot 219051500			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330PAStkPS_00067	07/08/22	AccuStandard, Lot 218031154-02			(Purchased Reagent)		2,4,6-Trinitrophenol	100 ug/mL
8330IntermStk_00072	07/08/22	04/20/22	Acetonitrile, Lot ACN_238	10 mL	8330ICALStock_00033	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
							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
							HMX	10 ug/mL
							Nitrobenzene	10 ug/mL
							RDX	10 ug/mL
							Tetryl	10 ug/mL
							1,2-Dinitrobenzene	10 ug/mL
.8330ICALStock_00033	04/01/23	04/01/22	Acetonitrile, Lot ACN_238	10 mL	8330 Stock_TS_00021	1 mL	1,3,5-Trinitrobenzene	100 ug/mL
							1,3-Dinitrobenzene	100 ug/mL
							2,4,6-Trinitrotoluene	100 ug/mL
							2,4-Dinitrotoluene	100 ug/mL
							2,6-Dinitrotoluene	100 ug/mL
							2-Amino-4,6-dinitrotoluene	100 ug/mL
							2-Nitrotoluene	100 ug/mL
							3-Nitrotoluene	100 ug/mL
							4-Amino-2,6-dinitrotoluene	100 ug/mL
							4-Nitrotoluene	100 ug/mL
							HMX	100 ug/mL
							Nitrobenzene	100 ug/mL
							RDX	100 ug/mL
							Tetryl	100 ug/mL
					8330SurrStock_00170	1 mL	1,2-Dinitrobenzene	100 ug/mL
..8330 Stock_TS_00021	04/01/23	Agilent, Lot 0006604365			(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
							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
							HMX	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							RDX	1000 ug/mL

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Tetryl	1000 ug/mL
..8330SurrStock_00170	04/01/23	AccuStandard, Lot 219051500			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
8330Surrogate_00127	05/16/22	11/16/21	Acetonitrile, Lot Acetonitrile_00059	500 mL	8330SurrStkSS_00203	1 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00204	1 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00207	1 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00211	1 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00212	1 mL	1,2-Dinitrobenzene	10 ug/mL
.8330SurrStkSS_00203	05/30/26	Restek, Lot A0172684			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00204	05/30/26	Restek, Lot A0172684			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00207	05/30/26	Restek, Lot A0172684			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00211	05/30/26	Restek, Lot A0172684			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00212	05/30/26	Restek, Lot A0172684			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
8330Surrogate_00128	07/21/22	01/21/22	Acetonitrile, Lot Acetonitrile_00059	500 mL	8330SurrStkSS_00205	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00206	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00208	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00209	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00210	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
.8330SurrStkSS_00205	05/30/26	Restek, Lot A0172684			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00206	05/30/26	Restek, Lot A0172684			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00208	05/30/26	Restek, Lot A0172684			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00209	05/30/26	Restek, Lot A0172684			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00210	05/30/26	Restek, Lot A0172684			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
Acrolein_A_00008	06/03/22	05/03/22	Methanol, Lot 230446	20 mL	MV-568720_00043	800 uL	Acrolein	790 ug/mL
.MV-568720_00043	02/28/23	RESTEK, Lot A0175809			(Purchased Reagent)		Acrolein	19750 ug/mL
Acrolein_B_00020	03/07/22	02/07/22	Methanol, Lot 230446	20 mL	MV-568720.sec_00036	1000 uL	Acrolein	987.5 ug/mL
.MV-568720.sec_00036	08/31/22	RESTEK, Lot A0169469			(Purchased Reagent)		Acrolein	19750 ug/mL
Alk daily lcs_01041	05/27/22	05/23/22	Di Water, Lot na	1000 mL	Alk stk std_00022	4 mL	Total Alkalinity as CaCO3	200 mg/L
.Alk stk std_00022	10/30/22	SPEX, Lot 2-85BT			(Purchased Reagent)		Total Alkalinity as CaCO3	50 g/L
Cal Dil Std_00029	02/28/22	02/16/22	P&T Methanol, Lot 273166	100 uL	Acrolein_B_00020	5 uL	Acrolein	49.375 ug/mL
					MV-Gas A_00115	2 uL	Bromomethane	5 ug/mL
							Chloroethane	5 ug/mL
							Chloromethane	5 ug/mL
							Dichlorodifluoromethane	5 ug/mL

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dichlorofluoromethane	5 ug/mL
							Trichlorofluoromethane	5 ug/mL
							Vinyl chloride	5 ug/mL
							2-Chloroethyl vinyl ether	5 ug/mL
					MV-MegaMainA_00065	5 uL	2-Butanone (MEK)	20 ug/mL
							2-Hexanone	20 ug/mL
							4-Methyl-2-pentanone (MIBK)	20 ug/mL
							Acetone	20 ug/mL
							Vinyl acetate	10 ug/mL
							Cyclohexanone	175 ug/mL
							1,1,1,2-Tetrachloroethane	5 ug/mL
							1,1,1-Trichloroethane	5 ug/mL
							1,1,2,2-Tetrachloroethane	5 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	5 ug/mL
							1,1,2-Trichloroethane	5 ug/mL
							1,1-Dichloroethane	5 ug/mL
							1,1-Dichloroethene	5 ug/mL
							1,1-Dichloropropene	5 ug/mL
							1,2,3-Trichlorobenzene	5 ug/mL
							1,2,3-Trichloropropane	5 ug/mL
							1,2,4-Trichlorobenzene	5 ug/mL
							1,2,4-Trimethylbenzene	5 ug/mL
							1,2-Dibromo-3-Chloropropane	5 ug/mL
							1,2-Dichlorobenzene	5 ug/mL
							1,2-Dichloroethane	5 ug/mL
							1,2-Dichloropropane	5 ug/mL
							1,3,5-Trimethylbenzene	5 ug/mL
							1,3-Dichlorobenzene	5 ug/mL
							1,3-Dichloropropane	5 ug/mL
							1,4-Dichlorobenzene	5 ug/mL
							1,4-Dioxane	100 ug/mL
							2,2-Dichloropropane	5 ug/mL
							2-Chlorotoluene	5 ug/mL
							2-Methyl-2-propanol	50 ug/mL
							3-Chloro-1-propene	5 ug/mL
							4-Chlorotoluene	5 ug/mL
							4-Isopropyltoluene	5 ug/mL
							Acrylonitrile	50 ug/mL
							Benzene	5 ug/mL
							Bromobenzene	5 ug/mL
							Bromochloromethane	5 ug/mL
							Bromodichloromethane	5 ug/mL
							Bromoform	5 ug/mL
							Carbon disulfide	5 ug/mL
							Carbon tetrachloride	5 ug/mL
							Chlorobenzene	5 ug/mL
							Chloroform	5 ug/mL

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							cis-1,2-Dichloroethene	5 ug/mL
							cis-1,3-Dichloropropene	5 ug/mL
							Cyclohexane	5 ug/mL
							Dibromochloromethane	5 ug/mL
							Dibromomethane	5 ug/mL
							Ethyl ether	5 ug/mL
							Ethyl methacrylate	5 ug/mL
							Ethylbenzene	5 ug/mL
							Ethylene Dibromide	5 ug/mL
							Hexachlorobutadiene	5 ug/mL
							Hexane	5 ug/mL
							Iodomethane	5 ug/mL
							Isobutyl alcohol	125 ug/mL
							Isopropylbenzene	5 ug/mL
							m-Xylene & p-Xylene	5 ug/mL
							Methyl acetate	10 ug/mL
							Methyl tert-butyl ether	5 ug/mL
							Methylcyclohexane	5 ug/mL
							Methylene Chloride	5 ug/mL
							n-Butylbenzene	5 ug/mL
							N-Propylbenzene	5 ug/mL
							Naphthalene	5 ug/mL
							o-Xylene	5 ug/mL
							sec-Butylbenzene	5 ug/mL
							Styrene	5 ug/mL
							tert-Butylbenzene	5 ug/mL
							Tetrachloroethene	5 ug/mL
							Tetrahydrofuran	10 ug/mL
							Toluene	5 ug/mL
							trans-1,2-Dichloroethene	5 ug/mL
							trans-1,3-Dichloropropene	5 ug/mL
							trans-1,4-Dichloro-2-butene	5 ug/mL
							Trichloroethene	5 ug/mL
							1-Chlorohexane	4 ug/mL
							2-Pentanone	16 ug/mL
							sec-Butyl Alcohol	120 ug/mL
.Acrolein_B_00020	03/07/22	02/07/22	Methanol, Lot 230446	20 mL	MV-568720.sec_00036	1000 uL	Acrolein	987.5 ug/mL
..MV-568720.sec_00036	08/31/22		RESTEK, Lot A0169469		(Purchased Reagent)		Acrolein	19750 ug/mL
.MV-Gas A_00115	03/16/22	02/16/22	P&T Methanol, Lot 198123	12.5 mL	MV-569722_00018	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_00013	1250 uL	2-Chloroethyl vinyl ether	250 ug/mL
..MV-569722_00018	04/30/24		RESTEK, Lot A0171131		(Purchased Reagent)		Bromomethane	2500 ug/mL

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00013	09/30/24	RESTEK, Lot A0176827			(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
.MV-MegaMainA_00065	03/01/22	02/01/22	P&T Methanol, Lot 181124	25 mL	MV-569721_00011	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_00032	1000 uL	Vinyl acetate	200 ug/mL
					MV-569727_00016	3500 uL	Cyclohexanone	3500 ug/mL
					MV-571992_00009	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
							Benzene	100 ug/mL
							Bromobenzene	100 ug/mL
							Bromochloromethane	100 ug/mL
							Bromodichloromethane	100 ug/mL
							Bromoform	100 ug/mL

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00009	2000 uL	1-Chlorohexane	80 ug/mL
							2-Pentanone	320 ug/mL
							sec-Butyl Alcohol	2400 ug/mL
..MV-569721_00011	07/31/24		RESTEK, Lot A0174287		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
..MV-569724_00032	01/31/23		RESTEK, Lot A0174298		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
..MV-569727_00016	12/31/23		RESTEK, Lot A0167351		(Purchased Reagent)		Cyclohexanone	25000 ug/mL
..MV-571992_00009	10/31/22		RESTEK, Lot A0159680		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1,2,2-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
							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

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00009	09/30/23		Agilent, Lot 6631594		(Purchased Reagent)		1-Chlorohexane	1000 ug/mL
							2-Pentanone	4000 ug/mL
							sec-Butyl Alcohol	30000 ug/mL
Cal Std 5ppm_00012	05/26/22	05/05/22	P&T Methanol, Lot 181121	100 uL	Acrolein_A_00008	5 uL	Acrolein	39.5 ug/mL
					MV-Gas A_00122	2 uL	Bromomethane	5 ug/mL
							Chloroethane	5 ug/mL
							Chloromethane	5 ug/mL
							Dichlorodifluoromethane	5 ug/mL
							Dichlorofluoromethane	5 ug/mL
							Trichlorofluoromethane	5 ug/mL
							Vinyl chloride	5 ug/mL
							2-Chloroethyl vinyl ether	5 ug/mL
					MV-MegaMainA_00070	5 uL	2-Butanone (MEK)	20 ug/mL
							2-Hexanone	20 ug/mL
							4-Methyl-2-pentanone (MIBK)	20 ug/mL
							Acetone	20 ug/mL
							Vinyl acetate	10 ug/mL
							Cyclohexanone	150 ug/mL
							1,1,1,2-Tetrachloroethane	5 ug/mL
							1,1,1-Trichloroethane	5 ug/mL
							1,1,2,2-Tetrachloroethane	5 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	5 ug/mL
							1,1,2-Trichloroethane	5 ug/mL
							1,1-Dichloroethane	5 ug/mL
							1,1-Dichloroethene	5 ug/mL

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1-Dichloropropene	5 ug/mL
							1,2,3-Trichlorobenzene	5 ug/mL
							1,2,3-Trichloropropane	5 ug/mL
							1,2,4-Trichlorobenzene	5 ug/mL
							1,2,4-Trimethylbenzene	5 ug/mL
							1,2-Dibromo-3-Chloropropane	5 ug/mL
							1,2-Dichlorobenzene	5 ug/mL
							1,2-Dichloroethane	5 ug/mL
							1,2-Dichloropropane	5 ug/mL
							1,3,5-Trimethylbenzene	5 ug/mL
							1,3-Dichlorobenzene	5 ug/mL
							1,3-Dichloropropane	5 ug/mL
							1,4-Dichlorobenzene	5 ug/mL
							1,4-Dioxane	100 ug/mL
							2,2-Dichloropropane	5 ug/mL
							2-Chlorotoluene	5 ug/mL
							2-Methyl-2-propanol	50 ug/mL
							3-Chloro-1-propene	5 ug/mL
							4-Chlorotoluene	5 ug/mL
							4-Isopropyltoluene	5 ug/mL
							Acrylonitrile	50 ug/mL
							Benzene	5 ug/mL
							Bromobenzene	5 ug/mL
							Bromochloromethane	5 ug/mL
							Bromodichloromethane	5 ug/mL
							Bromoform	5 ug/mL
							Carbon disulfide	5 ug/mL
							Carbon tetrachloride	5 ug/mL
							Chlorobenzene	5 ug/mL
							Chloroform	5 ug/mL
							cis-1,2-Dichloroethene	5 ug/mL
							cis-1,3-Dichloropropene	5 ug/mL
							Cyclohexane	5 ug/mL
							Dibromochloromethane	5 ug/mL
							Dibromomethane	5 ug/mL
							Ethyl ether	5 ug/mL
							Ethyl methacrylate	5 ug/mL
							Ethylbenzene	5 ug/mL
							Ethylene Dibromide	5 ug/mL
							Hexachlorobutadiene	5 ug/mL
							Hexane	5 ug/mL
							Iodomethane	5 ug/mL
							Isobutyl alcohol	125 ug/mL
							Isopropylbenzene	5 ug/mL
							m-Xylene & p-Xylene	5 ug/mL
							Methyl acetate	10 ug/mL
							Methyl tert-butyl ether	5 ug/mL
							Methylcyclohexane	5 ug/mL

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methylene Chloride	5 ug/mL
							n-Butylbenzene	5 ug/mL
							N-Propylbenzene	5 ug/mL
							Naphthalene	5 ug/mL
							o-Xylene	5 ug/mL
							sec-Butylbenzene	5 ug/mL
							Styrene	5 ug/mL
							tert-Butylbenzene	5 ug/mL
							Tetrachloroethene	5 ug/mL
							Tetrahydrofuran	10 ug/mL
							Toluene	5 ug/mL
							trans-1,2-Dichloroethene	5 ug/mL
							trans-1,3-Dichloropropene	5 ug/mL
							trans-1,4-Dichloro-2-butene	5 ug/mL
							Trichloroethene	5 ug/mL
							1-Chlorohexane	4 ug/mL
							2-Pentanone	16 ug/mL
							sec-Butyl Alcohol	120 ug/mL
.Acrolein_A_00008	06/03/22	05/03/22	Methanol, Lot 230446	20 mL	MV-568720_00043	800 uL	Acrolein	790 ug/mL
..MV-568720_00043	02/28/23		RESTEK, Lot A0175809		(Purchased Reagent)		Acrolein	19750 ug/mL
.MV-Gas A_00122	05/26/22	04/26/22	P&T Methanol, Lot 198123	12.5 mL	MV-569722_00018	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_00015	1250 uL	2-Chloroethyl vinyl ether	250 ug/mL
..MV-569722_00018	04/30/24		RESTEK, Lot A0171131		(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_00015	09/30/24		RESTEK, Lot A0176827		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
.MV-MegaMainA_00070	05/26/22	04/26/22	P&T Methanol, Lot 181124	25 mL	MV-569721_00012	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_00032	1000 uL	Vinyl acetate	200 ug/mL
					MV-569727_00020	3000 uL	Cyclohexanone	3000 ug/mL
					MV-571992_00013	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

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1,2-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
							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

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00011	2000 uL	1-Chlorohexane	80 ug/mL
							2-Pentanone	320 ug/mL
							sec-Butyl Alcohol	2400 ug/mL
..MV-569721_00012	07/31/24		RESTEK, Lot A0174287		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
..MV-569724_00032	01/31/23		RESTEK, Lot A0174298		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
..MV-569727_00020	03/31/25		RESTEK, Lot A0182677		(Purchased Reagent)		Cyclohexanone	25000 ug/mL
..MV-571992_00013	10/31/22		RESTEK, Lot A0159680		(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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							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

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00011	09/30/23	Agilent, Lot 6631594			(Purchased Reagent)		1-Chlorohexane	1000 ug/mL
							2-Pentanone	4000 ug/mL
							sec-Butyl Alcohol	30000 ug/mL
DRO_L4/CCV_00119	08/05/22	04/25/22	Methylene Chloride, Lot MeCl2_Cycl_00567	12 mL	DRO_L7_00078	2 mL	C10-C28	5000.05 ug/mL
							C10-C36	5000.05 ug/mL
							n-Octacosane	25 ug/mL
							o-Terphenyl (Surr)	25 ug/mL
.DRO_L7_00078	08/05/22	04/25/22	Methylene Chloride, Lot MeCl2_Cycl_00567	10 mL	DRO_Fuel2_00167	2 mL	C10-C28	30000.3 ug/mL
							C10-C36	30000.3 ug/mL
					DRO_Fuel2_00170	4 mL	C10-C28	30000.3 ug/mL
							C10-C36	30000.3 ug/mL
					DRO_SURR_00179	300 uL	n-Octacosane	150 ug/mL
							o-Terphenyl (Surr)	150 ug/mL
..DRO_Fuel2_00167	07/31/28	Restek, Lot A0173887			(Purchased Reagent)		C10-C28	50000.5 ug/mL
							C10-C36	50000.5 ug/mL
..DRO_Fuel2_00170	07/31/28	Restek, Lot A0173887			(Purchased Reagent)		C10-C28	50000.5 ug/mL
							C10-C36	50000.5 ug/mL
..DRO_SURR_00179	07/07/24	Accustandard, Lot 221071062			(Purchased Reagent)		n-Octacosane	5000 ug/mL
							o-Terphenyl (Surr)	5000 ug/mL
DRO_L4/CCV_00120	08/05/22	05/13/22	Methylene Chloride, Lot MeCl2_Cycl_00567	12 mL	DRO_L7_00078	2 mL	n-Octacosane	25 ug/mL
							o-Terphenyl (Surr)	25 ug/mL
.DRO_L7_00078	08/05/22	04/25/22	Methylene Chloride, Lot MeCl2_Cycl_00567	10 mL	DRO_SURR_00179	300 uL	n-Octacosane	150 ug/mL
							o-Terphenyl (Surr)	150 ug/mL
..DRO_SURR_00179	07/07/24	Accustandard, Lot 221071062			(Purchased Reagent)		n-Octacosane	5000 ug/mL
							o-Terphenyl (Surr)	5000 ug/mL
DRO_L4/CCV_00120	08/05/22	05/13/22	Methylene Chloride, Lot MeCl2_Cycl_00567	12 mL	DRO_L7_00078	2 mL	C10-C28	5000.05 ug/mL
.DRO_L7_00078	08/05/22	04/25/22	Methylene Chloride, Lot MeCl2_Cycl_00567	10 mL	DRO_Fuel2_00167	2 mL	C10-C28	30000.3 ug/mL
					DRO_Fuel2_00170	4 mL	C10-C28	30000.3 ug/mL
..DRO_Fuel2_00167	07/31/28	Restek, Lot A0173887			(Purchased Reagent)		C10-C28	50000.5 ug/mL
..DRO_Fuel2_00170	07/31/28	Restek, Lot A0173887			(Purchased Reagent)		C10-C28	50000.5 ug/mL
DRO_L7_00078	08/05/22	04/25/22	Methylene Chloride, Lot MeCl2_Cycl_00567	10 mL	DRO_Fuel2_00167	2 mL	C10-C28	30000.3 ug/mL
							C10-C36	30000.3 ug/mL
					DRO_Fuel2_00170	4 mL	C10-C28	30000.3 ug/mL
							C10-C36	30000.3 ug/mL
					DRO_SURR_00179	300 uL	n-Octacosane	150 ug/mL
							o-Terphenyl (Surr)	150 ug/mL
.DRO_Fuel2_00167	07/31/28	Restek, Lot A0173887			(Purchased Reagent)		C10-C28	50000.5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							C10-C36	50000.5 ug/mL
.DRO_Fuel2_00170	07/31/28	Restek, Lot A0173887			(Purchased Reagent)		C10-C28	50000.5 ug/mL
							C10-C36	50000.5 ug/mL
.DRO_SURR_00179	07/07/24	Accustandard, Lot 221071062			(Purchased Reagent)		n-Octacosane	5000 ug/mL
							o-Terphenyl (Surr)	5000 ug/mL
DRO_RTMKR_00065	01/12/23	05/04/22	Methylene Chloride, Lot MeCl2_cycl_00567	5 mL	DRO_RTMKR1_00124	625 uL	C10-C28	1250 ug/mL
							n-Octacosane	250 ug/mL
					DRO_RTMKR2_00067	625 uL	n-Octacosane	250 ug/mL
.DRO_RTMKR1_00124	05/11/31	Accustandard, Lot 221051079			(Purchased Reagent)		C10-C28	10000 ug/mL
							n-Octacosane	1000 ug/mL
.DRO_RTMKR2_00067	02/28/23	Agilent, Lot 0006516152			(Purchased Reagent)		n-Octacosane	1000 ug/mL
DRO_SS_00034	10/17/22	05/02/22	Methylene Chloride, Lot MeCl2_cycl_00567	10 mL	DRO_SURR_00179	40 uL	n-Octacosane	20 ug/mL
							o-Terphenyl (Surr)	20 ug/mL
.DRO_SURR_00179	07/07/24	Accustandard, Lot 221071062			(Purchased Reagent)		n-Octacosane	5000 ug/mL
							o-Terphenyl (Surr)	5000 ug/mL
DRO_SS_00034	10/17/22	05/02/22	Methylene Chloride, Lot MeCl2_cycl_00567	10 mL	8015 DROStock_00807	400 uL	C10-C28	1984 ug/mL
.8015 DROStock_00807	01/13/30	Accustandard, Lot 220011117			(Purchased Reagent)		C10-C28	49600 ug/mL
IC CAL cl/so4_00419	05/18/22	05/11/22	Di Water, Lot na	100 mL	IC CL cal_00071	25 mL	Chloride	250 mg/L
					IC SO4 Cal_00003	25 mL	Sulfate	250 mg/L
.IC CL cal_00071	11/30/22	SPEX CertiPrep, Lot 5-67CL-2x			(Purchased Reagent)		Chloride	1000 mg/L
.IC SO4 Cal_00003	12/30/22	SPEX CertiPrep, Lot 5-118SO49-2X			(Purchased Reagent)		Sulfate	1000 mg/L
IC CAL cl/so4_00424	06/08/22	06/01/22	Di Water, Lot na	100 mL	IC SO4 ICV_00023	25 mL	Sulfate	250 mg/L
.IC SO4 ICV_00023	06/11/23	ERA, Lot 060720m			(Purchased Reagent)		Sulfate	1000 mg/L
IC Cal low_00637	05/18/22	05/11/22	Di Water, Lot NA	100 mL	IC BR ICV_00022	5 mL	Bromide	50 mg/L
					IC FL cal_00019	5 mL	Fluoride	50 mg/L
.IC BR ICV_00022	01/31/23	ricca, Lot 4108277			(Purchased Reagent)		Bromide	1000 mg/L
.IC FL cal_00019	01/31/23	Ricca, Lot 4108A94			(Purchased Reagent)		Fluoride	1000 mg/L
IC LCS_01879	06/08/22	06/01/22	Di Water, Lot 27	200 mL	IC SO4 ICV_00023	20 mL	Sulfate	100 mg/L as N
.IC SO4 ICV_00023	06/11/23	ERA, Lot 060720m			(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_00760	06/08/22	06/01/22	Di Water, Lot NA	10 mL	IC SPK 6 ANIO_00025	5 mL	Sulfate	5000.51 mg/L
.IC SPK 6 ANIO_00025	10/12/22	10/12/21	Di Water, Lot NA	1000 mL	IC MS/MSD SO4_00006	18.1408 g	Sulfate	10001 mg/L
..IC MS/MSD SO4_00006	09/29/23	FISHER, Lot 147276			(Purchased Reagent)		Sulfate	0.5513 g/g
mv-Cent BFB_00004							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							TAH	
							Tentatively Identified Compound	
							Total BTEX	
							Trihalomethanes, Total	
							Xylenes, Total	

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					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_00114	03/08/22	02/08/22	P&T Methanol, Lot 198123	12.5 mL	MV-569722_00018	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_00012	1250 uL	2-Chloroethyl vinyl ether	250 ug/mL
.MV-569722_00018	04/30/24		RESTEK, Lot A0171131		(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_00012	09/30/24		RESTEK, Lot A0176827		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
MV-Gas A_00122	05/26/22	04/26/22	P&T Methanol, Lot 198123	12.5 mL	MV-569722_00018	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_00015	1250 uL	2-Chloroethyl vinyl ether	250 ug/mL
.MV-569722_00018	04/30/24		RESTEK, Lot A0171131		(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_00015	09/30/24		RESTEK, Lot A0176827		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
MV-Gas A_00124	06/20/22	05/20/22	P&T Methanol, Lot 198123	12.5 mL	MV-569722_00018	1250 uL	Bromomethane	250 ug/mL
							Chloroethane	250 ug/mL
							Chloromethane	250 ug/mL

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dichlorodifluoromethane	250 ug/mL
							Trichlorofluoromethane	250 ug/mL
							Vinyl chloride	250 ug/mL
.MV-569722_00018	04/30/24		RESTEK, Lot A0171131		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
MV-Gas B_00110	05/29/22	04/29/22	P&T Methanol, Lot ea1899-us	12.5 mL	MV-569722_00019	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_00019	04/30/24		RESTEK, Lot A0171131		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
mv-IS_SS_00033	02/28/22	01/26/22	P&T Methanol, Lot 198123	50 mL	mv-30241_00009	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_00009	01/31/25		Restek, Lot A0175533		(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-IS_SS_00038	05/09/22	04/09/22	P&T Methanol, Lot 198123	50 mL	mv-30241_00009	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_00009	01/31/25		Restek, Lot A0175533		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2500 ug/mL
							Chlorobenzene-d5	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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-IS_SS_00039	05/29/22	04/29/22	P&T Methanol, Lot 198123	50 mL	mv-30241_00010	1000 uL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5	50 ug/mL
							Fluorobenzene	50 ug/mL
.mv-30241_00010	01/31/27		Restek, Lot A0180349		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2500 ug/mL
							Chlorobenzene-d5	2500 ug/mL
							Fluorobenzene	2500 ug/mL
mv-IS_SS_00039	05/29/22	04/29/22	P&T Methanol, Lot 198123	50 mL	MV-567650_00030	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-567650_00030	05/31/26		Restek, Lot A0172587		(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_00068	05/25/22	04/25/22	P&T Methanol, Lot 181124	25 mL	MV-569721.sec_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-571992.sec_00007	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

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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		
							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
							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_00008	08/31/23		RESTEK, Lot A0163783		(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_00007	06/30/23		RESTEK, Lot A0167172		(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

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Cyclohexane	2500 ug/mL
							Dibromochloromethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Ethylene Dibromide	2500 ug/mL
							Isopropylbenzene	2500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							Styrene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							Trichloroethene	2500 ug/mL
							Xylenes, Total	5000 ug/mL
MV-MegaMainA_00065	03/01/22	02/01/22	P&T Methanol, Lot 181124	25 mL	MV-569721_00011	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_00032	1000 uL	Vinyl acetate	200 ug/mL
					MV-569727_00016	3500 uL	Cyclohexanone	3500 ug/mL
					MV-571992_00009	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

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							3-Chloro-1-propene	100 ug/mL
							4-Chlorotoluene	100 ug/mL
							4-Isopropyltoluene	100 ug/mL
							Acrylonitrile	1000 ug/mL
							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_00009	2000 uL	1-Chlorohexane	80 ug/mL
							2-Pentanone	320 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		
							sec-Butyl Alcohol	2400 ug/mL
.MV-569721_00011	07/31/24		RESTEK, Lot A0174287		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
.MV-569724_00032	01/31/23		RESTEK, Lot A0174298		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
.MV-569727_00016	12/31/23		RESTEK, Lot A0167351		(Purchased Reagent)		Cyclohexanone	25000 ug/mL
.MV-571992_00009	10/31/22		RESTEK, Lot A0159680		(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

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dibromochloromethane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Ethyl ether	2500 ug/mL
							Ethyl methacrylate	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Ethylene Dibromide	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Hexane	2500 ug/mL
							Iodomethane	2500 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
							Trichloroethene	2500 ug/mL
.MV-CUS17739_00009	09/30/23	Agilent, Lot 6631594			(Purchased Reagent)		1-Chlorohexane	1000 ug/mL
							2-Pentanone	4000 ug/mL
							sec-Butyl Alcohol	30000 ug/mL
MV-MegaMainA_00065	03/01/22	02/01/22	P&T Methanol, Lot 181124	25 mL	MV-571992_00009	1000 uL	Xylenes, Total	200 ug/mL
.MV-571992_00009	10/31/22	RESTEK, Lot A0159680			(Purchased Reagent)		Xylenes, Total	5000 ug/mL
MV-MegaMainA_00070	05/26/22	04/26/22	P&T Methanol, Lot 181124	25 mL	MV-569721_00012	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_00032	1000 uL	Vinyl acetate	200 ug/mL
					MV-569727_00020	3000 uL	Cyclohexanone	3000 ug/mL
					MV-571992_00013	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

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1,2-Trichloroethane	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
							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

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00011	2000 uL	1-Chlorohexane	80 ug/mL
							2-Pentanone	320 ug/mL
							sec-Butyl Alcohol	2400 ug/mL
.MV-569721_00012	07/31/24		RESTEK, Lot A0174287		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
.MV-569724_00032	01/31/23		RESTEK, Lot A0174298		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
.MV-569727_00020	03/31/25		RESTEK, Lot A0182677		(Purchased Reagent)		Cyclohexanone	25000 ug/mL
.MV-571992_00013	10/31/22		RESTEK, Lot A0159680		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3,5-Trimethylbenzene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,4-Dioxane	50000 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							3-Chloro-1-propene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							4-Isopropyltoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dibromochloromethane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Ethyl ether	2500 ug/mL
							Ethyl methacrylate	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Ethylene Dibromide	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Hexane	2500 ug/mL
							Iodomethane	2500 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							trans-1,4-Dichloro-2-butene	2500 ug/mL
							Trichloroethene	2500 ug/mL
.MV-CUS17739_00011	09/30/23	Agilent, Lot 6631594			(Purchased Reagent)		1-Chlorohexane	1000 ug/mL
							2-Pentanone	4000 ug/mL
							sec-Butyl Alcohol	30000 ug/mL
MV-MegaMainA_00070	05/26/22	04/26/22	P&T Methanol, Lot 181124	25 mL	MV-571992_00013	1000 uL	Xylenes, Total	200 ug/mL
.MV-571992_00013	10/31/22	RESTEK, Lot A0159680			(Purchased Reagent)		Xylenes, Total	5000 ug/mL
MV-MegaMainA_00072	06/25/22	05/26/22	P&T Methanol, Lot 181124	25 mL	MV-569721_00012	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_00013	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
							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

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00012	07/31/24		RESTEK, Lot A0174287		(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_00013	10/31/22		RESTEK, Lot A0159680		(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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							trans-1,3-Dichloropropene	2500 ug/mL
							Trichloroethene	2500 ug/mL
							Xylenes, Total	5000 ug/mL
NXN CAL INT_00623	06/08/22	06/01/22	Di Water, Lot NA	100 mL	NOXT Cal STD_00025	10 mL	Nitrate Nitrite as N	100 mg/L
.NOXT Cal STD_00025	10/31/22	RICCA, Lot 2104e50			(Purchased Reagent)		Nitrate Nitrite as N	1000 mg/L
NXN ICV INT_00599	06/08/22	06/01/22	Di Water, Lot NA	100 mL	NOXT ICV STD_00028	10 mL	Nitrate Nitrite as N	100 mg/L
.NOXT ICV STD_00028	01/20/23	ERA, Lot 420121m			(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_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
RSK7gasMathes_00034	03/22/23	Matheson, Lot 9301615705			(Purchased Reagent)		Ethane	12317 ug/L
							Ethylene	11490 ug/L
							Methane	6570.3 ug/L
SFD CAL INT_02185	08/24/22	05/24/22	ELGA Water, Lot NA	500 mL	50% NaOH_00023	2 mL	Sodium Hydroxide	2000 mg/L
					SFD CAL STK_00009	3.7004 g	Sulfide	988.007 mg/L
.50% NaOH_00023	01/31/24	RICCA, Lot 1102857			(Purchased Reagent)		Sodium Hydroxide	50 %
.SFD CAL STK_00009	09/30/23	Thermo Scientific, Lot A0411500			(Purchased Reagent)		Sulfide	0.1335 g/g
SFD CAL INT_02186	08/24/22	05/25/22	ELGA Water, Lot NA	500 mL	50% NaOH_00023	2 mL	Sodium Hydroxide	2000 mg/L
					SFD CAL STK_00009	3.7157 g	Sulfide	992.092 mg/L
.50% NaOH_00023	01/31/24	RICCA, Lot 1102857			(Purchased Reagent)		Sodium Hydroxide	50 %
.SFD CAL STK_00009	09/30/23	Thermo Scientific, Lot A0411500			(Purchased Reagent)		Sulfide	0.1335 g/g
TKN 25ppm_00832	07/01/22	05/30/22	Di Water, Lot 1	100 mL	TKN 100PPM_00145	25 mL	Nitrogen, Total Kjeldahl	25 mg/L
.TKN 100PPM_00145	07/01/22	05/30/22	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_00118	07/01/22	05/30/22	DI water, Lot 1	100 mL	TKN ICV 100_00107	25 mL	Nitrogen, Total Kjeldahl	25 mg/L
.TKN ICV 100_00107	07/01/22	05/30/22	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_00049	01/31/23	Ricca, Lot 1201B45			(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_00054	12/31/23	Agilent, Lot 0006645841			(Purchased Reagent)		Dissolved Organic Carbon - Quad	1001 ppm
							DOC Result 1	1001 ppm
							DOC Result 2	1001 ppm
							DOC Result 3	1001 ppm
							DOC Result 4	1001 ppm

Reagent

50% NaOH_00023

RICCA CHEMICAL COMPANY®

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Arlington, TX 76012
http://www.riccachemical.com
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customerservice@riccachemical.com

Certificate of Analysis

Sodium Hydroxide, 50% (w/w) (760 g/L), Analytical Reagent Grade

Lot Number: 1102857 **Product Number:** 7291

Manufacture Date: FEB 05, 2021
Expiration Date: JAN 2024

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 %	0.00009 %	
Nickel (Ni)	max 5 ppm	< 1 ppm	3136
Nitrogen Compounds (as N)	max 5 ppm	< 5 ppm	
Phosphate (PO_4)	max 5 ppm	< 5 ppm	
Potassium (K)	max 0.01 %	0.002 %	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)
7291-1	4 L natural poly	36 months
7291-16	500 mL natural poly	36 months

Recommended Storage: 15°C - 30°C (59°F - 86°F)



Israel Alamudun (02/05/2021)
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

8330 LCS_00111

Preliminary Report

Eurofins TestAmerica, Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20211112-106450.b\LCS111.D

Lims ID: LCS111 Inj. Date: 12-Nov-2021 17:18:59

Worklist ID: 280-0106450-021 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 3535
4 HMX	0.5000	0.4991	99.8	65-135
8 RDX	0.5000	0.4595	91.9	68-130
9 2,4,6-Trinitrophenol	0.5000	0.4794	95.9	73-124
11 1,3,5-Trinitrobenzene	0.5000	0.4892	97.8	73-125
12 1,3-Dinitrobenzene	0.5000	0.4864	97.3	78-120
13 Nitrobenzene	0.5000	0.4870	97.4	65-134
15 Tetryl	0.5000	0.4805	96.1	64-128
16 Nitroglycerin	5.00	4.94	98.9	74-127
17 2,4,6-Trinitrotoluene	0.5000	0.4933	98.7	71-123
18 4AMD	0.5000	0.4752	95.0	76-125
19 2-Amino-4,6-dinitrotolu	0.5000	0.4783	95.7	79-120
20 2,6-Dinitrotoluene	0.5000	0.4939	98.8	77-127
21 2,4-Dinitrotoluene	0.5000	0.4820	96.4	78-120
22 o-Nitrotoluene	0.5000	0.4819	96.4	70-127
23 p-Nitrotoluene	0.5000	0.4905	98.1	71-127
24 m-Nitrotoluene	0.5000	0.4585	91.7	73-125
25 PETN	5.00	4.87	97.5	73-127

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

280-155295-A-3-A 280-155295-B-7-A

Reagent

8330 LCS_00113

Preliminary Report

Eurofins Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20220301-108907.b\071-0601.D

Lims ID: 8330LCS113 Inj. Date: 01-Mar-2022 16:06:37

Worklist ID: 280-0108907-067 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 3535	Limits 2 3535	Limits 3 3535
4 HMX	0.5000	0.4640	92.8	65-135	66-115	
8 RDX	0.5000	0.4736	94.7	68-130	69-122	
9 2,4,6-Trinitrophenol	0.5000	0.5129	102.6	73-124	80-120	63-135
11 1,3,5-Trinitrobenzene	0.5000	0.5000	100.0	73-125	62-127	
12 1,3-Dinitrobenzene	0.5000	0.5038	100.8	78-120	59-131	
13 Nitrobenzene	0.5000	0.5047	100.9	65-134	46-144	
15 Tetryl	0.5000	0.4990	99.8	64-128	56-131	
16 Nitroglycerin	5.00	5.05	101.0	74-127	70-125	
17 2,4,6-Trinitrotoluene	0.5000	0.4952	99.0	71-123	46-139	
18 4AMD	0.5000	0.4892	97.8	76-125	43-120	
19 2-Amino-4,6-dinitrotolu	0.5000	0.4885	97.7	79-120	46-124	
20 2,6-Dinitrotoluene	0.5000	0.5015	100.3	77-127	51-130	
21 2,4-Dinitrotoluene	0.5000	0.4744	94.9	78-120	53-127	
22 o-Nitrotoluene	0.5000	0.4879	97.6	70-127	37-138	
23 p-Nitrotoluene	0.5000	0.5210	104.2	71-127	41-137	
24 m-Nitrotoluene	0.5000	0.4604	92.1	73-125	31-140	
25 PETN	5.00	5.23	104.6	73-127	67-127	

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

280-159056-B-1-B	280-159056-B-2-B	280-159056-B-3-B
280-159056-B-4-B	280-159130-B-1-A	280-159130-A-2-A
280-159130-B-3-A	280-159130-B-4-A	280-159130-A-5-A
280-159130-A-6-A	280-159137-A-1-A	280-159137-B-2-A
280-159137-A-3-A	280-159137-A-4-A	280-159137-A-5-A

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

280-159005-C-1-B	280-159005-C-2-B	280-159005-C-3-B
280-159005-D-4-D	280-159005-D-5-B	280-159043-C-1-B
280-159043-D-2-B	280-159043-D-3-B	280-159043-D-4-B
280-159043-D-5-B	280-159088-D-1-C	280-159088-C-2-C
280-159088-D-3-C	280-159088-D-4-C	

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

860-21351-C-1-C	280-159025-A-1-C	280-159025-A-2-C

Reagent

8330 LCSMix2_00112

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31451 **Lot No.:** A0171368

Description : 8330 Calibration Mix #2

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

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

Expiration Date : April 30, 2026 **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		1,008.0 µg/mL	+/- 5.9872 µg/mL		Gravimetric
	CAS # 479-45-8	(Lot 091120JLM)		+/- 55.2213 µg/mL		Unstressed
	Purity 99%			+/- 64.3934 µg/mL		Stressed
2	4-Amino-2,6-dinitrotoluene		1,002.0 µg/mL	+/- 5.9516 µg/mL		Gravimetric
	CAS # 19406-51-0	(Lot ER070908-01)		+/- 54.8926 µg/mL		Unstressed
	Purity 99%			+/- 64.0101 µg/mL		Stressed
3	2-Amino-4,6-dinitrotoluene		1,006.0 µg/mL	+/- 5.9753 µg/mL		Gravimetric
	CAS # 35572-78-2	(Lot 29550-55)		+/- 55.1117 µg/mL		Unstressed
	Purity 99%			+/- 64.2657 µg/mL		Stressed
4	2,6-Dinitrotoluene		1,008.0 µg/mL	+/- 5.9872 µg/mL		Gravimetric
	CAS # 606-20-2	(Lot 1437483V)		+/- 55.2213 µg/mL		Unstressed
	Purity 99%			+/- 64.3934 µg/mL		Stressed
5	2-Nitrotoluene		1,010.0 µg/mL	+/- 5.9991 µg/mL		Gravimetric
	CAS # 88-72-2	(Lot BCBZ7826)		+/- 55.3308 µg/mL		Unstressed
	Purity 99%			+/- 64.5212 µg/mL		Stressed
6	4-Nitrotoluene		1,010.0 µg/mL	+/- 5.9991 µg/mL		Gravimetric
	CAS # 99-99-0	(Lot FAU01)		+/- 55.3308 µg/mL		Unstressed
	Purity 99%			+/- 64.5212 µg/mL		Stressed
7	3-Nitrotoluene		1,000.0 µg/mL	+/- 5.9397 µg/mL		Gravimetric
	CAS # 99-08-1	(Lot 07329LG)		+/- 54.7830 µg/mL		Unstressed
	Purity 99%			+/- 63.8824 µg/mL		Stressed

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

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

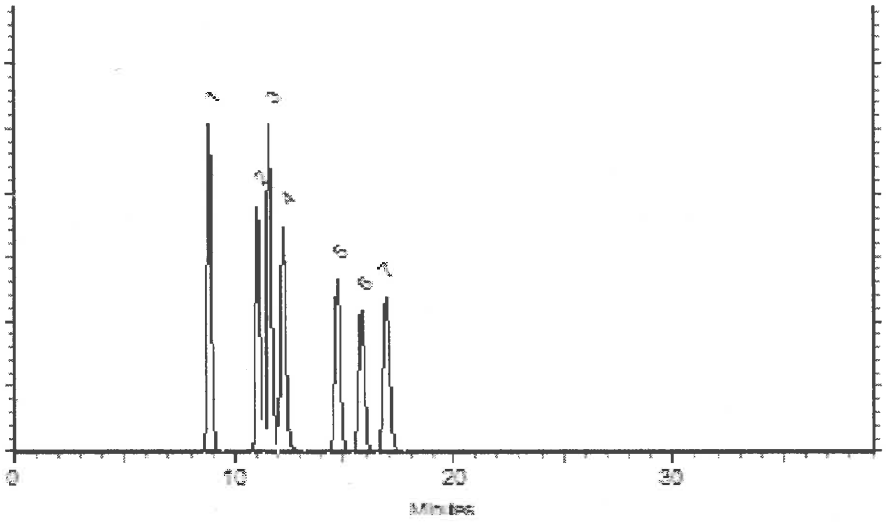
Flow Rate:
1.0 ml/min.

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.

Cory Meyer - Operations Tech I

Date Mixed: 15-Apr-2021 **Balance:** 1128342314

Alexis Shelow - Operations Tech I

Date Passed: 20-Apr-2021

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 Stock_TS_00019

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_00021

Agilent

Certificate of Analysis

Product Name: Stock Standard

Product Number: NAIM-833E-1

Lot Number: 0006604365

Lot Issue Date: 28-May-2021

Expiration Date: 30-Jun-2024

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
HMX	002691-41-0	RM06237	1001 ± 5 µg/mL
RDX	000121-82-4	RM10915	1001 ± 5 µg/mL
1,3,5-trinitrobenzene	000099-35-4	RM17843	1001 ± 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	RM16204	1001 ± 5 µg/mL
2,4-dinitrotoluene	000121-14-2	RM10279	1004 ± 5 µg/mL
tetryl	000479-45-8	RM14651	1003 ± 5 µg/mL
2,6-dinitrotoluene	000606-20-2	RM10763	1003 ± 5 µg/mL
2-nitrotoluene	000088-72-2	NT01996	1004 ± 5 µg/mL
3-nitrotoluene	000099-08-1	NT02212	1002 ± 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	1003 ± 5 µg/mL

Matrix: acetonitrile

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

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

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CSD-QA-015.1

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Reagent

8330_NG_Stk_00096

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568871 **Lot No.:** A0161840

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

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Nitroglycerin	5,032.0 µg/mL	+/- 46.7949	µg/mL	Gravimetric
	CAS # 55-63-0 (Lot 200507JLM)		+/- 278.0096	µg/mL	Unstressed
	Purity 99%		+/- 323.4663	µg/mL	Stressed

Solvent: Acetonitrile
CAS # 75-05-8
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

8330_NG_Stk_00098

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568871 **Lot No.:** A0161840

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

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Nitroglycerin	5,032.0 µg/mL	+/- 46.7949	µg/mL	Gravimetric
	CAS # 55-63-0 (Lot 200507JLM)		+/- 278.0096	µg/mL	Unstressed
	Purity 99%		+/- 323.4663	µg/mL	Stressed

Solvent: Acetonitrile
CAS # 75-05-8
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

8330_NG1000_00006

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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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. : 31498 **Lot No.:** A0175997

Description : Nitroglycerin Standard

Nitroglycerin Standard 1,000µg/mL, Methanol, 1mL/ampul

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

Expiration Date : September 30, 2026 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Nitroglycerin	1,000.0 µg/mL	+/- 5.9397 µg/mL	Gravimetric
	CAS # 55-63-0 (Lot 200507JLM)		+/- 54.7830 µg/mL	Unstressed
	Purity 99%		+/- 63.8824 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

8330_OP_DMT_00012

Preliminary Report

Eurofins TestAmerica, Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20210923-104924.b\09230005.D

Lims ID: DMT LCS 12 Inj. Date: 23-Sep-2021 17:32:02

Worklist ID: 280-0104924-005 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 0B_Sonc_
2 TNX	0.5005	0.5409	108.1	50-150
5 DNX	0.5005	0.5315	106.2	50-150
6 MNX	0.5835	0.6076	104.1	50-150

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

410-54924-B-2-B 410-54924-B-4-B 410-54924-B-6-D

410-54924-B-8-D 410-54873-B-2-F 410-54873-B-4-B

410-54873-B-6-B

Reagent

8330_OP_DMT_00014

Preliminary Report

Eurofins Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20220505-110724.b\05050011.D

Lims ID: DMTLCS14 Inj. Date: 05-May-2022 19:41:44

Worklist ID: 280-0110724-011 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 3535	Limits 2 3535	Limits 3 3535
3 TNX	0.5000	0.5258	105.2	50-150		
6 DNX	0.5020	0.5146	102.5	50-150	66-119	
7 MNX	0.5850	0.5996	102.5	68-123	57-132	

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

580-113280-A-8-A 280-161899-A-1-A 280-161899-A-2-A

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

410-82564-D-1-A 410-82564-D-2-A 410-82564-D-3-A
410-82564-D-4-A 410-82564-D-5-A 410-82564-D-6-A
410-82564-D-7-A 410-82564-D-8-A 410-82564-E-9-A
410-82564-E-10-A 410-82564-E-11-A 410-82564-D-12-A
410-82564-D-13-A 280-161779-F-1-A 280-161779-G-2-A
280-161779-G-3-A 280-161779-F-4-A

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

550-183393-N-1-A

Reagent

8330_PETN_Stk_00111

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Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568872 **Lot No.:** A0172687

Description : Custom PETN Standard

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

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

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

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	PETN	5,032.0 µg/mL	+/- 46.7949	µg/mL	Gravimetric
	CAS # 78-11-5 (Lot 051108JLM)		+/- 278.0096	µg/mL	Unstressed
	Purity 99%		+/- 323.4663	µg/mL	Stressed

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

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

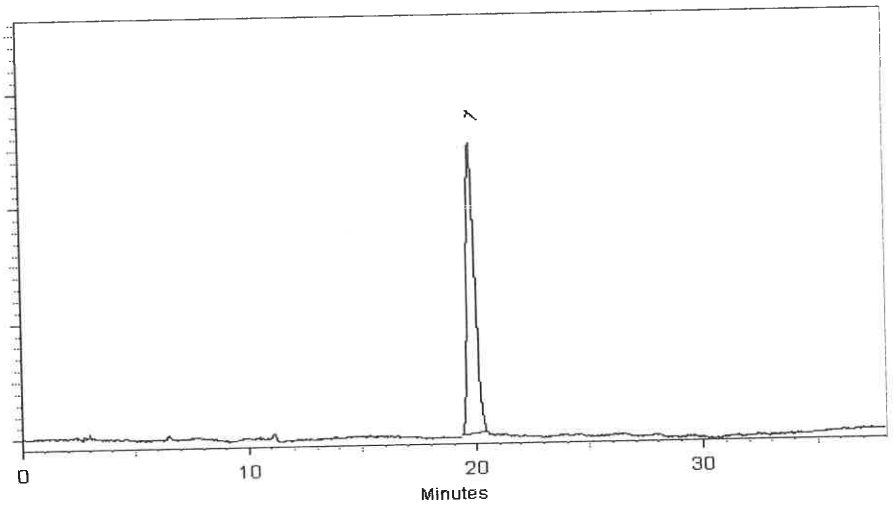
Flow Rate:
1.0 ml/min.

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.

Katelyn McGinni - Operations Tech I

Date Mixed: 24-May-2021 **Balance:** 1128353505

Marlina Cowan - Operations Tech I

Date Passed: 27-May-2021

REVIEWED
By Jennifer Polimo at 2:38 pm, May 27, 2021

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

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Manufacturing Notes:

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Handling Notes:

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Reagent

8330_PETN_Stk_00113

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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. : 568872 **Lot No.:** A0172687

Description : Custom PETN Standard

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

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

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

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	PETN **CAS #** 78-11-5 **Purity** 99%	(Lot 051108JLM)	5,032.0 µg/mL	+/- 46.7949 µg/mL +/- 278.0096 µg/mL +/- 323.4663 µg/mL		Gravimetric Unstressed Stressed

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

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

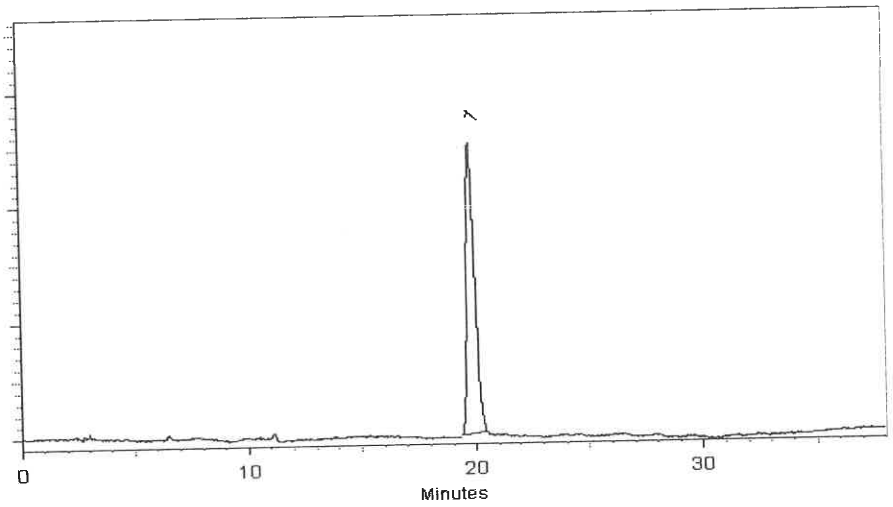
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 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.

Katelyn McGinni - Operations Tech I

Date Mixed: 24-May-2021 **Balance:** 1128353505

Marlina Cowan - Operations Tech I

Date Passed: 27-May-2021

REVIEWED
By Jennifer Polimo at 2:38 pm, May 27, 2021

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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Purity Notes:

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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.

Reagent

8330_PETN1000_00006

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31600 **Lot No.:** A0175907

Description : PETN Standard

PETN Standard 1000µg/mL, Methanol, 1mL/ampul

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

Expiration Date : August 31, 2026 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	PETN		1,006.8 µg/mL	+/- 10.1422	µg/mL	Gravimetric
	CAS # 78-11-5	(Lot 051108JLM)		+/- 55.7605	µg/mL	Unstressed
	Purity 99%			+/- 64.8363	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:

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

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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:

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Reagent

8330LCSMix1_00126

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31450 **Lot No.:** A0171502

Description : 8330 Calibration Mix #1

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

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

Expiration Date : April 30, 2026 **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 **CAS #** 2691-41-0 **Purity** 99%	(Lot 210324JLM)	1,002.0 µg/mL	+/- 5.9516 +/- 54.8926 +/- 64.0101	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	RDX **CAS #** 121-82-4 **Purity** 99%	(Lot 080220JLM)	1,003.0 µg/mL	+/- 5.9575 +/- 54.9474 +/- 64.0740	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	1,3,5-Trinitrobenzene **CAS #** 99-35-4 **Purity** 99%	(Lot A6TDK)	1,004.0 µg/mL	+/- 5.9635 +/- 55.0021 +/- 64.1379	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	1,3-Dinitrobenzene **CAS #** 99-65-0 **Purity** 99%	(Lot 1-DXX-24-1)	1,000.0 µg/mL	+/- 5.9397 +/- 54.7830 +/- 63.8824	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Nitrobenzene **CAS #** 98-95-3 **Purity** 99%	(Lot MKCK4267)	1,010.0 µg/mL	+/- 5.9991 +/- 55.3308 +/- 64.5212	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	2,4,6-Trinitrotoluene **CAS #** 118-96-7 **Purity** 99%	(Lot D10587700)	1,000.0 µg/mL	+/- 5.9397 +/- 54.7830 +/- 63.8824	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	2,4-Dinitrotoluene **CAS #** 121-14-2 **Purity** 99%	(Lot MKAA0690)	1,004.0 µg/mL	+/- 5.9635 +/- 55.0021 +/- 64.1379	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

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

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

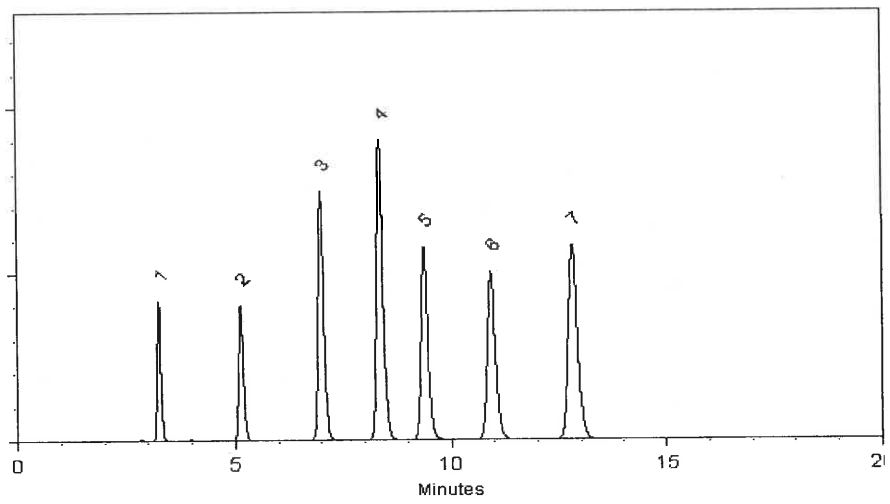
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 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.

Lane Kibe - Mix Technician

Date Mixed: 20-Apr-2021 **Balance:** 1127510105

Alexis Shelow - Operations Tech I

Date Passed: 23-Apr-2021

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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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

8330LCSMix1_00129

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31450 **Lot No.:** A0171502

Description : 8330 Calibration Mix #1

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

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

Expiration Date : April 30, 2026 **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 **CAS #** 2691-41-0 **Purity** 99%	(Lot 210324JLM)	1,002.0 µg/mL	+/- 5.9516 +/- 54.8926 +/- 64.0101	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	RDX **CAS #** 121-82-4 **Purity** 99%	(Lot 080220JLM)	1,003.0 µg/mL	+/- 5.9575 +/- 54.9474 +/- 64.0740	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	1,3,5-Trinitrobenzene **CAS #** 99-35-4 **Purity** 99%	(Lot A6TDK)	1,004.0 µg/mL	+/- 5.9635 +/- 55.0021 +/- 64.1379	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	1,3-Dinitrobenzene **CAS #** 99-65-0 **Purity** 99%	(Lot 1-DXX-24-1)	1,000.0 µg/mL	+/- 5.9397 +/- 54.7830 +/- 63.8824	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Nitrobenzene **CAS #** 98-95-3 **Purity** 99%	(Lot MKCK4267)	1,010.0 µg/mL	+/- 5.9991 +/- 55.3308 +/- 64.5212	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	2,4,6-Trinitrotoluene **CAS #** 118-96-7 **Purity** 99%	(Lot D10587700)	1,000.0 µg/mL	+/- 5.9397 +/- 54.7830 +/- 63.8824	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	2,4-Dinitrotoluene **CAS #** 121-14-2 **Purity** 99%	(Lot MKAA0690)	1,004.0 µg/mL	+/- 5.9635 +/- 55.0021 +/- 64.1379	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

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

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

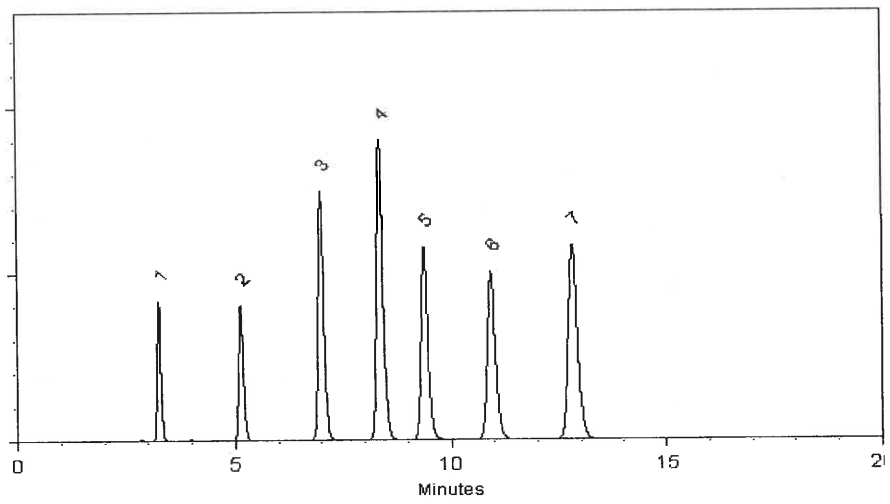
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 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.

Lane Kibe - Mix Technician

Date Mixed: 20-Apr-2021 **Balance:** 1127510105

Alexis Shelow - Operations Tech I

Date Passed: 23-Apr-2021

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

8330LCSmix2_00028

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31451 **Lot No.:** A0171368

Description : 8330 Calibration Mix #2

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

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

Expiration Date : April 30, 2026 **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)	1,008.0 µg/mL	+/- 5.9872 µg/mL +/- 55.2213 µg/mL +/- 64.3934 µg/mL	Gravimetric Unstressed Stressed
2	4-Amino-2,6-dinitrotoluene **CAS #** 19406-51-0 **Purity** 99%	(Lot ER070908-01)	1,002.0 µg/mL	+/- 5.9516 µg/mL +/- 54.8926 µg/mL +/- 64.0101 µg/mL	Gravimetric Unstressed Stressed
3	2-Amino-4,6-dinitrotoluene **CAS #** 35572-78-2 **Purity** 99%	(Lot 29550-55)	1,006.0 µg/mL	+/- 5.9753 µg/mL +/- 55.1117 µg/mL +/- 64.2657 µg/mL	Gravimetric Unstressed Stressed
4	2,6-Dinitrotoluene **CAS #** 606-20-2 **Purity** 99%	(Lot 1437483V)	1,008.0 µg/mL	+/- 5.9872 µg/mL +/- 55.2213 µg/mL +/- 64.3934 µg/mL	Gravimetric Unstressed Stressed
5	2-Nitrotoluene **CAS #** 88-72-2 **Purity** 99%	(Lot BCBZ7826)	1,010.0 µg/mL	+/- 5.9991 µg/mL +/- 55.3308 µg/mL +/- 64.5212 µg/mL	Gravimetric Unstressed Stressed
6	4-Nitrotoluene **CAS #** 99-99-0 **Purity** 99%	(Lot FAU01)	1,010.0 µg/mL	+/- 5.9991 µg/mL +/- 55.3308 µg/mL +/- 64.5212 µg/mL	Gravimetric Unstressed Stressed
7	3-Nitrotoluene **CAS #** 99-08-1 **Purity** 99%	(Lot 07329LG)	1,000.0 µg/mL	+/- 5.9397 µg/mL +/- 54.7830 µg/mL +/- 63.8824 µg/mL	Gravimetric Unstressed Stressed

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

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

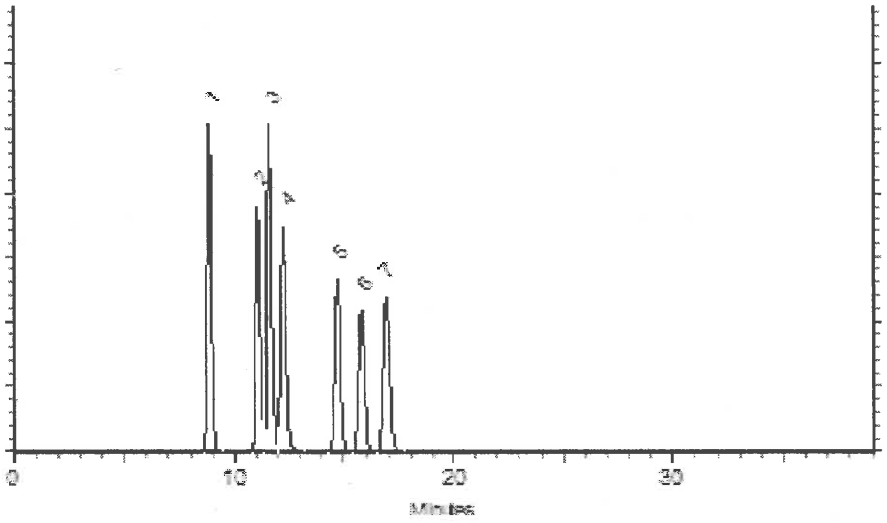
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 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.

Cory Meyer - Operations Tech I

Alexis Shelow - Operations Tech I

Date Mixed: 15-Apr-2021 **Balance:** 1128342314

Date Passed: 20-Apr-2021

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

8330PAStkPS_00067

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New Haven, CT 06513
USA

AccuStandard®

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Fax (203)786-5287
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CERTIFICATE OF ANALYSIS

Catalog No: M-8330-ADD-3
Description: Picric acid
Lot: 218031154-02
Solvent: Acetonitrile (50%)
Methanol (50%)
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: Jun 8, 2020
Expiration: Jul 8, 2022
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED AR-1463 ANAB ACCREDITED AT-1339 ilac-MRA

Component	CAS #	Purity % (HPLC)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (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

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

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

Reagent

8330Surrogate_00127

Preliminary Report

Eurofins TestAmerica, Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20211116-106552.b\071-0801.D

Lims ID: Surr127 Inj. Date: 16-Nov-2021 17:37:51

Worklist ID: 280-0106552-072 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 3535
$ 10 1,2-Dinitrobenzene	0.5000	0.5055	101.1	83-119

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

280-155547-B-1-A

Reagent

8330Surrogate_00128

Preliminary Report

Eurofins TestAmerica, Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20220121-108087.b\01210004.D

Lims ID: CaCl2_Sol_00078 Inj. Date: 21-Jan-2022 15:41:36

Worklist ID: 280-0108087-004 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 0B_Sonc_
$ 10 1,2-Dinitrobenzene	0.5000	0.5226	104.5	78-119

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

280-157690-A-1-B	280-157690-A-2-B	280-157690-A-3-B
280-157690-A-4-B	280-157690-A-5-B	280-157690-A-6-B
280-157690-A-7-E	280-157690-A-8-B	280-157690-A-9-B
280-157690-A-10-B	280-157690-A-11-B	280-157690-A-12-B
280-157690-A-13-B	280-157690-A-14-B	280-157690-A-15-B
280-157690-A-16-B	280-157690-A-17-B	280-157690-A-18-B

Reagent

8330SurrStkSS_00203

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31453 **Lot No.:** A0172684

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, 2026 **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	1,002.0 µg/mL	+/- 5.9516 µg/mL	Gravimetric
	CAS # 528-29-0 (Lot MKCH6067)		+/- 56.1943 µg/mL	Unstressed
	Purity 99%		+/- 57.5086 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
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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_00204

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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.:** A0172684

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, 2026 **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	1,002.0 µg/mL	+/- 5.9516 µg/mL	Gravimetric
	CAS # 528-29-0 (Lot MKCH6067)		+/- 56.1943 µg/mL	Unstressed
	Purity 99%		+/- 57.5086 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.
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Purity Notes:

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- 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_00205

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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Reference Material Producer
Certificate #3222.01

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31453 **Lot No.:** A0172684

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, 2026 **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	1,002.0 µg/mL	+/- 5.9516 µg/mL	Gravimetric
	CAS # 528-29-0 (Lot MKCH6067)		+/- 56.1943 µg/mL	Unstressed
	Purity 99%		+/- 57.5086 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_00206

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CERTIFIED REFERENCE MATERIAL

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31453 **Lot No.:** A0172684

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, 2026 **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	1,002.0 µg/mL	+/- 5.9516 µg/mL	Gravimetric
	CAS # 528-29-0 (Lot MKCH6067)		+/- 56.1943 µg/mL	Unstressed
	Purity 99%		+/- 57.5086 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_00207

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31453 **Lot No.:** A0172684

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, 2026 **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	1,002.0 µg/mL	+/- 5.9516	µg/mL	Gravimetric
	CAS # 528-29-0 (Lot MKCH6067)		+/- 56.1943	µg/mL	Unstressed
	Purity 99%		+/- 57.5086	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_00208

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CERTIFIED REFERENCE MATERIAL

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31453 **Lot No.:** A0172684

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, 2026 **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	1,002.0 µg/mL	+/- 5.9516 µg/mL	Gravimetric
	CAS # 528-29-0 (Lot MKCH6067)		+/- 56.1943 µg/mL	Unstressed
	Purity 99%		+/- 57.5086 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_00209

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CERTIFIED REFERENCE MATERIAL

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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.:** A0172684

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, 2026 **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	1,002.0 µg/mL	+/- 5.9516 µg/mL	Gravimetric
	CAS # 528-29-0 (Lot MKCH6067)		+/- 56.1943 µg/mL	Unstressed
	Purity 99%		+/- 57.5086 µg/mL	Stressed

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
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- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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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

8330SurrStkSS_00210

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

Catalog No. : 31453 **Lot No.:** A0172684

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, 2026 **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	1,002.0 µg/mL	+/- 5.9516 µg/mL	Gravimetric
	CAS # 528-29-0 (Lot MKCH6067)		+/- 56.1943 µg/mL	Unstressed
	Purity 99%		+/- 57.5086 µg/mL	Stressed

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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- 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.
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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_00211

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31453 **Lot No.:** A0172684

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, 2026 **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	1,002.0 µg/mL	+/- 5.9516	µg/mL	Gravimetric
	CAS # 528-29-0 (Lot MKCH6067)		+/- 56.1943	µg/mL	Unstressed
	Purity 99%		+/- 57.5086	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_00212

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31453 **Lot No.:** A0172684

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, 2026 **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	1,002.0 µg/mL	+/- 5.9516 µg/mL	Gravimetric
	CAS # 528-29-0 (Lot MKCH6067)		+/- 56.1943 µg/mL	Unstressed
	Purity 99%		+/- 57.5086 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_00169

125 Market Street
New Haven, CT 06513
USA

AccuStandard®

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

CERTIFICATE OF ANALYSIS

Catalog No: M-8330-SS
Description: 1,2-Dinitrobenzene
Lot: 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.

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

8330SurrStock_00170

125 Market Street
New Haven, CT 06513
USA

AccuStandard®

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

CERTIFICATE OF ANALYSIS

Catalog No: M-8330-SS
Description: 1,2-Dinitrobenzene
Lot: 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.

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

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

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. 7/20

Reagent

Alk stk std_00022

spex certiprep

ACCREDITED
Reference Materials Producer
Cert# 2495.01

SPEXertificate®
Certificate of Reference Material

ilac-MRA ACCREDITED
Chemical Testing
Cert# 2495.02

Catalog Number: VTACO-3 **Lot No.:** 2-85BT

Description: Custom Standard

Matrix: H_2O

This Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for conductance meters and conductivity cells used in water purity measurements. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

The CRM is prepared gravimetrically using high purity sodium carbonate (Na_2CO_3) Lot# H04155 and ASTM Type I water, using Class A laboratory ware to give precise concentration.

Certified Value:

Analyte:	Na_2CO_3
Alkalinity:	50,000 µg/mL as $CaCO_3$
Uncertainty:	±500 µg/mL
Traceable to:	Standard made from NIST SRM # 351a

Balances are calibrated regularly with weight sets traceable to NIST#s 32856, 32867. This CRM is guaranteed stable to ±1% of the certified concentration inclusive of uncertainty of measurements and other components such as homogeneity, long and short-term stability for a period of one year from the date of certification. This guarantee is valid only when the material is kept tightly capped and stored under ambient laboratory conditions.

Date of Certification: OCT - - 2021

Certifying Officer: Katherine Cullinan

Katherine Cullinan, QC Manager

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Report of Certification

This Certified Reference Material (CRM) has been prepared and certified under an ISO 9001 (certified by DQS), ISO/IEC 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, labels, and accompanying documentation
- ISO Guide 35: Reference Materials – Guidance for characterization and assessment of homogeneity and stability
- 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/IEC 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@spex.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/IEC 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@spex.com.

Legal Notice:
Spex CertiPrep reference materials are not for any cosmetic, drug or household application and are to be used only by qualified individuals who are trained in appropriate procedures. No claims against Spex CertiPrep, LLC. of any kind whatsoever, whether based on breach of warranty, alleged negligence, or otherwise, with respect to this Reference Material shall be greater than the purchase price. In no event shall Spex CertiPrep, LLC. be liable for any loss of profits or any incidental, special, or consequential damages.

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www.spexcertiprep.com • Email: CRMSales@spex.com
Phone: 1.800.LAB.SPEX • 1.732.549.7144 Fax: 732.603.9647

Reagent

DRO_Fuel2_00167

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

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Certificate of Analysis

Reference Material Producer
Certificate #3222.01

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

06/10/2022

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31259 **Lot No.:** A0173887

Description : Diesel Fuel #2 Composite Standard

Diesel Fuel #2 Composite Standard 50,000µg/mL, Methylene Chloride, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : July 31, 2028 **Storage:** 25°C nominal

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Diesel Fuel #2 Composite	50,000.5 µg/mL	+/- 290.6918 µg/mL	Gravimetric
	CAS # 68334-30-5.A (Lot A0160886)		+/- 1,488.6711 µg/mL	Unstressed
	Purity ----%		+/- 1,587.7189 µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

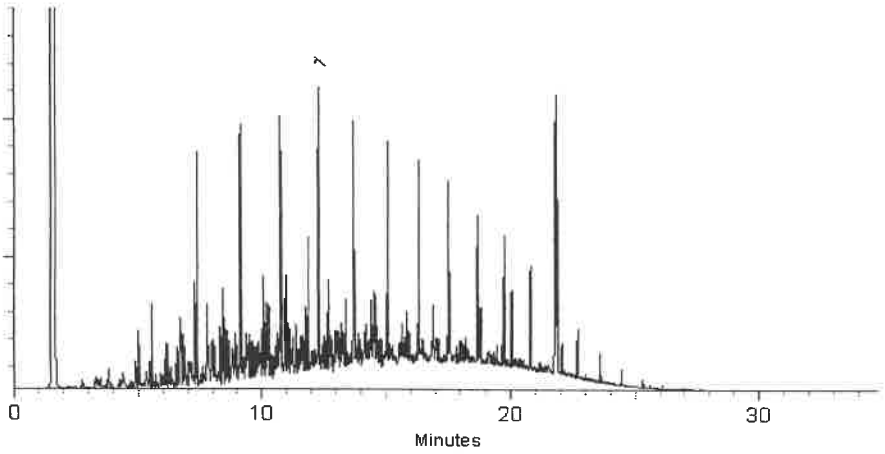
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



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

Michael Maye

Date Mixed: 28-Jun-2021 **Balance:** 1128353505

Alexis Shelow - Operations Tech I

Date Passed: 30-Jun-2021

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

06/10/2022

Reagent

DRO_Fuel2_00170

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

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Certificate of Analysis

Reference Material Producer
Certificate #3222.01

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Testing Laboratory
Certificate #3222.02

06/10/2022

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31259 **Lot No.:** A0173887

Description : Diesel Fuel #2 Composite Standard

Diesel Fuel #2 Composite Standard 50,000µg/mL, Methylene Chloride, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : July 31, 2028 **Storage:** 25°C nominal

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Diesel Fuel #2 Composite	50,000.5 µg/mL	+/- 290.6918 µg/mL	Gravimetric
	CAS # 68334-30-5.A (Lot A0160886)		+/- 1,488.6711 µg/mL	Unstressed
	Purity ----%		+/- 1,587.7189 µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

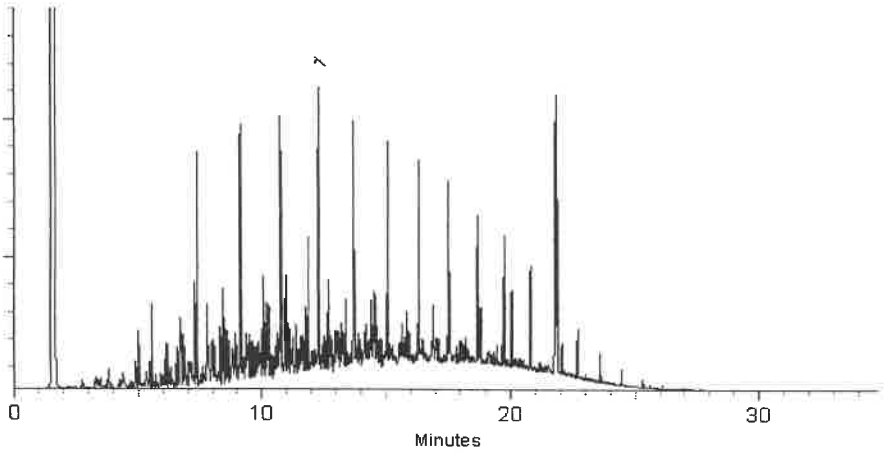
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



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

Michael Maye

Alexis Shelow - Operations Tech I

Date Mixed: 28-Jun-2021 **Balance:** 1128353505

Date Passed: 30-Jun-2021

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

06/10/2022

Reagent

DRO_Fuel2_00190

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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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. : 31259 **Lot No.:** A0176616

Description : Diesel Fuel #2 Composite Standard

Diesel Fuel #2 Composite Standard 50,000µg/mL, Methylene Chloride, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : October 31, 2028 **Storage:** 25°C nominal

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Diesel Fuel #2 Composite	50,010.1 µg/mL	+/- 290.7478 µg/mL	Gravimetric
	CAS # 68334-30-5.A (Lot A0160886)		+/- 1,488.9579 µg/mL	Unstressed
	Purity ----%		+/- 1,588.0248 µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

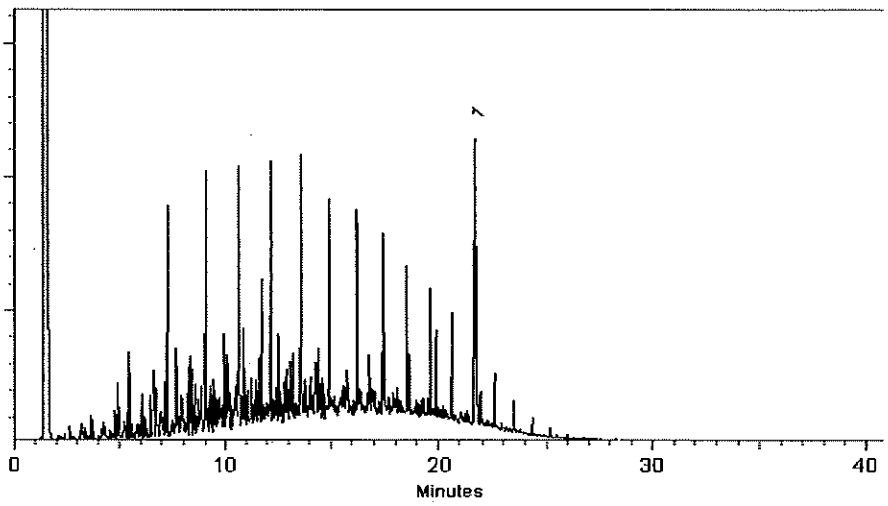
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



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

Sam Moodler - Operations Tech I

Date Mixed: 21-Sep-2021 **Balance:** 1128360905

Alexis Shelow - Operations Tech I

Date Passed: 23-Sep-2021

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

DRO_Fuel2_00192

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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. : 31259 **Lot No.:** A0176616

Description : Diesel Fuel #2 Composite Standard

Diesel Fuel #2 Composite Standard 50,000µg/mL, Methylene Chloride, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : October 31, 2028 **Storage:** 25°C nominal

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Diesel Fuel #2 Composite	50,010.1 µg/mL	+/- 290.7478 µg/mL	Gravimetric
	CAS # 68334-30-5.A (Lot A0160886)		+/- 1,488.9579 µg/mL	Unstressed
	Purity ----%		+/- 1,588.0248 µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

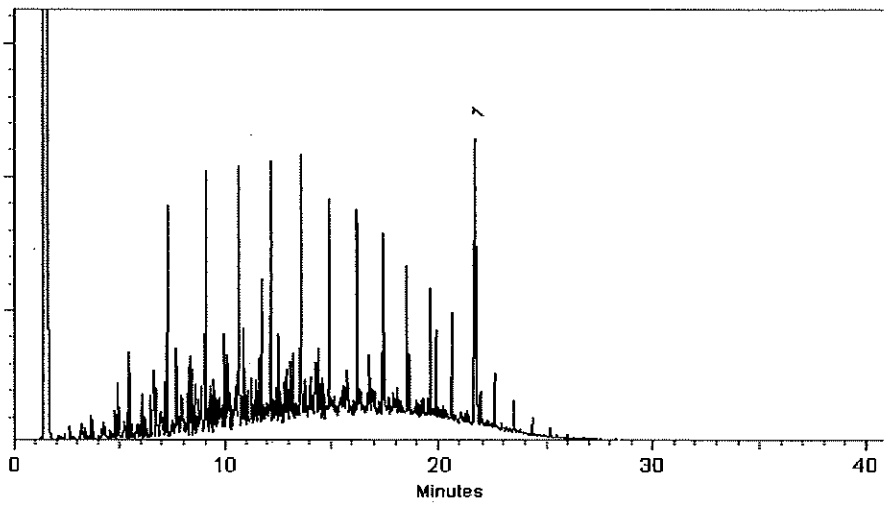
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



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

Sam Moodler - Operations Tech I

Date Mixed: 21-Sep-2021 **Balance:** 1128360905

Alexis Shelow - Operations Tech I

Date Passed: 23-Sep-2021

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

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CERTIFICATE OF ANALYSIS

Catalog No: DRH-004S-R1-5X
Description: Calibration/Window Defining Hydrocarbon Standard
Lot: 221051079
Solvent: Chloroform
Hazards: *Refer to SDS for complete safety information*



Signal Word: Warning

Date Certified: May 11, 2021
Expiration: May 11, 2031
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	99.8	1000	998
Decane	124-18-5	100.0	1004	1004
Dodecane	112-40-3	99.0	1003	993
n-Tetradecane	629-59-4	99.9	1000	999
Hexadecane	544-76-3	100.0	1003	1003
n-Octadecane	593-45-3	100.0	1003	1003
Eicosane	112-95-8	99.8	1000	998
Docosane	629-97-0	99.1	1001	992
n-Tetracosane	646-31-1	98.9	1002	991
Hexacosane	630-01-3	99.5	1001	996
n-Octacosane	630-02-4	99.0	1002	992
n-Triacontane	638-68-6	100.0	1001	1001
Dotriacontane	544-85-4	98.0	1002	982
Tetratriacontane	14167-59-0	99.1	1002	993
Hexatriacontane	630-06-8	98.0	1002	982
n-Octatriacontane	7194-85-6	96.2	1040*	1000
Tetracontane	4181-95-7	99.9	1002	1001

* 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.

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

Hazard Information. Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard

Reference Material Producers ANAB Certificate Number AR-1463

ISO/IEC 17025:2017 – 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. 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

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CERTIFICATE OF ANALYSIS

Catalog No: S-8087-2.5X
Description: Custom Standard
Lot: 221071062
Solvent: Dichloromethane
Hazards: *Refer to SDS for complete safety information*



Signal Word: Warning

Date Certified: Jul 7, 2021
Expiration: Jul 7, 2024
Sample Size: 1 mL
Components: 2
Storage Condition: Refrig (0-5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
o-Terphenyl	84-15-1	99.9	5050	5045
n-Octacosane	630-02-4	99.0	5050	5000

This Certified Reference Material was verified in accordance with ISO/IEC 17025

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

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

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 17034:2016 – General Requirements for the Competence of Reference Material Producers

   ISO/IEC 17025:2017 – General Requirements for the Competence of Testing And Calibration Laboratories

   ISO 9001:2015 – Quality Management System – Requirements Eagle Registrations

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. 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

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CERTIFICATE OF ANALYSIS

Catalog No: S-8087-2.5X
Description: Custom Standard
Lot: 221071062
Solvent: Dichloromethane
Hazards: *Refer to SDS for complete safety information*



Signal Word: Warning

Date Certified: Jul 7, 2021
Expiration: Jul 7, 2024
Sample Size: 1 mL
Components: 2
Storage Condition: Refrig (0-5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
o-Terphenyl	84-15-1	99.9	5050	5045
n-Octacosane	630-02-4	99.0	5050	5000

This Certified Reference Material was verified in accordance with ISO/IEC 17025

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

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

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

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CERTIFICATE OF ANALYSIS

Catalog No: S-8087-2.5X
Description: Custom Standard
Lot: 221071062
Solvent: Dichloromethane
Hazards: *Refer to SDS for complete safety information*



Signal Word: Warning

Date Certified: Jul 7, 2021
Expiration: Jul 7, 2024
Sample Size: 1 mL
Components: 2
Storage Condition: Refrig (0-5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
o-Terphenyl	84-15-1	99.9	5050	5045
n-Octacosane	630-02-4	99.0	5050	5000

This Certified Reference Material was verified in accordance with ISO/IEC 17025

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

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

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
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Reagent

IC BR ICV_00022

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http://www.riccachemical.com
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customerservice@riccachemical.com

Certificate of Analysis

Bromide Standard, 1000 ppm Br

Lot Number: 4108277 **Product Number:** 1180

Manufacture Date: AUG 02, 2021
Expiration Date: JAN 2023

The certified value reported is the prepared value based upon the method of preparation of the material. The uncertainty in the prepared value is based upon the volumetric method of preparation.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Sodium Bromide	7647-15-6	High Purity

Test	Specification	Result
Appearance	Colorless liquid	Passed
Bromide (Br)	995-1005 ppm	1000 ppm

Specification	Reference
Bromide Solution, Standard (1 mL = 1 mg Br-)	ASTM (D 3869 D)
Standard Bromide Solution, 1000 mg/L	APHA (4110 B)
Bromide Stock Solution (1.00 mL = 1.00 mg Br-)	EPA (SW-846) (9056)
Sodium Bromide Standard Solution, 1000 mg/L	ASTM (D 1246)
Bromide Stock Solution (1.00 mL = 1.00 mg Br?)	ASTM (D 4327)

Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
1180-16	500 mL natural poly	18 months
1180-4	120 mL natural poly	18 months

Recommended Storage: 15°C - 30°C (59°F - 86°F)

Karen Bodewes

Karen Bodewes (08/02/2021)
Quality Control
This Certificate of Analysis is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

This test report shall not be reproduced, except in full, without the written approval of Ricca Chemical Company.

Reagent

IC CL cal_00071

ACCREDITED
Reference Materials Producer
Cert #2495.01

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Certificate of Reference Material

ilac-MRA ACCREDITED
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: NOV - - 2021 Certifying Officer: Katherine Cullinan

Katherine Cullinan, QC Manager

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Reagent

IC FL cal_00019

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Certificate of Analysis

Fluoride Standard, 1000 ppm F^-

Lot Number: 4108A94 **Product Number:** 3173

Manufacture Date: AUG 04, 2021

Expiration Date: JAN 2023

The certified value reported is the prepared value based upon the method of preparation of the material. The uncertainty in the prepared value is based upon the volumetric method of preparation.
The concentration is confirmed by Fluoride ISE and is certified traceable to NIST SRM 2203.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Sodium Fluoride	7681-49-4	High Purity

Test	Specification	Result
Appearance	Colorless liquid	Passed
Fluoride (F)	995-1005 ppm	1005 ppm

Specification	Reference
Fluoride Solution, Stock (1.00 mL = 1.00 mg F)	ASTM (D 5542)
Fluoride Stock Solution (1.00 mL = 1.00 mg F-)	EPA (SW-846) (9056)
Fluoride Calibration Stock Solution (1,000 mg/L F-)	EPA (SW-846) (9214)
Stock Solution, 1.0 mL = 1.0 mg F	EPA (340.3)
Fluoride Solution, Stock (1.00 mL = 1.00 mg F)	ASTM (D 5996)
Fluoride Stock Solution (1.00 mL = 1.00 mg F?)	ASTM (D 4327)
Fluoride Stock Standard Solution (1 mg of F in 1 mL)	ACS (N/A)

Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
3173-16	500 mL natural poly	18 months
3173-32	1 L natural poly	18 months

Recommended Storage: 15°C - 30°C (59°F - 86°F)

Karen Bodewes (08/04/2021)

Quality Control

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 Cal_00003

Reference Materials Producer
Cert #2495.01

SPEXertificate®

Certificate of Reference Material

Chemical Testing
Cert #2495.02

Catalog Number: AS-SO49-2X **Lot No.** 5-118SO49-2X

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: 999 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# AN07201A. 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 Barium Chloride. Filter, ignite, and weigh as BaSO4.

Instrumental Analysis by Ion Chromatography: 999 µg/mL

Uncertified Properties

Trace Ionic Impurities in the Actual Solution via IC Analysis:

Element	µg/mL	Element	µg/mL
Br^-	<0.01	NO_2^-	<0.01
Cl^-	<0.03	NO_3^-	<0.02
F^-	<0.003	$PO4^{-3}$	<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: NOV - - 2021 Certifying Officer: Katherine Cullinan

Katherine Cullinan, QC Manager

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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 SO4 ICV_00023

ERA
A Waters Company

Certified Reference Material

▪ Certificate of Analysis ▪

Product:	1000 mg/L Sulfate
Catalog Number:	062-125mL, 995-500mL
Lot No.	260621m
Starting Material:	Potassium Sulfate (K_2SO_4)
Matrix:	18 megohm deionized water
Density:	0.9991 ± 0.0003 g/mL 18.5 °C and 749 mm Hg
Verification Method:	Ion Chromatography
Certificate Issue Date:	July 1, 2021
Expiration Date:	June 11, 2023
Revision Number:	Original

CERTIFICATION

Parameter	Certified Value[1]	Uncertainty[2]	NIST Traceability	
	mg/L	%	SRM Number[3]	Recovery %
Sulfate	1000	0.983	3181	99.8

16341 Table Mountain Pkwy ▪ Golden, CO 80403 ▪ 800.372.0122 ▪ 303.431.8454 ▪ fax 303.421.0159 ▪ www.eraqc.com

Reagent

MNX,TNX,DNX_00057

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_00063

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

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:** 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
www.agilent.com/quality/
CSD-QA-015.1

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
ISO 17025 Cert
No. AT-1937

Reagent

MNX,TNX,DNX_00066

ISO 17034

Agilent
Trusted Answers

Reference Material Certificate

Product Name: Custom Standard
Product Number: CUS-23984
Storage Conditions: Store at Room Temperature (15° to 30°C).

Lot Number: 0006659035
Lot Issue Date: 11-Jan-2022
Expiration Date: 28-Feb-2023

Component Name	CERTIFIED VALUES Concentration	Expanded Uncertainty	CAS#	Analyte Lot
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)	100.4 ±	0.5 µg/mL	N/A	RM12426
1-nitro-3,5-dinitroso-1,3,5-triazacyclohexane (DNX)	100.4 ±	0.5 µg/mL	N/A	RM12428
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane (MNX)	117.0 ±	0.6 µg/mL	N/A	RM12428

Matrix: acetonitrile

Description:
This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard 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 above.

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 analytical reference standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

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.

Safety:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this analytical reference material.

Intended Use:
This analytical reference standard 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.

Expiration of Certification:

Reagent

MNX,TNX,DNX_00067

ISO 17034

Agilent
Trusted Answers

Reference Material Certificate

Product Name: Custom Standard
Product Number: CUS-23984
Storage Conditions: Store at Room Temperature (15° to 30°C).

Lot Number: 0006659035
Lot Issue Date: 11-Jan-2022
Expiration Date: 28-Feb-2023

Component Name	CERTIFIED VALUES Concentration	Expanded Uncertainty	CAS#	Analyte Lot
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)	100.4 ±	0.5 µg/mL	N/A	RM12426
1-nitro-3,5-dinitroso-1,3,5-triazacyclohexane (DNX)	100.4 ±	0.5 µg/mL	N/A	RM12428
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane (MNX)	117.0 ±	0.6 µg/mL	N/A	RM12428

Matrix: acetonitrile

Description:
This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard 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 above.

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 analytical reference standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

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.

Safety:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this analytical reference material.

Intended Use:
This analytical reference standard 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.

Expiration of Certification:

Reagent

mv-30241_00009

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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. : 30241 **Lot No.:** A0175533

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 : August 31, 2026 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Fluorobenzene **CAS #** 462-06-6 (Lot BCBZ5549) **Purity** 99%	2,510.2 µg/mL	+/- 14.5945 µg/mL +/- 140.7444 µg/mL +/- 144.0377 µg/mL	Gravimetric Unstressed Stressed
2	Chlorobenzene-d5 **CAS #** 3114-55-4 (Lot PR-29571) **Purity** 99%	2,509.2 µg/mL	+/- 14.5887 µg/mL +/- 140.6884 µg/mL +/- 143.9803 µg/mL	Gravimetric Unstressed Stressed
3	1,4-Dichlorobenzene-d4 **CAS #** 3855-82-1 (Lot PR-30447) **Purity** 99%	2,503.8 µg/mL	+/- 14.5573 µg/mL +/- 140.3856 µg/mL +/- 143.6704 µg/mL	Gravimetric Unstressed Stressed

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

Revd

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

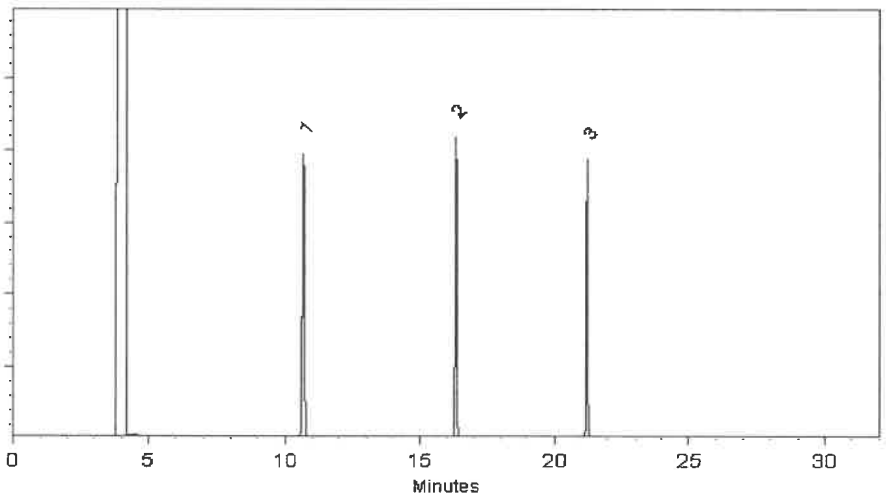
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Jeremy Warefield - Operations Tech I

Date Mixed: 18-Aug-2021 **Balance:** 1128342314

Marline Cowan - Operations Tech I

Date Passed: 20-Aug-2021

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

Reagent

mv-30241_00010

RESTEK
110 Benner Circle
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www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30241 **Lot No.:** A0180349

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 : January 31, 2027 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Fluorobenzene **CAS #** 462-06-6 (Lot BCBZ5549) **Purity** 99%	2,500.6 µg/mL	+/- 14.5387 µg/mL +/- 140.2062 µg/mL +/- 143.4868 µg/mL	Gravimetric Unstressed Stressed
2	Chlorobenzene-d5 **CAS #** 3114-55-4 (Lot PR-29571) **Purity** 99%	2,500.8 µg/mL	+/- 14.5399 µg/mL +/- 140.2174 µg/mL +/- 143.4983 µg/mL	Gravimetric Unstressed Stressed
3	1,4-Dichlorobenzene-d4 **CAS #** 3855-82-1 (Lot PR-30447) **Purity** 99%	2,500.2 µg/mL	+/- 14.5364 µg/mL +/- 140.1837 µg/mL +/- 143.4639 µg/mL	Gravimetric Unstressed Stressed

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

Revd 4/5/22

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

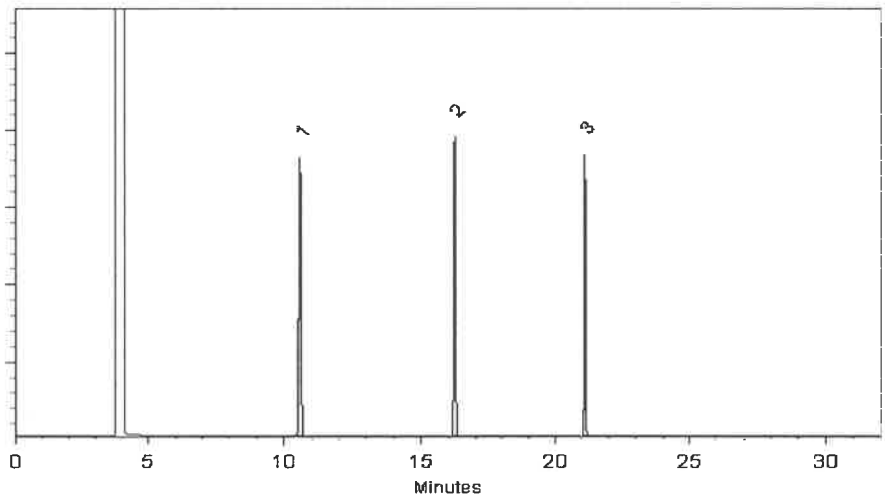
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Penelope Riglin - Operations Tech I

Date Mixed: 06-Jan-2022 **Balance:** B707717271

Marlina Cowan - Operations Tech I

Date Passed: 10-Jan-2022

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

Reagent

MV-567650_00028

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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)

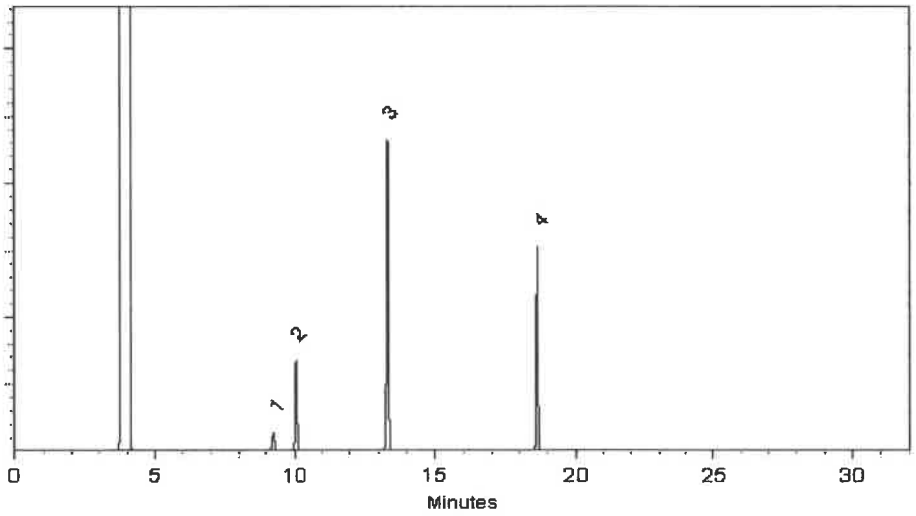
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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-567650_00030

RESTEK
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Certificate of Analysis

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

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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. : 567650 **Lot No.:** A0172587

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 : May 31, 2026 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dibromofluoromethane **CAS #** 1868-53-7 (Lot 012021) **Purity** 99%	2,510.9 µg/mL	+/- 14.5983 µg/mL +/- 140.7809 µg/mL +/- 144.0750 µg/mL	Gravimetric Unstressed Stressed
2	1,2-Dichloroethane-d4 **CAS #** 17060-07-0 (Lot PR-29377) **Purity** 99%	2,518.0 µg/mL	+/- 14.6399 µg/mL +/- 141.1818 µg/mL +/- 144.4852 µg/mL	Gravimetric Unstressed Stressed
3	Toluene-d8 **CAS #** 2037-26-5 (Lot PR-31750) **Purity** 99%	2,500.4 µg/mL	+/- 14.5375 µg/mL +/- 140.1949 µg/mL +/- 143.4753 µg/mL	Gravimetric Unstressed Stressed
4	1-Bromo-4-fluorobenzene (BFB) **CAS #** 460-00-4 (Lot 20401KO) **Purity** 99%	2,520.9 µg/mL	+/- 14.6567 µg/mL +/- 141.3444 µg/mL +/- 144.6516 µg/mL	Gravimetric Unstressed Stressed

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

Rcvd 4/6/22

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

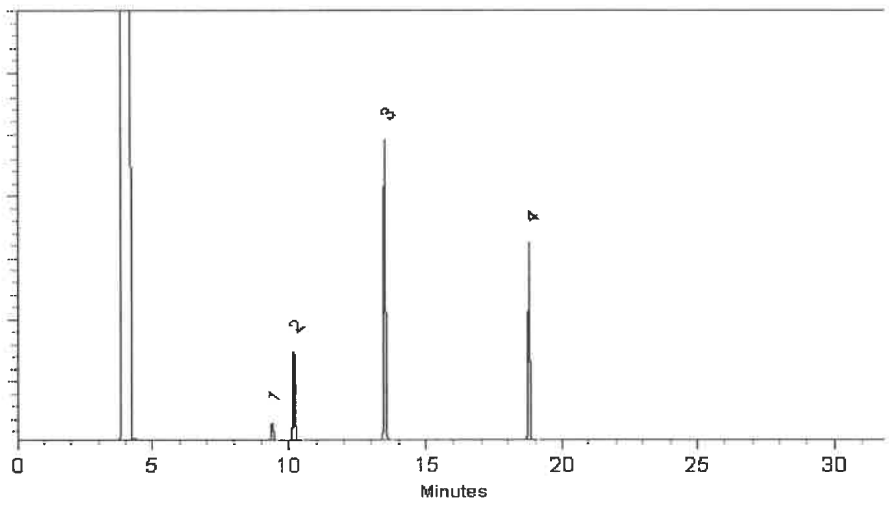
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Sam Moodler - Operations Tech I

Date Mixed: 19-May-2021 **Balance:** B707717271

Alexis Shelow - Operations Tech I

Date Passed: 21-May-2021

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

Reagent

MV-568718-D_00016

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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)

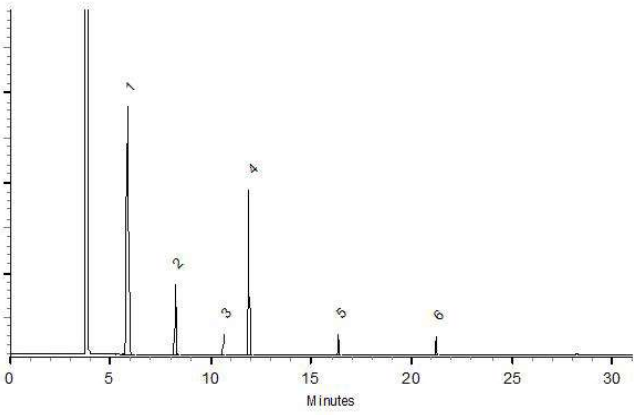
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.sec_00036

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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. : 568720.SEC **Lot No.:** A0169469

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 : August 31, 2022 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acrolein	19,753.5 µg/mL	+/- 115.6611 µg/mL	Gravimetric
	CAS # 107-02-8.SEC (Lot CS-D0310)		+/- 394.6221 µg/mL	Unstressed
	Purity 99%		+/- 885.3245 µg/mL	Stressed

Solvent: Water
CAS # 7732-18-5
Purity 99%

Rcvd 1/4/21

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

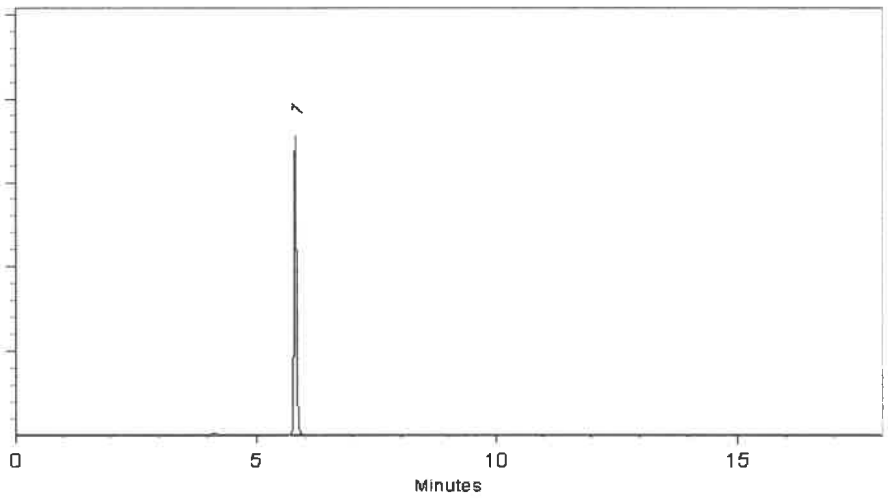
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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: 25-Feb-2021 **Balance:** 1127510105

Merline Cowan - Operations Tech I

Date Passed: 01-Mar-2021

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

Reagent

MV-568720_00043

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568720 **Lot No.:** A0175809

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 : February 28, 2023 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound			Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)			
1	Acrolein			19,891.5	µg/mL	+/-	116.4691	µg/mL	Gravimetric
	CAS #	107-02-8	(Lot RD210729)			+/-	397.3790	µg/mL	Unstressed
	Purity	99%				+/-	891.5094	µg/mL	Stressed

Solvent: Water
CAS # 7732-18-5
Purity 99%

Recd
4/6/22
JM

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

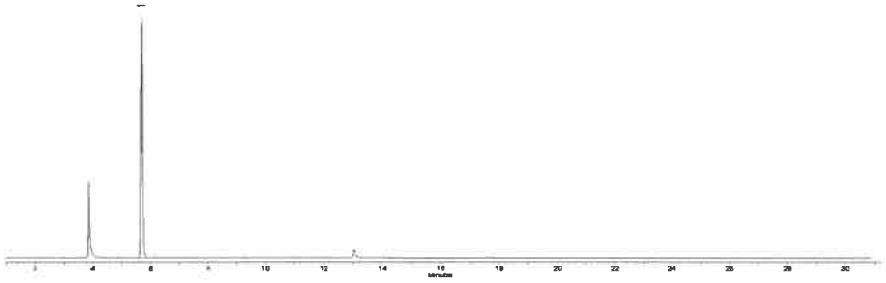
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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: 26-Aug-2021 **Balance:** B707717271

John Lidgett - AD Chemist

Date Passed: 02-Sep-2021

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

Reagent

MV-569721.sec_00008

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Catalog No. : 569721.SEC **Lot No.:** A0163783

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, 2023 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acetone **CAS #** 67-64-1.SEC (Lot U13B039) **Purity** 99%	12,500.0 µg/mL	+/- 73.1902 µg/mL +/- 754.2301 µg/mL +/- 756.0205 µg/mL	Gravimetric Unstressed Stressed
2	2-Butanone (MEK) **CAS #** 78-93-3.SEC (Lot RGZ2A) **Purity** 99%	12,500.0 µg/mL	+/- 73.1902 µg/mL +/- 754.2301 µg/mL +/- 756.0205 µg/mL	Gravimetric Unstressed Stressed
3	4-Methyl-2-pentanone (MIBK) **CAS #** 108-10-1.SEC (Lot E29T040) **Purity** 99%	12,507.0 µg/mL	+/- 73.2312 µg/mL +/- 754.6525 µg/mL +/- 756.4439 µg/mL	Gravimetric Unstressed Stressed
4	2-Hexanone **CAS #** 591-78-6.SEC (Lot V3NRA) **Purity** 99%	12,507.0 µg/mL	+/- 73.2312 µg/mL +/- 754.6525 µg/mL +/- 756.4439 µg/mL	Gravimetric Unstressed 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)

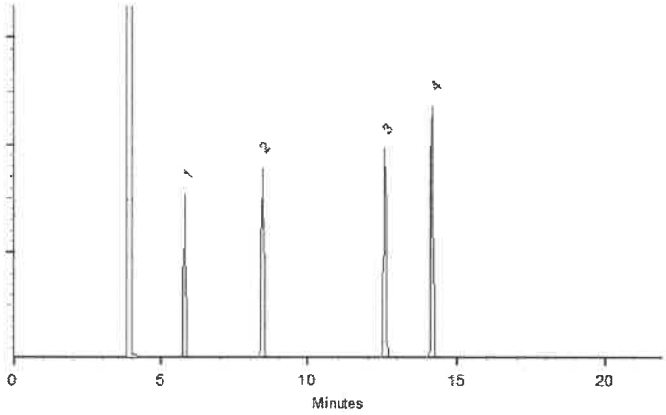
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Michael J Maye

Date Mixed: 22-Aug-2020 **Balance:** 1127510105

Justine Albertson - Operations Tech-ARM QC

Date Passed: 26-Aug-2020

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Reagent

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Catalog No. : 569721 **Lot No.:** A0174287

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

Rec'd 12/13/21 GM

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

Expiration Date : July 31, 2024 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acetone **CAS #** 67-64-1 (Lot SHBN3661) **Purity** 99%	12,526.4 µg/mL	+/- 73.3448 µg/mL +/- 755.8230 µg/mL +/- 757.6173 µg/mL	Gravimetric Unstressed Stressed
2	2-Butanone (MEK) **CAS #** 78-93-3 (Lot SHBL5543) **Purity** 99%	12,543.6 µg/mL	+/- 73.4455 µg/mL +/- 756.8609 µg/mL +/- 758.6575 µg/mL	Gravimetric Unstressed Stressed
3	4-Methyl-2-pentanone (MIBK) **CAS #** 108-10-1 (Lot SHBM7956) **Purity** 99%	12,534.8 µg/mL	+/- 73.3940 µg/mL +/- 756.3299 µg/mL +/- 758.1253 µg/mL	Gravimetric Unstressed Stressed
4	2-Hexanone **CAS #** 591-78-6 (Lot MKCL1599) **Purity** 99%	12,617.6 µg/mL	+/- 73.8788 µg/mL +/- 761.3259 µg/mL +/- 763.1332 µg/mL	Gravimetric Unstressed 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)

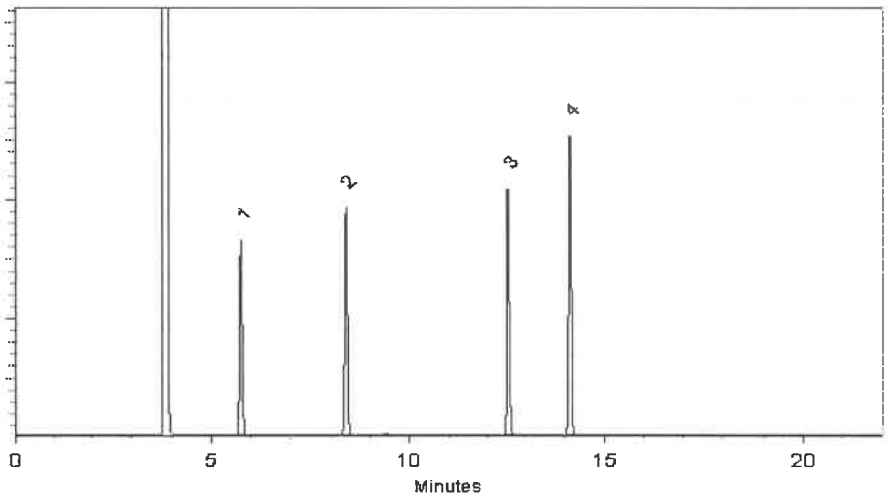
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Sam Moodler - Operations Tech I

Date Mixed: 11-Jul-2021 **Balance:** B707717271

Marlina Cowan - Operations Tech I

Date Passed: 13-Jul-2021

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

Reagent

MV-569721_00012

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Catalog No. : 569721 **Lot No.:** A0174287

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 : July 31, 2024 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Acetone	12,526.4 µg/mL	+/- 73.3448	µg/mL	Gravimetric
	CAS # 67-64-1 (Lot SHBN3661)		+/- 755.8230	µg/mL	Unstressed
	Purity 99%		+/- 757.6173	µg/mL	Stressed
2	2-Butanone (MEK)	12,543.6 µg/mL	+/- 73.4455	µg/mL	Gravimetric
	CAS # 78-93-3 (Lot SHBL5543)		+/- 756.8609	µg/mL	Unstressed
	Purity 99%		+/- 758.6575	µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)	12,534.8 µg/mL	+/- 73.3940	µg/mL	Gravimetric
	CAS # 108-10-1 (Lot SHBM7956)		+/- 756.3299	µg/mL	Unstressed
	Purity 99%		+/- 758.1253	µg/mL	Stressed
4	2-Hexanone	12,617.6 µg/mL	+/- 73.8788	µg/mL	Gravimetric
	CAS # 591-78-6 (Lot MKCL1599)		+/- 761.3259	µg/mL	Unstressed
	Purity 99%		+/- 763.1332	µg/mL	Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Rwd 2/22

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

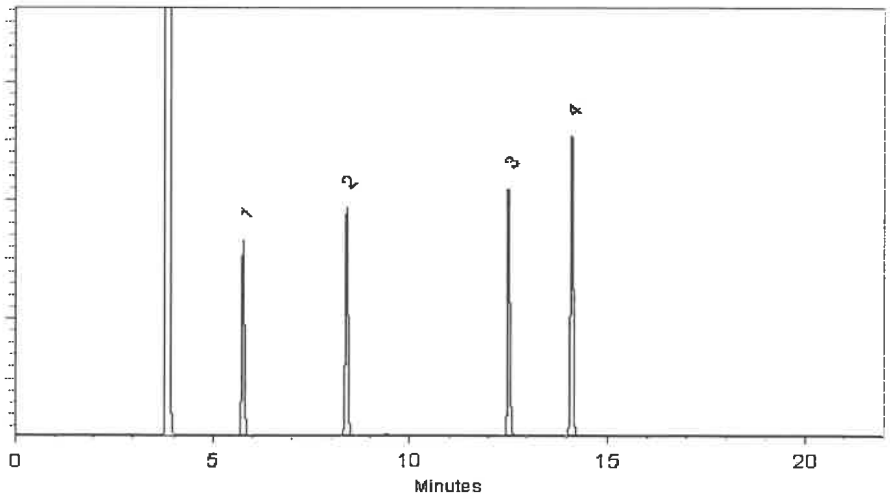
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Sam Moodler - Operations Tech I

Date Mixed: 11-Jul-2021 **Balance:** B707717271

Marlina Cowan - Operations Tech I

Date Passed: 13-Jul-2021

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

Reagent

MV-569722_00018

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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. : 569722 **Lot No.:** A0171131

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 : April 30, 2024 **Storage:** 0°C or colder

Ship: Ambient

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%	2,500.4 µg/mL	+/- 17.4665 µg/mL +/- 140.5300 µg/mL +/- 143.8028 µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3 (Lot SHBK6571) **Purity** 99%	2,500.3 µg/mL	+/- 17.4265 µg/mL +/- 140.5200 µg/mL +/- 143.7928 µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4 (Lot 00015559) **Purity** 99%	2,501.4 µg/mL	+/- 16.6715 µg/mL +/- 140.4849 µg/mL +/- 143.7611 µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0 (Lot 00019375) **Purity** 99%	2,499.9 µg/mL	+/- 17.9031 µg/mL +/- 140.5578 µg/mL +/- 143.8287 µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9 (Lot 101604) **Purity** 99%	2,500.8 µg/mL	+/- 16.8347 µg/mL +/- 140.4711 µg/mL +/- 143.7461 µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3 (Lot 107-401039114-1) **Purity** 99%	2,501.1 µg/mL	+/- 17.4608 µg/mL +/- 140.5674 µg/mL +/- 143.8412 µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4 (Lot 10172500) **Purity** 99%	2,500.0 µg/mL	+/- 14.5352 µg/mL +/- 140.1725 µg/mL +/- 143.4524 µg/mL	Gravimetric Unstressed Stressed

JL 2/3/22

8	Trichlorofluoromethane (CFC-11)		2,501.2	µg/mL	+/-	16.2200	µg/mL	Gravimetric
	CAS # 75-69-4	(Lot MKCJ8658)			+/-	140.4243	µg/mL	Unstressed
	Purity 99%				+/-	143.7015	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)

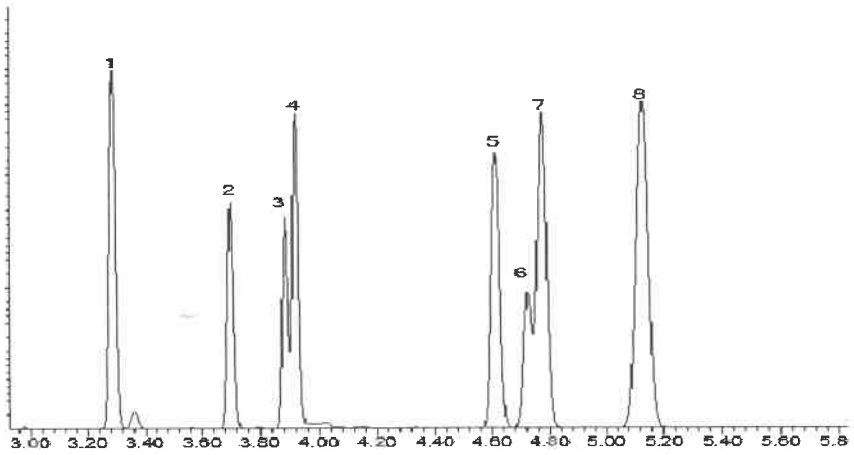
Carrier Gas:
helium-constant pressure 30 psi

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: 08-Apr-2021 **Balance:** B707717271

Alexis Shelow - Operations Tech I

Date Passed: 13-Apr-2021

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Catalog No. : 569722 **Lot No.:** A0171131

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 : April 30, 2024 **Storage:** 0°C or colder

Ship: Ambient

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%	2,500.4 µg/mL	+/- 17.4665 µg/mL +/- 140.5300 µg/mL +/- 143.8028 µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3 (Lot SHBK6571) **Purity** 99%	2,500.3 µg/mL	+/- 17.4265 µg/mL +/- 140.5200 µg/mL +/- 143.7928 µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4 (Lot 00015559) **Purity** 99%	2,501.4 µg/mL	+/- 16.6715 µg/mL +/- 140.4849 µg/mL +/- 143.7611 µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0 (Lot 00019375) **Purity** 99%	2,499.9 µg/mL	+/- 17.9031 µg/mL +/- 140.5578 µg/mL +/- 143.8287 µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9 (Lot 101604) **Purity** 99%	2,500.8 µg/mL	+/- 16.8347 µg/mL +/- 140.4711 µg/mL +/- 143.7461 µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3 (Lot 107-401039114-1) **Purity** 99%	2,501.1 µg/mL	+/- 17.4608 µg/mL +/- 140.5674 µg/mL +/- 143.8412 µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4 (Lot 10172500) **Purity** 99%	2,500.0 µg/mL	+/- 14.5352 µg/mL +/- 140.1725 µg/mL +/- 143.4524 µg/mL	Gravimetric Unstressed Stressed

Rcvd 4/6/22

8	Trichlorofluoromethane (CFC-11)		2,501.2	µg/mL	+/-	16.2200	µg/mL	Gravimetric
	CAS # 75-69-4	(Lot MKCJ8658)			+/-	140.4243	µg/mL	Unstressed
	Purity 99%				+/-	143.7015	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)

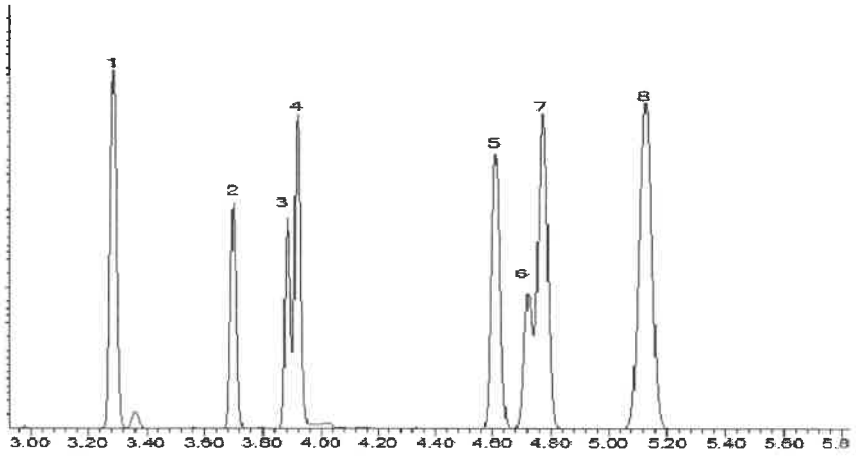
Carrier Gas:
helium-constant pressure 30 psi

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: 08-Apr-2021 **Balance:** B707717271

Alexis Shelow - Operations Tech I

Date Passed: 13-Apr-2021

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Catalog No. : 569723 **Lot No.:** A0176827

Description : 8260 List 1 / Std #4 2-CEVE (2015)

8260 List 1 / Std #4 2-CEVE (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

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

Expiration Date : September 30, 2024 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	2-Chloroethyl vinyl ether	2,505.0 µg/mL	+/- 14.7007 µg/mL	Gravimetric
	CAS # 110-75-8 (Lot MKCD0033)		+/- 53.6696 µg/mL	Unstressed
	Purity 99%		+/- 55.2277 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.

Rcvd
12/30/21
AK

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

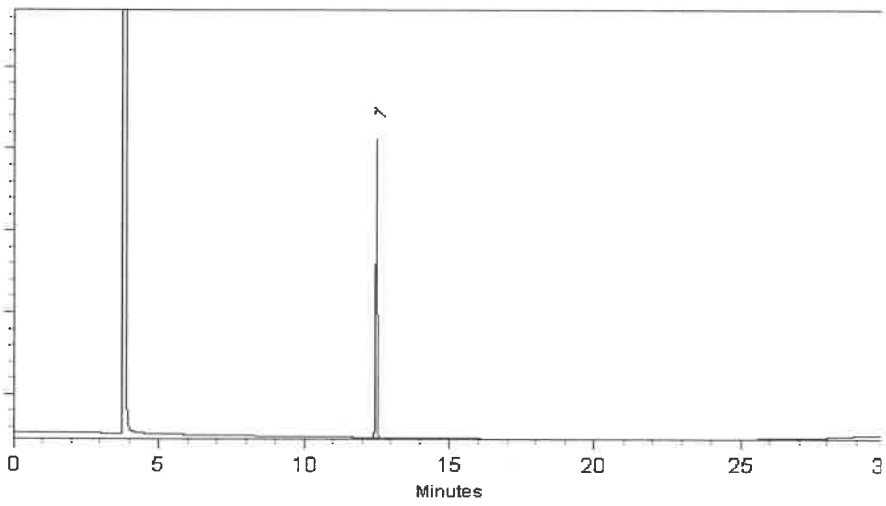
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Cathleen Soltis - Mix Technician

Date Mixed: 27-Sep-2021 **Balance:** B251644995

Alexis Shelow - Operations Tech I

Date Passed: 28-Sep-2021

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

Reagent

MV-569723_00013

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5 ampules rec'd 6/10/22 j.morales

Catalog No. : 569723 **Lot No.:** A0176827

Description : 8260 List 1 / Std #4 2-CEVE (2015)

8260 List 1 / Std #4 2-CEVE (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

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

Expiration Date : September 30, 2024 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	2-Chloroethyl vinyl ether	2,505.0 µg/mL	+/- 14.7007 µg/mL	Gravimetric
	CAS # 110-75-8 (Lot MKCD0033)		+/- 53.6696 µg/mL	Unstressed
	Purity 99%		+/- 55.2277 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.

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

MV-569723_00015

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Catalog No. : 569723 **Lot No.:** A0176827

Description : 8260 List 1 / Std #4 2-CEVE (2015)

8260 List 1 / Std #4 2-CEVE (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

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

Expiration Date : September 30, 2024 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2-Chloroethyl vinyl ether	2,505.0 µg/mL	+/- 14.7007	µg/mL	Gravimetric
	CAS # 110-75-8 (Lot MKCD0033)		+/- 53.6696	µg/mL	Unstressed
	Purity 99%		+/- 55.2277	µg/mL	Stressed

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

Rcvd 4/4/22

Tech Tips:
Degradation of tetrachloroethylene to pentachloroethane may occur if solutions containing 2-chloroethyl vinyl ether are combined with solutions that contain tetrachloroethylene.

-00015

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

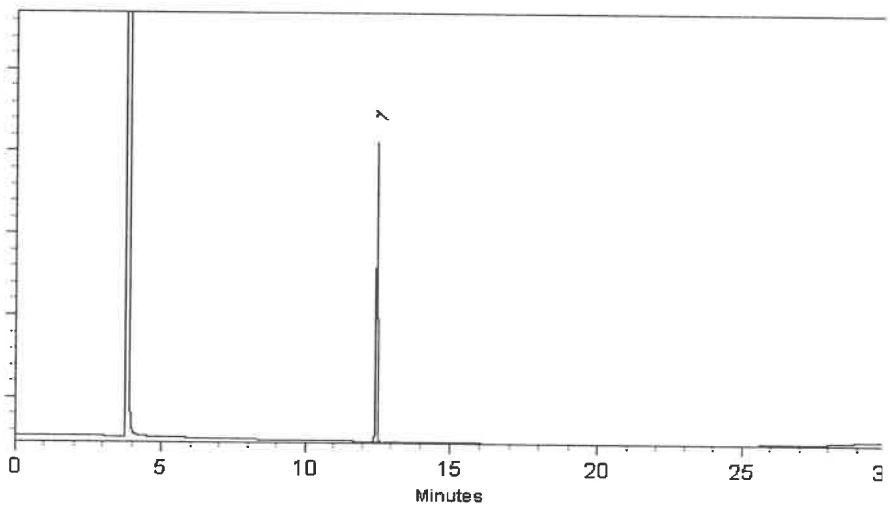
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Cathleen Soltis - Mix Technician

Date Mixed: 27-Sep-2021 **Balance:** B251644995

Alexis Shelow - Operations Tech I

Date Passed: 28-Sep-2021

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

Reagent

MV-569724_00032

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Catalog No. : 569724 **Lot No.:** A0174298

Description : 8260 List 1 / Std #6 Vinyl Acetate (2015)

8260 List 1 / Std #6 Vinyl Acetate (2015) 5,000µg/mL, P&T Methanol, 1mL/ampul

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

Expiration Date : January 31, 2023 **Storage:** -20°C or colder

Handling: This product is photosensitive. **Ship:** On Ice

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Vinyl acetate	5,035.0 µg/mL	+/- 29.4810	µg/mL	Gravimetric
	CAS # 108-05-4 (Lot RD200601)		+/- 303.8039	µg/mL	Unstressed
	Purity 99%		+/- 304.5251	µg/mL	Stressed

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

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Rcvd 12/30/21

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

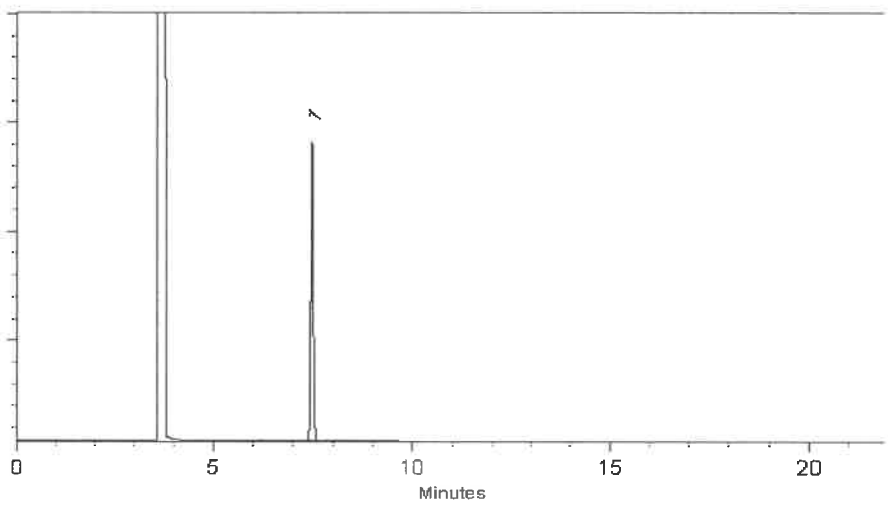
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Russ Bookhamer - Operations Technician I

Date Mixed: 12-Jul-2021 **Balance:** B707717271

Alexis Shelow - Operations Tech I

Date Passed: 14-Jul-2021

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Reagent

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Catalog No. : 569727 **Lot No.:** A0167351

Description : 8260 List 2/ Std #3 Cyclohexanone (2015)

8260 List 2/ Std #3 Cyclohexanone (2015) 25,000µg/mL, Water, 1mL/ampul

REC'D 12/2/21

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

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

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Cyclohexanone		25,228.0 µg/mL	+/-	147.7155	µg/mL	Gravimetric
	CAS # 108-94-1	(Lot 10211916)		+/-	1,522.2174	µg/mL	Unstressed
	Purity 99%			+/-	1,525.8309	µg/mL	Stressed

Solvent: Water
CAS # 7732-18-5
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

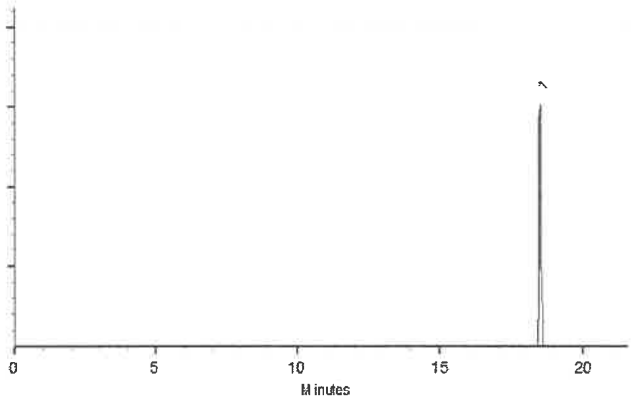
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Sam Moodler - Operations Tech I

Date Mixed: 18-Dec-2020 **Balance:** B707717271

Justine Albertson - Operations Tech-ARM QC

Date Passed: 21-Dec-2020

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

Reagent

MV-569727_00020

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Certificate #3222.02

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Catalog No. : 569727 **Lot No.:** A0182677

Description : 8260 List 2/ Std #3 Cyclohexanone (2015)

8260 List 2/ Std #3 Cyclohexanone (2015) 25,000µg/mL, Water, 1mL/ampul

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

Expiration Date : March 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	Cyclohexanone	25,249.5 µg/mL	+/- 147.8414	µg/mL	Gravimetric
	CAS # 108-94-1 (Lot 10211916)		+/- 1,523.5147	µg/mL	Unstressed
	Purity 99%		+/- 1,527.1313	µg/mL	Stressed

Solvent: Water
CAS # 7732-18-5
Purity 99%

Revd 4/26/22

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

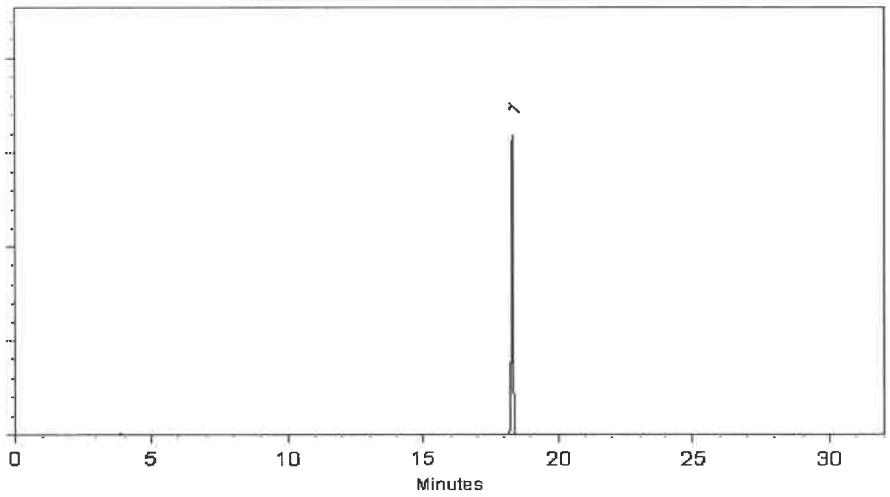
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Brittany Federinko - Operations Tech I

Date Mixed: 08-Mar-2022 **Balance:** B707717271

Marlina Cowan - Operations Tech I

Date Passed: 10-Mar-2022

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

Reagent

MV-571992.sec_00007

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. : 571992.SEC **Lot No.:** A0167172

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, 2023 **Storage:** 0°C or colder

Ship: Ambient

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** 99%	2,501.7 µg/mL	+/- 14.5449 µg/mL +/- 150.9366 µg/mL +/- 151.2950 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1.SEC (Lot 18342) **Purity** 99%	2,500.8 µg/mL	+/- 14.5401 µg/mL +/- 150.8864 µg/mL +/- 151.2446 µg/mL	Gravimetric Unstressed Stressed
3	1,1-Dichloroethene **CAS #** 75-35-4.SEC (Lot 7692300) **Purity** 99%	2,501.2 µg/mL	+/- 14.5420 µg/mL +/- 150.9065 µg/mL +/- 151.2647 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0.SEC (Lot HGCHN) **Purity** 99%	25,001.2 µg/mL	+/- 145.3513 µg/mL +/- 1,508.4304 µg/mL +/- 1,512.0117 µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9.SEC (Lot UCNEL) **Purity** 99%	5,000.2 µg/mL	+/- 29.0714 µg/mL +/- 301.6822 µg/mL +/- 302.3985 µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4.SEC (Lot Y25A027) **Purity** 99%	2,501.0 µg/mL	+/- 14.5410 µg/mL +/- 150.8964 µg/mL +/- 151.2547 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1.SEC (Lot H3HGC) **Purity** 99%	2,501.7 µg/mL	+/- 14.5449 µg/mL +/- 150.9366 µg/mL +/- 151.2950 µg/mL	Gravimetric Unstressed Stressed

8	Methylene chloride (dichloromethane)		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 75-09-2.SEC	(Lot FGM02)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%				+/-	151.2547	µg/mL	Stressed
9	Carbon disulfide		2,501.5	µg/mL	+/-	14.5439	µg/mL	Gravimetric
	CAS # 75-15-0.SEC	(Lot MKBL1376V)			+/-	150.9266	µg/mL	Unstressed
	Purity 99%				+/-	151.2849	µg/mL	Stressed
10	Acrylonitrile		25,000.7	µg/mL	+/-	145.3484	µg/mL	Gravimetric
	CAS # 107-13-1.SEC	(Lot V54AD)			+/-	1,508.4003	µg/mL	Unstressed
	Purity 99%				+/-	1,511.9815	µg/mL	Stressed
11	Methyl-tert-butyl ether (MTBE)		2,501.2	µg/mL	+/-	14.5420	µg/mL	Gravimetric
	CAS # 1634-04-4.SEC	(Lot ZHKYA)			+/-	150.9065	µg/mL	Unstressed
	Purity 99%				+/-	151.2647	µg/mL	Stressed
12	cis-1,2-Dichloroethene		2,500.2	µg/mL	+/-	14.5362	µg/mL	Gravimetric
	CAS # 156-59-2.SEC	(Lot YZO5O)			+/-	150.8461	µg/mL	Unstressed
	Purity 99%				+/-	151.2043	µg/mL	Stressed
13	n-Hexane (C6)		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 110-54-3.SEC	(Lot 10188491)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
14	1,1-Dichloroethane		2,500.8	µg/mL	+/-	14.5401	µg/mL	Gravimetric
	CAS # 75-34-3.SEC	(Lot 1026.30-2)			+/-	150.8864	µg/mL	Unstressed
	Purity 99%				+/-	151.2446	µg/mL	Stressed
15	2,2-Dichloropropane		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 594-20-7.SEC	(Lot I7E8E)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
16	trans-1,2-Dichloroethene		2,500.7	µg/mL	+/-	14.5391	µg/mL	Gravimetric
	CAS # 156-60-5.SEC	(Lot L5QOH)			+/-	150.8763	µg/mL	Unstressed
	Purity 99%				+/-	151.2345	µg/mL	Stressed
17	Isobutanol (2-Methyl-1-propanol)		62,500.7	µg/mL	+/-	363.3653	µg/mL	Gravimetric
	CAS # 78-83-1.SEC	(Lot YNG3K)			+/-	3,770.9403	µg/mL	Unstressed
	Purity 99%				+/-	3,779.8932	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		2,501.5	µg/mL	+/-	14.5439	µg/mL	Gravimetric
	CAS # 74-97-5.SEC	(Lot 8529200)			+/-	150.9266	µg/mL	Unstressed
	Purity 99%				+/-	151.2849	µg/mL	Stressed
20	Tetrahydrofuran		5,001.5	µg/mL	+/-	29.0792	µg/mL	Gravimetric
	CAS # 109-99-9.SEC	(Lot 8DAOJ)			+/-	301.7627	µg/mL	Unstressed
	Purity 99%				+/-	302.4791	µg/mL	Stressed
21	1,1,1-Trichloroethane		2,500.7	µg/mL	+/-	14.5391	µg/mL	Gravimetric
	CAS # 71-55-6.SEC	(Lot 7998000)			+/-	150.8763	µg/mL	Unstressed
	Purity 99%				+/-	151.2345	µg/mL	Stressed
22	Cyclohexane		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 110-82-7.SEC	(Lot YADRA)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed
23	1,1-Dichloropropene		2,501.5	µg/mL	+/-	14.5439	µg/mL	Gravimetric
	CAS # 563-58-6.SEC	(Lot 556500)			+/-	150.9266	µg/mL	Unstressed
	Purity 99%				+/-	151.2849	µg/mL	Stressed

24	Carbon tetrachloride		2,501.5	µg/mL	+/-	14.5439	µg/mL	Gravimetric
	CAS # 56-23-5.SEC	(Lot 11466)			+/-	150.9266	µg/mL	Unstressed
	Purity 99%				+/-	151.2849	µg/mL	Stressed
25	n-Heptane (C7)		2,500.2	µg/mL	+/-	14.5362	µg/mL	Gravimetric
	CAS # 142-82-5.SEC	(Lot TFHUC)			+/-	150.8461	µg/mL	Unstressed
	Purity 99%				+/-	151.2043	µg/mL	Stressed
26	1,2-Dichloroethane		2,501.2	µg/mL	+/-	14.5420	µg/mL	Gravimetric
	CAS # 107-06-2.SEC	(Lot 00016165)			+/-	150.9065	µg/mL	Unstressed
	Purity 99%				+/-	151.2647	µg/mL	Stressed
27	Benzene		2,501.2	µg/mL	+/-	14.5420	µg/mL	Gravimetric
	CAS # 71-43-2.SEC	(Lot B28Y008)			+/-	150.9065	µg/mL	Unstressed
	Purity 99%				+/-	151.2647	µg/mL	Stressed
28	Trichloroethene		2,501.3	µg/mL	+/-	14.5430	µg/mL	Gravimetric
	CAS # 79-01-6.SEC	(Lot H04X050)			+/-	150.9165	µg/mL	Unstressed
	Purity 99%				+/-	151.2748	µg/mL	Stressed
29	Methylcyclohexane		2,500.8	µg/mL	+/-	14.5401	µg/mL	Gravimetric
	CAS # 108-87-2.SEC	(Lot 24MSD-CD)			+/-	150.8864	µg/mL	Unstressed
	Purity 99%				+/-	151.2446	µg/mL	Stressed
30	1,2-Dichloropropane		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 78-87-5.SEC	(Lot ERRBI-RH)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed
31	1,4-Dioxane		50,000.7	µg/mL	+/-	290.6930	µg/mL	Gravimetric
	CAS # 123-91-1.SEC	(Lot 8CALO)			+/-	3,016.7603	µg/mL	Unstressed
	Purity 99%				+/-	3,023.9226	µg/mL	Stressed
32	Dibromomethane		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 74-95-3.SEC	(Lot MOKKJ)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%				+/-	151.2547	µg/mL	Stressed
33	cis-1,3-Dichloropropene		2,501.7	µg/mL	+/-	14.5449	µg/mL	Gravimetric
	CAS # 10061-01-5.SEC	(Lot 7ZLXJ-TJ)			+/-	150.9366	µg/mL	Unstressed
	Purity 99%				+/-	151.2950	µg/mL	Stressed
34	Toluene		2,500.2	µg/mL	+/-	14.5362	µg/mL	Gravimetric
	CAS # 108-88-3.SEC	(Lot YND2B-BD)			+/-	150.8461	µg/mL	Unstressed
	Purity 99%				+/-	151.2043	µg/mL	Stressed
35	Ethyl methacrylate		2,500.7	µg/mL	+/-	14.5391	µg/mL	Gravimetric
	CAS # 97-63-2.SEC	(Lot AQSPO)			+/-	150.8763	µg/mL	Unstressed
	Purity 99%				+/-	151.2345	µg/mL	Stressed
36	trans-1,3-Dichloropropene		2,501.0	µg/mL	+/-	14.5408	µg/mL	Gravimetric
	CAS # 10061-02-6.SEC	(Lot ZDMSL)			+/-	150.8940	µg/mL	Unstressed
	Purity 98%				+/-	151.2522	µg/mL	Stressed
37	1,1,2-Trichloroethane		2,501.7	µg/mL	+/-	14.5449	µg/mL	Gravimetric
	CAS # 79-00-5.SEC	(Lot 9245400)			+/-	150.9366	µg/mL	Unstressed
	Purity 99%				+/-	151.2950	µg/mL	Stressed
38	1,3-Dichloropropane		2,501.8	µg/mL	+/-	14.5459	µg/mL	Gravimetric
	CAS # 142-28-9.SEC	(Lot IQCON)			+/-	150.9467	µg/mL	Unstressed
	Purity 99%				+/-	151.3051	µg/mL	Stressed
39	Tetrachloroethene		2,501.7	µg/mL	+/-	14.5449	µg/mL	Gravimetric
	CAS # 127-18-4.SEC	(Lot F09W014)			+/-	150.9366	µg/mL	Unstressed
	Purity 99%				+/-	151.2950	µg/mL	Stressed

40	Dibromochloromethane		2,502.8	µg/mL	+/-	14.5513	µg/mL	Gravimetric
	CAS # 124-48-1.SEC	(Lot 10206360)			+/-	151.0027	µg/mL	Unstressed
	Purity 97%				+/-	151.3612	µg/mL	Stressed
41	1,2-Dibromoethane (EDB)		2,500.3	µg/mL	+/-	14.5372	µg/mL	Gravimetric
	CAS # 106-93-4.SEC	(Lot 8529900)			+/-	150.8562	µg/mL	Unstressed
	Purity 99%				+/-	151.2143	µg/mL	Stressed
42	Chlorobenzene		2,500.7	µg/mL	+/-	14.5391	µg/mL	Gravimetric
	CAS # 108-90-7.SEC	(Lot 1161936)			+/-	150.8763	µg/mL	Unstressed
	Purity 99%				+/-	151.2345	µg/mL	Stressed
43	m-Xylene		1,251.3	µg/mL	+/-	7.2922	µg/mL	Gravimetric
	CAS # 108-38-3.SEC	(Lot OUKMG-GB)			+/-	75.5001	µg/mL	Unstressed
	Purity 99%				+/-	75.6793	µg/mL	Stressed
44	p-Xylene		1,250.3	µg/mL	+/-	7.2863	µg/mL	Gravimetric
	CAS # 106-42-3.SEC	(Lot D6UOA)			+/-	75.4398	µg/mL	Unstressed
	Purity 99%				+/-	75.6189	µg/mL	Stressed
45	Ethylbenzene		2,501.5	µg/mL	+/-	14.5439	µg/mL	Gravimetric
	CAS # 100-41-4.SEC	(Lot PI4SE)			+/-	150.9266	µg/mL	Unstressed
	Purity 99%				+/-	151.2849	µg/mL	Stressed
46	1,1,1,2-Tetrachloroethane		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 630-20-6.SEC	(Lot 9366000)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%				+/-	151.2547	µg/mL	Stressed
47	o-Xylene		2,501.8	µg/mL	+/-	14.5459	µg/mL	Gravimetric
	CAS # 95-47-6.SEC	(Lot FGL01)			+/-	150.9467	µg/mL	Unstressed
	Purity 99%				+/-	151.3051	µg/mL	Stressed
48	Styrene		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 100-42-5.SEC	(Lot QGQ7F)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
49	Isopropylbenzene (cumene)		2,501.0	µg/mL	+/-	14.5408	µg/mL	Gravimetric
	CAS # 98-82-8.SEC	(Lot WVREC)			+/-	150.8940	µg/mL	Unstressed
	Purity 98%				+/-	151.2522	µg/mL	Stressed
50	Bromoform		2,501.2	µg/mL	+/-	14.5420	µg/mL	Gravimetric
	CAS # 75-25-2.SEC	(Lot 9170700)			+/-	150.9065	µg/mL	Unstressed
	Purity 99%				+/-	151.2647	µg/mL	Stressed
51	Bromodichloromethane		2,501.2	µg/mL	+/-	14.5420	µg/mL	Gravimetric
	CAS # 75-27-4.SEC	(Lot 13780)			+/-	150.9065	µg/mL	Unstressed
	Purity 99%				+/-	151.2647	µg/mL	Stressed
52	1,1,2,2-Tetrachloroethane		2,500.5	µg/mL	+/-	14.5379	µg/mL	Gravimetric
	CAS # 79-34-5.SEC	(Lot BCCB0724)			+/-	150.8644	µg/mL	Unstressed
	Purity 98%				+/-	151.2226	µg/mL	Stressed
53	1,2,3-Trichloropropane		2,500.8	µg/mL	+/-	14.5401	µg/mL	Gravimetric
	CAS # 96-18-4.SEC	(Lot GUHZN)			+/-	150.8864	µg/mL	Unstressed
	Purity 99%				+/-	151.2446	µg/mL	Stressed
54	trans-1,4-Dichloro-2-butene		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 110-57-6.SEC	(Lot 100700-3)			+/-	150.8661	µg/mL	Unstressed
	Purity 97%				+/-	151.2243	µg/mL	Stressed
55	n-Propylbenzene		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 103-65-1.SEC	(Lot T2HFC)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%				+/-	151.2547	µg/mL	Stressed

56	Bromobenzene		2,500.7	µg/mL	+/-	14.5391	µg/mL	Gravimetric
	CAS # 108-86-1.SEC	(Lot 8DKWJ)			+/-	150.8763	µg/mL	Unstressed
	Purity 99%				+/-	151.2345	µg/mL	Stressed
57	1,3,5-Trimethylbenzene		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 108-67-8.SEC	(Lot TOOOF)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%				+/-	151.2547	µg/mL	Stressed
58	2-Chlorotoluene		2,500.7	µg/mL	+/-	14.5391	µg/mL	Gravimetric
	CAS # 95-49-8.SEC	(Lot SW8QG-AO)			+/-	150.8763	µg/mL	Unstressed
	Purity 99%				+/-	151.2345	µg/mL	Stressed
59	4-Chlorotoluene		2,501.3	µg/mL	+/-	14.5430	µg/mL	Gravimetric
	CAS # 106-43-4.SEC	(Lot S5SKD)			+/-	150.9165	µg/mL	Unstressed
	Purity 99%				+/-	151.2748	µg/mL	Stressed
60	tert-Butylbenzene		2,500.7	µg/mL	+/-	14.5391	µg/mL	Gravimetric
	CAS # 98-06-6.SEC	(Lot D6OHC)			+/-	150.8763	µg/mL	Unstressed
	Purity 99%				+/-	151.2345	µg/mL	Stressed
61	1,2,4-Trimethylbenzene		2,500.8	µg/mL	+/-	14.5401	µg/mL	Gravimetric
	CAS # 95-63-6.SEC	(Lot JMIYD)			+/-	150.8864	µg/mL	Unstressed
	Purity 99%				+/-	151.2446	µg/mL	Stressed
62	sec-Butylbenzene		2,501.3	µg/mL	+/-	14.5430	µg/mL	Gravimetric
	CAS # 135-98-8.SEC	(Lot O4HRF)			+/-	150.9165	µg/mL	Unstressed
	Purity 99%				+/-	151.2748	µg/mL	Stressed
63	4-Isopropyltoluene (p-cymene)		2,501.5	µg/mL	+/-	14.5439	µg/mL	Gravimetric
	CAS # 99-87-6.SEC	(Lot 5221800)			+/-	150.9266	µg/mL	Unstressed
	Purity 99%				+/-	151.2849	µg/mL	Stressed
64	1,3-Dichlorobenzene		2,500.3	µg/mL	+/-	14.5372	µg/mL	Gravimetric
	CAS # 541-73-1.SEC	(Lot FMDFD)			+/-	150.8562	µg/mL	Unstressed
	Purity 99%				+/-	151.2143	µg/mL	Stressed
65	1,4-Dichlorobenzene		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 106-46-7.SEC	(Lot 4Y5DC)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%				+/-	151.2547	µg/mL	Stressed
66	n-Butylbenzene		2,500.3	µg/mL	+/-	14.5372	µg/mL	Gravimetric
	CAS # 104-51-8.SEC	(Lot MMPGA)			+/-	150.8562	µg/mL	Unstressed
	Purity 99%				+/-	151.2143	µg/mL	Stressed
67	1,2-Dichlorobenzene		2,500.7	µg/mL	+/-	14.5391	µg/mL	Gravimetric
	CAS # 95-50-1.SEC	(Lot R6QDM)			+/-	150.8763	µg/mL	Unstressed
	Purity 99%				+/-	151.2345	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane		2,500.8	µg/mL	+/-	14.5401	µg/mL	Gravimetric
	CAS # 96-12-8.SEC	(Lot Q135-105)			+/-	150.8864	µg/mL	Unstressed
	Purity 99%				+/-	151.2446	µg/mL	Stressed
69	1,2,4-Trichlorobenzene		2,500.8	µg/mL	+/-	14.5401	µg/mL	Gravimetric
	CAS # 120-82-1.SEC	(Lot IGLFA)			+/-	150.8864	µg/mL	Unstressed
	Purity 99%				+/-	151.2446	µg/mL	Stressed
70	Hexachlorobutadiene		2,501.5	µg/mL	+/-	14.5438	µg/mL	Gravimetric
	CAS # 87-68-3.SEC	(Lot 10550800)			+/-	150.9247	µg/mL	Unstressed
	Purity 97%				+/-	151.2830	µg/mL	Stressed
71	Naphthalene		2,500.7	µg/mL	+/-	14.5391	µg/mL	Gravimetric
	CAS # 91-20-3.SEC	(Lot AM5NG)			+/-	150.8763	µg/mL	Unstressed
	Purity 99%				+/-	151.2345	µg/mL	Stressed

72	1,2,3-Trichlorobenzene		2,501.7	µg/mL	+/-	14.5449	µg/mL	Gravimetric
	CAS # 87-61-6.SEC	(Lot A0043055)			+/-	150.9366	µg/mL	Unstressed
	Purity 99%				+/-	151.2950	µg/mL	Stressed

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

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

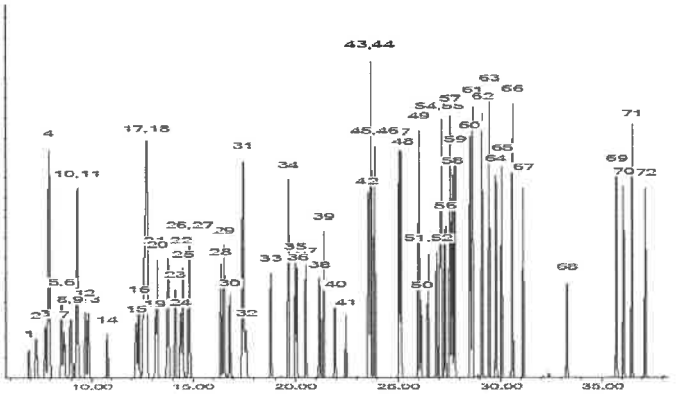
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



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

Michael J Maye

Date Mixed: 13-Dec-2020 **Balance:** 1127510105

Justine Albertson - Operations Tech-ARM QC

Date Passed: 23-Dec-2020

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

Reagent

MV-571992_00009

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. : 571992 **Lot No.:** A0159680

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 : 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	Diethyl ether (ethyl ether) **CAS #** 60-29-7 (Lot SHBK7710) **Purity** 99%	2,518.8 µg/mL	+/- 14.6442 µg/mL +/- 151.9673 µg/mL +/- 152.3281 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1 (Lot 00016133) **Purity** 99%	2,523.8 µg/mL	+/- 14.6733 µg/mL +/- 152.2690 µg/mL +/- 152.6305 µg/mL	Gravimetric Unstressed Stressed
3	1,1-dichloroethene **CAS #** 75-35-4 (Lot SHBK2437) **Purity** 99%	2,517.5 µg/mL	+/- 14.6370 µg/mL +/- 151.8919 µg/mL +/- 152.2525 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0 (Lot SHBL0592) **Purity** 99%	25,122.1 µg/mL	+/- 146.0546 µg/mL +/- 1,515.7284 µg/mL +/- 1,519.3270 µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9 (Lot SHBK5436) **Purity** 99%	5,041.4 µg/mL	+/- 29.3110 µg/mL +/- 304.1685 µg/mL +/- 304.8906 µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4 (Lot D4406-0122JM) **Purity** 99%	2,520.5 µg/mL	+/- 14.6544 µg/mL +/- 152.0729 µg/mL +/- 152.4340 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1 (Lot 191118KJ) **Purity** 99%	2,521.0 µg/mL	+/- 14.6573 µg/mL +/- 152.1031 µg/mL +/- 152.4642 µg/mL	Gravimetric Unstressed Stressed

8	Methylene chloride (dichloromethane)		2,518.6	µg/mL	+/-	14.6435	µg/mL	Gravimetric
	CAS # 75-09-2	(Lot SHBL3107)			+/-	151.9598	µg/mL	Unstressed
	Purity 99%				+/-	152.3206	µg/mL	Stressed
9	Carbon disulfide		2,521.9	µg/mL	+/-	14.6624	µg/mL	Gravimetric
	CAS # 75-15-0	(Lot U22D706)			+/-	152.1559	µg/mL	Unstressed
	Purity 99%				+/-	152.5171	µg/mL	Stressed
10	Acrylonitrile		25,178.5	µg/mL	+/-	146.3823	µg/mL	Gravimetric
	CAS # 107-13-1	(Lot A0387097)			+/-	1,519.1297	µg/mL	Unstressed
	Purity 99%				+/-	1,522.7364	µg/mL	Stressed
11	Methyl-tert-butyl ether (MTBE)		2,513.9	µg/mL	+/-	14.6159	µg/mL	Gravimetric
	CAS # 1634-04-4	(Lot SHBL0822)			+/-	151.6732	µg/mL	Unstressed
	Purity 99%				+/-	152.0333	µg/mL	Stressed
12	cis-1,2-Dichloroethene		2,517.3	µg/mL	+/-	14.6355	µg/mL	Gravimetric
	CAS # 156-59-2	(Lot MKCK1803)			+/-	151.8768	µg/mL	Unstressed
	Purity 99%				+/-	152.2374	µg/mL	Stressed
13	n-Hexane (C6)		2,521.1	µg/mL	+/-	14.6580	µg/mL	Gravimetric
	CAS # 110-54-3	(Lot SHBL0924)			+/-	152.1106	µg/mL	Unstressed
	Purity 99%				+/-	152.4718	µg/mL	Stressed
14	1,1-Dichloroethane		2,524.5	µg/mL	+/-	14.6777	µg/mL	Gravimetric
	CAS # 75-34-3	(Lot 580900)			+/-	152.3143	µg/mL	Unstressed
	Purity 99%				+/-	152.6759	µg/mL	Stressed
15	2,2-Dichloropropane		2,523.0	µg/mL	+/-	14.6690	µg/mL	Gravimetric
	CAS # 594-20-7	(Lot BCBX0066)			+/-	152.2244	µg/mL	Unstressed
	Purity 98%				+/-	152.5858	µg/mL	Stressed
16	trans-1,2-Dichloroethene		2,523.8	µg/mL	+/-	14.6733	µg/mL	Gravimetric
	CAS # 156-60-5	(Lot MKBH9850V)			+/-	152.2690	µg/mL	Unstressed
	Purity 99%				+/-	152.6305	µg/mL	Stressed
17	Isobutanol (2-Methyl-1-propanol)		62,671.0	µg/mL	+/-	364.3555	µg/mL	Gravimetric
	CAS # 78-83-1	(Lot SHBK0551)			+/-	3,781.2173	µg/mL	Unstressed
	Purity 99%				+/-	3,790.1946	µg/mL	Stressed
18	chloroform		2,524.3	µg/mL	+/-	14.6762	µg/mL	Gravimetric
	CAS # 67-66-3	(Lot SHBL6923)			+/-	152.2992	µg/mL	Unstressed
	Purity 99%				+/-	152.6608	µg/mL	Stressed
19	Bromochloromethane		2,516.6	µg/mL	+/-	14.6320	µg/mL	Gravimetric
	CAS # 74-97-5	(Lot 00008541)			+/-	151.8400	µg/mL	Unstressed
	Purity 98%				+/-	152.2005	µg/mL	Stressed
20	Tetrahydrofuran		5,045.5	µg/mL	+/-	29.3350	µg/mL	Gravimetric
	CAS # 109-99-9	(Lot SHBJ6179)			+/-	304.4174	µg/mL	Unstressed
	Purity 99%				+/-	305.1401	µg/mL	Stressed
21	1,1,1-trichloroethane		2,514.9	µg/mL	+/-	14.6220	µg/mL	Gravimetric
	CAS # 71-55-6	(Lot 190123CG)			+/-	151.7366	µg/mL	Unstressed
	Purity 98%				+/-	152.0968	µg/mL	Stressed
22	Cyclohexane		2,521.5	µg/mL	+/-	14.6602	µg/mL	Gravimetric
	CAS # 110-82-7	(Lot MKCF5831)			+/-	152.1333	µg/mL	Unstressed
	Purity 99%				+/-	152.4945	µg/mL	Stressed
23	1,1-Dichloropropene		2,522.3	µg/mL	+/-	14.6646	µg/mL	Gravimetric
	CAS # 563-58-6	(Lot 190919JLM)			+/-	152.1785	µg/mL	Unstressed
	Purity 99%				+/-	152.5398	µg/mL	Stressed

24	carbon tetrachloride		2,523.6	µg/mL	+/-	14.6726	µg/mL	Gravimetric
	CAS # 56-23-5	(Lot SHBG8938V)			+/-	152.2615	µg/mL	Unstressed
	Purity 99%				+/-	152.6230	µg/mL	Stressed
25	n-Heptane (C7)		2,515.8	µg/mL	+/-	14.6270	µg/mL	Gravimetric
	CAS # 142-82-5	(Lot SHBK8626)			+/-	151.7883	µg/mL	Unstressed
	Purity 98%				+/-	152.1487	µg/mL	Stressed
26	1,2-Dichloroethane		2,522.6	µg/mL	+/-	14.6668	µg/mL	Gravimetric
	CAS # 107-06-2	(Lot MKCH9948)			+/-	152.2011	µg/mL	Unstressed
	Purity 99%				+/-	152.5625	µg/mL	Stressed
27	Benzene		2,514.6	µg/mL	+/-	14.6202	µg/mL	Gravimetric
	CAS # 71-43-2	(Lot SHBL4231)			+/-	151.7185	µg/mL	Unstressed
	Purity 99%				+/-	152.0787	µg/mL	Stressed
28	Trichloroethene		2,512.9	µg/mL	+/-	14.6101	µg/mL	Gravimetric
	CAS # 79-01-6	(Lot SHBJ4611)			+/-	151.6129	µg/mL	Unstressed
	Purity 99%				+/-	151.9728	µg/mL	Stressed
29	Methylcyclohexane		2,517.4	µg/mL	+/-	14.6362	µg/mL	Gravimetric
	CAS # 108-87-2	(Lot SHBJ0457)			+/-	151.8844	µg/mL	Unstressed
	Purity 99%				+/-	152.2450	µg/mL	Stressed
30	1,2-Dichloropropane		2,519.5	µg/mL	+/-	14.6486	µg/mL	Gravimetric
	CAS # 78-87-5	(Lot BCBR0882V)			+/-	152.0126	µg/mL	Unstressed
	Purity 99%				+/-	152.3735	µg/mL	Stressed
31	1,4-Dioxane		50,250.0	µg/mL	+/-	292.1426	µg/mL	Gravimetric
	CAS # 123-91-1	(Lot SHBL3022)			+/-	3,031.8037	µg/mL	Unstressed
	Purity 99%				+/-	3,039.0017	µg/mL	Stressed
32	Dibromomethane		2,523.5	µg/mL	+/-	14.6718	µg/mL	Gravimetric
	CAS # 74-95-3	(Lot 10215970)			+/-	152.2539	µg/mL	Unstressed
	Purity 99%				+/-	152.6154	µg/mL	Stressed
33	cis-1,3-Dichloropropene		2,523.0	µg/mL	+/-	14.6689	µg/mL	Gravimetric
	CAS # 10061-01-5	(Lot 200107JLM)			+/-	152.2238	µg/mL	Unstressed
	Purity 99%				+/-	152.5852	µg/mL	Stressed
34	Toluene		2,523.3	µg/mL	+/-	14.6704	µg/mL	Gravimetric
	CAS # 108-88-3	(Lot MKCH9232)			+/-	152.2389	µg/mL	Unstressed
	Purity 99%				+/-	152.6003	µg/mL	Stressed
35	Ethyl methacrylate		2,515.4	µg/mL	+/-	14.6246	µg/mL	Gravimetric
	CAS # 97-63-2	(Lot SHBF9649V)			+/-	151.7637	µg/mL	Unstressed
	Purity 99%				+/-	152.1240	µg/mL	Stressed
36	trans-1,3-Dichloropropene		2,521.1	µg/mL	+/-	14.6576	µg/mL	Gravimetric
	CAS # 10061-02-6	(Lot 19420164-D1119)			+/-	152.1061	µg/mL	Unstressed
	Purity 98%				+/-	152.4672	µg/mL	Stressed
37	1,1,2-Trichloroethane		2,515.8	µg/mL	+/-	14.6268	µg/mL	Gravimetric
	CAS # 79-00-5	(Lot FGB01)			+/-	151.7863	µg/mL	Unstressed
	Purity 99%				+/-	152.1467	µg/mL	Stressed
38	1,3-Dichloropropane		2,518.8	µg/mL	+/-	14.6442	µg/mL	Gravimetric
	CAS # 142-28-9	(Lot BCBC6265)			+/-	151.9673	µg/mL	Unstressed
	Purity 99%				+/-	152.3281	µg/mL	Stressed
39	Tetrachloroethene		2,513.1	µg/mL	+/-	14.6115	µg/mL	Gravimetric
	CAS # 127-18-4	(Lot SHBJ7422)			+/-	151.6280	µg/mL	Unstressed
	Purity 99%				+/-	151.9880	µg/mL	Stressed

40	dibromochloromethane		2,513.5	µg/mL	+/-	14.6137	µg/mL	Gravimetric
	CAS # 124-48-1	(Lot MKCK6472)			+/-	151.6506	µg/mL	Unstressed
	Purity 99%				+/-	152.0106	µg/mL	Stressed
41	1,2-Dibromoethane (EDB)		2,521.9	µg/mL	+/-	14.6624	µg/mL	Gravimetric
	CAS # 106-93-4	(Lot BCBH3877V)			+/-	152.1559	µg/mL	Unstressed
	Purity 99%				+/-	152.5171	µg/mL	Stressed
42	Chlorobenzene		2,521.0	µg/mL	+/-	14.6573	µg/mL	Gravimetric
	CAS # 108-90-7	(Lot SHBJ0839)			+/-	152.1031	µg/mL	Unstressed
	Purity 99%				+/-	152.4642	µg/mL	Stressed
43	m-Xylene		1,257.9	µg/mL	+/-	7.3134	µg/mL	Gravimetric
	CAS # 108-38-3	(Lot SHBL0265)			+/-	75.8932	µg/mL	Unstressed
	Purity 99%				+/-	76.0734	µg/mL	Stressed
44	p-Xylene		1,260.0	µg/mL	+/-	7.3257	µg/mL	Gravimetric
	CAS # 106-42-3	(Lot SHBJ7329)			+/-	76.0214	µg/mL	Unstressed
	Purity 99%				+/-	76.2019	µg/mL	Stressed
45	Ethylbenzene		2,521.1	µg/mL	+/-	14.6580	µg/mL	Gravimetric
	CAS # 100-41-4	(Lot SHBL0706)			+/-	152.1106	µg/mL	Unstressed
	Purity 99%				+/-	152.4718	µg/mL	Stressed
46	1,1,1,2-Tetrachloroethane		2,515.5	µg/mL	+/-	14.6256	µg/mL	Gravimetric
	CAS # 630-20-6	(Lot GC01)			+/-	151.7735	µg/mL	Unstressed
	Purity 98%				+/-	152.1339	µg/mL	Stressed
47	o-Xylene		2,517.9	µg/mL	+/-	14.6391	µg/mL	Gravimetric
	CAS # 95-47-6	(Lot SHBK7739)			+/-	151.9146	µg/mL	Unstressed
	Purity 99%				+/-	152.2752	µg/mL	Stressed
48	Styrene		2,516.0	µg/mL	+/-	14.6282	µg/mL	Gravimetric
	CAS # 100-42-5	(Lot MKCG7519)			+/-	151.8014	µg/mL	Unstressed
	Purity 99%				+/-	152.1618	µg/mL	Stressed
49	Isopropylbenzene (cumene)		2,516.8	µg/mL	+/-	14.6326	µg/mL	Gravimetric
	CAS # 98-82-8	(Lot P15E008)			+/-	151.8467	µg/mL	Unstressed
	Purity 99%				+/-	152.2072	µg/mL	Stressed
50	bromoform		2,518.4	µg/mL	+/-	14.6420	µg/mL	Gravimetric
	CAS # 75-25-2	(Lot SHBJ4835)			+/-	151.9447	µg/mL	Unstressed
	Purity 99%				+/-	152.3055	µg/mL	Stressed
51	bromodichloromethane		2,523.3	µg/mL	+/-	14.6704	µg/mL	Gravimetric
	CAS # 75-27-4	(Lot MKCJ0238)			+/-	152.2389	µg/mL	Unstressed
	Purity 99%				+/-	152.6003	µg/mL	Stressed
52	1,1,2,2-Tetrachloroethane		2,520.9	µg/mL	+/-	14.6566	µg/mL	Gravimetric
	CAS # 79-34-5	(Lot CFA4D)			+/-	152.0956	µg/mL	Unstressed
	Purity 99%				+/-	152.4567	µg/mL	Stressed
53	1,2,3-Trichloropropane		2,520.3	µg/mL	+/-	14.6530	µg/mL	Gravimetric
	CAS # 96-18-4	(Lot BCBH8722V)			+/-	152.0579	µg/mL	Unstressed
	Purity 99%				+/-	152.4189	µg/mL	Stressed
54	trans-1,4-dichloro-2-butene		2,511.8	µg/mL	+/-	14.6038	µg/mL	Gravimetric
	CAS # 110-57-6	(Lot MKBZ5026V)			+/-	151.5480	µg/mL	Unstressed
	Purity 95%				+/-	151.9078	µg/mL	Stressed
55	n-Propylbenzene		2,518.3	µg/mL	+/-	14.6413	µg/mL	Gravimetric
	CAS # 103-65-1	(Lot MKCG9378)			+/-	151.9372	µg/mL	Unstressed
	Purity 99%				+/-	152.2979	µg/mL	Stressed

56	Bromobenzene		2,520.1	µg/mL	+/- 14.6522	µg/mL	Gravimetric
	CAS # 108-86-1	(Lot WXBC5147V)			+/- 152.0503	µg/mL	Unstressed
	Purity 99%				+/- 152.4113	µg/mL	Stressed
57	1,3,5-Trimethylbenzene		2,519.4	µg/mL	+/- 14.6479	µg/mL	Gravimetric
	CAS # 108-67-8	(Lot BCBZ6781)			+/- 152.0051	µg/mL	Unstressed
	Purity 99%				+/- 152.3659	µg/mL	Stressed
58	2-Chlorotoluene		2,519.4	µg/mL	+/- 14.6479	µg/mL	Gravimetric
	CAS # 95-49-8	(Lot MKCF5243)			+/- 152.0051	µg/mL	Unstressed
	Purity 99%				+/- 152.3659	µg/mL	Stressed
59	4-Chlorotoluene		2,518.8	µg/mL	+/- 14.6442	µg/mL	Gravimetric
	CAS # 106-43-4	(Lot MKCC8496)			+/- 151.9673	µg/mL	Unstressed
	Purity 99%				+/- 152.3281	µg/mL	Stressed
60	tert-Butylbenzene		2,518.6	µg/mL	+/- 14.6435	µg/mL	Gravimetric
	CAS # 98-06-6	(Lot STBD6954V)			+/- 151.9598	µg/mL	Unstressed
	Purity 99%				+/- 152.3206	µg/mL	Stressed
61	1,2,4-Trimethylbenzene		2,522.0	µg/mL	+/- 14.6631	µg/mL	Gravimetric
	CAS # 95-63-6	(Lot WXBC4246V)			+/- 152.1634	µg/mL	Unstressed
	Purity 99%				+/- 152.5247	µg/mL	Stressed
62	sec-Butylbenzene		2,519.8	µg/mL	+/- 14.6500	µg/mL	Gravimetric
	CAS # 135-98-8	(Lot MKCG5431)			+/- 152.0277	µg/mL	Unstressed
	Purity 99%				+/- 152.3886	µg/mL	Stressed
63	p-Isopropyltoluene (p-Cymene)		2,521.5	µg/mL	+/- 14.6602	µg/mL	Gravimetric
	CAS # 99-87-6	(Lot MKCJ9905)			+/- 152.1333	µg/mL	Unstressed
	Purity 99%				+/- 152.4945	µg/mL	Stressed
64	1,3-Dichlorobenzene		2,517.6	µg/mL	+/- 14.6377	µg/mL	Gravimetric
	CAS # 541-73-1	(Lot BCBQ7100V)			+/- 151.8995	µg/mL	Unstressed
	Purity 99%				+/- 152.2601	µg/mL	Stressed
65	1,4-Dichlorobenzene		2,520.3	µg/mL	+/- 14.6530	µg/mL	Gravimetric
	CAS # 106-46-7	(Lot MKBS4401V)			+/- 152.0579	µg/mL	Unstressed
	Purity 99%				+/- 152.4189	µg/mL	Stressed
66	n-Butylbenzene		2,523.9	µg/mL	+/- 14.6740	µg/mL	Gravimetric
	CAS # 104-51-8	(Lot 09804AE)			+/- 152.2766	µg/mL	Unstressed
	Purity 99%				+/- 152.6381	µg/mL	Stressed
67	1,2-Dichlorobenzene		2,514.4	µg/mL	+/- 14.6188	µg/mL	Gravimetric
	CAS # 95-50-1	(Lot SHBK7741)			+/- 151.7034	µg/mL	Unstressed
	Purity 99%				+/- 152.0636	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane		2,510.7	µg/mL	+/- 14.5976	µg/mL	Gravimetric
	CAS # 96-12-8	(Lot FBL01)			+/- 151.4831	µg/mL	Unstressed
	Purity 97%				+/- 151.8427	µg/mL	Stressed
69	1,2,4-Trichlorobenzene		2,521.6	µg/mL	+/- 14.6609	µg/mL	Gravimetric
	CAS # 120-82-1	(Lot SHBJ9215)			+/- 152.1408	µg/mL	Unstressed
	Purity 99%				+/- 152.5020	µg/mL	Stressed
70	Hexachlorobutadiene		2,517.0	µg/mL	+/- 14.6341	µg/mL	Gravimetric
	CAS # 87-68-3	(Lot J31X013)			+/- 151.8622	µg/mL	Unstressed
	Purity 98%				+/- 152.2228	µg/mL	Stressed
71	Naphthalene		2,511.4	µg/mL	+/- 14.6014	µg/mL	Gravimetric
	CAS # 91-20-3	(Lot MKBZ8680V)			+/- 151.5224	µg/mL	Unstressed
	Purity 99%				+/- 151.8821	µg/mL	Stressed

72	1,2,3-Trichlorobenzene		2,519.3	µg/mL	+/-	14.6471	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot MKBX7627V)			+/-	151.9975	µg/mL	Unstressed
	Purity 99%				+/-	152.3584	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)

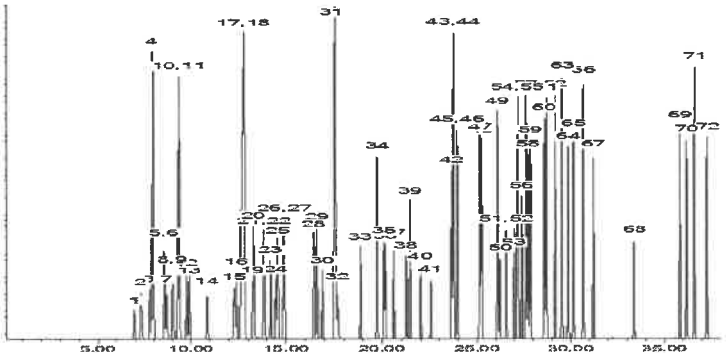
Carrier Gas:
helium-constant pressure 30 psi

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.

Tom Suckar - Mix Technician

Date Mixed: 07-Apr-2020 **Balance:** B707717271

Feng-Yan Le - QC Analyst

Date Passed: 13-Apr-2020

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

Reagent

MV-571992_00013

RESTEK®
110 Benner Circle
Bellefonte, PA 16823-8812
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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.:** A0159680

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 : 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	Diethyl ether (ethyl ether) **CAS #** 60-29-7 (Lot SHBK7710) **Purity** 99%	2,518.8 µg/mL	+/- 14.6442 µg/mL +/- 151.9673 µg/mL +/- 152.3281 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1 (Lot 00016133) **Purity** 99%	2,523.8 µg/mL	+/- 14.6733 µg/mL +/- 152.2690 µg/mL +/- 152.6305 µg/mL	Gravimetric Unstressed Stressed
3	1,1-dichloroethene **CAS #** 75-35-4 (Lot SHBK2437) **Purity** 99%	2,517.5 µg/mL	+/- 14.6370 µg/mL +/- 151.8919 µg/mL +/- 152.2525 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0 (Lot SHBL0592) **Purity** 99%	25,122.1 µg/mL	+/- 146.0546 µg/mL +/- 1,515.7284 µg/mL +/- 1,519.3270 µg/mL	Gravimetric Unstressed Stressed
5	Methyl acetate **CAS #** 79-20-9 (Lot SHBK5436) **Purity** 99%	5,041.4 µg/mL	+/- 29.3110 µg/mL +/- 304.1685 µg/mL +/- 304.8906 µg/mL	Gravimetric Unstressed Stressed
6	Iodomethane (methyl iodide) **CAS #** 74-88-4 (Lot D4406-0122JM) **Purity** 99%	2,520.5 µg/mL	+/- 14.6544 µg/mL +/- 152.0729 µg/mL +/- 152.4340 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1 (Lot 191118KJ) **Purity** 99%	2,521.0 µg/mL	+/- 14.6573 µg/mL +/- 152.1031 µg/mL +/- 152.4642 µg/mL	Gravimetric Unstressed Stressed

2/3/22

8	Methylene chloride (dichloromethane)		2,518.6	µg/mL	+/-	14.6435	µg/mL	Gravimetric
	CAS # 75-09-2	(Lot SHBL3107)			+/-	151.9598	µg/mL	Unstressed
	Purity 99%				+/-	152.3206	µg/mL	Stressed
9	Carbon disulfide		2,521.9	µg/mL	+/-	14.6624	µg/mL	Gravimetric
	CAS # 75-15-0	(Lot U22D706)			+/-	152.1559	µg/mL	Unstressed
	Purity 99%				+/-	152.5171	µg/mL	Stressed
10	Acrylonitrile		25,178.5	µg/mL	+/-	146.3823	µg/mL	Gravimetric
	CAS # 107-13-1	(Lot A0387097)			+/-	1,519.1297	µg/mL	Unstressed
	Purity 99%				+/-	1,522.7364	µg/mL	Stressed
11	Methyl-tert-butyl ether (MTBE)		2,513.9	µg/mL	+/-	14.6159	µg/mL	Gravimetric
	CAS # 1634-04-4	(Lot SHBL0822)			+/-	151.6732	µg/mL	Unstressed
	Purity 99%				+/-	152.0333	µg/mL	Stressed
12	cis-1,2-Dichloroethene		2,517.3	µg/mL	+/-	14.6355	µg/mL	Gravimetric
	CAS # 156-59-2	(Lot MKCK1803)			+/-	151.8768	µg/mL	Unstressed
	Purity 99%				+/-	152.2374	µg/mL	Stressed
13	n-Hexane (C6)		2,521.1	µg/mL	+/-	14.6580	µg/mL	Gravimetric
	CAS # 110-54-3	(Lot SHBL0924)			+/-	152.1106	µg/mL	Unstressed
	Purity 99%				+/-	152.4718	µg/mL	Stressed
14	1,1-Dichloroethane		2,524.5	µg/mL	+/-	14.6777	µg/mL	Gravimetric
	CAS # 75-34-3	(Lot 580900)			+/-	152.3143	µg/mL	Unstressed
	Purity 99%				+/-	152.6759	µg/mL	Stressed
15	2,2-Dichloropropane		2,523.0	µg/mL	+/-	14.6690	µg/mL	Gravimetric
	CAS # 594-20-7	(Lot BCBX0066)			+/-	152.2244	µg/mL	Unstressed
	Purity 98%				+/-	152.5858	µg/mL	Stressed
16	trans-1,2-Dichloroethene		2,523.8	µg/mL	+/-	14.6733	µg/mL	Gravimetric
	CAS # 156-60-5	(Lot MKBH9850V)			+/-	152.2690	µg/mL	Unstressed
	Purity 99%				+/-	152.6305	µg/mL	Stressed
17	Isobutanol (2-Methyl-1-propanol)		62,671.0	µg/mL	+/-	364.3555	µg/mL	Gravimetric
	CAS # 78-83-1	(Lot SHBK0551)			+/-	3,781.2173	µg/mL	Unstressed
	Purity 99%				+/-	3,790.1946	µg/mL	Stressed
18	chloroform		2,524.3	µg/mL	+/-	14.6762	µg/mL	Gravimetric
	CAS # 67-66-3	(Lot SHBL6923)			+/-	152.2992	µg/mL	Unstressed
	Purity 99%				+/-	152.6608	µg/mL	Stressed
19	Bromochloromethane		2,516.6	µg/mL	+/-	14.6320	µg/mL	Gravimetric
	CAS # 74-97-5	(Lot 00008541)			+/-	151.8400	µg/mL	Unstressed
	Purity 98%				+/-	152.2005	µg/mL	Stressed
20	Tetrahydrofuran		5,045.5	µg/mL	+/-	29.3350	µg/mL	Gravimetric
	CAS # 109-99-9	(Lot SHBJ6179)			+/-	304.4174	µg/mL	Unstressed
	Purity 99%				+/-	305.1401	µg/mL	Stressed
21	1,1,1-trichloroethane		2,514.9	µg/mL	+/-	14.6220	µg/mL	Gravimetric
	CAS # 71-55-6	(Lot 190123CG)			+/-	151.7366	µg/mL	Unstressed
	Purity 98%				+/-	152.0968	µg/mL	Stressed
22	Cyclohexane		2,521.5	µg/mL	+/-	14.6602	µg/mL	Gravimetric
	CAS # 110-82-7	(Lot MKCF5831)			+/-	152.1333	µg/mL	Unstressed
	Purity 99%				+/-	152.4945	µg/mL	Stressed
23	1,1-Dichloropropene		2,522.3	µg/mL	+/-	14.6646	µg/mL	Gravimetric
	CAS # 563-58-6	(Lot 190919JLM)			+/-	152.1785	µg/mL	Unstressed
	Purity 99%				+/-	152.5398	µg/mL	Stressed

24	carbon tetrachloride		2,523.6	µg/mL	+/-	14.6726	µg/mL	Gravimetric
	CAS # 56-23-5	(Lot SHBG8938V)			+/-	152.2615	µg/mL	Unstressed
	Purity 99%				+/-	152.6230	µg/mL	Stressed
25	n-Heptane (C7)		2,515.8	µg/mL	+/-	14.6270	µg/mL	Gravimetric
	CAS # 142-82-5	(Lot SHBK8626)			+/-	151.7883	µg/mL	Unstressed
	Purity 98%				+/-	152.1487	µg/mL	Stressed
26	1,2-Dichloroethane		2,522.6	µg/mL	+/-	14.6668	µg/mL	Gravimetric
	CAS # 107-06-2	(Lot MKCH9948)			+/-	152.2011	µg/mL	Unstressed
	Purity 99%				+/-	152.5625	µg/mL	Stressed
27	Benzene		2,514.6	µg/mL	+/-	14.6202	µg/mL	Gravimetric
	CAS # 71-43-2	(Lot SHBL4231)			+/-	151.7185	µg/mL	Unstressed
	Purity 99%				+/-	152.0787	µg/mL	Stressed
28	Trichloroethene		2,512.9	µg/mL	+/-	14.6101	µg/mL	Gravimetric
	CAS # 79-01-6	(Lot SHBJ4611)			+/-	151.6129	µg/mL	Unstressed
	Purity 99%				+/-	151.9728	µg/mL	Stressed
29	Methylcyclohexane		2,517.4	µg/mL	+/-	14.6362	µg/mL	Gravimetric
	CAS # 108-87-2	(Lot SHBJ0457)			+/-	151.8844	µg/mL	Unstressed
	Purity 99%				+/-	152.2450	µg/mL	Stressed
30	1,2-Dichloropropane		2,519.5	µg/mL	+/-	14.6486	µg/mL	Gravimetric
	CAS # 78-87-5	(Lot BCBR0882V)			+/-	152.0126	µg/mL	Unstressed
	Purity 99%				+/-	152.3735	µg/mL	Stressed
31	1,4-Dioxane		50,250.0	µg/mL	+/-	292.1426	µg/mL	Gravimetric
	CAS # 123-91-1	(Lot SHBL3022)			+/-	3,031.8037	µg/mL	Unstressed
	Purity 99%				+/-	3,039.0017	µg/mL	Stressed
32	Dibromomethane		2,523.5	µg/mL	+/-	14.6718	µg/mL	Gravimetric
	CAS # 74-95-3	(Lot 10215970)			+/-	152.2539	µg/mL	Unstressed
	Purity 99%				+/-	152.6154	µg/mL	Stressed
33	cis-1,3-Dichloropropene		2,523.0	µg/mL	+/-	14.6689	µg/mL	Gravimetric
	CAS # 10061-01-5	(Lot 200107JLM)			+/-	152.2238	µg/mL	Unstressed
	Purity 99%				+/-	152.5852	µg/mL	Stressed
34	Toluene		2,523.3	µg/mL	+/-	14.6704	µg/mL	Gravimetric
	CAS # 108-88-3	(Lot MKCH9232)			+/-	152.2389	µg/mL	Unstressed
	Purity 99%				+/-	152.6003	µg/mL	Stressed
35	Ethyl methacrylate		2,515.4	µg/mL	+/-	14.6246	µg/mL	Gravimetric
	CAS # 97-63-2	(Lot SHBF9649V)			+/-	151.7637	µg/mL	Unstressed
	Purity 99%				+/-	152.1240	µg/mL	Stressed
36	trans-1,3-Dichloropropene		2,521.1	µg/mL	+/-	14.6576	µg/mL	Gravimetric
	CAS # 10061-02-6	(Lot 19420164-D1119)			+/-	152.1061	µg/mL	Unstressed
	Purity 98%				+/-	152.4672	µg/mL	Stressed
37	1,1,2-Trichloroethane		2,515.8	µg/mL	+/-	14.6268	µg/mL	Gravimetric
	CAS # 79-00-5	(Lot FGB01)			+/-	151.7863	µg/mL	Unstressed
	Purity 99%				+/-	152.1467	µg/mL	Stressed
38	1,3-Dichloropropane		2,518.8	µg/mL	+/-	14.6442	µg/mL	Gravimetric
	CAS # 142-28-9	(Lot BCBC6265)			+/-	151.9673	µg/mL	Unstressed
	Purity 99%				+/-	152.3281	µg/mL	Stressed
39	Tetrachloroethene		2,513.1	µg/mL	+/-	14.6115	µg/mL	Gravimetric
	CAS # 127-18-4	(Lot SHBJ7422)			+/-	151.6280	µg/mL	Unstressed
	Purity 99%				+/-	151.9880	µg/mL	Stressed

40	dibromochloromethane		2,513.5	µg/mL	+/-	14.6137	µg/mL	Gravimetric
	CAS # 124-48-1	(Lot MKCK6472)			+/-	151.6506	µg/mL	Unstressed
	Purity 99%				+/-	152.0106	µg/mL	Stressed
41	1,2-Dibromoethane (EDB)		2,521.9	µg/mL	+/-	14.6624	µg/mL	Gravimetric
	CAS # 106-93-4	(Lot BCBH3877V)			+/-	152.1559	µg/mL	Unstressed
	Purity 99%				+/-	152.5171	µg/mL	Stressed
42	Chlorobenzene		2,521.0	µg/mL	+/-	14.6573	µg/mL	Gravimetric
	CAS # 108-90-7	(Lot SHBJ0839)			+/-	152.1031	µg/mL	Unstressed
	Purity 99%				+/-	152.4642	µg/mL	Stressed
43	m-Xylene		1,257.9	µg/mL	+/-	7.3134	µg/mL	Gravimetric
	CAS # 108-38-3	(Lot SHBL0265)			+/-	75.8932	µg/mL	Unstressed
	Purity 99%				+/-	76.0734	µg/mL	Stressed
44	p-Xylene		1,260.0	µg/mL	+/-	7.3257	µg/mL	Gravimetric
	CAS # 106-42-3	(Lot SHBJ7329)			+/-	76.0214	µg/mL	Unstressed
	Purity 99%				+/-	76.2019	µg/mL	Stressed
45	Ethylbenzene		2,521.1	µg/mL	+/-	14.6580	µg/mL	Gravimetric
	CAS # 100-41-4	(Lot SHBL0706)			+/-	152.1106	µg/mL	Unstressed
	Purity 99%				+/-	152.4718	µg/mL	Stressed
46	1,1,1,2-Tetrachloroethane		2,515.5	µg/mL	+/-	14.6256	µg/mL	Gravimetric
	CAS # 630-20-6	(Lot GC01)			+/-	151.7735	µg/mL	Unstressed
	Purity 98%				+/-	152.1339	µg/mL	Stressed
47	o-Xylene		2,517.9	µg/mL	+/-	14.6391	µg/mL	Gravimetric
	CAS # 95-47-6	(Lot SHBK7739)			+/-	151.9146	µg/mL	Unstressed
	Purity 99%				+/-	152.2752	µg/mL	Stressed
48	Styrene		2,516.0	µg/mL	+/-	14.6282	µg/mL	Gravimetric
	CAS # 100-42-5	(Lot MKCG7519)			+/-	151.8014	µg/mL	Unstressed
	Purity 99%				+/-	152.1618	µg/mL	Stressed
49	Isopropylbenzene (cumene)		2,516.8	µg/mL	+/-	14.6326	µg/mL	Gravimetric
	CAS # 98-82-8	(Lot P15E008)			+/-	151.8467	µg/mL	Unstressed
	Purity 99%				+/-	152.2072	µg/mL	Stressed
50	bromoform		2,518.4	µg/mL	+/-	14.6420	µg/mL	Gravimetric
	CAS # 75-25-2	(Lot SHBJ4835)			+/-	151.9447	µg/mL	Unstressed
	Purity 99%				+/-	152.3055	µg/mL	Stressed
51	bromodichloromethane		2,523.3	µg/mL	+/-	14.6704	µg/mL	Gravimetric
	CAS # 75-27-4	(Lot MKCJ0238)			+/-	152.2389	µg/mL	Unstressed
	Purity 99%				+/-	152.6003	µg/mL	Stressed
52	1,1,2,2-Tetrachloroethane		2,520.9	µg/mL	+/-	14.6566	µg/mL	Gravimetric
	CAS # 79-34-5	(Lot CFA4D)			+/-	152.0956	µg/mL	Unstressed
	Purity 99%				+/-	152.4567	µg/mL	Stressed
53	1,2,3-Trichloropropane		2,520.3	µg/mL	+/-	14.6530	µg/mL	Gravimetric
	CAS # 96-18-4	(Lot BCBH8722V)			+/-	152.0579	µg/mL	Unstressed
	Purity 99%				+/-	152.4189	µg/mL	Stressed
54	trans-1,4-dichloro-2-butene		2,511.8	µg/mL	+/-	14.6038	µg/mL	Gravimetric
	CAS # 110-57-6	(Lot MKBZ5026V)			+/-	151.5480	µg/mL	Unstressed
	Purity 95%				+/-	151.9078	µg/mL	Stressed
55	n-Propylbenzene		2,518.3	µg/mL	+/-	14.6413	µg/mL	Gravimetric
	CAS # 103-65-1	(Lot MKCG9378)			+/-	151.9372	µg/mL	Unstressed
	Purity 99%				+/-	152.2979	µg/mL	Stressed

56	Bromobenzene		2,520.1	µg/mL	+/-	14.6522	µg/mL	Gravimetric
	CAS # 108-86-1	(Lot WXBC5147V)			+/-	152.0503	µg/mL	Unstressed
	Purity 99%				+/-	152.4113	µg/mL	Stressed
57	1,3,5-Trimethylbenzene		2,519.4	µg/mL	+/-	14.6479	µg/mL	Gravimetric
	CAS # 108-67-8	(Lot BCBZ6781)			+/-	152.0051	µg/mL	Unstressed
	Purity 99%				+/-	152.3659	µg/mL	Stressed
58	2-Chlorotoluene		2,519.4	µg/mL	+/-	14.6479	µg/mL	Gravimetric
	CAS # 95-49-8	(Lot MKCF5243)			+/-	152.0051	µg/mL	Unstressed
	Purity 99%				+/-	152.3659	µg/mL	Stressed
59	4-Chlorotoluene		2,518.8	µg/mL	+/-	14.6442	µg/mL	Gravimetric
	CAS # 106-43-4	(Lot MKCC8496)			+/-	151.9673	µg/mL	Unstressed
	Purity 99%				+/-	152.3281	µg/mL	Stressed
60	tert-Butylbenzene		2,518.6	µg/mL	+/-	14.6435	µg/mL	Gravimetric
	CAS # 98-06-6	(Lot STBD6954V)			+/-	151.9598	µg/mL	Unstressed
	Purity 99%				+/-	152.3206	µg/mL	Stressed
61	1,2,4-Trimethylbenzene		2,522.0	µg/mL	+/-	14.6631	µg/mL	Gravimetric
	CAS # 95-63-6	(Lot WXBC4246V)			+/-	152.1634	µg/mL	Unstressed
	Purity 99%				+/-	152.5247	µg/mL	Stressed
62	sec-Butylbenzene		2,519.8	µg/mL	+/-	14.6500	µg/mL	Gravimetric
	CAS # 135-98-8	(Lot MKCG5431)			+/-	152.0277	µg/mL	Unstressed
	Purity 99%				+/-	152.3886	µg/mL	Stressed
63	p-Isopropyltoluene (p-Cymene)		2,521.5	µg/mL	+/-	14.6602	µg/mL	Gravimetric
	CAS # 99-87-6	(Lot MKCJ9905)			+/-	152.1333	µg/mL	Unstressed
	Purity 99%				+/-	152.4945	µg/mL	Stressed
64	1,3-Dichlorobenzene		2,517.6	µg/mL	+/-	14.6377	µg/mL	Gravimetric
	CAS # 541-73-1	(Lot BCBQ7100V)			+/-	151.8995	µg/mL	Unstressed
	Purity 99%				+/-	152.2601	µg/mL	Stressed
65	1,4-Dichlorobenzene		2,520.3	µg/mL	+/-	14.6530	µg/mL	Gravimetric
	CAS # 106-46-7	(Lot MKBS4401V)			+/-	152.0579	µg/mL	Unstressed
	Purity 99%				+/-	152.4189	µg/mL	Stressed
66	n-Butylbenzene		2,523.9	µg/mL	+/-	14.6740	µg/mL	Gravimetric
	CAS # 104-51-8	(Lot 09804AE)			+/-	152.2766	µg/mL	Unstressed
	Purity 99%				+/-	152.6381	µg/mL	Stressed
67	1,2-Dichlorobenzene		2,514.4	µg/mL	+/-	14.6188	µg/mL	Gravimetric
	CAS # 95-50-1	(Lot SHBK7741)			+/-	151.7034	µg/mL	Unstressed
	Purity 99%				+/-	152.0636	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane		2,510.7	µg/mL	+/-	14.5976	µg/mL	Gravimetric
	CAS # 96-12-8	(Lot FBL01)			+/-	151.4831	µg/mL	Unstressed
	Purity 97%				+/-	151.8427	µg/mL	Stressed
69	1,2,4-Trichlorobenzene		2,521.6	µg/mL	+/-	14.6609	µg/mL	Gravimetric
	CAS # 120-82-1	(Lot SHBJ9215)			+/-	152.1408	µg/mL	Unstressed
	Purity 99%				+/-	152.5020	µg/mL	Stressed
70	Hexachlorobutadiene		2,517.0	µg/mL	+/-	14.6341	µg/mL	Gravimetric
	CAS # 87-68-3	(Lot J31X013)			+/-	151.8622	µg/mL	Unstressed
	Purity 98%				+/-	152.2228	µg/mL	Stressed
71	Naphthalene		2,511.4	µg/mL	+/-	14.6014	µg/mL	Gravimetric
	CAS # 91-20-3	(Lot MKBZ8680V)			+/-	151.5224	µg/mL	Unstressed
	Purity 99%				+/-	151.8821	µg/mL	Stressed

72	1,2,3-Trichlorobenzene		2,519.3	µg/mL	+/-	14.6471	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot MKBX7627V)			+/-	151.9975	µg/mL	Unstressed
	Purity 99%				+/-	152.3584	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)

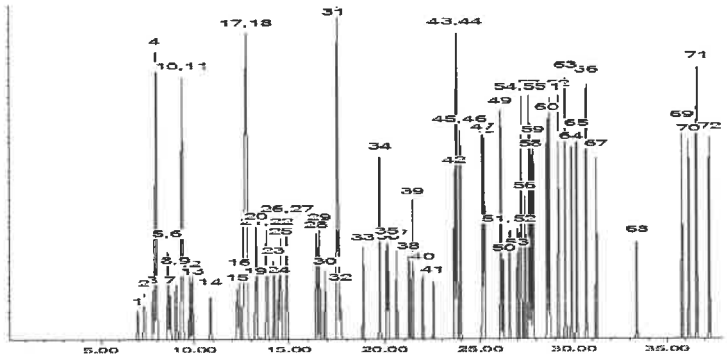
Carrier Gas:
helium-constant pressure 30 psi

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.

Tom Suckar - Mix Technician

Date Mixed: 07-Apr-2020 **Balance:** B707717271

Peng-Yan Lo - QC Analyst

Date Passed: 13-Apr-2020

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

Reagent

MV-CUS17739_00009

ISO 17034

Agilent
Trusted Answers

Reference Material Certificate

Product Name: Custom Standard
Product Number: CUS-17739
Storage Conditions: Store Frozen (-25° to -10°C).

Lot Number: 0006631594
Lot Issue Date: 27-Aug-2021
Expiration Date: 30-Sep-2023

Component Name	CERTIFIED VALUES Concentration	Expanded Uncertainty	CAS#	Analyte Lot
1-chlorohexane	1004	± 5 µg/mL	000544-10-5	RM15291
2-pentanone	4018	± 20 µg/mL	000107-87-9	RM13478
sec-butanol	30102	± 151 µg/mL	000078-92-2	RM01299

Matrix: methanol (purge & trap grade)

Description:
This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard 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 above.

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 analytical reference standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

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.

Safety:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this analytical reference material.

Intended Use:
This analytical reference standard 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.

Expiration of Certification:

Rec'd 11/7/21

CSD-QA-015.1

The certification of this analytical reference standard is valid until the expiration date specified above, provided the material is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the material 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

Reagent

MV-CUS17739_00011

ISO 17034

Agilent
Trusted Answers

Reference Material Certificate

Product Name: Custom Standard
Product Number: CUS-17739
Storage Conditions: Store Frozen (-25° to -10°C).

Lot Number: 0006631594
Lot Issue Date: 27-Aug-2021
Expiration Date: 30-Sep-2023

Component Name	CERTIFIED VALUES Concentration		Expanded Uncertainty	CAS#	Analyte Lot
1-chlorohexane	1004	±	5 µg/mL	000544-10-5	RM15291
2-pentanone	4018	±	20 µg/mL	000107-87-9	RM13478
sec-butanol	30102	±	151 µg/mL	000078-92-2	RM01299

Matrix: methanol (purge & trap grade)

Description:
This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard 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 above.

Traceability:
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Homogeneity:
This analytical reference standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

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.

Safety:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this analytical reference material.

Intended Use:
This analytical reference standard 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.

Expiration of Certification:

Revd 2/22

CSD-QA-015.1

The certification of this analytical reference standard is valid until the expiration date specified above, provided the material is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the material 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

Reagent

mv-IS/SS Tune_00001

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

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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)

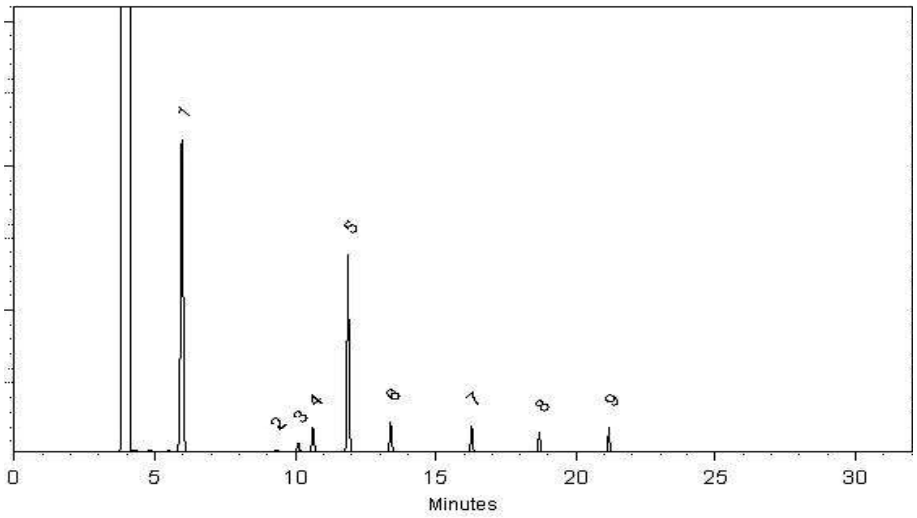
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

n-Octacosane_00002

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. : 31672 **Lot No.:** A0182548

Description : Octacosane Standard

Octacosane Std 10, 000µg/mL, Methylene Chloride, 1mL/ampul

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

Expiration Date : April 30, 2029 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	n-Octacosane (C28)	10,015.0 µg/mL	+/- 92.6807 µg/mL	Gravimetric
	CAS # 630-02-4 (Lot BCCG0084)		+/- 258.7688 µg/mL	Unstressed
	Purity 99%		+/- 306.6005 µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

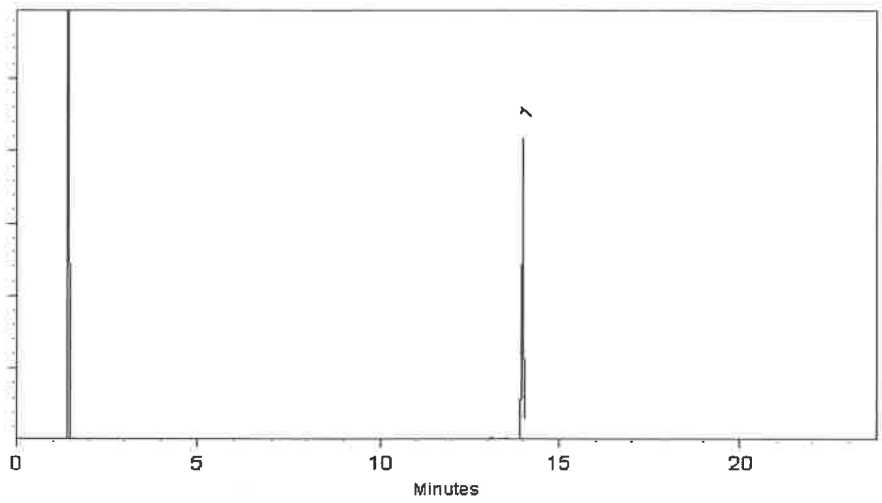
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



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

Jess Hoy - Operations Tech I

Date Mixed: 04-Mar-2022 **Balance:** B345965662

Clara Windle - Operations Technician I

Date Passed: 09-Mar-2022

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

Reagent

NH3 ICV STD_00032

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Ion Chromatography Solution
Catalog Number:	ICNNH41
Lot Number:	N2-NH669544
Matrix:	H2O
Value / Analyte(s):	1 000 µg/mL ea: Ammonium as N
Starting Material:	Ammonium chloride
Starting Material Lot#:	1736
Starting Material Purity:	99.0000%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1002 ± 3 µg/mL

Density: 0.999 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **1005 ± 3 µg/mL**
IC Assay NIST SRM 194a Lot Number: 194a

Assay Method #2 **997 ± 3 µg/mL**
Fajans NIST SRM 999c Lot Number: 999c

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2 (u_{char\ a})^2 + (w_b)^2 (u_{char\ b})^2]^{½}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

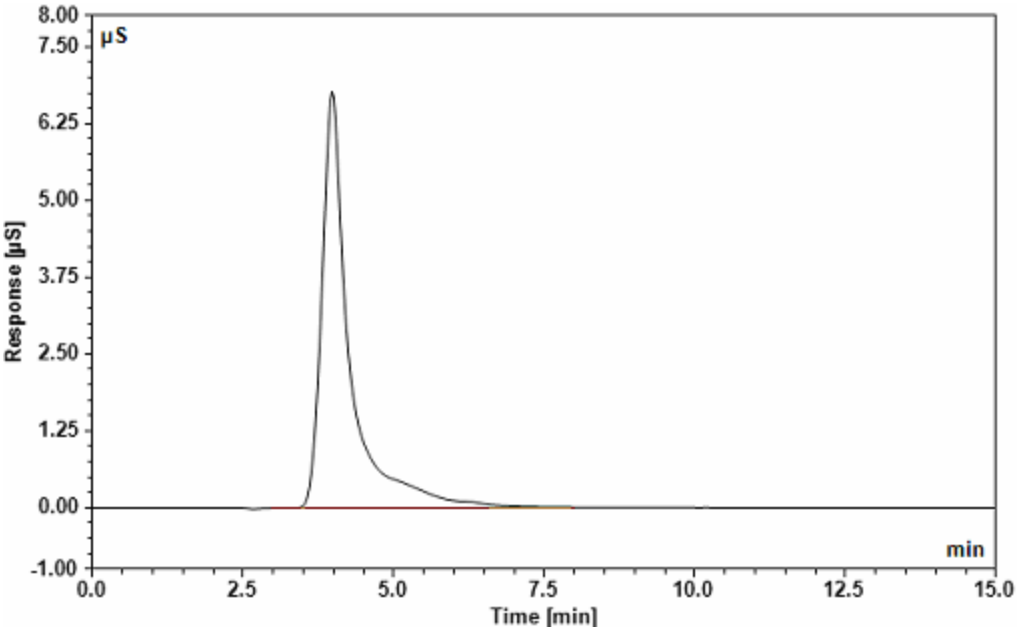
4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 CHROMATOGRAM



Dionex ICS-2000 Ion Chromatograph

Analytical Column:	IonPac CS18 2 x 250 mm	**Eluent:**	10 mM MSA
Guard Column:	IonPac CG18 2 x 50 mm	**Eluent Flow Rate:**	0.25 mL/min
Anion Self Regen Suppressor/ Chemical Suppression:	N/A	**Column Temp:**	35 °C
		Cell Temp:	35 °C
Cation Self Regen Suppressor/ Chemical Suppression:	CERS 500 2mm	**Scale X-Axis:**	minutes
		Scale Y-Axis:	8 µS/cm
		Concentration:	10 µg/g
Suppressor Current/ Chemical Suppressant:	8 mA		

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 01, 2018

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 01, 2022**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

James King Jr
Chemist, Technical Manager



Certificate Approved By:

Michael Booth
Supervisor, Quality Control



Certifying Officer:

Paul Gaines
CEO, Senior Technical Director



Reagent

NOXT Cal STD_00025

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: 2104E50 **Product Number:** 5459

Manufacture Date: APR 19, 2021
Expiration Date: OCT 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
5459-4	120 mL natural poly	18 months

Recommended Storage: 15°C - 30°C (59°F - 86°F)

Kerry Kingsbury (04/19/2021)
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

PicricARestek_00102

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.:** A0175186

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 : August 31, 2026 **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	1,006.0 µg/mL	+/- 5.9753	µg/mL	Gravimetric
	CAS # 88-89-1 (Lot 06130CU)		+/- 55.1117	µg/mL	Unstressed
	Purity 99%		+/- 64.2657	µg/mL	Stressed

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

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

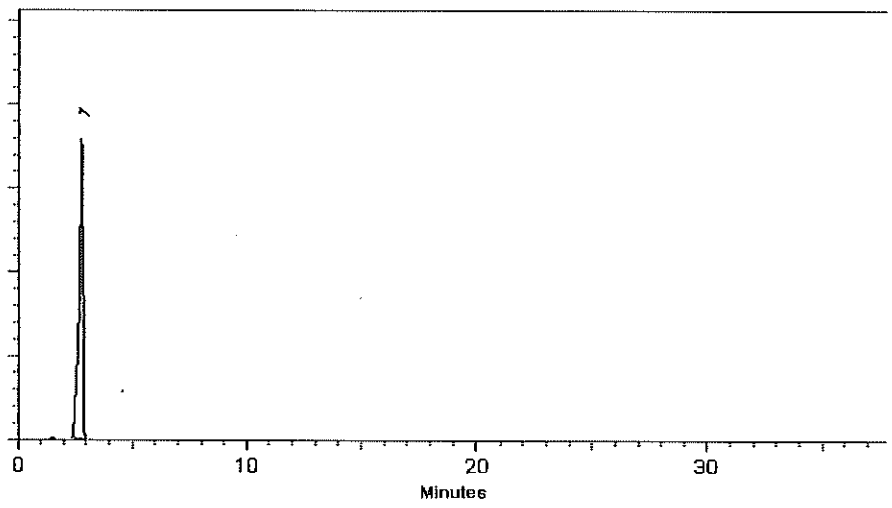
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 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.

Lane Kibe - Mix Technician

Date Mixed: 06-Aug-2021 **Balance:** B345965662

Alexis Shelow - Operations Tech I

Date Passed: 10-Aug-2021

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

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

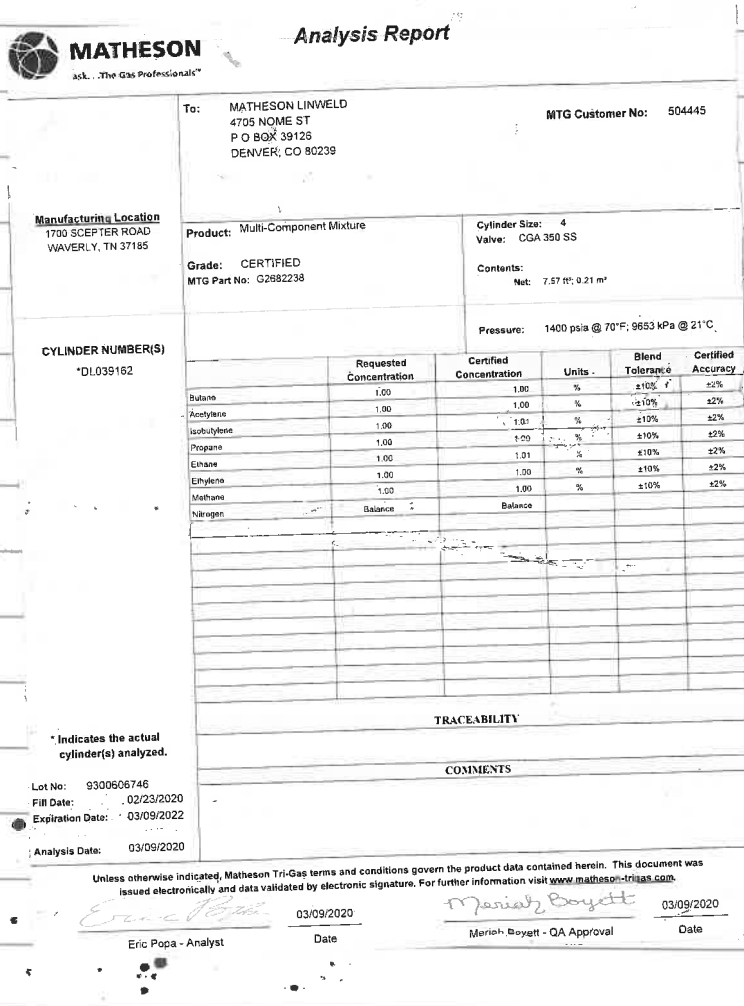
Notes:MANUFACTURE DATE 4-16-2019
PO# P481562
P/N 22562

Impurities verified against analytical standards traceable to NIST by weight and/or analysis.

Approved for Release

Reagent

RSK7gasMathes_00031



MATHESON
ask. . .The Gas Professionals™

Analysis Report

To: MATHESON LINWELD
4705 NOME ST
P O BOX 39126
DENVER, CO 80239

MTG Customer No: 504445

Manufacturing Location
1700 SCEPTER ROAD
WAVERLY, TN 37185

Product: Multi-Component Mixture
Grade: CERTIFIED
MTG Part No: G2682238

Cylinder Size: 4
Valve: CGA 350 SS
Contents:
Net: 7.57 ft³; 0.21 m³

Pressure: 1400 psia @ 70°F; 9653 kPa @ 21°C

CYLINDER NUMBER(S)
*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

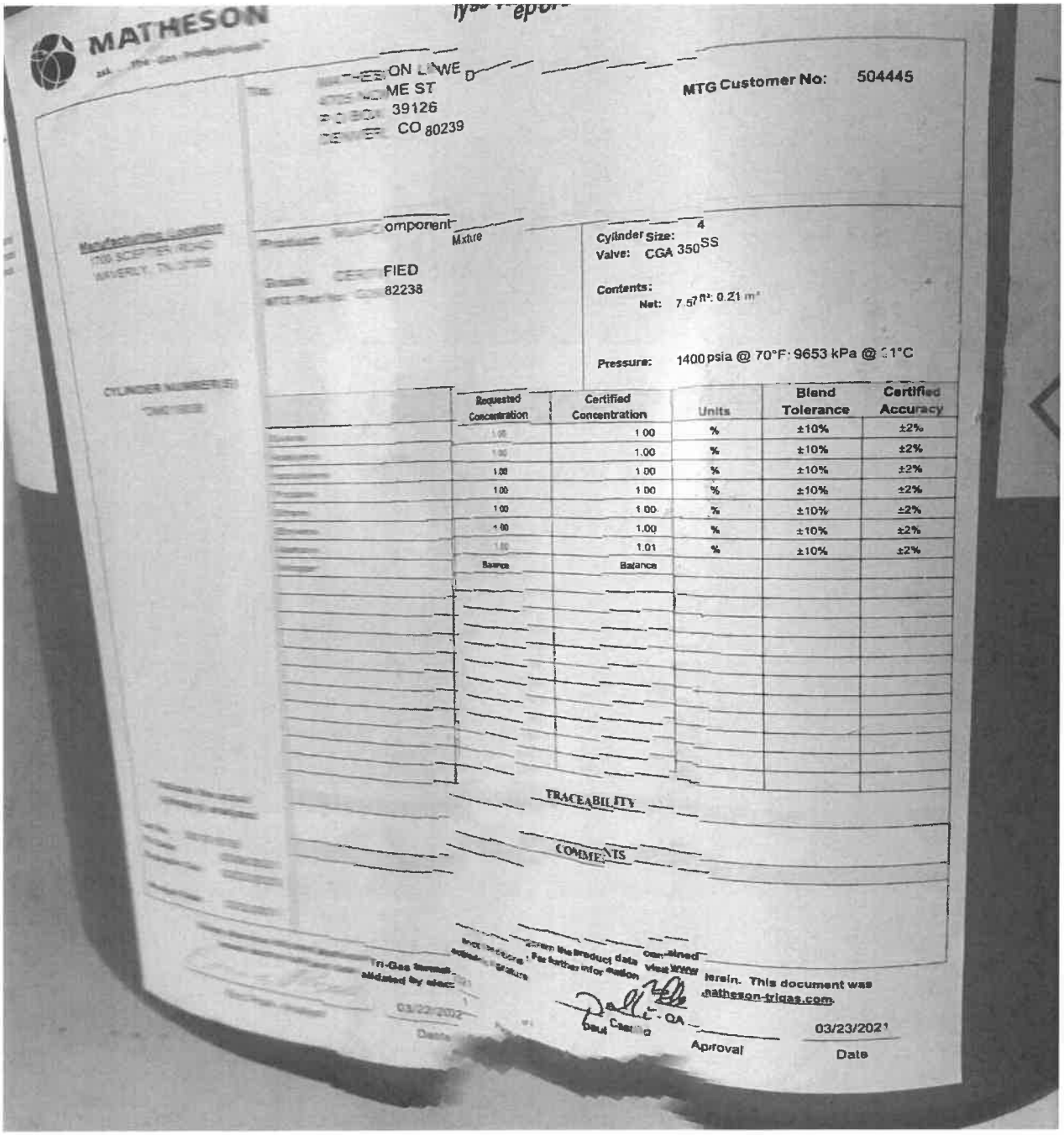
Unless otherwise indicated, Matheson Tri-Gas terms and conditions govern the product data contained herein. This document was issued electronically and data validated by electronic signature. For further information visit www.matheson-trigas.com.

Eric Popa - Analyst — 03/09/2020 Date

Meriah Boyett - QA Approval — 03/09/2020 Date

Reagent

RSK7gasMathes_00034



MATHESON

ON LIWE D
ME ST
39126
CO 80239

MTG Customer No: 504445

Manufacturing Location:
1700 SCEPTER ROAD
WAVERLY, TN 37185

Product: Multi-Component Mixture

Grade: CERTIFIED
MTG Part No: 82238

Cylinder Size: 4
Valve: CGA 350SS

Contents:
Net: 7.57 ft³: 0.21 m³

Pressure: 1400 psia @ 70°F: 9653 kPa @ 21°C

CYLINDER NUMBER(S)

	Requested Concentration	Certified Concentration	Units	Blend Tolerance	Certified Accuracy
[illegible]	1.00	1.00	%	±10%	±2%
[illegible]	1.00	1.00	%	±10%	±2%
[illegible]	1.00	1.00	%	±10%	±2%
[illegible]	1.00	1.00	%	±10%	±2%
[illegible]	1.00	1.00	%	±10%	±2%
[illegible]	1.00	1.00	%	±10%	±2%
[illegible]	1.00	1.01	%	±10%	±2%
[illegible]	Balance	Balance			

TRACEABILITY

COMMENTS

Tri-Gas formula
validated by elec

03/22/2021
Date

Paul Castillo - QA
Approval

03/23/2021
Date

Tri-Gas formula ... Scan the product data contained ... For further information visit www.matheson-trigas.com.

...terein. This document was ...matheson-trigas.com.

MTG Part No: [illegible]

Net: [illegible]

Pressure: 1400 psia @ 70°F; 9653 kPa @ 21°C

CYLINDER NUMBER(S)

*DM019038

	Requested Concentration	Certified Concentration	Units	Blend Tolerance	Certified Accuracy
Butane	1.00	1.00	%	±10%	±2%
Acetylene	1.00	1.00	%	±10%	±2%
Isobutylene	1.00	1.00	%	±10%	±2%
Propane	1.00	1.00	%	±10%	±2%
Ethane	1.00	1.00	%	±10%	±2%
Ethylene	1.00	1.00	%	±10%	±2%
Methane	1.00	1.01	%	±10%	±2%
Nitrogen	Balance	Balance			

TRACEABILITY

COMMENTS

*** indicates the actual cylinder(s) analyzed.**

Lot No: 9301615705
Fill Date: 03/08/2021
Expiration Date: 03/22/2023

Analysis Date: 03/22/2021

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 — 03/22/2021 (Date)

Paul Castillo - QA Approval — 03/23/2021 (Date)

Page 1 of 1

[redacted]

Reagent

TKN CAL STD_00019

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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 ISO 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_00049

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: 1201B45 **Product Number:** 1847

Manufacture Date: JAN 24, 2022

Expiration Date: JAN 2023

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

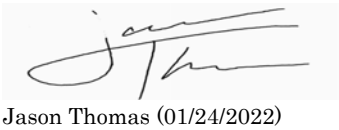
Test	Specification	Result
Appearance	Colorless liquid	Passed
Carbon (C)	995-1005 ppm	1000 ppm

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
1847-4	120 mL amber glass	12 months

Recommended Storage: 15°C - 30°C (59°F - 86°F)



Jason Thomas (01/24/2022)

Operations Manager

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_00054

ISO 17034

Agilent
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Reference Material Certificate

Product Name: Total Organic Carbon (TOC) Standard
Product Number: IQC-106
Storage Conditions: Store at Room Temperature (15° to 30°C).

Lot Number: 0006645841
Lot Issue Date: 12-Nov-2021
Expiration Date: 31-Dec-2023

Component Name	CERTIFIED VALUES Concentration	Expanded Uncertainty	CAS#	Analyte Lot
potassium hydrogen phthalate (KHP) (as TOC)	1002	± 5 mg/L	000877-24-7	RM19275

Matrix: water (low TOC, < 50 ppb)

Description:
This document is prepared in accordance with ISO 17034 and Guide 31. 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.

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 analytical reference standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

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.

Safety:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this analytical reference material.

Intended Use:
This analytical reference standard 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.

Expiration of Certification:
The certification of this analytical reference standard is valid until the expiration date specified above, provided the material is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the material 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

Method 8260B

Volatile Organic Compounds (GC/MS) by Method 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-162622-1

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 #
SHGW02-22A	280-162622-19	101	101	102	109
SHGW05-22A	280-162622-20	98	98	101	111
G0053-22A	280-162622-21	100	99	102	110
G0069-22A	280-162622-22	99	100	104	108
5-18 TB	280-162622-23	101	101	103	108
SHGW04-22A	280-162622-24	101	98	102	111
SHGW03-22A	280-162622-25	103	101	101	110
SAMW1-22A	280-162622-26	100	101	104	106
	MB 280-576482/9	101	101	100	108
	LCS 280-576482/1002	97	96	102	110
	LCSD 280-576482/5	95	97	103	108

	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 Denver Job No.: 280-162622-1

SDG No.:

Matrix: Water Level: Low Lab File ID: MS1_6845b-LCS.d

Lab ID: LCS 280-576482/1002 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	50.0	46.8	94	74-131	
1,1,2,2-Tetrachloroethane	50.0	48.4	97	71-121	
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	43.2	86	70-136	
1,1,2-Trichloroethane	50.0	50.1	100	80-119	
1,1-Dichloroethane	50.0	44.8	90	77-125	
1,1-Dichloroethene	50.0	43.8	88	71-131	
1,2,3-Trichlorobenzene	50.0	41.3	83	69-129	
1,2,4-Trichlorobenzene	50.0	42.8	86	69-130	
1,2-Dibromo-3-Chloropropane	50.0	43.0	86	62-128	
1,2-Dichlorobenzene	50.0	47.1	94	80-119	
1,2-Dichloroethane	50.0	44.7	89	73-128	
1,2-Dichloropropane	50.0	47.5	95	78-122	
1,3-Dichlorobenzene	50.0	47.6	95	80-119	
1,4-Dichlorobenzene	50.0	46.3	93	79-118	
2-Butanone (MEK)	200	202	101	56-143	
2-Hexanone	200	200	100	57-139	
4-Methyl-2-pentanone (MIBK)	200	204	102	67-130	
Acetone	200	174	87	39-160	
Benzene	50.0	46.7	93	79-120	
Bromochloromethane	50.0	43.3	87	78-123	
Bromodichloromethane	50.0	47.9	96	79-125	
Bromoform	50.0	46.5	93	66-130	
Bromomethane	50.0	53.9	108	53-141	
Carbon disulfide	50.0	42.7	85	64-133	
Carbon tetrachloride	50.0	46.1	92	72-136	
Chlorobenzene	50.0	46.9	94	82-118	
Chloroethane	50.0	54.0	108	60-138	
Chloroform	50.0	46.8	94	79-124	
Chloromethane	50.0	46.1	92	50-139	
cis-1,2-Dichloroethene	50.0	47.7	95	78-123	
cis-1,3-Dichloropropene	50.0	46.4	93	75-124	
Cyclohexane	50.0	45.1	90	71-130	
Dibromochloromethane	50.0	49.7	99	74-126	
Dichlorodifluoromethane	50.0	48.1	96	32-152	
Ethylbenzene	50.0	47.0	94	79-121	
Ethylene Dibromide	50.0	48.5	97	77-121	
Isopropylbenzene	50.0	52.1	104	72-131	
Methyl acetate	100	95.1	95	56-136	
Methyl tert-butyl ether	50.0	52.0	104	71-124	
Methylcyclohexane	50.0	45.3	91	72-132	
Methylene Chloride	50.0	43.2	86	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 Denver Job No.: 280-162622-1

SDG No.:

Matrix: Water Level: Low Lab File ID: MS1_6845b-LCS.d

Lab ID: LCS 280-576482/1002 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Styrene	50.0	51.4	103	78-123	
Tetrachloroethene	50.0	42.8	86	74-129	
Toluene	50.0	47.0	94	80-121	
trans-1,2-Dichloroethene	50.0	46.0	92	75-124	
trans-1,3-Dichloropropene	50.0	50.1	100	73-127	
Trichloroethene	50.0	46.5	93	79-123	
Trichlorofluoromethane	50.0	50.8	102	65-141	
Vinyl chloride	50.0	45.8	92	58-137	
Xylenes, Total	100	96.0	96	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 Denver Job No.: 280-162622-1

SDG No.:

Matrix: Water Level: Low Lab File ID: MS1_6847.D

Lab ID: LCSD 280-576482/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	50.0	52.4	105	11	20	74-131	
1,1,2,2-Tetrachloroethane	50.0	50.0	100	3	20	71-121	
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	52.1	104	19	20	70-136	
1,1,2-Trichloroethane	50.0	48.1	96	4	20	80-119	
1,1-Dichloroethane	50.0	48.1	96	7	20	77-125	
1,1-Dichloroethene	50.0	52.8	106	19	20	71-131	
1,2,3-Trichlorobenzene	50.0	39.3	79	5	20	69-129	
1,2,4-Trichlorobenzene	50.0	44.5	89	4	20	69-130	
1,2-Dibromo-3-Chloropropane	50.0	44.0	88	2	20	62-128	
1,2-Dichlorobenzene	50.0	47.6	95	1	20	80-119	
1,2-Dichloroethane	50.0	44.3	89	1	20	73-128	
1,2-Dichloropropane	50.0	49.2	98	3	20	78-122	
1,3-Dichlorobenzene	50.0	49.9	100	5	20	80-119	
1,4-Dichlorobenzene	50.0	47.7	95	3	20	79-118	
2-Butanone (MEK)	200	189	95	6	20	56-143	
2-Hexanone	200	190	95	5	20	57-139	
4-Methyl-2-pentanone (MIBK)	200	190	95	7	20	67-130	
Acetone	200	164	82	6	20	39-160	
Benzene	50.0	50.7	101	8	20	79-120	
Bromochloromethane	50.0	42.8	86	1	20	78-123	
Bromodichloromethane	50.0	48.4	97	1	20	79-125	
Bromoform	50.0	47.2	94	2	20	66-130	
Bromomethane	50.0	52.1	104	3	20	53-141	
Carbon disulfide	50.0	50.6	101	17	20	64-133	
Carbon tetrachloride	50.0	53.1	106	14	20	72-136	
Chlorobenzene	50.0	49.7	99	6	20	82-118	
Chloroethane	50.0	51.4	103	5	20	60-138	
Chloroform	50.0	50.4	101	7	20	79-124	
Chloromethane	50.0	45.1	90	2	20	50-139	
cis-1,2-Dichloroethene	50.0	51.3	103	7	20	78-123	
cis-1,3-Dichloropropene	50.0	49.4	99	6	20	75-124	
Cyclohexane	50.0	54.3	109	19	20	71-130	
Dibromochloromethane	50.0	50.0	100	1	20	74-126	
Dichlorodifluoromethane	50.0	45.8	92	5	20	32-152	
Ethylbenzene	50.0	51.3	103	9	20	79-121	
Ethylene Dibromide	50.0	49.9	100	3	20	77-121	
Isopropylbenzene	50.0	57.0	114	9	20	72-131	
Methyl acetate	100	89.4	89	6	20	56-136	
Methyl tert-butyl ether	50.0	51.9	104	0	20	71-124	
Methylcyclohexane	50.0	55.6	111	20	20	72-132	
Methylene Chloride	50.0	47.1	94	9	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 Denver Job No.: 280-162622-1

SDG No.:

Matrix: Water Level: Low Lab File ID: MS1_6847.D

Lab ID: LCSD 280-576482/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Styrene	50.0	53.6	107	4	20	78-123	
Tetrachloroethene	50.0	49.8	100	15	20	74-129	
Toluene	50.0	51.2	102	9	20	80-121	
trans-1,2-Dichloroethene	50.0	50.6	101	9	20	75-124	
trans-1,3-Dichloropropene	50.0	52.5	105	5	20	73-127	
Trichloroethene	50.0	51.1	102	10	20	79-123	
Trichlorofluoromethane	50.0	50.9	102	0	20	65-141	
Vinyl chloride	50.0	44.3	89	3	20	58-137	
Xylenes, Total	100	104	104	8	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 Denver Job No.: 280-162622-1

SDG No.:

Lab File ID: MS1_6850.D Lab Sample ID: MB 280-576482/9

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: VMS_MS1 Date Analyzed: 05/27/2022 20:24

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 280-576482/1002	MS1_6845b-LCS.d	05/27/2022 18:02
	LCSD 280-576482/5	MS1_6847.D	05/27/2022 19:21
5-18 TB	280-162622-23	MS1_6853.D	05/27/2022 21:27
SHGW02-22A	280-162622-19	MS1_6859.D	05/27/2022 23:34
SHGW05-22A	280-162622-20	MS1_6860.D	05/27/2022 23:55
G0053-22A	280-162622-21	MS1_6861.D	05/28/2022 00:16
G0069-22A	280-162622-22	MS1_6862.D	05/28/2022 00:38
SHGW04-22A	280-162622-24	MS1_6863.D	05/28/2022 00:59
SHGW03-22A	280-162622-25	MS1_6864.D	05/28/2022 01:20
SAMW1-22A	280-162622-26	MS1_6865.D	05/28/2022 01:41

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab File ID: MS1_2510.D BFB Injection Date: 02/16/2022

Instrument ID: VMS_MS1 BFB Injection Time: 14:18

Analysis Batch No.: 566025

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	22.7	
75	30.0 - 60.0 % of mass 95	54.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.4	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	Greater than 50% of mass 95	70.6	
175	5.0 - 9.0 % of mass 174	5.5	(7.8) 1
176	95.0 - 101.0 % of mass 174	68.2	(96.7) 1
177	5.0 - 9.0 % of mass 176	4.5	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 280-566025/14	MS1_2511.D	02/16/2022	14:56
	IC 280-566025/15	MS1_2512.D	02/16/2022	15:18
	IC 280-566025/16	MS1_2513.D	02/16/2022	15:39
	IC 280-566025/17	MS1_2514.D	02/16/2022	16:01
	IC 280-566025/18	MS1_2515.D	02/16/2022	16:22
	ICIS 280-566025/19	MS1_2516.D	02/16/2022	16:43
	IC 280-566025/20	MS1_2517.D	02/16/2022	17:04
	IC 280-566025/21	MS1_2518.D	02/16/2022	17:26
	IC 280-566025/22	MS1_2519.D	02/16/2022	17:47
	ICV 280-566025/32	MS1_2529.D	02/16/2022	21:21

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab File ID: MS1_5802.D BFB Injection Date: 05/05/2022

Instrument ID: VMS_MS1 BFB Injection Time: 14:14

Analysis Batch No.: 574012

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	24.7	
75	30.0 - 60.0 % of mass 95	58.8	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.7	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	Greater than 50% of mass 95	65.1	
175	5.0 - 9.0 % of mass 174	5.3	(8.2) 1
176	95.0 - 101.0 % of mass 174	63.8	(98.0) 1
177	5.0 - 9.0 % of mass 176	4.0	(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
	IC 280-574012/35	MS1_5803.D	05/05/2022	14:42
	IC 280-574012/36	MS1_5804.D	05/05/2022	15:04
	IC 280-574012/37	MS1_5805.D	05/05/2022	15:25
	IC 280-574012/38	MS1_5806.D	05/05/2022	15:46
	IC 280-574012/39	MS1_5807.D	05/05/2022	16:07
	ICIS 280-574012/40	MS1_5808.D	05/05/2022	16:28
	IC 280-574012/41	MS1_5809.D	05/05/2022	16:49
	IC 280-574012/42	MS1_5810.D	05/05/2022	17:10
	IC 280-574012/43	MS1_5811.D	05/05/2022	17:32
	ICV 280-574012/44	MS1_5812.D	05/05/2022	17:53

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab File ID: MS1_6845A.D BFB Injection Date: 05/27/2022

Instrument ID: VMS_MS1 BFB Injection Time: 18:02

Analysis Batch No.: 576482

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	19.0	
75	30.0 - 60.0 % of mass 95	51.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.4	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	Greater than 50% of mass 95	77.1	
175	5.0 - 9.0 % of mass 174	6.1	(7.9) 1
176	95.0 - 101.0 % of mass 174	73.3	(95.2) 1
177	5.0 - 9.0 % of mass 176	4.6	(6.2) 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 280-576482/2	MS1_6845b.D	05/27/2022	18:02
	LCS 280-576482/1002	MS1_6845b-LCS	05/27/2022	18:02
	LCSD 280-576482/5	MS1_6847.D	05/27/2022	19:21
	MB 280-576482/9	MS1_6850.D	05/27/2022	20:24
5-18 TB	280-162622-23	MS1_6853.D	05/27/2022	21:27
SHGW02-22A	280-162622-19	MS1_6859.D	05/27/2022	23:34
SHGW05-22A	280-162622-20	MS1_6860.D	05/27/2022	23:55
G0053-22A	280-162622-21	MS1_6861.D	05/28/2022	0:16
G0069-22A	280-162622-22	MS1_6862.D	05/28/2022	0:38
SHGW04-22A	280-162622-24	MS1_6863.D	05/28/2022	0:59
SHGW03-22A	280-162622-25	MS1_6864.D	05/28/2022	1:20
SAMW1-22A	280-162622-26	MS1_6865.D	05/28/2022	1:41
	CCVC 280-576482/33	MS1_6871.D	05/28/2022	3:49

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Sample No.: ICIS 280-566025/19 Date Analyzed: 02/16/2022 16:43

Instrument ID: VMS_MS1 GC Column: DB-624 (60.25) ID: 0.25(mm)

Lab File ID (Standard): MS1_2516.D Heated Purge: (Y/N) N

Calibration ID: 62277

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1674350	5.80	375417	8.52	653680	10.80
UPPER LIMIT		3348700	6.30	750834	9.02	1307360	11.30
LOWER LIMIT		837175	5.30	187709	8.02	326840	10.30
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 280-566025/32		1698642	5.80	352765	8.52	599264	10.80

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 VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Sample No.: ICIS 280-574012/40 Date Analyzed: 05/05/2022 16:28

Instrument ID: VMS_MS1 GC Column: DB-624 (60.25) ID: 0.25(mm)

Lab File ID (Standard): MS1_5808.D Heated Purge: (Y/N) N

Calibration ID: 65315

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1327574	5.79	305154	8.52	513820	10.79
UPPER LIMIT		2655148	6.29	610308	9.02	1027640	11.29
LOWER LIMIT		663787	5.29	152577	8.02	256910	10.29
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 280-574012/44		1376257	5.79	328356	8.52	546165	10.79
CCV 280-576482/2		1168464	5.79	268060	8.52	434742	10.79
LCS 280-576482/1002		1168464	5.79	268060	8.52	434742	10.79
LCSD 280-576482/5		1203909	5.79	275560	8.52	450344	10.79
MB 280-576482/9		1111144	5.79	275063	8.52	440130	10.79
280-162622-23	5-18 TB	1108840	5.79	265917	8.52	432360	10.79
280-162622-19	SHGW02-22A	984924	5.79	242921	8.52	398050	10.79
280-162622-20	SHGW05-22A	1032997	5.79	250803	8.52	402407	10.79
280-162622-21	G0053-22A	1130033	5.79	273511	8.52	438794	10.79
280-162622-22	G0069-22A	1089804	5.79	260653	8.52	424446	10.79
280-162622-24	SHGW04-22A	1073604	5.79	260409	8.52	418223	10.79
280-162622-25	SHGW03-22A	1107606	5.79	273117	8.52	448617	10.79
280-162622-26	SAMW1-22A	1102078	5.79	264065	8.52	438728	10.79
CCVC 280-576482/33		1185305	5.79	279557	8.52	450890	10.79

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 Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: SHGW02-22A | Lab Sample ID: 280-162622-19

Matrix: Water | Lab File ID: MS1_6859.D

Analysis Method: 8260B | Date Collected: 05/18/2022 09:05

Sample wt/vol: 5(mL) | Date Analyzed: 05/27/2022 23:34

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 576482 | 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	3.1		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)	41		6.0	4.0	2.0
591-78-6	2-Hexanone	60		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	40		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	0.90	U	1.0	0.90	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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: SHGW02-22A | Lab Sample ID: 280-162622-19

Matrix: Water | Lab File ID: MS1_6859.D

Analysis Method: 8260B | Date Collected: 05/18/2022 09:05

Sample wt/vol: 5(mL) | Date Analyzed: 05/27/2022 23:34

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 576482 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
75-71-8	Dichlorodifluoromethane	0.80	U Q	2.0	0.80	0.31
100-41-4	Ethylbenzene	0.40	U	1.0	0.40	0.16
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)	101		81-118
460-00-4	4-Bromofluorobenzene (Surr)	109		85-114
1868-53-7	Dibromofluoromethane (Surr)	101		80-119
2037-26-5	Toluene-d8 (Surr)	102		89-112

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6859.D
Lims ID: 280-162622-D-19
Client ID: SHGW02-22A
Sample Type: Client
Inject. Date: 27-May-2022 23:34:30 ALS Bottle#: 13 Worklist Smp#: 21
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-162622-D-19
Misc. Info.: 280-0111427-021
Operator ID: burkes Instrument ID: VMS_MS1

Method: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 28-May-2022 07:16:15 Calib Date: 05-May-2022 17:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5811.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1675

First Level Reviewer: sunleec Date: 28-May-2022 07:07:43

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.794	5.794	0.000	99	984924	50.0	
*	2 Chlorobenzene-d5	119	8.517	8.517	0.000	87	242921	50.0	
*	3 1,4-Dichlorobenzene-d4	152	10.794	10.794	0.000	96	398050	50.0	
*	4 Fluorobenzene (IS)	96		0.000				ND	
$	5 Dibromofluoromethane (Surr)	111	5.221	5.221	0.000	92	265511	50.5	
$	6 1,2-Dichloroethane-d4 (Surr)	65	5.515	5.514	0.001	0	306981	50.6	
$	7 Toluene-d8 (Surr)	98	7.177	7.176	0.001	94	1011891	51.1	
$	8 4-Bromofluorobenzene (Surr)	95	9.649	9.648	0.001	87	382398	54.6	
	11 Dichlorodifluoromethane	85		1.674				ND	
	12 Chloromethane	50		1.869				ND	
	13 Vinyl chloride	62		1.967				ND	
	15 Bromomethane	94		2.316				ND	
	16 Chloroethane	64		2.428				ND	
	18 Trichlorofluoromethane	101		2.679				ND	
	23 1,1-Dichloroethene	96		3.196				ND	
	24 112TCTFE	151	3.196	3.196	0.000	92	7592	3.15	
	25 Acetone	43	3.224	3.224	0.000	99	36610	39.5	
	28 Carbon disulfide	76		3.406				ND	7
	30 Methyl acetate	43		3.517				ND	
	32 Methylene Chloride	84		3.657				ND	
	35 Methyl tert-butyl ether	73		3.894				ND	
	36 trans-1,2-Dichloroethene	96		3.908				ND	
	40 1,1-Dichloroethane	63		4.300				ND	
	46 2-Butanone (MEK)	43	4.774	4.774	0.000	100	49665	40.7	
	48 cis-1,2-Dichloroethene	96		4.788				ND	
	53 Chlorobromomethane	128		4.998				ND	
	55 Chloroform	83		5.082				ND	
	56 1,1,1-Trichloroethane	97		5.235				ND	
	57 Cyclohexane	56		5.291				ND	
	59 Carbon tetrachloride	117		5.375				ND	
	63 Benzene	78		5.543				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
64 1,2-Dichloroethane	62		5.584				ND	
68 Trichloroethene	95		6.101				ND	
70 Methylcyclohexane	55		6.311				ND	
71 1,2-Dichloropropane	63		6.325				ND	
75 Dichlorobromomethane	83		6.548				ND	
78 cis-1,3-Dichloropropene	75		6.925				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.037				ND	
82 Toluene	91		7.232				ND	
84 trans-1,3-Dichloropropene	75		7.428				ND	
87 1,1,2-Trichloroethane	97		7.610				ND	
89 Tetrachloroethene	164		7.707				ND	
91 2-Hexanone	43	7.791	7.791	0.000	98	109517	59.9	
95 Chlorodibromomethane	129		7.973				ND	
96 Ethylene Dibromide	107		8.084				ND	
99 Chlorobenzene	112		8.545				ND	
101 Ethylbenzene	106		8.629				ND	
102 m-Xylene & p-Xylene	106		8.741				ND	
103 o-Xylene	106		9.118				ND	
104 Styrene	104		9.132				ND	
106 Bromoform	173		9.327				ND	
107 Isopropylbenzene	105		9.467				ND	
110 1,1,2,2-Tetrachloroethane	83		9.760				ND	
121 1,3-Dichlorobenzene	146		10.710				ND	
123 1,4-Dichlorobenzene	146		10.822				ND	
127 1,2-Dichlorobenzene	146		11.171				ND	
128 1,2-Dibromo-3-Chloropropane	157		11.967				ND	
130 1,2,4-Trichlorobenzene	180		12.791				ND	
134 1,2,3-Trichlorobenzene	180		13.280				ND	
S 155 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00039 Amount Added: 5.00 Units: uL Run Reagent

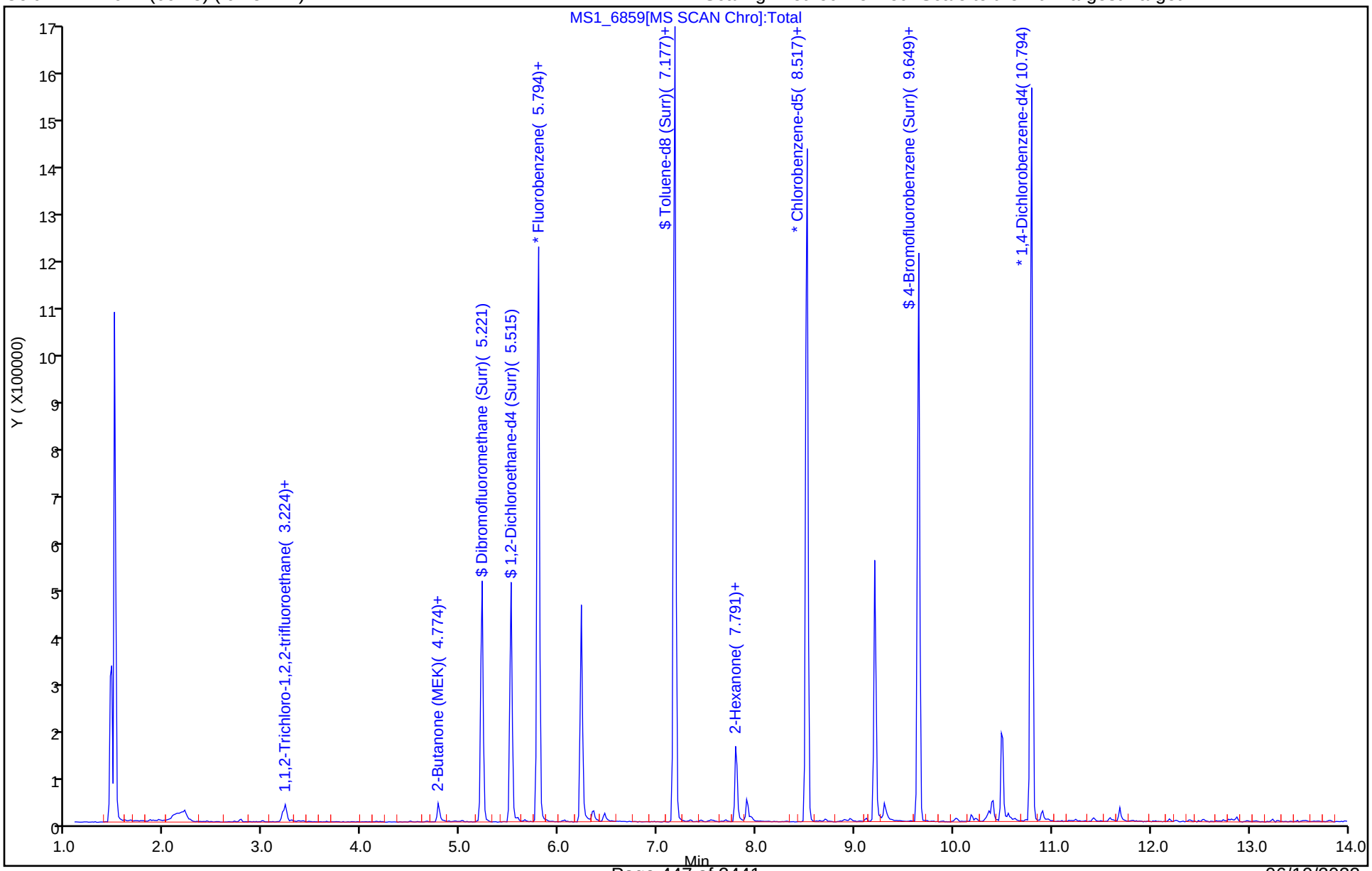
Report Date: 28-May-2022 07:16:21 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6859.D

Injection Date:	27-May-2022 23:34:30	Instrument ID:	VMS_MS1	Operator ID:	burkes
Lims ID:	280-162622-D-19	Lab Sample ID:	280-162622-19	Worklist Smp#:	21
Client ID:	SHGW02-22A				
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



Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6859.D
Lims ID: 280-162622-D-19
Client ID: SHGW02-22A
Sample Type: Client
Inject. Date: 27-May-2022 23:34:30 ALS Bottle#: 13 Worklist Smp#: 21
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-162622-D-19
Misc. Info.: 280-0111427-021
Operator ID: burkes Instrument ID: VMS_MS1

Method: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 28-May-2022 07:16:15 Calib Date: 05-May-2022 17:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5811.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1675

First Level Reviewer: sunleec Date: 28-May-2022 07:07:43

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	50.5	101.09
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	50.6	101.21
$ 7 Toluene-d8 (Surr)	50.0	51.1	102.16
$ 8 4-Bromofluorobenzene (Surr)	50.0	54.6	109.18

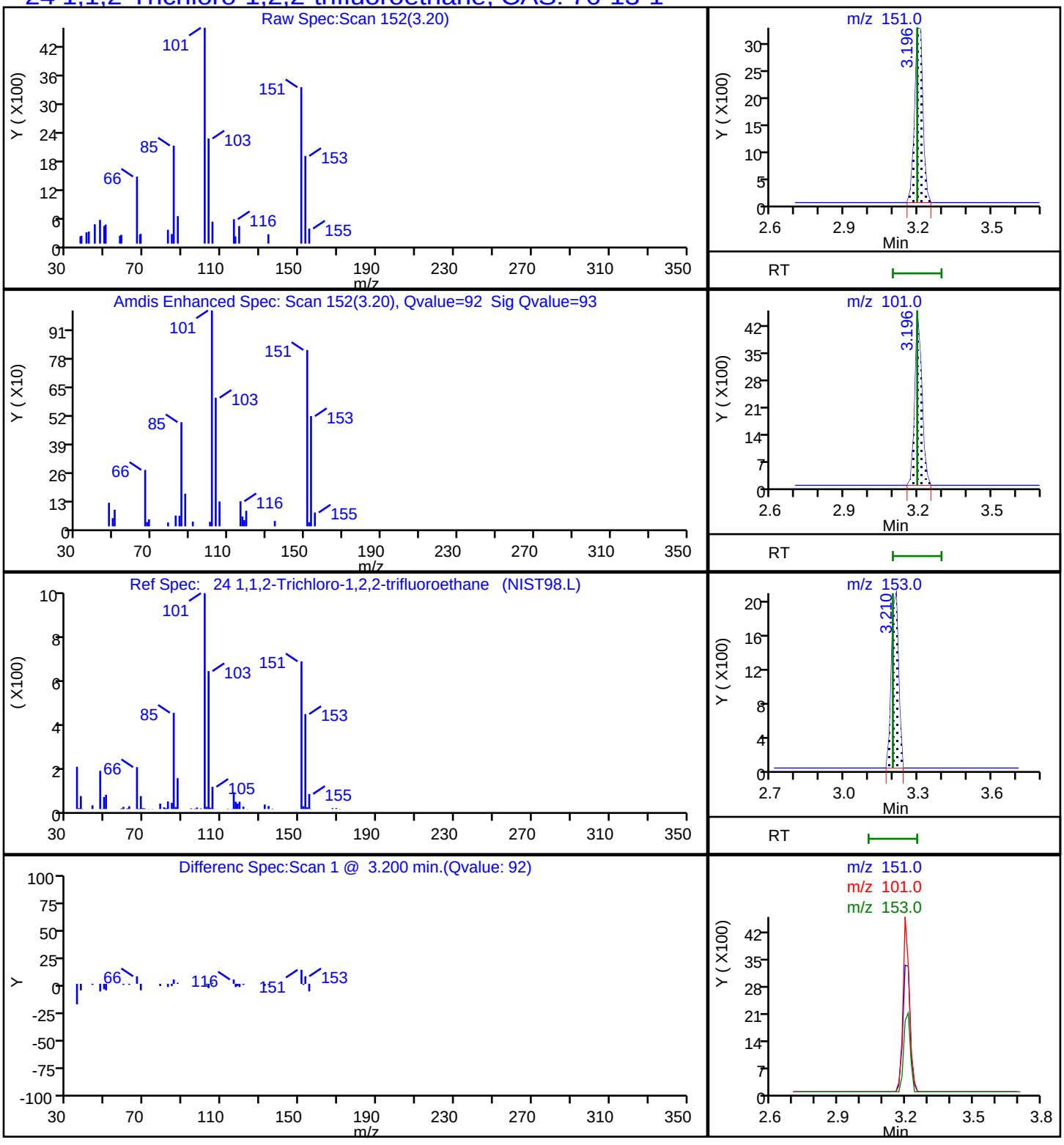
Report Date: 28-May-2022 07:16:21 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6859.D

Injection Date:	27-May-2022 23:34:30	Instrument ID:	VMS_MS1		
Lims ID:	280-162622-D-19	Lab Sample ID:	280-162622-19		
Client ID:	SHGW02-22A				
Operator ID:	burkes	ALS Bottle#:	13	Worklist Smp#:	21
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		

24 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1

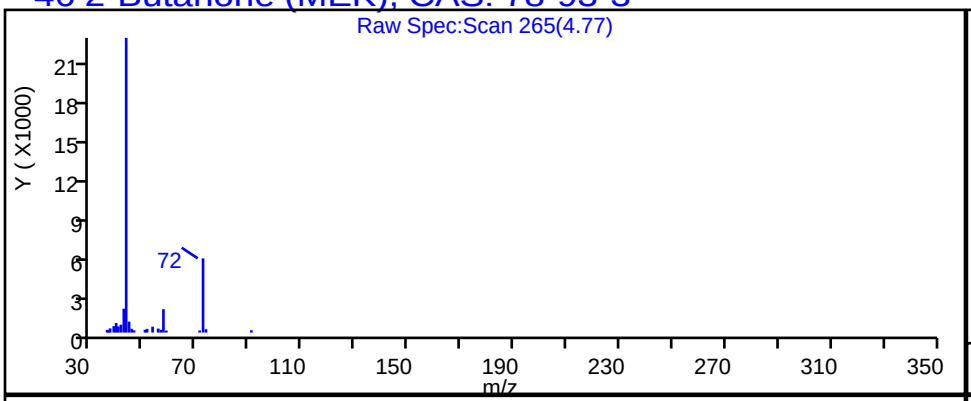


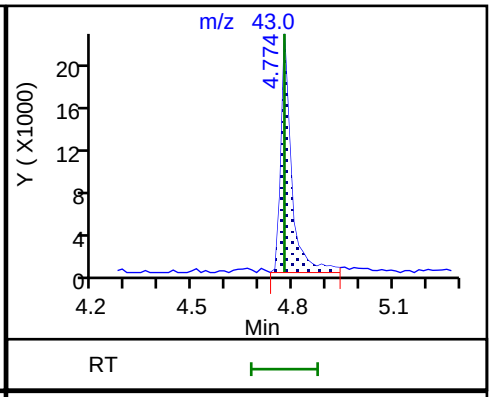
Eurofins Denver

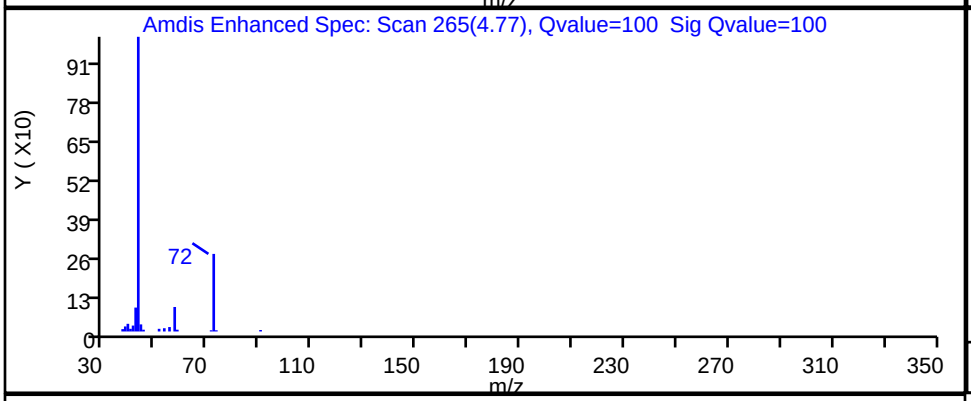
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6859.D

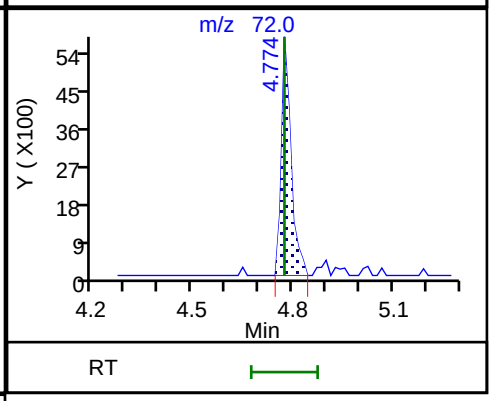
Injection Date:	27-May-2022 23:34:30	Instrument ID:	VMS_MS1
Lims ID:	280-162622-D-19	Lab Sample ID:	280-162622-19
Client ID:	SHGW02-22A		
Operator ID:	burkes	ALS Bottle#:	13 Worklist Smp#: 21
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	AQ_VMS1_8260	Limit Group:	MSV - 8260B Water and Solid
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN

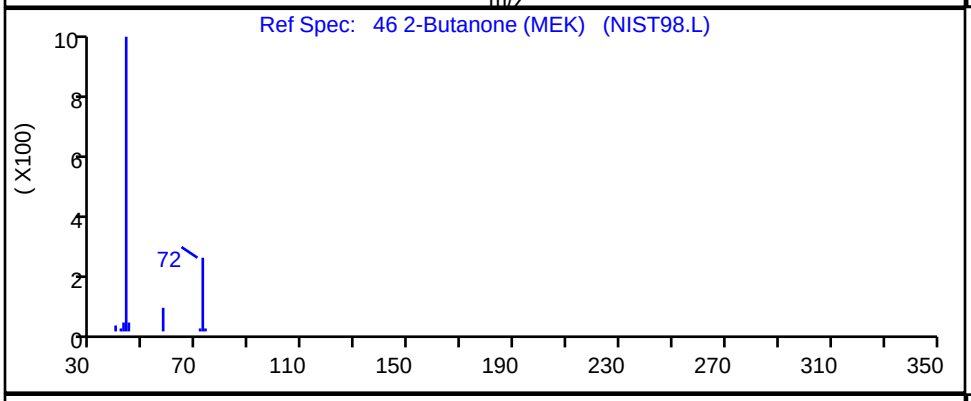
46 2-Butanone (MEK), CAS: 78-93-3

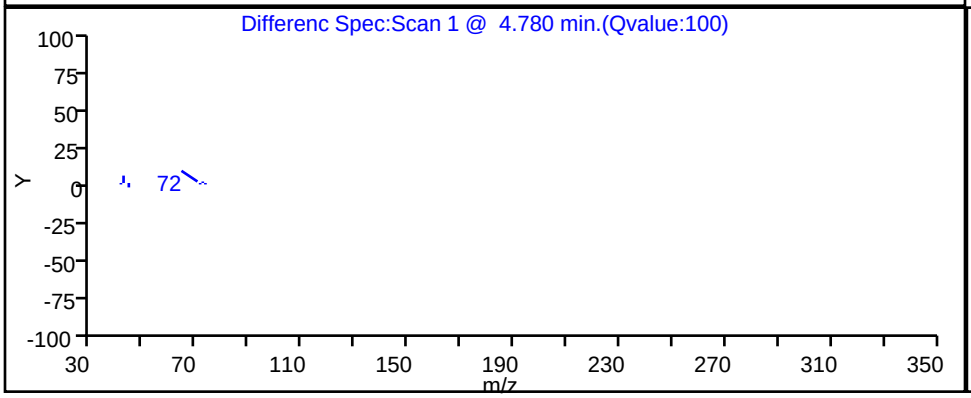


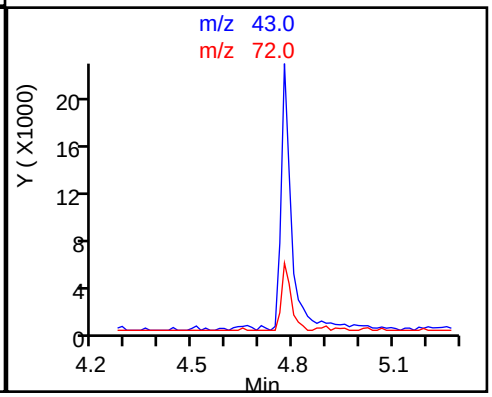












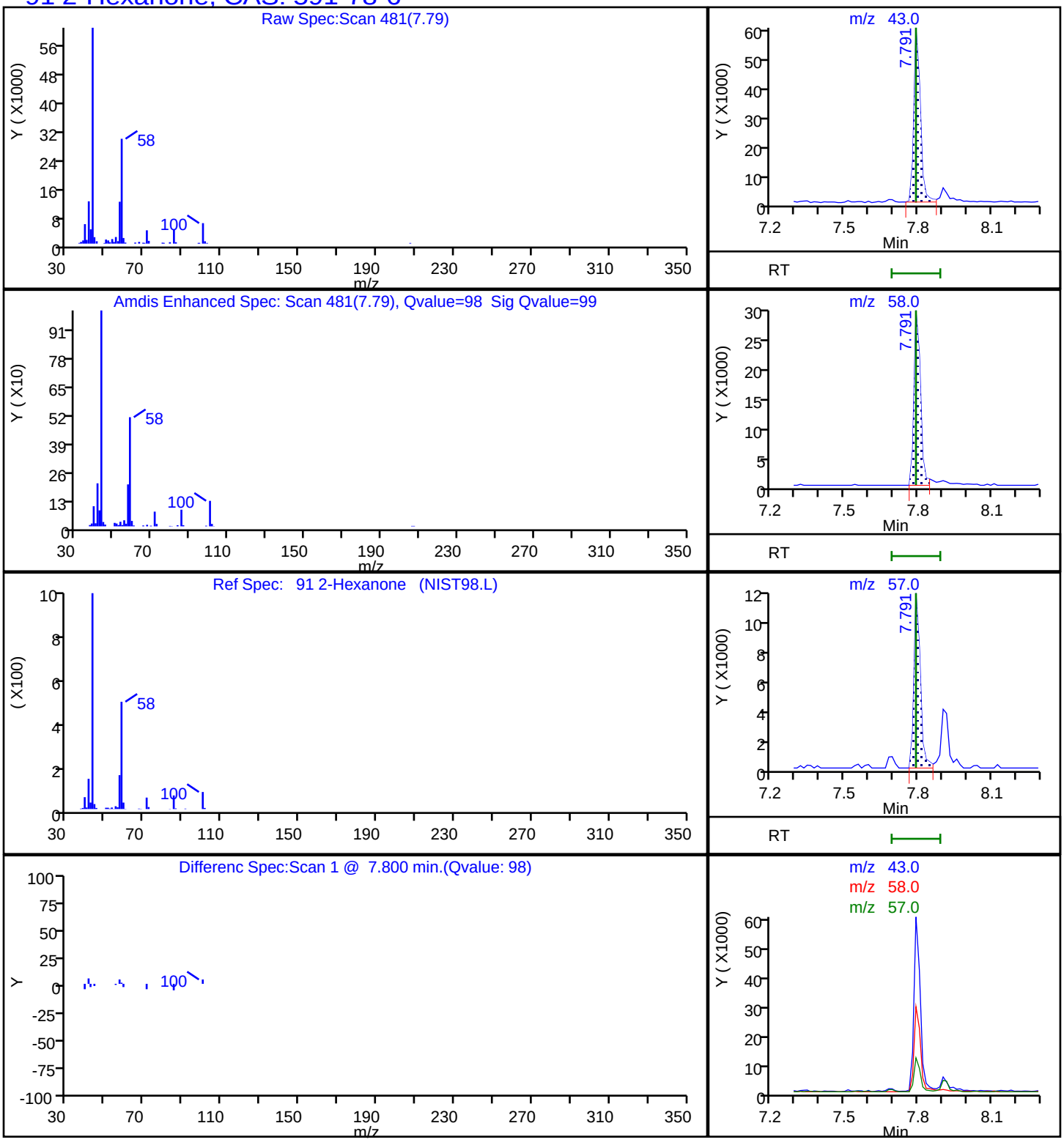
Report Date: 28-May-2022 07:16:21 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6859.D

Injection Date:	27-May-2022 23:34:30	Instrument ID:	VMS_MS1
Lims ID:	280-162622-D-19	Lab Sample ID:	280-162622-19
Client ID:	SHGW02-22A		
Operator ID:	burkes	ALS Bottle#:	13 Worklist Smp#: 21
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

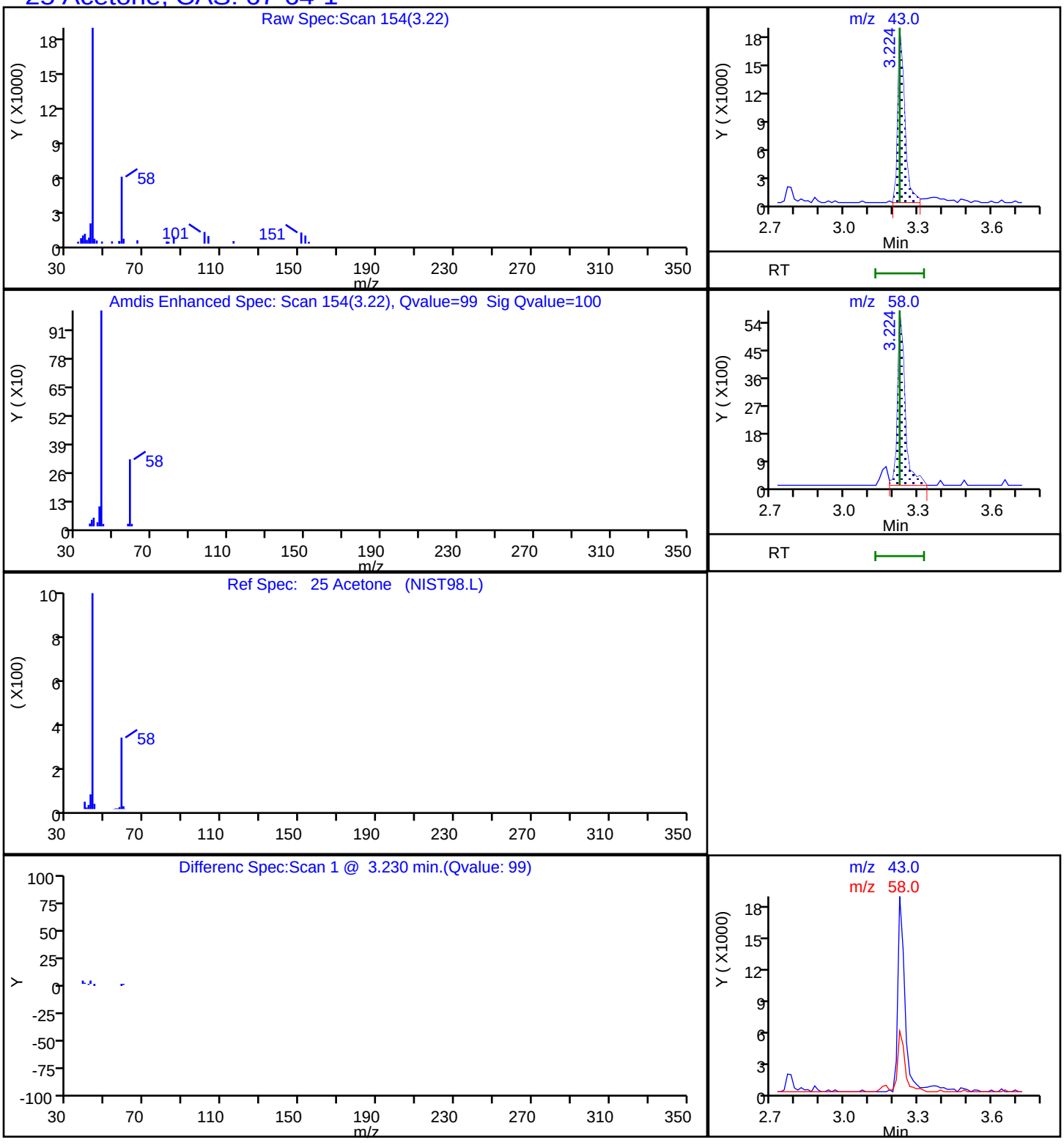


Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6859.D

Injection Date:	27-May-2022 23:34:30	Instrument ID:	VMS_MS1
Lims ID:	280-162622-D-19	Lab Sample ID:	280-162622-19
Client ID:	SHGW02-22A		
Operator ID:	burkes	ALS Bottle#:	13 Worklist Smp#: 21
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 Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: SHGW05-22A | Lab Sample ID: 280-162622-20

Matrix: Water | Lab File ID: MS1_6860.D

Analysis Method: 8260B | Date Collected: 05/18/2022 09:20

Sample wt/vol: 5(mL) | Date Analyzed: 05/27/2022 23:55

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 576482 | 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	2.6	J	3.0	0.40	0.18
79-00-5	1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.27
75-34-3	1,1-Dichloroethane	0.80	U	1.0	0.80	0.22
75-35-4	1,1-Dichloroethene	0.80	U	1.0	0.80	0.23
87-61-6	1,2,3-Trichlorobenzene	0.80	U	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)	38		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	41		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	0.90	U	1.0	0.90	0.46
74-83-9	Bromomethane	0.80	U	2.0	0.80	0.21
75-15-0	Carbon disulfide	0.80	U M	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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: SHGW05-22A | Lab Sample ID: 280-162622-20

Matrix: Water | Lab File ID: MS1_6860.D

Analysis Method: 8260B | Date Collected: 05/18/2022 09:20

Sample wt/vol: 5(mL) | Date Analyzed: 05/27/2022 23:55

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 576482 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
75-71-8	Dichlorodifluoromethane	0.80	U Q	2.0	0.80	0.31
100-41-4	Ethylbenzene	0.40	U	1.0	0.40	0.16
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)	111		85-114
1868-53-7	Dibromofluoromethane (Surr)	98		80-119
2037-26-5	Toluene-d8 (Surr)	101		89-112

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6860.D
Lims ID: 280-162622-E-20
Client ID: SHGW05-22A
Sample Type: Client
Inject. Date: 27-May-2022 23:55:30 ALS Bottle#: 14 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-162622-E-20
Misc. Info.: 280-0111427-022
Operator ID: burkes Instrument ID: VMS_MS1

Method: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 28-May-2022 07:16:15 Calib Date: 05-May-2022 17:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5811.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1675

First Level Reviewer: sunleec Date: 28-May-2022 07:07:59

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.794	5.794	0.000	99	1032997	50.0	
*	2 Chlorobenzene-d5	119	8.517	8.517	0.000	87	250803	50.0	
*	3 1,4-Dichlorobenzene-d4	152	10.794	10.794	0.000	96	402407	50.0	
*	4 Fluorobenzene (IS)	96		0.000				ND	
$	5 Dibromofluoromethane (Surr)	111	5.221	5.221	0.000	91	268961	48.8	
$	6 1,2-Dichloroethane-d4 (Surr)	65	5.515	5.514	0.001	0	312985	49.2	
$	7 Toluene-d8 (Surr)	98	7.177	7.176	0.001	93	1032245	50.5	
$	8 4-Bromofluorobenzene (Surr)	95	9.649	9.648	0.001	86	393245	55.5	
	11 Dichlorodifluoromethane	85		1.674				ND	
	12 Chloromethane	50		1.869				ND	
	13 Vinyl chloride	62		1.967				ND	
	15 Bromomethane	94		2.316				ND	
	16 Chloroethane	64		2.428				ND	
	18 Trichlorofluoromethane	101		2.679				ND	
	23 1,1-Dichloroethene	96		3.196				ND	
	24 112TCTFE	151	3.210	3.196	0.014	93	6680	2.63	
	25 Acetone	43	3.224	3.224	0.000	98	39883	41.1	
	28 Carbon disulfide	76		3.406				ND	U
	30 Methyl acetate	43		3.517				ND	
	32 Methylene Chloride	84		3.657				ND	
	35 Methyl tert-butyl ether	73		3.894				ND	
	36 trans-1,2-Dichloroethene	96		3.908				ND	
	40 1,1-Dichloroethane	63		4.300				ND	
	46 2-Butanone (MEK)	43	4.774	4.774	0.000	100	48930	38.3	
	48 cis-1,2-Dichloroethene	96		4.788				ND	
	53 Chlorobromomethane	128		4.998				ND	
	55 Chloroform	83		5.082				ND	
	56 1,1,1-Trichloroethane	97		5.235				ND	
	57 Cyclohexane	56		5.291				ND	
	59 Carbon tetrachloride	117		5.375				ND	
	63 Benzene	78		5.543				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
64 1,2-Dichloroethane	62		5.584				ND	
68 Trichloroethene	95		6.101				ND	
70 Methylcyclohexane	55		6.311				ND	
71 1,2-Dichloropropane	63		6.325				ND	
75 Dichlorobromomethane	83		6.548				ND	
78 cis-1,3-Dichloropropene	75		6.925				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.037				ND	
82 Toluene	91		7.232				ND	
84 trans-1,3-Dichloropropene	75		7.428				ND	
87 1,1,2-Trichloroethane	97		7.610				ND	
89 Tetrachloroethene	164		7.707				ND	
91 2-Hexanone	43	7.791	7.791	0.000	98	105152	55.7	
95 Chlorodibromomethane	129		7.973				ND	
96 Ethylene Dibromide	107		8.084				ND	
99 Chlorobenzene	112		8.545				ND	
101 Ethylbenzene	106		8.629				ND	
102 m-Xylene & p-Xylene	106		8.741				ND	
103 o-Xylene	106		9.118				ND	
104 Styrene	104		9.132				ND	
106 Bromoform	173		9.327				ND	
107 Isopropylbenzene	105		9.467				ND	
110 1,1,2,2-Tetrachloroethane	83		9.760				ND	
121 1,3-Dichlorobenzene	146		10.710				ND	
123 1,4-Dichlorobenzene	146		10.822				ND	
127 1,2-Dichlorobenzene	146		11.171				ND	
128 1,2-Dibromo-3-Chloropropane	157		11.967				ND	
130 1,2,4-Trichlorobenzene	180		12.791				ND	
134 1,2,3-Trichlorobenzene	180		13.280				ND	
S 155 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

mv-IS_SS_00039 Amount Added: 5.00 Units: uL Run Reagent

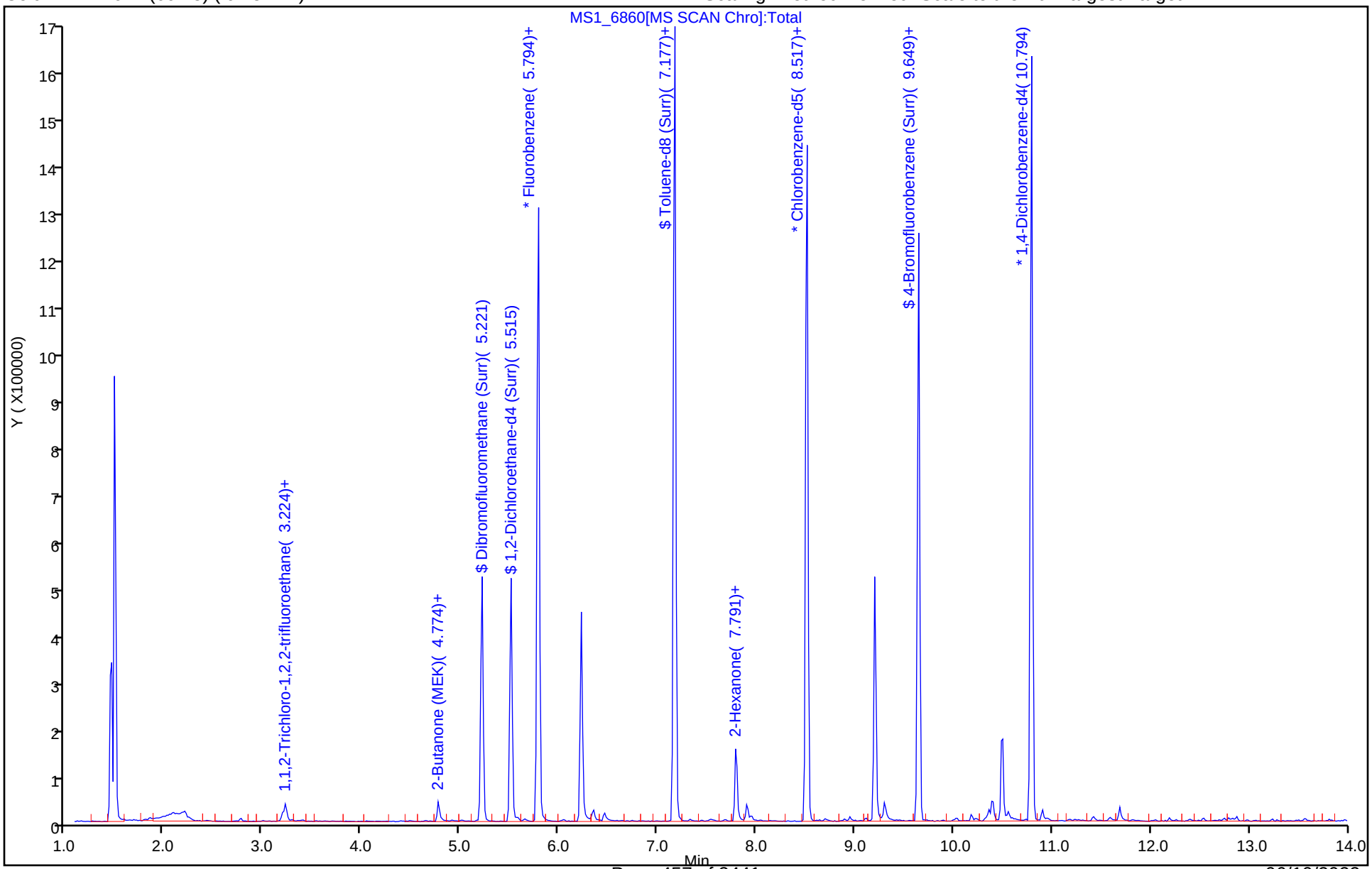
Report Date: 28-May-2022 07:16:22 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6860.D

Injection Date:	27-May-2022 23:55:30	Instrument ID:	VMS_MS1	Operator ID:	burkes
Lims ID:	280-162622-E-20	Lab Sample ID:	280-162622-20	Worklist Smp#:	22
Client ID:	SHGW05-22A				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
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 Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6860.D
Lims ID: 280-162622-E-20
Client ID: SHGW05-22A
Sample Type: Client
Inject. Date: 27-May-2022 23:55:30 ALS Bottle#: 14 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-162622-E-20
Misc. Info.: 280-0111427-022
Operator ID: burkes Instrument ID: VMS_MS1

Method: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 28-May-2022 07:16:15 Calib Date: 05-May-2022 17:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5811.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1675

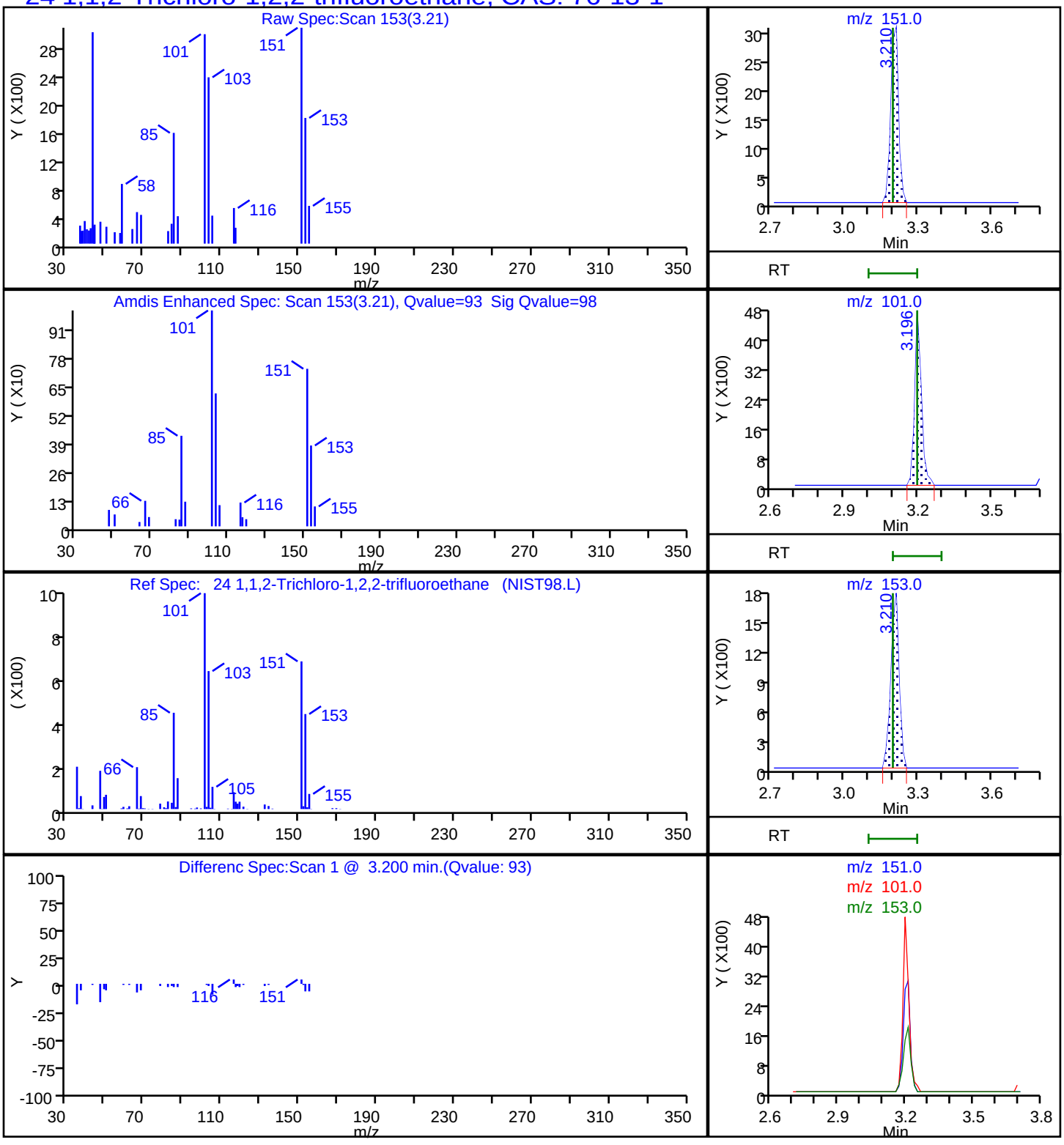
First Level Reviewer: sunleec Date: 28-May-2022 07:07:59

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	48.8	97.63
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	49.2	98.38
$ 7 Toluene-d8 (Surr)	50.0	50.5	100.94
$ 8 4-Bromofluorobenzene (Surr)	50.0	55.5	111.06

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6860.D
Injection Date: 27-May-2022 23:55:30 Instrument ID: VMS_MS1
Lims ID: 280-162622-E-20 Lab Sample ID: 280-162622-20
Client ID: SHGW05-22A
Operator ID: burkes ALS Bottle#: 14 Worklist Smp#: 22
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

24 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1

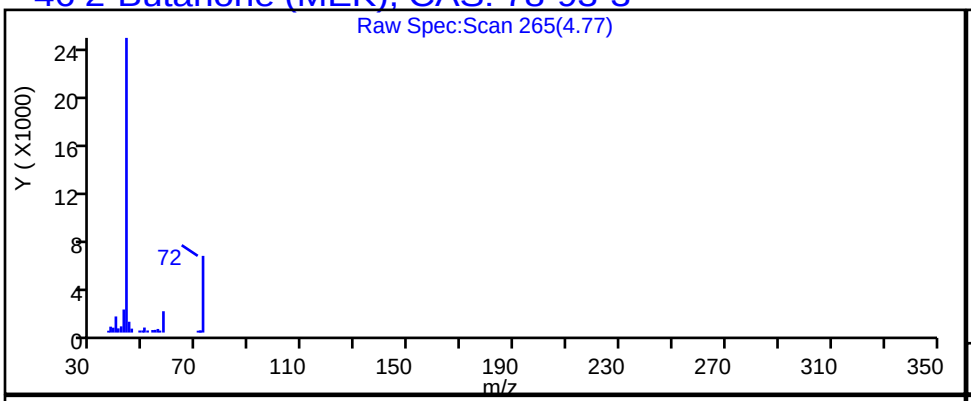


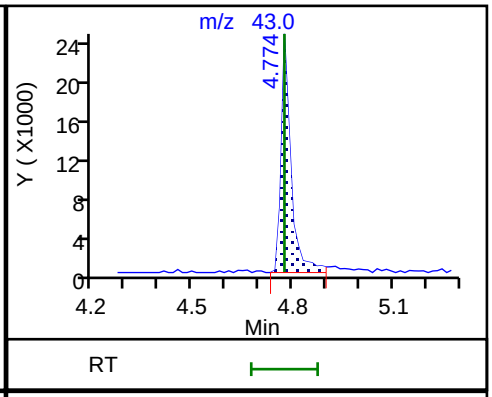
Eurofins Denver

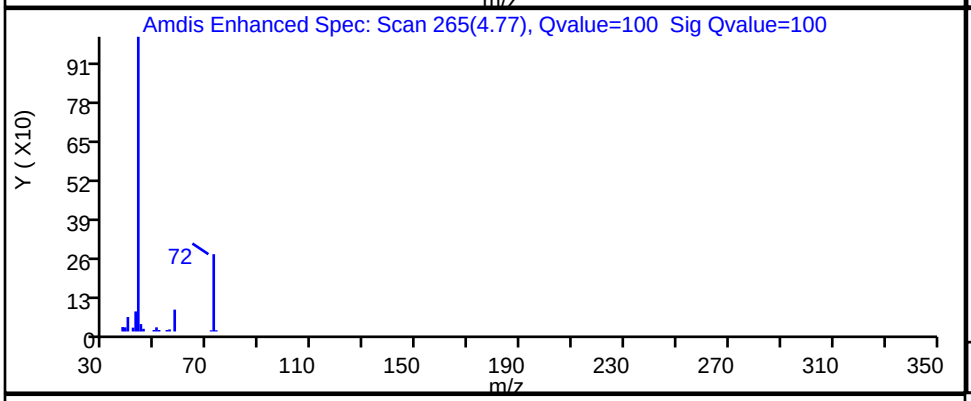
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6860.D

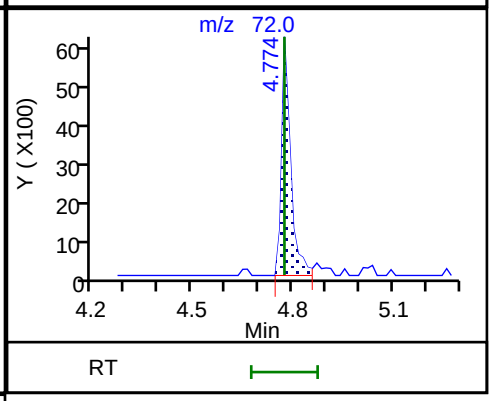
Injection Date:	27-May-2022 23:55:30	Instrument ID:	VMS_MS1
Lims ID:	280-162622-E-20	Lab Sample ID:	280-162622-20
Client ID:	SHGW05-22A		
Operator ID:	burkes	ALS Bottle#:	14 Worklist Smp#: 22
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	AQ_VMS1_8260	Limit Group:	MSV - 8260B Water and Solid
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN

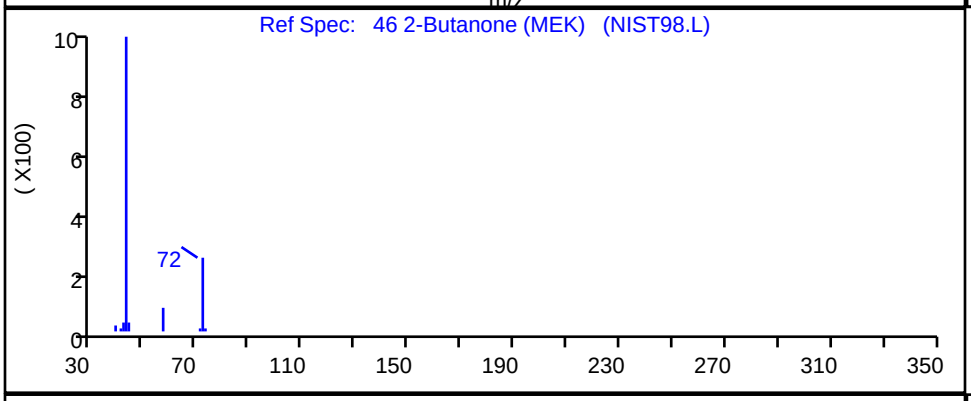
46 2-Butanone (MEK), CAS: 78-93-3

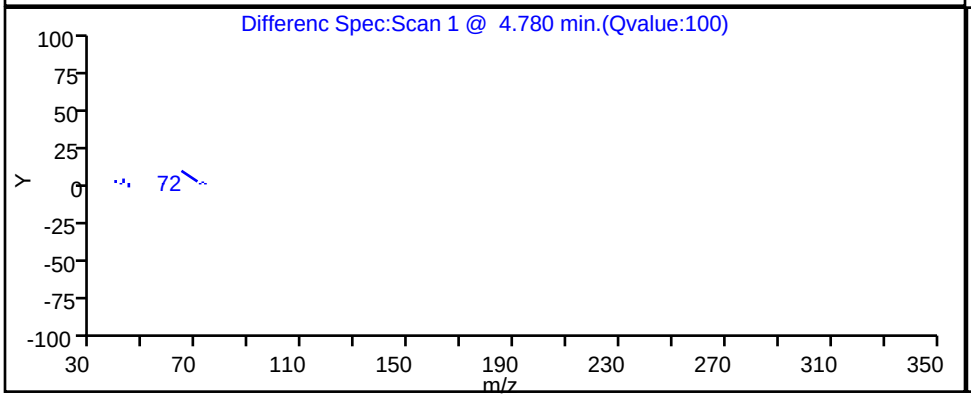


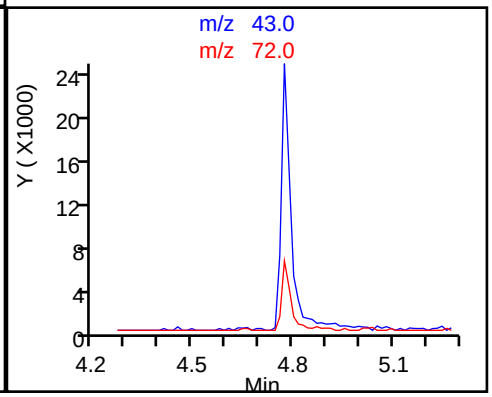










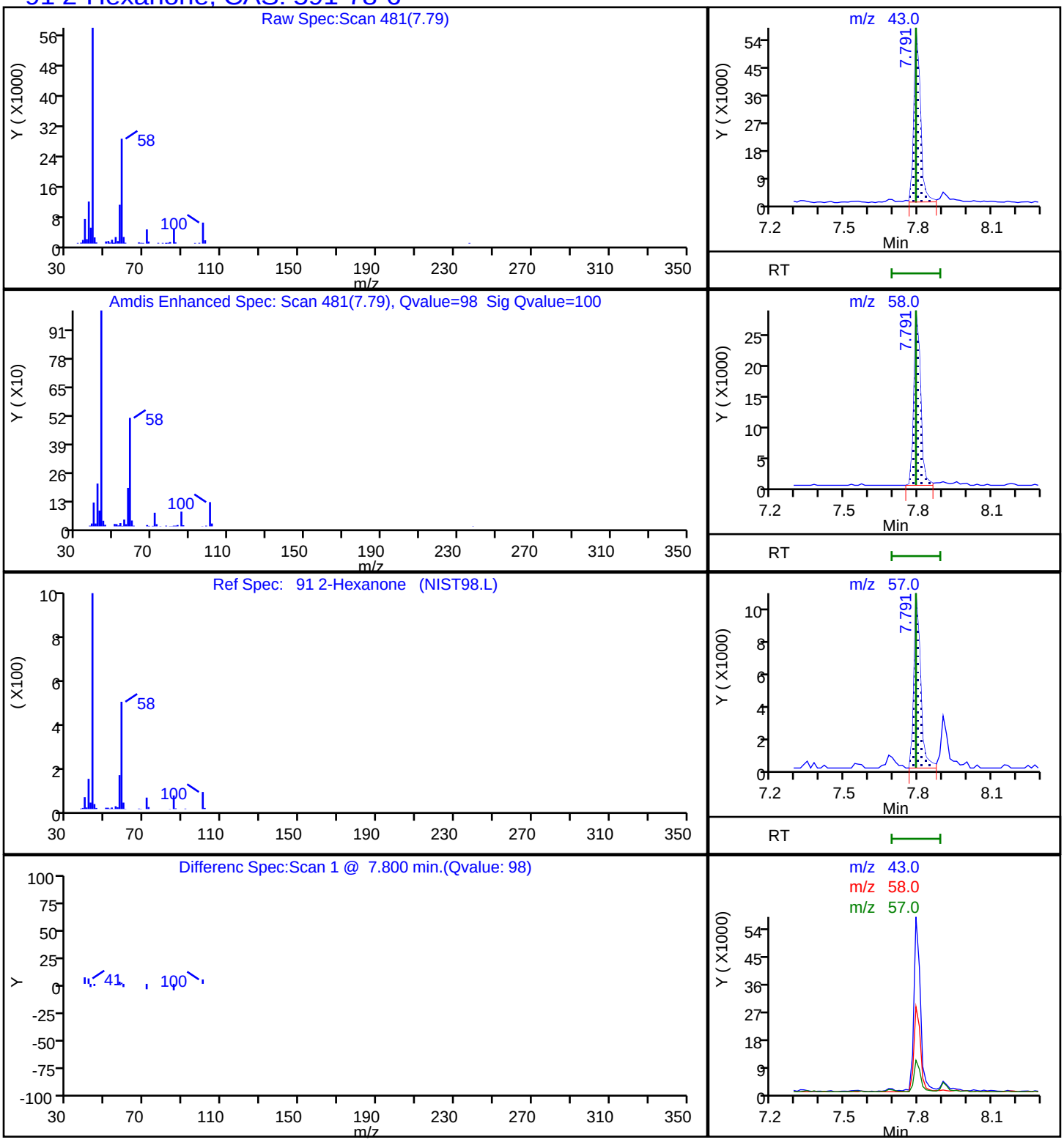


Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6860.D

Injection Date:	27-May-2022 23:55:30	Instrument ID:	VMS_MS1
Lims ID:	280-162622-E-20	Lab Sample ID:	280-162622-20
Client ID:	SHGW05-22A		
Operator ID:	burkes	ALS Bottle#:	14 Worklist Smp#: 22
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

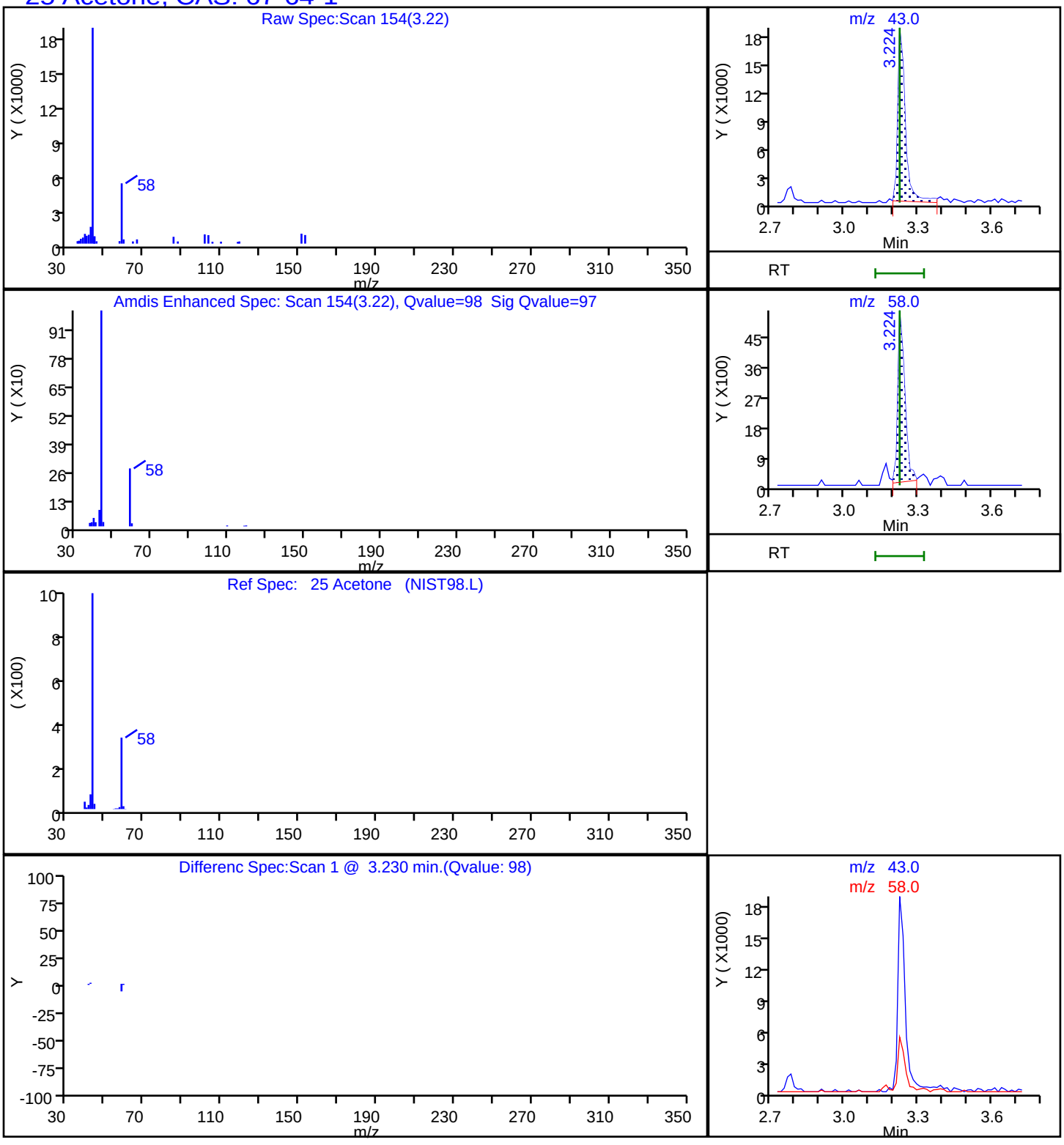
91 2-Hexanone, CAS: 591-78-6



Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6860.D
Injection Date: 27-May-2022 23:55:30 Instrument ID: VMS_MS1
Lims ID: 280-162622-E-20 Lab Sample ID: 280-162622-20
Client ID: SHGW05-22A
Operator ID: burkes ALS Bottle#: 14 Worklist Smp#: 22
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



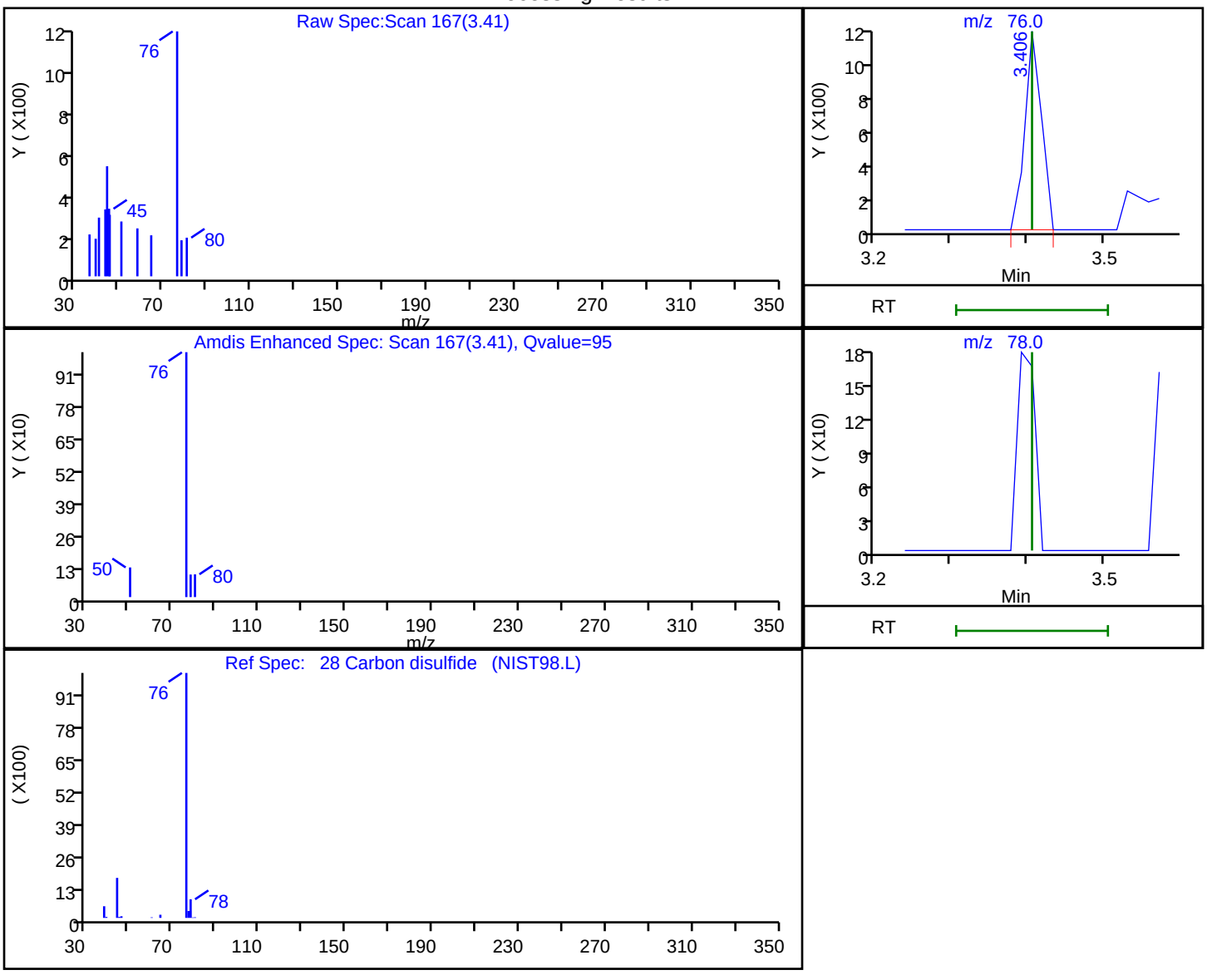
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6860.D				
Injection Date:	27-May-2022 23:55:30	Instrument ID:	VMS_MS1		
Lims ID:	280-162622-E-20	Lab Sample ID:	280-162622-20		
Client ID:	SHGW05-22A				
Operator ID:	burkes	ALS Bottle#:	14	Worklist Smp#:	22
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		

28 Carbon disulfide, CAS: 75-15-0

Processing Results



RT	Mass	Response	Amount
3.41	76.00	1723	0.162274
3.41	78.00	0	

Reviewer: sunleec, 28-May-2022 07:07:51

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0053-22A | Lab Sample ID: 280-162622-21

Matrix: Water | Lab File ID: MS1_6861.D

Analysis Method: 8260B | Date Collected: 05/18/2022 10:10

Sample wt/vol: 5(mL) | Date Analyzed: 05/28/2022 00:16

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 576482 | 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	2.9	J	3.0	0.40	0.18
79-00-5	1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.27
75-34-3	1,1-Dichloroethane	0.80	U	1.0	0.80	0.22
75-35-4	1,1-Dichloroethene	0.80	U	1.0	0.80	0.23
87-61-6	1,2,3-Trichlorobenzene	0.80	U	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	0.90	U	1.0	0.90	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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0053-22A | Lab Sample ID: 280-162622-21

Matrix: Water | Lab File ID: MS1_6861.D

Analysis Method: 8260B | Date Collected: 05/18/2022 10:10

Sample wt/vol: 5(mL) | Date Analyzed: 05/28/2022 00:16

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 576482 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
75-71-8	Dichlorodifluoromethane	0.80	U Q	2.0	0.80	0.31
100-41-4	Ethylbenzene	0.40	U	1.0	0.40	0.16
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)	110		85-114
1868-53-7	Dibromofluoromethane (Surr)	100		80-119
2037-26-5	Toluene-d8 (Surr)	102		89-112

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6861.D
Lims ID: 280-162622-E-21
Client ID: G0053-22A
Sample Type: Client
Inject. Date: 28-May-2022 00:16:30 ALS Bottle#: 15 Worklist Smp#: 23
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-162622-E-21
Misc. Info.: 280-0111427-023
Operator ID: burkes Instrument ID: VMS_MS1

Method: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 28-May-2022 07:16:15 Calib Date: 05-May-2022 17:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5811.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1675

First Level Reviewer: sunleec Date: 28-May-2022 07:08:10

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.794	5.794	0.000	99	1130033	50.0	
*	2 Chlorobenzene-d5	119	8.517	8.517	0.000	87	273511	50.0	
*	3 1,4-Dichlorobenzene-d4	152	10.794	10.794	0.000	97	438794	50.0	
*	4 Fluorobenzene (IS)	96		0.000				ND	
$	5 Dibromofluoromethane (Surr)	111	5.221	5.221	0.000	92	301330	50.0	
$	6 1,2-Dichloroethane-d4 (Surr)	65	5.515	5.514	0.001	0	344976	49.6	
$	7 Toluene-d8 (Surr)	98	7.177	7.176	0.001	94	1141834	51.2	
$	8 4-Bromofluorobenzene (Surr)	95	9.649	9.648	0.001	86	424201	54.9	
	11 Dichlorodifluoromethane	85		1.674				ND	
	12 Chloromethane	50		1.869				ND	
	13 Vinyl chloride	62		1.967				ND	
	15 Bromomethane	94		2.316				ND	
	16 Chloroethane	64		2.428				ND	
	18 Trichlorofluoromethane	101		2.679				ND	
	23 1,1-Dichloroethene	96		3.196				ND	
	24 112TCTFE	151	3.196	3.196	0.000	96	7995	2.89	
	25 Acetone	43		3.224				ND	
	28 Carbon disulfide	76		3.406				ND	7
	30 Methyl acetate	43		3.517				ND	
	32 Methylene Chloride	84		3.657				ND	
	35 Methyl tert-butyl ether	73		3.894				ND	
	36 trans-1,2-Dichloroethene	96		3.908				ND	
	40 1,1-Dichloroethane	63		4.300				ND	
	46 2-Butanone (MEK)	43		4.774				ND	
	48 cis-1,2-Dichloroethene	96		4.788				ND	
	53 Chlorobromomethane	128		4.998				ND	
	55 Chloroform	83		5.082				ND	
	56 1,1,1-Trichloroethane	97		5.235				ND	
	57 Cyclohexane	56		5.291				ND	
	59 Carbon tetrachloride	117		5.375				ND	
	63 Benzene	78		5.543				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
64 1,2-Dichloroethane	62		5.584				ND	
68 Trichloroethene	95		6.101				ND	
70 Methylcyclohexane	55		6.311				ND	
71 1,2-Dichloropropane	63		6.325				ND	
75 Dichlorobromomethane	83		6.548				ND	
78 cis-1,3-Dichloropropene	75		6.925				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.037				ND	
82 Toluene	91		7.232				ND	
84 trans-1,3-Dichloropropene	75		7.428				ND	
87 1,1,2-Trichloroethane	97		7.610				ND	
89 Tetrachloroethene	164		7.707				ND	
91 2-Hexanone	43		7.791				ND	
95 Chlorodibromomethane	129		7.973				ND	
96 Ethylene Dibromide	107		8.084				ND	
99 Chlorobenzene	112		8.545				ND	
101 Ethylbenzene	106		8.629				ND	
102 m-Xylene & p-Xylene	106		8.741				ND	
103 o-Xylene	106		9.118				ND	
104 Styrene	104		9.132				ND	
106 Bromoform	173		9.327				ND	
107 Isopropylbenzene	105		9.467				ND	
110 1,1,2,2-Tetrachloroethane	83		9.760				ND	
121 1,3-Dichlorobenzene	146		10.710				ND	
123 1,4-Dichlorobenzene	146		10.822				ND	
127 1,2-Dichlorobenzene	146		11.171				ND	
128 1,2-Dibromo-3-Chloropropane	157		11.967				ND	
130 1,2,4-Trichlorobenzene	180		12.791				ND	
134 1,2,3-Trichlorobenzene	180		13.280				ND	
S 155 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00039 Amount Added: 5.00 Units: uL Run Reagent

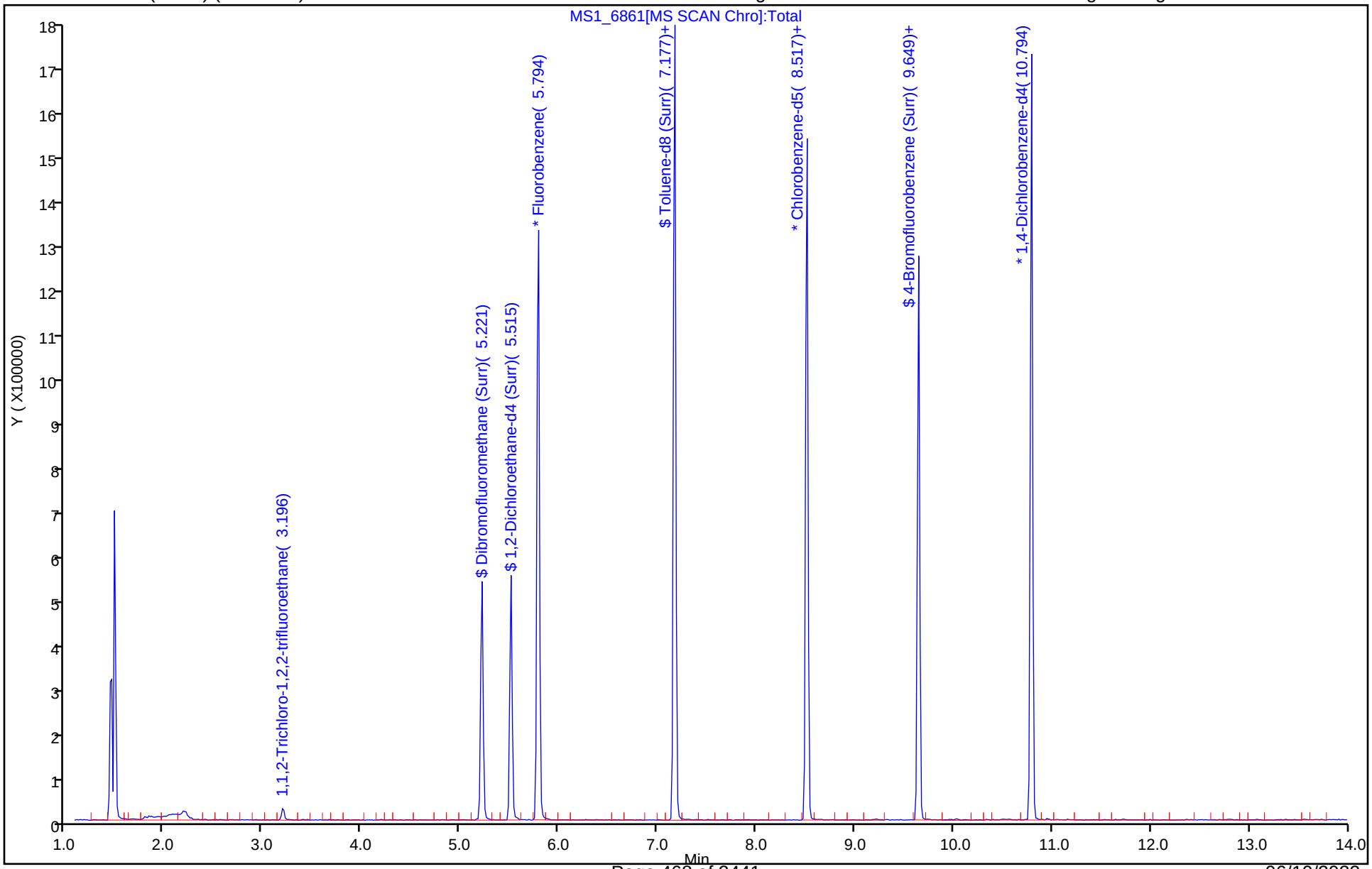
Report Date: 28-May-2022 07:16:23 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6861.D

Injection Date:	28-May-2022 00:16:30	Instrument ID:	VMS_MS1	Operator ID:	burkes
Lims ID:	280-162622-E-21	Lab Sample ID:	280-162622-21	Worklist Smp#:	23
Client ID:	G0053-22A				
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 Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6861.D
Lims ID: 280-162622-E-21
Client ID: G0053-22A
Sample Type: Client
Inject. Date: 28-May-2022 00:16:30 ALS Bottle#: 15 Worklist Smp#: 23
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-162622-E-21
Misc. Info.: 280-0111427-023
Operator ID: burkes Instrument ID: VMS_MS1

Method: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 28-May-2022 07:16:15 Calib Date: 05-May-2022 17:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5811.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1675

First Level Reviewer: sunleec Date: 28-May-2022 07:08:10

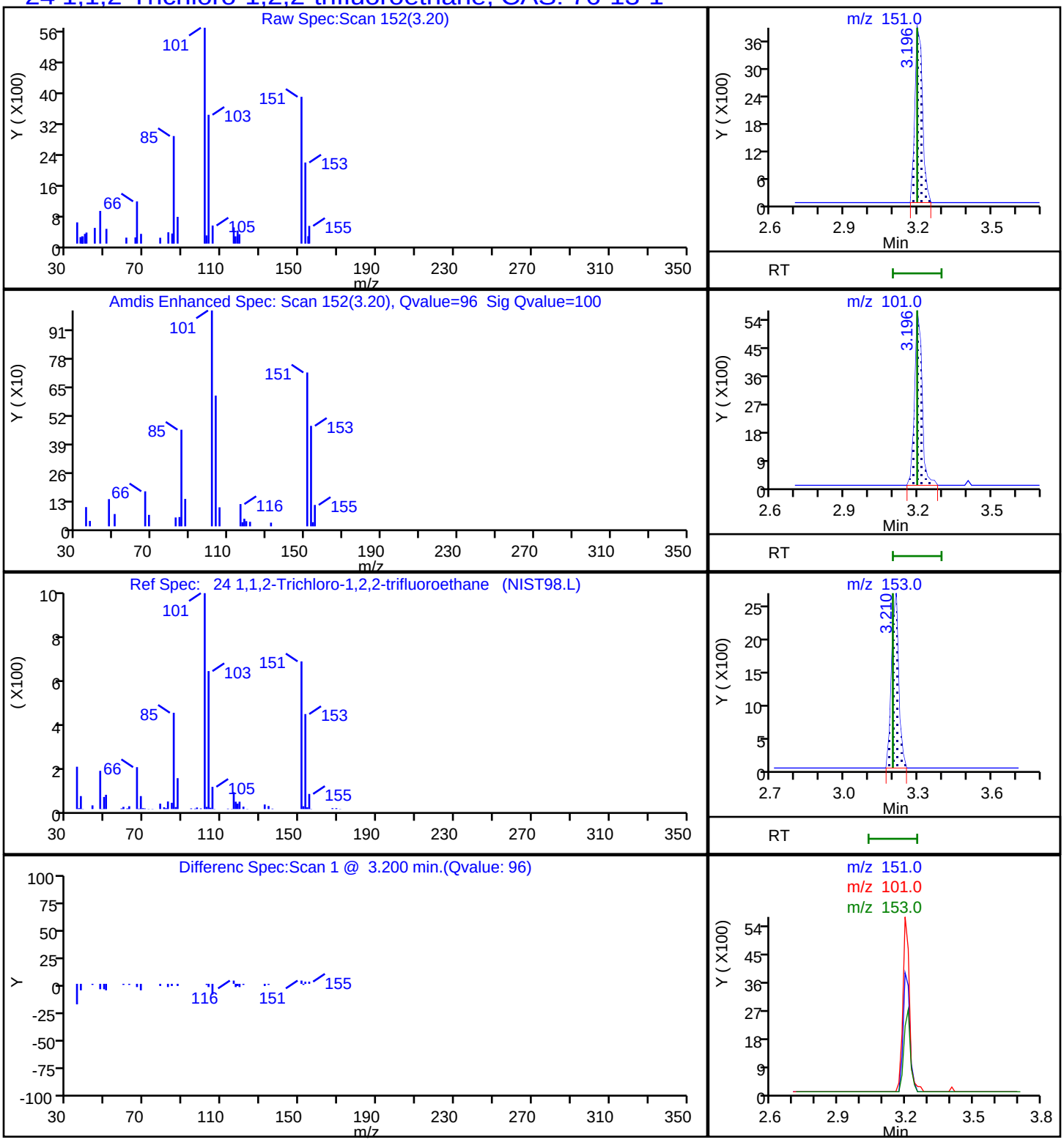
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	50.0	99.99
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	49.6	99.13
$ 7 Toluene-d8 (Surr)	50.0	51.2	102.38
$ 8 4-Bromofluorobenzene (Surr)	50.0	54.9	109.87

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6861.D

Injection Date:	28-May-2022 00:16:30	Instrument ID:	VMS_MS1
Lims ID:	280-162622-E-21	Lab Sample ID:	280-162622-21
Client ID:	G0053-22A		
Operator ID:	burkes	ALS Bottle#:	15 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

24 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0069-22A | Lab Sample ID: 280-162622-22

Matrix: Water | Lab File ID: MS1_6862.D

Analysis Method: 8260B | Date Collected: 05/18/2022 11:15

Sample wt/vol: 5(mL) | Date Analyzed: 05/28/2022 00:38

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 576482 | 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	3.5		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	0.90	U	1.0	0.90	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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0069-22A | Lab Sample ID: 280-162622-22

Matrix: Water | Lab File ID: MS1_6862.D

Analysis Method: 8260B | Date Collected: 05/18/2022 11:15

Sample wt/vol: 5(mL) | Date Analyzed: 05/28/2022 00:38

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 576482 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
75-71-8	Dichlorodifluoromethane	0.80	U Q	2.0	0.80	0.31
100-41-4	Ethylbenzene	0.40	U	1.0	0.40	0.16
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)	100		81-118
460-00-4	4-Bromofluorobenzene (Surr)	108		85-114
1868-53-7	Dibromofluoromethane (Surr)	99		80-119
2037-26-5	Toluene-d8 (Surr)	104		89-112

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6862.D
Lims ID: 280-162622-C-22
Client ID: G0069-22A
Sample Type: Client
Inject. Date: 28-May-2022 00:38:30 ALS Bottle#: 16 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-162622-C-22
Misc. Info.: 280-0111427-024
Operator ID: burkes Instrument ID: VMS_MS1

Method: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 28-May-2022 07:16:15 Calib Date: 05-May-2022 17:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5811.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1675

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.794	5.794	0.000	98	1089804	50.0	
* 2 Chlorobenzene-d5	119	8.517	8.517	0.000	87	260653	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.794	10.794	0.000	96	424446	50.0	
* 4 Fluorobenzene (IS)	96		0.000				ND	
$ 5 Dibromofluoromethane (Surr)	111	5.221	5.221	0.000	92	287336	49.4	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.515	5.514	0.001	0	336170	50.1	
$ 7 Toluene-d8 (Surr)	98	7.177	7.176	0.001	94	1101175	51.8	
$ 8 4-Bromofluorobenzene (Surr)	95	9.649	9.648	0.001	87	403934	54.1	
11 Dichlorodifluoromethane	85		1.674				ND	
12 Chloromethane	50		1.869				ND	
13 Vinyl chloride	62		1.967				ND	
15 Bromomethane	94		2.316				ND	
16 Chloroethane	64		2.428				ND	
18 Trichlorofluoromethane	101		2.679				ND	
23 1,1-Dichloroethene	96		3.196				ND	
24 112TCTFE	151	3.210	3.196	0.014	93	9417	3.54	
25 Acetone	43		3.224				ND	
28 Carbon disulfide	76		3.406				ND	7
30 Methyl acetate	43		3.517				ND	
32 Methylene Chloride	84		3.657				ND	
35 Methyl tert-butyl ether	73		3.894				ND	
36 trans-1,2-Dichloroethene	96		3.908				ND	
40 1,1-Dichloroethane	63		4.300				ND	
46 2-Butanone (MEK)	43		4.774				ND	
48 cis-1,2-Dichloroethene	96		4.788				ND	
53 Chlorobromomethane	128		4.998				ND	
55 Chloroform	83		5.082				ND	
56 1,1,1-Trichloroethane	97		5.235				ND	
57 Cyclohexane	56		5.291				ND	
59 Carbon tetrachloride	117		5.375				ND	
63 Benzene	78		5.543				ND	
64 1,2-Dichloroethane	62		5.584				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
68 Trichloroethene	95		6.101				ND	
70 Methylcyclohexane	55		6.311				ND	
71 1,2-Dichloropropane	63		6.325				ND	
75 Dichlorobromomethane	83		6.548				ND	
78 cis-1,3-Dichloropropene	75		6.925				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.037				ND	
82 Toluene	91		7.232				ND	
84 trans-1,3-Dichloropropene	75		7.428				ND	
87 1,1,2-Trichloroethane	97		7.610				ND	
89 Tetrachloroethene	164		7.707				ND	
91 2-Hexanone	43		7.791				ND	
95 Chlorodibromomethane	129		7.973				ND	
96 Ethylene Dibromide	107		8.084				ND	
99 Chlorobenzene	112		8.545				ND	
101 Ethylbenzene	106		8.629				ND	
102 m-Xylene & p-Xylene	106		8.741				ND	
103 o-Xylene	106		9.118				ND	
104 Styrene	104		9.132				ND	
106 Bromoform	173		9.327				ND	
107 Isopropylbenzene	105		9.467				ND	
110 1,1,2,2-Tetrachloroethane	83		9.760				ND	
121 1,3-Dichlorobenzene	146		10.710				ND	
123 1,4-Dichlorobenzene	146		10.822				ND	
127 1,2-Dichlorobenzene	146		11.171				ND	
128 1,2-Dibromo-3-Chloropropane	157		11.967				ND	
130 1,2,4-Trichlorobenzene	180		12.791				ND	
134 1,2,3-Trichlorobenzene	180		13.280				ND	
S 155 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00039 Amount Added: 5.00 Units: uL Run Reagent

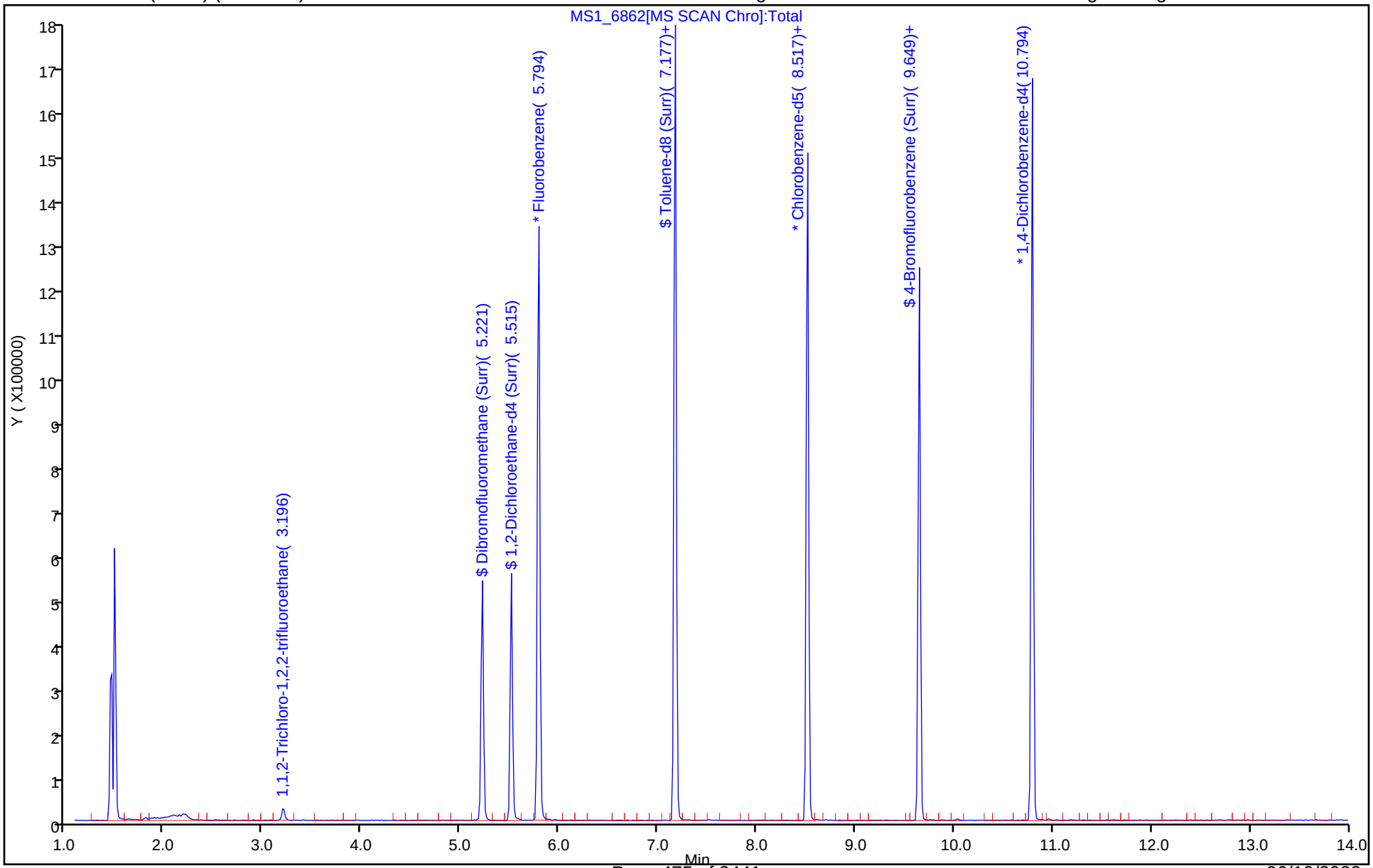
Report Date: 28-May-2022 07:16:23 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6862.D

Injection Date:	28-May-2022 00:38:30	Instrument ID:	VMS_MS1	Operator ID:	burkes
Lims ID:	280-162622-C-22	Lab Sample ID:	280-162622-22	Worklist Smp#:	24
Client ID:	G0069-22A				
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 Denver
Recovery Report

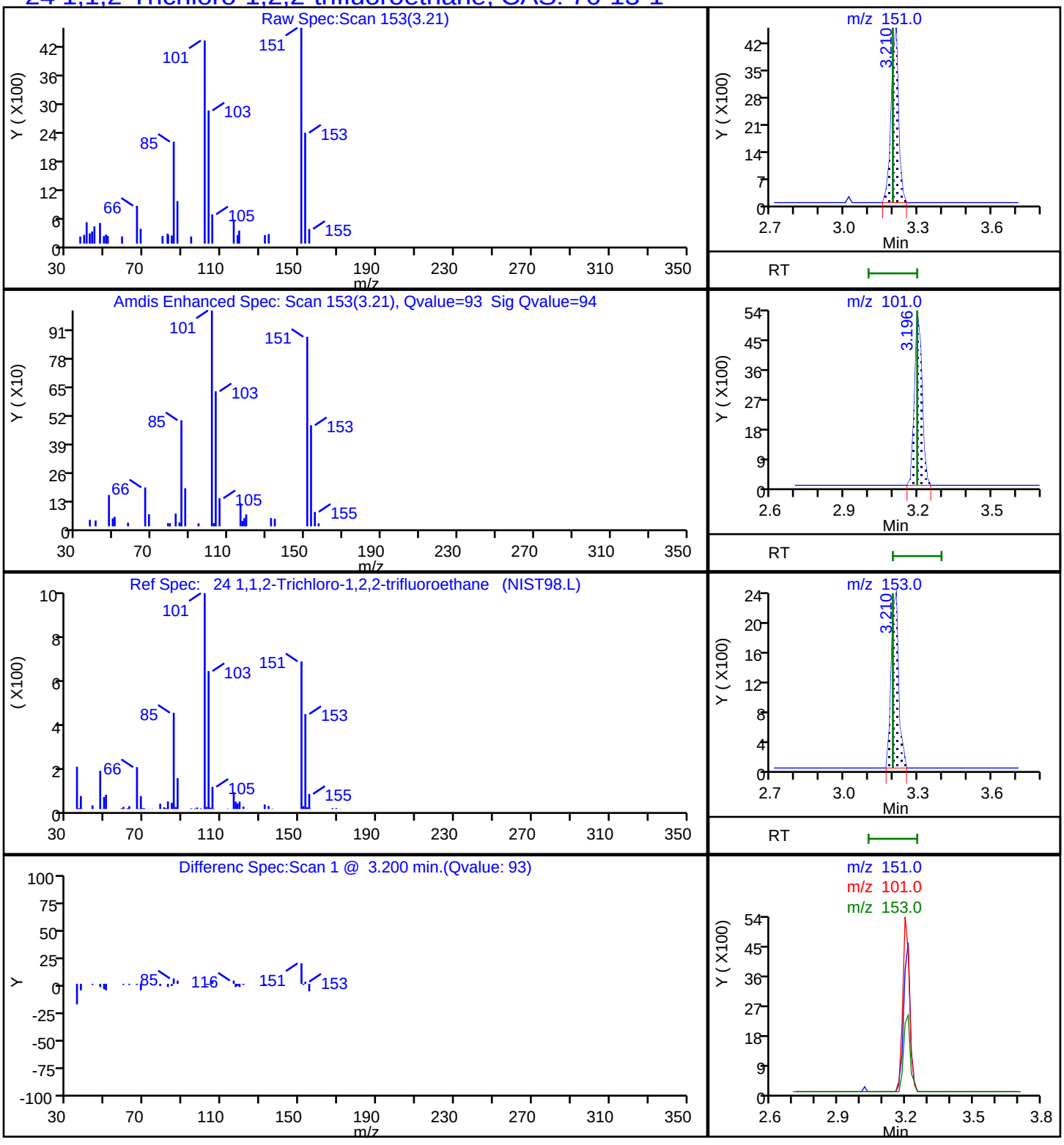
Data File:	\\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6862.D				
Lims ID:	280-162622-C-22				
Client ID:	G0069-22A				
Sample Type:	Client				
Inject. Date:	28-May-2022 00:38:30	ALS Bottle#:	16	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-162622-C-22				
Misc. Info.:	280-0111427-024				
Operator ID:	burkes	Instrument ID:	VMS_MS1		
Method:	\\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\AQ_VMS1_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	28-May-2022 07:16:15	Calib Date:	05-May-2022 17:32:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5811.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1675				

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	49.4	98.87
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	50.1	100.16
$ 7 Toluene-d8 (Surr)	50.0	51.8	103.61
$ 8 4-Bromofluorobenzene (Surr)	50.0	54.1	108.16

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6862.D
Injection Date: 28-May-2022 00:38:30 Instrument ID: VMS_MS1
Lims ID: 280-162622-C-22 Lab Sample ID: 280-162622-22
Client ID: G0069-22A
Operator ID: burkes ALS Bottle#: 16 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

24 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: 5-18 TB | Lab Sample ID: 280-162622-23

Matrix: Water | Lab File ID: MS1_6853.D

Analysis Method: 8260B | Date Collected: 05/18/2022 08:00

Sample wt/vol: 5(mL) | Date Analyzed: 05/27/2022 21:27

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 576482 | 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	0.90	U	1.0	0.90	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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: 5-18 TB | Lab Sample ID: 280-162622-23

Matrix: Water | Lab File ID: MS1_6853.D

Analysis Method: 8260B | Date Collected: 05/18/2022 08:00

Sample wt/vol: 5(mL) | Date Analyzed: 05/27/2022 21:27

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 576482 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
75-71-8	Dichlorodifluoromethane	0.80	U Q	2.0	0.80	0.31
100-41-4	Ethylbenzene	0.40	U	1.0	0.40	0.16
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)	101		81-118
460-00-4	4-Bromofluorobenzene (Surr)	108		85-114
1868-53-7	Dibromofluoromethane (Surr)	101		80-119
2037-26-5	Toluene-d8 (Surr)	103		89-112

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6853.D
Lims ID: 280-162622-A-23
Client ID: 5-18 TB
Sample Type: Client
Inject. Date: 27-May-2022 21:27:30 ALS Bottle#: 7 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-162622-A-23
Misc. Info.: 280-0111427-015
Operator ID: burkes Instrument ID: VMS_MS1

Method: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 27-May-2022 21:46:40 Calib Date: 05-May-2022 17:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5811.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1624

First Level Reviewer: burkes Date: 27-May-2022 21:46:40

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.794	5.794	0.000	99	1108840	50.0	
*	2 Chlorobenzene-d5	119	8.517	8.517	0.000	87	265917	50.0	
*	3 1,4-Dichlorobenzene-d4	152	10.794	10.794	0.000	96	432360	50.0	
*	4 Fluorobenzene (IS)	96		0.000				ND	
$	5 Dibromofluoromethane (Surr)	111	5.221	5.221	0.000	92	299169	50.6	
$	6 1,2-Dichloroethane-d4 (Surr)	65	5.515	5.514	0.000	0	344794	50.5	
$	7 Toluene-d8 (Surr)	98	7.176	7.176	0.000	93	1113309	51.3	
$	8 4-Bromofluorobenzene (Surr)	95	9.649	9.648	0.000	87	411125	54.0	
	11 Dichlorodifluoromethane	85		1.674				ND	
	12 Chloromethane	50		1.869				ND	
	13 Vinyl chloride	62		1.967				ND	
	15 Bromomethane	94		2.316				ND	
	16 Chloroethane	64		2.428				ND	
	18 Trichlorofluoromethane	101		2.679				ND	
	23 1,1-Dichloroethene	96		3.196				ND	
	24 112TCTFE	151		3.196				ND	
	25 Acetone	43		3.224				ND	
	28 Carbon disulfide	76		3.406				ND	7
	30 Methyl acetate	43		3.517				ND	
	32 Methylene Chloride	84		3.657				ND	
	35 Methyl tert-butyl ether	73		3.894				ND	
	36 trans-1,2-Dichloroethene	96		3.908				ND	
	40 1,1-Dichloroethane	63		4.300				ND	
	46 2-Butanone (MEK)	43		4.774				ND	
	48 cis-1,2-Dichloroethene	96		4.788				ND	
	53 Chlorobromomethane	128		4.998				ND	
	55 Chloroform	83		5.082				ND	
	56 1,1,1-Trichloroethane	97		5.235				ND	
	57 Cyclohexane	56		5.291				ND	
	59 Carbon tetrachloride	117		5.375				ND	
	63 Benzene	78		5.543				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
64 1,2-Dichloroethane	62		5.584				ND	
68 Trichloroethene	95		6.101				ND	
70 Methylcyclohexane	55		6.311				ND	
71 1,2-Dichloropropane	63		6.325				ND	
75 Dichlorobromomethane	83		6.548				ND	
78 cis-1,3-Dichloropropene	75		6.925				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.037				ND	
82 Toluene	91		7.232				ND	
84 trans-1,3-Dichloropropene	75		7.428				ND	
87 1,1,2-Trichloroethane	97		7.610				ND	
89 Tetrachloroethene	164		7.707				ND	
91 2-Hexanone	43		7.791				ND	
95 Chlorodibromomethane	129		7.973				ND	
96 Ethylene Dibromide	107		8.084				ND	
99 Chlorobenzene	112		8.545				ND	
101 Ethylbenzene	106		8.629				ND	
102 m-Xylene & p-Xylene	106		8.741				ND	
103 o-Xylene	106		9.118				ND	
104 Styrene	104		9.132				ND	
106 Bromoform	173		9.327				ND	
107 Isopropylbenzene	105		9.467				ND	
110 1,1,2,2-Tetrachloroethane	83		9.760				ND	
121 1,3-Dichlorobenzene	146		10.710				ND	
123 1,4-Dichlorobenzene	146		10.822				ND	
127 1,2-Dichlorobenzene	146		11.171				ND	
128 1,2-Dibromo-3-Chloropropane	157		11.967				ND	
130 1,2,4-Trichlorobenzene	180		12.791				ND	
134 1,2,3-Trichlorobenzene	180		13.280				ND	
S 155 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00039 Amount Added: 5.00 Units: uL Run Reagent

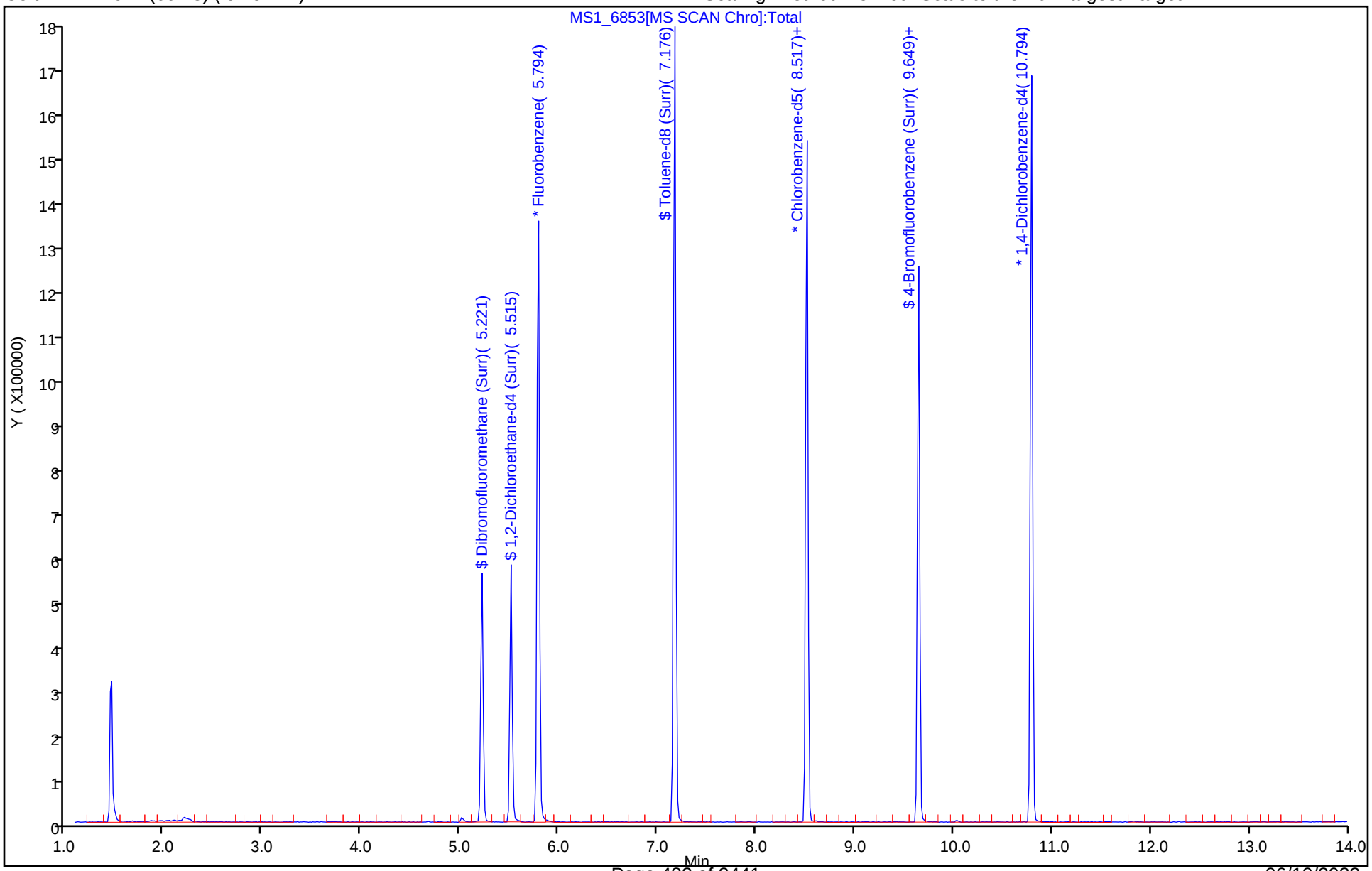
Report Date: 27-May-2022 21:46:40 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6853.D

Injection Date:	27-May-2022 21:27:30	Instrument ID:	VMS_MS1	Operator ID:	burkes
Lims ID:	280-162622-A-23	Lab Sample ID:	280-162622-23	Worklist Smp#:	15
Client ID:	5-18 TB				
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 Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6853.D
Lims ID: 280-162622-A-23
Client ID: 5-18 TB
Sample Type: Client
Inject. Date: 27-May-2022 21:27:30 ALS Bottle#: 7 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-162622-A-23
Misc. Info.: 280-0111427-015
Operator ID: burkes Instrument ID: VMS_MS1

Method: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 27-May-2022 21:46:40 Calib Date: 05-May-2022 17:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5811.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1624

First Level Reviewer: burkes Date: 27-May-2022 21:46:40

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	50.6	101.17
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	50.5	100.97
$ 7 Toluene-d8 (Surr)	50.0	51.3	102.68
$ 8 4-Bromofluorobenzene (Surr)	50.0	54.0	108.07

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: SHGW04-22A | Lab Sample ID: 280-162622-24

Matrix: Water | Lab File ID: MS1_6863.D

Analysis Method: 8260B | Date Collected: 05/18/2022 12:35

Sample wt/vol: 5(mL) | Date Analyzed: 05/28/2022 00:59

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 576482 | 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	2.9	J	3.0	0.40	0.18
79-00-5	1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.27
75-34-3	1,1-Dichloroethane	0.80	U	1.0	0.80	0.22
75-35-4	1,1-Dichloroethene	0.80	U	1.0	0.80	0.23
87-61-6	1,2,3-Trichlorobenzene	0.80	U	1.0	0.80	0.21
120-82-1	1,2,4-Trichlorobenzene	0.80	U	1.0	0.80	0.21
96-12-8	1,2-Dibromo-3-Chloropropane	1.6	U	5.0	1.6	0.47
95-50-1	1,2-Dichlorobenzene	0.40	U	1.0	0.40	0.15
107-06-2	1,2-Dichloroethane	0.40	U	1.0	0.40	0.13
78-87-5	1,2-Dichloropropane	0.40	U	1.0	0.40	0.18
541-73-1	1,3-Dichlorobenzene	0.40	U	1.0	0.40	0.13
106-46-7	1,4-Dichlorobenzene	0.40	U	1.0	0.40	0.16
78-93-3	2-Butanone (MEK)	4.0	U	6.0	4.0	2.0
591-78-6	2-Hexanone	4.0	U	5.0	4.0	1.7
108-10-1	4-Methyl-2-pentanone (MIBK)	3.2	U	5.0	3.2	0.98
67-64-1	Acetone	3.8	J	10	6.4	1.9
71-43-2	Benzene	0.40	U M	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	0.90	U	1.0	0.90	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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: SHGW04-22A | Lab Sample ID: 280-162622-24

Matrix: Water | Lab File ID: MS1_6863.D

Analysis Method: 8260B | Date Collected: 05/18/2022 12:35

Sample wt/vol: 5(mL) | Date Analyzed: 05/28/2022 00:59

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 576482 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
75-71-8	Dichlorodifluoromethane	0.80	U Q	2.0	0.80	0.31
100-41-4	Ethylbenzene	0.40	U	1.0	0.40	0.16
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	0.62	J	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)	111		85-114
1868-53-7	Dibromofluoromethane (Surr)	101		80-119
2037-26-5	Toluene-d8 (Surr)	102		89-112

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6863.D
Lims ID: 280-162622-A-24
Client ID: SHGW04-22A
Sample Type: Client
Inject. Date: 28-May-2022 00:59:30 ALS Bottle#: 17 Worklist Smp#: 25
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-162622-A-24
Misc. Info.: 280-0111427-025
Operator ID: burkes Instrument ID: VMS_MS1

Method: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 28-May-2022 07:16:15 Calib Date: 05-May-2022 17:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5811.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1675

First Level Reviewer: sunleec Date: 28-May-2022 07:08:41

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.794	5.794	0.000	99	1073604	50.0	
*	2 Chlorobenzene-d5	119	8.517	8.517	0.000	86	260409	50.0	
*	3 1,4-Dichlorobenzene-d4	152	10.794	10.794	0.000	97	418223	50.0	
*	4 Fluorobenzene (IS)	96		0.000				ND	
$	5 Dibromofluoromethane (Surr)	111	5.221	5.221	0.000	92	289685	50.6	
$	6 1,2-Dichloroethane-d4 (Surr)	65	5.515	5.514	0.001	0	323981	49.0	
$	7 Toluene-d8 (Surr)	98	7.177	7.176	0.001	94	1081483	50.9	
$	8 4-Bromofluorobenzene (Surr)	95	9.649	9.648	0.001	87	409608	55.7	
	11 Dichlorodifluoromethane	85		1.674				ND	
	12 Chloromethane	50		1.869				ND	
	13 Vinyl chloride	62		1.967				ND	
	15 Bromomethane	94		2.316				ND	
	16 Chloroethane	64		2.428				ND	
	18 Trichlorofluoromethane	101		2.679				ND	
	23 1,1-Dichloroethene	96		3.196				ND	
	24 112TCTFE	151	3.210	3.196	0.014	94	7743	2.94	
	25 Acetone	43	3.238	3.224	0.014	99	3849	3.81	
	28 Carbon disulfide	76		3.406				ND	7
	30 Methyl acetate	43		3.517				ND	
	32 Methylene Chloride	84		3.657				ND	
	35 Methyl tert-butyl ether	73		3.894				ND	
	36 trans-1,2-Dichloroethene	96		3.908				ND	
	40 1,1-Dichloroethane	63		4.300				ND	
	46 2-Butanone (MEK)	43		4.774				ND	
	48 cis-1,2-Dichloroethene	96		4.788				ND	
	53 Chlorobromomethane	128		4.998				ND	
	55 Chloroform	83		5.082				ND	
	56 1,1,1-Trichloroethane	97		5.235				ND	
	57 Cyclohexane	56		5.291				ND	
	59 Carbon tetrachloride	117		5.375				ND	
	63 Benzene	78		5.543				ND	U

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
64 1,2-Dichloroethane	62		5.584				ND	
68 Trichloroethene	95		6.101				ND	
70 Methylcyclohexane	55		6.311				ND	
71 1,2-Dichloropropane	63		6.325				ND	
75 Dichlorobromomethane	83		6.548				ND	
78 cis-1,3-Dichloropropene	75		6.925				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.037				ND	
82 Toluene	91		7.232				ND	
84 trans-1,3-Dichloropropene	75		7.428				ND	
87 1,1,2-Trichloroethane	97		7.610				ND	
89 Tetrachloroethene	164		7.707				ND	
91 2-Hexanone	43		7.791				ND	
95 Chlorodibromomethane	129		7.973				ND	
96 Ethylene Dibromide	107		8.084				ND	
99 Chlorobenzene	112		8.545				ND	
101 Ethylbenzene	106		8.629				ND	
102 m-Xylene & p-Xylene	106		8.741				ND	
103 o-Xylene	106	9.118	9.118	0.000	96	4173	0.6197	
104 Styrene	104		9.132				ND	
106 Bromoform	173		9.327				ND	
107 Isopropylbenzene	105		9.467				ND	
110 1,1,2,2-Tetrachloroethane	83		9.760				ND	
121 1,3-Dichlorobenzene	146		10.710				ND	
123 1,4-Dichlorobenzene	146		10.822				ND	
127 1,2-Dichlorobenzene	146		11.171				ND	
128 1,2-Dibromo-3-Chloropropane	157		11.967				ND	
130 1,2,4-Trichlorobenzene	180		12.791				ND	
134 1,2,3-Trichlorobenzene	180		13.280				ND	
S 155 Xylenes, Total	106				0		0.6197	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

mv-IS_SS_00039 Amount Added: 5.00 Units: uL Run Reagent

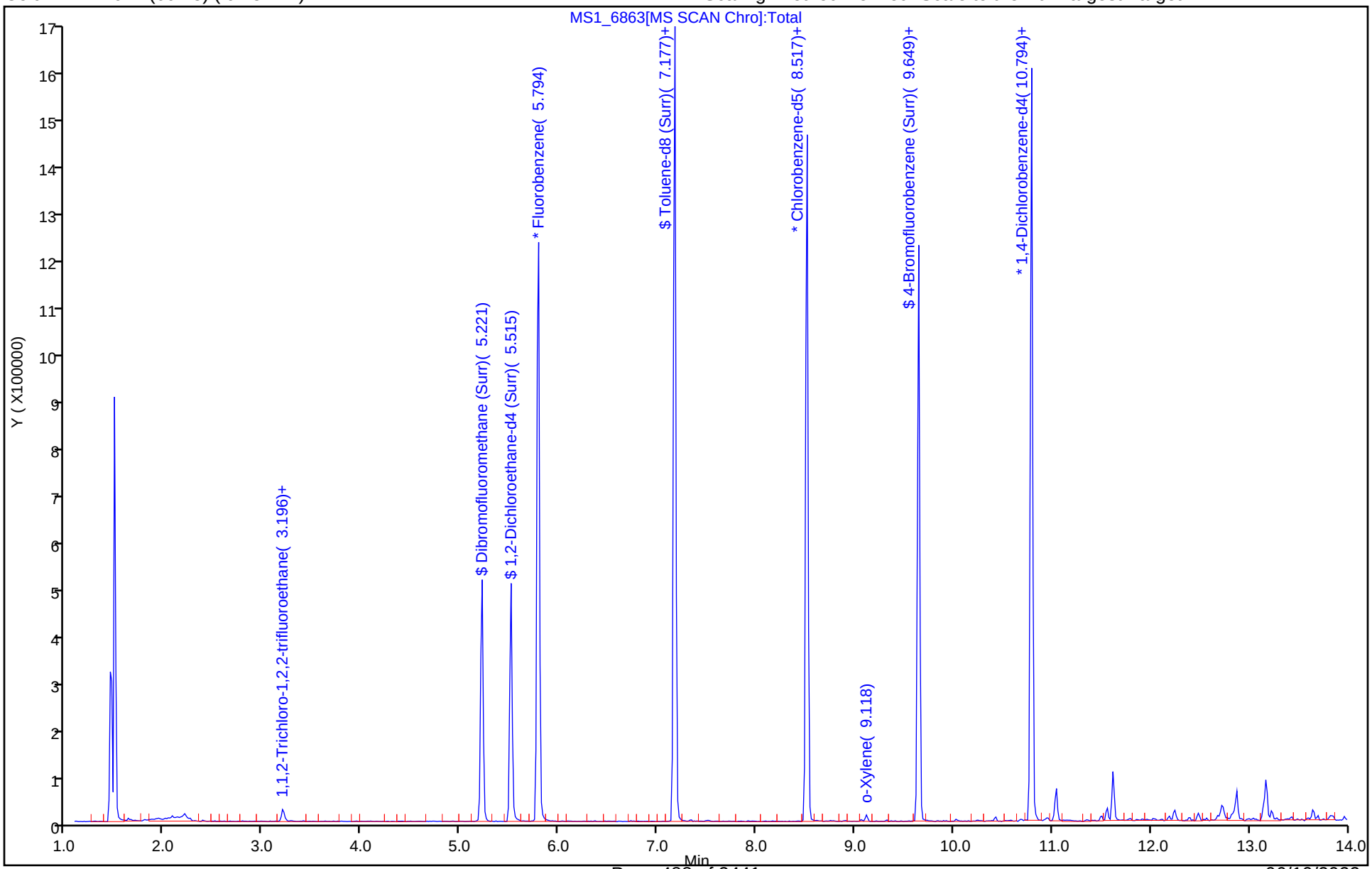
Report Date: 28-May-2022 07:16:24 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6863.D

Injection Date:	28-May-2022 00:59:30	Instrument ID:	VMS_MS1	Operator ID:	burkes
Lims ID:	280-162622-A-24	Lab Sample ID:	280-162622-24	Worklist Smp#:	25
Client ID:	SHGW04-22A				
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 Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6863.D
Lims ID: 280-162622-A-24
Client ID: SHGW04-22A
Sample Type: Client
Inject. Date: 28-May-2022 00:59:30 ALS Bottle#: 17 Worklist Smp#: 25
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-162622-A-24
Misc. Info.: 280-0111427-025
Operator ID: burkes Instrument ID: VMS_MS1

Method: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 28-May-2022 07:16:15 Calib Date: 05-May-2022 17:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5811.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1675

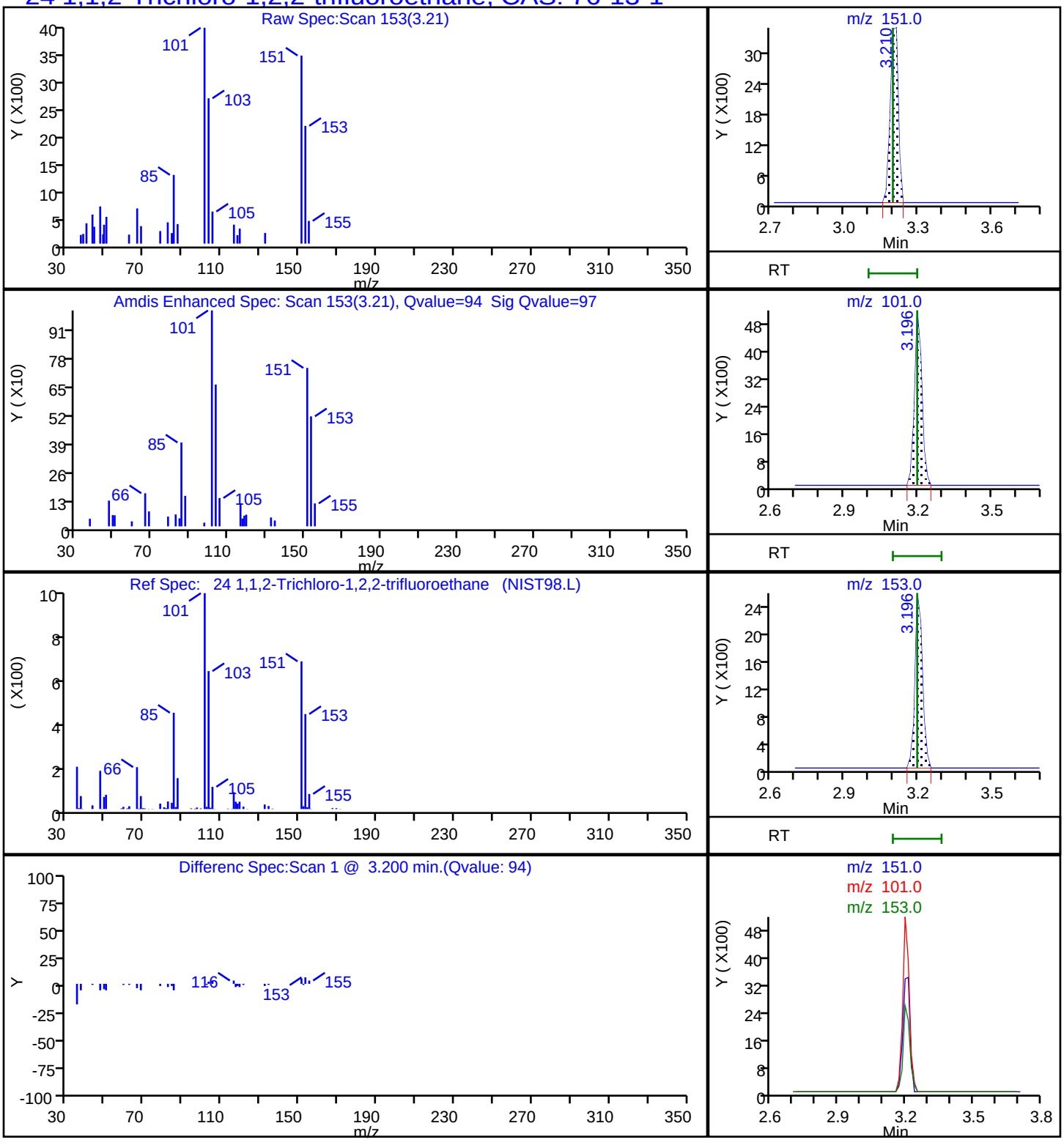
First Level Reviewer: sunleec Date: 28-May-2022 07:08:41

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	50.6	101.18
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	49.0	97.99
$ 7 Toluene-d8 (Surr)	50.0	50.9	101.85
$ 8 4-Bromofluorobenzene (Surr)	50.0	55.7	111.31

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6863.D
Injection Date: 28-May-2022 00:59:30 Instrument ID: VMS_MS1
Lims ID: 280-162622-A-24 Lab Sample ID: 280-162622-24
Client ID: SHGW04-22A
Operator ID: burkes ALS Bottle#: 17 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

24 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1



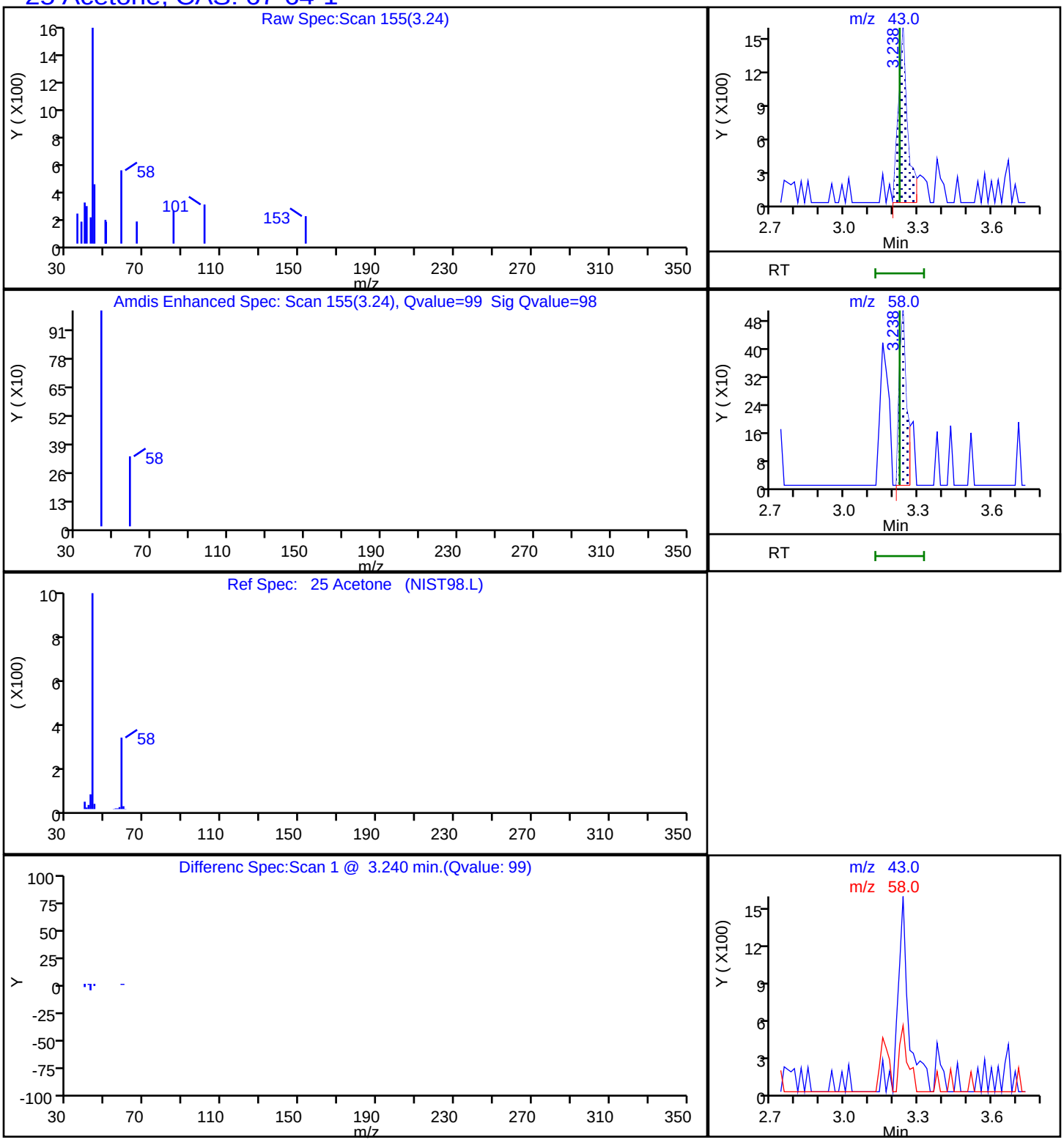
Report Date: 28-May-2022 07:16:24 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6863.D

Injection Date:	28-May-2022 00:59:30	Instrument ID:	VMS_MS1
Lims ID:	280-162622-A-24	Lab Sample ID:	280-162622-24
Client ID:	SHGW04-22A		
Operator ID:	burkes	ALS Bottle#:	17 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

25 Acetone, CAS: 67-64-1



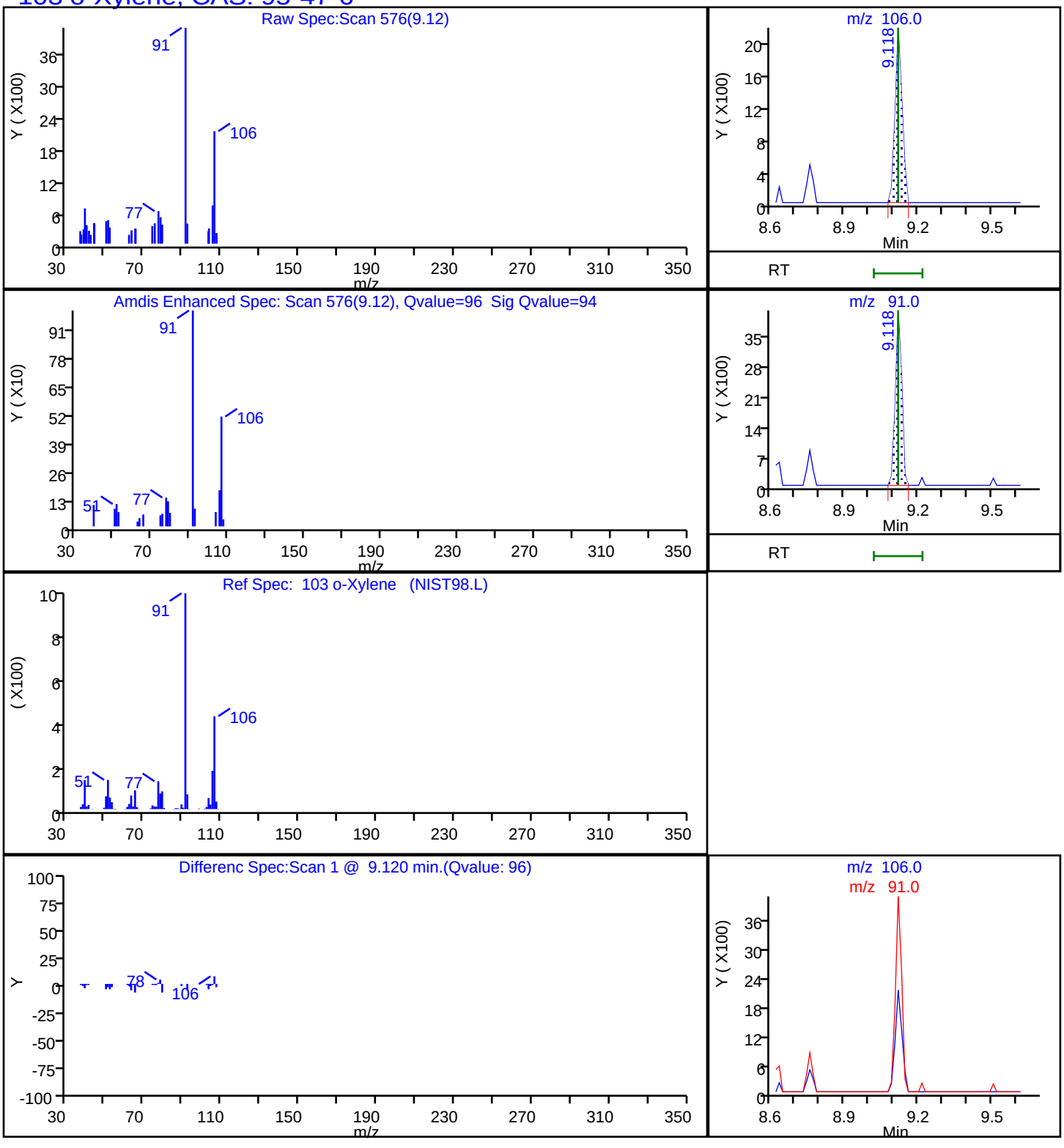
Report Date: 28-May-2022 07:16:24 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6863.D

Injection Date:	28-May-2022 00:59:30	Instrument ID:	VMS_MS1
Lims ID:	280-162622-A-24	Lab Sample ID:	280-162622-24
Client ID:	SHGW04-22A		
Operator ID:	burkes	ALS Bottle#:	17 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

103 o-Xylene, CAS: 95-47-6



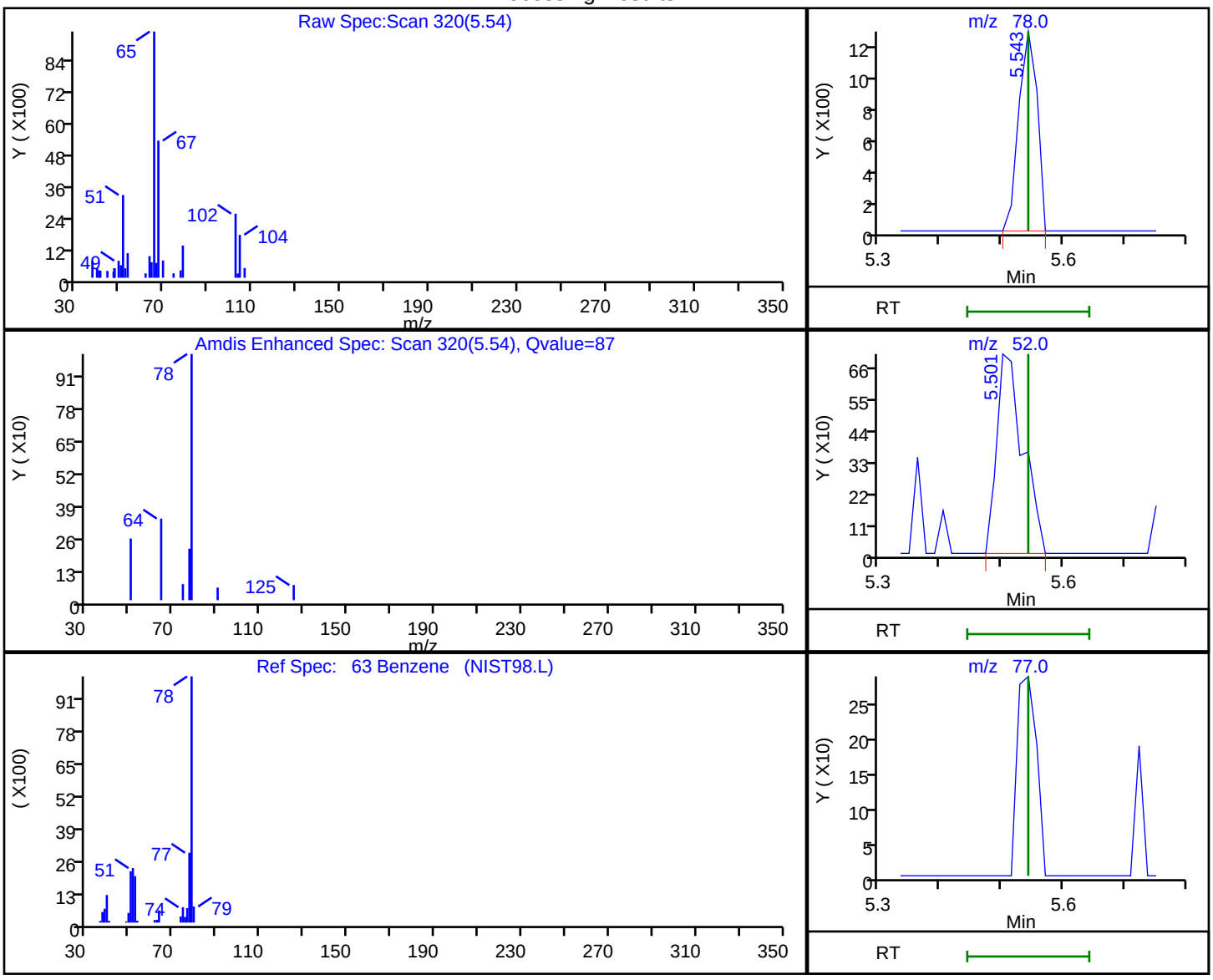
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6863.D				
Injection Date:	28-May-2022 00:59:30	Instrument ID:	VMS_MS1		
Lims ID:	280-162622-A-24	Lab Sample ID:	280-162622-24		
Client ID:	SHGW04-22A				
Operator ID:	burkes	ALS Bottle#:	17	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		

63 Benzene, CAS: 71-43-2

Processing Results



RT	Mass	Response	Amount
5.54	78.00	2588	0.174434
5.50	52.00	2111	
5.54	77.00	0	

Reviewer: sunleec, 28-May-2022 07:08:34

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: SHGW03-22A | Lab Sample ID: 280-162622-25

Matrix: Water | Lab File ID: MS1_6864.D

Analysis Method: 8260B | Date Collected: 05/18/2022 15:20

Sample wt/vol: 5(mL) | Date Analyzed: 05/28/2022 01:20

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 576482 | 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	1.5	J	3.0	0.40	0.18
79-00-5	1,1,2-Trichloroethane	4.1		1.0	0.80	0.27
75-34-3	1,1-Dichloroethane	0.80	U	1.0	0.80	0.22
75-35-4	1,1-Dichloroethene	0.80	U	1.0	0.80	0.23
87-61-6	1,2,3-Trichlorobenzene	0.80	U	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	0.90	U	1.0	0.90	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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: SHGW03-22A | Lab Sample ID: 280-162622-25

Matrix: Water | Lab File ID: MS1_6864.D

Analysis Method: 8260B | Date Collected: 05/18/2022 15:20

Sample wt/vol: 5(mL) | Date Analyzed: 05/28/2022 01:20

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 576482 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
75-71-8	Dichlorodifluoromethane	0.80	U Q	2.0	0.80	0.31
100-41-4	Ethylbenzene	0.33	J	1.0	0.40	0.16
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	0.40	J	1.0	0.80	0.19

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		81-118
460-00-4	4-Bromofluorobenzene (Surr)	110		85-114
1868-53-7	Dibromofluoromethane (Surr)	103		80-119
2037-26-5	Toluene-d8 (Surr)	101		89-112

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6864.D
Lims ID: 280-162622-A-25
Client ID: SHGW03-22A
Sample Type: Client
Inject. Date: 28-May-2022 01:20:30 ALS Bottle#: 18 Worklist Smp#: 26
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-162622-A-25
Misc. Info.: 280-0111427-026
Operator ID: burkes Instrument ID: VMS_MS1

Method: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 28-May-2022 07:16:15 Calib Date: 05-May-2022 17:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5811.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1675

First Level Reviewer: sunleec Date: 28-May-2022 07:08:56

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.794	5.794	0.000	99	1107606	50.0	
*	2 Chlorobenzene-d5	119	8.517	8.517	0.000	87	273117	50.0	
*	3 1,4-Dichlorobenzene-d4	152	10.794	10.794	0.000	96	448617	50.0	
*	4 Fluorobenzene (IS)	96		0.000				ND	
$	5 Dibromofluoromethane (Surr)	111	5.221	5.221	0.000	92	303245	51.3	
$	6 1,2-Dichloroethane-d4 (Surr)	65	5.515	5.514	0.000	0	344827	50.5	
$	7 Toluene-d8 (Surr)	98	7.176	7.176	0.000	94	1127335	50.6	
$	8 4-Bromofluorobenzene (Surr)	95	9.649	9.648	0.001	86	433124	54.9	
	11 Dichlorodifluoromethane	85		1.674				ND	
	12 Chloromethane	50		1.869				ND	
	13 Vinyl chloride	62		1.967				ND	
	15 Bromomethane	94		2.316				ND	
	16 Chloroethane	64		2.428				ND	
	18 Trichlorofluoromethane	101		2.679				ND	
	23 1,1-Dichloroethene	96		3.196				ND	
	24 112TCTFE	151	3.210	3.196	0.014	94	4023	1.46	
	25 Acetone	43		3.224				ND	
	28 Carbon disulfide	76		3.406				ND	
	30 Methyl acetate	43		3.517				ND	
	32 Methylene Chloride	84		3.657				ND	
	35 Methyl tert-butyl ether	73		3.894				ND	
	36 trans-1,2-Dichloroethene	96		3.908				ND	
	40 1,1-Dichloroethane	63		4.300				ND	
	46 2-Butanone (MEK)	43		4.774				ND	
	48 cis-1,2-Dichloroethene	96		4.788				ND	
	53 Chlorobromomethane	128		4.998				ND	
	55 Chloroform	83		5.082				ND	
	56 1,1,1-Trichloroethane	97		5.235				ND	
	57 Cyclohexane	56		5.291				ND	
	59 Carbon tetrachloride	117		5.375				ND	
	63 Benzene	78		5.543				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
64 1,2-Dichloroethane	62		5.584				ND	
68 Trichloroethene	95		6.101				ND	
70 Methylcyclohexane	55		6.311				ND	
71 1,2-Dichloropropane	63		6.325				ND	
75 Dichlorobromomethane	83		6.548				ND	
78 cis-1,3-Dichloropropene	75		6.925				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.037				ND	
82 Toluene	91		7.232				ND	
84 trans-1,3-Dichloropropene	75		7.428				ND	
87 1,1,2-Trichloroethane	97	7.623	7.610	0.013	92	12923	4.07	
89 Tetrachloroethene	164		7.707				ND	
91 2-Hexanone	43		7.791				ND	
95 Chlorodibromomethane	129		7.973				ND	
96 Ethylene Dibromide	107		8.084				ND	
99 Chlorobenzene	112		8.545				ND	
101 Ethylbenzene	106	8.629	8.629	0.000	98	1998	0.3334	
102 m-Xylene & p-Xylene	106	8.755	8.741	0.014	0	2955	0.3964	
103 o-Xylene	106		9.118				ND	
104 Styrene	104		9.132				ND	
106 Bromoform	173		9.327				ND	
107 Isopropylbenzene	105		9.467				ND	
110 1,1,2,2-Tetrachloroethane	83		9.760				ND	
121 1,3-Dichlorobenzene	146		10.710				ND	
123 1,4-Dichlorobenzene	146		10.822				ND	
127 1,2-Dichlorobenzene	146		11.171				ND	
128 1,2-Dibromo-3-Chloropropane	157		11.967				ND	
130 1,2,4-Trichlorobenzene	180		12.791				ND	
134 1,2,3-Trichlorobenzene	180		13.280				ND	
S 155 Xylenes, Total	106				0		0.3964	

QC Flag Legend

Processing Flags

Reagents:

mv-IS_SS_00039 Amount Added: 5.00 Units: uL Run Reagent

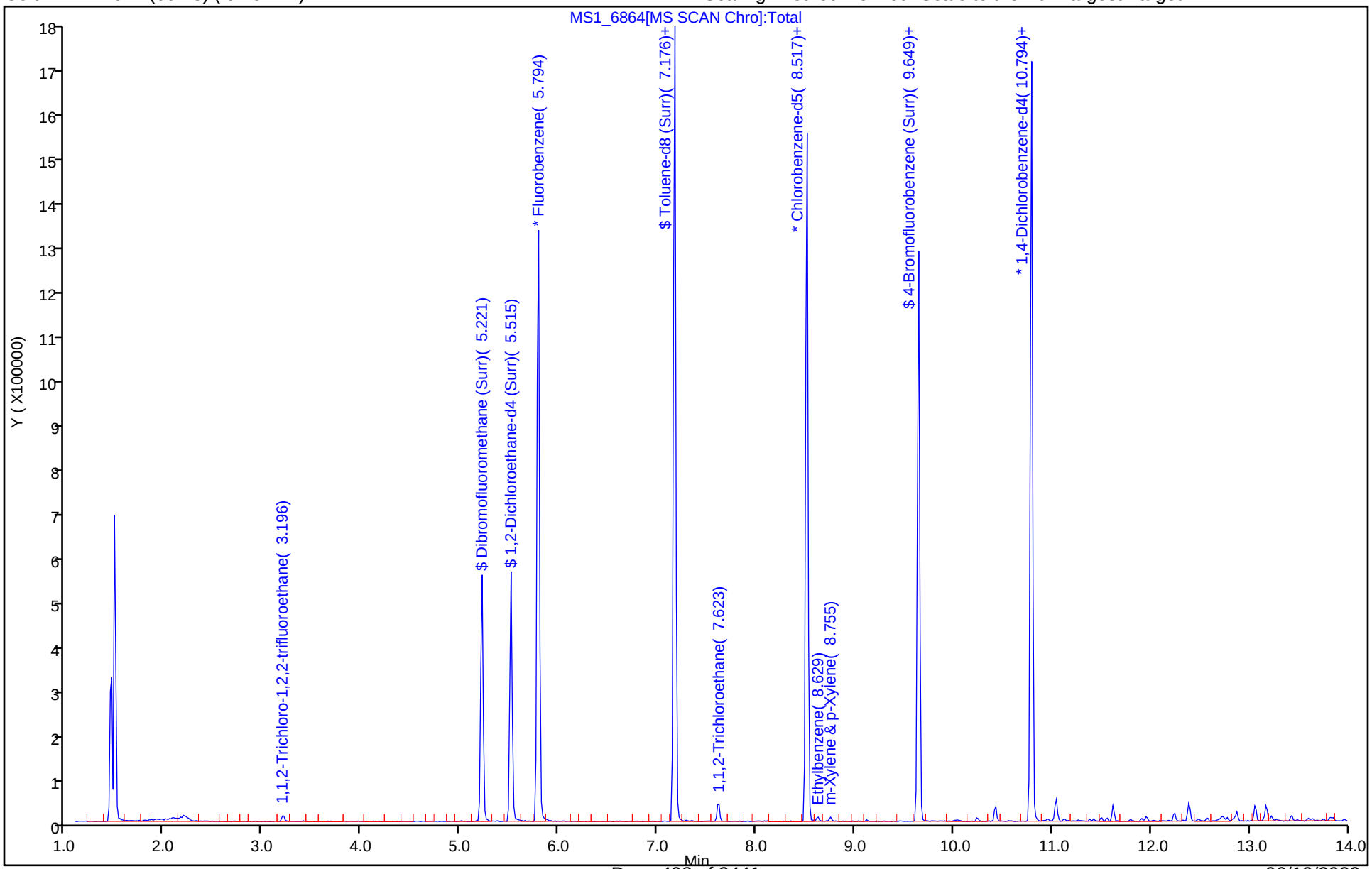
Report Date: 28-May-2022 07:16:25 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6864.D

Injection Date:	28-May-2022 01:20:30	Instrument ID:	VMS_MS1	Operator ID:	burkes
Lims ID:	280-162622-A-25	Lab Sample ID:	280-162622-25	Worklist Smp#:	26
Client ID:	SHGW03-22A				
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 Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6864.D
Lims ID: 280-162622-A-25
Client ID: SHGW03-22A
Sample Type: Client
Inject. Date: 28-May-2022 01:20:30 ALS Bottle#: 18 Worklist Smp#: 26
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-162622-A-25
Misc. Info.: 280-0111427-026
Operator ID: burkes Instrument ID: VMS_MS1

Method: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 28-May-2022 07:16:15 Calib Date: 05-May-2022 17:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5811.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1675

First Level Reviewer: sunleec Date: 28-May-2022 07:08:56

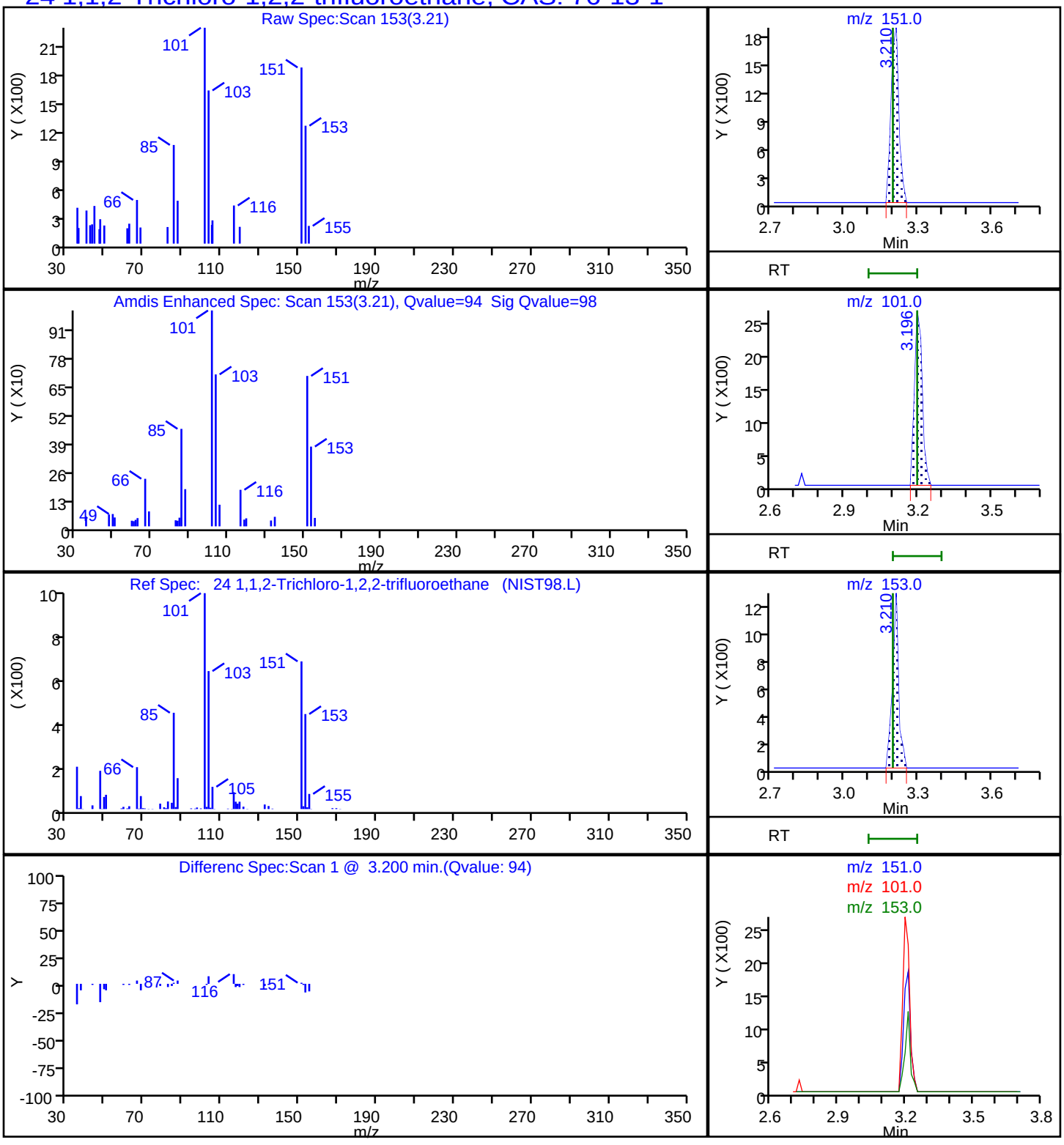
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	51.3	102.66
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	50.5	101.09
$ 7 Toluene-d8 (Surr)	50.0	50.6	101.23
$ 8 4-Bromofluorobenzene (Surr)	50.0	54.9	109.72

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6864.D

Injection Date:	28-May-2022 01:20:30	Instrument ID:	VMS_MS1		
Lims ID:	280-162622-A-25	Lab Sample ID:	280-162622-25		
Client ID:	SHGW03-22A				
Operator ID:	burkes	ALS Bottle#:	18	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		

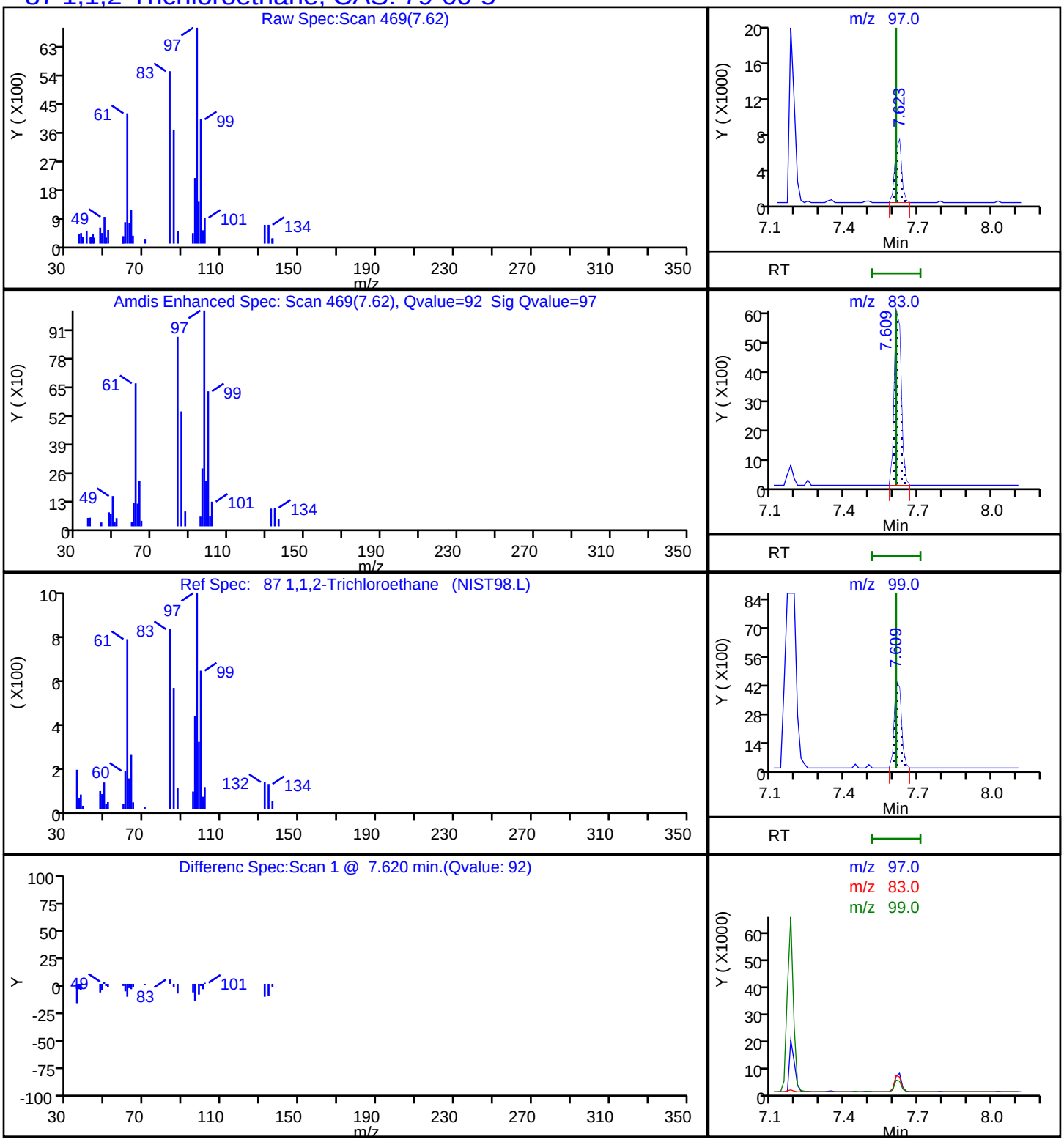
24 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1



Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6864.D
Injection Date: 28-May-2022 01:20:30 Instrument ID: VMS_MS1
Lims ID: 280-162622-A-25 Lab Sample ID: 280-162622-25
Client ID: SHGW03-22A
Operator ID: burkes ALS Bottle#: 18 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

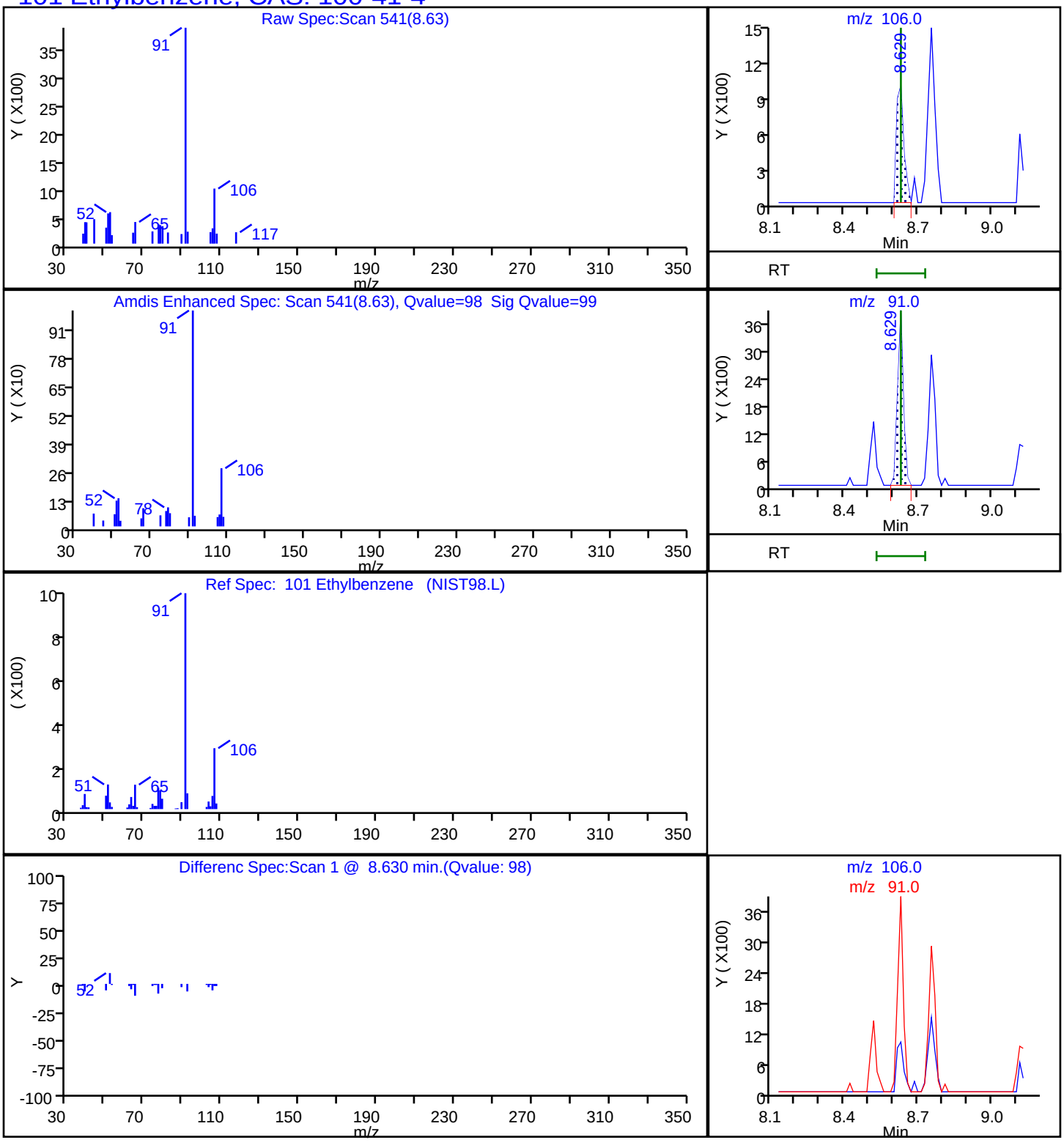
87 1,1,2-Trichloroethane, CAS: 79-00-5



Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6864.D
Injection Date: 28-May-2022 01:20:30 Instrument ID: VMS_MS1
Lims ID: 280-162622-A-25 Lab Sample ID: 280-162622-25
Client ID: SHGW03-22A
Operator ID: burkes ALS Bottle#: 18 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

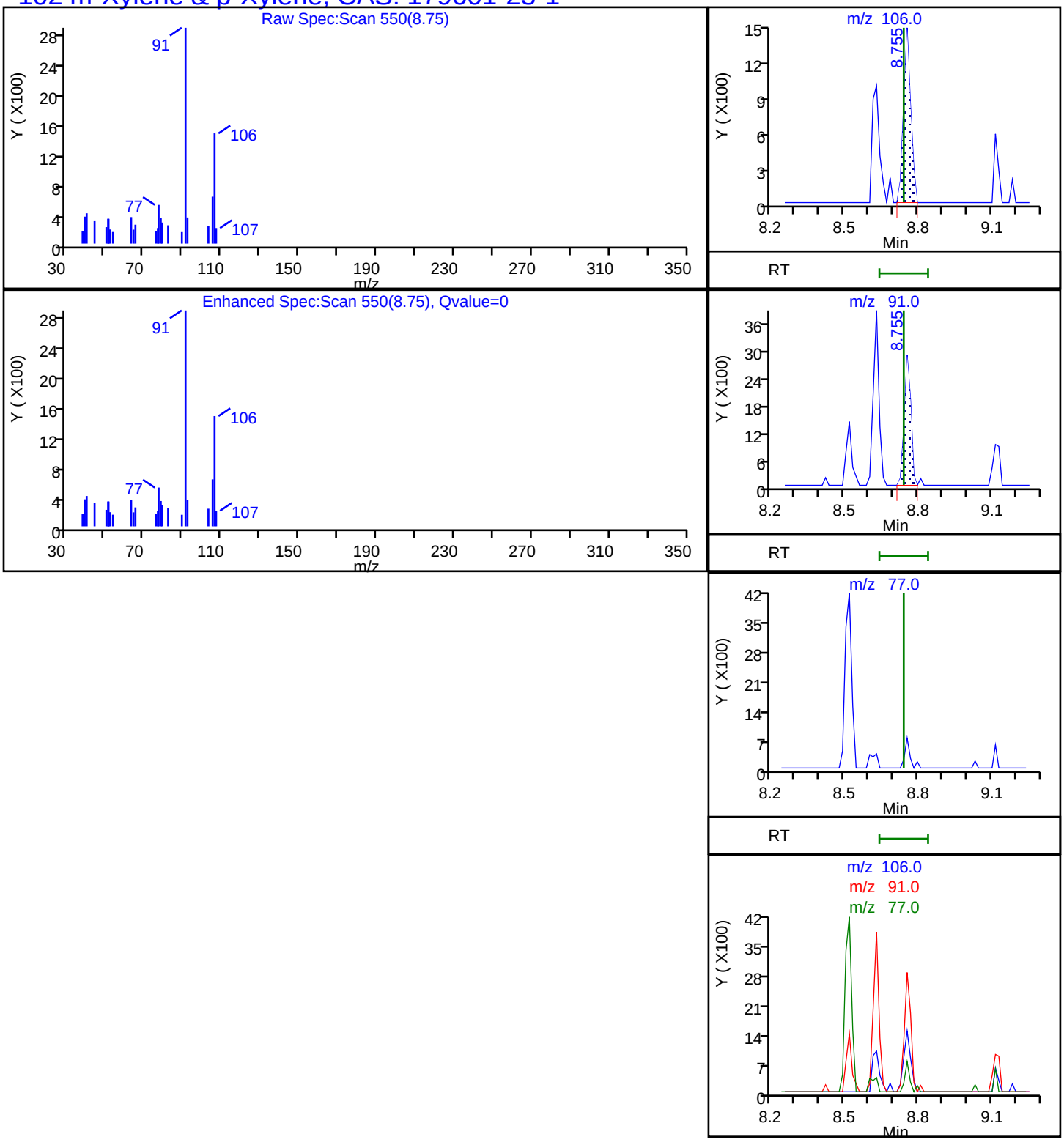
101 Ethylbenzene, CAS: 100-41-4



Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6864.D
Injection Date: 28-May-2022 01:20:30 Instrument ID: VMS_MS1
Lims ID: 280-162622-A-25 Lab Sample ID: 280-162622-25
Client ID: SHGW03-22A
Operator ID: burkes ALS Bottle#: 18 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

102 m-Xylene & p-Xylene, CAS: 179601-23-1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: SAMW1-22A | Lab Sample ID: 280-162622-26

Matrix: Water | Lab File ID: MS1_6865.D

Analysis Method: 8260B | Date Collected: 05/18/2022 14:10

Sample wt/vol: 5(mL) | Date Analyzed: 05/28/2022 01:41

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 576482 | 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	2.2	J	3.0	0.40	0.18
79-00-5	1,1,2-Trichloroethane	0.80	U	1.0	0.80	0.27
75-34-3	1,1-Dichloroethane	0.80	U	1.0	0.80	0.22
75-35-4	1,1-Dichloroethene	0.80	U	1.0	0.80	0.23
87-61-6	1,2,3-Trichlorobenzene	0.80	U	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	0.90	U	1.0	0.90	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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: SAMW1-22A | Lab Sample ID: 280-162622-26

Matrix: Water | Lab File ID: MS1_6865.D

Analysis Method: 8260B | Date Collected: 05/18/2022 14:10

Sample wt/vol: 5(mL) | Date Analyzed: 05/28/2022 01:41

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 576482 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
75-71-8	Dichlorodifluoromethane	0.80	U Q	2.0	0.80	0.31
100-41-4	Ethylbenzene	0.40	U	1.0	0.40	0.16
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)	101		81-118
460-00-4	4-Bromofluorobenzene (Surr)	106		85-114
1868-53-7	Dibromofluoromethane (Surr)	100		80-119
2037-26-5	Toluene-d8 (Surr)	104		89-112

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6865.D
Lims ID: 280-162622-E-26
Client ID: SAMW1-22A
Sample Type: Client
Inject. Date: 28-May-2022 01:41:30 ALS Bottle#: 19 Worklist Smp#: 27
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-162622-E-26
Misc. Info.: 280-0111427-027
Operator ID: burkes Instrument ID: VMS_MS1

Method: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 28-May-2022 07:16:15 Calib Date: 05-May-2022 17:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5811.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1675

First Level Reviewer: sunleec Date: 28-May-2022 07:09:05

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 Fluorobenzene	96	5.794	5.794	0.000	99	1102078	50.0	
*	2 Chlorobenzene-d5	119	8.517	8.517	0.000	87	264065	50.0	
*	3 1,4-Dichlorobenzene-d4	152	10.794	10.794	0.000	96	438728	50.0	
*	4 Fluorobenzene (IS)	96		0.000				ND	
$	5 Dibromofluoromethane (Surr)	111	5.221	5.221	0.000	92	292961	49.8	
$	6 1,2-Dichloroethane-d4 (Surr)	65	5.515	5.514	0.001	0	341501	50.3	
$	7 Toluene-d8 (Surr)	98	7.177	7.176	0.000	94	1118152	51.9	
$	8 4-Bromofluorobenzene (Surr)	95	9.649	9.648	0.001	87	408428	52.9	
	11 Dichlorodifluoromethane	85		1.674				ND	
	12 Chloromethane	50		1.869				ND	
	13 Vinyl chloride	62		1.967				ND	
	15 Bromomethane	94		2.316				ND	
	16 Chloroethane	64		2.428				ND	
	18 Trichlorofluoromethane	101		2.679				ND	
	23 1,1-Dichloroethene	96		3.196				ND	
	24 112TCTFE	151	3.196	3.196	0.000	95	5873	2.16	
	25 Acetone	43		3.224				ND	
	28 Carbon disulfide	76		3.406				ND	
	30 Methyl acetate	43		3.517				ND	
	32 Methylene Chloride	84		3.657				ND	
	35 Methyl tert-butyl ether	73		3.894				ND	
	36 trans-1,2-Dichloroethene	96		3.908				ND	
	40 1,1-Dichloroethane	63		4.300				ND	
	46 2-Butanone (MEK)	43		4.774				ND	
	48 cis-1,2-Dichloroethene	96		4.788				ND	
	53 Chlorobromomethane	128		4.998				ND	
	55 Chloroform	83		5.082				ND	
	56 1,1,1-Trichloroethane	97		5.235				ND	
	57 Cyclohexane	56		5.291				ND	
	59 Carbon tetrachloride	117		5.375				ND	
	63 Benzene	78		5.543				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
64 1,2-Dichloroethane	62		5.584				ND	
68 Trichloroethene	95		6.101				ND	
70 Methylcyclohexane	55		6.311				ND	
71 1,2-Dichloropropane	63		6.325				ND	
75 Dichlorobromomethane	83		6.548				ND	
78 cis-1,3-Dichloropropene	75		6.925				ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.037				ND	
82 Toluene	91		7.232				ND	
84 trans-1,3-Dichloropropene	75		7.428				ND	
87 1,1,2-Trichloroethane	97		7.610				ND	
89 Tetrachloroethene	164		7.707				ND	
91 2-Hexanone	43		7.791				ND	
95 Chlorodibromomethane	129		7.973				ND	
96 Ethylene Dibromide	107		8.084				ND	
99 Chlorobenzene	112		8.545				ND	
101 Ethylbenzene	106		8.629				ND	
102 m-Xylene & p-Xylene	106		8.741				ND	
103 o-Xylene	106		9.118				ND	
104 Styrene	104		9.132				ND	
106 Bromoform	173		9.327				ND	
107 Isopropylbenzene	105		9.467				ND	
110 1,1,2,2-Tetrachloroethane	83		9.760				ND	
121 1,3-Dichlorobenzene	146		10.710				ND	
123 1,4-Dichlorobenzene	146		10.822				ND	
127 1,2-Dichlorobenzene	146		11.171				ND	
128 1,2-Dibromo-3-Chloropropane	157		11.967				ND	
130 1,2,4-Trichlorobenzene	180		12.791				ND	
134 1,2,3-Trichlorobenzene	180		13.280				ND	
S 155 Xylenes, Total	106		0.000				ND	7

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

mv-IS_SS_00039 Amount Added: 5.00 Units: uL Run Reagent

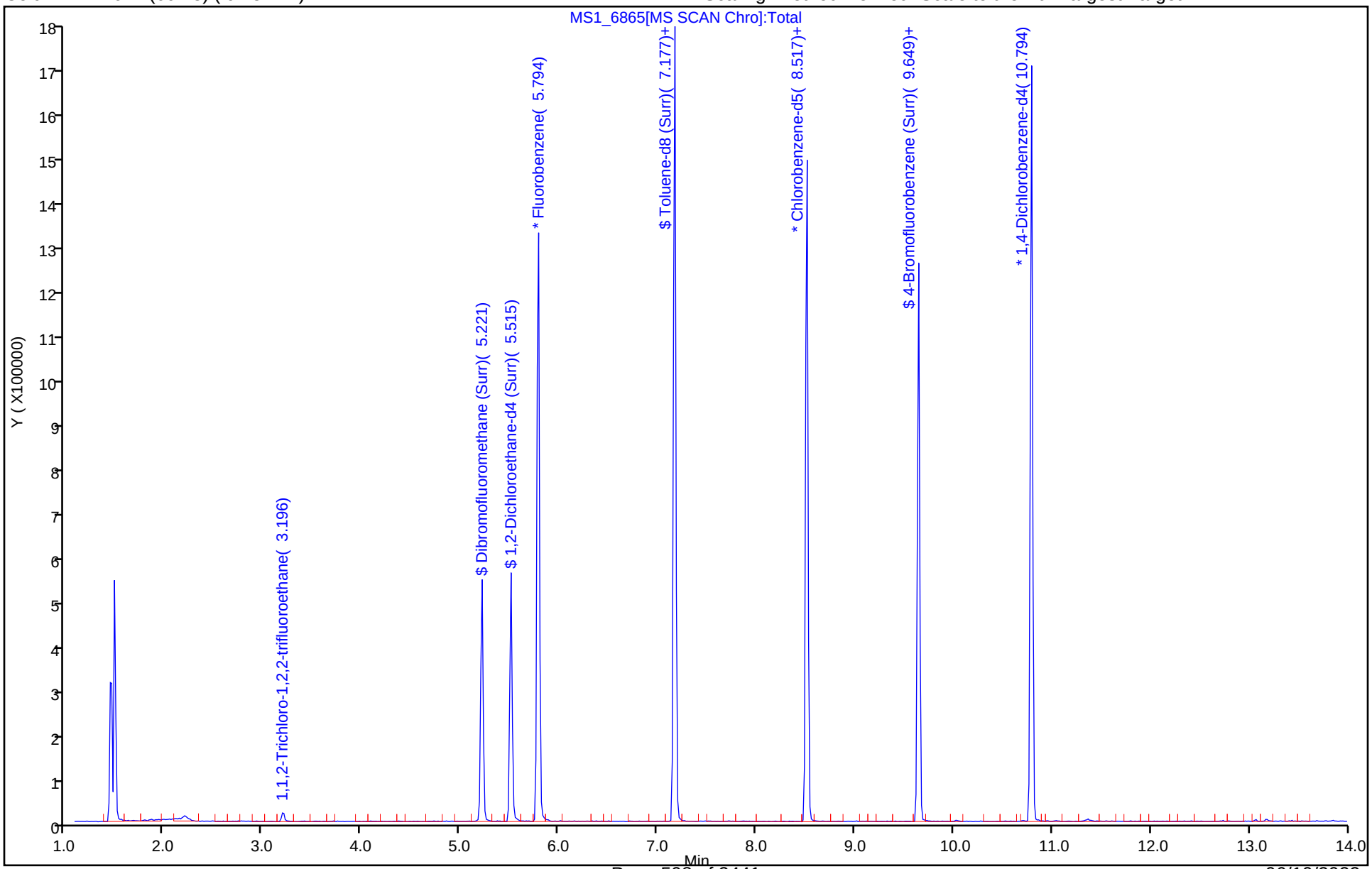
Report Date: 28-May-2022 07:16:26 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6865.D

Injection Date:	28-May-2022 01:41:30	Instrument ID:	VMS_MS1	Operator ID:	burkes
Lims ID:	280-162622-E-26	Lab Sample ID:	280-162622-26	Worklist Smp#:	27
Client ID:	SAMW1-22A				
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



Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6865.D
Lims ID: 280-162622-E-26
Client ID: SAMW1-22A
Sample Type: Client
Inject. Date: 28-May-2022 01:41:30 ALS Bottle#: 19 Worklist Smp#: 27
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-162622-E-26
Misc. Info.: 280-0111427-027
Operator ID: burkes Instrument ID: VMS_MS1

Method: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 28-May-2022 07:16:15 Calib Date: 05-May-2022 17:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5811.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1675

First Level Reviewer: sunleec Date: 28-May-2022 07:09:05

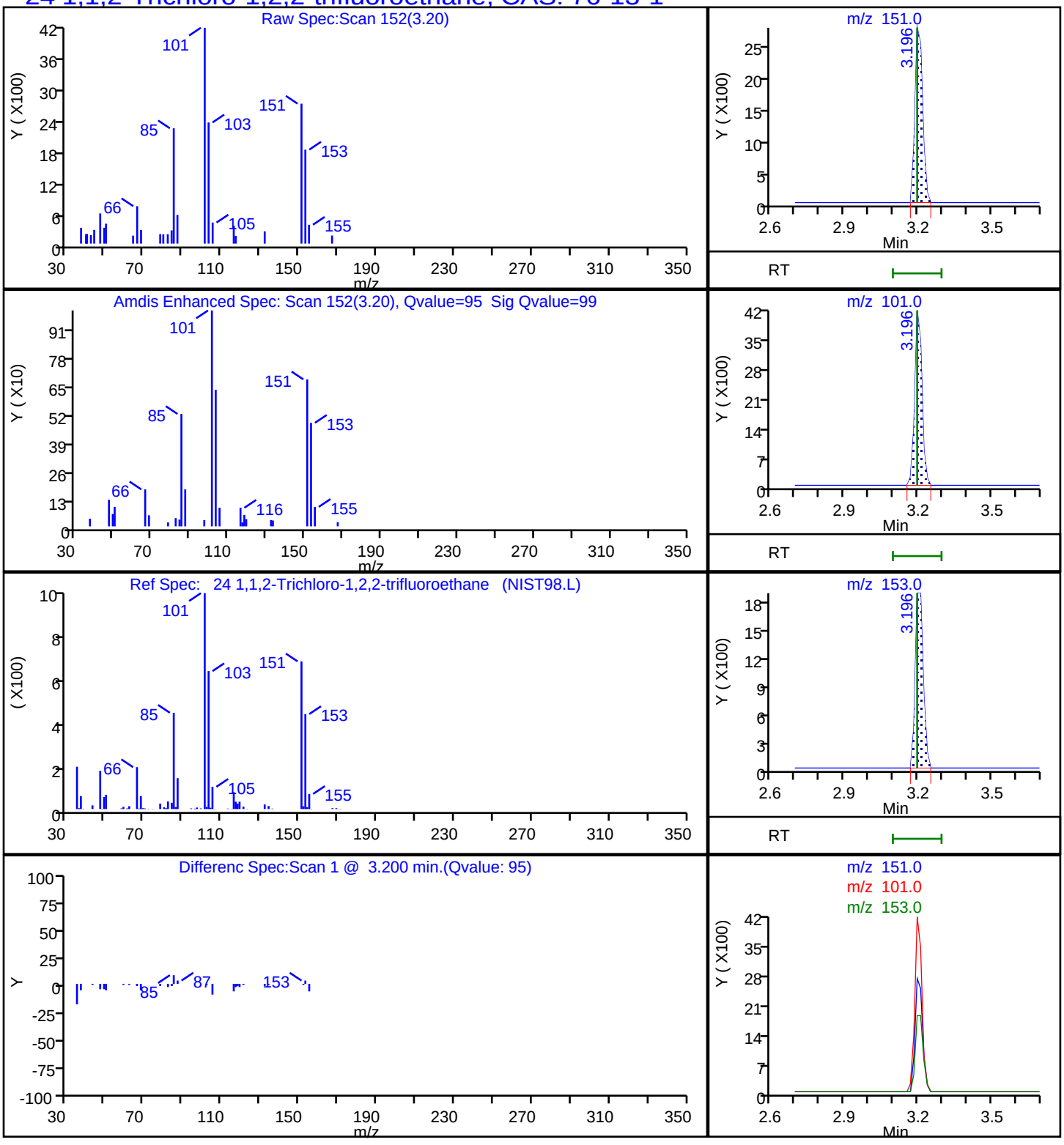
Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	49.8	99.68
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	50.3	100.62
$ 7 Toluene-d8 (Surr)	50.0	51.9	103.85
$ 8 4-Bromofluorobenzene (Surr)	50.0	52.9	105.80

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6865.D

Injection Date:	28-May-2022 01:41:30	Instrument ID:	VMS_MS1
Lims ID:	280-162622-E-26	Lab Sample ID:	280-162622-26
Client ID:	SAMW1-22A		
Operator ID:	burkes	ALS Bottle#:	19 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

24 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1



FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-162622-1 Analy Batch No.: 566025

SDG No.:

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/16/2022 14:56 Calibration End Date: 02/16/2022 17:47 Calibration ID: 62277

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-566025/14	MS1_2511.D
Level 2	IC 280-566025/15	MS1_2512.D
Level 3	IC 280-566025/16	MS1_2513.D
Level 4	IC 280-566025/17	MS1_2514.D
Level 5	IC 280-566025/18	MS1_2515.D
Level 6	ICIS 280-566025/19	MS1_2516.D
Level 7	IC 280-566025/20	MS1_2517.D
Level 8	IC 280-566025/21	MS1_2518.D
Level 9	IC 280-566025/22	MS1_2519.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 9	LVL 5		B	M1	M2								
Dichlorodifluoromethane	+++++ 0.2590	0.1903 0.2427	0.1917 0.2396	0.2267 0.2204	0.2307	Ave		0.2251				10.7		15.0			
Chloromethane	+++++ 0.2201	0.2526 0.2123	0.2156 0.2111	0.2229 0.2012	0.2109	Ave		0.2183			0.1000	7.0		15.0			
Vinyl chloride	0.1602 0.1848	0.1374 0.1747	0.1857 0.1671	0.1877 0.1601	0.1805	Ave		0.1709				9.6		30.0			
Bromomethane	+++++ 0.1379	0.2214 0.1286	0.1854 0.1202	0.1850 +++++	0.1711	Lin1	0.1424	0.1267							0.9930		0.9900
Chloroethane	0.1260 0.1424	0.1313 0.1347	0.1325 0.1312	0.1419 0.1232	0.1362	Ave		0.1333				4.8		15.0			
Dichlorofluoromethane	+++++ 0.3809	0.4411 0.3648	0.4479 0.3593	0.4006 0.3420	0.3782	Ave		0.3893				9.8		15.0			
Trichlorofluoromethane	+++++ 0.3147	0.2763 0.3033	0.2858 0.2926	0.2784 0.2886	0.2859	Ave		0.2907				4.4		15.0			
Ethyl ether	+++++ 0.1668	0.1263 0.1569	0.1600 0.1631	0.1574 0.1558	0.1688	Ave		0.1569				8.4		15.0			
Acrolein	+++++ 0.0065	0.0136 0.0065	0.0110 0.0064	0.0073 +++++	0.0069	Lin2	0.0750	0.0063							0.9930		0.9900
1,1-Dichloroethene	0.1440 0.1668	0.1679 0.1608	0.1645 0.1656	0.1223 0.1483	0.1412	Ave		0.1535				10.2		30.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0826 0.1259	0.1067 0.1239	0.1212 0.1284	0.0734 0.1118	0.0929	Lin1	-0.027	0.1189							0.9940		0.9900
Acetone	0.0722 0.0640	0.0811 0.0592	0.0654 0.0613	0.0575 0.0610	0.0556	Ave		0.0641				12.5		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
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-162622-1 Analy Batch No.: 566025

SDG No.:

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/16/2022 14:56 Calibration End Date: 02/16/2022 17:47 Calibration ID: 62277

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 9	LVL 5		B	M1	M2								
Iodomethane	+++++ 0.1973	0.0950 0.2147	0.0895 0.2183	0.0904 0.2147	0.1170	Lin1	-0.256	0.2137							0.9940		0.9900
Carbon disulfide	+++++ 0.5733	0.6168 0.5547	0.5761 0.5695	0.4381 0.5172	0.4997	Ave		0.5432				10.3		15.0			
Methyl acetate	+++++ 0.1410	0.1305 0.1414	0.1479 0.1483	0.1246 0.1467	0.1376	Ave		0.1397				6.1		15.0			
3-Chloro-1-propene	0.4378 0.3338	0.4072 0.3116	0.3863 0.3168	0.2890 0.2780	0.3236	Lin2	0.0719	0.3120							0.9910		0.9900
Methylene Chloride	0.3972 0.2106	0.3237 0.2013	0.2582 0.2057	0.2165 0.1958	0.2279	Lin2	0.1003	0.2057							0.9970		0.9900
t-Butyl alcohol	+++++ 0.0201	0.0147 0.0200	0.0150 0.0217	0.0171 0.0208	0.0176	Ave		0.0184				14.4		15.0			
Acrylonitrile	0.0763 0.0783	0.0850 0.0749	0.0786 0.0775	0.0809 0.0720	0.0797	Ave		0.0781				4.7		15.0			
Methyl tert-butyl ether	0.4097 0.5591	0.4996 0.5496	0.4783 0.5712	0.4653 0.5581	0.5188	Ave		0.5122				10.5		15.0			
trans-1,2-Dichloroethene	0.1612 0.1879	0.1893 0.1816	0.1870 0.1869	0.1605 0.1711	0.1745	Ave		0.1778				6.4		15.0			
Hexane	1.3211 1.1773	1.3242 1.1587	1.0228 1.2275	0.7497 1.1150	0.7685	Lin1	-0.116	1.1455							0.9940		0.9900
Vinyl acetate	+++++ 0.3855	0.3029 0.3899	0.3030 0.4070	0.3069 0.3927	0.3644	Ave		0.3565				12.6		15.0			
1,1-Dichloroethane	0.3193 0.3832	0.3629 0.3672	0.4110 0.3762	0.3358 0.3515	0.3756	Ave		0.3647			0.1000	7.4		15.0			
2-Butanone (MEK)	+++++ 0.0894	0.0642 0.0883	0.0695 0.0939	0.0705 0.0896	0.0804	Ave		0.0807				14.0		15.0			
cis-1,2-Dichloroethene	0.2108 0.2102	0.2468 0.2036	0.2085 0.2045	0.1857 0.1978	0.2027	Ave		0.2078				7.9		15.0			
2,2-Dichloropropane	0.3390 0.3221	0.3145 0.3099	0.3215 0.3132	0.2403 0.2883	0.2854	Ave		0.3038				9.5		15.0			
sec-Butyl Alcohol	+++++ 0.0155	0.0131 0.0155	0.0105 0.0166	0.0130 0.0161	0.0128	Ave		0.0141				14.9		15.0			
Bromochloromethane	0.0969 0.0962	0.1046 0.0900	0.1076 0.0934	0.0946 0.0917	0.1042	Ave		0.0977				6.4		15.0			
Tetrahydrofuran	0.1114 0.0608	0.0953 0.0592	0.0761 0.0612	0.0565 0.0597	0.0668	Lin2	0.0549	0.0601							0.9920		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 Denver Job No.: 280-162622-1 Analy Batch No.: 566025

SDG No.:

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/16/2022 14:56 Calibration End Date: 02/16/2022 17:47 Calibration ID: 62277

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 9	LVL 5		B	M1	M2								
Chloroform	0.4203 0.3640	0.3843 0.3512	0.4013 0.3603	0.3377 0.3441	0.3598	Ave		0.3692				7.4		30.0			
1,1,1-Trichloroethane	0.2559 0.3210	0.2914 0.3122	0.3049 0.3225	0.2390 0.2977	0.2758	Ave		0.2911				10.0		15.0			
Cyclohexane	0.4712 0.3633	0.3557 0.3489	0.3871 0.3662	0.2571 0.3215	0.2695	Lin1	0.0230	0.3391							0.9950		0.9900
1,1-Dichloropropene	+++++ 0.2887	0.2536 0.2802	0.2615 0.2922	0.1803 0.2661	0.2234	Ave		0.2558				14.7		15.0			
Carbon tetrachloride	0.1932 0.2470	0.2074 0.2420	0.2150 0.2531	0.1609 0.2331	0.1925	Ave		0.2160				14.2		15.0			
Isobutyl alcohol	0.0071 0.0063	0.0082 0.0065	0.0053 0.0069	0.0049 0.0067	0.0053	Lin1	-0.016	0.0066							0.9970		0.9900
Benzene	0.7901 0.7803	0.7825 0.7619	0.7926 0.7857	0.6372 0.7458	0.7436	Ave		0.7577				6.4		15.0			
1,2-Dichloroethane	0.3960 0.3167	0.3725 0.3045	0.3302 0.3119	0.3008 0.3046	0.3264	Ave		0.3293				10.1		15.0			
Trichloroethene	0.7037 0.9219	0.7702 0.9010	0.7746 0.9261	0.6477 0.8932	0.7466	Ave		0.8094				12.8		15.0			
2-Pentanone	+++++ 0.1401	+++++ 0.1384	0.1228 0.1471	0.1089 0.1403	0.1200	Ave		0.1311				10.6		15.0			
Methylcyclohexane	0.2491 0.2729	0.2262 0.2622	0.2414 0.2727	0.1746 0.2473	0.2007	Ave		0.2386				13.9		15.0			
1,2-Dichloropropane	0.1962 0.2157	0.1900 0.2056	0.2043 0.2134	0.1916 0.2071	0.2068	Ave		0.2034				4.4		30.0			
1,4-Dioxane	+++++ 0.0024	+++++ 0.0024	0.0018 0.0025	0.0022 0.0024	0.0025	Ave		0.0023				11.1		15.0			
Dibromomethane	0.1586 0.1268	0.1319 0.1205	0.1377 0.1253	0.1222 0.1230	0.1346	Ave		0.1312				9.0		15.0			
Bromodichloromethane	0.2607 0.2477	0.2579 0.2425	0.2514 0.2510	0.2161 0.2532	0.2393	Ave		0.2467				5.4		15.0			
2-Chloroethyl vinyl ether	+++++ 0.1123	0.0995 0.1086	0.1084 0.1139	0.1079 0.1068	0.1005	Ave		0.1072				4.7		15.0			
cis-1,3-Dichloropropene	+++++ 1.4027	1.1631 1.3835	1.2123 1.4383	1.0418 1.4540	1.2146	Ave		1.2888				11.7		15.0			
4-Methyl-2-pentanone (MIBK)	+++++ 0.1741	0.1746 0.1684	0.1643 0.1762	0.1615 0.1655	0.1658	Ave		0.1688				3.3		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-162622-1 Analy Batch No.: 566025

SDG No.:

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/16/2022 14:56 Calibration End Date: 02/16/2022 17:47 Calibration ID: 62277

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 9	LVL 5		B	M1	M2								
Toluene	+++++ 0.7592	0.8596 0.7396	0.8582 0.7538	0.6653 0.7159	0.7328	Ave		0.7606				8.8		30.0			
trans-1,3-Dichloropropene	+++++ 0.2930	0.2611 0.2854	0.2606 0.2995	0.2448 0.2959	0.2746	Ave		0.2769				7.2		15.0			
Ethyl methacrylate	+++++ 1.0114	1.0642 0.9881	0.9773 1.0255	0.8892 0.9833	0.9838	Ave		0.9903				5.1		15.0			
1,1,2-Trichloroethane	0.1484 0.1526	0.1629 0.1458	0.1468 0.1532	0.1429 0.1513	0.1459	Ave		0.1500				4.0		15.0			
Tetrachloroethene	0.3788 0.5732	0.5060 0.5693	0.4645 0.5935	0.4048 0.5672	0.4515	Lin1	-0.167	0.5723							0.9980		0.9900
1,3-Dichloropropane	1.0502 1.2979	1.1177 1.2836	1.0941 1.3207	1.1195 1.3198	1.1733	Ave		1.1974				9.0		15.0			
2-Hexanone	0.4166 0.5422	0.4018 0.5311	0.4633 0.5571	0.4827 0.5217	0.4976	Ave		0.4904				11.1		15.0			
Dibromochloromethane	+++++ 0.6831	0.5972 0.6744	0.5722 0.7194	0.5122 0.7514	0.5742	Ave		0.6355				13.1		15.0			
1,2-Dibromoethane (EDB)	0.5842 0.7272	0.5929 0.7096	0.6188 0.7426	0.5880 0.7446	0.6835	Ave		0.6657				10.4		15.0			
1-Chlorohexane	+++++ 1.0564	1.7860 1.0382	1.2198 1.0756	0.8008 0.9967	0.9102	Lin1	0.3139	1.0198							0.9970		0.9900
Chlorobenzene	2.0934 2.0598	1.9851 2.0222	1.9480 2.0638	1.7677 2.0302	1.9367	Ave		1.9897			0.3000	5.0		15.0			
1,1,1,2-Tetrachloroethane	+++++ 0.7046	0.6048 0.7037	0.6054 0.7393	0.5589 0.7491	0.6115	Ave		0.6596				11.0		15.0			
Ethylbenzene	1.0818 1.1628	1.0211 1.1438	1.1091 1.1685	0.9203 1.1128	1.0181	Ave		1.0820				7.6		30.0			
m-Xylene & p-Xylene	1.2373 1.4615	1.3513 1.4145	1.4160 1.4611	1.1810 1.3964	1.3210	Ave		1.3600				7.2		15.0			
o-Xylene	1.3424 1.4001	1.4349 1.3705	1.3682 1.3974	1.2122 1.3615	1.3278	Ave		1.3572				4.7		15.0			
Styrene	2.3911 2.4847	2.3546 2.3769	2.3475 2.4257	2.0965 2.3793	2.3221	Ave		2.3532				4.6		15.0			
Bromoform	+++++ 0.4089	0.3351 0.4075	0.3359 0.4266	0.2940 0.4562	0.3325	Lin1	-0.263	0.4352			0.1000				0.9960		0.9900
Isopropylbenzene	2.0306 2.1334	1.9553 2.1133	2.0026 2.2300	1.6576 2.0729	1.8467	Ave		2.0047				8.5		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
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-162622-1 Analy Batch No.: 566025

SDG No.:

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/16/2022 14:56 Calibration End Date: 02/16/2022 17:47 Calibration ID: 62277

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 9	LVL 5		B	M1	M2								
Cyclohexanone	0.0378 0.0356	0.0402 0.0349	0.0345 0.0367	0.0322 0.0347	0.0331	Ave		0.0355				6.8		15.0			
1,1,2,2-Tetrachloroethane	0.5732 0.5326	0.5594 0.5280	0.5216 0.5644	0.4927 0.5390	0.5036	Ave		0.5349			0.3000	5.1		15.0			
Bromobenzene	+++++ 0.4915	0.4322 0.4853	0.5006 0.5154	0.4280 0.4978	0.4677	Ave		0.4773				6.7		15.0			
trans-1,4-Dichloro-2-butene	0.1927 0.1963	0.2274 0.1939	0.1839 0.2080	0.1719 0.1961	0.1807	Ave		0.1945				8.3		15.0			
1,2,3-Trichloropropane	0.1607 0.1598	0.1221 0.1576	0.1495 0.1684	0.1441 0.1646	0.1485	Ave		0.1528				9.2		15.0			
N-Propylbenzene	0.5219 0.5782	0.4681 0.5724	0.5268 0.6046	0.4656 0.5670	0.4989	Ave		0.5337				9.4		15.0			
2-Chlorotoluene	0.4745 0.5001	0.4338 0.4945	0.4572 0.5149	0.4183 0.4927	0.4521	Ave		0.4709				6.9		15.0			
1,3,5-Trimethylbenzene	1.8148 1.8652	1.7066 1.8454	1.8062 1.9210	1.5254 1.8169	1.6914	Ave		1.7770				6.7		15.0			
4-Chlorotoluene	0.4352 0.5169	0.4844 0.5129	0.5102 0.5417	0.4476 0.5200	0.4863	Ave		0.4950				7.1		15.0			
tert-Butylbenzene	1.3822 1.4904	1.3633 1.4923	1.3661 1.5477	1.1709 1.4501	1.3209	Ave		1.3982				8.1		15.0			
1,2,4-Trimethylbenzene	2.0425 1.9325	1.8390 1.9147	1.8245 1.9833	1.6643 1.8753	1.7961	Ave		1.8747				5.9		15.0			
sec-Butylbenzene	0.3046 0.4227	0.3706 0.4196	0.3653 0.4412	0.3195 0.4161	0.3615	Ave		0.3801				12.6		15.0			
1,3-Dichlorobenzene	0.9198 0.9819	0.8878 0.9664	0.9306 1.0111	0.8621 0.9704	0.9123	Ave		0.9381				5.1		15.0			
4-Isopropyltoluene	1.7181 1.8867	1.6429 1.8566	1.7090 1.9433	1.4541 1.8204	1.6344	Ave		1.7406				8.8		15.0			
1,4-Dichlorobenzene	1.1683 0.9916	1.0433 0.9763	0.9390 1.0189	0.8758 0.9936	0.9401	Ave		0.9941				8.2		15.0			
n-Butylbenzene	1.8166 1.7738	1.4798 1.7465	1.6233 1.8255	1.3667 1.7234	1.5617	Ave		1.6575				9.7		15.0			
1,2-Dichlorobenzene	0.9253 0.9547	0.9083 0.9219	0.9282 0.9713	0.8360 0.9378	0.8917	Ave		0.9195				4.3		15.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.1070	0.0865 0.1060	0.0948 0.1134	0.0934 0.1119	0.1052	Ave		0.1023				9.4		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 Denver Job No.: 280-162622-1 Analy Batch No.: 566025

SDG No.:

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/16/2022 14:56 Calibration End Date: 02/16/2022 17:47 Calibration ID: 62277

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 9	LVL 5		B	M1	M2								
1,2,4-Trichlorobenzene	0.5992 0.5884	0.5569 0.5842	0.5392 0.6159	0.5055 0.5889	0.5639	Ave		0.5713				5.9		15.0			
Hexachlorobutadiene	0.1419 0.2077	0.1734 0.2045	0.1676 0.2230	0.1638 0.2081	0.1846	Ave		0.1861				14.2		15.0			
Naphthalene	1.7496 1.7145	1.6974 1.7298	1.6647 1.8253	1.6051 1.6782	1.6999	Ave		1.7072				3.6		15.0			
1,2,3-Trichlorobenzene	0.5238 0.5209	0.4554 0.5153	0.4904 0.5484	0.4784 0.5185	0.4997	Ave		0.5056				5.5		15.0			
Dibromofluoromethane (Surr)	0.2891 0.2674	0.2827 0.2634	0.2883 0.2626	0.2803 0.2618	0.2804	Ave		0.2751				4.1		15.0			
1,2-Dichloroethane-d4 (Surr)	0.3636 0.3507	0.3648 0.3439	0.3597 0.3490	0.3548 0.3558	0.3616	Ave		0.3560				2.0		15.0			
Toluene-d8 (Surr)	4.0054 4.1490	3.9989 4.1885	4.0527 4.1839	4.0579 4.2595	4.0577	Ave		4.1059				2.2		15.0			
4-Bromofluorobenzene (Surr)	1.0313 1.0151	1.0069 1.0140	1.0185 1.0317	1.0273 1.0265	1.0115	Ave		1.0203				0.9		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 Denver Job No.: 280-162622-1 Analy Batch No.: 566025

SDG No.:

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/16/2022 14:56 Calibration End Date: 02/16/2022 17:47 Calibration ID: 62277

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-566025/14	MS1_2511.D
Level 2	IC 280-566025/15	MS1_2512.D
Level 3	IC 280-566025/16	MS1_2513.D
Level 4	IC 280-566025/17	MS1_2514.D
Level 5	IC 280-566025/18	MS1_2515.D
Level 6	ICIS 280-566025/19	MS1_2516.D
Level 7	IC 280-566025/20	MS1_2517.D
Level 8	IC 280-566025/21	MS1_2518.D
Level 9	IC 280-566025/22	MS1_2519.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 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Dichlorodifluoromethane	FB	Ave	+++++	5651	11577	34364	71185	+++++	1.00	2.00	5.00	10.0
			433638	620182	831065	1641626		50.0	75.0	100	200	
Chloromethane	FB	Ave	+++++	7498	13022	33792	65051	+++++	1.00	2.00	5.00	10.0
			368504	542635	732096	1498825		50.0	75.0	100	200	
Vinyl chloride	FB	Ave	2480	4079	11216	28449	55682	0.500	1.00	2.00	5.00	10.0
			309465	446385	579670	1192802		50.0	75.0	100	200	
Bromomethane	FB	Lin1	+++++	6572	11197	28045	52792	+++++	1.00	2.00	5.00	10.0
			230816	328742	416985	+++++		50.0	75.0	100	+++++	
Chloroethane	FB	Ave	1950	3899	8005	21515	42029	0.500	1.00	2.00	5.00	10.0
			238447	344263	454996	917977		50.0	75.0	100	200	
Dichlorofluoromethane	FB	Ave	+++++	13095	27052	60730	116661	+++++	1.00	2.00	5.00	10.0
			637760	932223	1246087	2547289		50.0	75.0	100	200	
Trichlorofluoromethane	FB	Ave	+++++	8202	17263	42211	88207	+++++	1.00	2.00	5.00	10.0
			526922	775127	1014641	2150176		50.0	75.0	100	200	
Ethyl ether	FB	Ave	+++++	3751	9665	23861	52062	+++++	1.00	2.00	5.00	10.0
			279222	400953	565771	1160221		50.0	75.0	100	200	
Acrolein	FB	Lin2	+++++	3990	6553	10896	20928	+++++	9.88	19.8	49.4	98.8
			108139	165286	219676	+++++		494	741	988	+++++	
1,1-Dichloroethene	FB	Ave	2228	4986	9938	18536	43557	0.500	1.00	2.00	5.00	10.0
			279293	410871	574429	1104648		50.0	75.0	100	200	
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Lin1	1279	3167	7322	11133	28674	0.500	1.00	2.00	5.00	10.0
			210881	316746	445298	832830		50.0	75.0	100	200	
Acetone	FB	Ave	4470	9630	15798	34857	68626	2.00	4.00	8.00	20.0	40.0
			428674	605385	850160	1818313		200	300	400	800	

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver Job No.: 280-162622-1 Analy Batch No.: 566025

SDG No.:

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/16/2022 14:56 Calibration End Date: 02/16/2022 17:47 Calibration ID: 62277

ANALYTE	IS REF	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
Iodomethane	FB	Lin1	+++++ 330284	2821 548658	5408 756959	13711 1599210	36097	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Carbon disulfide	FB	Ave	+++++ 959904	18313 1417567	34797 1974982	66410 3852742	154167	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Methyl acetate	FB	Ave	+++++ 472014	7746 722650	17867 1028790	37780 2185271	84922	+++++ 100	2.00 150	4.00 200	10.0 400	20.0
3-Chloro-1-propene	FB	Lin2	6775 558907	12088 796379	23332 1098802	43817 2071071	99829	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Methylene Chloride	FB	Lin2	6147 352592	9611 514517	15597 713446	32821 1458324	70321	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
t-Butyl alcohol	FB	Ave	+++++ 335977	4374 510276	9060 752046	25994 1552017	54348	+++++ 500	10.0 750	20.0 1000	50.0 2000	100
Acrylonitrile	FB	Ave	11805 1311336	25235 1914902	47498 2689145	122720 5365034	245784	5.00 500	10.0 750	20.0 1000	50.0 2000	100
Methyl tert-butyl ether	FB	Ave	6340 936208	14833 1404599	28892 1980801	70539 4157502	160066	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
trans-1,2-Dichloroethene	FB	Ave	2495 314564	5620 464048	11295 648102	24331 1274854	53830	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Hexane	CBNZ d5	Lin1	5140 441963	9772 655357	15208 940222	27636 1801064	56914	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Vinyl acetate	FB	Ave	+++++ 1290959	17988 1992802	36605 2822615	93047 5851188	224860	+++++ 100	2.00 150	4.00 200	10.0 400	20.0
1,1-Dichloroethane	FB	Ave	4942 641666	10773 938389	24823 1304775	50914 2618147	115862	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
2-Butanone (MEK)	FB	Ave	+++++ 598579	7624 902885	16783 1303062	42754 2668414	99180	+++++ 200	4.00 300	8.00 400	20.0 800	40.0
cis-1,2-Dichloroethene	FB	Ave	3262 351915	7327 520430	12594 709360	28148 1473323	62548	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
2,2-Dichloropropane	FB	Ave	5246 539305	9338 791938	19416 1086247	36432 2147883	88040	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
sec-Butyl Alcohol	FB	Ave	+++++ 621242	9346 949353	15226 1381447	47208 2885234	94691	+++++ 1200	24.0 1800	48.0 2400	120 4800	240
Bromochloromethane	FB	Ave	1500 161034	3106 229940	6497 323962	14342 683181	32137	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Tetrahydrofuran	FB	Lin2	3447	5661	9187	17128	41190	1.00	2.00	4.00	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver Job No.: 280-162622-1 Analy Batch No.: 566025

SDG No.:

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/16/2022 14:56 Calibration End Date: 02/16/2022 17:47 Calibration ID: 62277

ANALYTE	IS REF	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
			203651	302835	424544	889462		100	150	200	400	
Chloroform	FB	Ave	6505 609485	11409 897613	24238 1249398	51189 2563397	111014	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,1,1-Trichloroethane	FB	Ave	3960 537534	8652 797840	18418 1118362	36227 2217270	85079	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Cyclohexane	FB	Lin1	7292 608308	10559 891578	23378 1269847	38980 2395249	83136	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,1-Dichloropropene	FB	Ave	+++++ 483374	7529 716136	15795 1013263	27340 1982456	68932	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Carbon tetrachloride	FB	Ave	2990 413613	6159 618535	12985 877643	24391 1736649	59393	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Isobutyl alcohol	FB	Lin1	2747 262166	6097 414192	8041 601883	18607 1253728	40796	12.5 1250	25.0 1875	50.0 2500	125 5000	250
Benzene	FB	Ave	12227 1306443	23233 1947164	47872 2724627	96604 5555860	229392	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,2-Dichloroethane	FB	Ave	6128 530344	11058 778221	19944 1081782	45609 2268899	100688	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Trichloroethene	CBNZ d5	Ave	2738 346092	5684 509582	11517 709303	23873 1442691	55292	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
2-Pentanone	FB	Ave	+++++ 750776	+++++ 1132070	23740 1632861	52818 3343691	118492	+++++ 160	+++++ 240	6.40 320	16.0 640	32.0
Methylcyclohexane	FB	Ave	3855 456975	6716 670171	14580 945587	26472 1842012	61926	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,2-Dichloropropane	FB	Ave	3037 361203	5641 525383	12342 740129	29043 1542611	63797	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,4-Dioxane	FB	Ave	+++++ 81756	+++++ 123861	2166 175039	6585 357700	15265	+++++ 1000	+++++ 1500	40.0 2000	100 4000	200
Dibromomethane	FB	Ave	2455 212338	3915 307863	8320 434430	18532 915999	41517	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Bromodichloromethane	FB	Ave	4035 414713	7656 619873	15187 870417	32766 1886291	73811	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
2-Chloroethyl vinyl ether	FB	Ave	+++++ 187955	2954 277472	6550 395070	16356 795679	31006	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
cis-1,3-Dichloropropene	CBNZ d5	Ave	+++++	8583	18025	38402	89950	+++++	1.00	2.00	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver Job No.: 280-162622-1 Analy Batch No.: 566025

SDG No.:

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/16/2022 14:56 Calibration End Date: 02/16/2022 17:47 Calibration ID: 62277

ANALYTE	IS REF	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
			526597	782498	1101641	2348612		50.0	75.0	100	200	
4-Methyl-2-pentanone (MIBK)	FB	Ave	+++++ 1166196	20735 1721414	39698 2444716	97920 4932605	204573	+++++ 200	4.00 300	8.00 400	20.0 800	40.0
Toluene	FB	Ave	+++++ 1271221	25521 1890342	51838 2614007	100862 5333119	226073	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
trans-1,3-Dichloropropene	FB	Ave	+++++ 490579	7752 729464	15743 1038501	37113 2204465	84722	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Ethyl methacrylate	CBNZ d5	Ave	+++++ 379684	7853 558824	14531 785462	32775 1588357	72854	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,1,2-Trichloroethane	FB	Ave	2297 255491	4836 372733	8866 531168	21664 1126798	45000	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Tetrachloroethene	CBNZ d5	Lin1	1474 215180	3734 321993	6907 454591	14920 916152	33439	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,3-Dichloropropane	CBNZ d5	Ave	4086 487248	8248 725970	16268 1011581	41267 2131851	86891	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
2-Hexanone	CBNZ d5	Ave	6484 814170	11860 1201488	27552 1706758	71166 3370685	147401	2.00 200	4.00 300	8.00 400	20.0 800	40.0
Dibromochloromethane	CBNZ d5	Ave	+++++ 256433	4407 381442	8508 551030	18881 1213667	42526	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,2-Dibromoethane (EDB)	CBNZ d5	Ave	2273 273005	4375 401320	9201 568755	21673 1202776	50620	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1-Chlorohexane	CBNZ d5	Lin1	+++++ 317278	10544 469749	14510 659053	23613 1287929	53925	+++++ 40.0	0.800 60.0	1.60 80.0	4.00 160	8.00
Chlorobenzene	CBNZ d5	Ave	8145 773293	14649 1143686	28964 1580758	65159 3279320	143427	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	+++++ 264503	4463 397994	9001 566246	20602 1209969	45284	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver Job No.: 280-162622-1 Analy Batch No.: 566025

SDG No.:

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/16/2022 14:56 Calibration End Date: 02/16/2022 17:47 Calibration ID: 62277

ANALYTE	IS REF	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
Ethylbenzene	CBNZ d5	Ave	4209 436538	7535 646902	16491 894979	33921 1797397	75401	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
m-Xylene & p-Xylene	CBNZ d5	Ave	4814 548664	9972 800019	21054 1119089	43533 2255498	97827	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
o-Xylene	CBNZ d5	Ave	5223 525637	10589 775136	20344 1070308	44684 2199184	98332	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Styrene	CBNZ d5	Ave	9303 932791	17376 1344309	34905 1857918	77279 3843203	171965	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Bromoform	CBNZ d5	Lin1	+++++ 153516	2473 230476	4995 326773	10836 736891	24623	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Isopropylbenzene	DCBd 4	Ave	13751 1394584	25534 2052212	52117 2837313	105096 5659223	237507	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Cyclohexanone	CBNZ d5	Ave	5142 467809	10381 691624	17941 984090	41590 1964456	85795	17.5 1750	35.0 2625	70.0 3500	175 7000	350
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	3882 348150	7305 512755	13574 718090	31239 1471460	64764	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Bromobenzene	DCBd 4	Ave	+++++ 321311	5644 471296	13027 655802	27139 1358968	60151	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	1305 128299	2969 188298	4787 264614	10898 535334	23242	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,2,3-Trichloropropane	DCBd 4	Ave	1088 104457	1594 153005	3892 214241	9136 449264	19097	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
N-Propylbenzene	DCBd 4	Ave	3534 377954	6113 555857	13711 769235	29518 1547925	64158	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver Job No.: 280-162622-1 Analy Batch No.: 566025

SDG No.:

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/16/2022 14:56 Calibration End Date: 02/16/2022 17:47 Calibration ID: 62277

ANALYTE	IS REF	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
2-Chlorotoluene	DCBd 4	Ave	3213	5665	11898	26520	58150	0.500	1.00	2.00	5.00	10.0
			326930	480228	655107	1345221		50.0	75.0	100	200	
1,3,5-Trimethylbenzene	DCBd 4	Ave	12290	22286	47008	96714	217525	0.500	1.00	2.00	5.00	10.0
			1219247	1792010	2444193	4960397		50.0	75.0	100	200	
4-Chlorotoluene	DCBd 4	Ave	2947	6326	13277	28380	62547	0.500	1.00	2.00	5.00	10.0
			337872	498034	689166	1419689		50.0	75.0	100	200	
tert-Butylbenzene	DCBd 4	Ave	9360	17803	35554	74239	169876	0.500	1.00	2.00	5.00	10.0
			974267	1449181	1969240	3958828		50.0	75.0	100	200	
1,2,4-Trimethylbenzene	DCBd 4	Ave	13832	24015	47483	105521	230991	0.500	1.00	2.00	5.00	10.0
			1263254	1859299	2523371	5119913		50.0	75.0	100	200	
sec-Butylbenzene	DCBd 4	Ave	2063	4839	9506	20258	46498	0.500	1.00	2.00	5.00	10.0
			276320	407477	561375	1135886		50.0	75.0	100	200	
1,3-Dichlorobenzene	DCBd 4	Ave	6229	11594	24220	54661	117333	0.500	1.00	2.00	5.00	10.0
			641834	938477	1286495	2649421		50.0	75.0	100	200	
4-Isopropyltoluene	DCBd 4	Ave	11635	21455	44476	92197	210197	0.500	1.00	2.00	5.00	10.0
			1233301	1802892	2472557	4969944		50.0	75.0	100	200	
1,4-Dichlorobenzene	DCBd 4	Ave	7912	13624	24439	55531	120912	0.500	1.00	2.00	5.00	10.0
			648204	948054	1296425	2712664		50.0	75.0	100	200	
n-Butylbenzene	DCBd 4	Ave	12302	19325	42246	86651	200855	0.500	1.00	2.00	5.00	10.0
			1159511	1696011	2322672	4705102		50.0	75.0	100	200	
1,2-Dichlorobenzene	DCBd 4	Ave	6266	11861	24157	53004	114677	0.500	1.00	2.00	5.00	10.0
			624100	895201	1235823	2560323		50.0	75.0	100	200	
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	+++++	1129	2467	5919	13528	+++++	1.00	2.00	5.00	10.0
			69959	102969	144306	305444		50.0	75.0	100	200	

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver Job No.: 280-162622-1 Analy Batch No.: 566025

SDG No.:

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/16/2022 14:56 Calibration End Date: 02/16/2022 17:47 Calibration ID: 62277

ANALYTE	IS REF	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
1,2,4-Trichlorobenzene	DCBd 4	Ave	4058 384621	7272 567331	14033 783604	32049 1607781	72520	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Hexachlorobutadiene	DCBd 4	Ave	961 135788	2264 198549	4362 283791	10384 568120	23737	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Naphthalene	DCBd 4	Ave	11848 1120757	22166 1679818	43325 2322437	101771 4581623	218630	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,2,3-Trichlorobenzene	DCBd 4	Ave	3547 340500	5947 500442	12763 697709	30332 1415504	64270	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Dibromofluoromethane (Surr)	FB	Ave	447419 447673	419592 448755	435342 455379	424959 487513	432555	50.0 50.0	50.0 50.0	50.0 50.0	50.0 50.0	50.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	562678 587231	541591 585966	543175 605105	537886 662575	557800	50.0 50.0	50.0 50.0	50.0 50.0	50.0 50.0	50.0
Toluene-d8 (Surr)	CBNZ d5	Ave	1558384 1557617	1475493 1579278	1506459 1602294	1495775 1720054	1502515	50.0 50.0	50.0 50.0	50.0 50.0	50.0 50.0	50.0
4-Bromofluorobenzene (Surr)	DCBd 4	Ave	698377 663575	657465 656437	662682 656353	651372 700602	650474	50.0 50.0	50.0 50.0	50.0 50.0	50.0 50.0	50.0

Curve Type Legend

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Lin2 = Linear 1/conc^2 ISTD

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\MS1_2511.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 16-Feb-2022 14:56:30 ALS Bottle#: 1 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 0.5
Operator ID: SUNLEEC Instrument ID: VMS_MS1
Sublist: chrom-AQ_VMS1_8260*sub164

Method: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 17-Feb-2022 13:44:57 Calib Date: 16-Feb-2022 20:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\MS1_2528.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1654

First Level Reviewer: seifertj Date: 17-Feb-2022 08:22:42

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.797	5.797	0.001	98	1547617	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.525	8.518	0.007	90	389075	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.799	10.799	0.000	98	677197	50.0	50.0	
$ 5 Dibromofluoromethane (Surr)	111	5.224	5.224	0.000	92	447419	50.0	52.5	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.517	5.517	0.000	0	562678	50.0	51.1	
$ 7 Toluene-d8 (Surr)	98	7.181	7.181	0.000	95	1558384	50.0	48.8	
$ 8 4-Bromofluorobenzene (Surr)	95	9.655	9.648	0.007	82	698377	50.0	50.5	
11 Dichlorodifluoromethane	85	1.677	1.677	0.000	1	983	0.5000	0.1411	Ma
12 Chloromethane	50	1.886	1.886	0.000	92	5407	0.5000	0.8001	
13 Vinyl chloride	62	1.970	1.970	0.000	94	2480	0.5000	0.4688	a
15 Bromomethane	94	2.319	2.319	0.000	9	3242	0.5000	-0.2971	
16 Chloroethane	64	2.431	2.431	0.000	1	1950	0.5000	0.4727	a
17 Dichlorofluoromethane	67	2.654	2.654	0.000	92	8884	0.5000	0.7372	
18 Trichlorofluoromethane	101	2.696	2.696	0.000	95	3442	0.5000	0.3825	
20 Ethyl ether	59	2.975	2.962	0.013	33	2282	0.5000	0.4699	
22 Acrolein	56	3.115	3.101	0.014	11	4208	4.94	9.65	
23 1,1-Dichloroethene	96	3.199	3.199	0.000	92	2228	0.5000	0.4690	
24 112TCTFE	151	3.213	3.213	0.000	54	1279	0.5000	0.5725	
25 Acetone	43	3.241	3.227	0.014	76	4470	2.00	2.25	
26 Iodomethane	142		3.353				ND	ND	
28 Carbon disulfide	76	3.408	3.409	-0.001	98	10384	0.5000	0.6176	
30 Methyl acetate	43		3.520				ND	ND	
31 3-Chloro-1-propene	41	3.548	3.548	0.000	92	6775	0.5000	0.4713	
32 Methylene Chloride	84	3.674	3.660	0.014	94	6147	0.5000	0.4778	
33 2-Methyl-2-propanol	59	3.744	3.744	0.000	95	2325	5.00	4.09	
34 Acrylonitrile	53	3.883	3.869	0.014	97	11805	5.00	4.88	
35 Methyl tert-butyl ether	73	3.897	3.897	0.000	88	6340	0.5000	0.3999	
36 trans-1,2-Dichloroethene	96	3.911	3.911	0.000	91	2495	0.5000	0.4534	
37 Hexane	57	4.163	4.163	0.000	88	5140	0.5000	0.6775	
39 Vinyl acetate	43	4.302	4.288	0.014	65	8754	1.00	0.7932	

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	4.302	4.302	0.000	91	4942	0.5000	0.4377	
46 2-Butanone (MEK)	43		4.777				ND	ND	
48 cis-1,2-Dichloroethene	96	4.805	4.791	0.014	84	3262	0.5000	0.5070	
49 2,2-Dichloropropane	77	4.805	4.805	0.000	65	5246	0.5000	0.5579	
51 sec-Butyl Alcohol	45		4.917				ND	ND	
53 Chlorobromomethane	128	5.015	5.001	0.014	1	1500	0.5000	0.4961	
54 Tetrahydrofuran	42	5.029	5.015	0.013	51	3447	1.00	0.9387	
55 Chloroform	83	5.084	5.085	0.000	95	6505	0.5000	0.5692	
56 1,1,1-Trichloroethane	97	5.238	5.238	0.000	35	3960	0.5000	0.4394	
57 Cyclohexane	56	5.308	5.294	0.014	90	7292	0.5000	0.6270	
58 1,1-Dichloropropene	75	5.364	5.364	0.000	1	2851	0.5000	0.3601	
59 Carbon tetrachloride	117	5.378	5.364	0.014	77	2990	0.5000	0.4472	
60 Isobutyl alcohol	41	5.448	5.420	0.028	20	2747	12.5	15.8	
63 Benzene	78	5.545	5.545	0.000	89	12227	0.5000	0.5213	
64 1,2-Dichloroethane	62	5.587	5.587	0.000	91	6128	0.5000	0.6012	a
66 n-Heptane	43	5.769	5.769	0.000	36	3623	0.5000	0.5265	
68 Trichloroethene	95	6.104	6.104	0.000	86	2738	0.5000	0.4347	
69 2-Pentanone	43		6.230				ND	ND	
70 Methylcyclohexane	55	6.313	6.314	-0.001	71	3855	0.5000	0.5221	
71 1,2-Dichloropropane	63	6.327	6.328	-0.001	77	3037	0.5000	0.4824	a
73 1,4-Dioxane	88		6.383				ND	ND	
74 Dibromomethane	93	6.411	6.411	0.000	83	2455	0.5000	0.6047	
75 Dichlorobromomethane	83	6.552	6.559	-0.007	92	4035	0.5000	0.5285	
77 2-Chloroethyl vinyl ether	63	6.802	6.788	0.014	72	1574	0.5000	0.4742	
78 cis-1,3-Dichloropropene	75	6.945	6.938	0.007	91	4689	0.5000	0.4676	
79 4-Methyl-2-pentanone (MIBK)	43	7.052	7.052	0.000	93	8806	2.00	1.69	
82 Toluene	91	7.245	7.238	0.007	94	15032	0.5000	0.6385	
84 trans-1,3-Dichloropropene	75	7.446	7.439	0.007	94	4738	0.5000	0.5529	
85 Ethyl methacrylate	69	7.474	7.467	0.007	73	4181	0.5000	0.5425	
87 1,1,2-Trichloroethane	97	7.632	7.625	0.008	82	2297	0.5000	0.4948	
89 Tetrachloroethene	164	7.710	7.710	0.000	87	1474	0.5000	0.6224	
90 1,3-Dichloropropane	76	7.782	7.775	0.007	85	4086	0.5000	0.4385	a
91 2-Hexanone	43	7.817	7.803	0.014	87	6484	2.00	1.70	
95 Chlorodibromomethane	129	7.982	7.975	0.007	81	2266	0.5000	0.4582	
96 Ethylene Dibromide	107	8.103	8.096	0.007	77	2273	0.5000	0.4388	
98 1-Chlorohexane	91	8.518	8.511	0.007	33	7347	0.4000	0.6180	
99 Chlorobenzene	112	8.554	8.547	0.007	90	8145	0.5000	0.5261	
100 1,1,1,2-Tetrachloroethane	131	8.640	8.626	0.014	41	2135	0.5000	0.4159	
101 Ethylbenzene	106	8.640	8.633	0.007	98	4209	0.5000	0.4999	
102 m-Xylene & p-Xylene	106	8.761	8.754	0.007	0	4814	0.5000	0.4549	
103 o-Xylene	106	9.126	9.126	0.000	96	5223	0.5000	0.4945	
104 Styrene	104	9.147	9.140	0.007	93	9303	0.5000	0.5081	
106 Bromoform	173	9.333	9.326	0.007	71	1129	0.5000	0.9365	a
107 Isopropylbenzene	105	9.476	9.476	0.000	96	13751	0.5000	0.5065	
109 Cyclohexanone	55	9.576	9.569	0.007	86	5142	17.5	18.6	
110 1,1,2,2-Tetrachloroethane	83	9.777	9.770	0.007	87	3882	0.5000	0.5358	
111 Bromobenzene	156	9.805	9.798	0.007	95	3008	0.5000	0.4653	
112 trans-1,4-Dichloro-2-butene	53	9.812	9.805	0.007	40	1305	0.5000	0.4953	
113 1,2,3-Trichloropropane	110	9.841	9.834	0.007	1	1088	0.5000	0.5257	M
114 N-Propylbenzene	120	9.891	9.884	0.007	97	3534	0.5000	0.4889	
115 2-Chlorotoluene	126	9.984	9.977	0.007	95	3213	0.5000	0.5038	
116 1,3,5-Trimethylbenzene	105	10.063	10.056	0.007	92	12290	0.5000	0.5106	

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	10.098	10.098	0.000	97	2947	0.5000	0.4396	
118 tert-Butylbenzene	119	10.377	10.370	0.007	93	9360	0.5000	0.4943	
119 1,2,4-Trimethylbenzene	105	10.434	10.427	0.007	96	13832	0.5000	0.5448	
120 sec-Butylbenzene	134	10.592	10.592	0.000	95	2063	0.5000	0.4007	
121 1,3-Dichlorobenzene	146	10.728	10.721	0.007	92	6229	0.5000	0.4903	
122 4-Isopropyltoluene	119	10.749	10.742	0.007	95	11635	0.5000	0.4935	
123 1,4-Dichlorobenzene	146	10.821	10.821	0.000	85	7912	0.5000	0.5876	
125 n-Butylbenzene	91	11.157	11.150	0.007	98	12302	0.5000	0.5480	
127 1,2-Dichlorobenzene	146	11.185	11.178	0.007	89	6266	0.5000	0.5032	
128 1,2-Dibromo-3-Chloropropane	157		11.972				ND	ND	
130 1,2,4-Trichlorobenzene	180	12.801	12.794	0.007	85	4058	0.5000	0.5244	
131 Hexachlorobutadiene	225	12.944	12.937	0.007	1	961	0.5000	0.3813	Ma
132 Naphthalene	128	13.066	13.066	0.000	96	11848	0.5000	0.5124	
134 1,2,3-Trichlorobenzene	180	13.287	13.287	0.000	90	3547	0.5000	0.5179	
S 149 1,2-Dichloroethene, Total (URS)	96				0		1.00	0.9605	
S 156 1,3-Dichloropropene, Total	1				0		1.00	1.02	
S 155 Xylenes, Total	106				0		1.00	0.9494	
S 153 Xylenes, Total (URS)	1				0		1.00	0.9494	
S 152 Total BTEX	1				0			2.61	
S 151 Trihalomethanes, Total	1				0		2.00	2.49	
S 150 1,2-Dichloroethene, Total	1				0		1.00	0.9605	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

Cal Dil Std_00029	Amount Added:	5.00	Units: uL	
mv-IS_SS_00033	Amount Added:	5.00	Units: uL	Run Reagent

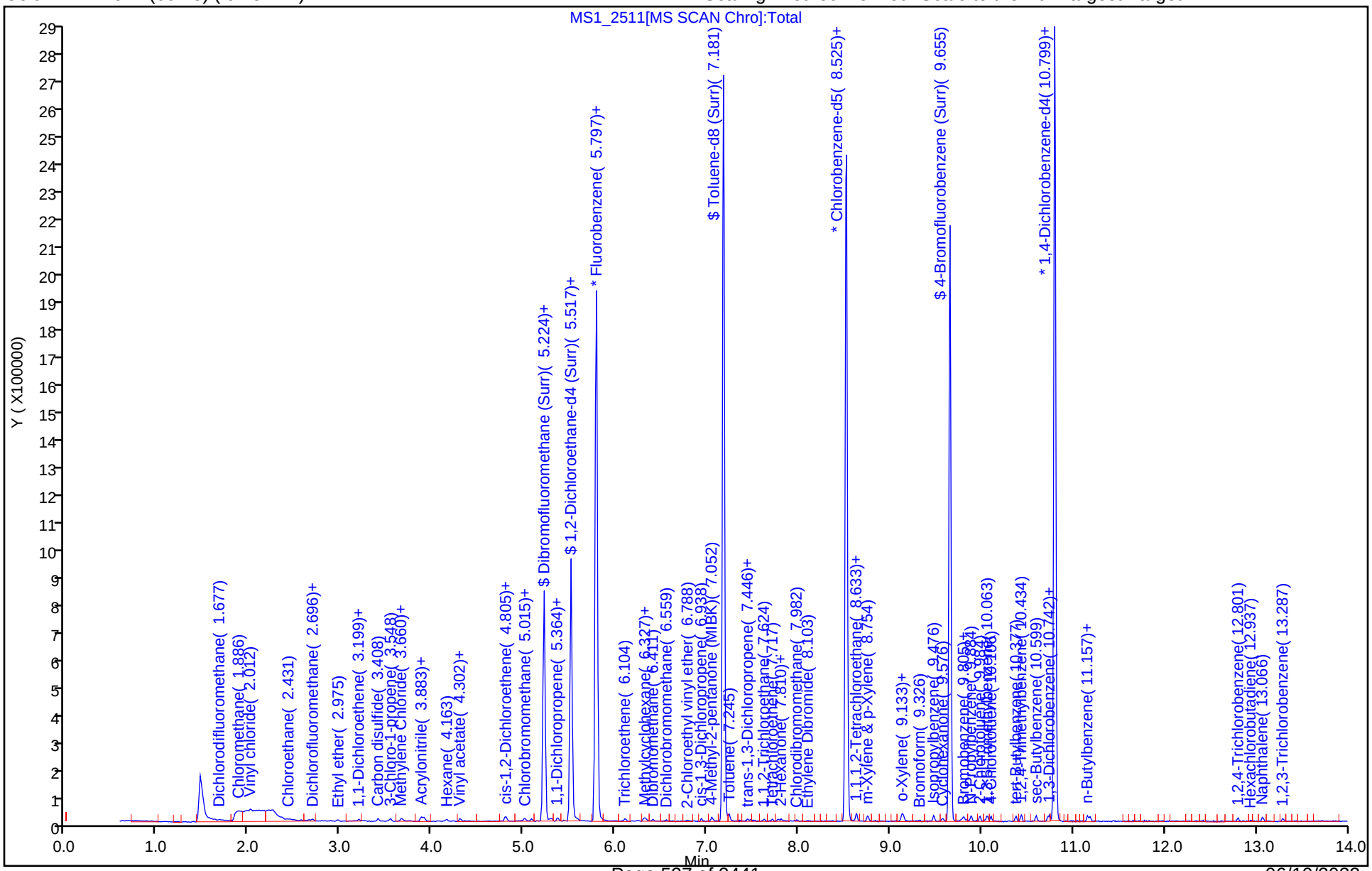
Report Date: 17-Feb-2022 13:44:57 Chrom Revision: 2.3 18-Jan-2022 20:25:40

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\MS1_2511.D

Injection Date:	16-Feb-2022 14:56:30	Instrument ID:	VMS_MS1	Operator ID:	SUNLEEC
Lims ID:	ic			Worklist Smp#:	14
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



Manual Integration/User Assign Peak Report

Eurofins Denver

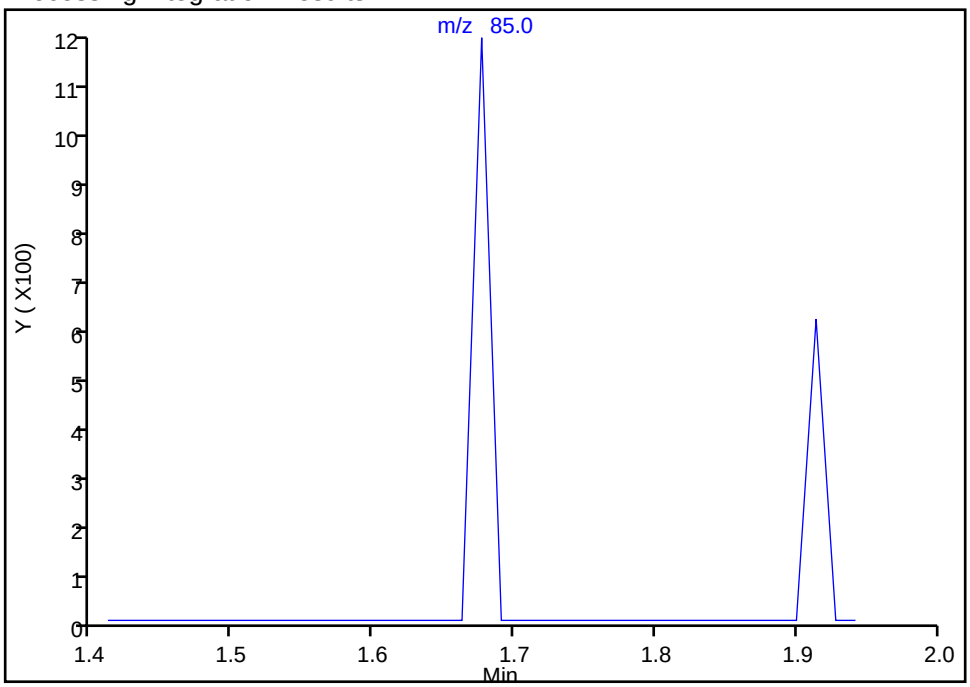
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\MS1_2511.D
Injection Date: 16-Feb-2022 14:56:30 Instrument ID: VMS_MS1
Lims ID: ic
Client ID:
Operator ID: SUNLEEC ALS Bottle#: 1 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

11 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

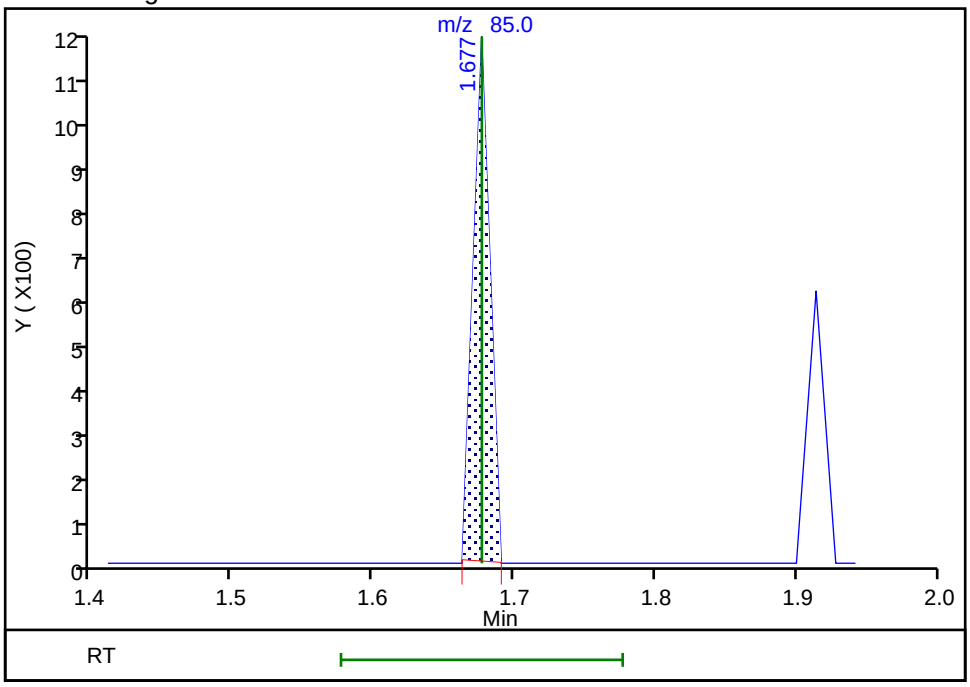
Not Detected
Expected RT: 1.68

Processing Integration Results



Manual Integration Results

RT: 1.68
Area: 983
Amount: 0.141063
Amount Units: ug/l



Reviewer: seifertj, 17-Feb-2022 08:21:24
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins Denver

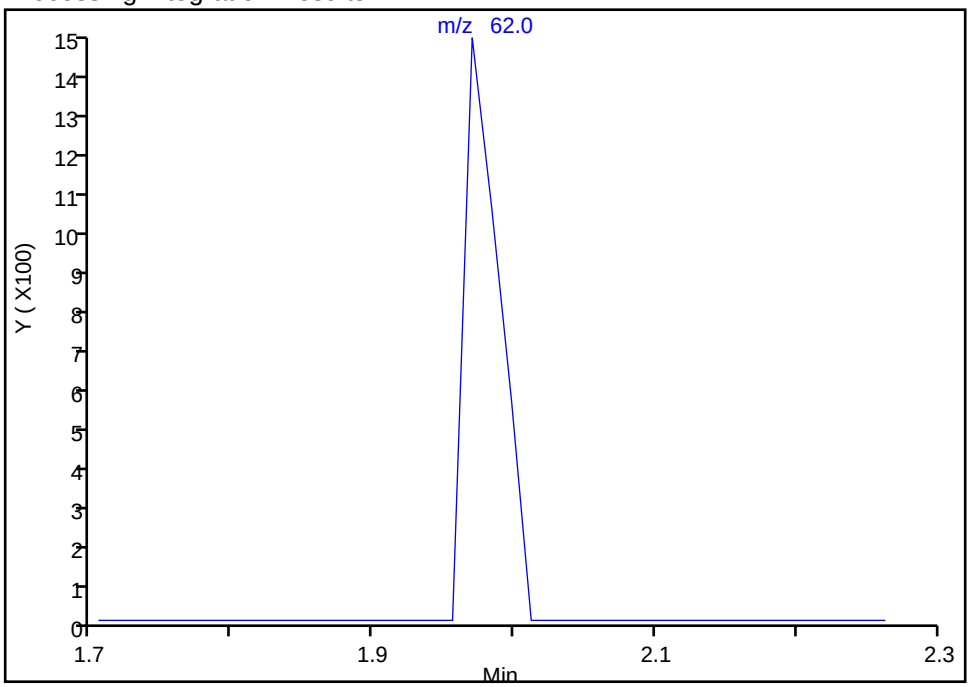
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\MS1_2511.D
Injection Date: 16-Feb-2022 14:56:30 Instrument ID: VMS_MS1
Lims ID: ic
Client ID:
Operator ID: SUNLEEC ALS Bottle#: 1 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

13 Vinyl chloride, CAS: 75-01-4

Signal: 1

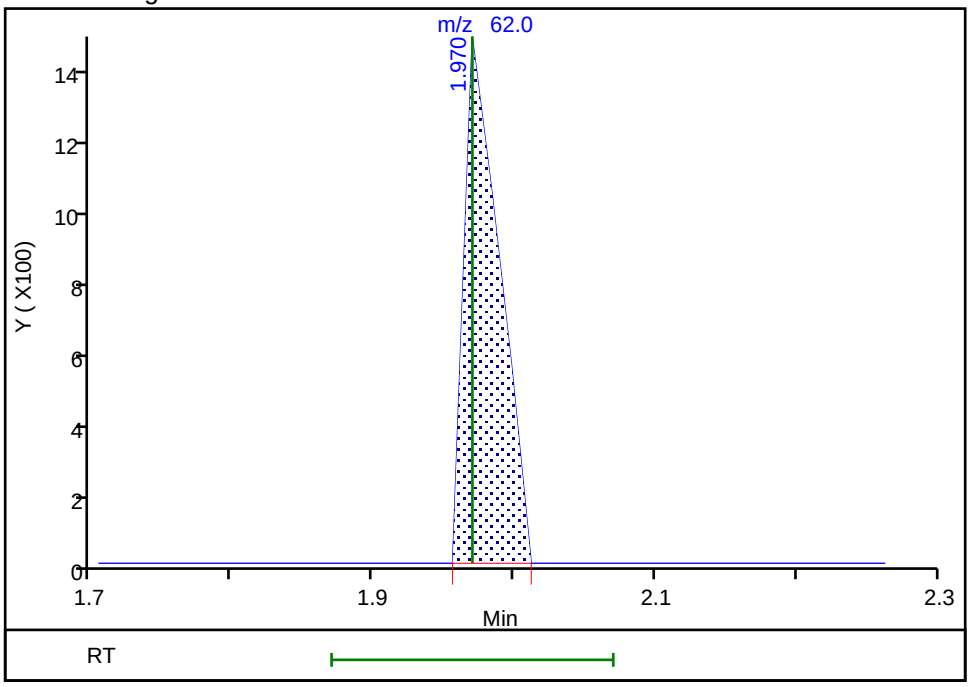
Not Detected
Expected RT: 1.97

Processing Integration Results



Manual Integration Results

RT: 1.97
Area: 2480
Amount: 0.468788
Amount Units: ug/l



Reviewer: seifertj, 17-Feb-2022 08:21:29
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins Denver

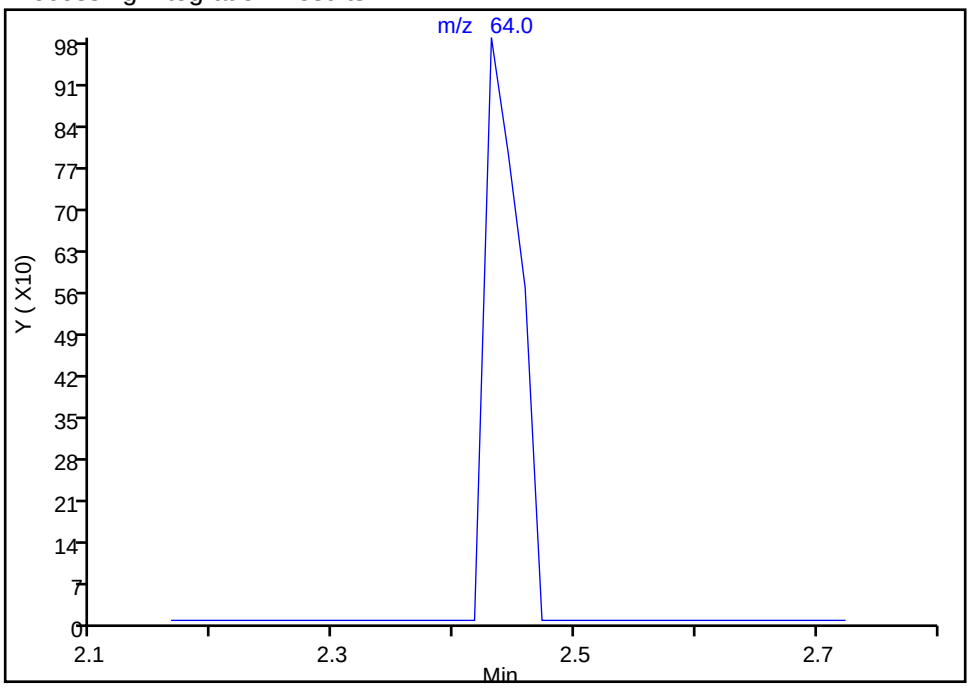
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\MS1_2511.D
Injection Date: 16-Feb-2022 14:56:30 Instrument ID: VMS_MS1
Lims ID: ic
Client ID:
Operator ID: SUNLEEC ALS Bottle#: 1 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

16 Chloroethane, CAS: 75-00-3

Signal: 1

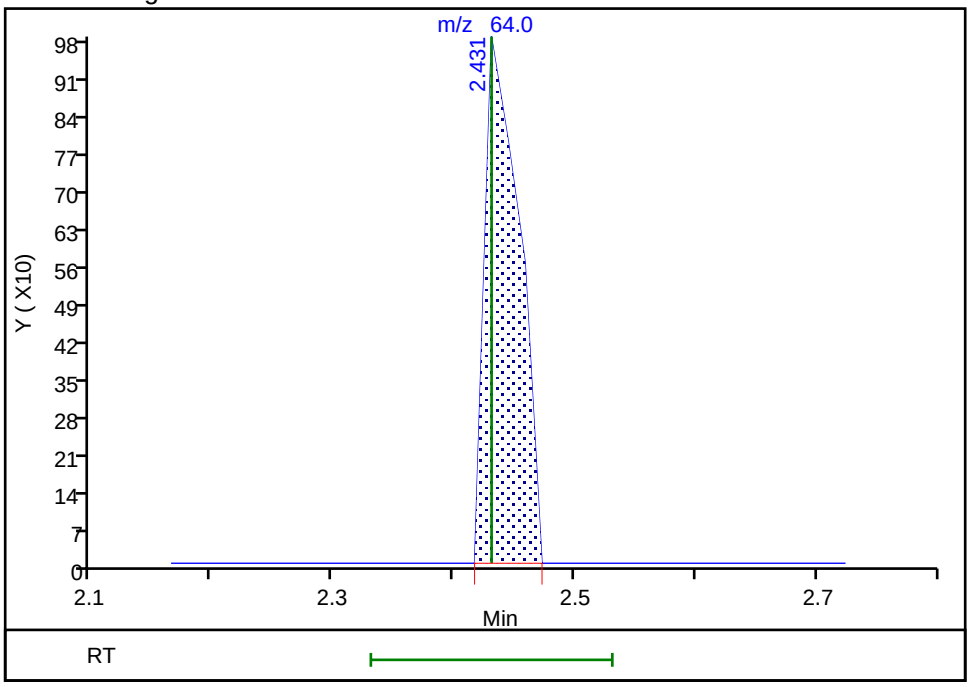
Not Detected
Expected RT: 2.43

Processing Integration Results



Manual Integration Results

RT: 2.43
Area: 1950
Amount: 0.472675
Amount Units: ug/l



Reviewer: seifertj, 17-Feb-2022 08:21:33
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins Denver

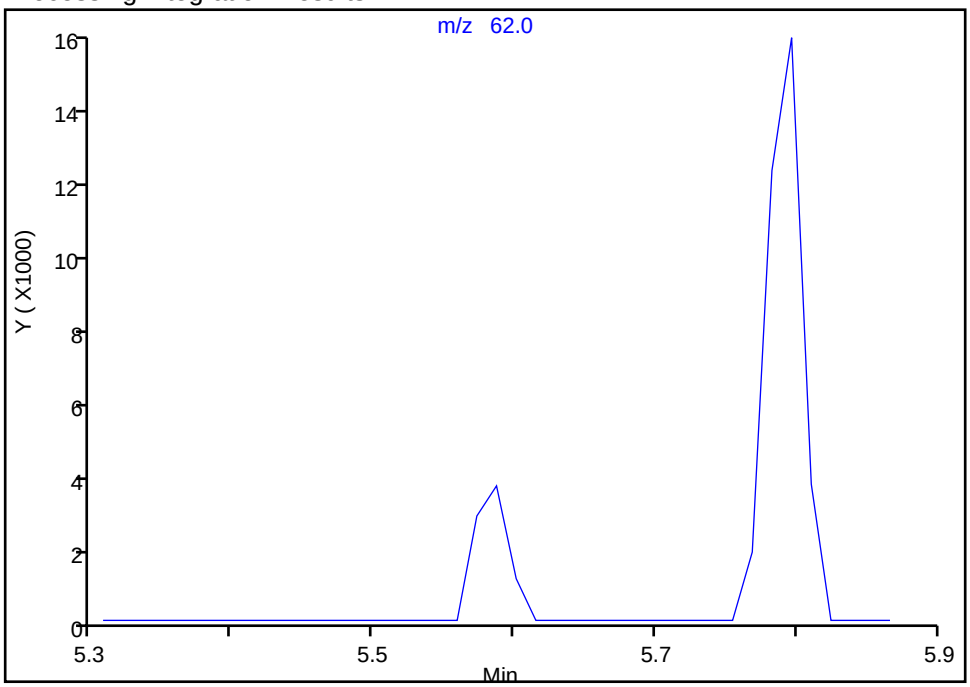
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\MS1_2511.D
Injection Date: 16-Feb-2022 14:56:30 Instrument ID: VMS_MS1
Lims ID: ic
Client ID:
Operator ID: SUNLEEC ALS Bottle#: 1 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

64 1,2-Dichloroethane, CAS: 107-06-2

Signal: 1

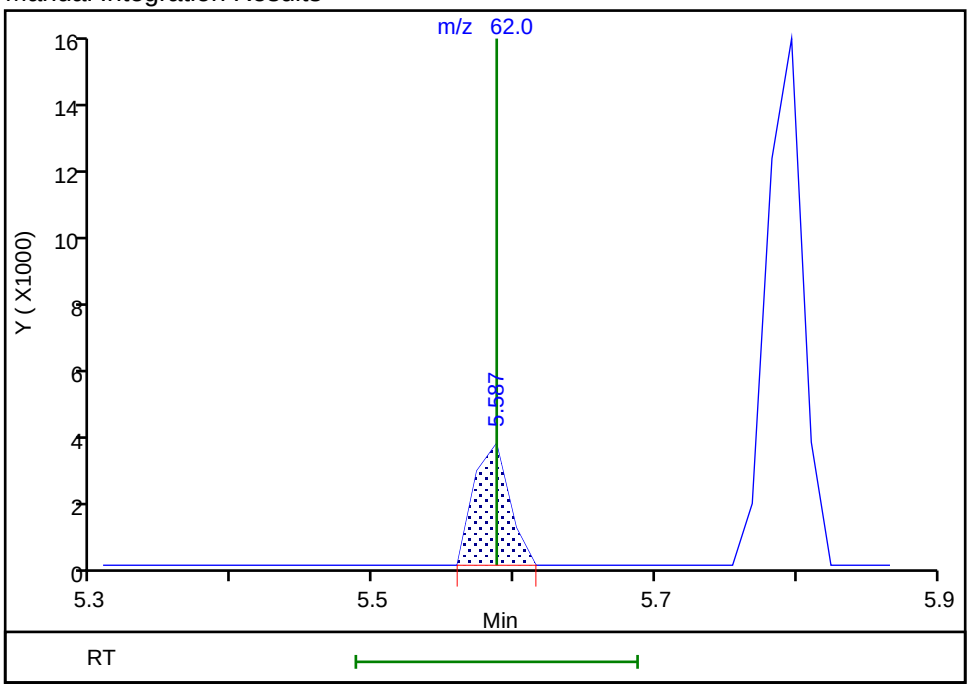
Not Detected
Expected RT: 5.59

Processing Integration Results



Manual Integration Results

RT: 5.59
Area: 6128
Amount: 0.601239
Amount Units: ug/l



Reviewer: seifertj, 17-Feb-2022 08:21:45
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins Denver

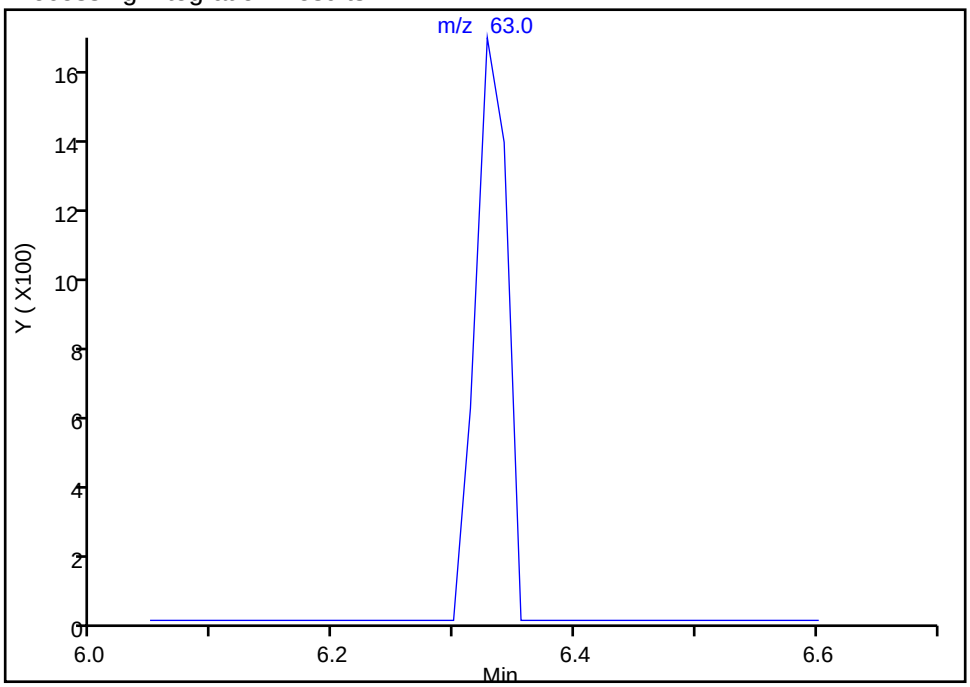
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\MS1_2511.D
Injection Date: 16-Feb-2022 14:56:30 Instrument ID: VMS_MS1
Lims ID: ic
Client ID:
Operator ID: SUNLEEC ALS Bottle#: 1 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

71 1,2-Dichloropropane, CAS: 78-87-5

Signal: 1

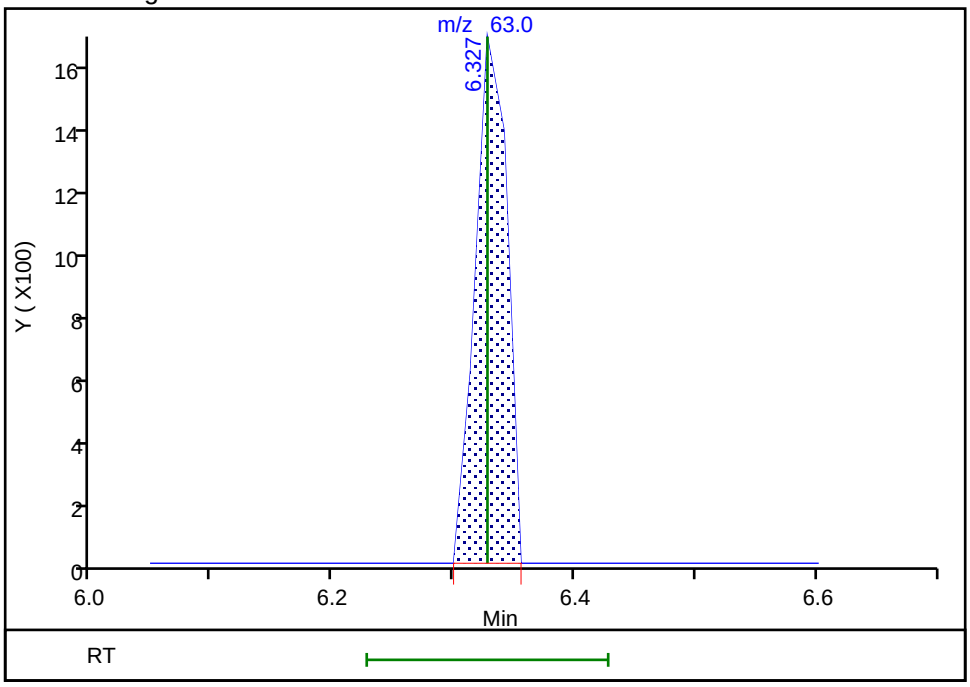
Not Detected
Expected RT: 6.33

Processing Integration Results



Manual Integration Results

RT: 6.33
Area: 3037
Amount: 0.482354
Amount Units: ug/l



Reviewer: seifertj, 17-Feb-2022 08:21:51
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins Denver

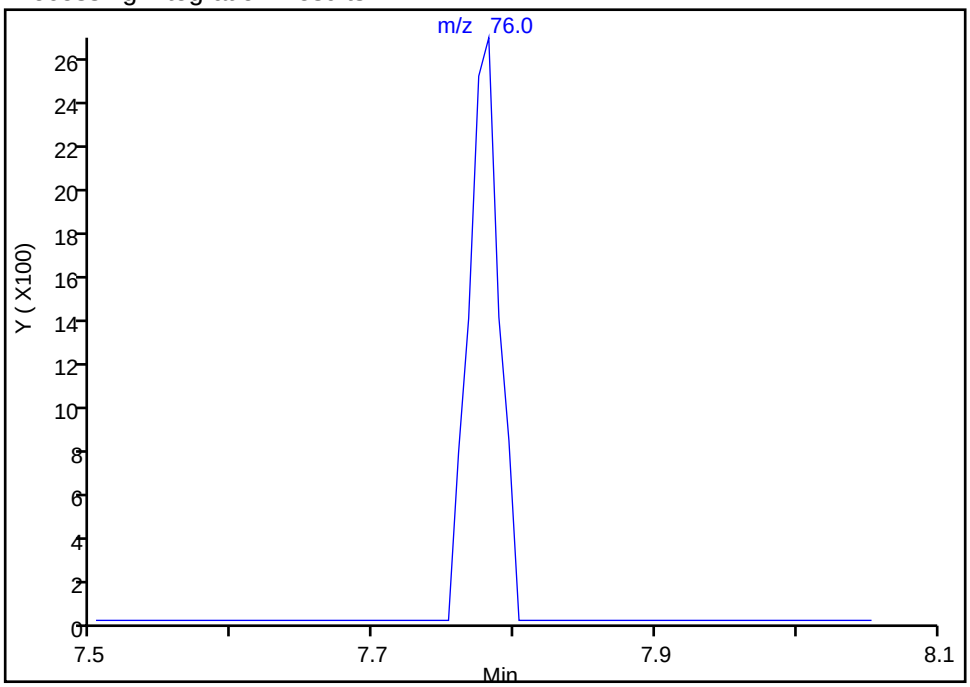
Data File:	\\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\MS1_2511.D				
Injection Date:	16-Feb-2022 14:56:30	Instrument ID:	VMS_MS1		
Lims ID:	ic				
Client ID:					
Operator ID:	SUNLEEC	ALS Bottle#:	1	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMS1_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

90 1,3-Dichloropropane, CAS: 142-28-9

Signal: 1

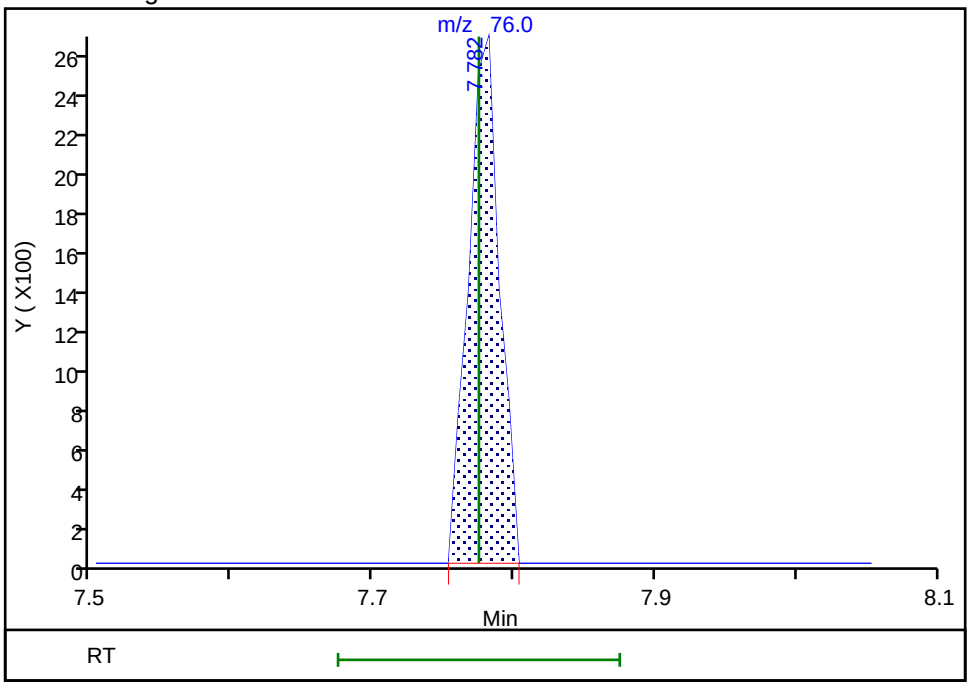
Not Detected
Expected RT: 7.77

Processing Integration Results



Manual Integration Results

RT: 7.78
Area: 4086
Amount: 0.438517
Amount Units: ug/l



Reviewer: seifertj, 17-Feb-2022 08:21:57
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins Denver

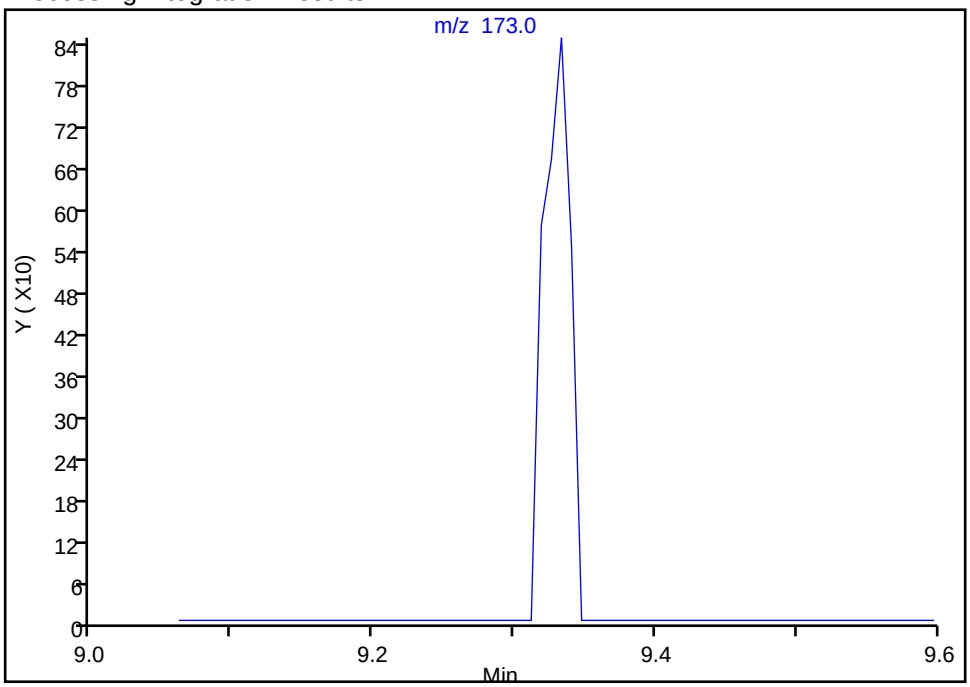
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\MS1_2511.D
Injection Date: 16-Feb-2022 14:56:30 Instrument ID: VMS_MS1
Lims ID: ic
Client ID:
Operator ID: SUNLEEC ALS Bottle#: 1 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

106 Bromoform, CAS: 75-25-2

Signal: 1

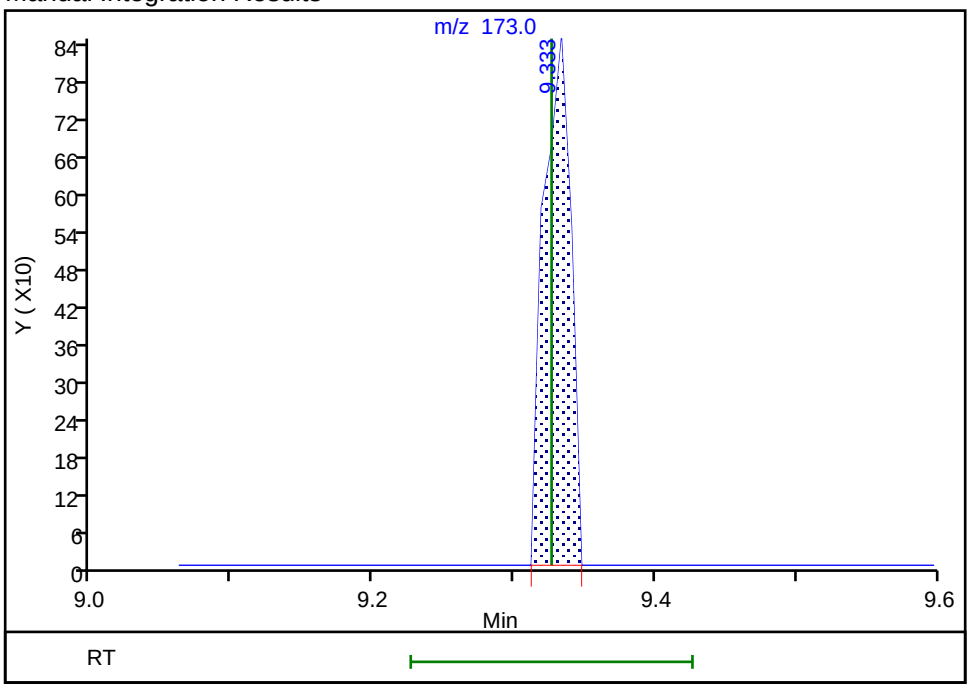
Not Detected
Expected RT: 9.33

Processing Integration Results



Manual Integration Results

RT: 9.33
Area: 1129
Amount: 0.936475
Amount Units: ug/l



Reviewer: seifertj, 17-Feb-2022 08:22:06
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins Denver

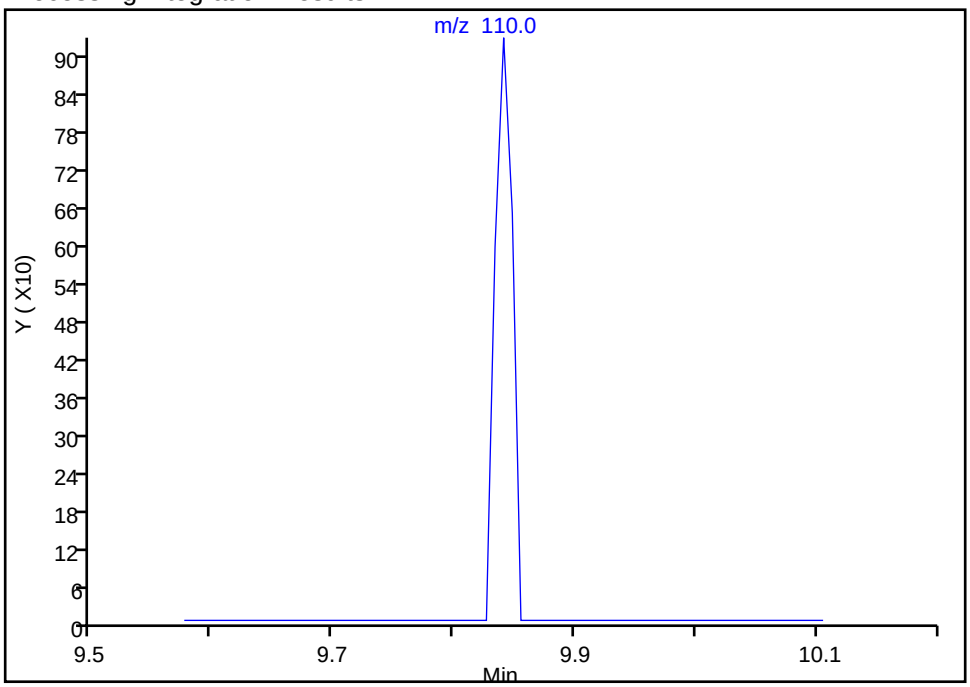
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\MS1_2511.D
Injection Date: 16-Feb-2022 14:56:30 Instrument ID: VMS_MS1
Lims ID: ic
Client ID:
Operator ID: SUNLEEC ALS Bottle#: 1 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

113 1,2,3-Trichloropropane, CAS: 96-18-4

Signal: 1

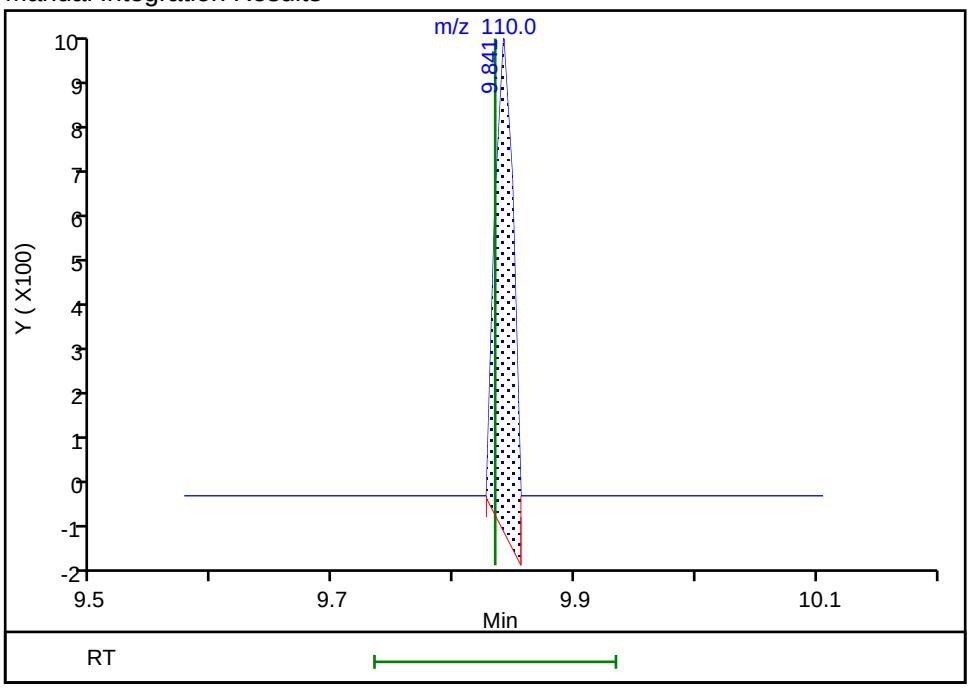
Not Detected
Expected RT: 9.83

Processing Integration Results



Manual Integration Results

RT: 9.84
Area: 1088
Amount: 0.525744
Amount Units: ug/l



Reviewer: seifertj, 17-Feb-2022 08:22:19
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins Denver

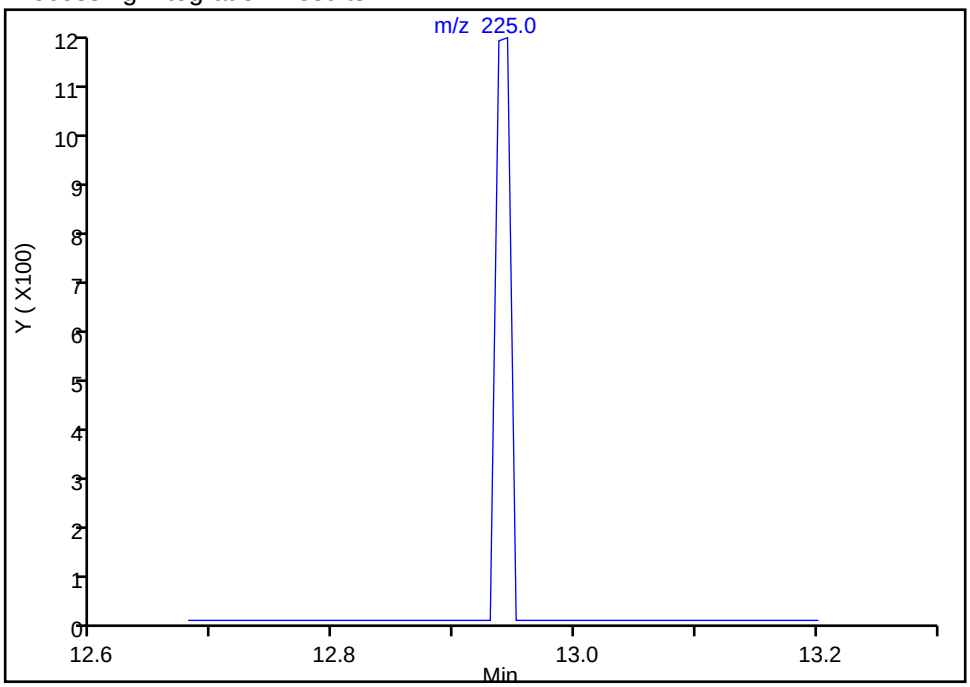
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\MS1_2511.D
Injection Date: 16-Feb-2022 14:56:30 Instrument ID: VMS_MS1
Lims ID: ic
Client ID:
Operator ID: SUNLEEC ALS Bottle#: 1 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

131 Hexachlorobutadiene, CAS: 87-68-3

Signal: 1

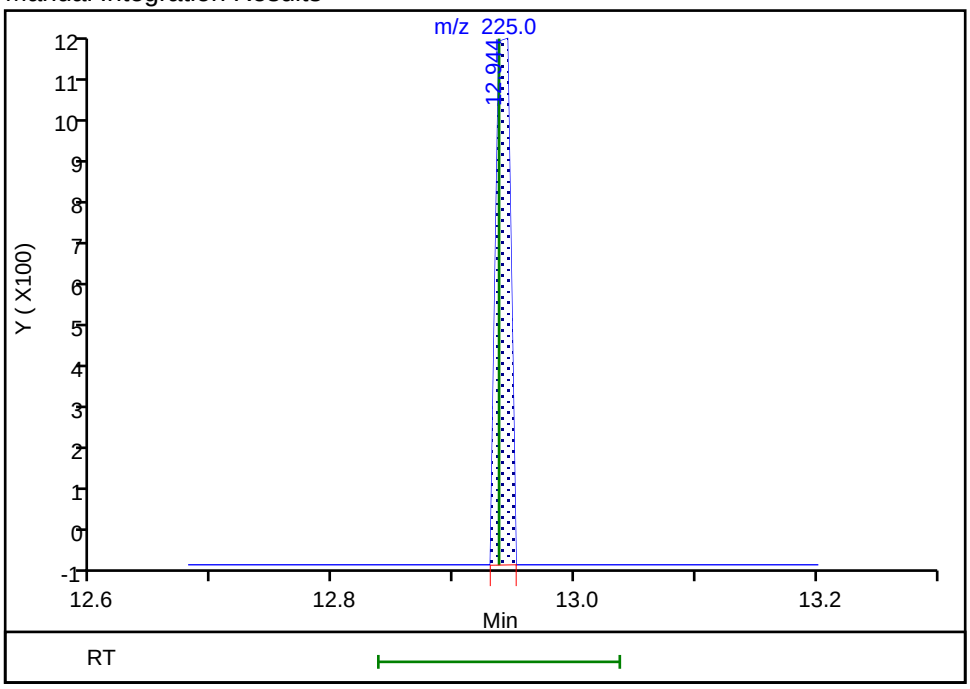
Not Detected
Expected RT: 12.94

Processing Integration Results



Manual Integration Results

RT: 12.94
Area: 961
Amount: 0.381347
Amount Units: ug/l



Reviewer: seifertj, 17-Feb-2022 08:22:36
Audit Action: Manually Integrated Audit Reason: Assign Peak

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\MS1_2512.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 16-Feb-2022 15:18:30 ALS Bottle#: 2 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Operator ID: SUNLEEC Instrument ID: VMS_MS1
Sublist: chrom-AQ_VMS1_8260*sub164

Method: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 17-Feb-2022 13:44:58 Calib Date: 16-Feb-2022 20:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\MS1_2528.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1654

First Level Reviewer: seifertj Date: 17-Feb-2022 08:23:47

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.797	5.797	0.001	98	1484455	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.518	8.518	0.000	90	368976	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.799	10.799	0.000	98	652947	50.0	50.0	
$ 5 Dibromofluoromethane (Surr)	111	5.224	5.224	0.000	92	419592	50.0	51.4	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.517	5.517	0.000	0	541591	50.0	51.2	
$ 7 Toluene-d8 (Surr)	98	7.181	7.181	0.000	94	1475493	50.0	48.7	
$ 8 4-Bromofluorobenzene (Surr)	95	9.655	9.648	0.007	82	657465	50.0	49.3	
11 Dichlorodifluoromethane	85	1.677	1.677	0.000	97	5651	1.00	0.8454	a
12 Chloromethane	50	1.886	1.886	0.000	89	7498	1.00	1.16	
13 Vinyl chloride	62	1.970	1.970	0.000	88	4079	1.00	0.8039	
15 Bromomethane	94	2.319	2.319	0.000	87	6572	1.00	0.6232	
16 Chloroethane	64	2.431	2.431	0.000	94	3899	1.00	0.9853	
17 Dichlorofluoromethane	67	2.654	2.654	0.000	38	13095	1.00	1.13	
18 Trichlorofluoromethane	101	2.696	2.696	0.000	96	8202	1.00	0.9503	
20 Ethyl ether	59	2.962	2.962	0.000	87	3751	1.00	0.8053	
22 Acrolein	56	3.115	3.101	0.014	19	3990	9.88	9.40	
23 1,1-Dichloroethene	96	3.199	3.199	0.000	96	4986	1.00	1.09	
24 112TCTFE	151	3.213	3.213	0.000	57	3167	1.00	1.12	
25 Acetone	43	3.241	3.227	0.014	98	9630	4.00	5.06	
26 Iodomethane	142	3.367	3.353	0.014	86	2821	1.00	1.64	a
28 Carbon disulfide	76	3.409	3.409	0.000	100	18313	1.00	1.14	
30 Methyl acetate	43	3.534	3.520	0.014	59	7746	2.00	1.87	a
31 3-Chloro-1-propene	41	3.548	3.548	0.000	87	12088	1.00	1.07	
32 Methylene Chloride	84	3.674	3.660	0.014	97	9611	1.00	1.09	
33 2-Methyl-2-propanol	59	3.744	3.744	0.000	91	4374	10.0	8.02	
34 Acrylonitrile	53	3.869	3.869	0.000	99	25235	10.0	10.9	
35 Methyl tert-butyl ether	73	3.897	3.897	0.000	97	14833	1.00	0.9754	
36 trans-1,2-Dichloroethene	96	3.911	3.911	0.000	90	5620	1.00	1.06	
37 Hexane	57	4.163	4.163	0.000	90	9772	1.00	1.26	
39 Vinyl acetate	43	4.302	4.288	0.014	97	17988	2.00	1.70	
40 1,1-Dichloroethane	63	4.302	4.302	0.000	91	10773	1.00	0.99	

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	4.791	4.777	0.014	62	7624	4.00	3.18	
48 cis-1,2-Dichloroethene	96	4.805	4.791	0.014	87	7327	1.00	1.19	
49 2,2-Dichloropropane	77	4.805	4.805	0.000	84	9338	1.00	1.04	
51 sec-Butyl Alcohol	45	4.945	4.917	0.028	92	9346	24.0	22.3	Ma
53 Chlorobromomethane	128	5.015	5.001	0.014	94	3106	1.00	1.07	
54 Tetrahydrofuran	42	5.015	5.015	0.000	58	5661	2.00	2.26	
55 Chloroform	83	5.085	5.085	0.001	93	11409	1.00	1.04	
56 1,1,1-Trichloroethane	97	5.238	5.238	0.000	97	8652	1.00	1.00	
57 Cyclohexane	56	5.294	5.294	0.000	89	10559	1.00	0.9811	
58 1,1-Dichloropropene	75	5.364	5.364	0.000	86	7529	1.00	0.99	
59 Carbon tetrachloride	117	5.378	5.364	0.014	82	6159	1.00	0.9603	
60 Isobutyl alcohol	41	5.434	5.420	0.014	79	6097	25.0	33.4	
63 Benzene	78	5.545	5.545	0.000	97	23233	1.00	1.03	
64 1,2-Dichloroethane	62	5.587	5.587	0.000	95	11058	1.00	1.13	a
66 n-Heptane	43	5.769	5.769	0.000	36	7617	1.00	1.15	
68 Trichloroethene	95	6.104	6.104	0.000	88	5684	1.00	0.9516	
69 2-Pentanone	43	6.244	6.230	0.014	96	10276	3.20	2.64	
70 Methylcyclohexane	55	6.314	6.314	0.000	85	6716	1.00	0.9482	
71 1,2-Dichloropropane	63	6.328	6.328	0.000	87	5641	1.00	0.9341	
73 1,4-Dioxane	88		6.383				ND	ND	
74 Dibromomethane	93	6.411	6.411	0.000	93	3915	1.00	1.01	
75 Dichlorobromomethane	83	6.559	6.559	0.000	95	7656	1.00	1.05	
77 2-Chloroethyl vinyl ether	63	6.795	6.788	0.007	78	2954	1.00	0.9278	
78 cis-1,3-Dichloropropene	75	6.938	6.938	0.000	89	8583	1.00	0.9025	
79 4-Methyl-2-pentanone (MIBK)	43	7.053	7.052	0.001	96	20735	4.00	4.14	
82 Toluene	91	7.246	7.238	0.008	97	25521	1.00	1.13	
84 trans-1,3-Dichloropropene	75	7.446	7.439	0.007	92	7752	1.00	0.9431	
85 Ethyl methacrylate	69	7.474	7.467	0.007	90	7853	1.00	1.07	
87 1,1,2-Trichloroethane	97	7.625	7.625	0.001	83	4836	1.00	1.09	
89 Tetrachloroethene	164	7.710	7.710	0.000	90	3734	1.00	1.18	
90 1,3-Dichloropropane	76	7.775	7.775	0.000	94	8248	1.00	0.9334	
91 2-Hexanone	43	7.803	7.803	0.000	98	11860	4.00	3.28	
95 Chlorodibromomethane	129	7.982	7.975	0.007	86	4407	1.00	0.9397	
96 Ethylene Dibromide	107	8.096	8.096	0.000	98	4375	1.00	0.8906	
98 1-Chlorohexane	91	8.511	8.511	0.000	36	10544	0.8000	1.09	
99 Chlorobenzene	112	8.547	8.547	0.000	92	14649	1.00	1.00	
100 1,1,1,2-Tetrachloroethane	131	8.626	8.626	0.000	44	4463	1.00	0.9168	
101 Ethylbenzene	106	8.633	8.633	0.000	99	7535	1.00	0.9437	
102 m-Xylene & p-Xylene	106	8.754	8.754	0.000	0	9972	1.00	0.99	
103 o-Xylene	106	9.126	9.126	0.000	97	10589	1.00	1.06	
104 Styrene	104	9.140	9.140	0.000	91	17376	1.00	1.00	
106 Bromoform	173	9.326	9.326	0.000	80	2473	1.00	1.37	a
107 Isopropylbenzene	105	9.476	9.476	0.000	96	25534	1.00	0.9753	
109 Cyclohexanone	55	9.569	9.569	0.000	91	10381	35.0	39.6	
110 1,1,2,2-Tetrachloroethane	83	9.777	9.770	0.007	88	7305	1.00	1.05	
111 Bromobenzene	156	9.798	9.798	0.000	96	5644	1.00	0.9055	
112 trans-1,4-Dichloro-2-butene	53	9.813	9.805	0.007	40	2969	1.00	1.17	
113 1,2,3-Trichloropropane	110	9.834	9.834	0.000	82	1594	1.00	0.7989	
114 N-Propylbenzene	120	9.884	9.884	0.000	99	6113	1.00	0.8771	
115 2-Chlorotoluene	126	9.977	9.977	0.000	94	5665	1.00	0.9212	
116 1,3,5-Trimethylbenzene	105	10.056	10.056	0.000	93	22286	1.00	0.9604	
117 4-Chlorotoluene	126	10.099	10.098	0.001	98	6326	1.00	0.9786	

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	10.370	10.370	0.000	93	17803	1.00	0.9750	
119 1,2,4-Trimethylbenzene	105	10.427	10.427	0.000	98	24015	1.00	0.9809	
120 sec-Butylbenzene	134	10.592	10.592	0.000	95	4839	1.00	0.9748	
121 1,3-Dichlorobenzene	146	10.728	10.721	0.007	94	11594	1.00	0.9464	
122 4-Isopropyltoluene	119	10.742	10.742	0.000	98	21455	1.00	0.9439	
123 1,4-Dichlorobenzene	146	10.828	10.821	0.007	87	13624	1.00	1.05	
125 n-Butylbenzene	91	11.157	11.150	0.007	97	19325	1.00	0.8928	
127 1,2-Dichlorobenzene	146	11.178	11.178	0.000	94	11861	1.00	0.9878	
128 1,2-Dibromo-3-Chloropropane	157	11.965	11.972	-0.007	82	1129	1.00	0.8454	a
130 1,2,4-Trichlorobenzene	180	12.794	12.794	0.000	90	7272	1.00	0.9747	
131 Hexachlorobutadiene	225	12.930	12.937	-0.007	78	2264	1.00	0.9318	
132 Naphthalene	128	13.066	13.066	0.000	98	22166	1.00	0.99	
134 1,2,3-Trichlorobenzene	180	13.288	13.287	0.001	90	5947	1.00	0.9006	
S 149 1,2-Dichloroethene, Total (URS)	96				0		2.00	2.25	
S 156 1,3-Dichloropropene, Total	1				0		2.00	1.85	
S 155 Xylenes, Total	106				0		2.00	2.05	
S 153 Xylenes, Total (URS)	1				0		2.00	2.05	
S 152 Total BTEX	1				0			5.16	
S 151 Trihalomethanes, Total	1				0		4.00	4.40	
S 150 1,2-Dichloroethene, Total	1				0		2.00	2.25	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

Cal Dil Std_00029	Amount Added: 10.00	Units: uL	
mv-IS_SS_00033	Amount Added: 5.00	Units: uL	Run Reagent

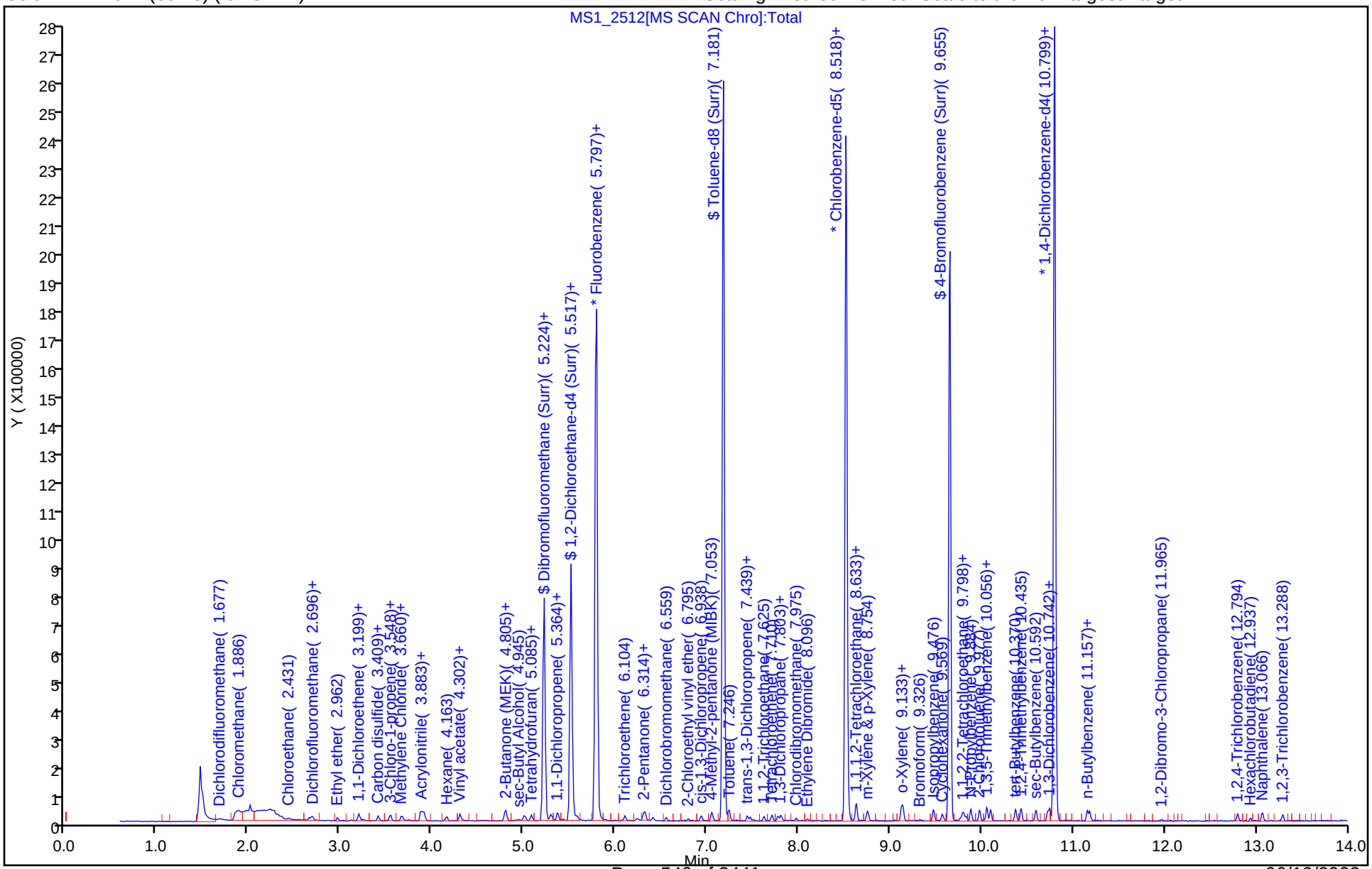
Report Date: 17-Feb-2022 13:44:59 Chrom Revision: 2.3 18-Jan-2022 20:25:40

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\MS1_2512.D

Injection Date:	16-Feb-2022 15:18:30	Instrument ID:	VMS_MS1	Operator ID:	SUNLEEC
Lims ID:	ic			Worklist Smp#:	15
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 Denver

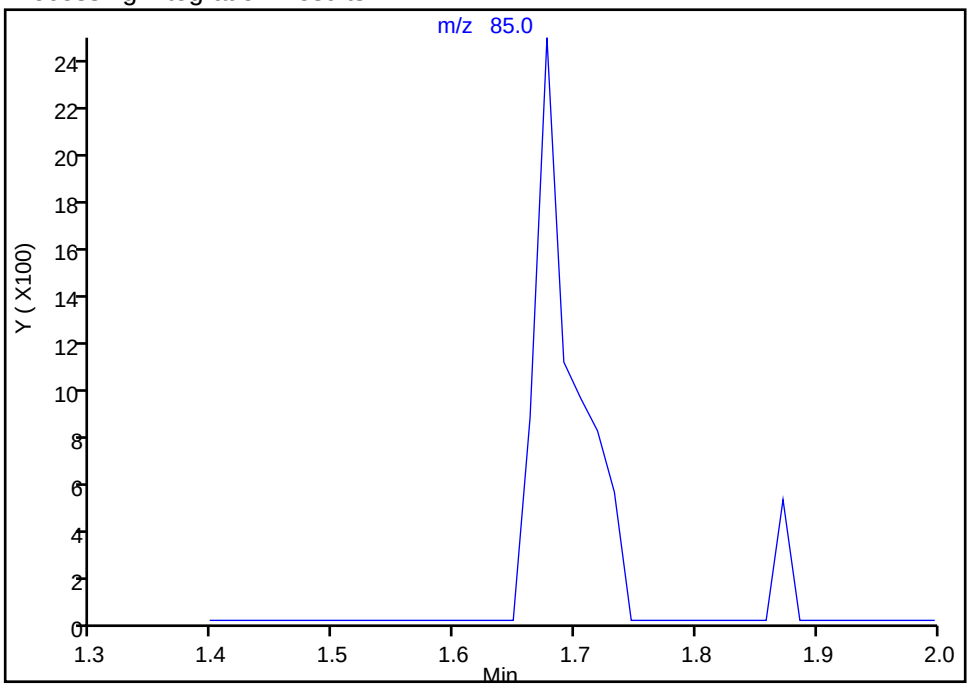
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\MS1_2512.D
Injection Date: 16-Feb-2022 15:18:30 Instrument ID: VMS_MS1
Lims ID: ic
Client ID:
Operator ID: SUNLEEC ALS Bottle#: 2 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

11 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

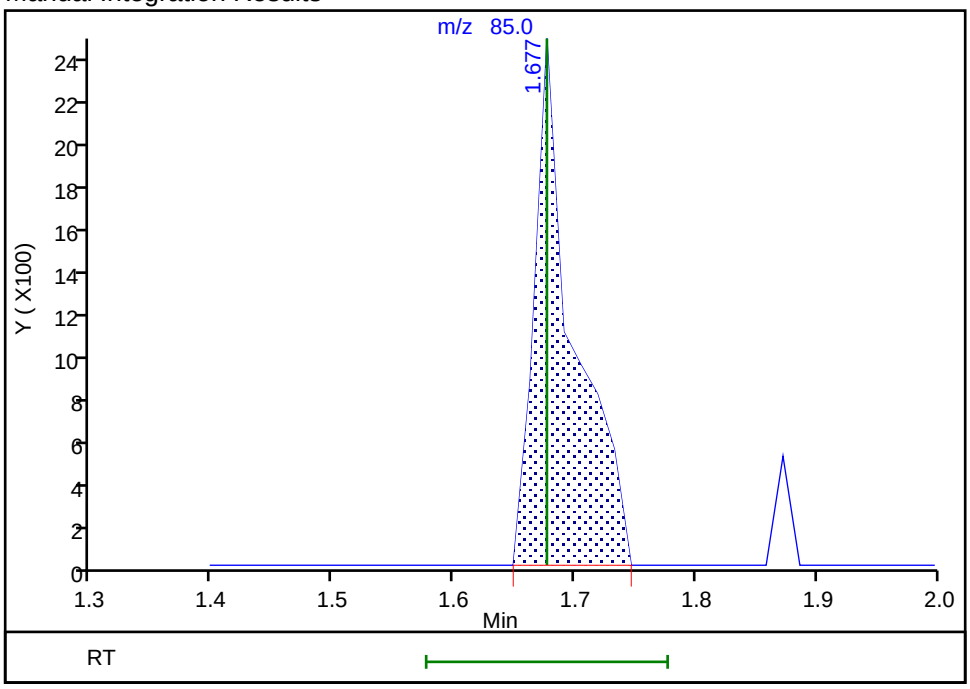
Not Detected
Expected RT: 1.68

Processing Integration Results



Manual Integration Results

RT: 1.68
Area: 5651
Amount: 0.845438
Amount Units: ug/l



Reviewer: seifertj, 17-Feb-2022 08:22:54
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins Denver

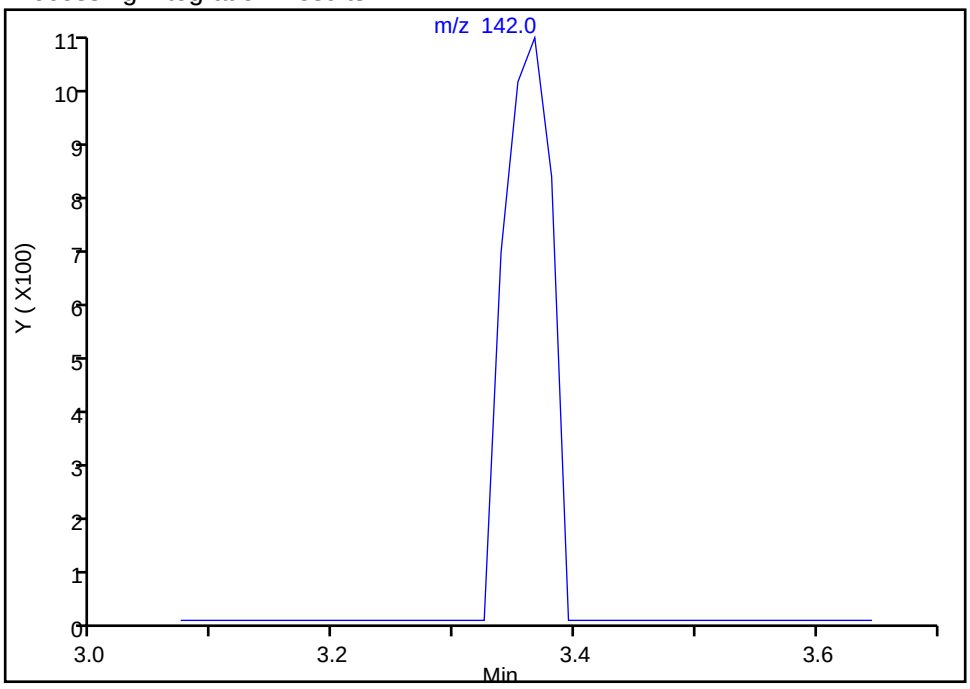
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\MS1_2512.D
Injection Date: 16-Feb-2022 15:18:30 Instrument ID: VMS_MS1
Lims ID: ic
Client ID:
Operator ID: SUNLEEC ALS Bottle#: 2 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

26 Iodomethane, CAS: 74-88-4

Signal: 1

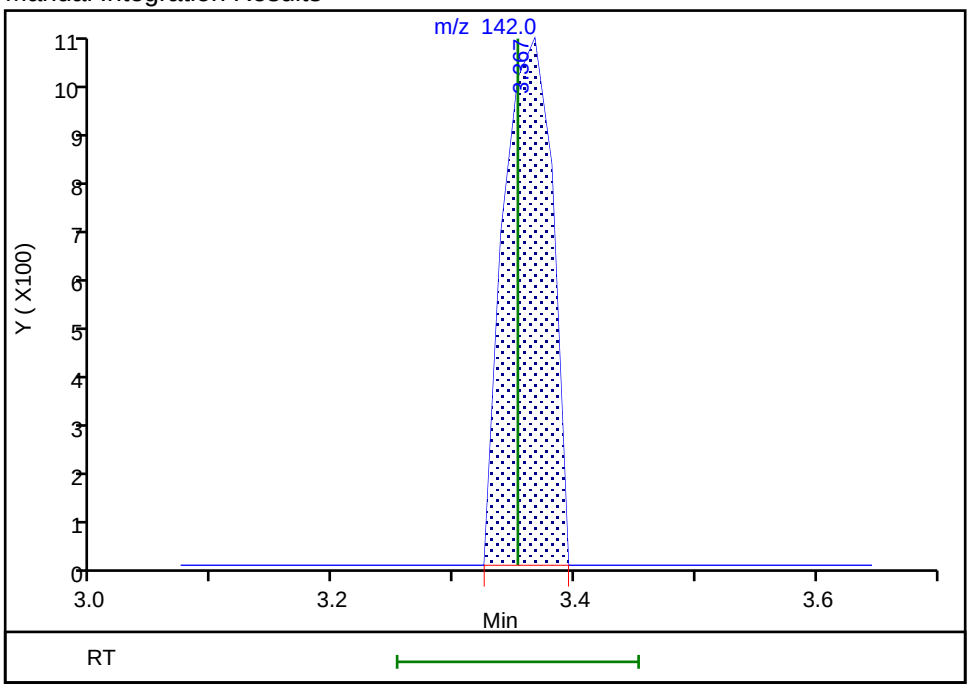
Not Detected
Expected RT: 3.35

Processing Integration Results



Manual Integration Results

RT: 3.37
Area: 2821
Amount: 1.641420
Amount Units: ug/l



Reviewer: seifertj, 17-Feb-2022 08:23:00
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins Denver

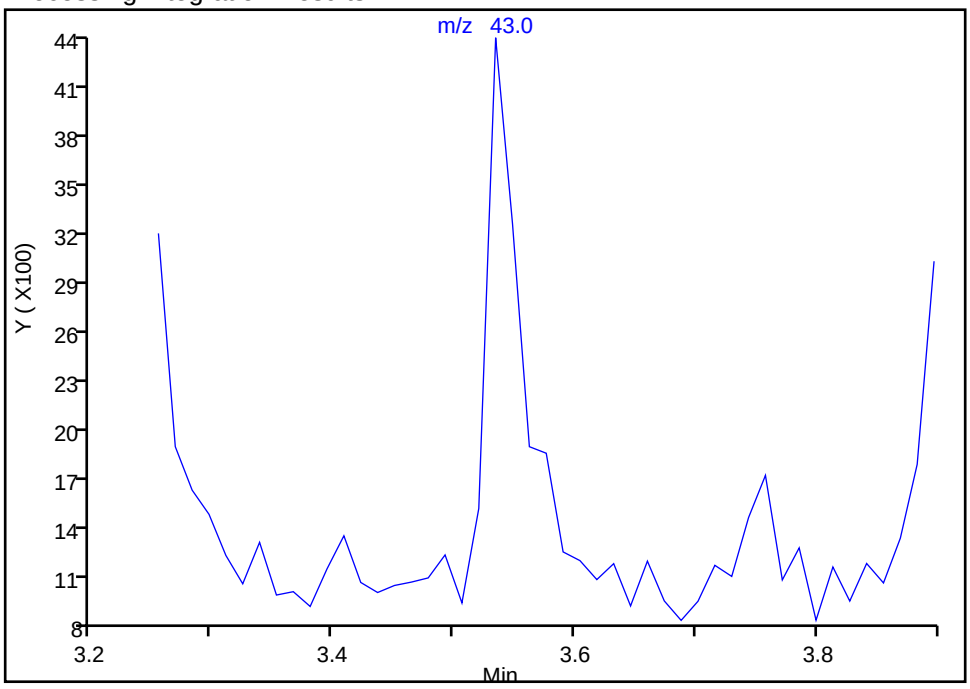
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\MS1_2512.D
Injection Date: 16-Feb-2022 15:18:30 Instrument ID: VMS_MS1
Lims ID: ic
Client ID:
Operator ID: SUNLEEC ALS Bottle#: 2 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

30 Methyl acetate, CAS: 79-20-9

Signal: 1

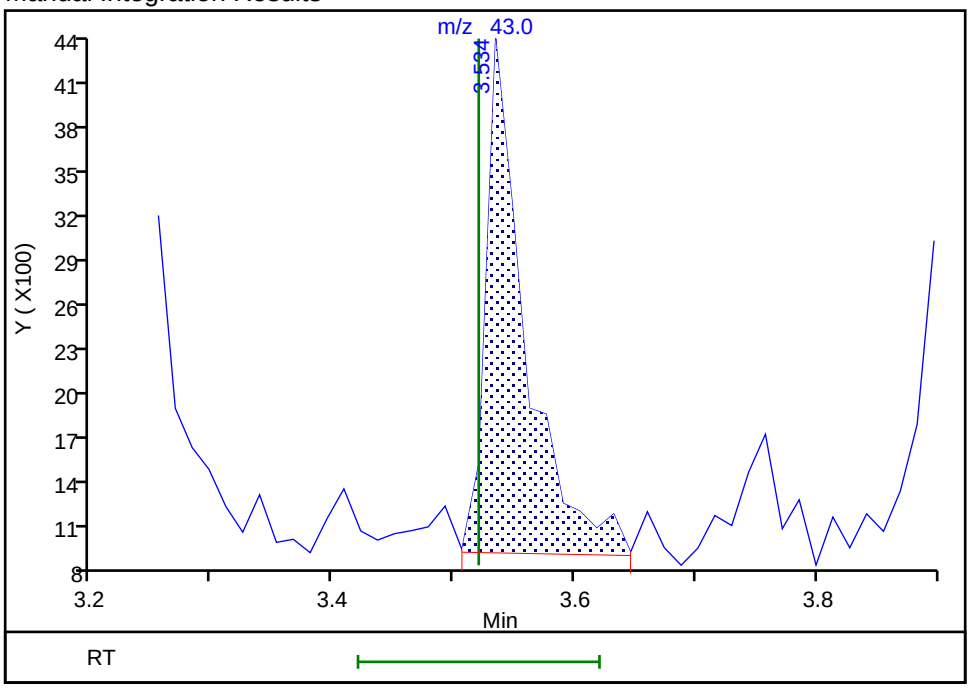
Not Detected
Expected RT: 3.52

Processing Integration Results



Manual Integration Results

RT: 3.53
Area: 7746
Amount: 1.867043
Amount Units: ug/l



Reviewer: seifertj, 17-Feb-2022 08:23:05
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins Denver

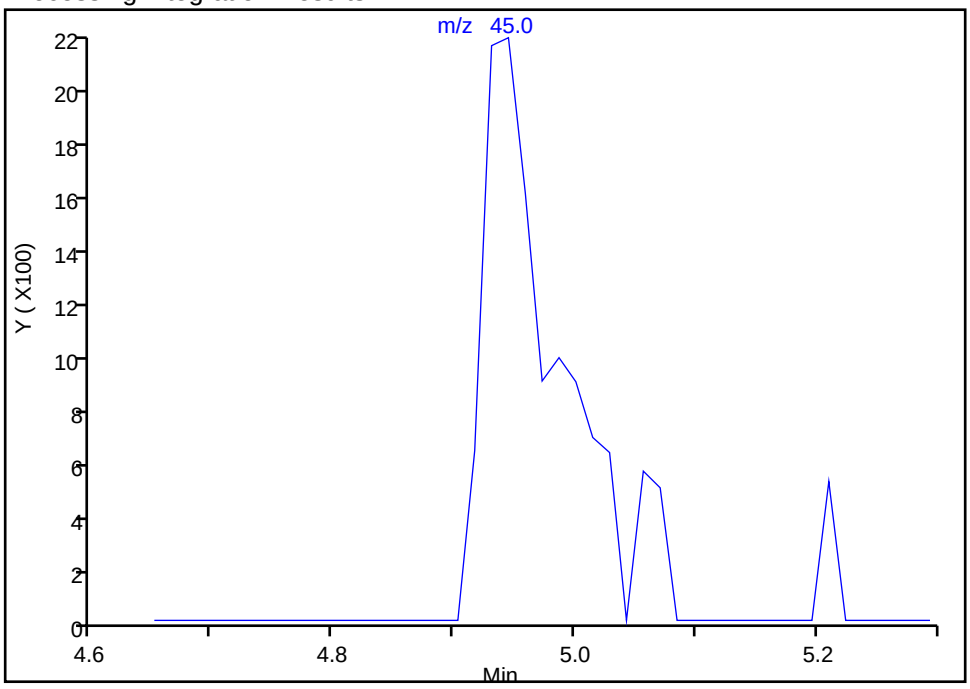
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\MS1_2512.D
Injection Date: 16-Feb-2022 15:18:30 Instrument ID: VMS_MS1
Lims ID: ic
Client ID:
Operator ID: SUNLEEC ALS Bottle#: 2 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

51 sec-Butyl Alcohol, CAS: 78-92-2

Signal: 1

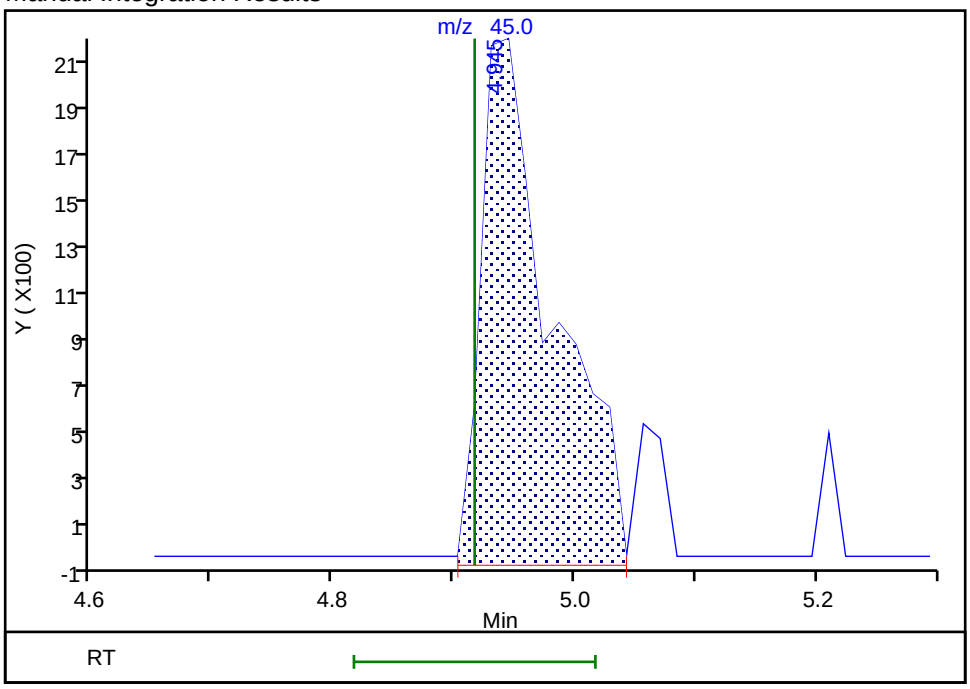
Not Detected
Expected RT: 4.92

Processing Integration Results



Manual Integration Results

RT: 4.94
Area: 9346
Amount: 22.275146
Amount Units: ug/l



Reviewer: seifertj, 17-Feb-2022 08:23:19
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins Denver

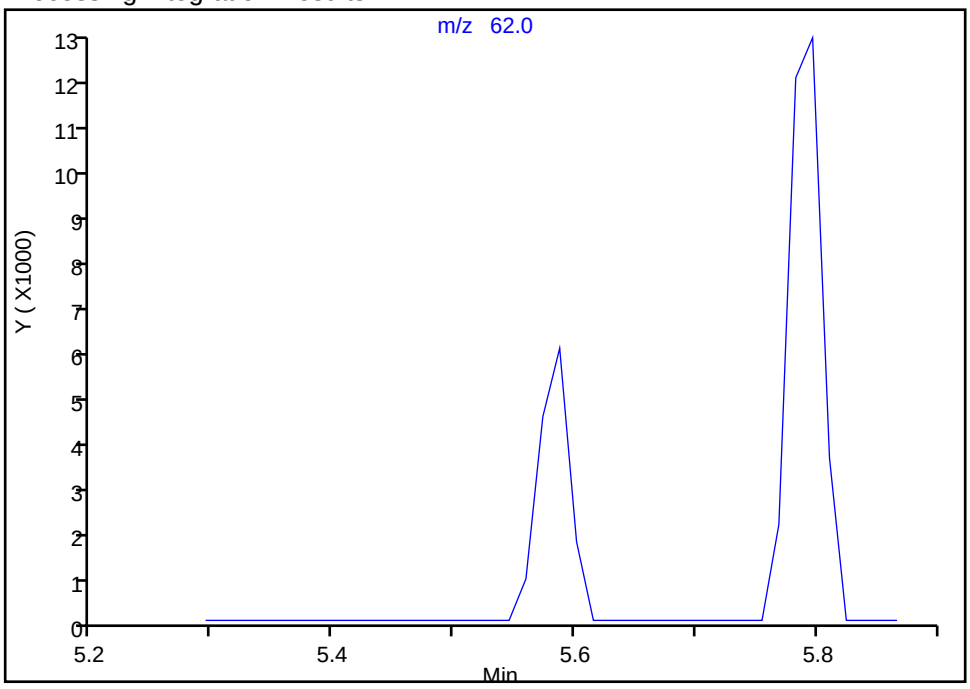
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\MS1_2512.D
Injection Date: 16-Feb-2022 15:18:30 Instrument ID: VMS_MS1
Lims ID: ic
Client ID:
Operator ID: SUNLEEC ALS Bottle#: 2 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

64 1,2-Dichloroethane, CAS: 107-06-2

Signal: 1

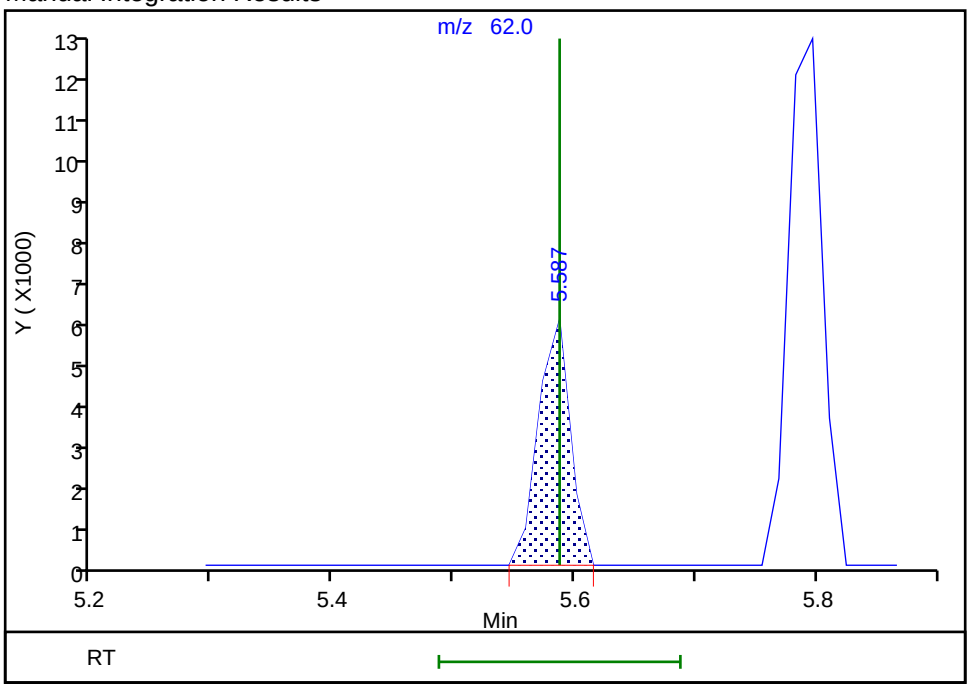
Not Detected
Expected RT: 5.59

Processing Integration Results



Manual Integration Results

RT: 5.59
Area: 11058
Amount: 1.131101
Amount Units: ug/l



Reviewer: seifertj, 17-Feb-2022 08:23:24
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins Denver

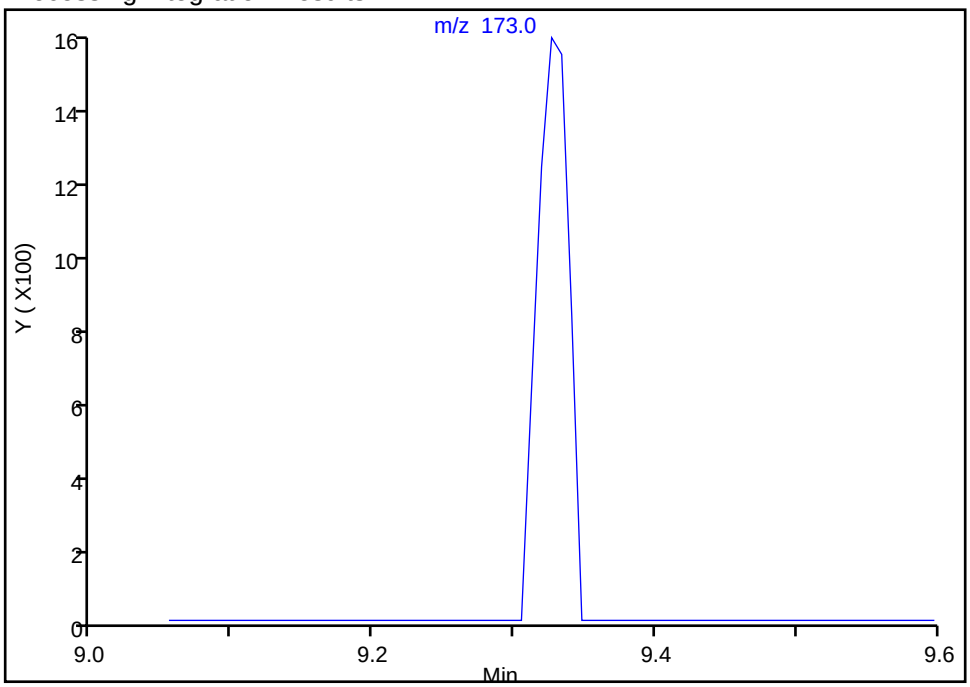
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\MS1_2512.D
Injection Date: 16-Feb-2022 15:18:30 Instrument ID: VMS_MS1
Lims ID: ic
Client ID:
Operator ID: SUNLEEC ALS Bottle#: 2 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

106 Bromoform, CAS: 75-25-2

Signal: 1

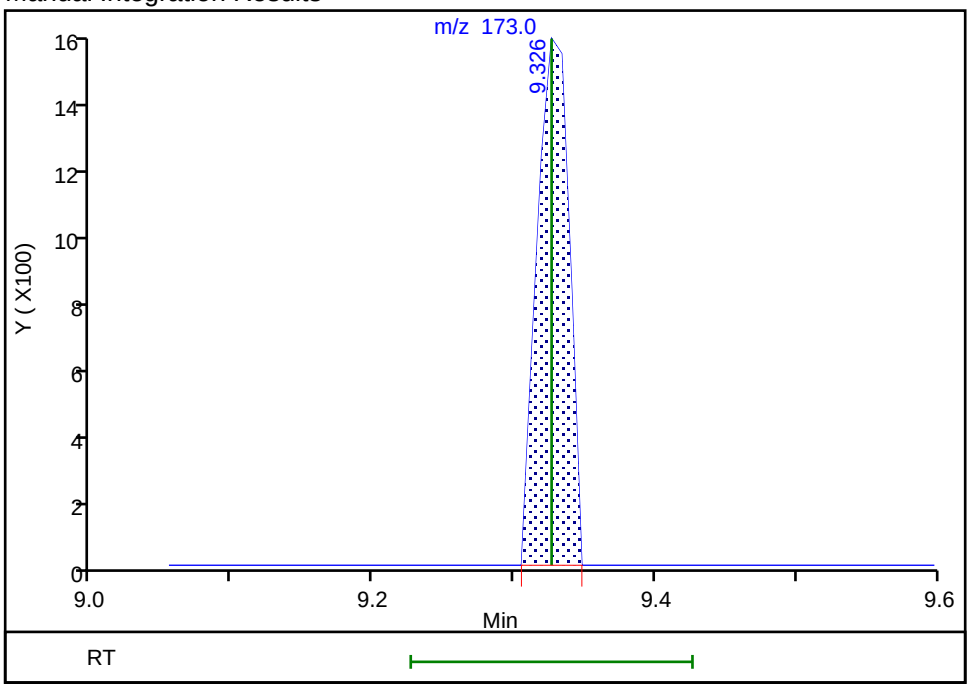
Not Detected
Expected RT: 9.33

Processing Integration Results



Manual Integration Results

RT: 9.33
Area: 2473
Amount: 1.373073
Amount Units: ug/l



Reviewer: seifertj, 17-Feb-2022 08:23:37
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins Denver

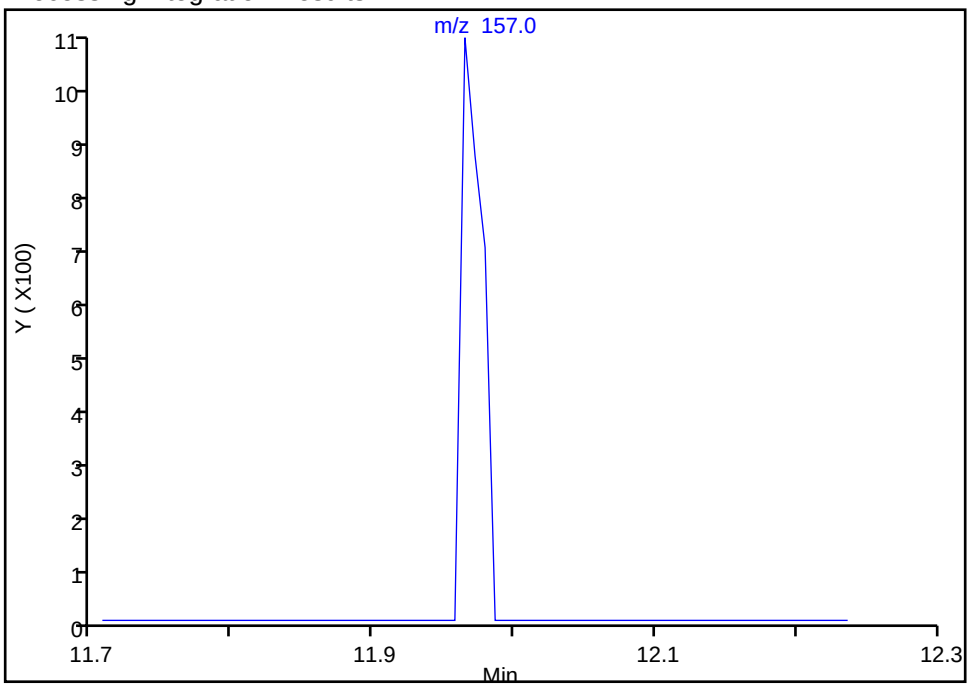
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\MS1_2512.D
Injection Date: 16-Feb-2022 15:18:30 Instrument ID: VMS_MS1
Lims ID: ic
Client ID:
Operator ID: SUNLEEC ALS Bottle#: 2 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water 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

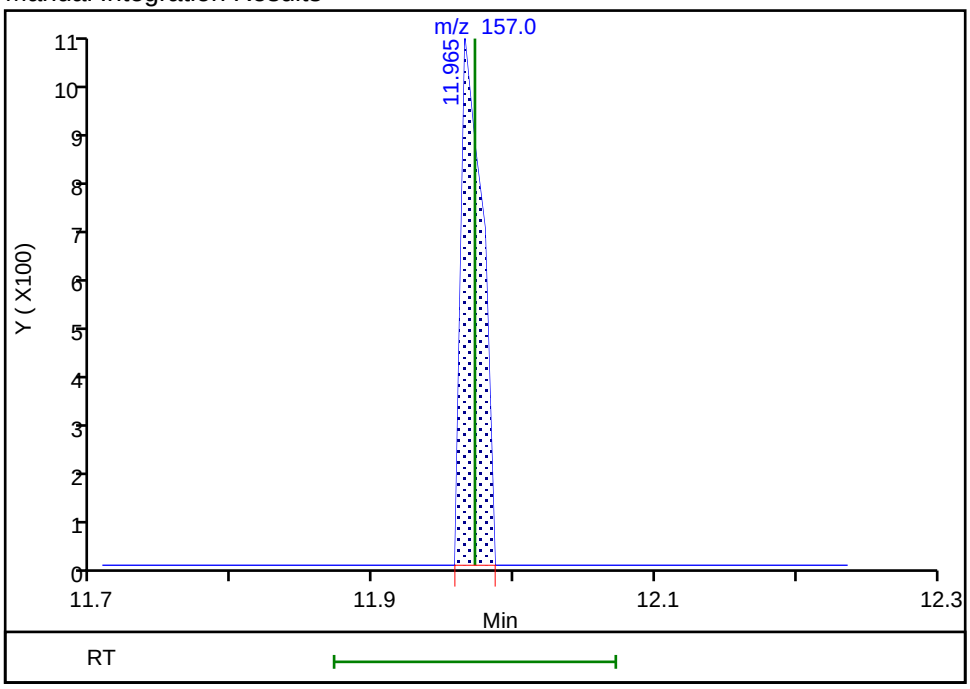
Not Detected
Expected RT: 11.97

Processing Integration Results



Manual Integration Results

RT: 11.96
Area: 1129
Amount: 0.845368
Amount Units: ug/l



Reviewer: seifertj, 17-Feb-2022 08:23:42
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\MS1_2513.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 16-Feb-2022 15:39:30 ALS Bottle#: 3 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Operator ID: SUNLEEC Instrument ID: VMS_MS1
Sublist: chrom-AQ_VMS1_8260*sub164

Method: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 17-Feb-2022 13:45:00 Calib Date: 16-Feb-2022 20:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\MS1_2528.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1654

First Level Reviewer: seifertj Date: 17-Feb-2022 08:24:20

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.797	5.797	0.001	98	1509993	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.518	8.518	0.000	91	371718	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.799	10.799	0.000	98	650632	50.0	50.0	
$ 5 Dibromofluoromethane (Surr)	111	5.224	5.224	0.000	92	435342	50.0	52.4	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.517	5.517	0.000	0	543175	50.0	50.5	
$ 7 Toluene-d8 (Surr)	98	7.181	7.181	0.000	95	1506459	50.0	49.4	
$ 8 4-Bromofluorobenzene (Surr)	95	9.655	9.648	0.007	82	662682	50.0	49.9	
11 Dichlorodifluoromethane	85	1.677	1.677	0.000	98	11577	2.00	1.70	
12 Chloromethane	50	1.886	1.886	0.000	98	13022	2.00	1.97	
13 Vinyl chloride	62	1.970	1.970	0.000	95	11216	2.00	2.17	
15 Bromomethane	94	2.319	2.319	0.000	95	11197	2.00	1.80	
16 Chloroethane	64	2.431	2.431	0.000	97	8005	2.00	1.99	
17 Dichlorofluoromethane	67	2.654	2.654	0.000	96	27052	2.00	2.30	
18 Trichlorofluoromethane	101	2.696	2.696	0.000	96	17263	2.00	1.97	
20 Ethyl ether	59	2.961	2.962	-0.001	92	9665	2.00	2.04	
22 Acrolein	56	3.115	3.101	0.014	83	6553	19.8	22.5	
23 1,1-Dichloroethene	96	3.199	3.199	0.000	94	9938	2.00	2.14	
24 112TCTFE	151	3.213	3.213	0.000	90	7322	2.00	2.26	
25 Acetone	43	3.241	3.227	0.014	98	15798	8.00	8.16	
26 Iodomethane	142	3.366	3.353	0.013	94	5408	2.00	2.03	
28 Carbon disulfide	76	3.408	3.409	-0.001	100	34797	2.00	2.12	
30 Methyl acetate	43	3.534	3.520	0.014	71	17867	4.00	4.23	
31 3-Chloro-1-propene	41	3.548	3.548	0.000	88	23332	2.00	2.25	
32 Methylene Chloride	84	3.660	3.660	0.000	93	15597	2.00	2.02	
33 2-Methyl-2-propanol	59	3.744	3.744	0.000	98	9060	20.0	16.3	
34 Acrylonitrile	53	3.869	3.869	0.000	97	47498	20.0	20.1	
35 Methyl tert-butyl ether	73	3.897	3.897	0.000	96	28892	2.00	1.87	
36 trans-1,2-Dichloroethene	96	3.911	3.911	0.000	96	11295	2.00	2.10	
37 Hexane	57	4.163	4.163	0.000	94	15208	2.00	1.89	
39 Vinyl acetate	43	4.302	4.288	0.014	97	36605	4.00	3.40	
40 1,1-Dichloroethane	63	4.302	4.302	0.000	94	24823	2.00	2.25	

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	4.791	4.777	0.014	70	16783	8.00	6.89	
48 cis-1,2-Dichloroethene	96	4.805	4.791	0.014	87	12594	2.00	2.01	
49 2,2-Dichloropropane	77	4.805	4.805	0.000	89	19416	2.00	2.12	
51 sec-Butyl Alcohol	45	4.931	4.917	0.014	96	15226	48.0	35.7	
53 Chlorobromomethane	128	5.001	5.001	0.000	96	6497	2.00	2.20	
54 Tetrahydrofuran	42	5.015	5.015	-0.001	90	9187	4.00	4.14	
55 Chloroform	83	5.084	5.085	0.000	95	24238	2.00	2.17	
56 1,1,1-Trichloroethane	97	5.238	5.238	0.000	97	18418	2.00	2.09	
57 Cyclohexane	56	5.294	5.294	0.000	92	23378	2.00	2.22	
58 1,1-Dichloropropene	75	5.364	5.364	0.000	91	15795	2.00	2.04	
59 Carbon tetrachloride	117	5.364	5.364	0.000	81	12985	2.00	1.99	
60 Isobutyl alcohol	41	5.420	5.420	0.000	91	8041	50.0	42.6	
63 Benzene	78	5.545	5.545	0.000	98	47872	2.00	2.09	
64 1,2-Dichloroethane	62	5.587	5.587	0.000	97	19944	2.00	2.01	
66 n-Heptane	43	5.769	5.769	0.000	87	14393	2.00	2.14	
68 Trichloroethene	95	6.104	6.104	0.000	93	11517	2.00	1.91	
69 2-Pentanone	43	6.230	6.230	0.000	99	23740	6.40	6.00	
70 Methylcyclohexane	55	6.313	6.314	-0.001	91	14580	2.00	2.02	
71 1,2-Dichloropropane	63	6.327	6.328	-0.001	87	12342	2.00	2.01	
73 1,4-Dioxane	88	6.383	6.383	0.000	18	2166	40.0	30.9	
74 Dibromomethane	93	6.411	6.411	0.000	90	8320	2.00	2.10	
75 Dichlorobromomethane	83	6.552	6.559	-0.007	95	15187	2.00	2.04	
77 2-Chloroethyl vinyl ether	63	6.795	6.788	0.007	86	6550	2.00	2.02	
78 cis-1,3-Dichloropropene	75	6.938	6.938	0.000	90	18025	2.00	1.88	
79 4-Methyl-2-pentanone (MIBK)	43	7.052	7.052	0.000	98	39698	8.00	7.79	
82 Toluene	91	7.238	7.238	0.000	96	51838	2.00	2.26	
84 trans-1,3-Dichloropropene	75	7.438	7.439	-0.001	92	15743	2.00	1.88	
85 Ethyl methacrylate	69	7.467	7.467	0.000	95	14531	2.00	1.97	
87 1,1,2-Trichloroethane	97	7.624	7.625	0.000	92	8866	2.00	1.96	
89 Tetrachloroethene	164	7.717	7.710	0.007	90	6907	2.00	1.91	
90 1,3-Dichloropropane	76	7.774	7.775	-0.001	96	16268	2.00	1.83	
91 2-Hexanone	43	7.803	7.803	0.000	97	27552	8.00	7.56	
95 Chlorodibromomethane	129	7.975	7.975	0.000	87	8508	2.00	1.80	
96 Ethylene Dibromide	107	8.089	8.096	-0.007	97	9201	2.00	1.86	
98 1-Chlorohexane	91	8.511	8.511	0.000	34	14510	1.60	1.61	
99 Chlorobenzene	112	8.547	8.547	0.000	96	28964	2.00	1.96	
100 1,1,1,2-Tetrachloroethane	131	8.625	8.626	-0.001	90	9001	2.00	1.84	
101 Ethylbenzene	106	8.633	8.633	-0.001	99	16491	2.00	2.05	
102 m-Xylene & p-Xylene	106	8.754	8.754	0.000	0	21054	2.00	2.08	
103 o-Xylene	106	9.126	9.126	0.000	98	20344	2.00	2.02	
104 Styrene	104	9.147	9.140	0.007	93	34905	2.00	2.00	
106 Bromoform	173	9.333	9.326	0.007	87	4995	2.00	2.15	
107 Isopropylbenzene	105	9.476	9.476	0.000	98	52117	2.00	2.00	
109 Cyclohexanone	55	9.569	9.569	0.000	94	17941	70.0	67.9	
110 1,1,2,2-Tetrachloroethane	83	9.769	9.770	-0.001	94	13574	2.00	1.95	
111 Bromobenzene	156	9.798	9.798	0.000	97	13027	2.00	2.10	
112 trans-1,4-Dichloro-2-butene	53	9.805	9.805	0.000	41	4787	2.00	1.89	
113 1,2,3-Trichloropropane	110	9.834	9.834	0.000	82	3892	2.00	1.96	
114 N-Propylbenzene	120	9.884	9.884	0.000	99	13711	2.00	1.97	
115 2-Chlorotoluene	126	9.977	9.977	0.000	94	11898	2.00	1.94	
116 1,3,5-Trimethylbenzene	105	10.063	10.056	0.007	94	47008	2.00	2.03	
117 4-Chlorotoluene	126	10.098	10.098	0.000	99	13277	2.00	2.06	

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	10.370	10.370	0.000	93	35554	2.00	1.95	
119 1,2,4-Trimethylbenzene	105	10.434	10.427	0.007	98	47483	2.00	1.95	
120 sec-Butylbenzene	134	10.592	10.592	0.000	96	9506	2.00	1.92	
121 1,3-Dichlorobenzene	146	10.720	10.721	-0.001	95	24220	2.00	1.98	
122 4-Isopropyltoluene	119	10.742	10.742	0.000	96	44476	2.00	1.96	
123 1,4-Dichlorobenzene	146	10.820	10.821	-0.001	90	24439	2.00	1.89	
125 n-Butylbenzene	91	11.149	11.150	-0.001	98	42246	2.00	1.96	
127 1,2-Dichlorobenzene	146	11.178	11.178	0.000	94	24157	2.00	2.02	
128 1,2-Dibromo-3-Chloropropane	157	11.972	11.972	0.000	79	2467	2.00	1.85	
130 1,2,4-Trichlorobenzene	180	12.801	12.794	0.007	90	14033	2.00	1.89	
131 Hexachlorobutadiene	225	12.944	12.937	0.007	81	4362	2.00	1.80	
132 Naphthalene	128	13.066	13.066	0.000	98	43325	2.00	1.95	
134 1,2,3-Trichlorobenzene	180	13.287	13.287	0.000	92	12763	2.00	1.94	
S 149 1,2-Dichloroethene, Total (URS)	96				0		4.00	4.11	
S 156 1,3-Dichloropropene, Total	1				0		4.00	3.76	
S 155 Xylenes, Total	106				0		4.00	4.10	
S 153 Xylenes, Total (URS)	1				0		4.00	4.10	
S 152 Total BTEX	1				0			10.5	
S 151 Trihalomethanes, Total	1				0		8.00	8.16	
S 150 1,2-Dichloroethene, Total	1				0		4.00	4.11	

QC Flag Legend

Processing Flags

Reagents:

Cal Dil Std_00029	Amount Added: 20.00	Units: uL	
mv-IS_SS_00033	Amount Added: 5.00	Units: uL	Run Reagent

Report Date: 17-Feb-2022 13:45:01 Chrom Revision: 2.3 18-Jan-2022 20:25:40

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\MS1_2513.D

Injection Date:	16-Feb-2022 15:39:30	Instrument ID:	VMS_MS1	Operator ID:	SUNLEEC
Lims ID:	ic			Worklist Smp#:	16
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 Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\MS1_2514.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 16-Feb-2022 16:01:30 ALS Bottle#: 4 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Operator ID: SUNLEEC Instrument ID: VMS_MS1
Sublist: chrom-AQ_VMS1_8260*sub164

Method: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 17-Feb-2022 13:45:02 Calib Date: 16-Feb-2022 20:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\MS1_2528.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1654

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.797	5.797	0.001	98	1516034	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.518	8.518	0.000	91	368604	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.799	10.799	0.000	98	634034	50.0	50.0	
$ 5 Dibromofluoromethane (Surr)	111	5.224	5.224	0.000	92	424959	50.0	50.9	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.517	5.517	0.000	0	537886	50.0	49.8	
$ 7 Toluene-d8 (Surr)	98	7.181	7.181	0.000	95	1495775	50.0	49.4	
$ 8 4-Bromofluorobenzene (Surr)	95	9.655	9.648	0.007	82	651372	50.0	50.3	
11 Dichlorodifluoromethane	85	1.677	1.677	0.000	98	34364	5.00	5.03	
12 Chloromethane	50	1.886	1.886	0.000	99	33792	5.00	5.10	
13 Vinyl chloride	62	1.970	1.970	0.000	99	28449	5.00	5.49	
15 Bromomethane	94	2.319	2.319	0.000	94	28045	5.00	6.18	
16 Chloroethane	64	2.431	2.431	0.000	99	21515	5.00	5.32	
17 Dichlorofluoromethane	67	2.654	2.654	0.000	99	60730	5.00	5.14	
18 Trichlorofluoromethane	101	2.696	2.696	0.000	97	42211	5.00	4.79	
20 Ethyl ether	59	2.962	2.962	0.000	94	23861	5.00	5.02	
22 Acrolein	56	3.101	3.101	0.000	94	10896	49.4	45.0	
23 1,1-Dichloroethene	96	3.199	3.199	0.000	97	18536	5.00	3.98	
24 112TCTFE	151	3.213	3.213	0.000	87	11133	5.00	3.31	
25 Acetone	43	3.241	3.227	0.014	99	34857	20.0	17.9	
26 Iodomethane	142	3.353	3.353	0.000	98	13711	5.00	3.31	
28 Carbon disulfide	76	3.408	3.409	-0.001	100	66410	5.00	4.03	
30 Methyl acetate	43	3.534	3.520	0.014	98	37780	10.0	8.92	
31 3-Chloro-1-propene	41	3.548	3.548	0.000	87	43817	5.00	4.40	
32 Methylene Chloride	84	3.674	3.660	0.014	95	32821	5.00	4.78	
33 2-Methyl-2-propanol	59	3.744	3.744	0.000	98	25994	50.0	46.6	
34 Acrylonitrile	53	3.869	3.869	0.000	97	122720	50.0	51.8	
35 Methyl tert-butyl ether	73	3.897	3.897	0.000	96	70539	5.00	4.54	
36 trans-1,2-Dichloroethene	96	3.911	3.911	0.000	97	24331	5.00	4.51	
37 Hexane	57	4.163	4.163	0.000	96	27636	5.00	3.37	
39 Vinyl acetate	43	4.302	4.288	0.014	97	93047	10.0	8.61	
40 1,1-Dichloroethane	63	4.302	4.302	0.000	81	50914	5.00	4.60	
46 2-Butanone (MEK)	43	4.777	4.777	0.000	100	42754	20.0	17.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
48 cis-1,2-Dichloroethene	96	4.805	4.791	0.014	88	28148	5.00	4.47	
49 2,2-Dichloropropane	77	4.805	4.805	0.000	92	36432	5.00	3.96	
51 sec-Butyl Alcohol	45	4.931	4.917	0.014	99	47208	120.0	110.2	
53 Chlorobromomethane	128	5.001	5.001	0.000	94	14342	5.00	4.84	
54 Tetrahydrofuran	42	5.015	5.015	0.000	83	17128	10.0	8.48	
55 Chloroform	83	5.084	5.085	0.000	97	51189	5.00	4.57	
56 1,1,1-Trichloroethane	97	5.238	5.238	0.000	98	36227	5.00	4.10	
57 Cyclohexane	56	5.294	5.294	0.000	93	38980	5.00	3.72	
58 1,1-Dichloropropene	75	5.364	5.364	0.000	88	27340	5.00	3.53	
59 Carbon tetrachloride	117	5.378	5.364	0.014	86	24391	5.00	3.72	
60 Isobutyl alcohol	41	5.420	5.420	0.000	92	18607	125.0	94.9	
63 Benzene	78	5.545	5.545	0.000	97	96604	5.00	4.20	
64 1,2-Dichloroethane	62	5.587	5.587	0.000	98	45609	5.00	4.57	
66 n-Heptane	43	5.769	5.769	0.000	91	28081	5.00	4.17	
68 Trichloroethene	95	6.104	6.104	0.000	94	23873	5.00	4.00	
69 2-Pentanone	43	6.230	6.230	0.000	98	52818	16.0	13.3	
70 Methylcyclohexane	55	6.313	6.314	-0.001	92	26472	5.00	3.66	
71 1,2-Dichloropropane	63	6.327	6.328	-0.001	91	29043	5.00	4.71	
73 1,4-Dioxane	88	6.383	6.383	0.000	91	6585	100.0	93.7	
74 Dibromomethane	93	6.411	6.411	0.000	92	18532	5.00	4.66	
75 Dichlorobromomethane	83	6.552	6.559	-0.007	96	32766	5.00	4.38	
77 2-Chloroethyl vinyl ether	63	6.788	6.788	0.000	94	16356	5.00	5.03	
78 cis-1,3-Dichloropropene	75	6.938	6.938	0.000	90	38402	5.00	4.04	
79 4-Methyl-2-pentanone (MIBK)	43	7.052	7.052	0.000	98	97920	20.0	19.1	
82 Toluene	91	7.238	7.238	0.000	96	100862	5.00	4.37	
84 trans-1,3-Dichloropropene	75	7.438	7.439	-0.001	99	37113	5.00	4.42	
85 Ethyl methacrylate	69	7.474	7.467	0.007	93	32775	5.00	4.49	
87 1,1,2-Trichloroethane	97	7.624	7.625	0.000	92	21664	5.00	4.76	
89 Tetrachloroethene	164	7.717	7.710	0.007	91	14920	5.00	3.83	
90 1,3-Dichloropropane	76	7.775	7.775	0.000	94	41267	5.00	4.67	
91 2-Hexanone	43	7.803	7.803	0.000	97	71166	20.0	19.7	
95 Chlorodibromomethane	129	7.975	7.975	0.000	90	18881	5.00	4.03	
96 Ethylene Dibromide	107	8.096	8.096	0.000	97	21673	5.00	4.42	
98 1-Chlorohexane	91	8.511	8.511	0.000	81	23613	4.00	2.83	
99 Chlorobenzene	112	8.547	8.547	0.000	95	65159	5.00	4.44	
100 1,1,1,2-Tetrachloroethane	131	8.625	8.626	-0.001	88	20602	5.00	4.24	
101 Ethylbenzene	106	8.633	8.633	0.000	99	33921	5.00	4.25	
102 m-Xylene & p-Xylene	106	8.754	8.754	0.000	0	43533	5.00	4.34	
103 o-Xylene	106	9.126	9.126	0.000	98	44684	5.00	4.47	
104 Styrene	104	9.140	9.140	0.000	94	77279	5.00	4.45	
106 Bromoform	173	9.326	9.326	0.000	88	10836	5.00	3.98	
107 Isopropylbenzene	105	9.476	9.476	0.000	97	105096	5.00	4.13	
109 Cyclohexanone	55	9.569	9.569	0.000	95	41590	175.0	158.8	
110 1,1,2,2-Tetrachloroethane	83	9.769	9.770	-0.001	95	31239	5.00	4.61	
111 Bromobenzene	156	9.798	9.798	0.000	97	27139	5.00	4.48	
112 trans-1,4-Dichloro-2-butene	53	9.805	9.805	0.000	74	10898	5.00	4.42	
113 1,2,3-Trichloropropane	110	9.834	9.834	0.000	87	9136	5.00	4.72	
114 N-Propylbenzene	120	9.884	9.884	0.000	99	29518	5.00	4.36	
115 2-Chlorotoluene	126	9.977	9.977	0.000	95	26520	5.00	4.44	
116 1,3,5-Trimethylbenzene	105	10.055	10.056	-0.001	93	96714	5.00	4.29	
117 4-Chlorotoluene	126	10.098	10.098	0.000	98	28380	5.00	4.52	
118 tert-Butylbenzene	119	10.370	10.370	0.000	93	74239	5.00	4.19	

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	10.434	10.427	0.007	98	105521	5.00	4.44	
120 sec-Butylbenzene	134	10.592	10.592	0.000	96	20258	5.00	4.20	
121 1,3-Dichlorobenzene	146	10.720	10.721	-0.001	95	54661	5.00	4.60	
122 4-Isopropyltoluene	119	10.742	10.742	0.000	96	92197	5.00	4.18	
123 1,4-Dichlorobenzene	146	10.821	10.821	0.000	92	55531	5.00	4.41	
125 n-Butylbenzene	91	11.157	11.150	0.007	98	86651	5.00	4.12	
127 1,2-Dichlorobenzene	146	11.185	11.178	0.007	94	53004	5.00	4.55	
128 1,2-Dibromo-3-Chloropropane	157	11.972	11.972	0.000	68	5919	5.00	4.56	
130 1,2,4-Trichlorobenzene	180	12.794	12.794	0.000	93	32049	5.00	4.42	
131 Hexachlorobutadiene	225	12.937	12.937	0.000	92	10384	5.00	4.40	
132 Naphthalene	128	13.066	13.066	0.000	98	101771	5.00	4.70	
134 1,2,3-Trichlorobenzene	180	13.287	13.287	0.000	92	30332	5.00	4.73	
S 149 1,2-Dichloroethene, Total (URS)	96				0		10.0	8.98	
S 156 1,3-Dichloropropene, Total	1				0		10.0	8.46	
S 155 Xylenes, Total	106				0		10.0	8.81	
S 153 Xylenes, Total (URS)	1				0		10.0	8.81	
S 152 Total BTEX	1				0			21.6	
S 151 Trihalomethanes, Total	1				0		20.0	17.0	
S 150 1,2-Dichloroethene, Total	1				0		10.0	8.98	

Reagents:

MV-MegaMainA_00065	Amount Added:	2.50	Units: uL	
Acrolein_B_00020	Amount Added:	2.50	Units: uL	
MV-Gas A_00114	Amount Added:	1.00	Units: uL	
mv-IS_SS_00033	Amount Added:	5.00	Units: uL	Run Reagent

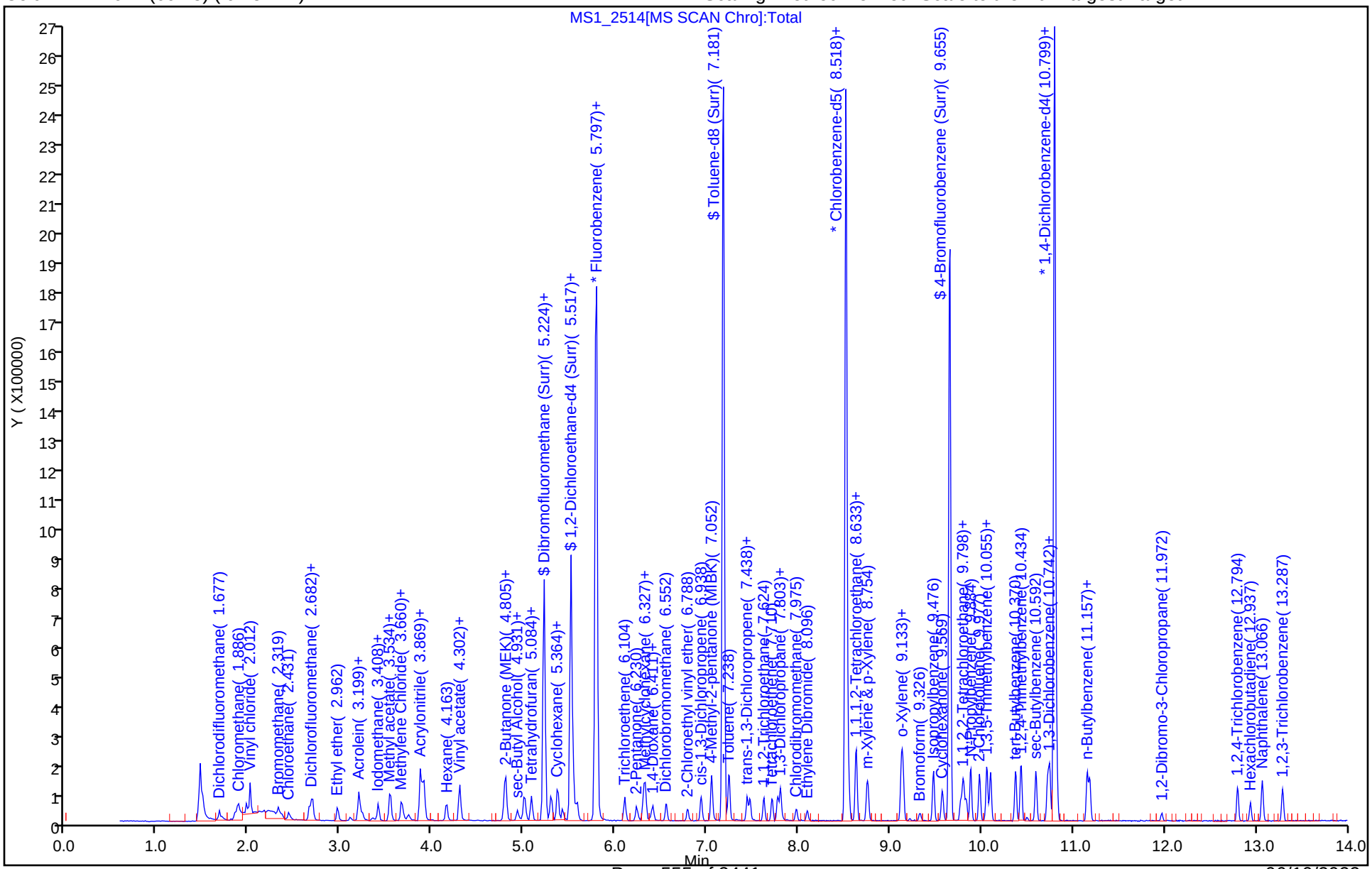
Report Date: 17-Feb-2022 13:45:02 Chrom Revision: 2.3 18-Jan-2022 20:25:40

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\MS1_2514.D

Injection Date:	16-Feb-2022 16:01:30	Instrument ID:	VMS_MS1	Operator ID:	SUNLEEC
Lims ID:	ic			Worklist Smp#:	17
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 Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\MS1_2515.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 16-Feb-2022 16:22:30 ALS Bottle#: 5 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 10
Operator ID: SUNLEEC Instrument ID: VMS_MS1
Sublist: chrom-AQ_VMS1_8260*sub164

Method: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 17-Feb-2022 13:45:04 Calib Date: 16-Feb-2022 20:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\MS1_2528.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1654

First Level Reviewer: seifertj Date: 17-Feb-2022 08:28:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.797	5.797	0.001	98	1542515	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.518	8.518	0.000	91	370285	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.799	10.799	0.000	98	643049	50.0	50.0	
$ 5 Dibromofluoromethane (Surr)	111	5.224	5.224	0.000	92	432555	50.0	51.0	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.517	5.517	0.000	0	557800	50.0	50.8	
$ 7 Toluene-d8 (Surr)	98	7.181	7.181	0.000	95	1502515	50.0	49.4	
$ 8 4-Bromofluorobenzene (Surr)	95	9.655	9.648	0.007	82	650474	50.0	49.6	
11 Dichlorodifluoromethane	85	1.677	1.677	0.000	99	71185	10.0	10.2	
12 Chloromethane	50	1.886	1.886	0.000	99	65051	10.0	9.66	
13 Vinyl chloride	62	1.970	1.970	0.000	99	55682	10.0	10.6	
15 Bromomethane	94	2.319	2.319	0.000	93	52792	10.0	12.4	
16 Chloroethane	64	2.431	2.431	0.000	99	42029	10.0	10.2	
17 Dichlorofluoromethane	67	2.654	2.654	0.000	99	116661	10.0	9.71	
18 Trichlorofluoromethane	101	2.696	2.696	0.000	99	88207	10.0	9.84	
20 Ethyl ether	59	2.961	2.962	-0.001	94	52062	10.0	10.8	
22 Acrolein	56	3.101	3.101	0.000	97	20928	98.8	95.4	
23 1,1-Dichloroethene	96	3.199	3.199	0.000	96	43557	10.0	9.20	
24 112TCTFE	151	3.213	3.213	0.000	92	28674	10.0	8.04	
25 Acetone	43	3.241	3.227	0.014	98	68626	40.0	34.7	
26 Iodomethane	142	3.353	3.353	0.000	99	36097	10.0	6.67	
28 Carbon disulfide	76	3.408	3.409	-0.001	100	154167	10.0	9.20	
30 Methyl acetate	43	3.534	3.520	0.014	99	84922	20.0	19.7	
31 3-Chloro-1-propene	41	3.548	3.548	0.000	87	99829	10.0	10.1	
32 Methylene Chloride	84	3.674	3.660	0.014	95	70321	10.0	10.6	
33 2-Methyl-2-propanol	59	3.744	3.744	0.000	99	54348	100.0	95.8	
34 Acrylonitrile	53	3.869	3.869	0.000	98	245784	100.0	101.9	
35 Methyl tert-butyl ether	73	3.897	3.897	0.000	97	160066	10.0	10.1	
36 trans-1,2-Dichloroethene	96	3.911	3.911	0.000	95	53830	10.0	9.82	
37 Hexane	57	4.163	4.163	0.000	95	56914	10.0	6.81	
39 Vinyl acetate	43	4.288	4.288	0.000	98	224860	20.0	20.4	

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	4.302	4.302	0.000	97	115862	10.0	10.3	
46 2-Butanone (MEK)	43	4.777	4.777	0.000	99	99180	40.0	39.8	
48 cis-1,2-Dichloroethene	96	4.805	4.791	0.014	88	62548	10.0	9.75	
49 2,2-Dichloropropane	77	4.805	4.805	0.000	92	88040	10.0	9.39	
51 sec-Butyl Alcohol	45	4.931	4.917	0.014	99	94691	240.0	217.2	
53 Chlorobromomethane	128	5.001	5.001	0.000	96	32137	10.0	10.7	
54 Tetrahydrofuran	42	5.015	5.015	-0.001	84	41190	20.0	21.3	
55 Chloroform	83	5.084	5.085	0.000	97	111014	10.0	9.75	
56 1,1,1-Trichloroethane	97	5.238	5.238	0.000	98	85079	10.0	9.47	
57 Cyclohexane	56	5.294	5.294	0.000	95	83136	10.0	7.88	
58 1,1-Dichloropropene	75	5.364	5.364	0.000	90	68932	10.0	8.74	
59 Carbon tetrachloride	117	5.378	5.364	0.014	84	59393	10.0	8.91	
60 Isobutyl alcohol	41	5.420	5.420	0.000	91	40796	250.0	201.6	
63 Benzene	78	5.545	5.545	0.000	98	229392	10.0	9.81	
64 1,2-Dichloroethane	62	5.587	5.587	0.000	98	100688	10.0	9.91	
66 n-Heptane	43	5.769	5.769	0.000	93	59296	10.0	8.65	
68 Trichloroethene	95	6.104	6.104	0.000	95	55292	10.0	9.22	
69 2-Pentanone	43	6.230	6.230	0.000	98	118492	32.0	29.3	
70 Methylcyclohexane	55	6.313	6.314	-0.001	94	61926	10.0	8.41	
71 1,2-Dichloropropane	63	6.327	6.328	-0.001	91	63797	10.0	10.2	
73 1,4-Dioxane	88	6.383	6.383	0.000	95	15265	200.0	213.4	
74 Dibromomethane	93	6.411	6.411	0.000	91	41517	10.0	10.3	
75 Dichlorobromomethane	83	6.559	6.559	0.000	97	73811	10.0	9.70	
77 2-Chloroethyl vinyl ether	63	6.788	6.788	0.000	93	31006	10.0	9.37	
78 cis-1,3-Dichloropropene	75	6.938	6.938	0.000	91	89950	10.0	9.42	
79 4-Methyl-2-pentanone (MIBK)	43	7.052	7.052	0.000	98	204573	40.0	39.3	
82 Toluene	91	7.245	7.238	0.007	97	226073	10.0	9.64	
84 trans-1,3-Dichloropropene	75	7.438	7.439	-0.001	98	84722	10.0	9.92	
85 Ethyl methacrylate	69	7.467	7.467	0.000	90	72854	10.0	9.93	
87 1,1,2-Trichloroethane	97	7.624	7.625	0.000	95	45000	10.0	9.73	
89 Tetrachloroethene	164	7.717	7.710	0.007	92	33439	10.0	8.18	
90 1,3-Dichloropropane	76	7.774	7.775	-0.001	93	86891	10.0	9.80	
91 2-Hexanone	43	7.803	7.803	0.000	98	147401	40.0	40.6	
95 Chlorodibromomethane	129	7.975	7.975	0.000	89	42526	10.0	9.04	
96 Ethylene Dibromide	107	8.096	8.096	0.000	96	50620	10.0	10.3	
98 1-Chlorohexane	91	8.511	8.511	0.000	93	53925	8.00	6.83	
99 Chlorobenzene	112	8.547	8.547	0.000	93	143427	10.0	9.73	
100 1,1,1,2-Tetrachloroethane	131	8.625	8.626	-0.001	91	45284	10.0	9.27	
101 Ethylbenzene	106	8.633	8.633	0.000	99	75401	10.0	9.41	
102 m-Xylene & p-Xylene	106	8.754	8.754	0.000	0	97827	10.0	9.71	
103 o-Xylene	106	9.126	9.126	0.000	97	98332	10.0	9.78	
104 Styrene	104	9.140	9.140	0.000	94	171965	10.0	9.87	
106 Bromoform	173	9.326	9.326	0.000	91	24623	10.0	8.24	
107 Isopropylbenzene	105	9.476	9.476	0.000	97	237507	10.0	9.21	
109 Cyclohexanone	55	9.569	9.569	0.000	95	85795	350.0	326.1	
110 1,1,2,2-Tetrachloroethane	83	9.769	9.770	-0.001	97	64764	10.0	9.41	
111 Bromobenzene	156	9.798	9.798	0.000	97	60151	10.0	9.80	
112 trans-1,4-Dichloro-2-butene	53	9.805	9.805	0.000	75	23242	10.0	9.29	
113 1,2,3-Trichloropropane	110	9.834	9.834	0.000	89	19097	10.0	9.72	
114 N-Propylbenzene	120	9.884	9.884	0.000	99	64158	10.0	9.35	
115 2-Chlorotoluene	126	9.977	9.977	0.000	94	58150	10.0	9.60	
116 1,3,5-Trimethylbenzene	105	10.055	10.056	-0.001	93	217525	10.0	9.52	

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	10.098	10.098	0.000	99	62547	10.0	9.82	
118 tert-Butylbenzene	119	10.370	10.370	0.000	93	169876	10.0	9.45	
119 1,2,4-Trimethylbenzene	105	10.434	10.427	0.007	98	230991	10.0	9.58	
120 sec-Butylbenzene	134	10.592	10.592	0.000	96	46498	10.0	9.51	
121 1,3-Dichlorobenzene	146	10.720	10.721	-0.001	95	117333	10.0	9.73	
122 4-Isopropyltoluene	119	10.742	10.742	0.000	97	210197	10.0	9.39	
123 1,4-Dichlorobenzene	146	10.820	10.821	-0.001	91	120912	10.0	9.46	
125 n-Butylbenzene	91	11.149	11.150	-0.001	98	200855	10.0	9.42	
127 1,2-Dichlorobenzene	146	11.178	11.178	0.000	93	114677	10.0	9.70	
128 1,2-Dibromo-3-Chloropropane	157	11.972	11.972	0.000	73	13528	10.0	10.3	
130 1,2,4-Trichlorobenzene	180	12.794	12.794	0.000	92	72520	10.0	9.87	
131 Hexachlorobutadiene	225	12.937	12.937	0.000	92	23737	10.0	9.92	
132 Naphthalene	128	13.066	13.066	0.000	98	218630	10.0	9.96	
134 1,2,3-Trichlorobenzene	180	13.287	13.287	0.000	93	64270	10.0	9.88	
S 149 1,2-Dichloroethene, Total (URS)	96				0		20.0	19.6	
S 156 1,3-Dichloropropene, Total	1				0		20.0	19.3	
S 155 Xylenes, Total	106				0		20.0	19.5	
S 153 Xylenes, Total (URS)	1				0		20.0	19.5	
S 152 Total BTEX	1				0			48.4	
S 151 Trihalomethanes, Total	1				0		40.0	36.7	
S 150 1,2-Dichloroethene, Total	1				0		20.0	19.6	

QC Flag Legend

Processing Flags

Reagents:

MV-MegaMainA_00065	Amount Added:	5.00	Units: uL		
Acrolein_B_00020	Amount Added:	5.00	Units: uL		
MV-Gas A_00114	Amount Added:	2.00	Units: uL		
mv-IS_SS_00033	Amount Added:	5.00	Units: uL	Run Reagent	

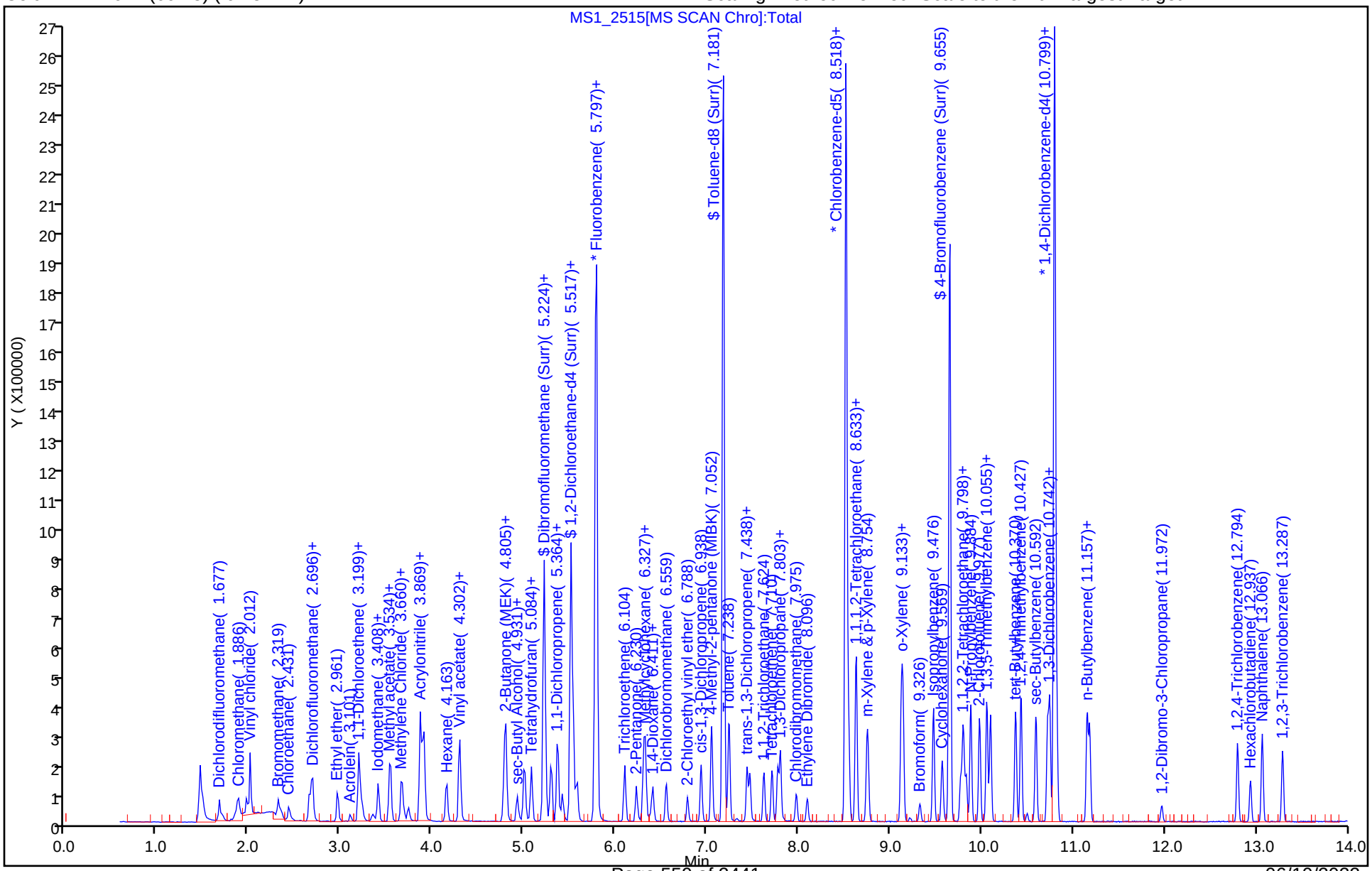
Report Date: 17-Feb-2022 13:45:05 Chrom Revision: 2.3 18-Jan-2022 20:25:40

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\MS1_2515.D

Injection Date:	16-Feb-2022 16:22:30	Instrument ID:	VMS_MS1	Operator ID:	SUNLEEC
Lims ID:	ic			Worklist Smp#:	18
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 Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\MS1_2516.D
Lims ID: icis
Client ID:
Sample Type: ICIS Calib Level: 6
Inject. Date: 16-Feb-2022 16:43:30 ALS Bottle#: 6 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICIS
Misc. Info.: 50
Operator ID: SUNLEEC Instrument ID: VMS_MS1
Sublist: chrom-AQ_VMS1_8260*sub164

Method: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 17-Feb-2022 13:45:06 Calib Date: 16-Feb-2022 20:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\MS1_2528.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1654

First Level Reviewer: seifertj Date: 17-Feb-2022 08:29:09

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.797	5.797	0.000	98	1674350	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.518	8.518	0.000	91	375417	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.799	10.799	0.000	97	653680	50.0	50.0	
$ 5 Dibromofluoromethane (Surr)	111	5.224	5.224	0.000	92	447673	50.0	48.6	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.517	5.517	0.000	0	587231	50.0	49.3	
$ 7 Toluene-d8 (Surr)	98	7.181	7.181	0.000	95	1557617	50.0	50.5	
$ 8 4-Bromofluorobenzene (Surr)	95	9.648	9.648	0.000	82	663575	50.0	49.7	
11 Dichlorodifluoromethane	85	1.677	1.677	0.000	100	433638	50.0	57.5	
12 Chloromethane	50	1.886	1.886	0.000	100	368504	50.0	50.4	
13 Vinyl chloride	62	1.970	1.970	0.000	100	309465	50.0	54.1	
15 Bromomethane	94	2.319	2.319	0.000	93	230816	50.0	53.3	
16 Chloroethane	64	2.431	2.431	0.000	99	238447	50.0	53.4	
17 Dichlorofluoromethane	67	2.654	2.654	0.000	100	637760	50.0	48.9	
18 Trichlorofluoromethane	101	2.696	2.696	0.000	99	526922	50.0	54.1	
20 Ethyl ether	59	2.962	2.962	0.000	94	279222	50.0	53.1	
22 Acrolein	56	3.101	3.101	0.000	99	108139	493.8	498.9	
23 1,1-Dichloroethene	96	3.199	3.199	0.000	96	279293	50.0	54.3	
24 112TCTFE	151	3.213	3.213	0.000	95	210881	50.0	53.2	
25 Acetone	43	3.227	3.227	0.000	98	428674	200.0	199.6	
26 Iodomethane	142	3.353	3.353	0.000	100	330284	50.0	47.4	
28 Carbon disulfide	76	3.409	3.409	0.000	100	959904	50.0	52.8	
30 Methyl acetate	43	3.520	3.520	0.000	98	472014	100.0	100.9	
31 3-Chloro-1-propene	41	3.548	3.548	0.000	88	558907	50.0	53.3	
32 Methylene Chloride	84	3.660	3.660	0.000	98	352592	50.0	50.7	
33 2-Methyl-2-propanol	59	3.744	3.744	0.000	99	335977	500.0	545.8	
34 Acrylonitrile	53	3.869	3.869	0.000	97	1311336	500.0	501.1	
35 Methyl tert-butyl ether	73	3.897	3.897	0.000	97	936208	50.0	54.6	
36 trans-1,2-Dichloroethene	96	3.911	3.911	0.000	95	314564	50.0	52.8	
37 Hexane	57	4.163	4.163	0.000	95	441963	50.0	51.5	
39 Vinyl acetate	43	4.288	4.288	0.000	98	1290959	100.0	108.1	

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	4.302	4.302	0.000	97	641666	50.0	52.5	
46 2-Butanone (MEK)	43	4.777	4.777	0.000	100	598579	200.0	221.5	
48 cis-1,2-Dichloroethene	96	4.791	4.791	0.000	90	351915	50.0	50.6	
49 2,2-Dichloropropane	77	4.805	4.805	0.000	91	539305	50.0	53.0	
51 sec-Butyl Alcohol	45	4.917	4.917	0.000	99	621242	1200.0	1312.7	
53 Chlorobromomethane	128	5.001	5.001	0.000	97	161034	50.0	49.2	
54 Tetrahydrofuran	42	5.015	5.015	0.000	87	203651	100.0	100.2	
55 Chloroform	83	5.085	5.085	0.000	97	609485	50.0	49.3	
56 1,1,1-Trichloroethane	97	5.238	5.238	0.000	98	537534	50.0	55.1	
57 Cyclohexane	56	5.294	5.294	0.000	95	608308	50.0	53.5	
58 1,1-Dichloropropene	75	5.364	5.364	0.000	91	483374	50.0	56.4	
59 Carbon tetrachloride	117	5.364	5.364	0.000	84	413613	50.0	57.2	
60 Isobutyl alcohol	41	5.420	5.420	0.000	93	262166	1250.0	1181.1	
63 Benzene	78	5.545	5.545	0.000	98	1306443	50.0	51.5	
64 1,2-Dichloroethane	62	5.587	5.587	0.000	98	530344	50.0	48.1	
66 n-Heptane	43	5.769	5.769	0.000	93	388837	50.0	52.2	
68 Trichloroethene	95	6.104	6.104	0.000	97	346092	50.0	56.9	
69 2-Pentanone	43	6.230	6.230	0.000	98	750776	160.0	171.0	
70 Methylcyclohexane	55	6.314	6.314	0.000	95	456975	50.0	57.2	
71 1,2-Dichloropropane	63	6.328	6.328	0.000	91	361203	50.0	53.0	
73 1,4-Dioxane	88	6.383	6.383	0.000	97	81756	1000.0	1053.1	
74 Dibromomethane	93	6.411	6.411	0.000	92	212338	50.0	48.3	
75 Dichlorobromomethane	83	6.559	6.559	0.000	97	414713	50.0	50.2	
77 2-Chloroethyl vinyl ether	63	6.788	6.788	0.000	93	187955	50.0	52.3	
78 cis-1,3-Dichloropropene	75	6.938	6.938	0.000	91	526597	50.0	54.4	
79 4-Methyl-2-pentanone (MIBK)	43	7.052	7.052	0.000	98	1166196	200.0	206.3	
82 Toluene	91	7.238	7.238	0.000	97	1271221	50.0	49.9	
84 trans-1,3-Dichloropropene	75	7.439	7.439	0.000	99	490579	50.0	52.9	
85 Ethyl methacrylate	69	7.467	7.467	0.000	91	379684	50.0	51.1	
87 1,1,2-Trichloroethane	97	7.625	7.625	0.000	94	255491	50.0	50.9	
89 Tetrachloroethene	164	7.710	7.710	0.000	92	215180	50.0	50.4	
90 1,3-Dichloropropane	76	7.775	7.775	0.000	95	487248	50.0	54.2	
91 2-Hexanone	43	7.803	7.803	0.000	98	814170	200.0	221.1	
95 Chlorodibromomethane	129	7.975	7.975	0.000	90	256433	50.0	53.7	
96 Ethylene Dibromide	107	8.096	8.096	0.000	98	273005	50.0	54.6	
98 1-Chlorohexane	91	8.511	8.511	0.000	91	317278	40.0	41.1	
99 Chlorobenzene	112	8.547	8.547	0.000	90	773293	50.0	51.8	
100 1,1,1,2-Tetrachloroethane	131	8.626	8.626	0.000	91	264503	50.0	53.4	
101 Ethylbenzene	106	8.633	8.633	0.000	99	436538	50.0	53.7	
102 m-Xylene & p-Xylene	106	8.754	8.754	0.000	0	548664	50.0	53.7	
103 o-Xylene	106	9.126	9.126	0.000	98	525637	50.0	51.6	
104 Styrene	104	9.140	9.140	0.000	94	932791	50.0	52.8	
106 Bromoform	173	9.326	9.326	0.000	92	153516	50.0	47.6	
107 Isopropylbenzene	105	9.476	9.476	0.000	97	1394584	50.0	53.2	
109 Cyclohexanone	55	9.569	9.569	0.000	96	467809	1750.0	1753.6	
110 1,1,2,2-Tetrachloroethane	83	9.770	9.770	0.000	97	348150	50.0	49.8	
111 Bromobenzene	156	9.798	9.798	0.000	98	321311	50.0	51.5	
112 trans-1,4-Dichloro-2-butene	53	9.805	9.805	0.000	81	128299	50.0	50.4	
113 1,2,3-Trichloropropane	110	9.834	9.834	0.000	87	104457	50.0	52.3	
114 N-Propylbenzene	120	9.884	9.884	0.000	99	377954	50.0	54.2	
115 2-Chlorotoluene	126	9.977	9.977	0.000	94	326930	50.0	53.1	
116 1,3,5-Trimethylbenzene	105	10.056	10.056	0.000	93	1219247	50.0	52.5	

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	10.098	10.098	0.000	99	337872	50.0	52.2	
118 tert-Butylbenzene	119	10.370	10.370	0.000	93	974267	50.0	53.3	
119 1,2,4-Trimethylbenzene	105	10.427	10.427	0.000	98	1263254	50.0	51.5	
120 sec-Butylbenzene	134	10.592	10.592	0.000	96	276320	50.0	55.6	
121 1,3-Dichlorobenzene	146	10.721	10.721	0.000	96	641834	50.0	52.3	
122 4-Isopropyltoluene	119	10.742	10.742	0.000	97	1233301	50.0	54.2	
123 1,4-Dichlorobenzene	146	10.821	10.821	0.000	90	648204	50.0	49.9	
125 n-Butylbenzene	91	11.150	11.150	0.000	98	1159511	50.0	53.5	
127 1,2-Dichlorobenzene	146	11.178	11.178	0.000	95	624100	50.0	51.9	
128 1,2-Dibromo-3-Chloropropane	157	11.972	11.972	0.000	76	69959	50.0	52.3	
130 1,2,4-Trichlorobenzene	180	12.794	12.794	0.000	93	384621	50.0	51.5	
131 Hexachlorobutadiene	225	12.937	12.937	0.000	95	135788	50.0	55.8	
132 Naphthalene	128	13.066	13.066	0.000	98	1120757	50.0	50.2	
134 1,2,3-Trichlorobenzene	180	13.287	13.287	0.000	93	340500	50.0	51.5	
S 149 1,2-Dichloroethene, Total (URS)	96				0		100.0	103.4	
S 156 1,3-Dichloropropene, Total	1				0		100.0	107.3	
S 155 Xylenes, Total	106				0		100.0	105.3	
S 153 Xylenes, Total (URS)	1				0		100.0	105.3	
S 151 Trihalomethanes, Total	1				0		200.0	200.8	
S 150 1,2-Dichloroethene, Total	1				0		100.0	103.4	

QC Flag Legend

Processing Flags

Reagents:

MV-MegaMainA_00065	Amount Added:	25.00	Units: uL	
Acrolein_B_00020	Amount Added:	25.00	Units: uL	
MV-Gas A_00114	Amount Added:	10.00	Units: uL	
mv-IS_SS_00033	Amount Added:	5.00	Units: uL	Run Reagent

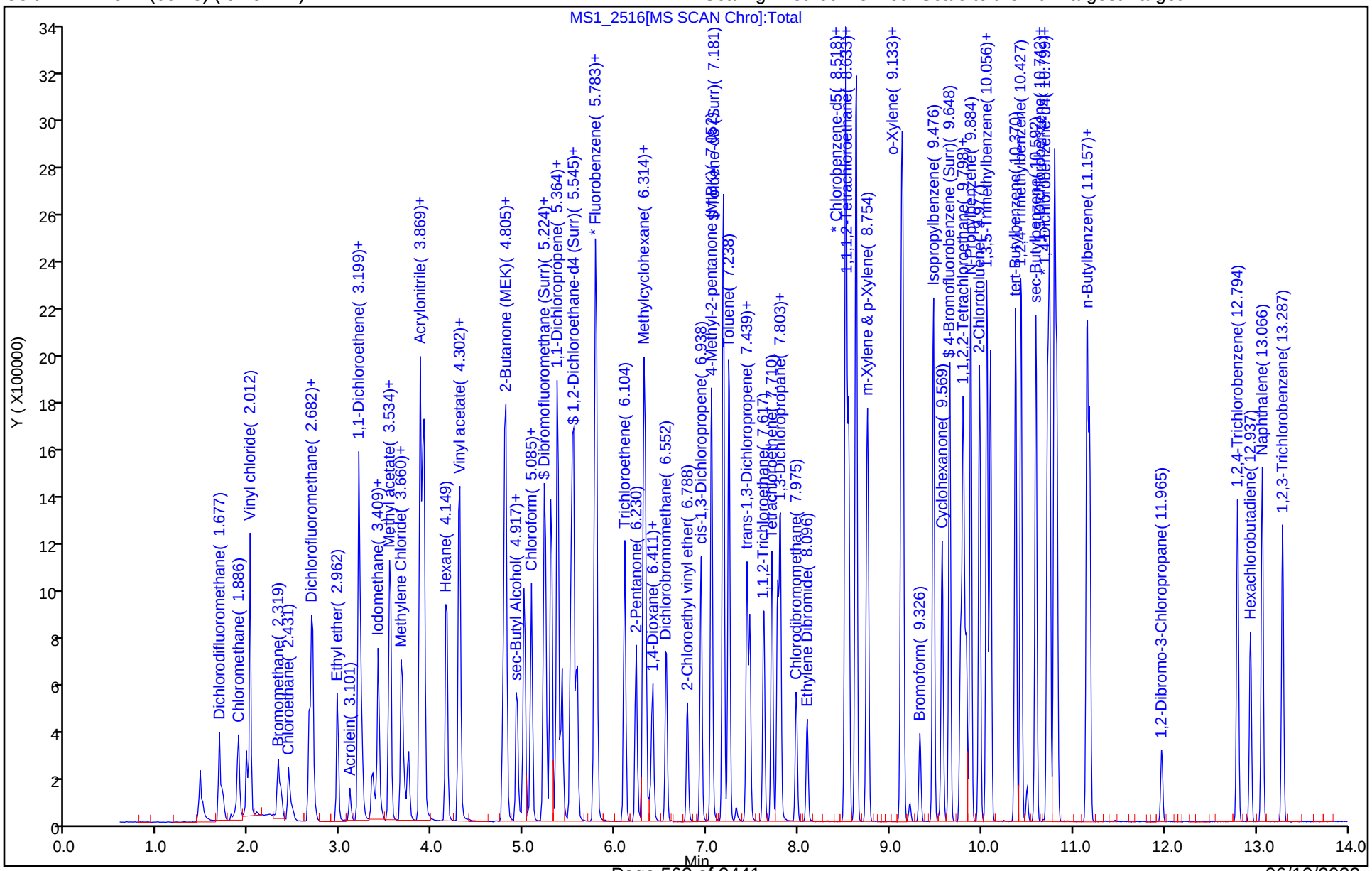
Report Date: 17-Feb-2022 13:45:06 Chrom Revision: 2.3 18-Jan-2022 20:25:40

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\MS1_2516.D

Injection Date:	16-Feb-2022 16:43:30	Instrument ID:	VMS_MS1	Operator ID:	SUNLEEC
Lims ID:	icis			Worklist Smp#:	19
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 Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\MS1_2517.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 16-Feb-2022 17:04:30 ALS Bottle#: 7 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 75
Operator ID: SUNLEEC Instrument ID: VMS_MS1
Sublist: chrom-AQ_VMS1_8260*sub164

Method: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 17-Feb-2022 13:45:07 Calib Date: 16-Feb-2022 20:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\MS1_2528.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1654

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.797	5.797	0.000	98	1703829	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.518	8.518	0.000	91	377052	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.799	10.799	0.000	97	647388	50.0	50.0	
$ 5 Dibromofluoromethane (Surr)	111	5.224	5.224	0.000	92	448755	50.0	47.9	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.517	5.517	0.000	0	585966	50.0	48.3	
$ 7 Toluene-d8 (Surr)	98	7.181	7.181	0.000	95	1579278	50.0	51.0	
$ 8 4-Bromofluorobenzene (Surr)	95	9.655	9.648	0.007	83	656437	50.0	49.7	
11 Dichlorodifluoromethane	85	1.677	1.677	0.000	100	620182	75.0	80.8	
12 Chloromethane	50	1.886	1.886	0.000	99	542635	75.0	72.9	
13 Vinyl chloride	62	1.970	1.970	0.000	100	446385	75.0	76.6	
15 Bromomethane	94	2.319	2.319	0.000	93	328742	75.0	75.0	
16 Chloroethane	64	2.431	2.431	0.000	99	344263	75.0	75.8	
17 Dichlorofluoromethane	67	2.654	2.654	0.000	100	932223	75.0	70.3	
18 Trichlorofluoromethane	101	2.682	2.696	-0.014	99	775127	75.0	78.2	
20 Ethyl ether	59	2.962	2.962	0.000	95	400953	75.0	75.0	
22 Acrolein	56	3.101	3.101	0.000	99	165286	740.6	755.4	
23 1,1-Dichloroethene	96	3.199	3.199	0.000	96	410871	75.0	78.6	
24 112TCTFE	151	3.213	3.213	0.000	95	316746	75.0	78.4	
25 Acetone	43	3.227	3.227	0.000	98	605385	300.0	277.0	
26 Iodomethane	142	3.353	3.353	0.000	100	548658	75.0	76.5	
28 Carbon disulfide	76	3.409	3.409	0.000	100	1417567	75.0	76.6	
30 Methyl acetate	43	3.520	3.520	0.000	98	722650	150.0	151.8	
31 3-Chloro-1-propene	41	3.548	3.548	0.000	87	796379	75.0	74.7	
32 Methylene Chloride	84	3.660	3.660	0.000	96	514517	75.0	72.9	
33 2-Methyl-2-propanol	59	3.744	3.744	0.000	99	510276	750.0	814.7	
34 Acrylonitrile	53	3.869	3.869	0.000	97	1914902	750.0	719.1	
35 Methyl tert-butyl ether	73	3.897	3.897	0.000	97	1404599	75.0	80.5	
36 trans-1,2-Dichloroethene	96	3.911	3.911	0.000	95	464048	75.0	76.6	
37 Hexane	57	4.163	4.163	0.000	95	655357	75.0	76.0	
39 Vinyl acetate	43	4.288	4.288	0.000	98	1992802	150.0	164.0	
40 1,1-Dichloroethane	63	4.302	4.302	0.000	97	938389	75.0	75.5	

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	4.777	4.777	0.000	100	902885	300.0	328.3	
48 cis-1,2-Dichloroethene	96	4.805	4.791	0.014	88	520430	75.0	73.5	
49 2,2-Dichloropropane	77	4.805	4.805	0.000	91	791938	75.0	76.5	
51 sec-Butyl Alcohol	45	4.917	4.917	0.000	99	949353	1800.0	1971.3	
53 Chlorobromomethane	128	5.001	5.001	0.000	96	229940	75.0	69.1	
54 Tetrahydrofuran	42	5.015	5.015	0.000	86	302835	150.0	146.8	
55 Chloroform	83	5.085	5.085	0.001	98	897613	75.0	71.3	
56 1,1,1-Trichloroethane	97	5.238	5.238	0.000	98	797840	75.0	80.4	
57 Cyclohexane	56	5.294	5.294	0.000	95	891578	75.0	77.1	
58 1,1-Dichloropropene	75	5.364	5.364	0.000	90	716136	75.0	82.2	
59 Carbon tetrachloride	117	5.378	5.364	0.014	90	618535	75.0	84.0	
60 Isobutyl alcohol	41	5.420	5.420	0.000	92	414192	1875.0	1832.4	
63 Benzene	78	5.545	5.545	0.000	98	1947164	75.0	75.4	
64 1,2-Dichloroethane	62	5.587	5.587	0.000	98	778221	75.0	69.4	
66 n-Heptane	43	5.769	5.769	0.000	93	574418	75.0	75.8	
68 Trichloroethene	95	6.104	6.104	0.000	97	509582	75.0	83.5	
69 2-Pentanone	43	6.230	6.230	0.000	98	1132070	240.0	253.4	
70 Methylcyclohexane	55	6.314	6.314	0.000	94	670171	75.0	82.4	
71 1,2-Dichloropropane	63	6.328	6.328	0.000	91	525383	75.0	75.8	
73 1,4-Dioxane	88	6.383	6.383	0.000	96	123861	1500.0	1567.9	
74 Dibromomethane	93	6.411	6.411	0.000	93	307863	75.0	68.9	
75 Dichlorobromomethane	83	6.559	6.559	0.000	98	619873	75.0	73.8	
77 2-Chloroethyl vinyl ether	63	6.788	6.788	0.000	94	277472	75.0	75.9	
78 cis-1,3-Dichloropropene	75	6.938	6.938	0.000	91	782498	75.0	80.5	
79 4-Methyl-2-pentanone (MIBK)	43	7.053	7.052	0.000	98	1721414	300.0	299.3	
82 Toluene	91	7.238	7.238	0.000	97	1890342	75.0	72.9	
84 trans-1,3-Dichloropropene	75	7.439	7.439	0.000	99	729464	75.0	77.3	
85 Ethyl methacrylate	69	7.467	7.467	0.000	90	558824	75.0	74.8	
87 1,1,2-Trichloroethane	97	7.625	7.625	0.001	95	372733	75.0	72.9	
89 Tetrachloroethene	164	7.710	7.710	0.000	92	321993	75.0	74.9	
90 1,3-Dichloropropane	76	7.775	7.775	0.000	95	725970	75.0	80.4	
91 2-Hexanone	43	7.803	7.803	0.000	97	1201488	300.0	324.9	
95 Chlorodibromomethane	129	7.975	7.975	0.000	90	381442	75.0	79.6	
96 Ethylene Dibromide	107	8.096	8.096	0.000	98	401320	75.0	79.9	
98 1-Chlorohexane	91	8.511	8.511	0.000	94	469749	60.0	60.8	
99 Chlorobenzene	112	8.547	8.547	0.000	90	1143686	75.0	76.2	
100 1,1,1,2-Tetrachloroethane	131	8.626	8.626	0.000	91	397994	75.0	80.0	
101 Ethylbenzene	106	8.633	8.633	0.000	99	646902	75.0	79.3	
102 m-Xylene & p-Xylene	106	8.754	8.754	0.000	0	800019	75.0	78.0	
103 o-Xylene	106	9.126	9.126	0.000	98	775136	75.0	75.7	
104 Styrene	104	9.140	9.140	0.000	94	1344309	75.0	75.8	
106 Bromoform	173	9.326	9.326	0.000	92	230476	75.0	70.8	
107 Isopropylbenzene	105	9.476	9.476	0.000	97	2052212	75.0	79.1	
109 Cyclohexanone	55	9.569	9.569	0.000	95	691624	2625.0	2581.4	
110 1,1,2,2-Tetrachloroethane	83	9.770	9.770	0.000	97	512755	75.0	74.0	
111 Bromobenzene	156	9.798	9.798	0.000	98	471296	75.0	76.3	
112 trans-1,4-Dichloro-2-butene	53	9.805	9.805	0.000	76	188298	75.0	74.8	
113 1,2,3-Trichloropropane	110	9.834	9.834	0.000	89	153005	75.0	77.3	
114 N-Propylbenzene	120	9.884	9.884	0.000	99	555857	75.0	80.4	
115 2-Chlorotoluene	126	9.977	9.977	0.000	94	480228	75.0	78.8	
116 1,3,5-Trimethylbenzene	105	10.056	10.056	0.000	95	1792010	75.0	77.9	
117 4-Chlorotoluene	126	10.099	10.098	0.000	99	498034	75.0	77.7	

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	10.370	10.370	0.000	93	1449181	75.0	80.0	
119 1,2,4-Trimethylbenzene	105	10.435	10.427	0.008	98	1859299	75.0	76.6	
120 sec-Butylbenzene	134	10.592	10.592	0.000	96	407477	75.0	82.8	
121 1,3-Dichlorobenzene	146	10.721	10.721	0.000	96	938477	75.0	77.3	
122 4-Isopropyltoluene	119	10.742	10.742	0.000	96	1802892	75.0	80.0	
123 1,4-Dichlorobenzene	146	10.821	10.821	0.000	91	948054	75.0	73.7	
125 n-Butylbenzene	91	11.150	11.150	0.000	99	1696011	75.0	79.0	
127 1,2-Dichlorobenzene	146	11.178	11.178	0.000	94	895201	75.0	75.2	
128 1,2-Dibromo-3-Chloropropane	157	11.965	11.972	-0.007	74	102969	75.0	77.8	
130 1,2,4-Trichlorobenzene	180	12.794	12.794	0.000	93	567331	75.0	76.7	
131 Hexachlorobutadiene	225	12.937	12.937	0.000	95	198549	75.0	82.4	
132 Naphthalene	128	13.066	13.066	0.000	98	1679818	75.0	76.0	
134 1,2,3-Trichlorobenzene	180	13.288	13.287	0.001	93	500442	75.0	76.4	
S 149 1,2-Dichloroethene, Total (URS)	96				0		150.0	150.1	
S 156 1,3-Dichloropropene, Total	1				0		150.0	157.8	
S 155 Xylenes, Total	106				0		150.0	153.7	
S 153 Xylenes, Total (URS)	1				0		150.0	153.7	
S 152 Total BTEX	1				0			381.4	
S 151 Trihalomethanes, Total	1				0		300.0	295.5	
S 150 1,2-Dichloroethene, Total	1				0		150.0	150.1	

Reagents:

MV-MegaMainA_00065	Amount Added:	37.50	Units: uL	
Acrolein_B_00020	Amount Added:	37.50	Units: uL	
MV-Gas A_00114	Amount Added:	15.00	Units: uL	
mv-IS_SS_00033	Amount Added:	5.00	Units: uL	Run Reagent

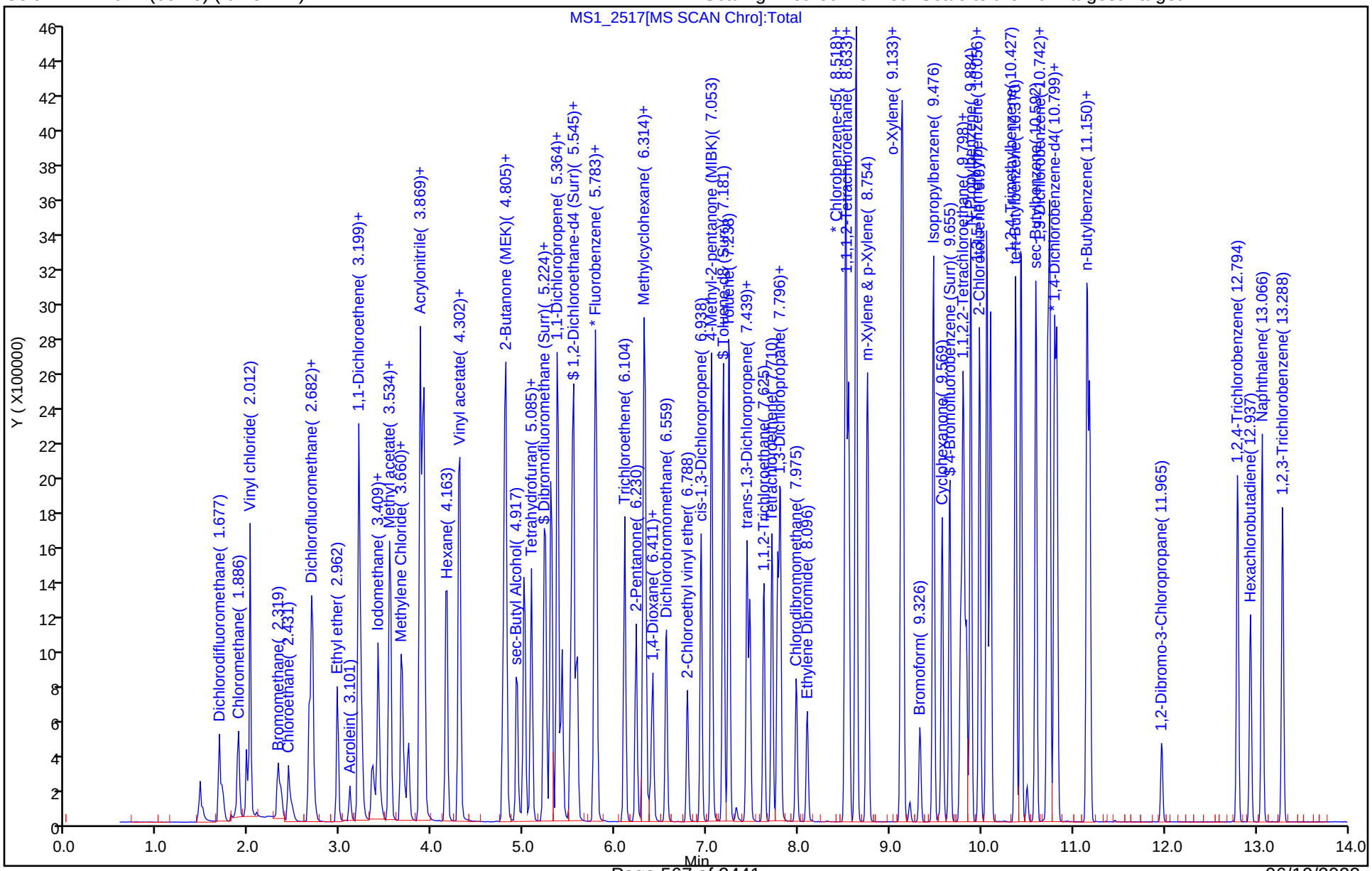
Report Date: 17-Feb-2022 13:45:08 Chrom Revision: 2.3 18-Jan-2022 20:25:40

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\MS1_2517.D

Injection Date:	16-Feb-2022 17:04:30	Instrument ID:	VMS_MS1	Operator ID:	SUNLEEC
Lims ID:	ic			Worklist Smp#:	20
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 Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\MS1_2518.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 16-Feb-2022 17:26:30 ALS Bottle#: 8 Worklist Smp#: 21
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 100
Operator ID: SUNLEEC Instrument ID: VMS_MS1
Sublist: chrom-AQ_VMS1_8260*sub164

Method: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 17-Feb-2022 13:45:09 Calib Date: 16-Feb-2022 20:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\MS1_2528.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1654

First Level Reviewer: seifertj Date: 17-Feb-2022 08:25:45

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.797	5.797	0.000	98	1733995	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.518	8.518	0.000	91	382968	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.799	10.799	0.000	97	636165	50.0	50.0	
$ 5 Dibromofluoromethane (Surr)	111	5.224	5.224	0.000	92	455379	50.0	47.7	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.517	5.517	0.000	0	605105	50.0	49.0	
$ 7 Toluene-d8 (Surr)	98	7.181	7.181	0.000	95	1602294	50.0	50.9	
$ 8 4-Bromofluorobenzene (Surr)	95	9.655	9.648	0.007	82	656353	50.0	50.6	
11 Dichlorodifluoromethane	85	1.677	1.677	0.000	100	831065	100.0	106.4	M
12 Chloromethane	50	1.886	1.886	0.000	99	732096	100.0	96.7	
13 Vinyl chloride	62	1.970	1.970	0.000	100	579670	100.0	97.8	
15 Bromomethane	94	2.319	2.319	0.000	93	416985	100.0	93.8	
16 Chloroethane	64	2.431	2.431	0.000	99	454996	100.0	98.4	
17 Dichlorofluoromethane	67	2.654	2.654	0.000	99	1246087	100.0	92.3	
18 Trichlorofluoromethane	101	2.682	2.696	-0.014	99	1014641	100.0	100.6	
20 Ethyl ether	59	2.962	2.962	0.000	94	565771	100.0	104.0	
22 Acrolein	56	3.101	3.101	0.000	99	219676	987.5	990.1	
23 1,1-Dichloroethene	96	3.199	3.199	0.000	96	574429	100.0	107.9	
24 112TCTFE	151	3.213	3.213	0.000	97	445298	100.0	108.2	
25 Acetone	43	3.227	3.227	0.000	99	850160	400.0	382.2	
26 Iodomethane	142	3.353	3.353	0.000	100	756959	100.0	103.3	
28 Carbon disulfide	76	3.409	3.409	0.000	100	1974982	100.0	104.8	
30 Methyl acetate	43	3.520	3.520	0.000	98	1028790	200.0	212.3	
31 3-Chloro-1-propene	41	3.548	3.548	0.000	88	1098802	100.0	101.3	
32 Methylene Chloride	84	3.674	3.660	0.014	96	713446	100.0	99.5	
33 2-Methyl-2-propanol	59	3.744	3.744	0.000	99	752046	1000.0	1179.8	
34 Acrylonitrile	53	3.869	3.869	0.000	97	2689145	1000.0	992.2	
35 Methyl tert-butyl ether	73	3.897	3.897	0.000	97	1980801	100.0	111.5	
36 trans-1,2-Dichloroethene	96	3.911	3.911	0.000	96	648102	100.0	105.1	
37 Hexane	57	4.163	4.163	0.000	94	940222	100.0	107.3	
39 Vinyl acetate	43	4.288	4.288	0.000	98	2822615	200.0	228.3	

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	4.302	4.302	0.000	97	1304775	100.0	103.2	
46 2-Butanone (MEK)	43	4.777	4.777	0.000	100	1303062	400.0	465.5	
48 cis-1,2-Dichloroethene	96	4.805	4.791	0.014	89	709360	100.0	98.4	
49 2,2-Dichloropropane	77	4.805	4.805	0.000	91	1086247	100.0	103.1	
51 sec-Butyl Alcohol	45	4.917	4.917	0.000	99	1381447	2400.0	2818.7	
53 Chlorobromomethane	128	5.001	5.001	0.000	97	323962	100.0	95.6	
54 Tetrahydrofuran	42	5.015	5.015	0.000	87	424544	200.0	202.6	
55 Chloroform	83	5.085	5.085	0.000	97	1249398	100.0	97.6	
56 1,1,1-Trichloroethane	97	5.238	5.238	0.000	98	1118362	100.0	110.8	
57 Cyclohexane	56	5.294	5.294	0.000	96	1269847	100.0	107.9	
58 1,1-Dichloropropene	75	5.364	5.364	0.000	90	1013263	100.0	114.2	
59 Carbon tetrachloride	117	5.378	5.364	0.014	90	877643	100.0	117.1	
60 Isobutyl alcohol	41	5.420	5.420	0.000	93	601883	2500.0	2615.4	
63 Benzene	78	5.545	5.545	0.000	98	2724627	100.0	103.7	
64 1,2-Dichloroethane	62	5.587	5.587	0.000	98	1081782	100.0	94.7	
66 n-Heptane	43	5.769	5.769	0.000	93	812095	100.0	105.3	
68 Trichloroethene	95	6.104	6.104	0.000	97	709303	100.0	114.4	
69 2-Pentanone	43	6.230	6.230	0.000	98	1632861	320.0	359.2	
70 Methylcyclohexane	55	6.314	6.314	0.000	94	945587	100.0	114.3	
71 1,2-Dichloropropane	63	6.327	6.328	-0.001	91	740129	100.0	104.9	
73 1,4-Dioxane	88	6.383	6.383	0.000	97	175039	2000.0	2177.1	
74 Dibromomethane	93	6.411	6.411	0.000	93	434430	100.0	95.5	
75 Dichlorobromomethane	83	6.552	6.559	-0.007	98	870417	100.0	101.8	
77 2-Chloroethyl vinyl ether	63	6.788	6.788	0.000	94	395070	100.0	106.2	
78 cis-1,3-Dichloropropene	75	6.938	6.938	0.000	91	1101641	100.0	111.6	
79 4-Methyl-2-pentanone (MIBK)	43	7.052	7.052	0.000	98	2444716	400.0	417.6	
82 Toluene	91	7.238	7.238	0.000	97	2614007	100.0	99.1	
84 trans-1,3-Dichloropropene	75	7.439	7.439	0.000	99	1038501	100.0	108.2	
85 Ethyl methacrylate	69	7.467	7.467	0.000	90	785462	100.0	103.6	
87 1,1,2-Trichloroethane	97	7.624	7.625	0.000	95	531168	100.0	102.1	
89 Tetrachloroethene	164	7.710	7.710	0.000	91	454591	100.0	104.0	
90 1,3-Dichloropropane	76	7.775	7.775	0.000	95	1011581	100.0	110.3	
91 2-Hexanone	43	7.803	7.803	0.000	98	1706758	400.0	454.4	
95 Chlorodibromomethane	129	7.975	7.975	0.000	90	551030	100.0	113.2	
96 Ethylene Dibromide	107	8.096	8.096	0.000	98	568755	100.0	111.5	
98 1-Chlorohexane	91	8.511	8.511	0.000	93	659053	80.0	84.1	
99 Chlorobenzene	112	8.547	8.547	0.000	90	1580758	100.0	103.7	
100 1,1,1,2-Tetrachloroethane	131	8.626	8.626	0.000	92	566246	100.0	112.1	
101 Ethylbenzene	106	8.633	8.633	0.000	99	894979	100.0	108.0	
102 m-Xylene & p-Xylene	106	8.754	8.754	0.000	0	1119089	100.0	107.4	
103 o-Xylene	106	9.126	9.126	0.000	98	1070308	100.0	103.0	
104 Styrene	104	9.140	9.140	0.000	94	1857918	100.0	103.1	
106 Bromoform	173	9.326	9.326	0.000	92	326773	100.0	98.6	
107 Isopropylbenzene	105	9.476	9.476	0.000	97	2837313	100.0	111.2	
109 Cyclohexanone	55	9.569	9.569	0.000	95	984090	3500.0	3616.2	
110 1,1,2,2-Tetrachloroethane	83	9.770	9.770	0.000	97	718090	100.0	105.5	
111 Bromobenzene	156	9.798	9.798	0.000	98	655802	100.0	108.0	
112 trans-1,4-Dichloro-2-butene	53	9.805	9.805	0.000	81	264614	100.0	106.9	
113 1,2,3-Trichloropropane	110	9.834	9.834	0.000	89	214241	100.0	110.2	
114 N-Propylbenzene	120	9.884	9.884	0.000	99	769235	100.0	113.3	
115 2-Chlorotoluene	126	9.977	9.977	0.000	94	655107	100.0	109.3	
116 1,3,5-Trimethylbenzene	105	10.056	10.056	0.000	93	2444193	100.0	108.1	

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	10.098	10.098	0.000	99	689166	100.0	109.4	
118 tert-Butylbenzene	119	10.370	10.370	0.000	93	1969240	100.0	110.7	
119 1,2,4-Trimethylbenzene	105	10.435	10.427	0.008	99	2523371	100.0	105.8	
120 sec-Butylbenzene	134	10.592	10.592	0.000	96	561375	100.0	116.1	
121 1,3-Dichlorobenzene	146	10.721	10.721	0.000	96	1286495	100.0	107.8	
122 4-Isopropyltoluene	119	10.742	10.742	0.000	96	2472557	100.0	111.6	
123 1,4-Dichlorobenzene	146	10.821	10.821	0.000	90	1296425	100.0	102.5	
125 n-Butylbenzene	91	11.150	11.150	0.000	98	2322672	100.0	110.1	
127 1,2-Dichlorobenzene	146	11.178	11.178	0.000	94	1235823	100.0	105.6	
128 1,2-Dibromo-3-Chloropropane	157	11.972	11.972	0.000	74	144306	100.0	110.9	
130 1,2,4-Trichlorobenzene	180	12.794	12.794	0.000	93	783604	100.0	107.8	
131 Hexachlorobutadiene	225	12.937	12.937	0.000	95	283791	100.0	119.9	
132 Naphthalene	128	13.066	13.066	0.000	98	2322437	100.0	106.9	
134 1,2,3-Trichlorobenzene	180	13.287	13.287	0.000	94	697709	100.0	108.4	
S 149 1,2-Dichloroethene, Total (URS)	96				0		200.0	203.5	
S 156 1,3-Dichloropropene, Total	1				0		200.0	219.8	
S 155 Xylenes, Total	106				0		200.0	210.4	
S 153 Xylenes, Total (URS)	1				0		200.0	210.4	
S 152 Total BTEX	1				0			521.2	
S 151 Trihalomethanes, Total	1				0		400.0	411.2	
S 150 1,2-Dichloroethene, Total	1				0		200.0	203.5	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MV-MegaMainA_00065	Amount Added:	50.00	Units: uL	
Acrolein_B_00020	Amount Added:	50.00	Units: uL	
MV-Gas A_00114	Amount Added:	20.00	Units: uL	
mv-IS_SS_00033	Amount Added:	5.00	Units: uL	Run Reagent

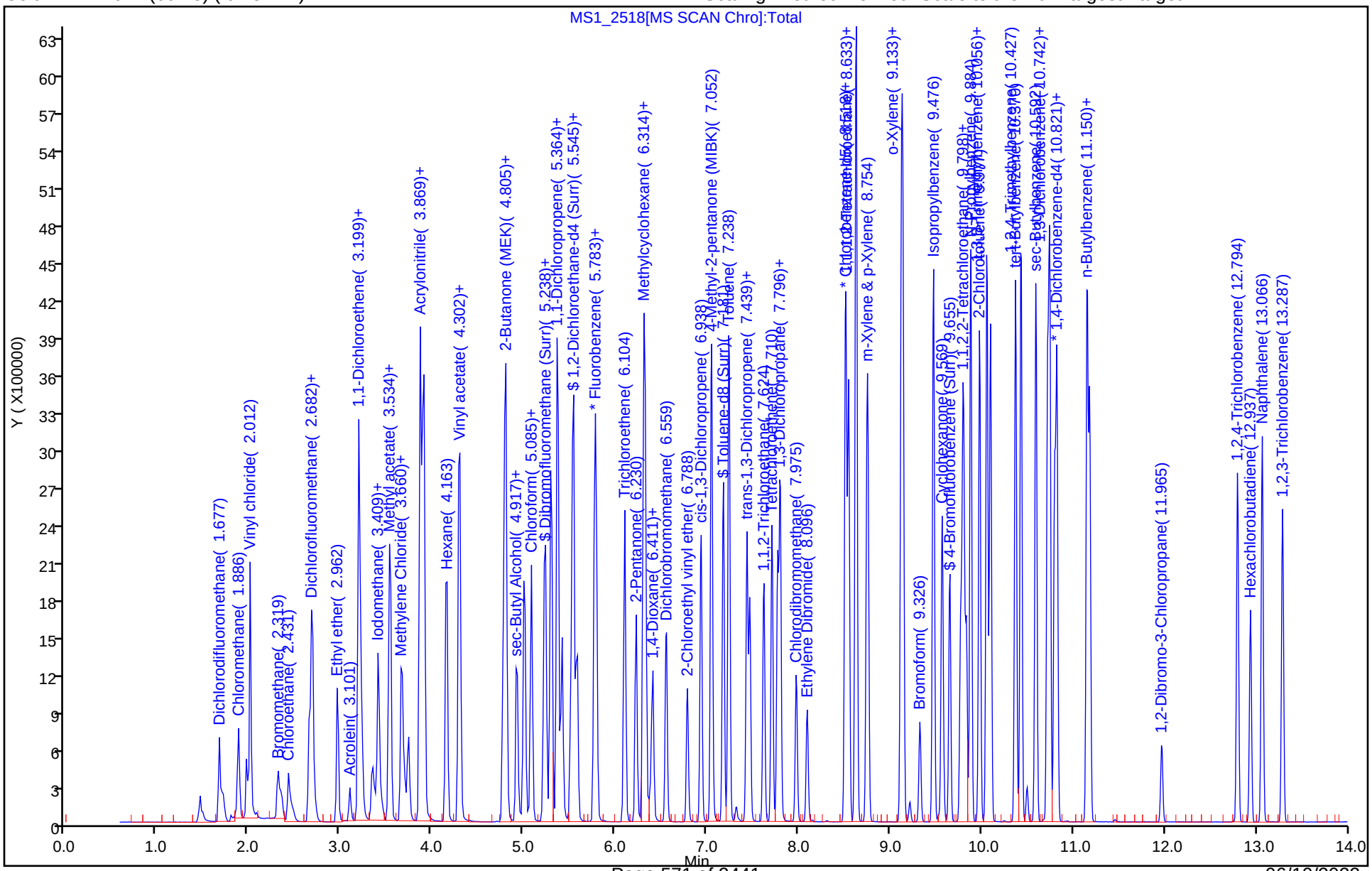
Report Date: 17-Feb-2022 13:45:10 Chrom Revision: 2.3 18-Jan-2022 20:25:40

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\MS1_2518.D

Injection Date:	16-Feb-2022 17:26:30	Instrument ID:	VMS_MS1	Operator ID:	SUNLEEC
Lims ID:	ic			Worklist Smp#:	21
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



Manual Integration/User Assign Peak Report

Eurofins Denver

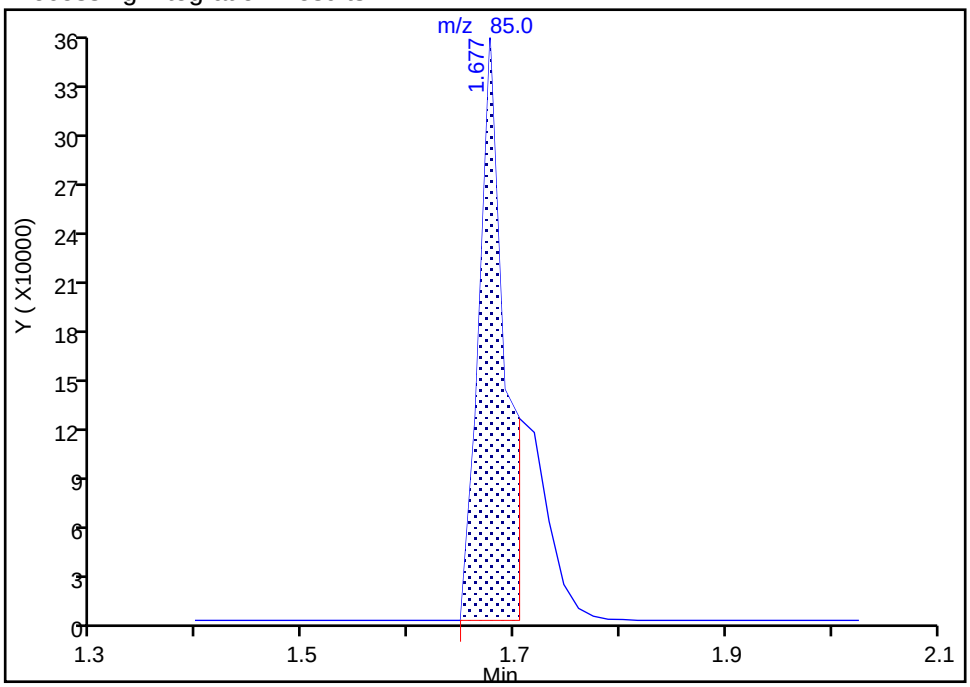
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\MS1_2518.D
Injection Date: 16-Feb-2022 17:26:30 Instrument ID: VMS_MS1
Lims ID: ic
Client ID:
Operator ID: SUNLEEC ALS Bottle#: 8 Worklist Smp#: 21
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

11 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

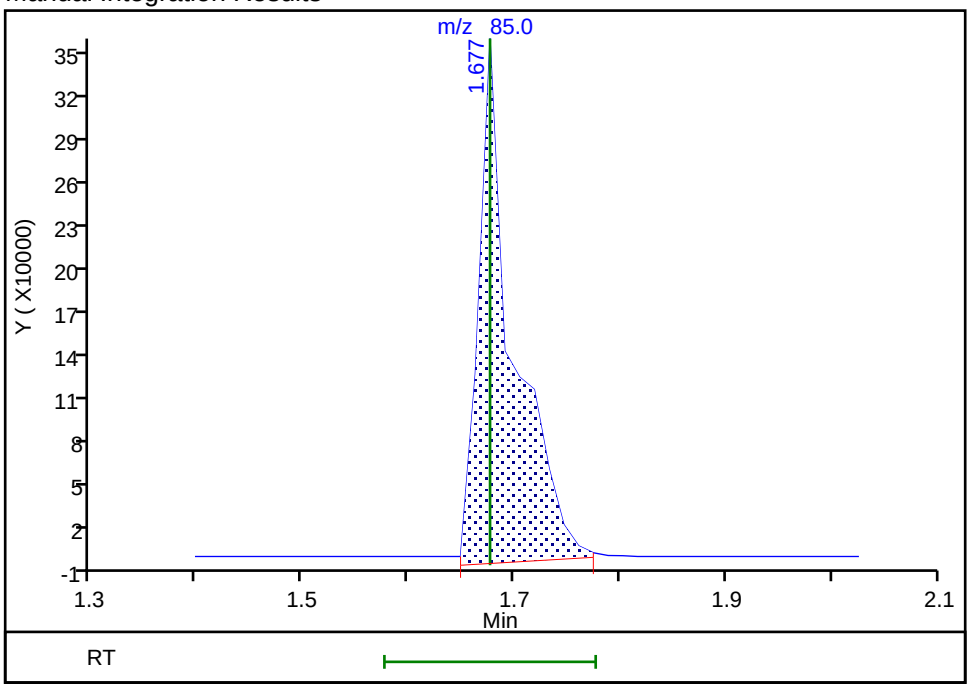
Processing Integration Results

RT: 1.68
Area: 628527
Amount: 90.306828
Amount Units: ug/l



Manual Integration Results

RT: 1.68
Area: 831065
Amount: 106.4414
Amount Units: ug/l



Reviewer: seifertj, 17-Feb-2022 08:24:31
Audit Action: Manually Integrated Audit Reason: Split Peak

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\MS1_2519.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 16-Feb-2022 17:47:30 ALS Bottle#: 9 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 200
Operator ID: SUNLEEC Instrument ID: VMS_MS1
Sublist: chrom-AQ_VMS1_8260*sub164

Method: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 17-Feb-2022 13:45:11 Calib Date: 16-Feb-2022 20:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\MS1_2528.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1654

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.797	5.797	0.000	98	1862280	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.518	8.518	0.000	91	403814	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.799	10.799	0.000	97	682529	50.0	50.0	
$ 5 Dibromofluoromethane (Surr)	111	5.224	5.224	0.000	92	487513	50.0	47.6	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.517	5.517	0.000	0	662575	50.0	50.0	
$ 7 Toluene-d8 (Surr)	98	7.181	7.181	0.000	95	1720054	50.0	51.9	
$ 8 4-Bromofluorobenzene (Surr)	95	9.648	9.648	0.000	82	700602	50.0	50.3	
11 Dichlorodifluoromethane	85	1.677	1.677	-0.001	100	1641626	200.0	195.8	
12 Chloromethane	50	1.886	1.886	0.000	99	1498825	200.0	184.3	
13 Vinyl chloride	62	1.970	1.970	0.000	100	1192802	200.0	187.4	
15 Bromomethane	94	2.305	2.319	-0.014	95	734661	200.0	154.5	
16 Chloroethane	64	2.431	2.431	0.000	99	917977	200.0	184.9	
17 Dichlorofluoromethane	67	2.654	2.654	0.000	100	2547289	200.0	175.7	
18 Trichlorofluoromethane	101	2.682	2.696	-0.014	98	2150176	200.0	198.6	
20 Ethyl ether	59	2.961	2.962	-0.001	94	1160221	200.0	198.6	
22 Acrolein	56	3.101	3.101	0.000	99	443117	1975.0	1870.0	
23 1,1-Dichloroethene	96	3.199	3.199	0.000	96	1104648	200.0	193.2	
24 112TCTFE	151	3.213	3.213	0.000	97	832830	200.0	188.3	
25 Acetone	43	3.227	3.227	0.000	98	1818313	800.0	761.1	
26 Iodomethane	142	3.352	3.353	-0.001	100	1599210	200.0	202.1	
28 Carbon disulfide	76	3.408	3.409	-0.001	100	3852742	200.0	190.4	
30 Methyl acetate	43	3.520	3.520	0.000	98	2185271	400.0	419.9	
31 3-Chloro-1-propene	41	3.534	3.548	-0.014	87	2071071	200.0	178.0	
32 Methylene Chloride	84	3.660	3.660	0.000	98	1458324	200.0	189.9	
33 2-Methyl-2-propanol	59	3.744	3.744	0.000	98	1552017	2000.0	2267.0	
34 Acrylonitrile	53	3.869	3.869	0.000	97	5365034	2000.0	1843.2	
35 Methyl tert-butyl ether	73	3.897	3.897	0.000	97	4157502	200.0	217.9	
36 trans-1,2-Dichloroethene	96	3.911	3.911	0.000	95	1274854	200.0	192.5	
37 Hexane	57	4.149	4.163	-0.014	95	1801064	200.0	194.8	
39 Vinyl acetate	43	4.288	4.288	0.000	98	5851188	400.0	440.6	
40 1,1-Dichloroethane	63	4.302	4.302	0.000	97	2618147	200.0	192.7	

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	4.777	4.777	0.000	100	2668414	800.0	887.6	
48 cis-1,2-Dichloroethene	96	4.791	4.791	0.000	89	1473323	200.0	190.3	
49 2,2-Dichloropropane	77	4.805	4.805	0.000	90	2147883	200.0	189.8	
51 sec-Butyl Alcohol	45	4.931	4.917	0.014	99	2885234	4800.0	5481.5	
53 Chlorobromomethane	128	5.000	5.001	-0.001	97	683181	200.0	187.8	
54 Tetrahydrofuran	42	5.014	5.015	-0.001	87	889462	400.0	396.1	
55 Chloroform	83	5.084	5.085	0.000	97	2563397	200.0	186.4	
56 1,1,1-Trichloroethane	97	5.238	5.238	0.000	98	2217270	200.0	204.5	
57 Cyclohexane	56	5.294	5.294	0.000	95	2395249	200.0	189.6	
58 1,1-Dichloropropene	75	5.364	5.364	0.000	90	1982456	200.0	208.1	
59 Carbon tetrachloride	117	5.378	5.364	0.014	89	1736649	200.0	215.8	
60 Isobutyl alcohol	41	5.419	5.420	-0.001	93	1253728	5000.0	5070.3	
63 Benzene	78	5.545	5.545	0.000	98	5555860	200.0	196.9	
64 1,2-Dichloroethane	62	5.587	5.587	0.000	98	2268899	200.0	185.0	
66 n-Heptane	43	5.769	5.769	0.000	93	1601145	200.0	193.4	
68 Trichloroethene	95	6.104	6.104	0.000	96	1442691	200.0	220.7	
69 2-Pentanone	43	6.230	6.230	0.000	98	3343691	640.0	684.8	
70 Methylcyclohexane	55	6.313	6.314	-0.001	94	1842012	200.0	207.3	
71 1,2-Dichloropropane	63	6.327	6.328	-0.001	91	1542611	200.0	203.6	
73 1,4-Dioxane	88	6.383	6.383	0.000	97	357700	4000.0	4142.6	
74 Dibromomethane	93	6.411	6.411	0.000	93	915999	200.0	187.5	
75 Dichlorobromomethane	83	6.559	6.559	0.000	98	1886291	200.0	205.3	
77 2-Chloroethyl vinyl ether	63	6.788	6.788	0.000	94	795679	200.0	199.2	
78 cis-1,3-Dichloropropene	75	6.938	6.938	0.000	91	2348612	200.0	225.6	
79 4-Methyl-2-pentanone (MIBK)	43	7.052	7.052	0.000	98	4932605	800.0	784.5	
82 Toluene	91	7.238	7.238	0.000	97	5333119	200.0	188.3	
84 trans-1,3-Dichloropropene	75	7.438	7.439	-0.001	99	2204465	200.0	213.8	
85 Ethyl methacrylate	69	7.467	7.467	0.000	90	1588357	200.0	198.6	
87 1,1,2-Trichloroethane	97	7.624	7.625	0.000	95	1126798	200.0	201.7	
89 Tetrachloroethene	164	7.710	7.710	0.000	92	916152	200.0	198.5	
90 1,3-Dichloropropane	76	7.774	7.775	-0.001	95	2131851	200.0	220.4	
91 2-Hexanone	43	7.803	7.803	0.000	98	3370685	800.0	851.0	
95 Chlorodibromomethane	129	7.975	7.975	0.000	90	1213667	200.0	236.5	
96 Ethylene Dibromide	107	8.096	8.096	0.000	98	1202776	200.0	223.7	
98 1-Chlorohexane	91	8.511	8.511	0.000	95	1287929	160.0	156.1	
99 Chlorobenzene	112	8.547	8.547	0.000	90	3279320	200.0	204.1	
100 1,1,1,2-Tetrachloroethane	131	8.625	8.626	-0.001	93	1209969	200.0	227.1	
101 Ethylbenzene	106	8.632	8.633	-0.001	99	1797397	200.0	205.7	
102 m-Xylene & p-Xylene	106	8.754	8.754	0.000	0	2255498	200.0	205.3	
103 o-Xylene	106	9.126	9.126	0.000	98	2199184	200.0	200.6	
104 Styrene	104	9.140	9.140	0.000	94	3843203	200.0	202.2	
106 Bromoform	173	9.326	9.326	0.000	92	736891	200.0	210.2	
107 Isopropylbenzene	105	9.476	9.476	0.000	98	5659223	200.0	206.8	
109 Cyclohexanone	55	9.569	9.569	0.000	95	1964456	7000.0	6846.1	
110 1,1,2,2-Tetrachloroethane	83	9.769	9.770	-0.001	97	1471460	200.0	201.5	
111 Bromobenzene	156	9.798	9.798	0.000	98	1358968	200.0	208.6	
112 trans-1,4-Dichloro-2-butene	53	9.805	9.805	0.000	77	535334	200.0	201.6	
113 1,2,3-Trichloropropane	110	9.834	9.834	0.000	89	449264	200.0	215.4	
114 N-Propylbenzene	120	9.884	9.884	0.000	99	1547925	200.0	212.5	
115 2-Chlorotoluene	126	9.977	9.977	0.000	94	1345221	200.0	209.3	
116 1,3,5-Trimethylbenzene	105	10.055	10.056	-0.001	95	4960397	200.0	204.5	
117 4-Chlorotoluene	126	10.098	10.098	0.000	99	1419689	200.0	210.1	

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	10.370	10.370	0.000	93	3958828	200.0	207.4	
119 1,2,4-Trimethylbenzene	105	10.434	10.427	0.007	99	5119913	200.0	200.1	
120 sec-Butylbenzene	134	10.592	10.592	0.000	96	1135886	200.0	218.9	
121 1,3-Dichlorobenzene	146	10.720	10.721	-0.001	95	2649421	200.0	206.9	
122 4-Isopropyltoluene	119	10.742	10.742	0.000	96	4969944	200.0	209.2	
123 1,4-Dichlorobenzene	146	10.820	10.821	-0.001	90	2712664	200.0	199.9	
125 n-Butylbenzene	91	11.149	11.150	-0.001	98	4705102	200.0	208.0	
127 1,2-Dichlorobenzene	146	11.178	11.178	0.000	94	2560323	200.0	204.0	
128 1,2-Dibromo-3-Chloropropane	157	11.964	11.972	-0.008	74	305444	200.0	218.8	
130 1,2,4-Trichlorobenzene	180	12.794	12.794	0.000	93	1607781	200.0	206.1	
131 Hexachlorobutadiene	225	12.937	12.937	0.000	95	568120	200.0	223.7	
132 Naphthalene	128	13.066	13.066	0.000	98	4581623	200.0	196.6	
134 1,2,3-Trichlorobenzene	180	13.287	13.287	0.000	94	1415504	200.0	205.1	
S 149 1,2-Dichloroethene, Total (URS)	96				0		400.0	382.9	
S 156 1,3-Dichloropropene, Total	1				0		400.0	439.4	
S 155 Xylenes, Total	106				0		400.0	406.0	
S 153 Xylenes, Total (URS)	1				0		400.0	406.0	
S 152 Total BTEX	1				0			996.8	
S 151 Trihalomethanes, Total	1				0		800.0	838.4	
S 150 1,2-Dichloroethene, Total	1				0		400.0	382.9	

Reagents:

MV-MegaMainA_00065	Amount Added: 100.00	Units: uL	
Acrolein_B_00020	Amount Added: 100.00	Units: uL	
MV-Gas A_00114	Amount Added: 40.00	Units: uL	
mv-IS_SS_00033	Amount Added: 5.00	Units: uL	Run Reagent

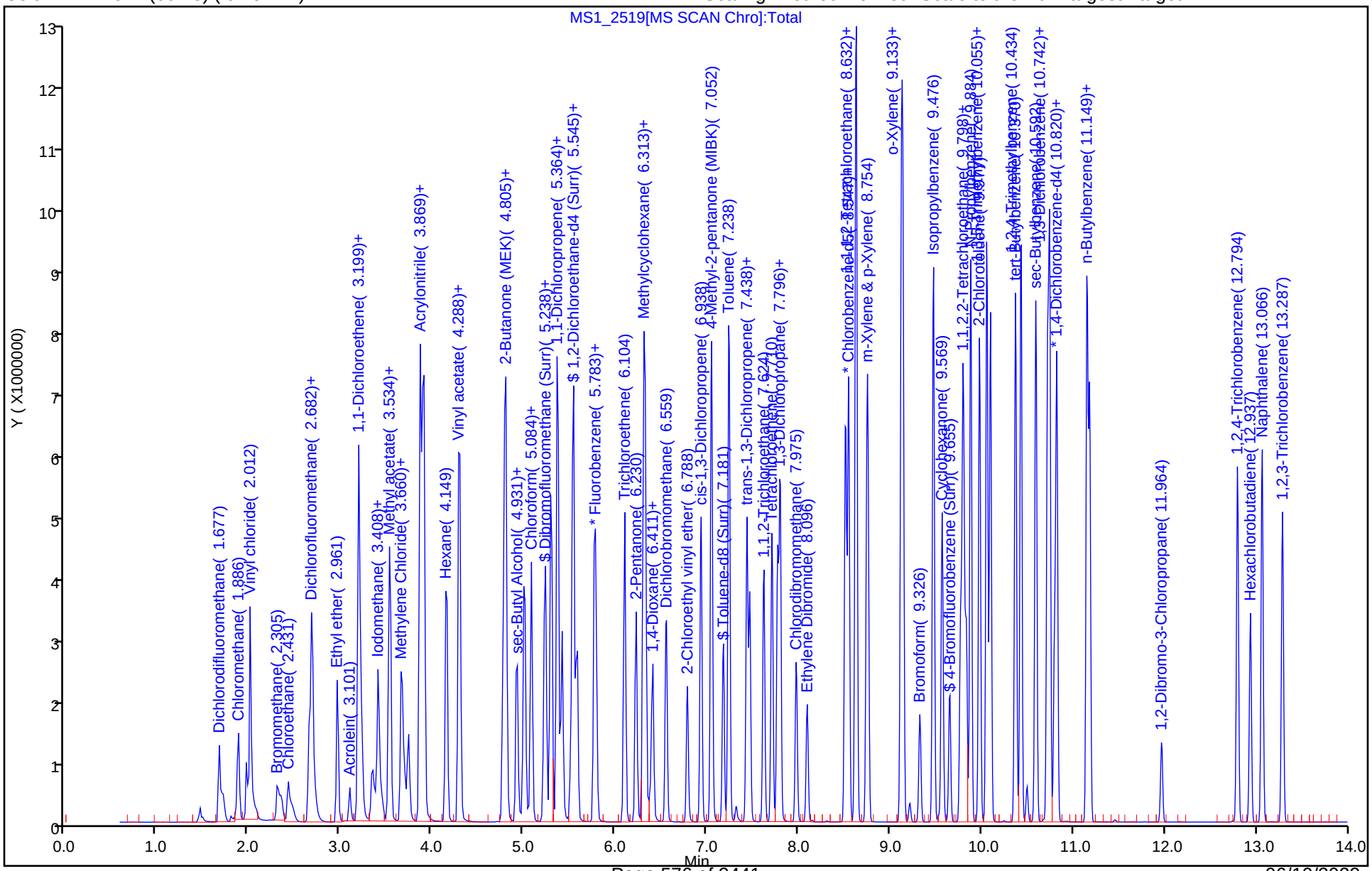
Report Date: 17-Feb-2022 13:45:11 Chrom Revision: 2.3 18-Jan-2022 20:25:40

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\MS1_2519.D

Injection Date:	16-Feb-2022 17:47:30	Instrument ID:	VMS_MS1	Operator ID:	SUNLEEC
Lims ID:	ic			Worklist Smp#:	22
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
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 VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-162622-1 Analy Batch No.: 574012

SDG No.:

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/05/2022 14:42 Calibration End Date: 05/05/2022 17:32 Calibration ID: 65315

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-574012/35	MS1_5803.D
Level 2	IC 280-574012/36	MS1_5804.D
Level 3	IC 280-574012/37	MS1_5805.D
Level 4	IC 280-574012/38	MS1_5806.D
Level 5	IC 280-574012/39	MS1_5807.D
Level 6	ICIS 280-574012/40	MS1_5808.D
Level 7	IC 280-574012/41	MS1_5809.D
Level 8	IC 280-574012/42	MS1_5810.D
Level 9	IC 280-574012/43	MS1_5811.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 9	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2313 0.2093	0.2020 0.1877	0.1769 0.1845	0.2604 0.1878	0.2017	Ave		0.2046				12.9		15.0			
Chloromethane	0.2281 0.1930	0.1820 0.1780	0.1699 0.1830	0.2497 0.1804	0.1831	Ave		0.1941			0.1000	13.7		15.0			
Vinyl chloride	+++++ 0.1911	0.2122 0.1713	0.1499 0.1739	0.2336 0.1741	0.1855	Ave		0.1865				14.0		30.0			
Bromomethane	0.0961 0.1353	0.1188 0.1082	0.0855 0.1130	0.1546 0.1144	0.1090	Lin1	-0.001	0.1156							0.9940		0.9900
Chloroethane	0.1231 0.1328	0.1225 0.1068	0.0996 0.1126	0.1445 0.1123	0.1077	Ave		0.1180				12.0		15.0			
Dichlorofluoromethane	0.2945 0.3410	0.3034 0.3000	0.3245 0.3135	0.4036 0.3042	0.3144	Ave		0.3221				10.4		15.0			
Trichlorofluoromethane	0.3050 0.2981	0.2661 0.2642	0.2337 0.2697	0.3561 0.2720	0.2733	Ave		0.2820				12.2		15.0			
Ethyl ether	0.1452 0.1424	0.1675 0.1371	0.1220 0.1380	0.1090 0.1438	0.1299	Ave		0.1372				11.9		15.0			
Acrolein	0.0100 0.0128	0.0118 0.0124	0.0101 0.0127	0.0107	0.0119	Ave		0.0115				9.7		15.0			
1,1-Dichloroethene	0.1832 0.1658	0.1942 0.1471	0.1510 0.1598	0.1126 0.1458	0.1345	Lin1	0.0096	0.1508							0.9960		0.9900
1,1,2-Trichloro-1,2,2-trifluoroethane	0.1501 0.1367	0.1464 0.1162	0.1191 0.1299	0.0861 0.1147	0.1082	Lin1	0.0062	0.1204							0.9940		0.9900
Acetone	+++++ 0.0424	0.0538 0.0412	0.0501 0.0433	0.0463 0.0487	0.0504	Ave		0.0470				9.5		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
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-162622-1 Analy Batch No.: 574012

SDG No.:

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/05/2022 14:42 Calibration End Date: 05/05/2022 17:32 Calibration ID: 65315

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 9	LVL 5		B	M1	M2								
Iodomethane	+++++ 0.2563	0.1976 0.2466	0.1927 0.2602	0.1725 0.2553	0.2007	Lin1	-0.140	0.2550							0.9980		0.9900
Carbon disulfide	+++++ 0.5371	0.6091 0.4929	0.5437 0.5326	0.3728 0.4901	0.5331	Ave		0.5139				13.2		15.0			
Methyl acetate	0.1258 0.1021	0.0834 0.1022	0.0996 0.1105	0.1039 0.1263	0.0929	Ave		0.1052				13.3		15.0			
3-Chloro-1-propene	+++++ 0.2887	0.3628 0.2673	0.3023 0.2767	0.2365 0.2756	0.2848	Ave		0.2869				12.6		15.0			
Methylene Chloride	0.2510 0.1926	0.2393 0.1818	0.2165 0.1861	0.1749 0.1869	0.2012	Ave		0.2034				13.1		15.0			
t-Butyl alcohol	0.0108 0.0111	0.0093 0.0117	0.0077 0.0125	0.0083 +++++	0.0103	Lin1	-0.034	0.0118							0.9950		0.9900
Acrylonitrile	0.0583 0.0609	0.0602 0.0587	0.0564 0.0611	0.0572 0.0640	0.0630	Ave		0.0600				4.3		15.0			
Methyl tert-butyl ether	0.3602 0.4436	0.3629 0.4327	0.3601 0.4609	0.3414 0.4768	0.4261	Ave		0.4072				12.5		15.0			
trans-1,2-Dichloroethene	0.2024 0.1792	0.1901 0.1645	0.1670 0.1783	0.1439 0.1656	0.1772	Ave		0.1742				9.6		15.0			
Hexane	0.8226 1.0625	0.8816 0.9679	0.8715 1.0680	0.6204 0.9890	0.9319	Lin1	-0.227	1.0097							0.9970		0.9900
Vinyl acetate	0.1929 0.2476	0.2226 0.2691	0.2255 0.2392	0.1813 0.2557	0.2172	Ave		0.2279				12.5		15.0			
1,1-Dichloroethane	0.3898 0.3292	0.4134 0.3071	0.3357 0.3193	0.2672 0.3070	0.3403	Ave		0.3343			0.1000	13.2		15.0			
2-Butanone (MEK)	+++++ 0.0659	0.0554 0.0650	0.0529 0.0675	0.0552 0.0744	0.0589	Ave		0.0619				12.1		15.0			
2,2-Dichloropropane	0.2639 0.2591	0.2481 0.2322	0.2236 0.2510	0.1805 0.2376	0.2477	Ave		0.2382				10.5		15.0			
cis-1,2-Dichloroethene	0.1814 0.1979	0.2086 0.1832	0.1774 0.1914	0.1501 0.1892	0.2033	Ave		0.1869				9.2		15.0			
sec-Butyl Alcohol	+++++ 0.0088	+++++ 0.0093	0.0056 0.0102	0.0059 +++++	0.0066	Lin1	-0.337	0.0097							0.9940		0.9900
Bromochloromethane	0.1356 0.0995	0.1068 0.0896	0.1031 0.0954	0.0878 0.0952	0.0970	Ave		0.1011				14.1		15.0			
Tetrahydrofuran	+++++ 0.0474	0.0539 0.0447	0.0334 0.0448	0.0422 0.0500	0.0463	Ave		0.0453				13.2		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-162622-1 Analy Batch No.: 574012

SDG No.:

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/05/2022 14:42 Calibration End Date: 05/05/2022 17:32 Calibration ID: 65315

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 9	LVL 5		B	M1	M2								
Chloroform	0.3578 0.3308	0.3366 0.3059	0.3332 0.3193	0.2695 0.3136	0.3370	Ave		0.3226				7.8		30.0			
1,1,1-Trichloroethane	0.3001 0.2883	0.2657 0.2700	0.2513 0.2870	0.2015 0.2682	0.2753	Ave		0.2675				10.7		15.0			
Cyclohexane	0.3484 0.3242	0.3251 0.2905	0.2840 0.3158	0.2139 0.2897	0.3077	Ave		0.2999				12.8		15.0			
1,1-Dichloropropene	0.2727 0.2538	0.2307 0.2364	0.2185 0.2585	0.1598 0.2424	0.2317	Ave		0.2338				13.8		15.0			
Carbon tetrachloride	0.1939 0.2362	0.2207 0.2162	0.2100 0.2337	0.1478 0.2185	0.2289	Ave		0.2118				12.9		15.0			
Isobutyl alcohol	+++++ 0.0037	0.0017 0.0039	0.0031 0.0045	0.0028 +++++	0.0031	Lin1	-0.081	0.0041							0.9910		0.9900
Benzene	0.8113 0.7135	0.7241 0.6665	0.6665 0.7034	0.5306 0.6862	0.7165	Ave		0.6910				10.7		15.0			
1,2-Dichloroethane	0.3537 0.2504	0.3231 0.2482	0.2852 0.2531	0.2384 0.2560	0.2662	Ave		0.2749				14.2		15.0			
Trichloroethene	0.7455 0.8280	0.5572 0.7713	0.6942 0.8581	0.5160 0.7929	0.7891	Lin1	-0.186	0.8074							0.9970		0.9900
2-Pentanone	+++++ 0.0996	0.0746 0.0991	0.0757 0.1064	0.0739 0.1167	0.0885	Lin1	-0.244	0.1094							0.9940		0.9900
Methylcyclohexane	0.2329 0.2347	0.2013 0.2208	0.1932 0.2344	0.1516 0.2255	0.2145	Ave		0.2121				12.7		15.0			
1,2-Dichloropropane	0.2060 0.1825	0.1895 0.1725	0.1689 0.1774	0.1352 0.1805	0.1849	Ave		0.1775				10.8		30.0			
1,4-Dioxane	+++++ 0.0020	0.0029 0.0020	0.0018 0.0021	0.0019 0.0022	0.0022	Lin1	0.0028	0.0021							0.9970		0.9900
Dibromomethane	0.1159 0.1128	0.1255 0.1062	0.1336 0.1095	0.1081 0.1152	0.1161	Ave		0.1159				7.5		15.0			
Bromodichloromethane	0.2651 0.2418	0.2637 0.2307	0.2283 0.2411	0.1890 0.2475	0.2410	Ave		0.2387				9.4		15.0			
2-Chloroethyl vinyl ether	+++++ 0.0892	0.0727 0.0913	0.0825 0.0968	0.0896 0.0973	0.0842	Ave		0.0879				9.2		15.0			
cis-1,3-Dichloropropene	1.0591 1.1807	0.8044 1.1629	0.9520 1.2320	0.8079 1.2363	1.0753	Lin1	-0.366	1.2132							0.9980		0.9900
4-Methyl-2-pentanone (MIBK)	0.1079 0.1339	0.1201 0.1268	0.1123 0.1350	0.1122 0.1441	0.1290	Ave		0.1246				9.8		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 Denver Job No.: 280-162622-1 Analy Batch No.: 574012

SDG No.:

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/05/2022 14:42 Calibration End Date: 05/05/2022 17:32 Calibration ID: 65315

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 9	LVL 5		B	M1	M2								
Toluene	0.7211 0.7449	0.7849 0.6929	0.7361 0.7268	0.5806 0.7113	0.7574	Ave		0.7173				8.1		30.0			
trans-1,3-Dichloropropene	+++++ 0.2389	0.2083 0.2381	0.1970 0.2507	0.1847 0.2706	0.2195	Ave		0.2260				12.8		15.0			
Ethyl methacrylate	0.5689 0.7654	0.6746 0.7694	0.6193 0.8112	0.6348 0.8307	0.7424	Ave		0.7130				12.9		15.0			
1,1,2-Trichloroethane	0.1526 0.1465	0.1516 0.1407	0.1395 0.1475	0.1221 0.1517	0.1377	Ave		0.1433				6.8		15.0			
Tetrachloroethene	0.7135 0.6482	0.7633 0.5779	0.6078 0.6302	0.4197 0.5895	0.5806	Lin1	0.0312	0.6012							0.9970		0.9900
1,3-Dichloropropane	1.1503 1.1302	1.1008 1.0985	0.9884 1.1256	0.9055 1.1567	1.0724	Ave		1.0809				7.7		15.0			
2-Hexanone	0.3946 0.3917	0.3368 0.3850	0.3418 0.4066	0.3307 0.4211	0.3785	Ave		0.3763				8.6		15.0			
Dibromochloromethane	0.6728 0.7245	0.6662 0.7071	0.5700 0.7457	0.5546 0.7764	0.6888	Ave		0.6785				11.0		15.0			
Ethylene Dibromide	0.6233 0.6814	0.6520 0.6625	0.5561 0.7021	0.5264 0.7124	0.6619	Ave		0.6420				9.9		15.0			
1-Chlorohexane	+++++ 1.0004	1.2744 0.9302	0.9672 1.0223	0.6622 0.9527	0.9374	Lin1	0.0045	0.9671							0.9970		0.9900
Chlorobenzene	2.4536 2.0547	2.2132 1.9657	2.0199 2.0232	1.6844 1.9810	2.0742	Ave		2.0522			0.3000	10.0		15.0			
1,1,1,2-Tetrachloroethane	0.6393 0.6868	0.6574 0.6714	0.6771 0.7255	0.4826 0.7354	0.6570	Ave		0.6592				11.1		15.0			
Ethylbenzene	1.2291 1.1644	1.1589 1.0812	1.0615 1.1391	0.8612 1.0867	1.0928	Ave		1.0972				9.4		30.0			
m-Xylene & p-Xylene	1.4886 1.4630	1.5196 1.3307	1.2934 1.4083	1.0313 1.3616	1.3866	Ave		1.3648				10.6		15.0			
o-Xylene	1.2239 1.3867	1.3603 1.2945	1.3477 1.3465	1.0075 1.3192	1.3500	Ave		1.2929				9.0		15.0			
Styrene	2.1022 2.3767	2.2198 2.2866	2.2329 2.3708	1.7573 2.3100	2.3579	Ave		2.2238				8.8		15.0			
Bromoform	0.4455 0.4581	0.3527 0.4351	0.4038 0.4764	0.3661 0.4863	0.4346	Ave		0.4287			0.1000	10.8		15.0			
Isopropylbenzene	1.7676 2.1814	2.0175 1.9866	1.9629 2.1497	1.4264 2.0078	2.0258	Ave		1.9473				11.7		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 Denver Job No.: 280-162622-1 Analy Batch No.: 574012

SDG No.:

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/05/2022 14:42 Calibration End Date: 05/05/2022 17:32 Calibration ID: 65315

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 9	LVL 5		B	M1	M2								
Cyclohexanone	0.0254 0.0226	0.0229 0.0226	0.0200 0.0238	0.0183 0.0255	0.0218	Ave		0.0225				10.4		15.0			
1,1,2,2-Tetrachloroethane	0.5747 0.4581	0.5052 0.4419	0.4662 0.4553	0.4043 0.4629	0.4598	Ave		0.4698			0.3000	10.1		15.0			
Bromobenzene	0.6724 0.5334	0.5099 0.5052	0.5689 0.5286	0.4097 0.5204	0.5361	Ave		0.5316				12.9		15.0			
trans-1,4-Dichloro-2-butene	+++++ 0.1414	0.1496 0.1376	0.1151 0.1422	0.1170 0.1544	0.1360	Ave		0.1366				10.3		15.0			
1,2,3-Trichloropropane	+++++ 0.1475	0.1595 0.1402	0.1548 0.1440	0.1266 0.1523	0.1409	Ave		0.1457				7.0		15.0			
N-Propylbenzene	0.4828 0.6062	0.5178 0.5510	0.5677 0.5818	0.4291 0.5684	0.5706	Ave		0.5417				10.3		15.0			
2-Chlorotoluene	0.5764 0.4953	0.4773 0.4636	0.5119 0.4976	0.3655 0.4790	0.4891	Ave		0.4840				11.4		15.0			
1,3,5-Trimethylbenzene	1.5633 1.8351	1.8120 1.7074	1.5934 1.7964	1.3703 1.7351	1.7432	Ave		1.6840				8.9		15.0			
4-Chlorotoluene	0.5035 0.5171	0.5983 0.4899	0.5195 0.5128	0.3959 0.5045	0.5385	Ave		0.5089				10.4		15.0			
tert-Butylbenzene	1.3752 1.5819	1.4656 1.4456	1.3655 1.5448	1.0710 1.4712	1.4431	Ave		1.4182				10.4		15.0			
1,2,4-Trimethylbenzene	1.9613 1.9033	1.6878 1.7494	1.8054 1.8318	1.3936 1.7855	1.8210	Ave		1.7710				9.2		15.0			
sec-Butylbenzene	0.3915 0.4518	0.4274 0.4156	0.4077 0.4547	0.3166 0.4269	0.4352	Ave		0.4141				10.1		15.0			
1,3-Dichlorobenzene	1.1957 1.0591	0.9469 0.9701	0.9438 1.0142	0.7969 1.0034	1.0198	Ave		0.9944				10.7		15.0			
4-Isopropyltoluene	2.0915 1.9690	1.7982 1.8277	1.6884 1.9303	1.3257 1.8648	1.8895	Ave		1.8206				11.9		15.0			
1,4-Dichlorobenzene	1.2228 1.0495	1.2343 0.9920	1.0401 1.0359	0.8603 1.0193	1.0684	Ave		1.0581				10.8		15.0			
n-Butylbenzene	1.4763 1.7684	1.6917 1.6251	1.5344 1.7363	1.2187 1.6673	1.6203	Ave		1.5932				10.5		15.0			
1,2-Dichlorobenzene	1.0033 0.9889	1.0886 0.9138	0.9881 0.9646	0.8341 0.9507	1.0010	Ave		0.9704				7.2		15.0			
1,2-Dibromo-3-Chloropropane	0.0926 0.0967	0.1071 0.0913	0.1013 0.0977	0.0759 0.1069	0.0937	Ave		0.0959				9.9		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 Denver Job No.: 280-162622-1 Analy Batch No.: 574012

SDG No.:

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/05/2022 14:42 Calibration End Date: 05/05/2022 17:32 Calibration ID: 65315

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 9	LVL 5		B	M1	M2								
1,2,4-Trichlorobenzene	0.6602 0.6131	0.6168 0.5863	0.6060 0.6100	0.4991 0.6246	0.5965	Ave		0.6014				7.2		15.0			
Hexachlorobutadiene	+++++ 0.2359	0.2488 0.2104	0.2187 0.2320	0.1356 0.2309	0.2082	Lin1	-0.054	0.2276							0.9970		0.9900
Naphthalene	1.4159 1.4276	1.2548 1.4119	1.2867 1.5218	1.1402 1.5109	1.3546	Lin1	-0.266	1.4833							0.9980		0.9900
1,2,3-Trichlorobenzene	0.4996 0.4994	0.5232 0.4771	0.4928 0.5024	0.4552 0.5093	0.4969	Ave		0.4951				3.9		15.0			
Dibromofluoromethane (Surr)	0.2775 0.2571	0.2804 0.2547	0.2761 0.2560	0.2746 0.2574	0.2663	Ave		0.2667				4.0		15.0			
1,2-Dichloroethane-d4 (Surr)	0.3158 0.2979	0.3174 0.2990	0.3127 0.2979	0.3140 0.3100	0.3068	Ave		0.3080				2.6		15.0			
Toluene-d8 (Surr)	4.1052 4.1802	4.0236 4.0846	3.9881 4.1293	4.0547 4.0478	4.0840	Ave		4.0775				1.4		15.0			
4-Bromofluorobenzene (Surr)	0.8618 0.9014	0.8355 0.8944	0.8853 0.8977	0.8713 0.8830	0.8888	Ave		0.8799				2.4		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
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver Job No.: 280-162622-1 Analy Batch No.: 574012

SDG No.:

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/05/2022 14:42 Calibration End Date: 05/05/2022 17:32 Calibration ID: 65315

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-574012/35	MS1_5803.D
Level 2	IC 280-574012/36	MS1_5804.D
Level 3	IC 280-574012/37	MS1_5805.D
Level 4	IC 280-574012/38	MS1_5806.D
Level 5	IC 280-574012/39	MS1_5807.D
Level 6	ICIS 280-574012/40	MS1_5808.D
Level 7	IC 280-574012/41	MS1_5809.D
Level 8	IC 280-574012/42	MS1_5810.D
Level 9	IC 280-574012/43	MS1_5811.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 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Dichlorodifluoromethane	FB	Ave	2904 277924	4861 392771	8734 509822	32167 1086339	51286	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Chloromethane	FB	Ave	2864 256218	4379 372550	8390 505689	30836 1043461	46570	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Vinyl chloride	FB	Ave	+++++ 253763	5107 358446	7400 480563	28852 1007069	47168	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Bromomethane	FB	Lin1	1206 179677	2860 226418	4222 312221	19099 661490	27708	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Chloroethane	FB	Ave	1546 176332	2949 223441	4918 311215	17850 649700	27384	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Dichlorofluoromethane	FB	Ave	3698 452712	7302 627866	16023 866122	49844 1759458	79957	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Trichlorofluoromethane	FB	Ave	3830 395749	6404 552804	11538 745109	43975 1573258	69490	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Ethyl ether	FB	Ave	1823 189036	4031 286921	6023 381204	13457 831914	33043	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Acrolein	FB	Ave	991 133864	2241 205132	3942 276325	10456	23907	3.95 395	7.90 593	15.8 790	39.5	79.0
1,1-Dichloroethene	FB	Lin1	2300 220084	4674 307895	7457 441463	13902 843472	34211	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Lin1	1884 181461	3522 243236	5883 358990	10632 663184	27520	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Acetone	FB	Ave	+++++ 225139	5181 345005	9886 478240	22855 1127144	51302	+++++ 200	4.00 300	8.00 400	20.0 800	40.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver Job No.: 280-162622-1 Analy Batch No.: 574012

SDG No.:

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/05/2022 14:42 Calibration End Date: 05/05/2022 17:32 Calibration ID: 65315

ANALYTE	IS REF	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
Iodomethane	FB	Lin1	+++++ 340215	4756 516112	9514 718904	21311 1476876	51049	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Carbon disulfide	FB	Ave	+++++ 713084	14657 1031514	26848 1471573	46041 2834760	135578	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Methyl acetate	FB	Ave	3160 271090	4016 427933	9840 610793	25668 1461122	47265	1.00 100	2.00 150	4.00 200	10.0 400	20.0
3-Chloro-1-propene	FB	Ave	+++++ 383287	8731 559430	14925 764626	29211 1594175	72432	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Methylene Chloride	FB	Ave	3152 255711	5758 380465	10690 514301	21604 1081190	51176	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
t-Butyl alcohol	FB	Lin1	1357 147089	2244 244151	3780 345202	10292 +++++	26076	5.00 500	10.0 750	20.0 1000	50.0 +++++	100
Acrylonitrile	FB	Ave	7321 808134	14477 1227793	27827 1687001	70649 3699264	160182	5.00 500	10.0 750	20.0 1000	50.0 2000	100
Methyl tert-butyl ether	FB	Ave	4522 588922	8734 905400	17781 1273612	42171 2757860	108355	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
trans-1,2-Dichloroethene	FB	Ave	2541 237899	4575 344259	8246 492670	17772 957720	45070	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Hexane	CBNZ d5	Lin1	2526 324230	5275 462644	10645 671659	18956 1335367	57145	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Vinyl acetate	FB	Ave	4843 657437	10713 1126169	22270 1322002	44773 2958435	110476	1.00 100	2.00 150	4.00 200	10.0 400	20.0
1,1-Dichloroethane	FB	Ave	4894 437061	9949 642536	16575 882245	33003 1775848	86530	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
2-Butanone (MEK)	FB	Ave	+++++ 350061	5336 543702	10455 745898	27253 1721820	59930	+++++ 200	4.00 300	8.00 400	20.0 800	40.0
2,2-Dichloropropane	FB	Ave	3313 344031	5971 486003	11043 693536	22297 1374356	62997	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
cis-1,2-Dichloroethene	FB	Ave	2277 262745	5019 383382	8759 528899	18540 1094359	51700	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
sec-Butyl Alcohol	FB	Lin1	+++++ 280408	+++++ 466450	6608 676089	17615 +++++	39985	+++++ 1200	+++++ 1800	48.0 2400	120 +++++	240
Bromochloromethane	FB	Ave	1703 132089	2571 187462	5092 263650	10847 550915	24677	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Tetrahydrofuran	FB	Ave	+++++	2595	3302	10420	23529	+++++	2.00	4.00	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver Job No.: 280-162622-1 Analy Batch No.: 574012

SDG No.:

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/05/2022 14:42 Calibration End Date: 05/05/2022 17:32 Calibration ID: 65315

ANALYTE	IS REF	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
			125900	187280	247711	578372		100	150	200	400	
Chloroform	FB	Ave	4493 439193	8100 640061	16453 882373	33284 1814004	85704	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,1,1-Trichloroethane	FB	Ave	3768 382798	6394 564918	12408 792901	24882 1551181	70011	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Cyclohexane	FB	Ave	4375 430438	7824 607958	14024 872477	26413 1675424	78255	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,1-Dichloropropene	FB	Ave	3424 336916	5552 494609	10788 714209	19737 1402232	58932	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Carbon tetrachloride	FB	Ave	2435 313598	5312 452371	10368 645728	18258 1264040	58218	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Isobutyl alcohol	FB	Lin1	+++++ 121761	1016 203252	3880 309673	8778 +++++	19716	+++++ 1250	25.0 1875	50.0 2500	125 +++++	250
Benzene	FB	Ave	10187 947186	17426 1394681	32912 1943642	65535 3969013	182216	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,2-Dichloroethane	FB	Ave	4441 332481	7775 519403	14080 699438	29442 1481018	67699	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Trichloroethene	CBNZ d5	Lin1	2289 252655	3334 368683	8479 539602	15766 1070579	48389	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
2-Pentanone	FB	Lin1	+++++ 422924	5747 663456	11966 941057	29205 2159935	72003	+++++ 160	3.20 240	6.40 320	16.0 640	32.0
Methylcyclohexane	FB	Ave	2924 311563	4844 462066	9541 647683	18725 1304585	54549	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,2-Dichloropropane	FB	Ave	2587 242220	4560 361038	8338 490149	16695 1044259	47011	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,4-Dioxane	FB	Lin1	+++++ 51899	1419 81683	1773 115329	4605 252817	11218	+++++ 1000	20.0 1500	40.0 2000	100 4000	200
Dibromomethane	FB	Ave	1455 149712	3019 222263	6598 302612	13355 666296	29537	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Bromodichloromethane	FB	Ave	3329 320948	6345 482710	11271 666057	23342 1431711	61285	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
2-Chloroethyl vinyl ether	FB	Ave	+++++ 118382	1750 191020	4075 267415	11067 562567	21413	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
cis-1,3-Dichloropropene	CBNZ d5	Lin1	3252	4813	11628	24687	65939	0.500	1.00	2.00	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver Job No.: 280-162622-1 Analy Batch No.: 574012

SDG No.:

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/05/2022 14:42 Calibration End Date: 05/05/2022 17:32 Calibration ID: 65315

ANALYTE	IS REF	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
			360303	555863	774734	1669284		50.0	75.0	100	200	
4-Methyl-2-pentanone (MIBK)	FB	Ave	5420 711023	11558 1061494	22174 1491553	55433 3333776	131268	2.00 200	4.00 300	8.00 400	20.0 800	40.0
Toluene	FB	Ave	9054 988918	18889 1449984	36346 2008125	71702 4114405	192614	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
trans-1,3-Dichloropropene	FB	Ave	+++++ 317139	5012 498342	9728 692619	22806 1565411	55818	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Ethyl methacrylate	CBNZ d5	Ave	1747 233560	4036 367789	7565 510165	19396 1121577	45526	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,1,2-Trichloroethane	FB	Ave	1916 194441	3648 294390	6886 407524	15080 877264	35008	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Tetrachloroethene	CBNZ d5	Lin1	2191 197809	4567 276257	7424 396283	12823 795875	35607	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,3-Dichloropropane	CBNZ d5	Ave	3532 344894	6586 525112	12073 707838	27669 1561789	65764	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
2-Hexanone	CBNZ d5	Ave	4847 478175	8060 736048	16699 1022792	40416 2274213	92832	2.00 200	4.00 300	8.00 400	20.0 800	40.0
Dibromochloromethane	CBNZ d5	Ave	2066 221088	3986 338007	6963 468972	16946 1048322	42239	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Ethylene Dibromide	CBNZ d5	Ave	1914 207932	3901 316664	6792 441530	16084 961866	40587	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1-Chlorohexane	CBNZ d5	Lin1	+++++ 244230	6100 355705	9451 514318	16188 1029069	45988	+++++ 40.0	0.800 60.0	1.60 80.0	4.00 160	8.00
Chlorobenzene	CBNZ d5	Ave	7534 627015	13242 939614	24672 1272308	51470 2674641	127196	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	1963 209592	3933 320917	8271 456220	14745 992879	40291	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver Job No.: 280-162622-1 Analy Batch No.: 574012

SDG No.:

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/05/2022 14:42 Calibration End Date: 05/05/2022 17:32 Calibration ID: 65315

ANALYTE	IS REF	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
Ethylbenzene	CBNZ d5	Ave	3774 355312	6934 516824	12966 716365	26314 1467261	67012	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
m-Xylene & p-Xylene	CBNZ d5	Ave	4571 446452	9092 636066	15798 885619	31512 1838435	85028	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
o-Xylene	CBNZ d5	Ave	3758 423172	8139 618795	16462 846789	30785 1781108	82784	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Styrene	CBNZ d5	Ave	6455 725266	13281 1093020	27274 1490911	53697 3118834	144593	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Bromoform	CBNZ d5	Ave	1368 139804	2110 207998	4932 299567	11187 656582	26651	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Isopropylbenzene	DCBd 4	Ave	9464 1120850	21155 1620627	41104 2287717	75483 4569323	215542	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Cyclohexanone	CBNZ d5	Ave	2337 206637	4112 324083	7325 449793	16776 1033711	40032	15.0 1500	30.0 2250	60.0 3000	150 6000	300
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	3077 235359	5297 360510	9762 484526	21393 1053492	48923	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Bromobenzene	DCBd 4	Ave	3600 274091	5347 412177	11912 562531	21680 1184324	57038	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	+++++ 72646	1569 112230	2410 151348	6189 351333	14465	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,2,3-Trichloropropane	DCBd 4	Ave	+++++ 75800	1672 114415	3242 153291	6701 346648	14991	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
N-Propylbenzene	DCBd 4	Ave	2585 311484	5429 449488	11887 619145	22710 1293501	60712	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver Job No.: 280-162622-1 Analy Batch No.: 574012

SDG No.:

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/05/2022 14:42 Calibration End Date: 05/05/2022 17:32 Calibration ID: 65315

ANALYTE	IS REF	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
2-Chlorotoluene	DCBd 4	Ave	3086	5005	10719	19344	52039	0.500	1.00	2.00	5.00	10.0
			254497	378170	529500	1090130		50.0	75.0	100	200	
1,3,5-Trimethylbenzene	DCBd 4	Ave	8370	19000	33366	72514	185475	0.500	1.00	2.00	5.00	10.0
			942929	1392885	1911663	3948632		50.0	75.0	100	200	
4-Chlorotoluene	DCBd 4	Ave	2696	6274	10879	20950	57294	0.500	1.00	2.00	5.00	10.0
			265681	399654	545718	1148172		50.0	75.0	100	200	
tert-Butylbenzene	DCBd 4	Ave	7363	15368	28593	56678	153541	0.500	1.00	2.00	5.00	10.0
			812832	1179329	1643906	3348118		50.0	75.0	100	200	
1,2,4-Trimethylbenzene	DCBd 4	Ave	10501	17698	37806	73751	193747	0.500	1.00	2.00	5.00	10.0
			977951	1427126	1949413	4063332		50.0	75.0	100	200	
sec-Butylbenzene	DCBd 4	Ave	2096	4482	8538	16752	46301	0.500	1.00	2.00	5.00	10.0
			232144	339008	483866	971565		50.0	75.0	100	200	
1,3-Dichlorobenzene	DCBd 4	Ave	6402	9929	19763	42174	108502	0.500	1.00	2.00	5.00	10.0
			544200	791378	1079276	2283405		50.0	75.0	100	200	
4-Isopropyltoluene	DCBd 4	Ave	11198	18855	35354	70153	201040	0.500	1.00	2.00	5.00	10.0
			1011728	1491061	2054194	4243753		50.0	75.0	100	200	
1,4-Dichlorobenzene	DCBd 4	Ave	6547	12942	21779	45524	113678	0.500	1.00	2.00	5.00	10.0
			539264	809312	1102443	2319590		50.0	75.0	100	200	
n-Butylbenzene	DCBd 4	Ave	7904	17738	32131	64491	172395	0.500	1.00	2.00	5.00	10.0
			908658	1325740	1847768	3794460		50.0	75.0	100	200	
1,2-Dichlorobenzene	DCBd 4	Ave	5372	11415	20691	44139	106506	0.500	1.00	2.00	5.00	10.0
			508106	745490	1026568	2163602		50.0	75.0	100	200	
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	496	1123	2121	4014	9967	0.500	1.00	2.00	5.00	10.0
			49694	74523	104003	243374		50.0	75.0	100	200	

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver Job No.: 280-162622-1 Analy Batch No.: 574012

SDG No.:

Instrument ID: VMS_MS1 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/05/2022 14:42 Calibration End Date: 05/05/2022 17:32 Calibration ID: 65315

ANALYTE	IS REF	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
1,2,4-Trichlorobenzene	DCBd 4	Ave	3535 315023	6467 478325	12690 649196	26413 1421401	63470	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Hexachlorobutadiene	DCBd 4	Lin1	+++++ 121223	2609 171677	4580 246911	7177 525476	22148	+++++ 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Naphthalene	DCBd 4	Lin1	7581 733539	13157 1151840	26944 1619477	60339 3438567	144127	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
1,2,3-Trichlorobenzene	DCBd 4	Ave	2675 256597	5486 389177	10319 534663	24091 1158955	52869	0.500 50.0	1.00 75.0	2.00 100	5.00 200	10.0
Dibromofluoromethane (Surr)	FB	Ave	348474 341262	337343 355315	340817 353620	339182 372270	338658	50.0 50.0	50.0 50.0	50.0 50.0	50.0 50.0	50.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	396559 395483	381941 417170	385981 411614	387859 448337	390049	50.0 50.0	50.0 50.0	50.0 50.0	50.0 50.0	50.0
Toluene-d8 (Surr)	CBNZ d5	Ave	1260529 1275604	1203666 1301650	1217850 1298380	1238965 1366294	1252216	50.0 50.0	50.0 50.0	50.0 50.0	50.0 50.0	50.0
4-Bromofluorobenzene (Surr)	DCBd 4	Ave	461412 463132	438048 486428	463471 477640	461084 502402	472833	50.0 50.0	50.0 50.0	50.0 50.0	50.0 50.0	50.0

Curve Type Legend
Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5803.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 05-May-2022 14:42:30 ALS Bottle#: 1 Worklist Smp#: 35
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 0.5
Operator ID: SUNLEEC Instrument ID: VMS_MS1
Sublist: chrom-AQ_VMS1_8260*sub164

Method: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-May-2022 19:53:22 Calib Date: 05-May-2022 17:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5811.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1632

First Level Reviewer: peppinga Date: 05-May-2022 18:16:27

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.794	5.794	0.000	98	1255579	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.517	8.517	0.000	87	307060	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.794	10.794	0.000	96	535409	50.0	50.0	
$ 5 Dibromofluoromethane (Surr)	111	5.221	5.221	0.000	93	348474	50.0	52.0	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.515	5.514	0.001	0	396559	50.0	51.3	
$ 7 Toluene-d8 (Surr)	98	7.177	7.176	0.001	94	1260529	50.0	50.3	
$ 8 4-Bromofluorobenzene (Surr)	95	9.649	9.648	0.001	88	461412	50.0	49.0	
11 Dichlorodifluoromethane	85	1.674	1.674	0.000	4	2904	0.5000	0.5651	
12 Chloromethane	50	1.869	1.869	0.000	32	2864	0.5000	0.5875	
13 Vinyl chloride	62	1.967	1.967	0.000	73	1575	0.5000	0.3364	
15 Bromomethane	94	2.330	2.316	0.014	22	1206	0.5000	0.4278	
16 Chloroethane	64	2.428	2.428	0.000	44	1546	0.5000	0.5217	
17 Dichlorofluoromethane	67	2.652	2.651	0.001	94	3698	0.5000	0.4572	
18 Trichlorofluoromethane	101	2.693	2.693	0.000	93	3830	0.5000	0.5408	
20 Ethyl ether	59	2.959	2.959	0.000	94	1823	0.5000	0.5291	
22 Acrolein	56	3.112	3.098	0.014	55	991	3.95	3.42	Ma
23 1,1-Dichloroethene	96	3.196	3.196	0.000	96	2300	0.5000	0.5438	
24 112TCTFE	151	3.196	3.210	-0.014	68	1884	0.5000	0.5717	
25 Acetone	43	3.238	3.224	0.014	80	4513	2.00	3.82	
26 Iodomethane	142	3.350	3.350	0.000	94	2141	0.5000	0.8817	
28 Carbon disulfide	76	3.406	3.406	0.000	98	8858	0.5000	0.6864	
30 Methyl acetate	43	3.531	3.531	0.000	46	3160	1.00	1.20	
31 3-Chloro-1-propene	41	3.545	3.545	0.000	88	5760	0.5000	0.7996	
32 Methylene Chloride	84	3.657	3.671	-0.014	94	3152	0.5000	0.6172	
33 2-Methyl-2-propanol	59	3.741	3.741	0.000	7	1357	5.00	7.43	
34 Acrylonitrile	53	3.881	3.866	0.015	98	7321	5.00	4.86	
35 Methyl tert-butyl ether	73	3.895	3.894	0.001	96	4522	0.5000	0.4422	
36 trans-1,2-Dichloroethene	96	3.922	3.908	0.014	92	2541	0.5000	0.5807	
37 Hexane	57	4.160	4.160	0.000	84	2526	0.5000	0.6318	
39 Vinyl acetate	43	4.314	4.285	0.029	92	4843	1.00	0.8463	

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	4.300	4.299	0.001	94	4894	0.5000	0.5829	
46 2-Butanone (MEK)	43		4.774				ND	ND	U
48 cis-1,2-Dichloroethene	96	4.802	4.802	0.000	84	2277	0.5000	0.4851	
49 2,2-Dichloropropane	77	4.802	4.802	0.000	65	3313	0.5000	0.5538	
51 sec-Butyl Alcohol	45		4.928				ND	ND	U
53 Chlorobromomethane	128	5.012	4.998	0.014	89	1703	0.5000	0.6706	
54 Tetrahydrofuran	42	5.026	5.012	0.014	64	2733	1.00	2.40	
55 Chloroform	83	5.082	5.082	0.000	92	4493	0.5000	0.5545	
56 1,1,1-Trichloroethane	97	5.249	5.235	0.014	35	3768	0.5000	0.5610	
57 Cyclohexane	56	5.291	5.305	-0.014	94	4375	0.5000	0.5809	
58 1,1-Dichloropropene	75	5.375	5.375	0.000	90	3424	0.5000	0.5831	
59 Carbon tetrachloride	117	5.375	5.375	0.000	77	2435	0.5000	0.4579	
60 Isobutyl alcohol	41		5.417				ND	ND	
63 Benzene	78	5.543	5.542	0.001	93	10187	0.5000	0.5871	
64 1,2-Dichloroethane	62	5.584	5.584	0.000	94	4441	0.5000	0.6433	
66 n-Heptane	43	5.780	5.766	0.014	36	3174	0.5000	0.5325	
68 Trichloroethene	95	6.101	6.101	0.000	92	2289	0.5000	0.6916	
69 2-Pentanone	43		6.227				ND	ND	
70 Methylcyclohexane	55	6.311	6.311	0.000	82	2924	0.5000	0.5490	
71 1,2-Dichloropropane	63	6.325	6.325	0.000	76	2587	0.5000	0.5805	
73 1,4-Dioxane	88	6.381	6.380	0.001	56	1273	10.0	22.9	
74 Dibromomethane	93	6.408	6.408	0.000	84	1455	0.5000	0.5000	
75 Dichlorobromomethane	83	6.548	6.548	0.000	96	3329	0.5000	0.5554	
77 2-Chloroethyl vinyl ether	63		6.785				ND	ND	U
78 cis-1,3-Dichloropropene	75	6.939	6.925	0.014	89	3252	0.5000	0.7381	
79 4-Methyl-2-pentanone (MIBK)	43	7.051	7.037	0.014	95	5420	2.00	1.73	
82 Toluene	91	7.232	7.232	0.000	95	9054	0.5000	0.5026	
84 trans-1,3-Dichloropropene	75		7.428				ND	ND	
85 Ethyl methacrylate	69	7.470	7.470	0.000	32	1747	0.5000	0.3990	
87 1,1,2-Trichloroethane	97	7.610	7.609	0.001	84	1916	0.5000	0.5324	
89 Tetrachloroethene	164	7.707	7.707	0.000	91	2191	0.5000	0.5415	
90 1,3-Dichloropropane	76	7.777	7.763	0.014	92	3532	0.5000	0.5321	
91 2-Hexanone	43	7.805	7.791	0.014	88	4847	2.00	2.10	
95 Chlorodibromomethane	129	7.973	7.973	0.000	87	2066	0.5000	0.4958	
96 Ethylene Dibromide	107	8.098	8.084	0.014	98	1914	0.5000	0.4855	
98 1-Chlorohexane	91		8.503				ND	ND	U
99 Chlorobenzene	112	8.545	8.545	0.000	93	7534	0.5000	0.5978	
100 1,1,1,2-Tetrachloroethane	131	8.615	8.615	0.000	44	1963	0.5000	0.4849	
101 Ethylbenzene	106	8.629	8.629	0.000	97	3774	0.5000	0.5601	
102 m-Xylene & p-Xylene	106	8.741	8.741	0.000	0	4571	0.5000	0.5454	
103 o-Xylene	106	9.118	9.118	0.000	96	3758	0.5000	0.4733	
104 Styrene	104	9.132	9.132	0.000	89	6455	0.5000	0.4727	
106 Bromoform	173	9.327	9.327	0.000	37	1368	0.5000	0.5196	
107 Isopropylbenzene	105	9.467	9.467	0.000	95	9464	0.5000	0.4539	
109 Cyclohexanone	55	9.565	9.565	0.000	82	2337	15.0	16.9	
110 1,1,2,2-Tetrachloroethane	83	9.774	9.760	0.014	30	3077	0.5000	0.6116	
111 Bromobenzene	156	9.788	9.788	0.000	87	3600	0.5000	0.6324	
112 trans-1,4-Dichloro-2-butene	53	9.802	9.802	0.000	61	1058	0.5000	0.7230	
113 1,2,3-Trichloropropane	110	9.830	9.830	0.000	58	336	0.5000	0.2153	M
114 N-Propylbenzene	120	9.886	9.872	0.014	98	2585	0.5000	0.4456	
115 2-Chlorotoluene	126	9.984	9.970	0.014	68	3086	0.5000	0.5955	
116 1,3,5-Trimethylbenzene	105	10.054	10.054	0.000	92	8370	0.5000	0.4642	

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	10.096	10.095	0.001	96	2696	0.5000	0.4947	
118 tert-Butylbenzene	119	10.375	10.361	0.014	89	7363	0.5000	0.4848	
119 1,2,4-Trimethylbenzene	105	10.431	10.431	0.000	93	10501	0.5000	0.5537	
120 sec-Butylbenzene	134	10.584	10.584	0.000	94	2096	0.5000	0.4726	
121 1,3-Dichlorobenzene	146	10.724	10.710	0.014	95	6402	0.5000	0.6012	
122 4-Isopropyltoluene	119	10.738	10.738	0.000	95	11198	0.5000	0.5744	
123 1,4-Dichlorobenzene	146	10.822	10.822	0.000	89	6547	0.5000	0.5778	
125 n-Butylbenzene	91	11.143	11.143	0.000	93	7904	0.5000	0.4633	
127 1,2-Dichlorobenzene	146	11.185	11.171	0.014	89	5372	0.5000	0.5170	
128 1,2-Dibromo-3-Chloropropane	157	11.967	11.967	0.000	1	496	0.5000	0.4829	Ma
130 1,2,4-Trichlorobenzene	180	12.805	12.791	0.014	91	3535	0.5000	0.5489	
131 Hexachlorobutadiene	225	12.931	12.931	0.000	84	2160	0.5000	1.12	
132 Naphthalene	128	13.070	13.056	0.014	96	7581	0.5000	0.6568	
134 1,2,3-Trichlorobenzene	180	13.280	13.280	0.000	92	2675	0.5000	0.5046	
S 149 1,2-Dichloroethene, Total (URS)	96				0		1.00	1.07	
S 156 1,3-Dichloropropene, Total	1				0		1.00	0.7381	
S 155 Xylenes, Total	106				0		1.00	1.02	
S 153 Xylenes, Total (URS)	1				0		1.00	1.02	
S 152 Total BTEX	1				0			2.67	
S 151 Trihalomethanes, Total	1				0		2.00	2.13	
S 150 1,2-Dichloroethene, Total	1				0		1.00	1.07	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND
Review Flags
M - Manually Integrated
U - Marked Undetected
a - User Assigned ID

Reagents:

Cal Std 5ppm_00012	Amount Added:	5.00	Units: uL	
mv-IS_SS_00038	Amount Added:	5.00	Units: uL	Run Reagent

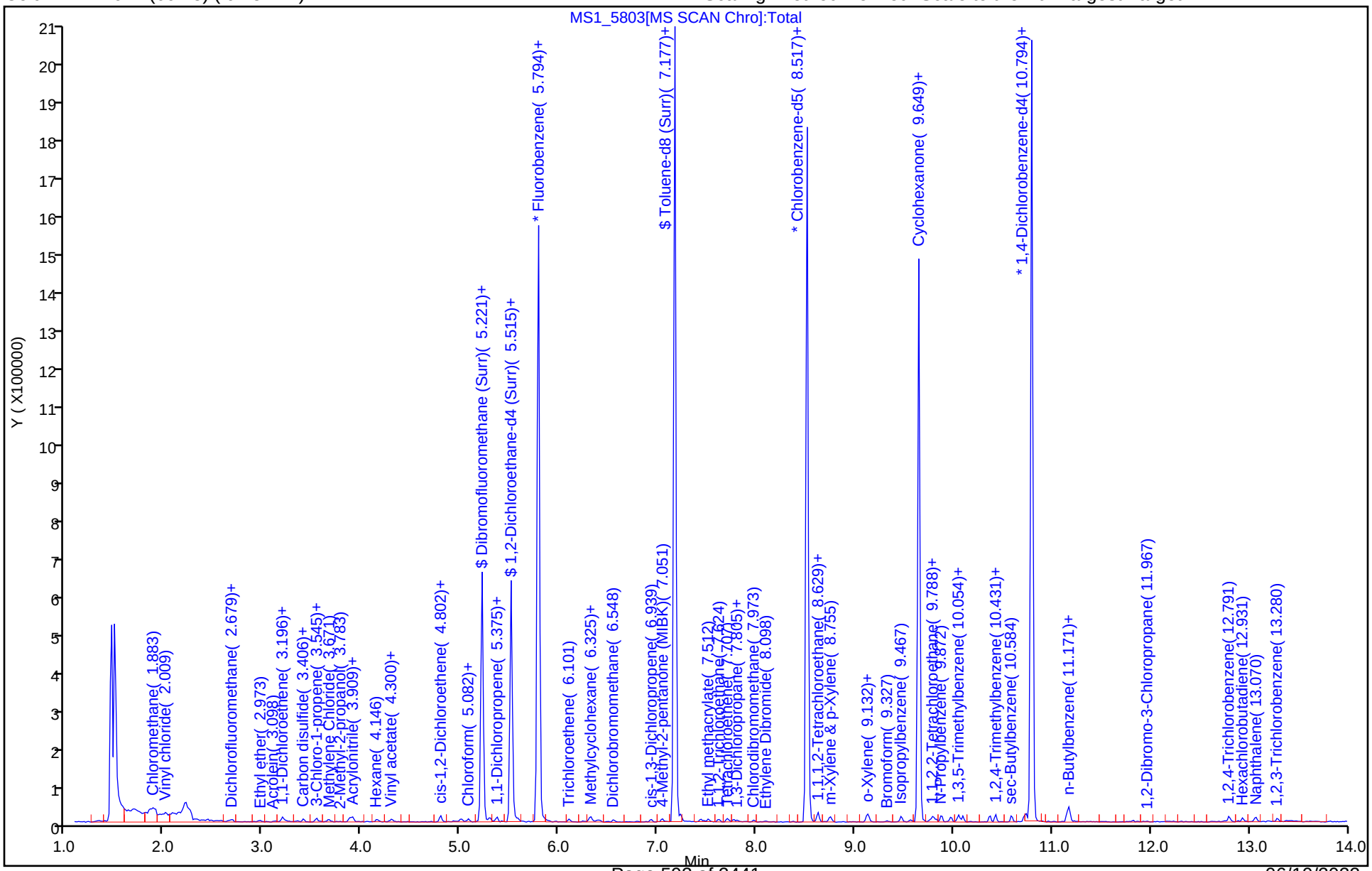
Report Date: 05-May-2022 19:53:23 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5803.D

Injection Date:	05-May-2022 14:42:30	Instrument ID:	VMS_MS1	Operator ID:	SUNLEEC
Lims ID:	IC			Worklist Smp#:	35
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



Manual Integration/User Assign Peak Report

Eurofins Denver

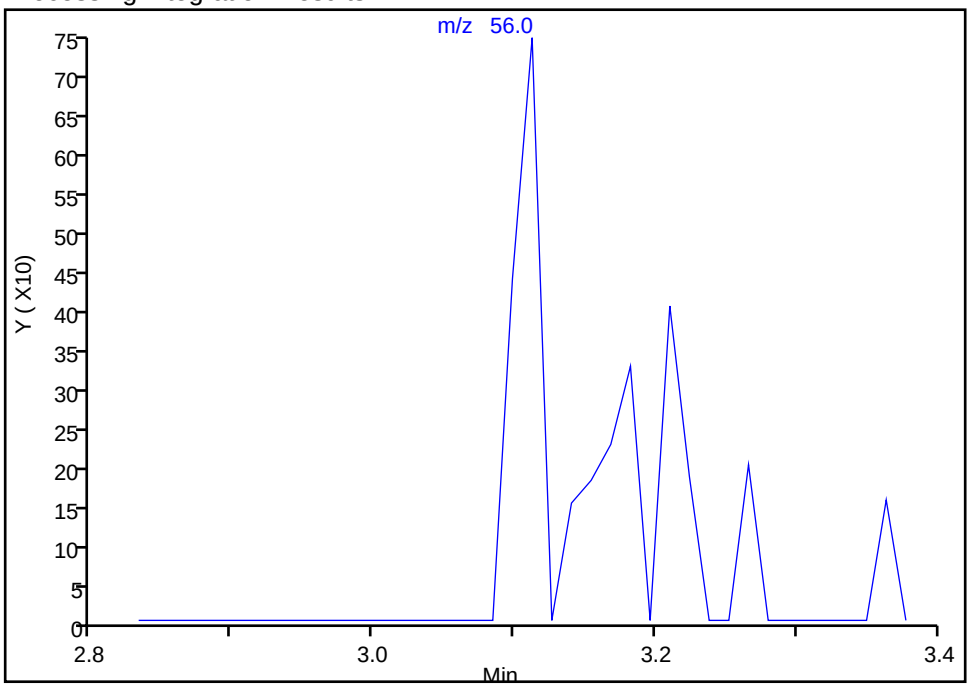
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5803.D
Injection Date: 05-May-2022 14:42:30 Instrument ID: VMS_MS1
Lims ID: IC
Client ID:
Operator ID: SUNLEEC ALS Bottle#: 1 Worklist Smp#: 35
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

22 Acrolein, CAS: 107-02-8

Signal: 1

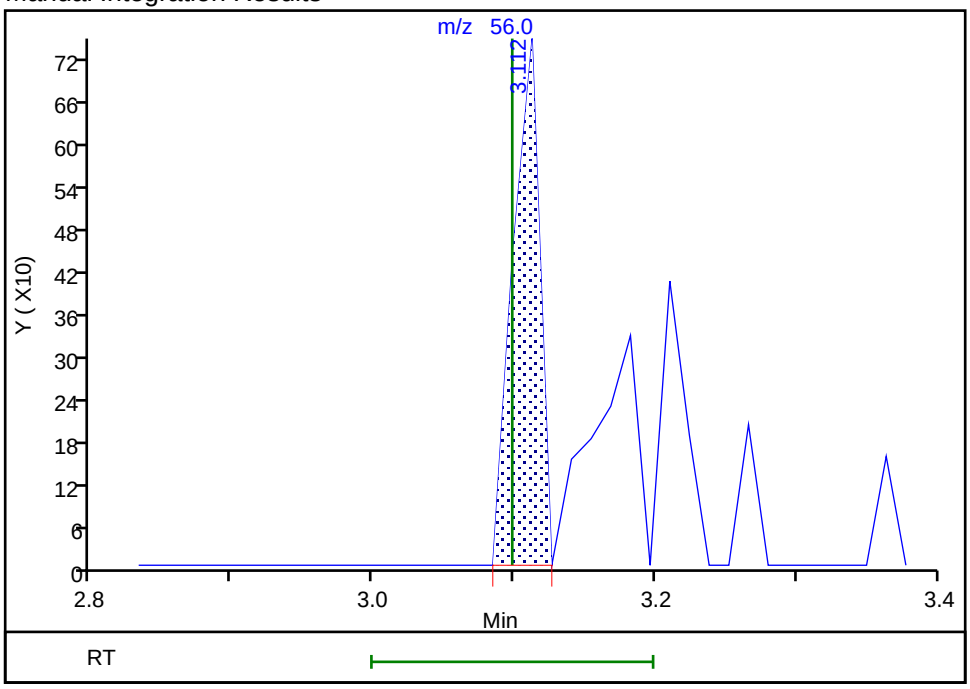
Not Detected
Expected RT: 3.10

Processing Integration Results



Manual Integration Results

RT: 3.11
Area: 991
Amount: 3.419304
Amount Units: ug/l



Reviewer: peppinga, 05-May-2022 18:12:57
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins Denver

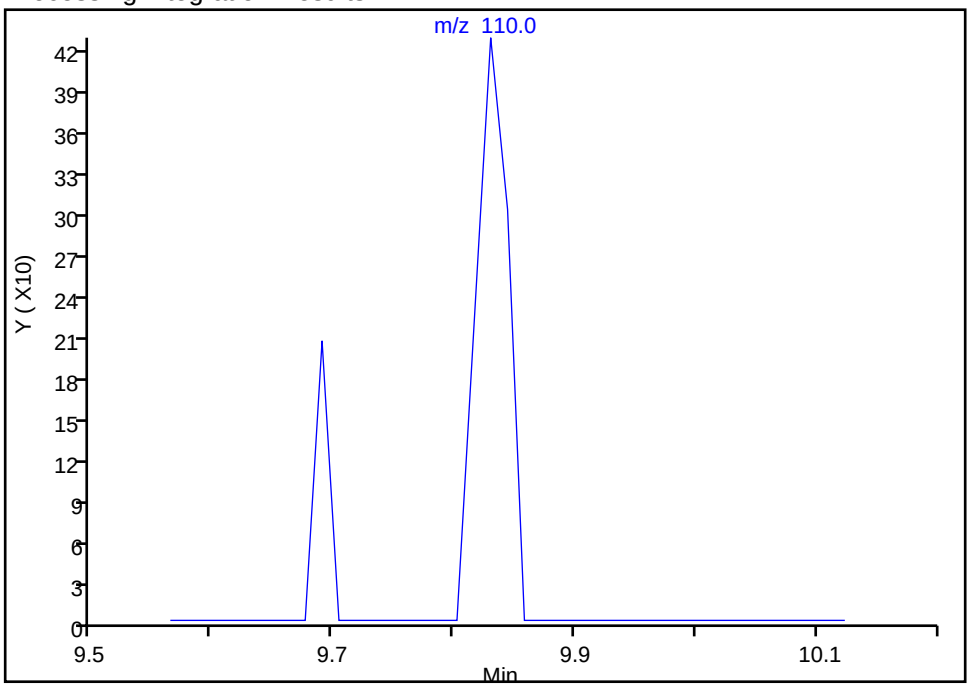
Data File:	\\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5803.D				
Injection Date:	05-May-2022 14:42:30	Instrument ID:	VMS_MS1		
Lims ID:	IC				
Client ID:					
Operator ID:	SUNLEEC	ALS Bottle#:	1	Worklist Smp#:	35
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMS1_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

113 1,2,3-Trichloropropane, CAS: 96-18-4

Signal: 1

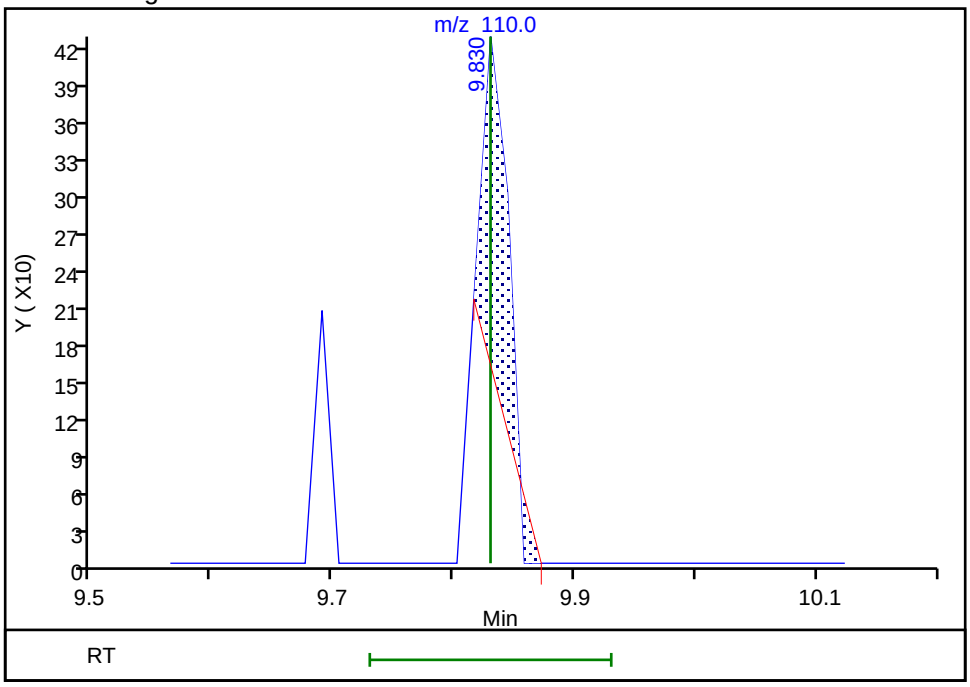
Not Detected
Expected RT: 9.83

Processing Integration Results



Manual Integration Results

RT: 9.83
Area: 336
Amount: 0.215296
Amount Units: ug/l



Reviewer: peppinga, 05-May-2022 18:15:42
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins Denver

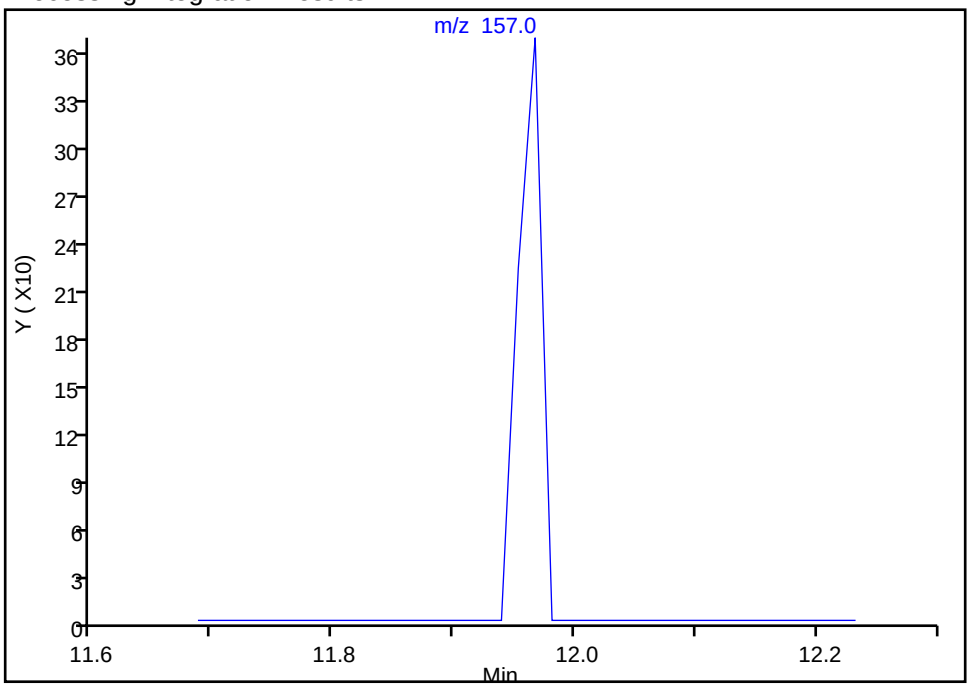
Data File:	\\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5803.D				
Injection Date:	05-May-2022 14:42:30	Instrument ID:	VMS_MS1		
Lims ID:	IC				
Client ID:					
Operator ID:	SUNLEEC	ALS Bottle#:	1	Worklist Smp#:	35
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	AQ_VMS1_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

128 1,2-Dibromo-3-Chloropropane, CAS: 96-12-8

Signal: 1

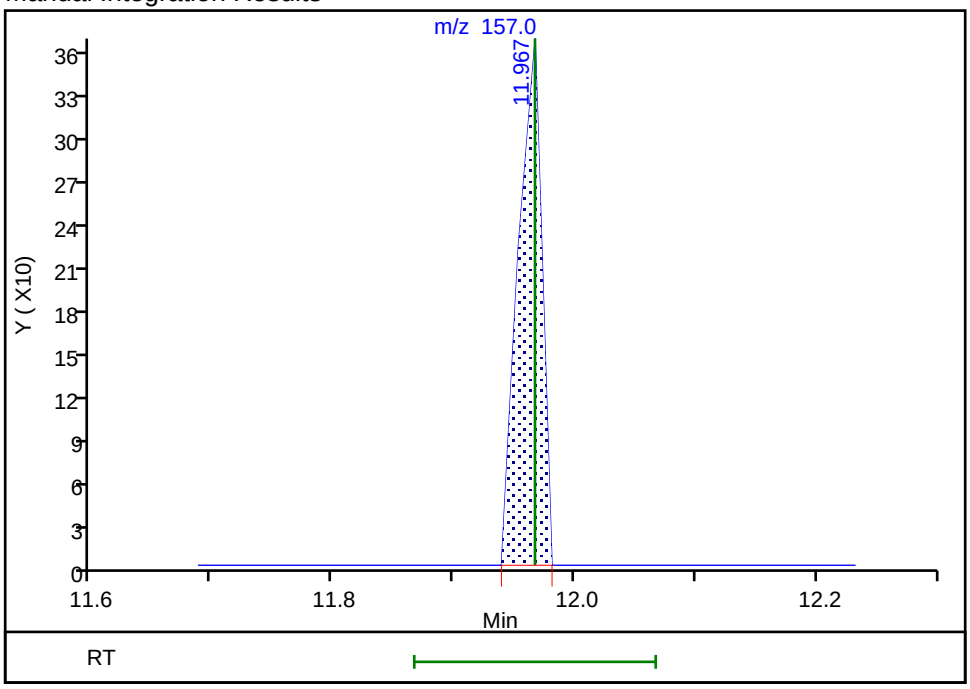
Processing Integration Results

Not Detected
Expected RT: 11.97



Manual Integration Results

RT: 11.97
Area: 496
Amount: 0.482892
Amount Units: ug/l



Reviewer: peppinga, 05-May-2022 18:16:10
Audit Action: Manually Integrated Audit Reason: Assign Peak

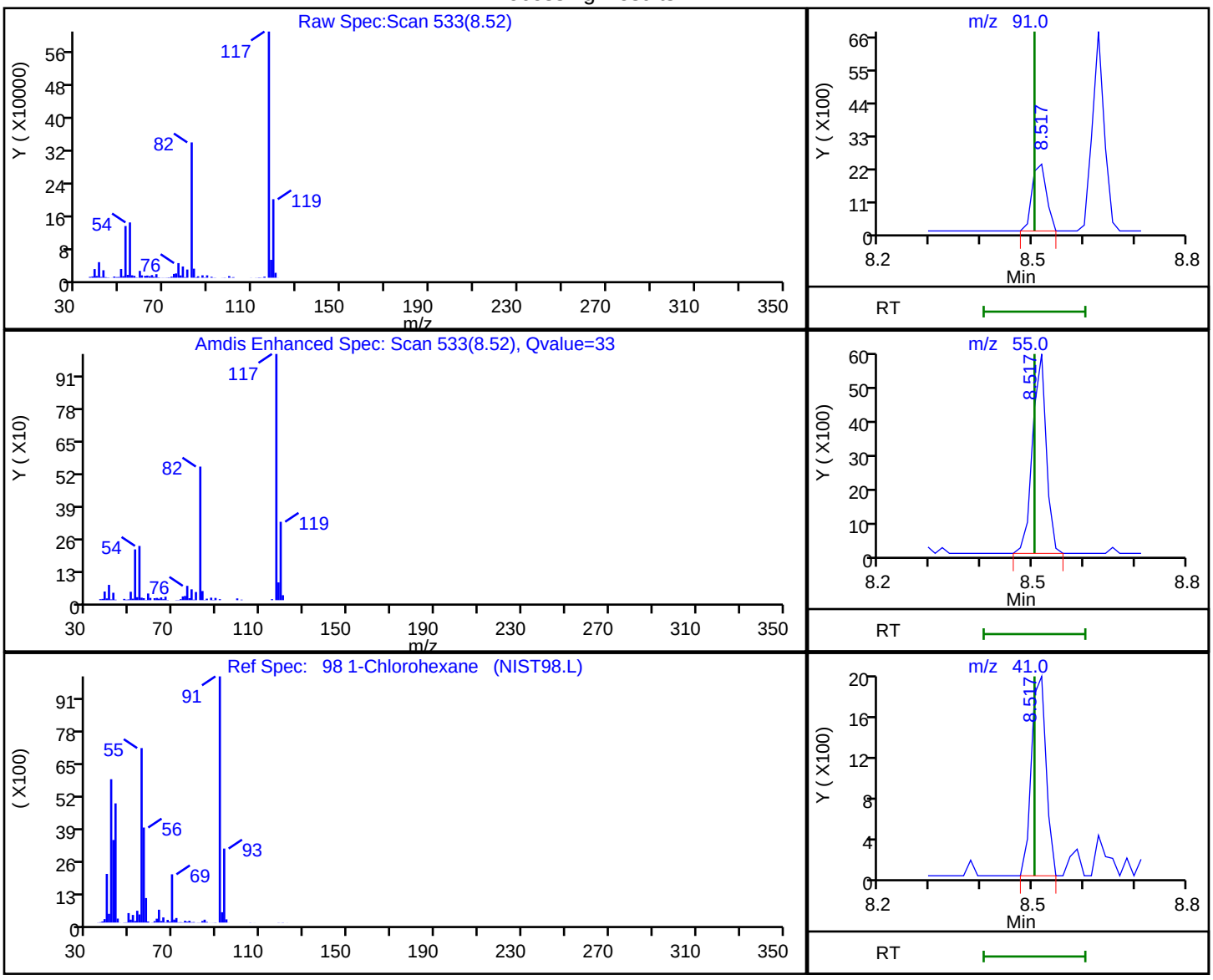
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5803.D				
Injection Date:	05-May-2022 14:42:30	Instrument ID:	VMS_MS1		
Lims ID:	IC				
Client ID:					
Operator ID:	SUNLEEC	ALS Bottle#:	1	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		

98 1-Chlorohexane, CAS: 544-10-5

Processing Results



RT	Mass	Response	Amount
8.52	91.00	4454	0.560937
8.52	55.00	11077	
8.52	41.00	3950	

Reviewer: peppinga, 05-May-2022 18:15:05

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

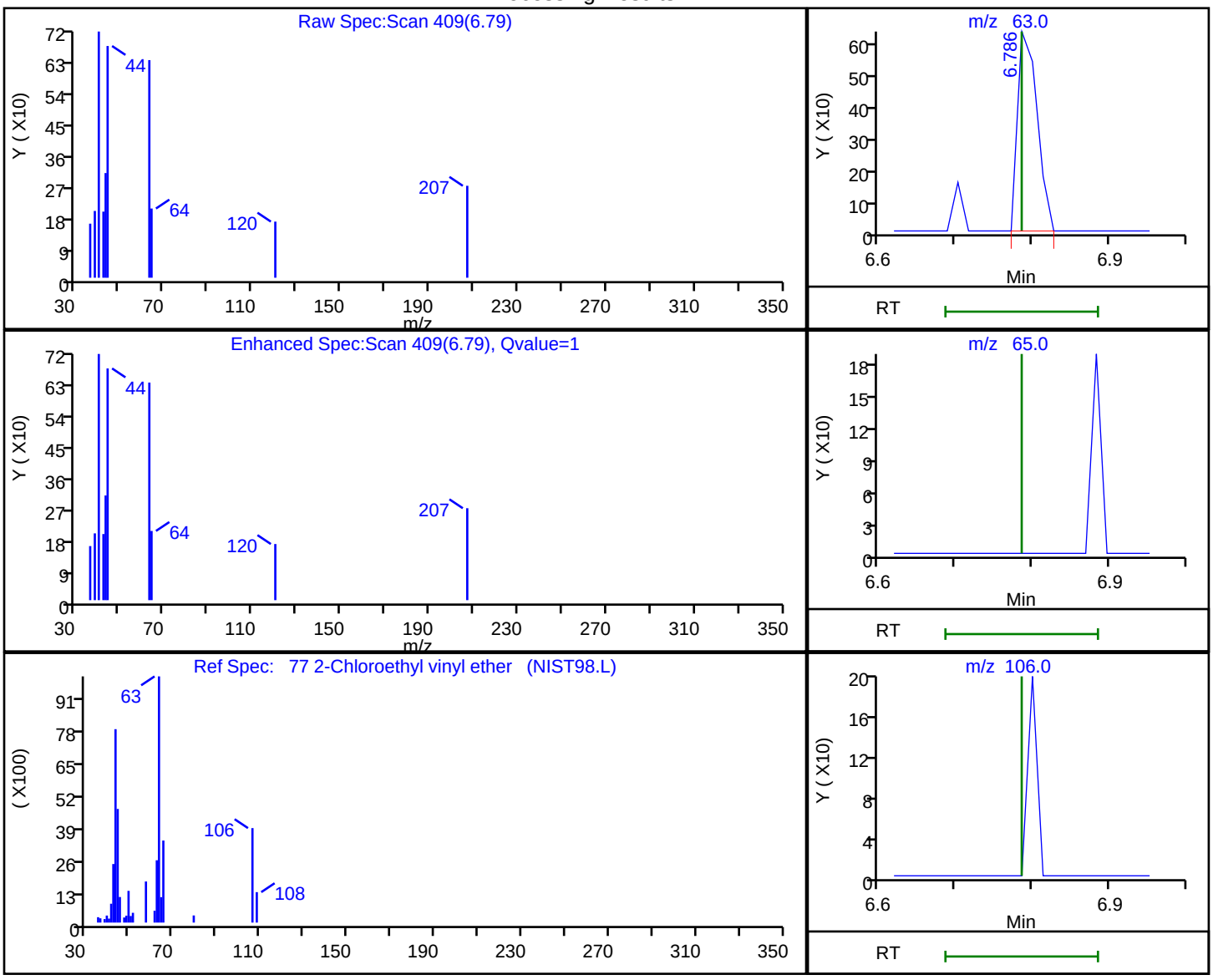
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5803.D				
Injection Date:	05-May-2022 14:42:30	Instrument ID:	VMS_MS1		
Lims ID:	IC				
Client ID:					
Operator ID:	SUNLEEC	ALS Bottle#:	1	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		

77 2-Chloroethyl vinyl ether, CAS: 110-75-8

Processing Results



RT	Mass	Response	Amount
6.79	63.00	1125	0.508350
6.79	65.00	0	
6.79	106.00	0	

Reviewer: peppinga, 05-May-2022 18:14:33

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5804.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 05-May-2022 15:04:30 ALS Bottle#: 2 Worklist Smp#: 36
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Operator ID: SUNLEEC Instrument ID: VMS_MS1
Sublist: chrom-AQ_VMS1_8260*sub164

Method: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-May-2022 19:53:24 Calib Date: 05-May-2022 17:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5811.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1632

First Level Reviewer: peppinga Date: 05-May-2022 18:18:38

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.794	5.794	0.000	98	1203211	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.517	8.517	0.000	86	299155	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.794	10.794	0.000	95	524280	50.0	50.0	
$ 5 Dibromofluoromethane (Surr)	111	5.221	5.221	0.000	93	337343	50.0	52.6	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.514	5.514	0.000	0	381941	50.0	51.5	
$ 7 Toluene-d8 (Surr)	98	7.176	7.176	0.000	93	1203666	50.0	49.3	
$ 8 4-Bromofluorobenzene (Surr)	95	9.649	9.648	0.000	90	438048	50.0	47.5	
11 Dichlorodifluoromethane	85	1.674	1.674	0.000	96	4861	1.00	0.9872	
12 Chloromethane	50	1.883	1.869	0.014	95	4379	1.00	0.9373	
13 Vinyl chloride	62	1.967	1.967	0.000	97	5107	1.00	1.14	
15 Bromomethane	94	2.316	2.316	0.000	84	2860	1.00	1.04	
16 Chloroethane	64	2.428	2.428	0.000	73	2949	1.00	1.04	
17 Dichlorofluoromethane	67	2.651	2.651	0.000	94	7302	1.00	0.9420	
18 Trichlorofluoromethane	101	2.693	2.693	0.000	96	6404	1.00	0.9437	
20 Ethyl ether	59	2.973	2.959	0.014	90	4031	1.00	1.22	
22 Acrolein	56	3.098	3.098	0.000	88	2241	7.90	8.07	
23 1,1-Dichloroethene	96	3.196	3.196	0.000	93	4674	1.00	1.22	
24 112TCTFE	151	3.210	3.210	0.000	71	3522	1.00	1.16	
25 Acetone	43	3.238	3.224	0.014	97	5181	4.00	4.58	
26 Iodomethane	142	3.336	3.350	-0.014	92	4756	1.00	1.32	
28 Carbon disulfide	76	3.406	3.406	0.000	98	14657	1.00	1.19	
30 Methyl acetate	43	3.531	3.531	0.000	56	4016	2.00	1.59	
31 3-Chloro-1-propene	41	3.531	3.545	-0.014	88	8731	1.00	1.26	
32 Methylene Chloride	84	3.671	3.671	0.000	96	5758	1.00	1.18	
33 2-Methyl-2-propanol	59	3.755	3.741	0.014	53	2244	10.0	10.7	
34 Acrylonitrile	53	3.880	3.866	0.014	97	14477	10.0	10.0	
35 Methyl tert-butyl ether	73	3.894	3.894	0.000	93	8734	1.00	0.8913	
36 trans-1,2-Dichloroethene	96	3.908	3.908	0.000	95	4575	1.00	1.09	
37 Hexane	57	4.160	4.160	0.000	94	5275	1.00	1.10	
39 Vinyl acetate	43	4.299	4.285	0.014	77	10713	2.00	1.95	
40 1,1-Dichloroethane	63	4.299	4.299	0.000	96	9949	1.00	1.24	

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	4.788	4.774	0.014	57	5336	4.00	3.58	
48 cis-1,2-Dichloroethene	96	4.802	4.802	0.000	83	5019	1.00	1.12	
49 2,2-Dichloropropane	77	4.802	4.802	0.000	70	5971	1.00	1.04	
51 sec-Butyl Alcohol	45	4.928	4.928	0.000	73	3488	24.0	49.7	
53 Chlorobromomethane	128	5.012	4.998	0.014	91	2571	1.00	1.06	
54 Tetrahydrofuran	42	5.012	5.012	0.000	61	2595	2.00	2.38	
55 Chloroform	83	5.082	5.082	0.000	92	8100	1.00	1.04	
56 1,1,1-Trichloroethane	97	5.235	5.235	0.000	96	6394	1.00	0.99	
57 Cyclohexane	56	5.305	5.305	0.000	92	7824	1.00	1.08	
58 1,1-Dichloropropene	75	5.375	5.375	0.000	89	5552	1.00	0.9867	
59 Carbon tetrachloride	117	5.375	5.375	0.000	90	5312	1.00	1.04	
60 Isobutyl alcohol	41	5.431	5.417	0.014	44	1016	25.0	29.9	
63 Benzene	78	5.542	5.542	0.000	97	17426	1.00	1.05	
64 1,2-Dichloroethane	62	5.584	5.584	0.000	96	7775	1.00	1.18	
66 n-Heptane	43	5.766	5.766	0.000	84	6752	1.00	1.29	
68 Trichloroethene	95	6.101	6.101	0.000	85	3334	1.00	0.9202	
69 2-Pentanone	43	6.241	6.227	0.014	96	5747	3.20	4.41	
70 Methylcyclohexane	55	6.311	6.311	0.000	87	4844	1.00	0.9490	
71 1,2-Dichloropropane	63	6.325	6.325	0.000	88	4560	1.00	1.07	
73 1,4-Dioxane	88	6.380	6.380	0.000	40	1419	20.0	26.9	
74 Dibromomethane	93	6.408	6.408	0.000	92	3019	1.00	1.08	
75 Dichlorobromomethane	83	6.548	6.548	0.000	94	6345	1.00	1.10	
77 2-Chloroethyl vinyl ether	63	6.785	6.785	0.000	83	1750	1.00	0.8269	
78 cis-1,3-Dichloropropene	75	6.939	6.925	0.014	87	4813	1.00	0.9647	
79 4-Methyl-2-pentanone (MIBK)	43	7.051	7.037	0.014	95	11558	4.00	3.86	
82 Toluene	91	7.232	7.232	0.000	98	18889	1.00	1.09	
84 trans-1,3-Dichloropropene	75	7.442	7.428	0.014	95	5012	1.00	0.9217	
85 Ethyl methacrylate	69	7.470	7.470	0.000	81	4036	1.00	0.9461	
87 1,1,2-Trichloroethane	97	7.623	7.609	0.014	88	3648	1.00	1.06	
89 Tetrachloroethene	164	7.707	7.707	0.000	93	4567	1.00	1.22	
90 1,3-Dichloropropane	76	7.763	7.763	0.000	89	6586	1.00	1.02	
91 2-Hexanone	43	7.805	7.791	0.014	92	8060	4.00	3.58	
95 Chlorodibromomethane	129	7.973	7.973	0.000	85	3986	1.00	0.9819	
96 Ethylene Dibromide	107	8.084	8.084	0.000	91	3901	1.00	1.02	
98 1-Chlorohexane	91	8.503	8.503	0.000	33	6100	0.8000	1.05	
99 Chlorobenzene	112	8.545	8.545	0.000	93	13242	1.00	1.08	
100 1,1,1,2-Tetrachloroethane	131	8.629	8.615	0.014	43	3933	1.00	1.00	
101 Ethylbenzene	106	8.629	8.629	0.000	99	6934	1.00	1.06	
102 m-Xylene & p-Xylene	106	8.755	8.741	0.014	0	9092	1.00	1.11	
103 o-Xylene	106	9.118	9.118	0.000	96	8139	1.00	1.05	
104 Styrene	104	9.132	9.132	0.000	94	13281	1.00	1.00	
106 Bromoform	173	9.327	9.327	0.000	89	2110	1.00	0.8226	
107 Isopropylbenzene	105	9.467	9.467	0.000	95	21155	1.00	1.04	
109 Cyclohexanone	55	9.565	9.565	0.000	85	4112	30.0	30.5	
110 1,1,2,2-Tetrachloroethane	83	9.760	9.760	0.000	93	5297	1.00	1.08	
111 Bromobenzene	156	9.802	9.788	0.014	94	5347	1.00	0.9592	
112 trans-1,4-Dichloro-2-butene	53	9.802	9.802	0.000	59	1569	1.00	1.10	
113 1,2,3-Trichloropropane	110	9.830	9.830	0.000	82	1672	1.00	1.09	
114 N-Propylbenzene	120	9.886	9.872	0.014	99	5429	1.00	0.9558	
115 2-Chlorotoluene	126	9.970	9.970	0.000	94	5005	1.00	0.9863	
116 1,3,5-Trimethylbenzene	105	10.054	10.054	0.000	95	19000	1.00	1.08	
117 4-Chlorotoluene	126	10.095	10.095	0.000	96	6274	1.00	1.18	

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	10.361	10.361	0.000	92	15368	1.00	1.03	
119 1,2,4-Trimethylbenzene	105	10.431	10.431	0.000	97	17698	1.00	0.9530	
120 sec-Butylbenzene	134	10.584	10.584	0.000	95	4482	1.00	1.03	
121 1,3-Dichlorobenzene	146	10.724	10.710	0.014	94	9929	1.00	0.9522	
122 4-Isopropyltoluene	119	10.738	10.738	0.000	97	18855	1.00	0.9877	
123 1,4-Dichlorobenzene	146	10.822	10.822	0.000	90	12942	1.00	1.17	
125 n-Butylbenzene	91	11.157	11.143	0.014	96	17738	1.00	1.06	
127 1,2-Dichlorobenzene	146	11.171	11.171	0.000	94	11415	1.00	1.12	
128 1,2-Dibromo-3-Chloropropane	157	11.981	11.967	0.014	70	1123	1.00	1.12	
130 1,2,4-Trichlorobenzene	180	12.791	12.791	0.000	92	6467	1.00	1.03	
131 Hexachlorobutadiene	225	12.945	12.931	0.014	89	2609	1.00	1.33	
132 Naphthalene	128	13.056	13.056	0.000	97	13157	1.00	1.03	
134 1,2,3-Trichlorobenzene	180	13.294	13.280	0.014	93	5486	1.00	1.06	
S 149 1,2-Dichloroethene, Total (URS)	96				0		2.00	2.21	
S 156 1,3-Dichloropropene, Total	1				0		2.00	1.89	
S 155 Xylenes, Total	106				0		2.00	2.17	
S 153 Xylenes, Total (URS)	1				0		2.00	2.17	
S 152 Total BTEX	1				0			5.36	
S 151 Trihalomethanes, Total	1				0		4.00	3.95	
S 150 1,2-Dichloroethene, Total	1				0		2.00	2.21	

QC Flag Legend

Processing Flags

Reagents:

Cal Std 5ppm_00012	Amount Added: 10.00	Units: uL	
mv-IS_SS_00038	Amount Added: 5.00	Units: uL	Run Reagent

Report Date: 05-May-2022 19:53:24 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5804.D

Injection Date:	05-May-2022 15:04:30	Instrument ID:	VMS_MS1	Operator ID:	SUNLEEC
Lims ID:	IC			Worklist Smp#:	36
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



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5805.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 05-May-2022 15:25:30 ALS Bottle#: 3 Worklist Smp#: 37
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Operator ID: SUNLEEC Instrument ID: VMS_MS1
Sublist: chrom-AQ_VMS1_8260*sub164

Method: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-May-2022 19:53:25 Calib Date: 05-May-2022 17:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5811.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1632

First Level Reviewer: peppinga Date: 05-May-2022 18:19:42

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.794	5.794	0.000	99	1234418	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.517	8.517	0.000	96	305368	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.794	10.794	0.000	95	523499	50.0	50.0	
$ 5 Dibromofluoromethane (Surr)	111	5.221	5.221	0.000	93	340817	50.0	51.8	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.515	5.514	0.001	0	385981	50.0	50.8	
$ 7 Toluene-d8 (Surr)	98	7.177	7.176	0.001	94	1217850	50.0	48.9	
$ 8 4-Bromofluorobenzene (Surr)	95	9.649	9.648	0.001	89	463471	50.0	50.3	
11 Dichlorodifluoromethane	85	1.674	1.674	0.000	96	8734	2.00	1.73	
12 Chloromethane	50	1.869	1.869	0.000	98	8390	2.00	1.75	
13 Vinyl chloride	62	1.967	1.967	0.000	96	7400	2.00	1.61	
15 Bromomethane	94	2.316	2.316	0.000	83	4222	2.00	1.49	
16 Chloroethane	64	2.428	2.428	0.000	96	4918	2.00	1.69	
17 Dichlorofluoromethane	67	2.652	2.651	0.001	96	16023	2.00	2.01	
18 Trichlorofluoromethane	101	2.694	2.693	0.001	95	11538	2.00	1.66	
20 Ethyl ether	59	2.959	2.959	0.000	89	6023	2.00	1.78	
22 Acrolein	56	3.099	3.098	0.001	98	3942	15.8	13.8	
23 1,1-Dichloroethene	96	3.196	3.196	0.000	96	7457	2.00	1.94	
24 112TCTFE	151	3.196	3.210	-0.014	93	5883	2.00	1.93	
25 Acetone	43	3.238	3.224	0.014	95	9886	8.00	8.52	
26 Iodomethane	142	3.350	3.350	0.000	99	9514	2.00	2.06	
28 Carbon disulfide	76	3.406	3.406	0.000	99	26848	2.00	2.12	
30 Methyl acetate	43	3.531	3.531	0.000	65	9840	4.00	3.79	
31 3-Chloro-1-propene	41	3.545	3.545	0.000	87	14925	2.00	2.11	
32 Methylene Chloride	84	3.657	3.671	-0.014	97	10690	2.00	2.13	
33 2-Methyl-2-propanol	59	3.741	3.741	0.000	98	3780	20.0	15.8	
34 Acrylonitrile	53	3.867	3.866	0.001	99	27827	20.0	18.8	
35 Methyl tert-butyl ether	73	3.895	3.894	0.001	99	17781	2.00	1.77	
36 trans-1,2-Dichloroethene	96	3.909	3.908	0.001	94	8246	2.00	1.92	
37 Hexane	57	4.160	4.160	0.000	90	10645	2.00	1.95	
39 Vinyl acetate	43	4.300	4.285	0.015	94	22270	4.00	3.96	
40 1,1-Dichloroethane	63	4.300	4.299	0.001	97	16575	2.00	2.01	

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	4.788	4.774	0.014	59	10455	8.00	6.84	
48 cis-1,2-Dichloroethene	96	4.802	4.802	0.000	86	8759	2.00	1.90	
49 2,2-Dichloropropane	77	4.802	4.802	0.000	70	11043	2.00	1.88	
51 sec-Butyl Alcohol	45	4.928	4.928	0.000	97	6608	48.0	62.3	
53 Chlorobromomethane	128	5.012	4.998	0.014	93	5092	2.00	2.04	
54 Tetrahydrofuran	42	5.012	5.012	0.000	70	3302	4.00	2.95	
55 Chloroform	83	5.082	5.082	0.000	95	16453	2.00	2.07	
56 1,1,1-Trichloroethane	97	5.235	5.235	0.000	97	12408	2.00	1.88	
57 Cyclohexane	56	5.291	5.305	-0.014	93	14024	2.00	1.89	
58 1,1-Dichloropropene	75	5.361	5.375	-0.014	89	10788	2.00	1.87	
59 Carbon tetrachloride	117	5.375	5.375	0.000	94	10368	2.00	1.98	
60 Isobutyl alcohol	41	5.417	5.417	0.000	80	3880	50.0	57.9	
63 Benzene	78	5.543	5.542	0.001	95	32912	2.00	1.93	
64 1,2-Dichloroethane	62	5.585	5.584	0.001	96	14080	2.00	2.07	
66 n-Heptane	43	5.766	5.766	0.000	77	10186	2.00	1.93	
68 Trichloroethene	95	6.101	6.101	0.000	96	8479	2.00	1.95	
69 2-Pentanone	43	6.227	6.227	0.000	98	11966	6.40	6.66	
70 Methylcyclohexane	55	6.311	6.311	0.000	90	9541	2.00	1.82	
71 1,2-Dichloropropane	63	6.325	6.325	0.000	87	8338	2.00	1.90	
73 1,4-Dioxane	88	6.395	6.380	0.015	1	1773	40.0	33.0	
74 Dibromomethane	93	6.409	6.408	0.001	94	6598	2.00	2.31	
75 Dichlorobromomethane	83	6.548	6.548	0.000	98	11271	2.00	1.91	
77 2-Chloroethyl vinyl ether	63	6.786	6.785	0.001	90	4075	2.00	1.88	
78 cis-1,3-Dichloropropene	75	6.939	6.925	0.014	93	11628	2.00	1.87	
79 4-Methyl-2-pentanone (MIBK)	43	7.051	7.037	0.014	98	22174	8.00	7.21	
82 Toluene	91	7.233	7.232	0.001	98	36346	2.00	2.05	
84 trans-1,3-Dichloropropene	75	7.428	7.428	0.000	96	9728	2.00	1.74	
85 Ethyl methacrylate	69	7.470	7.470	0.000	84	7565	2.00	1.74	
87 1,1,2-Trichloroethane	97	7.624	7.609	0.015	92	6886	2.00	1.95	
89 Tetrachloroethene	164	7.707	7.707	0.000	94	7424	2.00	1.97	
90 1,3-Dichloropropane	76	7.777	7.763	0.014	92	12073	2.00	1.83	
91 2-Hexanone	43	7.805	7.791	0.014	95	16699	8.00	7.27	
95 Chlorodibromomethane	129	7.973	7.973	0.000	94	6963	2.00	1.68	
96 Ethylene Dibromide	107	8.098	8.084	0.014	92	6792	2.00	1.73	
98 1-Chlorohexane	91	8.503	8.503	0.000	60	9451	1.60	1.60	
99 Chlorobenzene	112	8.545	8.545	0.000	97	24672	2.00	1.97	
100 1,1,1,2-Tetrachloroethane	131	8.615	8.615	0.000	85	8271	2.00	2.05	
101 Ethylbenzene	106	8.629	8.629	0.000	98	12966	2.00	1.93	
102 m-Xylene & p-Xylene	106	8.755	8.741	0.014	0	15798	2.00	1.90	
103 o-Xylene	106	9.118	9.118	0.000	96	16462	2.00	2.08	
104 Styrene	104	9.132	9.132	0.000	94	27274	2.00	2.01	
106 Bromoform	173	9.327	9.327	0.000	92	4932	2.00	1.88	
107 Isopropylbenzene	105	9.467	9.467	0.000	95	41104	2.00	2.02	
109 Cyclohexanone	55	9.565	9.565	0.000	97	7325	60.0	53.2	
110 1,1,2,2-Tetrachloroethane	83	9.760	9.760	0.000	95	9762	2.00	1.98	
111 Bromobenzene	156	9.788	9.788	0.000	94	11912	2.00	2.14	
112 trans-1,4-Dichloro-2-butene	53	9.802	9.802	0.000	47	2410	2.00	1.68	
113 1,2,3-Trichloropropane	110	9.830	9.830	0.000	81	3242	2.00	2.12	
114 N-Propylbenzene	120	9.872	9.872	0.000	99	11887	2.00	2.10	
115 2-Chlorotoluene	126	9.970	9.970	0.000	97	10719	2.00	2.12	
116 1,3,5-Trimethylbenzene	105	10.054	10.054	0.000	95	33366	2.00	1.89	
117 4-Chlorotoluene	126	10.096	10.095	0.001	96	10879	2.00	2.04	

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	10.375	10.361	0.014	92	28593	2.00	1.93	
119 1,2,4-Trimethylbenzene	105	10.431	10.431	0.000	96	37806	2.00	2.04	
120 sec-Butylbenzene	134	10.584	10.584	0.000	94	8538	2.00	1.97	
121 1,3-Dichlorobenzene	146	10.724	10.710	0.014	97	19763	2.00	1.90	
122 4-Isopropyltoluene	119	10.738	10.738	0.000	97	35354	2.00	1.85	
123 1,4-Dichlorobenzene	146	10.822	10.822	0.000	94	21779	2.00	1.97	
125 n-Butylbenzene	91	11.143	11.143	0.000	98	32131	2.00	1.93	
127 1,2-Dichlorobenzene	146	11.171	11.171	0.000	97	20691	2.00	2.04	
128 1,2-Dibromo-3-Chloropropane	157	11.967	11.967	0.000	85	2121	2.00	2.11	
130 1,2,4-Trichlorobenzene	180	12.791	12.791	0.000	91	12690	2.00	2.02	
131 Hexachlorobutadiene	225	12.931	12.931	0.000	88	4580	2.00	2.16	
132 Naphthalene	128	13.056	13.056	0.000	97	26944	2.00	1.91	
134 1,2,3-Trichlorobenzene	180	13.280	13.280	0.000	92	10319	2.00	1.99	
S 149 1,2-Dichloroethene, Total (URS)	96				0		4.00	3.81	
S 156 1,3-Dichloropropene, Total	1				0		4.00	3.61	
S 155 Xylenes, Total	106				0		4.00	3.98	
S 153 Xylenes, Total (URS)	1				0		4.00	3.98	
S 152 Total BTEX	1				0			9.90	
S 151 Trihalomethanes, Total	1				0		8.00	7.54	
S 150 1,2-Dichloroethene, Total	1				0		4.00	3.81	

QC Flag Legend

Processing Flags

Reagents:

Cal Std 5ppm_00012	Amount Added: 20.00	Units: uL	
mv-IS_SS_00038	Amount Added: 5.00	Units: uL	Run Reagent

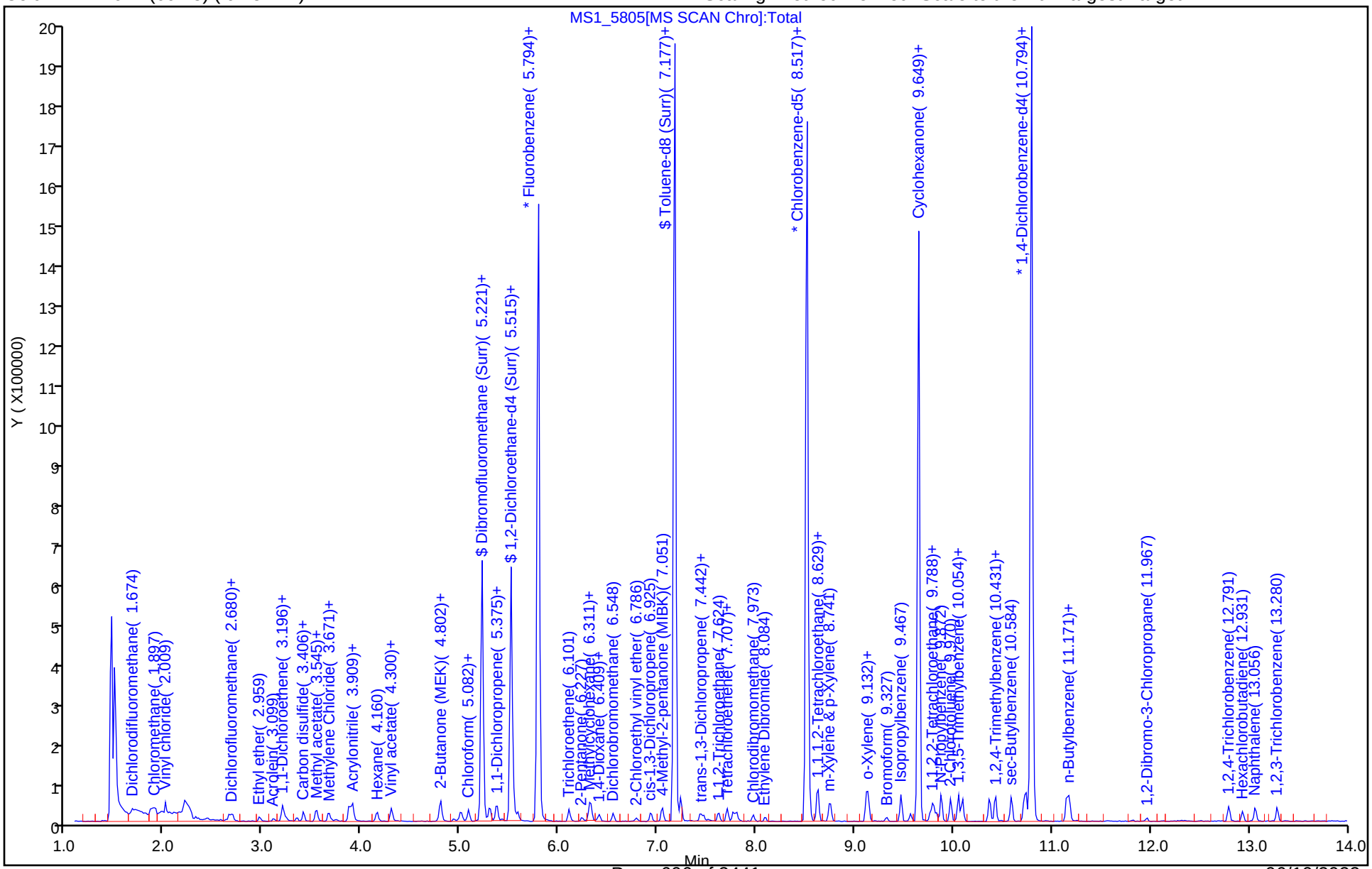
Report Date: 05-May-2022 19:53:26 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5805.D

Injection Date:	05-May-2022 15:25:30	Instrument ID:	VMS_MS1	Operator ID:	SUNLEEC
Lims ID:	IC			Worklist Smp#:	37
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 Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5806.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 05-May-2022 15:46:30 ALS Bottle#: 4 Worklist Smp#: 38
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Operator ID: SUNLEEC Instrument ID: VMS_MS1
Sublist: chrom-AQ_VMS1_8260*sub164

Method: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-May-2022 19:53:27 Calib Date: 05-May-2022 17:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5811.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1632

First Level Reviewer: peppinga Date: 05-May-2022 18:20:41

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.794	5.794	0.000	98	1235070	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.517	8.517	0.000	86	305560	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.794	10.794	0.000	95	529194	50.0	50.0	
$ 5 Dibromofluoromethane (Surr)	111	5.221	5.221	0.000	92	339182	50.0	51.5	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.515	5.514	0.001	0	387859	50.0	51.0	
$ 7 Toluene-d8 (Surr)	98	7.177	7.176	0.001	94	1238965	50.0	49.7	
$ 8 4-Bromofluorobenzene (Surr)	95	9.649	9.648	0.001	89	461084	50.0	49.5	
11 Dichlorodifluoromethane	85	1.674	1.674	0.000	99	32167	5.00	6.36	
12 Chloromethane	50	1.869	1.869	0.000	99	30836	5.00	6.43	
13 Vinyl chloride	62	1.967	1.967	0.000	99	28852	5.00	6.26	
15 Bromomethane	94	2.316	2.316	0.000	89	19099	5.00	6.70	
16 Chloroethane	64	2.428	2.428	0.000	98	17850	5.00	6.12	
17 Dichlorofluoromethane	67	2.652	2.651	0.001	97	49844	5.00	6.26	
18 Trichlorofluoromethane	101	2.693	2.693	0.000	98	43975	5.00	6.31	
20 Ethyl ether	59	2.959	2.959	0.000	93	13457	5.00	3.97	
22 Acrolein	56	3.098	3.098	0.000	93	10456	39.5	36.7	
23 1,1-Dichloroethene	96	3.196	3.196	0.000	98	13902	5.00	3.67	
24 112TCTFE	151	3.210	3.210	0.000	83	10632	5.00	3.52	
25 Acetone	43	3.238	3.224	0.014	98	22855	20.0	19.7	
26 Iodomethane	142	3.350	3.350	0.000	96	21311	5.00	3.93	
28 Carbon disulfide	76	3.406	3.406	0.000	100	46041	5.00	3.63	
30 Methyl acetate	43	3.531	3.531	0.000	99	25668	10.0	9.88	
31 3-Chloro-1-propene	41	3.545	3.545	0.000	88	29211	5.00	4.12	
32 Methylene Chloride	84	3.671	3.671	0.000	96	21604	5.00	4.30	
33 2-Methyl-2-propanol	59	3.741	3.741	0.000	99	10292	50.0	38.1	
34 Acrylonitrile	53	3.867	3.866	0.001	100	70649	50.0	47.7	
35 Methyl tert-butyl ether	73	3.895	3.894	0.001	98	42171	5.00	4.19	
36 trans-1,2-Dichloroethene	96	3.909	3.908	0.001	97	17772	5.00	4.13	
37 Hexane	57	4.160	4.160	0.000	93	18956	5.00	3.30	
39 Vinyl acetate	43	4.300	4.285	0.015	98	44773	10.0	7.95	
40 1,1-Dichloroethane	63	4.300	4.299	0.001	91	33003	5.00	4.00	

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	4.788	4.774	0.014	99	27253	20.0	17.8	
48 cis-1,2-Dichloroethene	96	4.802	4.802	0.000	87	18540	5.00	4.02	
49 2,2-Dichloropropane	77	4.802	4.802	0.000	90	22297	5.00	3.79	
51 sec-Butyl Alcohol	45	4.928	4.928	0.000	97	17615	120.0	108.3	
53 Chlorobromomethane	128	4.998	4.998	0.000	93	10847	5.00	4.34	
54 Tetrahydrofuran	42	5.012	5.012	0.000	92	10420	10.0	9.30	
55 Chloroform	83	5.082	5.082	0.000	95	33284	5.00	4.18	
56 1,1,1-Trichloroethane	97	5.235	5.235	0.000	98	24882	5.00	3.77	
57 Cyclohexane	56	5.291	5.305	-0.014	93	26413	5.00	3.57	
58 1,1-Dichloropropene	75	5.375	5.375	0.000	90	19737	5.00	3.42	
59 Carbon tetrachloride	117	5.375	5.375	0.000	89	18258	5.00	3.49	
60 Isobutyl alcohol	41	5.417	5.417	0.000	95	8778	125.0	106.1	
63 Benzene	78	5.543	5.542	0.001	96	65535	5.00	3.84	
64 1,2-Dichloroethane	62	5.584	5.584	0.000	98	29442	5.00	4.34	
66 n-Heptane	43	5.766	5.766	0.000	83	18054	5.00	3.48	
68 Trichloroethene	95	6.101	6.101	0.000	95	15766	5.00	3.43	
69 2-Pentanone	43	6.227	6.227	0.000	98	29205	16.0	13.0	
70 Methylcyclohexane	55	6.311	6.311	0.000	93	18725	5.00	3.57	
71 1,2-Dichloropropane	63	6.325	6.325	0.000	88	16695	5.00	3.81	
73 1,4-Dioxane	88	6.381	6.380	0.001	90	4605	100.0	87.8	
74 Dibromomethane	93	6.408	6.408	0.000	88	13355	5.00	4.67	
75 Dichlorobromomethane	83	6.548	6.548	0.000	98	23342	5.00	3.96	
77 2-Chloroethyl vinyl ether	63	6.786	6.785	0.001	93	11067	5.00	5.09	
78 cis-1,3-Dichloropropene	75	6.925	6.925	0.000	93	24687	5.00	3.63	
79 4-Methyl-2-pentanone (MIBK)	43	7.051	7.037	0.014	98	55433	20.0	18.0	
82 Toluene	91	7.232	7.232	0.000	98	71702	5.00	4.05	
84 trans-1,3-Dichloropropene	75	7.428	7.428	0.000	98	22806	5.00	4.09	
85 Ethyl methacrylate	69	7.470	7.470	0.000	88	19396	5.00	4.45	
87 1,1,2-Trichloroethane	97	7.624	7.609	0.015	93	15080	5.00	4.26	
89 Tetrachloroethene	164	7.707	7.707	0.000	93	12823	5.00	3.44	
90 1,3-Dichloropropane	76	7.763	7.763	0.000	93	27669	5.00	4.19	
91 2-Hexanone	43	7.791	7.791	0.000	96	40416	20.0	17.6	
95 Chlorodibromomethane	129	7.973	7.973	0.000	92	16946	5.00	4.09	
96 Ethylene Dibromide	107	8.084	8.084	0.000	99	16084	5.00	4.10	
98 1-Chlorohexane	91	8.503	8.503	0.000	84	16188	4.00	2.73	
99 Chlorobenzene	112	8.545	8.545	0.000	96	51470	5.00	4.10	
100 1,1,1,2-Tetrachloroethane	131	8.615	8.615	0.000	91	14745	5.00	3.66	
101 Ethylbenzene	106	8.629	8.629	0.000	98	26314	5.00	3.92	
102 m-Xylene & p-Xylene	106	8.755	8.741	0.014	0	31512	5.00	3.78	
103 o-Xylene	106	9.118	9.118	0.000	97	30785	5.00	3.90	
104 Styrene	104	9.132	9.132	0.000	93	53697	5.00	3.95	
106 Bromoform	173	9.327	9.327	0.000	94	11187	5.00	4.27	
107 Isopropylbenzene	105	9.467	9.467	0.000	96	75483	5.00	3.66	
109 Cyclohexanone	55	9.565	9.565	0.000	94	16776	150.0	121.8	
110 1,1,2,2-Tetrachloroethane	83	9.760	9.760	0.000	96	21393	5.00	4.30	
111 Bromobenzene	156	9.788	9.788	0.000	97	21680	5.00	3.85	
112 trans-1,4-Dichloro-2-butene	53	9.802	9.802	0.000	75	6189	5.00	4.28	
113 1,2,3-Trichloropropane	110	9.830	9.830	0.000	84	6701	5.00	4.34	
114 N-Propylbenzene	120	9.872	9.872	0.000	99	22710	5.00	3.96	
115 2-Chlorotoluene	126	9.970	9.970	0.000	95	19344	5.00	3.78	
116 1,3,5-Trimethylbenzene	105	10.054	10.054	0.000	92	72514	5.00	4.07	
117 4-Chlorotoluene	126	10.096	10.095	0.001	98	20950	5.00	3.89	

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	10.361	10.361	0.000	94	56678	5.00	3.78	
119 1,2,4-Trimethylbenzene	105	10.431	10.431	0.000	97	73751	5.00	3.93	
120 sec-Butylbenzene	134	10.584	10.584	0.000	95	16752	5.00	3.82	
121 1,3-Dichlorobenzene	146	10.710	10.710	0.000	96	42174	5.00	4.01	
122 4-Isopropyltoluene	119	10.738	10.738	0.000	97	70153	5.00	3.64	
123 1,4-Dichlorobenzene	146	10.822	10.822	0.000	93	45524	5.00	4.07	
125 n-Butylbenzene	91	11.143	11.143	0.000	98	64491	5.00	3.82	
127 1,2-Dichlorobenzene	146	11.171	11.171	0.000	95	44139	5.00	4.30	
128 1,2-Dibromo-3-Chloropropane	157	11.967	11.967	0.000	82	4014	5.00	3.95	
130 1,2,4-Trichlorobenzene	180	12.791	12.791	0.000	92	26413	5.00	4.15	
131 Hexachlorobutadiene	225	12.931	12.931	0.000	87	7177	5.00	3.22	
132 Naphthalene	128	13.056	13.056	0.000	97	60339	5.00	4.02	
134 1,2,3-Trichlorobenzene	180	13.280	13.280	0.000	91	24091	5.00	4.60	
S 149 1,2-Dichloroethene, Total (URS)	96				0		10.0	8.14	
S 156 1,3-Dichloropropene, Total	1				0		10.0	7.72	
S 155 Xylenes, Total	106				0		10.0	7.67	
S 153 Xylenes, Total (URS)	1				0		10.0	7.67	
S 152 Total BTEX	1				0			19.5	
S 151 Trihalomethanes, Total	1				0		20.0	16.5	
S 150 1,2-Dichloroethene, Total	1				0		10.0	8.14	

QC Flag Legend

Processing Flags

Reagents:

MV-MegaMainA_00070	Amount Added:	2.50	Units: uL	
Acrolein_A_00008	Amount Added:	2.50	Units: uL	
MV-Gas A_00122	Amount Added:	1.00	Units: uL	
mv-IS_SS_00038	Amount Added:	5.00	Units: uL	Run Reagent

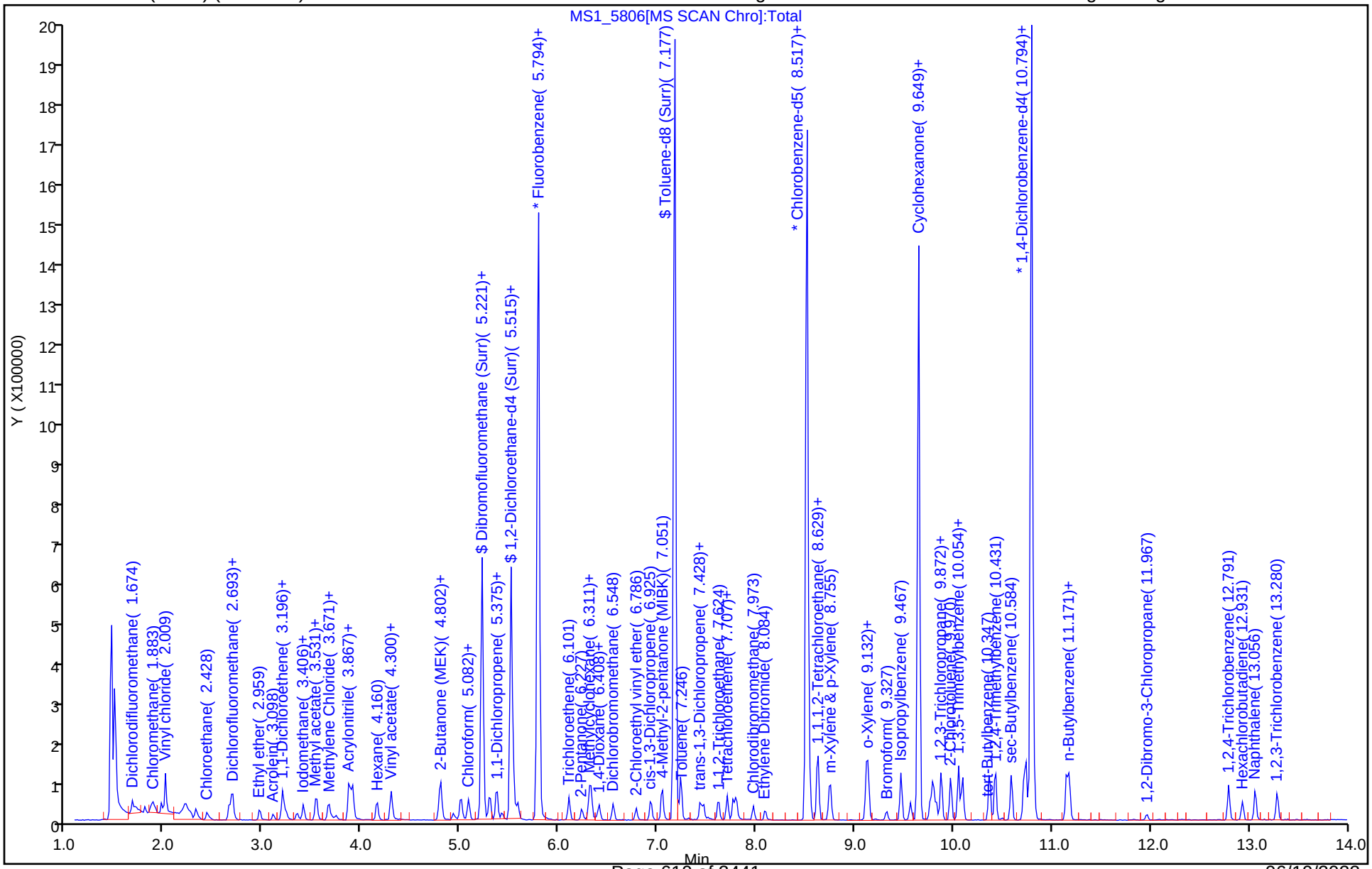
Report Date: 05-May-2022 19:53:27 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5806.D

Injection Date:	05-May-2022 15:46:30	Instrument ID:	VMS_MS1	Operator ID:	SUNLEEC
Lims ID:	IC			Worklist Smp#:	38
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 Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5807.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 05-May-2022 16:07:30 ALS Bottle#: 5 Worklist Smp#: 39
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 10
Operator ID: SUNLEEC Instrument ID: VMS_MS1
Sublist: chrom-AQ_VMS1_8260*sub164

Method: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-May-2022 19:53:28 Calib Date: 05-May-2022 17:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5811.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1632

First Level Reviewer: peppinga Date: 05-May-2022 18:21:40

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.794	5.794	0.000	99	1271528	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.517	8.517	0.000	87	306617	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.794	10.794	0.000	95	531986	50.0	50.0	
$ 5 Dibromofluoromethane (Surr)	111	5.221	5.221	0.000	93	338658	50.0	49.9	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.515	5.514	0.001	0	390049	50.0	49.8	
$ 7 Toluene-d8 (Surr)	98	7.177	7.176	0.001	93	1252216	50.0	50.1	
$ 8 4-Bromofluorobenzene (Surr)	95	9.649	9.648	0.001	88	472833	50.0	50.5	
11 Dichlorodifluoromethane	85	1.674	1.674	0.000	100	51286	10.0	9.86	
12 Chloromethane	50	1.869	1.869	0.000	98	46570	10.0	9.43	
13 Vinyl chloride	62	1.967	1.967	0.000	98	47168	10.0	9.95	
15 Bromomethane	94	2.316	2.316	0.000	93	27708	10.0	9.44	
16 Chloroethane	64	2.428	2.428	0.000	97	27384	10.0	9.13	
17 Dichlorofluoromethane	67	2.651	2.651	0.000	96	79957	10.0	9.76	
18 Trichlorofluoromethane	101	2.679	2.693	-0.014	97	69490	10.0	9.69	
20 Ethyl ether	59	2.959	2.959	0.000	95	33043	10.0	9.47	
22 Acrolein	56	3.098	3.098	0.000	97	23907	79.0	81.5	
23 1,1-Dichloroethene	96	3.196	3.196	0.000	95	34211	10.0	8.86	
24 112TCTFE	151	3.210	3.210	0.000	95	27520	10.0	8.94	
25 Acetone	43	3.224	3.224	0.000	98	51302	40.0	42.9	
26 Iodomethane	142	3.350	3.350	0.000	98	51049	10.0	8.42	
28 Carbon disulfide	76	3.406	3.406	0.000	100	135578	10.0	10.4	
30 Methyl acetate	43	3.531	3.531	0.000	97	47265	20.0	17.7	
31 3-Chloro-1-propene	41	3.545	3.545	0.000	89	72432	10.0	9.93	
32 Methylene Chloride	84	3.671	3.671	0.000	93	51176	10.0	9.89	
33 2-Methyl-2-propanol	59	3.741	3.741	0.000	97	26076	100.0	89.6	
34 Acrylonitrile	53	3.867	3.866	0.001	99	160182	100.0	105.1	
35 Methyl tert-butyl ether	73	3.894	3.894	0.000	97	108355	10.0	10.5	
36 trans-1,2-Dichloroethene	96	3.908	3.908	0.000	97	45070	10.0	10.2	
37 Hexane	57	4.160	4.160	0.000	93	57145	10.0	9.45	
39 Vinyl acetate	43	4.286	4.285	0.001	98	110476	20.0	19.1	

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	4.299	4.299	0.000	98	86530	10.0	10.2	
46 2-Butanone (MEK)	43	4.774	4.774	0.000	100	59930	40.0	38.1	
48 cis-1,2-Dichloroethene	96	4.802	4.802	0.000	84	51700	10.0	10.9	
49 2,2-Dichloropropane	77	4.802	4.802	0.000	91	62997	10.0	10.4	
51 sec-Butyl Alcohol	45	4.928	4.928	0.000	97	39985	240.0	196.9	
53 Chlorobromomethane	128	4.998	4.998	0.000	95	24677	10.0	9.59	
54 Tetrahydrofuran	42	5.012	5.012	0.000	91	23529	20.0	20.4	
55 Chloroform	83	5.082	5.082	0.000	97	85704	10.0	10.4	
56 1,1,1-Trichloroethane	97	5.235	5.235	0.000	97	70011	10.0	10.3	
57 Cyclohexane	56	5.291	5.305	-0.014	94	78255	10.0	10.3	
58 1,1-Dichloropropene	75	5.361	5.375	-0.014	89	58932	10.0	9.91	
59 Carbon tetrachloride	117	5.375	5.375	0.000	94	58218	10.0	10.8	
60 Isobutyl alcohol	41	5.417	5.417	0.000	92	19716	250.0	208.3	
63 Benzene	78	5.542	5.542	0.000	97	182216	10.0	10.4	
64 1,2-Dichloroethane	62	5.584	5.584	0.000	98	67699	10.0	9.68	
66 n-Heptane	43	5.766	5.766	0.000	87	50674	10.0	9.65	
68 Trichloroethene	95	6.101	6.101	0.000	97	48389	10.0	10.0	
69 2-Pentanone	43	6.227	6.227	0.000	99	72003	32.0	28.1	
70 Methylcyclohexane	55	6.311	6.311	0.000	92	54549	10.0	10.1	
71 1,2-Dichloropropane	63	6.325	6.325	0.000	92	47011	10.0	10.4	
73 1,4-Dioxane	88	6.380	6.380	0.000	92	11218	200.0	209.5	
74 Dibromomethane	93	6.408	6.408	0.000	96	29537	10.0	10.0	
75 Dichlorobromomethane	83	6.548	6.548	0.000	98	61285	10.0	10.1	
77 2-Chloroethyl vinyl ether	63	6.785	6.785	0.000	94	21413	10.0	9.57	
78 cis-1,3-Dichloropropene	75	6.925	6.925	0.000	93	65939	10.0	9.16	
79 4-Methyl-2-pentanone (MIBK)	43	7.051	7.037	0.014	98	131268	40.0	41.4	
82 Toluene	91	7.232	7.232	0.000	97	192614	10.0	10.6	
84 trans-1,3-Dichloropropene	75	7.428	7.428	0.000	98	55818	10.0	9.71	
85 Ethyl methacrylate	69	7.470	7.470	0.000	91	45526	10.0	10.4	
87 1,1,2-Trichloroethane	97	7.623	7.609	0.014	91	35008	10.0	9.61	
89 Tetrachloroethene	164	7.707	7.707	0.000	97	35607	10.0	9.61	
90 1,3-Dichloropropane	76	7.763	7.763	0.000	94	65764	10.0	9.92	
91 2-Hexanone	43	7.791	7.791	0.000	96	92832	40.0	40.2	
95 Chlorodibromomethane	129	7.973	7.973	0.000	91	42239	10.0	10.2	
96 Ethylene Dibromide	107	8.084	8.084	0.000	99	40587	10.0	10.3	
98 1-Chlorohexane	91	8.503	8.503	0.000	89	45988	8.00	7.75	
99 Chlorobenzene	112	8.545	8.545	0.000	95	127196	10.0	10.1	
100 1,1,1,2-Tetrachloroethane	131	8.615	8.615	0.000	93	40291	10.0	9.97	
101 Ethylbenzene	106	8.629	8.629	0.000	99	67012	10.0	9.96	
102 m-Xylene & p-Xylene	106	8.755	8.741	0.014	0	85028	10.0	10.2	
103 o-Xylene	106	9.118	9.118	0.000	96	82784	10.0	10.4	
104 Styrene	104	9.132	9.132	0.000	93	144593	10.0	10.6	
106 Bromoform	173	9.327	9.327	0.000	94	26651	10.0	10.1	
107 Isopropylbenzene	105	9.467	9.467	0.000	96	215542	10.0	10.4	
109 Cyclohexanone	55	9.565	9.565	0.000	92	40032	300.0	289.6	
110 1,1,2,2-Tetrachloroethane	83	9.760	9.760	0.000	95	48923	10.0	9.79	
111 Bromobenzene	156	9.788	9.788	0.000	98	57038	10.0	10.1	
112 trans-1,4-Dichloro-2-butene	53	9.802	9.802	0.000	78	14465	10.0	9.95	
113 1,2,3-Trichloropropane	110	9.830	9.830	0.000	87	14991	10.0	9.67	
114 N-Propylbenzene	120	9.872	9.872	0.000	99	60712	10.0	10.5	
115 2-Chlorotoluene	126	9.970	9.970	0.000	95	52039	10.0	10.1	
116 1,3,5-Trimethylbenzene	105	10.054	10.054	0.000	95	185475	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	10.095	10.095	0.000	98	57294	10.0	10.6	
118 tert-Butylbenzene	119	10.361	10.361	0.000	93	153541	10.0	10.2	
119 1,2,4-Trimethylbenzene	105	10.431	10.431	0.000	98	193747	10.0	10.3	
120 sec-Butylbenzene	134	10.584	10.584	0.000	95	46301	10.0	10.5	
121 1,3-Dichlorobenzene	146	10.724	10.710	0.014	98	108502	10.0	10.3	
122 4-Isopropyltoluene	119	10.738	10.738	0.000	97	201040	10.0	10.4	
123 1,4-Dichlorobenzene	146	10.822	10.822	0.000	95	113678	10.0	10.1	
125 n-Butylbenzene	91	11.143	11.143	0.000	98	172395	10.0	10.2	
127 1,2-Dichlorobenzene	146	11.171	11.171	0.000	96	106506	10.0	10.3	
128 1,2-Dibromo-3-Chloropropane	157	11.967	11.967	0.000	78	9967	10.0	9.77	
130 1,2,4-Trichlorobenzene	180	12.791	12.791	0.000	93	63470	10.0	9.92	
131 Hexachlorobutadiene	225	12.931	12.931	0.000	93	22148	10.0	9.38	
132 Naphthalene	128	13.056	13.056	0.000	98	144127	10.0	9.31	
134 1,2,3-Trichlorobenzene	180	13.280	13.280	0.000	94	52869	10.0	10.0	
S 149 1,2-Dichloroethene, Total (URS)	96				0		20.0	21.0	
S 156 1,3-Dichloropropene, Total	1				0		20.0	18.9	
S 155 Xylenes, Total	106				0		20.0	20.6	
S 153 Xylenes, Total (URS)	1				0		20.0	20.6	
S 152 Total BTEX	1				0			51.5	
S 151 Trihalomethanes, Total	1				0		40.0	40.8	
S 150 1,2-Dichloroethene, Total	1				0		20.0	21.0	

QC Flag Legend

Processing Flags

Reagents:

MV-MegaMainA_00070	Amount Added:	5.00	Units: uL		
Acrolein_A_00008	Amount Added:	5.00	Units: uL		
MV-Gas A_00122	Amount Added:	2.00	Units: uL		
mv-IS_SS_00038	Amount Added:	5.00	Units: uL	Run Reagent	

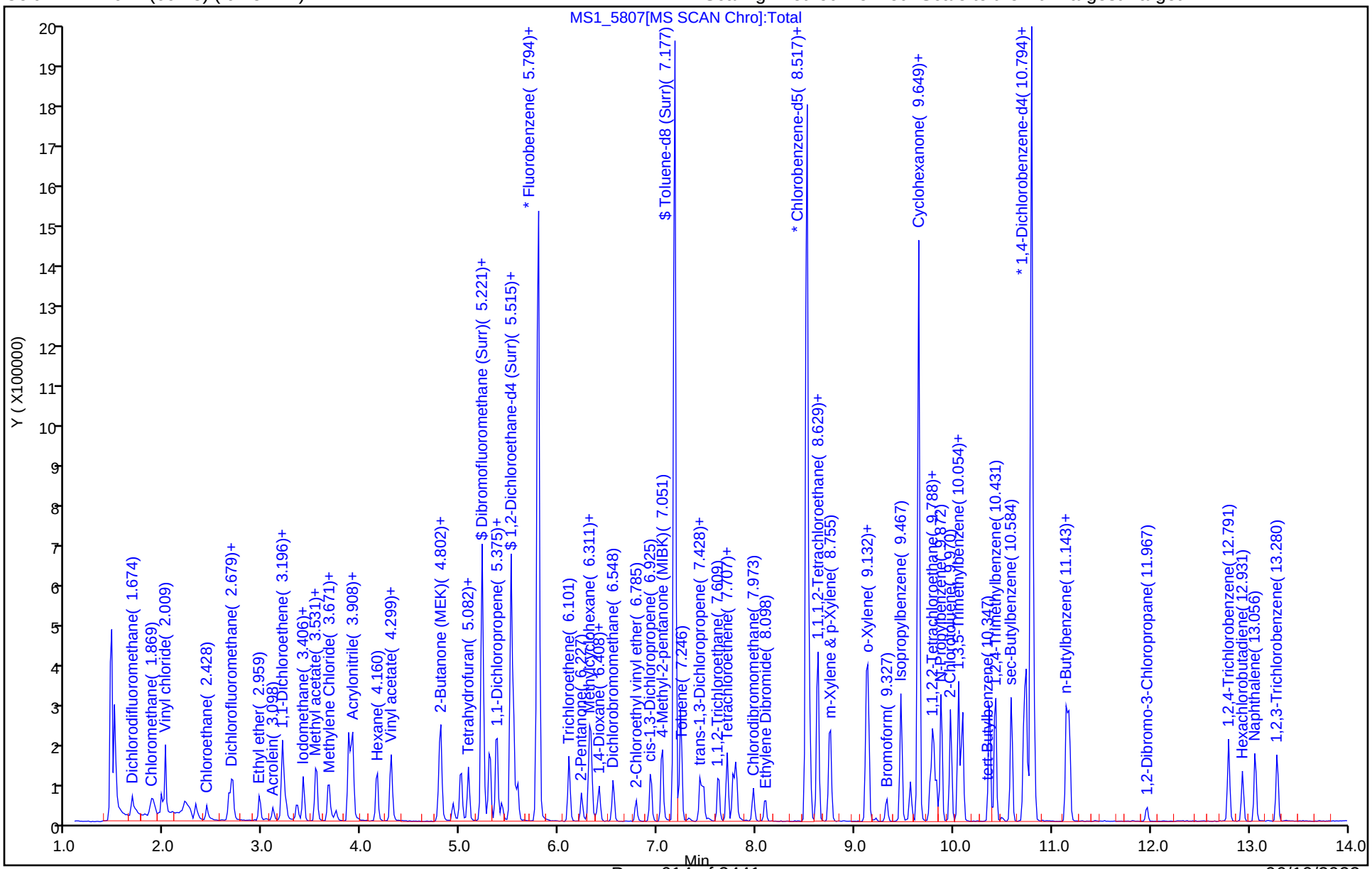
Report Date: 05-May-2022 19:53:29 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5807.D

Injection Date:	05-May-2022 16:07:30	Instrument ID:	VMS_MS1	Operator ID:	SUNLEEC
Lims ID:	IC			Worklist Smp#:	39
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 Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5808.D
Lims ID: ICIS
Client ID:
Sample Type: ICIS Calib Level: 6
Inject. Date: 05-May-2022 16:28:30 ALS Bottle#: 6 Worklist Smp#: 40
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICIS
Misc. Info.: 50
Operator ID: SUNLEEC Instrument ID: VMS_MS1
Sublist: chrom-AQ_VMS1_8260*sub164

Method: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-May-2022 19:53:30 Calib Date: 05-May-2022 17:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5811.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1632

First Level Reviewer: peppinga Date: 05-May-2022 18:22:17

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.794	5.794	0.000	98	1327574	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.517	8.517	0.000	87	305154	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.794	10.794	0.000	95	513820	50.0	50.0	
$ 5 Dibromofluoromethane (Surr)	111	5.221	5.221	0.000	92	341262	50.0	48.2	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.514	5.514	0.000	0	395483	50.0	48.4	
$ 7 Toluene-d8 (Surr)	98	7.176	7.176	0.000	93	1275604	50.0	51.3	
$ 8 4-Bromofluorobenzene (Surr)	95	9.648	9.648	0.000	91	463132	50.0	51.2	
11 Dichlorodifluoromethane	85	1.674	1.674	0.000	100	277924	50.0	51.2	
12 Chloromethane	50	1.869	1.869	0.000	99	256218	50.0	49.7	
13 Vinyl chloride	62	1.967	1.967	0.000	98	253763	50.0	51.3	
15 Bromomethane	94	2.316	2.316	0.000	91	179677	50.0	58.6	
16 Chloroethane	64	2.428	2.428	0.000	100	176332	50.0	56.3	
17 Dichlorofluoromethane	67	2.651	2.651	0.000	98	452712	50.0	52.9	
18 Trichlorofluoromethane	101	2.693	2.693	0.000	100	395749	50.0	52.9	
20 Ethyl ether	59	2.959	2.959	0.000	92	189036	50.0	51.9	
22 Acrolein	56	3.098	3.098	0.000	99	133864	395.0	436.8	
23 1,1-Dichloroethene	96	3.196	3.196	0.000	98	220084	50.0	54.9	
24 112TCTFE	151	3.210	3.210	0.000	93	181461	50.0	56.7	
25 Acetone	43	3.224	3.224	0.000	99	225139	200.0	180.3	
26 Iodomethane	142	3.350	3.350	0.000	100	340215	50.0	50.8	
28 Carbon disulfide	76	3.406	3.406	0.000	100	713084	50.0	52.3	
30 Methyl acetate	43	3.531	3.531	0.000	98	271090	100.0	97.0	
31 3-Chloro-1-propene	41	3.545	3.545	0.000	88	383287	50.0	50.3	
32 Methylene Chloride	84	3.671	3.671	0.000	95	255711	50.0	47.4	
33 2-Methyl-2-propanol	59	3.741	3.741	0.000	96	147089	500.0	471.3	
34 Acrylonitrile	53	3.866	3.866	0.000	97	808134	500.0	507.7	
35 Methyl tert-butyl ether	73	3.894	3.894	0.000	97	588922	50.0	54.5	
36 trans-1,2-Dichloroethene	96	3.908	3.908	0.000	99	237899	50.0	51.4	
37 Hexane	57	4.160	4.160	0.000	95	324230	50.0	52.8	
39 Vinyl acetate	43	4.285	4.285	0.000	98	657437	100.0	108.6	

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	4.299	4.299	0.000	96	437061	50.0	49.2	
46 2-Butanone (MEK)	43	4.774	4.774	0.000	100	350061	200.0	213.0	
48 cis-1,2-Dichloroethene	96	4.802	4.802	0.000	85	262745	50.0	52.9	
49 2,2-Dichloropropane	77	4.802	4.802	0.000	92	344031	50.0	54.4	
51 sec-Butyl Alcohol	45	4.928	4.928	0.000	99	280408	1200.0	1123.8	
53 Chlorobromomethane	128	4.998	4.998	0.000	97	132089	50.0	49.2	
54 Tetrahydrofuran	42	5.012	5.012	0.000	89	125900	100.0	104.6	
55 Chloroform	83	5.082	5.082	0.000	95	439193	50.0	51.3	
56 1,1,1-Trichloroethane	97	5.235	5.235	0.000	99	382798	50.0	53.9	
57 Cyclohexane	56	5.305	5.305	0.000	92	430438	50.0	54.1	
58 1,1-Dichloropropene	75	5.375	5.375	0.000	91	336916	50.0	54.3	
59 Carbon tetrachloride	117	5.375	5.375	0.000	89	313598	50.0	55.8	
60 Isobutyl alcohol	41	5.417	5.417	0.000	93	121761	1250.0	1135.2	
63 Benzene	78	5.542	5.542	0.000	97	947186	50.0	51.6	
64 1,2-Dichloroethane	62	5.584	5.584	0.000	98	332481	50.0	45.5	
66 n-Heptane	43	5.766	5.766	0.000	93	289169	50.0	53.1	
68 Trichloroethene	95	6.101	6.101	0.000	97	252655	50.0	51.5	
69 2-Pentanone	43	6.227	6.227	0.000	99	422924	160.0	147.8	
70 Methylcyclohexane	55	6.311	6.311	0.000	92	311563	50.0	55.3	
71 1,2-Dichloropropane	63	6.325	6.325	0.000	92	242220	50.0	51.4	
73 1,4-Dioxane	88	6.380	6.380	0.000	98	51899	1000.0	933.1	
74 Dibromomethane	93	6.408	6.408	0.000	95	149712	50.0	48.7	
75 Dichlorobromomethane	83	6.548	6.548	0.000	99	320948	50.0	50.6	
77 2-Chloroethyl vinyl ether	63	6.785	6.785	0.000	94	118382	50.0	50.7	
78 cis-1,3-Dichloropropene	75	6.925	6.925	0.000	94	360303	50.0	49.0	
79 4-Methyl-2-pentanone (MIBK)	43	7.037	7.037	0.000	99	711023	200.0	214.9	
82 Toluene	91	7.232	7.232	0.000	98	988918	50.0	51.9	
84 trans-1,3-Dichloropropene	75	7.428	7.428	0.000	97	317139	50.0	52.9	
85 Ethyl methacrylate	69	7.470	7.470	0.000	89	233560	50.0	53.7	
87 1,1,2-Trichloroethane	97	7.609	7.609	0.000	92	194441	50.0	51.1	
89 Tetrachloroethene	164	7.707	7.707	0.000	96	197809	50.0	53.9	
90 1,3-Dichloropropane	76	7.763	7.763	0.000	95	344894	50.0	52.3	
91 2-Hexanone	43	7.791	7.791	0.000	98	478175	200.0	208.2	
95 Chlorodibromomethane	129	7.973	7.973	0.000	90	221088	50.0	53.4	
96 Ethylene Dibromide	107	8.084	8.084	0.000	98	207932	50.0	53.1	
98 1-Chlorohexane	91	8.503	8.503	0.000	93	244230	40.0	41.4	
99 Chlorobenzene	112	8.545	8.545	0.000	94	627015	50.0	50.1	
100 1,1,1,2-Tetrachloroethane	131	8.615	8.615	0.000	93	209592	50.0	52.1	
101 Ethylbenzene	106	8.629	8.629	0.000	99	355312	50.0	53.1	
102 m-Xylene & p-Xylene	106	8.741	8.741	0.000	0	446452	50.0	53.6	
103 o-Xylene	106	9.118	9.118	0.000	96	423172	50.0	53.6	
104 Styrene	104	9.132	9.132	0.000	94	725266	50.0	53.4	
106 Bromoform	173	9.327	9.327	0.000	95	139804	50.0	53.4	
107 Isopropylbenzene	105	9.467	9.467	0.000	96	1120850	50.0	56.0	
109 Cyclohexanone	55	9.565	9.565	0.000	94	206637	1500.0	1502.1	
110 1,1,2,2-Tetrachloroethane	83	9.760	9.760	0.000	95	235359	50.0	48.7	
111 Bromobenzene	156	9.788	9.788	0.000	98	274091	50.0	50.2	
112 trans-1,4-Dichloro-2-butene	53	9.802	9.802	0.000	83	72646	50.0	51.7	
113 1,2,3-Trichloropropane	110	9.830	9.830	0.000	87	75800	50.0	50.6	
114 N-Propylbenzene	120	9.872	9.872	0.000	99	311484	50.0	56.0	
115 2-Chlorotoluene	126	9.970	9.970	0.000	95	254497	50.0	51.2	
116 1,3,5-Trimethylbenzene	105	10.054	10.054	0.000	95	942929	50.0	54.5	

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	10.095	10.095	0.000	98	265681	50.0	50.8	
118 tert-Butylbenzene	119	10.361	10.361	0.000	93	812832	50.0	55.8	
119 1,2,4-Trimethylbenzene	105	10.431	10.431	0.000	97	977951	50.0	53.7	
120 sec-Butylbenzene	134	10.584	10.584	0.000	95	232144	50.0	54.5	
121 1,3-Dichlorobenzene	146	10.710	10.710	0.000	98	544200	50.0	53.3	
122 4-Isopropyltoluene	119	10.738	10.738	0.000	97	1011728	50.0	54.1	
123 1,4-Dichlorobenzene	146	10.822	10.822	0.000	96	539264	50.0	49.6	
125 n-Butylbenzene	91	11.143	11.143	0.000	98	908658	50.0	55.5	
127 1,2-Dichlorobenzene	146	11.171	11.171	0.000	97	508106	50.0	51.0	
128 1,2-Dibromo-3-Chloropropane	157	11.967	11.967	0.000	87	49694	50.0	50.4	
130 1,2,4-Trichlorobenzene	180	12.791	12.791	0.000	94	315023	50.0	51.0	
131 Hexachlorobutadiene	225	12.931	12.931	0.000	96	121223	50.0	52.1	
132 Naphthalene	128	13.056	13.056	0.000	97	733539	50.0	48.3	
134 1,2,3-Trichlorobenzene	180	13.280	13.280	0.000	96	256597	50.0	50.4	
S 149 1,2-Dichloroethene, Total (URS)	96				0		100.0	104.4	
S 156 1,3-Dichloropropene, Total	1				0		100.0	101.8	
S 155 Xylenes, Total	106				0		100.0	107.2	
S 153 Xylenes, Total (URS)	1				0		100.0	107.2	
S 151 Trihalomethanes, Total	1				0		200.0	208.7	
S 150 1,2-Dichloroethene, Total	1				0		100.0	104.4	

QC Flag Legend

Processing Flags

Reagents:

MV-MegaMainA_00070	Amount Added:	25.00	Units: uL	
Acrolein_A_00008	Amount Added:	25.00	Units: uL	
MV-Gas A_00122	Amount Added:	10.00	Units: uL	
mv-IS_SS_00038	Amount Added:	5.00	Units: uL	Run Reagent

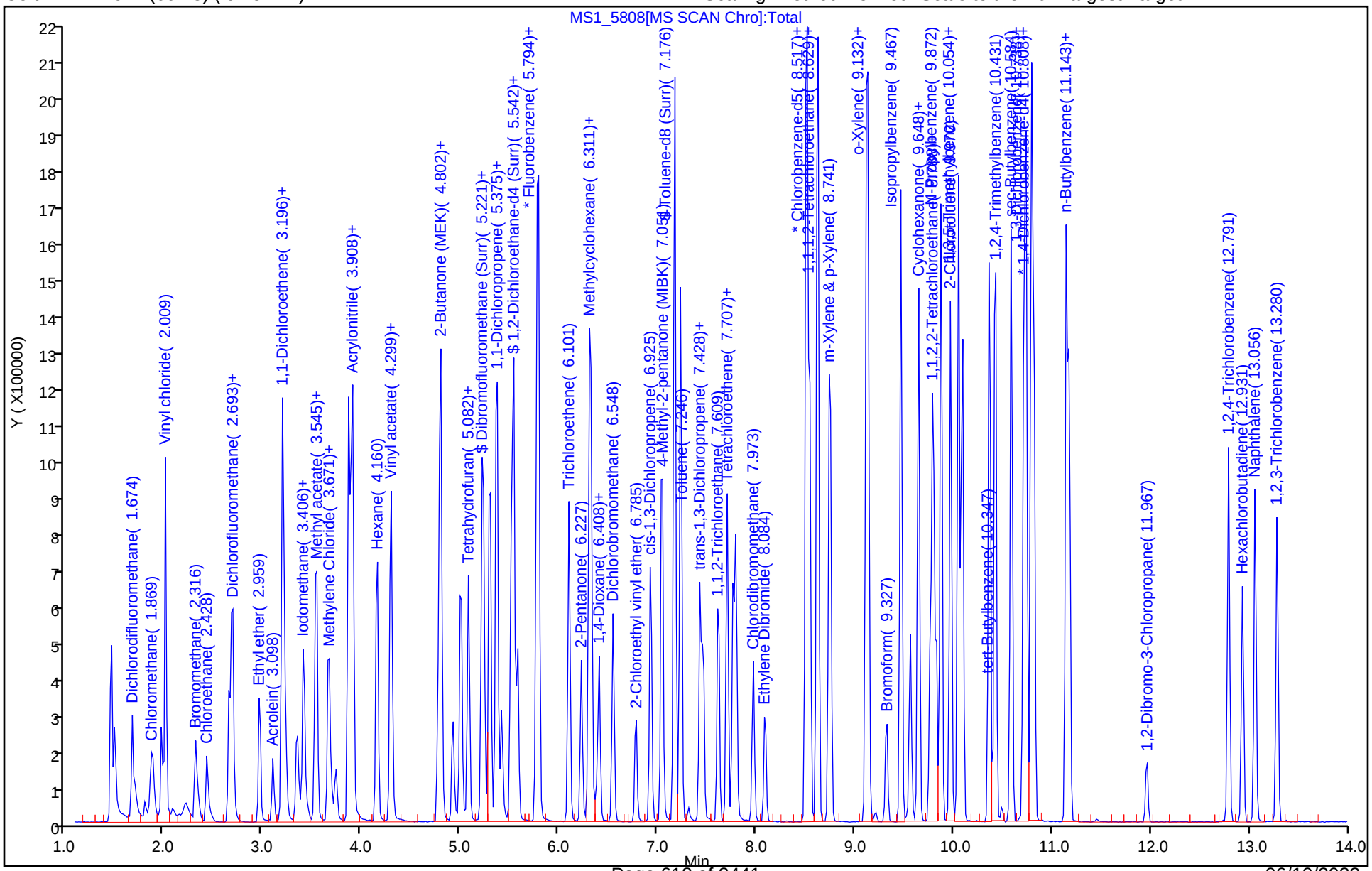
Report Date: 05-May-2022 19:53:30 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5808.D

Injection Date:	05-May-2022 16:28:30	Instrument ID:	VMS_MS1	Operator ID:	SUNLEEC
Lims ID:	ICIS			Worklist Smp#:	40
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 Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5809.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 05-May-2022 16:49:30 ALS Bottle#: 7 Worklist Smp#: 41
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 75
Operator ID: SUNLEEC Instrument ID: VMS_MS1
Sublist: chrom-AQ_VMS1_8260*sub164

Method: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-May-2022 19:53:31 Calib Date: 05-May-2022 17:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5811.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1632

First Level Reviewer: peppinga Date: 05-May-2022 18:23:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.794	5.794	0.000	98	1395070	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.517	8.517	0.000	87	318673	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.794	10.794	0.000	95	543866	50.0	50.0	
$ 5 Dibromofluoromethane (Surr)	111	5.221	5.221	0.000	92	355315	50.0	47.8	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.515	5.514	0.001	0	417170	50.0	48.6	
$ 7 Toluene-d8 (Surr)	98	7.177	7.176	0.001	93	1301650	50.0	50.1	
$ 8 4-Bromofluorobenzene (Surr)	95	9.649	9.648	0.001	89	486428	50.0	50.8	
11 Dichlorodifluoromethane	85	1.674	1.674	0.000	100	392771	75.0	68.8	
12 Chloromethane	50	1.869	1.869	0.000	99	372550	75.0	68.8	
13 Vinyl chloride	62	1.967	1.967	0.000	100	358446	75.0	68.9	
15 Bromomethane	94	2.316	2.316	0.000	94	226418	75.0	70.2	
16 Chloroethane	64	2.428	2.428	0.000	98	223441	75.0	67.9	
17 Dichlorofluoromethane	67	2.651	2.651	0.000	95	627866	75.0	69.9	
18 Trichlorofluoromethane	101	2.693	2.693	0.000	98	552804	75.0	70.3	
20 Ethyl ether	59	2.959	2.959	0.000	93	286921	75.0	74.9	
22 Acrolein	56	3.098	3.098	0.000	99	205132	592.5	637.0	
23 1,1-Dichloroethene	96	3.196	3.196	0.000	97	307895	75.0	73.1	
24 112TCTFE	151	3.210	3.210	0.000	94	243236	75.0	72.4	
25 Acetone	43	3.224	3.224	0.000	99	345005	300.0	263.0	
26 Iodomethane	142	3.350	3.350	0.000	99	516112	75.0	73.1	
28 Carbon disulfide	76	3.406	3.406	0.000	100	1031514	75.0	71.9	
30 Methyl acetate	43	3.517	3.531	-0.014	98	427933	150.0	145.8	
31 3-Chloro-1-propene	41	3.545	3.545	0.000	89	559430	75.0	69.9	
32 Methylene Chloride	84	3.671	3.671	0.000	93	380465	75.0	67.0	
33 2-Methyl-2-propanol	59	3.741	3.741	0.000	97	244151	750.0	742.8	
34 Acrylonitrile	53	3.867	3.866	0.001	98	1227793	750.0	734.0	
35 Methyl tert-butyl ether	73	3.894	3.894	0.000	97	905400	75.0	79.7	
36 trans-1,2-Dichloroethene	96	3.908	3.908	0.000	98	344259	75.0	70.8	
37 Hexane	57	4.160	4.160	0.000	94	462644	75.0	72.1	
39 Vinyl acetate	43	4.286	4.285	0.001	97	1126169	150.0	177.1	

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	4.299	4.299	0.000	96	642536	75.0	68.9	
46 2-Butanone (MEK)	43	4.774	4.774	0.000	100	543702	300.0	314.8	
48 cis-1,2-Dichloroethene	96	4.802	4.802	0.000	84	383382	75.0	73.5	
49 2,2-Dichloropropane	77	4.802	4.802	0.000	92	486003	75.0	73.1	
51 sec-Butyl Alcohol	45	4.928	4.928	0.000	98	466450	1800.0	1758.7	
53 Chlorobromomethane	128	4.998	4.998	0.000	97	187462	75.0	66.4	
54 Tetrahydrofuran	42	5.012	5.012	0.000	87	187280	150.0	148.0	
55 Chloroform	83	5.082	5.082	0.000	96	640061	75.0	71.1	
56 1,1,1-Trichloroethane	97	5.235	5.235	0.000	99	564918	75.0	75.7	
57 Cyclohexane	56	5.291	5.305	-0.014	94	607958	75.0	72.6	
58 1,1-Dichloropropene	75	5.361	5.375	-0.014	93	494609	75.0	75.8	
59 Carbon tetrachloride	117	5.375	5.375	0.000	88	452371	75.0	76.6	
60 Isobutyl alcohol	41	5.417	5.417	0.000	93	203252	1875.0	1791.7	
63 Benzene	78	5.542	5.542	0.000	97	1394681	75.0	72.3	
64 1,2-Dichloroethane	62	5.584	5.584	0.000	98	519403	75.0	67.7	
66 n-Heptane	43	5.766	5.766	0.000	93	404284	75.0	70.7	
68 Trichloroethene	95	6.101	6.101	0.000	98	368683	75.0	71.9	
69 2-Pentanone	43	6.227	6.227	0.000	99	663456	240.0	219.5	
70 Methylcyclohexane	55	6.311	6.311	0.000	92	462066	75.0	78.1	
71 1,2-Dichloropropane	63	6.325	6.325	0.000	92	361038	75.0	72.9	
73 1,4-Dioxane	88	6.380	6.380	0.000	94	81683	1500.0	1398.2	
74 Dibromomethane	93	6.408	6.408	0.000	97	222263	75.0	68.7	
75 Dichlorobromomethane	83	6.548	6.548	0.000	99	482710	75.0	72.5	
77 2-Chloroethyl vinyl ether	63	6.785	6.785	0.000	94	191020	75.0	77.8	
78 cis-1,3-Dichloropropene	75	6.925	6.925	0.000	93	555863	75.0	72.2	
79 4-Methyl-2-pentanone (MIBK)	43	7.037	7.037	0.000	99	1061494	300.0	305.4	
82 Toluene	91	7.232	7.232	0.000	98	1449984	75.0	72.4	
84 trans-1,3-Dichloropropene	75	7.428	7.428	0.000	99	498342	75.0	79.0	
85 Ethyl methacrylate	69	7.470	7.470	0.000	89	367789	75.0	80.9	
87 1,1,2-Trichloroethane	97	7.609	7.609	0.000	92	294390	75.0	73.6	
89 Tetrachloroethene	164	7.707	7.707	0.000	98	276257	75.0	72.0	
90 1,3-Dichloropropane	76	7.763	7.763	0.000	96	525112	75.0	76.2	
91 2-Hexanone	43	7.791	7.791	0.000	99	736048	300.0	306.9	
95 Chlorodibromomethane	129	7.973	7.973	0.000	90	338007	75.0	78.2	
96 Ethylene Dibromide	107	8.084	8.084	0.000	99	316664	75.0	77.4	
98 1-Chlorohexane	91	8.503	8.503	0.000	95	355705	60.0	57.7	
99 Chlorobenzene	112	8.545	8.545	0.000	94	939614	75.0	71.8	
100 1,1,1,2-Tetrachloroethane	131	8.615	8.615	0.000	94	320917	75.0	76.4	
101 Ethylbenzene	106	8.629	8.629	0.000	99	516824	75.0	73.9	
102 m-Xylene & p-Xylene	106	8.755	8.741	0.014	0	636066	75.0	73.1	
103 o-Xylene	106	9.118	9.118	0.000	96	618795	75.0	75.1	
104 Styrene	104	9.132	9.132	0.000	94	1093020	75.0	77.1	
106 Bromoform	173	9.327	9.327	0.000	95	207998	75.0	76.1	
107 Isopropylbenzene	105	9.467	9.467	0.000	96	1620627	75.0	76.5	
109 Cyclohexanone	55	9.565	9.565	0.000	95	324083	2250.0	2255.9	
110 1,1,2,2-Tetrachloroethane	83	9.760	9.760	0.000	95	360510	75.0	70.5	
111 Bromobenzene	156	9.788	9.788	0.000	98	412177	75.0	71.3	
112 trans-1,4-Dichloro-2-butene	53	9.802	9.802	0.000	88	112230	75.0	75.5	
113 1,2,3-Trichloropropane	110	9.830	9.830	0.000	86	114415	75.0	72.2	
114 N-Propylbenzene	120	9.872	9.872	0.000	99	449488	75.0	76.3	
115 2-Chlorotoluene	126	9.970	9.970	0.000	95	378170	75.0	71.8	
116 1,3,5-Trimethylbenzene	105	10.054	10.054	0.000	95	1392885	75.0	76.0	

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	10.095	10.095	0.000	98	399654	75.0	72.2	
118 tert-Butylbenzene	119	10.361	10.361	0.000	93	1179329	75.0	76.4	
119 1,2,4-Trimethylbenzene	105	10.431	10.431	0.000	98	1427126	75.0	74.1	
120 sec-Butylbenzene	134	10.584	10.584	0.000	95	339008	75.0	75.3	
121 1,3-Dichlorobenzene	146	10.710	10.710	0.000	98	791378	75.0	73.2	
122 4-Isopropyltoluene	119	10.738	10.738	0.000	97	1491061	75.0	75.3	
123 1,4-Dichlorobenzene	146	10.822	10.822	0.000	95	809312	75.0	70.3	
125 n-Butylbenzene	91	11.143	11.143	0.000	98	1325740	75.0	76.5	
127 1,2-Dichlorobenzene	146	11.171	11.171	0.000	96	745490	75.0	70.6	
128 1,2-Dibromo-3-Chloropropane	157	11.967	11.967	0.000	85	74523	75.0	71.4	
130 1,2,4-Trichlorobenzene	180	12.791	12.791	0.000	94	478325	75.0	73.1	
131 Hexachlorobutadiene	225	12.931	12.931	0.000	96	171677	75.0	69.6	
132 Naphthalene	128	13.056	13.056	0.000	98	1151840	75.0	71.6	
134 1,2,3-Trichlorobenzene	180	13.280	13.280	0.000	95	389177	75.0	72.3	
S 149 1,2-Dichloroethene, Total (URS)	96				0		150.0	144.3	
S 156 1,3-Dichloropropene, Total	1				0		150.0	151.2	
S 155 Xylenes, Total	106				0		150.0	148.2	
S 153 Xylenes, Total (URS)	1				0		150.0	148.2	
S 152 Total BTEX	1				0			366.9	
S 151 Trihalomethanes, Total	1				0		300.0	297.9	
S 150 1,2-Dichloroethene, Total	1				0		150.0	144.3	

QC Flag Legend

Processing Flags

Reagents:

MV-MegaMainA_00070	Amount Added:	37.50	Units: uL	
Acrolein_A_00008	Amount Added:	37.50	Units: uL	
MV-Gas A_00122	Amount Added:	15.00	Units: uL	
mv-IS_SS_00038	Amount Added:	5.00	Units: uL	Run Reagent

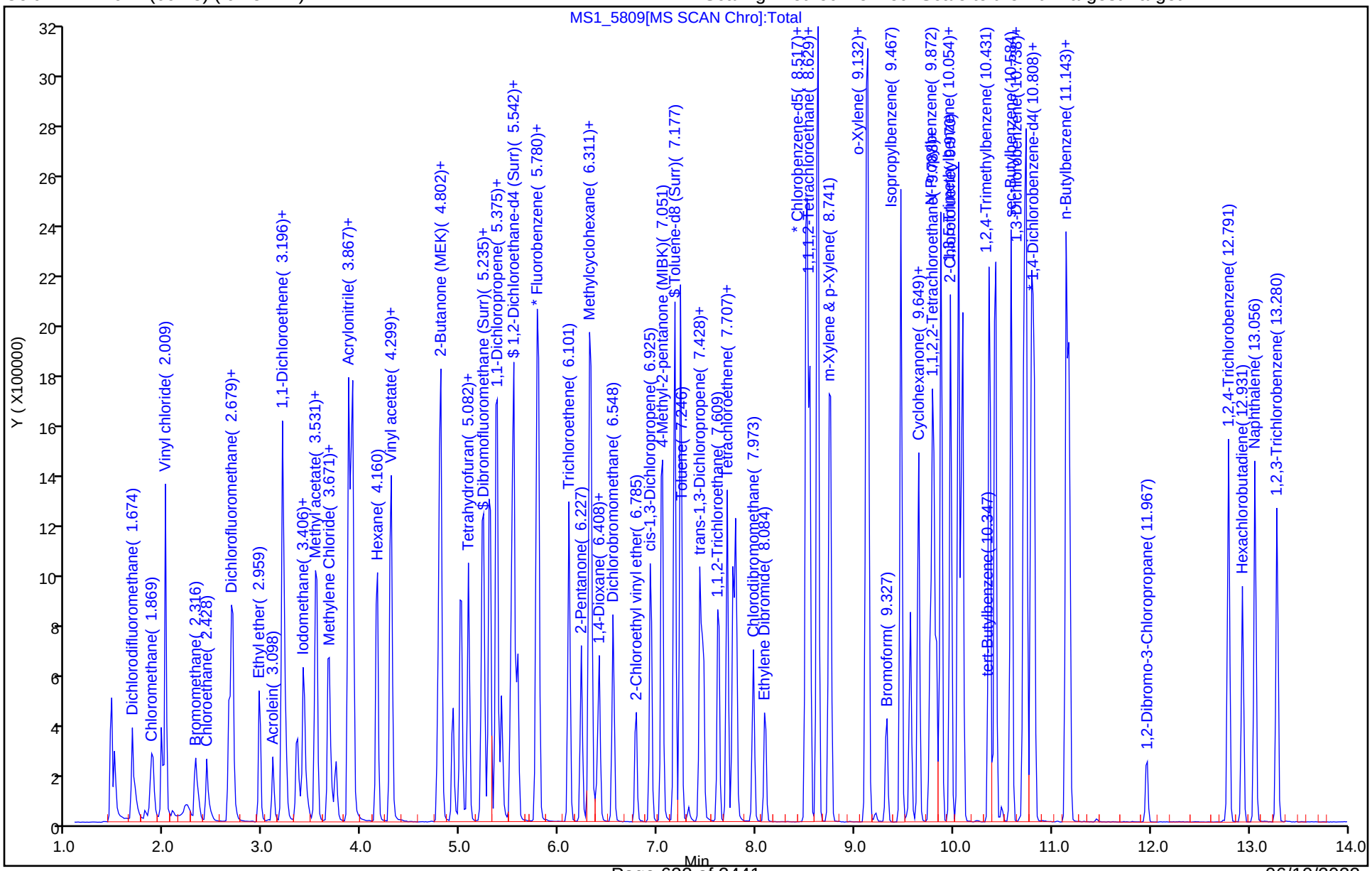
Report Date: 05-May-2022 19:53:31 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5809.D

Injection Date:	05-May-2022 16:49:30	Instrument ID:	VMS_MS1	Operator ID:	SUNLEEC
Lims ID:	IC			Worklist Smp#:	41
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 Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5810.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 05-May-2022 17:10:30 ALS Bottle#: 8 Worklist Smp#: 42
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 100
Operator ID: SUNLEEC Instrument ID: VMS_MS1
Sublist: chrom-AQ_VMS1_8260*sub164

Method: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-May-2022 19:53:33 Calib Date: 05-May-2022 17:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5811.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1632

First Level Reviewer: peppinga Date: 05-May-2022 18:23:38

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.794	5.794	0.000	99	1381560	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.517	8.517	0.000	87	314434	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.794	10.794	0.000	96	532094	50.0	50.0	
$ 5 Dibromofluoromethane (Surr)	111	5.221	5.221	0.000	93	353620	50.0	48.0	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.515	5.514	0.001	0	411614	50.0	48.4	
$ 7 Toluene-d8 (Surr)	98	7.177	7.176	0.001	93	1298380	50.0	50.6	
$ 8 4-Bromofluorobenzene (Surr)	95	9.649	9.648	0.001	89	477640	50.0	51.0	
11 Dichlorodifluoromethane	85	1.674	1.674	0.000	99	509822	100.0	90.2	
12 Chloromethane	50	1.883	1.869	0.014	99	505689	100.0	94.3	
13 Vinyl chloride	62	1.967	1.967	0.000	100	480563	100.0	93.3	
15 Bromomethane	94	2.316	2.316	0.000	94	312221	100.0	97.8	
16 Chloroethane	64	2.428	2.428	0.000	98	311215	100.0	95.4	
17 Dichlorofluoromethane	67	2.652	2.651	0.001	100	866122	100.0	97.3	
18 Trichlorofluoromethane	101	2.693	2.693	0.000	98	745109	100.0	95.6	
20 Ethyl ether	59	2.959	2.959	0.000	94	381204	100.0	100.5	
22 Acrolein	56	3.099	3.098	0.000	99	276325	790.0	866.5	
23 1,1-Dichloroethene	96	3.196	3.196	0.000	98	441463	100.0	105.9	
24 112TCTFE	151	3.210	3.210	0.000	93	358990	100.0	107.9	
25 Acetone	43	3.224	3.224	0.000	99	478240	400.0	368.1	
26 Iodomethane	142	3.350	3.350	0.000	99	718904	100.0	102.6	
28 Carbon disulfide	76	3.406	3.406	0.000	100	1471573	100.0	103.6	
30 Methyl acetate	43	3.518	3.531	-0.013	98	610793	200.0	210.1	
31 3-Chloro-1-propene	41	3.545	3.545	0.000	88	764626	100.0	96.5	
32 Methylene Chloride	84	3.671	3.671	0.000	94	514301	100.0	91.5	
33 2-Methyl-2-propanol	59	3.741	3.741	0.000	97	345202	1000.0	1059.3	
34 Acrylonitrile	53	3.867	3.866	0.001	98	1687001	1000.0	1018.4	
35 Methyl tert-butyl ether	73	3.895	3.894	0.001	97	1273612	100.0	113.2	
36 trans-1,2-Dichloroethene	96	3.909	3.908	0.001	98	492670	100.0	102.3	
37 Hexane	57	4.160	4.160	0.000	95	671659	100.0	106.0	
39 Vinyl acetate	43	4.286	4.285	0.001	98	1322002	200.0	209.9	

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	4.300	4.299	0.001	96	882245	100.0	95.5	
46 2-Butanone (MEK)	43	4.774	4.774	0.000	100	745898	400.0	436.1	
48 cis-1,2-Dichloroethene	96	4.802	4.802	0.000	83	528899	100.0	102.4	
49 2,2-Dichloropropane	77	4.802	4.802	0.000	91	693536	100.0	105.4	
51 sec-Butyl Alcohol	45	4.928	4.928	0.000	99	676089	2400.0	2558.0	
53 Chlorobromomethane	128	4.998	4.998	0.000	97	263650	100.0	94.3	
54 Tetrahydrofuran	42	5.012	5.012	0.000	86	247711	200.0	197.7	
55 Chloroform	83	5.082	5.082	0.000	94	882373	100.0	99.0	
56 1,1,1-Trichloroethane	97	5.235	5.235	0.000	99	792901	100.0	107.3	
57 Cyclohexane	56	5.291	5.305	-0.014	95	872477	100.0	105.3	
58 1,1-Dichloropropene	75	5.361	5.375	-0.014	92	714209	100.0	110.5	
59 Carbon tetrachloride	117	5.375	5.375	0.000	88	645728	100.0	110.3	
60 Isobutyl alcohol	41	5.417	5.417	0.000	93	309673	2500.0	2745.9	
63 Benzene	78	5.543	5.542	0.001	97	1943642	100.0	101.8	
64 1,2-Dichloroethane	62	5.585	5.584	0.000	98	699438	100.0	92.1	
66 n-Heptane	43	5.766	5.766	0.000	94	571673	100.0	100.9	
68 Trichloroethene	95	6.101	6.101	0.000	98	539602	100.0	106.5	
69 2-Pentanone	43	6.227	6.227	0.000	99	941057	320.0	313.4	
70 Methylcyclohexane	55	6.311	6.311	0.000	92	647683	100.0	110.5	
71 1,2-Dichloropropane	63	6.325	6.325	0.000	92	490149	100.0	99.9	
73 1,4-Dioxane	88	6.381	6.380	0.001	94	115329	2000.0	1994.0	
74 Dibromomethane	93	6.409	6.408	0.000	96	302612	100.0	94.5	
75 Dichlorobromomethane	83	6.548	6.548	0.000	99	666057	100.0	101.0	
77 2-Chloroethyl vinyl ether	63	6.786	6.785	0.001	92	267415	100.0	110.0	
78 cis-1,3-Dichloropropene	75	6.925	6.925	0.000	93	774734	100.0	101.8	
79 4-Methyl-2-pentanone (MIBK)	43	7.037	7.037	0.000	99	1491553	400.0	433.3	
82 Toluene	91	7.233	7.232	0.001	98	2008125	100.0	101.3	
84 trans-1,3-Dichloropropene	75	7.428	7.428	0.000	98	692619	100.0	110.9	
85 Ethyl methacrylate	69	7.456	7.470	-0.014	90	510165	100.0	113.8	
87 1,1,2-Trichloroethane	97	7.610	7.609	0.001	94	407524	100.0	102.9	
89 Tetrachloroethene	164	7.707	7.707	0.000	97	396283	100.0	104.8	
90 1,3-Dichloropropane	76	7.763	7.763	0.000	95	707838	100.0	104.1	
91 2-Hexanone	43	7.791	7.791	0.000	98	1022792	400.0	432.2	
95 Chlorodibromomethane	129	7.973	7.973	0.000	90	468972	100.0	109.9	
96 Ethylene Dibromide	107	8.084	8.084	0.000	98	441530	100.0	109.4	
98 1-Chlorohexane	91	8.503	8.503	0.000	97	514318	80.0	84.6	
99 Chlorobenzene	112	8.545	8.545	0.000	94	1272308	100.0	98.6	
100 1,1,1,2-Tetrachloroethane	131	8.615	8.615	0.000	93	456220	100.0	110.1	
101 Ethylbenzene	106	8.629	8.629	0.000	99	716365	100.0	103.8	
102 m-Xylene & p-Xylene	106	8.741	8.741	0.000	0	885619	100.0	103.2	
103 o-Xylene	106	9.118	9.118	0.000	96	846789	100.0	104.1	
104 Styrene	104	9.132	9.132	0.000	94	1490911	100.0	106.6	
106 Bromoform	173	9.327	9.327	0.000	95	299567	100.0	111.1	
107 Isopropylbenzene	105	9.467	9.467	0.000	96	2287717	100.0	110.4	
109 Cyclohexanone	55	9.565	9.565	0.000	94	449793	3000.0	3173.2	
110 1,1,2,2-Tetrachloroethane	83	9.760	9.760	0.000	96	484526	100.0	96.9	
111 Bromobenzene	156	9.788	9.788	0.000	97	562531	100.0	99.4	
112 trans-1,4-Dichloro-2-butene	53	9.802	9.802	0.000	86	151348	100.0	104.1	
113 1,2,3-Trichloropropane	110	9.830	9.830	0.000	85	153291	100.0	98.8	
114 N-Propylbenzene	120	9.872	9.872	0.000	99	619145	100.0	107.4	
115 2-Chlorotoluene	126	9.970	9.970	0.000	96	529500	100.0	102.8	
116 1,3,5-Trimethylbenzene	105	10.054	10.054	0.000	95	1911663	100.0	106.7	

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	10.096	10.095	0.001	98	545718	100.0	100.8	
118 tert-Butylbenzene	119	10.361	10.361	0.000	93	1643906	100.0	108.9	
119 1,2,4-Trimethylbenzene	105	10.431	10.431	0.000	97	1949413	100.0	103.4	
120 sec-Butylbenzene	134	10.584	10.584	0.000	95	483866	100.0	109.8	
121 1,3-Dichlorobenzene	146	10.710	10.710	0.000	97	1079276	100.0	102.0	
122 4-Isopropyltoluene	119	10.738	10.738	0.000	97	2054194	100.0	106.0	
123 1,4-Dichlorobenzene	146	10.822	10.822	0.000	96	1102443	100.0	97.9	
125 n-Butylbenzene	91	11.143	11.143	0.000	98	1847768	100.0	109.0	
127 1,2-Dichlorobenzene	146	11.171	11.171	0.000	96	1026568	100.0	99.4	
128 1,2-Dibromo-3-Chloropropane	157	11.967	11.967	0.000	85	104003	100.0	101.9	
130 1,2,4-Trichlorobenzene	180	12.791	12.791	0.000	94	649196	100.0	101.4	
131 Hexachlorobutadiene	225	12.931	12.931	0.000	95	246911	100.0	102.2	
132 Naphthalene	128	13.056	13.056	0.000	97	1619477	100.0	102.8	
134 1,2,3-Trichlorobenzene	180	13.280	13.280	0.000	95	534663	100.0	101.5	
S 149 1,2-Dichloroethene, Total (URS)	96				0		200.0	204.7	
S 156 1,3-Dichloropropene, Total	1				0		200.0	212.8	
S 155 Xylenes, Total	106				0		200.0	207.3	
S 153 Xylenes, Total (URS)	1				0		200.0	207.3	
S 152 Total BTEX	1				0			514.3	
S 151 Trihalomethanes, Total	1				0		400.0	421.0	
S 150 1,2-Dichloroethene, Total	1				0		200.0	204.7	

QC Flag Legend

Processing Flags

Reagents:

MV-MegaMainA_00070	Amount Added:	50.00	Units: uL	
Acrolein_A_00008	Amount Added:	50.00	Units: uL	
MV-Gas A_00122	Amount Added:	20.00	Units: uL	
mv-IS_SS_00038	Amount Added:	5.00	Units: uL	Run Reagent

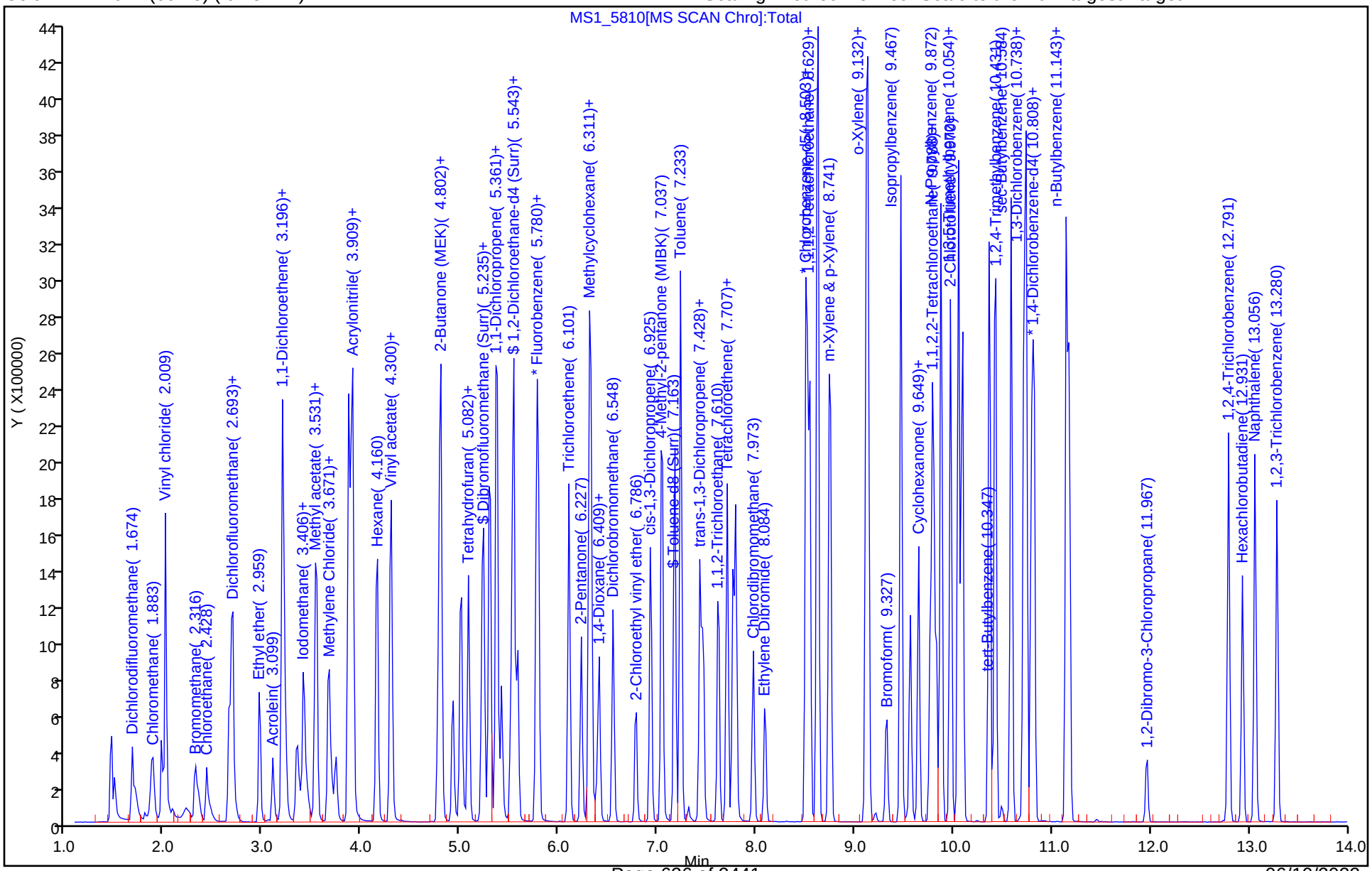
Report Date: 05-May-2022 19:53:33 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5810.D

Injection Date:	05-May-2022 17:10:30	Instrument ID:	VMS_MS1	Operator ID:	SUNLEEC
Lims ID:	IC			Worklist Smp#:	42
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



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5811.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 05-May-2022 17:32:30 ALS Bottle#: 9 Worklist Smp#: 43
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 200
Operator ID: SUNLEEC Instrument ID: VMS_MS1
Sublist: chrom-AQ_VMS1_8260*sub164

Method: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-May-2022 19:53:34 Calib Date: 05-May-2022 17:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5811.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1632

First Level Reviewer: peppinga Date: 05-May-2022 18:24:54

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.794	5.794	0.000	99	1446027	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.517	8.517	0.000	86	337543	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.794	10.794	0.000	95	568942	50.0	50.0	
$ 5 Dibromofluoromethane (Surr)	111	5.221	5.221	0.000	93	372270	50.0	48.3	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.515	5.514	0.001	0	448337	50.0	50.3	
$ 7 Toluene-d8 (Surr)	98	7.177	7.176	0.001	93	1366294	50.0	49.6	
$ 8 4-Bromofluorobenzene (Surr)	95	9.649	9.648	0.001	89	502402	50.0	50.2	
11 Dichlorodifluoromethane	85	1.674	1.674	0.000	99	1086339	200.0	183.6	
12 Chloromethane	50	1.883	1.869	0.014	99	1043461	200.0	185.8	
13 Vinyl chloride	62	1.967	1.967	0.000	100	1007069	200.0	186.8	
15 Bromomethane	94	2.316	2.316	0.000	93	661490	200.0	197.9	
16 Chloroethane	64	2.428	2.428	0.000	99	649700	200.0	190.4	
17 Dichlorofluoromethane	67	2.651	2.651	0.000	95	1759458	200.0	188.9	
18 Trichlorofluoromethane	101	2.693	2.693	0.000	98	1573258	200.0	192.9	
20 Ethyl ether	59	2.959	2.959	0.000	93	831914	200.0	209.6	
23 1,1-Dichloroethene	96	3.196	3.196	0.000	98	843472	200.0	193.4	
24 112TCTFE	151	3.210	3.210	0.000	93	663184	200.0	190.4	
25 Acetone	43	3.224	3.224	0.000	99	1127144	800.0	828.8	
26 Iodomethane	142	3.350	3.350	0.000	99	1476876	200.0	200.8	
28 Carbon disulfide	76	3.406	3.406	0.000	100	2834760	200.0	190.7	
30 Methyl acetate	43	3.517	3.531	-0.014	99	1461122	400.0	480.2	
31 3-Chloro-1-propene	41	3.545	3.545	0.000	88	1594175	200.0	192.2	
32 Methylene Chloride	84	3.671	3.671	0.000	94	1081190	200.0	183.8	
33 2-Methyl-2-propanol	59	3.741	3.741	0.000	97	845437	2000.0	2474.8	
34 Acrylonitrile	53	3.867	3.866	0.001	98	3699264	2000.0	2133.6	
35 Methyl tert-butyl ether	73	3.894	3.894	0.000	97	2757860	200.0	234.2	
36 trans-1,2-Dichloroethene	96	3.908	3.908	0.000	98	957720	200.0	190.1	
37 Hexane	57	4.160	4.160	0.000	95	1335367	200.0	196.1	
39 Vinyl acetate	43	4.286	4.285	0.001	98	2958435	400.0	448.9	
40 1,1-Dichloroethane	63	4.299	4.299	0.000	96	1775848	200.0	183.7	

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	4.774	4.774	0.000	100	1721820	800.0	961.7	
48 cis-1,2-Dichloroethene	96	4.802	4.802	0.000	83	1094359	200.0	202.4	
49 2,2-Dichloropropane	77	4.802	4.802	0.000	91	1374356	200.0	199.5	
51 sec-Butyl Alcohol	45	4.928	4.928	0.000	99	1648274	4800.0	5912.2	
53 Chlorobromomethane	128	5.012	4.998	0.014	97	550915	200.0	188.4	
54 Tetrahydrofuran	42	5.012	5.012	0.000	87	578372	400.0	441.0	
55 Chloroform	83	5.082	5.082	0.000	94	1814004	200.0	194.4	
56 1,1,1-Trichloroethane	97	5.235	5.235	0.000	98	1551181	200.0	200.5	
57 Cyclohexane	56	5.291	5.305	-0.014	94	1675424	200.0	193.2	
58 1,1-Dichloropropene	75	5.361	5.375	-0.014	93	1402232	200.0	207.4	
59 Carbon tetrachloride	117	5.375	5.375	0.000	88	1264040	200.0	206.4	
60 Isobutyl alcohol	41	5.417	5.417	0.000	92	770156	5000.0	6497.5	
63 Benzene	78	5.542	5.542	0.000	97	3969013	200.0	198.6	
64 1,2-Dichloroethane	62	5.584	5.584	0.000	98	1481018	200.0	186.3	
66 n-Heptane	43	5.766	5.766	0.000	94	1196269	200.0	201.9	
68 Trichloroethene	95	6.101	6.101	0.000	98	1070579	200.0	196.6	
69 2-Pentanone	43	6.227	6.227	0.000	99	2159935	640.0	684.7	
70 Methylcyclohexane	55	6.311	6.311	0.000	92	1304585	200.0	212.7	
71 1,2-Dichloropropane	63	6.325	6.325	0.000	92	1044259	200.0	203.4	
73 1,4-Dioxane	88	6.380	6.380	0.000	95	252817	4000.0	4177.6	
74 Dibromomethane	93	6.408	6.408	0.000	96	666296	200.0	198.8	
75 Dichlorobromomethane	83	6.548	6.548	0.000	99	1431711	200.0	207.4	
77 2-Chloroethyl vinyl ether	63	6.785	6.785	0.000	93	562567	200.0	221.2	
78 cis-1,3-Dichloropropene	75	6.925	6.925	0.000	93	1669284	200.0	204.1	
79 4-Methyl-2-pentanone (MIBK)	43	7.037	7.037	0.000	99	3333776	800.0	925.3	
82 Toluene	91	7.232	7.232	0.000	98	4114405	200.0	198.3	
84 trans-1,3-Dichloropropene	75	7.428	7.428	0.000	98	1565411	200.0	239.5	
85 Ethyl methacrylate	69	7.470	7.470	0.000	88	1121577	200.0	233.0	
87 1,1,2-Trichloroethane	97	7.609	7.609	0.000	93	877264	200.0	211.7	
89 Tetrachloroethene	164	7.707	7.707	0.000	97	795875	200.0	196.0	
90 1,3-Dichloropropane	76	7.763	7.763	0.000	94	1561789	200.0	214.0	
91 2-Hexanone	43	7.791	7.791	0.000	98	2274213	800.0	895.2	
95 Chlorodibromomethane	129	7.973	7.973	0.000	90	1048322	200.0	228.9	
96 Ethylene Dibromide	107	8.084	8.084	0.000	98	961866	200.0	221.9	
98 1-Chlorohexane	91	8.503	8.503	0.000	96	1029069	160.0	157.6	
99 Chlorobenzene	112	8.545	8.545	0.000	93	2674641	200.0	193.1	
100 1,1,1,2-Tetrachloroethane	131	8.629	8.615	0.014	95	992879	200.0	223.1	
101 Ethylbenzene	106	8.629	8.629	0.000	99	1467261	200.0	198.1	
102 m-Xylene & p-Xylene	106	8.755	8.741	0.014	0	1838435	200.0	199.5	
103 o-Xylene	106	9.118	9.118	0.000	98	1781108	200.0	204.1	
104 Styrene	104	9.132	9.132	0.000	94	3118834	200.0	207.7	
106 Bromoform	173	9.327	9.327	0.000	95	656582	200.0	226.9	
107 Isopropylbenzene	105	9.467	9.467	0.000	97	4569323	200.0	206.2	
109 Cyclohexanone	55	9.565	9.565	0.000	94	1033711	6000.0	6793.3	
110 1,1,2,2-Tetrachloroethane	83	9.760	9.760	0.000	95	1053492	200.0	197.1	
111 Bromobenzene	156	9.788	9.788	0.000	98	1184324	200.0	195.8	
112 trans-1,4-Dichloro-2-butene	53	9.802	9.802	0.000	87	351333	200.0	226.0	
113 1,2,3-Trichloropropane	110	9.830	9.830	0.000	85	346648	200.0	209.0	
114 N-Propylbenzene	120	9.872	9.872	0.000	99	1293501	200.0	209.8	
115 2-Chlorotoluene	126	9.970	9.970	0.000	95	1090130	200.0	198.0	
116 1,3,5-Trimethylbenzene	105	10.054	10.054	0.000	94	3948632	200.0	206.1	
117 4-Chlorotoluene	126	10.095	10.095	0.000	98	1148172	200.0	198.3	

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	10.361	10.361	0.000	93	3348118	200.0	207.5	
119 1,2,4-Trimethylbenzene	105	10.431	10.431	0.000	98	4063332	200.0	201.6	
120 sec-Butylbenzene	134	10.584	10.584	0.000	95	971565	200.0	206.2	
121 1,3-Dichlorobenzene	146	10.724	10.710	0.014	98	2283405	200.0	201.8	
122 4-Isopropyltoluene	119	10.738	10.738	0.000	97	4243753	200.0	204.9	
123 1,4-Dichlorobenzene	146	10.822	10.822	0.000	95	2319590	200.0	192.7	
125 n-Butylbenzene	91	11.143	11.143	0.000	98	3794460	200.0	209.3	
127 1,2-Dichlorobenzene	146	11.171	11.171	0.000	97	2163602	200.0	196.0	
128 1,2-Dibromo-3-Chloropropane	157	11.967	11.967	0.000	85	243374	200.0	223.0	
130 1,2,4-Trichlorobenzene	180	12.791	12.791	0.000	94	1421401	200.0	207.7	
131 Hexachlorobutadiene	225	12.931	12.931	0.000	96	525476	200.0	203.1	
132 Naphthalene	128	13.056	13.056	0.000	98	3438567	200.0	203.9	
134 1,2,3-Trichlorobenzene	180	13.280	13.280	0.000	95	1158955	200.0	205.7	
S 149 1,2-Dichloroethene, Total (URS)	96				0		400.0	392.5	
S 156 1,3-Dichloropropene, Total	1				0		400.0	443.7	
S 155 Xylenes, Total	106				0		400.0	403.6	
S 153 Xylenes, Total (URS)	1				0		400.0	403.6	
S 152 Total BTEX	1				0			998.6	
S 151 Trihalomethanes, Total	1				0		800.0	857.6	
S 150 1,2-Dichloroethene, Total	1				0		400.0	392.5	

QC Flag Legend

Processing Flags

Reagents:

MV-MegaMainA_00070	Amount Added: 100.00	Units: uL	
MV-Gas A_00122	Amount Added: 40.00	Units: uL	
mv-IS_SS_00038	Amount Added: 5.00	Units: uL	Run Reagent

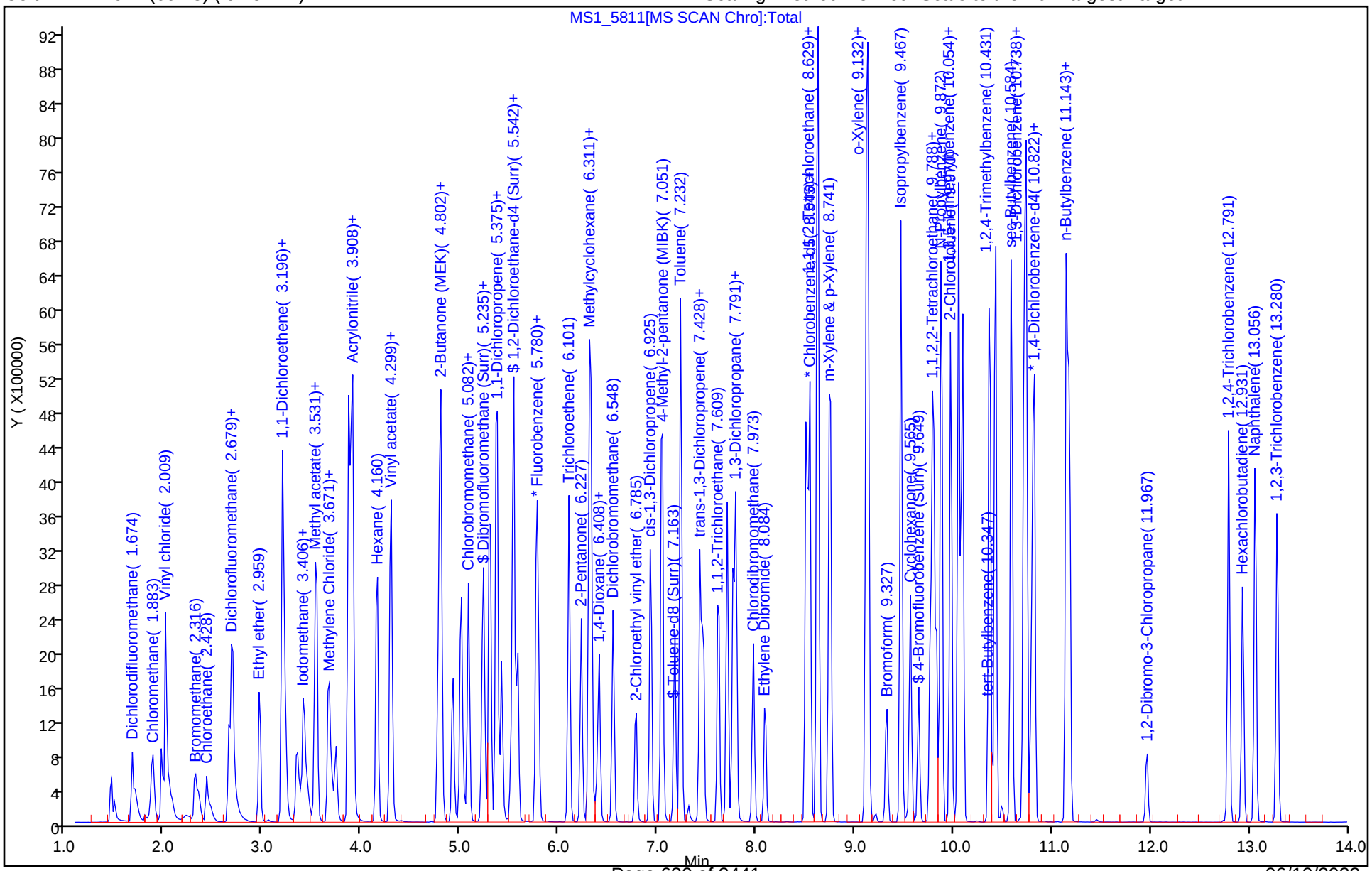
Report Date: 05-May-2022 19:53:35 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5811.D

Injection Date:	05-May-2022 17:32:30	Instrument ID:	VMS_MS1	Operator ID:	SUNLEEC
Lims ID:	IC			Worklist Smp#:	43
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
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



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

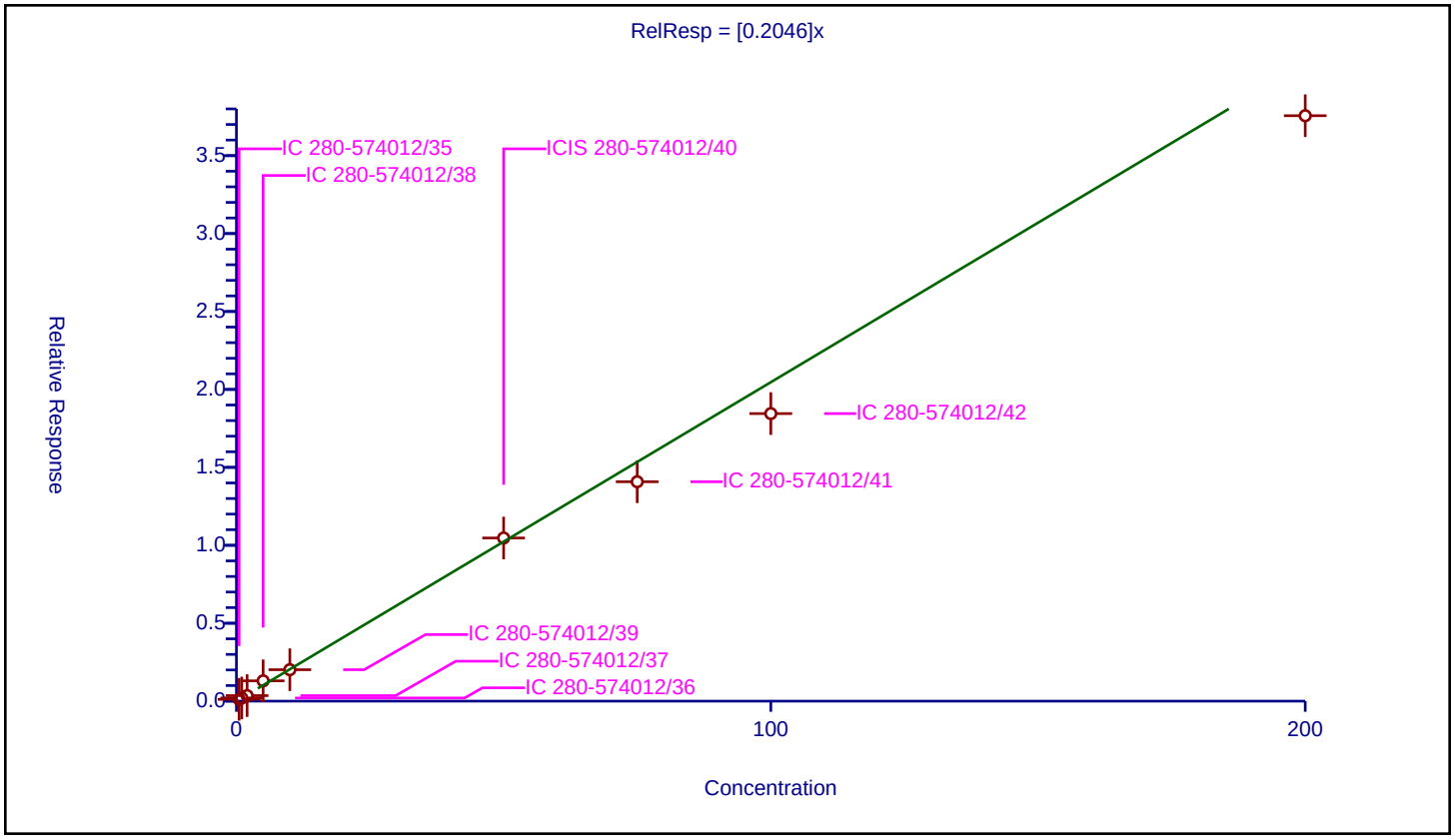
Curve Coefficients

Intercept:	0
Slope:	0.2046

Error Coefficients

Standard Error:	458000
Relative Standard Error:	12.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.978

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.115644	50.0	1255579.0	0.231288	Y
2	IC 280-574012/36	1.0	0.202001	50.0	1203211.0	0.202001	Y
3	IC 280-574012/37	2.0	0.35377	50.0	1234418.0	0.176885	Y
4	IC 280-574012/38	5.0	1.302234	50.0	1235070.0	0.260447	Y
5	IC 280-574012/39	10.0	2.016707	50.0	1271528.0	0.201671	Y
6	ICIS 280-574012/40	50.0	10.467364	50.0	1327574.0	0.209347	Y
7	IC 280-574012/41	75.0	14.077107	50.0	1395070.0	0.187695	Y
8	IC 280-574012/42	100.0	18.450954	50.0	1381560.0	0.18451	Y
9	IC 280-574012/43	200.0	37.562888	50.0	1446027.0	0.187814	Y



Calibration / Chloromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

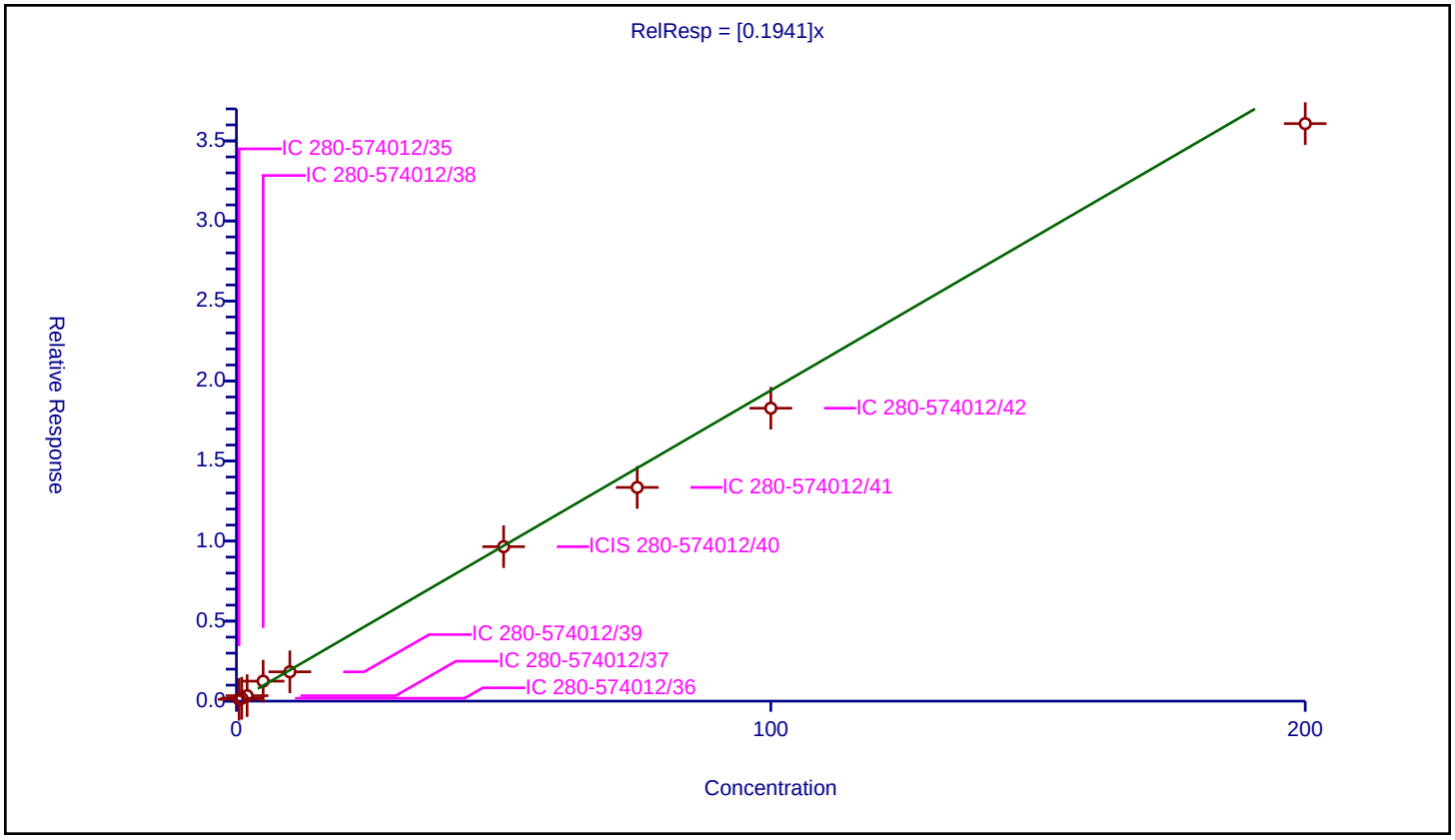
Curve Coefficients

Intercept:	0
Slope:	0.1941

Error Coefficients

Standard Error:	440000
Relative Standard Error:	13.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.975

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.114051	50.0	1255579.0	0.228102	Y
2	IC 280-574012/36	1.0	0.181971	50.0	1203211.0	0.181971	Y
3	IC 280-574012/37	2.0	0.339836	50.0	1234418.0	0.169918	Y
4	IC 280-574012/38	5.0	1.24835	50.0	1235070.0	0.24967	Y
5	IC 280-574012/39	10.0	1.831261	50.0	1271528.0	0.183126	Y
6	ICIS 280-574012/40	50.0	9.649858	50.0	1327574.0	0.192997	Y
7	IC 280-574012/41	75.0	13.352377	50.0	1395070.0	0.178032	Y
8	IC 280-574012/42	100.0	18.301377	50.0	1381560.0	0.183014	Y
9	IC 280-574012/43	200.0	36.080274	50.0	1446027.0	0.180401	Y



Calibration / Vinyl chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

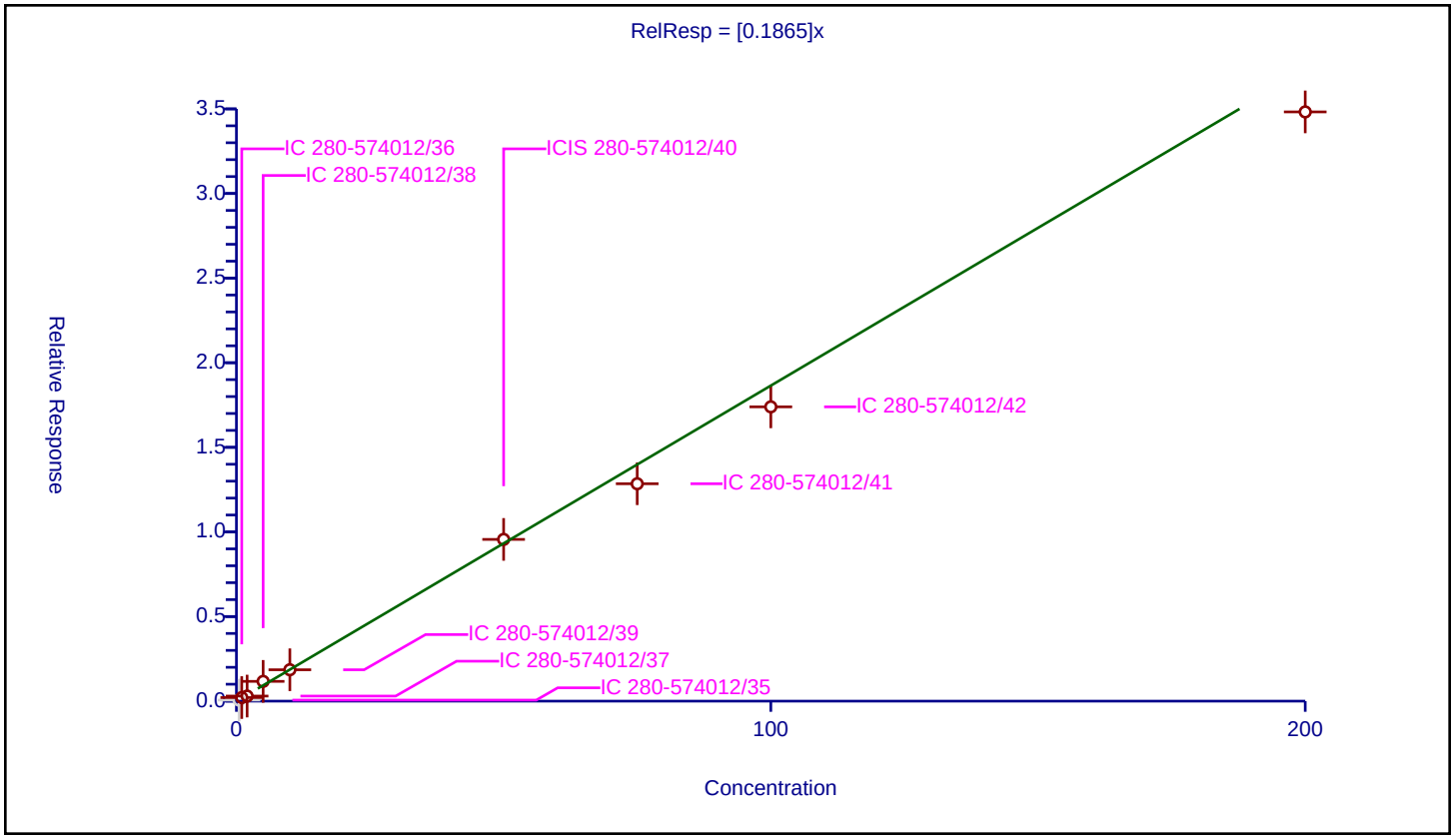
Curve Coefficients

Intercept:	0
Slope:	0.1865

Error Coefficients

Standard Error:	454000
Relative Standard Error:	14.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.974

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.06272	50.0	1255579.0	0.12544	N
2	IC 280-574012/36	1.0	0.212224	50.0	1203211.0	0.212224	Y
3	IC 280-574012/37	2.0	0.299736	50.0	1234418.0	0.149868	Y
4	IC 280-574012/38	5.0	1.168031	50.0	1235070.0	0.233606	Y
5	IC 280-574012/39	10.0	1.854776	50.0	1271528.0	0.185478	Y
6	ICIS 280-574012/40	50.0	9.557396	50.0	1327574.0	0.191148	Y
7	IC 280-574012/41	75.0	12.846882	50.0	1395070.0	0.171292	Y
8	IC 280-574012/42	100.0	17.392042	50.0	1381560.0	0.17392	Y
9	IC 280-574012/43	200.0	34.821929	50.0	1446027.0	0.17411	Y



Calibration / Bromomethane

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

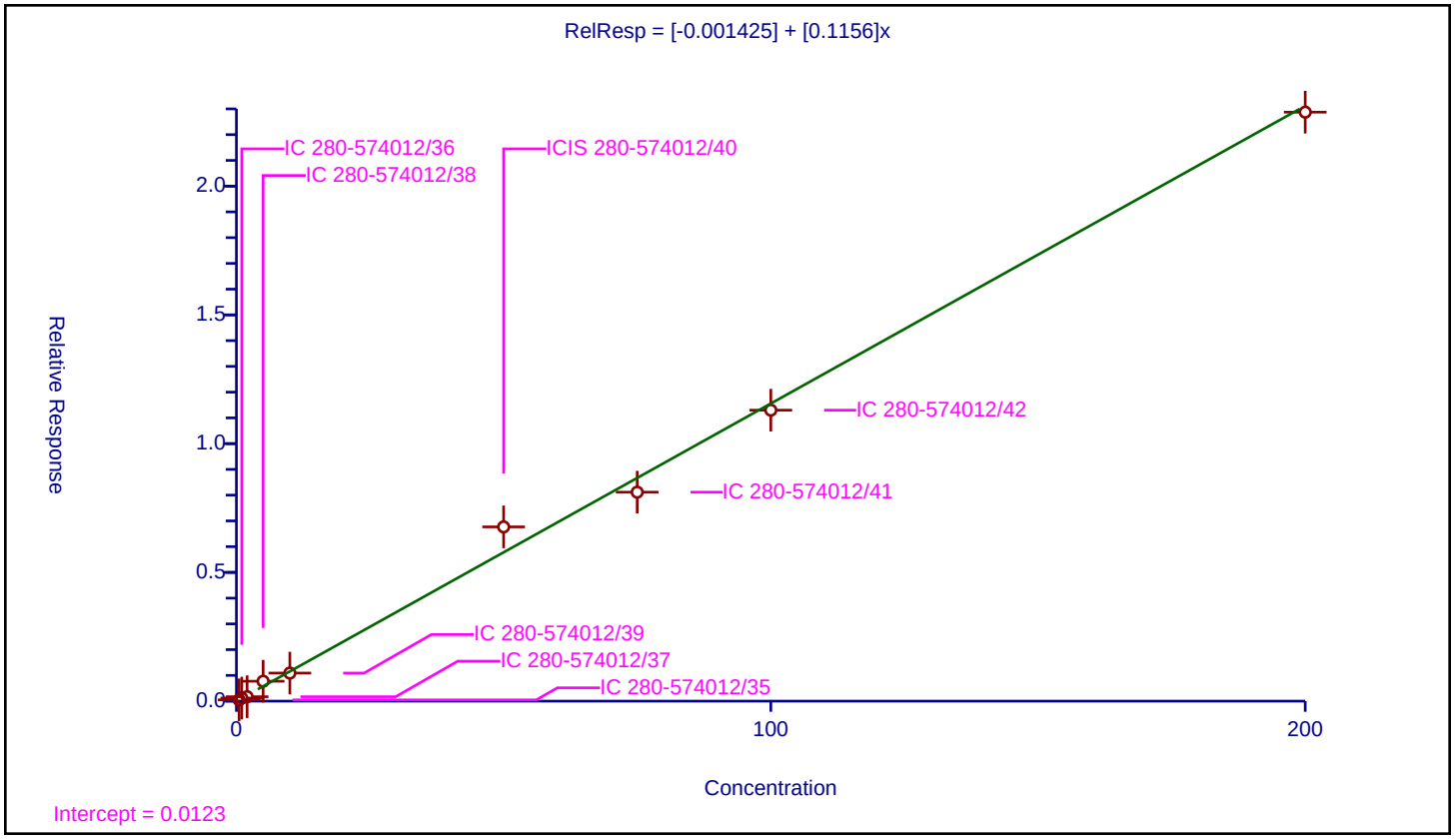
Curve Coefficients

Intercept:	-0.001425
Slope:	0.1156

Error Coefficients

Standard Error:	298000
Relative Standard Error:	18.5
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.048026	50.0	1255579.0	0.096051	Y
2	IC 280-574012/36	1.0	0.118849	50.0	1203211.0	0.118849	Y
3	IC 280-574012/37	2.0	0.171012	50.0	1234418.0	0.085506	Y
4	IC 280-574012/38	5.0	0.773195	50.0	1235070.0	0.154639	Y
5	IC 280-574012/39	10.0	1.089555	50.0	1271528.0	0.108956	Y
6	ICIS 280-574012/40	50.0	6.767118	50.0	1327574.0	0.135342	Y
7	IC 280-574012/41	75.0	8.114933	50.0	1395070.0	0.108199	Y
8	IC 280-574012/42	100.0	11.299582	50.0	1381560.0	0.112996	Y
9	IC 280-574012/43	200.0	22.872671	50.0	1446027.0	0.114363	Y



Calibration / Chloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

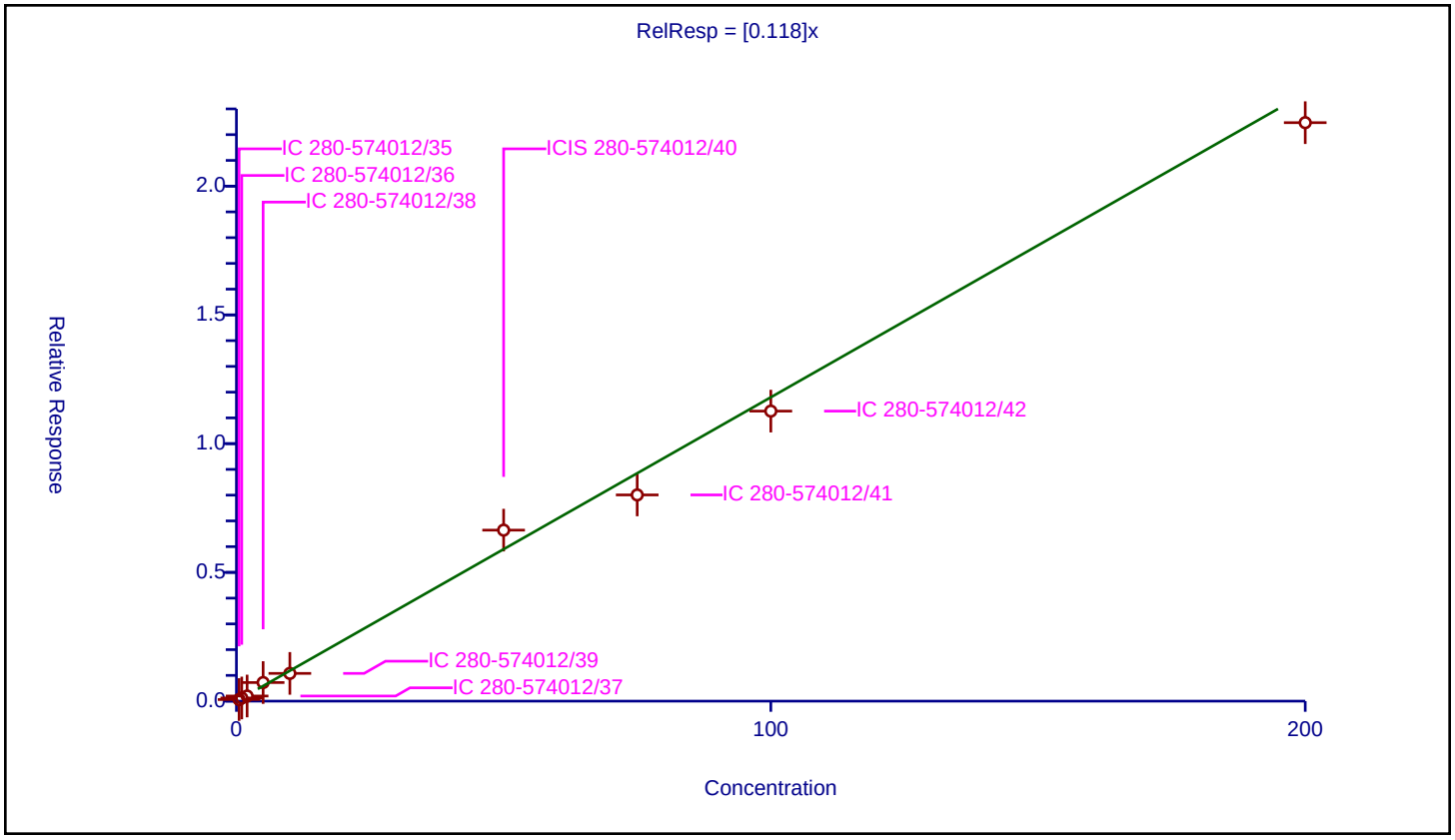
Curve Coefficients

Intercept:	0
Slope:	0.118

Error Coefficients

Standard Error:	274000
Relative Standard Error:	12.0
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.061565	50.0	1255579.0	0.12313	Y
2	IC 280-574012/36	1.0	0.122547	50.0	1203211.0	0.122547	Y
3	IC 280-574012/37	2.0	0.199203	50.0	1234418.0	0.099602	Y
4	IC 280-574012/38	5.0	0.722631	50.0	1235070.0	0.144526	Y
5	IC 280-574012/39	10.0	1.076815	50.0	1271528.0	0.107681	Y
6	ICIS 280-574012/40	50.0	6.641136	50.0	1327574.0	0.132823	Y
7	IC 280-574012/41	75.0	8.008236	50.0	1395070.0	0.106776	Y
8	IC 280-574012/42	100.0	11.263174	50.0	1381560.0	0.112632	Y
9	IC 280-574012/43	200.0	22.465002	50.0	1446027.0	0.112325	Y



Calibration / Dichlorofluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

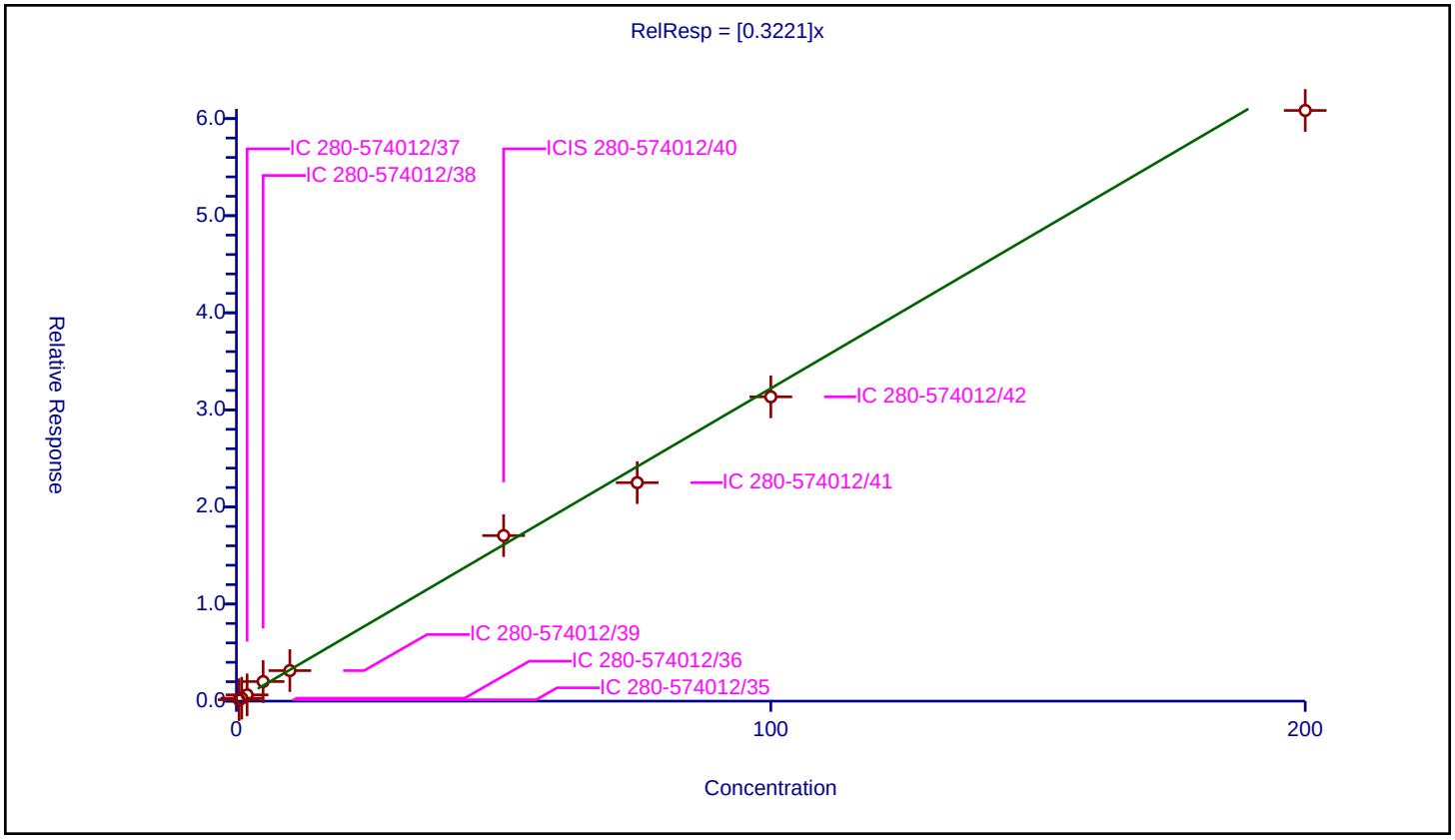
Curve Coefficients

Intercept:	0
Slope:	0.3221

Error Coefficients

Standard Error:	746000
Relative Standard Error:	10.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.147263	50.0	1255579.0	0.294525	Y
2	IC 280-574012/36	1.0	0.303438	50.0	1203211.0	0.303438	Y
3	IC 280-574012/37	2.0	0.64901	50.0	1234418.0	0.324505	Y
4	IC 280-574012/38	5.0	2.017861	50.0	1235070.0	0.403572	Y
5	IC 280-574012/39	10.0	3.144131	50.0	1271528.0	0.314413	Y
6	ICIS 280-574012/40	50.0	17.050349	50.0	1327574.0	0.341007	Y
7	IC 280-574012/41	75.0	22.503029	50.0	1395070.0	0.30004	Y
8	IC 280-574012/42	100.0	31.345798	50.0	1381560.0	0.313458	Y
9	IC 280-574012/43	200.0	60.837661	50.0	1446027.0	0.304188	Y



Calibration / Trichlorofluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

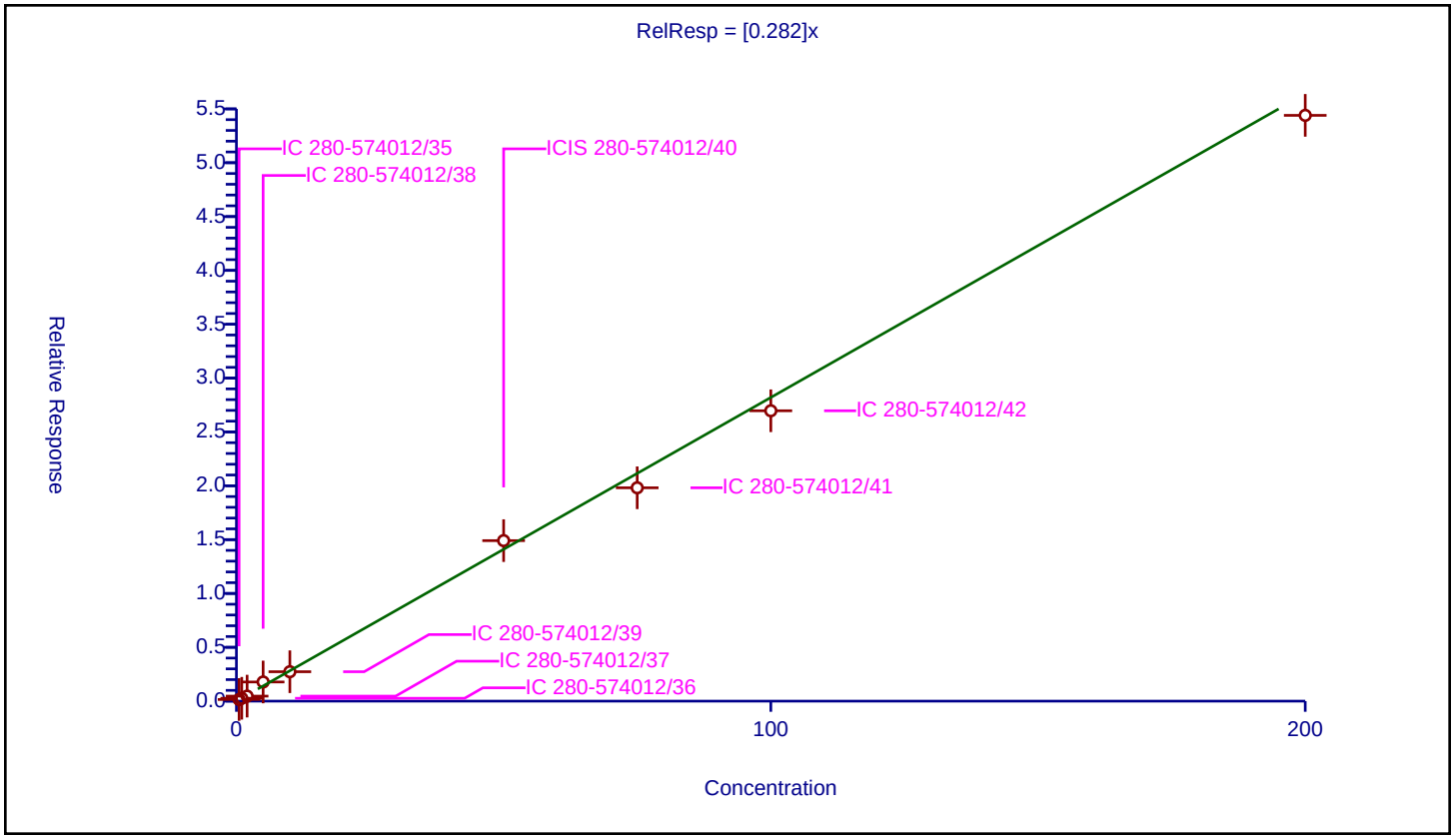
Curve Coefficients

Intercept:	0
Slope:	0.282

Error Coefficients

Standard Error:	661000
Relative Standard Error:	12.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.152519	50.0	1255579.0	0.305039	Y
2	IC 280-574012/36	1.0	0.266121	50.0	1203211.0	0.266121	Y
3	IC 280-574012/37	2.0	0.467346	50.0	1234418.0	0.233673	Y
4	IC 280-574012/38	5.0	1.780263	50.0	1235070.0	0.356053	Y
5	IC 280-574012/39	10.0	2.732539	50.0	1271528.0	0.273254	Y
6	ICIS 280-574012/40	50.0	14.90497	50.0	1327574.0	0.298099	Y
7	IC 280-574012/41	75.0	19.812769	50.0	1395070.0	0.26417	Y
8	IC 280-574012/42	100.0	26.966219	50.0	1381560.0	0.269662	Y
9	IC 280-574012/43	200.0	54.39933	50.0	1446027.0	0.271997	Y



Calibration / Ethyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

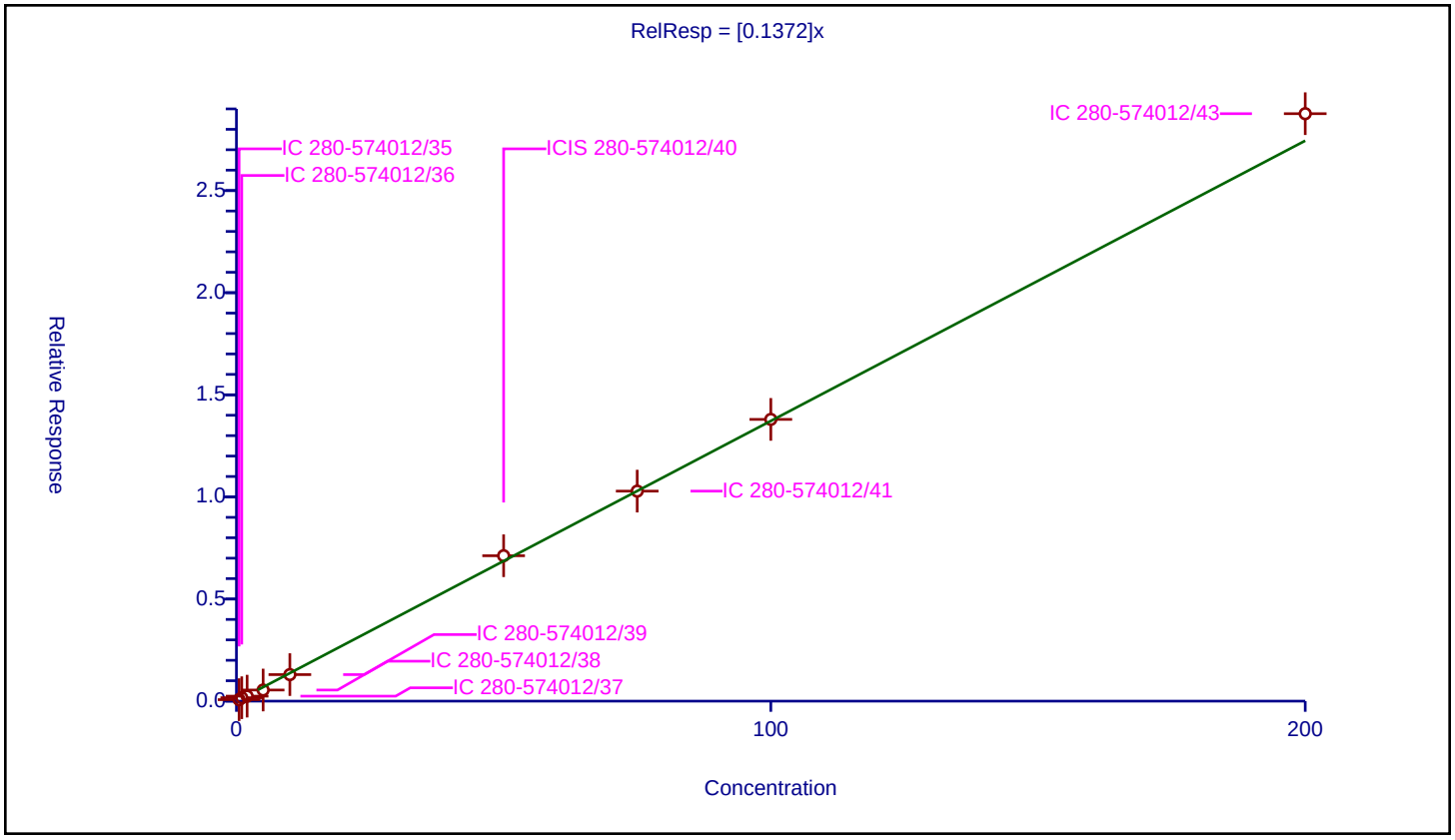
Curve Coefficients

Intercept:	0
Slope:	0.1372

Error Coefficients

Standard Error:	346000
Relative Standard Error:	11.9
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.072596	50.0	1255579.0	0.145192	Y
2	IC 280-574012/36	1.0	0.16751	50.0	1203211.0	0.16751	Y
3	IC 280-574012/37	2.0	0.243961	50.0	1234418.0	0.121981	Y
4	IC 280-574012/38	5.0	0.544787	50.0	1235070.0	0.108957	Y
5	IC 280-574012/39	10.0	1.299342	50.0	1271528.0	0.129934	Y
6	ICIS 280-574012/40	50.0	7.119603	50.0	1327574.0	0.142392	Y
7	IC 280-574012/41	75.0	10.283391	50.0	1395070.0	0.137112	Y
8	IC 280-574012/42	100.0	13.796143	50.0	1381560.0	0.137961	Y
9	IC 280-574012/43	200.0	28.765507	50.0	1446027.0	0.143828	Y



Calibration / Acrolein

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

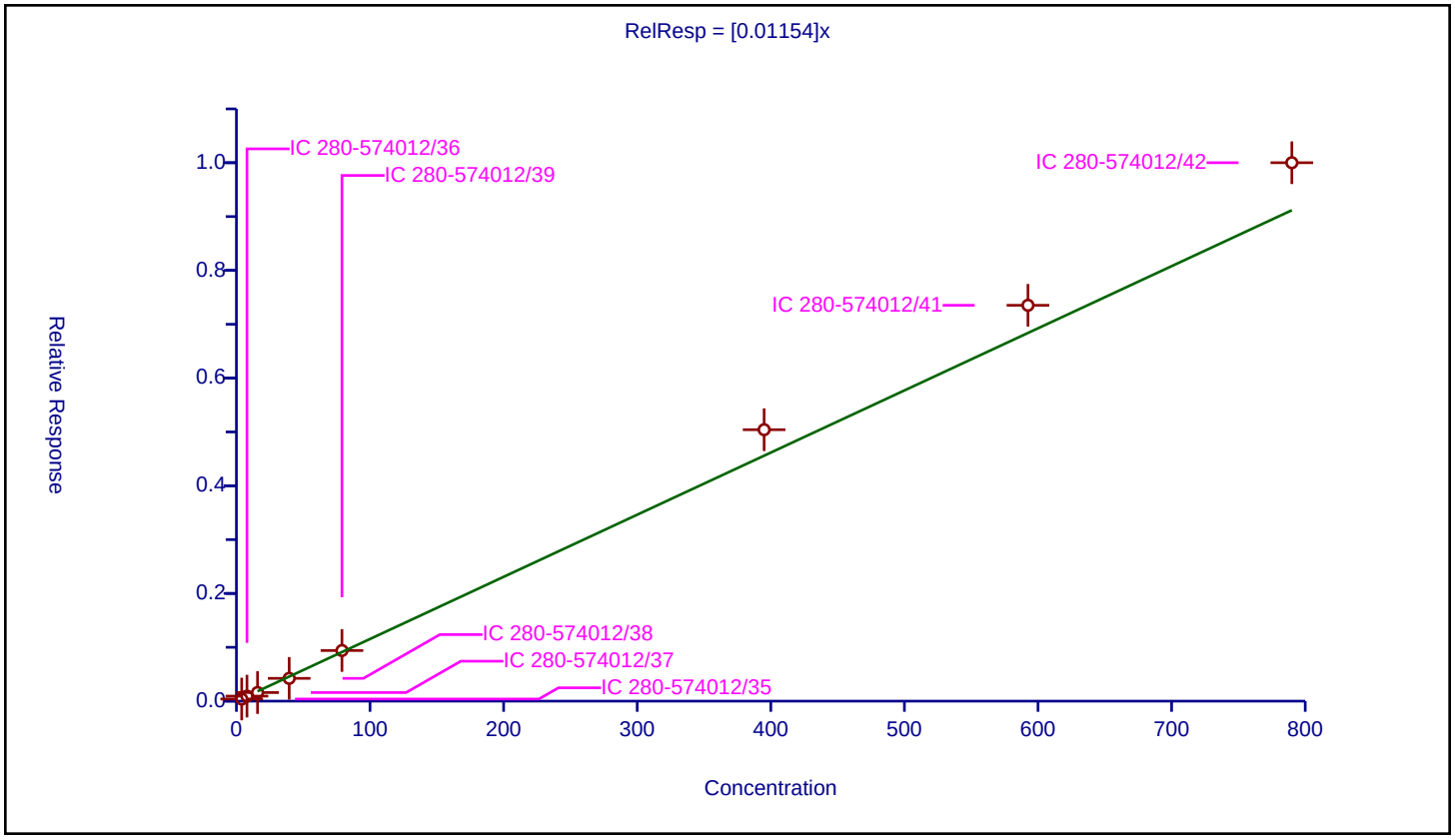
Curve Coefficients

Intercept:	0
Slope:	0.01154

Error Coefficients

Standard Error:	140000
Relative Standard Error:	9.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	3.95	0.039464	50.0	1255579.0	0.009991	Y
2	IC 280-574012/36	7.9	0.093126	50.0	1203211.0	0.011788	Y
3	IC 280-574012/37	15.8	0.15967	50.0	1234418.0	0.010106	Y
4	IC 280-574012/38	39.5	0.423296	50.0	1235070.0	0.010716	Y
5	IC 280-574012/39	79.0	0.940089	50.0	1271528.0	0.0119	Y
6	ICIS 280-574012/40	395.0	5.041678	50.0	1327574.0	0.012764	Y
7	IC 280-574012/41	592.5	7.352033	50.0	1395070.0	0.012408	Y
8	IC 280-574012/42	790.0	10.00047	50.0	1381560.0	0.012659	Y



Calibration / 1,1,2-Trichloro-1,2,2-trifluoroethane

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

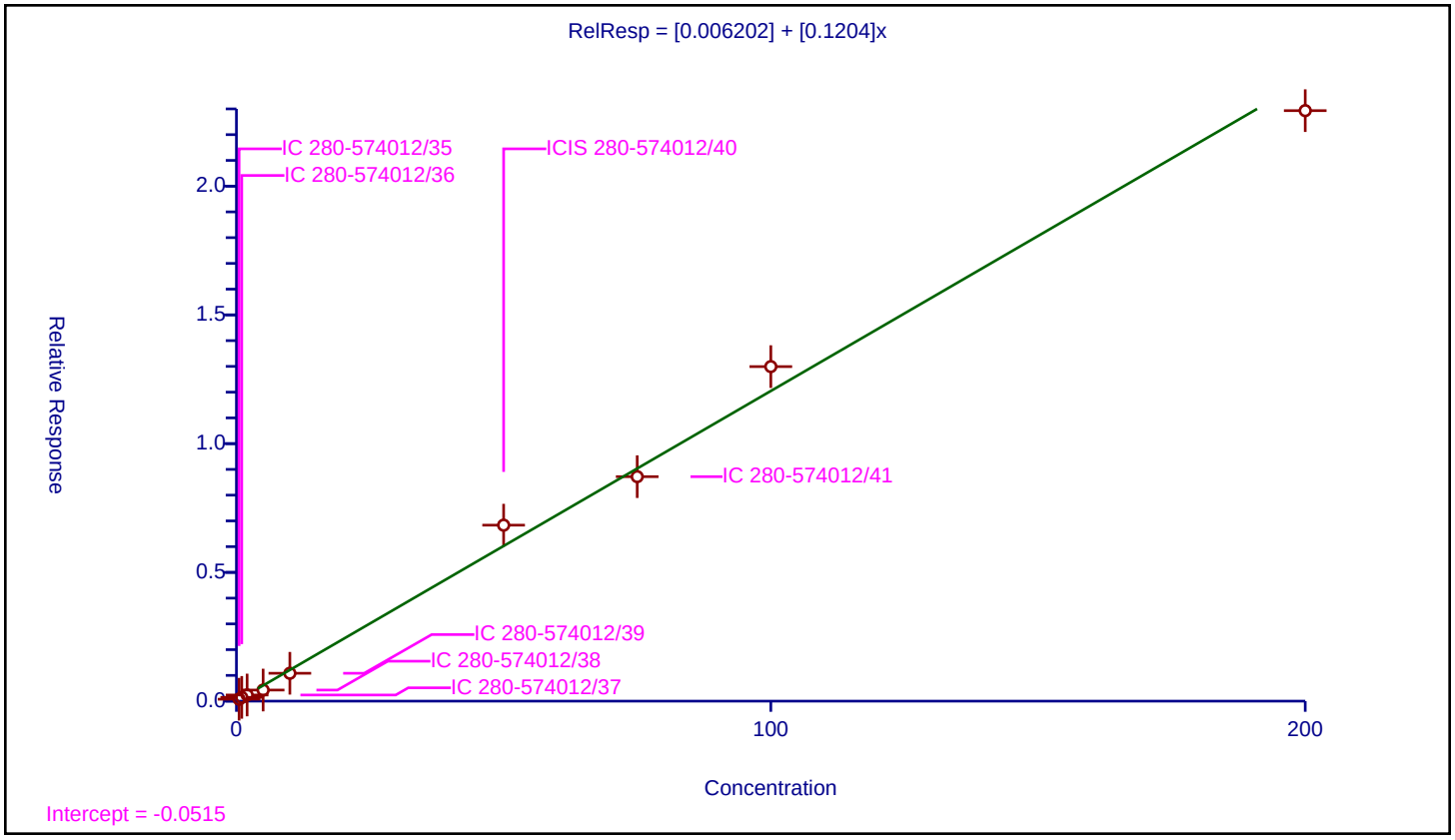
Curve Coefficients

Intercept:	0.006202
Slope:	0.1204

Error Coefficients

Standard Error:	307000
Relative Standard Error:	15.8
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.075025	50.0	1255579.0	0.15005	Y
2	IC 280-574012/36	1.0	0.146358	50.0	1203211.0	0.146358	Y
3	IC 280-574012/37	2.0	0.23829	50.0	1234418.0	0.119145	Y
4	IC 280-574012/38	5.0	0.430421	50.0	1235070.0	0.086084	Y
5	IC 280-574012/39	10.0	1.082163	50.0	1271528.0	0.108216	Y
6	ICIS 280-574012/40	50.0	6.834308	50.0	1327574.0	0.136686	Y
7	IC 280-574012/41	75.0	8.717699	50.0	1395070.0	0.116236	Y
8	IC 280-574012/42	100.0	12.992197	50.0	1381560.0	0.129922	Y
9	IC 280-574012/43	200.0	22.931245	50.0	1446027.0	0.114656	Y



Calibration / 1,1-Dichloroethene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

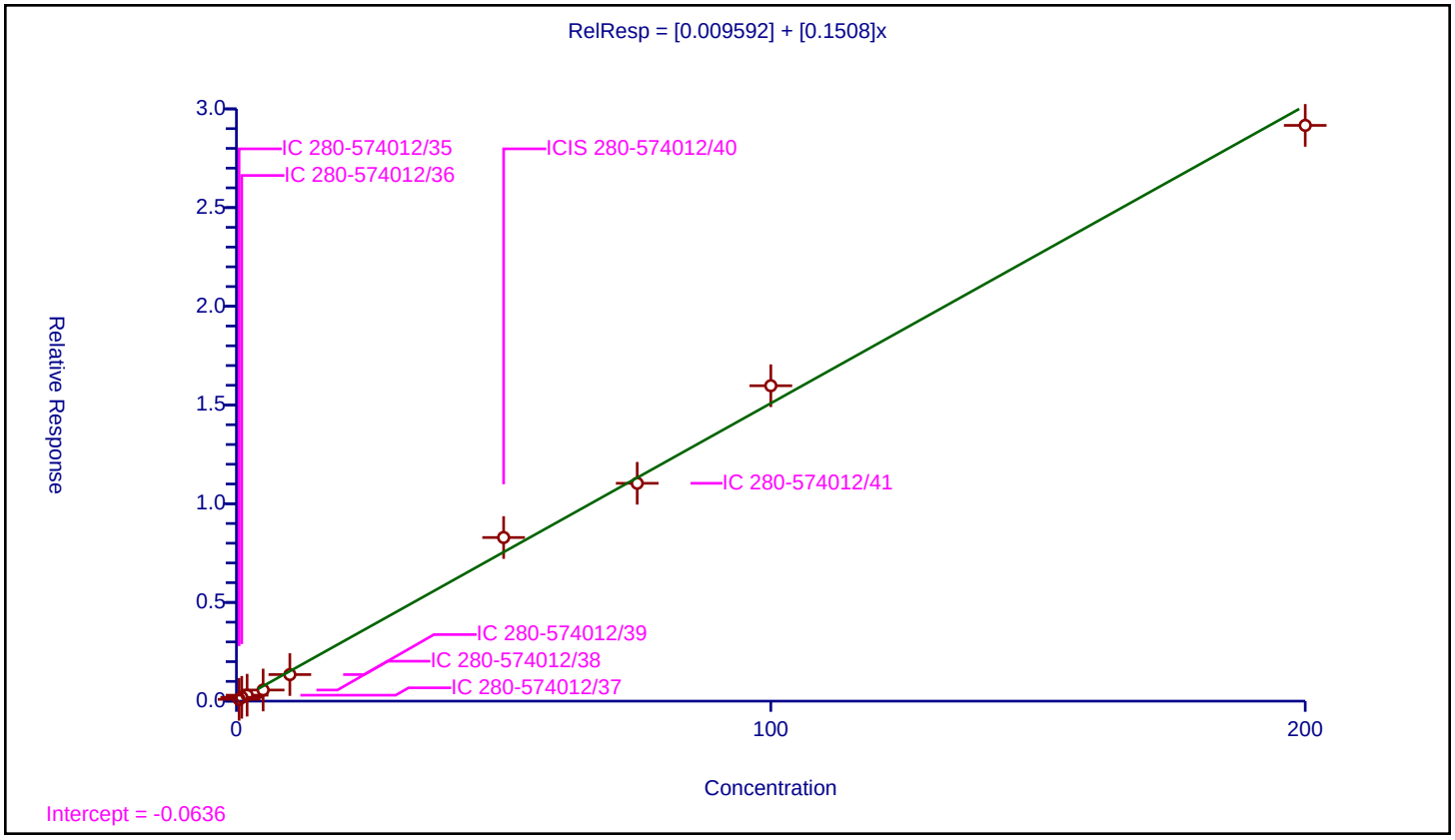
Curve Coefficients

Intercept:	0.009592
Slope:	0.1508

Error Coefficients

Standard Error:	387000
Relative Standard Error:	15.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.091591	50.0	1255579.0	0.183182	Y
2	IC 280-574012/36	1.0	0.19423	50.0	1203211.0	0.19423	Y
3	IC 280-574012/37	2.0	0.302045	50.0	1234418.0	0.151023	Y
4	IC 280-574012/38	5.0	0.562802	50.0	1235070.0	0.11256	Y
5	IC 280-574012/39	10.0	1.345271	50.0	1271528.0	0.134527	Y
6	ICIS 280-574012/40	50.0	8.288954	50.0	1327574.0	0.165779	Y
7	IC 280-574012/41	75.0	11.035109	50.0	1395070.0	0.147135	Y
8	IC 280-574012/42	100.0	15.976975	50.0	1381560.0	0.15977	Y
9	IC 280-574012/43	200.0	29.165154	50.0	1446027.0	0.145826	Y



Calibration / Acetone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

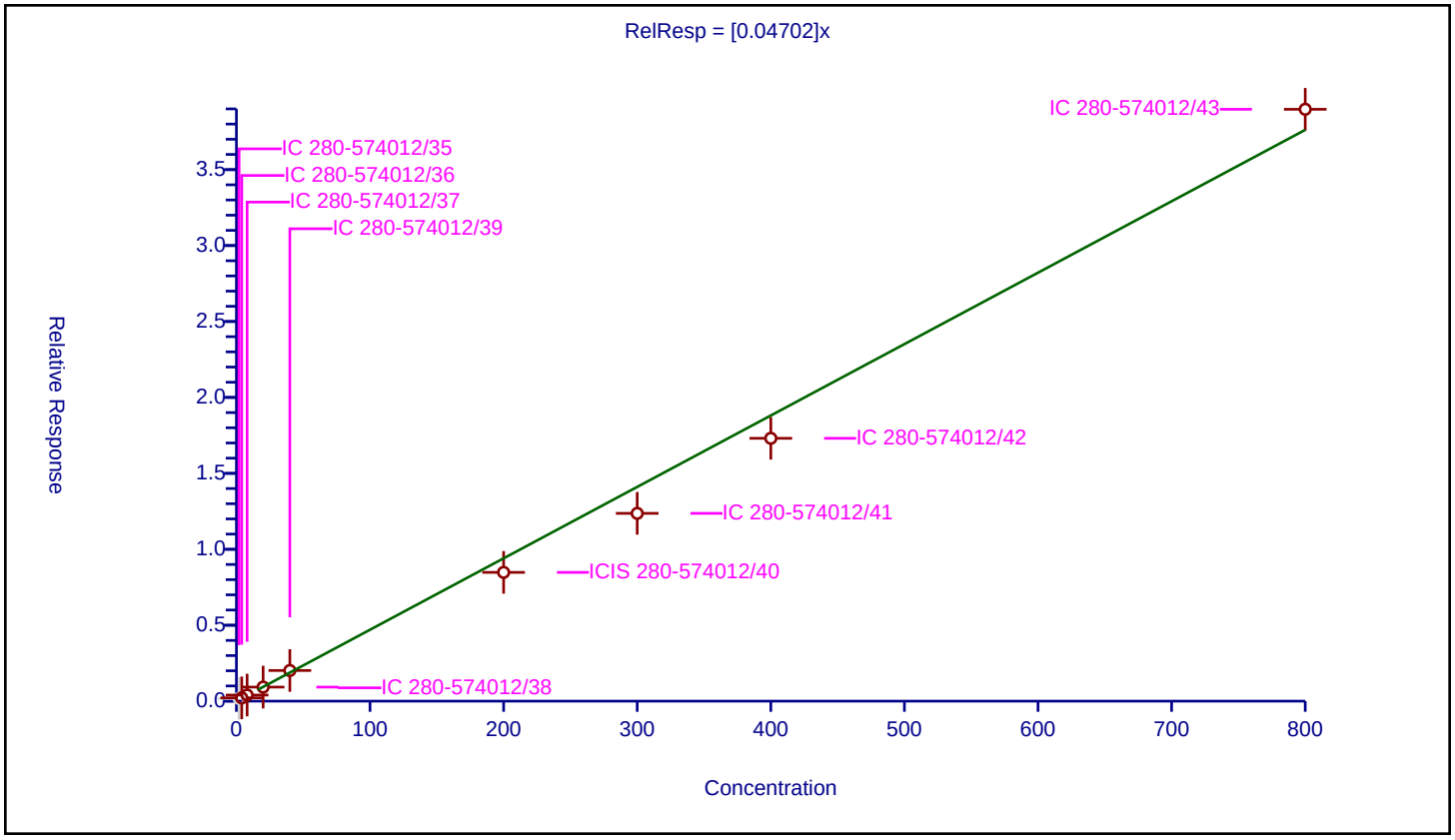
Curve Coefficients

Intercept:	0
Slope:	0.04702

Error Coefficients

Standard Error:	489000
Relative Standard Error:	9.5
Correlation Coefficient:	0.991
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	2.0	0.179718	50.0	1255579.0	0.089859	N
2	IC 280-574012/36	4.0	0.215299	50.0	1203211.0	0.053825	Y
3	IC 280-574012/37	8.0	0.400432	50.0	1234418.0	0.050054	Y
4	IC 280-574012/38	20.0	0.925251	50.0	1235070.0	0.046263	Y
5	IC 280-574012/39	40.0	2.017337	50.0	1271528.0	0.050433	Y
6	ICIS 280-574012/40	200.0	8.479339	50.0	1327574.0	0.042397	Y
7	IC 280-574012/41	300.0	12.36515	50.0	1395070.0	0.041217	Y
8	IC 280-574012/42	400.0	17.307971	50.0	1381560.0	0.04327	Y
9	IC 280-574012/43	800.0	38.973823	50.0	1446027.0	0.048717	Y



Calibration / Iodomethane

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

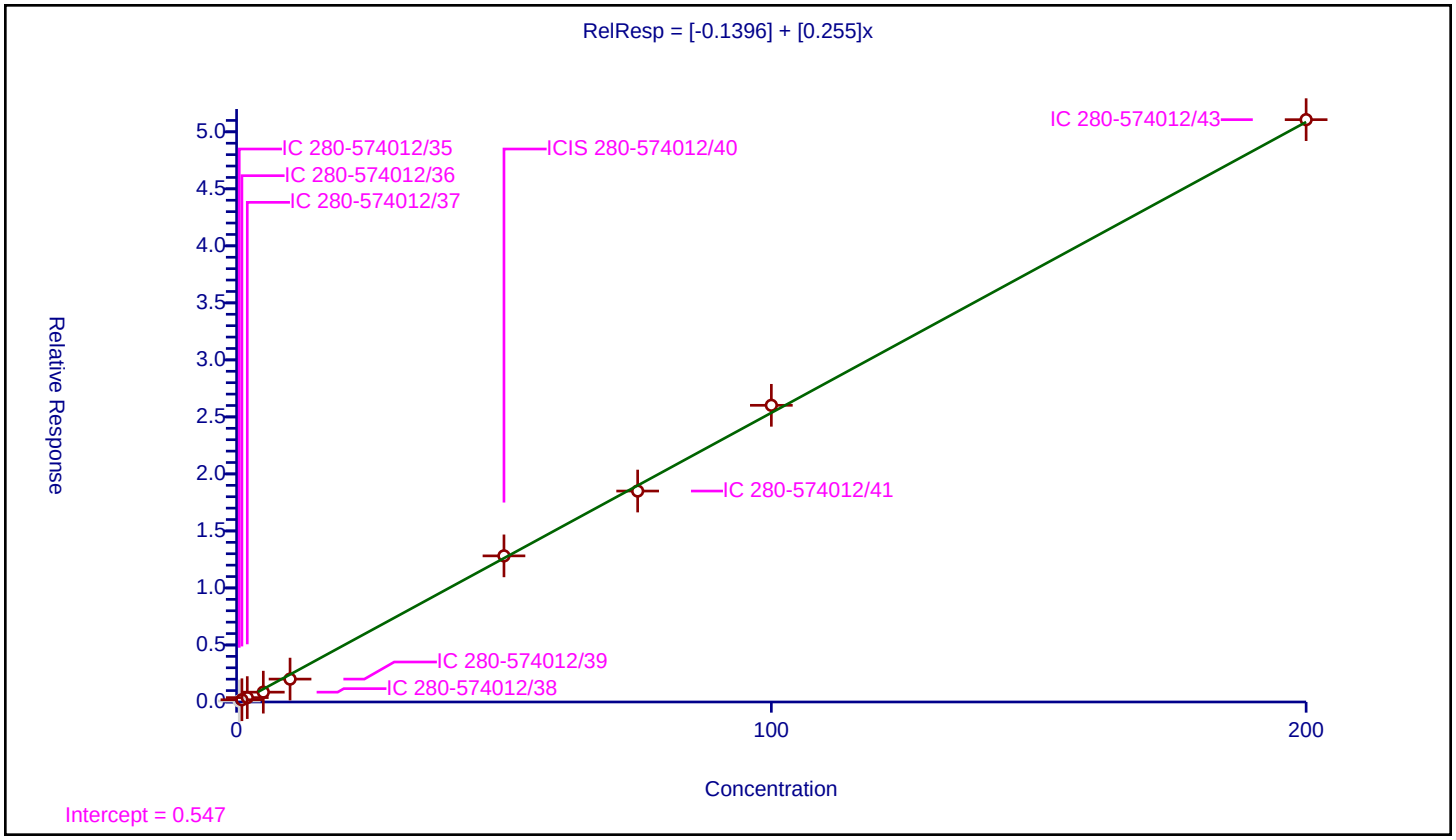
Curve Coefficients

Intercept:	-0.1396
Slope:	0.255

Error Coefficients

Standard Error:	717000
Relative Standard Error:	17.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.085259	50.0	1255579.0	0.170519	N
2	IC 280-574012/36	1.0	0.197638	50.0	1203211.0	0.197638	Y
3	IC 280-574012/37	2.0	0.385364	50.0	1234418.0	0.192682	Y
4	IC 280-574012/38	5.0	0.862745	50.0	1235070.0	0.172549	Y
5	IC 280-574012/39	10.0	2.007388	50.0	1271528.0	0.200739	Y
6	ICIS 280-574012/40	50.0	12.81341	50.0	1327574.0	0.256268	Y
7	IC 280-574012/41	75.0	18.49771	50.0	1395070.0	0.246636	Y
8	IC 280-574012/42	100.0	26.017835	50.0	1381560.0	0.260178	Y
9	IC 280-574012/43	200.0	51.066681	50.0	1446027.0	0.255333	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

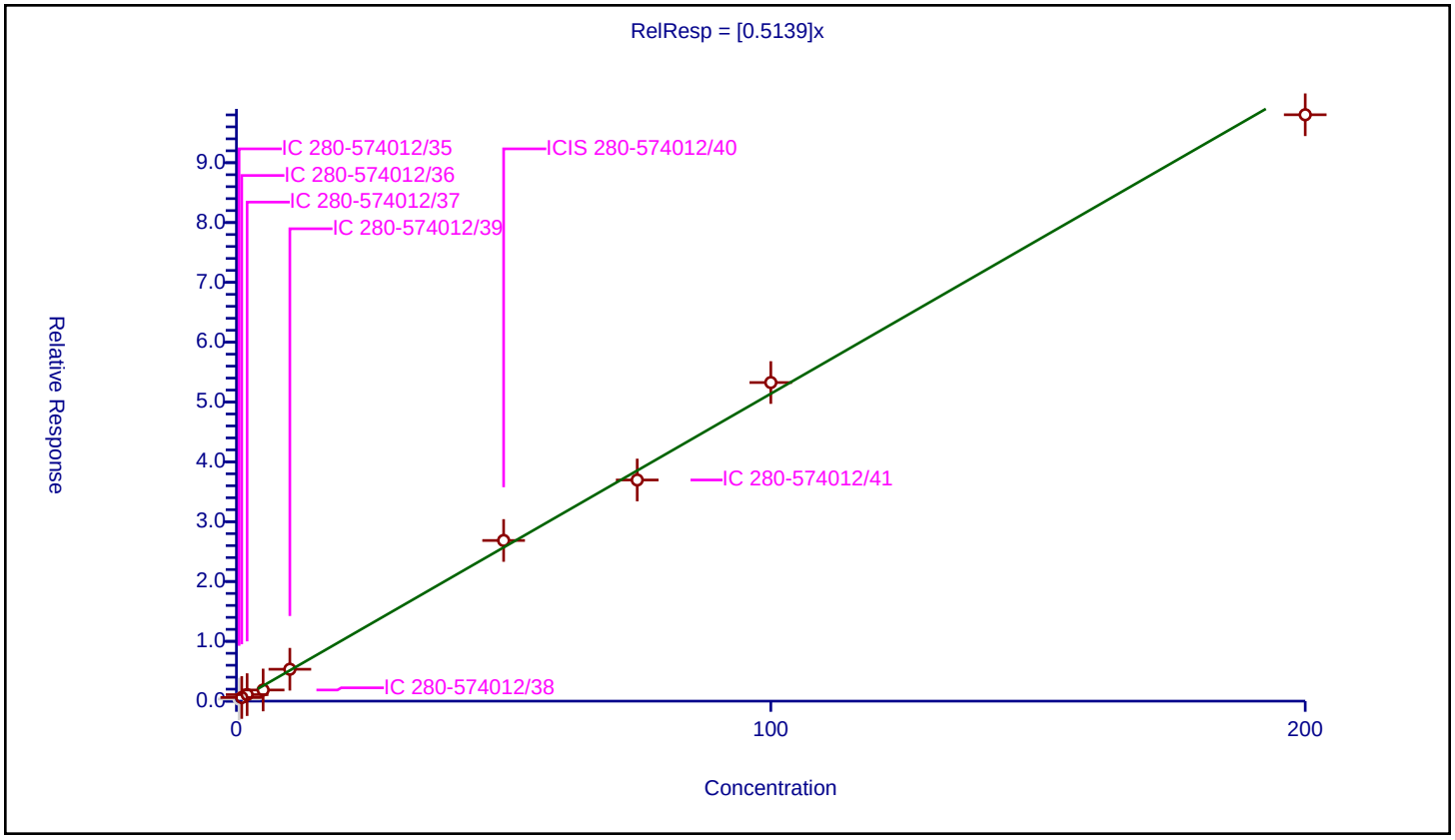
Curve Coefficients

Intercept:	0
Slope:	0.5139

Error Coefficients

Standard Error:	1300000
Relative Standard Error:	13.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.976

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.352746	50.0	1255579.0	0.705491	N
2	IC 280-574012/36	1.0	0.609079	50.0	1203211.0	0.609079	Y
3	IC 280-574012/37	2.0	1.087476	50.0	1234418.0	0.543738	Y
4	IC 280-574012/38	5.0	1.863902	50.0	1235070.0	0.37278	Y
5	IC 280-574012/39	10.0	5.331302	50.0	1271528.0	0.53313	Y
6	ICIS 280-574012/40	50.0	26.856657	50.0	1327574.0	0.537133	Y
7	IC 280-574012/41	75.0	36.969973	50.0	1395070.0	0.492933	Y
8	IC 280-574012/42	100.0	53.257658	50.0	1381560.0	0.532577	Y
9	IC 280-574012/43	200.0	98.018917	50.0	1446027.0	0.490095	Y



Calibration / Methyl acetate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

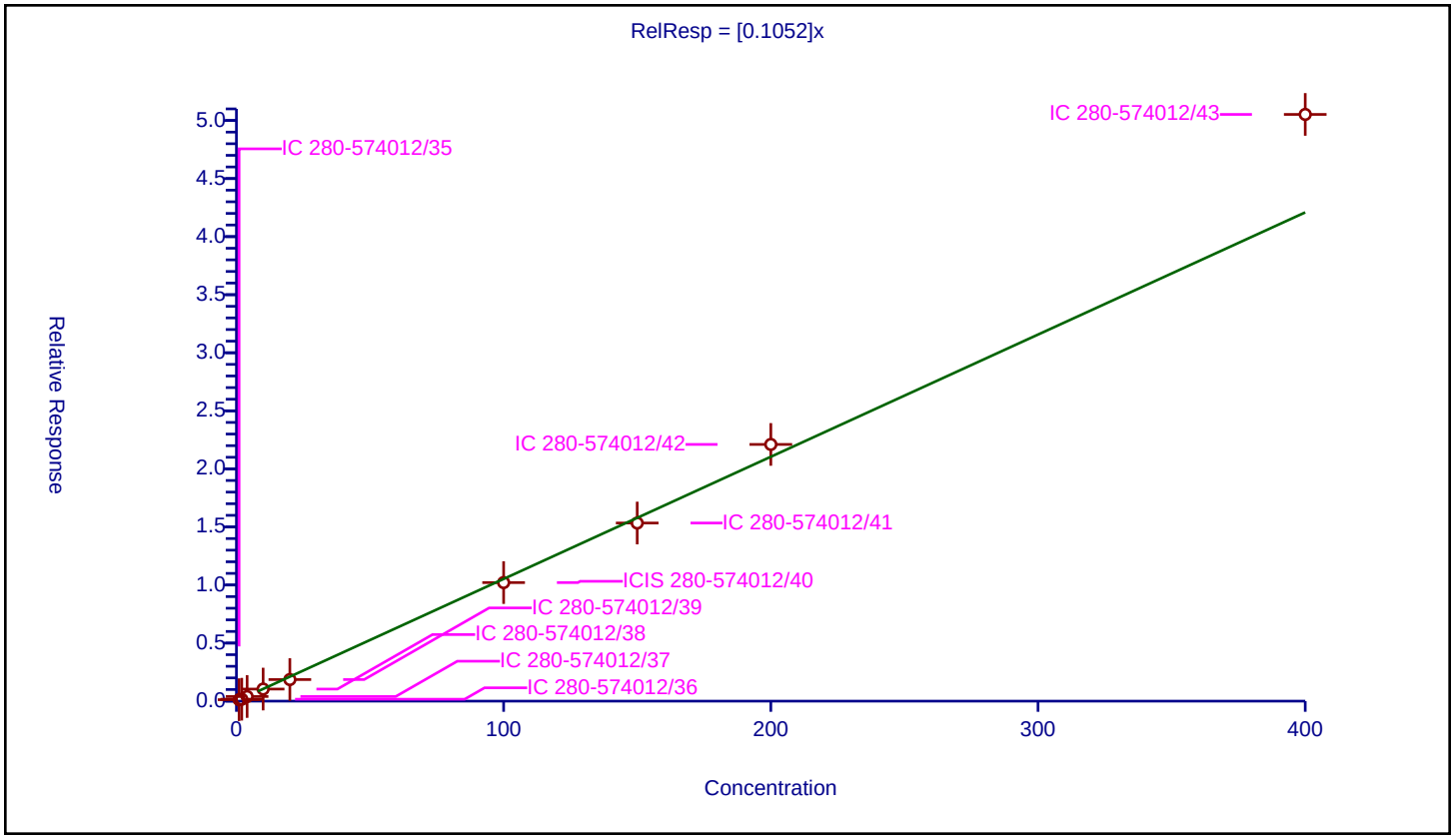
Curve Coefficients

Intercept:	0
Slope:	0.1052

Error Coefficients

Standard Error:	588000
Relative Standard Error:	13.3
Correlation Coefficient:	0.989
Coefficient of Determination (Adjusted):	0.977

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	1.0	0.125838	50.0	1255579.0	0.125838	Y
2	IC 280-574012/36	2.0	0.166887	50.0	1203211.0	0.083443	Y
3	IC 280-574012/37	4.0	0.398568	50.0	1234418.0	0.099642	Y
4	IC 280-574012/38	10.0	1.039131	50.0	1235070.0	0.103913	Y
5	IC 280-574012/39	20.0	1.858591	50.0	1271528.0	0.09293	Y
6	ICIS 280-574012/40	100.0	10.209977	50.0	1327574.0	0.1021	Y
7	IC 280-574012/41	150.0	15.337331	50.0	1395070.0	0.102249	Y
8	IC 280-574012/42	200.0	22.105193	50.0	1381560.0	0.110526	Y
9	IC 280-574012/43	400.0	50.521947	50.0	1446027.0	0.126305	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

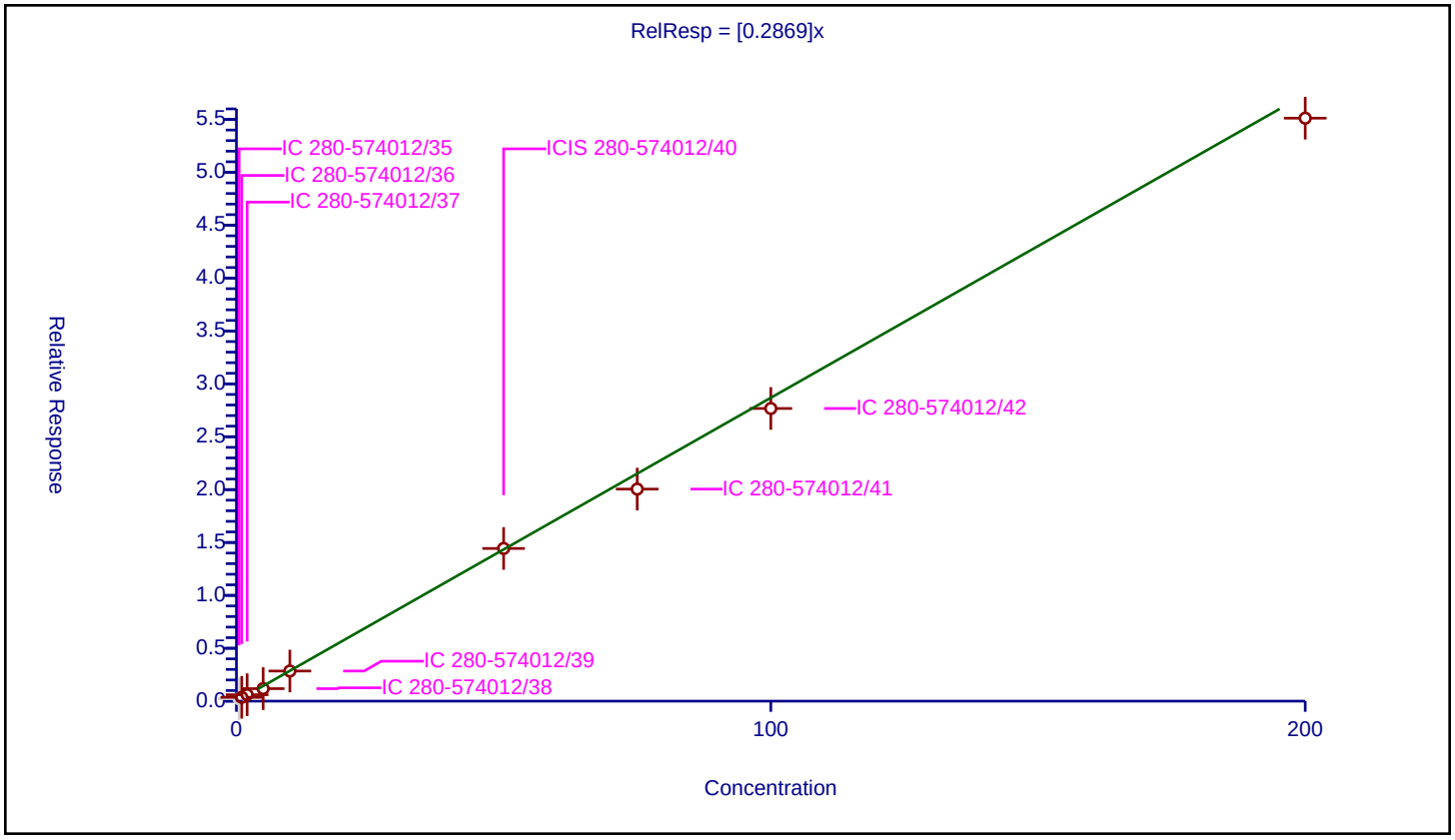
Curve Coefficients

Intercept:	0
Slope:	0.2869

Error Coefficients

Standard Error:	716000
Relative Standard Error:	12.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.976

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.229376	50.0	1255579.0	0.458752	N
2	IC 280-574012/36	1.0	0.362821	50.0	1203211.0	0.362821	Y
3	IC 280-574012/37	2.0	0.604536	50.0	1234418.0	0.302268	Y
4	IC 280-574012/38	5.0	1.182565	50.0	1235070.0	0.236513	Y
5	IC 280-574012/39	10.0	2.848227	50.0	1271528.0	0.284823	Y
6	ICIS 280-574012/40	50.0	14.435617	50.0	1327574.0	0.288712	Y
7	IC 280-574012/41	75.0	20.050248	50.0	1395070.0	0.267337	Y
8	IC 280-574012/42	100.0	27.672559	50.0	1381560.0	0.276726	Y
9	IC 280-574012/43	200.0	55.122588	50.0	1446027.0	0.275613	Y



Calibration / Methylene Chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

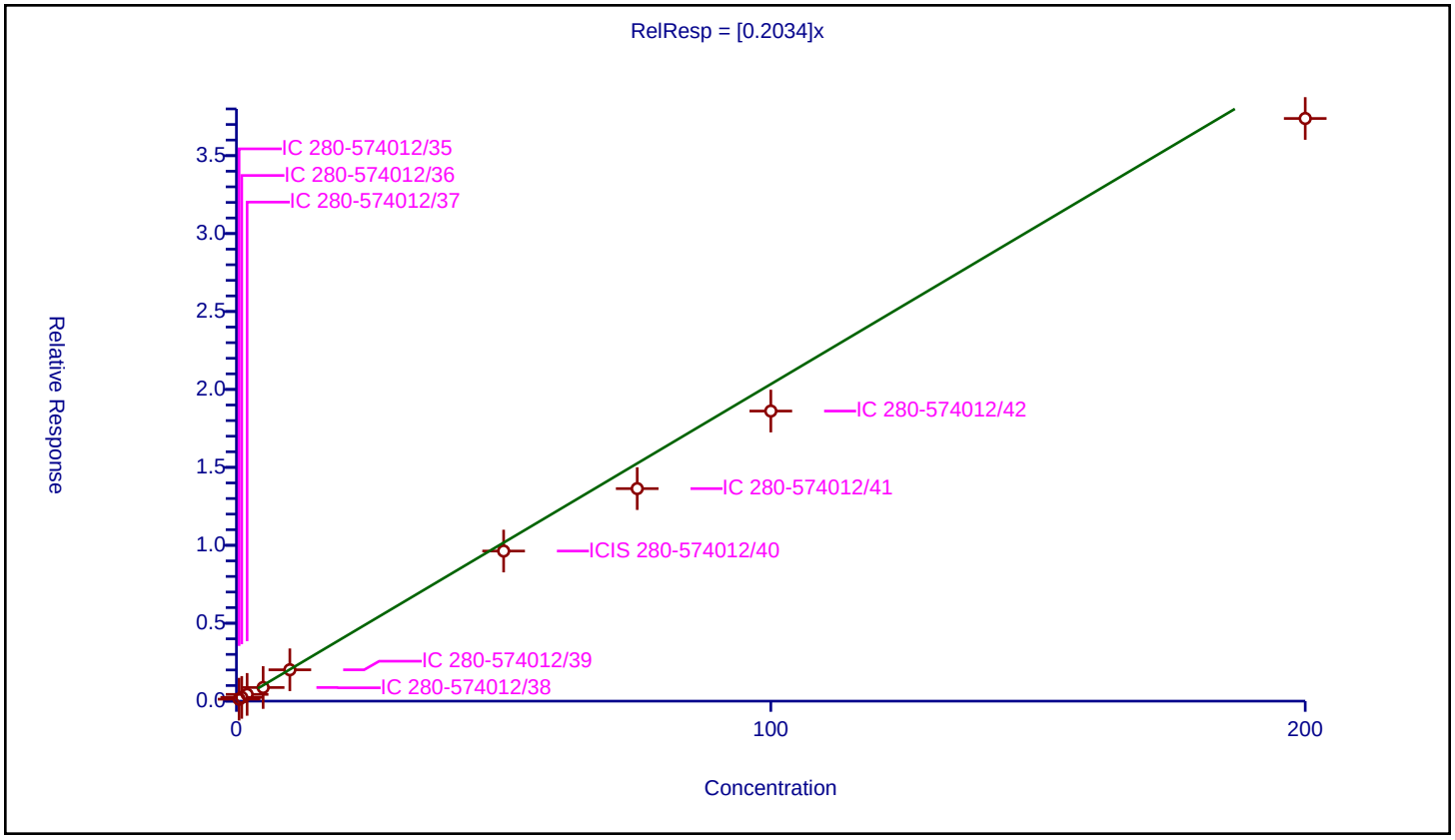
Curve Coefficients

Intercept:	0
Slope:	0.2034

Error Coefficients

Standard Error:	454000
Relative Standard Error:	13.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.974

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.12552	50.0	1255579.0	0.25104	Y
2	IC 280-574012/36	1.0	0.239276	50.0	1203211.0	0.239276	Y
3	IC 280-574012/37	2.0	0.432998	50.0	1234418.0	0.216499	Y
4	IC 280-574012/38	5.0	0.874606	50.0	1235070.0	0.174921	Y
5	IC 280-574012/39	10.0	2.012382	50.0	1271528.0	0.201238	Y
6	ICIS 280-574012/40	50.0	9.630763	50.0	1327574.0	0.192615	Y
7	IC 280-574012/41	75.0	13.636054	50.0	1395070.0	0.181814	Y
8	IC 280-574012/42	100.0	18.613053	50.0	1381560.0	0.186131	Y
9	IC 280-574012/43	200.0	37.384848	50.0	1446027.0	0.186924	Y



Calibration / 2-Methyl-2-propanol

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

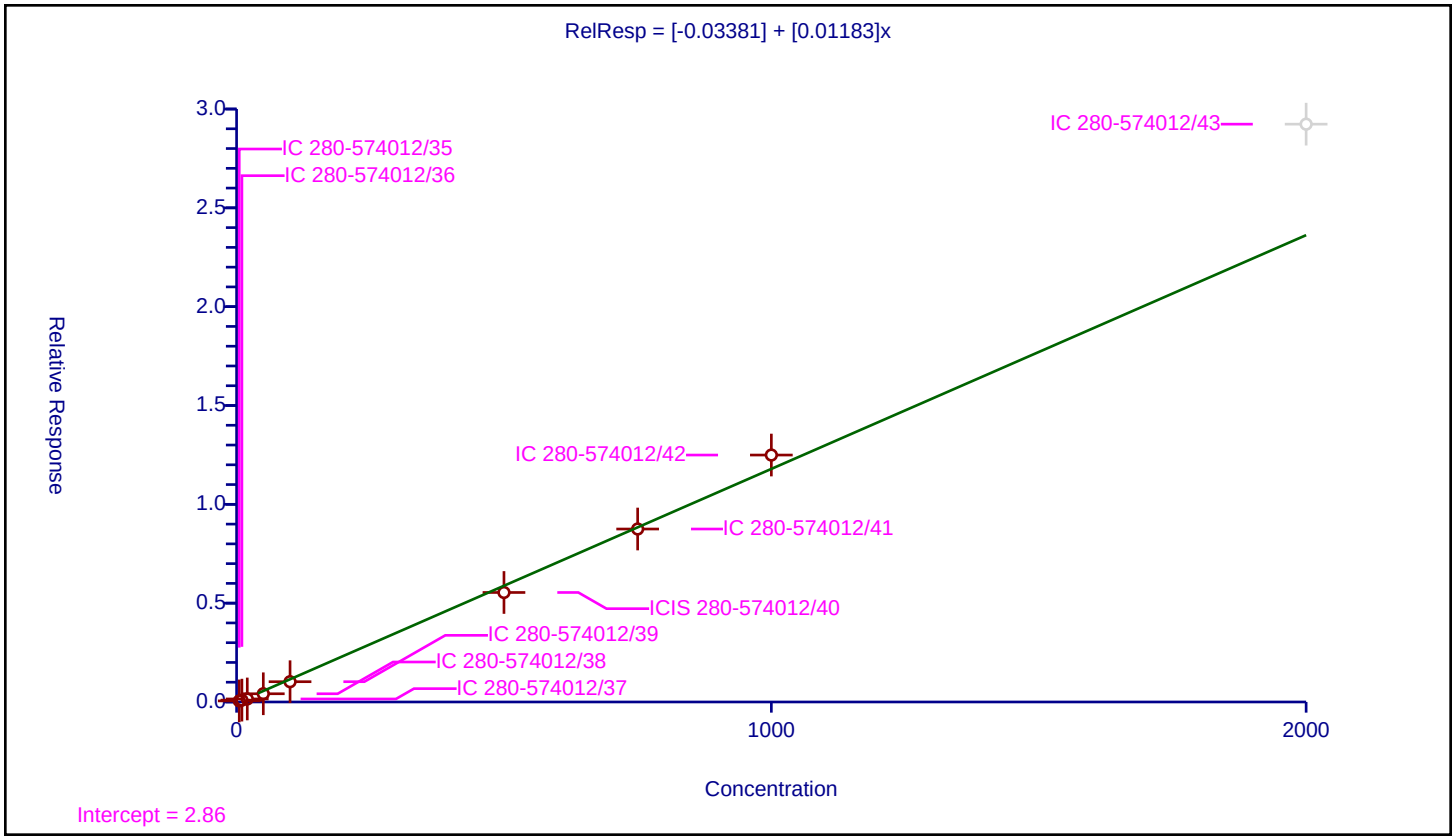
Curve Coefficients

Intercept:	-0.03381
Slope:	0.01183

Error Coefficients

Standard Error:	183000
Relative Standard Error:	24.5
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	5.0	0.054039	50.0	1255579.0	0.010808	Y
2	IC 280-574012/36	10.0	0.09325	50.0	1203211.0	0.009325	Y
3	IC 280-574012/37	20.0	0.153109	50.0	1234418.0	0.007655	Y
4	IC 280-574012/38	50.0	0.416657	50.0	1235070.0	0.008333	Y
5	IC 280-574012/39	100.0	1.02538	50.0	1271528.0	0.010254	Y
6	ICIS 280-574012/40	500.0	5.539767	50.0	1327574.0	0.01108	Y
7	IC 280-574012/41	750.0	8.750493	50.0	1395070.0	0.011667	Y
8	IC 280-574012/42	1000.0	12.493196	50.0	1381560.0	0.012493	Y
9	IC 280-574012/43	2000.0	29.233099	50.0	1446027.0	0.014617	N



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

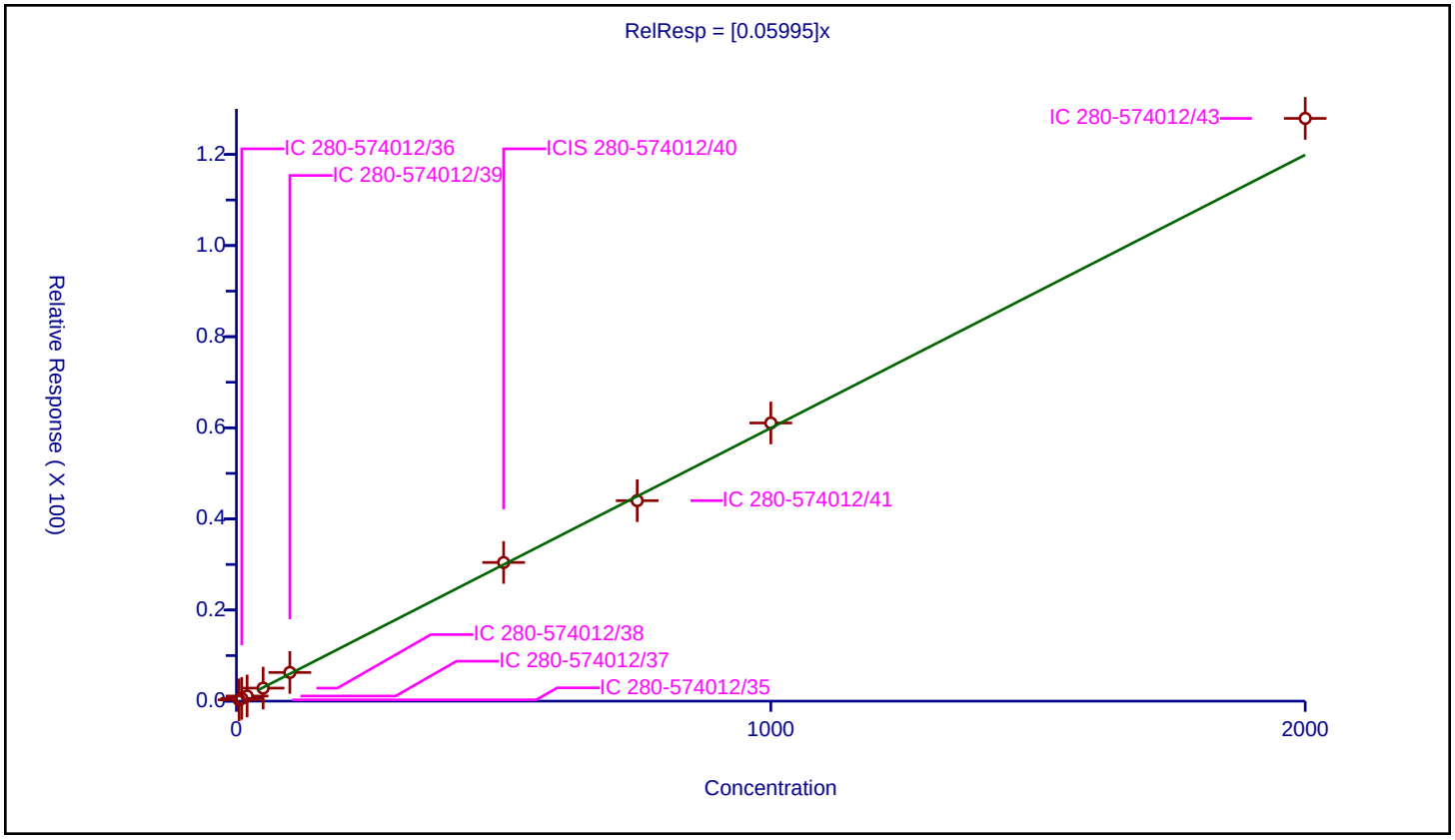
Curve Coefficients

Intercept:	0
Slope:	0.05995

Error Coefficients

Standard Error:	1530000
Relative Standard Error:	4.3
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	5.0	0.291539	50.0	1255579.0	0.058308	Y
2	IC 280-574012/36	10.0	0.601599	50.0	1203211.0	0.06016	Y
3	IC 280-574012/37	20.0	1.12713	50.0	1234418.0	0.056357	Y
4	IC 280-574012/38	50.0	2.860121	50.0	1235070.0	0.057202	Y
5	IC 280-574012/39	100.0	6.2988	50.0	1271528.0	0.062988	Y
6	ICIS 280-574012/40	500.0	30.436495	50.0	1327574.0	0.060873	Y
7	IC 280-574012/41	750.0	44.004709	50.0	1395070.0	0.058673	Y
8	IC 280-574012/42	1000.0	61.054207	50.0	1381560.0	0.061054	Y
9	IC 280-574012/43	2000.0	127.911305	50.0	1446027.0	0.063956	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

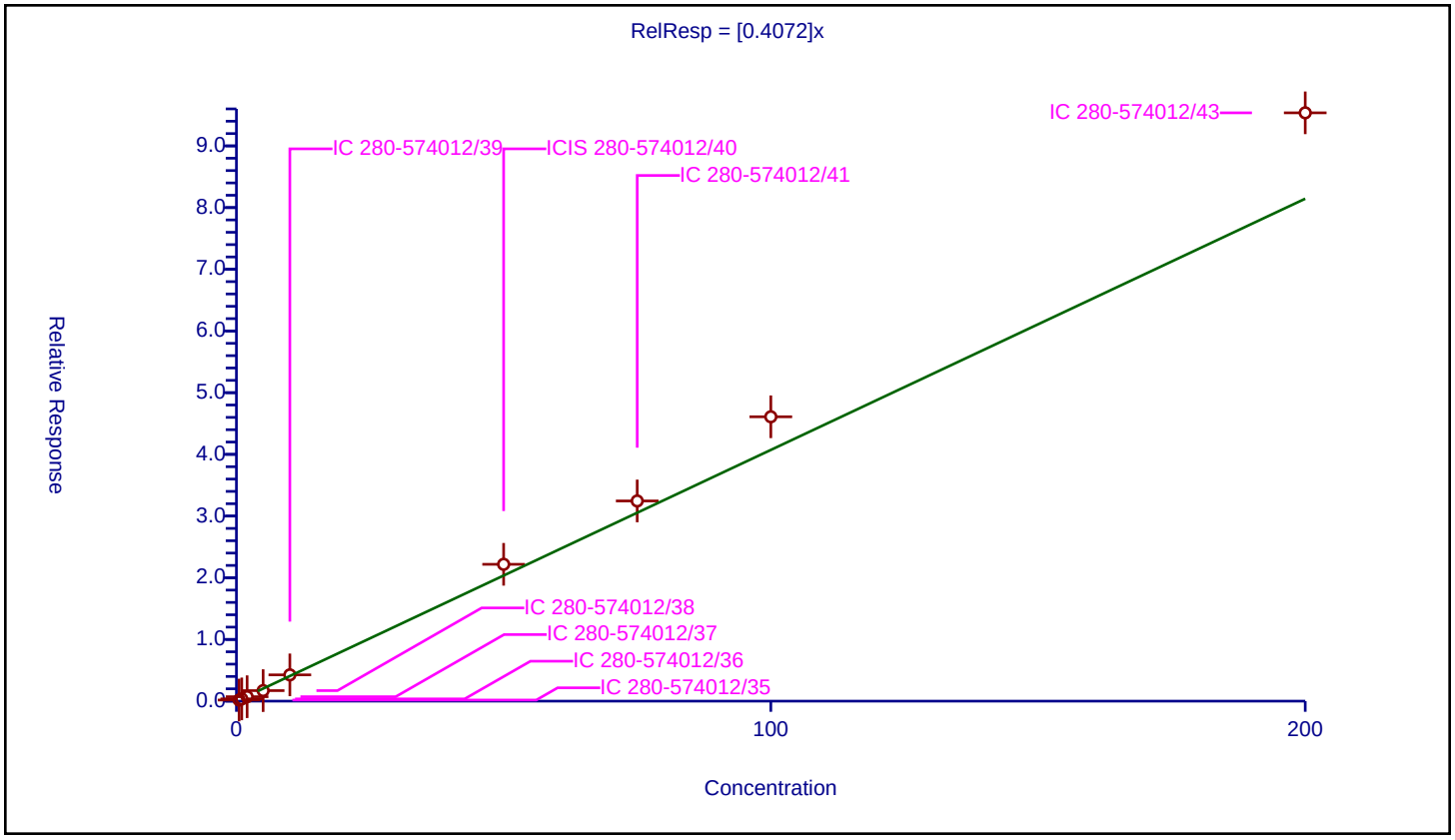
Curve Coefficients

Intercept:	0
Slope:	0.4072

Error Coefficients

Standard Error:	1140000
Relative Standard Error:	12.5
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.180076	50.0	1255579.0	0.360153	Y
2	IC 280-574012/36	1.0	0.362945	50.0	1203211.0	0.362945	Y
3	IC 280-574012/37	2.0	0.720218	50.0	1234418.0	0.360109	Y
4	IC 280-574012/38	5.0	1.707231	50.0	1235070.0	0.341446	Y
5	IC 280-574012/39	10.0	4.260818	50.0	1271528.0	0.426082	Y
6	ICIS 280-574012/40	50.0	22.180383	50.0	1327574.0	0.443608	Y
7	IC 280-574012/41	75.0	32.449985	50.0	1395070.0	0.432666	Y
8	IC 280-574012/42	100.0	46.093257	50.0	1381560.0	0.460933	Y
9	IC 280-574012/43	200.0	95.359907	50.0	1446027.0	0.4768	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

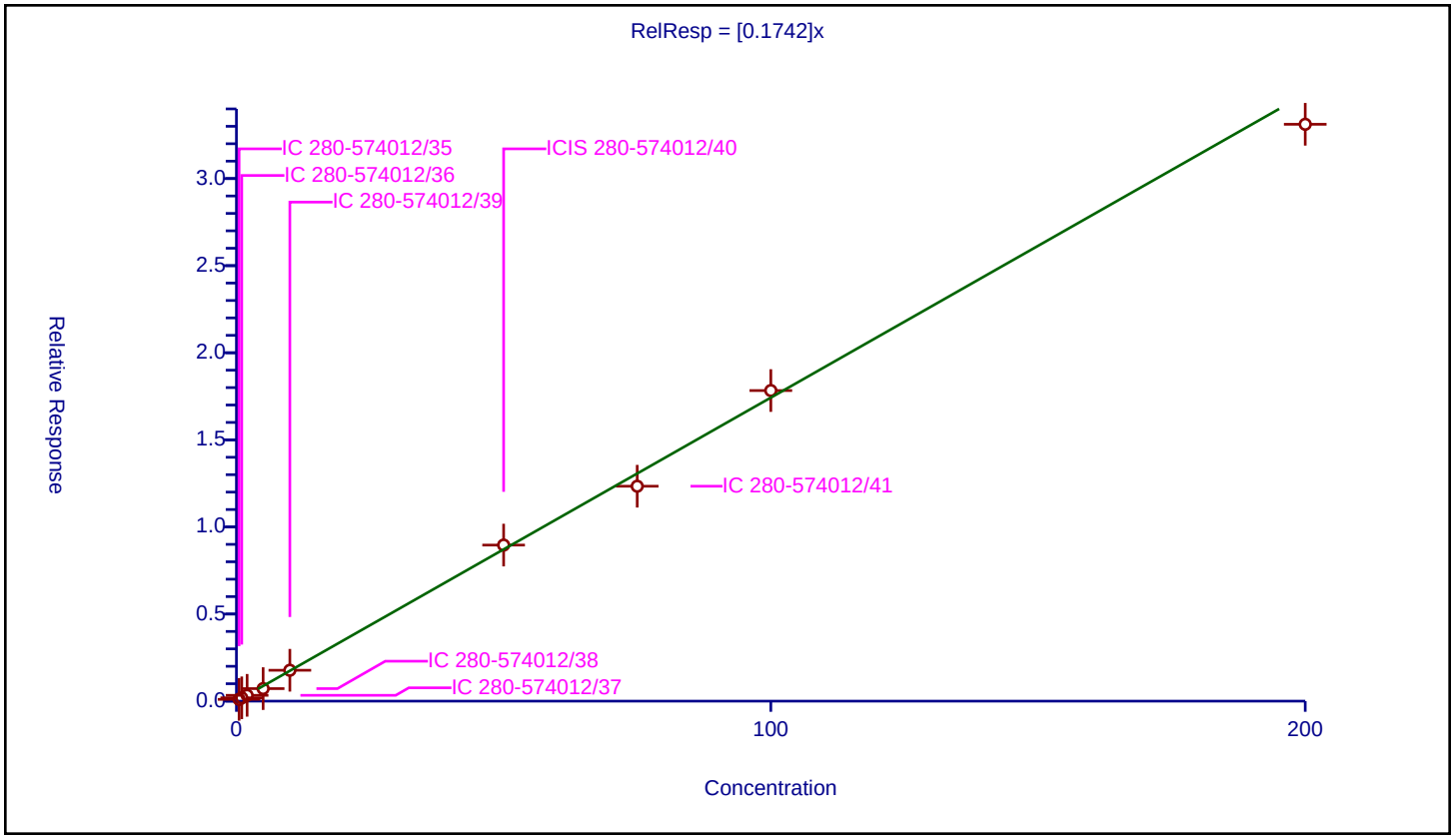
Curve Coefficients

Intercept:	0
Slope:	0.1742

Error Coefficients

Standard Error:	409000
Relative Standard Error:	9.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.101188	50.0	1255579.0	0.202377	Y
2	IC 280-574012/36	1.0	0.190116	50.0	1203211.0	0.190116	Y
3	IC 280-574012/37	2.0	0.334004	50.0	1234418.0	0.167002	Y
4	IC 280-574012/38	5.0	0.719473	50.0	1235070.0	0.143895	Y
5	IC 280-574012/39	10.0	1.772277	50.0	1271528.0	0.177228	Y
6	ICIS 280-574012/40	50.0	8.959915	50.0	1327574.0	0.179198	Y
7	IC 280-574012/41	75.0	12.338413	50.0	1395070.0	0.164512	Y
8	IC 280-574012/42	100.0	17.830206	50.0	1381560.0	0.178302	Y
9	IC 280-574012/43	200.0	33.115564	50.0	1446027.0	0.165578	Y



Calibration / Hexane

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

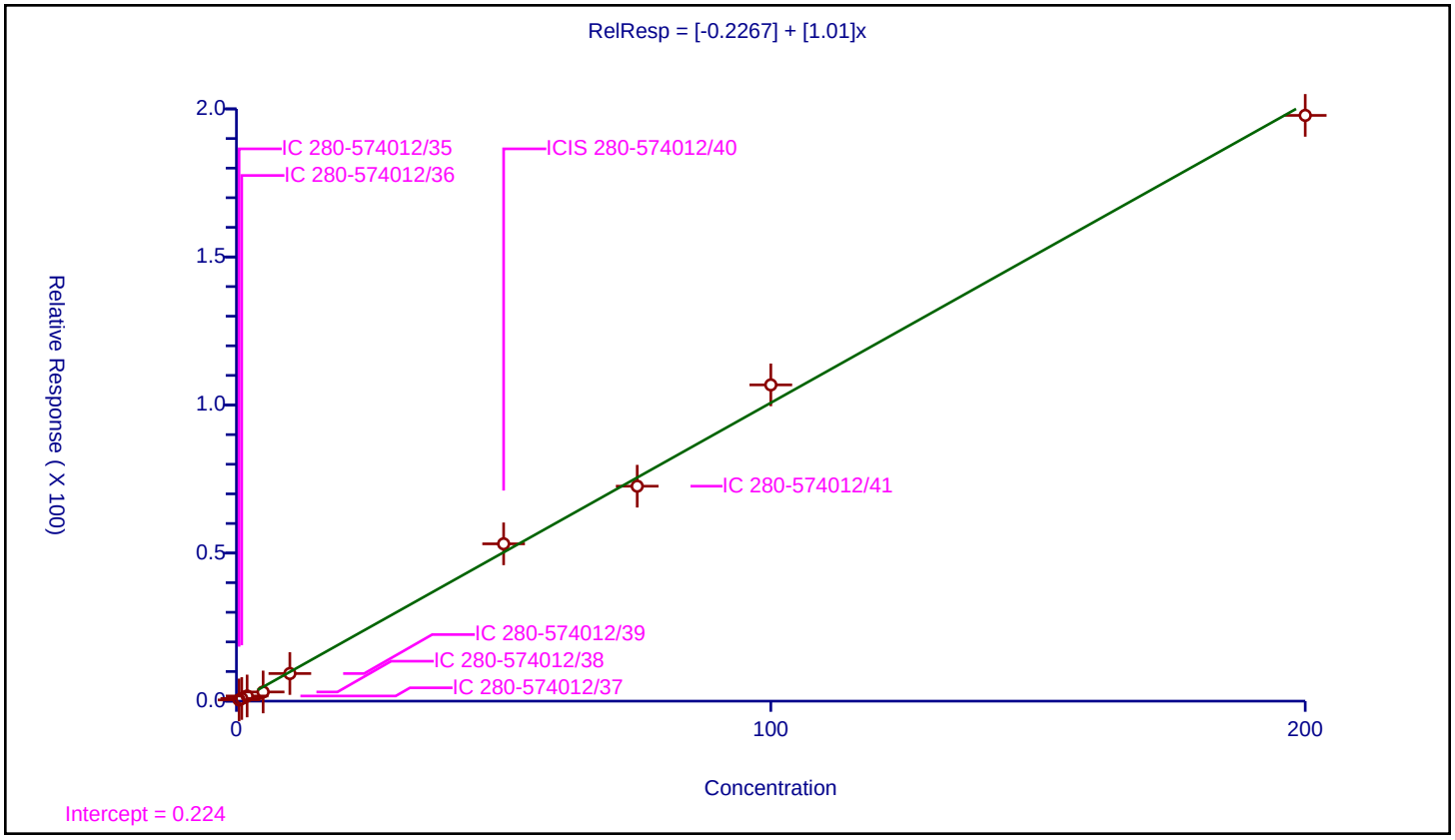
Curve Coefficients

Intercept:	-0.2267
Slope:	1.01

Error Coefficients

Standard Error:	604000
Relative Standard Error:	17.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.41132	50.0	307060.0	0.822641	Y
2	IC 280-574012/36	1.0	0.88165	50.0	299155.0	0.88165	Y
3	IC 280-574012/37	2.0	1.742979	50.0	305368.0	0.871489	Y
4	IC 280-574012/38	5.0	3.101846	50.0	305560.0	0.620369	Y
5	IC 280-574012/39	10.0	9.318629	50.0	306617.0	0.931863	Y
6	ICIS 280-574012/40	50.0	53.125635	50.0	305154.0	1.062513	Y
7	IC 280-574012/41	75.0	72.589143	50.0	318673.0	0.967855	Y
8	IC 280-574012/42	100.0	106.804449	50.0	314434.0	1.068044	Y
9	IC 280-574012/43	200.0	197.806946	50.0	337543.0	0.989035	Y



Calibration / Vinyl acetate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

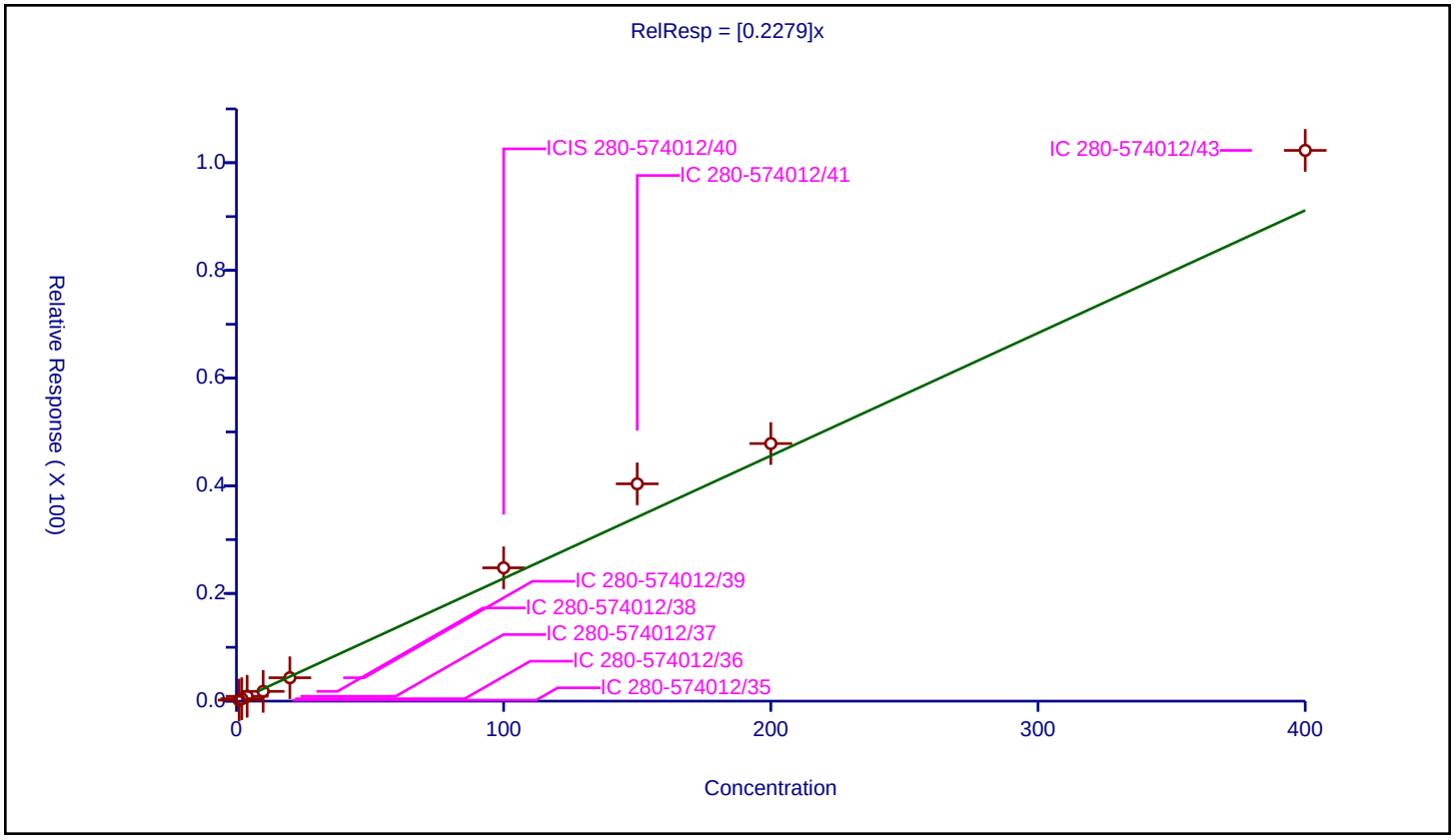
Curve Coefficients

Intercept:	0
Slope:	0.2279

Error Coefficients

Standard Error:	1240000
Relative Standard Error:	12.5
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	1.0	0.192859	50.0	1255579.0	0.192859	Y
2	IC 280-574012/36	2.0	0.445184	50.0	1203211.0	0.222592	Y
3	IC 280-574012/37	4.0	0.902045	50.0	1234418.0	0.225511	Y
4	IC 280-574012/38	10.0	1.812569	50.0	1235070.0	0.181257	Y
5	IC 280-574012/39	20.0	4.344222	50.0	1271528.0	0.217211	Y
6	ICIS 280-574012/40	100.0	24.760842	50.0	1327574.0	0.247608	Y
7	IC 280-574012/41	150.0	40.362455	50.0	1395070.0	0.269083	Y
8	IC 280-574012/42	200.0	47.844538	50.0	1381560.0	0.239223	Y
9	IC 280-574012/43	400.0	102.295289	50.0	1446027.0	0.255738	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

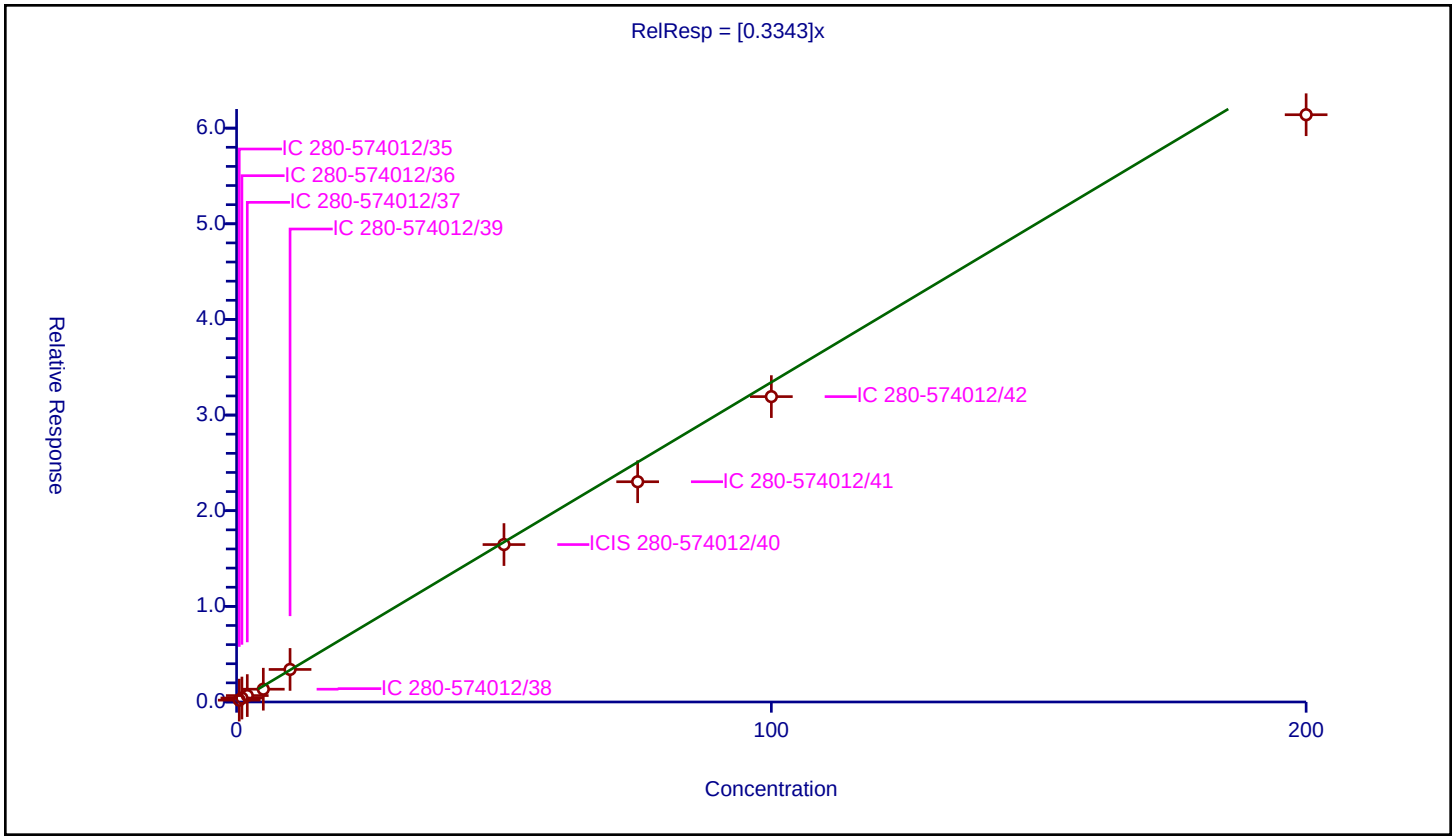
Curve Coefficients

Intercept:	0
Slope:	0.3343

Error Coefficients

Standard Error:	754000
Relative Standard Error:	13.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.975

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.19489	50.0	1255579.0	0.38978	Y
2	IC 280-574012/36	1.0	0.413435	50.0	1203211.0	0.413435	Y
3	IC 280-574012/37	2.0	0.671369	50.0	1234418.0	0.335685	Y
4	IC 280-574012/38	5.0	1.336078	50.0	1235070.0	0.267216	Y
5	IC 280-574012/39	10.0	3.402599	50.0	1271528.0	0.34026	Y
6	ICIS 280-574012/40	50.0	16.46089	50.0	1327574.0	0.329218	Y
7	IC 280-574012/41	75.0	23.028809	50.0	1395070.0	0.307051	Y
8	IC 280-574012/42	100.0	31.929305	50.0	1381560.0	0.319293	Y
9	IC 280-574012/43	200.0	61.404386	50.0	1446027.0	0.307022	Y



Calibration / 2-Butanone (MEK)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

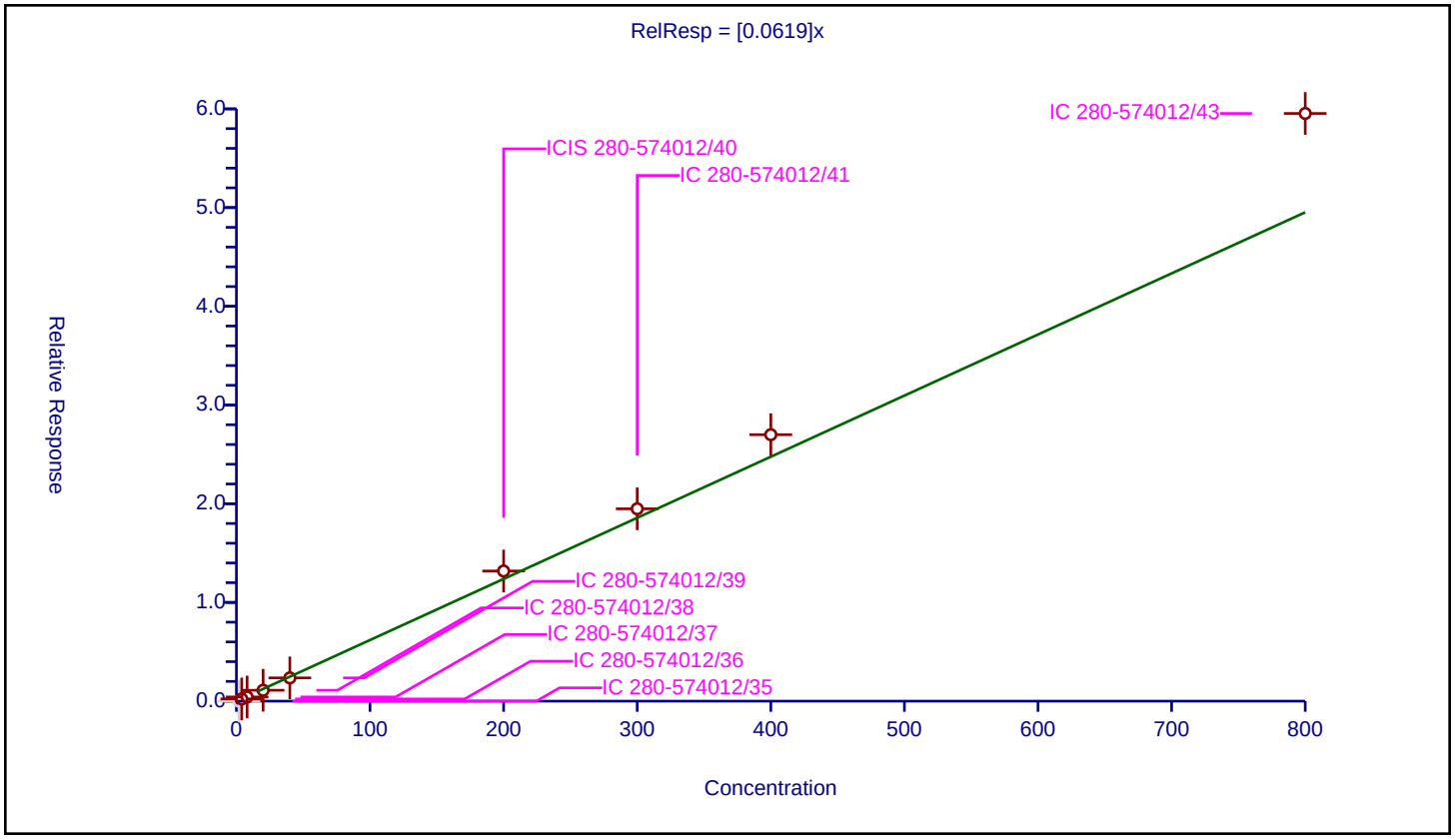
Curve Coefficients

Intercept:	0
Slope:	0.0619

Error Coefficients

Standard Error:	751000
Relative Standard Error:	12.1
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	2.0	0.0	50.0	1255579.0	0.0	N
2	IC 280-574012/36	4.0	0.22174	50.0	1203211.0	0.055435	Y
3	IC 280-574012/37	8.0	0.423479	50.0	1234418.0	0.052935	Y
4	IC 280-574012/38	20.0	1.103298	50.0	1235070.0	0.055165	Y
5	IC 280-574012/39	40.0	2.356613	50.0	1271528.0	0.058915	Y
6	ICIS 280-574012/40	200.0	13.184237	50.0	1327574.0	0.065921	Y
7	IC 280-574012/41	300.0	19.486549	50.0	1395070.0	0.064955	Y
8	IC 280-574012/42	400.0	26.994774	50.0	1381560.0	0.067487	Y
9	IC 280-574012/43	800.0	59.536233	50.0	1446027.0	0.07442	Y



Calibration / 2,2-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

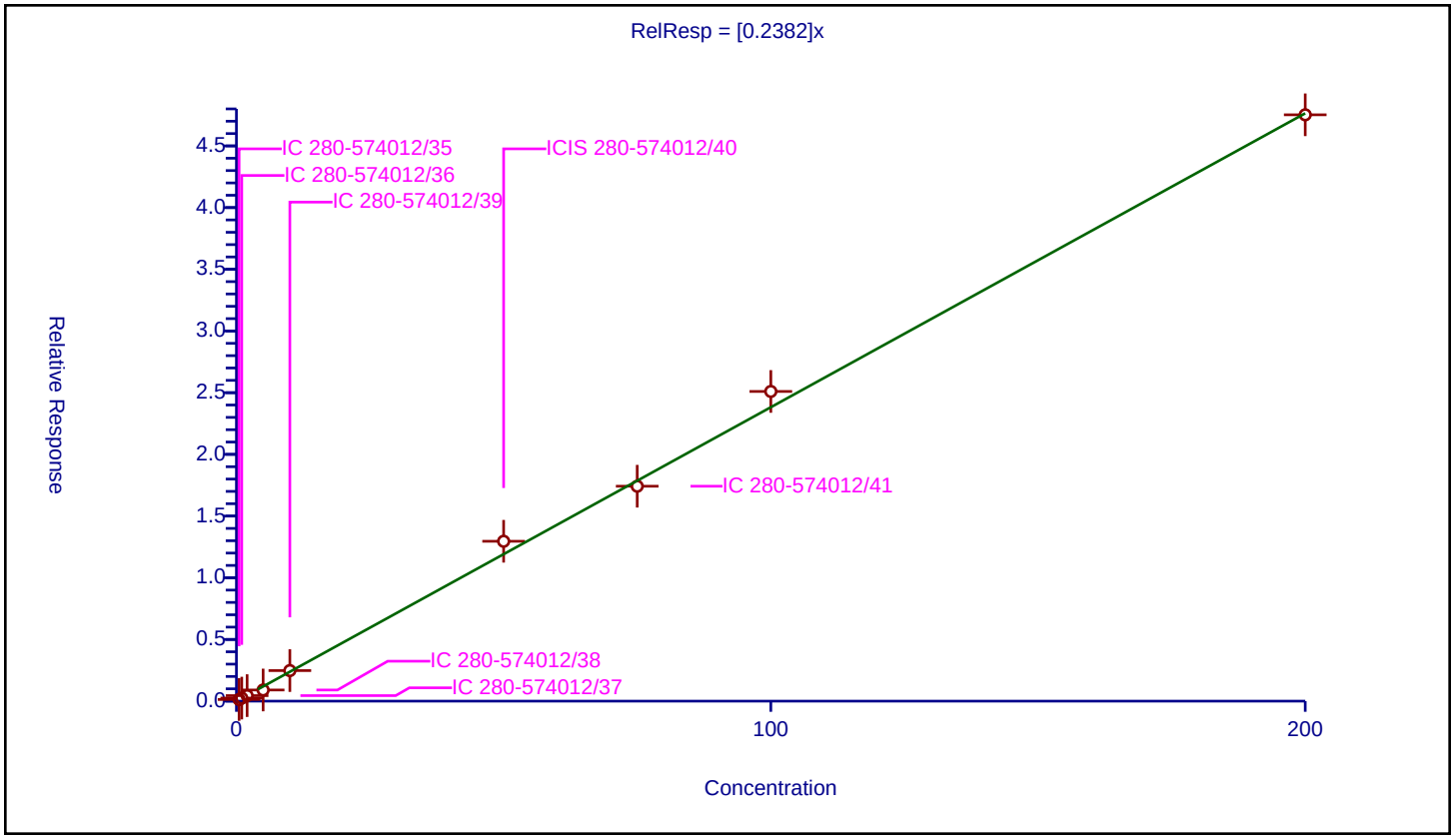
Curve Coefficients

Intercept:	0
Slope:	0.2382

Error Coefficients

Standard Error:	584000
Relative Standard Error:	10.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.131931	50.0	1255579.0	0.263862	Y
2	IC 280-574012/36	1.0	0.248128	50.0	1203211.0	0.248128	Y
3	IC 280-574012/37	2.0	0.447296	50.0	1234418.0	0.223648	Y
4	IC 280-574012/38	5.0	0.902661	50.0	1235070.0	0.180532	Y
5	IC 280-574012/39	10.0	2.477216	50.0	1271528.0	0.247722	Y
6	ICIS 280-574012/40	50.0	12.957131	50.0	1327574.0	0.259143	Y
7	IC 280-574012/41	75.0	17.418588	50.0	1395070.0	0.232248	Y
8	IC 280-574012/42	100.0	25.099742	50.0	1381560.0	0.250997	Y
9	IC 280-574012/43	200.0	47.521796	50.0	1446027.0	0.237609	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

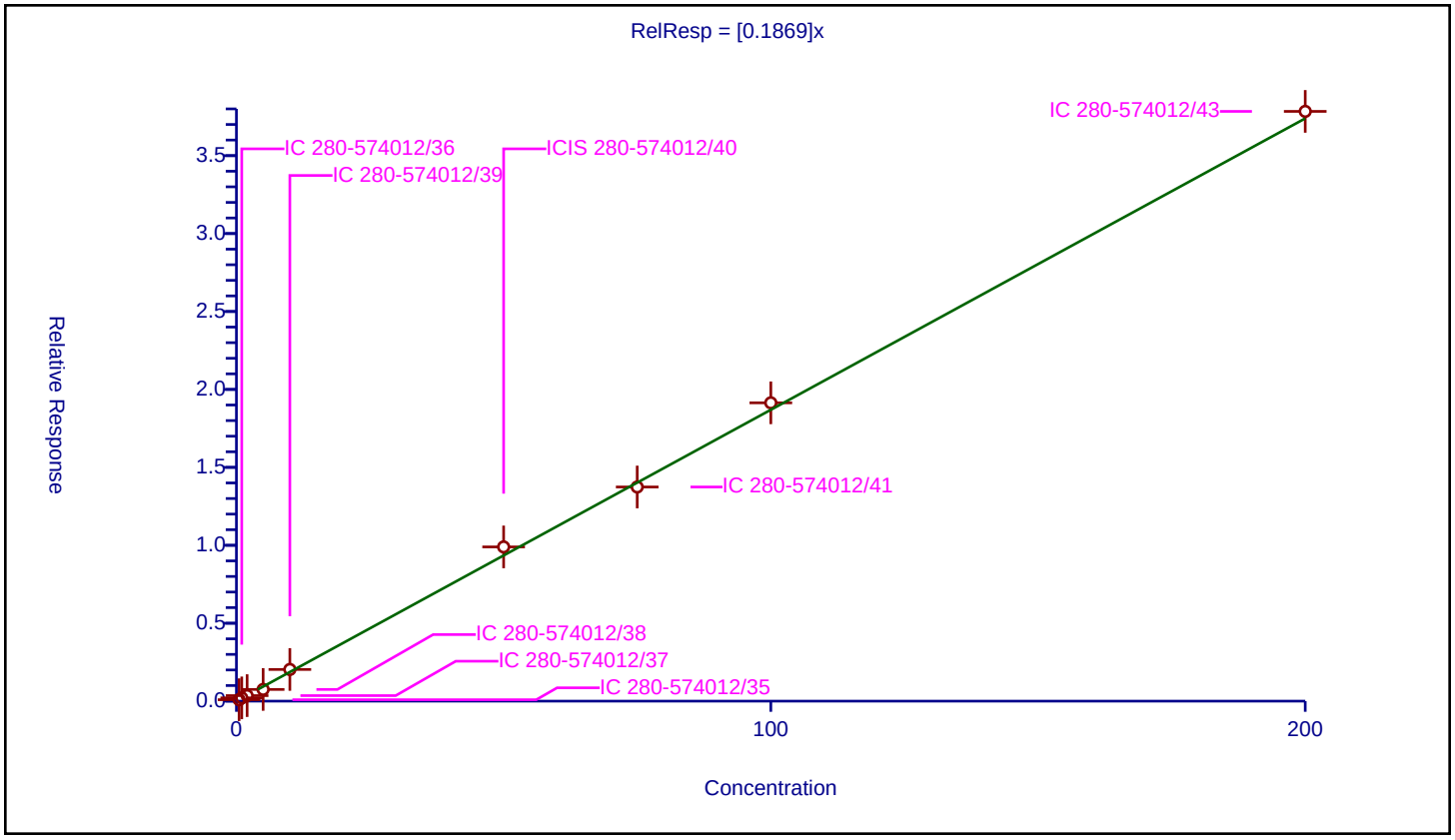
Curve Coefficients

Intercept:	0
Slope:	0.1869

Error Coefficients

Standard Error:	460000
Relative Standard Error:	9.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.090675	50.0	1255579.0	0.181351	Y
2	IC 280-574012/36	1.0	0.208567	50.0	1203211.0	0.208567	Y
3	IC 280-574012/37	2.0	0.354783	50.0	1234418.0	0.177391	Y
4	IC 280-574012/38	5.0	0.750565	50.0	1235070.0	0.150113	Y
5	IC 280-574012/39	10.0	2.032987	50.0	1271528.0	0.203299	Y
6	ICIS 280-574012/40	50.0	9.895682	50.0	1327574.0	0.197914	Y
7	IC 280-574012/41	75.0	13.740601	50.0	1395070.0	0.183208	Y
8	IC 280-574012/42	100.0	19.141369	50.0	1381560.0	0.191414	Y
9	IC 280-574012/43	200.0	37.840199	50.0	1446027.0	0.189201	Y



Calibration / sec-Butyl Alcohol

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

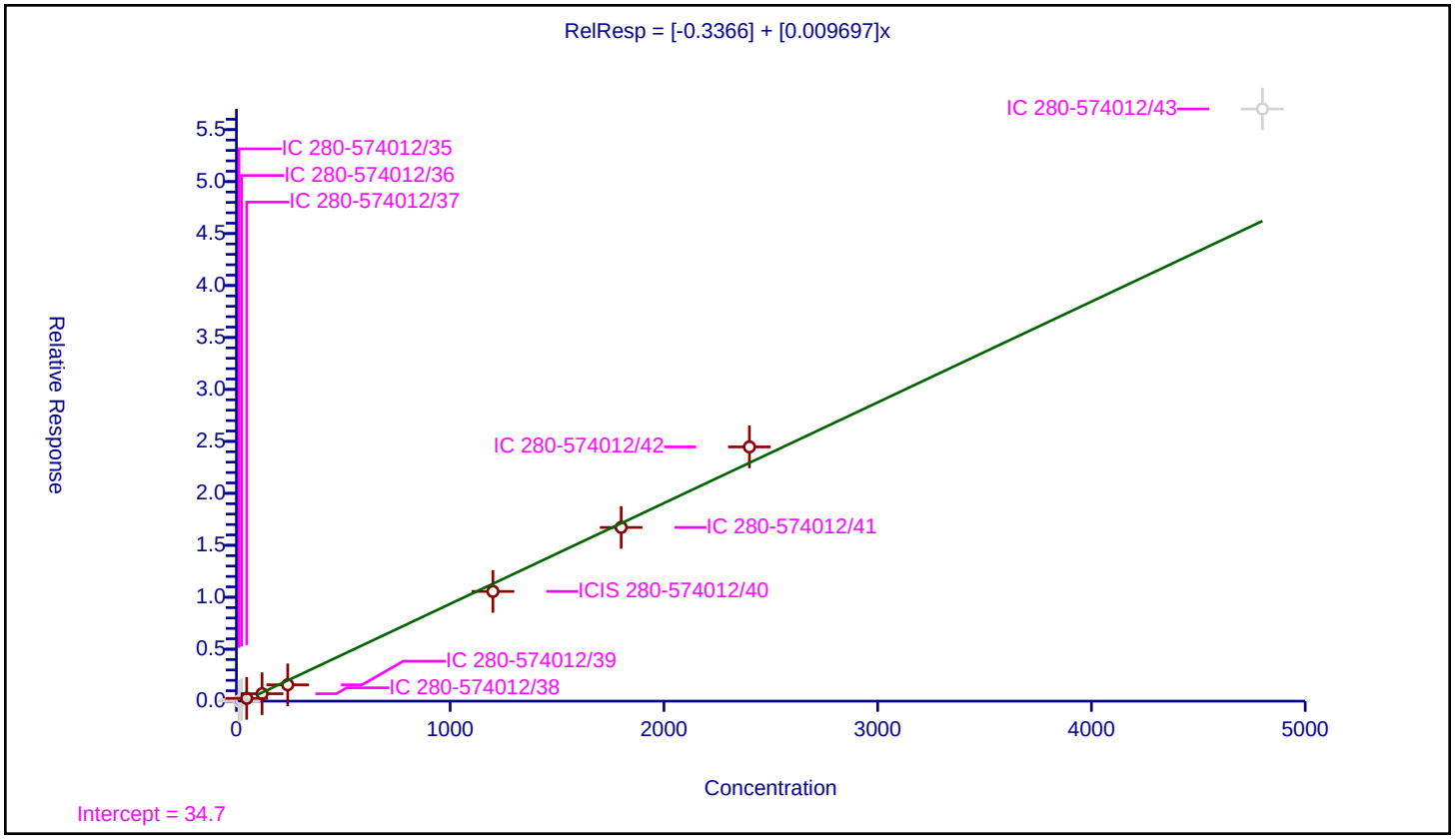
Curve Coefficients

Intercept:	-0.3366
Slope:	0.009697

Error Coefficients

Standard Error:	435000
Relative Standard Error:	18.7
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	12.0	0.0	50.0	1255579.0	0.0	N
2	IC 280-574012/36	24.0	0.144945	50.0	1203211.0	0.006039	N
3	IC 280-574012/37	48.0	0.267656	50.0	1234418.0	0.005576	Y
4	IC 280-574012/38	120.0	0.713117	50.0	1235070.0	0.005943	Y
5	IC 280-574012/39	240.0	1.572321	50.0	1271528.0	0.006551	Y
6	ICIS 280-574012/40	1200.0	10.560918	50.0	1327574.0	0.008801	Y
7	IC 280-574012/41	1800.0	16.717799	50.0	1395070.0	0.009288	Y
8	IC 280-574012/42	2400.0	24.468318	50.0	1381560.0	0.010195	Y
9	IC 280-574012/43	4800.0	56.993196	50.0	1446027.0	0.011874	N



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

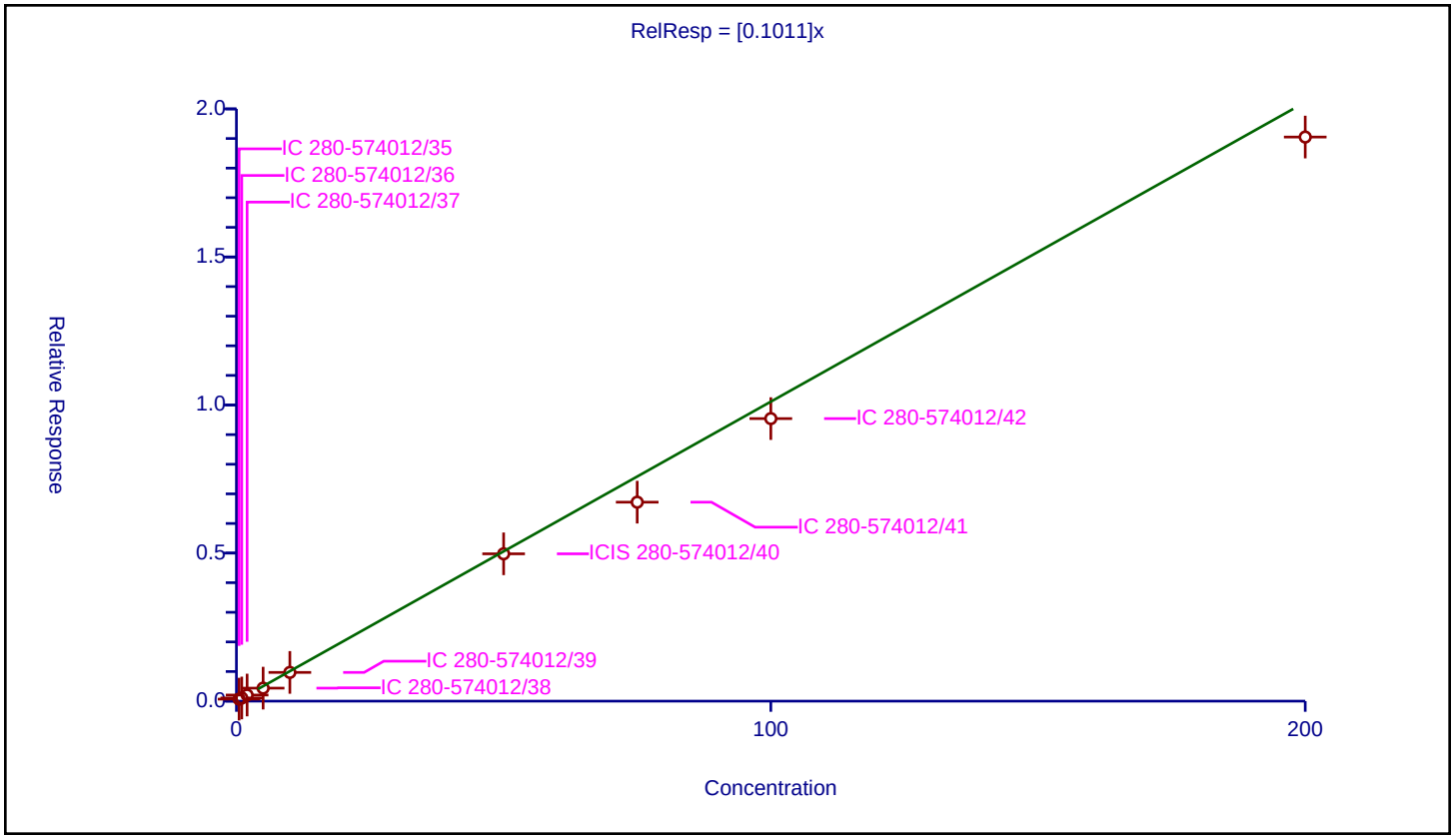
Curve Coefficients

Intercept:	0
Slope:	0.1011

Error Coefficients

Standard Error:	231000
Relative Standard Error:	14.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.970

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.067817	50.0	1255579.0	0.135635	Y
2	IC 280-574012/36	1.0	0.106839	50.0	1203211.0	0.106839	Y
3	IC 280-574012/37	2.0	0.206251	50.0	1234418.0	0.103126	Y
4	IC 280-574012/38	5.0	0.439125	50.0	1235070.0	0.087825	Y
5	IC 280-574012/39	10.0	0.970368	50.0	1271528.0	0.097037	Y
6	ICIS 280-574012/40	50.0	4.974826	50.0	1327574.0	0.099497	Y
7	IC 280-574012/41	75.0	6.718731	50.0	1395070.0	0.089583	Y
8	IC 280-574012/42	100.0	9.54175	50.0	1381560.0	0.095417	Y
9	IC 280-574012/43	200.0	19.049264	50.0	1446027.0	0.095246	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

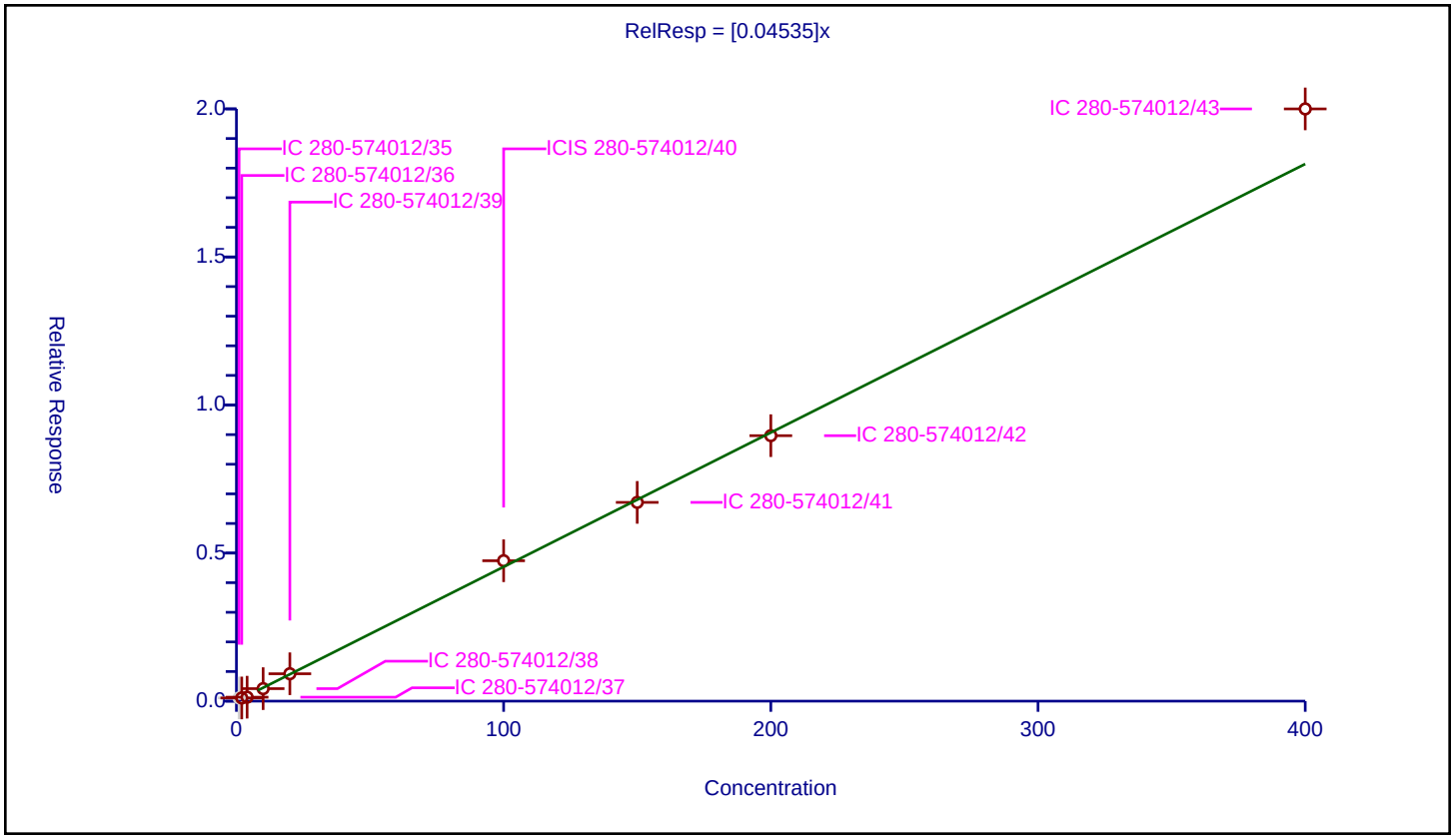
Curve Coefficients

Intercept:	0
Slope:	0.04535

Error Coefficients

Standard Error:	253000
Relative Standard Error:	13.2
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.977

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	1.0	0.108834	50.0	1255579.0	0.108834	N
2	IC 280-574012/36	2.0	0.107836	50.0	1203211.0	0.053918	Y
3	IC 280-574012/37	4.0	0.133747	50.0	1234418.0	0.033437	Y
4	IC 280-574012/38	10.0	0.421838	50.0	1235070.0	0.042184	Y
5	IC 280-574012/39	20.0	0.925225	50.0	1271528.0	0.046261	Y
6	ICIS 280-574012/40	100.0	4.741732	50.0	1327574.0	0.047417	Y
7	IC 280-574012/41	150.0	6.712208	50.0	1395070.0	0.044748	Y
8	IC 280-574012/42	200.0	8.964902	50.0	1381560.0	0.044825	Y
9	IC 280-574012/43	400.0	19.998658	50.0	1446027.0	0.049997	Y



Calibration / Chloroform

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

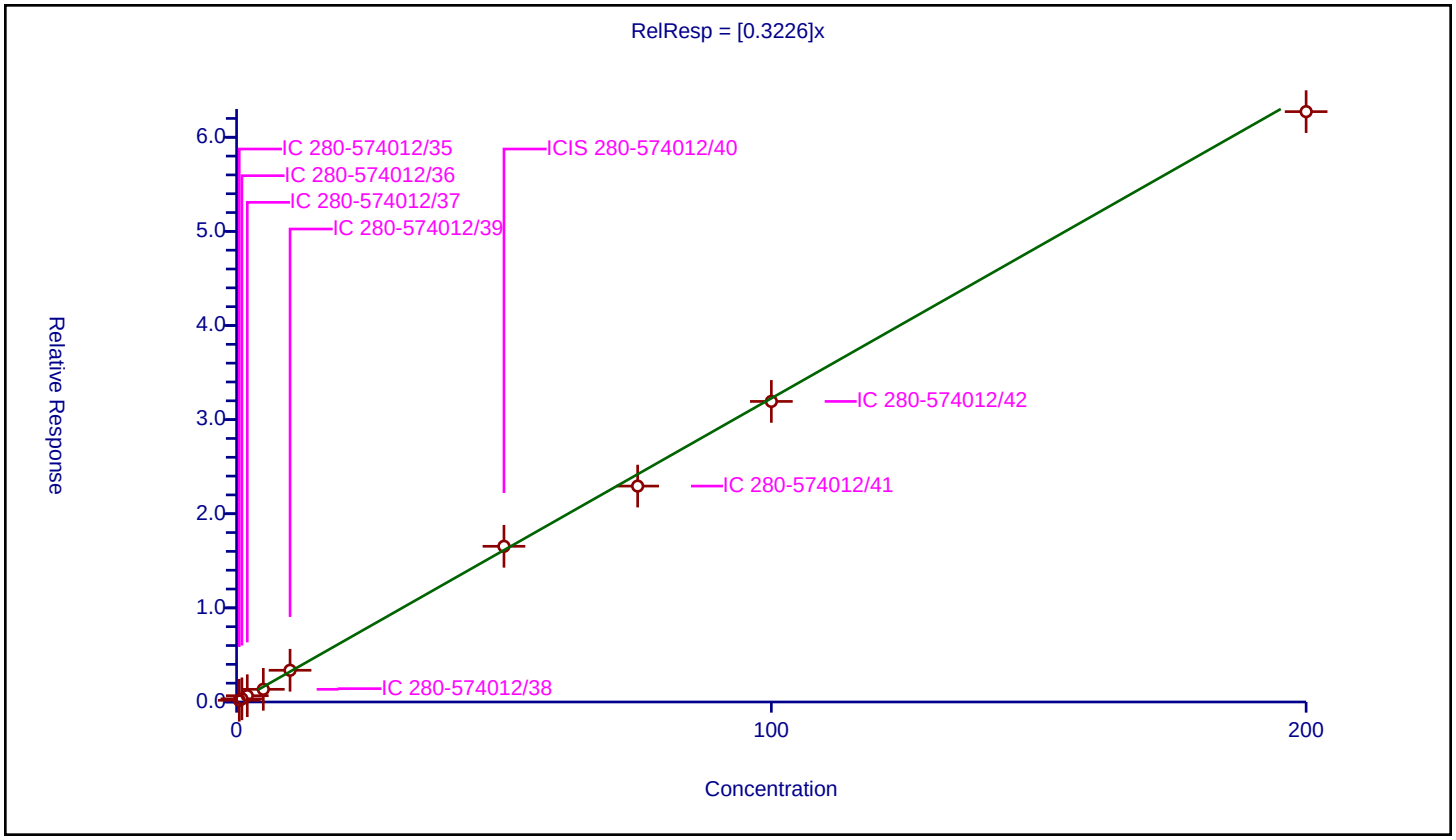
Curve Coefficients

Intercept:	0
Slope:	0.3226

Error Coefficients

Standard Error:	765000
Relative Standard Error:	7.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.178921	50.0	1255579.0	0.357843	Y
2	IC 280-574012/36	1.0	0.336599	50.0	1203211.0	0.336599	Y
3	IC 280-574012/37	2.0	0.666427	50.0	1234418.0	0.333214	Y
4	IC 280-574012/38	5.0	1.347454	50.0	1235070.0	0.269491	Y
5	IC 280-574012/39	10.0	3.370118	50.0	1271528.0	0.337012	Y
6	ICIS 280-574012/40	50.0	16.541187	50.0	1327574.0	0.330824	Y
7	IC 280-574012/41	75.0	22.940103	50.0	1395070.0	0.305868	Y
8	IC 280-574012/42	100.0	31.933937	50.0	1381560.0	0.319339	Y
9	IC 280-574012/43	200.0	62.723725	50.0	1446027.0	0.313619	Y



Calibration / Dibromofluoromethane (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

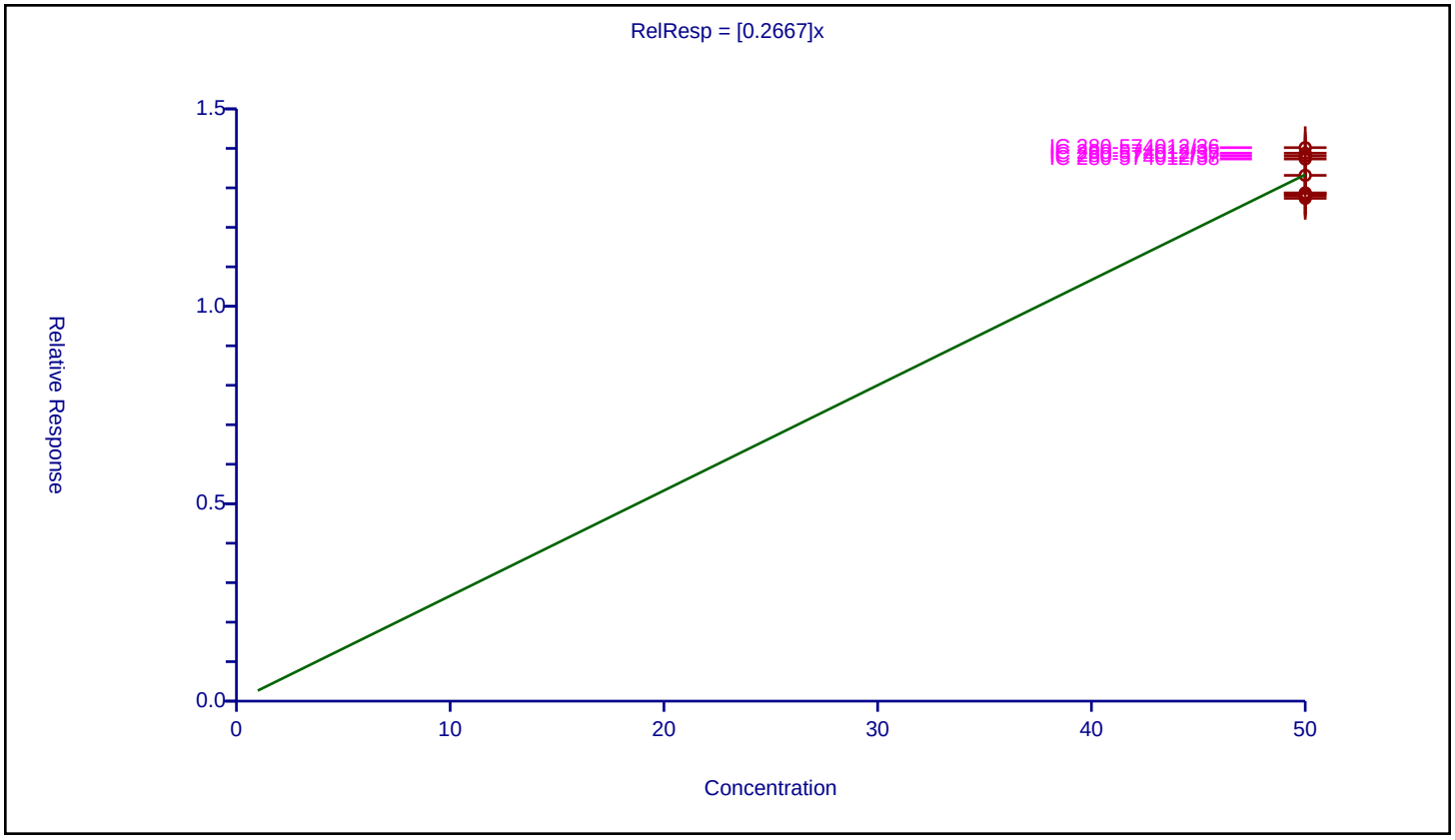
Curve Coefficients

Intercept:	0
Slope:	0.2667

Error Coefficients

Standard Error:	369000
Relative Standard Error:	4.0
Correlation Coefficient:	0.00000000000000000000
Coefficient of Determination (Adjusted):	0.000000000000000222

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	50.0	13.877024	50.0	1255579.0	0.27754	Y
2	IC 280-574012/36	50.0	14.018447	50.0	1203211.0	0.280369	Y
3	IC 280-574012/37	50.0	13.804765	50.0	1234418.0	0.276095	Y
4	IC 280-574012/38	50.0	13.731286	50.0	1235070.0	0.274626	Y
5	IC 280-574012/39	50.0	13.31697	50.0	1271528.0	0.266339	Y
6	ICIS 280-574012/40	50.0	12.852843	50.0	1327574.0	0.257057	Y
7	IC 280-574012/41	50.0	12.734666	50.0	1395070.0	0.254693	Y
8	IC 280-574012/42	50.0	12.797852	50.0	1381560.0	0.255957	Y
9	IC 280-574012/43	50.0	12.872166	50.0	1446027.0	0.257443	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

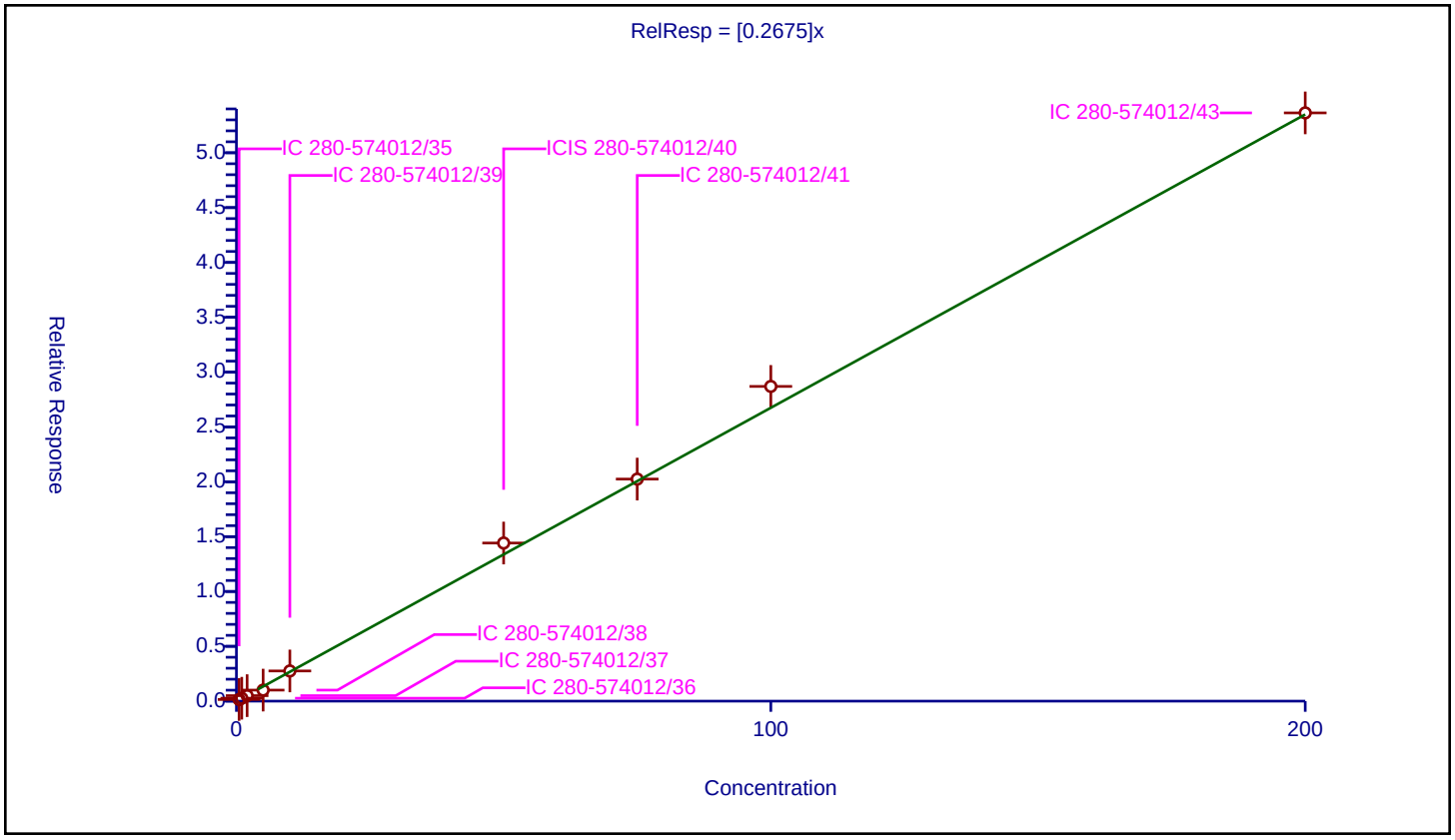
Curve Coefficients

Intercept:	0
Slope:	0.2675

Error Coefficients

Standard Error:	662000
Relative Standard Error:	10.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.15005	50.0	1255579.0	0.300101	Y
2	IC 280-574012/36	1.0	0.265706	50.0	1203211.0	0.265706	Y
3	IC 280-574012/37	2.0	0.502585	50.0	1234418.0	0.251293	Y
4	IC 280-574012/38	5.0	1.007311	50.0	1235070.0	0.201462	Y
5	IC 280-574012/39	10.0	2.753026	50.0	1271528.0	0.275303	Y
6	ICIS 280-574012/40	50.0	14.4172	50.0	1327574.0	0.288344	Y
7	IC 280-574012/41	75.0	20.246941	50.0	1395070.0	0.269959	Y
8	IC 280-574012/42	100.0	28.695858	50.0	1381560.0	0.286959	Y
9	IC 280-574012/43	200.0	53.635963	50.0	1446027.0	0.26818	Y



Calibration / Cyclohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

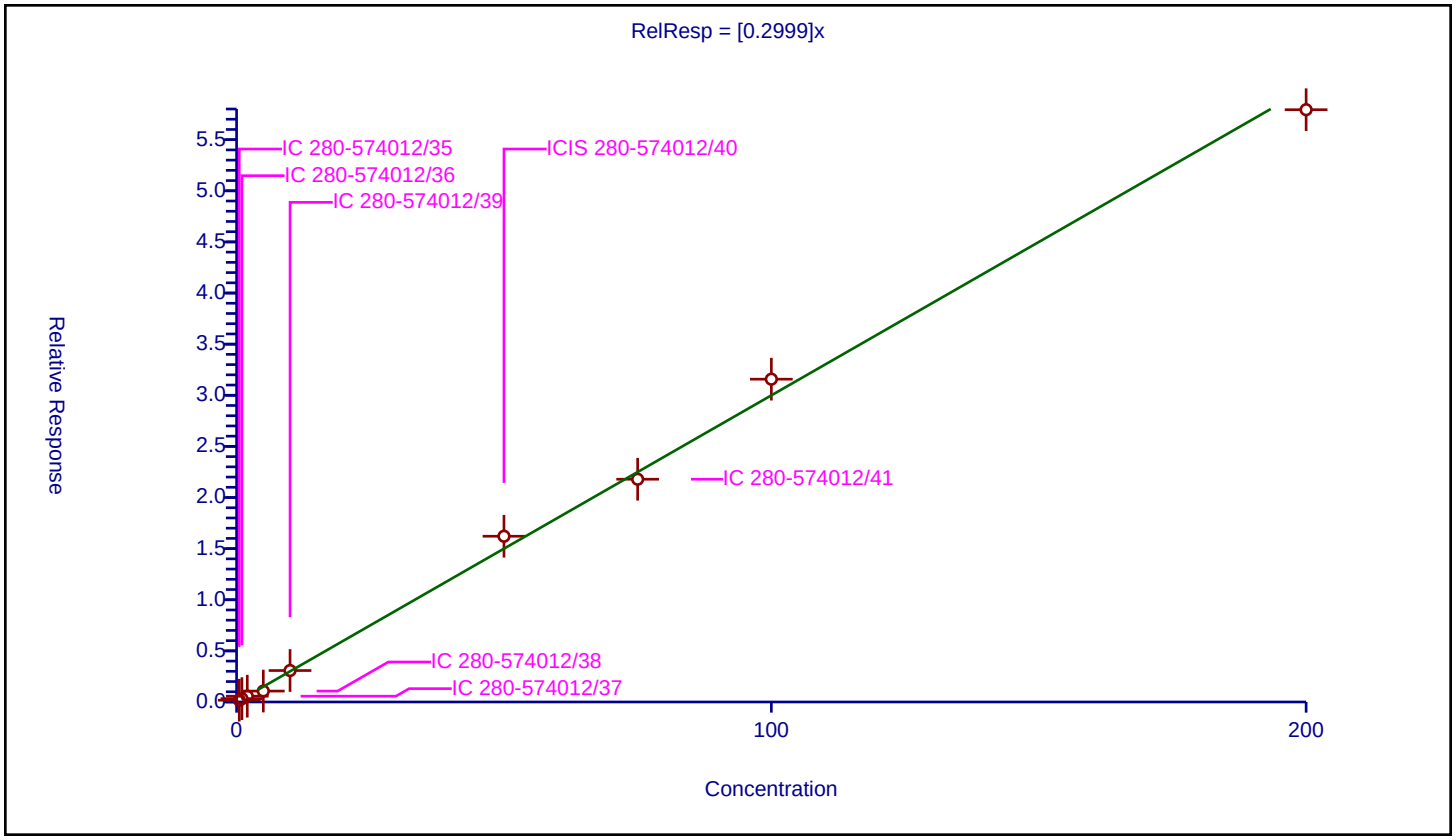
Curve Coefficients

Intercept:	0
Slope:	0.2999

Error Coefficients

Standard Error:	719000
Relative Standard Error:	12.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.978

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.174222	50.0	1255579.0	0.348445	Y
2	IC 280-574012/36	1.0	0.32513	50.0	1203211.0	0.32513	Y
3	IC 280-574012/37	2.0	0.568041	50.0	1234418.0	0.28402	Y
4	IC 280-574012/38	5.0	1.069292	50.0	1235070.0	0.213858	Y
5	IC 280-574012/39	10.0	3.077203	50.0	1271528.0	0.30772	Y
6	ICIS 280-574012/40	50.0	16.21145	50.0	1327574.0	0.324229	Y
7	IC 280-574012/41	75.0	21.789516	50.0	1395070.0	0.290527	Y
8	IC 280-574012/42	100.0	31.575791	50.0	1381560.0	0.315758	Y
9	IC 280-574012/43	200.0	57.931975	50.0	1446027.0	0.28966	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

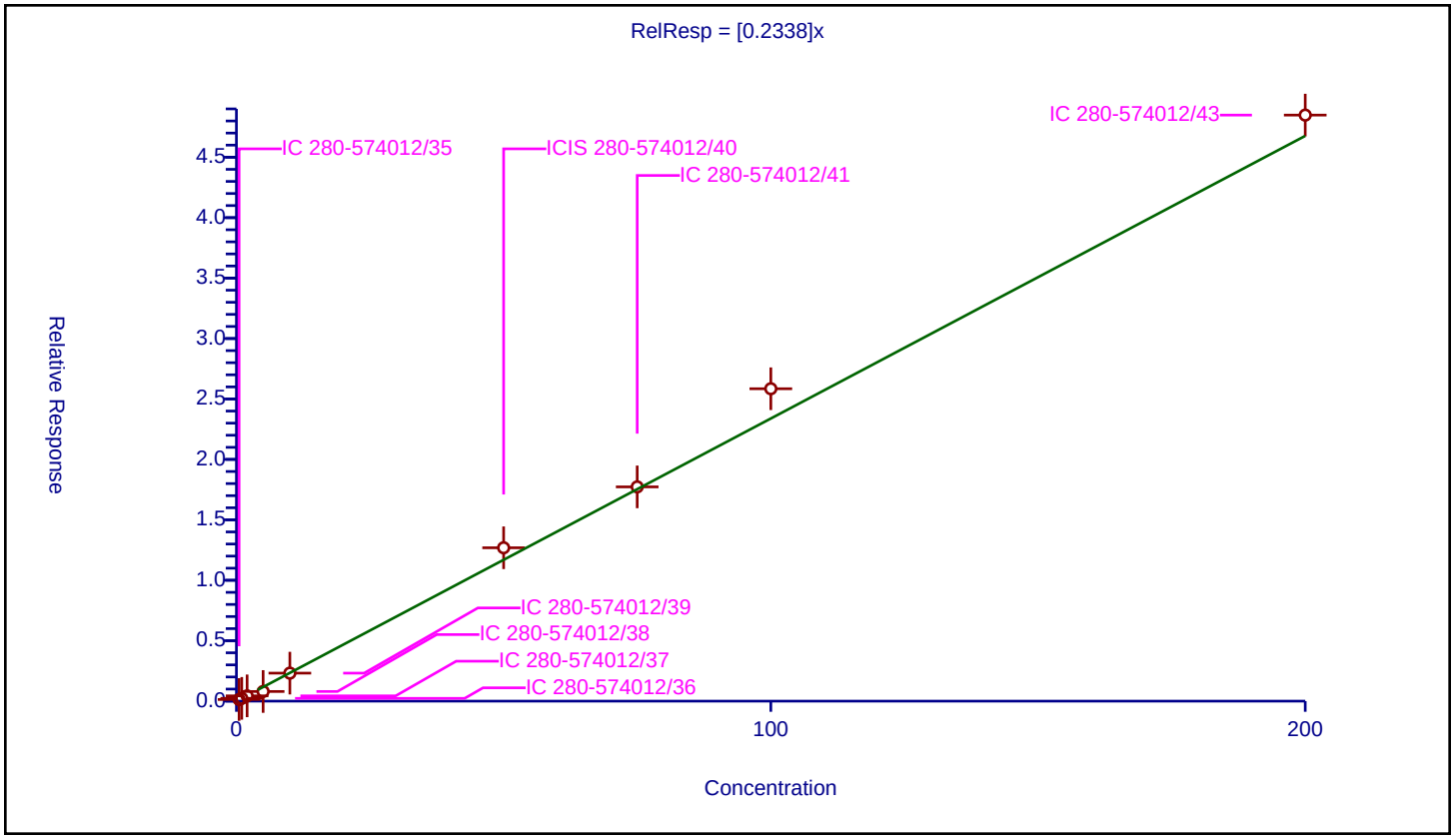
Curve Coefficients

Intercept:	0
Slope:	0.2338

Error Coefficients

Standard Error:	596000
Relative Standard Error:	13.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.975

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.136351	50.0	1255579.0	0.272703	Y
2	IC 280-574012/36	1.0	0.230716	50.0	1203211.0	0.230716	Y
3	IC 280-574012/37	2.0	0.436967	50.0	1234418.0	0.218484	Y
4	IC 280-574012/38	5.0	0.799024	50.0	1235070.0	0.159805	Y
5	IC 280-574012/39	10.0	2.317369	50.0	1271528.0	0.231737	Y
6	ICIS 280-574012/40	50.0	12.689161	50.0	1327574.0	0.253783	Y
7	IC 280-574012/41	75.0	17.727032	50.0	1395070.0	0.23636	Y
8	IC 280-574012/42	100.0	25.847918	50.0	1381560.0	0.258479	Y
9	IC 280-574012/43	200.0	48.485678	50.0	1446027.0	0.242428	Y



Calibration / Carbon tetrachloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

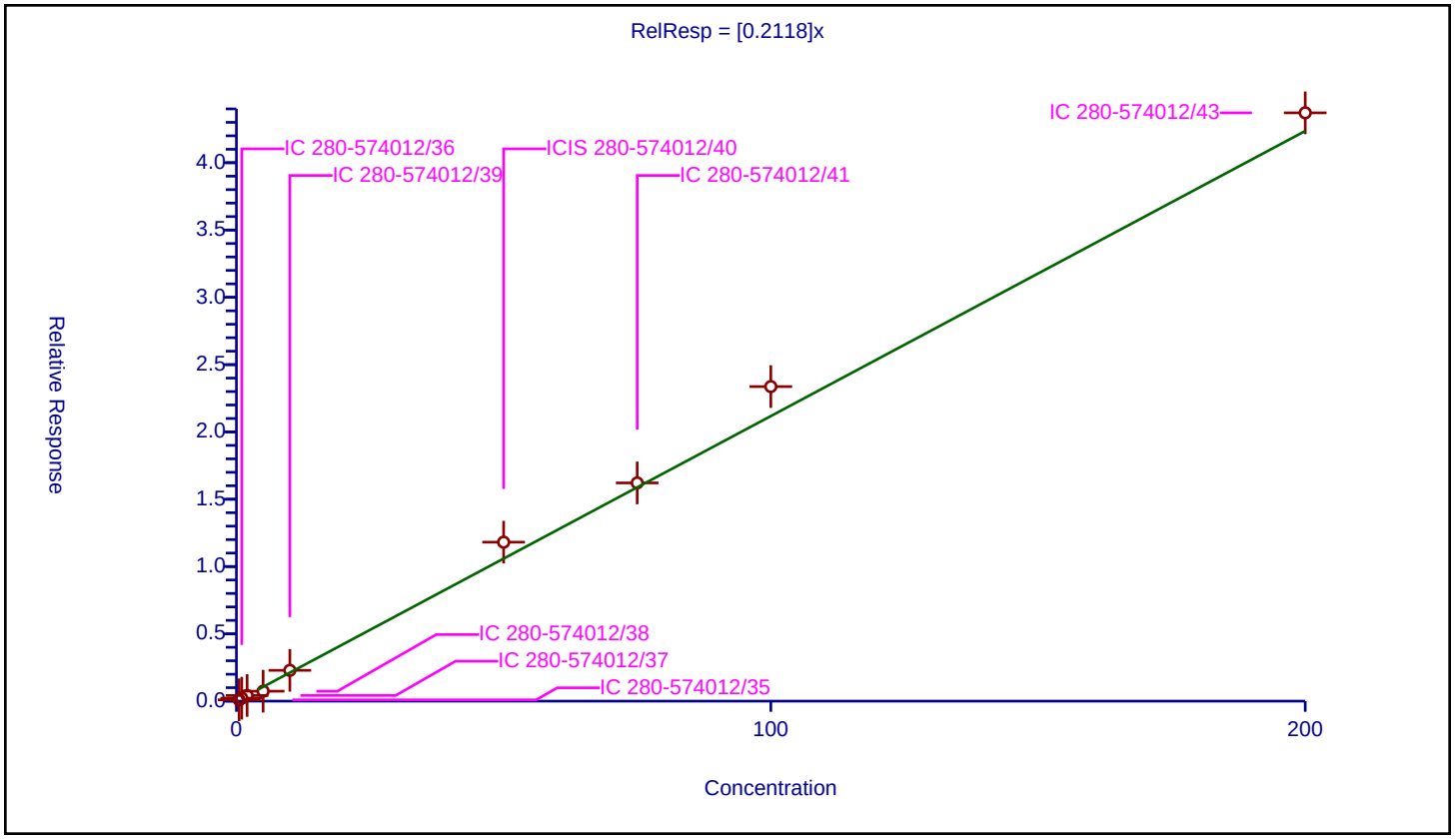
Curve Coefficients

Intercept:	0
Slope:	0.2118

Error Coefficients

Standard Error:	539000
Relative Standard Error:	12.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.980

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.096967	50.0	1255579.0	0.193934	Y
2	IC 280-574012/36	1.0	0.220743	50.0	1203211.0	0.220743	Y
3	IC 280-574012/37	2.0	0.419955	50.0	1234418.0	0.209977	Y
4	IC 280-574012/38	5.0	0.739148	50.0	1235070.0	0.14783	Y
5	IC 280-574012/39	10.0	2.289293	50.0	1271528.0	0.228929	Y
6	ICIS 280-574012/40	50.0	11.810942	50.0	1327574.0	0.236219	Y
7	IC 280-574012/41	75.0	16.213201	50.0	1395070.0	0.216176	Y
8	IC 280-574012/42	100.0	23.369524	50.0	1381560.0	0.233695	Y
9	IC 280-574012/43	200.0	43.707344	50.0	1446027.0	0.218537	Y



Calibration / Isobutyl alcohol

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

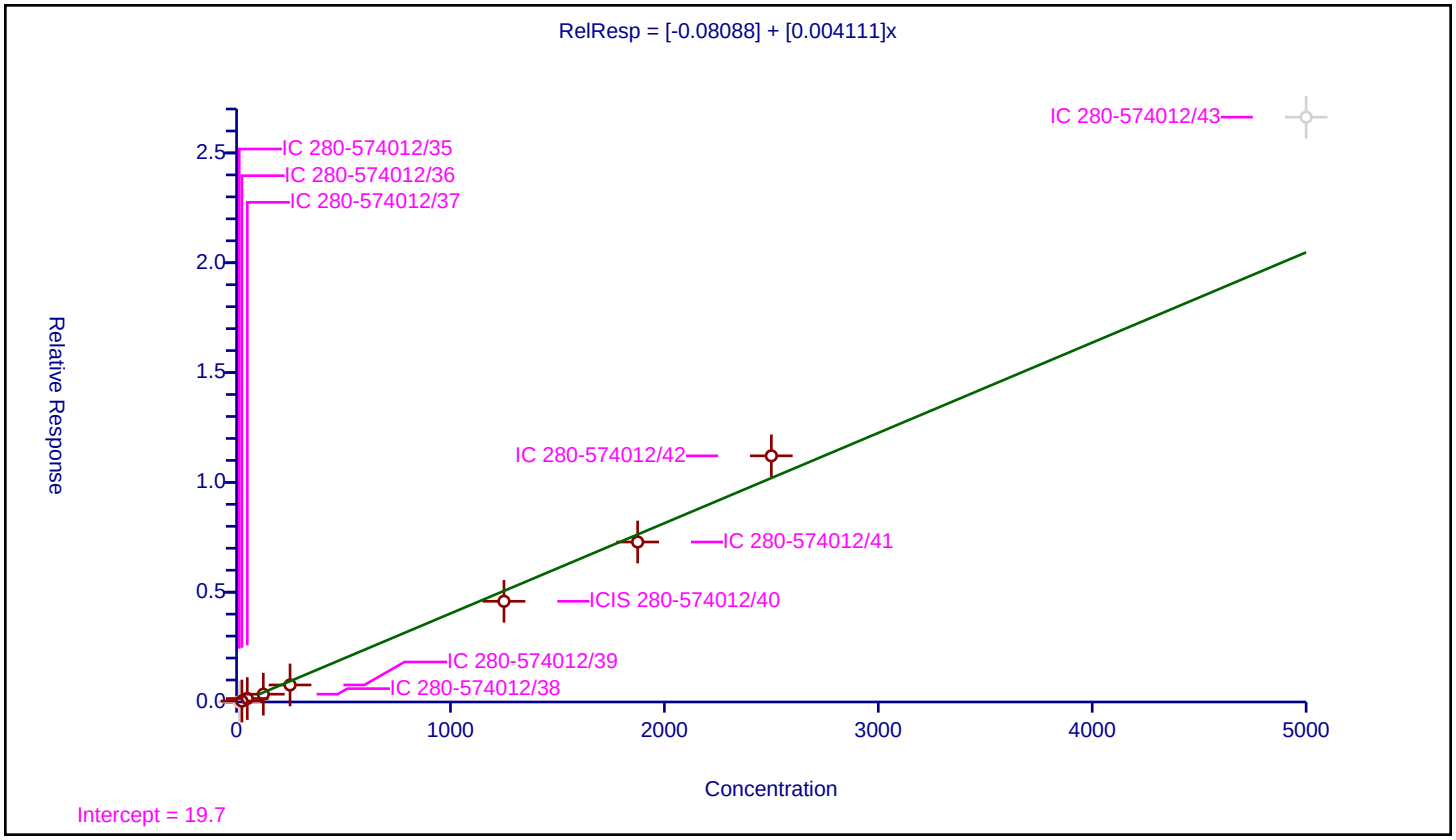
Curve Coefficients

Intercept:	-0.08088
Slope:	0.004111

Error Coefficients

Standard Error:	175000
Relative Standard Error:	16.4
Correlation Coefficient:	0.989
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	12.5	0.0	50.0	1255579.0	0.0	N
2	IC 280-574012/36	25.0	0.04222	50.0	1203211.0	0.001689	Y
3	IC 280-574012/37	50.0	0.157159	50.0	1234418.0	0.003143	Y
4	IC 280-574012/38	125.0	0.355364	50.0	1235070.0	0.002843	Y
5	IC 280-574012/39	250.0	0.775288	50.0	1271528.0	0.003101	Y
6	ICIS 280-574012/40	1250.0	4.585846	50.0	1327574.0	0.003669	Y
7	IC 280-574012/41	1875.0	7.284652	50.0	1395070.0	0.003885	Y
8	IC 280-574012/42	2500.0	11.207367	50.0	1381560.0	0.004483	Y
9	IC 280-574012/43	5000.0	26.63007	50.0	1446027.0	0.005326	N



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

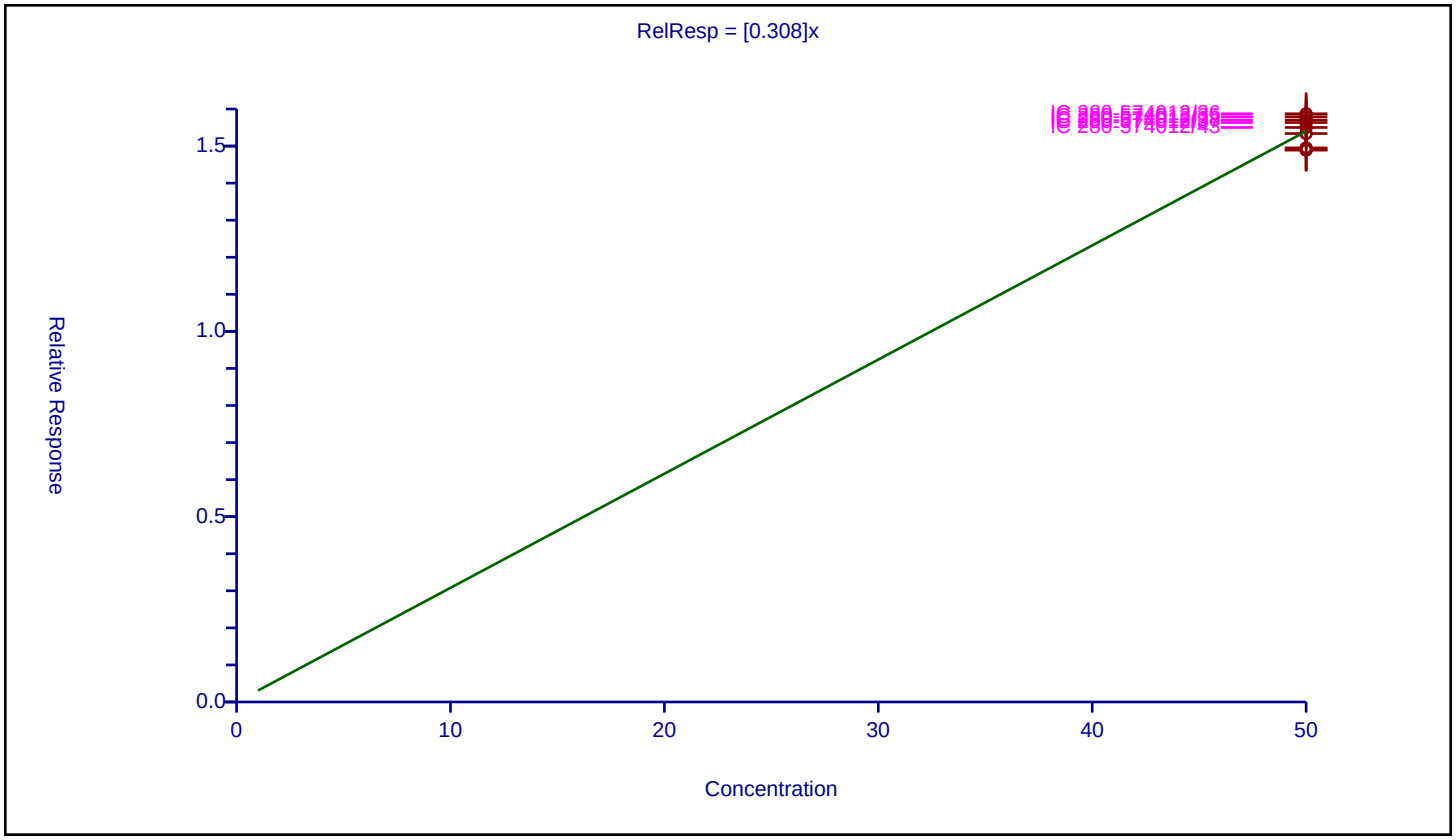
Curve Coefficients

Intercept:	0
Slope:	0.308

Error Coefficients

Standard Error:	427000
Relative Standard Error:	2.6
Correlation Coefficient:	NA
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	50.0	15.791878	50.0	1255579.0	0.315838	Y
2	IC 280-574012/36	50.0	15.871738	50.0	1203211.0	0.317435	Y
3	IC 280-574012/37	50.0	15.634129	50.0	1234418.0	0.312683	Y
4	IC 280-574012/38	50.0	15.701904	50.0	1235070.0	0.314038	Y
5	IC 280-574012/39	50.0	15.337806	50.0	1271528.0	0.306756	Y
6	ICIS 280-574012/40	50.0	14.894951	50.0	1327574.0	0.297899	Y
7	IC 280-574012/41	50.0	14.951579	50.0	1395070.0	0.299032	Y
8	IC 280-574012/42	50.0	14.896711	50.0	1381560.0	0.297934	Y
9	IC 280-574012/43	50.0	15.502373	50.0	1446027.0	0.310047	Y



Calibration / Benzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

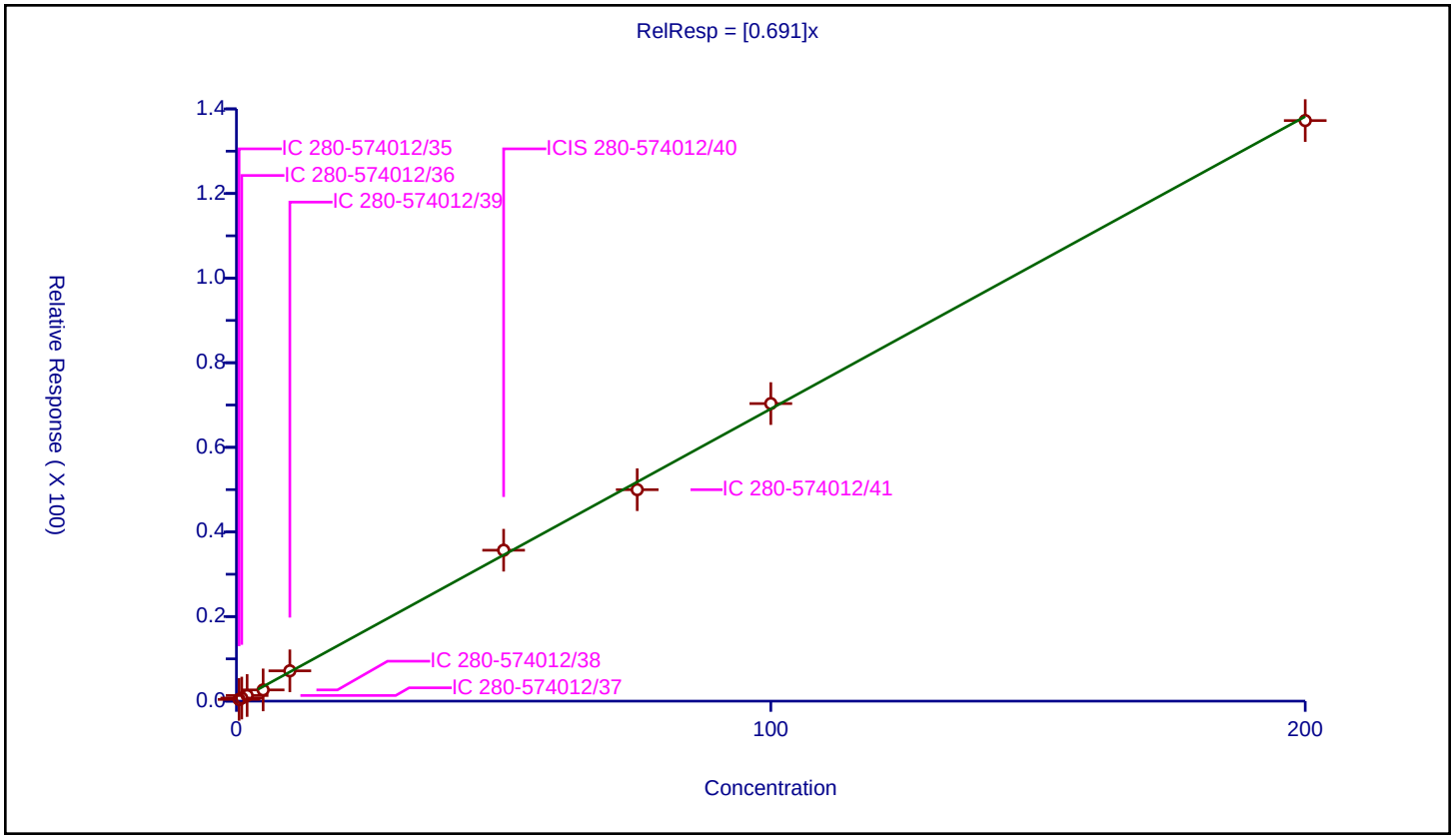
Curve Coefficients

Intercept:	0
Slope:	0.691

Error Coefficients

Standard Error:	1670000
Relative Standard Error:	10.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.984

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.405669	50.0	1255579.0	0.811339	Y
2	IC 280-574012/36	1.0	0.724146	50.0	1203211.0	0.724146	Y
3	IC 280-574012/37	2.0	1.333098	50.0	1234418.0	0.666549	Y
4	IC 280-574012/38	5.0	2.653088	50.0	1235070.0	0.530618	Y
5	IC 280-574012/39	10.0	7.165237	50.0	1271528.0	0.716524	Y
6	ICIS 280-574012/40	50.0	35.673567	50.0	1327574.0	0.713471	Y
7	IC 280-574012/41	75.0	49.986058	50.0	1395070.0	0.666481	Y
8	IC 280-574012/42	100.0	70.342294	50.0	1381560.0	0.703423	Y
9	IC 280-574012/43	200.0	137.238551	50.0	1446027.0	0.686193	Y



Calibration / 1,2-Dichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

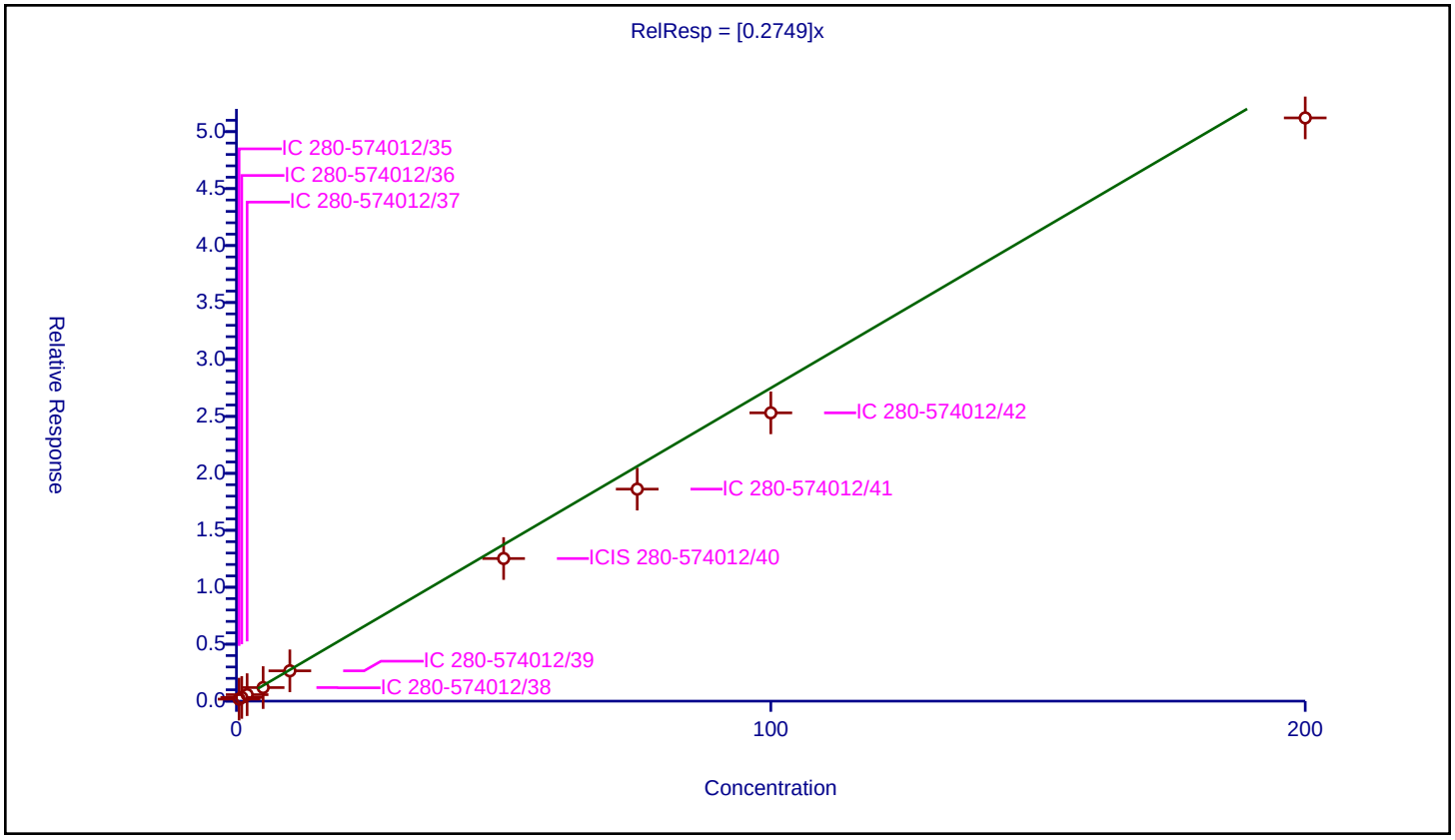
Curve Coefficients

Intercept:	0
Slope:	0.2749

Error Coefficients

Standard Error:	619000
Relative Standard Error:	14.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.969

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.176851	50.0	1255579.0	0.353701	Y
2	IC 280-574012/36	1.0	0.323094	50.0	1203211.0	0.323094	Y
3	IC 280-574012/37	2.0	0.570309	50.0	1234418.0	0.285155	Y
4	IC 280-574012/38	5.0	1.191916	50.0	1235070.0	0.238383	Y
5	IC 280-574012/39	10.0	2.662112	50.0	1271528.0	0.266211	Y
6	ICIS 280-574012/40	50.0	12.522127	50.0	1327574.0	0.250443	Y
7	IC 280-574012/41	75.0	18.615661	50.0	1395070.0	0.248209	Y
8	IC 280-574012/42	100.0	25.313341	50.0	1381560.0	0.253133	Y
9	IC 280-574012/43	200.0	51.209901	50.0	1446027.0	0.25605	Y



Calibration / Trichloroethene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

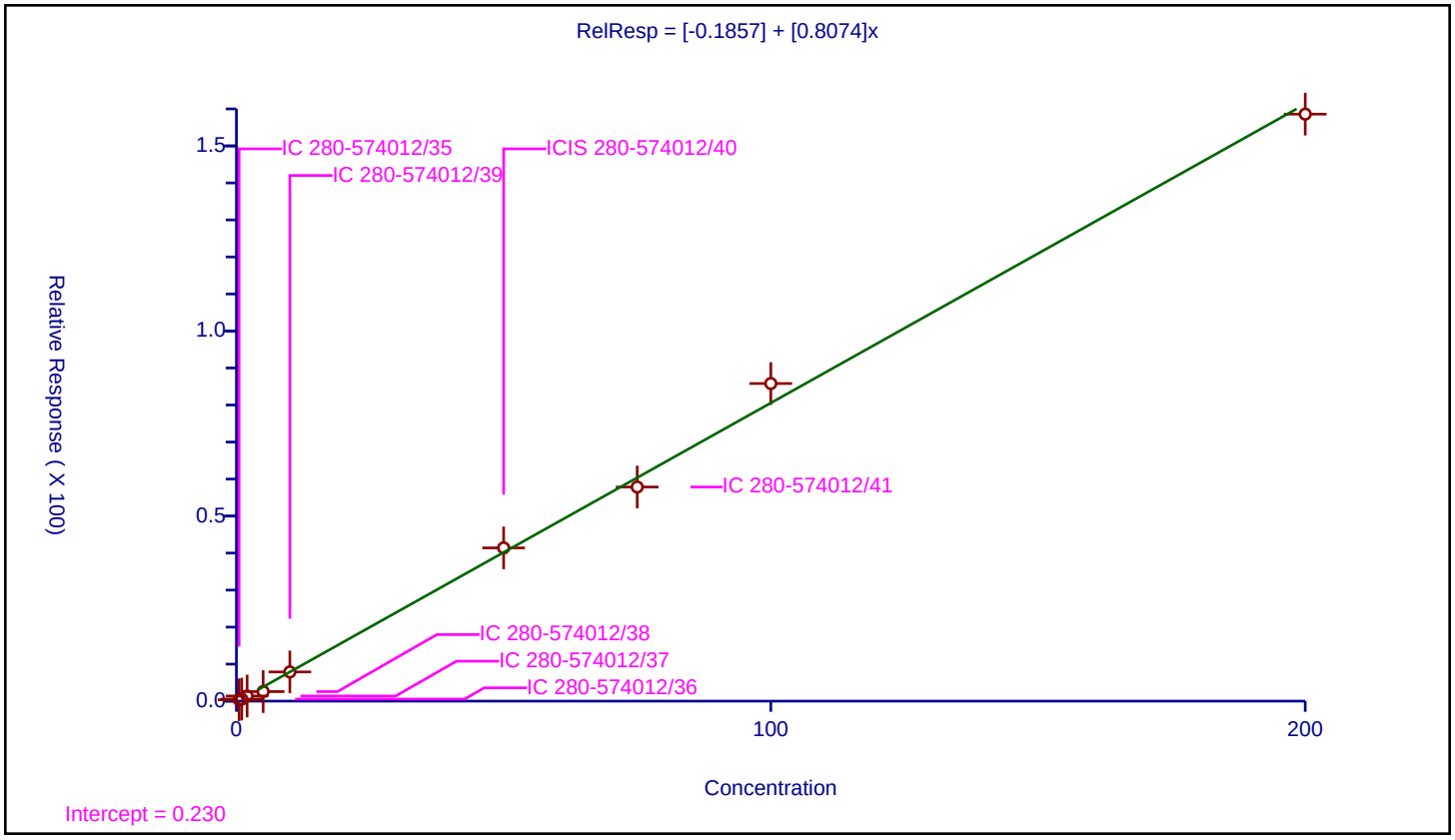
Curve Coefficients

Intercept:	-0.1857
Slope:	0.8074

Error Coefficients

Standard Error:	484000
Relative Standard Error:	19.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.372728	50.0	307060.0	0.745457	Y
2	IC 280-574012/36	1.0	0.557236	50.0	299155.0	0.557236	Y
3	IC 280-574012/37	2.0	1.388325	50.0	305368.0	0.694162	Y
4	IC 280-574012/38	5.0	2.579853	50.0	305560.0	0.515971	Y
5	IC 280-574012/39	10.0	7.890789	50.0	306617.0	0.789079	Y
6	ICIS 280-574012/40	50.0	41.39795	50.0	305154.0	0.827959	Y
7	IC 280-574012/41	75.0	57.846601	50.0	318673.0	0.771288	Y
8	IC 280-574012/42	100.0	85.805288	50.0	314434.0	0.858053	Y
9	IC 280-574012/43	200.0	158.584092	50.0	337543.0	0.79292	Y



Calibration / 2-Pentanone

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

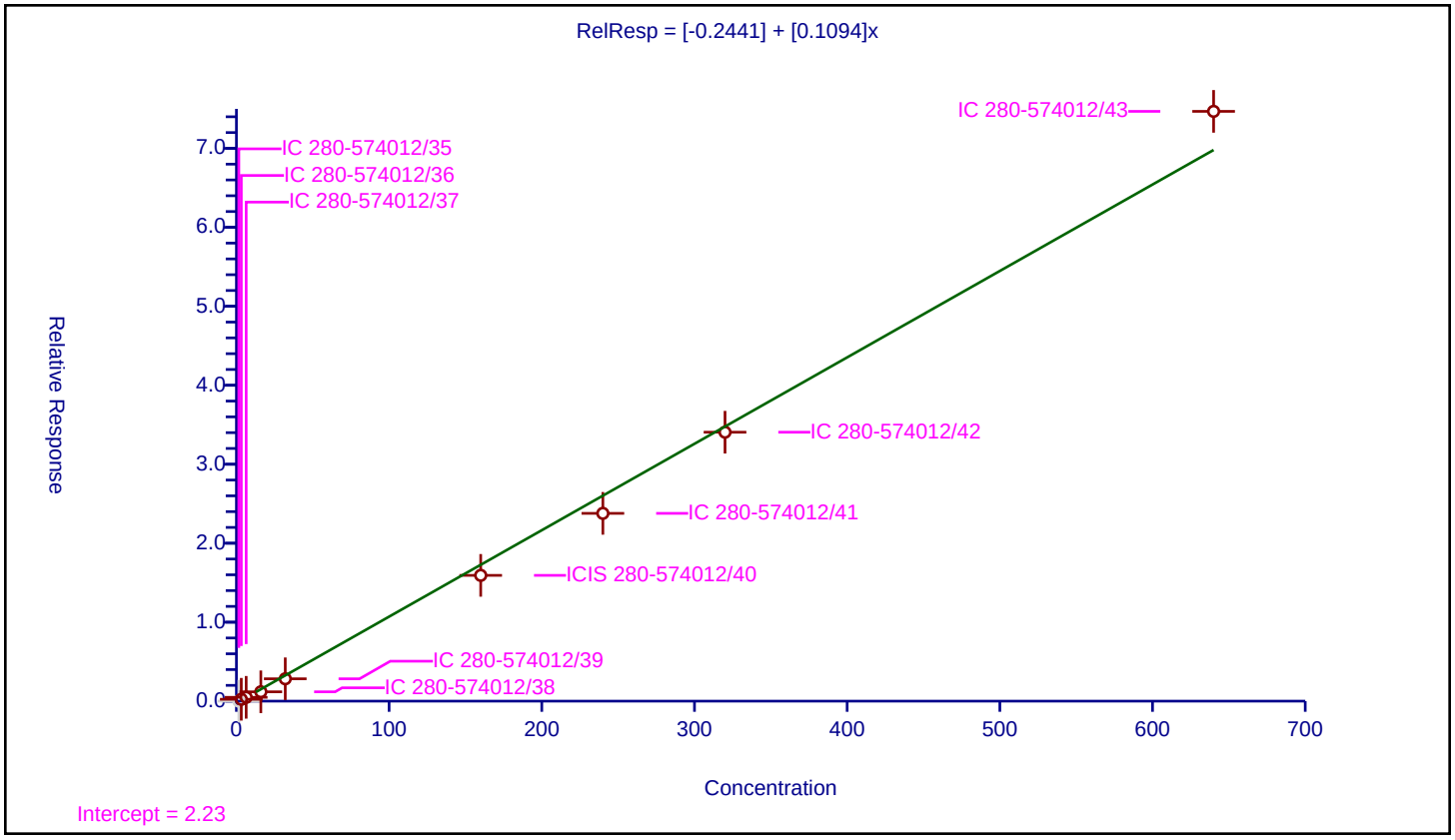
Curve Coefficients

Intercept:	-0.2441
Slope:	0.1094

Error Coefficients

Standard Error:	1010000
Relative Standard Error:	18.8
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	1.6	0.0	50.0	1255579.0	0.0	N
2	IC 280-574012/36	3.2	0.238819	50.0	1203211.0	0.074631	Y
3	IC 280-574012/37	6.4	0.484682	50.0	1234418.0	0.075732	Y
4	IC 280-574012/38	16.0	1.182322	50.0	1235070.0	0.073895	Y
5	IC 280-574012/39	32.0	2.831357	50.0	1271528.0	0.08848	Y
6	ICIS 280-574012/40	160.0	15.928453	50.0	1327574.0	0.099553	Y
7	IC 280-574012/41	240.0	23.778592	50.0	1395070.0	0.099077	Y
8	IC 280-574012/42	320.0	34.057768	50.0	1381560.0	0.106431	Y
9	IC 280-574012/43	640.0	74.685155	50.0	1446027.0	0.116696	Y



Calibration / Methylcyclohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

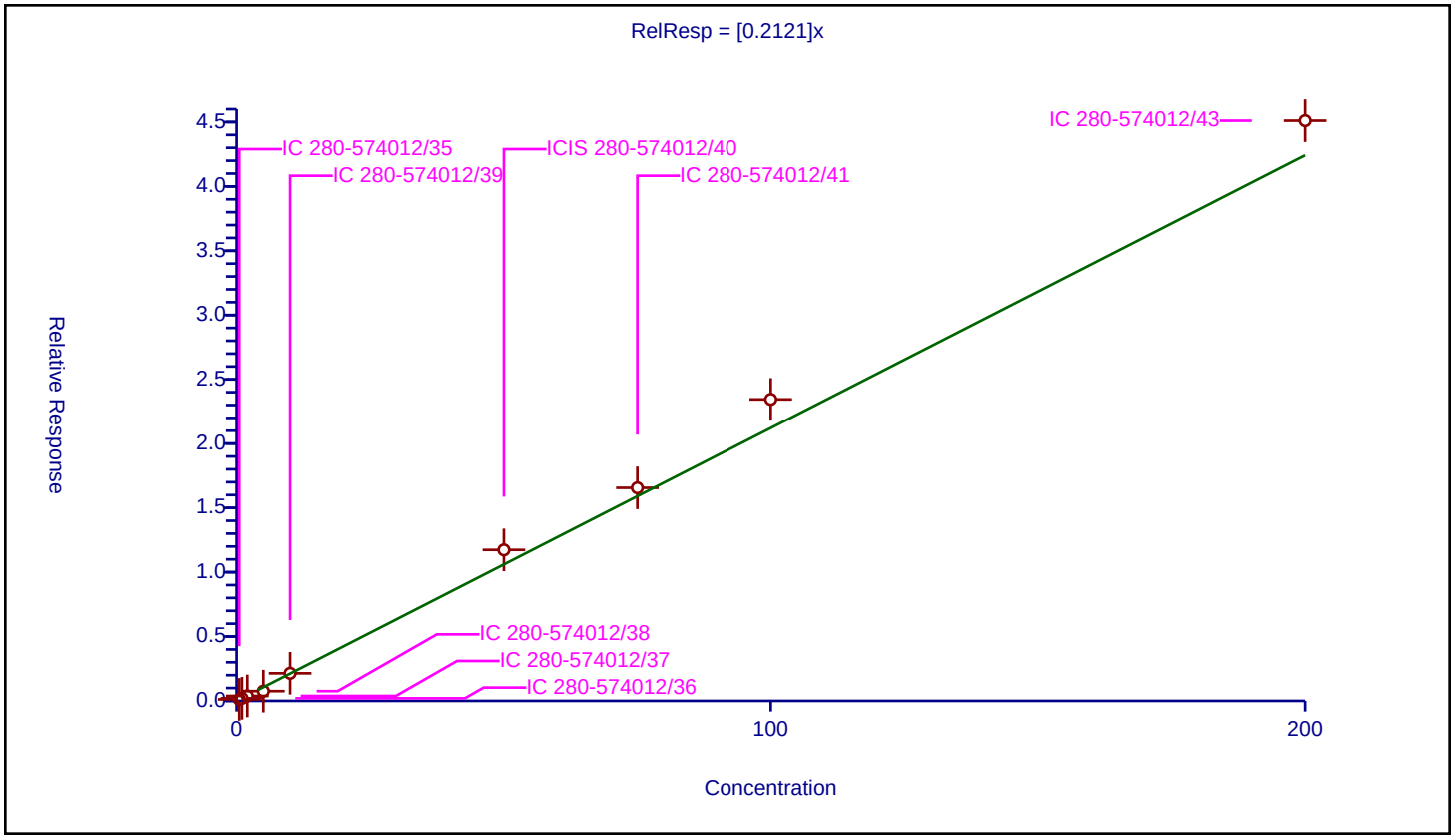
Curve Coefficients

Intercept:	0
Slope:	0.2121

Error Coefficients

Standard Error:	552000
Relative Standard Error:	12.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.979

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.11644	50.0	1255579.0	0.232881	Y
2	IC 280-574012/36	1.0	0.201295	50.0	1203211.0	0.201295	Y
3	IC 280-574012/37	2.0	0.386457	50.0	1234418.0	0.193229	Y
4	IC 280-574012/38	5.0	0.758054	50.0	1235070.0	0.151611	Y
5	IC 280-574012/39	10.0	2.145018	50.0	1271528.0	0.214502	Y
6	ICIS 280-574012/40	50.0	11.734299	50.0	1327574.0	0.234686	Y
7	IC 280-574012/41	75.0	16.560674	50.0	1395070.0	0.220809	Y
8	IC 280-574012/42	100.0	23.440278	50.0	1381560.0	0.234403	Y
9	IC 280-574012/43	200.0	45.109289	50.0	1446027.0	0.225546	Y



Calibration / 1,2-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

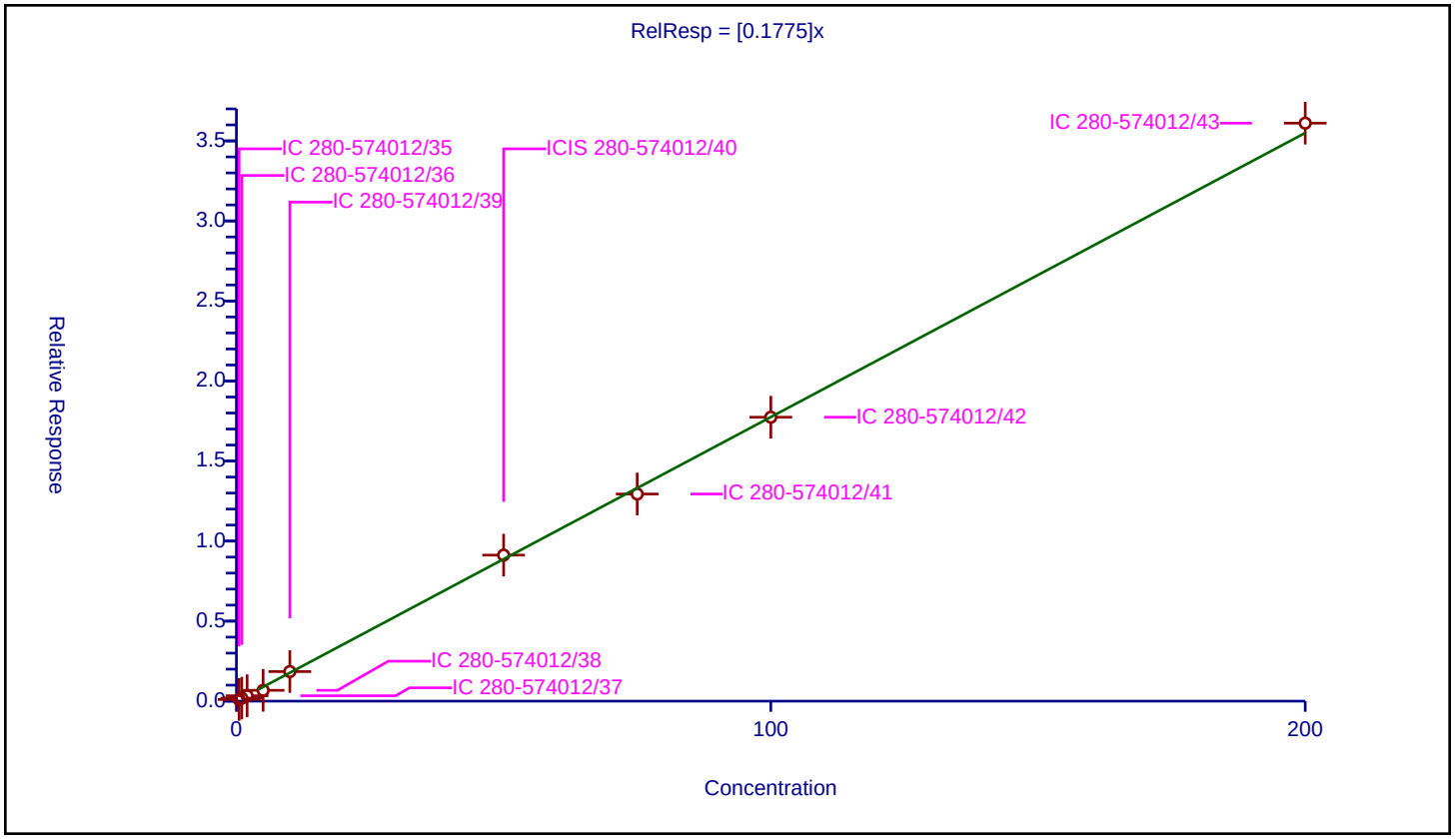
Curve Coefficients

Intercept:	0
Slope:	0.1775

Error Coefficients

Standard Error:	436000
Relative Standard Error:	10.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.984

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.10302	50.0	1255579.0	0.20604	Y
2	IC 280-574012/36	1.0	0.189493	50.0	1203211.0	0.189493	Y
3	IC 280-574012/37	2.0	0.33773	50.0	1234418.0	0.168865	Y
4	IC 280-574012/38	5.0	0.675873	50.0	1235070.0	0.135175	Y
5	IC 280-574012/39	10.0	1.848603	50.0	1271528.0	0.18486	Y
6	ICIS 280-574012/40	50.0	9.122655	50.0	1327574.0	0.182453	Y
7	IC 280-574012/41	75.0	12.939781	50.0	1395070.0	0.17253	Y
8	IC 280-574012/42	100.0	17.738969	50.0	1381560.0	0.17739	Y
9	IC 280-574012/43	200.0	36.107867	50.0	1446027.0	0.180539	Y



Calibration / 1,4-Dioxane

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

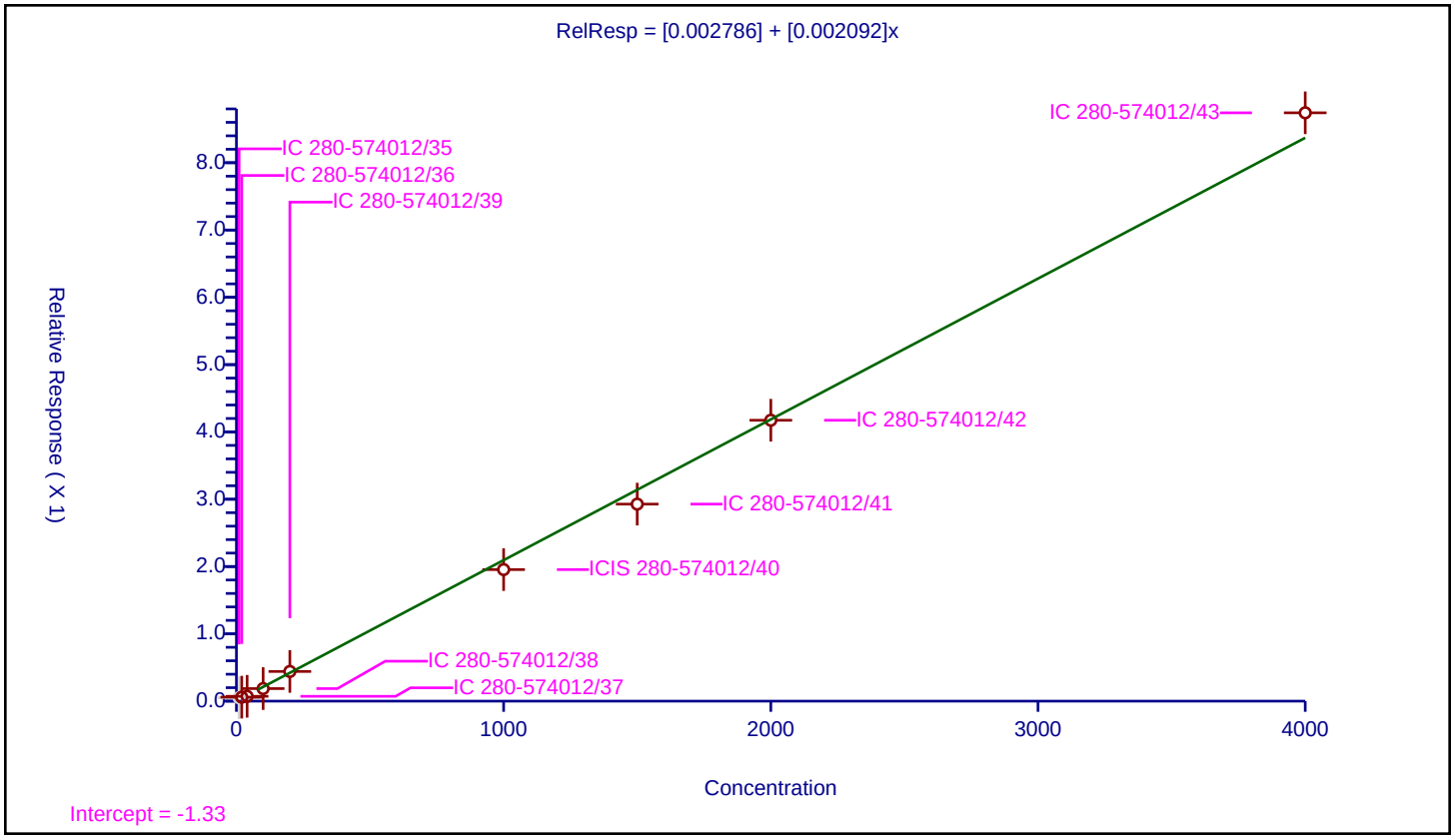
Curve Coefficients

Intercept:	0.002786
Slope:	0.002092

Error Coefficients

Standard Error:	120000
Relative Standard Error:	17.1
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	10.0	0.050694	50.0	1255579.0	0.005069	N
2	IC 280-574012/36	20.0	0.058967	50.0	1203211.0	0.002948	Y
3	IC 280-574012/37	40.0	0.071815	50.0	1234418.0	0.001795	Y
4	IC 280-574012/38	100.0	0.186427	50.0	1235070.0	0.001864	Y
5	IC 280-574012/39	200.0	0.441123	50.0	1271528.0	0.002206	Y
6	ICIS 280-574012/40	1000.0	1.954656	50.0	1327574.0	0.001955	Y
7	IC 280-574012/41	1500.0	2.927559	50.0	1395070.0	0.001952	Y
8	IC 280-574012/42	2000.0	4.173869	50.0	1381560.0	0.002087	Y
9	IC 280-574012/43	4000.0	8.74178	50.0	1446027.0	0.002185	Y



Calibration / Dibromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

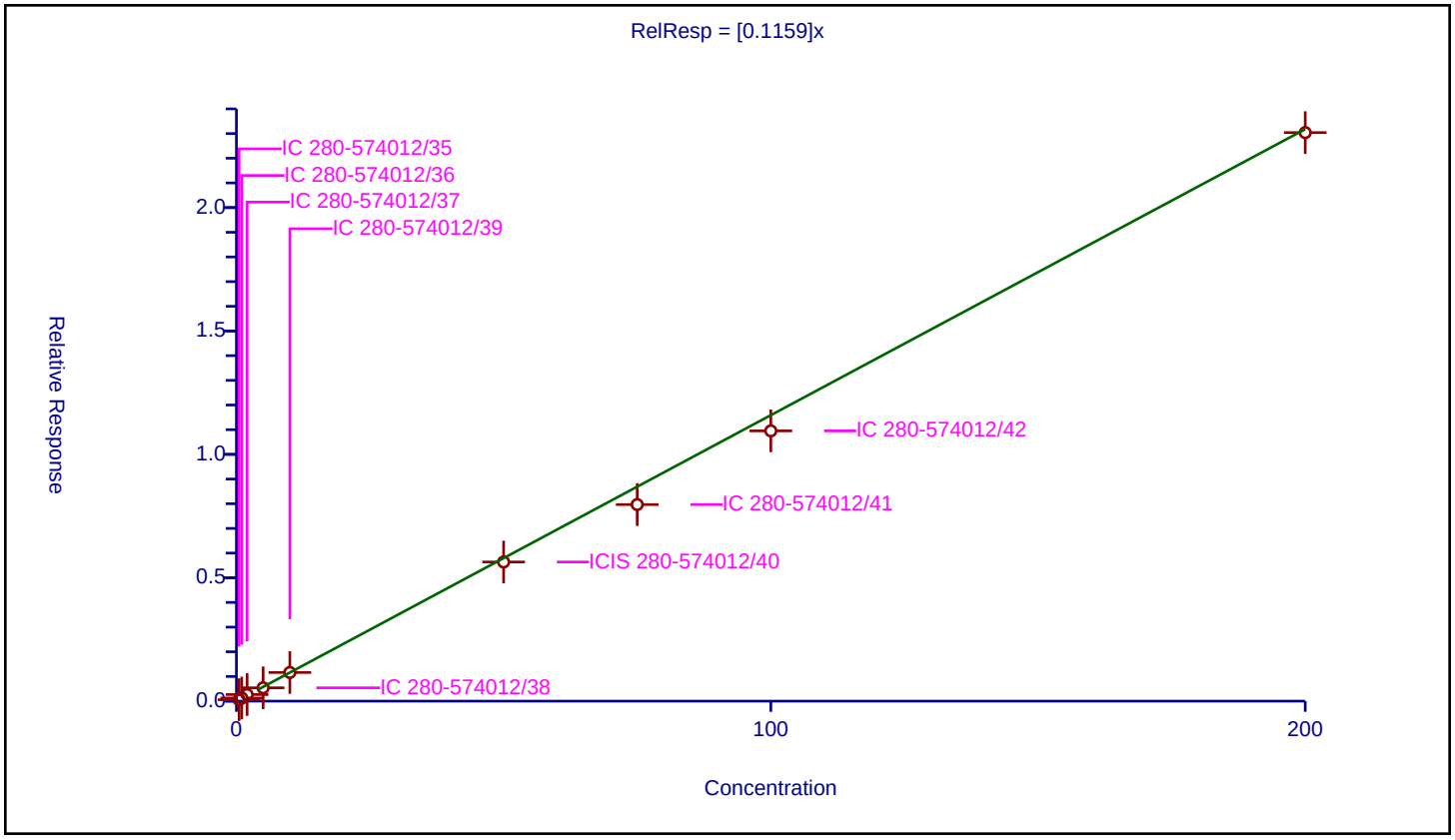
Curve Coefficients

Intercept:	0
Slope:	0.1159

Error Coefficients

Standard Error:	276000
Relative Standard Error:	7.5
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.057941	50.0	1255579.0	0.115883	Y
2	IC 280-574012/36	1.0	0.125456	50.0	1203211.0	0.125456	Y
3	IC 280-574012/37	2.0	0.267251	50.0	1234418.0	0.133626	Y
4	IC 280-574012/38	5.0	0.540658	50.0	1235070.0	0.108132	Y
5	IC 280-574012/39	10.0	1.161477	50.0	1271528.0	0.116148	Y
6	ICIS 280-574012/40	50.0	5.638556	50.0	1327574.0	0.112771	Y
7	IC 280-574012/41	75.0	7.966016	50.0	1395070.0	0.106214	Y
8	IC 280-574012/42	100.0	10.951823	50.0	1381560.0	0.109518	Y
9	IC 280-574012/43	200.0	23.038851	50.0	1446027.0	0.115194	Y



Calibration / Dichlorobromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

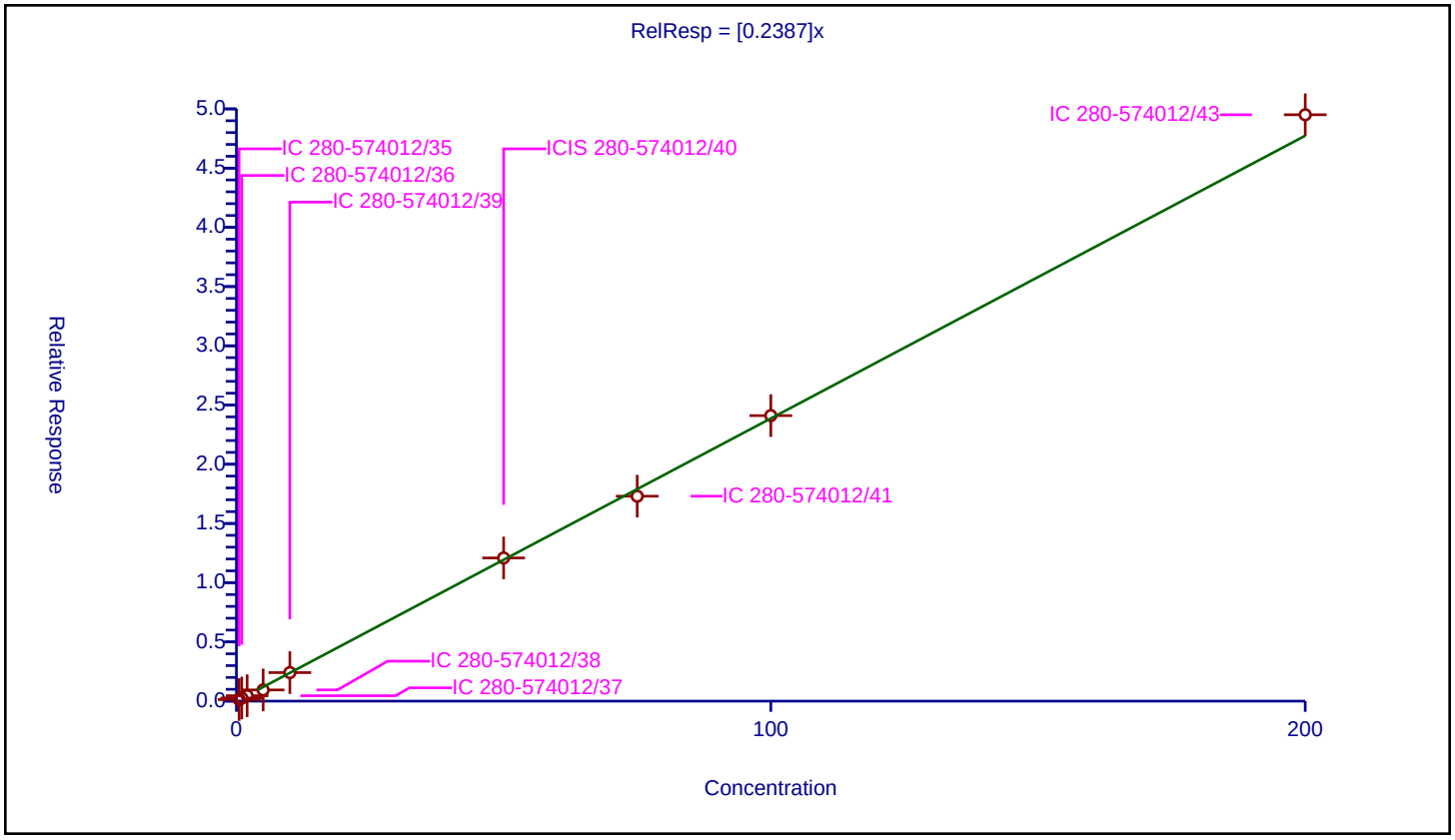
Curve Coefficients

Intercept:	0
Slope:	0.2387

Error Coefficients

Standard Error:	595000
Relative Standard Error:	9.4
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.132568	50.0	1255579.0	0.265137	Y
2	IC 280-574012/36	1.0	0.263669	50.0	1203211.0	0.263669	Y
3	IC 280-574012/37	2.0	0.456531	50.0	1234418.0	0.228265	Y
4	IC 280-574012/38	5.0	0.944967	50.0	1235070.0	0.188993	Y
5	IC 280-574012/39	10.0	2.409896	50.0	1271528.0	0.24099	Y
6	ICIS 280-574012/40	50.0	12.087763	50.0	1327574.0	0.241755	Y
7	IC 280-574012/41	75.0	17.300566	50.0	1395070.0	0.230674	Y
8	IC 280-574012/42	100.0	24.105251	50.0	1381560.0	0.241053	Y
9	IC 280-574012/43	200.0	49.504988	50.0	1446027.0	0.247525	Y



Calibration / 2-Chloroethyl vinyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

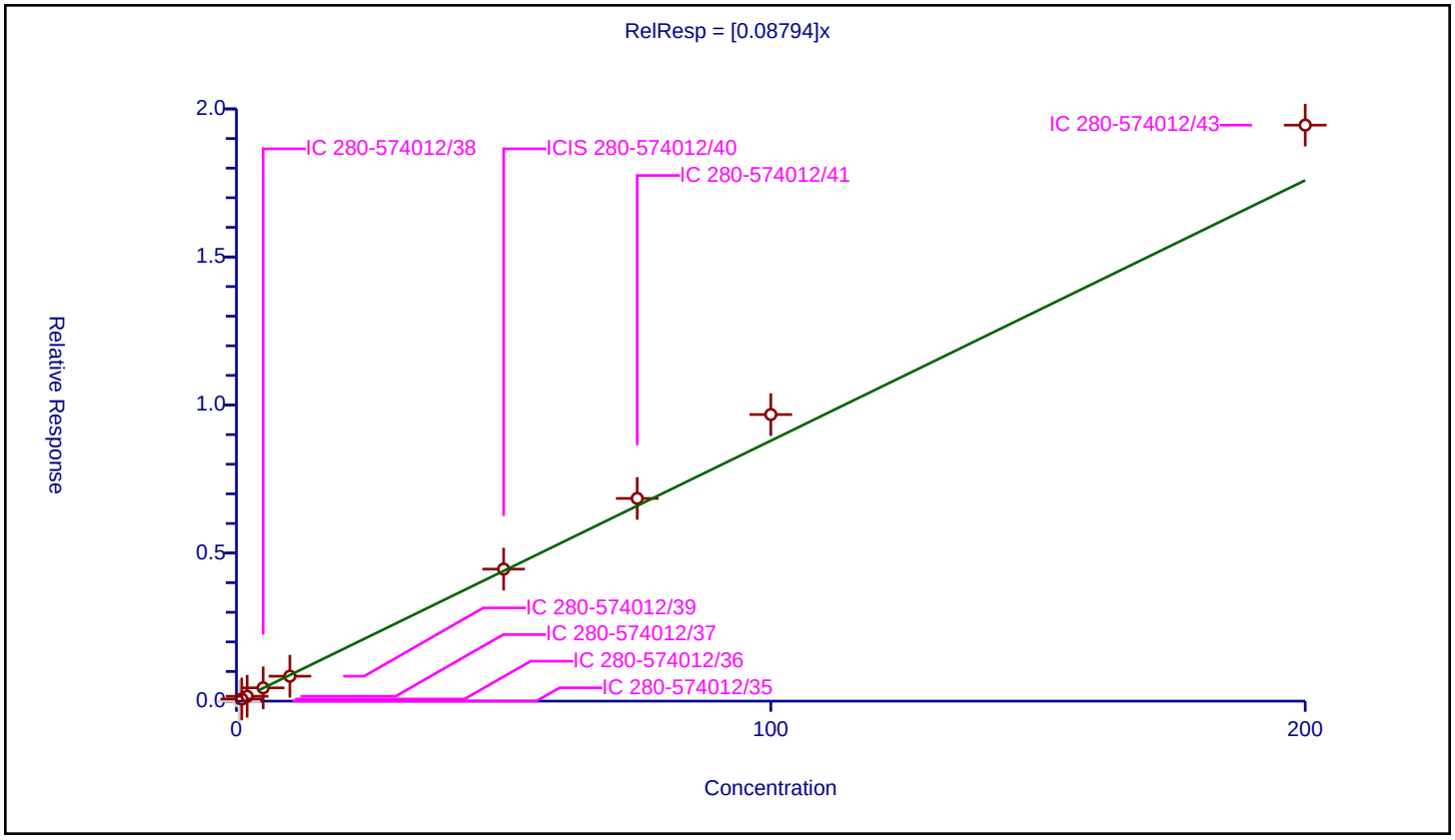
Curve Coefficients

Intercept:	0
Slope:	0.08794

Error Coefficients

Standard Error:	250000
Relative Standard Error:	9.2
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.0	50.0	1255579.0	0.0	N
2	IC 280-574012/36	1.0	0.072722	50.0	1203211.0	0.072722	Y
3	IC 280-574012/37	2.0	0.165058	50.0	1234418.0	0.082529	Y
4	IC 280-574012/38	5.0	0.448031	50.0	1235070.0	0.089606	Y
5	IC 280-574012/39	10.0	0.842018	50.0	1271528.0	0.084202	Y
6	ICIS 280-574012/40	50.0	4.458584	50.0	1327574.0	0.089172	Y
7	IC 280-574012/41	75.0	6.846251	50.0	1395070.0	0.091283	Y
8	IC 280-574012/42	100.0	9.678009	50.0	1381560.0	0.09678	Y
9	IC 280-574012/43	200.0	19.452161	50.0	1446027.0	0.097261	Y



Calibration / cis-1,3-Dichloropropene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

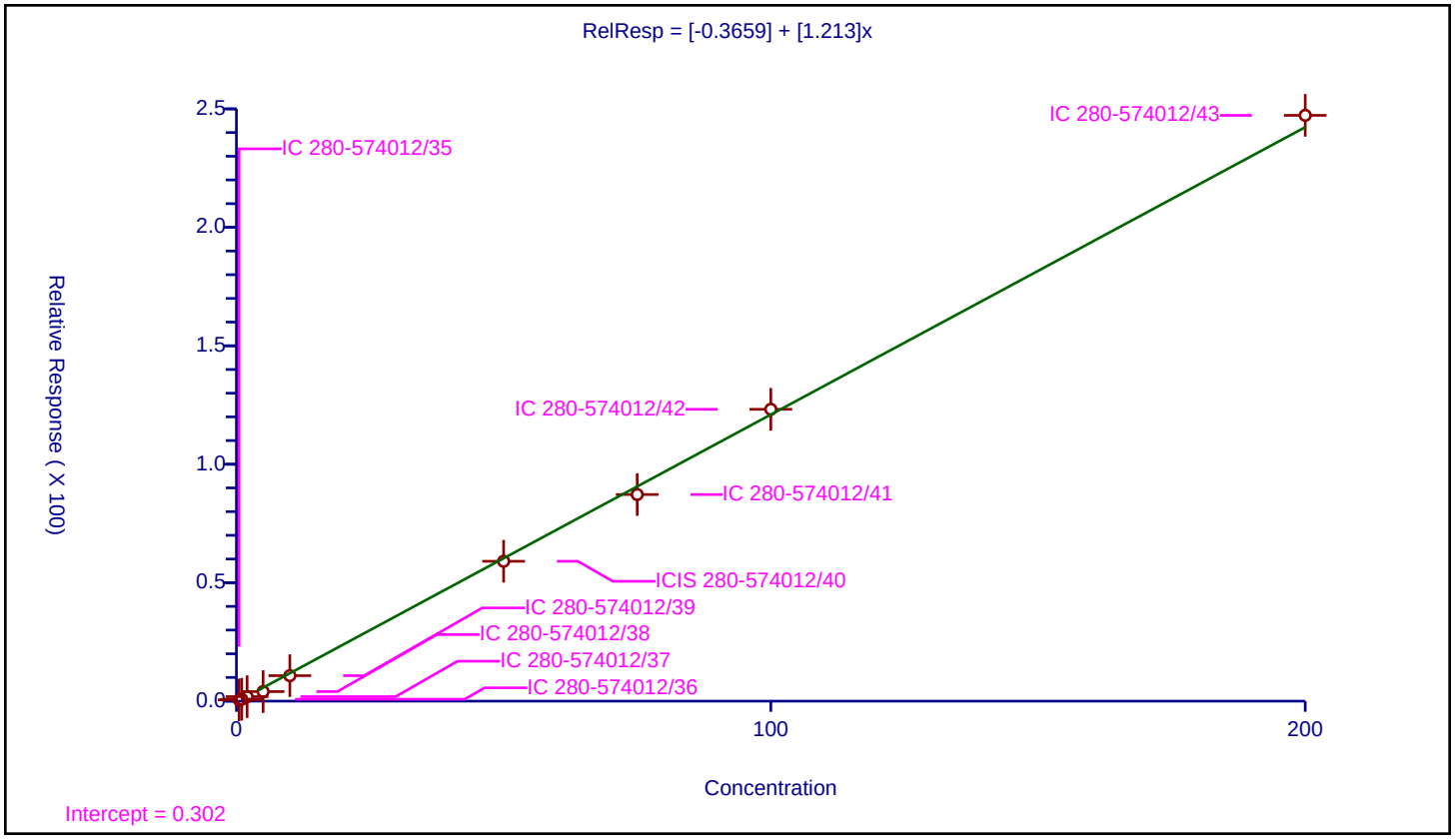
Curve Coefficients

Intercept:	-0.3659
Slope:	1.213

Error Coefficients

Standard Error:	740000
Relative Standard Error:	21.3
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.529538	50.0	307060.0	1.059076	Y
2	IC 280-574012/36	1.0	0.804432	50.0	299155.0	0.804432	Y
3	IC 280-574012/37	2.0	1.903932	50.0	305368.0	0.951966	Y
4	IC 280-574012/38	5.0	4.039632	50.0	305560.0	0.807926	Y
5	IC 280-574012/39	10.0	10.752665	50.0	306617.0	1.075267	Y
6	ICIS 280-574012/40	50.0	59.036257	50.0	305154.0	1.180725	Y
7	IC 280-574012/41	75.0	87.215265	50.0	318673.0	1.16287	Y
8	IC 280-574012/42	100.0	123.195011	50.0	314434.0	1.23195	Y
9	IC 280-574012/43	200.0	247.269829	50.0	337543.0	1.236349	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

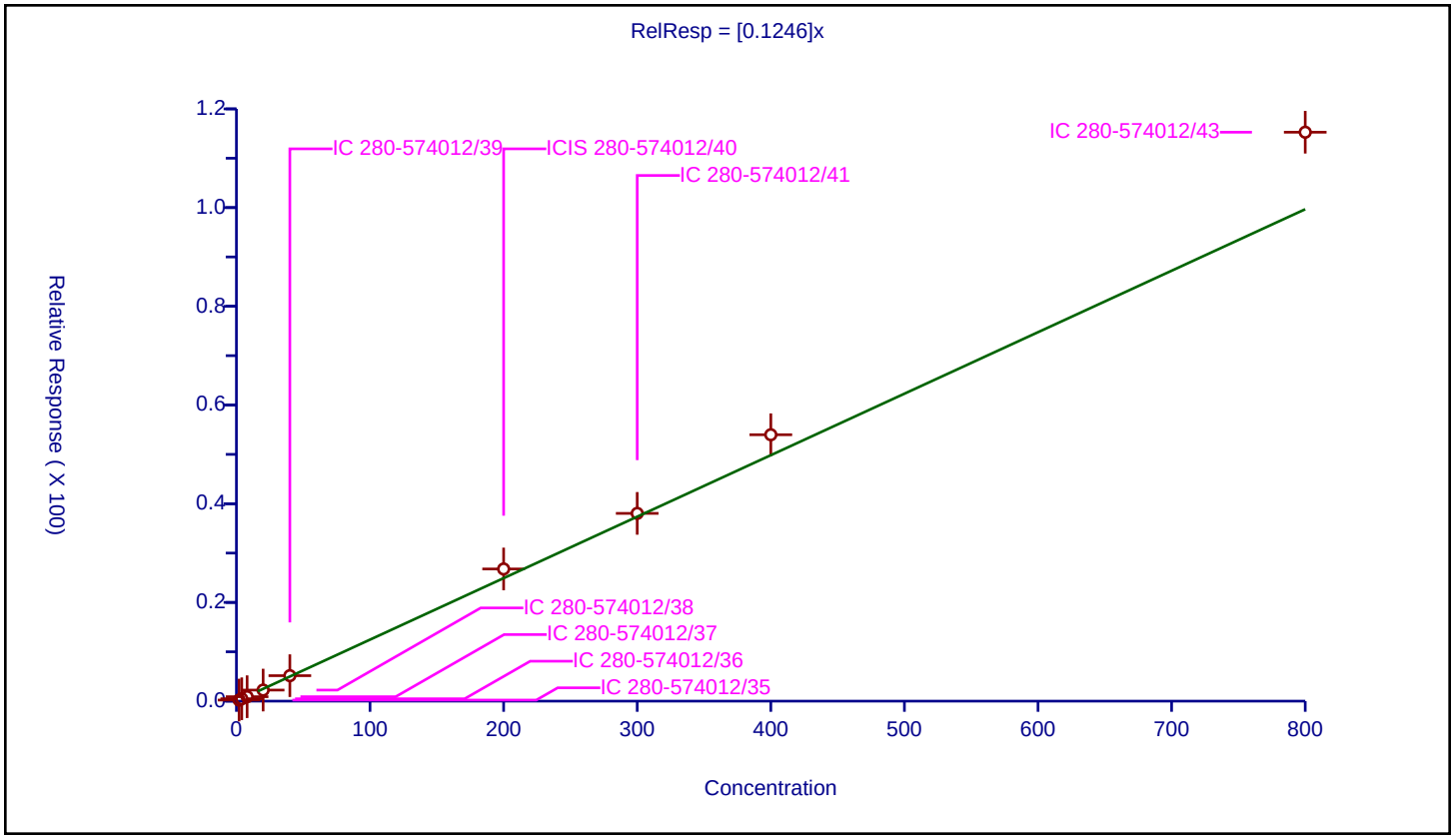
Curve Coefficients

Intercept:	0
Slope:	0.1246

Error Coefficients

Standard Error:	1370000
Relative Standard Error:	9.8
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	2.0	0.215837	50.0	1255579.0	0.107918	Y
2	IC 280-574012/36	4.0	0.480298	50.0	1203211.0	0.120075	Y
3	IC 280-574012/37	8.0	0.898156	50.0	1234418.0	0.11227	Y
4	IC 280-574012/38	20.0	2.244124	50.0	1235070.0	0.112206	Y
5	IC 280-574012/39	40.0	5.161821	50.0	1271528.0	0.129046	Y
6	ICIS 280-574012/40	200.0	26.779035	50.0	1327574.0	0.133895	Y
7	IC 280-574012/41	300.0	38.044471	50.0	1395070.0	0.126815	Y
8	IC 280-574012/42	400.0	53.980754	50.0	1381560.0	0.134952	Y
9	IC 280-574012/43	800.0	115.273643	50.0	1446027.0	0.144092	Y



Calibration / Toluene-d8 (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

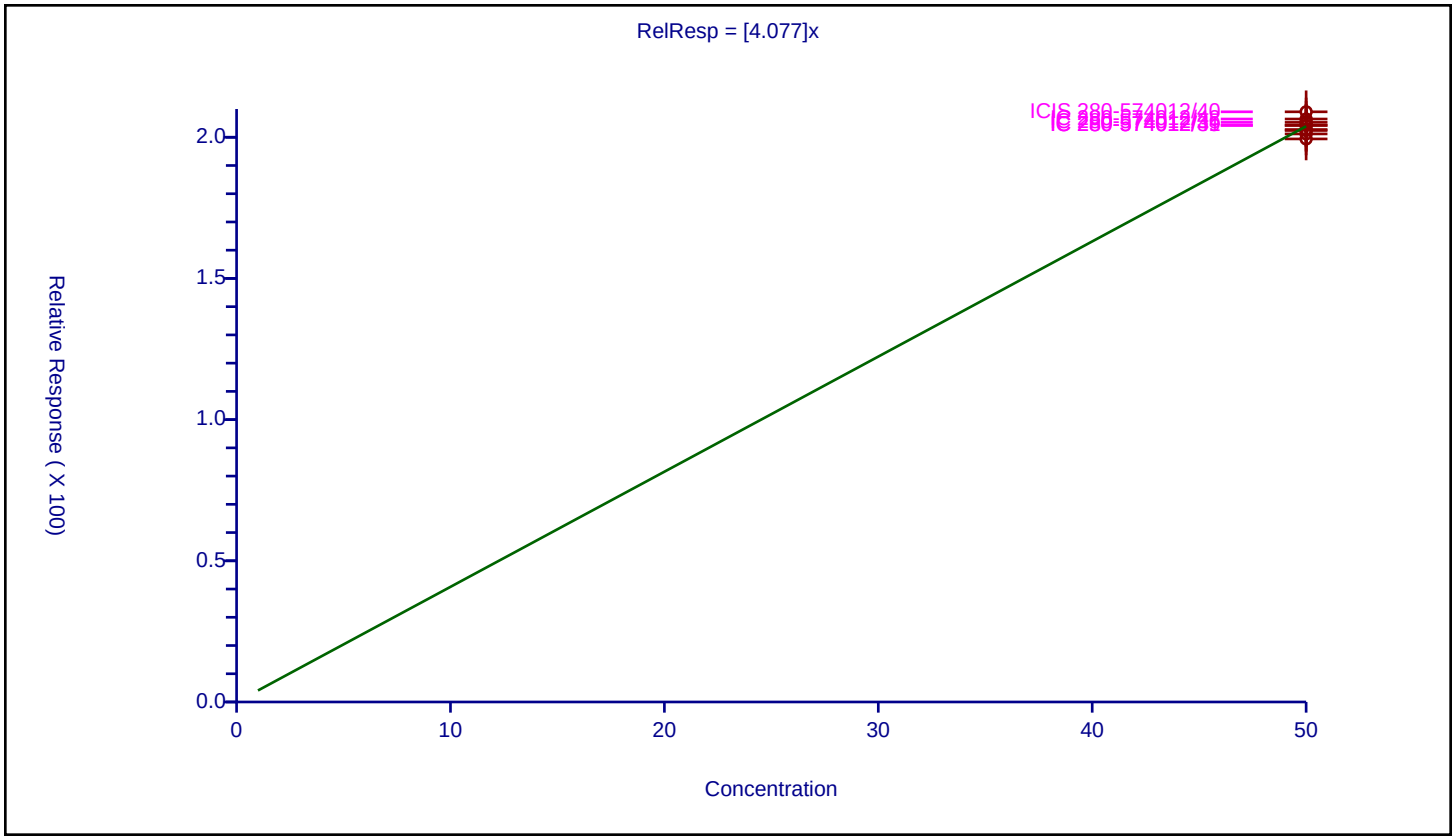
Curve Coefficients

Intercept:	0
Slope:	4.077

Error Coefficients

Standard Error:	1350000
Relative Standard Error:	1.4
Correlation Coefficient:	NA
Coefficient of Determination (Adjusted):	0.000000000000000111

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	50.0	205.257767	50.0	307060.0	4.105155	Y
2	IC 280-574012/36	50.0	201.17765	50.0	299155.0	4.023553	Y
3	IC 280-574012/37	50.0	199.406945	50.0	305368.0	3.988139	Y
4	IC 280-574012/38	50.0	202.736778	50.0	305560.0	4.054736	Y
5	IC 280-574012/39	50.0	204.198723	50.0	306617.0	4.083974	Y
6	ICIS 280-574012/40	50.0	209.009877	50.0	305154.0	4.180198	Y
7	IC 280-574012/41	50.0	204.229728	50.0	318673.0	4.084595	Y
8	IC 280-574012/42	50.0	206.463042	50.0	314434.0	4.129261	Y
9	IC 280-574012/43	50.0	202.38814	50.0	337543.0	4.047763	Y



Calibration / Toluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

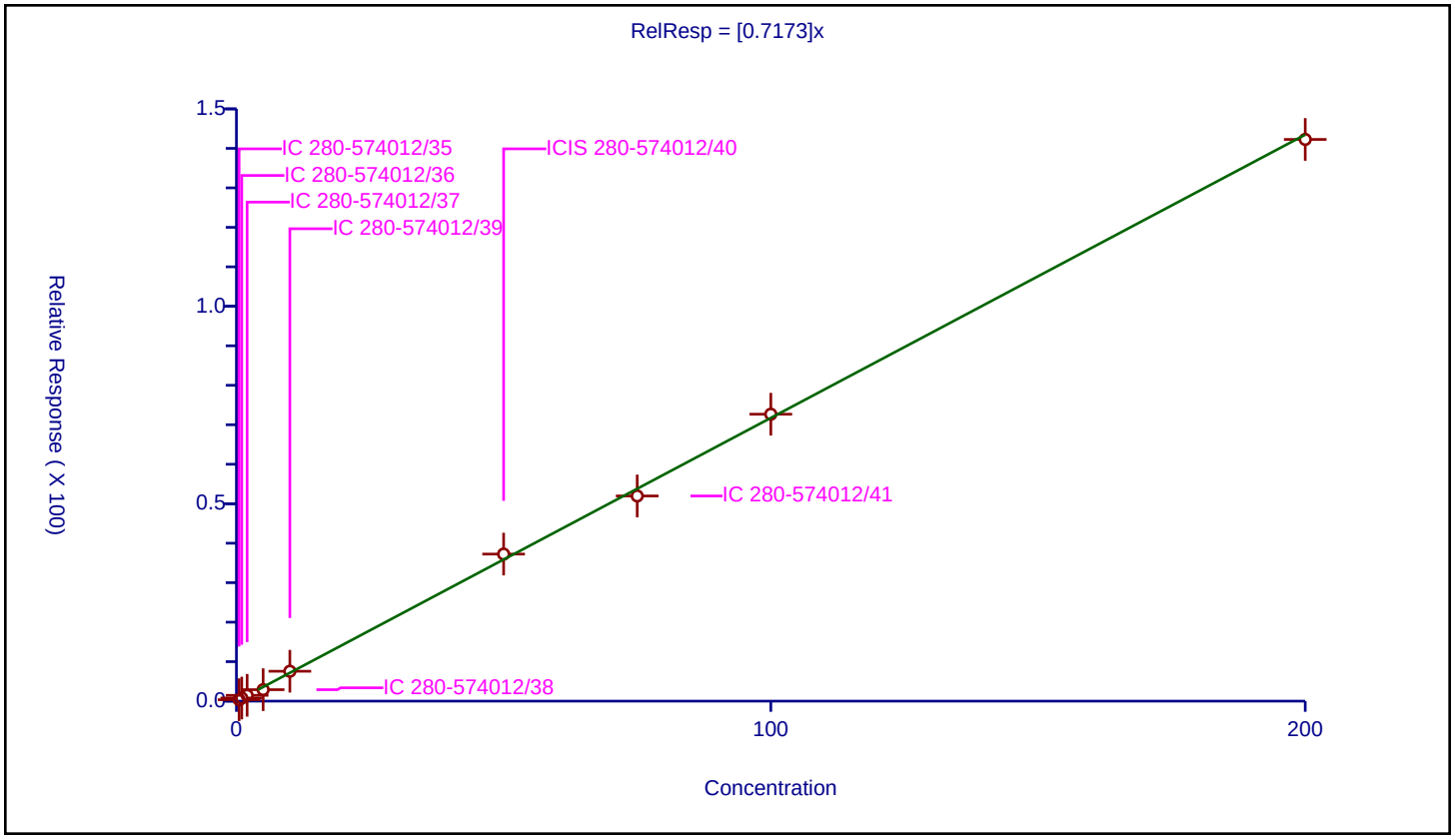
Curve Coefficients

Intercept:	0
Slope:	0.7173

Error Coefficients

Standard Error:	1740000
Relative Standard Error:	8.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.360551	50.0	1255579.0	0.721102	Y
2	IC 280-574012/36	1.0	0.784941	50.0	1203211.0	0.784941	Y
3	IC 280-574012/37	2.0	1.472192	50.0	1234418.0	0.736096	Y
4	IC 280-574012/38	5.0	2.90275	50.0	1235070.0	0.58055	Y
5	IC 280-574012/39	10.0	7.574116	50.0	1271528.0	0.757412	Y
6	ICIS 280-574012/40	50.0	37.245306	50.0	1327574.0	0.744906	Y
7	IC 280-574012/41	75.0	51.968145	50.0	1395070.0	0.692909	Y
8	IC 280-574012/42	100.0	72.675997	50.0	1381560.0	0.72676	Y
9	IC 280-574012/43	200.0	142.265843	50.0	1446027.0	0.711329	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

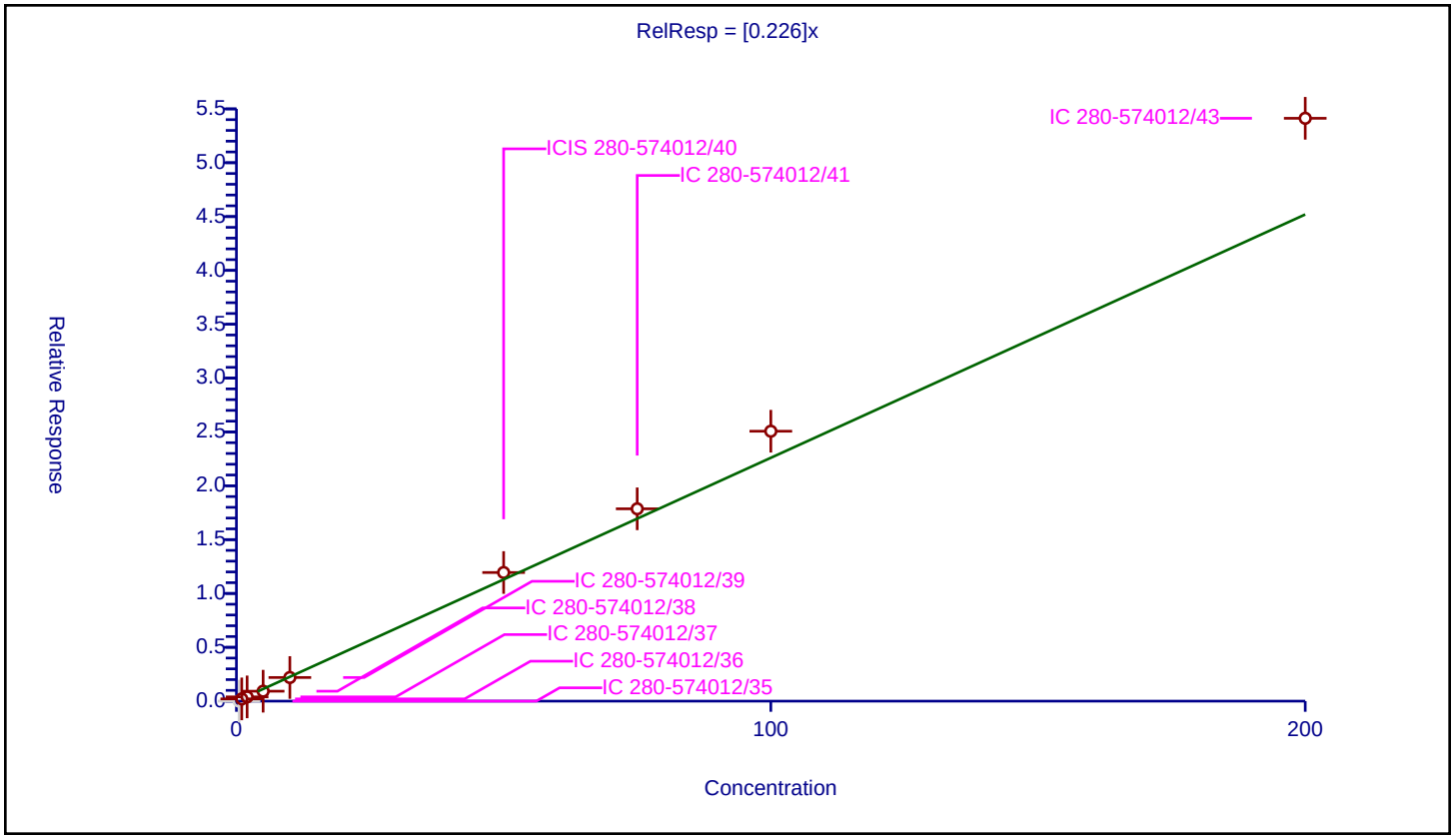
Curve Coefficients

Intercept:	0
Slope:	0.226

Error Coefficients

Standard Error:	685000
Relative Standard Error:	12.8
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.0	50.0	1255579.0	0.0	N
2	IC 280-574012/36	1.0	0.208276	50.0	1203211.0	0.208276	Y
3	IC 280-574012/37	2.0	0.394032	50.0	1234418.0	0.197016	Y
4	IC 280-574012/38	5.0	0.923268	50.0	1235070.0	0.184654	Y
5	IC 280-574012/39	10.0	2.194918	50.0	1271528.0	0.219492	Y
6	ICIS 280-574012/40	50.0	11.944306	50.0	1327574.0	0.238886	Y
7	IC 280-574012/41	75.0	17.860824	50.0	1395070.0	0.238144	Y
8	IC 280-574012/42	100.0	25.066555	50.0	1381560.0	0.250666	Y
9	IC 280-574012/43	200.0	54.128	50.0	1446027.0	0.27064	Y



Calibration / Ethyl methacrylate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

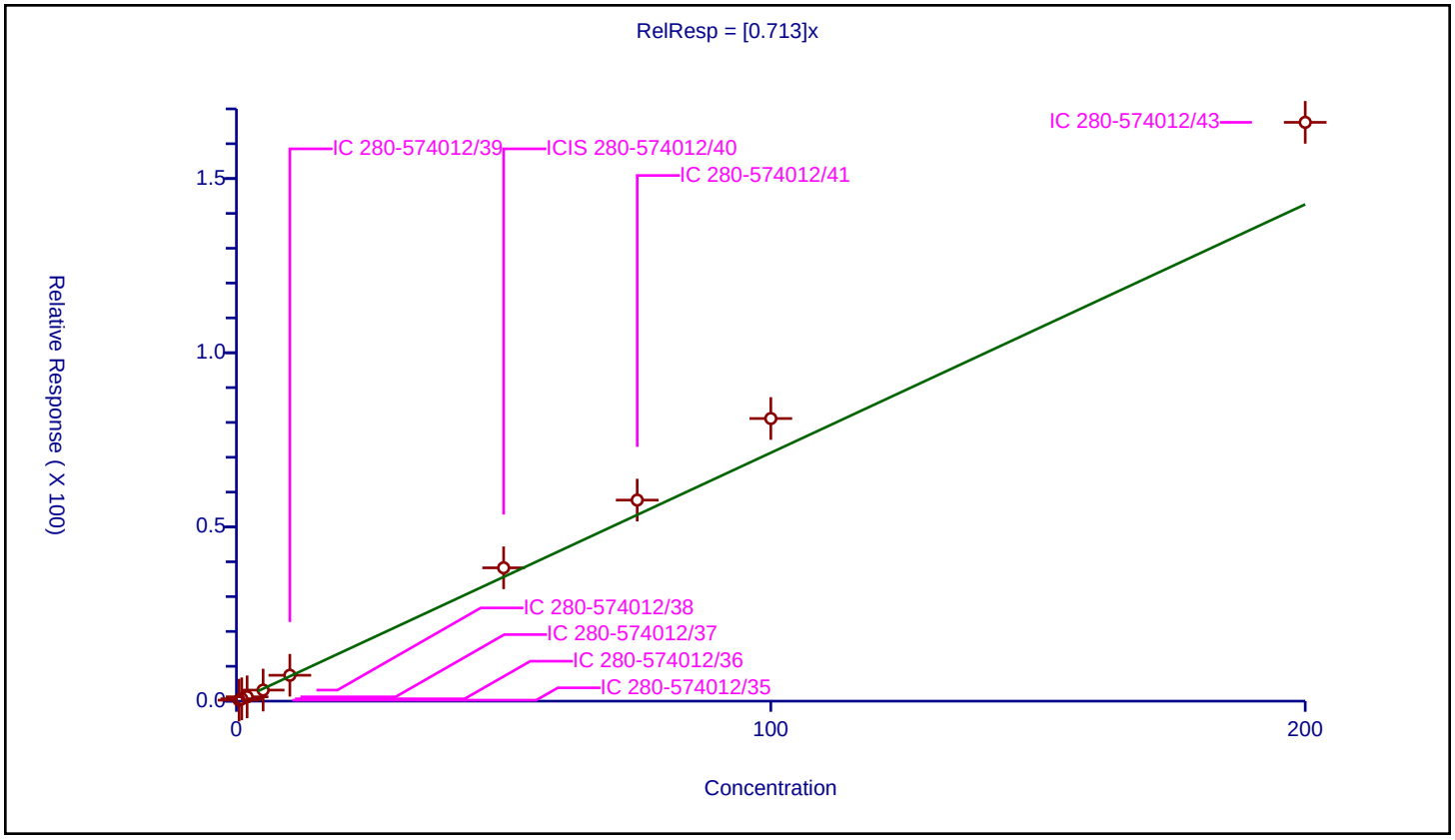
Curve Coefficients

Intercept:	0
Slope:	0.713

Error Coefficients

Standard Error:	462000
Relative Standard Error:	12.9
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.284472	50.0	307060.0	0.568944	Y
2	IC 280-574012/36	1.0	0.674567	50.0	299155.0	0.674567	Y
3	IC 280-574012/37	2.0	1.238669	50.0	305368.0	0.619335	Y
4	IC 280-574012/38	5.0	3.173845	50.0	305560.0	0.634769	Y
5	IC 280-574012/39	10.0	7.42392	50.0	306617.0	0.742392	Y
6	ICIS 280-574012/40	50.0	38.269202	50.0	305154.0	0.765384	Y
7	IC 280-574012/41	75.0	57.706332	50.0	318673.0	0.769418	Y
8	IC 280-574012/42	100.0	81.124338	50.0	314434.0	0.811243	Y
9	IC 280-574012/43	200.0	166.138388	50.0	337543.0	0.830692	Y



Calibration / 1,1,2-Trichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

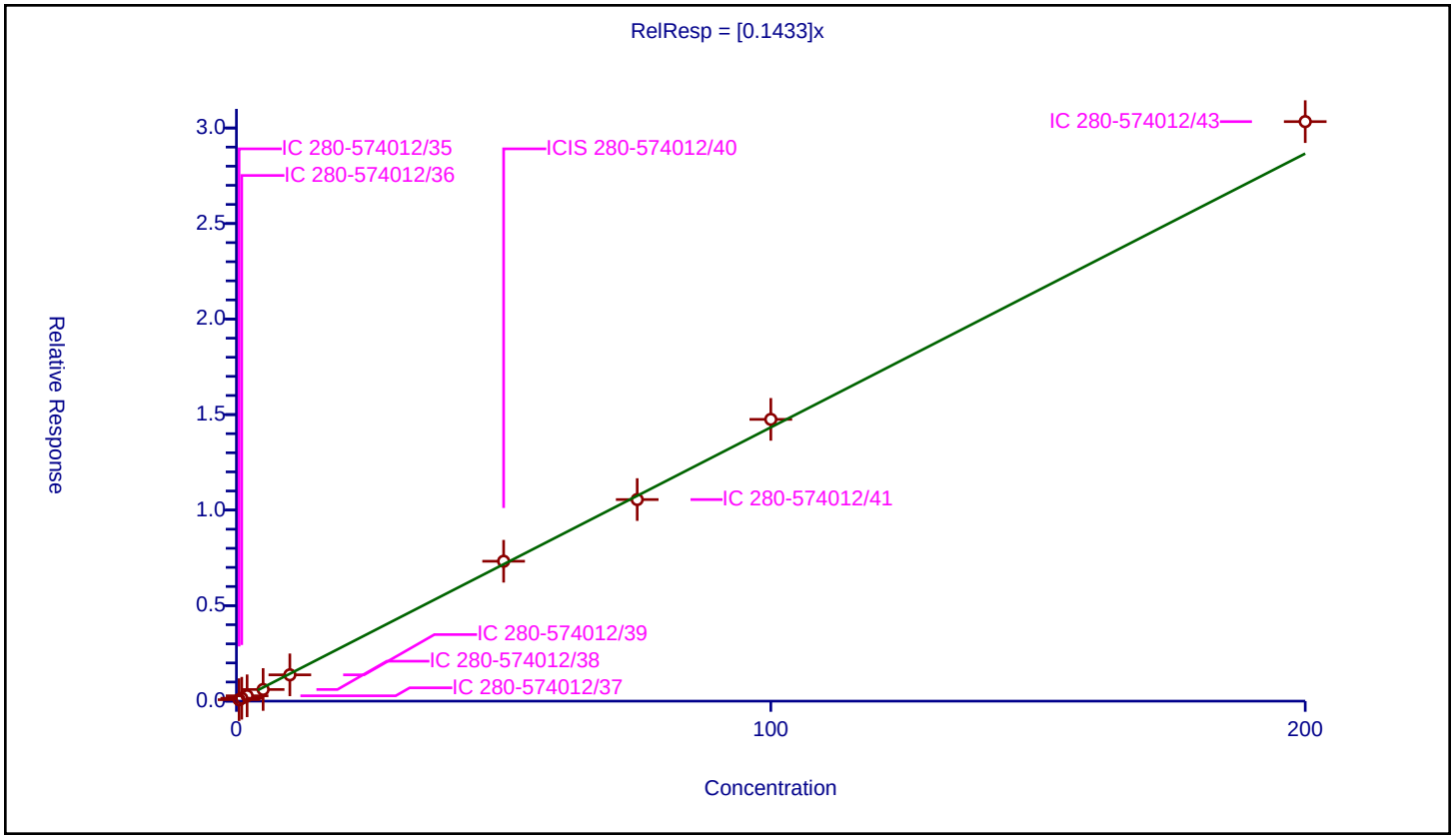
Curve Coefficients

Intercept:	0
Slope:	0.1433

Error Coefficients

Standard Error:	364000
Relative Standard Error:	6.8
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.076299	50.0	1255579.0	0.152599	Y
2	IC 280-574012/36	1.0	0.151594	50.0	1203211.0	0.151594	Y
3	IC 280-574012/37	2.0	0.278917	50.0	1234418.0	0.139458	Y
4	IC 280-574012/38	5.0	0.610492	50.0	1235070.0	0.122098	Y
5	IC 280-574012/39	10.0	1.376611	50.0	1271528.0	0.137661	Y
6	ICIS 280-574012/40	50.0	7.32317	50.0	1327574.0	0.146463	Y
7	IC 280-574012/41	75.0	10.551083	50.0	1395070.0	0.140681	Y
8	IC 280-574012/42	100.0	14.74869	50.0	1381560.0	0.147487	Y
9	IC 280-574012/43	200.0	30.333597	50.0	1446027.0	0.151668	Y



Calibration / Tetrachloroethene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

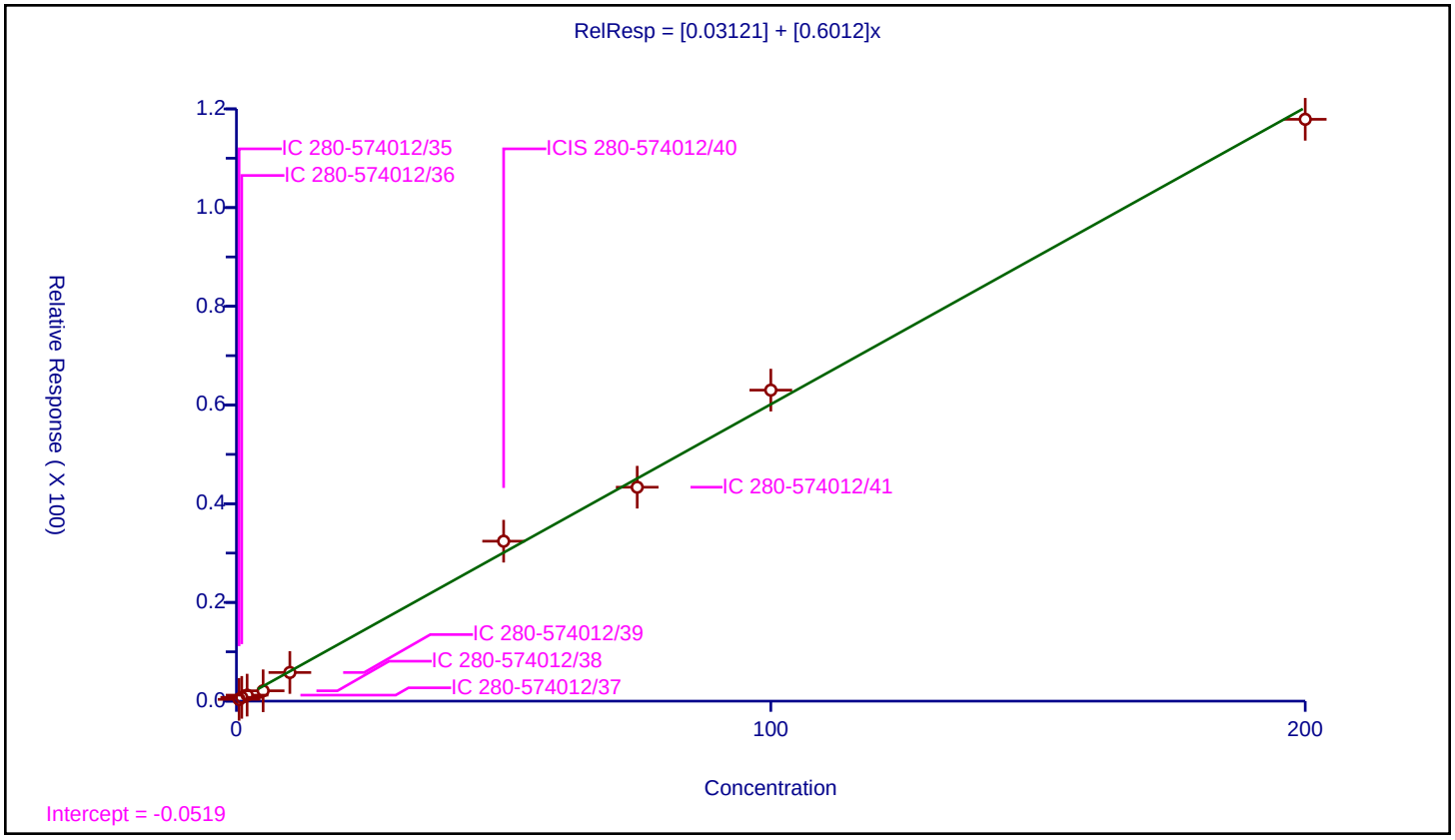
Curve Coefficients

Intercept:	0.03121
Slope:	0.6012

Error Coefficients

Standard Error:	360000
Relative Standard Error:	15.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.356771	50.0	307060.0	0.713541	Y
2	IC 280-574012/36	1.0	0.763317	50.0	299155.0	0.763317	Y
3	IC 280-574012/37	2.0	1.215583	50.0	305368.0	0.607791	Y
4	IC 280-574012/38	5.0	2.098279	50.0	305560.0	0.419656	Y
5	IC 280-574012/39	10.0	5.80643	50.0	306617.0	0.580643	Y
6	ICIS 280-574012/40	50.0	32.41134	50.0	305154.0	0.648227	Y
7	IC 280-574012/41	75.0	43.344902	50.0	318673.0	0.577932	Y
8	IC 280-574012/42	100.0	63.015291	50.0	314434.0	0.630153	Y
9	IC 280-574012/43	200.0	117.892387	50.0	337543.0	0.589462	Y



Calibration / 1,3-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

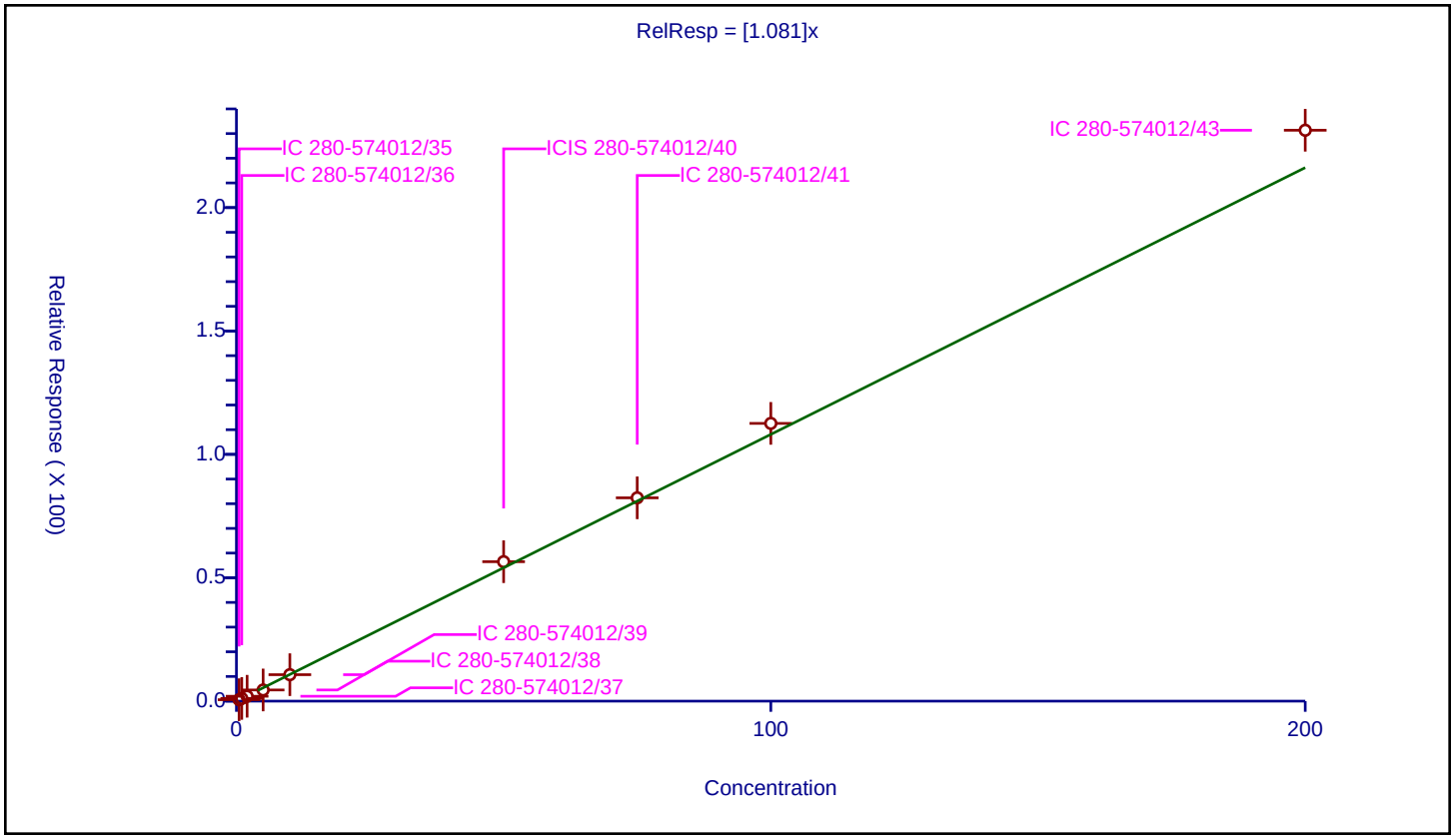
Curve Coefficients

Intercept:	0
Slope:	1.081

Error Coefficients

Standard Error:	646000
Relative Standard Error:	7.7
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.575132	50.0	307060.0	1.150264	Y
2	IC 280-574012/36	1.0	1.100767	50.0	299155.0	1.100767	Y
3	IC 280-574012/37	2.0	1.976795	50.0	305368.0	0.988398	Y
4	IC 280-574012/38	5.0	4.527589	50.0	305560.0	0.905518	Y
5	IC 280-574012/39	10.0	10.724128	50.0	306617.0	1.072413	Y
6	ICIS 280-574012/40	50.0	56.511466	50.0	305154.0	1.130229	Y
7	IC 280-574012/41	75.0	82.390413	50.0	318673.0	1.098539	Y
8	IC 280-574012/42	100.0	112.557484	50.0	314434.0	1.125575	Y
9	IC 280-574012/43	200.0	231.346673	50.0	337543.0	1.156733	Y



Calibration / 2-Hexanone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

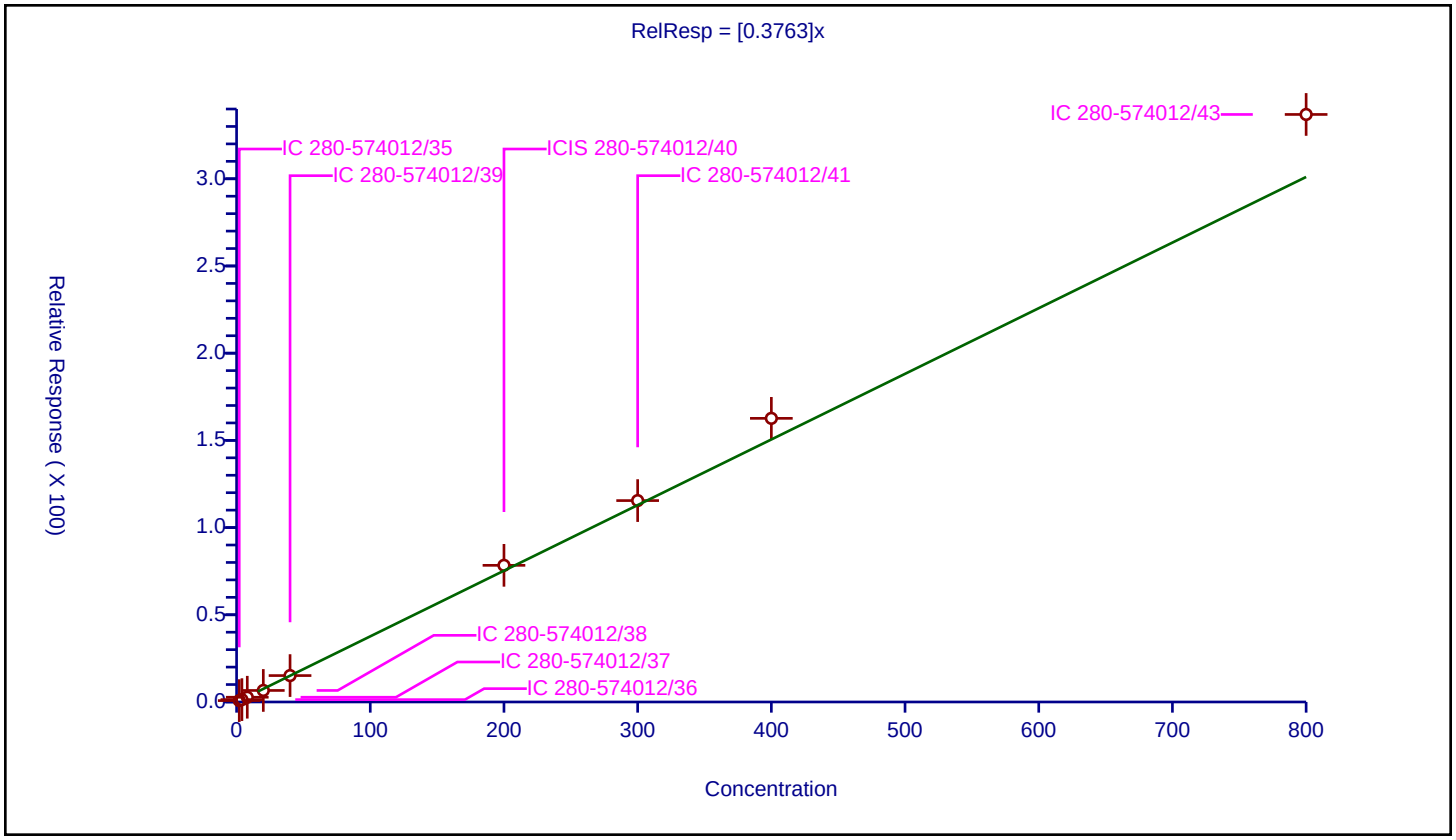
Curve Coefficients

Intercept:	0
Slope:	0.3763

Error Coefficients

Standard Error:	935000
Relative Standard Error:	8.6
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	2.0	0.789259	50.0	307060.0	0.39463	Y
2	IC 280-574012/36	4.0	1.347128	50.0	299155.0	0.336782	Y
3	IC 280-574012/37	8.0	2.734242	50.0	305368.0	0.34178	Y
4	IC 280-574012/38	20.0	6.613431	50.0	305560.0	0.330672	Y
5	IC 280-574012/39	40.0	15.138104	50.0	306617.0	0.378453	Y
6	ICIS 280-574012/40	200.0	78.349784	50.0	305154.0	0.391749	Y
7	IC 280-574012/41	300.0	115.486408	50.0	318673.0	0.384955	Y
8	IC 280-574012/42	400.0	162.640173	50.0	314434.0	0.4066	Y
9	IC 280-574012/43	800.0	336.877524	50.0	337543.0	0.421097	Y



Calibration / Chlorodibromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

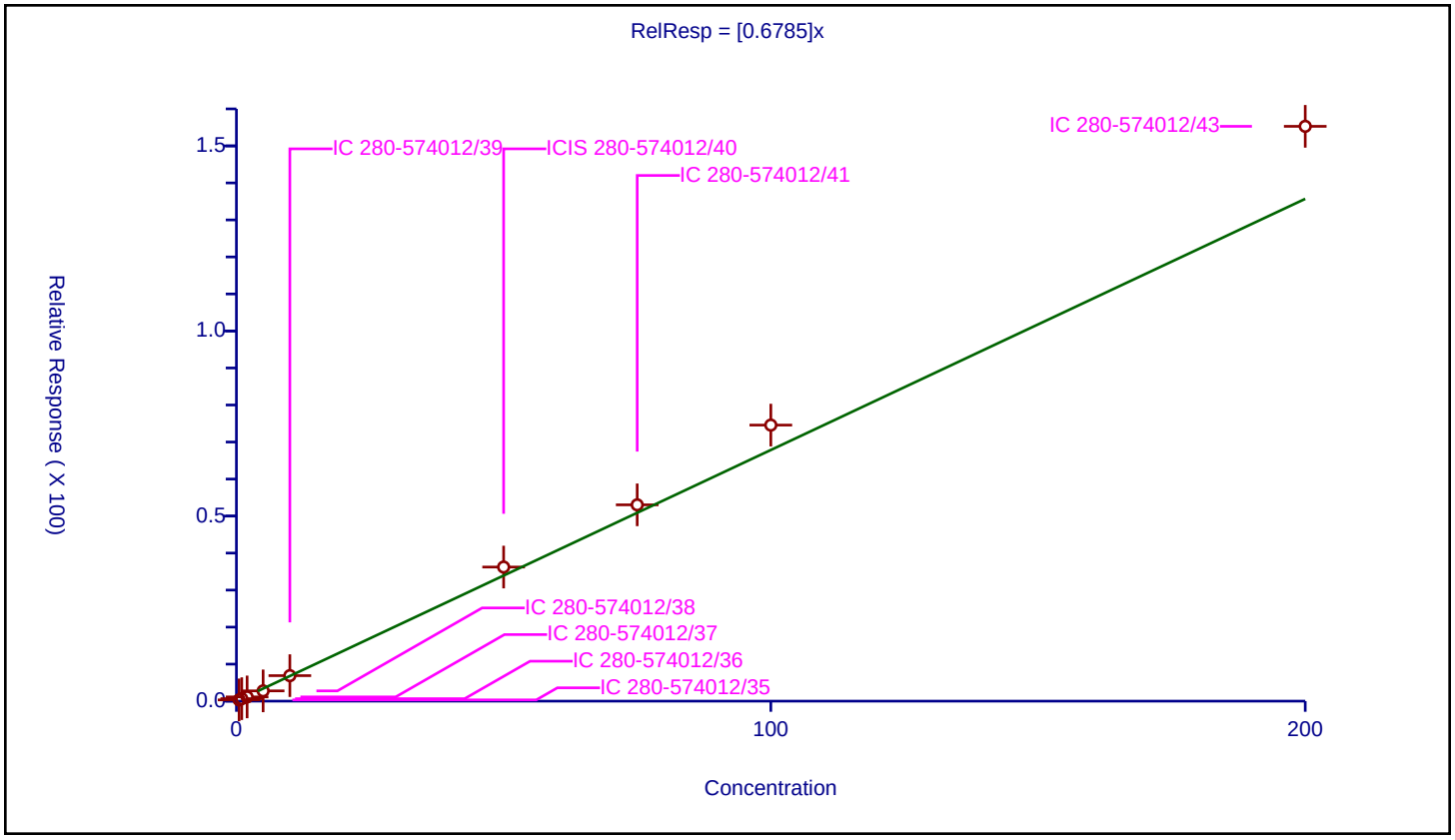
Curve Coefficients

Intercept:	0
Slope:	0.6785

Error Coefficients

Standard Error:	431000
Relative Standard Error:	11.0
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.336416	50.0	307060.0	0.672833	Y
2	IC 280-574012/36	1.0	0.66621	50.0	299155.0	0.66621	Y
3	IC 280-574012/37	2.0	1.1401	50.0	305368.0	0.57005	Y
4	IC 280-574012/38	5.0	2.772941	50.0	305560.0	0.554588	Y
5	IC 280-574012/39	10.0	6.887909	50.0	306617.0	0.688791	Y
6	ICIS 280-574012/40	50.0	36.225643	50.0	305154.0	0.724513	Y
7	IC 280-574012/41	75.0	53.033517	50.0	318673.0	0.707114	Y
8	IC 280-574012/42	100.0	74.573996	50.0	314434.0	0.74574	Y
9	IC 280-574012/43	200.0	155.287178	50.0	337543.0	0.776436	Y



Calibration / Ethylene Dibromide

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

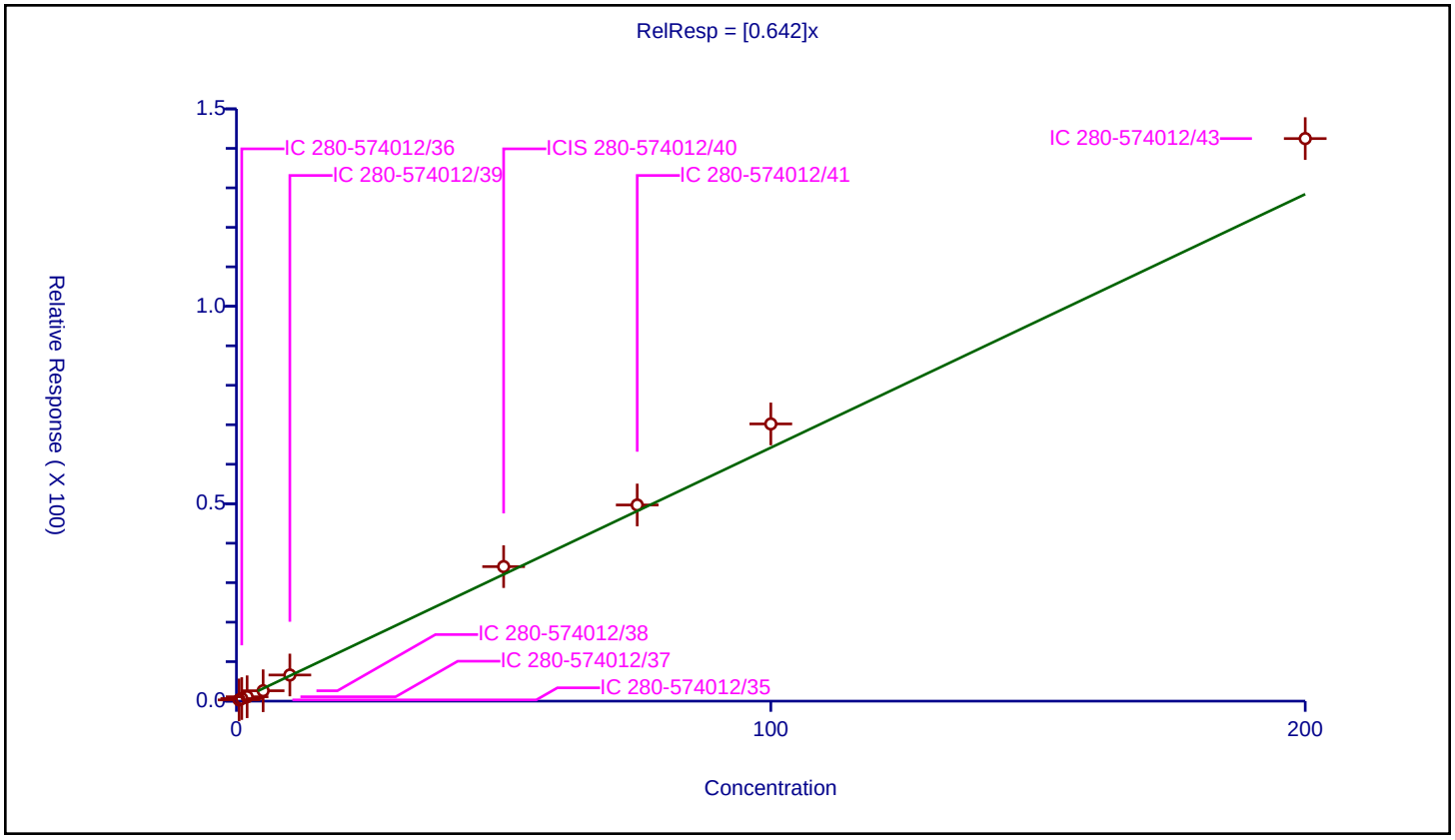
Curve Coefficients

Intercept:	0
Slope:	0.642

Error Coefficients

Standard Error:	398000
Relative Standard Error:	9.9
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.311665	50.0	307060.0	0.623331	Y
2	IC 280-574012/36	1.0	0.652003	50.0	299155.0	0.652003	Y
3	IC 280-574012/37	2.0	1.112101	50.0	305368.0	0.55605	Y
4	IC 280-574012/38	5.0	2.631889	50.0	305560.0	0.526378	Y
5	IC 280-574012/39	10.0	6.618518	50.0	306617.0	0.661852	Y
6	ICIS 280-574012/40	50.0	34.070011	50.0	305154.0	0.6814	Y
7	IC 280-574012/41	75.0	49.684787	50.0	318673.0	0.662464	Y
8	IC 280-574012/42	100.0	70.210283	50.0	314434.0	0.702103	Y
9	IC 280-574012/43	200.0	142.480514	50.0	337543.0	0.712403	Y



Calibration / 1-Chlorohexane

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

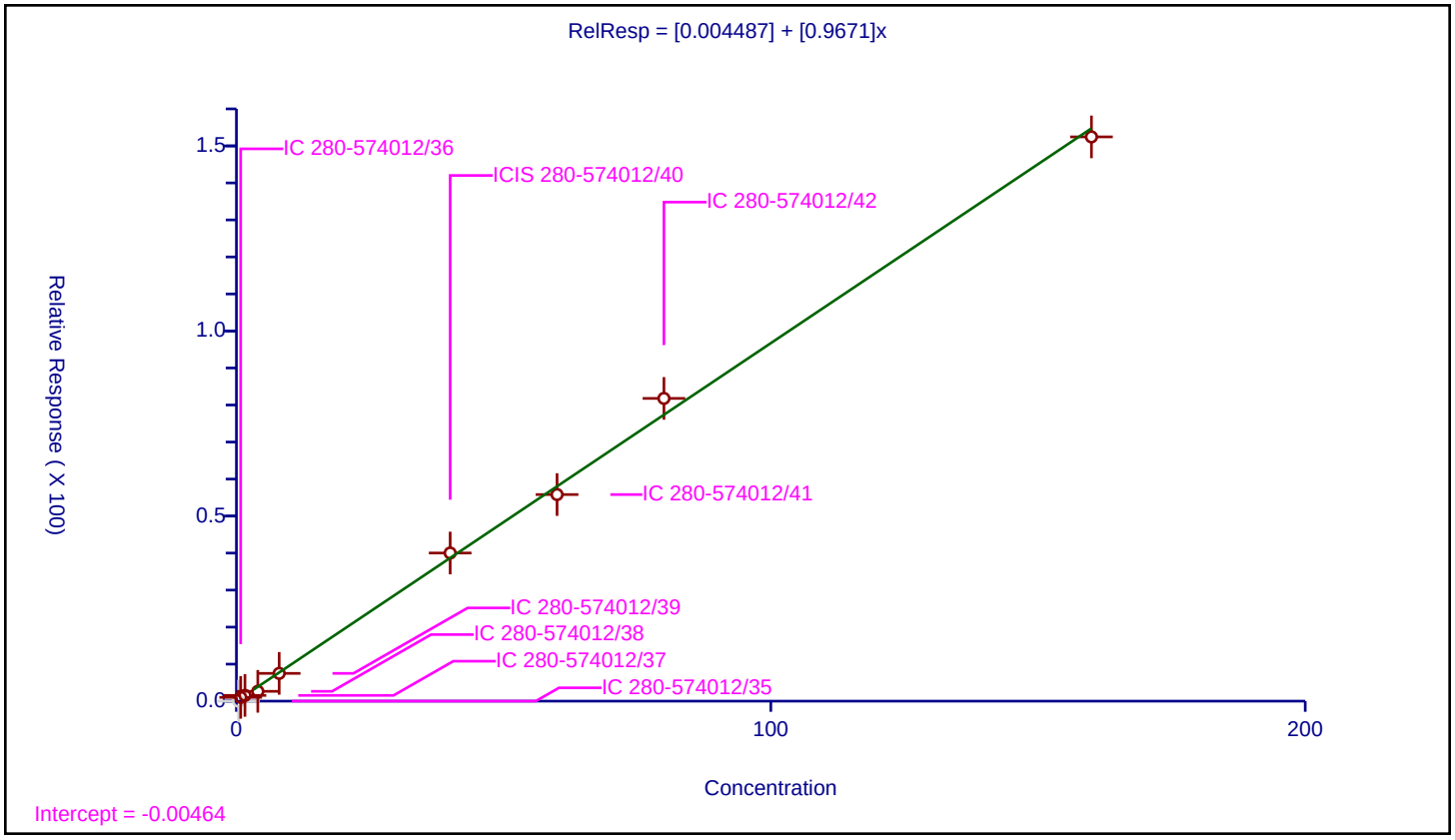
Curve Coefficients

Intercept:	0.004487
Slope:	0.9671

Error Coefficients

Standard Error:	502000
Relative Standard Error:	18.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.4	0.0	50.0	307060.0	0.0	N
2	IC 280-574012/36	0.8	1.019538	50.0	299155.0	1.274423	Y
3	IC 280-574012/37	1.6	1.547477	50.0	305368.0	0.967173	Y
4	IC 280-574012/38	4.0	2.648907	50.0	305560.0	0.662227	Y
5	IC 280-574012/39	8.0	7.499258	50.0	306617.0	0.937407	Y
6	ICIS 280-574012/40	40.0	40.017499	50.0	305154.0	1.000437	Y
7	IC 280-574012/41	60.0	55.810345	50.0	318673.0	0.930172	Y
8	IC 280-574012/42	80.0	81.784731	50.0	314434.0	1.022309	Y
9	IC 280-574012/43	160.0	152.435245	50.0	337543.0	0.95272	Y



Calibration / Chlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

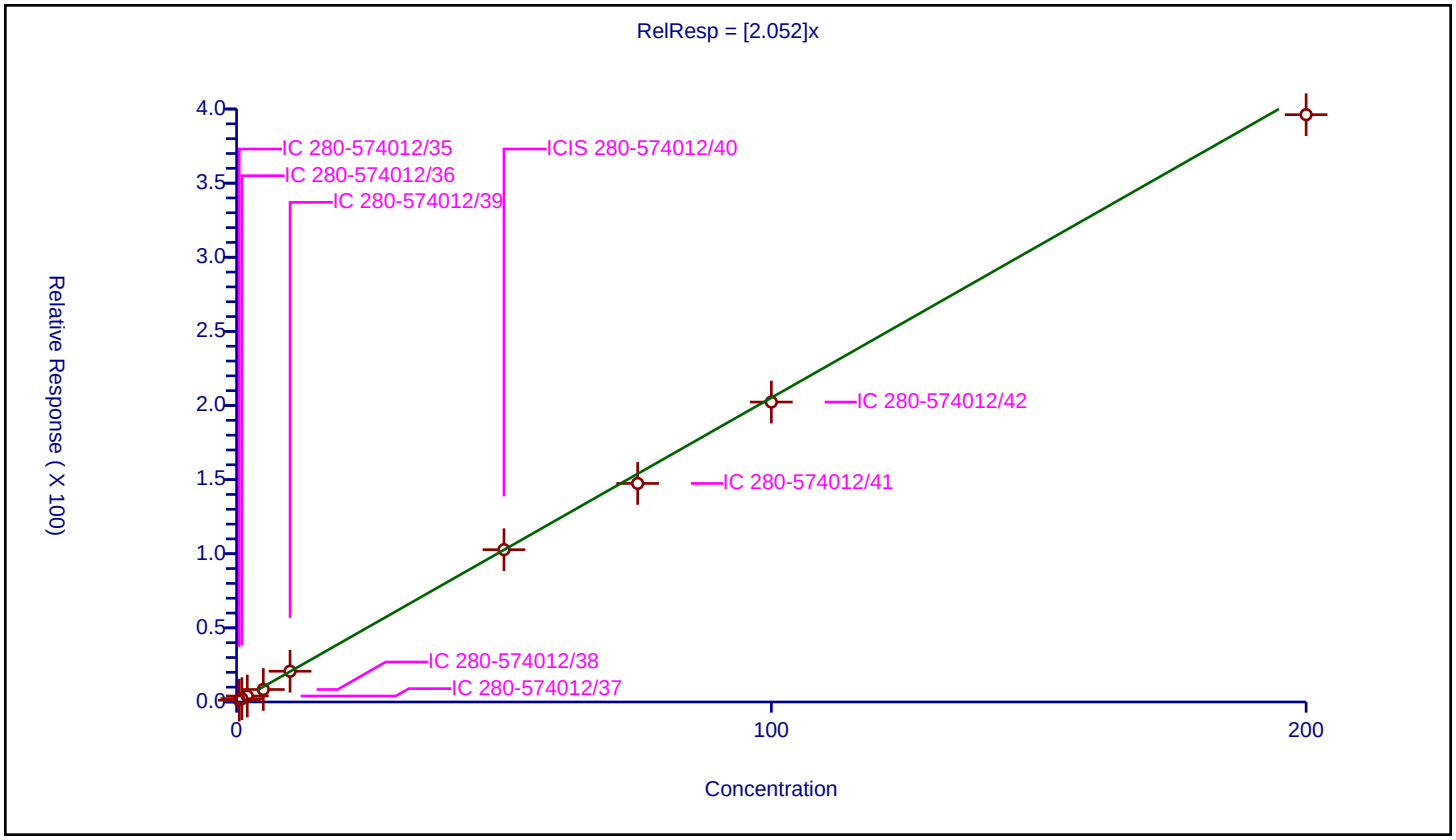
Curve Coefficients

Intercept:	0
Slope:	2.052

Error Coefficients

Standard Error:	1120000
Relative Standard Error:	10.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	1.226796	50.0	307060.0	2.453592	Y
2	IC 280-574012/36	1.0	2.213234	50.0	299155.0	2.213234	Y
3	IC 280-574012/37	2.0	4.039716	50.0	305368.0	2.019858	Y
4	IC 280-574012/38	5.0	8.422241	50.0	305560.0	1.684448	Y
5	IC 280-574012/39	10.0	20.741838	50.0	306617.0	2.074184	Y
6	ICIS 280-574012/40	50.0	102.73747	50.0	305154.0	2.054749	Y
7	IC 280-574012/41	75.0	147.426045	50.0	318673.0	1.965681	Y
8	IC 280-574012/42	100.0	202.317179	50.0	314434.0	2.023172	Y
9	IC 280-574012/43	200.0	396.192633	50.0	337543.0	1.980963	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

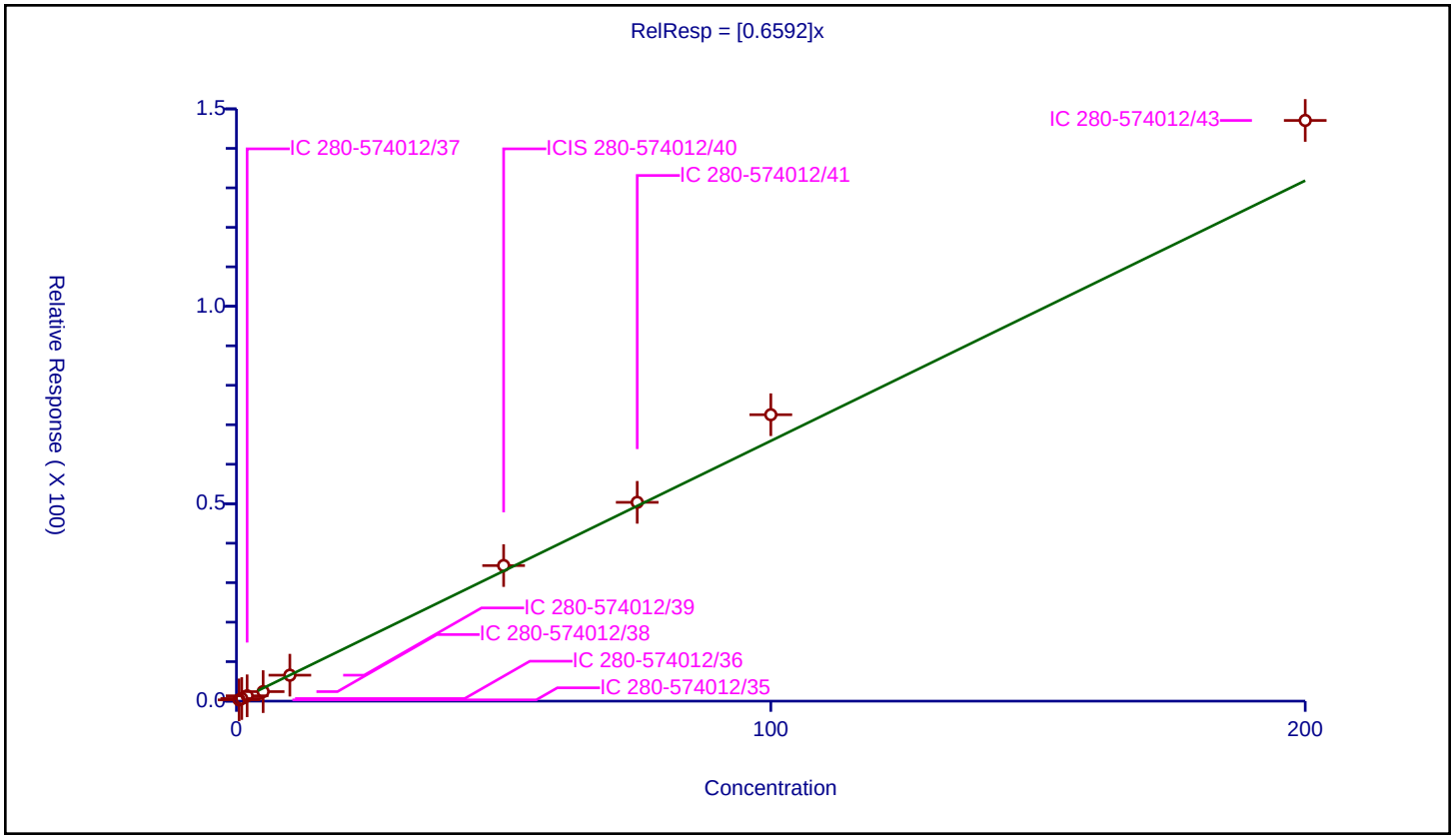
Curve Coefficients

Intercept:	0
Slope:	0.6592

Error Coefficients

Standard Error:	410000
Relative Standard Error:	11.1
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.319644	50.0	307060.0	0.639289	Y
2	IC 280-574012/36	1.0	0.657352	50.0	299155.0	0.657352	Y
3	IC 280-574012/37	2.0	1.354268	50.0	305368.0	0.677134	Y
4	IC 280-574012/38	5.0	2.412783	50.0	305560.0	0.482557	Y
5	IC 280-574012/39	10.0	6.570249	50.0	306617.0	0.657025	Y
6	ICIS 280-574012/40	50.0	34.342004	50.0	305154.0	0.68684	Y
7	IC 280-574012/41	75.0	50.352085	50.0	318673.0	0.671361	Y
8	IC 280-574012/42	100.0	72.546226	50.0	314434.0	0.725462	Y
9	IC 280-574012/43	200.0	147.074447	50.0	337543.0	0.735372	Y



Calibration / Ethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

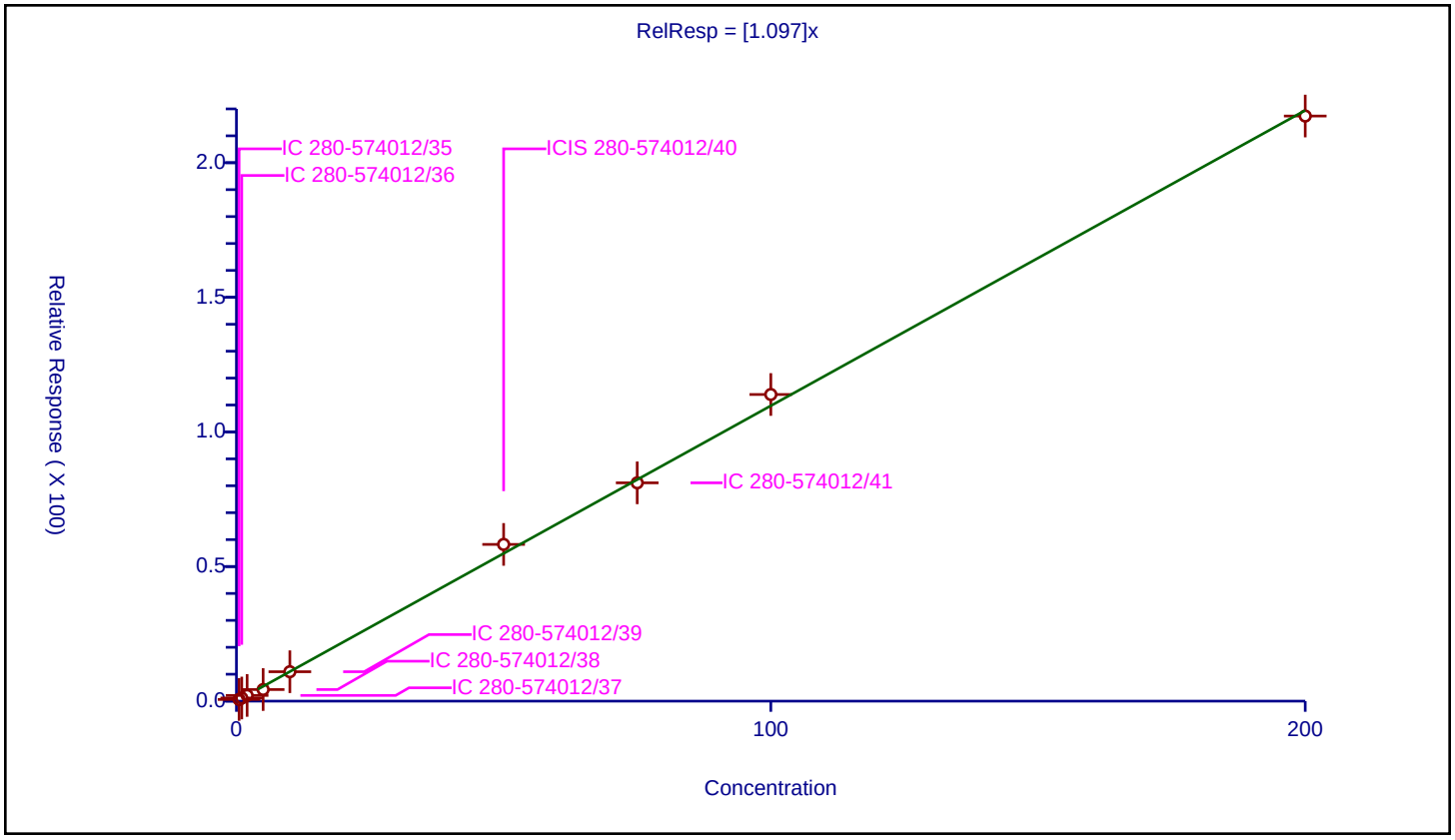
Curve Coefficients

Intercept:	0
Slope:	1.097

Error Coefficients

Standard Error:	619000
Relative Standard Error:	9.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.614538	50.0	307060.0	1.229076	Y
2	IC 280-574012/36	1.0	1.158931	50.0	299155.0	1.158931	Y
3	IC 280-574012/37	2.0	2.123012	50.0	305368.0	1.061506	Y
4	IC 280-574012/38	5.0	4.305865	50.0	305560.0	0.861173	Y
5	IC 280-574012/39	10.0	10.927639	50.0	306617.0	1.092764	Y
6	ICIS 280-574012/40	50.0	58.218473	50.0	305154.0	1.164369	Y
7	IC 280-574012/41	75.0	81.09002	50.0	318673.0	1.0812	Y
8	IC 280-574012/42	100.0	113.913413	50.0	314434.0	1.139134	Y
9	IC 280-574012/43	200.0	217.344309	50.0	337543.0	1.086722	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

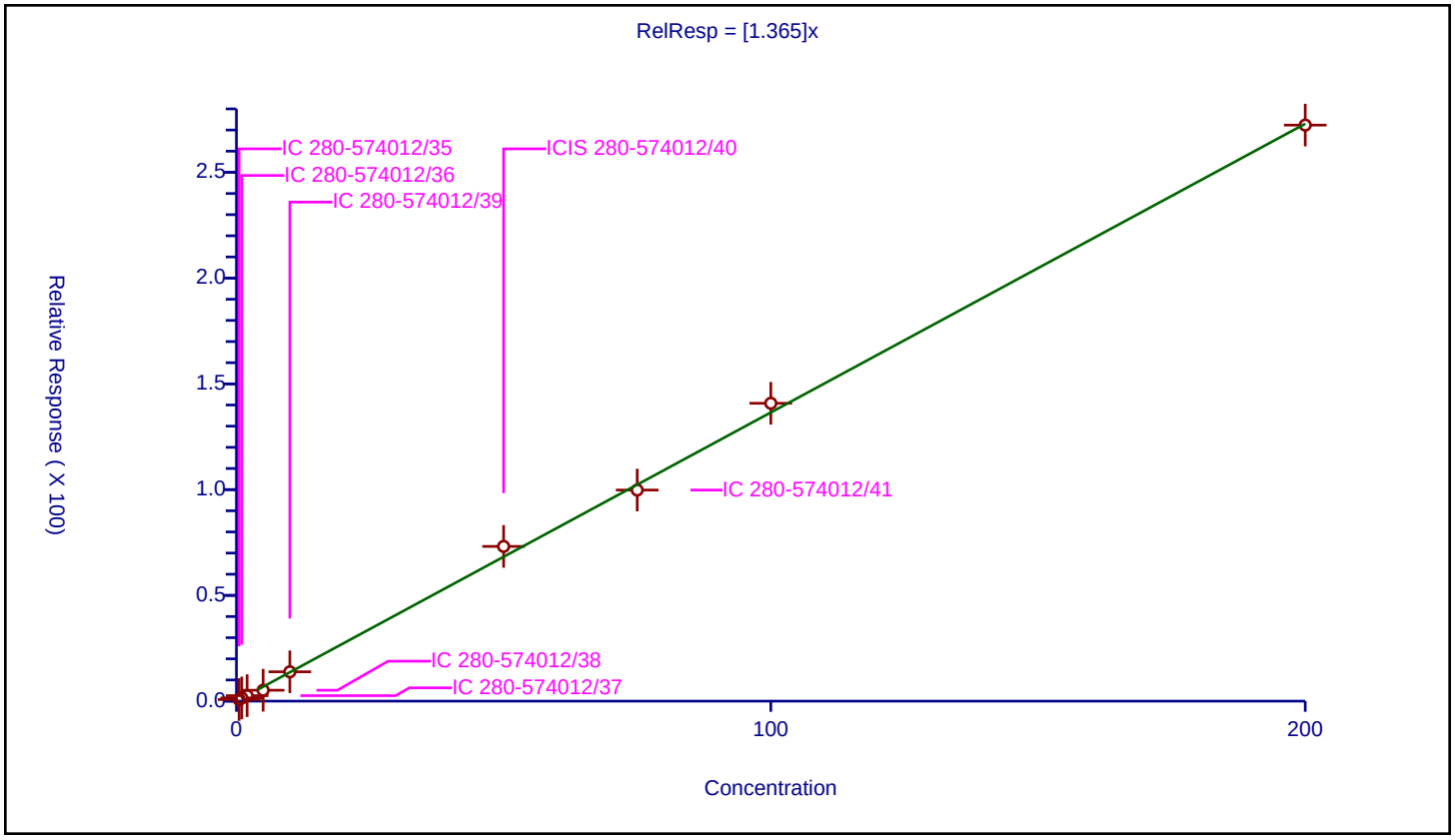
Curve Coefficients

Intercept:	0
Slope:	1.365

Error Coefficients

Standard Error:	773000
Relative Standard Error:	10.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.744317	50.0	307060.0	1.488634	Y
2	IC 280-574012/36	1.0	1.519614	50.0	299155.0	1.519614	Y
3	IC 280-574012/37	2.0	2.586715	50.0	305368.0	1.293358	Y
4	IC 280-574012/38	5.0	5.156434	50.0	305560.0	1.031287	Y
5	IC 280-574012/39	10.0	13.865506	50.0	306617.0	1.386551	Y
6	ICIS 280-574012/40	50.0	73.151917	50.0	305154.0	1.463038	Y
7	IC 280-574012/41	75.0	99.799167	50.0	318673.0	1.330656	Y
8	IC 280-574012/42	100.0	140.827487	50.0	314434.0	1.408275	Y
9	IC 280-574012/43	200.0	272.326044	50.0	337543.0	1.36163	Y



Calibration / o-Xylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

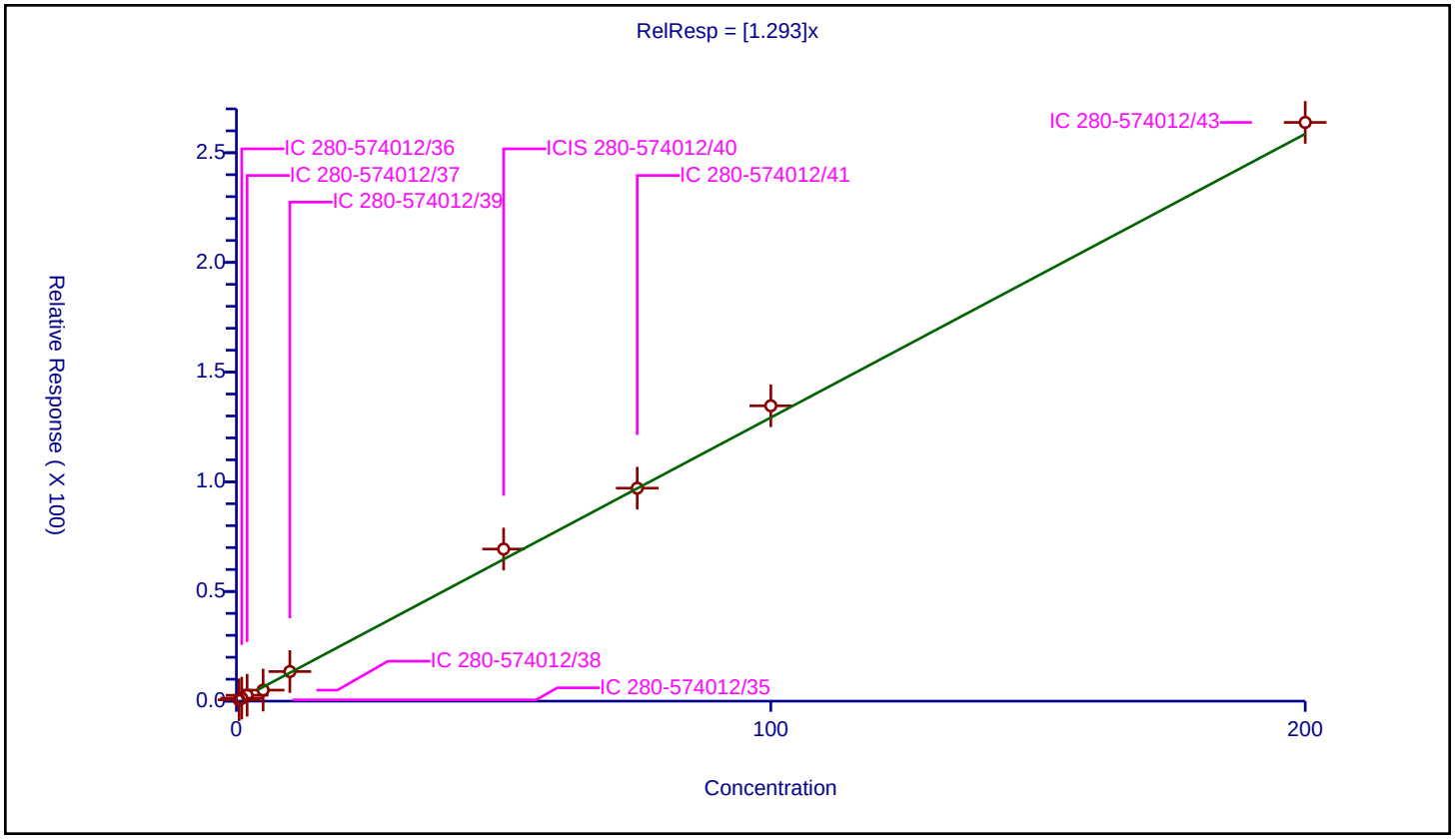
Curve Coefficients

Intercept:	0
Slope:	1.293

Error Coefficients

Standard Error:	747000
Relative Standard Error:	9.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.611933	50.0	307060.0	1.223865	Y
2	IC 280-574012/36	1.0	1.360332	50.0	299155.0	1.360332	Y
3	IC 280-574012/37	2.0	2.695436	50.0	305368.0	1.347718	Y
4	IC 280-574012/38	5.0	5.037472	50.0	305560.0	1.007494	Y
5	IC 280-574012/39	10.0	13.499578	50.0	306617.0	1.349958	Y
6	ICIS 280-574012/40	50.0	69.337449	50.0	305154.0	1.386749	Y
7	IC 280-574012/41	75.0	97.089336	50.0	318673.0	1.294524	Y
8	IC 280-574012/42	100.0	134.6529	50.0	314434.0	1.346529	Y
9	IC 280-574012/43	200.0	263.834237	50.0	337543.0	1.319171	Y



Calibration / Styrene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

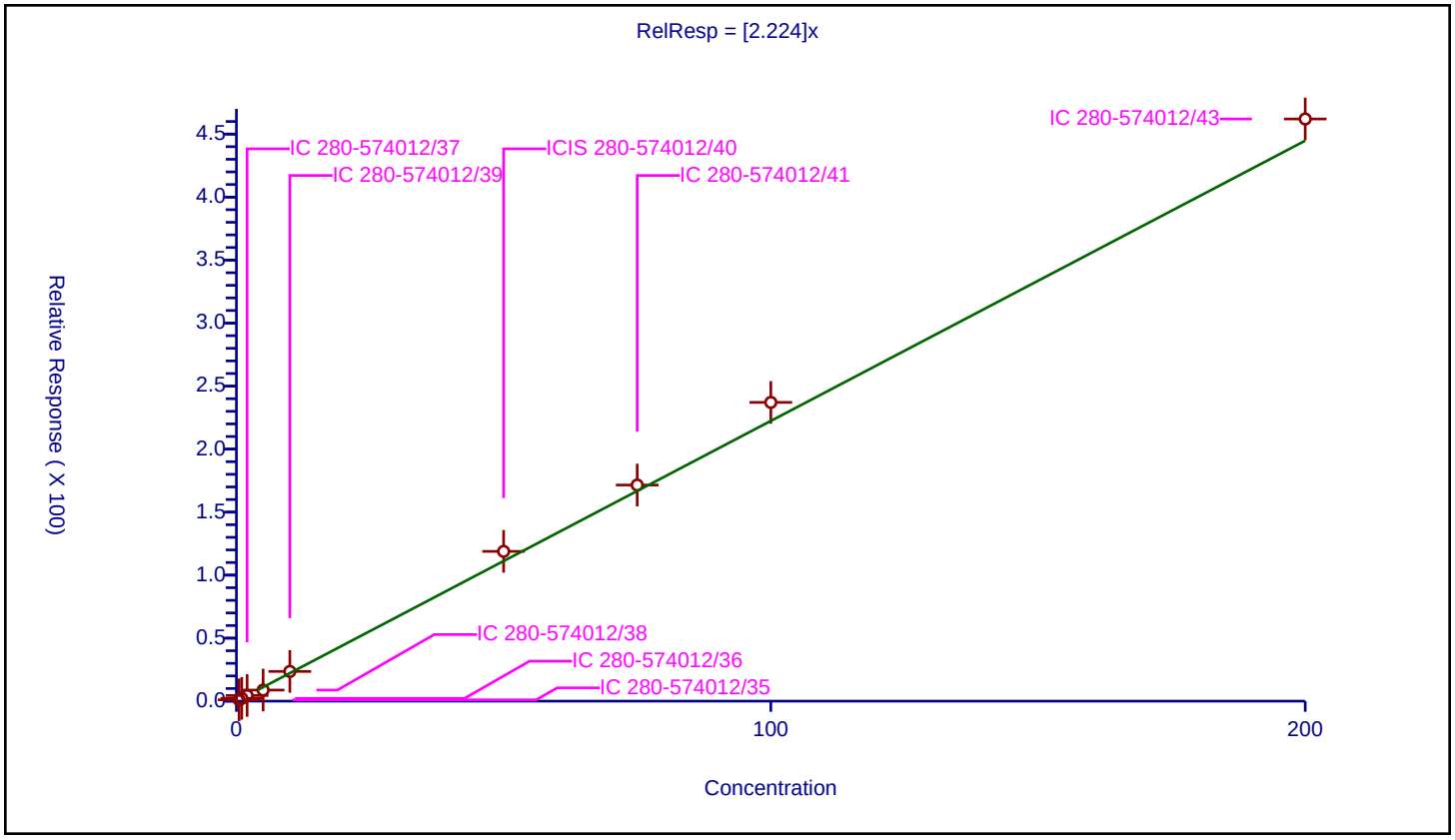
Curve Coefficients

Intercept:	0
Slope:	2.224

Error Coefficients

Standard Error:	1310000
Relative Standard Error:	8.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	1.051098	50.0	307060.0	2.102195	Y
2	IC 280-574012/36	1.0	2.219752	50.0	299155.0	2.219752	Y
3	IC 280-574012/37	2.0	4.465759	50.0	305368.0	2.23288	Y
4	IC 280-574012/38	5.0	8.786654	50.0	305560.0	1.757331	Y
5	IC 280-574012/39	10.0	23.578764	50.0	306617.0	2.357876	Y
6	ICIS 280-574012/40	50.0	118.836063	50.0	305154.0	2.376721	Y
7	IC 280-574012/41	75.0	171.495546	50.0	318673.0	2.286607	Y
8	IC 280-574012/42	100.0	237.078528	50.0	314434.0	2.370785	Y
9	IC 280-574012/43	200.0	461.99062	50.0	337543.0	2.309953	Y



Calibration / Bromoform

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

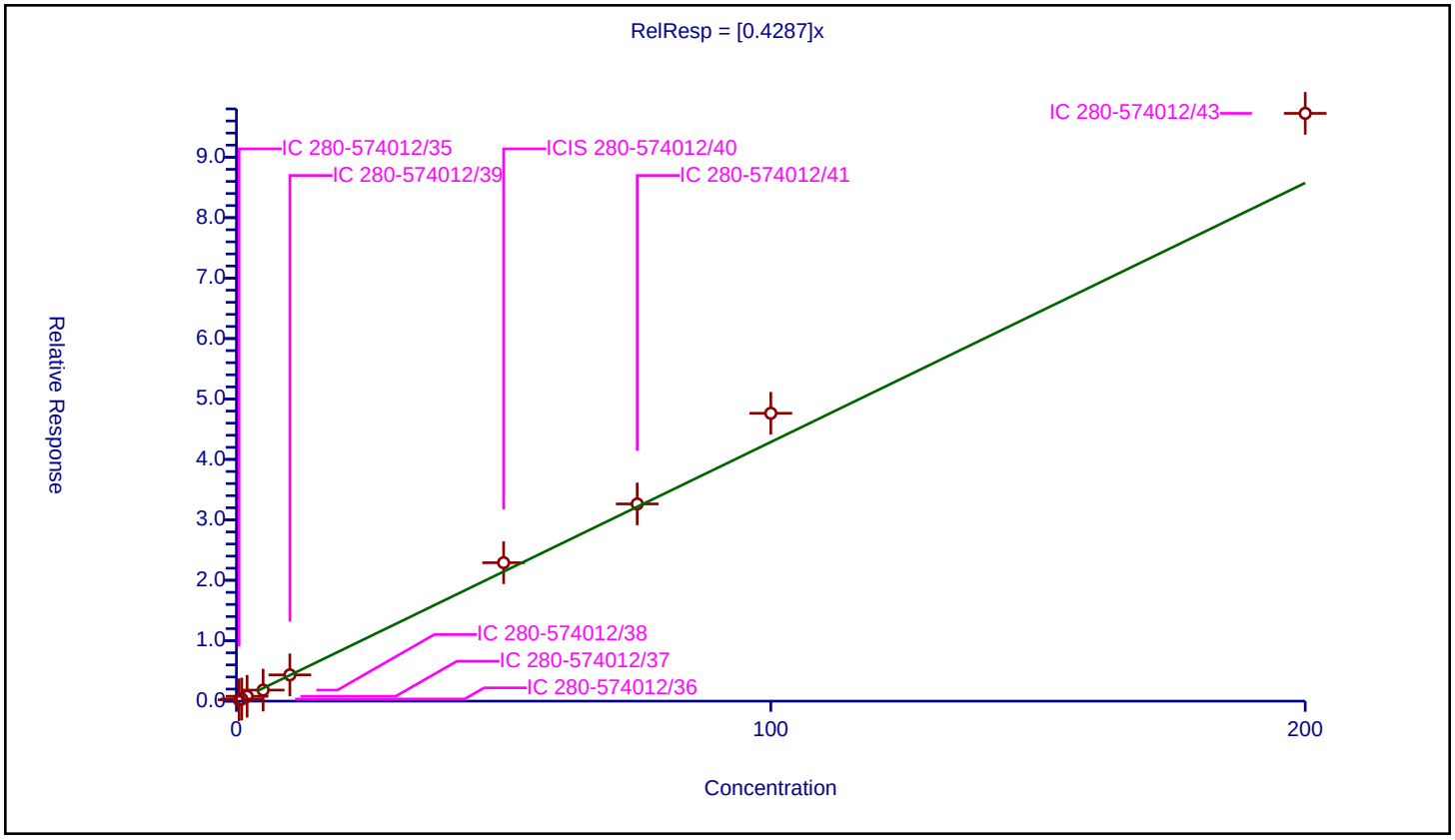
Curve Coefficients

Intercept:	0
Slope:	0.4287

Error Coefficients

Standard Error:	270000
Relative Standard Error:	10.8
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.222758	50.0	307060.0	0.445516	Y
2	IC 280-574012/36	1.0	0.35266	50.0	299155.0	0.35266	Y
3	IC 280-574012/37	2.0	0.80755	50.0	305368.0	0.403775	Y
4	IC 280-574012/38	5.0	1.830573	50.0	305560.0	0.366115	Y
5	IC 280-574012/39	10.0	4.345976	50.0	306617.0	0.434598	Y
6	ICIS 280-574012/40	50.0	22.907122	50.0	305154.0	0.458142	Y
7	IC 280-574012/41	75.0	32.635021	50.0	318673.0	0.435134	Y
8	IC 280-574012/42	100.0	47.635911	50.0	314434.0	0.476359	Y
9	IC 280-574012/43	200.0	97.259016	50.0	337543.0	0.486295	Y



Calibration / Isopropylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

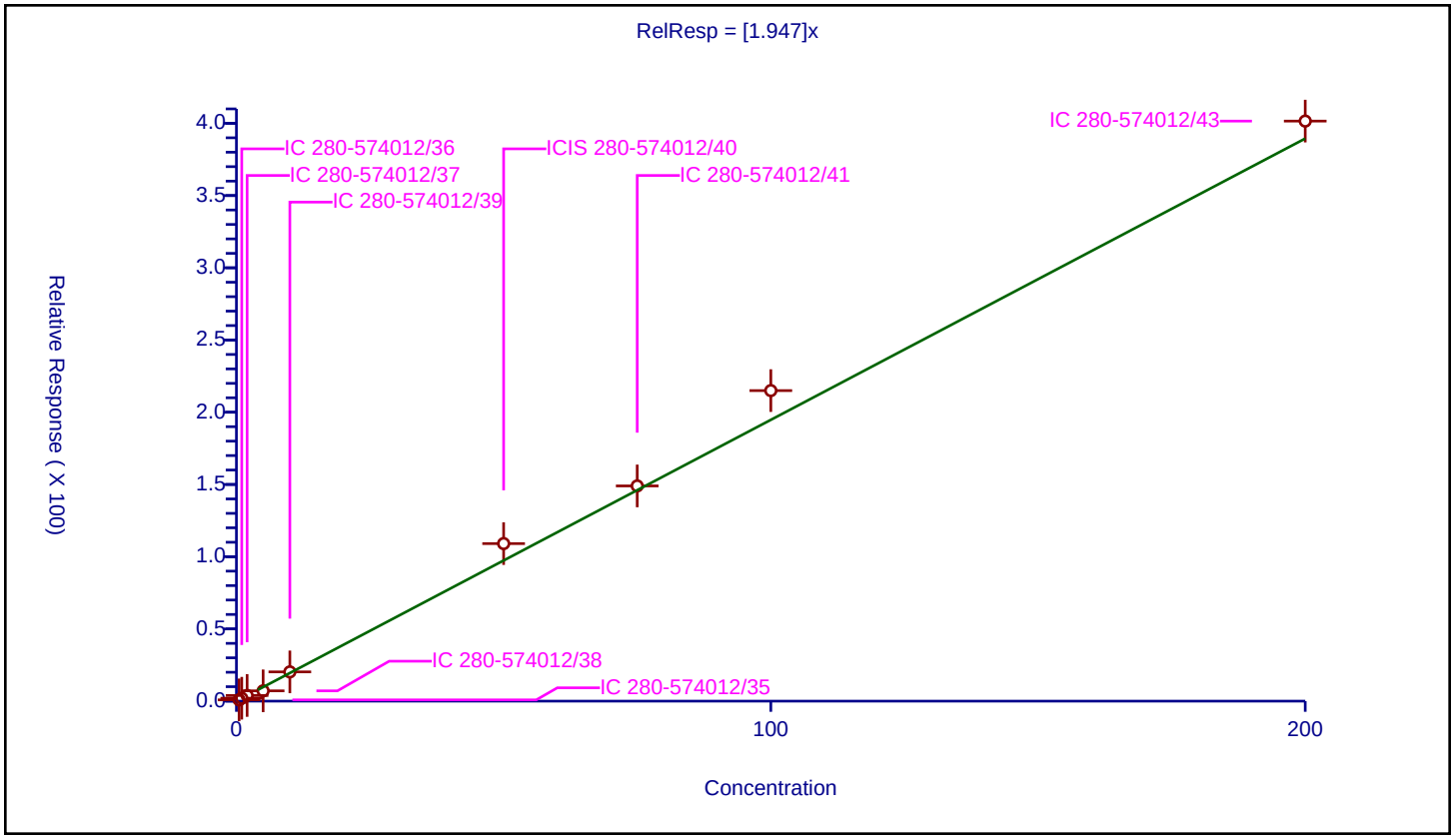
Curve Coefficients

Intercept:	0
Slope:	1.947

Error Coefficients

Standard Error:	1940000
Relative Standard Error:	11.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.88381	50.0	535409.0	1.767621	Y
2	IC 280-574012/36	1.0	2.017529	50.0	524280.0	2.017529	Y
3	IC 280-574012/37	2.0	3.925891	50.0	523499.0	1.962945	Y
4	IC 280-574012/38	5.0	7.131884	50.0	529194.0	1.426377	Y
5	IC 280-574012/39	10.0	20.25824	50.0	531986.0	2.025824	Y
6	ICIS 280-574012/40	50.0	109.070297	50.0	513820.0	2.181406	Y
7	IC 280-574012/41	75.0	148.991388	50.0	543866.0	1.986552	Y
8	IC 280-574012/42	100.0	214.973012	50.0	532094.0	2.14973	Y
9	IC 280-574012/43	200.0	401.563165	50.0	568942.0	2.007816	Y



Calibration / Cyclohexanone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

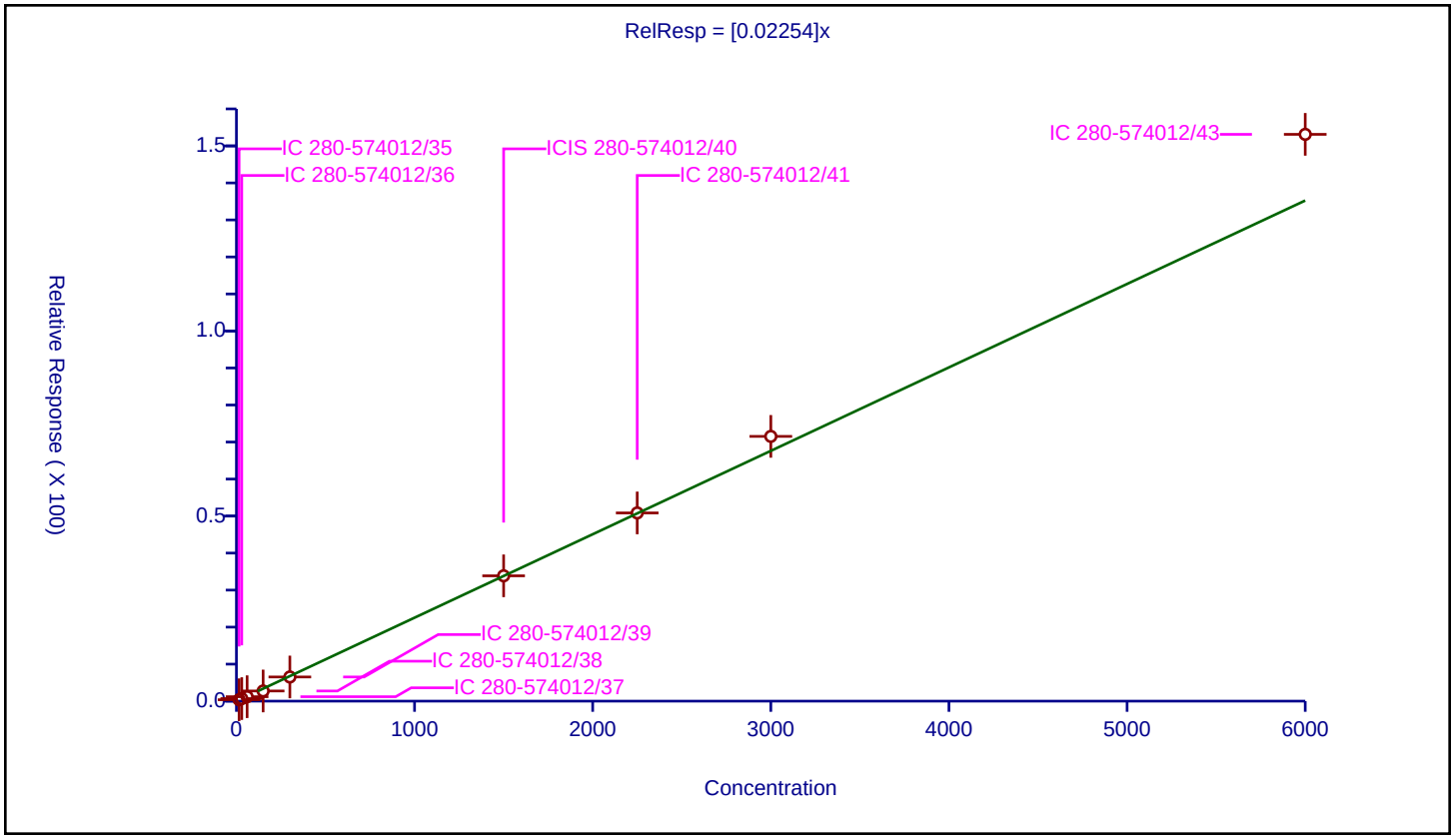
Curve Coefficients

Intercept:	0
Slope:	0.02254

Error Coefficients

Standard Error:	421000
Relative Standard Error:	10.4
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	15.0	0.380545	50.0	307060.0	0.02537	Y
2	IC 280-574012/36	30.0	0.687269	50.0	299155.0	0.022909	Y
3	IC 280-574012/37	60.0	1.199373	50.0	305368.0	0.01999	Y
4	IC 280-574012/38	150.0	2.745124	50.0	305560.0	0.018301	Y
5	IC 280-574012/39	300.0	6.528014	50.0	306617.0	0.02176	Y
6	ICIS 280-574012/40	1500.0	33.857823	50.0	305154.0	0.022572	Y
7	IC 280-574012/41	2250.0	50.848833	50.0	318673.0	0.022599	Y
8	IC 280-574012/42	3000.0	71.524231	50.0	314434.0	0.023841	Y
9	IC 280-574012/43	6000.0	153.122861	50.0	337543.0	0.02552	Y



Calibration / 4-Bromofluorobenzene (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

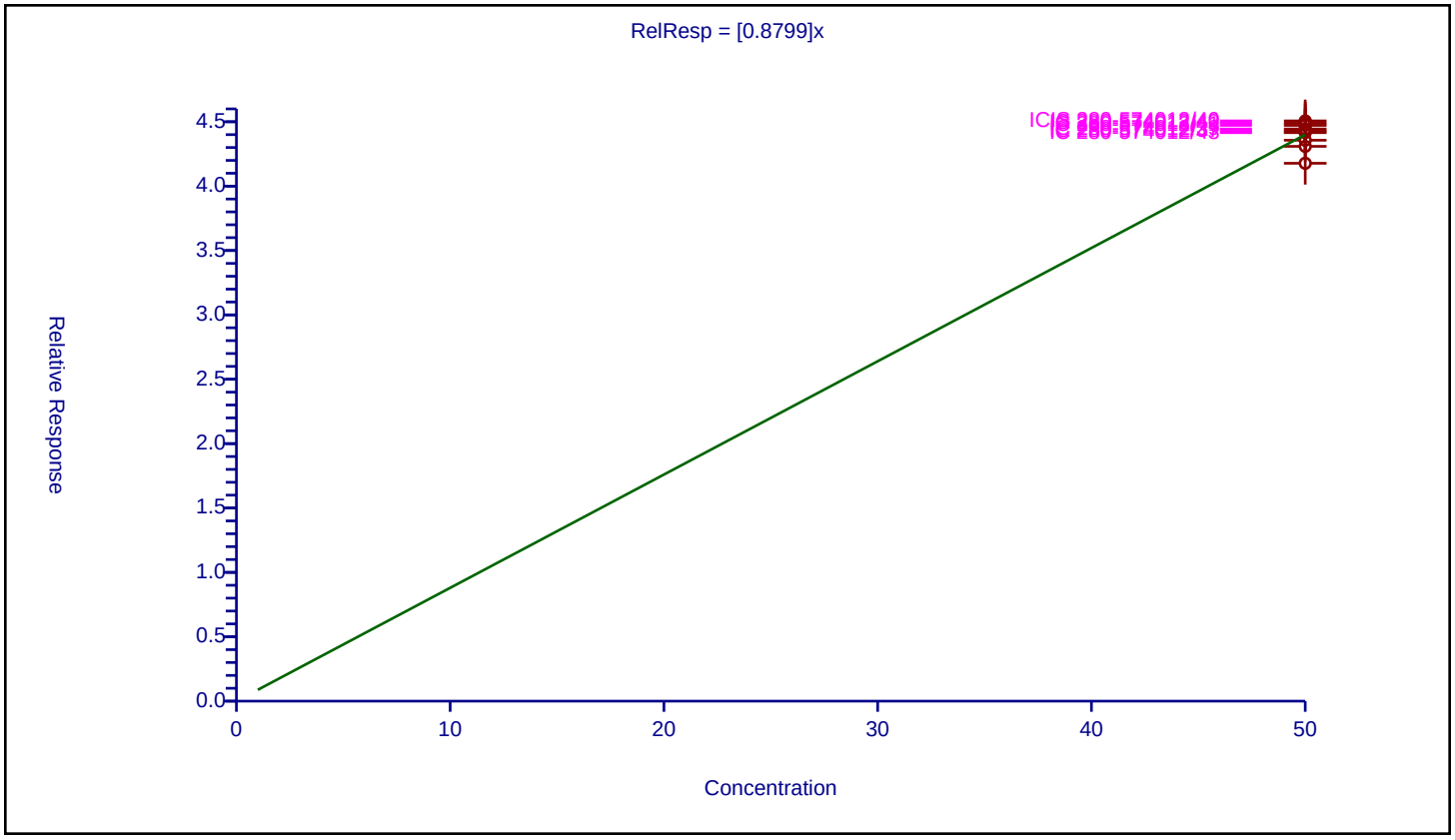
Curve Coefficients

Intercept:	0
Slope:	0.8799

Error Coefficients

Standard Error:	498000
Relative Standard Error:	2.4
Correlation Coefficient:	NA
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	50.0	43.089675	50.0	535409.0	0.861794	Y
2	IC 280-574012/36	50.0	41.77615	50.0	524280.0	0.835523	Y
3	IC 280-574012/37	50.0	44.266656	50.0	523499.0	0.885333	Y
4	IC 280-574012/38	50.0	43.564742	50.0	529194.0	0.871295	Y
5	IC 280-574012/39	50.0	44.440361	50.0	531986.0	0.888807	Y
6	ICIS 280-574012/40	50.0	45.067533	50.0	513820.0	0.901351	Y
7	IC 280-574012/41	50.0	44.719471	50.0	543866.0	0.894389	Y
8	IC 280-574012/42	50.0	44.883047	50.0	532094.0	0.897661	Y
9	IC 280-574012/43	50.0	44.152304	50.0	568942.0	0.883046	Y



Calibration / 1,1,2,2-Tetrachloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

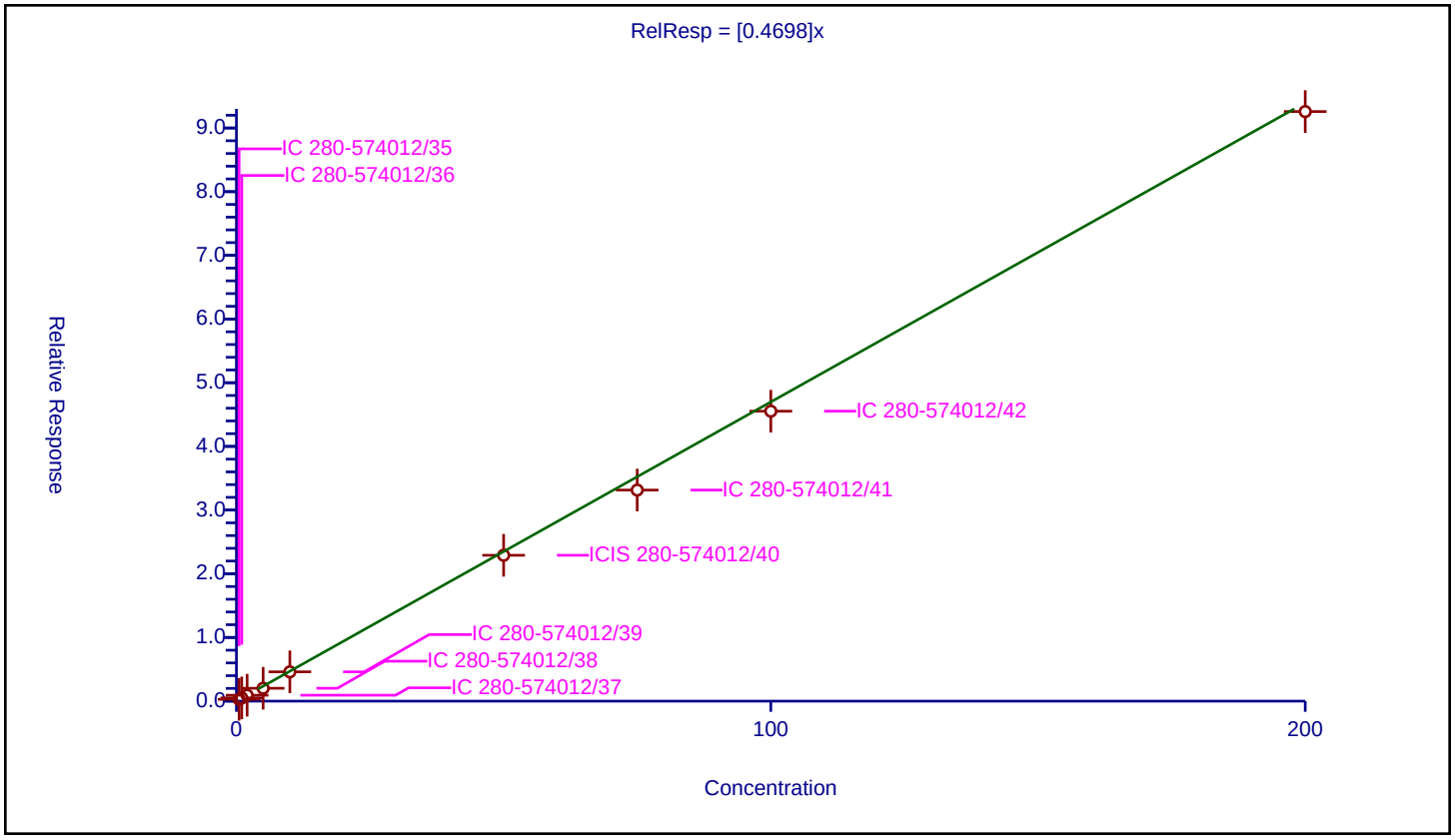
Curve Coefficients

Intercept:	0
Slope:	0.4698

Error Coefficients

Standard Error:	438000
Relative Standard Error:	10.1
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.28735	50.0	535409.0	0.574701	Y
2	IC 280-574012/36	1.0	0.505169	50.0	524280.0	0.505169	Y
3	IC 280-574012/37	2.0	0.93238	50.0	523499.0	0.46619	Y
4	IC 280-574012/38	5.0	2.021281	50.0	529194.0	0.404256	Y
5	IC 280-574012/39	10.0	4.598147	50.0	531986.0	0.459815	Y
6	ICIS 280-574012/40	50.0	22.902865	50.0	513820.0	0.458057	Y
7	IC 280-574012/41	75.0	33.143274	50.0	543866.0	0.44191	Y
8	IC 280-574012/42	100.0	45.530113	50.0	532094.0	0.455301	Y
9	IC 280-574012/43	200.0	92.583427	50.0	568942.0	0.462917	Y



Calibration / Bromobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

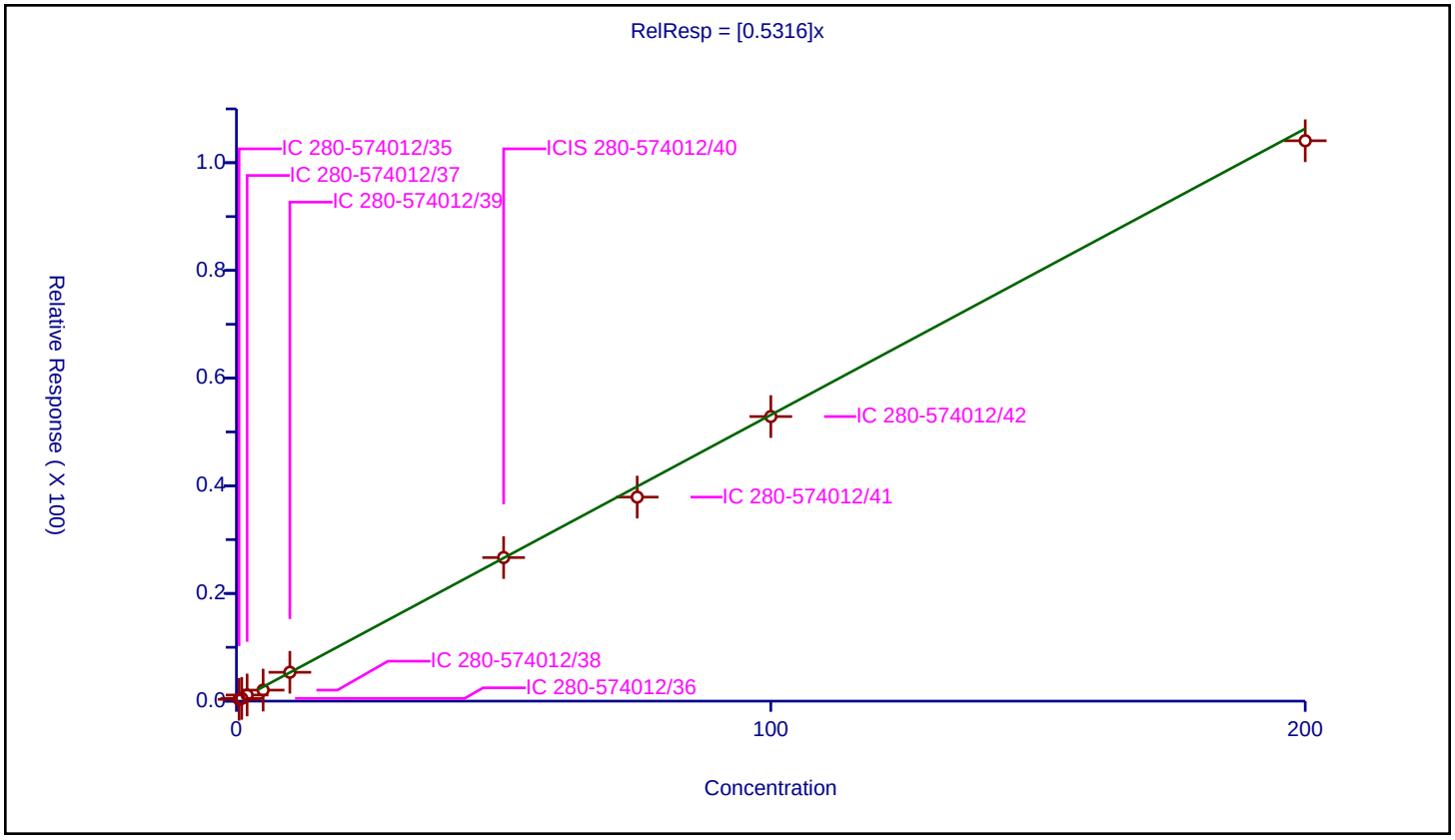
Curve Coefficients

Intercept:	0
Slope:	0.5316

Error Coefficients

Standard Error:	496000
Relative Standard Error:	12.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.976

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.336192	50.0	535409.0	0.672383	Y
2	IC 280-574012/36	1.0	0.509937	50.0	524280.0	0.509937	Y
3	IC 280-574012/37	2.0	1.137729	50.0	523499.0	0.568865	Y
4	IC 280-574012/38	5.0	2.048398	50.0	529194.0	0.40968	Y
5	IC 280-574012/39	10.0	5.360855	50.0	531986.0	0.536086	Y
6	ICIS 280-574012/40	50.0	26.671889	50.0	513820.0	0.533438	Y
7	IC 280-574012/41	75.0	37.893249	50.0	543866.0	0.505243	Y
8	IC 280-574012/42	100.0	52.860115	50.0	532094.0	0.528601	Y
9	IC 280-574012/43	200.0	104.08126	50.0	568942.0	0.520406	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

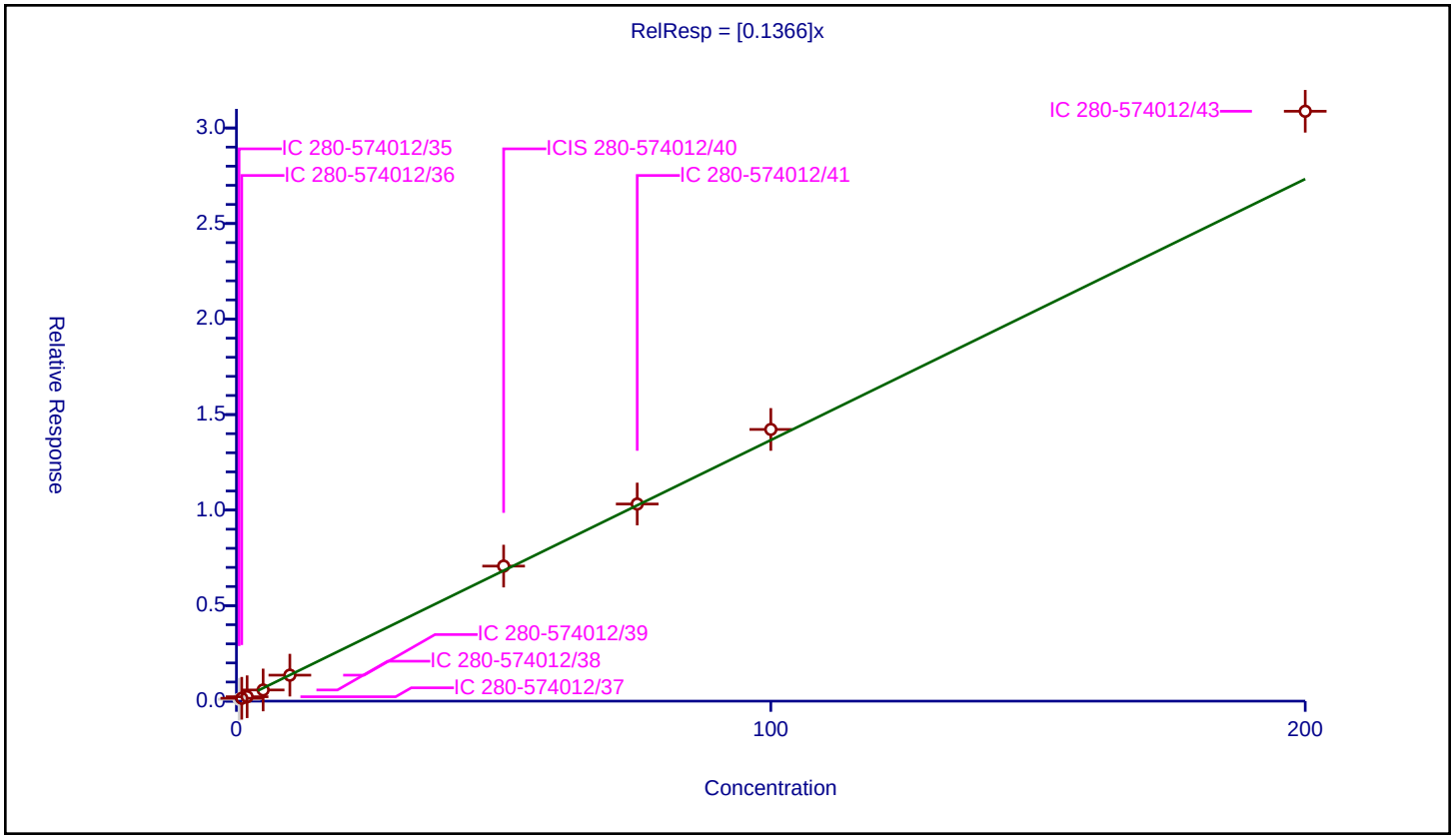
Curve Coefficients

Intercept:	0
Slope:	0.1366

Error Coefficients

Standard Error:	153000
Relative Standard Error:	10.3
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.098803	50.0	535409.0	0.197606	N
2	IC 280-574012/36	1.0	0.149634	50.0	524280.0	0.149634	Y
3	IC 280-574012/37	2.0	0.230182	50.0	523499.0	0.115091	Y
4	IC 280-574012/38	5.0	0.584757	50.0	529194.0	0.116951	Y
5	IC 280-574012/39	10.0	1.359528	50.0	531986.0	0.135953	Y
6	ICIS 280-574012/40	50.0	7.069207	50.0	513820.0	0.141384	Y
7	IC 280-574012/41	75.0	10.317799	50.0	543866.0	0.137571	Y
8	IC 280-574012/42	100.0	14.221923	50.0	532094.0	0.142219	Y
9	IC 280-574012/43	200.0	30.875994	50.0	568942.0	0.15438	Y



Calibration / 1,2,3-Trichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

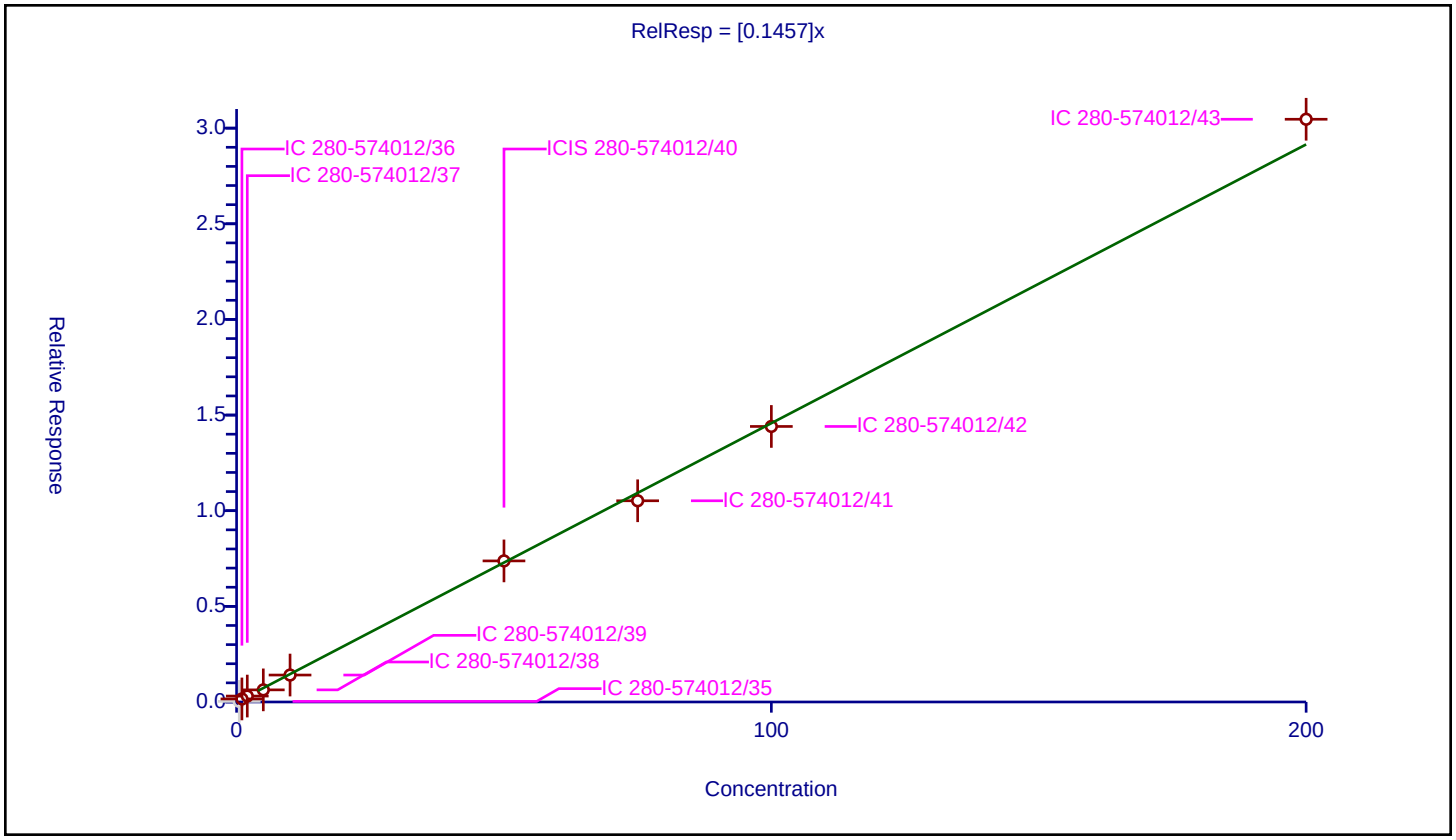
Curve Coefficients

Intercept:	0
Slope:	0.1457

Error Coefficients

Standard Error:	152000
Relative Standard Error:	7.0
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.031378	50.0	535409.0	0.062756	N
2	IC 280-574012/36	1.0	0.159457	50.0	524280.0	0.159457	Y
3	IC 280-574012/37	2.0	0.309647	50.0	523499.0	0.154824	Y
4	IC 280-574012/38	5.0	0.633133	50.0	529194.0	0.126627	Y
5	IC 280-574012/39	10.0	1.408966	50.0	531986.0	0.140897	Y
6	ICIS 280-574012/40	50.0	7.376124	50.0	513820.0	0.147522	Y
7	IC 280-574012/41	75.0	10.518676	50.0	543866.0	0.140249	Y
8	IC 280-574012/42	100.0	14.404504	50.0	532094.0	0.144045	Y
9	IC 280-574012/43	200.0	30.464265	50.0	568942.0	0.152321	Y



Calibration / N-Propylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

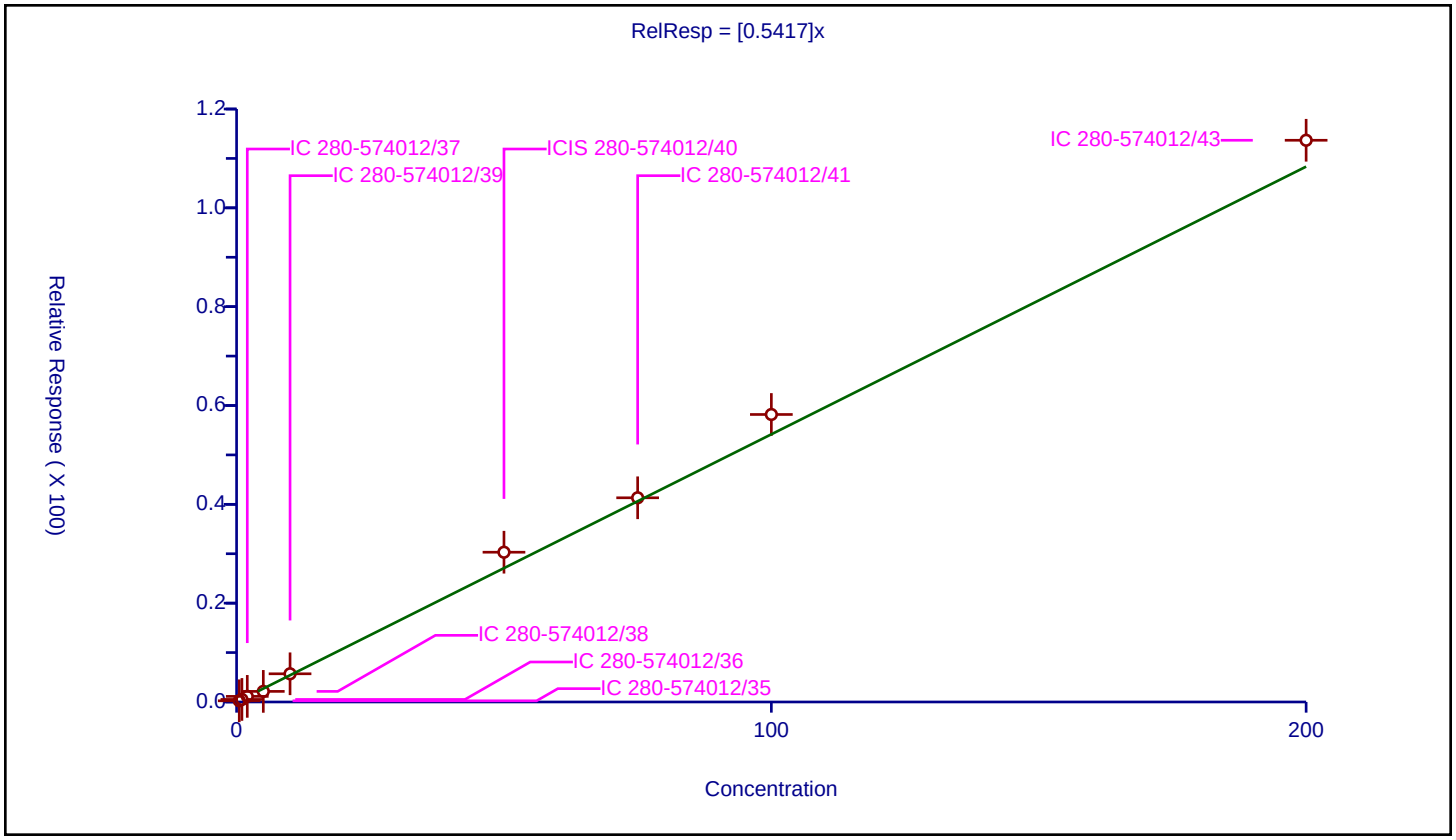
Curve Coefficients

Intercept:	0
Slope:	0.5417

Error Coefficients

Standard Error:	543000
Relative Standard Error:	10.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.241404	50.0	535409.0	0.482808	Y
2	IC 280-574012/36	1.0	0.517758	50.0	524280.0	0.517758	Y
3	IC 280-574012/37	2.0	1.135341	50.0	523499.0	0.567671	Y
4	IC 280-574012/38	5.0	2.145716	50.0	529194.0	0.429143	Y
5	IC 280-574012/39	10.0	5.706165	50.0	531986.0	0.570617	Y
6	ICIS 280-574012/40	50.0	30.310615	50.0	513820.0	0.606212	Y
7	IC 280-574012/41	75.0	41.323414	50.0	543866.0	0.550979	Y
8	IC 280-574012/42	100.0	58.18004	50.0	532094.0	0.5818	Y
9	IC 280-574012/43	200.0	113.675999	50.0	568942.0	0.56838	Y



Calibration / 2-Chlorotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

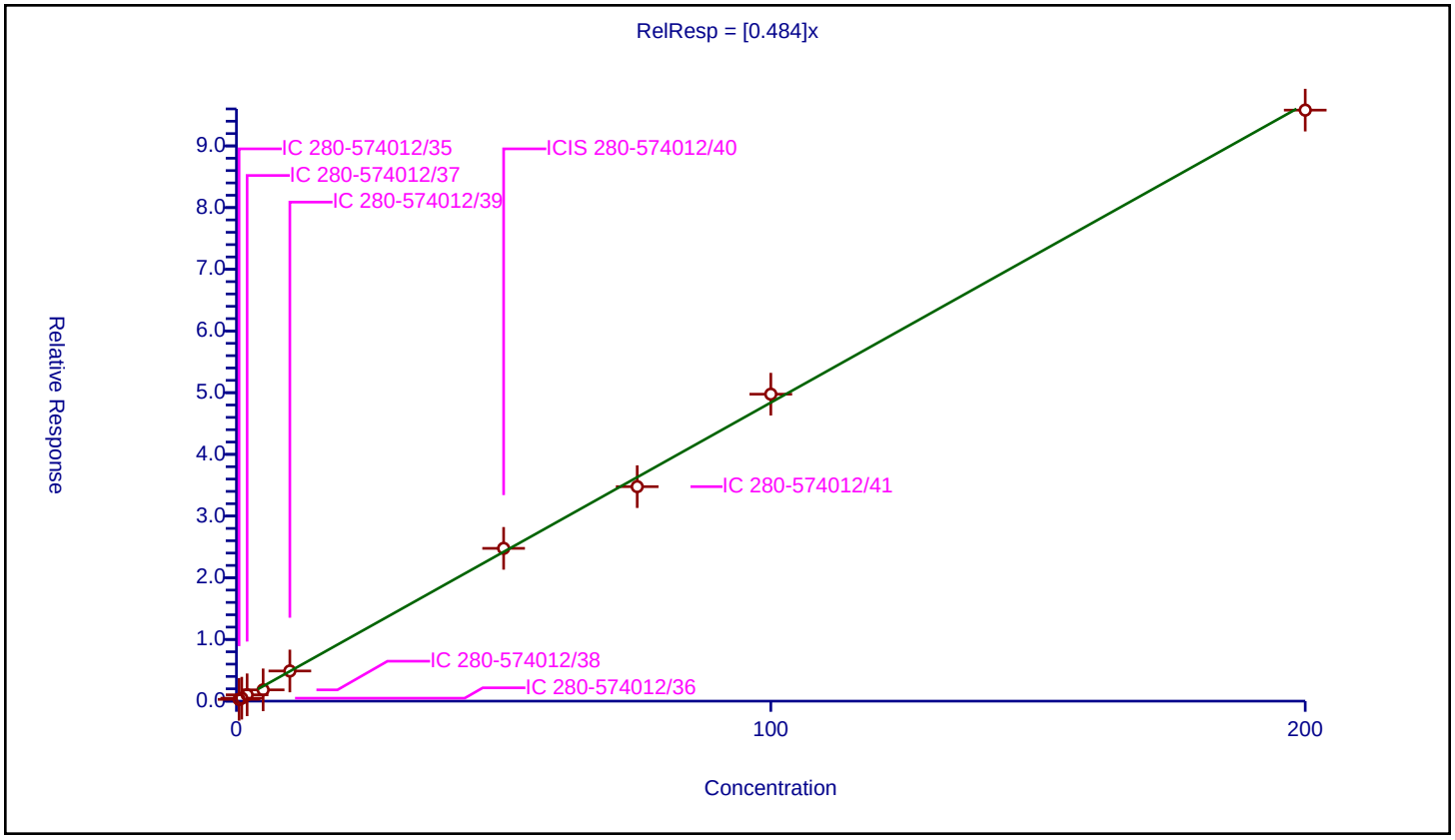
Curve Coefficients

Intercept:	0
Slope:	0.484

Error Coefficients

Standard Error:	458000
Relative Standard Error:	11.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.288191	50.0	535409.0	0.576382	Y
2	IC 280-574012/36	1.0	0.477321	50.0	524280.0	0.477321	Y
3	IC 280-574012/37	2.0	1.023784	50.0	523499.0	0.511892	Y
4	IC 280-574012/38	5.0	1.827685	50.0	529194.0	0.365537	Y
5	IC 280-574012/39	10.0	4.891012	50.0	531986.0	0.489101	Y
6	ICIS 280-574012/40	50.0	24.76519	50.0	513820.0	0.495304	Y
7	IC 280-574012/41	75.0	34.766836	50.0	543866.0	0.463558	Y
8	IC 280-574012/42	100.0	49.756246	50.0	532094.0	0.497562	Y
9	IC 280-574012/43	200.0	95.803263	50.0	568942.0	0.479016	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

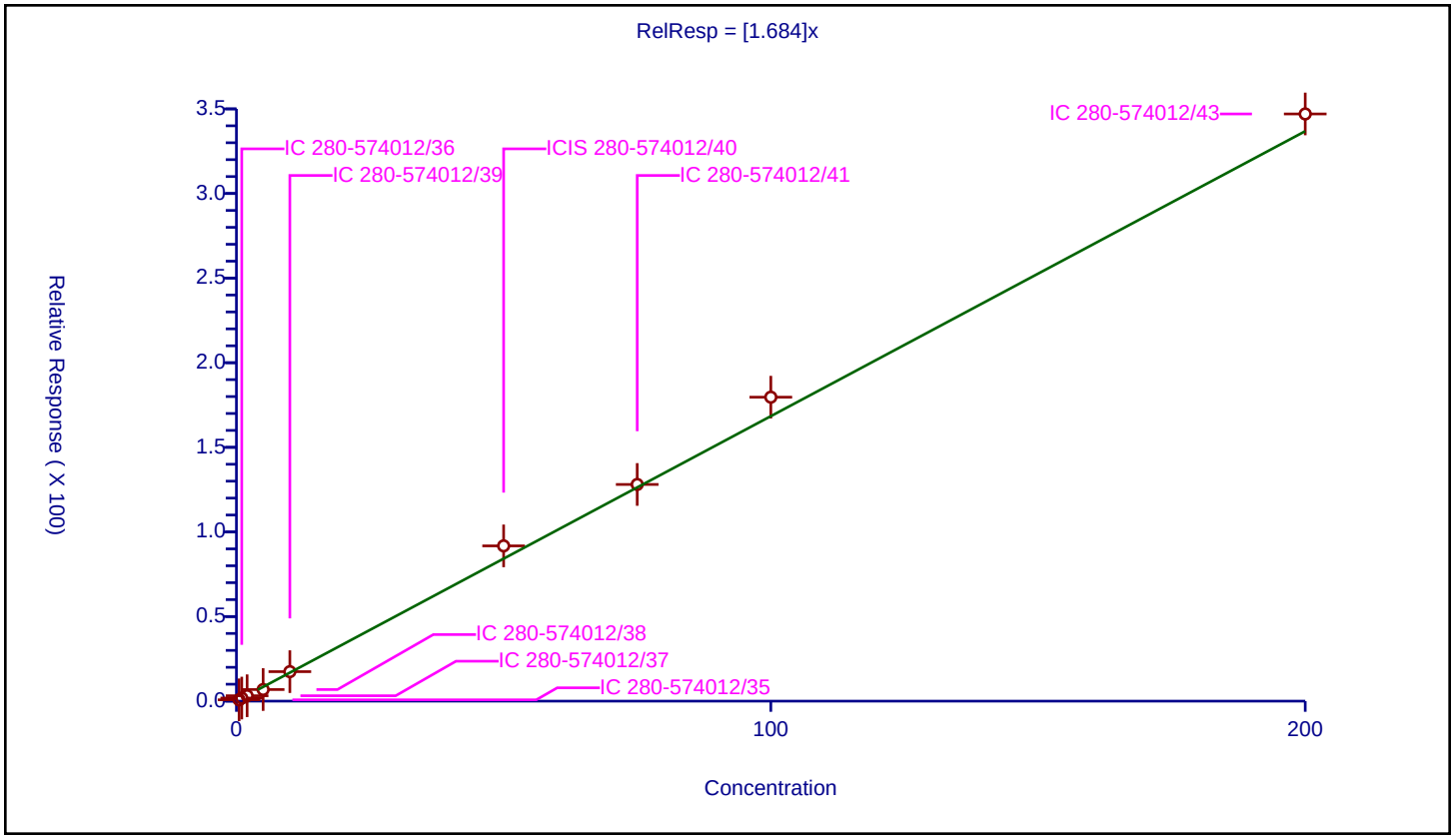
Curve Coefficients

Intercept:	0
Slope:	1.684

Error Coefficients

Standard Error:	1660000
Relative Standard Error:	8.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.781645	50.0	535409.0	1.563291	Y
2	IC 280-574012/36	1.0	1.812009	50.0	524280.0	1.812009	Y
3	IC 280-574012/37	2.0	3.186826	50.0	523499.0	1.593413	Y
4	IC 280-574012/38	5.0	6.851363	50.0	529194.0	1.370273	Y
5	IC 280-574012/39	10.0	17.43232	50.0	531986.0	1.743232	Y
6	ICIS 280-574012/40	50.0	91.756744	50.0	513820.0	1.835135	Y
7	IC 280-574012/41	75.0	128.054061	50.0	543866.0	1.707387	Y
8	IC 280-574012/42	100.0	179.635835	50.0	532094.0	1.796358	Y
9	IC 280-574012/43	200.0	347.015337	50.0	568942.0	1.735077	Y



Calibration / 4-Chlorotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

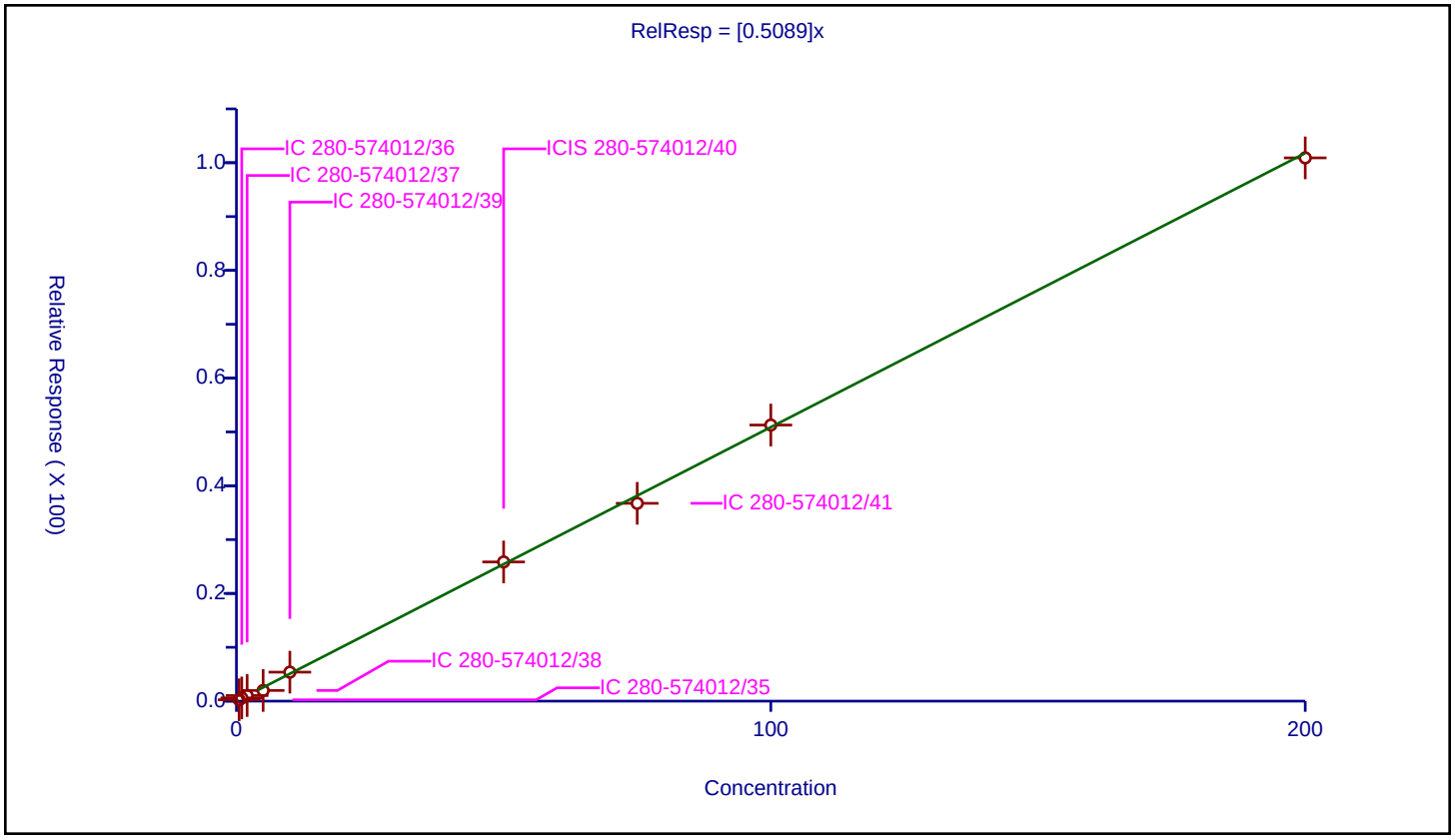
Curve Coefficients

Intercept:	0
Slope:	0.5089

Error Coefficients

Standard Error:	481000
Relative Standard Error:	10.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.25177	50.0	535409.0	0.50354	Y
2	IC 280-574012/36	1.0	0.598344	50.0	524280.0	0.598344	Y
3	IC 280-574012/37	2.0	1.039066	50.0	523499.0	0.519533	Y
4	IC 280-574012/38	5.0	1.979425	50.0	529194.0	0.395885	Y
5	IC 280-574012/39	10.0	5.384916	50.0	531986.0	0.538492	Y
6	ICIS 280-574012/40	50.0	25.853509	50.0	513820.0	0.51707	Y
7	IC 280-574012/41	75.0	36.741955	50.0	543866.0	0.489893	Y
8	IC 280-574012/42	100.0	51.280225	50.0	532094.0	0.512802	Y
9	IC 280-574012/43	200.0	100.904134	50.0	568942.0	0.504521	Y



Calibration / tert-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

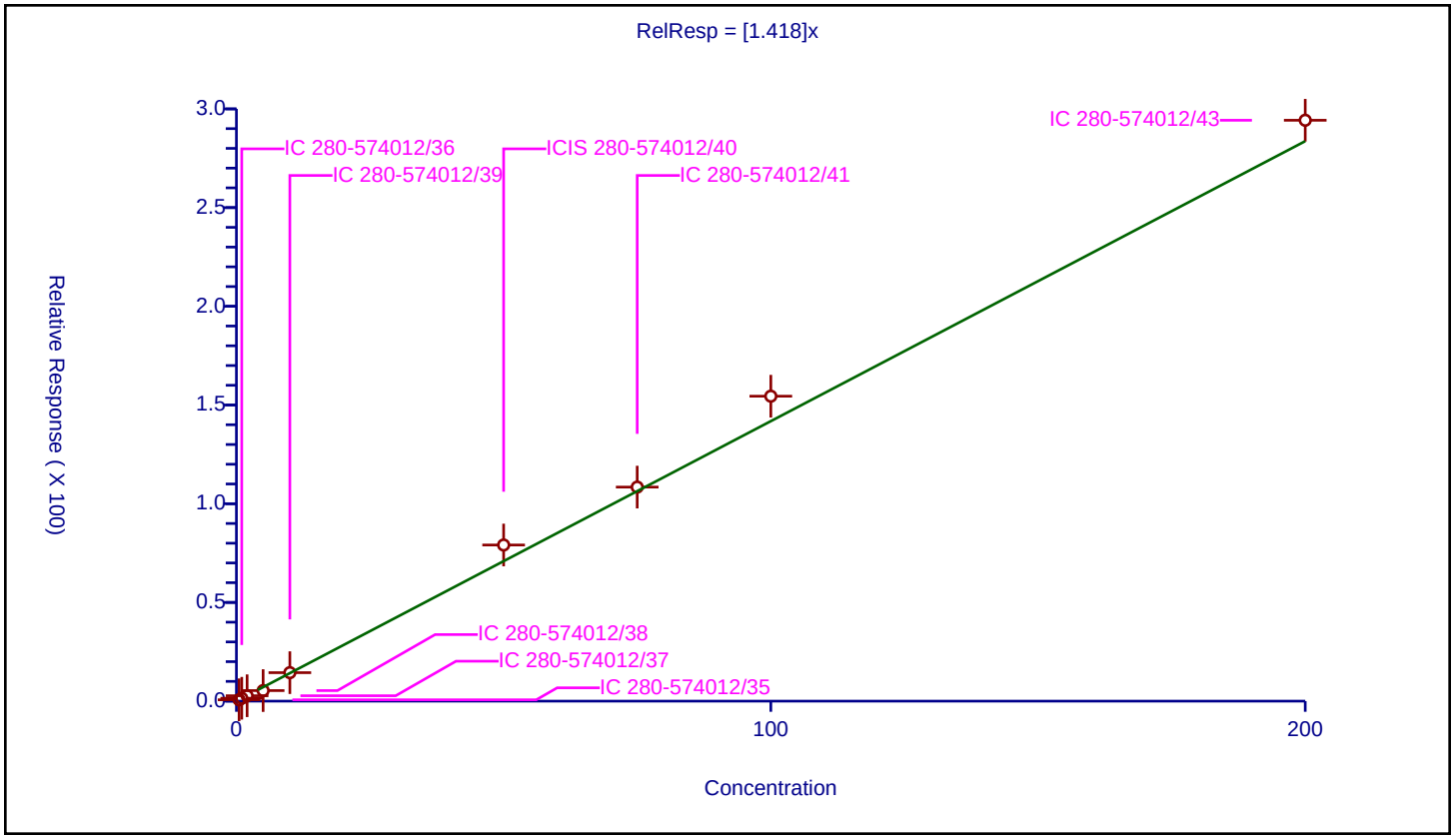
Curve Coefficients

Intercept:	0
Slope:	1.418

Error Coefficients

Standard Error:	1410000
Relative Standard Error:	10.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.687605	50.0	535409.0	1.37521	Y
2	IC 280-574012/36	1.0	1.465629	50.0	524280.0	1.465629	Y
3	IC 280-574012/37	2.0	2.730951	50.0	523499.0	1.365475	Y
4	IC 280-574012/38	5.0	5.355125	50.0	529194.0	1.071025	Y
5	IC 280-574012/39	10.0	14.430925	50.0	531986.0	1.443092	Y
6	ICIS 280-574012/40	50.0	79.09696	50.0	513820.0	1.581939	Y
7	IC 280-574012/41	75.0	108.420916	50.0	543866.0	1.445612	Y
8	IC 280-574012/42	100.0	154.475149	50.0	532094.0	1.544751	Y
9	IC 280-574012/43	200.0	294.240713	50.0	568942.0	1.471204	Y



Calibration / 1,2,4-Trimethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

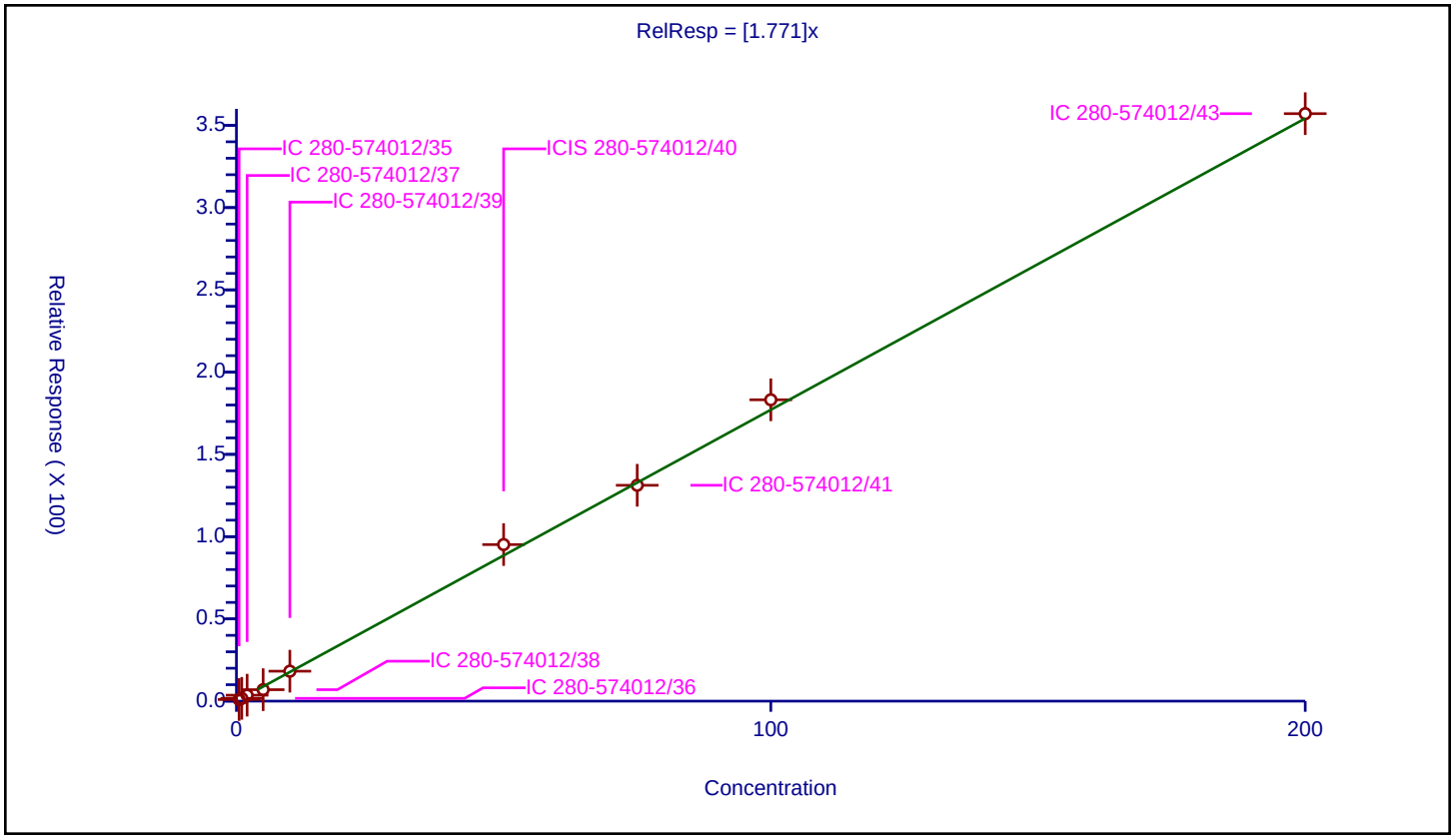
Curve Coefficients

Intercept:	0
Slope:	1.771

Error Coefficients

Standard Error:	1710000
Relative Standard Error:	9.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.980652	50.0	535409.0	1.961304	Y
2	IC 280-574012/36	1.0	1.687839	50.0	524280.0	1.687839	Y
3	IC 280-574012/37	2.0	3.610895	50.0	523499.0	1.805448	Y
4	IC 280-574012/38	5.0	6.968238	50.0	529194.0	1.393648	Y
5	IC 280-574012/39	10.0	18.209784	50.0	531986.0	1.820978	Y
6	ICIS 280-574012/40	50.0	95.164746	50.0	513820.0	1.903295	Y
7	IC 280-574012/41	75.0	131.201987	50.0	543866.0	1.74936	Y
8	IC 280-574012/42	100.0	183.183141	50.0	532094.0	1.831831	Y
9	IC 280-574012/43	200.0	357.095451	50.0	568942.0	1.785477	Y



Calibration / sec-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

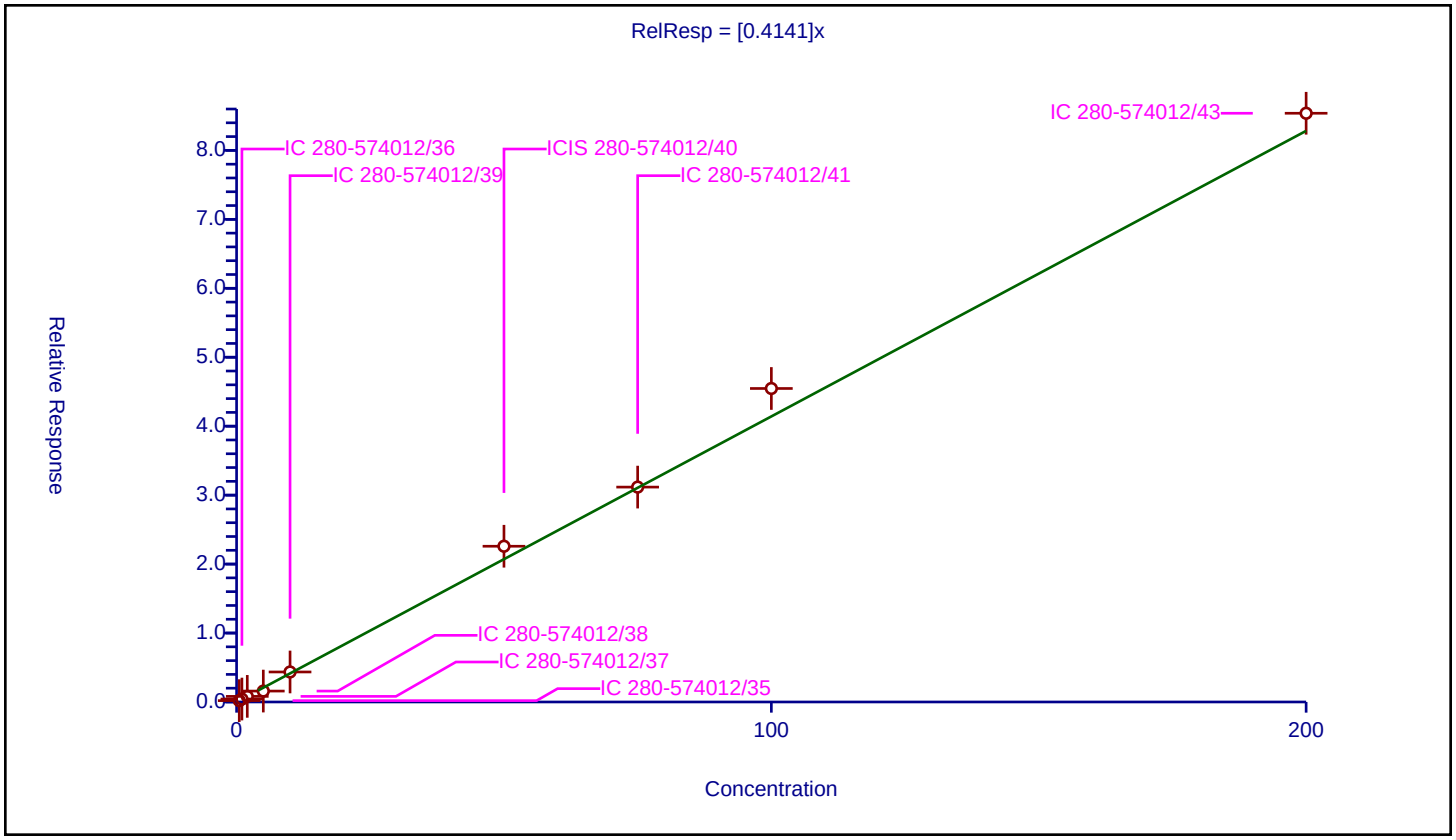
Curve Coefficients

Intercept:	0
Slope:	0.4141

Error Coefficients

Standard Error:	411000
Relative Standard Error:	10.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.195738	50.0	535409.0	0.391476	Y
2	IC 280-574012/36	1.0	0.427443	50.0	524280.0	0.427443	Y
3	IC 280-574012/37	2.0	0.815474	50.0	523499.0	0.407737	Y
4	IC 280-574012/38	5.0	1.582784	50.0	529194.0	0.316557	Y
5	IC 280-574012/39	10.0	4.351712	50.0	531986.0	0.435171	Y
6	ICIS 280-574012/40	50.0	22.590012	50.0	513820.0	0.4518	Y
7	IC 280-574012/41	75.0	31.166501	50.0	543866.0	0.415553	Y
8	IC 280-574012/42	100.0	45.468094	50.0	532094.0	0.454681	Y
9	IC 280-574012/43	200.0	85.383484	50.0	568942.0	0.426917	Y



Calibration / 1,3-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

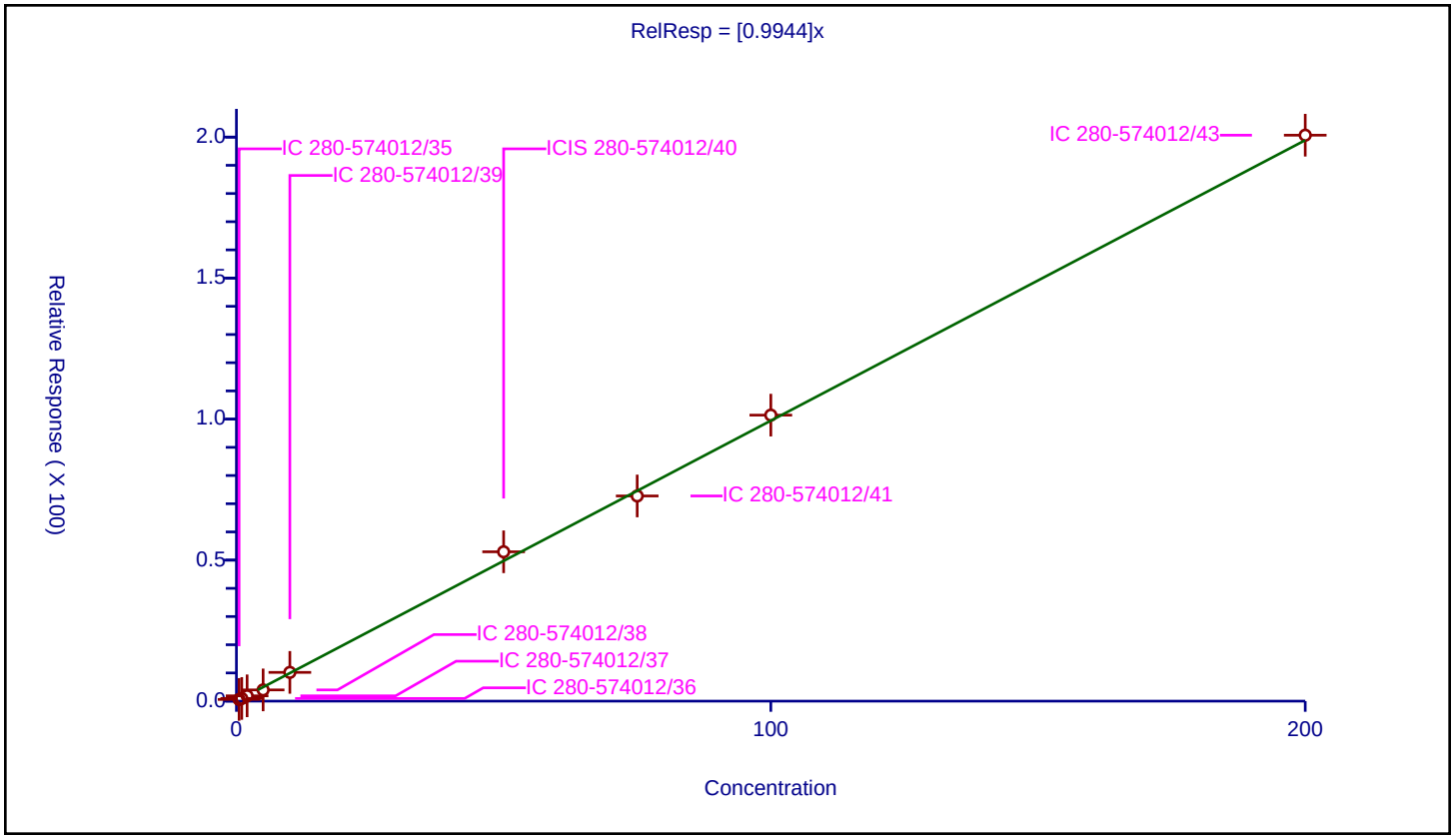
Curve Coefficients

Intercept:	0
Slope:	0.9944

Error Coefficients

Standard Error:	956000
Relative Standard Error:	10.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.984

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.597861	50.0	535409.0	1.195721	Y
2	IC 280-574012/36	1.0	0.946918	50.0	524280.0	0.946918	Y
3	IC 280-574012/37	2.0	1.887587	50.0	523499.0	0.943794	Y
4	IC 280-574012/38	5.0	3.984739	50.0	529194.0	0.796948	Y
5	IC 280-574012/39	10.0	10.197825	50.0	531986.0	1.019782	Y
6	ICIS 280-574012/40	50.0	52.956288	50.0	513820.0	1.059126	Y
7	IC 280-574012/41	75.0	72.75487	50.0	543866.0	0.970065	Y
8	IC 280-574012/42	100.0	101.417795	50.0	532094.0	1.014178	Y
9	IC 280-574012/43	200.0	200.671158	50.0	568942.0	1.003356	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

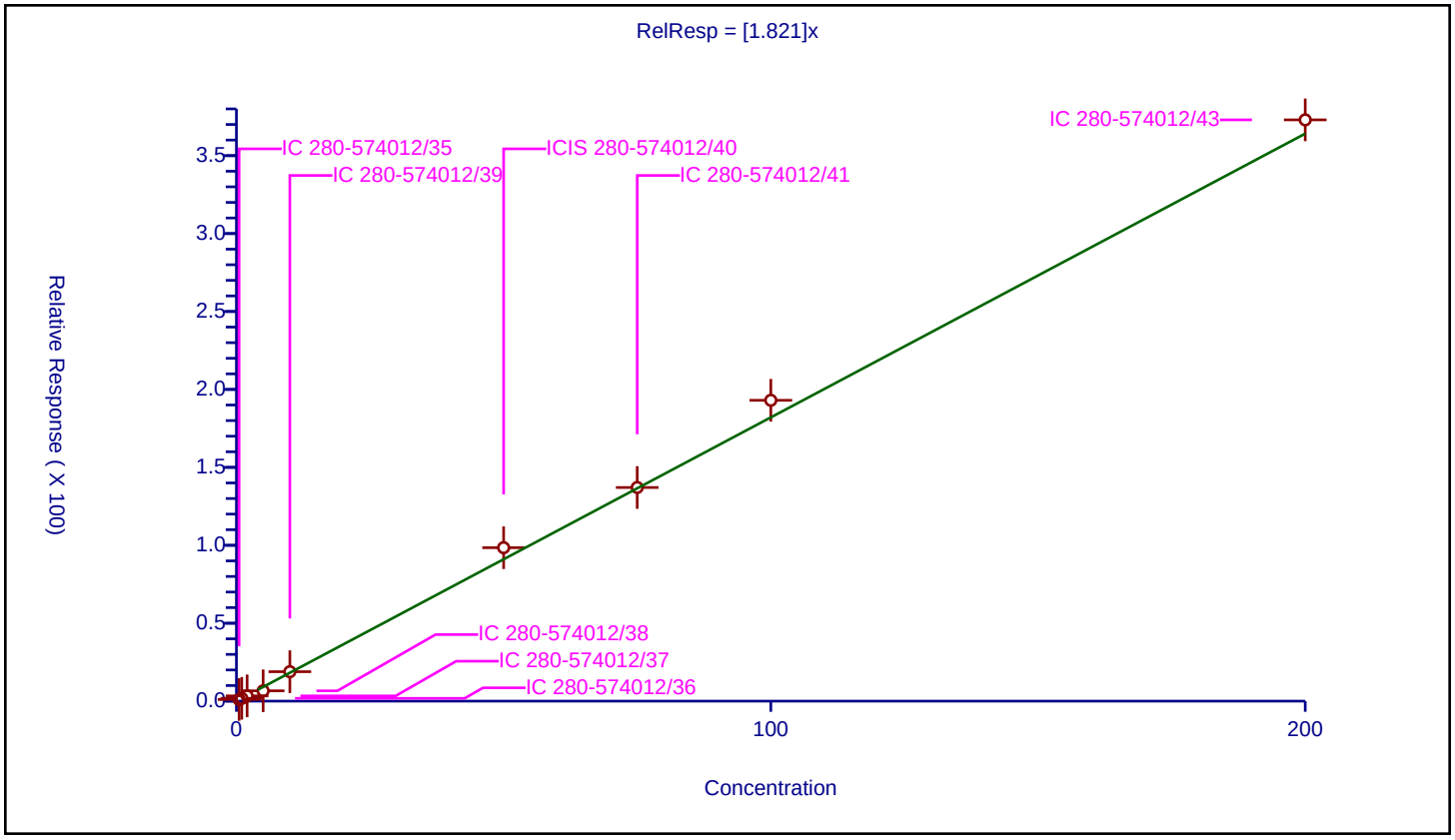
Curve Coefficients

Intercept:	0
Slope:	1.821

Error Coefficients

Standard Error:	1790000
Relative Standard Error:	11.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	1.045743	50.0	535409.0	2.091485	Y
2	IC 280-574012/36	1.0	1.79818	50.0	524280.0	1.79818	Y
3	IC 280-574012/37	2.0	3.376702	50.0	523499.0	1.688351	Y
4	IC 280-574012/38	5.0	6.628288	50.0	529194.0	1.325658	Y
5	IC 280-574012/39	10.0	18.895234	50.0	531986.0	1.889523	Y
6	ICIS 280-574012/40	50.0	98.451598	50.0	513820.0	1.969032	Y
7	IC 280-574012/41	75.0	137.079814	50.0	543866.0	1.827731	Y
8	IC 280-574012/42	100.0	193.029239	50.0	532094.0	1.930292	Y
9	IC 280-574012/43	200.0	372.951285	50.0	568942.0	1.864756	Y



Calibration / 1,4-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

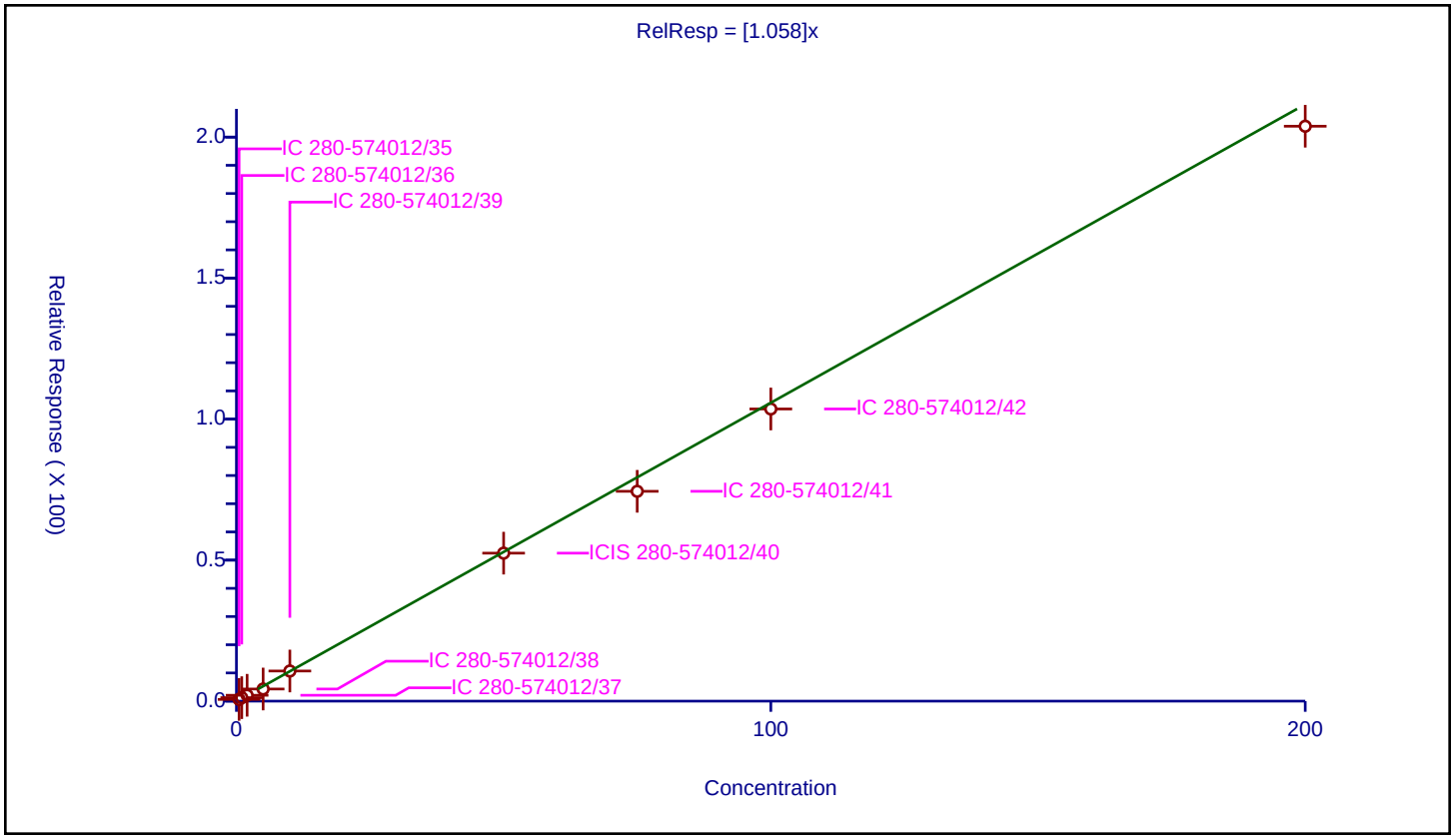
Curve Coefficients

Intercept:	0
Slope:	1.058

Error Coefficients

Standard Error:	972000
Relative Standard Error:	10.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.611402	50.0	535409.0	1.222804	Y
2	IC 280-574012/36	1.0	1.234264	50.0	524280.0	1.234264	Y
3	IC 280-574012/37	2.0	2.080138	50.0	523499.0	1.040069	Y
4	IC 280-574012/38	5.0	4.301258	50.0	529194.0	0.860252	Y
5	IC 280-574012/39	10.0	10.684304	50.0	531986.0	1.06843	Y
6	ICIS 280-574012/40	50.0	52.475964	50.0	513820.0	1.049519	Y
7	IC 280-574012/41	75.0	74.403621	50.0	543866.0	0.992048	Y
8	IC 280-574012/42	100.0	103.59476	50.0	532094.0	1.035948	Y
9	IC 280-574012/43	200.0	203.851183	50.0	568942.0	1.019256	Y



Calibration / n-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

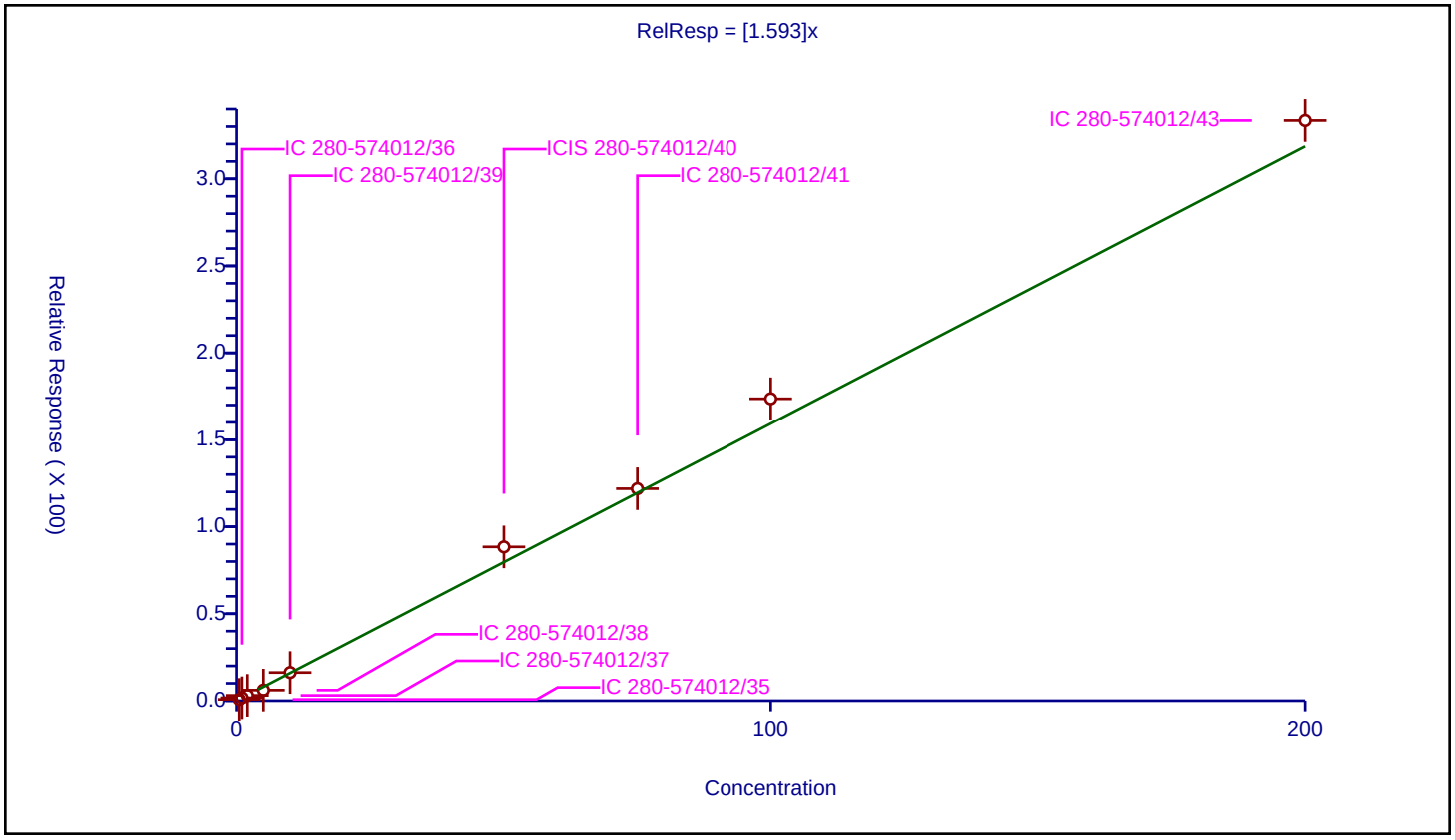
Curve Coefficients

Intercept:	0
Slope:	1.593

Error Coefficients

Standard Error:	1600000
Relative Standard Error:	10.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.738127	50.0	535409.0	1.476255	Y
2	IC 280-574012/36	1.0	1.691653	50.0	524280.0	1.691653	Y
3	IC 280-574012/37	2.0	3.068869	50.0	523499.0	1.534435	Y
4	IC 280-574012/38	5.0	6.093323	50.0	529194.0	1.218665	Y
5	IC 280-574012/39	10.0	16.202964	50.0	531986.0	1.620296	Y
6	ICIS 280-574012/40	50.0	88.421821	50.0	513820.0	1.768436	Y
7	IC 280-574012/41	75.0	121.881125	50.0	543866.0	1.625082	Y
8	IC 280-574012/42	100.0	173.631727	50.0	532094.0	1.736317	Y
9	IC 280-574012/43	200.0	333.466329	50.0	568942.0	1.667332	Y



Calibration / 1,2-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

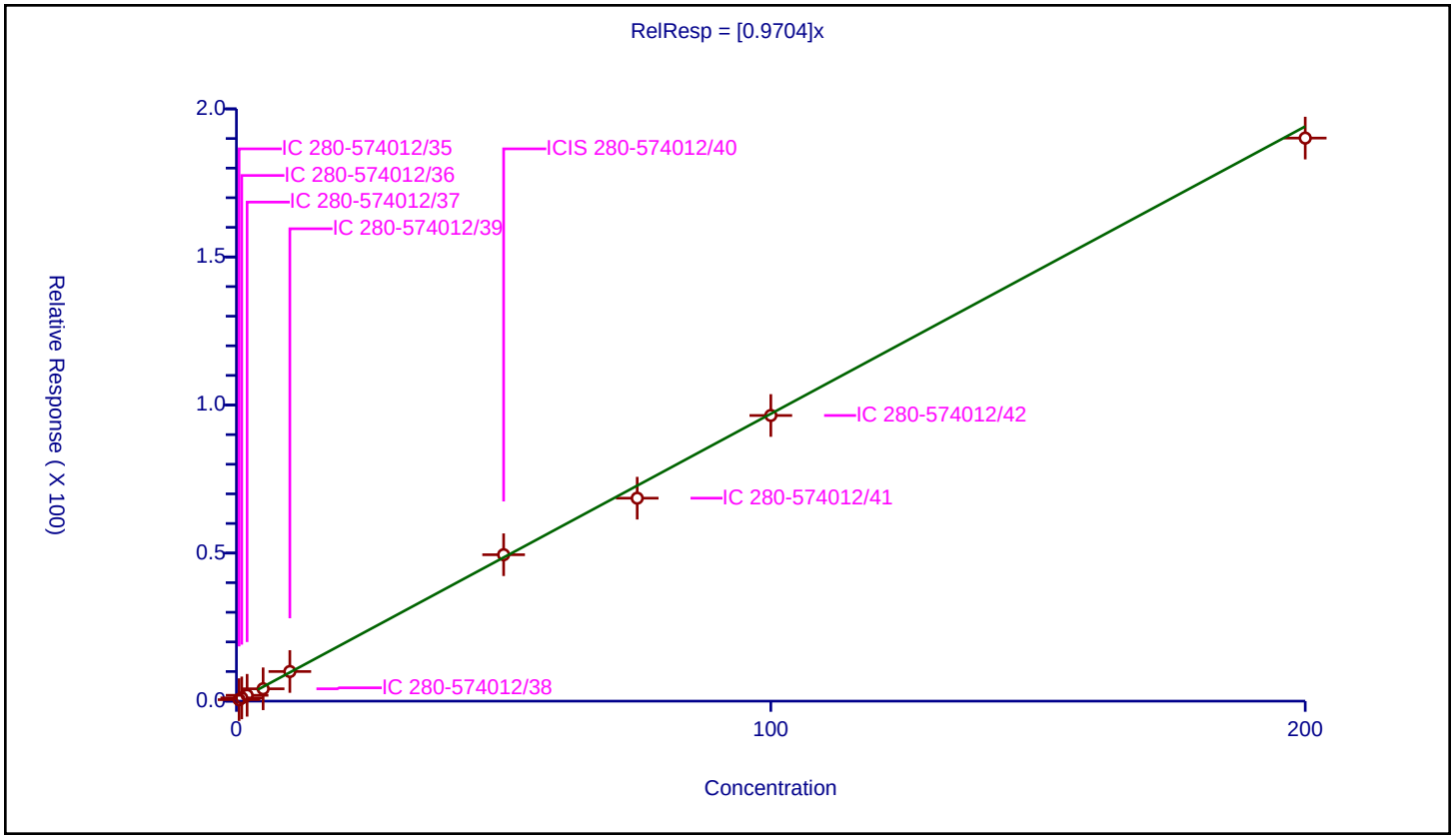
Curve Coefficients

Intercept:	0
Slope:	0.9704

Error Coefficients

Standard Error:	906000
Relative Standard Error:	7.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.501673	50.0	535409.0	1.003345	Y
2	IC 280-574012/36	1.0	1.088636	50.0	524280.0	1.088636	Y
3	IC 280-574012/37	2.0	1.976222	50.0	523499.0	0.988111	Y
4	IC 280-574012/38	5.0	4.170399	50.0	529194.0	0.83408	Y
5	IC 280-574012/39	10.0	10.010226	50.0	531986.0	1.001023	Y
6	ICIS 280-574012/40	50.0	49.443969	50.0	513820.0	0.988879	Y
7	IC 280-574012/41	75.0	68.536184	50.0	543866.0	0.913816	Y
8	IC 280-574012/42	100.0	96.46491	50.0	532094.0	0.964649	Y
9	IC 280-574012/43	200.0	190.14258	50.0	568942.0	0.950713	Y



Calibration / 1,2-Dibromo-3-Chloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

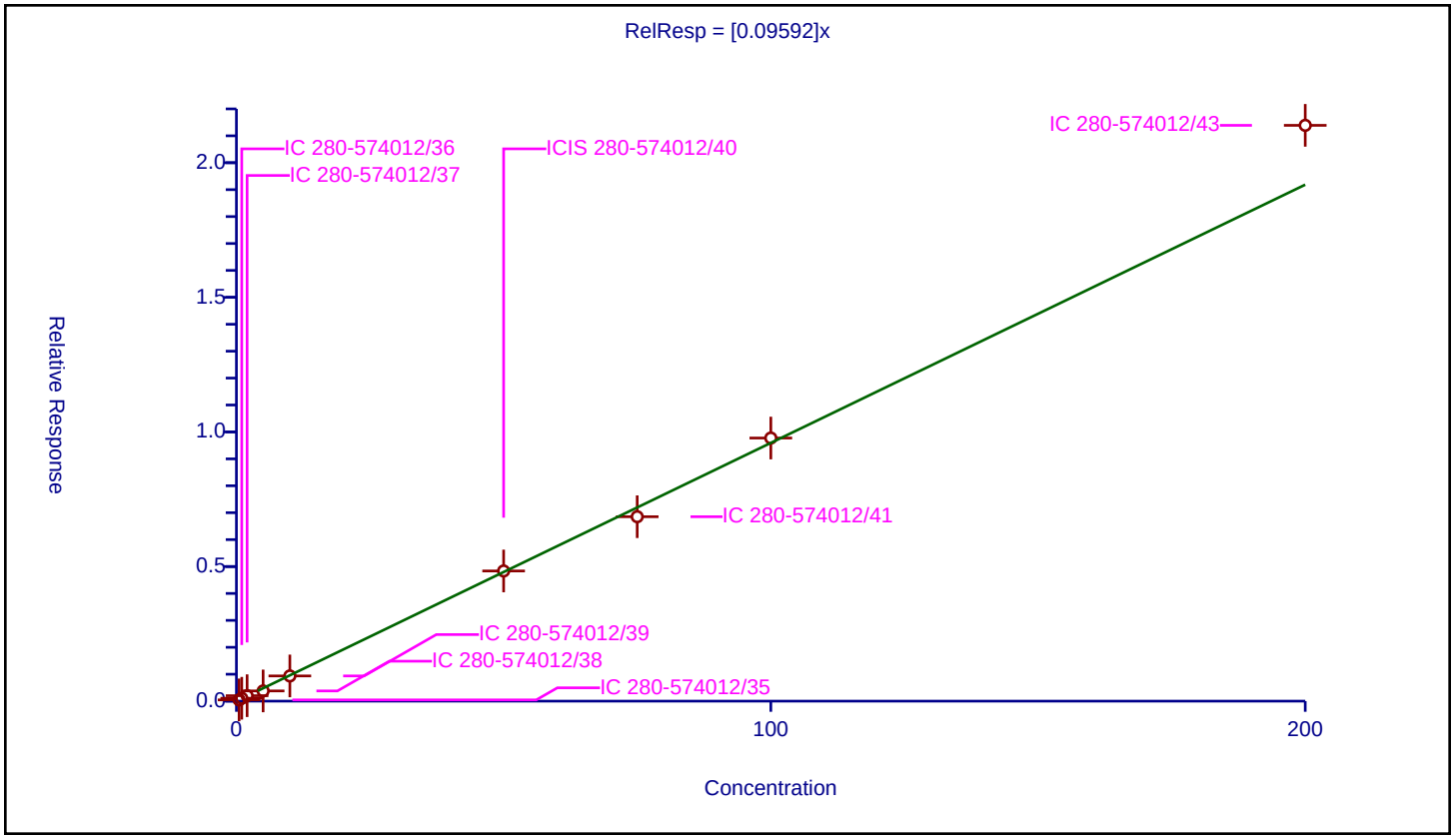
Curve Coefficients

Intercept:	0
Slope:	0.09592

Error Coefficients

Standard Error:	98900
Relative Standard Error:	9.9
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.04632	50.0	535409.0	0.092639	Y
2	IC 280-574012/36	1.0	0.107099	50.0	524280.0	0.107099	Y
3	IC 280-574012/37	2.0	0.202579	50.0	523499.0	0.10129	Y
4	IC 280-574012/38	5.0	0.379256	50.0	529194.0	0.075851	Y
5	IC 280-574012/39	10.0	0.936773	50.0	531986.0	0.093677	Y
6	ICIS 280-574012/40	50.0	4.83574	50.0	513820.0	0.096715	Y
7	IC 280-574012/41	75.0	6.851228	50.0	543866.0	0.09135	Y
8	IC 280-574012/42	100.0	9.772991	50.0	532094.0	0.09773	Y
9	IC 280-574012/43	200.0	21.388296	50.0	568942.0	0.106941	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

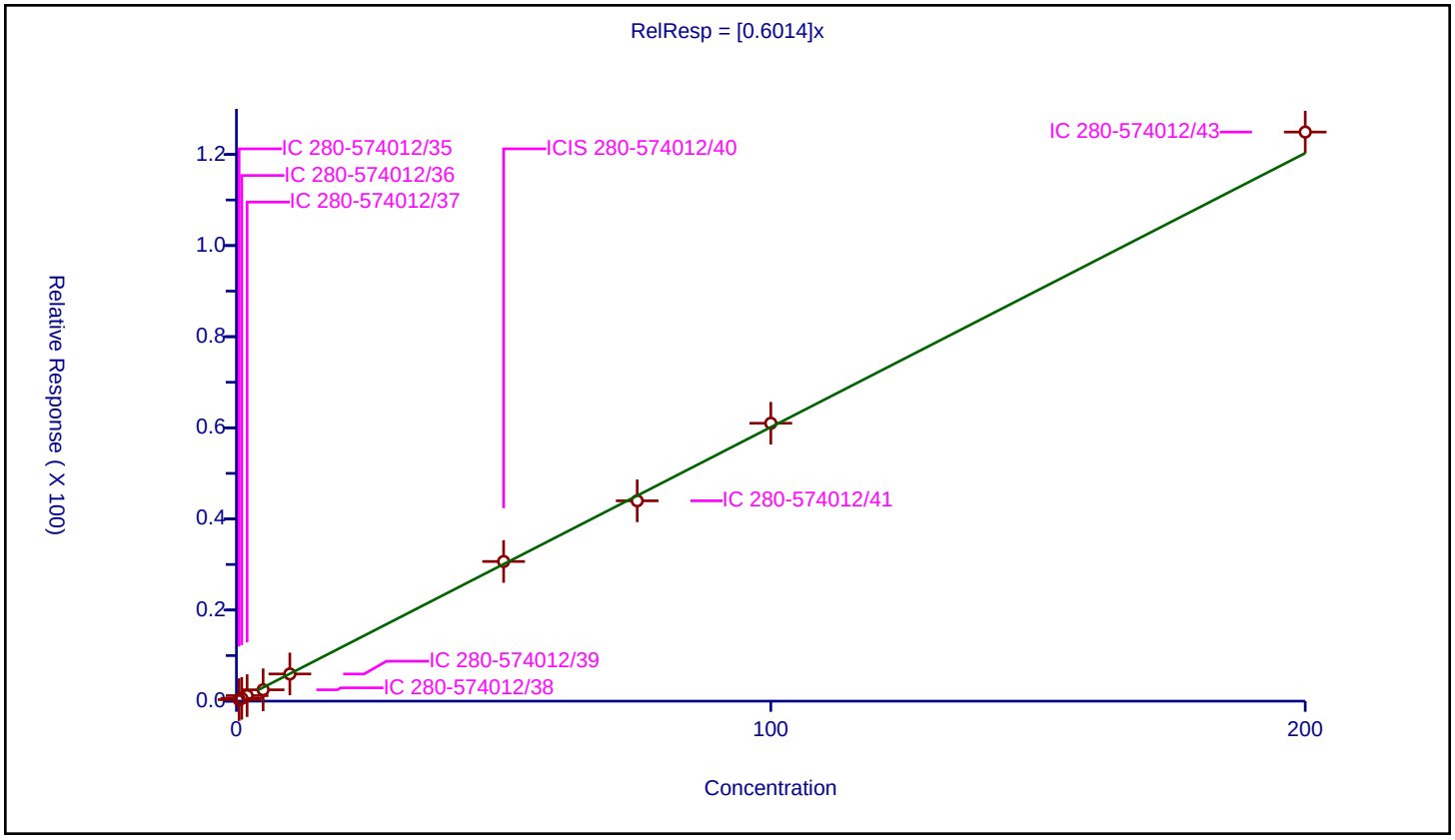
Curve Coefficients

Intercept:	0
Slope:	0.6014

Error Coefficients

Standard Error:	589000
Relative Standard Error:	7.2
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.330121	50.0	535409.0	0.660243	Y
2	IC 280-574012/36	1.0	0.616751	50.0	524280.0	0.616751	Y
3	IC 280-574012/37	2.0	1.212037	50.0	523499.0	0.606018	Y
4	IC 280-574012/38	5.0	2.495588	50.0	529194.0	0.499118	Y
5	IC 280-574012/39	10.0	5.965383	50.0	531986.0	0.596538	Y
6	ICIS 280-574012/40	50.0	30.654996	50.0	513820.0	0.6131	Y
7	IC 280-574012/41	75.0	43.974527	50.0	543866.0	0.586327	Y
8	IC 280-574012/42	100.0	61.003883	50.0	532094.0	0.610039	Y
9	IC 280-574012/43	200.0	124.91616	50.0	568942.0	0.624581	Y



Calibration / Hexachlorobutadiene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

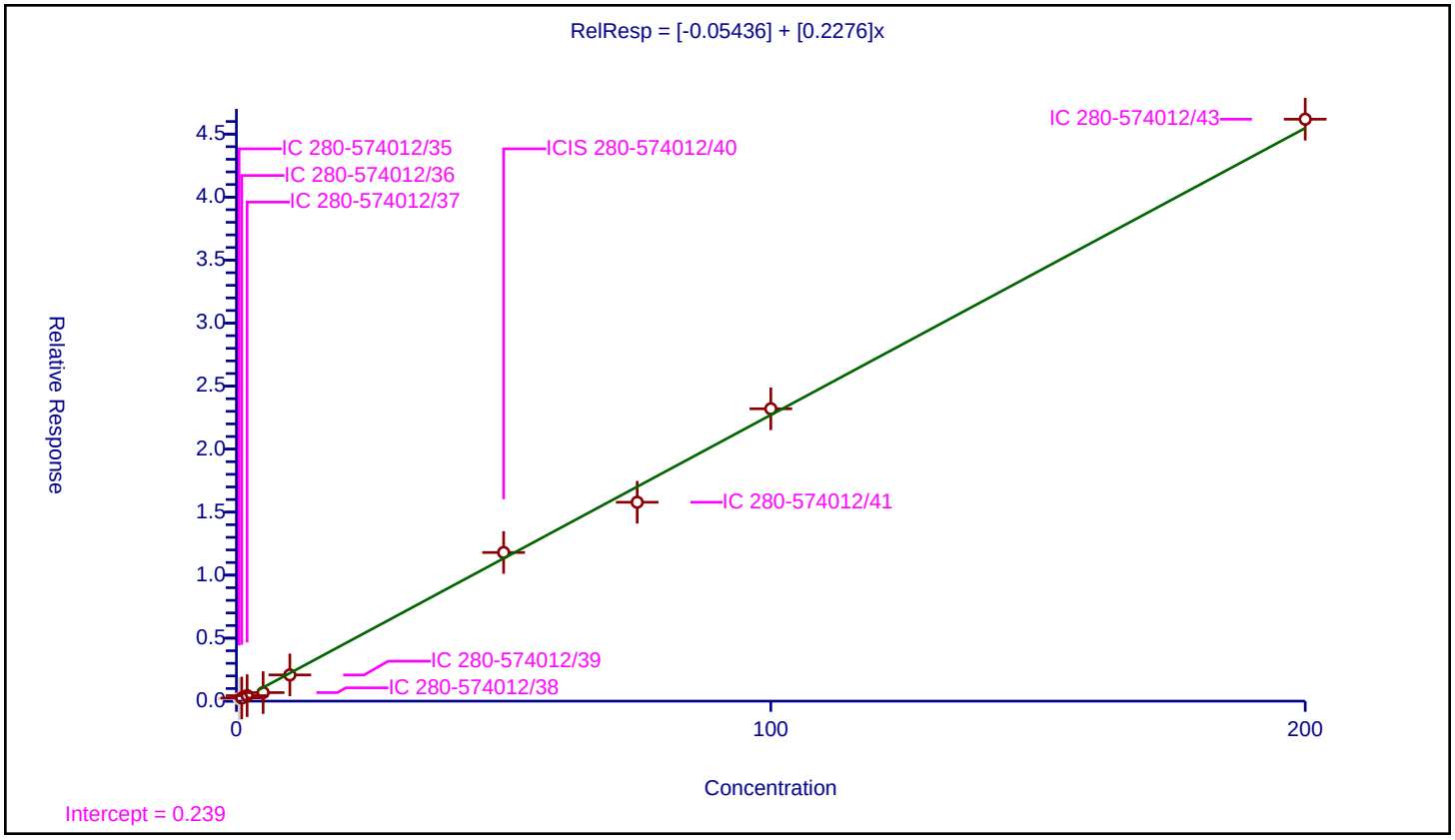
Curve Coefficients

Intercept:	-0.05436
Slope:	0.2276

Error Coefficients

Standard Error:	252000
Relative Standard Error:	20.6
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.201715	50.0	535409.0	0.40343	N
2	IC 280-574012/36	1.0	0.248817	50.0	524280.0	0.248817	Y
3	IC 280-574012/37	2.0	0.437441	50.0	523499.0	0.218721	Y
4	IC 280-574012/38	5.0	0.678107	50.0	529194.0	0.135621	Y
5	IC 280-574012/39	10.0	2.081634	50.0	531986.0	0.208163	Y
6	ICIS 280-574012/40	50.0	11.796252	50.0	513820.0	0.235925	Y
7	IC 280-574012/41	75.0	15.783024	50.0	543866.0	0.21044	Y
8	IC 280-574012/42	100.0	23.201821	50.0	532094.0	0.232018	Y
9	IC 280-574012/43	200.0	46.180103	50.0	568942.0	0.230901	Y



Calibration / Naphthalene

Curve Type:	Linear
Weighting:	Conc
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

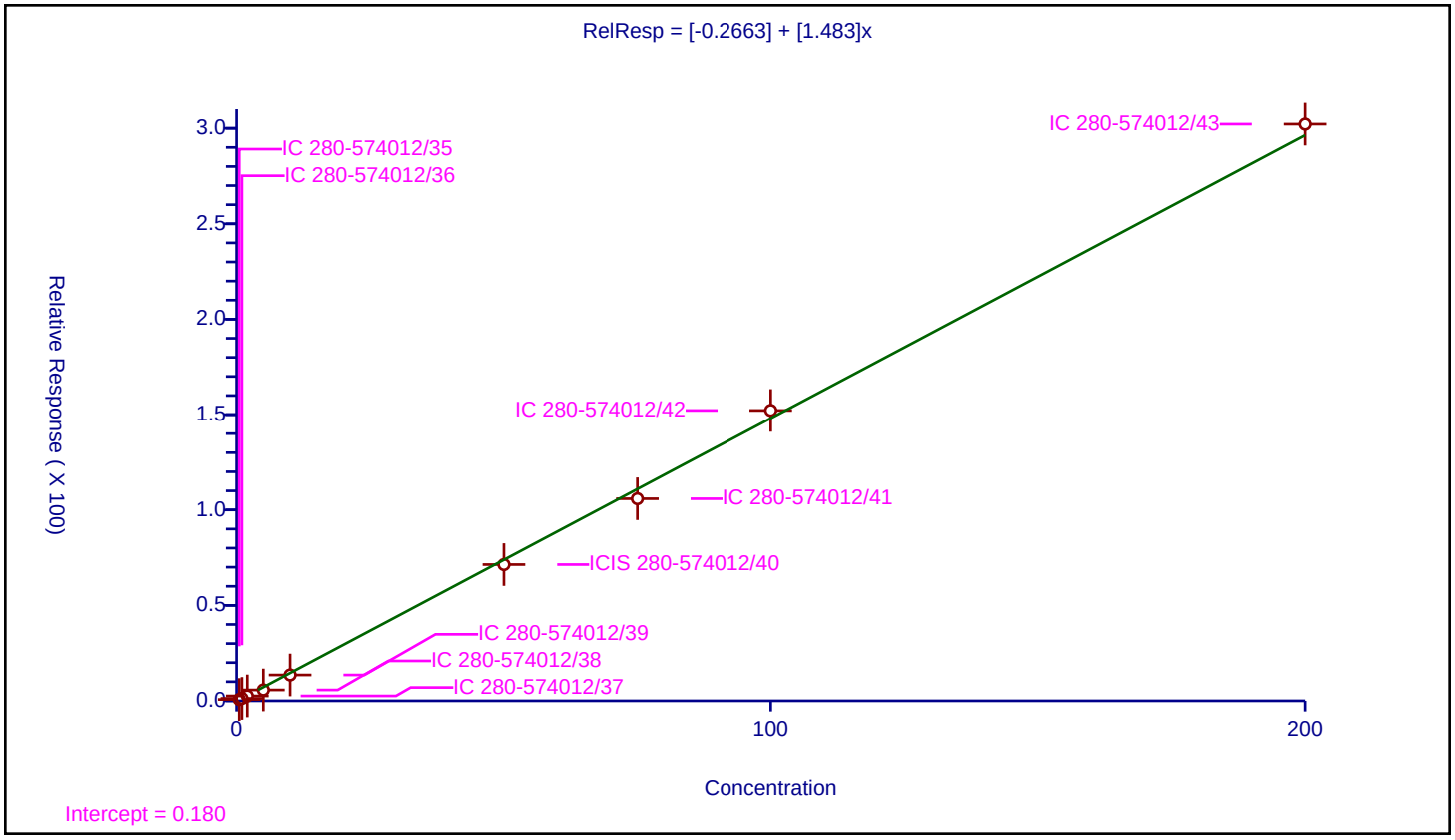
Curve Coefficients

Intercept:	-0.2663
Slope:	1.483

Error Coefficients

Standard Error:	1530000
Relative Standard Error:	14.5
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.707963	50.0	535409.0	1.415927	Y
2	IC 280-574012/36	1.0	1.254768	50.0	524280.0	1.254768	Y
3	IC 280-574012/37	2.0	2.573453	50.0	523499.0	1.286726	Y
4	IC 280-574012/38	5.0	5.701028	50.0	529194.0	1.140206	Y
5	IC 280-574012/39	10.0	13.546127	50.0	531986.0	1.354613	Y
6	ICIS 280-574012/40	50.0	71.380931	50.0	513820.0	1.427619	Y
7	IC 280-574012/41	75.0	105.893731	50.0	543866.0	1.411916	Y
8	IC 280-574012/42	100.0	152.179596	50.0	532094.0	1.521796	Y
9	IC 280-574012/43	200.0	302.189591	50.0	568942.0	1.510948	Y



Calibration / 1,2,3-Trichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

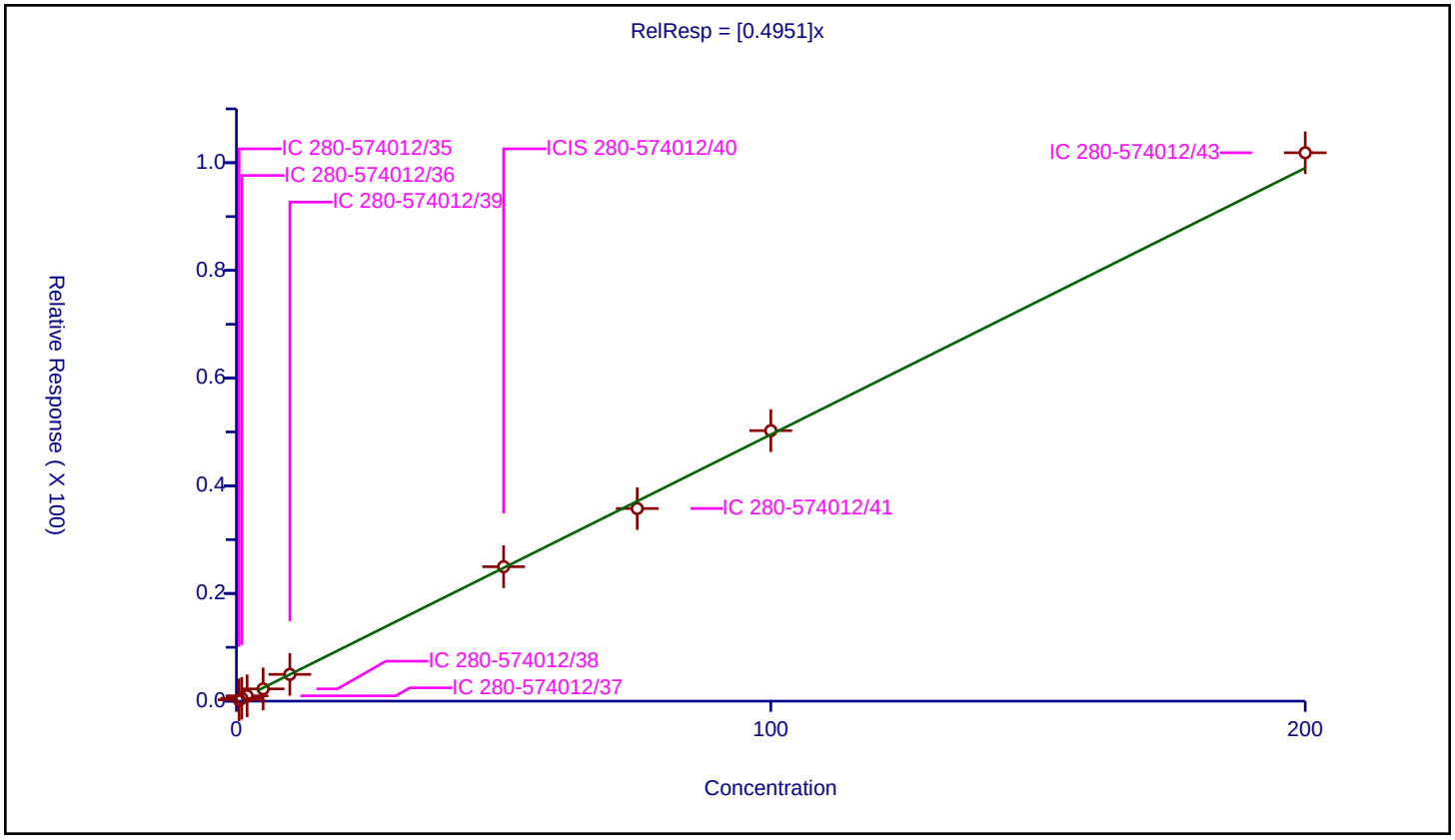
Curve Coefficients

Intercept:	0
Slope:	0.4951

Error Coefficients

Standard Error:	481000
Relative Standard Error:	3.9
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 280-574012/35	0.5	0.249809	50.0	535409.0	0.499618	Y
2	IC 280-574012/36	1.0	0.523194	50.0	524280.0	0.523194	Y
3	IC 280-574012/37	2.0	0.98558	50.0	523499.0	0.49279	Y
4	IC 280-574012/38	5.0	2.276197	50.0	529194.0	0.455239	Y
5	IC 280-574012/39	10.0	4.969022	50.0	531986.0	0.496902	Y
6	ICIS 280-574012/40	50.0	24.969542	50.0	513820.0	0.499391	Y
7	IC 280-574012/41	75.0	35.778758	50.0	543866.0	0.47705	Y
8	IC 280-574012/42	100.0	50.241405	50.0	532094.0	0.502414	Y
9	IC 280-574012/43	200.0	101.85177	50.0	568942.0	0.509259	Y



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: ICV 280-574012/44 Calibration Date: 05/05/2022 17:53

Instrument ID: VMS_MS1 Calib Start Date: 05/05/2022 14:42

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 05/05/2022 17:32

Lab File ID: MS1_5812.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2046	0.2628		64.2	50.0	28.4*	20.0
Chloromethane	Ave	0.1941	0.2290	0.1000	59.0	50.0	18.0	20.0
Vinyl chloride	Ave	0.1865	0.2104		56.4	50.0	12.9	20.0
Bromomethane	Lin1		0.1383		59.8	50.0	19.7	20.0
Chloroethane	Ave	0.1180	0.1296		54.9	50.0	9.8	20.0
Dichlorofluoromethane	Ave	0.3221	0.3393		52.7	50.0	5.3	20.0
Trichlorofluoromethane	Ave	0.2820	0.3063		54.3	50.0	8.6	20.0
Ethyl ether	Ave	0.1372	0.1290		47.0	50.0	-6.0	20.0
Acrolein	Ave	0.0115	0.0172		587	395	48.7*	20.0
1,1-Dichloroethene	Lin1		0.1351		44.7	50.0	-10.5	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Lin1		0.0986		40.9	50.0	-18.2	20.0
Acetone	Ave	0.0470	0.0478		203	200	1.6	20.0
Iodomethane	Lin1		0.2243		44.5	50.0	-10.9	20.0
Carbon disulfide	Ave	0.5139	0.4679		45.5	50.0	-9.0	20.0
Methyl acetate	Ave	0.1052	0.1063		101	100	1.0	20.0
3-Chloro-1-propene	Ave	0.2869	0.2688		46.8	50.0	-6.3	20.0
Methylene Chloride	Ave	0.2034	0.1826		44.9	50.0	-10.2	20.0
t-Butyl alcohol	Lin1		0.0117		496	500	-0.9	20.0
Acrylonitrile	Ave	0.0600	0.0610		509	500	1.8	20.0
Methyl tert-butyl ether	Ave	0.4072	0.4283		52.6	50.0	5.2	20.0
trans-1,2-Dichloroethene	Ave	0.1742	0.1636		47.0	50.0	-6.1	20.0
Hexane	Lin1		0.8759		43.6	50.0	-12.8	20.0
Vinyl acetate	Ave	0.2279	0.2636		116	100	15.7	20.0
1,1-Dichloroethane	Ave	0.3343	0.2966	0.1000	44.4	50.0	-11.3	20.0
2-Butanone (MEK)	Ave	0.0619	0.0662		214	200	6.9	20.0
2,2-Dichloropropane	Ave	0.2382	0.2249		47.2	50.0	-5.6	20.0
cis-1,2-Dichloroethene	Ave	0.1869	0.1845		49.4	50.0	-1.3	20.0
sec-Butyl Alcohol	Lin1		0.0090		1150	1200	-4.4	20.0
Bromochloromethane	Ave	0.1011	0.0938		46.4	50.0	-7.3	20.0
Tetrahydrofuran	Ave	0.0453	0.0459		101	100	1.2	20.0
Chloroform	Ave	0.3226	0.3115		48.3	50.0	-3.5	20.0
1,1,1-Trichloroethane	Ave	0.2675	0.2552		47.7	50.0	-4.6	20.0
Cyclohexane	Ave	0.2999	0.2808		46.8	50.0	-6.4	20.0
1,1-Dichloropropene	Ave	0.2338	0.2216		47.4	50.0	-5.2	20.0
Carbon tetrachloride	Ave	0.2118	0.2069		48.8	50.0	-2.3	20.0
Isobutyl alcohol	Lin1		0.0039		1200	1250	-4.3	20.0
Benzene	Ave	0.6910	0.6479		46.9	50.0	-6.2	20.0
1,2-Dichloroethane	Ave	0.2749	0.2340		42.5	50.0	-14.9	20.0
Trichloroethene	Lin1		0.7227		45.0	50.0	-10.0	20.0
2-Pentanone	Lin1		0.0990		147	160	-8.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: ICV 280-574012/44 Calibration Date: 05/05/2022 17:53

Instrument ID: VMS_MS1 Calib Start Date: 05/05/2022 14:42

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 05/05/2022 17:32

Lab File ID: MS1_5812.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.2121	0.2053		48.4	50.0	-3.2	20.0
1,2-Dichloropropane	Ave	0.1775	0.1708		48.1	50.0	-3.8	20.0
1,4-Dioxane	Lin1		0.0020		955	1000	-4.5	20.0
Dibromomethane	Ave	0.1159	0.1088		47.0	50.0	-6.1	20.0
Bromodichloromethane	Ave	0.2387	0.2319		48.6	50.0	-2.9	20.0
2-Chloroethyl vinyl ether	Ave	0.0879	0.0934		53.1	50.0	6.2	20.0
cis-1,3-Dichloropropene	Lin1		1.079		44.8	50.0	-10.5	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1246	0.1328		213	200	6.6	20.0
Toluene	Ave	0.7173	0.6759		47.1	50.0	-5.8	20.0
trans-1,3-Dichloropropene	Ave	0.2260	0.2360		52.2	50.0	4.4	20.0
Ethyl methacrylate	Ave	0.7130	0.7329		51.4	50.0	2.8	20.0
1,1,2-Trichloroethane	Ave	0.1433	0.1413		49.3	50.0	-1.4	20.0
Tetrachloroethene	Lin1		0.5357		44.5	50.0	-11.0	20.0
1,3-Dichloropropane	Ave	1.081	1.057		48.9	50.0	-2.2	20.0
2-Hexanone	Ave	0.3763	0.3900		207	200	3.7	20.0
Dibromochloromethane	Ave	0.6785	0.6842		50.4	50.0	0.8	20.0
Ethylene Dibromide	Ave	0.6420	0.6339		49.4	50.0	-1.3	20.0
1-Chlorohexane	Lin1		0.8637		35.7	40.0	-10.7	20.0
Chlorobenzene	Ave	2.052	1.862	0.3000	45.4	50.0	-9.3	20.0
1,1,1,2-Tetrachloroethane	Ave	0.6592	0.6526		49.5	50.0	-1.0	20.0
Ethylbenzene	Ave	1.097	1.008		45.9	50.0	-8.1	20.0
m-Xylene & p-Xylene	Ave	1.365	1.251		45.8	50.0	-8.3	20.0
o-Xylene	Ave	1.293	1.265		48.9	50.0	-2.1	20.0
Styrene	Ave	2.224	2.108		47.4	50.0	-5.2	20.0
Bromoform	Ave	0.4287	0.4244	0.1000	49.5	50.0	-1.0	20.0
Isopropylbenzene	Ave	1.947	1.904		48.9	50.0	-2.2	20.0
Cyclohexanone	Ave	0.0225	0.0249		1650	1500	10.3	20.0
1,1,2,2-Tetrachloroethane	Ave	0.4698	0.4535	0.3000	48.3	50.0	-3.5	20.0
Bromobenzene	Ave	0.5316	0.5024		47.3	50.0	-5.5	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1366	0.1349		49.3	50.0	-1.3	20.0
1,2,3-Trichloropropane	Ave	0.1457	0.1400		48.0	50.0	-3.9	20.0
N-Propylbenzene	Ave	0.5417	0.5288		48.8	50.0	-2.4	20.0
2-Chlorotoluene	Ave	0.4840	0.4557		47.1	50.0	-5.8	20.0
1,3,5-Trimethylbenzene	Ave	1.684	1.663		49.4	50.0	-1.3	20.0
4-Chlorotoluene	Ave	0.5089	0.4882		48.0	50.0	-4.1	20.0
tert-Butylbenzene	Ave	1.418	1.391		49.0	50.0	-2.0	20.0
1,2,4-Trimethylbenzene	Ave	1.771	1.736		49.0	50.0	-2.0	20.0
sec-Butylbenzene	Ave	0.4141	0.3986		48.1	50.0	-3.8	20.0
1,3-Dichlorobenzene	Ave	0.9944	0.9623		48.4	50.0	-3.2	20.0
4-Isopropyltoluene	Ave	1.821	1.781		48.9	50.0	-2.2	20.0
1,4-Dichlorobenzene	Ave	1.058	0.9867		46.6	50.0	-6.7	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: ICV 280-574012/44 Calibration Date: 05/05/2022 17:53

Instrument ID: VMS_MS1 Calib Start Date: 05/05/2022 14:42

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 05/05/2022 17:32

Lab File ID: MS1_5812.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	1.593	1.558		48.9	50.0	-2.2	20.0
1,2-Dichlorobenzene	Ave	0.9704	0.9293		47.9	50.0	-4.2	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0959	0.0996		51.9	50.0	3.9	20.0
1,2,4-Trichlorobenzene	Ave	0.6014	0.6143		51.1	50.0	2.1	20.0
Hexachlorobutadiene	Lin1		0.2197		48.5	50.0	-3.0	20.0
Naphthalene	Lin1		1.697		57.4	50.0	14.8	20.0
1,2,3-Trichlorobenzene	Ave	0.4951	0.5489		55.4	50.0	10.9	20.0
Dibromofluoromethane (Surr)	Ave	0.2667	0.2551		47.8	50.0	-4.3	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3080	0.3126		50.7	50.0	1.5	20.0
Toluene-d8 (Surr)	Ave	4.077	4.030		49.4	50.0	-1.2	20.0
4-Bromofluorobenzene (Surr)	Ave	0.8799	0.8998		51.1	50.0	2.3	20.0

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5812.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 05-May-2022 17:53:30 ALS Bottle#: 10 Worklist Smp#: 44
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICV
Operator ID: SUNLEEC Instrument ID: VMS_MS1
Sublist:

Method: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-May-2022 19:59:18 Calib Date: 05-May-2022 17:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5811.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1632

First Level Reviewer: peppinga Date: 05-May-2022 18:38:15

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.794	5.794	0.000	98	1376257	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.517	8.517	0.000	87	328356	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.794	10.794	0.000	95	546165	50.0	50.0	
$ 5 Dibromofluoromethane (Surr)	111	5.221	5.221	0.000	92	351101	50.0	47.8	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.515	5.514	0.001	0	430192	50.0	50.7	
$ 7 Toluene-d8 (Surr)	98	7.177	7.176	0.001	93	1323410	50.0	49.4	
$ 8 4-Bromofluorobenzene (Surr)	95	9.649	9.648	0.001	90	491435	50.0	51.1	
11 Dichlorodifluoromethane	85	1.674	1.674	0.000	100	361742	50.0	64.2	
12 Chloromethane	50	1.869	1.869	0.000	99	315156	50.0	59.0	
13 Vinyl chloride	62	1.967	1.967	0.000	98	289607	50.0	56.4	
15 Bromomethane	94	2.316	2.316	0.000	93	190394	50.0	59.8	
16 Chloroethane	64	2.428	2.428	0.000	98	178362	50.0	54.9	
17 Dichlorofluoromethane	67	2.652	2.651	0.001	98	466960	50.0	52.7	
18 Trichlorofluoromethane	101	2.693	2.693	0.000	98	421533	50.0	54.3	
20 Ethyl ether	59	2.959	2.959	0.000	95	177593	50.0	47.0	
22 Acrolein	56	3.098	3.098	0.000	97	186569	395.0	587.3	
23 1,1-Dichloroethene	96	3.196	3.196	0.000	95	185956	50.0	44.7	
24 112TCTFE	151	3.210	3.210	0.000	94	135633	50.0	40.9	
25 Acetone	43	3.224	3.224	0.000	98	262885	200.0	203.1	
26 Iodomethane	142	3.350	3.350	0.000	98	308723	50.0	44.5	
28 Carbon disulfide	76	3.406	3.406	0.000	100	643969	50.0	45.5	
30 Methyl acetate	43	3.517	3.531	-0.014	98	292641	100.0	101.0	
31 3-Chloro-1-propene	41	3.545	3.545	0.000	89	369903	50.0	46.8	
32 Methylene Chloride	84	3.671	3.671	0.000	93	251247	50.0	44.9	
33 2-Methyl-2-propanol	59	3.741	3.741	0.000	96	160377	500.0	495.5	
34 Acrylonitrile	53	3.867	3.866	0.001	98	839844	500.0	508.9	
35 Methyl tert-butyl ether	73	3.895	3.894	0.001	97	589403	50.0	52.6	
36 trans-1,2-Dichloroethene	96	3.909	3.908	0.001	98	225207	50.0	47.0	
37 Hexane	57	4.160	4.160	0.000	95	287604	50.0	43.6	
39 Vinyl acetate	43	4.286	4.285	0.001	98	725672	100.0	115.7	
40 1,1-Dichloroethane	63	4.300	4.299	0.001	96	408186	50.0	44.4	

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	4.774	4.774	0.000	100	364329	200.0	213.8	
49 2,2-Dichloropropane	77	4.802	4.802	0.000	92	309584	50.0	47.2	
48 cis-1,2-Dichloroethene	96	4.802	4.802	0.000	85	253965	50.0	49.4	
51 sec-Butyl Alcohol	45	4.928	4.928	0.000	98	296923	1200.0	1147.2	
53 Chlorobromomethane	128	4.998	4.998	0.000	98	129042	50.0	46.4	
54 Tetrahydrofuran	42	5.012	5.012	0.000	87	126260	100.0	101.2	
55 Chloroform	83	5.082	5.082	0.000	95	428658	50.0	48.3	
56 1,1,1-Trichloroethane	97	5.235	5.235	0.000	98	351279	50.0	47.7	
57 Cyclohexane	56	5.291	5.305	-0.014	95	386429	50.0	46.8	
58 1,1-Dichloropropene	75	5.361	5.375	-0.014	91	304962	50.0	47.4	
59 Carbon tetrachloride	117	5.375	5.375	0.000	91	284699	50.0	48.8	
60 Isobutyl alcohol	41	5.417	5.417	0.000	93	133071	1250.0	1195.7	
63 Benzene	78	5.543	5.542	0.001	97	891697	50.0	46.9	
64 1,2-Dichloroethane	62	5.584	5.584	0.000	98	321988	50.0	42.5	
66 n-Heptane	43	5.766	5.766	0.000	92	248201	50.0	43.9	
68 Trichloroethene	95	6.101	6.101	0.000	97	237298	50.0	45.0	
69 2-Pentanone	43	6.227	6.227	0.000	99	436140	160.0	147.0	
70 Methylcyclohexane	55	6.311	6.311	0.000	91	282551	50.0	48.4	
71 1,2-Dichloropropane	63	6.325	6.325	0.000	93	235049	50.0	48.1	
73 1,4-Dioxane	88	6.381	6.380	0.001	96	55091	1000.0	955.5	
74 Dibromomethane	93	6.408	6.408	0.000	95	149759	50.0	47.0	
75 Dichlorobromomethane	83	6.548	6.548	0.000	99	319089	50.0	48.6	
77 2-Chloroethyl vinyl ether	63	6.786	6.785	0.001	92	128534	50.0	53.1	
78 cis-1,3-Dichloropropene	75	6.925	6.925	0.000	93	354304	50.0	44.8	
79 4-Methyl-2-pentanone (MIBK)	43	7.037	7.037	0.000	99	731031	200.0	213.2	
82 Toluene	91	7.232	7.232	0.000	98	930254	50.0	47.1	
84 trans-1,3-Dichloropropene	75	7.428	7.428	0.000	98	324785	50.0	52.2	
85 Ethyl methacrylate	69	7.470	7.470	0.000	92	240650	50.0	51.4	
87 1,1,2-Trichloroethane	97	7.610	7.609	0.001	93	194480	50.0	49.3	
89 Tetrachloroethene	164	7.707	7.707	0.000	97	175911	50.0	44.5	
90 1,3-Dichloropropane	76	7.763	7.763	0.000	95	347064	50.0	48.9	
91 2-Hexanone	43	7.791	7.791	0.000	98	512286	200.0	207.3	
95 Chlorodibromomethane	129	7.973	7.973	0.000	90	224661	50.0	50.4	
96 Ethylene Dibromide	107	8.084	8.084	0.000	99	208143	50.0	49.4	
98 1-Chlorohexane	91	8.503	8.503	0.000	96	226871	40.0	35.7	
99 Chlorobenzene	112	8.545	8.545	0.000	94	611262	50.0	45.4	
100 1,1,1,2-Tetrachloroethane	131	8.615	8.615	0.000	49	214272	50.0	49.5	
101 Ethylbenzene	106	8.629	8.629	0.000	99	331060	50.0	45.9	
102 m-Xylene & p-Xylene	106	8.755	8.741	0.014	0	410723	50.0	45.8	
103 o-Xylene	106	9.118	9.118	0.000	96	415468	50.0	48.9	
104 Styrene	104	9.132	9.132	0.000	93	692108	50.0	47.4	
106 Bromoform	173	9.327	9.327	0.000	95	139359	50.0	49.5	
107 Isopropylbenzene	105	9.467	9.467	0.000	96	1039824	50.0	48.9	
109 Cyclohexanone	55	9.565	9.565	0.000	93	244931	1500.0	1654.7	
110 1,1,2,2-Tetrachloroethane	83	9.760	9.760	0.000	95	247707	50.0	48.3	
111 Bromobenzene	156	9.788	9.788	0.000	98	274389	50.0	47.3	
112 trans-1,4-Dichloro-2-butene	53	9.802	9.802	0.000	84	73652	50.0	49.3	
113 1,2,3-Trichloropropane	110	9.830	9.830	0.000	86	76478	50.0	48.0	
114 N-Propylbenzene	120	9.872	9.872	0.000	99	288809	50.0	48.8	
115 2-Chlorotoluene	126	9.970	9.970	0.000	95	248887	50.0	47.1	
116 1,3,5-Trimethylbenzene	105	10.054	10.054	0.000	94	908241	50.0	49.4	
117 4-Chlorotoluene	126	10.096	10.095	0.001	97	266611	50.0	48.0	

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	10.361	10.361	0.000	94	759449	50.0	49.0	
119 1,2,4-Trimethylbenzene	105	10.431	10.431	0.000	98	948332	50.0	49.0	
120 sec-Butylbenzene	134	10.584	10.584	0.000	95	217708	50.0	48.1	
121 1,3-Dichlorobenzene	146	10.724	10.710	0.014	98	525596	50.0	48.4	
122 4-Isopropyltoluene	119	10.738	10.738	0.000	97	972486	50.0	48.9	
123 1,4-Dichlorobenzene	146	10.822	10.822	0.000	95	538888	50.0	46.6	
125 n-Butylbenzene	91	11.143	11.143	0.000	98	850819	50.0	48.9	
127 1,2-Dichlorobenzene	146	11.171	11.171	0.000	97	507546	50.0	47.9	
128 1,2-Dibromo-3-Chloropropane	157	11.967	11.967	0.000	83	54417	50.0	51.9	
130 1,2,4-Trichlorobenzene	180	12.791	12.791	0.000	94	335507	50.0	51.1	
131 Hexachlorobutadiene	225	12.931	12.931	0.000	96	120006	50.0	48.5	
132 Naphthalene	128	13.056	13.056	0.000	98	927053	50.0	57.4	
134 1,2,3-Trichlorobenzene	180	13.280	13.280	0.000	94	299787	50.0	55.4	
S 149 1,2-Dichloroethene, Total (URS)	96				0		100.0	96.3	
S 156 1,3-Dichloropropene, Total	1				0		100.0	97.0	
S 155 Xylenes, Total	106				0		100.0	94.8	
S 153 Xylenes, Total (URS)	1				0		100.0	94.8	
S 151 Trihalomethanes, Total	1				0		200.0	196.8	
S 150 1,2-Dichloroethene, Total	1				0		100.0	96.3	

QC Flag Legend

Processing Flags

Reagents:

MV-MegaMain B_00068	Amount Added:	25.00	Units: uL	
Acrolein_B_00025	Amount Added:	25.00	Units: uL	
MV-Gas B_00110	Amount Added:	10.00	Units: uL	
mv-IS_SS_00038	Amount Added:	5.00	Units: uL	Run Reagent

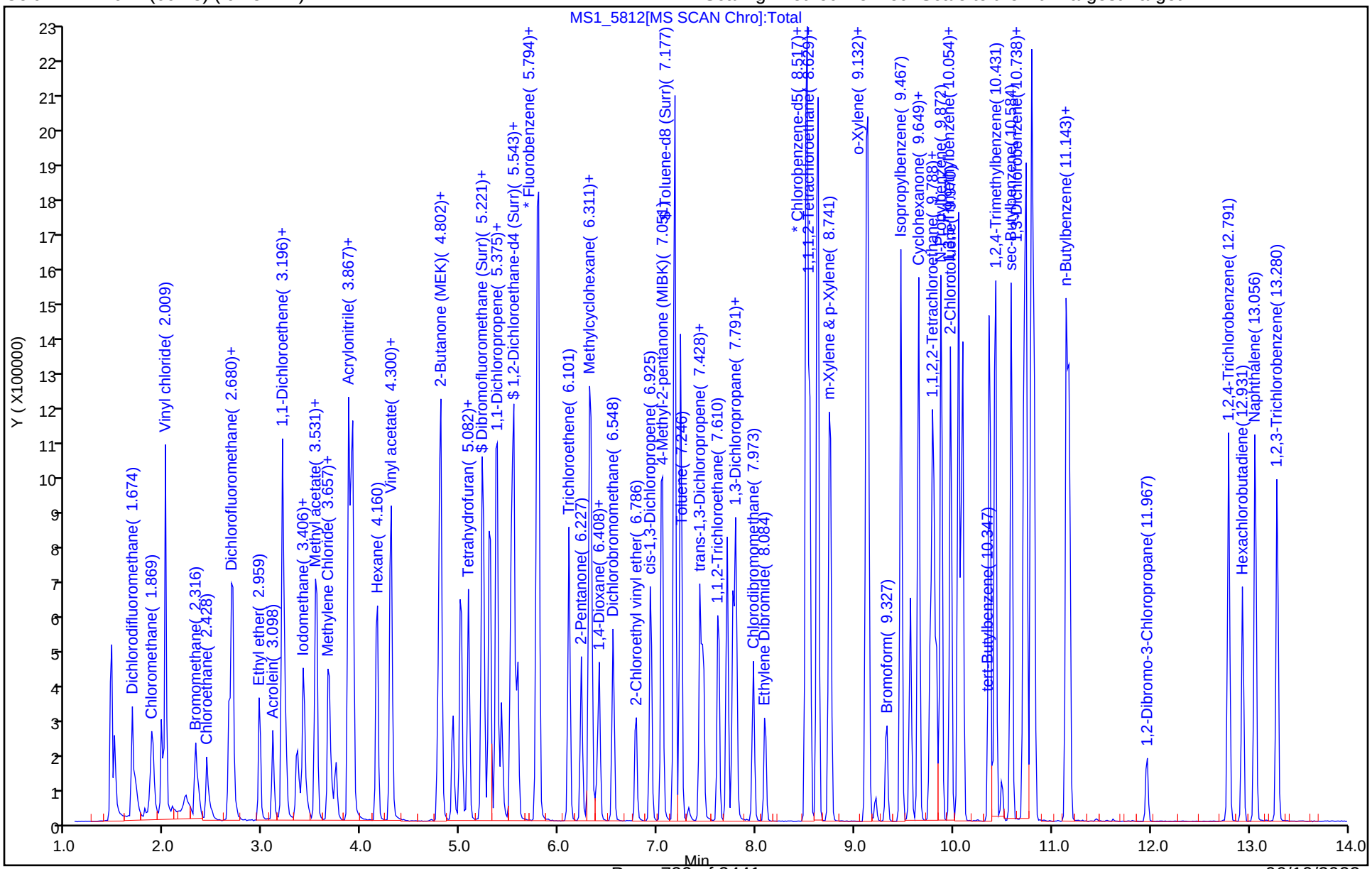
Report Date: 05-May-2022 19:59:27 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5812.D

Injection Date:	05-May-2022 17:53:30	Instrument ID:	VMS_MS1	Operator ID:	SUNLEEC
Lims ID:	ICV			Worklist Smp#:	44
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
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 Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576482/2 Calibration Date: 05/27/2022 18:02

Instrument ID: VMS_MS1 Calib Start Date: 05/05/2022 14:42

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 05/05/2022 17:32

Lab File ID: MS1_6845b.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2046	0.1968		48.1	50.0	-3.8	20.0
Chloromethane	Ave	0.1941	0.1788	0.1000	46.1	50.0	-7.9	20.0
Vinyl chloride	Ave	0.1865	0.1709		45.8	50.0	-8.4	20.0
Bromomethane	Lin1		0.1246		53.9	50.0	7.8	20.0
Chloroethane	Ave	0.1180	0.1274		54.0	50.0	8.0	20.0
Dichlorofluoromethane	Ave	0.3221	0.3263		50.6	50.0	1.3	20.0
Trichlorofluoromethane	Ave	0.2820	0.2865		50.8	50.0	1.6	20.0
Ethyl ether	Ave	0.1372	0.1269		46.3	50.0	-7.5	20.0
Acrolein	Ave	0.0115	0.0113		388	395	-1.8	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Lin1		0.1041		43.2	50.0	-13.6	20.0
1,1-Dichloroethene	Lin1		0.1323		43.8	50.0	-12.4	20.0
Acetone	Ave	0.0470	0.0408		174	200	-13.2	20.0
Iodomethane	Lin1		0.1849		36.8	50.0	-26.4*	20.0
Carbon disulfide	Ave	0.5139	0.4388		42.7	50.0	-14.6	20.0
Methyl acetate	Ave	0.1052	0.1001		95.1	100	-4.9	20.0
3-Chloro-1-propene	Ave	0.2869	0.2379		41.5	50.0	-17.0	20.0
Methylene Chloride	Ave	0.2034	0.1756		43.2	50.0	-13.7	20.0
t-Butyl alcohol	Lin1		0.0106		452	500	-9.6	20.0
Acrylonitrile	Ave	0.0600	0.0577		481	500	-3.7	20.0
Methyl tert-butyl ether	Ave	0.4072	0.4233		52.0	50.0	3.9	20.0
trans-1,2-Dichloroethene	Ave	0.1742	0.1602		46.0	50.0	-8.0	20.0
Hexane	Lin1		0.8330		41.5	50.0	-17.1	20.0
Vinyl acetate	Ave	0.2279	0.2306		101	100	1.2	20.0
1,1-Dichloroethane	Ave	0.3343	0.2994	0.1000	44.8	50.0	-10.5	20.0
2-Butanone (MEK)	Ave	0.0619	0.0624		202	200	0.8	20.0
cis-1,2-Dichloroethene	Ave	0.1869	0.1784		47.7	50.0	-4.6	20.0
2,2-Dichloropropane	Ave	0.2382	0.2013		42.3	50.0	-15.5	20.0
sec-Butyl Alcohol	Lin1		0.0082		1050	1200	-12.6	20.0
Bromochloromethane	Ave	0.1011	0.0875		43.3	50.0	-13.4	20.0
Tetrahydrofuran	Ave	0.0453	0.0429		94.5	100	-5.5	20.0
Chloroform	Ave	0.3226	0.3022		46.8	50.0	-6.3	20.0
1,1,1-Trichloroethane	Ave	0.2675	0.2504		46.8	50.0	-6.4	20.0
Cyclohexane	Ave	0.2999	0.2707		45.1	50.0	-9.7	20.0
1,1-Dichloropropene	Ave	0.2338	0.2184		46.7	50.0	-6.6	20.0
Carbon tetrachloride	Ave	0.2118	0.1951		46.1	50.0	-7.9	20.0
Isobutyl alcohol	Lin1		0.0035		1090	1250	-12.4	20.0
Benzene	Ave	0.6910	0.6457		46.7	50.0	-6.6	20.0
1,2-Dichloroethane	Ave	0.2749	0.2457		44.7	50.0	-10.6	20.0
Trichloroethene	Lin1		0.7465		46.5	50.0	-7.1	20.0
2-Pentanone	Lin1		0.0941		140	160	-12.6	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576482/2 Calibration Date: 05/27/2022 18:02

Instrument ID: VMS_MS1 Calib Start Date: 05/05/2022 14:42

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 05/05/2022 17:32

Lab File ID: MS1_6845b.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.2121	0.1923		45.3	50.0	-9.3	20.0
1,2-Dichloropropane	Ave	0.1775	0.1686		47.5	50.0	-5.0	20.0
1,4-Dioxane	Lin1		0.0018		851	1000	-14.9	20.0
Dibromomethane	Ave	0.1159	0.1045		45.1	50.0	-9.8	20.0
Bromodichloromethane	Ave	0.2387	0.2285		47.9	50.0	-4.2	20.0
2-Chloroethyl vinyl ether	Ave	0.0879	0.1001		56.9	50.0	13.8	20.0
cis-1,3-Dichloropropene	Lin1		1.118		46.4	50.0	-7.3	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1246	0.1268		204	200	1.8	20.0
Toluene	Ave	0.7173	0.6736		47.0	50.0	-6.1	20.0
trans-1,3-Dichloropropene	Ave	0.2260	0.2263		50.1	50.0	0.1	20.0
Ethyl methacrylate	Ave	0.7130	0.7804		54.7	50.0	9.5	20.0
1,1,2-Trichloroethane	Ave	0.1433	0.1435		50.1	50.0	0.1	20.0
Tetrachloroethene	Lin1		0.5150		42.8	50.0	-14.4	20.0
1,3-Dichloropropane	Ave	1.081	1.088		50.3	50.0	0.6	20.0
2-Hexanone	Ave	0.3763	0.3766		200	200	0.0	20.0
Dibromochloromethane	Ave	0.6785	0.6750		49.7	50.0	-0.5	20.0
Ethylene Dibromide	Ave	0.6420	0.6224		48.5	50.0	-3.1	20.0
1-Chlorohexane	Lin1		0.8268		34.2	40.0	-14.5	20.0
Chlorobenzene	Ave	2.052	1.926	0.3000	46.9	50.0	-6.2	20.0
1,1,1,2-Tetrachloroethane	Ave	0.6592	0.6536		49.6	50.0	-0.8	20.0
Ethylbenzene	Ave	1.097	1.032		47.0	50.0	-5.9	20.0
m-Xylene & p-Xylene	Ave	1.365	1.288		47.2	50.0	-5.6	20.0
o-Xylene	Ave	1.293	1.262		48.8	50.0	-2.4	20.0
Styrene	Ave	2.224	2.284		51.4	50.0	2.7	20.0
Bromoform	Ave	0.4287	0.3986	0.1000	46.5	50.0	-7.0	20.0
Isopropylbenzene	Ave	1.947	2.029		52.1	50.0	4.2	20.0
Cyclohexanone	Ave	0.0225	0.0215		1430	1500	-4.6	20.0
1,1,2,2-Tetrachloroethane	Ave	0.4698	0.4548	0.3000	48.4	50.0	-3.2	20.0
Bromobenzene	Ave	0.5316	0.5129		48.2	50.0	-3.5	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1366	0.1393		51.0	50.0	2.0	20.0
1,2,3-Trichloropropane	Ave	0.1457	0.1481		50.8	50.0	1.6	20.0
N-Propylbenzene	Ave	0.5417	0.5441		50.2	50.0	0.4	20.0
2-Chlorotoluene	Ave	0.4840	0.4636		47.9	50.0	-4.2	20.0
1,3,5-Trimethylbenzene	Ave	1.684	1.740		51.7	50.0	3.4	20.0
4-Chlorotoluene	Ave	0.5089	0.4933		48.5	50.0	-3.1	20.0
tert-Butylbenzene	Ave	1.418	1.411		49.7	50.0	-0.5	20.0
1,2,4-Trimethylbenzene	Ave	1.771	1.807		51.0	50.0	2.1	20.0
sec-Butylbenzene	Ave	0.4141	0.3827		46.2	50.0	-7.6	20.0
1,3-Dichlorobenzene	Ave	0.9944	0.9468		47.6	50.0	-4.8	20.0
4-Isopropyltoluene	Ave	1.821	1.767		48.5	50.0	-3.0	20.0
1,4-Dichlorobenzene	Ave	1.058	0.9793		46.3	50.0	-7.4	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576482/2 Calibration Date: 05/27/2022 18:02

Instrument ID: VMS_MS1 Calib Start Date: 05/05/2022 14:42

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 05/05/2022 17:32

Lab File ID: MS1_6845b.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	1.593	1.552		48.7	50.0	-2.6	20.0
1,2-Dichlorobenzene	Ave	0.9704	0.9139		47.1	50.0	-5.8	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0959	0.0825		43.0	50.0	-14.0	20.0
1,2,4-Trichlorobenzene	Ave	0.6014	0.5152		42.8	50.0	-14.3	20.0
Hexachlorobutadiene	Lin1		0.1779		39.3	50.0	-21.4*	20.0
Naphthalene	Lin1		1.282		43.4	50.0	-13.2	20.0
1,2,3-Trichlorobenzene	Ave	0.4951	0.4089		41.3	50.0	-17.4	20.0
Dibromofluoromethane (Surr)	Ave	0.2667	0.2579		48.4	50.0	-3.3	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3080	0.2963		48.1	50.0	-3.8	20.0
Toluene-d8 (Surr)	Ave	4.077	4.173		51.2	50.0	2.3	20.0
4-Bromofluorobenzene (Surr)	Ave	0.8799	0.9712		55.2	50.0	10.4	20.0

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6845b.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 27-May-2022 18:02:30 ALS Bottle#: 24 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ccvc
Operator ID: sunleec Instrument ID: VMS_MS1
Sublist: chrom-AQ_VMS1_8260*sub164

Method: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 27-May-2022 19:16:12 Calib Date: 05-May-2022 17:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5811.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1624

First Level Reviewer: burkes Date: 27-May-2022 19:16:12

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.794	5.794	0.000	98	1168464	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.517	8.517	0.000	88	268060	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.794	10.794	0.000	96	434742	50.0	50.0	
$ 5 Dibromofluoromethane (Surr)	111	5.221	5.221	0.000	92	301398	50.0	48.4	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.515	5.515	0.000	0	346264	50.0	48.1	
$ 7 Toluene-d8 (Surr)	98	7.177	7.177	0.000	94	1118682	50.0	51.2	
$ 8 4-Bromofluorobenzene (Surr)	95	9.649	9.649	0.000	87	422215	50.0	55.2	
11 Dichlorodifluoromethane	85	1.674	1.674	0.000	100	230009	50.0	48.1	
12 Chloromethane	50	1.869	1.869	0.000	98	208938	50.0	46.1	
13 Vinyl chloride	62	1.967	1.967	0.000	100	199661	50.0	45.8	
15 Bromomethane	94	2.316	2.316	0.000	92	145608	50.0	53.9	
16 Chloroethane	64	2.428	2.428	0.000	99	148893	50.0	54.0	
17 Dichlorofluoromethane	67	2.652	2.652	0.000	97	381255	50.0	50.6	
18 Trichlorofluoromethane	101	2.679	2.679	0.000	99	334711	50.0	50.8	
20 Ethyl ether	59	2.959	2.959	0.000	95	148324	50.0	46.3	
22 Acrolein	56	3.098	3.098	0.000	98	104635	395.0	387.9	
23 1,1-Dichloroethene	96	3.196	3.196	0.000	97	154530	50.0	43.8	
24 112TCTFE	151	3.196	3.196	0.000	94	121618	50.0	43.2	
25 Acetone	43	3.224	3.224	0.000	99	190834	200.0	173.7	
26 Iodomethane	142	3.336	3.336	0.000	99	216098	50.0	36.8	
28 Carbon disulfide	76	3.406	3.406	0.000	100	512666	50.0	42.7	
30 Methyl acetate	43	3.517	3.517	0.000	99	233867	100.0	95.1	
31 3-Chloro-1-propene	41	3.531	3.531	0.000	88	278036	50.0	41.5	
32 Methylene Chloride	84	3.657	3.657	0.000	94	205163	50.0	43.2	
33 2-Methyl-2-propanol	59	3.741	3.741	0.000	96	124095	500.0	451.9	
34 Acrylonitrile	53	3.867	3.867	0.000	98	674287	500.0	481.3	
35 Methyl tert-butyl ether	73	3.894	3.894	0.000	97	494562	50.0	52.0	
36 trans-1,2-Dichloroethene	96	3.908	3.908	0.000	98	187245	50.0	46.0	
37 Hexane	57	4.146	4.146	0.000	95	223293	50.0	41.5	
39 Vinyl acetate	43	4.286	4.286	0.000	98	538825	100.0	101.2	
40 1,1-Dichloroethane	63	4.300	4.300	0.000	96	349796	50.0	44.8	

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	4.774	4.774	0.000	100	291515	200.0	201.5	
48 cis-1,2-Dichloroethene	96	4.788	4.788	0.000	84	208459	50.0	47.7	
49 2,2-Dichloropropane	77	4.802	4.802	0.000	91	235243	50.0	42.3	
51 sec-Butyl Alcohol	45	4.928	4.928	0.000	98	229671	1200.0	1048.2	
53 Chlorobromomethane	128	4.998	4.998	0.000	98	102283	50.0	43.3	
54 Tetrahydrofuran	42	5.012	5.012	0.000	86	100155	100.0	94.5	
55 Chloroform	83	5.082	5.082	0.000	94	353158	50.0	46.8	
56 1,1,1-Trichloroethane	97	5.235	5.235	0.000	98	292584	50.0	46.8	
57 Cyclohexane	56	5.291	5.291	0.000	94	316353	50.0	45.1	
58 1,1-Dichloropropene	75	5.361	5.361	0.000	92	255176	50.0	46.7	
59 Carbon tetrachloride	117	5.375	5.375	0.000	88	227955	50.0	46.1	
60 Isobutyl alcohol	41	5.417	5.417	0.000	93	103269	1250.0	1094.6	
63 Benzene	78	5.543	5.543	0.000	98	754421	50.0	46.7	
64 1,2-Dichloroethane	62	5.584	5.584	0.000	98	287116	50.0	44.7	
66 n-Heptane	43	5.766	5.766	0.000	91	192139	50.0	40.1	
68 Trichloroethene	95	6.101	6.101	0.000	97	200097	50.0	46.5	
69 2-Pentanone	43	6.227	6.227	0.000	99	351999	160.0	139.9	
70 Methylcyclohexane	55	6.311	6.311	0.000	91	224721	50.0	45.3	
71 1,2-Dichloropropane	63	6.325	6.325	0.000	92	197038	50.0	47.5	
73 1,4-Dioxane	88	6.380	6.380	0.000	98	41643	1000.0	850.5	
74 Dibromomethane	93	6.408	6.408	0.000	95	122097	50.0	45.1	
75 Dichlorobromomethane	83	6.548	6.548	0.000	99	267049	50.0	47.9	
77 2-Chloroethyl vinyl ether	63	6.786	6.786	0.000	93	116978	50.0	56.9	
78 cis-1,3-Dichloropropene	75	6.925	6.925	0.000	93	299588	50.0	46.4	
79 4-Methyl-2-pentanone (MIBK)	43	7.037	7.037	0.000	99	592667	200.0	203.6	
82 Toluene	91	7.232	7.232	0.000	98	787114	50.0	47.0	
84 trans-1,3-Dichloropropene	75	7.428	7.428	0.000	99	264421	50.0	50.1	
85 Ethyl methacrylate	69	7.456	7.456	0.000	91	209185	50.0	54.7	
87 1,1,2-Trichloroethane	97	7.610	7.610	0.000	91	167622	50.0	50.1	
89 Tetrachloroethene	164	7.707	7.707	0.000	96	138061	50.0	42.8	
90 1,3-Dichloropropane	76	7.763	7.763	0.000	95	291570	50.0	50.3	
91 2-Hexanone	43	7.791	7.791	0.000	97	403815	200.0	200.2	
95 Chlorodibromomethane	129	7.973	7.973	0.000	89	180938	50.0	49.7	
96 Ethylene Dibromide	107	8.084	8.084	0.000	100	166839	50.0	48.5	
98 1-Chlorohexane	91	8.503	8.503	0.000	96	177301	40.0	34.2	
99 Chlorobenzene	112	8.545	8.545	0.000	93	516224	50.0	46.9	
100 1,1,1,2-Tetrachloroethane	131	8.615	8.615	0.000	91	175196	50.0	49.6	
101 Ethylbenzene	106	8.629	8.629	0.000	99	276716	50.0	47.0	
102 m-Xylene & p-Xylene	106	8.741	8.741	0.000	0	345328	50.0	47.2	
103 o-Xylene	106	9.118	9.118	0.000	96	338331	50.0	48.8	
104 Styrene	104	9.132	9.132	0.000	94	612302	50.0	51.4	
106 Bromoform	173	9.327	9.327	0.000	94	106838	50.0	46.5	
107 Isopropylbenzene	105	9.467	9.467	0.000	96	881998	50.0	52.1	
109 Cyclohexanone	55	9.565	9.565	0.000	94	172875	1500.0	1430.6	
110 1,1,2,2-Tetrachloroethane	83	9.760	9.760	0.000	95	197701	50.0	48.4	
111 Bromobenzene	156	9.788	9.788	0.000	98	222997	50.0	48.2	
112 trans-1,4-Dichloro-2-butene	53	9.802	9.802	0.000	84	60568	50.0	51.0	
113 1,2,3-Trichloropropane	110	9.830	9.830	0.000	85	64376	50.0	50.8	
114 N-Propylbenzene	120	9.872	9.872	0.000	99	236532	50.0	50.2	
115 2-Chlorotoluene	126	9.970	9.970	0.000	95	201557	50.0	47.9	
116 1,3,5-Trimethylbenzene	105	10.054	10.054	0.000	95	756661	50.0	51.7	
117 4-Chlorotoluene	126	10.096	10.096	0.000	98	214460	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
118 tert-Butylbenzene	119	10.361	10.361	0.000	93	613420	50.0	49.7	
119 1,2,4-Trimethylbenzene	105	10.431	10.431	0.000	98	785776	50.0	51.0	
120 sec-Butylbenzene	134	10.584	10.584	0.000	95	166359	50.0	46.2	
121 1,3-Dichlorobenzene	146	10.710	10.710	0.000	97	411605	50.0	47.6	
122 4-Isopropyltoluene	119	10.738	10.738	0.000	97	768114	50.0	48.5	
123 1,4-Dichlorobenzene	146	10.822	10.822	0.000	96	425724	50.0	46.3	
125 n-Butylbenzene	91	11.143	11.143	0.000	98	674756	50.0	48.7	
127 1,2-Dichlorobenzene	146	11.171	11.171	0.000	96	397298	50.0	47.1	
128 1,2-Dibromo-3-Chloropropane	157	11.967	11.967	0.000	83	35858	50.0	43.0	
130 1,2,4-Trichlorobenzene	180	12.791	12.791	0.000	94	223968	50.0	42.8	
131 Hexachlorobutadiene	225	12.931	12.931	0.000	95	77359	50.0	39.3	
132 Naphthalene	128	13.056	13.056	0.000	98	557199	50.0	43.4	
134 1,2,3-Trichlorobenzene	180	13.280	13.280	0.000	94	177752	50.0	41.3	
S 149 1,2-Dichloroethene, Total (URS)	96				0		100.0	93.7	
S 156 1,3-Dichloropropene, Total	1				0		100.0	96.4	
S 155 Xylenes, Total	106				0		100.0	96.0	
S 153 Xylenes, Total (URS)	1				0		100.0	96.0	
S 151 Trihalomethanes, Total	1				0		200.0	190.9	
S 150 1,2-Dichloroethene, Total	1				0		100.0	93.7	

Reagents:

Acrolein_A_00008	Amount Added:	25.00	Units: uL	
MV-MegaMainA_00072	Amount Added:	25.00	Units: uL	
MV-Gas A_00124	Amount Added:	10.00	Units: uL	
mv-IS_SS_00039	Amount Added:	5.00	Units: uL	Run Reagent

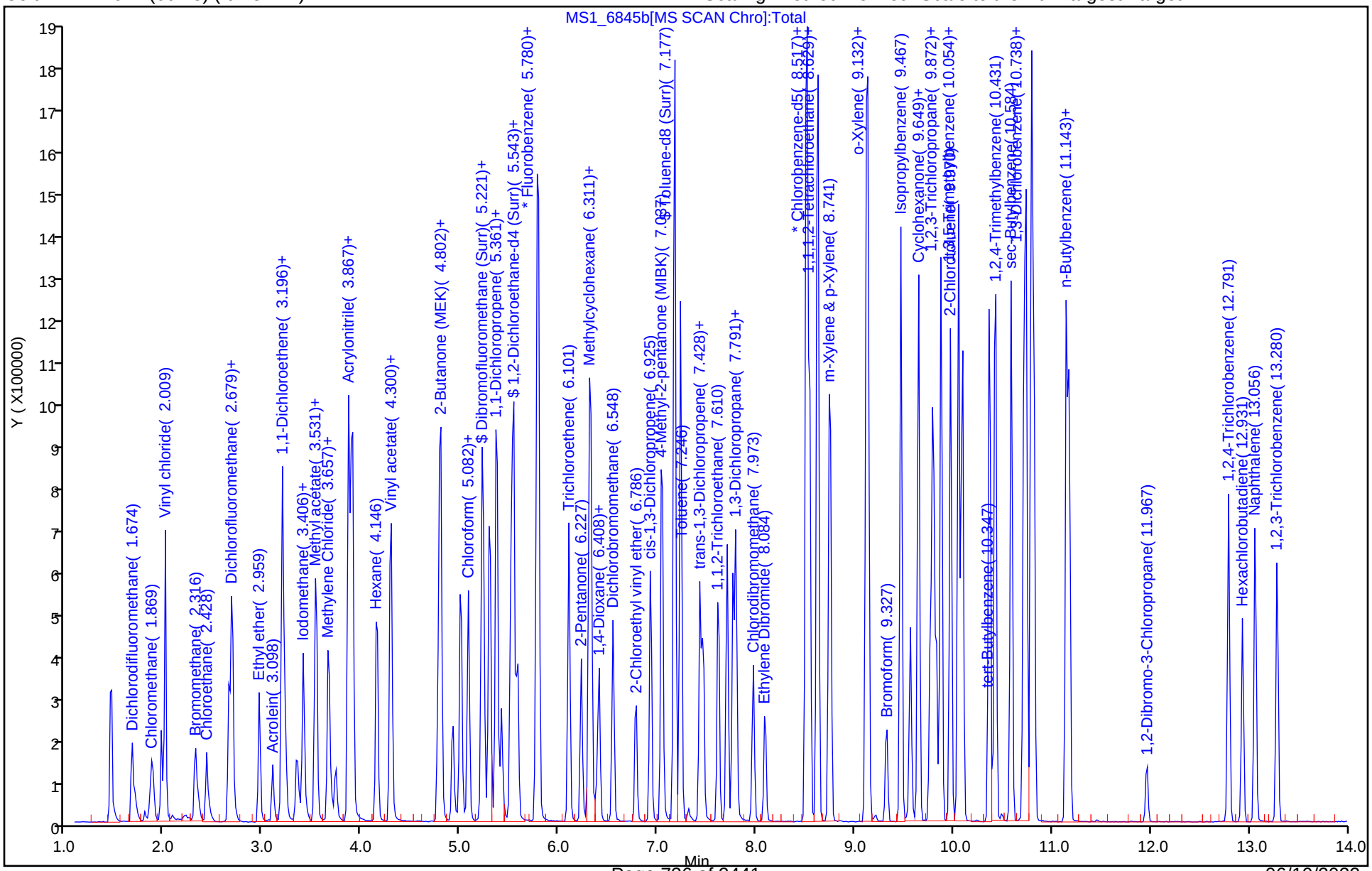
Report Date: 27-May-2022 19:16:12 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6845b.D

Injection Date:	27-May-2022 18:02:30	Instrument ID:	VMS_MS1	Operator ID:	sunleec
Lims ID:	CCV			Worklist Smp#:	2
Client ID:					
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



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCVC 280-576482/33 Calibration Date: 05/28/2022 03:49

Instrument ID: VMS_MS1 Calib Start Date: 05/05/2022 14:42

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 05/05/2022 17:32

Lab File ID: MS1_6871.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2046	0.1778		21.7	25.0	-13.1	50.0
Chloromethane	Ave	0.1941	0.1725	0.1000	22.2	25.0	-11.1	50.0
Vinyl chloride	Ave	0.1865	0.1698		22.8	25.0	-9.0	50.0
Bromomethane	Lin1		0.1062		23.0	25.0	-8.1	50.0
Chloroethane	Ave	0.1180	0.1235		26.2	25.0	4.6	50.0
Dichlorofluoromethane	Ave	0.3221	0.3169		24.6	25.0	-1.6	50.0
Trichlorofluoromethane	Ave	0.2820	0.2850		25.3	25.0	1.0	50.0
Ethyl ether	Ave	0.1372	0.1234		22.5	25.0	-10.0	50.0
Acrolein	Ave	0.0115	0.0091		155	198	-21.5	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Lin1		0.1204		25.0	25.0	-0.2	50.0
1,1-Dichloroethene	Lin1		0.1575		26.0	25.0	4.2	50.0
Acetone	Ave	0.0470	0.0342		72.7	100	-27.3	50.0
Iodomethane	Lin1		0.1259		12.9	25.0	-48.4	50.0
Carbon disulfide	Ave	0.5139	0.5022		24.4	25.0	-2.3	50.0
Methyl acetate	Ave	0.1052	0.0824		39.1	50.0	-21.7	50.0
3-Chloro-1-propene	Ave	0.2869	0.2588		22.6	25.0	-9.8	50.0
Methylene Chloride	Ave	0.2034	0.1900		23.4	25.0	-6.6	50.0
t-Butyl alcohol	Lin1		0.0078		169	250	-32.6	50.0
Acrylonitrile	Ave	0.0600	0.0508		212	250	-15.2	50.0
Methyl tert-butyl ether	Ave	0.4072	0.3741		23.0	25.0	-8.1	50.0
trans-1,2-Dichloroethene	Ave	0.1742	0.1732		24.9	25.0	-0.6	50.0
Hexane	Lin1		0.8739		21.9	25.0	-12.6	50.0
Vinyl acetate	Ave	0.2279	0.1870		41.0	50.0	-17.9	50.0
1,1-Dichloroethane	Ave	0.3343	0.3212	0.1000	24.0	25.0	-3.9	50.0
2-Butanone (MEK)	Ave	0.0619	0.0498		80.5	100	-19.5	50.0
2,2-Dichloropropane	Ave	0.2382	0.2227		23.4	25.0	-6.5	50.0
cis-1,2-Dichloroethene	Ave	0.1869	0.1985		26.5	25.0	6.2	50.0
sec-Butyl Alcohol	Lin1		0.0052		355	600	-40.9	50.0
Bromochloromethane	Ave	0.1011	0.0855		21.1	25.0	-15.4	50.0
Tetrahydrofuran	Ave	0.0453	0.0357		39.3	50.0	-21.3	50.0
Chloroform	Ave	0.3226	0.3190		24.7	25.0	-1.1	50.0
1,1,1-Trichloroethane	Ave	0.2675	0.2756		25.8	25.0	3.0	50.0
Cyclohexane	Ave	0.2999	0.3179		26.5	25.0	6.0	50.0
1,1-Dichloropropene	Ave	0.2338	0.2391		25.6	25.0	2.2	50.0
Carbon tetrachloride	Ave	0.2118	0.2143		25.3	25.0	1.2	50.0
Isobutyl alcohol	Lin1		0.0026		409	625	-34.6	50.0
Benzene	Ave	0.6910	0.6941		25.1	25.0	0.5	50.0
1,2-Dichloroethane	Ave	0.2749	0.2506		22.8	25.0	-8.9	50.0
Trichloroethene	Lin1		0.7778		24.3	25.0	-2.8	50.0
2-Pentanone	Lin1		0.0735		56.0	80.0	-30.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCVC 280-576482/33 | Calibration Date: 05/28/2022 03:49

Instrument ID: VMS_MS1 | Calib Start Date: 05/05/2022 14:42

GC Column: DB-624 (60.25) ID: 0.25(mm) | Calib End Date: 05/05/2022 17:32

Lab File ID: MS1_6871.D | Conc. Units: ug/L | Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.2121	0.2270		26.8	25.0	7.0	50.0
1,2-Dichloropropane	Ave	0.1775	0.1629		22.9	25.0	-8.2	50.0
1,4-Dioxane	Lin1		0.0015		365	500	-27.0	50.0
Dibromomethane	Ave	0.1159	0.1024		22.1	25.0	-11.6	50.0
Bromodichloromethane	Ave	0.2387	0.2225		23.3	25.0	-6.8	50.0
2-Chloroethyl vinyl ether	Ave	0.0879	0.0811		23.1	25.0	-7.8	50.0
cis-1,3-Dichloropropene	Lin1		1.025		21.4	25.0	-14.3	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1246	0.1078		86.5	100	-13.5	50.0
Toluene	Ave	0.7173	0.7463		26.0	25.0	4.0	50.0
trans-1,3-Dichloropropene	Ave	0.2260	0.2014		22.3	25.0	-10.9	50.0
Ethyl methacrylate	Ave	0.7130	0.6515		22.8	25.0	-8.6	50.0
1,1,2-Trichloroethane	Ave	0.1433	0.1293		22.6	25.0	-9.8	50.0
Tetrachloroethene	Lin1		0.5680		23.6	25.0	-5.7	50.0
1,3-Dichloropropane	Ave	1.081	0.9936		23.0	25.0	-8.1	50.0
2-Hexanone	Ave	0.3763	0.3027		80.4	100	-19.6	50.0
Dibromochloromethane	Ave	0.6785	0.5947		21.9	25.0	-12.3	50.0
Ethylene Dibromide	Ave	0.6420	0.5714		22.3	25.0	-11.0	50.0
1-Chlorohexane	Lin1		0.9276		19.2	20.0	-4.1	50.0
Chlorobenzene	Ave	2.052	1.924	0.3000	23.4	25.0	-6.2	50.0
1,1,1,2-Tetrachloroethane	Ave	0.6592	0.6119		23.2	25.0	-7.2	50.0
Ethylbenzene	Ave	1.097	1.100		25.1	25.0	0.3	50.0
m-Xylene & p-Xylene	Ave	1.365	1.377		25.2	25.0	0.9	50.0
o-Xylene	Ave	1.293	1.279		24.7	25.0	-1.1	50.0
Styrene	Ave	2.224	2.259		25.4	25.0	1.6	50.0
Bromoform	Ave	0.4287	0.3436	0.1000	20.0	25.0	-19.9	50.0
Isopropylbenzene	Ave	1.947	2.178		28.0	25.0	11.8	50.0
Cyclohexanone	Ave	0.0225	0.0163		541	750	-27.8	50.0
1,1,2,2-Tetrachloroethane	Ave	0.4698	0.4056	0.3000	21.6	25.0	-13.7	50.0
Bromobenzene	Ave	0.5316	0.5120		24.1	25.0	-3.7	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1366	0.0940		17.2	25.0	-31.2	50.0
1,2,3-Trichloropropane	Ave	0.1457	0.1267		21.7	25.0	-13.0	50.0
N-Propylbenzene	Ave	0.5417	0.5825		26.9	25.0	7.5	50.0
2-Chlorotoluene	Ave	0.4840	0.5031		26.0	25.0	4.0	50.0
1,3,5-Trimethylbenzene	Ave	1.684	1.815		26.9	25.0	7.8	50.0
4-Chlorotoluene	Ave	0.5089	0.5109		25.1	25.0	0.4	50.0
tert-Butylbenzene	Ave	1.418	1.505		26.5	25.0	6.1	50.0
1,2,4-Trimethylbenzene	Ave	1.771	1.876		26.5	25.0	5.9	50.0
sec-Butylbenzene	Ave	0.4141	0.4309		26.0	25.0	4.0	50.0
1,3-Dichlorobenzene	Ave	0.9944	0.9718		24.4	25.0	-2.3	50.0
4-Isopropyltoluene	Ave	1.821	1.908		26.2	25.0	4.8	50.0
1,4-Dichlorobenzene	Ave	1.058	0.9787		23.1	25.0	-7.5	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCVC 280-576482/33 Calibration Date: 05/28/2022 03:49

Instrument ID: VMS_MS1 Calib Start Date: 05/05/2022 14:42

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 05/05/2022 17:32

Lab File ID: MS1_6871.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	1.593	1.646		25.8	25.0	3.3	50.0
1,2-Dichlorobenzene	Ave	0.9704	0.9250		23.8	25.0	-4.7	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.0959	0.0646		16.8	25.0	-32.6	50.0
1,2,4-Trichlorobenzene	Ave	0.6014	0.4869		20.2	25.0	-19.0	50.0
Hexachlorobutadiene	Lin1		0.1860		20.7	25.0	-17.3	50.0
Naphthalene	Lin1		1.033		17.6	25.0	-29.6	50.0
1,2,3-Trichlorobenzene	Ave	0.4951	0.3509		17.7	25.0	-29.1	50.0
Dibromofluoromethane (Surr)	Ave	0.2667	0.2576		48.3	50.0	-3.4	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3080	0.3008		48.8	50.0	-2.3	50.0
Toluene-d8 (Surr)	Ave	4.077	4.126		50.6	50.0	1.2	50.0
4-Bromofluorobenzene (Surr)	Ave	0.8799	0.9595		54.5	50.0	9.0	50.0

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6871.D
Lims ID: CCVC
Client ID:
Sample Type: CCVC
Inject. Date: 28-May-2022 03:49:30 ALS Bottle#: 25 Worklist Smp#: 33
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVC
Misc. Info.: 280-0111427-033
Operator ID: burkes Instrument ID: VMS_MS1
Sublist: chrom-AQ_VMS1_8260*sub164

Method: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 28-May-2022 07:16:34 Calib Date: 05-May-2022 17:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5811.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1675

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.794	5.794	0.000	99	1185305	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.517	8.517	0.000	88	279557	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.794	10.794	0.000	96	450890	50.0	50.0	
$ 5 Dibromofluoromethane (Surr)	111	5.221	5.221	0.000	92	305334	50.0	48.3	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.515	5.514	0.001	0	356590	50.0	48.8	
$ 7 Toluene-d8 (Surr)	98	7.177	7.176	0.001	93	1153377	50.0	50.6	
$ 8 4-Bromofluorobenzene (Surr)	95	9.649	9.648	0.001	86	432644	50.0	54.5	
11 Dichlorodifluoromethane	85	1.674	1.674	0.000	99	105396	25.0	21.7	
12 Chloromethane	50	1.869	1.869	0.000	99	102258	25.0	22.2	
13 Vinyl chloride	62	1.967	1.967	0.000	98	100603	25.0	22.8	
15 Bromomethane	94	2.316	2.316	0.000	91	62951	25.0	23.0	
16 Chloroethane	64	2.428	2.428	0.000	99	73173	25.0	26.2	
17 Dichlorofluoromethane	67	2.651	2.652	-0.001	97	187813	25.0	24.6	
18 Trichlorofluoromethane	101	2.679	2.679	0.000	99	168883	25.0	25.3	
20 Ethyl ether	59	2.959	2.959	0.000	94	73162	25.0	22.5	
22 Acrolein	56	3.098	3.098	0.000	97	42406	197.5	155.0	
23 1,1-Dichloroethene	96	3.196	3.196	0.000	98	93341	25.0	26.0	
24 112TCTFE	151	3.196	3.196	0.000	93	71355	25.0	25.0	
25 Acetone	43	3.224	3.224	0.000	99	81001	100.0	72.7	
26 Iodomethane	142	3.336	3.336	0.000	99	74619	25.0	12.9	
28 Carbon disulfide	76	3.406	3.406	0.000	100	297640	25.0	24.4	
30 Methyl acetate	43	3.517	3.517	0.000	98	97611	50.0	39.1	
31 3-Chloro-1-propene	41	3.531	3.531	0.000	88	153360	25.0	22.6	
32 Methylene Chloride	84	3.657	3.657	0.000	94	112586	25.0	23.4	
33 2-Methyl-2-propanol	59	3.741	3.741	0.000	96	46444	250.0	168.5	
34 Acrylonitrile	53	3.867	3.867	0.000	99	301244	250.0	212.0	
35 Methyl tert-butyl ether	73	3.894	3.894	0.000	97	221692	25.0	23.0	
36 trans-1,2-Dichloroethene	96	3.908	3.908	0.000	97	102661	25.0	24.9	
37 Hexane	57	4.160	4.146	0.014	95	122148	25.0	21.9	
39 Vinyl acetate	43	4.286	4.286	0.000	98	221685	50.0	41.0	
40 1,1-Dichloroethane	63	4.299	4.300	-0.001	97	190379	25.0	24.0	

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	4.774	4.774	0.000	100	118173	100.0	80.5	
48 cis-1,2-Dichloroethene	96	4.802	4.788	0.014	84	117619	25.0	26.5	
49 2,2-Dichloropropane	77	4.802	4.802	0.000	92	131968	25.0	23.4	
51 sec-Butyl Alcohol	45	4.928	4.928	0.000	97	73547	600.0	354.7	
53 Chlorobromomethane	128	4.998	4.998	0.000	97	50695	25.0	21.1	
54 Tetrahydrofuran	42	5.012	5.012	0.000	91	42276	50.0	39.3	
55 Chloroform	83	5.082	5.082	0.000	94	189071	25.0	24.7	
56 1,1,1-Trichloroethane	97	5.235	5.235	0.000	98	163330	25.0	25.8	
57 Cyclohexane	56	5.291	5.291	0.000	95	188427	25.0	26.5	
58 1,1-Dichloropropene	75	5.361	5.361	0.000	91	141682	25.0	25.6	
59 Carbon tetrachloride	117	5.375	5.375	0.000	93	126989	25.0	25.3	
60 Isobutyl alcohol	41	5.417	5.417	0.000	97	37928	625.0	408.9	
63 Benzene	78	5.542	5.543	0.000	97	411381	25.0	25.1	
64 1,2-Dichloroethane	62	5.584	5.584	0.000	97	148505	25.0	22.8	
66 n-Heptane	43	5.766	5.766	0.000	89	106687	25.0	21.9	
68 Trichloroethene	95	6.101	6.101	0.000	97	108713	25.0	24.3	
69 2-Pentanone	43	6.227	6.227	0.000	99	139397	80.0	56.0	
70 Methylcyclohexane	55	6.311	6.311	0.000	92	134538	25.0	26.8	
71 1,2-Dichloropropane	63	6.325	6.325	0.000	90	96545	25.0	22.9	
73 1,4-Dioxane	88	6.380	6.380	0.000	90	18163	500.0	364.9	
74 Dibromomethane	93	6.408	6.408	0.000	94	60678	25.0	22.1	
75 Dichlorobromomethane	83	6.548	6.548	0.000	98	131859	25.0	23.3	
77 2-Chloroethyl vinyl ether	63	6.785	6.786	-0.001	94	48074	25.0	23.1	
78 cis-1,3-Dichloropropene	75	6.925	6.925	0.000	93	143272	25.0	21.4	
79 4-Methyl-2-pentanone (MIBK)	43	7.037	7.037	0.000	98	255505	100.0	86.5	
82 Toluene	91	7.232	7.232	0.000	98	442319	25.0	26.0	
84 trans-1,3-Dichloropropene	75	7.428	7.428	0.000	99	119339	25.0	22.3	
85 Ethyl methacrylate	69	7.470	7.456	0.014	89	91061	25.0	22.8	
87 1,1,2-Trichloroethane	97	7.609	7.610	-0.001	95	76608	25.0	22.6	
89 Tetrachloroethene	164	7.707	7.707	0.000	96	79398	25.0	23.6	
90 1,3-Dichloropropane	76	7.763	7.763	0.000	95	138888	25.0	23.0	
91 2-Hexanone	43	7.791	7.791	0.000	98	169258	100.0	80.4	
95 Chlorodibromomethane	129	7.973	7.973	0.000	90	83125	25.0	21.9	
96 Ethylene Dibromide	107	8.084	8.084	0.000	99	79869	25.0	22.3	
98 1-Chlorohexane	91	8.503	8.503	0.000	94	103723	20.0	19.2	
99 Chlorobenzene	112	8.545	8.545	0.000	93	268934	25.0	23.4	
100 1,1,1,2-Tetrachloroethane	131	8.615	8.615	0.000	93	85535	25.0	23.2	
101 Ethylbenzene	106	8.629	8.629	0.000	99	153772	25.0	25.1	
102 m-Xylene & p-Xylene	106	8.755	8.741	0.014	0	192427	25.0	25.2	
103 o-Xylene	106	9.118	9.118	0.000	98	178812	25.0	24.7	
104 Styrene	104	9.132	9.132	0.000	93	315754	25.0	25.4	
106 Bromoform	173	9.327	9.327	0.000	94	48026	25.0	20.0	
107 Isopropylbenzene	105	9.467	9.467	0.000	96	490968	25.0	28.0	
109 Cyclohexanone	55	9.565	9.565	0.000	95	68238	750.0	541.5	
110 1,1,2,2-Tetrachloroethane	83	9.760	9.760	0.000	96	91450	25.0	21.6	
111 Bromobenzene	156	9.788	9.788	0.000	98	115423	25.0	24.1	
112 trans-1,4-Dichloro-2-butene	53	9.802	9.802	0.000	83	21191	25.0	17.2	
113 1,2,3-Trichloropropane	110	9.830	9.830	0.000	86	28575	25.0	21.7	
114 N-Propylbenzene	120	9.872	9.872	0.000	99	131332	25.0	26.9	
115 2-Chlorotoluene	126	9.970	9.970	0.000	95	113427	25.0	26.0	
116 1,3,5-Trimethylbenzene	105	10.054	10.054	0.000	94	409137	25.0	26.9	
117 4-Chlorotoluene	126	10.095	10.096	-0.001	98	115170	25.0	25.1	

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	10.361	10.361	0.000	93	339294	25.0	26.5	
119 1,2,4-Trimethylbenzene	105	10.431	10.431	0.000	98	423011	25.0	26.5	
120 sec-Butylbenzene	134	10.584	10.584	0.000	95	97146	25.0	26.0	
121 1,3-Dichlorobenzene	146	10.710	10.710	0.000	97	219098	25.0	24.4	
122 4-Isopropyltoluene	119	10.738	10.738	0.000	97	430219	25.0	26.2	
123 1,4-Dichlorobenzene	146	10.822	10.822	0.000	94	220632	25.0	23.1	
125 n-Butylbenzene	91	11.143	11.143	0.000	98	371091	25.0	25.8	
127 1,2-Dichlorobenzene	146	11.171	11.171	0.000	96	208540	25.0	23.8	
128 1,2-Dibromo-3-Chloropropane	157	11.967	11.967	0.000	76	14574	25.0	16.8	
130 1,2,4-Trichlorobenzene	180	12.791	12.791	0.000	93	109769	25.0	20.2	
131 Hexachlorobutadiene	225	12.931	12.931	0.000	93	41944	25.0	20.7	
132 Naphthalene	128	13.056	13.056	0.000	98	232882	25.0	17.6	
134 1,2,3-Trichlorobenzene	180	13.280	13.280	0.000	96	79115	25.0	17.7	
S 149 1,2-Dichloroethene, Total (URS)	96				0		50.0	51.4	
S 156 1,3-Dichloropropene, Total	1				0		50.0	43.7	
S 155 Xylenes, Total	106				0		50.0	50.0	
S 153 Xylenes, Total (URS)	1				0		50.0	50.0	
S 152 Total BTEX	1				0			126.1	
S 151 Trihalomethanes, Total	1				0		100.0	90.0	
S 150 1,2-Dichloroethene, Total	1				0		50.0	51.4	

Reagents:

Acrolein_A_00008	Amount Added:	12.50	Units: uL	
MV-MegaMainA_00072	Amount Added:	12.50	Units: uL	
MV-Gas A_00124	Amount Added:	5.00	Units: uL	
mv-IS_SS_00039	Amount Added:	5.00	Units: uL	Run Reagent

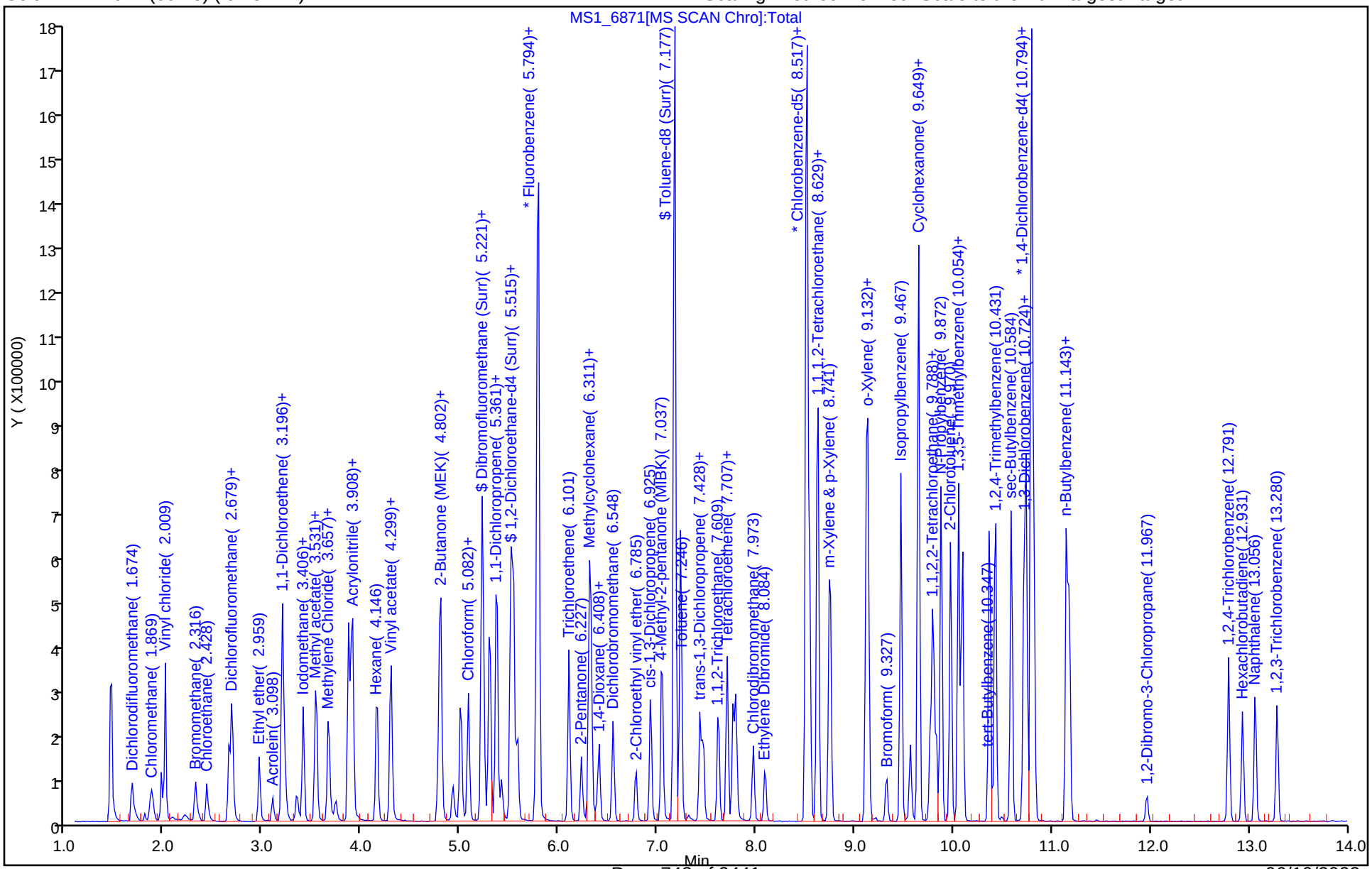
Report Date: 28-May-2022 07:16:35 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6871.D

Injection Date:	28-May-2022 03:49:30	Instrument ID:	VMS_MS1	Operator ID:	burkes
Lims ID:	CCVC			Worklist Smp#:	33
Client ID:					
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 Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\MS1_2510.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 16-Feb-2022 14:18:30 ALS Bottle#: 100 Worklist Smp#: 1
Injection Vol: 2.0 uL Dil. Factor: 1.0000
Sample Info: BFB
Operator ID: SUNLEEC Instrument ID: VMS_MS1

Method: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 17-Feb-2022 13:47:09 Calib Date: 16-Feb-2022 20:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\MS1_2528.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1654

First Level Reviewer: seifertj Date: 17-Feb-2022 13:47:09

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 10 BFB	95	3.537	3.537	0.000	0	693046	NR	NR	a

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
Review Flags
a - User Assigned ID

Reagents:

mv-Cent BFB_00004 Amount Added: 5.00 Units: uL

Manual Integration/User Assign Peak Report

Eurofins Denver

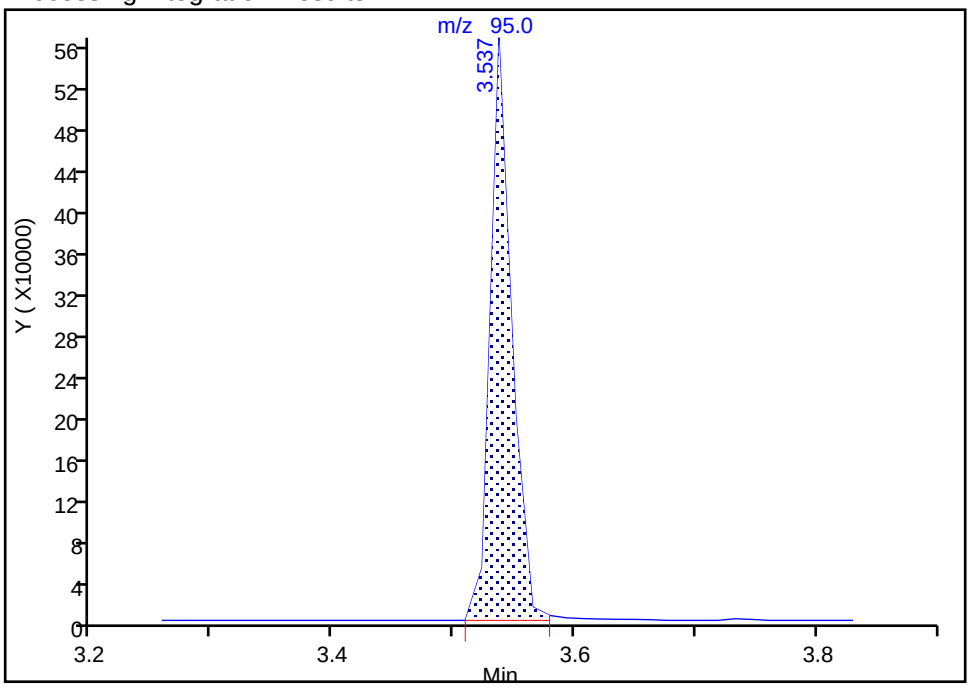
Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\MS1_2510.D
Injection Date: 16-Feb-2022 14:18:30 Instrument ID: VMS_MS1
Lims ID: BFB
Client ID:
Operator ID: SUNLEEC ALS Bottle#: 100 Worklist Smp#: 1
Injection Vol: 2.0 uL Dil. Factor: 1.0000
Method: AQ_VMS1_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

$ 10 BFB, CAS: 460-00-4

Signal: 1

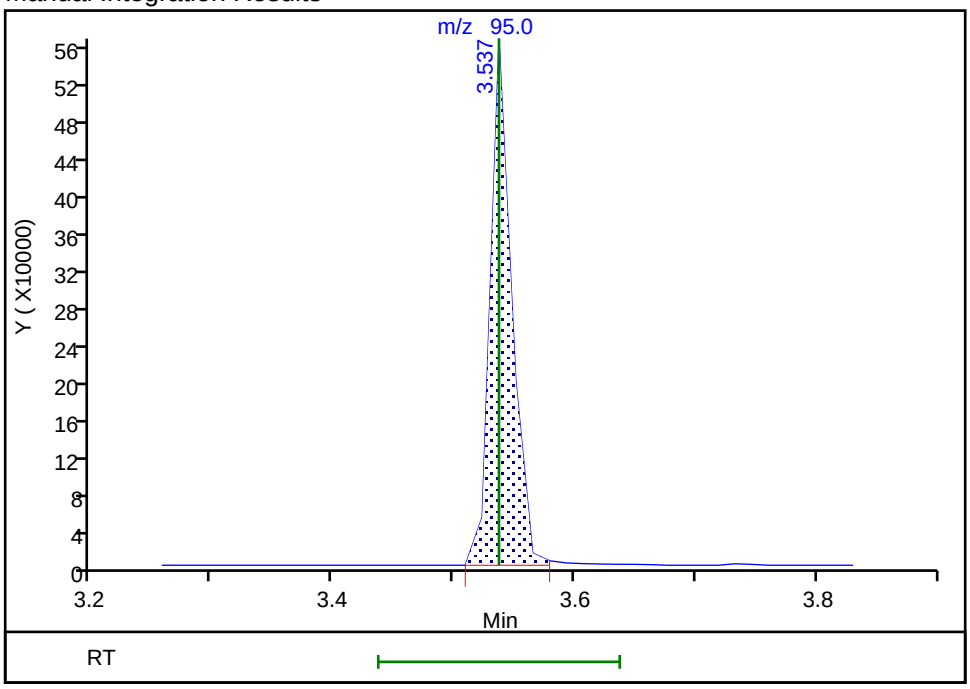
Processing Integration Results

RT: 3.54
Area: 693046
Amount: 0
Amount Units: ug/l



Manual Integration Results

RT: 3.54
Area: 693046
Amount: 0
Amount Units: ug/l



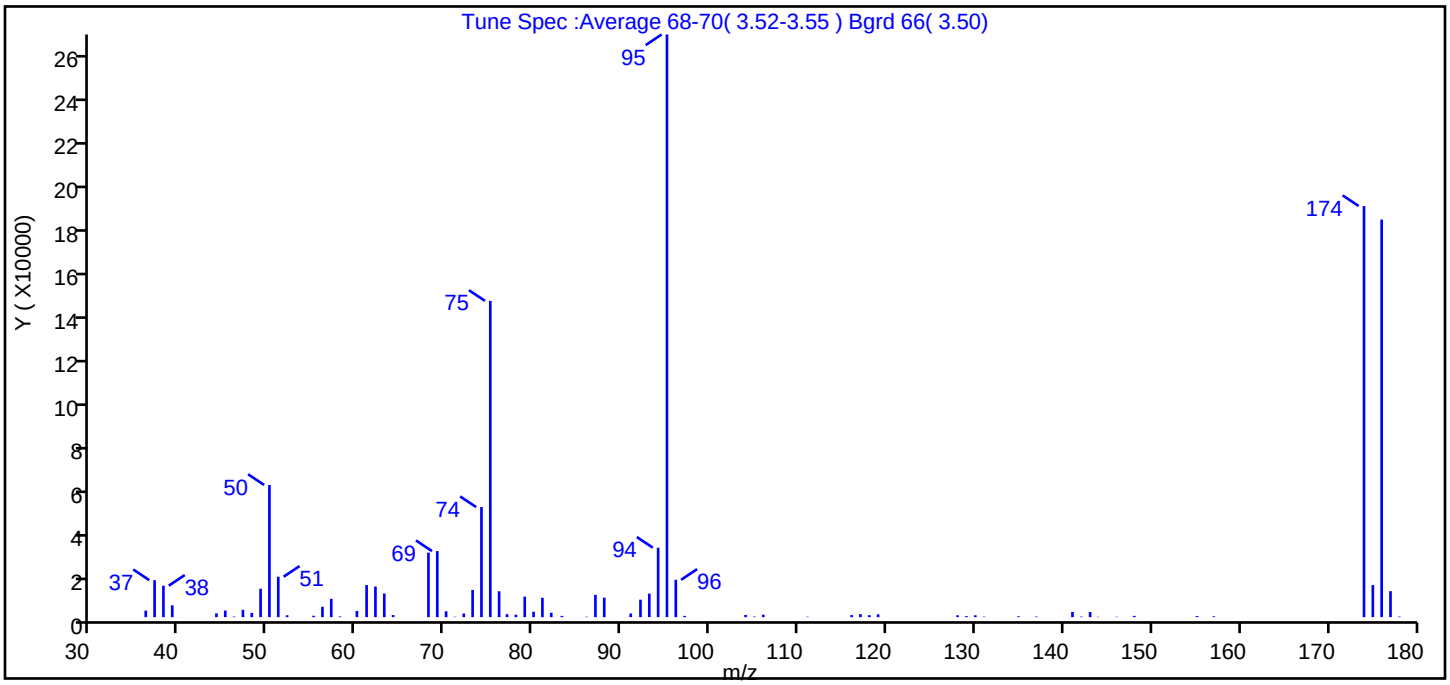
Reviewer: sunleec, 16-Feb-2022 14:34:21
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

MS Tune Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\MS1_2510.D
Injection Date: 16-Feb-2022 14:18:30 Instrument ID: VMS_MS1
Lims ID: BFB
Client ID:
Operator ID: SUNLEEC 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	22.7
75	30 to 60% of m/z 95	54.3
96	5 to 9% of m/z 95	6.4
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	70.6
175	5 to 9% of m/z 174	5.5 (7.8)
176	Greater than 95% but less than 101% of m/z 174	68.2 (96.7)
177	5 to 9% of m/z 176	4.5 (6.5)

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\MS1_2510.D\AQ_VMS1_8260.rslt\spectra.c
Injection Date: 16-Feb-2022 14:18:30
Spectrum: Tune Spec :Average 68-70(3.52-3.55) Bgrd 66(3.50)
Base Peak: 95.10
Minimum % Base Peak: 0
Number of Points: 77

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3025	61.00	14864	86.00	192	130.00	872
37.00	17128	62.00	14183	87.00	10310	131.00	233
38.00	14554	63.00	10936	88.00	9030	135.00	389
39.00	5453	64.00	964	91.00	1681	137.00	262
40.00	46	68.00	29840	92.00	8085	141.00	2375
42.00	3	69.00	30584	93.00	10895	142.00	258
44.00	1747	70.00	2713	94.00	32160	143.00	2352
45.00	3063	71.00	188	95.00	269760	144.00	167
46.00	260	72.00	1686	96.00	17296	146.00	176
47.00	3401	73.00	12616	97.00	594	148.00	592
48.00	1972	74.00	50960	104.00	1026	155.00	494
49.00	13147	75.00	146432	105.00	269	157.00	383
50.00	61200	76.00	11967	106.00	1132	174.00	190336
51.00	18704	77.00	1377	111.00	197	175.00	14837
52.00	881	78.00	1139	116.00	951	176.00	184064
55.00	644	79.00	9514	117.00	1388	177.00	12024
56.00	4807	80.00	2491	118.00	919	178.00	263
57.00	8501	81.00	8963	119.00	1299		
58.00	326	82.00	2013	128.00	861		
60.00	2861	83.00	593	129.00	477		

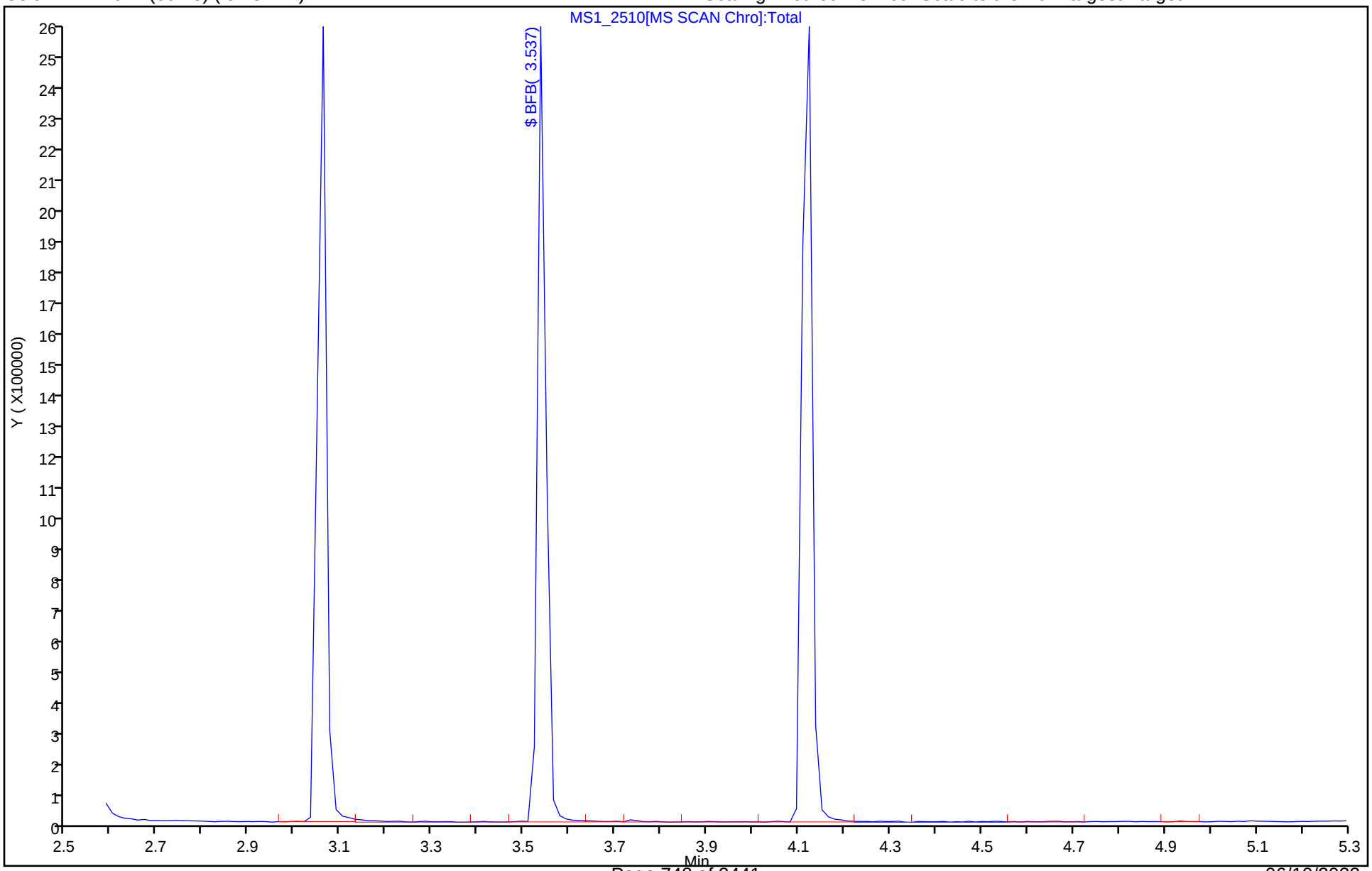
Report Date: 17-Feb-2022 13:47:09 Chrom Revision: 2.3 18-Jan-2022 20:25:40

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220215-108566.b\MS1_2510.D

Injection Date:	16-Feb-2022 14:18:30	Instrument ID:	VMS_MS1	Operator ID:	SUNLEEC
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 Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5802.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	05-May-2022 14:14:30	ALS Bottle#:	100	Worklist Smp#:	1
Injection Vol:	2.0 uL	Dil. Factor:	1.0000		
Sample Info:	BFB				
Operator ID:	SUNLEEC	Instrument ID:	VMS_MS1		
Method:	\\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\AQ_VMS1_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	05-May-2022 19:59:28	Calib Date:	05-May-2022 17:32:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5811.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1632				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 10 BFB	95	3.537	3.537	0.000	0	468455	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

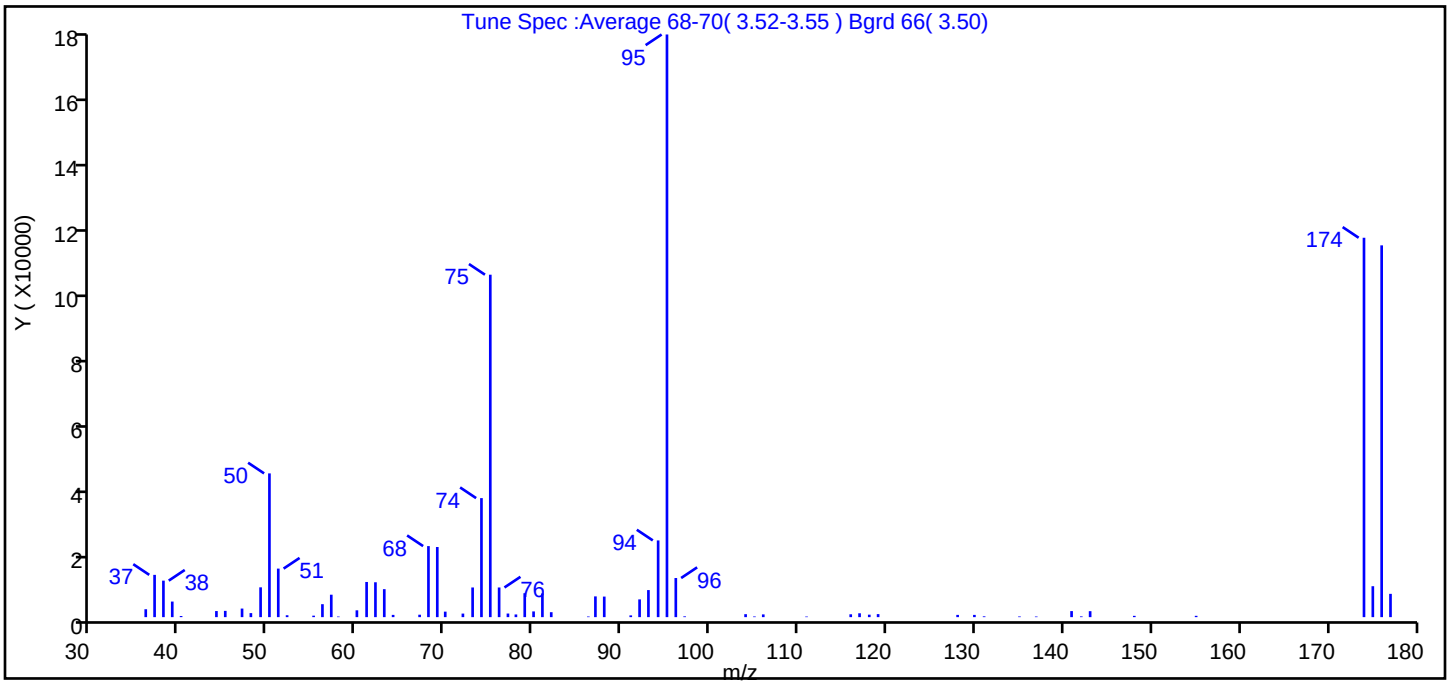
mv-Cent BFB_00004 Amount Added: 5.00 Units: uL

MS Tune Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5802.D
Injection Date: 05-May-2022 14:14:30 Instrument ID: VMS_MS1
Lims ID: BFB
Client ID:
Operator ID: SUNLEEC 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	24.7
75	30 to 60% of m/z 95	58.8
96	5 to 9% of m/z 95	6.7
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	65.1
175	5 to 9% of m/z 174	5.3 (8.2)
176	Greater than 95% but less than 101% of m/z 174	63.8 (98.0)
177	5 to 9% of m/z 176	4.0 (6.3)

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5802.D\AQ_VMS1_8260.rslt\spectra.c
Injection Date: 05-May-2022 14:14:30
Spectrum: Tune Spec :Average 68-70(3.52-3.55) Bgrd 66(3.50)
Base Peak: 95.10
Minimum % Base Peak: 0
Number of Points: 69

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2407	61.00	10700	82.00	1507	119.00	923
37.00	12864	62.00	10611	86.00	193	128.00	686
38.00	11108	63.00	8514	87.00	6315	130.00	684
39.00	4740	64.00	688	88.00	6256	131.00	243
40.00	339	67.00	741	91.00	532	135.00	209
44.00	1854	68.00	21616	92.00	5402	137.00	189
45.00	1907	69.00	21336	93.00	8233	141.00	1842
47.00	2612	70.00	1676	94.00	23344	142.00	228
48.00	1227	72.00	1086	95.00	177280	143.00	1816
49.00	9070	73.00	9027	96.00	11903	148.00	395
50.00	43736	74.00	36216	97.00	239	155.00	402
51.00	14769	75.00	104192	104.00	904	174.00	115432
52.00	577	76.00	9025	105.00	203	175.00	9411
55.00	450	77.00	1099	106.00	837	176.00	113120
56.00	3942	78.00	819	111.00	183	177.00	7087
57.00	6828	79.00	7285	116.00	867		
58.00	181	80.00	1745	117.00	1176		
60.00	2078	81.00	7194	118.00	754		

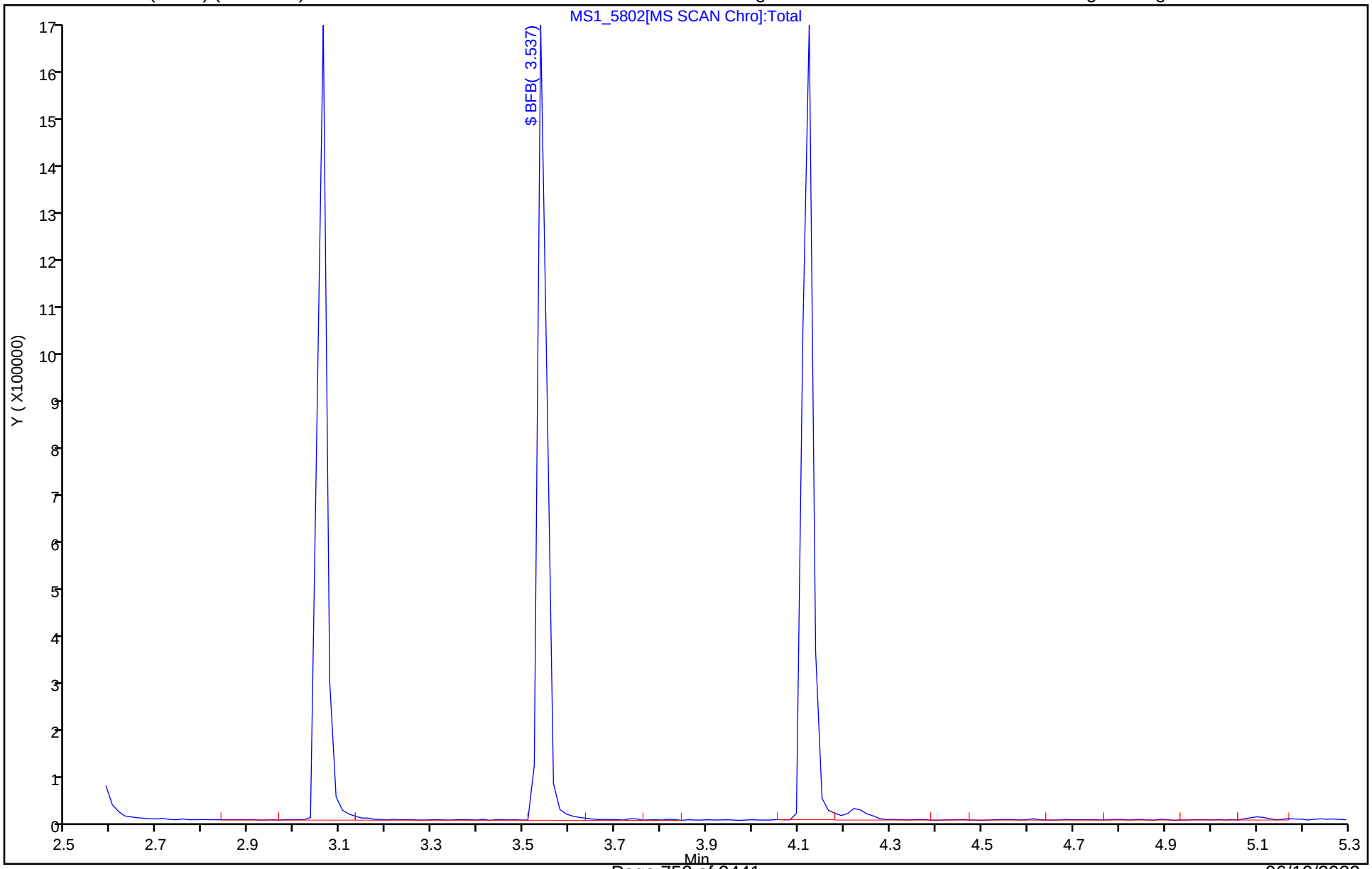
Report Date: 05-May-2022 19:59:28 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5802.D

Injection Date:	05-May-2022 14:14:30	Instrument ID:	VMS_MS1	Operator ID:	SUNLEEC
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 Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6845A.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 27-May-2022 18:02:30 ALS Bottle#: 24 Worklist Smp#: 1
Injection Vol: 2.0 uL Dil. Factor: 1.0000
Sample Info: ccvc
Operator ID: sunleec Instrument ID: VMS_MS1

Method: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 27-May-2022 19:15:17 Calib Date: 05-May-2022 17:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5811.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1624

First Level Reviewer: burkes Date: 27-May-2022 19:15:17

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 10 BFB	95	9.649	9.649	0.000	0	423051	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

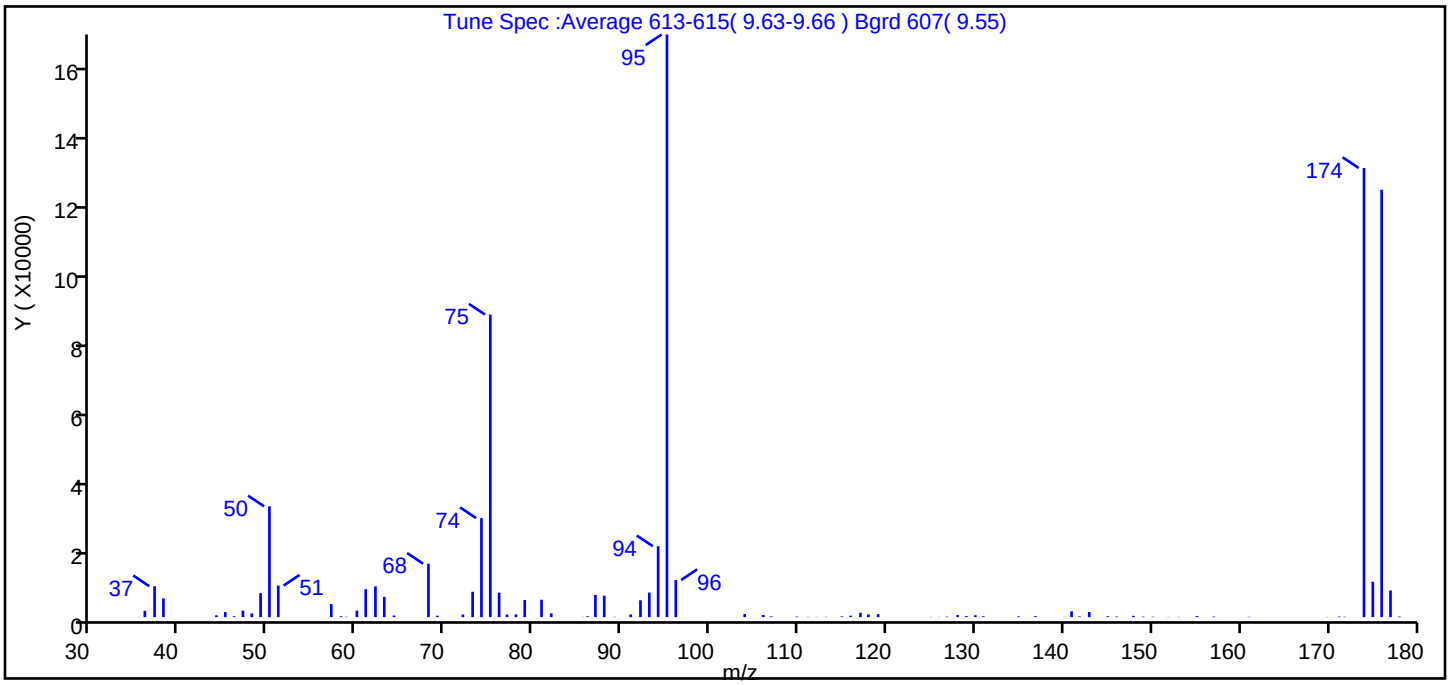
mv-Cent BFB_00004 Amount Added: 5.00 Units: uL

MS Tune Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6845A.D
Injection Date: 27-May-2022 18:02:30 Instrument ID: VMS_MS1
Lims ID: BFB
Client ID:
Operator ID: sunleec ALS Bottle#: 24 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	19.0
75	30 to 60% of m/z 95	51.9
96	5 to 9% of m/z 95	6.4
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	77.1
175	5 to 9% of m/z 174	6.1 (7.9)
176	Greater than 95% but less than 101% of m/z 174	73.3 (95.2)
177	5 to 9% of m/z 176	4.6 (6.2)

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6845A.D\AQ_VMS1_8260.rslt\spectra
Injection Date: 27-May-2022 18:02:30
Spectrum: Tune Spec :Average 613-615(9.63-9.66) Bgrd 607(9.55)
Base Peak: 95.10
Minimum % Base Peak: 0
Number of Points: 87

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	62	72.00	739	104.00	862	141.00	1611
36.00	1748	73.00	7049	106.00	610	142.00	194
37.00	8598	74.00	27504	107.00	219	143.00	1401
38.00	5194	75.00	84024	110.00	156	145.00	253
44.00	508	76.00	6793	111.00	75	146.00	180
45.00	1394	77.00	724	112.00	63	148.00	368
46.00	258	78.00	764	113.00	86	149.00	144
47.00	1817	79.00	4756	115.00	209	150.00	117
48.00	1032	81.00	4826	116.00	420	152.00	74
49.00	6658	82.00	1031	117.00	1190	153.00	76
50.00	30768	86.00	57	118.00	741	155.00	297
51.00	8765	86.00	238	119.00	833	157.00	168
57.00	3614	87.00	6166	125.00	69	161.00	106
58.00	255	88.00	5955	126.00	53	170.00	57
59.00	117	89.00	79	127.00	139	171.00	174
60.00	1805	91.00	751	128.00	573	172.00	105
61.00	7763	92.00	4675	129.00	293	174.00	124720
62.00	8545	93.00	6808	130.00	530	175.00	9838
63.00	5608	94.00	19696	131.00	243	176.00	118672
64.00	463	95.00	161792	135.00	221	177.00	7412
68.00	14836	96.00	10306	137.00	276	178.00	172
69.00	398	103.00	10	140.00	72		

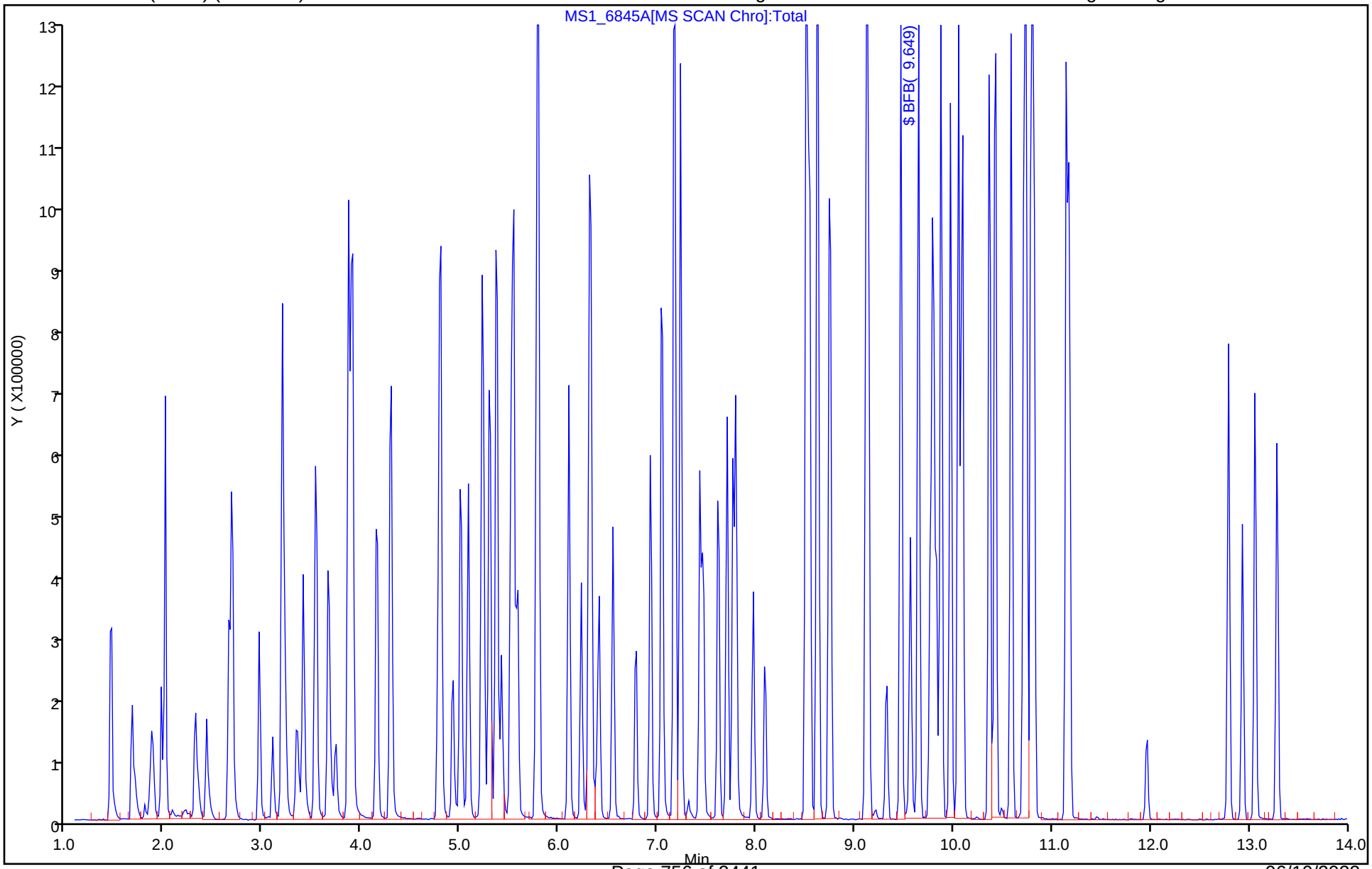
Report Date: 27-May-2022 19:15:17 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6845A.D

Injection Date:	27-May-2022 18:02:30	Instrument ID:	VMS_MS1	Operator ID:	sunleec
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	2.0 uL	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



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-576482/9

Matrix: Water | Lab File ID: MS1_6850.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 05/27/2022 20:24

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 576482 | 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	0.90	U	1.0	0.90	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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-576482/9

Matrix: Water | Lab File ID: MS1_6850.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 05/27/2022 20:24

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 576482 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
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
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)	101		81-118
460-00-4	4-Bromofluorobenzene (Surr)	108		85-114
1868-53-7	Dibromofluoromethane (Surr)	101		80-119
2037-26-5	Toluene-d8 (Surr)	100		89-112

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6850.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 27-May-2022 20:24:30 ALS Bottle#: 4 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: mb
Operator ID: burkes Instrument ID: VMS_MS1

Method: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 27-May-2022 21:01:08 Calib Date: 05-May-2022 17:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5811.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1624

First Level Reviewer: burkes Date: 27-May-2022 21:01:08

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.794	5.794	0.000	99	1111144	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.517	8.517	0.000	87	275063	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.794	10.794	0.000	96	440130	50.0	50.0	
* 4 Fluorobenzene (IS)	96		0.000					ND	
$ 5 Dibromofluoromethane (Surr)	111	5.221	5.221	0.000	92	299859	50.0	50.6	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.515	5.514	0.001	0	346532	50.0	50.6	
$ 7 Toluene-d8 (Surr)	98	7.177	7.176	0.001	94	1123146	50.0	50.1	
$ 8 4-Bromofluorobenzene (Surr)	95	9.649	9.648	0.001	87	418517	50.0	54.0	
$ 9 Trifluorotoluene (Surr)	1		0.000					ND	
$ 10 BFB	95	9.649	9.649	0.000	86	418517		NR	
11 Dichlorodifluoromethane	85		1.674					ND	
12 Chloromethane	50		1.869					ND	
13 Vinyl chloride	62		1.967					ND	
14 Ethylene oxide	43		2.121					ND	
15 Bromomethane	94		2.316					ND	
16 Chloroethane	64		2.428					ND	
17 Dichlorofluoromethane	67		2.652					ND	
18 Trichlorofluoromethane	101		2.679					ND	
19 Ethanol	45		2.861					ND	
20 Ethyl ether	59		2.959					ND	
21 Propene oxide	58		3.015					ND	
22 Acrolein	56		3.098					ND	
23 1,1-Dichloroethene	96		3.196					ND	
24 112TCTFE	151		3.196					ND	
25 Acetone	43		3.224					ND	
26 Iodomethane	142		3.336					ND	
27 Isopropyl alcohol	45		3.364					ND	
28 Carbon disulfide	76		3.406					ND	7
29 Acetonitrile	41		3.489					ND	
30 Methyl acetate	43		3.517					ND	
31 3-Chloro-1-propene	41		3.531					ND	
32 Methylene Chloride	84		3.657					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		3.741					ND	
34 Acrylonitrile	53		3.867					ND	
35 Methyl tert-butyl ether	73		3.894					ND	
36 trans-1,2-Dichloroethene	96		3.908					ND	
37 Hexane	57		4.146					ND	
38 Chlorotrifluoroethene	116		4.248					ND	
39 Vinyl acetate	43		4.286					ND	
40 1,1-Dichloroethane	63		4.300					ND	
41 Isopropyl ether	87		4.313					ND	
42 2-Chloro-1,3-butadiene	53		4.369					ND	
43 1,2-Dichloro-1,1,2,2-tetrafluoro	85		4.472					ND	
44 Tert-butyl ethyl ether	59		4.635					ND	
45 2-Chloro-1,1,1-Trifluoroethane	118		4.737					ND	
46 2-Butanone (MEK)	43		4.774					ND	
48 cis-1,2-Dichloroethene	96		4.788					ND	
47 Ethyl acetate	43		4.802					ND	
49 2,2-Dichloropropane	77		4.802					ND	
50 Propionitrile	54		4.830					ND	
51 sec-Butyl Alcohol	45		4.928					ND	
52 Methacrylonitrile	41		4.956					ND	
53 Chlorobromomethane	128		4.998					ND	
54 Tetrahydrofuran	42		5.012					ND	
55 Chloroform	83		5.082					ND	
56 1,1,1-Trichloroethane	97		5.235					ND	
57 Cyclohexane	56		5.291					ND	
58 1,1-Dichloropropene	75		5.361					ND	
59 Carbon tetrachloride	117		5.375					ND	
60 Isobutyl alcohol	41		5.417					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		5.543					ND	
64 1,2-Dichloroethane	62		5.584					ND	
65 Tert-amyl methyl ether	73		5.640					ND	
66 n-Heptane	43		5.766					ND	
67 n-Butanol	56		5.989					ND	
68 Trichloroethene	95		6.101					ND	
69 2-Pentanone	43		6.227					ND	
70 Methylcyclohexane	55		6.311					ND	
71 1,2-Dichloropropane	63		6.325					ND	
72 Methyl methacrylate	100		6.352					ND	
73 1,4-Dioxane	88		6.380					ND	
74 Dibromomethane	93		6.408					ND	
75 Dichlorobromomethane	83		6.548					ND	
76 2-Nitropropane	41		6.730					ND	
77 2-Chloroethyl vinyl ether	63		6.786					ND	
78 cis-1,3-Dichloropropene	75		6.925					ND	
79 4-Methyl-2-pentanone (MIBK)	43		7.037					ND	
82 Toluene	91		7.232					ND	
80 2,2-Dimethylpentane	57	7.177	7.251	-0.074	27	1275			NC
81 2,4-Dimethylpentane	43		7.293					ND	
84 trans-1,3-Dichloropropene	75		7.428					ND	
85 Ethyl methacrylate	69		7.456					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
83 2,2,3-Trimethylbutane	57		7.502					ND	
87 1,1,2-Trichloroethane	97		7.610					ND	
86 3,3-Dimethylpentane	43		7.682					ND	
89 Tetrachloroethene	164		7.707					ND	
90 1,3-Dichloropropane	76		7.763					ND	
91 2-Hexanone	43		7.791					ND	
88 2-Methylhexane	43		7.810					ND	
93 2,3-Dimethylpentane	56		7.949					ND	
92 3-Methylhexane	43		7.949					ND	
94 Tetrahydrothiophene	60		7.959					ND	
95 Chlorodibromomethane	129		7.973					ND	
96 Ethylene Dibromide	107		8.084					ND	
97 3-Ethylpentane	43		8.214					ND	
98 1-Chlorohexane	91		8.503					ND	U
99 Chlorobenzene	112		8.545					ND	
100 1,1,1,2-Tetrachloroethane	131		8.615					ND	
101 Ethylbenzene	106		8.629					ND	
102 m-Xylene & p-Xylene	106		8.741					ND	
103 o-Xylene	106		9.118					ND	
104 Styrene	104		9.132					ND	
106 Bromoform	173		9.327					ND	
105 Dimethyl disulfide	94		9.388					ND	
107 Isopropylbenzene	105		9.467					ND	
108 cis-1,4-Dichloro-2-butene	53		9.523					ND	
109 Cyclohexanone	55		9.565					ND	U
110 1,1,2,2-Tetrachloroethane	83		9.760					ND	
111 Bromobenzene	156		9.788					ND	
112 trans-1,4-Dichloro-2-butene	53		9.802					ND	
113 1,2,3-Trichloropropane	110		9.830					ND	
114 N-Propylbenzene	120		9.872					ND	
115 2-Chlorotoluene	126		9.970					ND	
116 1,3,5-Trimethylbenzene	105		10.054					ND	
117 4-Chlorotoluene	126		10.096					ND	
118 tert-Butylbenzene	119		10.361					ND	
119 1,2,4-Trimethylbenzene	105		10.431					ND	
120 sec-Butylbenzene	134		10.584					ND	
121 1,3-Dichlorobenzene	146		10.710					ND	
122 4-Isopropyltoluene	119		10.738					ND	
123 1,4-Dichlorobenzene	146		10.822					ND	
124 1,2,3-Trimethylbenzene	105		10.836					ND	
125 n-Butylbenzene	91		11.143					ND	
127 1,2-Dichlorobenzene	146		11.171					ND	
126 Pentachloroethane	167		11.283					ND	
128 1,2-Dibromo-3-Chloropropane	157		11.967					ND	
129 1,3,5-Trichlorobenzene	180		12.148					ND	
130 1,2,4-Trichlorobenzene	180		12.791					ND	
131 Hexachlorobutadiene	225		12.931					ND	
132 Naphthalene	128		13.056					ND	
134 1,2,3-Trichlorobenzene	180		13.280					ND	
133 n-Nonyl Aldehyde	57		13.340					ND	
138 1,4-Dibromobenzene	1		0.000					ND	
136 1-Chloro-1-fluoroethane TIC	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
148 1-Bromo-2-chloroethane	1		0.000				ND		
147 n-Nonane TIC	1		0.000				ND		
137 1,2-dichloro-4-(trifluoromethyl)	1		0.000				ND		
142 Benzene, 1-bromo-4-ethyl-	1		0.000				ND		
146 t-Amyl alcohol	1		0.000				ND		
144 1-Chlorohexane TIC	1		0.000				ND		
139 1,3-Dibromobenzene	1		0.000				ND		
140 4-Bromofluorobenzene	95		0.000				ND		
141 4-Chlorobenzotrifluoride	1		0.000				ND		
143 Benzene, 1-bromo-3-fluoro-	1		0.000				ND		
145 Ethyl acrylate	55		0.000				ND		
135 Pentachloroethane TIC	1		0.000				ND		
S 149 1,2-Dichloroethene, Total (URS)	96		2.000				ND		7
S 156 1,3-Dichloropropene, Total	1		0.000				ND		7
S 155 Xylenes, Total	106		0.000				ND		7
S 154 TAH	1				0			0	
S 153 Xylenes, Total (URS)	1		0.000				ND		7
S 152 Total BTEX	1		0.000				ND		7
S 151 Trihalomethanes, Total	1		0.000				ND		7
S 150 1,2-Dichloroethene, Total	1		0.000				ND		7

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

NC - Not Calibrated

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

mv-IS_SS_00039 Amount Added: 5.00 Units: uL Run Reagent

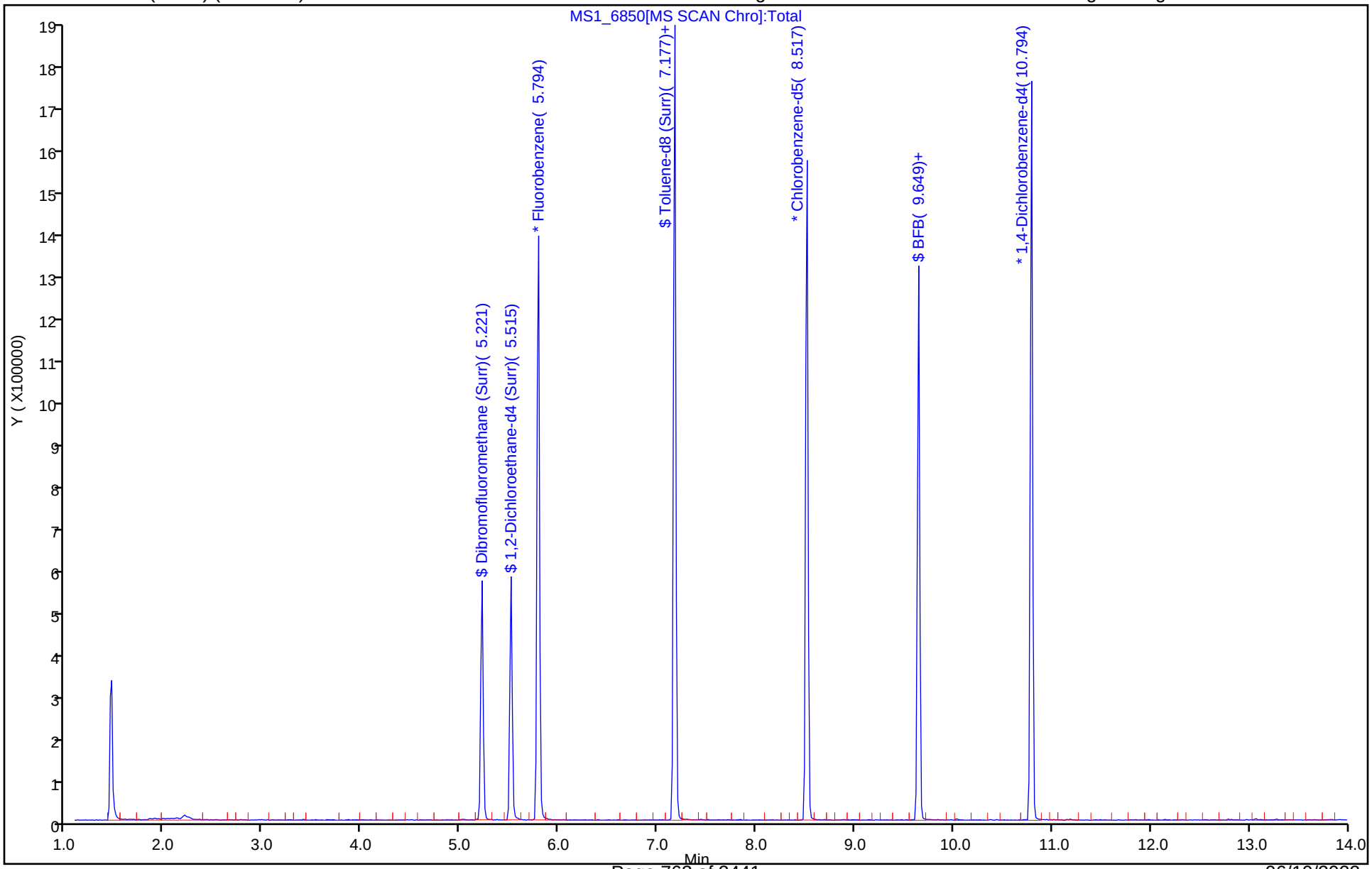
Report Date: 27-May-2022 21:01:08 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6850.D

Injection Date:	27-May-2022 20:24:30	Instrument ID:	VMS_MS1	Operator ID:	burkes
Lims ID:	MB			Worklist Smp#:	9
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 Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6850.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 27-May-2022 20:24:30 ALS Bottle#: 4 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: mb
Operator ID: burkes Instrument ID: VMS_MS1

Method: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 27-May-2022 21:01:08 Calib Date: 05-May-2022 17:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5811.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1624

First Level Reviewer: burkes Date: 27-May-2022 21:01:08

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	50.6	101.19
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	50.6	101.27
$ 7 Toluene-d8 (Surr)	50.0	50.1	100.14
$ 8 4-Bromofluorobenzene (Surr)	50.0	54.0	108.07

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-576482/1002

Matrix: Water | Lab File ID: MS1_6845b-LCS.d

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 05/27/2022 18:02

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 576482 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
71-55-6	1,1,1-Trichloroethane	46.8		1.0	0.40	0.16
79-34-5	1,1,2,2-Tetrachloroethane	48.4		1.0	0.80	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	43.2		3.0	0.40	0.18
79-00-5	1,1,2-Trichloroethane	50.1		1.0	0.80	0.27
75-34-3	1,1-Dichloroethane	44.8		1.0	0.80	0.22
75-35-4	1,1-Dichloroethene	43.8		1.0	0.80	0.23
87-61-6	1,2,3-Trichlorobenzene	41.3		1.0	0.80	0.21
120-82-1	1,2,4-Trichlorobenzene	42.8		1.0	0.80	0.21
96-12-8	1,2-Dibromo-3-Chloropropane	43.0		5.0	1.6	0.47
95-50-1	1,2-Dichlorobenzene	47.1		1.0	0.40	0.15
107-06-2	1,2-Dichloroethane	44.7		1.0	0.40	0.13
78-87-5	1,2-Dichloropropane	47.5		1.0	0.40	0.18
541-73-1	1,3-Dichlorobenzene	47.6		1.0	0.40	0.13
106-46-7	1,4-Dichlorobenzene	46.3		1.0	0.40	0.16
78-93-3	2-Butanone (MEK)	202		6.0	4.0	2.0
591-78-6	2-Hexanone	200		5.0	4.0	1.7
108-10-1	4-Methyl-2-pentanone (MIBK)	204		5.0	3.2	0.98
67-64-1	Acetone	174		10	6.4	1.9
71-43-2	Benzene	46.7		1.0	0.40	0.16
74-97-5	Bromochloromethane	43.3		1.0	0.20	0.10
75-27-4	Bromodichloromethane	47.9		1.0	0.40	0.17
75-25-2	Bromoform	46.5		1.0	0.90	0.46
74-83-9	Bromomethane	53.9		2.0	0.80	0.21
75-15-0	Carbon disulfide	42.7		2.0	0.80	0.17
56-23-5	Carbon tetrachloride	46.1		2.0	0.40	0.19
108-90-7	Chlorobenzene	46.9		1.0	0.40	0.17
75-00-3	Chloroethane	54.0		2.0	1.6	0.41
67-66-3	Chloroform	46.8		1.0	0.40	0.16
74-87-3	Chloromethane	46.1		2.0	0.80	0.30
156-59-2	cis-1,2-Dichloroethene	47.7		1.0	0.40	0.15
10061-01-5	cis-1,3-Dichloropropene	46.4		1.0	0.40	0.16
110-82-7	Cyclohexane	45.1		2.0	0.80	0.28
124-48-1	Dibromochloromethane	49.7		1.0	0.40	0.17

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-576482/1002

Matrix: Water | Lab File ID: MS1_6845b-LCS.d

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 05/27/2022 18:02

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 576482 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
75-71-8	Dichlorodifluoromethane	48.1		2.0	0.80	0.31
100-41-4	Ethylbenzene	47.0		1.0	0.40	0.16
106-93-4	Ethylene Dibromide	48.5		1.0	0.40	0.18
98-82-8	Isopropylbenzene	52.1		1.0	0.40	0.19
79-20-9	Methyl acetate	95.1		5.0	4.0	1.6
1634-04-4	Methyl tert-butyl ether	52.0		5.0	0.80	0.25
108-87-2	Methylcyclohexane	45.3		2.0	0.40	0.10
75-09-2	Methylene Chloride	43.2		5.0	2.0	0.94
100-42-5	Styrene	51.4		1.0	0.80	0.36
127-18-4	Tetrachloroethene	42.8		1.0	0.40	0.20
108-88-3	Toluene	47.0		1.0	0.40	0.17
156-60-5	trans-1,2-Dichloroethene	46.0		1.0	0.40	0.15
10061-02-6	trans-1,3-Dichloropropene	50.1		1.0	0.40	0.19
79-01-6	Trichloroethene	46.5		1.0	0.40	0.16
75-69-4	Trichlorofluoromethane	50.8		2.0	0.80	0.29
75-01-4	Vinyl chloride	45.8		1.5	0.20	0.10
1330-20-7	Xylenes, Total	96.0		1.0	0.80	0.19

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		81-118
460-00-4	4-Bromofluorobenzene (Surr)	110		85-114
1868-53-7	Dibromofluoromethane (Surr)	97		80-119
2037-26-5	Toluene-d8 (Surr)	102		89-112

Eurofins Environment Testing America
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6845b-LCS.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 27-May-2022 18:02:30 ALS Bottle#: 24 Worklist Smp#: 1002
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ccvc
Operator ID: sunleec Instrument ID: VMS_MS1

Method: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 27-May-2022 19:16:12 Calib Date: 05-May-2022 17:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5811.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1624

First Level Reviewer: burkes Date: 27-May-2022 19:16:12

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.794	5.794	0.000	98	1168464	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.517	8.517	0.000	88	268060	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.794	10.794	0.000	96	434742	50.0	50.0	
$ 5 Dibromofluoromethane (Surr)	111	5.221	5.221	0.000	92	301398	50.0	48.4	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.515	5.515	0.000	0	346264	50.0	48.1	
$ 7 Toluene-d8 (Surr)	98	7.177	7.177	0.000	94	1118682	50.0	51.2	
$ 8 4-Bromofluorobenzene (Surr)	95	9.649	9.649	0.000	87	422215	50.0	55.2	
11 Dichlorodifluoromethane	85	1.674	1.674	0.000	100	230009	50.0	48.1	
12 Chloromethane	50	1.869	1.869	0.000	98	208938	50.0	46.1	
13 Vinyl chloride	62	1.967	1.967	0.000	100	199661	50.0	45.8	
15 Bromomethane	94	2.316	2.316	0.000	92	145608	50.0	53.9	
16 Chloroethane	64	2.428	2.428	0.000	99	148893	50.0	54.0	
17 Dichlorofluoromethane	67	2.652	2.652	0.000	97	381255	50.0	50.6	
18 Trichlorofluoromethane	101	2.679	2.679	0.000	99	334711	50.0	50.8	
20 Ethyl ether	59	2.959	2.959	0.000	95	148324	50.0	46.3	
22 Acrolein	56	3.098	3.098	0.000	98	104635	395.0	387.9	
23 1,1-Dichloroethene	96	3.196	3.196	0.000	97	154530	50.0	43.8	
24 112TCTFE	151	3.196	3.196	0.000	94	121618	50.0	43.2	
25 Acetone	43	3.224	3.224	0.000	99	190834	200.0	173.7	
26 Iodomethane	142	3.336	3.336	0.000	99	216098	50.0	36.8	
28 Carbon disulfide	76	3.406	3.406	0.000	100	512666	50.0	42.7	
30 Methyl acetate	43	3.517	3.517	0.000	99	233867	100.0	95.1	
31 3-Chloro-1-propene	41	3.531	3.531	0.000	88	278036	50.0	41.5	
32 Methylene Chloride	84	3.657	3.657	0.000	94	205163	50.0	43.2	
33 2-Methyl-2-propanol	59	3.741	3.741	0.000	96	124095	500.0	451.9	
34 Acrylonitrile	53	3.867	3.867	0.000	98	674287	500.0	481.3	
35 Methyl tert-butyl ether	73	3.894	3.894	0.000	97	494562	50.0	52.0	
36 trans-1,2-Dichloroethene	96	3.908	3.908	0.000	98	187245	50.0	46.0	
37 Hexane	57	4.146	4.146	0.000	95	223293	50.0	41.5	
39 Vinyl acetate	43	4.286	4.286	0.000	98	538825	100.0	101.2	
40 1,1-Dichloroethane	63	4.300	4.300	0.000	96	349796	50.0	44.8	
46 2-Butanone (MEK)	43	4.774	4.774	0.000	100	291515	200.0	201.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
48 cis-1,2-Dichloroethene	96	4.788	4.788	0.000	84	208459	50.0	47.7	
49 2,2-Dichloropropane	77	4.802	4.802	0.000	91	235243	50.0	42.3	
51 sec-Butyl Alcohol	45	4.928	4.928	0.000	98	229671	1200.0	1048.2	
53 Chlorobromomethane	128	4.998	4.998	0.000	98	102283	50.0	43.3	
54 Tetrahydrofuran	42	5.012	5.012	0.000	86	100155	100.0	94.5	
55 Chloroform	83	5.082	5.082	0.000	94	353158	50.0	46.8	
56 1,1,1-Trichloroethane	97	5.235	5.235	0.000	98	292584	50.0	46.8	
57 Cyclohexane	56	5.291	5.291	0.000	94	316353	50.0	45.1	
58 1,1-Dichloropropene	75	5.361	5.361	0.000	92	255176	50.0	46.7	
59 Carbon tetrachloride	117	5.375	5.375	0.000	88	227955	50.0	46.1	
60 Isobutyl alcohol	41	5.417	5.417	0.000	93	103269	1250.0	1094.6	
63 Benzene	78	5.543	5.543	0.000	98	754421	50.0	46.7	
64 1,2-Dichloroethane	62	5.584	5.584	0.000	98	287116	50.0	44.7	
66 n-Heptane	43	5.766	5.766	0.000	91	192139	50.0	40.1	
68 Trichloroethene	95	6.101	6.101	0.000	97	200097	50.0	46.5	
69 2-Pentanone	43	6.227	6.227	0.000	99	351999	160.0	139.9	
70 Methylcyclohexane	55	6.311	6.311	0.000	91	224721	50.0	45.3	
71 1,2-Dichloropropane	63	6.325	6.325	0.000	92	197038	50.0	47.5	
73 1,4-Dioxane	88	6.380	6.380	0.000	98	41643	1000.0	850.5	
74 Dibromomethane	93	6.408	6.408	0.000	95	122097	50.0	45.1	
75 Dichlorobromomethane	83	6.548	6.548	0.000	99	267049	50.0	47.9	
77 2-Chloroethyl vinyl ether	63	6.786	6.786	0.000	93	116978	50.0	56.9	
78 cis-1,3-Dichloropropene	75	6.925	6.925	0.000	93	299588	50.0	46.4	
79 4-Methyl-2-pentanone (MIBK)	43	7.037	7.037	0.000	99	592667	200.0	203.6	
82 Toluene	91	7.232	7.232	0.000	98	787114	50.0	47.0	
84 trans-1,3-Dichloropropene	75	7.428	7.428	0.000	99	264421	50.0	50.1	
85 Ethyl methacrylate	69	7.456	7.456	0.000	91	209185	50.0	54.7	
87 1,1,2-Trichloroethane	97	7.610	7.610	0.000	91	167622	50.0	50.1	
89 Tetrachloroethene	164	7.707	7.707	0.000	96	138061	50.0	42.8	
90 1,3-Dichloropropane	76	7.763	7.763	0.000	95	291570	50.0	50.3	
91 2-Hexanone	43	7.791	7.791	0.000	97	403815	200.0	200.2	
95 Chlorodibromomethane	129	7.973	7.973	0.000	89	180938	50.0	49.7	
96 Ethylene Dibromide	107	8.084	8.084	0.000	100	166839	50.0	48.5	
98 1-Chlorohexane	91	8.503	8.503	0.000	96	177301	40.0	34.2	
99 Chlorobenzene	112	8.545	8.545	0.000	93	516224	50.0	46.9	
100 1,1,1,2-Tetrachloroethane	131	8.615	8.615	0.000	91	175196	50.0	49.6	
101 Ethylbenzene	106	8.629	8.629	0.000	99	276716	50.0	47.0	
102 m-Xylene & p-Xylene	106	8.741	8.741	0.000	0	345328	50.0	47.2	
103 o-Xylene	106	9.118	9.118	0.000	96	338331	50.0	48.8	
104 Styrene	104	9.132	9.132	0.000	94	612302	50.0	51.4	
106 Bromoform	173	9.327	9.327	0.000	94	106838	50.0	46.5	
107 Isopropylbenzene	105	9.467	9.467	0.000	96	881998	50.0	52.1	
109 Cyclohexanone	55	9.565	9.565	0.000	94	172875	1500.0	1430.6	
110 1,1,2,2-Tetrachloroethane	83	9.760	9.760	0.000	95	197701	50.0	48.4	
111 Bromobenzene	156	9.788	9.788	0.000	98	222997	50.0	48.2	
112 trans-1,4-Dichloro-2-butene	53	9.802	9.802	0.000	84	60568	50.0	51.0	
113 1,2,3-Trichloropropane	110	9.830	9.830	0.000	85	64376	50.0	50.8	
114 N-Propylbenzene	120	9.872	9.872	0.000	99	236532	50.0	50.2	
115 2-Chlorotoluene	126	9.970	9.970	0.000	95	201557	50.0	47.9	
116 1,3,5-Trimethylbenzene	105	10.054	10.054	0.000	95	756661	50.0	51.7	
117 4-Chlorotoluene	126	10.096	10.096	0.000	98	214460	50.0	48.5	
118 tert-Butylbenzene	119	10.361	10.361	0.000	93	613420	50.0	49.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
119 1,2,4-Trimethylbenzene	105	10.431	10.431	0.000	98	785776	50.0	51.0	
120 sec-Butylbenzene	134	10.584	10.584	0.000	95	166359	50.0	46.2	
121 1,3-Dichlorobenzene	146	10.710	10.710	0.000	97	411605	50.0	47.6	
122 4-Isopropyltoluene	119	10.738	10.738	0.000	97	768114	50.0	48.5	
123 1,4-Dichlorobenzene	146	10.822	10.822	0.000	96	425724	50.0	46.3	
125 n-Butylbenzene	91	11.143	11.143	0.000	98	674756	50.0	48.7	
127 1,2-Dichlorobenzene	146	11.171	11.171	0.000	96	397298	50.0	47.1	
128 1,2-Dibromo-3-Chloropropane	157	11.967	11.967	0.000	83	35858	50.0	43.0	
130 1,2,4-Trichlorobenzene	180	12.791	12.791	0.000	94	223968	50.0	42.8	
131 Hexachlorobutadiene	225	12.931	12.931	0.000	95	77359	50.0	39.3	
132 Naphthalene	128	13.056	13.056	0.000	98	557199	50.0	43.4	
134 1,2,3-Trichlorobenzene	180	13.280	13.280	0.000	94	177752	50.0	41.3	
S 149 1,2-Dichloroethene, Total (URS)	96				0		100.0	93.7	
S 156 1,3-Dichloropropene, Total	1				0		100.0	96.4	
S 155 Xylenes, Total	106				0		100.0	96.0	
S 153 Xylenes, Total (URS)	1				0		100.0	96.0	
S 151 Trihalomethanes, Total	1				0		200.0	190.9	
S 150 1,2-Dichloroethene, Total	1				0		100.0	93.7	

Reagents:

Acrolein_A_00008	Amount Added:	25.00	Units: uL	
MV-MegaMainA_00072	Amount Added:	25.00	Units: uL	
MV-Gas A_00124	Amount Added:	10.00	Units: uL	
mv-IS_SS_00039	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 27-May-2022 19:16:13 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Environment Testing America

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6845b-LCS.d

Injection Date: 27-May-2022 18:02:30 Instrument ID: VMS_MS1 Operator ID: sunleec

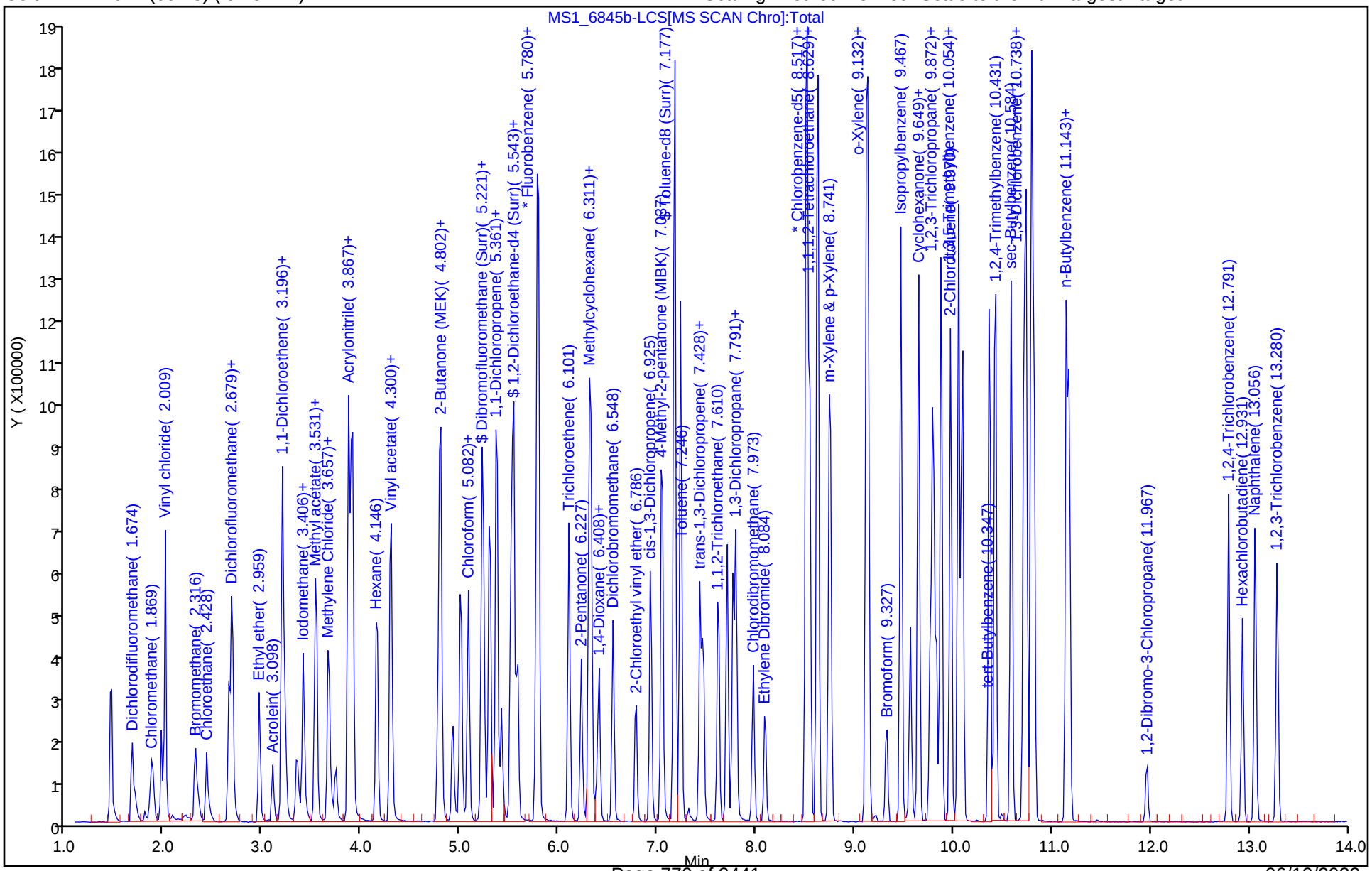
Lims ID: LCS Worklist Smp#: 1002

Client ID:

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 Environment Testing America

Recovery Report

Data File:	\\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6845b-LCS.d				
Lims ID:	LCS				
Client ID:					
Sample Type:	LCS				
Inject. Date:	27-May-2022 18:02:30	ALS Bottle#:	24	Worklist Smp#:	1002
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	ccvc				
Operator ID:	sunleec	Instrument ID:	VMS_MS1		
Method:	\\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\AQ_VMS1_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	27-May-2022 19:16:12	Calib Date:	05-May-2022 17:32:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5811.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1624				

First Level Reviewer: burkes Date: 27-May-2022 19:16:12

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	48.4	96.72
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	48.1	96.23
$ 7 Toluene-d8 (Surr)	50.0	51.2	102.35
$ 8 4-Bromofluorobenzene (Surr)	50.0	55.2	110.37

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 280-576482/5

Matrix: Water | Lab File ID: MS1_6847.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 05/27/2022 19:21

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 576482 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
71-55-6	1,1,1-Trichloroethane	52.4		1.0	0.40	0.16
79-34-5	1,1,2,2-Tetrachloroethane	50.0		1.0	0.80	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	52.1		3.0	0.40	0.18
79-00-5	1,1,2-Trichloroethane	48.1		1.0	0.80	0.27
75-34-3	1,1-Dichloroethane	48.1		1.0	0.80	0.22
75-35-4	1,1-Dichloroethene	52.8		1.0	0.80	0.23
87-61-6	1,2,3-Trichlorobenzene	39.3		1.0	0.80	0.21
120-82-1	1,2,4-Trichlorobenzene	44.5		1.0	0.80	0.21
96-12-8	1,2-Dibromo-3-Chloropropane	44.0		5.0	1.6	0.47
95-50-1	1,2-Dichlorobenzene	47.6		1.0	0.40	0.15
107-06-2	1,2-Dichloroethane	44.3		1.0	0.40	0.13
78-87-5	1,2-Dichloropropane	49.2		1.0	0.40	0.18
541-73-1	1,3-Dichlorobenzene	49.9		1.0	0.40	0.13
106-46-7	1,4-Dichlorobenzene	47.7		1.0	0.40	0.16
78-93-3	2-Butanone (MEK)	189		6.0	4.0	2.0
591-78-6	2-Hexanone	190		5.0	4.0	1.7
108-10-1	4-Methyl-2-pentanone (MIBK)	190		5.0	3.2	0.98
67-64-1	Acetone	164		10	6.4	1.9
71-43-2	Benzene	50.7		1.0	0.40	0.16
74-97-5	Bromochloromethane	42.8		1.0	0.20	0.10
75-27-4	Bromodichloromethane	48.4		1.0	0.40	0.17
75-25-2	Bromoform	47.2		1.0	0.90	0.46
74-83-9	Bromomethane	52.1		2.0	0.80	0.21
75-15-0	Carbon disulfide	50.6		2.0	0.80	0.17
56-23-5	Carbon tetrachloride	53.1		2.0	0.40	0.19
108-90-7	Chlorobenzene	49.7		1.0	0.40	0.17
75-00-3	Chloroethane	51.4		2.0	1.6	0.41
67-66-3	Chloroform	50.4		1.0	0.40	0.16
74-87-3	Chloromethane	45.1		2.0	0.80	0.30
156-59-2	cis-1,2-Dichloroethene	51.3		1.0	0.40	0.15
10061-01-5	cis-1,3-Dichloropropene	49.4		1.0	0.40	0.16
110-82-7	Cyclohexane	54.3		2.0	0.80	0.28
124-48-1	Dibromochloromethane	50.0		1.0	0.40	0.17

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 280-576482/5

Matrix: Water | Lab File ID: MS1_6847.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 05/27/2022 19:21

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 576482 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
75-71-8	Dichlorodifluoromethane	45.8		2.0	0.80	0.31
100-41-4	Ethylbenzene	51.3		1.0	0.40	0.16
106-93-4	Ethylene Dibromide	49.9		1.0	0.40	0.18
98-82-8	Isopropylbenzene	57.0		1.0	0.40	0.19
79-20-9	Methyl acetate	89.4		5.0	4.0	1.6
1634-04-4	Methyl tert-butyl ether	51.9		5.0	0.80	0.25
108-87-2	Methylcyclohexane	55.6		2.0	0.40	0.10
75-09-2	Methylene Chloride	47.1		5.0	2.0	0.94
100-42-5	Styrene	53.6		1.0	0.80	0.36
127-18-4	Tetrachloroethene	49.8		1.0	0.40	0.20
108-88-3	Toluene	51.2		1.0	0.40	0.17
156-60-5	trans-1,2-Dichloroethene	50.6		1.0	0.40	0.15
10061-02-6	trans-1,3-Dichloropropene	52.5		1.0	0.40	0.19
79-01-6	Trichloroethene	51.1		1.0	0.40	0.16
75-69-4	Trichlorofluoromethane	50.9		2.0	0.80	0.29
75-01-4	Vinyl chloride	44.3		1.5	0.20	0.10
1330-20-7	Xylenes, Total	104		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)	108		85-114
1868-53-7	Dibromofluoromethane (Surr)	95		80-119
2037-26-5	Toluene-d8 (Surr)	103		89-112

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6847.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 27-May-2022 19:21:30 ALS Bottle#: 1 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: lcsd
Operator ID: burkes Instrument ID: VMS_MS1

Method: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 27-May-2022 20:59:22 Calib Date: 05-May-2022 17:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5811.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1624

First Level Reviewer: burkes Date: 27-May-2022 20:59:22

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.794	5.794	0.000	98	1203909	50.0	50.0	
* 2 Chlorobenzene-d5	119	8.517	8.517	0.000	88	275560	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.794	10.794	0.000	97	450344	50.0	50.0	
$ 5 Dibromofluoromethane (Surr)	111	5.221	5.221	0.000	92	306396	50.0	47.7	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.515	5.514	0.001	0	360705	50.0	48.6	
$ 7 Toluene-d8 (Surr)	98	7.177	7.176	0.001	94	1161093	50.0	51.7	
$ 8 4-Bromofluorobenzene (Surr)	95	9.649	9.648	0.001	86	429318	50.0	54.2	
11 Dichlorodifluoromethane	85	1.674	1.674	0.000	99	225504	50.0	45.8	
12 Chloromethane	50	1.870	1.869	0.001	99	210929	50.0	45.1	
13 Vinyl chloride	62	1.967	1.967	0.000	98	199109	50.0	44.3	
15 Bromomethane	94	2.316	2.316	0.000	92	145056	50.0	52.1	
16 Chloroethane	64	2.428	2.428	0.000	99	145906	50.0	51.4	
17 Dichlorofluoromethane	67	2.652	2.652	0.000	97	386409	50.0	49.8	
18 Trichlorofluoromethane	101	2.680	2.679	0.001	98	345456	50.0	50.9	
20 Ethyl ether	59	2.959	2.959	0.000	93	158658	50.0	48.0	
22 Acrolein	56	3.099	3.098	0.001	99	114218	395.0	411.0	
23 1,1-Dichloroethene	96	3.196	3.196	0.000	98	191910	50.0	52.8	
24 112TCTFE	151	3.210	3.196	0.014	94	151055	50.0	52.1	
25 Acetone	43	3.224	3.224	0.000	99	185744	200.0	164.1	
26 Iodomethane	142	3.336	3.336	0.000	100	226327	50.0	37.4	
28 Carbon disulfide	76	3.406	3.406	0.000	100	626680	50.0	50.6	
30 Methyl acetate	43	3.518	3.517	0.001	98	226388	100.0	89.4	
31 3-Chloro-1-propene	41	3.532	3.531	0.001	88	338630	50.0	49.0	
32 Methylene Chloride	84	3.657	3.657	0.000	92	230671	50.0	47.1	
33 2-Methyl-2-propanol	59	3.741	3.741	0.000	96	121266	500.0	428.7	
34 Acrylonitrile	53	3.867	3.867	0.000	98	670428	500.0	464.4	
35 Methyl tert-butyl ether	73	3.895	3.894	0.001	97	508662	50.0	51.9	
36 trans-1,2-Dichloroethene	96	3.909	3.908	0.001	98	212134	50.0	50.6	
37 Hexane	57	4.160	4.146	0.014	95	300147	50.0	54.2	
39 Vinyl acetate	43	4.286	4.286	0.000	98	740641	100.0	135.0	
40 1,1-Dichloroethane	63	4.300	4.300	0.000	97	387122	50.0	48.1	
46 2-Butanone (MEK)	43	4.775	4.774	0.000	99	281752	200.0	189.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
48 cis-1,2-Dichloroethene	96	4.802	4.788	0.014	84	230952	50.0	51.3	
49 2,2-Dichloropropane	77	4.802	4.802	0.000	91	318221	50.0	55.5	
51 sec-Butyl Alcohol	45	4.928	4.928	0.000	98	224606	1200.0	996.7	
53 Chlorobromomethane	128	4.998	4.998	0.000	97	104342	50.0	42.8	
54 Tetrahydrofuran	42	5.012	5.012	0.000	88	99266	100.0	90.9	
55 Chloroform	83	5.082	5.082	0.000	94	391874	50.0	50.4	
56 1,1,1-Trichloroethane	97	5.235	5.235	0.000	98	337396	50.0	52.4	
57 Cyclohexane	56	5.291	5.291	0.000	94	392399	50.0	54.3	
58 1,1-Dichloropropene	75	5.361	5.361	0.000	93	309318	50.0	54.9	
59 Carbon tetrachloride	117	5.375	5.375	0.000	89	270620	50.0	53.1	
60 Isobutyl alcohol	41	5.417	5.417	0.000	92	103718	1250.0	1067.5	
63 Benzene	78	5.543	5.543	0.001	98	843392	50.0	50.7	
64 1,2-Dichloroethane	62	5.585	5.584	0.001	98	293444	50.0	44.3	
66 n-Heptane	43	5.766	5.766	0.000	93	263775	50.0	53.4	
68 Trichloroethene	95	6.101	6.101	0.000	96	226573	50.0	51.1	
69 2-Pentanone	43	6.227	6.227	0.000	99	346319	160.0	133.7	
70 Methylcyclohexane	55	6.311	6.311	0.000	92	283763	50.0	55.6	
71 1,2-Dichloropropane	63	6.325	6.325	0.000	91	210056	50.0	49.2	
73 1,4-Dioxane	88	6.381	6.380	0.001	93	44432	1000.0	880.8	
74 Dibromomethane	93	6.409	6.408	0.001	97	123858	50.0	44.4	
75 Dichlorobromomethane	83	6.548	6.548	0.000	98	278312	50.0	48.4	
77 2-Chloroethyl vinyl ether	63	6.786	6.786	0.000	93	108897	50.0	51.4	
78 cis-1,3-Dichloropropene	75	6.925	6.925	0.000	93	328371	50.0	49.4	
79 4-Methyl-2-pentanone (MIBK)	43	7.051	7.037	0.014	97	571001	200.0	190.3	
82 Toluene	91	7.233	7.232	0.001	98	884015	50.0	51.2	
84 trans-1,3-Dichloropropene	75	7.428	7.428	0.000	95	285778	50.0	52.5	
85 Ethyl methacrylate	69	7.470	7.456	0.014	92	200566	50.0	51.0	
87 1,1,2-Trichloroethane	97	7.624	7.610	0.014	93	165912	50.0	48.1	
89 Tetrachloroethene	164	7.707	7.707	0.000	95	165094	50.0	49.8	
90 1,3-Dichloropropane	76	7.763	7.763	0.000	95	300113	50.0	50.4	
91 2-Hexanone	43	7.791	7.791	0.000	98	393714	200.0	189.8	
95 Chlorodibromomethane	129	7.973	7.973	0.000	90	186933	50.0	50.0	
96 Ethylene Dibromide	107	8.085	8.084	0.000	97	176515	50.0	49.9	
98 1-Chlorohexane	91	8.503	8.503	0.000	97	223681	40.0	42.0	
99 Chlorobenzene	112	8.545	8.545	0.000	94	561890	50.0	49.7	
100 1,1,1,2-Tetrachloroethane	131	8.629	8.615	0.014	93	182583	50.0	50.3	
101 Ethylbenzene	106	8.629	8.629	0.000	99	310280	50.0	51.3	
102 m-Xylene & p-Xylene	106	8.755	8.741	0.014	0	392776	50.0	52.2	
103 o-Xylene	106	9.118	9.118	0.000	98	367174	50.0	51.5	
104 Styrene	104	9.132	9.132	0.000	94	656477	50.0	53.6	
106 Bromoform	173	9.328	9.327	0.001	94	111562	50.0	47.2	
107 Isopropylbenzene	105	9.467	9.467	0.000	97	999563	50.0	57.0	
109 Cyclohexanone	55	9.565	9.565	0.000	94	165290	1500.0	1330.6	
110 1,1,2,2-Tetrachloroethane	83	9.774	9.760	0.014	94	211608	50.0	50.0	
111 Bromobenzene	156	9.802	9.788	0.014	97	231000	50.0	48.2	
112 trans-1,4-Dichloro-2-butene	53	9.802	9.802	0.000	80	63314	50.0	51.4	
113 1,2,3-Trichloropropane	110	9.830	9.830	0.000	88	61726	50.0	47.0	
114 N-Propylbenzene	120	9.886	9.872	0.014	99	265756	50.0	54.5	
115 2-Chlorotoluene	126	9.970	9.970	0.000	95	225797	50.0	51.8	
116 1,3,5-Trimethylbenzene	105	10.054	10.054	0.000	94	836774	50.0	55.2	
117 4-Chlorotoluene	126	10.096	10.096	0.000	99	232268	50.0	50.7	
118 tert-Butylbenzene	119	10.375	10.361	0.014	94	706385	50.0	55.3	

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	10.431	10.431	0.000	98	867202	50.0	54.4	
120 sec-Butylbenzene	134	10.598	10.584	0.014	95	197062	50.0	52.8	
121 1,3-Dichlorobenzene	146	10.724	10.710	0.014	98	447302	50.0	49.9	
122 4-Isopropyltoluene	119	10.738	10.738	0.000	97	876380	50.0	53.4	
123 1,4-Dichlorobenzene	146	10.822	10.822	0.000	94	454533	50.0	47.7	
125 n-Butylbenzene	91	11.143	11.143	0.000	98	789332	50.0	55.0	
127 1,2-Dichlorobenzene	146	11.185	11.171	0.014	98	416359	50.0	47.6	
128 1,2-Dibromo-3-Chloropropane	157	11.967	11.967	0.000	83	38011	50.0	44.0	
130 1,2,4-Trichlorobenzene	180	12.791	12.791	0.000	93	241055	50.0	44.5	
131 Hexachlorobutadiene	225	12.931	12.931	0.000	93	93959	50.0	46.1	
132 Naphthalene	128	13.070	13.056	0.014	97	533876	50.0	40.1	
134 1,2,3-Trichlorobenzene	180	13.294	13.280	0.014	95	175392	50.0	39.3	
S 149 1,2-Dichloroethene, Total (URS)	96				0		100.0	101.9	
S 156 1,3-Dichloropropene, Total	1				0		100.0	101.9	
S 155 Xylenes, Total	106				0		100.0	103.7	
S 153 Xylenes, Total (URS)	1				0		100.0	103.7	
S 151 Trihalomethanes, Total	1				0		200.0	196.1	
S 150 1,2-Dichloroethene, Total	1				0		100.0	101.9	

QC Flag Legend

Processing Flags

Reagents:

MV-MegaMainA_00072	Amount Added:	25.00	Units: uL	
Acrolein_A_00008	Amount Added:	25.00	Units: uL	
MV-Gas A_00124	Amount Added:	10.00	Units: uL	
mv-IS_SS_00039	Amount Added:	5.00	Units: uL	Run Reagent

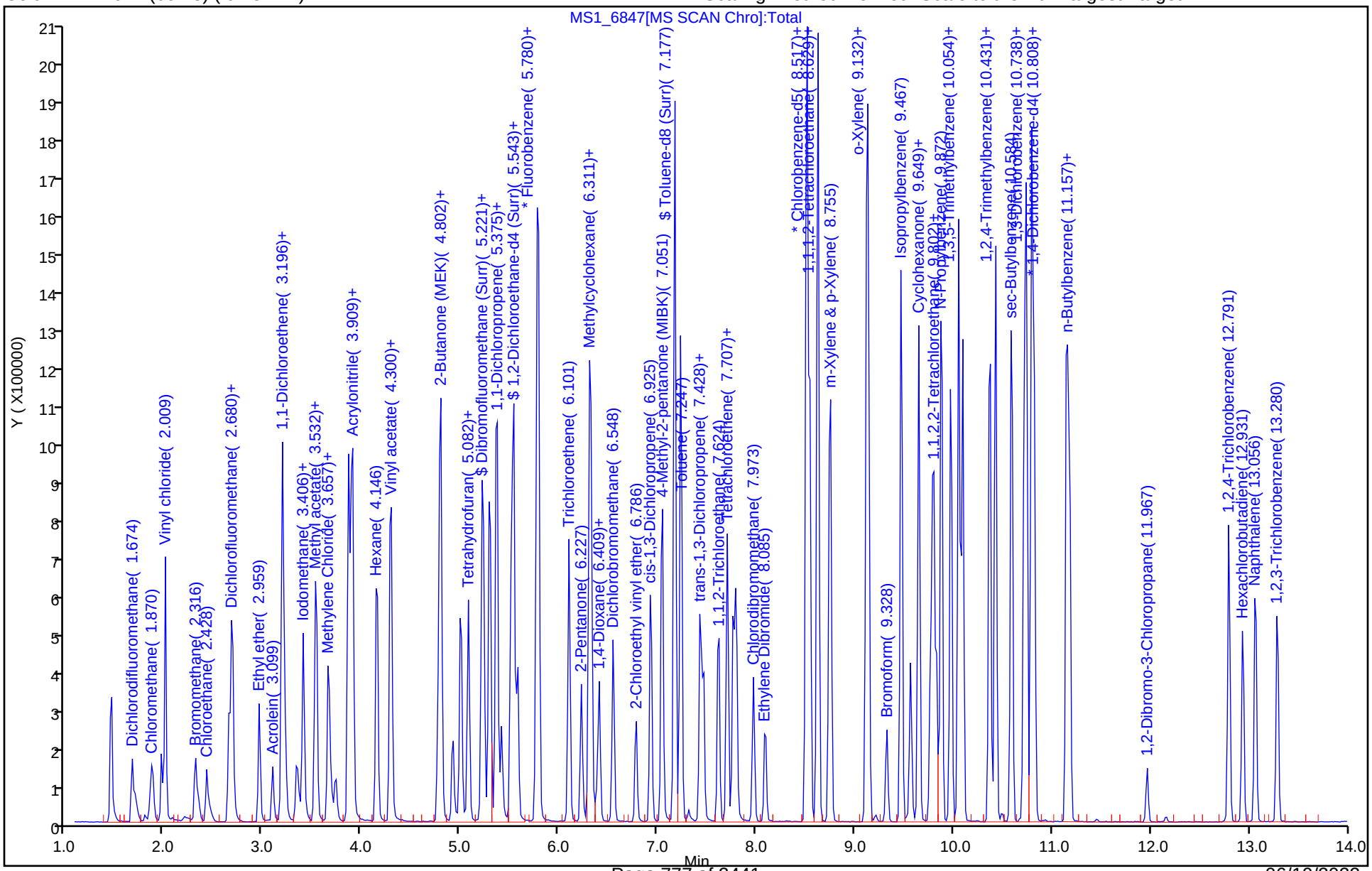
Report Date: 27-May-2022 20:59:23 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6847.D

Injection Date:	27-May-2022 19:21:30	Instrument ID:	VMS_MS1	Operator ID:	burkes
Lims ID:	LCSD			Worklist Smp#:	5
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



Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\MS1_6847.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 27-May-2022 19:21:30 ALS Bottle#: 1 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: lcsd
Operator ID: burkes Instrument ID: VMS_MS1

Method: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b\AQ_VMS1_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 27-May-2022 20:59:22 Calib Date: 05-May-2022 17:32:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b\MS1_5811.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: CTX1624

First Level Reviewer: burkes Date: 27-May-2022 20:59:22

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	50.0	47.7	95.43
$ 6 1,2-Dichloroethane-d4 (Surr)	50.0	48.6	97.29
$ 7 Toluene-d8 (Surr)	50.0	51.7	103.34
$ 8 4-Bromofluorobenzene (Surr)	50.0	54.2	108.34

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: VMS_MS1 Start Date: 02/16/2022 14:18

Analysis Batch Number: 566025 End Date: 02/16/2022 21:21

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-566025/1		02/16/2022 14:18	1	MS1_2510.D	DB-624 (60.25) 0.25(mm)
IC 280-566025/14		02/16/2022 14:56	1	MS1_2511.D	DB-624 (60.25) 0.25(mm)
IC 280-566025/15		02/16/2022 15:18	1	MS1_2512.D	DB-624 (60.25) 0.25(mm)
IC 280-566025/16		02/16/2022 15:39	1	MS1_2513.D	DB-624 (60.25) 0.25(mm)
IC 280-566025/17		02/16/2022 16:01	1	MS1_2514.D	DB-624 (60.25) 0.25(mm)
IC 280-566025/18		02/16/2022 16:22	1	MS1_2515.D	DB-624 (60.25) 0.25(mm)
ICIS 280-566025/19		02/16/2022 16:43	1	MS1_2516.D	DB-624 (60.25) 0.25(mm)
IC 280-566025/20		02/16/2022 17:04	1	MS1_2517.D	DB-624 (60.25) 0.25(mm)
IC 280-566025/21		02/16/2022 17:26	1	MS1_2518.D	DB-624 (60.25) 0.25(mm)
IC 280-566025/22		02/16/2022 17:47	1	MS1_2519.D	DB-624 (60.25) 0.25(mm)
ICV 280-566025/23		02/16/2022 18:08	1		DB-624 (60.25) 0.25(mm)
IC 280-566025/24		02/16/2022 18:30	1		DB-624 (60.25) 0.25(mm)
IC 280-566025/25		02/16/2022 18:51	1		DB-624 (60.25) 0.25(mm)
IC 280-566025/26		02/16/2022 19:13	1		DB-624 (60.25) 0.25(mm)
IC 280-566025/27		02/16/2022 19:34	1		DB-624 (60.25) 0.25(mm)
IC 280-566025/28		02/16/2022 19:55	1		DB-624 (60.25) 0.25(mm)
IC 280-566025/29		02/16/2022 20:17	1		DB-624 (60.25) 0.25(mm)
IC 280-566025/30		02/16/2022 20:38	1		DB-624 (60.25) 0.25(mm)
IC 280-566025/31		02/16/2022 20:59	1		DB-624 (60.25) 0.25(mm)
ICV 280-566025/32		02/16/2022 21:21	1	MS1_2529.D	DB-624 (60.25) 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: VMS_MS1 Start Date: 05/05/2022 14:14

Analysis Batch Number: 574012 End Date: 05/05/2022 17:53

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-574012/1		05/05/2022 14:14	1	MS1_5802.D	DB-624 (60.25) 0.25(mm)
IC 280-574012/35		05/05/2022 14:42	1	MS1_5803.D	DB-624 (60.25) 0.25(mm)
IC 280-574012/36		05/05/2022 15:04	1	MS1_5804.D	DB-624 (60.25) 0.25(mm)
IC 280-574012/37		05/05/2022 15:25	1	MS1_5805.D	DB-624 (60.25) 0.25(mm)
IC 280-574012/38		05/05/2022 15:46	1	MS1_5806.D	DB-624 (60.25) 0.25(mm)
IC 280-574012/39		05/05/2022 16:07	1	MS1_5807.D	DB-624 (60.25) 0.25(mm)
ICIS 280-574012/40		05/05/2022 16:28	1	MS1_5808.D	DB-624 (60.25) 0.25(mm)
IC 280-574012/41		05/05/2022 16:49	1	MS1_5809.D	DB-624 (60.25) 0.25(mm)
IC 280-574012/42		05/05/2022 17:10	1	MS1_5810.D	DB-624 (60.25) 0.25(mm)
IC 280-574012/43		05/05/2022 17:32	1	MS1_5811.D	DB-624 (60.25) 0.25(mm)
ICV 280-574012/44		05/05/2022 17:53	1	MS1_5812.D	DB-624 (60.25) 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: VMS_MS1 Start Date: 05/27/2022 18:02

Analysis Batch Number: 576482 End Date: 05/28/2022 04:10

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-576482/1		05/27/2022 18:02	1	MS1_6845A.D	DB-624 (60.25) 0.25(mm)
CCV 280-576482/2		05/27/2022 18:02	1	MS1_6845b.D	DB-624 (60.25) 0.25(mm)
LCS 280-576482/1002		05/27/2022 18:02	1	MS1_6845b-LCS.d	DB-624 (60.25) 0.25(mm)
CCV 280-576482/3		05/27/2022 18:24	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/27/2022 18:24	1		DB-624 (60.25) 0.25(mm)
LCSD 280-576482/5		05/27/2022 19:21	1	MS1_6847.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		05/27/2022 19:42	1		DB-624 (60.25) 0.25(mm)
MB 280-576482/9		05/27/2022 20:24	1	MS1_6850.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		05/27/2022 20:45	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/27/2022 21:06	1		DB-624 (60.25) 0.25(mm)
280-162622-23	5-18 TB	05/27/2022 21:27	1	MS1_6853.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		05/27/2022 21:49	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/27/2022 22:10	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/27/2022 22:31	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/27/2022 22:52	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/27/2022 23:13	1		DB-624 (60.25) 0.25(mm)
280-162622-19	SHGW02-22A	05/27/2022 23:34	1	MS1_6859.D	DB-624 (60.25) 0.25(mm)
280-162622-20	SHGW05-22A	05/27/2022 23:55	1	MS1_6860.D	DB-624 (60.25) 0.25(mm)
280-162622-21	G0053-22A	05/28/2022 00:16	1	MS1_6861.D	DB-624 (60.25) 0.25(mm)
280-162622-22	G0069-22A	05/28/2022 00:38	1	MS1_6862.D	DB-624 (60.25) 0.25(mm)
280-162622-24	SHGW04-22A	05/28/2022 00:59	1	MS1_6863.D	DB-624 (60.25) 0.25(mm)
280-162622-25	SHGW03-22A	05/28/2022 01:20	1	MS1_6864.D	DB-624 (60.25) 0.25(mm)
280-162622-26	SAMW1-22A	05/28/2022 01:41	1	MS1_6865.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		05/28/2022 02:03	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/28/2022 02:24	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/28/2022 02:45	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/28/2022 03:06	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/28/2022 03:28	1		DB-624 (60.25) 0.25(mm)
CCVC 280-576482/33		05/28/2022 03:49	1	MS1_6871.D	DB-624 (60.25) 0.25(mm)
CCVC 280-576482/34		05/28/2022 04:10	1		DB-624 (60.25) 0.25(mm)

Eurofins Environment Testing America
Worklist Report

Worklist Name: 052722pm
Instrument Name: VMS_MS1
Purge Volume: 5.000
Analysis Type: VOA
Worklist Number: 111427
Chrom Method: AQ_VMS1_8260
Units: mL
Batch Directory: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b
Upload Directory: \\CorpTALSAPP16\280-DN-RawData\Organics\MS\VMS_MS1

Run Reagent: mv-IS_SS_00039
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_00004		
2	#2 CCV	CCV	1.000	voaWater	5.000	mL	Acrolein_A_00008 MV-MegaMainA_00072 MV-Gas A_00124		
3	#3 CCV	CCV	1.000	voaWater	5.000	mL	MV-Supp A_00067		
4	#4 LCS	LCS	1.000	voaWater	5.000	mL	MV-MegaMainA_00072 Acrolein_A_00008 MV-Gas A_00124		
5	#5 LCSD	LCSD	1.000	voaWater	5.000	mL	MV-MegaMainA_00072 Acrolein_A_00008 MV-Gas A_00124		
6	#6 LCS	LCS	1.000	voaWater	5.000	mL	MV-Supp A_00067		
7	#7 LCSD	LCSD	1.000	voaWater	5.000	mL	MV-Supp A_00067		
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-2	Client	1.000	voaWater	5.000	mL			
11	#11 280-141475-A-3	Client	1.000	voaWater	5.000	mL			
12	#12 280-141475-A-7	Client	1.000	voaWater	5.000	mL			
13	#13 280-162525-A-2	Client	1.000	voaWater	5.000	mL		≤2	
14	#14 280-162568-B-5	Client	1.000	voaWater	5.000	mL		≤2	
15	#15 280-162622-A-23	Client	1.000	voaWater	5.000	mL		≤2	
16	#16 280-162669-D-2	Client	1.000	voaWater	5.000	mL		≤2	
17	#17 280-162674-D-5	Client	1.000	voaWater	5.000	mL		≥5	up
18	#18 280-162698-A-2	Client	1.000	voaWater	5.000	mL		≥5	up
19	#19 280-162674-D-4	Client	1.000	voaWater	5.000	mL		≥5	up
20	#20 280-162568-E-3	Client	1.000	voaWater	5.000	mL		≥5	up
21	#21 280-162622-D-19	Client	1.000	voaWater	5.000	mL		≤2	
22	#22 280-162622-E-20	Client	1.000	voaWater	5.000	mL		≤2	
23	#23 280-162622-E-21	Client	1.000	voaWater	5.000	mL		≤2	
24	#24 280-162622-C-22	Client	1.000	voaWater	5.000	mL		≤2	
25	#25 280-162622-A-24	Client	1.000	voaWater	5.000	mL		≤2	
26	#26 280-162622-A-25	Client	1.000	voaWater	5.000	mL		≤2	
27	#27 280-162622-E-26	Client	1.000	voaWater	5.000	mL		≤2	
28	#28 280-162669-I-1	Client	1.000	voaWater	5.000	mL		≤2	
29	#29 280-162674-J-1	Client	1.000	voaWater	5.000	mL		≥7	up
30	#30 280-162674-I-2	Client	1.000	voaWater	5.000	mL		≥7	up
31	#31 280-162674-H-3	Client	1.000	voaWater	5.000	mL		≥7	up
32	#32 280-162698-H-1	Client	1.000	voaWater	5.000	mL		≥7	up
33	#33 CCVC	CCVC	1.000	voaWater	5.000	mL	Acrolein_A_00008 MV-MegaMainA_00072 MV-Gas A_00124		
34	#34 CCVC	CCVC	1.000	voaWater	5.000	mL	MV-Supp A_00067		

5-28-22 dlchecked SL

Eurofins TestAmerica Denver
Instrument ID: MS1
SOP: DV-MS-0010 Rev. 28
Method: (524 / 624 / 8260B / 8260C)
Purge Volume (20mL / 5mL)
Matrix: (Water / Soil / Waste)
Tune Time: 18:02
TALs Batch: 576482

Preliminary Report

Eurofins Environment Testing America
Qc Batch Report

Data Path: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b

Worklist Name:	052722pm	Worklist Num:	111427
Instrument:	VMS_MS1	Method:	AQ_VMS1_8260
Analysis Type:	VOA	Creator:	Burke, Sophie G
Inj Volume:	5	Inj Vol Units:	mL
QC Batching:	Disabled	Limit Group Batching:	Enabled

QC Batch: 1	MSV - 8260B Water and Solid Raw Batch: 576482
# 1 BFB	# 1 BFB
# 2 CCV	# 2 CCV
# 3 CCV	# 3 CCV
# 4 LCS	# 4 LCS
# 5 LCSD	# 5 LCSD
# 6 LCS	# 6 LCS
# 7 LCSD	# 7 LCSD
# 8 RINSE	# 8 RINSE
# 9 MB	# 9 MB
# 10 280-141475-A-2	# 10 280-141475-A-2
# 11 280-141475-A-3	# 11 280-141475-A-3
# 12 280-141475-A-7	# 12 280-141475-A-7
# 13 280-162525-A-2	# 13 280-162525-A-2
# 14 280-162568-B-5	# 14 280-162568-B-5
# 15 280-162622-A-23	# 15 280-162622-A-23
# 16 280-162669-D-2	# 16 280-162669-D-2
# 17 280-162674-D-5	# 17 280-162674-D-5
# 18 280-162698-A-2	# 18 280-162698-A-2
# 19 280-162674-D-4	# 19 280-162674-D-4
# 20 280-162568-E-3	# 20 280-162568-E-3
# 21 280-162622-D-19	# 21 280-162622-D-19
# 22 280-162622-E-20	# 22 280-162622-E-20
# 23 280-162622-E-21	# 23 280-162622-E-21
# 24 280-162622-C-22	# 24 280-162622-C-22
# 25 280-162622-A-24	# 25 280-162622-A-24
# 26 280-162622-A-25	# 26 280-162622-A-25
# 27 280-162622-E-26	# 27 280-162622-E-26
# 28 280-162669-I-1	# 28 280-162669-I-1
# 29 280-162674-J-1	# 29 280-162674-J-1
# 30 280-162674-I-2	# 30 280-162674-I-2
# 31 280-162674-H-3	# 31 280-162674-H-3
# 32 280-162698-H-1	# 32 280-162698-H-1
# 33 CCVC	# 33 CCVC
# 34 CCVC	# 34 CCVC

Eurofins Environment Testing America
Worklist Report

Worklist Name: 052722pm
Instrument Name: VMS_MS1
Purge Volume: 5.000
Analysis Type: VOA
Batch Directory: \\chromfs\Denver\ChromData\VMS_MS1\20220527-111427.b
Upload Directory: \\CorpTALSAPP16\280-DN-RawData\Organics\MS\VMS_MS1
Run Reagent: mv-IS_SS_00039
Batch #s: 576482

Worklist Number: 111427
Chrom Method: AQ_VMS1_8260
Units: mL
Amount Added: 5.000, Units: uL

Worklist ID	Lims ID	Sample Reagents	Smp Type	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
280-0111427-001	# 1 BFB	mv-Cent BFB_00004	BFB	voaWater	2.000	uL	1.000
280-0111427-002	# 2 CCV	Acrolein_A_00008 MV-MegaMainA_00072 MV-Gas A_00124	CCV	voaWater	5.000	mL	1.000
280-0111427-003	# 3 CCV	MV-Supp A_00067	CCV	voaWater	5.000	mL	1.000
280-0111427-004	# 4 LCS	MV-MegaMainA_00072 Acrolein_A_00008 MV-Gas A_00124	LCS	voaWater	5.000	mL	1.000
280-0111427-005	# 5 LCSD	MV-MegaMainA_00072 Acrolein_A_00008 MV-Gas A_00124	LCSD	voaWater	5.000	mL	1.000
280-0111427-006	# 6 LCS	MV-Supp A_00067	LCS	voaWater	5.000	mL	1.000
280-0111427-007	# 7 LCSD	MV-Supp A_00067	LCSD	voaWater	5.000	mL	1.000
280-0111427-008	# 8 RINSE		Client	voaWater	5.000	mL	1.000
280-0111427-009	# 9 MB		MB	voaWater	5.000	mL	1.000
280-0111427-010	#10 280-141475-A-2		Client	voaWater	5.000	mL	1.000
280-0111427-011	#11 280-141475-A-3		Client	voaWater	5.000	mL	1.000
280-0111427-012	#12 280-141475-A-7		Client	voaWater	5.000	mL	1.000
280-0111427-013	#13 280-162525-A-2		Client	voaWater	5.000	mL	1.000

Worklist ID	Lims ID	Sample Reagents	Smp Type	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
280-0111427-014	#14 280-162568-B-5		Client	voaWater	5.000	mL	1.000
280-0111427-015	#15 280-162622-A-23		Client	voaWater	5.000	mL	1.000
280-0111427-016	#16 280-162669-D-2		Client	voaWater	5.000	mL	1.000
280-0111427-017	#17 280-162674-D-5		Client	voaWater	5.000	mL	1.000
280-0111427-018	#18 280-162698-A-2		Client	voaWater	5.000	mL	1.000
280-0111427-019	#19 280-162674-D-4		Client	voaWater	5.000	mL	1.000
280-0111427-020	#20 280-162568-E-3		Client	voaWater	5.000	mL	1.000
280-0111427-021	#21 280-162622-D-19		Client	voaWater	5.000	mL	1.000
280-0111427-022	#22 280-162622-E-20		Client	voaWater	5.000	mL	1.000
280-0111427-023	#23 280-162622-E-21		Client	voaWater	5.000	mL	1.000
280-0111427-024	#24 280-162622-C-22		Client	voaWater	5.000	mL	1.000
280-0111427-025	#25 280-162622-A-24		Client	voaWater	5.000	mL	1.000
280-0111427-026	#26 280-162622-A-25		Client	voaWater	5.000	mL	1.000
280-0111427-027	#27 280-162622-E-26		Client	voaWater	5.000	mL	1.000
280-0111427-028	#28 280-162669-I-1		Client	voaWater	5.000	mL	1.000
280-0111427-029	#29 280-162674-J-1		Client	voaWater	5.000	mL	1.000
280-0111427-030	#30 280-162674-I-2		Client	voaWater	5.000	mL	1.000
280-0111427-031	#31 280-162674-H-3		Client	voaWater	5.000	mL	1.000

Worklist ID	Lims ID	Sample Reagents	Smp Type	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
280-0111427-032	#32 280-162698-H-1		Client	voaWater	5.000	mL	1.000
280-0111427-033	#33 CCVC	Acrolein_A_00008 MV-MegaMainA_00072 MV-Gas A_00124	CCVC	voaWater	5.000	mL	1.000
280-0111427-034	#34 CCVC	MV-Supp A_00067	CCVC	voaWater	5.000	mL	1.000

msl

Sample Request Form: 75096

den_msvoa_totalbacklog Gabe 5/27/2022 7:41:28 PM Assigned to:Burke, Sophie G

Sample	Client Sample ID	Container	Method	Analytical Method	Hold Time	Due	PM	State Code	Storage	Hazard Level
280-162525-2	Trip Blank	1x	8260B	8260B	06/01 23:59	06/07/22	JSC	NV	VS-12	Unconfirmed
280-162568-3	BD-1	1x	8260C	8260C	05/30 23:59	06/01/22	DRR	NE	135 & Mtls-Use & VS-12	Unconfirmed
280-162568-5	TB-2	1x	8260C	8260C	05/30 23:59	06/01/22	DRR	NE	VS-12	Unconfirmed
280-162622-19	SHGW02-22A	1x	8260B_DOD5	8260B_DOD5	06/01 23:59	06/07/22	PJM	NE	152 & VS-15 & VS-5	Unconfirmed
M	Q5Rev3.1-12212015_Std Var App_60day disposal_DIL3									
280-162622-20	SHGW05-22A	1x	8260B_DOD5	8260B_DOD5	06/01 23:59	06/07/22	PJM	NE	152 & VS-5 & VS-15	Unconfirmed
M	Q5Rev3.1-12212015_Std Var App_60day disposal_DIL3									
280-162622-21	G0053-22A	1x	8260B_DOD5	8260B_DOD5	06/01 23:59	06/07/22	PJM	NE	VS-5 & 152 & VS-15	Unconfirmed
M	Q5Rev3.1-12212015_Std Var App_60day disposal_DIL3									
280-162622-22	G0069-22A	1x	8260B_DOD5	8260B_DOD5	06/01 23:59	06/07/22	PJM	NE	VS-5 & VS-15	Unconfirmed
M	Q5Rev3.1-12212015_Std Var App_60day disposal_DIL3									
280-162622-23	5-18 TB	1x	8260B_DOD5	8260B_DOD5	06/01 23:59	06/07/22	PJM	NE	VS-5	Unconfirmed
M	Q5Rev3.1-12212015_Std Var App_60day disposal_DIL3									
280-162622-24	SHGW04-22A	1x	8260B_DOD5	8260B_DOD5	06/01 23:59	06/07/22	PJM	NE	VS-5 & VS-15	Unconfirmed
M	Q5Rev3.1-12212015_Std Var App_60day disposal_DIL3									
280-162622-25	SHGW03-22A	1x	8260B_DOD5	8260B_DOD5	06/01 23:59	06/07/22	PJM	NE	VS-5 & VS-15	Unconfirmed
M	Q5Rev3.1-12212015_Std Var App_60day disposal_DIL3									
280-162622-26	SAMW1-22A	1x	8260B_DOD5	8260B_DOD5	06/01 23:59	06/07/22	PJM	NE	152 & VS-5 & VS-15	Unconfirmed
M	Q5Rev3.1-12212015_Std Var App_60day disposal_DIL3									

msl

Sample Request Form: 75096

den_msvoa_totalbacklog Gabe 5/27/2022 7:41:28 PM Assigned to:Burke, Sophie G

Sample	Client Sample ID	Container	Method	Analytical Method	Hold Time	Due	PM	State Code	Storage	Hazard Level
280-162669-1	Leachate	1x	8260D	8260D	05/30 23:59	06/06/22	DTB	CO	VS-15 & AA-2 & 156 & Mtls-Use & WC Dpt	Unconfirmed
280-162669-2	Trip Blank	1x	8260D	8260D	05/30 23:59	06/06/22	DTB	CO	AA-2 & VS-15	Unconfirmed
280-162674-1	MW-1	1x	8260D	8260D	05/30 23:59	06/06/22	DTB	CO	WC Dpt & VS-15 & Mtls-Use & 156 & AA-2	Unconfirmed
280-162674-2	MW-2	1x	8260D	8260D	05/30 23:59	06/06/22	DTB	CO	VS-15 & Mtls-Use & 156 & AA-2 & WC Dpt	Unconfirmed
280-162674-3	MW-3	1x	8260D	8260D	05/30 23:59	06/06/22	DTB	CO	156 & Mtls-Use & AA-2 & WC Dpt & VS-15	Unconfirmed
280-162674-4	Rinsate Blank	1x	8260D	8260D	05/31 23:59	06/06/22	DTB	CO	VS-15 & AA-2	Unconfirmed
280-162674-5	Trip Blank	1x	8260D	8260D	05/30 23:59	06/06/22	DTB	CO	VS-15 & AA-2	Unconfirmed
280-162698-1	MW-1	1x	8260D	8260D	05/30 23:59	06/06/22	DTB	CO	172 & AA-2 & Mtls-Use & Marked as Disposed	Unconfirmed
280-162698-2	Trip Blank	1x	8260D	8260D	05/30 23:59	06/06/22	DTB	CO	AA-2	Unconfirmed

Eurofins Environment Testing America
Worklist Report

Eurofins TestAmerica Denver
Instrument ID: MS1
SOP: DV-MS-0010 Rev. 28
Method: (524 / 624 / 8260B / 8260C)
Purge Volume (20mL / 5mL)
Matrix: (Water / Soil / Waste)
Tune Time: 14:14 - 17:53
TALs Batch: 574012

Worklist Name: 050522ic
Instrument Name: VMS_MS1
Purge Volume: 5.000
Analysis Type: VOA
Batch Directory: \\chromfs\Denver\ChromData\VMS_MS1\20220505-110723.b
Upload Directory: \\CorpTALSAPP16\280-DN-RawData\Organics\MS\VMS_MS1

Worklist Number: 110723
Chrom Method: AQ_VMS1_8260
Units: mL

Run Reagent: mv-IS_SS_00038 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_00004		
2	#2 CCV	CCV		1.000	voaWater	5.000	mL	MV-MegaMainA_00069 Acrolein_A_00007 MV-Gas A_00121		
3	#3 CCV	CCV		1.000	voaWater	5.000	mL	mv-Cent IS_00006 MV-Supp A_00066		
4	#4 LCS	LCS		1.000	voaWater	5.000	mL	MV-MegaMainA_00069 Acrolein_A_00007 MV-Gas A_00121		
5	#5 LCSD	LCSD		1.000	voaWater	5.000	mL	MV-MegaMainA_00069 Acrolein_A_00007 MV-Gas A_00121		
6	#6 LCS	LCS		1.000	voaWater	5.000	mL	MV-Supp A_00066		
7	#7 LCSD	LCSD		1.000	voaWater	5.000	mL	MV-Supp A_00066		
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			
35	#35 IC	IC	1	1.000	voaWater	5.000	mL	Cal Std 5ppm_00012		
36	#36 IC	IC	2	1.000	voaWater	5.000	mL	Cal Std 5ppm_00012		
37	#37 IC	IC	3	1.000	voaWater	5.000	mL	Cal Std 5ppm_00012		
38	#38 IC	IC	4	1.000	voaWater	5.000	mL	MV-MegaMainA_00070 Acrolein_A_00008 MV-Gas A_00122		
39	#39 IC	IC	5	1.000	voaWater	5.000	mL	MV-MegaMainA_00070 Acrolein_A_00008 MV-Gas A_00122		
40	#40 ICIS	ICIS	6	1.000	voaWater	5.000	mL	MV-MegaMainA_00070 Acrolein_A_00008 MV-Gas A_00122		
41	#41 IC	IC	7	1.000	voaWater	5.000	mL	MV-MegaMainA_00070 Acrolein_A_00008 MV-Gas A_00122		
42	#42 IC	IC	8	1.000	voaWater	5.000	mL	MV-MegaMainA_00070 Acrolein_A_00008 MV-Gas A_00122		
43	#43 IC	IC	9	1.000	voaWater	5.000	mL	MV-MegaMainA_00070 MV-Gas A_00122		
44	#44 ICV	ICV		1.000	voaWater	5.000	mL	MV-MegaMain B_00068 Acrolein_B_00025 MV-Gas B_00110		
45	#45 280-160516-A-9 MDLV	MDLV		1.000	voaWater	5.000	mL	Cal Std 5ppm_00012		
46	#46 280-160516-A-9 MDLV	MDLV		1.000	voaWater	5.000	mL	Cal Std 5ppm_00012		
47	#47 280-160516-A-9 MDLV	MDLV		1.000	voaWater	5.000	mL	Cal Std 5ppm_00012		
48	#48 280-160516-A-9 MDLV	MDLV		1.000	voaWater	5.000	mL	Cal Std 5ppm_00012		
49	#49 280-160516-A-9 MDLV	MDLV		1.000	voaWater	5.000	mL	Cal Std 5ppm_00012		

Main / Gas / Surr ICAL

All compounds ± 20% Except
Dichlorodifluoromethane +28.4%
Acrolein +48.7%

1st Level Reviewer: 5/5/22

2nd Level Reviewer: Claire 5-6-22 06/10/2022

Eurofins Environment Testing America
Worklist Report

Worklist Name: 050522ic Worklist Number: 110723
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\20220505-110723.b
Upload Directory: \\CorpTALSAPP16\280-DN-RawData\Organics\MS\VMS_MS1
Run Reagent: mv-IS_SS_00038 Amount Added: 5.000, Units: uL
Batch #s: 574012

Worklist ID	Lims ID	Sample Reagents	Smp Type	Cal Lvl	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
280-0110723-001	# 1 BFB	mv-Cent BFB_00004	BFB		voaWater	2.000	uL	1.000
280-0110723-002	# 2 CCV	MV-MegaMainA_00069 Acrolein_A_00007 MV-Gas A_00121	CCV		voaWater	5.000	mL	1.000
280-0110723-003	# 3 CCV	mv-Cent IS_00006 MV-Supp A_00066	CCV		voaWater	5.000	mL	1.000
280-0110723-004	# 4 LCS	MV-MegaMainA_00069 Acrolein_A_00007 MV-Gas A_00121	LCS		voaWater	5.000	mL	1.000
280-0110723-005	# 5 LCSD	MV-MegaMainA_00069 Acrolein_A_00007 MV-Gas A_00121	LCSD		voaWater	5.000	mL	1.000
280-0110723-006	# 6 LCS	MV-Supp A_00066	LCS		voaWater	5.000	mL	1.000
280-0110723-007	# 7 LCSD	MV-Supp A_00066	LCSD		voaWater	5.000	mL	1.000
280-0110723-008	# 8 RINSE		Client		voaWater	5.000	mL	1.000
280-0110723-009	# 9 MB		MB		voaWater	5.000	mL	1.000
280-0110723-010	#10 280-141475-A-1		Client		voaWater	5.000	mL	1.000
280-0110723-011	#11 280-141475-A-2		Client		voaWater	5.000	mL	1.000
280-0110723-012	#12 280-141475-A-3		Client		voaWater	5.000	mL	1.000
280-0110723-013	#13 280-141475-A-7		Client		voaWater	5.000	mL	1.000

Worklist ID	Lims ID	Sample Reagents	Smp Type	Cal Lvl	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
280-0110723-035	#35 IC	Cal Std 5ppm_00012	IC	1	voaWater	5.000	mL	1.000
280-0110723-036	#36 IC	Cal Std 5ppm_00012	IC	2	voaWater	5.000	mL	1.000
280-0110723-037	#37 IC	Cal Std 5ppm_00012	IC	3	voaWater	5.000	mL	1.000
280-0110723-038	#38 IC	MV-MegaMainA_00070 Acrolein_A_00008 MV-Gas A_00122	IC	4	voaWater	5.000	mL	1.000
280-0110723-039	#39 IC	MV-MegaMainA_00070 Acrolein_A_00008 MV-Gas A_00122	IC	5	voaWater	5.000	mL	1.000
280-0110723-040	#40 ICIS	MV-MegaMainA_00070 Acrolein_A_00008 MV-Gas A_00122	ICIS	6	voaWater	5.000	mL	1.000
280-0110723-041	#41 IC	MV-MegaMainA_00070 Acrolein_A_00008 MV-Gas A_00122	IC	7	voaWater	5.000	mL	1.000
280-0110723-042	#42 IC	MV-MegaMainA_00070 Acrolein_A_00008 MV-Gas A_00122	IC	8	voaWater	5.000	mL	1.000
280-0110723-043	#43 IC	MV-MegaMainA_00070 MV-Gas A_00122	IC	9	voaWater	5.000	mL	1.000
280-0110723-044	#44 ICV	MV-MegaMain B_00068 Acrolein_B_00025 MV-Gas B_00110	ICV		voaWater	5.000	mL	1.000
280-0110723-045	#45 280-160516-A-9 MDLV	Cal Std 5ppm_00012	MDLV		voaWater	5.000	mL	1.000
280-0110723-046	#46 280-160516-A-9 MDLV	Cal Std 5ppm_00012	MDLV		voaWater	5.000	mL	1.000
280-0110723-047	#47 280-160516-A-9 MDLV	Cal Std 5ppm_00012	MDLV		voaWater	5.000	mL	1.000
280-0110723-048	#48 280-160516-A-9 MDLV	Cal Std 5ppm_00012	MDLV		voaWater	5.000	mL	1.000
280-0110723-049	#49 280-160516-A-9 MDLV	Cal Std 5ppm_00012	MDLV		voaWater	5.000	mL	1.000

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 566025 Batch Start Date: 02/16/22 14:18 Batch Analyst: Sunlee, Claire K

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Acrolein_B 00020	Cal Dil Std 00029	mv-Cent BFB 00004	mv-Cent IS 00006
BFB 280-566025/1		8260B		2 uL	2 uL			5 uL	
IC 280-566025/14		8260B		5 mL	5 mL		5 uL		
IC 280-566025/15		8260B		5 mL	5 mL		10 uL		
IC 280-566025/16		8260B		5 mL	5 mL		20 uL		
IC 280-566025/17		8260B		5 mL	5 mL	2.5 uL			
IC 280-566025/18		8260B		5 mL	5 mL	5 uL			
ICIS 280-566025/19		8260B		5 mL	5 mL	25 uL			
IC 280-566025/20		8260B		5 mL	5 mL	37.5 uL			
IC 280-566025/21		8260B		5 mL	5 mL	50 uL			
IC 280-566025/22		8260B		5 mL	5 mL	100 uL			
ICV 280-566025/32		8260B		5 mL	5 mL				5 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MV-ETOH_CUS B 00001	MV-Gas A 00114	mv-IS_SS 00033	MV-MegaMainA 00065	MV-Supp B 00046	
BFB 280-566025/1		8260B							
IC 280-566025/14		8260B				5 uL			
IC 280-566025/15		8260B				5 uL			
IC 280-566025/16		8260B				5 uL			
IC 280-566025/17		8260B			1 uL	5 uL	2.5 uL		
IC 280-566025/18		8260B			2 uL	5 uL	5 uL		
ICIS 280-566025/19		8260B			10 uL	5 uL	25 uL		
IC 280-566025/20		8260B			15 uL	5 uL	37.5 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 Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 566025 Batch Start Date: 02/16/22 14:18 Batch Analyst: Sunlee, Claire K

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	MV-ETOH_CUS B 00001	MV-Gas A 00114	mv-IS_SS 00033	MV-MegaMainA 00065	MV-Supp B 00046	
IC 280-566025/21		8260B			20 uL	5 uL	50 uL		
IC 280-566025/22		8260B			40 uL	5 uL	100 uL		
ICV 280-566025/32		8260B		50 uL				50 uL	

Batch Notes	

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 574012 Batch Start Date: 05/05/22 14:14 Batch Analyst: Sunlee, Claire K

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Acrolein_A 00008	Acrolein_B 00025	Cal Std 5ppm 00012	mv-Cent BFB 00004
BFB 280-574012/1		8260B		2 uL	2 uL				5 uL
IC 280-574012/35		8260B		5 mL	5 mL			5 uL	
IC 280-574012/36		8260B		5 mL	5 mL			10 uL	
IC 280-574012/37		8260B		5 mL	5 mL			20 uL	
IC 280-574012/38		8260B		5 mL	5 mL	2.5 uL			
IC 280-574012/39		8260B		5 mL	5 mL	5 uL			
ICIS 280-574012/40		8260B		5 mL	5 mL	25 uL			
IC 280-574012/41		8260B		5 mL	5 mL	37.5 uL			
IC 280-574012/42		8260B		5 mL	5 mL	50 uL			
IC 280-574012/43		8260B		5 mL	5 mL				
ICV 280-574012/44		8260B		5 mL	5 mL		25 uL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	MV-Gas A 00122	MV-Gas B 00110	mv-IS_SS 00038	MV-MegaMain B 00068	MV-MegaMainA 00070	
BFB 280-574012/1		8260B							
IC 280-574012/35		8260B				5 uL			
IC 280-574012/36		8260B				5 uL			
IC 280-574012/37		8260B				5 uL			
IC 280-574012/38		8260B		1 uL		5 uL		2.5 uL	
IC 280-574012/39		8260B		2 uL		5 uL		5 uL	
ICIS 280-574012/40		8260B		10 uL		5 uL		25 uL	
IC 280-574012/41		8260B		15 uL		5 uL		37.5 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 Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 574012 Batch Start Date: 05/05/22 14:14 Batch Analyst: Sunlee, Claire K

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	MV-Gas A 00122	MV-Gas B 00110	mv-IS_SS 00038	MV-MegaMain B 00068	MV-MegaMainA 00070	
IC 280-574012/42		8260B		20 uL		5 uL		50 uL	
IC 280-574012/43		8260B		40 uL		5 uL		100 uL	
ICV 280-574012/44		8260B			10 uL	5 uL	25 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 Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 576482 Batch Start Date: 05/27/22 18:02 Batch Analyst: Burke, Sophie G

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Acrolein_A 00008	mv-Cent BFB 00004	MV-Gas A 00124	mv-IS_SS 00039
BFB 280-576482/1		8260B		2 uL	2 uL		5 uL		
CCV 280-576482/2		8260B		5 mL	5 mL	25 uL		10 uL	5 uL
LCSD 280-576482/5		8260B		5 mL	5 mL	25 uL		10 uL	5 uL
MB 280-576482/9		8260B		5 mL	5 mL				5 uL
280-162622-A-23	5-18 TB	8260B	T	5 mL	5 mL				5 uL
280-162622-D-19	SHGW02-22A	8260B	T	5 mL	5 mL				5 uL
280-162622-E-20	SHGW05-22A	8260B	T	5 mL	5 mL				5 uL
280-162622-E-21	G0053-22A	8260B	T	5 mL	5 mL				5 uL
280-162622-C-22	G0069-22A	8260B	T	5 mL	5 mL				5 uL
280-162622-A-24	SHGW04-22A	8260B	T	5 mL	5 mL				5 uL
280-162622-A-25	SHGW03-22A	8260B	T	5 mL	5 mL				5 uL
280-162622-E-26	SAMW1-22A	8260B	T	5 mL	5 mL				5 uL
CCVC 280-576482/33		8260B		5 mL	5 mL	12.5 uL		5 uL	5 uL
LCS 280-576482/1002		8260B		5 mL	5 mL	25 uL		10 uL	5 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MV-MegaMainA 00072					
BFB 280-576482/1		8260B							
CCV 280-576482/2		8260B		25 uL					
LCSD 280-576482/5		8260B		25 uL					
MB 280-576482/9		8260B							
280-162622-A-23	5-18 TB	8260B	T						
280-162622-D-19	SHGW02-22A	8260B	T						
280-162622-E-20	SHGW05-22A	8260B	T						
280-162622-E-21	G0053-22A	8260B	T						
280-162622-C-22	G0069-22A	8260B	T						
280-162622-A-24	SHGW04-22A	8260B	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 576482 Batch Start Date: 05/27/22 18:02 Batch Analyst: Burke, Sophie G

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	MV-MegaMainA 00072					
280-162622-A-25	SHGW03-22A	8260B	T						
280-162622-E-26	SAMW1-22A	8260B	T						
CCVC 280-576482/33		8260B		12.5 uL					
LCS 280-576482/1002		8260B		25 uL					

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

RSK_175_DOD5

Dissolved Gases (GC)

FORM III
GC VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 003F0301.D

Lab ID: LCS 280-576662/3 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
Ethane	0.123	0.134	109	74-131	
Methane	0.0657	0.0640	97	73-125	
Ethylene	0.115	0.118	103	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 Denver Job No.: 280-162622-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 030F3001.D

Lab ID: LCS 280-576768/59 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
Methane	0.0657	0.0648	99	73-125	

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 003F0301.D

Lab ID: LCS 280-576907/3 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
Methane	0.0657	0.0651	99	73-125	

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 003F0301.D

Lab ID: LCS 280-577087/3 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
Methane	0.0657	0.0644	98	73-125	

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 004F0401.D

Lab ID: LCSD 280-576662/4 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCSD CONCENTRATION (mg/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Ethane	0.123	0.133	108	1	20	74-131	
Methane	0.0657	0.0640	97	0	20	73-125	
Ethylene	0.115	0.118	103	0	20	72-133	

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 031F3101.D

Lab ID: LCSD 280-576768/60 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCSD CONCENTRATION (mg/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methane	0.0657	0.0645	98	1	20	73-125	

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 004F0401.D

Lab ID: LCSD 280-576907/4 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCSD CONCENTRATION (mg/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methane	0.0657	0.0641	98	1	20	73-125	

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 004F0401.D

Lab ID: LCSD 280-577087/4 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCSD CONCENTRATION (mg/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methane	0.0657	0.0635	97	1	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 Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: MB 280-576662/5

Matrix: Water Date Extracted:

Lab File ID:(1) 005F0501.D Lab File ID:(2) 005F0501.D

Date Analyzed:(1) 06/01/2022 10:24 Date Analyzed:(2) 06/01/2022 10:24

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 280-576662/3	06/01/2022 09:58	06/01/2022 09:58
	LCSD 280-576662/4	06/01/2022 10:11	06/01/2022 10:11
G0119-22A	280-162622-1	06/01/2022 10:37	06/01/2022 10:37
G0119-22A DU	280-162622-1 DU	06/01/2022 10:50	06/01/2022 10:50
G0101-22A	280-162622-3	06/01/2022 11:15	06/01/2022 11:15
G0100-22A	280-162622-4	06/01/2022 11:29	06/01/2022 11:29
G0122-22A	280-162622-5	06/01/2022 11:42	06/01/2022 11:42
G0066R-22A	280-162622-6	06/01/2022 11:55	06/01/2022 11:55
G0115-22A	280-162622-8	06/01/2022 12:08	06/01/2022 12:08
G0095-22A	280-162622-9	06/01/2022 12:20	06/01/2022 12:20
SHGW02-22A	280-162622-19	06/01/2022 12:33	06/01/2022 12:33
SHGW05-22A	280-162622-20	06/01/2022 12:46	06/01/2022 12:46
G0053-22A	280-162622-21	06/01/2022 13:12	06/01/2022 13:12
G0069-22A	280-162622-22	06/01/2022 13:25	06/01/2022 13:25
SHGW04-22A	280-162622-24	06/01/2022 13:38	06/01/2022 13:38
SHGW03-22A	280-162622-25	06/01/2022 13:51	06/01/2022 13:51
SAMW1-22A	280-162622-26	06/01/2022 14:04	06/01/2022 14:04
PZ018-22A	280-162622-10	06/01/2022 15:09	06/01/2022 15:09
PZ020-22A	280-162622-11	06/01/2022 15:22	06/01/2022 15:22

FORM IV
GC VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: MB 280-576768/61

Matrix: Water Date Extracted:

Lab File ID:(1) 032F3201.D Lab File ID:(2) 032F3201.D

Date Analyzed:(1) 06/01/2022 16:13 Date Analyzed:(2) 06/01/2022 16:13

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 280-576768/59	06/01/2022 15:47	06/01/2022 15:47
	LCSD 280-576768/60	06/01/2022 16:00	06/01/2022 16:00
G0024-22A	280-162622-7	06/01/2022 19:54	06/01/2022 19:54
G0077-22A	280-162622-12	06/01/2022 20:07	06/01/2022 20:07

FORM IV
GC VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: MB 280-576907/5

Matrix: Water Date Extracted:

Lab File ID:(1) 005F0501.D Lab File ID:(2) 005F0501.D

Date Analyzed:(1) 06/02/2022 12:31 Date Analyzed:(2) 06/02/2022 12:31

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 280-576907/3	06/02/2022 12:05	06/02/2022 12:05
	LCSD 280-576907/4	06/02/2022 12:18	06/02/2022 12:18
G0311-22A	280-162622-16	06/02/2022 15:32	06/02/2022 15:32
G0111-22A	280-162622-17	06/02/2022 15:45	06/02/2022 15:45
G0123-22A	280-162622-18	06/02/2022 15:58	06/02/2022 15:58

FORM IV
GC VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: MB 280-577087/5

Matrix: Water Date Extracted:

Lab File ID:(1) 005F0501.D Lab File ID:(2) 005F0501.D

Date Analyzed:(1) 06/03/2022 15:07 Date Analyzed:(2) 06/03/2022 15:07

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 280-577087/3	06/03/2022 14:42	06/03/2022 14:42
	LCSD 280-577087/4	06/03/2022 14:54	06/03/2022 14:54
G0121-22A DL	280-162622-2 DL	06/03/2022 17:56	06/03/2022 17:56

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0119-22A Lab Sample ID: 280-162622-1

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/01/2022 10:37 Date Analyzed (2): 06/01/2022 10:37

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.67	1.64	1.72	0.98		11.2
	2		1.27	1.23	1.31	1.1		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0119-22A DU Lab Sample ID: 280-162622-1 DU

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/01/2022 10:50 Date Analyzed (2): 06/01/2022 10:50

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.67	1.64	1.72	0.956		11.2
	2		1.27	1.23	1.31	1.07		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0121-22A DL Lab Sample ID: 280-162622-2 DL

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/03/2022 17:56 Date Analyzed (2): 06/03/2022 17:56

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.66	1.64	1.72	19		8.9
	2		1.26	1.23	1.31	21		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0101-22A Lab Sample ID: 280-162622-3

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/01/2022 11:15 Date Analyzed (2): 06/01/2022 11:15

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.67	1.64	1.72	13		9.9
	2		1.27	1.23	1.31	15		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0100-22A Lab Sample ID: 280-162622-4

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/01/2022 11:29 Date Analyzed (2): 06/01/2022 11:29

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.67	1.64	1.72	17		9.4
	2		1.27	1.23	1.31	19		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0122-22A Lab Sample ID: 280-162622-5

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/01/2022 11:42 Date Analyzed (2): 06/01/2022 11:42

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.66	1.64	1.72	18		9.4
	2		1.27	1.23	1.31	20		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0066R-22A Lab Sample ID: 280-162622-6

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/01/2022 11:55 Date Analyzed (2): 06/01/2022 11:55

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.67	1.64	1.72	3.6		10.7
	2		1.27	1.23	1.31	4.0		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0115-22A Lab Sample ID: 280-162622-8

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/01/2022 12:08 Date Analyzed (2): 06/01/2022 12:08

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.67	1.64	1.72	14		9.7
	2		1.27	1.23	1.31	15		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0095-22A Lab Sample ID: 280-162622-9

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/01/2022 12:20 Date Analyzed (2): 06/01/2022 12:20

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.67	1.64	1.72	16		9.7
	2		1.27	1.23	1.31	18		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Client Sample ID: PZ018-22A Lab Sample ID: 280-162622-10

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/01/2022 15:09 Date Analyzed (2): 06/01/2022 15:09

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.67	1.64	1.72	15		9.6
	2		1.27	1.23	1.31	17		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0077-22A Lab Sample ID: 280-162622-12

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/01/2022 20:07 Date Analyzed (2): 06/01/2022 20:07

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.67	1.64	1.72	3.3		10.1
	2		1.26	1.23	1.31	3.7		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0311-22A Lab Sample ID: 280-162622-16

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/02/2022 15:32 Date Analyzed (2): 06/02/2022 15:32

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.66	1.64	1.72	8.4		10.9
	2		1.27	1.23	1.31	9.4		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0111-22A Lab Sample ID: 280-162622-17

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/02/2022 15:45 Date Analyzed (2): 06/02/2022 15:45

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.66	1.64	1.72	8.3		11.0
	2		1.27	1.23	1.31	9.3		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0123-22A Lab Sample ID: 280-162622-18

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/02/2022 15:58 Date Analyzed (2): 06/02/2022 15:58

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.66	1.64	1.72	18		9.7
	2		1.26	1.23	1.31	20		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Client Sample ID: SHGW02-22A Lab Sample ID: 280-162622-19

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/01/2022 12:33 Date Analyzed (2): 06/01/2022 12:33

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.67	1.64	1.72	8.5		8.6
	2		1.26	1.23	1.31	9.3		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Client Sample ID: SHGW05-22A Lab Sample ID: 280-162622-20

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/01/2022 12:46 Date Analyzed (2): 06/01/2022 12:46

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.67	1.64	1.72	8.5		8.6
	2		1.26	1.23	1.31	9.3		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0053-22A Lab Sample ID: 280-162622-21

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/01/2022 13:12 Date Analyzed (2): 06/01/2022 13:12

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.67	1.64	1.72	0.0016		31.1
	2		1.26	1.23	1.31	0.0022		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0069-22A Lab Sample ID: 280-162622-22

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/01/2022 13:25 Date Analyzed (2): 06/01/2022 13:25

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.67	1.64	1.72	0.0023		26.1
	2		1.26	1.23	1.31	0.0030		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Client Sample ID: SHGW04-22A Lab Sample ID: 280-162622-24

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/01/2022 13:38 Date Analyzed (2): 06/01/2022 13:38

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		1.67	1.64	1.72	0.25		11.4
	2		1.26	1.23	1.31	0.27		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Client Sample ID: SHGW03-22A Lab Sample ID: 280-162622-25

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/01/2022 13:51 Date Analyzed (2): 06/01/2022 13:51

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.67	1.64	1.72	0.27		11.0
	2		1.26	1.23	1.31	0.30		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Client Sample ID: SAMW1-22A Lab Sample ID: 280-162622-26

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/01/2022 14:04 Date Analyzed (2): 06/01/2022 14:04

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.67	1.64	1.72	0.064		10.1
	2		1.26	1.23	1.31	0.071		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-576662/3

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/01/2022 09:58 Date Analyzed (2): 06/01/2022 09:58

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.68	1.64	1.72	0.0640		1.6
	2		1.27	1.23	1.31	0.0650		
Ethylene	1		2.62	2.57	2.67	0.118		0.7
	2		1.80	1.70	1.80	0.118		
Ethane	1		3.03	2.99	3.09	0.134		2.9
	2		1.52	1.46	1.56	0.130		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-576662/4

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/01/2022 10:11 Date Analyzed (2): 06/01/2022 10:11

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.68	1.64	1.72	0.0640		2.3
	2		1.27	1.23	1.31	0.0655		
Ethylene	1		2.61	2.57	2.67	0.118		0.2
	2		1.82	1.70	1.80	0.118		
Ethane	1		3.03	2.99	3.09	0.133		1.5
	2		1.53	1.46	1.56	0.131		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-576768/59

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/01/2022 15:47 Date Analyzed (2): 06/01/2022 15:47

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.67	1.64	1.72	0.0648		3.0
	2		1.26	1.23	1.31	0.0668		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-576768/60

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/01/2022 16:00 Date Analyzed (2): 06/01/2022 16:00

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.67	1.64	1.72	0.0645		3.0
	2		1.26	1.23	1.31	0.0665		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-576907/3

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/02/2022 12:05 Date Analyzed (2): 06/02/2022 12:05

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.68	1.64	1.72	0.0651		2.2
	2		1.27	1.23	1.31	0.0665		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-576907/4

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/02/2022 12:18 Date Analyzed (2): 06/02/2022 12:18

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.67	1.64	1.72	0.0641		2.7
	2		1.27	1.23	1.31	0.0659		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-577087/3

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/03/2022 14:42 Date Analyzed (2): 06/03/2022 14:42

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.68	1.64	1.72	0.0644		2.3
	2		1.27	1.23	1.31	0.0658		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-577087/4

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 06/03/2022 14:54 Date Analyzed (2): 06/03/2022 14:54

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		1.67	1.64	1.72	0.0635		3.0
	2		1.27	1.23	1.31	0.0654		

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0119-22A Lab Sample ID: 280-162622-1

Matrix: Water Lab File ID: 006F0601.D

Analysis Method: RSK-175 Date Collected: 05/19/2022 10:50

Sample wt/vol: 20(mL) Date Analyzed: 06/01/2022 10:37

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

Purge Volume: Heated Purge: (Y/N) N pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 576662 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.98		0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\006F0601.D
Lims ID: 280-162622-I-1
Client ID: G0119-22A
Sample Type: Client
Inject. Date: 01-Jun-2022 10:37:14 ALS Bottle#: 6 Worklist Smp#: 35
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-162622-I-1
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Jun-2022 09:24:53 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1606

First Level Reviewer: sciannac Date: 01-Jun-2022 11:02:44

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	1.267	1.269	-0.002	38596236	1095.5	
2	1.672	1.682	-0.010	35424315	979.5	
					RPD = 11.19	
3 Ethane						
1		1.510			ND	
2		3.040				
4 Ethylene						
1		1.750			ND	
2		2.620				
5 Propane						
1		2.469			ND	
2		4.937				
6 Acetylene						
1		3.964			ND	
2		2.768				
7 Butane						
1		4.340			ND	
2		6.432				
8 isobutylene						
1		5.245			ND	
2		6.275				

QC Flag Legend

Processing Flags

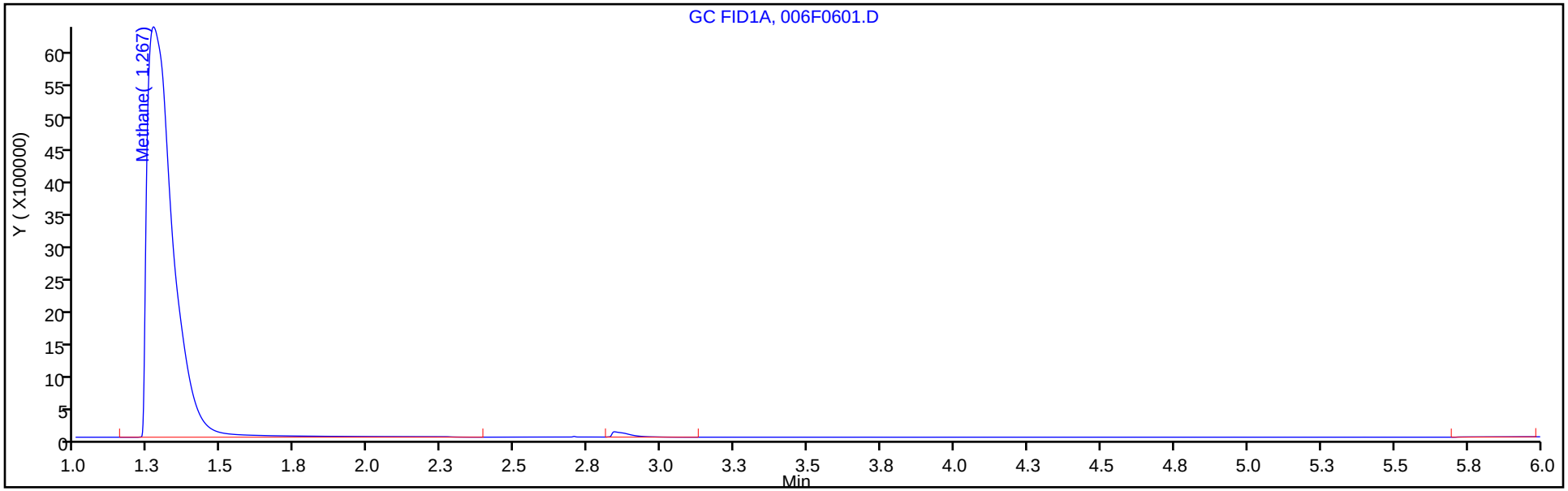
Report Date: 03-Jun-2022 09:24:56 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

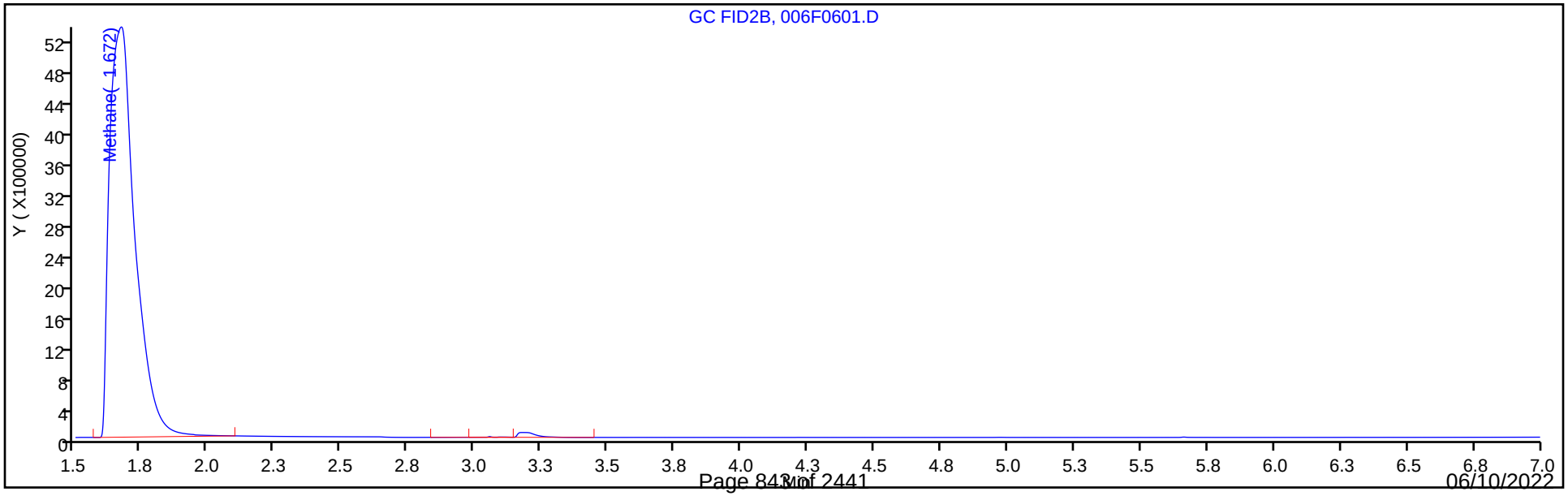
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\006F0601.D

Injection Date:	01-Jun-2022 10:37:14	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-162622-I-1	Lab Sample ID:	280-162622-1	Worklist Smp#:	35
Client ID:	G0119-22A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0121-22A DL | Lab Sample ID: 280-162622-2 DL

Matrix: Water | Lab File ID: 018F1801.D

Analysis Method: RSK-175 | Date Collected: 05/19/2022 12:05

Sample wt/vol: 20(mL) | Date Analyzed: 06/03/2022 17:56

Soil Aliquot Vol: | Dilution Factor: 2

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

Purge Volume: | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 577087 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	19	H D	0.010	0.0026	0.0013

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220603-111567.b\018F1801.D
Lims ID: 280-162622-I-2
Client ID: G0121-22A
Sample Type: Client
Inject. Date: 03-Jun-2022 17:56:17 ALS Bottle#: 18 Worklist Smp#: 31
Purge Vol: 18.000 mL Dil. Factor: 2.0000
Sample Info: 280-162583-E-2
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220603-111567.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 06-Jun-2022 15:18:18 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1658

First Level Reviewer: sciannac Date: 06-Jun-2022 15:10:50

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1	4.339	4.362	-0.023	250688	NC	
2	5.497	5.458	0.039	56015	NC	
					RPD = 0.00	
2 Methane						
1	1.259	1.268	-0.009	372684761	10595	
2	1.662	1.679	-0.017	349804064	9687.3	
					RPD = 8.95	
3 Ethane						
1		1.516			ND	
2		3.034				
4 Ethylene						
1		1.774			ND	
2		2.617				
5 Propane						
1		2.509			ND	
2		4.932				
6 Acetylene						
1		4.016			ND	
2		2.766				
7 Butane						
1		4.373			ND	
2		6.431				
8 isobutylene						
1		5.276			ND	
2		6.274				

QC Flag Legend

Processing Flags

NC - Not Calibrated

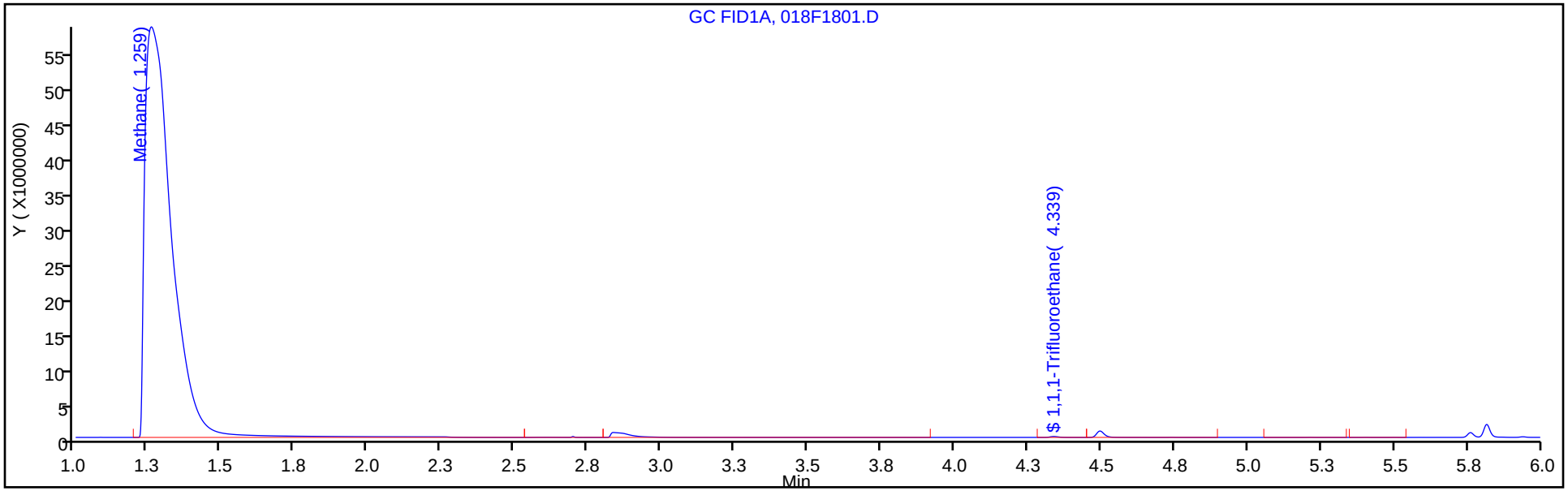
Report Date: 06-Jun-2022 15:18:26 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

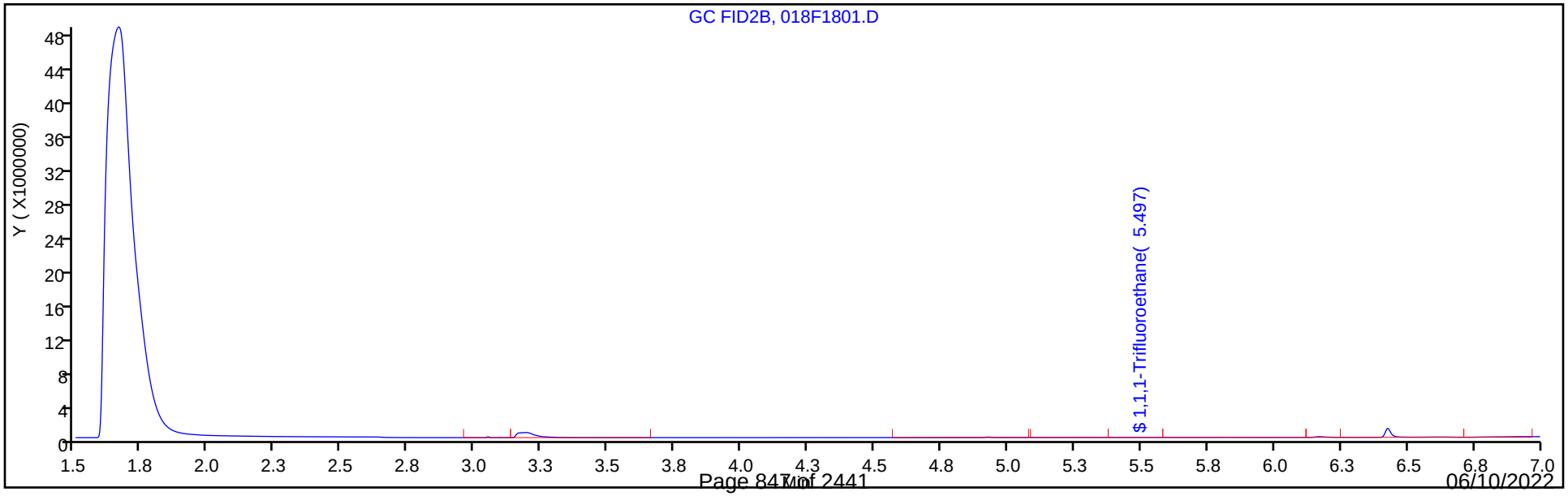
Data File: \\chromfs\Denver\ChromData\VGC_J\20220603-111567.b\018F1801.D

Injection Date:	03-Jun-2022 17:56:17	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-162622-I-2	Lab Sample ID:	280-162622-2	Worklist Smp#:	31
Client ID:	G0121-22A				
Purge Vol:	18.000 mL	Dil. Factor:	2.0000	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



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\VGC_J\20220603-111567.b\018F1801.D				
Lims ID:	280-162622-I-2				
Client ID:	G0121-22A				
Sample Type:	Client				
Inject. Date:	03-Jun-2022 17:56:17	ALS Bottle#:	18	Worklist Smp#:	31
Purge Vol:	18.000 mL	Dil. Factor:	2.0000		
Sample Info:	280-162583-E-2				
Operator ID:	sciannac	Instrument ID:	VGC_J		
Method:	\\chromfs\Denver\ChromData\VGC_J\20220603-111567.b\RSK_J.m				
Limit Group:	GCV - RSK 175				
Method Label:	DV-GC-0025: Dissolved Gases in Water by RSK-175				
Last Update:	06-Jun-2022 15:18:18	Calib Date:	24-Sep-2021 15:12:55		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D				
Column 1 :	Rt-Alumina BOND/KCl (0.53 mm)		Det: GC FID1A		
Column 2 :	HP-PLOT/Q (0.53 mm)		Det: GC FID2B		
Process Host:	CTX1658				
First Level Reviewer: sciannac		Date:	06-Jun-2022 15:10:50		

Surrogate Recovery, Detector: GC FID1A

Compound	Amount Added	Amount Recovered	% Rec.

Surrogate Recovery, Detector: GC FID2B

Compound	Amount Added	Amount Recovered	% Rec.

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0101-22A | Lab Sample ID: 280-162622-3

Matrix: Water | Lab File ID: 009F0901.D

Analysis Method: RSK-175 | Date Collected: 05/19/2022 09:45

Sample wt/vol: 20(mL) | Date Analyzed: 06/01/2022 11:15

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

Purge Volume: | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 576662 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	13		0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\009F0901.D
Lims ID: 280-162622-I-3
Client ID: G0101-22A
Sample Type: Client
Inject. Date: 01-Jun-2022 11:15:59 ALS Bottle#: 9 Worklist Smp#: 38
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-162622-I-3
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Jun-2022 09:24:53 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1606

First Level Reviewer: sciannac Date: 03-Jun-2022 08:59:43

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	1.266	1.269	-0.003	521387702	14823	
2	1.666	1.682	-0.016	484799449	13427	
					RPD = 9.88	
3 Ethane						
1		1.510			ND	
2		3.040				
4 Ethylene						
1		1.750			ND	
2		2.620				
5 Propane						
1		2.469			ND	
2		4.937				
6 Acetylene						
1		3.964			ND	
2		2.768				
7 Butane						
1		4.340			ND	
2		6.432				
8 isobutylene						
1		5.245			ND	
2		6.275				

QC Flag Legend

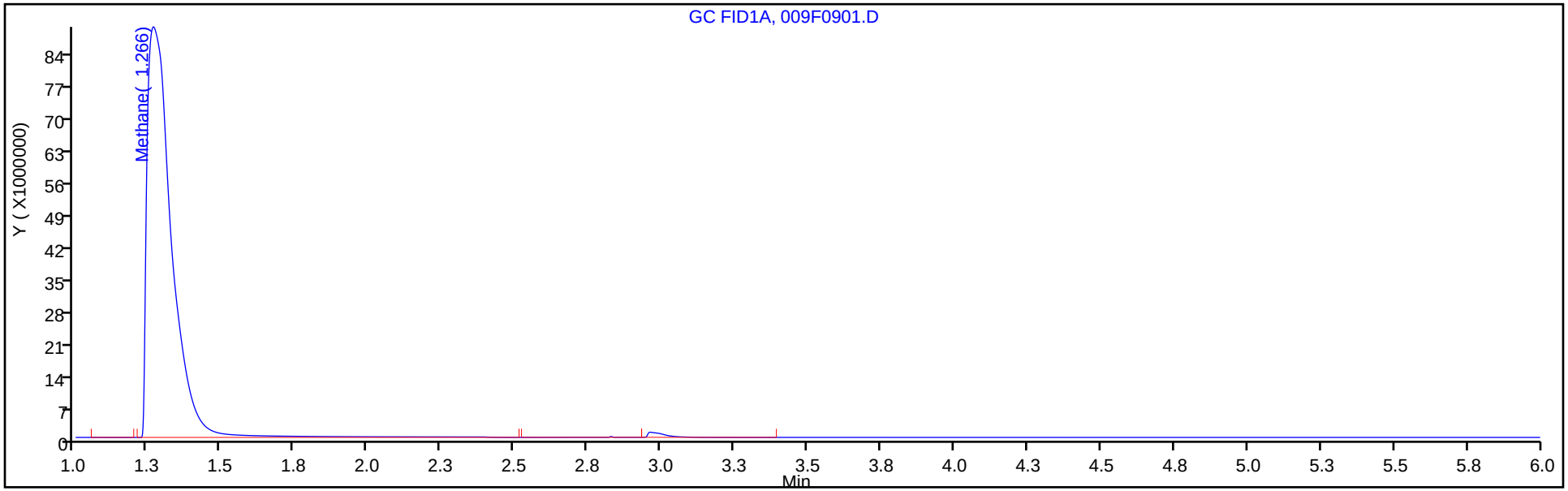
Processing Flags

Report Date: 03-Jun-2022 09:24:57 Chrom Revision: 2.3 18-May-2022 20:00:04

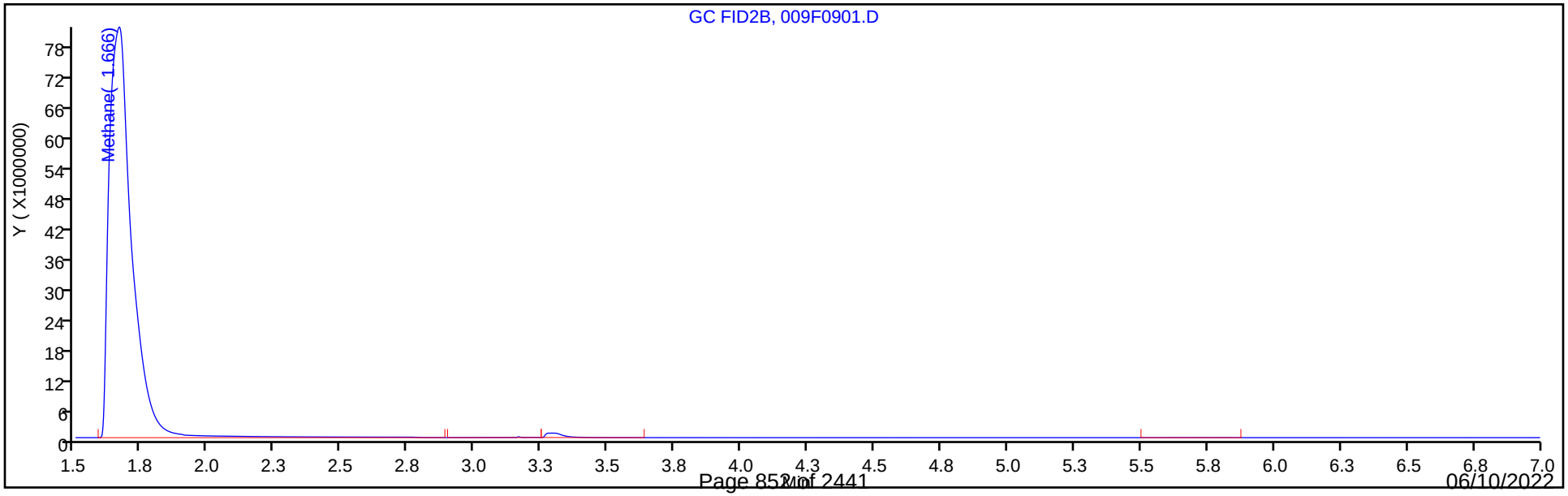
Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\009F0901.D				
Injection Date:	01-Jun-2022 11:15:59	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-162622-I-3	Lab Sample ID:	280-162622-3	Worklist Smp#:	38
Client ID:	G0101-22A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0100-22A | Lab Sample ID: 280-162622-4

Matrix: Water | Lab File ID: 010F1001.D

Analysis Method: RSK-175 | Date Collected: 05/19/2022 09:50

Sample wt/vol: 20(mL) | Date Analyzed: 06/01/2022 11:29

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

Purge Volume: | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 576662 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	17		0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\010F1001.D
Lims ID: 280-162622-I-4
Client ID: G0100-22A
Sample Type: Client
Inject. Date: 01-Jun-2022 11:29:02 ALS Bottle#: 10 Worklist Smp#: 39
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-162622-I-4
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Jun-2022 09:24:53 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1606

First Level Reviewer: sciannac Date: 01-Jun-2022 16:11:45

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	1.265	1.269	-0.004	656106918	18653	
2	1.666	1.682	-0.016	613128353	16981	
					RPD = 9.38	
3 Ethane						
1		1.510			ND	
2		3.040				
4 Ethylene						
1		1.750			ND	
2		2.620				
5 Propane						
1		2.469			ND	
2		4.937				
6 Acetylene						
1		3.964			ND	
2		2.768				
7 Butane						
1		4.340			ND	
2		6.432				
8 isobutylene						
1		5.245			ND	
2		6.275				

QC Flag Legend

Processing Flags

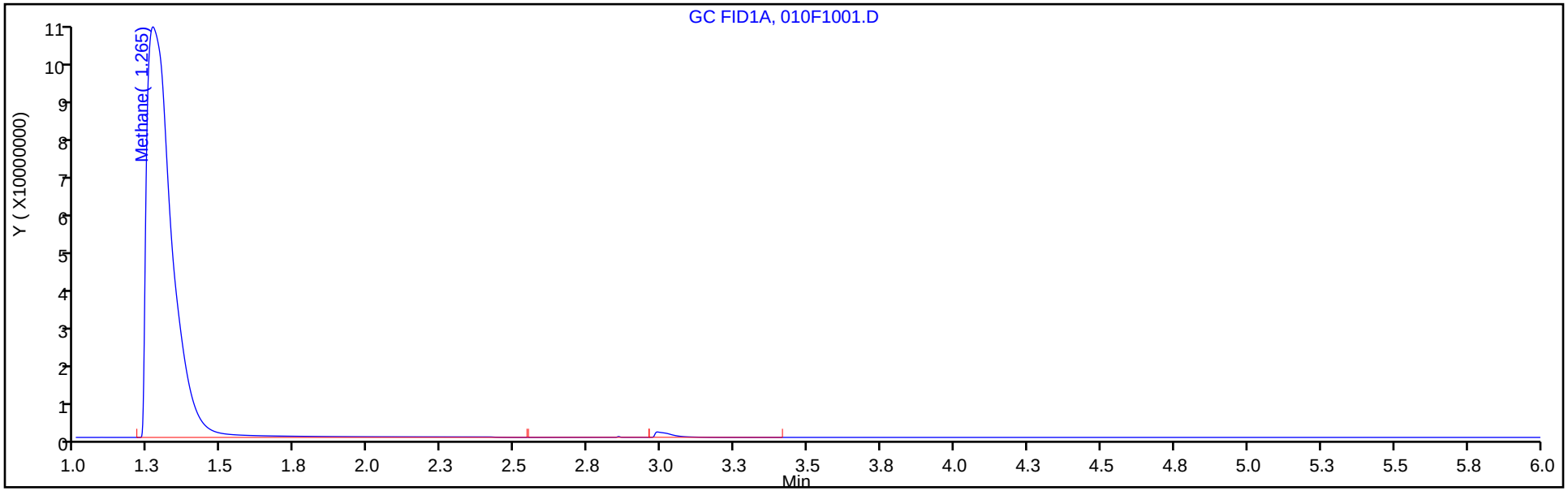
Report Date: 03-Jun-2022 09:24:58 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

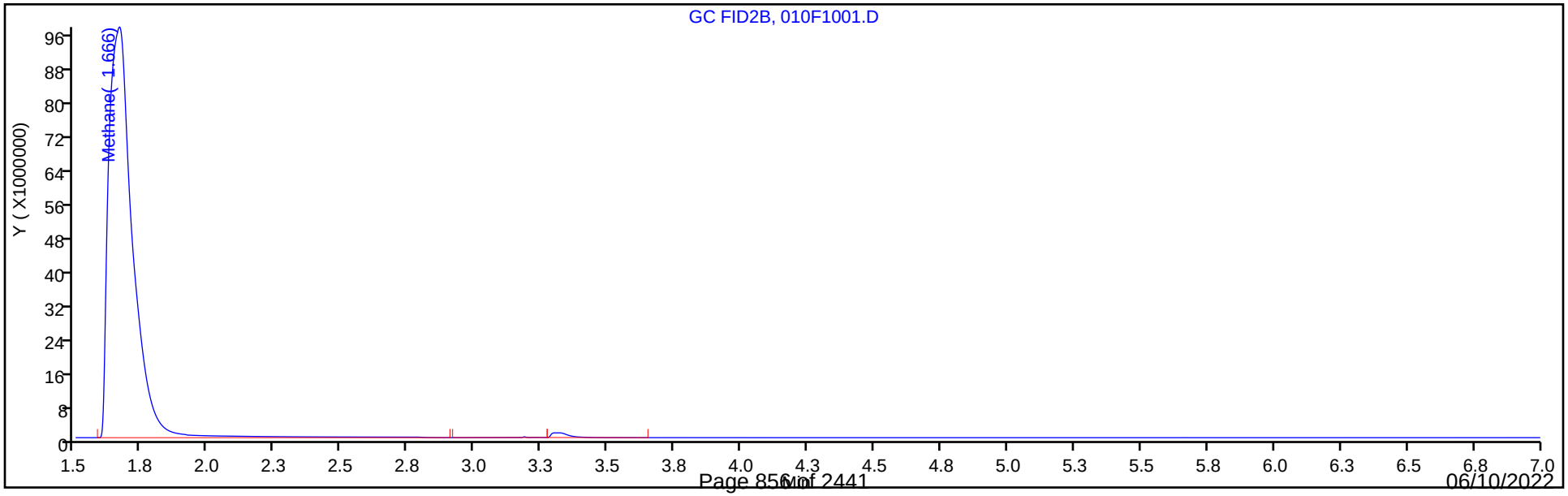
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\010F1001.D

Injection Date:	01-Jun-2022 11:29:02	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-162622-I-4	Lab Sample ID:	280-162622-4	Worklist Smp#:	39
Client ID:	G0100-22A				
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 Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0122-22A | Lab Sample ID: 280-162622-5

Matrix: Water | Lab File ID: 011F1101.D

Analysis Method: RSK-175 | Date Collected: 05/19/2022 12:10

Sample wt/vol: 20(mL) | Date Analyzed: 06/01/2022 11:42

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

Purge Volume: | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 576662 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	18		0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\011F1101.D
Lims ID: 280-162622-H-5
Client ID: G0122-22A
Sample Type: Client
Inject. Date: 01-Jun-2022 11:42:08 ALS Bottle#: 11 Worklist Smp#: 40
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-162622-H-5
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Jun-2022 09:24:53 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1606

First Level Reviewer: sciannac Date: 01-Jun-2022 16:11:54

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						E
1	1.265	1.269	-0.004	692301220	19682	E
2	1.664	1.682	-0.018	646845619	17915	
					RPD = 9.40	
3 Ethane						
1		1.510			ND	
2		3.040				
4 Ethylene						
1		1.750			ND	
2		2.620				
5 Propane						
1		2.469			ND	
2		4.937				
6 Acetylene						
1		3.964			ND	
2		2.768				
7 Butane						
1		4.340			ND	
2		6.432				
8 isobutylene						
1		5.245			ND	
2		6.275				

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

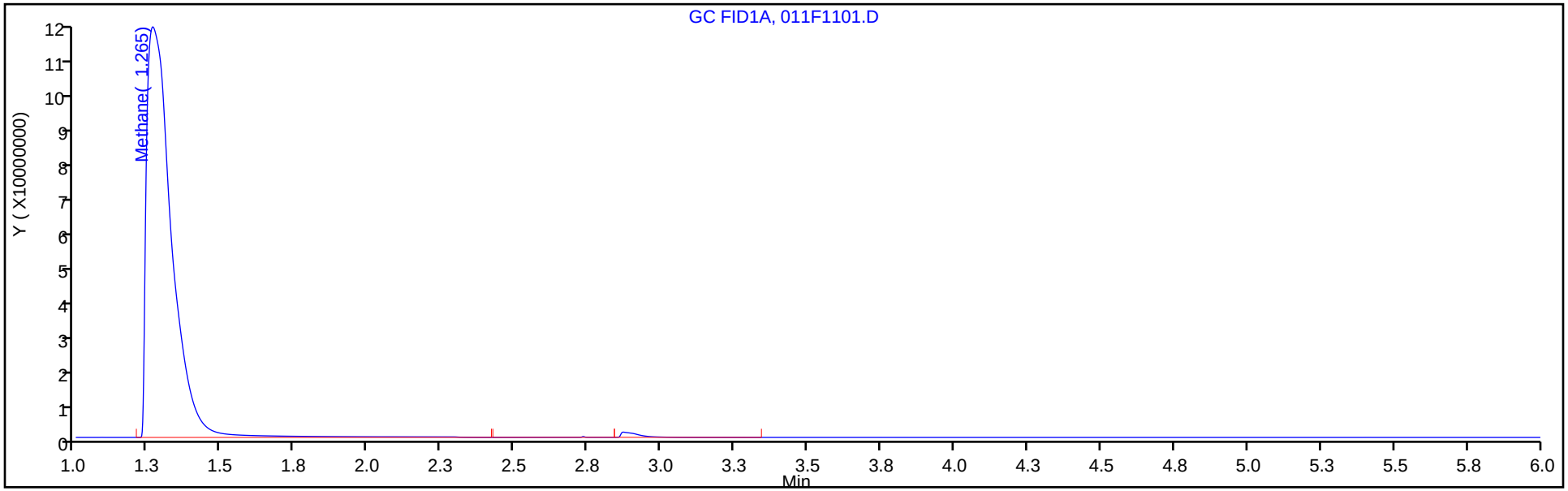
Report Date: 03-Jun-2022 09:24:58 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

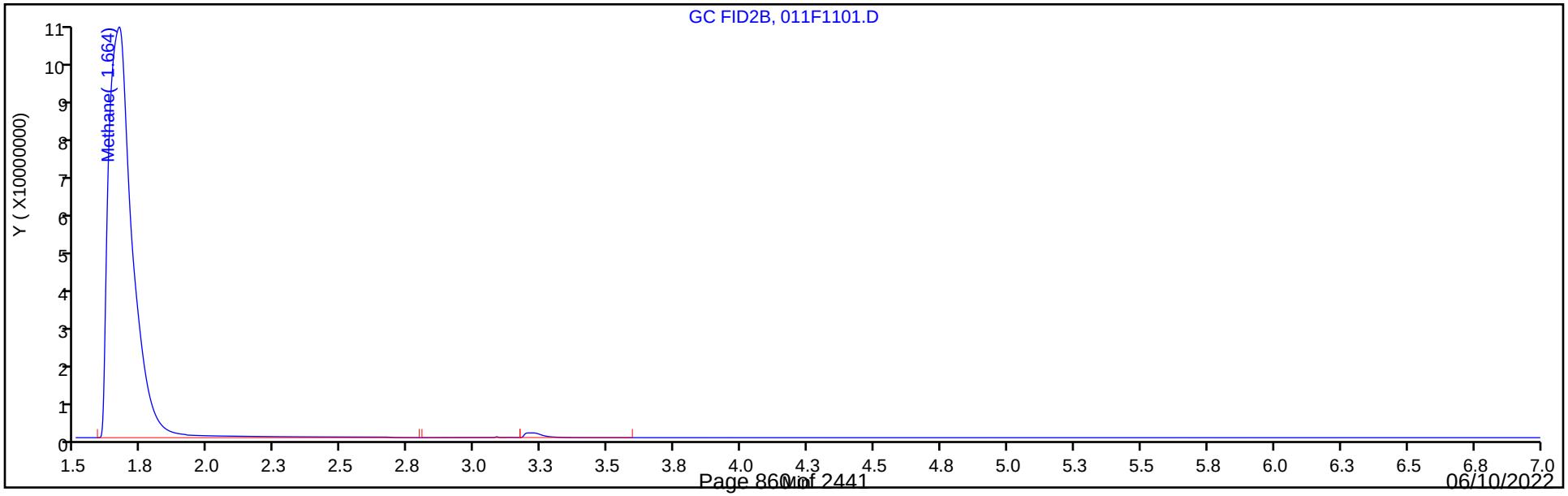
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\011F1101.D

Injection Date:	01-Jun-2022 11:42:08	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-162622-H-5	Lab Sample ID:	280-162622-5	Worklist Smp#:	40
Client ID:	G0122-22A				
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 Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0066R-22A | Lab Sample ID: 280-162622-6

Matrix: Water | Lab File ID: 012F1201.D

Analysis Method: RSK-175 | Date Collected: 05/19/2022 10:55

Sample wt/vol: 20(mL) | Date Analyzed: 06/01/2022 11:55

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

Purge Volume: | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 576662 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	3.6		0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\012F1201.D
Lims ID: 280-162622-G-6
Client ID: G0066R-22A
Sample Type: Client
Inject. Date: 01-Jun-2022 11:55:05 ALS Bottle#: 12 Worklist Smp#: 41
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-162622-G-6
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Jun-2022 09:24:53 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1606

First Level Reviewer: sciannac Date: 03-Jun-2022 08:59:56

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	1.266	1.269	-0.003	140193528	3984.2	
2	1.670	1.682	-0.012	129287919	3579.4	
					RPD = 10.71	
3 Ethane						
1		1.510			ND	
2		3.040				
4 Ethylene						
1		1.750			ND	
2		2.620				
5 Propane						
1		2.469			ND	
2		4.937				
6 Acetylene						
1		3.964			ND	
2		2.768				
7 Butane						
1		4.340			ND	
2		6.432				
8 isobutylene						
1		5.245			ND	
2		6.275				

QC Flag Legend

Processing Flags

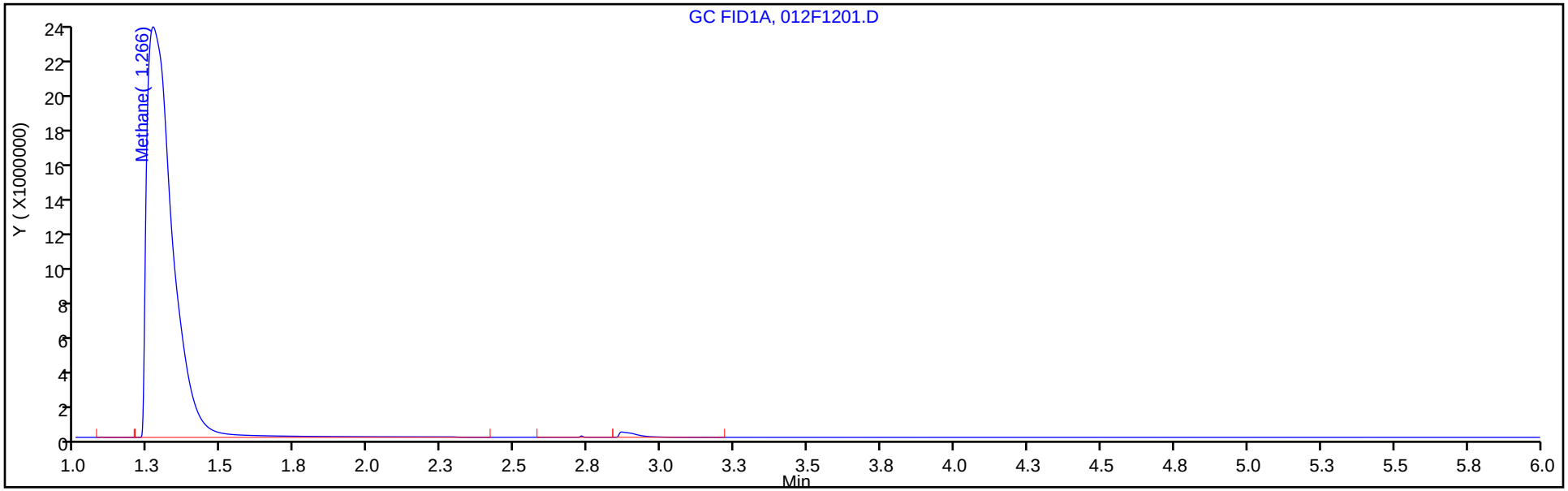
Report Date: 03-Jun-2022 09:24:59 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

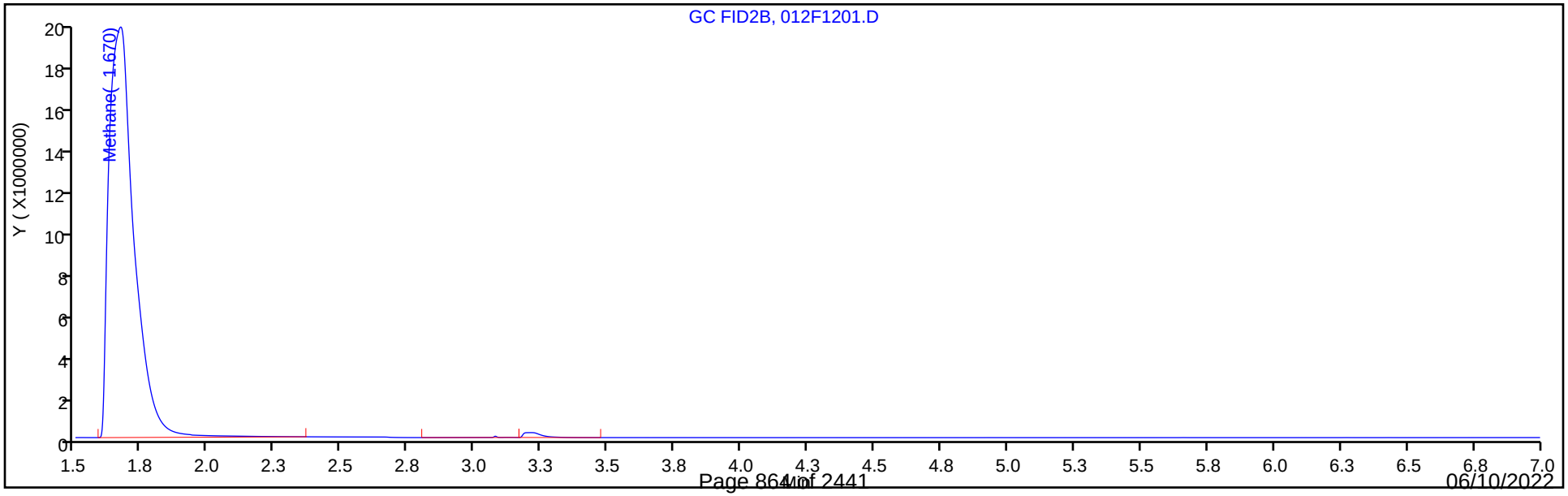
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\012F1201.D

Injection Date:	01-Jun-2022 11:55:05	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-162622-G-6	Lab Sample ID:	280-162622-6	Worklist Smp#:	41
Client ID:	G0066R-22A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0024-22A | Lab Sample ID: 280-162622-7

Matrix: Water | Lab File ID: 049F4901.D

Analysis Method: RSK-175 | Date Collected: 05/18/2022 14:50

Sample wt/vol: 20(mL) | Date Analyzed: 06/01/2022 19:54

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

Purge Volume: | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 576768 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0013	U	0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\049F4901.D
Lims ID: 280-162622-H-7
Client ID: G0024-22A
Sample Type: Client
Inject. Date: 01-Jun-2022 19:54:27 ALS Bottle#: 49 Worklist Smp#: 78
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-162622-H-7
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Jun-2022 09:25:17 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1606

First Level Reviewer: sciannac Date: 03-Jun-2022 09:21:46

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	1.256	1.269	-0.013	96543	0.8871	
2	1.669	1.682	-0.013	81542	0.5237	
					RPD = 51.52	
3 Ethane						
1		1.510			ND	
2		3.040				
4 Ethylene						
1		1.750			ND	
2		2.620				
5 Propane						
1		2.469			ND	
2		4.937				
6 Acetylene						
1		3.964			ND	
2		2.768				
7 Butane						
1		4.340			ND	
2		6.432				
8 isobutylene						
1		5.245			ND	
2		6.275				

QC Flag Legend

Processing Flags

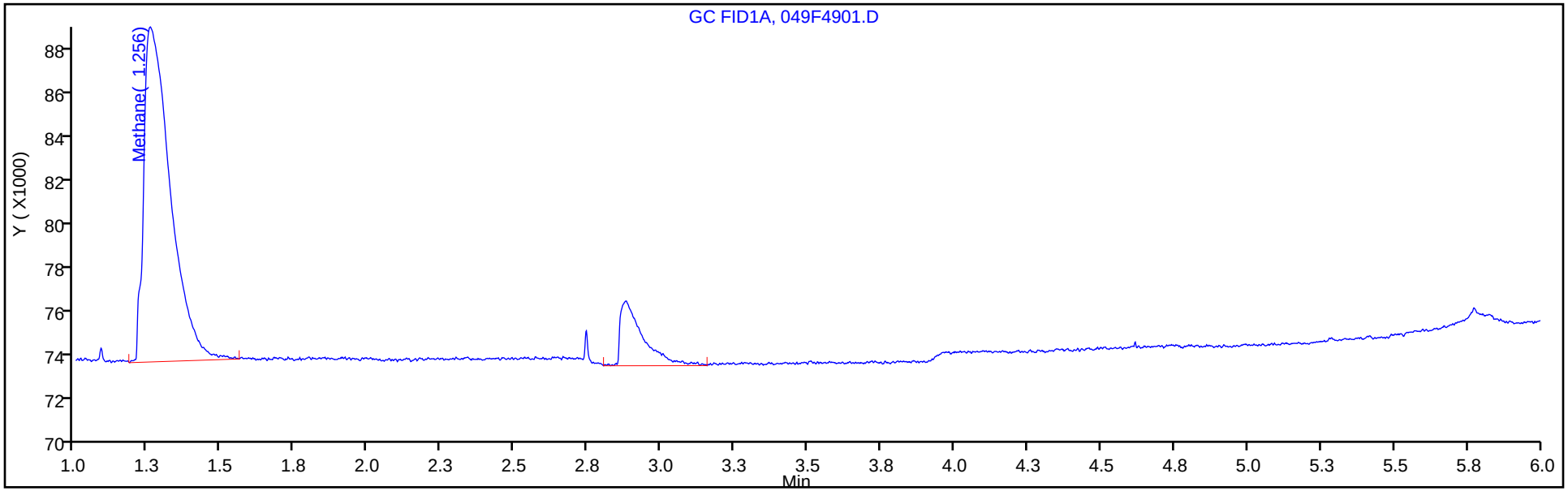
Report Date: 03-Jun-2022 09:25:18 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

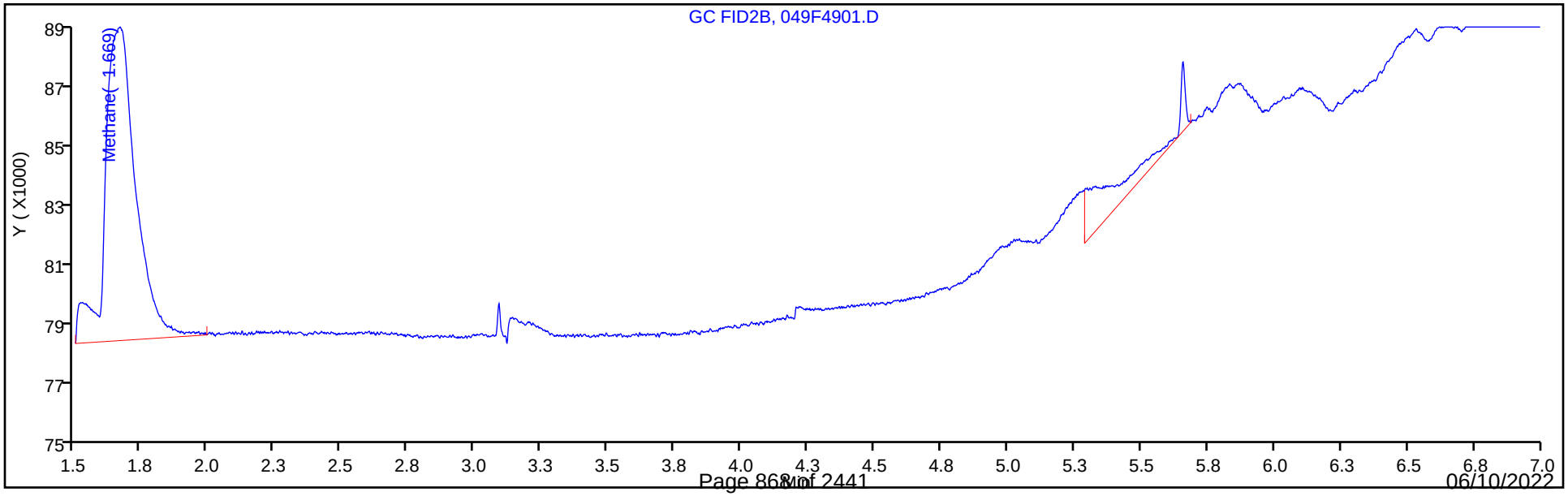
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\049F4901.D

Injection Date:	01-Jun-2022 19:54:27	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-162622-H-7	Lab Sample ID:	280-162622-7	Worklist Smp#:	78
Client ID:	G0024-22A				
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 Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0115-22A | Lab Sample ID: 280-162622-8

Matrix: Water | Lab File ID: 013F1301.D

Analysis Method: RSK-175 | Date Collected: 05/19/2022 08:45

Sample wt/vol: 20(mL) | Date Analyzed: 06/01/2022 12:08

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

Purge Volume: | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 576662 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	14		0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\013F1301.D
Lims ID: 280-162622-H-8
Client ID: G0115-22A
Sample Type: Client
Inject. Date: 01-Jun-2022 12:08:01 ALS Bottle#: 13 Worklist Smp#: 42
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-162622-H-8
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Jun-2022 09:24:53 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1606

First Level Reviewer: sciannac Date: 03-Jun-2022 09:00:01

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	1.267	1.269	-0.002	526886913	14979	
2	1.668	1.682	-0.014	490781449	13592	
					RPD = 9.71	
3 Ethane						
1		1.510			ND	
2		3.040				
4 Ethylene						
1		1.750			ND	
2		2.620				
5 Propane						
1		2.469			ND	
2		4.937				
6 Acetylene						
1		3.964			ND	
2		2.768				
7 Butane						
1		4.340			ND	
2		6.432				
8 isobutylene						
1		5.245			ND	
2		6.275				

QC Flag Legend

Processing Flags

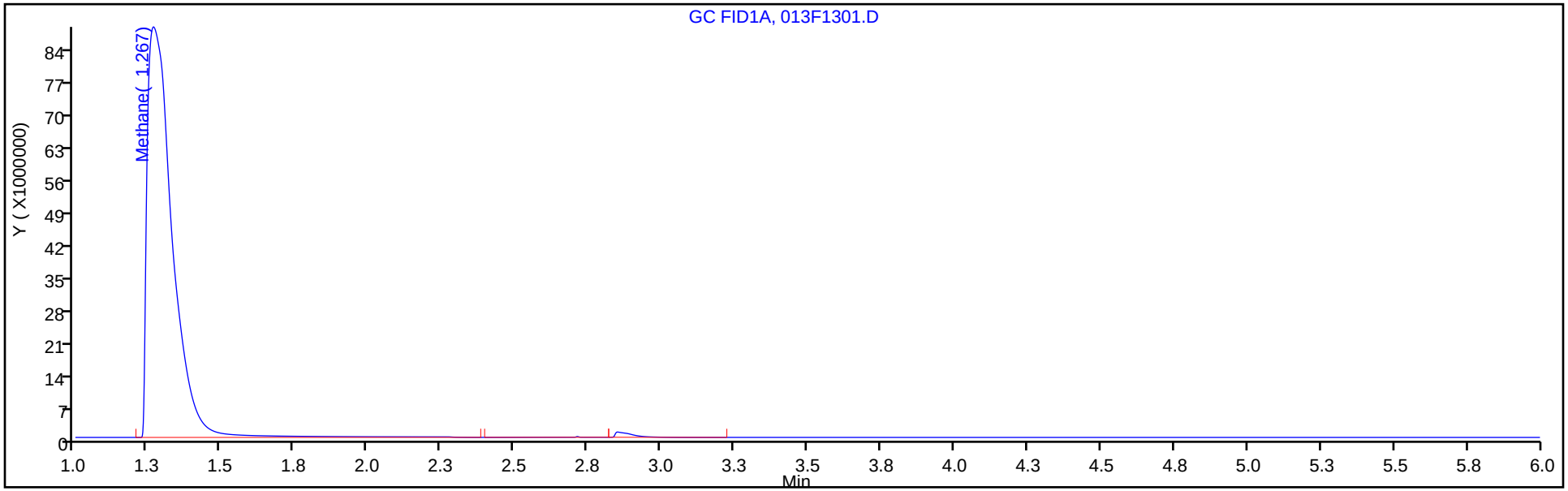
Report Date: 03-Jun-2022 09:24:59 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

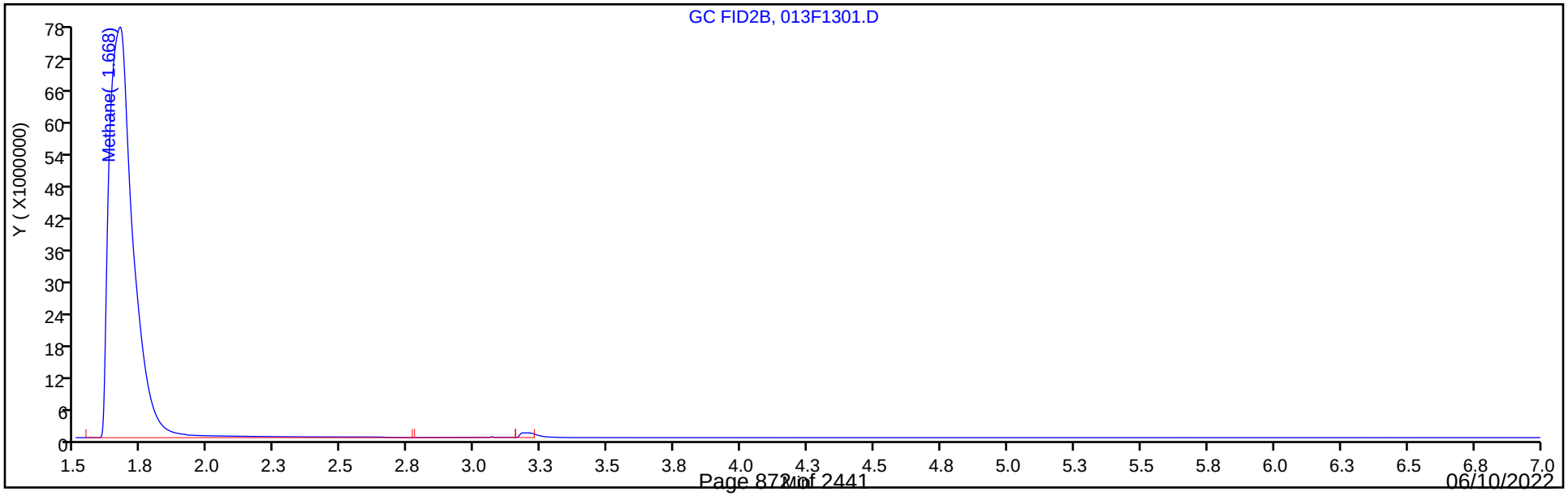
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\013F1301.D

Injection Date:	01-Jun-2022 12:08:01	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-162622-H-8	Lab Sample ID:	280-162622-8	Worklist Smp#:	42
Client ID:	G0115-22A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0095-22A | Lab Sample ID: 280-162622-9

Matrix: Water | Lab File ID: 014F1401.D

Analysis Method: RSK-175 | Date Collected: 05/19/2022 08:45

Sample wt/vol: 20(mL) | Date Analyzed: 06/01/2022 12:20

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

Purge Volume: | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 576662 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	16		0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\014F1401.D
Lims ID: 280-162622-G-9
Client ID: G0095-22A
Sample Type: Client
Inject. Date: 01-Jun-2022 12:20:57 ALS Bottle#: 14 Worklist Smp#: 43
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-162622-G-9
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Jun-2022 09:24:53 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1606

First Level Reviewer: sciannac Date: 03-Jun-2022 09:00:06

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	1.266	1.269	-0.003	627693441	17845	
2	1.665	1.682	-0.017	584694890	16193	
					RPD = 9.70	
3 Ethane						
1		1.510			ND	
2		3.040				
4 Ethylene						
1		1.750			ND	
2		2.620				
5 Propane						
1		2.469			ND	
2		4.937				
6 Acetylene						
1		3.964			ND	
2		2.768				
7 Butane						
1		4.340			ND	
2		6.432				
8 isobutylene						
1		5.245			ND	
2		6.275				

QC Flag Legend

Processing Flags

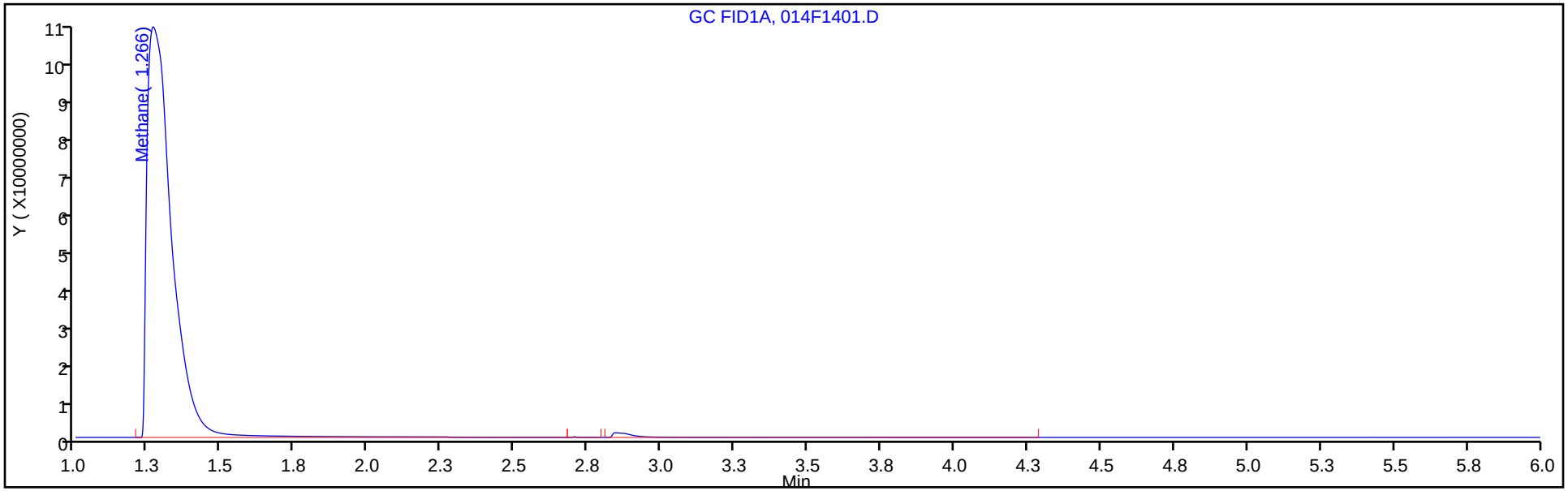
Report Date: 03-Jun-2022 09:25:00 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

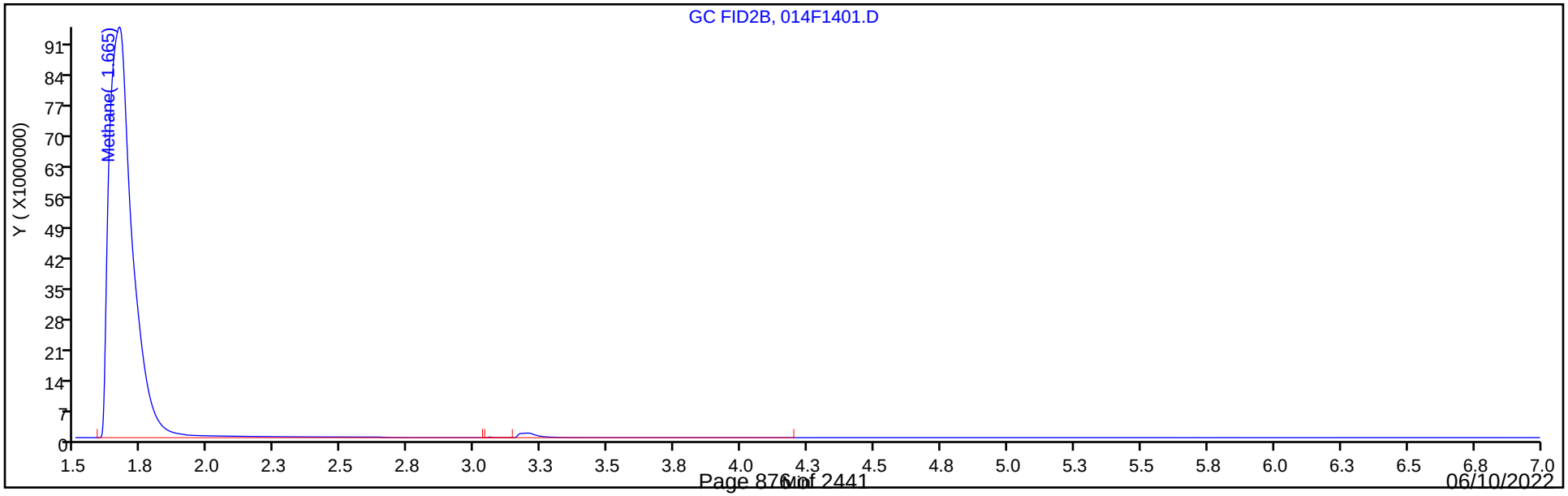
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\014F1401.D

Injection Date:	01-Jun-2022 12:20:57	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-162622-G-9	Lab Sample ID:	280-162622-9	Worklist Smp#:	43
Client ID:	G0095-22A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: PZ018-22A | Lab Sample ID: 280-162622-10

Matrix: Water | Lab File ID: 027F2701.D

Analysis Method: RSK-175 | Date Collected: 05/18/2022 10:05

Sample wt/vol: 20(mL) | Date Analyzed: 06/01/2022 15:09

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

Purge Volume: | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 576662 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	15		0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\027F2701.D
Lims ID: 280-162622-I-10
Client ID: PZ018-22A
Sample Type: Client
Inject. Date: 01-Jun-2022 15:09:06 ALS Bottle#: 27 Worklist Smp#: 56
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-162622-I-10
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Jun-2022 09:25:02 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1606

First Level Reviewer: sciannac Date: 03-Jun-2022 09:09:07

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	1.265	1.269	-0.004	581267895	16525	
2	1.667	1.682	-0.015	542016884	15011	
					RPD = 9.60	
3 Ethane						
1		1.510			ND	
2		3.040				
4 Ethylene						
1		1.750			ND	
2		2.620				
5 Propane						
1		2.469			ND	
2		4.937				
6 Acetylene						
1		3.964			ND	
2		2.768				
7 Butane						
1		4.340			ND	
2		6.432				
8 isobutylene						
1		5.245			ND	
2		6.275				

QC Flag Legend

Processing Flags

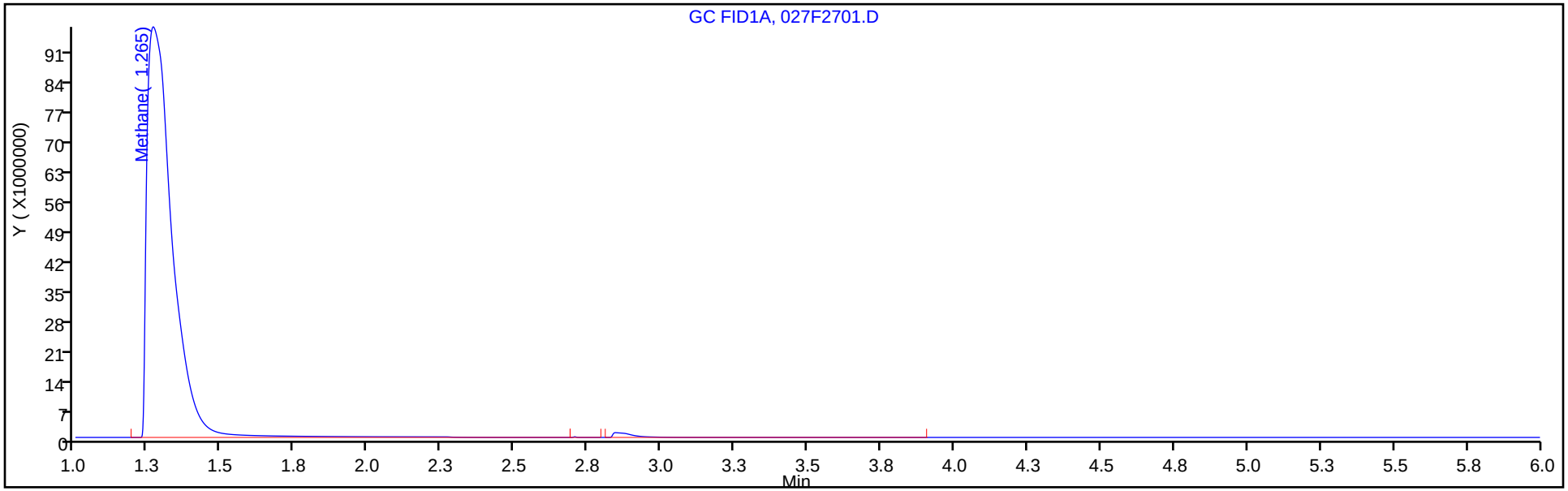
Report Date: 03-Jun-2022 09:25:07 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

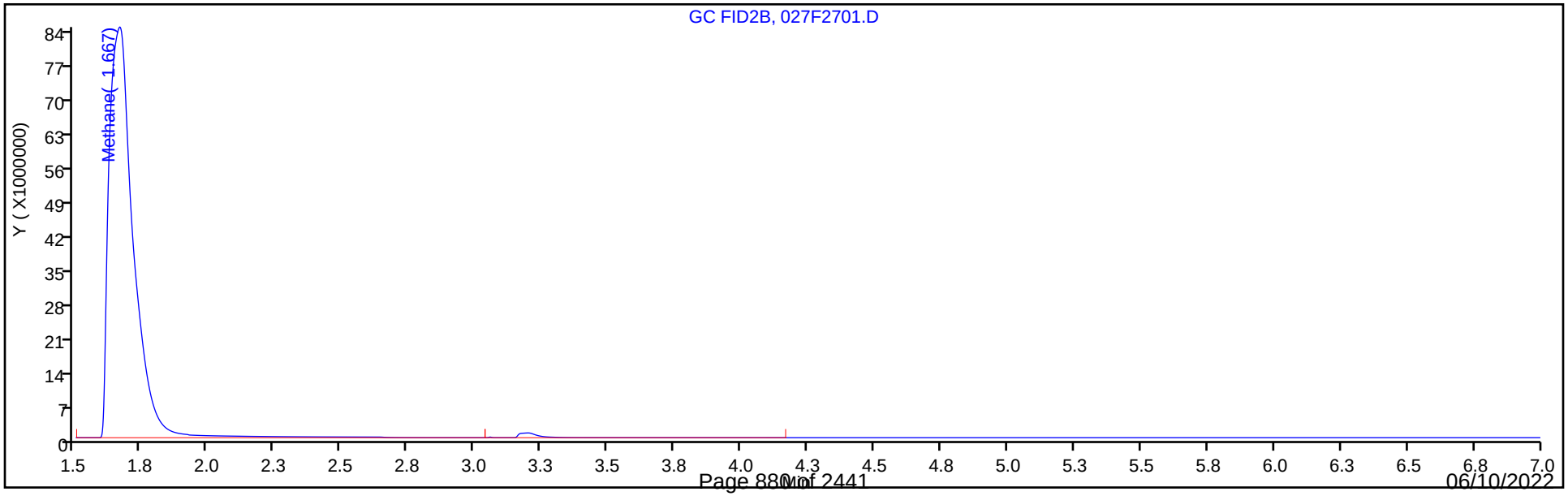
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\027F2701.D

Injection Date:	01-Jun-2022 15:09:06	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-162622-I-10	Lab Sample ID:	280-162622-10	Worklist Smp#:	56
Client ID:	PZ018-22A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: PZ020-22A | Lab Sample ID: 280-162622-11

Matrix: Water | Lab File ID: 028F2801.D

Analysis Method: RSK-175 | Date Collected: 05/18/2022 13:05

Sample wt/vol: 20(mL) | Date Analyzed: 06/01/2022 15:22

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

Purge Volume: | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 576662 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0013	U	0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\028F2801.D				
Lims ID:	280-162622-H-11				
Client ID:	PZ020-22A				
Sample Type:	Client				
Inject. Date:	01-Jun-2022 15:22:03	ALS Bottle#:	28	Worklist Smp#:	57
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-162622-H-11				
Operator ID:	sciannac	Instrument ID:	VGC_J		
Method:	\\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\RSK_J.m				
Limit Group:	GCV - RSK 175				
Method Label:	DV-GC-0025: Dissolved Gases in Water by RSK-175				
Last Update:	03-Jun-2022 09:25:02	Calib Date:	24-Sep-2021 15:12:55		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D				
Column 1 :	Rt-Alumina BOND/KCl (0.53 mm)		Det: GC FID1A		
Column 2 :	HP-PLOT/Q (0.53 mm)		Det: GC FID2B		
Process Host:	CTX1606				

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		1.269			ND	
2		1.682				
3 Ethane						
1		1.510			ND	
2		3.040				
4 Ethylene						
1		1.750			ND	
2		2.620				
5 Propane						
1		2.469			ND	
2		4.937				
6 Acetylene						
1		3.964			ND	
2		2.768				
7 Butane						
1		4.340			ND	
2		6.432				
8 isobutylene						
1		5.245			ND	
2		6.275				

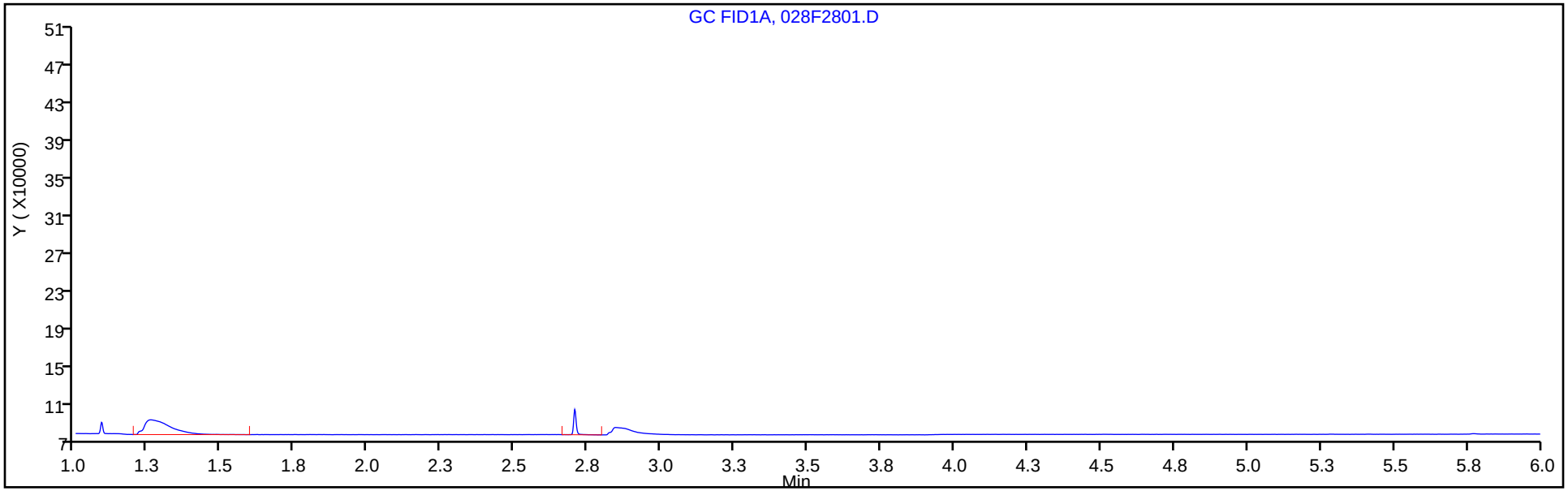
Report Date: 03-Jun-2022 09:25:07 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

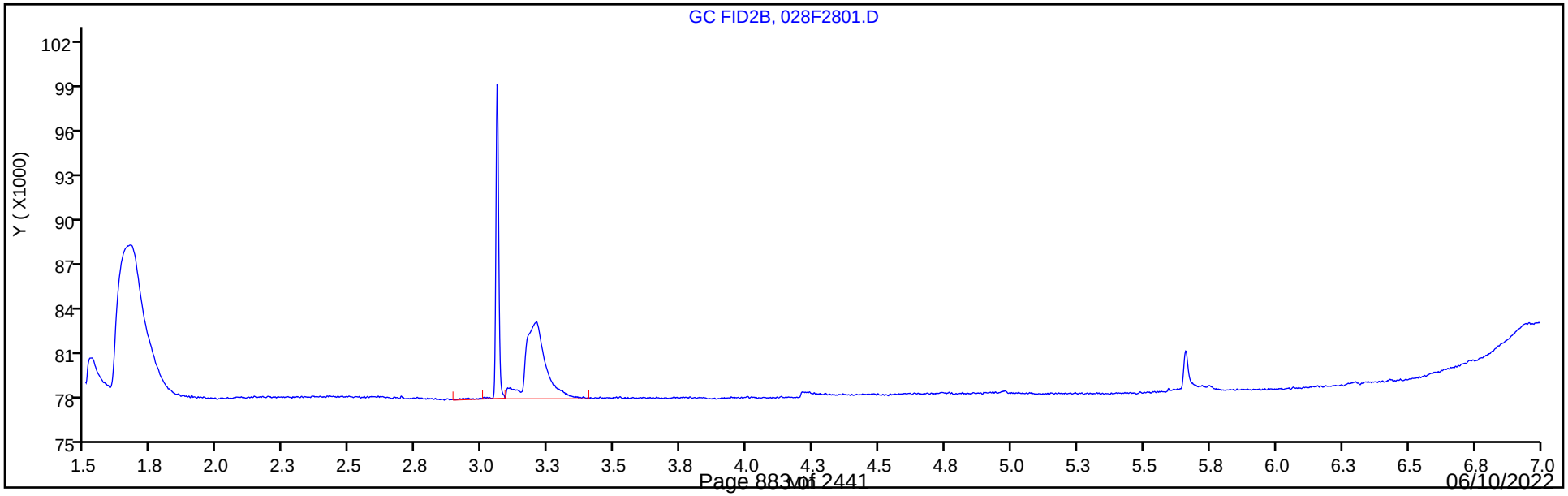
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\028F2801.D

Injection Date:	01-Jun-2022 15:22:03	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-162622-H-11	Lab Sample ID:	280-162622-11	Worklist Smp#:	57
Client ID:	PZ020-22A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0077-22A | Lab Sample ID: 280-162622-12

Matrix: Water | Lab File ID: 050F5001.D

Analysis Method: RSK-175 | Date Collected: 05/18/2022 16:20

Sample wt/vol: 20(mL) | Date Analyzed: 06/01/2022 20:07

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

Purge Volume: | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 576768 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	3.3		0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\050F5001.D
Lims ID: 280-162622-H-12
Client ID: G0077-22A
Sample Type: Client
Inject. Date: 01-Jun-2022 20:07:28 ALS Bottle#: 50 Worklist Smp#: 79
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-162622-H-12
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Jun-2022 09:25:17 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1606

First Level Reviewer: sciannac Date: 03-Jun-2022 09:22:01

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	1.264	1.269	-0.005	130324563	3703.6	
2	1.670	1.682	-0.012	120869501	3346.2	
					RPD = 10.14	
3 Ethane						
1		1.510			ND	
2		3.040				
4 Ethylene						
1		1.750			ND	
2		2.620				
5 Propane						
1		2.469			ND	
2		4.937				
6 Acetylene						
1		3.964			ND	
2		2.768				
7 Butane						
1		4.340			ND	
2		6.432				
8 isobutylene						
1		5.245			ND	
2		6.275				

QC Flag Legend

Processing Flags

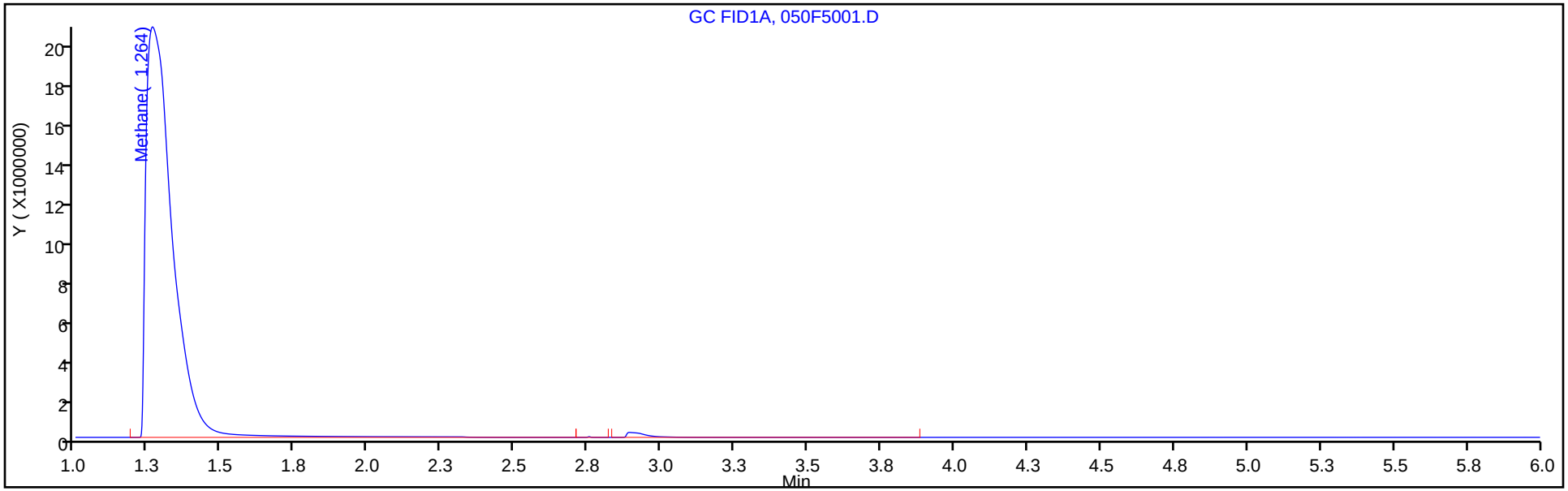
Report Date: 03-Jun-2022 09:25:19 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

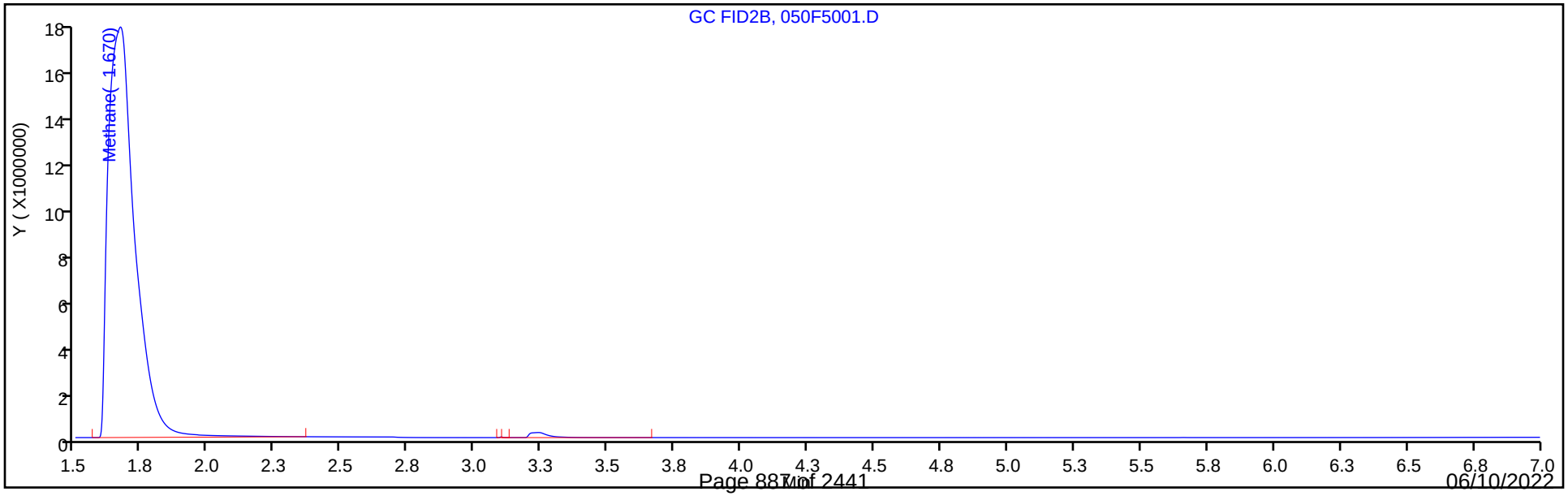
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\050F5001.D

Injection Date:	01-Jun-2022 20:07:28	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-162622-H-12	Lab Sample ID:	280-162622-12	Worklist Smp#:	79
Client ID:	G0077-22A				
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 Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0311-22A | Lab Sample ID: 280-162622-16

Matrix: Water | Lab File ID: 019F1901.D

Analysis Method: RSK-175 | Date Collected: 05/19/2022 08:00

Sample wt/vol: 20(mL) | Date Analyzed: 06/02/2022 15:32

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

Purge Volume: | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 576907 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	8.4		0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220602-111531.b\019F1901.D
Lims ID: 280-162622-G-16
Client ID: G0311-22A
Sample Type: Client
Inject. Date: 02-Jun-2022 15:32:56 ALS Bottle#: 19 Worklist Smp#: 19
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-162622-G-16
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220602-111531.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Jun-2022 09:48:32 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1606

First Level Reviewer: sciannac Date: 03-Jun-2022 09:37:34

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	1.266	1.270	-0.004	329303790	9361.1	
2	1.664	1.680	-0.016	303125056	8394.4	
					RPD = 10.89	
3 Ethane						
1		1.525			ND	
2		3.038				
4 Ethylene						
1		1.795			ND	
2		2.620				
5 Propane						
1		2.547			ND	
2		4.935				
6 Acetylene						
1		4.057			ND	
2		2.768				
7 Butane						
1		4.403			ND	
2		6.431				
8 isobutylene						
1		5.307			ND	
2		6.275				

QC Flag Legend

Processing Flags

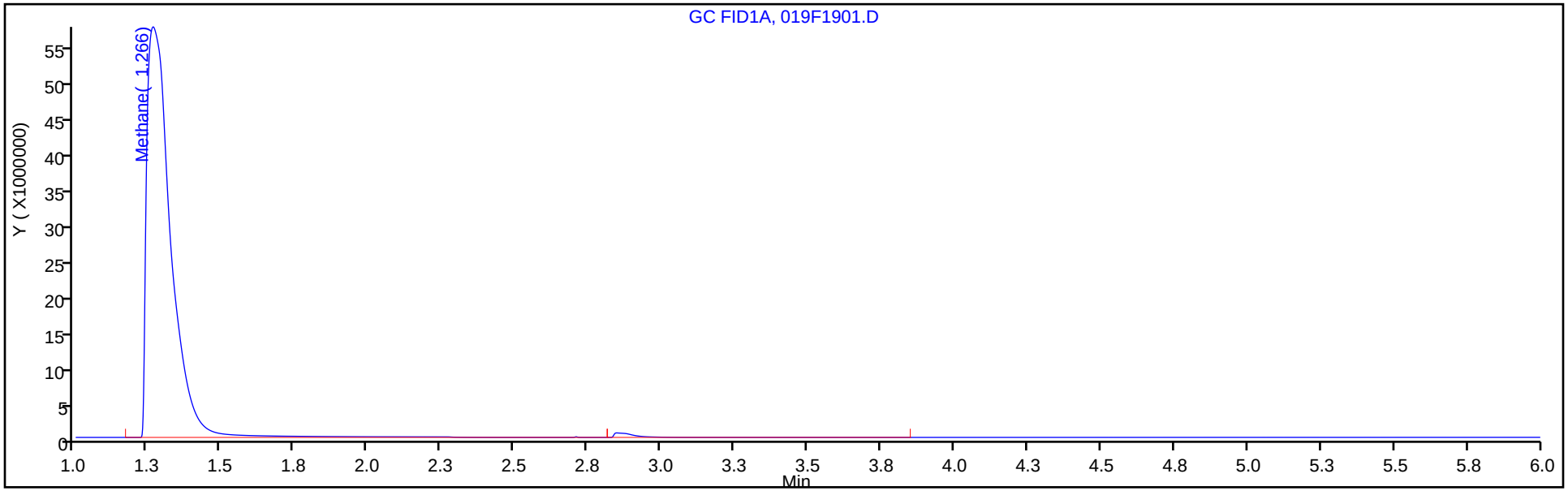
Report Date: 03-Jun-2022 09:48:33 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

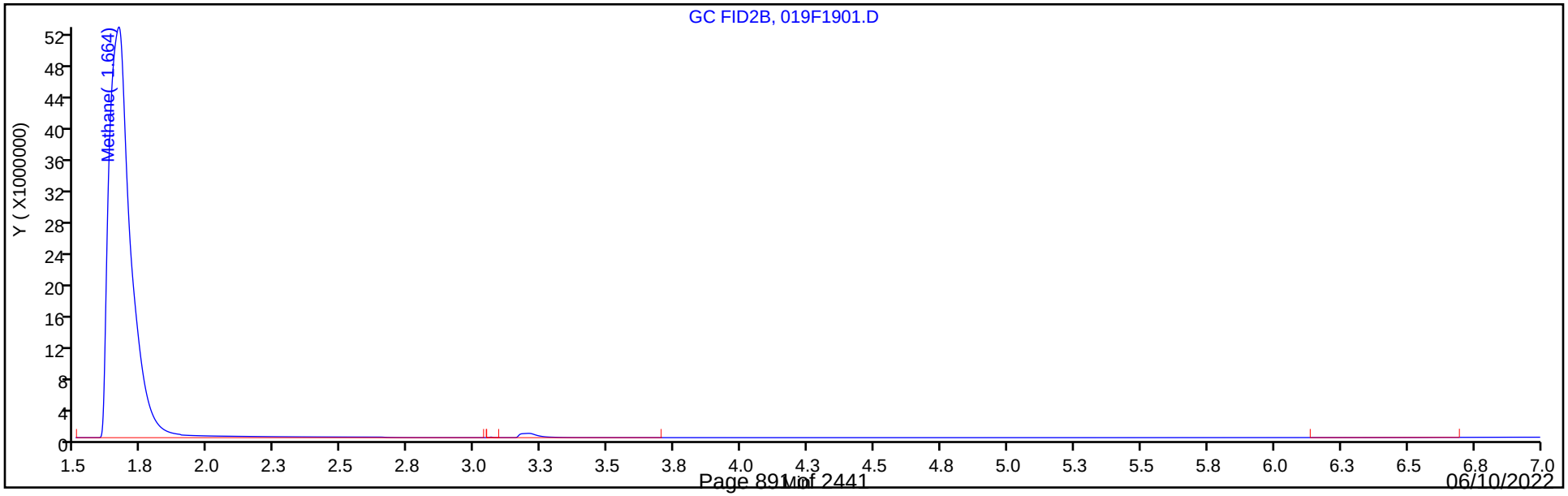
Data File: \\chromfs\Denver\ChromData\VGC_J\20220602-111531.b\019F1901.D

Injection Date:	02-Jun-2022 15:32:56	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-162622-G-16	Lab Sample ID:	280-162622-16	Worklist Smp#:	19
Client ID:	G0311-22A				
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 Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0111-22A | Lab Sample ID: 280-162622-17

Matrix: Water | Lab File ID: 020F2001.D

Analysis Method: RSK-175 | Date Collected: 05/19/2022 13:15

Sample wt/vol: 20(mL) | Date Analyzed: 06/02/2022 15:45

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

Purge Volume: | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 576907 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	8.3		0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220602-111531.b\020F2001.D
Lims ID: 280-162622-H-17
Client ID: G0111-22A
Sample Type: Client
Inject. Date: 02-Jun-2022 15:45:53 ALS Bottle#: 20 Worklist Smp#: 20
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-162622-H-17
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220602-111531.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Jun-2022 09:48:32 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1606

First Level Reviewer: sciannac Date: 03-Jun-2022 09:37:39

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	1.266	1.270	-0.004	327120982	9299.1	
2	1.664	1.680	-0.016	300833344	8330.9	
					RPD = 10.98	
3 Ethane						
1		1.525			ND	
2		3.038				
4 Ethylene						
1		1.795			ND	
2		2.620				
5 Propane						
1		2.547			ND	
2		4.935				
6 Acetylene						
1		4.057			ND	
2		2.768				
7 Butane						
1		4.403			ND	
2		6.431				
8 isobutylene						
1		5.307			ND	
2		6.275				

QC Flag Legend

Processing Flags

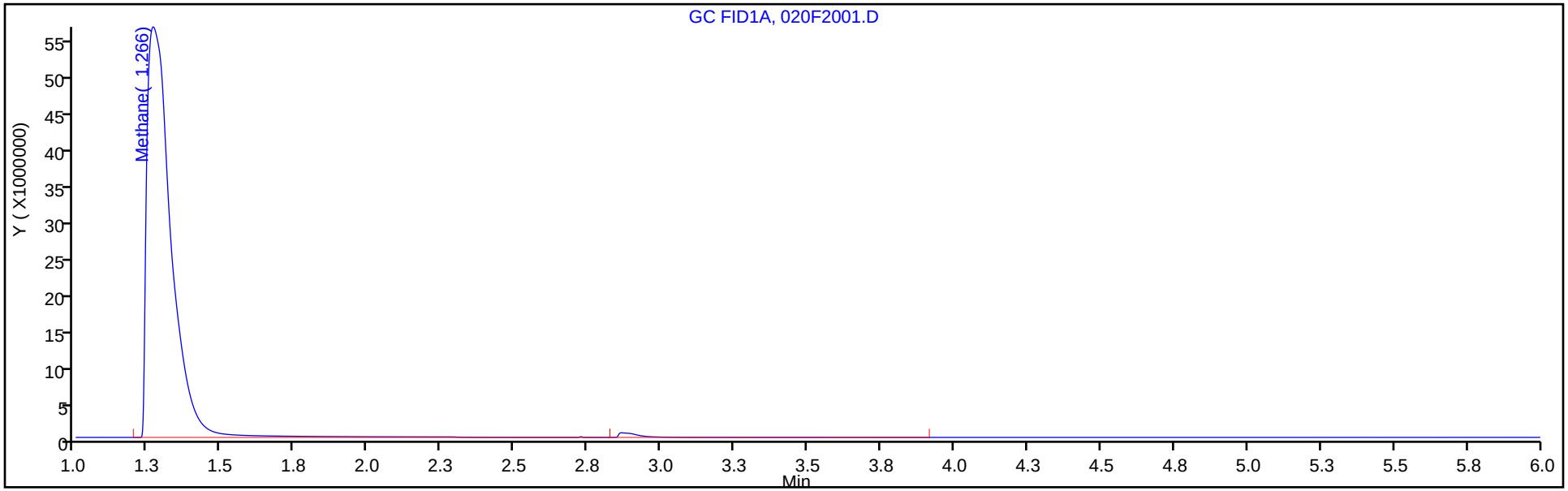
Report Date: 03-Jun-2022 09:48:33 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

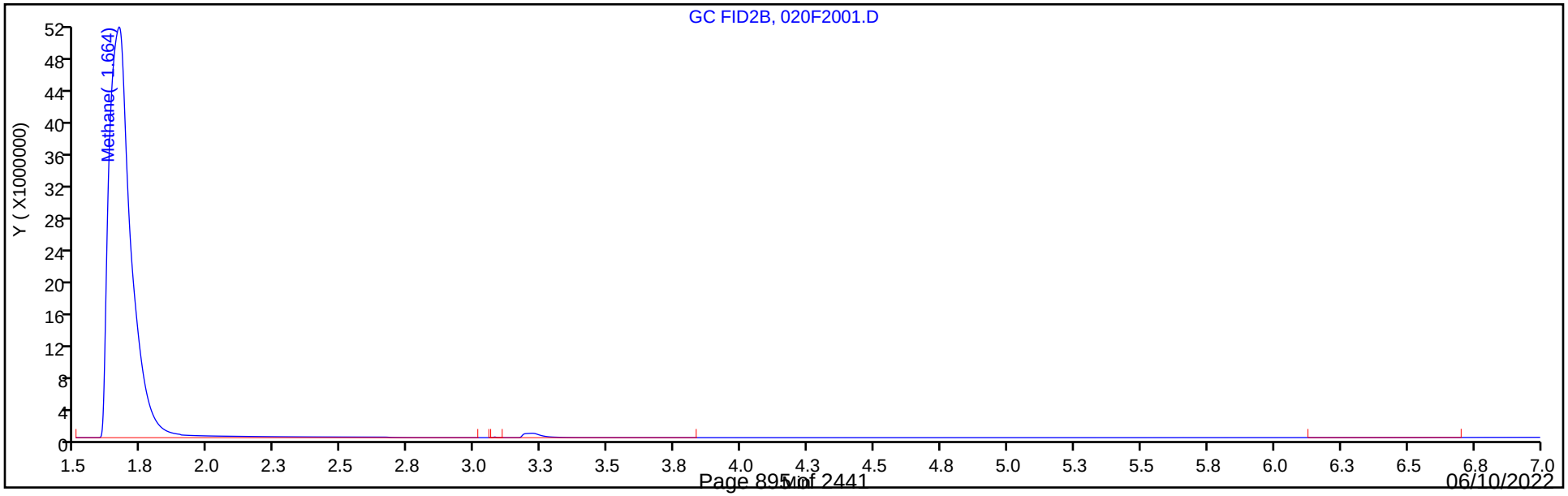
Data File: \\chromfs\Denver\ChromData\VGC_J\20220602-111531.b\020F2001.D

Injection Date:	02-Jun-2022 15:45:53	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-162622-H-17	Lab Sample ID:	280-162622-17	Worklist Smp#:	20
Client ID:	G0111-22A				
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 Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0123-22A | Lab Sample ID: 280-162622-18

Matrix: Water | Lab File ID: 021F2101.D

Analysis Method: RSK-175 | Date Collected: 05/19/2022 13:20

Sample wt/vol: 20(mL) | Date Analyzed: 06/02/2022 15:58

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

Purge Volume: | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 576907 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	18		0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220602-111531.b\021F2101.D
Lims ID: 280-162622-I-18
Client ID: G0123-22A
Sample Type: Client
Inject. Date: 02-Jun-2022 15:58:52 ALS Bottle#: 21 Worklist Smp#: 21
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-162622-I-18
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220602-111531.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Jun-2022 09:48:32 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1606

First Level Reviewer: sciannac Date: 03-Jun-2022 08:51:29

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						E
1	1.262	1.270	-0.008	714310842	20308	E
2	1.662	1.680	-0.018	665319371	18427	
					RPD = 9.71	
3 Ethane						
1		1.525			ND	
2		3.038				
4 Ethylene						
1		1.795			ND	
2		2.620				
5 Propane						
1		2.547			ND	
2		4.935				
6 Acetylene						
1		4.057			ND	
2		2.768				
7 Butane						
1		4.403			ND	
2		6.431				
8 isobutylene						
1		5.307			ND	
2		6.275				

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

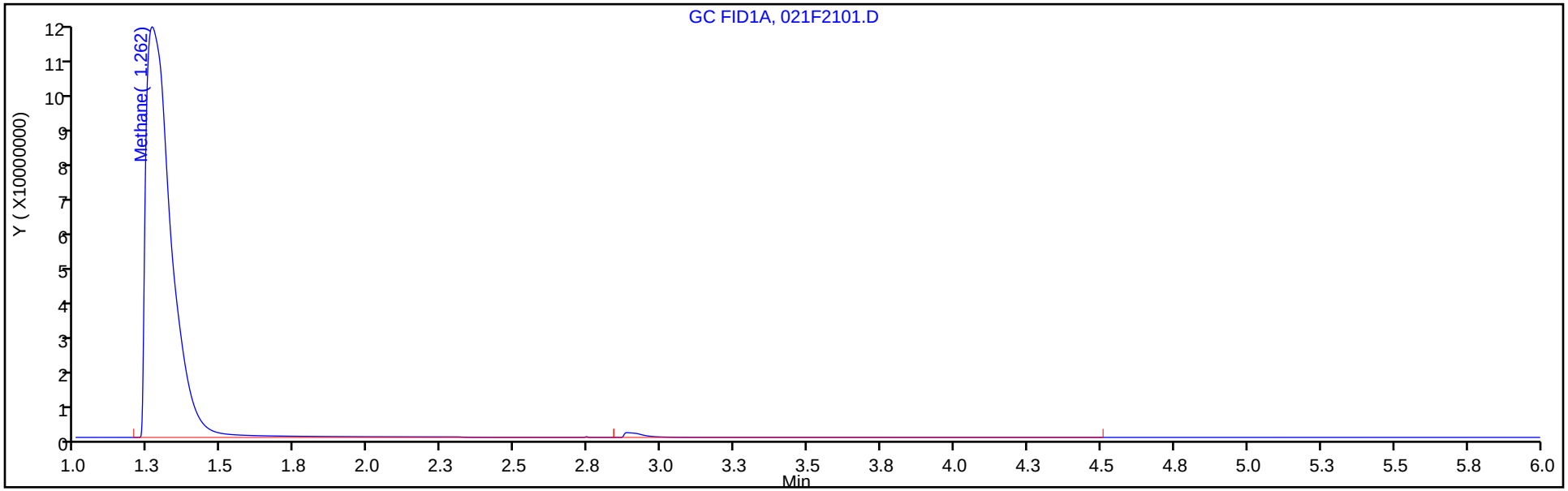
Report Date: 03-Jun-2022 09:48:34 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

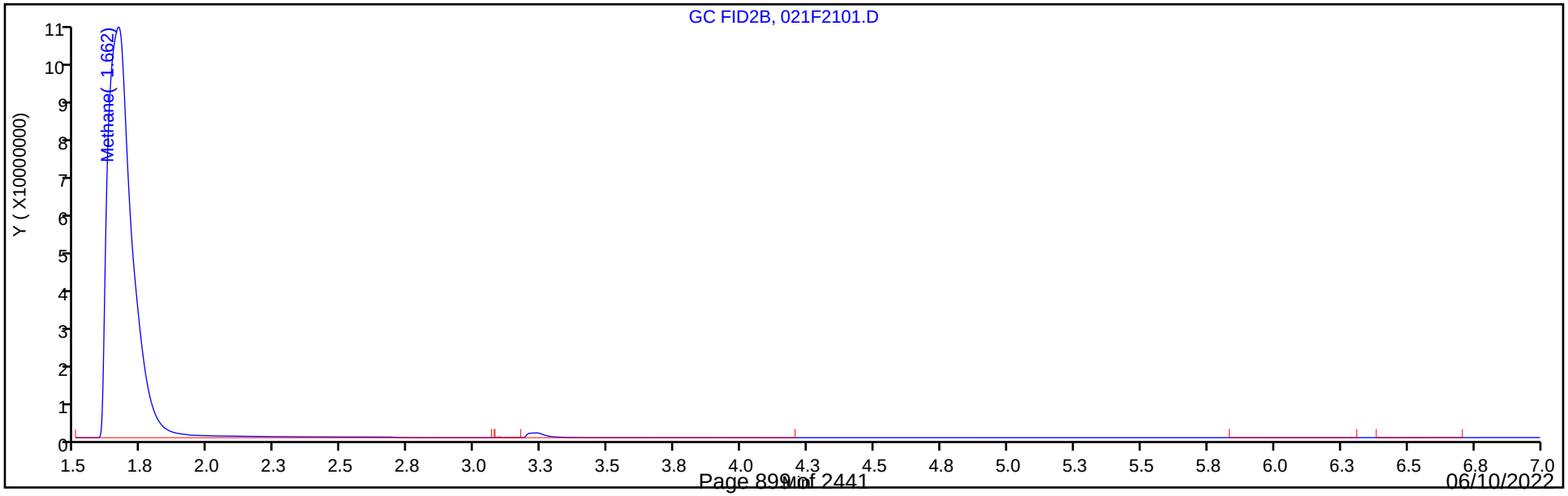
Data File: \\chromfs\Denver\ChromData\VGC_J\20220602-111531.b\021F2101.D

Injection Date:	02-Jun-2022 15:58:52	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-162622-I-18	Lab Sample ID:	280-162622-18	Worklist Smp#:	21
Client ID:	G0123-22A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: SHGW02-22A | Lab Sample ID: 280-162622-19

Matrix: Water | Lab File ID: 015F1501.D

Analysis Method: RSK-175 | Date Collected: 05/18/2022 09:05

Sample wt/vol: 20(mL) | Date Analyzed: 06/01/2022 12:33

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

Purge Volume: | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 576662 | 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	8.5		0.0050	0.0013	0.00063
74-85-1	Ethylene	0.0014	U	0.0050	0.0014	0.00040

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\015F1501.D
Lims ID: 280-162622-G-19
Client ID: SHGW02-22A
Sample Type: Client
Inject. Date: 01-Jun-2022 12:33:52 ALS Bottle#: 15 Worklist Smp#: 44
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-162622-G-19
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Jun-2022 09:24:53 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1606

First Level Reviewer: sciannac Date: 03-Jun-2022 09:00:10

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						
1	1.262	1.269	-0.007	327296937	9304.1	
2	1.667	1.682	-0.015	308266975	8536.8	
					RPD = 8.60	
3 Ethane						
1		1.510			ND	
2		3.040				
4 Ethylene						
1		1.750			ND	
2		2.620				
5 Propane						
1		2.469			ND	
2		4.937				
6 Acetylene						
1		3.964			ND	
2		2.768				
7 Butane						
1		4.340			ND	
2		6.432				
8 isobutylene						
1		5.245			ND	
2		6.275				

QC Flag Legend

Processing Flags

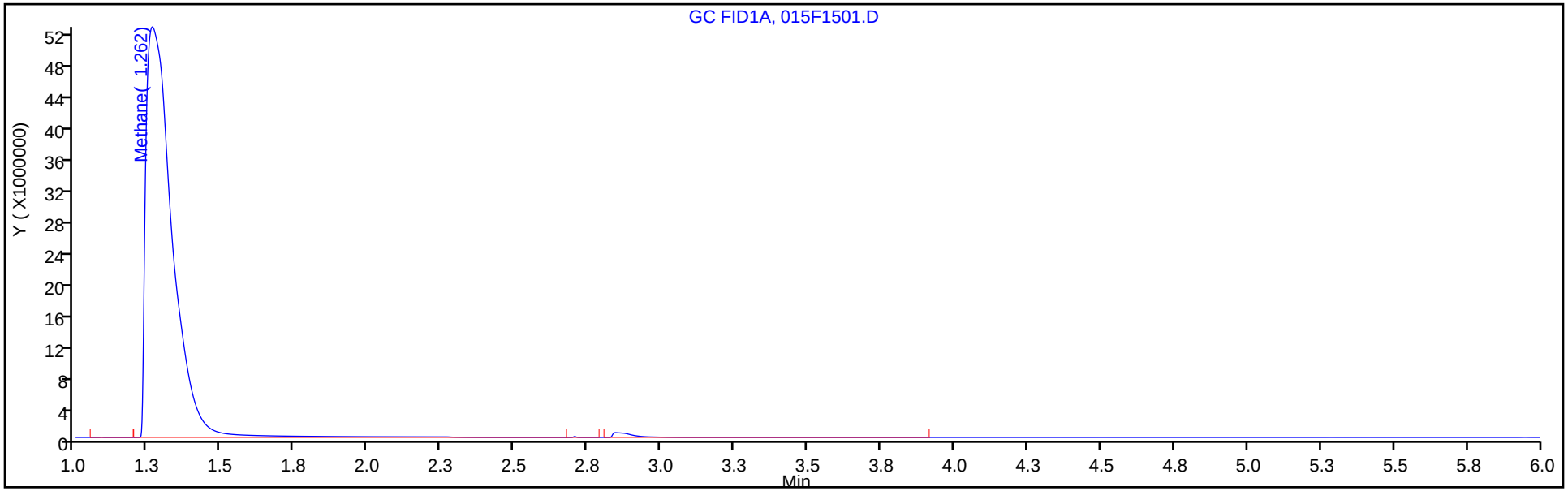
Report Date: 03-Jun-2022 09:25:00 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

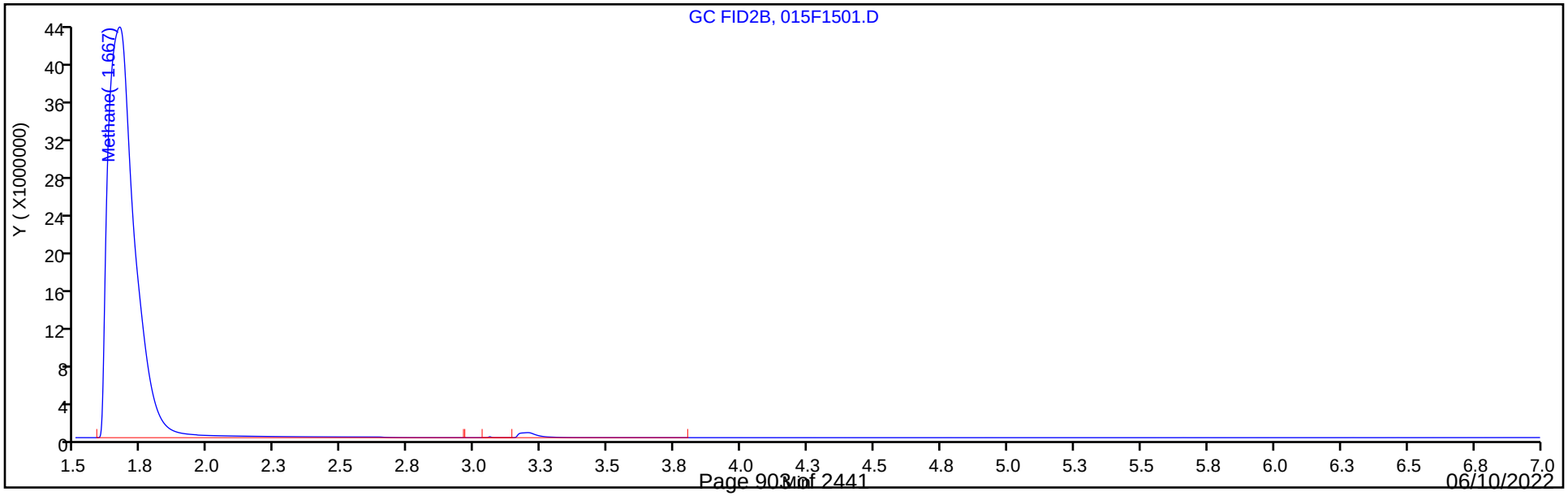
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\015F1501.D

Injection Date:	01-Jun-2022 12:33:52	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-162622-G-19	Lab Sample ID:	280-162622-19	Worklist Smp#:	44
Client ID:	SHGW02-22A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: SHGW05-22A | Lab Sample ID: 280-162622-20

Matrix: Water | Lab File ID: 016F1601.D

Analysis Method: RSK-175 | Date Collected: 05/18/2022 09:20

Sample wt/vol: 20(mL) | Date Analyzed: 06/01/2022 12:46

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

Purge Volume: | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 576662 | 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	8.5		0.0050	0.0013	0.00063
74-85-1	Ethylene	0.0014	U	0.0050	0.0014	0.00040

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\016F1601.D
Lims ID: 280-162622-H-20
Client ID: SHGW05-22A
Sample Type: Client
Inject. Date: 01-Jun-2022 12:46:47 ALS Bottle#: 16 Worklist Smp#: 45
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-162622-H-20
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Jun-2022 09:24:53 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1606

First Level Reviewer: sciannac Date: 03-Jun-2022 09:00:14

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	1.263	1.269	-0.006	326079014	9269.4	
2	1.668	1.682	-0.014	306976967	8501.1	
					RPD = 8.65	
3 Ethane						
1		1.510			ND	
2		3.040				
4 Ethylene						
1		1.750			ND	
2		2.620				
5 Propane						
1		2.469			ND	
2		4.937				
6 Acetylene						
1		3.964			ND	
2		2.768				
7 Butane						
1		4.340			ND	
2		6.432				
8 isobutylene						
1		5.245			ND	
2		6.275				

QC Flag Legend

Processing Flags

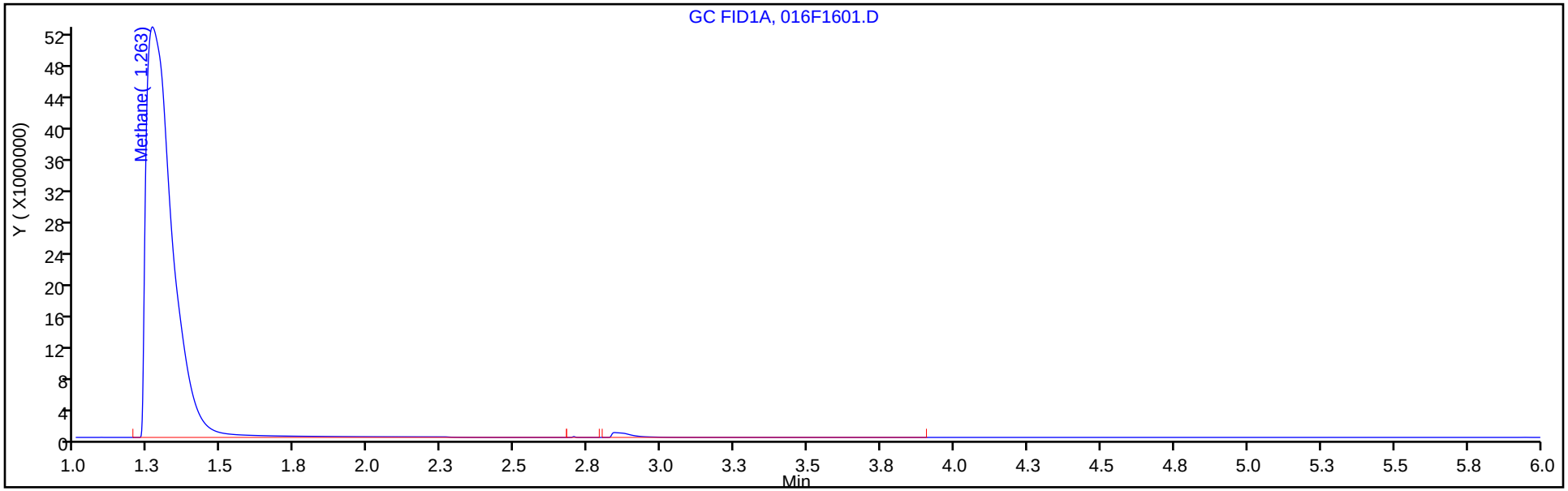
Report Date: 03-Jun-2022 09:25:01 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

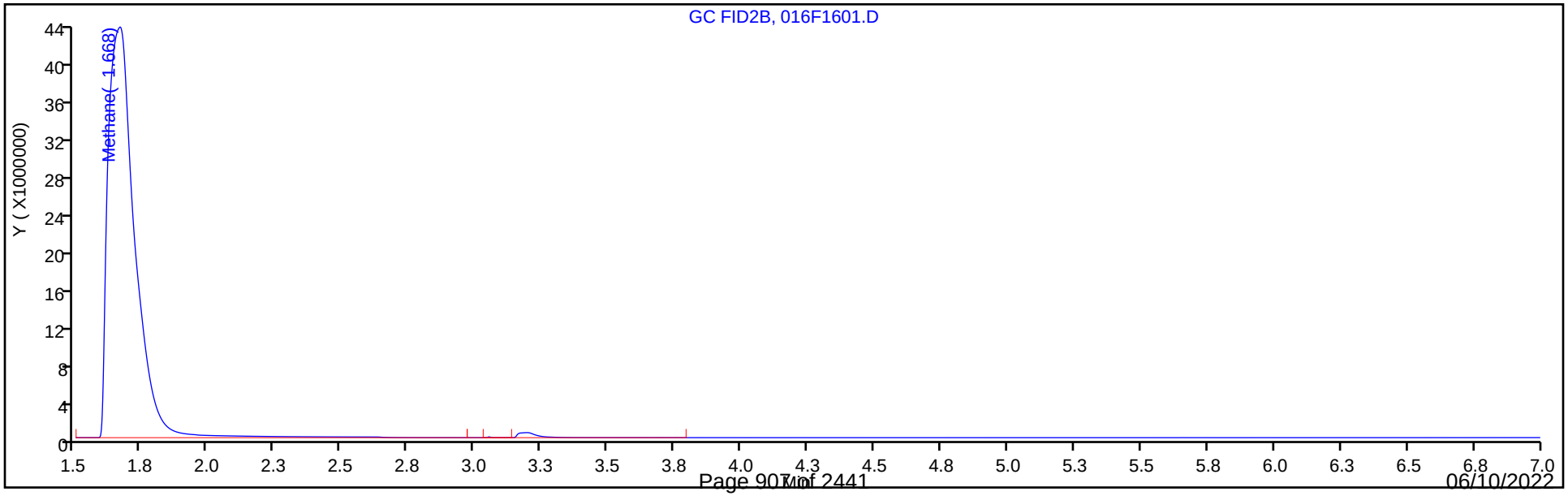
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\016F1601.D

Injection Date:	01-Jun-2022 12:46:47	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-162622-H-20	Lab Sample ID:	280-162622-20	Worklist Smp#:	45
Client ID:	SHGW05-22A				
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 Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0053-22A | Lab Sample ID: 280-162622-21

Matrix: Water | Lab File ID: 018F1801.D

Analysis Method: RSK-175 | Date Collected: 05/18/2022 10:10

Sample wt/vol: 20(mL) | Date Analyzed: 06/01/2022 13:12

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

Purge Volume: | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 576662 | 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	0.0016	J	0.0050	0.0013	0.00063
74-85-1	Ethylene	0.0014	U	0.0050	0.0014	0.00040

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\018F1801.D
Lims ID: 280-162622-F-21
Client ID: G0053-22A
Sample Type: Client
Inject. Date: 01-Jun-2022 13:12:37 ALS Bottle#: 18 Worklist Smp#: 47
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-162622-F-21
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Jun-2022 09:25:02 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1606

First Level Reviewer: sciannac Date: 03-Jun-2022 09:00:42

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	1.257	1.269	-0.012	141546	2.17	
2	1.667	1.682	-0.015	119780	1.58	
					RPD = 31.14	
3 Ethane						
1		1.510			ND	
2		3.040				
4 Ethylene						
1		1.750			ND	
2		2.620				
5 Propane						
1		2.469			ND	
2		4.937				
6 Acetylene						
1		3.964			ND	
2		2.768				
7 Butane						
1		4.340			ND	
2		6.432				
8 isobutylene						
1		5.245			ND	
2		6.275				

QC Flag Legend

Processing Flags

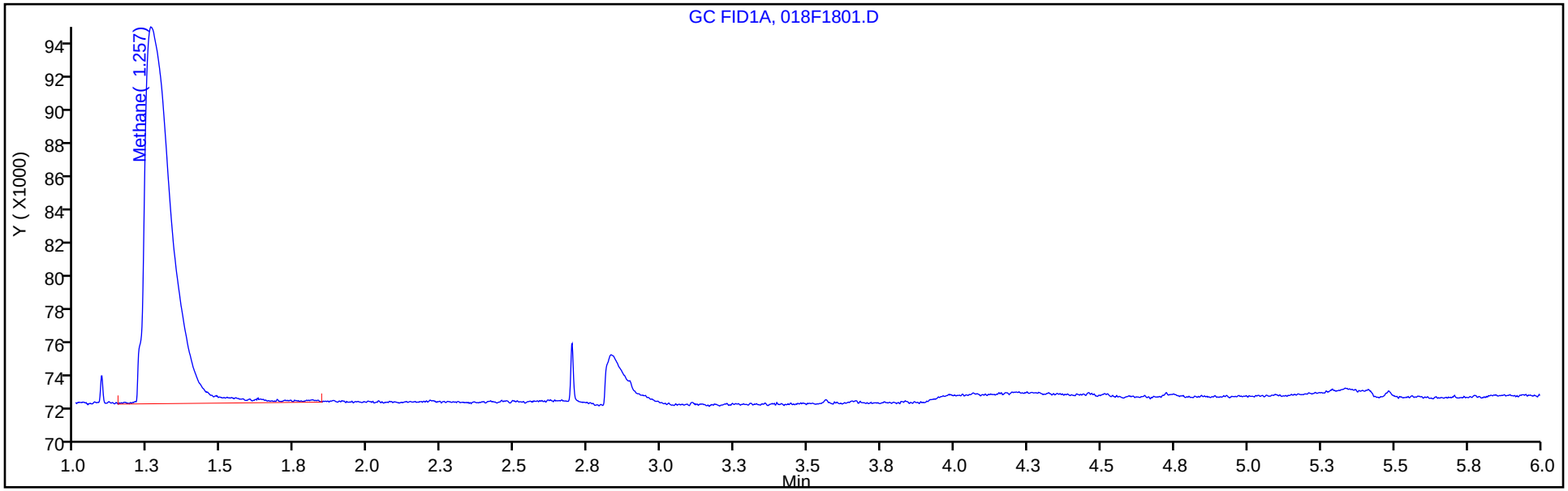
Report Date: 03-Jun-2022 09:25:03 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

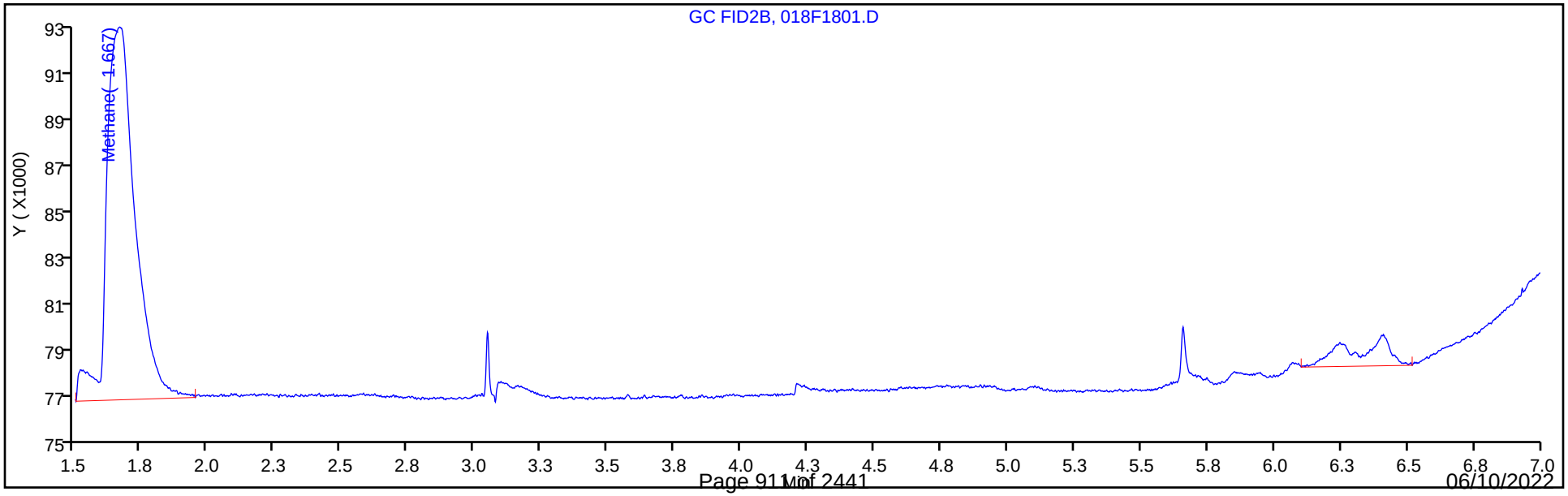
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\018F1801.D

Injection Date:	01-Jun-2022 13:12:37	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-162622-F-21	Lab Sample ID:	280-162622-21	Worklist Smp#:	47
Client ID:	G0053-22A				
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 Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0069-22A | Lab Sample ID: 280-162622-22

Matrix: Water | Lab File ID: 019F1901.D

Analysis Method: RSK-175 | Date Collected: 05/18/2022 11:15

Sample wt/vol: 20(mL) | Date Analyzed: 06/01/2022 13:25

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

Purge Volume: | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 576662 | 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	0.0023	J	0.0050	0.0013	0.00063
74-85-1	Ethylene	0.0014	U	0.0050	0.0014	0.00040

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\019F1901.D
Lims ID: 280-162622-F-22
Client ID: G0069-22A
Sample Type: Client
Inject. Date: 01-Jun-2022 13:25:33 ALS Bottle#: 19 Worklist Smp#: 48
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-162622-F-22
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Jun-2022 09:25:02 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1606

First Level Reviewer: sciannac Date: 03-Jun-2022 09:00:46

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	1.261	1.269	-0.008	170632	2.99	
2	1.669	1.682	-0.013	145758	2.30	
					RPD = 26.10	
3 Ethane						
1		1.510			ND	
2		3.040				
4 Ethylene						
1		1.750			ND	
2		2.620				
5 Propane						
1		2.469			ND	
2		4.937				
6 Acetylene						
1		3.964			ND	
2		2.768				
7 Butane						
1		4.340			ND	
2		6.432				
8 isobutylene						
1		5.245			ND	
2		6.275				

QC Flag Legend

Processing Flags

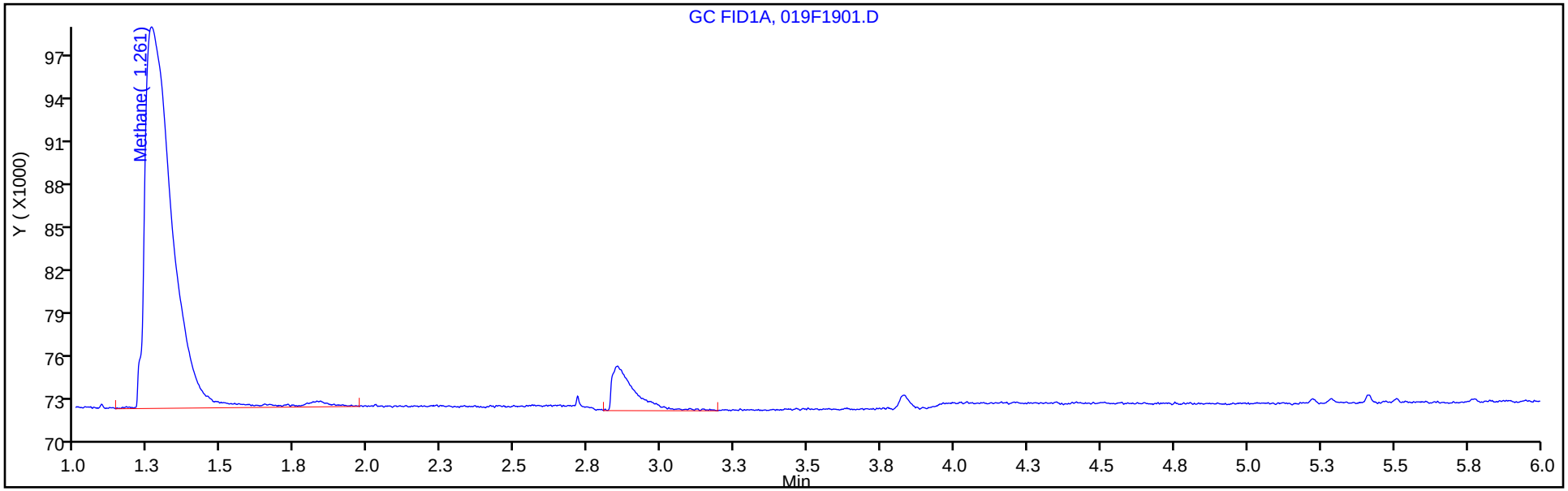
Report Date: 03-Jun-2022 09:25:03 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

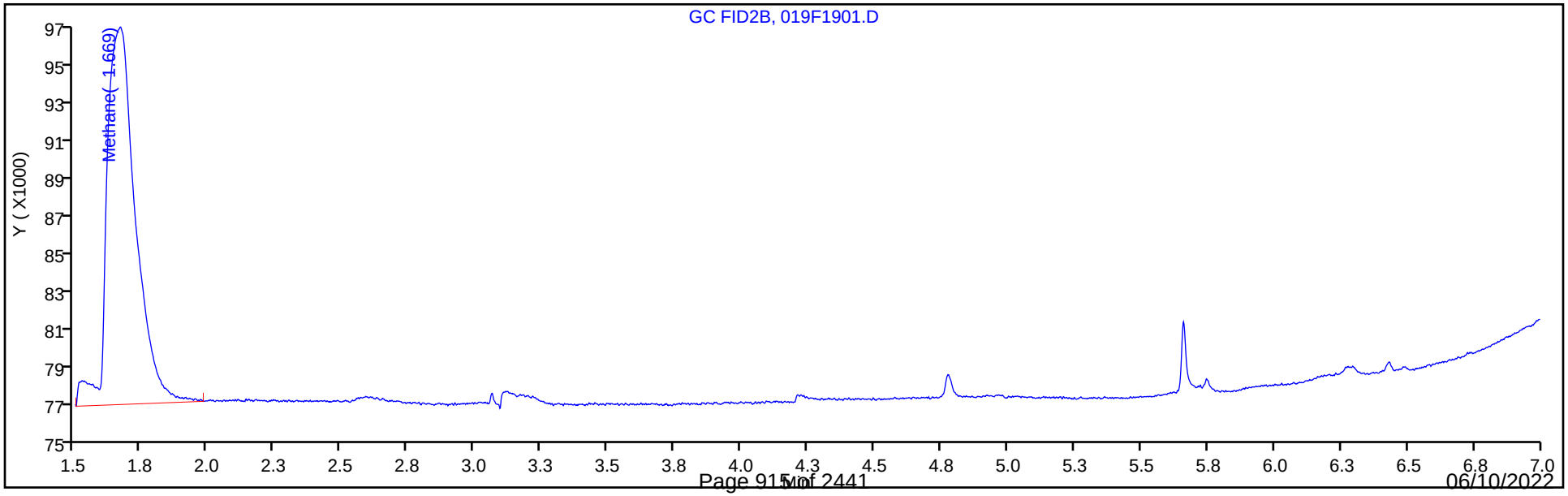
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\019F1901.D

Injection Date:	01-Jun-2022 13:25:33	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-162622-F-22	Lab Sample ID:	280-162622-22	Worklist Smp#:	48
Client ID:	G0069-22A				
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 Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: SHGW04-22A | Lab Sample ID: 280-162622-24

Matrix: Water | Lab File ID: 020F2001.D

Analysis Method: RSK-175 | Date Collected: 05/18/2022 12:35

Sample wt/vol: 20(mL) | Date Analyzed: 06/01/2022 13:38

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

Purge Volume: | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 576662 | 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	0.25		0.0050	0.0013	0.00063
74-85-1	Ethylene	0.0014	U	0.0050	0.0014	0.00040

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\020F2001.D
Lims ID: 280-162622-E-24
Client ID: SHGW04-22A
Sample Type: Client
Inject. Date: 01-Jun-2022 13:38:30 ALS Bottle#: 20 Worklist Smp#: 49
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-162622-E-24
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Jun-2022 09:25:02 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1606

First Level Reviewer: sciannac Date: 03-Jun-2022 09:00:49

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	1.264	1.269	-0.005	9730106	274.8	
2	1.672	1.682	-0.010	8915224	245.2	
					RPD = 11.38	
3 Ethane						
1		1.510			ND	
2		3.040				
4 Ethylene						
1		1.750			ND	
2		2.620				
5 Propane						
1		2.469			ND	
2		4.937				
6 Acetylene						
1		3.964			ND	
2		2.768				
7 Butane						
1		4.340			ND	
2		6.432				
8 isobutylene						
1		5.245			ND	
2		6.275				

QC Flag Legend

Processing Flags

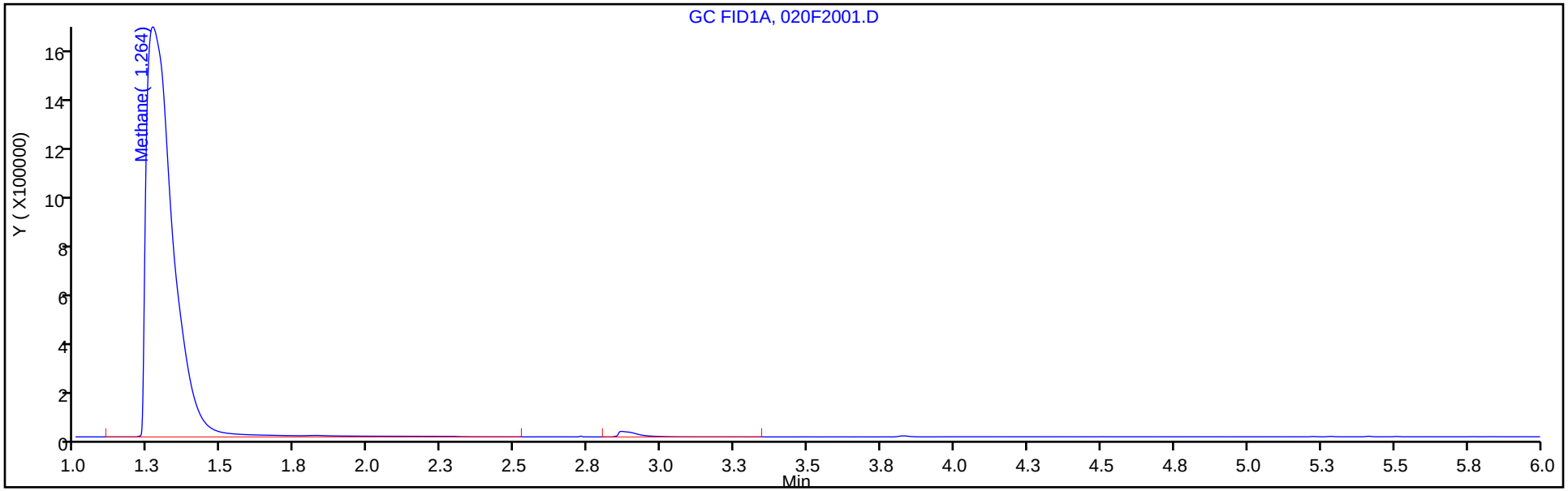
Report Date: 03-Jun-2022 09:25:03 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

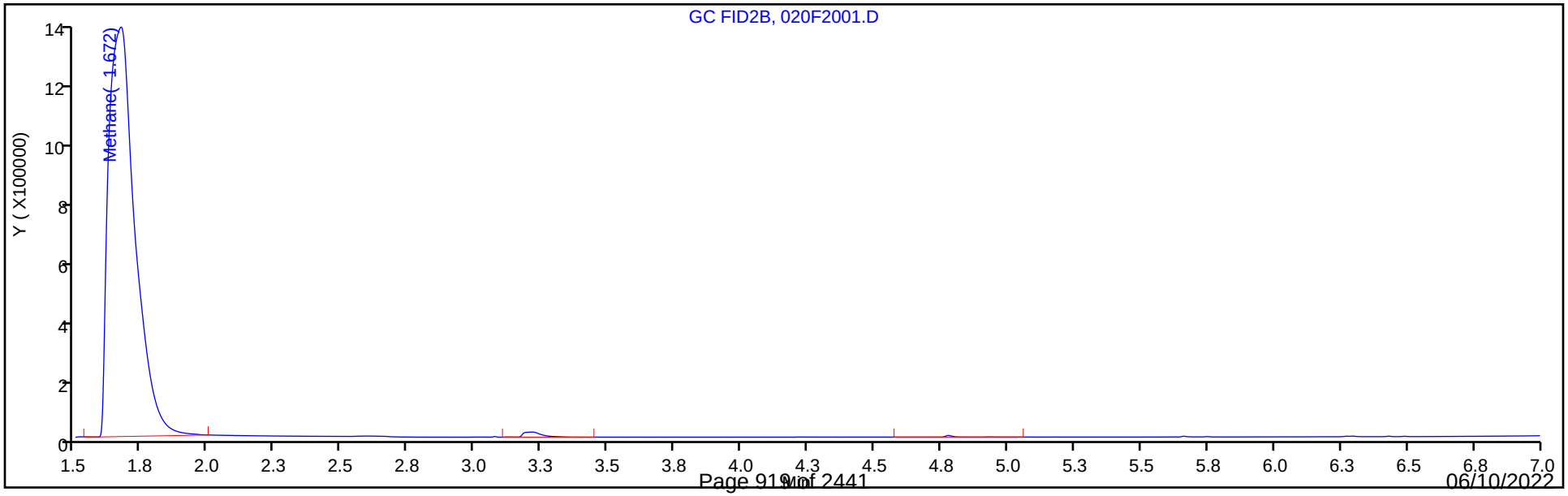
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\020F2001.D

Injection Date:	01-Jun-2022 13:38:30	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-162622-E-24	Lab Sample ID:	280-162622-24	Worklist Smp#:	49
Client ID:	SHGW04-22A				
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 Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: SHGW03-22A | Lab Sample ID: 280-162622-25

Matrix: Water | Lab File ID: 021F2101.D

Analysis Method: RSK-175 | Date Collected: 05/18/2022 15:20

Sample wt/vol: 20(mL) | Date Analyzed: 06/01/2022 13:51

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

Purge Volume: | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 576662 | 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	0.27		0.0050	0.0013	0.00063
74-85-1	Ethylene	0.0014	U	0.0050	0.0014	0.00040

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\021F2101.D
Lims ID: 280-162622-F-25
Client ID: SHGW03-22A
Sample Type: Client
Inject. Date: 01-Jun-2022 13:51:28 ALS Bottle#: 21 Worklist Smp#: 50
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-162622-F-25
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Jun-2022 09:25:02 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1606

First Level Reviewer: sciannac Date: 03-Jun-2022 09:00:53

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	1.263	1.269	-0.006	10552065	298.2	
2	1.670	1.682	-0.012	9703188	267.0	
					RPD = 11.02	
3 Ethane						
1		1.510			ND	
2		3.040				
4 Ethylene						
1		1.750			ND	
2		2.620				
5 Propane						
1		2.469			ND	
2		4.937				
6 Acetylene						
1		3.964			ND	
2		2.768				
7 Butane						
1		4.340			ND	
2		6.432				
8 isobutylene						
1		5.245			ND	
2		6.275				

QC Flag Legend

Processing Flags

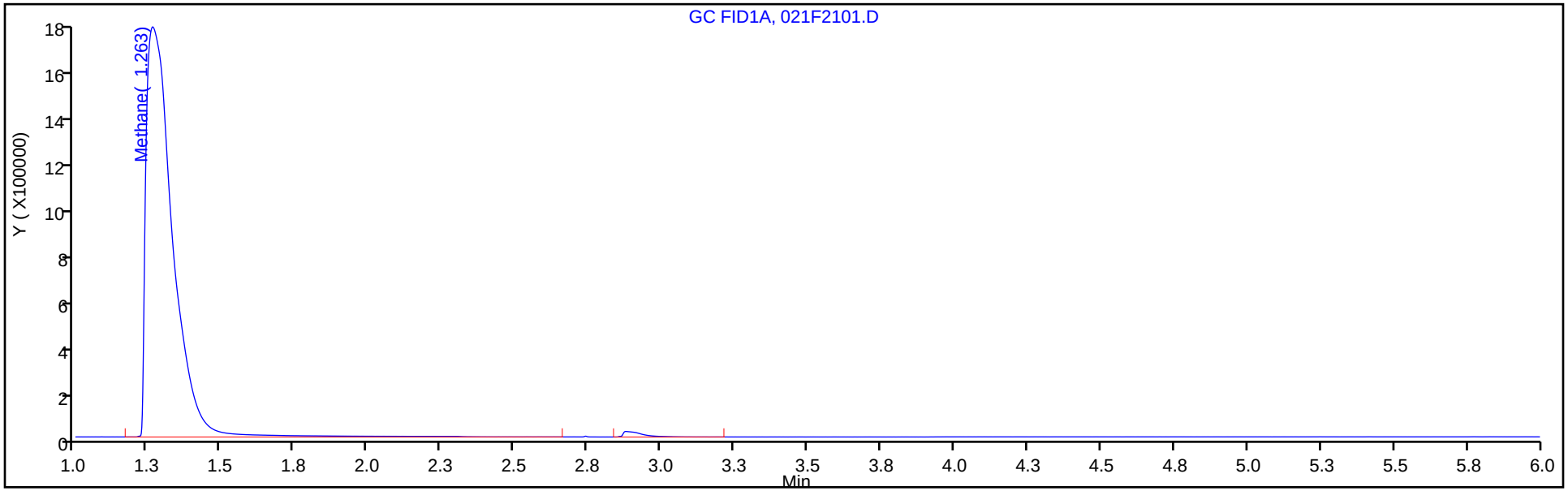
Report Date: 03-Jun-2022 09:25:04 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

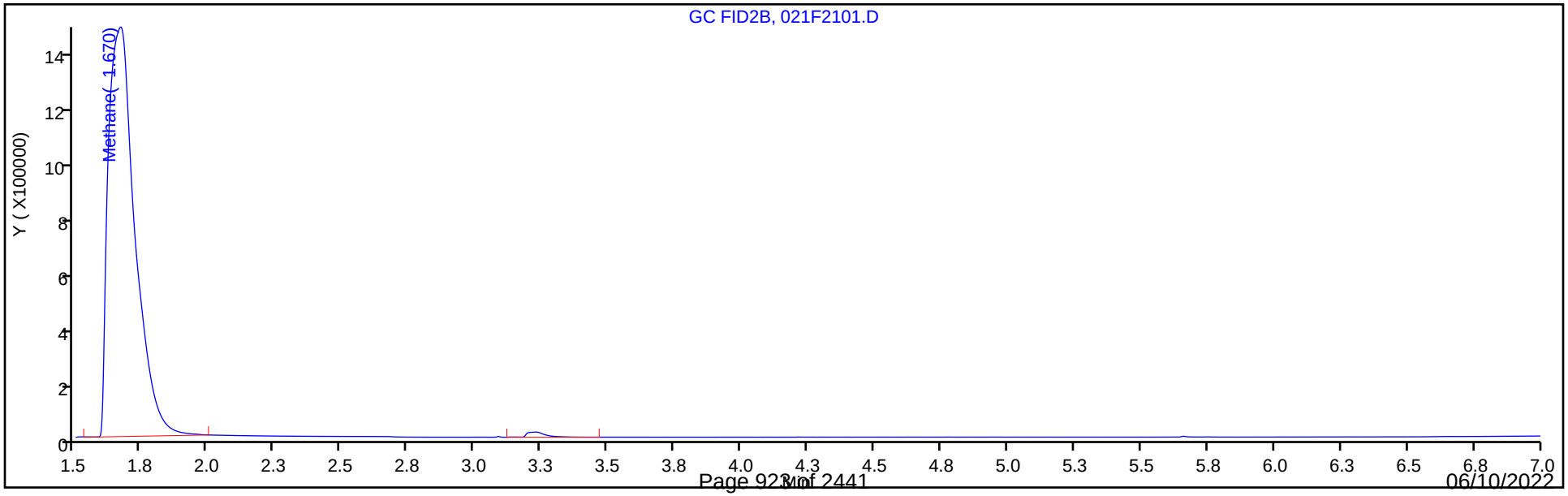
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\021F2101.D

Injection Date:	01-Jun-2022 13:51:28	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-162622-F-25	Lab Sample ID:	280-162622-25	Worklist Smp#:	50
Client ID:	SHGW03-22A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: SAMW1-22A | Lab Sample ID: 280-162622-26

Matrix: Water | Lab File ID: 022F2201.D

Analysis Method: RSK-175 | Date Collected: 05/18/2022 14:10

Sample wt/vol: 20(mL) | Date Analyzed: 06/01/2022 14:04

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

Purge Volume: | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 576662 | 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	0.064		0.0050	0.0013	0.00063
74-85-1	Ethylene	0.0014	U	0.0050	0.0014	0.00040

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\022F2201.D
Lims ID: 280-162622-F-26
Client ID: SAMW1-22A
Sample Type: Client
Inject. Date: 01-Jun-2022 14:04:27 ALS Bottle#: 22 Worklist Smp#: 51
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-162622-F-26
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Jun-2022 09:25:02 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1606

First Level Reviewer: sciannac Date: 03-Jun-2022 09:00:57

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	1.263	1.269	-0.006	2565658	71.1	
2	1.673	1.682	-0.009	2382844	64.3	
					RPD = 10.08	
3 Ethane						
1		1.510			ND	
2		3.040				
4 Ethylene						
1		1.750			ND	
2		2.620				
5 Propane						
1		2.469			ND	
2		4.937				
6 Acetylene						
1		3.964			ND	
2		2.768				
7 Butane						
1		4.340			ND	
2		6.432				
8 isobutylene						
1		5.245			ND	
2		6.275				

QC Flag Legend

Processing Flags

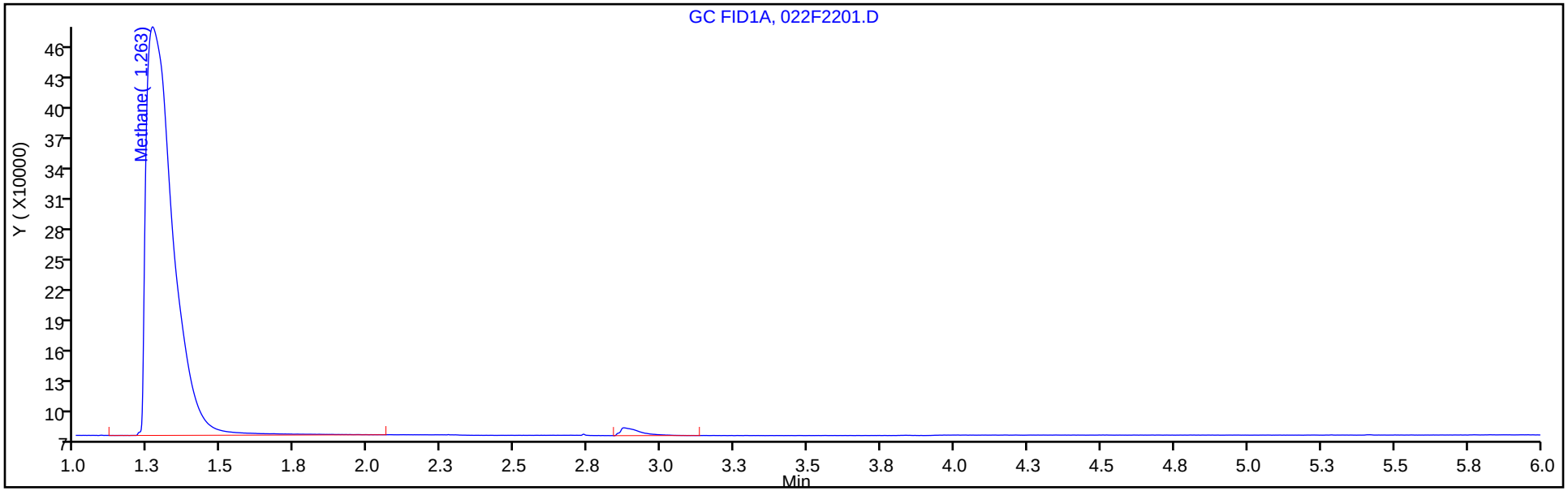
Report Date: 03-Jun-2022 09:25:04 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

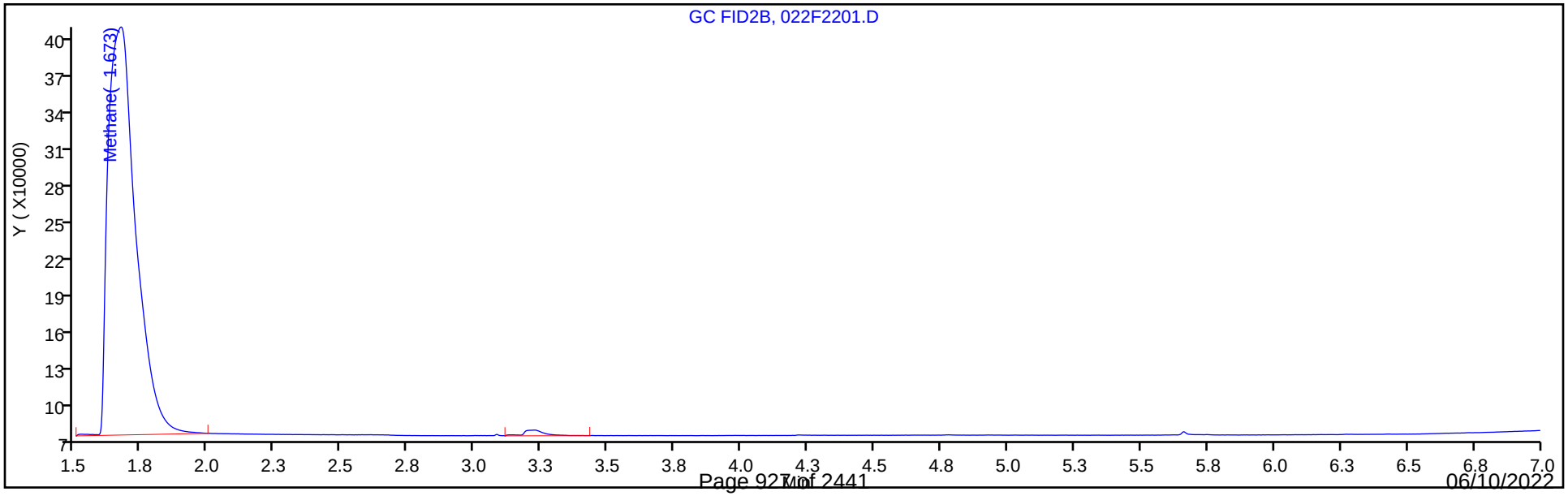
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\022F2201.D

Injection Date:	01-Jun-2022 14:04:27	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-162622-F-26	Lab Sample ID:	280-162622-26	Worklist Smp#:	51
Client ID:	SAMW1-22A				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1 Analy Batch No.: 550959

SDG No.:

Instrument ID: VGC_J GC Column: Rt-Alumina ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/24/2021 13:28 Calibration End Date: 09/24/2021 15:12 Calibration ID: 58237

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-550959/2	004F0201.D
Level 2	IC 280-550959/3	005F0301.D
Level 3	IC 280-550959/4	006F0401.D
Level 4	IC 280-550959/5	007F0501.D
Level 5	IC 280-550959/6	008F0601.D
Level 6	IC 280-550959/7	009F0701.D
Level 7	IC 280-550959/9	010F0801.D
Level 8	IC 280-550959/10	011F0901.D
Level 9	IC 280-550959/11	012F1001.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	1.292	1.293	1.293	1.295	1.295	1.294	1.293	1.292	1.288		1.259 - 1.339	1.293
Ethane	1.559	1.562	1.561	1.561	1.560	1.561					1.506 - 1.606	1.561
Ethylene	1.859	1.867	1.870	1.870	1.873	1.873					1.794 - 1.894	1.869
Acetylene	4.184	4.213	4.226	4.230	4.230	4.228					4.150 - 4.310	4.219

FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-162622-1 Analy Batch No.: 550959

SDG No.:

Instrument ID: VGC_J GC Column: Rt-Alumina ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/24/2021 13:28 Calibration End Date: 09/24/2021 15:12 Calibration ID: 58237

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-550959/2	004F0201.D
Level 2	IC 280-550959/3	005F0301.D
Level 3	IC 280-550959/4	006F0401.D
Level 4	IC 280-550959/5	007F0501.D
Level 5	IC 280-550959/6	008F0601.D
Level 6	IC 280-550959/7	009F0701.D
Level 7	IC 280-550959/9	010F0801.D
Level 8	IC 280-550959/10	011F0901.D
Level 9	IC 280-550959/11	012F1001.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	113753 36593 34286	77207 30893	37613 37193	37343 37763	Lin2	65341.4749	35170.8362							0.9950		0.9900
Ethane	30155 35527	35278 30441	32231	35816	Ave		33241.2722				7.9		20.0			
Ethylene	33189 37346	37318 31937	33977	37589	Ave		35225.9675				7.1		20.0			
Acetylene	26445 29412	29909 25729	27524	29815	Ave		28139.0195				6.5		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver Job No.: 280-162622-1 Analy Batch No.: 550959

SDG No.:

Instrument ID: VGC_J GC Column: Rt-Alumina ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/24/2021 13:28 Calibration End Date: 09/24/2021 15:12 Calibration ID: 58237

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-550959/2	004F0201.D
Level 2	IC 280-550959/3	005F0301.D
Level 3	IC 280-550959/4	006F0401.D
Level 4	IC 280-550959/5	007F0501.D
Level 5	IC 280-550959/6	008F0601.D
Level 6	IC 280-550959/7	009F0701.D
Level 7	IC 280-550959/9	010F0801.D
Level 8	IC 280-550959/10	011F0901.D
Level 9	IC 280-550959/11	012F1001.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	93424 8118988	126818 60484705	494257 245647963	2453548 669092603	4808571	0.821 263	1.64 1626	13.1 6505	65.7 19515	131
Ethane	Ave	46427 14997572	108631	793971	4411499	8751636	1.54 493	3.08	24.6	123	246
Ethylene	Ave	47667 14678124	107197	780792	4318968	8582166	1.44 460	2.87	23.0	115	230
Acetylene	Ave	35261 10977943	79761	587204	3180347	6274725	1.33 427	2.67	21.3	107	213

Curve Type Legend

Ave = Average
Lin2 = Linear 1/conc^2

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 24-Sep-2021 13:28:57 ALS Bottle#: 4 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 29-Sep-2021 10:55:12 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1655

First Level Reviewer: sciannac Date: 24-Sep-2021 13:57:02

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							a
1	1.292	1.299	-0.007	93424	0.8213	0.7985	a
2	1.689	1.686	0.003	91227	0.8213	0.7920	a
						RPD = 0.81	
3 Ethane							a
1	1.559	1.556	0.003	46427	1.54	1.40	a
2	3.032	3.028	0.004	46984	1.54	1.41	a
						RPD = 0.77	
4 Ethylene							a
1	1.859	1.844	0.015	47667	1.44	1.35	a
2	2.612	2.609	0.003	41226	1.44	1.33	a
						RPD = 1.67	
5 Propane							a
1	2.682	2.721	-0.039	76526	2.26	2.13	a
2	4.937	4.929	0.008	73050	2.26	2.09	a
						RPD = 1.83	
6 Acetylene							a
1	4.184	4.230	-0.046	35261	1.33	1.25	a
2	2.759	2.746	0.013	41503	1.33	1.21	a
						RPD = 3.15	
7 Butane							Ma
1	4.555	4.528	0.027	101912	2.98	2.80	a
2	6.435	6.426	0.009	95155	2.98	2.71	M
						RPD = 3.27	
8 isobutylene							Ma
1	5.437	5.403	0.034	92868	2.87	2.57	M
2	6.277	6.274	0.003	91569	2.87	2.76	a
						RPD = 7.02	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 2.50 Units: uL

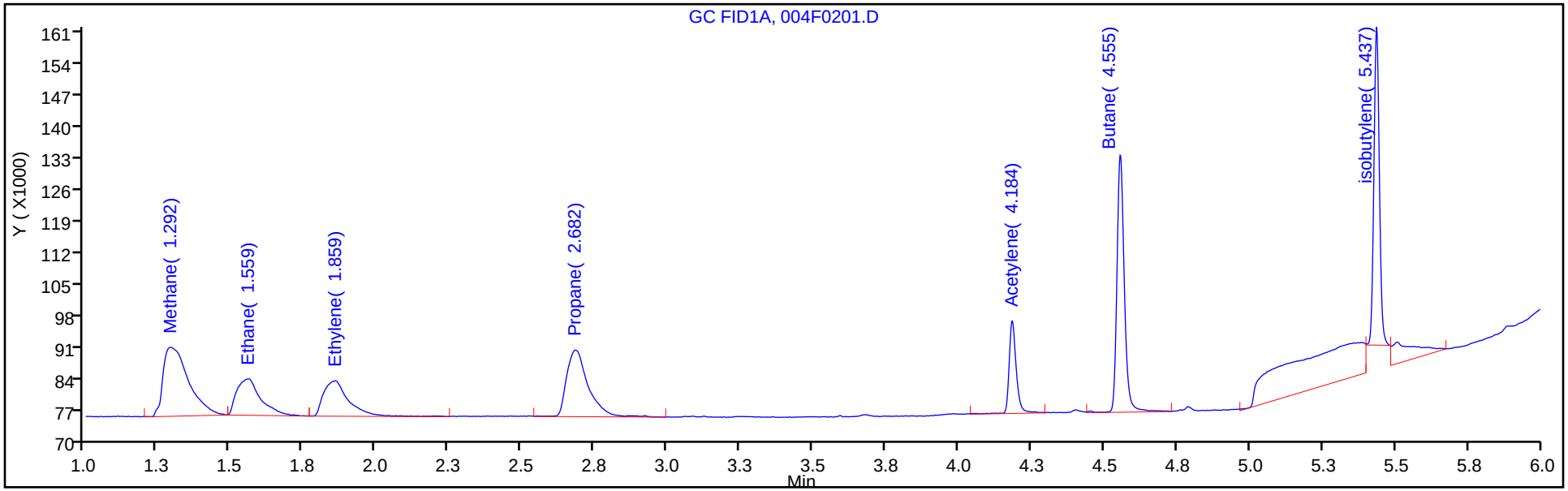
Report Date: 29-Sep-2021 10:55:12 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

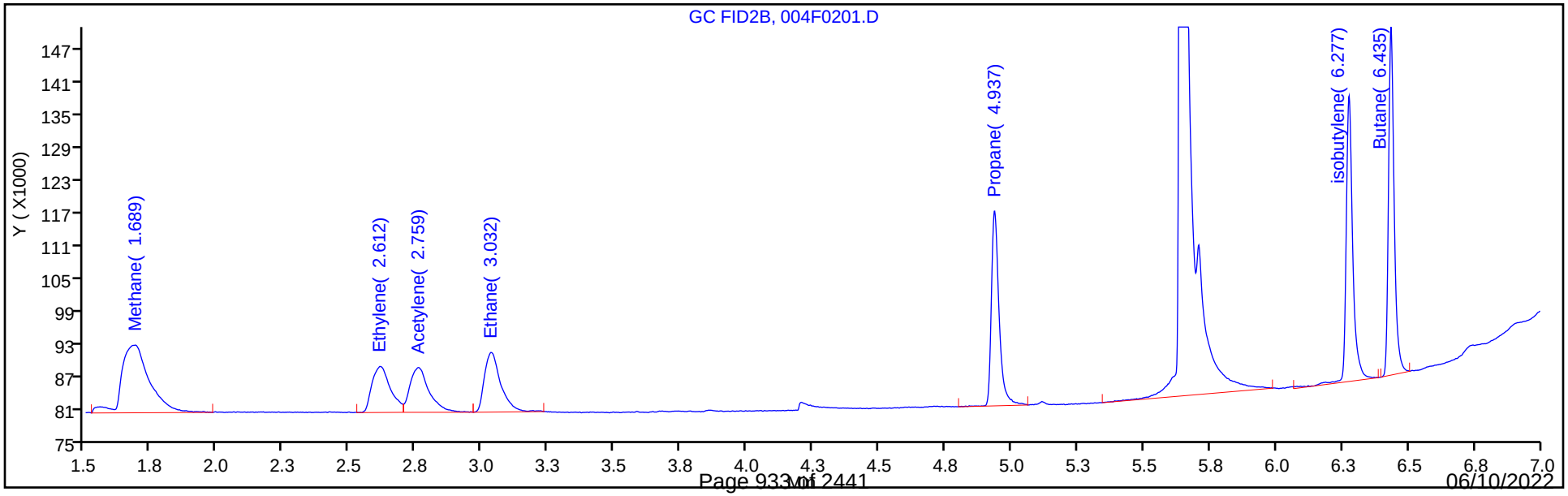
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D

Injection Date:	24-Sep-2021 13:28:57	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ic			Worklist Smp#:	2
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

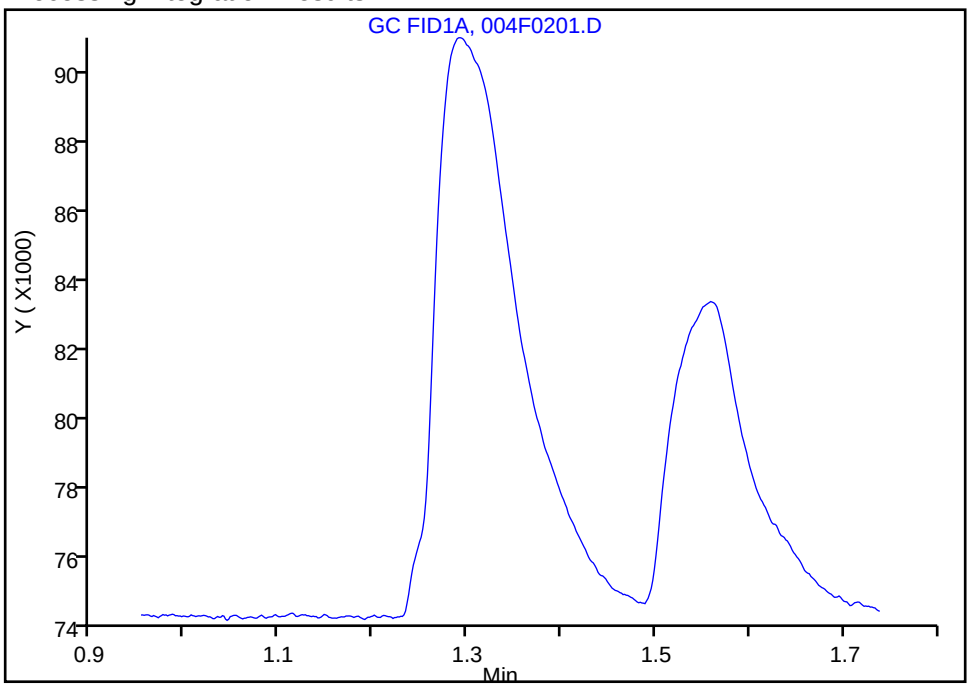
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D
Injection Date: 24-Sep-2021 13:28:57 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 4 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

2 Methane, CAS: 74-82-8

Signal: 1

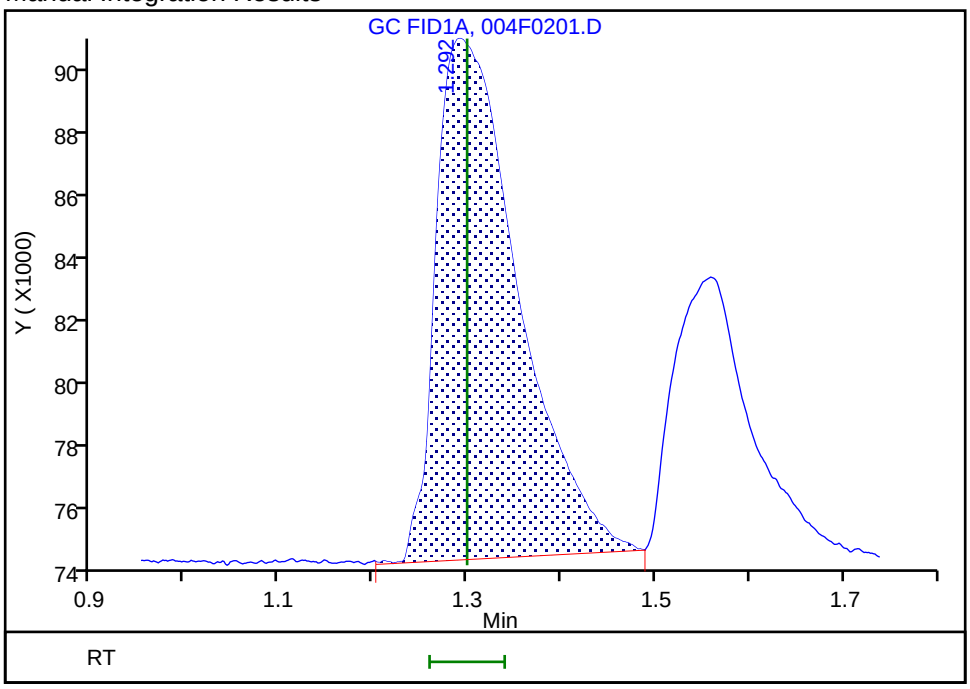
Not Detected
Expected RT: 1.30

Processing Integration Results



Manual Integration Results

RT: 1.29
Area: 93424
Amount: 0.798461
Amount Units: ug/l



Reviewer: sciannac, 24-Sep-2021 13:54:22
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

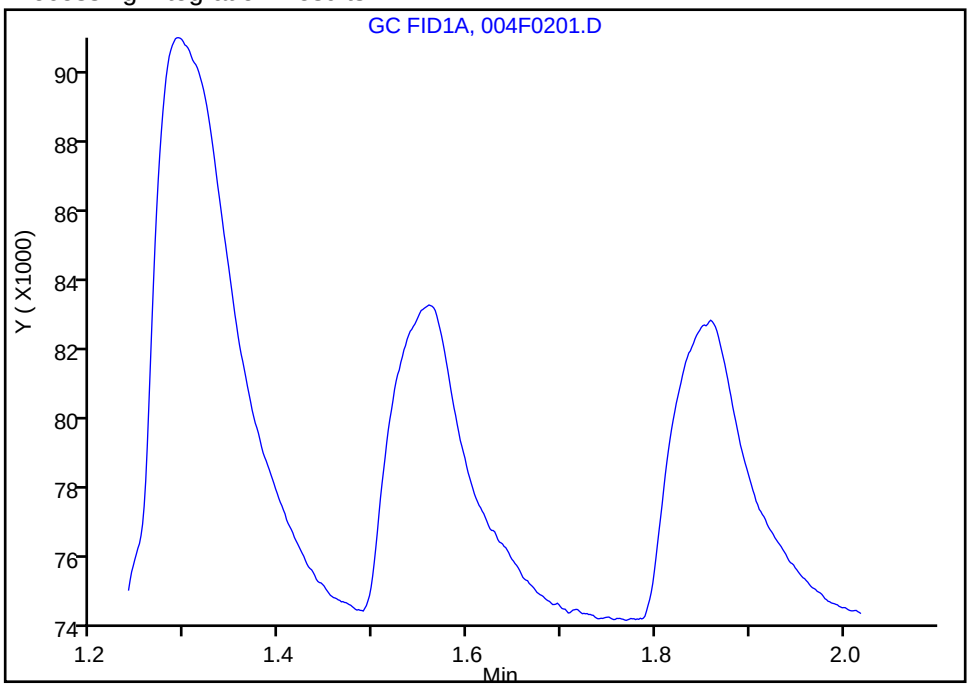
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D
Injection Date: 24-Sep-2021 13:28:57 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 4 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

3 Ethane, CAS: 74-84-0

Signal: 1

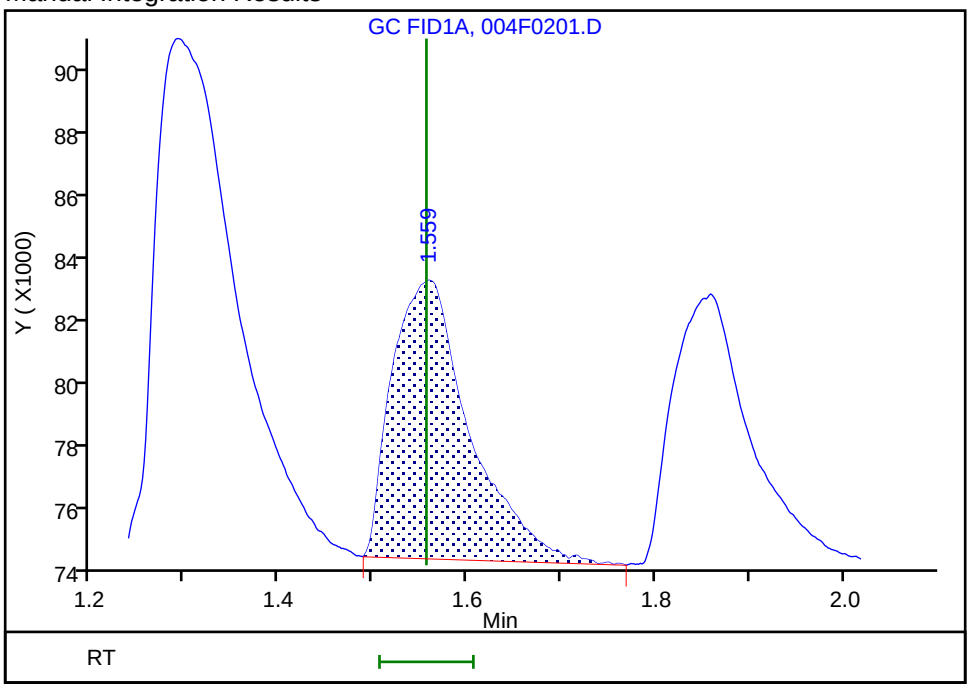
Not Detected
Expected RT: 1.56

Processing Integration Results



Manual Integration Results

RT: 1.56
Area: 46427
Amount: 1.396667
Amount Units: ug/l



Reviewer: sciannac, 24-Sep-2021 13:54:28
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

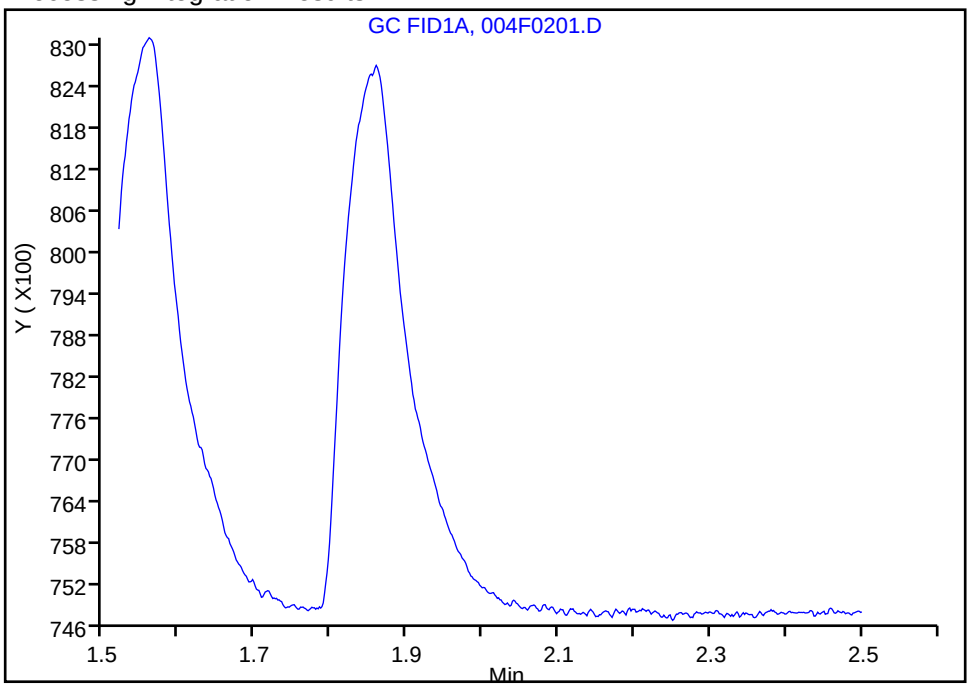
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D
Injection Date: 24-Sep-2021 13:28:57 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 4 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

4 Ethylene, CAS: 74-85-1

Signal: 1

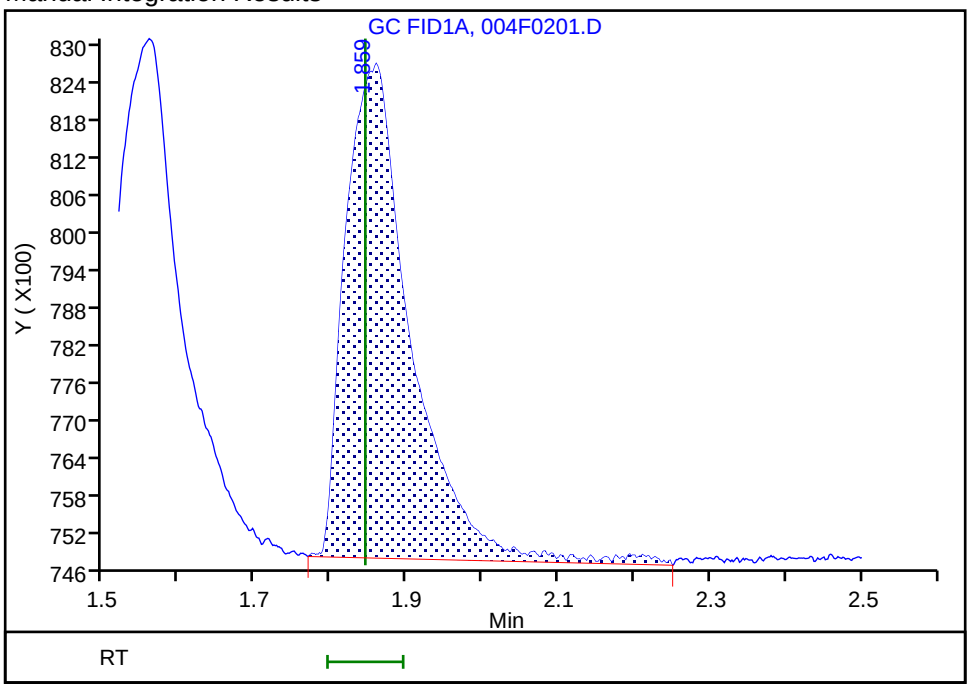
Not Detected
Expected RT: 1.84

Processing Integration Results



Manual Integration Results

RT: 1.86
Area: 47667
Amount: 1.353178
Amount Units: ug/l



Reviewer: sciannac, 24-Sep-2021 13:54:47
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

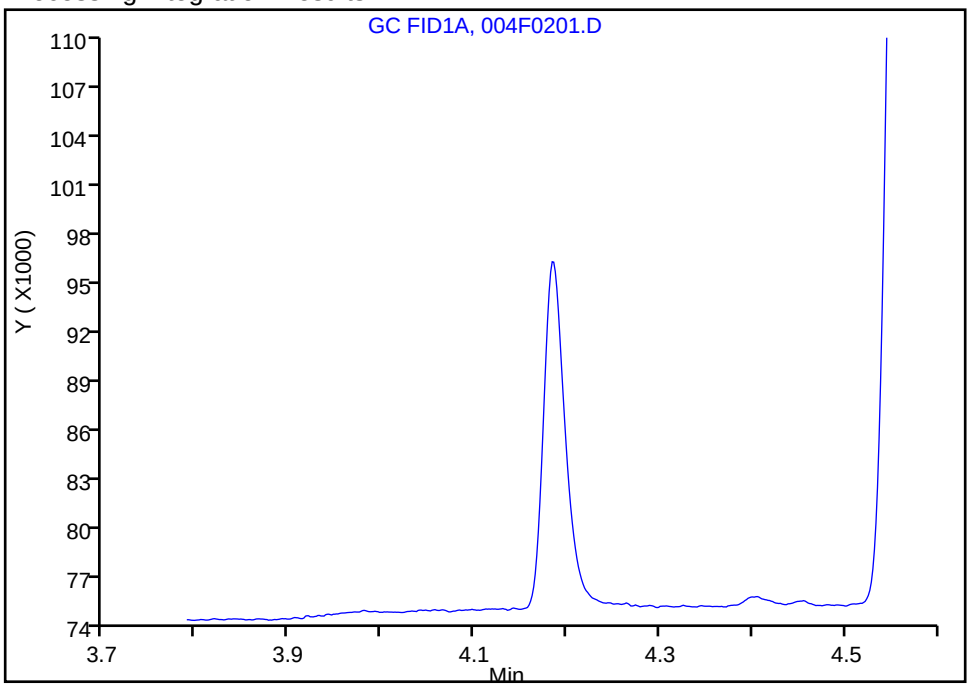
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D
Injection Date: 24-Sep-2021 13:28:57 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 4 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

6 Acetylene, CAS: 74-86-2

Signal: 1

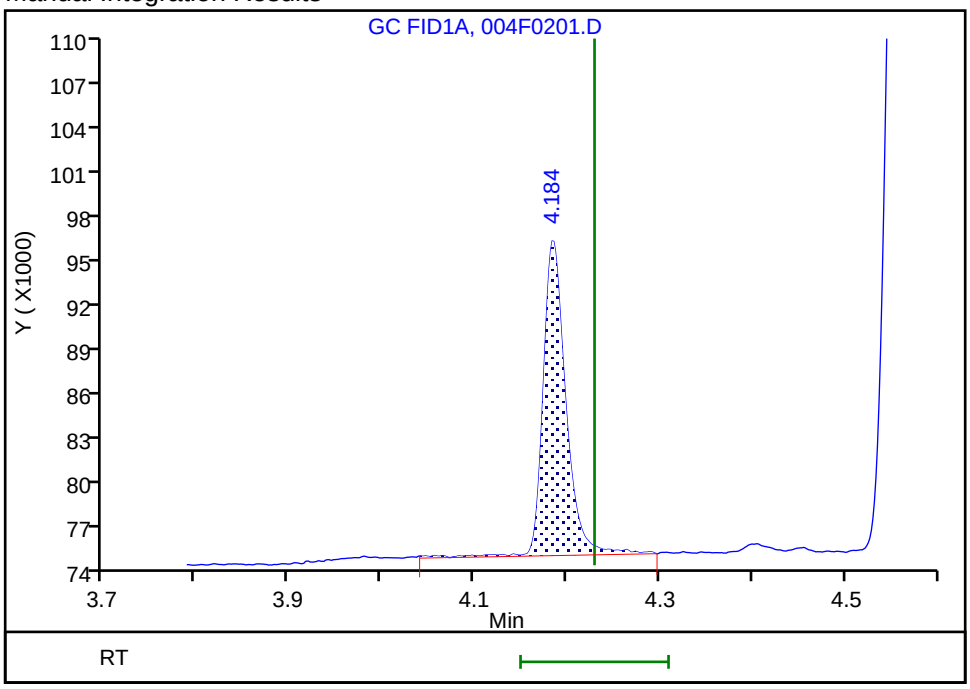
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.18
Area: 35261
Amount: 1.253100
Amount Units: ug/l



Reviewer: sciannac, 24-Sep-2021 13:55:04
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\005F0301.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 24-Sep-2021 13:41:52 ALS Bottle#: 5 Worklist Smp#: 3
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 29-Sep-2021 10:55:13 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1655

First Level Reviewer: sciannac Date: 24-Sep-2021 13:58:34

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.293	1.299	-0.006	126818	1.64	1.75	
2	1.686	1.686	0.000	126529	1.64	1.77	
						RPD = 1.24	
3 Ethane							
1	1.562	1.556	0.006	108631	3.08	3.27	
2	3.031	3.028	0.003	107446	3.08	3.22	
						RPD = 1.52	
4 Ethylene							
1	1.867	1.844	0.023	107197	2.87	3.04	
2	2.613	2.609	0.004	95159	2.87	3.07	
						RPD = 0.93	
5 Propane							
1	2.700	2.721	-0.021	174390	4.52	4.84	
2	4.935	4.929	0.006	170185	4.52	4.86	
						RPD = 0.37	
6 Acetylene							
1	4.213	4.230	-0.017	79761	2.67	2.83	
2	2.756	2.746	0.010	94797	2.67	2.77	
						RPD = 2.17	
7 Butane							Ma
1	4.575	4.528	0.047	232737	5.95	6.39	a
2	6.435	6.426	0.009	221865	5.95	6.31	M
						RPD = 1.20	
8 isobutylene							Ma
1	5.457	5.403	0.054	232885	5.75	6.45	
2	6.276	6.274	0.002	200266	5.75	6.03	M
						RPD = 6.65	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 5.00 Units: uL

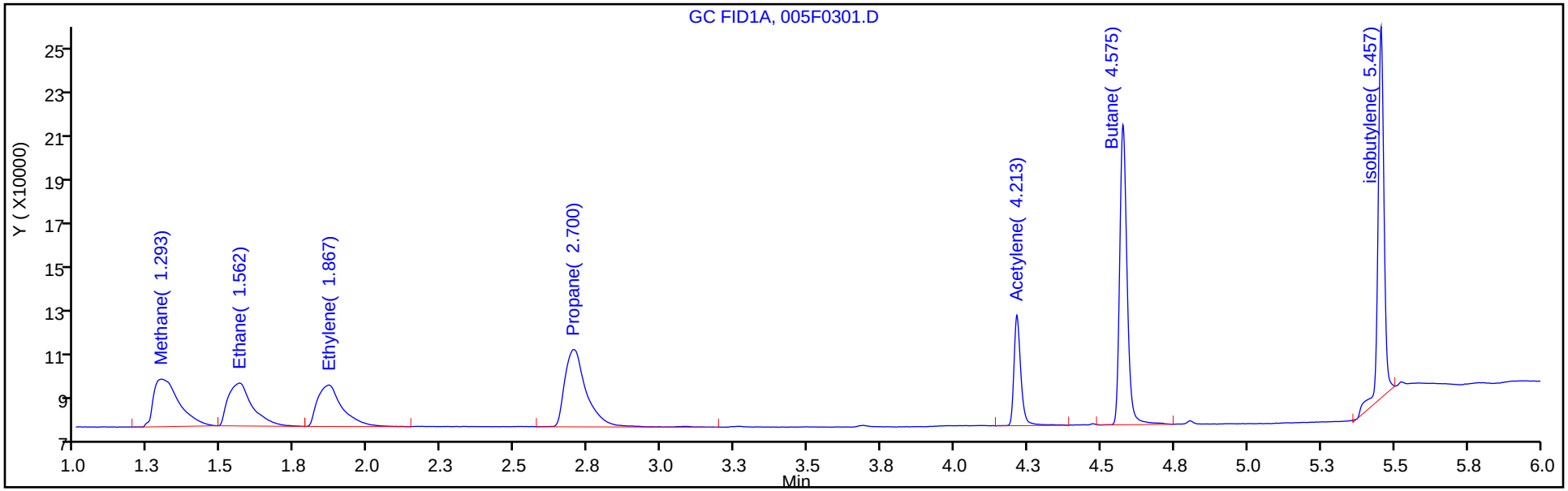
Report Date: 29-Sep-2021 10:55:13 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

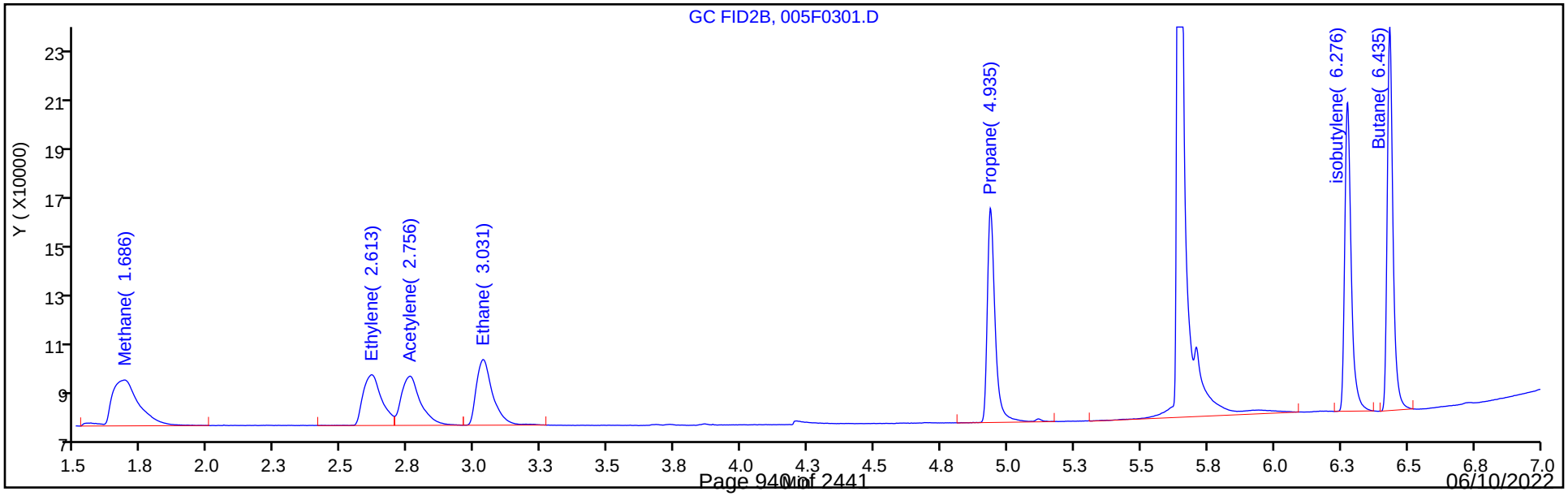
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\005F0301.D

Injection Date:	24-Sep-2021 13:41:52	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ic			Worklist Smp#:	3
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\20210923-104922.b\006F0401.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 24-Sep-2021 13:54:46 ALS Bottle#: 6 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 29-Sep-2021 10:55:14 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1655

First Level Reviewer: sciannac Date: 24-Sep-2021 15:51:08

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.293	1.299	-0.006	494257	13.1	12.2	
2	1.684	1.686	-0.002	509129	13.1	12.4	
						RPD = 1.40	
3 Ethane							
1	1.561	1.556	0.005	793971	24.6	23.9	
2	3.029	3.028	0.001	803791	24.6	24.1	
						RPD = 0.81	
4 Ethylene							
1	1.870	1.844	0.026	780792	23.0	22.2	
2	2.609	2.609	0.000	687818	23.0	22.2	
						RPD = 0.16	
5 Propane							
1	2.711	2.721	-0.010	1259121	36.1	35.0	
2	4.934	4.929	0.005	1221976	36.1	34.9	
						RPD = 0.18	
6 Acetylene							a
1	4.226	4.230	-0.004	587204	21.3	20.9	a
2	2.753	2.746	0.007	713476	21.3	20.9	a
						RPD = 0.03	
7 Butane							Ma
1	4.586	4.528	0.058	1686797	47.6	46.3	a
2	6.433	6.426	0.007	1612366	47.6	45.9	M
						RPD = 0.93	
8 isobutylene							Ma
1	5.465	5.403	0.062	1589725	46.0	44.0	
2	6.274	6.274	0.000	1464027	46.0	44.1	M
						RPD = 0.20	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 40.00 Units: uL

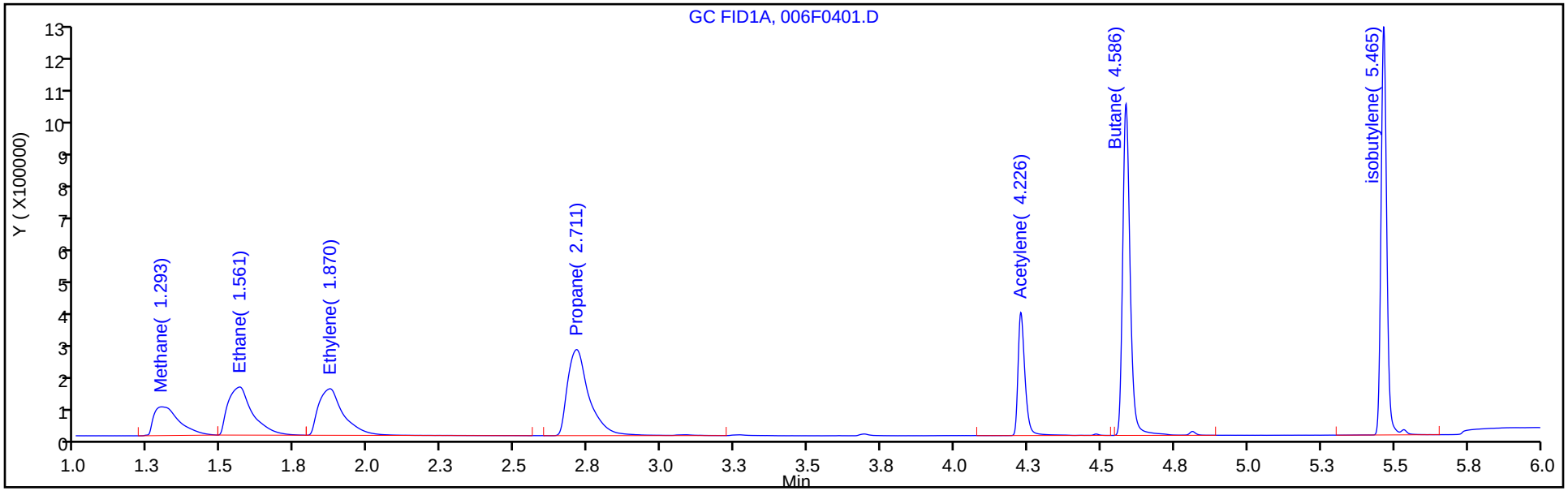
Report Date: 29-Sep-2021 10:55:14 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

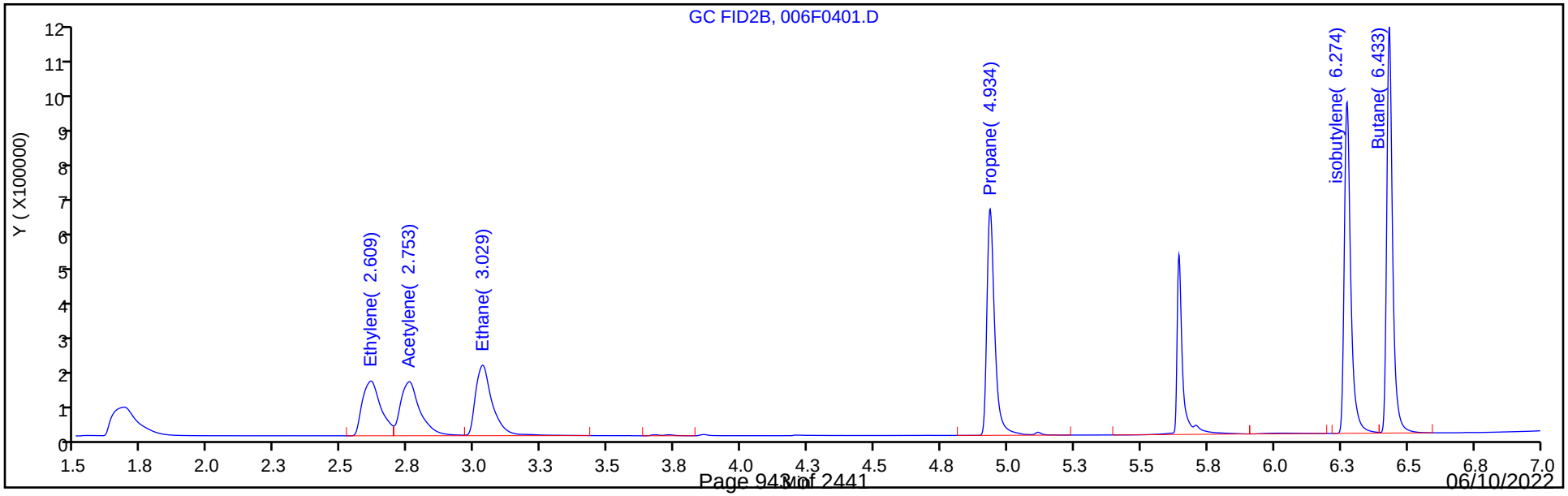
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\006F0401.D

Injection Date:	24-Sep-2021 13:54:46	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ic			Worklist Smp#:	4
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

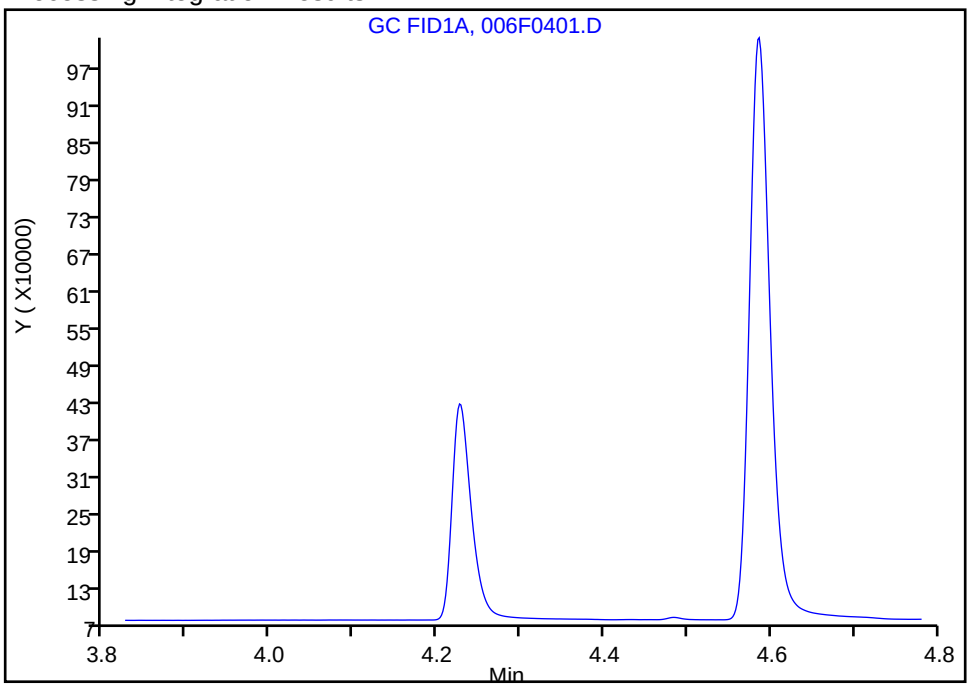
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\006F0401.D
Injection Date: 24-Sep-2021 13:54:46 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 6 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

6 Acetylene, CAS: 74-86-2

Signal: 1

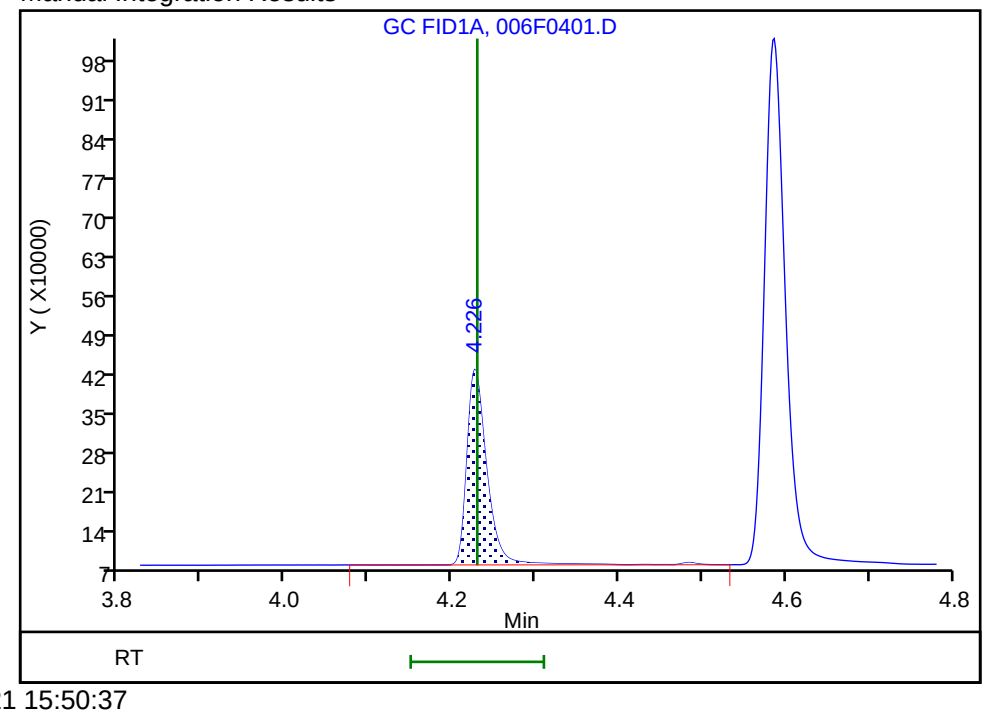
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.23
Area: 587204
Amount: 20.867962
Amount Units: ug/l



Reviewer: sciannac, 24-Sep-2021 15:50:37
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\007F0501.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 24-Sep-2021 14:07:45 ALS Bottle#: 7 Worklist Smp#: 5
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 29-Sep-2021 10:55:14 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1655

First Level Reviewer: sciannac Date: 24-Sep-2021 15:50:30

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.295	1.295	0.000	2453548	65.7	67.9	
2	1.681	1.681	0.000	2553566	65.7	69.0	
						RPD = 1.60	
3 Ethane							Ma
1	1.561	1.561	0.000	4411499	123.2	132.7	
2	3.026	3.026	0.000	4450065	123.2	133.3	M
						RPD = 0.45	
4 Ethylene							
1	1.870	1.870	0.000	4318968	114.9	122.6	
2	2.608	2.608	0.000	3812973	114.9	123.1	
						RPD = 0.38	
5 Propane							
1	2.716	2.716	0.000	6962772	180.6	193.4	
2	4.933	4.933	0.000	6754582	180.6	192.9	
						RPD = 0.22	
6 Acetylene							a
1	4.230	4.230	0.000	3180347	106.7	113.0	a
2	2.751	2.751	0.000	3899802	106.7	114.1	a
						RPD = 0.95	
7 Butane							
1	4.590	4.590	0.000	9255328	238.1	254.1	
2	6.430	6.430	0.000	8939530	238.1	254.4	
						RPD = 0.11	
8 isobutylene							
1	5.468	5.468	0.000	8777969	229.8	243.0	
2	6.271	6.271	0.000	8052089	229.8	242.5	
						RPD = 0.20	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

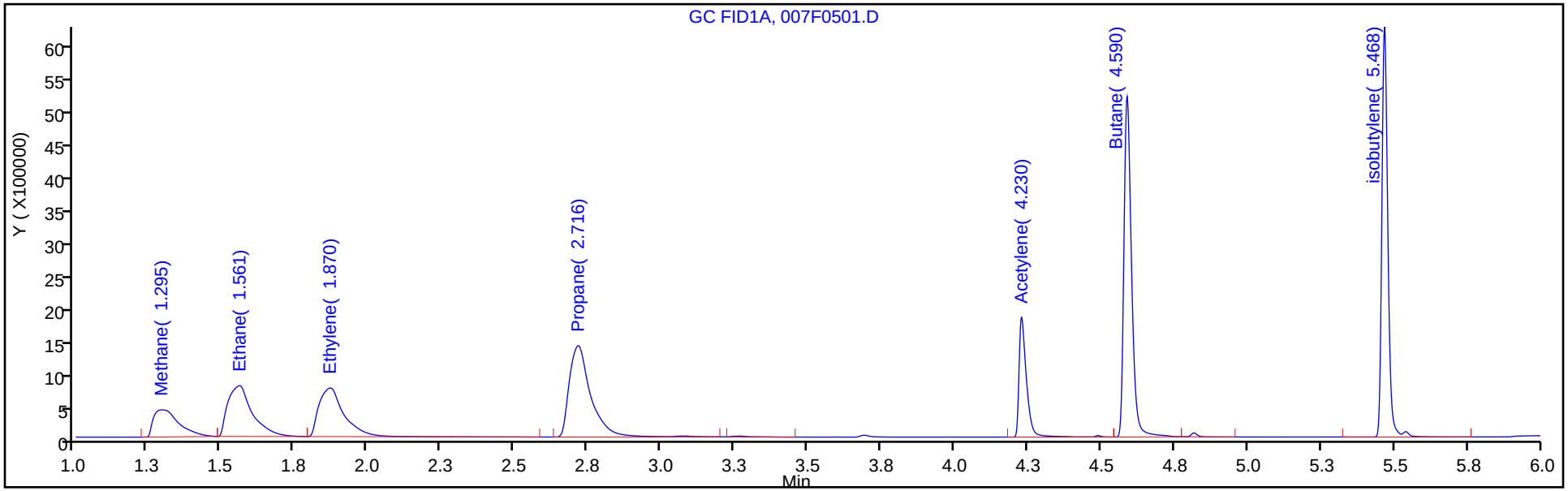
Report Date: 29-Sep-2021 10:55:14 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

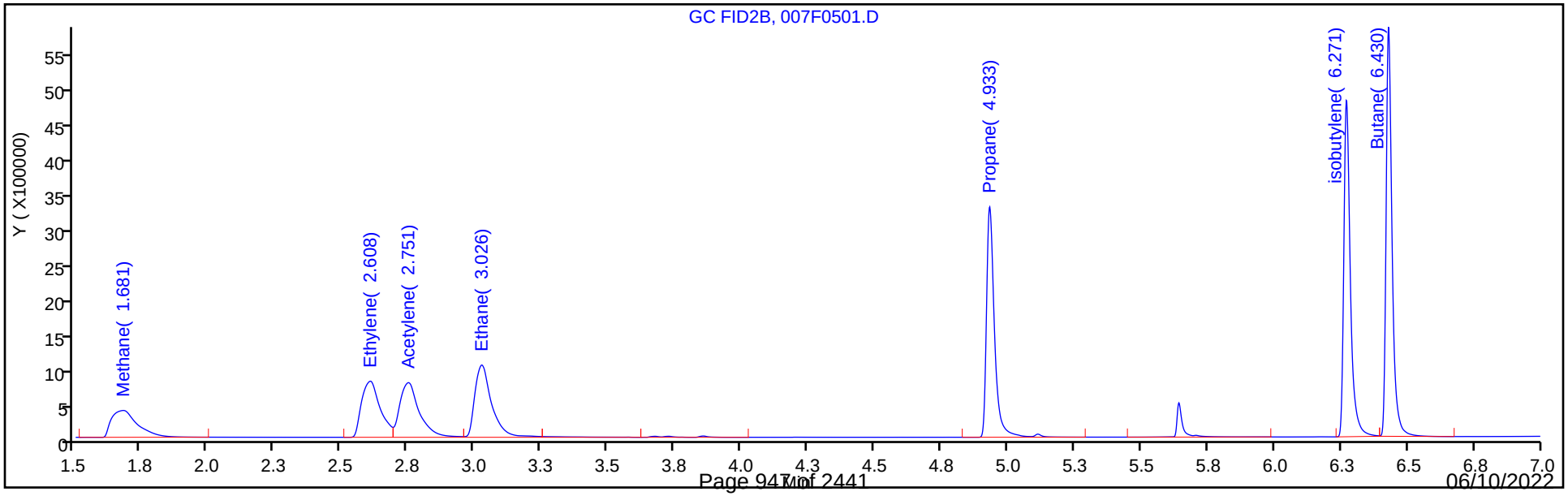
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\007F0501.D

Injection Date:	24-Sep-2021 14:07:45	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ic			Worklist Smp#:	5
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

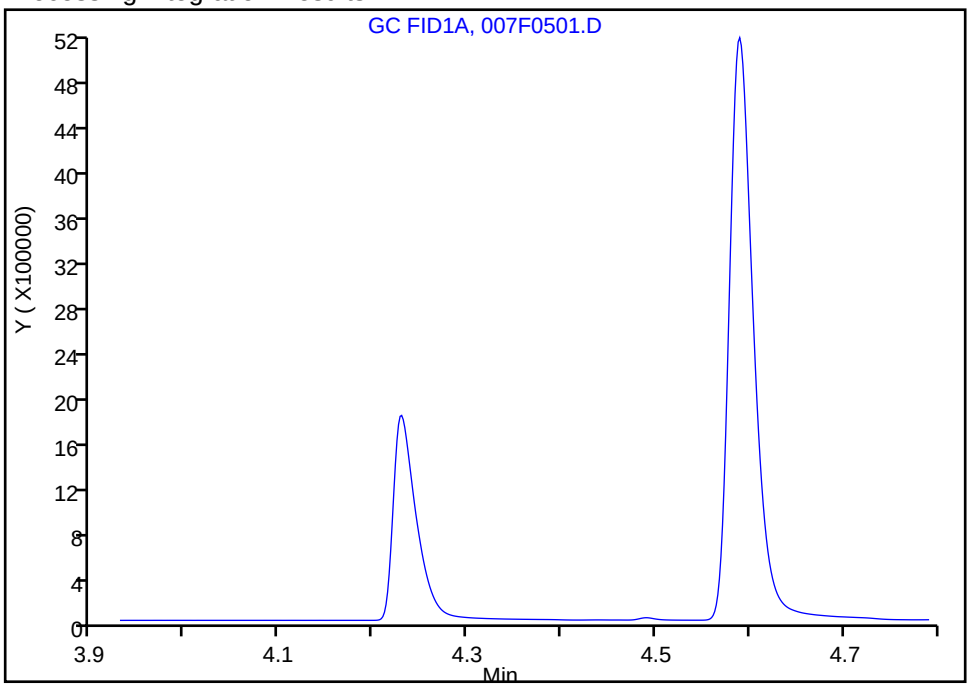
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\007F0501.D
Injection Date: 24-Sep-2021 14:07:45 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 7 Worklist Smp#: 5
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

6 Acetylene, CAS: 74-86-2

Signal: 1

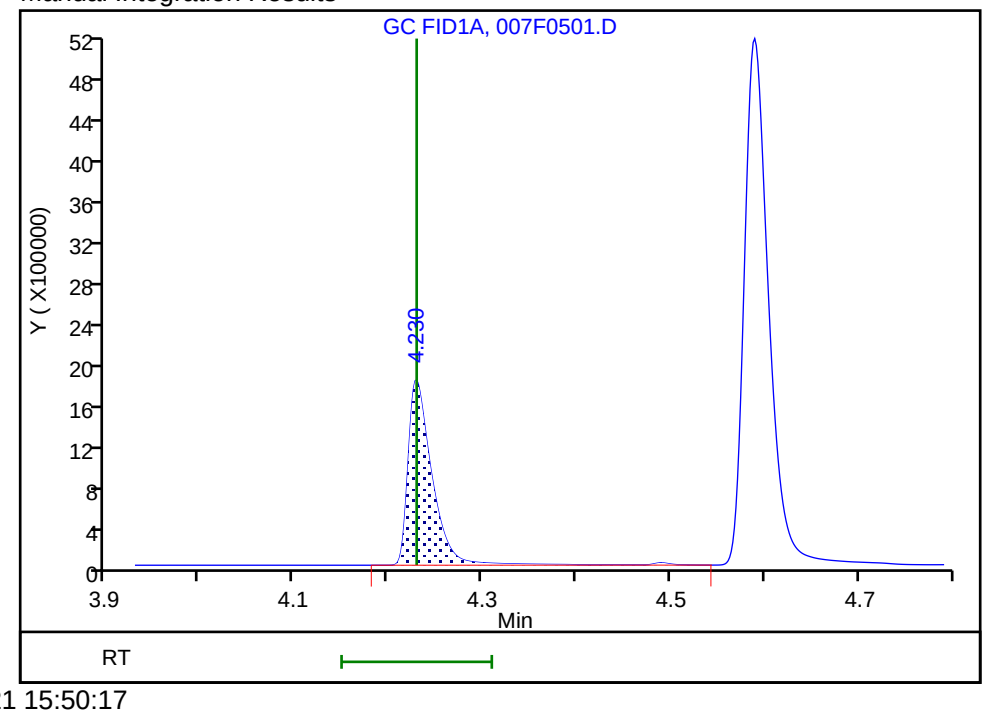
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.23
Area: 3180347
Amount: 113.0227
Amount Units: ug/l



Reviewer: sciannac, 24-Sep-2021 15:50:17
Audit Action: Assigned Compound ID Audit Reason: Split Peak

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\008F0601.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 24-Sep-2021 14:20:44 ALS Bottle#: 8 Worklist Smp#: 6
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 29-Sep-2021 10:55:15 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1655

First Level Reviewer: sciannac Date: 24-Sep-2021 15:46:14

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							M
1	1.295	1.295	0.000	4808571	131.4	134.9	
2	1.678	1.678	0.000	5065048	131.4	138.6	M
						RPD = 2.70	
3 Ethane							
1	1.560	1.560	0.000	8751636	246.3	263.3	
2	3.023	3.023	0.000	8976911	246.3	268.9	
						RPD = 2.12	
4 Ethylene							
1	1.873	1.873	0.000	8582166	229.8	243.6	
2	2.603	2.603	0.000	7548044	229.8	243.6	
						RPD = 0.00	
5 Propane							M
1	2.721	2.721	0.000	13578180	361.3	377.1	M
2	4.929	4.929	0.000	13344347	361.3	381.1	
						RPD = 1.08	
6 Acetylene							a
1	4.230	4.230	0.000	6274725	213.3	223.0	a
2	2.746	2.746	0.000	7865310	213.3	230.1	a
						RPD = 3.15	
7 Butane							Ma
1	4.591	4.591	0.000	18468578	476.1	507.1	a
2	6.426	6.426	0.000	17766895	476.1	505.6	M
						RPD = 0.29	
8 isobutylene							Ma
1	5.468	5.468	0.000	17314841	459.7	479.3	
2	6.269	6.269	0.000	15966351	459.7	480.9	M
						RPD = 0.33	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 400.00 Units: uL

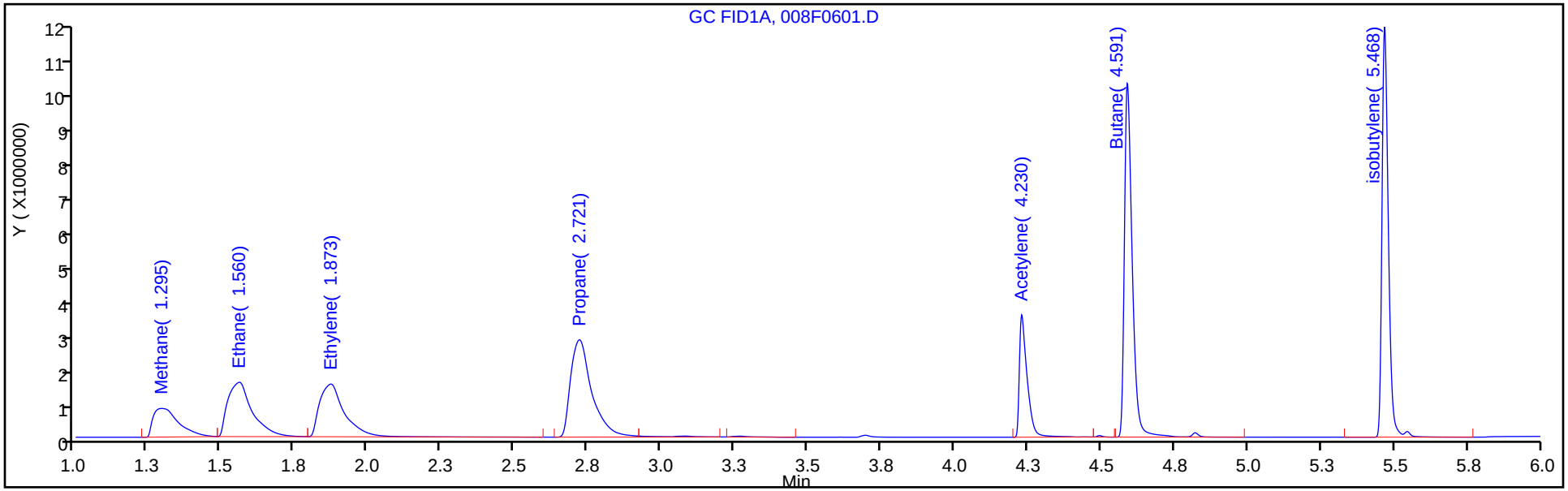
Report Date: 29-Sep-2021 10:55:15 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

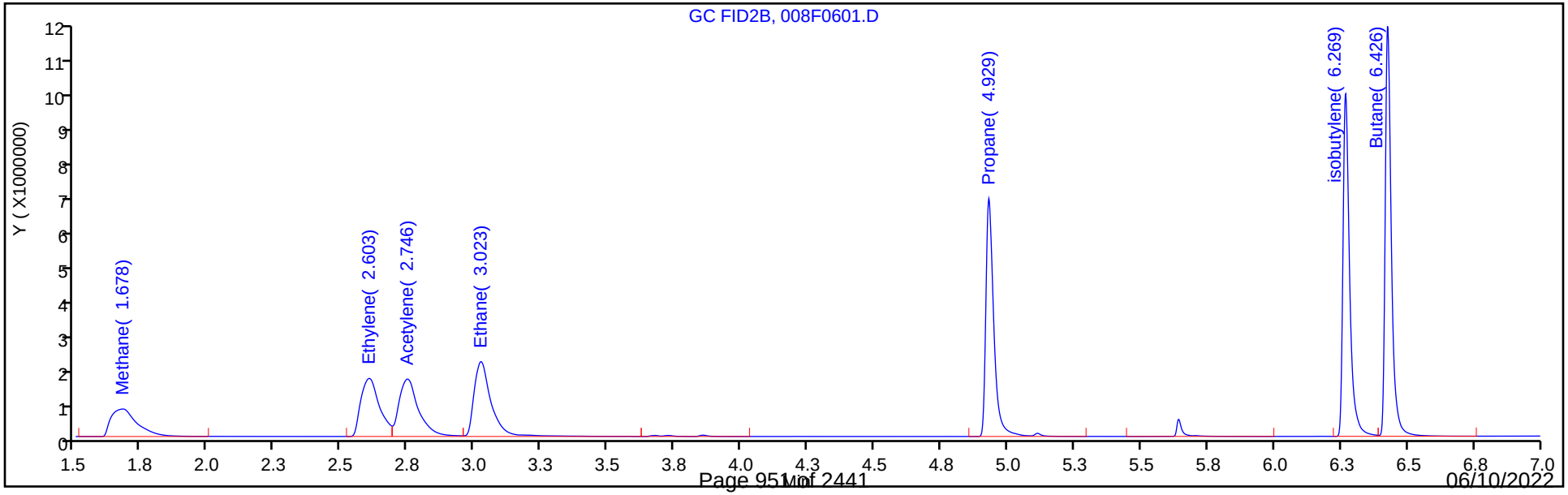
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\008F0601.D

Injection Date:	24-Sep-2021 14:20:44	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ic			Worklist Smp#:	6
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

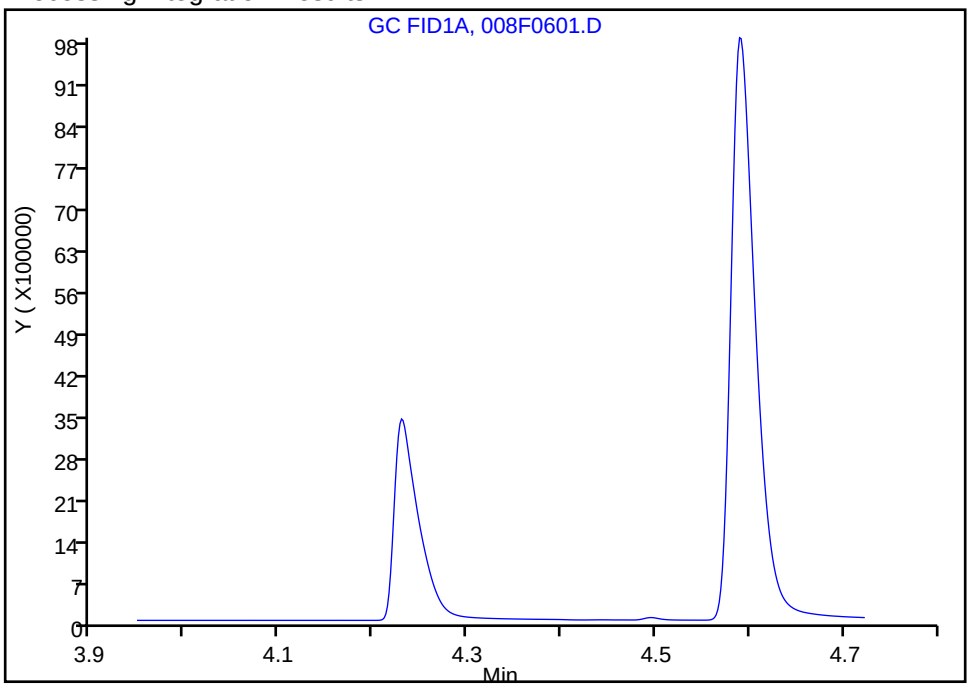
Data File:	\\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\008F0601.D				
Injection Date:	24-Sep-2021 14:20:44	Instrument ID:	VGC_J		
Lims ID:	ic				
Client ID:					
Operator ID:	sciannac	ALS Bottle#:	8	Worklist Smp#:	6
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

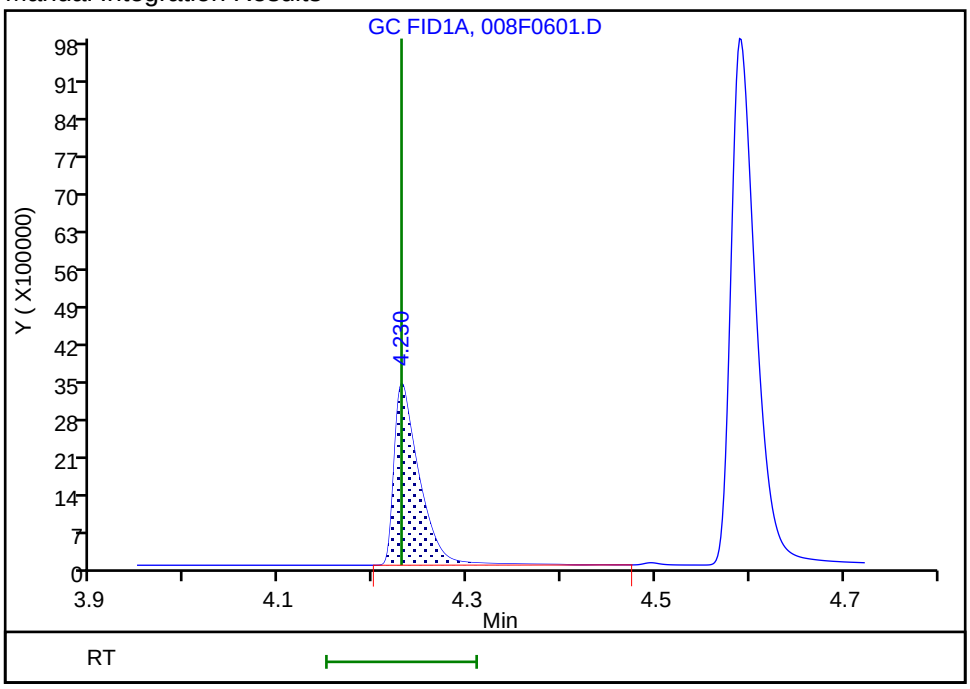
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.23
Area: 6274725
Amount: 222.9902
Amount Units: ug/l



Reviewer: sciannac, 24-Sep-2021 15:44:55
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\009F0701.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 24-Sep-2021 14:33:44 ALS Bottle#: 9 Worklist Smp#: 7
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 29-Sep-2021 10:55:16 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1655

First Level Reviewer: sciannac Date: 24-Sep-2021 15:47:03

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.294	1.295	-0.001	8118988	262.8	229.0	
2	1.678	1.678	0.000	8455607	262.8	232.5	
						RPD = 1.51	
3 Ethane							
1	1.561	1.560	0.001	14997572	492.7	451.2	
2	3.021	3.023	-0.002	14625440	492.7	438.1	
						RPD = 2.94	
4 Ethylene							
1	1.873	1.873	0.000	14678124	459.6	416.7	
2	2.602	2.603	-0.001	12909086	459.6	416.7	
						RPD = 0.00	
5 Propane							
1	2.723	2.721	0.002	23539538	722.6	653.7	
2	4.926	4.929	-0.003	23034734	722.6	657.9	
						RPD = 0.65	
6 Acetylene							a
1	4.228	4.230	-0.002	10977943	426.7	390.1	a
2	2.746	2.746	0.000	13452620	426.7	393.6	a
						RPD = 0.88	
7 Butane							Ma
1	4.588	4.591	-0.003	30555104	952.3	838.9	a
2	6.423	6.426	-0.003	31281741	952.3	890.2	M
						RPD = 5.93	
8 isobutylene							Ma
1	5.466	5.468	-0.002	30754275	919.4	851.3	
2	6.266	6.269	-0.003	28385241	919.4	854.9	M
						RPD = 0.42	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 800.00 Units: uL

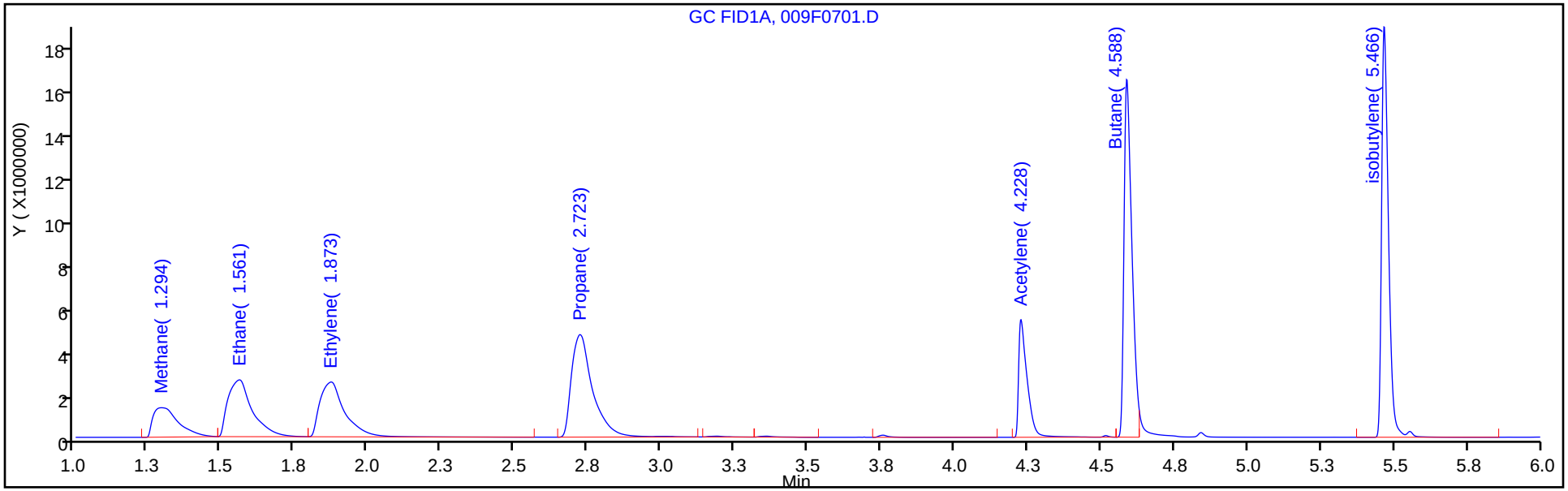
Report Date: 29-Sep-2021 10:55:16 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

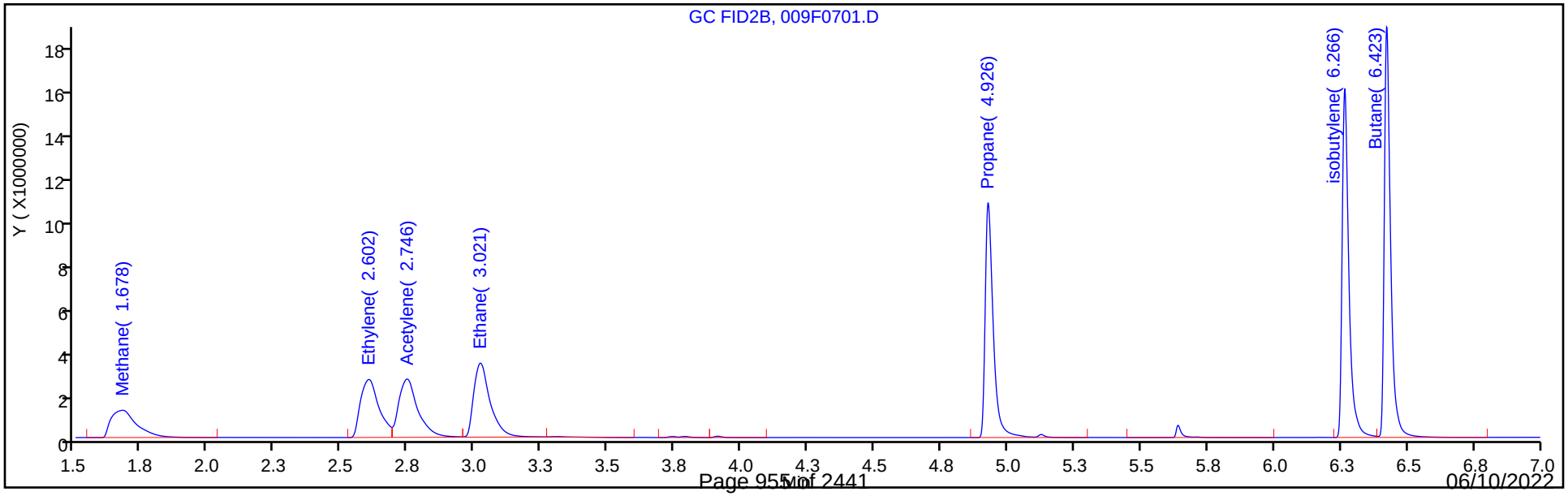
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\009F0701.D

Injection Date:	24-Sep-2021 14:33:44	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ic			Worklist Smp#:	7
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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

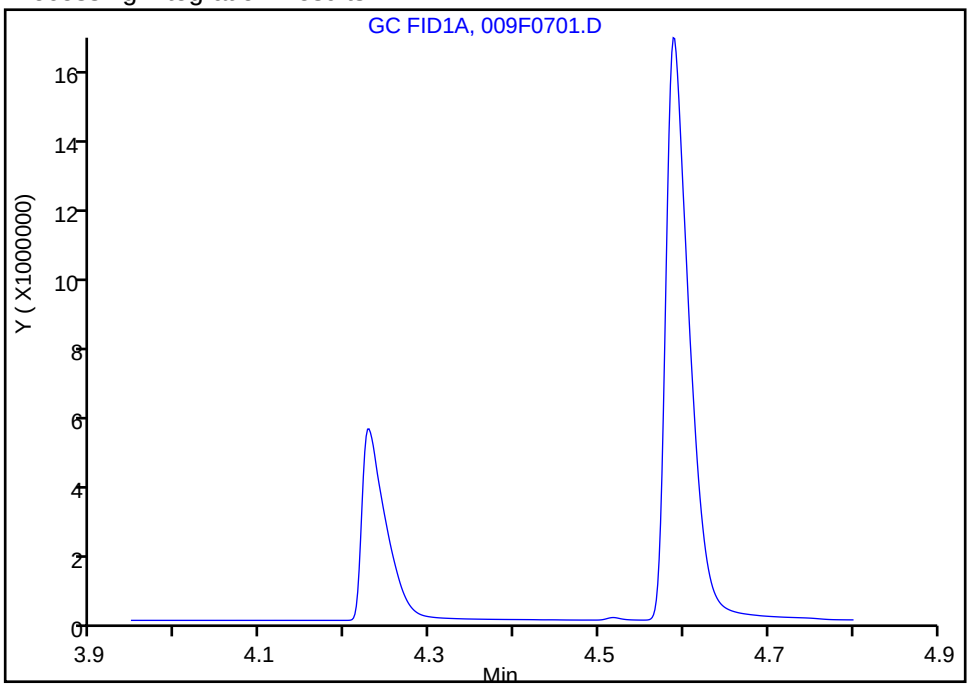
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\009F0701.D
Injection Date: 24-Sep-2021 14:33:44 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 9 Worklist Smp#: 7
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

6 Acetylene, CAS: 74-86-2

Signal: 1

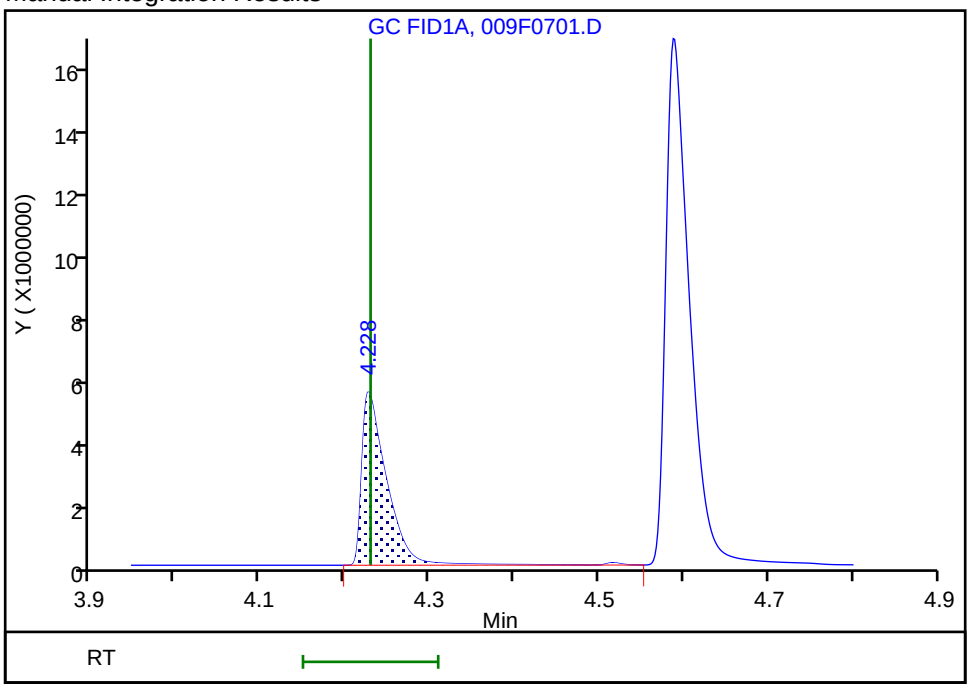
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.23
Area: 10977943
Amount: 390.1324
Amount Units: ug/l



Reviewer: sciannac, 24-Sep-2021 15:46:29
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\010F0801.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 24-Sep-2021 14:46:48 ALS Bottle#: 10 Worklist Smp#: 9
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 29-Sep-2021 10:55:17 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1655

First Level Reviewer: sciannac Date: 24-Sep-2021 15:48:04

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.293	1.295	-0.002	60484705	1626.3	1717.9	
2	1.676	1.678	-0.002	59798125	1626.3	1654.6	
						RPD = 3.75	

QC Flag Legend
Processing Flags

Reagents:
RSK175methane_00010 Amount Added: 50.00 Units: uL

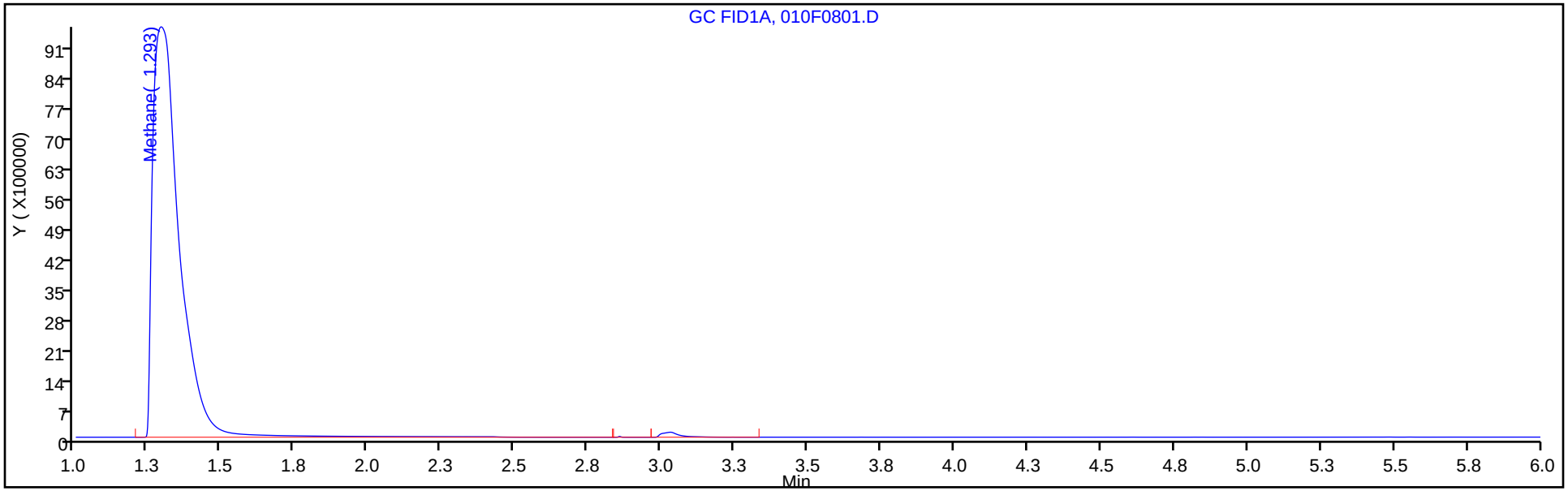
Report Date: 29-Sep-2021 10:55:17 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

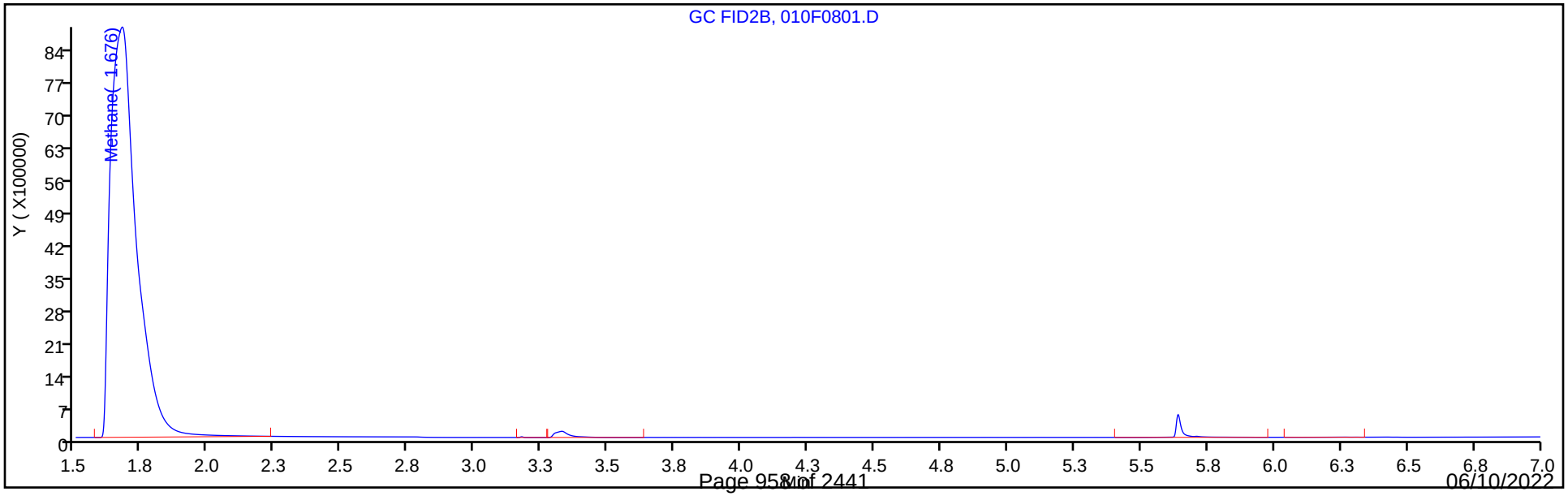
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\010F0801.D

Injection Date:	24-Sep-2021 14:46:48	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ic			Worklist Smp#:	9
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\011F0901.D				
Lims ID:	ic				
Client ID:					
Sample Type:	IC	Calib Level:	9		
Inject. Date:	24-Sep-2021 14:59:53	ALS Bottle#:	11	Worklist Smp#:	10
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Sample Info:	ic				
Operator ID:	sciannac	Instrument ID:	VGC_J		
Sublist:	chrom-RSK_J*sub5				
Method:	\\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m				
Limit Group:	GCV - RSK 175				
Method Label:	DV-GC-0025: Dissolved Gases in Water by RSK-175				
Last Update:	29-Sep-2021 10:55:17	Calib Date:	24-Sep-2021 15:12:55		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D				
Column 1 :	Rt-Alumina BOND/KCl (0.53 mm)		Det: GC FID1A		
Column 2 :	HP-PLOT/Q (0.53 mm)		Det: GC FID2B		
Process Host:	CTX1655				

First Level Reviewer: sciannac Date: 24-Sep-2021 15:48:14

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.292	1.295	-0.003	245647963	6505.0	6982.6	
2	1.673	1.678	-0.005	247051774	6505.0	6841.2	
						RPD = 2.04	

QC Flag Legend

Processing Flags

Reagents:

RSK175methane_00010 Amount Added: 200.00 Units: uL

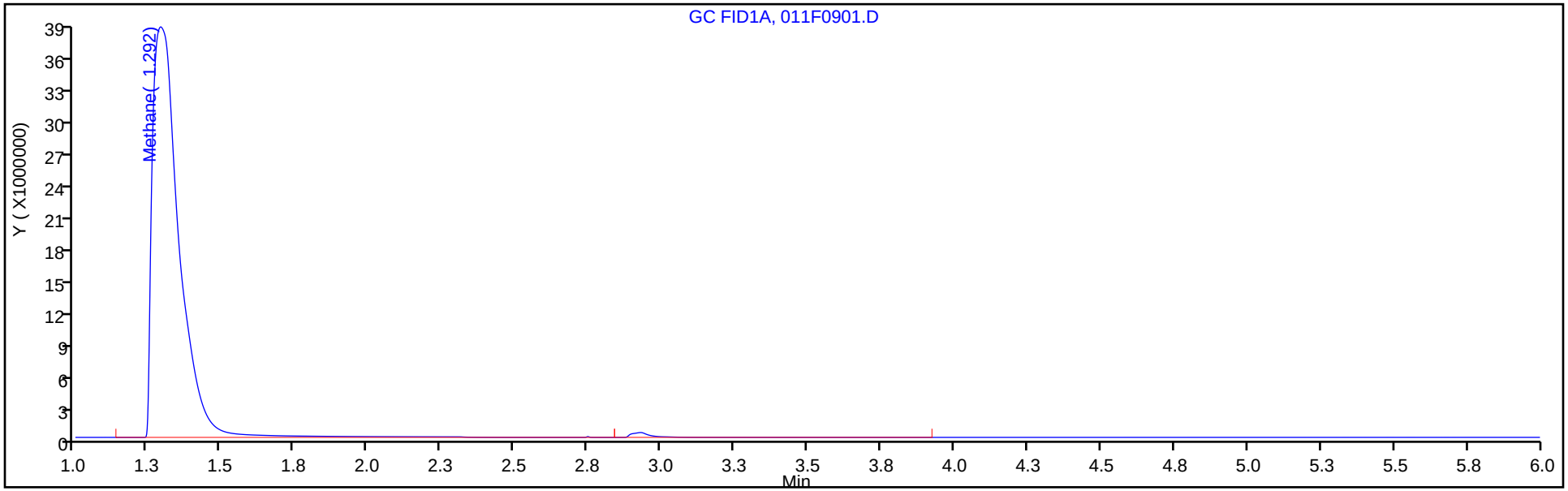
Report Date: 29-Sep-2021 10:55:17 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

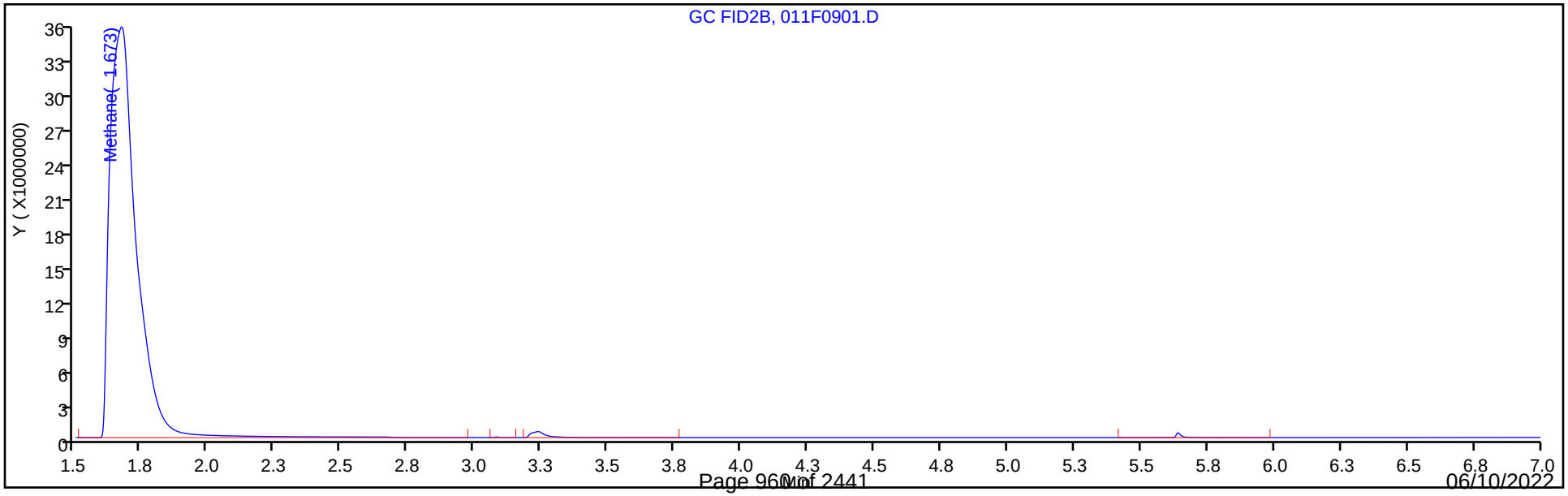
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\011F0901.D

Injection Date:	24-Sep-2021 14:59:53	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ic			Worklist Smp#:	10
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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D				
Lims ID:	ic				
Client ID:					
Sample Type:	IC	Calib Level:	10		
Inject. Date:	24-Sep-2021 15:12:55	ALS Bottle#:	12	Worklist Smp#:	11
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Sample Info:	ic				
Operator ID:	sciannac	Instrument ID:	VGC_J		
Sublist:	chrom-RSK_J*sub5				
Method:	\\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m				
Limit Group:	GCV - RSK 175				
Method Label:	DV-GC-0025: Dissolved Gases in Water by RSK-175				
Last Update:	29-Sep-2021 10:55:18	Calib Date:	24-Sep-2021 15:12:55		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D				
Column 1 :	Rt-Alumina BOND/KCl (0.53 mm)		Det: GC FID1A		
Column 2 :	HP-PLOT/Q (0.53 mm)		Det: GC FID2B		
Process Host:	CTX1655				

First Level Reviewer: sciannac Date: 24-Sep-2021 15:48:27

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.288	1.295	-0.007	669092603	19515	19022	
2	1.669	1.678	-0.009	675608539	19515	18712	
						RPD = 1.65	

QC Flag Legend

Processing Flags

Reagents:

RSK175methane_00010 Amount Added: 600.00 Units: uL

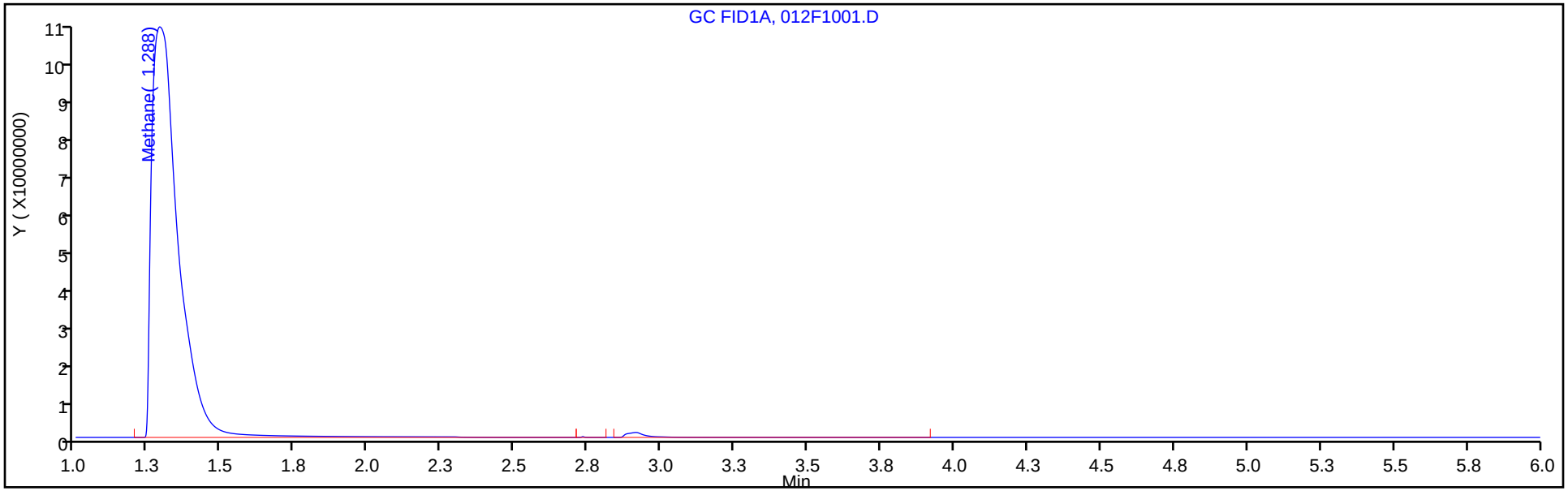
Report Date: 29-Sep-2021 10:55:18 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

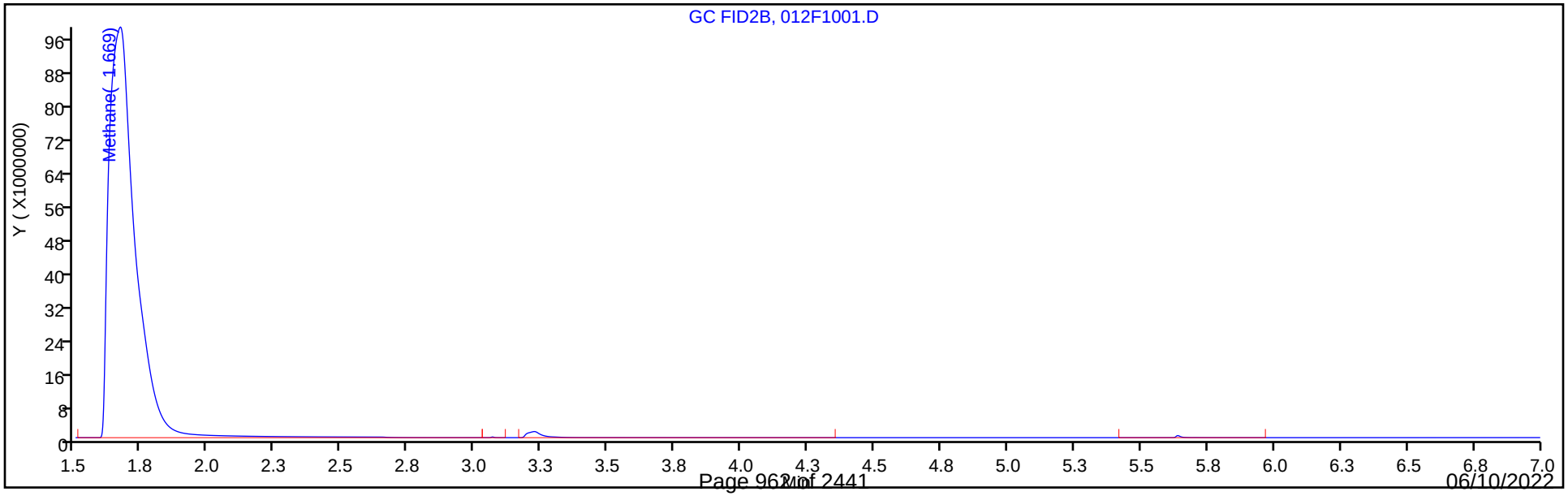
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Injection Date:	24-Sep-2021 15:12:55	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ic			Worklist Smp#:	11
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Calibration / Methane

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

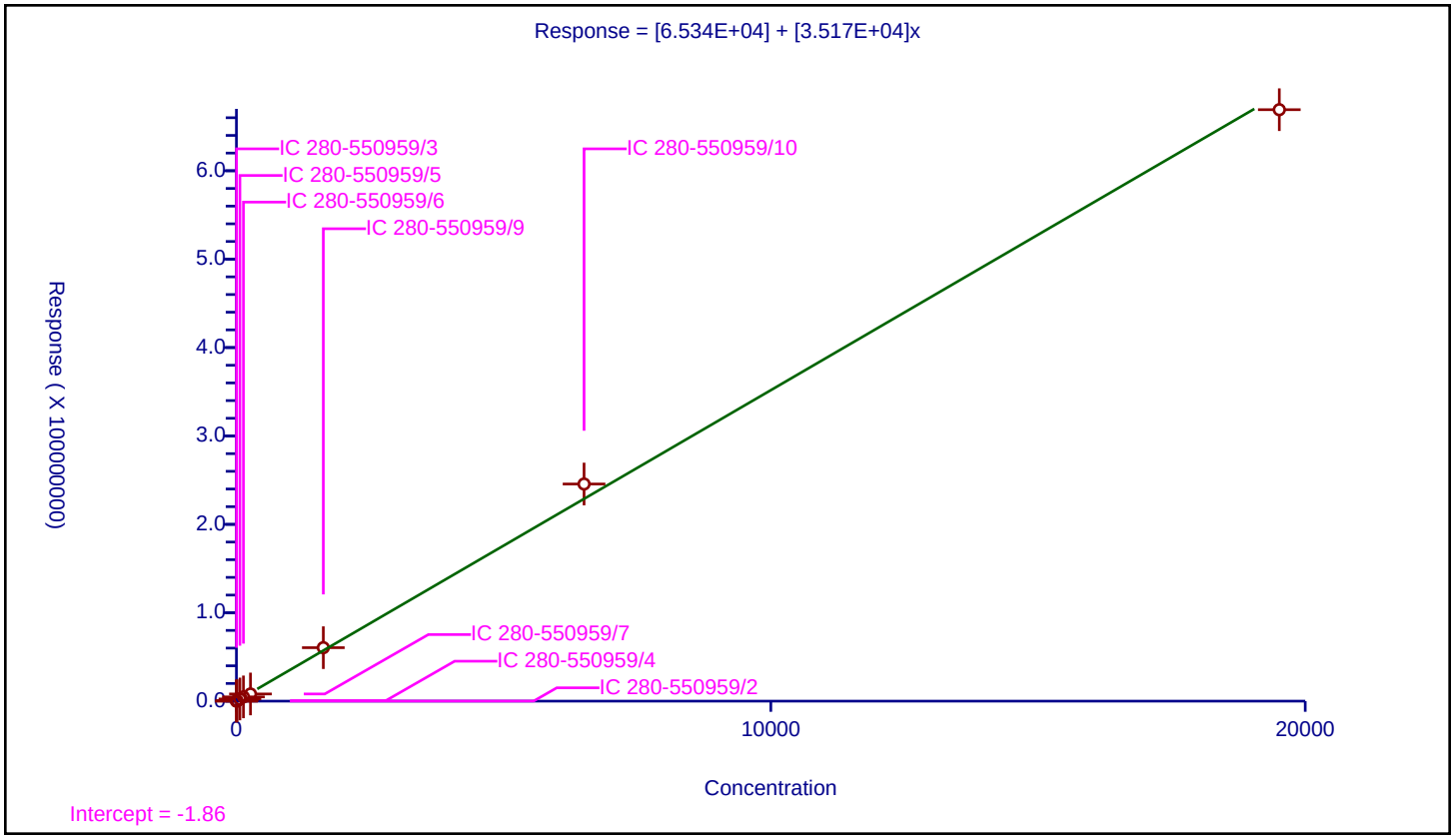
Curve Coefficients

Intercept:	6.534E+04
Slope:	3.517E+04

Error Coefficients

Standard Error:	9210000
Relative Standard Error:	7.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-550959/2	0.821288	93424.0			113753.101076	Y
2	IC 280-550959/3	1.642575	126818.0			77206.82465	Y
3	IC 280-550959/4	13.1406	494257.0			37612.970488	Y
4	IC 280-550959/5	65.703	2453548.0			37343.013257	Y
5	IC 280-550959/6	131.406	4808571.0			36593.237752	Y
6	IC 280-550959/7	262.812	8118988.0			30892.759844	Y
7	IC 280-550959/9	1626.25	60484705.0			37192.747118	Y
8	IC 280-550959/10	6505.0	245647963.0			37762.945888	Y
9	IC 280-550959/11	19515.0	669092603.0			34286.067282	Y



Calibration / Ethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

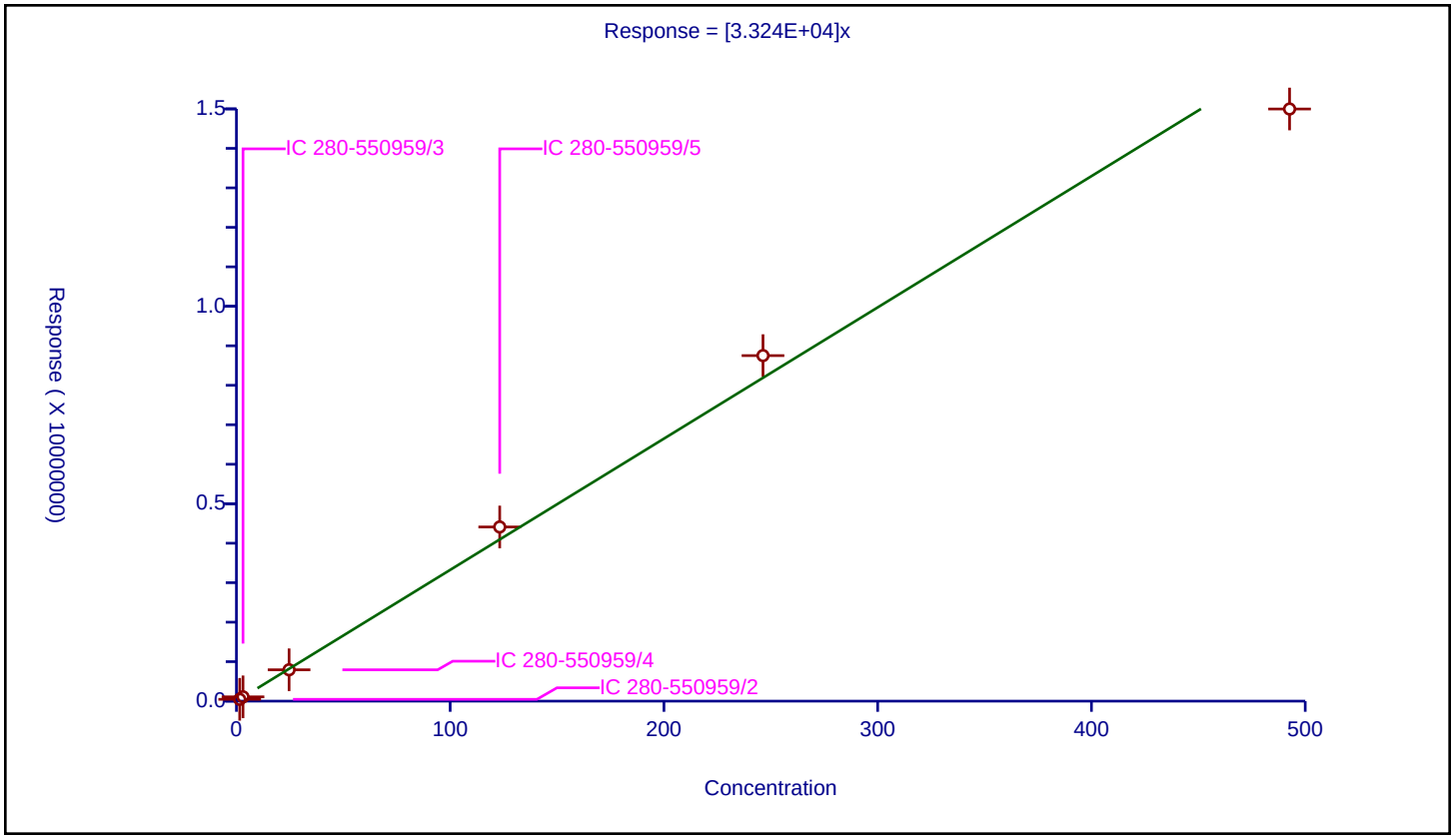
Curve Coefficients

Intercept:	0
Slope:	3.324E+04

Error Coefficients

Standard Error:	681000
Relative Standard Error:	7.9
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-550959/2	1.539625	46427.0			30154.745474	Y
2	IC 280-550959/3	3.07925	108631.0			35278.395713	Y
3	IC 280-550959/4	24.634	793971.0			32230.69741	Y
4	IC 280-550959/5	123.17	4411499.0			35816.343265	Y
5	IC 280-550959/6	246.34	8751636.0			35526.654218	Y
6	IC 280-550959/7	492.68	14997572.0			30440.797272	Y



Calibration / Ethylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

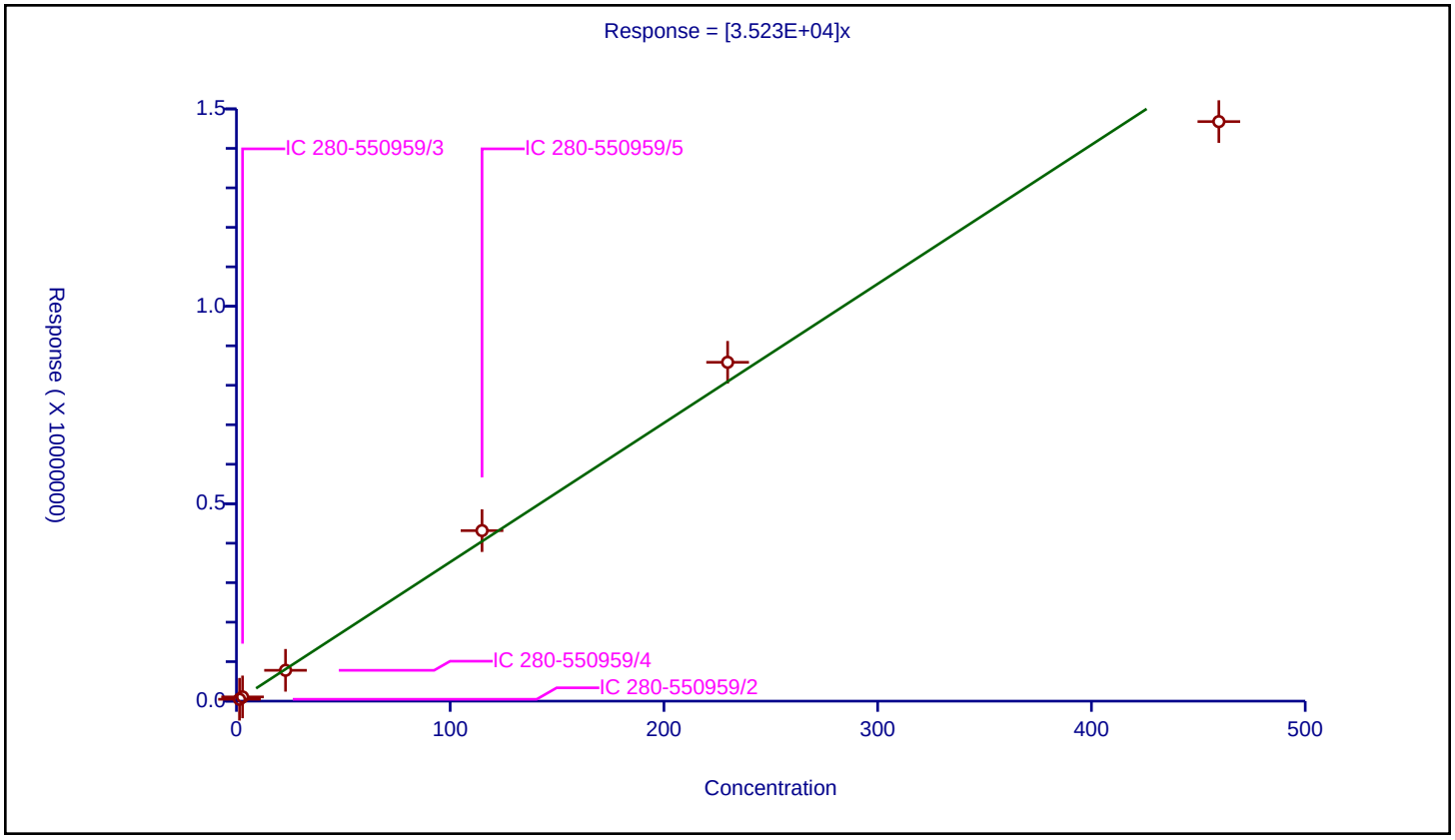
Curve Coefficients

Intercept:	0
Slope:	3.523E+04

Error Coefficients

Standard Error:	721000
Relative Standard Error:	7.1
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-550959/2	1.43625	47667.0			33188.511749	Y
2	IC 280-550959/3	2.8725	107197.0			37318.363795	Y
3	IC 280-550959/4	22.98	780792.0			33977.023499	Y
4	IC 280-550959/5	114.9	4318968.0			37588.929504	Y
5	IC 280-550959/6	229.8	8582166.0			37346.240209	Y
6	IC 280-550959/7	459.6	14678124.0			31936.736292	Y



Calibration / Acetylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

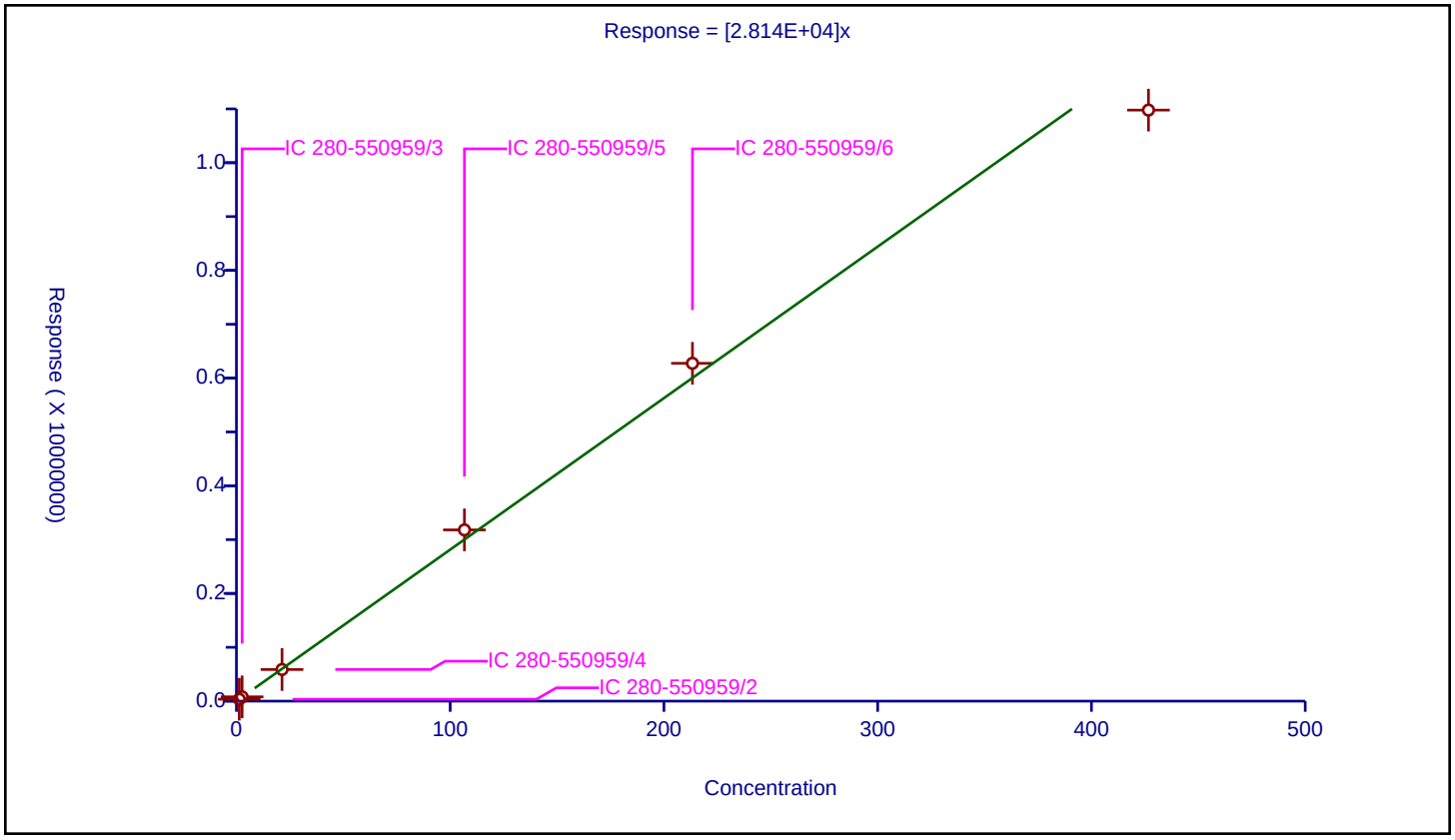
Curve Coefficients

Intercept:	0
Slope:	2.814E+04

Error Coefficients

Standard Error:	482000
Relative Standard Error:	6.5
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-550959/2	1.333375	35261.0			26444.923596	Y
2	IC 280-550959/3	2.66675	79761.0			29909.44033	Y
3	IC 280-550959/4	21.334	587204.0			27524.327365	Y
4	IC 280-550959/5	106.67	3180347.0			29814.821412	Y
5	IC 280-550959/6	213.34	6274725.0			29411.854317	Y
6	IC 280-550959/7	426.68	10977943.0			25728.749883	Y



FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1 Analy Batch No.: 550959

SDG No.:

Instrument ID: VGC_J GC Column: HP-Plot Q ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/24/2021 13:28 Calibration End Date: 09/24/2021 15:12 Calibration ID: 58238

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-550959/2	004F0201.D
Level 2	IC 280-550959/3	005F0301.D
Level 3	IC 280-550959/4	006F0401.D
Level 4	IC 280-550959/5	007F0501.D
Level 5	IC 280-550959/6	008F0601.D
Level 6	IC 280-550959/7	009F0701.D
Level 7	IC 280-550959/9	010F0801.D
Level 8	IC 280-550959/10	011F0901.D
Level 9	IC 280-550959/11	012F1001.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	1.689	1.686	1.684	1.681	1.678	1.678	1.676	1.673	1.669		1.646 - 1.726	1.679
Ethylene	2.612	2.613	2.609	2.608	2.603	2.602					2.559 - 2.659	2.608
Acetylene	2.759	2.756	2.753	2.751	2.746	2.746					2.666 - 2.826	2.752
Ethane	3.032	3.031	3.029	3.026	3.023	3.021					2.978 - 3.078	3.027

FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-162622-1 Analy Batch No.: 550959

SDG No.:

Instrument ID: VGC_J GC Column: HP-Plot Q ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/24/2021 13:28 Calibration End Date: 09/24/2021 15:12 Calibration ID: 58238

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-550959/2	004F0201.D
Level 2	IC 280-550959/3	005F0301.D
Level 3	IC 280-550959/4	006F0401.D
Level 4	IC 280-550959/5	007F0501.D
Level 5	IC 280-550959/6	008F0601.D
Level 6	IC 280-550959/7	009F0701.D
Level 7	IC 280-550959/9	010F0801.D
Level 8	IC 280-550959/10	011F0901.D
Level 9	IC 280-550959/11	012F1001.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	111078 38545 34620	77031 32174	38745 36771	38865 37979	Lin2	62633.7795	36102.9355							0.9950		0.9900
Ethylene	28704 32846	33128 28088	29931	33185	Ave		30980.2676				7.6		20.0			
Acetylene	31126 36867	35548 31529	33443	36560	Ave		34178.7944				7.4		20.0			
Ethane	30517 36441	34894 29685	32629	36129	Ave		33382.5817				8.6		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 Denver Job No.: 280-162622-1 Analy Batch No.: 550959

SDG No.:

Instrument ID: VGC_J GC Column: HP-Plot Q ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/24/2021 13:28 Calibration End Date: 09/24/2021 15:12 Calibration ID: 58238

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-550959/2	004F0201.D
Level 2	IC 280-550959/3	005F0301.D
Level 3	IC 280-550959/4	006F0401.D
Level 4	IC 280-550959/5	007F0501.D
Level 5	IC 280-550959/6	008F0601.D
Level 6	IC 280-550959/7	009F0701.D
Level 7	IC 280-550959/9	010F0801.D
Level 8	IC 280-550959/10	011F0901.D
Level 9	IC 280-550959/11	012F1001.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	91227 8455607	126529 59798125	509129 247051774	2553566 675608539	5065048	0.821 263	1.64 1626	13.1 6505	65.7 19515	131
Ethylene	Ave	41226 12909086	95159	687818	3812973	7548044	1.44 460	2.87	23.0	115	230
Acetylene	Ave	41503 13452620	94797	713476	3899802	7865310	1.33 427	2.67	21.3	107	213
Ethane	Ave	46984 14625440	107446	803791	4450065	8976911	1.54 493	3.08	24.6	123	246

Curve Type Legend

Ave = Average
Lin2 = Linear 1/conc^2

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 24-Sep-2021 13:28:57 ALS Bottle#: 4 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 29-Sep-2021 10:55:12 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1655

First Level Reviewer: sciannac Date: 24-Sep-2021 13:57:02

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							a
1	1.292	1.299	-0.007	93424	0.8213	0.7985	a
2	1.689	1.686	0.003	91227	0.8213	0.7920	a
						RPD = 0.81	
3 Ethane							a
1	1.559	1.556	0.003	46427	1.54	1.40	a
2	3.032	3.028	0.004	46984	1.54	1.41	a
						RPD = 0.77	
4 Ethylene							a
1	1.859	1.844	0.015	47667	1.44	1.35	a
2	2.612	2.609	0.003	41226	1.44	1.33	a
						RPD = 1.67	
5 Propane							a
1	2.682	2.721	-0.039	76526	2.26	2.13	a
2	4.937	4.929	0.008	73050	2.26	2.09	a
						RPD = 1.83	
6 Acetylene							a
1	4.184	4.230	-0.046	35261	1.33	1.25	a
2	2.759	2.746	0.013	41503	1.33	1.21	a
						RPD = 3.15	
7 Butane							Ma
1	4.555	4.528	0.027	101912	2.98	2.80	a
2	6.435	6.426	0.009	95155	2.98	2.71	M
						RPD = 3.27	
8 isobutylene							Ma
1	5.437	5.403	0.034	92868	2.87	2.57	M
2	6.277	6.274	0.003	91569	2.87	2.76	a
						RPD = 7.02	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 2.50 Units: uL

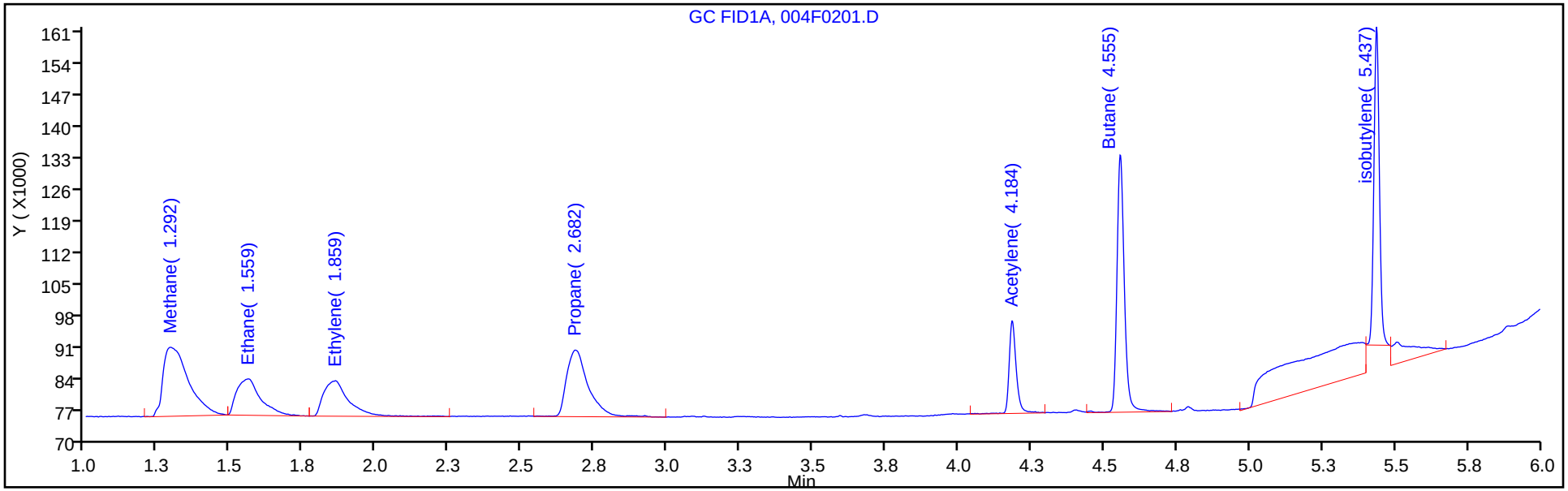
Report Date: 29-Sep-2021 10:55:12 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

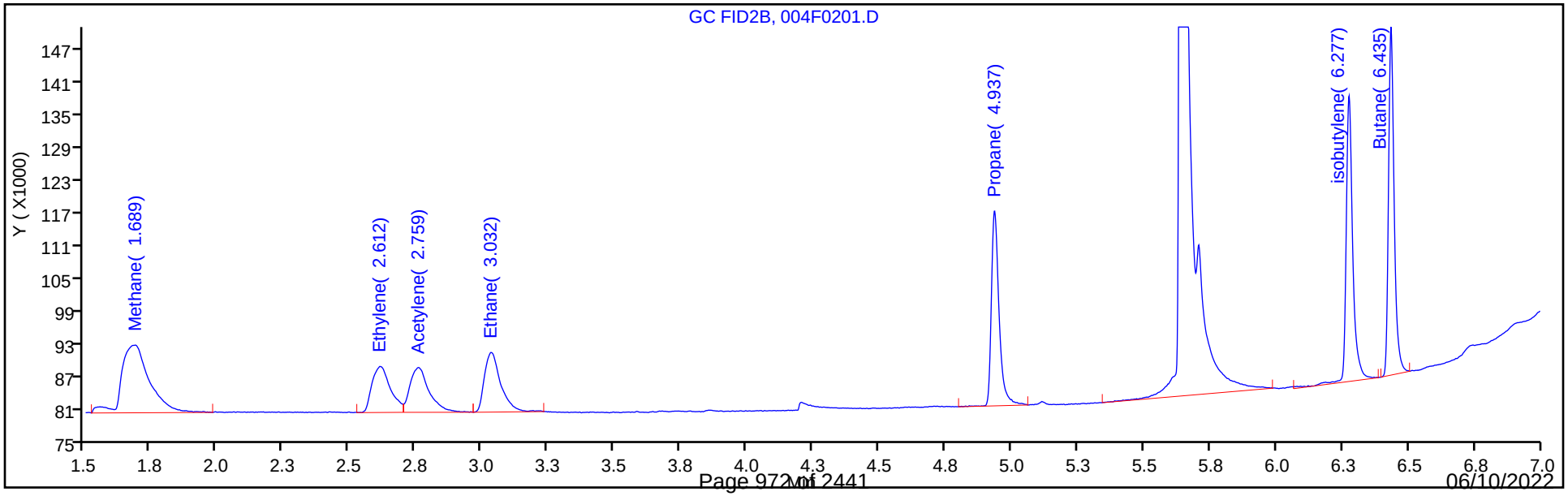
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D

Injection Date:	24-Sep-2021 13:28:57	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ic			Worklist Smp#:	2
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

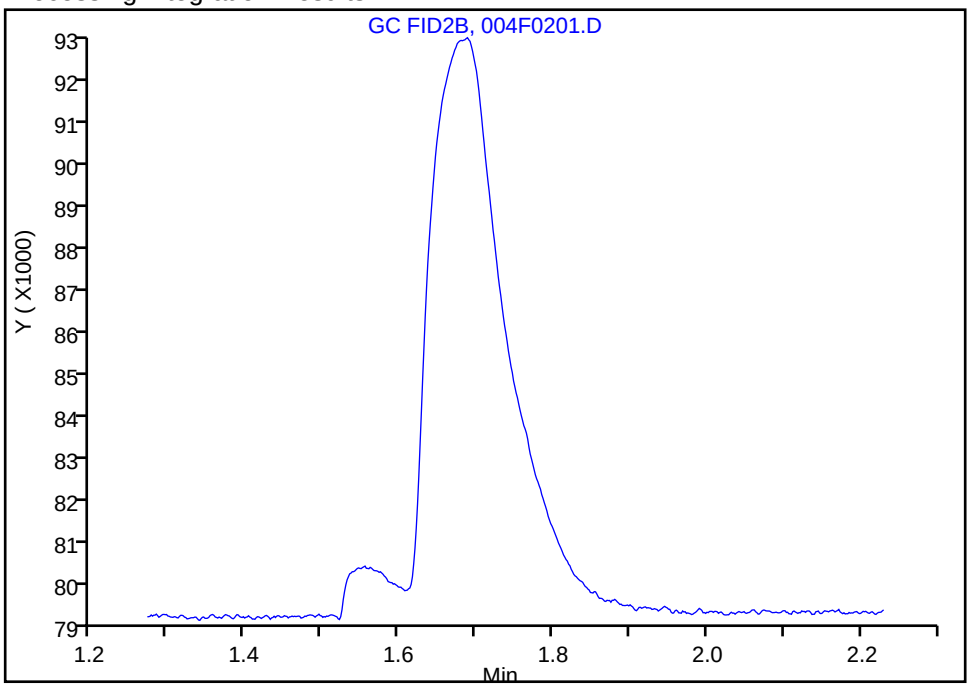
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D
Injection Date: 24-Sep-2021 13:28:57 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 4 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

2 Methane, CAS: 74-82-8

Signal: 2

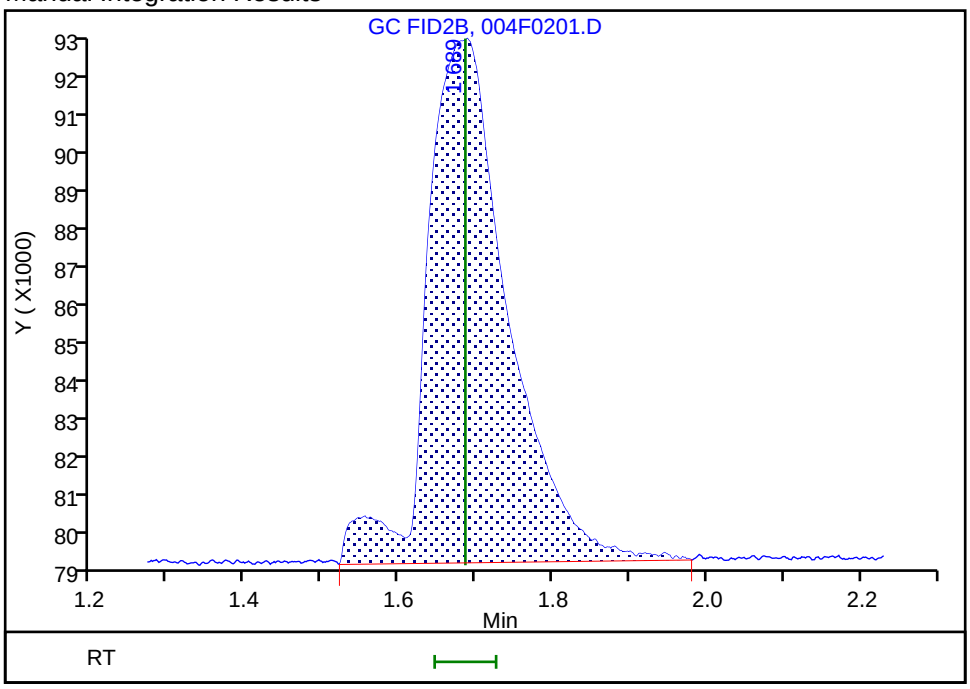
Not Detected
Expected RT: 1.69

Processing Integration Results



Manual Integration Results

RT: 1.69
Area: 91227
Amount: 0.791992
Amount Units: ug/l



Reviewer: sciannac, 24-Sep-2021 13:54:25
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

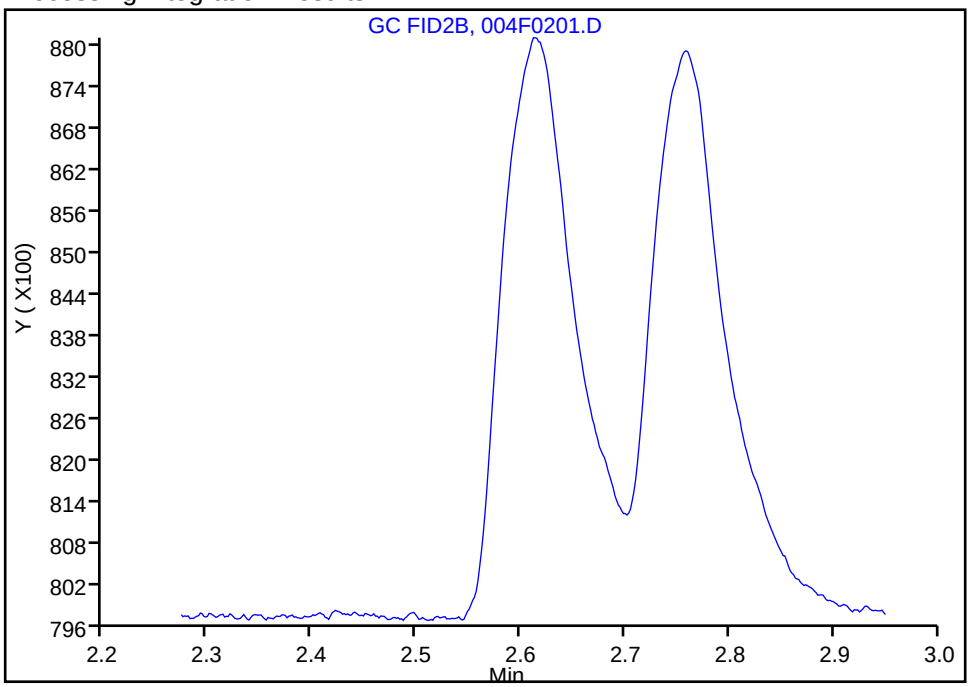
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D
Injection Date: 24-Sep-2021 13:28:57 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 4 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

4 Ethylene, CAS: 74-85-1

Signal: 2

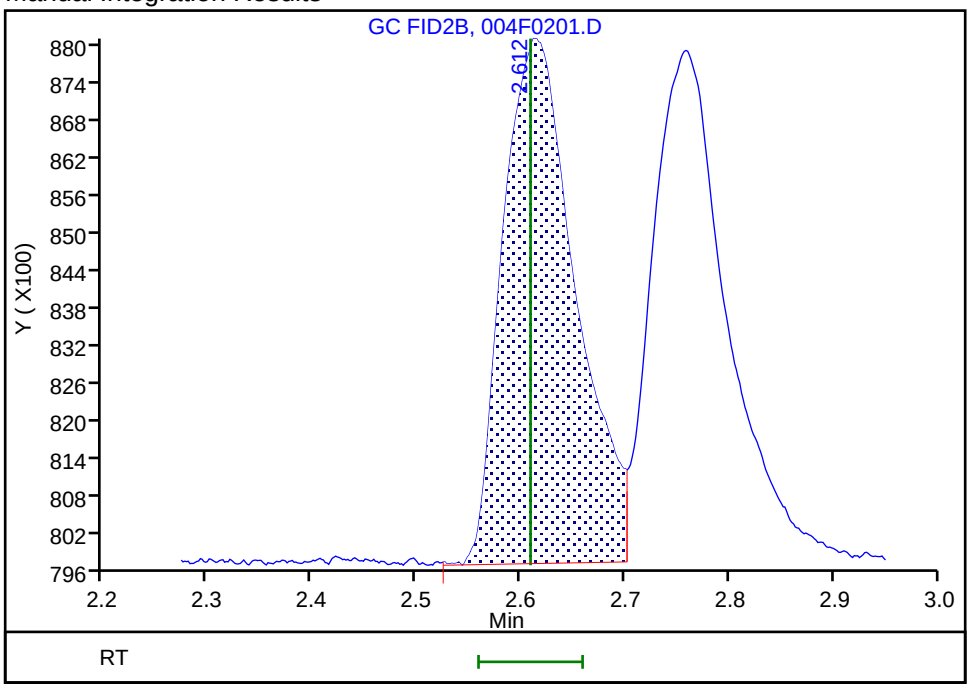
Not Detected
Expected RT: 2.61

Processing Integration Results



Manual Integration Results

RT: 2.61
Area: 41226
Amount: 1.330718
Amount Units: ug/l



Reviewer: sciannac, 24-Sep-2021 13:54:49
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

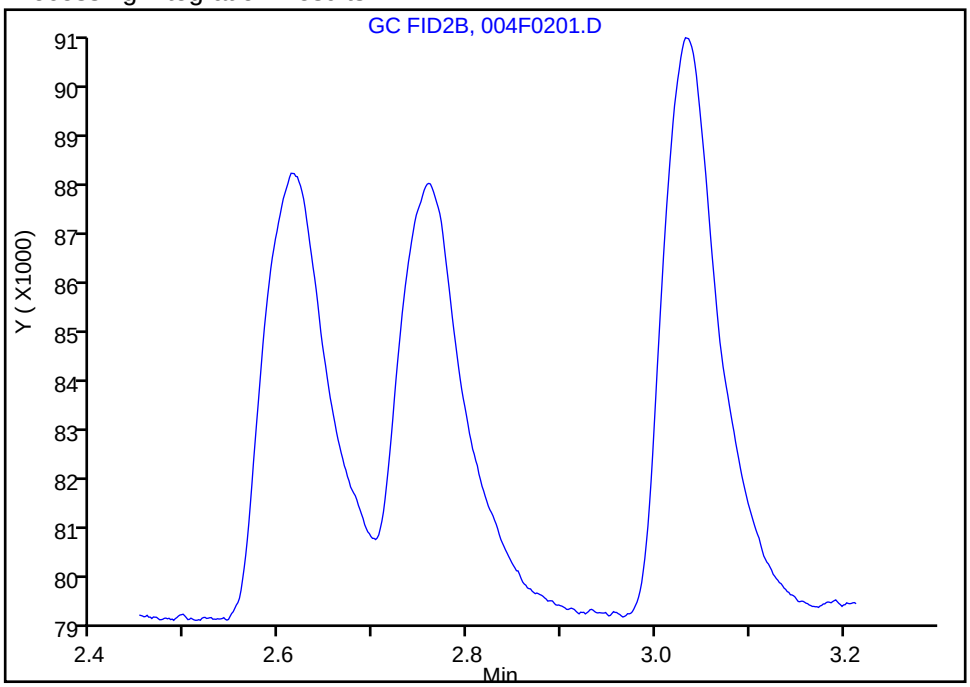
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D
Injection Date: 24-Sep-2021 13:28:57 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 4 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

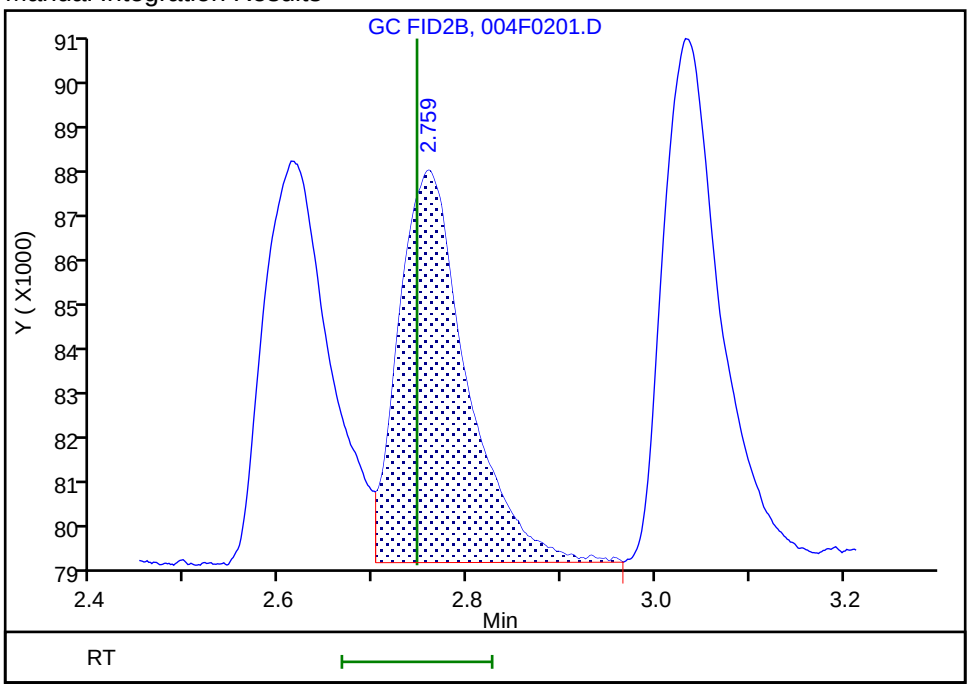
Not Detected
Expected RT: 2.75

Processing Integration Results



Manual Integration Results

RT: 2.76
Area: 41503
Amount: 1.214291
Amount Units: ug/l



Reviewer: sciannac, 24-Sep-2021 13:55:02
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

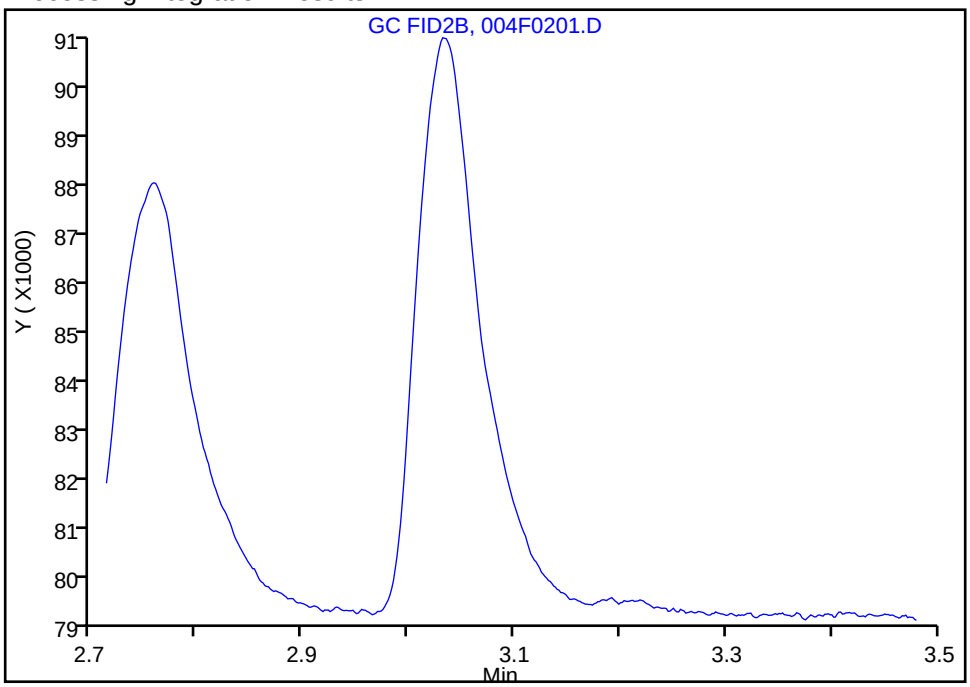
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D
Injection Date: 24-Sep-2021 13:28:57 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 4 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

3 Ethane, CAS: 74-84-0

Signal: 2

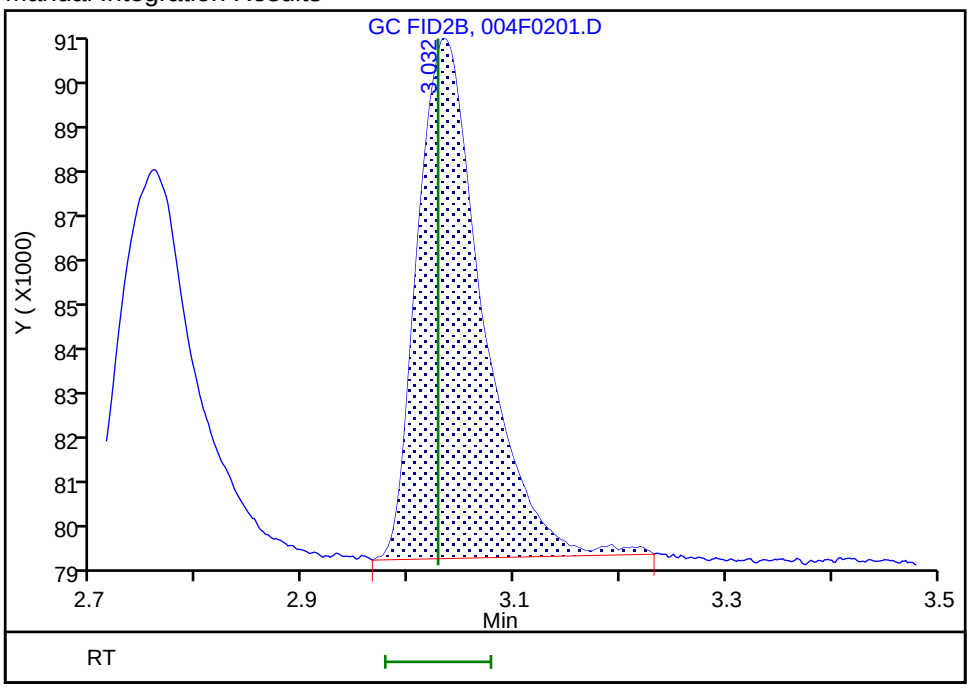
Not Detected
Expected RT: 3.03

Processing Integration Results



Manual Integration Results

RT: 3.03
Area: 46984
Amount: 1.407441
Amount Units: ug/l



Reviewer: sciannac, 24-Sep-2021 13:54:34
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\005F0301.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 24-Sep-2021 13:41:52 ALS Bottle#: 5 Worklist Smp#: 3
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 29-Sep-2021 10:55:13 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1655

First Level Reviewer: sciannac Date: 24-Sep-2021 13:58:34

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.293	1.299	-0.006	126818	1.64	1.75	
2	1.686	1.686	0.000	126529	1.64	1.77	
						RPD = 1.24	
3 Ethane							
1	1.562	1.556	0.006	108631	3.08	3.27	
2	3.031	3.028	0.003	107446	3.08	3.22	
						RPD = 1.52	
4 Ethylene							
1	1.867	1.844	0.023	107197	2.87	3.04	
2	2.613	2.609	0.004	95159	2.87	3.07	
						RPD = 0.93	
5 Propane							
1	2.700	2.721	-0.021	174390	4.52	4.84	
2	4.935	4.929	0.006	170185	4.52	4.86	
						RPD = 0.37	
6 Acetylene							
1	4.213	4.230	-0.017	79761	2.67	2.83	
2	2.756	2.746	0.010	94797	2.67	2.77	
						RPD = 2.17	
7 Butane							Ma
1	4.575	4.528	0.047	232737	5.95	6.39	a
2	6.435	6.426	0.009	221865	5.95	6.31	M
						RPD = 1.20	
8 isobutylene							Ma
1	5.457	5.403	0.054	232885	5.75	6.45	
2	6.276	6.274	0.002	200266	5.75	6.03	M
						RPD = 6.65	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 5.00 Units: uL

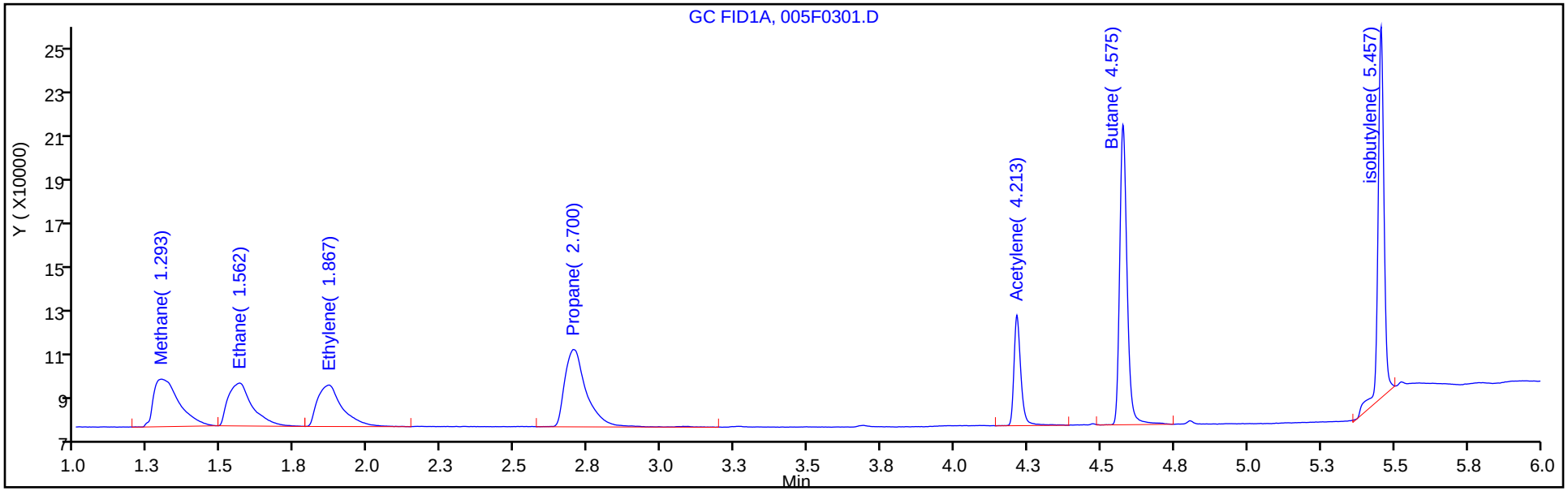
Report Date: 29-Sep-2021 10:55:13 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

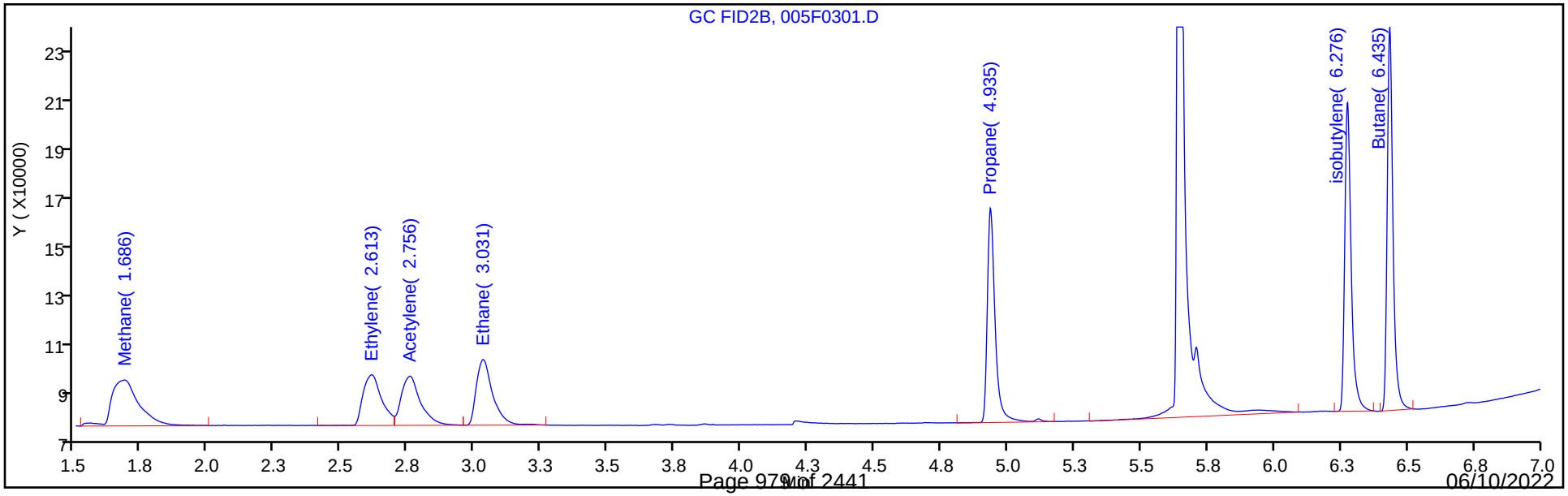
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\005F0301.D

Injection Date:	24-Sep-2021 13:41:52	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ic			Worklist Smp#:	3
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\20210923-104922.b\006F0401.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 24-Sep-2021 13:54:46 ALS Bottle#: 6 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 29-Sep-2021 10:55:14 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1655

First Level Reviewer: sciannac Date: 24-Sep-2021 15:51:08

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.293	1.299	-0.006	494257	13.1	12.2	
2	1.684	1.686	-0.002	509129	13.1	12.4	
						RPD = 1.40	
3 Ethane							
1	1.561	1.556	0.005	793971	24.6	23.9	
2	3.029	3.028	0.001	803791	24.6	24.1	
						RPD = 0.81	
4 Ethylene							
1	1.870	1.844	0.026	780792	23.0	22.2	
2	2.609	2.609	0.000	687818	23.0	22.2	
						RPD = 0.16	
5 Propane							
1	2.711	2.721	-0.010	1259121	36.1	35.0	
2	4.934	4.929	0.005	1221976	36.1	34.9	
						RPD = 0.18	
6 Acetylene							a
1	4.226	4.230	-0.004	587204	21.3	20.9	a
2	2.753	2.746	0.007	713476	21.3	20.9	a
						RPD = 0.03	
7 Butane							Ma
1	4.586	4.528	0.058	1686797	47.6	46.3	a
2	6.433	6.426	0.007	1612366	47.6	45.9	M
						RPD = 0.93	
8 isobutylene							Ma
1	5.465	5.403	0.062	1589725	46.0	44.0	
2	6.274	6.274	0.000	1464027	46.0	44.1	M
						RPD = 0.20	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 40.00 Units: uL

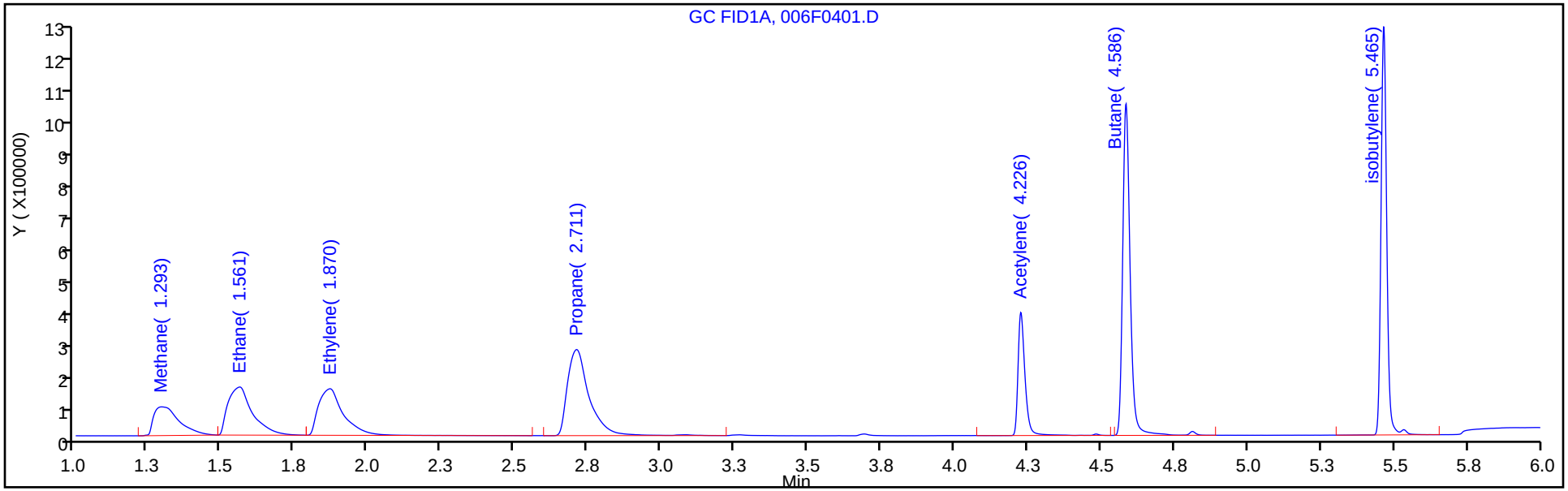
Report Date: 29-Sep-2021 10:55:14 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

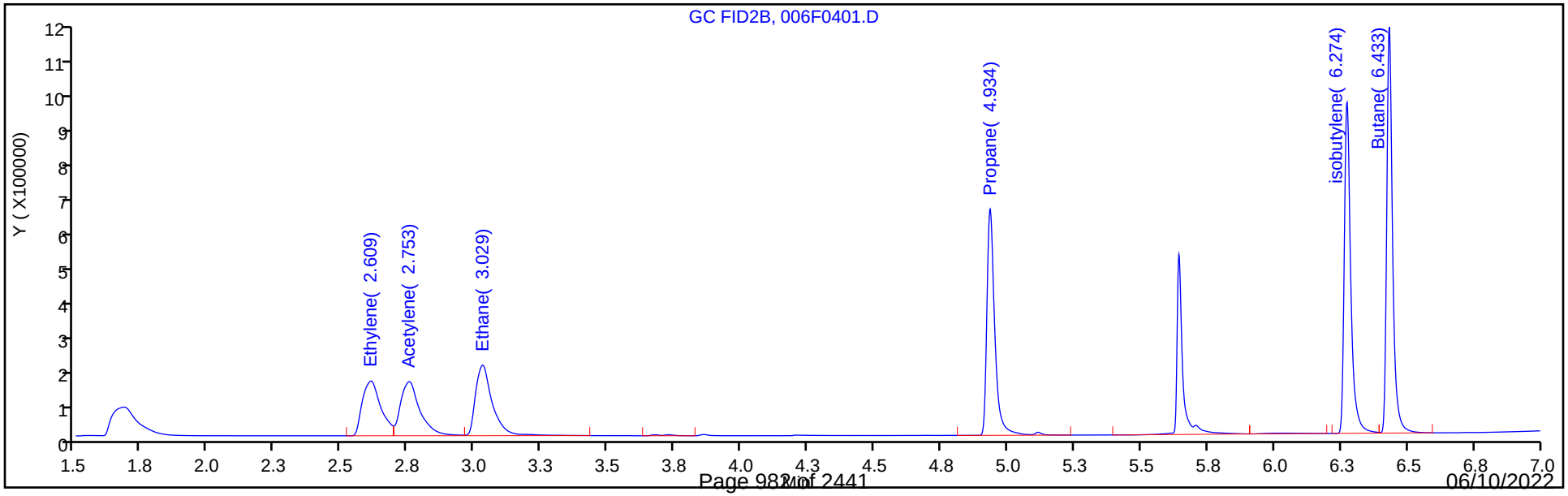
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\006F0401.D

Injection Date:	24-Sep-2021 13:54:46	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ic			Worklist Smp#:	4
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

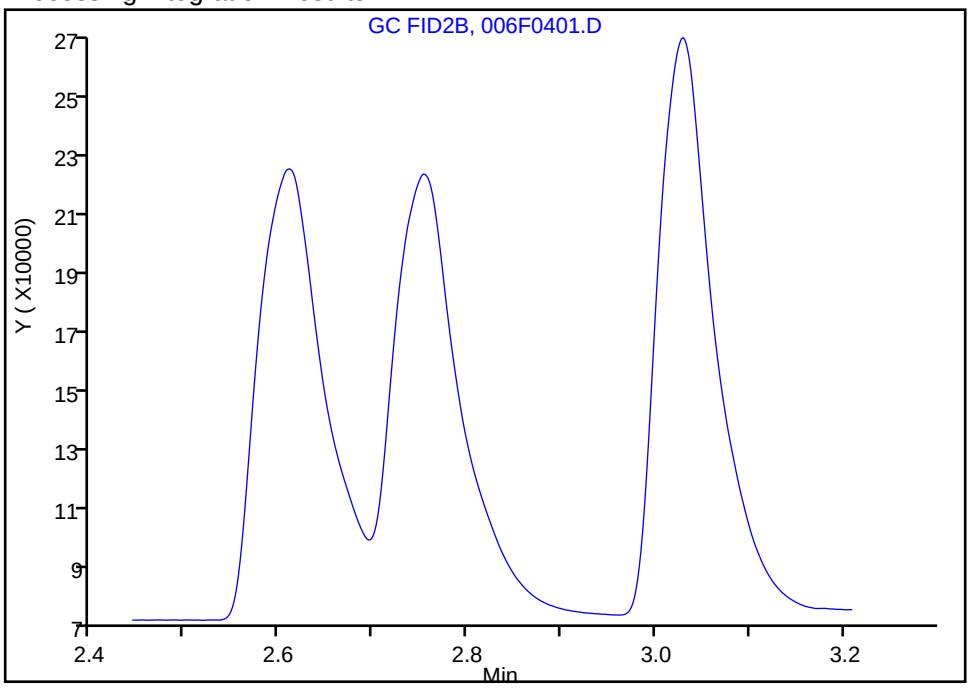
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\006F0401.D
Injection Date: 24-Sep-2021 13:54:46 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 6 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

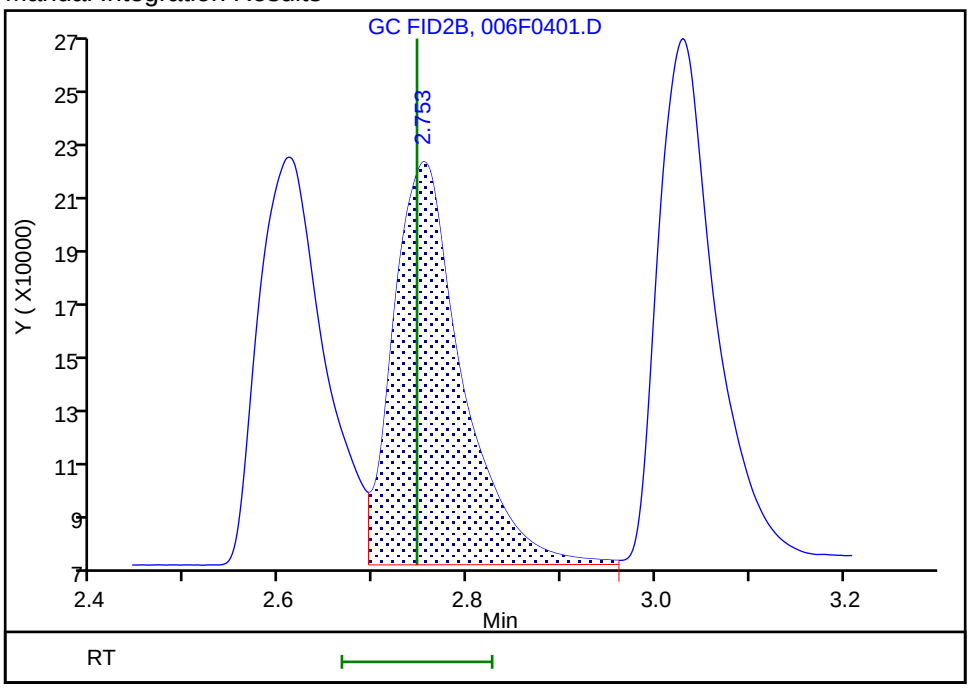
Not Detected
Expected RT: 2.75

Processing Integration Results



Manual Integration Results

RT: 2.75
Area: 713476
Amount: 20.874815
Amount Units: ug/l



Reviewer: sciannac, 24-Sep-2021 15:50:39
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\007F0501.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 24-Sep-2021 14:07:45 ALS Bottle#: 7 Worklist Smp#: 5
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 29-Sep-2021 10:55:14 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1655

First Level Reviewer: sciannac Date: 24-Sep-2021 15:50:30

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.295	1.295	0.000	2453548	65.7	67.9	
2	1.681	1.681	0.000	2553566	65.7	69.0	
						RPD = 1.60	
3 Ethane							Ma
1	1.561	1.561	0.000	4411499	123.2	132.7	
2	3.026	3.026	0.000	4450065	123.2	133.3	M
						RPD = 0.45	
4 Ethylene							
1	1.870	1.870	0.000	4318968	114.9	122.6	
2	2.608	2.608	0.000	3812973	114.9	123.1	
						RPD = 0.38	
5 Propane							
1	2.716	2.716	0.000	6962772	180.6	193.4	
2	4.933	4.933	0.000	6754582	180.6	192.9	
						RPD = 0.22	
6 Acetylene							a
1	4.230	4.230	0.000	3180347	106.7	113.0	a
2	2.751	2.751	0.000	3899802	106.7	114.1	a
						RPD = 0.95	
7 Butane							
1	4.590	4.590	0.000	9255328	238.1	254.1	
2	6.430	6.430	0.000	8939530	238.1	254.4	
						RPD = 0.11	
8 isobutylene							
1	5.468	5.468	0.000	8777969	229.8	243.0	
2	6.271	6.271	0.000	8052089	229.8	242.5	
						RPD = 0.20	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

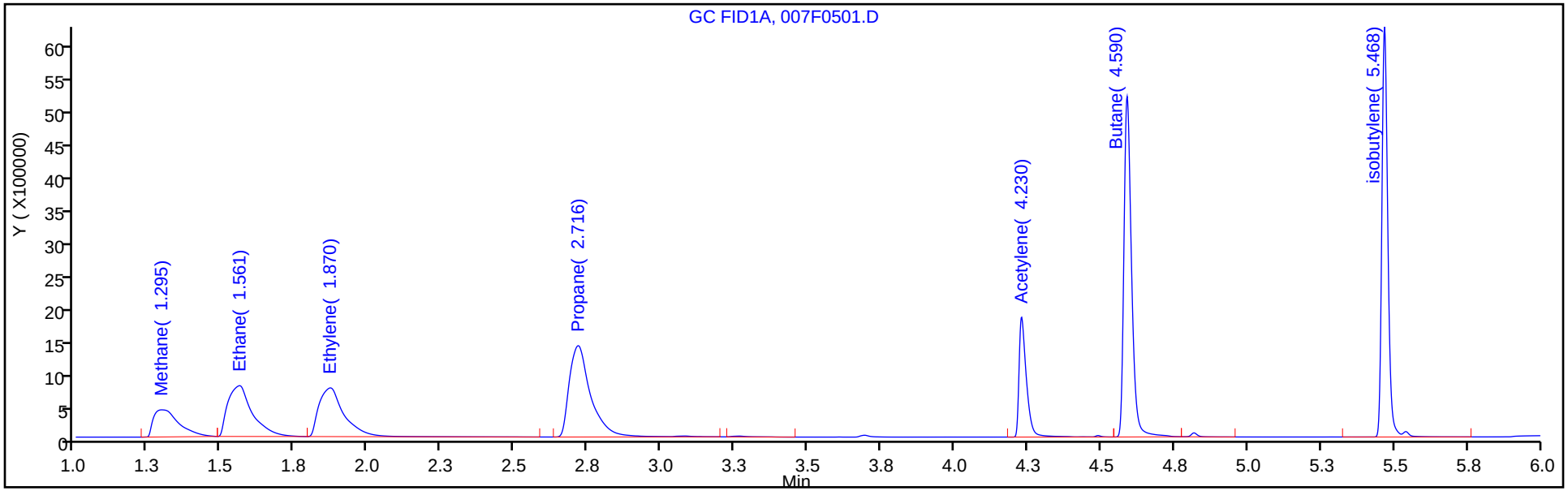
Report Date: 29-Sep-2021 10:55:15 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

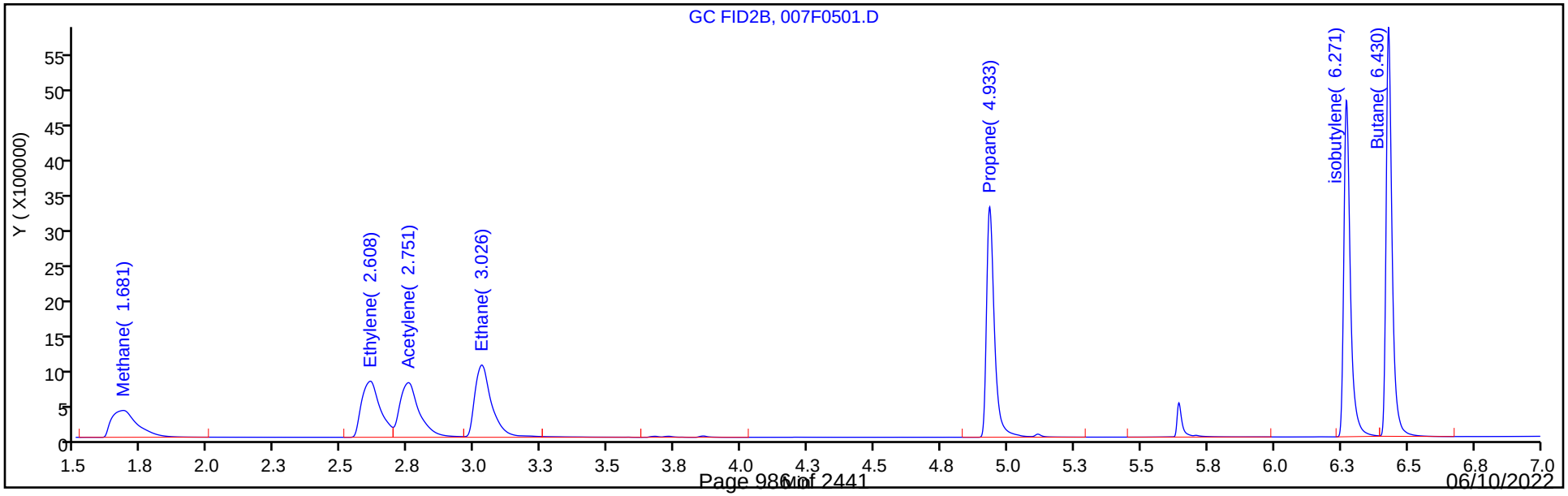
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\007F0501.D

Injection Date:	24-Sep-2021 14:07:45	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ic			Worklist Smp#:	5
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

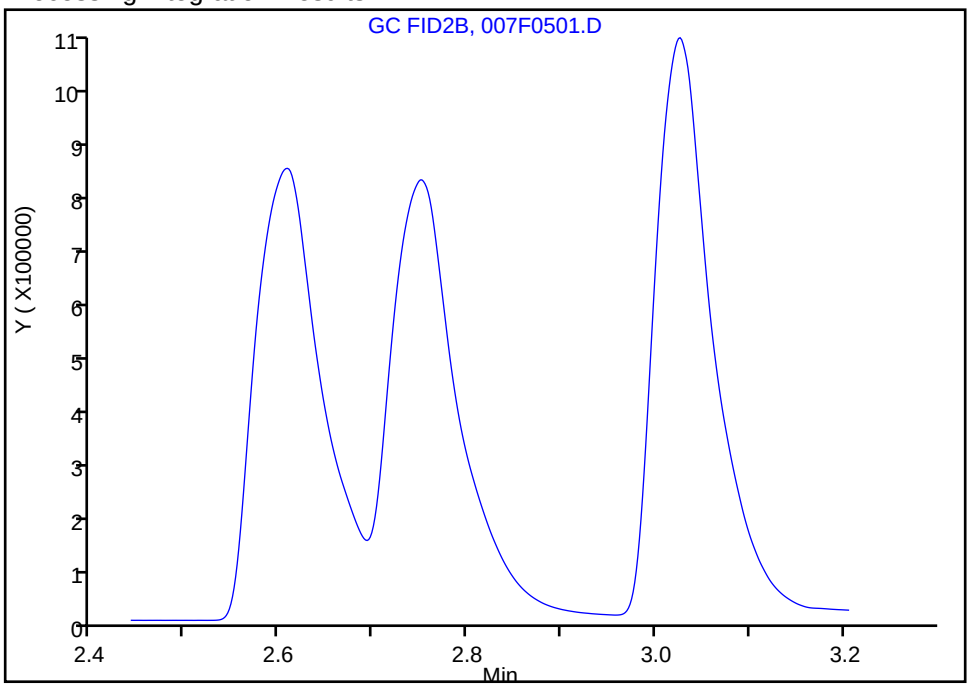
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\007F0501.D
Injection Date: 24-Sep-2021 14:07:45 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 7 Worklist Smp#: 5
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

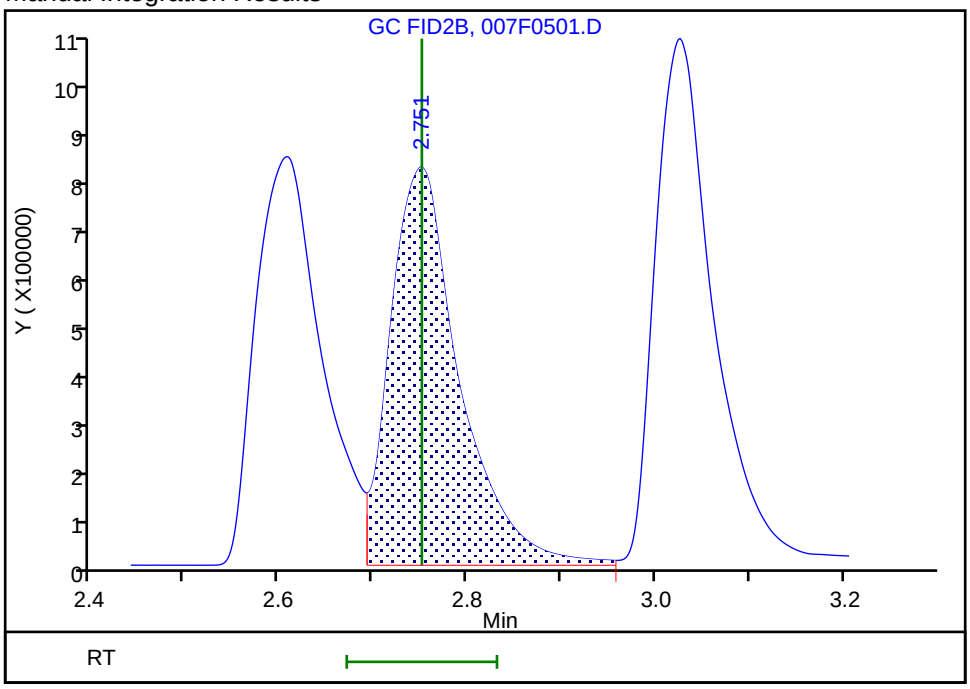
Not Detected
Expected RT: 2.75

Processing Integration Results



Manual Integration Results

RT: 2.75
Area: 3899802
Amount: 114.1000
Amount Units: ug/l



Reviewer: sciannac, 24-Sep-2021 15:50:19
Audit Action: Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

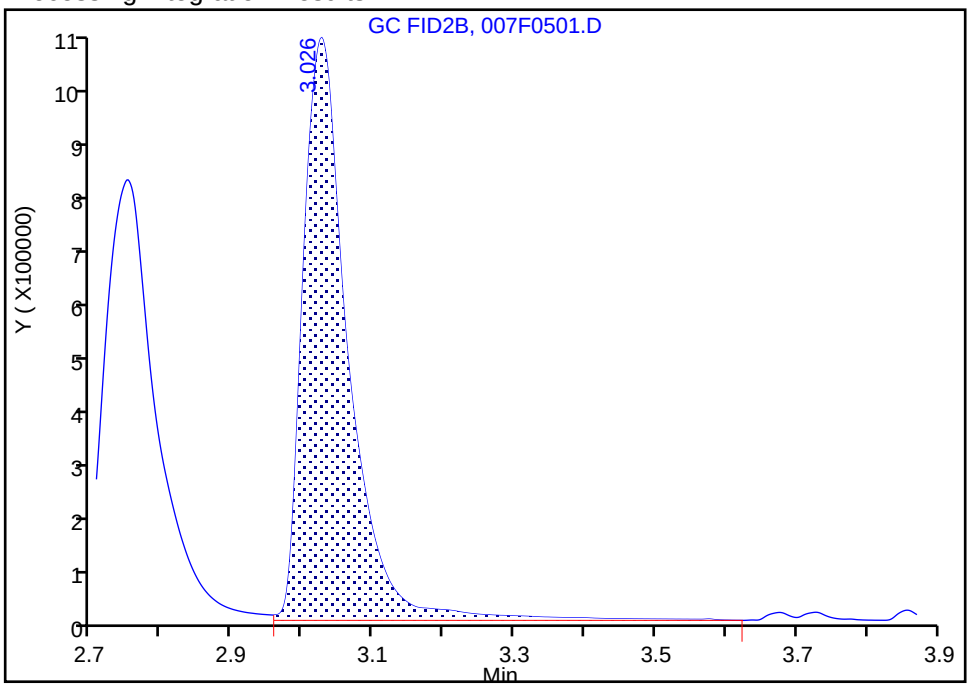
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\007F0501.D
Injection Date: 24-Sep-2021 14:07:45 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 7 Worklist Smp#: 5
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

3 Ethane, CAS: 74-84-0

Signal: 2

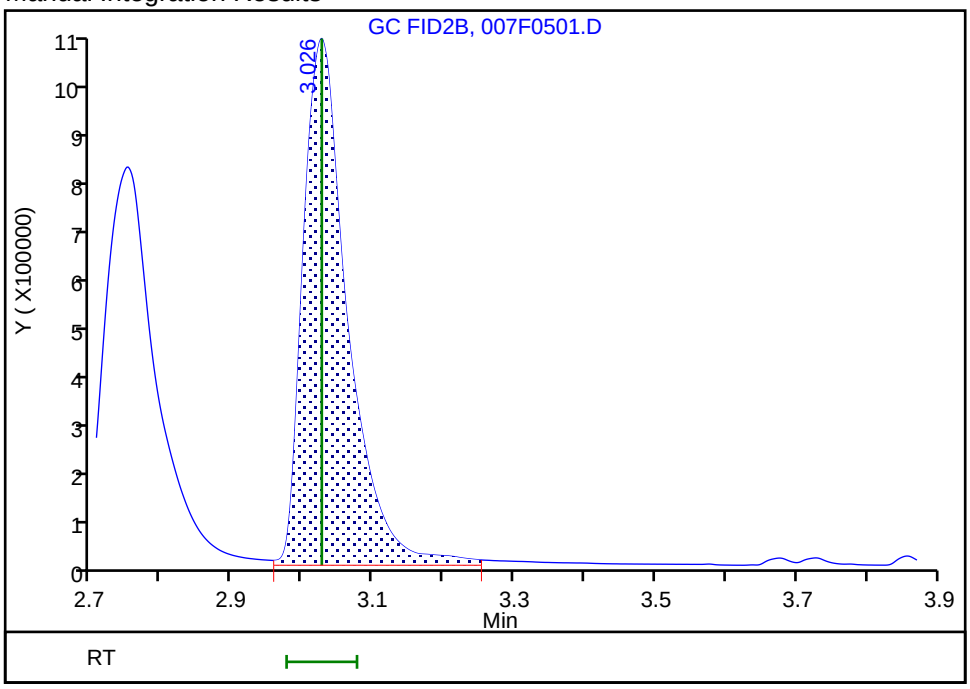
Processing Integration Results

RT: 3.03
Area: 4534073
Amount: 134.6635
Amount Units: ug/l



Manual Integration Results

RT: 3.03
Area: 4450065
Amount: 133.3050
Amount Units: ug/l



Reviewer: sciannac, 24-Sep-2021 15:50:09
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Split Peak

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\008F0601.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 24-Sep-2021 14:20:44 ALS Bottle#: 8 Worklist Smp#: 6
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 29-Sep-2021 10:55:15 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1655

First Level Reviewer: sciannac Date: 24-Sep-2021 15:46:14

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							M
1	1.295	1.295	0.000	4808571	131.4	134.9	
2	1.678	1.678	0.000	5065048	131.4	138.6	M
						RPD = 2.70	
3 Ethane							
1	1.560	1.560	0.000	8751636	246.3	263.3	
2	3.023	3.023	0.000	8976911	246.3	268.9	
						RPD = 2.12	
4 Ethylene							
1	1.873	1.873	0.000	8582166	229.8	243.6	
2	2.603	2.603	0.000	7548044	229.8	243.6	
						RPD = 0.00	
5 Propane							M
1	2.721	2.721	0.000	13578180	361.3	377.1	M
2	4.929	4.929	0.000	13344347	361.3	381.1	
						RPD = 1.08	
6 Acetylene							a
1	4.230	4.230	0.000	6274725	213.3	223.0	a
2	2.746	2.746	0.000	7865310	213.3	230.1	a
						RPD = 3.15	
7 Butane							Ma
1	4.591	4.591	0.000	18468578	476.1	507.1	a
2	6.426	6.426	0.000	17766895	476.1	505.6	M
						RPD = 0.29	
8 isobutylene							Ma
1	5.468	5.468	0.000	17314841	459.7	479.3	
2	6.269	6.269	0.000	15966351	459.7	480.9	M
						RPD = 0.33	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 400.00 Units: uL

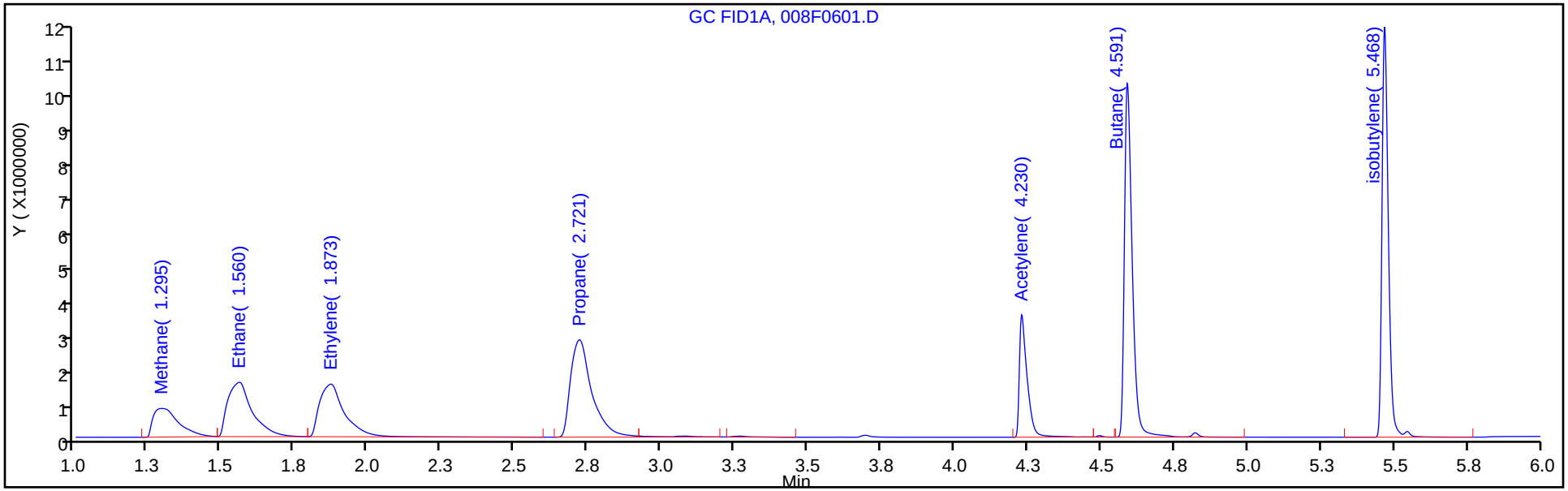
Report Date: 29-Sep-2021 10:55:15 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

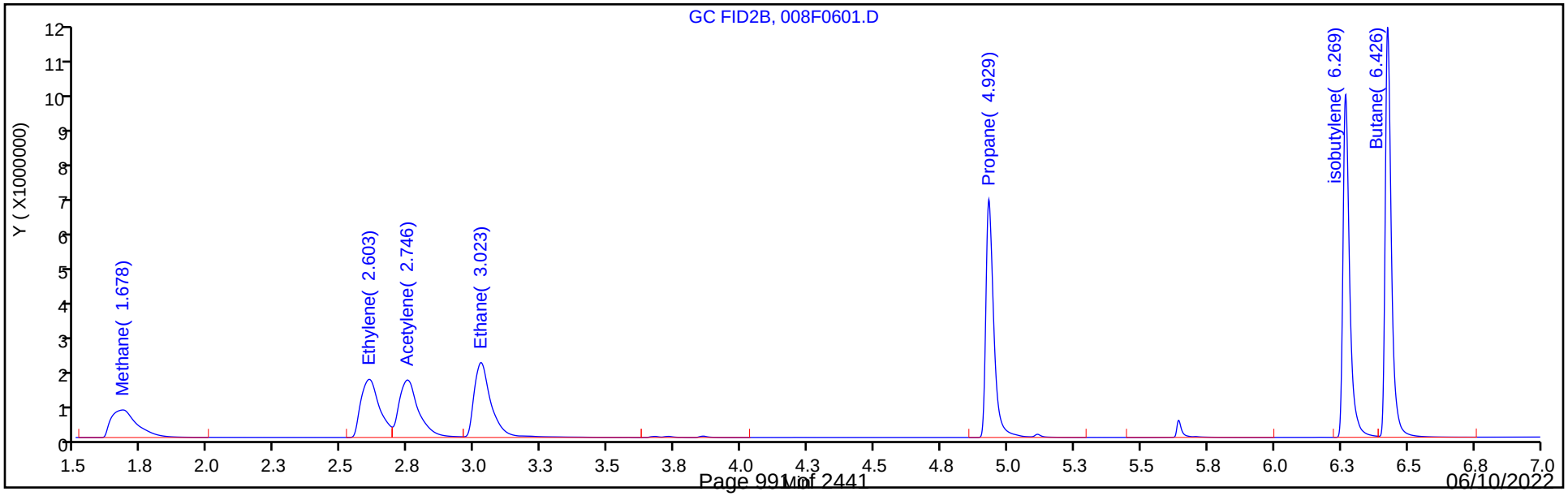
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\008F0601.D

Injection Date:	24-Sep-2021 14:20:44	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ic			Worklist Smp#:	6
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

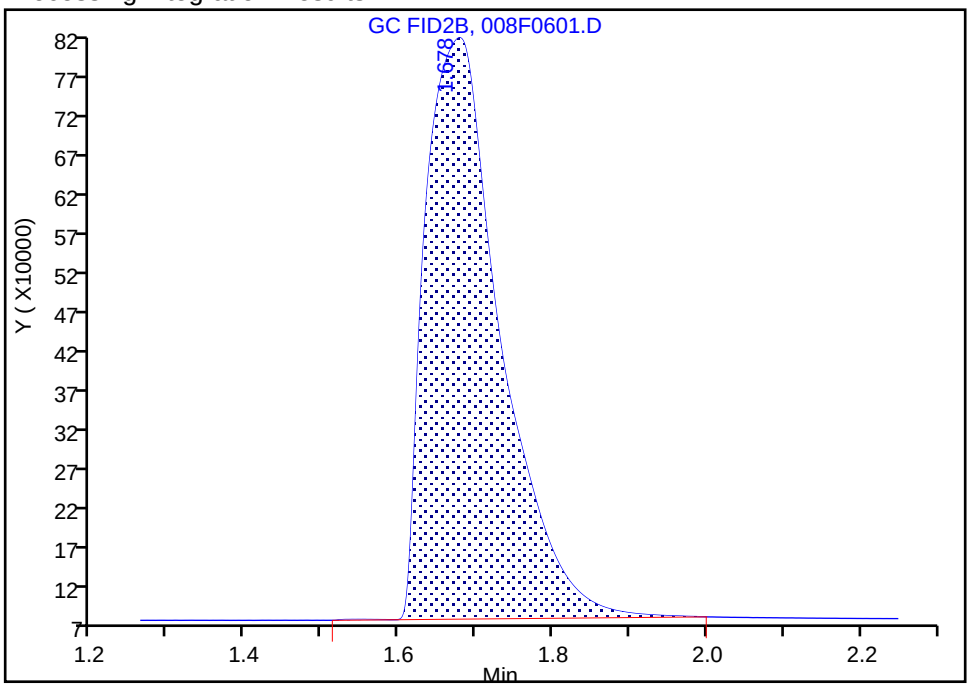
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\008F0601.D
Injection Date: 24-Sep-2021 14:20:44 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 8 Worklist Smp#: 6
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

2 Methane, CAS: 74-82-8

Signal: 2

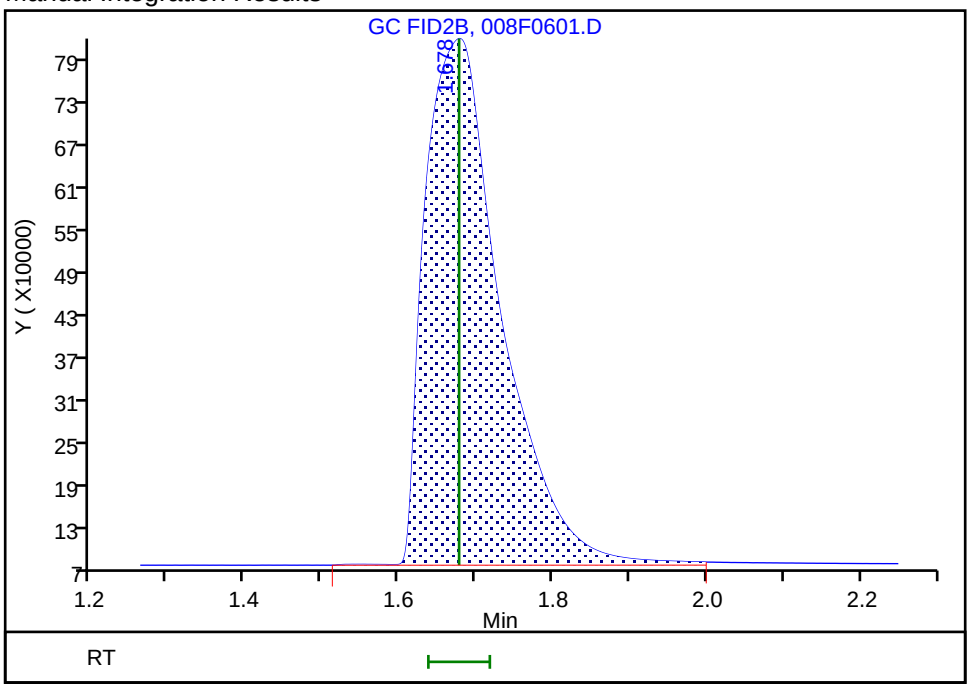
Processing Integration Results

RT: 1.68
Area: 5002633
Amount: 137.0848
Amount Units: ug/l



Manual Integration Results

RT: 1.68
Area: 5065048
Amount: 138.5598
Amount Units: ug/l



Reviewer: sciannac, 29-Sep-2021 09:21:50
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

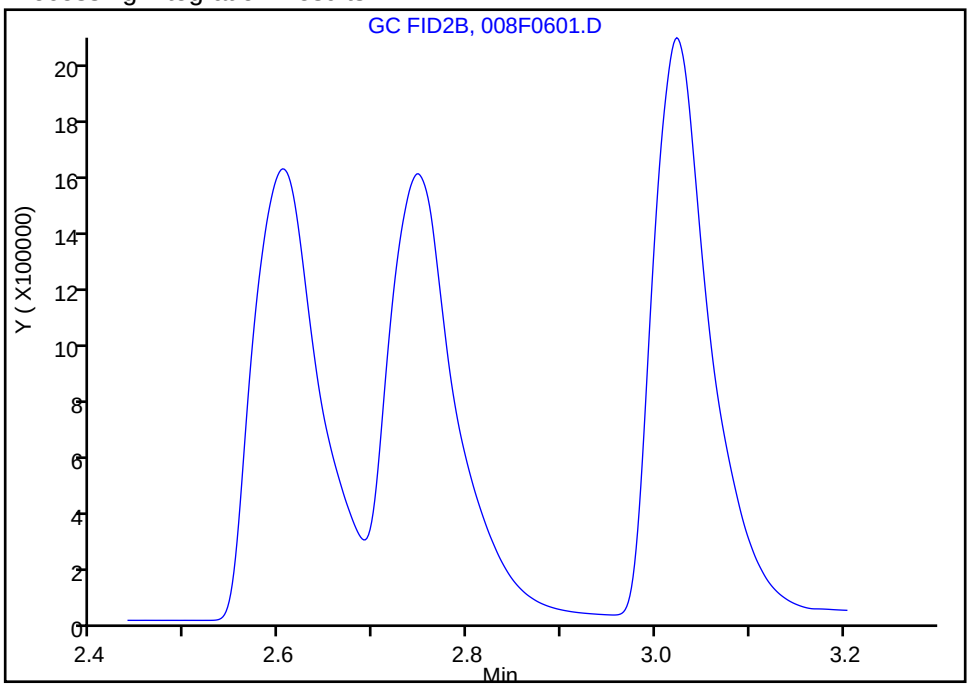
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\008F0601.D
Injection Date: 24-Sep-2021 14:20:44 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 8 Worklist Smp#: 6
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

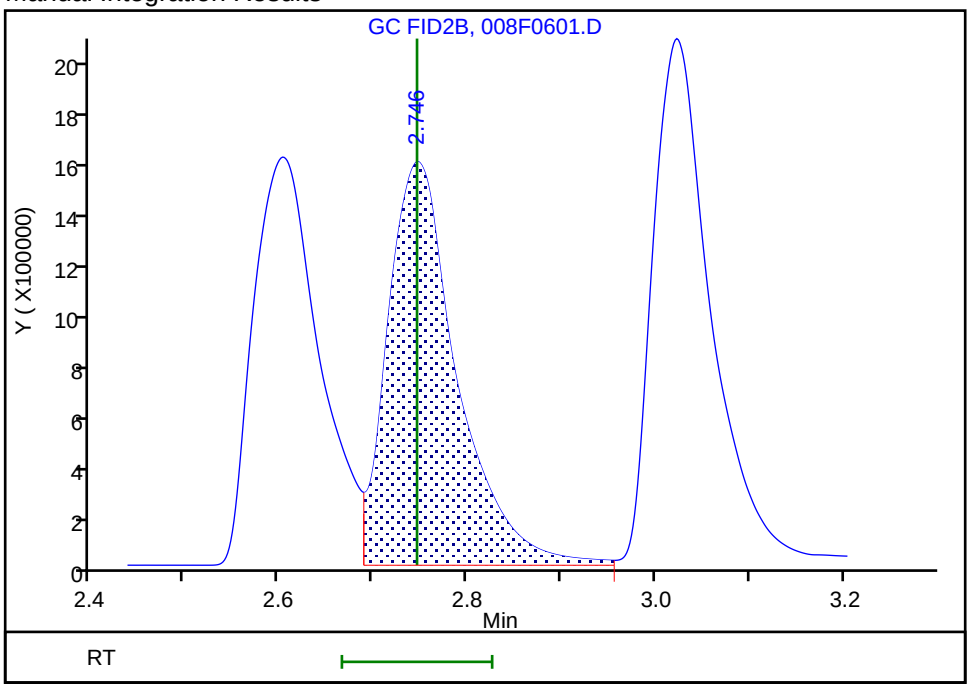
Not Detected
Expected RT: 2.75

Processing Integration Results



Manual Integration Results

RT: 2.75
Area: 7865310
Amount: 230.1225
Amount Units: ug/l



Reviewer: sciannac, 24-Sep-2021 15:44:53
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\009F0701.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 24-Sep-2021 14:33:44 ALS Bottle#: 9 Worklist Smp#: 7
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 29-Sep-2021 10:55:16 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1655

First Level Reviewer: sciannac Date: 24-Sep-2021 15:47:03

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.294	1.295	-0.001	8118988	262.8	229.0	
2	1.678	1.678	0.000	8455607	262.8	232.5	
						RPD = 1.51	
3 Ethane							
1	1.561	1.560	0.001	14997572	492.7	451.2	
2	3.021	3.023	-0.002	14625440	492.7	438.1	
						RPD = 2.94	
4 Ethylene							
1	1.873	1.873	0.000	14678124	459.6	416.7	
2	2.602	2.603	-0.001	12909086	459.6	416.7	
						RPD = 0.00	
5 Propane							
1	2.723	2.721	0.002	23539538	722.6	653.7	
2	4.926	4.929	-0.003	23034734	722.6	657.9	
						RPD = 0.65	
6 Acetylene							a
1	4.228	4.230	-0.002	10977943	426.7	390.1	a
2	2.746	2.746	0.000	13452620	426.7	393.6	a
						RPD = 0.88	
7 Butane							Ma
1	4.588	4.591	-0.003	30555104	952.3	838.9	a
2	6.423	6.426	-0.003	31281741	952.3	890.2	M
						RPD = 5.93	
8 isobutylene							Ma
1	5.466	5.468	-0.002	30754275	919.4	851.3	
2	6.266	6.269	-0.003	28385241	919.4	854.9	M
						RPD = 0.42	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 800.00 Units: uL

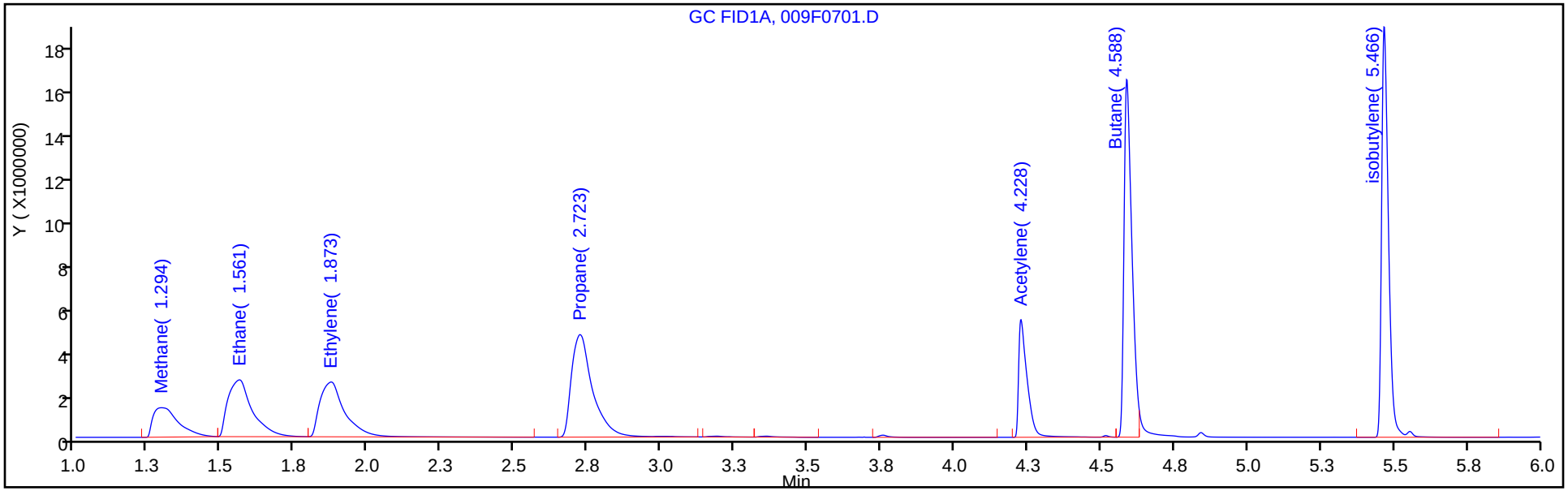
Report Date: 29-Sep-2021 10:55:16 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

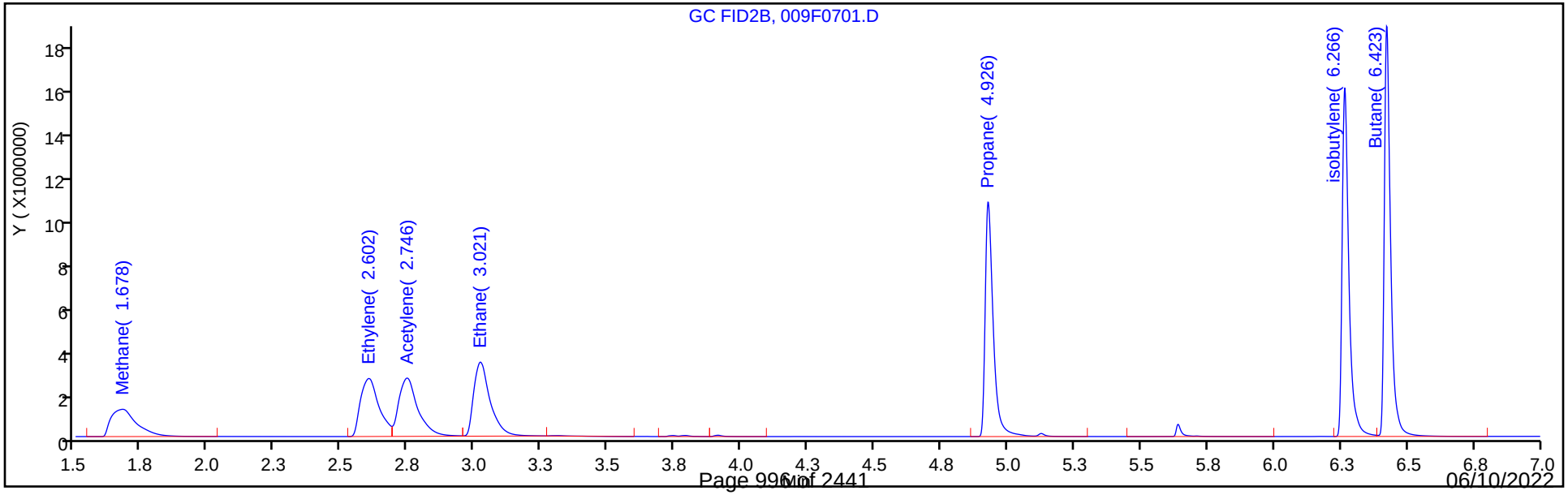
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\009F0701.D

Injection Date:	24-Sep-2021 14:33:44	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ic			Worklist Smp#:	7
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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

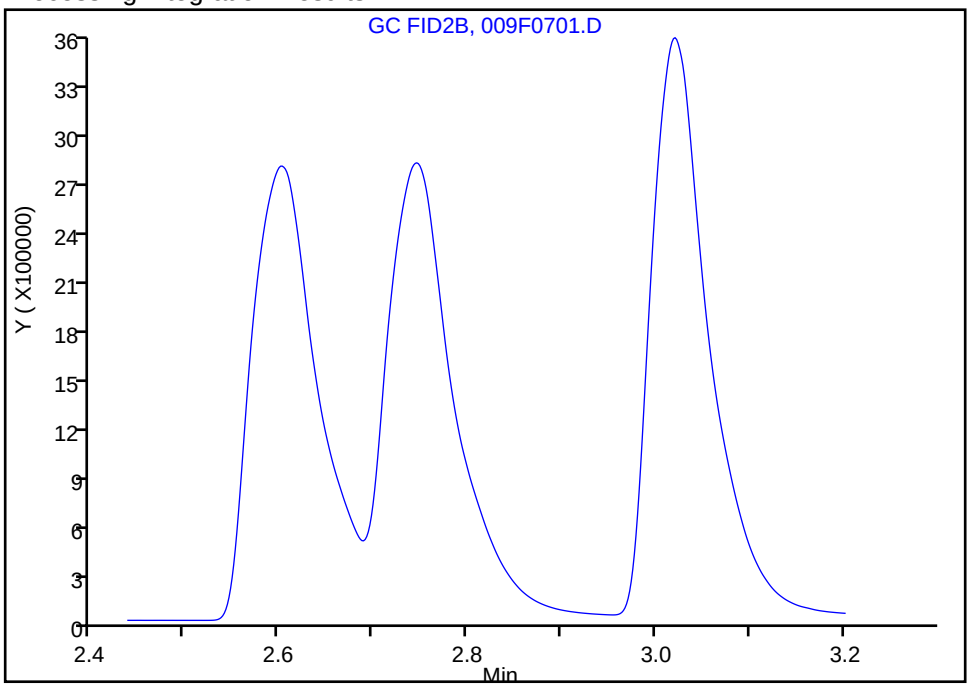
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\009F0701.D
Injection Date: 24-Sep-2021 14:33:44 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 9 Worklist Smp#: 7
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

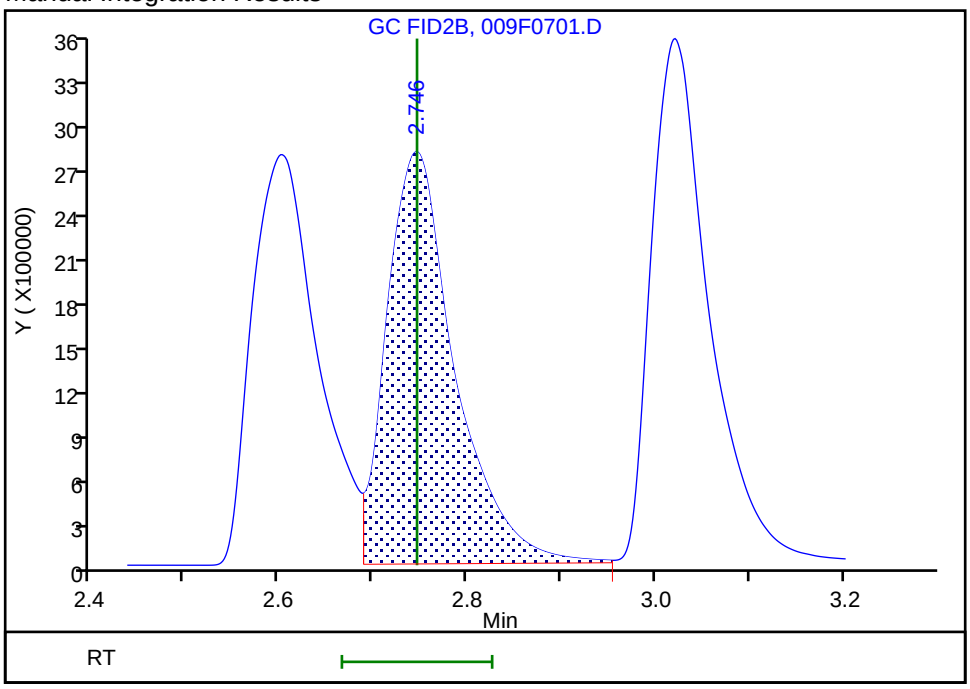
Not Detected
Expected RT: 2.75

Processing Integration Results



Manual Integration Results

RT: 2.75
Area: 13452620
Amount: 393.5955
Amount Units: ug/l



Reviewer: sciannac, 24-Sep-2021 15:46:30
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\010F0801.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 24-Sep-2021 14:46:48 ALS Bottle#: 10 Worklist Smp#: 9
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 29-Sep-2021 10:55:17 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1655

First Level Reviewer: sciannac Date: 24-Sep-2021 15:48:04

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.293	1.295	-0.002	60484705	1626.3	1717.9	
2	1.676	1.678	-0.002	59798125	1626.3	1654.6	
						RPD = 3.75	

QC Flag Legend

Processing Flags

Reagents:

RSK175methane_00010 Amount Added: 50.00 Units: uL

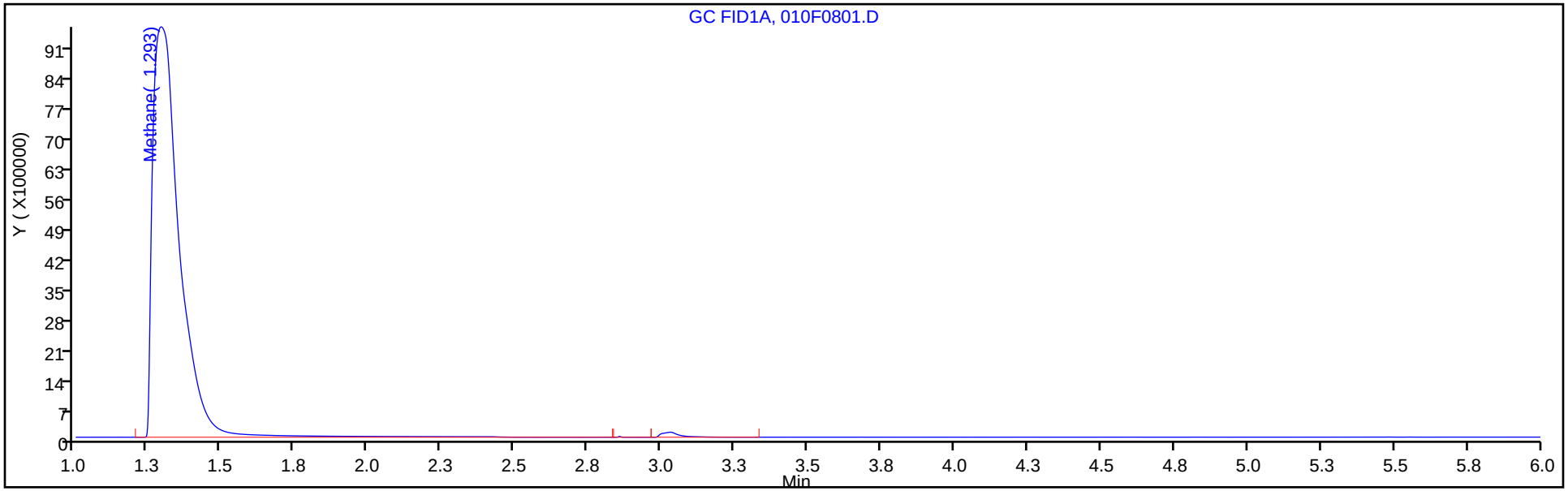
Report Date: 29-Sep-2021 10:55:17 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

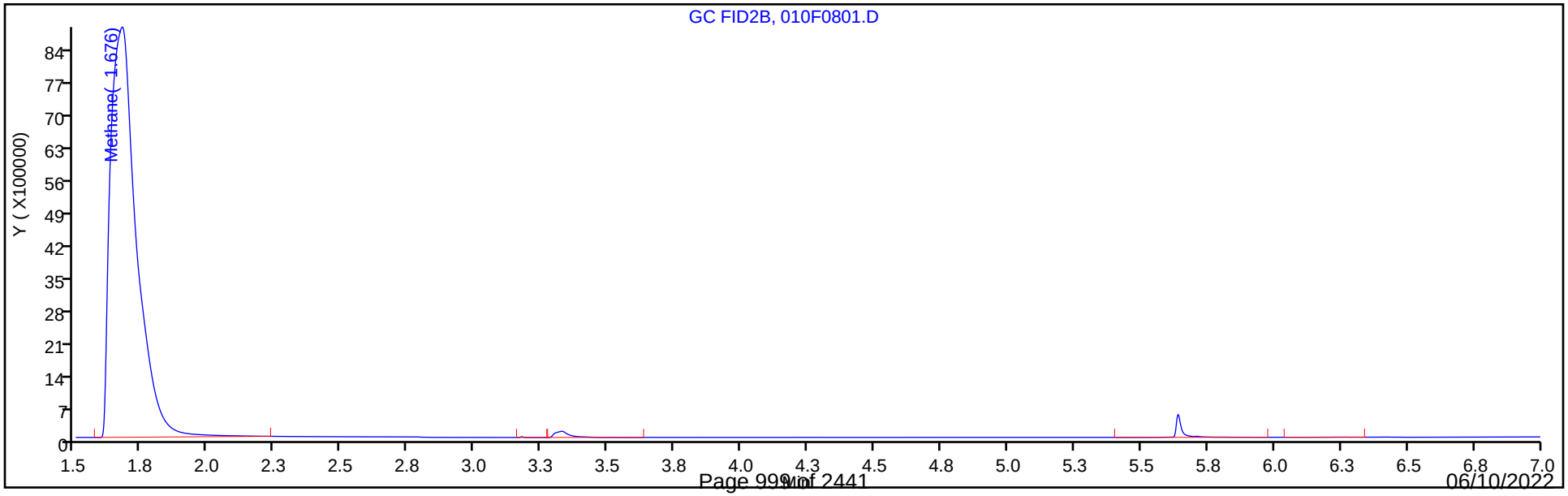
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\010F0801.D

Injection Date:	24-Sep-2021 14:46:48	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ic			Worklist Smp#:	9
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\011F0901.D				
Lims ID:	ic				
Client ID:					
Sample Type:	IC	Calib Level:	9		
Inject. Date:	24-Sep-2021 14:59:53	ALS Bottle#:	11	Worklist Smp#:	10
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Sample Info:	ic				
Operator ID:	sciannac	Instrument ID:	VGC_J		
Sublist:	chrom-RSK_J*sub5				
Method:	\\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m				
Limit Group:	GCV - RSK 175				
Method Label:	DV-GC-0025: Dissolved Gases in Water by RSK-175				
Last Update:	29-Sep-2021 10:55:17	Calib Date:	24-Sep-2021 15:12:55		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D				
Column 1 :	Rt-Alumina BOND/KCl (0.53 mm)		Det: GC FID1A		
Column 2 :	HP-PLOT/Q (0.53 mm)		Det: GC FID2B		
Process Host:	CTX1655				

First Level Reviewer: sciannac Date: 24-Sep-2021 15:48:14

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.292	1.295	-0.003	245647963	6505.0	6982.6	
2	1.673	1.678	-0.005	247051774	6505.0	6841.2	
						RPD = 2.04	

QC Flag Legend

Processing Flags

Reagents:

RSK175methane_00010 Amount Added: 200.00 Units: uL

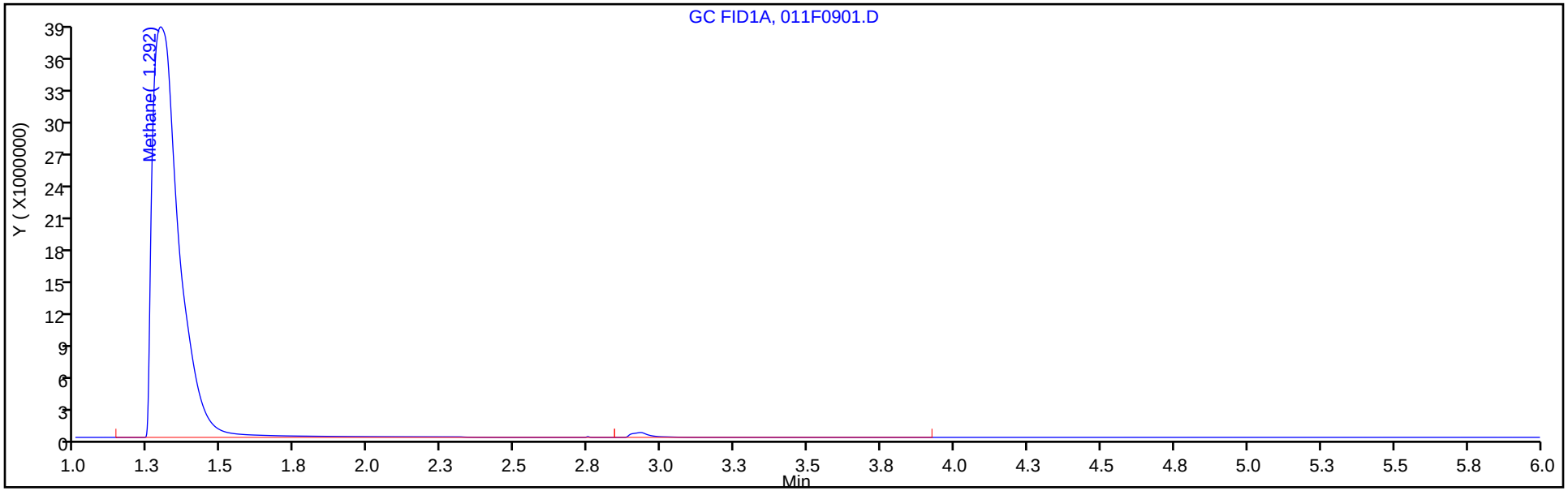
Report Date: 29-Sep-2021 10:55:17 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

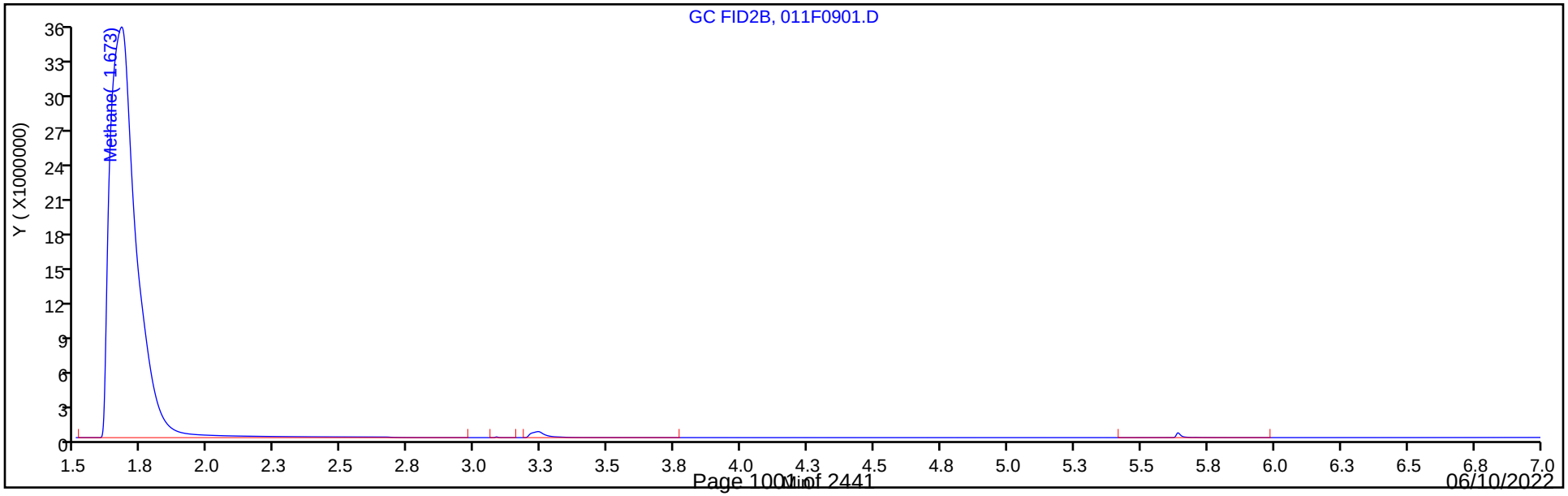
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\011F0901.D

Injection Date:	24-Sep-2021 14:59:53	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ic			Worklist Smp#:	10
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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D				
Lims ID:	ic				
Client ID:					
Sample Type:	IC	Calib Level:	10		
Inject. Date:	24-Sep-2021 15:12:55	ALS Bottle#:	12	Worklist Smp#:	11
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Sample Info:	ic				
Operator ID:	sciannac	Instrument ID:	VGC_J		
Sublist:	chrom-RSK_J*sub5				
Method:	\\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m				
Limit Group:	GCV - RSK 175				
Method Label:	DV-GC-0025: Dissolved Gases in Water by RSK-175				
Last Update:	29-Sep-2021 10:55:18	Calib Date:	24-Sep-2021 15:12:55		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D				
Column 1 :	Rt-Alumina BOND/KCl (0.53 mm)		Det: GC FID1A		
Column 2 :	HP-PLOT/Q (0.53 mm)		Det: GC FID2B		
Process Host:	CTX1655				

First Level Reviewer: sciannac Date: 24-Sep-2021 15:48:27

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.288	1.295	-0.007	669092603	19515	19022	
2	1.669	1.678	-0.009	675608539	19515	18712	
						RPD = 1.65	

QC Flag Legend

Processing Flags

Reagents:

RSK175methane_00010 Amount Added: 600.00 Units: uL

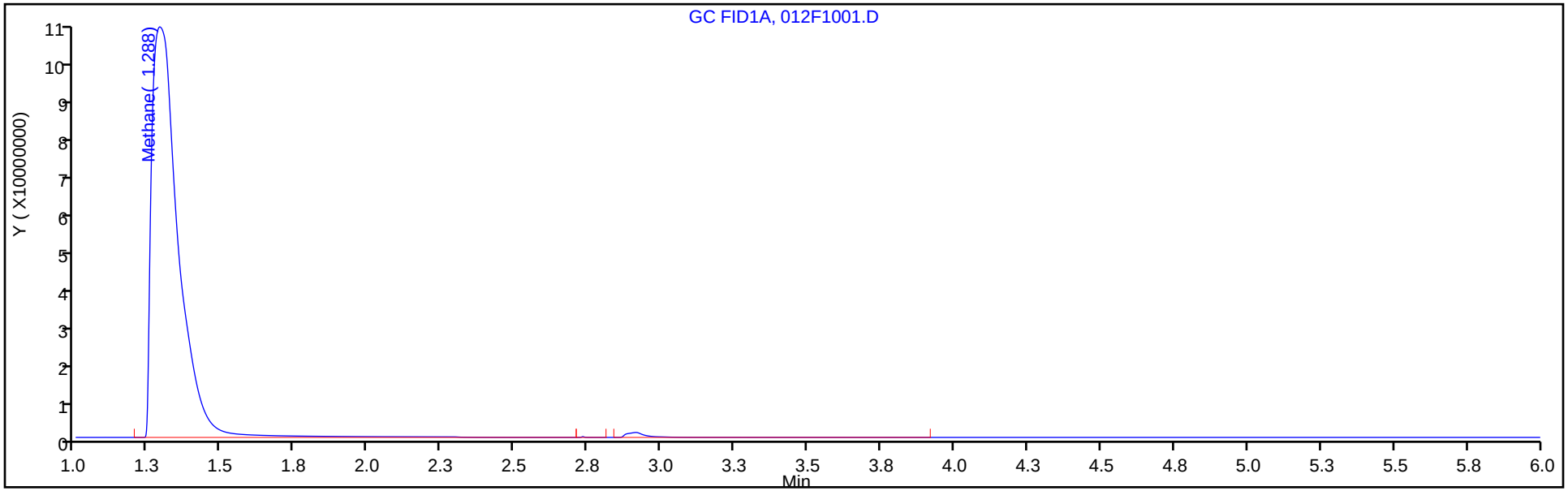
Report Date: 29-Sep-2021 10:55:18 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

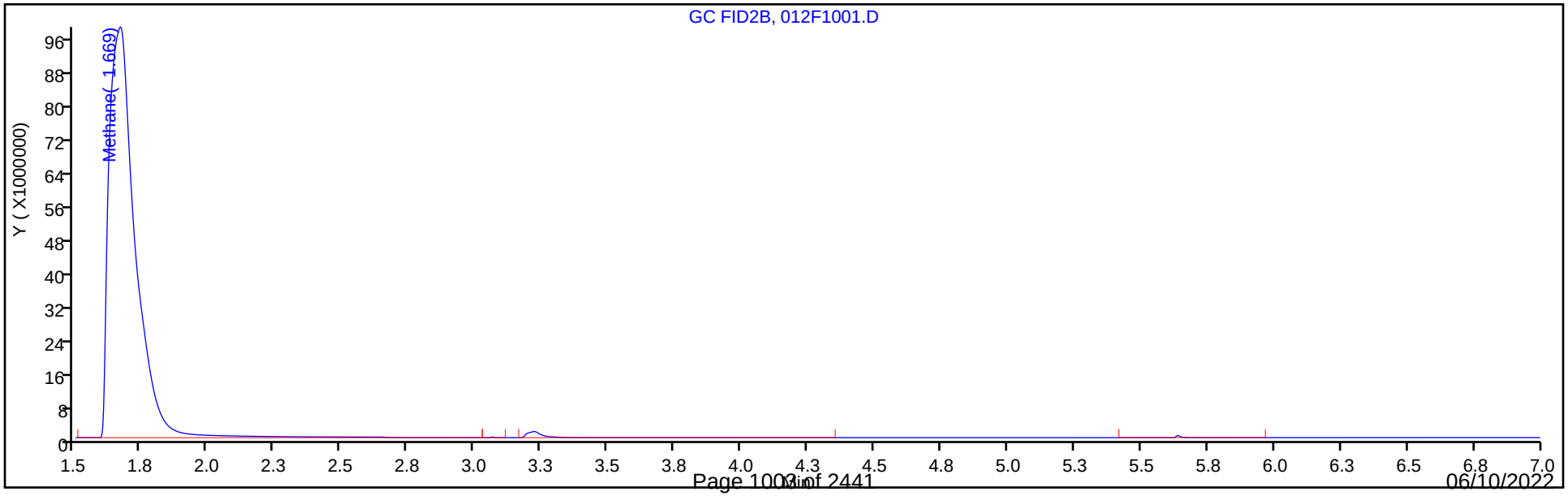
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Injection Date:	24-Sep-2021 15:12:55	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ic			Worklist Smp#:	11
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Calibration / Methane

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

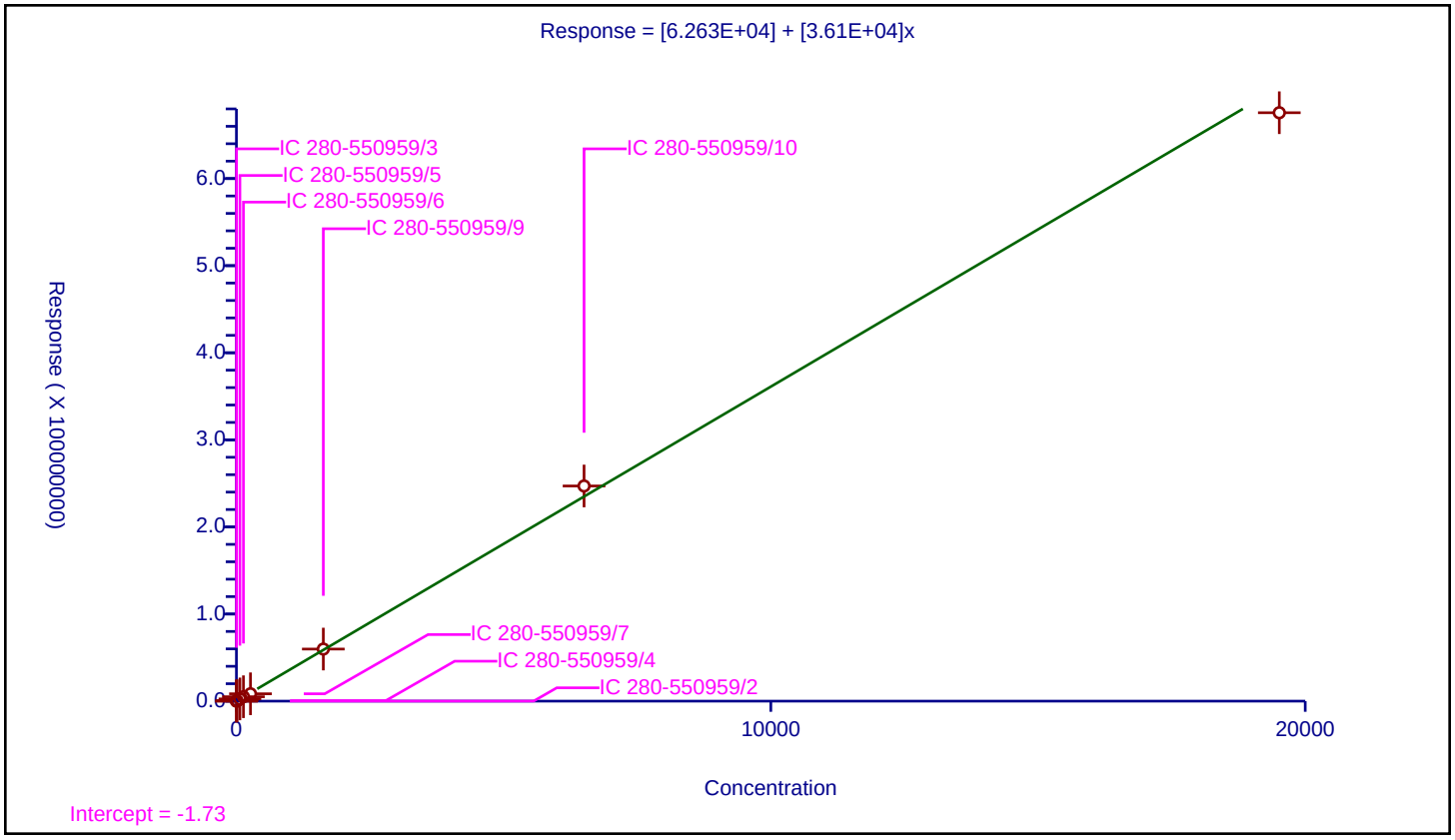
Curve Coefficients

Intercept:	6.263E+04
Slope:	3.61E+04

Error Coefficients

Standard Error:	11900000
Relative Standard Error:	7.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-550959/2	0.821288	91227.0			111078.032967	Y
2	IC 280-550959/3	1.642575	126529.0			77030.88139	Y
3	IC 280-550959/4	13.1406	509129.0			38744.730073	Y
4	IC 280-550959/5	65.703	2553566.0			38865.287734	Y
5	IC 280-550959/6	131.406	5065048.0			38545.028385	Y
6	IC 280-550959/7	262.812	8455607.0			32173.595574	Y
7	IC 280-550959/9	1626.25	59798125.0			36770.561107	Y
8	IC 280-550959/10	6505.0	247051774.0			37978.750807	Y
9	IC 280-550959/11	19515.0	675608539.0			34619.961004	Y



Calibration / Ethylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

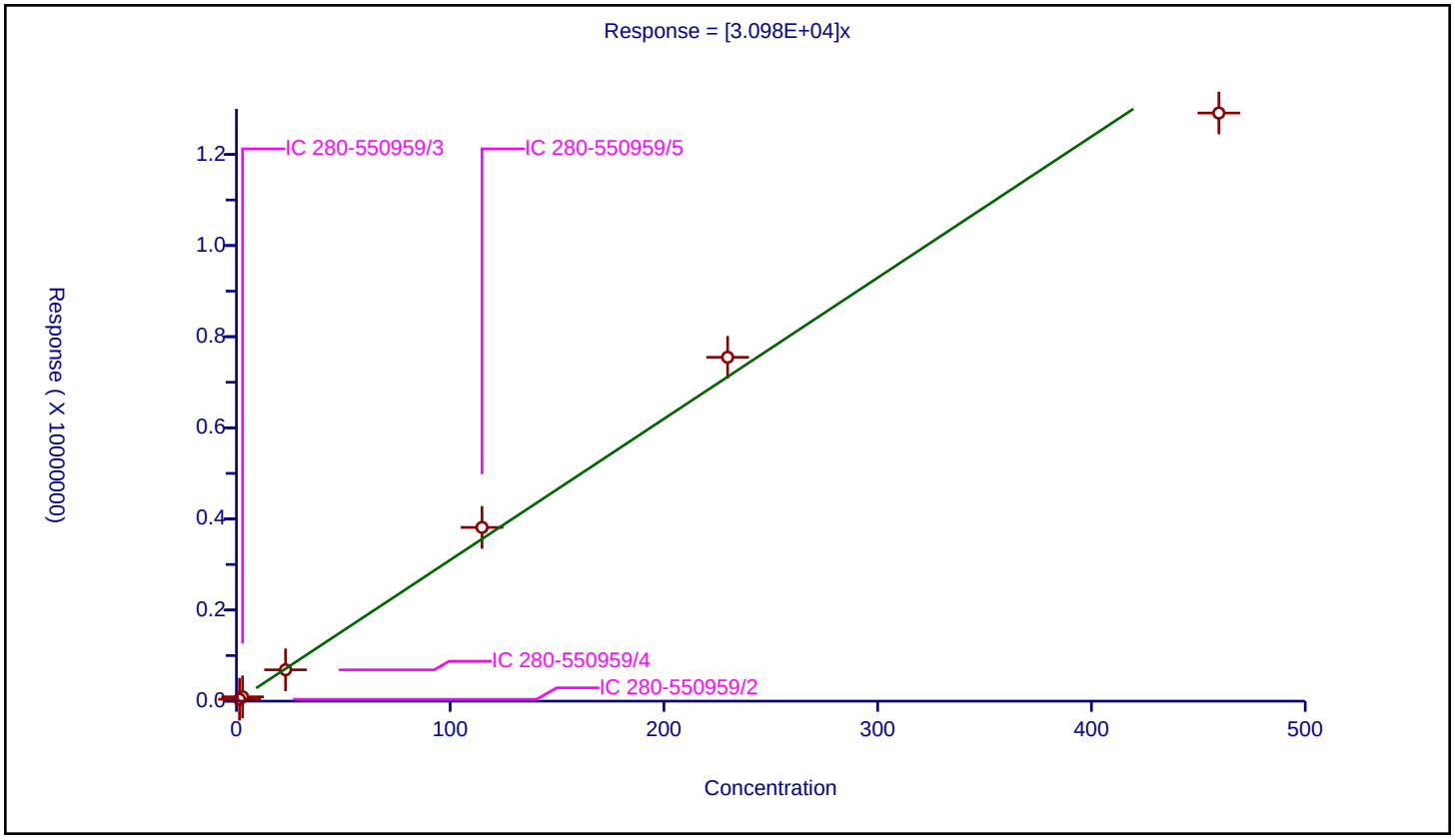
Curve Coefficients

Intercept:	0
Slope:	3.098E+04

Error Coefficients

Standard Error:	635000
Relative Standard Error:	7.6
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-550959/2	1.43625	41226.0			28703.916449	Y
2	IC 280-550959/3	2.8725	95159.0			33127.589208	Y
3	IC 280-550959/4	22.98	687818.0			29931.157528	Y
4	IC 280-550959/5	114.9	3812973.0			33185.143603	Y
5	IC 280-550959/6	229.8	7548044.0			32846.144473	Y
6	IC 280-550959/7	459.6	12909086.0			28087.654482	Y



Calibration / Acetylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

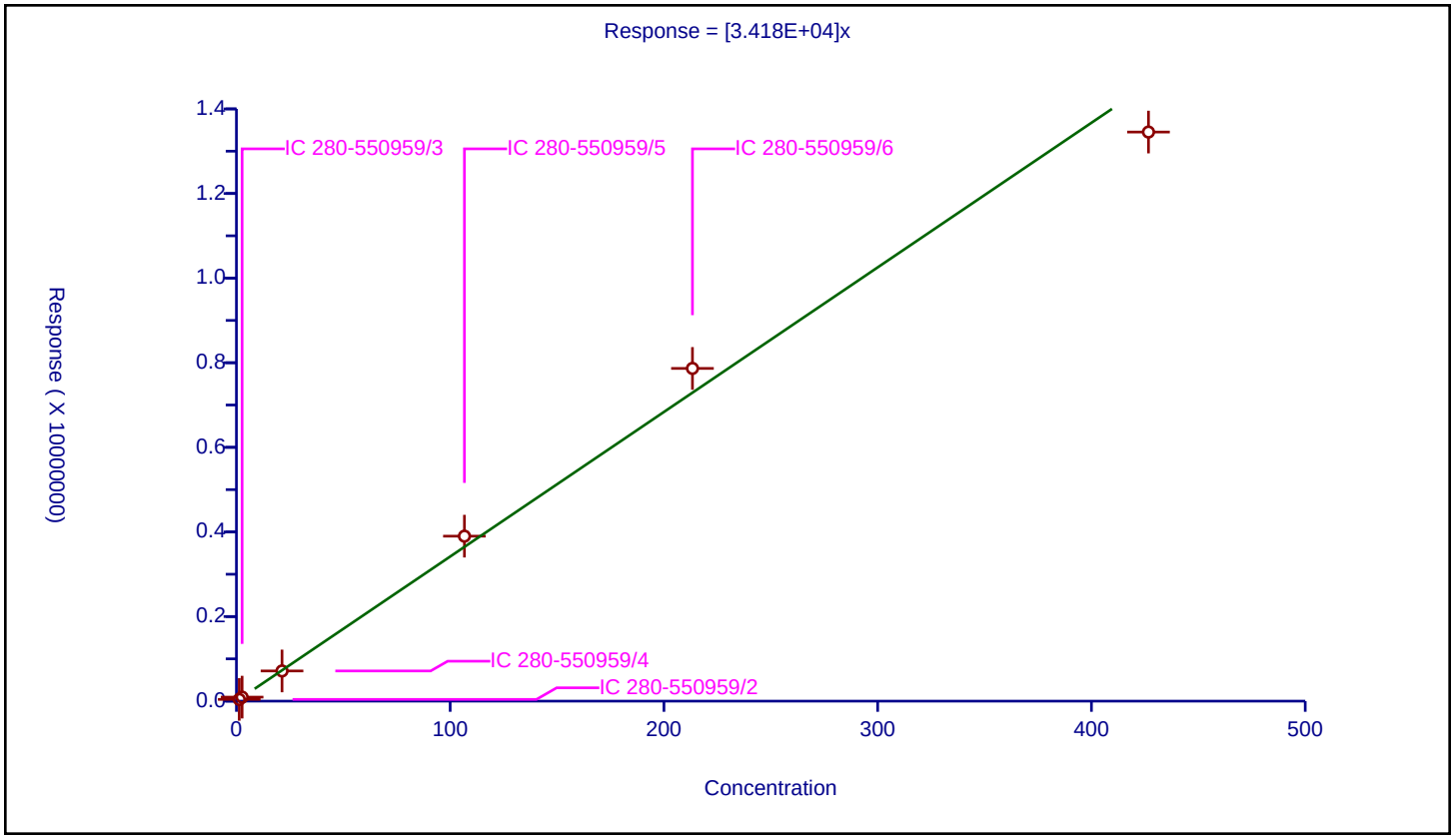
Curve Coefficients

Intercept:	0
Slope:	3.418E+04

Error Coefficients

Standard Error:	578000
Relative Standard Error:	7.4
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-550959/2	1.333375	41503.0			31126.277304	Y
2	IC 280-550959/3	2.66675	94797.0			35547.764132	Y
3	IC 280-550959/4	21.334	713476.0			33443.142402	Y
4	IC 280-550959/5	106.67	3899802.0			36559.501266	Y
5	IC 280-550959/6	213.34	7865310.0			36867.488516	Y
6	IC 280-550959/7	426.68	13452620.0			31528.592856	Y



Calibration / Ethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

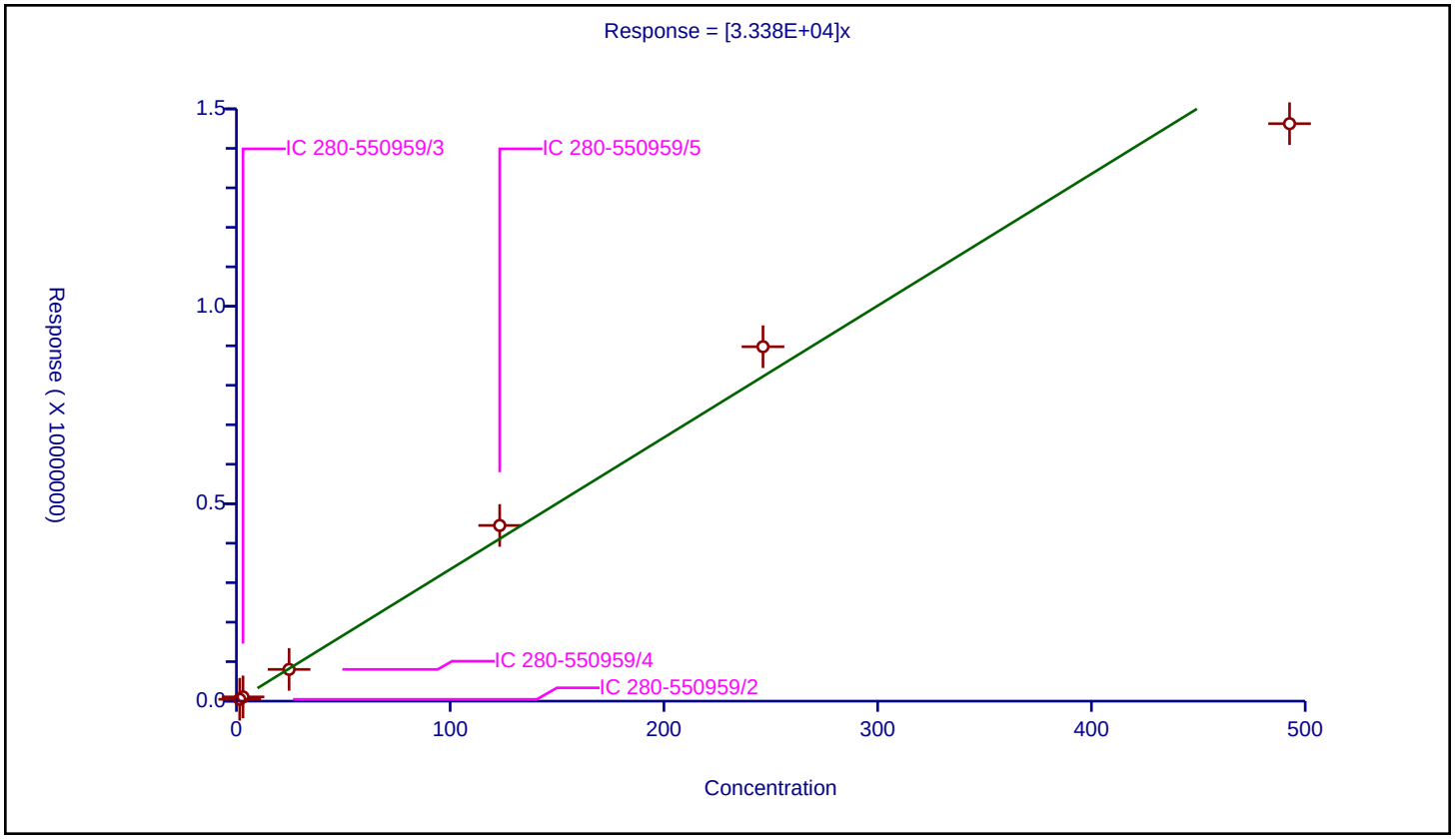
Curve Coefficients

Intercept:	0
Slope:	3.338E+04

Error Coefficients

Standard Error:	894000
Relative Standard Error:	8.6
Correlation Coefficient:	0.987
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-550959/2	1.539625	46984.0			30516.52188	Y
2	IC 280-550959/3	3.07925	107446.0			34893.561744	Y
3	IC 280-550959/4	24.634	803791.0			32629.333442	Y
4	IC 280-550959/5	123.17	4450065.0			36129.455224	Y
5	IC 280-550959/6	246.34	8976911.0			36441.142324	Y
6	IC 280-550959/7	492.68	14625440.0			29685.475359	Y



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: ICV 280-550959/13 Calibration Date: 09/24/2021 15:38

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 014F1201.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		37179		67.6	65.7	2.9	20.0
Ethane	Ave	33241	36496		135	123	9.8	20.0
Ethylene	Ave	35226	37757		123	115	7.2	20.0
Acetylene	Ave	28139	30719		116	107	9.2	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: ICV 280-550959/13 Calibration Date: 09/24/2021 15:38

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 014F1201.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.29	1.26	1.34
Ethane	1.56	1.51	1.61
Ethylene	1.87	1.79	1.89
Acetylene	4.24	4.15	4.31

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\014F1201.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 24-Sep-2021 15:38:59 ALS Bottle#: 14 Worklist Smp#: 13
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: icv
Operator ID: sciannac Instrument ID: VGC_J
Sublist:

Method: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 29-Sep-2021 10:58:12 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1655

First Level Reviewer: sciannac Date: 24-Sep-2021 15:54:40

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.289	1.299	-0.010	2442793	65.7	67.6	
2	1.676	1.686	-0.010	2535074	65.7	68.5	
						RPD = 1.30	
3 Ethane							
1	1.559	1.556	0.003	4495267	123.2	135.2	
2	3.018	3.028	-0.010	4535642	123.2	135.9	
						RPD = 0.47	
4 Ethylene							
1	1.874	1.844	0.030	4338329	114.9	123.2	
2	2.598	2.609	-0.011	3828020	114.9	123.6	
						RPD = 0.33	
5 Propane							
1	2.726	2.721	0.005	7114360	180.6	197.6	
2	4.928	4.929	-0.001	6799509	180.6	194.2	
						RPD = 1.71	
6 Acetylene							
1	4.243	4.230	0.013	3276773	106.7	116.4	
2	2.741	2.746	-0.005	4007122	106.7	117.2	
						RPD = 0.68	
7 Butane							Ma
1	4.599	4.528	0.071	9349199	238.1	256.7	a
2	6.426	6.426	0.000	8946550	238.1	254.6	M
						RPD = 0.82	
8 isobutylene							Ma
1	5.479	5.403	0.076	8850386	229.8	245.0	
2	6.268	6.274	-0.006	8132396	229.8	244.9	M
						RPD = 0.03	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

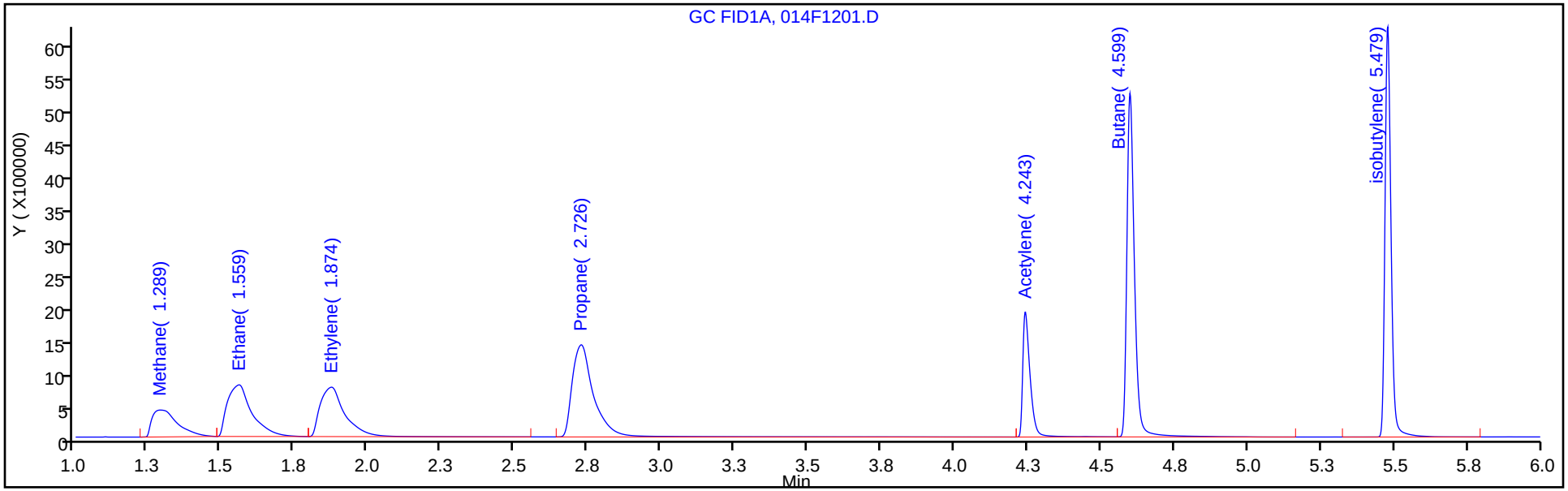
Report Date: 29-Sep-2021 10:58:13 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

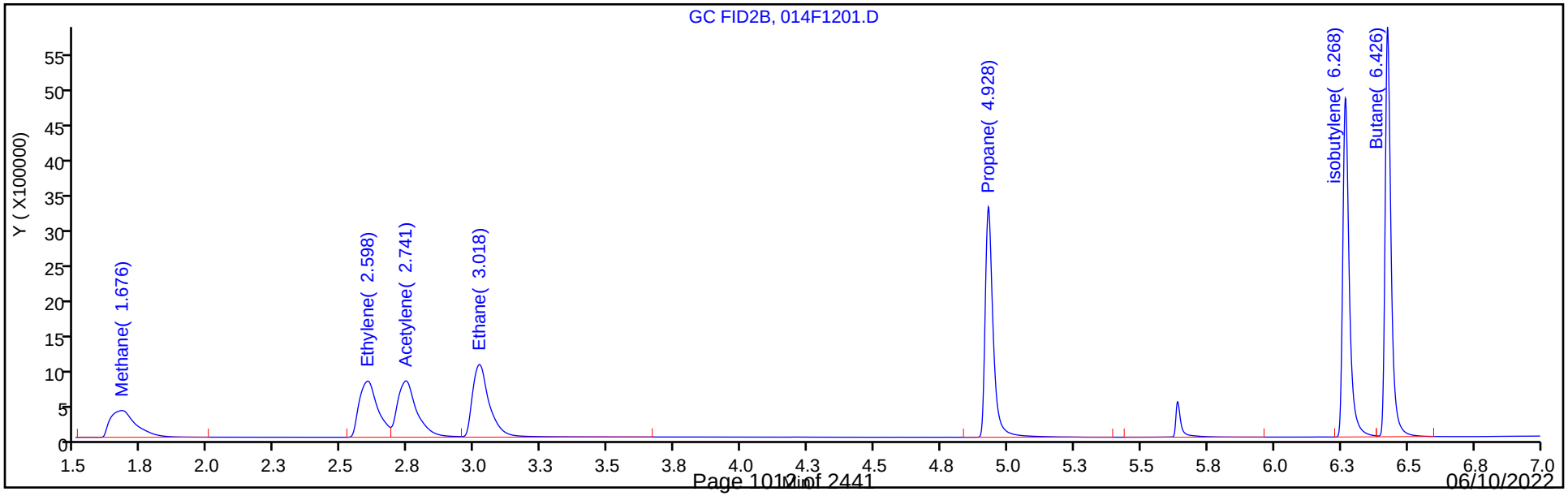
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\014F1201.D

Injection Date:	24-Sep-2021 15:38:59	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ICV			Worklist Smp#:	13
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: ICV 280-550959/13 Calibration Date: 09/24/2021 15:38

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 014F1201.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		38584		68.5	65.7	4.2	20.0
Ethylene	Ave	30980	33316		124	115	7.5	20.0
Acetylene	Ave	34179	37566		117	107	9.9	20.0
Ethane	Ave	33383	36824		136	123	10.3	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: ICV 280-550959/13 Calibration Date: 09/24/2021 15:38

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 014F1201.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.68	1.65	1.73
Ethylene	2.60	2.56	2.66
Acetylene	2.74	2.67	2.83
Ethane	3.02	2.98	3.08

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\014F1201.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 24-Sep-2021 15:38:59 ALS Bottle#: 14 Worklist Smp#: 13
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: icv
Operator ID: sciannac Instrument ID: VGC_J
Sublist:

Method: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 29-Sep-2021 10:58:12 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1655

First Level Reviewer: sciannac Date: 24-Sep-2021 15:54:40

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.289	1.299	-0.010	2442793	65.7	67.6	
2	1.676	1.686	-0.010	2535074	65.7	68.5	
						RPD = 1.30	
3 Ethane							
1	1.559	1.556	0.003	4495267	123.2	135.2	
2	3.018	3.028	-0.010	4535642	123.2	135.9	
						RPD = 0.47	
4 Ethylene							
1	1.874	1.844	0.030	4338329	114.9	123.2	
2	2.598	2.609	-0.011	3828020	114.9	123.6	
						RPD = 0.33	
5 Propane							
1	2.726	2.721	0.005	7114360	180.6	197.6	
2	4.928	4.929	-0.001	6799509	180.6	194.2	
						RPD = 1.71	
6 Acetylene							
1	4.243	4.230	0.013	3276773	106.7	116.4	
2	2.741	2.746	-0.005	4007122	106.7	117.2	
						RPD = 0.68	
7 Butane							Ma
1	4.599	4.528	0.071	9349199	238.1	256.7	a
2	6.426	6.426	0.000	8946550	238.1	254.6	M
						RPD = 0.82	
8 isobutylene							Ma
1	5.479	5.403	0.076	8850386	229.8	245.0	
2	6.268	6.274	-0.006	8132396	229.8	244.9	M
						RPD = 0.03	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

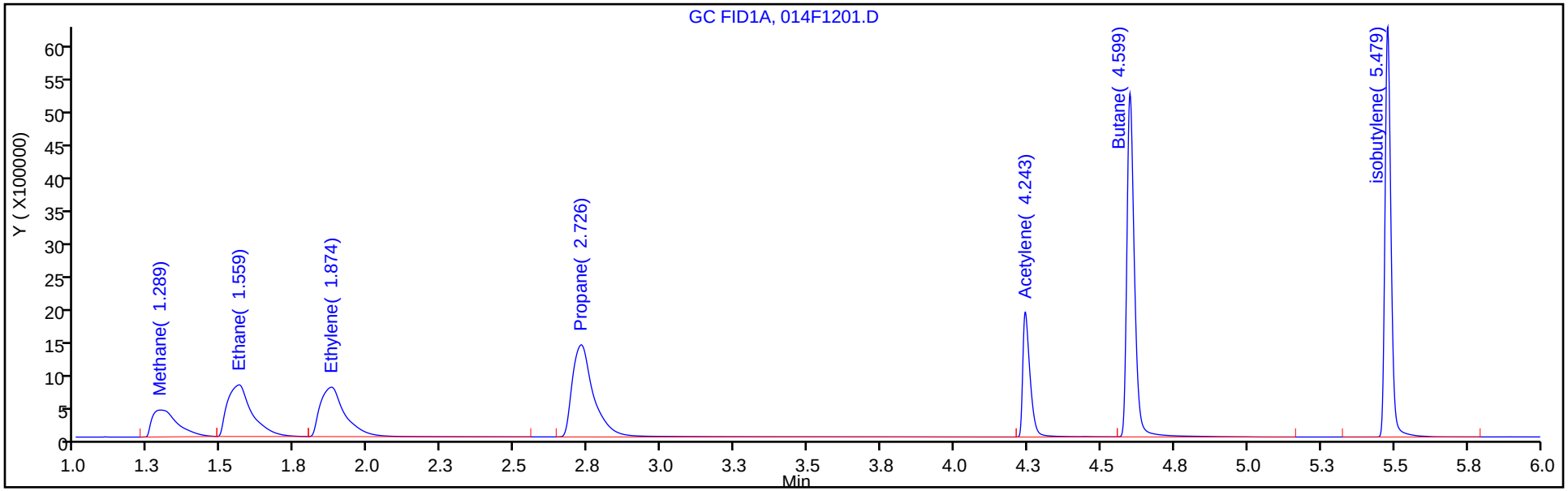
Report Date: 29-Sep-2021 10:58:13 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

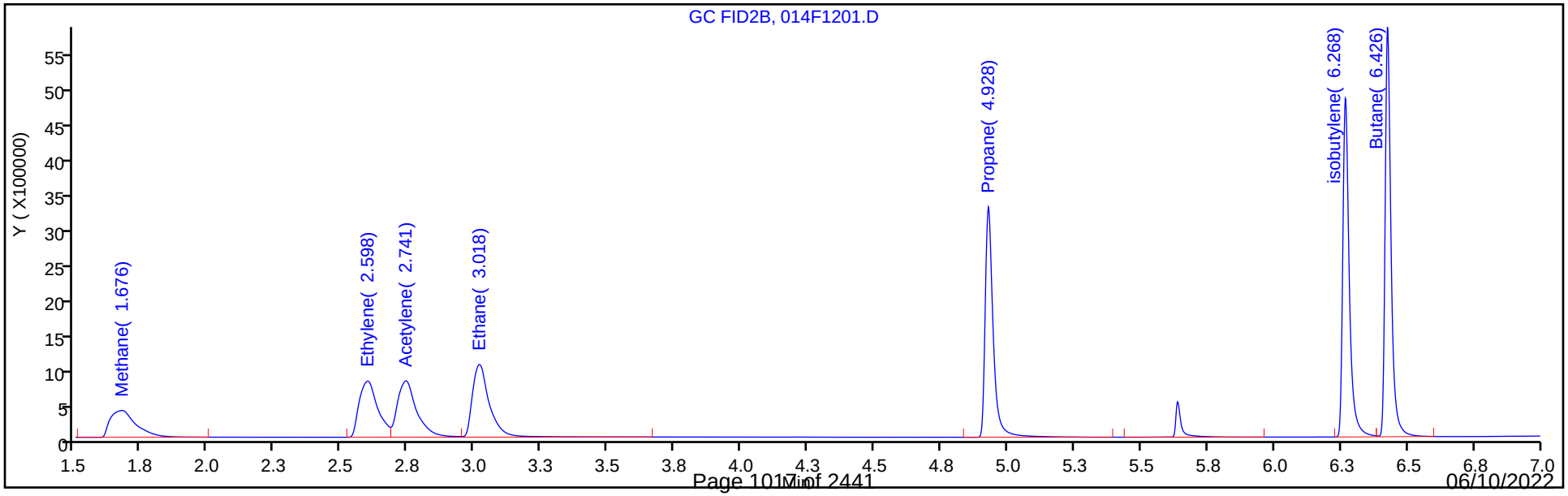
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\014F1201.D

Injection Date:	24-Sep-2021 15:38:59	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ICV			Worklist Smp#:	13
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCVRT 280-576662/2 Calibration Date: 06/01/2022 09:45

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 002F0201.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		34841		63.2	65.7	-3.8	20.0
Ethane	Ave	33241	33899		126	123	2.0	20.0
Ethylene	Ave	35226	35013		114	115	-0.6	20.0
Acetylene	Ave	28139	28691		109	107	2.0	20.0

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCVRT 280-576768/2 Calibration Date: 06/01/2022 09:45

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 002F0201.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		34841		63.2	65.7	-3.8	20.0
Ethane	Ave	33241	33899		126	123	2.0	20.0
Ethylene	Ave	35226	35013		114	115	-0.6	20.0
Acetylene	Ave	28139	28691		109	107	2.0	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCVRT 280-576662/2 Calibration Date: 06/01/2022 09:45

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 002F0201.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.27	1.23	1.31
Ethane	1.51	1.46	1.56
Ethylene	1.75	1.70	1.80
Acetylene	3.96	3.88	4.04

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCVRT 280-576768/2 Calibration Date: 06/01/2022 09:45

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 002F0201.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.27	1.23	1.31
Ethane	1.51	1.46	1.56
Ethylene	1.75	1.70	1.80
Acetylene	3.96	3.88	4.04

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\002F0201.D
Lims ID: ccvrt
Client ID:
Sample Type: CCVRT
Inject. Date: 01-Jun-2022 09:45:35 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccvrt
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Jun-2022 09:24:53 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1606

First Level Reviewer: sciannac Date: 01-Jun-2022 13:18:08

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.269	1.269	0.000	2289157	65.7	63.2	
2	1.682	1.682	0.000	2372038	65.7	64.0	
						RPD = 1.16	
3 Ethane							
1	1.510	1.510	0.000	4175309	123.2	125.6	
2	3.040	3.040	0.000	4446819	123.2	133.2	
						RPD = 5.87	
4 Ethylene							Ma
1	1.750	1.750	0.000	4022982	114.9	114.2	a
2	2.620	2.620	0.000	3651558	114.9	117.9	M
						RPD = 3.16	
5 Propane							a
1	2.469	2.469	0.000	6546424	180.6	181.8	a
2	4.937	4.937	0.000	6279911	180.6	179.4	a
						RPD = 1.34	
6 Acetylene							Ma
1	3.964	3.964	0.000	3060450	106.7	108.8	a
2	2.768	2.768	0.000	3695690	106.7	108.1	M
						RPD = 0.58	
7 Butane							a
1	4.340	4.340	0.000	8729008	238.1	239.7	a
2	6.432	6.432	0.000	8328964	238.1	237.0	a
						RPD = 1.11	
8 isobutylene							a
1	5.245	5.245	0.000	8077906	229.8	223.6	a
2	6.275	6.275	0.000	7284750	229.8	219.4	a
						RPD = 1.90	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\002F0201.D
Lims ID: ccvrt
Client ID:
Sample Type: CCVRT
Inject. Date: 01-Jun-2022 09:45:35 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccvrt
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Jun-2022 09:24:53 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1606

First Level Reviewer: sciannac Date: 01-Jun-2022 13:18:08

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.269	1.269	0.000	2289157	65.7	63.2	
2	1.682	1.682	0.000	2372038	65.7	64.0	
						RPD = 1.16	
3 Ethane							
1	1.510	1.510	0.000	4175309	123.2	125.6	
2	3.040	3.040	0.000	4446819	123.2	133.2	
						RPD = 5.87	
4 Ethylene							Ma
1	1.750	1.750	0.000	4022982	114.9	114.2	a
2	2.620	2.620	0.000	3651558	114.9	117.9	M
						RPD = 3.16	
5 Propane							a
1	2.469	2.469	0.000	6546424	180.6	181.8	a
2	4.937	4.937	0.000	6279911	180.6	179.4	a
						RPD = 1.34	
6 Acetylene							Ma
1	3.964	3.964	0.000	3060450	106.7	108.8	a
2	2.768	2.768	0.000	3695690	106.7	108.1	M
						RPD = 0.58	
7 Butane							a
1	4.340	4.340	0.000	8729008	238.1	239.7	a
2	6.432	6.432	0.000	8328964	238.1	237.0	a
						RPD = 1.11	
8 isobutylene							a
1	5.245	5.245	0.000	8077906	229.8	223.6	a
2	6.275	6.275	0.000	7284750	229.8	219.4	a
						RPD = 1.90	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

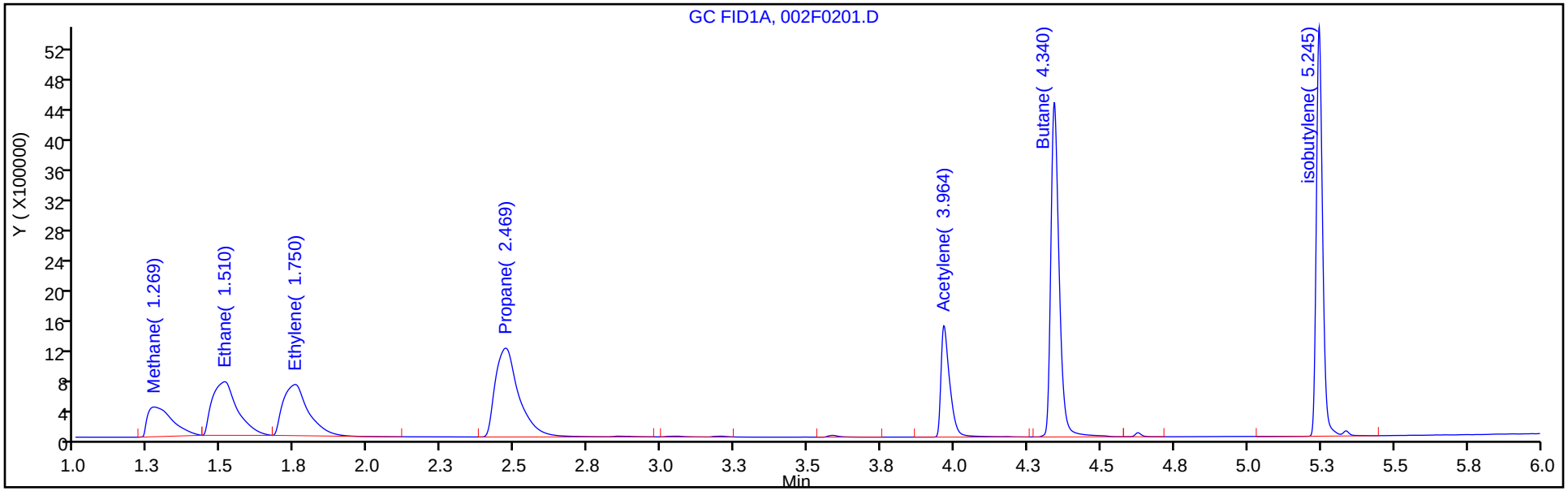
Report Date: 03-Jun-2022 09:24:54 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

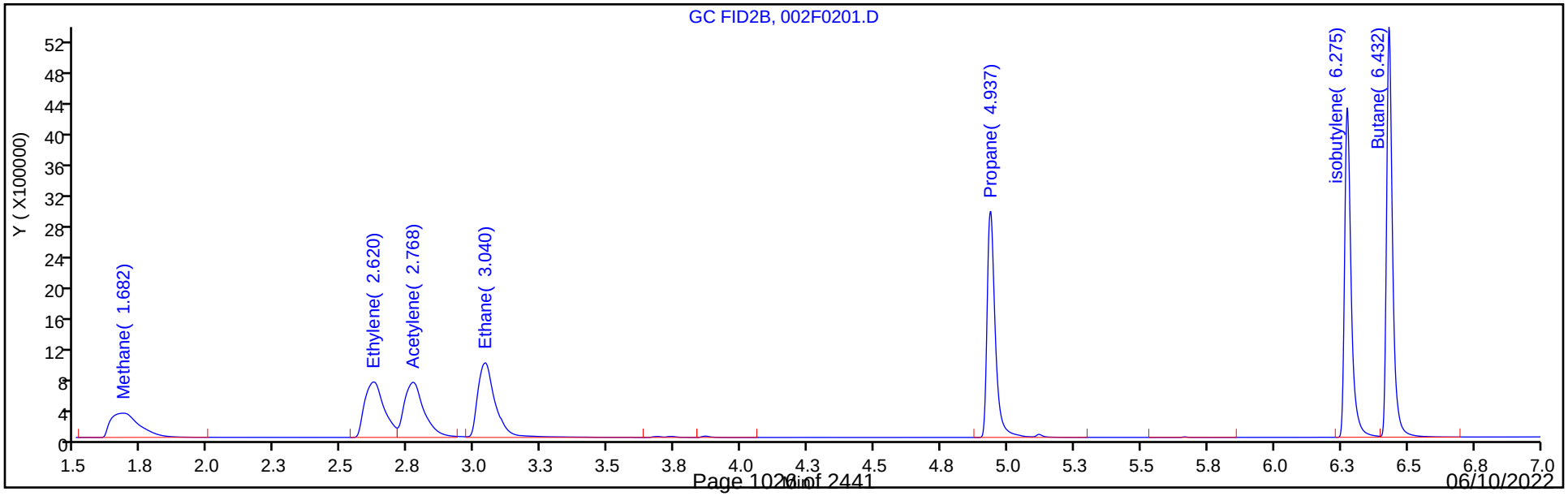
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\002F0201.D

Injection Date:	01-Jun-2022 09:45:35	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccvrt			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



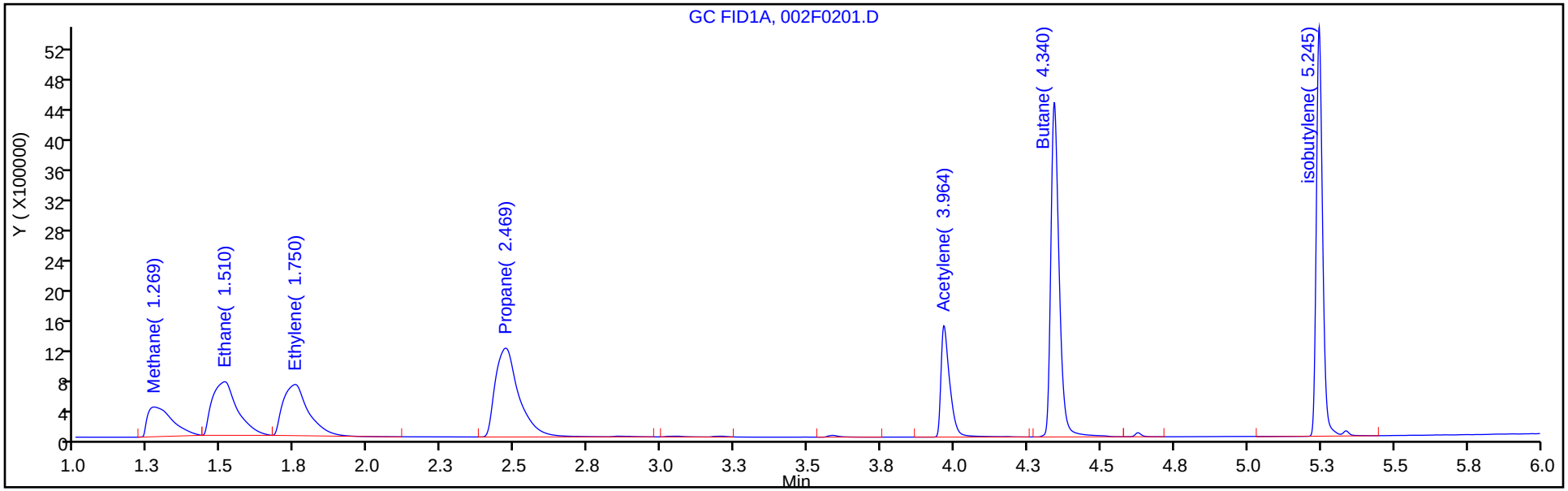
Report Date: 03-Jun-2022 09:24:53 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

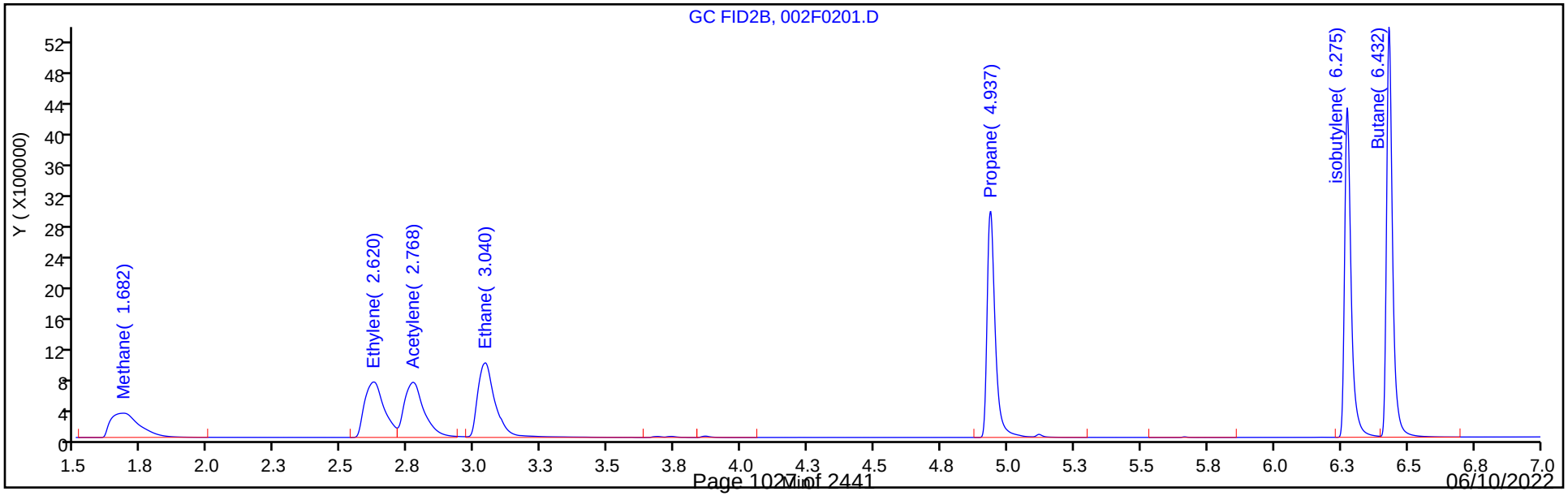
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\002F0201.D

Injection Date:	01-Jun-2022 09:45:35	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccvrt			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 Denver

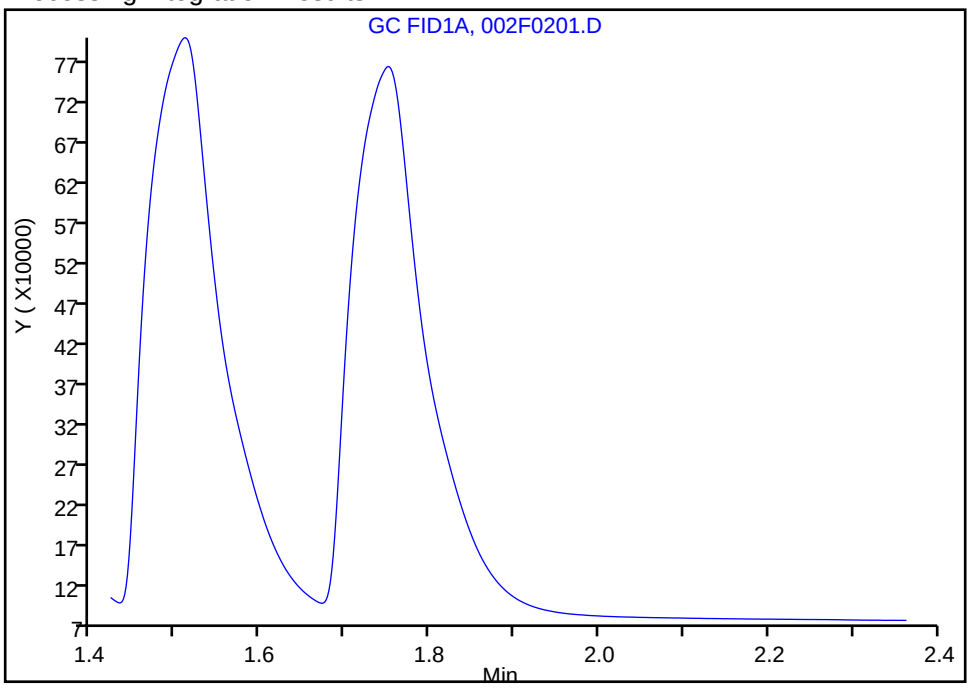
Data File:	\\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\002F0201.D				
Injection Date:	01-Jun-2022 09:45:35	Instrument ID:	VGC_J		
Lims ID:	ccvrt				
Client ID:					
Operator ID:	sciannac	ALS Bottle#:	2	Worklist Smp#:	2
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

4 Ethylene, CAS: 74-85-1

Signal: 1

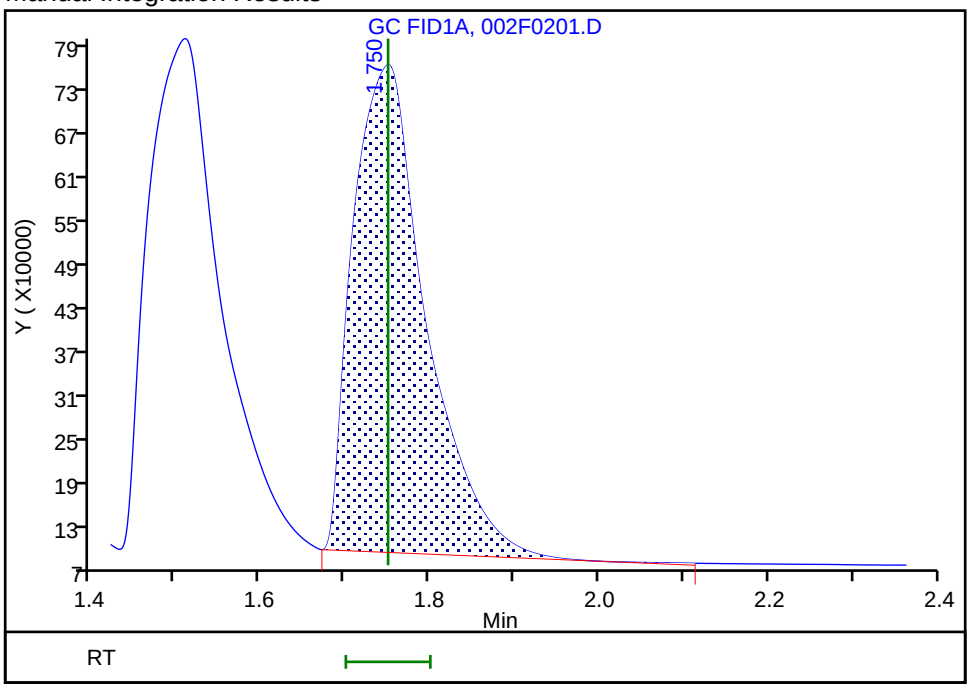
Not Detected
Expected RT: 1.75

Processing Integration Results



Manual Integration Results

RT: 1.75
Area: 4022982
Amount: 114.2050
Amount Units: ug/l



Reviewer: sciannac, 01-Jun-2022 13:17:40
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Denver

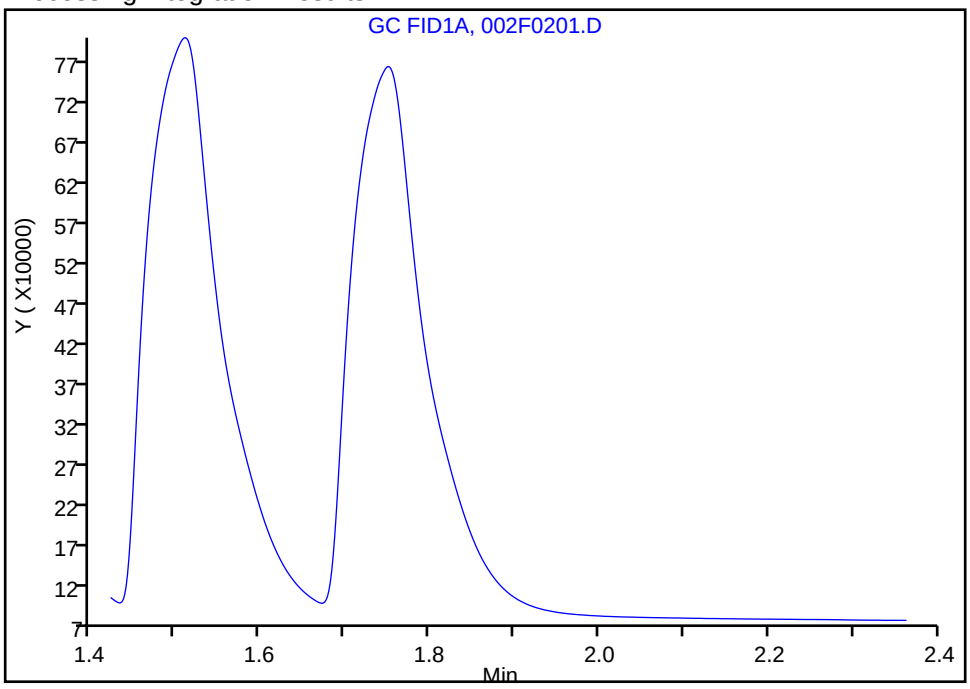
Data File:	\\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\002F0201.D				
Injection Date:	01-Jun-2022 09:45:35	Instrument ID:	VGC_J		
Lims ID:	ccvrt				
Client ID:					
Operator ID:	sciannac	ALS Bottle#:	2	Worklist Smp#:	2
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

4 Ethylene, CAS: 74-85-1

Signal: 1

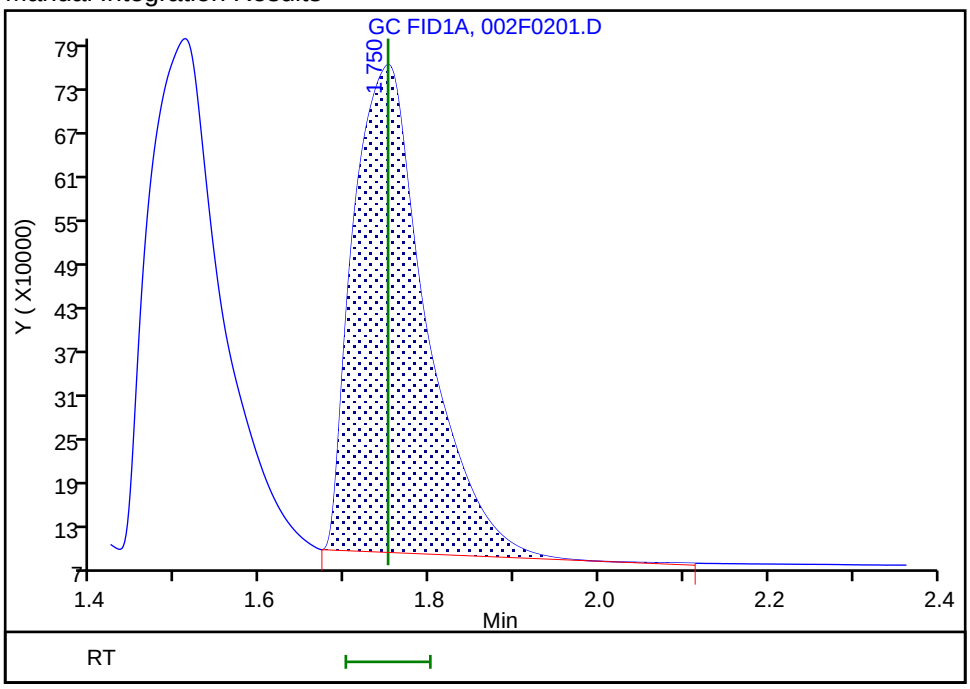
Not Detected
Expected RT: 1.75

Processing Integration Results



Manual Integration Results

RT: 1.75
Area: 4022982
Amount: 114.2050
Amount Units: ug/l



Reviewer: sciannac, 01-Jun-2022 13:17:40
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Denver

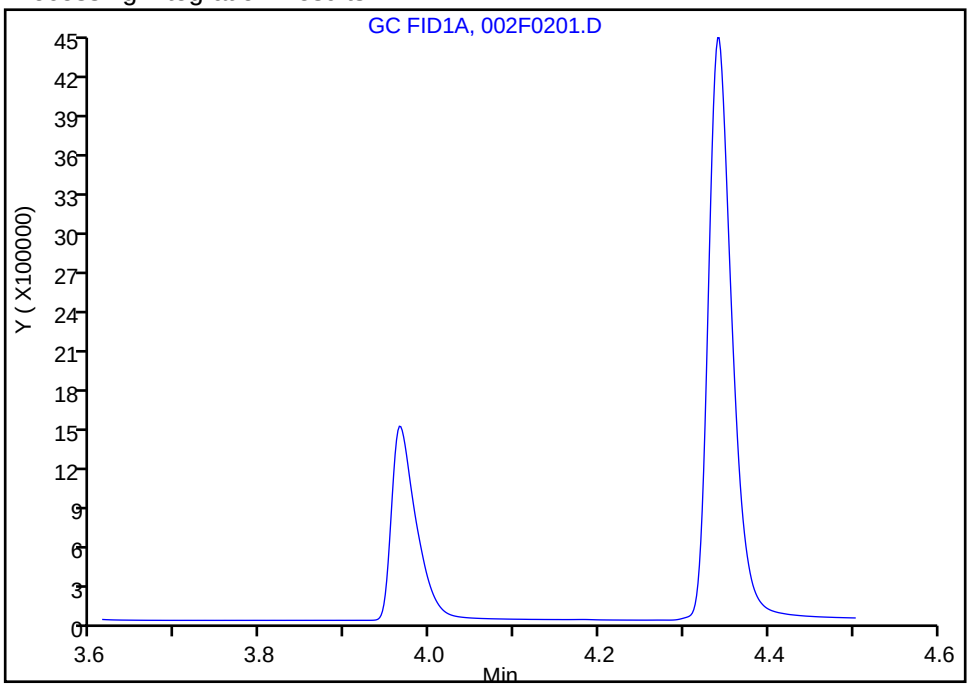
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\002F0201.D
Injection Date: 01-Jun-2022 09:45:35 Instrument ID: VGC_J
Lims ID: ccvrt
Client ID:
Operator ID: sciannac ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

6 Acetylene, CAS: 74-86-2

Signal: 1

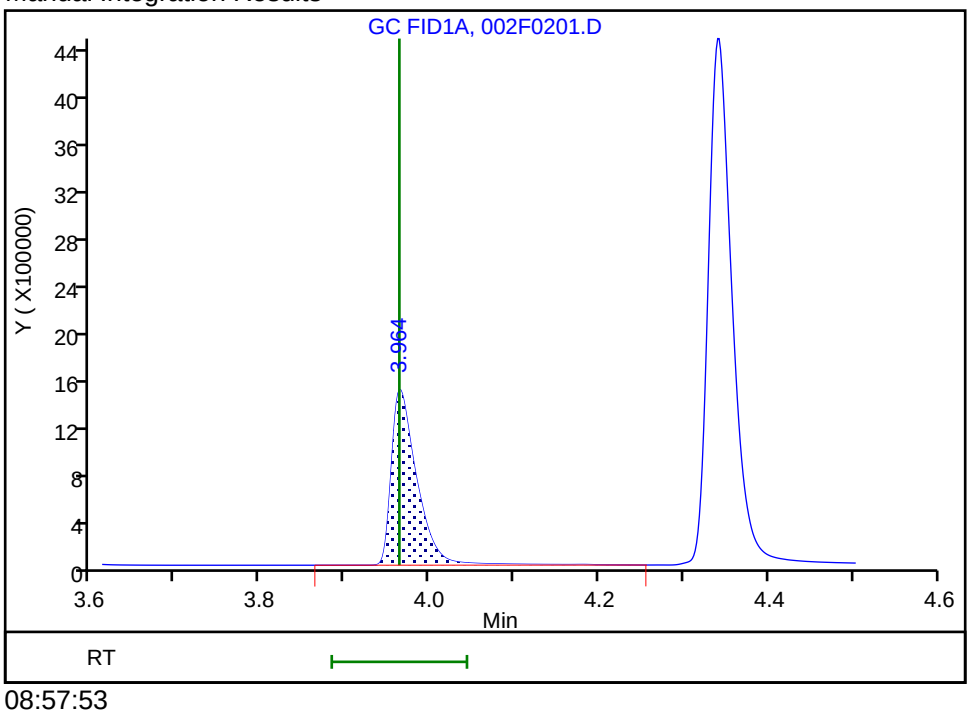
Not Detected
Expected RT: 3.96

Processing Integration Results



Manual Integration Results

RT: 3.96
Area: 3060450
Amount: 108.7618
Amount Units: ug/l



Reviewer: sciannac, 03-Jun-2022 08:57:53
Audit Action: Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Denver

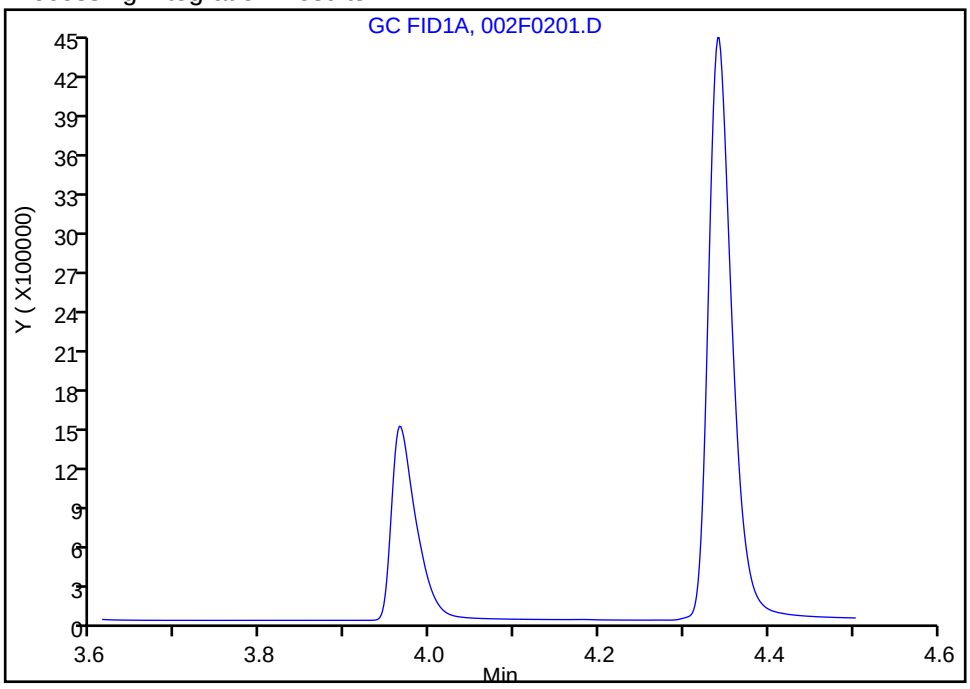
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\002F0201.D
Injection Date: 01-Jun-2022 09:45:35 Instrument ID: VGC_J
Lims ID: ccvrt
Client ID:
Operator ID: sciannac ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

6 Acetylene, CAS: 74-86-2

Signal: 1

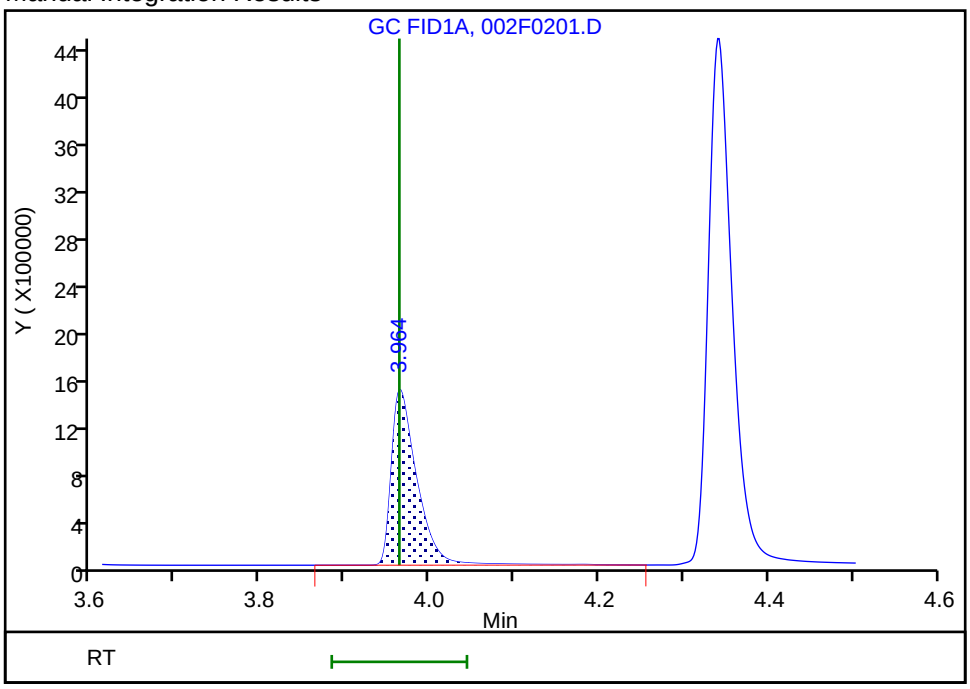
Not Detected
Expected RT: 3.96

Processing Integration Results



Manual Integration Results

RT: 3.96
Area: 3060450
Amount: 108.7618
Amount Units: ug/l



Reviewer: sciannac, 03-Jun-2022 08:57:53
Audit Action: Assigned Compound ID Audit Reason: Split Peak

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCVRT 280-576662/2 Calibration Date: 06/01/2022 09:45

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 002F0201.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		36102		64.0	65.7	-2.6	20.0
Ethylene	Ave	30980	31780		118	115	2.6	20.0
Acetylene	Ave	34179	34646		108	107	1.4	20.0
Ethane	Ave	33383	36103		133	123	8.1	20.0

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCVRT 280-576768/2 Calibration Date: 06/01/2022 09:45

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 002F0201.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		36102		64.0	65.7	-2.6	20.0
Ethylene	Ave	30980	31780		118	115	2.6	20.0
Acetylene	Ave	34179	34646		108	107	1.4	20.0
Ethane	Ave	33383	36103		133	123	8.1	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCVRT 280-576662/2 Calibration Date: 06/01/2022 09:45

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 002F0201.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.68	1.64	1.72
Ethylene	2.62	2.57	2.67
Acetylene	2.77	2.69	2.85
Ethane	3.04	2.99	3.09

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCVRT 280-576768/2 Calibration Date: 06/01/2022 09:45

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 002F0201.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.68	1.64	1.72
Ethylene	2.62	2.57	2.67
Acetylene	2.77	2.69	2.85
Ethane	3.04	2.99	3.09

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\002F0201.D
Lims ID: ccvrt
Client ID:
Sample Type: CCVRT
Inject. Date: 01-Jun-2022 09:45:35 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccvrt
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Jun-2022 09:24:53 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1606

First Level Reviewer: sciannac Date: 01-Jun-2022 13:18:08

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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2	2.620	2.620	0.000	3651558	114.9	117.9	M
						RPD = 3.16	
5 Propane							a
1	2.469	2.469	0.000	6546424	180.6	181.8	a
2	4.937	4.937	0.000	6279911	180.6	179.4	a
						RPD = 1.34	
6 Acetylene							Ma
1	3.964	3.964	0.000	3060450	106.7	108.8	a
2	2.768	2.768	0.000	3695690	106.7	108.1	M
						RPD = 0.58	
7 Butane							a
1	4.340	4.340	0.000	8729008	238.1	239.7	a
2	6.432	6.432	0.000	8328964	238.1	237.0	a
						RPD = 1.11	
8 isobutylene							a
1	5.245	5.245	0.000	8077906	229.8	223.6	a
2	6.275	6.275	0.000	7284750	229.8	219.4	a
						RPD = 1.90	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\002F0201.D
Lims ID: ccvrt
Client ID:
Sample Type: CCVRT
Inject. Date: 01-Jun-2022 09:45:35 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccvrt
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Jun-2022 09:24:53 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1606

First Level Reviewer: sciannac Date: 01-Jun-2022 13:18:08

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.269	1.269	0.000	2289157	65.7	63.2	
2	1.682	1.682	0.000	2372038	65.7	64.0	
						RPD = 1.16	
3 Ethane							
1	1.510	1.510	0.000	4175309	123.2	125.6	
2	3.040	3.040	0.000	4446819	123.2	133.2	
						RPD = 5.87	
4 Ethylene							Ma
1	1.750	1.750	0.000	4022982	114.9	114.2	a
2	2.620	2.620	0.000	3651558	114.9	117.9	M
						RPD = 3.16	
5 Propane							a
1	2.469	2.469	0.000	6546424	180.6	181.8	a
2	4.937	4.937	0.000	6279911	180.6	179.4	a
						RPD = 1.34	
6 Acetylene							Ma
1	3.964	3.964	0.000	3060450	106.7	108.8	a
2	2.768	2.768	0.000	3695690	106.7	108.1	M
						RPD = 0.58	
7 Butane							a
1	4.340	4.340	0.000	8729008	238.1	239.7	a
2	6.432	6.432	0.000	8328964	238.1	237.0	a
						RPD = 1.11	
8 isobutylene							a
1	5.245	5.245	0.000	8077906	229.8	223.6	a
2	6.275	6.275	0.000	7284750	229.8	219.4	a
						RPD = 1.90	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

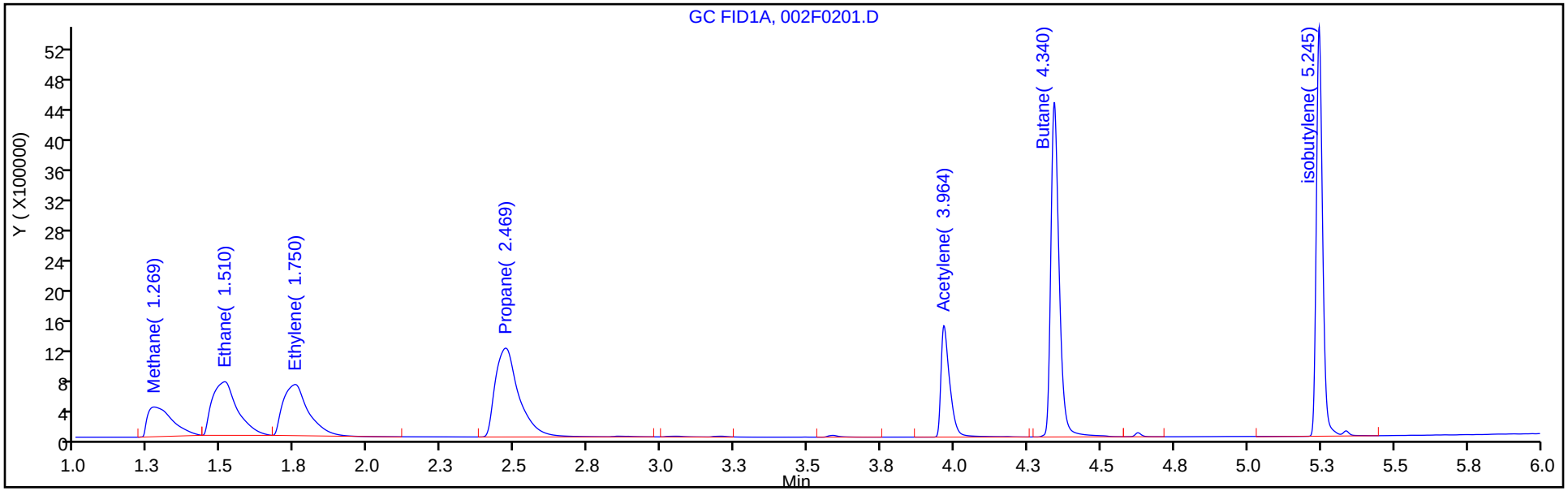
Report Date: 03-Jun-2022 09:24:54 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

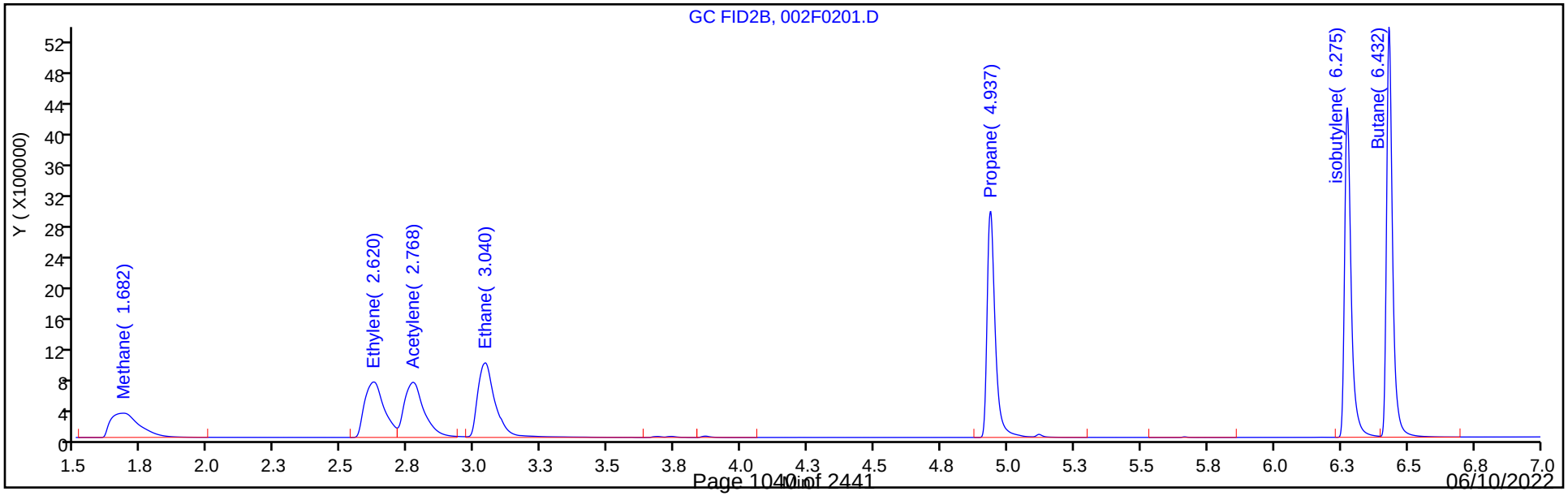
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\002F0201.D

Injection Date:	01-Jun-2022 09:45:35	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccvrt			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



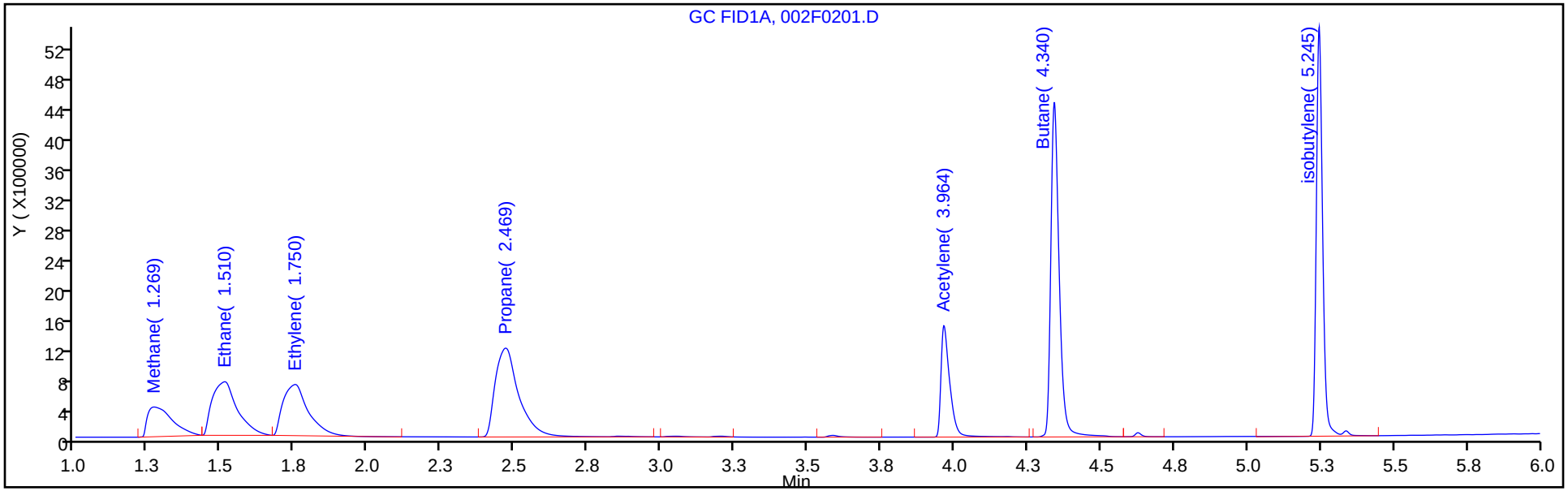
Report Date: 03-Jun-2022 09:24:54 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

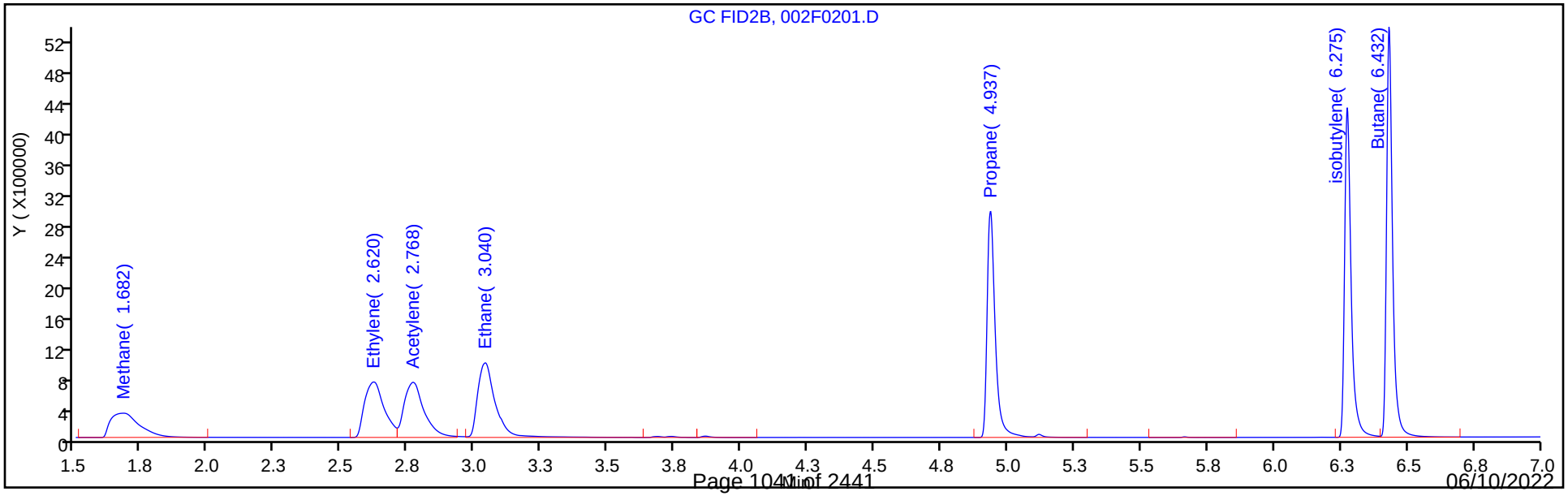
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\002F0201.D

Injection Date:	01-Jun-2022 09:45:35	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccvrt			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 Denver

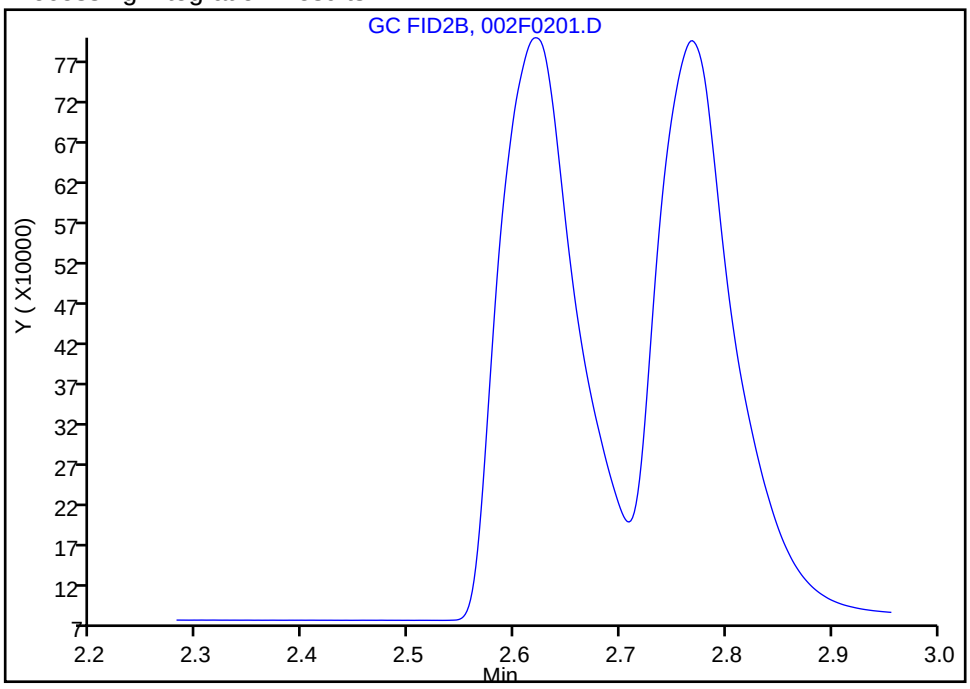
Data File:	\\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\002F0201.D				
Injection Date:	01-Jun-2022 09:45:35	Instrument ID:	VGC_J		
Lims ID:	ccvrt				
Client ID:					
Operator ID:	sciannac	ALS Bottle#:	2	Worklist Smp#:	2
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

4 Ethylene, CAS: 74-85-1

Signal: 2

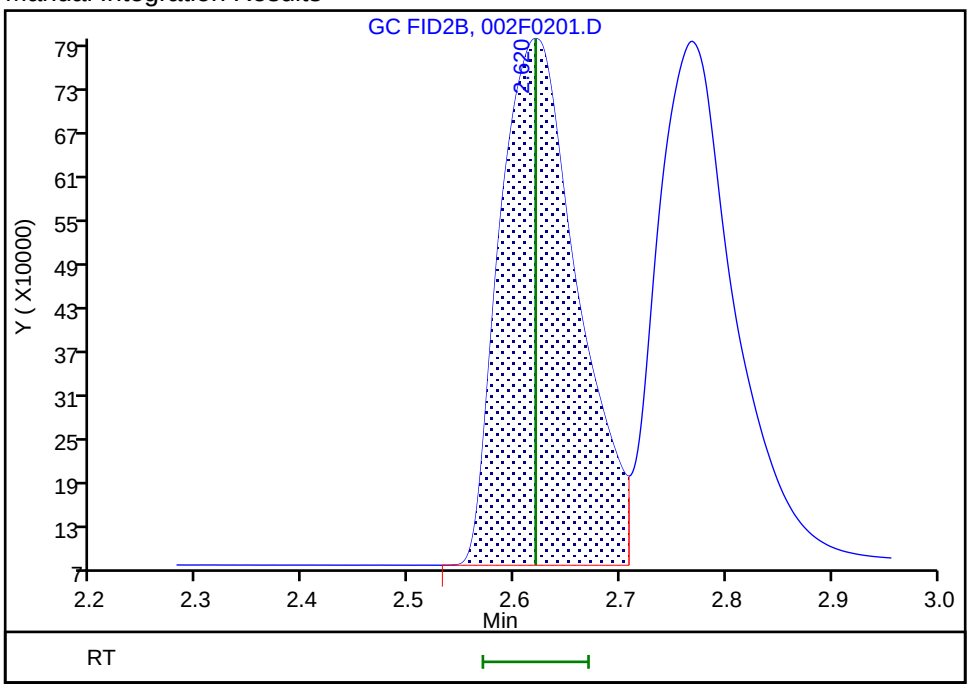
Not Detected
Expected RT: 2.62

Processing Integration Results



Manual Integration Results

RT: 2.62
Area: 3651558
Amount: 117.8672
Amount Units: ug/l



Reviewer: sciannac, 03-Jun-2022 08:58:22
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Denver

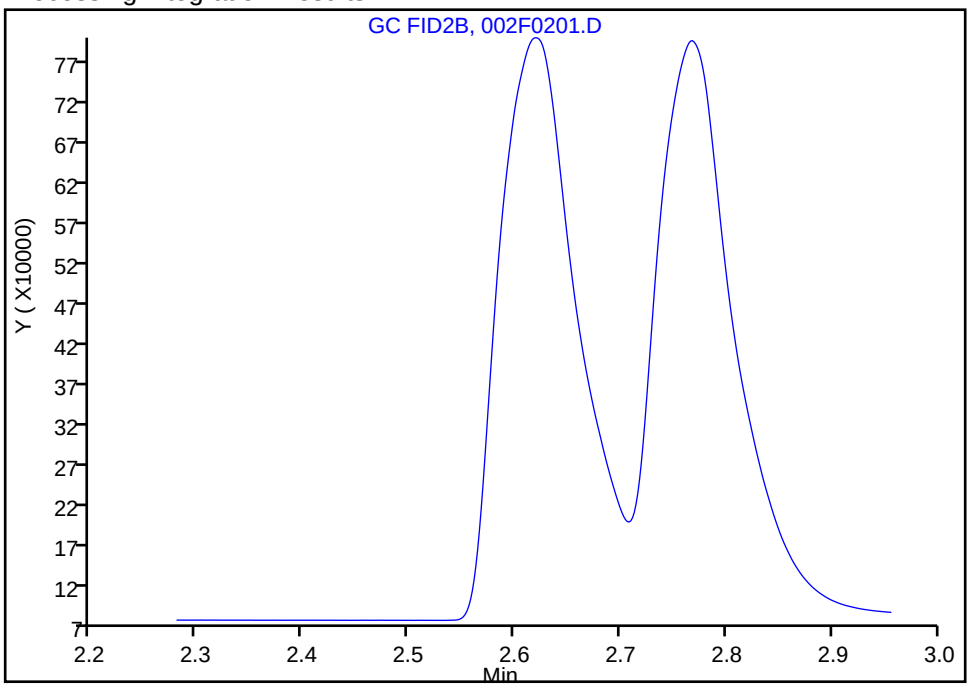
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\002F0201.D
Injection Date: 01-Jun-2022 09:45:35 Instrument ID: VGC_J
Lims ID: ccvrt
Client ID:
Operator ID: sciannac ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

4 Ethylene, CAS: 74-85-1

Signal: 2

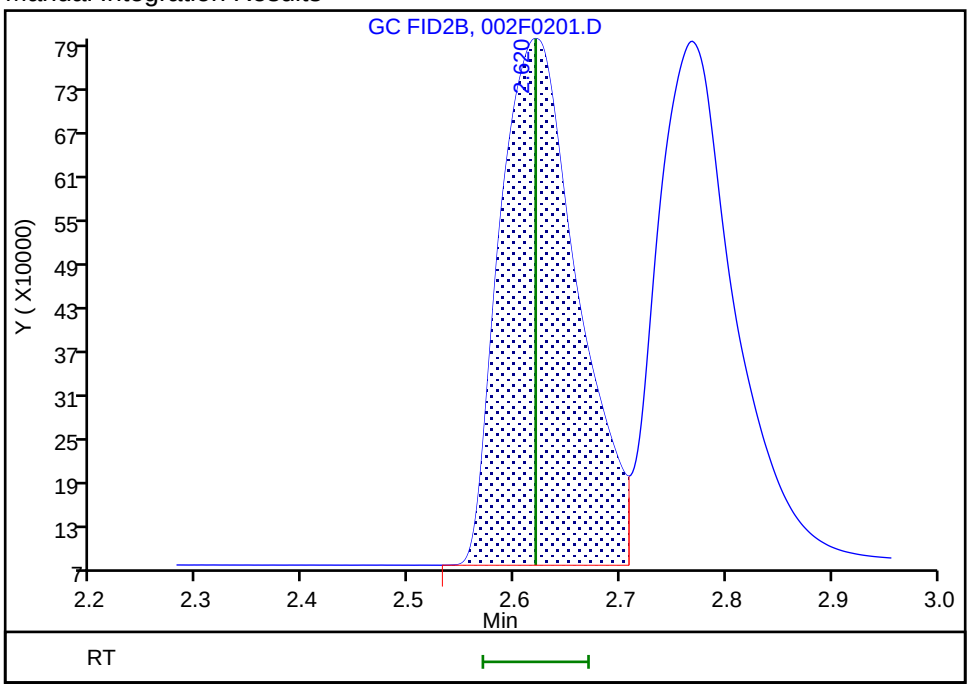
Not Detected
Expected RT: 2.62

Processing Integration Results



Manual Integration Results

RT: 2.62
Area: 3651558
Amount: 117.8672
Amount Units: ug/l



Reviewer: sciannac, 03-Jun-2022 08:58:22
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Denver

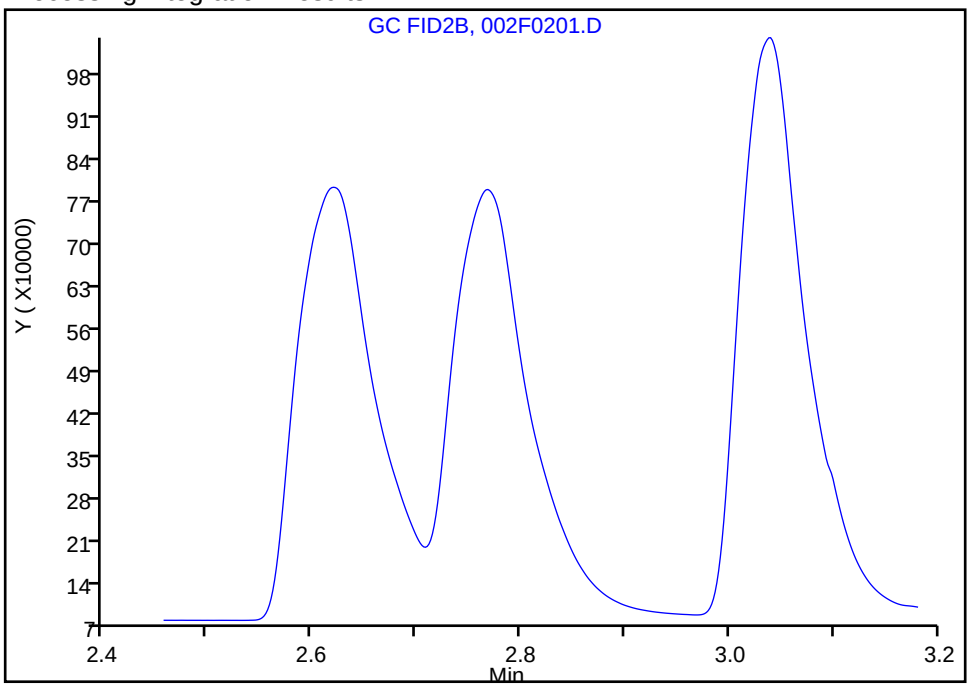
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\002F0201.D
Injection Date: 01-Jun-2022 09:45:35 Instrument ID: VGC_J
Lims ID: ccvrt
Client ID:
Operator ID: sciannac ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

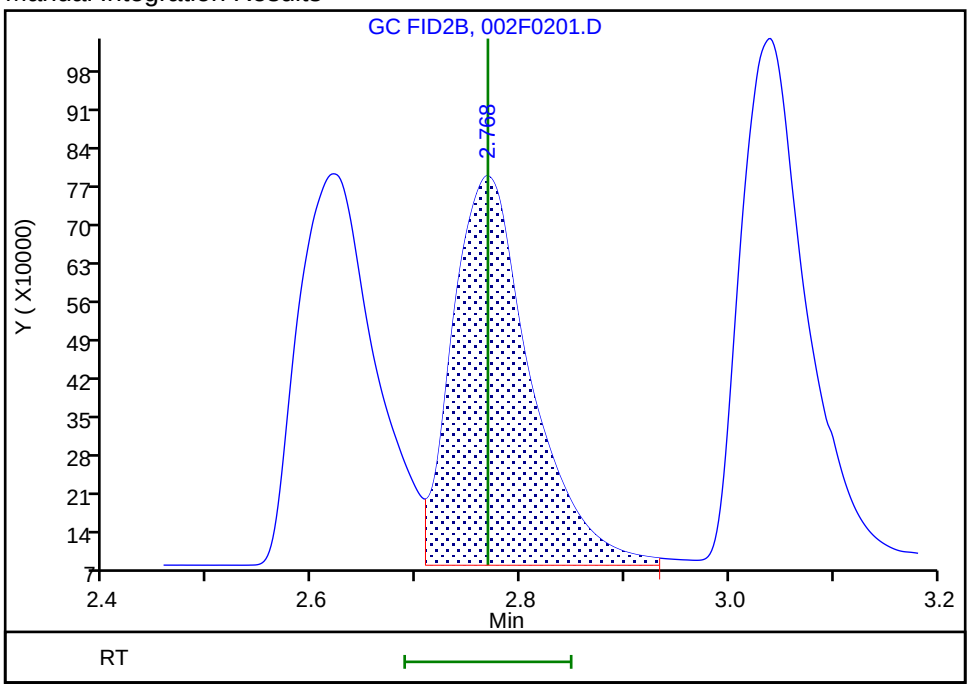
Not Detected
Expected RT: 2.77

Processing Integration Results



Manual Integration Results

RT: 2.77
Area: 3695690
Amount: 108.1282
Amount Units: ug/l



Reviewer: sciannac, 03-Jun-2022 08:57:55
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Denver

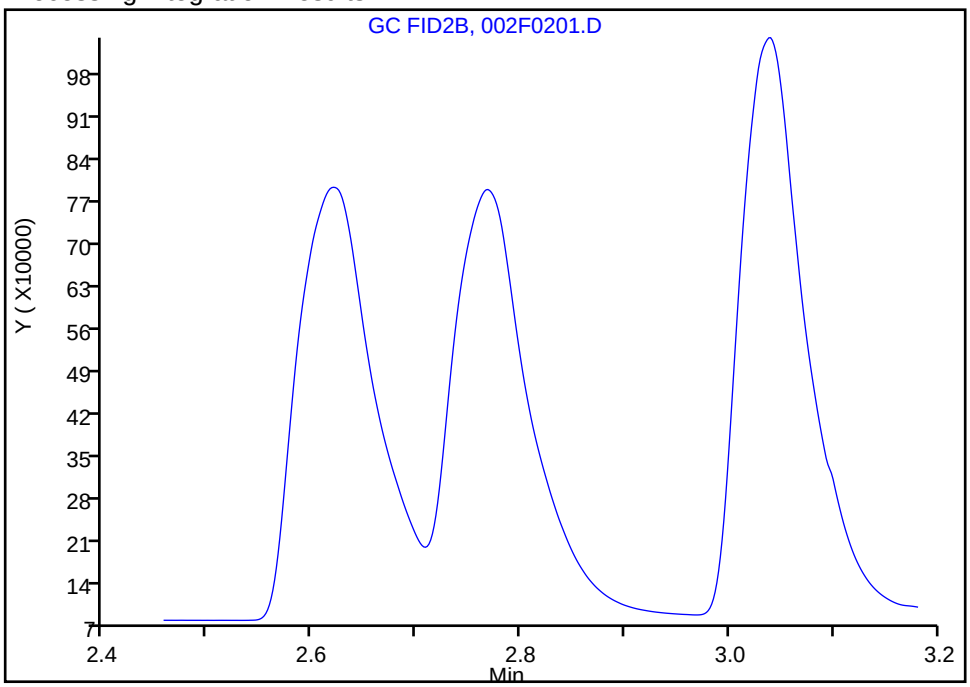
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\002F0201.D
Injection Date: 01-Jun-2022 09:45:35 Instrument ID: VGC_J
Lims ID: ccvrt
Client ID:
Operator ID: sciannac ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

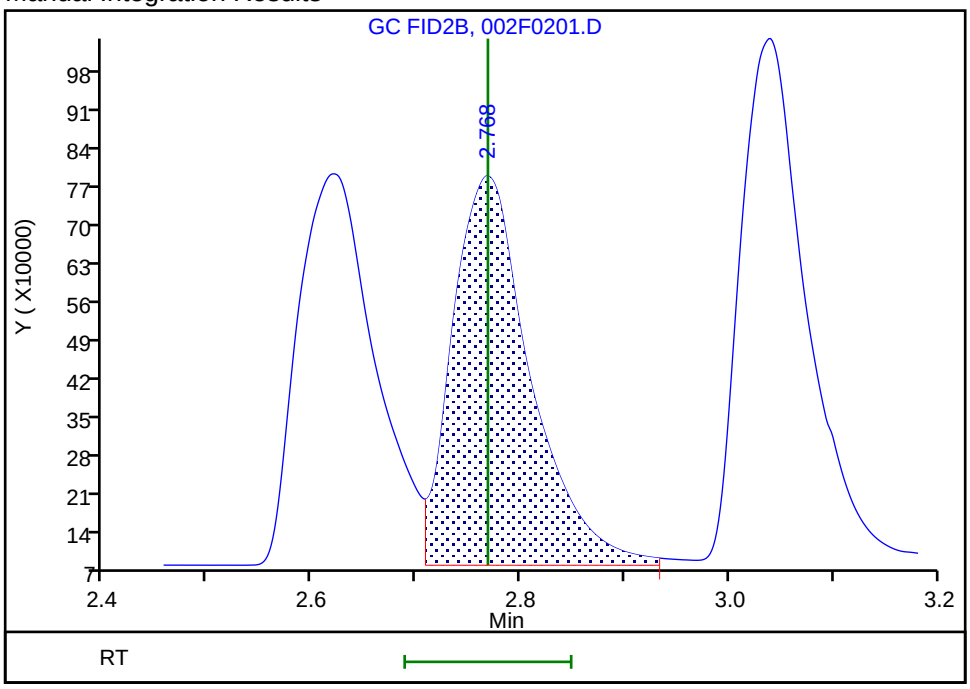
Not Detected
Expected RT: 2.77

Processing Integration Results



Manual Integration Results

RT: 2.77
Area: 3695690
Amount: 108.1282
Amount Units: ug/l



Reviewer: sciannac, 03-Jun-2022 08:57:55
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Split Peak

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576662/46 Calibration Date: 06/01/2022 12:59

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 017F1701.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		34933		63.4	65.7	-3.5	20.0
Ethane	Ave	33241	33561		124	123	1.0	20.0
Ethylene	Ave	35226	34334		112	115	-2.5	20.0
Acetylene	Ave	28139	26305		99.7	107	-6.5	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576662/46 Calibration Date: 06/01/2022 12:59

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 017F1701.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.26	1.23	1.31
Ethane	1.53	1.46	1.56
Ethylene	1.83	1.70	1.80
Acetylene	4.21	3.88	4.04

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\017F1701.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 01-Jun-2022 12:59:42 ALS Bottle#: 17 Worklist Smp#: 46
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Jun-2022 09:25:02 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1606

First Level Reviewer: sciannac Date: 03-Jun-2022 09:00:37

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.261	1.269	-0.008	2295203	65.7	63.4	
2	1.666	1.682	-0.016	2278051	65.7	61.4	
						RPD = 3.27	
3 Ethane							
1	1.529	1.510	0.019	4133660	123.2	124.4	
2	3.022	3.040	-0.018	4247819	123.2	127.2	
						RPD = 2.30	
4 Ethylene							a
1	1.834	1.750	0.084	3944931	114.9	112.0	a
2	2.604	2.620	-0.016	3459163	114.9	111.7	a
						RPD = 0.30	
5 Propane							
1	2.634	2.469	0.165	6097772	180.6	169.3	
2	4.929	4.937	-0.008	5857501	180.6	167.3	
						RPD = 1.21	
6 Acetylene							a
1	4.208	3.964	0.244	2805981	106.7	99.7	a
2	2.752	2.768	-0.016	3537089	106.7	103.5	a
						RPD = 3.71	
7 Butane							
1	4.506	4.340	0.166	7848770	238.1	215.5	
2	6.427	6.432	-0.005	7368154	238.1	209.7	
						RPD = 2.73	
8 isobutylene							
1	5.408	5.245	0.163	7134343	229.8	197.5	
2	6.271	6.275	-0.004	6439169	229.8	193.9	
						RPD = 1.82	

QC Flag Legend

Processing Flags

Review Flags

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

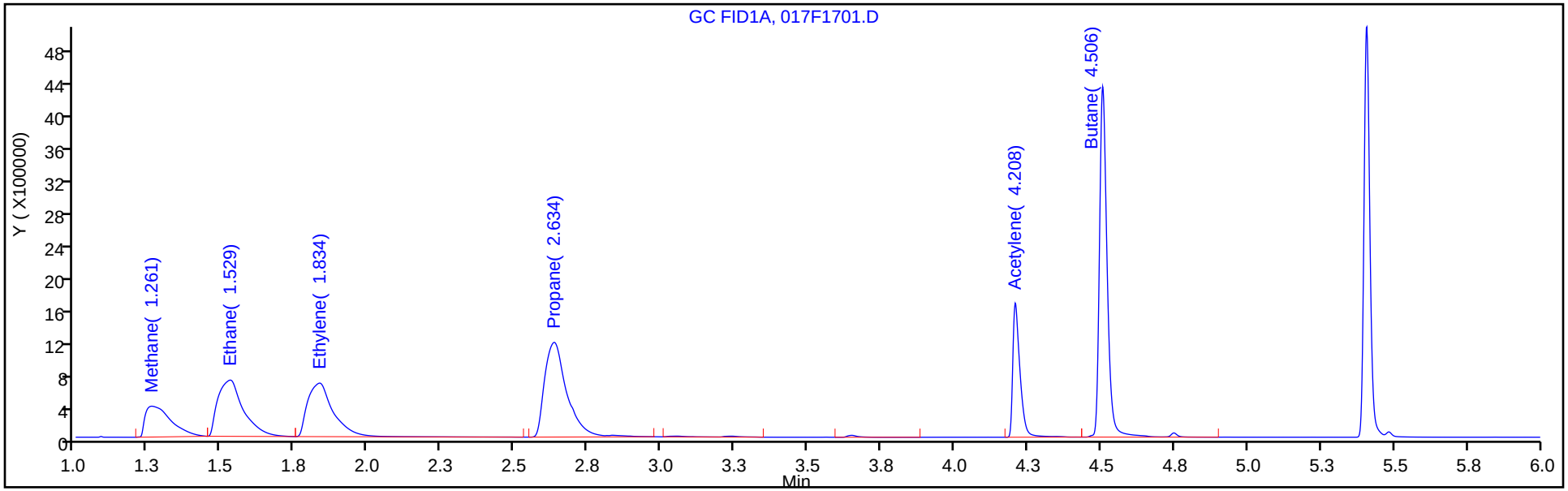
Report Date: 03-Jun-2022 09:25:02 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

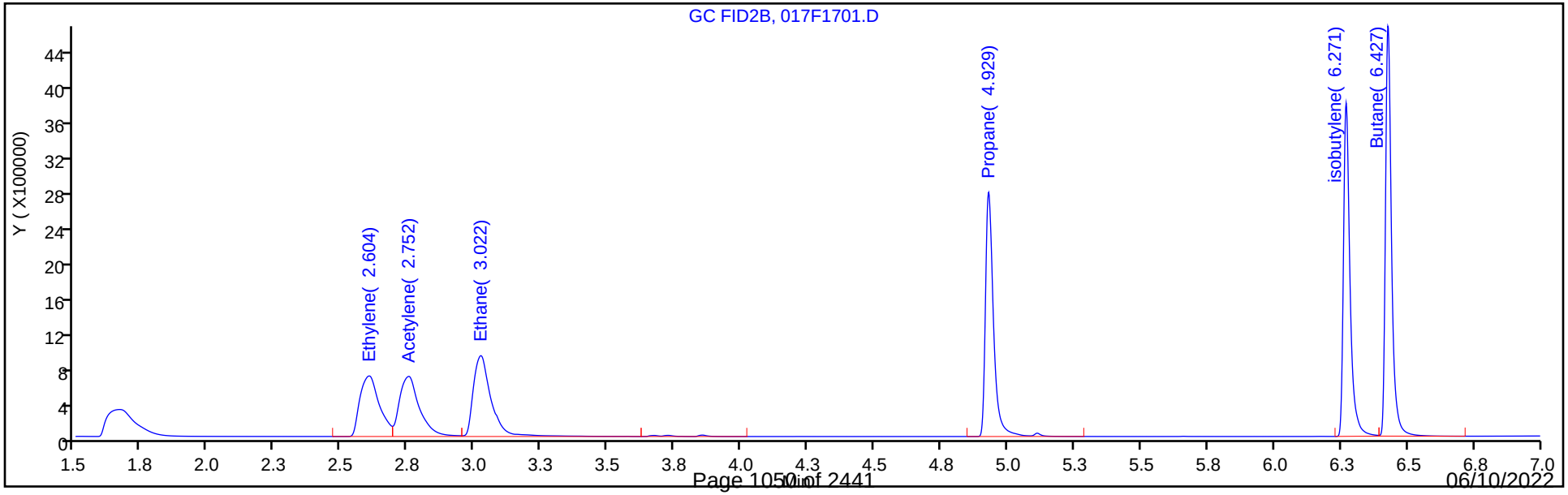
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\017F1701.D

Injection Date:	01-Jun-2022 12:59:42	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccv			Worklist Smp#:	46
Client ID:					
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 Denver

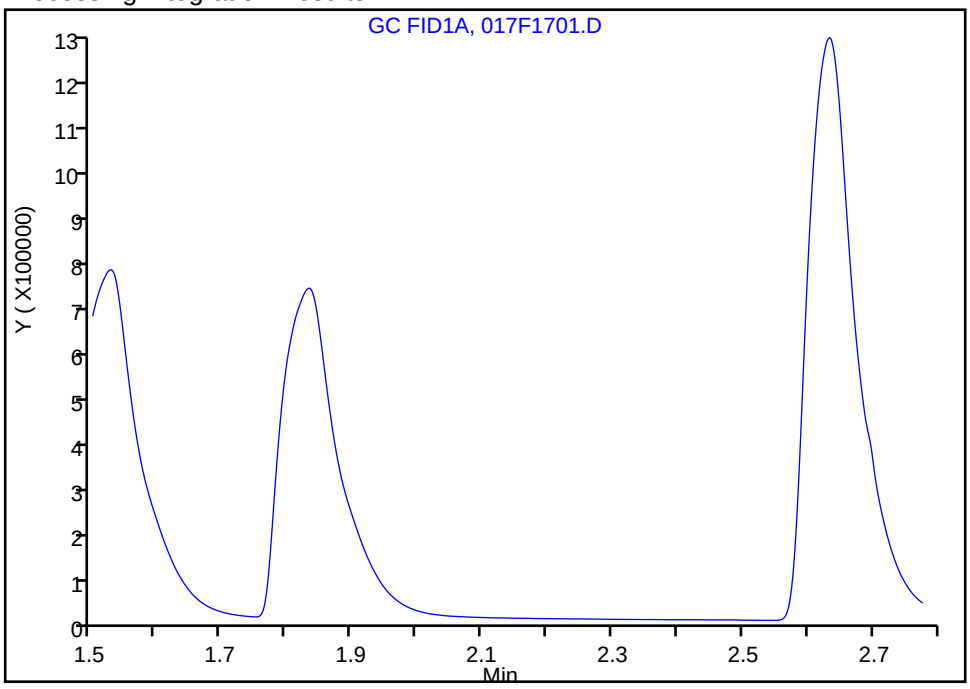
Data File:	\\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\017F1701.D				
Injection Date:	01-Jun-2022 12:59:42	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	sciannac	ALS Bottle#:	17	Worklist Smp#:	46
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

4 Ethylene, CAS: 74-85-1

Signal: 1

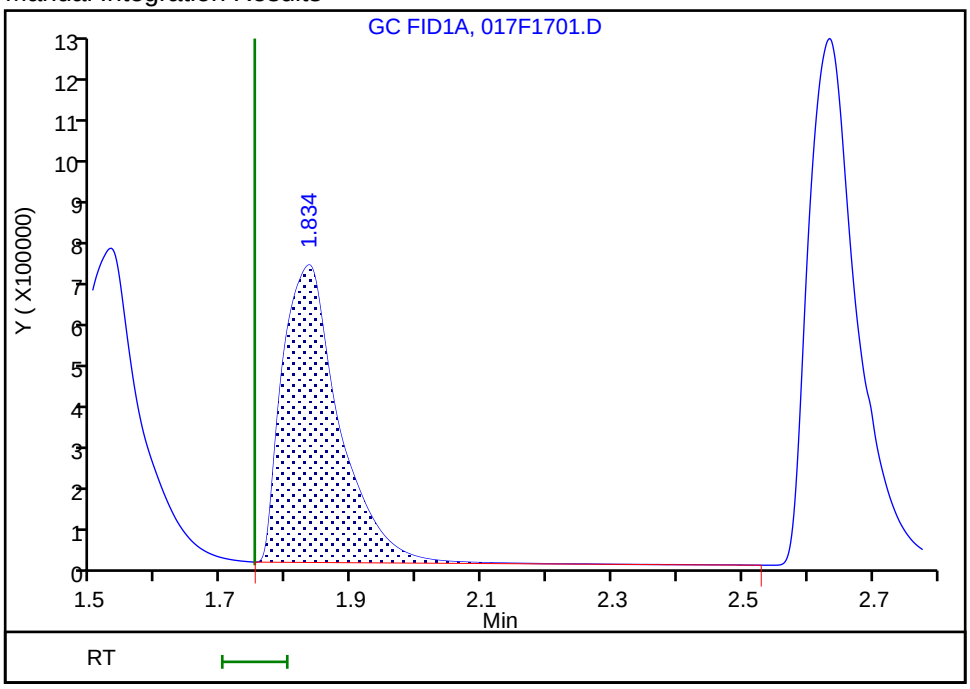
Not Detected
Expected RT: 1.75

Processing Integration Results



Manual Integration Results

RT: 1.83
Area: 3944931
Amount: 111.9893
Amount Units: ug/l



Reviewer: sciannac, 03-Jun-2022 09:00:28
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Denver

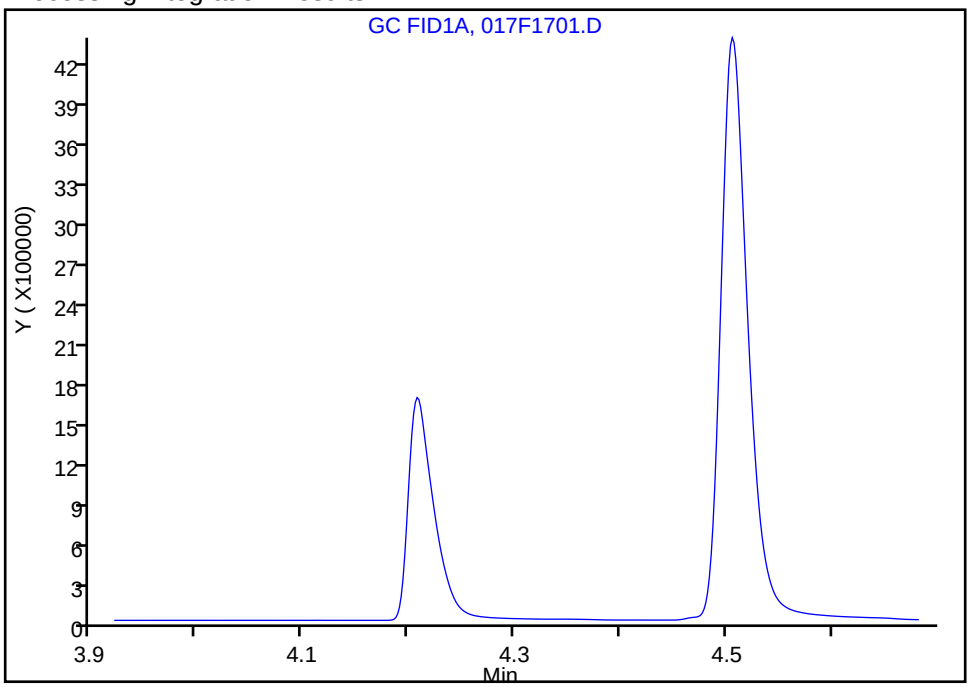
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\017F1701.D
Injection Date: 01-Jun-2022 12:59:42 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: sciannac ALS Bottle#: 17 Worklist Smp#: 46
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

6 Acetylene, CAS: 74-86-2

Signal: 1

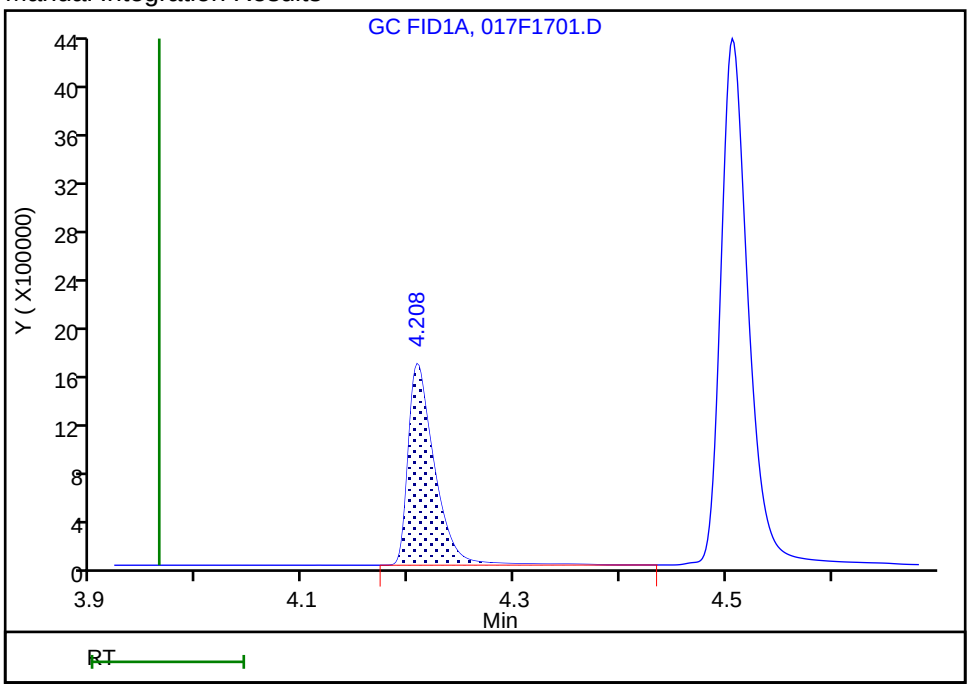
Not Detected
Expected RT: 3.96

Processing Integration Results



Manual Integration Results

RT: 4.21
Area: 2805981
Amount: 99.718507
Amount Units: ug/l



Reviewer: sciannac, 03-Jun-2022 09:00:22
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576662/46 Calibration Date: 06/01/2022 12:59

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 017F1701.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		34672		61.4	65.7	-6.6	20.0
Ethylene	Ave	30980	30106		112	115	-2.8	20.0
Acetylene	Ave	34179	33159		103	107	-3.0	20.0
Ethane	Ave	33383	34487		127	123	3.3	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576662/46 Calibration Date: 06/01/2022 12:59

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 017F1701.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.67	1.64	1.72
Ethylene	2.60	2.57	2.67
Acetylene	2.75	2.69	2.85
Ethane	3.02	2.99	3.09

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\017F1701.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 01-Jun-2022 12:59:42 ALS Bottle#: 17 Worklist Smp#: 46
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Jun-2022 09:25:02 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1606

First Level Reviewer: sciannac Date: 03-Jun-2022 09:00:37

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.261	1.269	-0.008	2295203	65.7	63.4	
2	1.666	1.682	-0.016	2278051	65.7	61.4	
						RPD = 3.27	
3 Ethane							
1	1.529	1.510	0.019	4133660	123.2	124.4	
2	3.022	3.040	-0.018	4247819	123.2	127.2	
						RPD = 2.30	
4 Ethylene							a
1	1.834	1.750	0.084	3944931	114.9	112.0	a
2	2.604	2.620	-0.016	3459163	114.9	111.7	a
						RPD = 0.30	
5 Propane							
1	2.634	2.469	0.165	6097772	180.6	169.3	
2	4.929	4.937	-0.008	5857501	180.6	167.3	
						RPD = 1.21	
6 Acetylene							a
1	4.208	3.964	0.244	2805981	106.7	99.7	a
2	2.752	2.768	-0.016	3537089	106.7	103.5	a
						RPD = 3.71	
7 Butane							
1	4.506	4.340	0.166	7848770	238.1	215.5	
2	6.427	6.432	-0.005	7368154	238.1	209.7	
						RPD = 2.73	
8 isobutylene							
1	5.408	5.245	0.163	7134343	229.8	197.5	
2	6.271	6.275	-0.004	6439169	229.8	193.9	
						RPD = 1.82	

QC Flag Legend

Processing Flags

Review Flags

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

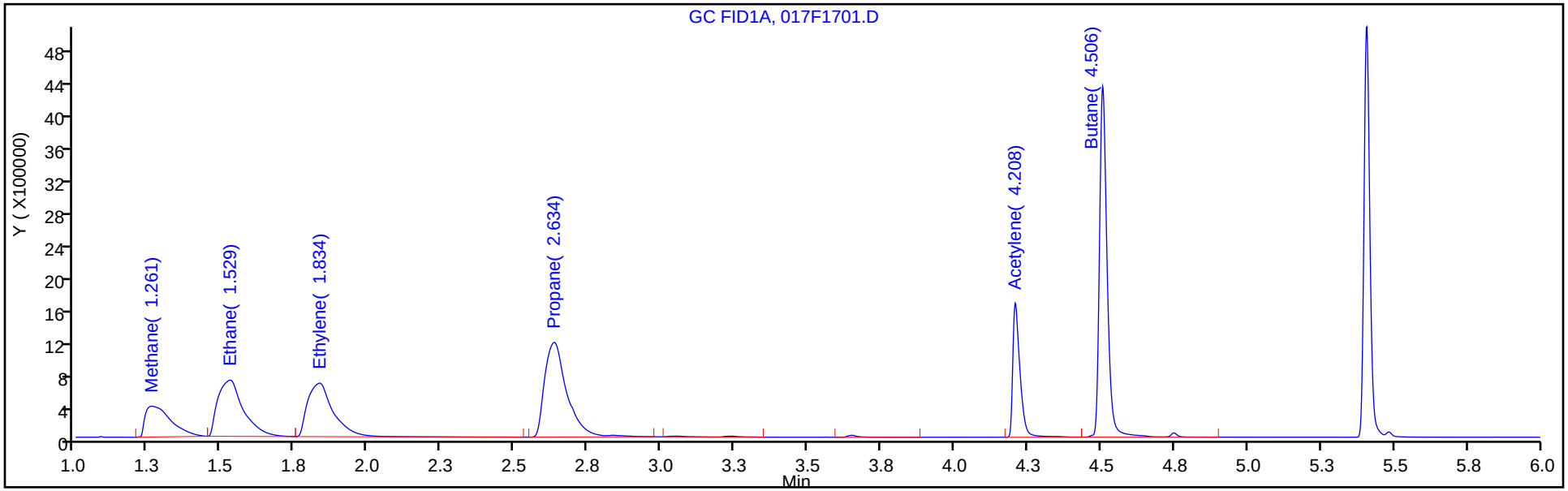
Report Date: 03-Jun-2022 09:25:02 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

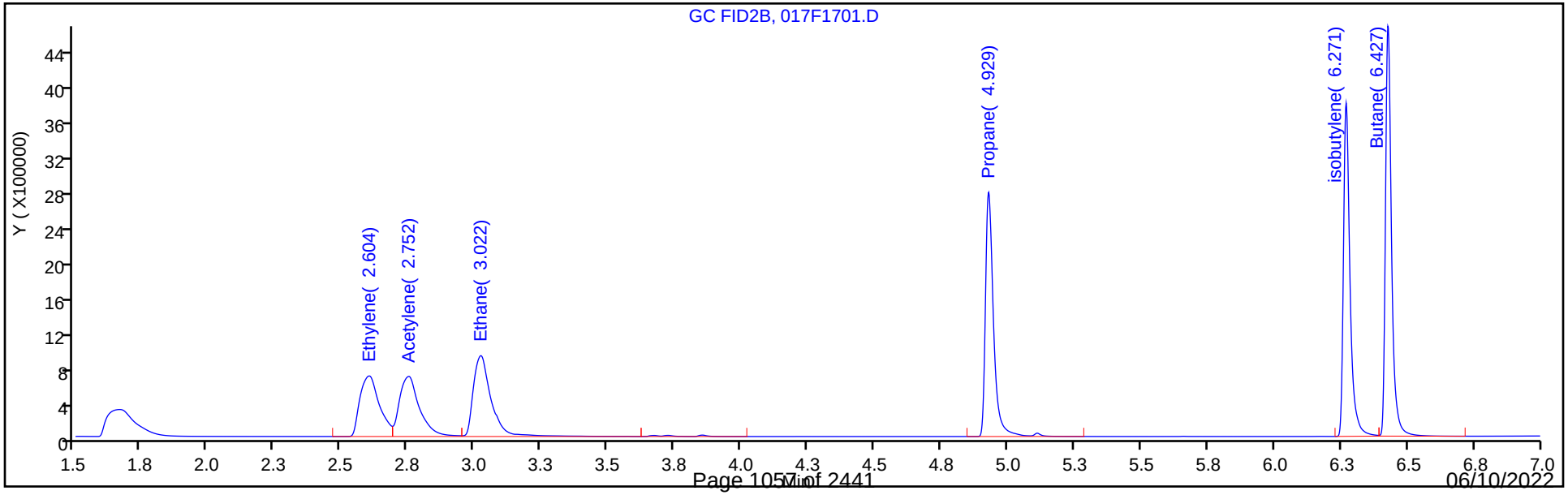
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\017F1701.D

Injection Date:	01-Jun-2022 12:59:42	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccv			Worklist Smp#:	46
Client ID:					
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 Denver

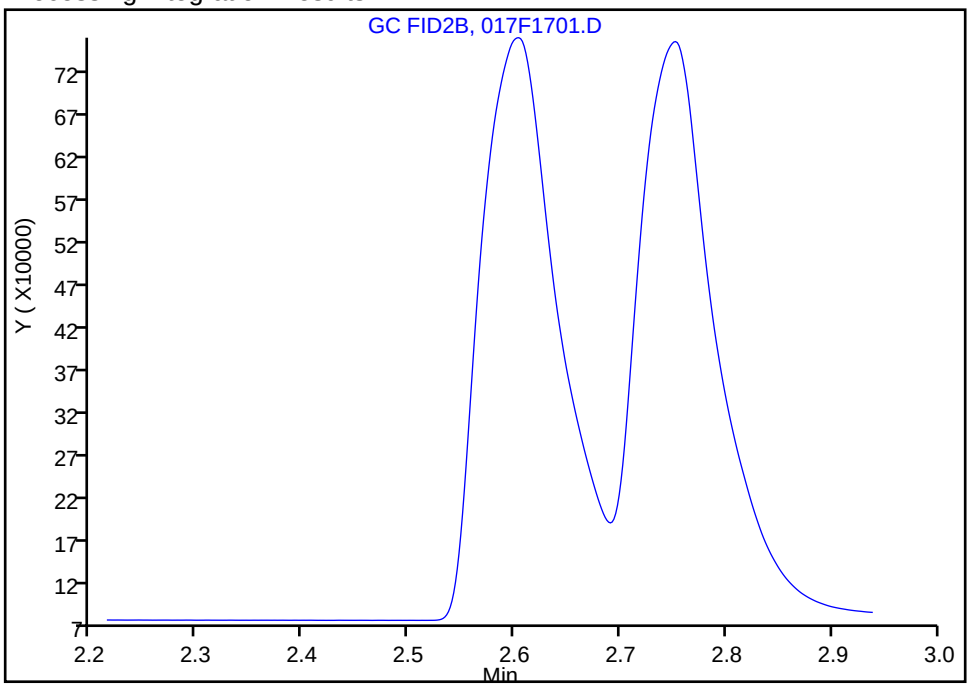
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\017F1701.D
Injection Date: 01-Jun-2022 12:59:42 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: sciannac ALS Bottle#: 17 Worklist Smp#: 46
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

4 Ethylene, CAS: 74-85-1

Signal: 2

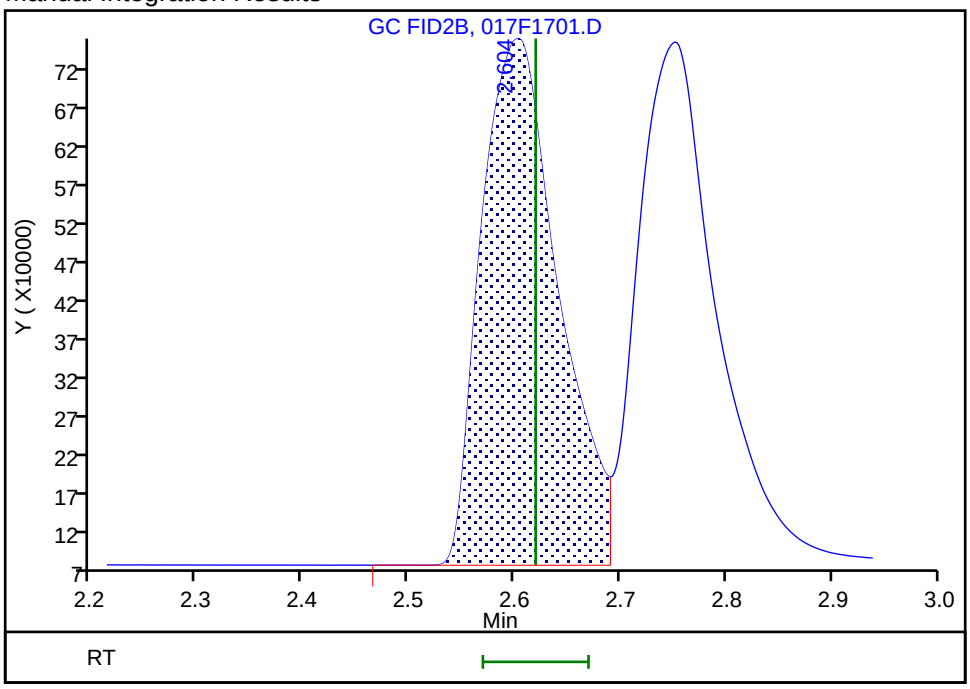
Not Detected
Expected RT: 2.62

Processing Integration Results



Manual Integration Results

RT: 2.60
Area: 3459163
Amount: 111.6570
Amount Units: ug/l



Reviewer: sciannac, 03-Jun-2022 09:00:30
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Denver

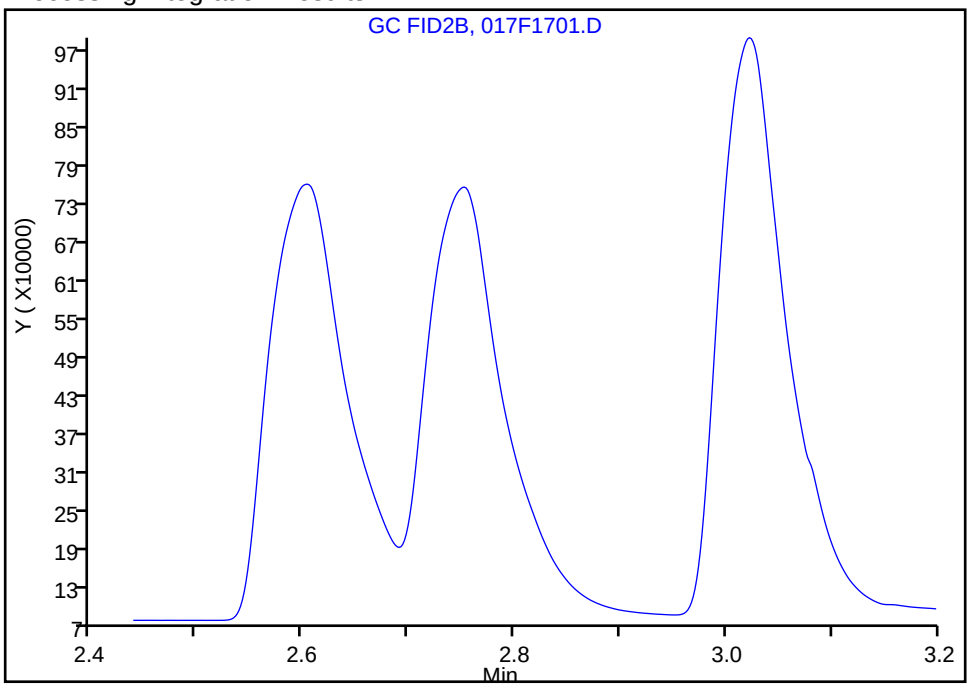
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\017F1701.D
Injection Date: 01-Jun-2022 12:59:42 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: sciannac ALS Bottle#: 17 Worklist Smp#: 46
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

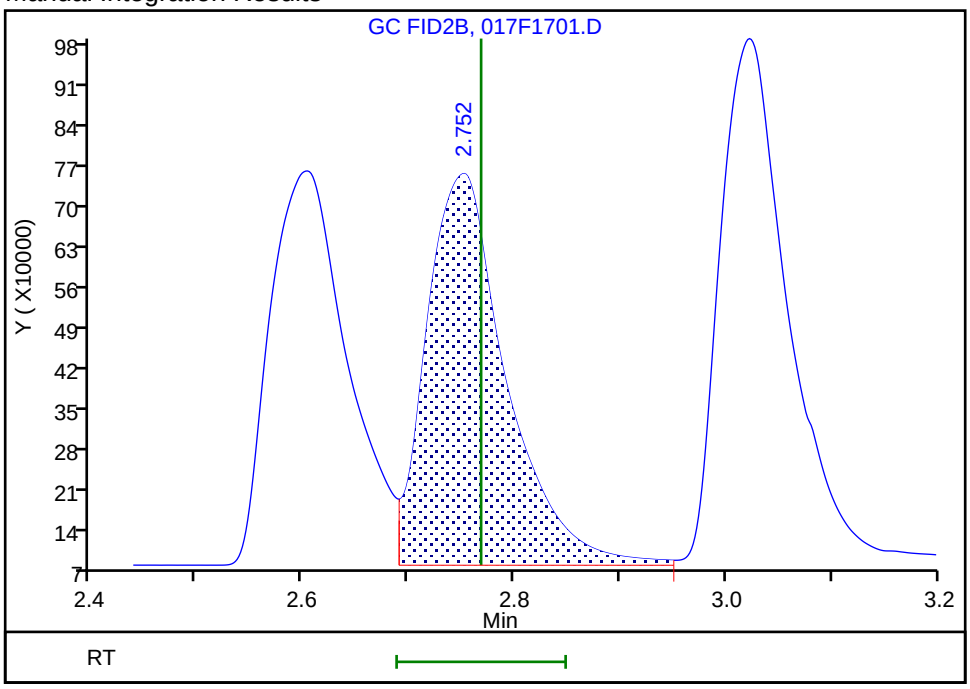
Not Detected
Expected RT: 2.77

Processing Integration Results



Manual Integration Results

RT: 2.75
Area: 3537089
Amount: 103.4878
Amount Units: ug/l



Reviewer: sciannac, 03-Jun-2022 09:00:20
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576662/58 Calibration Date: 06/01/2022 15:34

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 029F2901.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		34346		62.3	65.7	-5.2	20.0
Ethane	Ave	33241	33505		124	123	0.8	20.0
Ethylene	Ave	35226	34153		111	115	-3.0	20.0
Acetylene	Ave	28139	26078		98.9	107	-7.3	20.0

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576768/58 Calibration Date: 06/01/2022 15:34

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 029F2901.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		34346		62.3	65.7	-5.2	20.0
Ethane	Ave	33241	33505		124	123	0.8	20.0
Ethylene	Ave	35226	34153		111	115	-3.0	20.0
Acetylene	Ave	28139	26078		98.9	107	-7.3	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576662/58 Calibration Date: 06/01/2022 15:34

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 029F2901.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.26	1.23	1.31
Ethane	1.53	1.46	1.56
Ethylene	1.83	1.70	1.80
Acetylene	4.21	3.88	4.04

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576768/58 Calibration Date: 06/01/2022 15:34

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 029F2901.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.26	1.23	1.31
Ethane	1.53	1.46	1.56
Ethylene	1.83	1.70	1.80
Acetylene	4.21	3.88	4.04

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\029F2901.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 01-Jun-2022 15:34:59 ALS Bottle#: 29 Worklist Smp#: 58
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Jun-2022 09:25:07 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1606

First Level Reviewer: sciannac Date: 03-Jun-2022 09:10:11

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.261	1.269	-0.008	2256632	65.7	62.3	
2	1.667	1.682	-0.015	2248815	65.7	60.6	
						RPD = 2.85	
3 Ethane							
1	1.529	1.510	0.019	4126831	123.2	124.1	
2	3.022	3.040	-0.018	4193964	123.2	125.6	
						RPD = 1.19	
4 Ethylene							a
1	1.832	1.750	0.082	3924163	114.9	111.4	a
2	2.602	2.620	-0.018	3426329	114.9	110.6	a
						RPD = 0.72	
5 Propane							
1	2.634	2.469	0.165	6225206	180.6	172.9	
2	4.930	4.937	-0.007	5904627	180.6	168.6	
						RPD = 2.47	
6 Acetylene							a
1	4.206	3.964	0.242	2781689	106.7	98.9	a
2	2.750	2.768	-0.018	3488556	106.7	102.1	a
						RPD = 3.20	
7 Butane							
1	4.506	4.340	0.166	8077872	238.1	221.8	
2	6.427	6.432	-0.005	7604736	238.1	216.4	
						RPD = 2.45	
8 isobutylene							
1	5.407	5.245	0.162	7318893	229.8	202.6	
2	6.270	6.275	-0.005	6608973	229.8	199.0	
						RPD = 1.77	

QC Flag Legend

Processing Flags

Review Flags

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\029F2901.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 01-Jun-2022 15:34:59 ALS Bottle#: 29 Worklist Smp#: 58
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Jun-2022 09:25:07 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1606

First Level Reviewer: sciannac Date: 03-Jun-2022 09:10:11

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.261	1.269	-0.008	2256632	65.7	62.3	
2	1.667	1.682	-0.015	2248815	65.7	60.6	
						RPD = 2.85	
3 Ethane							
1	1.529	1.510	0.019	4126831	123.2	124.1	
2	3.022	3.040	-0.018	4193964	123.2	125.6	
						RPD = 1.19	
4 Ethylene							a
1	1.832	1.750	0.082	3924163	114.9	111.4	a
2	2.602	2.620	-0.018	3426329	114.9	110.6	a
						RPD = 0.72	
5 Propane							
1	2.634	2.469	0.165	6225206	180.6	172.9	
2	4.930	4.937	-0.007	5904627	180.6	168.6	
						RPD = 2.47	
6 Acetylene							a
1	4.206	3.964	0.242	2781689	106.7	98.9	a
2	2.750	2.768	-0.018	3488556	106.7	102.1	a
						RPD = 3.20	
7 Butane							
1	4.506	4.340	0.166	8077872	238.1	221.8	
2	6.427	6.432	-0.005	7604736	238.1	216.4	
						RPD = 2.45	
8 isobutylene							
1	5.407	5.245	0.162	7318893	229.8	202.6	
2	6.270	6.275	-0.005	6608973	229.8	199.0	
						RPD = 1.77	

QC Flag Legend

Processing Flags

Review Flags

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

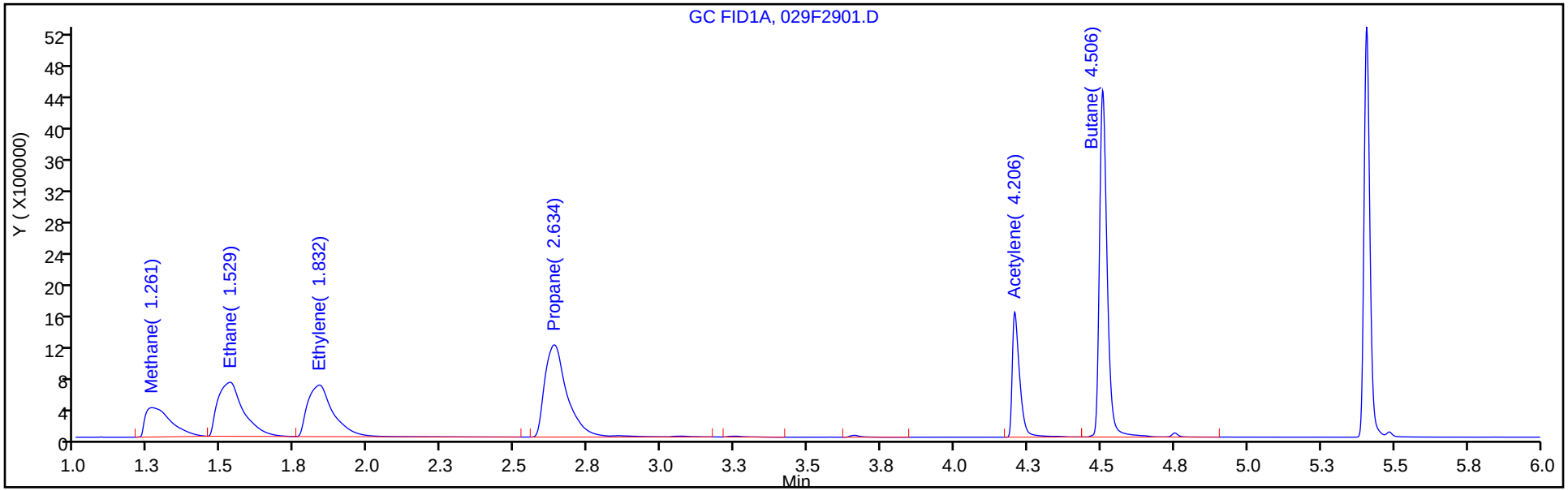
Report Date: 03-Jun-2022 09:25:08 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

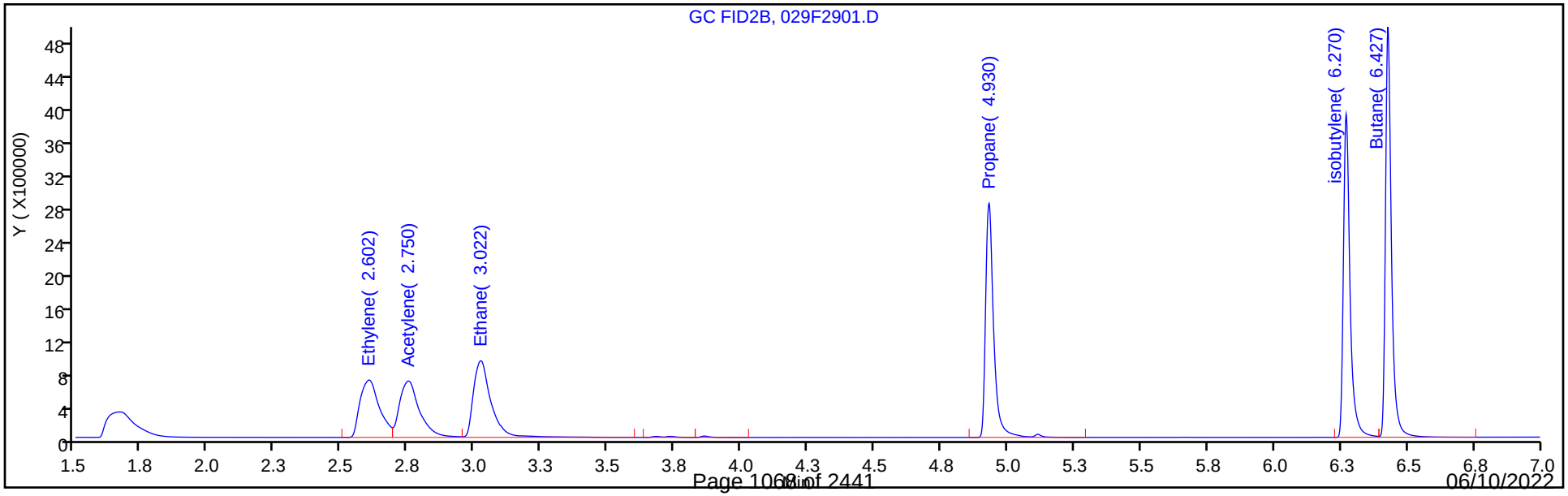
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\029F2901.D

Injection Date:	01-Jun-2022 15:34:59	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccv			Worklist Smp#:	58
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



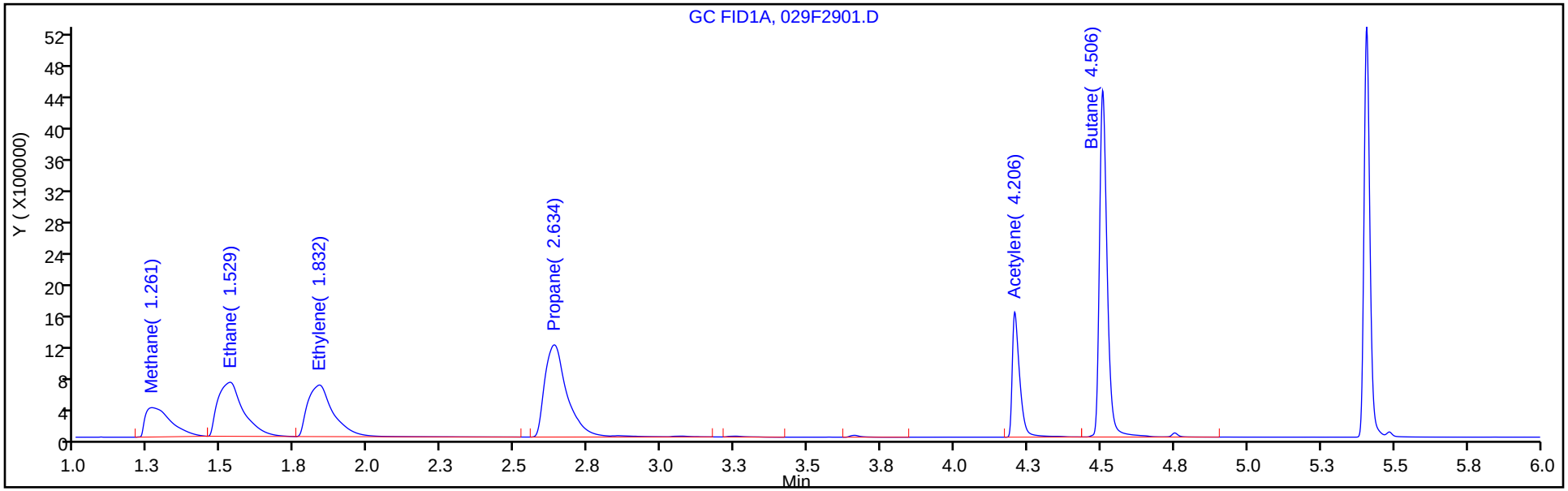
Report Date: 03-Jun-2022 09:25:08 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

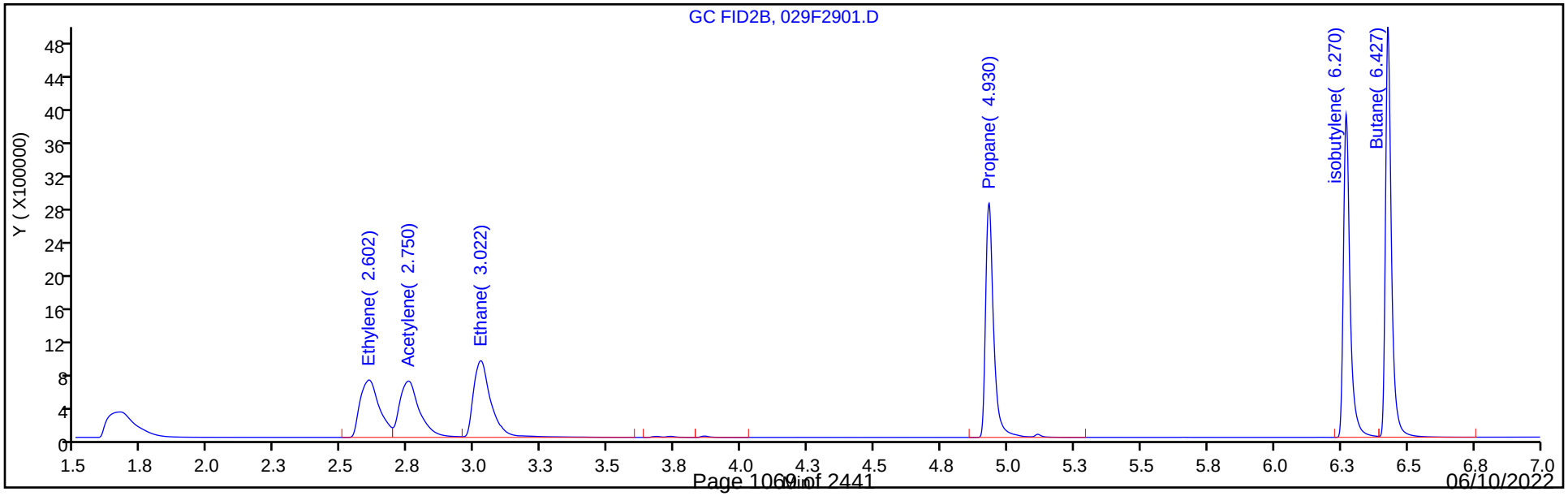
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\029F2901.D

Injection Date:	01-Jun-2022 15:34:59	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccv			Worklist Smp#:	58
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

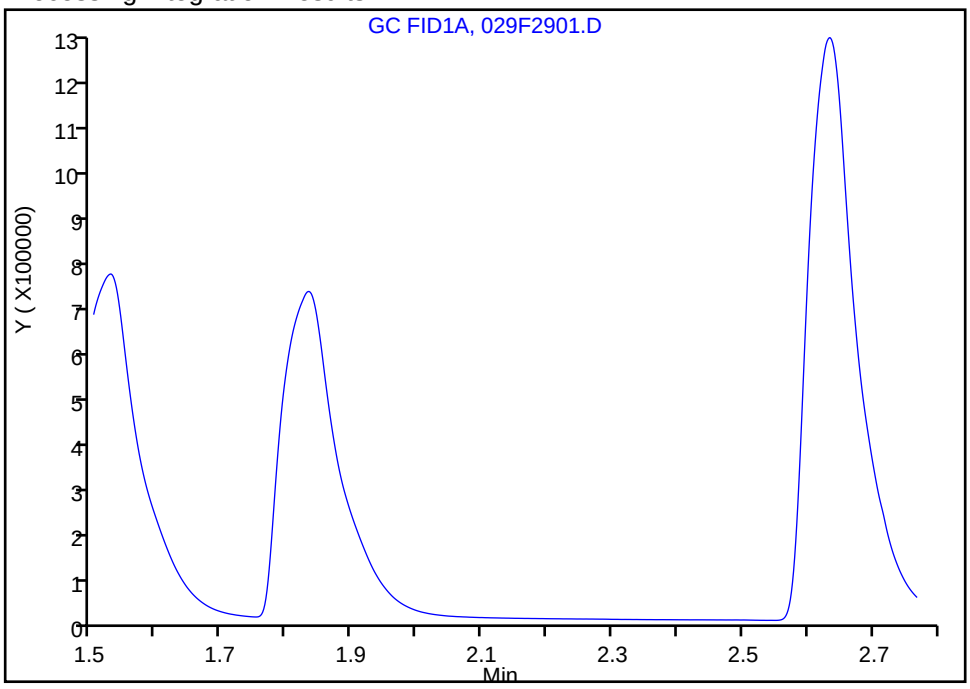
Data File:	\\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\029F2901.D				
Injection Date:	01-Jun-2022 15:34:59	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	sciannac	ALS Bottle#:	29	Worklist Smp#:	58
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

4 Ethylene, CAS: 74-85-1

Signal: 1

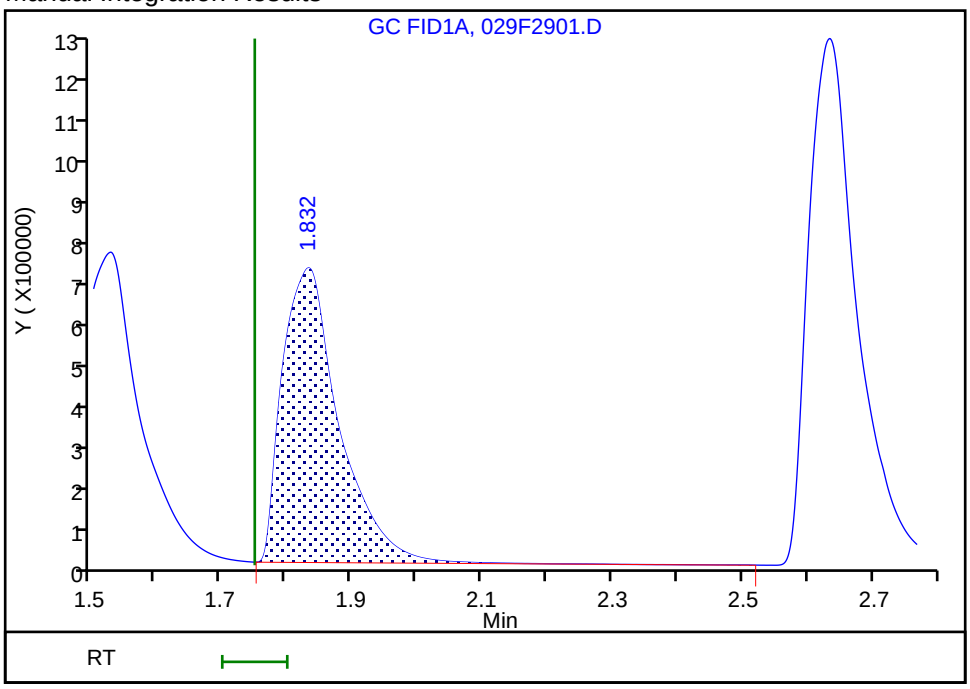
Not Detected
Expected RT: 1.75

Processing Integration Results



Manual Integration Results

RT: 1.83
Area: 3924163
Amount: 111.3997
Amount Units: ug/l



Reviewer: sciannac, 03-Jun-2022 09:09:14
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Denver

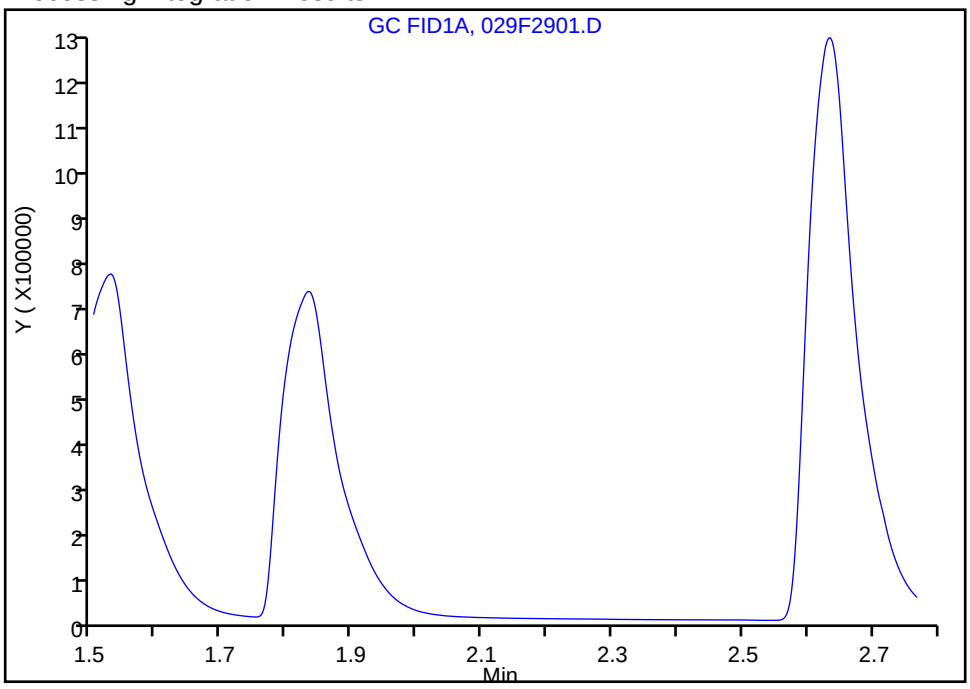
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\029F2901.D
Injection Date: 01-Jun-2022 15:34:59 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: sciannac ALS Bottle#: 29 Worklist Smp#: 58
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

4 Ethylene, CAS: 74-85-1

Signal: 1

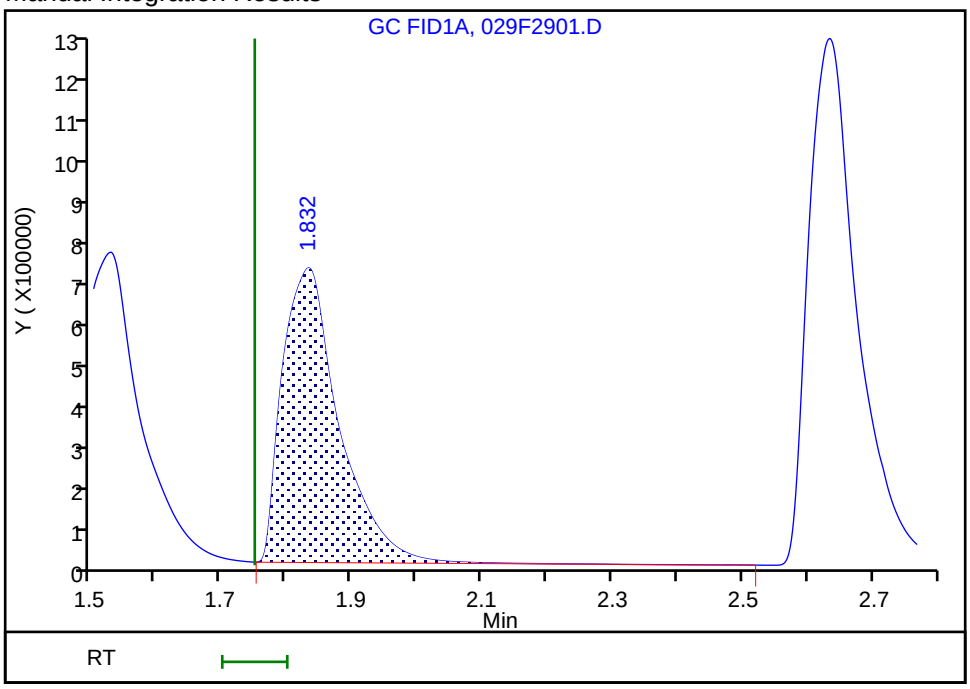
Not Detected
Expected RT: 1.75

Processing Integration Results



Manual Integration Results

RT: 1.83
Area: 3924163
Amount: 111.3997
Amount Units: ug/l



Reviewer: sciannac, 03-Jun-2022 09:09:14
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Denver

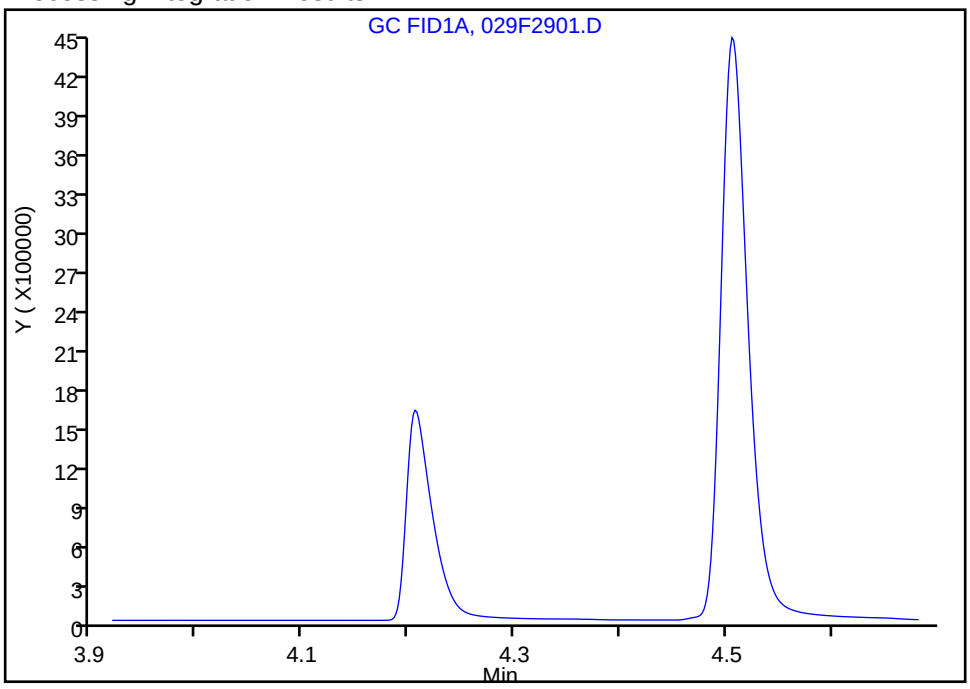
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\029F2901.D
Injection Date: 01-Jun-2022 15:34:59 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: sciannac ALS Bottle#: 29 Worklist Smp#: 58
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

6 Acetylene, CAS: 74-86-2

Signal: 1

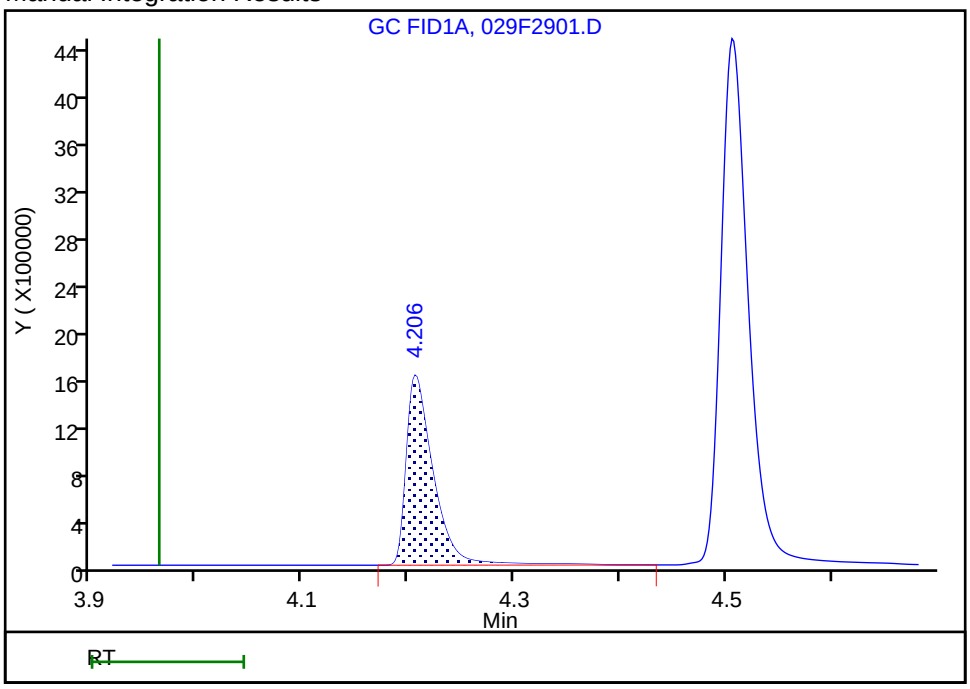
Not Detected
Expected RT: 3.96

Processing Integration Results



Manual Integration Results

RT: 4.21
Area: 2781689
Amount: 98.855221
Amount Units: ug/l



Reviewer: sciannac, 03-Jun-2022 09:09:37
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Denver

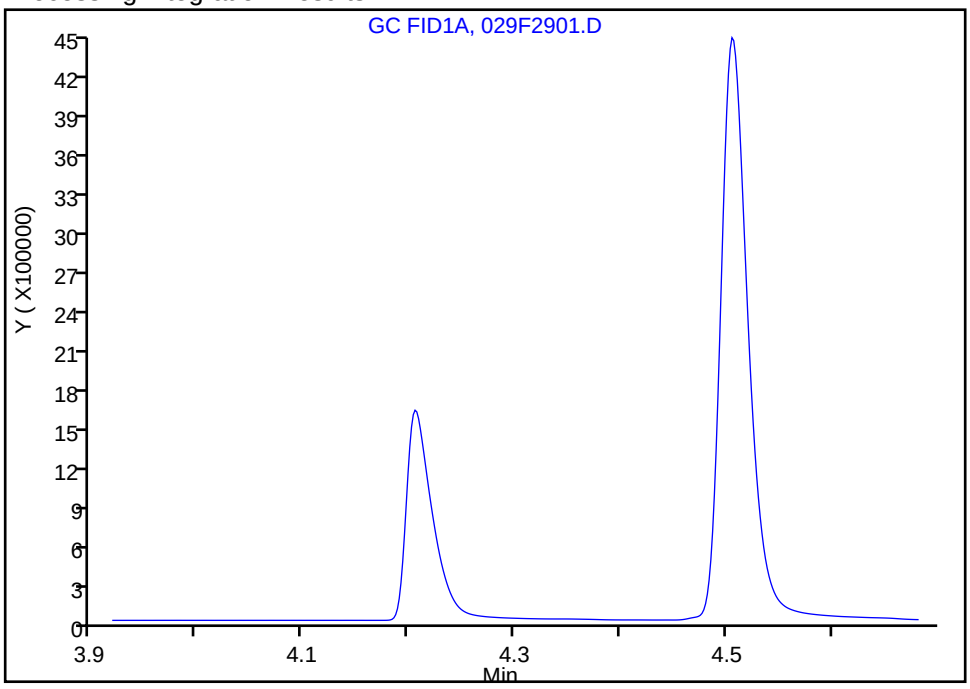
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\029F2901.D
Injection Date: 01-Jun-2022 15:34:59 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: sciannac ALS Bottle#: 29 Worklist Smp#: 58
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

6 Acetylene, CAS: 74-86-2

Signal: 1

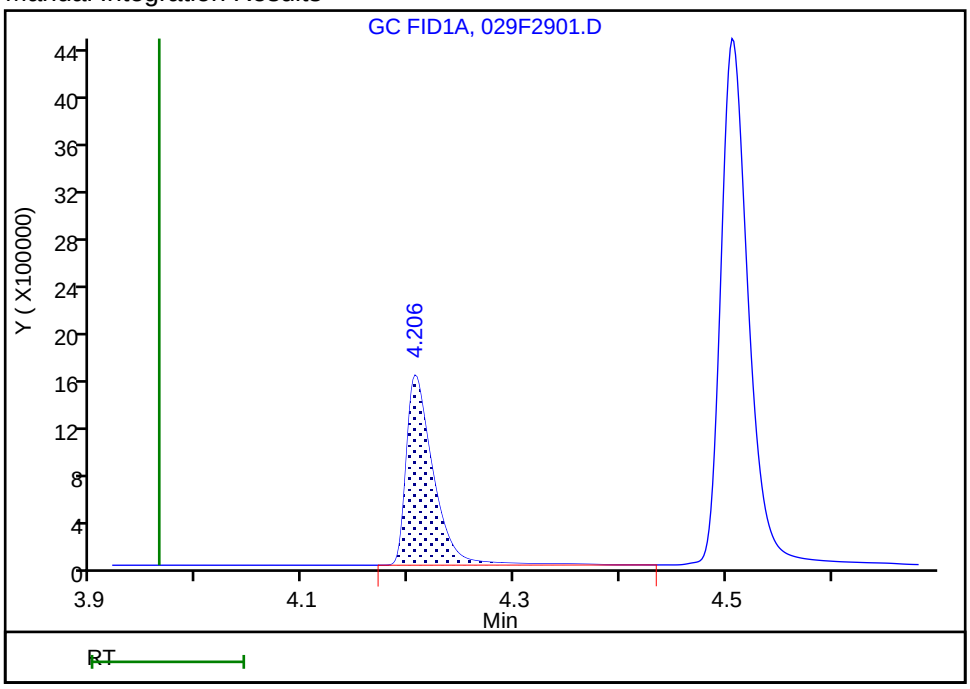
Not Detected
Expected RT: 3.96

Processing Integration Results



Manual Integration Results

RT: 4.21
Area: 2781689
Amount: 98.855221
Amount Units: ug/l



Reviewer: sciannac, 03-Jun-2022 09:09:37
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576662/58 Calibration Date: 06/01/2022 15:34

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 029F2901.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		34227		60.6	65.7	-7.8	20.0
Ethylene	Ave	30980	29820		111	115	-3.7	20.0
Acetylene	Ave	34179	32704		102	107	-4.3	20.0
Ethane	Ave	33383	34050		126	123	2.0	20.0

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576768/58 Calibration Date: 06/01/2022 15:34

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 029F2901.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		34227		60.6	65.7	-7.8	20.0
Ethylene	Ave	30980	29820		111	115	-3.7	20.0
Acetylene	Ave	34179	32704		102	107	-4.3	20.0
Ethane	Ave	33383	34050		126	123	2.0	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576662/58 Calibration Date: 06/01/2022 15:34

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 029F2901.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.67	1.64	1.72
Ethylene	2.60	2.57	2.67
Acetylene	2.75	2.69	2.85
Ethane	3.02	2.99	3.09

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576768/58 Calibration Date: 06/01/2022 15:34

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 029F2901.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.67	1.64	1.72
Ethylene	2.60	2.57	2.67
Acetylene	2.75	2.69	2.85
Ethane	3.02	2.99	3.09

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\029F2901.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 01-Jun-2022 15:34:59 ALS Bottle#: 29 Worklist Smp#: 58
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Jun-2022 09:25:07 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1606

First Level Reviewer: sciannac Date: 03-Jun-2022 09:10:11

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.261	1.269	-0.008	2256632	65.7	62.3	
2	1.667	1.682	-0.015	2248815	65.7	60.6	
						RPD = 2.85	
3 Ethane							
1	1.529	1.510	0.019	4126831	123.2	124.1	
2	3.022	3.040	-0.018	4193964	123.2	125.6	
						RPD = 1.19	
4 Ethylene							a
1	1.832	1.750	0.082	3924163	114.9	111.4	a
2	2.602	2.620	-0.018	3426329	114.9	110.6	a
						RPD = 0.72	
5 Propane							
1	2.634	2.469	0.165	6225206	180.6	172.9	
2	4.930	4.937	-0.007	5904627	180.6	168.6	
						RPD = 2.47	
6 Acetylene							a
1	4.206	3.964	0.242	2781689	106.7	98.9	a
2	2.750	2.768	-0.018	3488556	106.7	102.1	a
						RPD = 3.20	
7 Butane							
1	4.506	4.340	0.166	8077872	238.1	221.8	
2	6.427	6.432	-0.005	7604736	238.1	216.4	
						RPD = 2.45	
8 isobutylene							
1	5.407	5.245	0.162	7318893	229.8	202.6	
2	6.270	6.275	-0.005	6608973	229.8	199.0	
						RPD = 1.77	

QC Flag Legend

Processing Flags

Review Flags

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\029F2901.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 01-Jun-2022 15:34:59 ALS Bottle#: 29 Worklist Smp#: 58
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Jun-2022 09:25:07 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1606

First Level Reviewer: sciannac Date: 03-Jun-2022 09:10:11

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.261	1.269	-0.008	2256632	65.7	62.3	
2	1.667	1.682	-0.015	2248815	65.7	60.6	
						RPD = 2.85	
3 Ethane							
1	1.529	1.510	0.019	4126831	123.2	124.1	
2	3.022	3.040	-0.018	4193964	123.2	125.6	
						RPD = 1.19	
4 Ethylene							a
1	1.832	1.750	0.082	3924163	114.9	111.4	a
2	2.602	2.620	-0.018	3426329	114.9	110.6	a
						RPD = 0.72	
5 Propane							
1	2.634	2.469	0.165	6225206	180.6	172.9	
2	4.930	4.937	-0.007	5904627	180.6	168.6	
						RPD = 2.47	
6 Acetylene							a
1	4.206	3.964	0.242	2781689	106.7	98.9	a
2	2.750	2.768	-0.018	3488556	106.7	102.1	a
						RPD = 3.20	
7 Butane							
1	4.506	4.340	0.166	8077872	238.1	221.8	
2	6.427	6.432	-0.005	7604736	238.1	216.4	
						RPD = 2.45	
8 isobutylene							
1	5.407	5.245	0.162	7318893	229.8	202.6	
2	6.270	6.275	-0.005	6608973	229.8	199.0	
						RPD = 1.77	

QC Flag Legend

Processing Flags

Review Flags

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

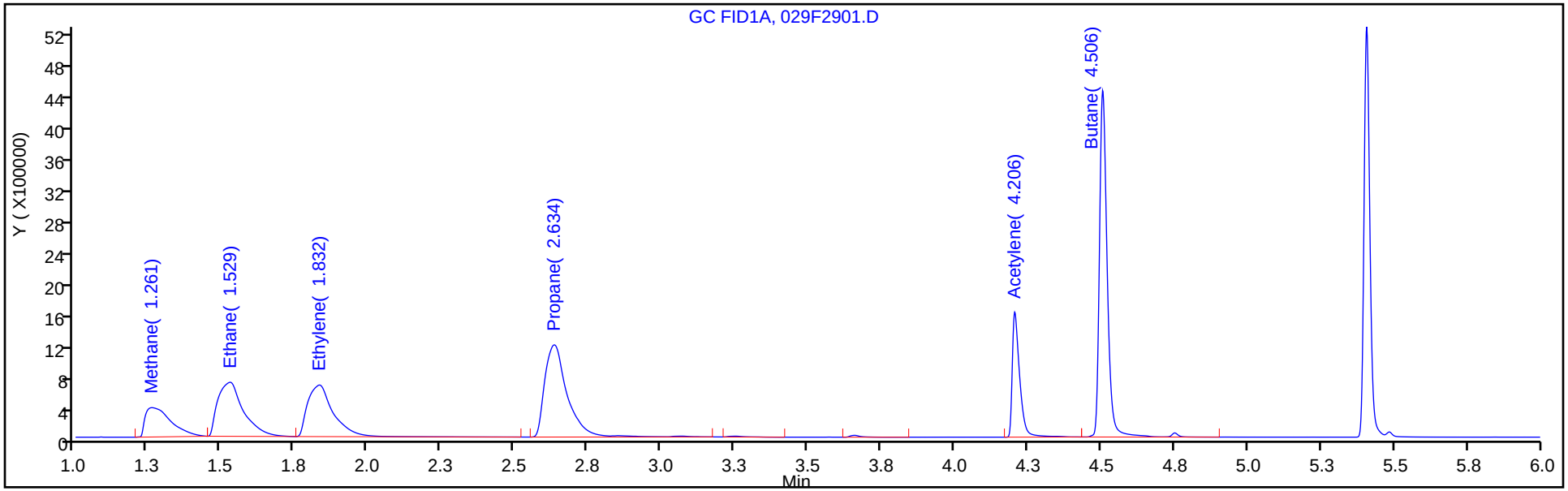
Report Date: 03-Jun-2022 09:25:08 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

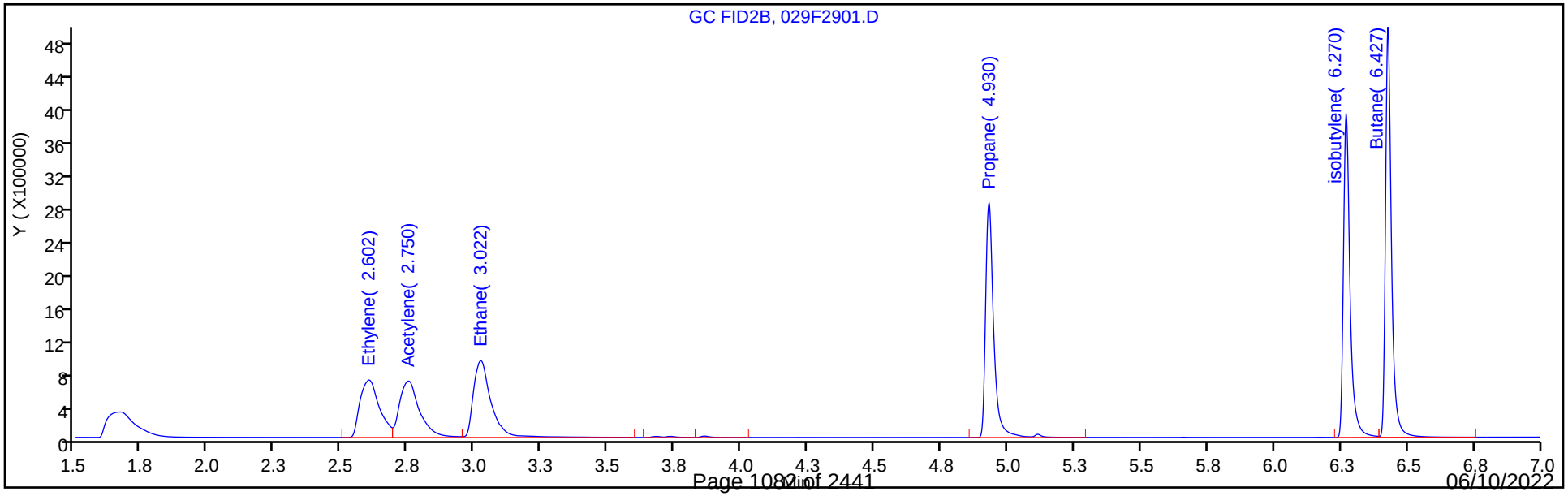
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\029F2901.D

Injection Date:	01-Jun-2022 15:34:59	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccv			Worklist Smp#:	58
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



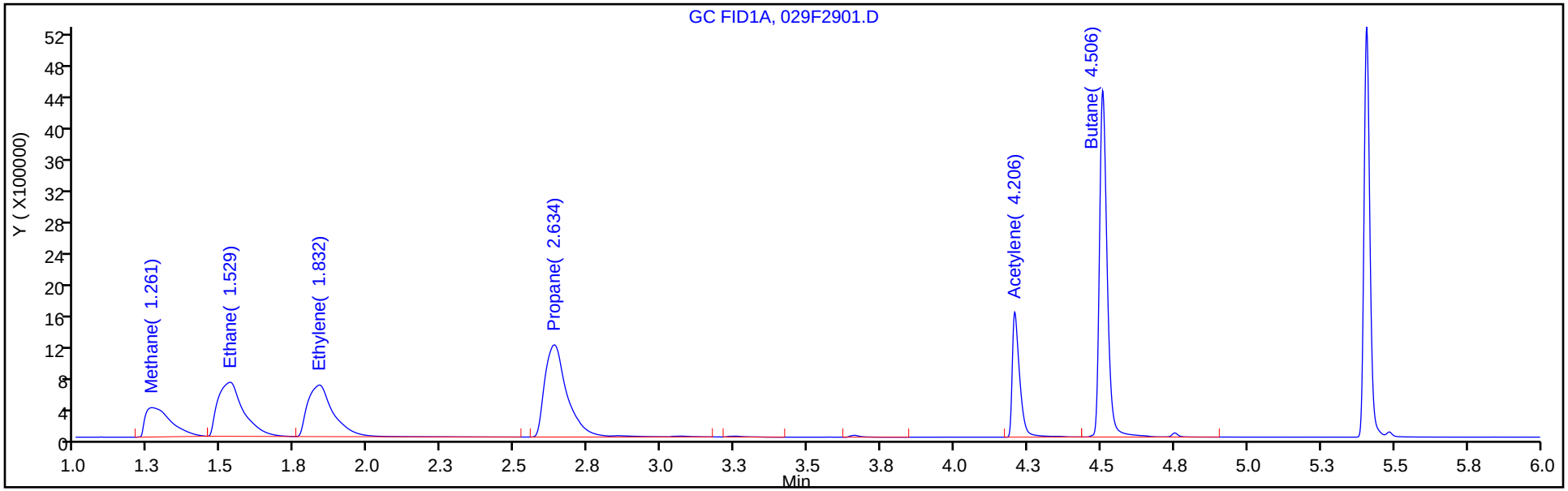
Report Date: 03-Jun-2022 09:25:08 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

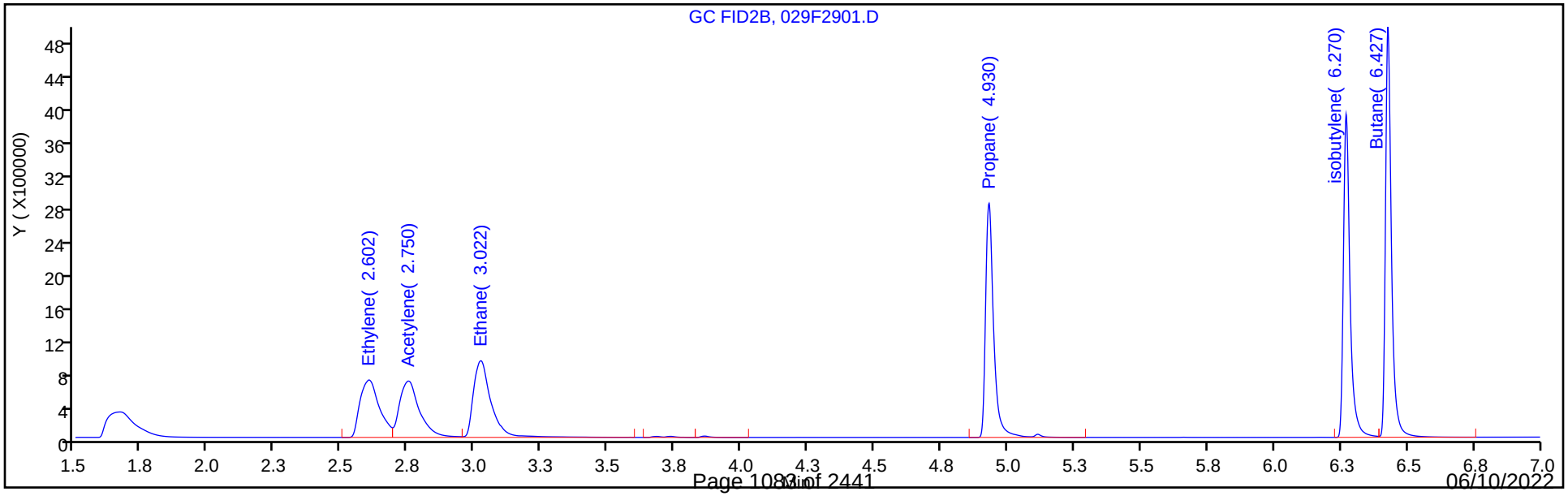
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\029F2901.D

Injection Date:	01-Jun-2022 15:34:59	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccv			Worklist Smp#:	58
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

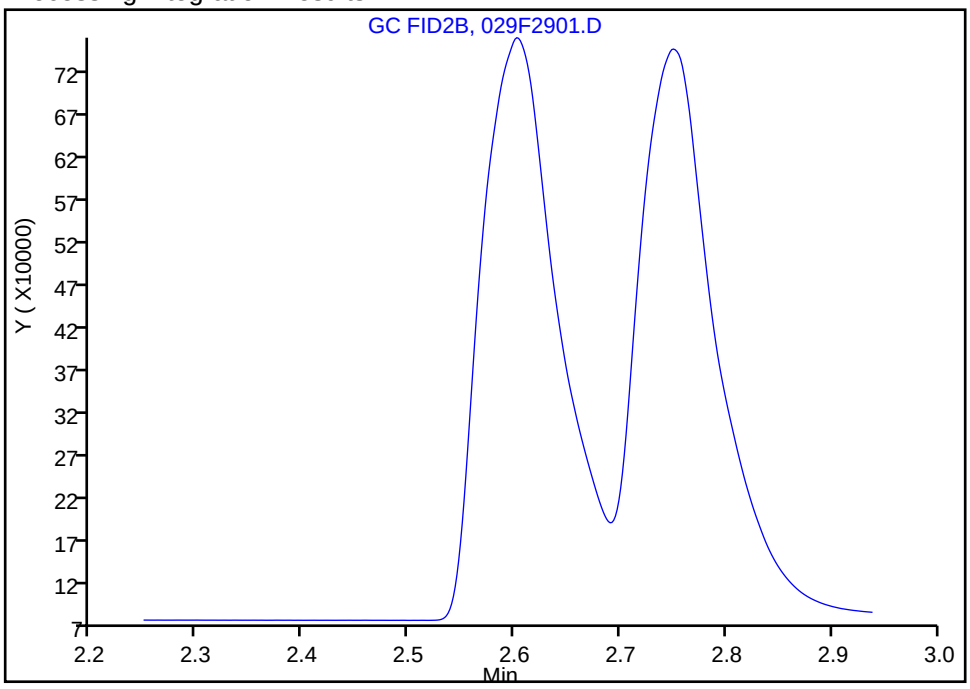
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\029F2901.D
Injection Date: 01-Jun-2022 15:34:59 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: sciannac ALS Bottle#: 29 Worklist Smp#: 58
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

4 Ethylene, CAS: 74-85-1

Signal: 2

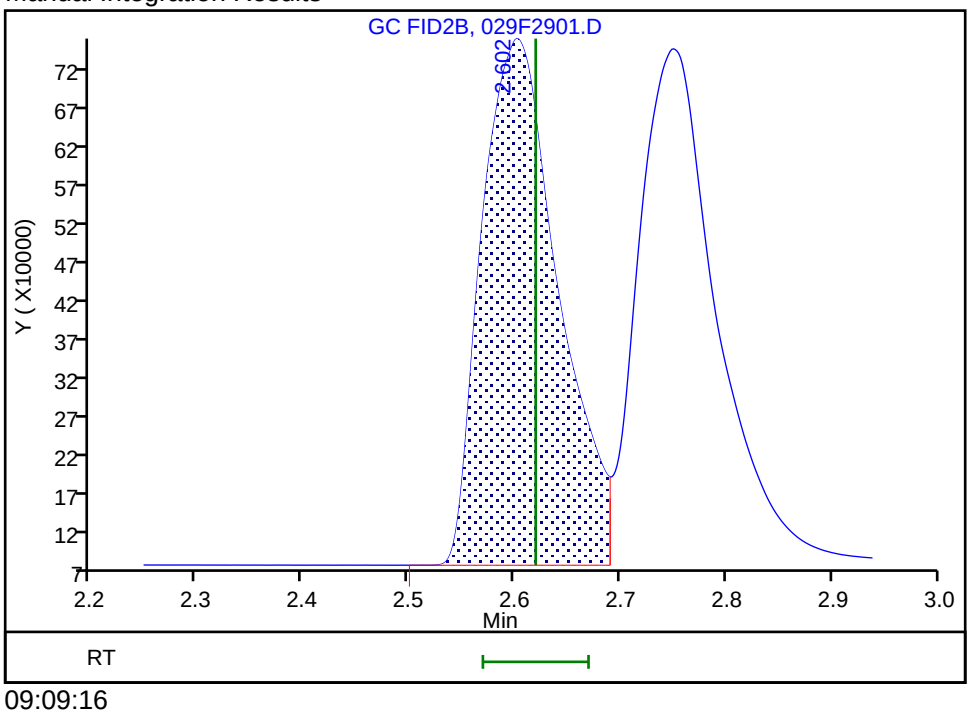
Not Detected
Expected RT: 2.62

Processing Integration Results



Manual Integration Results

RT: 2.60
Area: 3426329
Amount: 110.5971
Amount Units: ug/l



Reviewer: sciannac, 03-Jun-2022 09:09:16
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Denver

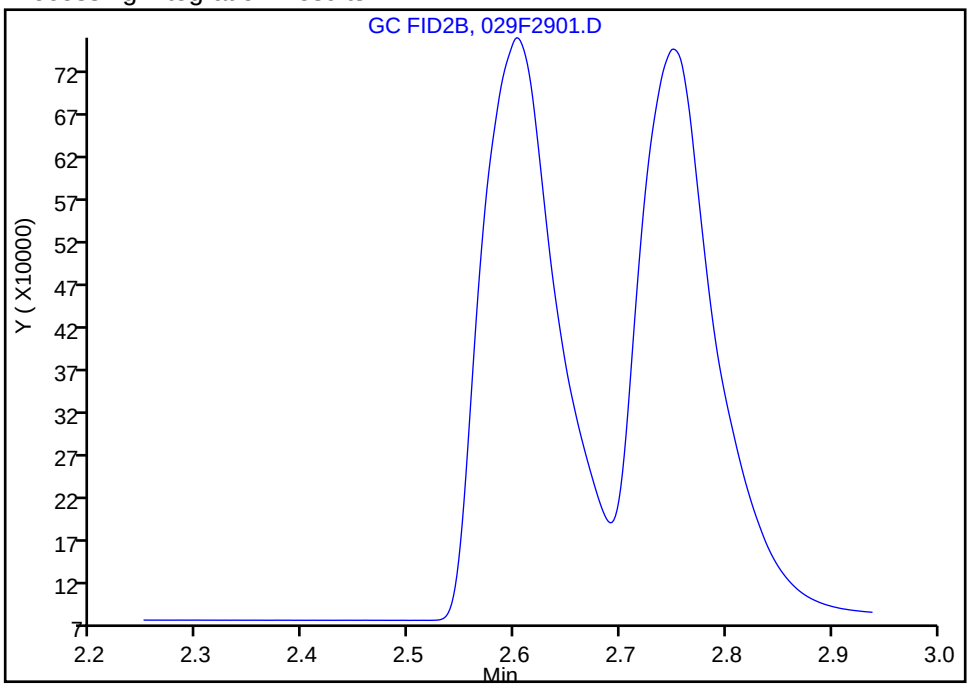
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\029F2901.D
Injection Date: 01-Jun-2022 15:34:59 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: sciannac ALS Bottle#: 29 Worklist Smp#: 58
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

4 Ethylene, CAS: 74-85-1

Signal: 2

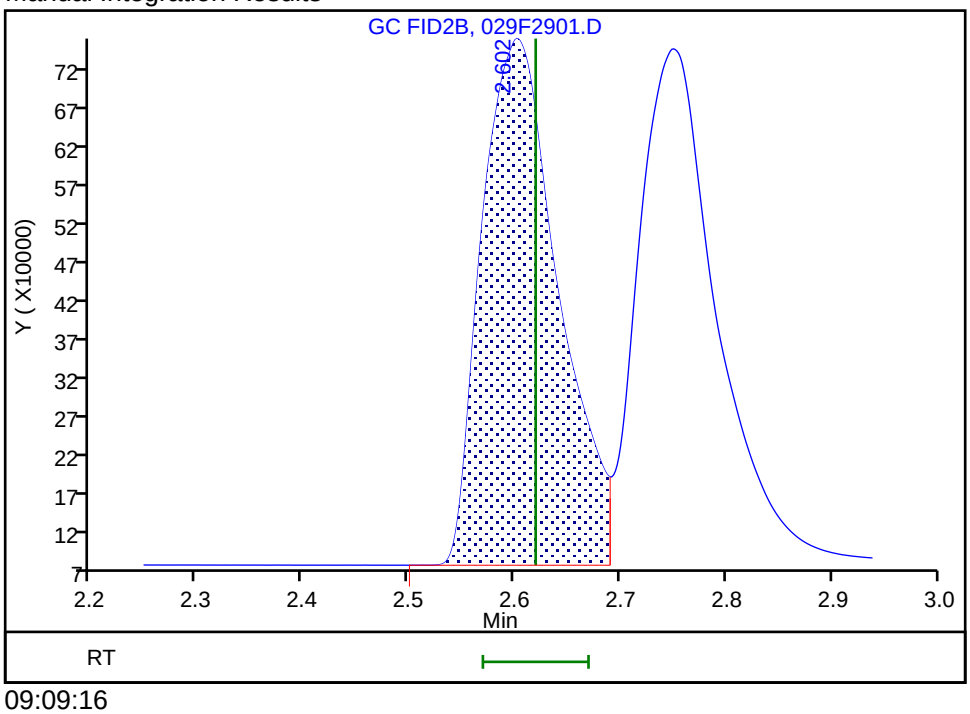
Not Detected
Expected RT: 2.62

Processing Integration Results



Manual Integration Results

RT: 2.60
Area: 3426329
Amount: 110.5971
Amount Units: ug/l



Reviewer: sciannac, 03-Jun-2022 09:09:16
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Denver

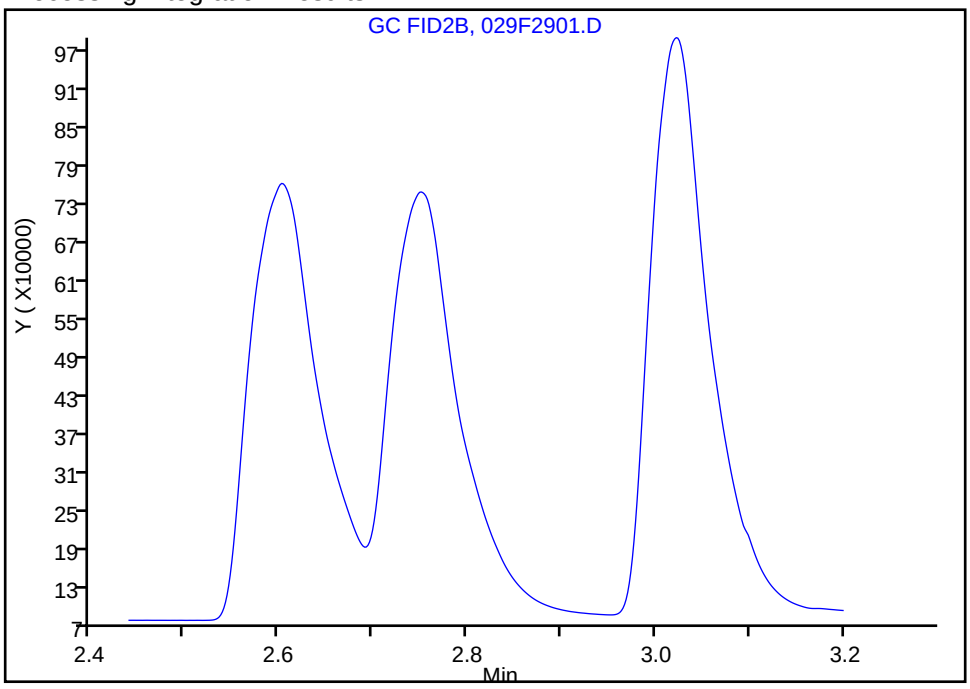
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\029F2901.D
Injection Date: 01-Jun-2022 15:34:59 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: sciannac ALS Bottle#: 29 Worklist Smp#: 58
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

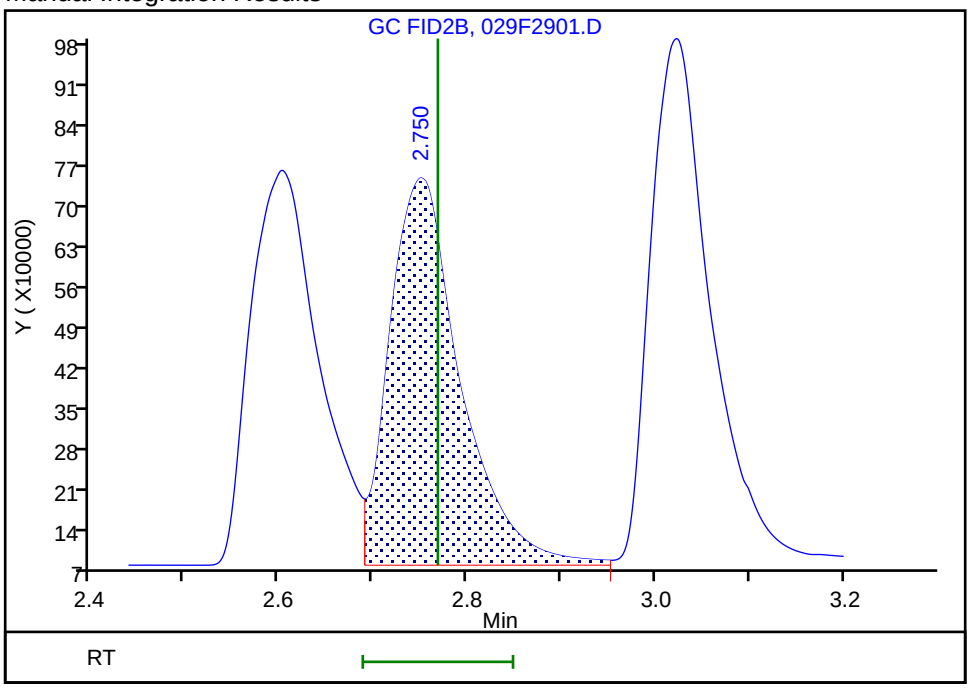
Not Detected
Expected RT: 2.77

Processing Integration Results



Manual Integration Results

RT: 2.75
Area: 3488556
Amount: 102.0678
Amount Units: ug/l



Reviewer: sciannac, 03-Jun-2022 09:09:35
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Denver

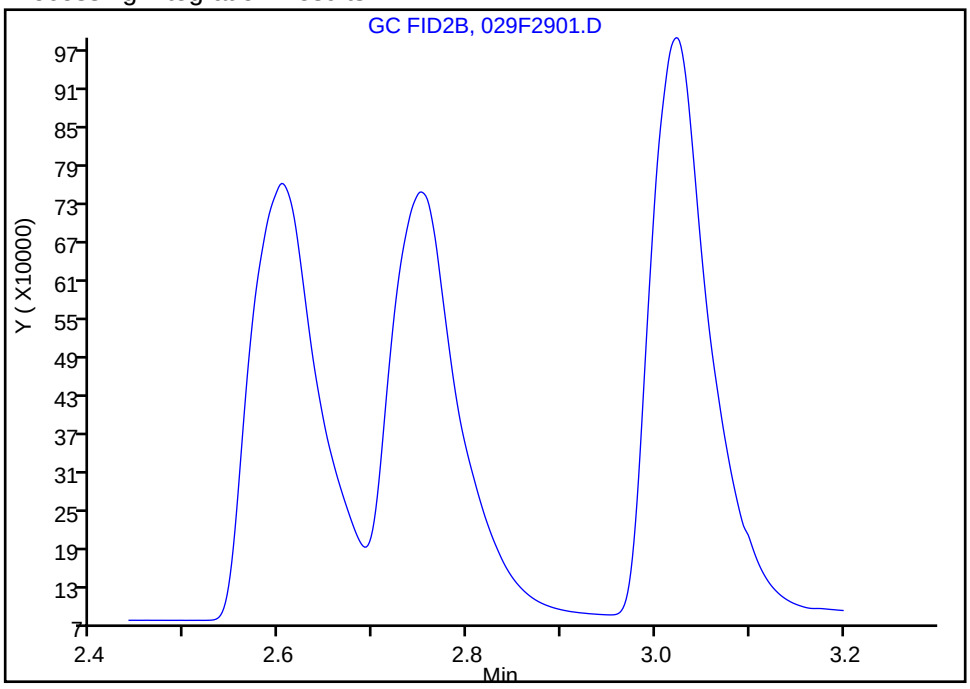
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\029F2901.D
Injection Date: 01-Jun-2022 15:34:59 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: sciannac ALS Bottle#: 29 Worklist Smp#: 58
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

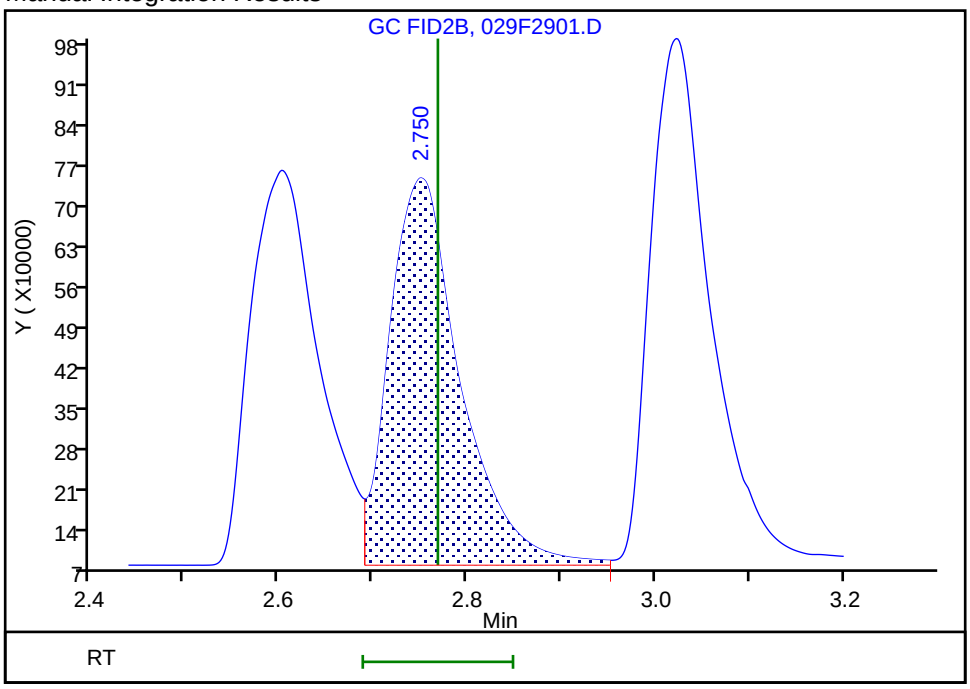
Not Detected
Expected RT: 2.77

Processing Integration Results



Manual Integration Results

RT: 2.75
Area: 3488556
Amount: 102.0678
Amount Units: ug/l



Reviewer: sciannac, 03-Jun-2022 09:09:35
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576768/75 Calibration Date: 06/01/2022 19:15

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 046F4601.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		35589		64.6	65.7	-1.6	20.0
Ethane	Ave	33241	34874		129	123	4.9	20.0
Ethylene	Ave	35226	35635		116	115	1.2	20.0
Acetylene	Ave	28139	27547		104	107	-2.1	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576768/75 Calibration Date: 06/01/2022 19:15

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 046F4601.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.26	1.23	1.31
Ethane	1.53	1.46	1.56
Ethylene	1.83	1.70	1.80
Acetylene	4.21	3.88	4.04

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\046F4601.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 01-Jun-2022 19:15:32 ALS Bottle#: 46 Worklist Smp#: 75
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Jun-2022 09:25:17 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1606

First Level Reviewer: sciannac Date: 03-Jun-2022 09:21:01

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.262	1.269	-0.007	2338280	65.7	64.6	
2	1.668	1.682	-0.014	2321300	65.7	62.6	
						RPD = 3.25	
3 Ethane							
1	1.528	1.510	0.018	4295468	123.2	129.2	
2	3.021	3.040	-0.019	4381186	123.2	131.2	
						RPD = 1.55	
4 Ethylene							a
1	1.833	1.750	0.083	4094407	114.9	116.2	a
2	2.603	2.620	-0.017	3578826	114.9	115.5	a
						RPD = 0.62	
5 Propane							
1	2.635	2.469	0.166	6444929	180.6	179.0	
2	4.928	4.937	-0.009	6130954	180.6	175.1	
						RPD = 2.18	
6 Acetylene							a
1	4.205	3.964	0.241	2938392	106.7	104.4	a
2	2.749	2.768	-0.019	3716337	106.7	108.7	a
						RPD = 4.04	
7 Butane							Ma
1	4.506	4.340	0.166	8631104	238.1	237.0	a
2	6.428	6.432	-0.004	8048639	238.1	229.1	M
						RPD = 3.40	
8 isobutylene							Ma
1	5.407	5.245	0.162	7836409	229.8	216.9	
2	6.271	6.275	-0.004	6960127	229.8	209.6	M
						RPD = 3.42	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

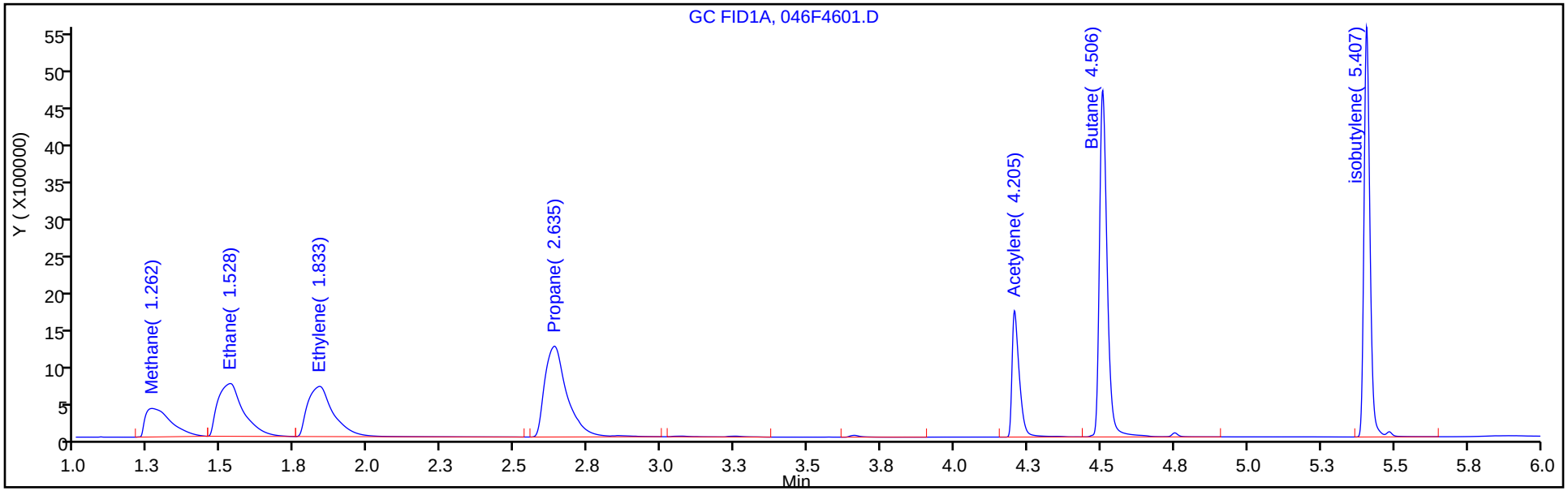
Report Date: 03-Jun-2022 09:25:17 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

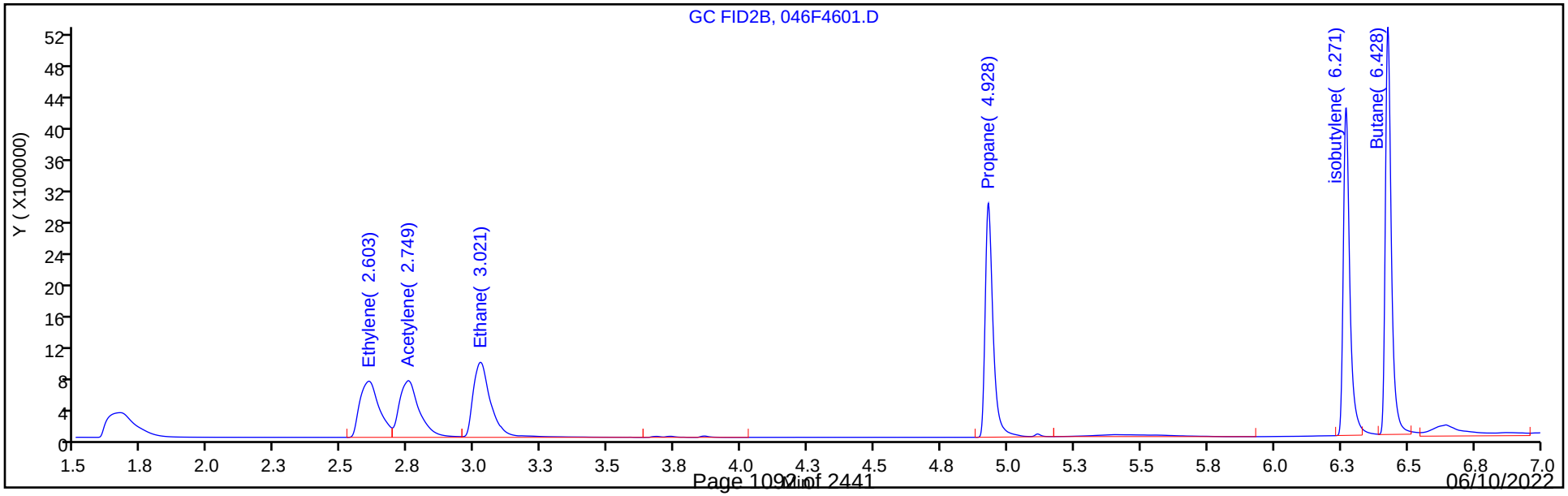
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\046F4601.D

Injection Date:	01-Jun-2022 19:15:32	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccv			Worklist Smp#:	75
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	46
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



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 Denver

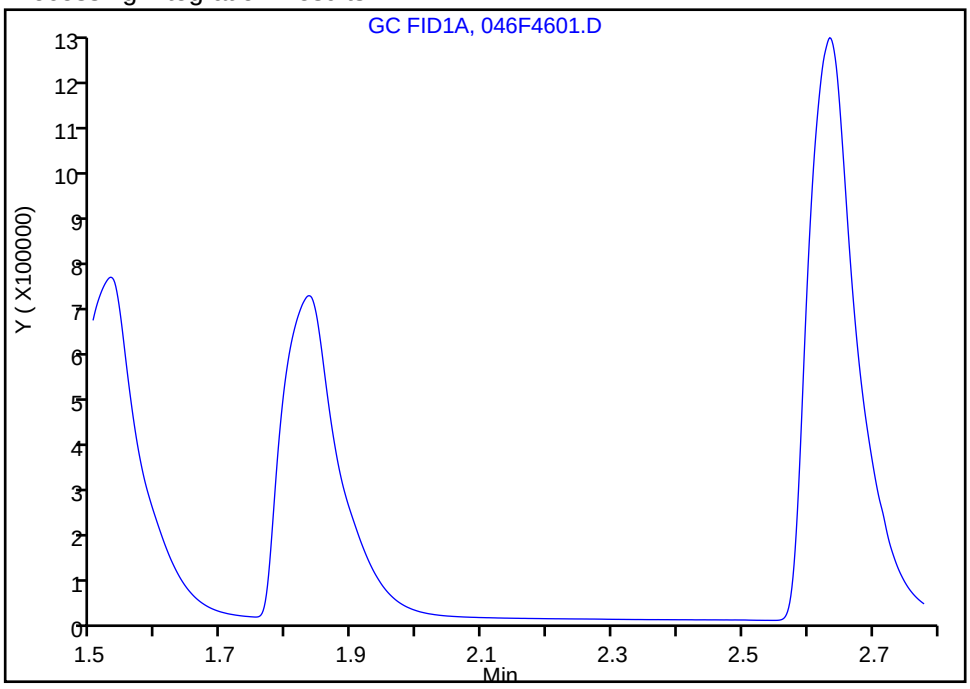
Data File:	\\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\046F4601.D				
Injection Date:	01-Jun-2022 19:15:32	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	sciannac	ALS Bottle#:	46	Worklist Smp#:	75
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

4 Ethylene, CAS: 74-85-1

Signal: 1

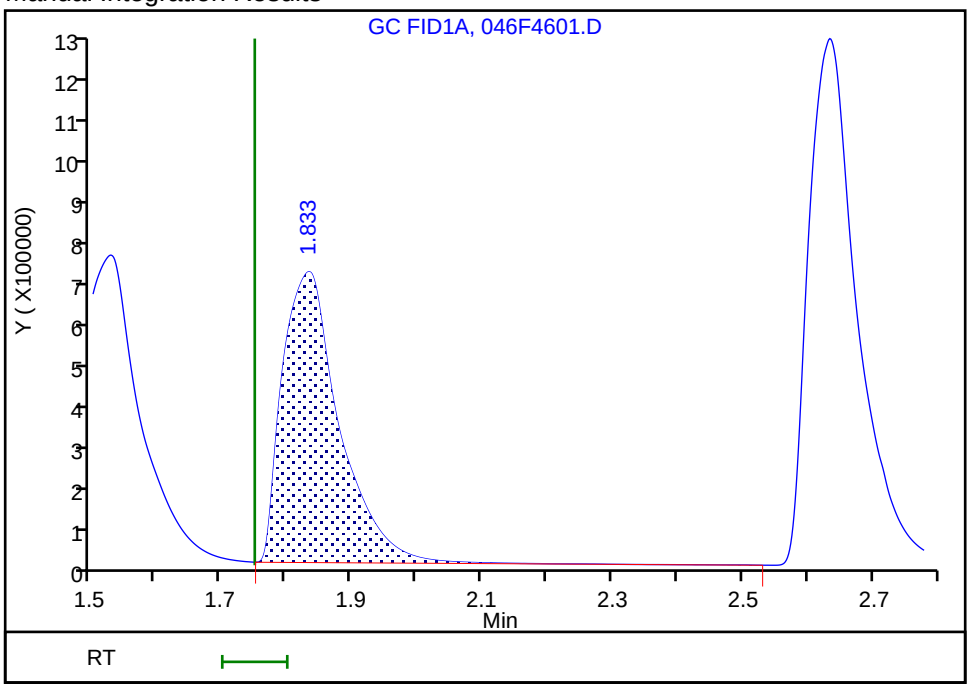
Not Detected
Expected RT: 1.75

Processing Integration Results



Manual Integration Results

RT: 1.83
Area: 4094407
Amount: 116.2326
Amount Units: ug/l



Reviewer: sciannac, 03-Jun-2022 09:17:37
Audit Action: Assigned Compound ID Audit Reason: Peak not integrated

Manual Integration/User Assign Peak Report

Eurofins Denver

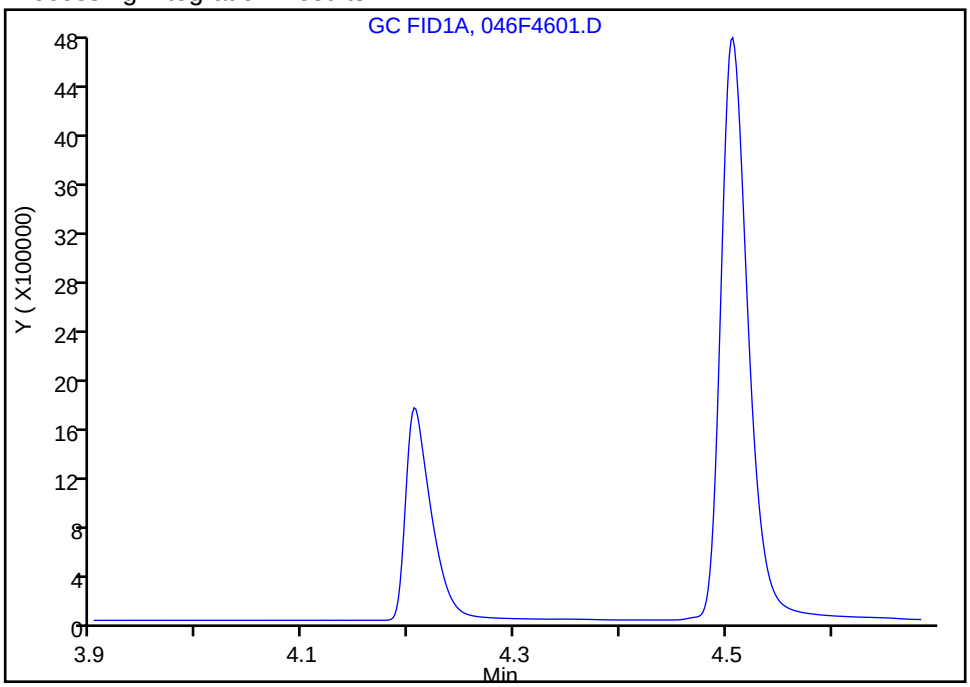
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\046F4601.D
Injection Date: 01-Jun-2022 19:15:32 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: sciannac ALS Bottle#: 46 Worklist Smp#: 75
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

6 Acetylene, CAS: 74-86-2

Signal: 1

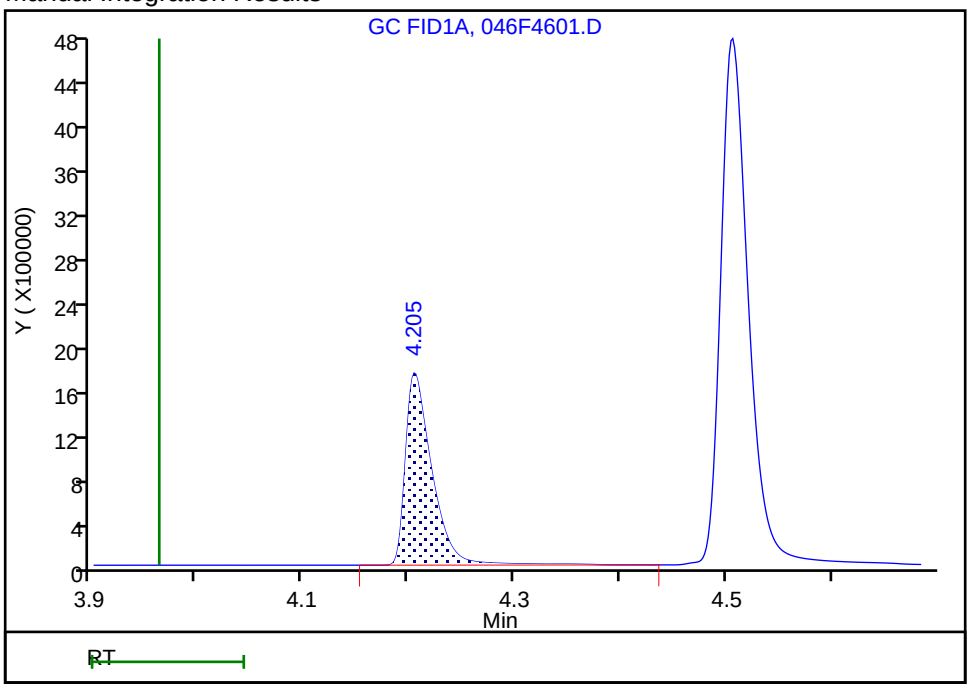
Not Detected
Expected RT: 3.96

Processing Integration Results



Manual Integration Results

RT: 4.20
Area: 2938392
Amount: 104.4241
Amount Units: ug/l



Reviewer: sciannac, 03-Jun-2022 09:17:31
Audit Action: Assigned Compound ID Audit Reason: Peak not integrated

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576768/75 Calibration Date: 06/01/2022 19:15

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 046F4601.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		35330		62.6	65.7	-4.8	20.0
Ethylene	Ave	30980	31147		116	115	0.5	20.0
Acetylene	Ave	34179	34840		109	107	1.9	20.0
Ethane	Ave	33383	35570		131	123	6.6	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576768/75 Calibration Date: 06/01/2022 19:15

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 046F4601.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.67	1.64	1.72
Ethylene	2.60	2.57	2.67
Acetylene	2.75	2.69	2.85
Ethane	3.02	2.99	3.09

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\046F4601.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 01-Jun-2022 19:15:32 ALS Bottle#: 46 Worklist Smp#: 75
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Jun-2022 09:25:17 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1606

First Level Reviewer: sciannac Date: 03-Jun-2022 09:21:01

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.262	1.269	-0.007	2338280	65.7	64.6	
2	1.668	1.682	-0.014	2321300	65.7	62.6	
						RPD = 3.25	
3 Ethane							
1	1.528	1.510	0.018	4295468	123.2	129.2	
2	3.021	3.040	-0.019	4381186	123.2	131.2	
						RPD = 1.55	
4 Ethylene							a
1	1.833	1.750	0.083	4094407	114.9	116.2	a
2	2.603	2.620	-0.017	3578826	114.9	115.5	a
						RPD = 0.62	
5 Propane							
1	2.635	2.469	0.166	6444929	180.6	179.0	
2	4.928	4.937	-0.009	6130954	180.6	175.1	
						RPD = 2.18	
6 Acetylene							a
1	4.205	3.964	0.241	2938392	106.7	104.4	a
2	2.749	2.768	-0.019	3716337	106.7	108.7	a
						RPD = 4.04	
7 Butane							Ma
1	4.506	4.340	0.166	8631104	238.1	237.0	a
2	6.428	6.432	-0.004	8048639	238.1	229.1	M
						RPD = 3.40	
8 isobutylene							Ma
1	5.407	5.245	0.162	7836409	229.8	216.9	
2	6.271	6.275	-0.004	6960127	229.8	209.6	M
						RPD = 3.42	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

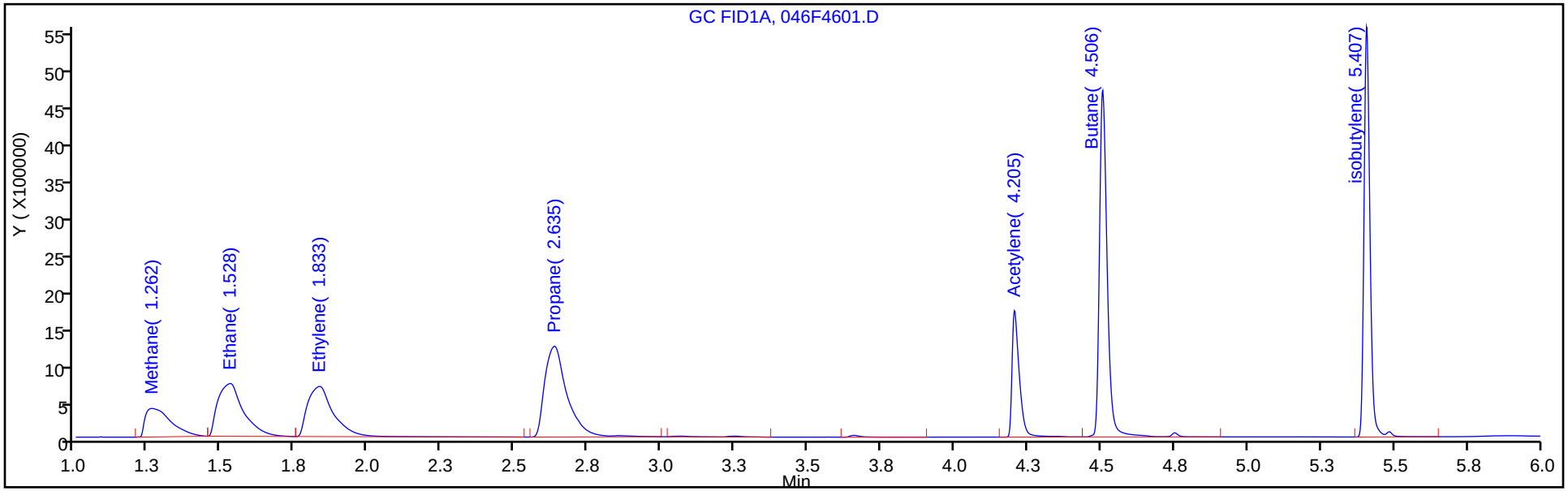
Report Date: 03-Jun-2022 09:25:17 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

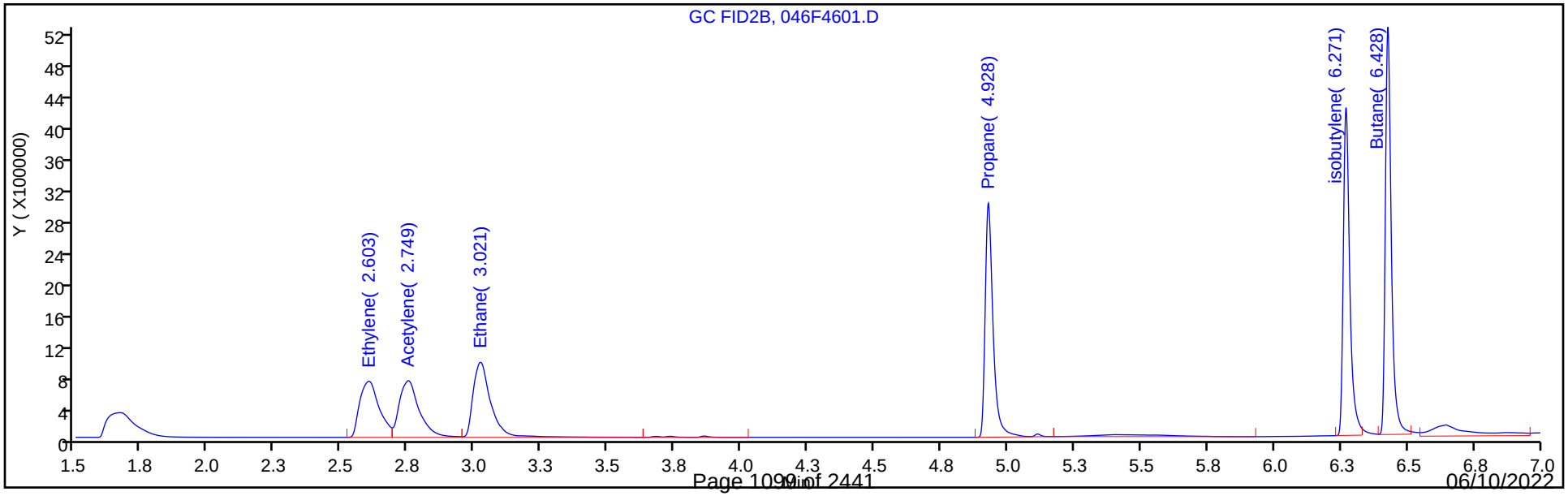
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\046F4601.D

Injection Date:	01-Jun-2022 19:15:32	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccv			Worklist Smp#:	75
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	46
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



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 Denver

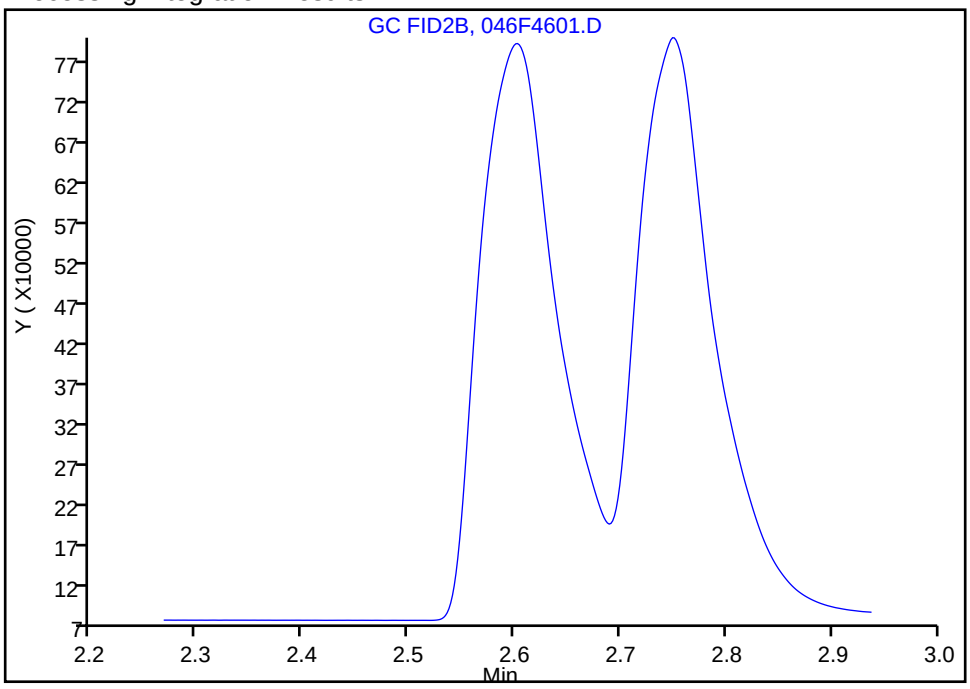
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\046F4601.D
Injection Date: 01-Jun-2022 19:15:32 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: sciannac ALS Bottle#: 46 Worklist Smp#: 75
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

4 Ethylene, CAS: 74-85-1

Signal: 2

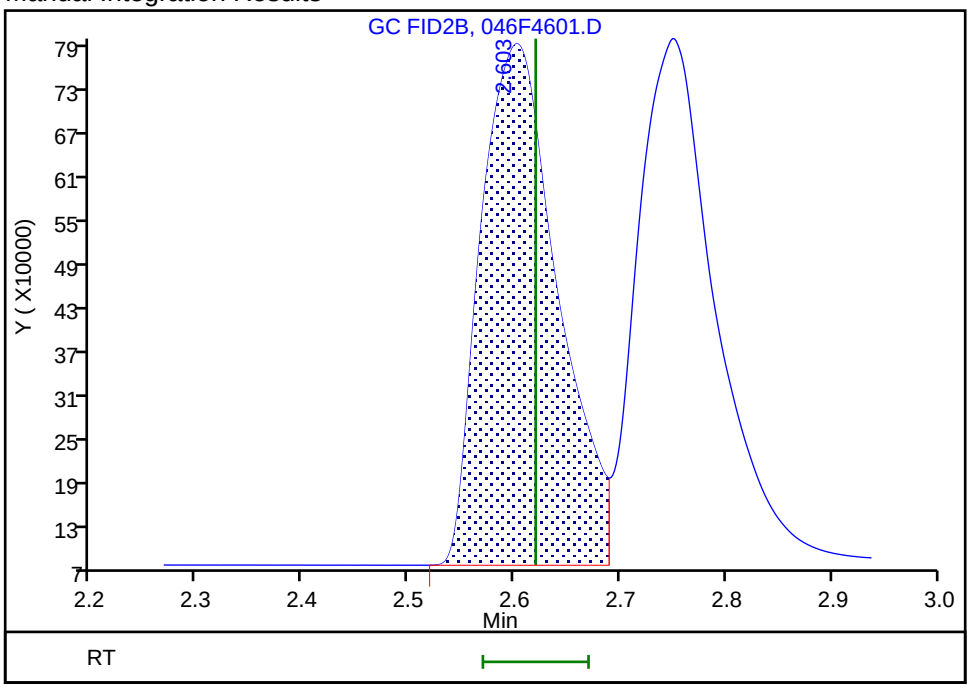
Not Detected
Expected RT: 2.62

Processing Integration Results



Manual Integration Results

RT: 2.60
Area: 3578826
Amount: 115.5195
Amount Units: ug/l



Reviewer: sciannac, 03-Jun-2022 09:17:39
Audit Action: Assigned Compound ID Audit Reason: Peak not integrated

Manual Integration/User Assign Peak Report

Eurofins Denver

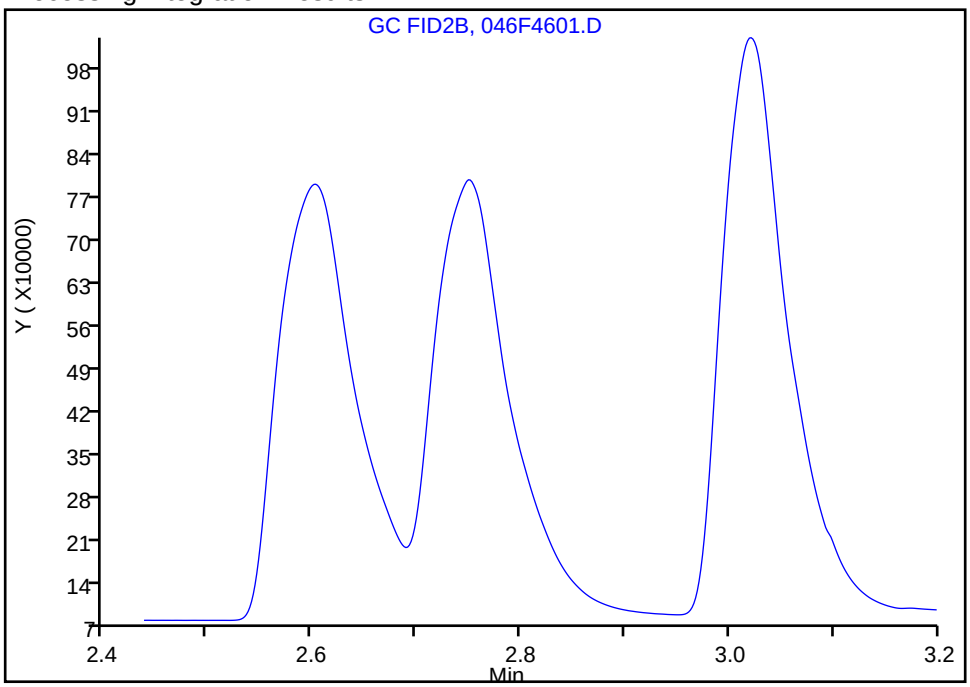
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\046F4601.D
Injection Date: 01-Jun-2022 19:15:32 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: sciannac ALS Bottle#: 46 Worklist Smp#: 75
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

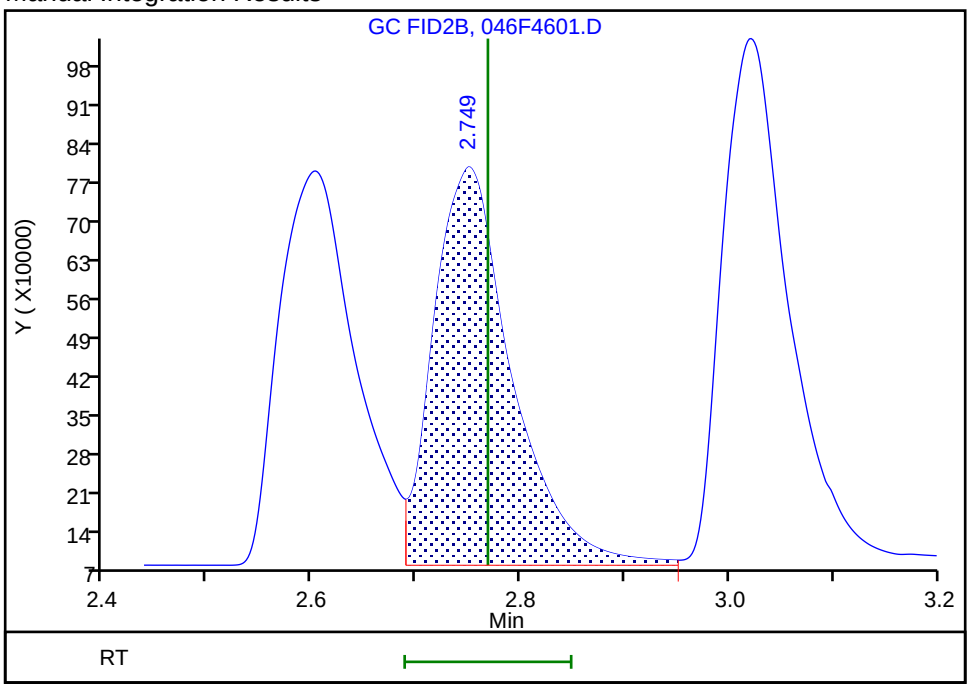
Not Detected
Expected RT: 2.77

Processing Integration Results



Manual Integration Results

RT: 2.75
Area: 3716337
Amount: 108.7322
Amount Units: ug/l



Reviewer: sciannac, 03-Jun-2022 09:17:30
Audit Action: Assigned Compound ID Audit Reason: Peak not integrated

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576768/87 Calibration Date: 06/01/2022 21:51

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 058F5801.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		36343		66.0	65.7	0.5	20.0
Ethane	Ave	33241	34735		129	123	4.5	20.0
Ethylene	Ave	35226	35535		116	115	0.9	20.0
Acetylene	Ave	28139	27923		106	107	-0.8	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576768/87 Calibration Date: 06/01/2022 21:51

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 058F5801.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.26	1.23	1.31
Ethane	1.53	1.46	1.56
Ethylene	1.84	1.70	1.80
Acetylene	4.21	3.88	4.04

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\058F5801.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 01-Jun-2022 21:51:35 ALS Bottle#: 58 Worklist Smp#: 87
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Jun-2022 09:25:23 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1606

First Level Reviewer: sciannac Date: 02-Jun-2022 09:12:09

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.264	1.269	-0.005	2387812	65.7	66.0	
2	1.673	1.682	-0.009	2374982	65.7	64.0	
						RPD = 3.05	
3 Ethane							
1	1.534	1.510	0.024	4278331	123.2	128.7	
2	3.025	3.040	-0.015	4264147	123.2	127.7	
						RPD = 0.76	
4 Ethylene							a
1	1.837	1.750	0.087	4082940	114.9	115.9	a
2	2.607	2.620	-0.013	3570747	114.9	115.3	a
						RPD = 0.56	
5 Propane							
1	2.639	2.469	0.170	6417618	180.6	178.2	
2	4.930	4.937	-0.007	6026562	180.6	172.1	
						RPD = 3.47	
6 Acetylene							a
1	4.205	3.964	0.241	2978594	106.7	105.9	a
2	2.755	2.768	-0.013	3654630	106.7	106.9	a
						RPD = 1.01	
7 Butane							Ma
1	4.507	4.340	0.167	7842546	238.1	215.3	a
2	6.428	6.432	-0.004	7422675	238.1	211.2	M
						RPD = 1.92	
8 isobutylene							Ma
1	5.409	5.245	0.164	7200264	229.8	199.3	
2	6.272	6.275	-0.003	6508196	229.8	196.0	M
						RPD = 1.67	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

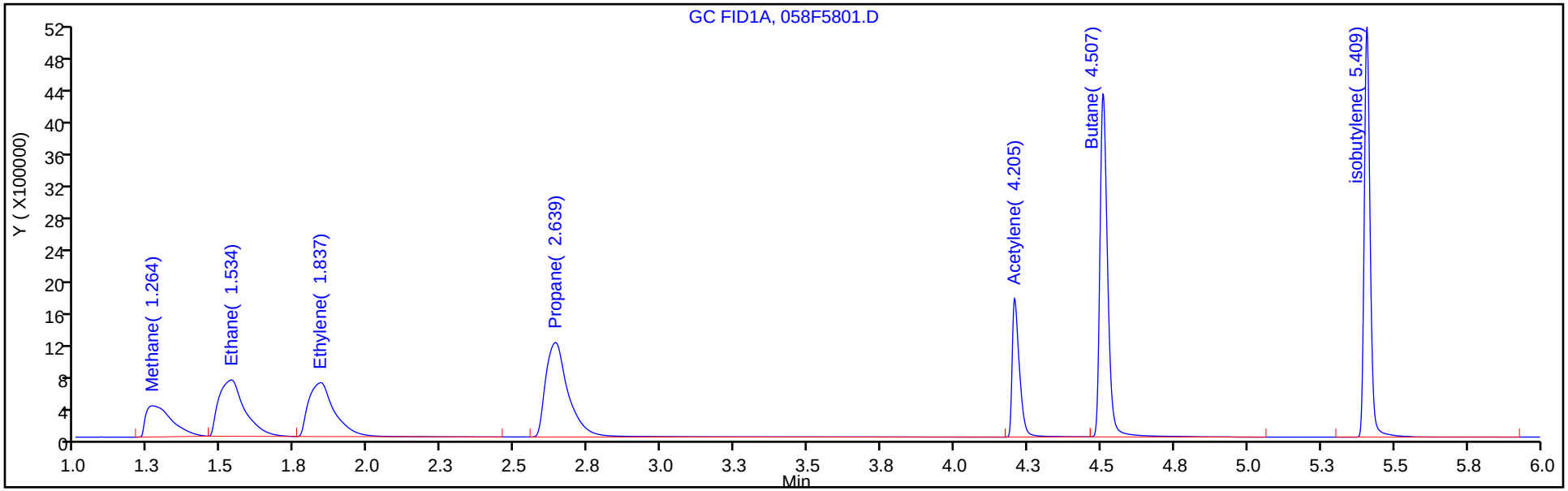
Report Date: 03-Jun-2022 09:25:23 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

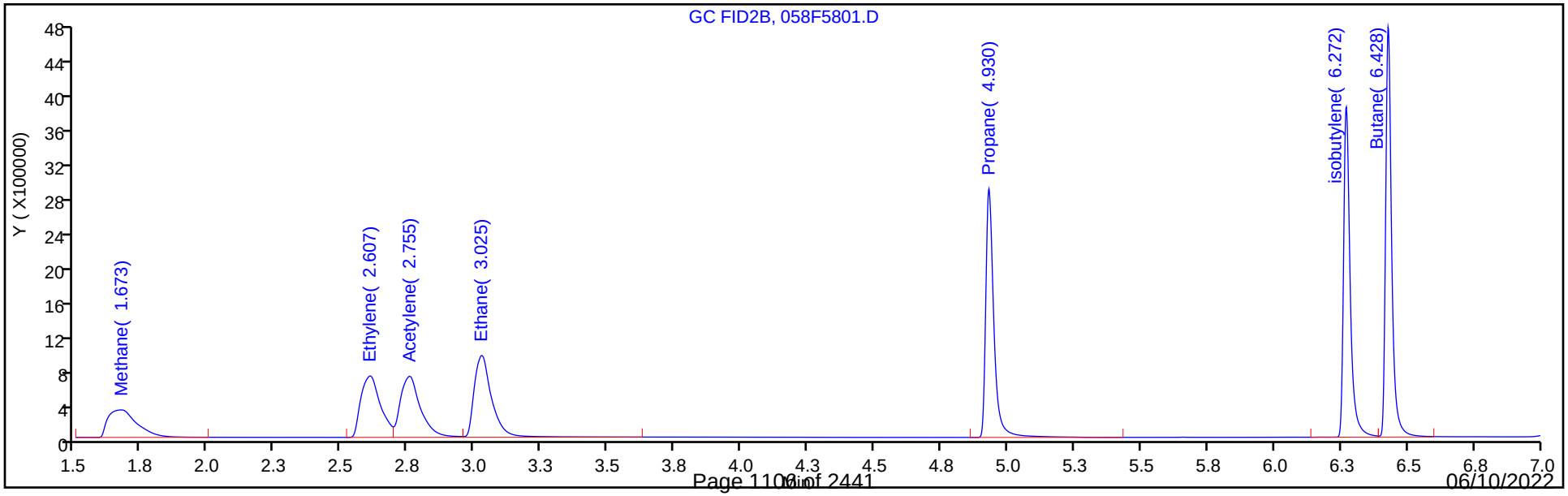
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\058F5801.D

Injection Date:	01-Jun-2022 21:51:35	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccv			Worklist Smp#:	87
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	58
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

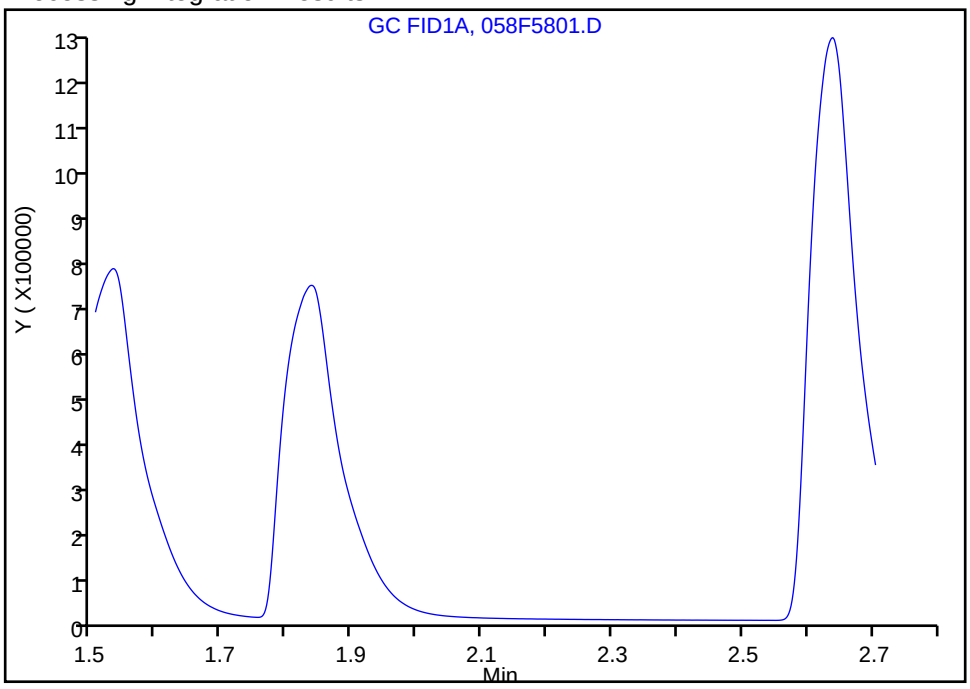
Data File:	\\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\058F5801.D				
Injection Date:	01-Jun-2022 21:51:35	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	sciannac	ALS Bottle#:	58	Worklist Smp#:	87
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

4 Ethylene, CAS: 74-85-1

Signal: 1

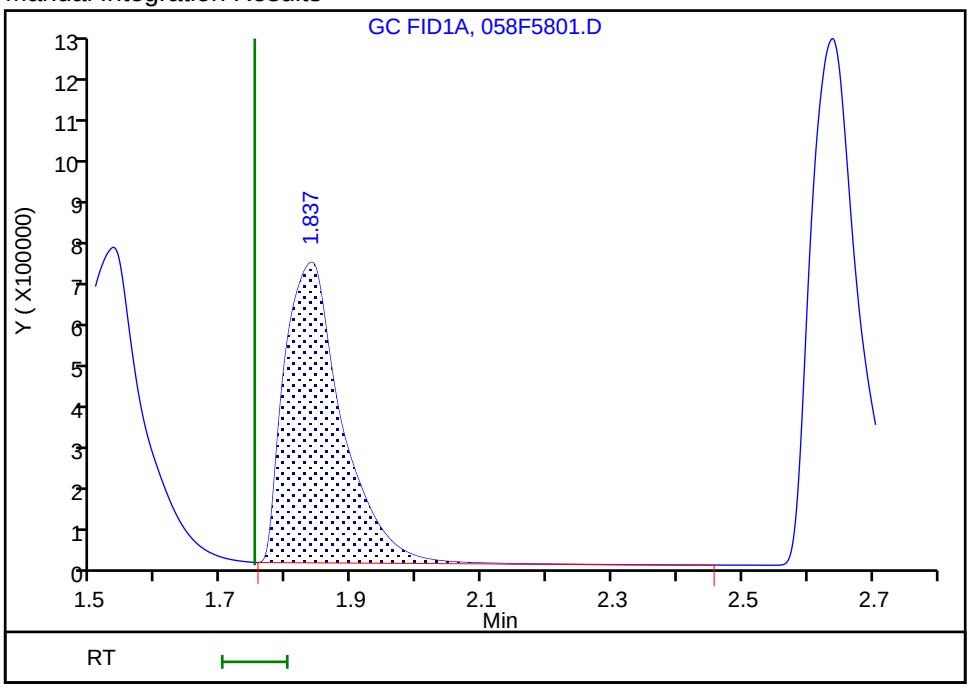
Not Detected
Expected RT: 1.75

Processing Integration Results



Manual Integration Results

RT: 1.84
Area: 4082940
Amount: 115.9071
Amount Units: ug/l



Reviewer: sciannac, 02-Jun-2022 09:05:03
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Denver

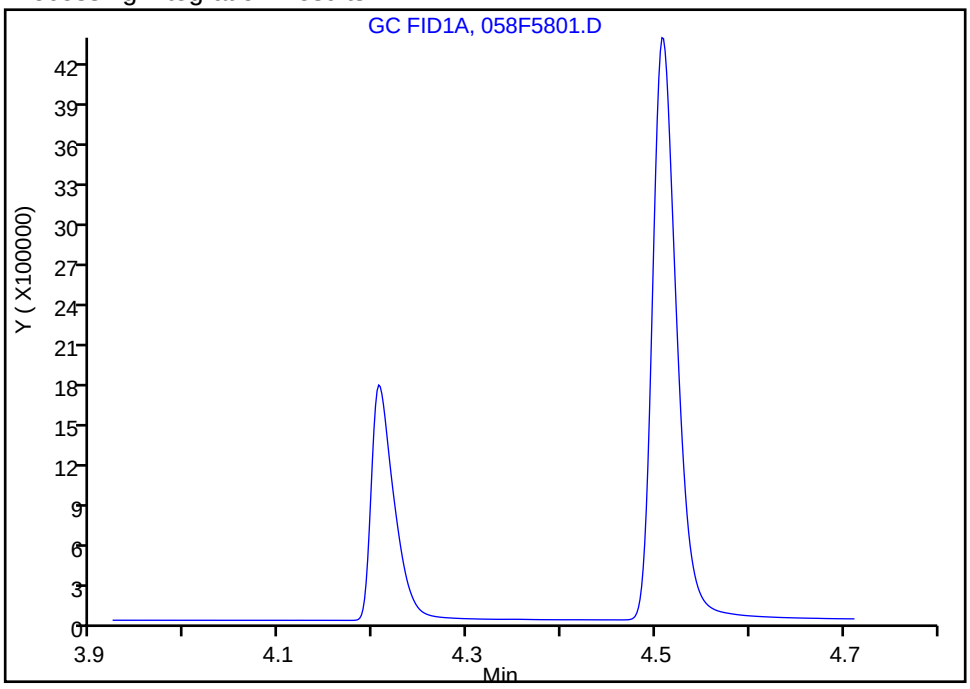
Data File:	\\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\058F5801.D				
Injection Date:	01-Jun-2022 21:51:35	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	sciannac	ALS Bottle#:	58	Worklist Smp#:	87
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

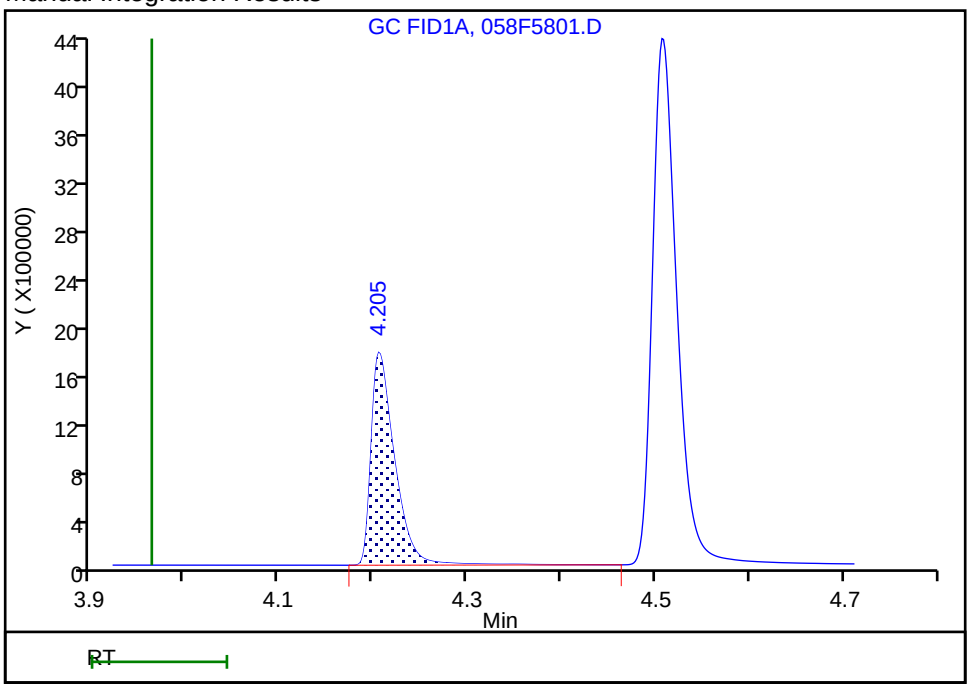
Not Detected
Expected RT: 3.96

Processing Integration Results



Manual Integration Results

RT: 4.21
Area: 2978594
Amount: 105.8528
Amount Units: ug/l



Reviewer: sciannac, 02-Jun-2022 09:05:15
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576768/87 Calibration Date: 06/01/2022 21:51

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 058F5801.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		36147		64.0	65.7	-2.5	20.0
Ethylene	Ave	30980	31077		115	115	0.3	20.0
Acetylene	Ave	34179	34261		107	107	0.2	20.0
Ethane	Ave	33383	34620		128	123	3.7	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576768/87 Calibration Date: 06/01/2022 21:51

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 058F5801.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.67	1.64	1.72
Ethylene	2.61	2.57	2.67
Acetylene	2.76	2.69	2.85
Ethane	3.03	2.99	3.09

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\058F5801.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 01-Jun-2022 21:51:35 ALS Bottle#: 58 Worklist Smp#: 87
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Jun-2022 09:25:23 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1606

First Level Reviewer: sciannac Date: 02-Jun-2022 09:12:09

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.264	1.269	-0.005	2387812	65.7	66.0	
2	1.673	1.682	-0.009	2374982	65.7	64.0	
						RPD = 3.05	
3 Ethane							
1	1.534	1.510	0.024	4278331	123.2	128.7	
2	3.025	3.040	-0.015	4264147	123.2	127.7	
						RPD = 0.76	
4 Ethylene							a
1	1.837	1.750	0.087	4082940	114.9	115.9	a
2	2.607	2.620	-0.013	3570747	114.9	115.3	a
						RPD = 0.56	
5 Propane							
1	2.639	2.469	0.170	6417618	180.6	178.2	
2	4.930	4.937	-0.007	6026562	180.6	172.1	
						RPD = 3.47	
6 Acetylene							a
1	4.205	3.964	0.241	2978594	106.7	105.9	a
2	2.755	2.768	-0.013	3654630	106.7	106.9	a
						RPD = 1.01	
7 Butane							Ma
1	4.507	4.340	0.167	7842546	238.1	215.3	a
2	6.428	6.432	-0.004	7422675	238.1	211.2	M
						RPD = 1.92	
8 isobutylene							Ma
1	5.409	5.245	0.164	7200264	229.8	199.3	
2	6.272	6.275	-0.003	6508196	229.8	196.0	M
						RPD = 1.67	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

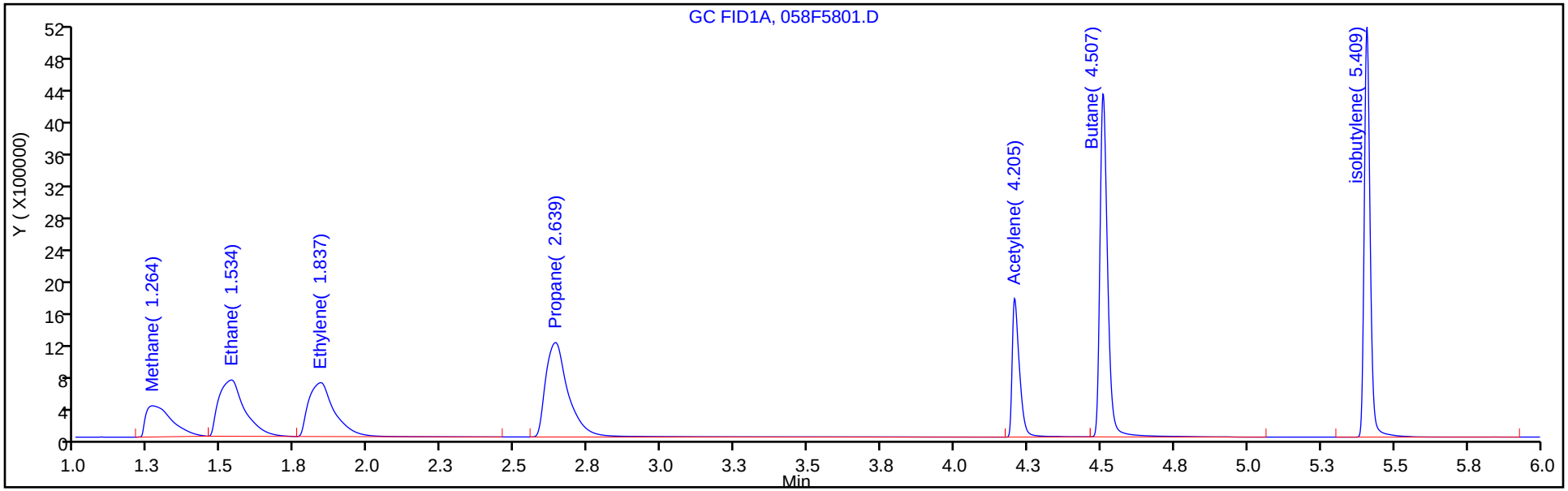
Report Date: 03-Jun-2022 09:25:24 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

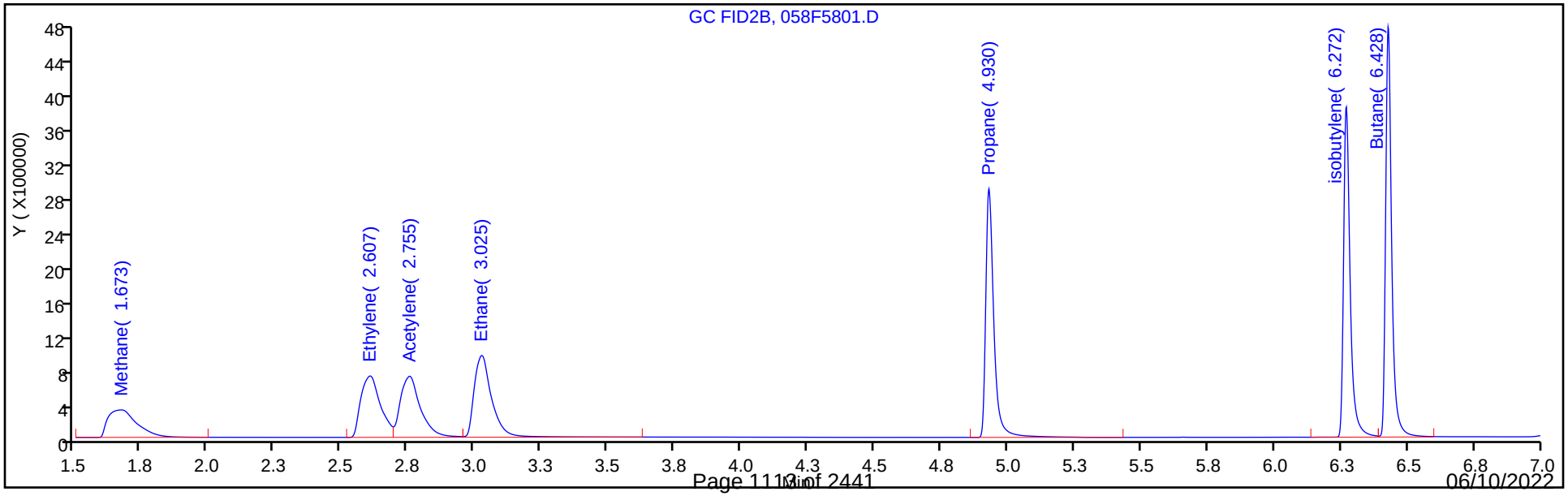
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\058F5801.D

Injection Date:	01-Jun-2022 21:51:35	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccv			Worklist Smp#:	87
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	58
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

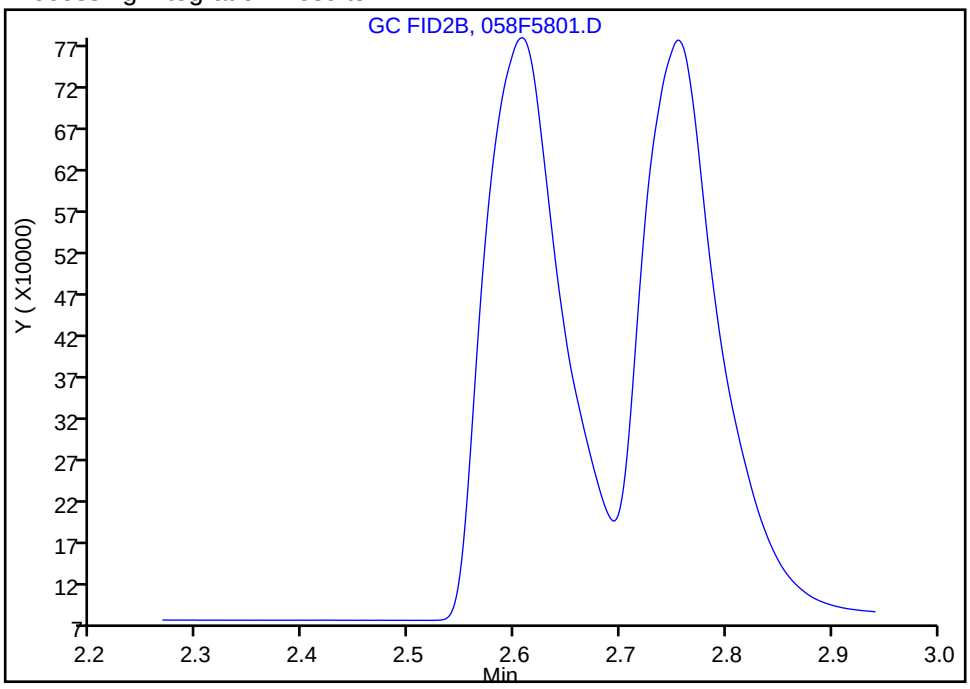
Data File:	\\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\058F5801.D				
Injection Date:	01-Jun-2022 21:51:35	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	sciannac	ALS Bottle#:	58	Worklist Smp#:	87
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

4 Ethylene, CAS: 74-85-1

Signal: 2

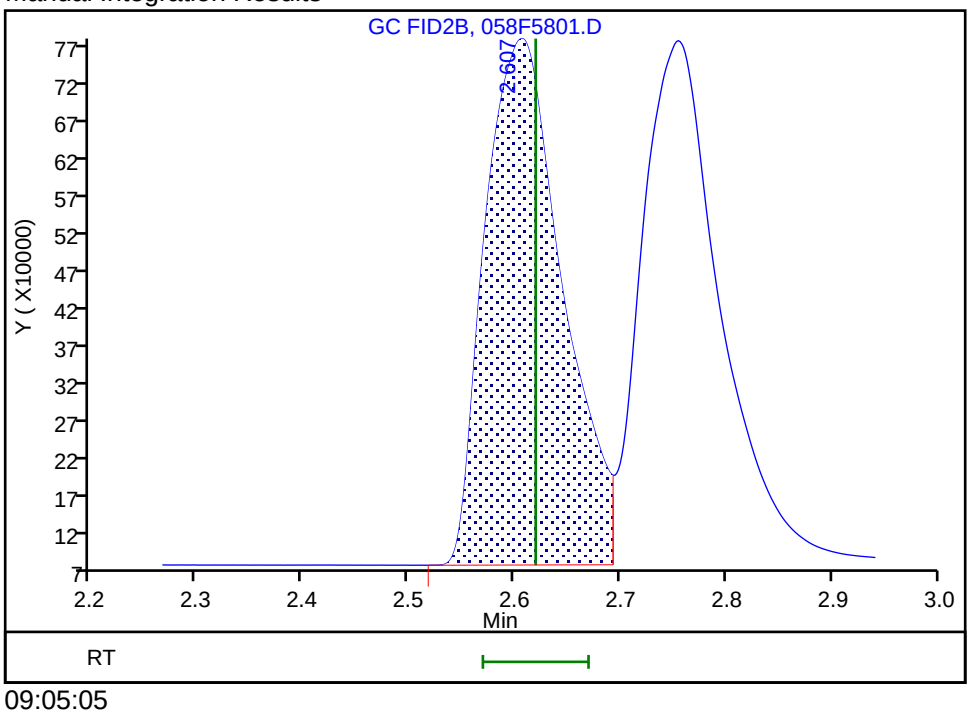
Not Detected
Expected RT: 2.62

Processing Integration Results



Manual Integration Results

RT: 2.61
Area: 3570747
Amount: 115.2588
Amount Units: ug/l



Reviewer: sciannac, 02-Jun-2022 09:05:05
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Denver

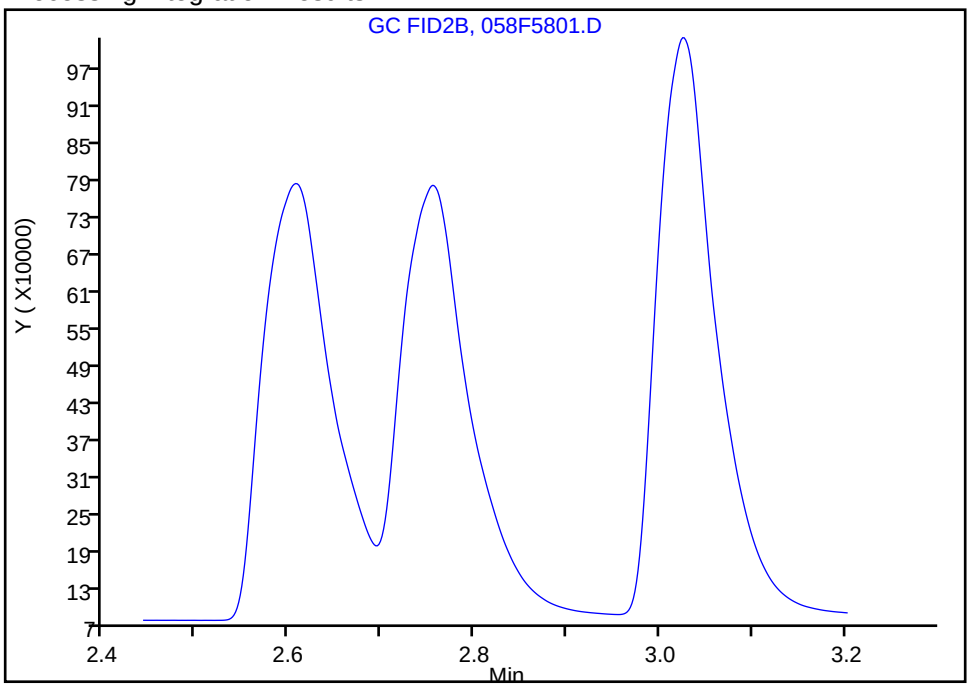
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\058F5801.D
Injection Date: 01-Jun-2022 21:51:35 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: sciannac ALS Bottle#: 58 Worklist Smp#: 87
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

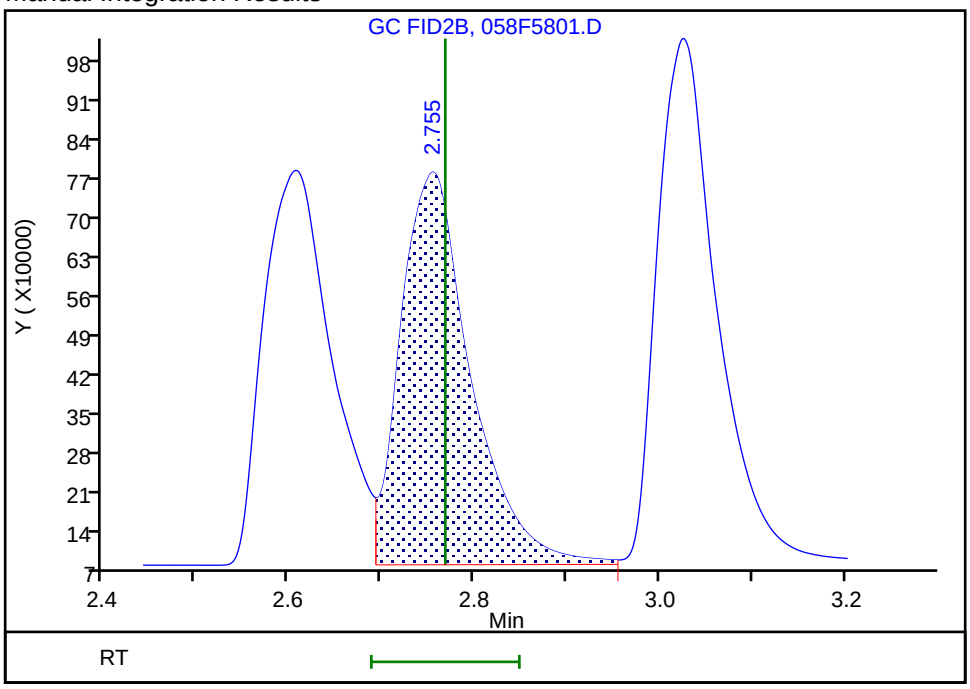
Not Detected
Expected RT: 2.77

Processing Integration Results



Manual Integration Results

RT: 2.75
Area: 3654630
Amount: 106.9268
Amount Units: ug/l



Reviewer: sciannac, 02-Jun-2022 09:05:17
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCVRT 280-576907/2 Calibration Date: 06/02/2022 11:52

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 002F0201.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		36265		65.9	65.7	0.3	20.0
Ethane	Ave	33241	35563		132	123	7.0	20.0
Ethylene	Ave	35226	36468		119	115	3.5	20.0
Acetylene	Ave	28139	28913		110	107	2.7	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCVRT 280-576907/2 Calibration Date: 06/02/2022 11:52

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 002F0201.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.27	1.23	1.31
Ethane	1.53	1.48	1.58
Ethylene	1.80	1.75	1.85
Acetylene	4.06	3.98	4.14

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220602-111531.b\002F0201.D
Lims ID: ccvrt
Client ID:
Sample Type: CCVRT
Inject. Date: 02-Jun-2022 11:52:54 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccvrt
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20220602-111531.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Jun-2022 10:36:54 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1606

First Level Reviewer: sciannac Date: 02-Jun-2022 12:34:04

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.270	1.270	0.000	2382695	65.7	65.9	
2	1.680	1.680	0.000	2405106	65.7	64.9	
						RPD = 1.54	
3 Ethane							
1	1.525	1.525	0.000	4380308	123.2	131.8	
2	3.038	3.038	0.000	4522587	123.2	135.5	
						RPD = 2.77	
4 Ethylene							
1	1.795	1.795	0.000	4190166	114.9	119.0	
2	2.620	2.620	0.000	3709232	114.9	119.7	
						RPD = 0.65	
5 Propane							
1	2.547	2.547	0.000	6702326	180.6	186.1	
2	4.935	4.935	0.000	6422298	180.6	183.4	
						RPD = 1.45	
6 Acetylene							
1	4.057	4.057	0.000	3084125	106.7	109.6	
2	2.768	2.768	0.000	3840615	106.7	112.4	
						RPD = 2.49	
7 Butane							
1	4.403	4.403	0.000	9148959	238.1	251.2	
2	6.431	6.431	0.000	8554194	238.1	243.4	
						RPD = 3.14	
8 isobutylene							
1	5.307	5.307	0.000	8339538	229.8	230.9	
2	6.275	6.275	0.000	7486180	229.8	225.5	
						RPD = 2.36	

QC Flag Legend

Processing Flags

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

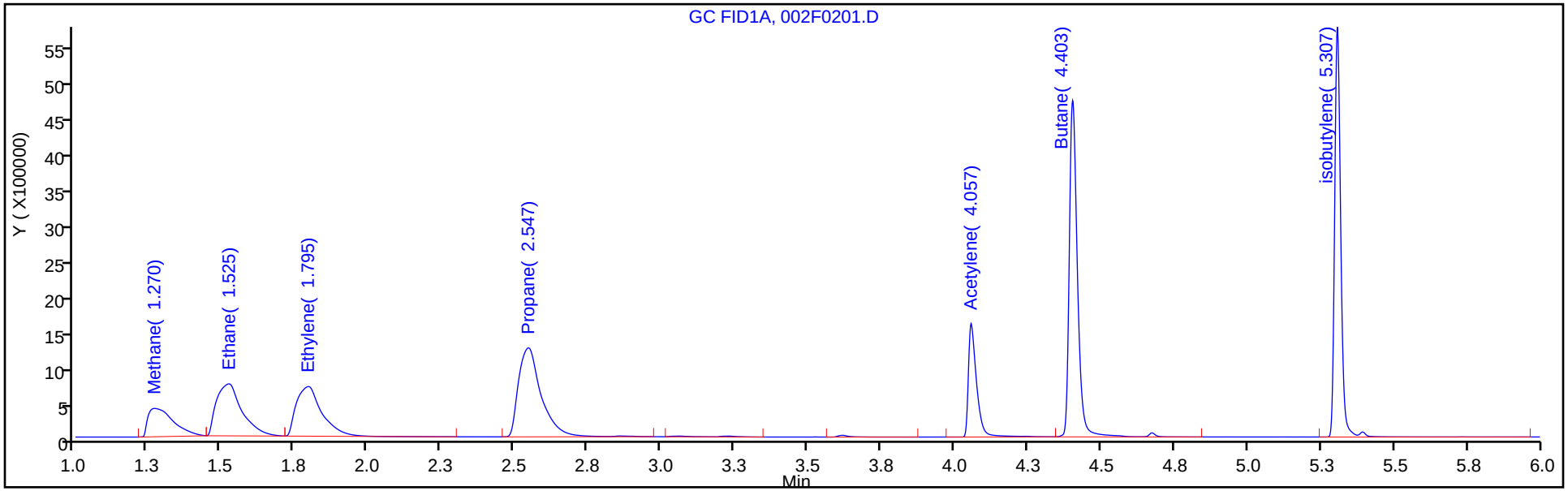
Report Date: 03-Jun-2022 10:36:54 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

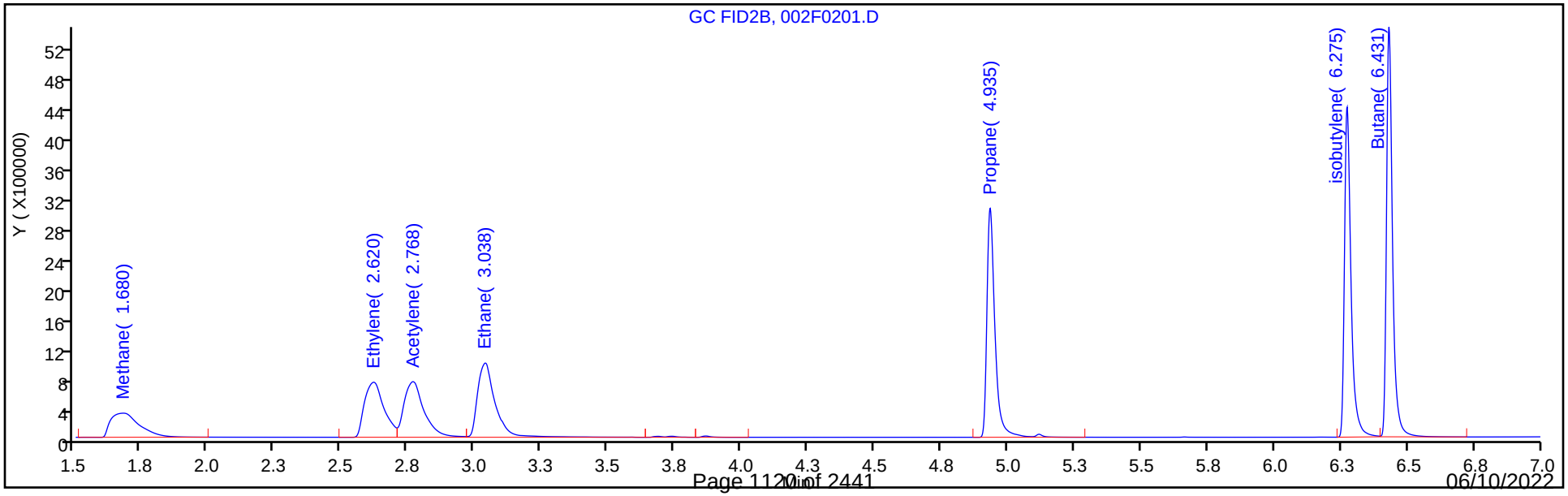
Data File: \\chromfs\Denver\ChromData\VGC_J\20220602-111531.b\002F0201.D

Injection Date:	02-Jun-2022 11:52:54	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccvrt			Worklist Smp#:	2
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCVRT 280-576907/2 Calibration Date: 06/02/2022 11:52

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 002F0201.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		36606		64.9	65.7	-1.2	20.0
Ethylene	Ave	30980	32282		120	115	4.2	20.0
Acetylene	Ave	34179	36005		112	107	5.3	20.0
Ethane	Ave	33383	36718		135	123	10.0	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCVRT 280-576907/2 Calibration Date: 06/02/2022 11:52

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 002F0201.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.68	1.64	1.72
Ethylene	2.62	2.57	2.67
Acetylene	2.77	2.69	2.85
Ethane	3.04	2.99	3.09

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220602-111531.b\002F0201.D
Lims ID: ccvrt
Client ID:
Sample Type: CCVRT
Inject. Date: 02-Jun-2022 11:52:54 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccvrt
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20220602-111531.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Jun-2022 10:36:54 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1606

First Level Reviewer: sciannac Date: 02-Jun-2022 12:34:04

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.270	1.270	0.000	2382695	65.7	65.9	
2	1.680	1.680	0.000	2405106	65.7	64.9	
						RPD = 1.54	
3 Ethane							
1	1.525	1.525	0.000	4380308	123.2	131.8	
2	3.038	3.038	0.000	4522587	123.2	135.5	
						RPD = 2.77	
4 Ethylene							
1	1.795	1.795	0.000	4190166	114.9	119.0	
2	2.620	2.620	0.000	3709232	114.9	119.7	
						RPD = 0.65	
5 Propane							
1	2.547	2.547	0.000	6702326	180.6	186.1	
2	4.935	4.935	0.000	6422298	180.6	183.4	
						RPD = 1.45	
6 Acetylene							
1	4.057	4.057	0.000	3084125	106.7	109.6	
2	2.768	2.768	0.000	3840615	106.7	112.4	
						RPD = 2.49	
7 Butane							
1	4.403	4.403	0.000	9148959	238.1	251.2	
2	6.431	6.431	0.000	8554194	238.1	243.4	
						RPD = 3.14	
8 isobutylene							
1	5.307	5.307	0.000	8339538	229.8	230.9	
2	6.275	6.275	0.000	7486180	229.8	225.5	
						RPD = 2.36	

QC Flag Legend

Processing Flags

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

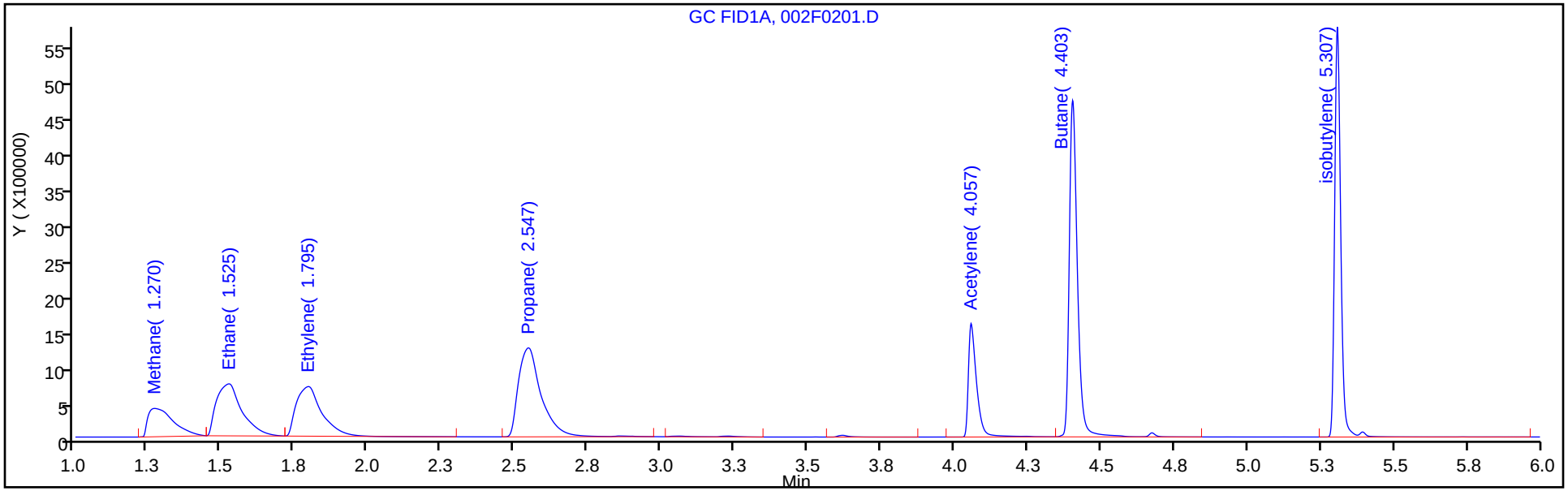
Report Date: 03-Jun-2022 10:36:54 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

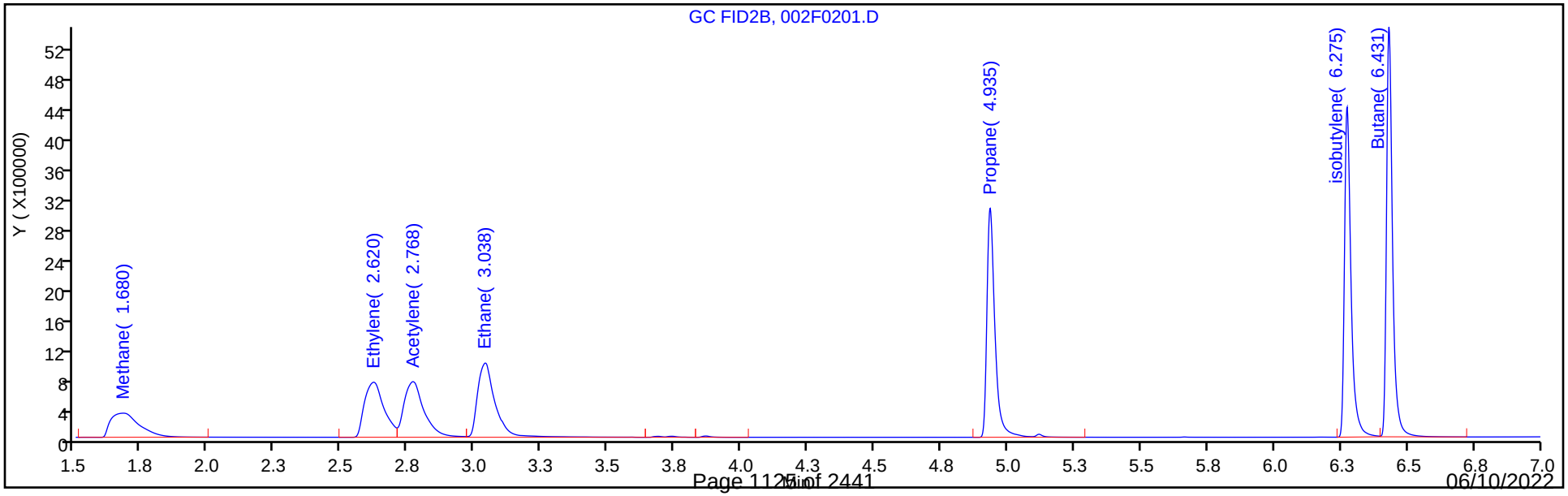
Data File: \\chromfs\Denver\ChromData\VGC_J\20220602-111531.b\002F0201.D

Injection Date:	02-Jun-2022 11:52:54	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccvrt			Worklist Smp#:	2
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576907/17 Calibration Date: 06/02/2022 15:07

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 017F1701.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		35992		65.4	65.7	-0.5	20.0
Ethane	Ave	33241	35100		130	123	5.6	20.0
Ethylene	Ave	35226	35848		117	115	1.8	20.0
Acetylene	Ave	28139	28243		107	107	0.4	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576907/17 Calibration Date: 06/02/2022 15:07

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 017F1701.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.26	1.23	1.31
Ethane	1.53	1.48	1.58
Ethylene	1.83	1.75	1.85
Acetylene	4.20	3.98	4.14

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220602-111531.b\017F1701.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 02-Jun-2022 15:07:04 ALS Bottle#: 17 Worklist Smp#: 17
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20220602-111531.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Jun-2022 09:48:32 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1606

First Level Reviewer: sciannac Date: 03-Jun-2022 08:50:01

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.258	1.270	-0.012	2364777	65.7	65.4	
2	1.665	1.680	-0.015	2333215	65.7	62.9	
						RPD = 3.88	
3 Ethane							
1	1.525	1.525	0.000	4323300	123.2	130.1	
2	3.018	3.038	-0.020	4372506	123.2	131.0	
						RPD = 0.71	
4 Ethylene							
1	1.828	1.795	0.033	4118894	114.9	116.9	
2	2.598	2.620	-0.022	3580965	114.9	115.6	
						RPD = 1.15	
5 Propane							a
1	2.625	2.547	0.078	6521662	180.6	181.1	a
2	4.925	4.935	-0.010	6103435	180.6	174.3	a
						RPD = 3.81	
6 Acetylene							a
1	4.200	4.057	0.143	3012662	106.7	107.1	a
2	2.746	2.768	-0.022	3704592	106.7	108.4	a
						RPD = 1.23	
7 Butane							Ma
1	4.498	4.403	0.095	8823852	238.1	242.3	a
2	6.425	6.431	-0.006	8415213	238.1	239.5	M
						RPD = 1.16	
8 isobutylene							Ma
1	5.400	5.307	0.093	7966791	229.8	220.5	a
2	6.268	6.275	-0.007	7662392	229.8	230.8	M
						RPD = 4.54	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

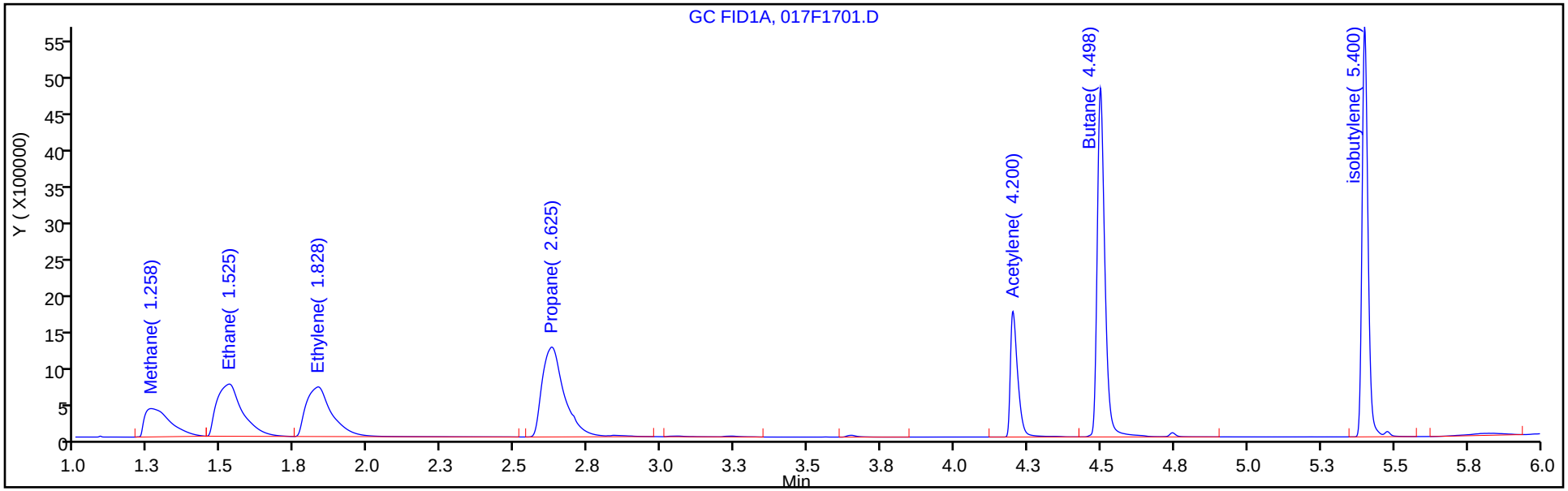
Report Date: 03-Jun-2022 09:48:32 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

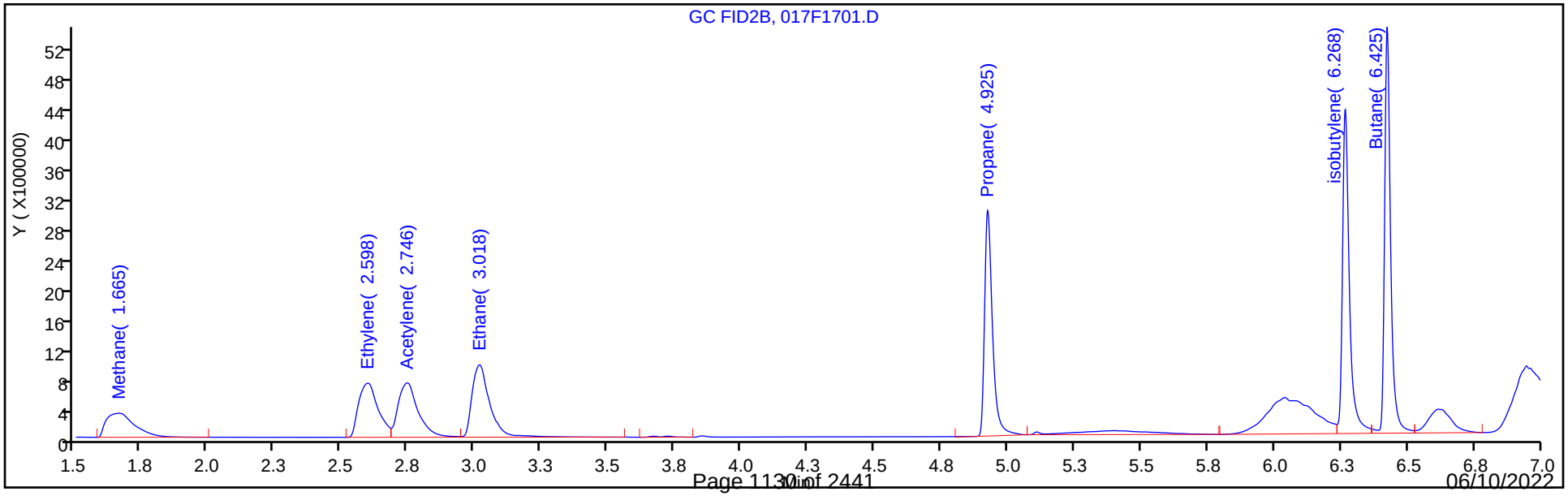
Data File: \\chromfs\Denver\ChromData\VGC_J\20220602-111531.b\017F1701.D

Injection Date:	02-Jun-2022 15:07:04	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccv			Worklist Smp#:	17
Client ID:					
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 Denver

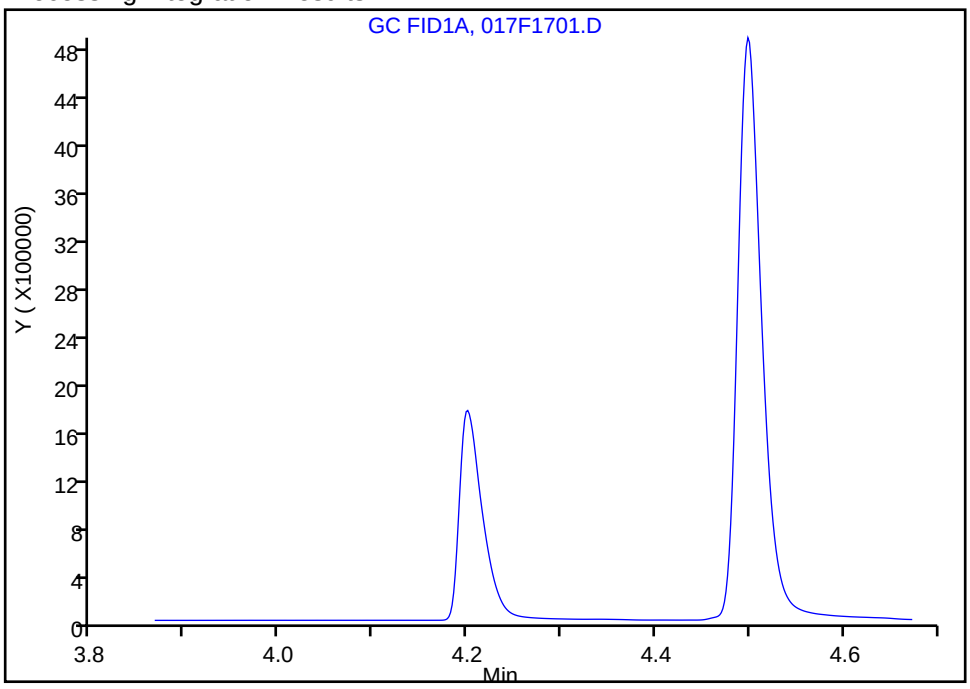
Data File:	\\chromfs\Denver\ChromData\VGC_J\20220602-111531.b\017F1701.D				
Injection Date:	02-Jun-2022 15:07:04	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	sciannac	ALS Bottle#:	17	Worklist Smp#:	17
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

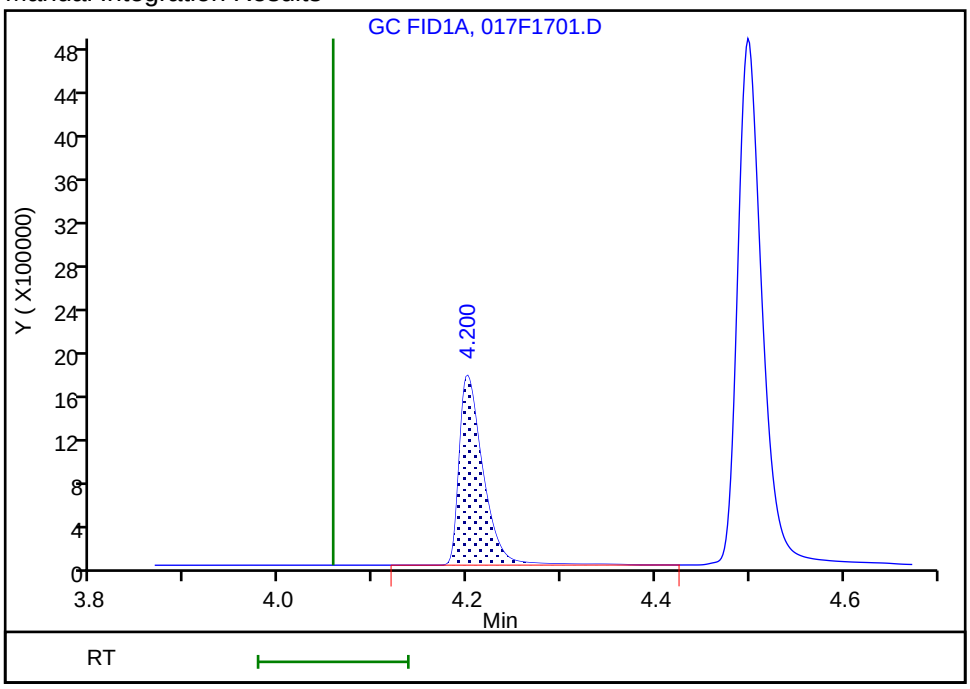
Not Detected
Expected RT: 4.06

Processing Integration Results



Manual Integration Results

RT: 4.20
Area: 3012662
Amount: 107.0635
Amount Units: ug/l



Reviewer: sciannac, 03-Jun-2022 08:49:42
Audit Action: Assigned Compound ID Audit Reason: Split Peak

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576907/17 Calibration Date: 06/02/2022 15:07

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 017F1701.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		35512		62.9	65.7	-4.3	20.0
Ethylene	Ave	30980	31166		116	115	0.6	20.0
Acetylene	Ave	34179	34729		108	107	1.6	20.0
Ethane	Ave	33383	35500		131	123	6.3	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576907/17 Calibration Date: 06/02/2022 15:07

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 017F1701.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.67	1.64	1.72
Ethylene	2.60	2.57	2.67
Acetylene	2.75	2.69	2.85
Ethane	3.02	2.99	3.09

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220602-111531.b\017F1701.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 02-Jun-2022 15:07:04 ALS Bottle#: 17 Worklist Smp#: 17
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20220602-111531.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Jun-2022 09:48:32 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1606

First Level Reviewer: sciannac Date: 03-Jun-2022 08:50:01

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.258	1.270	-0.012	2364777	65.7	65.4	
2	1.665	1.680	-0.015	2333215	65.7	62.9	
						RPD = 3.88	
3 Ethane							
1	1.525	1.525	0.000	4323300	123.2	130.1	
2	3.018	3.038	-0.020	4372506	123.2	131.0	
						RPD = 0.71	
4 Ethylene							
1	1.828	1.795	0.033	4118894	114.9	116.9	
2	2.598	2.620	-0.022	3580965	114.9	115.6	
						RPD = 1.15	
5 Propane							a
1	2.625	2.547	0.078	6521662	180.6	181.1	a
2	4.925	4.935	-0.010	6103435	180.6	174.3	a
						RPD = 3.81	
6 Acetylene							a
1	4.200	4.057	0.143	3012662	106.7	107.1	a
2	2.746	2.768	-0.022	3704592	106.7	108.4	a
						RPD = 1.23	
7 Butane							Ma
1	4.498	4.403	0.095	8823852	238.1	242.3	a
2	6.425	6.431	-0.006	8415213	238.1	239.5	M
						RPD = 1.16	
8 isobutylene							Ma
1	5.400	5.307	0.093	7966791	229.8	220.5	a
2	6.268	6.275	-0.007	7662392	229.8	230.8	M
						RPD = 4.54	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

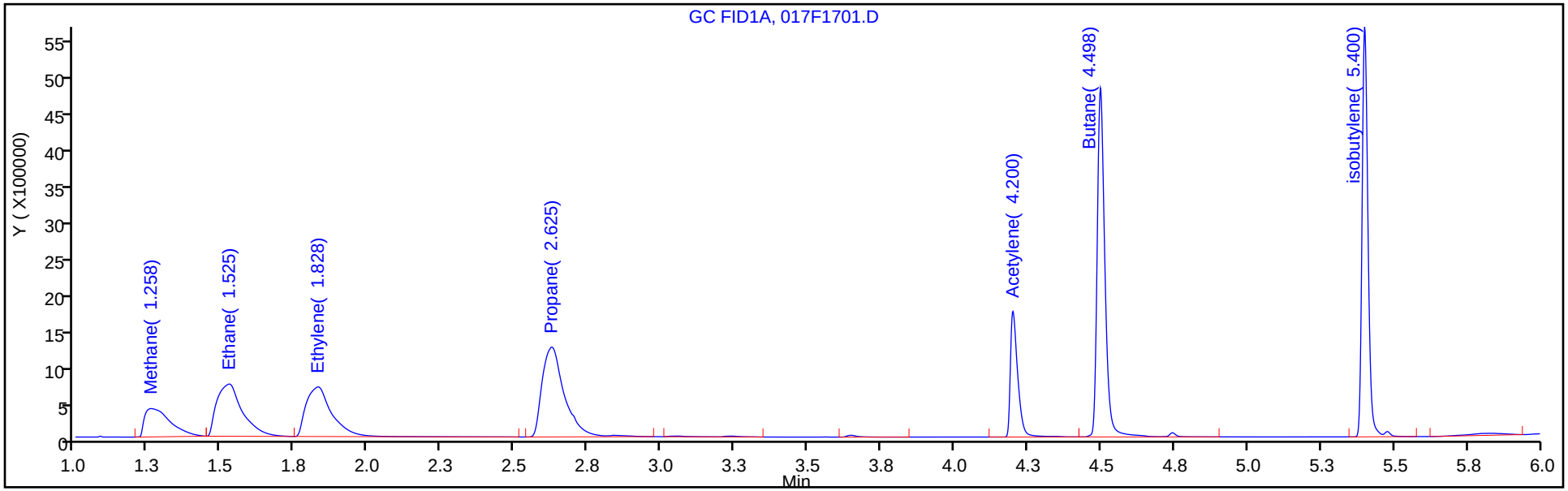
Report Date: 03-Jun-2022 09:48:32 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

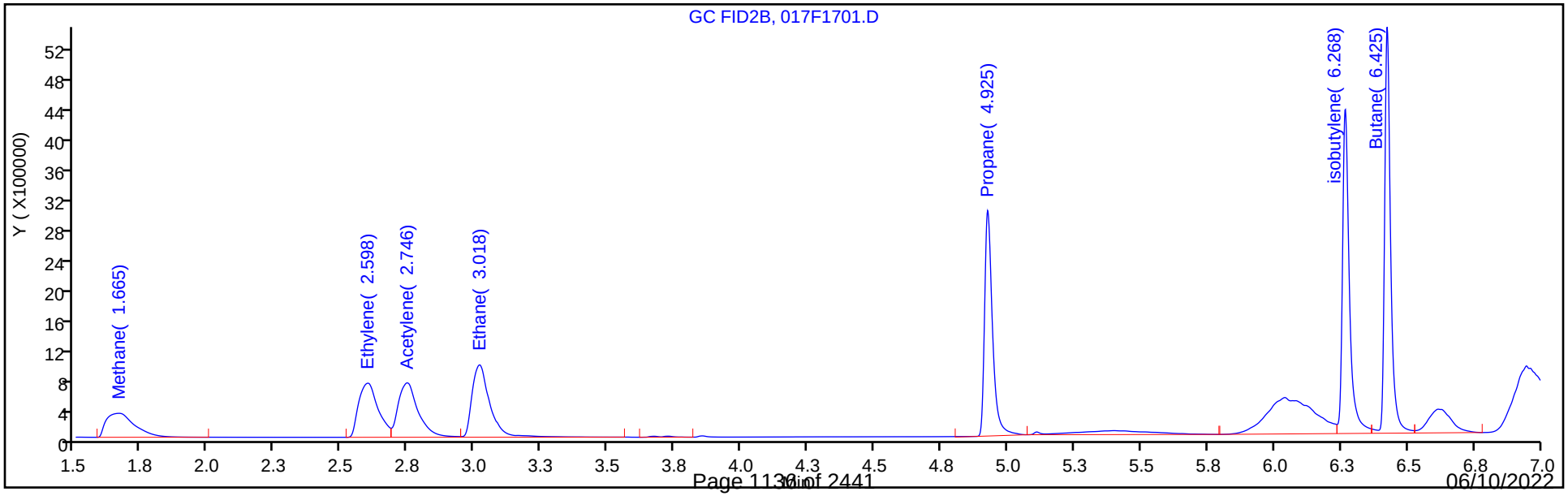
Data File: \\chromfs\Denver\ChromData\VGC_J\20220602-111531.b\017F1701.D

Injection Date:	02-Jun-2022 15:07:04	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccv			Worklist Smp#:	17
Client ID:					
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 Denver

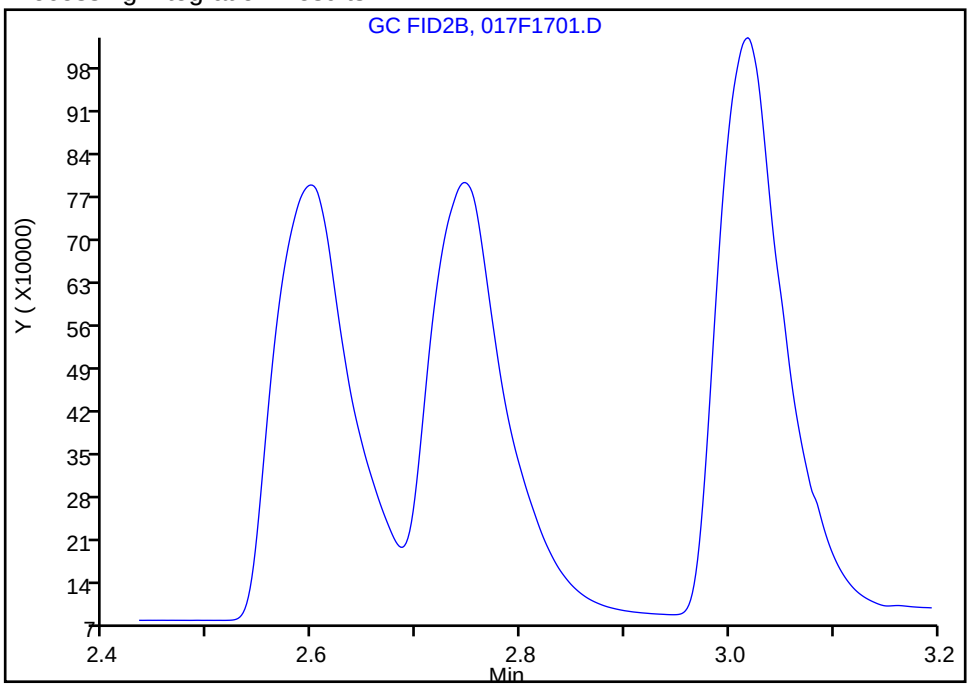
Data File: \\chromfs\Denver\ChromData\VGC_J\20220602-111531.b\017F1701.D
Injection Date: 02-Jun-2022 15:07:04 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: sciannac ALS Bottle#: 17 Worklist Smp#: 17
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

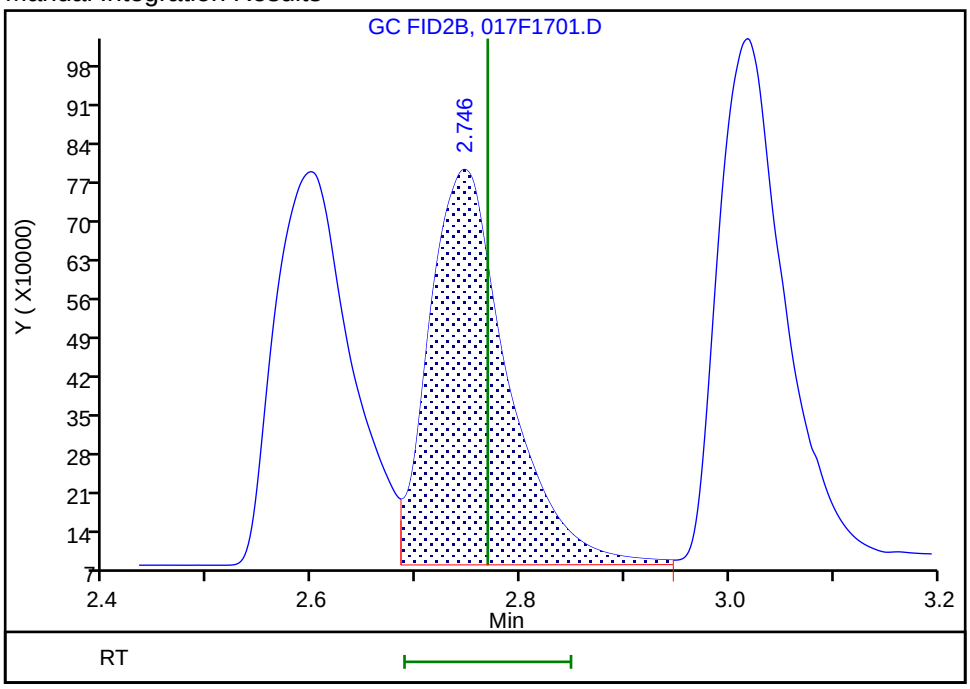
Not Detected
Expected RT: 2.77

Processing Integration Results



Manual Integration Results

RT: 2.75
Area: 3704592
Amount: 108.3886
Amount Units: ug/l



Reviewer: sciannac, 03-Jun-2022 08:49:40
Audit Action: Assigned Compound ID Audit Reason: Split Peak

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576907/28 Calibration Date: 06/02/2022 17:29

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 028F2801.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		36342		66.0	65.7	0.5	20.0
Ethane	Ave	33241	35448		131	123	6.6	20.0
Ethylene	Ave	35226	36190		118	115	2.7	20.0
Acetylene	Ave	28139	28214		107	107	0.3	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576907/28 Calibration Date: 06/02/2022 17:29

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 028F2801.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.26	1.23	1.31
Ethane	1.53	1.48	1.58
Ethylene	1.83	1.75	1.85
Acetylene	4.20	3.98	4.14

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220602-111531.b\028F2801.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 02-Jun-2022 17:29:26 ALS Bottle#: 28 Worklist Smp#: 28
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20220602-111531.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Jun-2022 10:36:51 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1606

First Level Reviewer: sciannac Date: 03-Jun-2022 10:36:51

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.259	1.270	-0.011	2387749	65.7	66.0	
2	1.662	1.680	-0.018	2367945	65.7	63.9	
						RPD = 3.35	
3 Ethane							
1	1.526	1.525	0.001	4366077	123.2	131.3	
2	3.017	3.038	-0.021	4445755	123.2	133.2	
						RPD = 1.38	
4 Ethylene							M
1	1.829	1.795	0.034	4158209	114.9	118.0	
2	2.599	2.620	-0.021	3441217	114.9	111.1	M
						RPD = 6.08	
5 Propane							a
1	2.627	2.547	0.080	6556872	180.6	182.1	a
2	4.927	4.935	-0.008	6279947	180.6	179.4	a
						RPD = 1.50	
6 Acetylene							Ma
1	4.201	4.057	0.144	3009546	106.7	107.0	a
2	2.747	2.768	-0.021	3759823	106.7	110.0	M
						RPD = 2.81	
7 Butane							a
1	4.501	4.403	0.098	8860496	238.1	243.3	a
2	6.425	6.431	-0.006	8234704	238.1	234.4	a
						RPD = 3.74	
8 isobutylene							a
1	5.402	5.307	0.095	8037243	229.8	222.5	a
2	6.269	6.275	-0.006	7186395	229.8	216.4	a
						RPD = 2.75	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

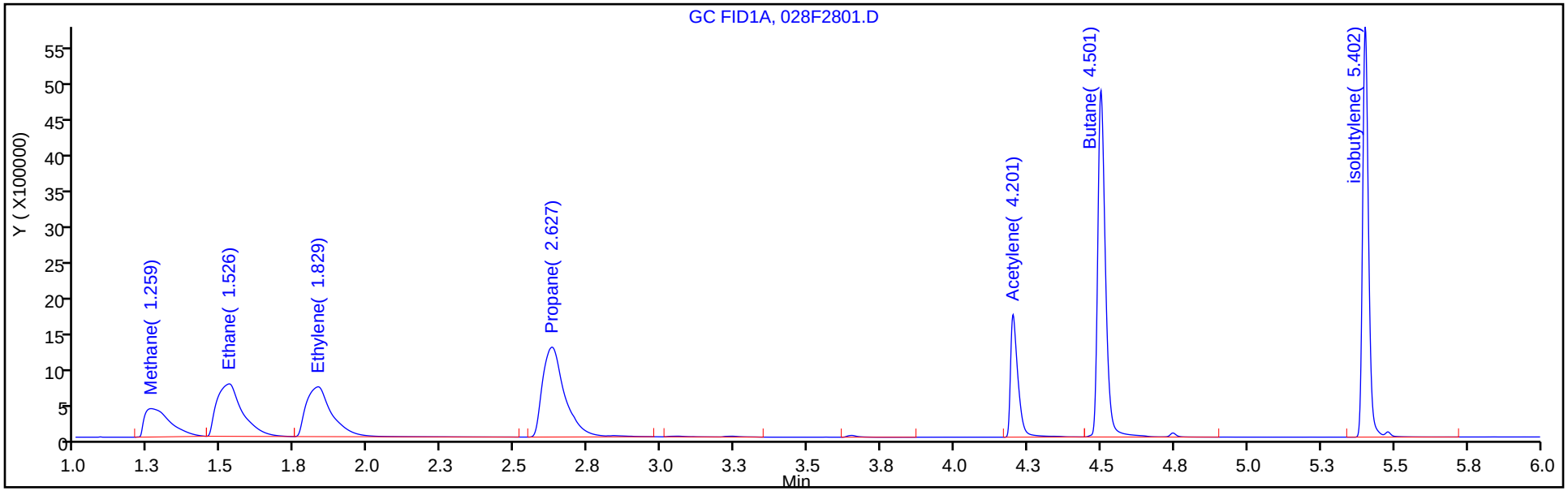
Report Date: 03-Jun-2022 10:36:51 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

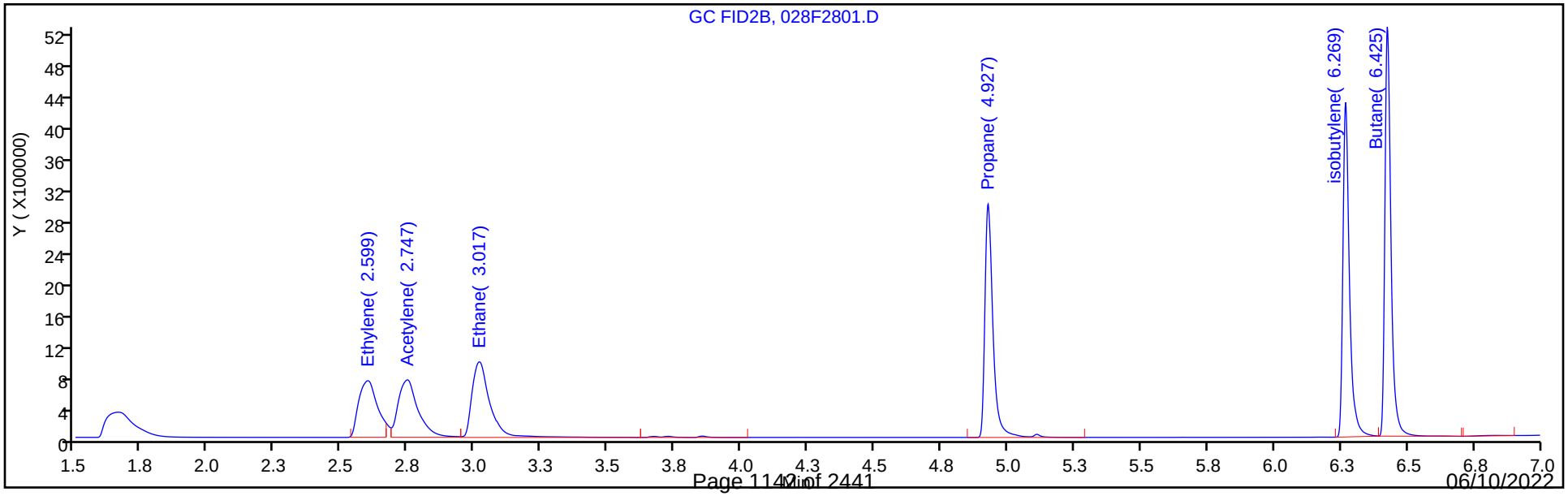
Data File: \\chromfs\Denver\ChromData\VGC_J\20220602-111531.b\028F2801.D

Injection Date:	02-Jun-2022 17:29:26	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccv			Worklist Smp#:	28
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

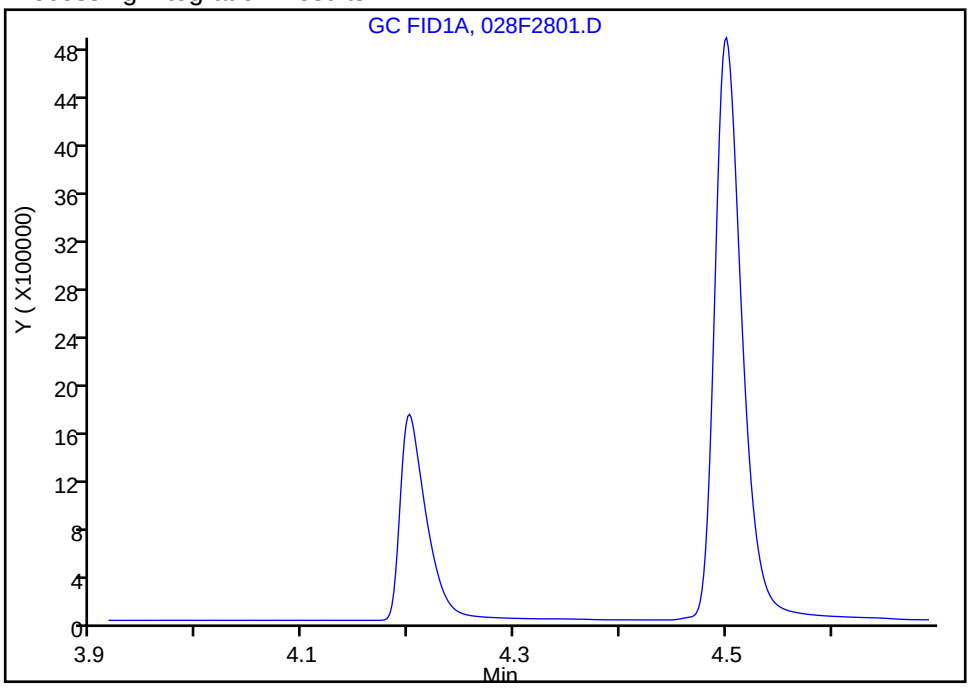
Data File:	\\chromfs\Denver\ChromData\VGC_J\20220602-111531.b\028F2801.D				
Injection Date:	02-Jun-2022 17:29:26	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	sciannac	ALS Bottle#:	28	Worklist Smp#:	28
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

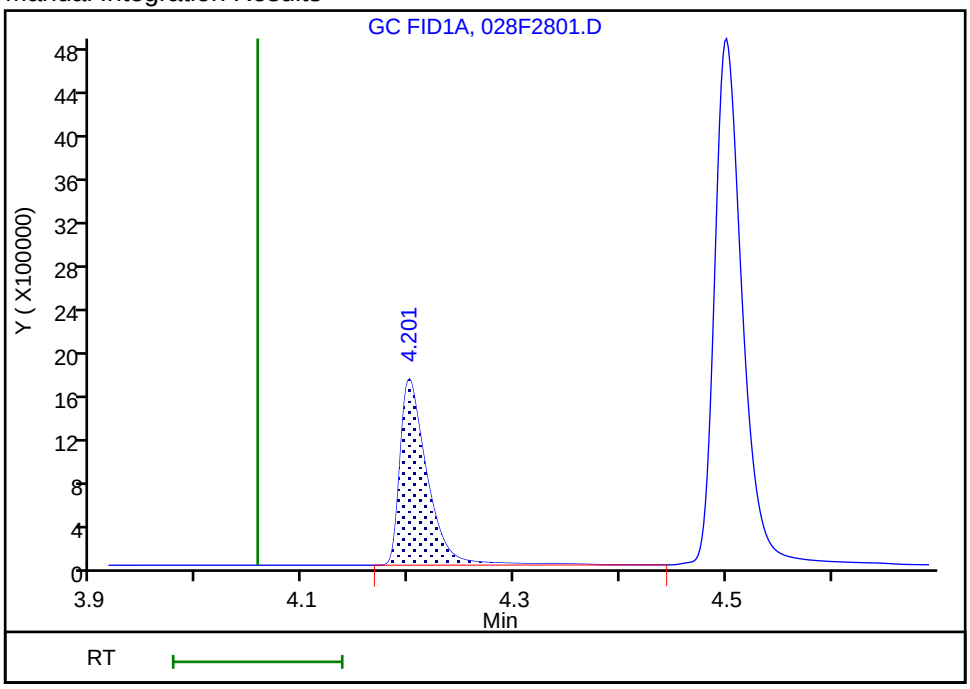
Not Detected
Expected RT: 4.06

Processing Integration Results



Manual Integration Results

RT: 4.20
Area: 3009546
Amount: 106.9528
Amount Units: ug/l



Reviewer: sciannac, 03-Jun-2022 09:39:49
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576907/28 Calibration Date: 06/02/2022 17:29

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 028F2801.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		36040		63.9	65.7	-2.8	20.0
Ethylene	Ave	30980	29950		111	115	-3.3	20.0
Acetylene	Ave	34179	35247		110	107	3.1	20.0
Ethane	Ave	33383	36094		133	123	8.1	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576907/28 Calibration Date: 06/02/2022 17:29

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 028F2801.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.66	1.64	1.72
Ethylene	2.60	2.57	2.67
Acetylene	2.75	2.69	2.85
Ethane	3.02	2.99	3.09

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220602-111531.b\028F2801.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 02-Jun-2022 17:29:26 ALS Bottle#: 28 Worklist Smp#: 28
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20220602-111531.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Jun-2022 10:36:51 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1606

First Level Reviewer: sciannac Date: 03-Jun-2022 10:36:51

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.259	1.270	-0.011	2387749	65.7	66.0	
2	1.662	1.680	-0.018	2367945	65.7	63.9	
						RPD = 3.35	
3 Ethane							
1	1.526	1.525	0.001	4366077	123.2	131.3	
2	3.017	3.038	-0.021	4445755	123.2	133.2	
						RPD = 1.38	
4 Ethylene							M
1	1.829	1.795	0.034	4158209	114.9	118.0	
2	2.599	2.620	-0.021	3441217	114.9	111.1	M
						RPD = 6.08	
5 Propane							a
1	2.627	2.547	0.080	6556872	180.6	182.1	a
2	4.927	4.935	-0.008	6279947	180.6	179.4	a
						RPD = 1.50	
6 Acetylene							Ma
1	4.201	4.057	0.144	3009546	106.7	107.0	a
2	2.747	2.768	-0.021	3759823	106.7	110.0	M
						RPD = 2.81	
7 Butane							a
1	4.501	4.403	0.098	8860496	238.1	243.3	a
2	6.425	6.431	-0.006	8234704	238.1	234.4	a
						RPD = 3.74	
8 isobutylene							a
1	5.402	5.307	0.095	8037243	229.8	222.5	a
2	6.269	6.275	-0.006	7186395	229.8	216.4	a
						RPD = 2.75	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

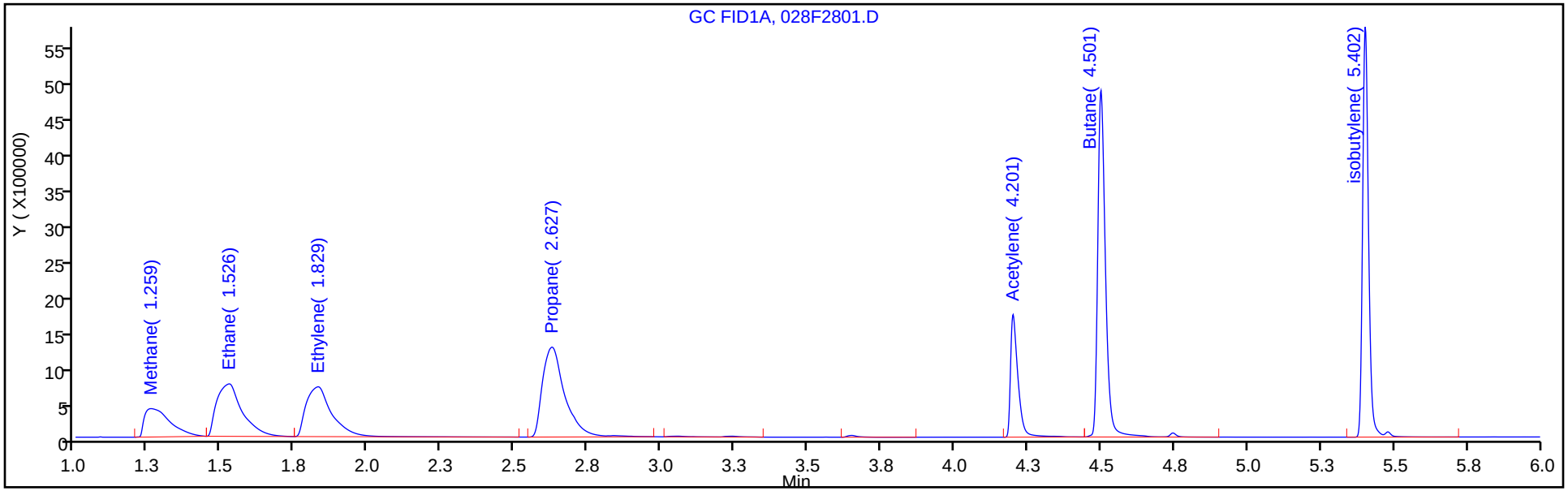
Report Date: 03-Jun-2022 10:36:51 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

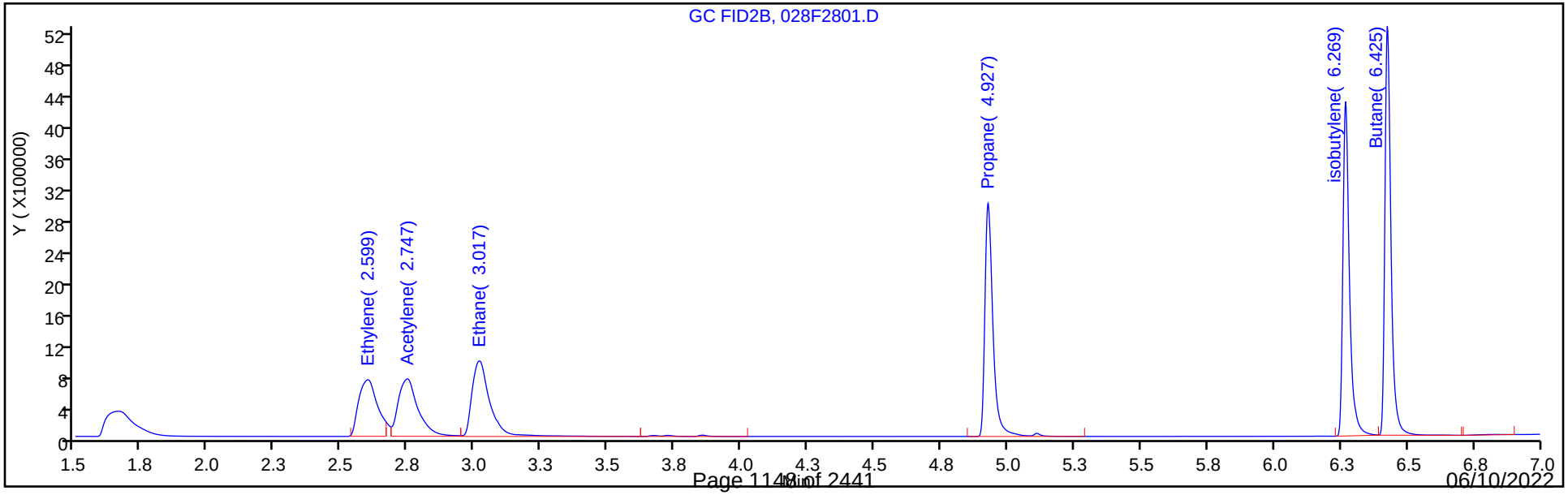
Data File: \\chromfs\Denver\ChromData\VGC_J\20220602-111531.b\028F2801.D

Injection Date:	02-Jun-2022 17:29:26	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccv			Worklist Smp#:	28
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

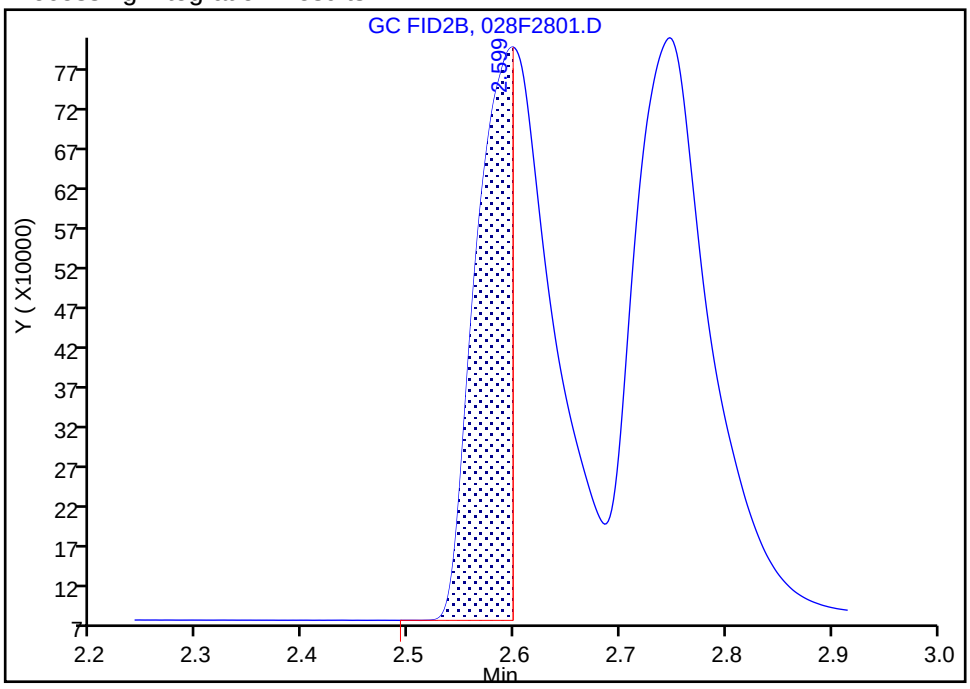
Data File: \\chromfs\Denver\ChromData\VGC_J\20220602-111531.b\028F2801.D
Injection Date: 02-Jun-2022 17:29:26 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: sciannac ALS Bottle#: 28 Worklist Smp#: 28
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

4 Ethylene, CAS: 74-85-1

Signal: 2

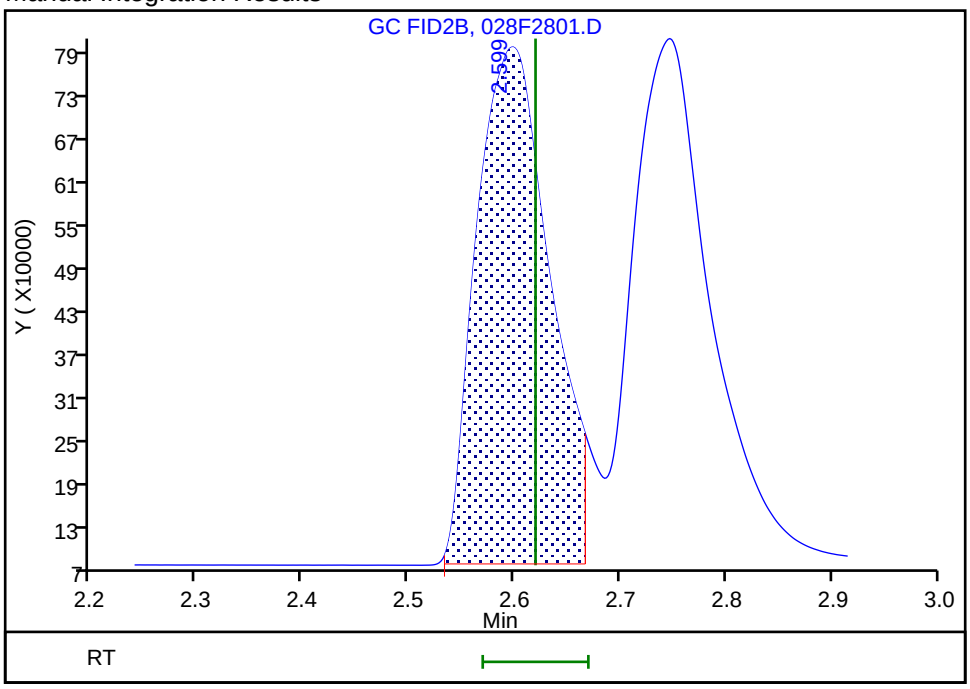
Processing Integration Results

RT: 2.60
Area: 1683042
Amount: 54.326258
Amount Units: ug/l



Manual Integration Results

RT: 2.60
Area: 3441217
Amount: 111.0777
Amount Units: ug/l



Reviewer: sciannac, 03-Jun-2022 08:50:24
Audit Action: Assigned New Baseline Audit Reason: Peak not integrated

Manual Integration/User Assign Peak Report

Eurofins Denver

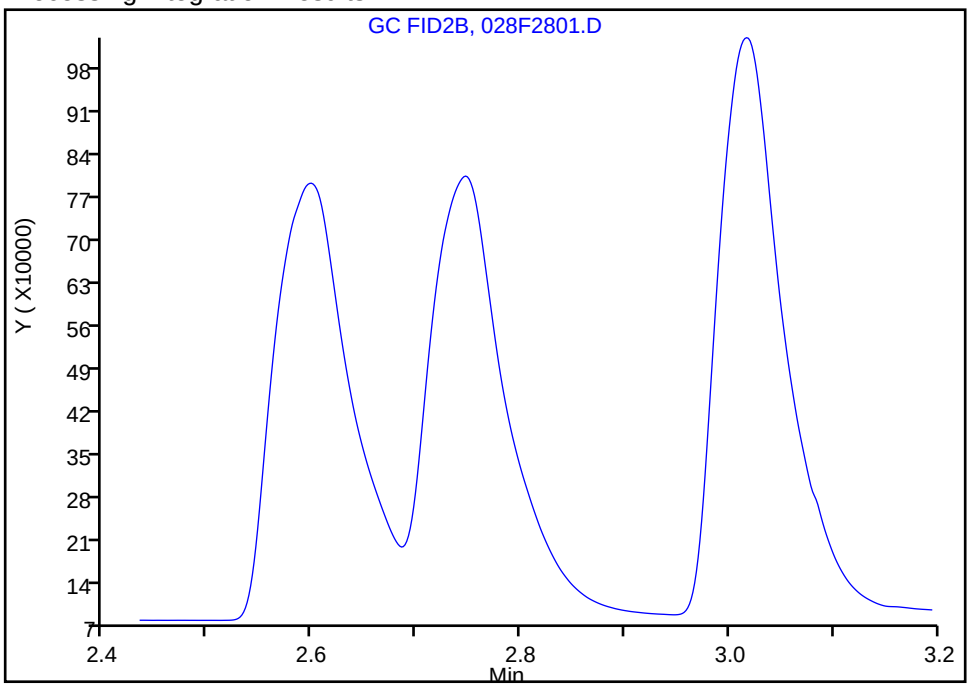
Data File: \\chromfs\Denver\ChromData\VGC_J\20220602-111531.b\028F2801.D
Injection Date: 02-Jun-2022 17:29:26 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: sciannac ALS Bottle#: 28 Worklist Smp#: 28
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

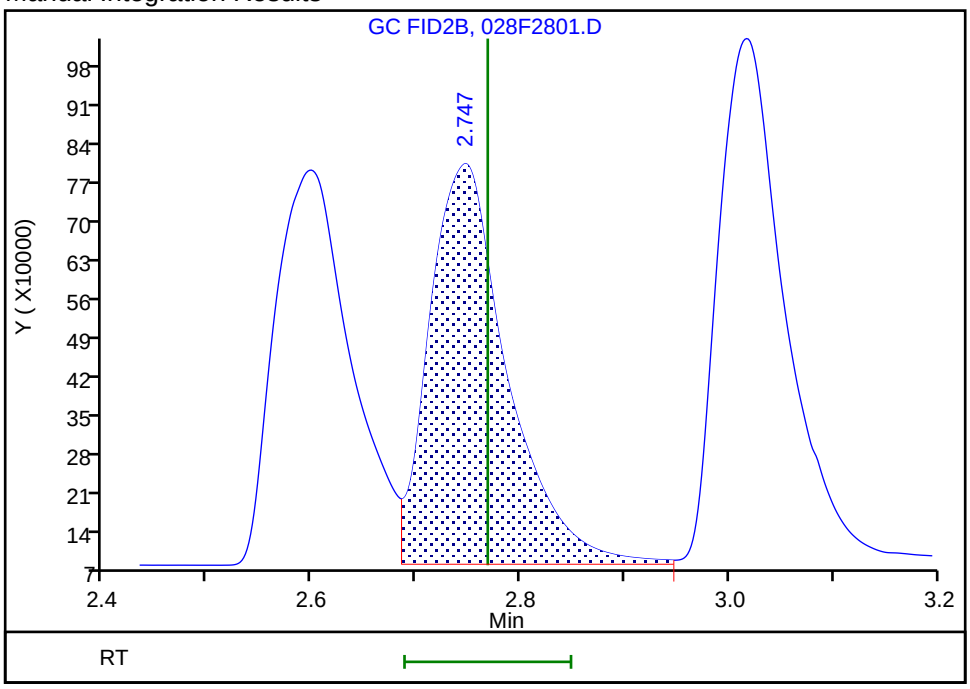
Not Detected
Expected RT: 2.77

Processing Integration Results



Manual Integration Results

RT: 2.75
Area: 3759823
Amount: 110.0046
Amount Units: ug/l



Reviewer: sciannac, 03-Jun-2022 09:39:48
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCVRT 280-577087/2 Calibration Date: 06/03/2022 14:29

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 002F0201.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		35197		63.9	65.7	-2.8	20.0
Ethane	Ave	33241	33875		126	123	1.9	20.0
Ethylene	Ave	35226	34951		114	115	-0.8	20.0
Acetylene	Ave	28139	27965		106	107	-0.6	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCVRT 280-577087/2 Calibration Date: 06/03/2022 14:29

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 002F0201.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.27	1.23	1.31
Ethane	1.52	1.47	1.57
Ethylene	1.77	1.72	1.82
Acetylene	4.02	3.94	4.10

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220603-111567.b\002F0201.D
Lims ID: ccvrt
Client ID:
Sample Type: CCVRT
Inject. Date: 03-Jun-2022 14:29:07 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccvrt
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20220603-111567.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 06-Jun-2022 16:09:53 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1658

First Level Reviewer: sciannac Date: 03-Jun-2022 16:13:01

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.268	1.268	0.000	2312573	65.7	63.9	
2	1.679	1.679	0.000	2343589	65.7	63.2	
						RPD = 1.13	
3 Ethane							
1	1.516	1.516	0.000	4172391	123.2	125.5	
2	3.034	3.034	0.000	4303240	123.2	128.9	
						RPD = 2.66	
4 Ethylene							
1	1.774	1.774	0.000	4015912	114.9	114.0	
2	2.617	2.617	0.000	3557481	114.9	114.8	
						RPD = 0.72	
5 Propane							
1	2.509	2.509	0.000	6341009	180.6	176.1	
2	4.932	4.932	0.000	6043383	180.6	172.6	
						RPD = 1.99	
6 Acetylene							
1	4.016	4.016	0.000	2982986	106.7	106.0	
2	2.766	2.766	0.000	3700588	106.7	108.3	
						RPD = 2.11	
7 Butane							
1	4.373	4.373	0.000	8315991	238.1	228.3	
2	6.431	6.431	0.000	7723990	238.1	219.8	
						RPD = 3.80	
8 isobutylene							
1	5.276	5.276	0.000	7603741	229.8	210.5	
2	6.274	6.274	0.000	6799872	229.8	204.8	
						RPD = 2.74	

QC Flag Legend

Processing Flags

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

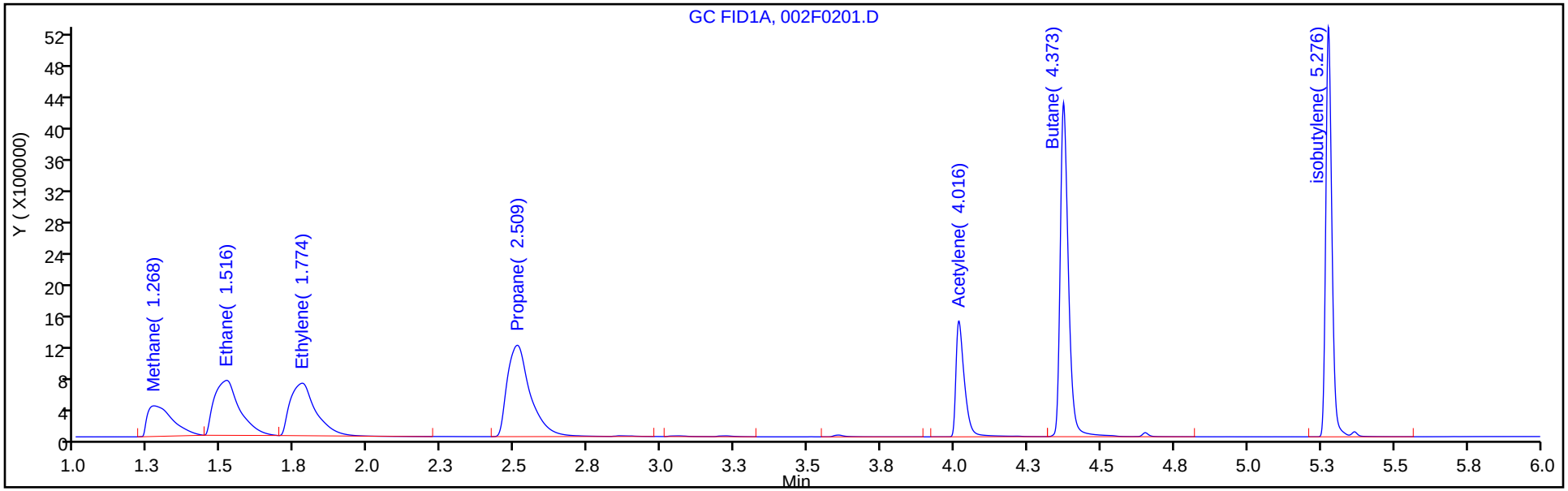
Report Date: 06-Jun-2022 16:09:53 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

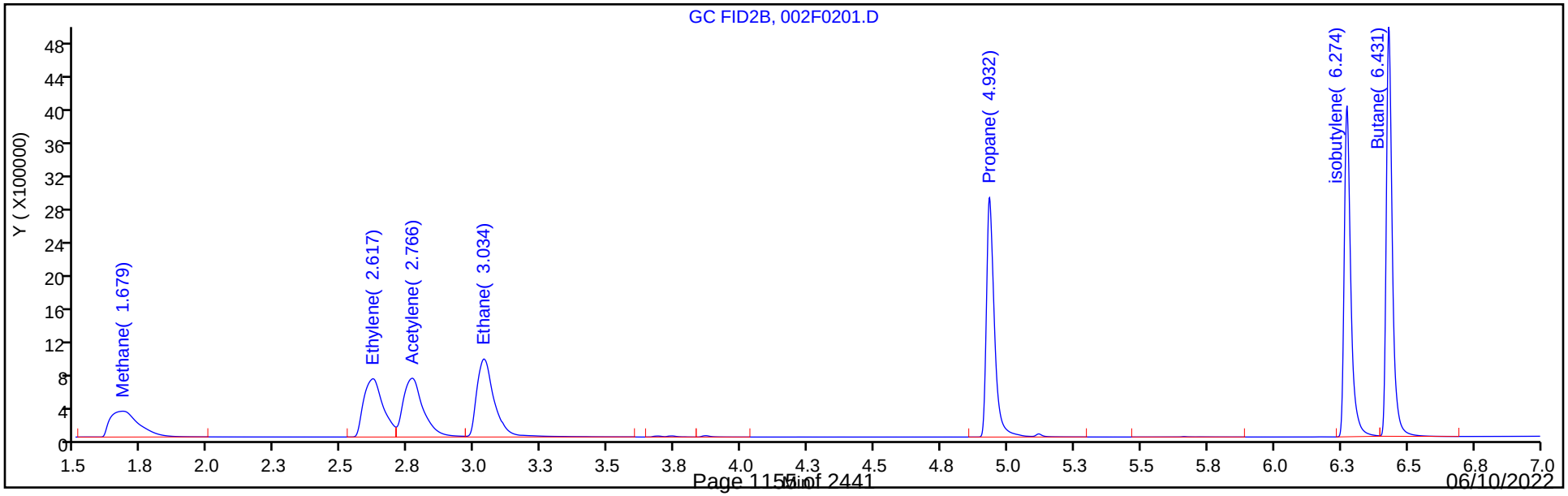
Data File: \\chromfs\Denver\ChromData\VGC_J\20220603-111567.b\002F0201.D

Injection Date:	03-Jun-2022 14:29:07	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccvrt			Worklist Smp#:	2
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCVRT 280-577087/2 Calibration Date: 06/03/2022 14:29

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 002F0201.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		35669		63.2	65.7	-3.8	20.0
Ethylene	Ave	30980	30962		115	115	-0.0	20.0
Acetylene	Ave	34179	34692		108	107	1.5	20.0
Ethane	Ave	33383	34937		129	123	4.7	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCVRT 280-577087/2 Calibration Date: 06/03/2022 14:29

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 002F0201.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.68	1.64	1.72
Ethylene	2.62	2.57	2.67
Acetylene	2.77	2.69	2.85
Ethane	3.03	2.98	3.08

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220603-111567.b\002F0201.D
Lims ID: ccvrt
Client ID:
Sample Type: CCVRT
Inject. Date: 03-Jun-2022 14:29:07 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccvrt
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20220603-111567.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 06-Jun-2022 16:09:53 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1658

First Level Reviewer: sciannac Date: 03-Jun-2022 16:13:01

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.268	1.268	0.000	2312573	65.7	63.9	
2	1.679	1.679	0.000	2343589	65.7	63.2	
						RPD = 1.13	
3 Ethane							
1	1.516	1.516	0.000	4172391	123.2	125.5	
2	3.034	3.034	0.000	4303240	123.2	128.9	
						RPD = 2.66	
4 Ethylene							
1	1.774	1.774	0.000	4015912	114.9	114.0	
2	2.617	2.617	0.000	3557481	114.9	114.8	
						RPD = 0.72	
5 Propane							
1	2.509	2.509	0.000	6341009	180.6	176.1	
2	4.932	4.932	0.000	6043383	180.6	172.6	
						RPD = 1.99	
6 Acetylene							
1	4.016	4.016	0.000	2982986	106.7	106.0	
2	2.766	2.766	0.000	3700588	106.7	108.3	
						RPD = 2.11	
7 Butane							
1	4.373	4.373	0.000	8315991	238.1	228.3	
2	6.431	6.431	0.000	7723990	238.1	219.8	
						RPD = 3.80	
8 isobutylene							
1	5.276	5.276	0.000	7603741	229.8	210.5	
2	6.274	6.274	0.000	6799872	229.8	204.8	
						RPD = 2.74	

QC Flag Legend

Processing Flags

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

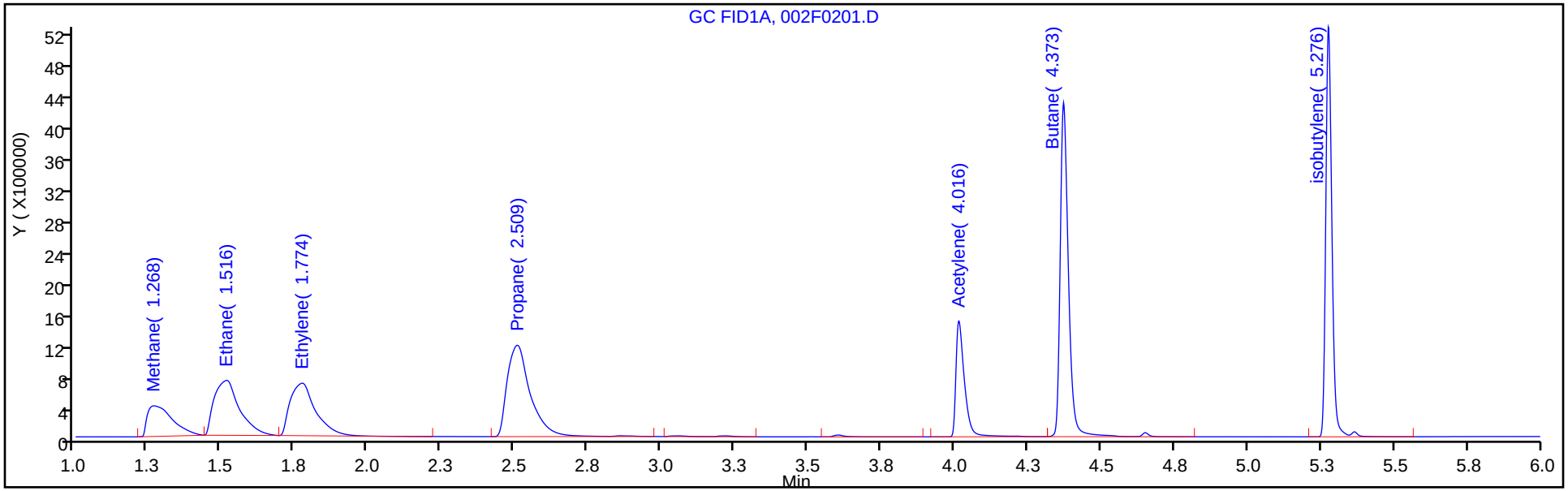
Report Date: 06-Jun-2022 16:09:53 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

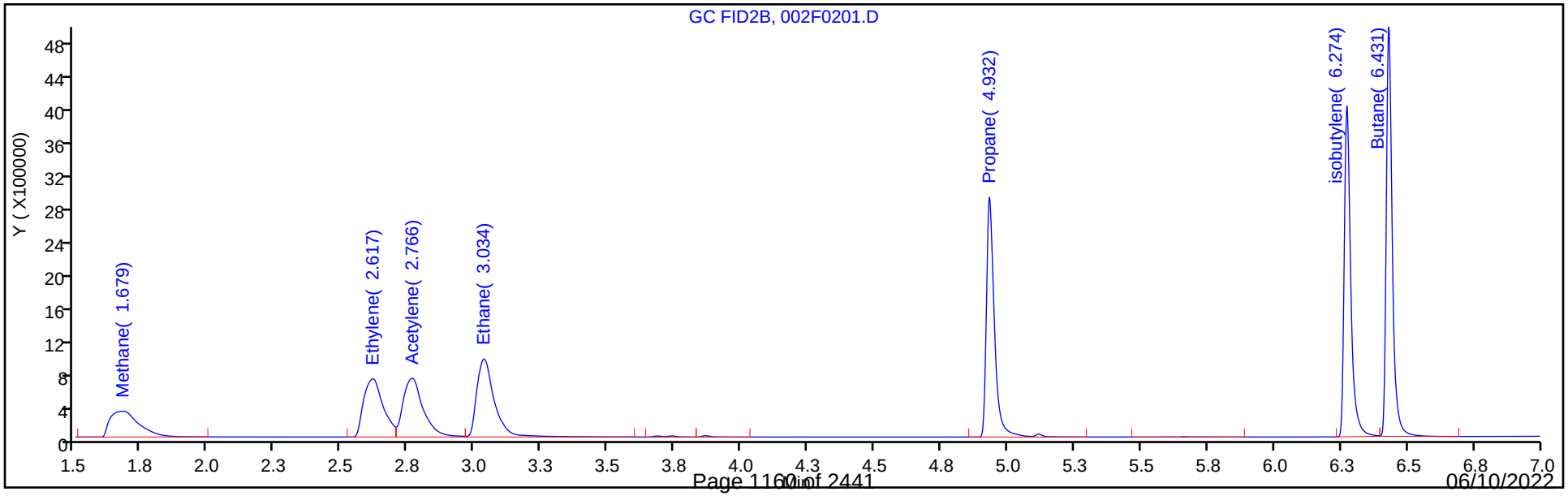
Data File: \\chromfs\Denver\ChromData\VGC_J\20220603-111567.b\002F0201.D

Injection Date:	03-Jun-2022 14:29:07	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccvrt			Worklist Smp#:	2
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-577087/17 Calibration Date: 06/03/2022 18:09

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 019F1901.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		35711		64.9	65.7	-1.3	20.0
Ethane	Ave	33241	34676		128	123	4.3	20.0
Ethylene	Ave	35226	35290		115	115	0.2	20.0
Acetylene	Ave	28139	27235		103	107	-3.2	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-577087/17 Calibration Date: 06/03/2022 18:09

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 019F1901.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.26	1.23	1.31
Ethane	1.53	1.47	1.57
Ethylene	1.83	1.72	1.82
Acetylene	4.20	3.94	4.10

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220603-111567.b\019F1901.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 03-Jun-2022 18:09:13 ALS Bottle#: 19 Worklist Smp#: 17
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20220603-111567.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 06-Jun-2022 15:18:26 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1658

First Level Reviewer: sciannac Date: 06-Jun-2022 15:12:13

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.258	1.268	-0.010	2346300	65.7	64.9	
2	1.664	1.679	-0.015	2312353	65.7	62.3	
						RPD = 3.99	
3 Ethane							
1	1.525	1.516	0.009	4271030	123.2	128.5	
2	3.016	3.034	-0.018	4305382	123.2	129.0	
						RPD = 0.38	
4 Ethylene							a
1	1.826	1.774	0.052	4054775	114.9	115.1	a
2	2.596	2.617	-0.021	3516597	114.9	113.5	a
						RPD = 1.40	
5 Propane							a
1	2.623	2.509	0.114	6432819	180.6	178.6	a
2	4.924	4.932	-0.008	5994203	180.6	171.2	a
						RPD = 4.25	
6 Acetylene							a
1	4.198	4.016	0.182	2905156	106.7	103.2	a
2	2.746	2.766	-0.020	3647540	106.7	106.7	a
						RPD = 3.31	
7 Butane							Ma
1	4.496	4.373	0.123	8701407	238.1	238.9	a
2	6.426	6.431	-0.005	7984577	238.1	227.2	M
						RPD = 5.01	
8 isobutylene							a
1	5.398	5.276	0.122	7794330	229.8	215.8	a
2	6.268	6.274	-0.006	6953456	229.8	209.4	a
						RPD = 2.98	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

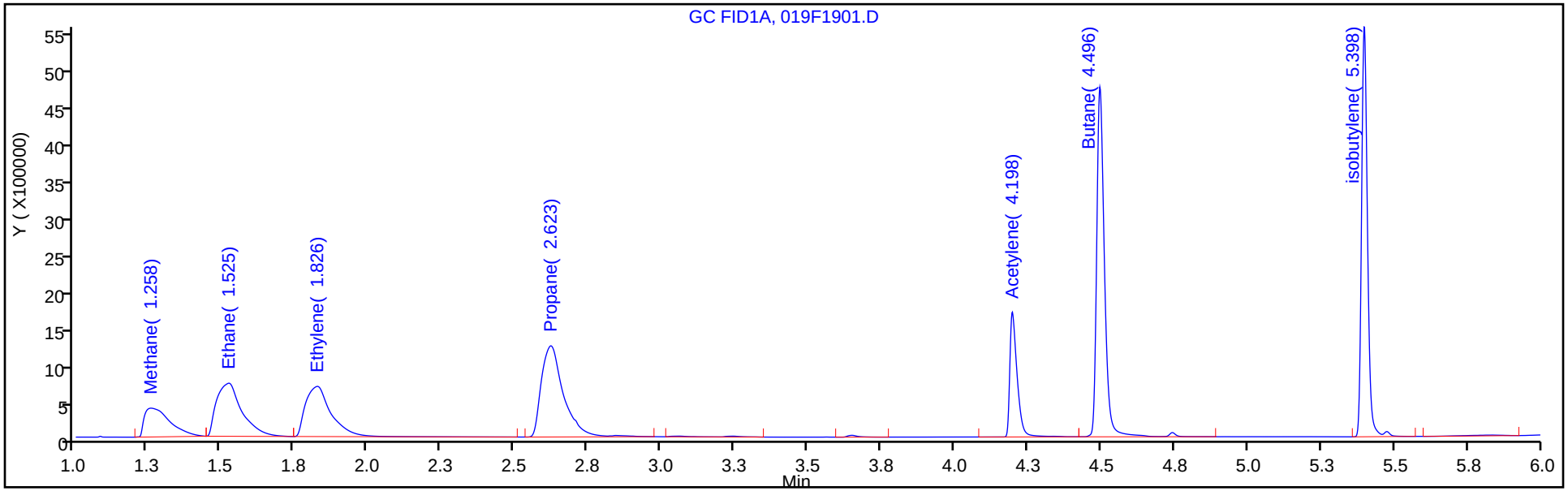
Report Date: 06-Jun-2022 15:18:27 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

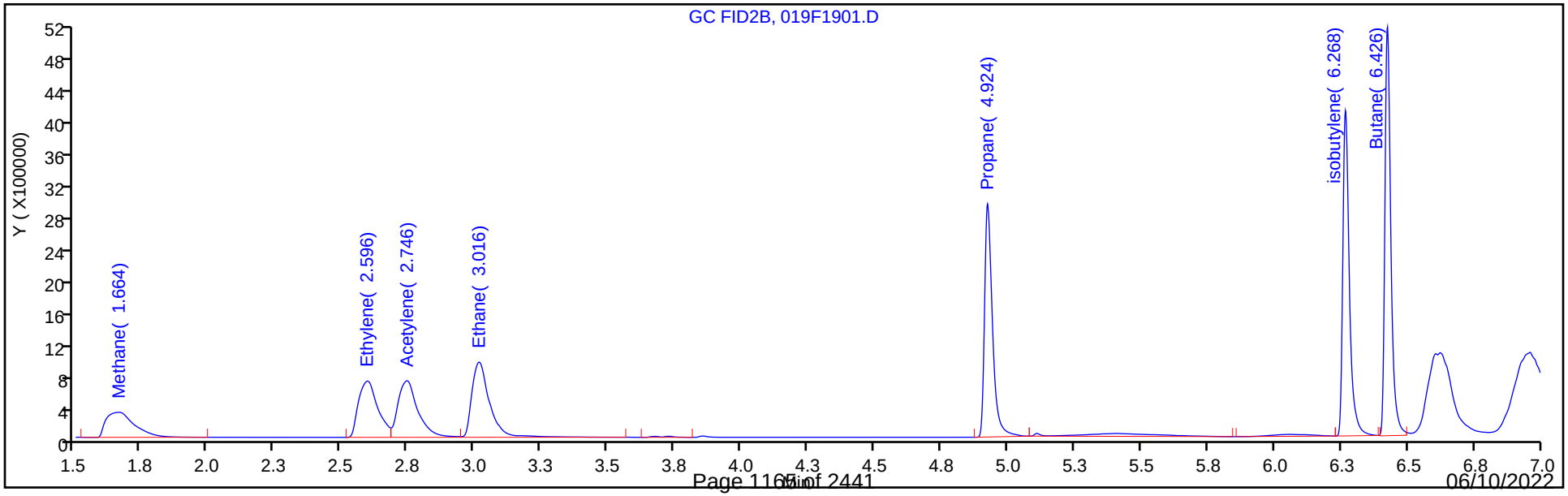
Data File: \\chromfs\Denver\ChromData\VGC_J\20220603-111567.b\019F1901.D

Injection Date:	03-Jun-2022 18:09:13	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccv			Worklist Smp#:	17
Client ID:					
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



Manual Integration/User Assign Peak Report

Eurofins Denver

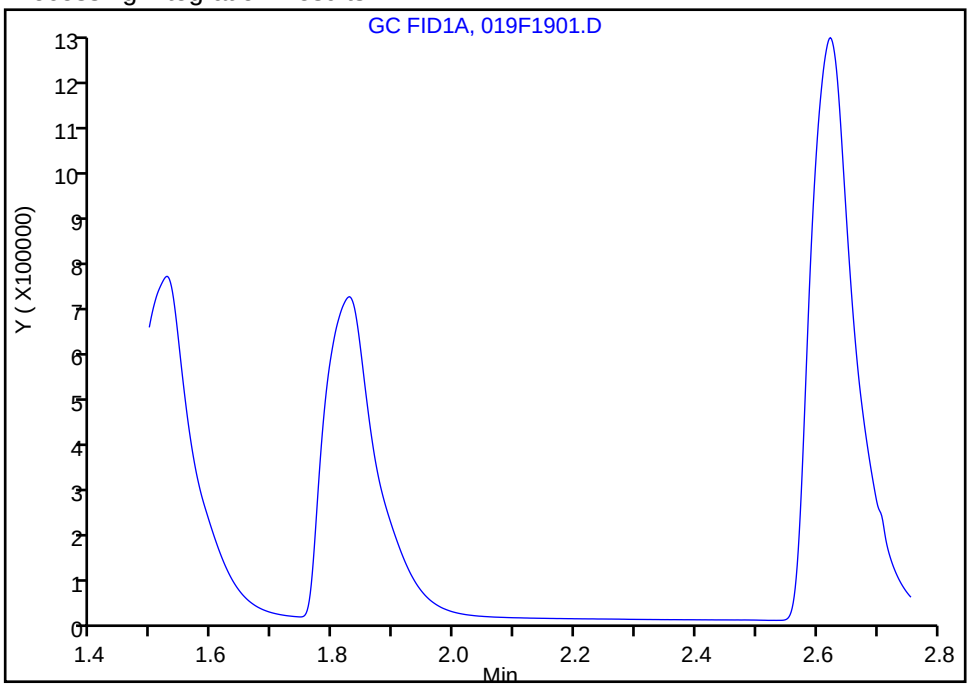
Data File: \\chromfs\Denver\ChromData\VGC_J\20220603-111567.b\019F1901.D
Injection Date: 03-Jun-2022 18:09:13 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: sciannac ALS Bottle#: 19 Worklist Smp#: 17
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

4 Ethylene, CAS: 74-85-1

Signal: 1

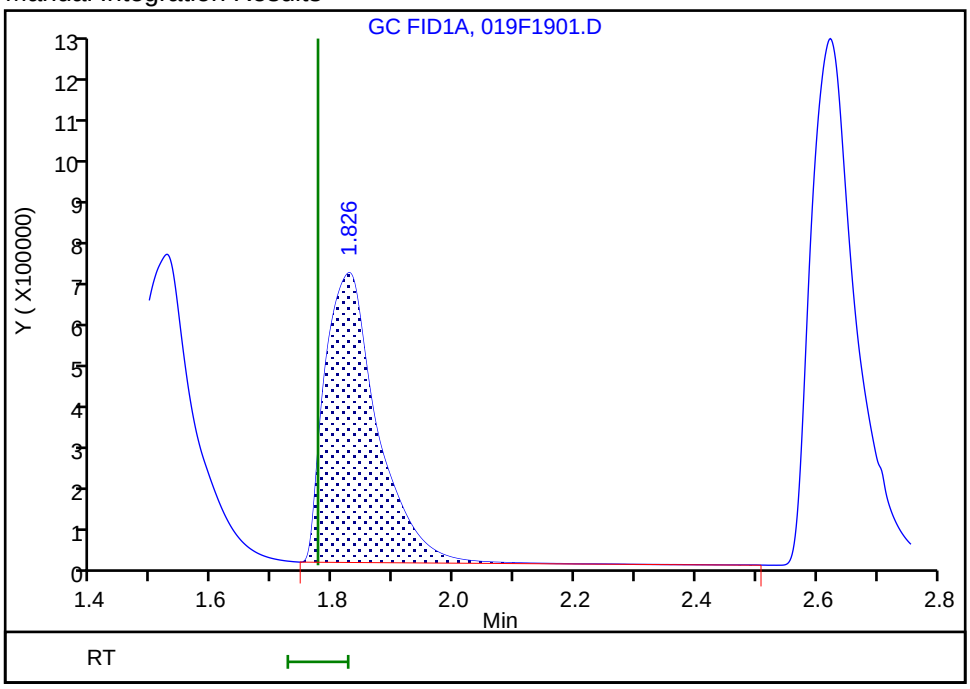
Not Detected
Expected RT: 1.77

Processing Integration Results



Manual Integration Results

RT: 1.83
Area: 4054775
Amount: 115.1076
Amount Units: ug/l



Reviewer: sciannac, 06-Jun-2022 15:11:49
Audit Action: Assigned Compound ID Audit Reason: Peak not integrated

Manual Integration/User Assign Peak Report

Eurofins Denver

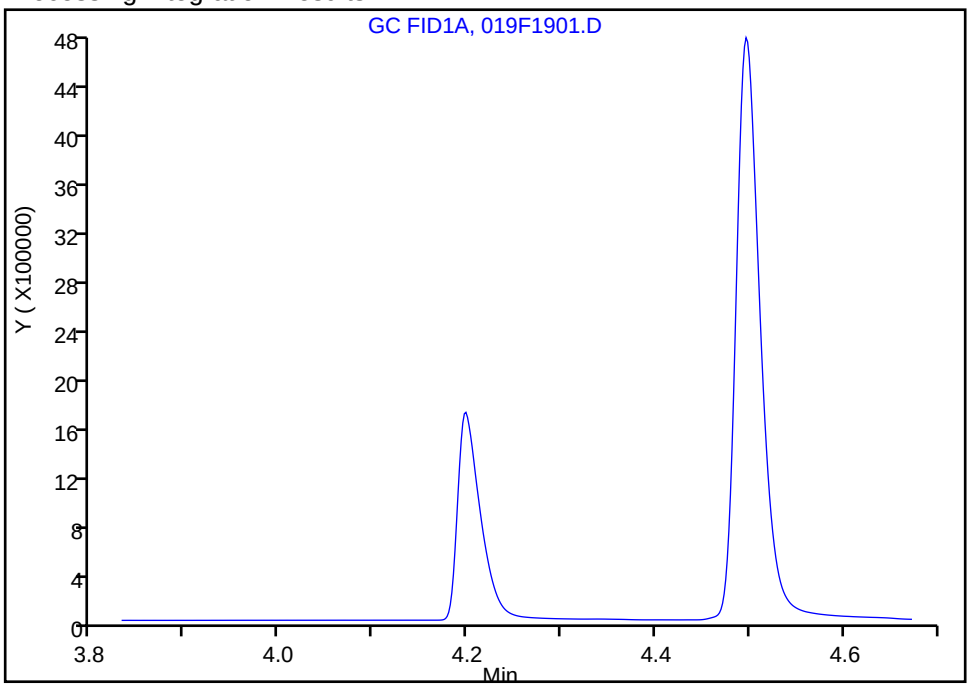
Data File: \\chromfs\Denver\ChromData\VGC_J\20220603-111567.b\019F1901.D
Injection Date: 03-Jun-2022 18:09:13 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: sciannac ALS Bottle#: 19 Worklist Smp#: 17
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

6 Acetylene, CAS: 74-86-2

Signal: 1

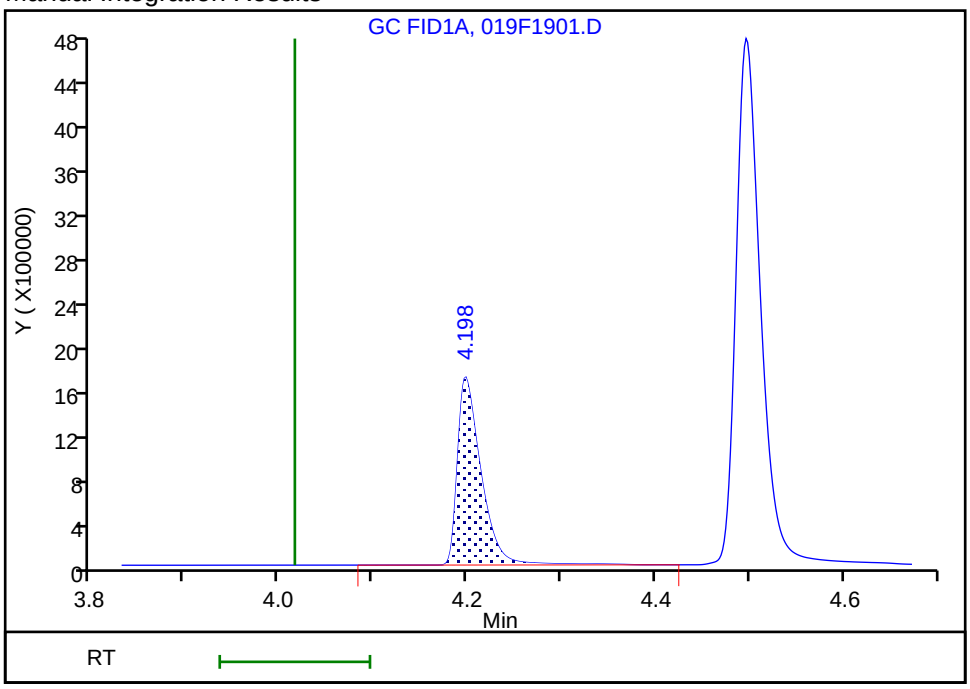
Not Detected
Expected RT: 4.02

Processing Integration Results



Manual Integration Results

RT: 4.20
Area: 2905156
Amount: 103.2430
Amount Units: ug/l



Reviewer: sciannac, 06-Jun-2022 15:11:40
Audit Action: Assigned Compound ID Audit Reason: Peak not integrated

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-577087/17 Calibration Date: 06/03/2022 18:09

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 019F1901.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		35194		62.3	65.7	-5.2	20.0
Ethylene	Ave	30980	30606		114	115	-1.2	20.0
Acetylene	Ave	34179	34195		107	107	0.0	20.0
Ethane	Ave	33383	34955		129	123	4.7	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-577087/17 Calibration Date: 06/03/2022 18:09

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 019F1901.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.66	1.64	1.72
Ethylene	2.60	2.57	2.67
Acetylene	2.75	2.69	2.85
Ethane	3.02	2.98	3.08

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220603-111567.b\019F1901.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 03-Jun-2022 18:09:13 ALS Bottle#: 19 Worklist Smp#: 17
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20220603-111567.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 06-Jun-2022 15:18:26 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1658

First Level Reviewer: sciannac Date: 06-Jun-2022 15:12:13

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.258	1.268	-0.010	2346300	65.7	64.9	
2	1.664	1.679	-0.015	2312353	65.7	62.3	
						RPD = 3.99	
3 Ethane							
1	1.525	1.516	0.009	4271030	123.2	128.5	
2	3.016	3.034	-0.018	4305382	123.2	129.0	
						RPD = 0.38	
4 Ethylene							a
1	1.826	1.774	0.052	4054775	114.9	115.1	a
2	2.596	2.617	-0.021	3516597	114.9	113.5	a
						RPD = 1.40	
5 Propane							a
1	2.623	2.509	0.114	6432819	180.6	178.6	a
2	4.924	4.932	-0.008	5994203	180.6	171.2	a
						RPD = 4.25	
6 Acetylene							a
1	4.198	4.016	0.182	2905156	106.7	103.2	a
2	2.746	2.766	-0.020	3647540	106.7	106.7	a
						RPD = 3.31	
7 Butane							Ma
1	4.496	4.373	0.123	8701407	238.1	238.9	a
2	6.426	6.431	-0.005	7984577	238.1	227.2	M
						RPD = 5.01	
8 isobutylene							a
1	5.398	5.276	0.122	7794330	229.8	215.8	a
2	6.268	6.274	-0.006	6953456	229.8	209.4	a
						RPD = 2.98	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

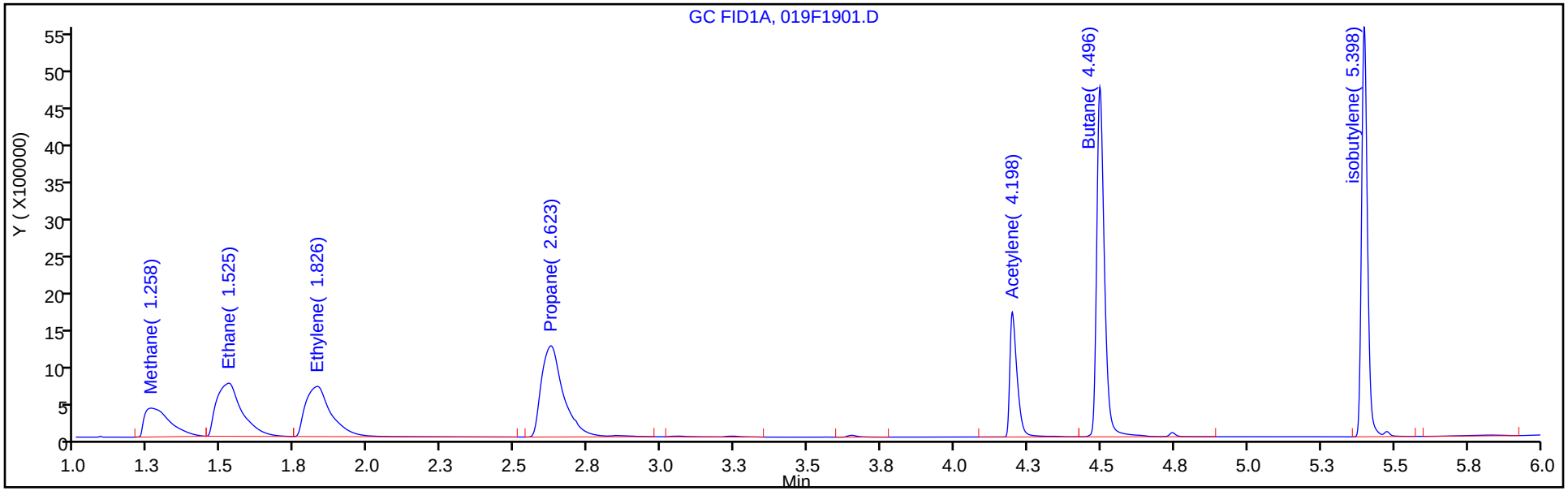
Report Date: 06-Jun-2022 15:18:27 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

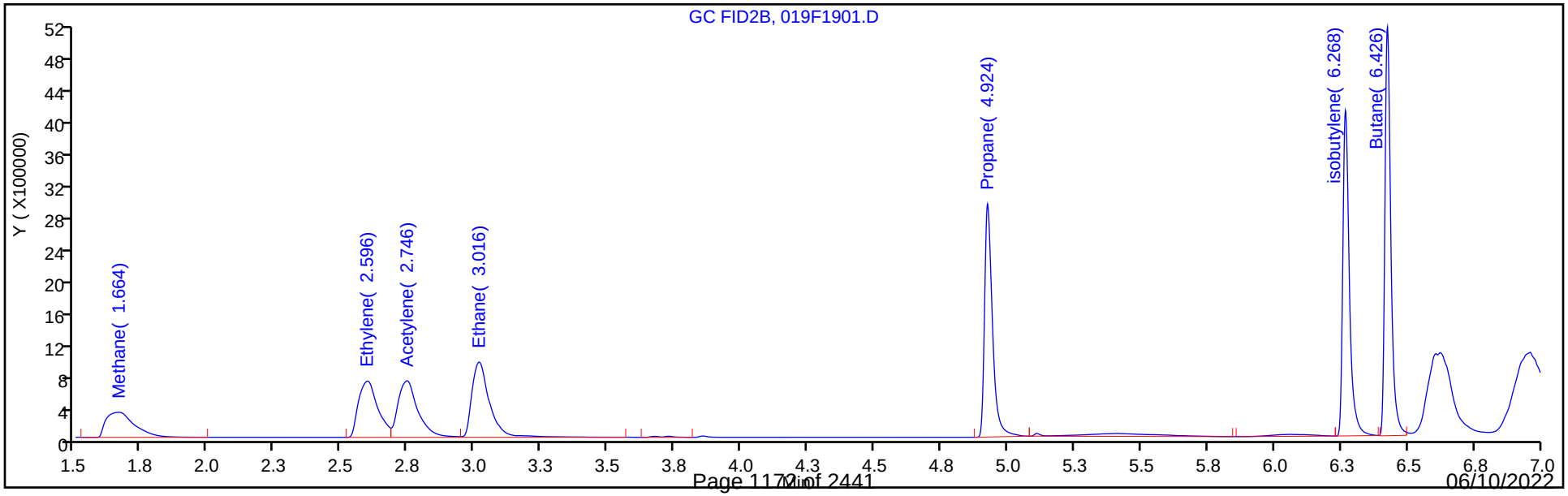
Data File: \\chromfs\Denver\ChromData\VGC_J\20220603-111567.b\019F1901.D

Injection Date:	03-Jun-2022 18:09:13	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccv			Worklist Smp#:	17
Client ID:					
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



Manual Integration/User Assign Peak Report

Eurofins Denver

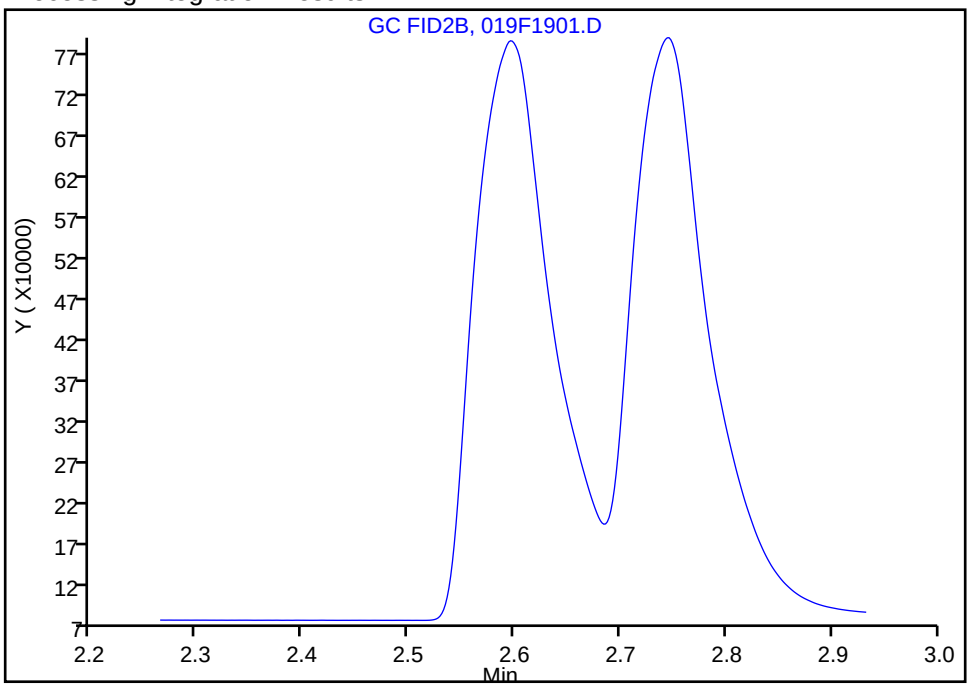
Data File: \\chromfs\Denver\ChromData\VGC_J\20220603-111567.b\019F1901.D
Injection Date: 03-Jun-2022 18:09:13 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: sciannac ALS Bottle#: 19 Worklist Smp#: 17
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

4 Ethylene, CAS: 74-85-1

Signal: 2

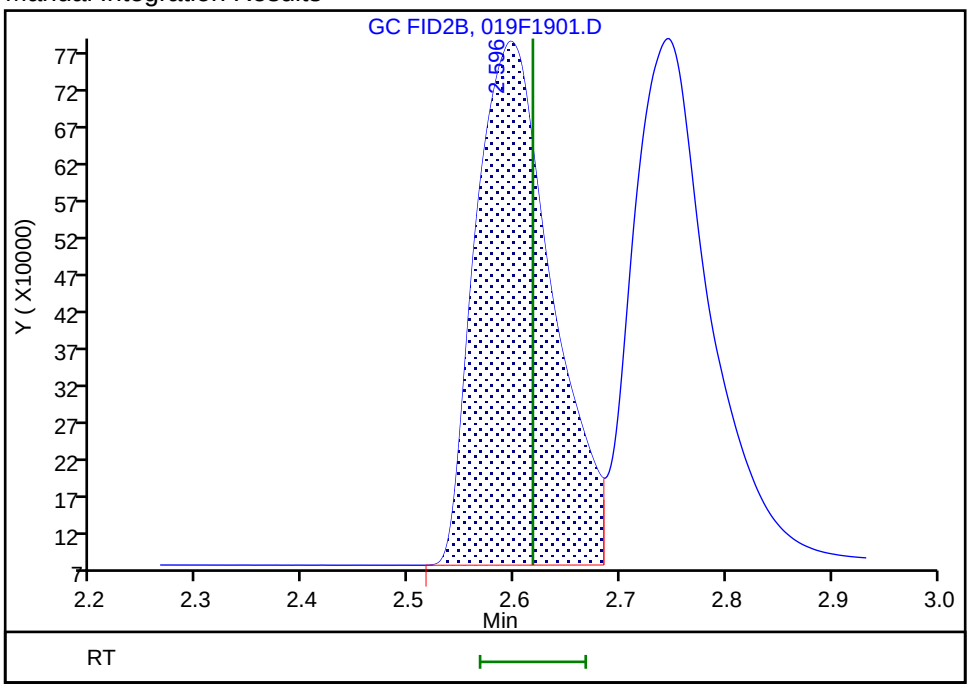
Not Detected
Expected RT: 2.62

Processing Integration Results



Manual Integration Results

RT: 2.60
Area: 3516597
Amount: 113.5109
Amount Units: ug/l



Reviewer: sciannac, 06-Jun-2022 15:11:51
Audit Action: Assigned Compound ID Audit Reason: Peak not integrated

Manual Integration/User Assign Peak Report

Eurofins Denver

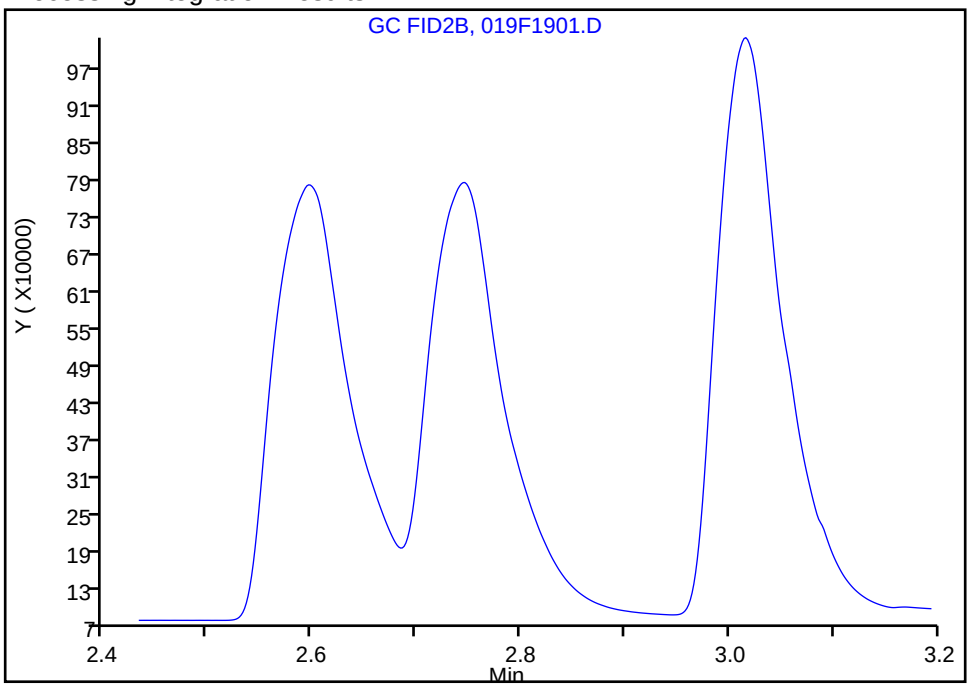
Data File: \\chromfs\Denver\ChromData\VGC_J\20220603-111567.b\019F1901.D
Injection Date: 03-Jun-2022 18:09:13 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: sciannac ALS Bottle#: 19 Worklist Smp#: 17
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

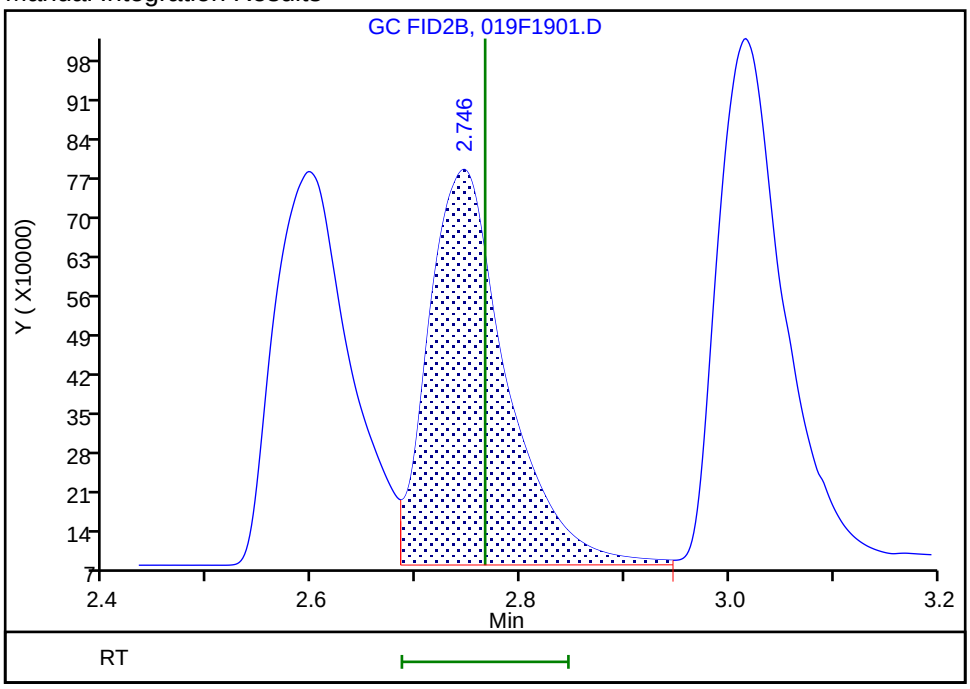
Not Detected
Expected RT: 2.77

Processing Integration Results



Manual Integration Results

RT: 2.75
Area: 3647540
Amount: 106.7194
Amount Units: ug/l



Reviewer: sciannac, 06-Jun-2022 15:11:39
Audit Action: Assigned Compound ID Audit Reason: Peak not integrated

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-576662/5

Matrix: Water | Lab File ID: 005F0501.D

Analysis Method: RSK-175 | Date Collected:

Sample wt/vol: 20(mL) | Date Analyzed: 06/01/2022 10:24

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

Purge Volume: | Heated Purge: (Y/N) N pH: 5.0

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 576662 | 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	0.0013	U	0.0050	0.0013	0.00063
74-85-1	Ethylene	0.0014	U	0.0050	0.0014	0.00040

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\005F0501.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 01-Jun-2022 10:24:19 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-162622-I-1
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Jun-2022 09:24:53 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1606

First Level Reviewer: sciannac Date: 01-Jun-2022 11:06:39

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		1.269				ND	
2		1.682					
3 Ethane							
1		1.510				ND	
2		3.040					
4 Ethylene							
1		1.750				ND	
2		2.620					
5 Propane							
1		2.469				ND	
2		4.937					
6 Acetylene							
1		3.964				ND	
2		2.768					
7 Butane							
1		4.340				ND	
2		6.432					
8 isobutylene							
1		5.245				ND	
2		6.275					

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

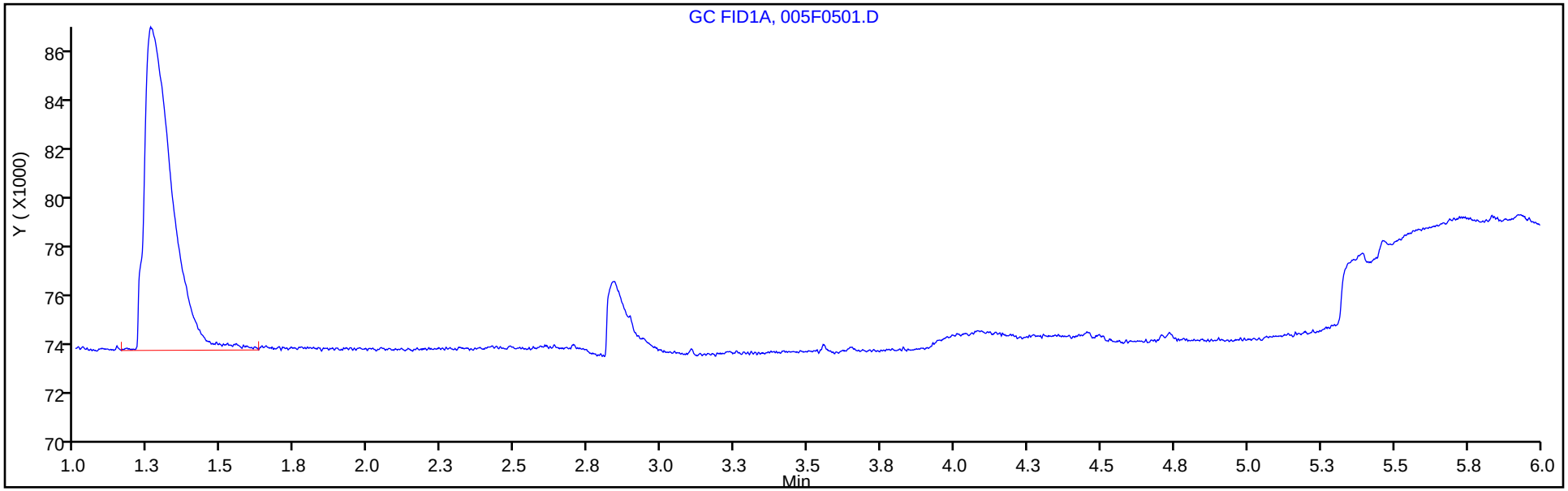
Report Date: 03-Jun-2022 09:24:56 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

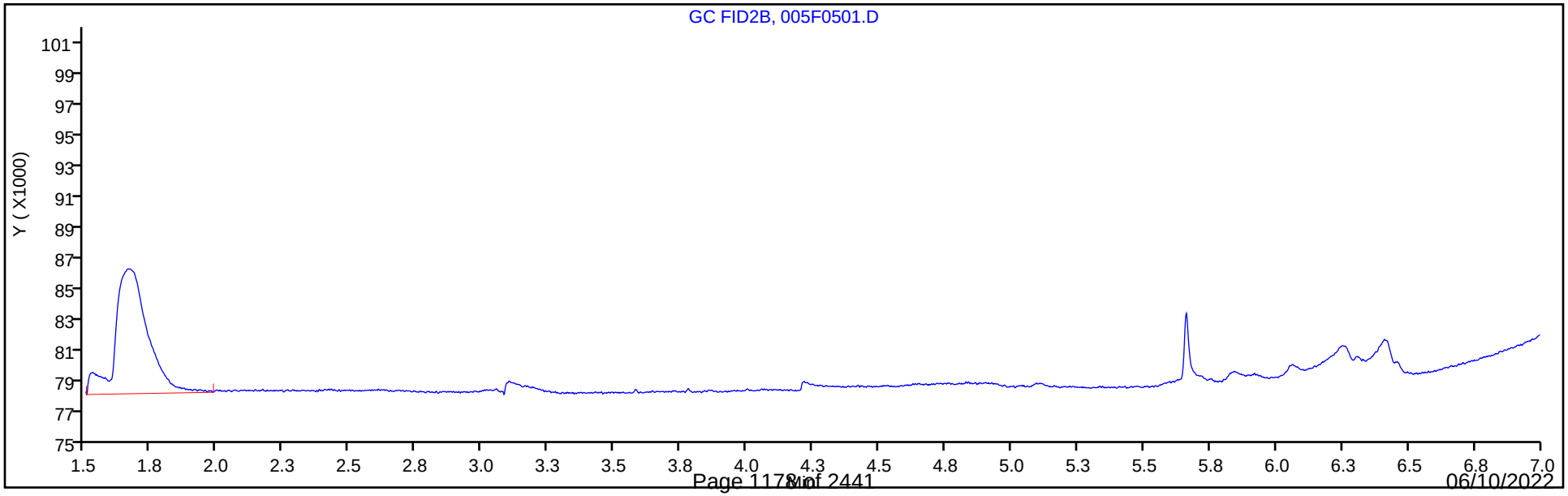
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\005F0501.D

Injection Date:	01-Jun-2022 10:24:19	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	mb			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 Denver Job No.: 280-162622-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-576768/61

Matrix: Water Lab File ID: 032F3201.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 20(mL) Date Analyzed: 06/01/2022 16:13

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

Purge Volume: Heated Purge: (Y/N) N pH: 5.0

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 576768 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0013	U M	0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\032F3201.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 01-Jun-2022 16:13:57 ALS Bottle#: 32 Worklist Smp#: 61
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: mb
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Jun-2022 09:25:07 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1606

First Level Reviewer: sciannac Date: 03-Jun-2022 09:12:13

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane							
1		4.362				ND	
2		5.458					
2 Methane							7a
1	1.256	1.269	-0.013	81720		0.4657	a
2	1.599	1.682	-0.083	55433		-0.1995	a
						RPD = 499.66	
LOD = 0.6300							
3 Ethane							
1		1.510				ND	
2		3.040					
4 Ethylene							
1		1.750				ND	
2		2.620					
5 Propane							
1		2.469				ND	
2		4.937					
6 Acetylene							
1		3.964				ND	
2		2.768					
7 Butane							
1		4.340				ND	
2		6.432					
8 isobutylene							
1		5.245				ND	
2		6.275					

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

a - User Assigned ID

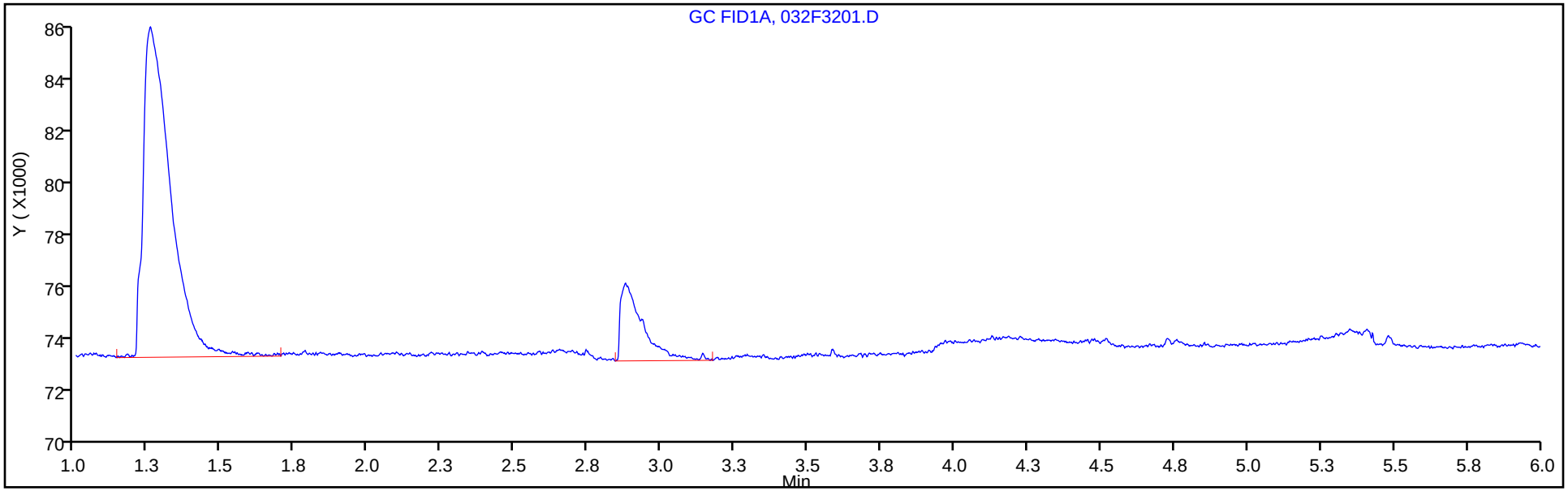
Report Date: 03-Jun-2022 09:25:10 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

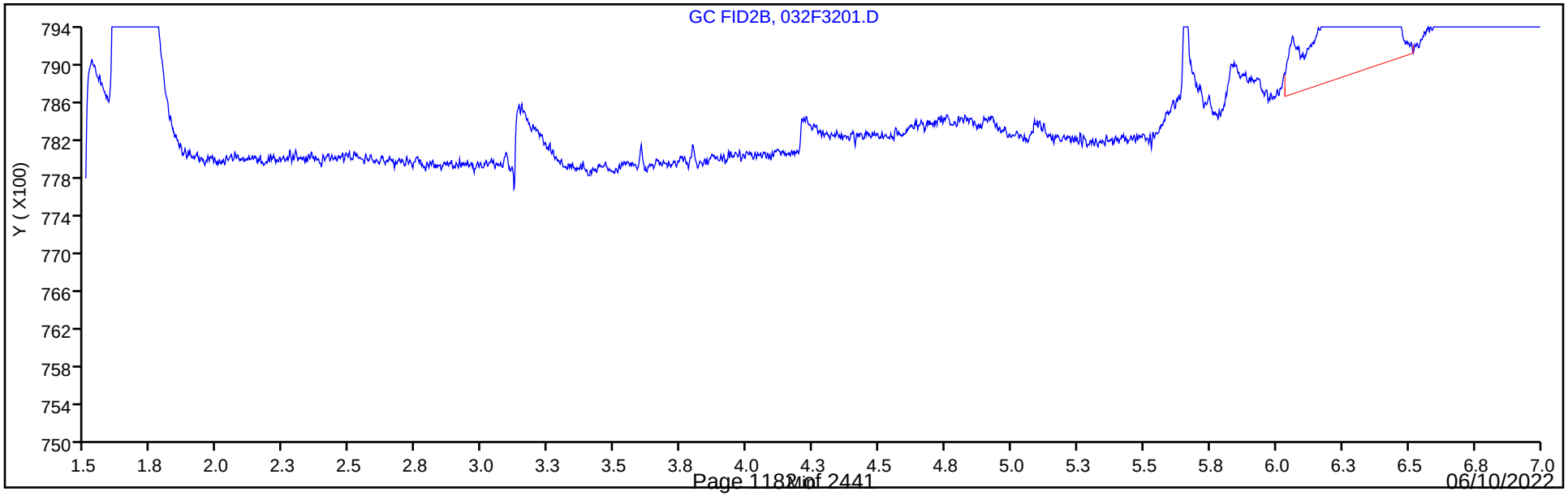
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\032F3201.D

Injection Date:	01-Jun-2022 16:13:57	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	mb			Worklist Smp#:	61
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	32
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

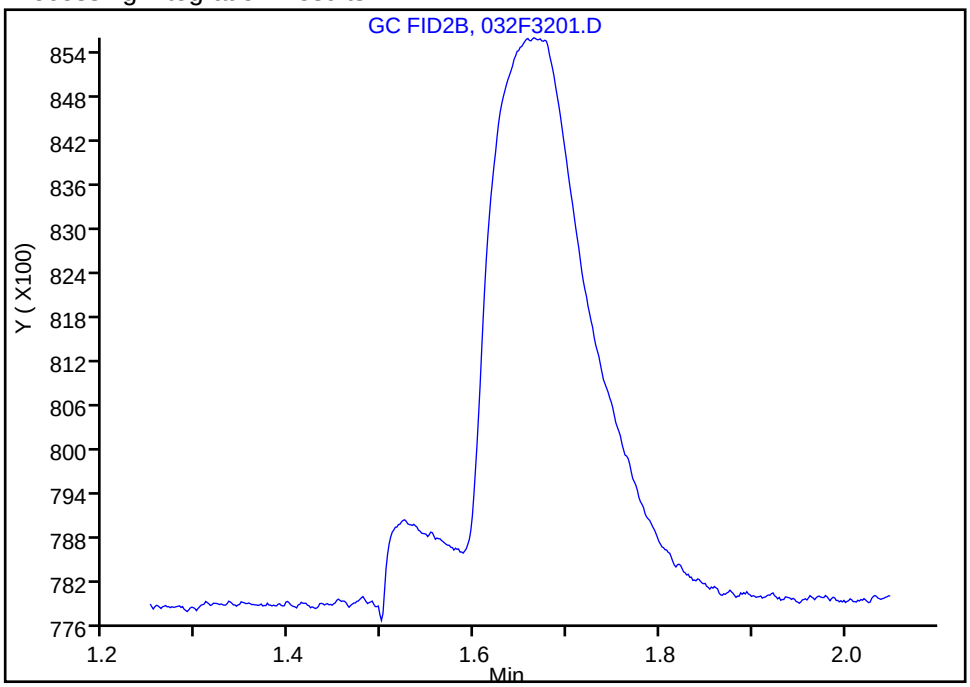
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\032F3201.D
Injection Date: 01-Jun-2022 16:13:57 Instrument ID: VGC_J
Lims ID: mb
Client ID:
Operator ID: sciannac ALS Bottle#: 32 Worklist Smp#: 61
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

2 Methane, CAS: 74-82-8

Signal: 2

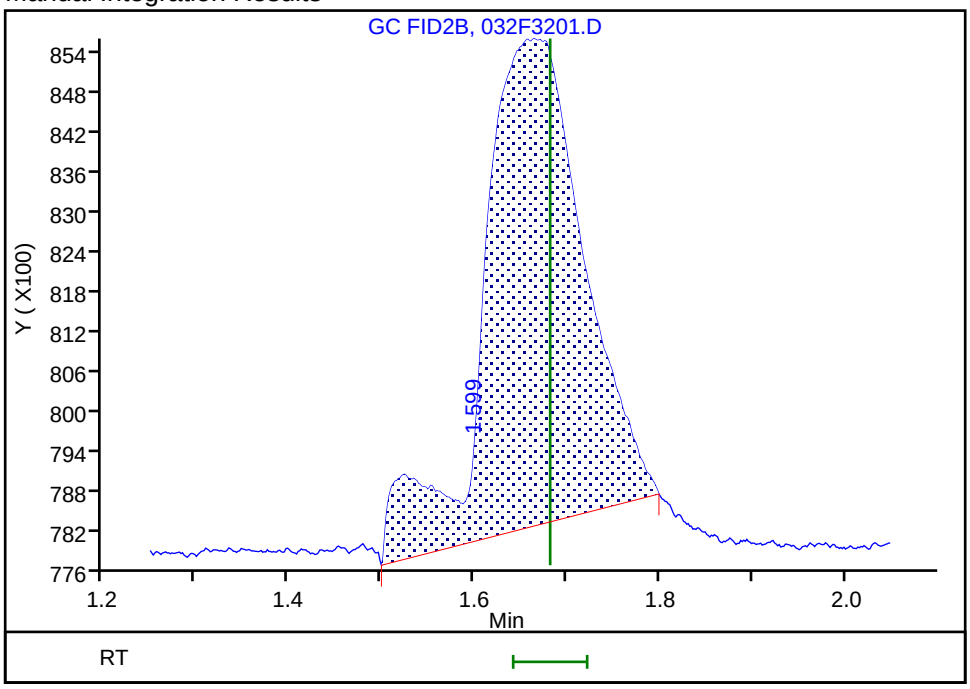
Not Detected
Expected RT: 1.68

Processing Integration Results



Manual Integration Results

RT: 1.60
Area: 55433
Amount: -0.199451
Amount Units: ug/l



Reviewer: sciannac, 03-Jun-2022 09:12:06
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-576907/5

Matrix: Water Lab File ID: 005F0501.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 20(mL) Date Analyzed: 06/02/2022 12:31

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

Purge Volume: Heated Purge: (Y/N) N pH: 5.0

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 576907 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0013	U	0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220602-111531.b\005F0501.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 02-Jun-2022 12:31:40 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: mb
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220602-111531.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Jun-2022 09:48:24 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1606

First Level Reviewer: sciannac Date: 03-Jun-2022 09:28:50

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							7
1		1.270				ND	
2		1.680					
3 Ethane							
1		1.525				ND	
2		3.038					
4 Ethylene							
1		1.795				ND	
2		2.620					
5 Propane							
1		2.547				ND	
2		4.935					
6 Acetylene							
1		4.057				ND	
2		2.768					
7 Butane							
1		4.403				ND	
2		6.431					
8 isobutylene							
1		5.307				ND	
2		6.275					

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

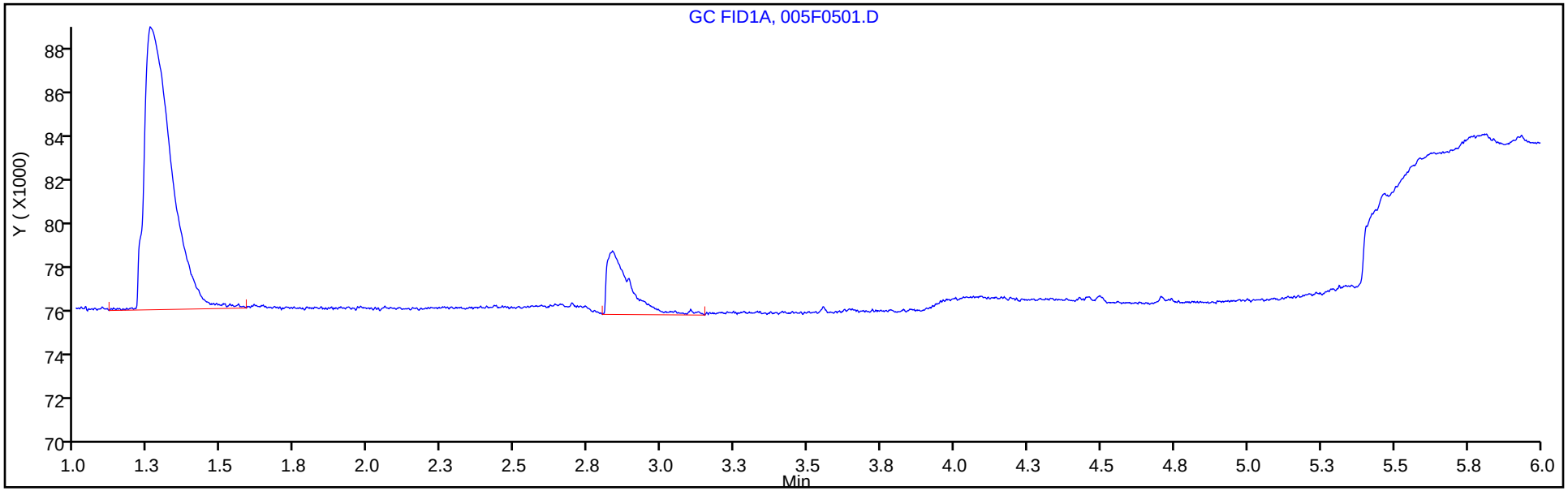
Report Date: 03-Jun-2022 09:48:26 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

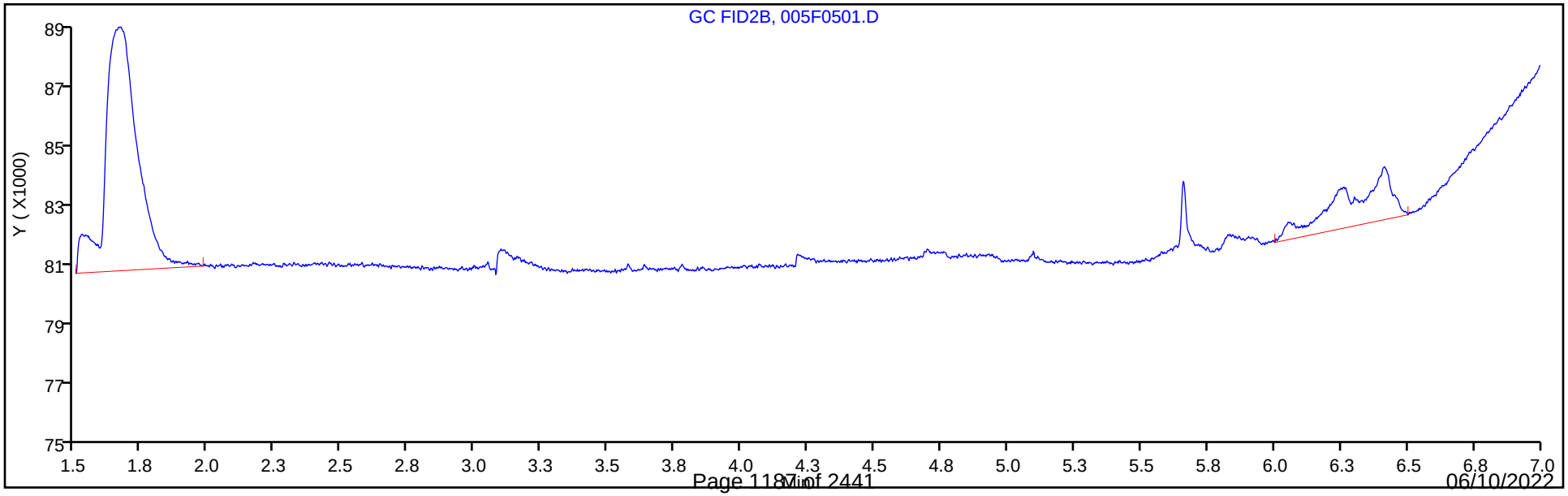
Data File: \\chromfs\Denver\ChromData\VGC_J\20220602-111531.b\005F0501.D

Injection Date:	02-Jun-2022 12:31:40	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	mb			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 Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-577087/5

Matrix: Water | Lab File ID: 005F0501.D

Analysis Method: RSK-175 | Date Collected:

Sample wt/vol: 20(mL) | Date Analyzed: 06/03/2022 15:07

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

Purge Volume: | Heated Purge: (Y/N) N pH: 5.0

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 577087 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0013	U	0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220603-111567.b\005F0501.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 03-Jun-2022 15:07:55 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: mb
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220603-111567.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 06-Jun-2022 15:18:18 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1658

First Level Reviewer: sciannac Date: 06-Jun-2022 15:06:03

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		1.268				ND	
2		1.679					
3 Ethane							
1		1.516				ND	
2		3.034					
4 Ethylene							
1		1.774				ND	
2		2.617					
5 Propane							
1		2.509				ND	
2		4.932					
6 Acetylene							
1		4.016				ND	
2		2.766					
7 Butane							
1		4.373				ND	
2		6.431					
8 isobutylene							
1		5.276				ND	
2		6.274					

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

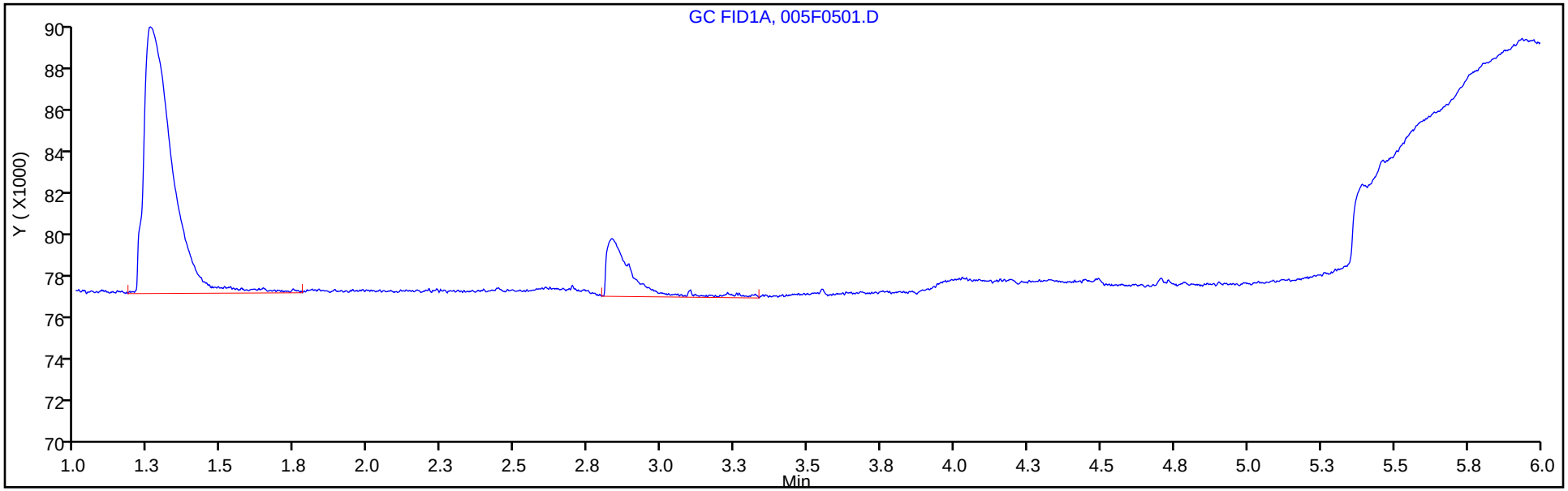
Report Date: 06-Jun-2022 15:18:20 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

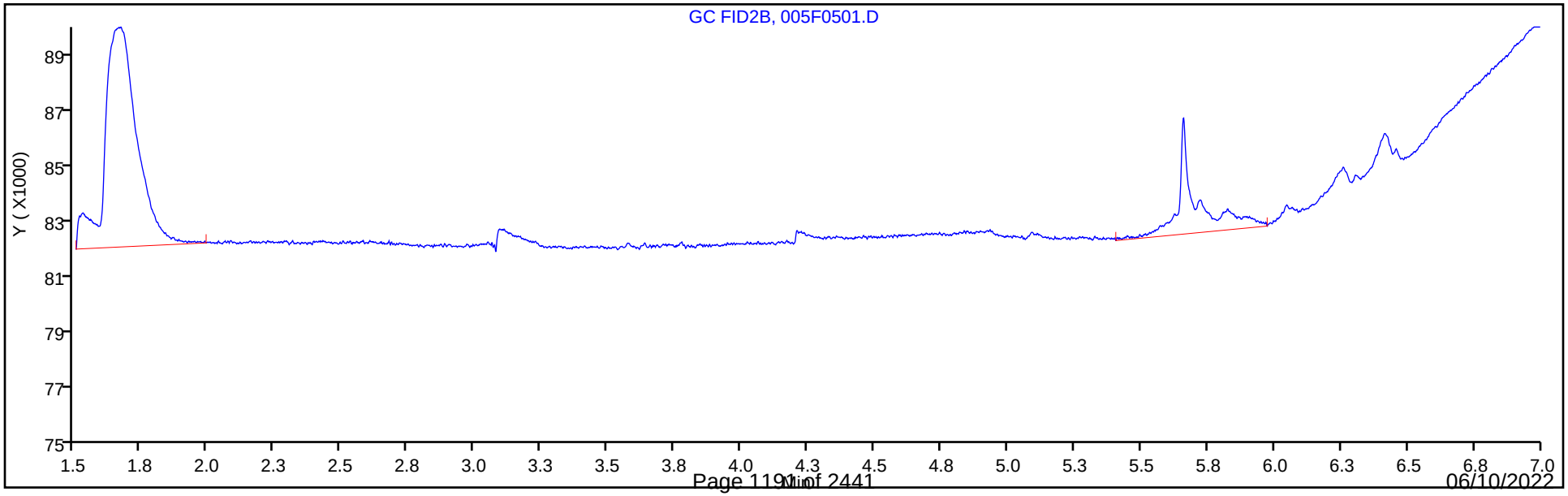
Data File: \\chromfs\Denver\ChromData\VGC_J\20220603-111567.b\005F0501.D

Injection Date:	03-Jun-2022 15:07:55	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	mb			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 Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-576662/3

Matrix: Water | Lab File ID: 003F0301.D

Analysis Method: RSK-175 | Date Collected:

Sample wt/vol: 20(mL) | Date Analyzed: 06/01/2022 09:58

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

Purge Volume: | Heated Purge: (Y/N) N pH: 5.0

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 576662 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-84-0	Ethane	0.134		0.0050	0.0015	0.00057
74-82-8	Methane	0.0640		0.0050	0.0013	0.00063
74-85-1	Ethylene	0.118		0.0050	0.0014	0.00040

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\003F0301.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 01-Jun-2022 09:58:30 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: lcs
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Jun-2022 09:24:53 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1606

First Level Reviewer: sciannac Date: 03-Jun-2022 08:58:40

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.268	1.269	-0.001	2352844	65.7	65.0	
2	1.677	1.682	-0.005	2374206	65.7	64.0	
						RPD = 1.57	
3 Ethane							
1	1.524	1.510	0.014	4325529	123.2	130.1	
2	3.034	3.040	-0.006	4472196	123.2	134.0	
						RPD = 2.91	
4 Ethylene							
1	1.804	1.750	0.054	4139471	114.9	117.5	
2	2.617	2.620	-0.003	3665130	114.9	118.3	
						RPD = 0.67	
5 Propane							
1	2.571	2.469	0.102	6586409	180.6	182.9	
2	4.934	4.937	-0.003	6330483	180.6	180.8	
						RPD = 1.15	
6 Acetylene							
1	4.124	3.964	0.160	3036068	106.7	107.9	
2	2.766	2.768	-0.002	3720246	106.7	108.8	
						RPD = 0.88	
7 Butane							
1	4.444	4.340	0.104	8869467	238.1	243.5	
2	6.432	6.432	0.000	8443073	238.1	240.3	
						RPD = 1.34	
8 isobutylene							
1	5.344	5.245	0.099	8166760	229.8	226.1	
2	6.274	6.275	-0.001	7398741	229.8	222.8	
						RPD = 1.44	

QC Flag Legend

Processing Flags

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

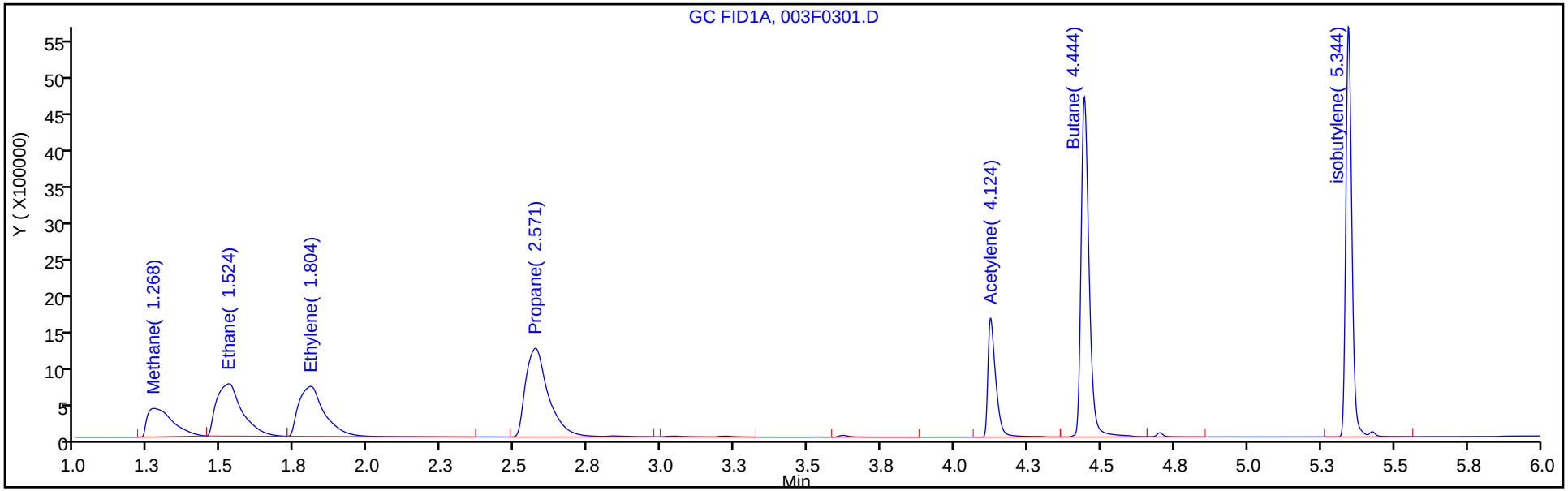
Report Date: 03-Jun-2022 09:24:55 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

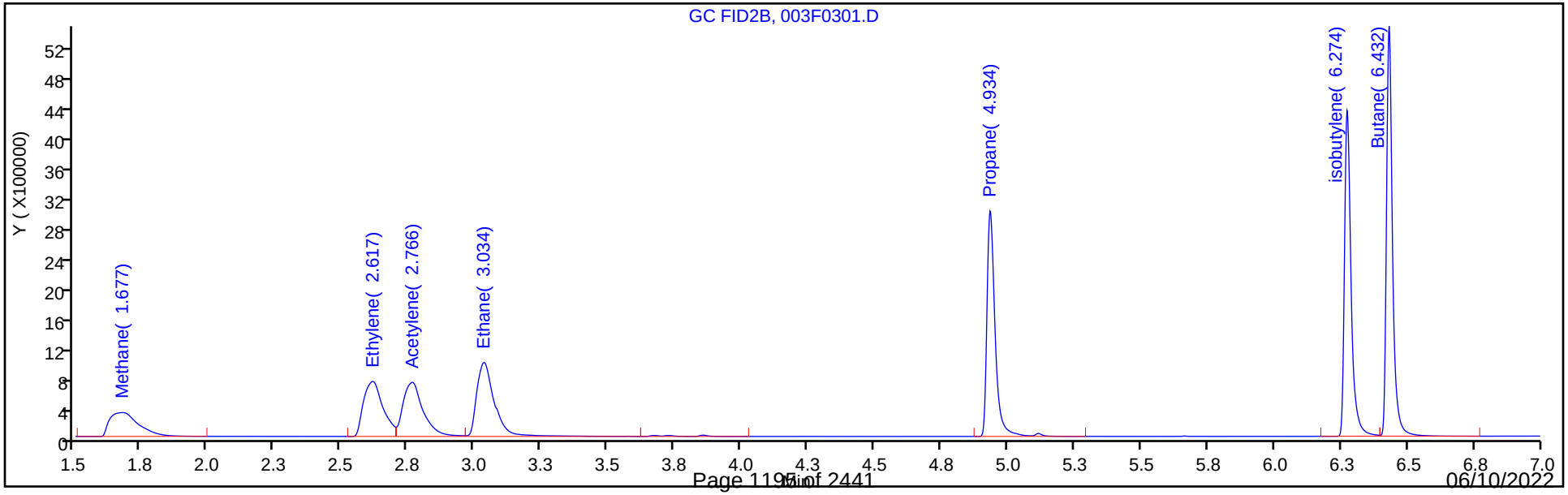
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\003F0301.D

Injection Date:	01-Jun-2022 09:58:30	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	lcs			Worklist Smp#:	3
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-576768/59

Matrix: Water Lab File ID: 030F3001.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 20(mL) Date Analyzed: 06/01/2022 15:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

Purge Volume: Heated Purge: (Y/N) N pH: 5.0

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 576768 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0648		0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\030F3001.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 01-Jun-2022 15:47:58 ALS Bottle#: 30 Worklist Smp#: 59
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: lcs
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Jun-2022 09:25:07 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1606

First Level Reviewer: sciannac Date: 03-Jun-2022 09:11:14

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.262	1.269	-0.007	2414434	65.7	66.8	
2	1.670	1.682	-0.012	2403397	65.7	64.8	
						RPD = 2.97	
3 Ethane							
1	1.530	1.510	0.020	4440699	123.2	133.6	
2	3.021	3.040	-0.019	4477409	123.2	134.1	
						RPD = 0.40	
4 Ethylene							a
1	1.833	1.750	0.083	4254589	114.9	120.8	a
2	2.605	2.620	-0.015	3723066	114.9	120.2	a
						RPD = 0.50	
5 Propane							
1	2.635	2.469	0.166	6666314	180.6	185.1	
2	4.928	4.937	-0.009	6411643	180.6	183.1	
						RPD = 1.08	
6 Acetylene							a
1	0.000	3.964	-3.964	0	106.7	0	
2	2.751	2.768	-0.017	3863856	106.7	113.0	a
						RPD = 200.00	
7 Butane							Ma
1	4.207	4.340	-0.133	3097555	238.1	85.0	a
2	6.428	6.432	-0.004	8543903	238.1	243.2	M
						RPD = 96.35	
8 isobutylene							Ma
1	5.407	5.245	0.162	8297047	229.8	229.7	
2	6.270	6.275	-0.005	7488930	229.8	225.6	M
						RPD = 1.81	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

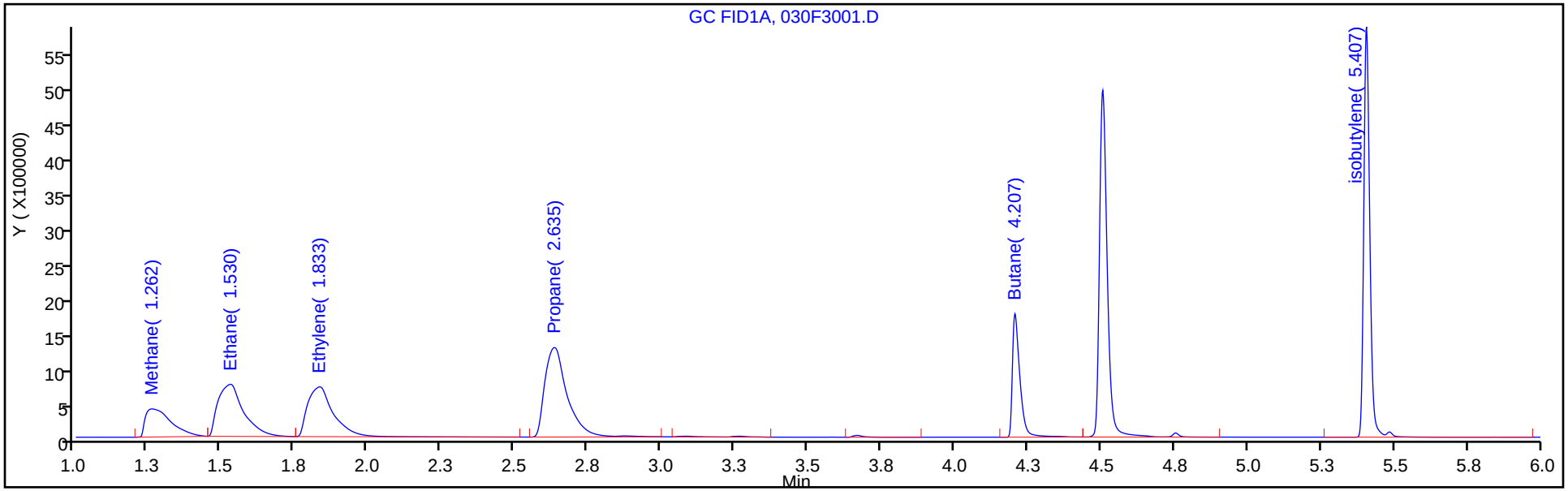
Report Date: 03-Jun-2022 09:25:09 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

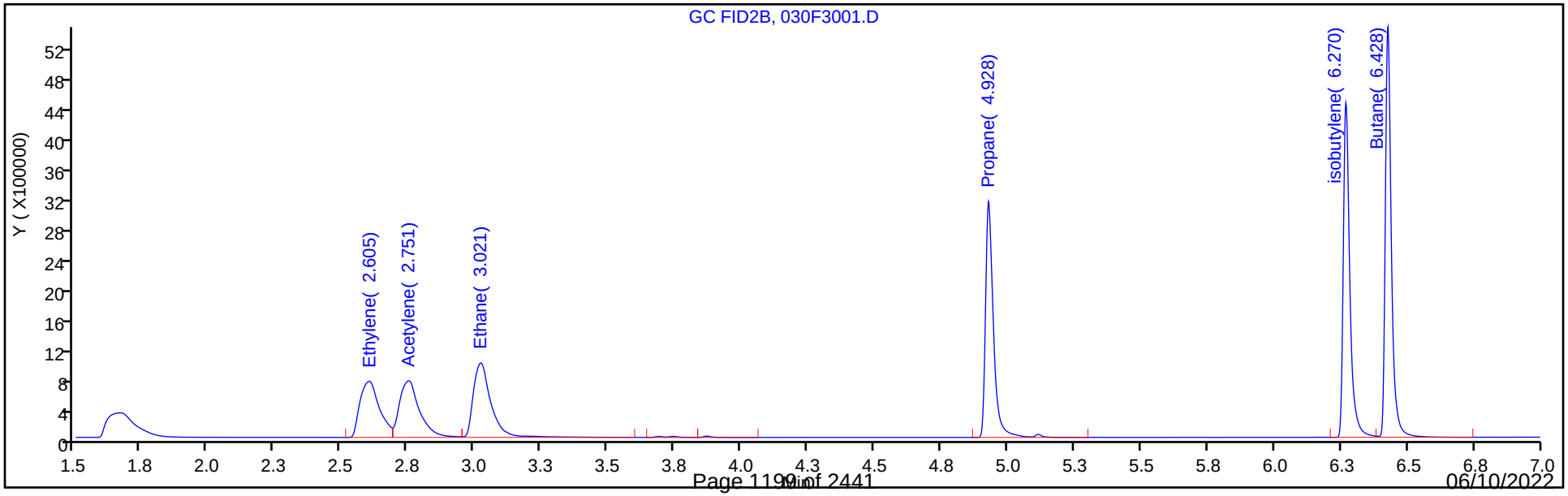
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\030F3001.D

Injection Date:	01-Jun-2022 15:47:58	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	lcs			Worklist Smp#:	59
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	30
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-576907/3

Matrix: Water | Lab File ID: 003F0301.D

Analysis Method: RSK-175 | Date Collected:

Sample wt/vol: 20(mL) | Date Analyzed: 06/02/2022 12:05

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

Purge Volume: | Heated Purge: (Y/N) N pH: 5.0

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 576907 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0651		0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220602-111531.b\003F0301.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 02-Jun-2022 12:05:50 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: lcs
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220602-111531.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Jun-2022 09:48:24 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1606

First Level Reviewer: sciannac Date: 02-Jun-2022 13:42:48

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.269	1.270	-0.001	2403385	65.7	66.5	
2	1.679	1.680	-0.001	2411294	65.7	65.1	
						RPD = 2.16	
3 Ethane							
1	1.528	1.525	0.003	4415242	123.2	132.8	
2	3.034	3.038	-0.004	4515420	123.2	135.3	
						RPD = 1.82	
4 Ethylene							
1	1.809	1.795	0.014	4216736	114.9	119.7	
2	2.617	2.620	-0.003	3710641	114.9	119.8	
						RPD = 0.06	
5 Propane							
1	2.579	2.547	0.032	6716588	180.6	186.5	
2	4.934	4.935	-0.001	6440614	180.6	184.0	
						RPD = 1.38	
6 Acetylene							
1	4.129	4.057	0.072	3067090	106.7	109.0	
2	2.766	2.768	-0.002	3814437	106.7	111.6	
						RPD = 2.36	
7 Butane							
1	4.449	4.403	0.046	9192573	238.1	252.4	
2	6.431	6.431	0.000	8577066	238.1	244.1	
						RPD = 3.34	
8 isobutylene							
1	5.351	5.307	0.044	8331136	229.8	230.6	
2	6.274	6.275	-0.001	7504162	229.8	226.0	
						RPD = 2.02	

QC Flag Legend

Processing Flags

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

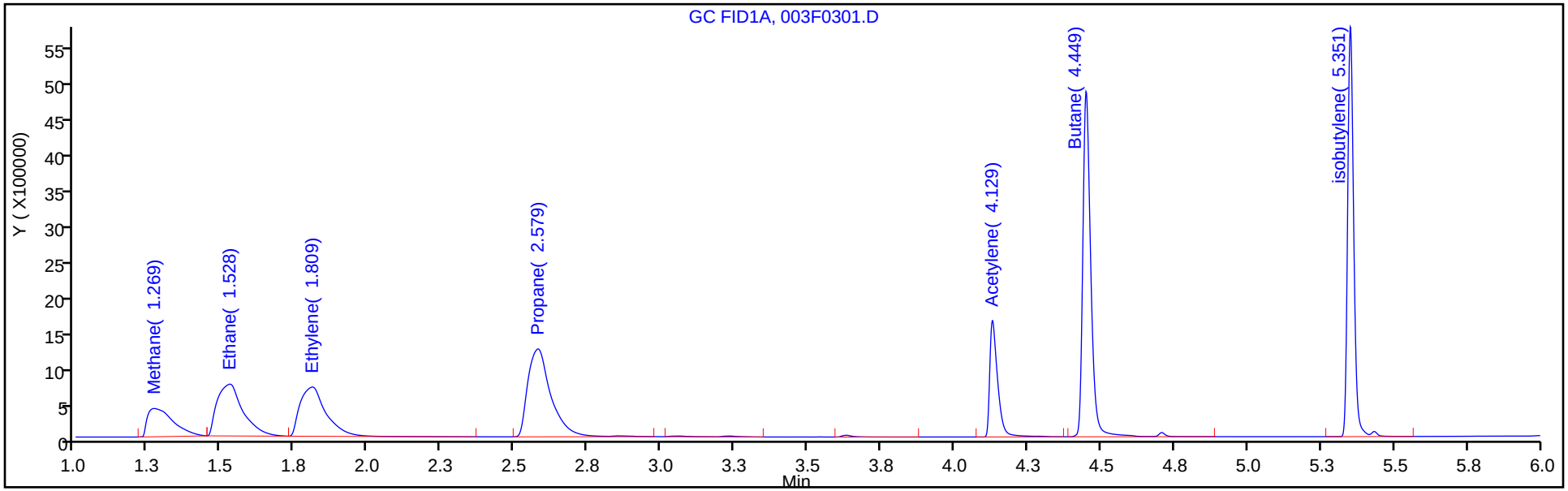
Report Date: 03-Jun-2022 09:48:25 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

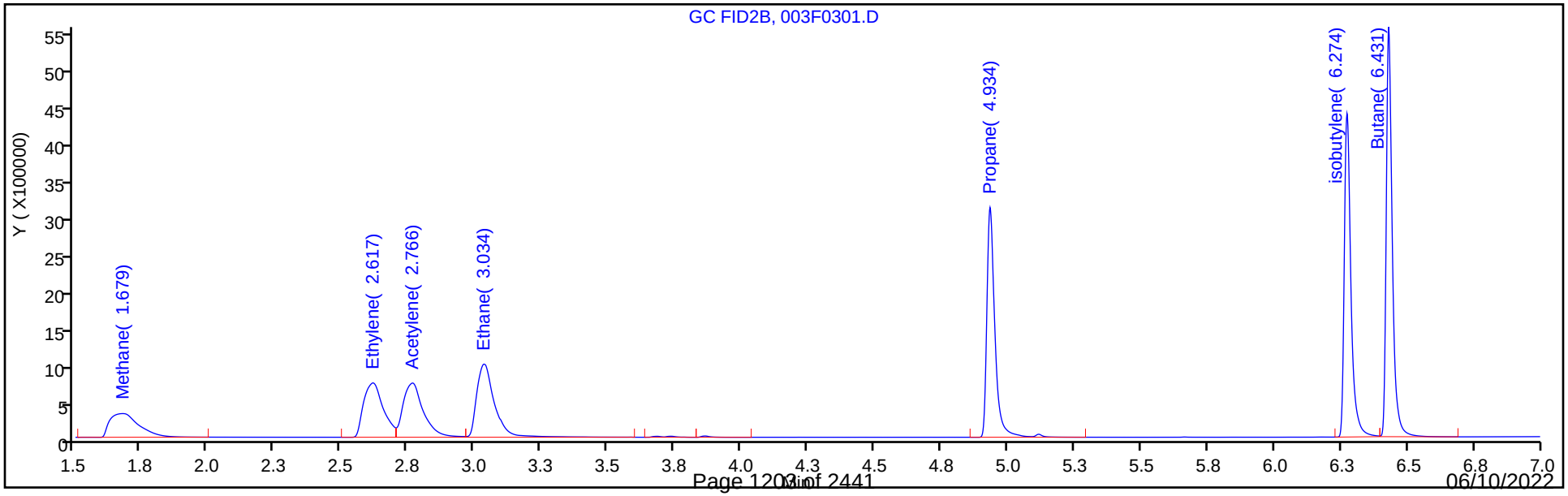
Data File: \\chromfs\Denver\ChromData\VGC_J\20220602-111531.b\003F0301.D

Injection Date:	02-Jun-2022 12:05:50	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	lcs			Worklist Smp#:	3
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-577087/3

Matrix: Water | Lab File ID: 003F0301.D

Analysis Method: RSK-175 | Date Collected:

Sample wt/vol: 20(mL) | Date Analyzed: 06/03/2022 14:42

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

Purge Volume: | Heated Purge: (Y/N) N pH: 5.0

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 577087 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0644		0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220603-111567.b\003F0301.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 03-Jun-2022 14:42:03 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: lcs
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220603-111567.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 06-Jun-2022 15:18:18 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1658

First Level Reviewer: sciannac Date: 06-Jun-2022 15:02:09

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.266	1.268	-0.002	2381330	65.7	65.8	
2	1.676	1.679	-0.003	2386114	65.7	64.4	
						RPD = 2.29	
3 Ethane							
1	1.523	1.516	0.007	4371623	123.2	131.5	
2	3.031	3.034	-0.003	4479561	123.2	134.2	
						RPD = 2.01	
4 Ethylene							
1	1.803	1.774	0.029	4194799	114.9	119.1	
2	2.614	2.617	-0.003	3678812	114.9	118.7	
						RPD = 0.28	
5 Propane							a
1	2.570	2.509	0.061	6636745	180.6	184.3	a
2	4.931	4.932	-0.001	6339159	180.6	181.1	a
						RPD = 1.77	
6 Acetylene							a
1	4.123	4.016	0.107	3126001	106.7	111.1	a
2	2.763	2.766	-0.003	3882364	106.7	113.6	a
						RPD = 2.22	
7 Butane							
1	4.443	4.373	0.070	8922413	238.1	245.0	
2	6.429	6.431	-0.002	8391391	238.1	238.8	
						RPD = 2.55	
8 isobutylene							
1	5.345	5.276	0.069	8237518	229.8	228.0	
2	6.273	6.274	-0.001	7393813	229.8	222.7	
						RPD = 2.37	

QC Flag Legend

Processing Flags

Review Flags

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

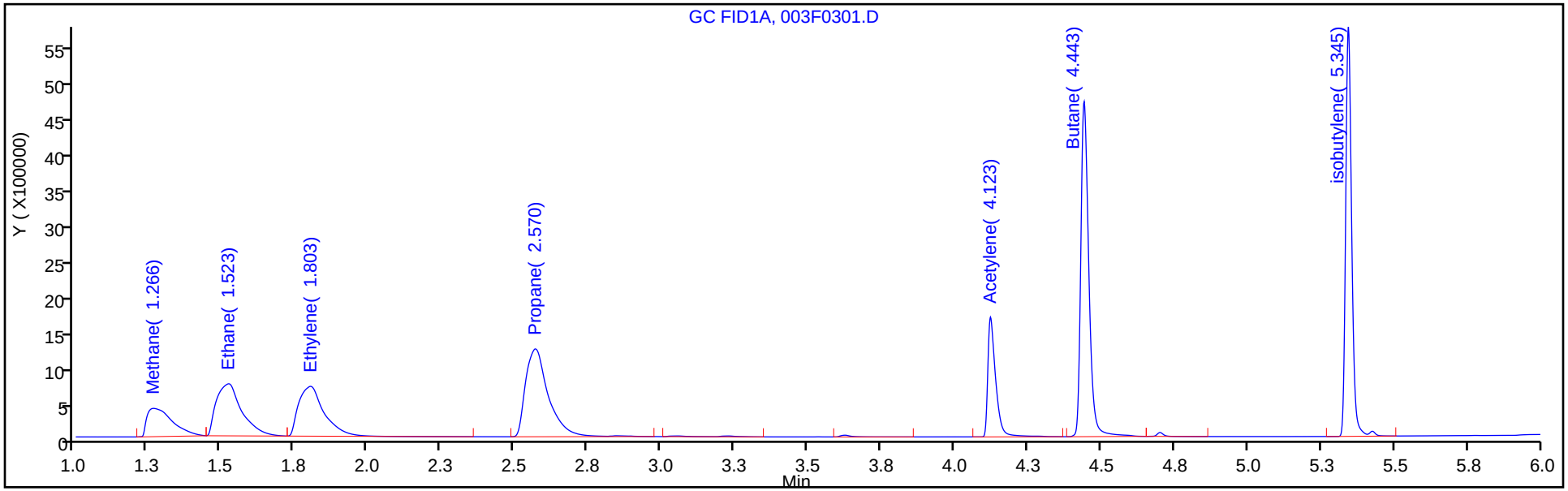
Report Date: 06-Jun-2022 15:18:19 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

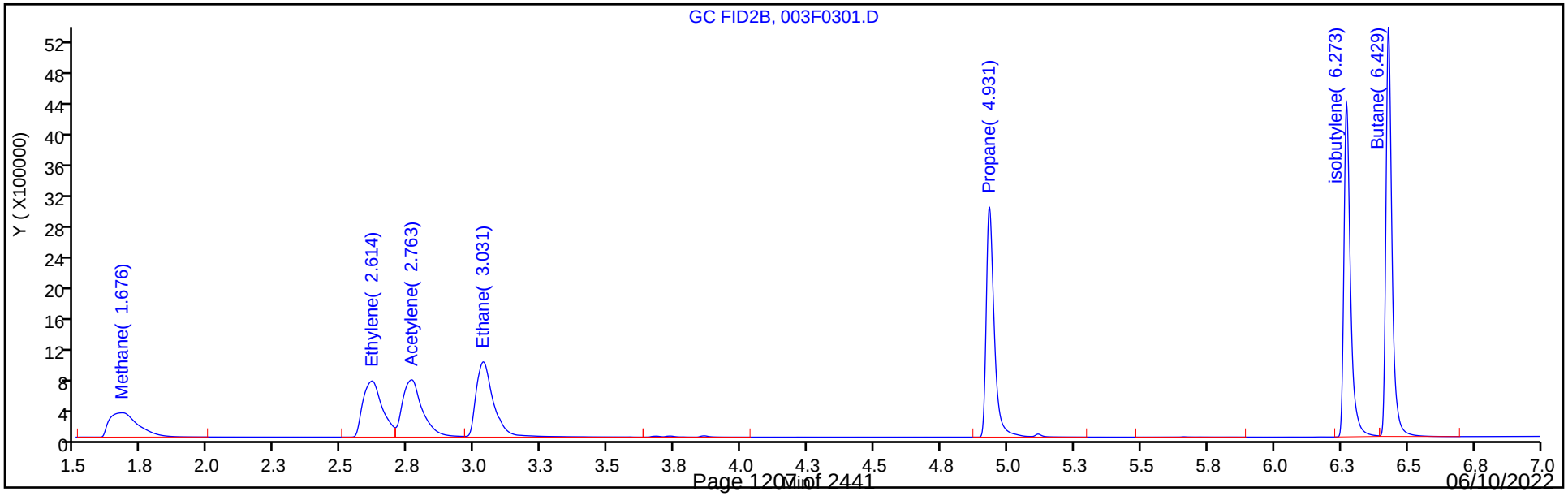
Data File: \\chromfs\Denver\ChromData\VGC_J\20220603-111567.b\003F0301.D

Injection Date:	03-Jun-2022 14:42:03	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	lcs			Worklist Smp#:	3
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-576662/4

Matrix: Water Lab File ID: 004F0401.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 20(mL) Date Analyzed: 06/01/2022 10:11

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

Purge Volume: Heated Purge: (Y/N) N pH: 5.0

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 576662 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-84-0	Ethane	0.133		0.0050	0.0015	0.00057
74-82-8	Methane	0.0640		0.0050	0.0013	0.00063
74-85-1	Ethylene	0.118		0.0050	0.0014	0.00040

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\004F0401.D
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 01-Jun-2022 10:11:24 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: lcsd
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Jun-2022 09:24:53 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1606

First Level Reviewer: sciannac Date: 03-Jun-2022 08:58:45

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.266	1.269	-0.003	2368735	65.7	65.5	
2	1.676	1.682	-0.006	2373753	65.7	64.0	
						RPD = 2.28	
3 Ethane							
1	1.530	1.510	0.020	4352655	123.2	130.9	
2	3.033	3.040	-0.007	4438347	123.2	133.0	
						RPD = 1.53	
4 Ethylene							
1	1.820	1.750	0.070	4154952	114.9	118.0	
2	2.614	2.620	-0.006	3661588	114.9	118.2	
						RPD = 0.20	
5 Propane							
1	2.605	2.469	0.136	6585370	180.6	182.9	
2	4.933	4.937	-0.004	6349132	180.6	181.3	
						RPD = 0.84	
6 Acetylene							
1	4.170	3.964	0.206	3029473	106.7	107.7	
2	2.761	2.768	-0.007	3722029	106.7	108.9	
						RPD = 1.14	
7 Butane							
1	4.475	4.340	0.135	8877067	238.1	243.7	
2	6.431	6.432	-0.001	8522218	238.1	242.5	
						RPD = 0.49	
8 isobutylene							
1	5.375	5.245	0.130	8203980	229.8	227.1	
2	6.274	6.275	-0.001	7444751	229.8	224.2	
						RPD = 1.28	

QC Flag Legend

Processing Flags

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

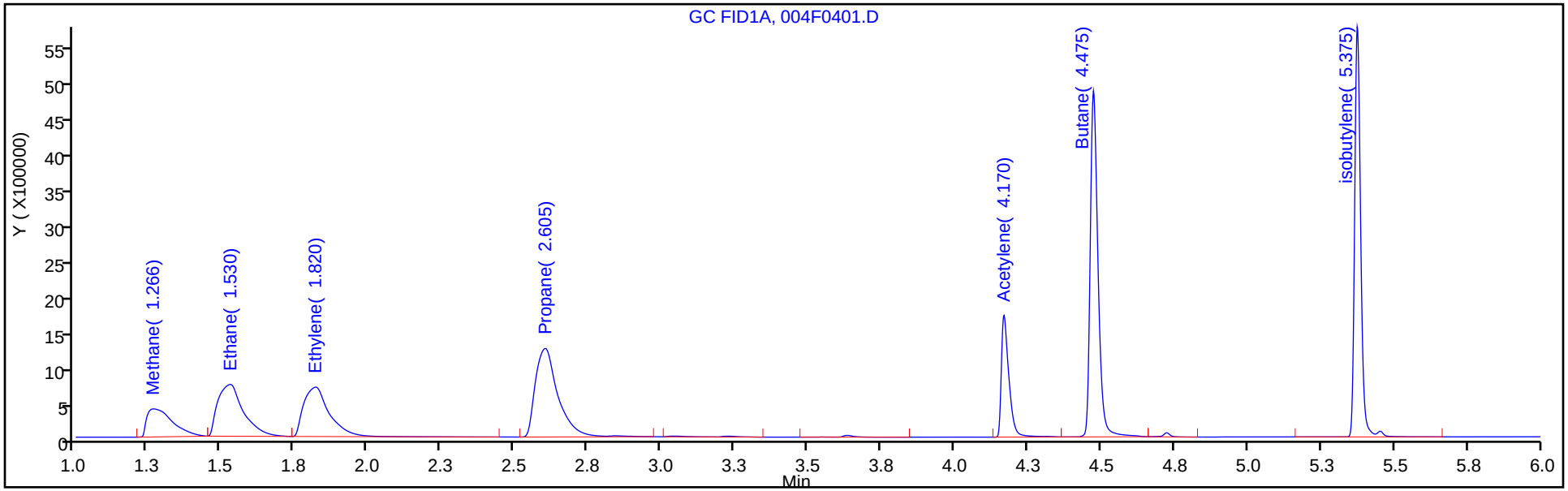
Report Date: 03-Jun-2022 09:24:55 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

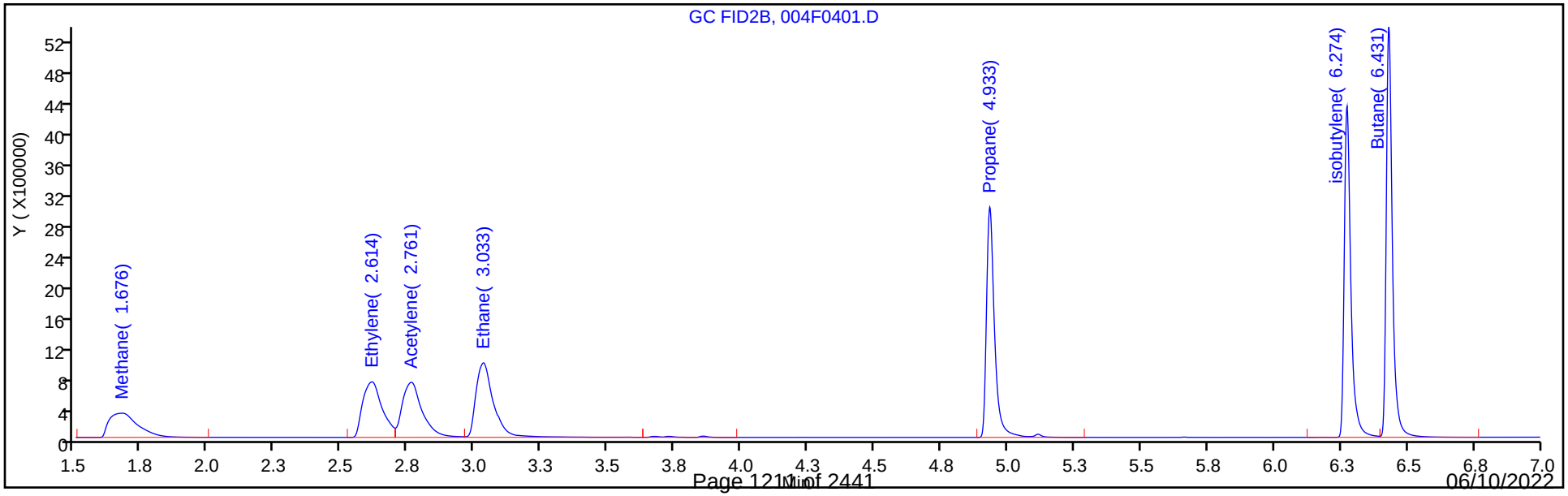
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\004F0401.D

Injection Date:	01-Jun-2022 10:11:24	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	lcsd			Worklist Smp#:	4
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-576768/60

Matrix: Water Lab File ID: 031F3101.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 20(mL) Date Analyzed: 06/01/2022 16:00

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

Purge Volume: Heated Purge: (Y/N) N pH: 5.0

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 576768 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0645		0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\031F3101.D
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 01-Jun-2022 16:00:58 ALS Bottle#: 31 Worklist Smp#: 60
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: lcsd
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Jun-2022 09:25:07 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1606

First Level Reviewer: sciannac Date: 03-Jun-2022 09:11:58

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.262	1.269	-0.007	2403383	65.7	66.5	
2	1.669	1.682	-0.013	2390616	65.7	64.5	
						RPD = 3.05	
3 Ethane							
1	1.531	1.510	0.021	4414228	123.2	132.8	
2	3.024	3.040	-0.016	4493243	123.2	134.6	
						RPD = 1.35	
4 Ethylene							a
1	1.834	1.750	0.084	4224678	114.9	119.9	a
2	2.604	2.620	-0.016	3693826	114.9	119.2	a
						RPD = 0.58	
5 Propane							
1	2.636	2.469	0.167	6630157	180.6	184.1	
2	4.929	4.937	-0.008	6368267	180.6	181.9	
						RPD = 1.22	
6 Acetylene							a
1	0.000	3.964	-3.964	0	106.7	0	
2	2.750	2.768	-0.018	3863961	106.7	113.1	a
						RPD = 200.00	
7 Butane							Ma
1	4.207	4.340	-0.133	3089668	238.1	84.8	a
2	6.427	6.432	-0.005	8494765	238.1	241.8	M
						RPD = 96.10	
8 isobutylene							Ma
1	5.407	5.245	0.162	8249549	229.8	228.4	
2	6.270	6.275	-0.005	7449761	229.8	224.4	M
						RPD = 1.76	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

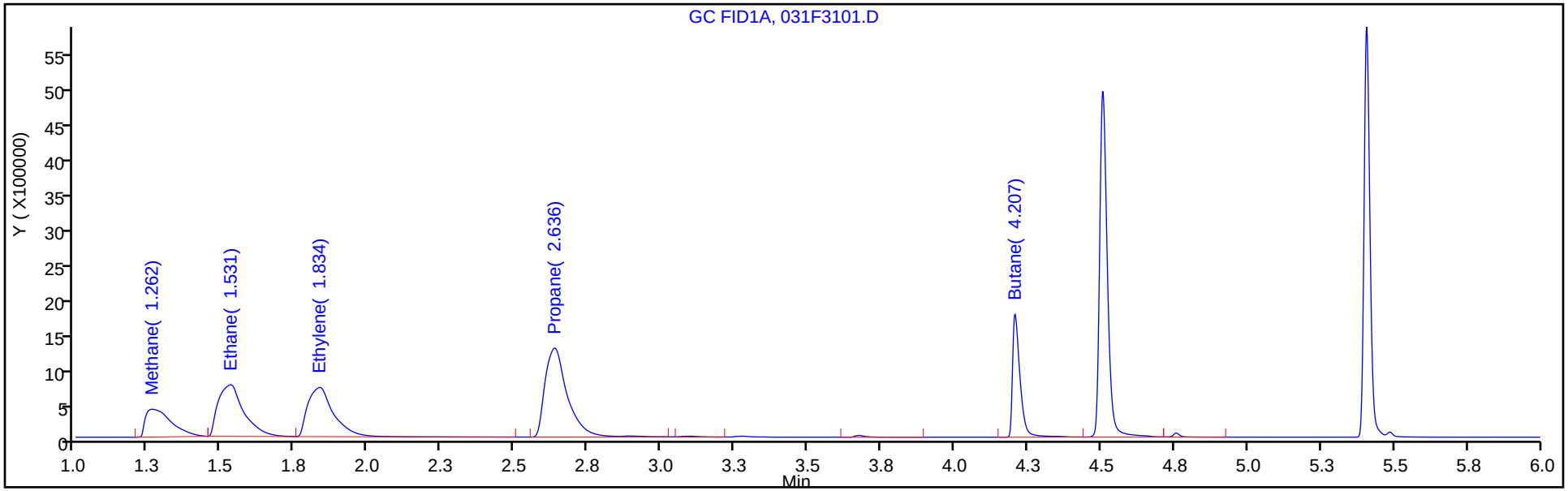
Report Date: 03-Jun-2022 09:25:10 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

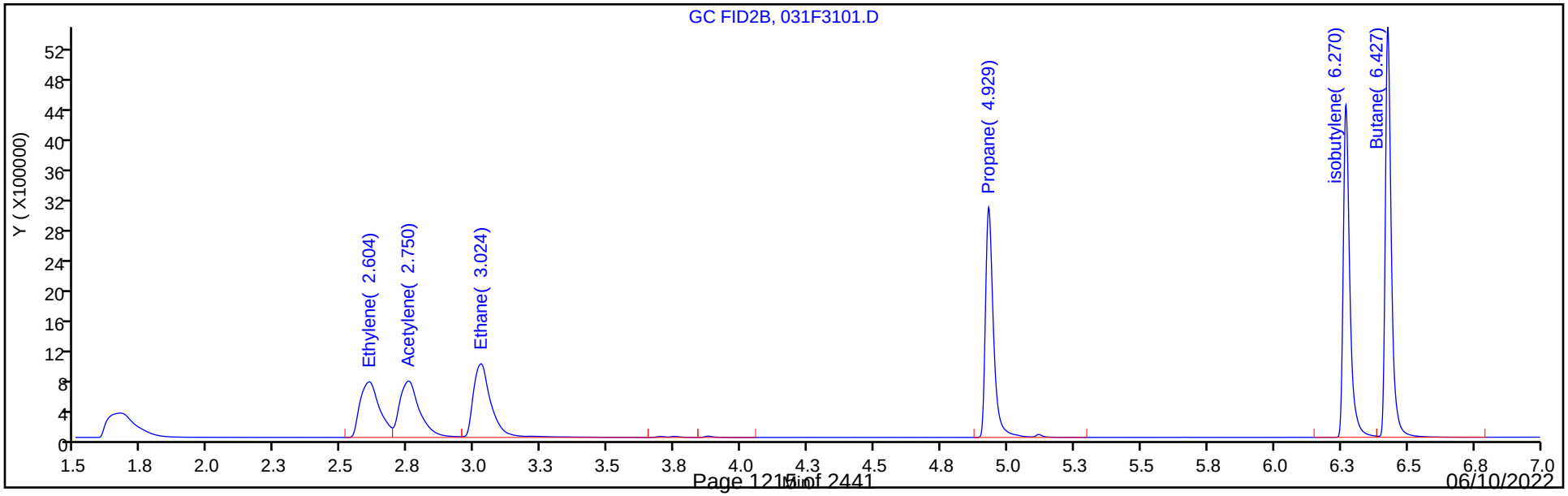
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\031F3101.D

Injection Date:	01-Jun-2022 16:00:58	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	lcsd			Worklist Smp#:	60
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-576907/4

Matrix: Water Lab File ID: 004F0401.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 20(mL) Date Analyzed: 06/02/2022 12:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

Purge Volume: Heated Purge: (Y/N) N pH: 5.0

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 576907 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0641		0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220602-111531.b\004F0401.D
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 02-Jun-2022 12:18:45 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: lcsd
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220602-111531.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Jun-2022 09:48:24 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1606

First Level Reviewer: sciannac Date: 03-Jun-2022 09:26:09

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.266	1.270	-0.004	2381515	65.7	65.9	
2	1.674	1.680	-0.006	2377297	65.7	64.1	
						RPD = 2.68	
3 Ethane							
1	1.531	1.525	0.006	4372877	123.2	131.5	
2	3.032	3.038	-0.006	4466514	123.2	133.8	
						RPD = 1.69	
4 Ethylene							
1	1.822	1.795	0.027	4190311	114.9	119.0	
2	2.614	2.620	-0.006	3669163	114.9	118.4	
						RPD = 0.44	
5 Propane							
1	2.606	2.547	0.059	6608175	180.6	183.5	
2	4.932	4.935	-0.003	6332679	180.6	180.9	
						RPD = 1.44	
6 Acetylene							a
1	4.171	4.057	0.114	3059388	106.7	108.7	a
2	2.760	2.768	-0.008	3808483	106.7	111.4	a
						RPD = 2.46	
7 Butane							
1	4.477	4.403	0.074	8903005	238.1	244.4	
2	6.430	6.431	-0.001	8424228	238.1	239.7	
						RPD = 1.94	
8 isobutylene							
1	5.377	5.307	0.070	8313949	229.8	230.1	
2	6.274	6.275	-0.001	7404478	229.8	223.0	
						RPD = 3.15	

QC Flag Legend

Processing Flags

Review Flags

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

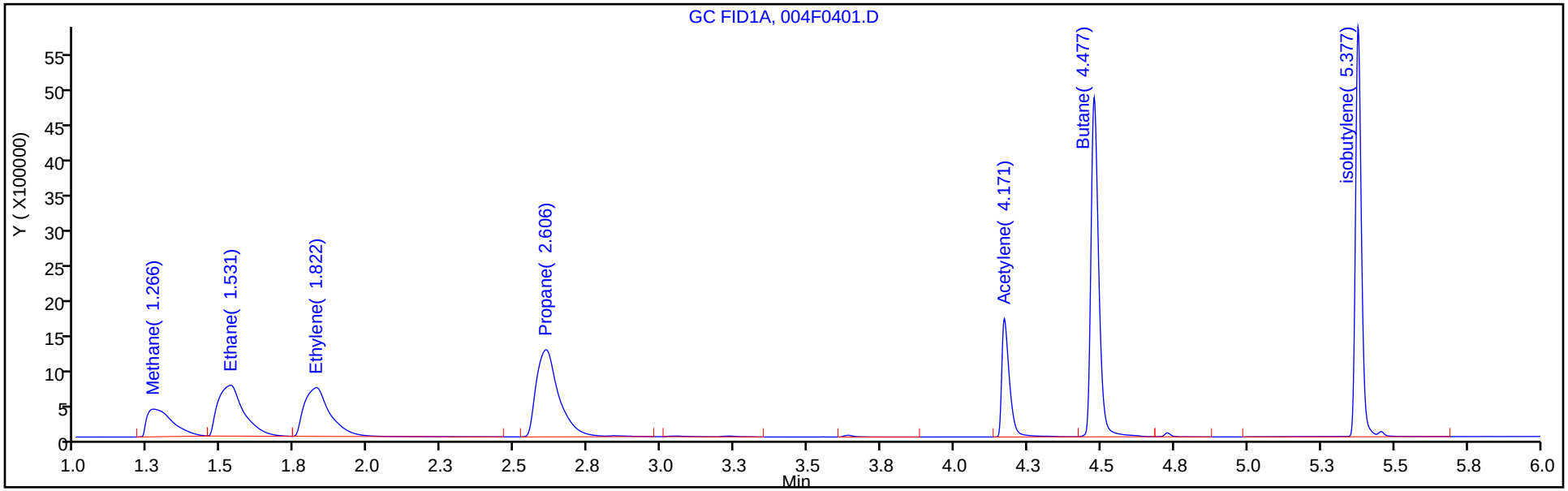
Report Date: 03-Jun-2022 09:48:26 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

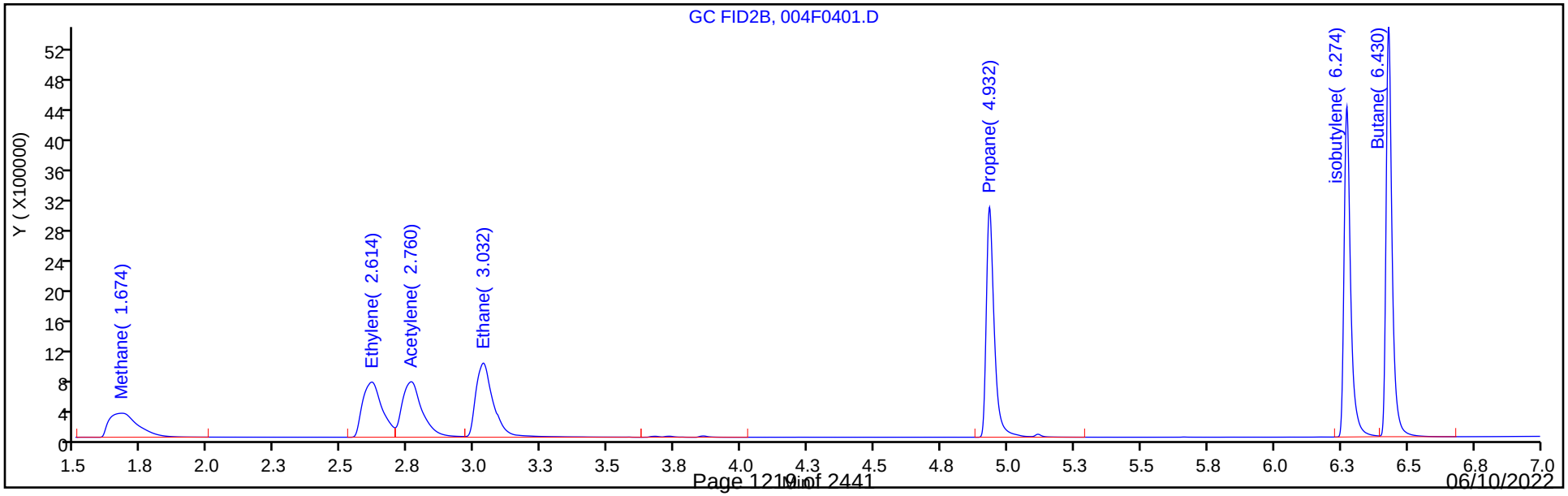
Data File: \\chromfs\Denver\ChromData\VGC_J\20220602-111531.b\004F0401.D

Injection Date:	02-Jun-2022 12:18:45	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	lcsd			Worklist Smp#:	4
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-577087/4

Matrix: Water Lab File ID: 004F0401.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 20(mL) Date Analyzed: 06/03/2022 14:54

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

Purge Volume: Heated Purge: (Y/N) N pH: 5.0

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 577087 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0635		0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220603-111567.b\004F0401.D
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 03-Jun-2022 14:54:58 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: lcsd
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220603-111567.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 06-Jun-2022 15:18:18 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1658

First Level Reviewer: sciannac Date: 06-Jun-2022 15:05:46

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.265	1.268	-0.003	2367249	65.7	65.4	
2	1.673	1.679	-0.006	2356054	65.7	63.5	
						RPD = 2.98	
3 Ethane							
1	1.527	1.516	0.011	4346747	123.2	130.8	
2	3.028	3.034	-0.006	4429992	123.2	132.7	
						RPD = 1.47	
4 Ethylene							
1	1.819	1.774	0.045	4173880	114.9	118.5	
2	2.610	2.617	-0.007	3639484	114.9	117.5	
						RPD = 0.86	
5 Propane							a
1	2.600	2.509	0.091	6571345	180.6	182.5	a
2	4.930	4.932	-0.002	6145551	180.6	175.5	a
						RPD = 3.88	
6 Acetylene							a
1	4.165	4.016	0.149	3095046	106.7	110.0	a
2	2.760	2.766	-0.006	3850082	106.7	112.6	a
						RPD = 2.38	
7 Butane							a
1	4.470	4.373	0.097	8951525	238.1	245.8	a
2	6.428	6.431	-0.003	8335116	238.1	237.2	a
						RPD = 3.55	
8 isobutylene							a
1	5.372	5.276	0.096	8241319	229.8	228.1	a
2	6.272	6.274	-0.002	7343189	229.8	221.2	a
						RPD = 3.10	

QC Flag Legend

Processing Flags

Review Flags

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

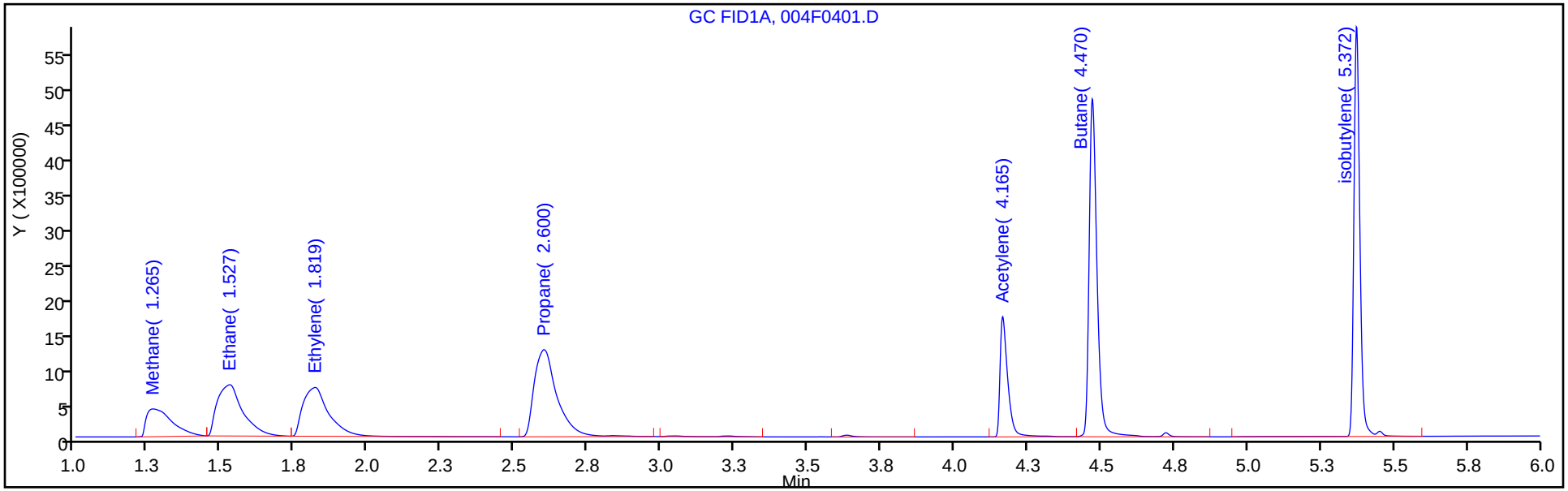
Report Date: 06-Jun-2022 15:18:20 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

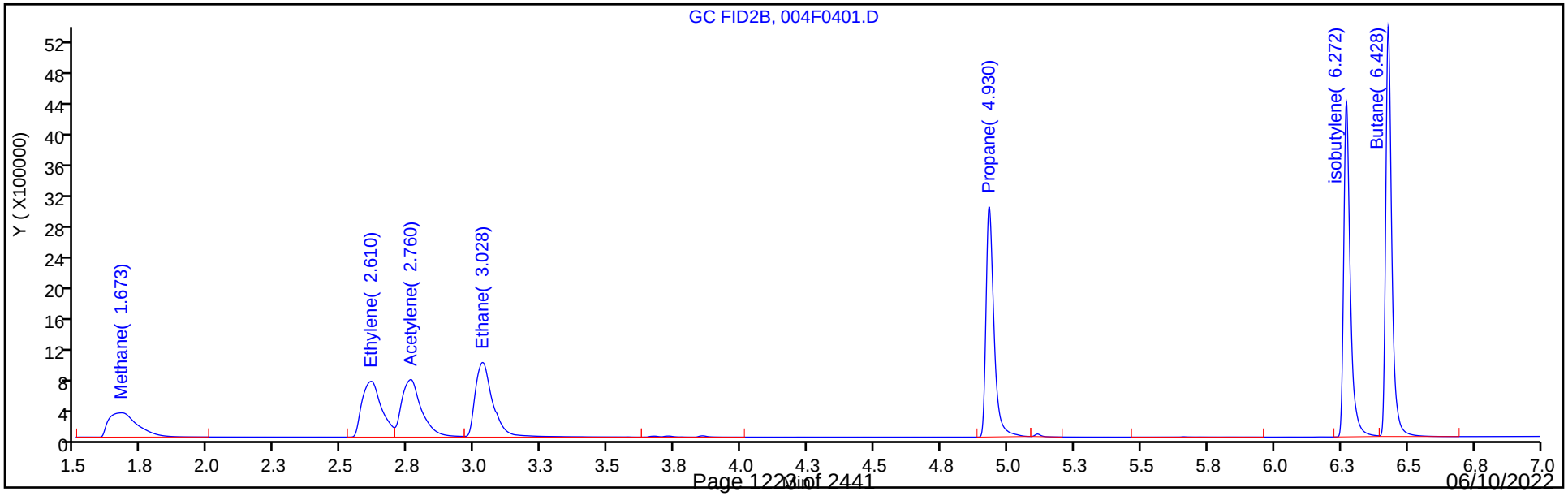
Data File: \\chromfs\Denver\ChromData\VGC_J\20220603-111567.b\004F0401.D

Injection Date:	03-Jun-2022 14:54:58	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	lcsd			Worklist Smp#:	4
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0119-22A DU | Lab Sample ID: 280-162622-1 DU

Matrix: Water | Lab File ID: 007F0701.D

Analysis Method: RSK-175 | Date Collected: 05/19/2022 10:50

Sample wt/vol: 20(mL) | Date Analyzed: 06/01/2022 10:50

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

Purge Volume: | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 576662 | 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	0.956		0.0050	0.0013	0.00063
74-85-1	Ethylene	0.0014	U	0.0050	0.0014	0.00040

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\007F0701.D
Lims ID: 280-162622-G-1 DU
Client ID:
Sample Type: DU
Inject. Date: 01-Jun-2022 10:50:09 ALS Bottle#: 7 Worklist Smp#: 36
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-162622-G-1 DU
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Jun-2022 09:24:53 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1606

First Level Reviewer: sciannac Date: 01-Jun-2022 11:03:21

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	1.267	1.269	-0.002	37665407		1069.1	
2	1.672	1.682	-0.010	34570918		955.8	
						RPD = 11.18	
3 Ethane							
1		1.510				ND	
2		3.040					
4 Ethylene							
1		1.750				ND	
2		2.620					
5 Propane							
1		2.469				ND	
2		4.937					
6 Acetylene							
1		3.964				ND	
2		2.768					
7 Butane							
1		4.340				ND	
2		6.432					
8 isobutylene							
1		5.245				ND	
2		6.275					

QC Flag Legend

Processing Flags

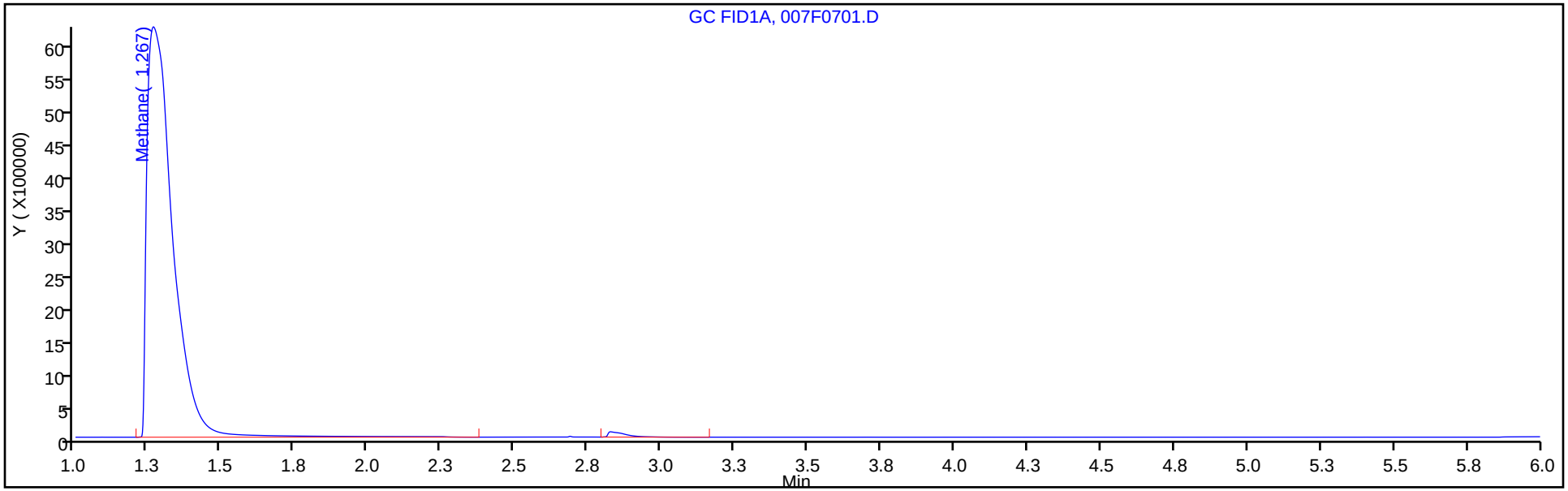
Report Date: 03-Jun-2022 09:24:57 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

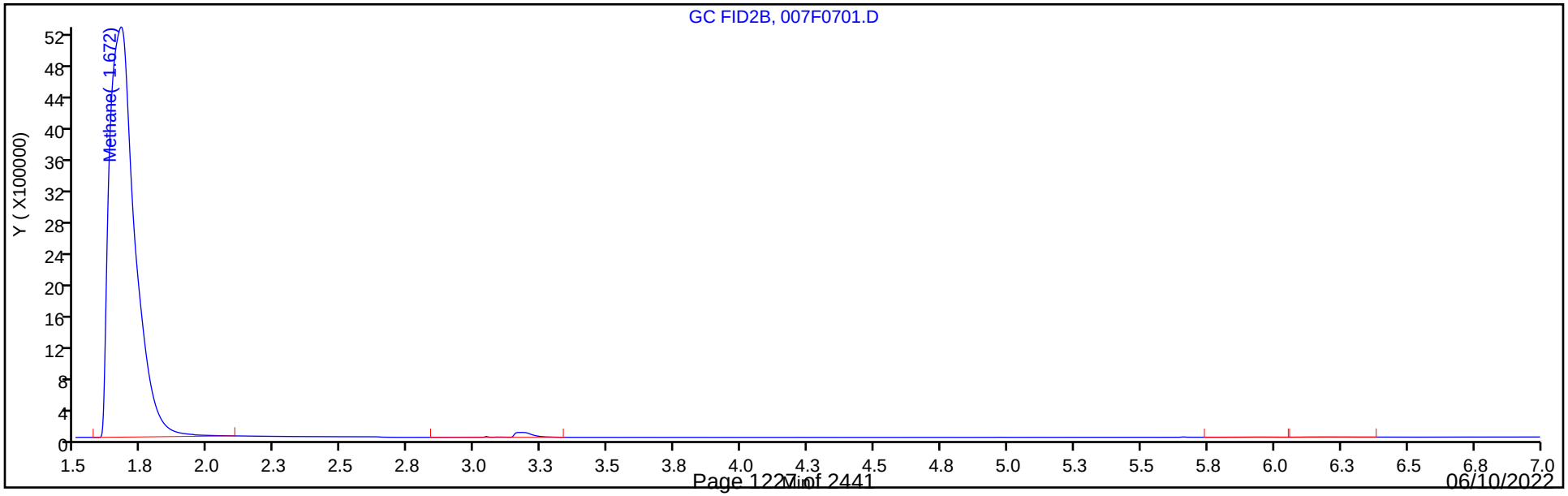
Data File: \\chromfs\Denver\ChromData\VGC_J\20220531-111474.b\007F0701.D

Injection Date:	01-Jun-2022 10:50:09	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-162622-G-1 DU			Worklist Smp#:	36
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



GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: VGC_J Start Date: 09/24/2021 13:16

Analysis Batch Number: 550959 End Date: 09/24/2021 15:38

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
RTC 280-550959/1		09/24/2021 13:16	1		Rt-Alumina KCl 0.53(mm)
RTC 280-550959/1		09/24/2021 13:16	1		HP-Plot Q 0.53(mm)
IC 280-550959/2		09/24/2021 13:28	1	004F0201.D	Rt-Alumina KCl 0.53(mm)
IC 280-550959/2		09/24/2021 13:28	1	004F0201.D	HP-Plot Q 0.53(mm)
IC 280-550959/3		09/24/2021 13:41	1	005F0301.D	Rt-Alumina KCl 0.53(mm)
IC 280-550959/3		09/24/2021 13:41	1	005F0301.D	HP-Plot Q 0.53(mm)
IC 280-550959/4		09/24/2021 13:54	1	006F0401.D	Rt-Alumina KCl 0.53(mm)
IC 280-550959/4		09/24/2021 13:54	1	006F0401.D	HP-Plot Q 0.53(mm)
IC 280-550959/5		09/24/2021 14:07	1	007F0501.D	Rt-Alumina KCl 0.53(mm)
IC 280-550959/5		09/24/2021 14:07	1	007F0501.D	HP-Plot Q 0.53(mm)
IC 280-550959/6		09/24/2021 14:20	1	008F0601.D	Rt-Alumina KCl 0.53(mm)
IC 280-550959/6		09/24/2021 14:20	1	008F0601.D	HP-Plot Q 0.53(mm)
IC 280-550959/7		09/24/2021 14:33	1	009F0701.D	Rt-Alumina KCl 0.53(mm)
IC 280-550959/7		09/24/2021 14:33	1	009F0701.D	HP-Plot Q 0.53(mm)
IC 280-550959/9		09/24/2021 14:46	1	010F0801.D	Rt-Alumina KCl 0.53(mm)
IC 280-550959/9		09/24/2021 14:46	1	010F0801.D	HP-Plot Q 0.53(mm)
IC 280-550959/10		09/24/2021 14:59	1	011F0901.D	Rt-Alumina KCl 0.53(mm)
IC 280-550959/10		09/24/2021 14:59	1	011F0901.D	HP-Plot Q 0.53(mm)
IC 280-550959/11		09/24/2021 15:12	1	012F1001.D	Rt-Alumina KCl 0.53(mm)
IC 280-550959/11		09/24/2021 15:12	1	012F1001.D	HP-Plot Q 0.53(mm)
ZZZZZ		09/24/2021 15:25	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		09/24/2021 15:25	1		HP-Plot Q 0.53(mm)
ICV 280-550959/13		09/24/2021 15:38	1	014F1201.D	Rt-Alumina KCl 0.53(mm)
ICV 280-550959/13		09/24/2021 15:38	1	014F1201.D	HP-Plot Q 0.53(mm)

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: VGC_J Start Date: 06/01/2022 09:45

Analysis Batch Number: 576662 End Date: 06/01/2022 15:34

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 280-576662/2		06/01/2022 09:45	1	002F0201.D	Rt-Alumina KCl 0.53(mm)
CCVRT 280-576662/2		06/01/2022 09:45	1	002F0201.D	HP-Plot Q 0.53(mm)
LCS 280-576662/3		06/01/2022 09:58	1	003F0301.D	Rt-Alumina KCl 0.53(mm)
LCS 280-576662/3		06/01/2022 09:58	1	003F0301.D	HP-Plot Q 0.53(mm)
LCSD 280-576662/4		06/01/2022 10:11	1	004F0401.D	Rt-Alumina KCl 0.53(mm)
LCSD 280-576662/4		06/01/2022 10:11	1	004F0401.D	HP-Plot Q 0.53(mm)
MB 280-576662/5		06/01/2022 10:24	1	005F0501.D	Rt-Alumina KCl 0.53(mm)
MB 280-576662/5		06/01/2022 10:24	1	005F0501.D	HP-Plot Q 0.53(mm)
280-162622-1	G0119-22A	06/01/2022 10:37	1	006F0601.D	Rt-Alumina KCl 0.53(mm)
280-162622-1	G0119-22A	06/01/2022 10:37	1	006F0601.D	HP-Plot Q 0.53(mm)
280-162622-1 DU	G0119-22A DU	06/01/2022 10:50	1	007F0701.D	Rt-Alumina KCl 0.53(mm)
280-162622-1 DU	G0119-22A DU	06/01/2022 10:50	1	007F0701.D	HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2022 11:03	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2022 11:03	1		HP-Plot Q 0.53(mm)
280-162622-3	G0101-22A	06/01/2022 11:15	1	009F0901.D	Rt-Alumina KCl 0.53(mm)
280-162622-3	G0101-22A	06/01/2022 11:15	1	009F0901.D	HP-Plot Q 0.53(mm)
280-162622-4	G0100-22A	06/01/2022 11:29	1	010F1001.D	Rt-Alumina KCl 0.53(mm)
280-162622-4	G0100-22A	06/01/2022 11:29	1	010F1001.D	HP-Plot Q 0.53(mm)
280-162622-5	G0122-22A	06/01/2022 11:42	1	011F1101.D	Rt-Alumina KCl 0.53(mm)
280-162622-5	G0122-22A	06/01/2022 11:42	1	011F1101.D	HP-Plot Q 0.53(mm)
280-162622-6	G0066R-22A	06/01/2022 11:55	1	012F1201.D	Rt-Alumina KCl 0.53(mm)
280-162622-6	G0066R-22A	06/01/2022 11:55	1	012F1201.D	HP-Plot Q 0.53(mm)
280-162622-8	G0115-22A	06/01/2022 12:08	1	013F1301.D	Rt-Alumina KCl 0.53(mm)
280-162622-8	G0115-22A	06/01/2022 12:08	1	013F1301.D	HP-Plot Q 0.53(mm)
280-162622-9	G0095-22A	06/01/2022 12:20	1	014F1401.D	Rt-Alumina KCl 0.53(mm)
280-162622-9	G0095-22A	06/01/2022 12:20	1	014F1401.D	HP-Plot Q 0.53(mm)
280-162622-19	SHGW02-22A	06/01/2022 12:33	1	015F1501.D	Rt-Alumina KCl 0.53(mm)
280-162622-19	SHGW02-22A	06/01/2022 12:33	1	015F1501.D	HP-Plot Q 0.53(mm)
280-162622-20	SHGW05-22A	06/01/2022 12:46	1	016F1601.D	Rt-Alumina KCl 0.53(mm)
280-162622-20	SHGW05-22A	06/01/2022 12:46	1	016F1601.D	HP-Plot Q 0.53(mm)
CCV 280-576662/46		06/01/2022 12:59	1	017F1701.D	Rt-Alumina KCl 0.53(mm)
CCV 280-576662/46		06/01/2022 12:59	1	017F1701.D	HP-Plot Q 0.53(mm)
280-162622-21	G0053-22A	06/01/2022 13:12	1	018F1801.D	Rt-Alumina KCl 0.53(mm)
280-162622-21	G0053-22A	06/01/2022 13:12	1	018F1801.D	HP-Plot Q 0.53(mm)
280-162622-22	G0069-22A	06/01/2022 13:25	1	019F1901.D	Rt-Alumina KCl 0.53(mm)
280-162622-22	G0069-22A	06/01/2022 13:25	1	019F1901.D	HP-Plot Q 0.53(mm)
280-162622-24	SHGW04-22A	06/01/2022 13:38	1	020F2001.D	Rt-Alumina KCl 0.53(mm)
280-162622-24	SHGW04-22A	06/01/2022 13:38	1	020F2001.D	HP-Plot Q 0.53(mm)
280-162622-25	SHGW03-22A	06/01/2022 13:51	1	021F2101.D	Rt-Alumina KCl 0.53(mm)
280-162622-25	SHGW03-22A	06/01/2022 13:51	1	021F2101.D	HP-Plot Q 0.53(mm)
280-162622-26	SAMW1-22A	06/01/2022 14:04	1	022F2201.D	Rt-Alumina KCl 0.53(mm)
280-162622-26	SAMW1-22A	06/01/2022 14:04	1	022F2201.D	HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2022 14:17	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2022 14:17	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2022 14:30	1		Rt-Alumina KCl 0.53(mm)

RSK-175

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: VGC_J Start Date: 06/01/2022 09:45

Analysis Batch Number: 576662 End Date: 06/01/2022 15:34

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		06/01/2022 14:30	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2022 14:43	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2022 14:43	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2022 14:56	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2022 14:56	1		HP-Plot Q 0.53(mm)
280-162622-10	PZ018-22A	06/01/2022 15:09	1	027F2701.D	Rt-Alumina KCl 0.53(mm)
280-162622-10	PZ018-22A	06/01/2022 15:09	1	027F2701.D	HP-Plot Q 0.53(mm)
280-162622-11	PZ020-22A	06/01/2022 15:22	1	028F2801.D	Rt-Alumina KCl 0.53(mm)
280-162622-11	PZ020-22A	06/01/2022 15:22	1	028F2801.D	HP-Plot Q 0.53(mm)
CCV 280-576662/58		06/01/2022 15:34	1	029F2901.D	Rt-Alumina KCl 0.53(mm)
CCV 280-576662/58		06/01/2022 15:34	1	029F2901.D	HP-Plot Q 0.53(mm)

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: VGC_J Start Date: 06/01/2022 09:45

Analysis Batch Number: 576768 End Date: 06/01/2022 21:51

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 280-576768/2		06/01/2022 09:45	1	002F0201.D	Rt-Alumina KCl 0.53(mm)
CCVRT 280-576768/2		06/01/2022 09:45	1	002F0201.D	HP-Plot Q 0.53(mm)
CCV 280-576768/58		06/01/2022 15:34	1	029F2901.D	Rt-Alumina KCl 0.53(mm)
CCV 280-576768/58		06/01/2022 15:34	1	029F2901.D	HP-Plot Q 0.53(mm)
LCS 280-576768/59		06/01/2022 15:47	1	030F3001.D	Rt-Alumina KCl 0.53(mm)
LCS 280-576768/59		06/01/2022 15:47	1	030F3001.D	HP-Plot Q 0.53(mm)
LCSD 280-576768/60		06/01/2022 16:00	1	031F3101.D	Rt-Alumina KCl 0.53(mm)
LCSD 280-576768/60		06/01/2022 16:00	1	031F3101.D	HP-Plot Q 0.53(mm)
MB 280-576768/61		06/01/2022 16:13	1	032F3201.D	Rt-Alumina KCl 0.53(mm)
MB 280-576768/61		06/01/2022 16:13	1	032F3201.D	HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2022 16:26	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2022 16:26	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2022 16:39	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2022 16:39	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2022 16:52	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2022 16:52	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2022 17:05	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2022 17:05	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2022 17:18	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2022 17:18	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2022 17:31	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2022 17:31	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2022 17:44	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2022 17:44	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2022 17:57	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2022 17:57	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2022 18:10	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2022 18:10	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2022 18:23	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2022 18:23	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2022 18:36	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2022 18:36	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2022 18:49	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2022 18:49	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2022 19:02	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2022 19:02	1		HP-Plot Q 0.53(mm)
CCV 280-576768/75		06/01/2022 19:15	1	046F4601.D	Rt-Alumina KCl 0.53(mm)
CCV 280-576768/75		06/01/2022 19:15	1	046F4601.D	HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2022 19:28	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2022 19:28	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2022 19:41	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2022 19:41	1		HP-Plot Q 0.53(mm)
280-162622-7	G0024-22A	06/01/2022 19:54	1	049F4901.D	Rt-Alumina KCl 0.53(mm)
280-162622-7	G0024-22A	06/01/2022 19:54	1	049F4901.D	HP-Plot Q 0.53(mm)
280-162622-12	G0077-22A	06/01/2022 20:07	1	050F5001.D	Rt-Alumina KCl 0.53(mm)

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: VGC_J Start Date: 06/01/2022 09:45

Analysis Batch Number: 576768 End Date: 06/01/2022 21:51

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
280-162622-12	G0077-22A	06/01/2022 20:07	1	050F5001.D	HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2022 20:20	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2022 20:20	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2022 20:33	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2022 20:33	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2022 20:46	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2022 20:46	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2022 20:59	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2022 20:59	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2022 21:12	4		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2022 21:12	4		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2022 21:25	4		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2022 21:25	4		HP-Plot Q 0.53(mm)
ZZZZZ		06/01/2022 21:38	2		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/01/2022 21:38	2		HP-Plot Q 0.53(mm)
CCV 280-576768/87		06/01/2022 21:51	1	058F5801.D	Rt-Alumina KCl 0.53(mm)
CCV 280-576768/87		06/01/2022 21:51	1	058F5801.D	HP-Plot Q 0.53(mm)

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: VGC_J Start Date: 06/02/2022 11:52

Analysis Batch Number: 576907 End Date: 06/02/2022 19:26

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 280-576907/2		06/02/2022 11:52	1	002F0201.D	Rt-Alumina KCl 0.53(mm)
CCVRT 280-576907/2		06/02/2022 11:52	1	002F0201.D	HP-Plot Q 0.53(mm)
LCS 280-576907/3		06/02/2022 12:05	1	003F0301.D	Rt-Alumina KCl 0.53(mm)
LCS 280-576907/3		06/02/2022 12:05	1	003F0301.D	HP-Plot Q 0.53(mm)
LCSD 280-576907/4		06/02/2022 12:18	1	004F0401.D	Rt-Alumina KCl 0.53(mm)
LCSD 280-576907/4		06/02/2022 12:18	1	004F0401.D	HP-Plot Q 0.53(mm)
MB 280-576907/5		06/02/2022 12:31	1	005F0501.D	Rt-Alumina KCl 0.53(mm)
MB 280-576907/5		06/02/2022 12:31	1	005F0501.D	HP-Plot Q 0.53(mm)
ZZZZZ		06/02/2022 12:44	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/02/2022 12:44	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/02/2022 12:57	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/02/2022 12:57	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/02/2022 13:10	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/02/2022 13:10	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/02/2022 13:23	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/02/2022 13:23	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/02/2022 13:36	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/02/2022 13:36	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/02/2022 13:49	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/02/2022 13:49	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/02/2022 14:02	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/02/2022 14:02	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/02/2022 14:15	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/02/2022 14:15	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/02/2022 14:28	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/02/2022 14:28	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/02/2022 14:41	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/02/2022 14:41	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/02/2022 14:54	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/02/2022 14:54	1		HP-Plot Q 0.53(mm)
CCV 280-576907/17		06/02/2022 15:07	1	017F1701.D	Rt-Alumina KCl 0.53(mm)
CCV 280-576907/17		06/02/2022 15:07	1	017F1701.D	HP-Plot Q 0.53(mm)
ZZZZZ		06/02/2022 15:20	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/02/2022 15:20	1		HP-Plot Q 0.53(mm)
280-162622-16	G0311-22A	06/02/2022 15:32	1	019F1901.D	Rt-Alumina KCl 0.53(mm)
280-162622-16	G0311-22A	06/02/2022 15:32	1	019F1901.D	HP-Plot Q 0.53(mm)
280-162622-17	G0111-22A	06/02/2022 15:45	1	020F2001.D	Rt-Alumina KCl 0.53(mm)
280-162622-17	G0111-22A	06/02/2022 15:45	1	020F2001.D	HP-Plot Q 0.53(mm)
280-162622-18	G0123-22A	06/02/2022 15:58	1	021F2101.D	Rt-Alumina KCl 0.53(mm)
280-162622-18	G0123-22A	06/02/2022 15:58	1	021F2101.D	HP-Plot Q 0.53(mm)
ZZZZZ		06/02/2022 16:11	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/02/2022 16:11	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/02/2022 16:24	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/02/2022 16:24	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/02/2022 16:37	1		Rt-Alumina KCl 0.53(mm)

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GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: VGC_J Start Date: 06/02/2022 11:52

Analysis Batch Number: 576907 End Date: 06/02/2022 19:26

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		06/02/2022 16:37	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/02/2022 16:50	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/02/2022 16:50	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/02/2022 17:03	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/02/2022 17:03	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/02/2022 17:16	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/02/2022 17:16	1		HP-Plot Q 0.53(mm)
CCV 280-576907/28		06/02/2022 17:29	1	028F2801.D	Rt-Alumina KCl 0.53(mm)
CCV 280-576907/28		06/02/2022 17:29	1	028F2801.D	HP-Plot Q 0.53(mm)
ZZZZZ		06/02/2022 17:42	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/02/2022 17:42	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/02/2022 17:55	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/02/2022 17:55	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/02/2022 18:08	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/02/2022 18:08	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/02/2022 18:21	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/02/2022 18:21	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/02/2022 18:34	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/02/2022 18:34	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/02/2022 18:47	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/02/2022 18:47	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/02/2022 19:00	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/02/2022 19:00	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/02/2022 19:13	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/02/2022 19:13	1		HP-Plot Q 0.53(mm)
CCV 280-576907/37		06/02/2022 19:26	1		Rt-Alumina KCl 0.53(mm)
CCV 280-576907/37		06/02/2022 19:26	1		HP-Plot Q 0.53(mm)

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: VGC_J Start Date: 06/03/2022 14:29

Analysis Batch Number: 577087 End Date: 06/03/2022 20:44

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 280-577087/2		06/03/2022 14:29	1	002F0201.D	Rt-Alumina KCl 0.53(mm)
CCVRT 280-577087/2		06/03/2022 14:29	1	002F0201.D	HP-Plot Q 0.53(mm)
LCS 280-577087/3		06/03/2022 14:42	1	003F0301.D	Rt-Alumina KCl 0.53(mm)
LCS 280-577087/3		06/03/2022 14:42	1	003F0301.D	HP-Plot Q 0.53(mm)
LCSD 280-577087/4		06/03/2022 14:54	1	004F0401.D	Rt-Alumina KCl 0.53(mm)
LCSD 280-577087/4		06/03/2022 14:54	1	004F0401.D	HP-Plot Q 0.53(mm)
MB 280-577087/5		06/03/2022 15:07	1	005F0501.D	Rt-Alumina KCl 0.53(mm)
MB 280-577087/5		06/03/2022 15:07	1	005F0501.D	HP-Plot Q 0.53(mm)
ZZZZZ		06/03/2022 15:20	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/03/2022 15:20	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/03/2022 15:33	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/03/2022 15:33	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/03/2022 15:46	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/03/2022 15:46	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/03/2022 15:59	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/03/2022 15:59	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/03/2022 16:12	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/03/2022 16:12	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/03/2022 16:25	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/03/2022 16:25	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/03/2022 16:38	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/03/2022 16:38	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/03/2022 16:51	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/03/2022 16:51	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/03/2022 17:04	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/03/2022 17:04	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/03/2022 17:17	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/03/2022 17:17	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/03/2022 17:30	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/03/2022 17:30	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/03/2022 17:43	2		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/03/2022 17:43	2		HP-Plot Q 0.53(mm)
280-162622-2 DL	G0121-22A DL	06/03/2022 17:56	2	018F1801.D	Rt-Alumina KCl 0.53(mm)
280-162622-2 DL	G0121-22A DL	06/03/2022 17:56	2	018F1801.D	HP-Plot Q 0.53(mm)
CCV 280-577087/17		06/03/2022 18:09	1	019F1901.D	Rt-Alumina KCl 0.53(mm)
CCV 280-577087/17		06/03/2022 18:09	1	019F1901.D	HP-Plot Q 0.53(mm)
ZZZZZ		06/03/2022 18:22	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/03/2022 18:22	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/03/2022 18:35	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/03/2022 18:35	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/03/2022 18:48	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/03/2022 18:48	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/03/2022 19:01	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/03/2022 19:01	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/03/2022 19:14	1		Rt-Alumina KCl 0.53(mm)

RSK-175

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: VGC_J Start Date: 06/03/2022 14:29

Analysis Batch Number: 577087 End Date: 06/03/2022 20:44

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		06/03/2022 19:14	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/03/2022 19:26	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/03/2022 19:26	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/03/2022 19:39	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/03/2022 19:39	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/03/2022 19:52	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/03/2022 19:52	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/03/2022 20:05	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/03/2022 20:05	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/03/2022 20:18	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/03/2022 20:18	1		HP-Plot Q 0.53(mm)
ZZZZZ		06/03/2022 20:31	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		06/03/2022 20:31	1		HP-Plot Q 0.53(mm)
CCV 280-577087/29		06/03/2022 20:44	1		Rt-Alumina KCl 0.53(mm)
CCV 280-577087/29		06/03/2022 20:44	1		HP-Plot Q 0.53(mm)

GC VOA BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 550959 Batch Start Date: 09/24/21 13:16 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	RSK175methane 00010	RSK7gasMathes 00031	RSK7gasMathes 00034
IC 280-550959/2		RSK-175		18 mL	18 mL	5 SU		2.5 uL	
IC 280-550959/3		RSK-175		18 mL	18 mL	5 SU		5 uL	
IC 280-550959/4		RSK-175		18 mL	18 mL	5 SU		40 uL	
IC 280-550959/5		RSK-175		18 mL	18 mL	5 SU		200 uL	
IC 280-550959/6		RSK-175		18 mL	18 mL	5 SU		400 uL	
IC 280-550959/7		RSK-175		18 mL	18 mL	5 SU		800 uL	
IC 280-550959/9		RSK-175		18 mL	18 mL	5 SU	50 uL		
IC 280-550959/10		RSK-175		18 mL	18 mL	5 SU	200 uL		
IC 280-550959/11		RSK-175		18 mL	18 mL	5 SU	600 uL		
ICV 280-550959/13		RSK-175		18 mL	18 mL	5 SU			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 VOA BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 576662 Batch Start Date: 06/01/22 09:45 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 00034		
CCVRT 280-576662/2		RSK-175		20 mL	20 mL	5 SU	200 uL		
LCS 280-576662/3		RSK-175		20 mL	20 mL	5 SU	200 uL		
LCSD 280-576662/4		RSK-175		20 mL	20 mL	5 SU	200 uL		
MB 280-576662/5		RSK-175		20 mL	20 mL	5 SU			
280-162622-I-1	G0119-22A	RSK-175	T	20 mL	20 mL	< 2 SU			
280-162622-G-1 DU	G0119-22A	RSK-175	T	20 mL	20 mL	< 2 SU			
280-162622-I-3	G0101-22A	RSK-175	T	20 mL	20 mL	< 2 SU			
280-162622-I-4	G0100-22A	RSK-175	T	20 mL	20 mL	< 2 SU			
280-162622-H-5	G0122-22A	RSK-175	T	20 mL	20 mL	< 2 SU			
280-162622-G-6	G0066R-22A	RSK-175	T	20 mL	20 mL	< 2 SU			
280-162622-H-8	G0115-22A	RSK-175	T	20 mL	20 mL	< 2 SU			
280-162622-G-9	G0095-22A	RSK-175	T	20 mL	20 mL	< 2 SU			
280-162622-G-19	SHGW02-22A	RSK-175	T	20 mL	20 mL	< 2 SU			
280-162622-H-20	SHGW05-22A	RSK-175	T	20 mL	20 mL	< 2 SU			
CCV 280-576662/46		RSK-175		20 mL	20 mL	5 SU	200 uL		
280-162622-F-21	G0053-22A	RSK-175	T	20 mL	20 mL	< 2 SU			
280-162622-F-22	G0069-22A	RSK-175	T	20 mL	20 mL	< 2 SU			
280-162622-E-24	SHGW04-22A	RSK-175	T	20 mL	20 mL	< 2 SU			
280-162622-F-25	SHGW03-22A	RSK-175	T	20 mL	20 mL	< 2 SU			
280-162622-F-26	SAMW1-22A	RSK-175	T	20 mL	20 mL	< 2 SU			
280-162622-I-10	PZ018-22A	RSK-175	T	20 mL	20 mL	< 2 SU			
280-162622-H-11	PZ020-22A	RSK-175	T	20 mL	20 mL	< 2 SU			
CCV 280-576662/58		RSK-175		20 mL	20 mL	5 SU	200 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 VOA BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 576662 Batch Start Date: 06/01/22 09:45 Batch Analyst: Scianna, Charles A

Batch Method: RSK-175 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.

GC VOA BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 576768 Batch Start Date: 06/01/22 09:45 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 00034		
CCVRT 280-576768/2		RSK-175		20 mL	20 mL	5 SU	200 uL		
CCV 280-576768/58		RSK-175		20 mL	20 mL	5 SU	200 uL		
LCS 280-576768/59		RSK-175		20 mL	20 mL	5 SU	200 uL		
LCSD 280-576768/60		RSK-175		20 mL	20 mL	5 SU	200 uL		
MB 280-576768/61		RSK-175		20 mL	20 mL	5 SU			
CCV 280-576768/75		RSK-175		20 mL	20 mL	5 SU	200 uL		
280-162622-H-7	G0024-22A	RSK-175	T	20 mL	20 mL	< 2 SU			
280-162622-H-12	G0077-22A	RSK-175	T	20 mL	20 mL	< 2 SU			
CCV 280-576768/87		RSK-175		20 mL	20 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 Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 576907 Batch Start Date: 06/02/22 11:52 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 00034		
CCVRT 280-576907/2		RSK-175		20 mL	20 mL	5 SU	200 uL		
LCS 280-576907/3		RSK-175		20 mL	20 mL	5 SU	200 uL		
LCSD 280-576907/4		RSK-175		20 mL	20 mL	5 SU	200 uL		
MB 280-576907/5		RSK-175		20 mL	20 mL	5 SU			
CCV 280-576907/17		RSK-175		20 mL	20 mL	5 SU	200 uL		
280-162622-G-16	G0311-22A	RSK-175	T	20 mL	20 mL	< 2 SU			
280-162622-H-17	G0111-22A	RSK-175	T	20 mL	20 mL	< 2 SU			
280-162622-I-18	G0123-22A	RSK-175	T	20 mL	20 mL	< 2 SU			
CCV 280-576907/28		RSK-175		20 mL	20 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 Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 577087 Batch Start Date: 06/03/22 14:29 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 00034		
CCVRT 280-577087/2		RSK-175		20 mL	20 mL	5 SU	200 uL		
LCS 280-577087/3		RSK-175		20 mL	20 mL	5 SU	200 uL		
LCSD 280-577087/4		RSK-175		20 mL	20 mL	5 SU	200 uL		
MB 280-577087/5		RSK-175		20 mL	20 mL	5 SU			
CCV 280-577087/17		RSK-175		20 mL	20 mL	5 SU	200 uL		
280-162622-I-2	G0121-22A	RSK-175	T	20 mL	20 mL	< 2 SU			

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

8015C_DRO_DOD5

Diesel Range Organics (DRO) (GC)

FORM II
DIESEL RANGE ORGANICS SURROGATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-162622-1

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	#
G0069-22A	280-162622-13	82		57	Q
G0069-22A RE	280-162622-13 RE	14	Q	26	Q
SHGW03-22A	280-162622-14	82		43	Q
SHGW03-22A RE	280-162622-14 RE	6	Q	10	Q
SHGW04-22A	280-162622-15	91		95	
SHGW04-22A RE	280-162622-15 RE	27	Q	24	Q
	MB 280-576113/1-A	78		40	Q
	MB 280-576710/1-A RE	7	Q	7	Q
	LCS 280-576113/2-A	94		46	Q
	LCS 280-576710/2-A RE	10	Q	9	Q
	LCSD 280-576113/3-A	96		42	Q
	LCSD 280-576710/3-A RE	10	Q	9	Q

	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 Denver Job No.: 280-162622-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 05300007.D

Lab ID: LCS 280-576113/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
C10-C28	2000	1450	73	36-132	Q

Column to be used to flag recovery and RPD values

FORM III 8015C DRO

FORM III
DIESEL RANGE ORGANICS LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 06030009.D

Lab ID: LCS 280-576710/2-A RE Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
C10-C28	2000	1290	65	36-132	Q

Column to be used to flag recovery and RPD values

FORM III 8015C DRO

FORM III
DIESEL RANGE ORGANICS LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 05300008.D

Lab ID: LCSD 280-576113/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
C10-C28	2000	1640	82	12	30	36-132	Q

Column to be used to flag recovery and RPD values

FORM III 8015C DRO

FORM III
DIESEL RANGE ORGANICS LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 06030010.D

Lab ID: LCSD 280-576710/3-A RE Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
C10-C28	2000	1330	67	3	30	36-132	Q

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 Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: MB 280-576113/1-A

Matrix: Water Date Extracted: 05/25/2022 15:07

Lab File ID:(1) 05300006.D Lab File ID:(2)

Date Analyzed:(1) 05/30/2022 18:06 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 280-576113/2-A	05/30/2022 18:28	
	LCSD 280-576113/3-A	05/30/2022 18:51	
G0069-22A	280-162622-13	05/30/2022 20:22	
SHGW03-22A	280-162622-14	05/30/2022 20:45	
SHGW04-22A	280-162622-15	05/30/2022 21:07	

FORM IV
DIESEL RANGE ORGANICS METHOD BLANK SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: MB 280-576710/1-A

Matrix: Water Date Extracted: 06/01/2022 12:30

Lab File ID:(1) 06030008.D Lab File ID:(2)

Date Analyzed:(1) 06/03/2022 17:54 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 280-576710/2-A RE	06/03/2022 18:16	
	LCSD 280-576710/3-A RE	06/03/2022 18:39	
G0069-22A RE	280-162622-13 RE	06/03/2022 19:01	
SHGW03-22A RE	280-162622-14 RE	06/03/2022 19:24	
SHGW04-22A RE	280-162622-15 RE	06/03/2022 19:47	

FORM VIII
DIESEL RANGE ORGANICS ANALYTICAL SEQUENCE

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Sample No.: ICRT 280-574280/5 Date Analyzed: 05/09/2022 14:07

Instrument ID: SGC_U2a GC Column: RTX-1 (30.32) ID: 0.25(mm)

Lab File ID (Standard): 05090005.D Heated Purge: (Y/N) N

Calibration ID: 65372

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				OTPH	OTCN	
				RT #	RT #	
INITIAL CALIBRATION SURROGATE				7.24	9.88	
UPPER LIMIT				7.29	9.93	
LOWER LIMIT				7.19	9.83	
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
ICRT 280-574280/5		05/09/2022 14:07	05090005.D	7.24	9.88	
ICV 280-574280/9		05/09/2022 15:39	05090009.D	7.24	9.88	

OTPH = o-Terphenyl
OTCN = n-Octacosane

OTPH RT Limit = ± 0.05 minutes of surrogate RT
OTCN RT Limit = ± 0.05 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8015C DRO

FORM VIII
DIESEL RANGE ORGANICS ANALYTICAL SEQUENCE

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Sample No.: CCVRT 280-576526/4 Date Analyzed: 05/30/2022 17:20

Instrument ID: SGC_U2a GC Column: RTX-1 (30.32) ID: 0.25(mm)

Lab File ID (Standard): 05300004.D Heated Purge: (Y/N) N

Calibration ID: 65372

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				OTPH	OTCN	
				RT #	RT #	
CONTINUING CALIBRATION SURROGATE				7.24	9.87	
UPPER LIMIT				7.29	9.92	
LOWER LIMIT				7.19	9.82	
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCVRT 280-576526/4		05/30/2022 17:20	05300004.D	7.24	9.87	
MB 280-576113/1-A		05/30/2022 18:06	05300006.D	7.23	9.87	
LCS 280-576113/2-A		05/30/2022 18:28	05300007.D	7.23	9.87	
LCSD 280-576113/3-A		05/30/2022 18:51	05300008.D	7.23	9.87	
280-162622-13	G0069-22A	05/30/2022 20:22	05300012.D	7.24	9.86	
280-162622-14	SHGW03-22A	05/30/2022 20:45	05300013.D	7.23	9.86	
280-162622-15	SHGW04-22A	05/30/2022 21:07	05300014.D	7.24	9.86	
CCV 280-576526/21		05/30/2022 23:46	05300021.D	7.24	9.86	

OTPH = o-Terphenyl
OTCN = n-Octacosane

OTPH RT Limit = ± 0.05 minutes of surrogate RT
OTCN RT Limit = ± 0.05 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8015C DRO

FORM VIII
DIESEL RANGE ORGANICS ANALYTICAL SEQUENCE

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Sample No.: CCVRT 280-577101/4 Date Analyzed: 06/03/2022 16:23

Instrument ID: SGC_U2a GC Column: RTX-1 (30.32) ID: 0.25(mm)

Lab File ID (Standard): 06030004.D Heated Purge: (Y/N) N

Calibration ID: 65372

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				OTPH	OTCN	
				RT #	RT #	
CONTINUING CALIBRATION SURROGATE				7.24	9.86	
UPPER LIMIT				7.29	9.91	
LOWER LIMIT				7.19	9.81	
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCVRT 280-577101/4		06/03/2022 16:23	06030004.D	7.24	9.86	
MB 280-576710/1-A RE		06/03/2022 17:54	06030008.D	7.24	9.87	
LCS 280-576710/2-A RE		06/03/2022 18:16	06030009.D	7.23	9.87	
LCSD 280-576710/3-A RE		06/03/2022 18:39	06030010.D	7.23	9.86	
280-162622-13 RE	G0069-22A RE	06/03/2022 19:01	06030011.D	7.23	9.86	
280-162622-14 RE	SHGW03-22A RE	06/03/2022 19:24	06030012.D	7.23	9.86	
280-162622-15 RE	SHGW04-22A RE	06/03/2022 19:47	06030013.D	7.24	9.86	
CCV 280-577101/14		06/03/2022 20:10	06030014.D	7.24	9.86	

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 Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0069-22A | Lab Sample ID: 280-162622-13

Matrix: Water | Lab File ID: 05300012.D

Analysis Method: 8015C DRO | Date Collected: 05/18/2022 11:15

Extraction Method: 3510C | Date Extracted: 05/25/2022 15:07

Sample wt/vol: 1042.7(mL) | Date Analyzed: 05/30/2022 20:22

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: RTX-1 (30.32) ID: 0.25(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 576526 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
STL00143	C10-C28	3400	Q	240	120	31

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl (Surr)	82		56-125
630-02-4	n-Octacosane	57	Q	60-142

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220530-111452.b\05300012.D
Lims ID: 280-162622-B-13-A
Client ID: G0069-22A
Sample Type: Client
Inject. Date: 30-May-2022 20:22:17 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-162622-B-13-A
Misc. Info.: 280-0111452-012
Operator ID: KA Instrument ID: SGC_U2a
Raw Data: Smoothed

Method: \\chromfs\Denver\ChromData\SGC_U2a\20220530-111452.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 31-May-2022 13:25:47 Calib Date: 09-May-2022 15:16:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090008.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX1640

First Level Reviewer: appenzellerk Date: 31-May-2022 13:09:32

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
A	2 C8-C12					
	3.052	(1.432-4.672)		1917455	17.7	
A	5 C10-C25					
	6.215	(3.365-9.066)		446286967	3287.6	
	6 Hexadecane					
	6.310	6.357	-0.047	2073125	NC	
A	7 C10-C28					
	6.597	(3.365-9.828)		491775441	3597.2	
A	8 C10-C32					
	7.052	(3.365-10.738)		510752599	3731.5	
$	9 o-Terphenyl					
	7.236	7.236	0.000	4876472	28.8	
A	10 C10-C36					
	7.481	(3.365-11.597)		520521802	3798.3	
A	14 C20-C38					
	9.782	(7.664-11.899)		279753728	2311.7	
$	13 n-Octacosane					
	9.864	9.868	-0.004	2436353	20.1	
A	15 C25-C36					
	10.331	(9.066-11.597)		52052435	547.0	
	16 Dotriacontane					
	10.813	10.799	0.014	1686673	NC	
$	19 n-Decanoic Acid (Surr)					
	0.000				ND	

QC Flag Legend

Processing Flags

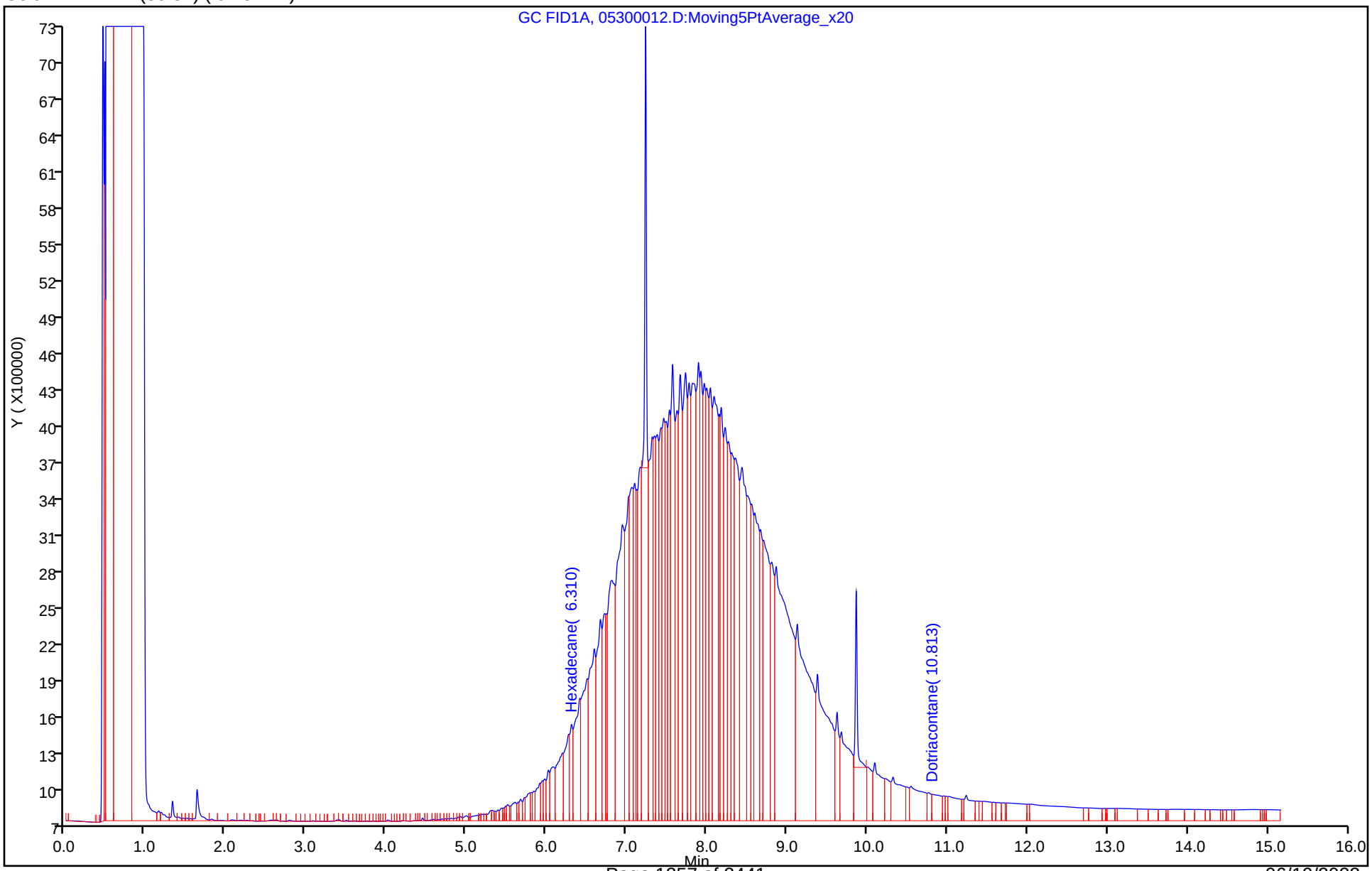
NC - Not Calibrated

Report Date: 31-May-2022 13:25:55 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20220530-111452.b\05300012.D				
Injection Date:	30-May-2022 20:22:17	Instrument ID:	SGC_U2a	Operator ID:	KA
Lims ID:	280-162622-B-13-A	Lab Sample ID:	280-162622-13	Worklist Smp#:	12
Client ID:	G0069-22A				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20220530-111452.b\05300012.D				
Lims ID:	280-162622-B-13-A				
Client ID:	G0069-22A				
Sample Type:	Client				
Inject. Date:	30-May-2022 20:22:17	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-162622-B-13-A				
Misc. Info.:	280-0111452-012				
Operator ID:	KA	Instrument ID:	SGC_U2a		
Raw Data:	Smoothed				
Method:	\\chromfs\Denver\ChromData\SGC_U2a\20220530-111452.b\DRO_U2a.m				
Limit Group:	GCSV - DRO				
Last Update:	31-May-2022 13:25:47	Calib Date:	09-May-2022 15:16:56		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090008.D				
Column 1 :	RTX-1 (30.32) (0.25 mm)		Det: GC FID1A		
Process Host:	CTX1640				

First Level Reviewer: appenzellerk Date: 31-May-2022 13:09:32

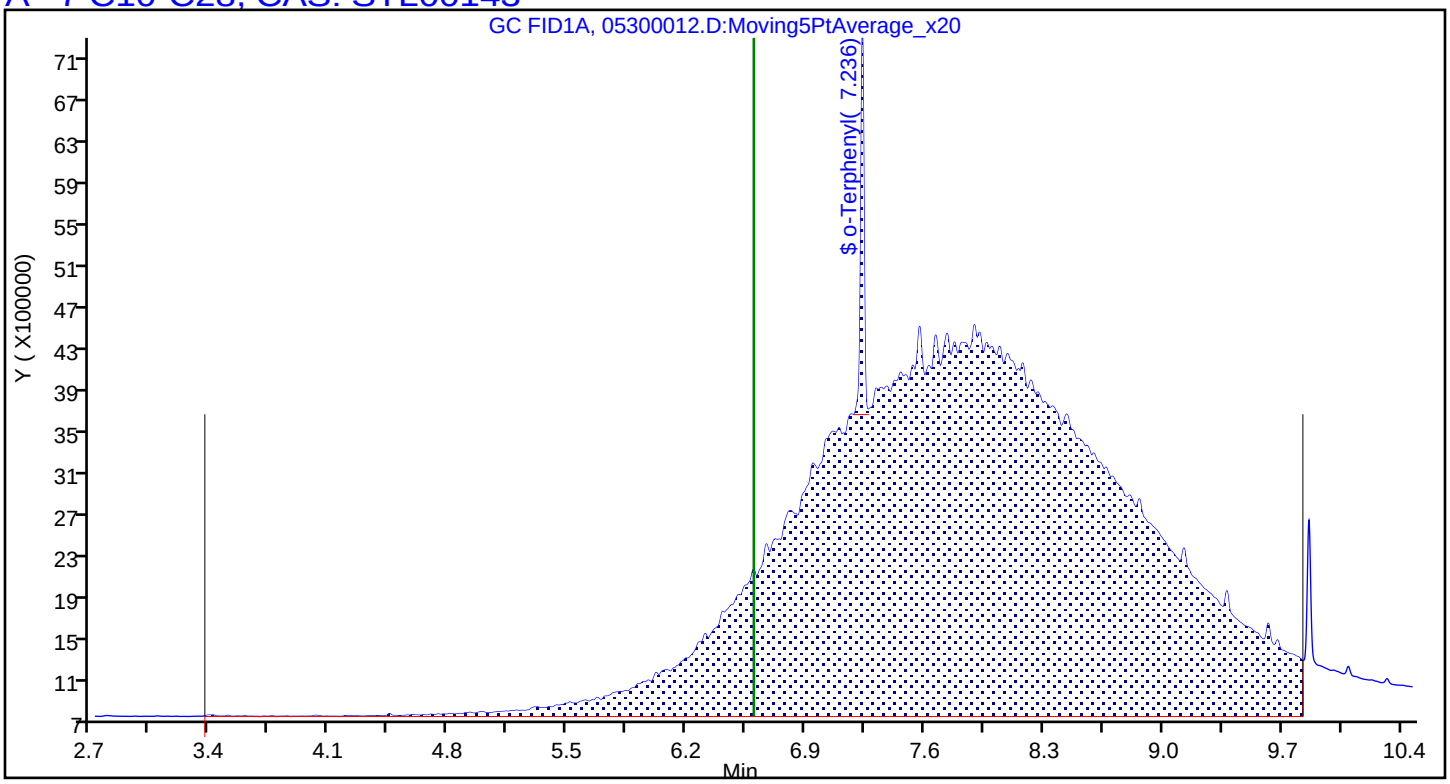
Compound	Amount Added	Amount Recovered	% Rec.
$ 9 o-Terphenyl	35.0	28.8	82.36
$ 13 n-Octacosane	35.0	20.1	57.30

Report Date: 31-May-2022 13:25:56 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20220530-111452.b\05300012.D				
Injection Date:	30-May-2022 20:22:17	Instrument ID:	SGC_U2a		
Lims ID:	280-162622-B-13-A	Lab Sample ID:	280-162622-13		
Client ID:	G0069-22A				
Operator ID:	KA	ALS Bottle#:	12	Worklist Smp#:	12
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 7 C10-C28, CAS: STL00143



FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0069-22A RE | Lab Sample ID: 280-162622-13 RE

Matrix: Water | Lab File ID: 06030011.D

Analysis Method: 8015C DRO | Date Collected: 05/18/2022 11:15

Extraction Method: 3510C | Date Extracted: 06/01/2022 12:30

Sample wt/vol: 1042.9(mL) | Date Analyzed: 06/03/2022 19:01

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: RTX-1 (30.32) ID: 0.25(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 577101 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
STL00143	*C10-C28*	*2900*	*H Q*	*240*	120	*31*

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl (Surr)	14	*Q*	56-125
630-02-4	n-Octacosane	26	*Q*	60-142

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220603-111568.b\06030011.D
Lims ID: 280-162622-A-13-A
Client ID: G0069-22A
Sample Type: Client
Inject. Date: 03-Jun-2022 19:01:58 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-162622-A-13-A
Misc. Info.: 280-0111568-011
Operator ID: KA Instrument ID: SGC_U2a
Raw Data: Smoothed

Method: \\chromfs\Denver\ChromData\SGC_U2a\20220603-111568.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 08-Jun-2022 15:54:43 Calib Date: 09-May-2022 15:16:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090008.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX1621

First Level Reviewer: appenzellerk Date: 08-Jun-2022 15:54:43

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
A	2 C8-C12					
	3.049	(1.427-4.672)		2190607	20.2	
A	5 C10-C25					
	6.208	(3.348-9.067)		376148113	2770.2	
	6 Hexadecane					
	6.309	6.347	-0.038	4132695	NC	
A	7 C10-C28					
	6.586	(3.348-9.824)		414330508	3030.1	
A	8 C10-C32					
	7.039	(3.348-10.730)		430777001	3146.3	
$	9 o-Terphenyl					
	7.233	7.235	-0.002	855573	4.90	
A	10 C10-C36					
	7.400	(3.348-11.452)		438987136	3201.6	
A	14 C20-C38					
	9.767	(7.648-11.887)		229958765	1896.7	
$	13 n-Octacosane					
	9.861	9.864	-0.003	1055651	9.01	
A	15 C25-C36					
	10.260	(9.067-11.452)		39932863	416.2	
	16 Dotriacontane					
	10.764	10.782	-0.018	1302795	NC	
$	19 n-Decanoic Acid (Surr)					
	0.000				ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

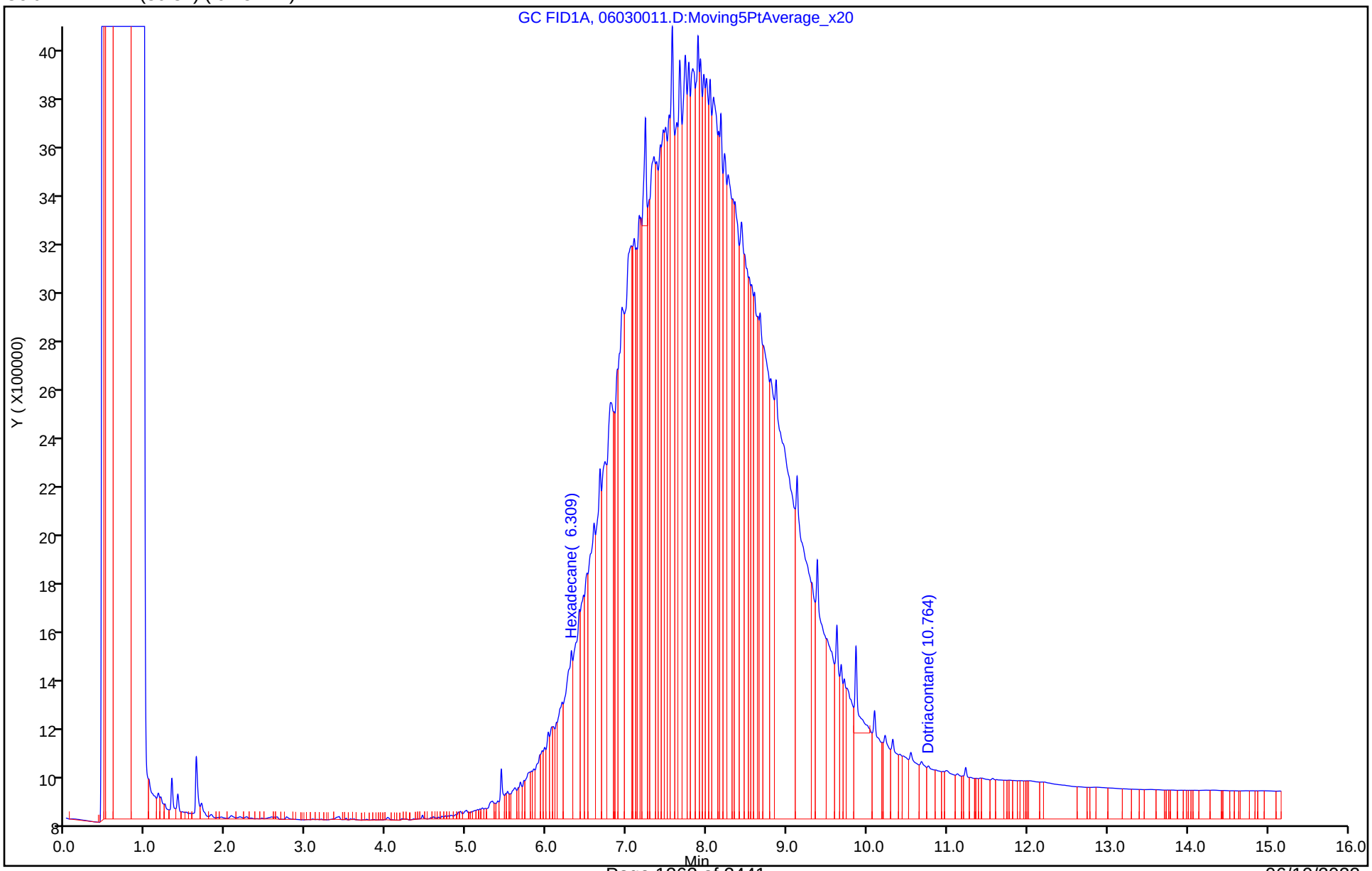
Report Date: 09-Jun-2022 12:23:15 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220603-111568.b\06030011.D

Injection Date:	03-Jun-2022 19:01:58	Instrument ID:	SGC_U2a	Operator ID:	KA
Lims ID:	280-162622-A-13-A	Lab Sample ID:	280-162622-13	Worklist Smp#:	11
Client ID:	G0069-22A				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20220603-111568.b\06030011.D				
Lims ID:	280-162622-A-13-A				
Client ID:	G0069-22A				
Sample Type:	Client				
Inject. Date:	03-Jun-2022 19:01:58	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-162622-A-13-A				
Misc. Info.:	280-0111568-011				
Operator ID:	KA	Instrument ID:	SGC_U2a		
Raw Data:	Smoothed				
Method:	\\chromfs\Denver\ChromData\SGC_U2a\20220603-111568.b\DRO_U2a.m				
Limit Group:	GCSV - DRO				
Last Update:	08-Jun-2022 15:54:43	Calib Date:	09-May-2022 15:16:56		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090008.D				
Column 1 :	RTX-1 (30.32) (0.25 mm)		Det: GC FID1A		
Process Host:	CTX1621				

First Level Reviewer: appenzellerk Date: 08-Jun-2022 15:54:43

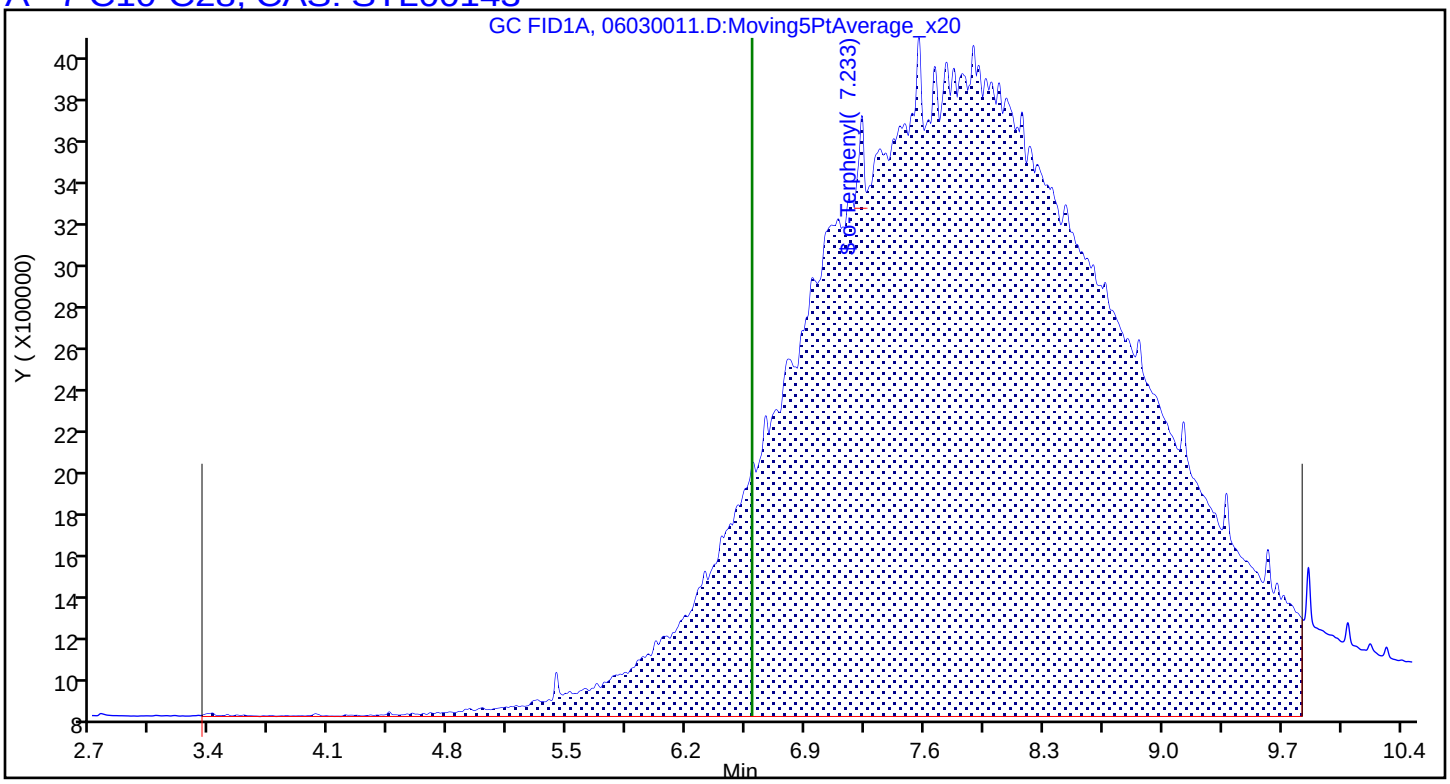
Compound	Amount Added	Amount Recovered	% Rec.
$ 9 o-Terphenyl	35.0	4.90	14.01
$ 13 n-Octacosane	35.0	9.01	25.74

Report Date: 09-Jun-2022 12:23:16 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20220603-111568.b\06030011.D				
Injection Date:	03-Jun-2022 19:01:58	Instrument ID:	SGC_U2a		
Lims ID:	280-162622-A-13-A	Lab Sample ID:	280-162622-13		
Client ID:	G0069-22A				
Operator ID:	KA	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A 7 C10-C28, CAS: STL00143



FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: SHGW03-22A | Lab Sample ID: 280-162622-14

Matrix: Water | Lab File ID: 05300013.D

Analysis Method: 8015C DRO | Date Collected: 05/18/2022 15:20

Extraction Method: 3510C | Date Extracted: 05/25/2022 15:07

Sample wt/vol: 1061.5(mL) | Date Analyzed: 05/30/2022 20:45

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: RTX-1 (30.32) ID: 0.25(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 576526 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
STL00143	C10-C28	320	Q	240	110	31

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl (Surr)	82		56-125
630-02-4	n-Octacosane	43	Q	60-142

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220530-111452.b\05300013.D
Lims ID: 280-162622-B-14-A
Client ID: SHGW03-22A
Sample Type: Client
Inject. Date: 30-May-2022 20:45:00 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-162622-B-14-A
Misc. Info.: 280-0111452-013
Operator ID: KA Instrument ID: SGC_U2a
Raw Data: Smoothed

Method: \\chromfs\Denver\ChromData\SGC_U2a\20220530-111452.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 31-May-2022 13:25:47 Calib Date: 09-May-2022 15:16:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090008.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX1640

First Level Reviewer: appenzellerk Date: 31-May-2022 13:09:38

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
A	2 C8-C12					
	3.052	(1.432-4.672)		5669053	52.2	
A	5 C10-C25					
	6.215	(3.365-9.066)		40887179	297.1	
	6 Hexadecane					
	6.355	6.357	-0.002	184477	NC	
A	7 C10-C28					
	6.597	(3.365-9.828)		46930396	339.9	
A	8 C10-C32					
	7.052	(3.365-10.738)		51827105	373.9	
$	9 o-Terphenyl					
	7.232	7.236	-0.004	4833413	28.6	
A	10 C10-C36					
	7.481	(3.365-11.597)		55511659	395.4	
A	14 C20-C38					
	9.782	(7.664-11.899)		12864025	87.4	
$	13 n-Octacosane					
	9.864	9.868	-0.004	1808887	15.0	
A	15 C25-C36					
	10.331	(9.066-11.597)		4108108	29.7	
	16 Dotriacontane					
	10.778	10.799	-0.021	407351	NC	
$	19 n-Decanoic Acid (Surr)					
	0.000				ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

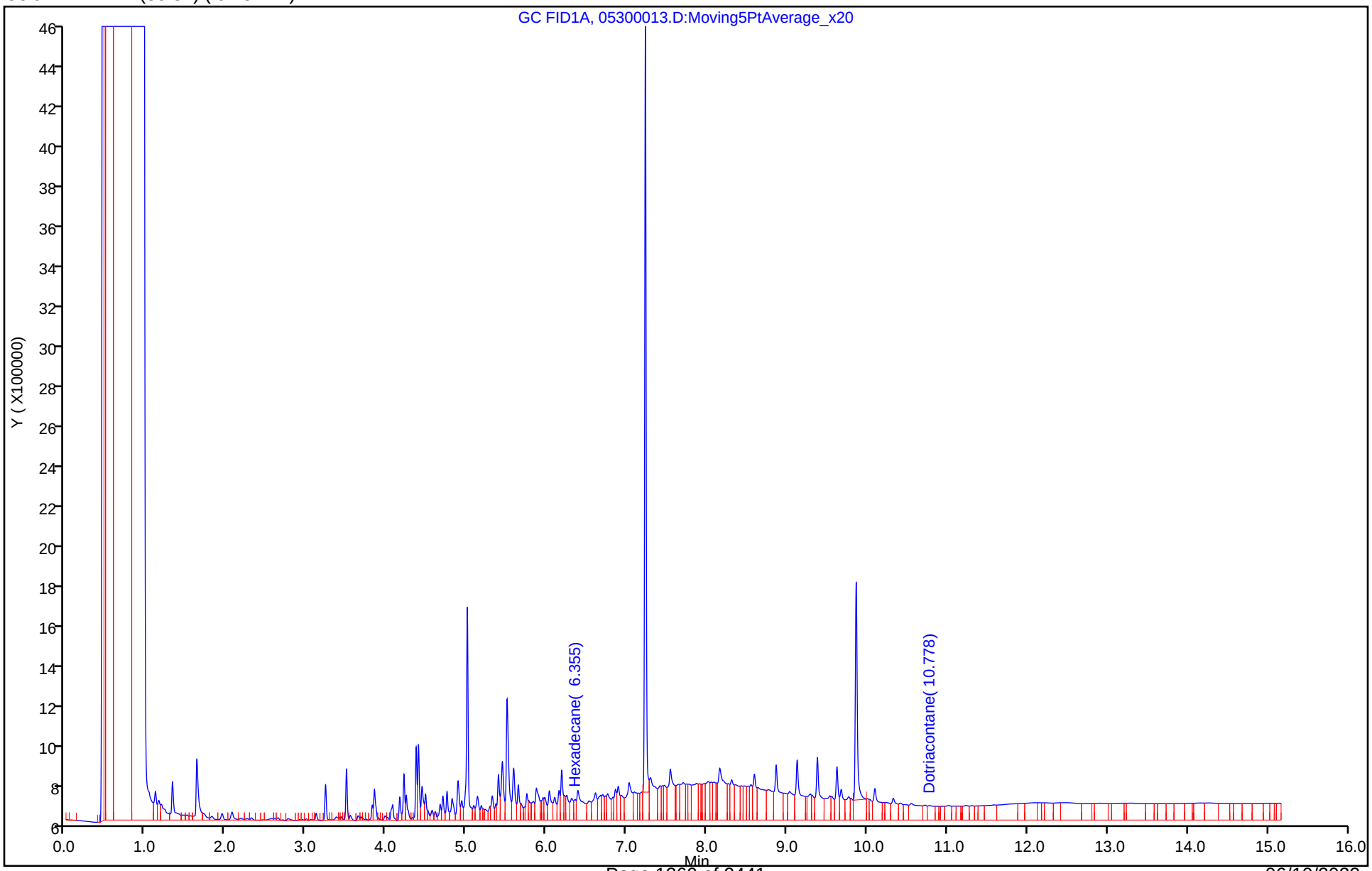
Report Date: 31-May-2022 13:25:57 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220530-111452.b\05300013.D

Injection Date:	30-May-2022 20:45:00	Instrument ID:	SGC_U2a	Operator ID:	KA
Lims ID:	280-162622-B-14-A	Lab Sample ID:	280-162622-14	Worklist Smp#:	13
Client ID:	SHGW03-22A				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20220530-111452.b\05300013.D				
Lims ID:	280-162622-B-14-A				
Client ID:	SHGW03-22A				
Sample Type:	Client				
Inject. Date:	30-May-2022 20:45:00	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-162622-B-14-A				
Misc. Info.:	280-0111452-013				
Operator ID:	KA	Instrument ID:	SGC_U2a		
Raw Data:	Smoothed				
Method:	\\chromfs\Denver\ChromData\SGC_U2a\20220530-111452.b\DRO_U2a.m				
Limit Group:	GCSV - DRO				
Last Update:	31-May-2022 13:25:47	Calib Date:	09-May-2022 15:16:56		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090008.D				
Column 1 :	RTX-1 (30.32) (0.25 mm)		Det: GC FID1A		
Process Host:	CTX1640				

First Level Reviewer: appenzellerk Date: 31-May-2022 13:09:38

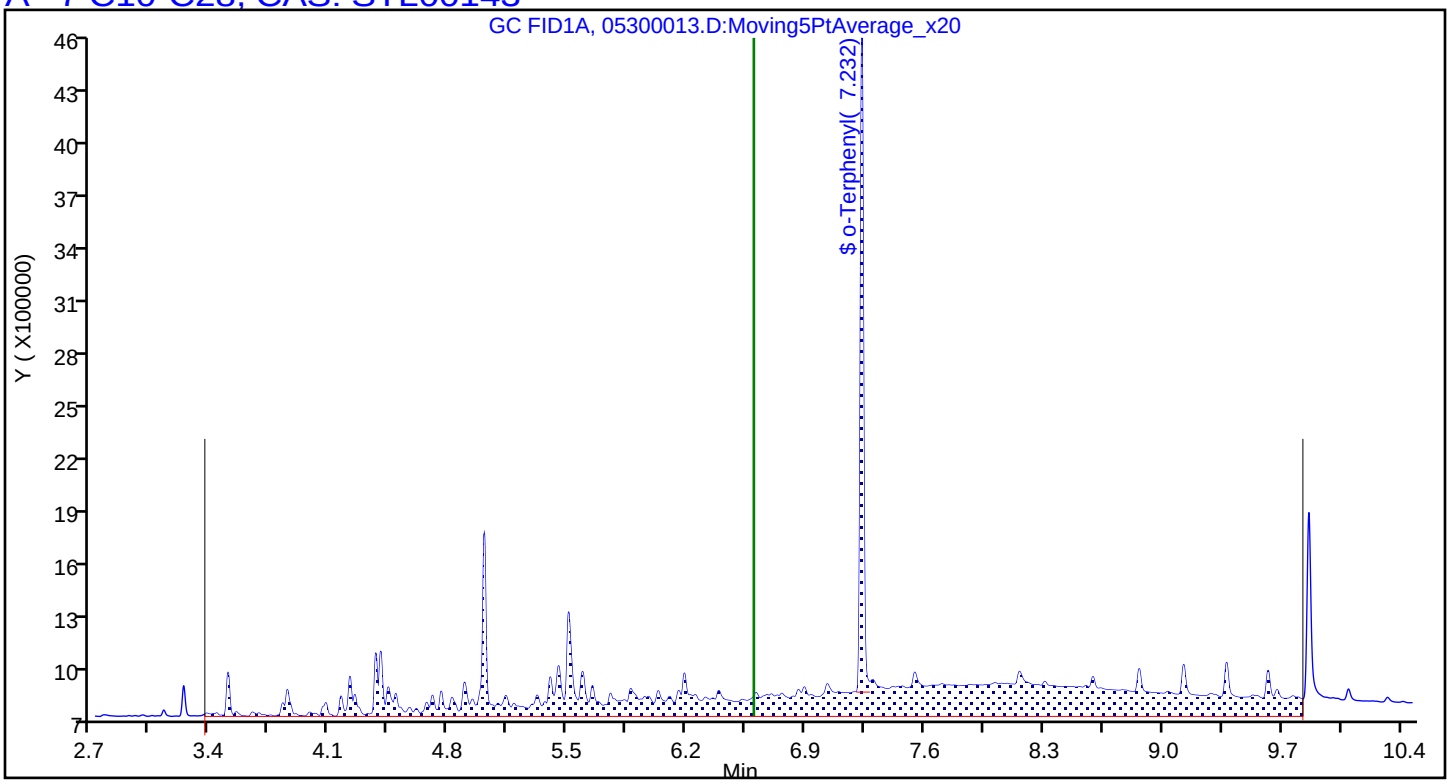
Compound	Amount Added	Amount Recovered	% Rec.
$ 9 o-Terphenyl	35.0	28.6	81.63
$ 13 n-Octacosane	35.0	15.0	42.96

Report Date: 31-May-2022 13:25:57 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20220530-111452.b\05300013.D				
Injection Date:	30-May-2022 20:45:00	Instrument ID:	SGC_U2a		
Lims ID:	280-162622-B-14-A	Lab Sample ID:	280-162622-14		
Client ID:	SHGW03-22A				
Operator ID:	KA	ALS Bottle#:	13	Worklist Smp#:	13
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 7 C10-C28, CAS: STL00143



FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: SHGW03-22A RE | Lab Sample ID: 280-162622-14 RE

Matrix: Water | Lab File ID: 06030012.D

Analysis Method: 8015C DRO | Date Collected: 05/18/2022 15:20

Extraction Method: 3510C | Date Extracted: 06/01/2022 12:30

Sample wt/vol: 1056.6(mL) | Date Analyzed: 06/03/2022 19:24

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: RTX-1 (30.32) ID: 0.25(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 577101 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
STL00143	*C10-C28*	*250*	*H Q*	*240*	110	*31*

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl (Surr)	6	*Q*	56-125
630-02-4	n-Octacosane	10	*Q*	60-142

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220603-111568.b\06030012.D
Lims ID: 280-162622-A-14-A
Client ID: SHGW03-22A
Sample Type: Client
Inject. Date: 03-Jun-2022 19:24:33 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-162622-A-14-A
Misc. Info.: 280-0111568-012
Operator ID: KA Instrument ID: SGC_U2a
Raw Data: Smoothed

Method: \\chromfs\Denver\ChromData\SGC_U2a\20220603-111568.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 08-Jun-2022 15:54:43 Calib Date: 09-May-2022 15:16:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090008.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX1621

First Level Reviewer: appenzellerk Date: 09-Jun-2022 12:22:51

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
A	2 C8-C12					
	3.049	(1.427-4.672)		4717724	43.5	
A	5 C10-C25					
	6.208	(3.348-9.067)		31520769	228.0	
	6 Hexadecane					
	6.356	6.347	0.009	124255	NC	
A	7 C10-C28					
	6.586	(3.348-9.824)		37152738	268.3	
A	8 C10-C32					
	7.039	(3.348-10.730)		42112220	302.8	
$	9 o-Terphenyl					
	7.232	7.235	-0.003	413771	2.27	
A	10 C10-C36					
	7.400	(3.348-11.452)		45831066	324.5	
A	14 C20-C38					
	9.767	(7.648-11.887)		9914815	62.8	
$	13 n-Octacosane					
	9.862	9.864	-0.002	345345	3.33	
A	15 C25-C36					
	10.260	(9.067-11.452)		2919966	16.9	
	16 Dotriacontane					
	10.767	10.782	-0.015	297006	NC	
$	19 n-Decanoic Acid (Surr)					
	0.000				ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

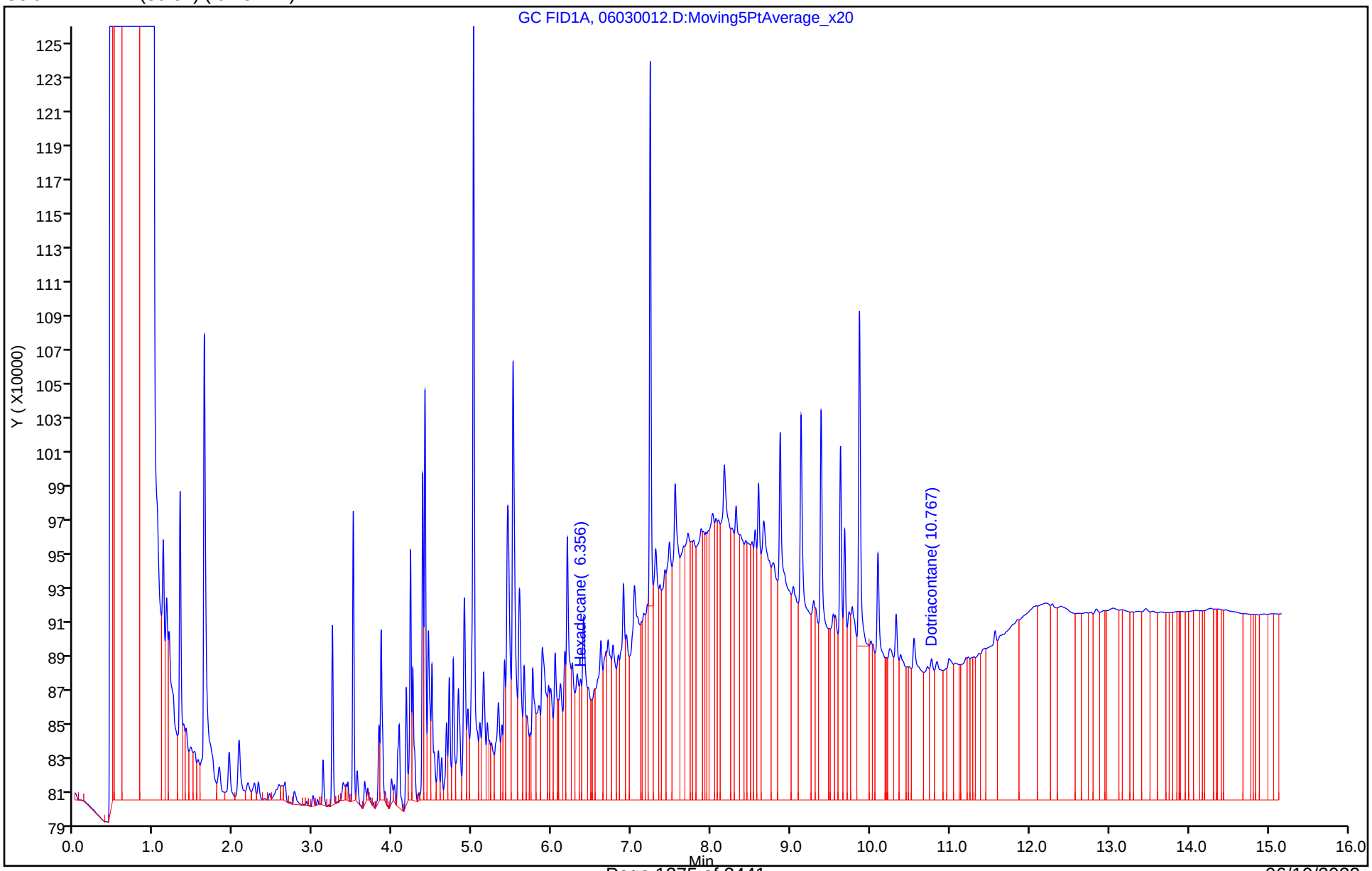
Report Date: 09-Jun-2022 12:23:17 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220603-111568.b\06030012.D

Injection Date:	03-Jun-2022 19:24:33	Instrument ID:	SGC_U2a	Operator ID:	KA
Lims ID:	280-162622-A-14-A	Lab Sample ID:	280-162622-14	Worklist Smp#:	12
Client ID:	SHGW03-22A				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20220603-111568.b\06030012.D				
Lims ID:	280-162622-A-14-A				
Client ID:	SHGW03-22A				
Sample Type:	Client				
Inject. Date:	03-Jun-2022 19:24:33	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-162622-A-14-A				
Misc. Info.:	280-0111568-012				
Operator ID:	KA	Instrument ID:	SGC_U2a		
Raw Data:	Smoothed				
Method:	\\chromfs\Denver\ChromData\SGC_U2a\20220603-111568.b\DRO_U2a.m				
Limit Group:	GCSV - DRO				
Last Update:	08-Jun-2022 15:54:43	Calib Date:	09-May-2022 15:16:56		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090008.D				
Column 1 :	RTX-1 (30.32) (0.25 mm)		Det: GC FID1A		
Process Host:	CTX1621				

First Level Reviewer: appenzellerk Date: 09-Jun-2022 12:22:51

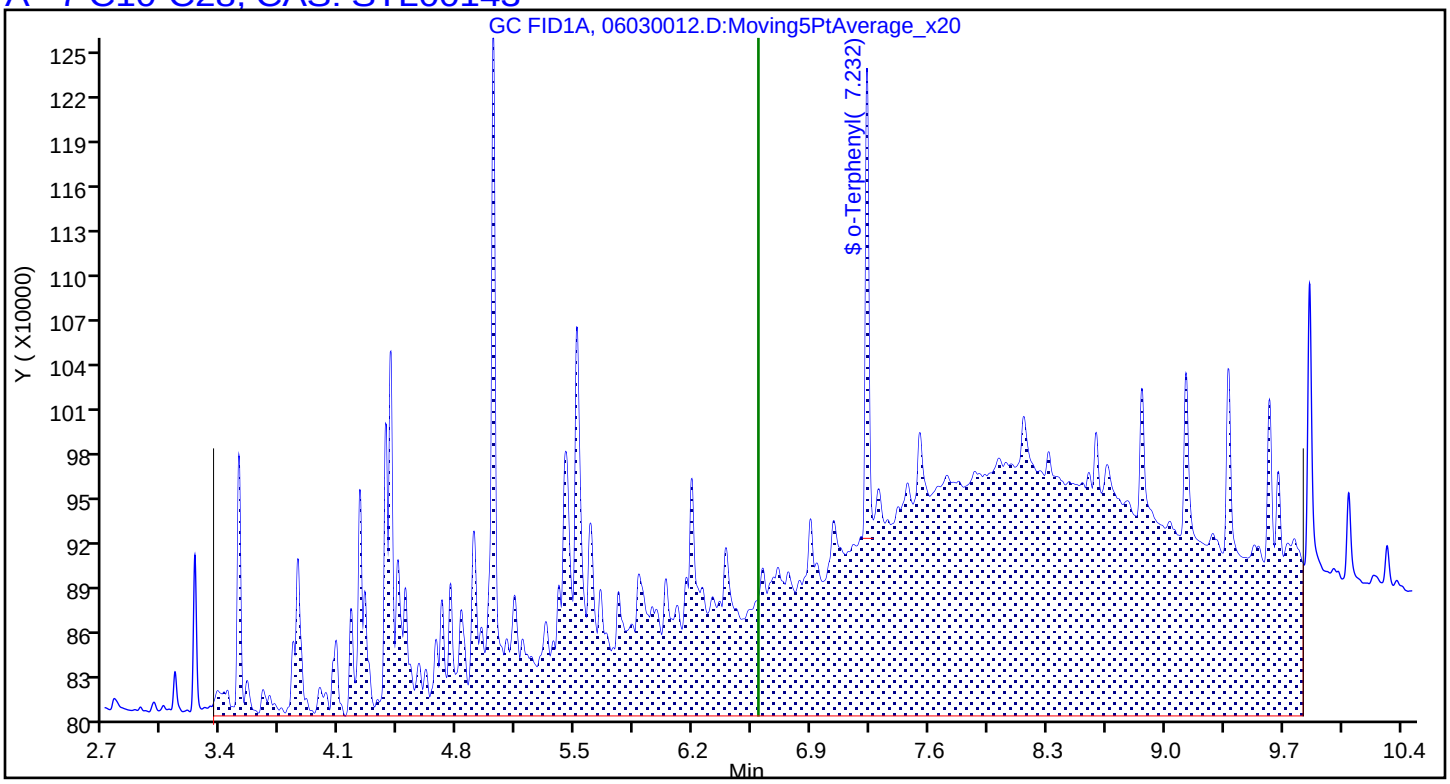
Compound	Amount Added	Amount Recovered	% Rec.
$ 9 o-Terphenyl	35.0	2.27	6.50
$ 13 n-Octacosane	35.0	3.33	9.51

Report Date: 09-Jun-2022 12:23:17 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20220603-111568.b\06030012.D				
Injection Date:	03-Jun-2022 19:24:33	Instrument ID:	SGC_U2a		
Lims ID:	280-162622-A-14-A	Lab Sample ID:	280-162622-14		
Client ID:	SHGW03-22A				
Operator ID:	KA	ALS Bottle#:	12	Worklist Smp#:	12
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_7 C10-C28, CAS: STL00143



FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: SHGW04-22A | Lab Sample ID: 280-162622-15

Matrix: Water | Lab File ID: 05300014.D

Analysis Method: 8015C DRO | Date Collected: 05/18/2022 12:35

Extraction Method: 3510C | Date Extracted: 05/25/2022 15:07

Sample wt/vol: 1060.4(mL) | Date Analyzed: 05/30/2022 21:07

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: RTX-1 (30.32) ID: 0.25(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 576526 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
STL00143	C10-C28	7200		240	110	31

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl (Surr)	91		56-125
630-02-4	n-Octacosane	95		60-142

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220530-111452.b\05300014.D
Lims ID: 280-162622-B-15-A
Client ID: SHGW04-22A
Sample Type: Client
Inject. Date: 30-May-2022 21:07:44 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-162622-B-15-A
Misc. Info.: 280-0111452-014
Operator ID: KA Instrument ID: SGC_U2a
Raw Data: Smoothed

Method: \\chromfs\Denver\ChromData\SGC_U2a\20220530-111452.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 31-May-2022 13:25:47 Calib Date: 09-May-2022 15:16:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090008.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX1640

First Level Reviewer: appenzellerk Date: 31-May-2022 13:09:44

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
A	2 C8-C12					
	3.052	(1.432-4.672)		14190620	130.7	
A	5 C10-C25					
	6.215	(3.365-9.066)		959672743	7074.6	
	6 Hexadecane					
	6.349	6.357	-0.008	9217274	NC	
A	7 C10-C28					
	6.597	(3.365-9.828)		1050066505	7685.1	
A	8 C10-C32					
	7.052	(3.365-10.738)		1090208336	7970.8	
$	9 o-Terphenyl					
	7.240	7.236	0.004	5384313	31.8	
A	10 C10-C36					
	7.481	(3.365-11.597)		1104137672	8069.1	
A	14 C20-C38					
	9.782	(7.664-11.899)		535743812	4445.2	
$	13 n-Octacosane					
	9.864	9.868	-0.004	4100156	33.4	
A	15 C25-C36					
	10.331	(9.066-11.597)		121045559	1291.4	
	16 Dotriacontane					
	10.765	10.799	-0.034	5189275	NC	
$	19 n-Decanoic Acid (Surr)					
	0.000				ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

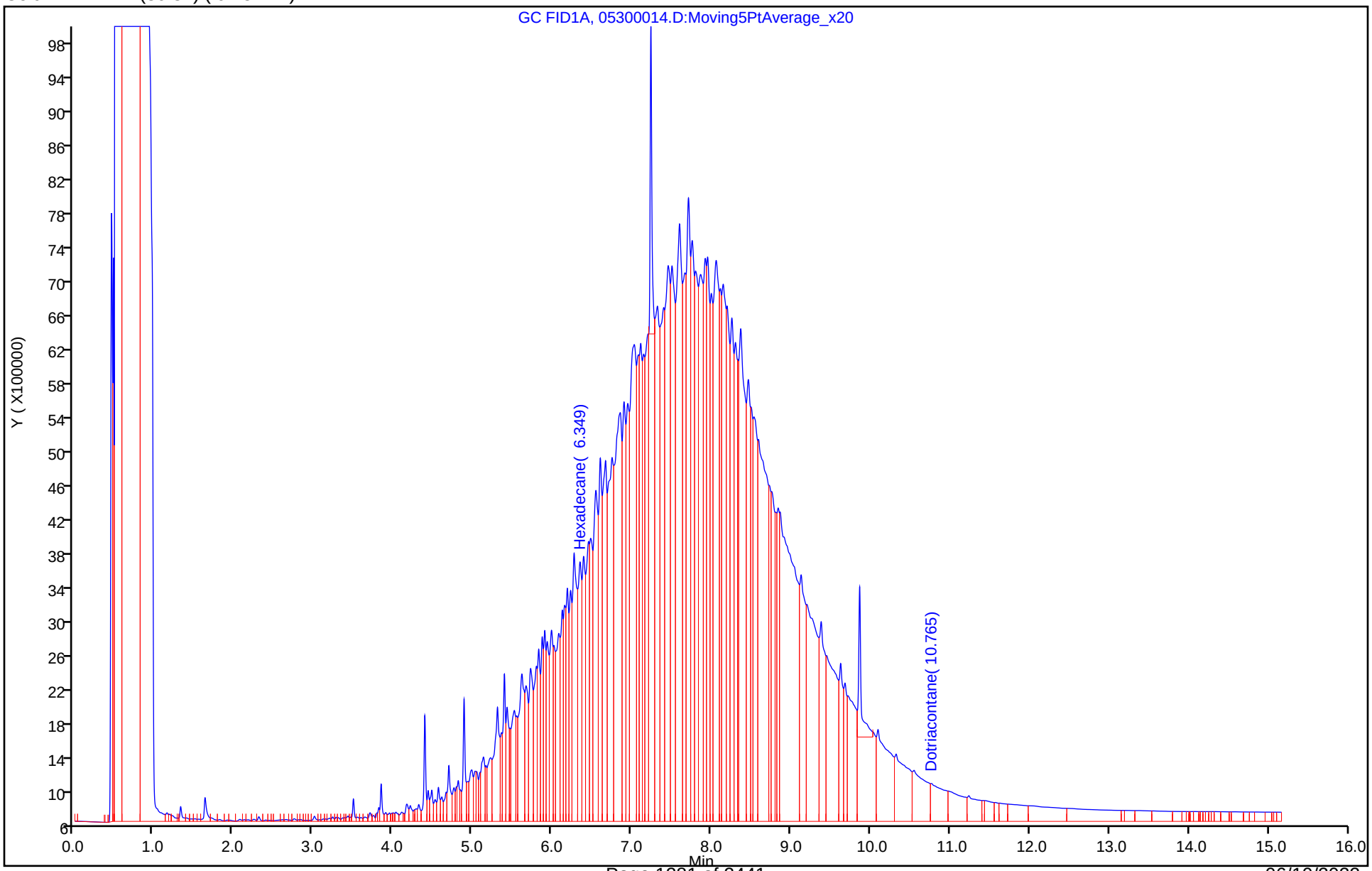
Report Date: 31-May-2022 13:25:58 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220530-111452.b\05300014.D

Injection Date:	30-May-2022 21:07:44	Instrument ID:	SGC_U2a	Operator ID:	KA
Lims ID:	280-162622-B-15-A	Lab Sample ID:	280-162622-15	Worklist Smp#:	14
Client ID:	SHGW04-22A				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20220530-111452.b\05300014.D				
Lims ID:	280-162622-B-15-A				
Client ID:	SHGW04-22A				
Sample Type:	Client				
Inject. Date:	30-May-2022 21:07:44	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-162622-B-15-A				
Misc. Info.:	280-0111452-014				
Operator ID:	KA	Instrument ID:	SGC_U2a		
Raw Data:	Smoothed				
Method:	\\chromfs\Denver\ChromData\SGC_U2a\20220530-111452.b\DRO_U2a.m				
Limit Group:	GCSV - DRO				
Last Update:	31-May-2022 13:25:47	Calib Date:	09-May-2022 15:16:56		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090008.D				
Column 1 :	RTX-1 (30.32) (0.25 mm)		Det: GC FID1A		
Process Host:	CTX1640				

First Level Reviewer: appenzellerk Date: 31-May-2022 13:09:44

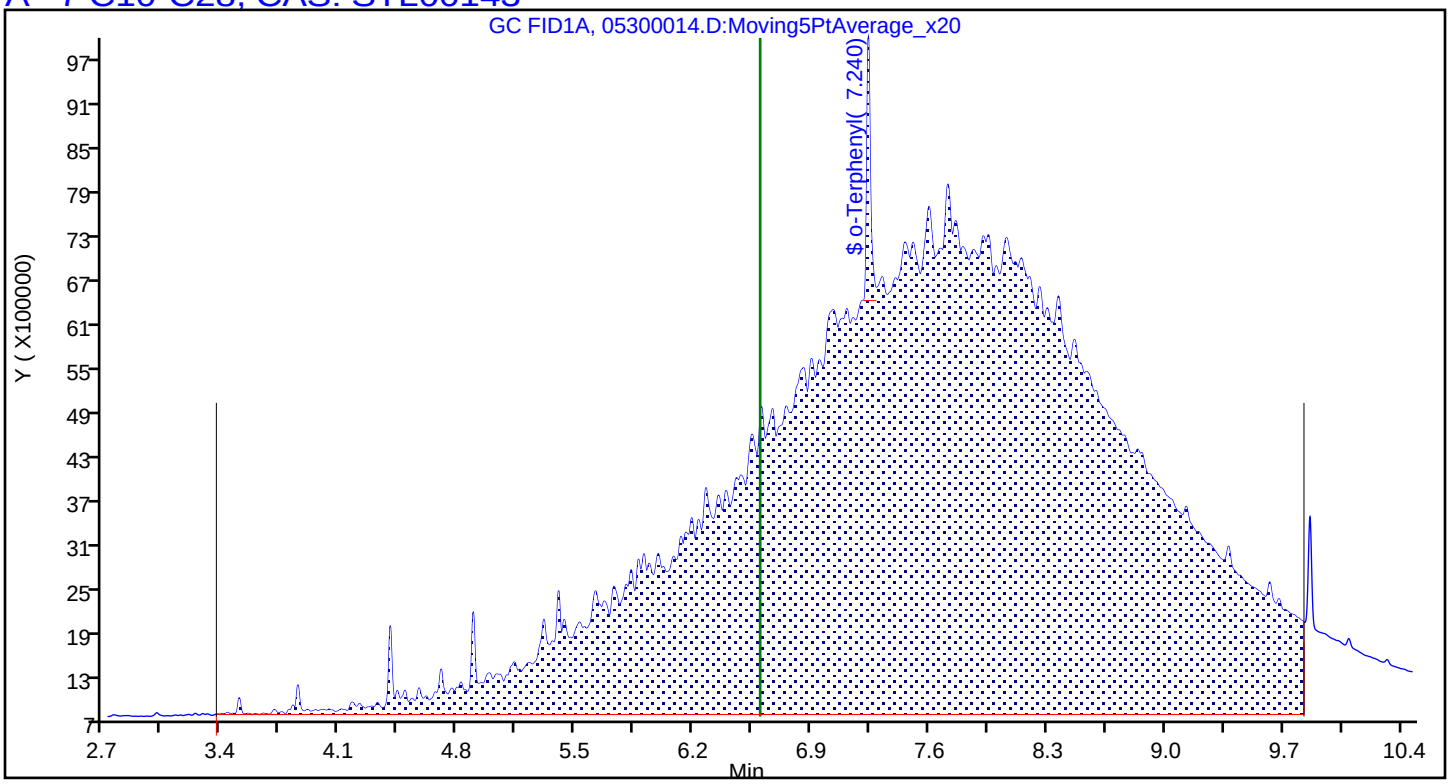
Compound	Amount Added	Amount Recovered	% Rec.
$ 9 o-Terphenyl	35.0	31.8	91.00
$ 13 n-Octacosane	35.0	33.4	95.34

Report Date: 31-May-2022 13:25:59 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20220530-111452.b\05300014.D				
Injection Date:	30-May-2022 21:07:44	Instrument ID:	SGC_U2a		
Lims ID:	280-162622-B-15-A	Lab Sample ID:	280-162622-15		
Client ID:	SHGW04-22A				
Operator ID:	KA	ALS Bottle#:	14	Worklist Smp#:	14
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 7 C10-C28, CAS: STL00143



FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: SHGW04-22A RE | Lab Sample ID: 280-162622-15 RE

Matrix: Water | Lab File ID: 06030013.D

Analysis Method: 8015C DRO | Date Collected: 05/18/2022 12:35

Extraction Method: 3510C | Date Extracted: 06/01/2022 12:30

Sample wt/vol: 1056.2(mL) | Date Analyzed: 06/03/2022 19:47

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: RTX-1 (30.32) ID: 0.25(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 577101 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
STL00143	*C10-C28*	*6300*	*H Q*	*240*	110	*31*

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl (Surr)	27	*Q*	56-125
630-02-4	n-Octacosane	24	*Q*	60-142

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220603-111568.b\06030013.D
Lims ID: 280-162622-A-15-A
Client ID: SHGW04-22A
Sample Type: Client
Inject. Date: 03-Jun-2022 19:47:14 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-162622-A-15-A
Misc. Info.: 280-0111568-013
Operator ID: KA Instrument ID: SGC_U2a
Raw Data: Smoothed

Method: \\chromfs\Denver\ChromData\SGC_U2a\20220603-111568.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 08-Jun-2022 15:54:43 Calib Date: 09-May-2022 15:16:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090008.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX1621

First Level Reviewer: appenzellerk Date: 06-Jun-2022 12:15:28

		RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
A	2 C8-C12	3.049	(1.427-4.672)		12553327	115.6	
A	5 C10-C25	6.208	(3.348-9.067)		830471680	6121.5	
	6 Hexadecane	6.345	6.347	-0.002	9155391	NC	
A	7 C10-C28	6.586	(3.348-9.824)		909058798	6652.6	
A	8 C10-C32	7.039	(3.348-10.730)		947234610	6924.8	
$	9 o-Terphenyl	7.242	7.235	0.007	1611789	9.40	
A	10 C10-C36	7.400	(3.348-11.452)		959677683	7012.0	
A	14 C20-C38	9.767	(7.648-11.887)		459524504	3810.0	
$	13 n-Octacosane	9.862	9.864	-0.002	995452	8.53	
A	15 C25-C36	10.260	(9.067-11.452)		103322647	1100.2	
	16 Dotriacontane	10.759	10.782	-0.023	4986248	NC	
$	19 n-Decanoic Acid (Surr)	0.000				ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

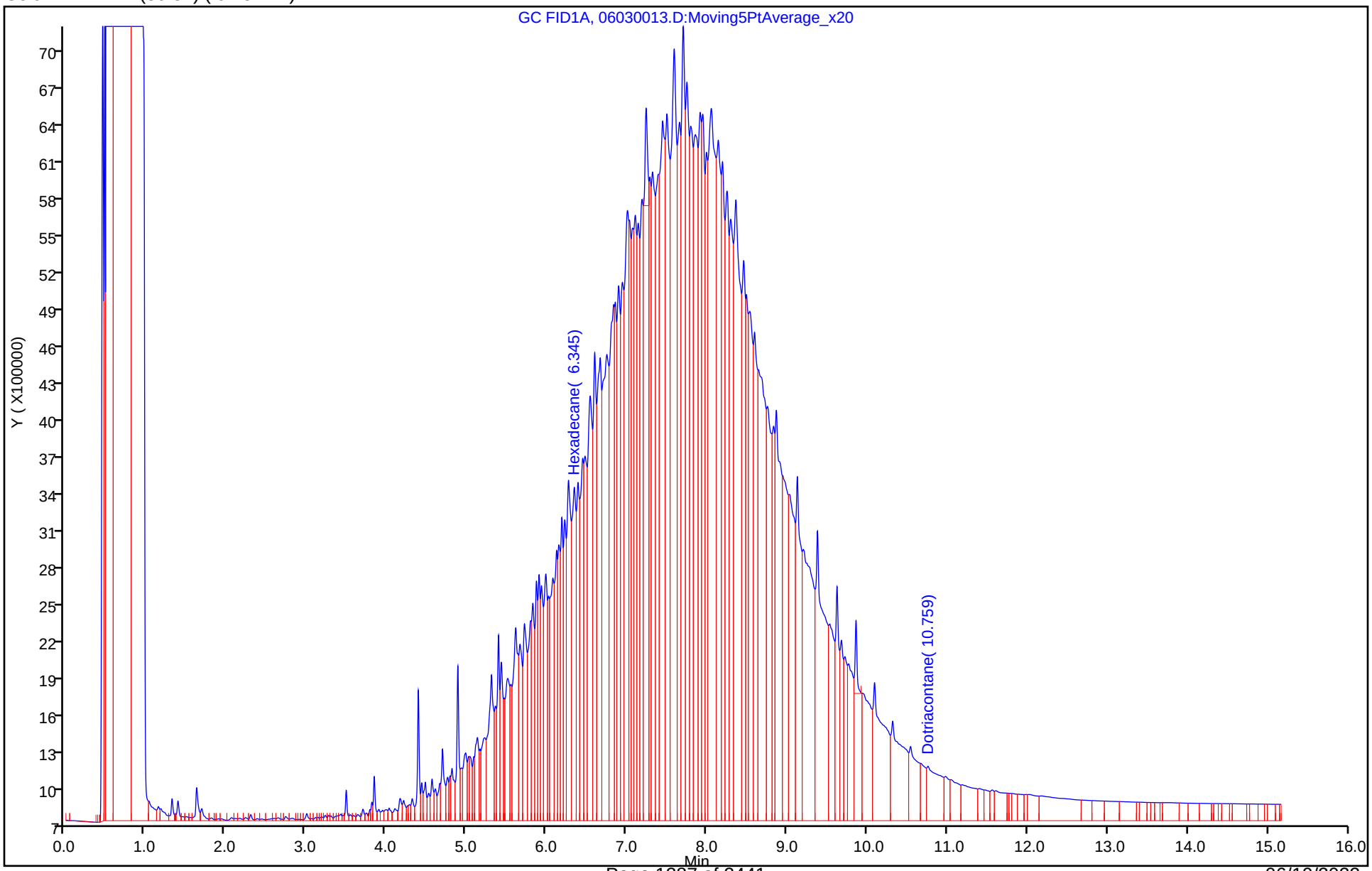
Report Date: 09-Jun-2022 12:23:19 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220603-111568.b\06030013.D

Injection Date:	03-Jun-2022 19:47:14	Instrument ID:	SGC_U2a	Operator ID:	KA
Lims ID:	280-162622-A-15-A	Lab Sample ID:	280-162622-15	Worklist Smp#:	13
Client ID:	SHGW04-22A				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20220603-111568.b\06030013.D				
Lims ID:	280-162622-A-15-A				
Client ID:	SHGW04-22A				
Sample Type:	Client				
Inject. Date:	03-Jun-2022 19:47:14	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-162622-A-15-A				
Misc. Info.:	280-0111568-013				
Operator ID:	KA	Instrument ID:	SGC_U2a		
Raw Data:	Smoothed				
Method:	\\chromfs\Denver\ChromData\SGC_U2a\20220603-111568.b\DRO_U2a.m				
Limit Group:	GCSV - DRO				
Last Update:	08-Jun-2022 15:54:43	Calib Date:	09-May-2022 15:16:56		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090008.D				
Column 1 :	RTX-1 (30.32) (0.25 mm)		Det: GC FID1A		
Process Host:	CTX1621				

First Level Reviewer: appenzellerk Date: 06-Jun-2022 12:15:28

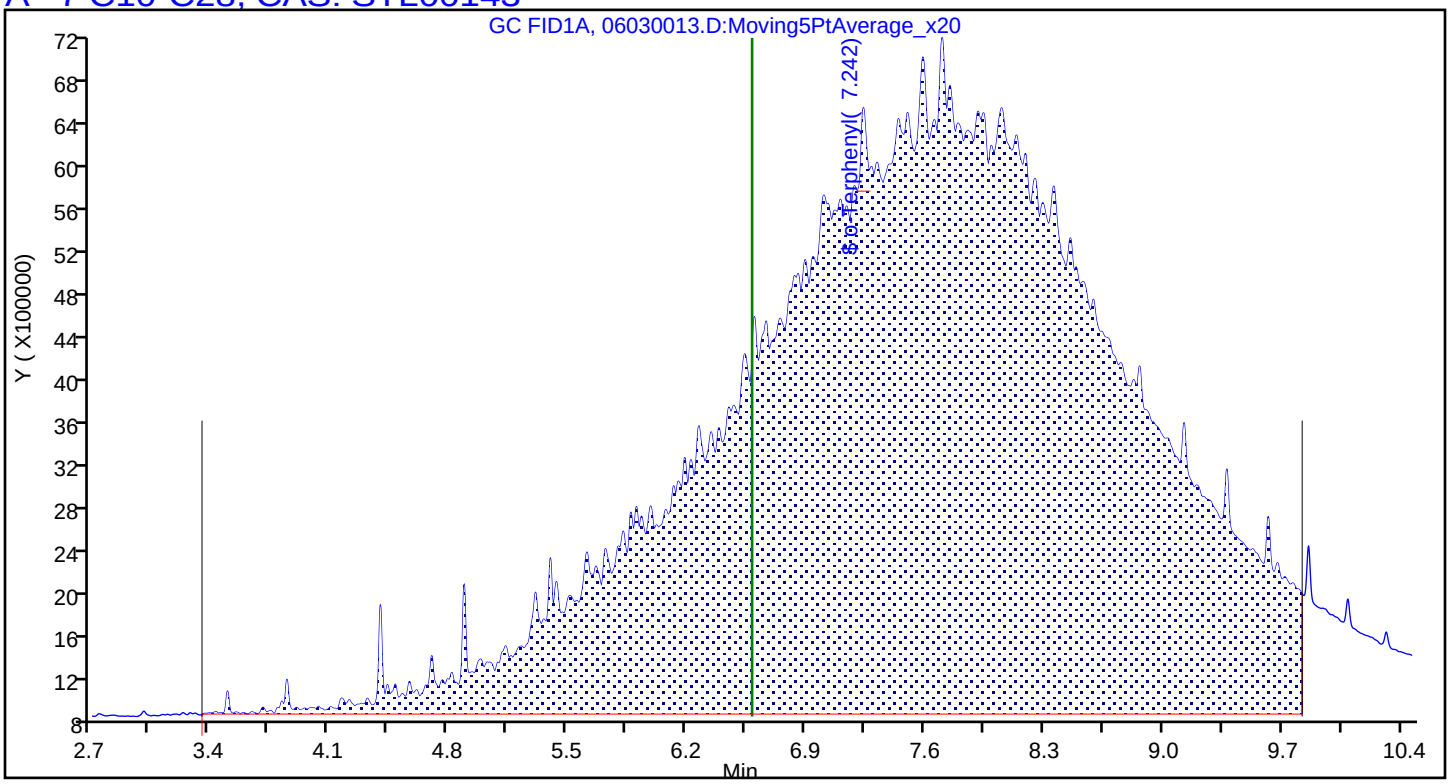
Compound	Amount Added	Amount Recovered	% Rec.
$ 9 o-Terphenyl	35.0	9.40	26.86
$ 13 n-Octacosane	35.0	8.53	24.37

Report Date: 09-Jun-2022 12:23:19 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20220603-111568.b\06030013.D				
Injection Date:	03-Jun-2022 19:47:14	Instrument ID:	SGC_U2a		
Lims ID:	280-162622-A-15-A	Lab Sample ID:	280-162622-15		
Client ID:	SHGW04-22A				
Operator ID:	KA	ALS Bottle#:	13	Worklist Smp#:	13
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_7 C10-C28, CAS: STL00143



FORM VI
DIESEL RANGE ORGANICS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1 Analy Batch No.: 574280

SDG No.:

Instrument ID: SGC_U2a GC Column: RTX-1 (30.3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/09/2022 12:59 Calibration End Date: 05/09/2022 15:16 Calibration ID: 65372

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 280-574280/8	05090008.D
Level 2	STD2 280-574280/7	05090007.D
Level 3	STD3 280-574280/6	05090006.D
Level 4	ICRT 280-574280/5	05090005.D
Level 5	STD5 280-574280/4	05090004.D
Level 6	STD6 280-574280/3	05090003.D
Level 7	STD7 280-574280/2	05090002.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7				RT WINDOW	AVG RT
C10-C28	6.615	6.615	6.615	6.615	6.615	6.627	6.627				3.393 - 9.836	6.618
C10-C36	7.435	7.435	7.435	7.435	7.435	7.435	7.435				3.393 - 11.477	7.435
o-Terphenyl (Surr)	7.246	7.242	7.238	7.242	7.244	7.253	7.266				7.192 - 7.292	7.247
n-Octacosane	9.843	9.903	9.888	9.876	9.877	9.877	9.887				9.826 - 9.926	9.879

FORM VI
DIESEL RANGE ORGANICS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-162622-1 Analy Batch No.: 574280

SDG No.:

Instrument ID: SGC_U2a GC Column: RTX-1 (30.3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/09/2022 12:59 Calibration End Date: 05/09/2022 15:16 Calibration ID: 65372

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 280-574280/8	05090008.D
Level 2	STD2 280-574280/7	05090007.D
Level 3	STD3 280-574280/6	05090006.D
Level 4	ICRT 280-574280/5	05090005.D
Level 5	STD5 280-574280/4	05090004.D
Level 6	STD6 280-574280/3	05090003.D
Level 7	STD7 280-574280/2	05090002.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4		B	M1	M2								
C10-C28	138141 129228	140837 133202	139814 138870	143707	Lin1	505774.123	136570.349							0.9990		0.9900
C10-C36	148808 129395	144572 133313	140460 139038	143905	Lin1	1486146.95	136650.717							0.9990		0.9900
o-Terphenyl (Surr)	241752 168595	164534 168005	177476 165579	188037	Lin1	31593.5835	168065.621							0.9990		0.9900
n-Octacosane	44.000 109057	79779 116693	100177 132448	119026	Lin1	-70535.067	124991.747							0.9950		0.9900

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
DIESEL RANGE ORGANICS BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver Job No.: 280-162622-1 Analy Batch No.: 574280

SDG No.:

Instrument ID: SGC_U2a GC Column: RTX-1 (30.3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/09/2022 12:59 Calibration End Date: 05/09/2022 15:16 Calibration ID: 65372

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 280-574280/8	05090008.D
Level 2	STD2 280-574280/7	05090007.D
Level 3	STD3 280-574280/6	05090006.D
Level 4	ICRT 280-574280/5	05090005.D
Level 5	STD5 280-574280/4	05090004.D
Level 6	STD6 280-574280/3	05090003.D
Level 7	STD7 280-574280/2	05090002.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
C10-C28	Lin1	13814193 199804989 1	35209612 416613324 2	139815008	718541689	969222176	100 15000	250 30000	1000	5000	7500
C10-C36	Lin1	14880993 199970904 9	36143382 417117869 5	140461173	719534222	970470639	100 15000	250 30000	1000	5000	7500
o-Terphenyl (Surr)	Lin1	120876 12600393	205667 24836905	887379	4700927	6322317	0.500 75.0	1.25 150	5.00	25.0	37.5
n-Octacosane	Lin1	22 8751953	99724 19867210	500885	2975662	4089620	0.500 75.0	1.25 150	5.00	25.0	37.5

Curve Type Legend
Lin1 = Linear 1/conc

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090002.D
Lims ID: STD7 DRO
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 09-May-2022 12:59:00 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD7 DRO
Misc. Info.: 280-0110812-002
Operator ID: KA Instrument ID: SGC_U2a
Sublist: chrom-DRO_U2a*sub19
Raw Data: Smoothed

Method: \\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 09-May-2022 15:42:02 Calib Date: 09-May-2022 15:16:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090008.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX1650

First Level Reviewer: appenzellerk Date: 09-May-2022 15:36:56

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
A	5 C10-C25						
	6.233	(3.393-9.072)		4134329922	30000	30493	
A	7 C10-C28						
	6.627	(3.393-9.836)		4166133242	30000	30502	
A	8 C10-C32						
	7.100	(3.393-10.807)		4170952441	30000	30510	
$	9 o-Terphenyl						M
	7.266	7.242	0.024	24836905	150.0	147.6	M
A	10 C10-C36						
	7.435	(3.393-11.477)		4171178695	30000	30514	
$	13 n-Octacosane						
	9.887	9.876	0.011	19867210	150.0	159.5	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

DRO_L7_00078 Amount Added: 200.00 Units: uL

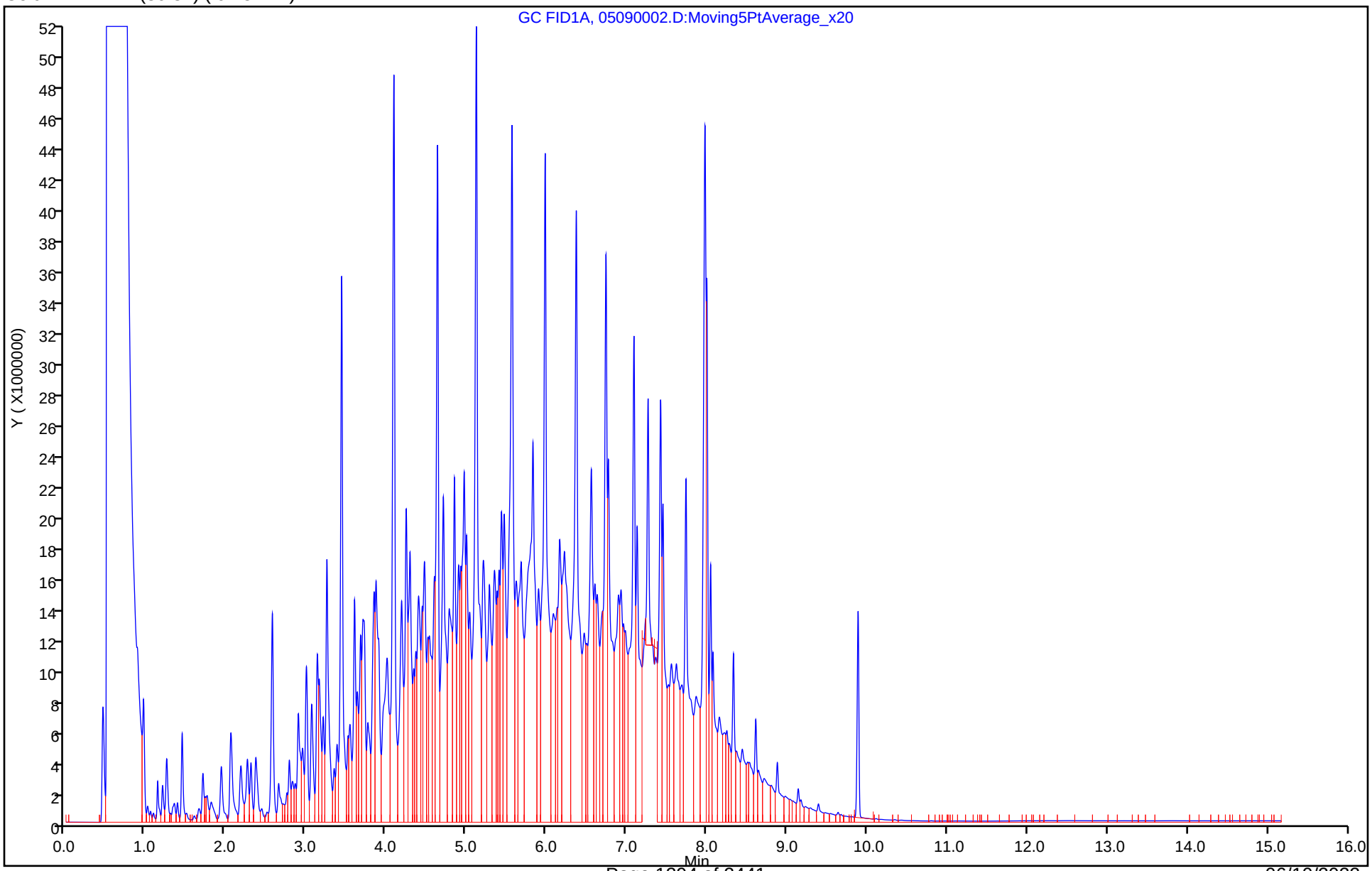
Report Date: 09-May-2022 15:42:02 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090002.D

Injection Date:	09-May-2022 12:59:00	Instrument ID:	SGC_U2a	Operator ID:	KA
Lims ID:	STD7 DRO			Worklist Smp#:	2
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)

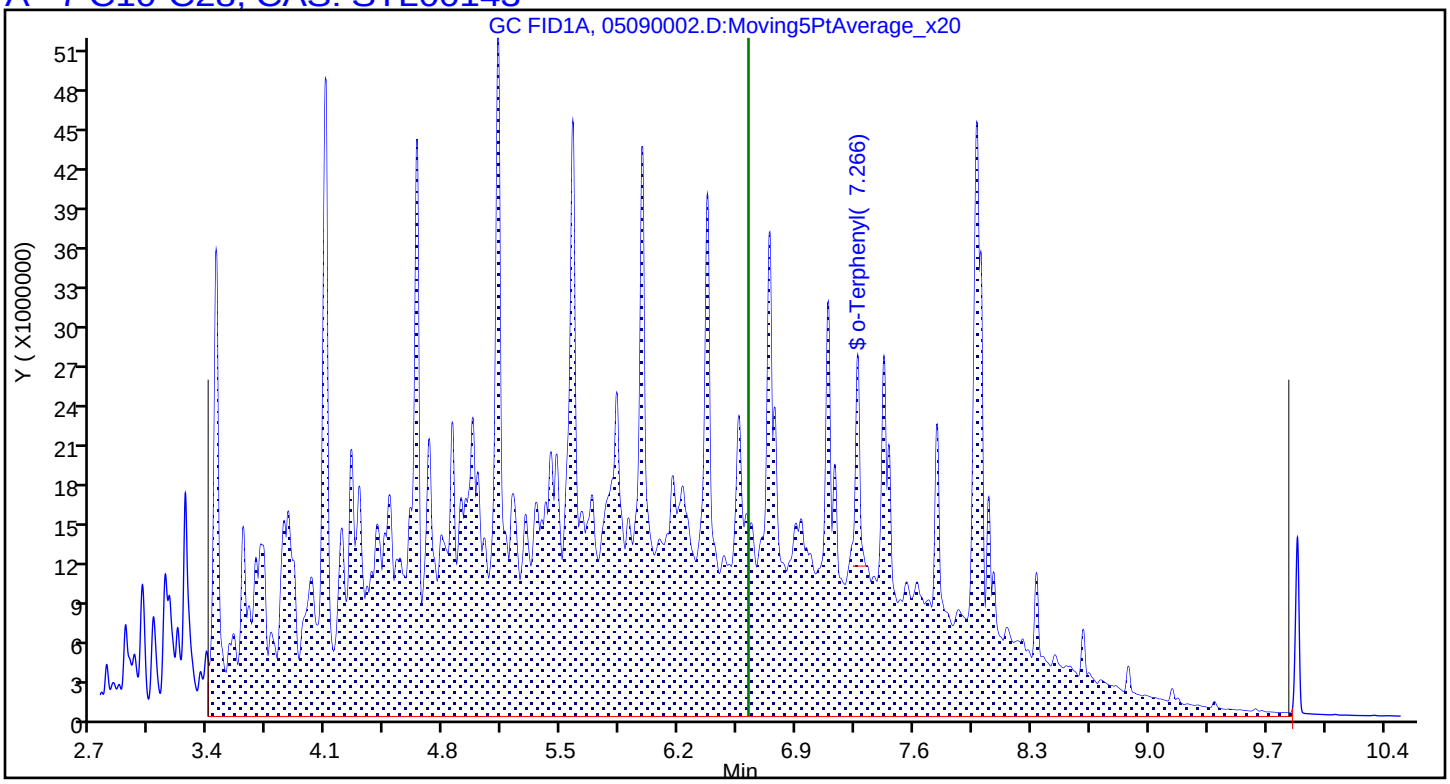


Report Date: 09-May-2022 15:42:02 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090002.D				
Injection Date:	09-May-2022 12:59:00	Instrument ID:	SGC_U2a		
Lims ID:	STD7 DRO				
Client ID:					
Operator ID:	KA	ALS Bottle#:	2	Worklist Smp#:	2
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 7 C10-C28, CAS: STL00143

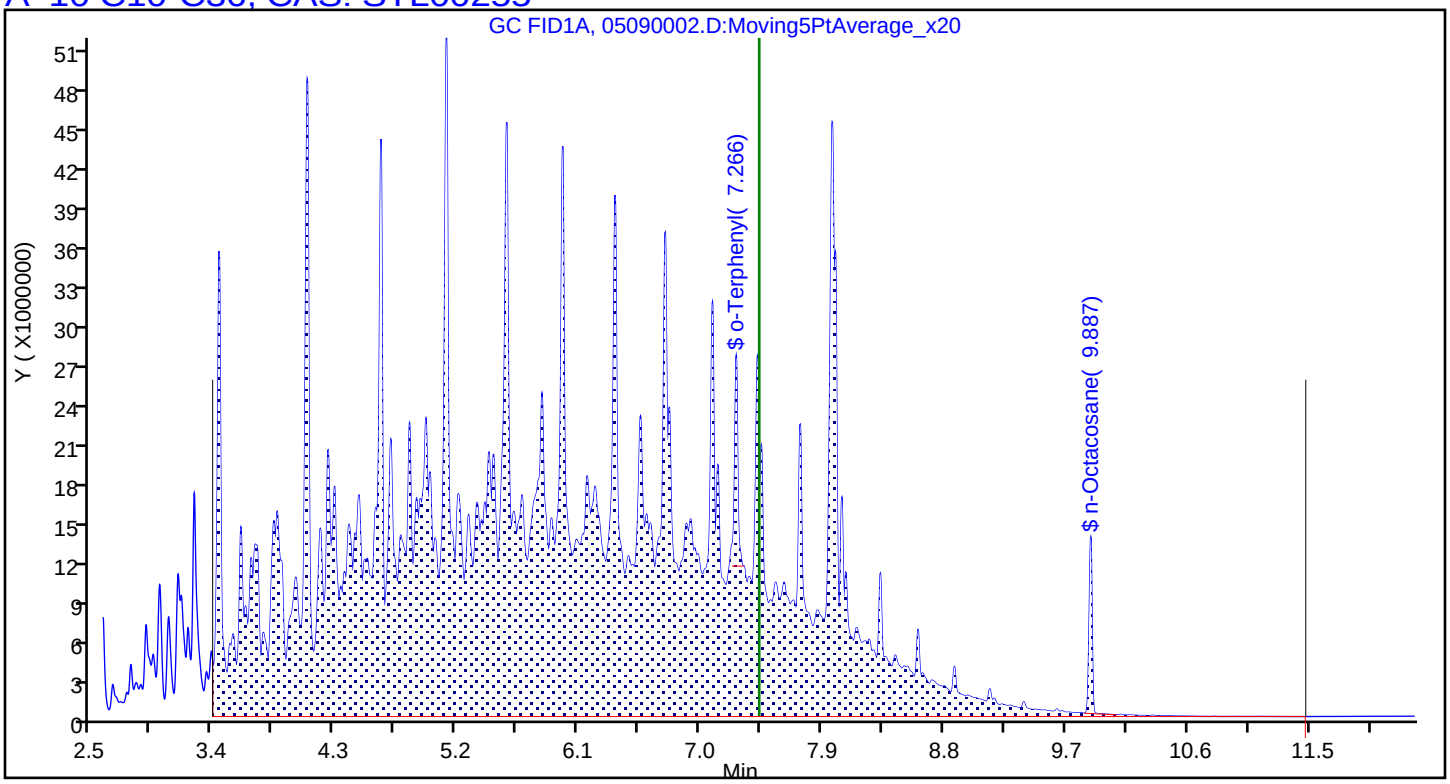


Report Date: 09-May-2022 15:42:03 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090002.D				
Injection Date:	09-May-2022 12:59:00	Instrument ID:	SGC_U2a		
Lims ID:	STD7 DRO				
Client ID:					
Operator ID:	KA	ALS Bottle#:	2	Worklist Smp#:	2
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_10 C10-C36, CAS: STL00255



Manual Integration/User Assign Peak Report

Eurofins Denver

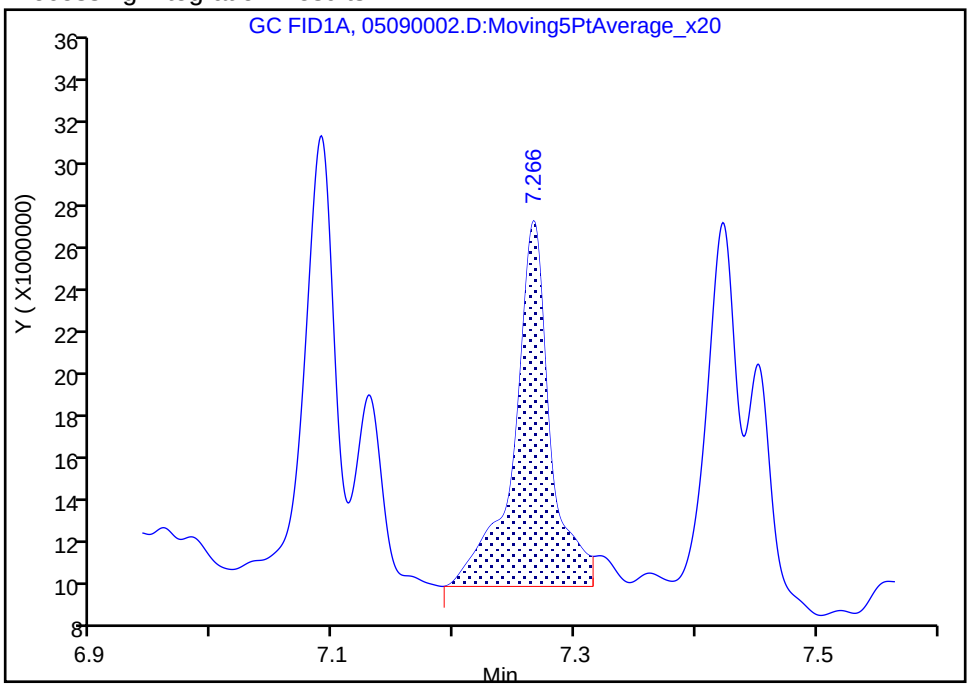
Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090002.D				
Injection Date:	09-May-2022 12:59:00	Instrument ID:	SGC_U2a		
Lims ID:	STD7 DRO				
Client ID:					
Operator ID:	KA	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

$ 9 o-Terphenyl, CAS: 84-15-1

Signal: 1

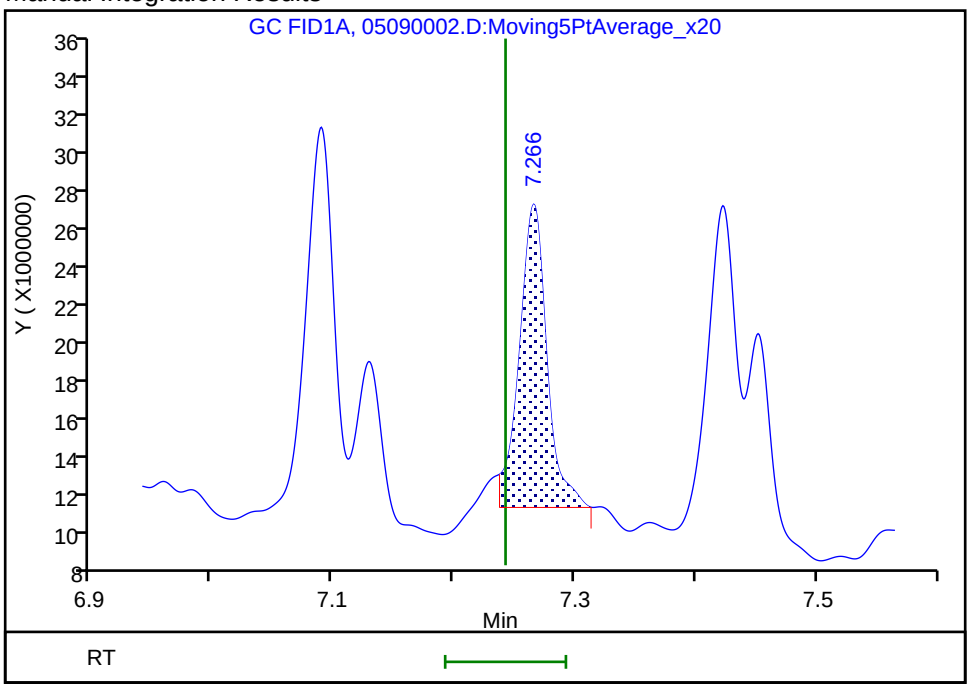
Processing Integration Results

RT: 7.27
Area: 35499435
Amount: 172.6541
Amount Units: ug/ml



Manual Integration Results

RT: 7.27
Area: 24836905
Amount: 147.5930
Amount Units: ug/ml



Reviewer: appenzellerk, 09-May-2022 15:36:44

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090003.D
Lims ID: STD6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 09-May-2022 13:21:53 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD6
Misc. Info.: 280-0110812-003
Operator ID: KA Instrument ID: SGC_U2a
Sublist: chrom-DRO_U2a*sub19
Raw Data: Smoothed

Method: \\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 09-May-2022 15:42:04 Calib Date: 09-May-2022 15:16:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090008.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX1650

First Level Reviewer: appenzellerk Date: 09-May-2022 15:37:11

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
A	5 C10-C25						
	6.233	(3.393-9.072)		1983384590	15000	14626	
A	7 C10-C28						
	6.627	(3.393-9.836)		1998049891	15000	14626	
A	8 C10-C32						
	7.100	(3.393-10.807)		1999460488	15000	14623	
$	9 o-Terphenyl						
	7.253	7.242	0.011	12600393	75.0	74.8	
A	10 C10-C36						
	7.435	(3.393-11.477)		1999709049	15000	14623	
$	13 n-Octacosane						
	9.877	9.876	0.001	8751953	75.0	70.6	

QC Flag Legend
Processing Flags

Reagents:
DRO_L7_00078 Amount Added: 100.00 Units: uL

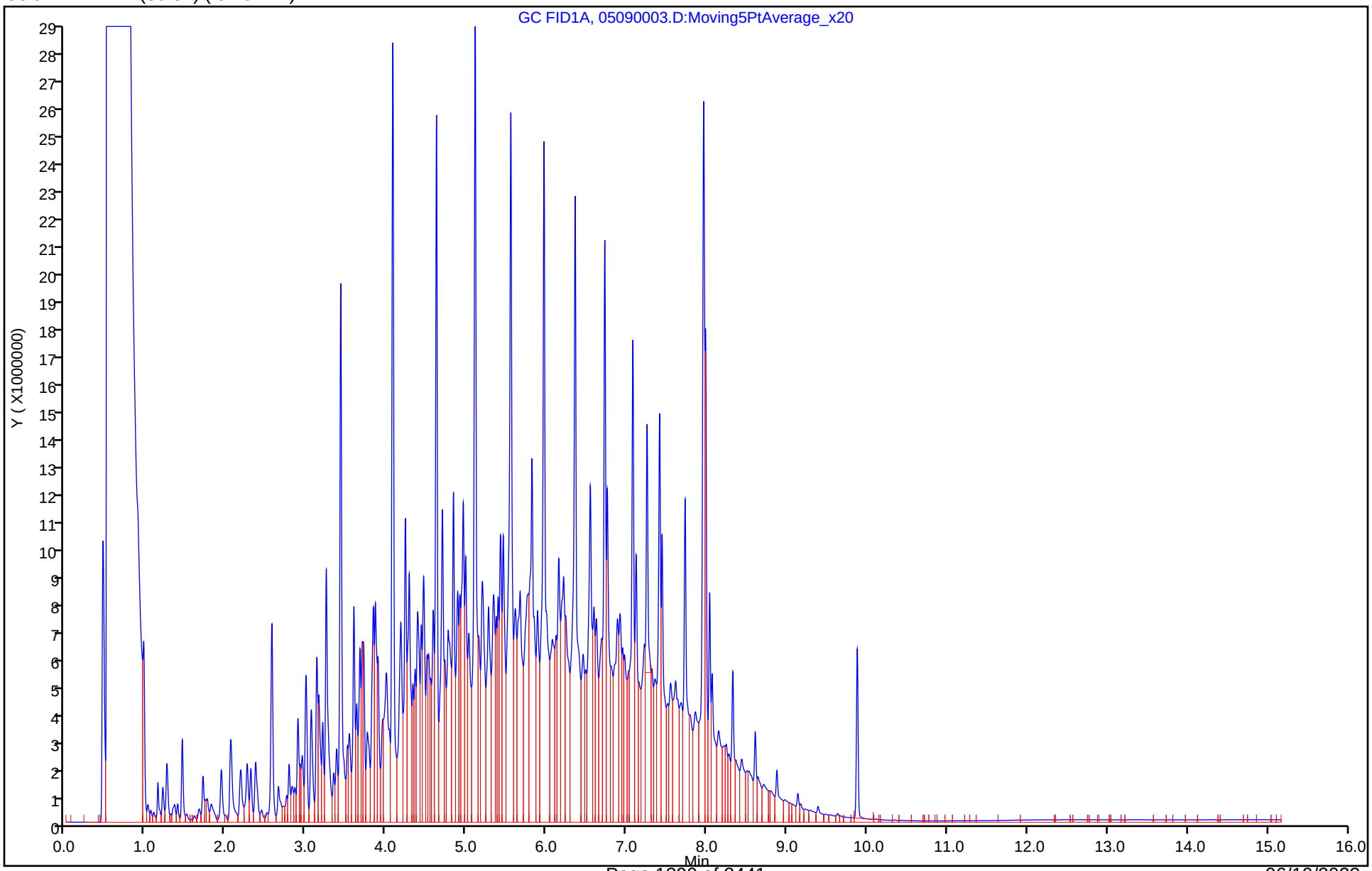
Report Date: 09-May-2022 15:42:04 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090003.D

Injection Date:	09-May-2022 13:21:53	Instrument ID:	SGC_U2a	Operator ID:	KA
Lims ID:	STD6			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)

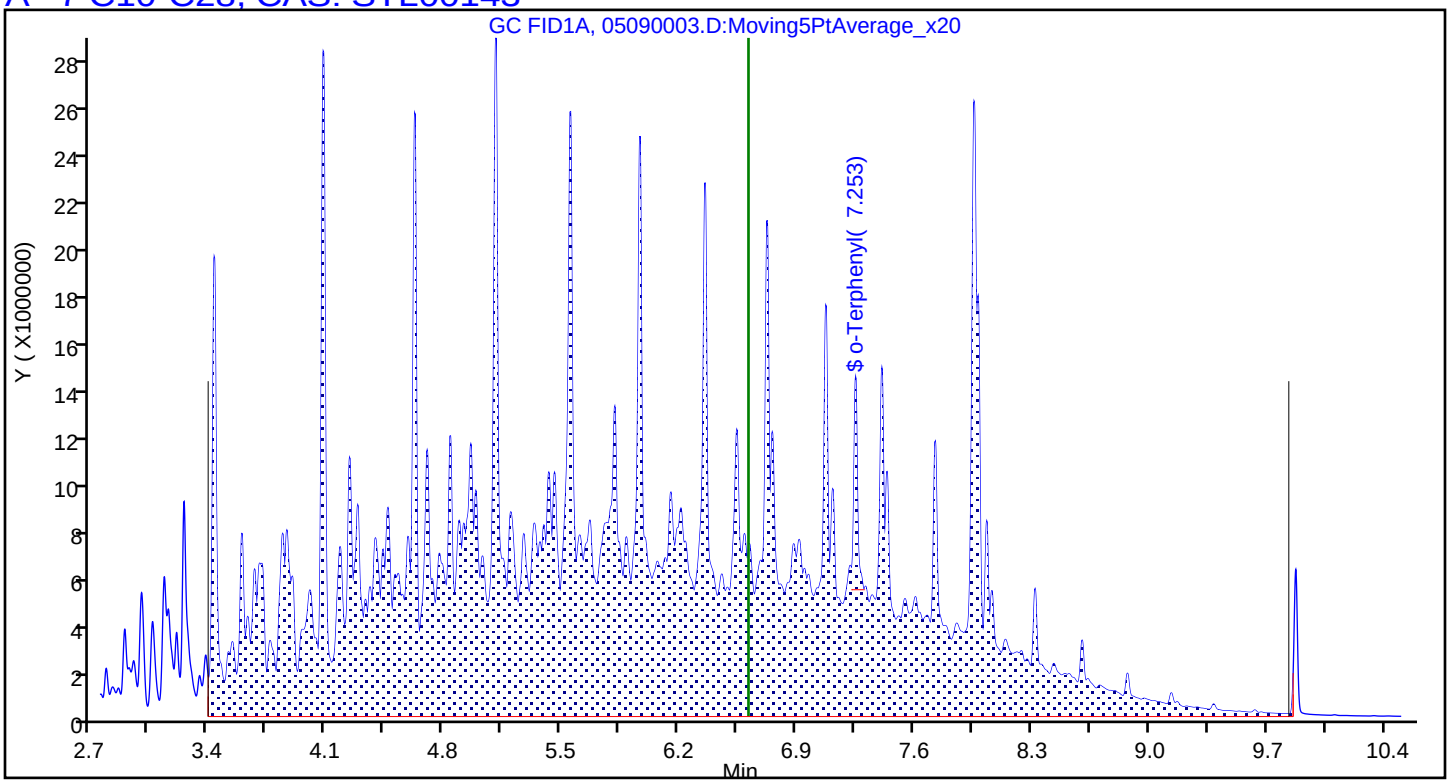


Report Date: 09-May-2022 15:42:04 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090003.D				
Injection Date:	09-May-2022 13:21:53	Instrument ID:	SGC_U2a		
Lims ID:	STD6				
Client ID:					
Operator ID:	KA	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 7 C10-C28, CAS: STL00143

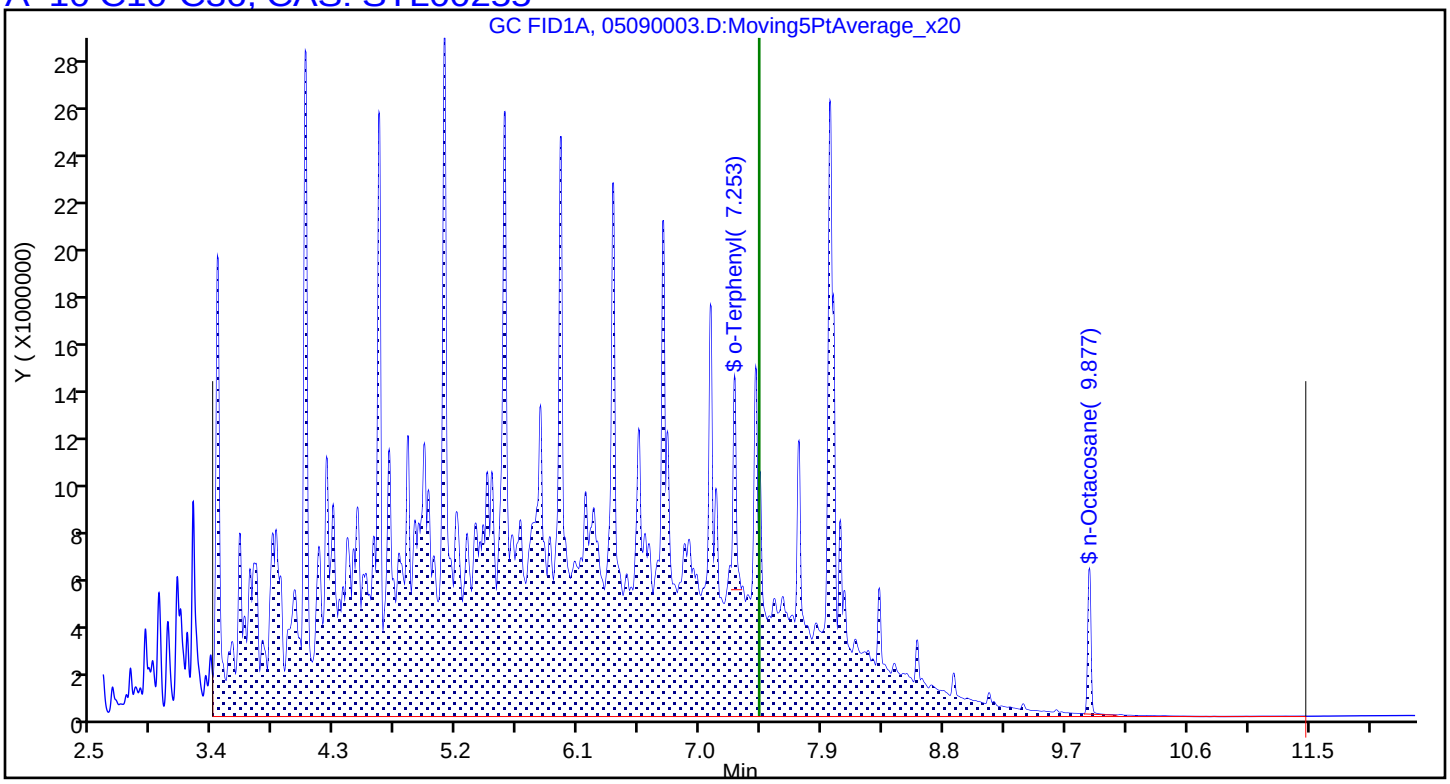


Report Date: 09-May-2022 15:42:05 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090003.D				
Injection Date:	09-May-2022 13:21:53	Instrument ID:	SGC_U2a		
Lims ID:	STD6				
Client ID:					
Operator ID:	KA	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_10 C10-C36, CAS: STL00255



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090004.D
Lims ID: STD5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 09-May-2022 13:44:53 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD5
Misc. Info.: 280-0110812-004
Operator ID: KA Instrument ID: SGC_U2a
Sublist: chrom-DRO_U2a*sub19
Raw Data: Smoothed

Method: \\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 09-May-2022 15:42:06 Calib Date: 09-May-2022 15:16:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090008.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX1650

First Level Reviewer: appenzellerk Date: 09-May-2022 15:37:26

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
A	5 C10-C25						
	6.233	(3.393-9.072)		962704672	7500.1	7097.0	
A	7 C10-C28						
	6.615	(3.393-9.837)		969222176	7500.1	7093.2	
A	8 C10-C32						
	7.100	(3.393-10.807)		970083022	7500.1	7092.0	
$	9 o-Terphenyl						
	7.244	7.244	0.000	6322317	37.5	37.4	
A	10 C10-C36						
	7.435	(3.393-11.477)		970470639	7500.1	7091.0	
$	13 n-Octacosane						
	9.877	9.877	0.000	4089620	37.5	33.3	

QC Flag Legend
Processing Flags

Reagents:
DRO_L7_00078 Amount Added: 50.00 Units: uL

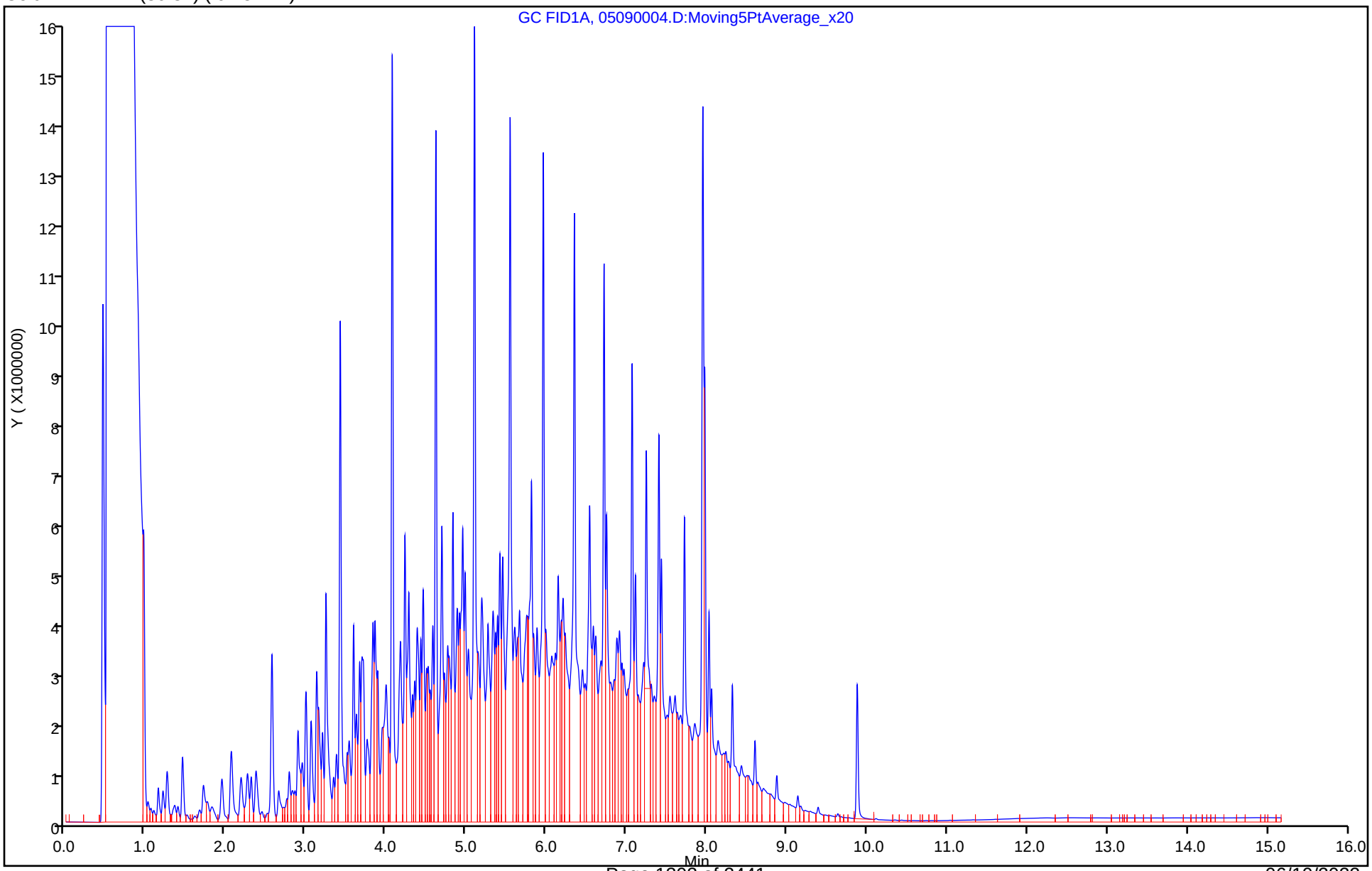
Report Date: 09-May-2022 15:42:06 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090004.D

Injection Date:	09-May-2022 13:44:53	Instrument ID:	SGC_U2a	Operator ID:	KA
Lims ID:	STD5			Worklist Smp#:	4
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)

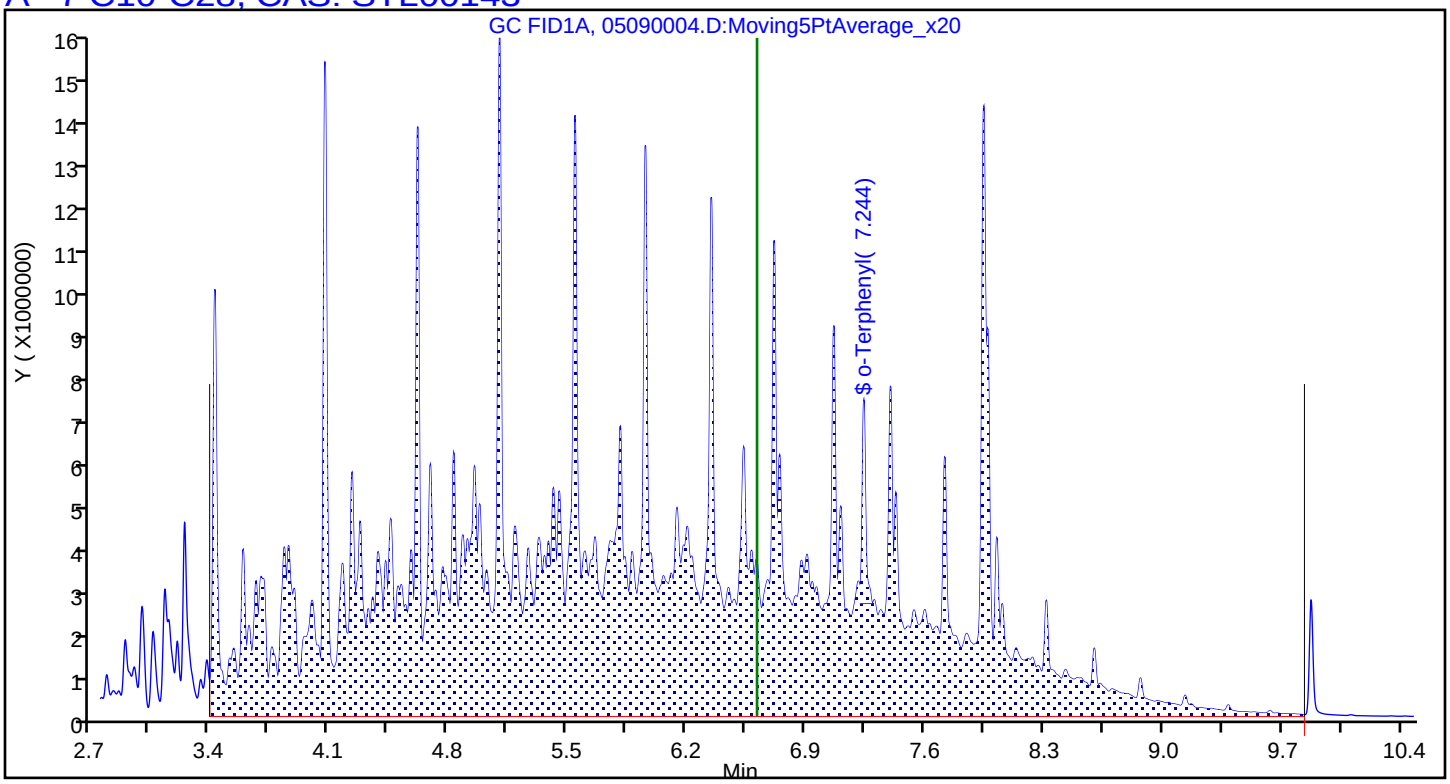


Report Date: 09-May-2022 15:42:06 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090004.D				
Injection Date:	09-May-2022 13:44:53	Instrument ID:	SGC_U2a		
Lims ID:	STD5				
Client ID:					
Operator ID:	KA	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A 7 C10-C28, CAS: STL00143

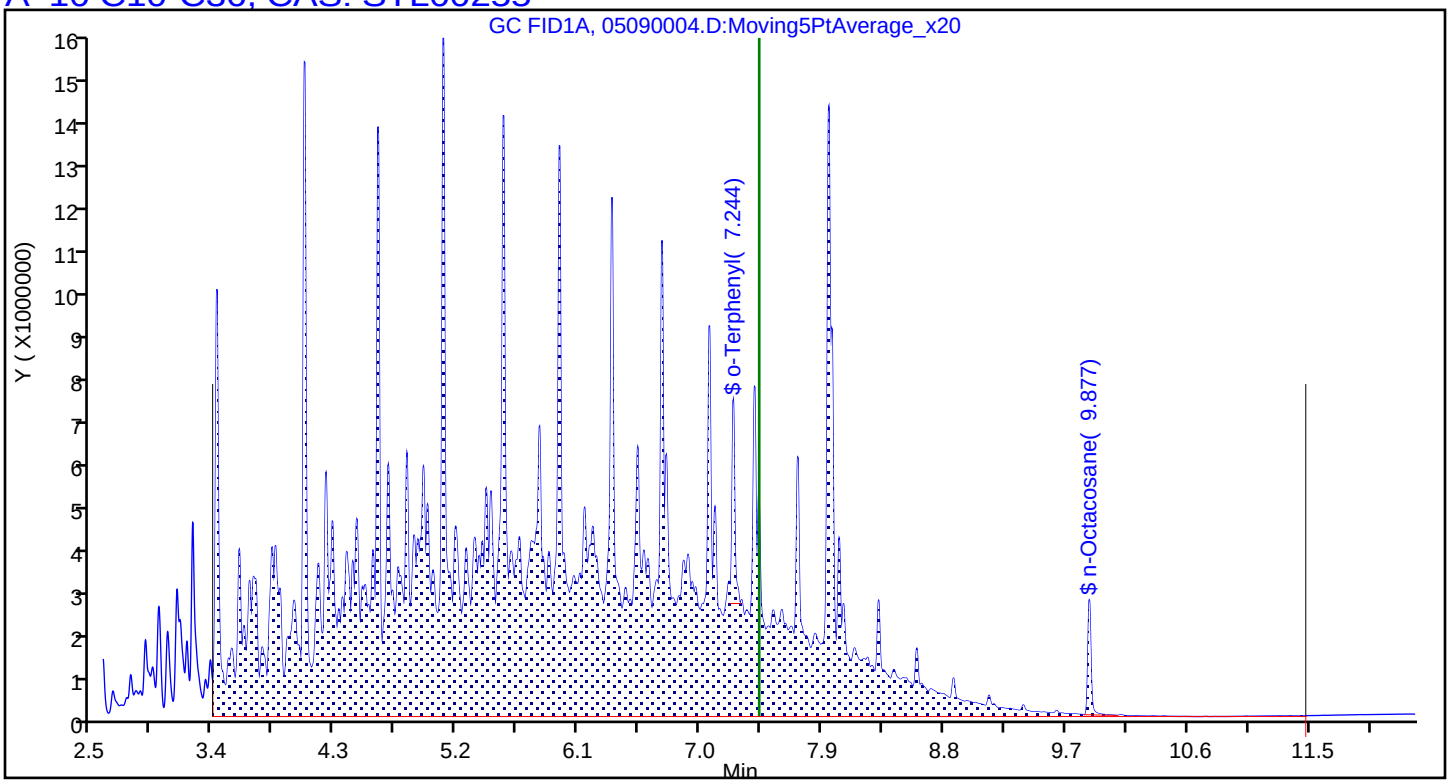


Report Date: 09-May-2022 15:42:06 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090004.D				
Injection Date:	09-May-2022 13:44:53	Instrument ID:	SGC_U2a		
Lims ID:	STD5				
Client ID:					
Operator ID:	KA	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A_10 C10-C36, CAS: STL00255



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090005.D
Lims ID: ICRT
Client ID:
Sample Type: ICRT Calib Level: 4
Inject. Date: 09-May-2022 14:07:52 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICRT
Misc. Info.: 280-0110812-005
Operator ID: KA Instrument ID: SGC_U2a
Sublist: chrom-DRO_U2a*sub19
Raw Data: Smoothed

Method: \\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 09-May-2022 15:42:08 Calib Date: 09-May-2022 15:16:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090008.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX1650

First Level Reviewer: appenzellerk Date: 09-May-2022 15:38:47

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
A	5 C10-C25						
	6.233	(3.393-9.072)		713906361	5000.1	5261.7	
A	7 C10-C28						
	6.615	(3.393-9.836)		718541689	5000.1	5257.6	
A	8 C10-C32						
	7.100	(3.393-10.807)		719117012	5000.1	5255.9	
$	9 o-Terphenyl						
	7.242	7.242	0.000	4700927	25.0	27.8	
A	10 C10-C36						
	7.435	(3.393-11.477)		719534222	5000.1	5254.6	
$	13 n-Octacosane						
	9.876	9.876	0.000	2975662	25.0	24.4	

QC Flag Legend
Processing Flags

Reagents:
DRO_L4/CCV_00119 Amount Added: 200.00 Units: uL

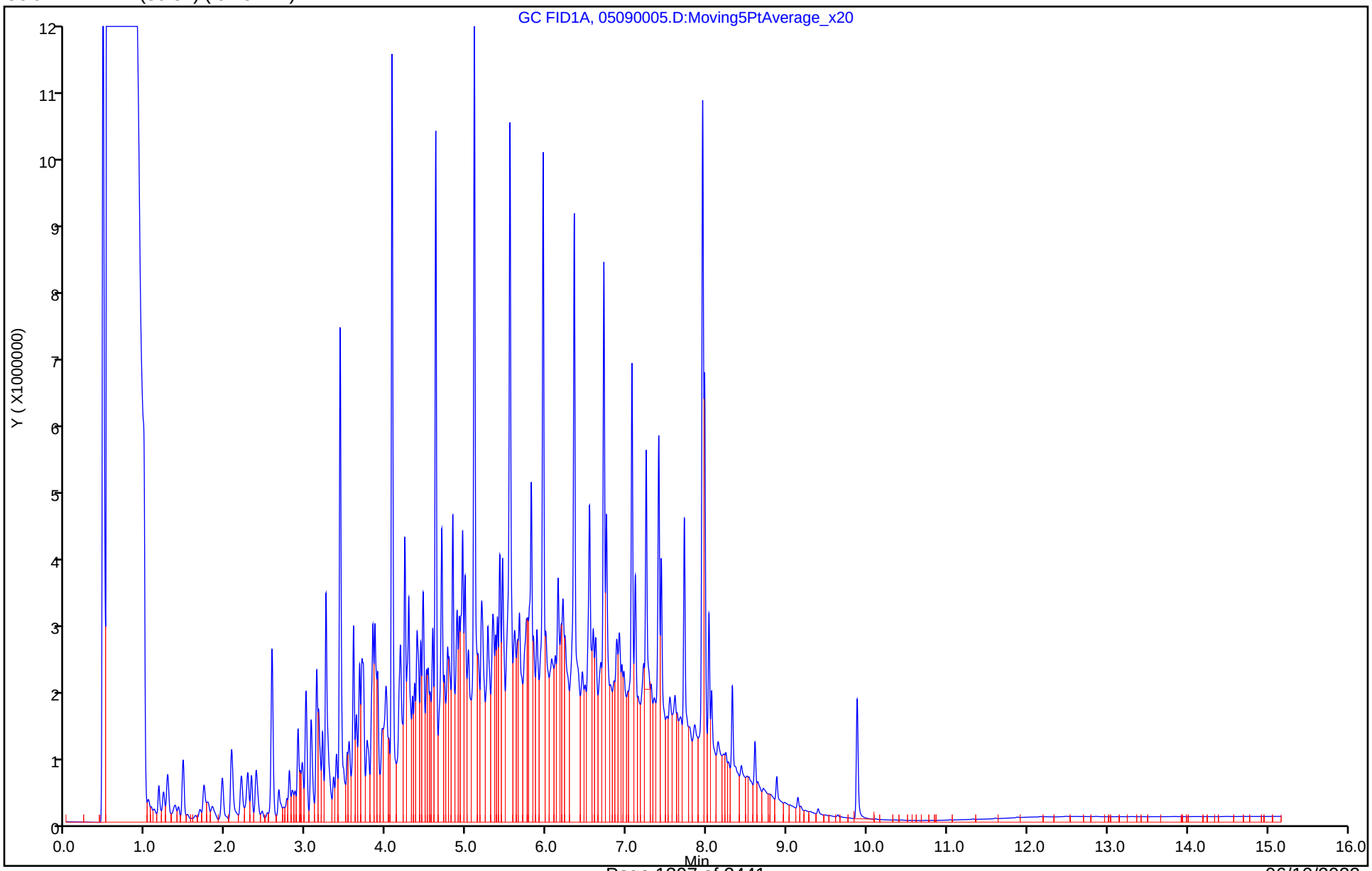
Report Date: 09-May-2022 15:42:08 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090005.D

Injection Date:	09-May-2022 14:07:52	Instrument ID:	SGC_U2a	Operator ID:	KA
Lims ID:	ICRT			Worklist Smp#:	5
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)

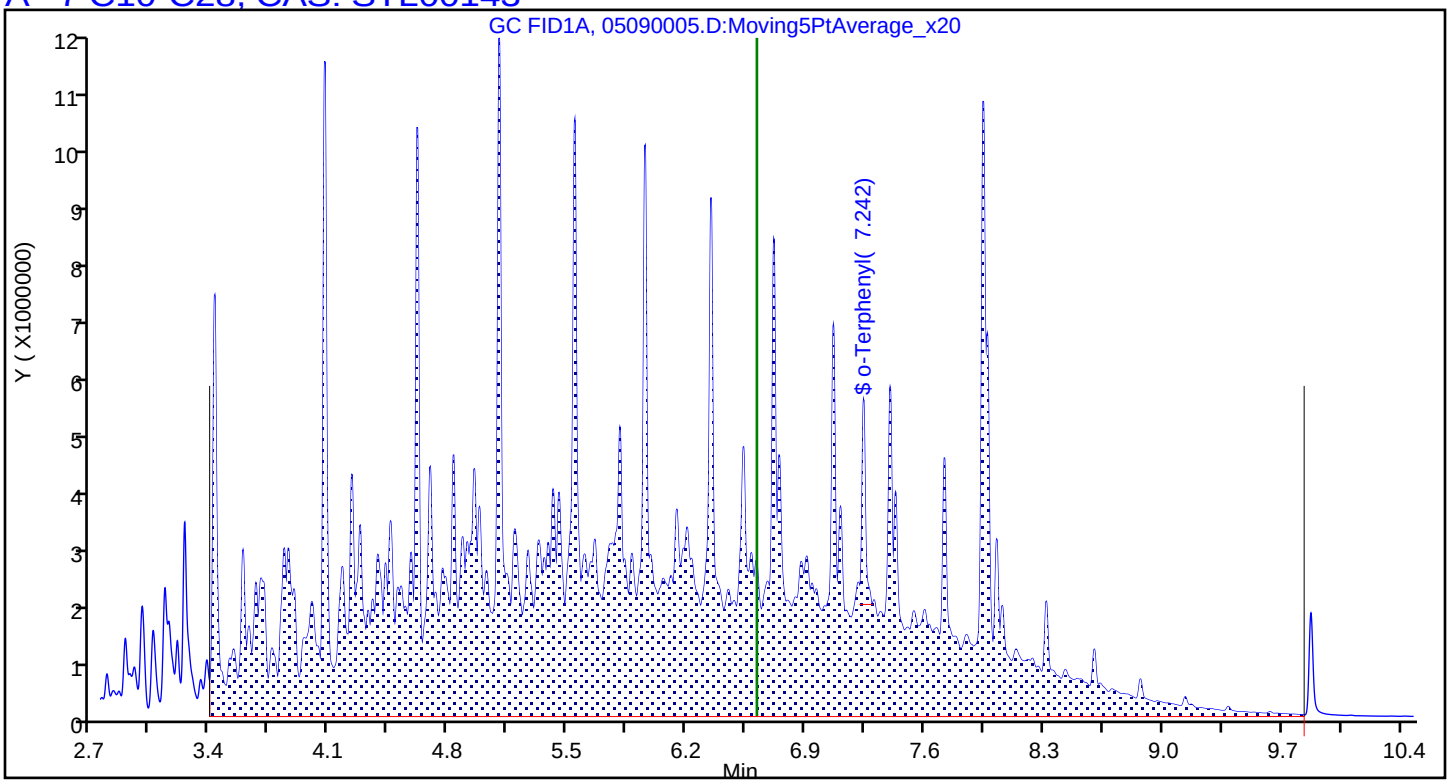


Report Date: 09-May-2022 15:42:08 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090005.D				
Injection Date:	09-May-2022 14:07:52	Instrument ID:	SGC_U2a		
Lims ID:	ICRT				
Client ID:					
Operator ID:	KA	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A 7 C10-C28, CAS: STL00143

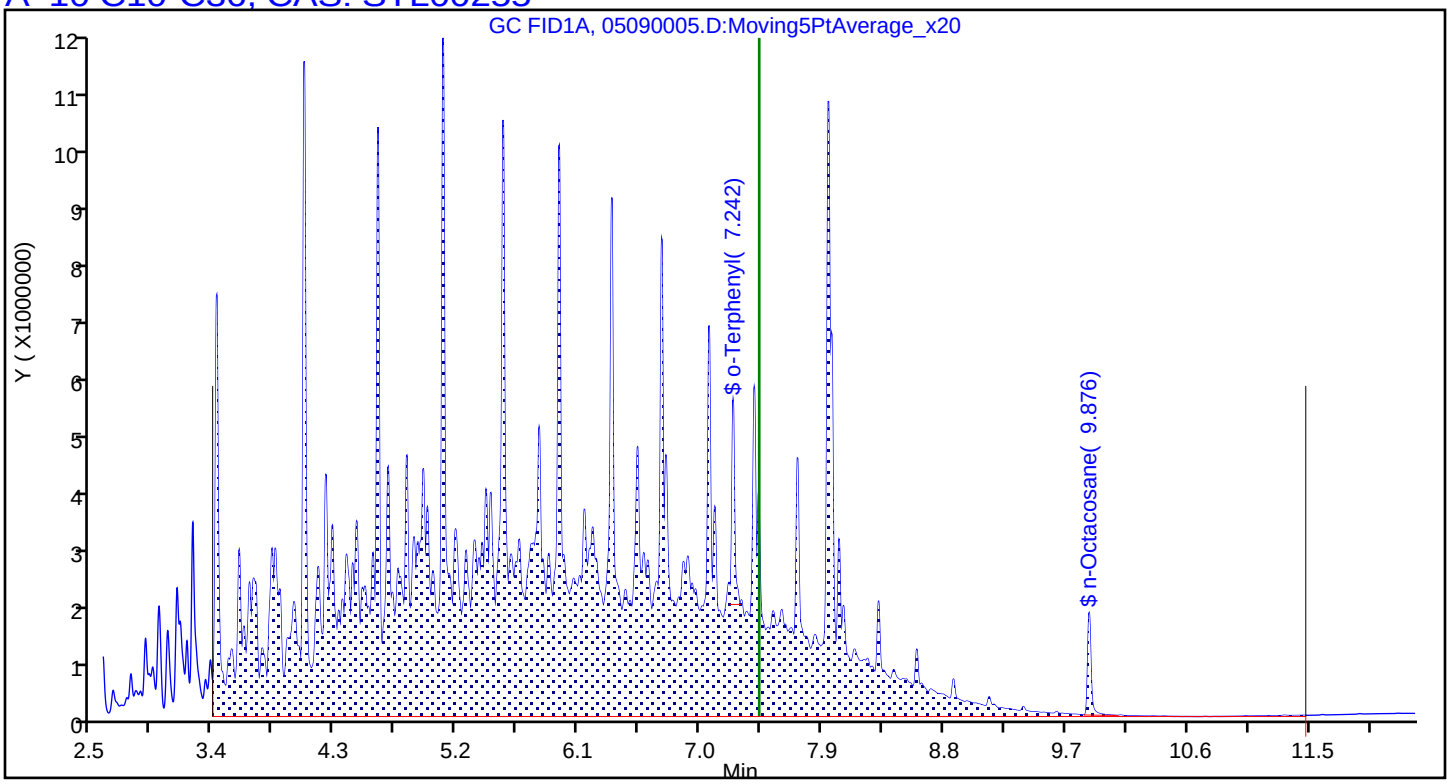


Report Date: 09-May-2022 15:42:08 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090005.D				
Injection Date:	09-May-2022 14:07:52	Instrument ID:	SGC_U2a		
Lims ID:	ICRT				
Client ID:					
Operator ID:	KA	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A_10 C10-C36, CAS: STL00255



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090006.D
Lims ID: STD3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 09-May-2022 14:30:49 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD3
Misc. Info.: 280-0110812-006
Operator ID: KA Instrument ID: SGC_U2a
Sublist: chrom-DRO_U2a*sub19
Raw Data: Smoothed

Method: \\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 09-May-2022 15:42:10 Calib Date: 09-May-2022 15:16:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090008.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX1650

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
A	5 C10-C25						
	6.233	(3.393-9.072)		139116019	1000.0	1021.7	
A	7 C10-C28						
	6.615	(3.393-9.836)		139815008	1000.0	1020.1	
A	8 C10-C32						
	7.100	(3.393-10.807)		139889662	1000.0	1018.2	
$	9 o-Terphenyl						
	7.238	7.242	-0.004	887379	5.00	5.09	
A	10 C10-C36						
	7.435	(3.393-11.477)		140461173	1000.0	1017.0	
$	13 n-Octacosane						
	9.888	9.876	0.012	500885	5.00	4.57	

Reagents:

DRO_L4/CCV_00119 Amount Added: 40.00 Units: uL

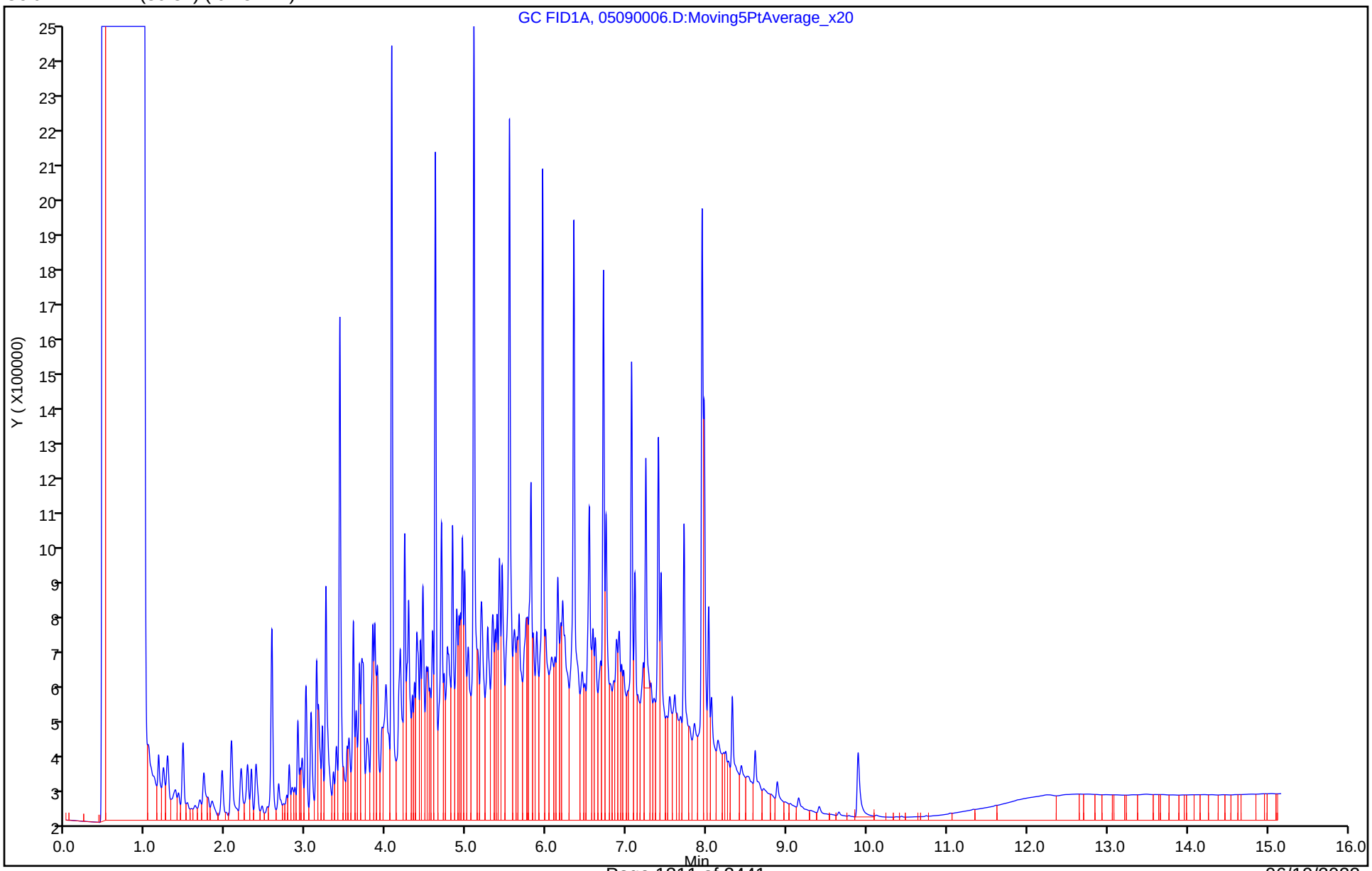
Report Date: 09-May-2022 15:42:10 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090006.D

Injection Date:	09-May-2022 14:30:49	Instrument ID:	SGC_U2a	Operator ID:	KA
Lims ID:	STD3			Worklist Smp#:	6
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)

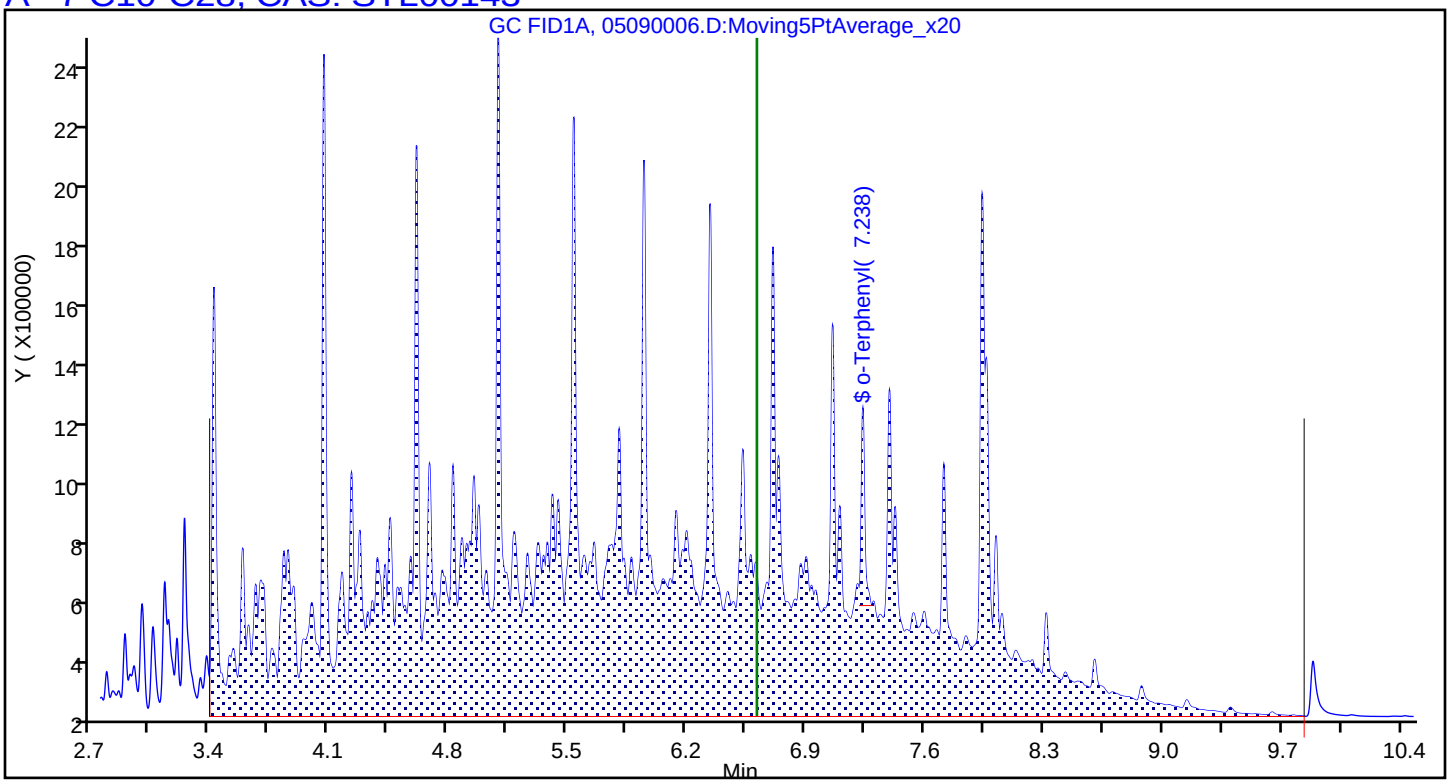


Report Date: 09-May-2022 15:42:10 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090006.D				
Injection Date:	09-May-2022 14:30:49	Instrument ID:	SGC_U2a		
Lims ID:	STD3				
Client ID:					
Operator ID:	KA	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A 7 C10-C28, CAS: STL00143

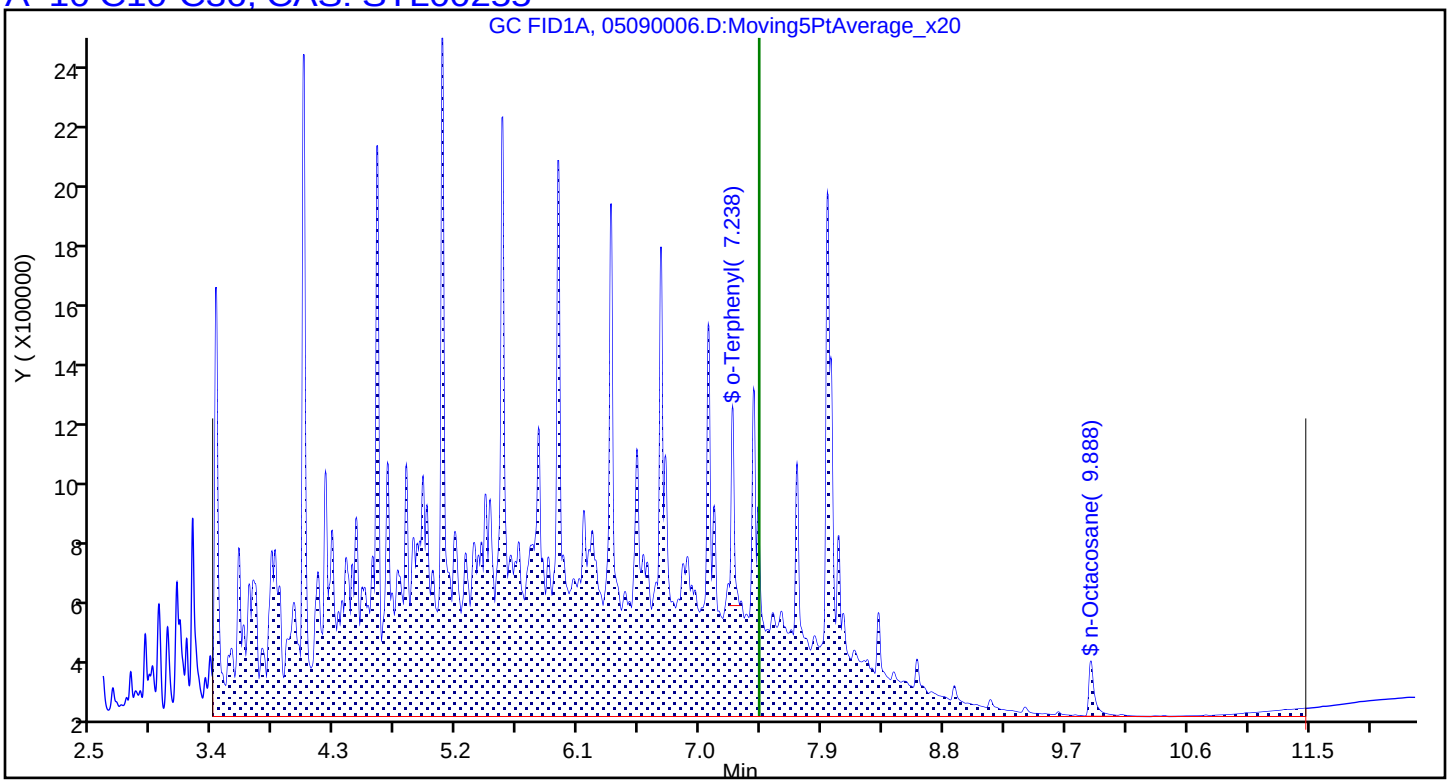


Report Date: 09-May-2022 15:42:11 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090006.D				
Injection Date:	09-May-2022 14:30:49	Instrument ID:	SGC_U2a		
Lims ID:	STD3				
Client ID:					
Operator ID:	KA	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A_10 C10-C36, CAS: STL00255



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090007.D
Lims ID: STD2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 09-May-2022 14:53:48 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD2
Misc. Info.: 280-0110812-007
Operator ID: KA Instrument ID: SGC_U2a
Sublist: chrom-DRO_U2a*sub19
Raw Data: Smoothed

Method: \\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 09-May-2022 15:42:12 Calib Date: 09-May-2022 15:16:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090008.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX1650

First Level Reviewer: appenzellerk Date: 09-May-2022 15:39:27

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
A	5 C10-C25						
	6.233 (3.393-9.072)			35084397	250.0	254.3	
A	7 C10-C28						
	6.615 (3.393-9.836)			35209612	250.0	254.1	
A	8 C10-C32						
	7.100 (3.393-10.807)			35398501	250.0	253.7	
$	9 o-Terphenyl						
	7.242	7.242	0.000	205667	1.25	1.04	
A	10 C10-C36						
	7.435 (3.393-11.477)			36143382	250.0	253.6	
$	13 n-Octacosane						M
	9.903	9.876	0.027	99724	1.25	1.36	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

DRO_L4/CCV_00119 Amount Added: 10.00 Units: uL

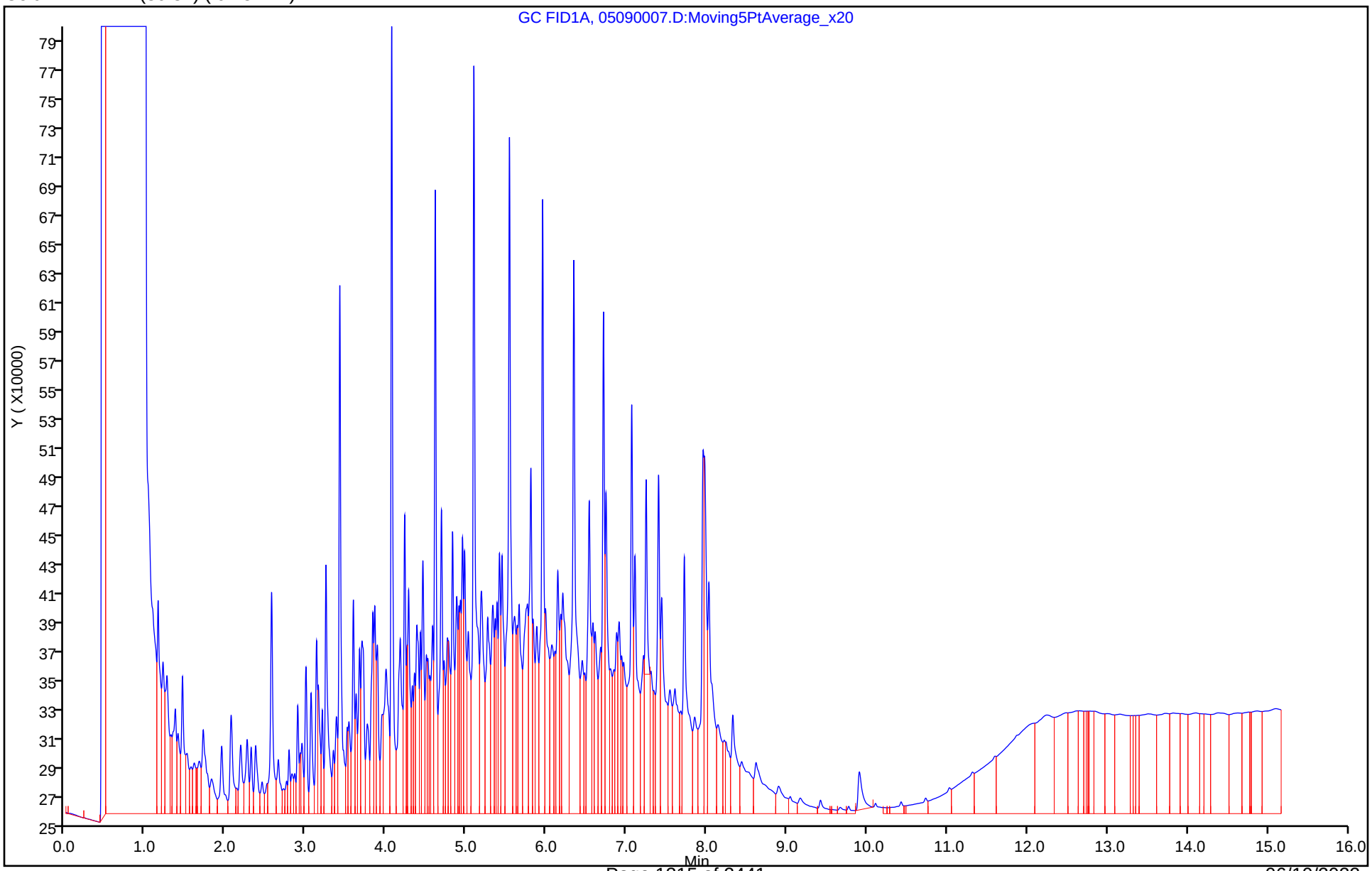
Report Date: 09-May-2022 15:42:12 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090007.D

Injection Date:	09-May-2022 14:53:48	Instrument ID:	SGC_U2a	Operator ID:	KA
Lims ID:	STD2			Worklist Smp#:	7
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)

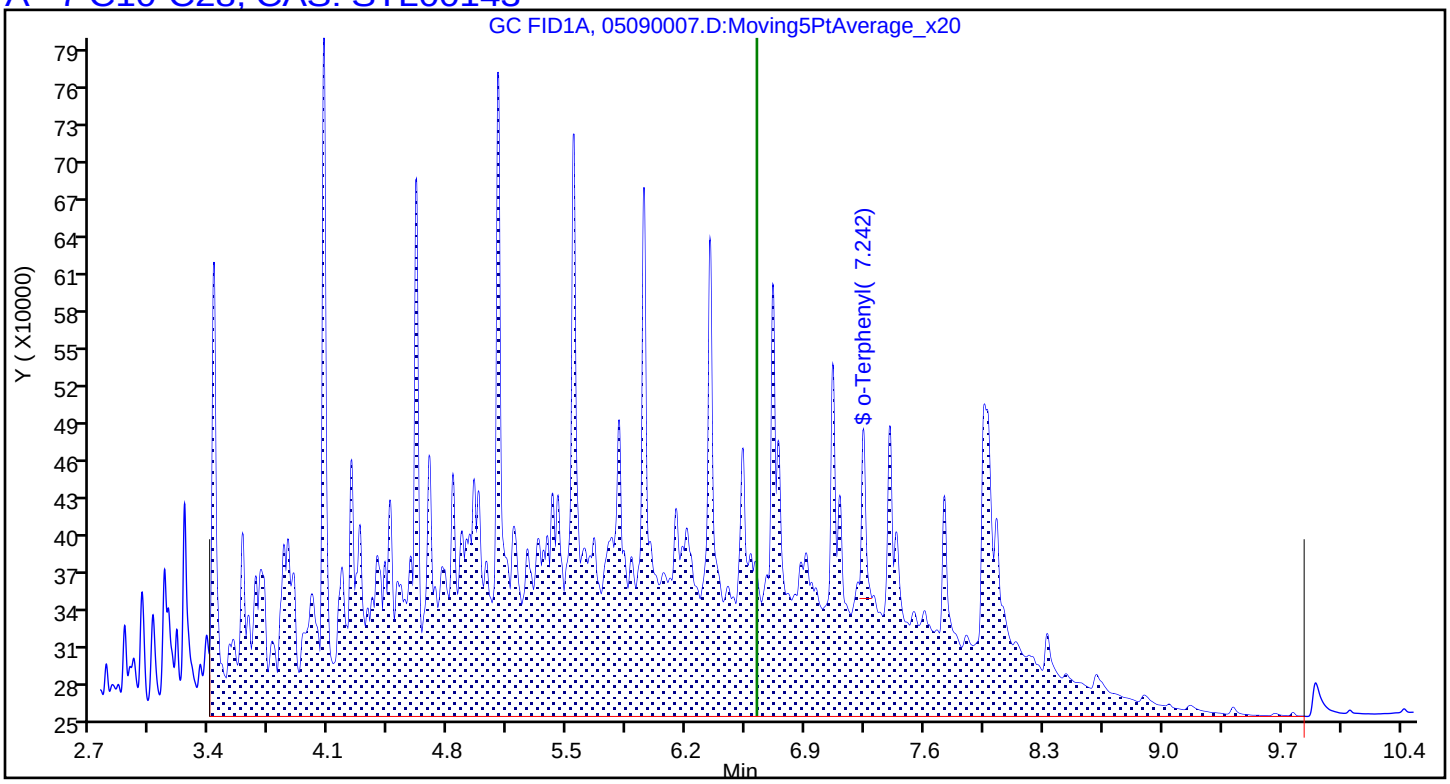


Report Date: 09-May-2022 15:42:12 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090007.D				
Injection Date:	09-May-2022 14:53:48	Instrument ID:	SGC_U2a		
Lims ID:	STD2				
Client ID:					
Operator ID:	KA	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A 7 C10-C28, CAS: STL00143

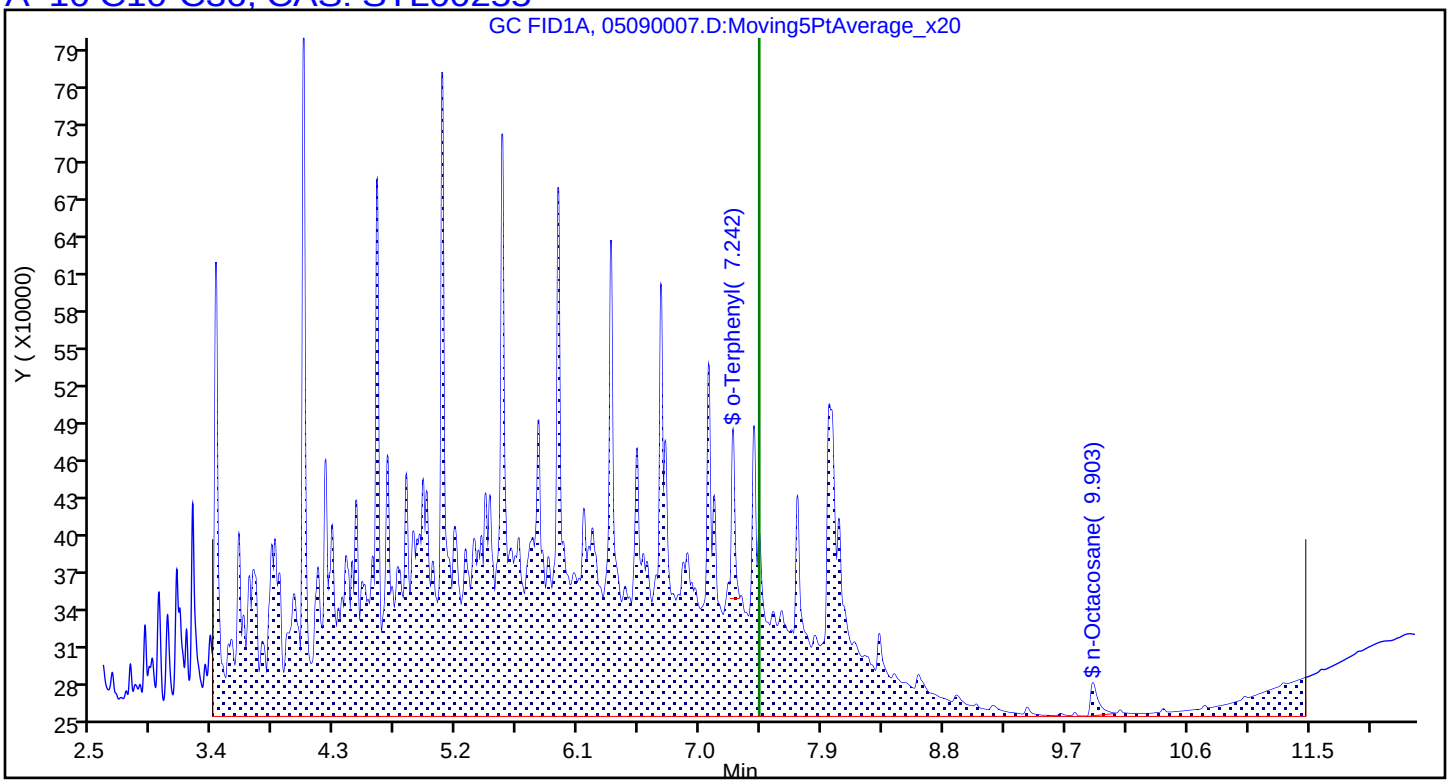


Report Date: 09-May-2022 15:42:13 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090007.D				
Injection Date:	09-May-2022 14:53:48	Instrument ID:	SGC_U2a		
Lims ID:	STD2				
Client ID:					
Operator ID:	KA	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A_10 C10-C36, CAS: STL00255



Manual Integration/User Assign Peak Report

Eurofins Denver

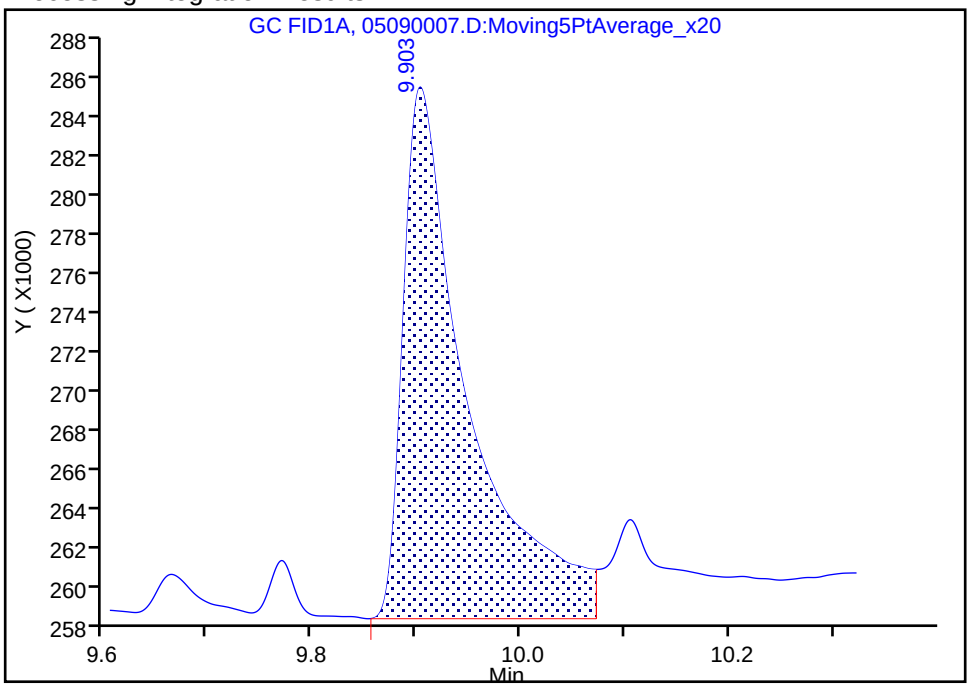
Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090007.D				
Injection Date:	09-May-2022 14:53:48	Instrument ID:	SGC_U2a		
Lims ID:	STD2				
Client ID:					
Operator ID:	KA	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

$ 13 n-Octacosane, CAS: 630-02-4

Signal: 1

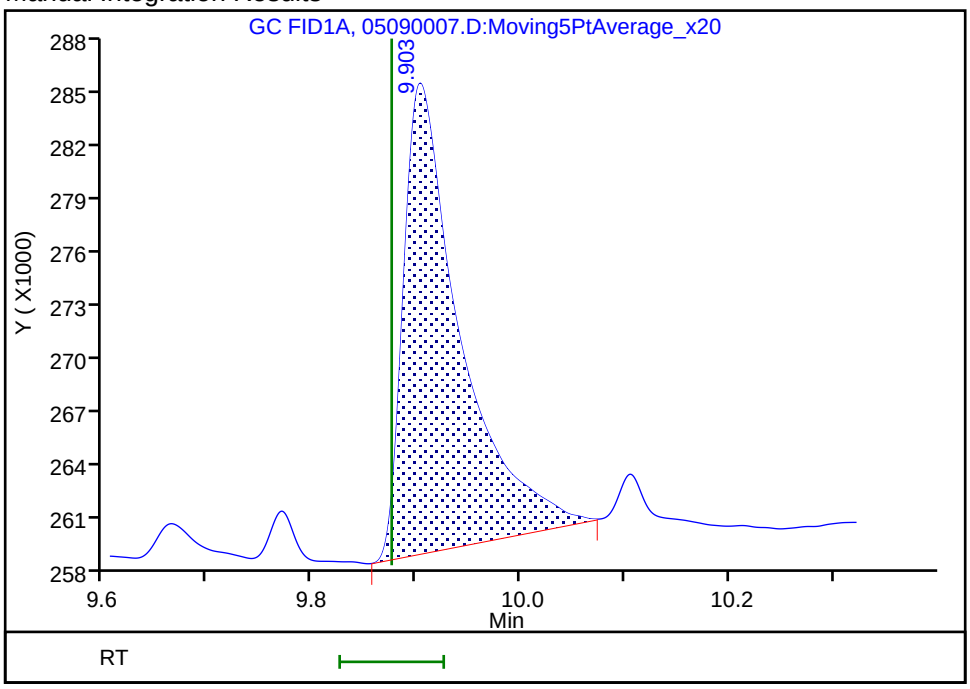
Processing Integration Results

RT: 9.90
Area: 115415
Amount: 1.454864
Amount Units: ug/ml



Manual Integration Results

RT: 9.90
Area: 99724
Amount: 1.362162
Amount Units: ug/ml



Reviewer: appenzellerk, 09-May-2022 15:39:22

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090008.D
Lims ID: STD1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 09-May-2022 15:16:56 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD1
Misc. Info.: 280-0110812-008
Operator ID: KA Instrument ID: SGC_U2a
Sublist: chrom-DRO_U2a*sub19
Raw Data: Smoothed

Method: \\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 09-May-2022 15:58:49 Calib Date: 09-May-2022 15:16:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090008.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX1650

First Level Reviewer: appenzellerk Date: 09-May-2022 15:58:49

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
A	5 C10-C25						
	6.233	(3.393-9.072)		13771298	100.0	97.1	
A	7 C10-C28						
	6.615	(3.393-9.836)		13814193	100.0	97.4	
A	8 C10-C32						
	7.100	(3.393-10.807)		14093610	100.0	97.8	
$	9 o-Terphenyl						
	7.246	7.242	0.004	120876	0.5000	0.5312	
A	10 C10-C36						
	7.435	(3.393-11.477)		14880993	100.0	98.0	
$	13 n-Octacosane						
	9.843	9.876	-0.033	22	0.5000	0.5645	

QC Flag Legend

Processing Flags

Reagents:

DRO_L4/CCV_00119 Amount Added: 4.00 Units: uL

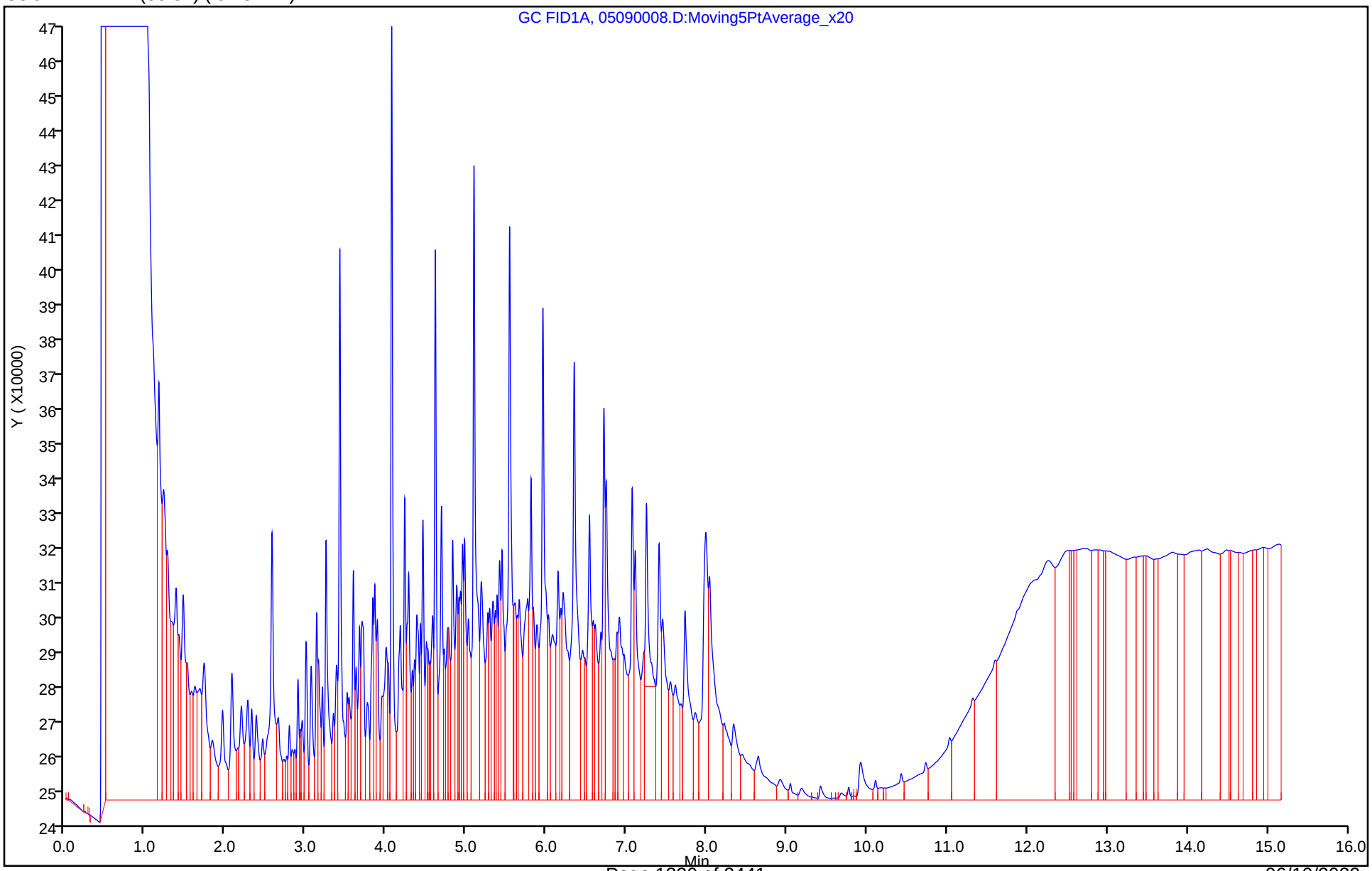
Report Date: 09-May-2022 15:58:49 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090008.D

Injection Date:	09-May-2022 15:16:56	Instrument ID:	SGC_U2a	Operator ID:	KA
Lims ID:	STD1			Worklist Smp#:	8
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)

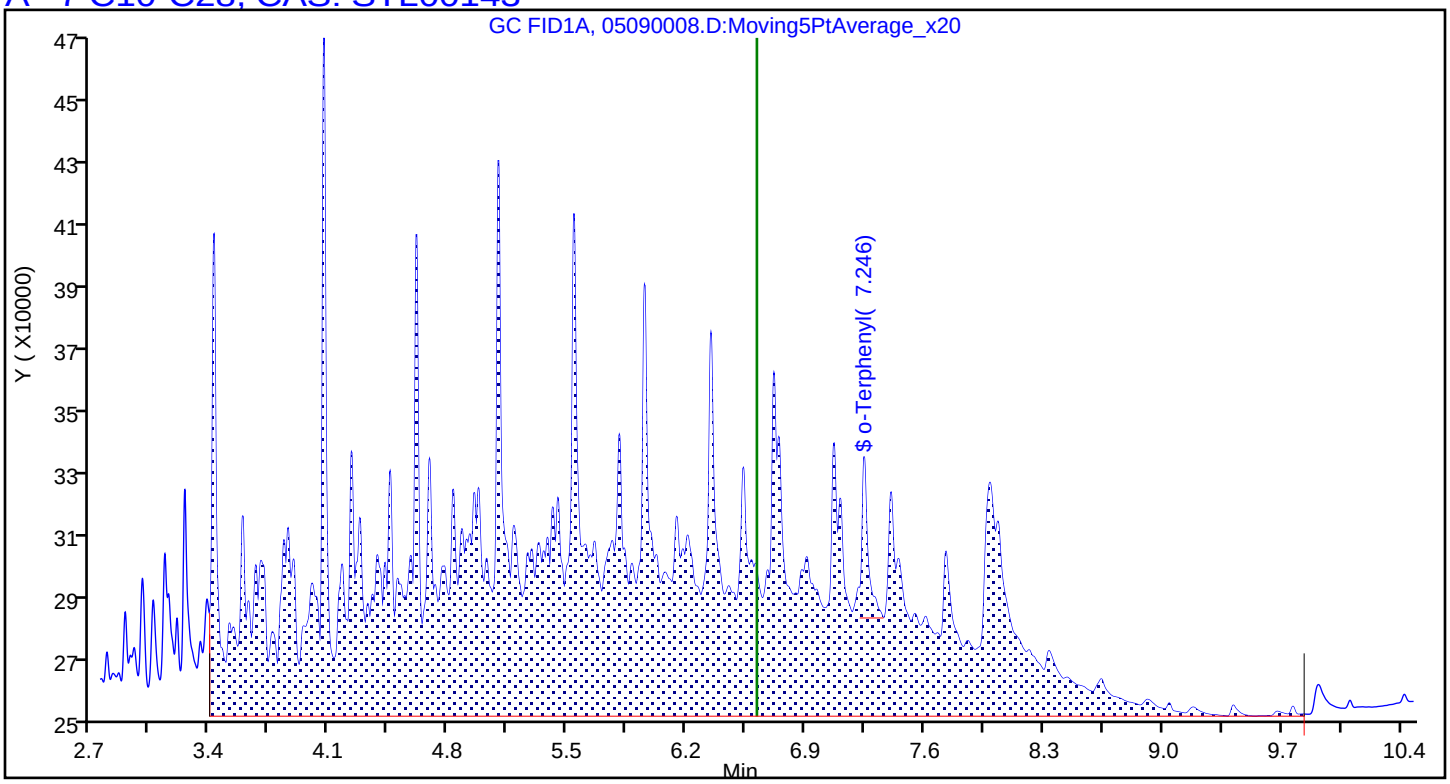


Report Date: 09-May-2022 15:58:49 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090008.D				
Injection Date:	09-May-2022 15:16:56	Instrument ID:	SGC_U2a		
Lims ID:	STD1				
Client ID:					
Operator ID:	KA	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A 7 C10-C28, CAS: STL00143

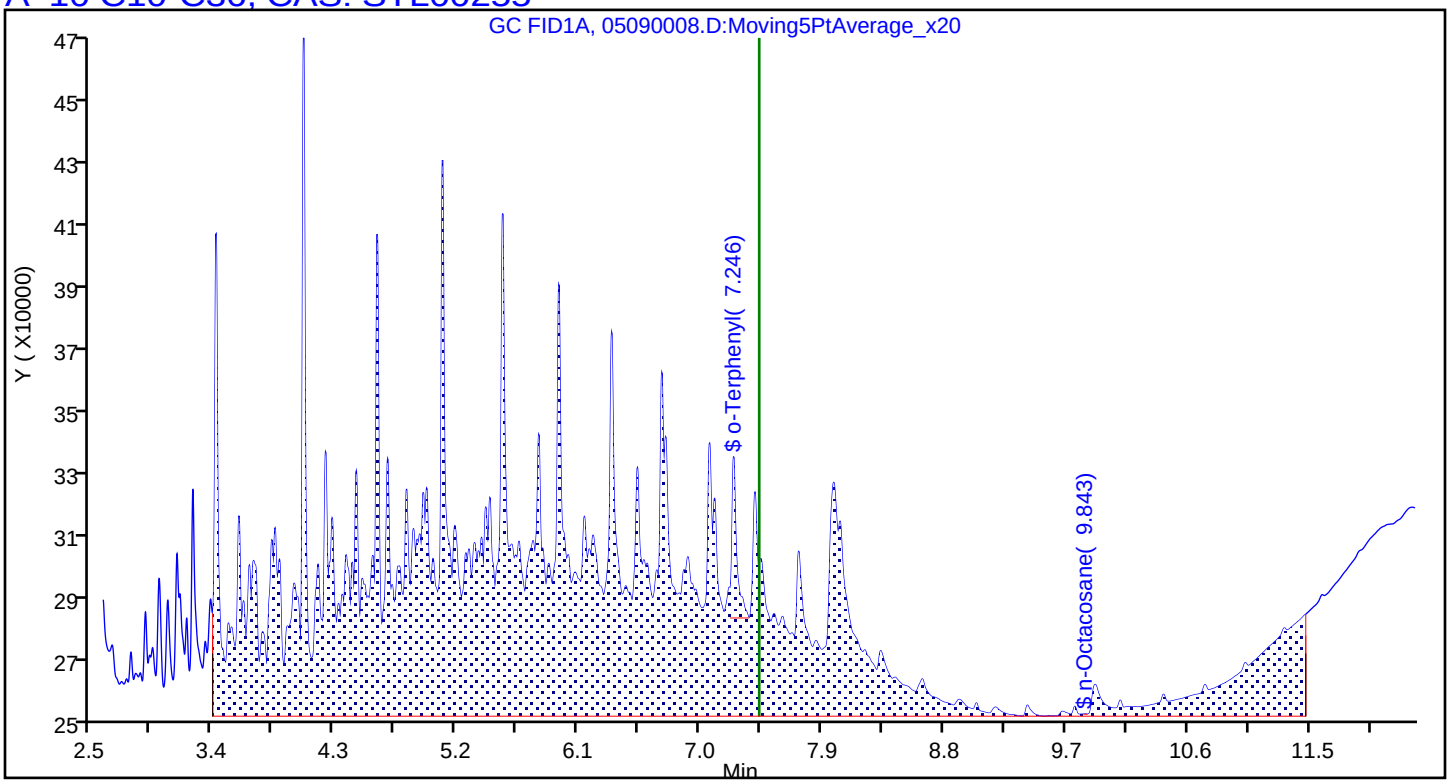


Report Date: 09-May-2022 15:58:49 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090008.D				
Injection Date:	09-May-2022 15:16:56	Instrument ID:	SGC_U2a		
Lims ID:	STD1				
Client ID:					
Operator ID:	KA	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A_10 C10-C36, CAS: STL00255



FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: ICV 280-574280/9 Calibration Date: 05/09/2022 15:39

Instrument ID: SGC_U2a Calib Start Date: 05/09/2022 12:59

GC Column: RTX-1 (30.32) ID: 0.25(mm) Calib End Date: 05/09/2022 15:16

Lab File ID: 05090009.D Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
C10-C28	Lin1		139380		2020	1980	1.9	20.0
C10-C36	Lin1		138565		2020	2000	0.9	20.0
o-Terphenyl (Surr)	Lin1		182216		21.5	20.0	7.5	20.0
n-Octacosane	Lin1		112771		18.6	20.0	-7.0	20.0

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: ICV 280-574280/9 Calibration Date: 05/09/2022 15:39

Instrument ID: SGC_U2a Calib Start Date: 05/09/2022 12:59

GC Column: RTX-1 (30.32) ID: 0.25(mm) Calib End Date: 05/09/2022 15:16

Lab File ID: 05090009.D

Analyte	RT	RT WINDOW	
		FROM	TO
C10-C28	6.62	3.39	9.84
C10-C36	7.44	3.39	11.48
o-Terphenyl (Surr)	7.24	7.19	7.29
n-Octacosane	9.88	9.83	9.93

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090009.D
Lims ID: ICV DRO
Client ID:
Sample Type: ICV
Inject. Date: 09-May-2022 15:39:58 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV DRO
Misc. Info.: 280-0110812-009
Operator ID: KA Instrument ID: SGC_U2a
Sublist:
Raw Data: Smoothed

Method: \\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 09-May-2022 15:58:49 Calib Date: 09-May-2022 15:16:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090008.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX1650

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
A 5 C10-C25	6.233	(3.393-9.072)		275039483	1962.0	2024.4	
A 7 C10-C28	6.615	(3.393-9.836)		276528960	1984.0	2021.1	
A 8 C10-C32	7.100	(3.393-10.807)		276645005	1992.0	2018.7	
$ 9 o-Terphenyl	7.240	7.242	-0.002	3644326	20.0	21.5	
A 10 C10-C36	7.435	(3.393-11.477)		277130630	2000.0	2017.1	
$ 13 n-Octacosane	9.878	9.876	0.002	2255415	20.0	18.6	

Reagents:

DRO_SS_00034 Amount Added: 200.00 Units: uL

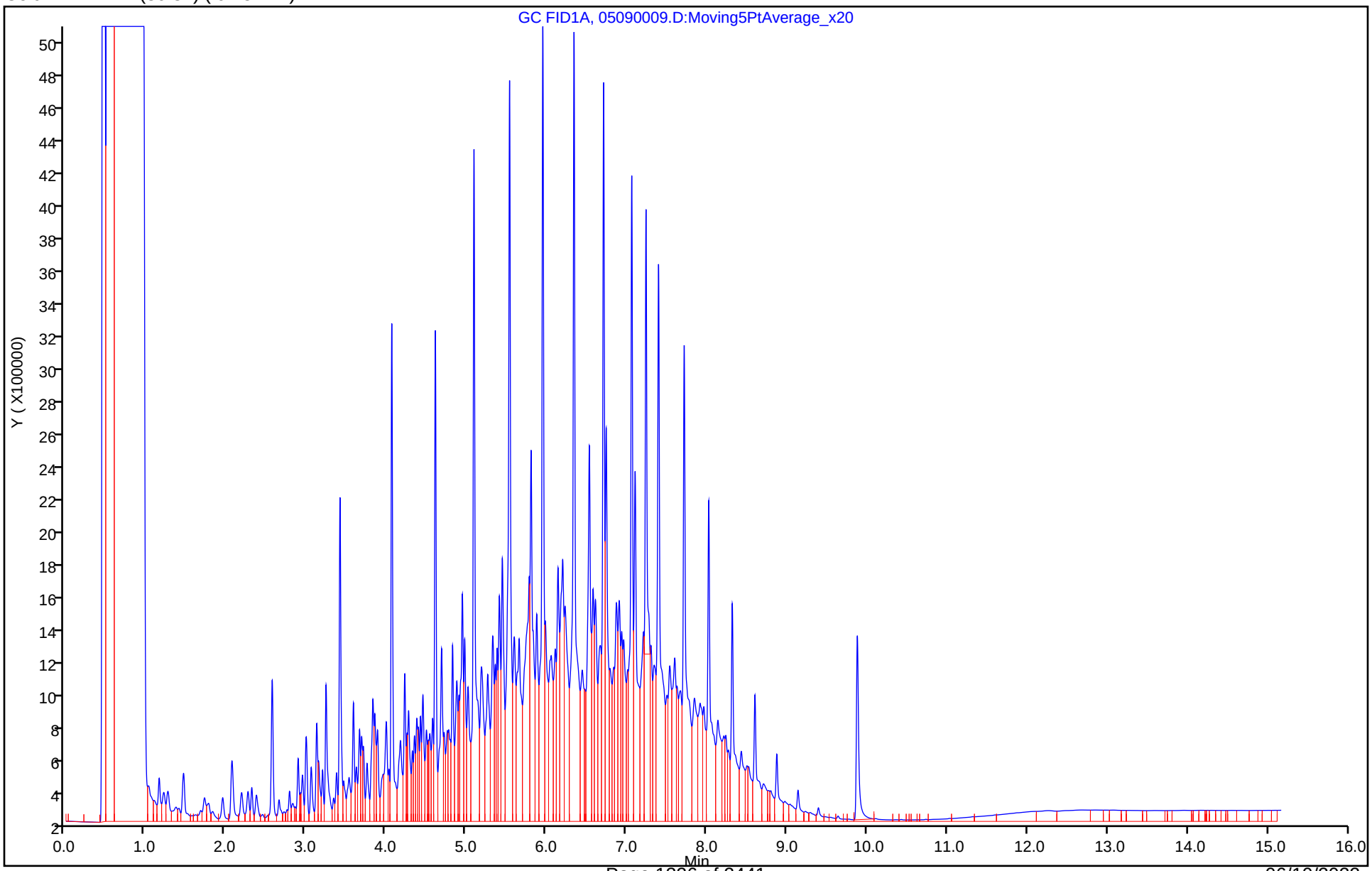
Report Date: 09-May-2022 16:03:32 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090009.D

Injection Date:	09-May-2022 15:39:58	Instrument ID:	SGC_U2a	Operator ID:	KA
Lims ID:	ICV DRO			Worklist Smp#:	9
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)

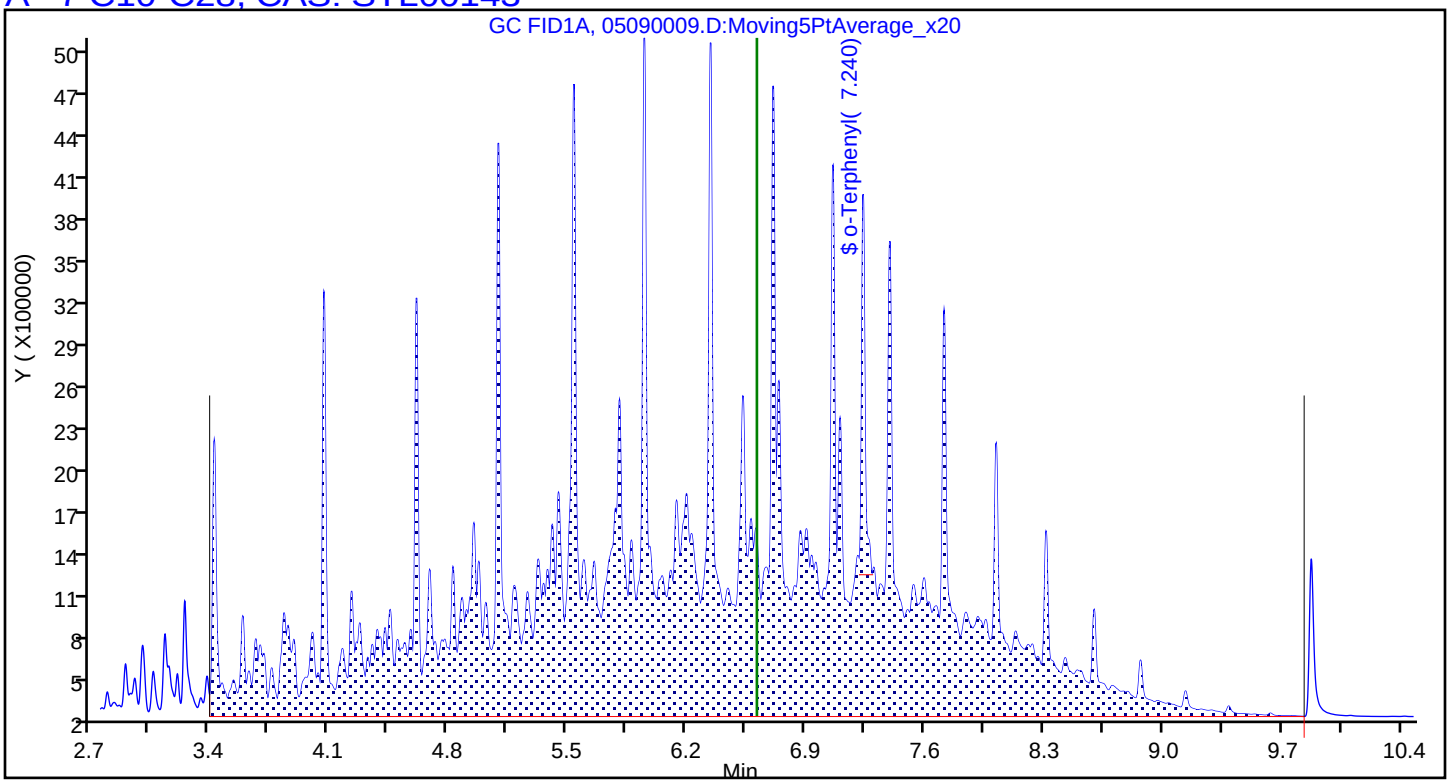


Report Date: 09-May-2022 16:03:32 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090009.D				
Injection Date:	09-May-2022 15:39:58	Instrument ID:	SGC_U2a		
Lims ID:	ICV DRO				
Client ID:					
Operator ID:	KA	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A 7 C10-C28, CAS: STL00143

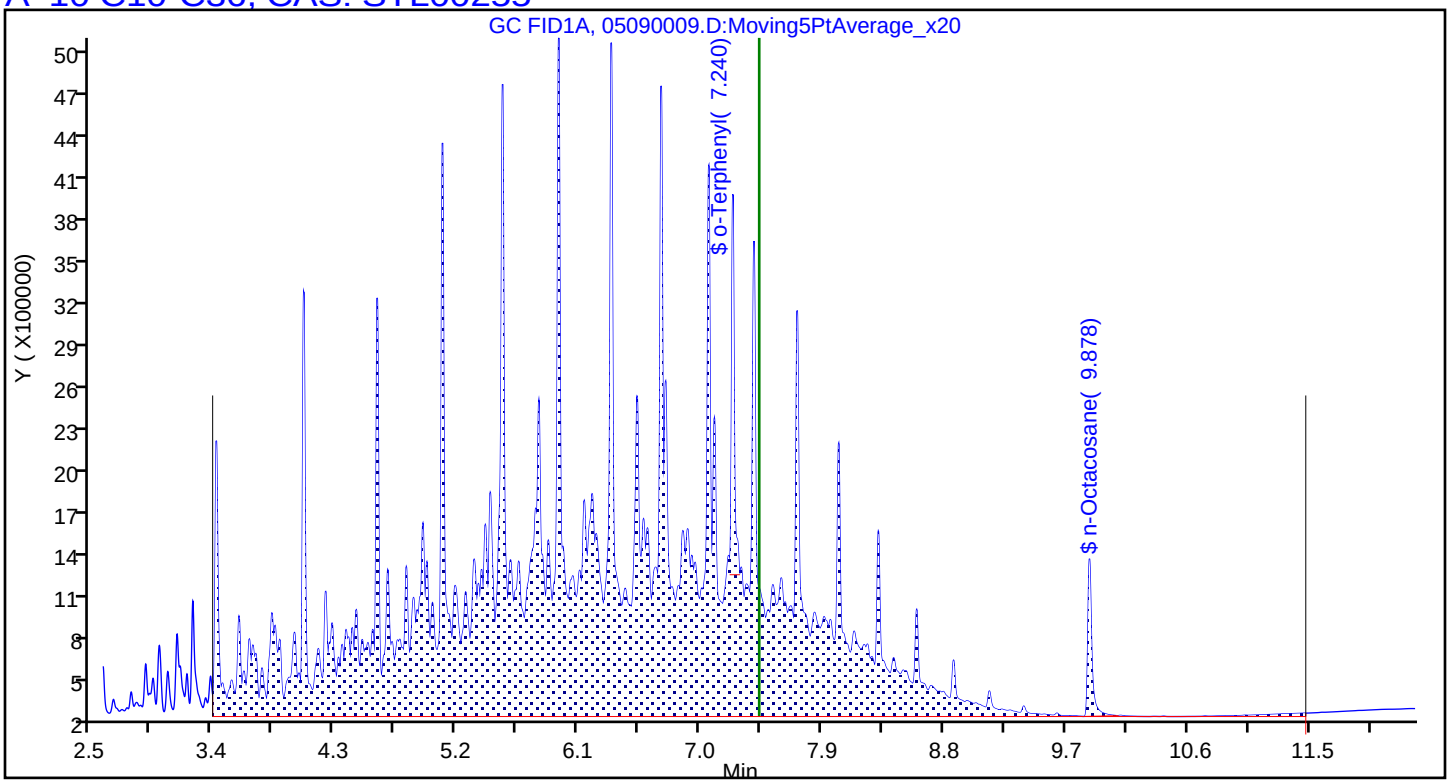


Report Date: 09-May-2022 16:03:32 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090009.D				
Injection Date:	09-May-2022 15:39:58	Instrument ID:	SGC_U2a		
Lims ID:	ICV DRO				
Client ID:					
Operator ID:	KA	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A_10 C10-C36, CAS: STL00255



FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCVRT 280-576526/4 | Calibration Date: 05/30/2022 17:20

Instrument ID: SGC_U2a | Calib Start Date: 05/09/2022 12:59

GC Column: RTX-1 (30.32) ID: 0.25(mm) | Calib End Date: 05/09/2022 15:16

Lab File ID: 05300004.D | Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
C10-C28	Lin1		134191		4910	5000	-1.8	20.0
C10-C36	Lin1		134388		4910	5000	-1.9	20.0
o-Terphenyl (Surr)	Lin1		174015		25.7	25.0	2.8	20.0
n-Octacosane	Lin1		109386		22.4	25.0	-10.2	20.0

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCVRT 280-576526/4 Calibration Date: 05/30/2022 17:20

Instrument ID: SGC_U2a Calib Start Date: 05/09/2022 12:59

GC Column: RTX-1 (30.32) ID: 0.25(mm) Calib End Date: 05/09/2022 15:16

Lab File ID: 05300004.D

Analyte	RT	RT WINDOW	
		FROM	TO
C10-C28	6.60	3.37	9.83
C10-C36	7.48	3.37	11.60
o-Terphenyl (Surr)	7.24	7.19	7.29
n-Octacosane	9.87	9.82	9.92

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220530-111452.b\05300004.D
Lims ID: CCVRT
Client ID:
Sample Type: CCVRT
Inject. Date: 30-May-2022 17:20:52 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCVRT
Misc. Info.: 280-0111452-004
Operator ID: KA Instrument ID: SGC_U2a
Sublist: chrom-DRO_U2a*sub19
Raw Data: Smoothed

Method: \\chromfs\Denver\ChromData\SGC_U2a\20220530-111452.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 31-May-2022 13:25:46 Calib Date: 09-May-2022 15:16:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090008.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX1640

First Level Reviewer: appenzellerk Date: 31-May-2022 13:08:29

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
A	5 C10-C25						
	6.215	(3.365-9.066)		667015304	5000.1	4915.8	
A	7 C10-C28						
	6.597	(3.365-9.828)		670963762	5000.1	4909.3	
A	8 C10-C32						
	7.052	(3.365-10.738)		671367901	5000.1	4906.5	
$	9 o-Terphenyl						
	7.236	7.236	0.000	4350369	25.0	25.7	
A	10 C10-C36						
	7.481	(3.365-11.597)		671949113	5000.1	4906.4	
$	13 n-Octacosane						
	9.868	9.868	0.000	2734639	25.0	22.4	

QC Flag Legend
Processing Flags

Reagents:
DRO_L4/CCV_00120 Amount Added: 200.00 Units: uL

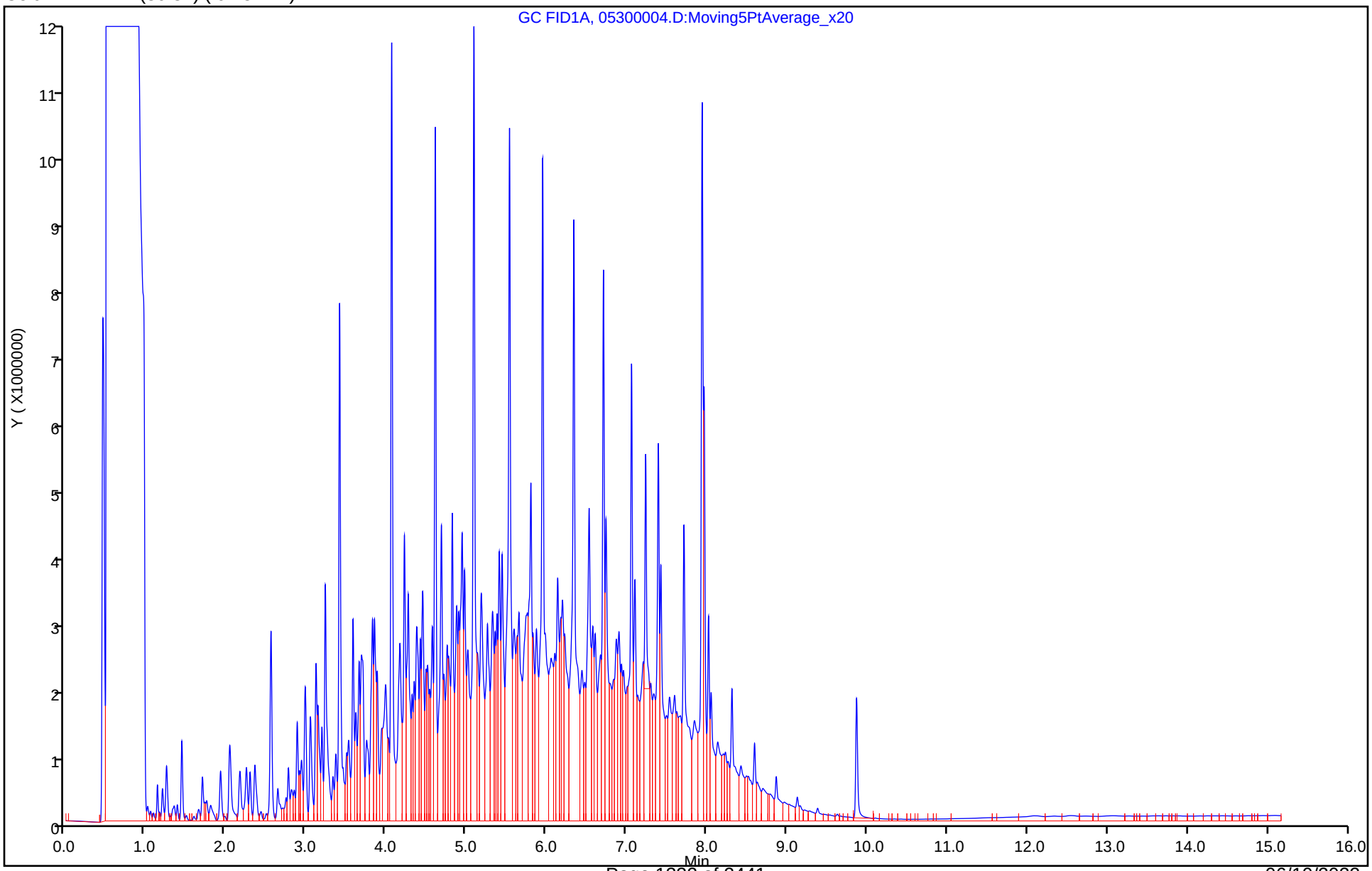
Report Date: 31-May-2022 13:25:46 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220530-111452.b\05300004.D

Injection Date:	30-May-2022 17:20:52	Instrument ID:	SGC_U2a	Operator ID:	KA
Lims ID:	CCVRT			Worklist Smp#:	4
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)

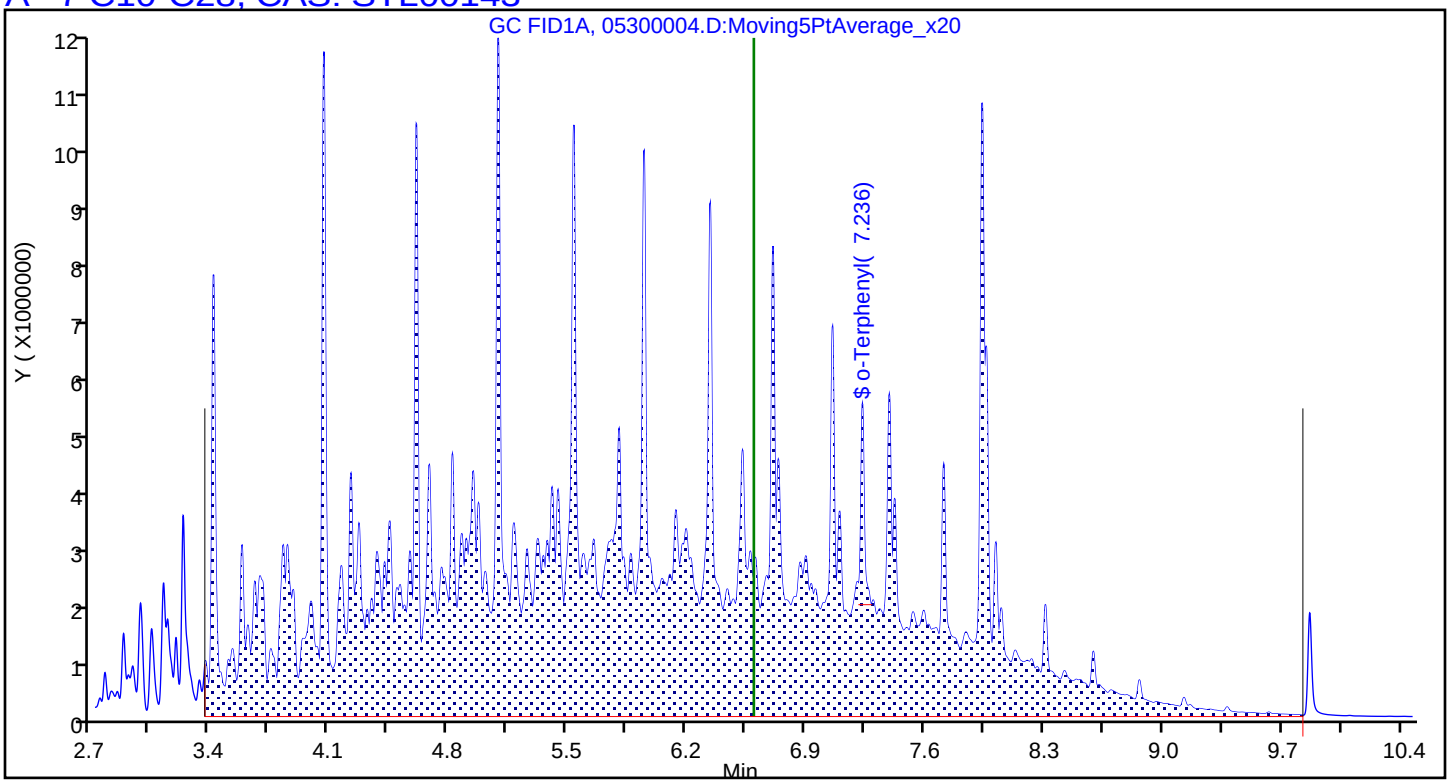


Report Date: 31-May-2022 13:25:46 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20220530-111452.b\05300004.D				
Injection Date:	30-May-2022 17:20:52	Instrument ID:	SGC_U2a		
Lims ID:	CCVRT				
Client ID:					
Operator ID:	KA	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A 7 C10-C28, CAS: STL00143

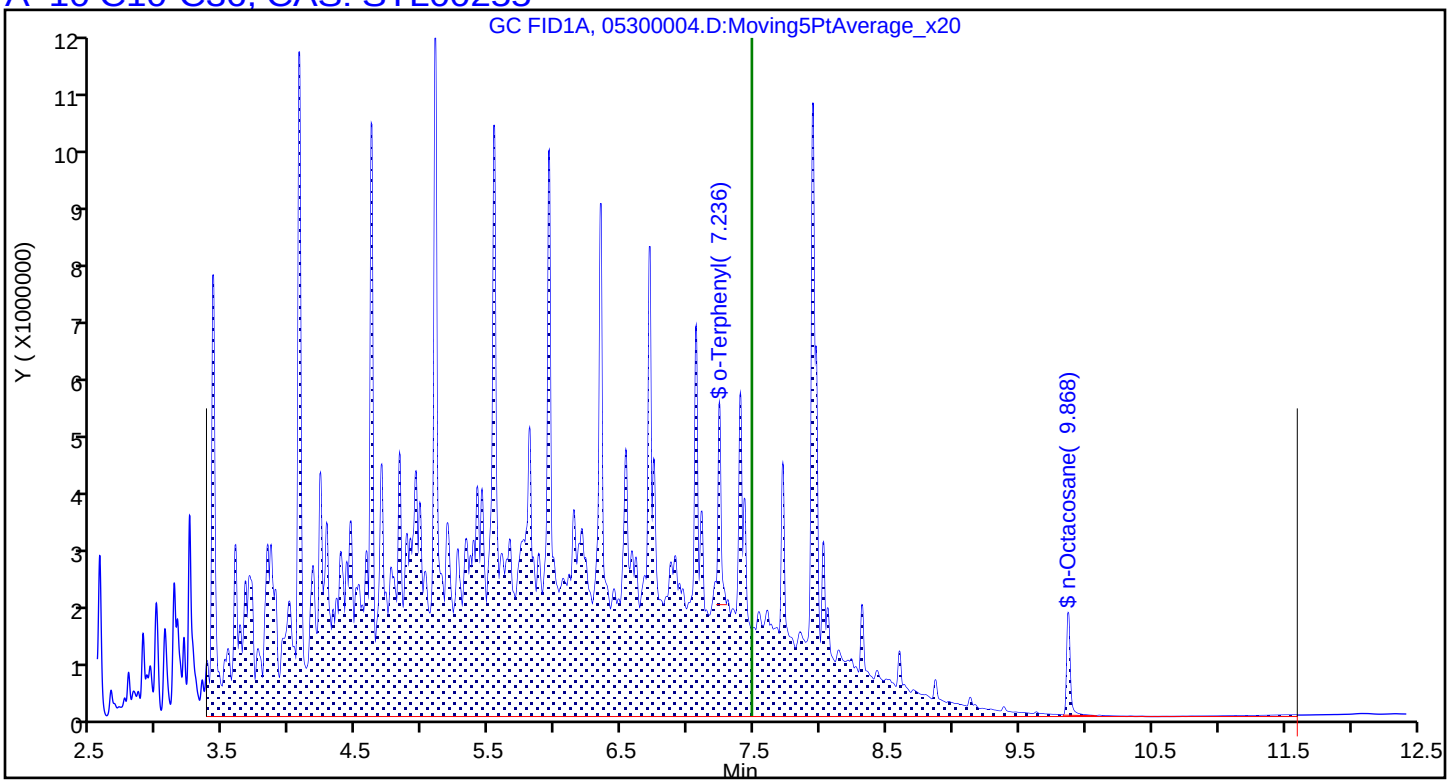


Report Date: 31-May-2022 13:25:47 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20220530-111452.b\05300004.D				
Injection Date:	30-May-2022 17:20:52	Instrument ID:	SGC_U2a		
Lims ID:	CCVRT				
Client ID:					
Operator ID:	KA	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A_10 C10-C36, CAS: STL00255



FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576526/21 Calibration Date: 05/30/2022 23:46

Instrument ID: SGC_U2a Calib Start Date: 05/09/2022 12:59

GC Column: RTX-1 (30.32) ID: 0.25(mm) Calib End Date: 05/09/2022 15:16

Lab File ID: 05300021.D Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
C10-C28	Lin1		140090		5130	5000	2.5	20.0
C10-C36	Lin1		140270		5120	5000	2.4	20.0
o-Terphenyl (Surr)	Lin1		181593		26.8	25.0	7.3	20.0
n-Octacosane	Lin1		115475		23.7	25.0	-5.4	20.0

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576526/21 Calibration Date: 05/30/2022 23:46

Instrument ID: SGC_U2a Calib Start Date: 05/09/2022 12:59

GC Column: RTX-1 (30.32) ID: 0.25(mm) Calib End Date: 05/09/2022 15:16

Lab File ID: 05300021.D

Analyte	RT	RT WINDOW	
		FROM	TO
C10-C28	6.60	3.37	9.83
C10-C36	7.48	3.37	11.60
o-Terphenyl (Surr)	7.24	7.19	7.29
n-Octacosane	9.86	9.82	9.92

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220530-111452.b\05300021.D
Lims ID: CCV DRO
Client ID:
Sample Type: CCV
Inject. Date: 30-May-2022 23:46:10 ALS Bottle#: 21 Worklist Smp#: 21
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV DRO
Misc. Info.: 280-0111452-021
Operator ID: KA Instrument ID: SGC_U2a
Sublist: chrom-DRO_U2a*sub19
Raw Data: Smoothed

Method: \\chromfs\Denver\ChromData\SGC_U2a\20220530-111452.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 31-May-2022 13:26:10 Calib Date: 09-May-2022 15:16:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090008.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX1640

First Level Reviewer: appenzellerk Date: 31-May-2022 13:15:02

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
A	5 C10-C25						
	6.215	(3.365-9.066)		696322552	5000.1	5132.0	
A	7 C10-C28						
	6.597	(3.365-9.828)		700456270	5000.1	5125.2	
A	8 C10-C32						
	7.052	(3.365-10.738)		700905371	5000.1	5122.6	
$	9 o-Terphenyl						
	7.235	7.236	-0.001	4539815	25.0	26.8	
A	10 C10-C36						
	7.481	(3.365-11.597)		701354650	5000.1	5121.6	
$	13 n-Octacosane						
	9.861	9.868	-0.007	2886883	25.0	23.7	

QC Flag Legend
Processing Flags

Reagents:
DRO_L4/CCV_00120 Amount Added: 200.00 Units: uL

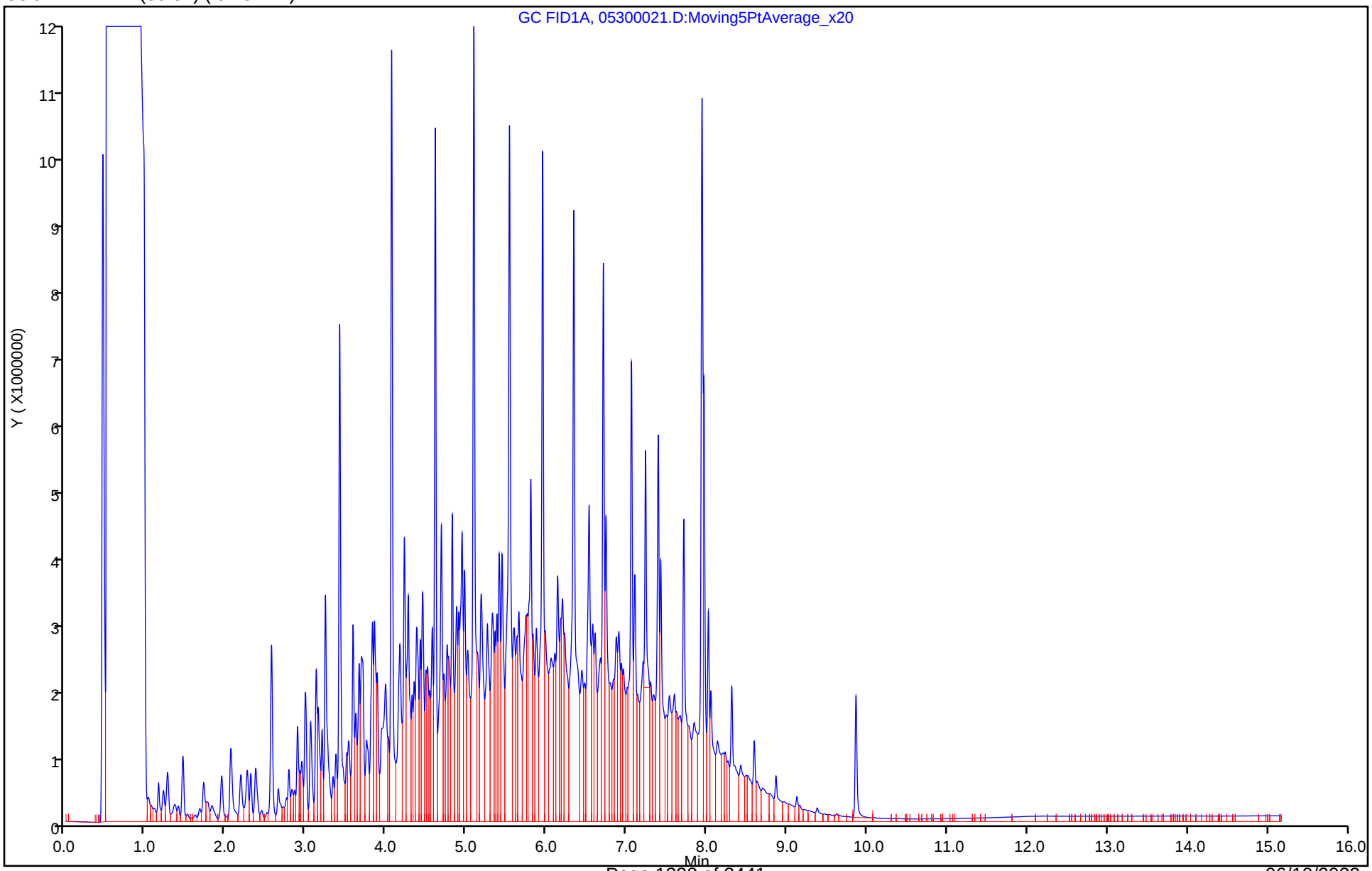
Report Date: 31-May-2022 13:26:11 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220530-111452.b\05300021.D

Injection Date:	30-May-2022 23:46:10	Instrument ID:	SGC_U2a	Operator ID:	KA
Lims ID:	CCV DRO			Worklist Smp#:	21
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)

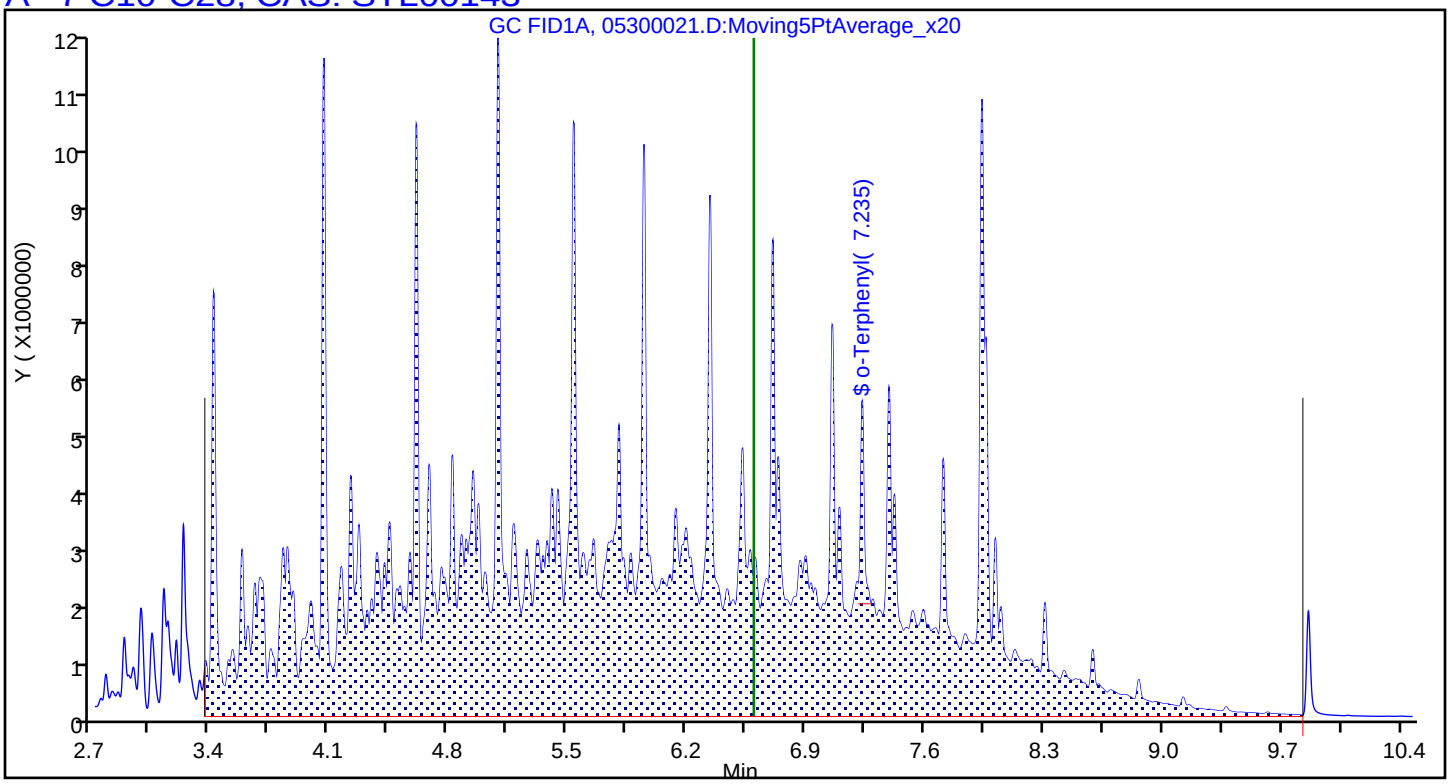


Report Date: 31-May-2022 13:26:11 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20220530-111452.b\05300021.D				
Injection Date:	30-May-2022 23:46:10	Instrument ID:	SGC_U2a		
Lims ID:	CCV DRO				
Client ID:					
Operator ID:	KA	ALS Bottle#:	21	Worklist Smp#:	21
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 7 C10-C28, CAS: STL00143

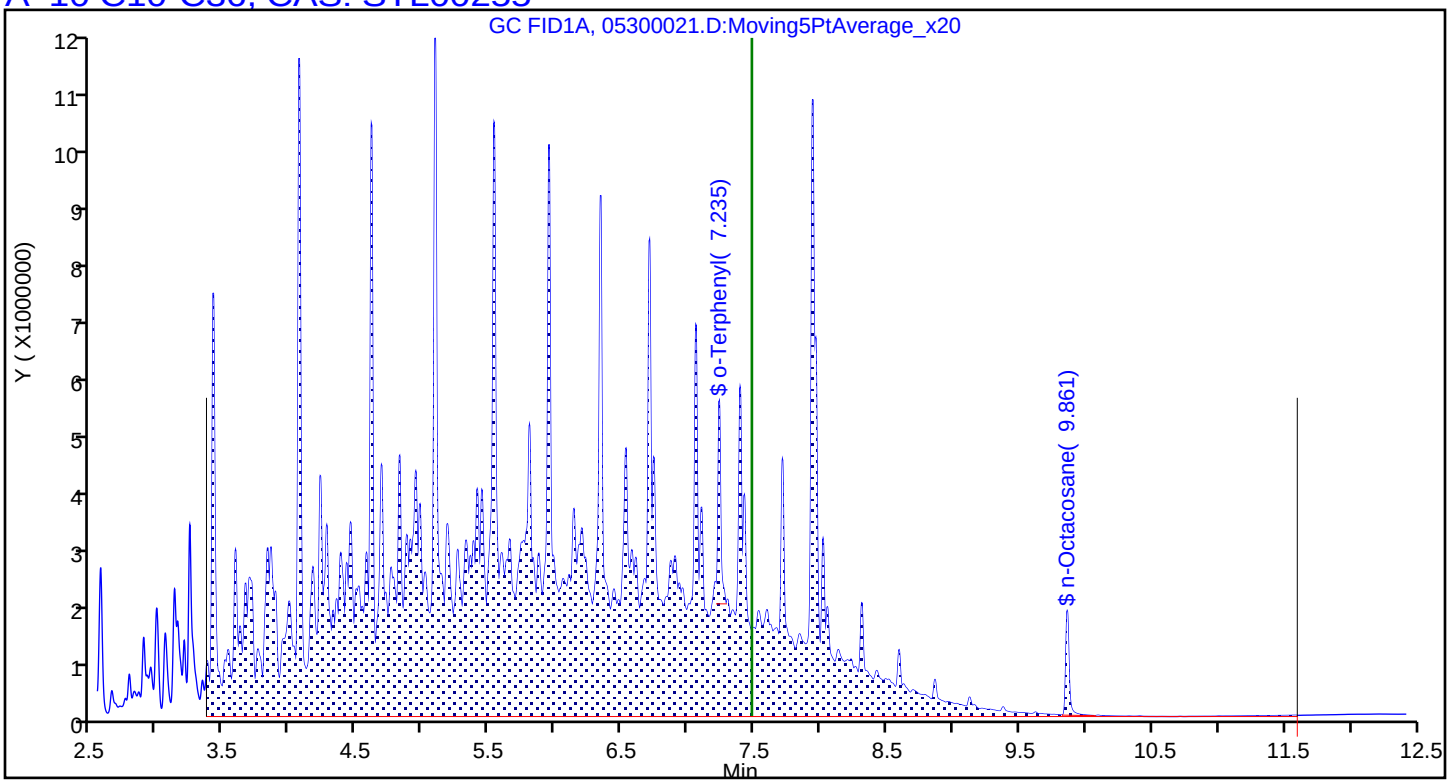


Report Date: 31-May-2022 13:26:11 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20220530-111452.b\05300021.D				
Injection Date:	30-May-2022 23:46:10	Instrument ID:	SGC_U2a		
Lims ID:	CCV DRO				
Client ID:					
Operator ID:	KA	ALS Bottle#:	21	Worklist Smp#:	21
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_10 C10-C36, CAS: STL00255



FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCVRT 280-577101/4 Calibration Date: 06/03/2022 16:23

Instrument ID: SGC_U2a Calib Start Date: 05/09/2022 12:59

GC Column: RTX-1 (30.32) ID: 0.25(mm) Calib End Date: 05/09/2022 15:16

Lab File ID: 06030004.D Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
C10-C28	Lin1		126830		4640	5000	-7.2	20.0
C10-C36	Lin1		127016		4640	5000	-7.3	20.0
o-Terphenyl (Surr)	Lin1		167027		24.7	25.0	-1.4	20.0
n-Octacosane	Lin1		106694		21.9	25.0	-12.4	20.0

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCVRT 280-577101/4 Calibration Date: 06/03/2022 16:23

Instrument ID: SGC_U2a Calib Start Date: 05/09/2022 12:59

GC Column: RTX-1 (30.32) ID: 0.25(mm) Calib End Date: 05/09/2022 15:16

Lab File ID: 06030004.D

Analyte	RT	RT WINDOW	
		FROM	TO
C10-C28	6.59	3.35	9.82
C10-C36	7.40	3.35	11.45
o-Terphenyl (Surr)	7.24	7.19	7.29
n-Octacosane	9.86	9.81	9.91

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220603-111568.b\06030004.D
Lims ID: CCVRT
Client ID:
Sample Type: CCVRT
Inject. Date: 03-Jun-2022 16:23:12 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCVRT
Misc. Info.: 280-0111568-004
Operator ID: KA Instrument ID: SGC_U2a
Sublist: chrom-DRO_U2a*sub19
Raw Data: Smoothed

Method: \\chromfs\Denver\ChromData\SGC_U2a\20220603-111568.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 06-Jun-2022 12:14:34 Calib Date: 09-May-2022 15:16:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090008.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX1659

First Level Reviewer: appenzellerk Date: 06-Jun-2022 12:11:55

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
A	5 C10-C25						
	6.208	(3.348-9.067)		630720107	5000.1	4648.1	
A	7 C10-C28						
	6.586	(3.348-9.824)		634155977	5000.1	4639.7	
A	8 C10-C32						
	7.039	(3.348-10.730)		634437496	5000.1	4636.4	
$	9 o-Terphenyl						
	7.235	7.235	0.000	4175668	25.0	24.7	
A	10 C10-C36						
	7.400	(3.348-11.452)		635087782	5000.1	4636.7	
$	13 n-Octacosane						
	9.864	9.864	0.000	2667339	25.0	21.9	

QC Flag Legend
Processing Flags

Reagents:
DRO_L4/CCV_00120 Amount Added: 200.00 Units: uL

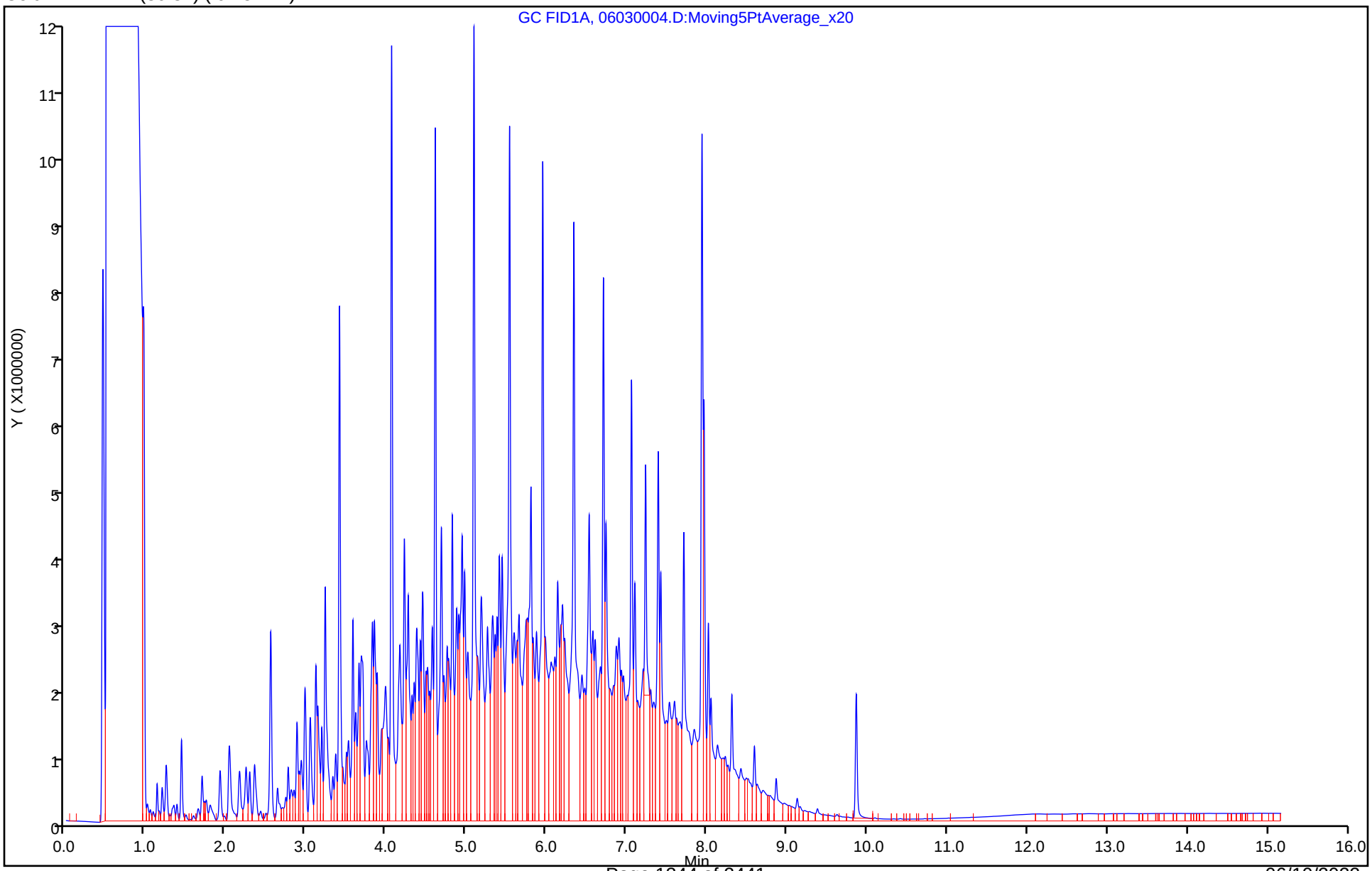
Report Date: 06-Jun-2022 12:14:35 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220603-111568.b\06030004.D

Injection Date:	03-Jun-2022 16:23:12	Instrument ID:	SGC_U2a	Operator ID:	KA
Lims ID:	CCVRT			Worklist Smp#:	4
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)

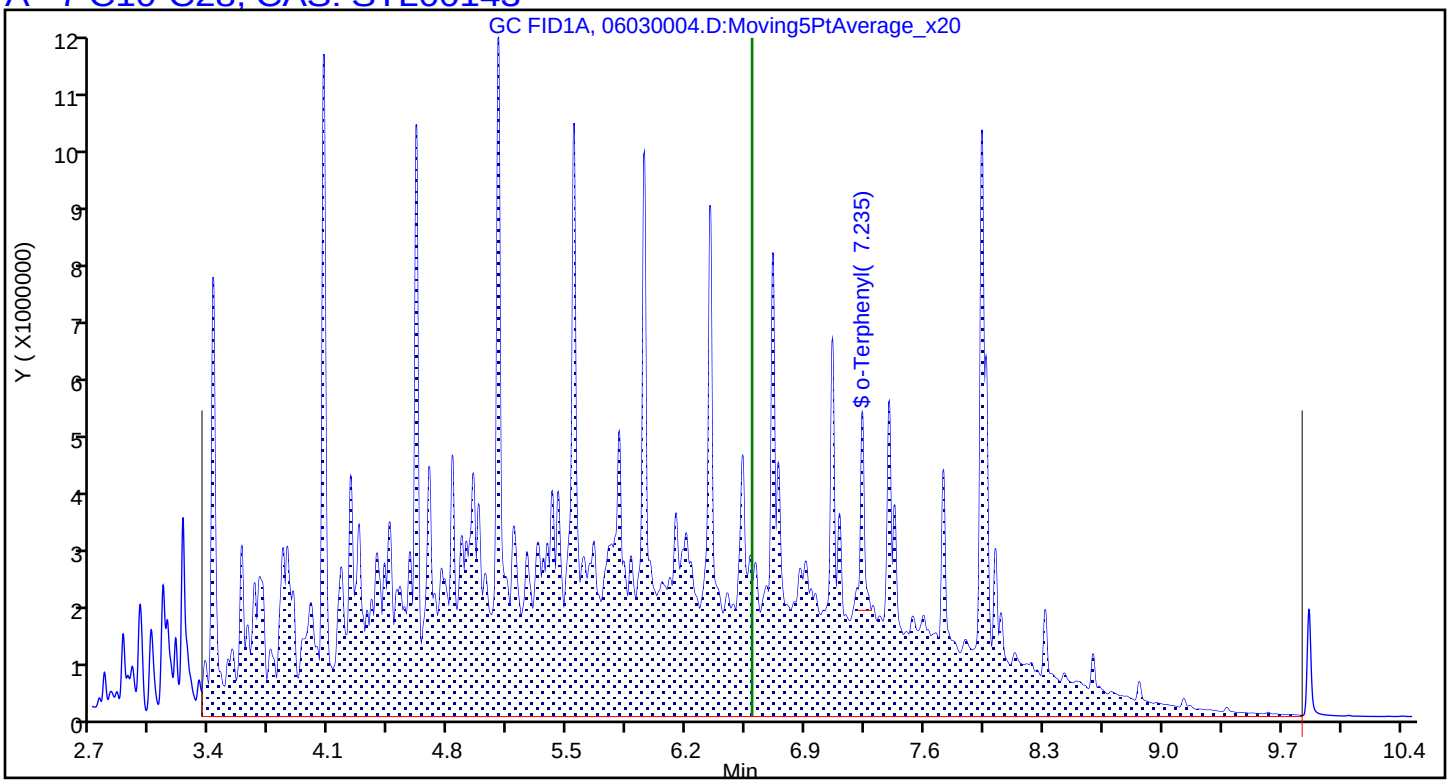


Report Date: 06-Jun-2022 12:14:35 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20220603-111568.b\06030004.D				
Injection Date:	03-Jun-2022 16:23:12	Instrument ID:	SGC_U2a		
Lims ID:	CCVRT				
Client ID:					
Operator ID:	KA	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A 7 C10-C28, CAS: STL00143



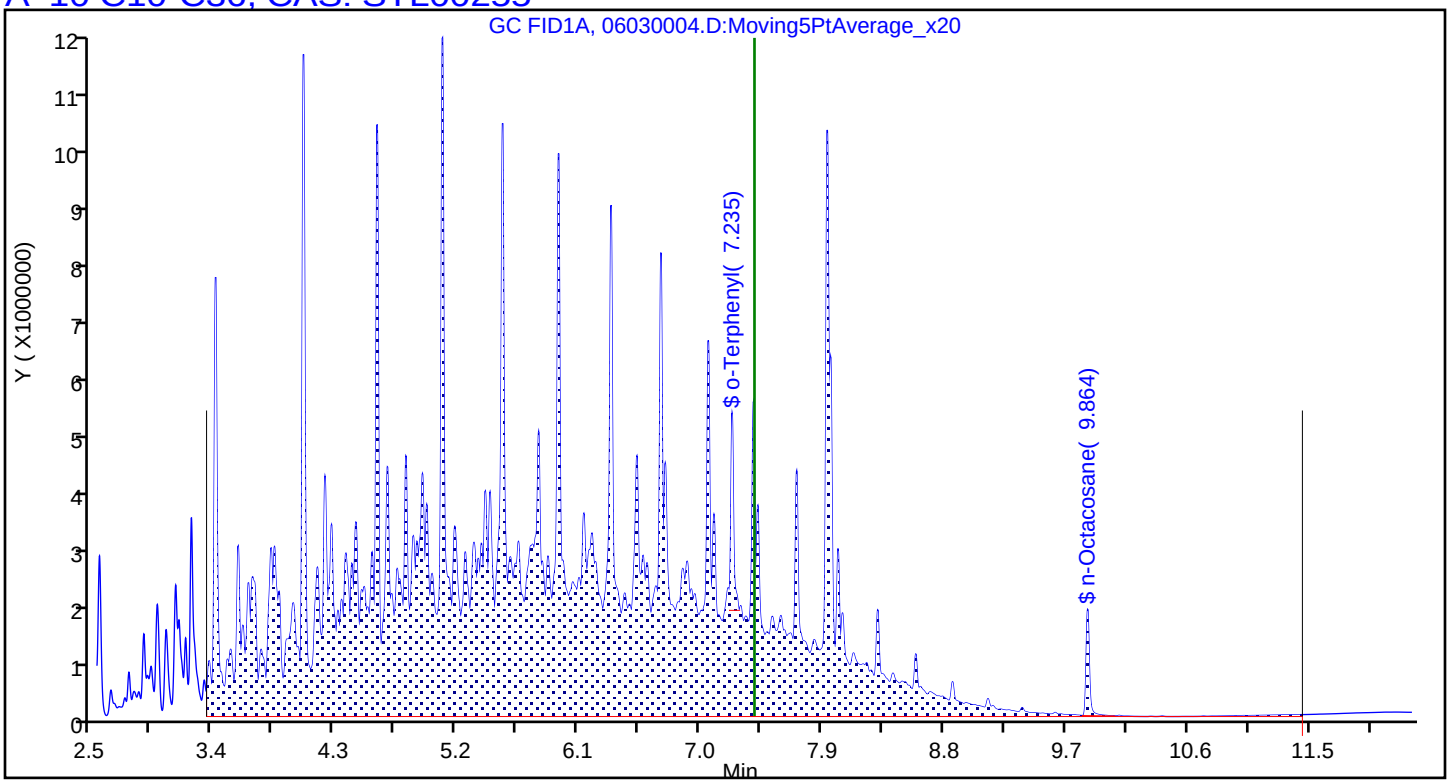
Report Date: 06-Jun-2022 12:14:35 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220603-111568.b\06030004.D

Injection Date:	03-Jun-2022 16:23:12	Instrument ID:	SGC_U2a		
Lims ID:	CCVRT				
Client ID:					
Operator ID:	KA	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A_10 C10-C36, CAS: STL00255



FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-577101/14 Calibration Date: 06/03/2022 20:10

Instrument ID: SGC_U2a Calib Start Date: 05/09/2022 12:59

GC Column: RTX-1 (30.32) ID: 0.25(mm) Calib End Date: 05/09/2022 15:16

Lab File ID: 06030014.D Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
C10-C28	Lin1		129165		4730	5000	-5.5	20.0
C10-C36	Lin1		129349		4720	5000	-5.6	20.0
o-Terphenyl (Surr)	Lin1		168024		24.8	25.0	-0.8	20.0
n-Octacosane	Lin1		108739		22.3	25.0	-10.7	20.0

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-577101/14 Calibration Date: 06/03/2022 20:10

Instrument ID: SGC_U2a Calib Start Date: 05/09/2022 12:59

GC Column: RTX-1 (30.32) ID: 0.25(mm) Calib End Date: 05/09/2022 15:16

Lab File ID: 06030014.D

Analyte	RT	RT WINDOW	
		FROM	TO
C10-C28	6.59	3.35	9.82
C10-C36	7.40	3.35	11.45
o-Terphenyl (Surr)	7.24	7.19	7.29
n-Octacosane	9.86	9.81	9.91

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220603-111568.b\06030014.D
Lims ID: CCV DRO
Client ID:
Sample Type: CCV
Inject. Date: 03-Jun-2022 20:10:01 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV DRO
Misc. Info.: 280-0111568-014
Operator ID: KA Instrument ID: SGC_U2a
Sublist: chrom-DRO_U2a*sub19
Raw Data: Smoothed

Method: \\chromfs\Denver\ChromData\SGC_U2a\20220603-111568.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 06-Jun-2022 12:16:21 Calib Date: 09-May-2022 15:16:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090008.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX1659

First Level Reviewer: appenzellerk Date: 06-Jun-2022 12:15:59

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
A	5 C10-C25						
	6.208	(3.348-9.022)		642357037	5000.1	4733.9	
A	7 C10-C28						
	6.586	(3.348-9.824)		645829212	5000.1	4725.2	
A	8 C10-C32						
	7.039	(3.348-10.730)		646131470	5000.1	4721.9	
$	9 o-Terphenyl						
	7.235	7.235	0.000	4200602	25.0	24.8	
A	10 C10-C36						
	7.400	(3.348-11.452)		646750396	5000.1	4722.0	
$	13 n-Octacosane						
	9.864	9.864	0.000	2718471	25.0	22.3	

QC Flag Legend
Processing Flags

Reagents:
DRO_L4/CCV_00120 Amount Added: 200.00 Units: uL

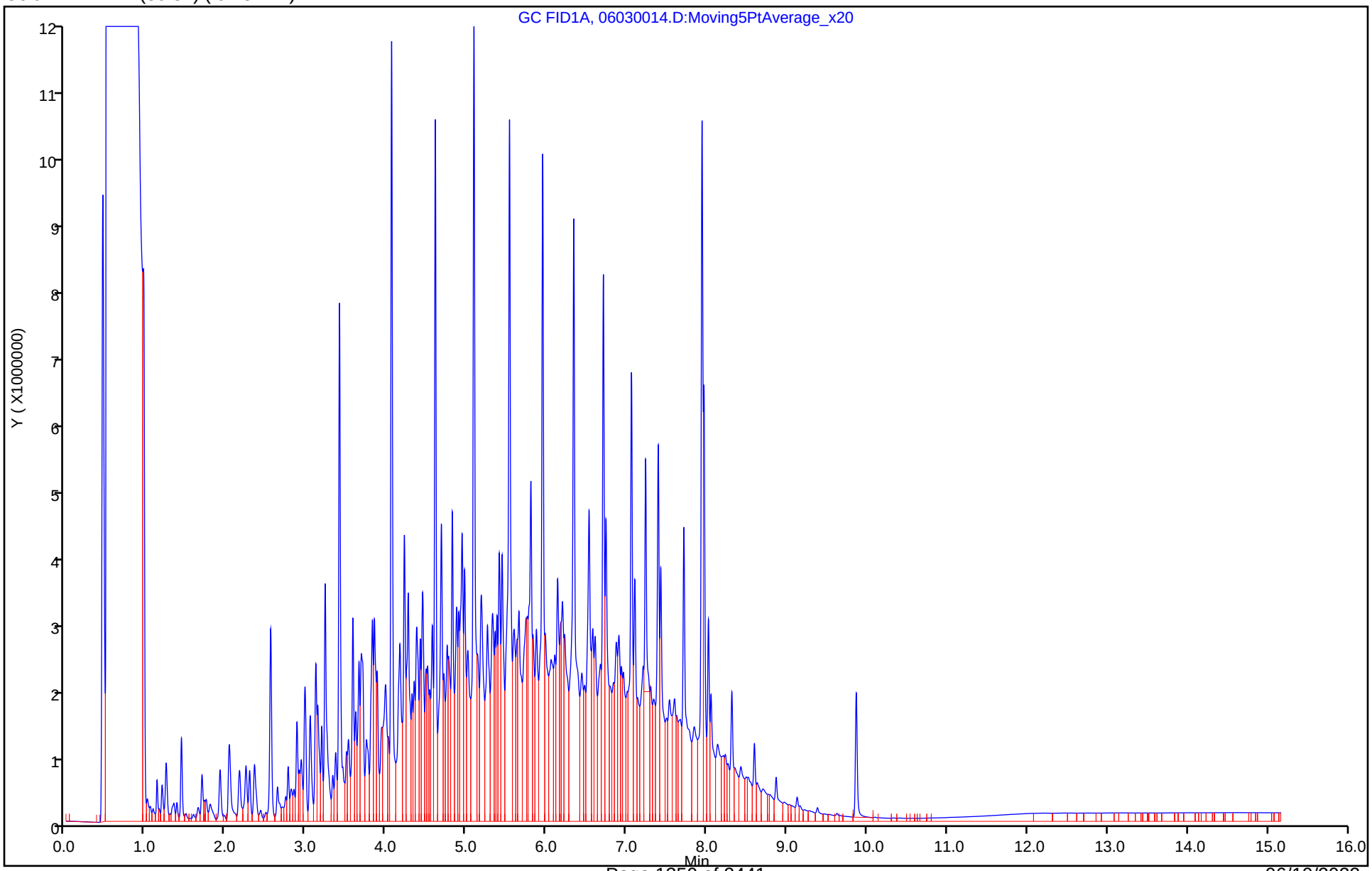
Report Date: 06-Jun-2022 12:16:22 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220603-111568.b\06030014.D

Injection Date:	03-Jun-2022 20:10:01	Instrument ID:	SGC_U2a	Operator ID:	KA
Lims ID:	CCV DRO			Worklist Smp#:	14
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)

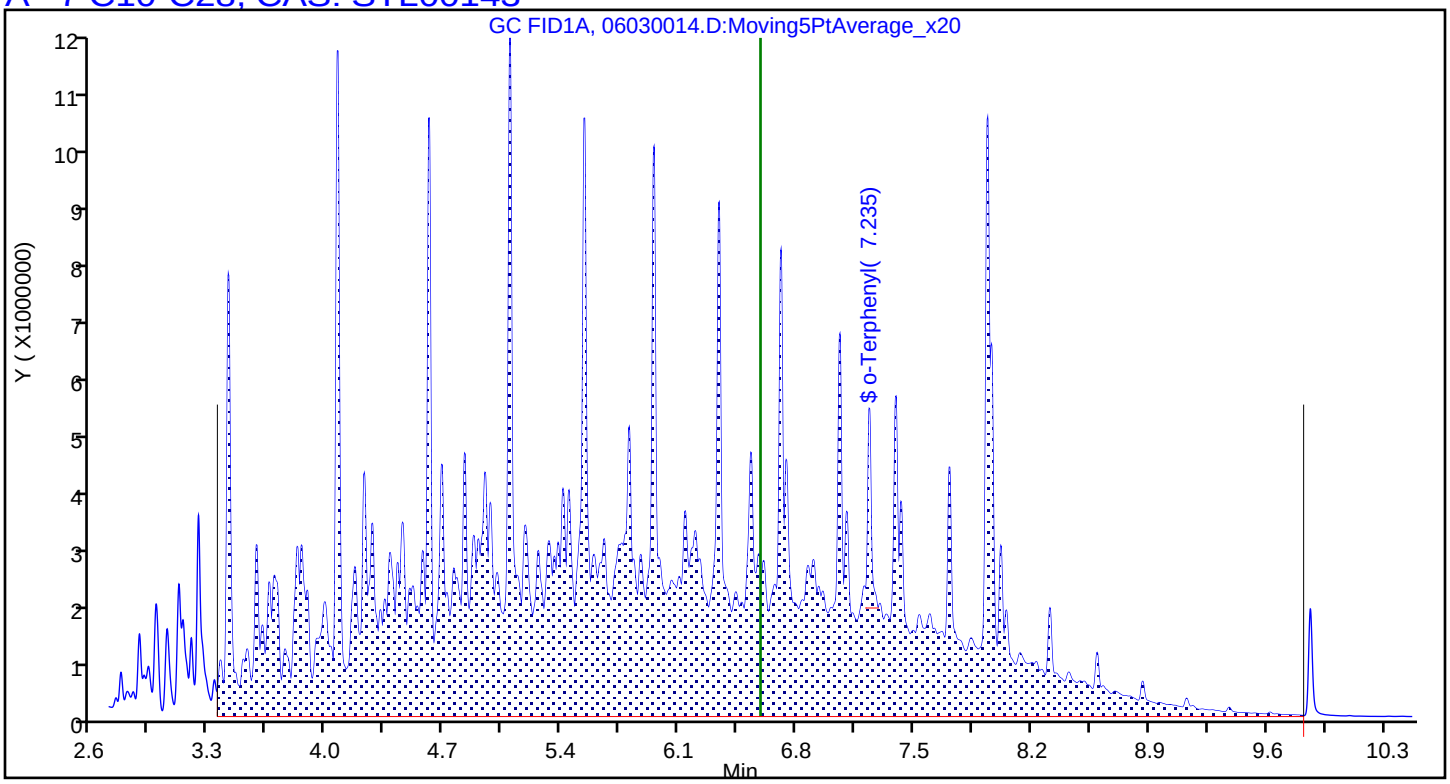


Report Date: 06-Jun-2022 12:16:22 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20220603-111568.b\06030014.D				
Injection Date:	03-Jun-2022 20:10:01	Instrument ID:	SGC_U2a		
Lims ID:	CCV DRO				
Client ID:					
Operator ID:	KA	ALS Bottle#:	14	Worklist Smp#:	14
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 7 C10-C28, CAS: STL00143

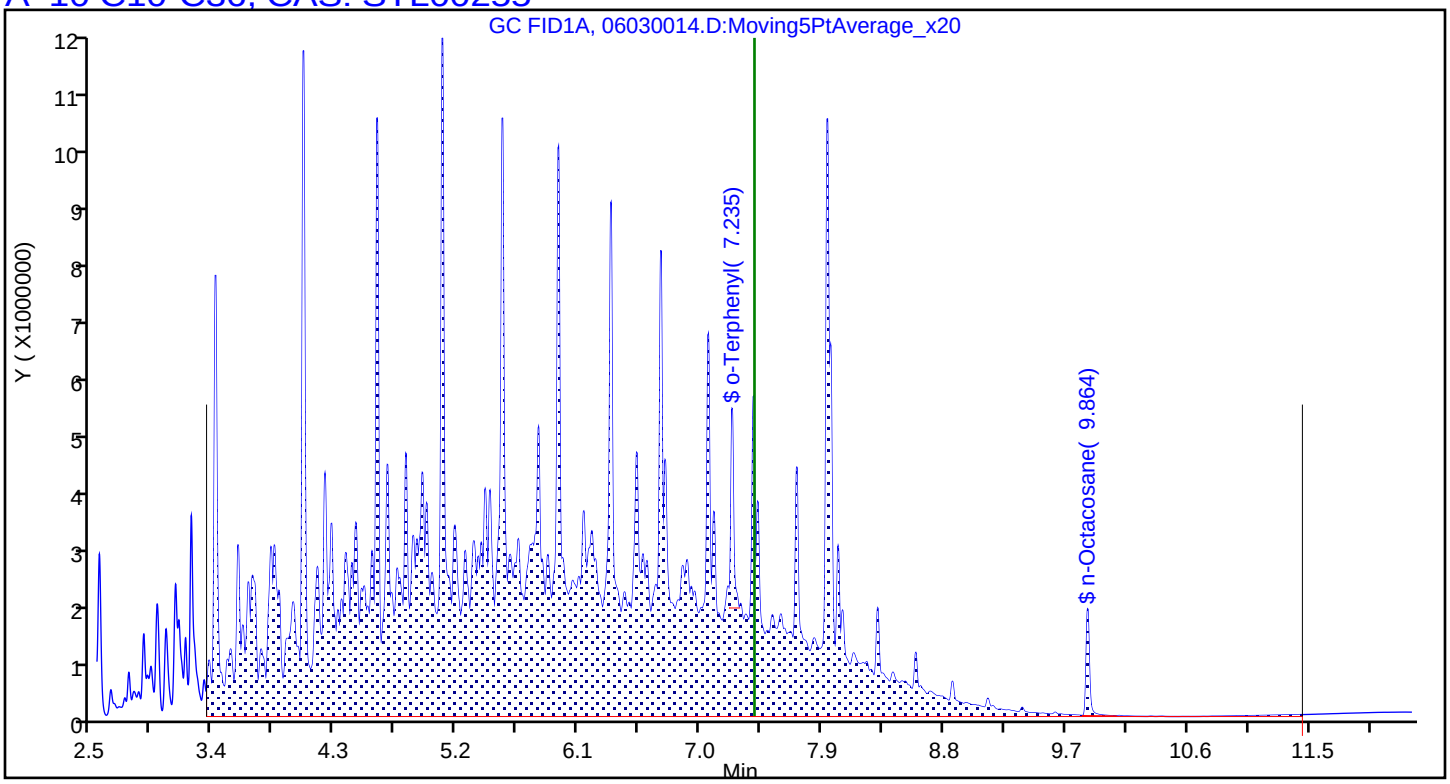


Report Date: 06-Jun-2022 12:16:22 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20220603-111568.b\06030014.D				
Injection Date:	03-Jun-2022 20:10:01	Instrument ID:	SGC_U2a		
Lims ID:	CCV DRO				
Client ID:					
Operator ID:	KA	ALS Bottle#:	14	Worklist Smp#:	14
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_10 C10-C36, CAS: STL00255



FORM VII
DIESEL RANGE ORGANICS RETENTION TIME CALIBRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: RTC 280-576526/3 Date Analyzed: 05/30/2022 16:58

Instrument ID: SGC_U2a GC Column: RTX-1 (30.32) ID: 0.25(mm)

Lab File ID: 05300003.D

Analyte	RT	RT WINDOW	
		FROM	TO
C10-C28	6.60	3.37	9.83

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220530-111452.b\05300003.D
Lims ID: RTC
Client ID:
Sample Type: RTC
Inject. Date: 30-May-2022 16:58:10 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: RTC
Misc. Info.: 280-0111452-003
Operator ID: KA Instrument ID: SGC_U2a
Raw Data: Smoothed

Method: \\chromfs\Denver\ChromData\SGC_U2a\20220530-111452.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 31-May-2022 13:25:45 Calib Date: 09-May-2022 15:16:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090008.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX1640

First Level Reviewer: appenzellerk Date: 31-May-2022 13:08:22

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 n-Octane						
	1.474	1.474	0.000	28133692	NC	NC	
	3 n-Decane						
	3.437	3.437	0.000	77527374	NC	NC	
	4 Dodecane						
	4.624	4.624	0.000	82544198	NC	NC	
	6 Hexadecane						
	6.357	6.357	0.000	78973195	NC	NC	
A	7 C10-C28						
	6.596	(3.365-9.827)		1005430926	1250.0	7358.3	
	11 icosane						
	7.735	7.735	0.000	72047630	NC	NC	
	12 C25						
	9.148	9.148	0.000	38327708	NC	NC	
$	13 n-Octacosane						
	9.887	9.887	0.000	41667107	250.0	333.9	
	16 Dotriacontane						
	10.799	10.799	0.000	41144984	NC	NC	
	17 n-Hexatriacontane						
	11.654	11.654	0.000	25515826	NC	NC	
	18 C38						
	12.075	12.075	0.000	14885165	NC	NC	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

DRO_RTMKR_00065 Amount Added: 200.00 Units: uL

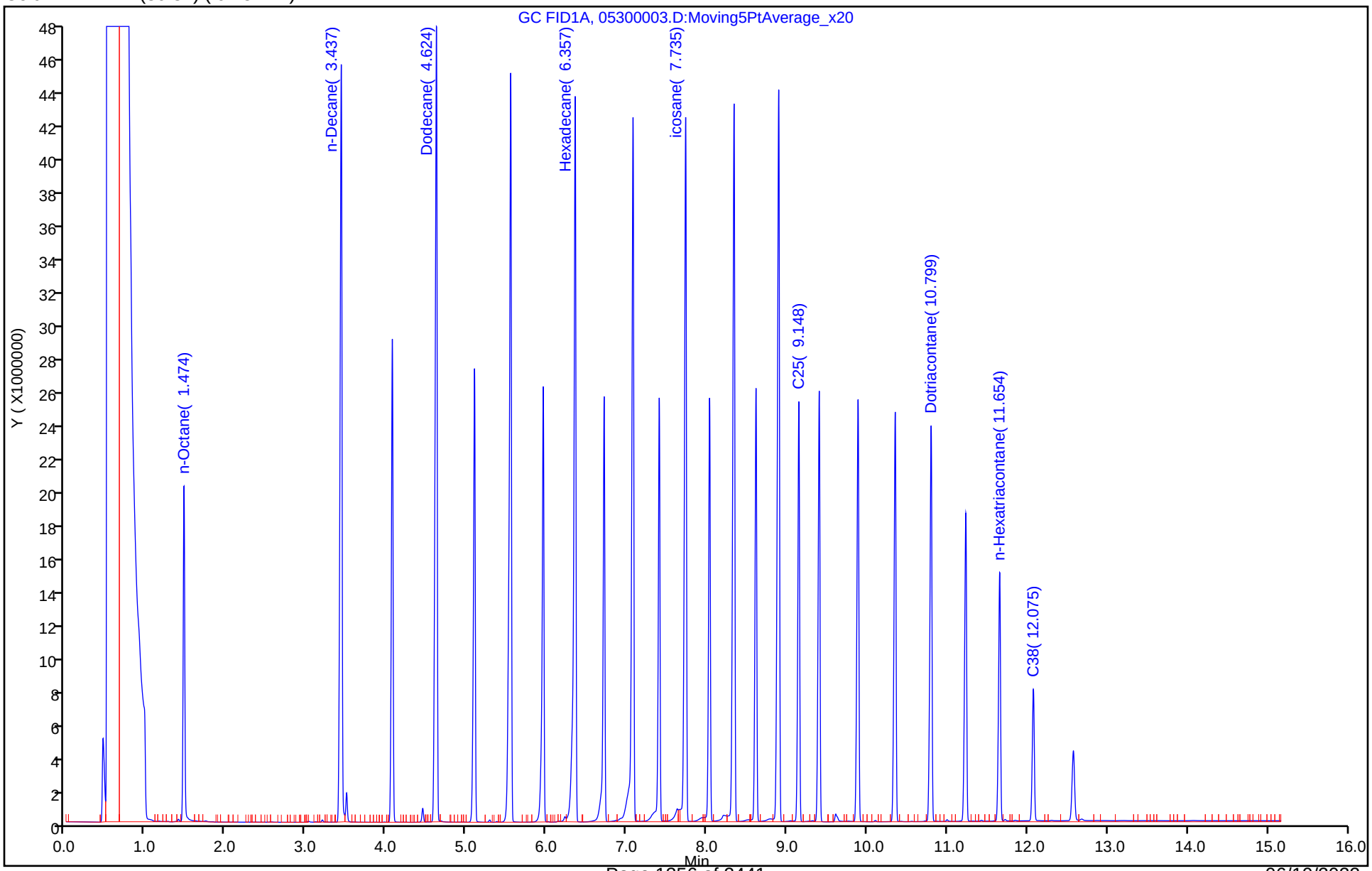
Report Date: 31-May-2022 13:25:45 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220530-111452.b\05300003.D

Injection Date:	30-May-2022 16:58:10	Instrument ID:	SGC_U2a	Operator ID:	KA
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)

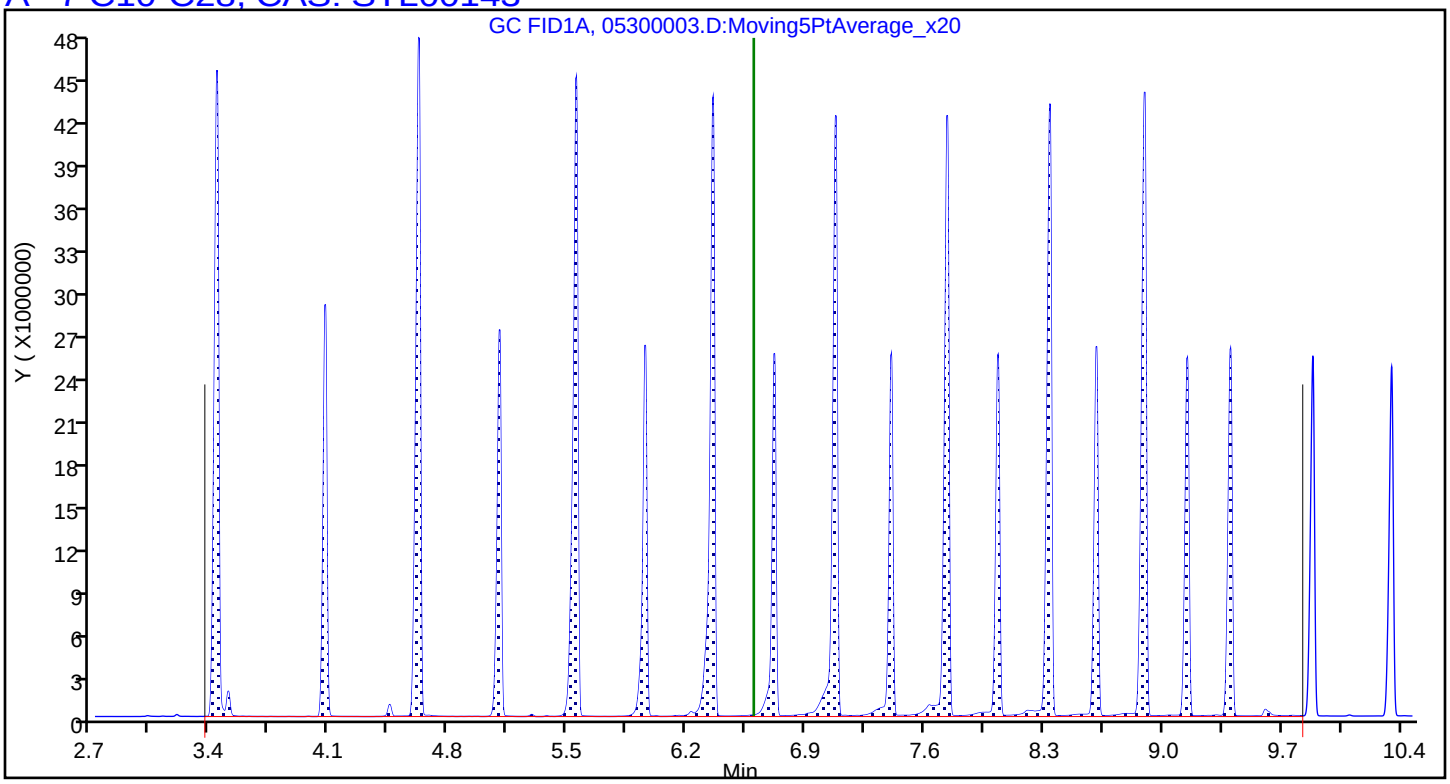


Report Date: 31-May-2022 13:25:45 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20220530-111452.b\05300003.D				
Injection Date:	30-May-2022 16:58:10	Instrument ID:	SGC_U2a		
Lims ID:	RTC				
Client ID:					
Operator ID:	KA	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 7 C10-C28, CAS: STL00143



FORM VII
DIESEL RANGE ORGANICS RETENTION TIME CALIBRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: RTC 280-577101/3 Date Analyzed: 06/03/2022 16:00

Instrument ID: SGC_U2a GC Column: RTX-1 (30.32) ID: 0.25(mm)

Lab File ID: 06030003.D

Analyte	RT	RT WINDOW	
		FROM	TO
C10-C28	6.59	3.35	9.82

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220603-111568.b\06030003.D
Lims ID: RTC
Client ID:
Sample Type: RTC
Inject. Date: 03-Jun-2022 16:00:25 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: RTC
Misc. Info.: 280-0111568-003
Operator ID: KA Instrument ID: SGC_U2a
Raw Data: Smoothed

Method: \\chromfs\Denver\ChromData\SGC_U2a\20220603-111568.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 06-Jun-2022 12:14:33 Calib Date: 09-May-2022 15:16:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090008.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX1659

First Level Reviewer: appenzellerk Date: 06-Jun-2022 12:11:25

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 n-Octane						
	1.465	1.465	0.000	18325993	NC	NC	
	3 n-Decane						
	3.427	3.427	0.000	38847767	NC	NC	
	4 Dodecane						
	4.617	4.617	0.000	38449807	NC	NC	
	6 Hexadecane						
	6.347	6.347	0.000	35752297	NC	NC	
A	7 C10-C28						
	6.586	(3.348-9.823)		456789116	1250.0	3341.0	
	11 icosane						
	7.724	7.724	0.000	32909256	NC	NC	
	12 C25						
	9.137	9.137	0.000	17075907	NC	NC	
$	13 n-Octacosane						
	9.874	9.874	0.000	18938551	250.0	152.1	
	16 Dotriacontane						
	10.782	10.782	0.000	20025628	NC	NC	
	17 n-Hexatriacontane						
	11.637	11.637	0.000	16911232	NC	NC	
	18 C38						
	12.058	12.058	0.000	12635694	NC	NC	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

DRO_RTMKR_00065 Amount Added: 200.00 Units: uL

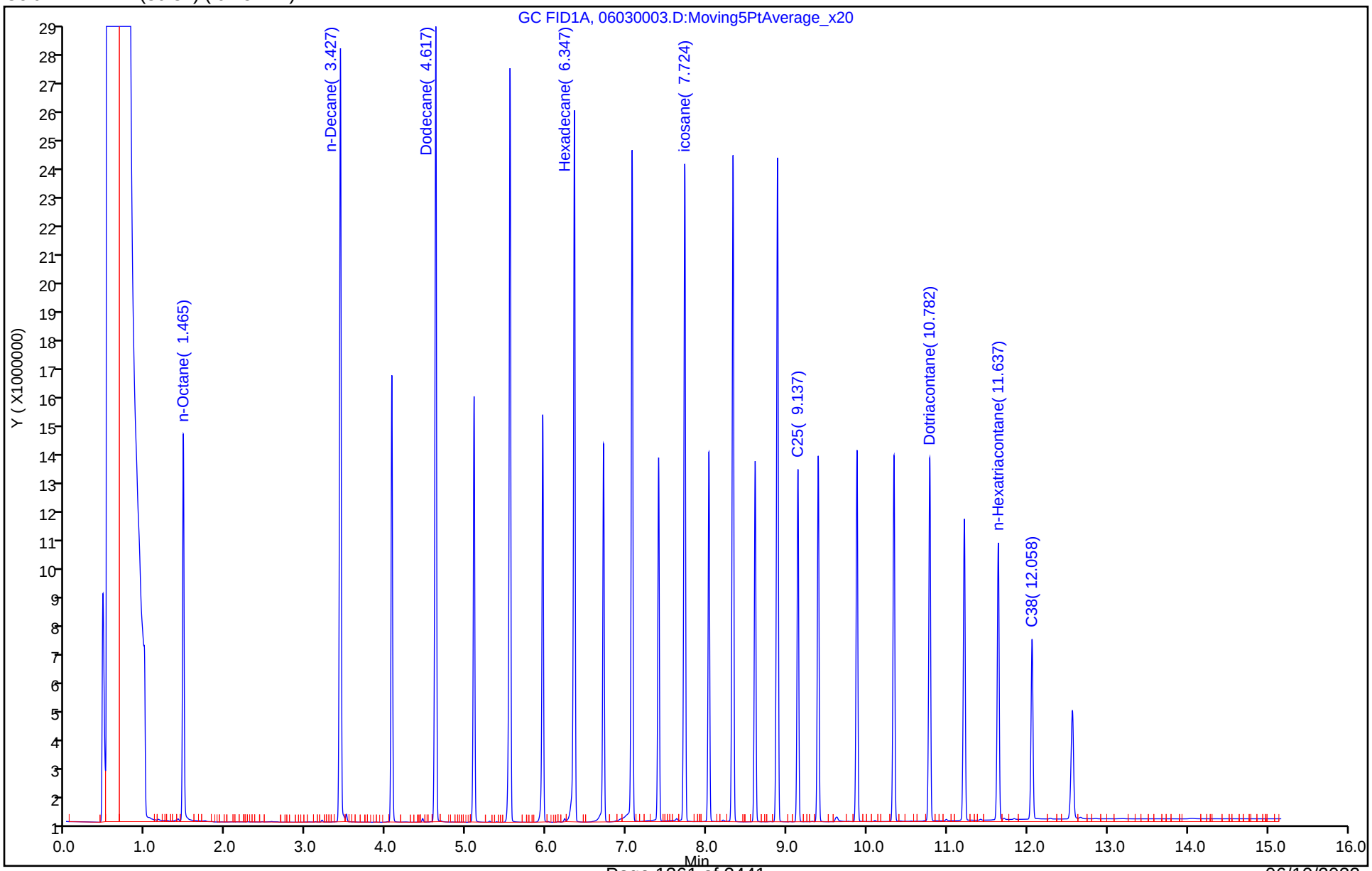
Report Date: 06-Jun-2022 12:14:34 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220603-111568.b\06030003.D

Injection Date:	03-Jun-2022 16:00:25	Instrument ID:	SGC_U2a	Operator ID:	KA
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)

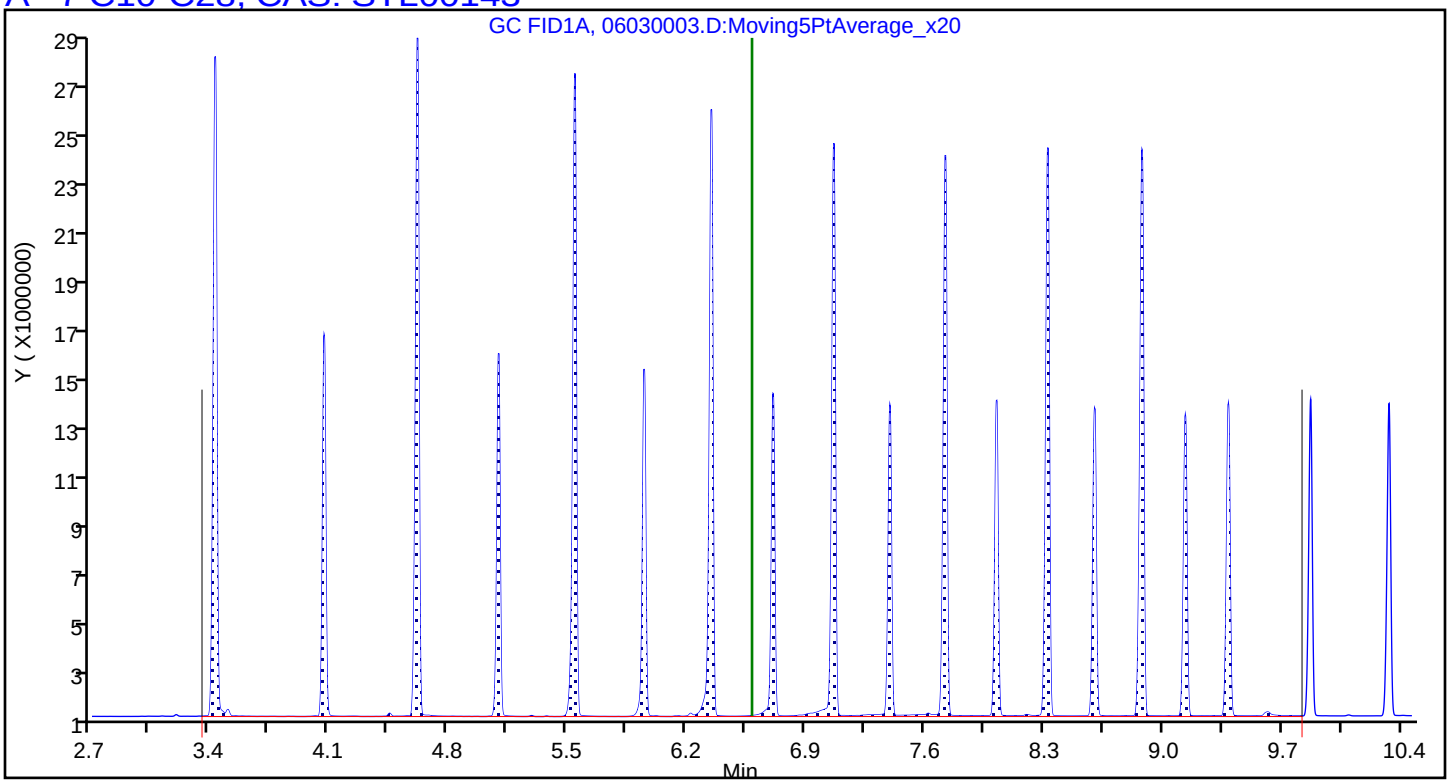


Report Date: 06-Jun-2022 12:14:34 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20220603-111568.b\06030003.D				
Injection Date:	03-Jun-2022 16:00:25	Instrument ID:	SGC_U2a		
Lims ID:	RTC				
Client ID:					
Operator ID:	KA	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 7 C10-C28, CAS: STL00143



FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-576113/1-A

Matrix: Water | Lab File ID: 05300006.D

Analysis Method: 8015C DRO | Date Collected:

Extraction Method: 3510C | Date Extracted: 05/25/2022 15:07

Sample wt/vol: 1000(mL) | Date Analyzed: 05/30/2022 18:06

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: RTX-1 (30.32) ID: 0.25(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 576526 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
STL00143	C10-C28	42.3	J Q	250	120	33

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl (Surr)	78		56-125
630-02-4	n-Octacosane	40	Q	60-142

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220530-111452.b\05300006.D
Lims ID: MB 280-576113/1-A
Client ID:
Sample Type: MB
Inject. Date: 30-May-2022 18:06:06 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-576113/1-A
Misc. Info.: 280-0111452-006
Operator ID: KA Instrument ID: SGC_U2a
Raw Data: Smoothed

Method: \\chromfs\Denver\ChromData\SGC_U2a\20220530-111452.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 31-May-2022 13:25:47 Calib Date: 09-May-2022 15:16:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090008.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX1640

First Level Reviewer: appenzellerk Date: 31-May-2022 13:08:53

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
A	2 C8-C12						
	3.052	(1.432-4.672)		2189963		20.2	
A	5 C10-C25						
	6.215	(3.365-9.066)		2884472		16.8	
	6 Hexadecane						
	6.346	6.357	-0.011	1070		NC	
A	7 C10-C28						
	6.597	(3.365-9.828)		6287944		42.3	
A	8 C10-C32						
	7.052	(3.365-10.738)		8745704		58.7	
$	9 o-Terphenyl						
	7.234	7.236	-0.002	4608051	35.0	27.2	
A	10 C10-C36						
	7.481	(3.365-11.597)		11488409		73.2	
A	14 C20-C38						
	9.782	(7.664-11.899)		9675620		60.9	
$	13 n-Octacosane						
	9.872	9.868	0.004	1658601	35.0	13.8	
A	15 C25-C36						
	10.331	(9.066-11.597)		7214205		63.2	
	16 Dotriacontane						
	10.801	10.799	0.002	103971		NC	
$	19 n-Decanoic Acid (Surr)						
	0.000					ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

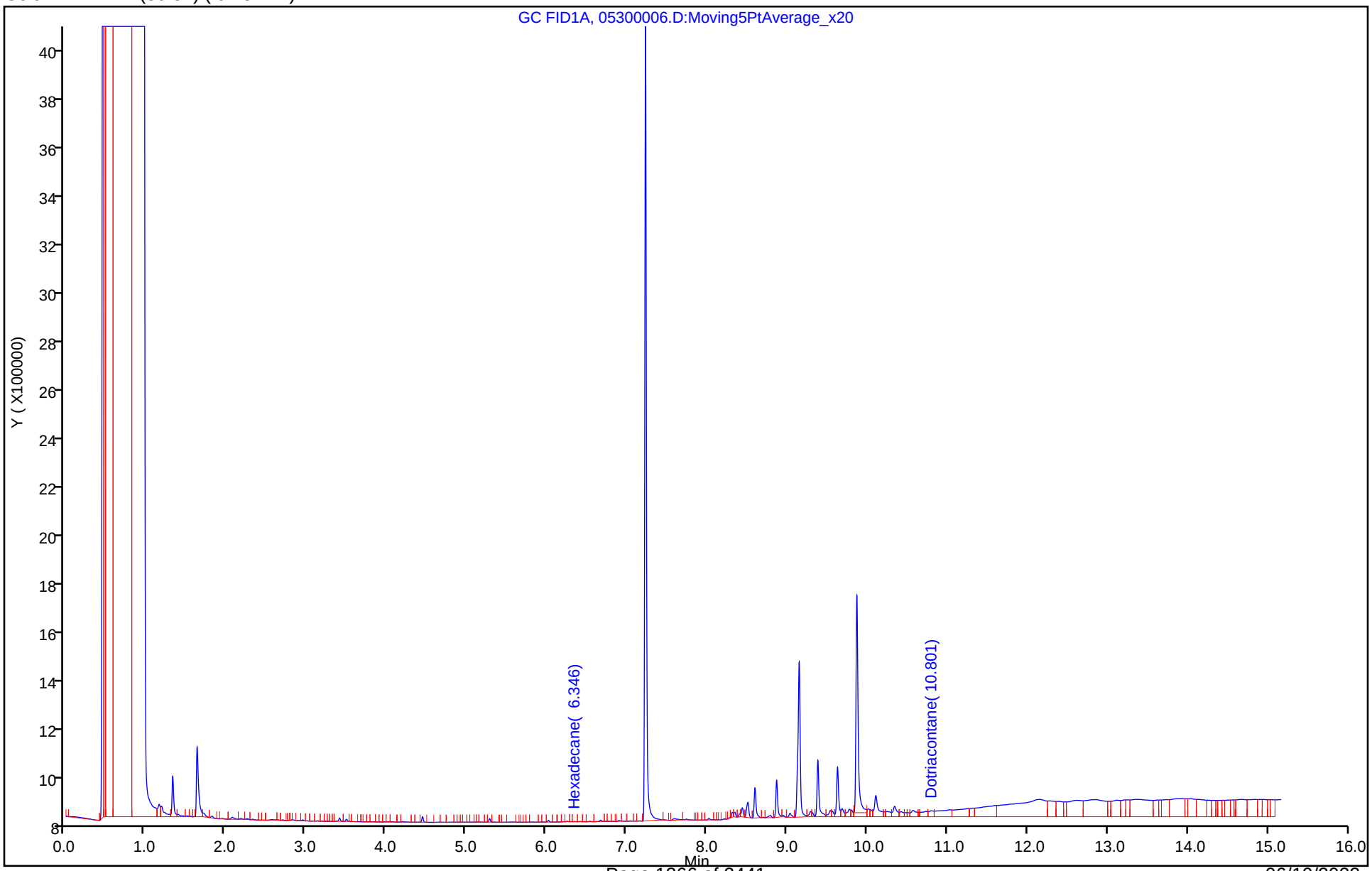
Report Date: 31-May-2022 13:25:48 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220530-111452.b\05300006.D

Injection Date:	30-May-2022 18:06:06	Instrument ID:	SGC_U2a	Operator ID:	KA
Lims ID:	MB 280-576113/1-A			Worklist Smp#:	6
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)



Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220530-111452.b\05300006.D
Lims ID: MB 280-576113/1-A
Client ID:
Sample Type: MB
Inject. Date: 30-May-2022 18:06:06 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-576113/1-A
Misc. Info.: 280-0111452-006
Operator ID: KA Instrument ID: SGC_U2a
Raw Data: Smoothed

Method: \\chromfs\Denver\ChromData\SGC_U2a\20220530-111452.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 31-May-2022 13:25:47 Calib Date: 09-May-2022 15:16:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090008.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX1640

First Level Reviewer: appenzellerk Date: 31-May-2022 13:08:53

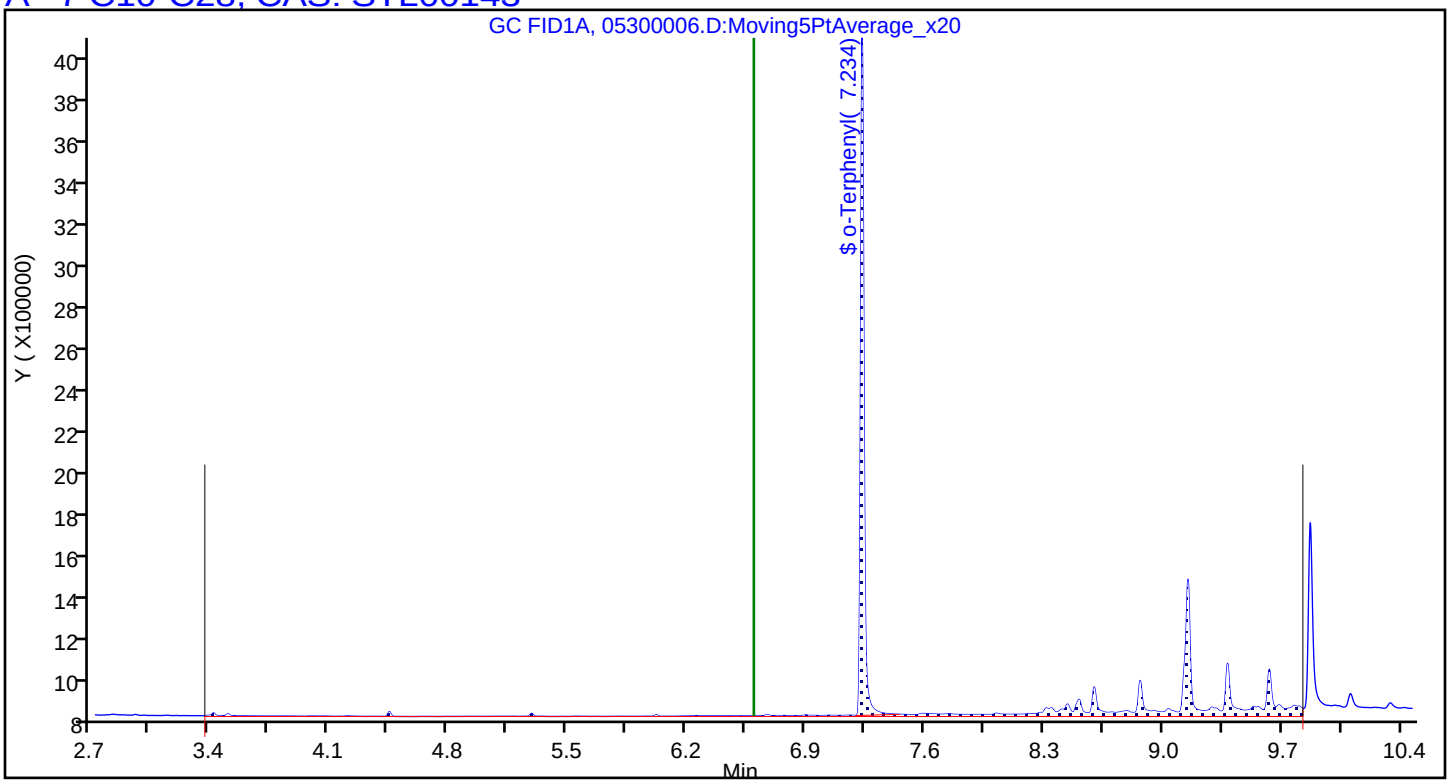
Compound	Amount Added	Amount Recovered	% Rec.
$ 9 o-Terphenyl	35.0	27.2	77.80
$ 13 n-Octacosane	35.0	13.8	39.53

Report Date: 31-May-2022 13:25:48 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20220530-111452.b\05300006.D				
Injection Date:	30-May-2022 18:06:06	Instrument ID:	SGC_U2a		
Lims ID:	MB 280-576113/1-A				
Client ID:					
Operator ID:	KA	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A 7 C10-C28, CAS: STL00143



FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-576710/1-A RE

Matrix: Water | Lab File ID: 06030008.D

Analysis Method: 8015C DRO | Date Collected:

Extraction Method: 3510C | Date Extracted: 06/01/2022 12:30

Sample wt/vol: 1000(mL) | Date Analyzed: 06/03/2022 17:54

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: RTX-1 (30.32) ID: 0.25(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 577101 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
STL00143	*C10-C28*	*120*	*U Q*	*250*	120	*33*

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl (Surr)	7	*Q*	56-125
630-02-4	n-Octacosane	7	*Q*	60-142

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220603-111568.b\06030008.D
Lims ID: MB 280-576710/1-A
Client ID:
Sample Type: MB
Inject. Date: 03-Jun-2022 17:54:01 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-576710/1-A
Misc. Info.: 280-0111568-008
Operator ID: KA Instrument ID: SGC_U2a
Raw Data: Smoothed

Method: \\chromfs\Denver\ChromData\SGC_U2a\20220603-111568.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 08-Jun-2022 15:54:43 Calib Date: 09-May-2022 15:16:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090008.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX1621

First Level Reviewer: appenzellerk Date: 06-Jun-2022 12:12:31

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
A	2 C8-C12						
	3.049 (1.427-4.672)			2320895		21.4	
A	5 C10-C25						
	6.208 (3.348-9.067)			1886168		9.43	
	6 Hexadecane						
	6.352	6.347	0.005	179		NC	
A	7 C10-C28						
	6.586 (3.348-9.824)			3172540		19.5	
A	8 C10-C32						
	7.039 (3.348-10.730)			5009667		31.4	
$	9 o-Terphenyl						
	7.242	7.235	0.007	437857	35.0	2.42	
A	10 C10-C36						
	7.400 (3.348-11.452)			7348533		42.9	
A	14 C20-C38						
	9.767 (7.648-11.887)			7129167		39.6	
$	13 n-Octacosane						
	9.870	9.864	0.006	250363	35.0	2.57	
A	15 C25-C36						
	10.260 (9.067-11.452)			4574428		34.7	
	16 Dotriacontane						
	10.782	10.782	0.000	108260		NC	
$	19 n-Decanoic Acid (Surr)						
	0.000					ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

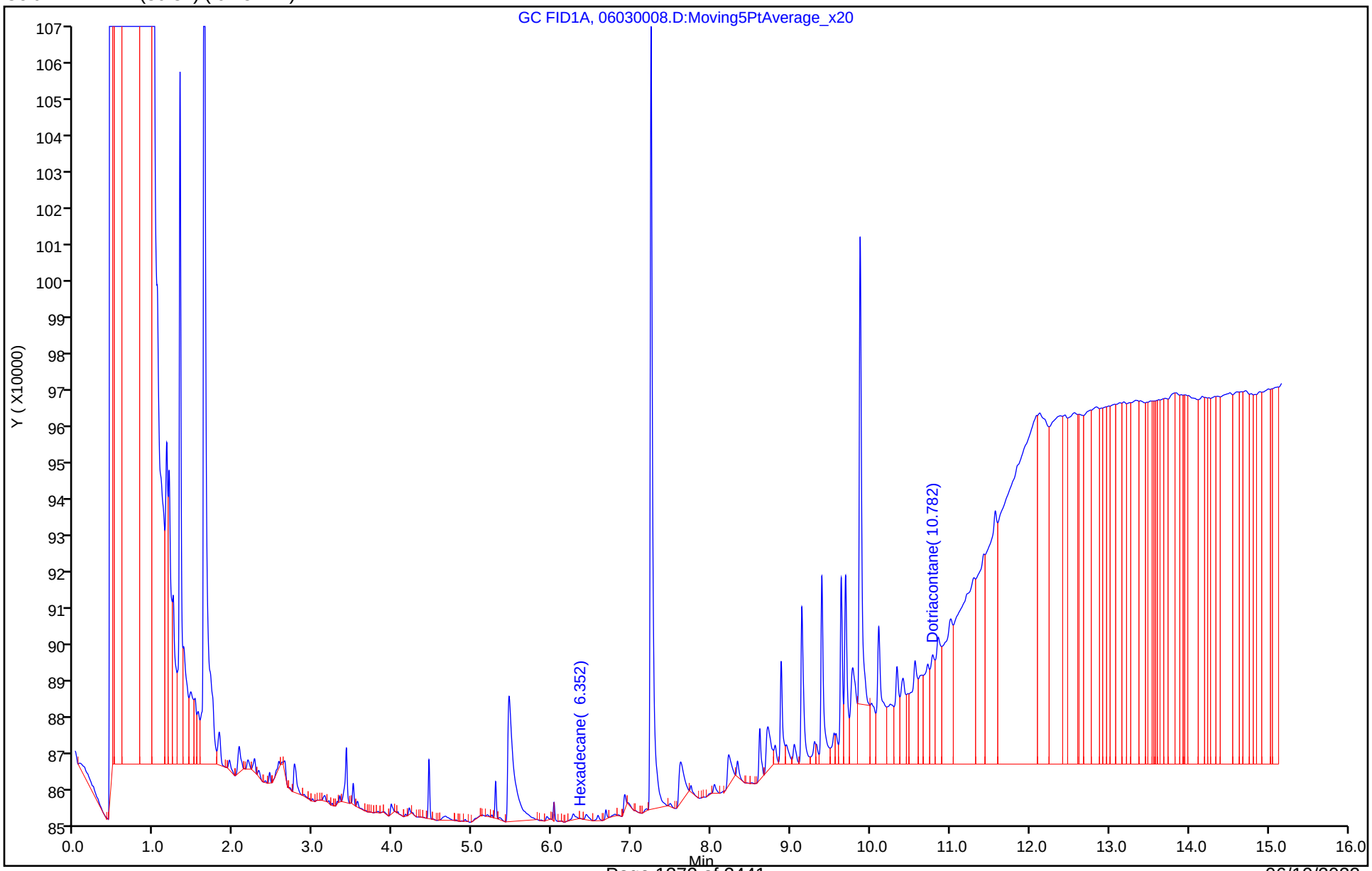
Report Date: 09-Jun-2022 12:23:10 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220603-111568.b\06030008.D

Injection Date:	03-Jun-2022 17:54:01	Instrument ID:	SGC_U2a	Operator ID:	KA
Lims ID:	MB 280-576710/1-A			Worklist Smp#:	8
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)



Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220603-111568.b\06030008.D
Lims ID: MB 280-576710/1-A
Client ID:
Sample Type: MB
Inject. Date: 03-Jun-2022 17:54:01 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-576710/1-A
Misc. Info.: 280-0111568-008
Operator ID: KA Instrument ID: SGC_U2a
Raw Data: Smoothed

Method: \\chromfs\Denver\ChromData\SGC_U2a\20220603-111568.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 08-Jun-2022 15:54:43 Calib Date: 09-May-2022 15:16:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090008.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX1621

First Level Reviewer: appenzellerk Date: 06-Jun-2022 12:12:31

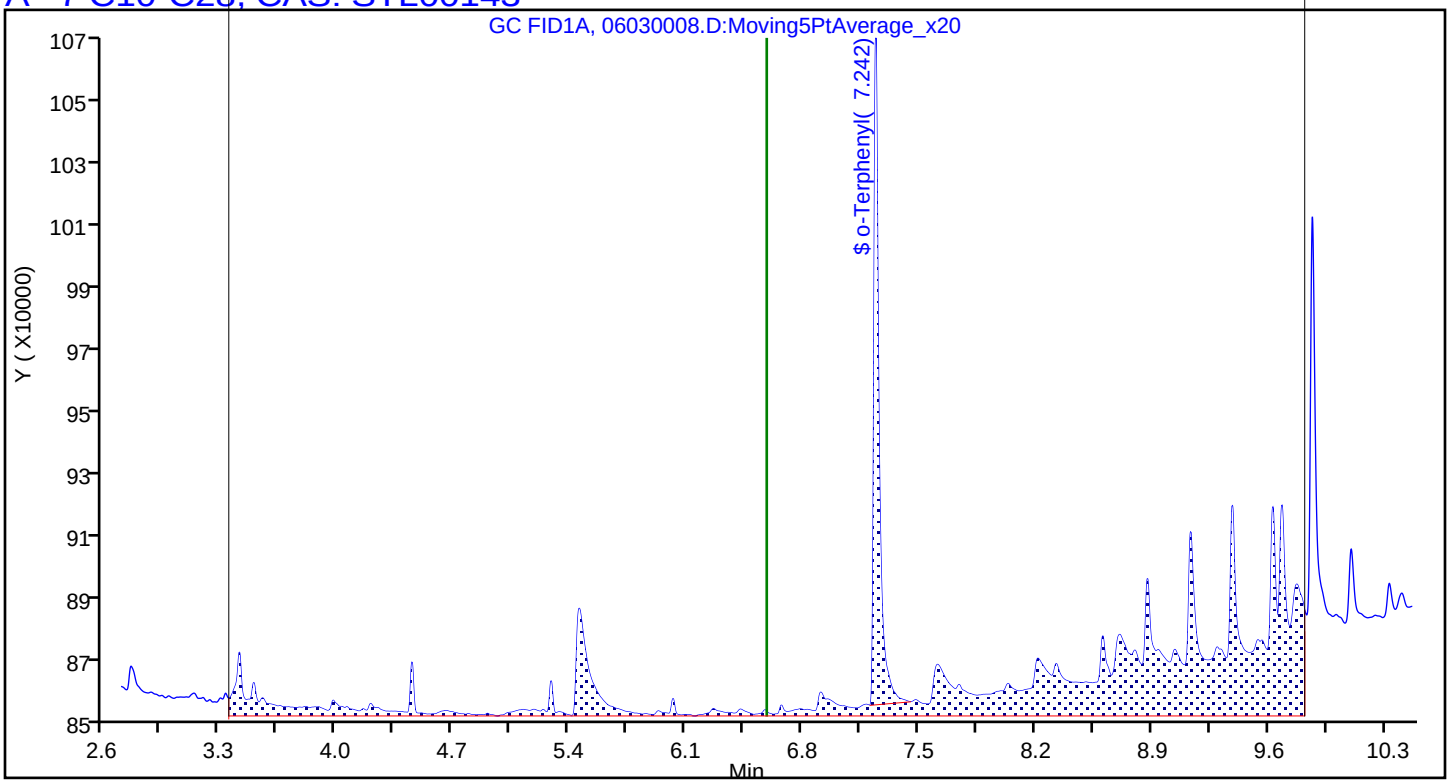
Compound	Amount Added	Amount Recovered	% Rec.
$ 9 o-Terphenyl	35.0	2.42	6.91
$ 13 n-Octacosane	35.0	2.57	7.34

Report Date: 09-Jun-2022 12:23:10 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20220603-111568.b\06030008.D				
Injection Date:	03-Jun-2022 17:54:01	Instrument ID:	SGC_U2a		
Lims ID:	MB 280-576710/1-A				
Client ID:					
Operator ID:	KA	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A 7 C10-C28, CAS: STL00143



FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-576113/2-A

Matrix: Water | Lab File ID: 05300007.D

Analysis Method: 8015C DRO | Date Collected:

Extraction Method: 3510C | Date Extracted: 05/25/2022 15:07

Sample wt/vol: 1000(mL) | Date Analyzed: 05/30/2022 18:28

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: RTX-1 (30.32) ID: 0.25(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 576526 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
STL00143	C10-C28	1450	Q	250	120	33

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl (Surr)	94		56-125
630-02-4	n-Octacosane	46	Q	60-142

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220530-111452.b\05300007.D
Lims ID: LCS 280-576113/2-A
Client ID:
Sample Type: LCS
Inject. Date: 30-May-2022 18:28:47 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-576113/2-A
Misc. Info.: 280-0111452-007
Operator ID: KA Instrument ID: SGC_U2a
Raw Data: Smoothed

Method: \\chromfs\Denver\ChromData\SGC_U2a\20220530-111452.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 31-May-2022 13:25:47 Calib Date: 09-May-2022 15:16:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090008.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX1640

First Level Reviewer: appenzellerk Date: 31-May-2022 13:09:01

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
A	5 C10-C25						
	6.215	(3.365-9.066)		195482642	2000.0	1437.5	
A	7 C10-C28						
	6.597	(3.365-9.828)		199187326	2000.0	1454.8	
A	8 C10-C32						
	7.052	(3.365-10.738)		200086052	2000.0	1458.6	
$	9 o-Terphenyl						
	7.233	7.236	-0.003	5566423	35.0	32.9	
A	10 C10-C36						
	7.481	(3.365-11.597)		200602672	2000.0	1457.1	
$	13 n-Octacosane						
	9.869	9.868	0.001	1944935	35.0	16.1	

QC Flag Legend
Processing Flags

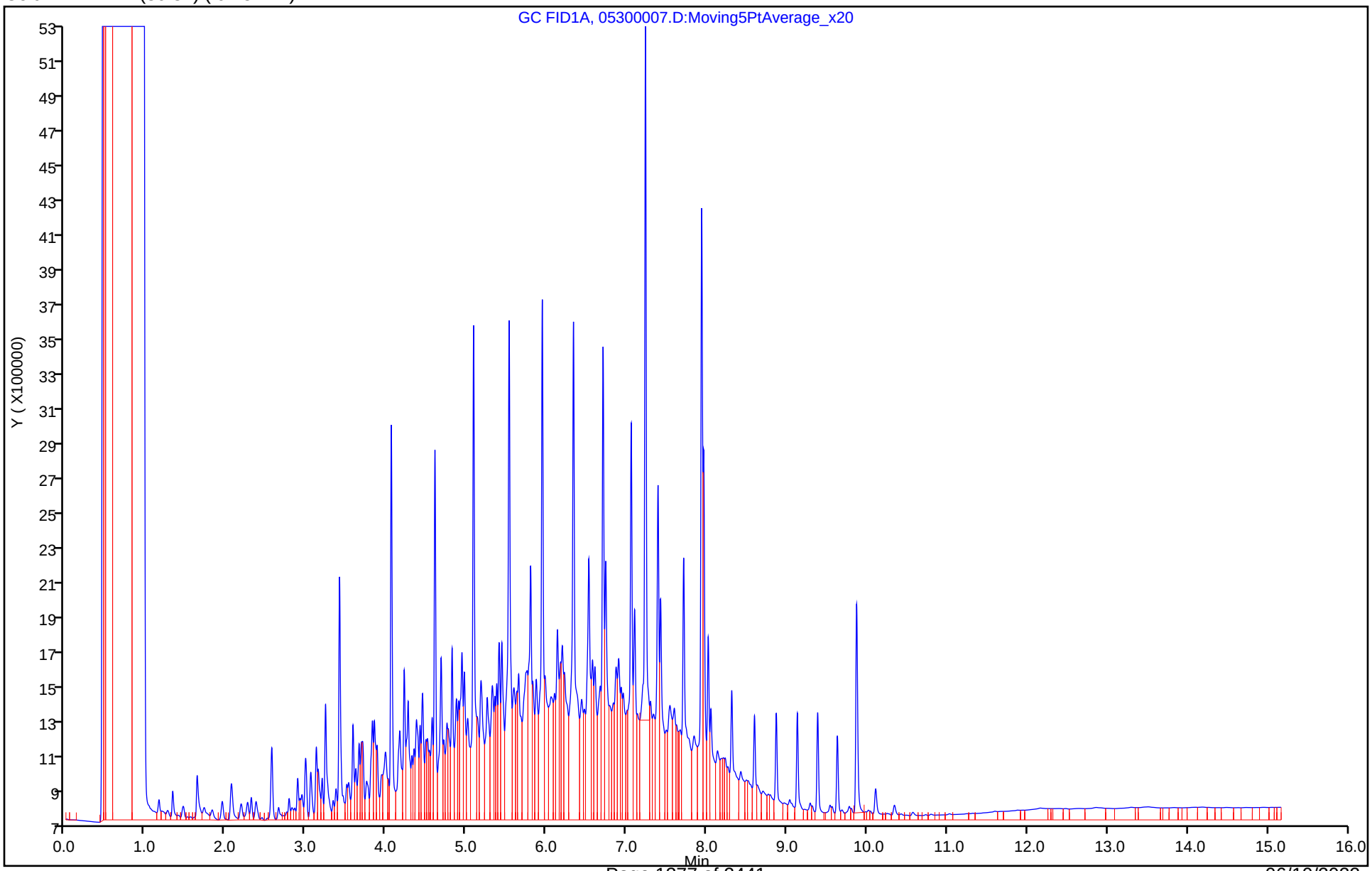
Report Date: 31-May-2022 13:25:50 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220530-111452.b\05300007.D

Injection Date:	30-May-2022 18:28:47	Instrument ID:	SGC_U2a	Operator ID:	KA
Lims ID:	LCS 280-576113/2-A			Worklist Smp#:	7
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)



Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220530-111452.b\05300007.D
Lims ID: LCS 280-576113/2-A
Client ID:
Sample Type: LCS
Inject. Date: 30-May-2022 18:28:47 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-576113/2-A
Misc. Info.: 280-0111452-007
Operator ID: KA Instrument ID: SGC_U2a
Raw Data: Smoothed

Method: \\chromfs\Denver\ChromData\SGC_U2a\20220530-111452.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 31-May-2022 13:25:47 Calib Date: 09-May-2022 15:16:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090008.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX1640

First Level Reviewer: appenzellerk Date: 31-May-2022 13:09:01

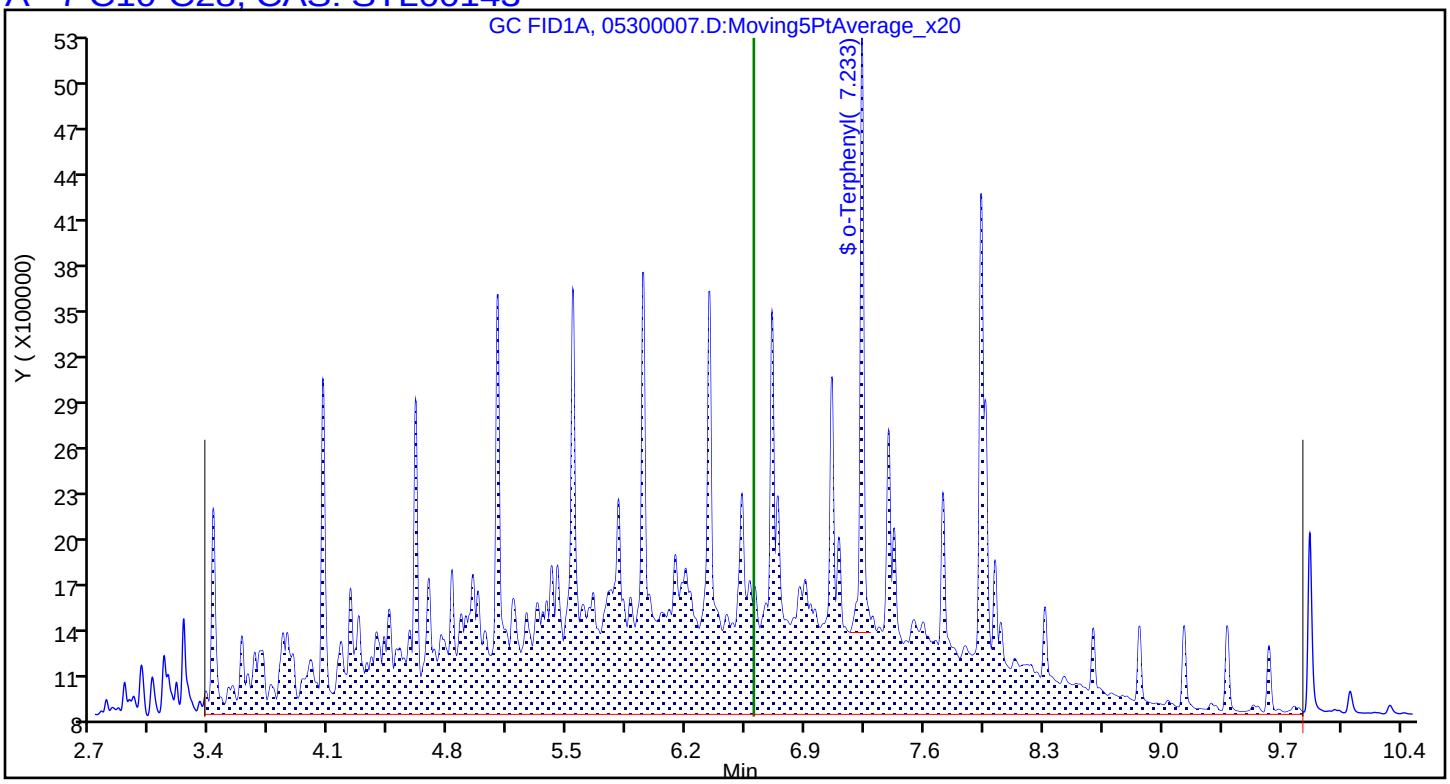
Compound	Amount Added	Amount Recovered	% Rec.
$ 9 o-Terphenyl	35.0	32.9	94.09
$ 13 n-Octacosane	35.0	16.1	46.07

Report Date: 31-May-2022 13:25:50 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20220530-111452.b\05300007.D				
Injection Date:	30-May-2022 18:28:47	Instrument ID:	SGC_U2a		
Lims ID:	LCS 280-576113/2-A				
Client ID:					
Operator ID:	KA	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A 7 C10-C28, CAS: STL00143



FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-576710/2-A RE

Matrix: Water | Lab File ID: 06030009.D

Analysis Method: 8015C DRO | Date Collected:

Extraction Method: 3510C | Date Extracted: 06/01/2022 12:30

Sample wt/vol: 1000(mL) | Date Analyzed: 06/03/2022 18:16

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: RTX-1 (30.32) ID: 0.25(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 577101 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
STL00143	*C10-C28*	*1290*	*Q*	*250*	120	*33*

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl (Surr)	10	*Q*	56-125
630-02-4	n-Octacosane	9	*Q*	60-142

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220603-111568.b\06030009.D
Lims ID: LCS 280-576710/2-A
Client ID:
Sample Type: LCS
Inject. Date: 03-Jun-2022 18:16:40 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-576710/2-A
Misc. Info.: 280-0111568-009
Operator ID: KA Instrument ID: SGC_U2a
Raw Data: Smoothed

Method: \\chromfs\Denver\ChromData\SGC_U2a\20220603-111568.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 08-Jun-2022 15:54:43 Calib Date: 09-May-2022 15:16:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090008.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX1621

First Level Reviewer: appenzellerk Date: 06-Jun-2022 12:13:24

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
A	5 C10-C25						
	6.208	(3.348-9.067)		175340652	2000.0	1288.9	
A	7 C10-C28						
	6.586	(3.348-9.824)		176920852	2000.0	1291.8	
A	8 C10-C32						
	7.039	(3.348-10.730)		177199399	2000.0	1291.1	
$	9 o-Terphenyl						
	7.232	7.235	-0.003	598089	35.0	3.37	
A	10 C10-C36						
	7.400	(3.348-11.452)		177944084	2000.0	1291.3	
$	13 n-Octacosane						
	9.867	9.864	0.003	325271	35.0	3.17	

QC Flag Legend
Processing Flags

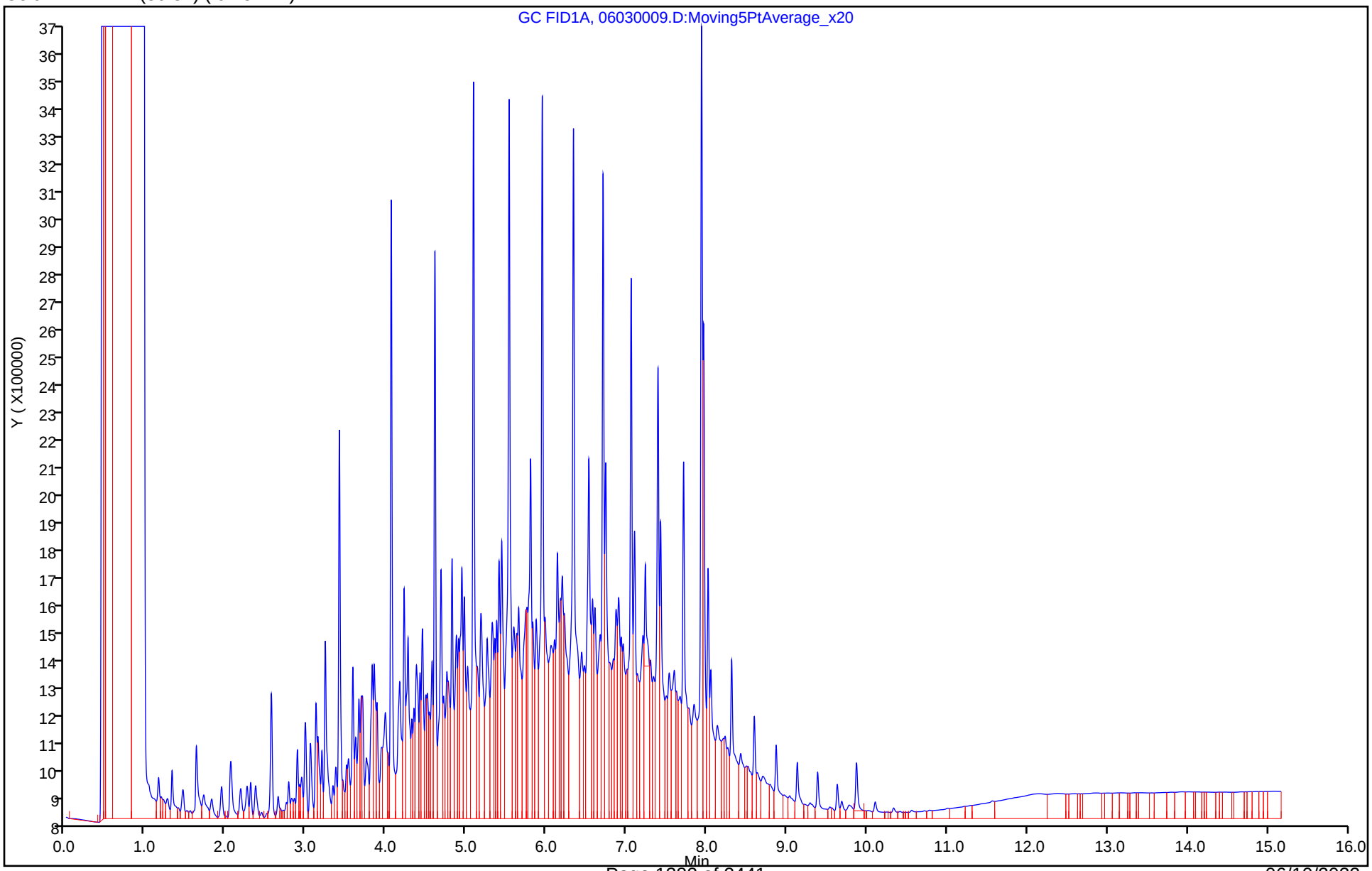
Report Date: 09-Jun-2022 12:23:12 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220603-111568.b\06030009.D

Injection Date:	03-Jun-2022 18:16:40	Instrument ID:	SGC_U2a	Operator ID:	KA
Lims ID:	LCS 280-576710/2-A			Worklist Smp#:	9
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)



Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220603-111568.b\06030009.D
Lims ID: LCS 280-576710/2-A
Client ID:
Sample Type: LCS
Inject. Date: 03-Jun-2022 18:16:40 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-576710/2-A
Misc. Info.: 280-0111568-009
Operator ID: KA Instrument ID: SGC_U2a
Raw Data: Smoothed

Method: \\chromfs\Denver\ChromData\SGC_U2a\20220603-111568.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 08-Jun-2022 15:54:43 Calib Date: 09-May-2022 15:16:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090008.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX1621

First Level Reviewer: appenzellerk Date: 06-Jun-2022 12:13:24

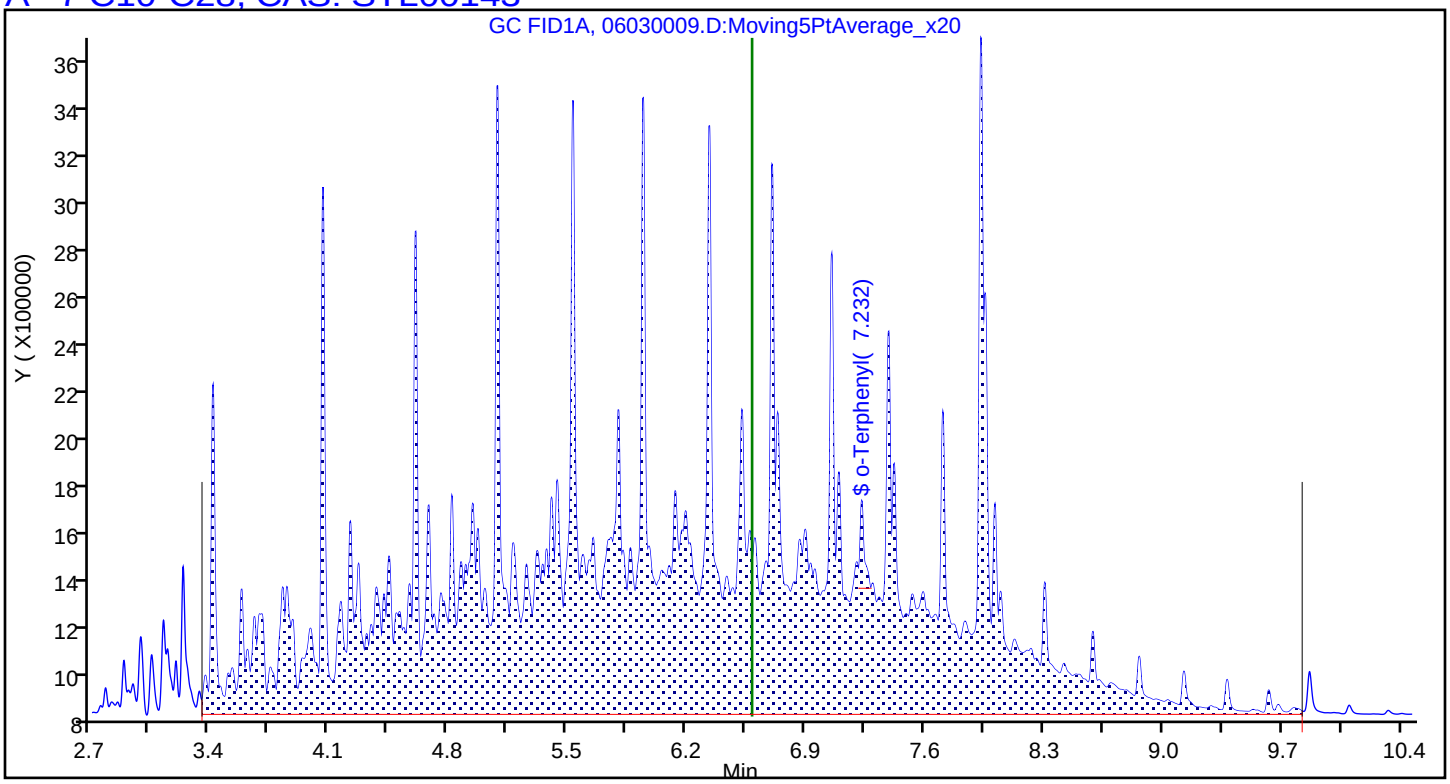
Compound	Amount Added	Amount Recovered	% Rec.
$ 9 o-Terphenyl	35.0	3.37	9.63
$ 13 n-Octacosane	35.0	3.17	9.05

Report Date: 09-Jun-2022 12:23:12 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20220603-111568.b\06030009.D				
Injection Date:	03-Jun-2022 18:16:40	Instrument ID:	SGC_U2a		
Lims ID:	LCS 280-576710/2-A				
Client ID:					
Operator ID:	KA	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A 7 C10-C28, CAS: STL00143



FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 280-576113/3-A

Matrix: Water | Lab File ID: 05300008.D

Analysis Method: 8015C DRO | Date Collected:

Extraction Method: 3510C | Date Extracted: 05/25/2022 15:07

Sample wt/vol: 1000(mL) | Date Analyzed: 05/30/2022 18:51

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: RTX-1 (30.32) ID: 0.25(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 576526 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
STL00143	C10-C28	1640	Q	250	120	33

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl (Surr)	96		56-125
630-02-4	n-Octacosane	42	Q	60-142

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220530-111452.b\05300008.D
Lims ID: LCSD 280-576113/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 30-May-2022 18:51:26 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 280-576113/3-A
Misc. Info.: 280-0111452-008
Operator ID: KA Instrument ID: SGC_U2a
Raw Data: Smoothed

Method: \\chromfs\Denver\ChromData\SGC_U2a\20220530-111452.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 31-May-2022 13:25:47 Calib Date: 09-May-2022 15:16:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090008.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX1640

First Level Reviewer: appenzellerk Date: 31-May-2022 13:09:06

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
A	5 C10-C25						
	6.215	(3.365-9.066)		222494653	2000.0	1636.8	
A	7 C10-C28						
	6.597	(3.365-9.828)		225122353	2000.0	1644.7	
A	8 C10-C32						
	7.052	(3.365-10.738)		225704960	2000.0	1646.0	
$	9 o-Terphenyl						
	7.233	7.236	-0.003	5680839	35.0	33.6	
A	10 C10-C36						
	7.481	(3.365-11.597)		226234037	2000.0	1644.7	
$	13 n-Octacosane						
	9.870	9.868	0.002	1772373	35.0	14.7	

QC Flag Legend
Processing Flags

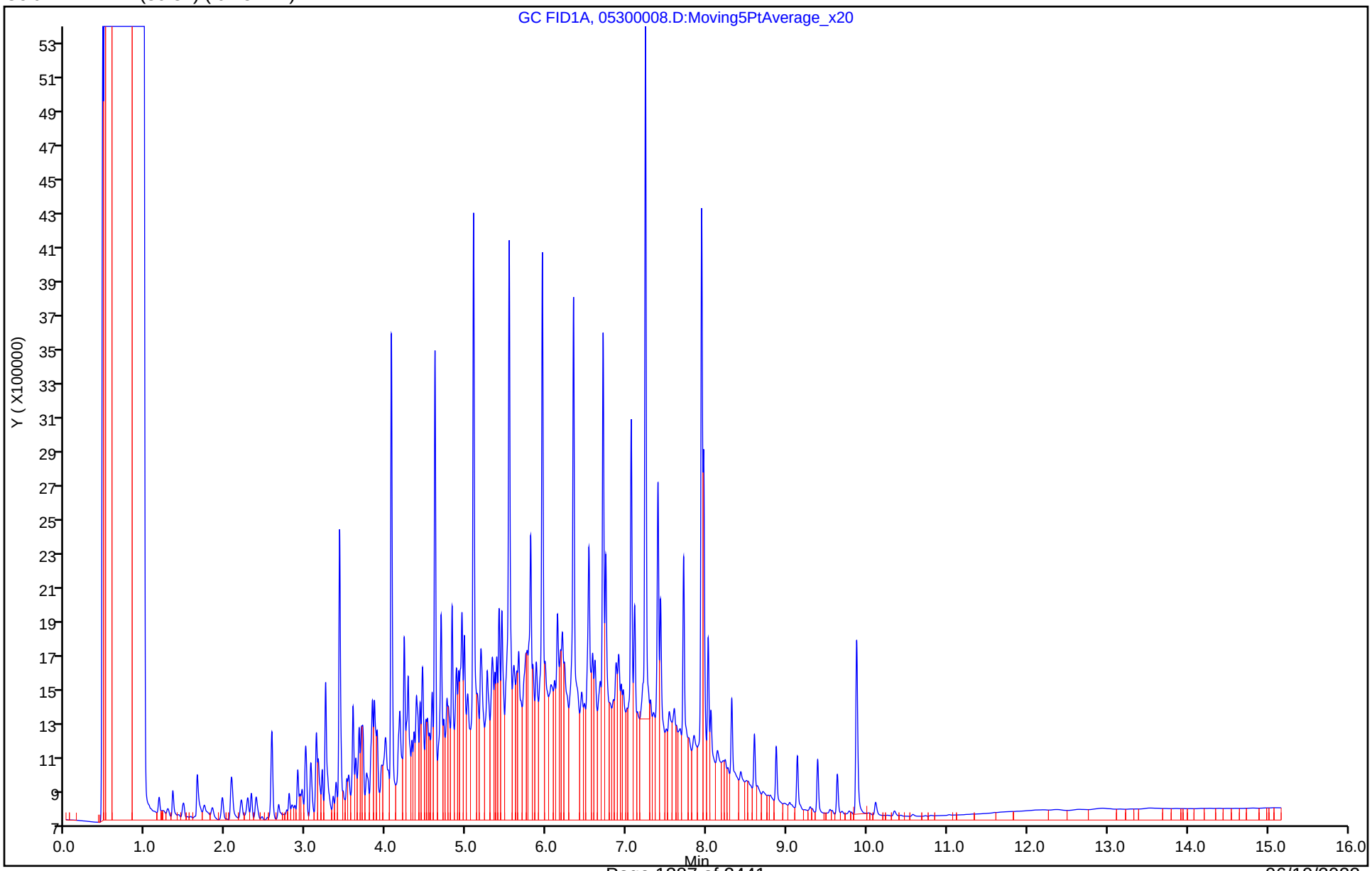
Report Date: 31-May-2022 13:25:51 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220530-111452.b\05300008.D

Injection Date:	30-May-2022 18:51:26	Instrument ID:	SGC_U2a	Operator ID:	KA
Lims ID:	LCSD 280-576113/3-A			Worklist Smp#:	8
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)



Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220530-111452.b\05300008.D
Lims ID: LCSD 280-576113/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 30-May-2022 18:51:26 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 280-576113/3-A
Misc. Info.: 280-0111452-008
Operator ID: KA Instrument ID: SGC_U2a
Raw Data: Smoothed

Method: \\chromfs\Denver\ChromData\SGC_U2a\20220530-111452.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 31-May-2022 13:25:47 Calib Date: 09-May-2022 15:16:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090008.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX1640

First Level Reviewer: appenzellerk Date: 31-May-2022 13:09:06

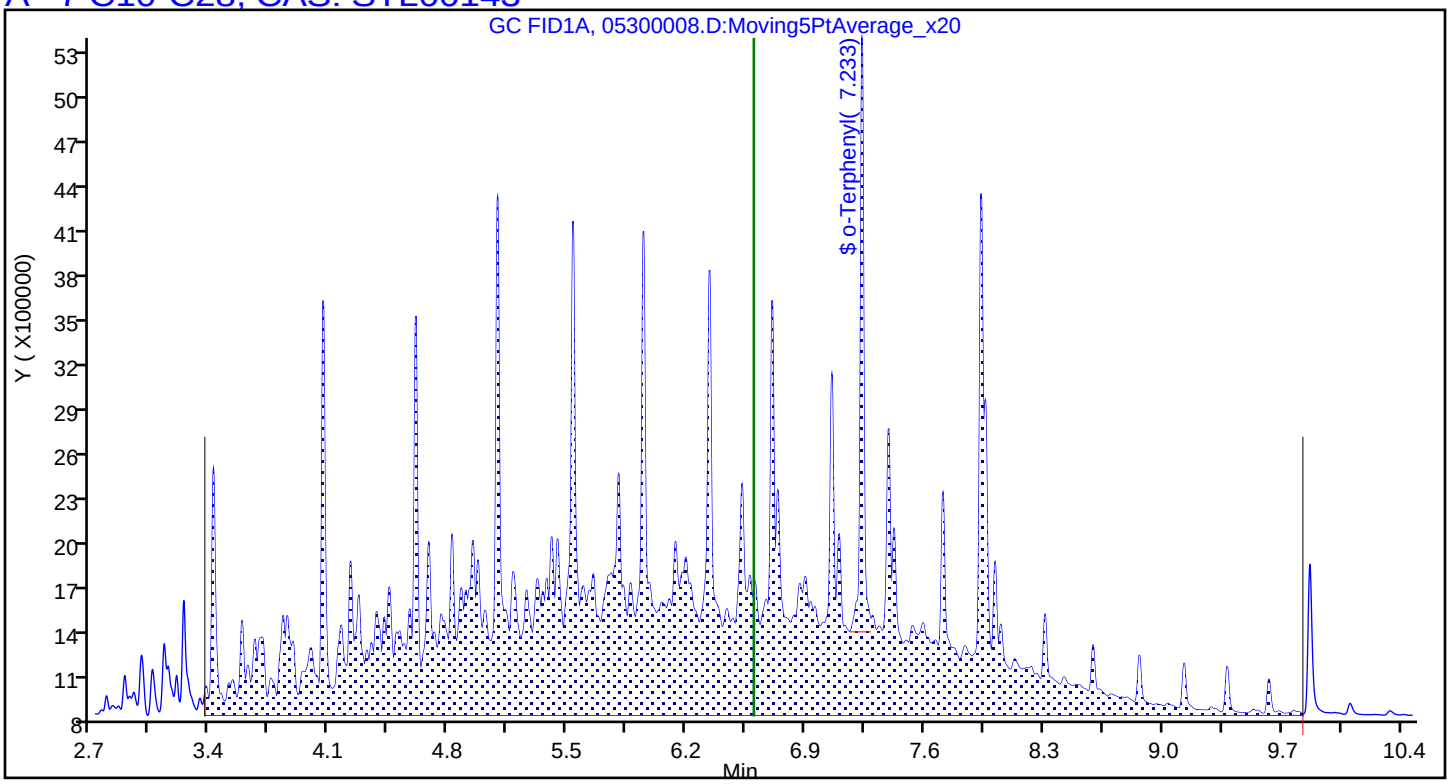
Compound	Amount Added	Amount Recovered	% Rec.
$ 9 o-Terphenyl	35.0	33.6	96.04
$ 13 n-Octacosane	35.0	14.7	42.13

Report Date: 31-May-2022 13:25:51 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20220530-111452.b\05300008.D				
Injection Date:	30-May-2022 18:51:26	Instrument ID:	SGC_U2a		
Lims ID:	LCSD 280-576113/3-A				
Client ID:					
Operator ID:	KA	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A 7 C10-C28, CAS: STL00143



FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 280-576710/3-A RE

Matrix: Water | Lab File ID: 06030010.D

Analysis Method: 8015C DRO | Date Collected:

Extraction Method: 3510C | Date Extracted: 06/01/2022 12:30

Sample wt/vol: 1000(mL) | Date Analyzed: 06/03/2022 18:39

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: RTX-1 (30.32) ID: 0.25(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 577101 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
STL00143	*C10-C28*	*1330*	*Q*	*250*	120	*33*

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl (Surr)	10	*Q*	56-125
630-02-4	n-Octacosane	9	*Q*	60-142

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220603-111568.b\06030010.D
Lims ID: LCSD 280-576710/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 03-Jun-2022 18:39:19 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 280-576710/3-A
Misc. Info.: 280-0111568-010
Operator ID: KA Instrument ID: SGC_U2a
Raw Data: Smoothed

Method: \\chromfs\Denver\ChromData\SGC_U2a\20220603-111568.b\DRO_U2a.m
Limit Group: GCSV - DRO
Last Update: 08-Jun-2022 15:54:43 Calib Date: 09-May-2022 15:16:56
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090008.D

Column 1 : RTX-1 (30.32) (0.25 mm) Det: GC FID1A
Process Host: CTX1621

First Level Reviewer: appenzellerk Date: 09-Jun-2022 12:22:27

	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
A 5 C10-C25	6.208	(3.348-9.067)		180902017	2000.0	1330.0	
A 7 C10-C28	6.586	(3.348-9.824)		182569602	2000.0	1333.1	
A 8 C10-C32	7.039	(3.348-10.730)		183096879	2000.0	1334.3	
$ 9 o-Terphenyl	7.231	7.235	-0.004	629131	35.0	3.56	
A 10 C10-C36	7.400	(3.348-11.452)		183797744	2000.0	1334.1	
$ 13 n-Octacosane	9.862	9.864	-0.002	304512	35.0	3.00	

QC Flag Legend
Processing Flags

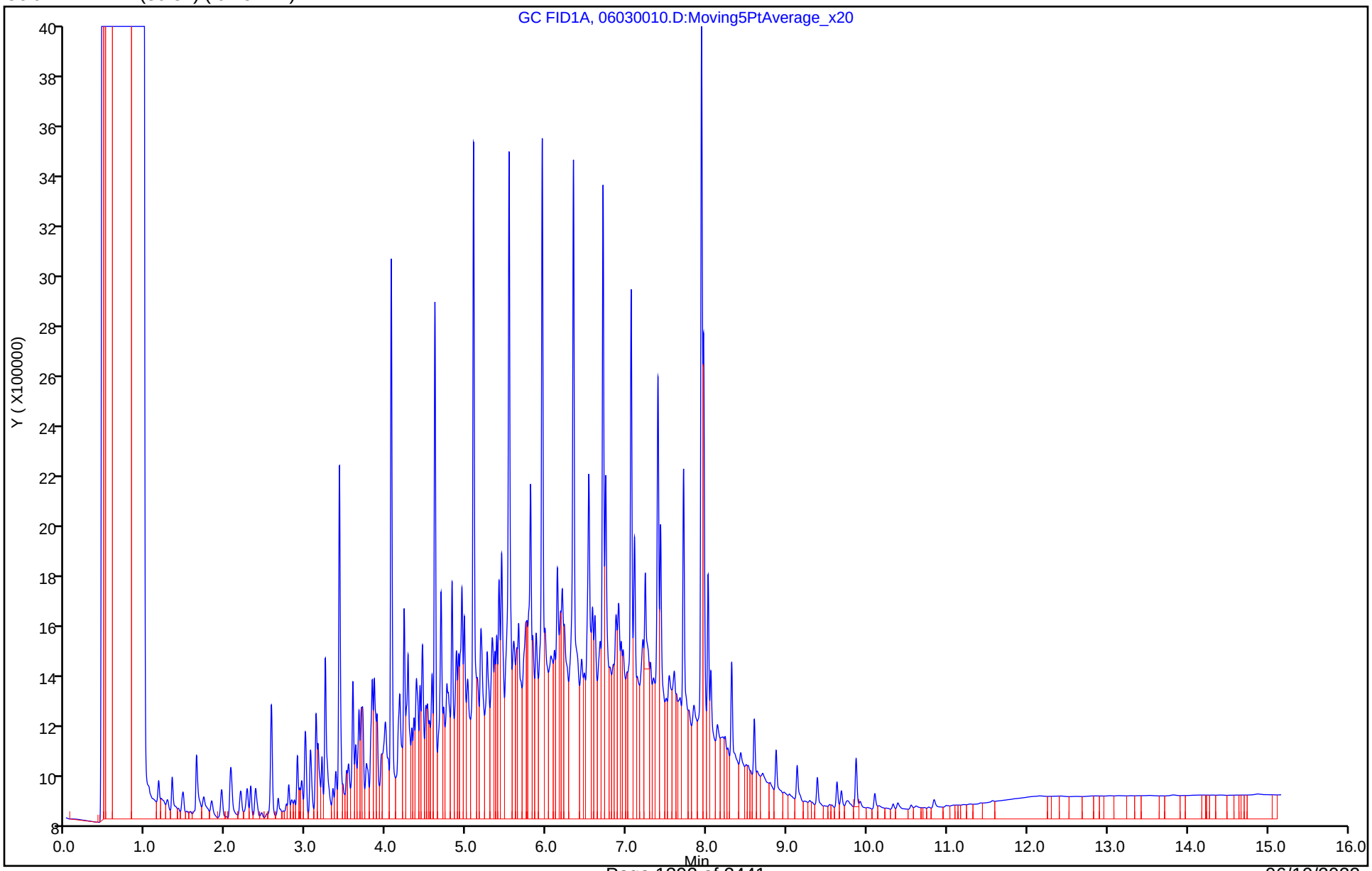
Report Date: 09-Jun-2022 12:23:13 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\SGC_U2a\20220603-111568.b\06030010.D

Injection Date:	03-Jun-2022 18:39:19	Instrument ID:	SGC_U2a	Operator ID:	KA
Lims ID:	LCSD 280-576710/3-A			Worklist Smp#:	10
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	DRO_U2a	Limit Group:	GCSV - DRO		

Column: RTX-1 (30.32) (0.25 mm)



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20220603-111568.b\06030010.D				
Lims ID:	LCSD 280-576710/3-A				
Client ID:					
Sample Type:	LCSD				
Inject. Date:	03-Jun-2022 18:39:19	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCSD 280-576710/3-A				
Misc. Info.:	280-0111568-010				
Operator ID:	KA	Instrument ID:	SGC_U2a		
Raw Data:	Smoothed				
Method:	\\chromfs\Denver\ChromData\SGC_U2a\20220603-111568.b\DRO_U2a.m				
Limit Group:	GCSV - DRO				
Last Update:	08-Jun-2022 15:54:43	Calib Date:	09-May-2022 15:16:56		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\SGC_U2a\20220509-110812.b\05090008.D				
Column 1 :	RTX-1 (30.32) (0.25 mm)		Det: GC FID1A		
Process Host:	CTX1621				

First Level Reviewer: appenzellerk Date: 09-Jun-2022 12:22:27

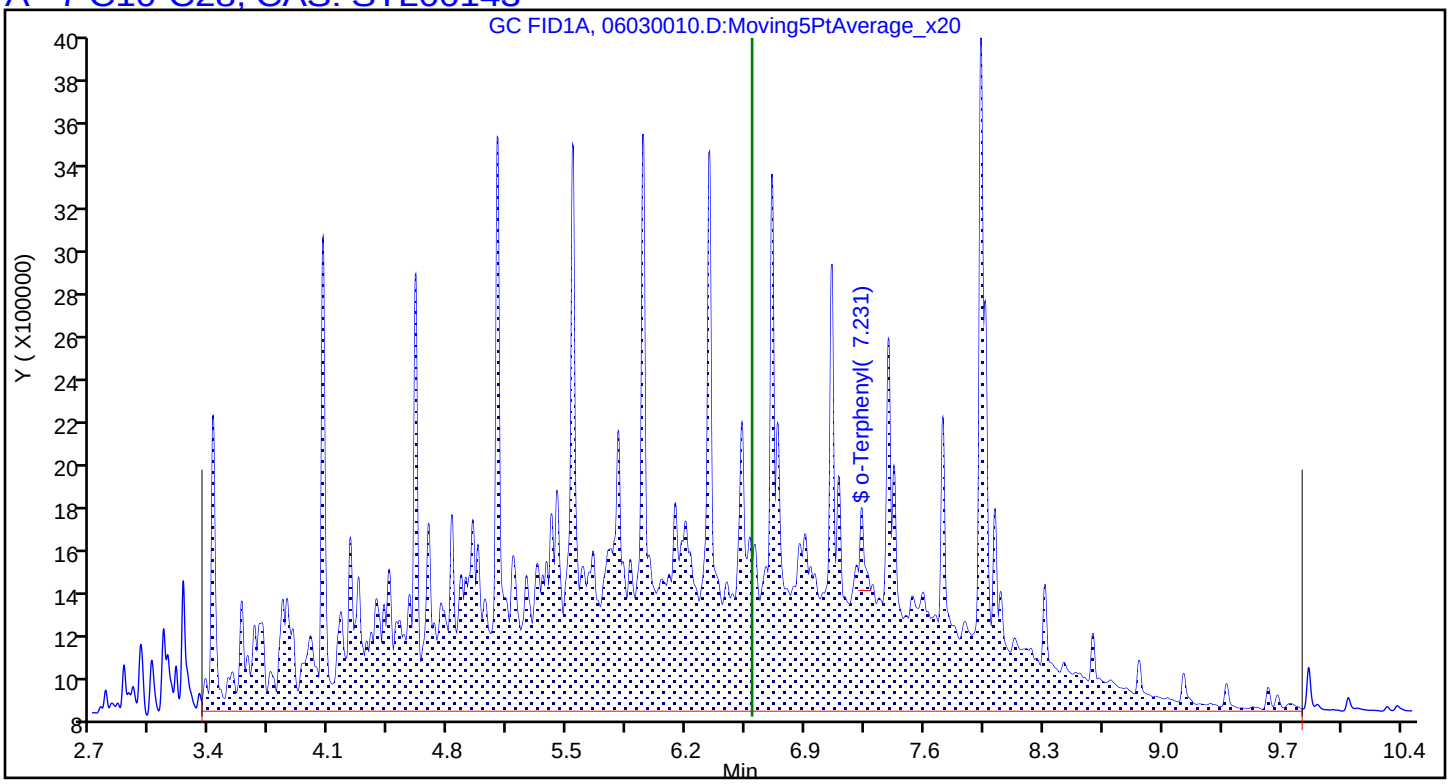
Compound	Amount Added	Amount Recovered	% Rec.
$ 9 o-Terphenyl	35.0	3.56	10.16
$ 13 n-Octacosane	35.0	3.00	8.57

Report Date: 09-Jun-2022 12:23:14 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\SGC_U2a\20220603-111568.b\06030010.D				
Injection Date:	03-Jun-2022 18:39:19	Instrument ID:	SGC_U2a		
Lims ID:	LCSD 280-576710/3-A				
Client ID:					
Operator ID:	KA	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	DRO_U2a	Limit Group:	GCSV - DRO		
Column:	RTX-1 (30.32) (0.25 mm)	Detector	GC FID1A		

A 7 C10-C28, CAS: STL00143



DIESEL RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: SGC_U2a Start Date: 05/09/2022 12:59

Analysis Batch Number: 574280 End Date: 05/09/2022 15:39

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD7 280-574280/2 IC		05/09/2022 12:59	1	05090002.D	RTX-1 (30.32) 0.25(mm)
STD6 280-574280/3 IC		05/09/2022 13:21	1	05090003.D	RTX-1 (30.32) 0.25(mm)
STD5 280-574280/4 IC		05/09/2022 13:44	1	05090004.D	RTX-1 (30.32) 0.25(mm)
ICRT 280-574280/5		05/09/2022 14:07	1	05090005.D	RTX-1 (30.32) 0.25(mm)
STD3 280-574280/6 IC		05/09/2022 14:30	1	05090006.D	RTX-1 (30.32) 0.25(mm)
STD2 280-574280/7 IC		05/09/2022 14:53	1	05090007.D	RTX-1 (30.32) 0.25(mm)
STD1 280-574280/8 IC		05/09/2022 15:16	1	05090008.D	RTX-1 (30.32) 0.25(mm)
ICV 280-574280/9		05/09/2022 15:39	1	05090009.D	RTX-1 (30.32) 0.25(mm)

DIESEL RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: SGC_U2a Start Date: 05/30/2022 16:58

Analysis Batch Number: 576526 End Date: 05/31/2022 09:41

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
RTC 280-576526/3		05/30/2022 16:58	1	05300003.D	RTX-1 (30.32) 0.25(mm)
CCVRT 280-576526/4		05/30/2022 17:20	1	05300004.D	RTX-1 (30.32) 0.25(mm)
CCV 280-576526/5		05/30/2022 17:43	1		RTX-1 (30.32) 0.25(mm)
MB 280-576113/1-A		05/30/2022 18:06	1	05300006.D	RTX-1 (30.32) 0.25(mm)
LCS 280-576113/2-A		05/30/2022 18:28	1	05300007.D	RTX-1 (30.32) 0.25(mm)
LCSD 280-576113/3-A		05/30/2022 18:51	1	05300008.D	RTX-1 (30.32) 0.25(mm)
ZZZZZ		05/30/2022 19:13	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		05/30/2022 19:36	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		05/30/2022 19:59	1		RTX-1 (30.32) 0.25(mm)
280-162622-13	G0069-22A	05/30/2022 20:22	1	05300012.D	RTX-1 (30.32) 0.25(mm)
280-162622-14	SHGW03-22A	05/30/2022 20:45	1	05300013.D	RTX-1 (30.32) 0.25(mm)
280-162622-15	SHGW04-22A	05/30/2022 21:07	1	05300014.D	RTX-1 (30.32) 0.25(mm)
ZZZZZ		05/30/2022 21:30	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		05/30/2022 21:53	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		05/30/2022 22:15	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		05/30/2022 22:38	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		05/30/2022 23:00	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		05/30/2022 23:23	1		RTX-1 (30.32) 0.25(mm)
CCV 280-576526/21		05/30/2022 23:46	1	05300021.D	RTX-1 (30.32) 0.25(mm)
CCV 280-576526/22		05/31/2022 00:08	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		05/31/2022 00:31	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		05/31/2022 00:53	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		05/31/2022 01:16	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		05/31/2022 01:39	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		05/31/2022 02:02	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		05/31/2022 02:25	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		05/31/2022 02:48	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		05/31/2022 03:11	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		05/31/2022 03:34	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		05/31/2022 03:58	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		05/31/2022 04:44	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		05/31/2022 05:07	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		05/31/2022 05:30	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		05/31/2022 05:53	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		05/31/2022 06:16	1		RTX-1 (30.32) 0.25(mm)
CCV 280-576526/38		05/31/2022 06:39	1		RTX-1 (30.32) 0.25(mm)
CCV 280-576526/39		05/31/2022 07:02	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		05/31/2022 07:25	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		05/31/2022 07:48	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		05/31/2022 08:11	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		05/31/2022 08:33	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		05/31/2022 08:56	1		RTX-1 (30.32) 0.25(mm)
CCV 280-576526/45		05/31/2022 09:19	1		RTX-1 (30.32) 0.25(mm)
CCV 280-576526/46		05/31/2022 09:41	1		RTX-1 (30.32) 0.25(mm)

DIESEL RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: SGC_U2a Start Date: 06/03/2022 16:00

Analysis Batch Number: 577101 End Date: 06/03/2022 20:32

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
RTC 280-577101/3		06/03/2022 16:00	1	06030003.D	RTX-1 (30.32) 0.25(mm)
CCVRT 280-577101/4		06/03/2022 16:23	1	06030004.D	RTX-1 (30.32) 0.25(mm)
CCV 280-577101/5		06/03/2022 16:45	1		RTX-1 (30.32) 0.25(mm)
ZZZZZ		06/03/2022 17:08	4		RTX-1 (30.32) 0.25(mm)
ZZZZZ		06/03/2022 17:31	4		RTX-1 (30.32) 0.25(mm)
MB 280-576710/1-A RE		06/03/2022 17:54	1	06030008.D	RTX-1 (30.32) 0.25(mm)
LCS 280-576710/2-A RE		06/03/2022 18:16	1	06030009.D	RTX-1 (30.32) 0.25(mm)
LCSD 280-576710/3-A RE		06/03/2022 18:39	1	06030010.D	RTX-1 (30.32) 0.25(mm)
280-162622-13 RE	G0069-22A RE	06/03/2022 19:01	1	06030011.D	RTX-1 (30.32) 0.25(mm)
280-162622-14 RE	SHGW03-22A RE	06/03/2022 19:24	1	06030012.D	RTX-1 (30.32) 0.25(mm)
280-162622-15 RE	SHGW04-22A RE	06/03/2022 19:47	1	06030013.D	RTX-1 (30.32) 0.25(mm)
CCV 280-577101/14		06/03/2022 20:10	1	06030014.D	RTX-1 (30.32) 0.25(mm)
CCV 280-577101/15		06/03/2022 20:32	1		RTX-1 (30.32) 0.25(mm)

DIESEL RANGE ORGANICS BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 574280 Batch Start Date: 05/09/22 12:59 Batch Analyst: Appenzeller, Kayla S

Batch Method: 8015C DRO Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	DRO_L4/CCV 00119	DRO_L7 00078	DRO_SS 00034			
STD7 280-574280/2 IC		8015C DRO			200 uL				
STD6 280-574280/3 IC		8015C DRO			100 uL				
STD5 280-574280/4 IC		8015C DRO			50 uL				
ICRT 280-574280/5		8015C DRO		200 uL					
STD3 280-574280/6 IC		8015C DRO		40 uL					
STD2 280-574280/7 IC		8015C DRO		10 uL					
STD1 280-574280/8 IC		8015C DRO		4 uL					
ICV 280-574280/9		8015C DRO				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.

DIESEL RANGE ORGANICS BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 576113 Batch Start Date: 05/25/22 15:07 Batch Analyst: Sharpe, Kaytlynn A

Batch Method: 3510C Batch End Date: 05/26/22 09:51

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	ReceivedpH	8015 LCS 00094
MB 280-576113/1		3510C, 8015C DRO				1000 mL	1 mL	5 SU	
LCS 280-576113/2		3510C, 8015C DRO				1000 mL	1 mL	5 SU	1 mL
LCSD 280-576113/3		3510C, 8015C DRO				1000 mL	1 mL	5 SU	1 mL
280-162622-B-13	G0069-22A	3510C, 8015C DRO	T	1554.0 g	511.3 g	1042.7 mL	1 mL	6 SU	
280-162622-B-14	SHGW03-22A	3510C, 8015C DRO	T	1565.4 g	503.9 g	1061.5 mL	1 mL	6 SU	
280-162622-B-15	SHGW04-22A	3510C, 8015C DRO	T	1570.4 g	510.0 g	1060.4 mL	1 mL	6 SU	

Lab Sample ID	Client Sample ID	Method Chain	Basis	8015Surrogate 00212	AnalysisComment				
MB 280-576113/1		3510C, 8015C DRO		1 mL					
LCS 280-576113/2		3510C, 8015C DRO		1 mL	DRO				
LCSD 280-576113/3		3510C, 8015C DRO		1 mL	DRO				
280-162622-B-13	G0069-22A	3510C, 8015C DRO	T	1 mL					
280-162622-B-14	SHGW03-22A	3510C, 8015C DRO	T	1 mL	d=0.9964				
280-162622-B-15	SHGW04-22A	3510C, 8015C DRO	T	1 mL	d= 0.9928				

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 Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 576113 Batch Start Date: 05/25/22 15:07 Batch Analyst: Sharpe, Kaytlynn A

Batch Method: 3510C Batch End Date: 05/26/22 09:51

Batch Notes	
Method/Fraction	3510C/8015C_DRO_DOD5
Balance ID	B318295195
Pipette/Syringe/Dispenser ID	LCMS
Analyst ID - Extraction	NC (Trainer) KS KZ SS (Trainees)
Reagent Water ID	N. ELGA
Analyst ID - Spike Analyst	NC (Trainer) KS (Trainee)
Analyst ID - Spike Witness Analyst	REVIEWER:NC
Sufficient Volume for Batch QC	NO
NaCl ID	215651
Prep Solvent ID	Mecl2_Cycl_00571
Prep Solvent Volume Used	180 mL
Glass Wool ID	13320999
Na2SO4 ID	Na2SO4_00087
Analyst ID - Concentration	SMQ
Equipment ID - Concentration 1	AR, RD
Thermometer ID - Concentration 1	761113, 3138
Concentration 1 Uncorrected Temperature	83, 84 Degrees C
Concentration 1 Corrected Temperature	84 Degrees C
Equipment ID - Concentration 2	41813
Thermometer ID - Concentration 2	3
Concentration 2 Uncorrected Temperature	31 Degrees C
Concentration 2 Corrected Temperature	32 Degrees C
Batch Comment	DV-OP-0006/0007

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.

DIESEL RANGE ORGANICS BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 576710 Batch Start Date: 06/01/22 12:30 Batch Analyst: Sharpe, Kaytlynn A

Batch Method: 3510C Batch End Date: 06/02/22 15:59

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	ReceivedpH	8015 LCS 00094
MB 280-576710/1		3510C, 8015C DRO				1000 mL	1 mL	5 SU	
LCS 280-576710/2		3510C, 8015C DRO				1000 mL	1 mL	5 SU	1 mL
LCSD 280-576710/3		3510C, 8015C DRO				1000 mL	1 mL	5 SU	1 mL
280-162622-A-13	G0069-22A	3510C, 8015C DRO	T	1552.9 g	510.0 g	1042.9 mL	1 mL	6 SU	
280-162622-A-14	SHGW03-22A	3510C, 8015C DRO	T	1567.7 g	511.1 g	1056.6 mL	1 mL	6 SU	
280-162622-A-15	SHGW04-22A	3510C, 8015C DRO	T	1565.2 g	509.0 g	1056.2 mL	1 mL	6 SU	

Lab Sample ID	Client Sample ID	Method Chain	Basis	8015Surrogate 00213	AnalysisComment				
MB 280-576710/1		3510C, 8015C DRO		1 mL					
LCS 280-576710/2		3510C, 8015C DRO		1 mL	DRO				
LCSD 280-576710/3		3510C, 8015C DRO		1 mL	DRO				
280-162622-A-13	G0069-22A	3510C, 8015C DRO	T	1 mL					
280-162622-A-14	SHGW03-22A	3510C, 8015C DRO	T	1 mL	d= 1.0067				
280-162622-A-15	SHGW04-22A	3510C, 8015C DRO	T	1 mL	d= 0.9983				

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 Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 576710 Batch Start Date: 06/01/22 12:30 Batch Analyst: Sharpe, Kaytlynn A

Batch Method: 3510C Batch End Date: 06/02/22 15:59

Batch Notes	
Method/Fraction	3510C/8015DRO_DOD5
Balance ID	B442138757
Pipette/Syringe/Dispenser ID	DJ
Analyst ID - Extraction	NC KZ (Trainer) KS SS (Trainees)
Reagent Water ID	N. ELGA
Analyst ID - Spike Analyst	NC (Trainer) KS (Trainee)
Analyst ID - Spike Witness Analyst	REVIEWER: JZ
Sufficient Volume for Batch QC	NO
NaCl ID	215651
Prep Solvent ID	Mecl2_Cycl_00571/572
Prep Solvent Volume Used	180 mL
Glass Wool ID	13320999
Na2SO4 ID	Na2SO4_00087
Analyst ID - Concentration	ARC, NC
Equipment ID - Concentration 1	AR, C
Thermometer ID - Concentration 1	761113, 3138
Concentration 1 Uncorrected Temperature	83, 84 Degrees C
Concentration 1 Corrected Temperature	84, 84 Degrees C
Equipment ID - Concentration 2	41813
Thermometer ID - Concentration 2	Nvap North 3
Concentration 2 Uncorrected Temperature	31 Degrees C
Concentration 2 Corrected Temperature	32 Degrees C
Batch Comment	DV-OP-0006/0007

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 Denver Job No.: 280-162622-1

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 #
G0119-22A	280-162622-1	99 M	
G0119-22A	280-162622-1		96
G0121-22A	280-162622-2	100 M	
G0121-22A	280-162622-2		91
G0101-22A	280-162622-3	116	
G0100-22A	280-162622-4	96 M	
G0100-22A	280-162622-4		92
G0122-22A	280-162622-5	102 M	
G0122-22A	280-162622-5		102 M
G0066R-22A	280-162622-6	102 M	
G0066R-22A	280-162622-6		104
G0024-22A	280-162622-7	108 M	
G0024-22A	280-162622-7		111
G0115-22A	280-162622-8	108 M	
G0095-22A	280-162622-9	111 M	
PZ018-22A	280-162622-10	109 M	
PZ018-22A	280-162622-10		97 M
PZ020-22A	280-162622-11	107 M	
PZ020-22A	280-162622-11		106 M
G0077-22A	280-162622-12	112 M	
G0077-22A	280-162622-12		113 M
G0311-22A	280-162622-16	118 M	
G0311-22A	280-162622-16		97 M
G0111-22A	280-162622-17	128 M Q	
G0111-22A	280-162622-17		101 M
G0123-22A	280-162622-18	120 M Q	
G0123-22A	280-162622-18		112
	MB 280-576154/1-A	103 M	
	LCS 280-576154/2-A	96	
	LCS 280-576154/4-A	97 M	
	LCSD 280-576154/3-A	97	
	LCSD 280-576154/5-A	101 M	

	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 Denver Job No.: 280-162622-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 05260012.D

Lab ID: LCS 280-576154/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.00	2.07	103	73-125	
1,3-Dinitrobenzene	2.00	1.98	99	78-120	
2,4,6-Trinitrotoluene	2.00	1.98	99	71-123	
2,4-Dinitrotoluene	2.00	1.80	90	78-120	
2,6-Dinitrotoluene	2.00	1.90	95	77-127	
2-Amino-4,6-dinitrotoluene	2.00	1.86	93	79-120	
2-Nitrotoluene	2.00	1.62	81	70-127	
3-Nitrotoluene	2.00	1.49	75	73-125	
4-Amino-2,6-dinitrotoluene	2.00	1.76	88	76-125	
4-Nitrotoluene	2.00	1.67	84	71-127	
HMX	2.00	1.92	96	65-135	M
Nitrobenzene	2.00	1.81	90	65-134	
RDX	2.00	1.92	96	68-130	
Tetryl	2.00	1.88	94	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 Denver Job No.: 280-162622-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 05260014.D

Lab ID: LCS 280-576154/4-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
MNX	2.34	2.31	99	57-132	M

Column to be used to flag recovery and RPD values

FORM III 8330A

FORM III
HPLC/IC LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 0526X013.D

Lab ID: LCSD 280-576154/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.00	2.06	103	1	30	73-125	
1,3-Dinitrobenzene	2.00	1.99	99	0	30	78-120	
2,4,6-Trinitrotoluene	2.00	1.98	99	0	30	71-123	
2,4-Dinitrotoluene	2.00	1.82	91	1	30	78-120	
2,6-Dinitrotoluene	2.00	1.91	96	1	30	77-127	
2-Amino-4,6-dinitrotoluene	2.00	1.86	93	0	30	79-120	
2-Nitrotoluene	2.00	1.64	82	1	30	70-127	
3-Nitrotoluene	2.00	1.46	73	2	30	73-125	
4-Amino-2,6-dinitrotoluene	2.00	1.77	89	1	30	76-125	
4-Nitrotoluene	2.00	1.72	86	3	30	71-127	
HMX	2.00	1.93	96	0	30	65-135	M
Nitrobenzene	2.00	1.77	88	2	30	65-134	M
RDX	2.00	1.93	96	0	30	68-130	
Tetryl	2.00	1.88	94	0	30	64-128	

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 Denver Job No.: 280-162622-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 05260015.D

Lab ID: LCSD 280-576154/5-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
MNX	2.34	2.39	102	3	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 Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: MB 280-576154/1-A

Matrix: Water Date Extracted: 05/25/2022 15:23

Lab File ID:(1) 05260011.D Lab File ID:(2)

Date Analyzed:(1) 05/26/2022 17:28 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 280-576154/2-A	05/26/2022 17:51	
	LCS 280-576154/4-A	05/26/2022 18:37	
	LCSD 280-576154/5-A	05/26/2022 19:00	
	LCSD 280-576154/3-A	05/26/2022 19:23	
G0119-22A	280-162622-1	05/26/2022 19:46	05/27/2022 21:28
G0121-22A	280-162622-2	05/26/2022 20:09	05/27/2022 22:03
G0101-22A	280-162622-3	05/26/2022 20:31	
G0100-22A	280-162622-4	05/26/2022 20:54	05/27/2022 22:38
G0122-22A	280-162622-5	05/26/2022 21:17	05/27/2022 23:13
G0066R-22A	280-162622-6	05/26/2022 22:26	05/27/2022 23:48
G0024-22A	280-162622-7	05/26/2022 22:49	05/28/2022 01:33
G0115-22A	280-162622-8	05/26/2022 23:12	
G0095-22A	280-162622-9	05/26/2022 23:35	
PZ018-22A	280-162622-10	05/26/2022 23:58	05/28/2022 02:08
PZ020-22A	280-162622-11	05/27/2022 00:21	05/28/2022 02:43
G0077-22A	280-162622-12	05/27/2022 00:44	05/28/2022 03:18
G0311-22A	280-162622-16	05/27/2022 01:07	05/28/2022 03:53
G0111-22A	280-162622-17	05/27/2022 01:30	05/28/2022 04:28
G0123-22A	280-162622-18	05/27/2022 01:53	05/28/2022 05:03

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0100-22A Lab Sample ID: 280-162622-4

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_X5

Date Analyzed (1): 05/26/2022 20:54 Date Analyzed (2): 05/27/2022 22:38

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		11.37	11.27	11.47	0.51		17.3
	2		18.25	18.08	18.38	0.43		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0122-22A Lab Sample ID: 280-162622-5

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_X5

Date Analyzed (1): 05/26/2022 21:17 Date Analyzed (2): 05/27/2022 23:13

GC Column (1): UltraCarb5uOD ID: 4.6(mm) GC Column (2): Luna-phenylhe ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
RDX	1		7.58	7.44	7.74	0.86		67.3
	2		8.83	8.69	8.99	1.7		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0024-22A Lab Sample ID: 280-162622-7

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_X5

Date Analyzed (1): 05/26/2022 22:49 Date Analyzed (2): 05/28/2022 01:33

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		10.91	10.82	11.02	0.18		8.0
	2		24.62	24.53	24.83	0.19		
4-Amino-2,6-dinitrotoluene	1		11.11	11.02	11.22	0.27		16.8
	2		17.15	17.10	17.40	0.32		
2-Amino-4,6-dinitrotoluene	1		11.36	11.27	11.47	0.52		16.1
	2		18.15	18.08	18.38	0.61		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Client Sample ID: PZ018-22A Lab Sample ID: 280-162622-10

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_X5

Date Analyzed (1): 05/26/2022 23:58 Date Analyzed (2): 05/28/2022 02:08

GC Column (1): UltraCarb5uOD ID: 4.6(mm) GC Column (2): Luna-phenylhe ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
RDX	1		7.60	7.44	7.74	0.68		18.7
	2		8.79	8.69	8.99	0.82		
2,4,6-Trinitrotoluene	1		10.91	10.82	11.02	3.3		12.0
	2		24.59	24.53	24.83	2.9		
4-Amino-2,6-dinitrotoluene	1		11.11	11.02	11.22	2.1		5.9
	2		17.15	17.10	17.40	2.2		
2-Amino-4,6-dinitrotoluene	1		11.36	11.27	11.47	1.3		14.1
	2		18.13	18.08	18.38	1.5		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Client Sample ID: PZ020-22A Lab Sample ID: 280-162622-11

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_X5

Date Analyzed (1): 05/27/2022 00:21 Date Analyzed (2): 05/28/2022 02:43

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		6.58	6.44	6.74	0.49		6.4
	2		6.67	6.56	6.86	0.52		
RDX	1		7.57	7.44	7.74	0.45		64.8
	2		8.77	8.69	8.99	0.23		
1,3,5-Trinitrobenzene	1		8.66	8.52	8.82	2.6		13.7
	2		18.41	18.34	18.64	3.0		
2,4,6-Trinitrotoluene	1		10.90	10.82	11.02	5.0		5.3
	2		24.59	24.53	24.83	5.3		
4-Amino-2,6-dinitrotoluene	1		11.10	11.02	11.22	2.1		23.6
	2		17.15	17.10	17.40	2.6		
2-Amino-4,6-dinitrotoluene	1		11.35	11.27	11.47	2.8		2.0
	2		18.15	18.08	18.38	2.8		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0077-22A Lab Sample ID: 280-162622-12

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_X5

Date Analyzed (1): 05/27/2022 00:44 Date Analyzed (2): 05/28/2022 03:18

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		6.59	6.44	6.74	0.75		40.5
	2		6.67	6.56	6.86	1.1		
RDX	1		7.58	7.44	7.74	1.2		7.8
	2		8.77	8.69	8.99	1.1		
1,3,5-Trinitrobenzene	1		8.66	8.52	8.82	5.4		12.9
	2		18.41	18.34	18.64	6.2		
2,4,6-Trinitrotoluene	1		10.90	10.82	11.02	7.7		3.6
	2		24.60	24.53	24.83	8.0		
4-Amino-2,6-dinitrotoluene	1		11.10	11.02	11.22	4.8		14.2
	2		17.16	17.10	17.40	5.5		
2-Amino-4,6-dinitrotoluene	1		11.35	11.27	11.47	4.2		10.1
	2		18.15	18.08	18.38	3.8		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0311-22A Lab Sample ID: 280-162622-16

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_X5

Date Analyzed (1): 05/27/2022 01:07 Date Analyzed (2): 05/28/2022 03:53

GC Column (1): UltraCarb5uOD ID: 4.6(mm) GC Column (2): Luna-phenylhe ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
1,3,5-Trinitrobenzene	1		8.66	8.52	8.82	4.3		20.9
	2		18.40	18.34	18.64	5.3		
2,4,6-Trinitrotoluene	1		10.91	10.82	11.02	3.6		3.3
	2		24.57	24.53	24.83	3.7		
4-Amino-2,6-dinitrotoluene	1		11.10	11.02	11.22	5.7		14.8
	2		17.16	17.10	17.40	6.6		
2-Amino-4,6-dinitrotoluene	1		11.35	11.27	11.47	8.6		1.4
	2		18.14	18.08	18.38	8.4		
2,4-Dinitrotoluene	1		11.69	11.61	11.81	0.65		20.8
	2		20.14	20.08	20.38	0.53		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0111-22A Lab Sample ID: 280-162622-17

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_X5

Date Analyzed (1): 05/27/2022 01:30 Date Analyzed (2): 05/28/2022 04:28

GC Column (1): UltraCarb5uOD ID: 4.6(mm) GC Column (2): Luna-phenylhe ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
1,3,5-Trinitrobenzene	1		8.66	8.52	8.82	4.6		19.7
	2		18.37	18.34	18.64	5.6		
2,4,6-Trinitrotoluene	1		10.90	10.82	11.02	4.0		2.3
	2		24.55	24.53	24.83	3.9		
4-Amino-2,6-dinitrotoluene	1		11.10	11.02	11.22	6.0		16.6
	2		17.12	17.10	17.40	7.1		
2-Amino-4,6-dinitrotoluene	1		11.36	11.27	11.47	8.8		0.1
	2		18.11	18.08	18.38	8.8		
2,4-Dinitrotoluene	1		11.69	11.61	11.81	0.79		32.8
	2		20.11	20.08	20.38	0.57		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0123-22A Lab Sample ID: 280-162622-18

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_X5

Date Analyzed (1): 05/27/2022 01:53 Date Analyzed (2): 05/28/2022 05:03

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		6.57	6.44	6.74	0.49		23.1
	2		6.66	6.56	6.86	0.62		

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0119-22A | Lab Sample ID: 280-162622-1

Matrix: Water | Lab File ID: 05260016.D

Analysis Method: 8330A | Date Collected: 05/19/2022 10:50

Extraction Method: 3535 | Date Extracted: 05/25/2022 15:23

Sample wt/vol: 487.9(mL) | Date Analyzed: 05/26/2022 19:46

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 576310 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-65-0	1,3-Dinitrobenzene	0.10	U M	0.11	0.10	0.038
118-96-7	2,4,6-Trinitrotoluene	0.10	U M	0.11	0.10	0.046
121-14-2	2,4-Dinitrotoluene	0.082	U	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	0.10	U	0.11	0.10	0.052
99-08-1	3-Nitrotoluene	0.41	U	0.41	0.41	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.059
99-99-0	4-Nitrotoluene	0.41	U	0.42	0.41	0.10
2691-41-0	HMX	0.20	U	0.22	0.20	0.090
5755-27-1	MNX	0.41	U	2.0	0.41	0.16
98-95-3	Nitrobenzene	0.20	U	0.22	0.20	0.093
121-82-4	RDX	0.20	U	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	99	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\05260016.D
Lims ID: 280-162622-A-1-A
Client ID: G0119-22A
Sample Type: Client
Inject. Date: 26-May-2022 19:46:07 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 280-576154/
Misc. Info.: 280-0111383-016
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 27-May-2022 13:18:41 Calib Date: 25-Mar-2022 16:30:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220325-109559.b\03250017.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1651

First Level Reviewer: zhangji Date: 26-May-2022 20:30:51

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.593			ND	
7 MNX	1		7.211			ND	
8 RDX	1		7.586			ND	
$ 10 1,2-Dinitrobenzene	1	8.542	8.546	-0.004	24744	0.1984	M
11 1,3,5-Trinitrobenzene	1	8.682	8.666	0.016	2318	0.0106	M
12 1,3-Dinitrobenzene	1		9.299			ND	U
13 Nitrobenzene	1		9.686			ND	
15 Tetryl	1		10.013			ND	U
17 2,4,6-Trinitrotoluene	1		10.919			ND	U
18 4-Amino-2,6-dinitrotoluene	1		11.119			ND	
19 2-Amino-4,6-dinitrotoluene	1		11.373			ND	
20 2,6-Dinitrotoluene	1		11.533			ND	
21 2,4-Dinitrotoluene	1		11.706			ND	
22 o-Nitrotoluene	1	12.575	12.559	0.016	2130	0.0167	
23 p-Nitrotoluene	1		12.993			ND	
24 m-Nitrotoluene	1		13.566			ND	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

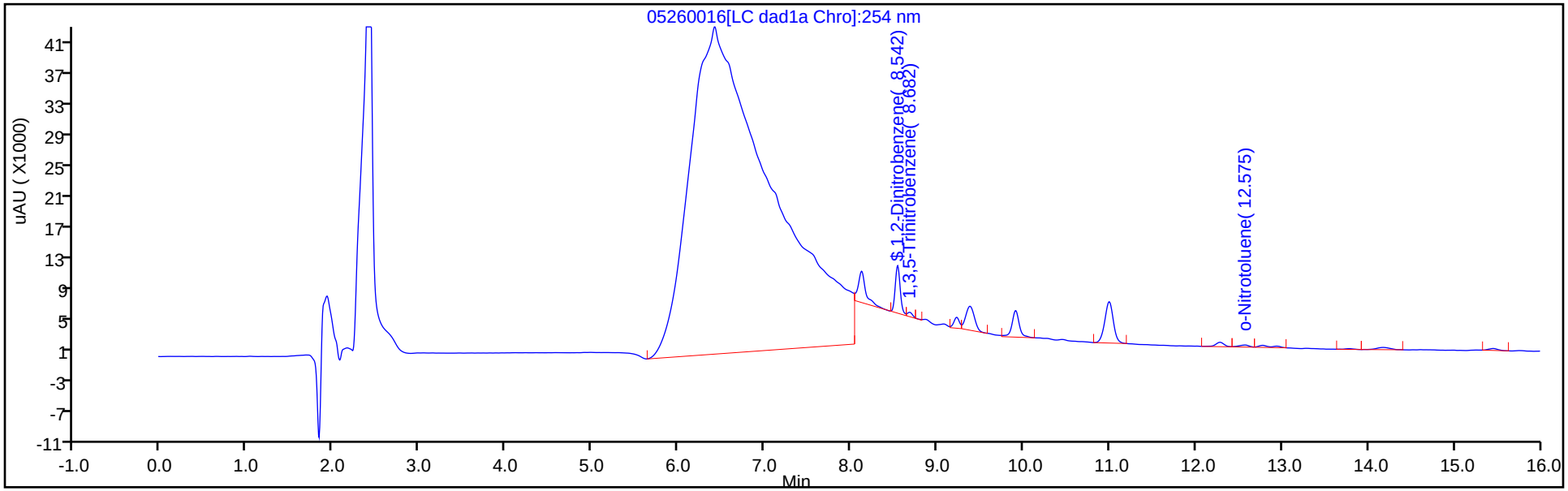
Report Date: 27-May-2022 13:18:44 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

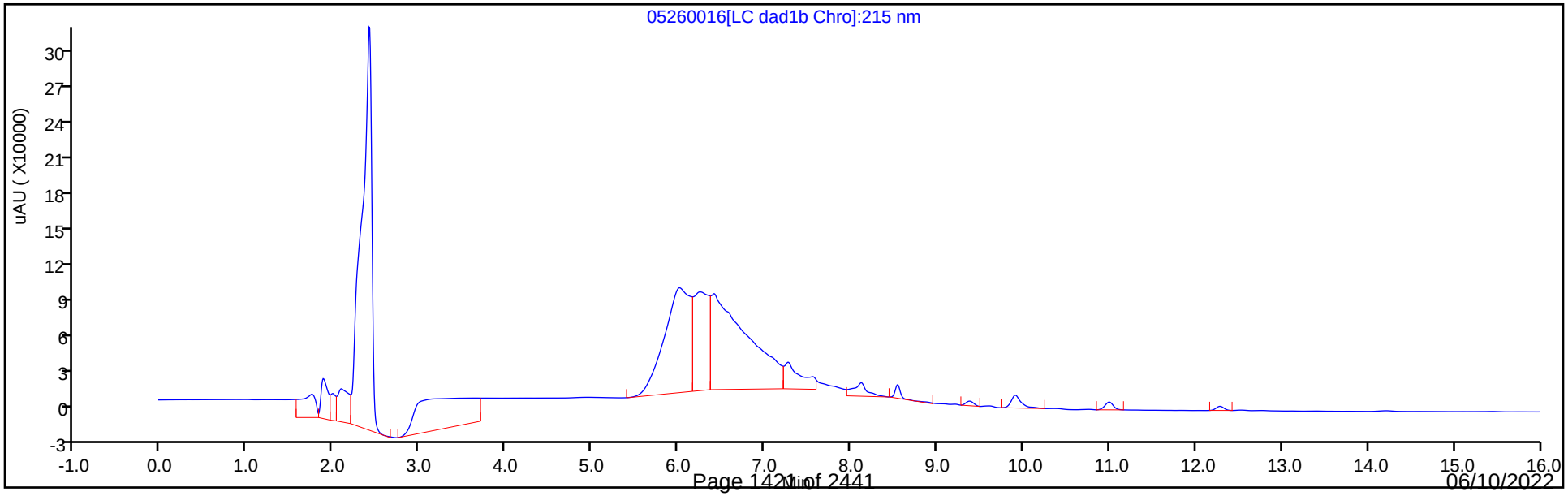
Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260016.d

Injection Date:	26-May-2022 19:46:07	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-162622-A-1-A	Lab Sample ID:	280-162622-1	Worklist Smp#:	16
Client ID:	G0119-22A				
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 Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\05260016.D				
Lims ID:	280-162622-A-1-A				
Client ID:	G0119-22A				
Sample Type:	Client				
Inject. Date:	26-May-2022 19:46:07	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCSD 280-576154/				
Misc. Info.:	280-0111383-016				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	27-May-2022 13:18:41	Calib Date:	25-Mar-2022 16:30:08		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220325-109559.b\03250017.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1651				

First Level Reviewer: zhangji Date: 26-May-2022 20:30:51

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1984	99.22

Manual Integration/User Assign Peak Report

Eurofins Denver

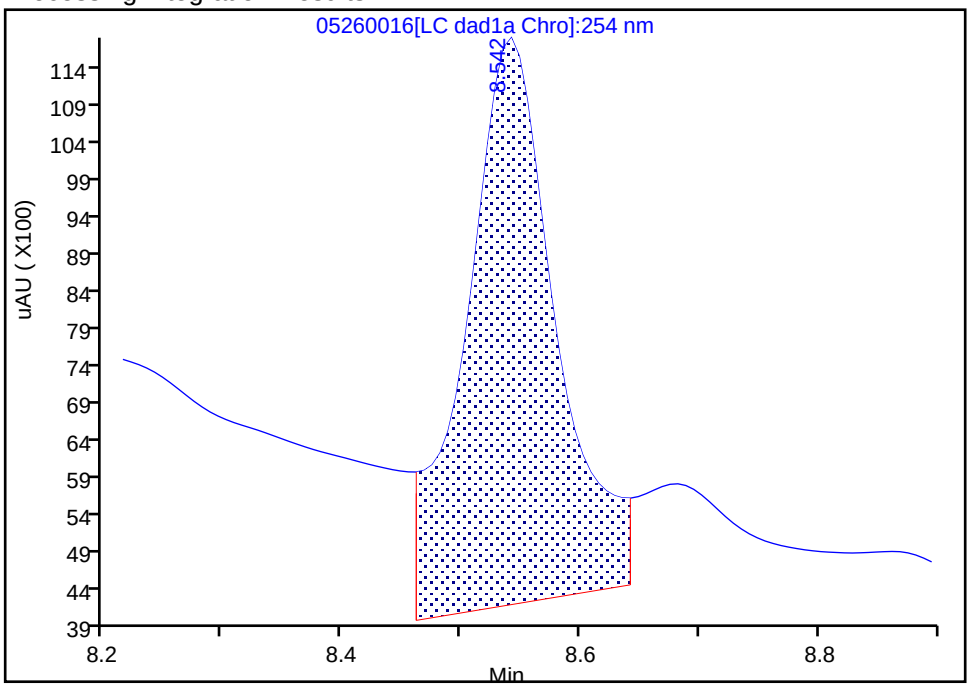
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260016.d				
Injection Date:	26-May-2022 19:46:07	Instrument ID:	CHHPLC_X3		
Lims ID:	280-162622-A-1-A	Lab Sample ID:	280-162622-1		
Client ID:	G0119-22A				
Operator ID:	JZ	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

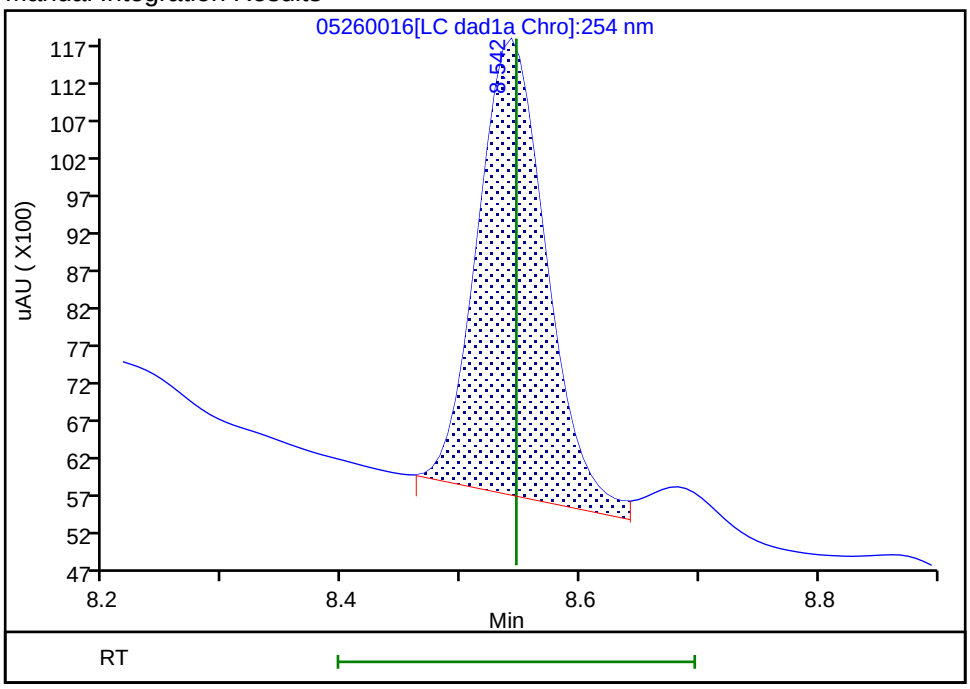
Processing Integration Results

RT: 8.54
Area: 40501
Amount: 0.324794
Amount Units: ug/mL



Manual Integration Results

RT: 8.54
Area: 24744
Amount: 0.198432
Amount Units: ug/mL



Reviewer: zhangji, 26-May-2022 20:30:43

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

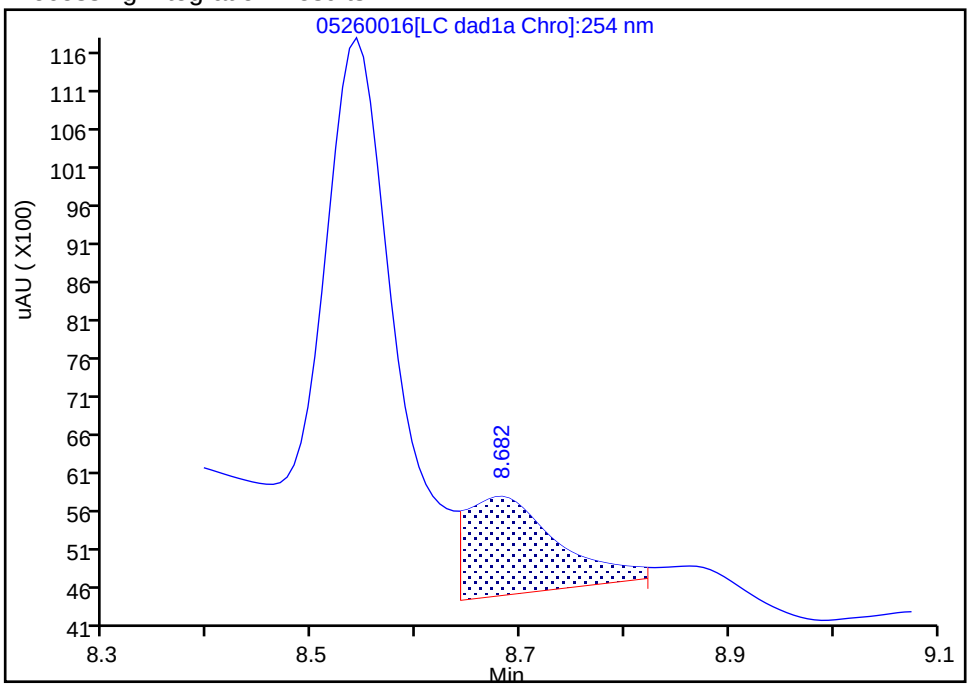
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260016.d				
Injection Date:	26-May-2022 19:46:07	Instrument ID:	CHHPLC_X3		
Lims ID:	280-162622-A-1-A	Lab Sample ID:	280-162622-1		
Client ID:	G0119-22A				
Operator ID:	JZ	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

11 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

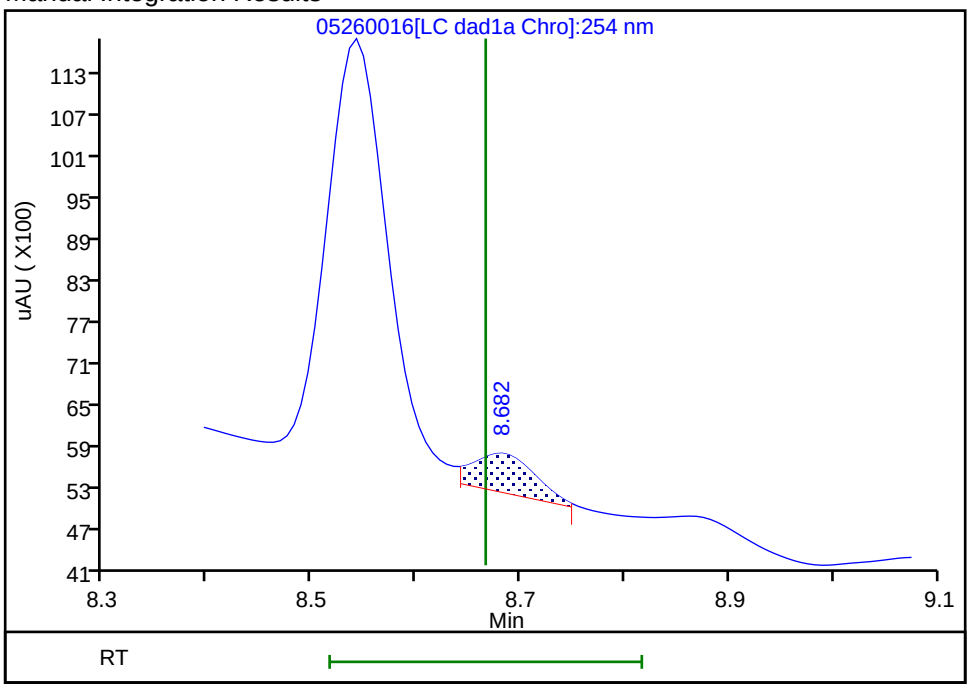
Processing Integration Results

RT: 8.68
Area: 7772
Amount: 0.035636
Amount Units: ug/mL



Manual Integration Results

RT: 8.68
Area: 2318
Amount: 0.010628
Amount Units: ug/mL



Reviewer: zhangji, 26-May-2022 20:30:46

Audit Action: Split an Integrated Peak Audit Reason: Baseline

User Disabled Compound Report

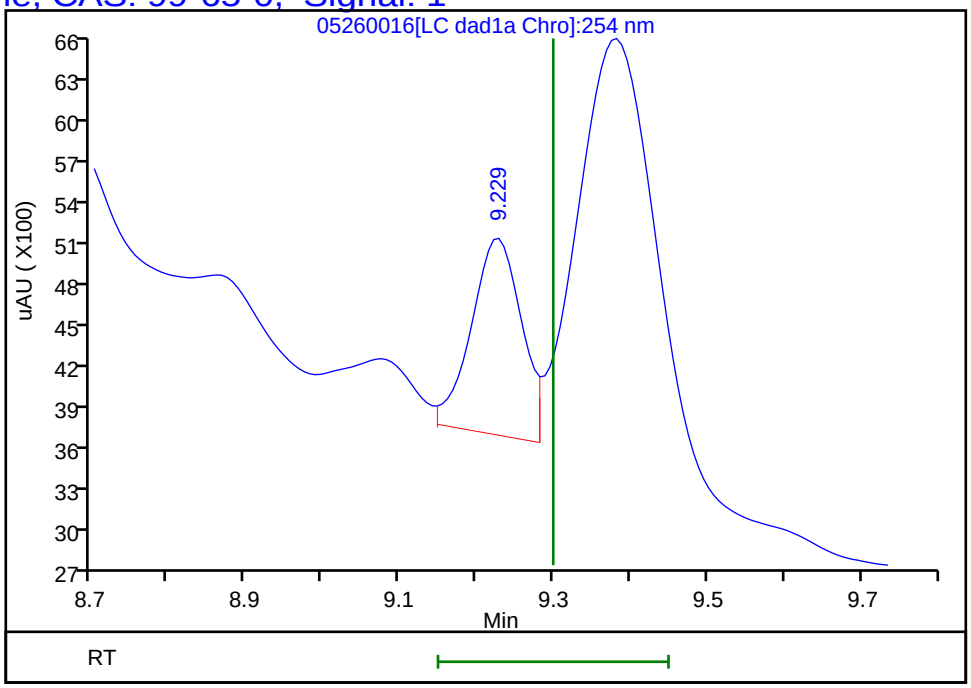
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260016.d
Injection Date: 26-May-2022 19:46:07 Instrument ID: CHHPLC_X3
Lims ID: 280-162622-A-1-A Lab Sample ID: 280-162622-1
Client ID: G0119-22A
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

12 1,3-Dinitrobenzene, CAS: 99-65-0, Signal: 1

RT: 9.23
Response: 6393
Amount: 0.022167



Reviewer: zhangji, 26-May-2022 20:30:51
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

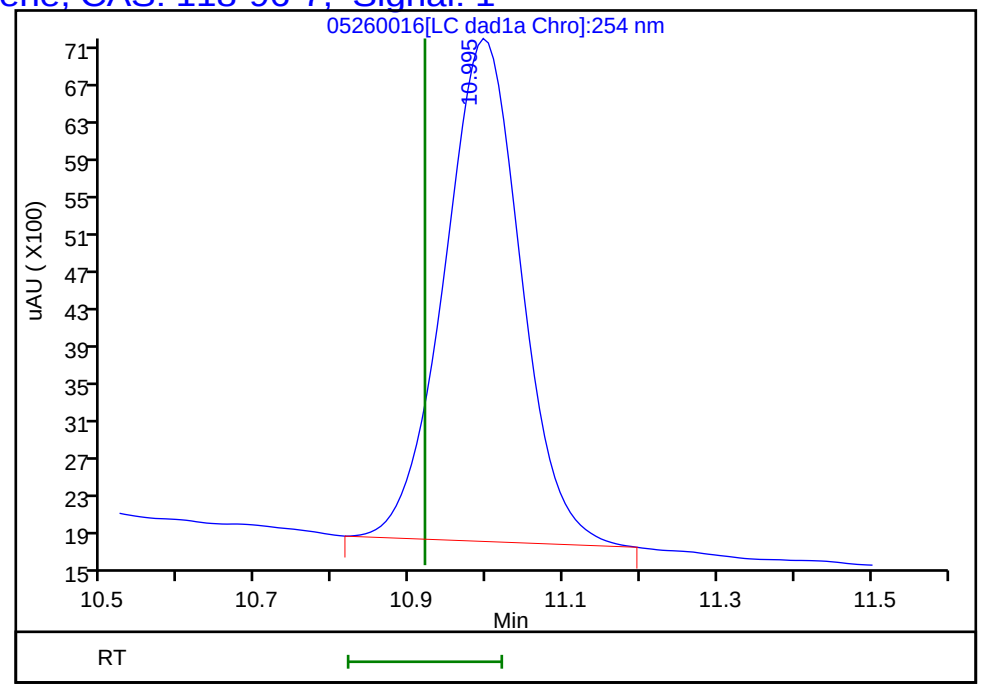
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260016.d
Injection Date: 26-May-2022 19:46:07 Instrument ID: CHHPLC_X3
Lims ID: 280-162622-A-1-A Lab Sample ID: 280-162622-1
Client ID: G0119-22A
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

17 2,4,6-Trinitrotoluene, CAS: 118-96-7, Signal: 1

RT: 11.00
Response: 37095
Amount: 0.182981



Reviewer: zhangji, 26-May-2022 20:30:51
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

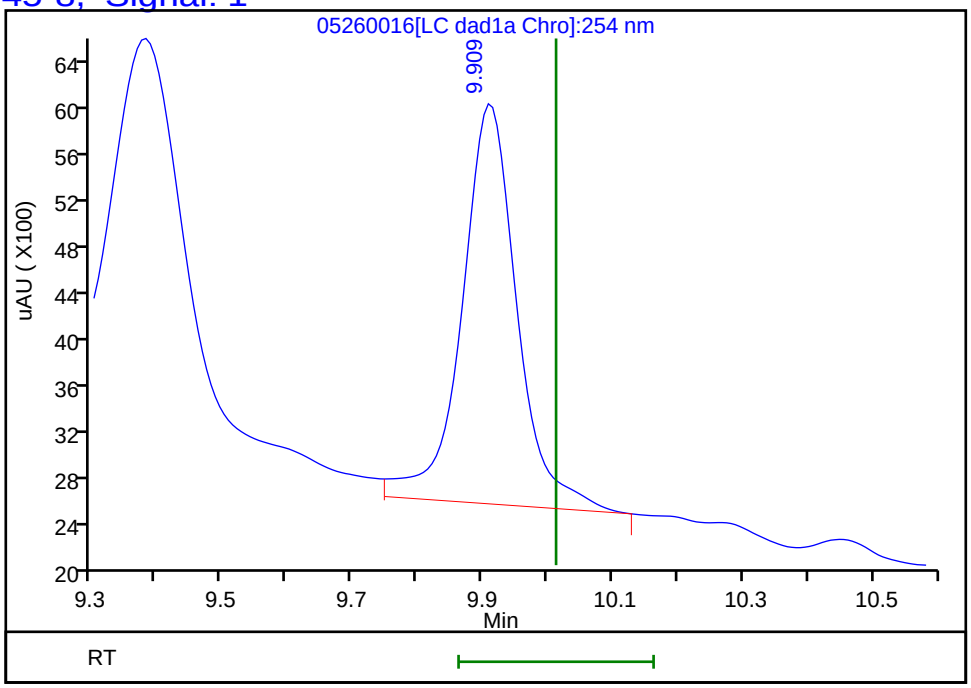
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260016.d
Injection Date: 26-May-2022 19:46:07 Instrument ID: CHHPLC_X3
Lims ID: 280-162622-A-1-A Lab Sample ID: 280-162622-1
Client ID: G0119-22A
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

15 Tetryl, CAS: 479-45-8, Signal: 1

RT: 9.91
Response: 20219
Amount: 0.118540



Reviewer: zhangji, 26-May-2022 20:30:51
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0119-22A | Lab Sample ID: 280-162622-1

Matrix: Water | Lab File ID: 05270015.D

Analysis Method: 8330A | Date Collected: 05/19/2022 10:50

Extraction Method: 3535 | Date Extracted: 05/25/2022 15:23

Sample wt/vol: 487.9(mL) | Date Analyzed: 05/27/2022 21:28

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: Luna-phenylhex ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 576448 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.20	U	0.22	0.20	0.086
88-72-2	2-Nitrotoluene	0.20	U	0.22	0.20	0.088

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	96		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270015.D				
Lims ID:	280-162622-A-1-A				
Client ID:	G0119-22A				
Sample Type:	Client				
Inject. Date:	27-May-2022 21:28:15	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-162622-A-1-A				
Misc. Info.:	280-0111418-015				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	28-May-2022 14:12:39	Calib Date:	03-Mar-2022 07:19:48		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1652				
First Level Reviewer: zhangji		Date:	28-May-2022 13:59:47		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
5 HMX	1	6.719	6.713	0.006	1336	0.008042	M
6 MNX	1		7.440			ND	
8 RDX	1	8.866	8.840	0.026	13758	0.0708	M
9 Nitrobenzene	1		11.707			ND	
$ 10 1,2-Dinitrobenzene	1	12.886	12.867	0.019	47996	0.1922	
12 1,3-Dinitrobenzene	1		15.233			ND	
14 o-Nitrotoluene	1		16.327			ND	
16 p-Nitrotoluene	1		16.627			ND	
17 4-Amino-2,6-dinitrotoluene	1		17.247			ND	U
18 m-Nitrotoluene	1		17.573			ND	U
19 2-Amino-4,6-dinitrotoluene	1		18.233			ND	
20 1,3,5-Trinitrobenzene	1		18.487			ND	
21 2,6-Dinitrotoluene	1		19.720			ND	
22 2,4-Dinitrotoluene	1		20.233			ND	7
23 Tetryl	1		23.880			ND	
24 2,4,6-Trinitrotoluene	1		24.680			ND	

QC Flag Legend

Processing Flags
- 7 - Failed Limit of Detection

Review Flags
- M - Manually Integrated
- U - Marked Undetected

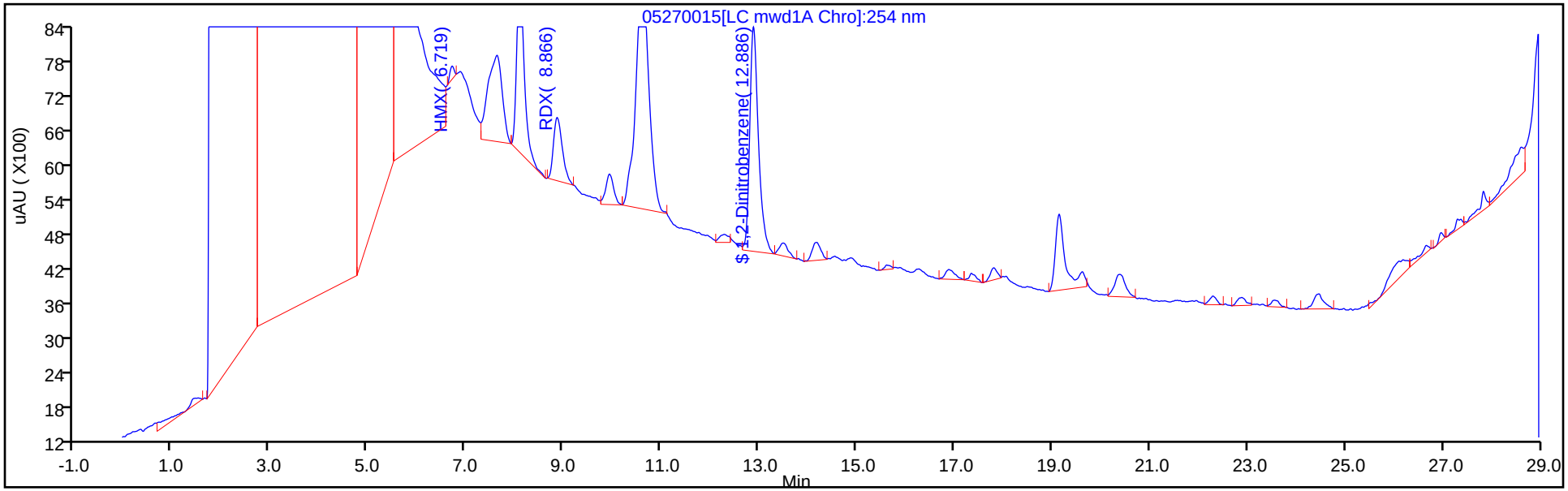
Report Date: 28-May-2022 14:12:42 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

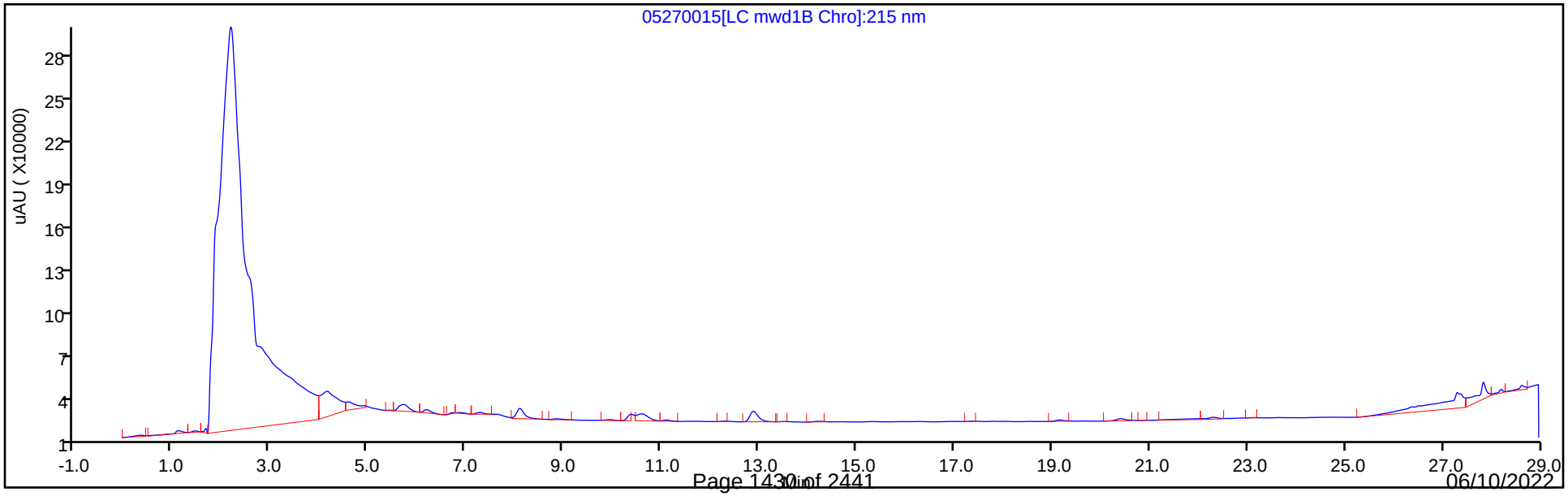
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270015.D

Injection Date:	27-May-2022 21:28:15	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-162622-A-1-A	Lab Sample ID:	280-162622-1	Worklist Smp#:	15
Client ID:	G0119-22A				
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



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270015.D				
Lims ID:	280-162622-A-1-A				
Client ID:	G0119-22A				
Sample Type:	Client				
Inject. Date:	27-May-2022 21:28:15	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-162622-A-1-A				
Misc. Info.:	280-0111418-015				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	28-May-2022 14:12:39	Calib Date:	03-Mar-2022 07:19:48		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1652				
First Level Reviewer: zhangji		Date:	28-May-2022 13:59:47		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1922	96.09

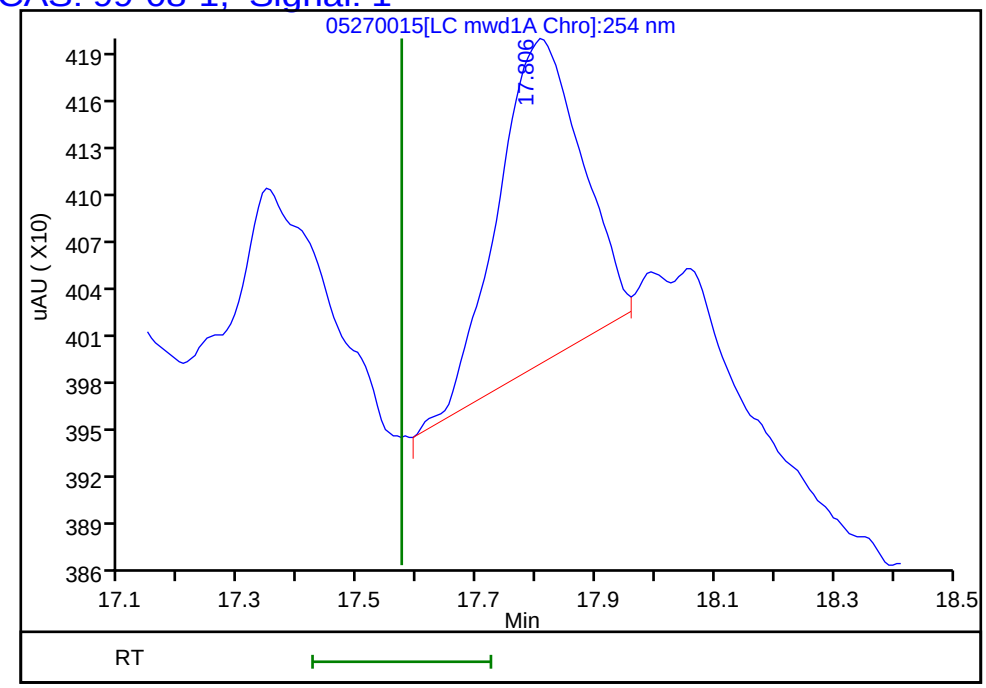
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270015.D				
Injection Date:	27-May-2022 21:28:15	Instrument ID:	CHHPLC_X5		
Lims ID:	280-162622-A-1-A	Lab Sample ID:	280-162622-1		
Client ID:	G0119-22A				
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:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

18 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 17.81
Response: 2029
Amount: 0.008340



Reviewer: zhangji, 28-May-2022 13:59:47
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

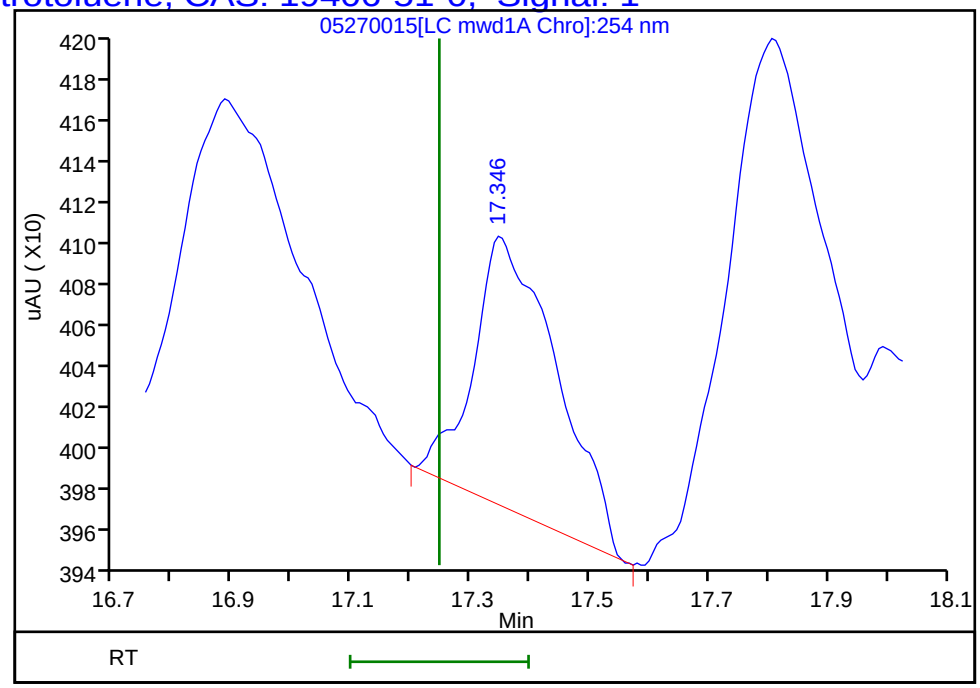
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270015.D				
Injection Date:	27-May-2022 21:28:15	Instrument ID:	CHHPLC_X5		
Lims ID:	280-162622-A-1-A	Lab Sample ID:	280-162622-1		
Client ID:	G0119-22A				
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:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

17 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0, Signal: 1

RT: 17.35
Response: 1282
Amount: 0.005032



Reviewer: zhangji, 28-May-2022 13:59:47
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

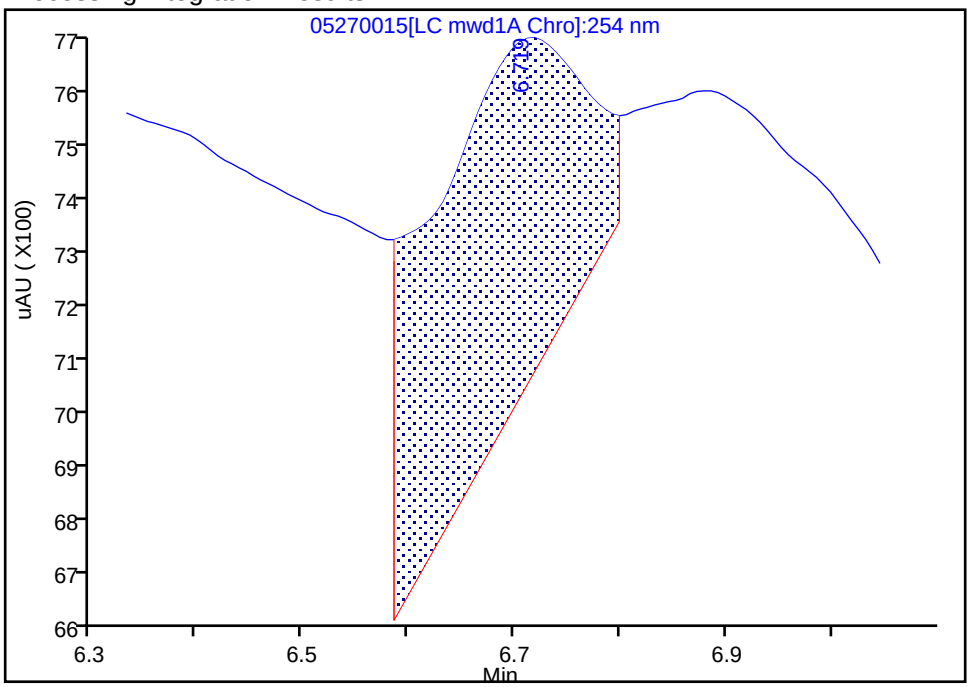
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270015.D				
Injection Date:	27-May-2022 21:28:15	Instrument ID:	CHHPLC_X5		
Lims ID:	280-162622-A-1-A	Lab Sample ID:	280-162622-1		
Client ID:	G0119-22A				
Operator ID:	JZ	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

5 HMX, CAS: 2691-41-0

Signal: 1

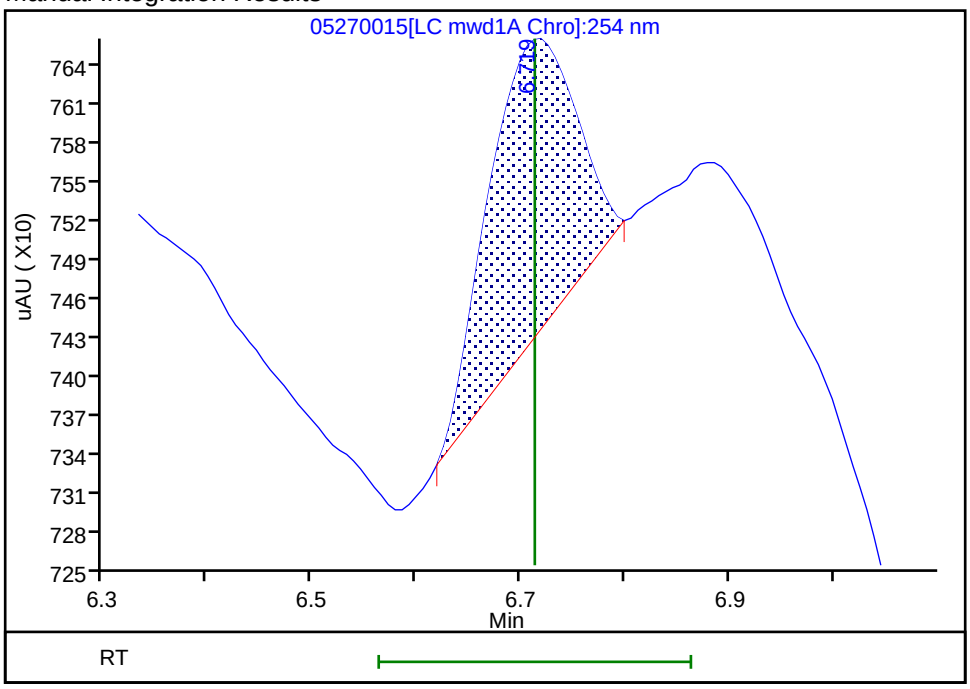
Processing Integration Results

RT: 6.72
Area: 6833
Amount: 0.041129
Amount Units: ug/ml



Manual Integration Results

RT: 6.72
Area: 1336
Amount: 0.008042
Amount Units: ug/ml



Reviewer: zhangji, 28-May-2022 13:59:39

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

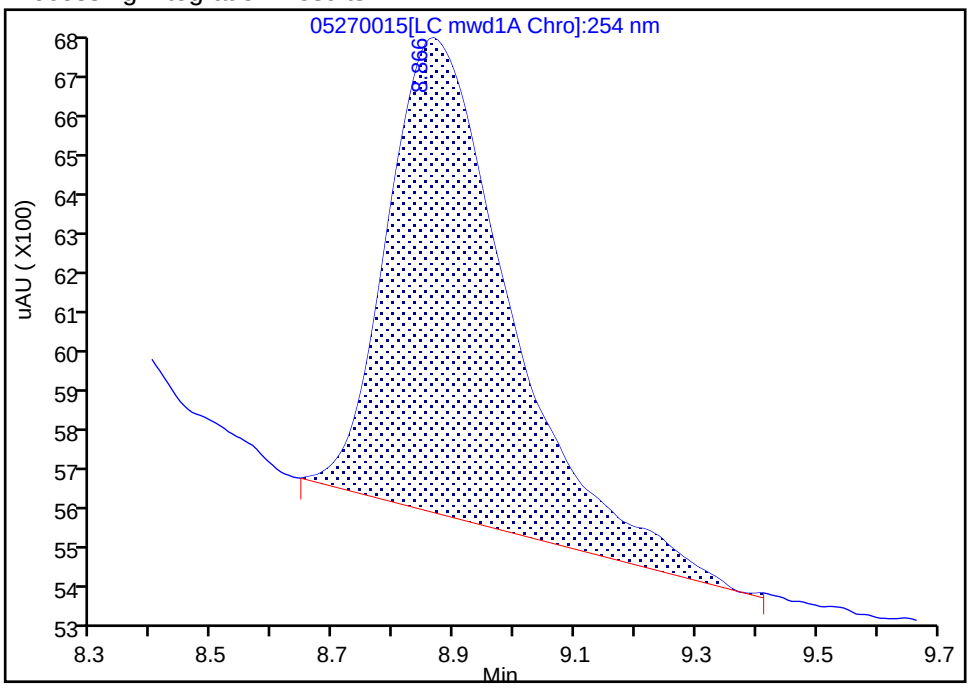
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270015.D				
Injection Date:	27-May-2022 21:28:15	Instrument ID:	CHHPLC_X5		
Lims ID:	280-162622-A-1-A	Lab Sample ID:	280-162622-1		
Client ID:	G0119-22A				
Operator ID:	JZ	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

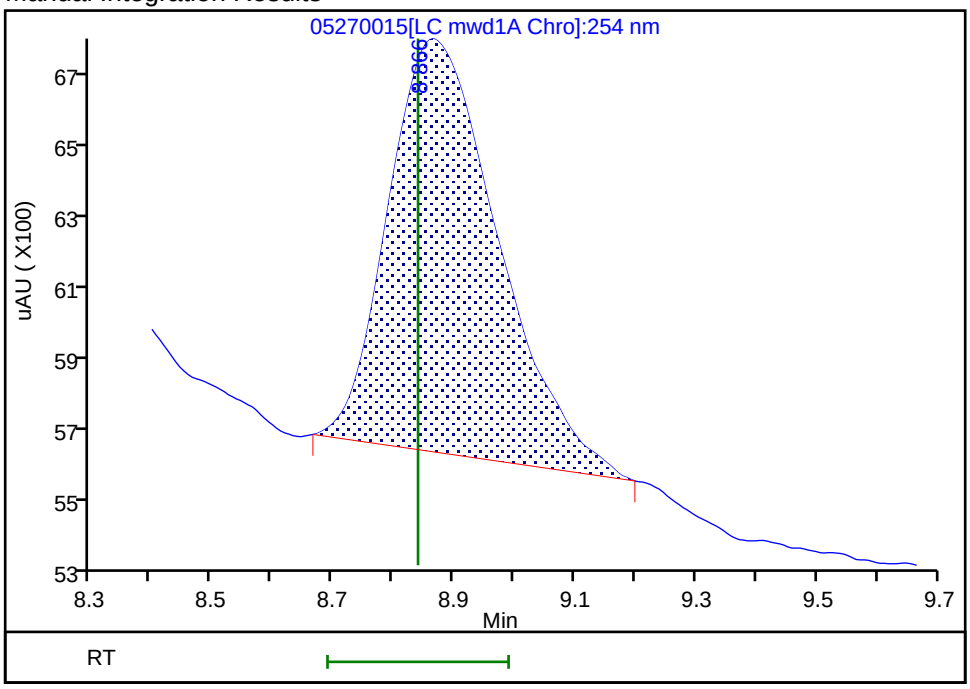
Processing Integration Results

RT: 8.87
Area: 15913
Amount: 0.081886
Amount Units: ug/ml



Manual Integration Results

RT: 8.87
Area: 13758
Amount: 0.070797
Amount Units: ug/ml



Reviewer: zhangji, 28-May-2022 13:59:45

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0121-22A | Lab Sample ID: 280-162622-2

Matrix: Water | Lab File ID: 05260017.D

Analysis Method: 8330A | Date Collected: 05/19/2022 12:05

Extraction Method: 3535 | Date Extracted: 05/25/2022 15:23

Sample wt/vol: 519(mL) | Date Analyzed: 05/26/2022 20:09

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 576310 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.19	U	0.20	0.19	0.081
118-96-7	2,4,6-Trinitrotoluene	0.096	U M	0.11	0.096	0.043
88-72-2	2-Nitrotoluene	0.19	U M	0.20	0.19	0.082
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U	0.14	0.12	0.056
99-99-0	4-Nitrotoluene	0.39	U M	0.39	0.39	0.096
2691-41-0	HMX	0.19	U	0.20	0.19	0.084
98-95-3	Nitrobenzene	0.19	U M	0.20	0.19	0.088
121-82-4	RDX	0.19	U M	0.20	0.19	0.050
479-45-8	Tetryl	0.096	U M	0.11	0.096	0.031

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	100	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\05260017.D
Lims ID: 280-162622-A-2-A
Client ID: G0121-22A
Sample Type: Client
Inject. Date: 26-May-2022 20:09:03 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-162622-A-2-A
Misc. Info.: 280-0111383-017
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 27-May-2022 13:18:41 Calib Date: 25-Mar-2022 16:30:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220325-109559.b\03250017.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1651

First Level Reviewer: zhangji Date: 26-May-2022 20:36:02

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.593			ND	
7 MNX	1	7.245	7.211	0.034	249153	1.98	M
8 RDX	1		7.586			ND	U
$ 10 1,2-Dinitrobenzene	1	8.552	8.546	0.006	24909	0.1998	M
11 1,3,5-Trinitrobenzene	1		8.666			ND	
12 1,3-Dinitrobenzene	1	9.311	9.299	0.012	76264	0.2644	M
13 Nitrobenzene	1		9.686			ND	U
15 Tetryl	1		10.013			ND	U
17 2,4,6-Trinitrotoluene	1		10.919			ND	MU
18 4-Amino-2,6-dinitrotoluene	1		11.119			ND	
19 2-Amino-4,6-dinitrotoluene	1	11.405	11.373	0.032	1999	0.009888	M
20 2,6-Dinitrotoluene	1	11.505	11.533	-0.028	5629	0.0393	M
21 2,4-Dinitrotoluene	1	11.678	11.706	-0.028	5571	0.0193	M
22 o-Nitrotoluene	1		12.559			ND	U
23 p-Nitrotoluene	1		12.993			ND	U
24 m-Nitrotoluene	1	13.585	13.566	0.019	14444	0.1015	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

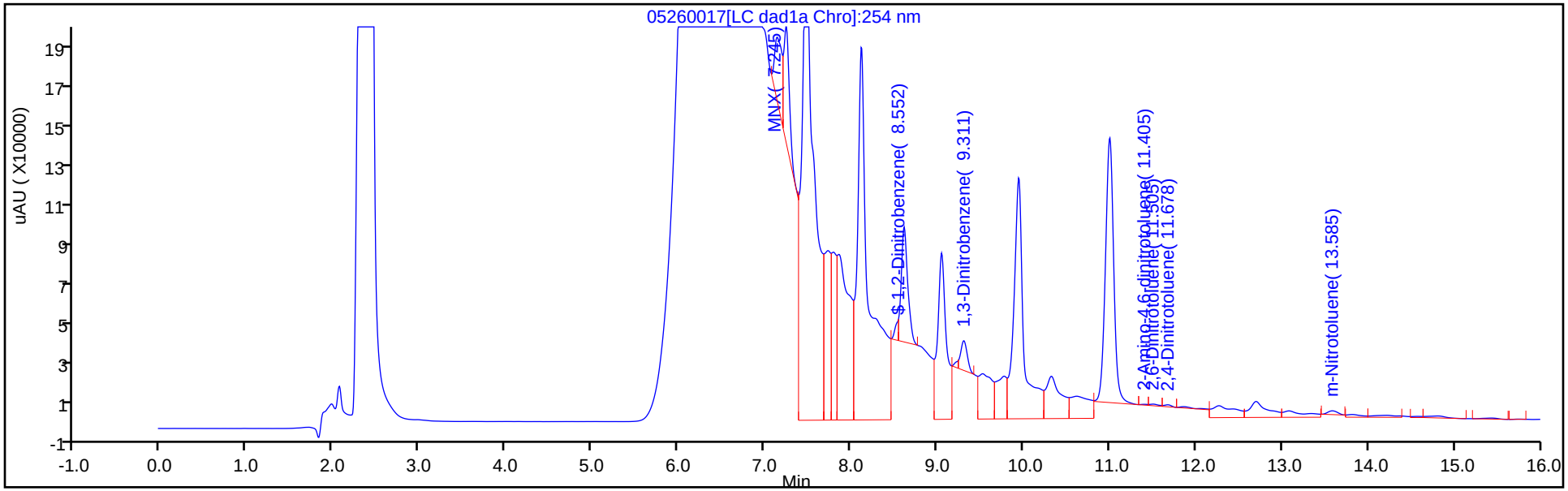
Report Date: 27-May-2022 13:18:43 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

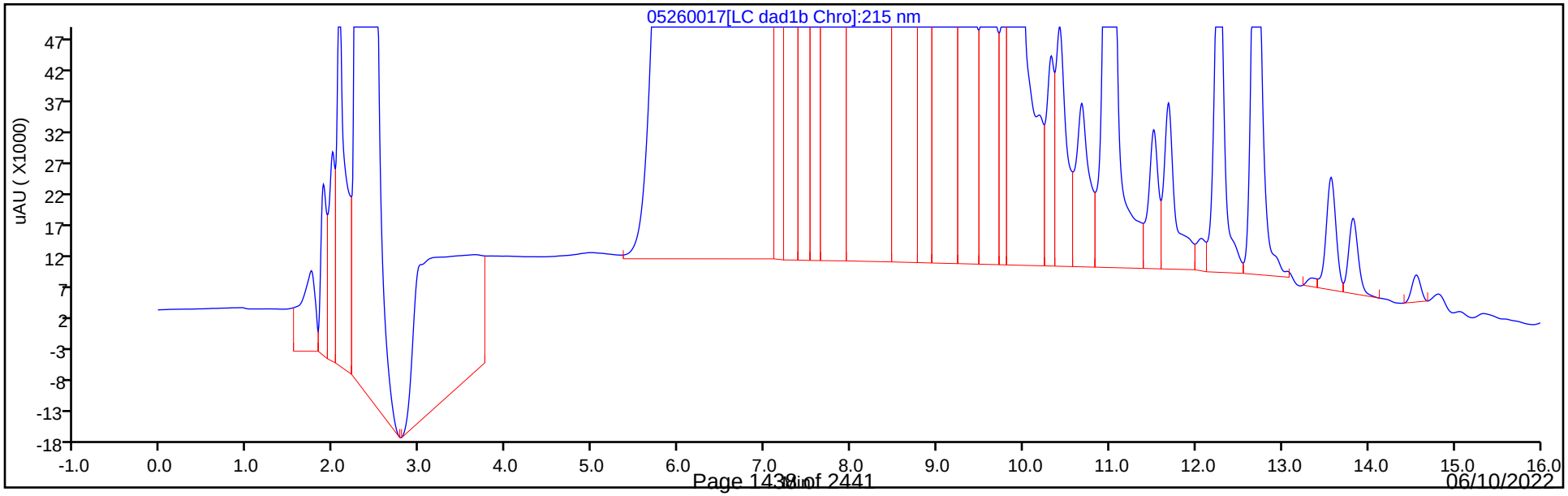
Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260017.d

Injection Date:	26-May-2022 20:09:03	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-162622-A-2-A	Lab Sample ID:	280-162622-2	Worklist Smp#:	17
Client ID:	G0121-22A				
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 Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\05260017.D				
Lims ID:	280-162622-A-2-A				
Client ID:	G0121-22A				
Sample Type:	Client				
Inject. Date:	26-May-2022 20:09:03	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-162622-A-2-A				
Misc. Info.:	280-0111383-017				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	27-May-2022 13:18:41	Calib Date:	25-Mar-2022 16:30:08		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220325-109559.b\03250017.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1651				

First Level Reviewer: zhangji Date: 26-May-2022 20:36:02

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1998	99.88

Manual Integration/User Assign Peak Report

Eurofins Denver

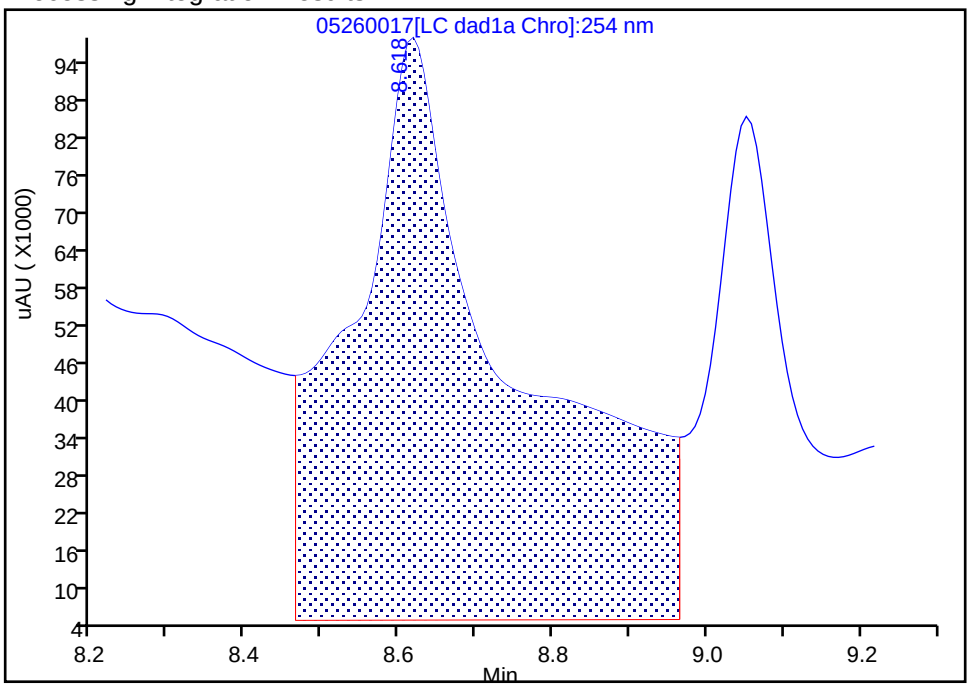
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260017.d				
Injection Date:	26-May-2022 20:09:03	Instrument ID:	CHHPLC_X3		
Lims ID:	280-162622-A-2-A	Lab Sample ID:	280-162622-2		
Client ID:	G0121-22A				
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

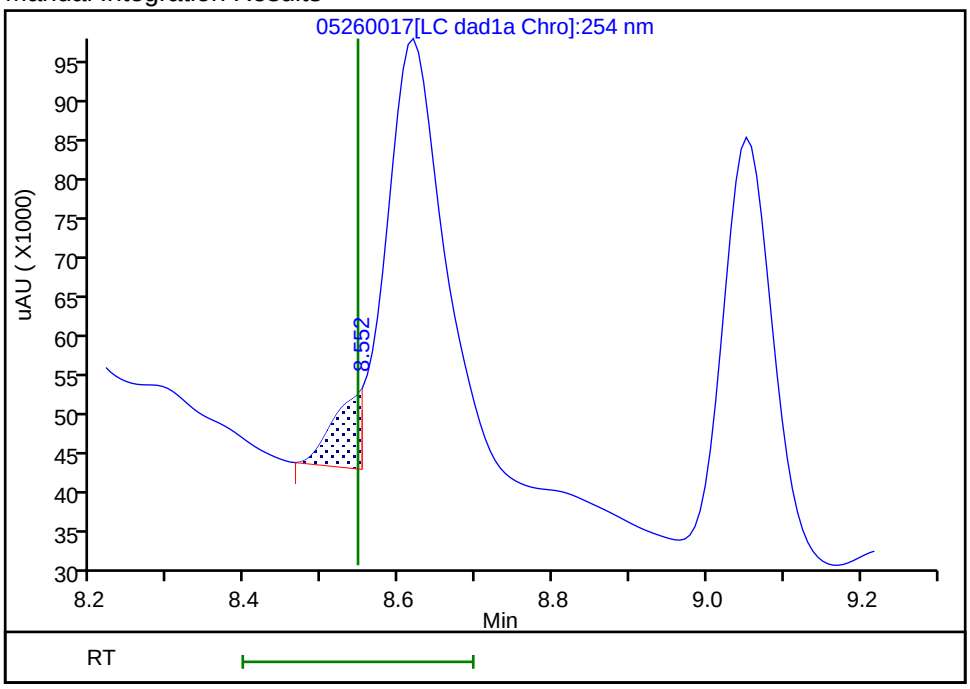
Processing Integration Results

RT: 8.62
Area: 1395983
Amount: 11.194940
Amount Units: ug/mL



Manual Integration Results

RT: 8.55
Area: 24909
Amount: 0.199755
Amount Units: ug/mL



Reviewer: zhangji, 26-May-2022 20:35:04

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

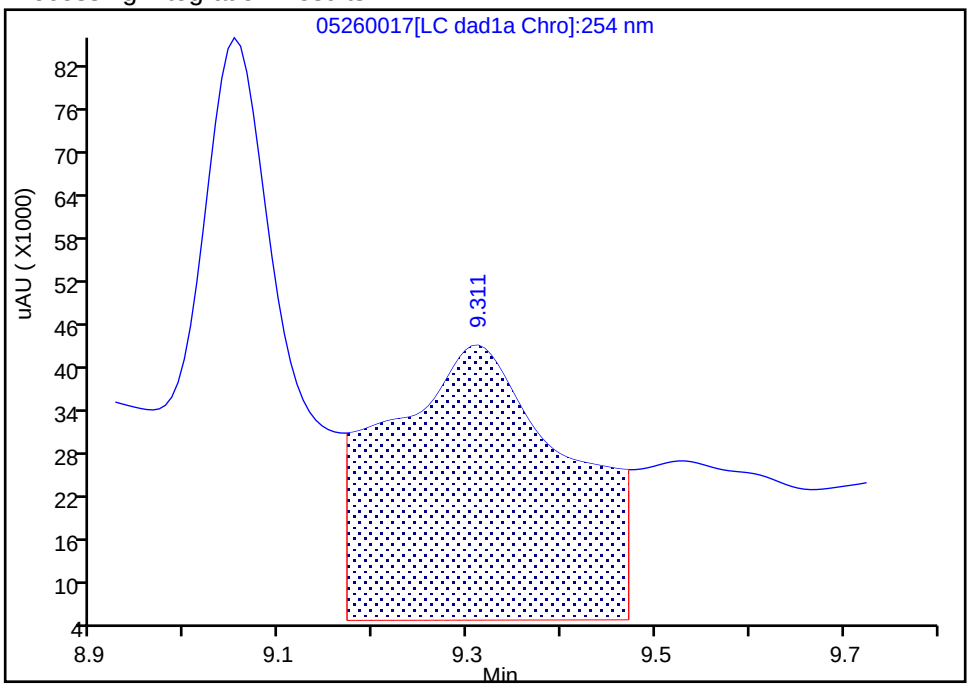
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260017.d				
Injection Date:	26-May-2022 20:09:03	Instrument ID:	CHHPLC_X3		
Lims ID:	280-162622-A-2-A	Lab Sample ID:	280-162622-2		
Client ID:	G0121-22A				
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

12 1,3-Dinitrobenzene, CAS: 99-65-0

Signal: 1

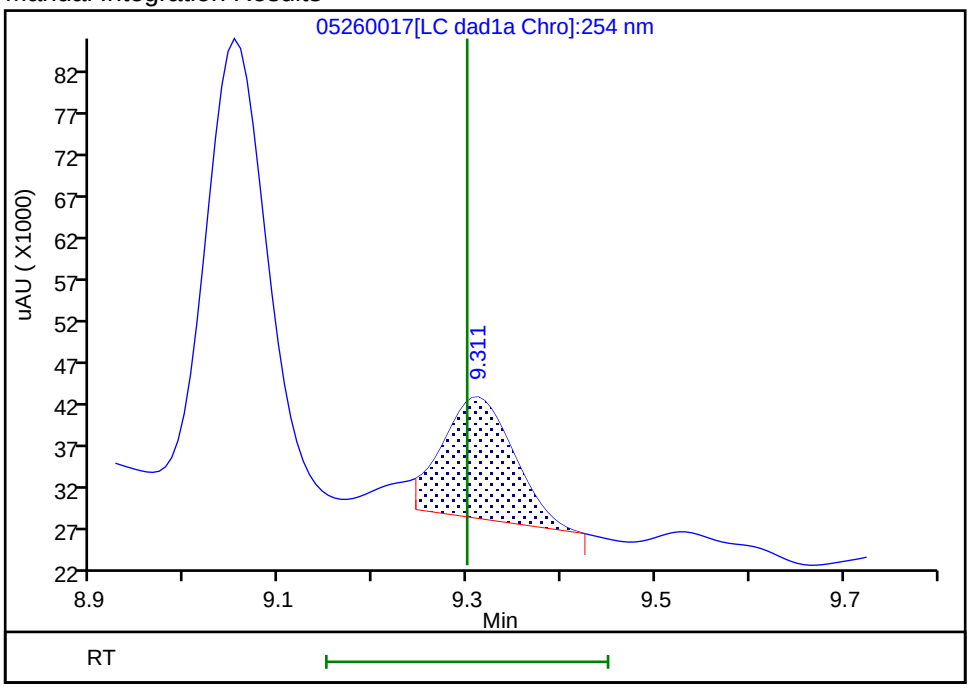
Processing Integration Results

RT: 9.31
Area: 506781
Amount: 1.757207
Amount Units: ug/mL



Manual Integration Results

RT: 9.31
Area: 76264
Amount: 0.264437
Amount Units: ug/mL



Reviewer: zhangji, 26-May-2022 20:35:43

Audit Action: Split an Integrated Peak Audit Reason: Baseline

User Disabled Compound Report

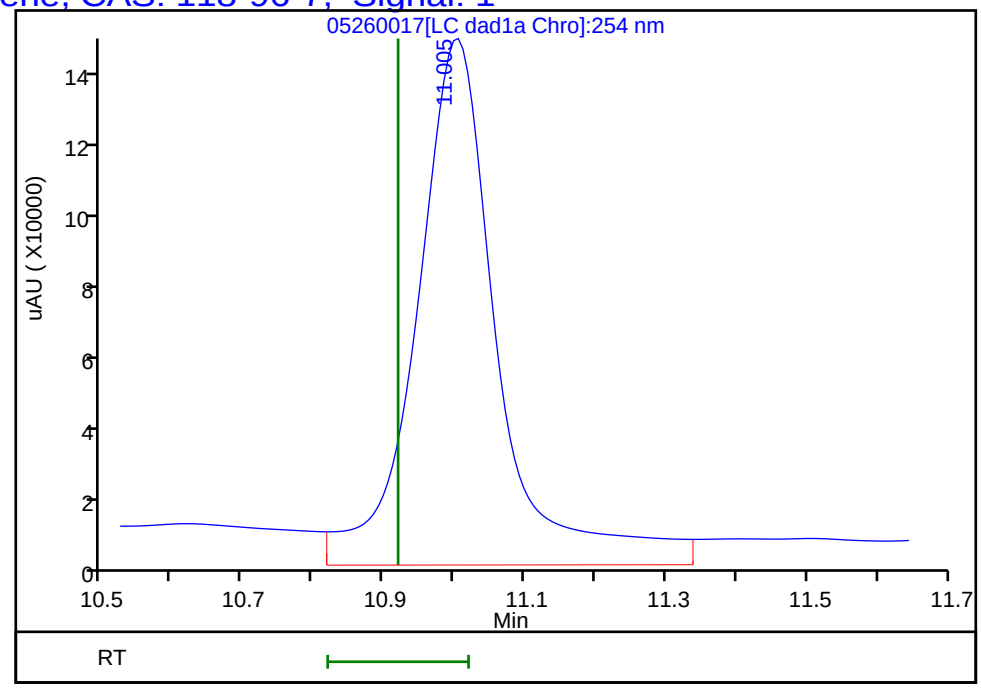
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260017.d
Injection Date: 26-May-2022 20:09:03 Instrument ID: CHHPLC_X3
Lims ID: 280-162622-A-2-A Lab Sample ID: 280-162622-2
Client ID: G0121-22A
Operator ID: JZ ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

17 2,4,6-Trinitrotoluene, CAS: 118-96-7, Signal: 1

RT: 11.00
Response: 1088698
Amount: 5.370294



Reviewer: zhangji, 26-May-2022 20:36:02
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

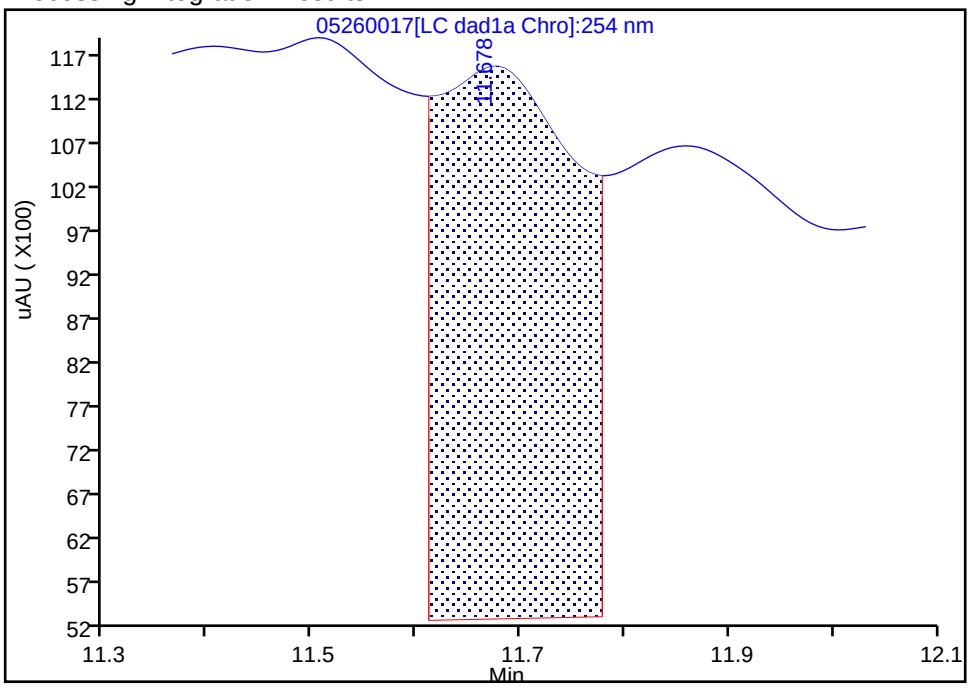
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260017.d				
Injection Date:	26-May-2022 20:09:03	Instrument ID:	CHHPLC_X3		
Lims ID:	280-162622-A-2-A	Lab Sample ID:	280-162622-2		
Client ID:	G0121-22A				
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

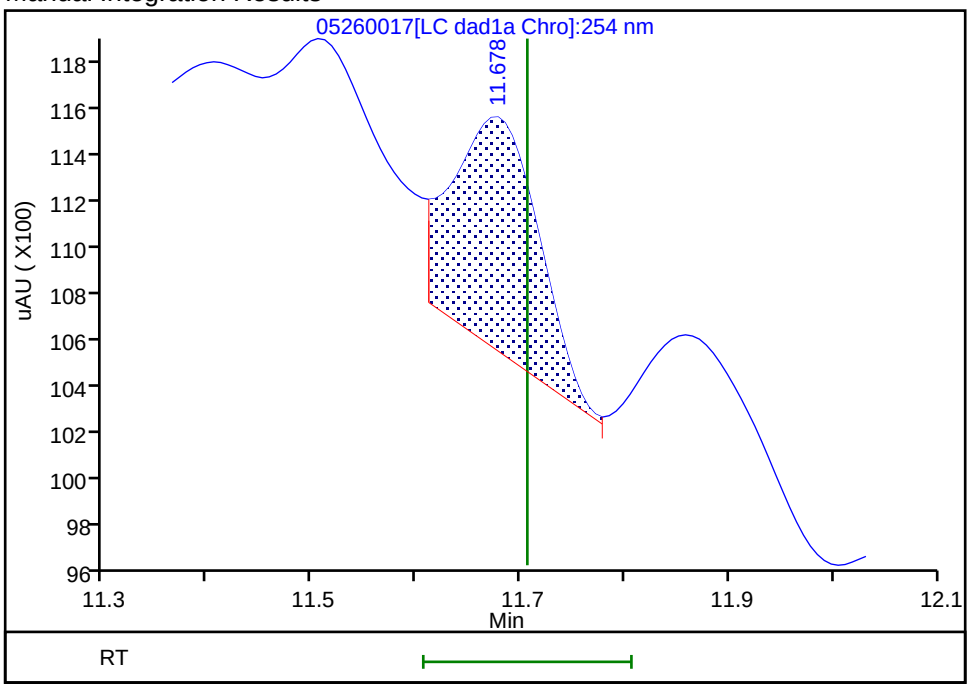
Processing Integration Results

RT: 11.68
Area: 58511
Amount: 0.202215
Amount Units: ug/mL



Manual Integration Results

RT: 11.68
Area: 5571
Amount: 0.019253
Amount Units: ug/mL



Reviewer: zhangji, 26-May-2022 20:35:57
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

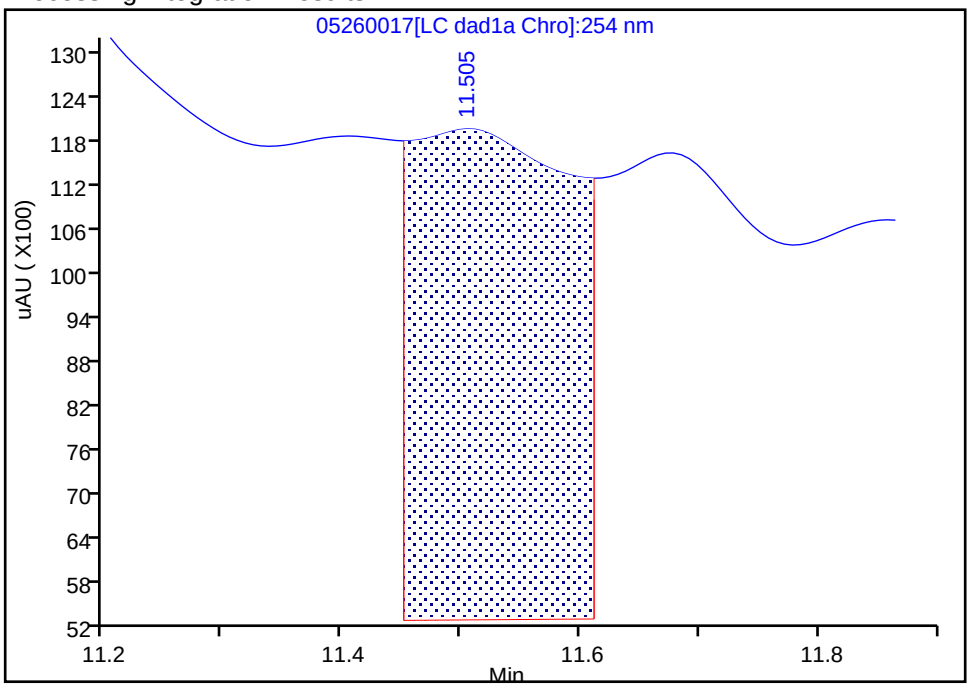
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260017.d				
Injection Date:	26-May-2022 20:09:03	Instrument ID:	CHHPLC_X3		
Lims ID:	280-162622-A-2-A	Lab Sample ID:	280-162622-2		
Client ID:	G0121-22A				
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

20 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

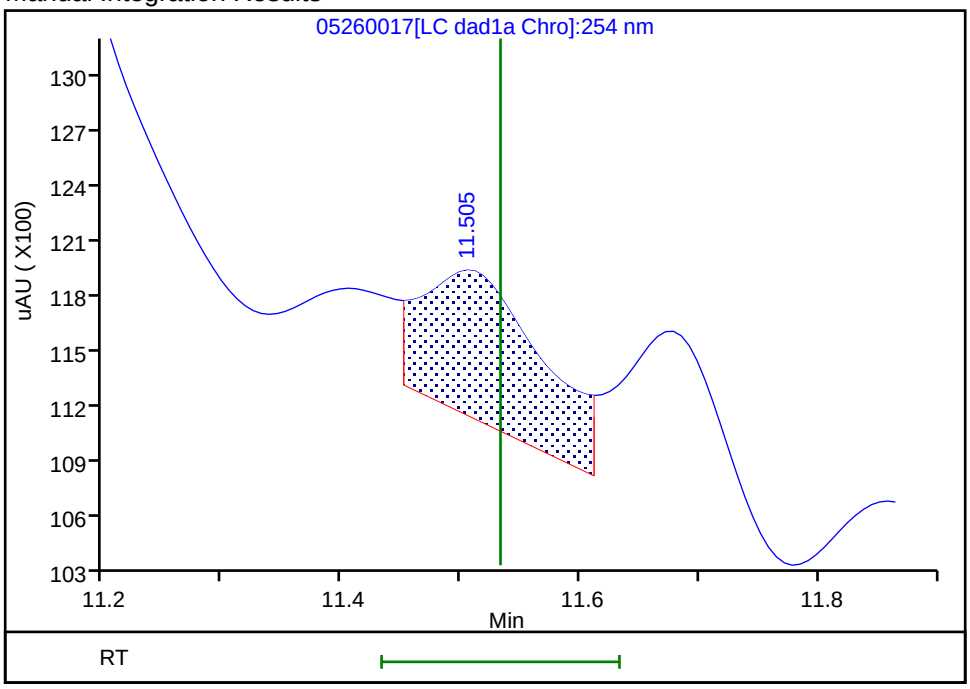
Processing Integration Results

RT: 11.50
Area: 61520
Amount: 0.429863
Amount Units: ug/mL



Manual Integration Results

RT: 11.50
Area: 5629
Amount: 0.039332
Amount Units: ug/mL



Reviewer: zhangji, 26-May-2022 20:35:57
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

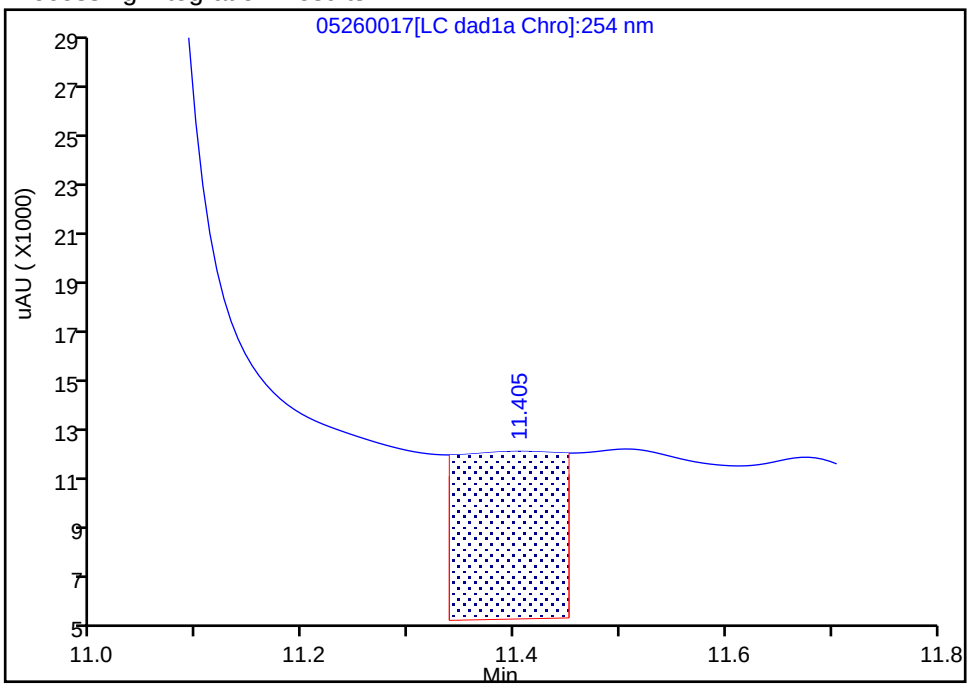
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260017.d				
Injection Date:	26-May-2022 20:09:03	Instrument ID:	CHHPLC_X3		
Lims ID:	280-162622-A-2-A	Lab Sample ID:	280-162622-2		
Client ID:	G0121-22A				
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

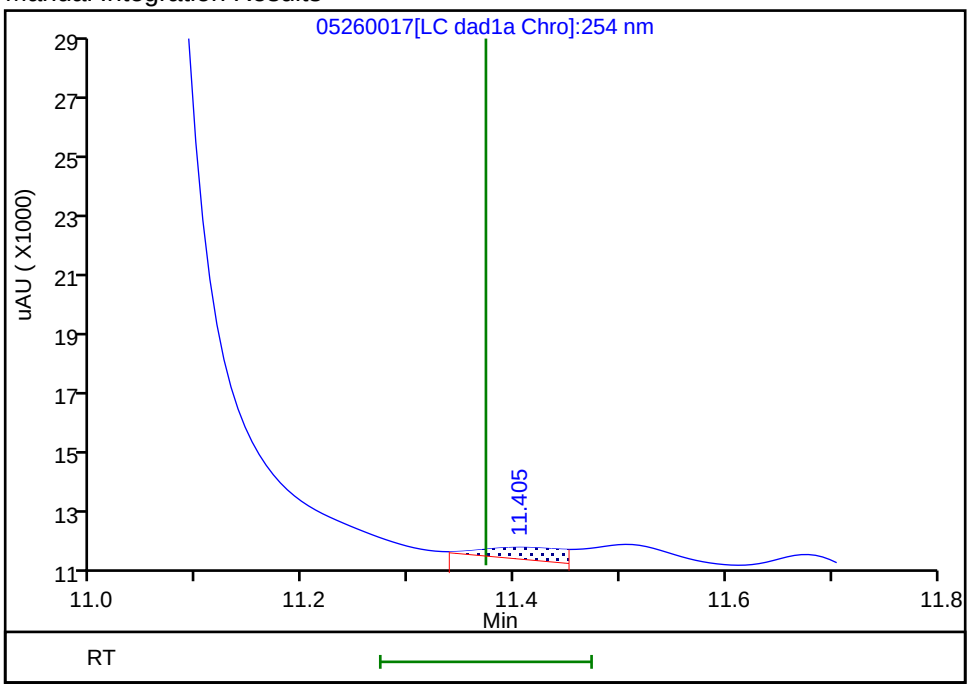
Processing Integration Results

RT: 11.40
Area: 44815
Amount: 0.221669
Amount Units: ug/mL



Manual Integration Results

RT: 11.40
Area: 1999
Amount: 0.009888
Amount Units: ug/mL



Reviewer: zhangji, 26-May-2022 20:35:57

Audit Action: Assigned New Baseline Audit Reason: Baseline

User Disabled Compound Report

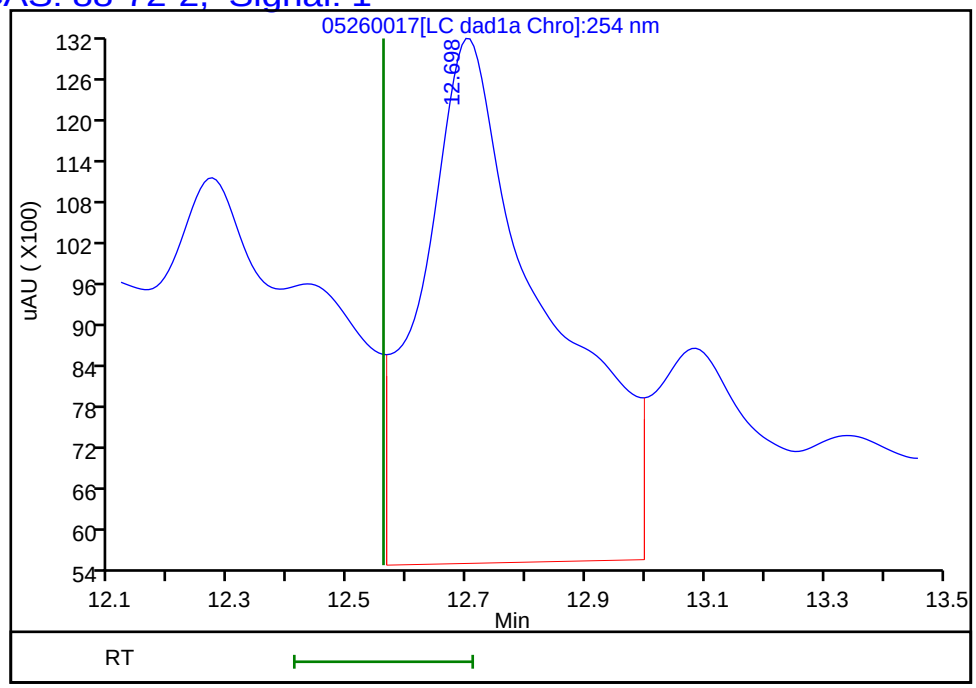
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260017.d
Injection Date: 26-May-2022 20:09:03 Instrument ID: CHHPLC_X3
Lims ID: 280-162622-A-2-A Lab Sample ID: 280-162622-2
Client ID: G0121-22A
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

22 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 12.70
Response: 112573
Amount: 0.882139



Reviewer: zhangji, 26-May-2022 20:36:02
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

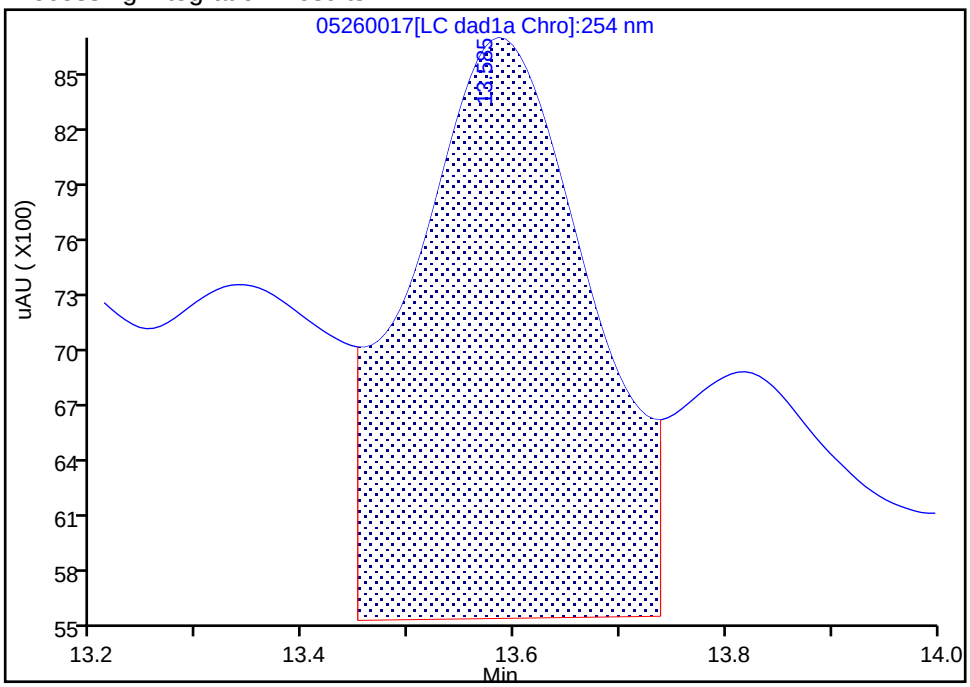
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260017.d				
Injection Date:	26-May-2022 20:09:03	Instrument ID:	CHHPLC_X3		
Lims ID:	280-162622-A-2-A	Lab Sample ID:	280-162622-2		
Client ID:	G0121-22A				
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

24 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

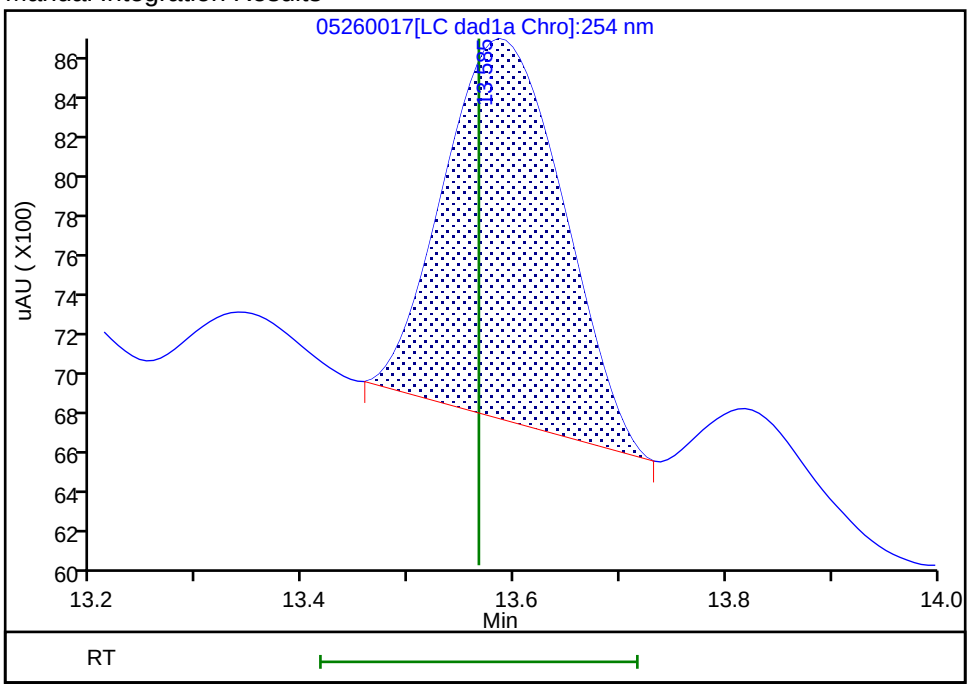
Processing Integration Results

RT: 13.58
Area: 36021
Amount: 0.253182
Amount Units: ug/mL



Manual Integration Results

RT: 13.58
Area: 14444
Amount: 0.101523
Amount Units: ug/mL



Reviewer: zhangji, 26-May-2022 20:35:27

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

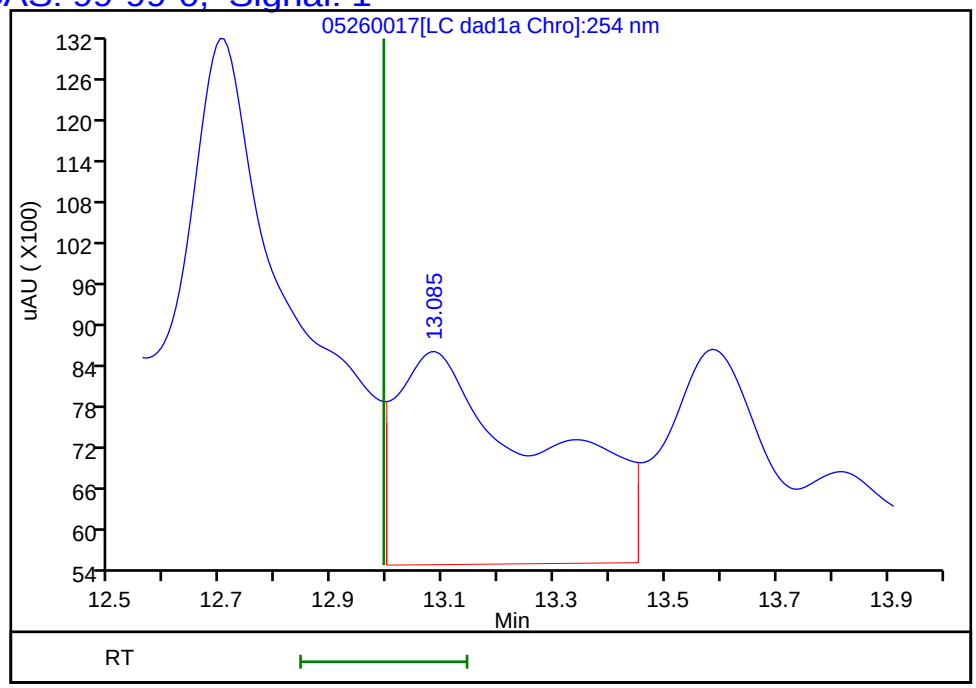
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260017.d
Injection Date: 26-May-2022 20:09:03 Instrument ID: CHHPLC_X3
Lims ID: 280-162622-A-2-A Lab Sample ID: 280-162622-2
Client ID: G0121-22A
Operator ID: JZ ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

23 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 13.08
Response: 56199
Amount: 0.529004



Reviewer: zhangji, 26-May-2022 20:36:02
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

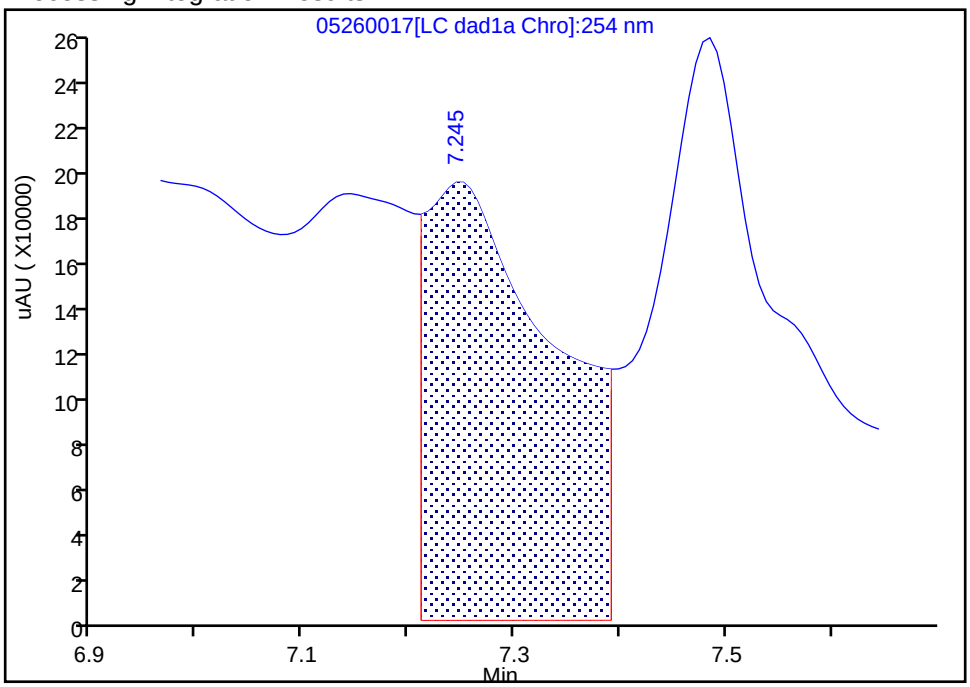
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260017.d				
Injection Date:	26-May-2022 20:09:03	Instrument ID:	CHHPLC_X3		
Lims ID:	280-162622-A-2-A	Lab Sample ID:	280-162622-2		
Client ID:	G0121-22A				
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

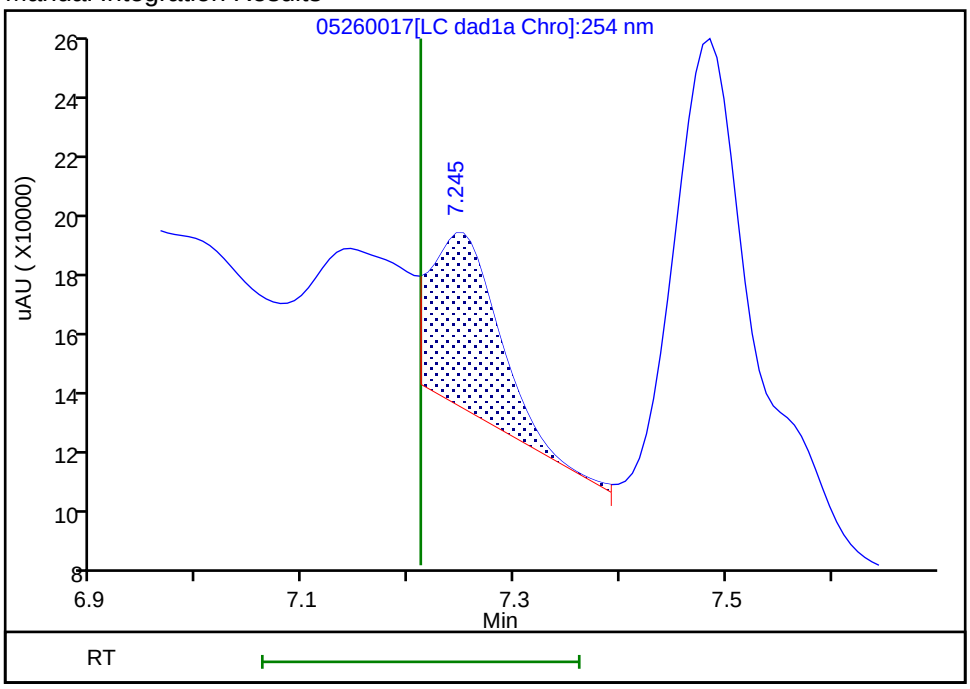
Processing Integration Results

RT: 7.24
Area: 1594444
Amount: 12.654778
Amount Units: ug/mL



Manual Integration Results

RT: 7.24
Area: 249153
Amount: 1.977477
Amount Units: ug/mL



Reviewer: zhangji, 26-May-2022 20:35:32

Audit Action: Assigned New Baseline Audit Reason: Baseline

User Disabled Compound Report

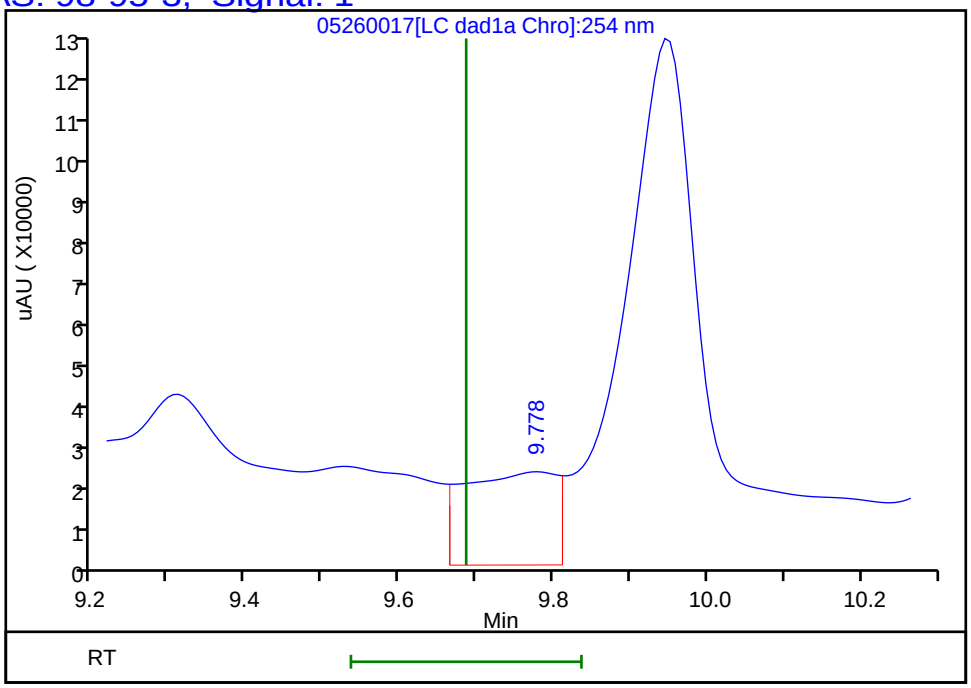
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260017.d
Injection Date: 26-May-2022 20:09:03 Instrument ID: CHHPLC_X3
Lims ID: 280-162622-A-2-A Lab Sample ID: 280-162622-2
Client ID: G0121-22A
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

13 Nitrobenzene, CAS: 98-95-3, Signal: 1

RT: 9.78
Response: 170385
Amount: 0.887638



Reviewer: zhangji, 26-May-2022 20:36:02
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

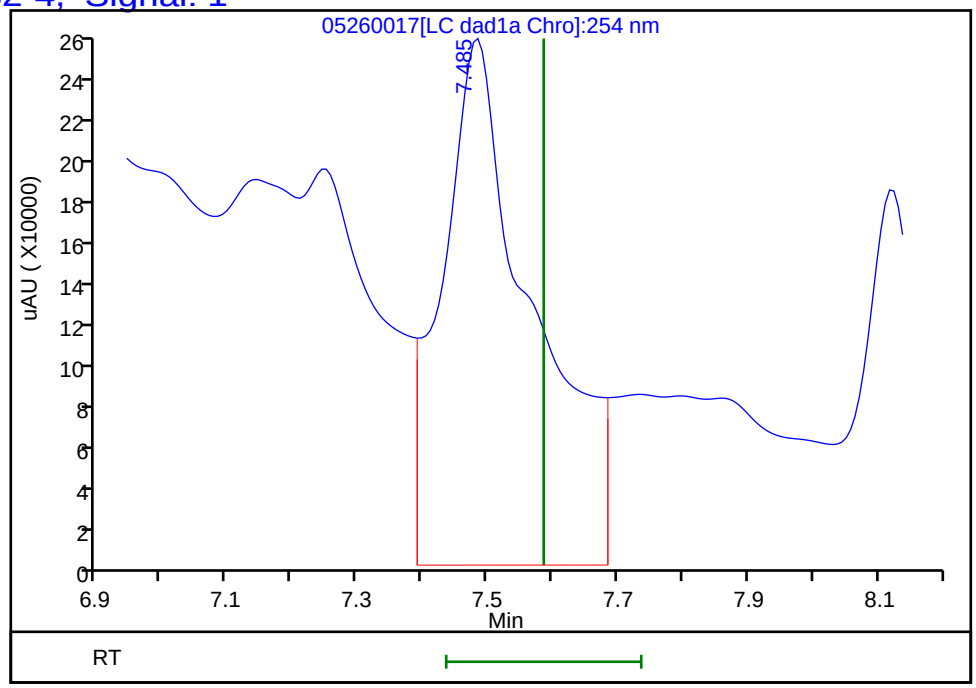
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260017.d
Injection Date: 26-May-2022 20:09:03 Instrument ID: CHHPLC_X3
Lims ID: 280-162622-A-2-A Lab Sample ID: 280-162622-2
Client ID: G0121-22A
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

8 RDX, CAS: 121-82-4, Signal: 1

RT: 7.48
Response: 2459521
Amount: 23.738443



Reviewer: zhangji, 26-May-2022 20:36:02
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

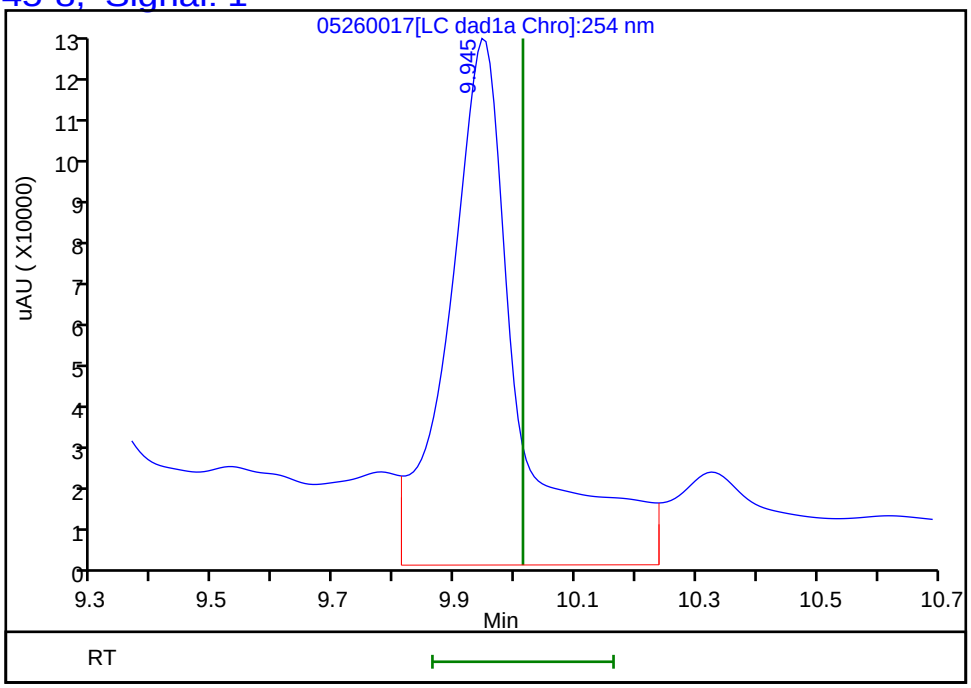
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260017.d
Injection Date: 26-May-2022 20:09:03 Instrument ID: CHHPLC_X3
Lims ID: 280-162622-A-2-A Lab Sample ID: 280-162622-2
Client ID: G0121-22A
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

15 Tetryl, CAS: 479-45-8, Signal: 1

RT: 9.94
Response: 956041
Amount: 5.605084



Reviewer: zhangji, 26-May-2022 20:36:02
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0121-22A | Lab Sample ID: 280-162622-2

Matrix: Water | Lab File ID: 05270016.D

Analysis Method: 8330A | Date Collected: 05/19/2022 12:05

Extraction Method: 3535 | Date Extracted: 05/25/2022 15:23

Sample wt/vol: 519(mL) | Date Analyzed: 05/27/2022 22:03

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: Luna-phenylhex ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 576448 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-65-0	1,3-Dinitrobenzene	0.096	U M	0.11	0.096	0.036
121-14-2	2,4-Dinitrotoluene	0.077	U M	0.096	0.077	0.026
606-20-2	2,6-Dinitrotoluene	0.077	U	0.096	0.077	0.039
35572-78-2	2-Amino-4,6-dinitrotoluene	0.096	U	0.11	0.096	0.049
99-08-1	3-Nitrotoluene	0.39	U	0.39	0.39	0.19
5755-27-1	MNX	0.39	U	1.9	0.39	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	91		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270016.D
Lims ID: 280-162622-A-2-A
Client ID: G0121-22A
Sample Type: Client
Inject. Date: 27-May-2022 22:03:20 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-162622-A-2-A
Misc. Info.: 280-0111418-016
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 28-May-2022 14:12:39 Calib Date: 03-Mar-2022 07:19:48
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1652

First Level Reviewer: zhangji Date: 28-May-2022 14:00:06

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	5 HMX	1		6.713			ND	
	6 MNX	1		7.440			ND	
	8 RDX	1	8.861	8.840	0.021	38852	0.1999	
	9 Nitrobenzene	1	11.801	11.707	0.094	4678	0.0127	
$	10 1,2-Dinitrobenzene	1	12.901	12.867	0.034	45325	0.1815	
	12 1,3-Dinitrobenzene	1		15.233			ND	U
	14 o-Nitrotoluene	1		16.327			ND	
	16 p-Nitrotoluene	1		16.627			ND	
	17 4-Amino-2,6-dinitrotoluene	1		17.247			ND	
	18 m-Nitrotoluene	1		17.573			ND	
	19 2-Amino-4,6-dinitrotoluene	1		18.233			ND	
	20 1,3,5-Trinitrobenzene	1	18.554	18.487	0.067	18414	0.0443	
	21 2,6-Dinitrotoluene	1		19.720			ND	
	22 2,4-Dinitrotoluene	1		20.233			ND	U
	23 Tetryl	1		23.880			ND	
	24 2,4,6-Trinitrotoluene	1		24.680			ND	

QC Flag Legend

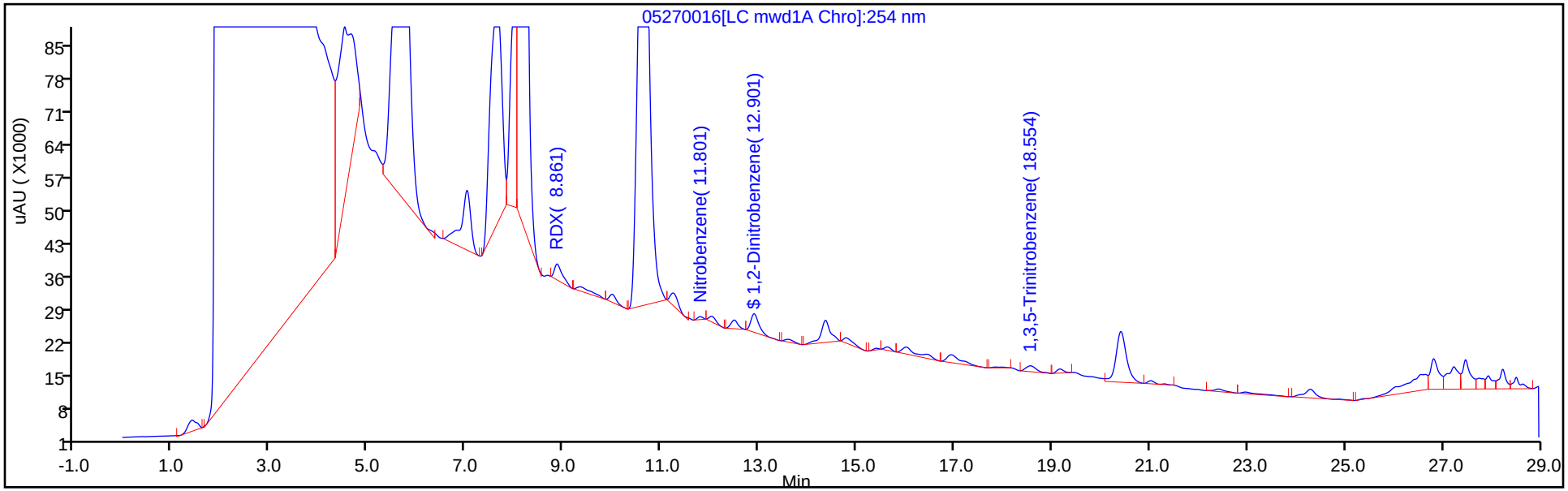
Processing Flags
Review Flags
U - Marked Undetected

Report Date: 28-May-2022 14:12:42 Chrom Revision: 2.3 18-May-2022 20:00:04

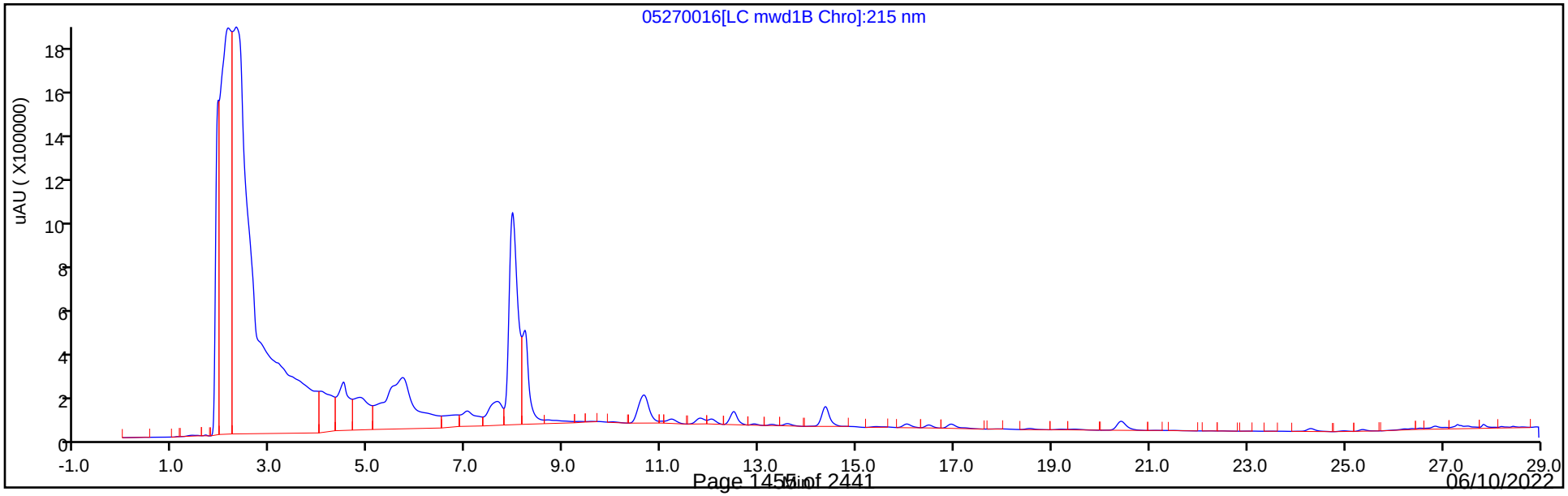
Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270016.D				
Injection Date:	27-May-2022 22:03:20	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-162622-A-2-A	Lab Sample ID:	280-162622-2	Worklist Smp#:	16
Client ID:	G0121-22A				
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



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270016.D				
Lims ID:	280-162622-A-2-A				
Client ID:	G0121-22A				
Sample Type:	Client				
Inject. Date:	27-May-2022 22:03:20	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-162622-A-2-A				
Misc. Info.:	280-0111418-016				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	28-May-2022 14:12:39	Calib Date:	03-Mar-2022 07:19:48		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1652				
First Level Reviewer: zhangji		Date:	28-May-2022 14:00:06		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1815	90.74

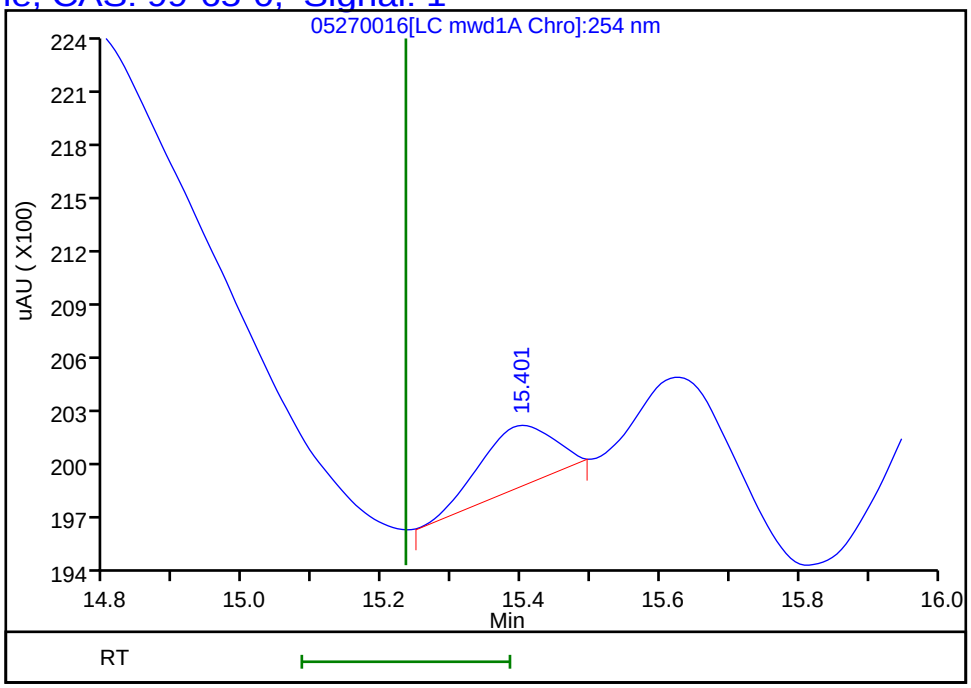
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270016.D				
Injection Date:	27-May-2022 22:03:20	Instrument ID:	CHHPLC_X5		
Lims ID:	280-162622-A-2-A	Lab Sample ID:	280-162622-2		
Client ID:	G0121-22A				
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:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

12 1,3-Dinitrobenzene, CAS: 99-65-0, Signal: 1

RT: 15.40
Response: 2559
Amount: 0.004476



Reviewer: zhangji, 28-May-2022 14:00:06
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

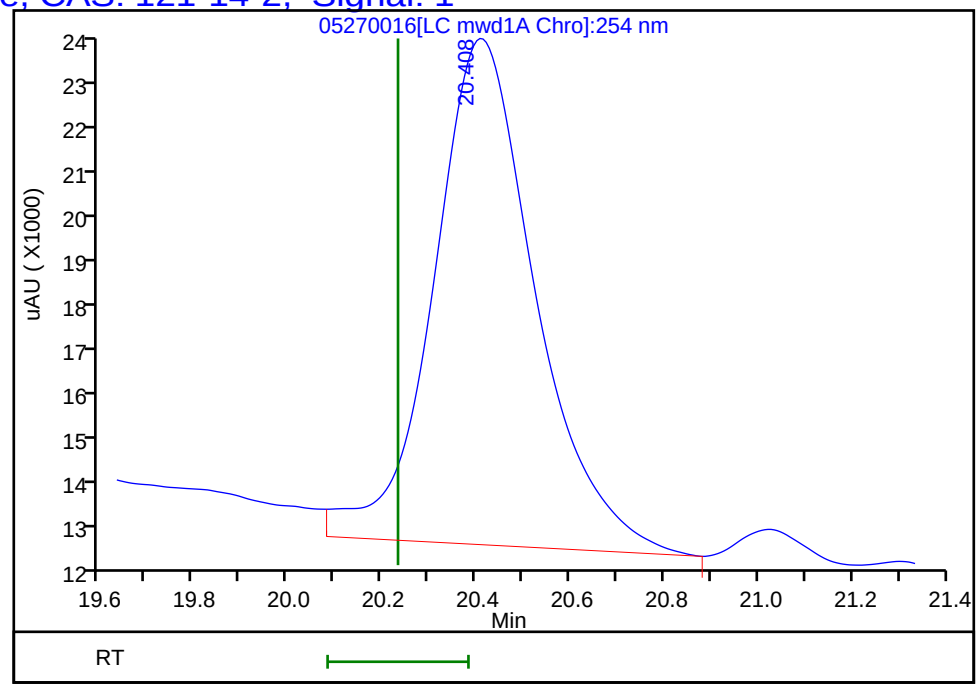
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270016.D				
Injection Date:	27-May-2022 22:03:20	Instrument ID:	CHHPLC_X5		
Lims ID:	280-162622-A-2-A	Lab Sample ID:	280-162622-2		
Client ID:	G0121-22A				
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:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

22 2,4-Dinitrotoluene, CAS: 121-14-2, Signal: 1

RT: 20.41
Response: 162749
Amount: 0.288699



Reviewer: zhangji, 28-May-2022 14:00:06
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0101-22A | Lab Sample ID: 280-162622-3

Matrix: Water | Lab File ID: 05260018.D

Analysis Method: 8330A | Date Collected: 05/19/2022 09:45

Extraction Method: 3535 | Date Extracted: 05/25/2022 15:23

Sample wt/vol: 517.4(mL) | Date Analyzed: 05/26/2022 20:31

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 576310 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.19	U M	0.20	0.19	0.081
99-65-0	1,3-Dinitrobenzene	0.097	U M	0.11	0.097	0.036
118-96-7	2,4,6-Trinitrotoluene	0.097	U	0.11	0.097	0.043
121-14-2	2,4-Dinitrotoluene	0.077	U	0.097	0.077	0.026
606-20-2	2,6-Dinitrotoluene	0.077	U	0.097	0.077	0.039
35572-78-2	2-Amino-4,6-dinitrotoluene	0.097	U M	0.11	0.097	0.049
88-72-2	2-Nitrotoluene	0.19	U	0.20	0.19	0.083
99-08-1	3-Nitrotoluene	0.39	U	0.39	0.39	0.19
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U	0.14	0.12	0.056
99-99-0	4-Nitrotoluene	0.39	U M	0.40	0.39	0.097
2691-41-0	HMX	0.19	U	0.20	0.19	0.085
5755-27-1	MNX	0.39	U M	1.9	0.39	0.15
98-95-3	Nitrobenzene	0.19	U	0.20	0.19	0.088
121-82-4	RDX	0.19	U	0.20	0.19	0.050
479-45-8	Tetryl	0.097	U M	0.11	0.097	0.031

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	116		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\05260018.D
Lims ID: 280-162622-A-3-A
Client ID: G0101-22A
Sample Type: Client
Inject. Date: 26-May-2022 20:31:56 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-162622-A-3-A
Misc. Info.: 280-0111383-018
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 27-May-2022 13:18:41 Calib Date: 25-Mar-2022 16:30:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220325-109559.b\03250017.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1651

First Level Reviewer: zhangji Date: 26-May-2022 20:54:36

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.593			ND	
7 MNX	1		7.211			ND	U
8 RDX	1		7.586			ND	
$ 10 1,2-Dinitrobenzene	1	8.543	8.546	-0.003	28930	0.2320	
11 1,3,5-Trinitrobenzene	1		8.666			ND	U
12 1,3-Dinitrobenzene	1		9.299			ND	U
13 Nitrobenzene	1		9.686			ND	
15 Tetryl	1		10.013			ND	U
17 2,4,6-Trinitrotoluene	1		10.919			ND	
18 4-Amino-2,6-dinitrotoluene	1		11.119			ND	
19 2-Amino-4,6-dinitrotoluene	1		11.373			ND	U
20 2,6-Dinitrotoluene	1		11.533			ND	
21 2,4-Dinitrotoluene	1		11.706			ND	
22 o-Nitrotoluene	1		12.559			ND	
23 p-Nitrotoluene	1		12.993			ND	U
24 m-Nitrotoluene	1		13.566			ND	

QC Flag Legend

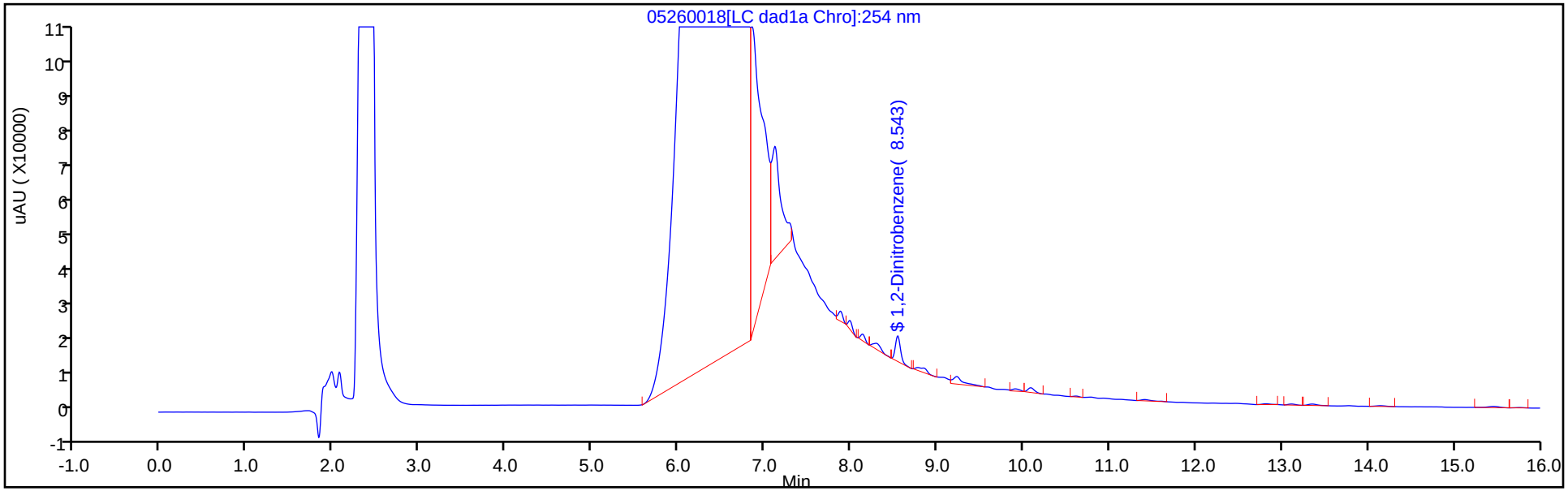
Processing Flags
Review Flags
U - Marked Undetected

Report Date: 27-May-2022 13:18:43 Chrom Revision: 2.3 18-May-2022 20:00:04

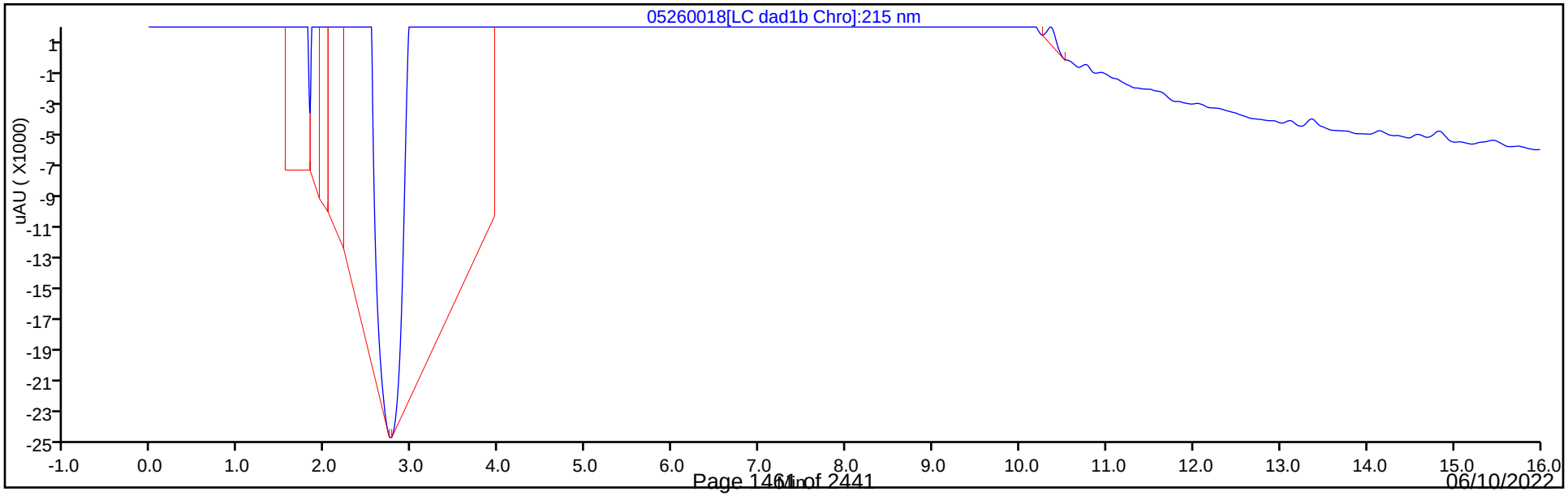
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260018.d				
Injection Date:	26-May-2022 20:31:56	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-162622-A-3-A	Lab Sample ID:	280-162622-3	Worklist Smp#:	18
Client ID:	G0101-22A				
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 Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\05260018.D				
Lims ID:	280-162622-A-3-A				
Client ID:	G0101-22A				
Sample Type:	Client				
Inject. Date:	26-May-2022 20:31:56	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-162622-A-3-A				
Misc. Info.:	280-0111383-018				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	27-May-2022 13:18:41	Calib Date:	25-Mar-2022 16:30:08		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220325-109559.b\03250017.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1651				

First Level Reviewer: zhangji Date: 26-May-2022 20:54:36

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2320	116.00

User Disabled Compound Report

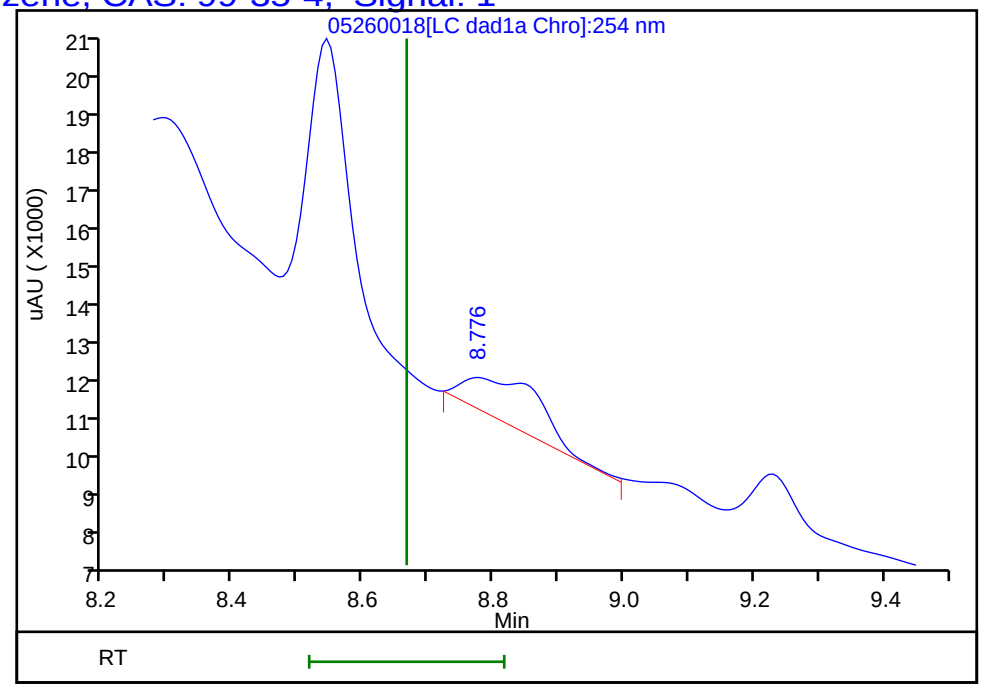
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260018.d
Injection Date: 26-May-2022 20:31:56 Instrument ID: CHHPLC_X3
Lims ID: 280-162622-A-3-A Lab Sample ID: 280-162622-3
Client ID: G0101-22A
Operator ID: JZ ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

11 1,3,5-Trinitrobenzene, CAS: 99-35-4, Signal: 1

RT: 8.78
Response: 8908
Amount: 0.040844



Reviewer: zhangji, 26-May-2022 20:54:36
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

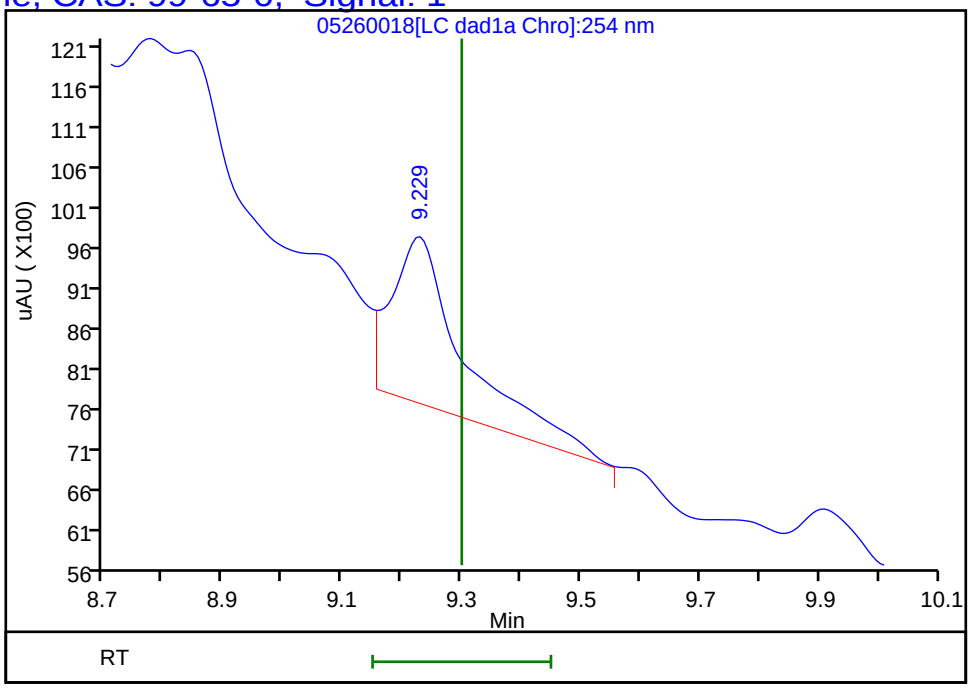
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260018.d
Injection Date: 26-May-2022 20:31:56 Instrument ID: CHHPLC_X3
Lims ID: 280-162622-A-3-A Lab Sample ID: 280-162622-3
Client ID: G0101-22A
Operator ID: JZ ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

12 1,3-Dinitrobenzene, CAS: 99-65-0, Signal: 1

RT: 9.23
Response: 17206
Amount: 0.059660



Reviewer: zhangji, 26-May-2022 20:54:36
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

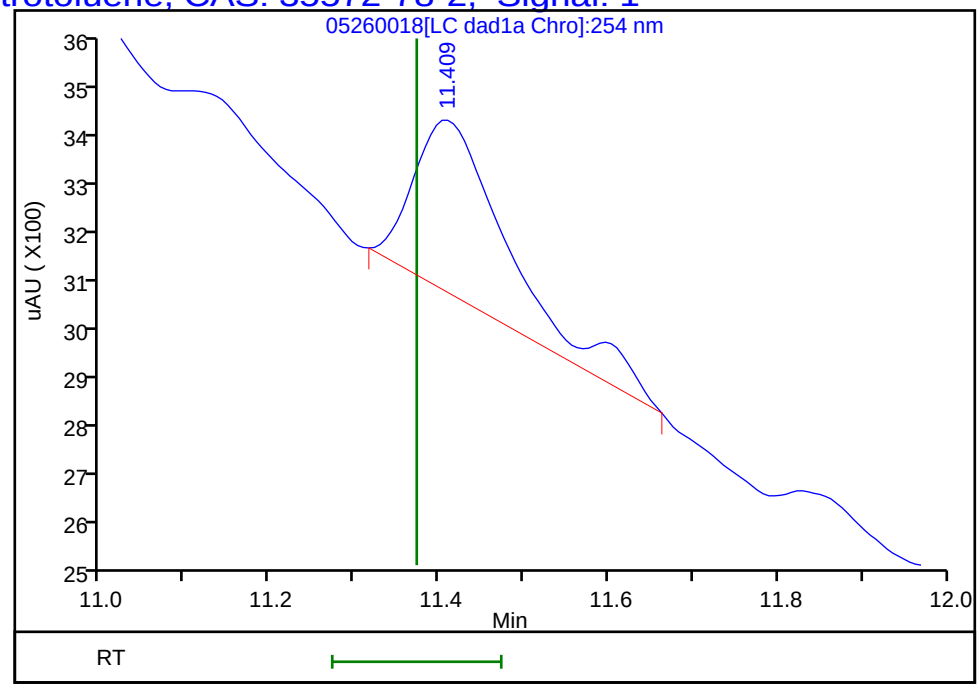
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260018.d
Injection Date: 26-May-2022 20:31:56 Instrument ID: CHHPLC_X3
Lims ID: 280-162622-A-3-A Lab Sample ID: 280-162622-3
Client ID: G0101-22A
Operator ID: JZ ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2, Signal: 1

RT: 11.41
Response: 2752
Amount: 0.013612



Reviewer: zhangji, 26-May-2022 20:54:36
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

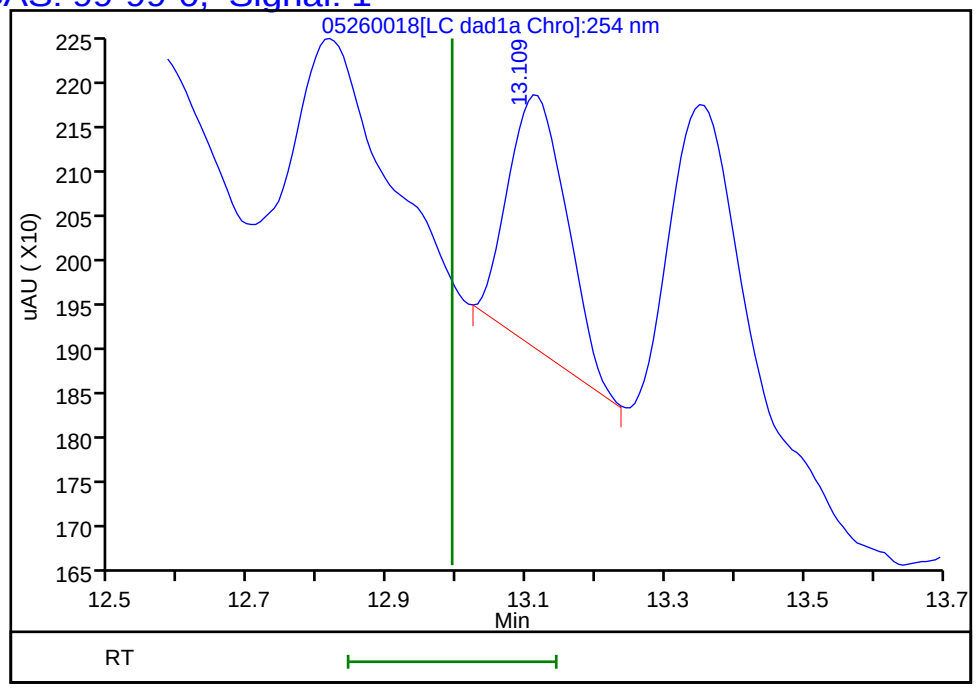
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260018.d
Injection Date: 26-May-2022 20:31:56 Instrument ID: CHHPLC_X3
Lims ID: 280-162622-A-3-A Lab Sample ID: 280-162622-3
Client ID: G0101-22A
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

23 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 13.11
Response: 1676
Amount: 0.015776



Reviewer: zhangji, 26-May-2022 20:54:36
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

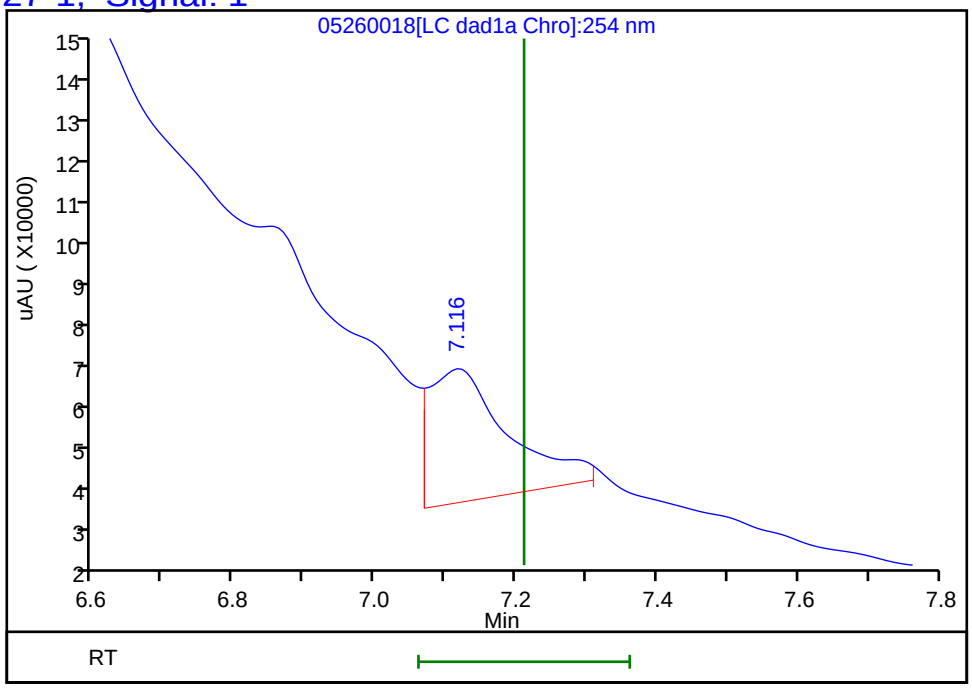
User Disabled Compound Report

Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260018.d
Injection Date: 26-May-2022 20:31:56 Instrument ID: CHHPLC_X3
Lims ID: 280-162622-A-3-A Lab Sample ID: 280-162622-3
Client ID: G0101-22A
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 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.12
Response: 233008
Amount: 1.849337



Reviewer: zhangji, 26-May-2022 20:54:36
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

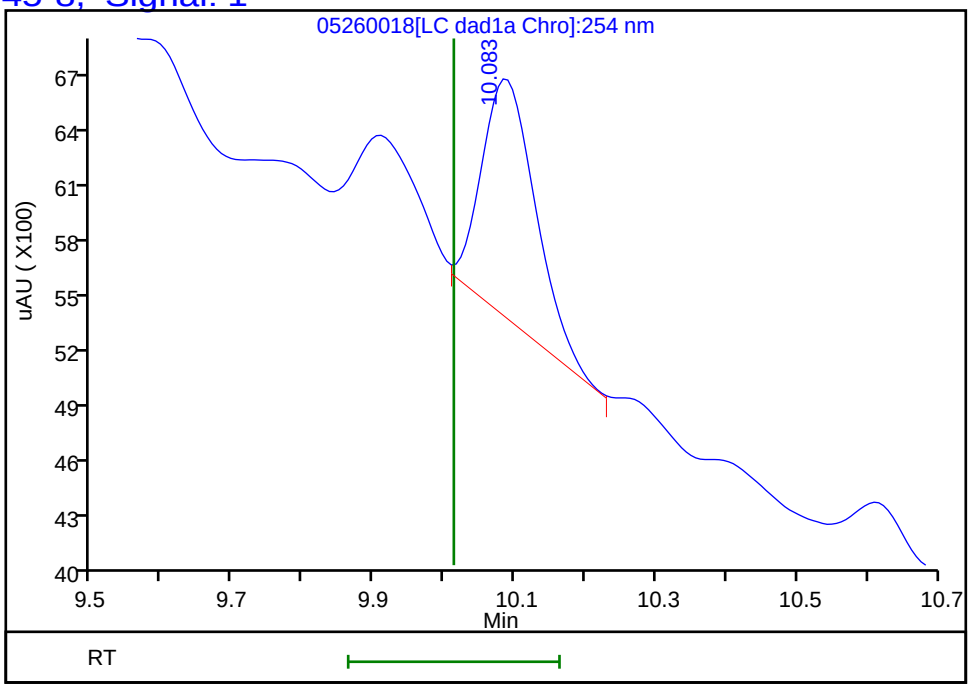
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260018.d
Injection Date: 26-May-2022 20:31:56 Instrument ID: CHHPLC_X3
Lims ID: 280-162622-A-3-A Lab Sample ID: 280-162622-3
Client ID: G0101-22A
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

15 Tetryl, CAS: 479-45-8, Signal: 1

RT: 10.08
Response: 6813
Amount: 0.039943



Reviewer: zhangji, 26-May-2022 20:54:36
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0100-22A | Lab Sample ID: 280-162622-4

Matrix: Water | Lab File ID: 05260019.D

Analysis Method: 8330A | Date Collected: 05/19/2022 09:50

Extraction Method: 3535 | Date Extracted: 05/25/2022 15:23

Sample wt/vol: 453.1(mL) | Date Analyzed: 05/26/2022 20:54

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 576310 | 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	0.093
99-65-0	1,3-Dinitrobenzene	0.11	U M	0.12	0.11	0.041
118-96-7	2,4,6-Trinitrotoluene	0.11	U M	0.12	0.11	0.050
121-14-2	2,4-Dinitrotoluene	0.088	U	0.11	0.088	0.030
606-20-2	2,6-Dinitrotoluene	0.088	U	0.11	0.088	0.044
35572-78-2	2-Amino-4,6-dinitrotoluene	0.51		0.12	0.11	0.056
88-72-2	2-Nitrotoluene	0.22	U M	0.23	0.22	0.094
99-08-1	3-Nitrotoluene	0.44	U	0.44	0.44	0.22
19406-51-0	4-Amino-2,6-dinitrotoluene	0.13	U	0.17	0.13	0.064
99-99-0	4-Nitrotoluene	0.44	U	0.45	0.44	0.11
2691-41-0	HMX	0.22	U	0.23	0.22	0.097
5755-27-1	MNX	0.44	U	2.2	0.44	0.17
98-95-3	Nitrobenzene	0.22	U	0.23	0.22	0.10
121-82-4	RDX	0.22	U	0.23	0.22	0.057
479-45-8	Tetryl	0.11	U M	0.12	0.11	0.035

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	96	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\05260019.D
Lims ID: 280-162622-A-4-A
Client ID: G0100-22A
Sample Type: Client
Inject. Date: 26-May-2022 20:54:50 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-162622-A-4-A
Misc. Info.: 280-0111383-019
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 27-May-2022 13:18:41 Calib Date: 25-Mar-2022 16:30:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220325-109559.b\03250017.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1651

First Level Reviewer: zhangji Date: 27-May-2022 12:49:05

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.593			ND	
7 MNX	1		7.211			ND	
8 RDX	1		7.586			ND	
$ 10 1,2-Dinitrobenzene	1	8.544	8.546	-0.002	23937	0.1920	M
11 1,3,5-Trinitrobenzene	1		8.666			ND	
12 1,3-Dinitrobenzene	1		9.299			ND	U
13 Nitrobenzene	1		9.686			ND	
15 Tetryl	1		10.013			ND	U
17 2,4,6-Trinitrotoluene	1		10.919			ND	U
18 4-Amino-2,6-dinitrotoluene	1		11.119			ND	
19 2-Amino-4,6-dinitrotoluene	1	11.371	11.373	-0.002	9378	0.0464	
20 2,6-Dinitrotoluene	1		11.533			ND	
21 2,4-Dinitrotoluene	1		11.706			ND	
22 o-Nitrotoluene	1		12.559			ND	U
23 p-Nitrotoluene	1		12.993			ND	
24 m-Nitrotoluene	1		13.566			ND	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

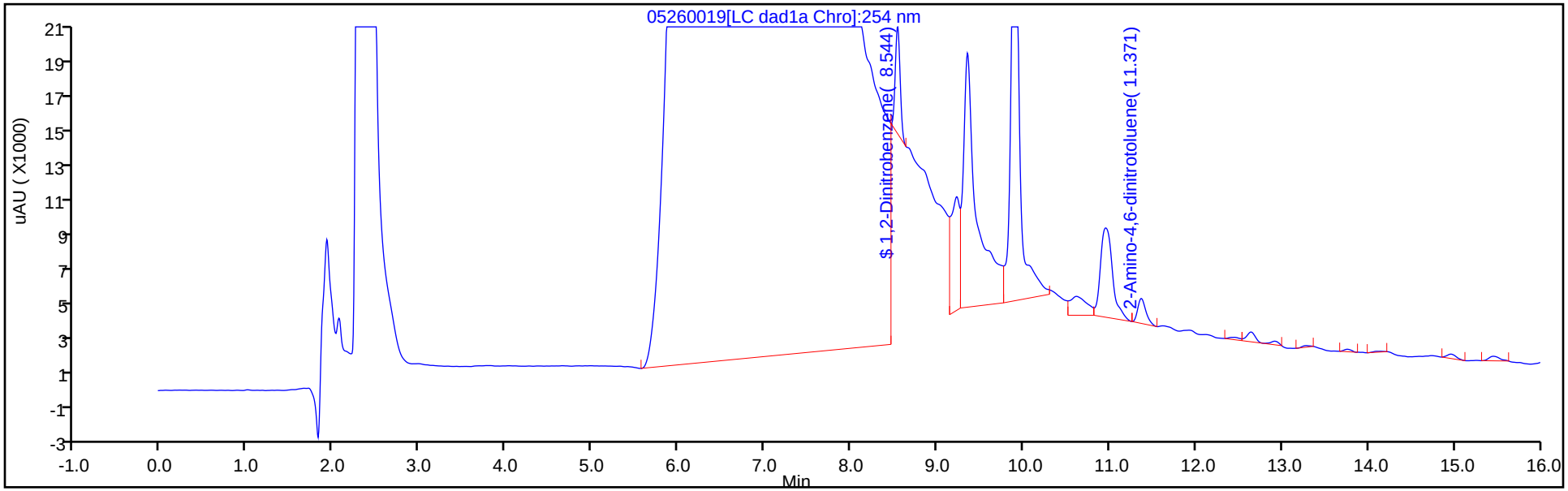
Report Date: 27-May-2022 13:18:42 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

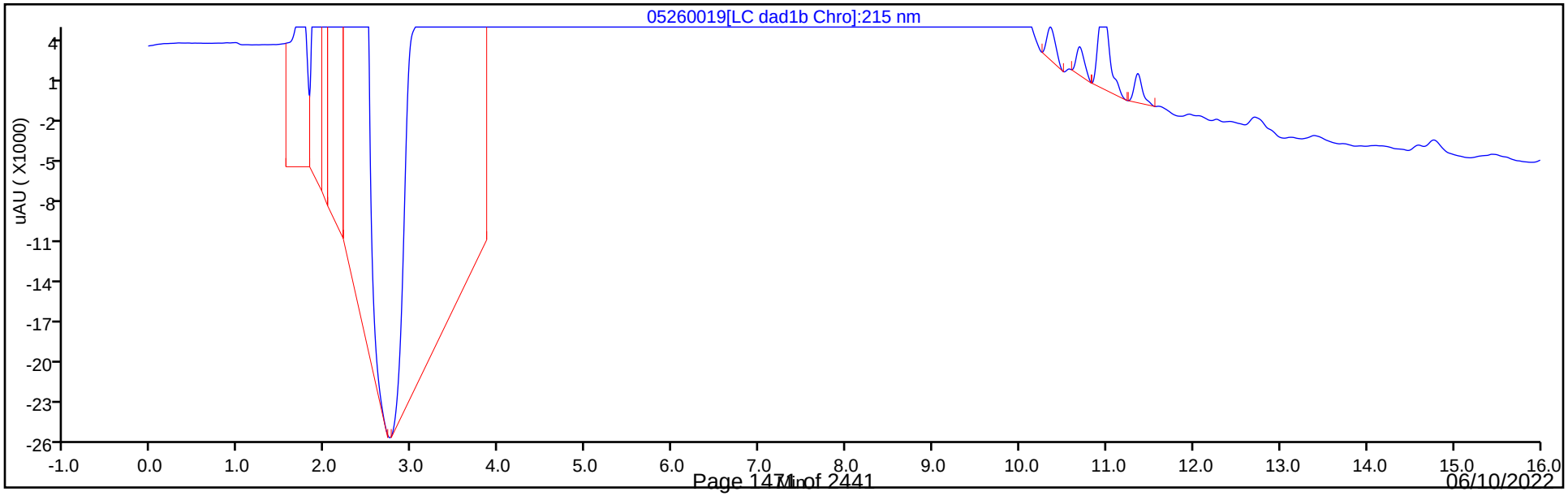
Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260019.d

Injection Date:	26-May-2022 20:54:50	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-162622-A-4-A	Lab Sample ID:	280-162622-4	Worklist Smp#:	19
Client ID:	G0100-22A				
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



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\05260019.D				
Lims ID:	280-162622-A-4-A				
Client ID:	G0100-22A				
Sample Type:	Client				
Inject. Date:	26-May-2022 20:54:50	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-162622-A-4-A				
Misc. Info.:	280-0111383-019				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	27-May-2022 13:18:41	Calib Date:	25-Mar-2022 16:30:08		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220325-109559.b\03250017.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1651				

First Level Reviewer: zhangji Date: 27-May-2022 12:49:05

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1920	95.98

Manual Integration/User Assign Peak Report

Eurofins Denver

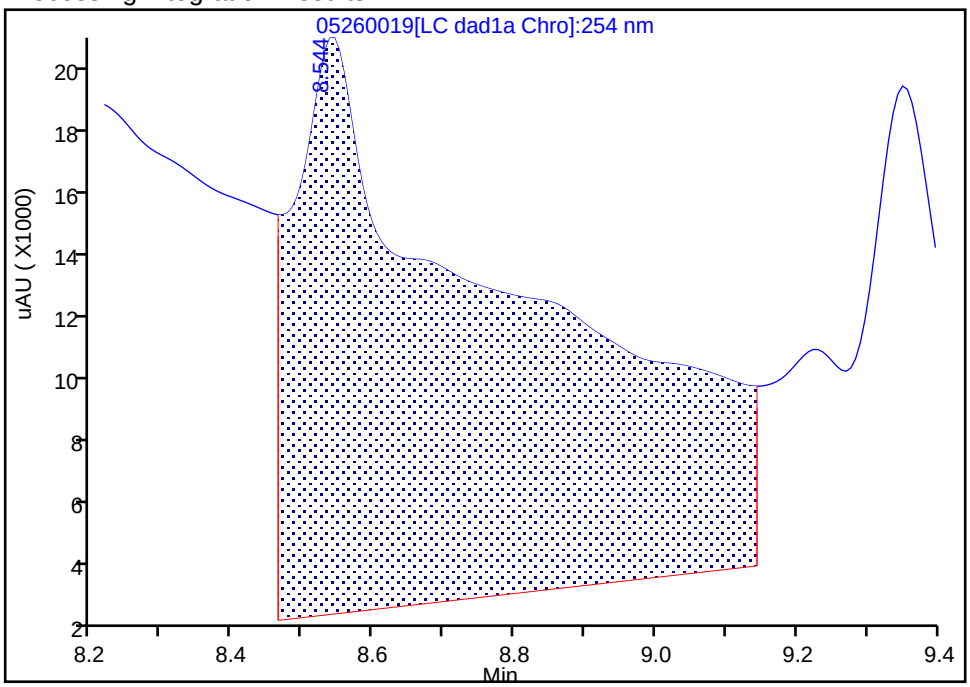
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260019.d				
Injection Date:	26-May-2022 20:54:50	Instrument ID:	CHHPLC_X3		
Lims ID:	280-162622-A-4-A	Lab Sample ID:	280-162622-4		
Client ID:	G0100-22A				
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

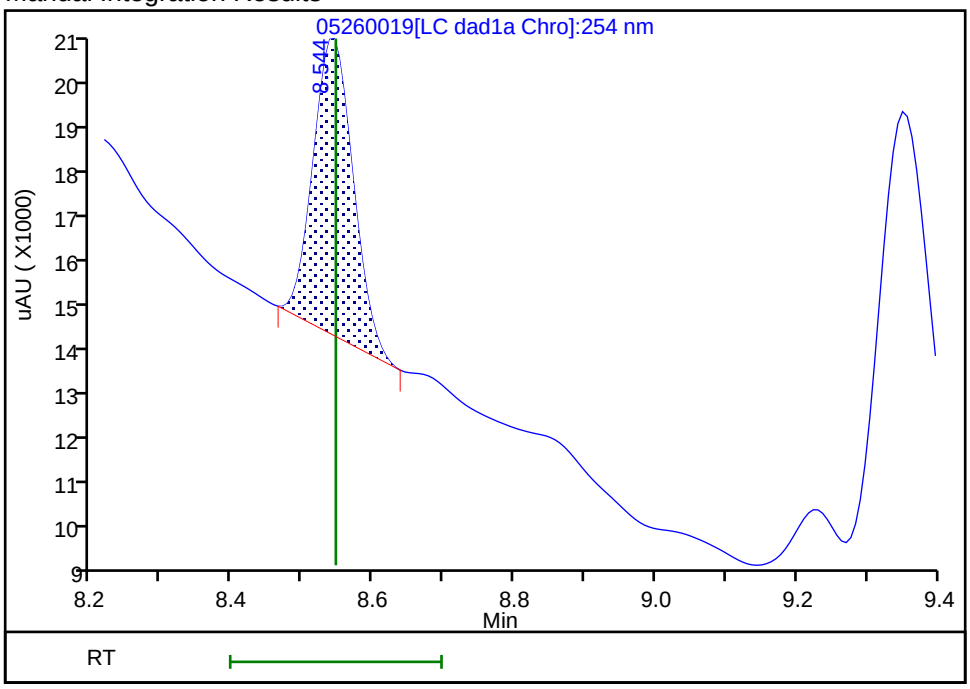
Processing Integration Results

RT: 8.54
Area: 393412
Amount: 3.154926
Amount Units: ug/mL



Manual Integration Results

RT: 8.54
Area: 23937
Amount: 0.191960
Amount Units: ug/mL



Reviewer: zhangji, 27-May-2022 12:48:53

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

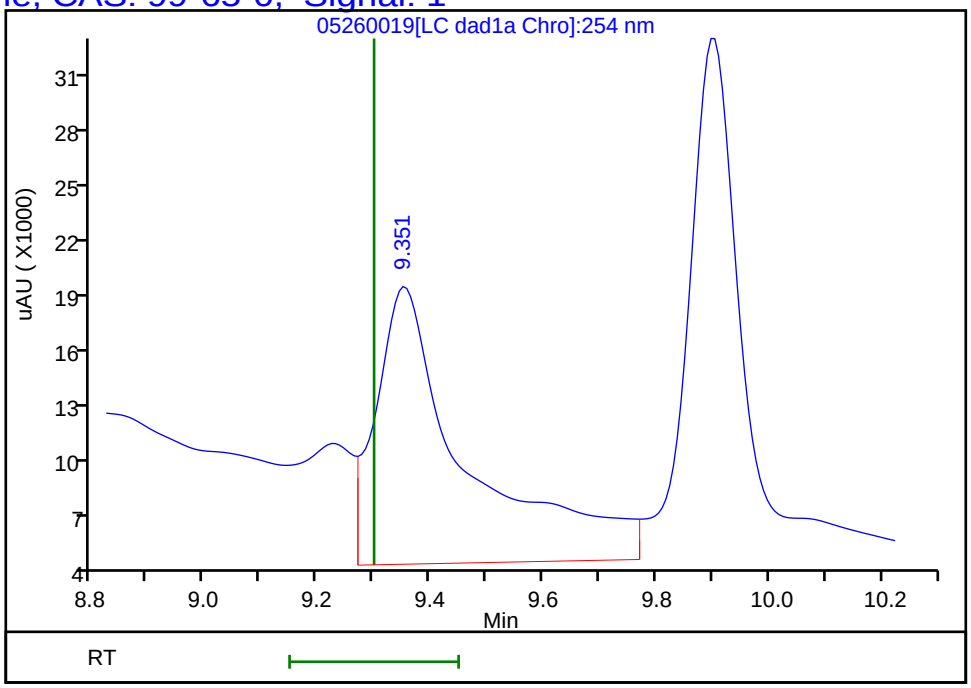
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260019.d
Injection Date: 26-May-2022 20:54:50 Instrument ID: CHHPLC_X3
Lims ID: 280-162622-A-4-A Lab Sample ID: 280-162622-4
Client ID: G0100-22A
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

12 1,3-Dinitrobenzene, CAS: 99-65-0, Signal: 1

RT: 9.35
Response: 161094
Amount: 0.558575



Reviewer: zhangji, 27-May-2022 12:49:05
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

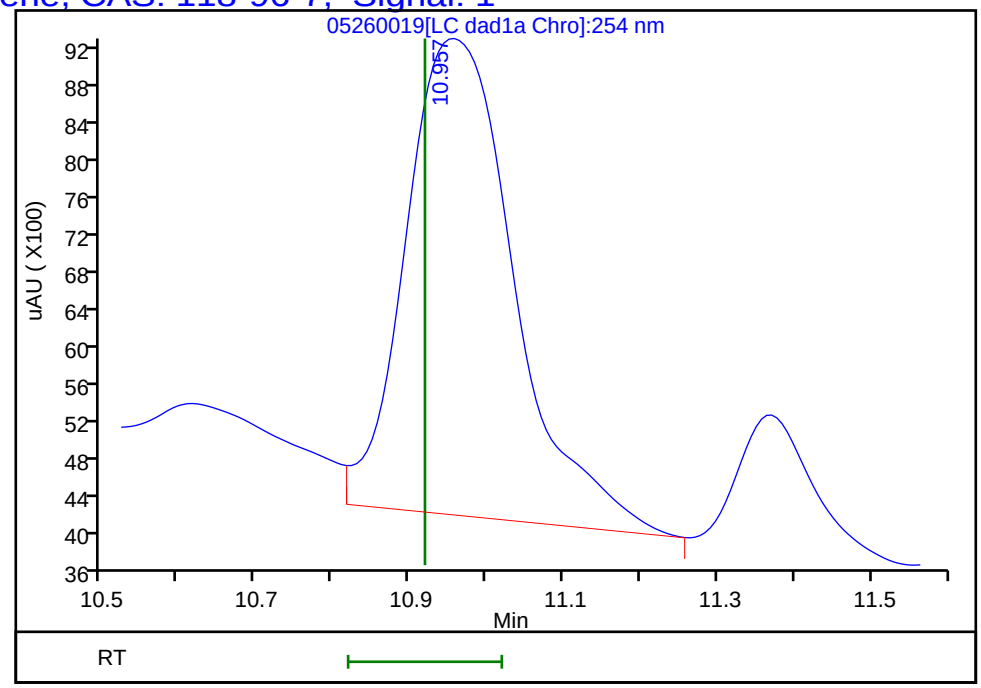
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260019.d
Injection Date: 26-May-2022 20:54:50 Instrument ID: CHHPLC_X3
Lims ID: 280-162622-A-4-A Lab Sample ID: 280-162622-4
Client ID: G0100-22A
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

17 2,4,6-Trinitrotoluene, CAS: 118-96-7, Signal: 1

RT: 10.96
Response: 49989
Amount: 0.246584



Reviewer: zhangji, 27-May-2022 12:49:05
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

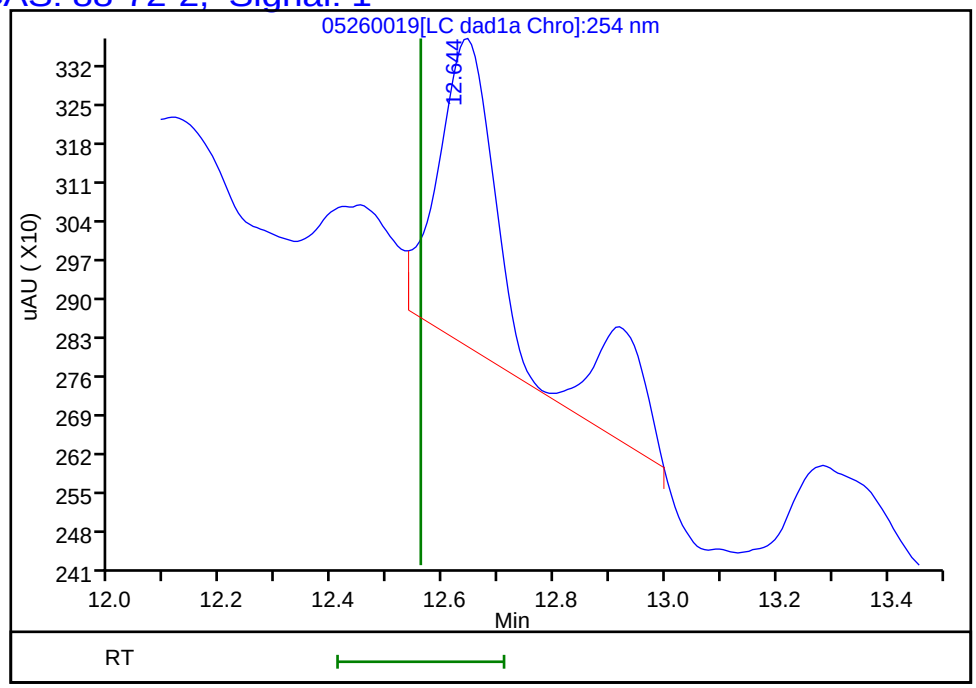
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260019.d
Injection Date: 26-May-2022 20:54:50 Instrument ID: CHHPLC_X3
Lims ID: 280-162622-A-4-A Lab Sample ID: 280-162622-4
Client ID: G0100-22A
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

22 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 12.64
Response: 5134
Amount: 0.040231



Reviewer: zhangji, 27-May-2022 12:49:05
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

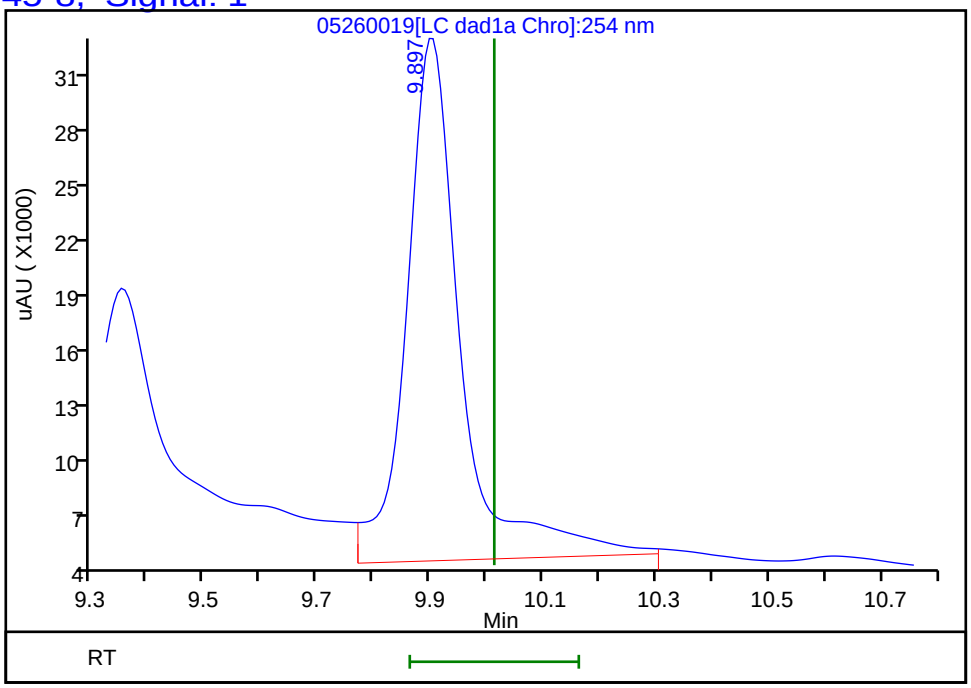
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260019.d
Injection Date: 26-May-2022 20:54:50 Instrument ID: CHHPLC_X3
Lims ID: 280-162622-A-4-A Lab Sample ID: 280-162622-4
Client ID: G0100-22A
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

15 Tetryl, CAS: 479-45-8, Signal: 1

RT: 9.90
Response: 180651
Amount: 1.059122



Reviewer: zhangji, 27-May-2022 12:49:05
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0100-22A | Lab Sample ID: 280-162622-4

Matrix: Water | Lab File ID: 05270017.D

Analysis Method: 8330A | Date Collected: 05/19/2022 09:50

Extraction Method: 3535 | Date Extracted: 05/25/2022 15:23

Sample wt/vol: 453.1(mL) | Date Analyzed: 05/27/2022 22:38

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: Luna-phenylhex ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 576448 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	92		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270017.D
Lims ID: 280-162622-A-4-A
Client ID: G0100-22A
Sample Type: Client
Inject. Date: 27-May-2022 22:38:34 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-162622-A-4-A
Misc. Info.: 280-0111418-017
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 28-May-2022 14:12:39 Calib Date: 03-Mar-2022 07:19:48
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1652

First Level Reviewer: zhangji Date: 28-May-2022 14:00:45

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	5 HMX	1		6.713			ND	U
	6 MNX	1		7.440			ND	
	8 RDX	1	8.899	8.840	0.059	13476	0.0693	M
	9 Nitrobenzene	1		11.707			ND	
$	10 1,2-Dinitrobenzene	1	12.905	12.867	0.038	45938	0.1839	
	12 1,3-Dinitrobenzene	1		15.233			ND	
	14 o-Nitrotoluene	1		16.327			ND	
	16 p-Nitrotoluene	1		16.627			ND	U
	17 4-Amino-2,6-dinitrotoluene	1	17.278	17.247	0.031	3029	0.0116	
	18 m-Nitrotoluene	1	17.598	17.573	0.025	4184	0.0164	
	19 2-Amino-4,6-dinitrotoluene	1	18.245	18.233	0.012	14058	0.0390	M
	20 1,3,5-Trinitrobenzene	1		18.487			ND	
	21 2,6-Dinitrotoluene	1		19.720			ND	U
	22 2,4-Dinitrotoluene	1		20.233			ND	7
	23 Tetryl	1		23.880			ND	
	24 2,4,6-Trinitrotoluene	1		24.680			ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

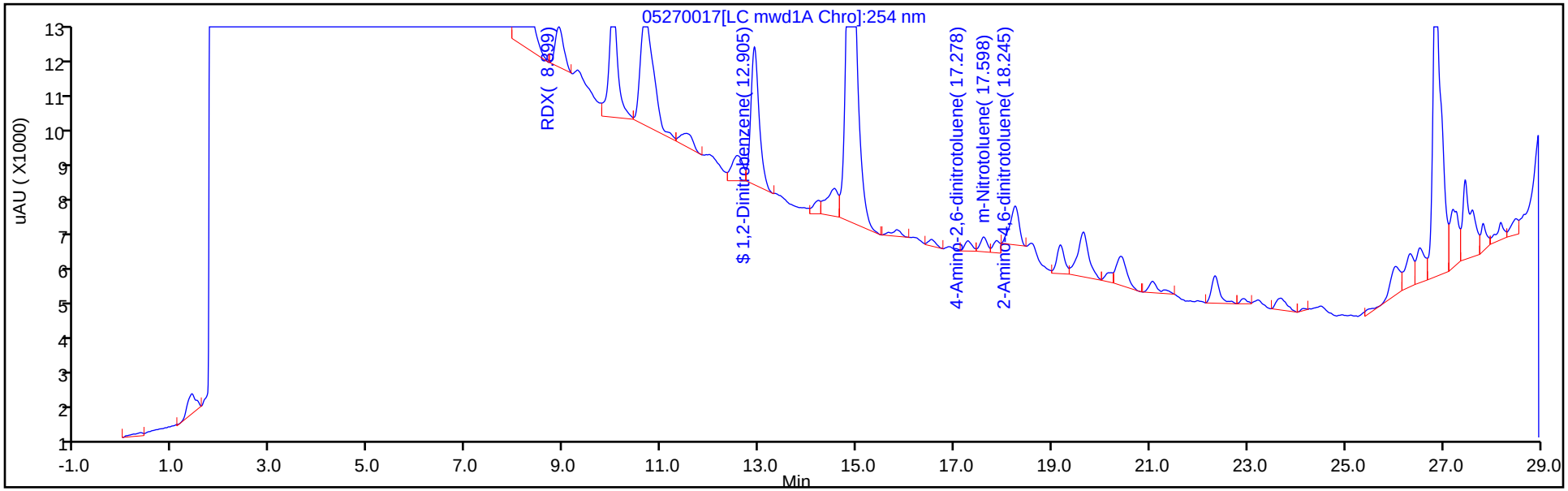
Report Date: 28-May-2022 14:12:43 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

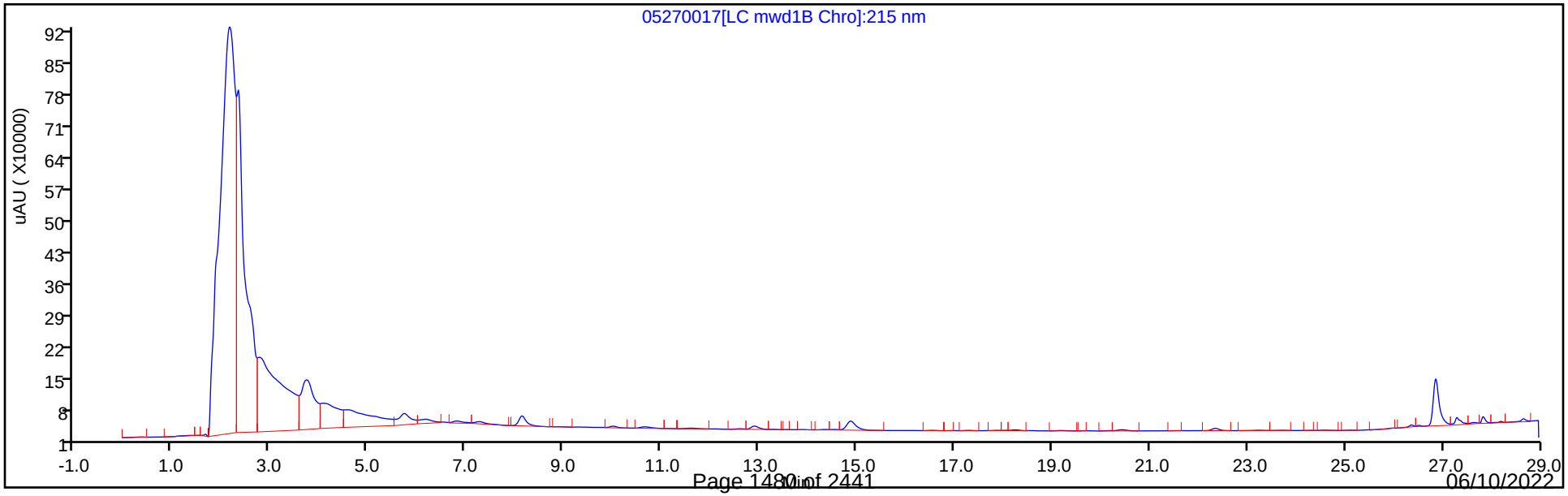
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270017.D

Injection Date:	27-May-2022 22:38:34	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-162622-A-4-A	Lab Sample ID:	280-162622-4	Worklist Smp#:	17
Client ID:	G0100-22A				
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 Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270017.D				
Lims ID:	280-162622-A-4-A				
Client ID:	G0100-22A				
Sample Type:	Client				
Inject. Date:	27-May-2022 22:38:34	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-162622-A-4-A				
Misc. Info.:	280-0111418-017				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	28-May-2022 14:12:39	Calib Date:	03-Mar-2022 07:19:48		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1652				
First Level Reviewer: zhangji		Date:	28-May-2022 14:00:45		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1839	91.97

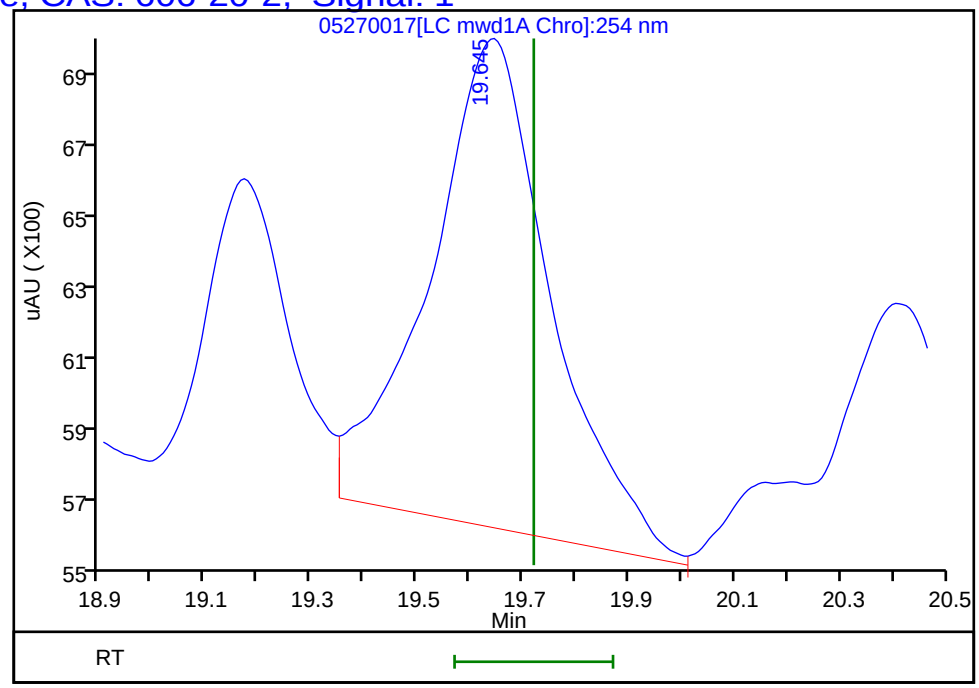
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270017.D				
Injection Date:	27-May-2022 22:38:34	Instrument ID:	CHHPLC_X5		
Lims ID:	280-162622-A-4-A	Lab Sample ID:	280-162622-4		
Client ID:	G0100-22A				
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		

21 2,6-Dinitrotoluene, CAS: 606-20-2, Signal: 1

RT: 19.65
Response: 20149
Amount: 0.075845



Reviewer: zhangji, 28-May-2022 14:00:45

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

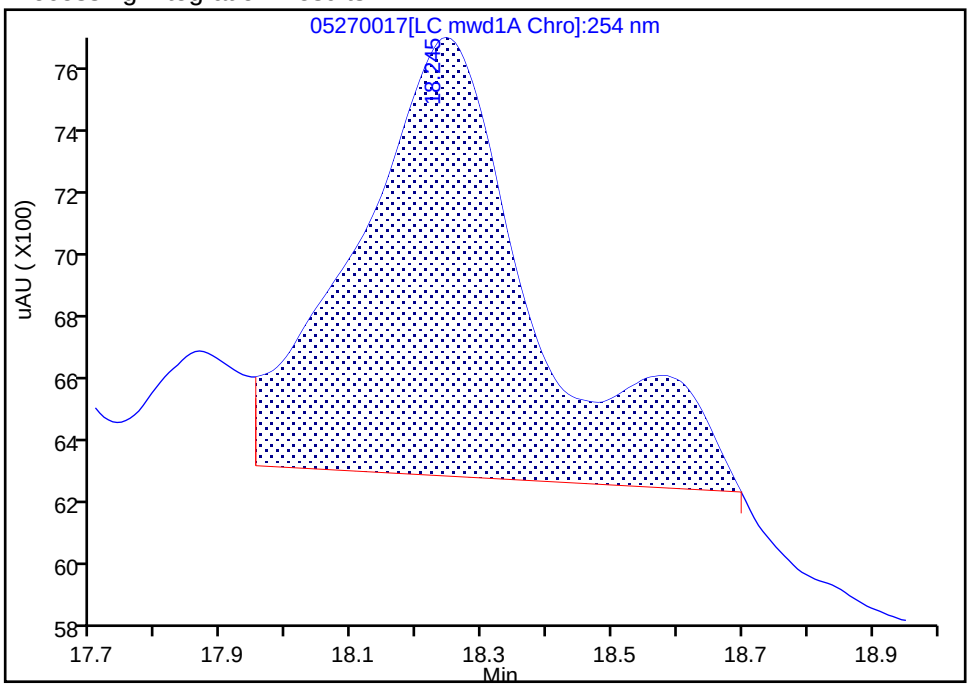
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270017.D				
Injection Date:	27-May-2022 22:38:34	Instrument ID:	CHHPLC_X5		
Lims ID:	280-162622-A-4-A	Lab Sample ID:	280-162622-4		
Client ID:	G0100-22A				
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

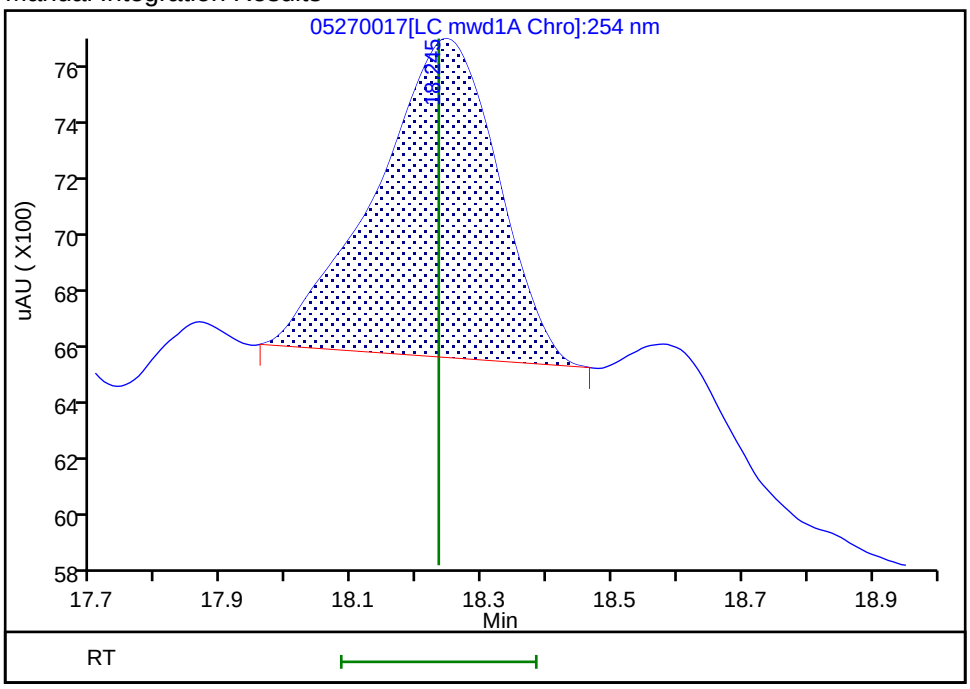
Processing Integration Results

RT: 18.25
Area: 25782
Amount: 0.071510
Amount Units: ug/ml



Manual Integration Results

RT: 18.25
Area: 14058
Amount: 0.038992
Amount Units: ug/ml



Reviewer: zhangji, 28-May-2022 14:00:33

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

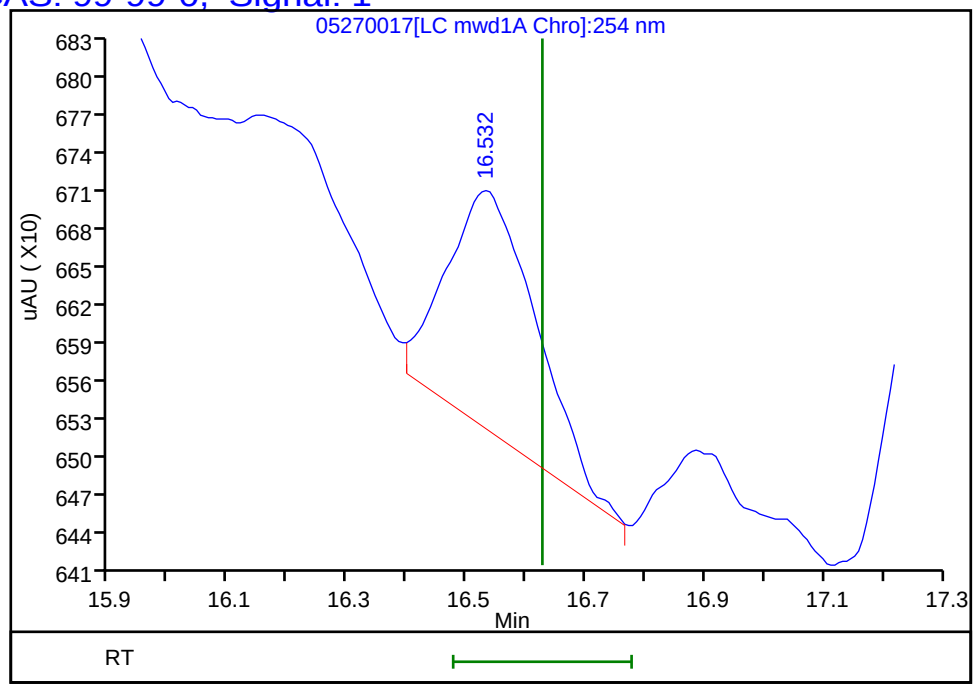
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270017.D				
Injection Date:	27-May-2022 22:38:34	Instrument ID:	CHHPLC_X5		
Lims ID:	280-162622-A-4-A	Lab Sample ID:	280-162622-4		
Client ID:	G0100-22A				
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		

16 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 16.53
Response: 1975
Amount: 0.009368



Reviewer: zhangji, 28-May-2022 14:00:45
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

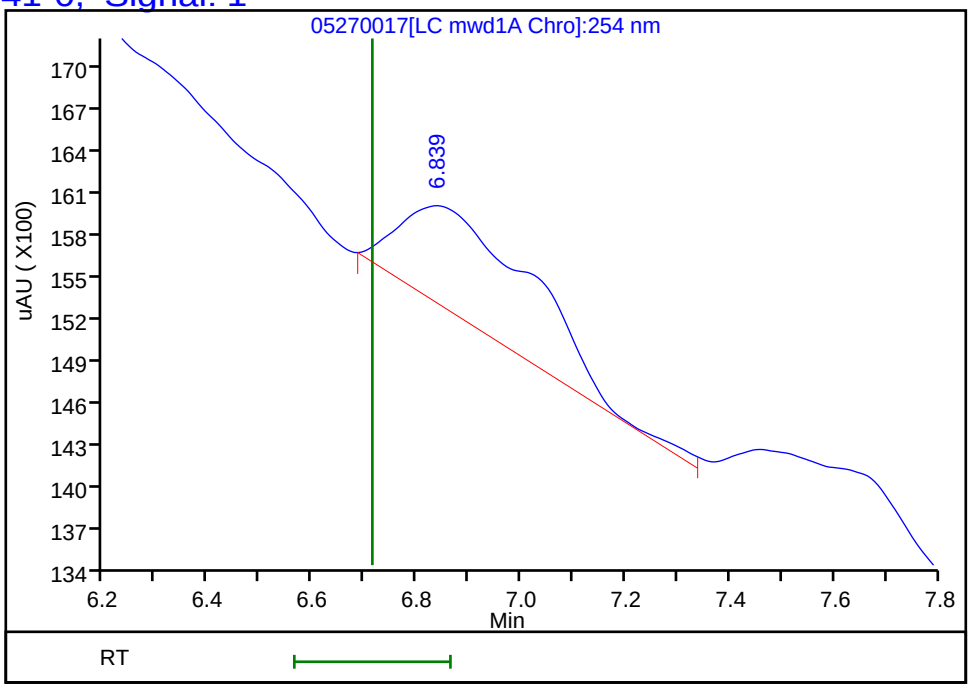
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270017.D				
Injection Date:	27-May-2022 22:38:34	Instrument ID:	CHHPLC_X5		
Lims ID:	280-162622-A-4-A	Lab Sample ID:	280-162622-4		
Client ID:	G0100-22A				
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		

5 HMX, CAS: 2691-41-0, Signal: 1

RT: 6.84
Response: 13811
Amount: 0.083131



Reviewer: zhangji, 28-May-2022 14:00:45
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

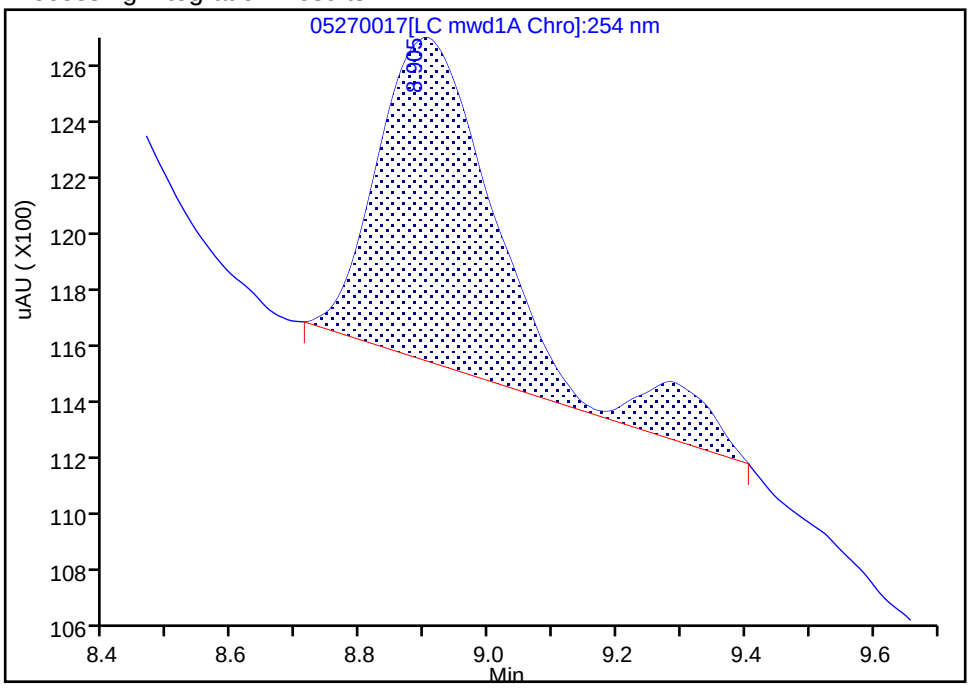
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270017.D				
Injection Date:	27-May-2022 22:38:34	Instrument ID:	CHHPLC_X5		
Lims ID:	280-162622-A-4-A	Lab Sample ID:	280-162622-4		
Client ID:	G0100-22A				
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. 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

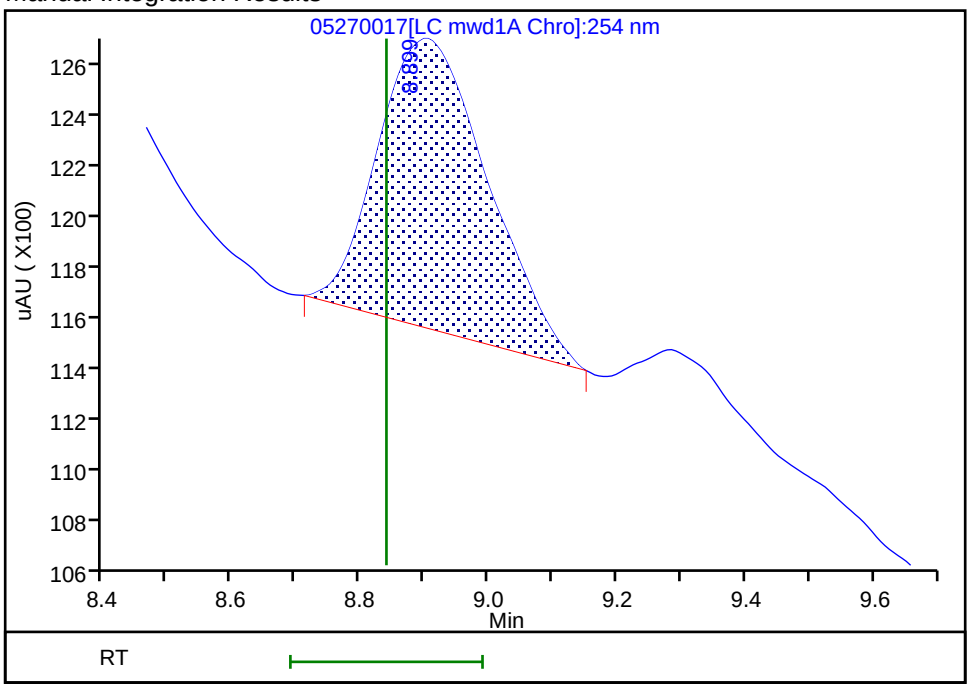
Processing Integration Results

RT: 8.91
Area: 15418
Amount: 0.079339
Amount Units: ug/ml



Manual Integration Results

RT: 8.90
Area: 13476
Amount: 0.069346
Amount Units: ug/ml



Reviewer: zhangji, 28-May-2022 14:00:42

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0122-22A | Lab Sample ID: 280-162622-5

Matrix: Water | Lab File ID: 05260020.D

Analysis Method: 8330A | Date Collected: 05/19/2022 12:10

Extraction Method: 3535 | Date Extracted: 05/25/2022 15:23

Sample wt/vol: 463.4(mL) | Date Analyzed: 05/26/2022 21:17

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 576310 | 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 M	0.12	0.11	0.040
118-96-7	2,4,6-Trinitrotoluene	0.11	U M	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	0.11	U	0.12	0.11	0.055
88-72-2	2-Nitrotoluene	0.22	U	0.23	0.22	0.092
99-08-1	3-Nitrotoluene	0.43	U	0.43	0.43	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.062
99-99-0	4-Nitrotoluene	0.43	U 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	2.2	0.43	0.17
98-95-3	Nitrobenzene	0.22	U	0.23	0.22	0.098
121-82-4	RDX	0.86	M J1	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	102	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\05260020.D
Lims ID: 280-162622-A-5-A
Client ID: G0122-22A
Sample Type: Client
Inject. Date: 26-May-2022 21:17:50 ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-162622-A-5-A
Misc. Info.: 280-0111383-020
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 27-May-2022 13:18:41 Calib Date: 25-Mar-2022 16:30:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220325-109559.b\03250017.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1651

First Level Reviewer: zhangji Date: 27-May-2022 12:49:26

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.593			ND	
7 MNX	1		7.211			ND	M
8 RDX	1	7.577	7.586	-0.009	8221	0.0793	M
$ 10 1,2-Dinitrobenzene	1	8.537	8.546	-0.009	25359	0.2034	M
11 1,3,5-Trinitrobenzene	1		8.666			ND	
12 1,3-Dinitrobenzene	1		9.299			ND	U
13 Nitrobenzene	1		9.686			ND	
15 Tetryl	1		10.013			ND	U
17 2,4,6-Trinitrotoluene	1		10.919			ND	U
18 4-Amino-2,6-dinitrotoluene	1		11.119			ND	
19 2-Amino-4,6-dinitrotoluene	1		11.373			ND	
20 2,6-Dinitrotoluene	1		11.533			ND	
21 2,4-Dinitrotoluene	1		11.706			ND	
22 o-Nitrotoluene	1		12.559			ND	
23 p-Nitrotoluene	1		12.993			ND	U
24 m-Nitrotoluene	1		13.566			ND	

QC Flag Legend

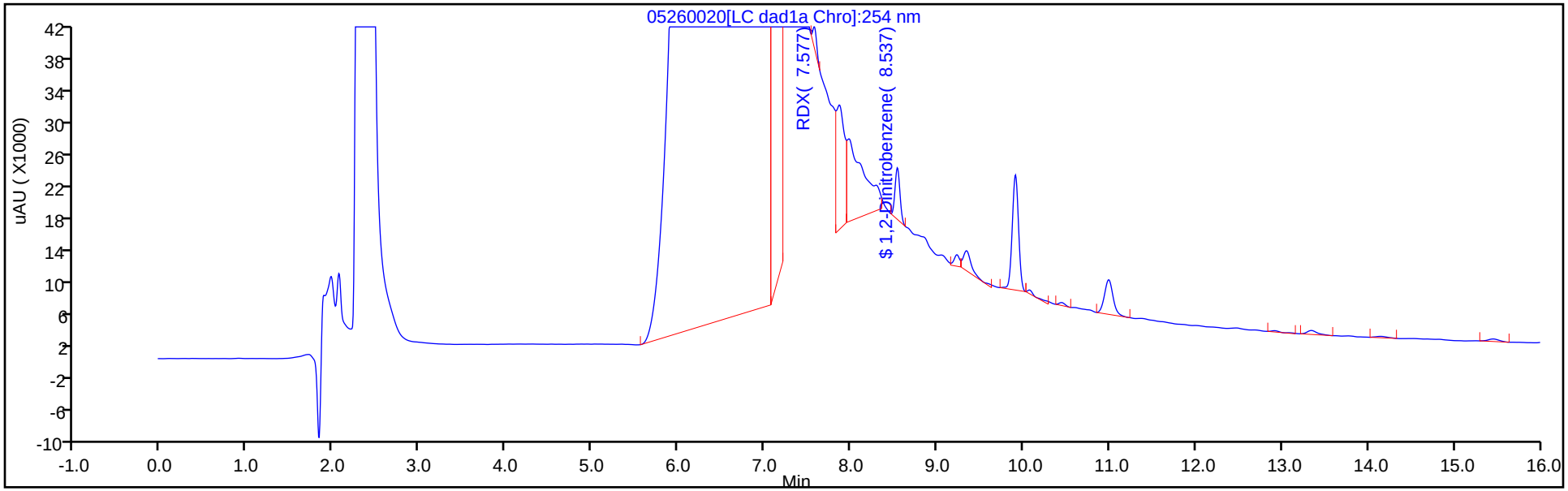
Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 27-May-2022 13:18:42 Chrom Revision: 2.3 18-May-2022 20:00:04

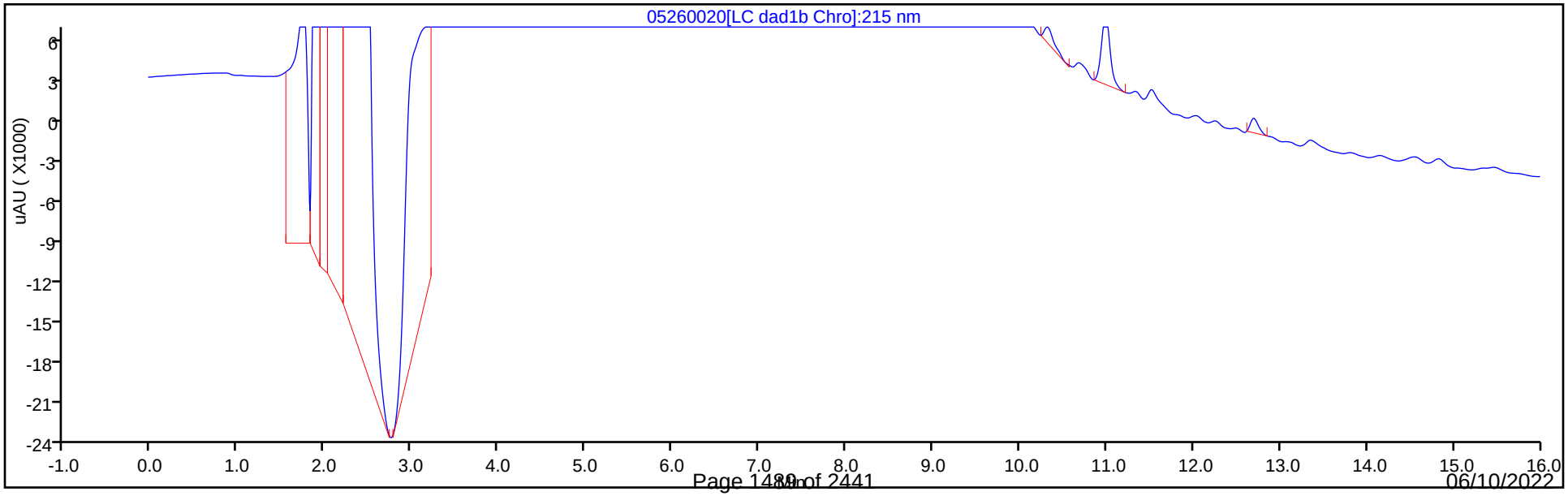
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260020.d				
Injection Date:	26-May-2022 21:17:50	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-162622-A-5-A	Lab Sample ID:	280-162622-5	Worklist Smp#:	20
Client ID:	G0122-22A				
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



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\05260020.D				
Lims ID:	280-162622-A-5-A				
Client ID:	G0122-22A				
Sample Type:	Client				
Inject. Date:	26-May-2022 21:17:50	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-162622-A-5-A				
Misc. Info.:	280-0111383-020				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	27-May-2022 13:18:41	Calib Date:	25-Mar-2022 16:30:08		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220325-109559.b\03250017.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1651				

First Level Reviewer: zhangji Date: 27-May-2022 12:49:26

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2034	101.68

Manual Integration/User Assign Peak Report

Eurofins Denver

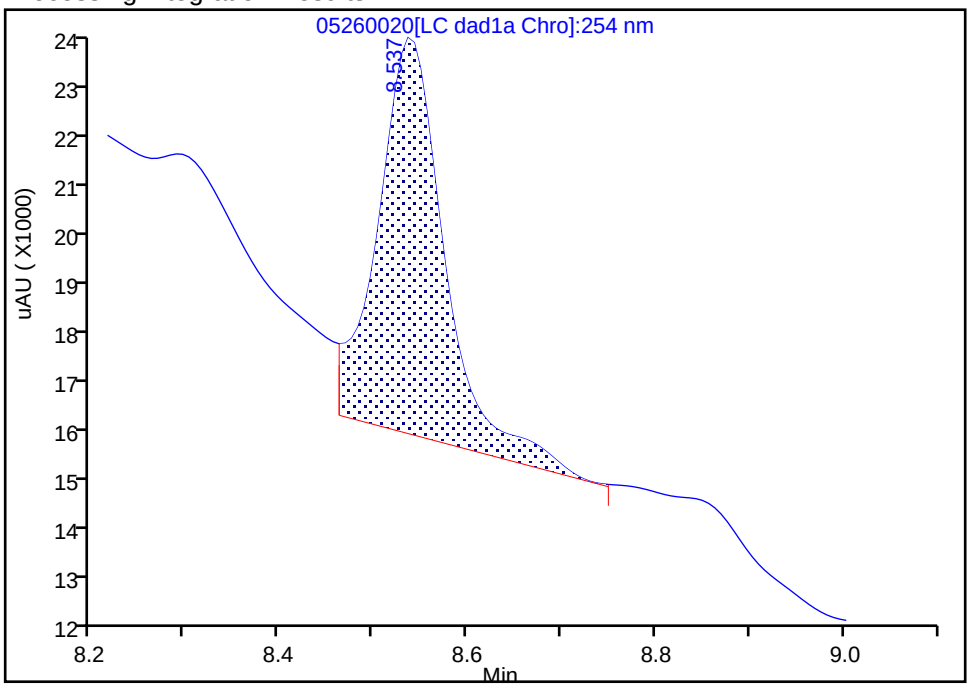
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260020.d				
Injection Date:	26-May-2022 21:17:50	Instrument ID:	CHHPLC_X3		
Lims ID:	280-162622-A-5-A	Lab Sample ID:	280-162622-5		
Client ID:	G0122-22A				
Operator ID:	JZ	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

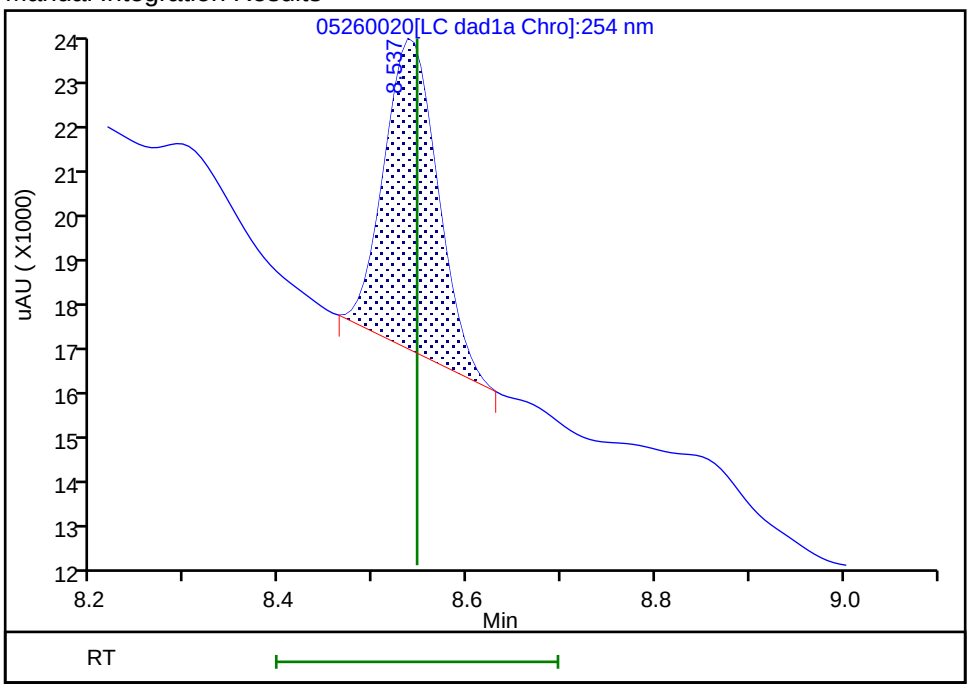
Processing Integration Results

RT: 8.54
Area: 36604
Amount: 0.293542
Amount Units: ug/mL



Manual Integration Results

RT: 8.54
Area: 25359
Amount: 0.203364
Amount Units: ug/mL



Reviewer: zhangji, 27-May-2022 12:49:25

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

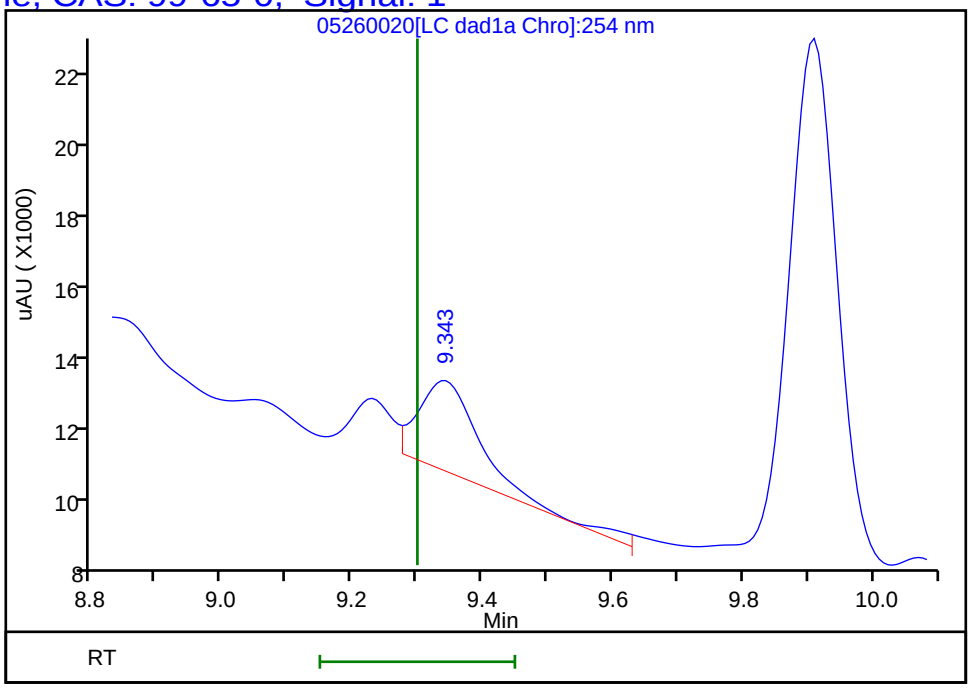
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260020.d
Injection Date: 26-May-2022 21:17:50 Instrument ID: CHHPLC_X3
Lims ID: 280-162622-A-5-A Lab Sample ID: 280-162622-5
Client ID: G0122-22A
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

12 1,3-Dinitrobenzene, CAS: 99-65-0, Signal: 1

RT: 9.34
Response: 16701
Amount: 0.057909



Reviewer: zhangji, 27-May-2022 12:49:26
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

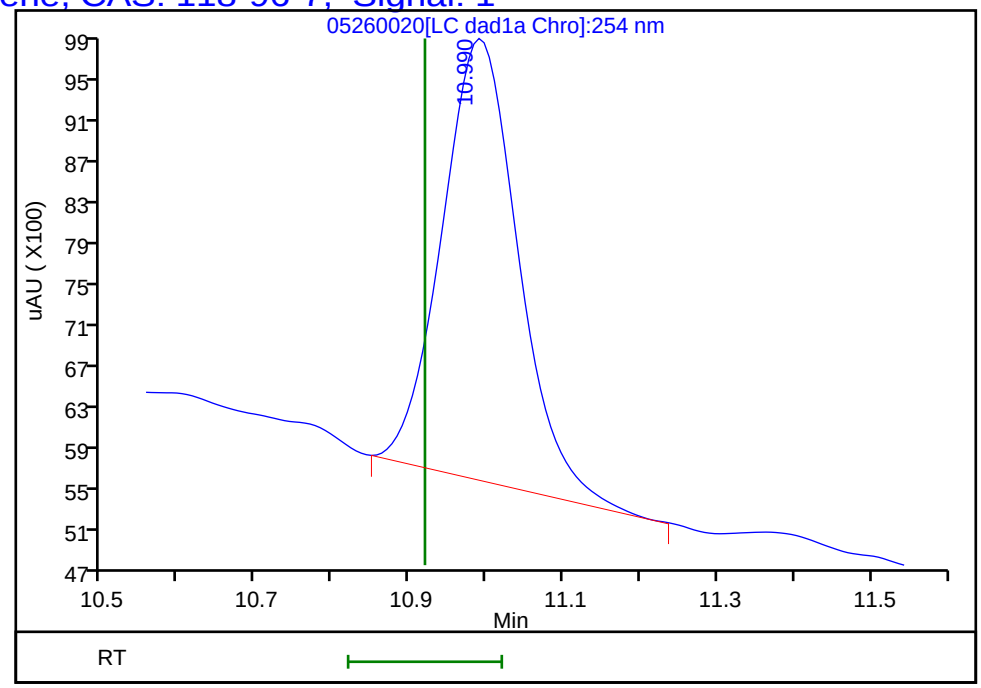
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260020.d
Injection Date: 26-May-2022 21:17:50 Instrument ID: CHHPLC_X3
Lims ID: 280-162622-A-5-A Lab Sample ID: 280-162622-5
Client ID: G0122-22A
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

17 2,4,6-Trinitrotoluene, CAS: 118-96-7, Signal: 1

RT: 10.99
Response: 29841
Amount: 0.147199



Reviewer: zhangji, 27-May-2022 12:49:26
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

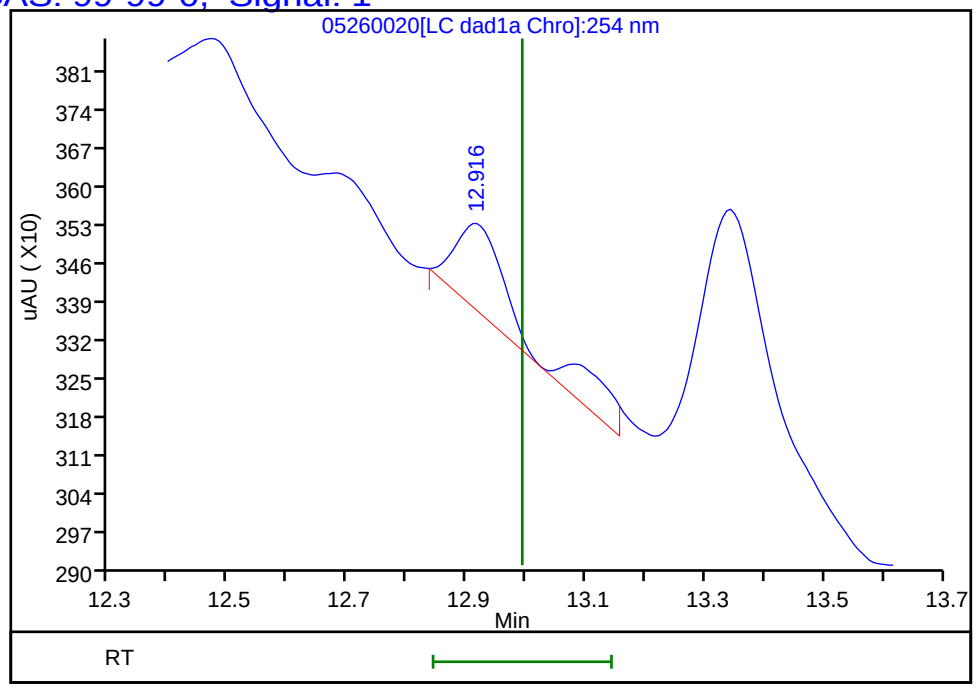
User Disabled Compound Report

Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260020.d
Injection Date: 26-May-2022 21:17:50 Instrument ID: CHHPLC_X3
Lims ID: 280-162622-A-5-A Lab Sample ID: 280-162622-5
Client ID: G0122-22A
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

23 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 12.92
Response: 1259
Amount: 0.011851



Reviewer: zhangji, 27-May-2022 12:49:26
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

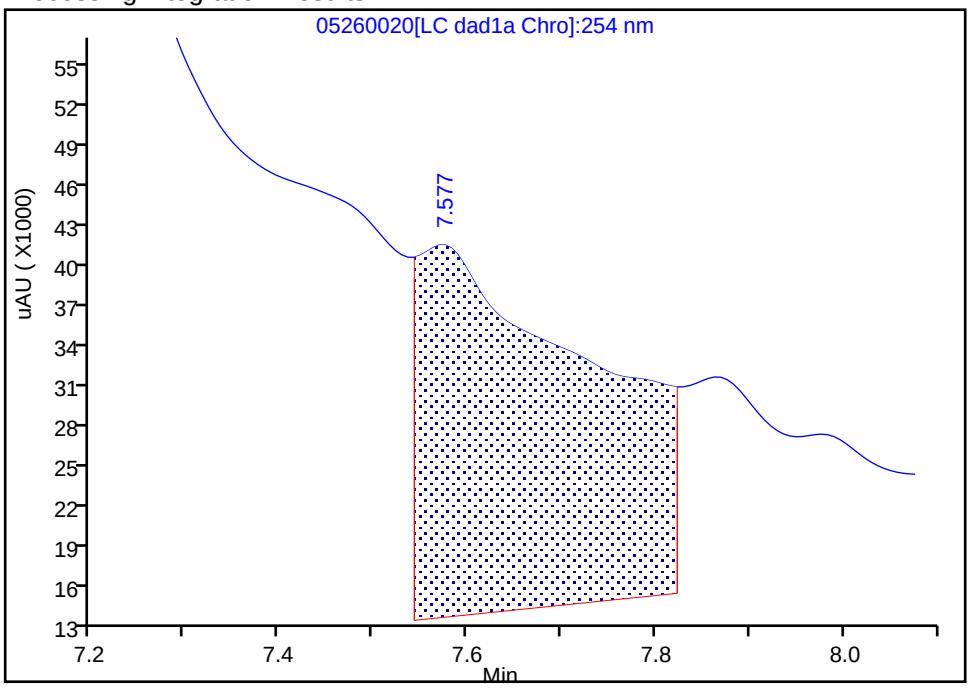
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260020.d				
Injection Date:	26-May-2022 21:17:50	Instrument ID:	CHHPLC_X3		
Lims ID:	280-162622-A-5-A	Lab Sample ID:	280-162622-5		
Client ID:	G0122-22A				
Operator ID:	JZ	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

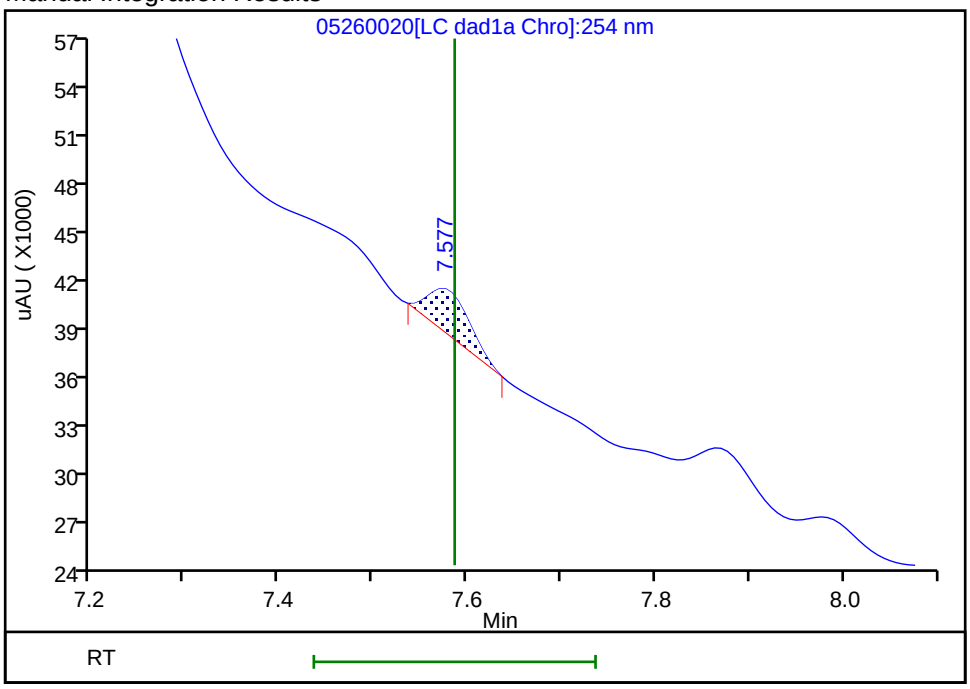
Processing Integration Results

RT: 7.58
Area: 342755
Amount: 3.308152
Amount Units: ug/mL



Manual Integration Results

RT: 7.58
Area: 8221
Amount: 0.079346
Amount Units: ug/mL



Reviewer: zhangji, 27-May-2022 12:49:21

Audit Action: Manually Integrated Audit Reason: Baseline

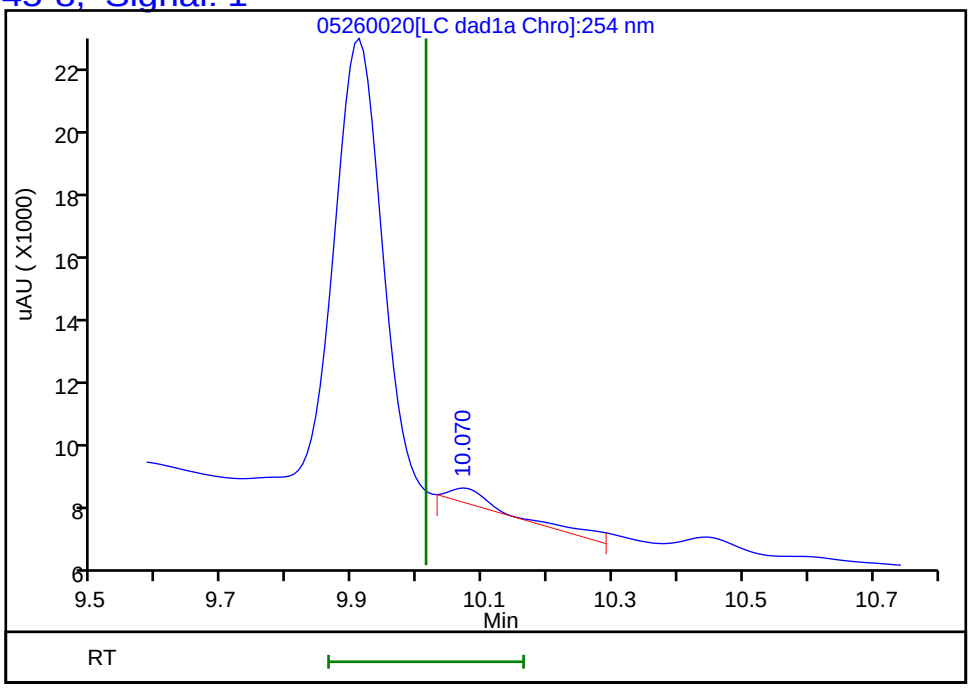
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260020.d				
Injection Date:	26-May-2022 21:17:50	Instrument ID:	CHHPLC_X3		
Lims ID:	280-162622-A-5-A	Lab Sample ID:	280-162622-5		
Client ID:	G0122-22A				
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		

15 Tetryl, CAS: 479-45-8, Signal: 1

RT: 10.07
Response: 3050
Amount: 0.017882



Reviewer: zhangji, 27-May-2022 12:49:26
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0122-22A | Lab Sample ID: 280-162622-5

Matrix: Water | Lab File ID: 05270018.D

Analysis Method: 8330A | Date Collected: 05/19/2022 12:10

Extraction Method: 3535 | Date Extracted: 05/25/2022 15:23

Sample wt/vol: 463.4(mL) | Date Analyzed: 05/27/2022 23:13

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: Luna-phenylhex ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 576448 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
121-82-4	*RDX*	*1.7*	*J1 M*	*0.23*	0.22	*0.056*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	102	*M*	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270018.D
Lims ID: 280-162622-A-5-A
Client ID: G0122-22A
Sample Type: Client
Inject. Date: 27-May-2022 23:13:41 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-162622-A-5-A
Misc. Info.: 280-0111418-018
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 28-May-2022 14:12:39 Calib Date: 03-Mar-2022 07:19:48
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1652

First Level Reviewer: zhangji Date: 28-May-2022 14:01:06

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	5 HMX	1		6.713			ND	U
	6 MNX	1		7.440			ND	
	8 RDX	1	8.832	8.840	-0.008	31047	0.1598	M
	9 Nitrobenzene	1		11.707			ND	
$	10 1,2-Dinitrobenzene	1	12.858	12.867	-0.009	50866	0.2037	M
	12 1,3-Dinitrobenzene	1		15.233			ND	
	14 o-Nitrotoluene	1		16.327			ND	U
	16 p-Nitrotoluene	1		16.627			ND	
	17 4-Amino-2,6-dinitrotoluene	1		17.247			ND	
	18 m-Nitrotoluene	1		17.573			ND	
	19 2-Amino-4,6-dinitrotoluene	1		18.233			ND	
	20 1,3,5-Trinitrobenzene	1		18.487			ND	
	21 2,6-Dinitrotoluene	1		19.720			ND	
	22 2,4-Dinitrotoluene	1		20.233			ND	
	23 Tetryl	1		23.880			ND	
	24 2,4,6-Trinitrotoluene	1		24.680			ND	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

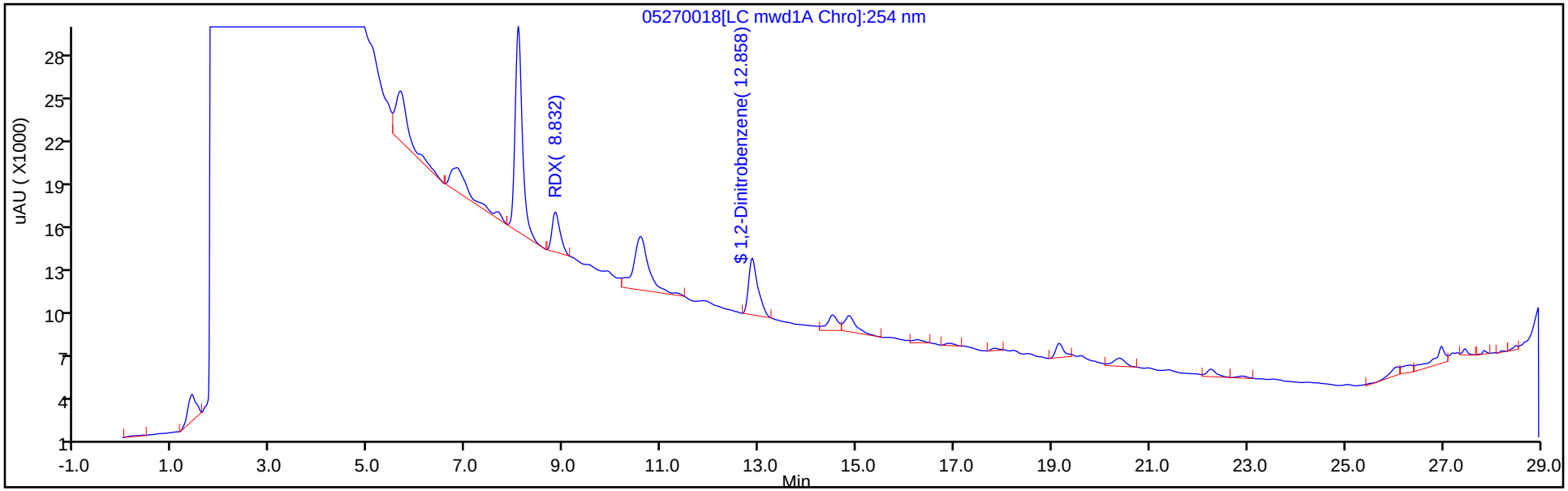
Report Date: 28-May-2022 14:12:43 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

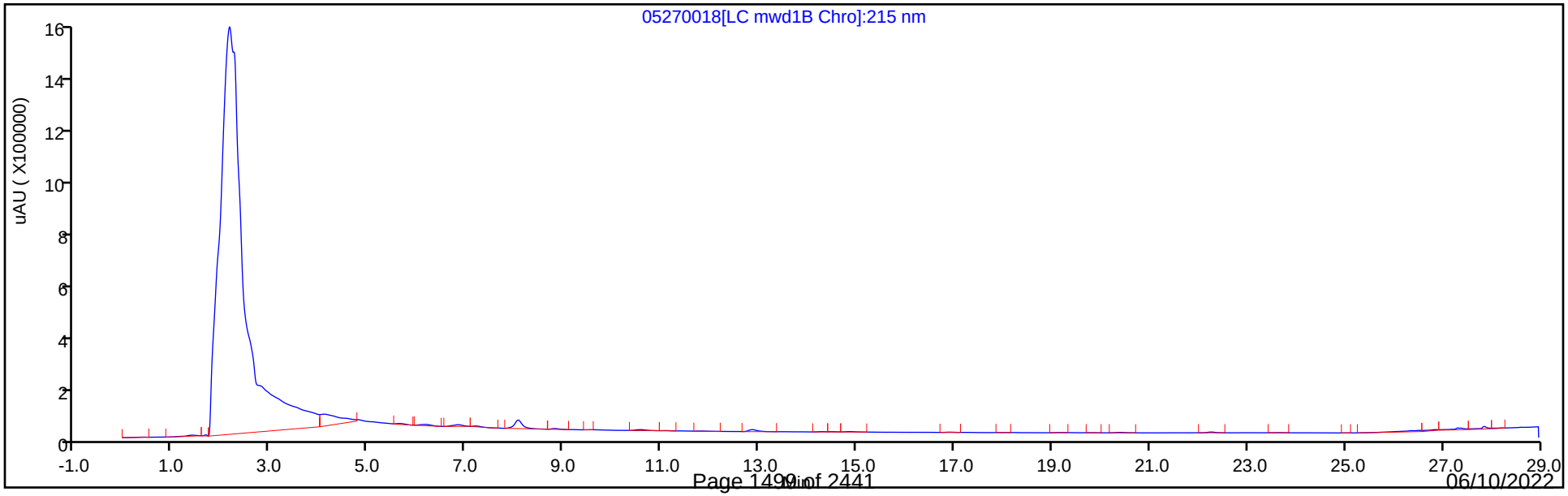
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270018.D

Injection Date:	27-May-2022 23:13:41	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-162622-A-5-A	Lab Sample ID:	280-162622-5	Worklist Smp#:	18
Client ID:	G0122-22A				
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 Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270018.D				
Lims ID:	280-162622-A-5-A				
Client ID:	G0122-22A				
Sample Type:	Client				
Inject. Date:	27-May-2022 23:13:41	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-162622-A-5-A				
Misc. Info.:	280-0111418-018				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	28-May-2022 14:12:39	Calib Date:	03-Mar-2022 07:19:48		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1652				
First Level Reviewer: zhangji		Date:	28-May-2022 14:01:06		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2037	101.83

Manual Integration/User Assign Peak Report

Eurofins Denver

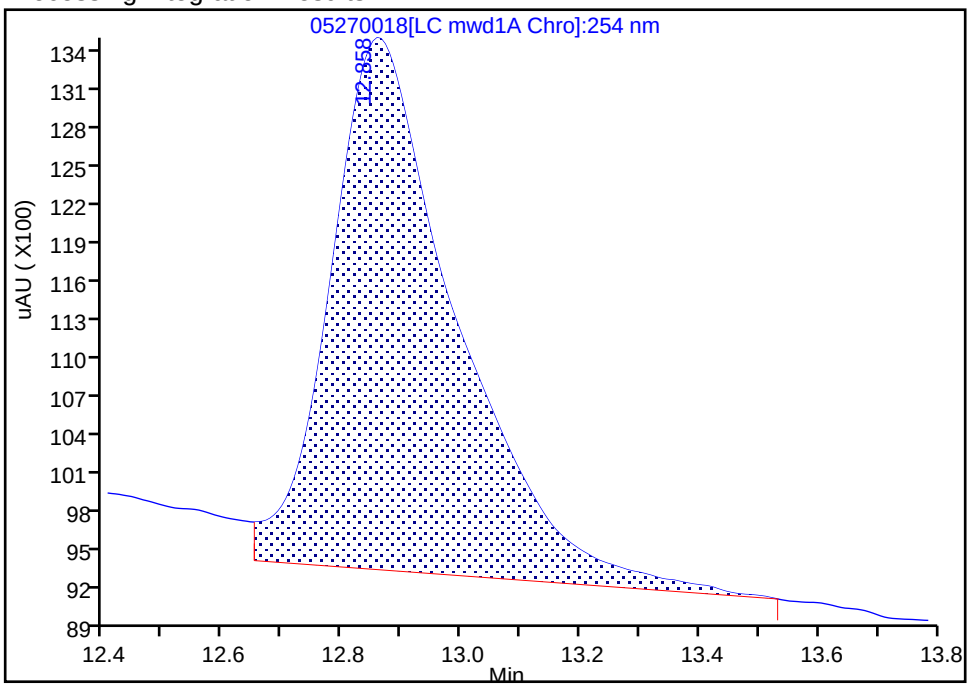
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270018.D				
Injection Date:	27-May-2022 23:13:41	Instrument ID:	CHHPLC_X5		
Lims ID:	280-162622-A-5-A	Lab Sample ID:	280-162622-5		
Client ID:	G0122-22A				
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. 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

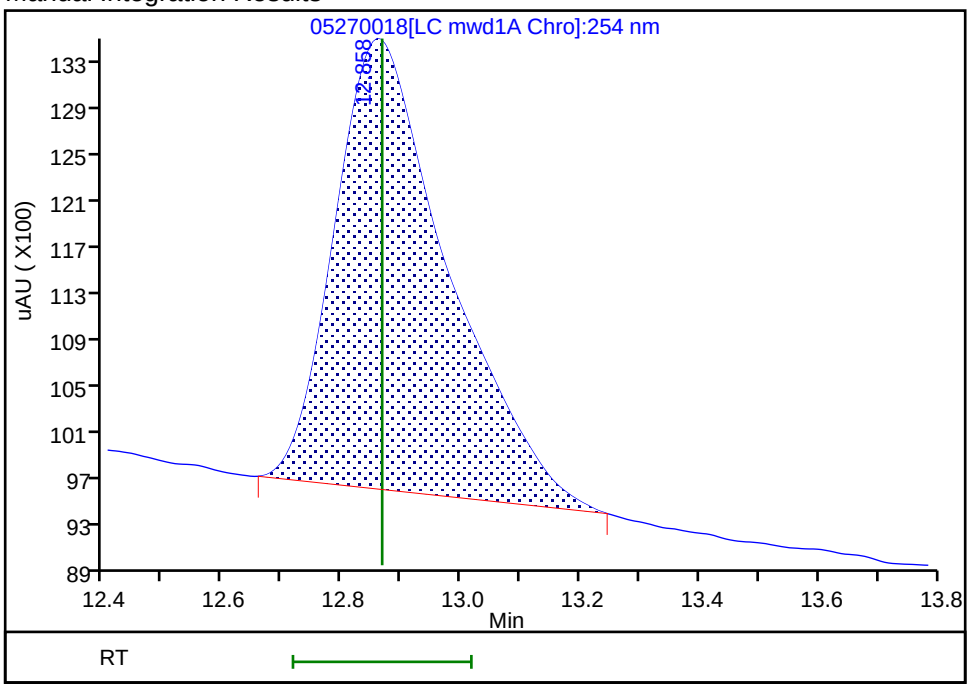
Processing Integration Results

RT: 12.86
Area: 60617
Amount: 0.242708
Amount Units: ug/ml



Manual Integration Results

RT: 12.86
Area: 50866
Amount: 0.203665
Amount Units: ug/ml



Reviewer: zhangji, 28-May-2022 14:01:01

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

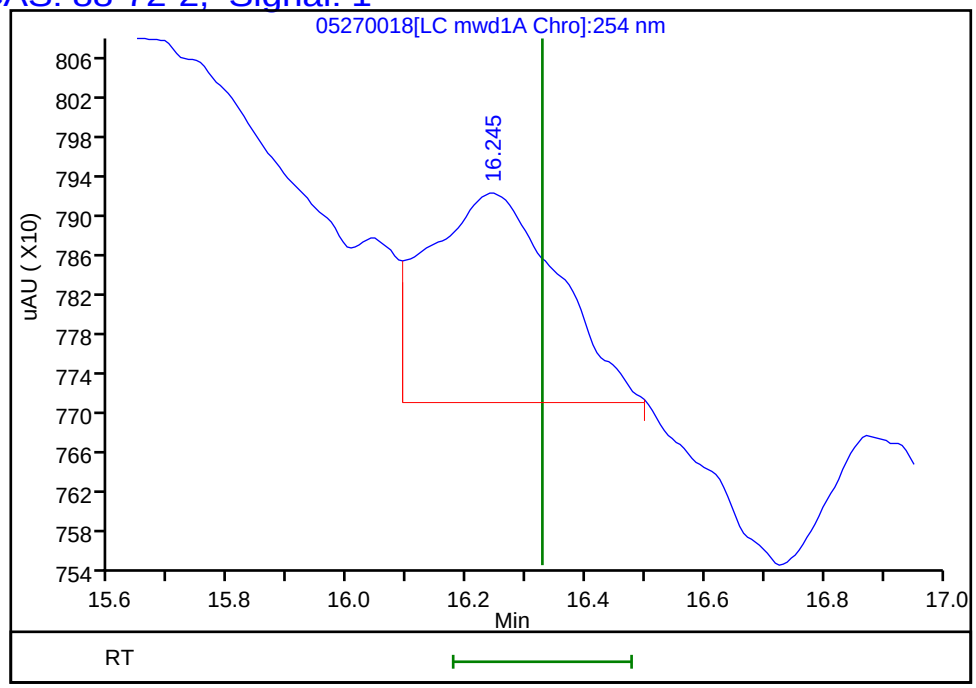
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270018.D				
Injection Date:	27-May-2022 23:13:41	Instrument ID:	CHHPLC_X5		
Lims ID:	280-162622-A-5-A	Lab Sample ID:	280-162622-5		
Client ID:	G0122-22A				
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: 16.24
Response: 3198
Amount: 0.013628



Reviewer: zhangji, 28-May-2022 14:01:06
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

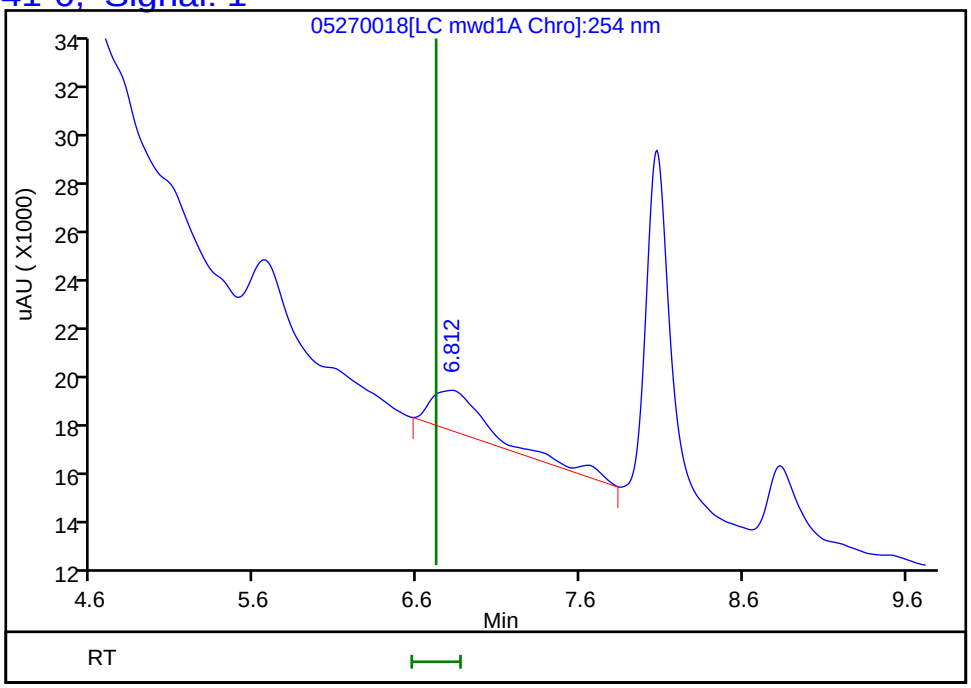
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270018.D				
Injection Date:	27-May-2022 23:13:41	Instrument ID:	CHHPLC_X5		
Lims ID:	280-162622-A-5-A	Lab Sample ID:	280-162622-5		
Client ID:	G0122-22A				
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		

5 HMX, CAS: 2691-41-0, Signal: 1

RT: 6.81
Response: 42931
Amount: 0.258410



Reviewer: zhangji, 28-May-2022 14:01:06
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

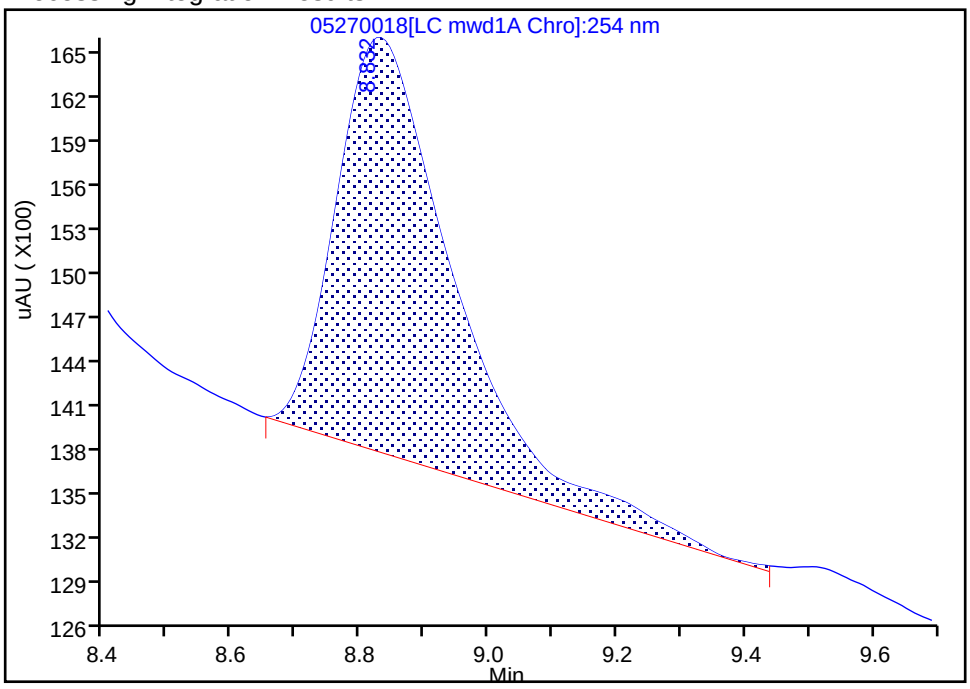
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270018.D				
Injection Date:	27-May-2022 23:13:41	Instrument ID:	CHHPLC_X5		
Lims ID:	280-162622-A-5-A	Lab Sample ID:	280-162622-5		
Client ID:	G0122-22A				
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

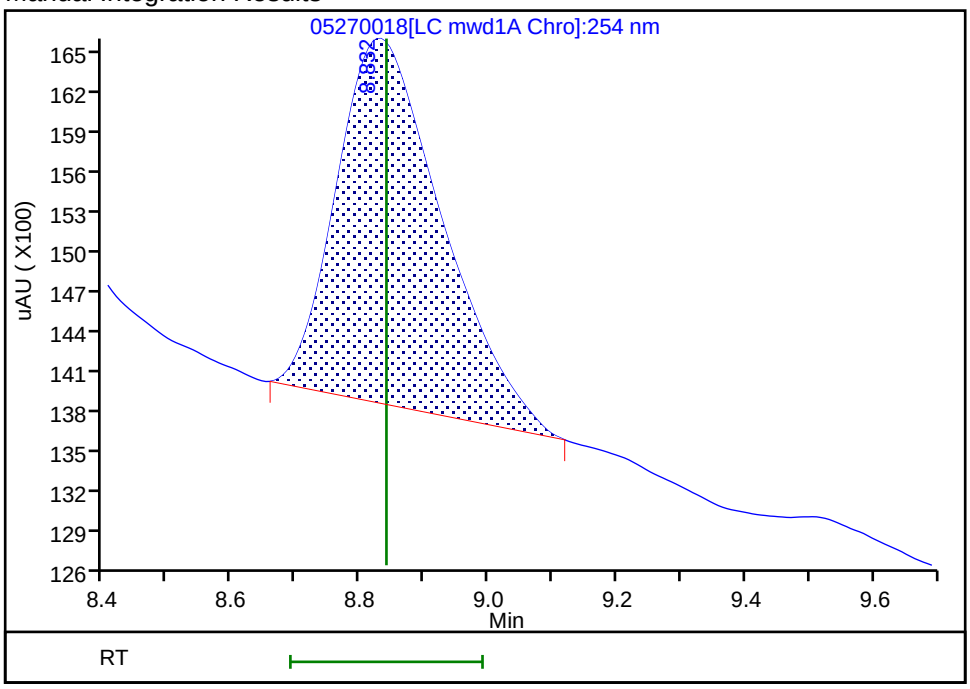
Processing Integration Results

RT: 8.83
Area: 35548
Amount: 0.182925
Amount Units: ug/ml



Manual Integration Results

RT: 8.83
Area: 31047
Amount: 0.159763
Amount Units: ug/ml



Reviewer: zhangji, 28-May-2022 14:01:05

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0066R-22A | Lab Sample ID: 280-162622-6

Matrix: Water | Lab File ID: 05260023.D

Analysis Method: 8330A | Date Collected: 05/19/2022 10:55

Extraction Method: 3535 | Date Extracted: 05/25/2022 15:23

Sample wt/vol: 438.1(mL) | Date Analyzed: 05/26/2022 22:26

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 576310 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.23	U	0.24	0.23	0.096
99-65-0	1,3-Dinitrobenzene	0.11	U M	0.13	0.11	0.042
118-96-7	2,4,6-Trinitrotoluene	0.11	U M	0.13	0.11	0.051
121-14-2	2,4-Dinitrotoluene	0.091	U	0.11	0.091	0.031
606-20-2	2,6-Dinitrotoluene	0.091	U	0.11	0.091	0.046
88-72-2	2-Nitrotoluene	0.23	U	0.24	0.23	0.098
99-08-1	3-Nitrotoluene	0.46	U	0.46	0.46	0.22
19406-51-0	4-Amino-2,6-dinitrotoluene	0.14	U	0.17	0.14	0.066
99-99-0	4-Nitrotoluene	0.46	U	0.47	0.46	0.11
2691-41-0	HMX	0.23	U	0.24	0.23	0.10
5755-27-1	MNX	0.46	U	2.3	0.46	0.18
98-95-3	Nitrobenzene	0.23	U	0.24	0.23	0.10
121-82-4	RDX	0.23	U	0.24	0.23	0.059
479-45-8	Tetryl	0.11	U M	0.13	0.11	0.036

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	102	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\05260023.D				
Lims ID:	280-162622-A-6-A				
Client ID:	G0066R-22A				
Sample Type:	Client				
Inject. Date:	26-May-2022 22:26:38	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-162622-A-6-A				
Misc. Info.:	280-0111383-023				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	27-May-2022 13:18:33	Calib Date:	25-Mar-2022 16:30:08		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220325-109559.b\03250017.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1651				
First Level Reviewer: zhangji		Date:	27-May-2022 12:50:24		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.593			ND	
7 MNX	1		7.211			ND	
8 RDX	1		7.586			ND	
$ 10 1,2-Dinitrobenzene	1	8.540	8.546	-0.006	25458	0.2042	M
11 1,3,5-Trinitrobenzene	1		8.666			ND	
12 1,3-Dinitrobenzene	1		9.299			ND	U
13 Nitrobenzene	1		9.686			ND	
15 Tetryl	1		10.013			ND	U
17 2,4,6-Trinitrotoluene	1		10.919			ND	U
18 4-Amino-2,6-dinitrotoluene	1		11.119			ND	
19 2-Amino-4,6-dinitrotoluene	1	11.360	11.373	-0.013	1418	0.007014	
20 2,6-Dinitrotoluene	1		11.533			ND	
21 2,4-Dinitrotoluene	1		11.706			ND	
22 o-Nitrotoluene	1		12.559			ND	
23 p-Nitrotoluene	1		12.993			ND	
24 m-Nitrotoluene	1		13.566			ND	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

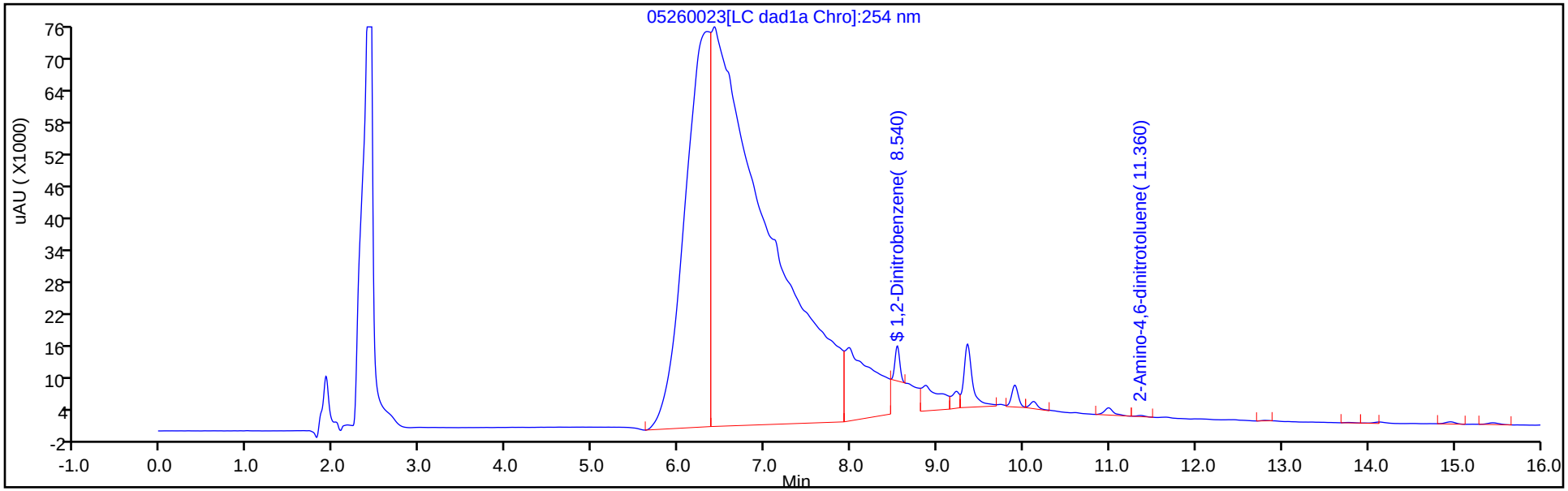
U - Marked Undetected

Report Date: 27-May-2022 13:18:39 Chrom Revision: 2.3 18-May-2022 20:00:04

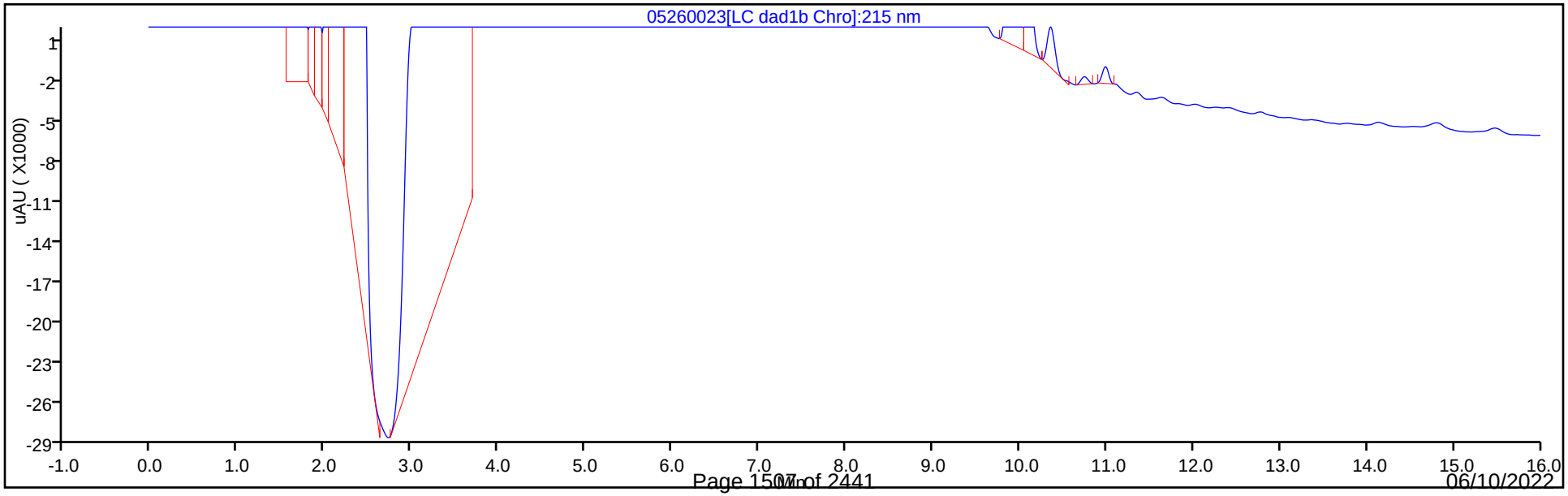
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260023.d				
Injection Date:	26-May-2022 22:26:38	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-162622-A-6-A	Lab Sample ID:	280-162622-6	Worklist Smp#:	23
Client ID:	G0066R-22A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\05260023.D				
Lims ID:	280-162622-A-6-A				
Client ID:	G0066R-22A				
Sample Type:	Client				
Inject. Date:	26-May-2022 22:26:38	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-162622-A-6-A				
Misc. Info.:	280-0111383-023				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	27-May-2022 13:18:33	Calib Date:	25-Mar-2022 16:30:08		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220325-109559.b\03250017.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1651				

First Level Reviewer: zhangji Date: 27-May-2022 12:50:24

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2042	102.08

Manual Integration/User Assign Peak Report

Eurofins Denver

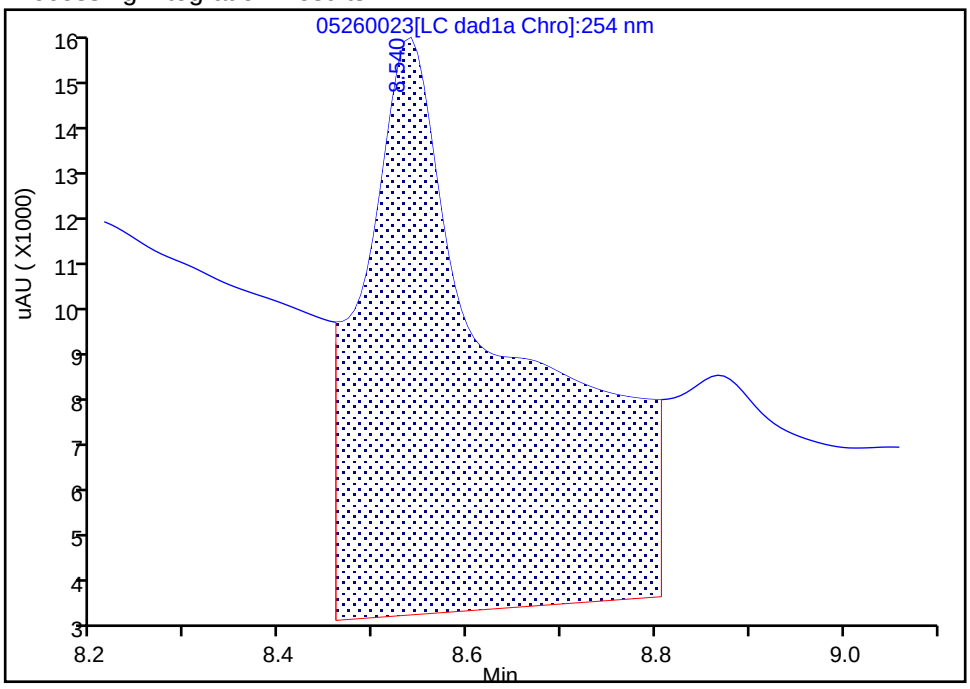
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260023.d				
Injection Date:	26-May-2022 22:26:38	Instrument ID:	CHHPLC_X3		
Lims ID:	280-162622-A-6-A	Lab Sample ID:	280-162622-6		
Client ID:	G0066R-22A				
Operator ID:	JZ	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

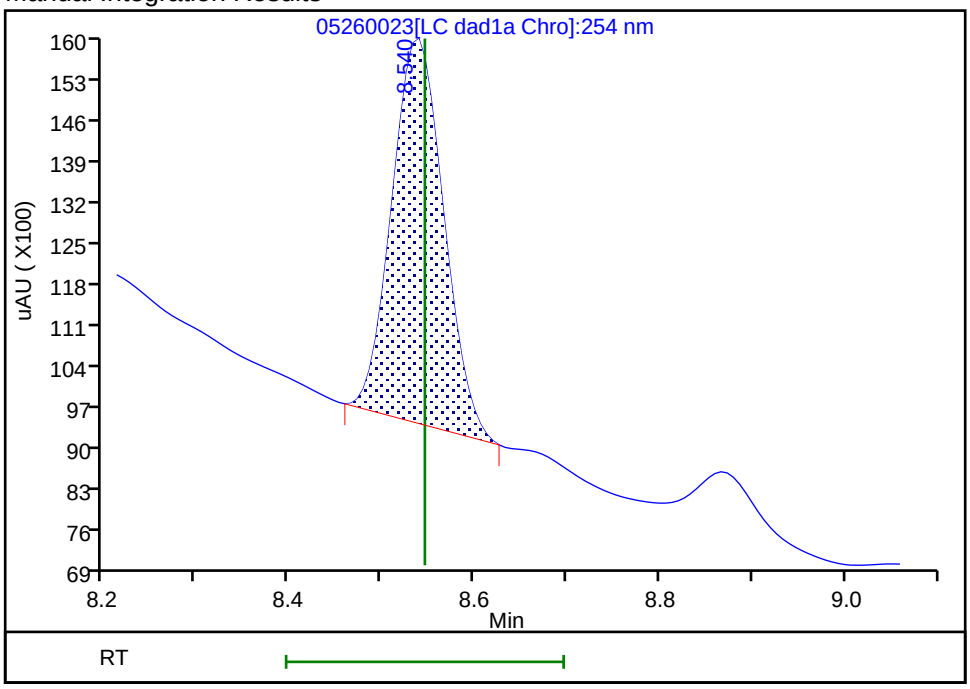
Processing Integration Results

RT: 8.54
Area: 138752
Amount: 1.112707
Amount Units: ug/mL



Manual Integration Results

RT: 8.54
Area: 25458
Amount: 0.204158
Amount Units: ug/mL



Reviewer: zhangji, 27-May-2022 12:50:23

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

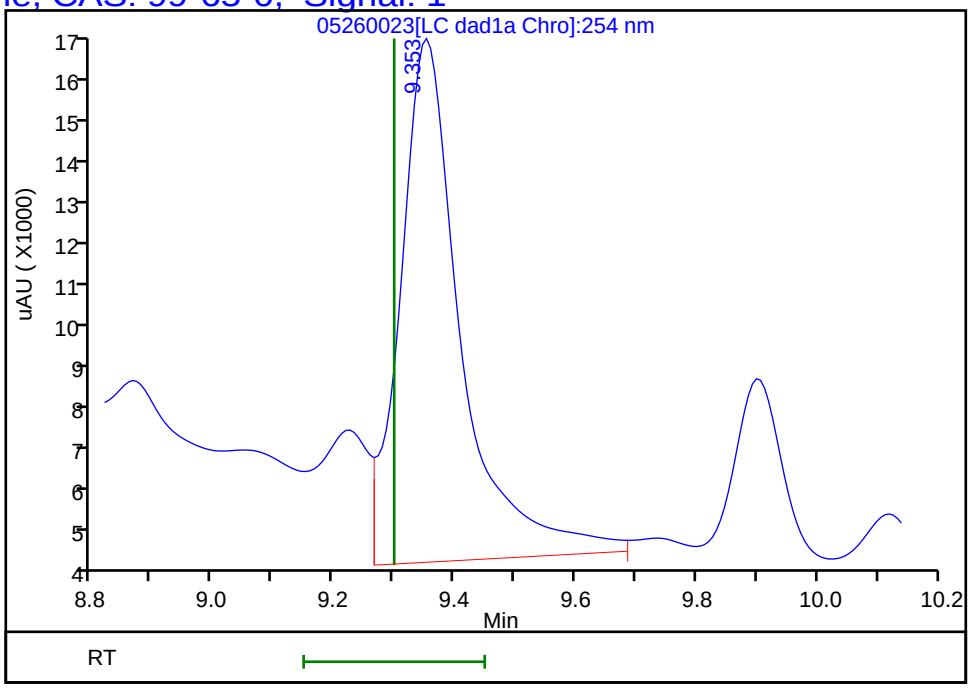
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260023.d
Injection Date: 26-May-2022 22:26:38 Instrument ID: CHHPLC_X3
Lims ID: 280-162622-A-6-A Lab Sample ID: 280-162622-6
Client ID: G0066R-22A
Operator ID: JZ ALS Bottle#: 23 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

12 1,3-Dinitrobenzene, CAS: 99-65-0, Signal: 1

RT: 9.35
Response: 82897
Amount: 0.287436



Reviewer: zhangji, 27-May-2022 12:50:24
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

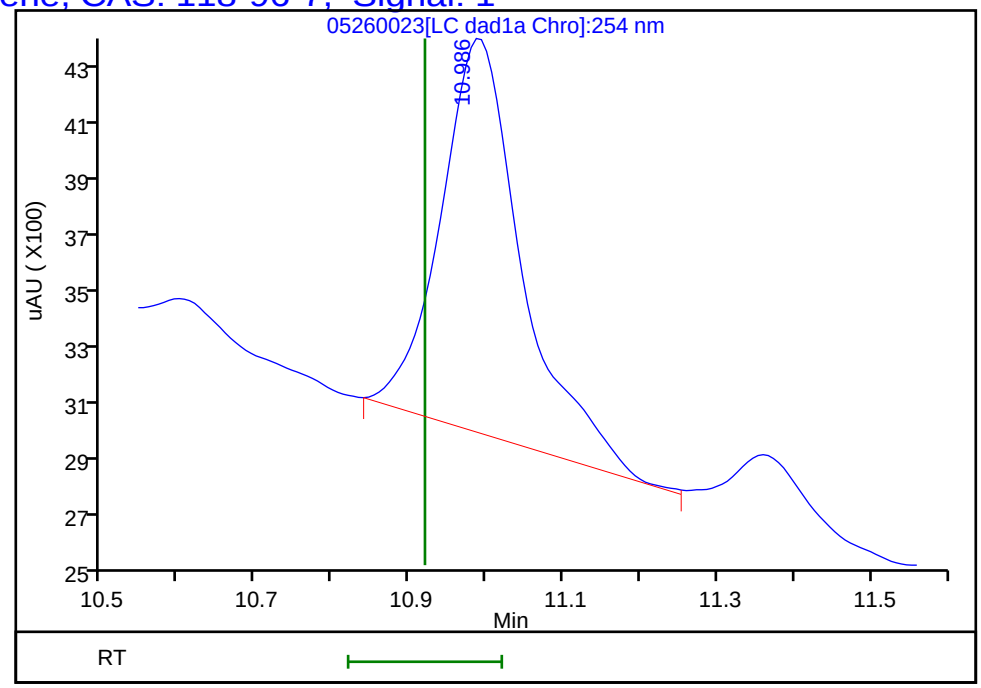
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260023.d
Injection Date: 26-May-2022 22:26:38 Instrument ID: CHHPLC_X3
Lims ID: 280-162622-A-6-A Lab Sample ID: 280-162622-6
Client ID: G0066R-22A
Operator ID: JZ ALS Bottle#: 23 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

17 2,4,6-Trinitrotoluene, CAS: 118-96-7, Signal: 1

RT: 10.99
Response: 9981
Amount: 0.049234



Reviewer: zhangji, 27-May-2022 12:50:24
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

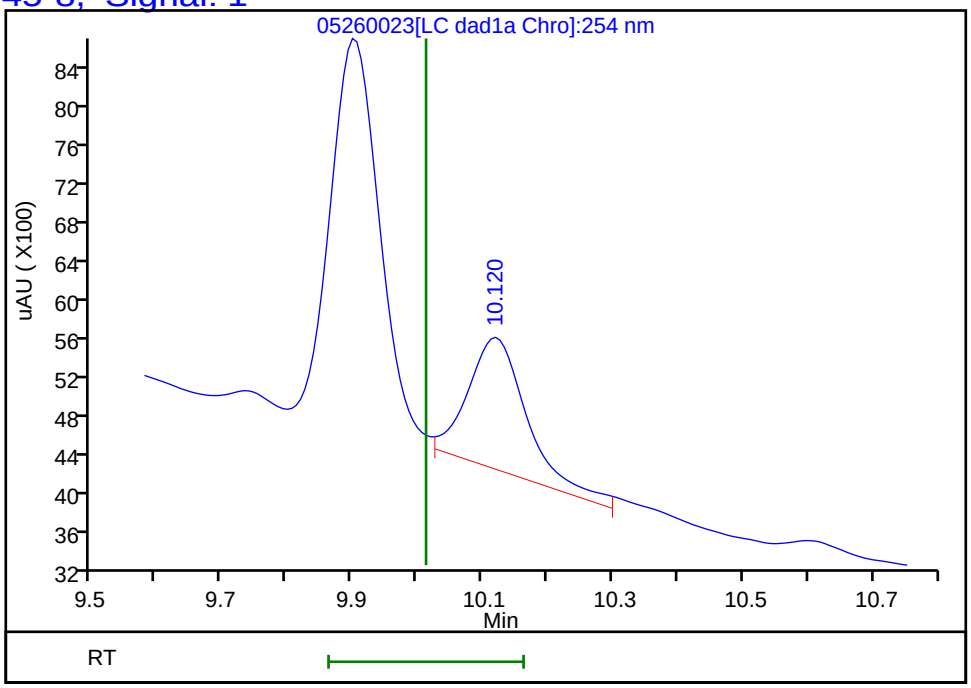
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260023.d
Injection Date: 26-May-2022 22:26:38 Instrument ID: CHHPLC_X3
Lims ID: 280-162622-A-6-A Lab Sample ID: 280-162622-6
Client ID: G0066R-22A
Operator ID: JZ ALS Bottle#: 23 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

15 Tetryl, CAS: 479-45-8, Signal: 1

RT: 10.12
Response: 8481
Amount: 0.049722



Reviewer: zhangji, 27-May-2022 12:50:24
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0066R-22A | Lab Sample ID: 280-162622-6

Matrix: Water | Lab File ID: 05270019.D

Analysis Method: 8330A | Date Collected: 05/19/2022 10:55

Extraction Method: 3535 | Date Extracted: 05/25/2022 15:23

Sample wt/vol: 438.1(mL) | Date Analyzed: 05/27/2022 23:48

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: Luna-phenylhex ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 576448 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
35572-78-2	2-Amino-4,6-dinitrotoluene	0.11	U	0.13	0.11	0.058

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	104		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270019.D				
Lims ID:	280-162622-A-6-A				
Client ID:	G0066R-22A				
Sample Type:	Client				
Inject. Date:	27-May-2022 23:48:42	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-162622-A-6-A				
Misc. Info.:	280-0111418-019				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	28-May-2022 14:12:39	Calib Date:	03-Mar-2022 07:19:48		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1652				
First Level Reviewer: zhangji		Date:	28-May-2022 14:01:32		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
5 HMX	1	6.698	6.713	-0.015	9390	0.0565	M
6 MNX	1		7.440			ND	
8 RDX	1	8.831	8.840	-0.009	12136	0.0625	
9 Nitrobenzene	1		11.707			ND	
$ 10 1,2-Dinitrobenzene	1	12.845	12.867	-0.022	51842	0.2076	
12 1,3-Dinitrobenzene	1		15.233			ND	
14 o-Nitrotoluene	1		16.327			ND	
16 p-Nitrotoluene	1		16.627			ND	
17 4-Amino-2,6-dinitrotoluene	1	17.211	17.247	-0.036	1465	0.005717	M
18 m-Nitrotoluene	1		17.573			ND	
19 2-Amino-4,6-dinitrotoluene	1		18.233			ND	7
20 1,3,5-Trinitrobenzene	1		18.487			ND	U
21 2,6-Dinitrotoluene	1		19.720			ND	
22 2,4-Dinitrotoluene	1		20.233			ND	7
23 Tetryl	1		23.880			ND	
24 2,4,6-Trinitrotoluene	1		24.680			ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

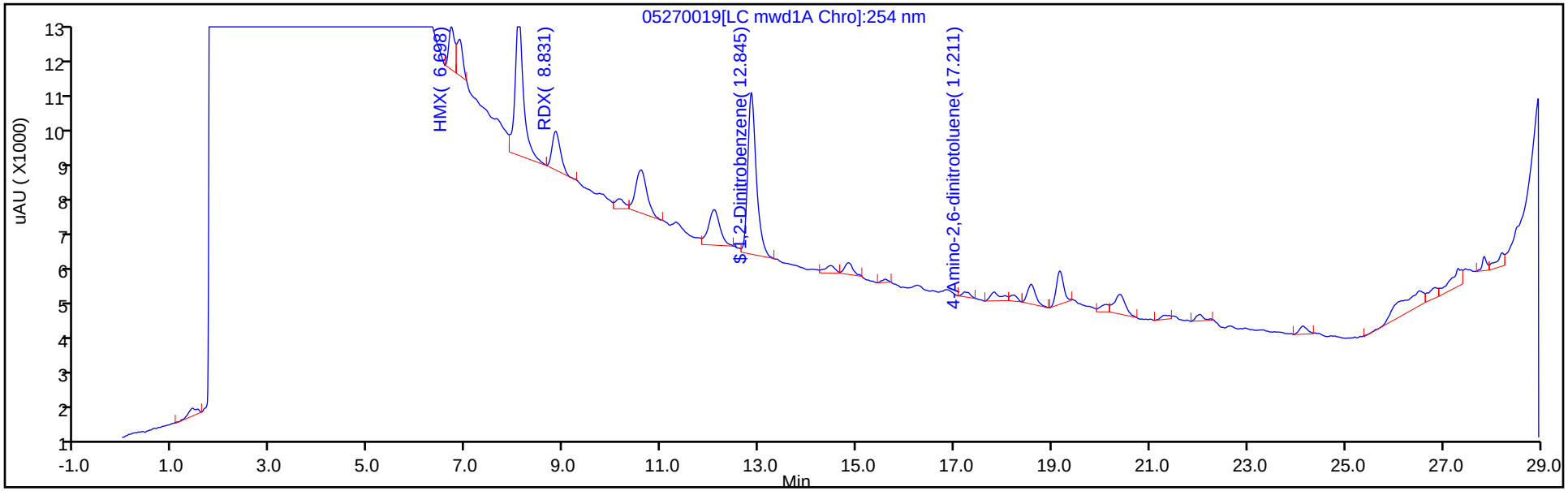
Report Date: 28-May-2022 14:12:44 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

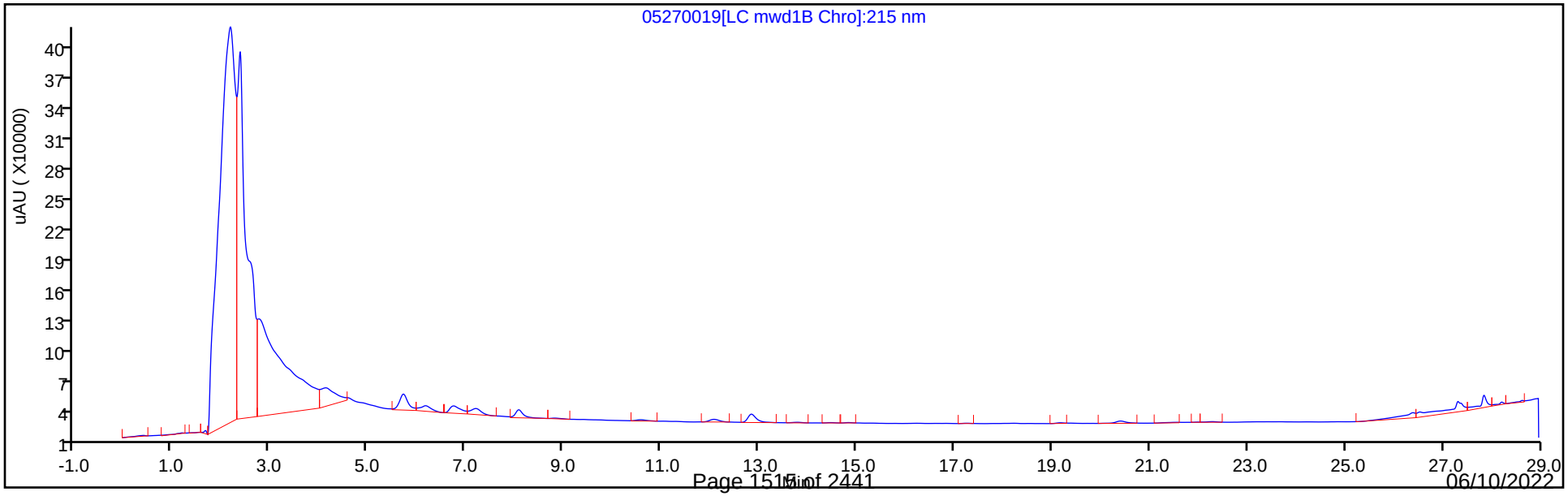
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270019.D

Injection Date:	27-May-2022 23:48:42	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-162622-A-6-A	Lab Sample ID:	280-162622-6	Worklist Smp#:	19
Client ID:	G0066R-22A				
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 Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270019.D				
Lims ID:	280-162622-A-6-A				
Client ID:	G0066R-22A				
Sample Type:	Client				
Inject. Date:	27-May-2022 23:48:42	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-162622-A-6-A				
Misc. Info.:	280-0111418-019				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	28-May-2022 14:12:39	Calib Date:	03-Mar-2022 07:19:48		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1652				
First Level Reviewer: zhangji		Date:	28-May-2022 14:01:32		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2076	103.79

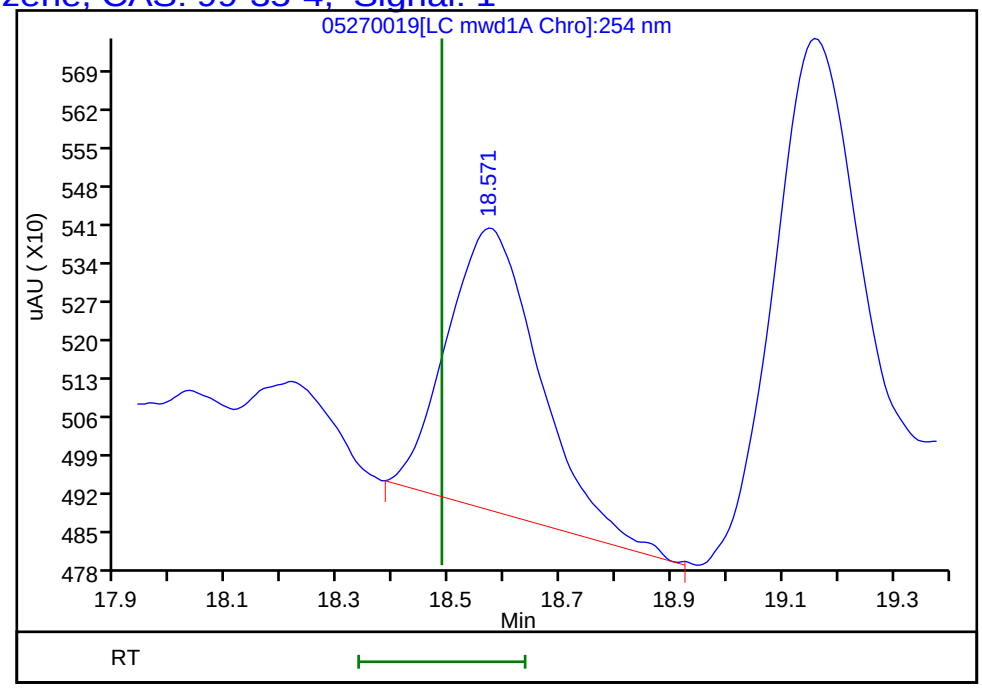
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270019.D				
Injection Date:	27-May-2022 23:48:42	Instrument ID:	CHHPLC_X5		
Lims ID:	280-162622-A-6-A	Lab Sample ID:	280-162622-6		
Client ID:	G0066R-22A				
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		

20 1,3,5-Trinitrobenzene, CAS: 99-35-4, Signal: 1

RT: 18.57
Response: 6038
Amount: 0.014533



Reviewer: zhangji, 28-May-2022 14:01:32
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

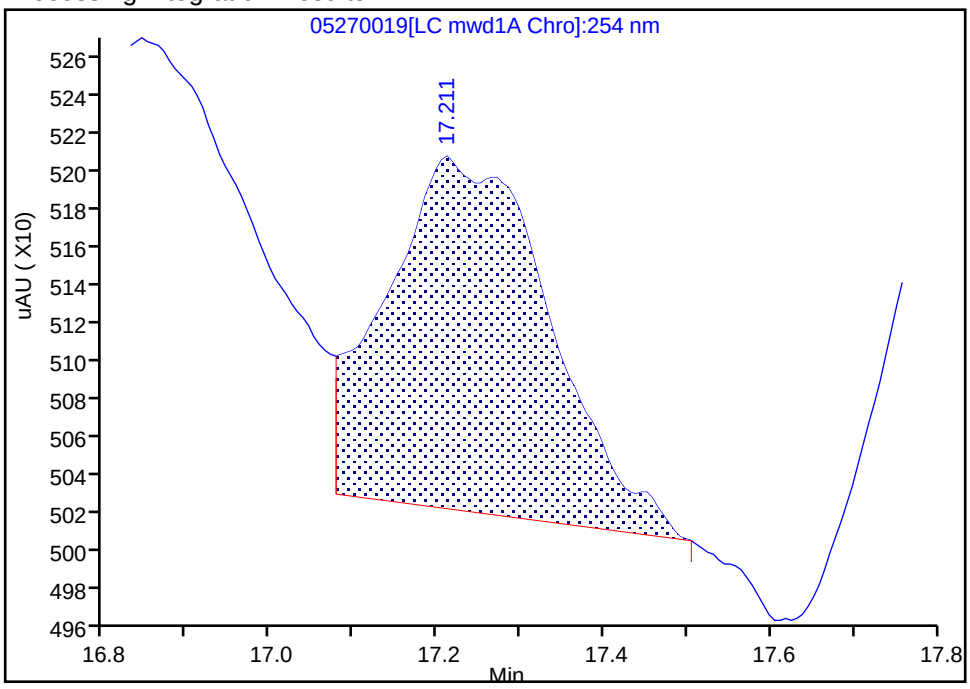
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270019.D				
Injection Date:	27-May-2022 23:48:42	Instrument ID:	CHHPLC_X5		
Lims ID:	280-162622-A-6-A	Lab Sample ID:	280-162622-6		
Client ID:	G0066R-22A				
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

17 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

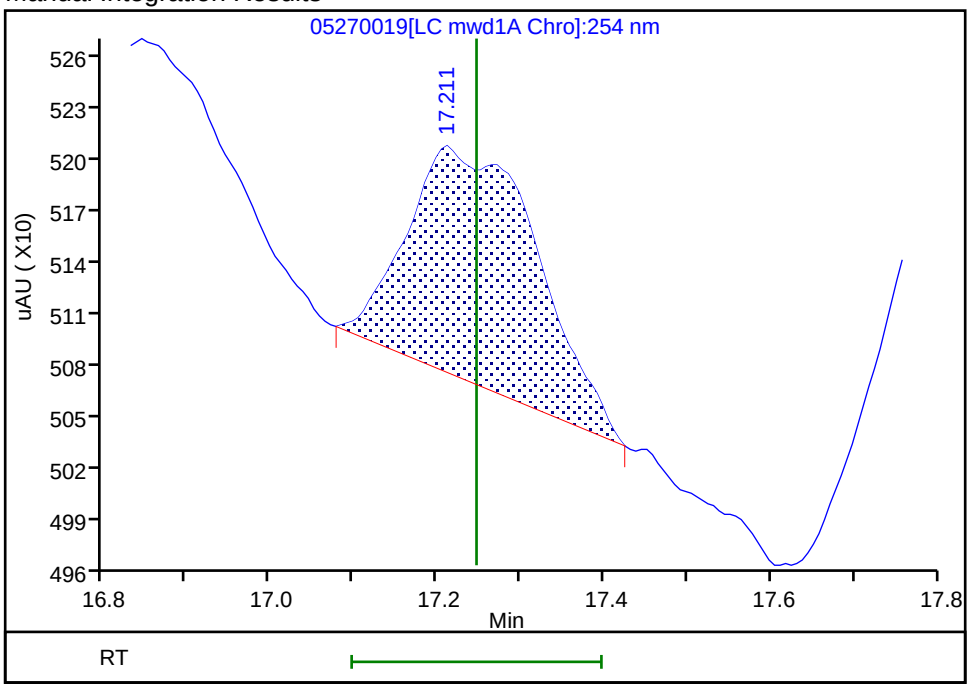
Processing Integration Results

RT: 17.21
Area: 2499
Amount: 0.009586
Amount Units: ug/ml



Manual Integration Results

RT: 17.21
Area: 1465
Amount: 0.005717
Amount Units: ug/ml



Reviewer: zhangji, 28-May-2022 14:01:31

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

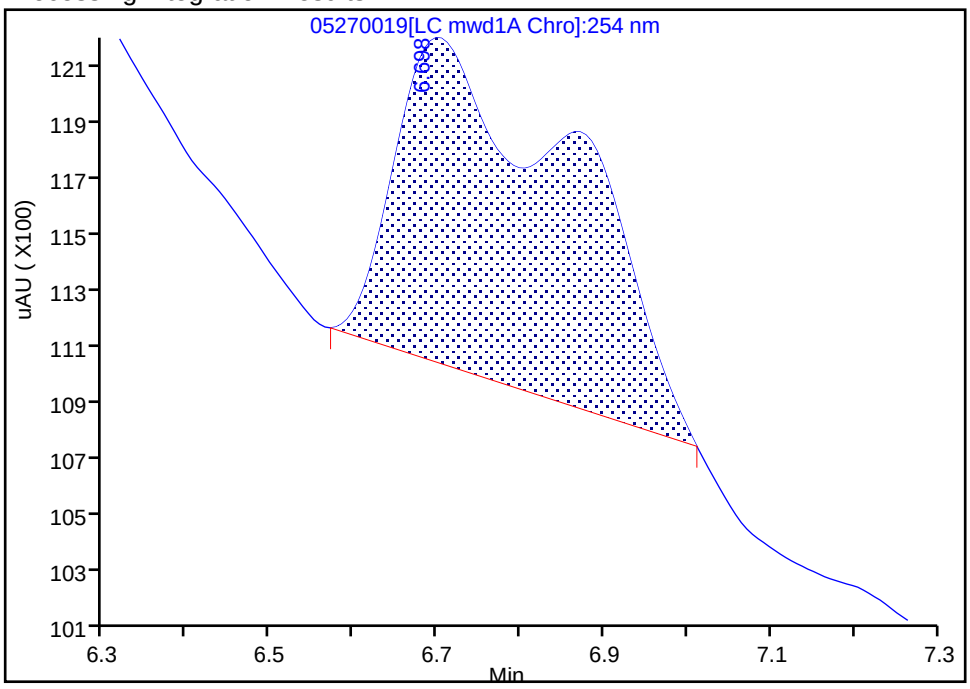
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270019.D				
Injection Date:	27-May-2022 23:48:42	Instrument ID:	CHHPLC_X5		
Lims ID:	280-162622-A-6-A	Lab Sample ID:	280-162622-6		
Client ID:	G0066R-22A				
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

5 HMX, CAS: 2691-41-0

Signal: 1

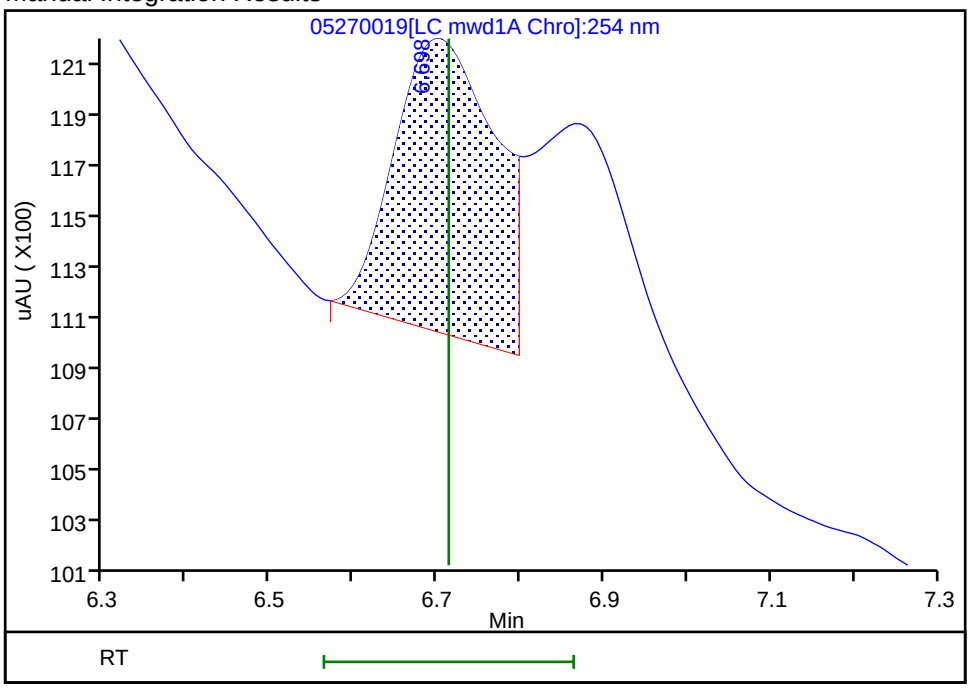
Processing Integration Results

RT: 6.70
Area: 17255
Amount: 0.103861
Amount Units: ug/ml



Manual Integration Results

RT: 6.70
Area: 9390
Amount: 0.056520
Amount Units: ug/ml



Reviewer: zhangji, 28-May-2022 14:01:22

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0024-22A | Lab Sample ID: 280-162622-7

Matrix: Water | Lab File ID: 05260024.D

Analysis Method: 8330A | Date Collected: 05/18/2022 14:50

Extraction Method: 3535 | Date Extracted: 05/25/2022 15:23

Sample wt/vol: 479.6(mL) | Date Analyzed: 05/26/2022 22:49

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 576310 | 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	0.088
99-65-0	1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.038
118-96-7	2,4,6-Trinitrotoluene	0.18		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	0.083	U	0.10	0.083	0.042
35572-78-2	2-Amino-4,6-dinitrotoluene	0.52		0.11	0.10	0.053
88-72-2	2-Nitrotoluene	0.21	U	0.22	0.21	0.089
99-08-1	3-Nitrotoluene	0.42	U	0.42	0.42	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.27		0.16	0.13	0.060
99-99-0	4-Nitrotoluene	0.42	U	0.43	0.42	0.10
2691-41-0	HMX	0.21	U	0.22	0.21	0.091
5755-27-1	MNX	0.42	U	2.1	0.42	0.16
98-95-3	Nitrobenzene	0.21	U	0.22	0.21	0.095
121-82-4	RDX	0.21	U	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	108	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\05260024.D
Lims ID: 280-162622-A-7-A
Client ID: G0024-22A
Sample Type: Client
Inject. Date: 26-May-2022 22:49:32 ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-162622-A-7-A
Misc. Info.: 280-0111383-024
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 27-May-2022 13:18:33 Calib Date: 25-Mar-2022 16:30:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220325-109559.b\03250017.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1651

First Level Reviewer: zhangji Date: 27-May-2022 12:50:38

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.593			ND	
7 MNX	1		7.211			ND	
8 RDX	1		7.586			ND	
$ 10 1,2-Dinitrobenzene	1	8.537	8.546	-0.009	27002	0.2165	M
11 1,3,5-Trinitrobenzene	1		8.666			ND	
12 1,3-Dinitrobenzene	1		9.299			ND	
13 Nitrobenzene	1		9.686			ND	
15 Tetryl	1		10.013			ND	U
17 2,4,6-Trinitrotoluene	1	10.910	10.919	-0.009	3476	0.0171	
18 4-Amino-2,6-dinitrotoluene	1	11.110	11.119	-0.009	3890	0.0258	
19 2-Amino-4,6-dinitrotoluene	1	11.363	11.373	-0.010	10087	0.0499	
20 2,6-Dinitrotoluene	1		11.533			ND	
21 2,4-Dinitrotoluene	1		11.706			ND	
22 o-Nitrotoluene	1		12.559			ND	
23 p-Nitrotoluene	1		12.993			ND	7
24 m-Nitrotoluene	1		13.566			ND	

QC Flag Legend

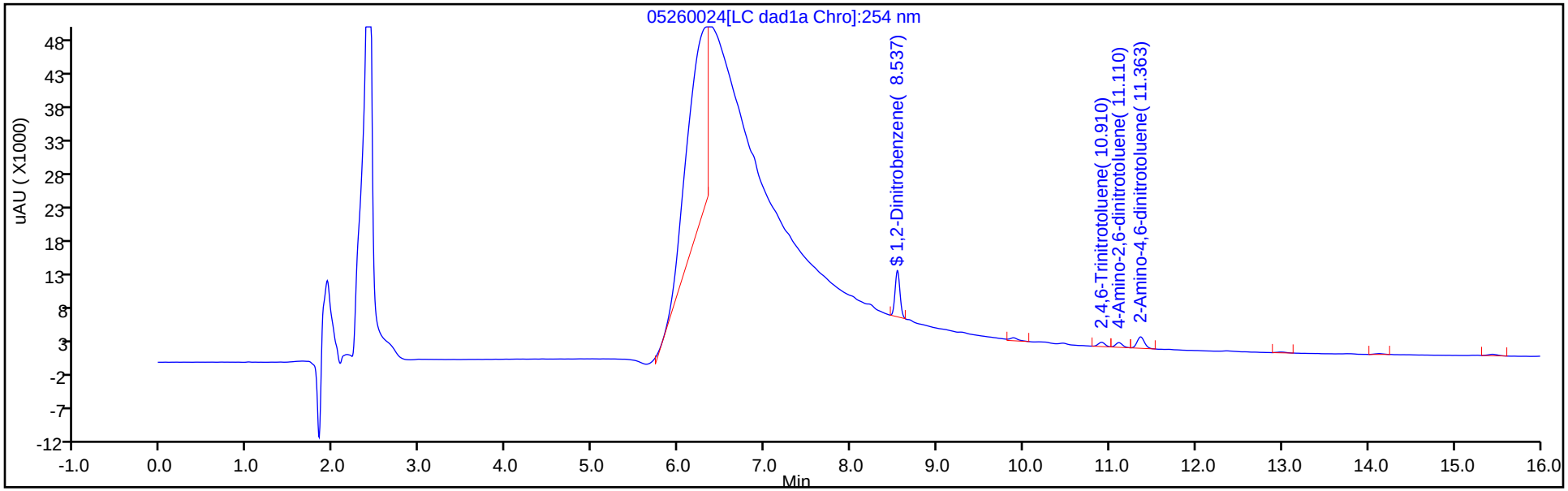
Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 27-May-2022 13:18:39 Chrom Revision: 2.3 18-May-2022 20:00:04

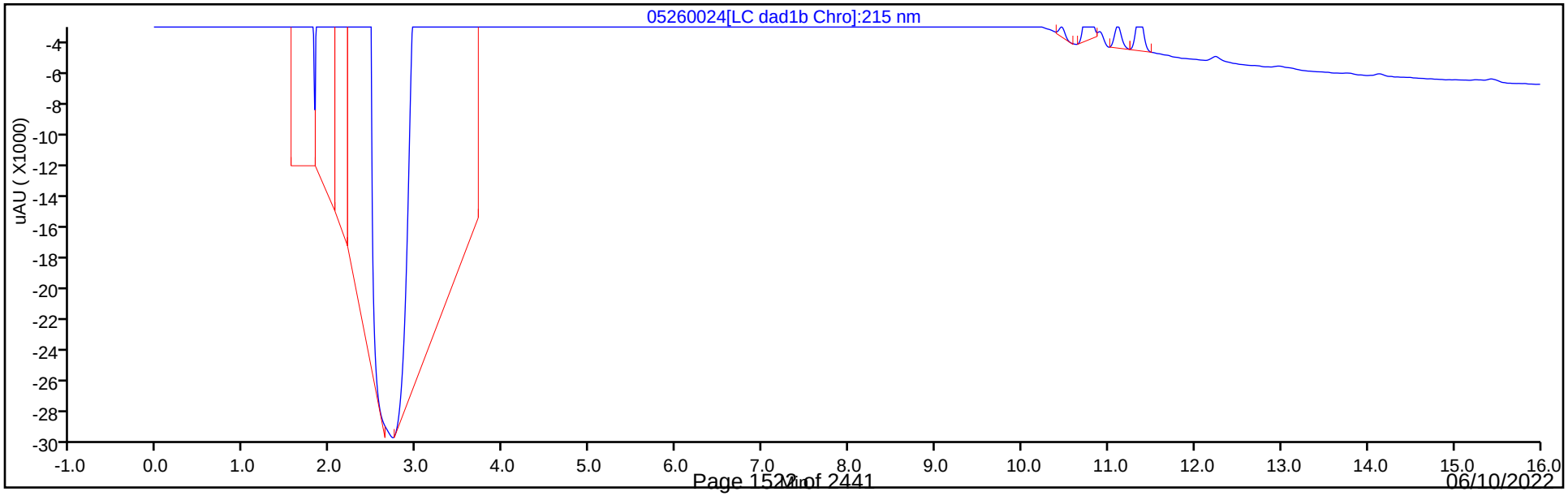
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260024.d				
Injection Date:	26-May-2022 22:49:32	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-162622-A-7-A	Lab Sample ID:	280-162622-7	Worklist Smp#:	24
Client ID:	G0024-22A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\05260024.D				
Lims ID:	280-162622-A-7-A				
Client ID:	G0024-22A				
Sample Type:	Client				
Inject. Date:	26-May-2022 22:49:32	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-162622-A-7-A				
Misc. Info.:	280-0111383-024				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	27-May-2022 13:18:33	Calib Date:	25-Mar-2022 16:30:08		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220325-109559.b\03250017.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1651				

First Level Reviewer: zhangji Date: 27-May-2022 12:50:38

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2165	108.27

Manual Integration/User Assign Peak Report

Eurofins Denver

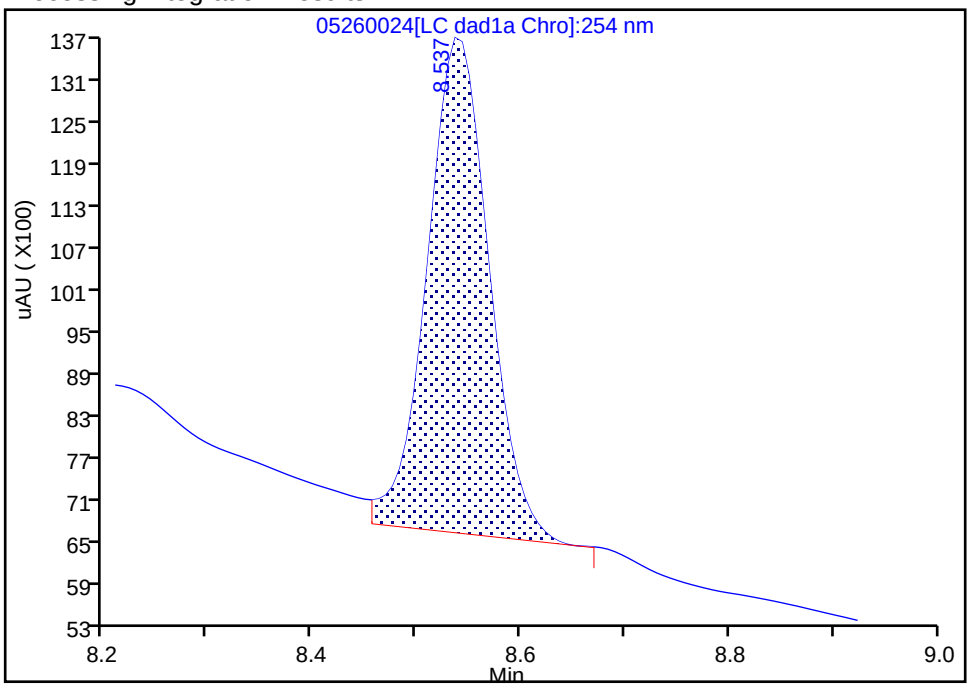
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260024.d				
Injection Date:	26-May-2022 22:49:32	Instrument ID:	CHHPLC_X3		
Lims ID:	280-162622-A-7-A	Lab Sample ID:	280-162622-7		
Client ID:	G0024-22A				
Operator ID:	JZ	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

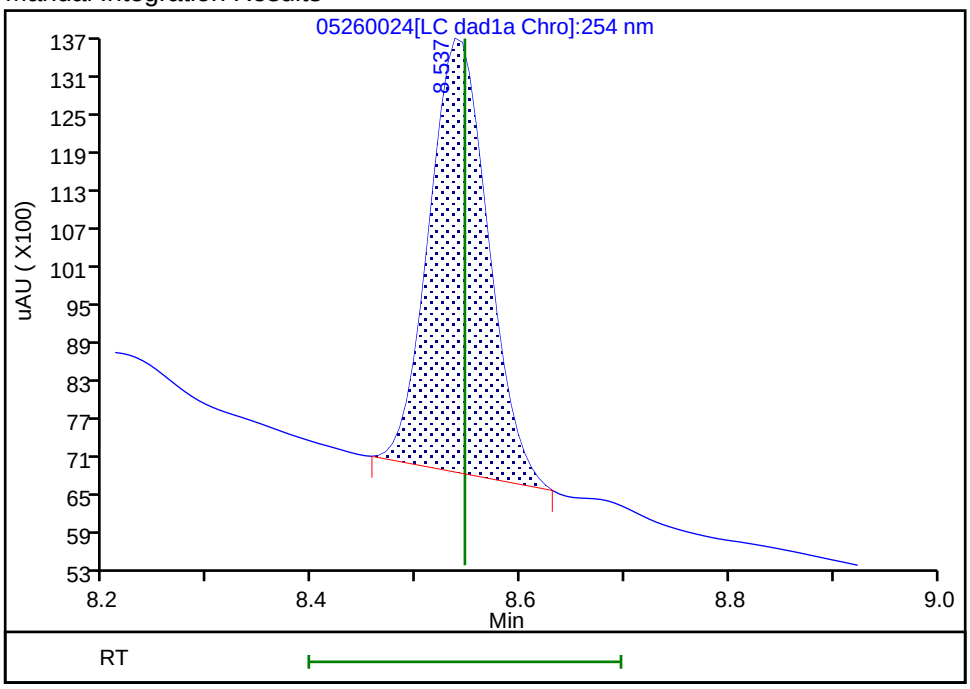
Processing Integration Results

RT: 8.54
Area: 29226
Amount: 0.234375
Amount Units: ug/mL



Manual Integration Results

RT: 8.54
Area: 27002
Amount: 0.216540
Amount Units: ug/mL



Reviewer: zhangji, 27-May-2022 12:50:37

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

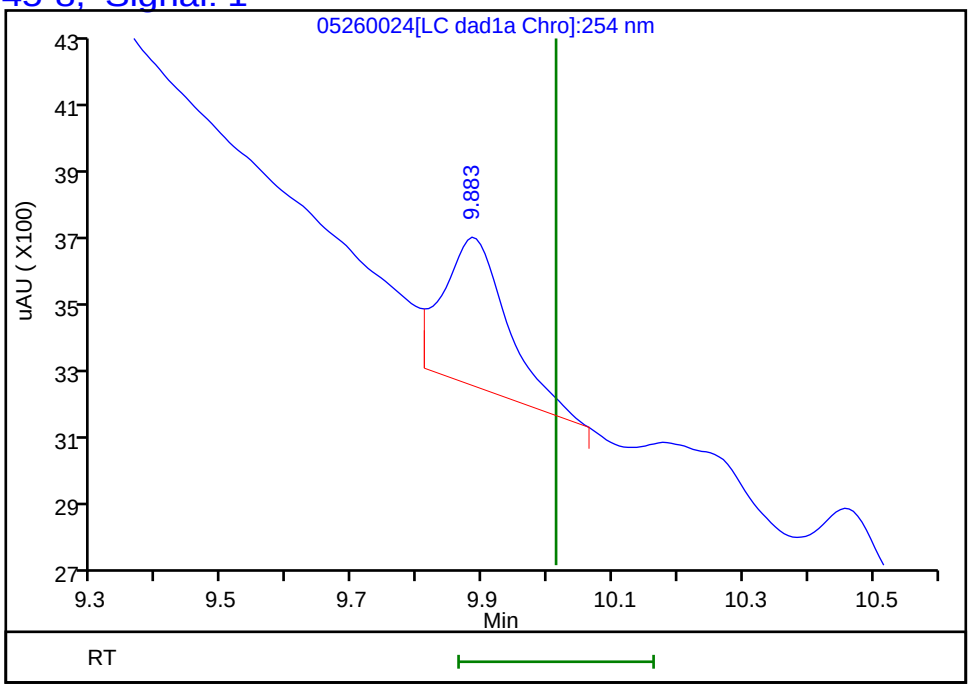
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260024.d
Injection Date: 26-May-2022 22:49:32 Instrument ID: CHHPLC_X3
Lims ID: 280-162622-A-7-A Lab Sample ID: 280-162622-7
Client ID: G0024-22A
Operator ID: JZ ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

15 Tetryl, CAS: 479-45-8, Signal: 1

RT: 9.88
Response: 3005
Amount: 0.017618



Reviewer: zhangji, 27-May-2022 12:50:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0024-22A | Lab Sample ID: 280-162622-7

Matrix: Water | Lab File ID: 05270022.D

Analysis Method: 8330A | Date Collected: 05/18/2022 14:50

Extraction Method: 3535 | Date Extracted: 05/25/2022 15:23

Sample wt/vol: 479.6(mL) | Date Analyzed: 05/28/2022 01:33

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: Luna-phenylhex ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 576448 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	111		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270022.D				
Lims ID:	280-162622-A-7-A				
Client ID:	G0024-22A				
Sample Type:	Client				
Inject. Date:	28-May-2022 01:33:46	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-162622-A-7-A				
Misc. Info.:	280-0111418-022				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	28-May-2022 14:12:44	Calib Date:	03-Mar-2022 07:19:48		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1652				
First Level Reviewer: zhangji		Date:	28-May-2022 10:17:45		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
5 HMX	1		6.713			ND	
6 MNX	1		7.440			ND	
8 RDX	1		8.840			ND	
9 Nitrobenzene	1		11.707			ND	
$ 10 1,2-Dinitrobenzene	1	12.807	12.867	-0.060	55603	0.2226	
12 1,3-Dinitrobenzene	1		15.233			ND	7
14 o-Nitrotoluene	1		16.327			ND	
16 p-Nitrotoluene	1		16.627			ND	
17 4-Amino-2,6-dinitrotoluene	1	17.153	17.247	-0.094	8083	0.0305	
18 m-Nitrotoluene	1		17.573			ND	U
19 2-Amino-4,6-dinitrotoluene	1	18.147	18.233	-0.086	21136	0.0586	
20 1,3,5-Trinitrobenzene	1		18.487			ND	
21 2,6-Dinitrotoluene	1		19.720			ND	
22 2,4-Dinitrotoluene	1		20.233			ND	
23 Tetryl	1		23.880			ND	
24 2,4,6-Trinitrotoluene	1	24.620	24.680	-0.060	6855	0.0186	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection
Review Flags
U - Marked Undetected

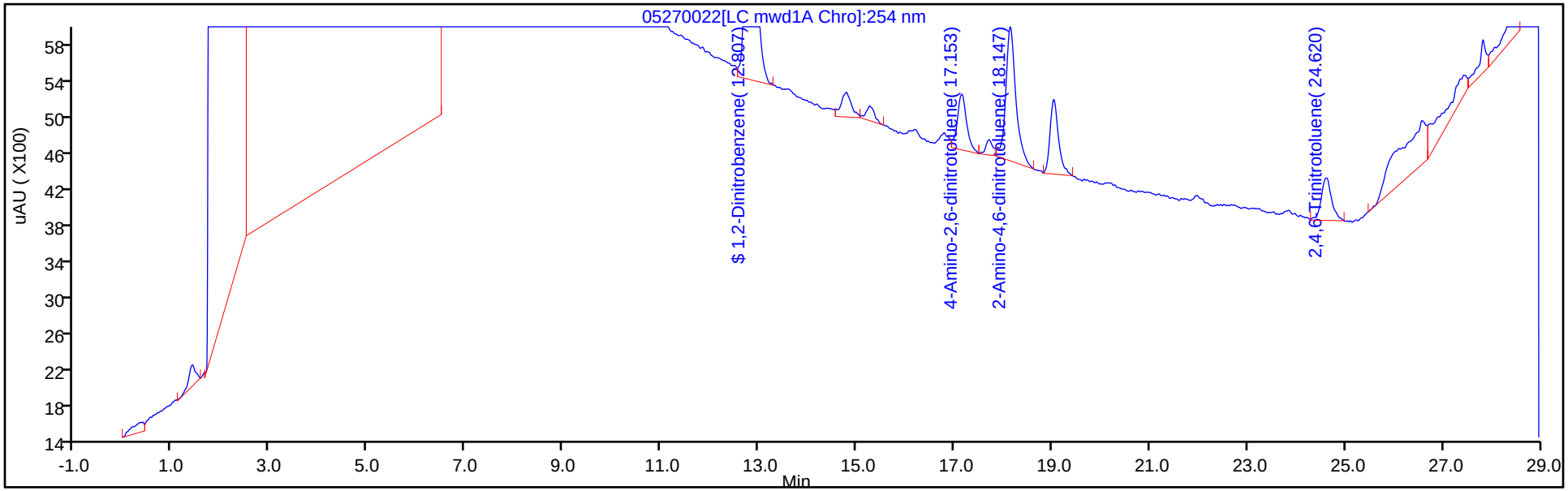
Report Date: 28-May-2022 14:12:45 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

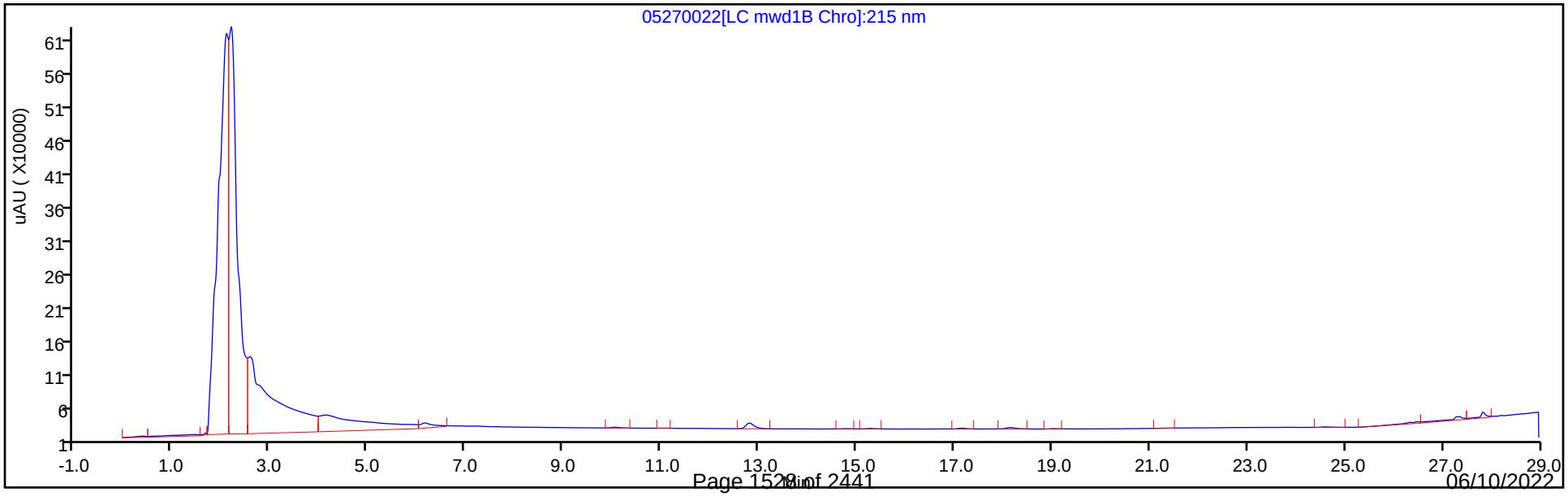
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270022.D

Injection Date:	28-May-2022 01:33:46	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-162622-A-7-A	Lab Sample ID:	280-162622-7	Worklist Smp#:	22
Client ID:	G0024-22A				
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 Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270022.D				
Lims ID:	280-162622-A-7-A				
Client ID:	G0024-22A				
Sample Type:	Client				
Inject. Date:	28-May-2022 01:33:46	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-162622-A-7-A				
Misc. Info.:	280-0111418-022				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	28-May-2022 14:12:44	Calib Date:	03-Mar-2022 07:19:48		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1652				
First Level Reviewer: zhangji		Date:	28-May-2022 10:17:45		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2226	111.32

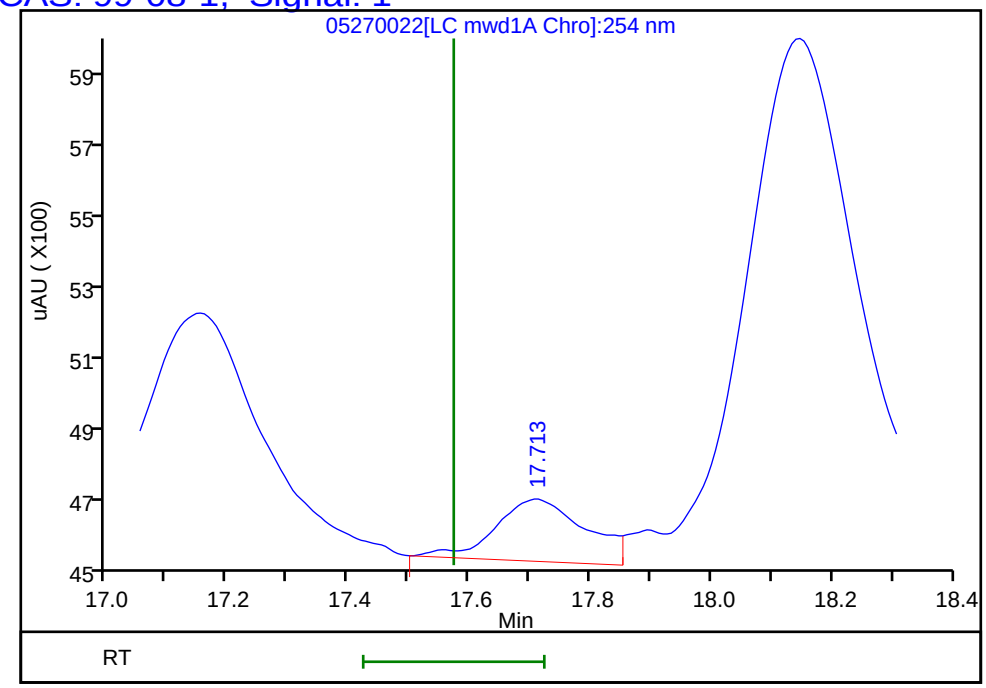
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270022.D				
Injection Date:	28-May-2022 01:33:46	Instrument ID:	CHHPLC_X5		
Lims ID:	280-162622-A-7-A	Lab Sample ID:	280-162622-7		
Client ID:	G0024-22A				
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		

18 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 17.71
Response: 1718
Amount: 0.007171



Reviewer: zhangji, 28-May-2022 14:09:16
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0115-22A | Lab Sample ID: 280-162622-8

Matrix: Water | Lab File ID: 05260025.D

Analysis Method: 8330A | Date Collected: 05/19/2022 08:45

Extraction Method: 3535 | Date Extracted: 05/25/2022 15:23

Sample wt/vol: 522.5(mL) | Date Analyzed: 05/26/2022 23:12

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 576310 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.19	U	0.20	0.19	0.080
99-65-0	1,3-Dinitrobenzene	0.096	U M	0.11	0.096	0.035
118-96-7	2,4,6-Trinitrotoluene	0.096	U M	0.11	0.096	0.043
121-14-2	2,4-Dinitrotoluene	0.077	U	0.096	0.077	0.026
606-20-2	2,6-Dinitrotoluene	0.077	U	0.096	0.077	0.038
35572-78-2	2-Amino-4,6-dinitrotoluene	0.096	U	0.11	0.096	0.049
88-72-2	2-Nitrotoluene	0.19	U	0.20	0.19	0.082
99-08-1	3-Nitrotoluene	0.38	U	0.38	0.38	0.19
19406-51-0	4-Amino-2,6-dinitrotoluene	0.11	U	0.14	0.11	0.055
99-99-0	4-Nitrotoluene	0.38	U	0.39	0.38	0.096
2691-41-0	HMX	0.19	U	0.20	0.19	0.084
5755-27-1	MNX	0.38	U	1.9	0.38	0.15
98-95-3	Nitrobenzene	0.19	U	0.20	0.19	0.087
121-82-4	RDX	0.19	U	0.20	0.19	0.049
479-45-8	Tetryl	0.096	U M	0.11	0.096	0.030

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	108	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\05260025.D
Lims ID: 280-162622-A-8-A
Client ID: G0115-22A
Sample Type: Client
Inject. Date: 26-May-2022 23:12:29 ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-162622-A-8-A
Misc. Info.: 280-0111383-025
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 27-May-2022 13:18:33 Calib Date: 25-Mar-2022 16:30:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220325-109559.b\03250017.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1651

First Level Reviewer: zhangji Date: 27-May-2022 12:50:52

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.593			ND	
7 MNX	1		7.211			ND	
8 RDX	1		7.586			ND	
$ 10 1,2-Dinitrobenzene	1	8.544	8.546	-0.002	26834	0.2152	M
11 1,3,5-Trinitrobenzene	1		8.666			ND	
12 1,3-Dinitrobenzene	1		9.299			ND	U
13 Nitrobenzene	1		9.686			ND	
15 Tetryl	1		10.013			ND	U
17 2,4,6-Trinitrotoluene	1		10.919			ND	U
18 4-Amino-2,6-dinitrotoluene	1		11.119			ND	
19 2-Amino-4,6-dinitrotoluene	1		11.373			ND	
20 2,6-Dinitrotoluene	1		11.533			ND	
21 2,4-Dinitrotoluene	1		11.706			ND	
22 o-Nitrotoluene	1		12.559			ND	
23 p-Nitrotoluene	1		12.993			ND	
24 m-Nitrotoluene	1		13.566			ND	

QC Flag Legend

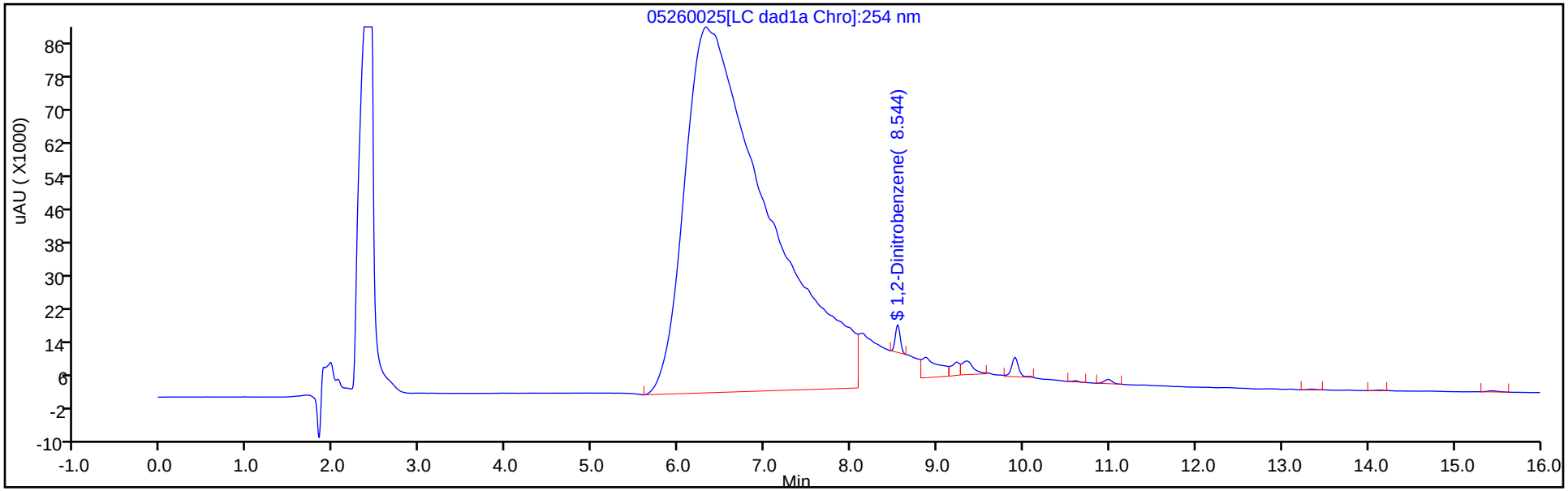
Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 27-May-2022 13:18:38 Chrom Revision: 2.3 18-May-2022 20:00:04

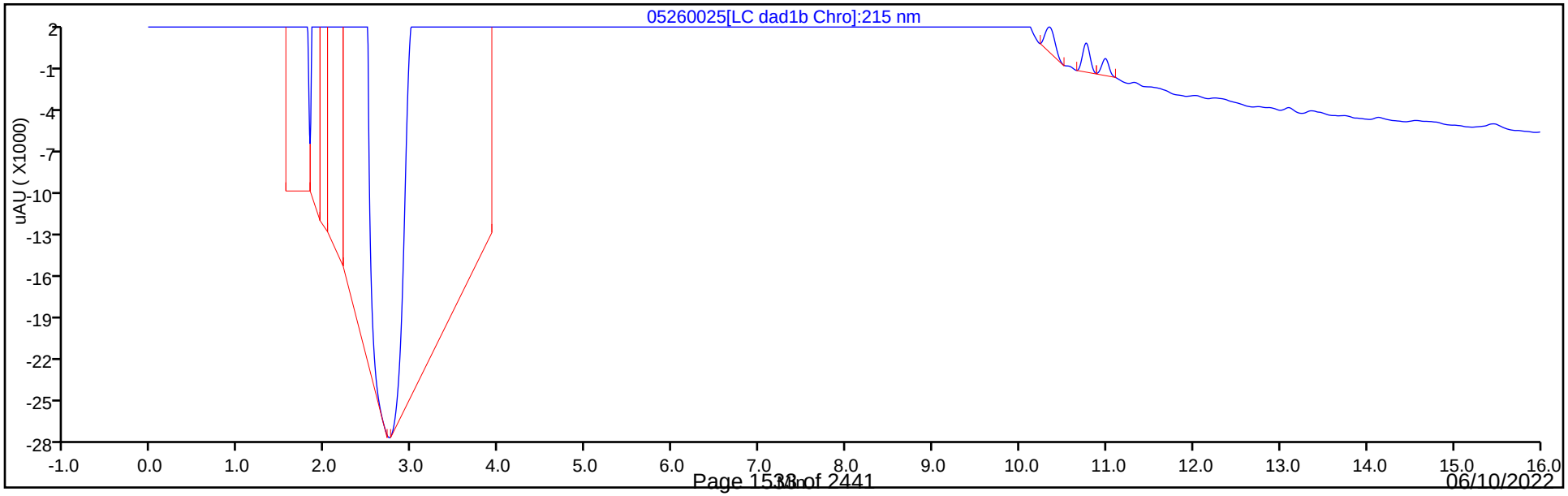
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260025.d				
Injection Date:	26-May-2022 23:12:29	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-162622-A-8-A	Lab Sample ID:	280-162622-8	Worklist Smp#:	25
Client ID:	G0115-22A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\05260025.D				
Lims ID:	280-162622-A-8-A				
Client ID:	G0115-22A				
Sample Type:	Client				
Inject. Date:	26-May-2022 23:12:29	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-162622-A-8-A				
Misc. Info.:	280-0111383-025				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	27-May-2022 13:18:33	Calib Date:	25-Mar-2022 16:30:08		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220325-109559.b\03250017.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1651				

First Level Reviewer: zhangji Date: 27-May-2022 12:50:52

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2152	107.60

Manual Integration/User Assign Peak Report

Eurofins Denver

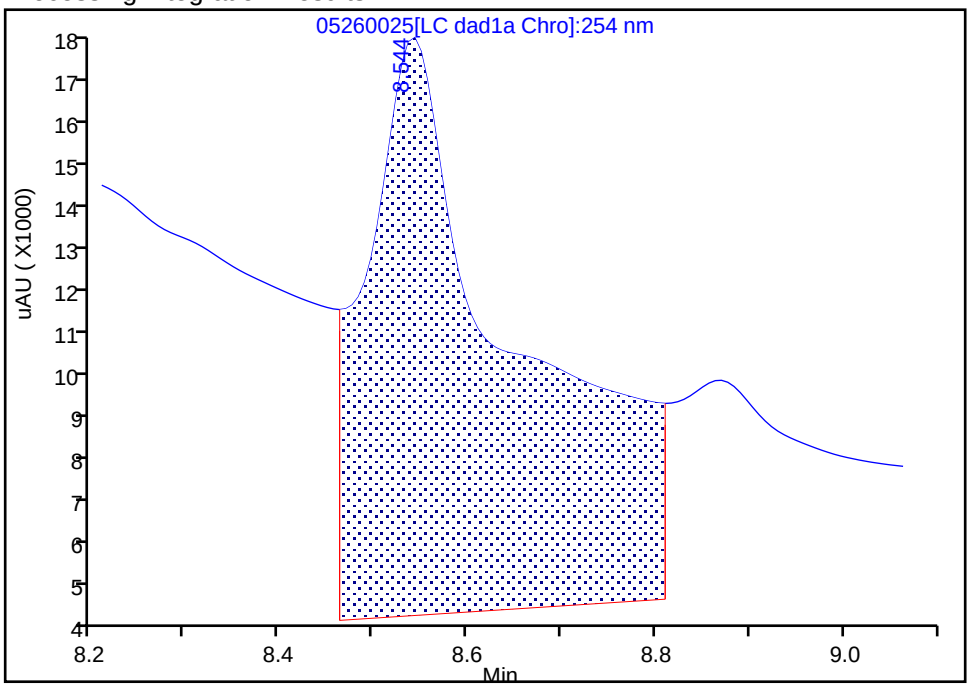
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260025.d				
Injection Date:	26-May-2022 23:12:29	Instrument ID:	CHHPLC_X3		
Lims ID:	280-162622-A-8-A	Lab Sample ID:	280-162622-8		
Client ID:	G0115-22A				
Operator ID:	JZ	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

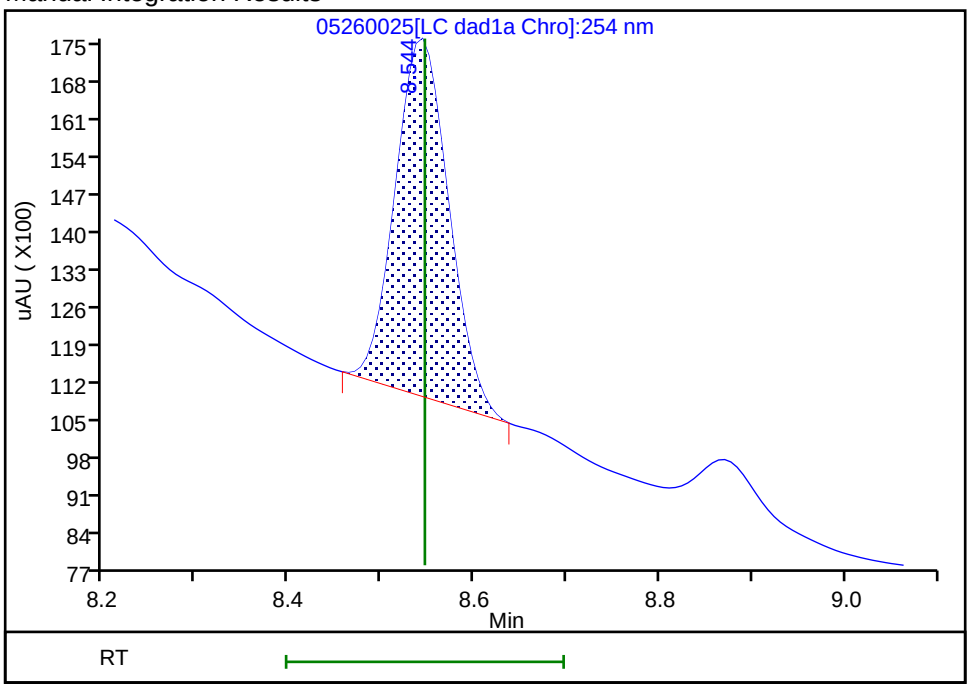
Processing Integration Results

RT: 8.54
Area: 148753
Amount: 1.192909
Amount Units: ug/mL



Manual Integration Results

RT: 8.54
Area: 26834
Amount: 0.215192
Amount Units: ug/mL



Reviewer: zhangji, 27-May-2022 12:50:51

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

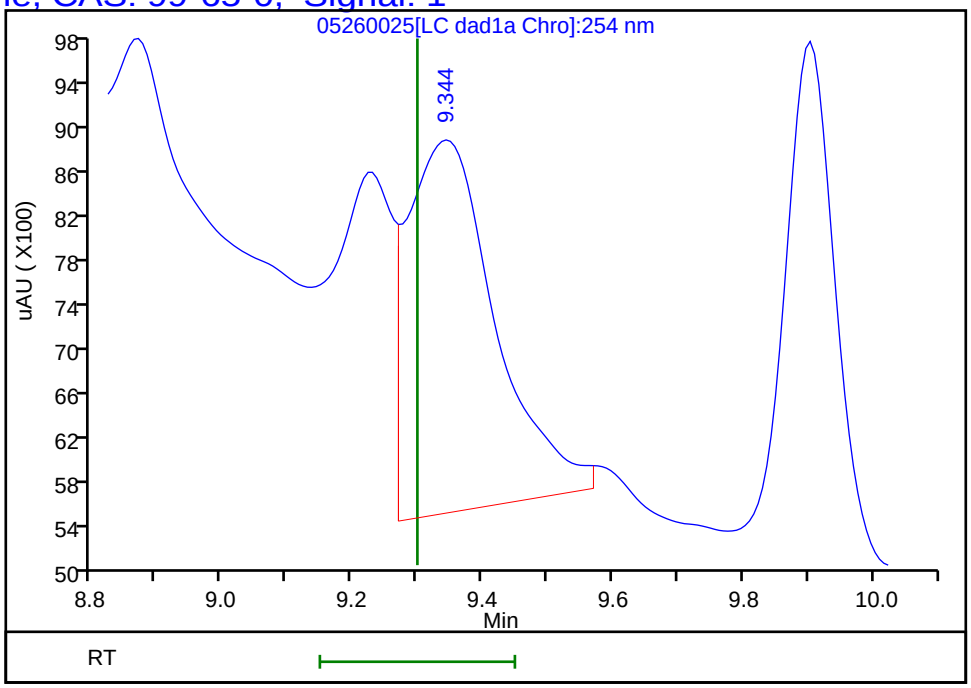
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260025.d
Injection Date: 26-May-2022 23:12:29 Instrument ID: CHHPLC_X3
Lims ID: 280-162622-A-8-A Lab Sample ID: 280-162622-8
Client ID: G0115-22A
Operator ID: JZ ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

12 1,3-Dinitrobenzene, CAS: 99-65-0, Signal: 1

RT: 9.34
Response: 30766
Amount: 0.106678



Reviewer: zhangji, 27-May-2022 12:50:52
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

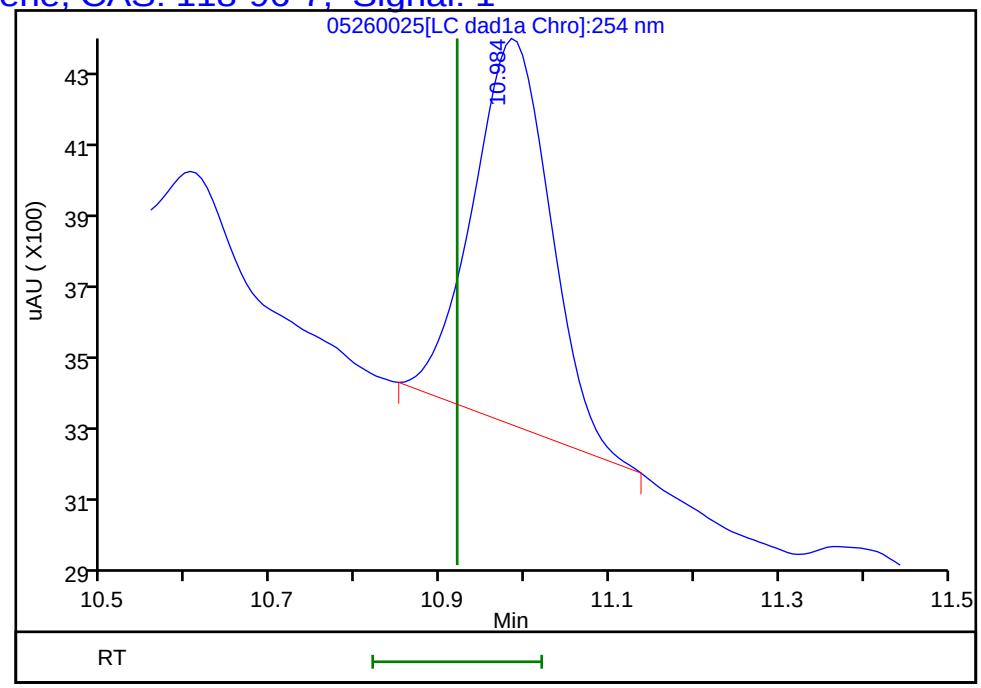
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260025.d
Injection Date: 26-May-2022 23:12:29 Instrument ID: CHHPLC_X3
Lims ID: 280-162622-A-8-A Lab Sample ID: 280-162622-8
Client ID: G0115-22A
Operator ID: JZ ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

17 2,4,6-Trinitrotoluene, CAS: 118-96-7, Signal: 1

RT: 10.98
Response: 6685
Amount: 0.032976



Reviewer: zhangji, 27-May-2022 12:50:52
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

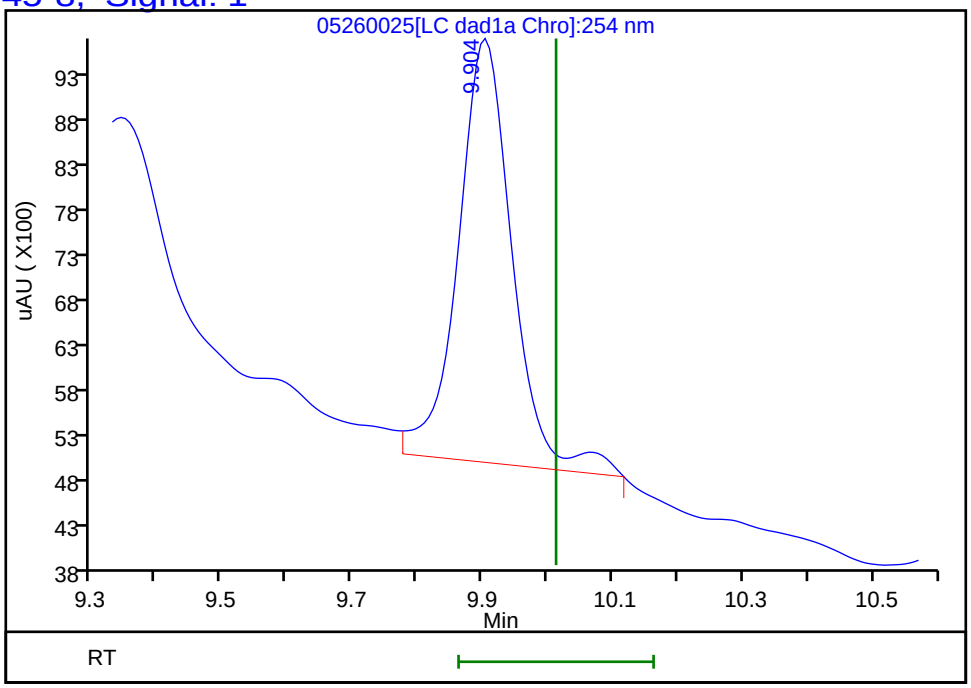
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260025.d
Injection Date: 26-May-2022 23:12:29 Instrument ID: CHHPLC_X3
Lims ID: 280-162622-A-8-A Lab Sample ID: 280-162622-8
Client ID: G0115-22A
Operator ID: JZ ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

15 Tetryl, CAS: 479-45-8, Signal: 1

RT: 9.90
Response: 27126
Amount: 0.159035



Reviewer: zhangji, 27-May-2022 12:50:52
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0095-22A | Lab Sample ID: 280-162622-9

Matrix: Water | Lab File ID: 05260026.D

Analysis Method: 8330A | Date Collected: 05/19/2022 08:45

Extraction Method: 3535 | Date Extracted: 05/25/2022 15:23

Sample wt/vol: 468.6(mL) | Date Analyzed: 05/26/2022 23:35

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 576310 | 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	0.090
99-65-0	1,3-Dinitrobenzene	0.11	U M	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	0.043
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	0.22	0.21	0.091
99-08-1	3-Nitrotoluene	0.43	U	0.43	0.43	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.062
99-99-0	4-Nitrotoluene	0.43	U	0.44	0.43	0.11
2691-41-0	HMX	0.21	U	0.22	0.21	0.093
5755-27-1	MNX	0.43	U	2.1	0.43	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	111	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\05260026.D
Lims ID: 280-162622-A-9-A
Client ID: G0095-22A
Sample Type: Client
Inject. Date: 26-May-2022 23:35:23 ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-162622-A-9-A
Misc. Info.: 280-0111383-026
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 27-May-2022 13:18:33 Calib Date: 25-Mar-2022 16:30:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220325-109559.b\03250017.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1651

First Level Reviewer: zhangji Date: 27-May-2022 12:56:39

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.593			ND	
7 MNX	1		7.211			ND	
8 RDX	1		7.586			ND	
$ 10 1,2-Dinitrobenzene	1	8.536	8.546	-0.010	27636	0.2216	M
11 1,3,5-Trinitrobenzene	1		8.666			ND	
12 1,3-Dinitrobenzene	1		9.299			ND	U
13 Nitrobenzene	1		9.686			ND	
15 Tetryl	1		10.013			ND	U
17 2,4,6-Trinitrotoluene	1		10.919			ND	
18 4-Amino-2,6-dinitrotoluene	1		11.119			ND	
19 2-Amino-4,6-dinitrotoluene	1		11.373			ND	7
20 2,6-Dinitrotoluene	1		11.533			ND	
21 2,4-Dinitrotoluene	1		11.706			ND	
22 o-Nitrotoluene	1		12.559			ND	
23 p-Nitrotoluene	1		12.993			ND	
24 m-Nitrotoluene	1		13.566			ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

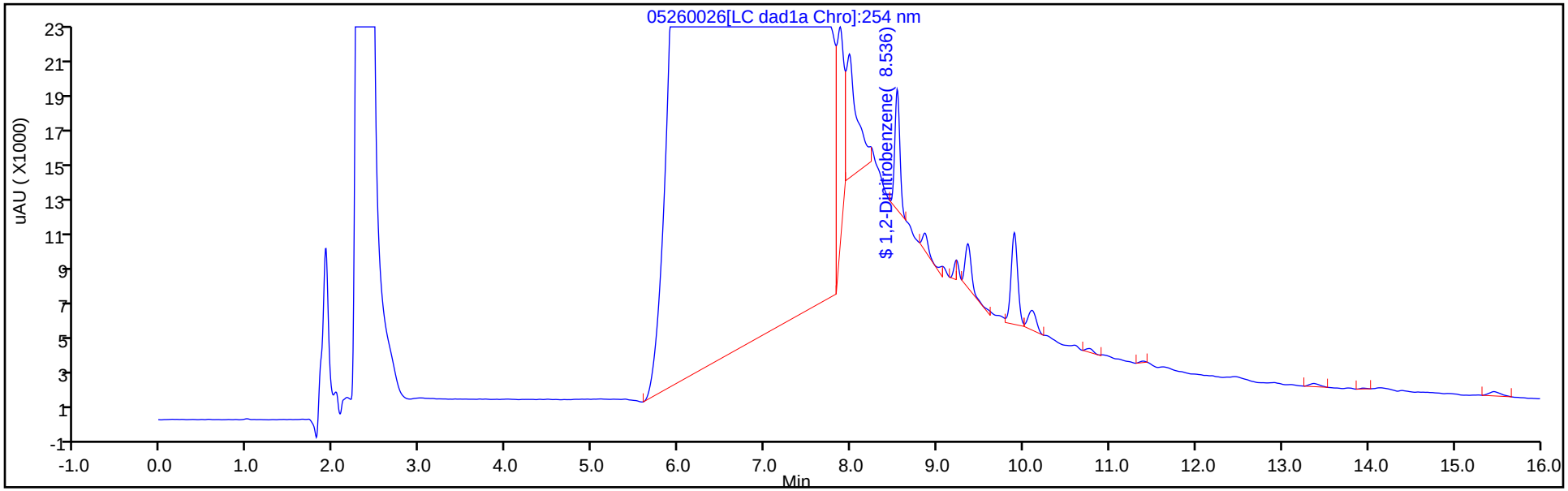
Report Date: 27-May-2022 13:18:38 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

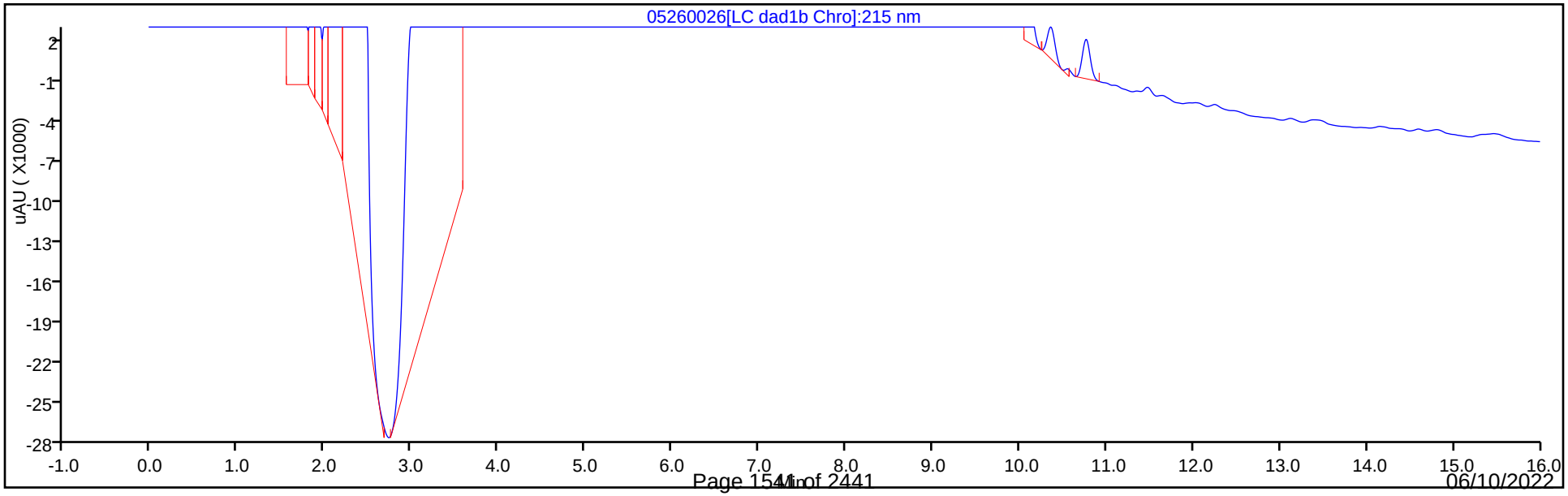
Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260026.d

Injection Date:	26-May-2022 23:35:23	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-162622-A-9-A	Lab Sample ID:	280-162622-9	Worklist Smp#:	26
Client ID:	G0095-22A				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\05260026.D				
Lims ID:	280-162622-A-9-A				
Client ID:	G0095-22A				
Sample Type:	Client				
Inject. Date:	26-May-2022 23:35:23	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-162622-A-9-A				
Misc. Info.:	280-0111383-026				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	27-May-2022 13:18:33	Calib Date:	25-Mar-2022 16:30:08		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220325-109559.b\03250017.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1651				

First Level Reviewer: zhangji Date: 27-May-2022 12:56:39

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2216	110.81

Manual Integration/User Assign Peak Report

Eurofins Denver

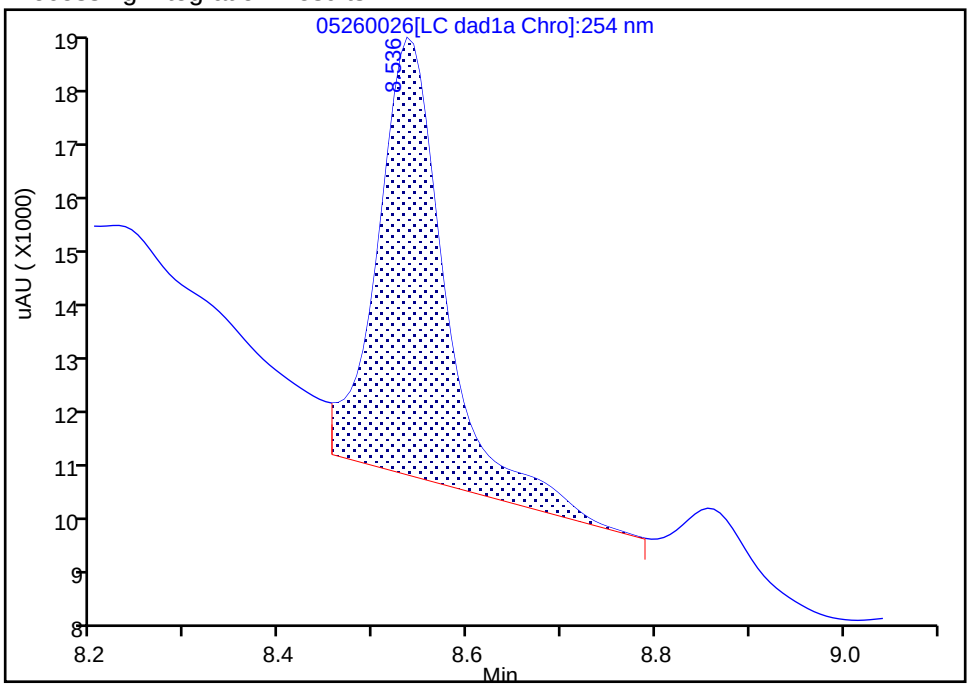
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260026.d				
Injection Date:	26-May-2022 23:35:23	Instrument ID:	CHHPLC_X3		
Lims ID:	280-162622-A-9-A	Lab Sample ID:	280-162622-9		
Client ID:	G0095-22A				
Operator ID:	JZ	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

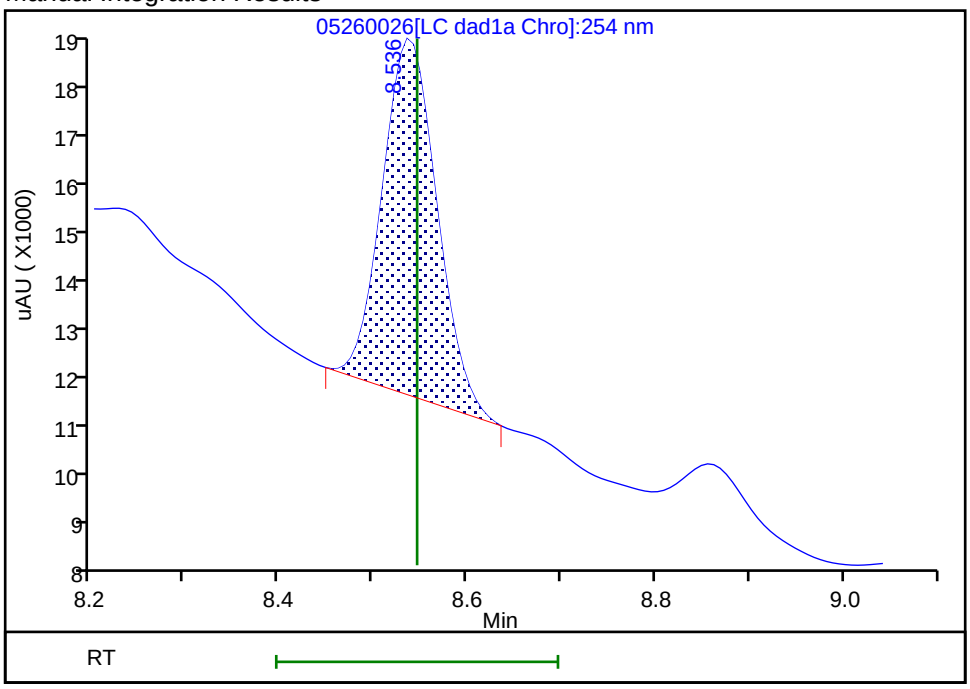
Processing Integration Results

RT: 8.54
Area: 38074
Amount: 0.305330
Amount Units: ug/mL



Manual Integration Results

RT: 8.54
Area: 27636
Amount: 0.221624
Amount Units: ug/mL



Reviewer: zhangji, 27-May-2022 12:56:38

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

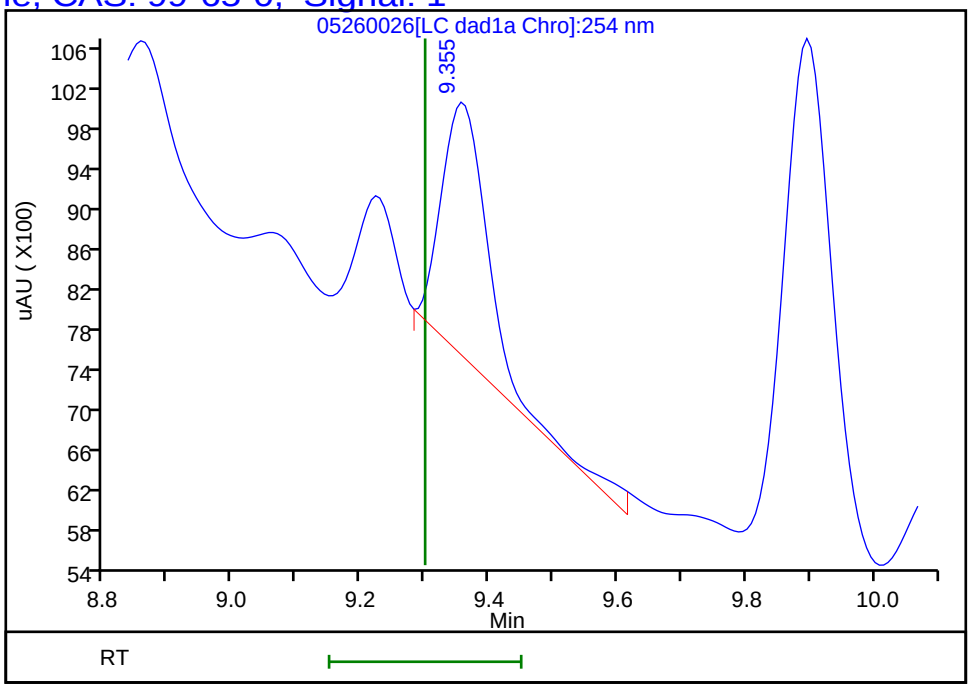
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260026.d
Injection Date: 26-May-2022 23:35:23 Instrument ID: CHHPLC_X3
Lims ID: 280-162622-A-9-A Lab Sample ID: 280-162622-9
Client ID: G0095-22A
Operator ID: JZ ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

12 1,3-Dinitrobenzene, CAS: 99-65-0, Signal: 1

RT: 9.36
Response: 12891
Amount: 0.044698



Reviewer: zhangji, 27-May-2022 12:56:39
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

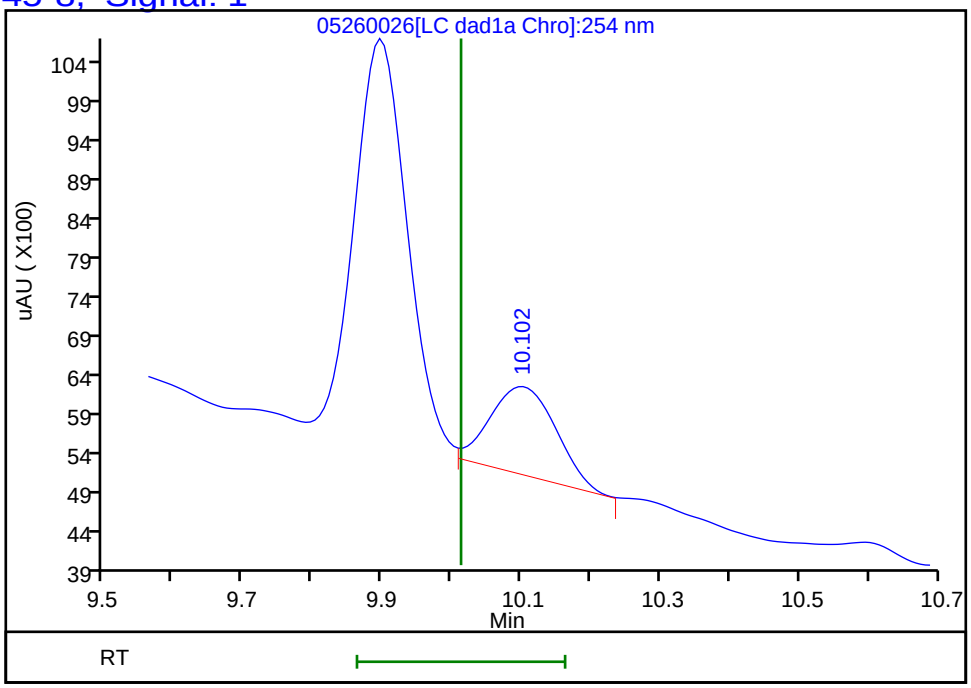
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260026.d
Injection Date: 26-May-2022 23:35:23 Instrument ID: CHHPLC_X3
Lims ID: 280-162622-A-9-A Lab Sample ID: 280-162622-9
Client ID: G0095-22A
Operator ID: JZ ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

15 Tetryl, CAS: 479-45-8, Signal: 1

RT: 10.10
Response: 7348
Amount: 0.043080



Reviewer: zhangji, 27-May-2022 12:56:39
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: PZ018-22A | Lab Sample ID: 280-162622-10

Matrix: Water | Lab File ID: 05260027.D

Analysis Method: 8330A | Date Collected: 05/18/2022 10:05

Extraction Method: 3535 | Date Extracted: 05/25/2022 15:23

Sample wt/vol: 463.5(mL) | Date Analyzed: 05/26/2022 23:58

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 576310 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.22	U M	0.23	0.22	0.091
99-65-0	1,3-Dinitrobenzene	0.11	U M	0.12	0.11	0.040
118-96-7	2,4,6-Trinitrotoluene	3.3		0.12	0.11	0.049
121-14-2	2,4-Dinitrotoluene	0.086	U M	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	1.3		0.12	0.11	0.055
99-08-1	3-Nitrotoluene	0.43	U	0.43	0.43	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	2.1		0.16	0.13	0.062
2691-41-0	HMX	0.22	U	0.23	0.22	0.094
5755-27-1	MNX	0.43	U M	2.2	0.43	0.17
98-95-3	Nitrobenzene	0.22	U	0.23	0.22	0.098
121-82-4	RDX	0.68	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	109	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\05260027.D
Lims ID: 280-162622-A-10-A
Client ID: PZ018-22A
Sample Type: Client
Inject. Date: 26-May-2022 23:58:18 ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-162622-A-10-
Misc. Info.: 280-0111383-027
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 27-May-2022 13:18:33 Calib Date: 25-Mar-2022 16:30:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220325-109559.b\03250017.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1651

First Level Reviewer: zhangji Date: 27-May-2022 12:57:22

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.593			ND	
7 MNX	1		7.211			ND	U
8 RDX	1	7.596	7.586	0.010	6551	0.0632	M
$ 10 1,2-Dinitrobenzene	1	8.536	8.546	-0.010	27164	0.2178	M
11 1,3,5-Trinitrobenzene	1		8.666			ND	U
12 1,3-Dinitrobenzene	1		9.299			ND	U
13 Nitrobenzene	1		9.686			ND	
15 Tetryl	1		10.013			ND	U
17 2,4,6-Trinitrotoluene	1	10.909	10.919	-0.010	61765	0.3047	
18 4-Amino-2,6-dinitrotoluene	1	11.109	11.119	-0.010	29220	0.1935	
19 2-Amino-4,6-dinitrotoluene	1	11.362	11.373	-0.011	23836	0.1179	
20 2,6-Dinitrotoluene	1		11.533			ND	
21 2,4-Dinitrotoluene	1		11.706			ND	U
22 o-Nitrotoluene	1	12.562	12.559	0.003	2120	0.0166	M
23 p-Nitrotoluene	1	12.949	12.993	-0.044	1795	0.0169	M
24 m-Nitrotoluene	1		13.566			ND	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

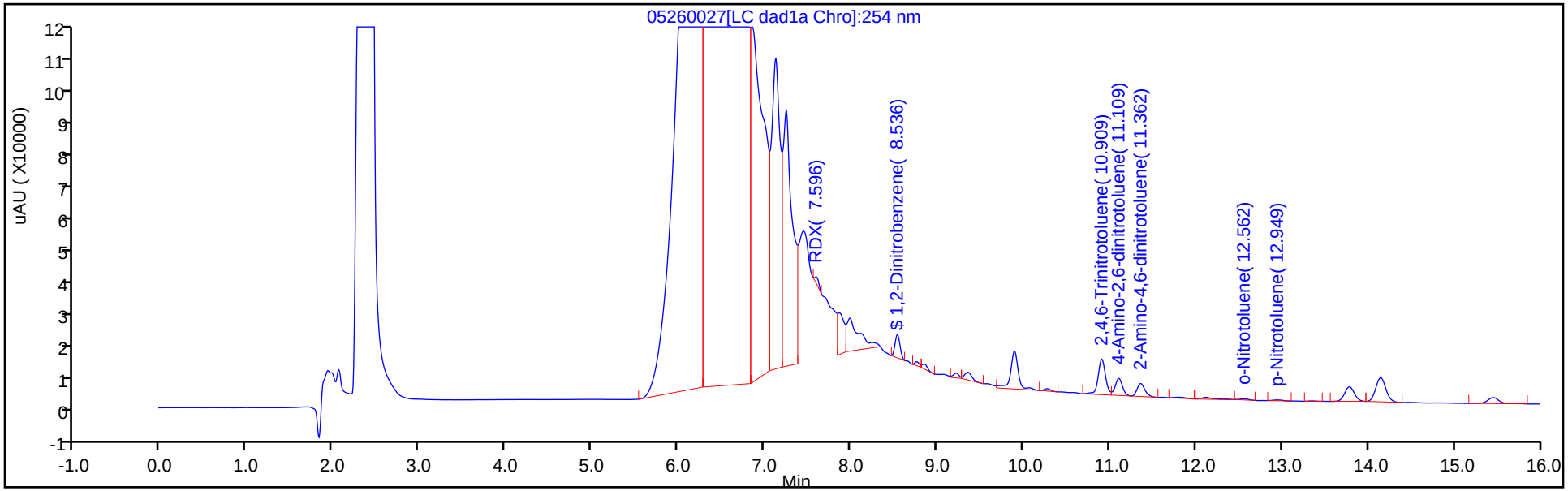
Report Date: 27-May-2022 13:18:37 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

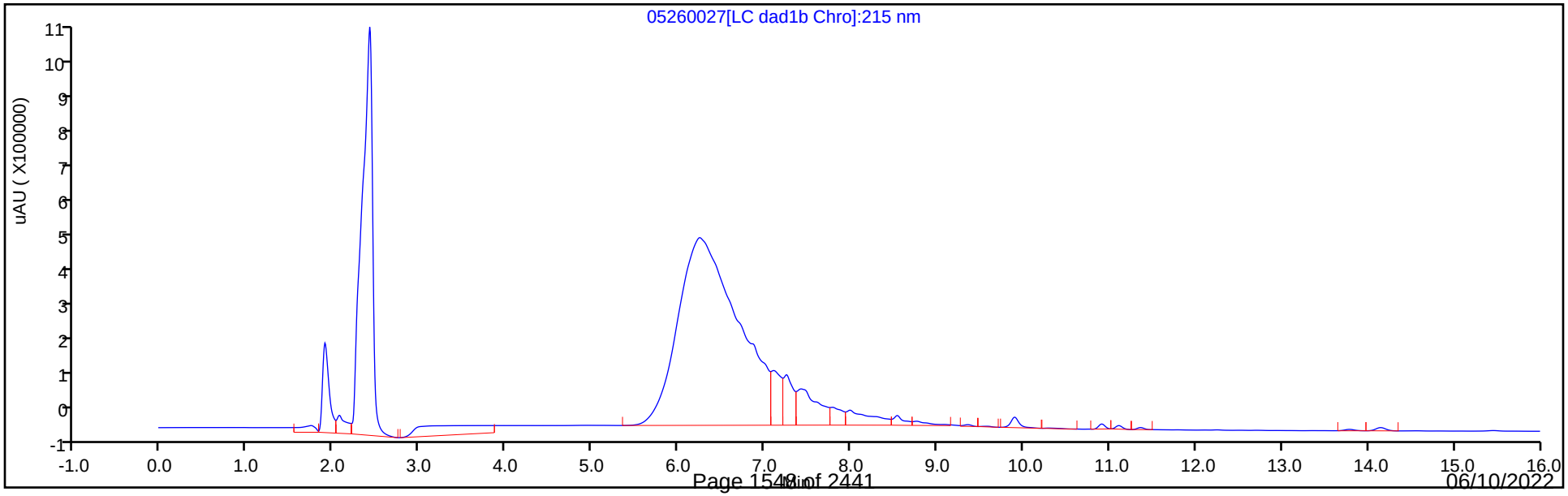
Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260027.d

Injection Date:	26-May-2022 23:58:18	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-162622-A-10-A	Lab Sample ID:	280-162622-10	Worklist Smp#:	27
Client ID:	PZ018-22A				
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 Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\05260027.D				
Lims ID:	280-162622-A-10-A				
Client ID:	PZ018-22A				
Sample Type:	Client				
Inject. Date:	26-May-2022 23:58:18	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-162622-A-10-				
Misc. Info.:	280-0111383-027				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	27-May-2022 13:18:33	Calib Date:	25-Mar-2022 16:30:08		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220325-109559.b\03250017.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1651				

First Level Reviewer: zhangji Date: 27-May-2022 12:57:22

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2178	108.92

Manual Integration/User Assign Peak Report

Eurofins Denver

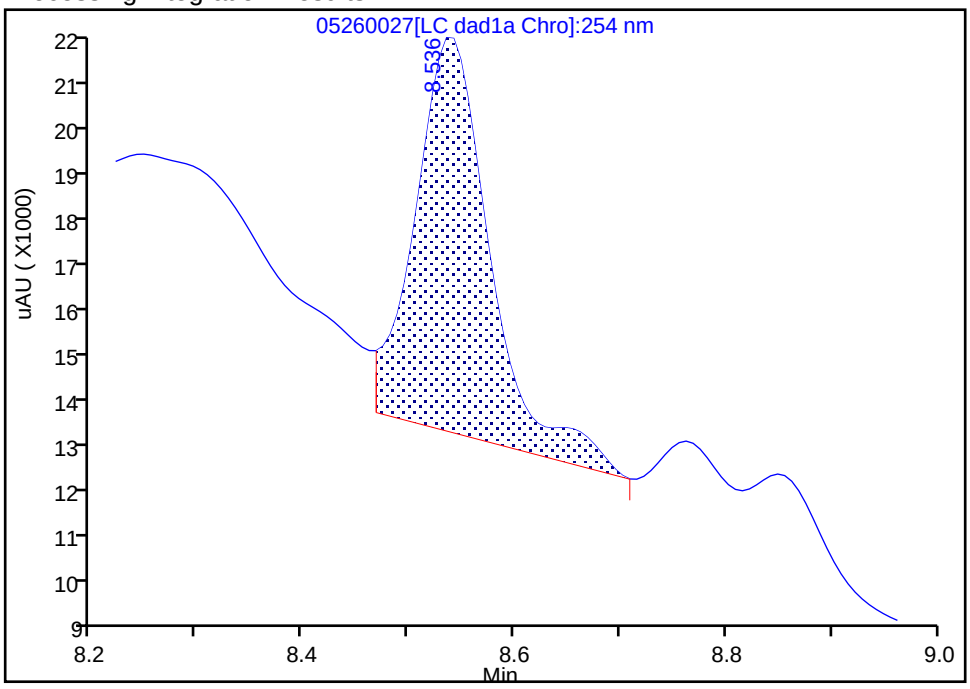
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260027.d				
Injection Date:	26-May-2022 23:58:18	Instrument ID:	CHHPLC_X3		
Lims ID:	280-162622-A-10-A	Lab Sample ID:	280-162622-10		
Client ID:	PZ018-22A				
Operator ID:	JZ	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

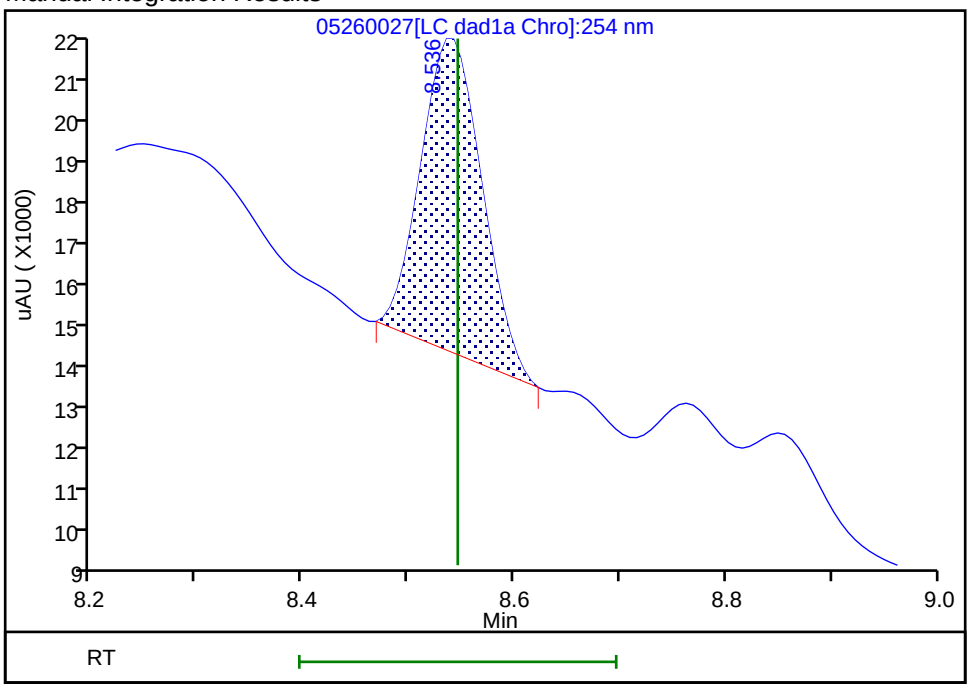
Processing Integration Results

RT: 8.54
Area: 37922
Amount: 0.304112
Amount Units: ug/mL



Manual Integration Results

RT: 8.54
Area: 27164
Amount: 0.217839
Amount Units: ug/mL



Reviewer: zhangji, 27-May-2022 12:57:17

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

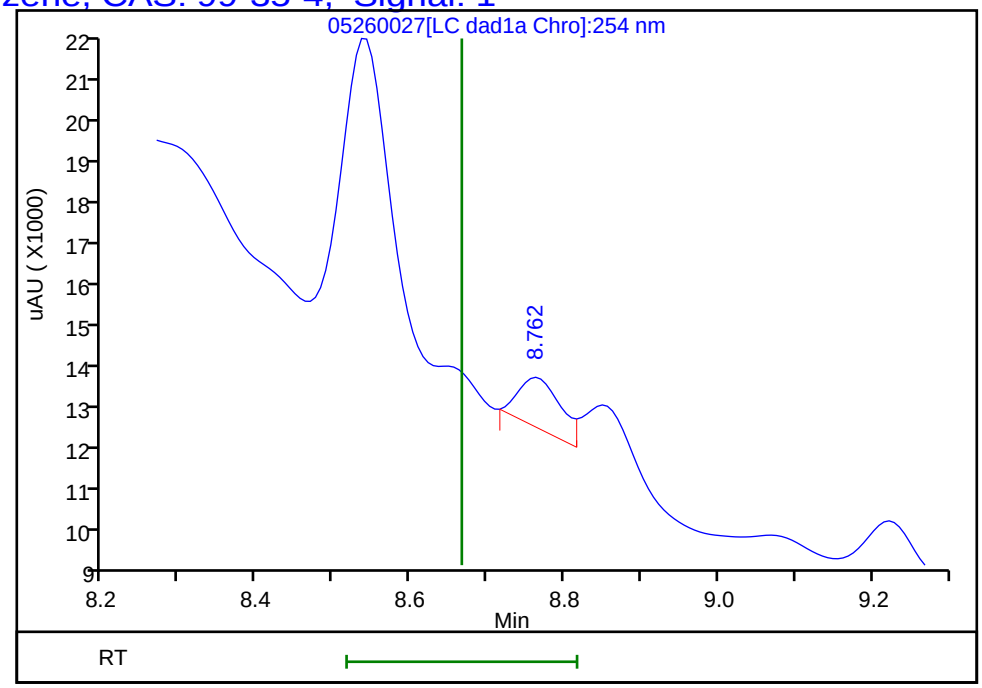
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260027.d
Injection Date: 26-May-2022 23:58:18 Instrument ID: CHHPLC_X3
Lims ID: 280-162622-A-10-A Lab Sample ID: 280-162622-10
Client ID: PZ018-22A
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 1,3,5-Trinitrobenzene, CAS: 99-35-4, Signal: 1

RT: 8.76
Response: 4499
Amount: 0.020629



Reviewer: zhangji, 27-May-2022 12:57:22
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

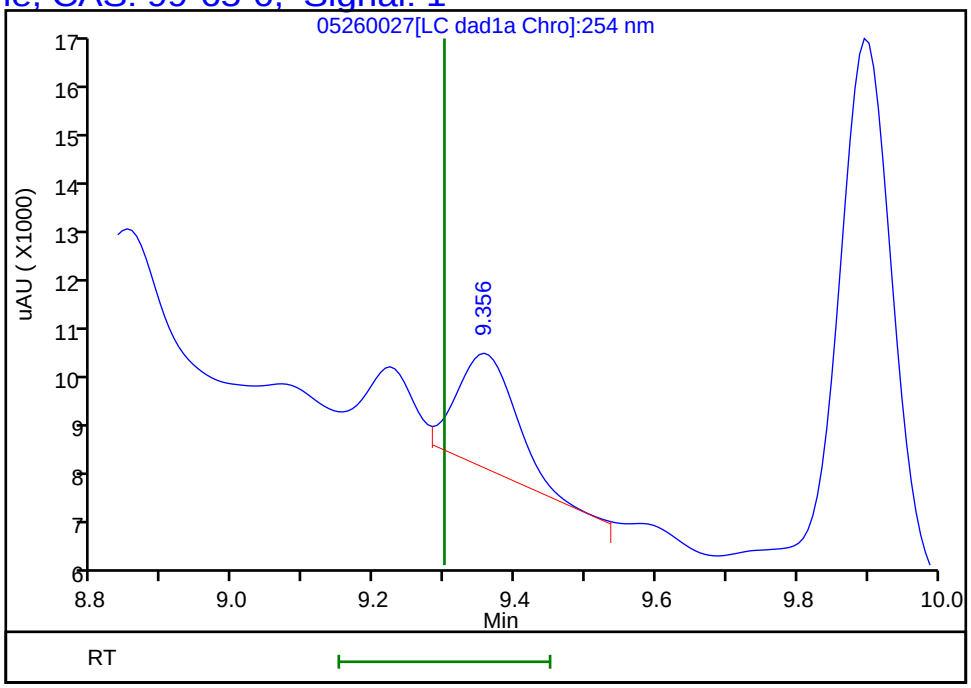
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260027.d
Injection Date: 26-May-2022 23:58:18 Instrument ID: CHHPLC_X3
Lims ID: 280-162622-A-10-A Lab Sample ID: 280-162622-10
Client ID: PZ018-22A
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 1,3-Dinitrobenzene, CAS: 99-65-0, Signal: 1

RT: 9.36
Response: 13043
Amount: 0.045225



Reviewer: zhangji, 27-May-2022 12:57:22
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

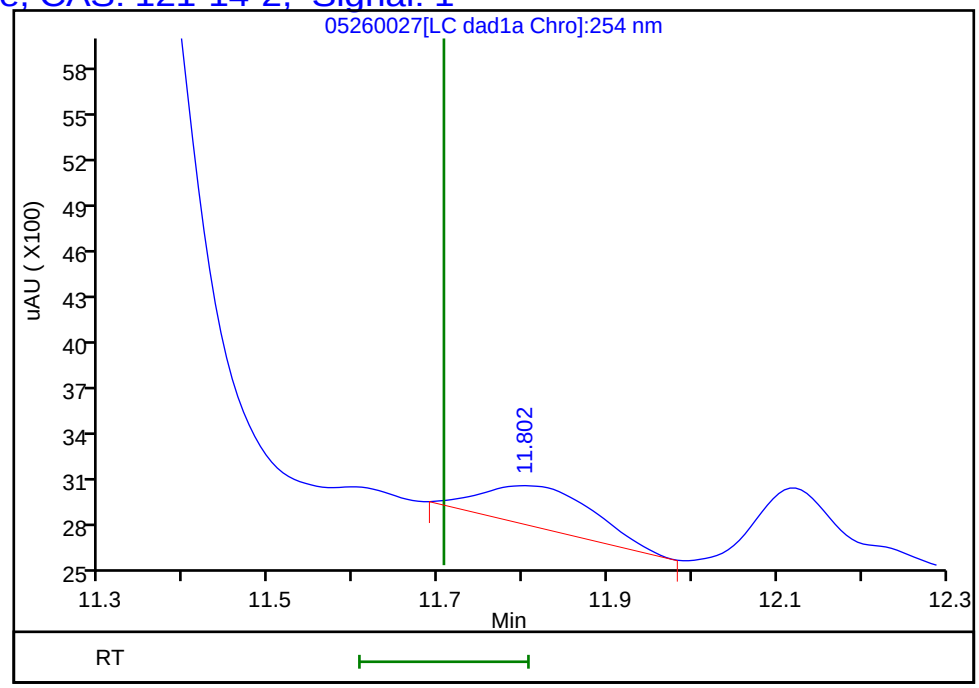
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260027.d
Injection Date: 26-May-2022 23:58:18 Instrument ID: CHHPLC_X3
Lims ID: 280-162622-A-10-A Lab Sample ID: 280-162622-10
Client ID: PZ018-22A
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 2,4-Dinitrotoluene, CAS: 121-14-2, Signal: 1

RT: 11.80
Response: 2505
Amount: 0.008657



Reviewer: zhangji, 27-May-2022 12:57:22
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

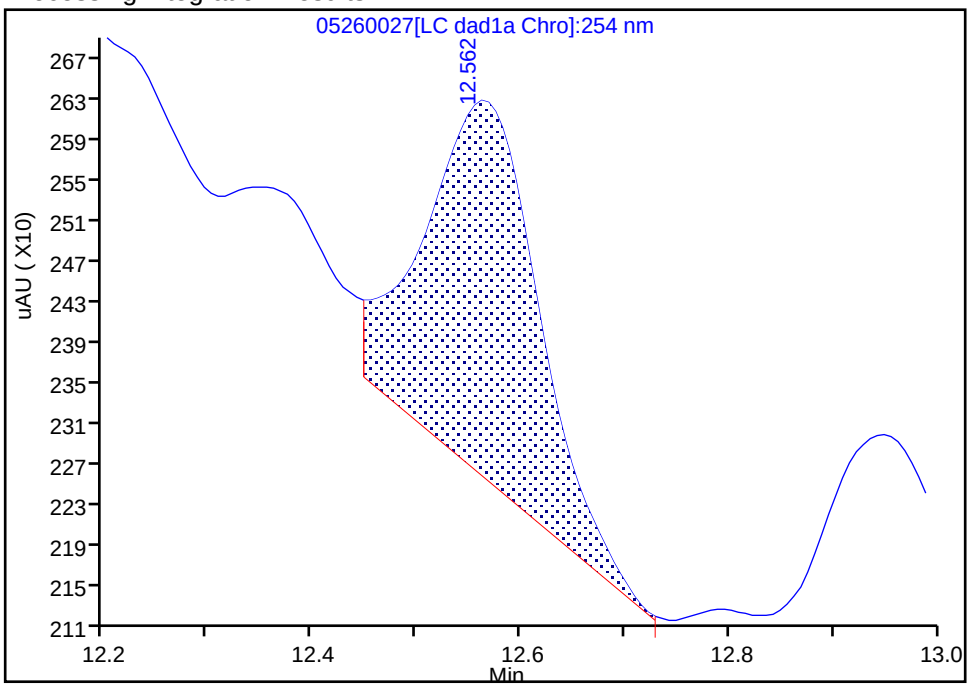
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260027.d				
Injection Date:	26-May-2022 23:58:18	Instrument ID:	CHHPLC_X3		
Lims ID:	280-162622-A-10-A	Lab Sample ID:	280-162622-10		
Client ID:	PZ018-22A				
Operator ID:	JZ	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

22 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

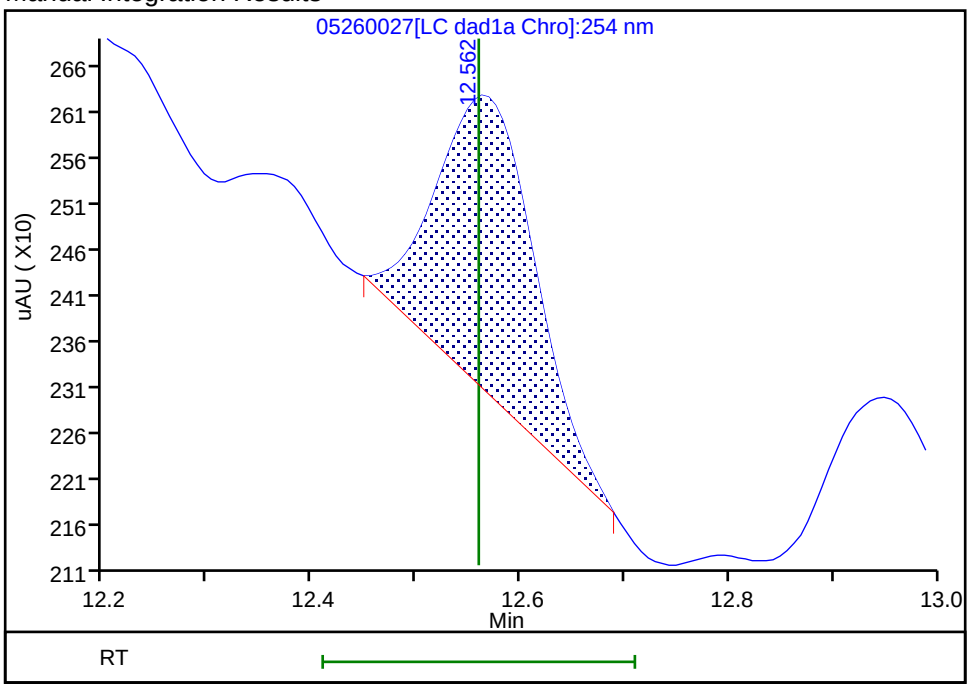
Processing Integration Results

RT: 12.56
Area: 2860
Amount: 0.022411
Amount Units: ug/mL



Manual Integration Results

RT: 12.56
Area: 2120
Amount: 0.016613
Amount Units: ug/mL



Reviewer: zhangji, 27-May-2022 12:57:10

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

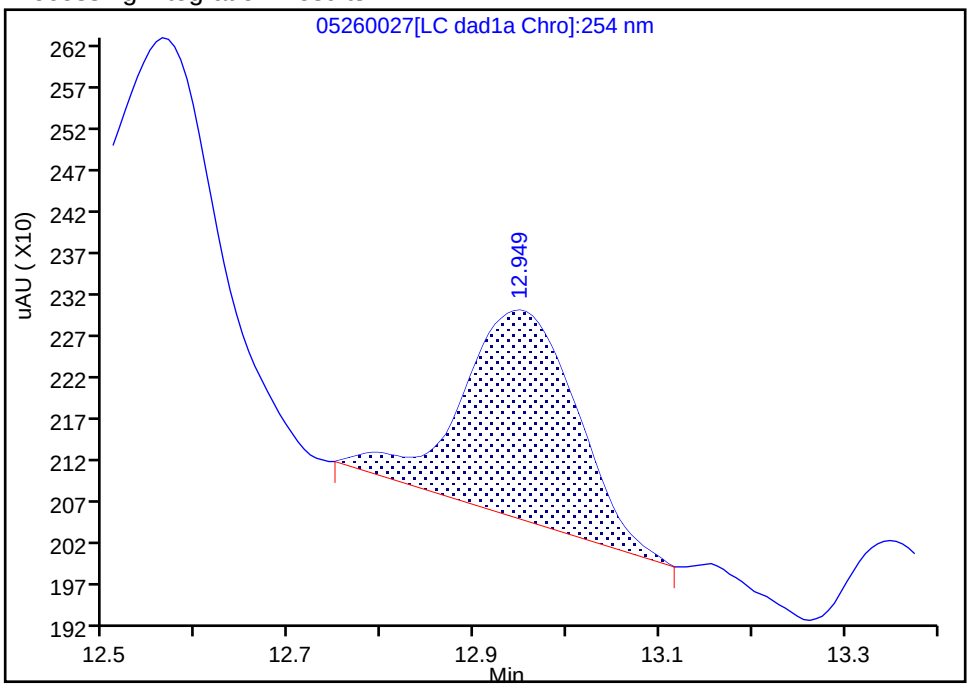
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260027.d				
Injection Date:	26-May-2022 23:58:18	Instrument ID:	CHHPLC_X3		
Lims ID:	280-162622-A-10-A	Lab Sample ID:	280-162622-10		
Client ID:	PZ018-22A				
Operator ID:	JZ	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

23 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

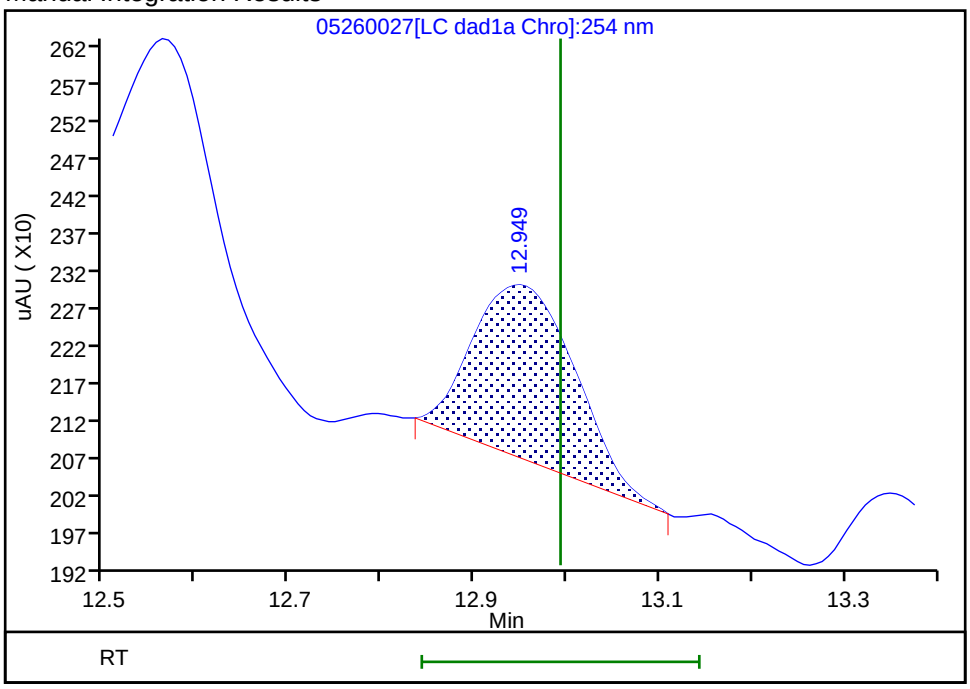
Processing Integration Results

RT: 12.95
Area: 2213
Amount: 0.020831
Amount Units: ug/mL



Manual Integration Results

RT: 12.95
Area: 1795
Amount: 0.016896
Amount Units: ug/mL



Reviewer: zhangji, 27-May-2022 12:57:06

Audit Action: Manually Integrated Audit Reason: Baseline

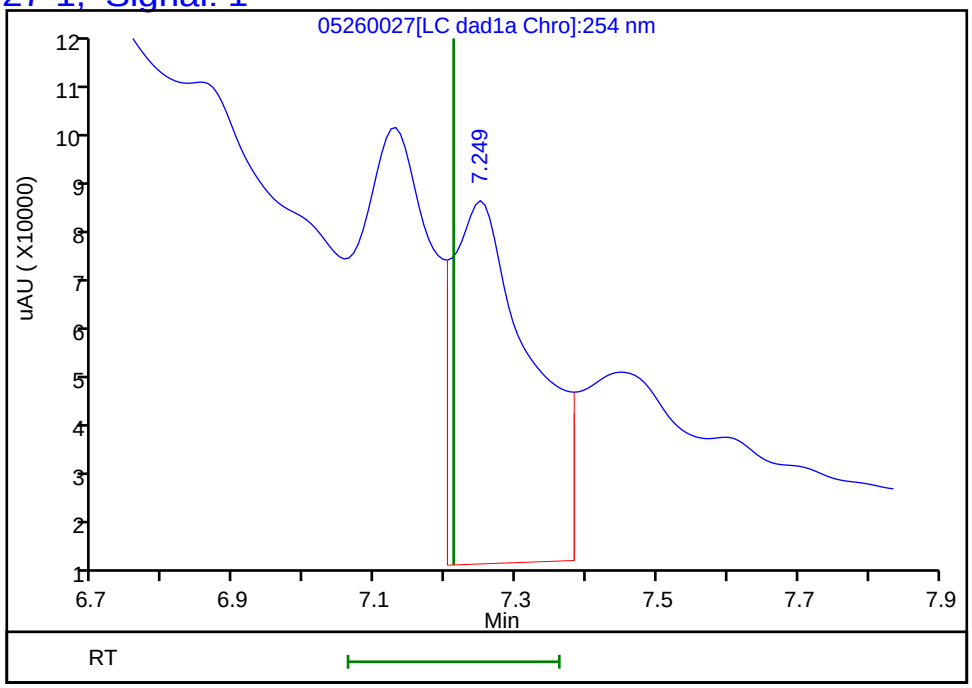
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260027.d				
Injection Date:	26-May-2022 23:58:18	Instrument ID:	CHHPLC_X3		
Lims ID:	280-162622-A-10-A	Lab Sample ID:	280-162622-10		
Client ID:	PZ018-22A				
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		

7 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.25
Response: 570835
Amount: 4.530601



Reviewer: zhangji, 27-May-2022 12:57:22
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

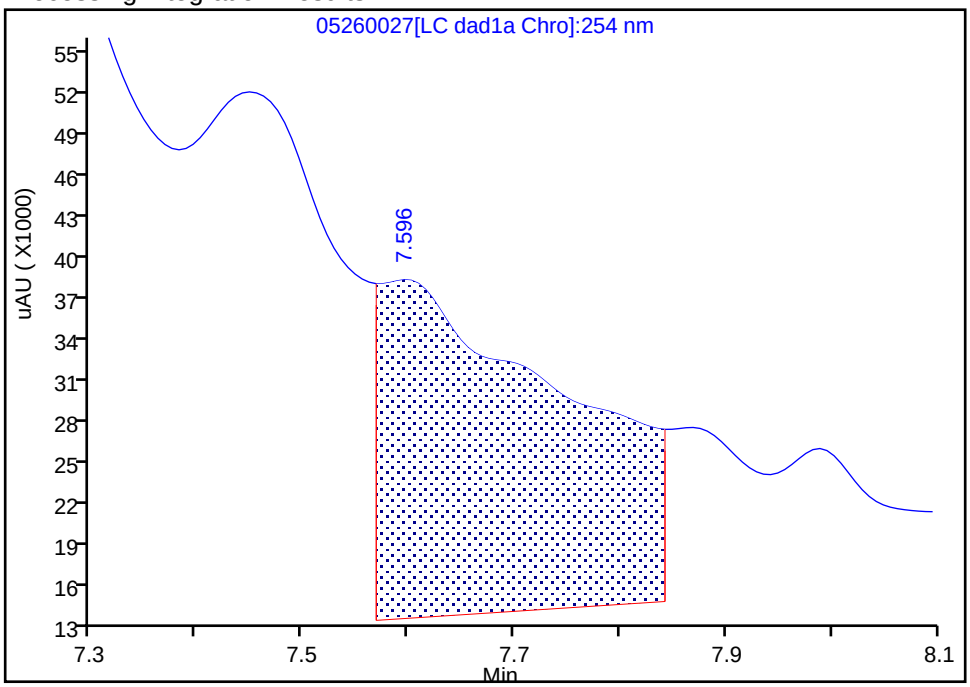
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260027.d				
Injection Date:	26-May-2022 23:58:18	Instrument ID:	CHHPLC_X3		
Lims ID:	280-162622-A-10-A	Lab Sample ID:	280-162622-10		
Client ID:	PZ018-22A				
Operator ID:	JZ	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

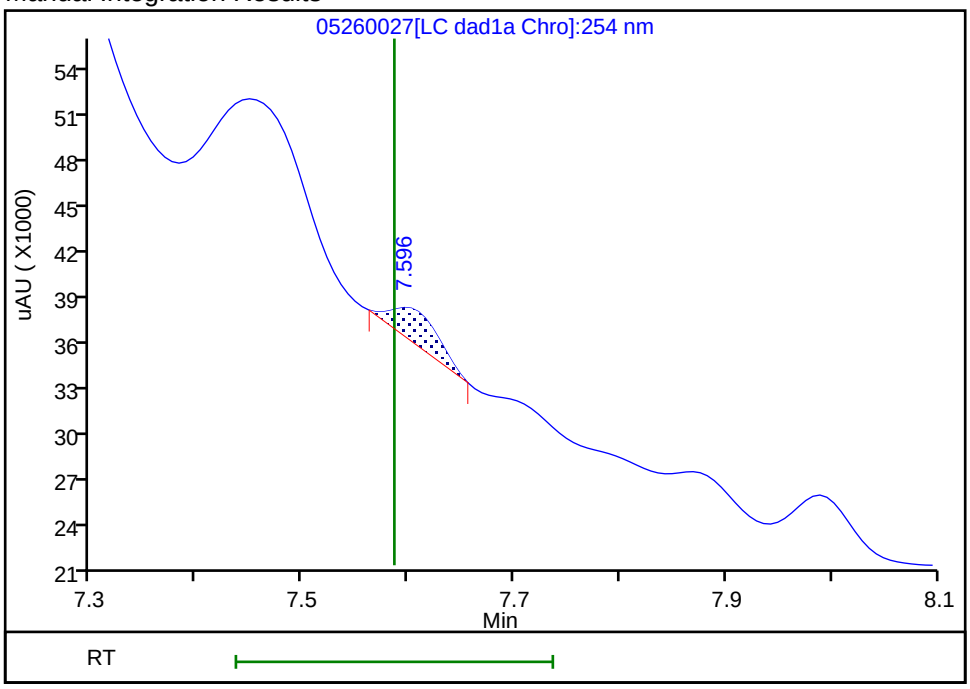
Processing Integration Results

RT: 7.60
Area: 288739
Amount: 2.786809
Amount Units: ug/mL



Manual Integration Results

RT: 7.60
Area: 6551
Amount: 0.063228
Amount Units: ug/mL



Reviewer: zhangji, 27-May-2022 12:57:21

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

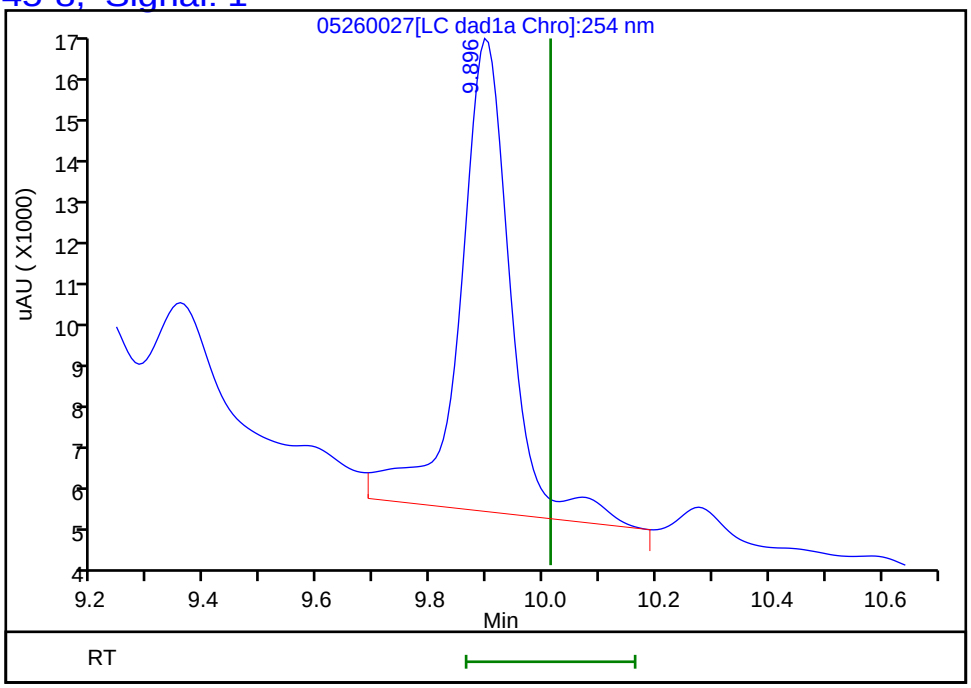
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260027.d
Injection Date: 26-May-2022 23:58:18 Instrument ID: CHHPLC_X3
Lims ID: 280-162622-A-10-A Lab Sample ID: 280-162622-10
Client ID: PZ018-22A
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

15 Tetryl, CAS: 479-45-8, Signal: 1

RT: 9.90
Response: 69507
Amount: 0.407506



Reviewer: zhangji, 27-May-2022 12:57:22
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: PZ018-22A | Lab Sample ID: 280-162622-10

Matrix: Water | Lab File ID: 05270023.D

Analysis Method: 8330A | Date Collected: 05/18/2022 10:05

Extraction Method: 3535 | Date Extracted: 05/25/2022 15:23

Sample wt/vol: 463.5(mL) | Date Analyzed: 05/28/2022 02:08

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: Luna-phenylhex ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 576448 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
88-72-2	2-Nitrotoluene	0.22	U	0.23	0.22	0.092
99-99-0	4-Nitrotoluene	0.43	U M	0.44	0.43	0.11

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	97	*M*	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270023.D
Lims ID: 280-162622-A-10-A
Client ID: PZ018-22A
Sample Type: Client
Inject. Date: 28-May-2022 02:08:44 ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-162622-A-10-A
Misc. Info.: 280-0111418-023
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 28-May-2022 14:12:44 Calib Date: 03-Mar-2022 07:19:48
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1652

First Level Reviewer: zhangji Date: 28-May-2022 14:09:44

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	5 HMX	1		6.713			ND	
	6 MNX	1		7.440			ND	
	8 RDX	1	8.786	8.840	-0.054	14827	0.0763	
	9 Nitrobenzene	1		11.707			ND	
$	10 1,2-Dinitrobenzene	1	12.779	12.867	-0.088	48628	0.1947	M
	12 1,3-Dinitrobenzene	1		15.233			ND	
	14 o-Nitrotoluene	1		16.327			ND	
	16 p-Nitrotoluene	1		16.627			ND	U
	17 4-Amino-2,6-dinitrotoluene	1	17.152	17.247	-0.095	54828	0.2054	
	18 m-Nitrotoluene	1		17.573			ND	U
	19 2-Amino-4,6-dinitrotoluene	1	18.132	18.233	-0.101	48947	0.1358	M
	20 1,3,5-Trinitrobenzene	1		18.487			ND	
	21 2,6-Dinitrotoluene	1		19.720			ND	
	22 2,4-Dinitrotoluene	1		20.233			ND	7
	23 Tetryl	1		23.880			ND	
	24 2,4,6-Trinitrotoluene	1	24.593	24.680	-0.087	99792	0.2703	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

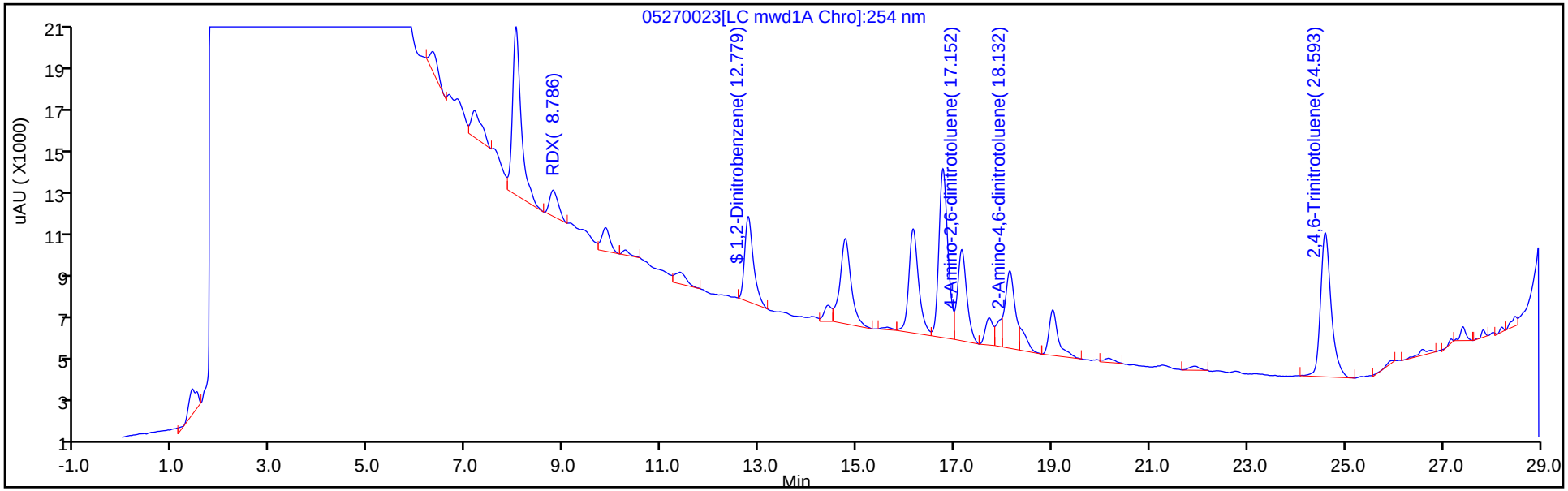
Report Date: 28-May-2022 14:12:45 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

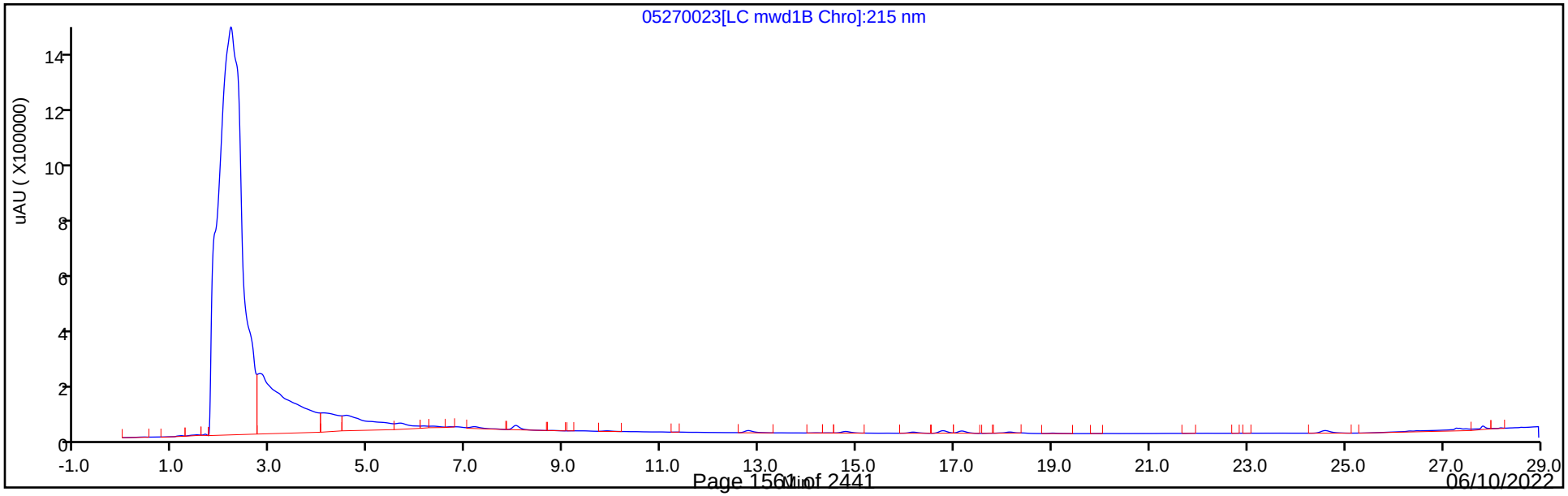
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270023.D

Injection Date:	28-May-2022 02:08:44	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-162622-A-10-A	Lab Sample ID:	280-162622-10	Worklist Smp#:	23
Client ID:	PZ018-22A				
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 Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270023.D				
Lims ID:	280-162622-A-10-A				
Client ID:	PZ018-22A				
Sample Type:	Client				
Inject. Date:	28-May-2022 02:08:44	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-162622-A-10-A				
Misc. Info.:	280-0111418-023				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	28-May-2022 14:12:44	Calib Date:	03-Mar-2022 07:19:48		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1652				
First Level Reviewer: zhangji		Date:	28-May-2022 14:09:44		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1947	97.35

Manual Integration/User Assign Peak Report

Eurofins Denver

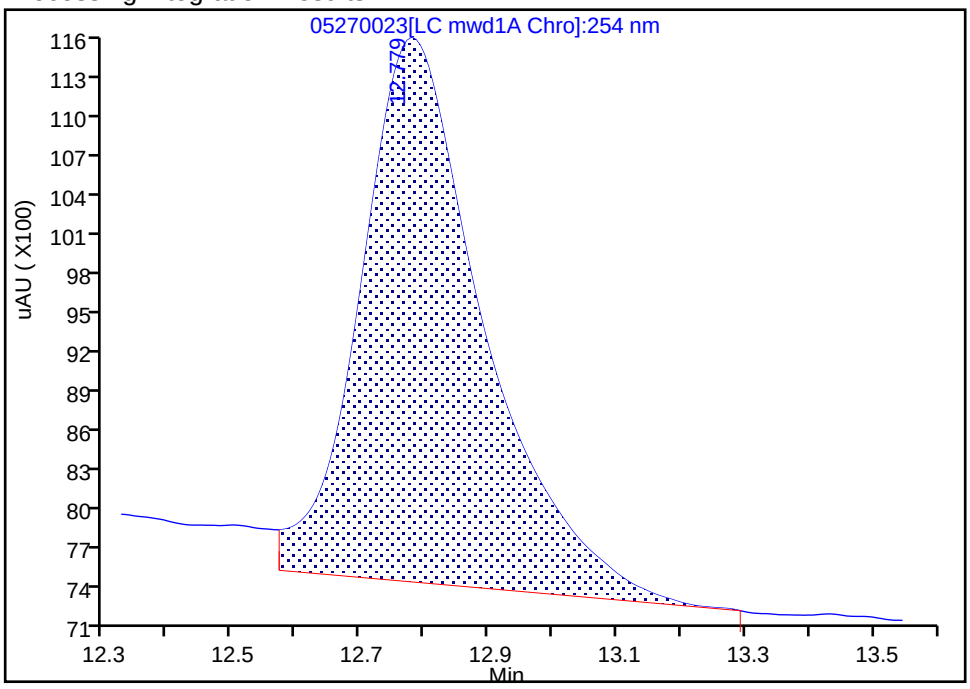
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270023.D				
Injection Date:	28-May-2022 02:08:44	Instrument ID:	CHHPLC_X5		
Lims ID:	280-162622-A-10-A	Lab Sample ID:	280-162622-10		
Client ID:	PZ018-22A				
Operator ID:	JZ	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	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

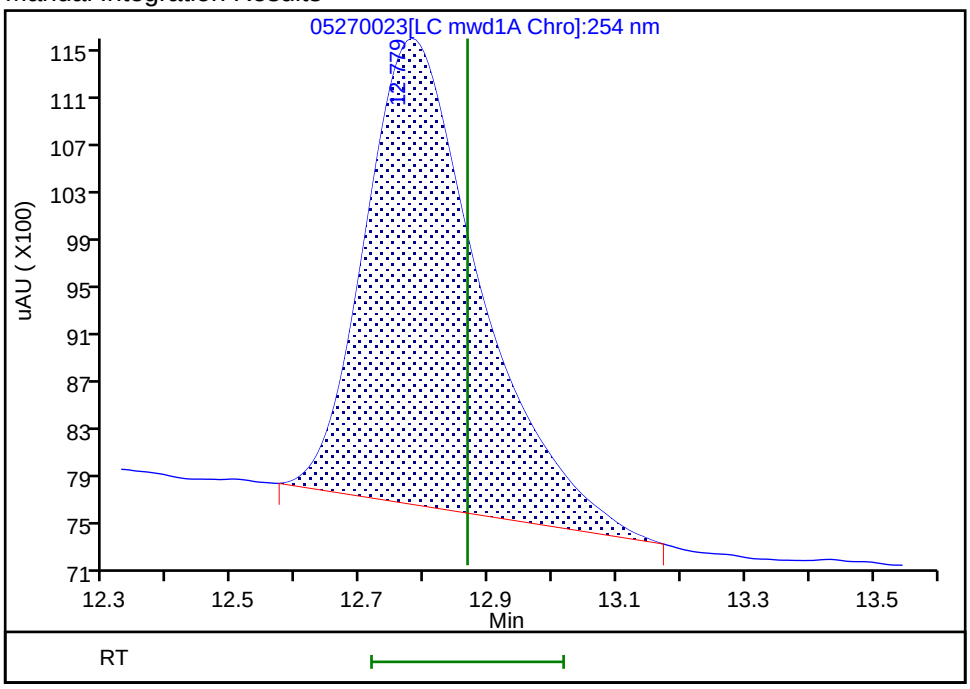
Processing Integration Results

RT: 12.78
Area: 55187
Amount: 0.220966
Amount Units: ug/ml



Manual Integration Results

RT: 12.78
Area: 48628
Amount: 0.194704
Amount Units: ug/ml



Reviewer: zhangji, 28-May-2022 14:09:39

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

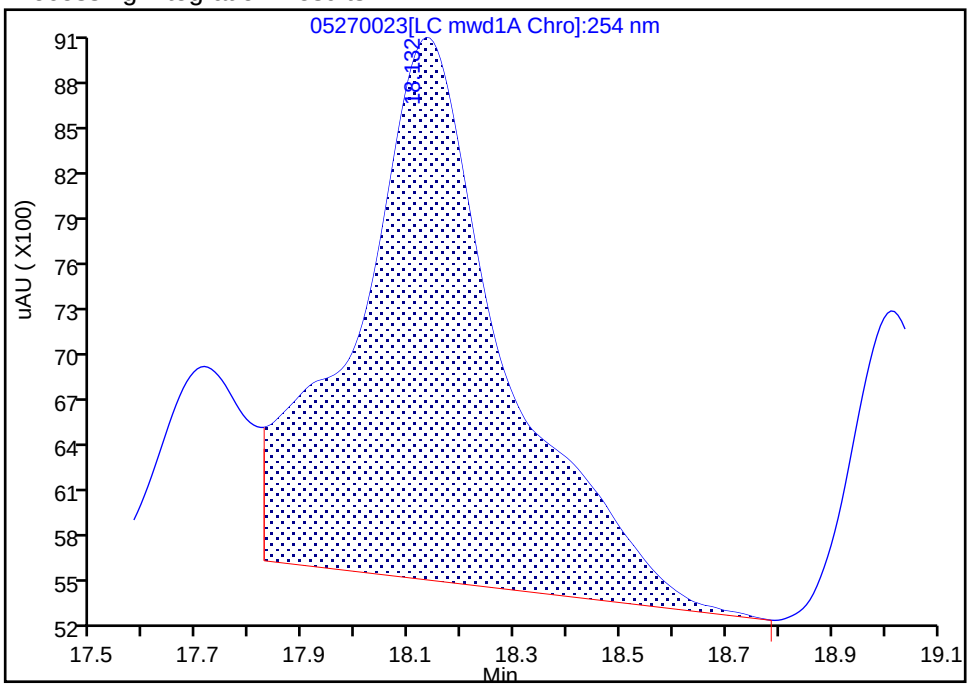
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270023.D				
Injection Date:	28-May-2022 02:08:44	Instrument ID:	CHHPLC_X5		
Lims ID:	280-162622-A-10-A	Lab Sample ID:	280-162622-10		
Client ID:	PZ018-22A				
Operator ID:	JZ	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

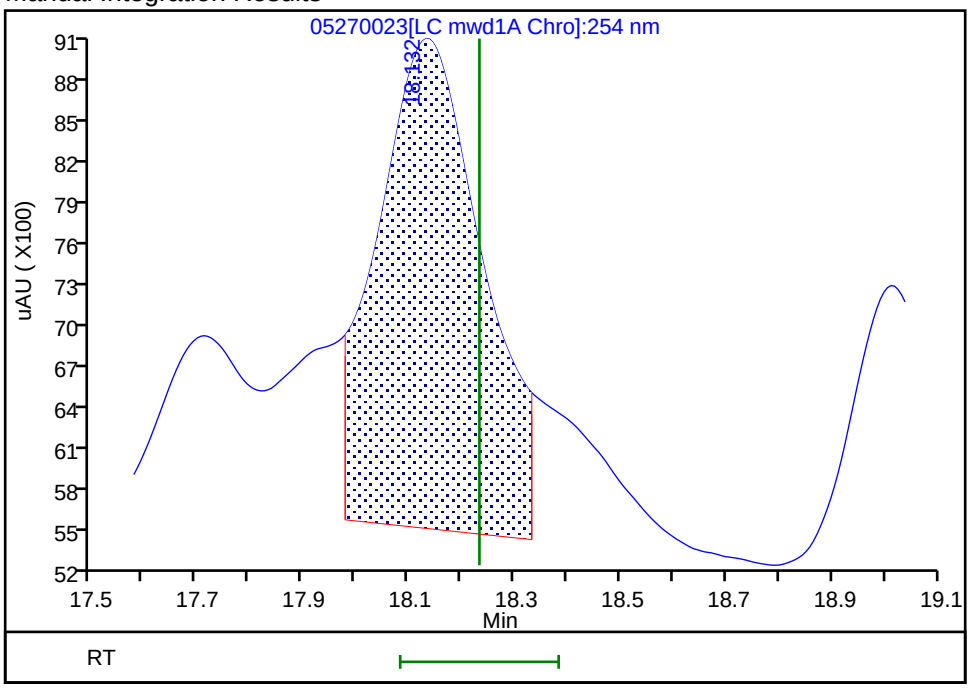
Processing Integration Results

RT: 18.13
Area: 69609
Amount: 0.193071
Amount Units: ug/ml



Manual Integration Results

RT: 18.13
Area: 48947
Amount: 0.135762
Amount Units: ug/ml



Reviewer: zhangji, 28-May-2022 14:09:33

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

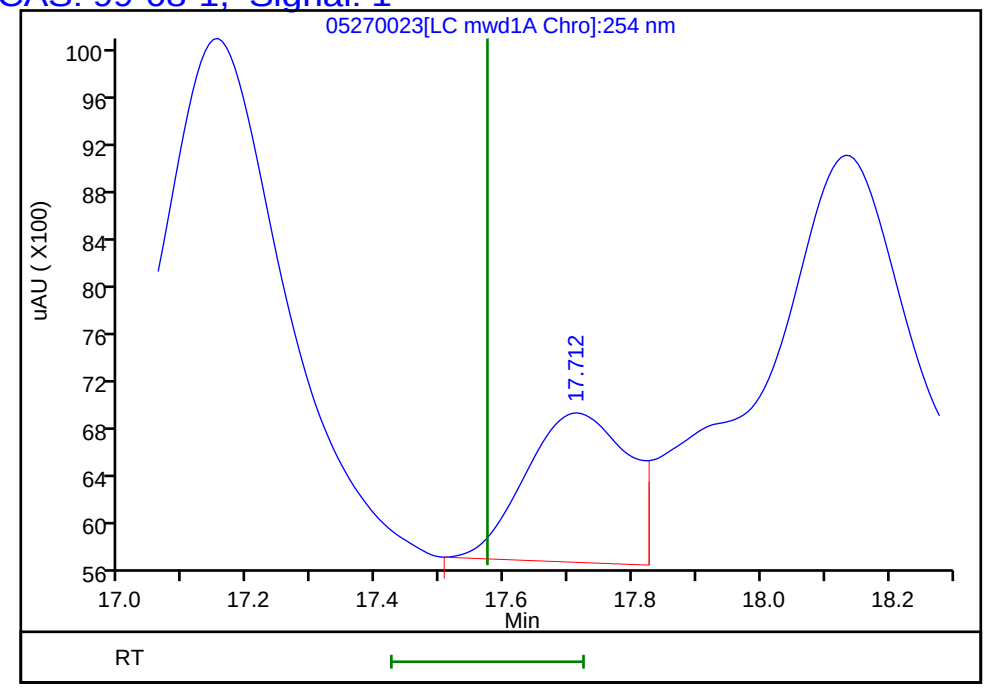
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270023.D				
Injection Date:	28-May-2022 02:08:44	Instrument ID:	CHHPLC_X5		
Lims ID:	280-162622-A-10-A	Lab Sample ID:	280-162622-10		
Client ID:	PZ018-22A				
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		

18 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 17.71
Response: 13884
Amount: 0.052907



Reviewer: zhangji, 28-May-2022 14:09:44
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

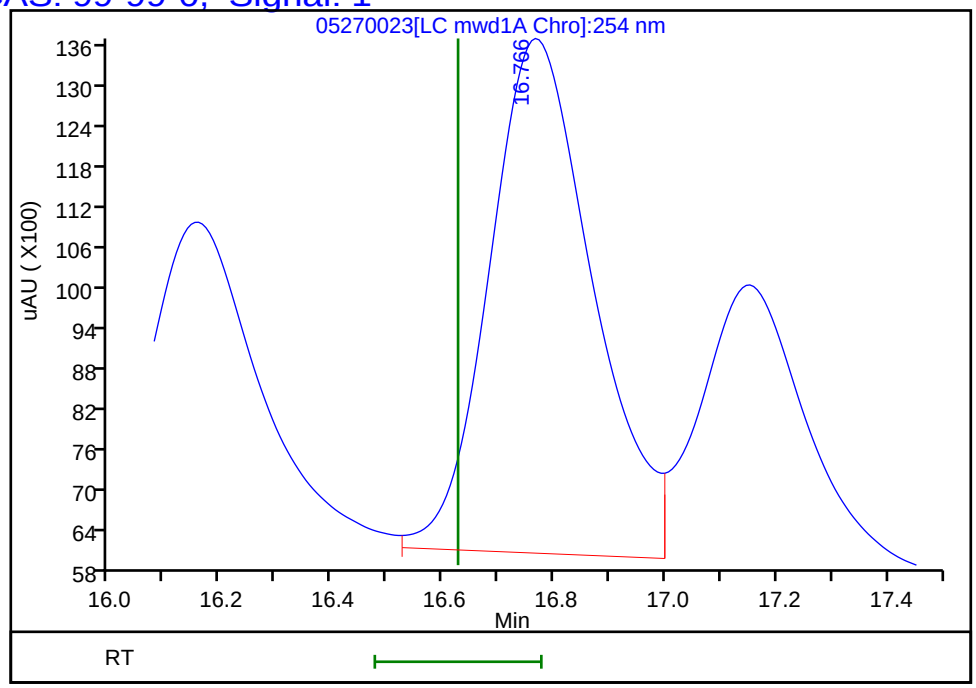
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270023.D				
Injection Date:	28-May-2022 02:08:44	Instrument ID:	CHHPLC_X5		
Lims ID:	280-162622-A-10-A	Lab Sample ID:	280-162622-10		
Client ID:	PZ018-22A				
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		

16 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 16.77
Response: 100115
Amount: 0.474891



Reviewer: zhangji, 28-May-2022 14:09:44
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: PZ020-22A | Lab Sample ID: 280-162622-11

Matrix: Water | Lab File ID: 05260028.D

Analysis Method: 8330A | Date Collected: 05/18/2022 13:05

Extraction Method: 3535 | Date Extracted: 05/25/2022 15:23

Sample wt/vol: 466.8(mL) | Date Analyzed: 05/27/2022 00:21

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 576310 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.6	M	0.22	0.21	0.090
118-96-7	2,4,6-Trinitrotoluene	5.0		0.12	0.11	0.048
606-20-2	2,6-Dinitrotoluene	0.086	U	0.11	0.086	0.043
35572-78-2	2-Amino-4,6-dinitrotoluene	2.8		0.12	0.11	0.054
88-72-2	2-Nitrotoluene	0.21	U	0.22	0.21	0.092
99-08-1	3-Nitrotoluene	0.43	U	0.43	0.43	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	2.1		0.16	0.13	0.062
2691-41-0	HMX	0.49	M	0.22	0.21	0.094
5755-27-1	MNX	0.43	U M	2.1	0.43	0.16
98-95-3	Nitrobenzene	0.21	U	0.22	0.21	0.097
121-82-4	RDX	0.45	M J1	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	107	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\05260028.D
Lims ID: 280-162622-A-11-A
Client ID: PZ020-22A
Sample Type: Client
Inject. Date: 27-May-2022 00:21:14 ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-162622-A-11-
Misc. Info.: 280-0111383-028
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 27-May-2022 13:18:33 Calib Date: 25-Mar-2022 16:30:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220325-109559.b\03250017.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1651

First Level Reviewer: zhangji Date: 27-May-2022 13:08:53

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1	6.576	6.593	-0.017	3830	0.0457	M
7 MNX	1		7.211			ND	U
8 RDX	1	7.569	7.586	-0.017	4307	0.0416	M
$ 10 1,2-Dinitrobenzene	1	8.536	8.546	-0.010	26714	0.2142	M
11 1,3,5-Trinitrobenzene	1	8.656	8.666	-0.010	53339	0.2446	M
12 1,3-Dinitrobenzene	1	9.289	9.299	-0.010	3258	0.0113	M
13 Nitrobenzene	1		9.686			ND	
15 Tetryl	1		10.013			ND	U
17 2,4,6-Trinitrotoluene	1	10.902	10.919	-0.017	95024	0.4687	
18 4-Amino-2,6-dinitrotoluene	1	11.102	11.119	-0.017	29189	0.1933	
19 2-Amino-4,6-dinitrotoluene	1	11.349	11.373	-0.024	53360	0.2639	
20 2,6-Dinitrotoluene	1		11.533			ND	
21 2,4-Dinitrotoluene	1	11.696	11.706	-0.010	2537	0.008768	
22 o-Nitrotoluene	1		12.559			ND	
23 p-Nitrotoluene	1	12.976	12.993	-0.017	2240	0.0211	
24 m-Nitrotoluene	1		13.566			ND	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

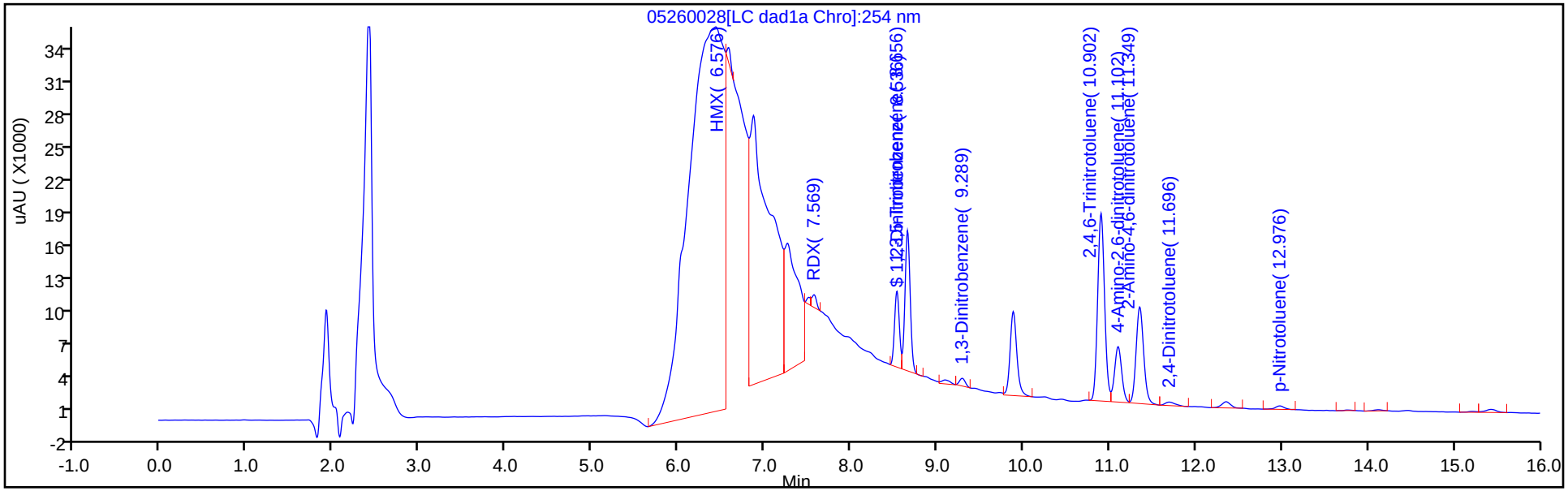
Report Date: 27-May-2022 13:18:36 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

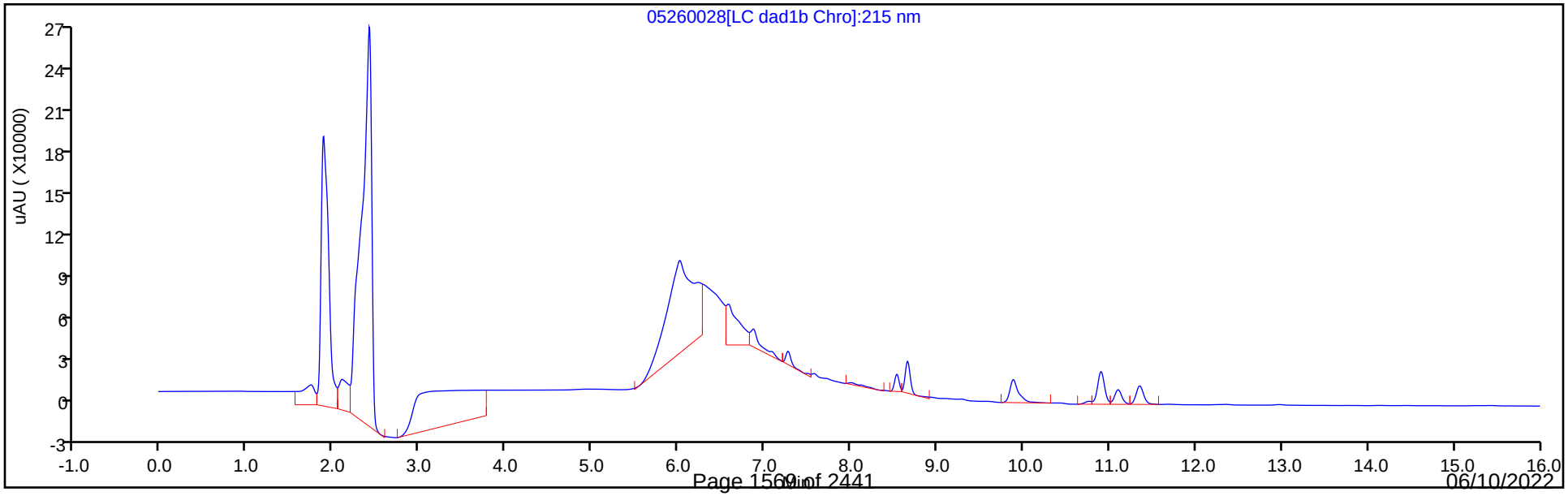
Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260028.d

Injection Date:	27-May-2022 00:21:14	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-162622-A-11-A	Lab Sample ID:	280-162622-11	Worklist Smp#:	28
Client ID:	PZ020-22A				
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 Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\05260028.D				
Lims ID:	280-162622-A-11-A				
Client ID:	PZ020-22A				
Sample Type:	Client				
Inject. Date:	27-May-2022 00:21:14	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-162622-A-11-				
Misc. Info.:	280-0111383-028				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	27-May-2022 13:18:33	Calib Date:	25-Mar-2022 16:30:08		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220325-109559.b\03250017.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1651				

First Level Reviewer: zhangji Date: 27-May-2022 13:08:53

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2142	107.12

Manual Integration/User Assign Peak Report

Eurofins Denver

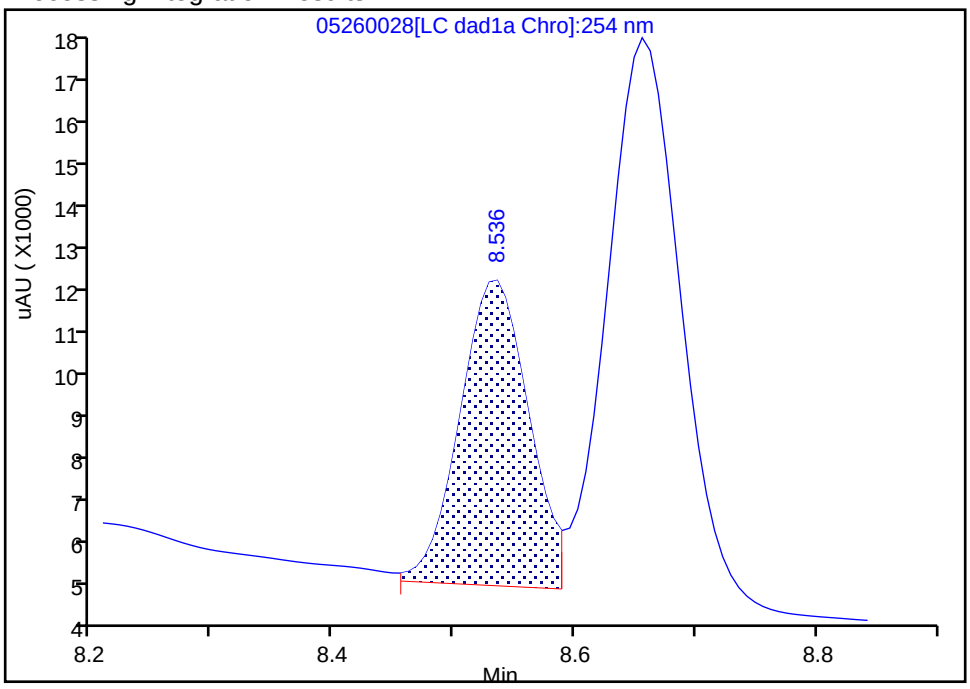
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260028.d				
Injection Date:	27-May-2022 00:21:14	Instrument ID:	CHHPLC_X3		
Lims ID:	280-162622-A-11-A	Lab Sample ID:	280-162622-11		
Client ID:	PZ020-22A				
Operator ID:	JZ	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

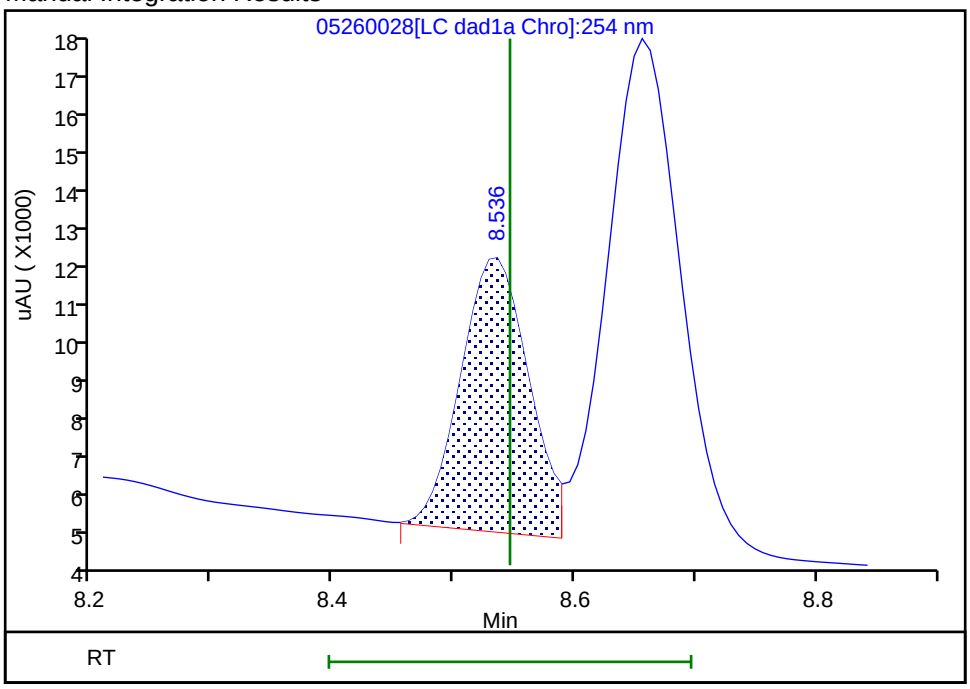
Processing Integration Results

RT: 8.54
Area: 27214
Amount: 0.218240
Amount Units: ug/mL



Manual Integration Results

RT: 8.54
Area: 26714
Amount: 0.214230
Amount Units: ug/mL



Reviewer: zhangji, 27-May-2022 13:08:36
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

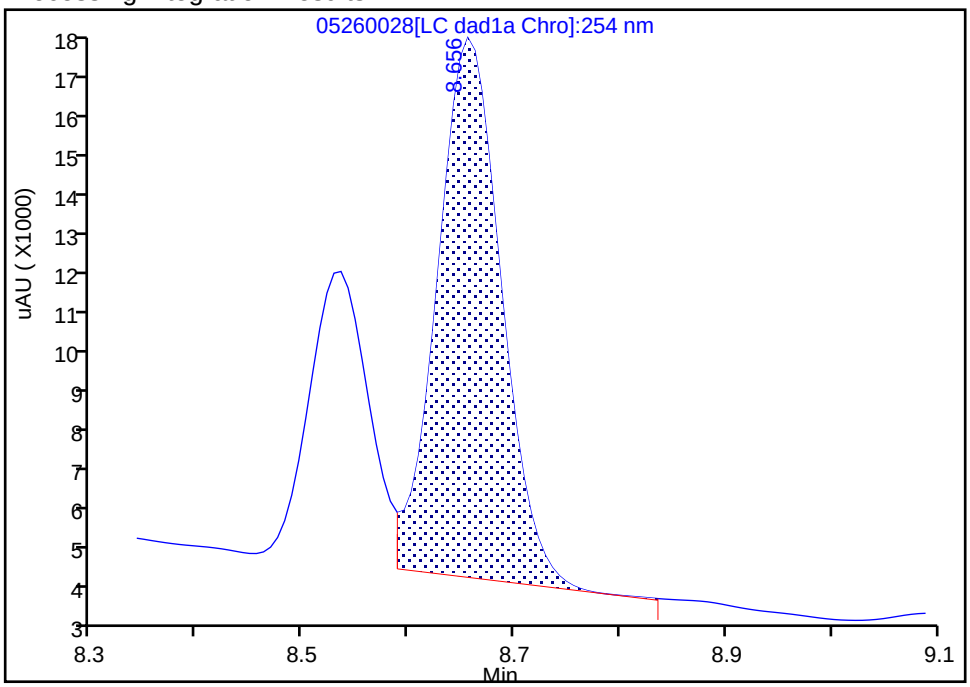
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260028.d				
Injection Date:	27-May-2022 00:21:14	Instrument ID:	CHHPLC_X3		
Lims ID:	280-162622-A-11-A	Lab Sample ID:	280-162622-11		
Client ID:	PZ020-22A				
Operator ID:	JZ	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

11 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

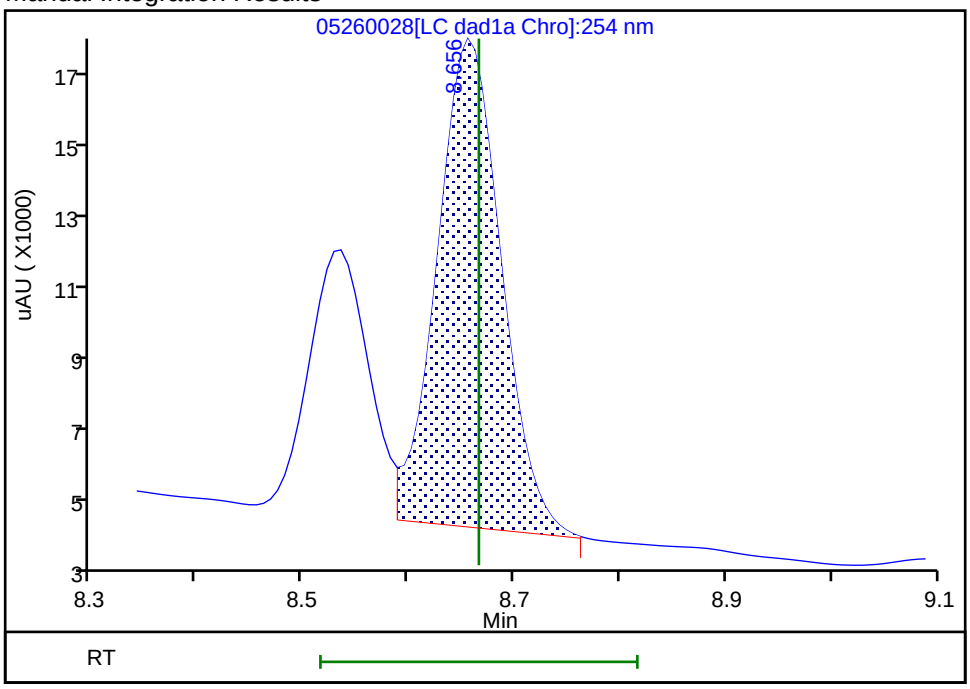
Processing Integration Results

RT: 8.66
Area: 53309
Amount: 0.244430
Amount Units: ug/mL



Manual Integration Results

RT: 8.66
Area: 53339
Amount: 0.244567
Amount Units: ug/mL



Reviewer: zhangji, 27-May-2022 13:08:40

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Eurofins Denver

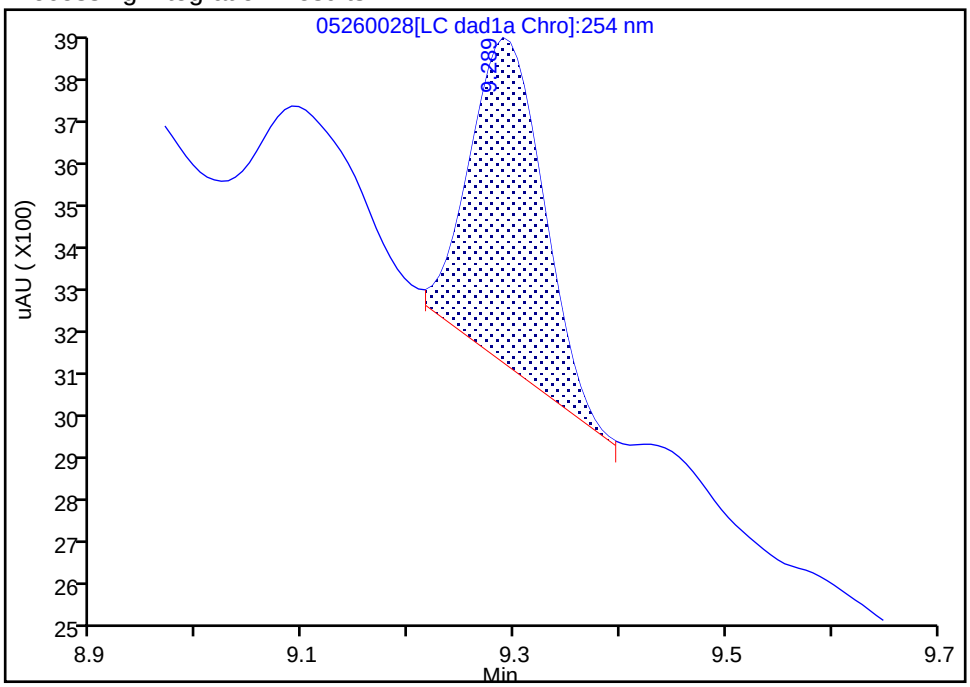
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260028.d				
Injection Date:	27-May-2022 00:21:14	Instrument ID:	CHHPLC_X3		
Lims ID:	280-162622-A-11-A	Lab Sample ID:	280-162622-11		
Client ID:	PZ020-22A				
Operator ID:	JZ	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

12 1,3-Dinitrobenzene, CAS: 99-65-0

Signal: 1

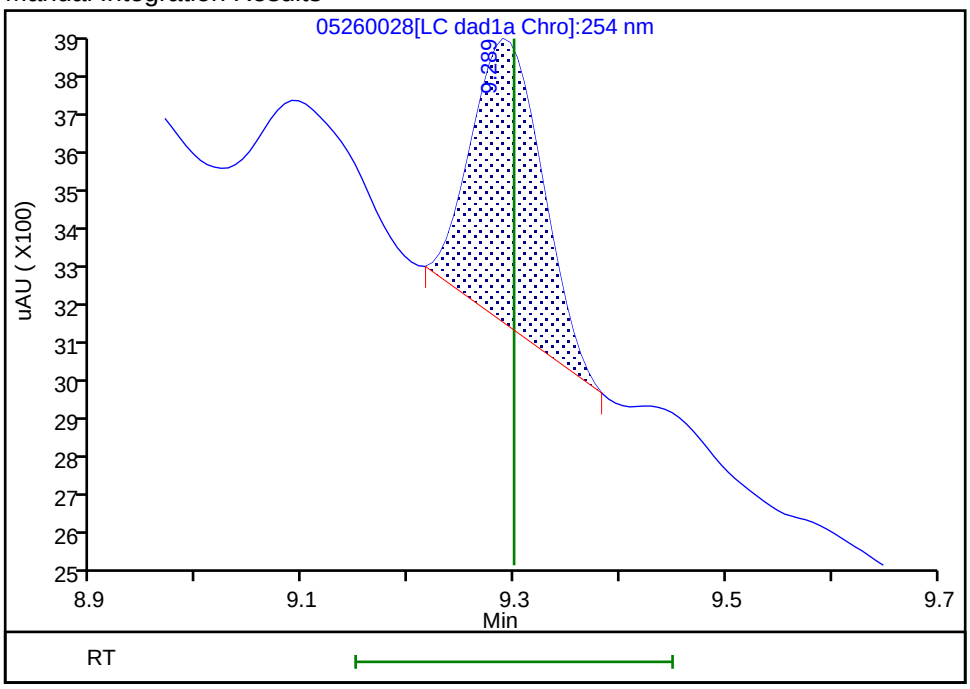
Processing Integration Results

RT: 9.29
Area: 3496
Amount: 0.012122
Amount Units: ug/mL



Manual Integration Results

RT: 9.29
Area: 3258
Amount: 0.011297
Amount Units: ug/mL



Reviewer: zhangji, 27-May-2022 13:08:45
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

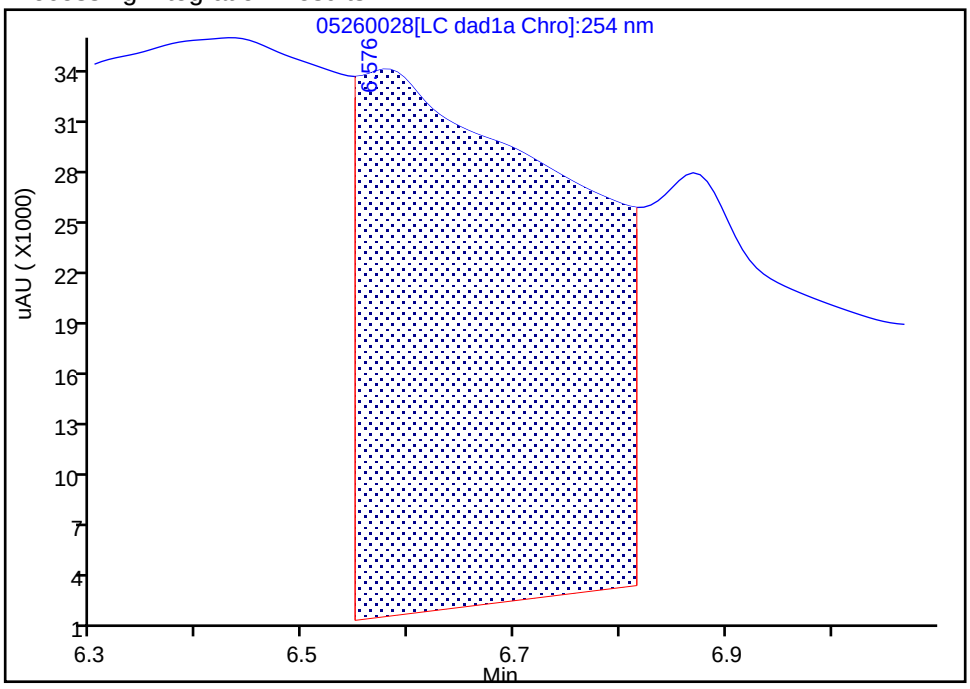
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260028.d				
Injection Date:	27-May-2022 00:21:14	Instrument ID:	CHHPLC_X3		
Lims ID:	280-162622-A-11-A	Lab Sample ID:	280-162622-11		
Client ID:	PZ020-22A				
Operator ID:	JZ	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

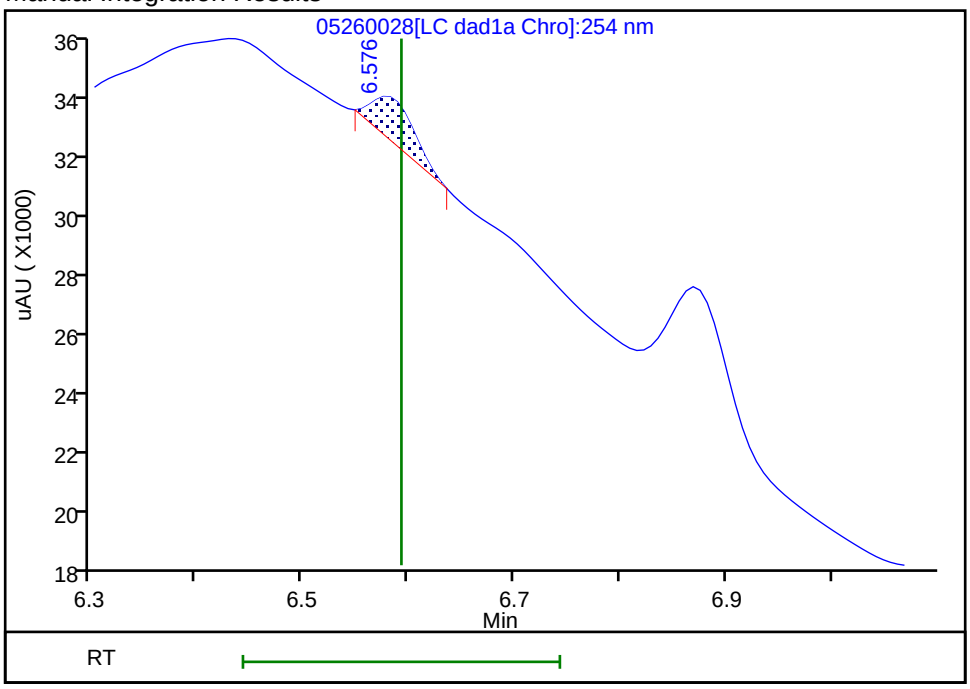
Processing Integration Results

RT: 6.58
Area: 439463
Amount: 5.242487
Amount Units: ug/mL



Manual Integration Results

RT: 6.58
Area: 3830
Amount: 0.045689
Amount Units: ug/mL



Reviewer: zhangji, 27-May-2022 13:08:18

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

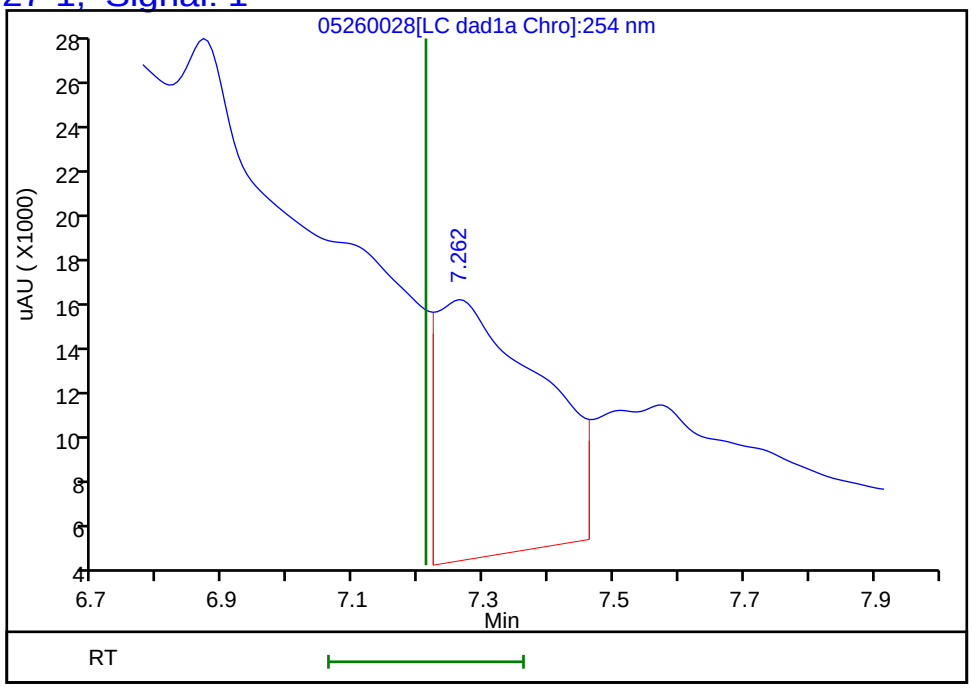
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260028.d
Injection Date: 27-May-2022 00:21:14 Instrument ID: CHHPLC_X3
Lims ID: 280-162622-A-11-A Lab Sample ID: 280-162622-11
Client ID: PZ020-22A
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

7 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.26
Response: 126308
Amount: 1.002481



Reviewer: zhangji, 27-May-2022 13:08:53
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

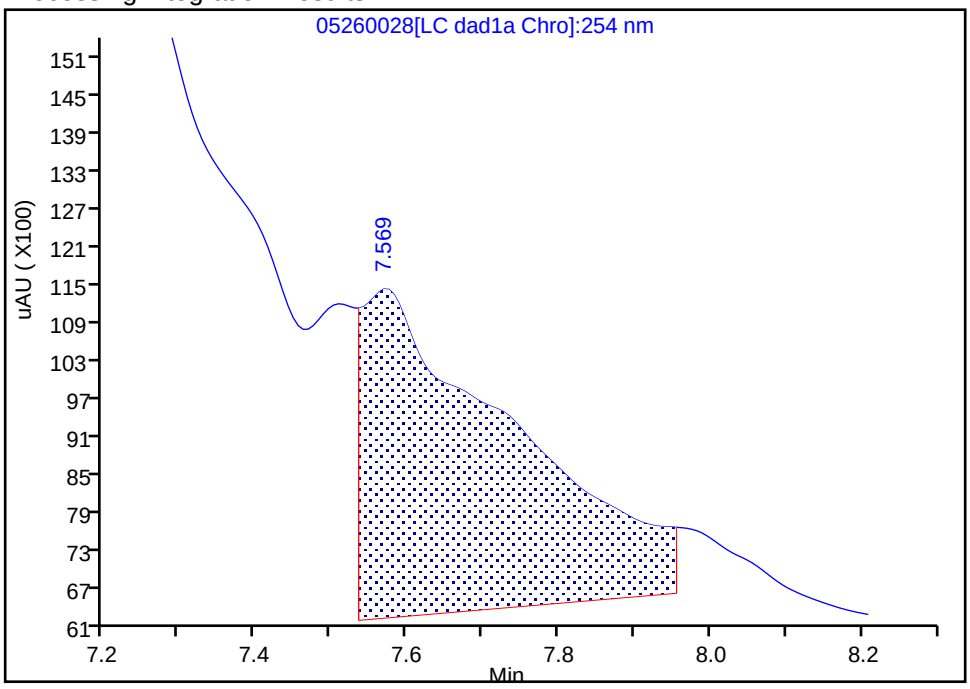
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260028.d				
Injection Date:	27-May-2022 00:21:14	Instrument ID:	CHHPLC_X3		
Lims ID:	280-162622-A-11-A	Lab Sample ID:	280-162622-11		
Client ID:	PZ020-22A				
Operator ID:	JZ	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

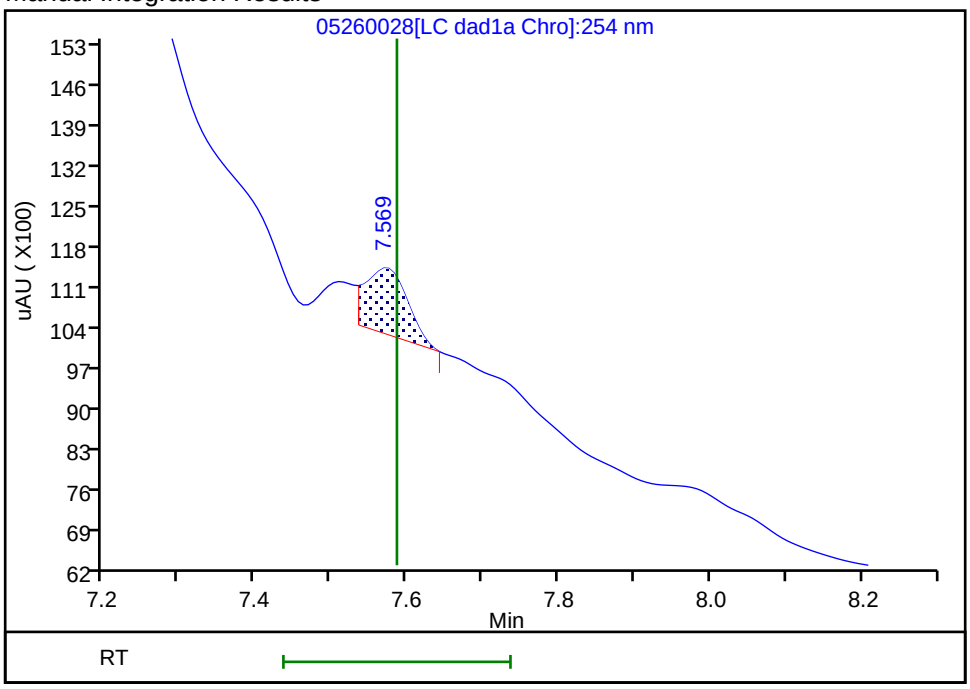
Processing Integration Results

RT: 7.57
Area: 72171
Amount: 0.696569
Amount Units: ug/mL



Manual Integration Results

RT: 7.57
Area: 4307
Amount: 0.041570
Amount Units: ug/mL



Reviewer: zhangji, 27-May-2022 13:08:29

Audit Action: Split an Integrated Peak Audit Reason: Baseline

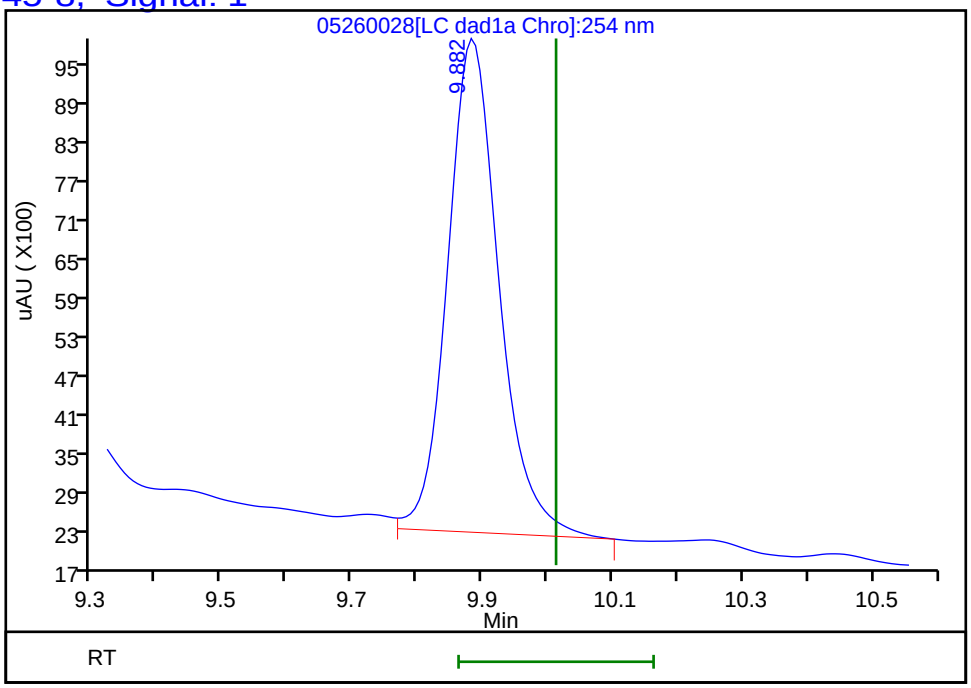
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260028.d				
Injection Date:	27-May-2022 00:21:14	Instrument ID:	CHHPLC_X3		
Lims ID:	280-162622-A-11-A	Lab Sample ID:	280-162622-11		
Client ID:	PZ020-22A				
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		

15 Tetryl, CAS: 479-45-8, Signal: 1

RT: 9.88
Response: 41608
Amount: 0.243940



Reviewer: zhangji, 27-May-2022 13:08:53
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: PZ020-22A | Lab Sample ID: 280-162622-11

Matrix: Water | Lab File ID: 05270024.D

Analysis Method: 8330A | Date Collected: 05/18/2022 13:05

Extraction Method: 3535 | Date Extracted: 05/25/2022 15:23

Sample wt/vol: 466.8(mL) | Date Analyzed: 05/28/2022 02:43

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: Luna-phenylhex ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 576448 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-65-0	1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.040
121-14-2	2,4-Dinitrotoluene	0.086	U	0.11	0.086	0.029
99-99-0	4-Nitrotoluene	0.43	U	0.44	0.43	0.11
121-82-4	*RDX*	*0.23*	*J1 M*	*0.22*	0.21	*0.055*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	106	*M*	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270024.D
Lims ID: 280-162622-A-11-A
Client ID: PZ020-22A
Sample Type: Client
Inject. Date: 28-May-2022 02:43:44 ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-162622-A-11-A
Misc. Info.: 280-0111418-024
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 28-May-2022 14:12:44 Calib Date: 03-Mar-2022 07:19:48
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1652

First Level Reviewer: zhangji Date: 28-May-2022 14:10:06

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	5 HMX	1	6.666	6.713	-0.047	8095	0.0487	M
	6 MNX	1		7.440			ND	
	8 RDX	1	8.773	8.840	-0.067	4124	0.0212	M
	9 Nitrobenzene	1		11.707			ND	
$	10 1,2-Dinitrobenzene	1	12.786	12.867	-0.081	52887	0.2118	M
	12 1,3-Dinitrobenzene	1		15.233			ND	
	14 o-Nitrotoluene	1		16.327			ND	
	16 p-Nitrotoluene	1		16.627			ND	
	17 4-Amino-2,6-dinitrotoluene	1	17.152	17.247	-0.095	65450	0.2451	
	18 m-Nitrotoluene	1		17.573			ND	
	19 2-Amino-4,6-dinitrotoluene	1	18.146	18.233	-0.087	93238	0.2586	
	20 1,3,5-Trinitrobenzene	1	18.412	18.487	-0.075	116608	0.2807	
	21 2,6-Dinitrotoluene	1		19.720			ND	
	22 2,4-Dinitrotoluene	1		20.233			ND	7
	23 Tetryl	1		23.880			ND	
	24 2,4,6-Trinitrotoluene	1	24.586	24.680	-0.094	182388	0.4940	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated

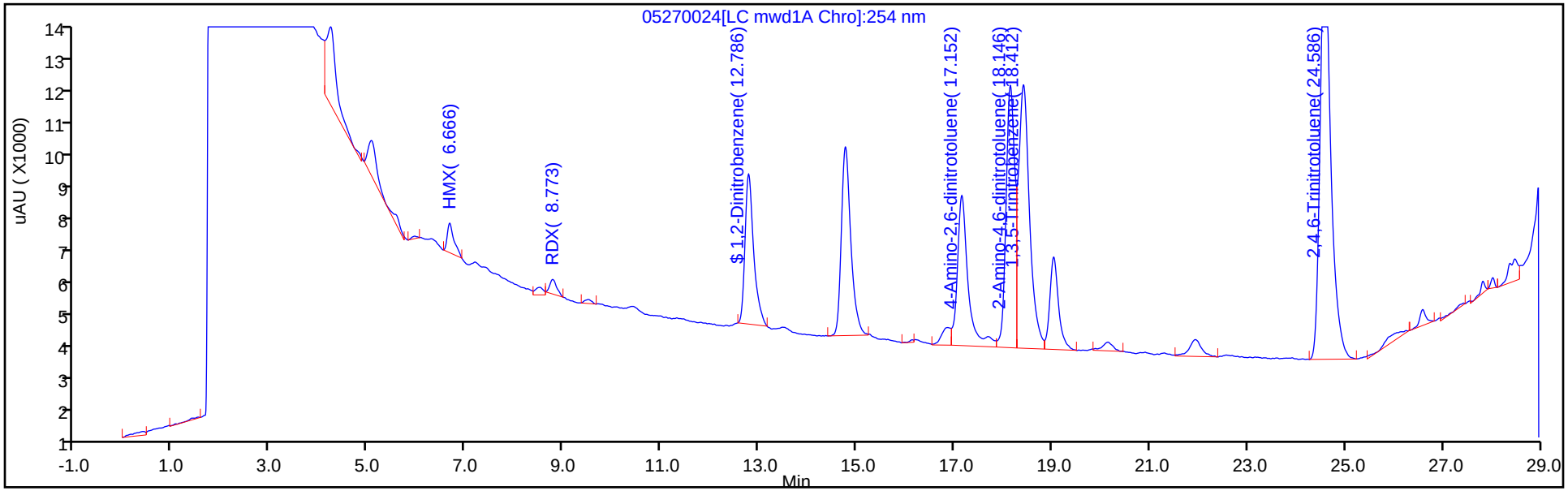
Report Date: 28-May-2022 14:12:46 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

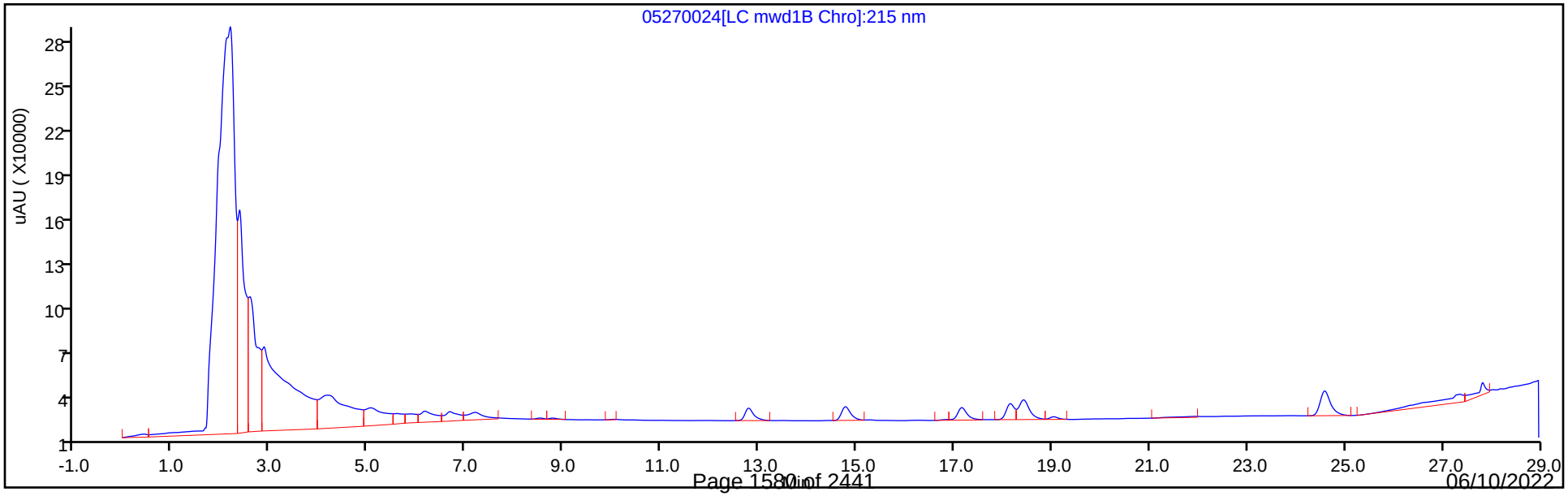
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270024.D

Injection Date:	28-May-2022 02:43:44	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-162622-A-11-A	Lab Sample ID:	280-162622-11	Worklist Smp#:	24
Client ID:	PZ020-22A				
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 Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270024.D				
Lims ID:	280-162622-A-11-A				
Client ID:	PZ020-22A				
Sample Type:	Client				
Inject. Date:	28-May-2022 02:43:44	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-162622-A-11-A				
Misc. Info.:	280-0111418-024				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	28-May-2022 14:12:44	Calib Date:	03-Mar-2022 07:19:48		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1652				
First Level Reviewer: zhangji		Date:	28-May-2022 14:10:06		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2118	105.88

Manual Integration/User Assign Peak Report

Eurofins Denver

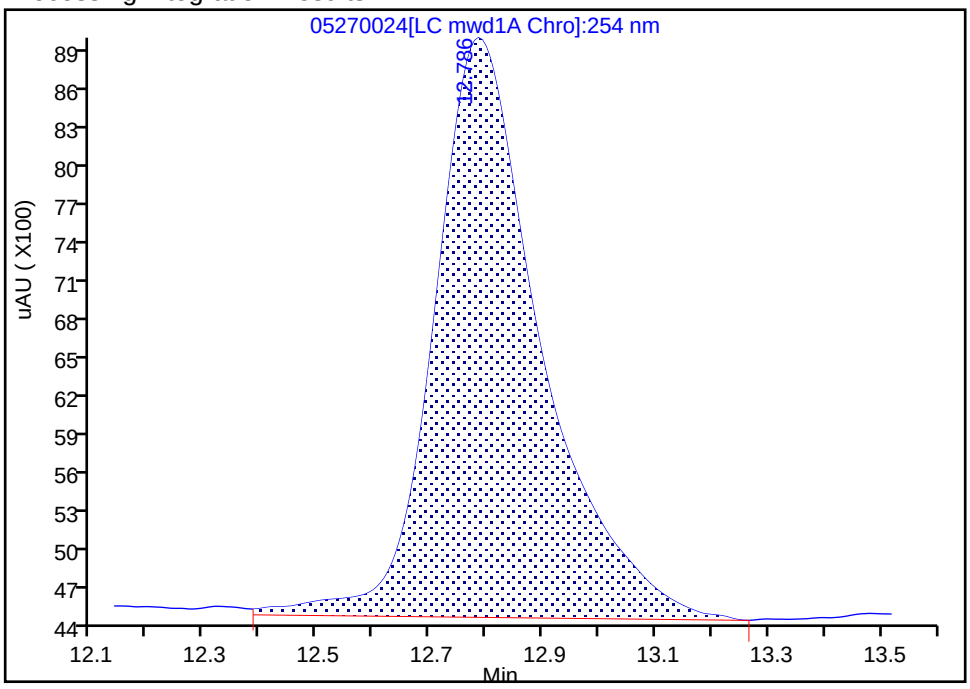
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270024.D				
Injection Date:	28-May-2022 02:43:44	Instrument ID:	CHHPLC_X5		
Lims ID:	280-162622-A-11-A	Lab Sample ID:	280-162622-11		
Client ID:	PZ020-22A				
Operator ID:	JZ	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

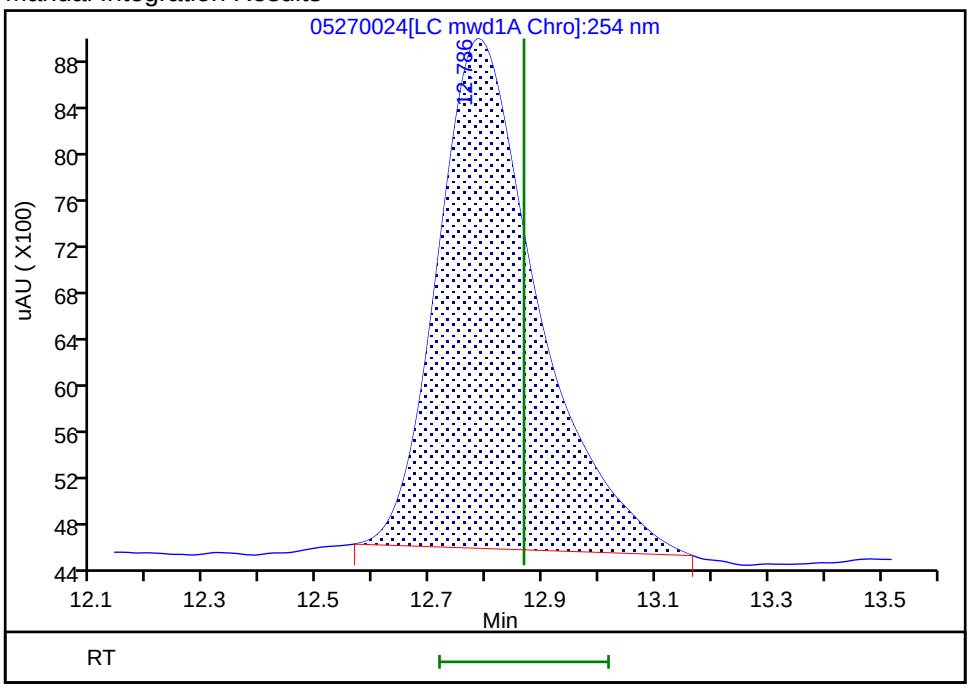
Processing Integration Results

RT: 12.79
Area: 58013
Amount: 0.232282
Amount Units: ug/ml



Manual Integration Results

RT: 12.79
Area: 52887
Amount: 0.211757
Amount Units: ug/ml



Reviewer: zhangji, 28-May-2022 14:09:59

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

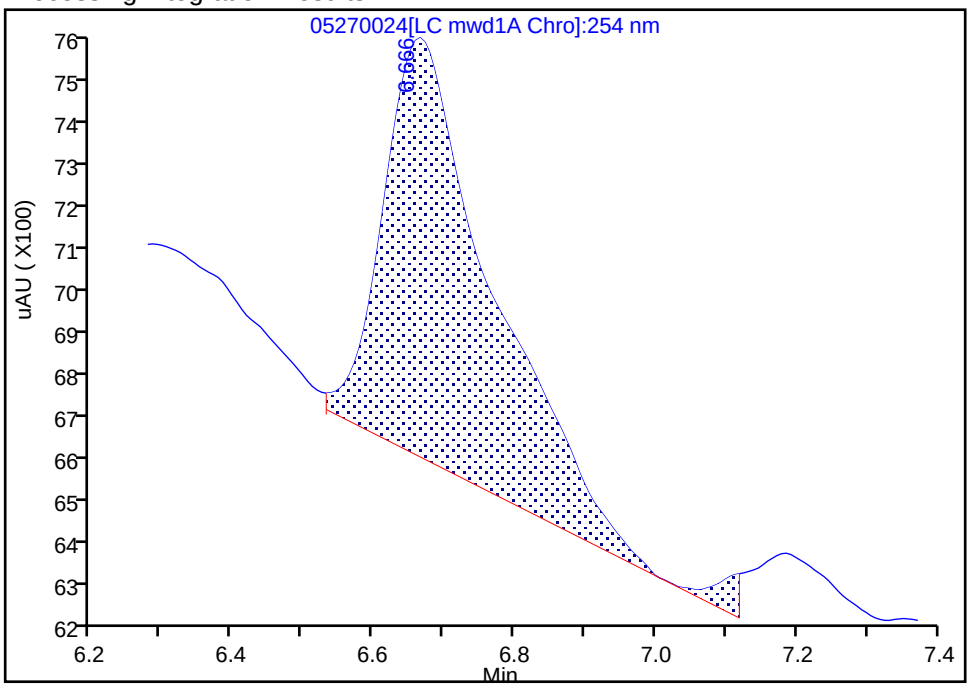
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270024.D				
Injection Date:	28-May-2022 02:43:44	Instrument ID:	CHHPLC_X5		
Lims ID:	280-162622-A-11-A	Lab Sample ID:	280-162622-11		
Client ID:	PZ020-22A				
Operator ID:	JZ	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

5 HMX, CAS: 2691-41-0

Signal: 1

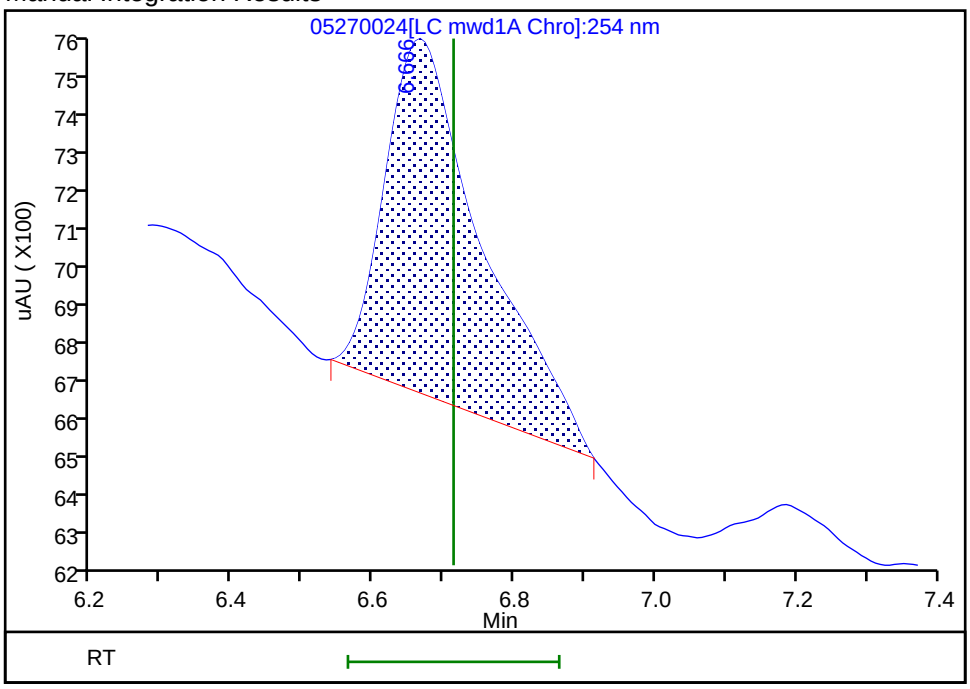
Processing Integration Results

RT: 6.67
Area: 10015
Amount: 0.060282
Amount Units: ug/ml



Manual Integration Results

RT: 6.67
Area: 8095
Amount: 0.048725
Amount Units: ug/ml



Reviewer: zhangji, 28-May-2022 14:09:52

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

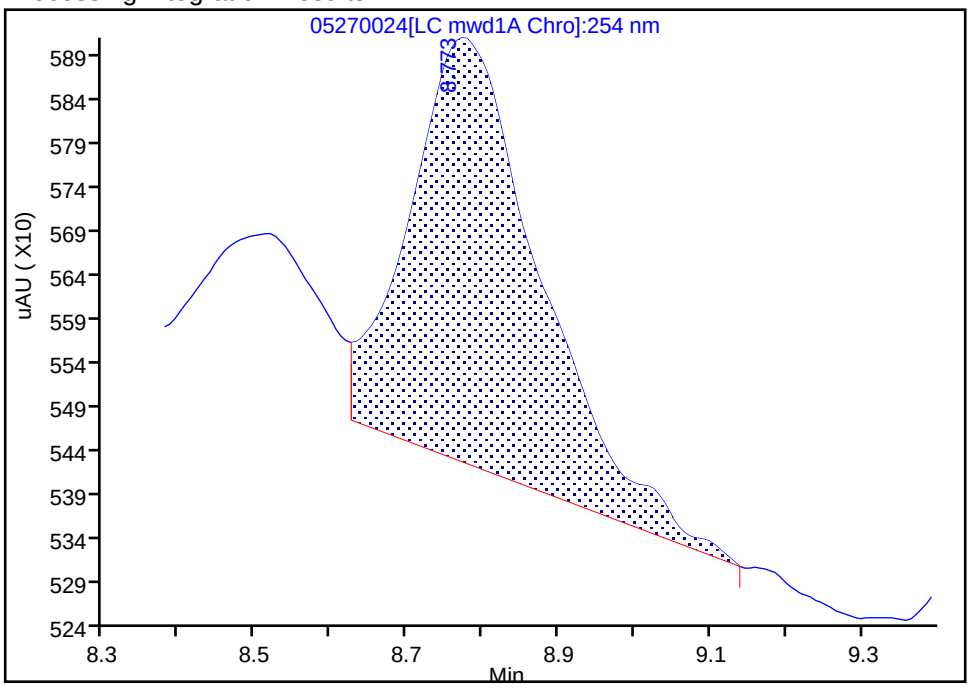
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270024.D				
Injection Date:	28-May-2022 02:43:44	Instrument ID:	CHHPLC_X5		
Lims ID:	280-162622-A-11-A	Lab Sample ID:	280-162622-11		
Client ID:	PZ020-22A				
Operator ID:	JZ	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	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

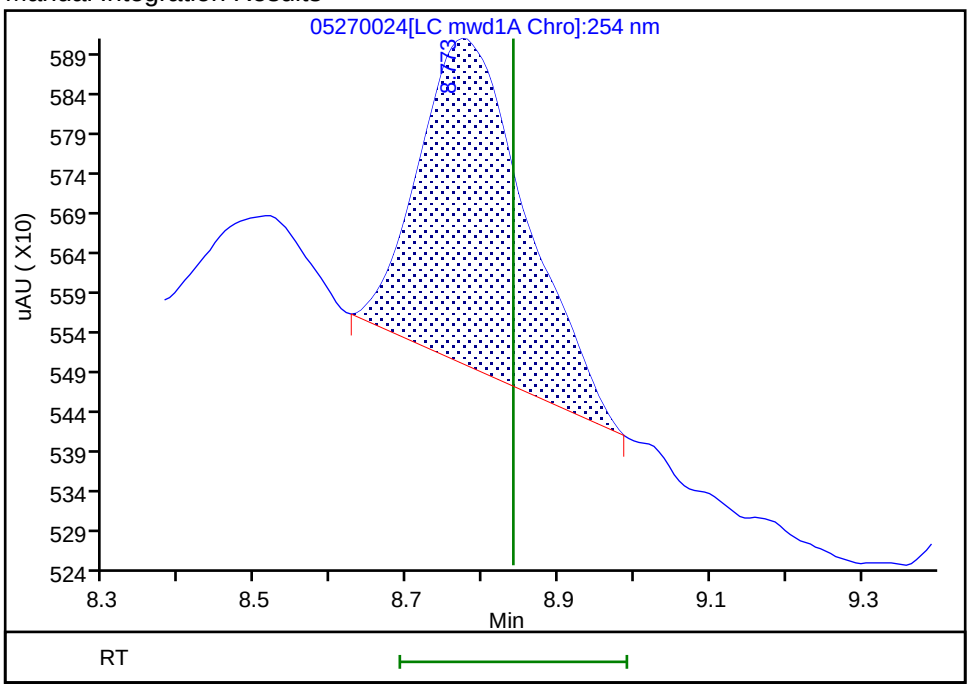
Processing Integration Results

RT: 8.77
Area: 5908
Amount: 0.030402
Amount Units: ug/ml



Manual Integration Results

RT: 8.77
Area: 4124
Amount: 0.021222
Amount Units: ug/ml



Reviewer: zhangji, 28-May-2022 14:09:56

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0077-22A | Lab Sample ID: 280-162622-12

Matrix: Water | Lab File ID: 05260029.D

Analysis Method: 8330A | Date Collected: 05/18/2022 16:20

Extraction Method: 3535 | Date Extracted: 05/25/2022 15:23

Sample wt/vol: 472(mL) | Date Analyzed: 05/27/2022 00:44

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 576310 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	5.4	M	0.22	0.21	0.089
118-96-7	2,4,6-Trinitrotoluene	7.7		0.12	0.11	0.048
121-14-2	2,4-Dinitrotoluene	0.085	U M	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	4.2		0.12	0.11	0.054
88-72-2	2-Nitrotoluene	0.21	U	0.22	0.21	0.091
99-08-1	3-Nitrotoluene	0.42	U	0.42	0.42	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	4.8		0.16	0.13	0.061
2691-41-0	HMX	0.75	M J1	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	0.22	0.21	0.096
121-82-4	RDX	1.2	M	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	112	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\05260029.D
Lims ID: 280-162622-A-12-A
Client ID: G0077-22A
Sample Type: Client
Inject. Date: 27-May-2022 00:44:11 ALS Bottle#: 29 Worklist Smp#: 29
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-162622-A-12-
Misc. Info.: 280-0111383-029
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 27-May-2022 13:18:33 Calib Date: 25-Mar-2022 16:30:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220325-109559.b\03250017.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1651

First Level Reviewer: zhangji Date: 27-May-2022 13:09:41

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1	6.585	6.593	-0.008	5925	0.0707	M
7 MNX	1		7.211			ND	U
8 RDX	1	7.578	7.586	-0.008	11966	0.1155	M
$ 10 1,2-Dinitrobenzene	1	8.532	8.546	-0.014	27872	0.2235	M
11 1,3,5-Trinitrobenzene	1	8.658	8.666	-0.008	111442	0.5110	M
12 1,3-Dinitrobenzene	1	9.285	9.299	-0.014	8502	0.0295	M
13 Nitrobenzene	1		9.686			ND	
15 Tetryl	1		10.013			ND	U
17 2,4,6-Trinitrotoluene	1	10.898	10.919	-0.021	147831	0.7292	
18 4-Amino-2,6-dinitrotoluene	1	11.098	11.119	-0.021	68481	0.4536	
19 2-Amino-4,6-dinitrotoluene	1	11.352	11.373	-0.021	79835	0.3949	
20 2,6-Dinitrotoluene	1		11.533			ND	
21 2,4-Dinitrotoluene	1		11.706			ND	U
22 o-Nitrotoluene	1		12.559			ND	
23 p-Nitrotoluene	1	12.978	12.993	-0.015	3706	0.0349	
24 m-Nitrotoluene	1		13.566			ND	

QC Flag Legend

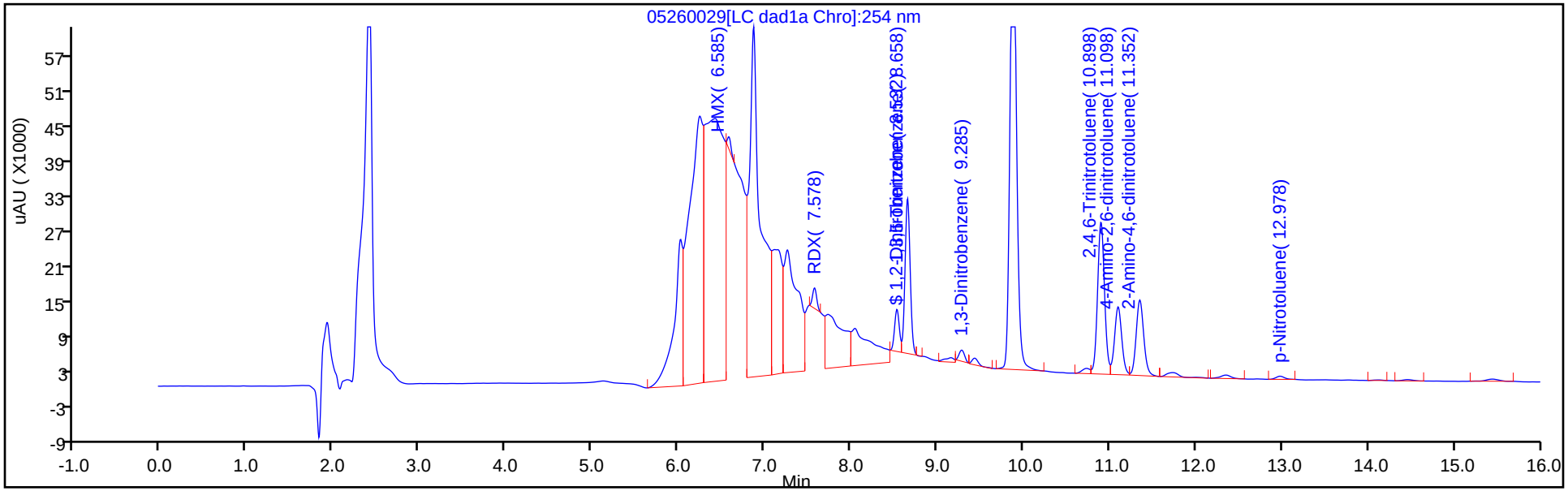
Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 27-May-2022 13:18:36 Chrom Revision: 2.3 18-May-2022 20:00:04

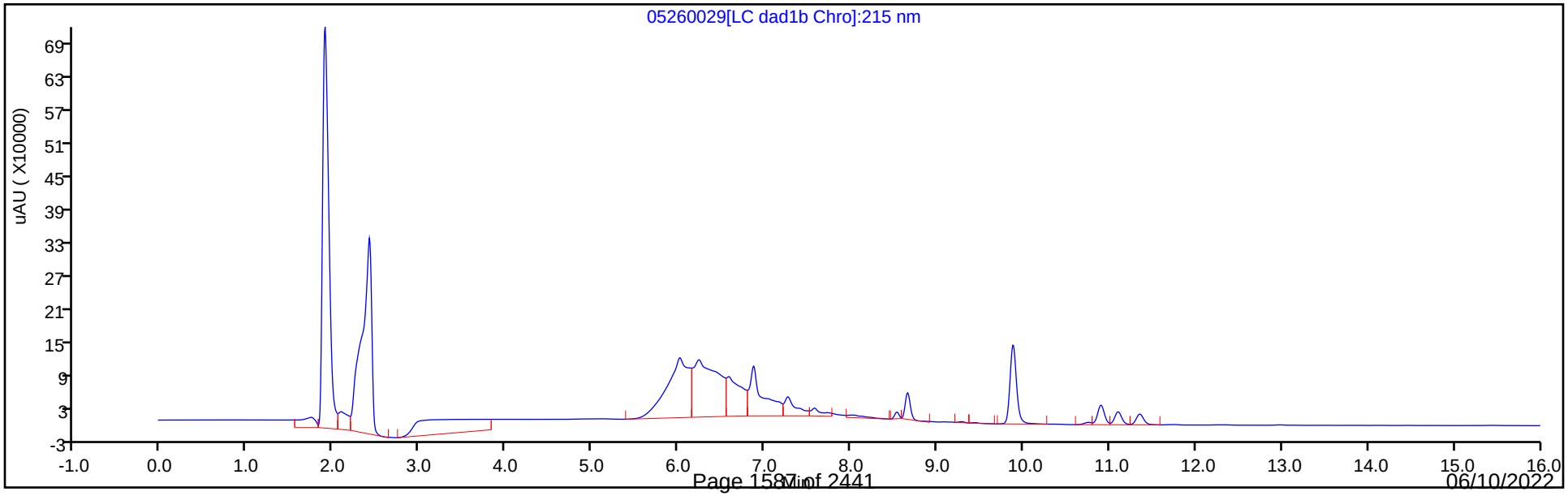
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260029.d				
Injection Date:	27-May-2022 00:44:11	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-162622-A-12-A	Lab Sample ID:	280-162622-12	Worklist Smp#:	29
Client ID:	G0077-22A				
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 Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\05260029.D				
Lims ID:	280-162622-A-12-A				
Client ID:	G0077-22A				
Sample Type:	Client				
Inject. Date:	27-May-2022 00:44:11	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-162622-A-12-				
Misc. Info.:	280-0111383-029				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	27-May-2022 13:18:33	Calib Date:	25-Mar-2022 16:30:08		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220325-109559.b\03250017.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1651				

First Level Reviewer: zhangji Date: 27-May-2022 13:09:41

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2235	111.76

Manual Integration/User Assign Peak Report

Eurofins Denver

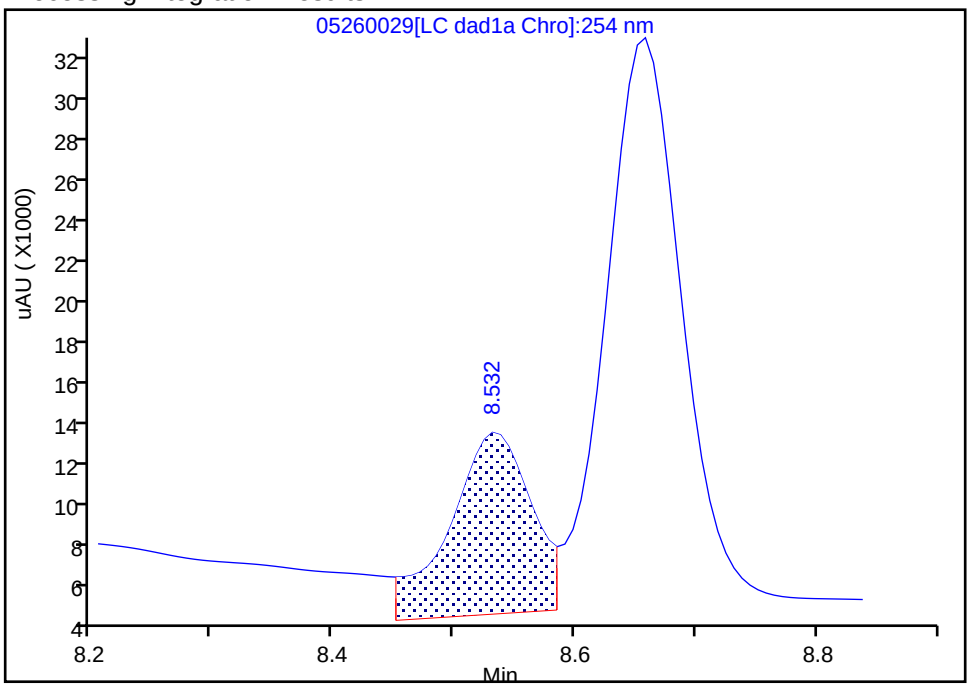
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260029.d				
Injection Date:	27-May-2022 00:44:11	Instrument ID:	CHHPLC_X3		
Lims ID:	280-162622-A-12-A	Lab Sample ID:	280-162622-12		
Client ID:	G0077-22A				
Operator ID:	JZ	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

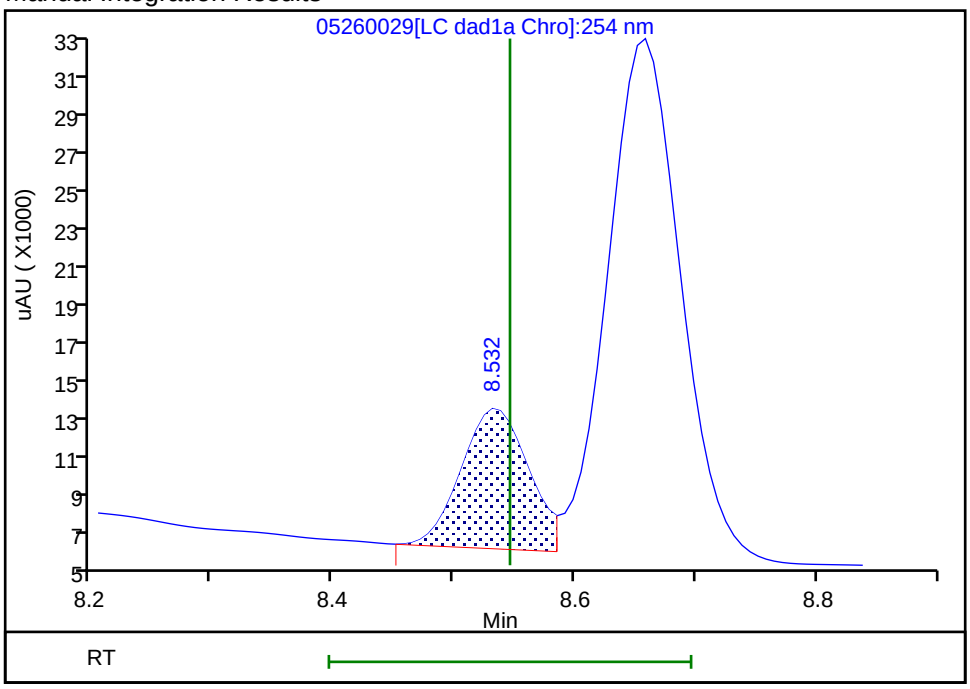
Processing Integration Results

RT: 8.53
Area: 41048
Amount: 0.329180
Amount Units: ug/mL



Manual Integration Results

RT: 8.53
Area: 27872
Amount: 0.223517
Amount Units: ug/mL



Reviewer: zhangji, 27-May-2022 13:09:19
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

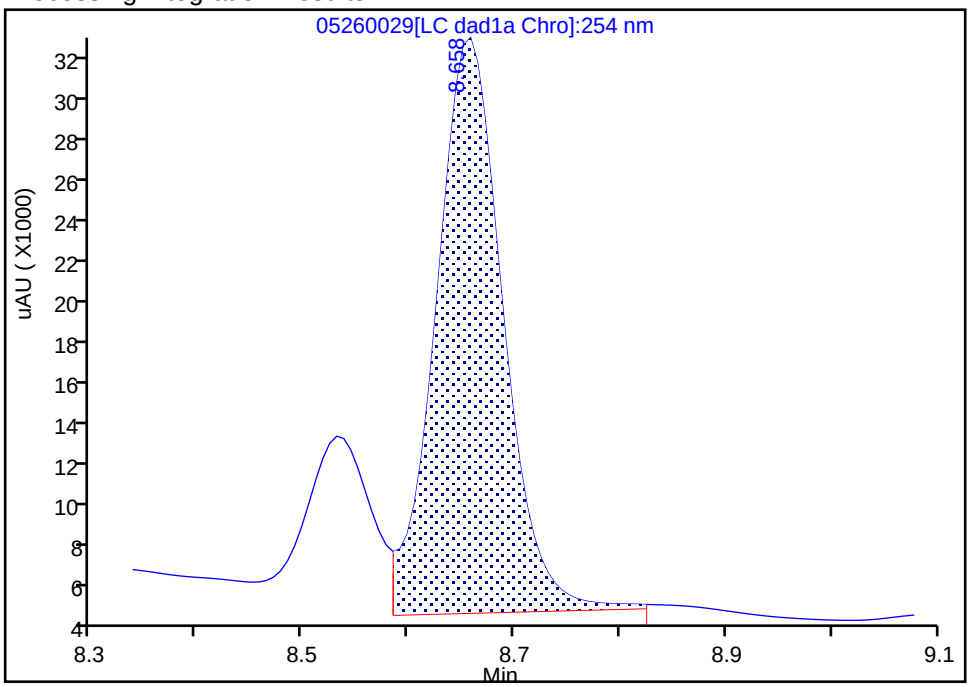
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260029.d				
Injection Date:	27-May-2022 00:44:11	Instrument ID:	CHHPLC_X3		
Lims ID:	280-162622-A-12-A	Lab Sample ID:	280-162622-12		
Client ID:	G0077-22A				
Operator ID:	JZ	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

11 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

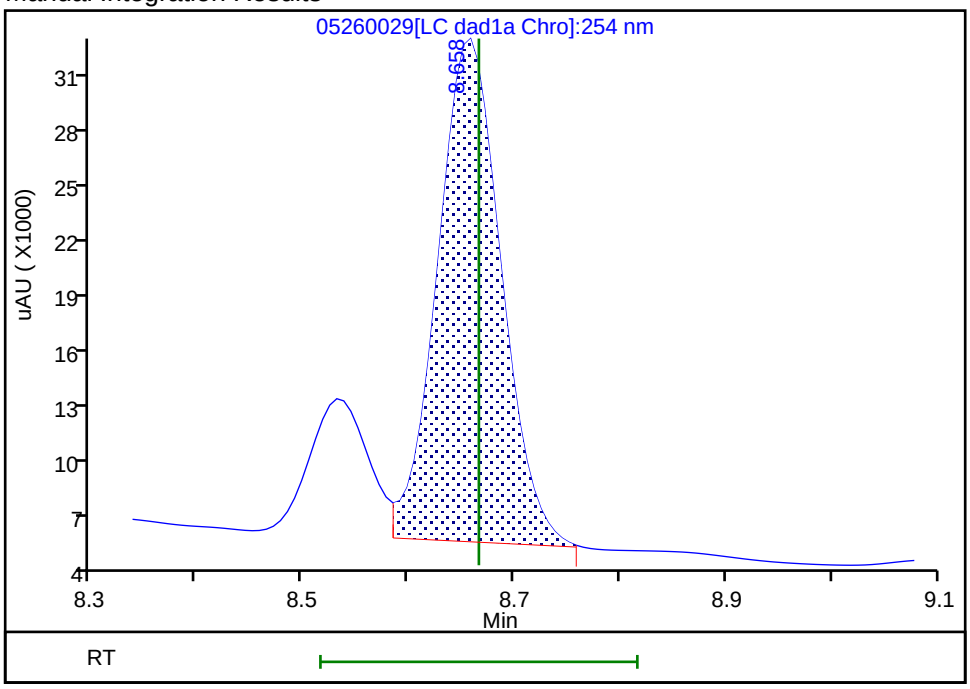
Processing Integration Results

RT: 8.66
Area: 121585
Amount: 0.557485
Amount Units: ug/mL



Manual Integration Results

RT: 8.66
Area: 111442
Amount: 0.510978
Amount Units: ug/mL



Reviewer: zhangji, 27-May-2022 13:09:22

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

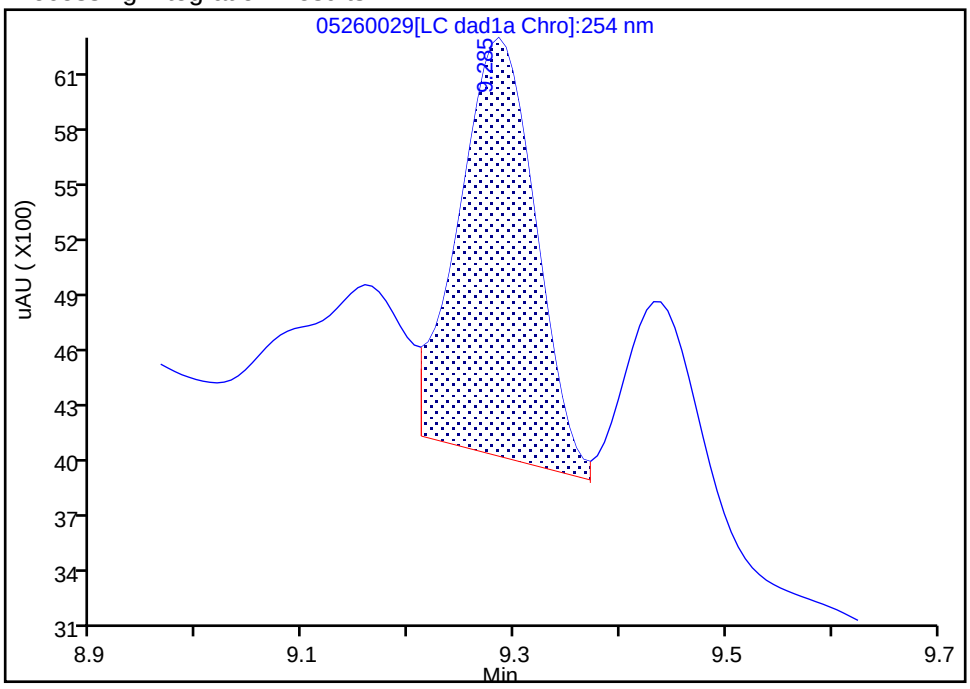
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260029.d				
Injection Date:	27-May-2022 00:44:11	Instrument ID:	CHHPLC_X3		
Lims ID:	280-162622-A-12-A	Lab Sample ID:	280-162622-12		
Client ID:	G0077-22A				
Operator ID:	JZ	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

12 1,3-Dinitrobenzene, CAS: 99-65-0

Signal: 1

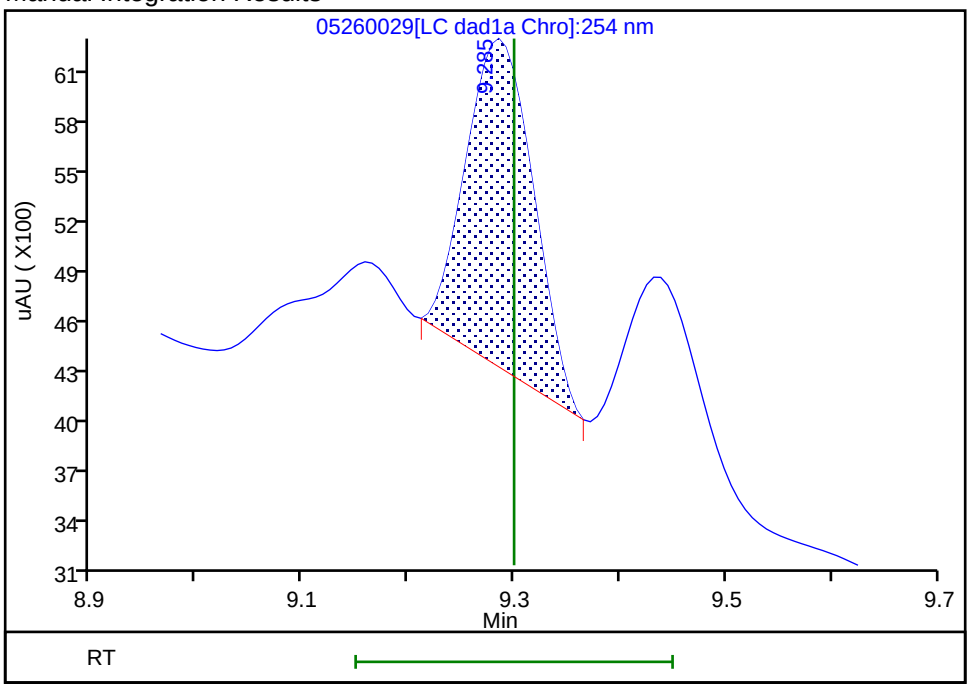
Processing Integration Results

RT: 9.28
Area: 11156
Amount: 0.038682
Amount Units: ug/mL



Manual Integration Results

RT: 9.28
Area: 8502
Amount: 0.029480
Amount Units: ug/mL



Reviewer: zhangji, 27-May-2022 13:09:28

Audit Action: Manually Integrated Audit Reason: Baseline

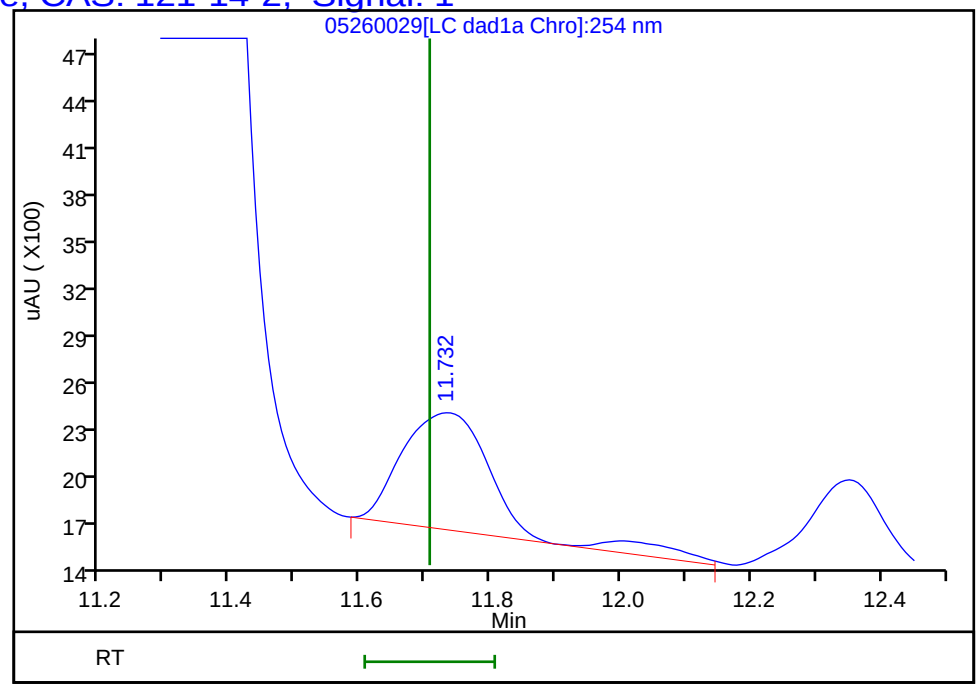
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260029.d				
Injection Date:	27-May-2022 00:44:11	Instrument ID:	CHHPLC_X3		
Lims ID:	280-162622-A-12-A	Lab Sample ID:	280-162622-12		
Client ID:	G0077-22A				
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		

21 2,4-Dinitrotoluene, CAS: 121-14-2, Signal: 1

RT: 11.73
Response: 7431
Amount: 0.025682



Reviewer: zhangji, 27-May-2022 13:09:41
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

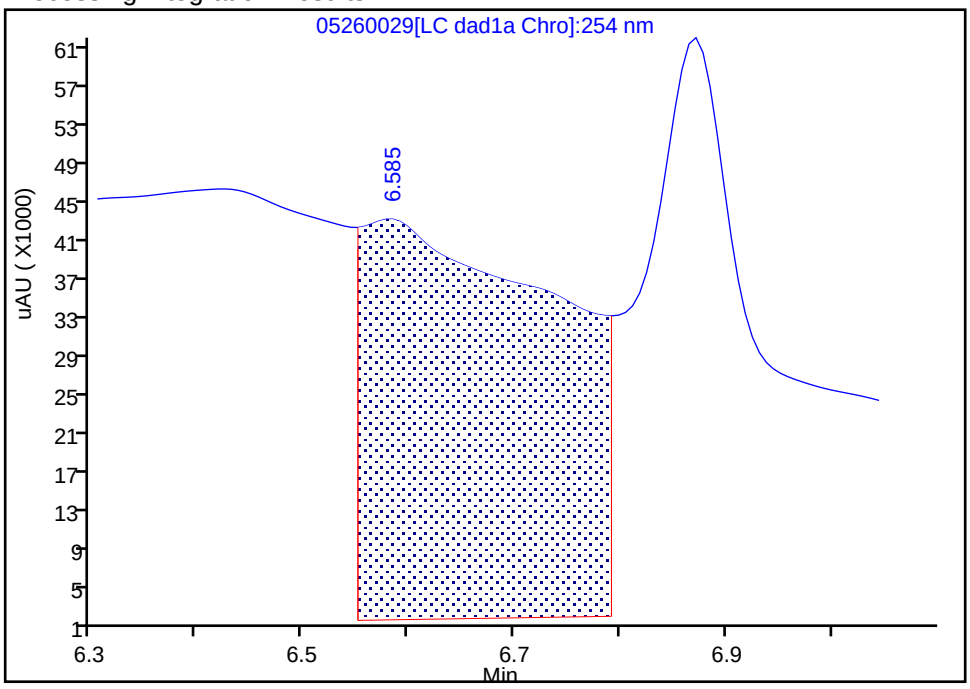
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260029.d				
Injection Date:	27-May-2022 00:44:11	Instrument ID:	CHHPLC_X3		
Lims ID:	280-162622-A-12-A	Lab Sample ID:	280-162622-12		
Client ID:	G0077-22A				
Operator ID:	JZ	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

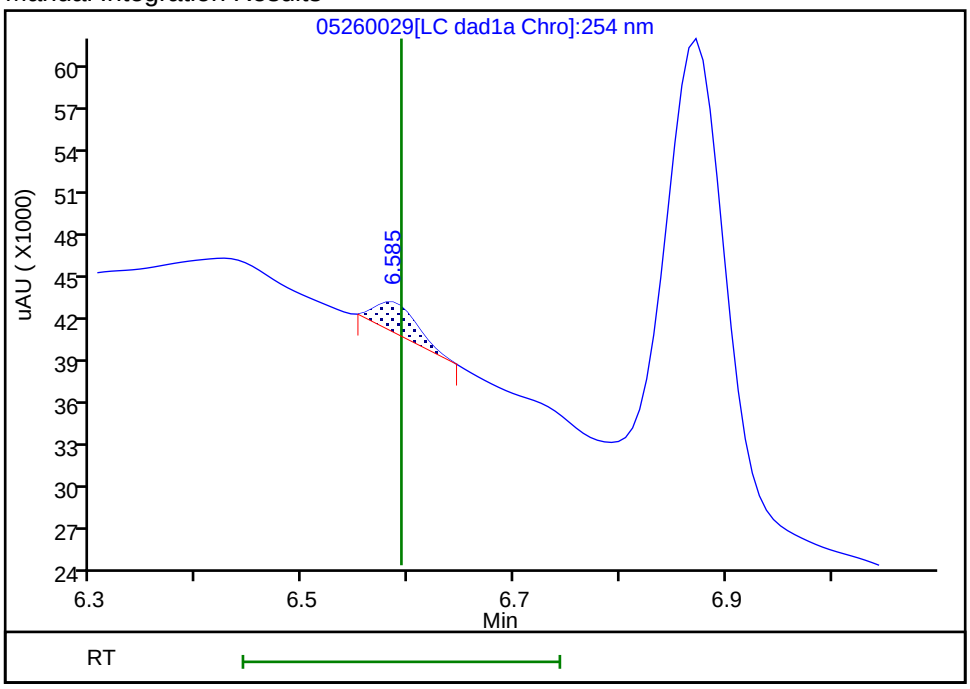
Processing Integration Results

RT: 6.59
Area: 526411
Amount: 6.279716
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 5925
Amount: 0.070681
Amount Units: ug/mL



Reviewer: zhangji, 27-May-2022 13:09:04

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

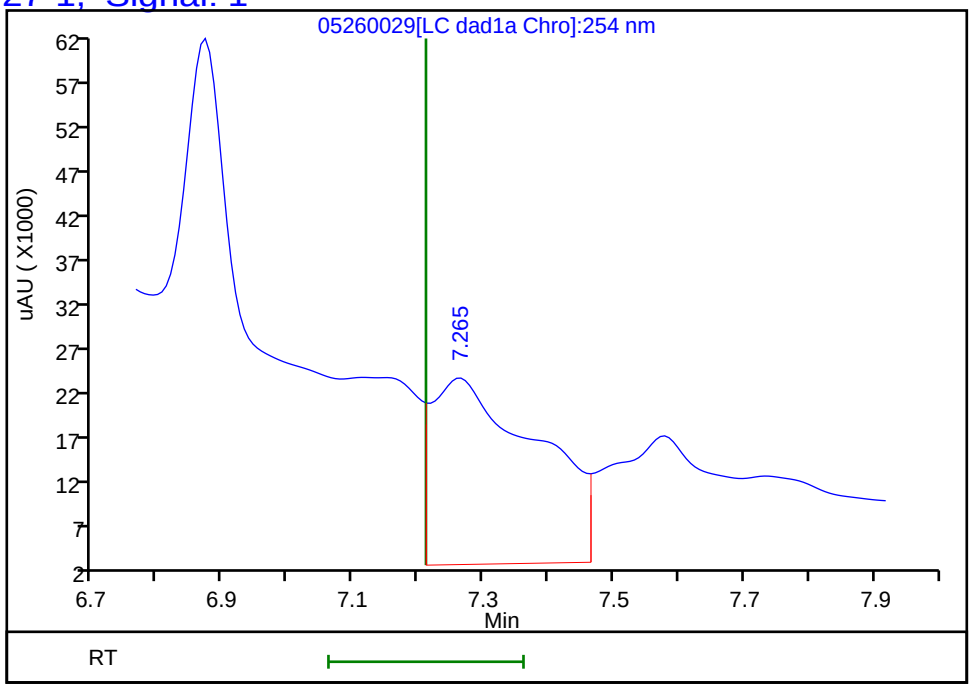
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260029.d
Injection Date: 27-May-2022 00:44:11 Instrument ID: CHHPLC_X3
Lims ID: 280-162622-A-12-A Lab Sample ID: 280-162622-12
Client ID: G0077-22A
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 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.27
Response: 239089
Amount: 1.897601



Reviewer: zhangji, 27-May-2022 13:09:41
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

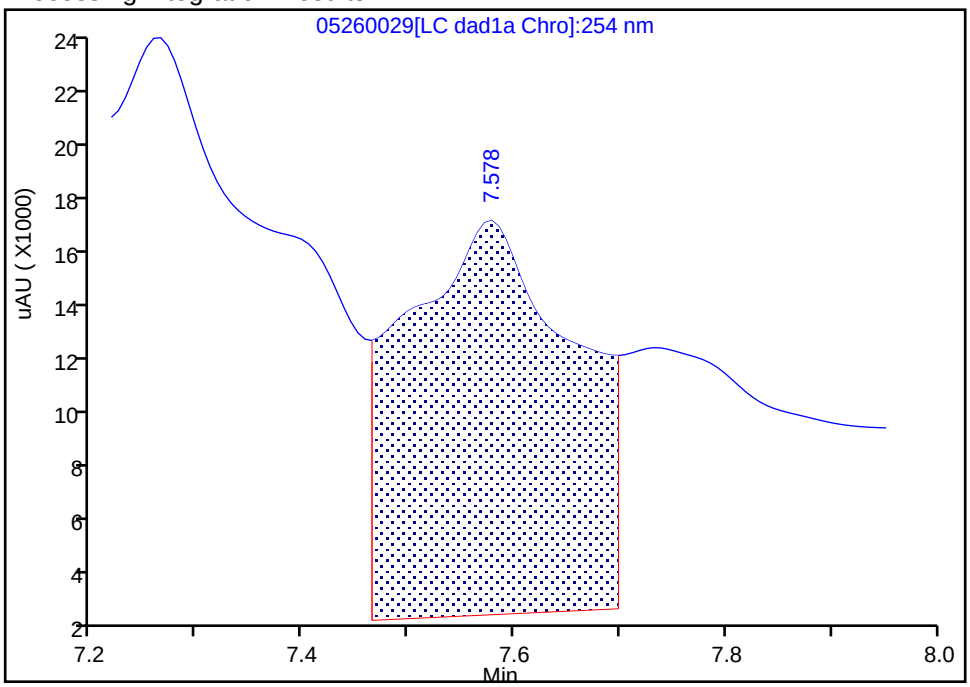
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260029.d				
Injection Date:	27-May-2022 00:44:11	Instrument ID:	CHHPLC_X3		
Lims ID:	280-162622-A-12-A	Lab Sample ID:	280-162622-12		
Client ID:	G0077-22A				
Operator ID:	JZ	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

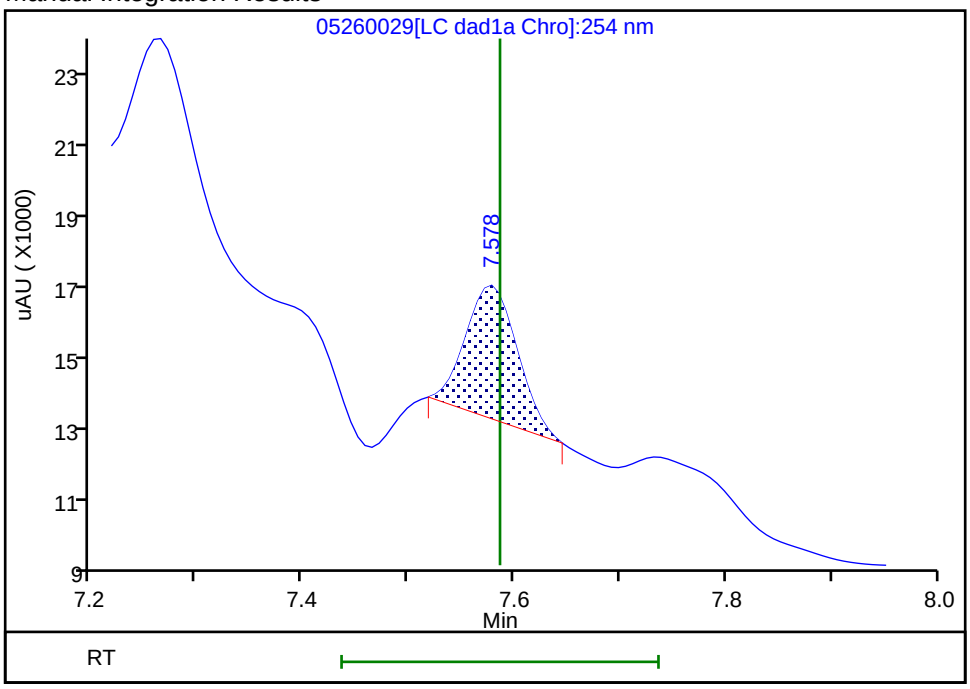
Processing Integration Results

RT: 7.58
Area: 156156
Amount: 1.507164
Amount Units: ug/mL



Manual Integration Results

RT: 7.58
Area: 11966
Amount: 0.115492
Amount Units: ug/mL



Reviewer: zhangji, 27-May-2022 13:09:11

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

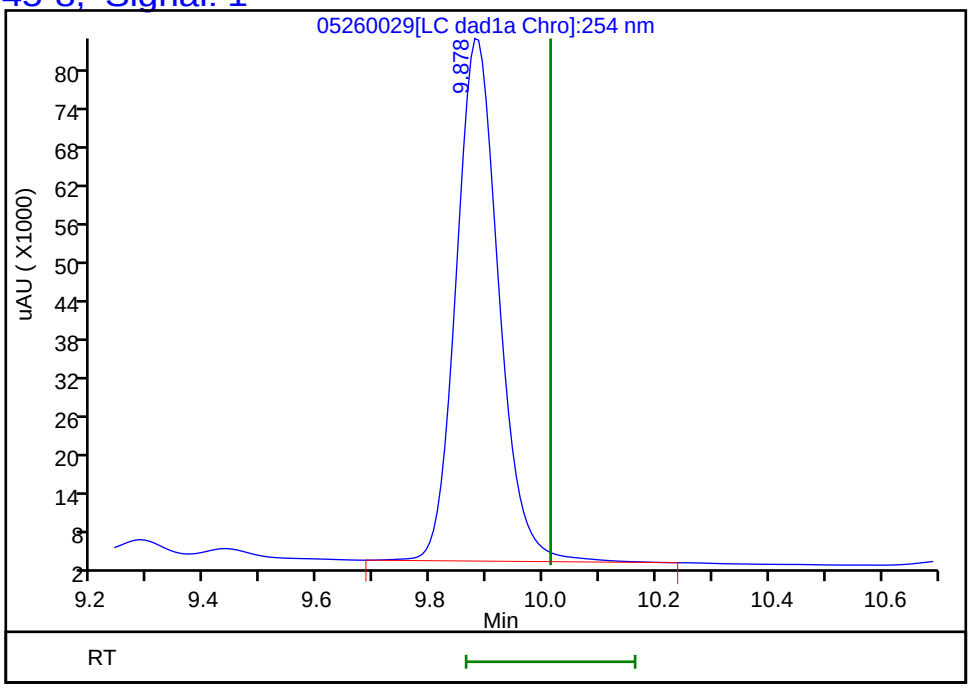
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260029.d
Injection Date: 27-May-2022 00:44:11 Instrument ID: CHHPLC_X3
Lims ID: 280-162622-A-12-A Lab Sample ID: 280-162622-12
Client ID: G0077-22A
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

15 Tetryl, CAS: 479-45-8, Signal: 1

RT: 9.88
Response: 429531
Amount: 2.518257



Reviewer: zhangji, 27-May-2022 13:09:41
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0077-22A | Lab Sample ID: 280-162622-12

Matrix: Water | Lab File ID: 05270025.D

Analysis Method: 8330A | Date Collected: 05/18/2022 16:20

Extraction Method: 3535 | Date Extracted: 05/25/2022 15:23

Sample wt/vol: 472(mL) | Date Analyzed: 05/28/2022 03:18

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: Luna-phenylhex ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 576448 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-65-0	1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.039
99-99-0	4-Nitrotoluene	0.42	U	0.43	0.42	0.11
2691-41-0	*HMX*	*1.1*	*J1*	*0.22*	0.21	*0.093*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	113	*M*	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270025.D
Lims ID: 280-162622-A-12-A
Client ID: G0077-22A
Sample Type: Client
Inject. Date: 28-May-2022 03:18:51 ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-162622-A-12-A
Misc. Info.: 280-0111418-025
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 28-May-2022 14:12:44 Calib Date: 03-Mar-2022 07:19:48
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1652

First Level Reviewer: zhangji Date: 28-May-2022 14:10:29

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	5 HMX	1	6.674	6.713	-0.039	17698	0.1065	
	6 MNX	1	7.394	7.440	-0.046	9025	0.0361	M
	8 RDX	1	8.767	8.840	-0.073	20756	0.1068	
	9 Nitrobenzene	1		11.707			ND	
$	10 1,2-Dinitrobenzene	1	12.793	12.867	-0.074	56283	0.2254	M
	12 1,3-Dinitrobenzene	1		15.233			ND	
	14 o-Nitrotoluene	1		16.327			ND	7
	16 p-Nitrotoluene	1		16.627			ND	
	17 4-Amino-2,6-dinitrotoluene	1	17.160	17.247	-0.087	139684	0.5229	
	18 m-Nitrotoluene	1		17.573			ND	
	19 2-Amino-4,6-dinitrotoluene	1	18.153	18.233	-0.080	128672	0.3569	
	20 1,3,5-Trinitrobenzene	1	18.413	18.487	-0.074	241498	0.5813	
	21 2,6-Dinitrotoluene	1		19.720			ND	U
	22 2,4-Dinitrotoluene	1		20.233			ND	
	23 Tetryl	1		23.880			ND	
	24 2,4,6-Trinitrotoluene	1	24.600	24.680	-0.080	279018	0.7558	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

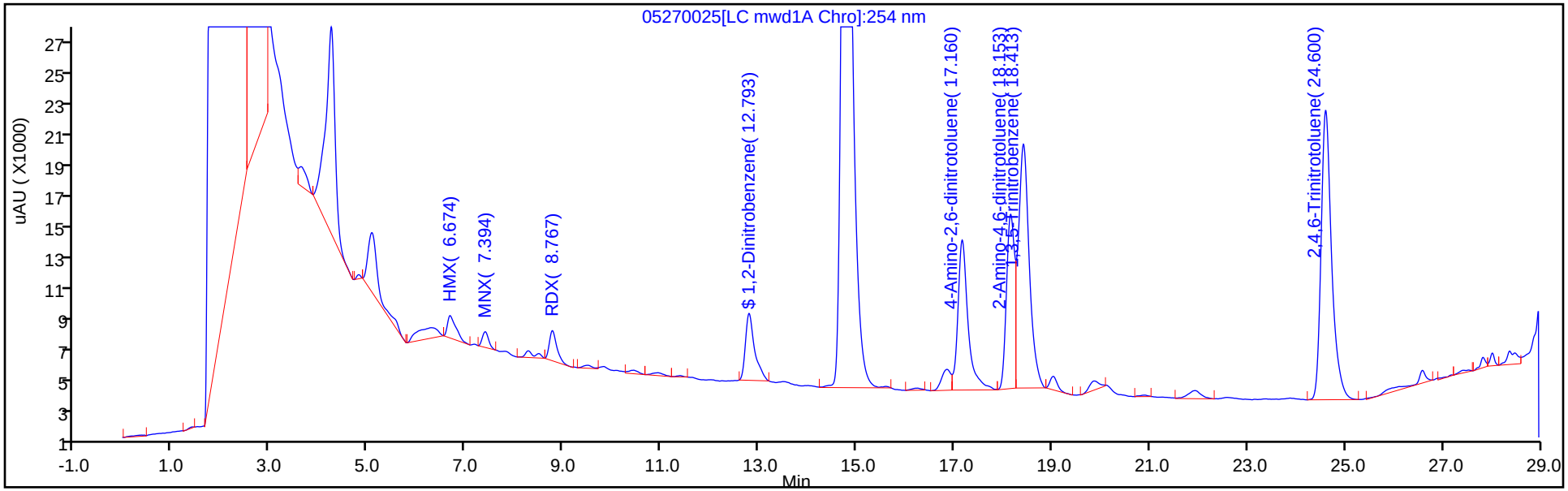
Report Date: 28-May-2022 14:12:46 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

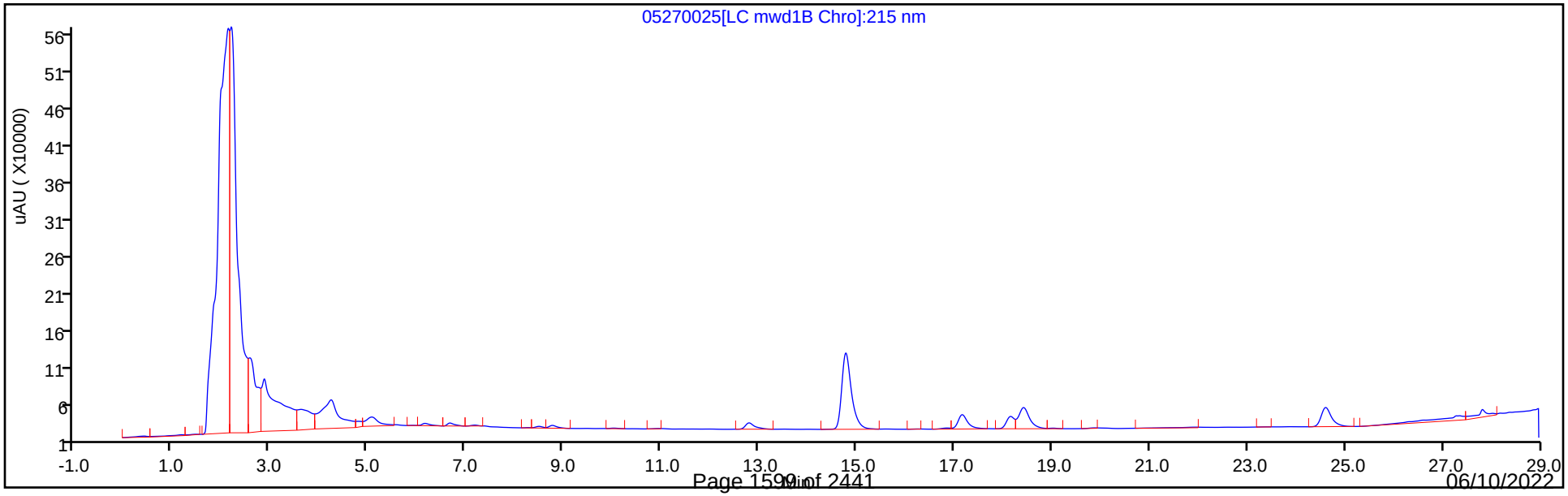
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270025.D

Injection Date:	28-May-2022 03:18:51	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-162622-A-12-A	Lab Sample ID:	280-162622-12	Worklist Smp#:	25
Client ID:	G0077-22A				
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 Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270025.D				
Lims ID:	280-162622-A-12-A				
Client ID:	G0077-22A				
Sample Type:	Client				
Inject. Date:	28-May-2022 03:18:51	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-162622-A-12-A				
Misc. Info.:	280-0111418-025				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	28-May-2022 14:12:44	Calib Date:	03-Mar-2022 07:19:48		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1652				
First Level Reviewer: zhangji		Date:	28-May-2022 14:10:29		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2254	112.68

Manual Integration/User Assign Peak Report

Eurofins Denver

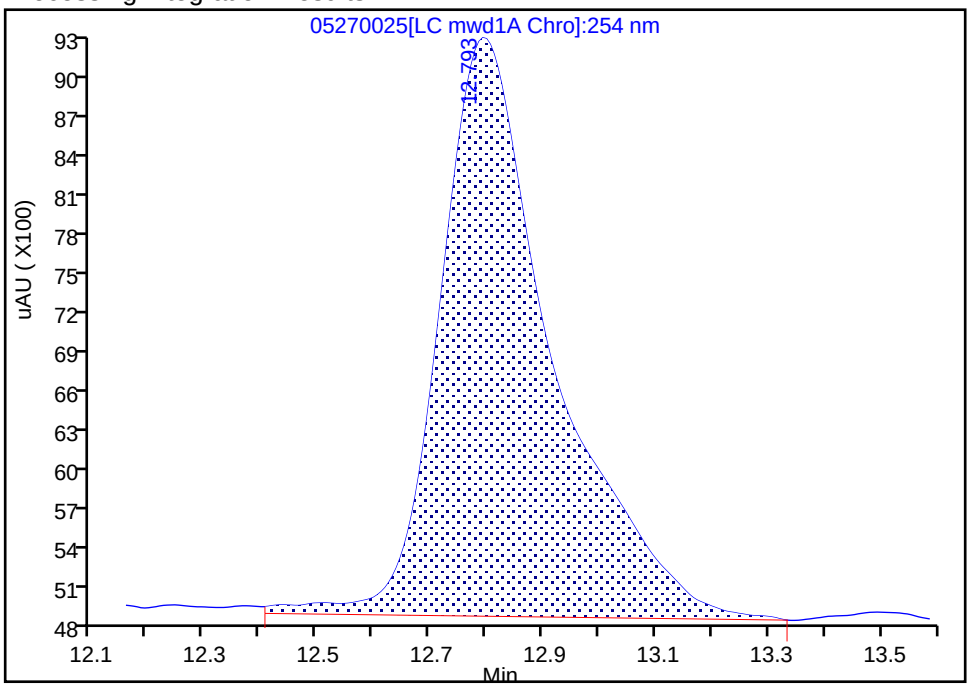
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270025.D				
Injection Date:	28-May-2022 03:18:51	Instrument ID:	CHHPLC_X5		
Lims ID:	280-162622-A-12-A	Lab Sample ID:	280-162622-12		
Client ID:	G0077-22A				
Operator ID:	JZ	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

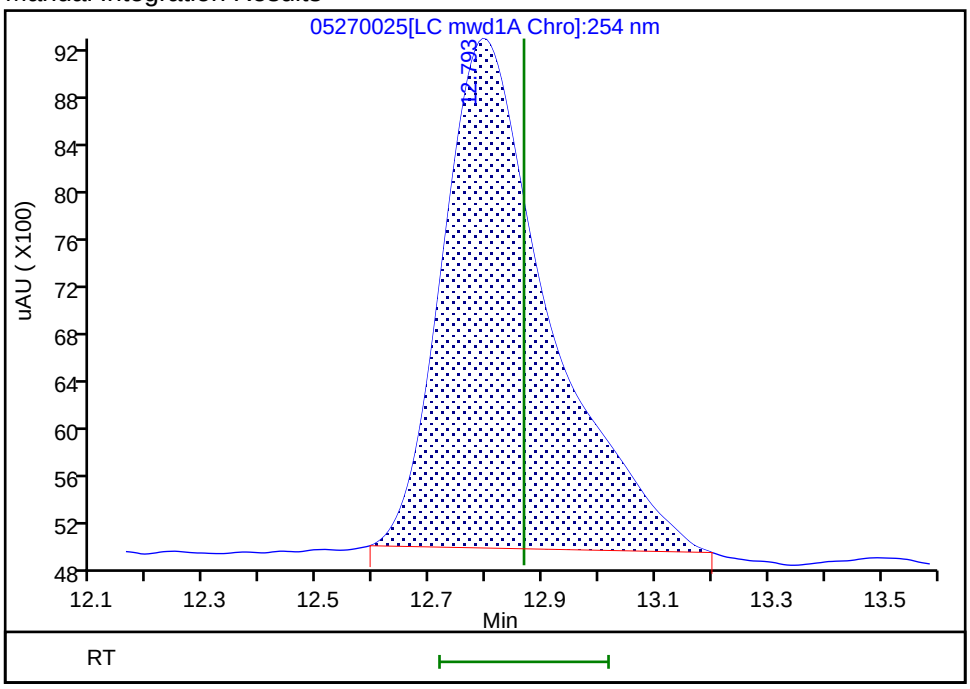
Processing Integration Results

RT: 12.79
Area: 61469
Amount: 0.246119
Amount Units: ug/ml



Manual Integration Results

RT: 12.79
Area: 56283
Amount: 0.225355
Amount Units: ug/ml



Reviewer: zhangji, 28-May-2022 14:10:13

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

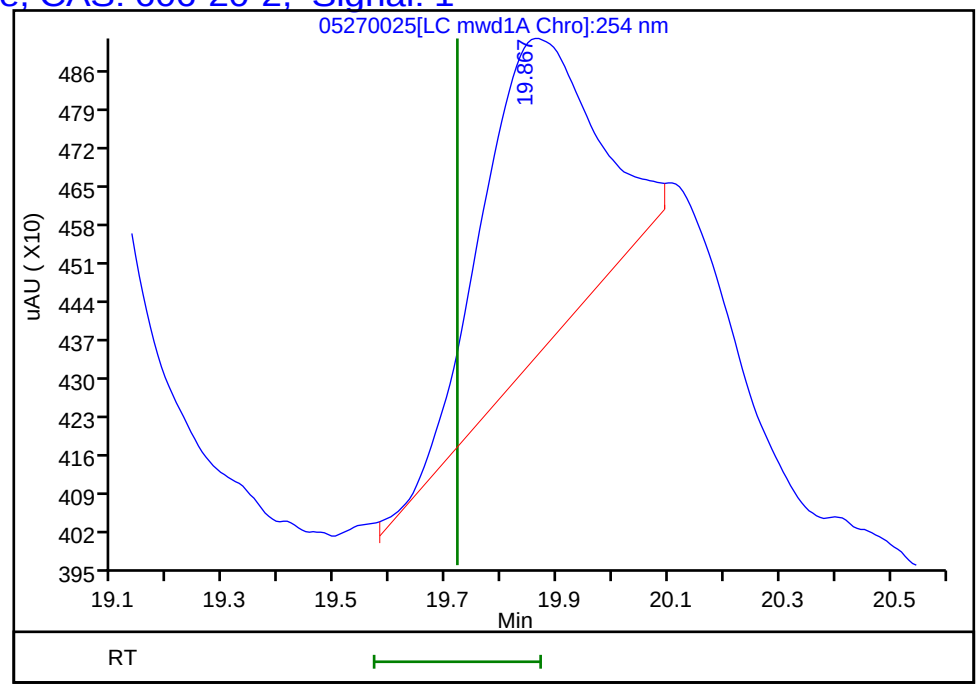
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270025.D				
Injection Date:	28-May-2022 03:18:51	Instrument ID:	CHHPLC_X5		
Lims ID:	280-162622-A-12-A	Lab Sample ID:	280-162622-12		
Client ID:	G0077-22A				
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 2,6-Dinitrotoluene, CAS: 606-20-2, Signal: 1

RT: 19.87
Response: 8120
Amount: 0.030565



Reviewer: zhangji, 28-May-2022 14:10:29

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

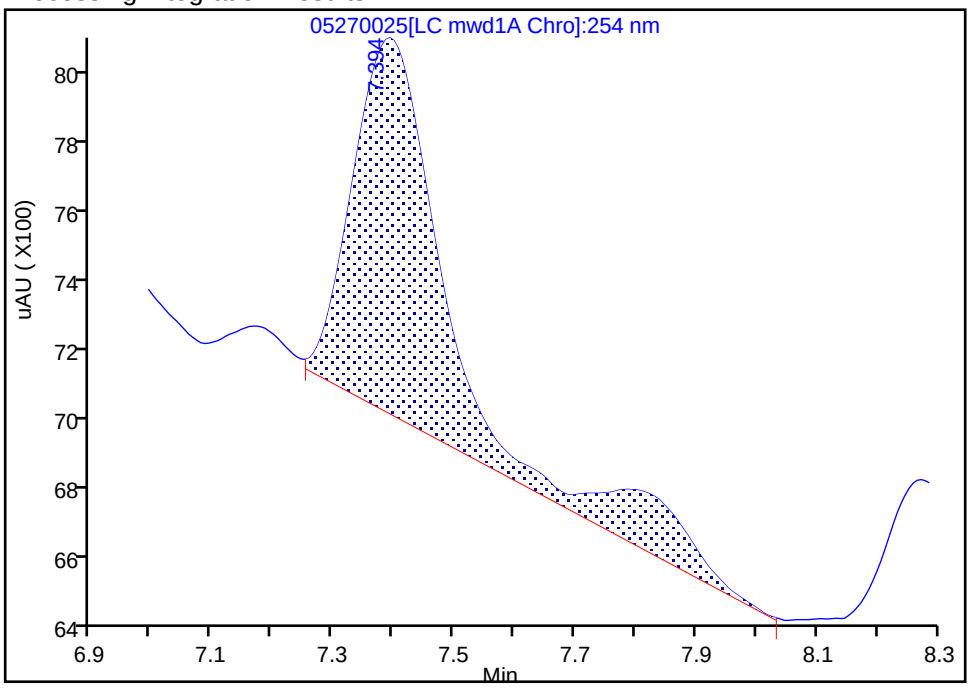
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270025.D				
Injection Date:	28-May-2022 03:18:51	Instrument ID:	CHHPLC_X5		
Lims ID:	280-162622-A-12-A	Lab Sample ID:	280-162622-12		
Client ID:	G0077-22A				
Operator ID:	JZ	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	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 MNX, CAS: 5755-27-1

Signal: 1

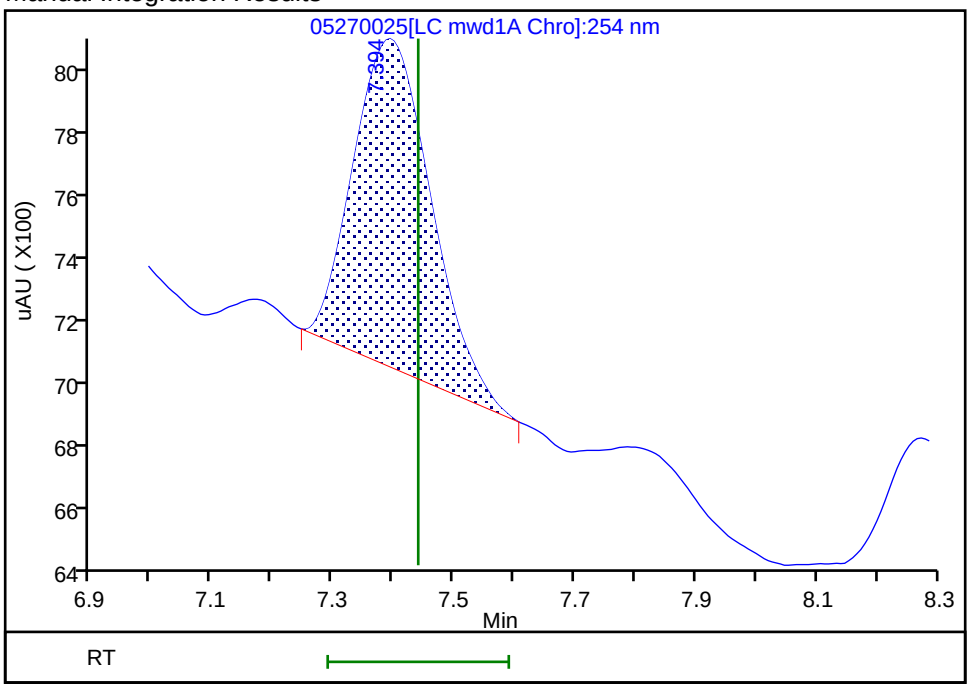
Processing Integration Results

RT: 7.39
Area: 11789
Amount: 0.047141
Amount Units: ug/ml



Manual Integration Results

RT: 7.39
Area: 9025
Amount: 0.036088
Amount Units: ug/ml



Reviewer: zhangji, 28-May-2022 14:10:19

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0311-22A | Lab Sample ID: 280-162622-16

Matrix: Water | Lab File ID: 05260030.D

Analysis Method: 8330A | Date Collected: 05/19/2022 08:00

Extraction Method: 3535 | Date Extracted: 05/25/2022 15:23

Sample wt/vol: 454.8(mL) | Date Analyzed: 05/27/2022 01:07

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 576310 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	4.3	M	0.23	0.22	0.092
118-96-7	2,4,6-Trinitrotoluene	3.6		0.12	0.11	0.049
121-14-2	2,4-Dinitrotoluene	0.65		0.11	0.088	0.030
606-20-2	2,6-Dinitrotoluene	0.088	U	0.11	0.088	0.044
35572-78-2	2-Amino-4,6-dinitrotoluene	8.6		0.12	0.11	0.056
88-72-2	2-Nitrotoluene	0.22	U	0.23	0.22	0.094
99-08-1	3-Nitrotoluene	0.44	U	0.44	0.44	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	5.7		0.16	0.13	0.063
2691-41-0	HMX	0.22	U M	0.23	0.22	0.096
5755-27-1	MNX	0.44	U M	2.2	0.44	0.17
98-95-3	Nitrobenzene	0.22	U M	0.23	0.22	0.10
121-82-4	RDX	0.22	U M	0.23	0.22	0.057
479-45-8	Tetryl	0.11	U M	0.12	0.11	0.035

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	118	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\05260030.D
Lims ID: 280-162622-A-16-A
Client ID: G0311-22A
Sample Type: Client
Inject. Date: 27-May-2022 01:07:07 ALS Bottle#: 30 Worklist Smp#: 30
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-162622-A-16-
Misc. Info.: 280-0111383-030
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 27-May-2022 13:18:33 Calib Date: 25-Mar-2022 16:30:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220325-109559.b\03250017.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1651

First Level Reviewer: zhangji Date: 27-May-2022 13:10:13

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.593			ND	U
7 MNX	1		7.211			ND	U
8 RDX	1		7.586			ND	U
$ 10 1,2-Dinitrobenzene	1	8.539	8.546	-0.007	29521	0.2367	M
11 1,3,5-Trinitrobenzene	1	8.659	8.666	-0.007	85554	0.3923	M
12 1,3-Dinitrobenzene	1	9.299	9.299	0.000	17650	0.0612	
13 Nitrobenzene	1		9.686			ND	U
15 Tetryl	1		10.013			ND	U
17 2,4,6-Trinitrotoluene	1	10.905	10.919	-0.014	65801	0.3246	
18 4-Amino-2,6-dinitrotoluene	1	11.099	11.119	-0.020	78157	0.5176	
19 2-Amino-4,6-dinitrotoluene	1	11.352	11.373	-0.021	157448	0.7788	
20 2,6-Dinitrotoluene	1		11.533			ND	
21 2,4-Dinitrotoluene	1	11.685	11.706	-0.021	17194	0.0594	
22 o-Nitrotoluene	1		12.559			ND	
23 p-Nitrotoluene	1	12.972	12.993	-0.021	1524	0.0143	
24 m-Nitrotoluene	1		13.566			ND	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

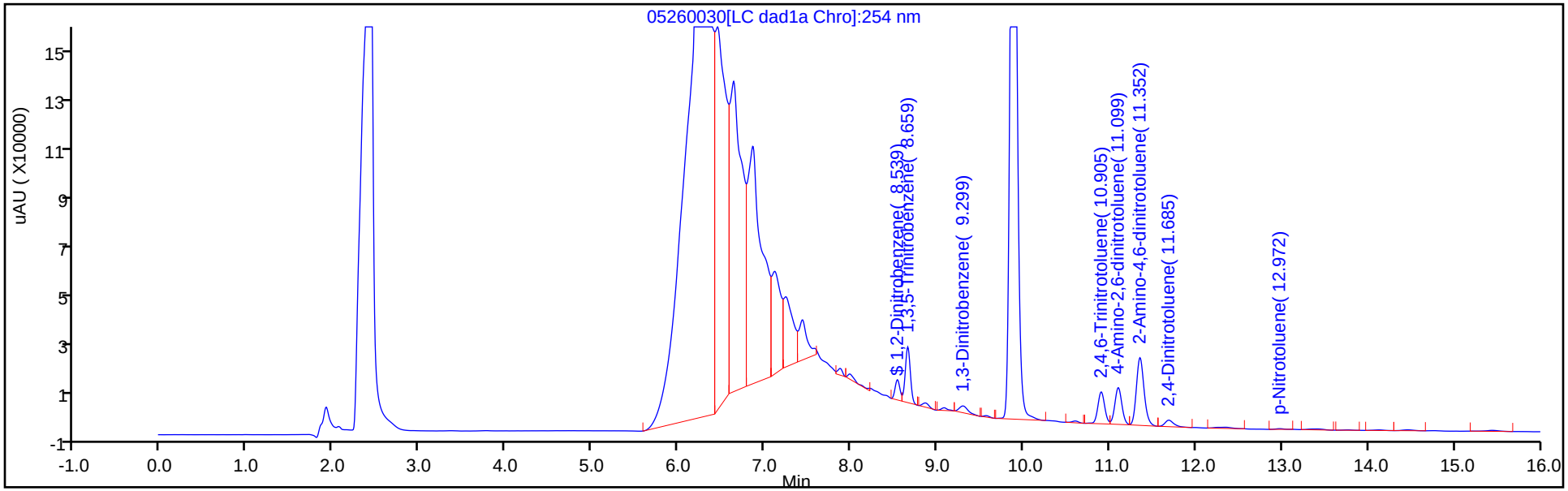
Report Date: 27-May-2022 13:18:35 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

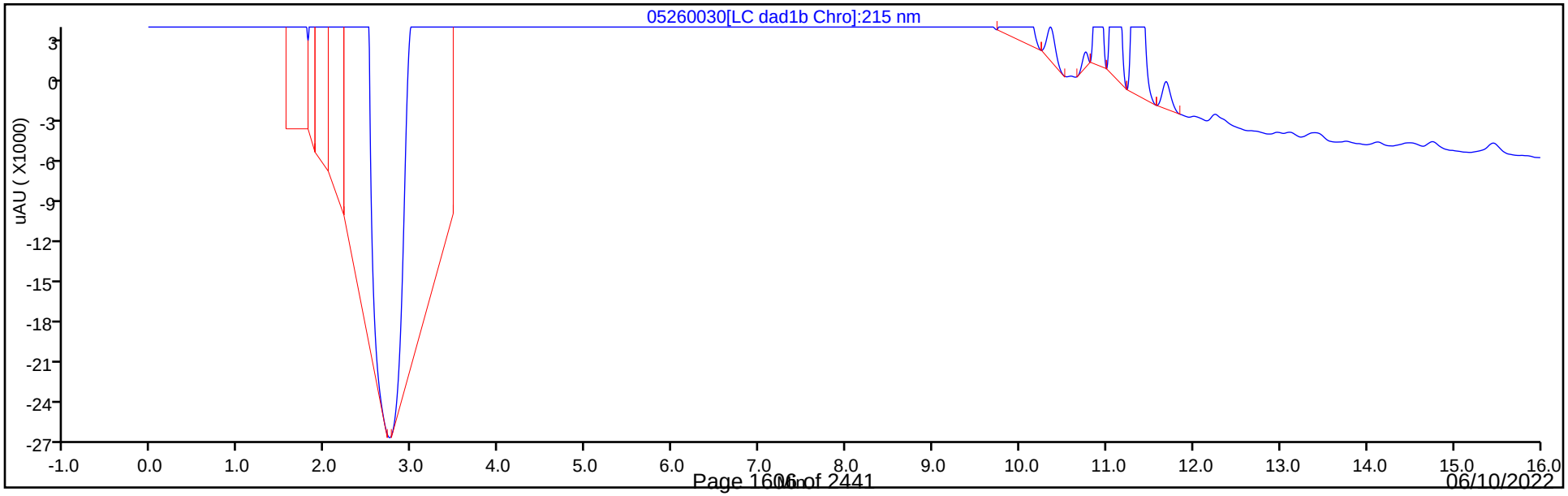
Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260030.d

Injection Date:	27-May-2022 01:07:07	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-162622-A-16-A	Lab Sample ID:	280-162622-16	Worklist Smp#:	30
Client ID:	G0311-22A				
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 Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\05260030.D				
Lims ID:	280-162622-A-16-A				
Client ID:	G0311-22A				
Sample Type:	Client				
Inject. Date:	27-May-2022 01:07:07	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-162622-A-16-				
Misc. Info.:	280-0111383-030				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	27-May-2022 13:18:33	Calib Date:	25-Mar-2022 16:30:08		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220325-109559.b\03250017.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1651				

First Level Reviewer: zhangji Date: 27-May-2022 13:10:13

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2367	118.37

Manual Integration/User Assign Peak Report

Eurofins Denver

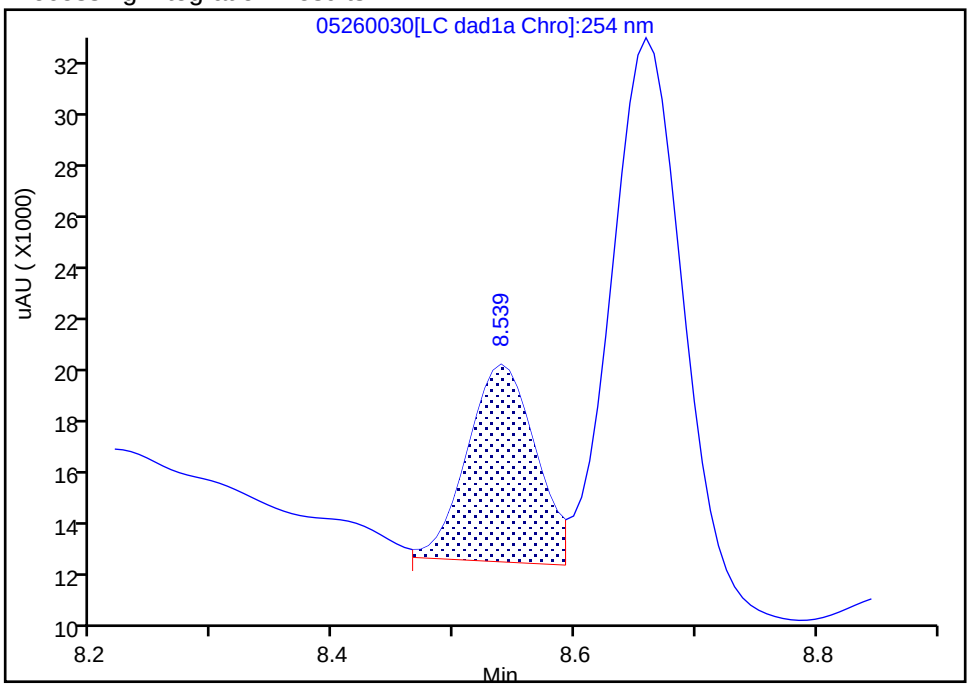
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260030.d				
Injection Date:	27-May-2022 01:07:07	Instrument ID:	CHHPLC_X3		
Lims ID:	280-162622-A-16-A	Lab Sample ID:	280-162622-16		
Client ID:	G0311-22A				
Operator ID:	JZ	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

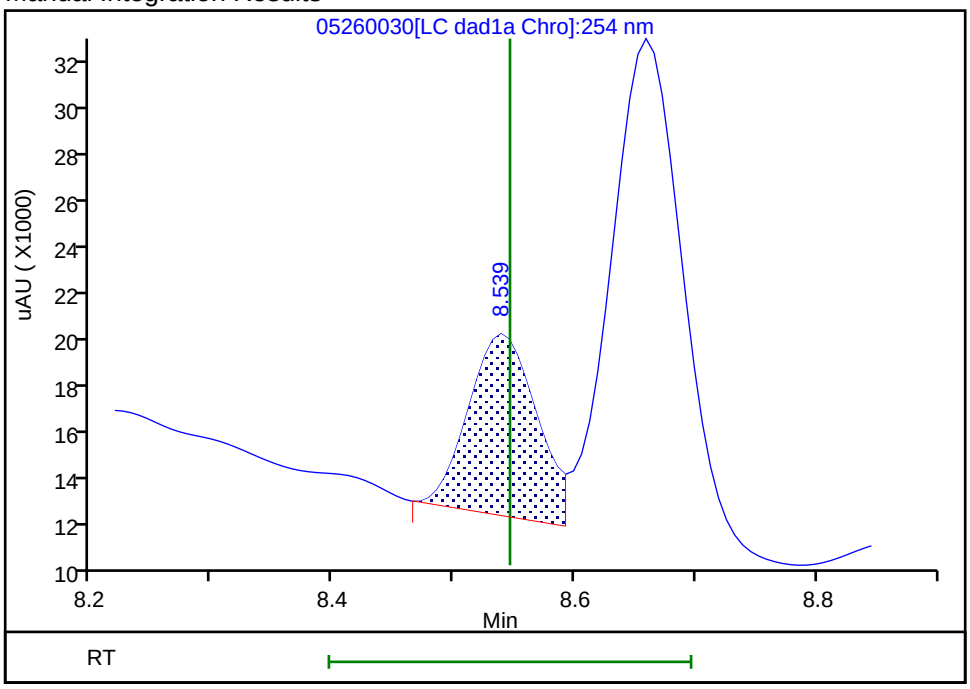
Processing Integration Results

RT: 8.54
Area: 28974
Amount: 0.232354
Amount Units: ug/mL



Manual Integration Results

RT: 8.54
Area: 29521
Amount: 0.236741
Amount Units: ug/mL



Reviewer: zhangji, 27-May-2022 13:10:11
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

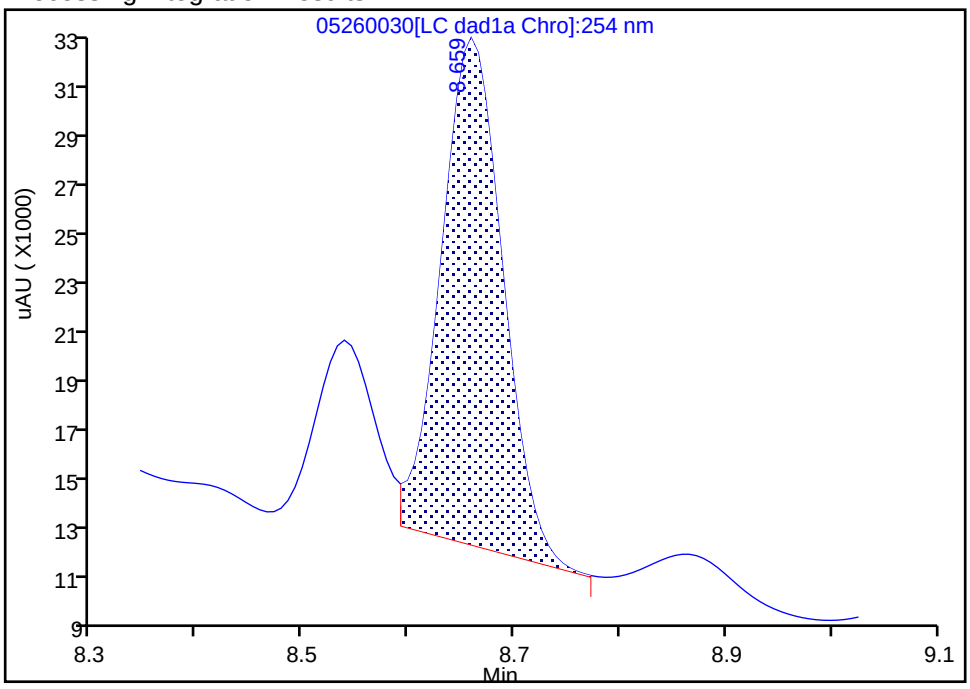
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260030.d				
Injection Date:	27-May-2022 01:07:07	Instrument ID:	CHHPLC_X3		
Lims ID:	280-162622-A-16-A	Lab Sample ID:	280-162622-16		
Client ID:	G0311-22A				
Operator ID:	JZ	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

11 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

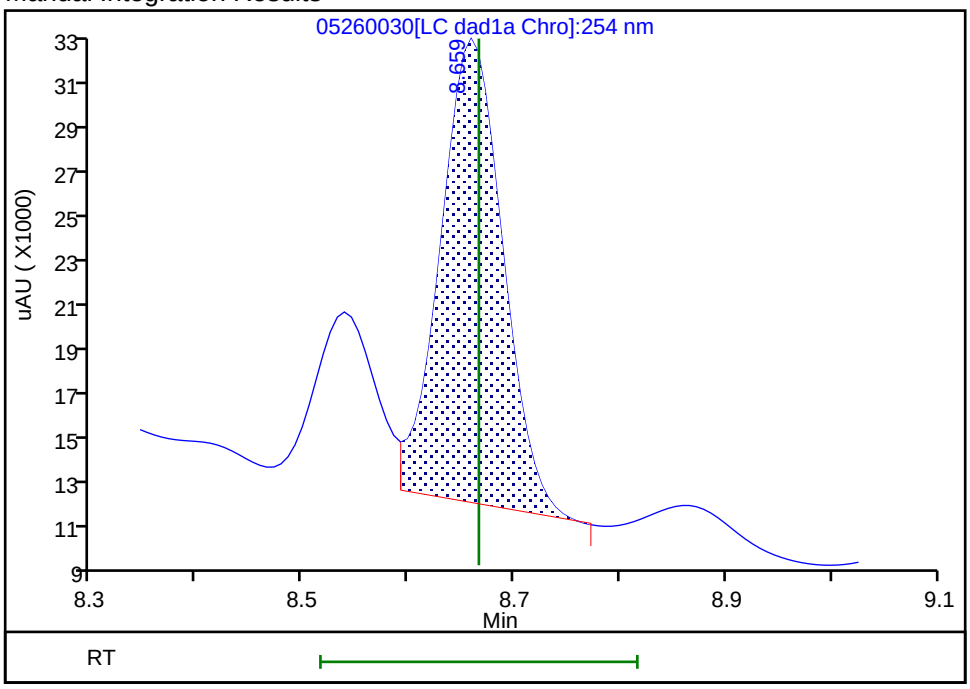
Processing Integration Results

RT: 8.66
Area: 83836
Amount: 0.384400
Amount Units: ug/mL



Manual Integration Results

RT: 8.66
Area: 85554
Amount: 0.392278
Amount Units: ug/mL



Reviewer: zhangji, 27-May-2022 13:10:11
Audit Action: Assigned New Baseline Audit Reason: Baseline

User Disabled Compound Report

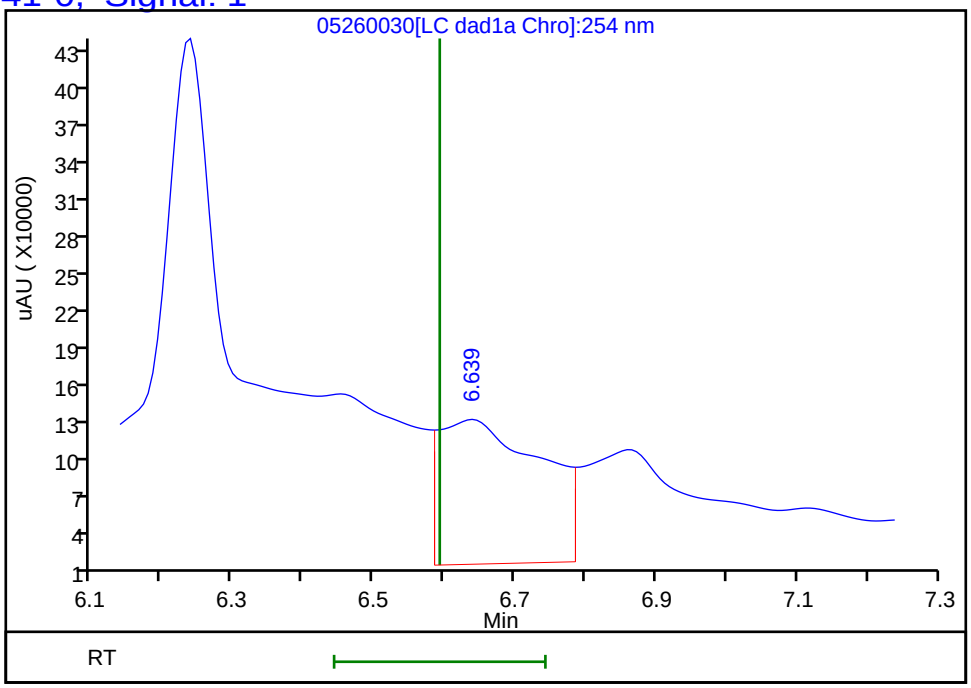
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260030.d
Injection Date: 27-May-2022 01:07:07 Instrument ID: CHHPLC_X3
Lims ID: 280-162622-A-16-A Lab Sample ID: 280-162622-16
Client ID: G0311-22A
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

4 HMX, CAS: 2691-41-0, Signal: 1

RT: 6.64
Response: 1157335
Amount: 13.806199



Reviewer: zhangji, 27-May-2022 13:10:13
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

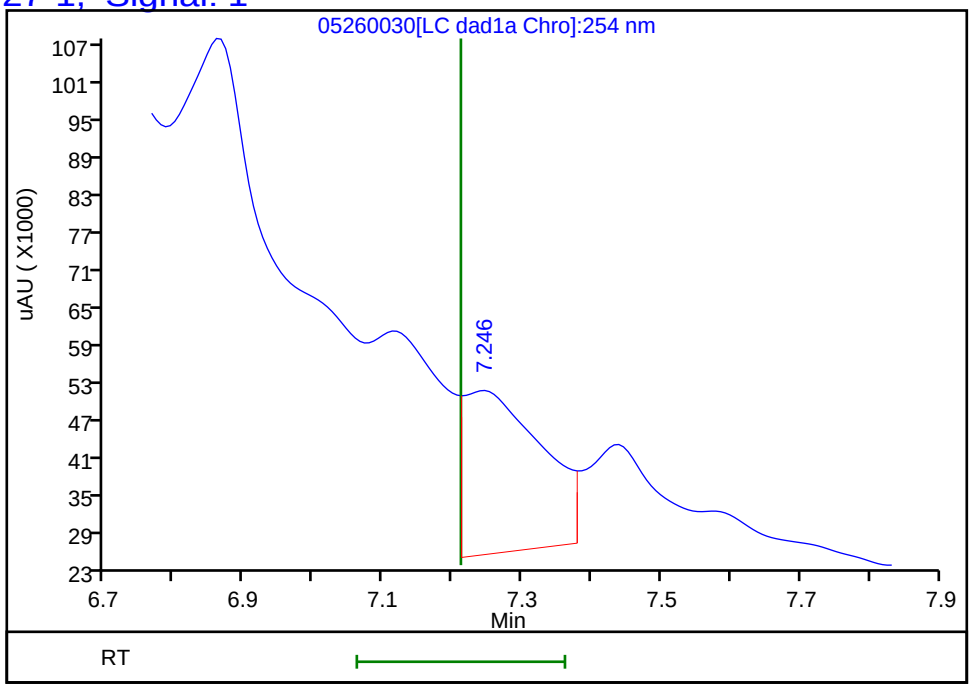
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260030.d
Injection Date: 27-May-2022 01:07:07 Instrument ID: CHHPLC_X3
Lims ID: 280-162622-A-16-A Lab Sample ID: 280-162622-16
Client ID: G0311-22A
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 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.25
Response: 200108
Amount: 1.588217



Reviewer: zhangji, 27-May-2022 13:10:13
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

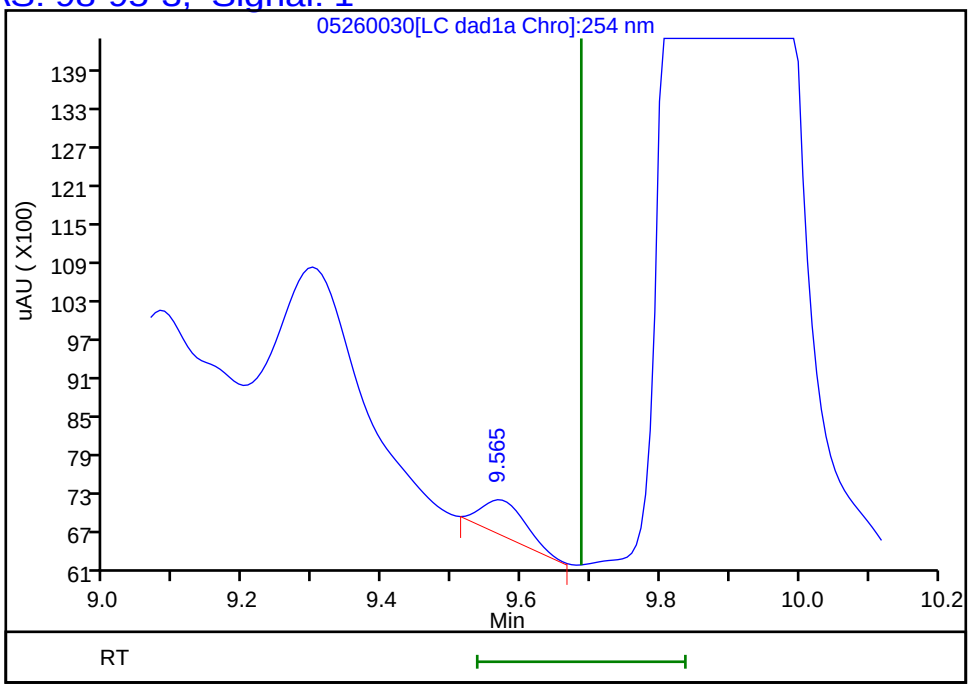
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260030.d
Injection Date: 27-May-2022 01:07:07 Instrument ID: CHHPLC_X3
Lims ID: 280-162622-A-16-A Lab Sample ID: 280-162622-16
Client ID: G0311-22A
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

13 Nitrobenzene, CAS: 98-95-3, Signal: 1

RT: 9.57
Response: 2453
Amount: 0.012779



Reviewer: zhangji, 27-May-2022 13:10:13
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

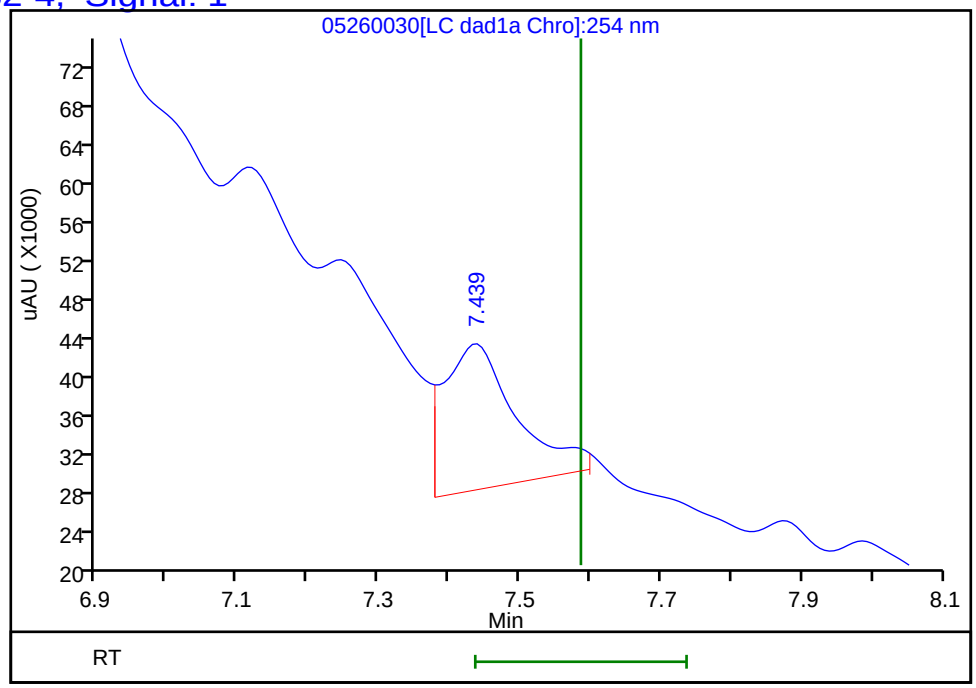
User Disabled Compound Report

Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260030.d
Injection Date: 27-May-2022 01:07:07 Instrument ID: CHHPLC_X3
Lims ID: 280-162622-A-16-A Lab Sample ID: 280-162622-16
Client ID: G0311-22A
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

8 RDX, CAS: 121-82-4, Signal: 1

RT: 7.44
Response: 105487
Amount: 1.018124



Reviewer: zhangji, 27-May-2022 13:10:13
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

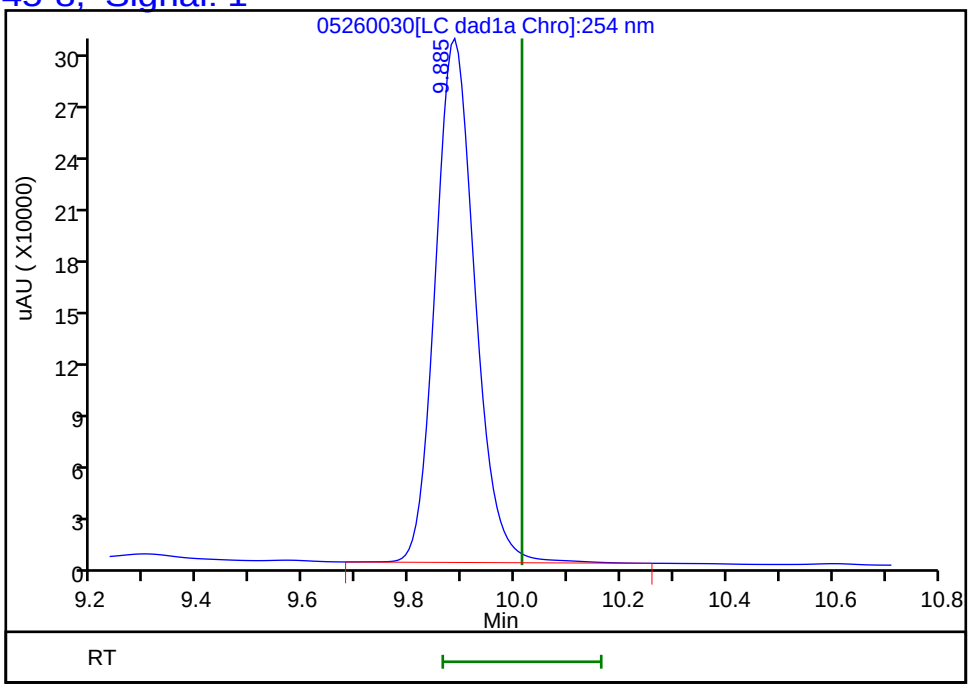
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260030.d				
Injection Date:	27-May-2022 01:07:07	Instrument ID:	CHHPLC_X3		
Lims ID:	280-162622-A-16-A	Lab Sample ID:	280-162622-16		
Client ID:	G0311-22A				
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		

15 Tetryl, CAS: 479-45-8, Signal: 1

RT: 9.89
Response: 1567568
Amount: 9.190349



Reviewer: zhangji, 27-May-2022 13:10:13
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0311-22A | Lab Sample ID: 280-162622-16

Matrix: Water | Lab File ID: 05270026.D

Analysis Method: 8330A | Date Collected: 05/19/2022 08:00

Extraction Method: 3535 | Date Extracted: 05/25/2022 15:23

Sample wt/vol: 454.8(mL) | Date Analyzed: 05/28/2022 03:53

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: Luna-phenylhex ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 576448 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-65-0	1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.041
99-99-0	4-Nitrotoluene	0.44	U	0.45	0.44	0.11

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	97	*M*	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270026.D
Lims ID: 280-162622-A-16-A
Client ID: G0311-22A
Sample Type: Client
Inject. Date: 28-May-2022 03:53:49 ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-162622-A-16-A
Misc. Info.: 280-0111418-026
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 28-May-2022 14:12:44 Calib Date: 03-Mar-2022 07:19:48
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1652

First Level Reviewer: zhangji Date: 28-May-2022 14:11:01

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	5 HMX	1	6.670	6.713	-0.043	3149	0.0190	M
	6 MNX	1	7.397	7.440	-0.043	9925	0.0397	M
	8 RDX	1		8.840			ND	
	9 Nitrobenzene	1		11.707			ND	
$	10 1,2-Dinitrobenzene	1	12.790	12.867	-0.077	48389	0.1937	M
	12 1,3-Dinitrobenzene	1		15.233			ND	
	14 o-Nitrotoluene	1		16.327			ND	
	16 p-Nitrotoluene	1		16.627			ND	
	17 4-Amino-2,6-dinitrotoluene	1	17.156	17.247	-0.091	160309	0.6001	
	18 m-Nitrotoluene	1		17.573			ND	
	19 2-Amino-4,6-dinitrotoluene	1	18.143	18.233	-0.090	276990	0.7683	
	20 1,3,5-Trinitrobenzene	1	18.403	18.487	-0.084	201019	0.4838	
	21 2,6-Dinitrotoluene	1		19.720			ND	
	22 2,4-Dinitrotoluene	1	20.143	20.233	-0.090	32527	0.0482	
	23 Tetryl	1		23.880			ND	
	24 2,4,6-Trinitrotoluene	1	24.570	24.680	-0.110	123800	0.3353	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

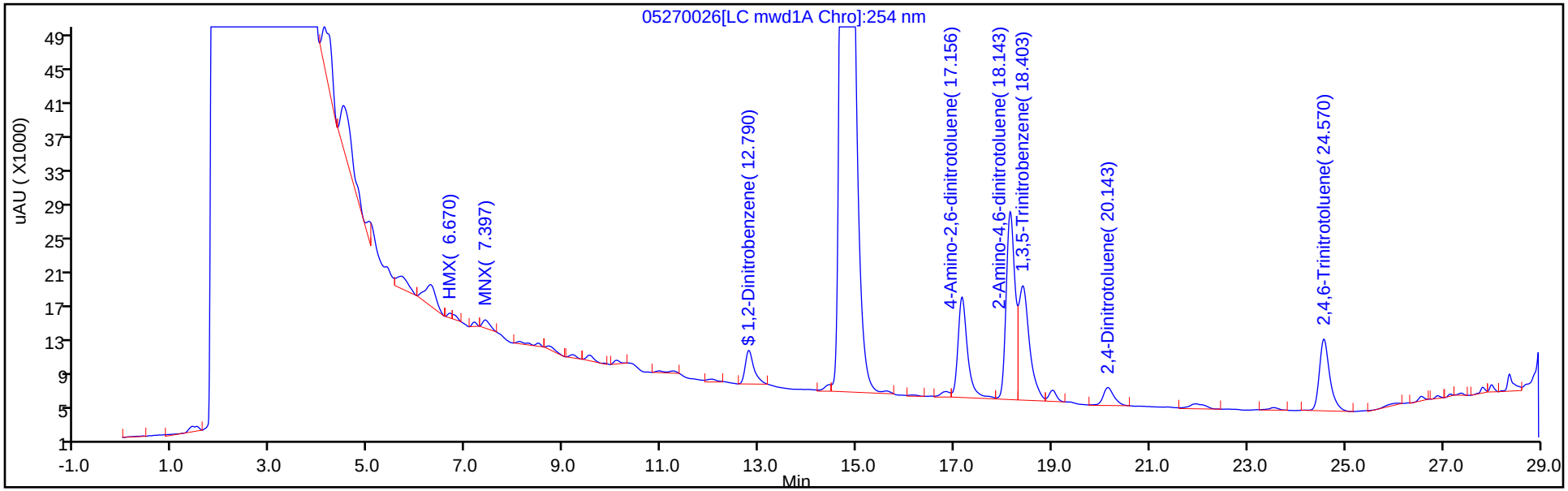
Report Date: 28-May-2022 14:12:47 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

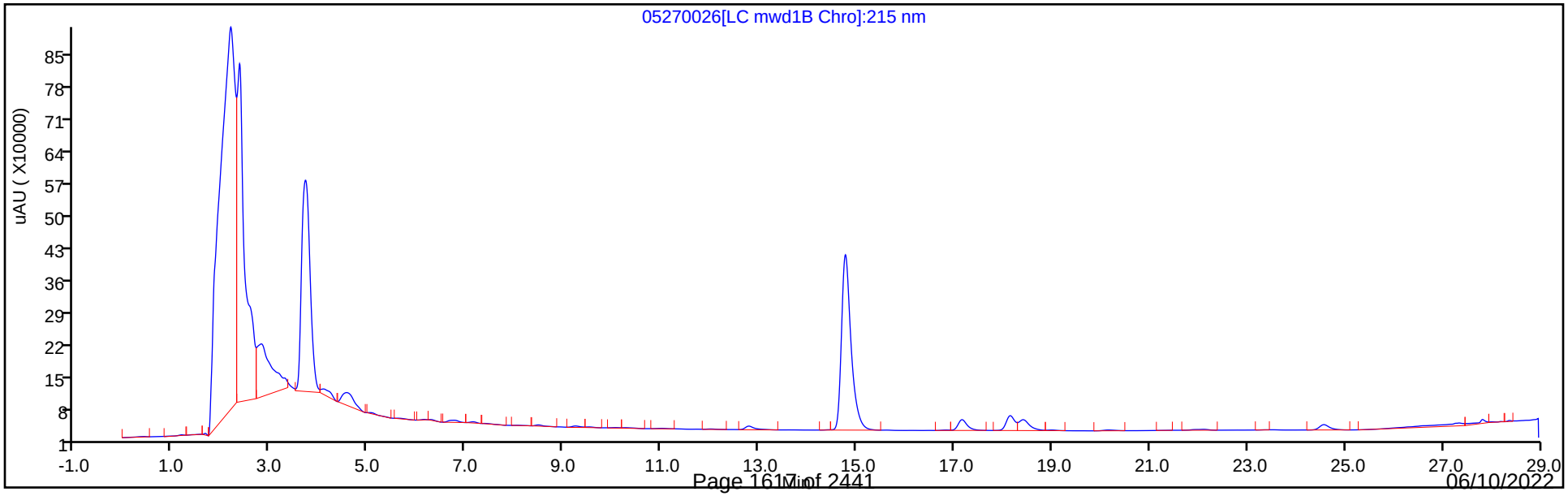
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270026.D

Injection Date:	28-May-2022 03:53:49	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-162622-A-16-A	Lab Sample ID:	280-162622-16	Worklist Smp#:	26
Client ID:	G0311-22A				
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 Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270026.D				
Lims ID:	280-162622-A-16-A				
Client ID:	G0311-22A				
Sample Type:	Client				
Inject. Date:	28-May-2022 03:53:49	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-162622-A-16-A				
Misc. Info.:	280-0111418-026				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	28-May-2022 14:12:44	Calib Date:	03-Mar-2022 07:19:48		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1652				
First Level Reviewer: zhangji		Date:	28-May-2022 14:11:01		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1937	96.87

Manual Integration/User Assign Peak Report

Eurofins Denver

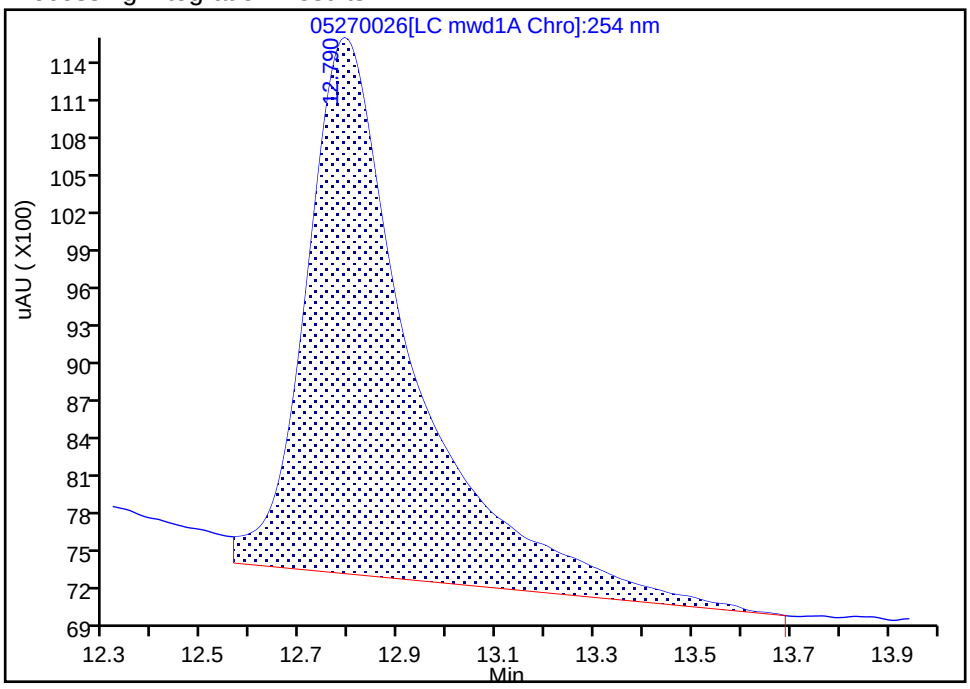
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270026.D				
Injection Date:	28-May-2022 03:53:49	Instrument ID:	CHHPLC_X5		
Lims ID:	280-162622-A-16-A	Lab Sample ID:	280-162622-16		
Client ID:	G0311-22A				
Operator ID:	JZ	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	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

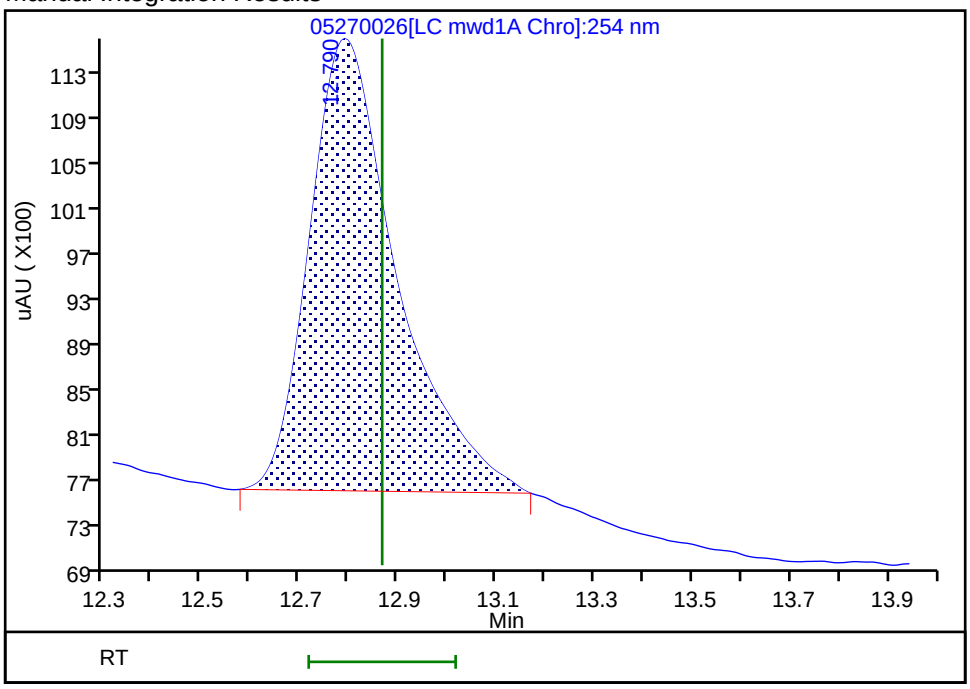
Processing Integration Results

RT: 12.79
Area: 63767
Amount: 0.255320
Amount Units: ug/ml



Manual Integration Results

RT: 12.79
Area: 48389
Amount: 0.193747
Amount Units: ug/ml



Reviewer: zhangji, 28-May-2022 14:10:38

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

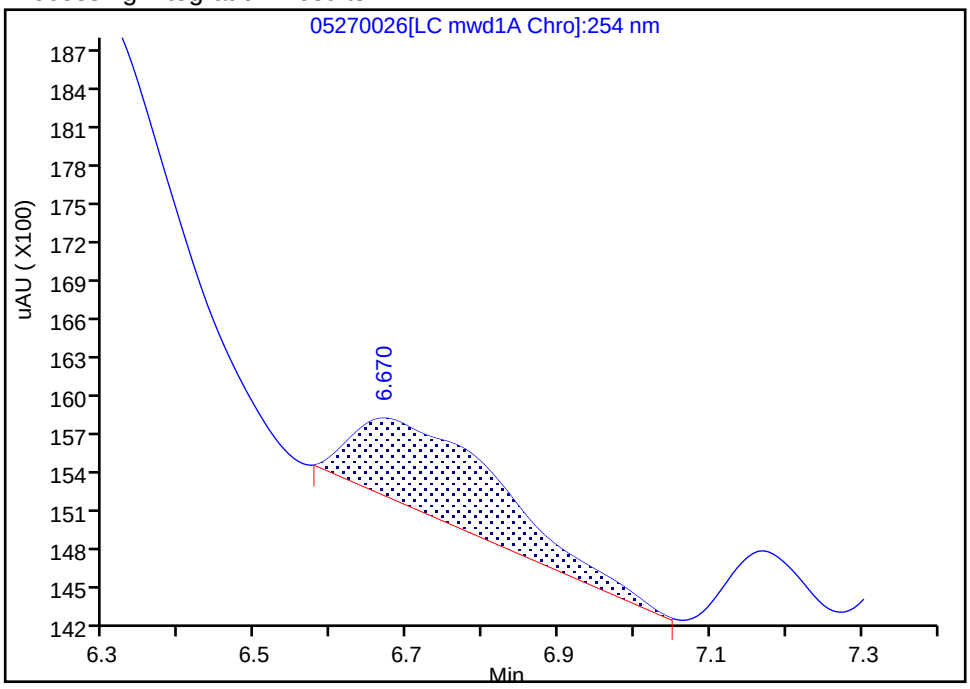
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270026.D				
Injection Date:	28-May-2022 03:53:49	Instrument ID:	CHHPLC_X5		
Lims ID:	280-162622-A-16-A	Lab Sample ID:	280-162622-16		
Client ID:	G0311-22A				
Operator ID:	JZ	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

5 HMX, CAS: 2691-41-0

Signal: 1

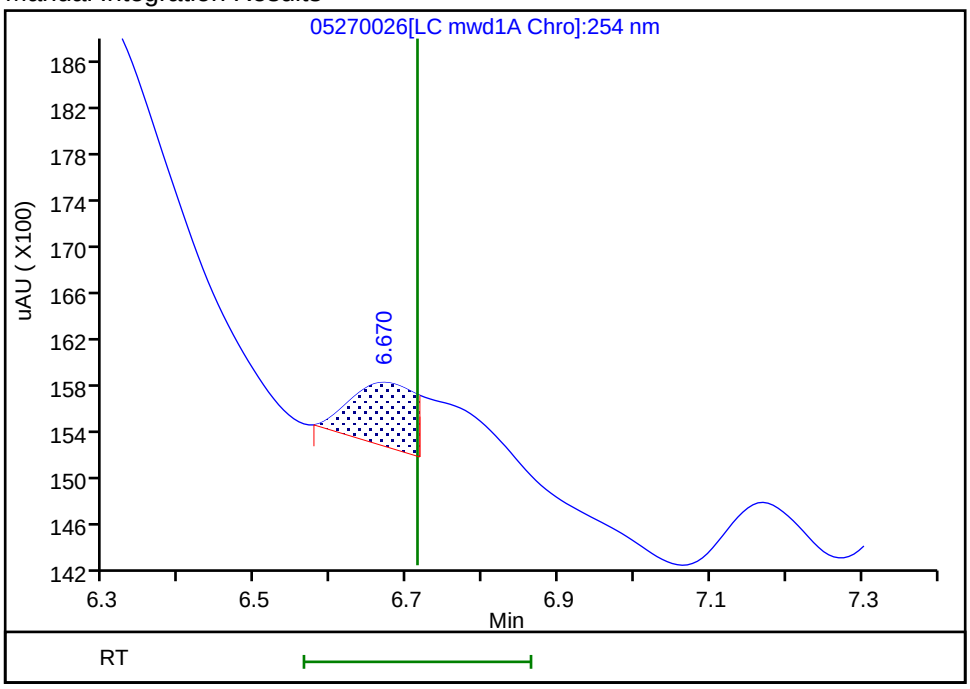
Processing Integration Results

RT: 6.67
Area: 9715
Amount: 0.058476
Amount Units: ug/ml



Manual Integration Results

RT: 6.67
Area: 3149
Amount: 0.018954
Amount Units: ug/ml



Reviewer: zhangji, 28-May-2022 14:10:46
Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

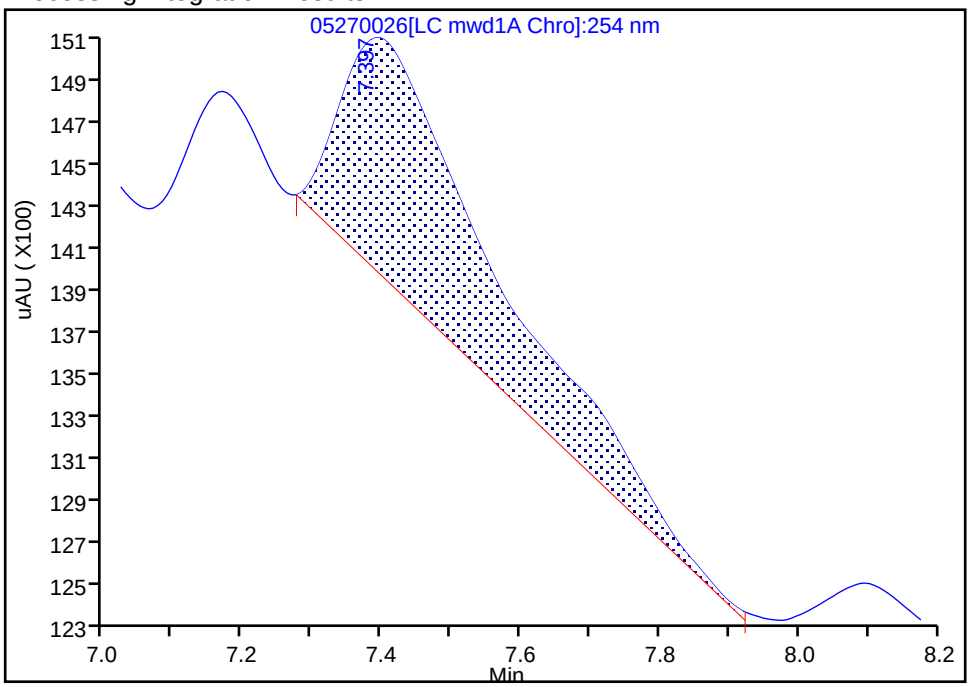
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270026.D				
Injection Date:	28-May-2022 03:53:49	Instrument ID:	CHHPLC_X5		
Lims ID:	280-162622-A-16-A	Lab Sample ID:	280-162622-16		
Client ID:	G0311-22A				
Operator ID:	JZ	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	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 MNX, CAS: 5755-27-1

Signal: 1

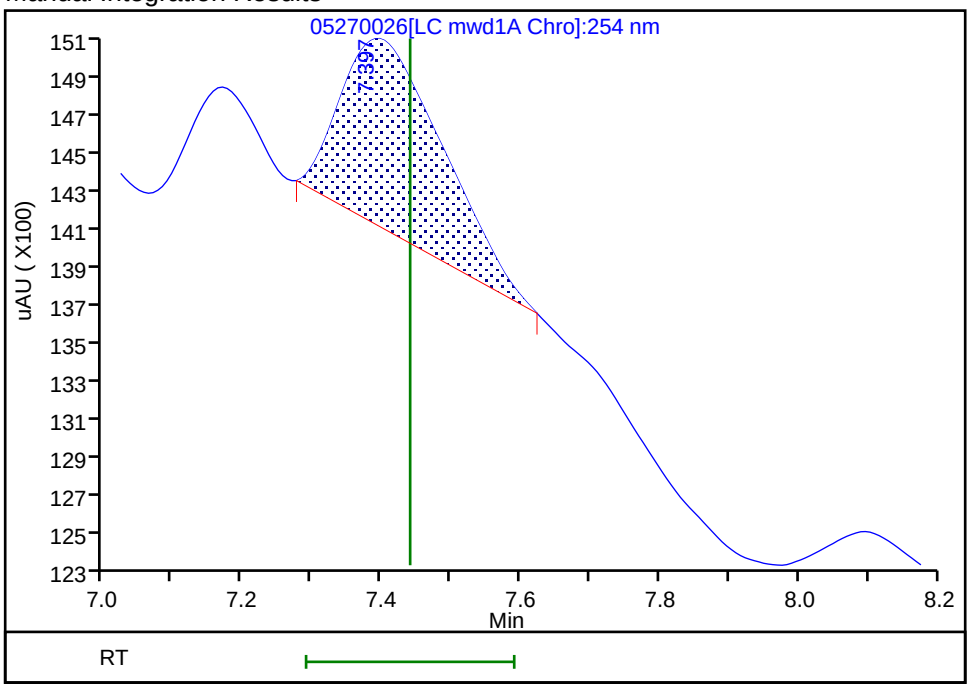
Processing Integration Results

RT: 7.40
Area: 17252
Amount: 0.068986
Amount Units: ug/ml



Manual Integration Results

RT: 7.40
Area: 9925
Amount: 0.039687
Amount Units: ug/ml



Reviewer: zhangji, 28-May-2022 14:10:50

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0111-22A | Lab Sample ID: 280-162622-17

Matrix: Water | Lab File ID: 05260031.D

Analysis Method: 8330A | Date Collected: 05/19/2022 13:15

Extraction Method: 3535 | Date Extracted: 05/25/2022 15:23

Sample wt/vol: 469.3(mL) | Date Analyzed: 05/27/2022 01:30

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 576310 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	4.6	M Q	0.22	0.21	0.090
118-96-7	2,4,6-Trinitrotoluene	4.0	M Q	0.12	0.11	0.048
121-14-2	2,4-Dinitrotoluene	0.79	Q	0.11	0.085	0.029
606-20-2	2,6-Dinitrotoluene	0.085	U Q	0.11	0.085	0.043
35572-78-2	2-Amino-4,6-dinitrotoluene	8.8	Q	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	0.43	U Q	0.43	0.43	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	6.0	Q	0.16	0.13	0.061
2691-41-0	HMX	0.21	U M Q	0.22	0.21	0.093
5755-27-1	MNX	0.43	U M	2.1	0.43	0.16
98-95-3	Nitrobenzene	0.21	U M Q	0.22	0.21	0.097
121-82-4	RDX	0.21	U Q	0.22	0.21	0.055
479-45-8	Tetryl	0.11	U M Q	0.12	0.11	0.034

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	128	M Q	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\05260031.D
Lims ID: 280-162622-A-17-A
Client ID: G0111-22A
Sample Type: Client
Inject. Date: 27-May-2022 01:30:05 ALS Bottle#: 31 Worklist Smp#: 31
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-162622-A-17-
Misc. Info.: 280-0111383-031
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 27-May-2022 13:18:33 Calib Date: 25-Mar-2022 16:30:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220325-109559.b\03250017.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1651

First Level Reviewer: zhangji Date: 27-May-2022 13:10:58

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.593			ND	U
7 MNX	1		7.211			ND	U
8 RDX	1		7.586			ND	
$ 10 1,2-Dinitrobenzene	1	8.535	8.546	-0.011	32021	0.2568	M
11 1,3,5-Trinitrobenzene	1	8.655	8.666	-0.011	93710	0.4297	M
12 1,3-Dinitrobenzene	1	9.309	9.299	0.010	20487	0.0710	M
13 Nitrobenzene	1		9.686			ND	U
15 Tetryl	1		10.013			ND	U
17 2,4,6-Trinitrotoluene	1	10.902	10.919	-0.017	75710	0.3735	M
18 4-Amino-2,6-dinitrotoluene	1	11.102	11.119	-0.017	85135	0.5639	
19 2-Amino-4,6-dinitrotoluene	1	11.355	11.373	-0.018	167364	0.8278	
20 2,6-Dinitrotoluene	1		11.533			ND	
21 2,4-Dinitrotoluene	1	11.689	11.706	-0.017	21542	0.0744	
22 o-Nitrotoluene	1		12.559			ND	
23 p-Nitrotoluene	1	12.989	12.993	-0.004	1381	0.0130	
24 m-Nitrotoluene	1		13.566			ND	

QC Flag Legend

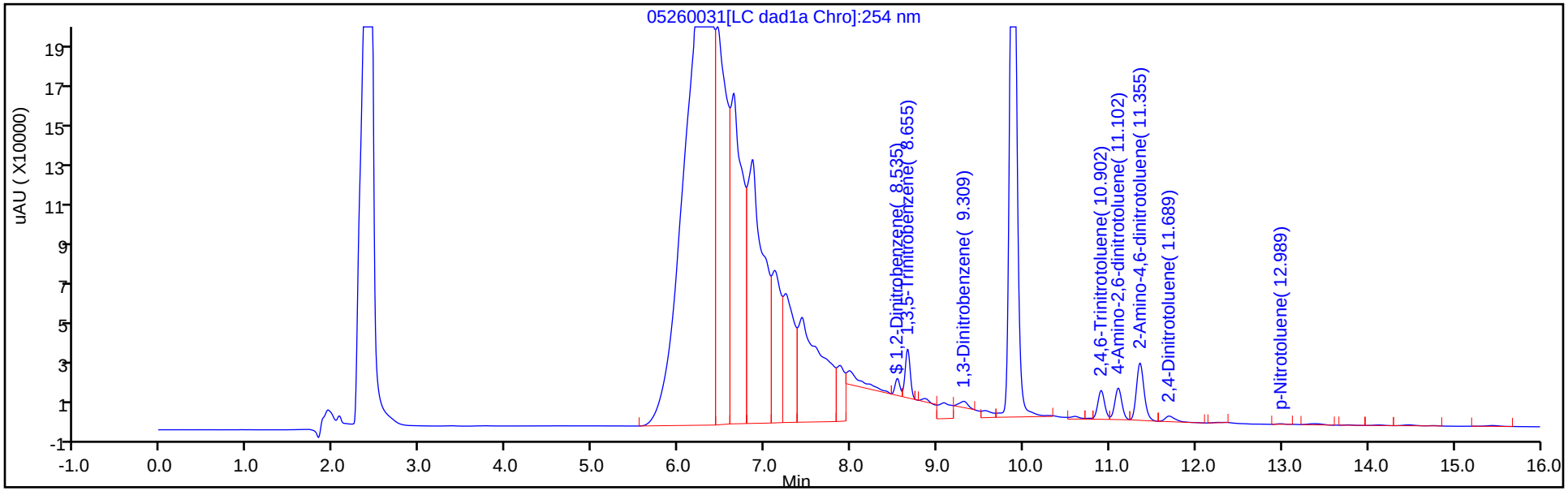
Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 27-May-2022 13:18:34 Chrom Revision: 2.3 18-May-2022 20:00:04

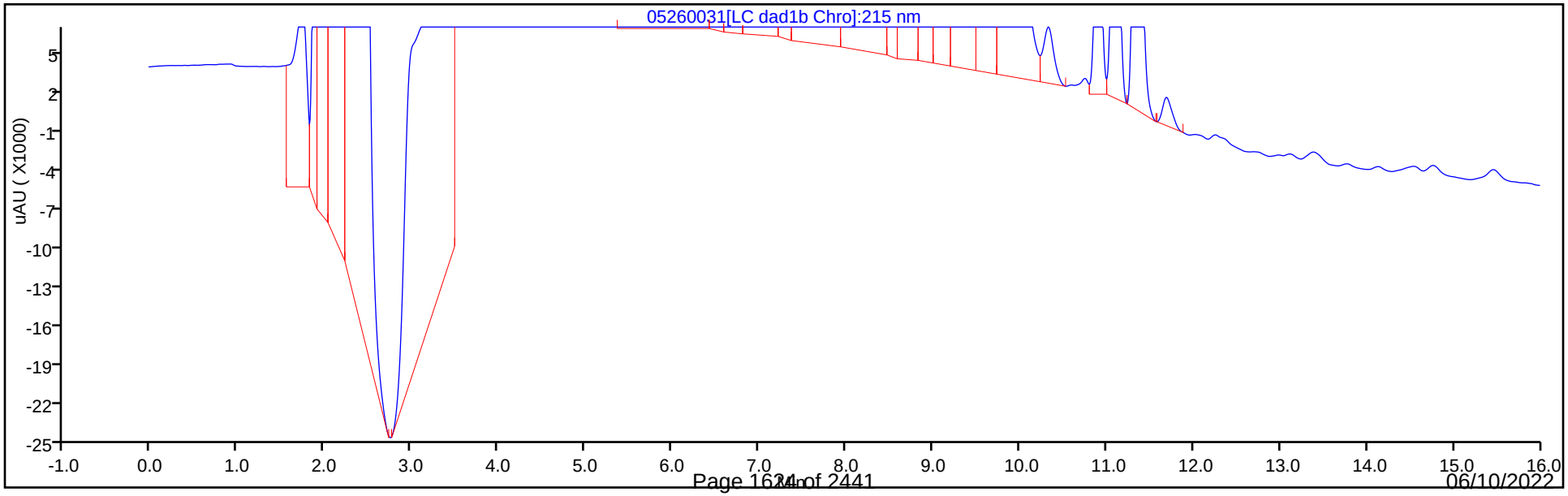
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260031.d				
Injection Date:	27-May-2022 01:30:05	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-162622-A-17-A	Lab Sample ID:	280-162622-17	Worklist Smp#:	31
Client ID:	G0111-22A				
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 Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\05260031.D				
Lims ID:	280-162622-A-17-A				
Client ID:	G0111-22A				
Sample Type:	Client				
Inject. Date:	27-May-2022 01:30:05	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-162622-A-17-				
Misc. Info.:	280-0111383-031				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	27-May-2022 13:18:33	Calib Date:	25-Mar-2022 16:30:08		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220325-109559.b\03250017.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1651				

First Level Reviewer: zhangji Date: 27-May-2022 13:10:58

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2568	128.39

Manual Integration/User Assign Peak Report

Eurofins Denver

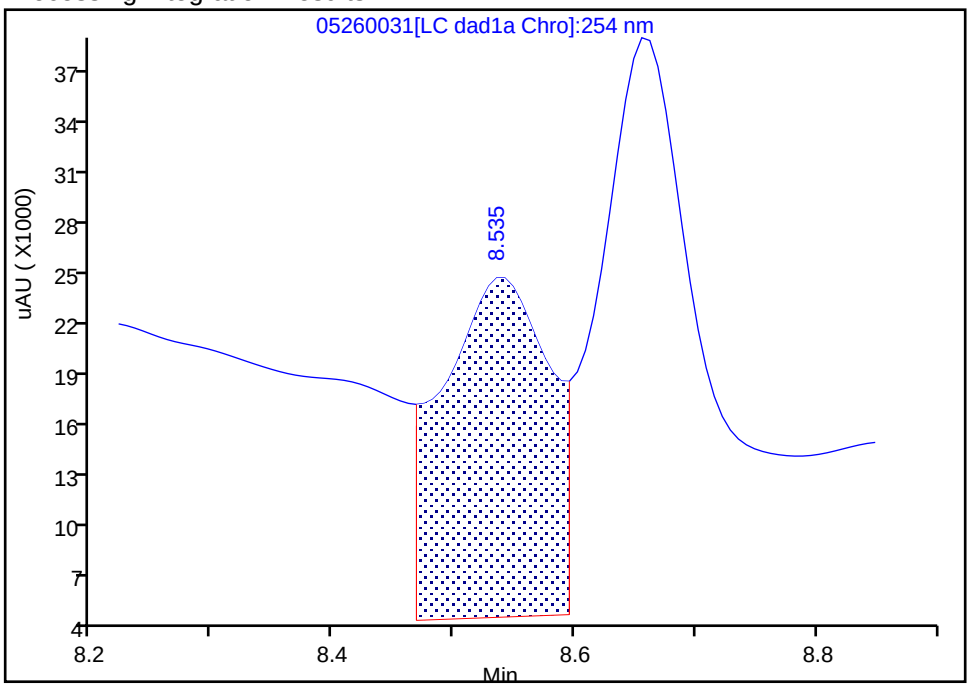
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260031.d				
Injection Date:	27-May-2022 01:30:05	Instrument ID:	CHHPLC_X3		
Lims ID:	280-162622-A-17-A	Lab Sample ID:	280-162622-17		
Client ID:	G0111-22A				
Operator ID:	JZ	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

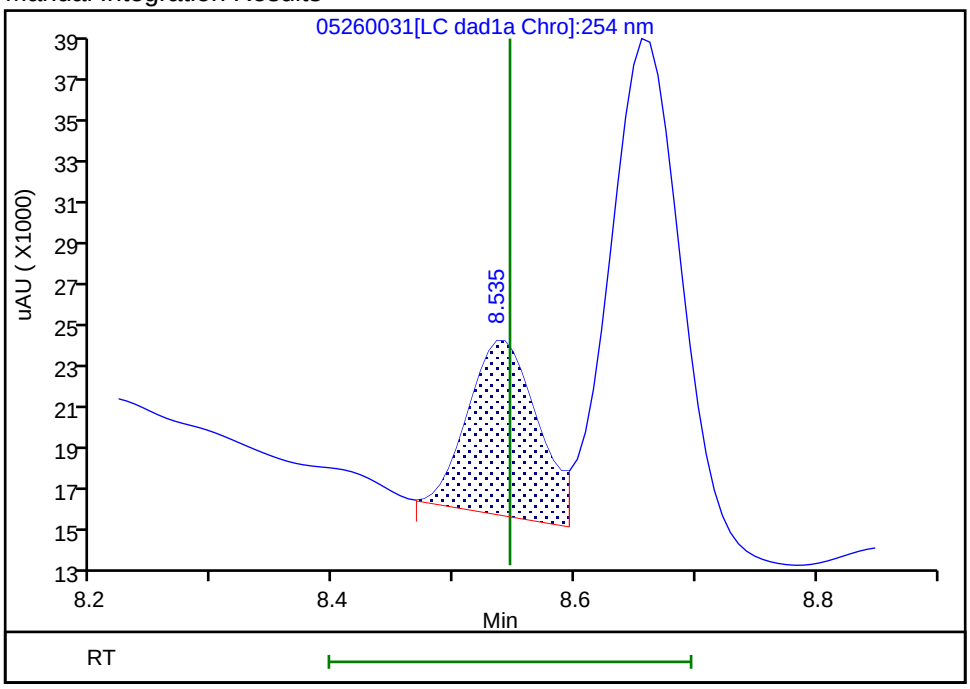
Processing Integration Results

RT: 8.54
Area: 120283
Amount: 0.964597
Amount Units: ug/mL



Manual Integration Results

RT: 8.54
Area: 32021
Amount: 0.256789
Amount Units: ug/mL



Reviewer: zhangji, 27-May-2022 13:10:46
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

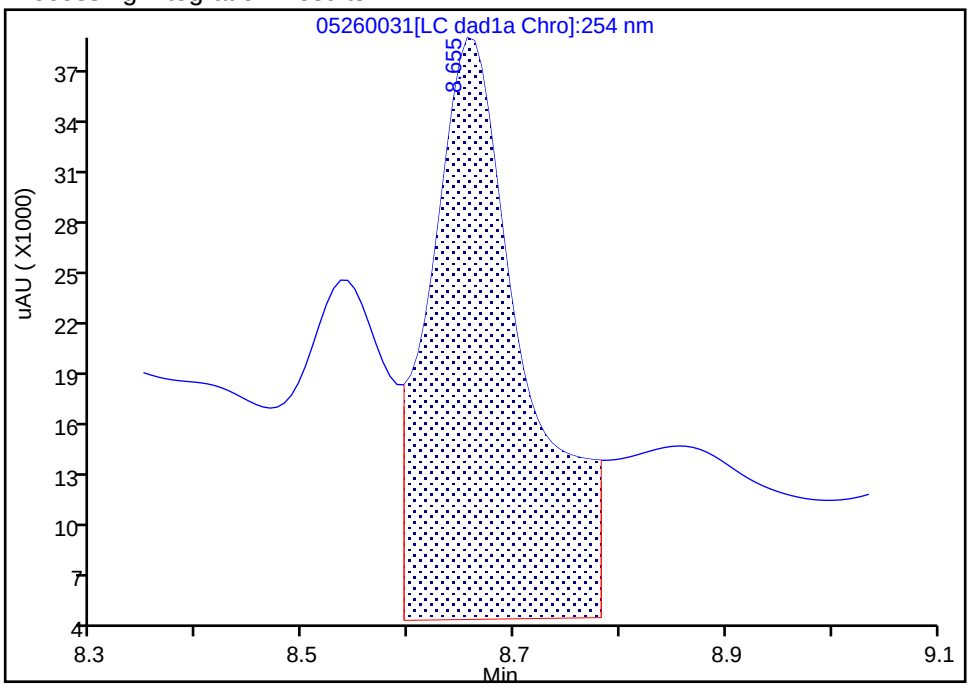
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260031.d				
Injection Date:	27-May-2022 01:30:05	Instrument ID:	CHHPLC_X3		
Lims ID:	280-162622-A-17-A	Lab Sample ID:	280-162622-17		
Client ID:	G0111-22A				
Operator ID:	JZ	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

11 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

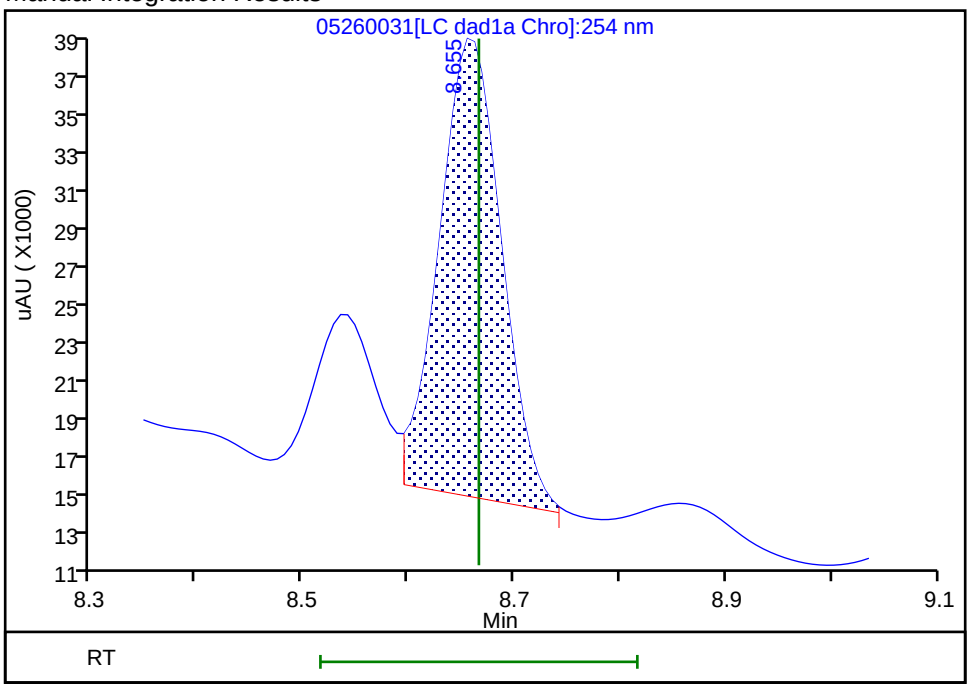
Processing Integration Results

RT: 8.66
Area: 204547
Amount: 0.937878
Amount Units: ug/mL



Manual Integration Results

RT: 8.66
Area: 93710
Amount: 0.429674
Amount Units: ug/mL



Reviewer: zhangji, 27-May-2022 13:10:49

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

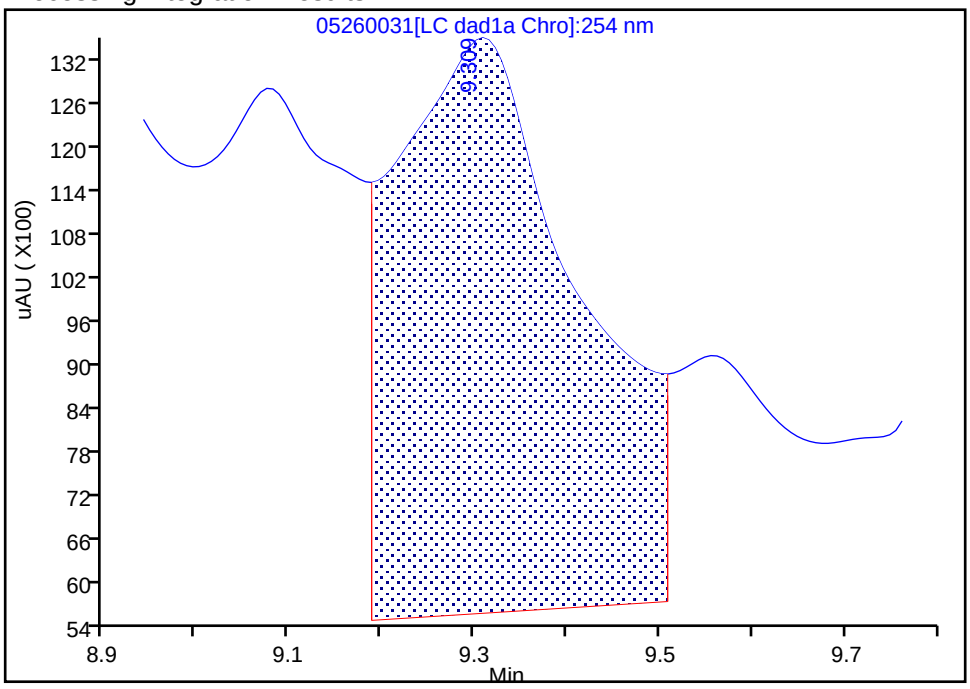
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260031.d				
Injection Date:	27-May-2022 01:30:05	Instrument ID:	CHHPLC_X3		
Lims ID:	280-162622-A-17-A	Lab Sample ID:	280-162622-17		
Client ID:	G0111-22A				
Operator ID:	JZ	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

12 1,3-Dinitrobenzene, CAS: 99-65-0

Signal: 1

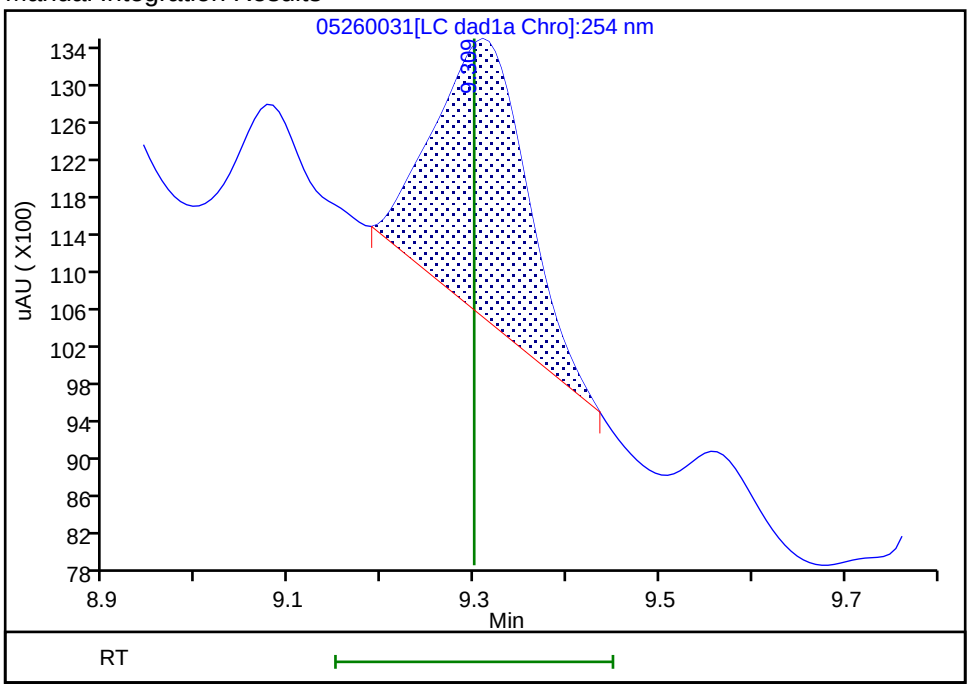
Processing Integration Results

RT: 9.31
Area: 108843
Amount: 0.377401
Amount Units: ug/mL



Manual Integration Results

RT: 9.31
Area: 20487
Amount: 0.071036
Amount Units: ug/mL



Reviewer: zhangji, 27-May-2022 13:10:56

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

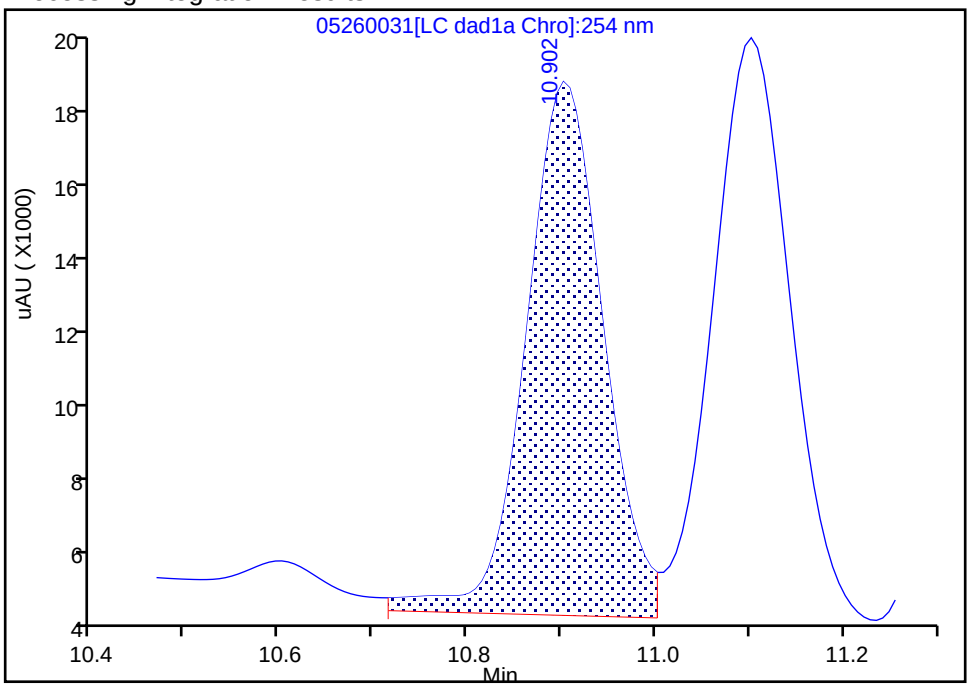
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260031.d				
Injection Date:	27-May-2022 01:30:05	Instrument ID:	CHHPLC_X3		
Lims ID:	280-162622-A-17-A	Lab Sample ID:	280-162622-17		
Client ID:	G0111-22A				
Operator ID:	JZ	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

17 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

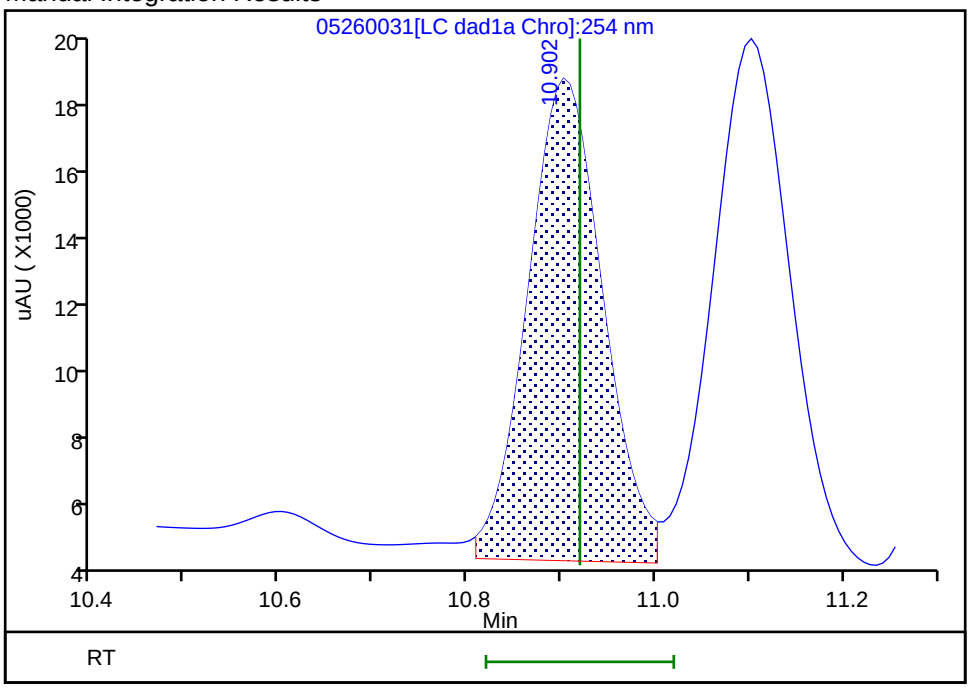
Processing Integration Results

RT: 10.90
Area: 77985
Amount: 0.384682
Amount Units: ug/mL



Manual Integration Results

RT: 10.90
Area: 75710
Amount: 0.373460
Amount Units: ug/mL



Reviewer: zhangji, 27-May-2022 13:10:32

Audit Action: Split an Integrated Peak Audit Reason: Baseline

User Disabled Compound Report

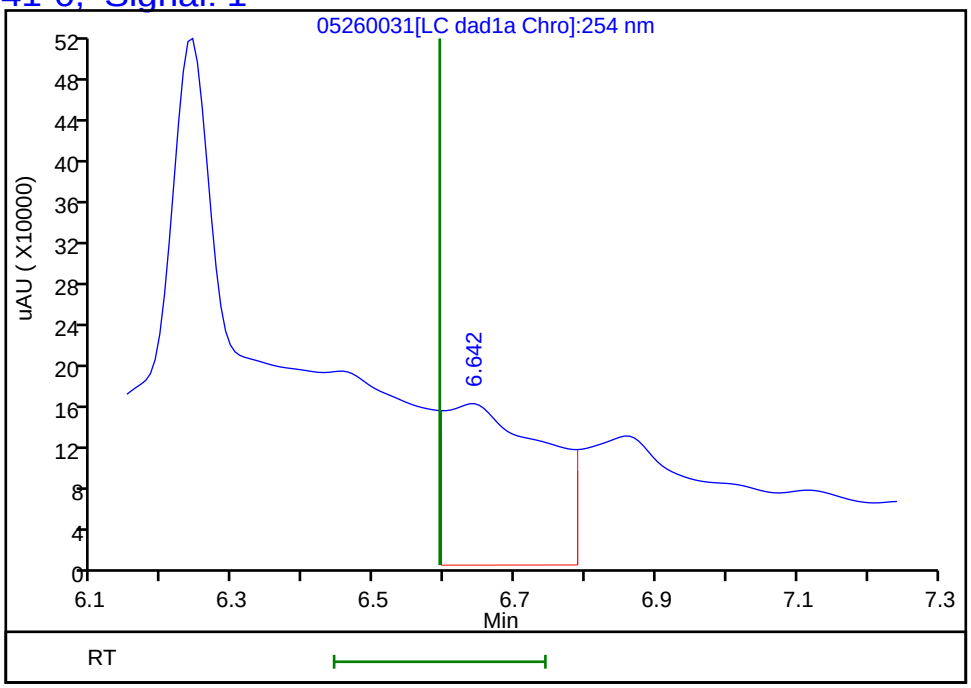
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260031.d
Injection Date: 27-May-2022 01:30:05 Instrument ID: CHHPLC_X3
Lims ID: 280-162622-A-17-A Lab Sample ID: 280-162622-17
Client ID: G0111-22A
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

4 HMX, CAS: 2691-41-0, Signal: 1

RT: 6.64
Response: 1542804
Amount: 18.404575



Reviewer: zhangji, 27-May-2022 13:10:58
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

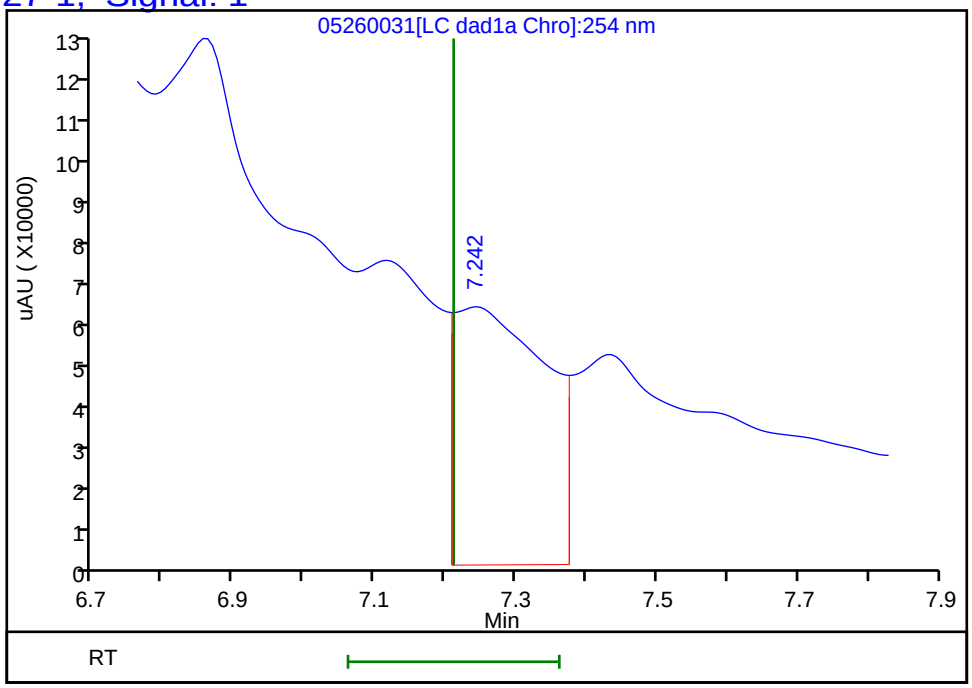
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260031.d
Injection Date: 27-May-2022 01:30:05 Instrument ID: CHHPLC_X3
Lims ID: 280-162622-A-17-A Lab Sample ID: 280-162622-17
Client ID: G0111-22A
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

7 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.24
Response: 539220
Amount: 4.279680



Reviewer: zhangji, 27-May-2022 13:10:58
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

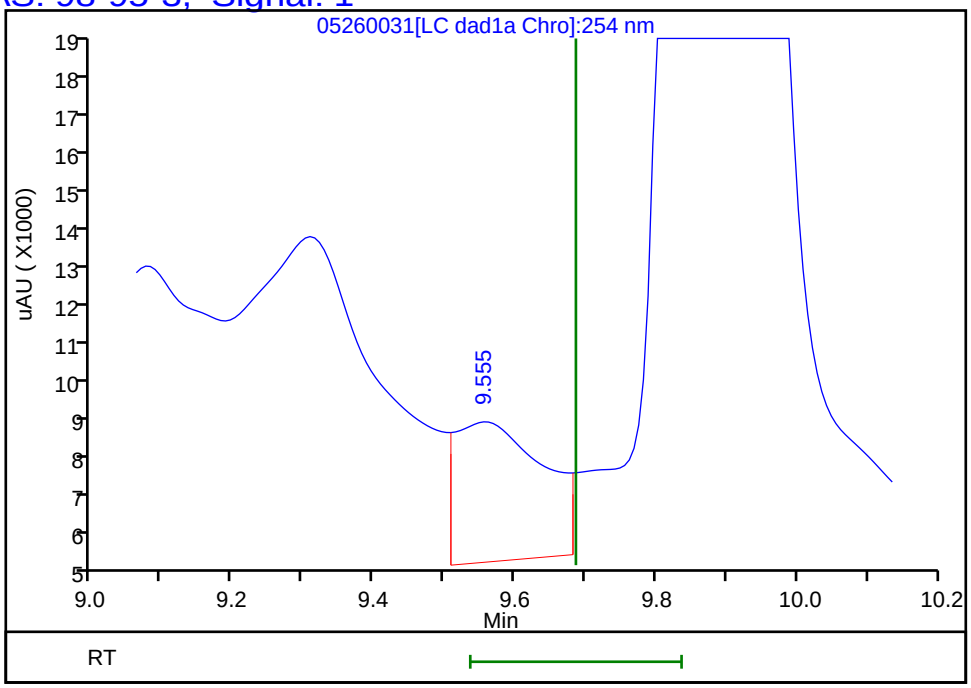
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260031.d
Injection Date: 27-May-2022 01:30:05 Instrument ID: CHHPLC_X3
Lims ID: 280-162622-A-17-A Lab Sample ID: 280-162622-17
Client ID: G0111-22A
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

13 Nitrobenzene, CAS: 98-95-3, Signal: 1

RT: 9.56
Response: 28358
Amount: 0.147734



Reviewer: zhangji, 27-May-2022 13:10:58
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

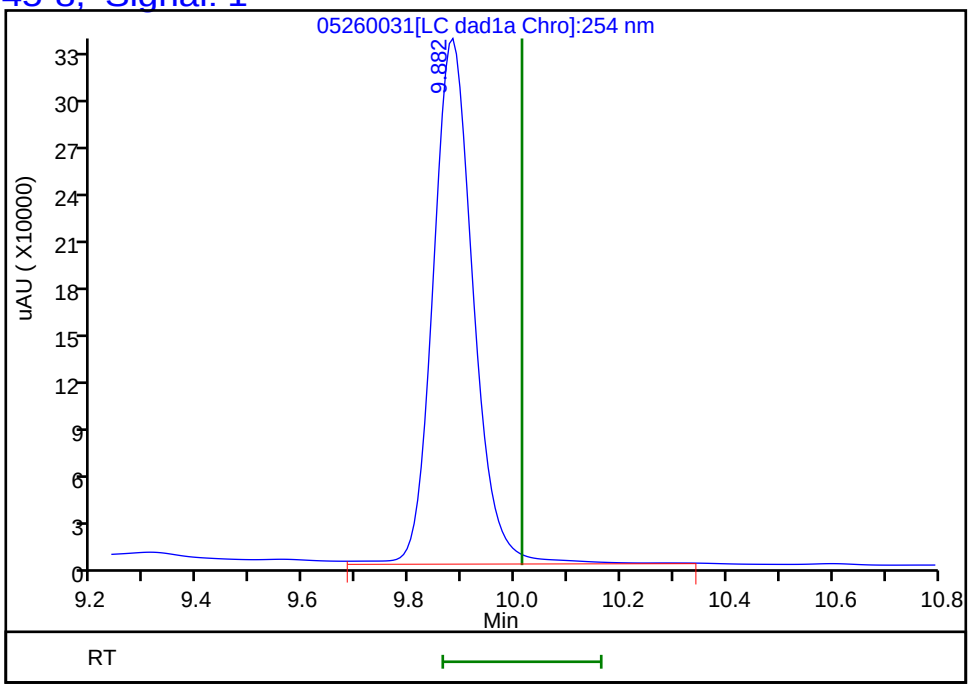
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260031.d				
Injection Date:	27-May-2022 01:30:05	Instrument ID:	CHHPLC_X3		
Lims ID:	280-162622-A-17-A	Lab Sample ID:	280-162622-17		
Client ID:	G0111-22A				
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		

15 Tetryl, CAS: 479-45-8, Signal: 1

RT: 9.88
Response: 1733920
Amount: 10.165638



Reviewer: zhangji, 27-May-2022 13:10:58
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0111-22A | Lab Sample ID: 280-162622-17

Matrix: Water | Lab File ID: 05270027.D

Analysis Method: 8330A | Date Collected: 05/19/2022 13:15

Extraction Method: 3535 | Date Extracted: 05/25/2022 15:23

Sample wt/vol: 469.3(mL) | Date Analyzed: 05/28/2022 04:28

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: Luna-phenylhex ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 576448 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-65-0	1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.039
99-99-0	4-Nitrotoluene	0.43	U M	0.44	0.43	0.11

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	101	*M*	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270027.D
Lims ID: 280-162622-A-17-A
Client ID: G0111-22A
Sample Type: Client
Inject. Date: 28-May-2022 04:28:56 ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-162622-A-17-A
Misc. Info.: 280-0111418-027
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 28-May-2022 14:12:44 Calib Date: 03-Mar-2022 07:19:48
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1652

First Level Reviewer: zhangji Date: 28-May-2022 14:11:28

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	5 HMX	1	6.659	6.713	-0.054	5558	0.0335	M
	6 MNX	1	7.366	7.440	-0.074	7523	0.0301	M
	8 RDX	1		8.840			ND	
	9 Nitrobenzene	1		11.707			ND	
$	10 1,2-Dinitrobenzene	1	12.786	12.867	-0.081	50346	0.2016	M
	12 1,3-Dinitrobenzene	1		15.233			ND	
	14 o-Nitrotoluene	1		16.327			ND	
	16 p-Nitrotoluene	1		16.627			ND	U
	17 4-Amino-2,6-dinitrotoluene	1	17.119	17.247	-0.128	177875	0.6658	
	18 m-Nitrotoluene	1		17.573			ND	
	19 2-Amino-4,6-dinitrotoluene	1	18.106	18.233	-0.127	298654	0.8284	
	20 1,3,5-Trinitrobenzene	1	18.372	18.487	-0.115	217628	0.5238	
	21 2,6-Dinitrotoluene	1		19.720			ND	
	22 2,4-Dinitrotoluene	1	20.112	20.233	-0.121	35343	0.0534	
	23 Tetryl	1		23.880			ND	
	24 2,4,6-Trinitrotoluene	1	24.546	24.680	-0.134	134672	0.3648	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

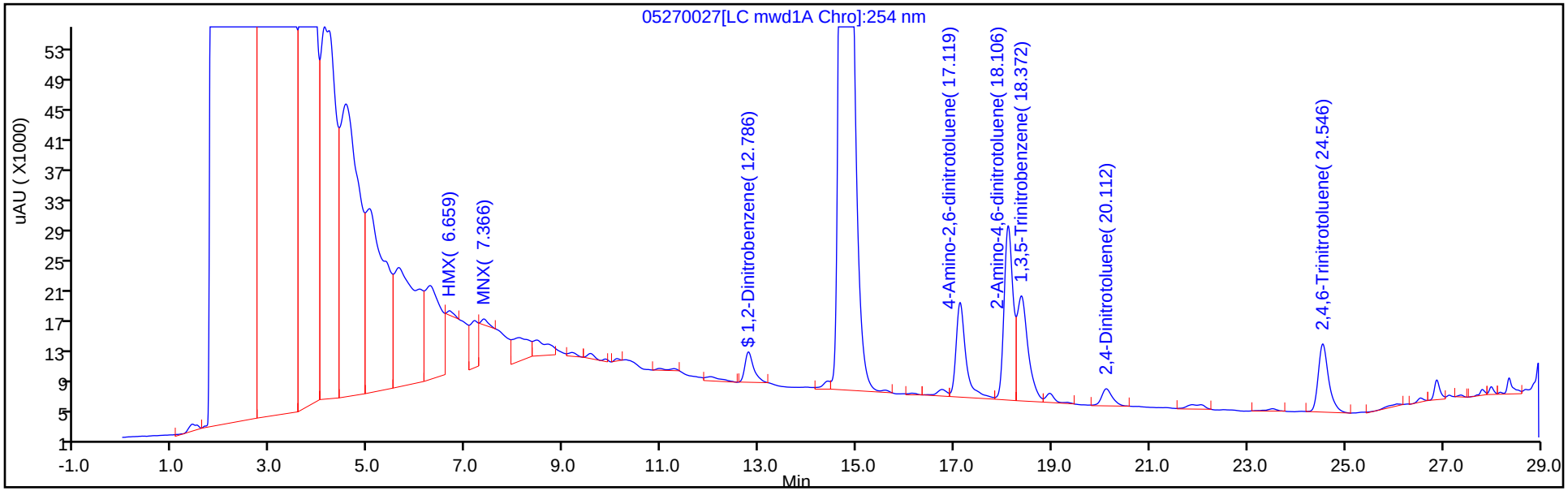
Report Date: 28-May-2022 14:12:47 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

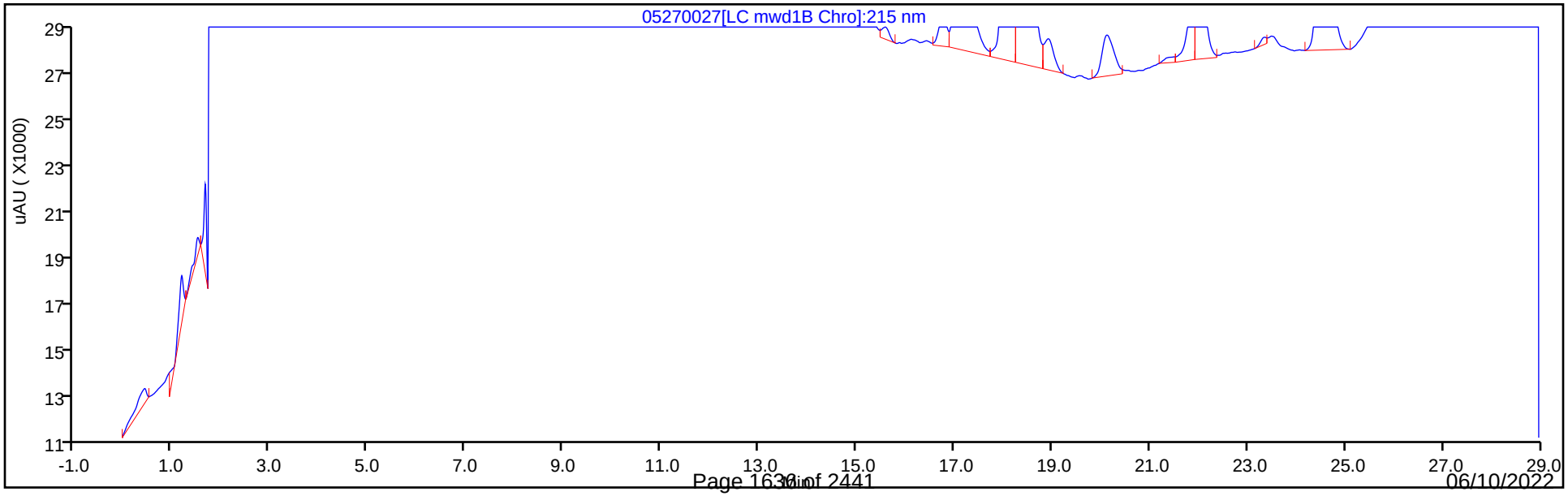
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270027.D

Injection Date:	28-May-2022 04:28:56	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-162622-A-17-A	Lab Sample ID:	280-162622-17	Worklist Smp#:	27
Client ID:	G0111-22A				
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



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270027.D				
Lims ID:	280-162622-A-17-A				
Client ID:	G0111-22A				
Sample Type:	Client				
Inject. Date:	28-May-2022 04:28:56	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-162622-A-17-A				
Misc. Info.:	280-0111418-027				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	28-May-2022 14:12:44	Calib Date:	03-Mar-2022 07:19:48		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1652				
First Level Reviewer: zhangji		Date:	28-May-2022 14:11:28		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2016	100.79

Manual Integration/User Assign Peak Report

Eurofins Denver

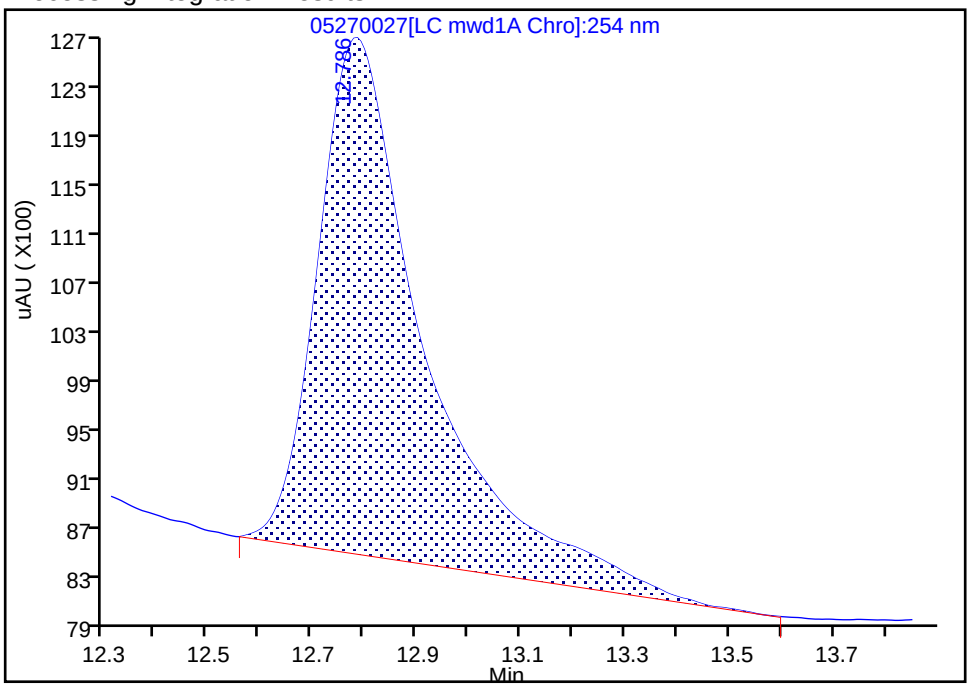
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270027.D				
Injection Date:	28-May-2022 04:28:56	Instrument ID:	CHHPLC_X5		
Lims ID:	280-162622-A-17-A	Lab Sample ID:	280-162622-17		
Client ID:	G0111-22A				
Operator ID:	JZ	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	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

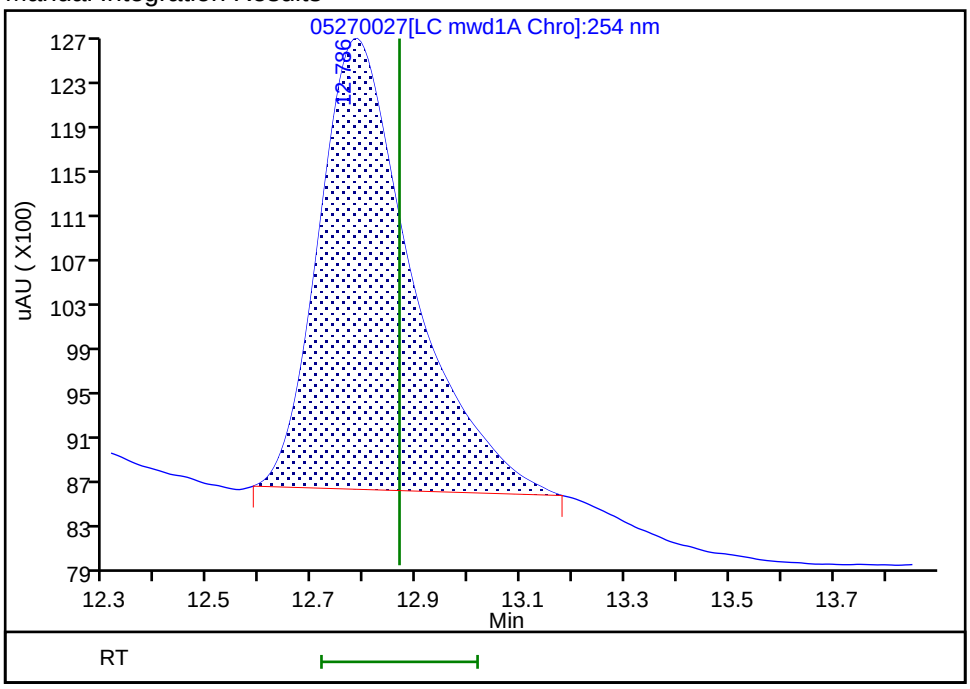
Processing Integration Results

RT: 12.79
Area: 59960
Amount: 0.240077
Amount Units: ug/ml



Manual Integration Results

RT: 12.79
Area: 50346
Amount: 0.201583
Amount Units: ug/ml



Reviewer: zhangji, 28-May-2022 14:11:18

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

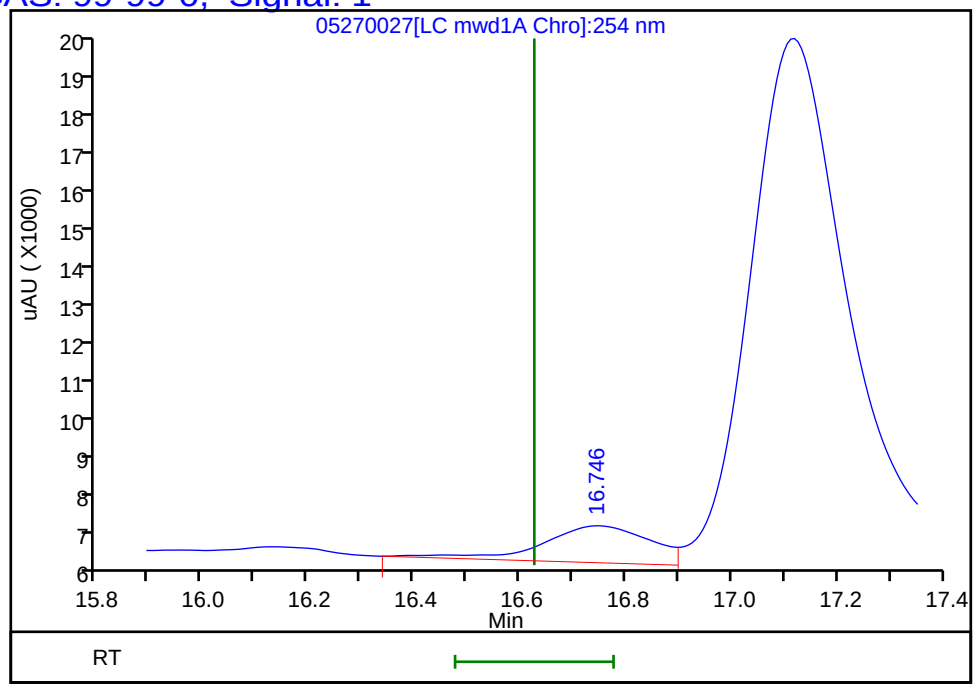
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270027.D				
Injection Date:	28-May-2022 04:28:56	Instrument ID:	CHHPLC_X5		
Lims ID:	280-162622-A-17-A	Lab Sample ID:	280-162622-17		
Client ID:	G0111-22A				
Operator ID:	JZ	ALS Bottle#:	27	Worklist Smp#:	27
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 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 16.75
Response: 12369
Amount: 0.058672



Reviewer: zhangji, 28-May-2022 14:11:28

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

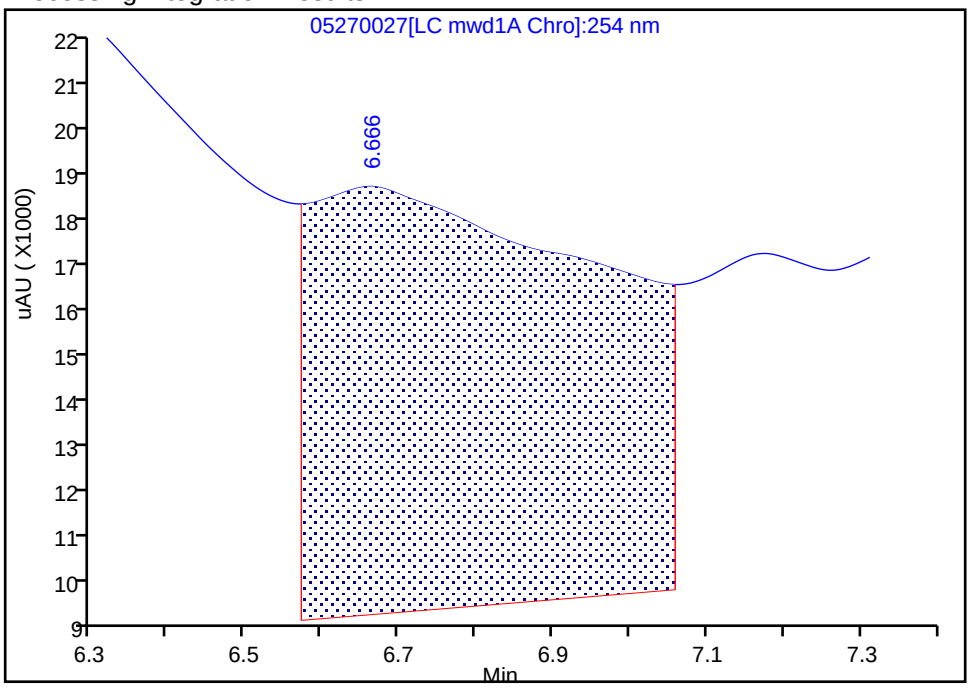
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270027.D				
Injection Date:	28-May-2022 04:28:56	Instrument ID:	CHHPLC_X5		
Lims ID:	280-162622-A-17-A	Lab Sample ID:	280-162622-17		
Client ID:	G0111-22A				
Operator ID:	JZ	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

5 HMX, CAS: 2691-41-0

Signal: 1

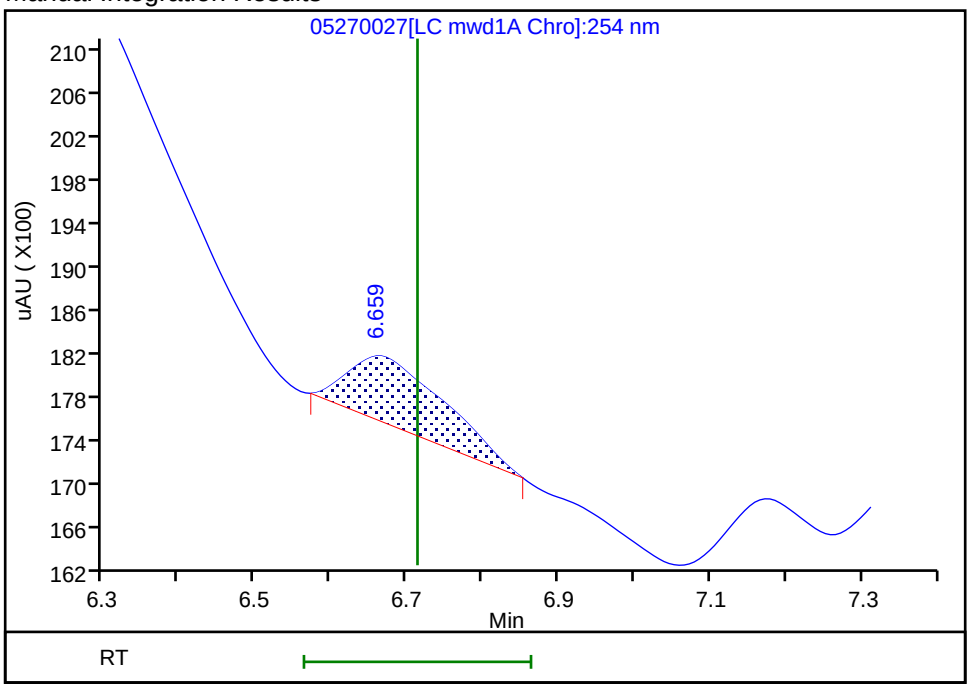
Processing Integration Results

RT: 6.67
Area: 213504
Amount: 1.285121
Amount Units: ug/ml



Manual Integration Results

RT: 6.66
Area: 5558
Amount: 0.033455
Amount Units: ug/ml



Reviewer: zhangji, 28-May-2022 14:11:10

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

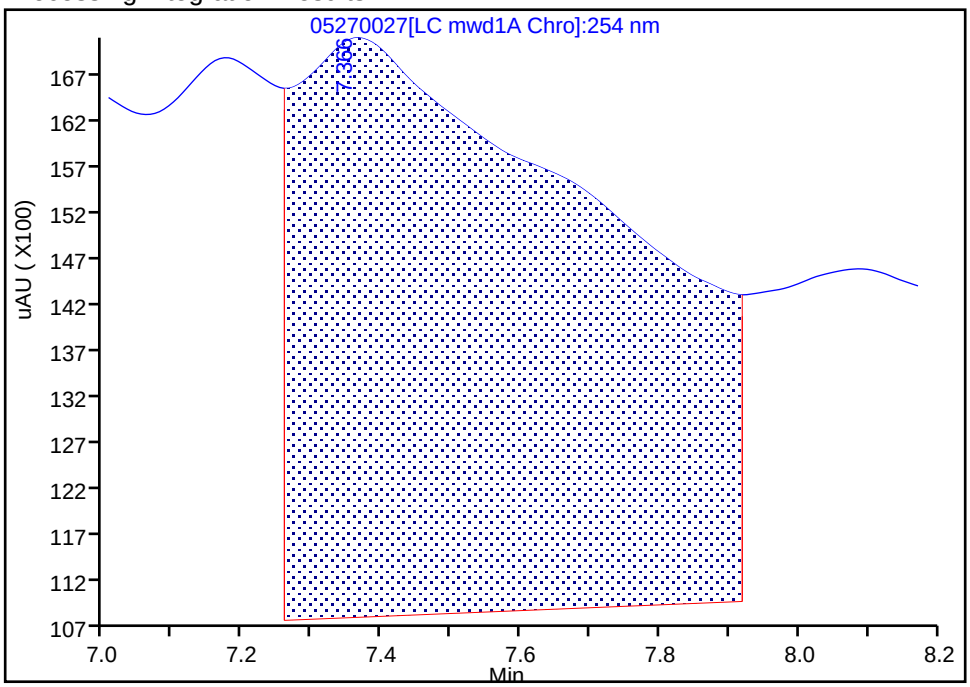
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270027.D				
Injection Date:	28-May-2022 04:28:56	Instrument ID:	CHHPLC_X5		
Lims ID:	280-162622-A-17-A	Lab Sample ID:	280-162622-17		
Client ID:	G0111-22A				
Operator ID:	JZ	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	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 MNX, CAS: 5755-27-1

Signal: 1

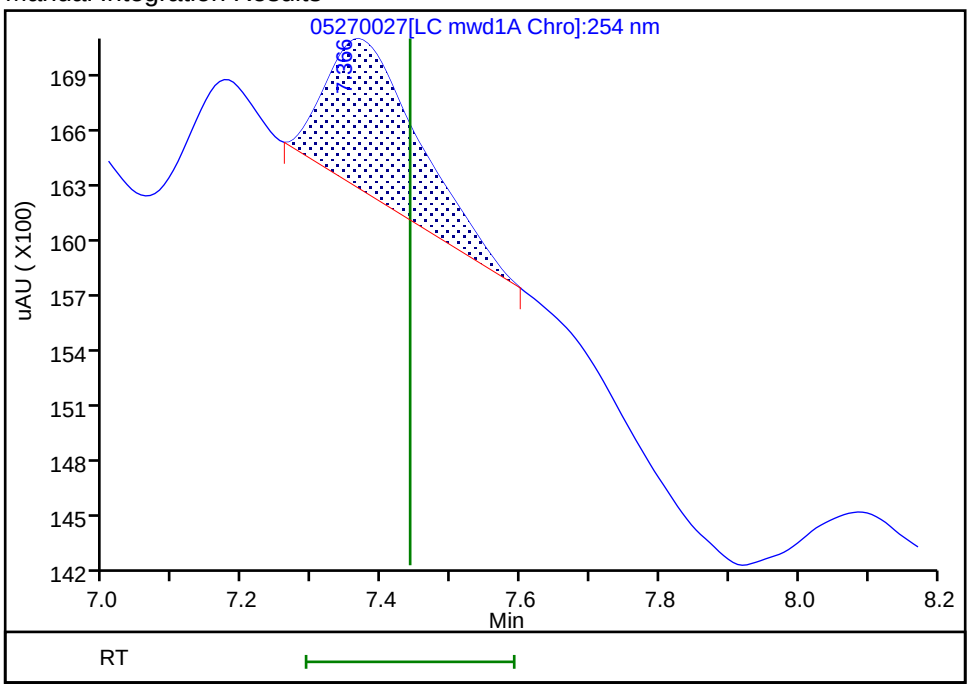
Processing Integration Results

RT: 7.37
Area: 192907
Amount: 0.771378
Amount Units: ug/ml



Manual Integration Results

RT: 7.37
Area: 7523
Amount: 0.030082
Amount Units: ug/ml



Reviewer: zhangji, 28-May-2022 14:11:14

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0123-22A | Lab Sample ID: 280-162622-18

Matrix: Water | Lab File ID: 05260032.D

Analysis Method: 8330A | Date Collected: 05/19/2022 13:20

Extraction Method: 3535 | Date Extracted: 05/25/2022 15:23

Sample wt/vol: 510.7(mL) | Date Analyzed: 05/27/2022 01:53

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 576310 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.20	U Q	0.21	0.20	0.082
99-65-0	1,3-Dinitrobenzene	0.098	U M Q	0.11	0.098	0.036
118-96-7	2,4,6-Trinitrotoluene	0.098	U M Q	0.11	0.098	0.044
121-14-2	2,4-Dinitrotoluene	0.078	U Q	0.098	0.078	0.027
606-20-2	2,6-Dinitrotoluene	0.078	U Q	0.098	0.078	0.039
35572-78-2	2-Amino-4,6-dinitrotoluene	0.098	U M Q	0.11	0.098	0.050
88-72-2	2-Nitrotoluene	0.20	U Q	0.21	0.20	0.084
99-08-1	3-Nitrotoluene	0.39	U Q	0.39	0.39	0.19
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U Q	0.15	0.12	0.056
99-99-0	4-Nitrotoluene	0.39	U Q	0.40	0.39	0.098
2691-41-0	HMX	0.49	M Q	0.21	0.20	0.086
5755-27-1	MNX	0.39	U M	2.0	0.39	0.15
98-95-3	Nitrobenzene	0.20	U Q	0.21	0.20	0.089
121-82-4	RDX	0.20	U M Q	0.21	0.20	0.050
479-45-8	Tetryl	0.098	U M Q	0.11	0.098	0.031

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	120	M Q	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\05260032.D
Lims ID: 280-162622-A-18-A
Client ID: G0123-22A
Sample Type: Client
Inject. Date: 27-May-2022 01:53:01 ALS Bottle#: 32 Worklist Smp#: 32
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-162622-A-18-
Misc. Info.: 280-0111383-032
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 27-May-2022 13:18:33 Calib Date: 25-Mar-2022 16:30:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220325-109559.b\03250017.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1651

First Level Reviewer: zhangji Date: 27-May-2022 13:11:21

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1	6.574	6.593	-0.019	4189	0.0500	M
7 MNX	1		7.211			ND	U
8 RDX	1		7.586			ND	U
$ 10 1,2-Dinitrobenzene	1	8.541	8.546	-0.005	29989	0.2405	M
11 1,3,5-Trinitrobenzene	1		8.666			ND	
12 1,3-Dinitrobenzene	1		9.299			ND	U
13 Nitrobenzene	1		9.686			ND	
15 Tetryl	1		10.013			ND	U
17 2,4,6-Trinitrotoluene	1		10.919			ND	U
18 4-Amino-2,6-dinitrotoluene	1		11.119			ND	
19 2-Amino-4,6-dinitrotoluene	1		11.373			ND	U
20 2,6-Dinitrotoluene	1		11.533			ND	
21 2,4-Dinitrotoluene	1		11.706			ND	
22 o-Nitrotoluene	1		12.559			ND	
23 p-Nitrotoluene	1		12.993			ND	
24 m-Nitrotoluene	1		13.566			ND	

QC Flag Legend

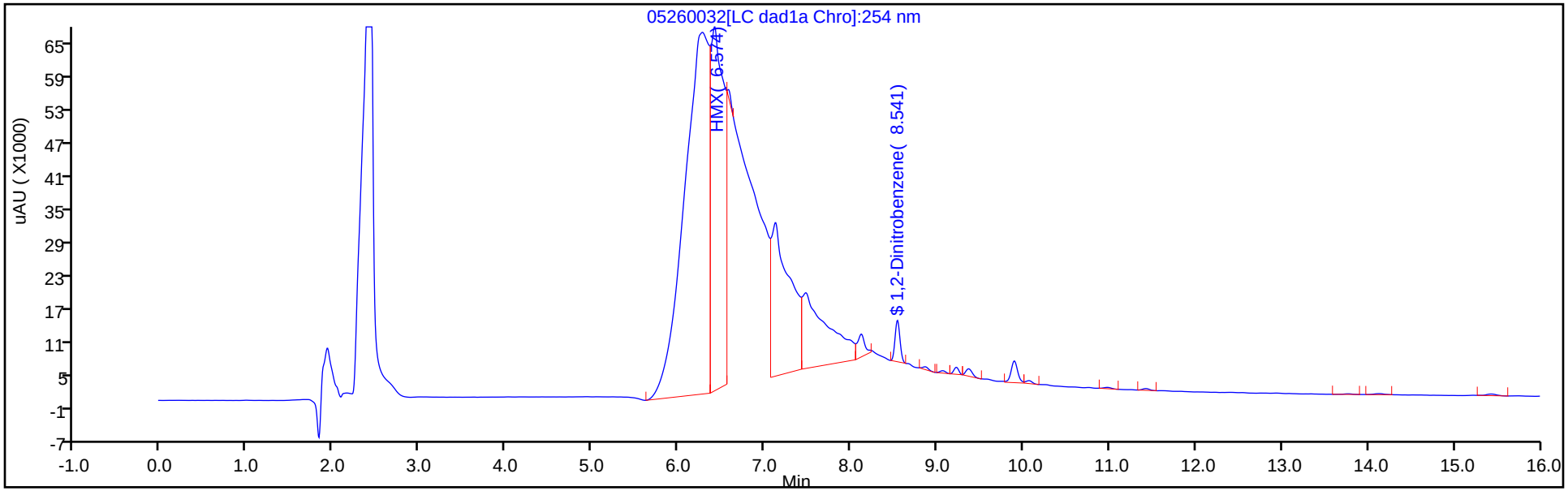
Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 27-May-2022 13:18:34 Chrom Revision: 2.3 18-May-2022 20:00:04

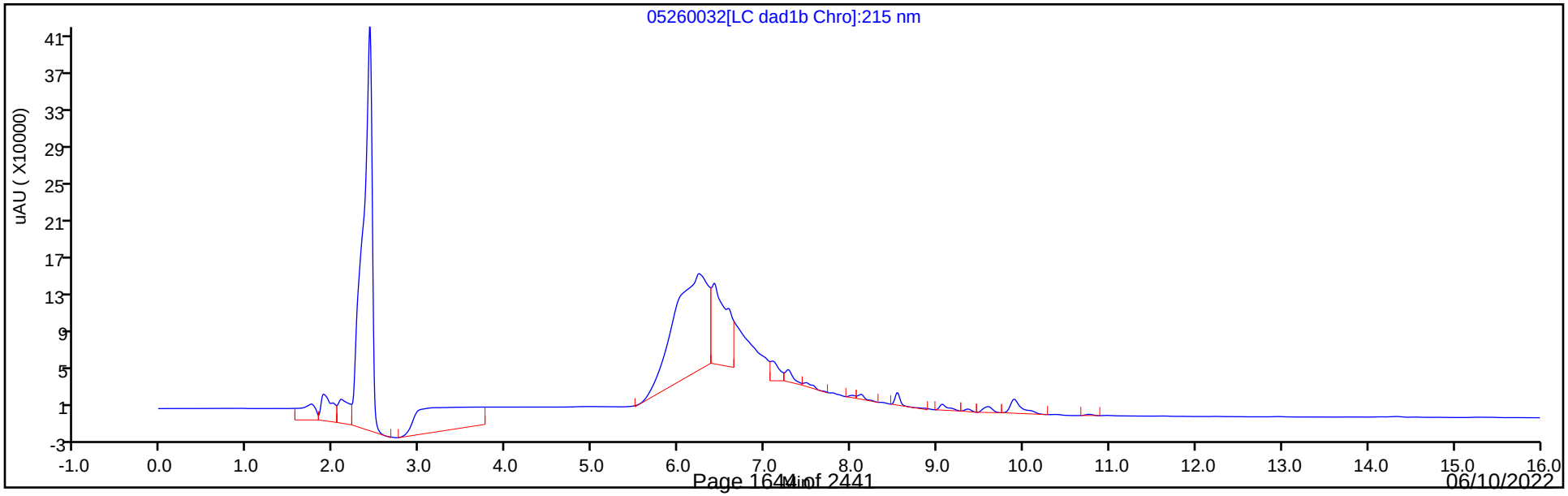
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260032.d				
Injection Date:	27-May-2022 01:53:01	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-162622-A-18-A	Lab Sample ID:	280-162622-18	Worklist Smp#:	32
Client ID:	G0123-22A				
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 Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\05260032.D				
Lims ID:	280-162622-A-18-A				
Client ID:	G0123-22A				
Sample Type:	Client				
Inject. Date:	27-May-2022 01:53:01	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-162622-A-18-				
Misc. Info.:	280-0111383-032				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	27-May-2022 13:18:33	Calib Date:	25-Mar-2022 16:30:08		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220325-109559.b\03250017.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1651				

First Level Reviewer: zhangji Date: 27-May-2022 13:11:21

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2405	120.25

Manual Integration/User Assign Peak Report

Eurofins Denver

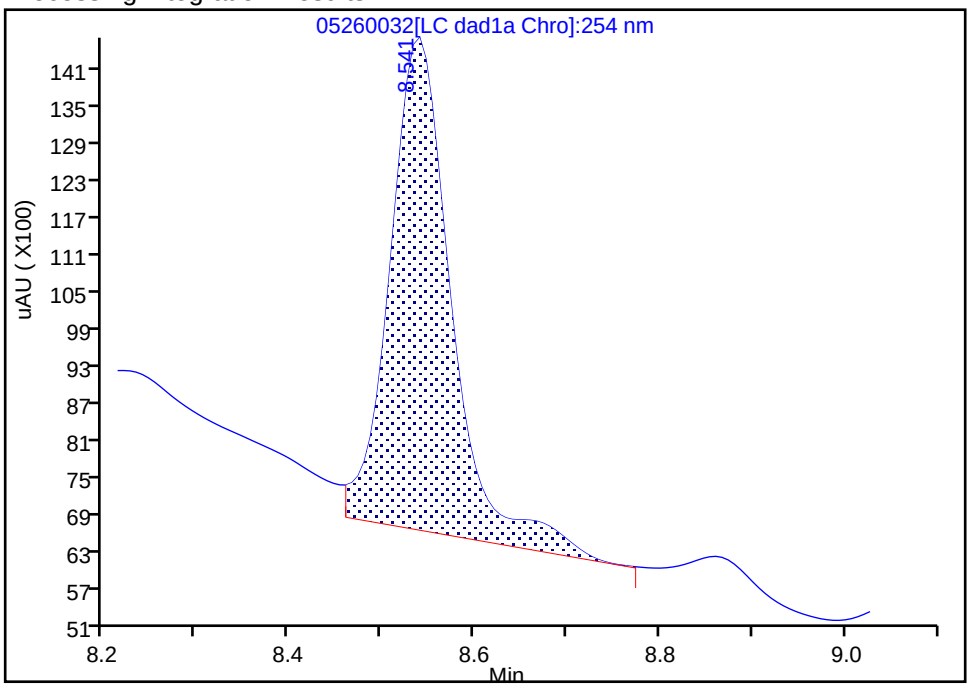
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260032.d				
Injection Date:	27-May-2022 01:53:01	Instrument ID:	CHHPLC_X3		
Lims ID:	280-162622-A-18-A	Lab Sample ID:	280-162622-18		
Client ID:	G0123-22A				
Operator ID:	JZ	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

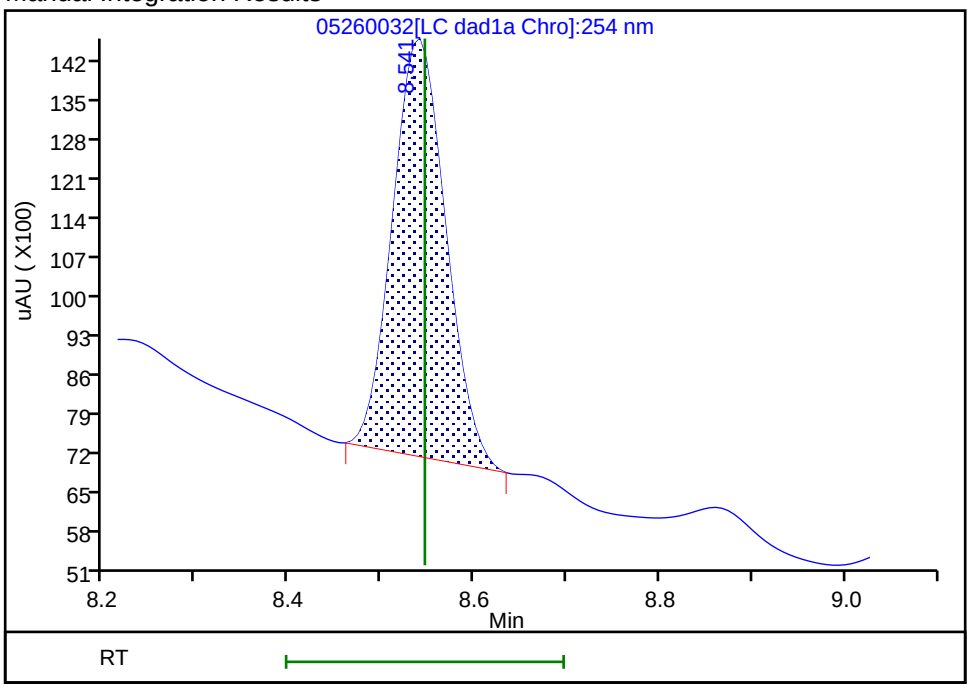
Processing Integration Results

RT: 8.54
Area: 37020
Amount: 0.296878
Amount Units: ug/mL



Manual Integration Results

RT: 8.54
Area: 29989
Amount: 0.240494
Amount Units: ug/mL



Reviewer: zhangji, 27-May-2022 13:11:20

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

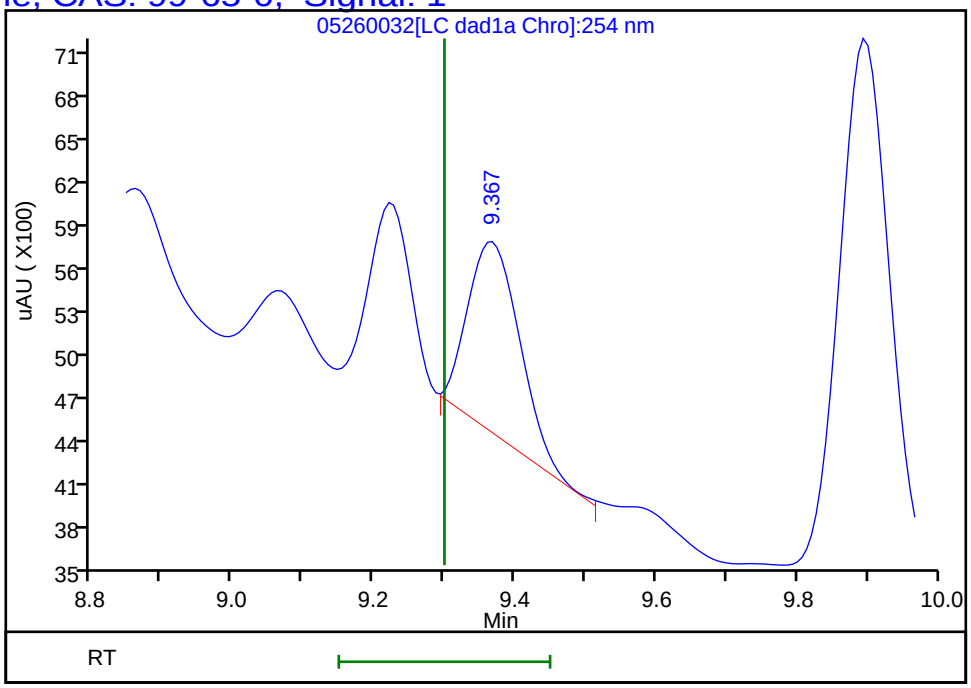
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260032.d
Injection Date: 27-May-2022 01:53:01 Instrument ID: CHHPLC_X3
Lims ID: 280-162622-A-18-A Lab Sample ID: 280-162622-18
Client ID: G0123-22A
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

12 1,3-Dinitrobenzene, CAS: 99-65-0, Signal: 1

RT: 9.37
Response: 6899
Amount: 0.023922



Reviewer: zhangji, 27-May-2022 13:11:21
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

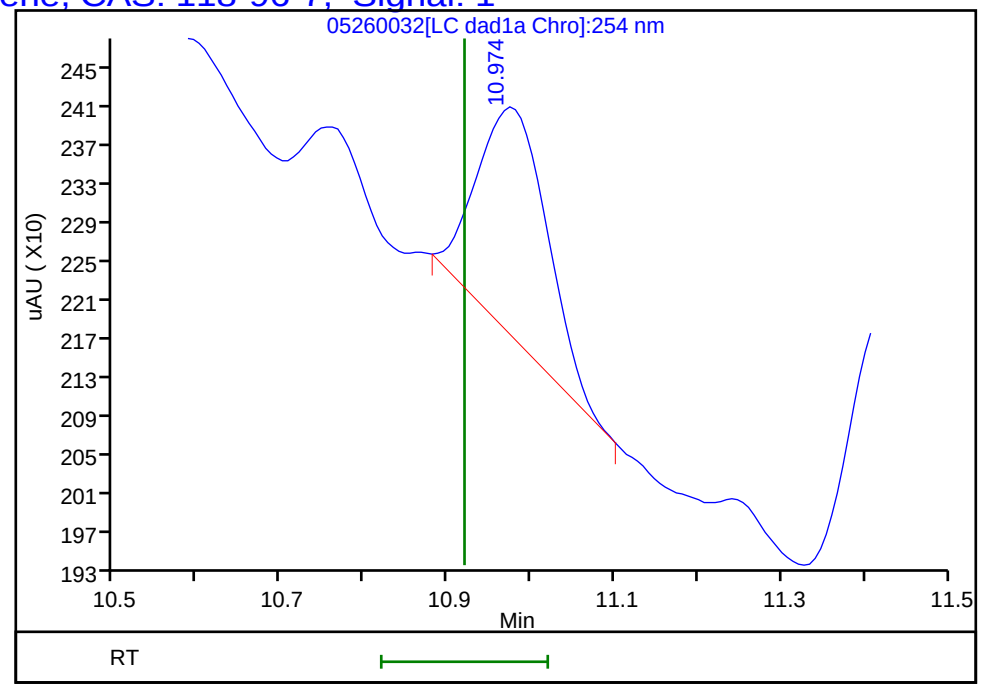
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260032.d
Injection Date: 27-May-2022 01:53:01 Instrument ID: CHHPLC_X3
Lims ID: 280-162622-A-18-A Lab Sample ID: 280-162622-18
Client ID: G0123-22A
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

17 2,4,6-Trinitrotoluene, CAS: 118-96-7, Signal: 1

RT: 10.97
Response: 1395
Amount: 0.006881



Reviewer: zhangji, 27-May-2022 13:11:21
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

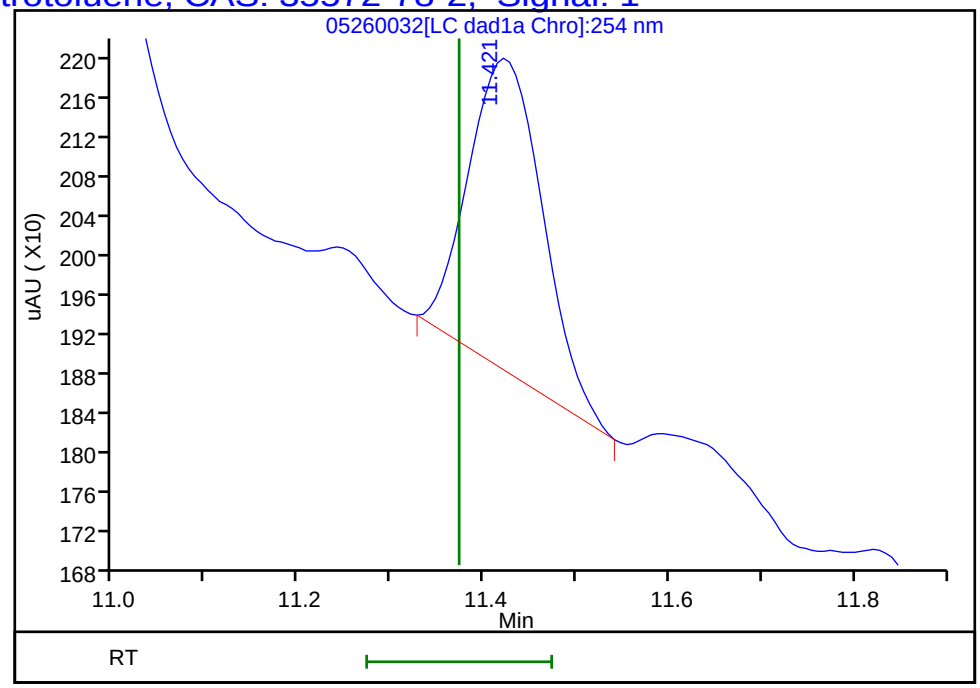
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260032.d
Injection Date: 27-May-2022 01:53:01 Instrument ID: CHHPLC_X3
Lims ID: 280-162622-A-18-A Lab Sample ID: 280-162622-18
Client ID: G0123-22A
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

19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2, Signal: 1

RT: 11.42
Response: 1768
Amount: 0.008745



Reviewer: zhangji, 27-May-2022 13:11:21
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

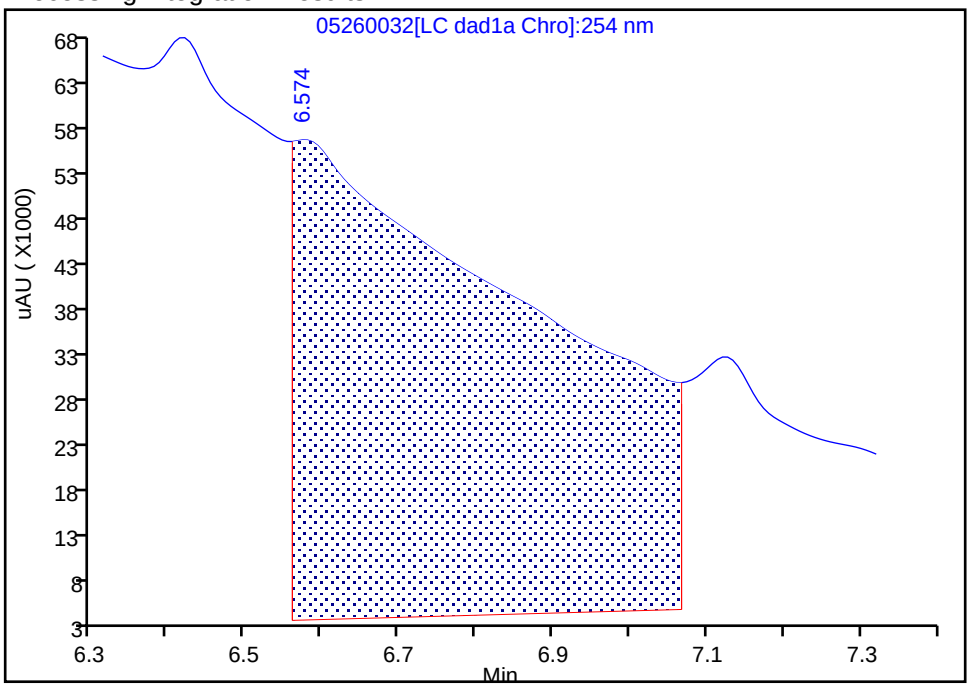
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260032.d				
Injection Date:	27-May-2022 01:53:01	Instrument ID:	CHHPLC_X3		
Lims ID:	280-162622-A-18-A	Lab Sample ID:	280-162622-18		
Client ID:	G0123-22A				
Operator ID:	JZ	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

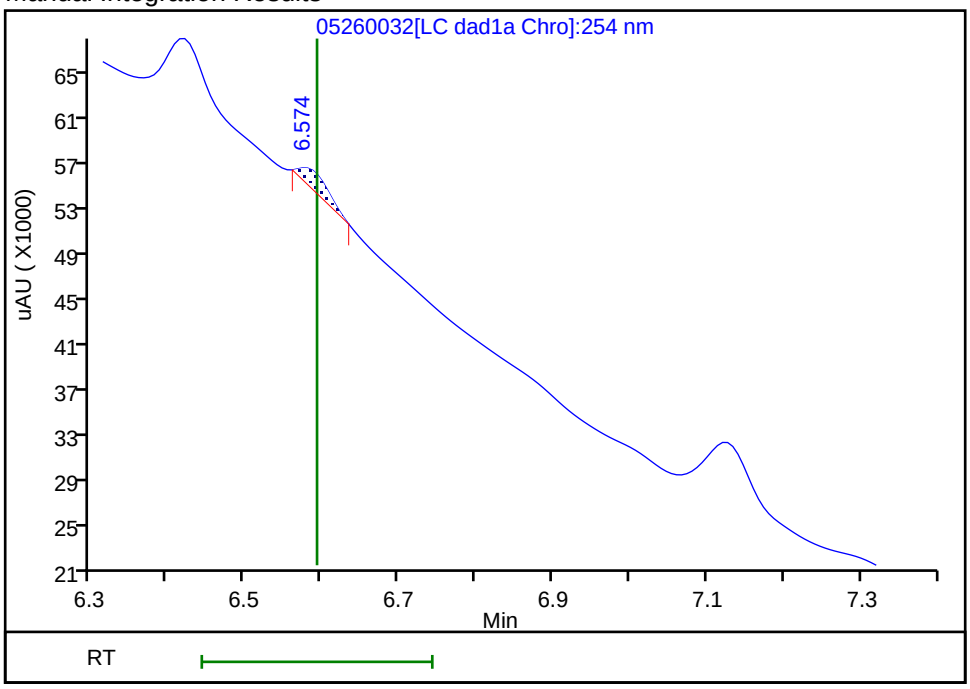
Processing Integration Results

RT: 6.57
Area: 1149101
Amount: 13.707973
Amount Units: ug/mL



Manual Integration Results

RT: 6.57
Area: 4189
Amount: 0.049972
Amount Units: ug/mL



Reviewer: zhangji, 27-May-2022 13:11:15

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

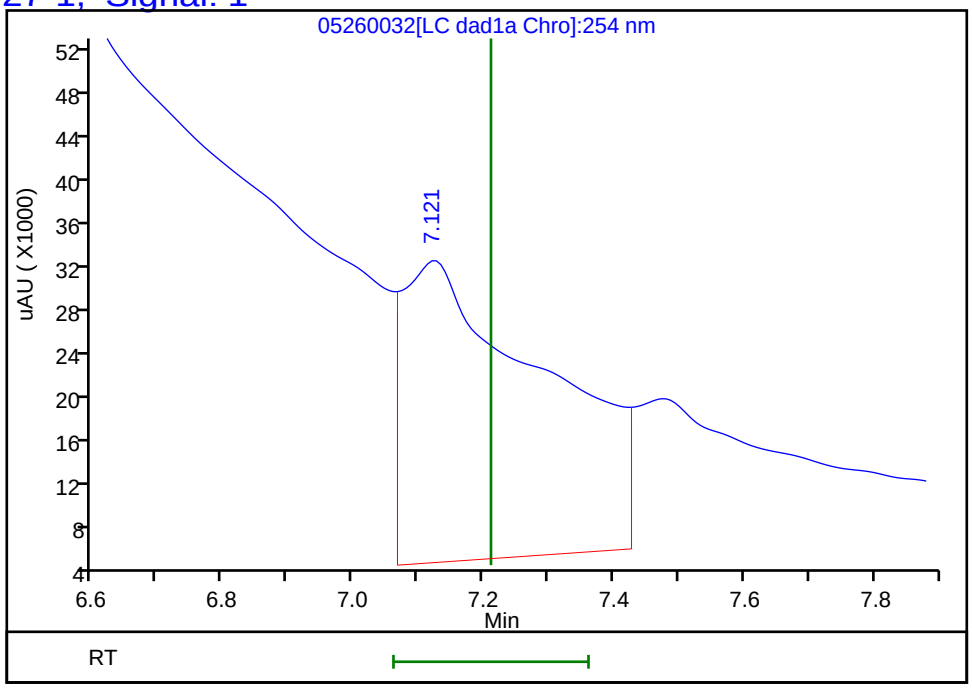
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260032.d
Injection Date: 27-May-2022 01:53:01 Instrument ID: CHHPLC_X3
Lims ID: 280-162622-A-18-A Lab Sample ID: 280-162622-18
Client ID: G0123-22A
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 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.12
Response: 420386
Amount: 3.336518



Reviewer: zhangji, 27-May-2022 13:11:21
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

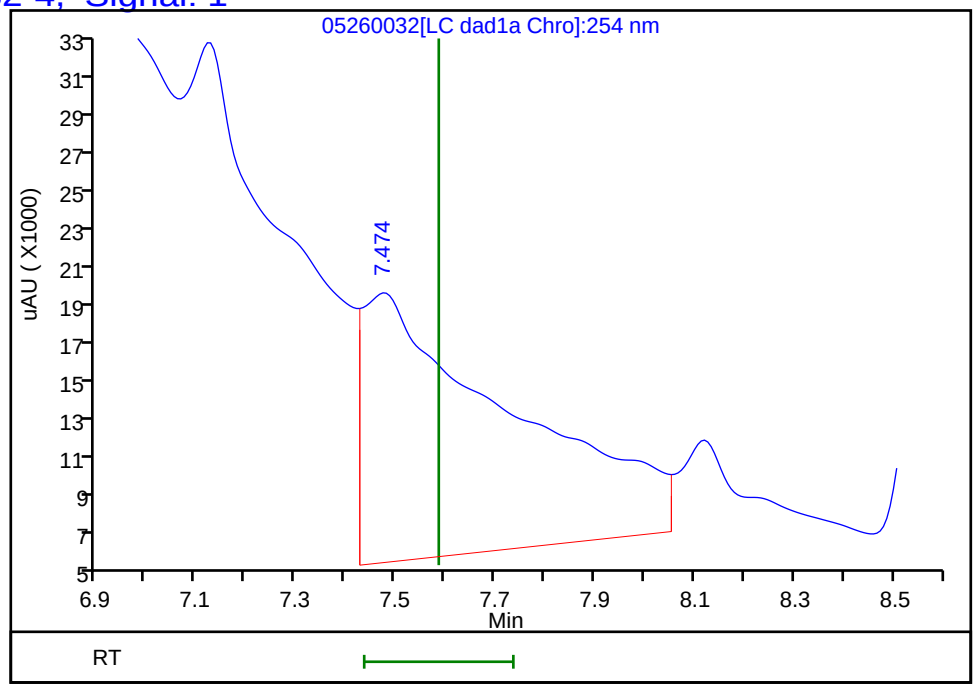
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260032.d
Injection Date: 27-May-2022 01:53:01 Instrument ID: CHHPLC_X3
Lims ID: 280-162622-A-18-A Lab Sample ID: 280-162622-18
Client ID: G0123-22A
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

8 RDX, CAS: 121-82-4, Signal: 1

RT: 7.47
Response: 280091
Amount: 2.703341



Reviewer: zhangji, 27-May-2022 13:11:21
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

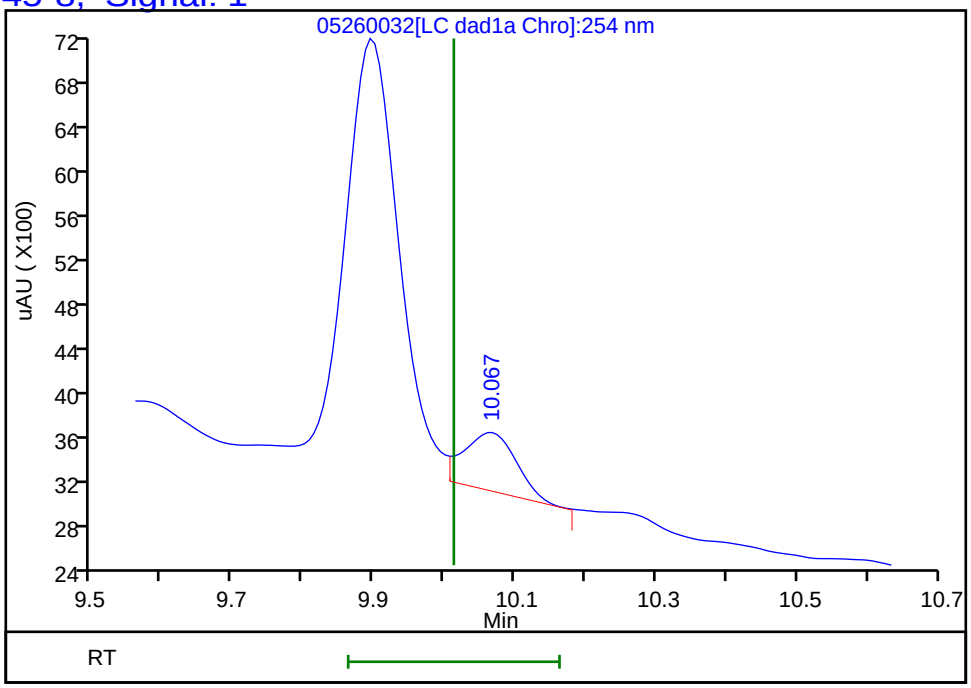
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260032.d
Injection Date: 27-May-2022 01:53:01 Instrument ID: CHHPLC_X3
Lims ID: 280-162622-A-18-A Lab Sample ID: 280-162622-18
Client ID: G0123-22A
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

15 Tetryl, CAS: 479-45-8, Signal: 1

RT: 10.07
Response: 2688
Amount: 0.015759



Reviewer: zhangji, 27-May-2022 13:11:21
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: G0123-22A | Lab Sample ID: 280-162622-18

Matrix: Water | Lab File ID: 05270028.D

Analysis Method: 8330A | Date Collected: 05/19/2022 13:20

Extraction Method: 3535 | Date Extracted: 05/25/2022 15:23

Sample wt/vol: 510.7(mL) | Date Analyzed: 05/28/2022 05:03

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: Luna-phenylhex ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 576448 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	112		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270028.D				
Lims ID:	280-162622-A-18-A				
Client ID:	G0123-22A				
Sample Type:	Client				
Inject. Date:	28-May-2022 05:03:54	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-162622-A-18-A				
Misc. Info.:	280-0111418-028				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	28-May-2022 14:12:44	Calib Date:	03-Mar-2022 07:19:48		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1652				
First Level Reviewer: zhangji		Date:	28-May-2022 14:11:51		

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	5 HMX	1	6.663	6.713	-0.050	10469	0.0630	M
	6 MNX	1		7.440			ND	U
	8 RDX	1	8.789	8.840	-0.051	13103	0.0674	M
	9 Nitrobenzene	1		11.707			ND	
$	10 1,2-Dinitrobenzene	1	12.776	12.867	-0.091	56136	0.2248	
	12 1,3-Dinitrobenzene	1		15.233			ND	
	14 o-Nitrotoluene	1		16.327			ND	
	16 p-Nitrotoluene	1		16.627			ND	7
	17 4-Amino-2,6-dinitrotoluene	1		17.247			ND	
	18 m-Nitrotoluene	1		17.573			ND	U
	19 2-Amino-4,6-dinitrotoluene	1		18.233			ND	
	20 1,3,5-Trinitrobenzene	1		18.487			ND	
	21 2,6-Dinitrotoluene	1		19.720			ND	
	22 2,4-Dinitrotoluene	1		20.233			ND	
	23 Tetryl	1		23.880			ND	
	24 2,4,6-Trinitrotoluene	1		24.680			ND	

QC Flag Legend

Processing Flags
- 7 - Failed Limit of Detection

Review Flags
- M - Manually Integrated
- U - Marked Undetected

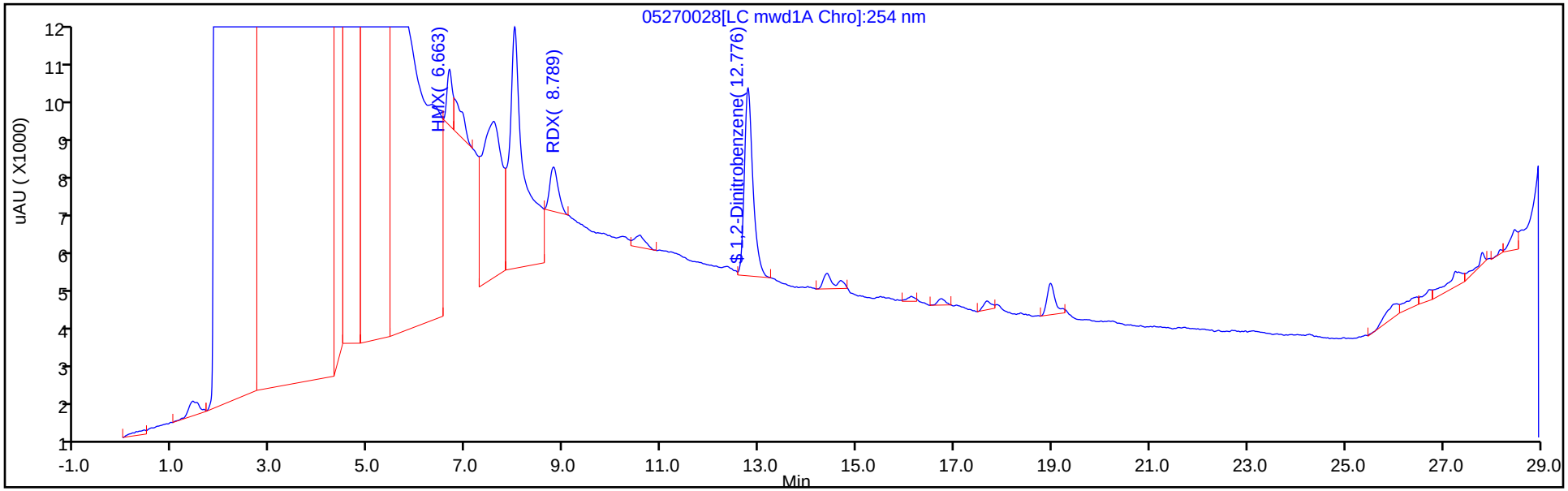
Report Date: 28-May-2022 14:12:48 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

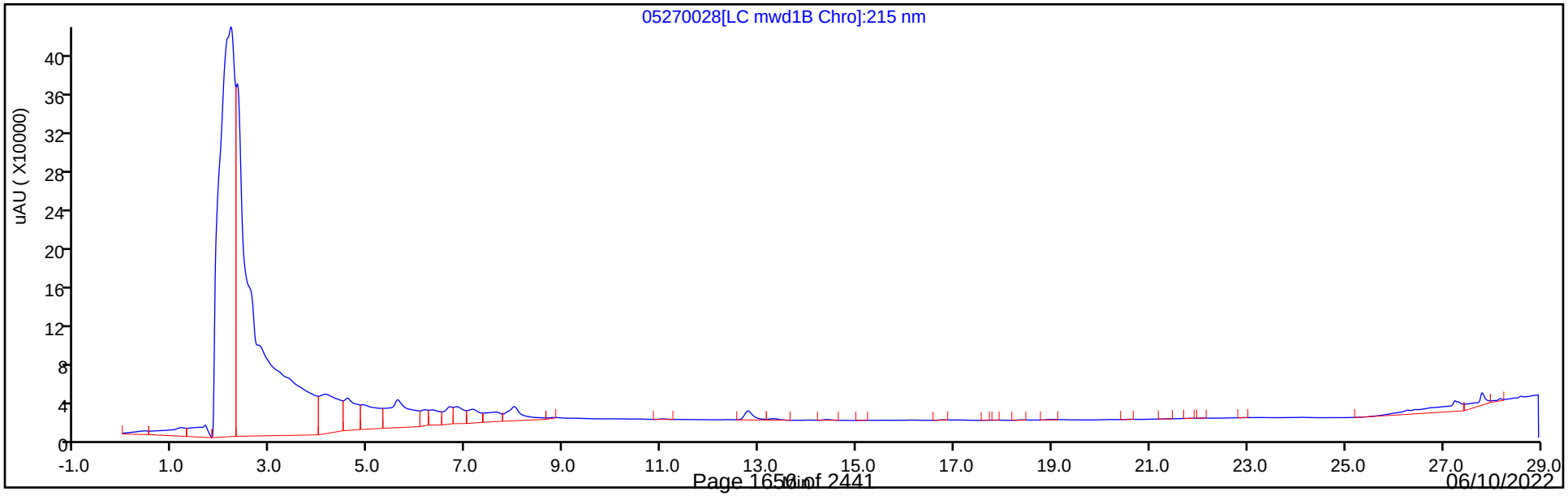
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270028.D

Injection Date:	28-May-2022 05:03:54	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-162622-A-18-A	Lab Sample ID:	280-162622-18	Worklist Smp#:	28
Client ID:	G0123-22A				
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



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270028.D				
Lims ID:	280-162622-A-18-A				
Client ID:	G0123-22A				
Sample Type:	Client				
Inject. Date:	28-May-2022 05:03:54	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-162622-A-18-A				
Misc. Info.:	280-0111418-028				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	28-May-2022 14:12:44	Calib Date:	03-Mar-2022 07:19:48		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1652				
First Level Reviewer: zhangji		Date:	28-May-2022 14:11:51		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2248	112.38

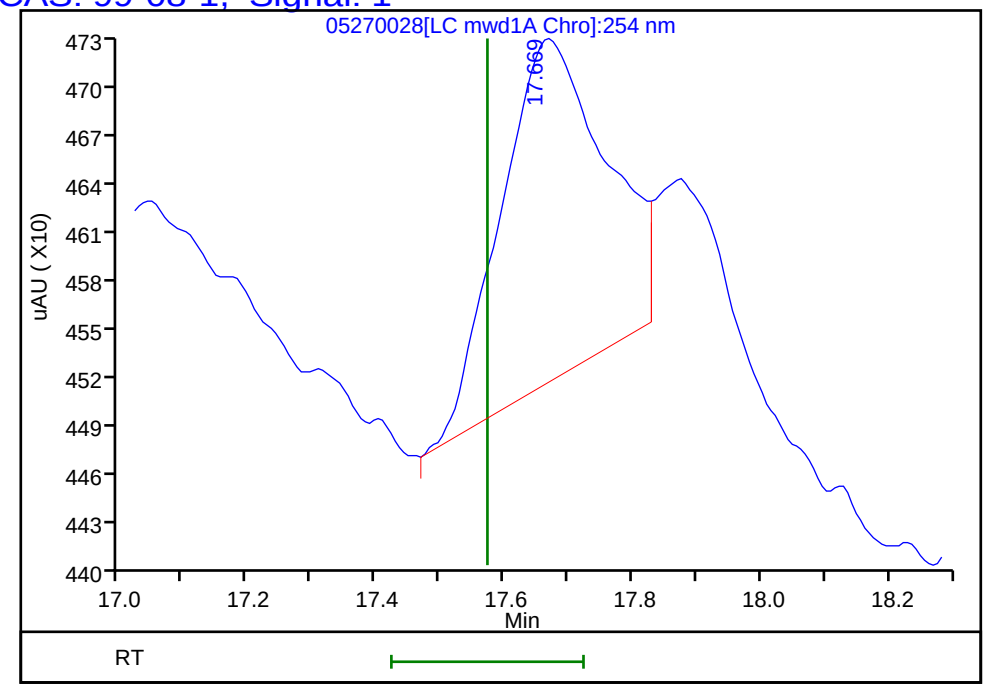
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270028.D				
Injection Date:	28-May-2022 05:03:54	Instrument ID:	CHHPLC_X5		
Lims ID:	280-162622-A-18-A	Lab Sample ID:	280-162622-18		
Client ID:	G0123-22A				
Operator ID:	JZ	ALS Bottle#:	28	Worklist Smp#:	28
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 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 17.67
Response: 2418
Amount: 0.009803



Reviewer: zhangji, 28-May-2022 14:11:51
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

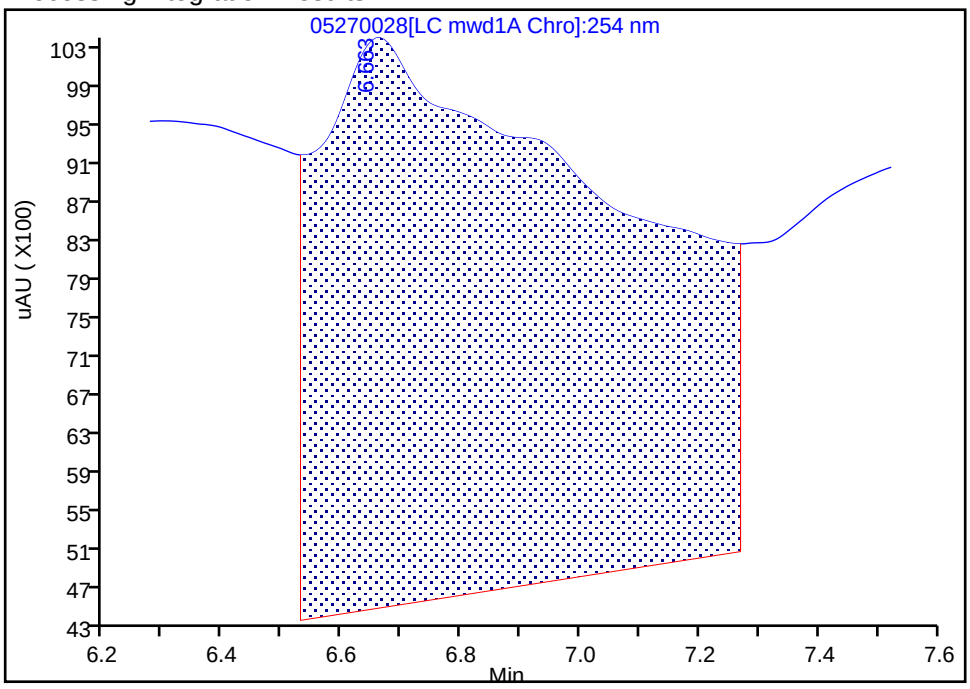
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270028.D				
Injection Date:	28-May-2022 05:03:54	Instrument ID:	CHHPLC_X5		
Lims ID:	280-162622-A-18-A	Lab Sample ID:	280-162622-18		
Client ID:	G0123-22A				
Operator ID:	JZ	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

5 HMX, CAS: 2691-41-0

Signal: 1

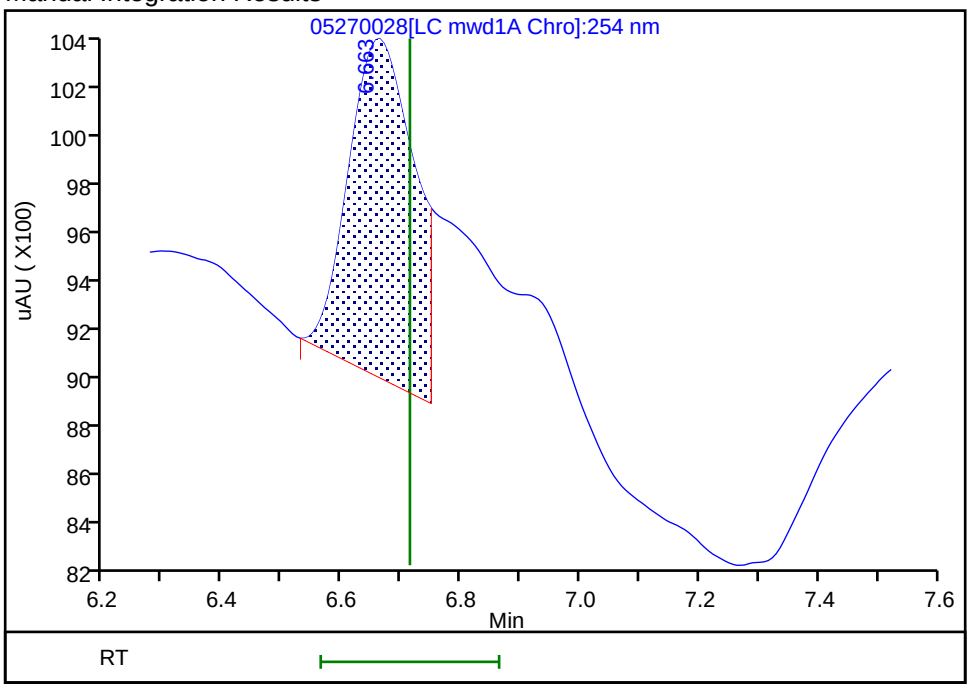
Processing Integration Results

RT: 6.66
Area: 198445
Amount: 1.194478
Amount Units: ug/ml



Manual Integration Results

RT: 6.66
Area: 10469
Amount: 0.063015
Amount Units: ug/ml



Reviewer: zhangji, 28-May-2022 14:11:44
Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

User Disabled Compound Report

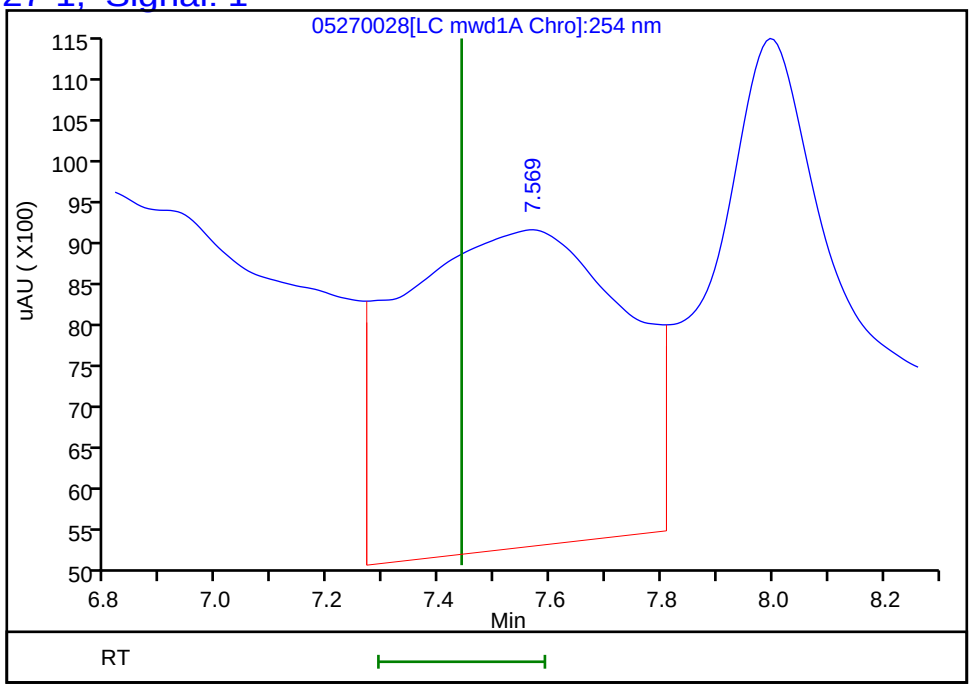
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270028.D

Injection Date:	28-May-2022 05:03:54	Instrument ID:	CHHPLC_X5		
Lims ID:	280-162622-A-18-A	Lab Sample ID:	280-162622-18		
Client ID:	G0123-22A				
Operator ID:	JZ	ALS Bottle#:	28	Worklist Smp#:	28
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 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.57
Response: 107405
Amount: 0.429481



Reviewer: zhangji, 28-May-2022 14:11:51
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

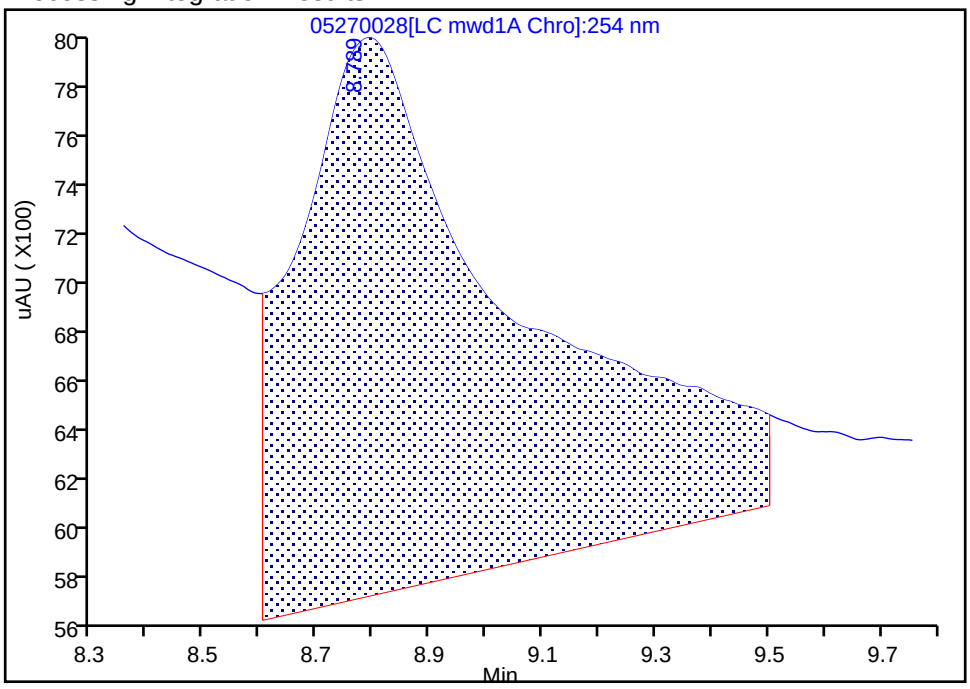
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270028.D				
Injection Date:	28-May-2022 05:03:54	Instrument ID:	CHHPLC_X5		
Lims ID:	280-162622-A-18-A	Lab Sample ID:	280-162622-18		
Client ID:	G0123-22A				
Operator ID:	JZ	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	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

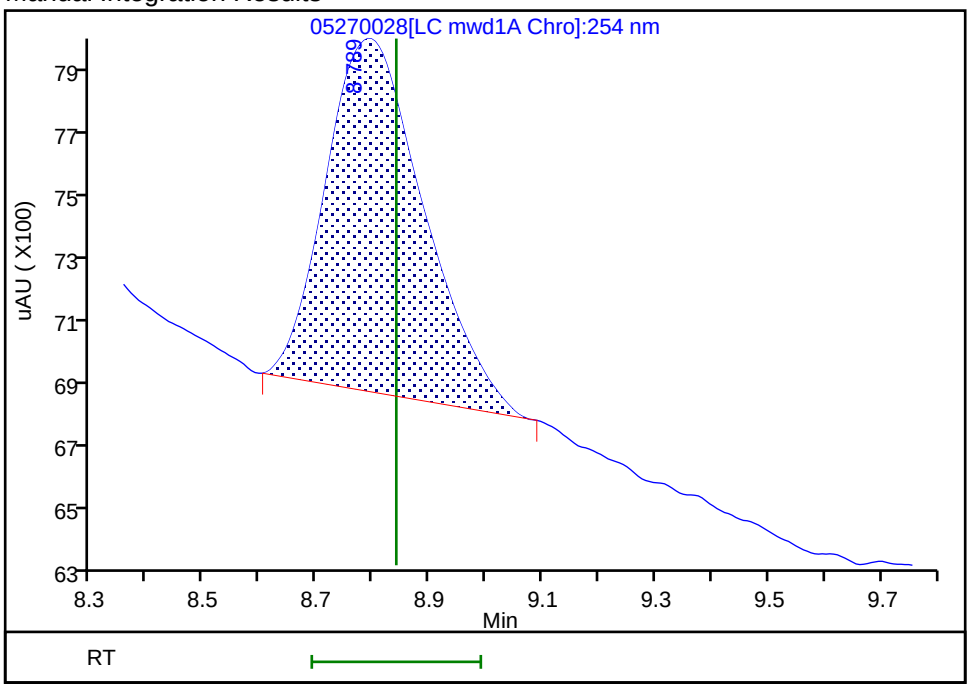
Processing Integration Results

RT: 8.79
Area: 61206
Amount: 0.314957
Amount Units: ug/ml



Manual Integration Results

RT: 8.79
Area: 13103
Amount: 0.067426
Amount Units: ug/ml



Reviewer: zhangji, 28-May-2022 14:11:49

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1 Analy Batch No.: 562503

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/04/2022 18:28 Calibration End Date: 01/04/2022 21:31 Calibration ID: 61345

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-562503/19	01040019.D
Level 2	IC 280-562503/18	01040018.D
Level 3	IC 280-562503/17	01040017.D
Level 4	IC 280-562503/16	01040016.D
Level 5	IC 280-562503/15	01040015.D
Level 6	IC 280-562503/14	01040014.D
Level 7	IC 280-562503/13	01040013.D
Level 8	IC 280-562503/12	01040012.D
Level 9	IC 280-562503/11	01040011.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	6.601	6.595	6.600	6.598	6.601	6.601	6.599	6.598	6.593		6.448 - 6.748	6.598
RDX	7.601	7.608	7.607	7.605	7.601	7.607	7.606	7.604	7.600		7.455 - 7.755	7.604
Picric acid	7.941	7.948	7.947	7.945	7.934	7.927	7.913	7.904	7.860		7.795 - 8.095	7.924
1,3,5-Trinitrobenzene	8.688	8.695	8.693	8.692	8.687	8.694	8.693	8.691	8.687		8.542 - 8.842	8.691
1,3-Dinitrobenzene	9.321	9.328	9.327	9.331	9.327	9.327	9.326	9.324	9.320		9.181 - 9.481	9.326
Nitrobenzene	9.714	9.722	9.727	9.725	9.720	9.727	9.726	9.717	9.713		9.575 - 9.875	9.721
Tetryl	10.041	10.055	10.060	10.058	10.054	10.061	10.053	10.051	10.046		9.908 - 10.208	10.053
Nitroglycerin	10.501	10.515	10.513	10.518	10.514	10.514	10.513	10.504	10.500		10.368 - 10.668	10.510
2,4,6-Trinitrotoluene	10.954	10.968	10.973	10.971	10.967	10.967	10.966	10.964	10.960		10.871 - 11.071	10.966
4-Amino-2,6-dinitrotoluene	11.154	11.175	11.173	11.171	11.167	11.174	11.173	11.164	11.160		11.071 - 11.271	11.168
2-Amino-4,6-dinitrotoluene	11.408	11.428	11.427	11.425	11.420	11.421	11.419	11.417	11.413		11.325 - 11.525	11.420
2,6-Dinitrotoluene	11.581	11.595	11.593	11.598	11.594	11.594	11.593	11.591	11.586		11.498 - 11.698	11.592
2,4-Dinitrotoluene	11.748	11.762	11.767	11.765	11.760	11.767	11.766	11.757	11.753		11.665 - 11.865	11.761
2-Nitrotoluene	12.614	12.642	12.640	12.638	12.634	12.634	12.633	12.631	12.620		12.488 - 12.788	12.632
4-Nitrotoluene	13.054	13.075	13.067	13.071	13.060	13.067	13.066	13.057	13.053		12.921 - 13.221	13.063
3-Nitrotoluene	13.634	13.655	13.653	13.651	13.647	13.647	13.646	13.644	13.633		13.501 - 13.801	13.646
PETN	14.708	14.735	14.733	14.738	14.727	14.734	14.733	14.724	14.713		14.588 - 14.888	14.727
1,2-Dinitrobenzene	8.561	8.575	8.573	8.572	8.567	8.574	8.573	8.571	8.567		8.422 - 8.722	8.570

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-162622-1 Analy Batch No.: 562503

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/04/2022 18:28 Calibration End Date: 01/04/2022 21:31 Calibration ID: 61345

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-562503/19	01040019.D
Level 2	IC 280-562503/18	01040018.D
Level 3	IC 280-562503/17	01040017.D
Level 4	IC 280-562503/16	01040016.D
Level 5	IC 280-562503/15	01040015.D
Level 6	IC 280-562503/14	01040014.D
Level 7	IC 280-562503/13	01040013.D
Level 8	IC 280-562503/12	01040012.D
Level 9	IC 280-562503/11	01040011.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	90100 81580 81292	86750 82313	84600 81626	84890 81295	Ave		83827.2016				3.6		20.0			
RDX	115200 98540 100273	104200 97815	114300 98669	104470 99016	Ave		103609.197				6.5		20.0			
Picric acid	71600 74240 80484	77700 76623	80580 76297	78550 77279	Ave		77039.1825				3.7		20.0			
1,3,5-Trinitrobenzene	219261 209936 225698	212026 217802	213792 221958	218124 224262	Ave		218095.534				2.5		20.0			
1,3-Dinitrobenzene	262774 281713 296660	291068 291824	293074 292328	291567 294606	Ave		288401.481				3.6		20.0			
Nitrobenzene	205876 184653 193838	191484 188466	185837 191771	192102 193551	Ave		191953.206				3.2		20.0			
Tetryl	177445 163545 172217	174551 166432	165968 169313	172036 173594	Ave		170566.759				2.7		20.0			
Nitroglycerin	63480 60791 64852	60040 64322	61302 64183	63595 64770	Ave		63037.2862				2.9		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-162622-1 Analy Batch No.: 562503

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/04/2022 18:28 Calibration End Date: 01/04/2022 21:31 Calibration ID: 61345

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	211753 195486 202459	210508 199081	203227 198317	203267 200435	Ave		202725.952				2.7		20.0			
4-Amino-2,6-dinitrotoluene	171628 142434 147171	157343 146076	152967 145091	149600 146556	Ave		150985.194				5.9		20.0			
2-Amino-4,6-dinitrotoluene	227789 193171 199435	213247 197134	191235 196207	201992 199332	Ave		202171.240				5.7		20.0			
2,6-Dinitrotoluene	154482 136163 144227	149054 142460	137610 141928	141773 140340	Ave		143115.218				4.0		20.0			
2,4-Dinitrotoluene	303486 281295 293182	293327 286355	277550 285832	292380 290749	Ave		289350.655				2.6		20.0			
2-Nitrotoluene	138700 121120 126002	137150 123750	126280 123333	127770 124418	Ave		127613.606				4.8		20.0			
4-Nitrotoluene	108084 103090 108687	107335 105826	103054 106012	106936 107095	Ave		106235.483				1.9		20.0			
3-Nitrotoluene	176224 132507 139283	149301 136601	134525 135465	139890 136664	Ave		142273.338				9.6		20.0			
PETN	87840 71710 74726	78525 73771	70168 73720	74208 74427	Lin2	1383.22998	72545.1478							0.9990		0.9900
1,2-Dinitrobenzene	118800 123244 127495	125150 124888	122540 125351	127800 127011	Ave		124697.681				2.3		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver Job No.: 280-162622-1 Analy Batch No.: 562503

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/04/2022 18:28 Calibration End Date: 01/04/2022 21:31 Calibration ID: 61345

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-562503/19	01040019.D
Level 2	IC 280-562503/18	01040018.D
Level 3	IC 280-562503/17	01040017.D
Level 4	IC 280-562503/16	01040016.D
Level 5	IC 280-562503/15	01040015.D
Level 6	IC 280-562503/14	01040014.D
Level 7	IC 280-562503/13	01040013.D
Level 8	IC 280-562503/12	01040012.D
Level 9	IC 280-562503/11	01040011.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	901	1735	4230	8489	20395	0.0100	0.0200	0.0500	0.100	0.250
		32925	57138	81295	203229		0.400	0.700	1.00	2.50	
RDX	Ave	1152	2084	5715	10447	24635	0.0100	0.0200	0.0500	0.100	0.250
		39126	69068	99016	250683		0.400	0.700	1.00	2.50	
Picric acid	Ave	716	1554	4029	7855	18560	0.0100	0.0200	0.0500	0.100	0.250
		30649	53408	77279	201210		0.400	0.700	1.00	2.50	
1,3,5-Trinitrobenzene	Ave	2197	4249	10711	21856	52589	0.0100	0.0200	0.0501	0.100	0.251
		87295	155681	224711	565374		0.401	0.701	1.00	2.51	
1,3-Dinitrobenzene	Ave	2633	5833	14683	29215	70569	0.0100	0.0200	0.0501	0.100	0.251
		116963	205039	295195	743133		0.401	0.701	1.00	2.51	
Nitrobenzene	Ave	2067	3845	9329	19287	46348	0.0100	0.0201	0.0502	0.100	0.251
		75688	134777	194325	486534		0.402	0.703	1.00	2.51	
Tetryl	Ave	1778	3498	8315	17238	40968	0.0100	0.0200	0.0501	0.100	0.251
		66706	118756	173941	431404		0.401	0.701	1.00	2.51	
Nitroglycerin	Ave	6348	12008	30651	63595	151977	0.100	0.200	0.500	1.00	2.50
		257287	449283	647703	1621311		4.00	7.00	10.0	25.0	
2,4,6-Trinitrotoluene	Ave	2126	4227	10202	20408	49067	0.0100	0.0201	0.0502	0.100	0.251
		79951	139377	201237	508173		0.402	0.703	1.00	2.51	
4-Amino-2,6-dinitrotoluene	Ave	1718	3150	7656	14975	35644	0.0100	0.0200	0.0501	0.100	0.250
		58489	101665	146703	368296		0.400	0.701	1.00	2.50	
2-Amino-4,6-dinitrotoluene	Ave	2287	4282	9600	20280	48486	0.0100	0.0201	0.0502	0.100	0.251
		79169	137894	200129	500581		0.402	0.703	1.00	2.51	
2,6-Dinitrotoluene	Ave	1551	2993	6908	14234	34177	0.0100	0.0201	0.0502	0.100	0.251
		57212	99747	140901	362011		0.402	0.703	1.00	2.51	
2,4-Dinitrotoluene	Ave	3047	5890	13933	29355	70605	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 Denver Job No.: 280-162622-1 Analy Batch No.: 562503

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/04/2022 18:28 Calibration End Date: 01/04/2022 21:31 Calibration ID: 61345

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
		115000	200883	291912	735887		0.402	0.703	1.00	2.51	
2-Nitrotoluene	Ave	1387	2743	6314	12777	30280	0.0100	0.0200	0.0500	0.100	0.250
		49500	86333	124418	315004		0.400	0.700	1.00	2.50	
4-Nitrotoluene	Ave	1083	2151	5163	10715	25824	0.0100	0.0200	0.0501	0.100	0.251
		42415	74357	107309	272262		0.401	0.701	1.00	2.51	
3-Nitrotoluene	Ave	1764	2989	6733	14003	33160	0.0100	0.0200	0.0501	0.100	0.250
		54695	94920	136801	348555		0.400	0.701	1.00	2.50	
PETN	Lin2	8784	15705	35084	74208	179275	0.100	0.200	0.500	1.00	2.50
		295082	516042	744274	1868141		4.00	7.00	10.0	25.0	
1,2-Dinitrobenzene	Ave	1188	2503	6127	12780	30811	0.0100	0.0200	0.0500	0.100	0.250
		49955	87746	127011	318738		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\20220104-107731.b\01040011.D
Lims ID: IC INT 9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 04-Jan-2022 18:28:10 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 9
Misc. Info.: 280-0107731-011
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Jan-2022 20:05:10 Calib Date: 05-Jan-2022 04:24:15
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1641

First Level Reviewer: zhangji Date: 04-Jan-2022 19:18:32

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.593	6.598	-0.005	203229	2.50	2.42	M
8 RDX	1	7.600	7.605	-0.005	250683	2.50	2.42	
9 2,4,6-Trinitrophenol	1	7.860	7.945	-0.085	201210	2.50	2.61	
$ 10 1,2-Dinitrobenzene	1	8.567	8.572	-0.005	318738	2.50	2.56	
11 1,3,5-Trinitrobenzene	1	8.687	8.692	-0.005	565374	2.51	2.59	
12 1,3-Dinitrobenzene	1	9.320	9.331	-0.011	743133	2.51	2.58	
13 Nitrobenzene	1	9.713	9.725	-0.012	486534	2.51	2.53	
15 Tetryl	1	10.046	10.058	-0.012	431404	2.51	2.53	
16 Nitroglycerin	2	10.500	10.518	-0.018	1621311	25.0	25.7	
17 2,4,6-Trinitrotoluene	1	10.960	10.971	-0.011	508173	2.51	2.51	
18 4-Amino-2,6-dinitrotoluene	1	11.160	11.171	-0.011	368296	2.50	2.44	
19 2-Amino-4,6-dinitrotoluene	1	11.413	11.425	-0.012	500581	2.51	2.48	
20 2,6-Dinitrotoluene	1	11.586	11.598	-0.012	362011	2.51	2.53	
21 2,4-Dinitrotoluene	1	11.753	11.765	-0.012	735887	2.51	2.54	
22 o-Nitrotoluene	1	12.620	12.638	-0.018	315004	2.50	2.47	
23 p-Nitrotoluene	1	13.053	13.071	-0.018	272262	2.51	2.56	
24 m-Nitrotoluene	1	13.633	13.651	-0.018	348555	2.50	2.45	
25 PETN	2	14.713	14.738	-0.025	1868141	25.0	25.7	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

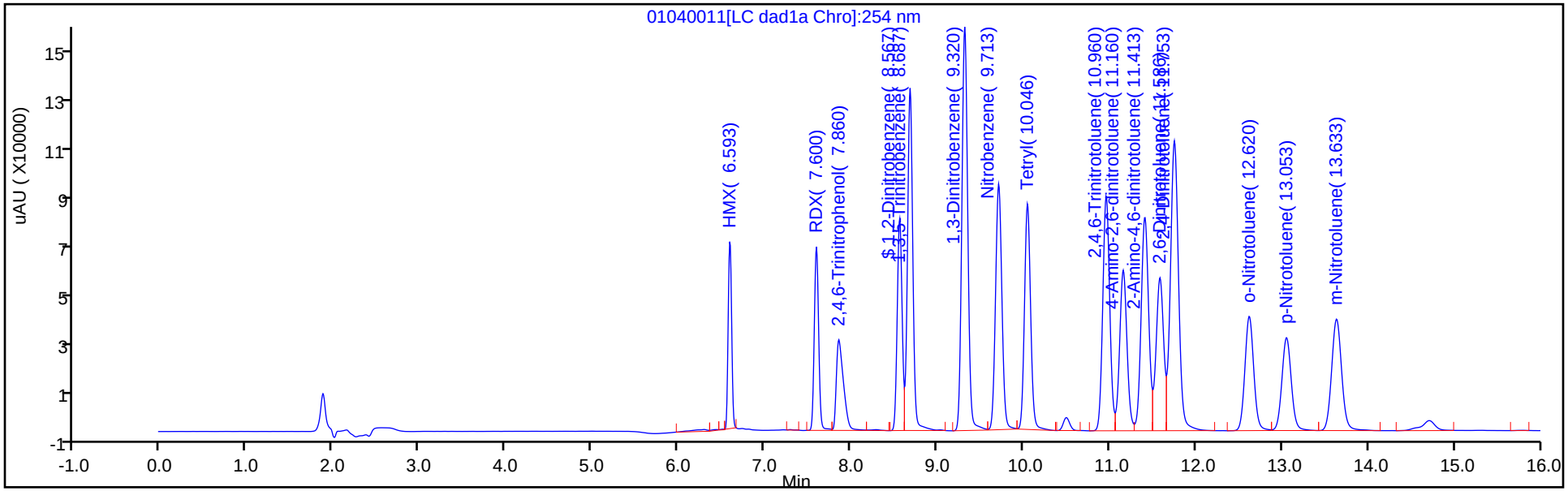
8330IntermStk_00070 Amount Added: 250.00 Units: uL

Report Date: 06-Jan-2022 20:05:10 Chrom Revision: 2.3 03-Jan-2022 17:03:12

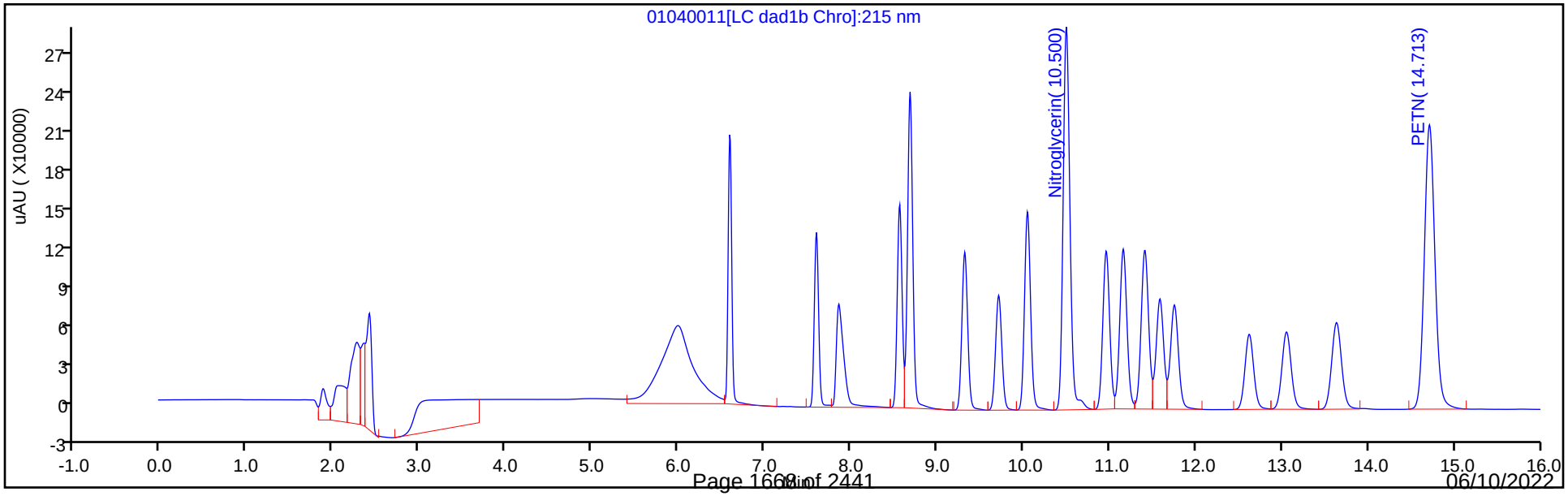
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040011.d				
Injection Date:	04-Jan-2022 18:28:10	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

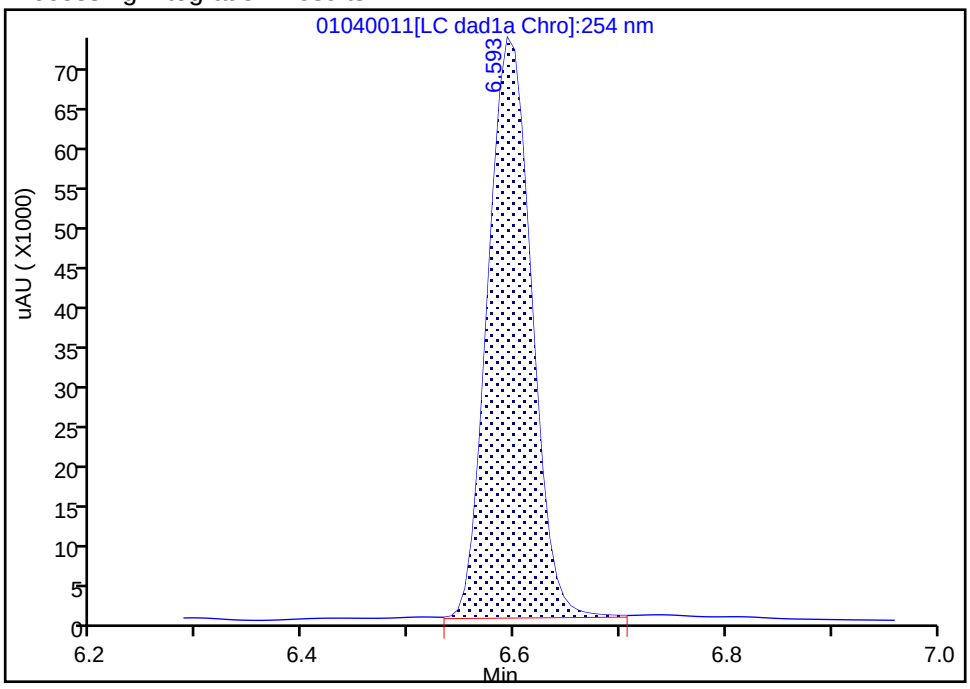
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040011.d				
Injection Date:	04-Jan-2022 18:28:10	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 9				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

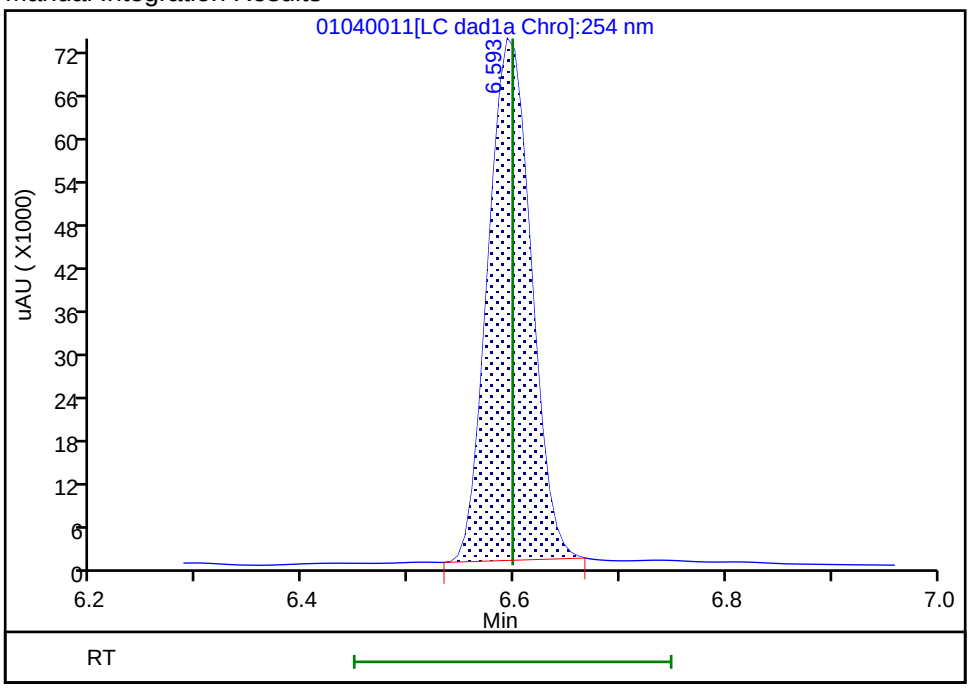
Processing Integration Results

RT: 6.59
Area: 207225
Amount: 2.498192
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 203229
Amount: 2.424380
Amount Units: ug/mL



Reviewer: zhangji, 04-Jan-2022 19:18:30

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040012.D
Lims ID: IC INT 8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 04-Jan-2022 18:51:00 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 8
Misc. Info.: 280-0107731-012
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Jan-2022 20:05:11 Calib Date: 05-Jan-2022 04:24:15
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1641

First Level Reviewer: zhangji Date: 04-Jan-2022 19:18:25

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.598	6.598	0.000	81295	1.00	0.9698	M
8 RDX	1	7.604	7.605	-0.001	99016	1.00	0.9557	
9 2,4,6-Trinitrophenol	1	7.904	7.945	-0.041	77279	1.00	1.00	
$ 10 1,2-Dinitrobenzene	1	8.571	8.572	-0.001	127011	1.00	1.02	
11 1,3,5-Trinitrobenzene	1	8.691	8.692	-0.001	224711	1.00	1.03	
12 1,3-Dinitrobenzene	1	9.324	9.331	-0.007	295195	1.00	1.02	
13 Nitrobenzene	1	9.717	9.725	-0.008	194325	1.00	1.01	
15 Tetryl	1	10.051	10.058	-0.007	173941	1.00	1.02	
16 Nitroglycerin	2	10.504	10.518	-0.014	647703	10.0	10.3	
17 2,4,6-Trinitrotoluene	1	10.964	10.971	-0.007	201237	1.00	0.99	
18 4-Amino-2,6-dinitrotoluene	1	11.164	11.171	-0.007	146703	1.00	0.9716	
19 2-Amino-4,6-dinitrotoluene	1	11.417	11.425	-0.008	200129	1.00	0.9899	
20 2,6-Dinitrotoluene	1	11.591	11.598	-0.007	140901	1.00	0.9845	
21 2,4-Dinitrotoluene	1	11.757	11.765	-0.008	291912	1.00	1.01	
22 o-Nitrotoluene	1	12.631	12.638	-0.007	124418	1.00	0.9750	
23 p-Nitrotoluene	1	13.057	13.071	-0.014	107309	1.00	1.01	
24 m-Nitrotoluene	1	13.644	13.651	-0.007	136801	1.00	0.9615	
25 PETN	2	14.724	14.738	-0.014	744274	10.0	10.2	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00070 Amount Added: 100.00 Units: uL

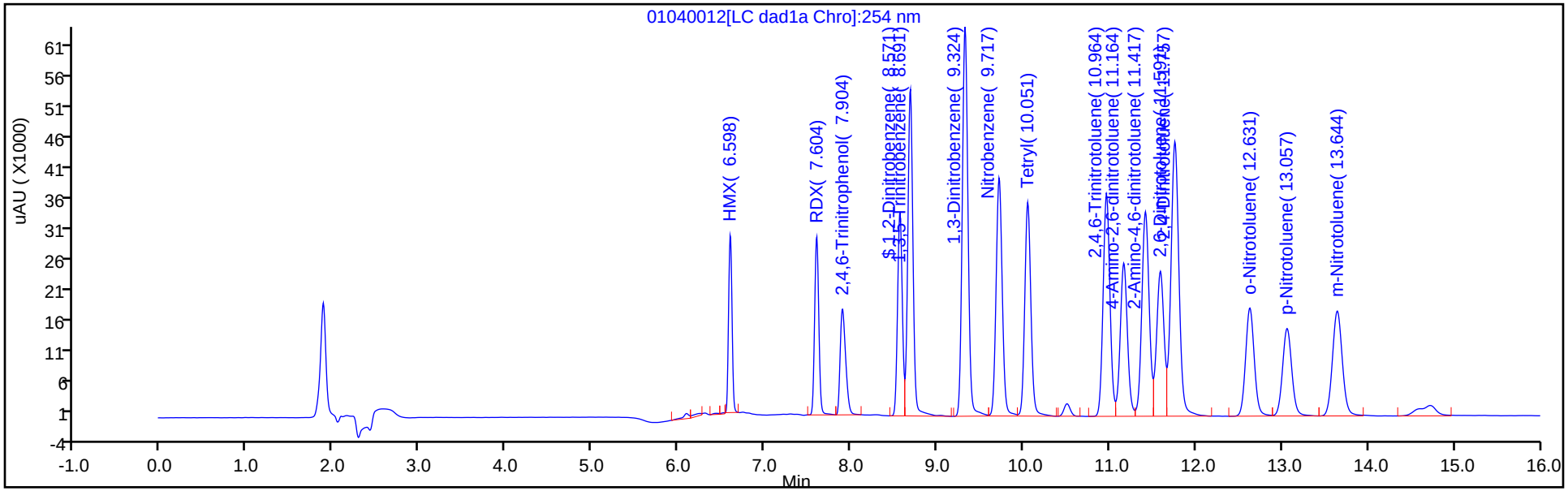
Report Date: 06-Jan-2022 20:05:11 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

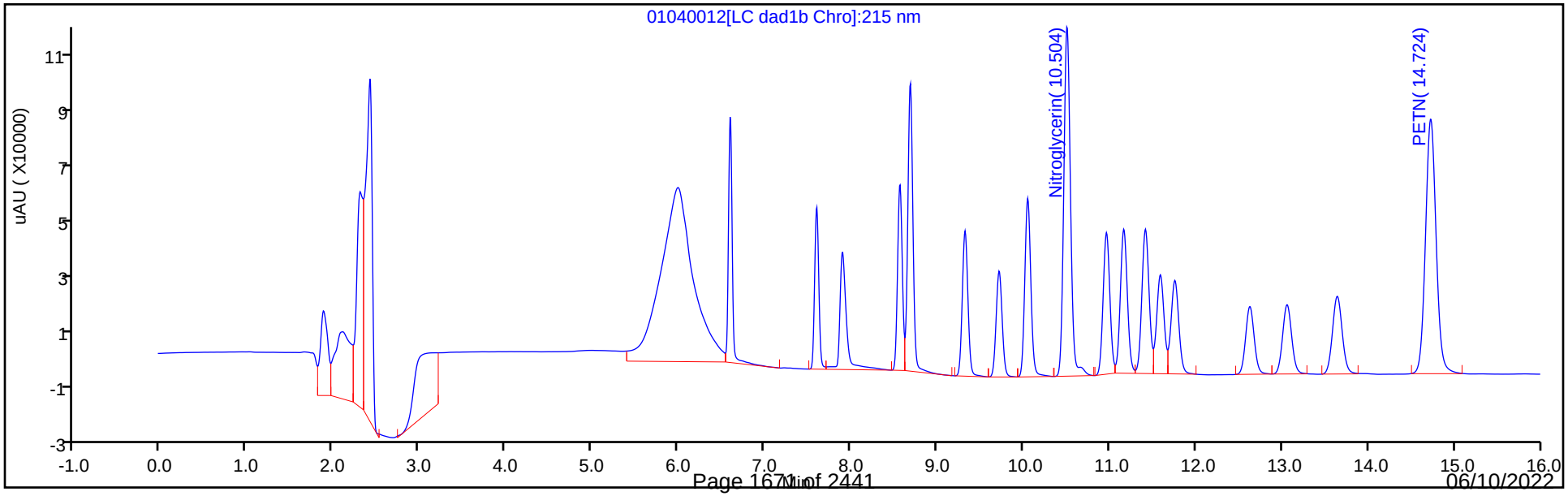
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040012.d

Injection Date:	04-Jan-2022 18:51:00	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

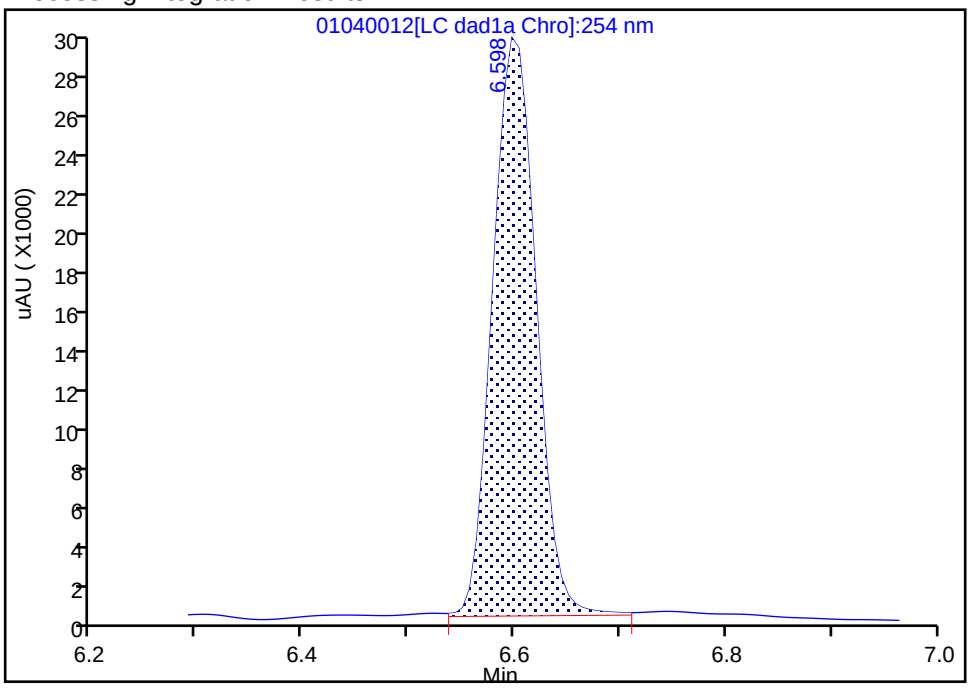
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040012.d				
Injection Date:	04-Jan-2022 18:51:00	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 8				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

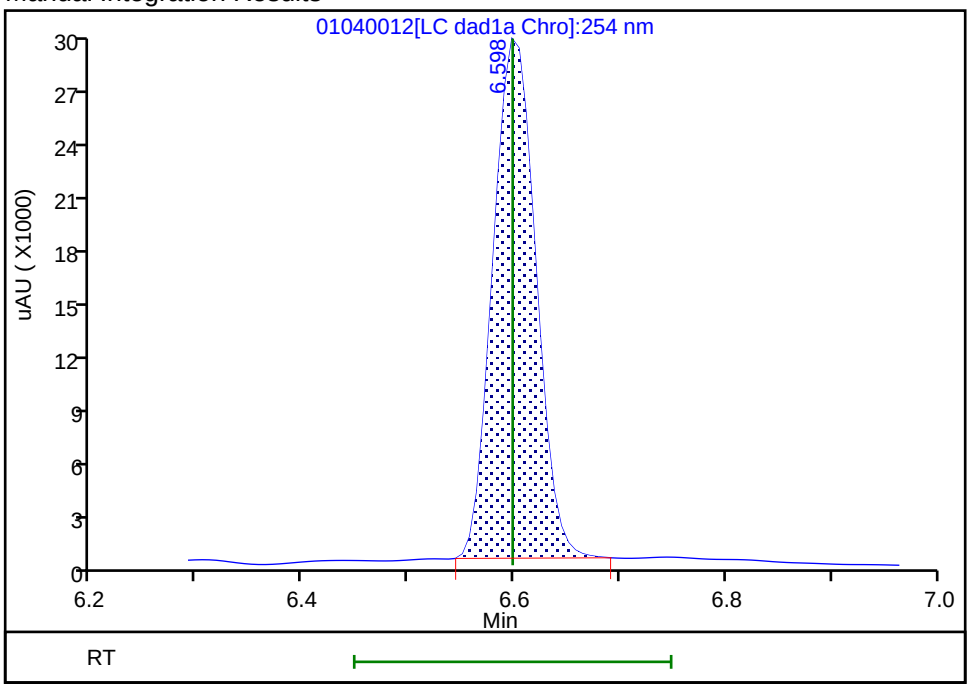
Processing Integration Results

RT: 6.60
Area: 83010
Amount: 1.010459
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 81295
Amount: 0.969793
Amount Units: ug/mL



Reviewer: zhangji, 04-Jan-2022 19:18:46

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040013.D
Lims ID: IC INT 7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 04-Jan-2022 19:13:53 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 7
Misc. Info.: 280-0107731-013
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Jan-2022 20:05:11 Calib Date: 05-Jan-2022 04:24:15
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1641

First Level Reviewer: zhangji Date: 04-Jan-2022 19:38:01

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.599	6.598	0.001	57138	0.7000	0.6816	
8 RDX	1	7.606	7.605	0.001	69068	0.7000	0.6666	
9 2,4,6-Trinitrophenol	1	7.913	7.945	-0.032	53408	0.7000	0.6933	
$ 10 1,2-Dinitrobenzene	1	8.573	8.572	0.001	87746	0.7000	0.7037	
11 1,3,5-Trinitrobenzene	1	8.693	8.692	0.001	155681	0.7014	0.7138	
12 1,3-Dinitrobenzene	1	9.326	9.331	-0.005	205039	0.7014	0.7109	
13 Nitrobenzene	1	9.726	9.725	0.001	134777	0.7028	0.7021	
15 Tetryl	1	10.053	10.058	-0.005	118756	0.7014	0.6962	
16 Nitroglycerin	2	10.513	10.518	-0.005	449283	7.00	7.13	
17 2,4,6-Trinitrotoluene	1	10.966	10.971	-0.005	139377	0.7028	0.6875	
18 4-Amino-2,6-dinitrotoluene	1	11.173	11.171	0.002	101665	0.7007	0.6733	
19 2-Amino-4,6-dinitrotoluene	1	11.419	11.425	-0.006	137894	0.7028	0.6821	
20 2,6-Dinitrotoluene	1	11.593	11.598	-0.005	99747	0.7028	0.6970	
21 2,4-Dinitrotoluene	1	11.766	11.765	0.001	200883	0.7028	0.6943	
22 o-Nitrotoluene	1	12.633	12.638	-0.005	86333	0.7000	0.6765	
23 p-Nitrotoluene	1	13.066	13.071	-0.005	74357	0.7014	0.6999	
24 m-Nitrotoluene	1	13.646	13.651	-0.005	94920	0.7007	0.6672	
25 PETN	2	14.733	14.738	-0.005	516042	7.00	7.09	

QC Flag Legend
Processing Flags

Reagents:
8330IntermStk_00070 Amount Added: 70.00 Units: uL

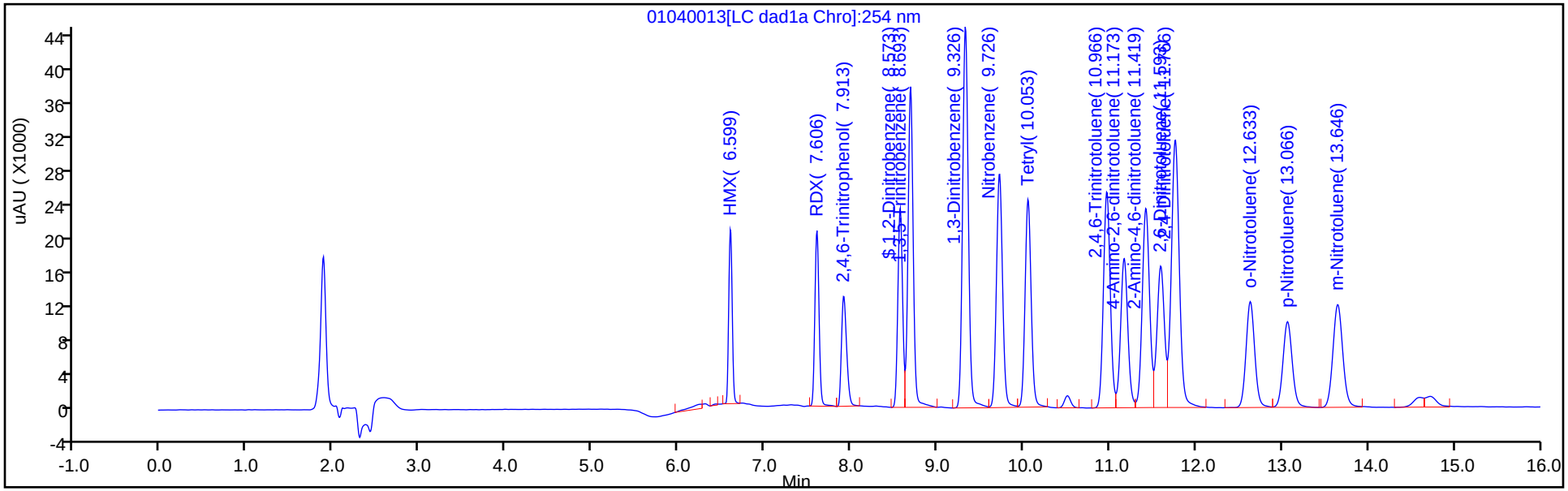
Report Date: 06-Jan-2022 20:05:11 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

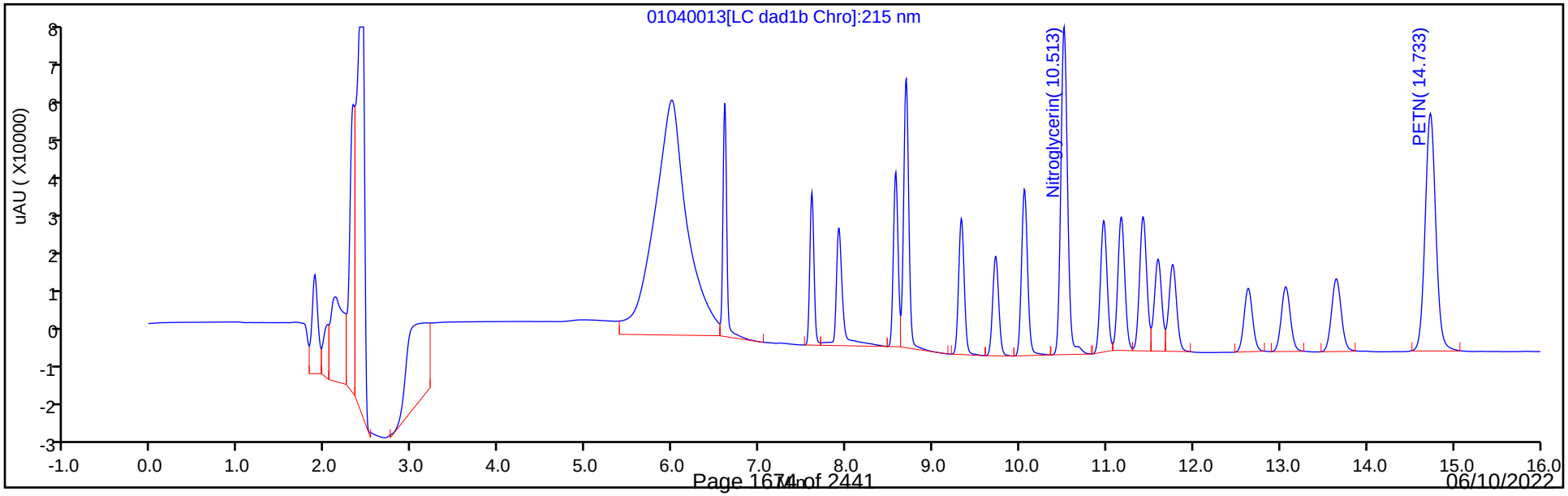
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040013.d

Injection Date:	04-Jan-2022 19:13:53	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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040014.D
Lims ID: IC INT 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 04-Jan-2022 19:36:46 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 6
Misc. Info.: 280-0107731-014
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Jan-2022 20:05:12 Calib Date: 05-Jan-2022 04:24:15
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1641

First Level Reviewer: zhangji Date: 04-Jan-2022 20:03:49

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.601	6.598	0.003	32925	0.4000	0.3928	
8 RDX	1	7.607	7.605	0.002	39126	0.4000	0.3776	
9 2,4,6-Trinitrophenol	1	7.927	7.945	-0.018	30649	0.4000	0.3978	
$ 10 1,2-Dinitrobenzene	1	8.574	8.572	0.002	49955	0.4000	0.4006	
11 1,3,5-Trinitrobenzene	1	8.694	8.692	0.002	87295	0.4008	0.4003	
12 1,3-Dinitrobenzene	1	9.327	9.331	-0.004	116963	0.4008	0.4056	
13 Nitrobenzene	1	9.727	9.725	0.002	75688	0.4016	0.3943	
15 Tetryl	1	10.061	10.058	0.003	66706	0.4008	0.3911	
16 Nitroglycerin	2	10.514	10.518	-0.004	257287	4.00	4.08	
17 2,4,6-Trinitrotoluene	1	10.967	10.971	-0.004	79951	0.4016	0.3944	
18 4-Amino-2,6-dinitrotoluene	1	11.174	11.171	0.003	58489	0.4004	0.3874	
19 2-Amino-4,6-dinitrotoluene	1	11.421	11.425	-0.004	79169	0.4016	0.3916	
20 2,6-Dinitrotoluene	1	11.594	11.598	-0.004	57212	0.4016	0.3998	
21 2,4-Dinitrotoluene	1	11.767	11.765	0.002	115000	0.4016	0.3974	
22 o-Nitrotoluene	1	12.634	12.638	-0.004	49500	0.4000	0.3879	
23 p-Nitrotoluene	1	13.067	13.071	-0.004	42415	0.4008	0.3993	
24 m-Nitrotoluene	1	13.647	13.651	-0.004	54695	0.4004	0.3844	
25 PETN	2	14.734	14.738	-0.004	295082	4.00	4.05	

QC Flag Legend
Processing Flags

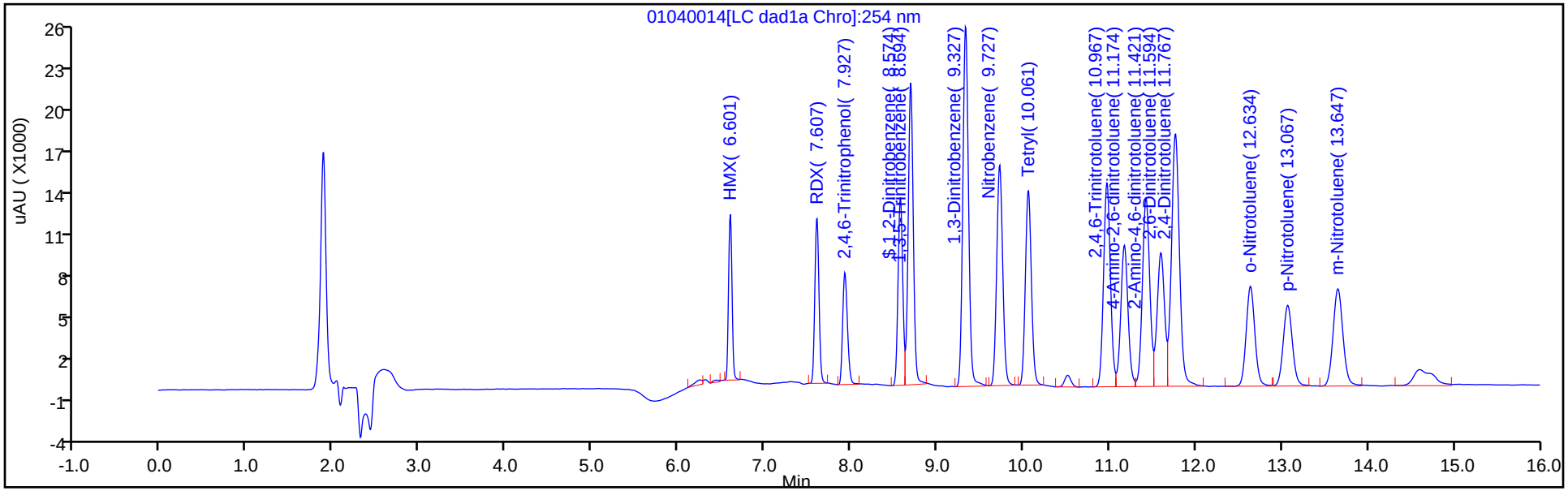
Reagents:
8330IntermStk_00070 Amount Added: 40.00 Units: uL

Report Date: 06-Jan-2022 20:05:12 Chrom Revision: 2.3 03-Jan-2022 17:03:12

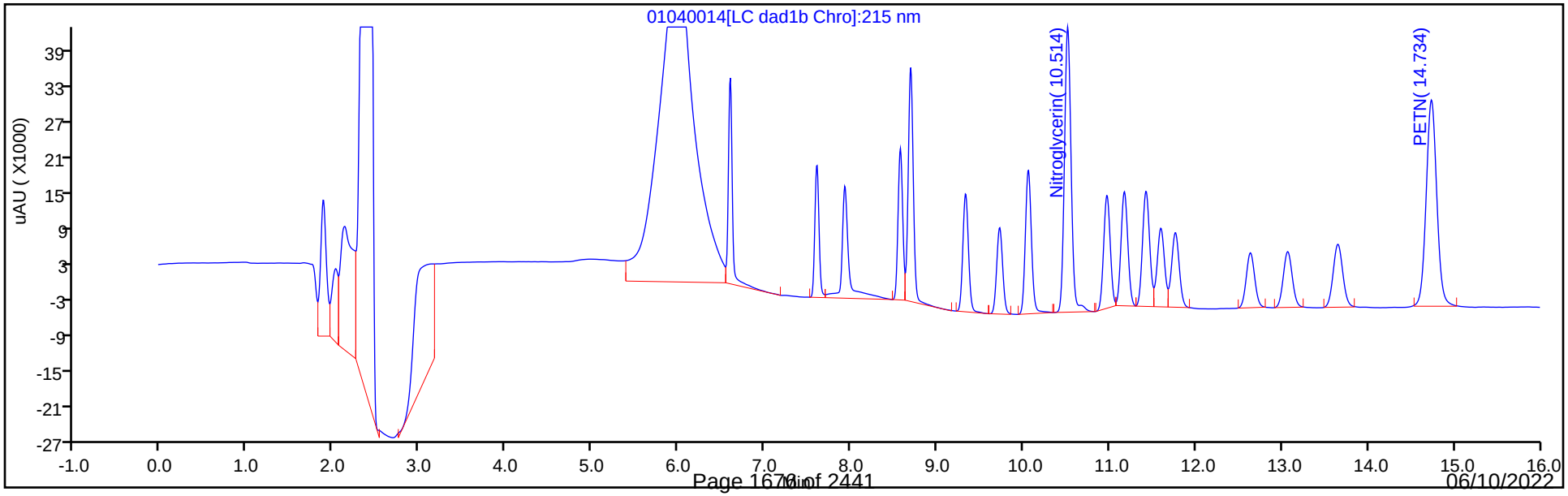
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040014.d				
Injection Date:	04-Jan-2022 19:36:46	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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040015.D
Lims ID: IC INT 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 04-Jan-2022 19:59:42 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 5
Misc. Info.: 280-0107731-015
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Jan-2022 20:05:12 Calib Date: 05-Jan-2022 04:24:15
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1641

First Level Reviewer: zhangji Date: 04-Jan-2022 20:30:59

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.601	6.598	0.003	20395	0.2500	0.2433	
8 RDX	1	7.601	7.605	-0.004	24635	0.2500	0.2378	
9 2,4,6-Trinitrophenol	1	7.934	7.945	-0.011	18560	0.2500	0.2409	
$ 10 1,2-Dinitrobenzene	1	8.567	8.572	-0.005	30811	0.2500	0.2471	
11 1,3,5-Trinitrobenzene	1	8.687	8.692	-0.005	52589	0.2505	0.2411	
12 1,3-Dinitrobenzene	1	9.327	9.331	-0.004	70569	0.2505	0.2447	
13 Nitrobenzene	1	9.720	9.725	-0.005	46348	0.2510	0.2415	
15 Tetryl	1	10.054	10.058	-0.004	40968	0.2505	0.2402	
16 Nitroglycerin	2	10.514	10.518	-0.004	151977	2.50	2.41	
17 2,4,6-Trinitrotoluene	1	10.967	10.971	-0.004	49067	0.2510	0.2420	
18 4-Amino-2,6-dinitrotoluene	1	11.167	11.171	-0.004	35644	0.2503	0.2361	
19 2-Amino-4,6-dinitrotoluene	1	11.420	11.425	-0.005	48486	0.2510	0.2398	
20 2,6-Dinitrotoluene	1	11.594	11.598	-0.004	34177	0.2510	0.2388	
21 2,4-Dinitrotoluene	1	11.760	11.765	-0.005	70605	0.2510	0.2440	
22 o-Nitrotoluene	1	12.634	12.638	-0.004	30280	0.2500	0.2373	
23 p-Nitrotoluene	1	13.060	13.071	-0.011	25824	0.2505	0.2431	
24 m-Nitrotoluene	1	13.647	13.651	-0.004	33160	0.2503	0.2331	
25 PETN	2	14.727	14.738	-0.011	179275	2.50	2.45	

QC Flag Legend
Processing Flags

Reagents:
8330IntermStk_00070 Amount Added: 25.00 Units: uL

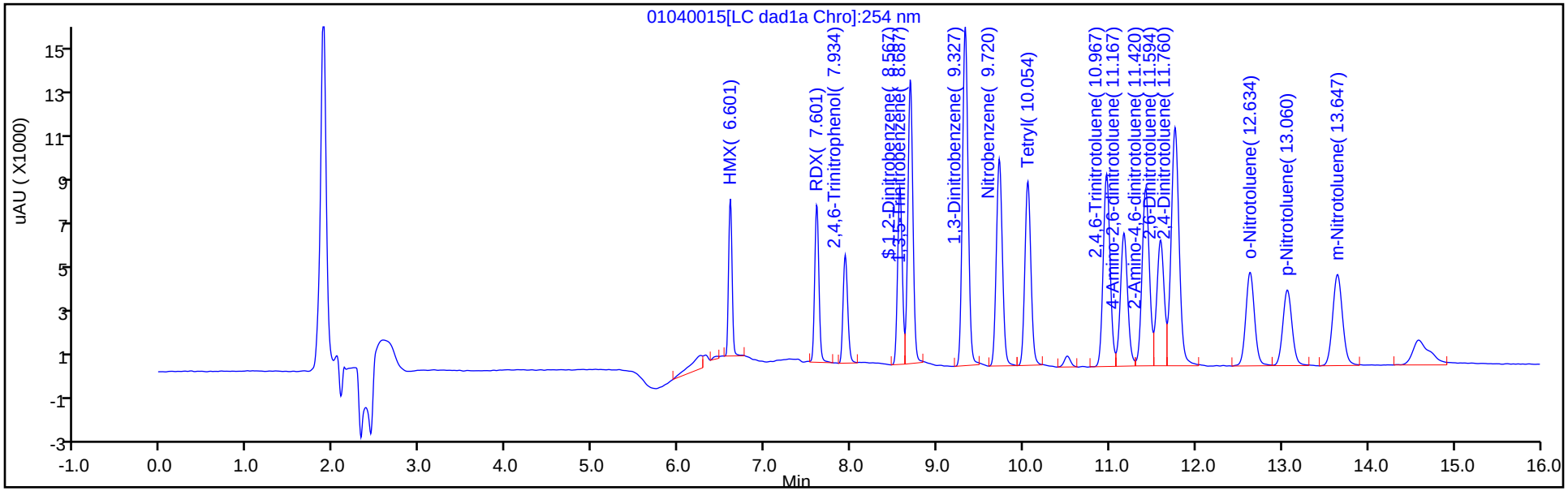
Report Date: 06-Jan-2022 20:05:12 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

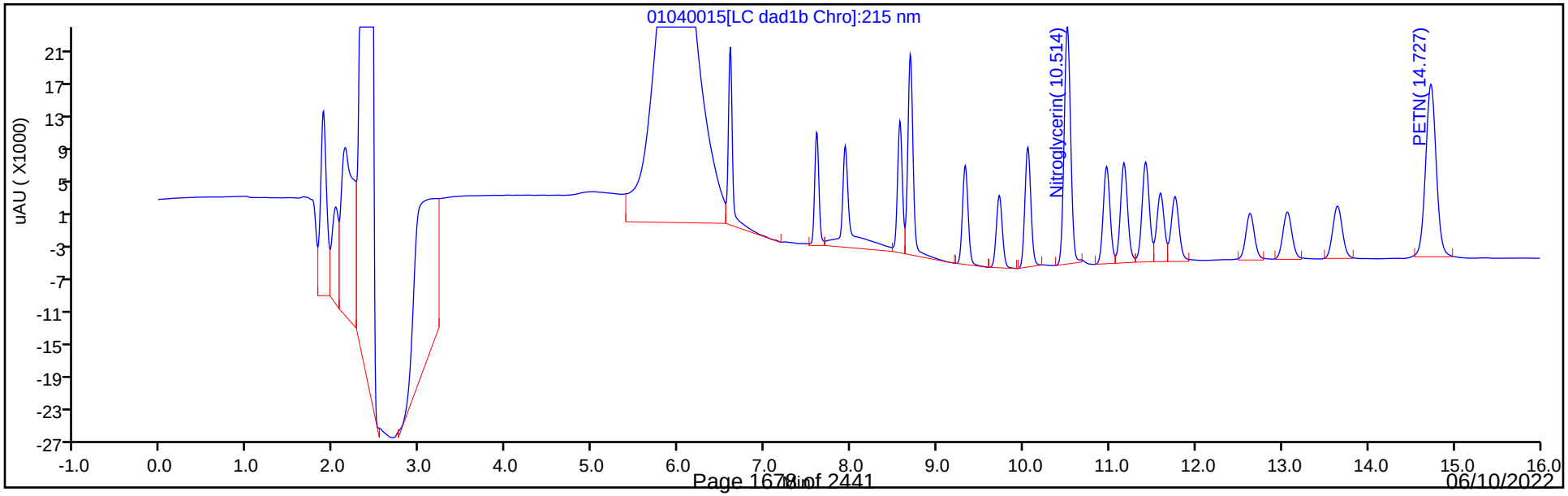
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040015.d

Injection Date:	04-Jan-2022 19:59:42	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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040016.D
Lims ID: IC INT 4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 04-Jan-2022 20:22:36 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 4
Misc. Info.: 280-0107731-016
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Jan-2022 20:05:12 Calib Date: 05-Jan-2022 04:24:15
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1641

First Level Reviewer: zhangji Date: 04-Jan-2022 20:49:54

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.598	6.598	0.000	8489	0.1000	0.1013	
8 RDX	1	7.605	7.605	0.000	10447	0.1000	0.1008	
9 2,4,6-Trinitrophenol	1	7.945	7.945	0.000	7855	0.1000	0.1020	
$ 10 1,2-Dinitrobenzene	1	8.572	8.572	0.000	12780	0.1000	0.1025	
11 1,3,5-Trinitrobenzene	1	8.692	8.692	0.000	21856	0.1002	0.1002	
12 1,3-Dinitrobenzene	1	9.331	9.331	0.000	29215	0.1002	0.1013	
13 Nitrobenzene	1	9.725	9.725	0.000	19287	0.1004	0.1005	
15 Tetryl	1	10.058	10.058	0.000	17238	0.1002	0.1011	
16 Nitroglycerin	2	10.518	10.518	0.000	63595	1.00	1.01	
17 2,4,6-Trinitrotoluene	1	10.971	10.971	0.000	20408	0.1004	0.1007	
18 4-Amino-2,6-dinitrotoluene	1	11.171	11.171	0.000	14975	0.1001	0.0992	
19 2-Amino-4,6-dinitrotoluene	1	11.425	11.425	0.000	20280	0.1004	0.1003	
20 2,6-Dinitrotoluene	1	11.598	11.598	0.000	14234	0.1004	0.0995	
21 2,4-Dinitrotoluene	1	11.765	11.765	0.000	29355	0.1004	0.1015	
22 o-Nitrotoluene	1	12.638	12.638	0.000	12777	0.1000	0.1001	
23 p-Nitrotoluene	1	13.071	13.071	0.000	10715	0.1002	0.1009	
24 m-Nitrotoluene	1	13.651	13.651	0.000	14003	0.1001	0.0984	
25 PETN	2	14.738	14.738	0.000	74208	1.00	1.00	

QC Flag Legend

Processing Flags

Reagents:

8330IntermStk_00070 Amount Added: 10.00 Units: uL

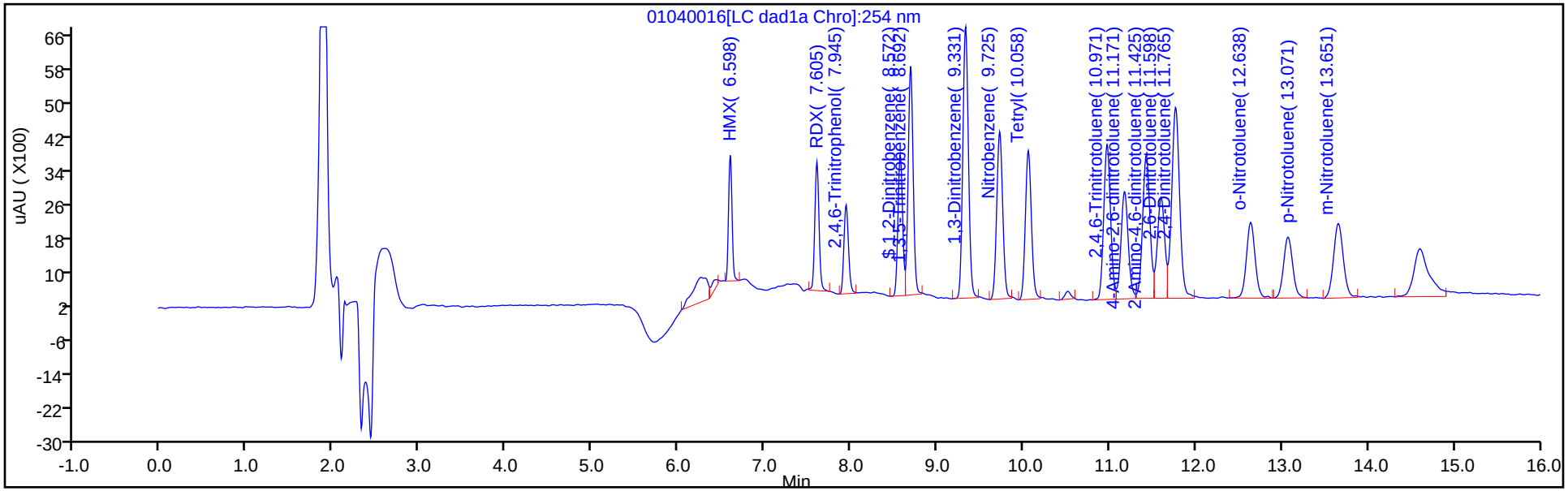
Report Date: 06-Jan-2022 20:05:13 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

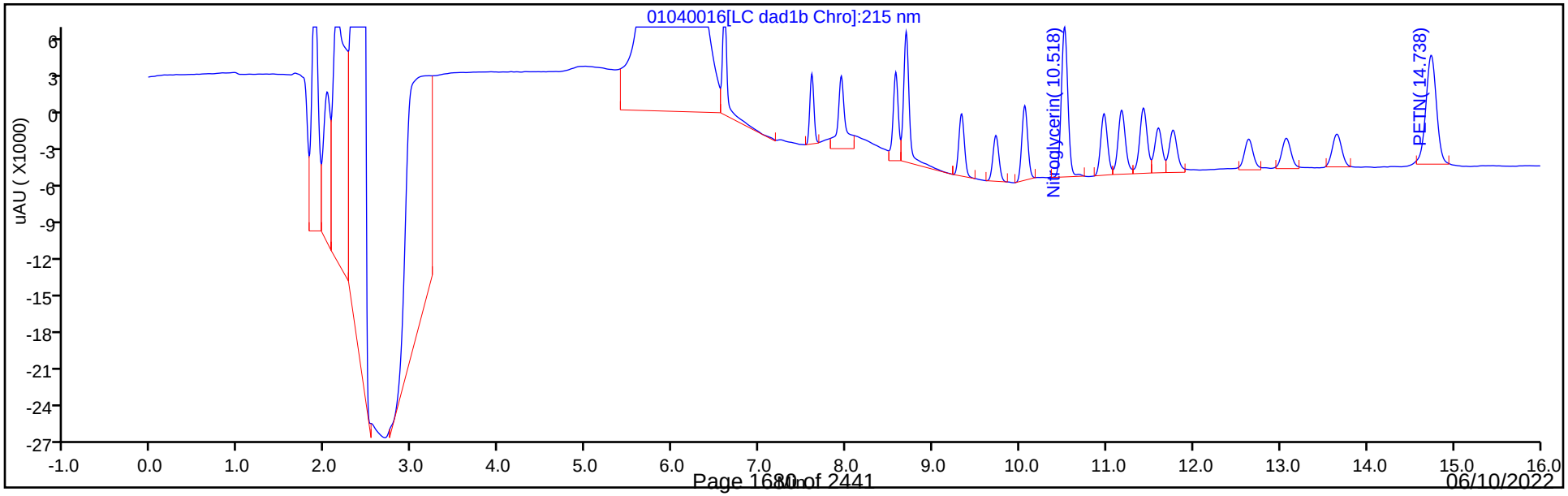
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040016.d

Injection Date:	04-Jan-2022 20:22:36	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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040017.D
Lims ID: IC INT 3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 04-Jan-2022 20:45:29 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 3
Misc. Info.: 280-0107731-017
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Jan-2022 20:05:13 Calib Date: 05-Jan-2022 04:24:15
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1641

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	4 HMX	1	6.600	6.598	0.002	4230	0.0500	0.0505	
	8 RDX	1	7.607	7.605	0.002	5715	0.0500	0.0552	
	9 2,4,6-Trinitrophenol	1	7.947	7.945	0.002	4029	0.0500	0.0523	
$	10 1,2-Dinitrobenzene	1	8.573	8.572	0.001	6127	0.0500	0.0491	
	11 1,3,5-Trinitrobenzene	1	8.693	8.692	0.001	10711	0.0501	0.0491	
	12 1,3-Dinitrobenzene	1	9.327	9.331	-0.004	14683	0.0501	0.0509	
	13 Nitrobenzene	1	9.727	9.725	0.002	9329	0.0502	0.0486	
	15 Tetryl	1	10.060	10.058	0.002	8315	0.0501	0.0487	
	16 Nitroglycerin	2	10.513	10.518	-0.005	30651	0.5000	0.4862	
	17 2,4,6-Trinitrotoluene	1	10.973	10.971	0.002	10202	0.0502	0.0503	
	18 4-Amino-2,6-dinitrotoluene	1	11.173	11.171	0.002	7656	0.0501	0.0507	
	19 2-Amino-4,6-dinitrotoluene	1	11.427	11.425	0.002	9600	0.0502	0.0475	
	20 2,6-Dinitrotoluene	1	11.593	11.598	-0.005	6908	0.0502	0.0483	
	21 2,4-Dinitrotoluene	1	11.767	11.765	0.002	13933	0.0502	0.0482	
	22 o-Nitrotoluene	1	12.640	12.638	0.002	6314	0.0500	0.0495	
	23 p-Nitrotoluene	1	13.067	13.071	-0.004	5163	0.0501	0.0486	
	24 m-Nitrotoluene	1	13.653	13.651	0.002	6733	0.0501	0.0473	
	25 PETN	2	14.733	14.738	-0.005	35084	0.5000	0.4645	

Reagents:

8330IntermStk_00070 Amount Added: 5.00 Units: uL

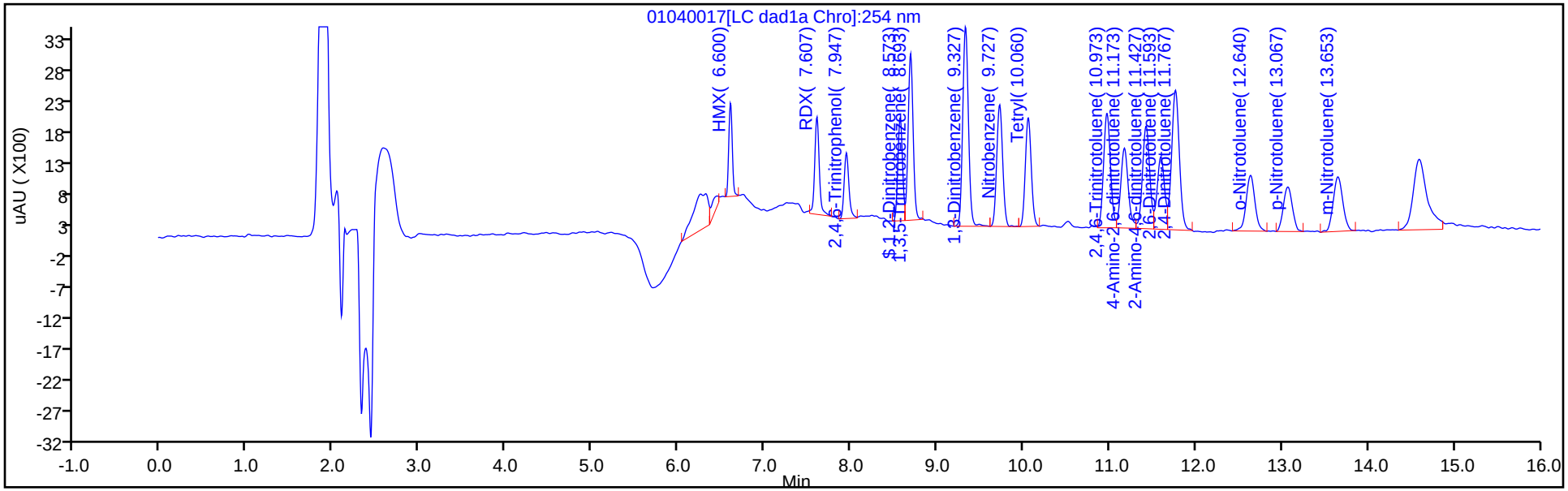
Report Date: 06-Jan-2022 20:05:13 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

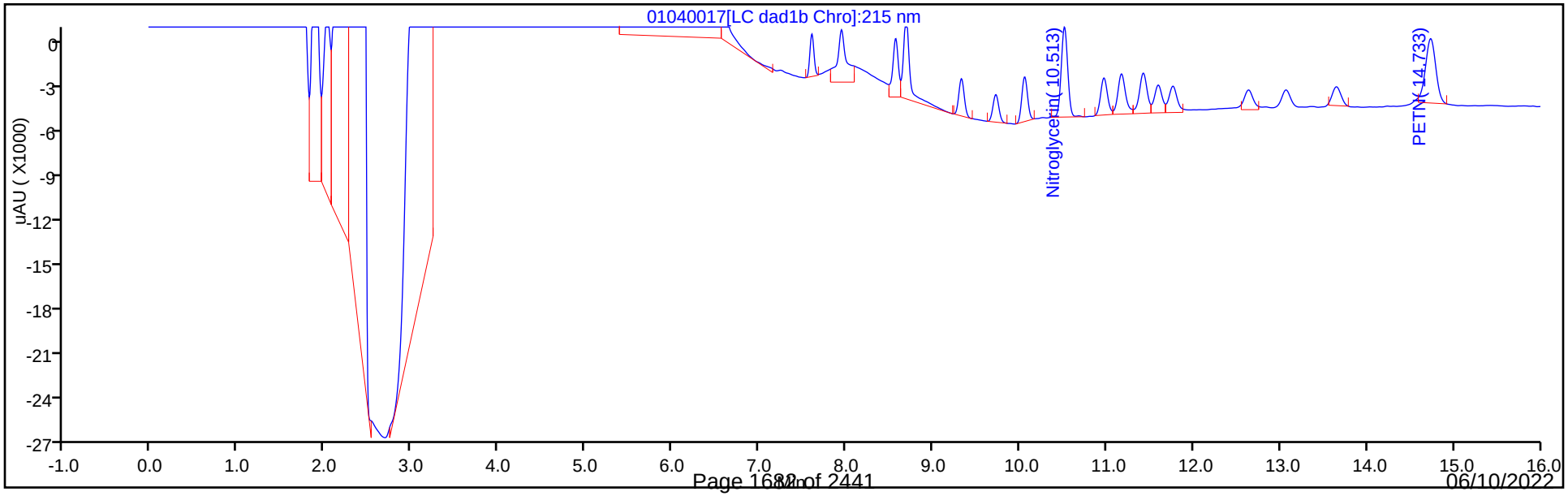
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040017.d

Injection Date:	04-Jan-2022 20:45:29	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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040018.D
Lims ID: IC INT 2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 04-Jan-2022 21:08:26 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 2
Misc. Info.: 280-0107731-018
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Jan-2022 20:05:13 Calib Date: 05-Jan-2022 04:24:15
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1641

First Level Reviewer: zhangji Date: 05-Jan-2022 12:01:28

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.595	6.598	-0.003	1735	0.0200	0.0207	
8 RDX	1	7.608	7.605	0.003	2084	0.0200	0.0201	M
9 2,4,6-Trinitrophenol	1	7.948	7.945	0.003	1554	0.0200	0.0202	M
$ 10 1,2-Dinitrobenzene	1	8.575	8.572	0.003	2503	0.0200	0.0201	
11 1,3,5-Trinitrobenzene	1	8.695	8.692	0.003	4249	0.0200	0.0195	
12 1,3-Dinitrobenzene	1	9.328	9.331	-0.003	5833	0.0200	0.0202	
13 Nitrobenzene	1	9.722	9.725	-0.003	3845	0.0201	0.0200	
15 Tetryl	1	10.055	10.058	-0.003	3498	0.0200	0.0205	
16 Nitroglycerin	2	10.515	10.518	-0.003	12008	0.2000	0.1905	
17 2,4,6-Trinitrotoluene	1	10.968	10.971	-0.003	4227	0.0201	0.0209	
18 4-Amino-2,6-dinitrotoluene	1	11.175	11.171	0.004	3150	0.0200	0.0209	
19 2-Amino-4,6-dinitrotoluene	1	11.428	11.425	0.003	4282	0.0201	0.0212	
20 2,6-Dinitrotoluene	1	11.595	11.598	-0.003	2993	0.0201	0.0209	
21 2,4-Dinitrotoluene	1	11.762	11.765	-0.003	5890	0.0201	0.0204	
22 o-Nitrotoluene	1	12.642	12.638	0.004	2743	0.0200	0.0215	
23 p-Nitrotoluene	1	13.075	13.071	0.004	2151	0.0200	0.0202	
24 m-Nitrotoluene	1	13.655	13.651	0.004	2989	0.0200	0.0210	
25 PETN	2	14.735	14.738	-0.003	15705	0.2000	0.1974	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00070 Amount Added: 2.00 Units: uL

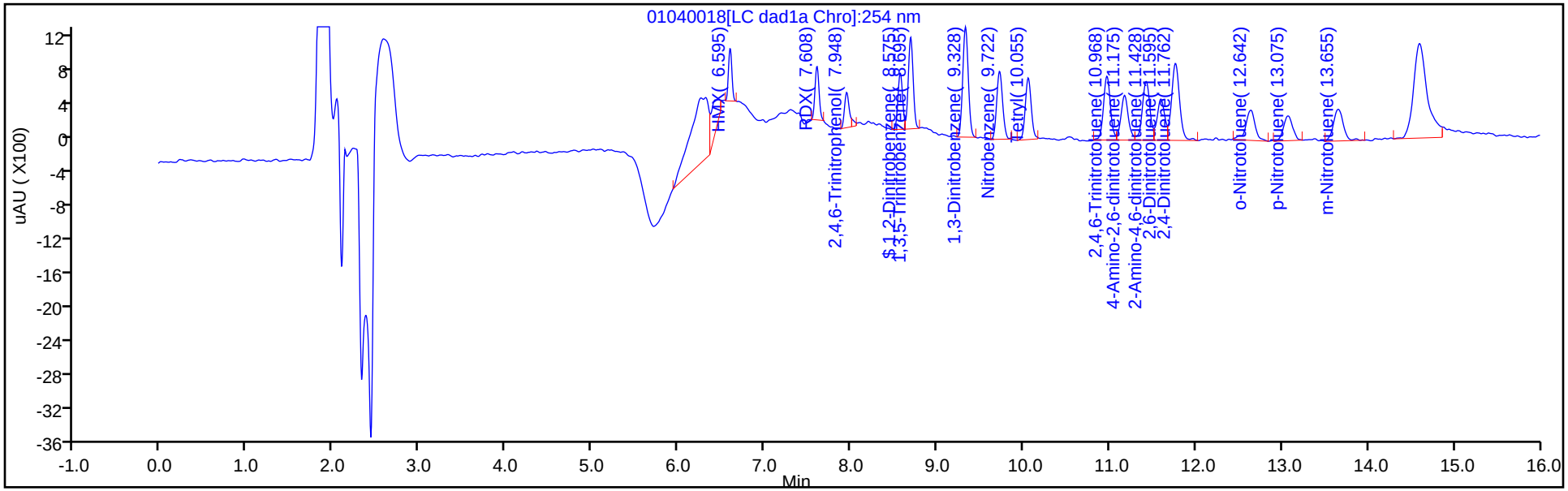
Report Date: 06-Jan-2022 20:05:13 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

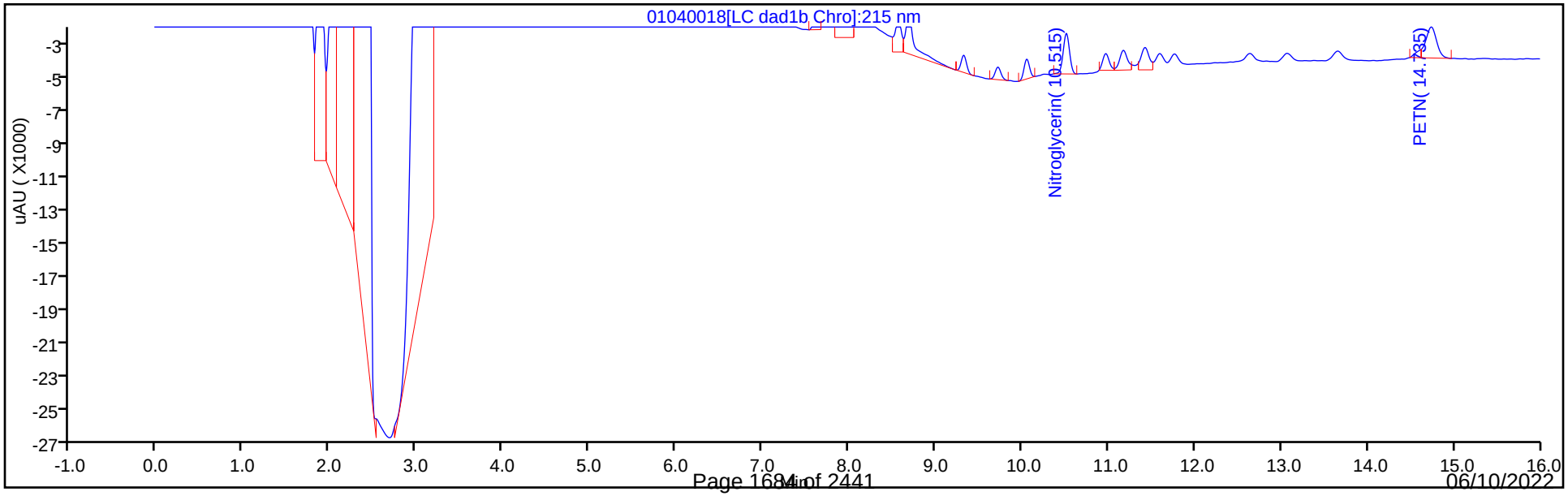
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040018.d

Injection Date:	04-Jan-2022 21:08:26	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

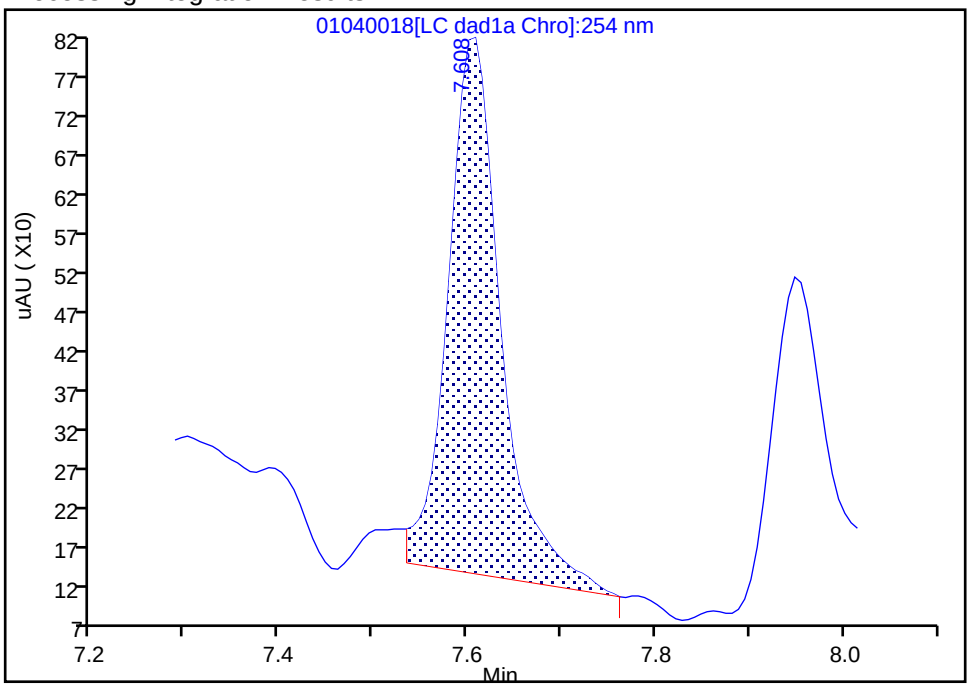
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040018.d				
Injection Date:	04-Jan-2022 21:08:26	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

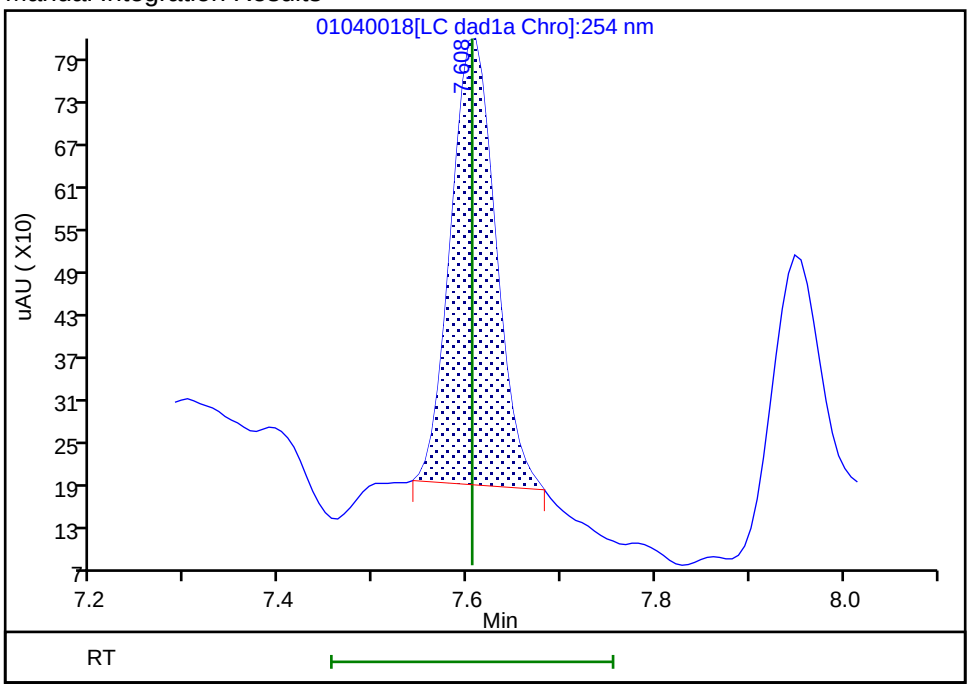
Processing Integration Results

RT: 7.61
Area: 2668
Amount: 0.024969
Amount Units: ug/mL



Manual Integration Results

RT: 7.61
Area: 2084
Amount: 0.020114
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:01:55

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

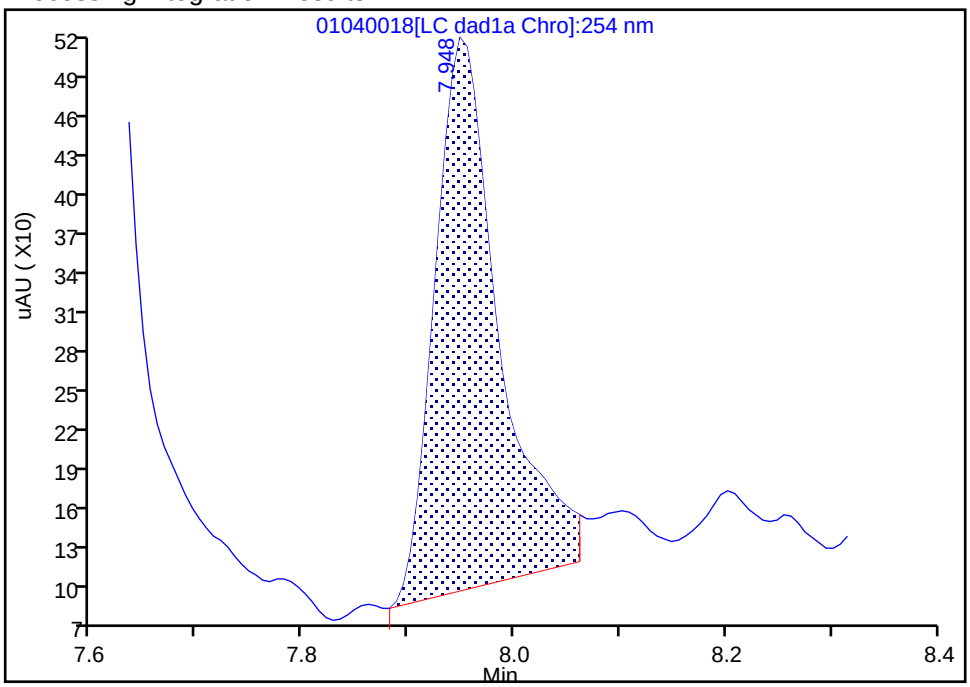
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040018.d				
Injection Date:	04-Jan-2022 21:08:26	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

9 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

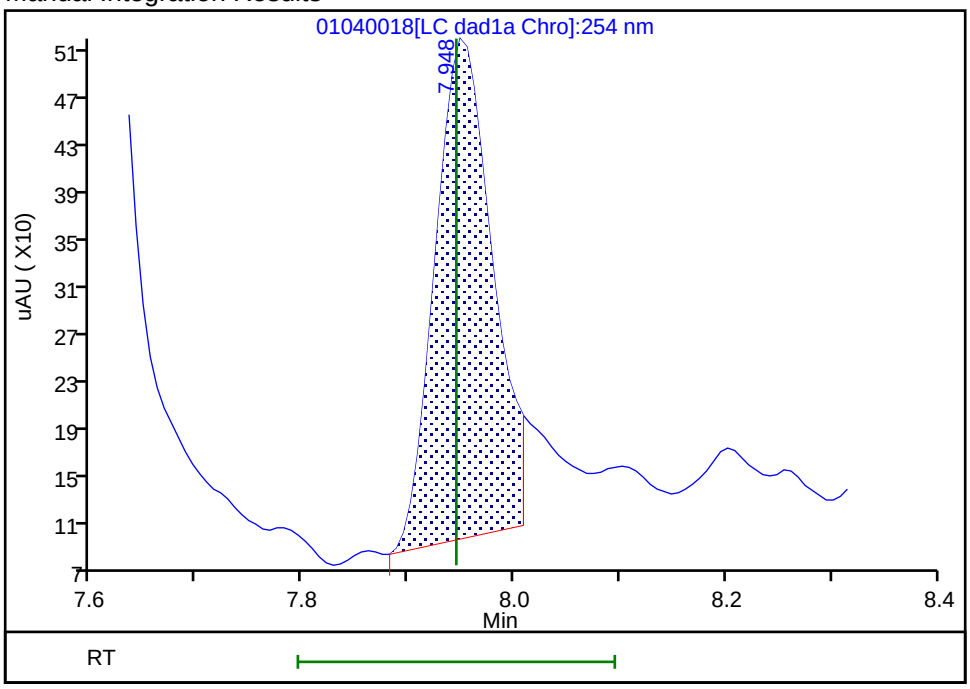
Processing Integration Results

RT: 7.95
Area: 1744
Amount: 0.022332
Amount Units: ug/mL



Manual Integration Results

RT: 7.95
Area: 1554
Amount: 0.020172
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:02:02

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

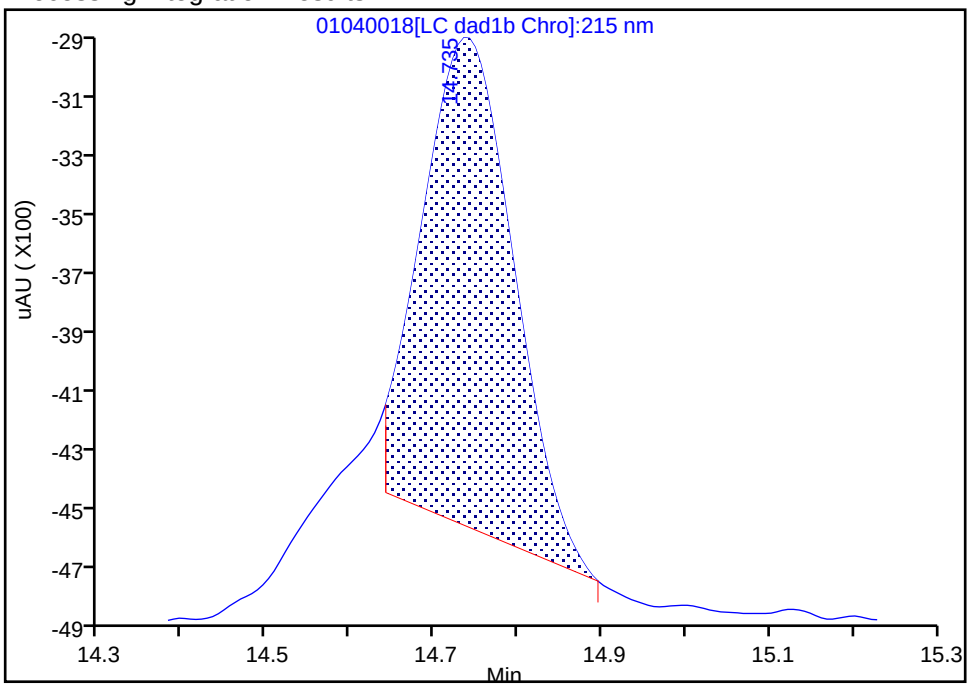
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040018.d
Injection Date: 04-Jan-2022 21:08:26 Instrument ID: CHHPLC_X3
Lims ID: IC INT 2
Client ID:
Operator ID: JZ ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: Detector LC DAD1C, 215 nm

25 PETN, CAS: 78-11-5

Signal: 1

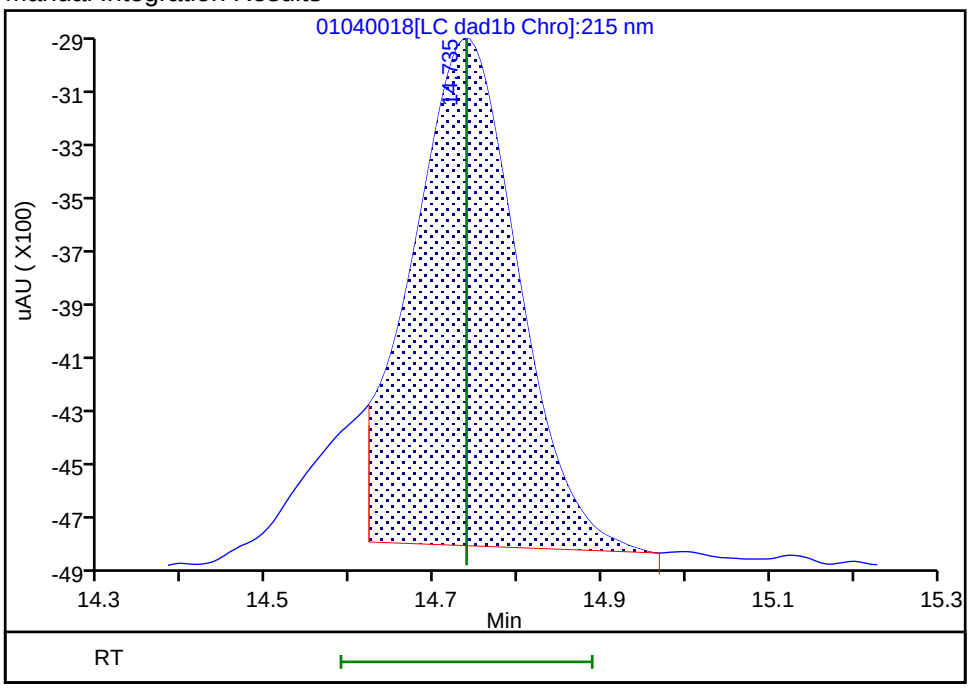
Processing Integration Results

RT: 14.73
Area: 11890
Amount: 0.166241
Amount Units: ug/mL



Manual Integration Results

RT: 14.73
Area: 15705
Amount: 0.197419
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:01:38
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040019.D
Lims ID: IC INT 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 04-Jan-2022 21:31:24 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 1
Misc. Info.: 280-0107731-019
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Jan-2022 20:05:14 Calib Date: 05-Jan-2022 04:24:15
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1641

First Level Reviewer: zhangji Date: 06-Jan-2022 20:05:03

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.601	6.598	0.003	901	0.0100	0.0107	M
8 RDX	1	7.601	7.605	-0.004	1152	0.0100	0.0111	M
9 2,4,6-Trinitrophenol	1	7.941	7.945	-0.004	716	0.0100	0.009294	M
$ 10 1,2-Dinitrobenzene	1	8.561	8.572	-0.011	1188	0.0100	0.009527	
11 1,3,5-Trinitrobenzene	1	8.688	8.692	-0.004	2197	0.0100	0.0101	
12 1,3-Dinitrobenzene	1	9.321	9.331	-0.010	2633	0.0100	0.009130	
13 Nitrobenzene	1	9.714	9.725	-0.011	2067	0.0100	0.0108	
15 Tetryl	1	10.041	10.058	-0.017	1778	0.0100	0.0104	
16 Nitroglycerin	2	10.501	10.518	-0.017	6348	0.1000	0.1007	
17 2,4,6-Trinitrotoluene	1	10.954	10.971	-0.017	2126	0.0100	0.0105	M
18 4-Amino-2,6-dinitrotoluene	1	11.154	11.171	-0.017	1718	0.0100	0.0114	M
19 2-Amino-4,6-dinitrotoluene	1	11.408	11.425	-0.017	2287	0.0100	0.0113	M
20 2,6-Dinitrotoluene	1	11.581	11.598	-0.017	1551	0.0100	0.0108	M
21 2,4-Dinitrotoluene	1	11.748	11.765	-0.017	3047	0.0100	0.0105	M
22 o-Nitrotoluene	1	12.614	12.638	-0.024	1387	0.0100	0.0109	
23 p-Nitrotoluene	1	13.054	13.071	-0.017	1083	0.0100	0.0102	
24 m-Nitrotoluene	1	13.634	13.651	-0.017	1764	0.0100	0.0124	
25 PETN	2	14.708	14.738	-0.030	8784	0.1000	0.1020	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00070 Amount Added: 1.00 Units: uL

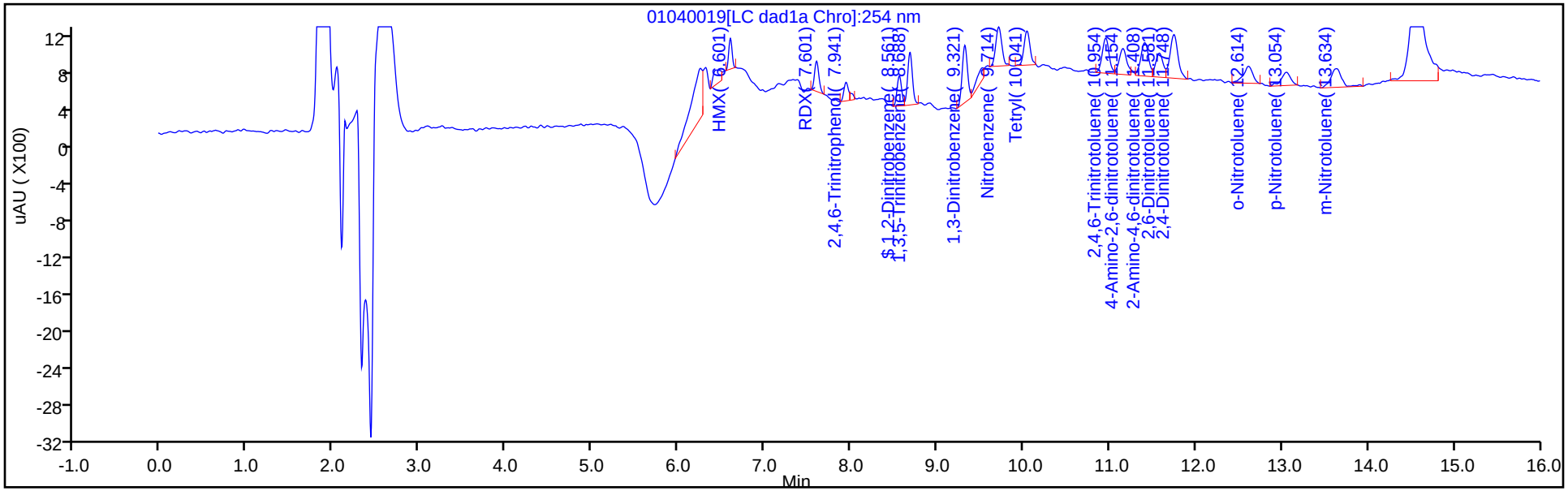
Report Date: 06-Jan-2022 20:05:14 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

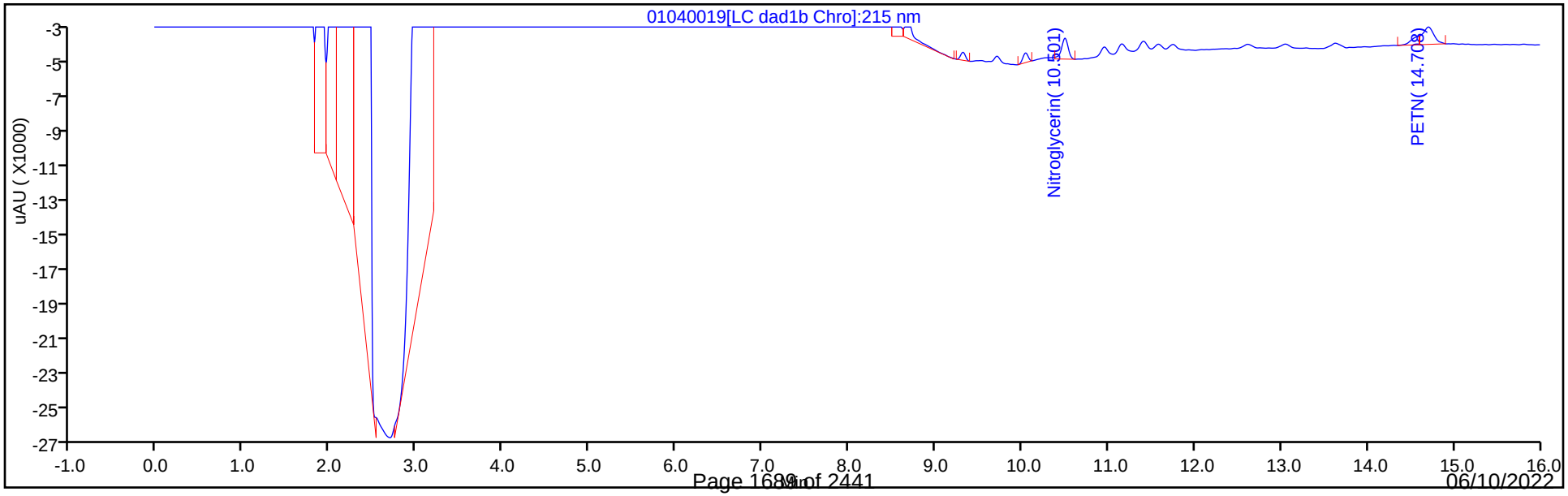
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040019.d

Injection Date:	04-Jan-2022 21:31:24	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

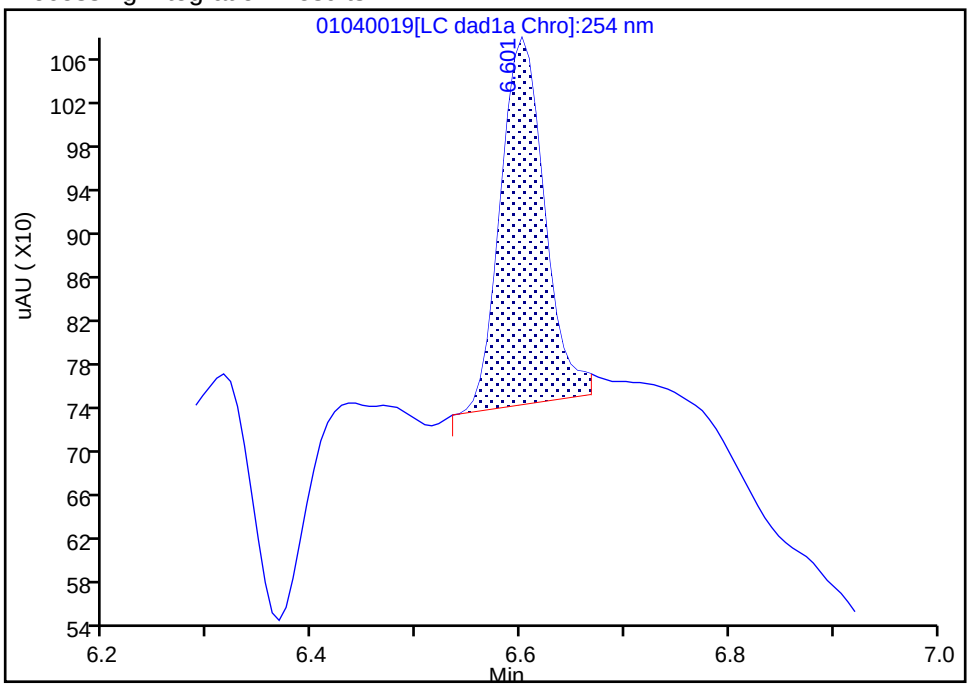
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040019.d				
Injection Date:	04-Jan-2022 21:31:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

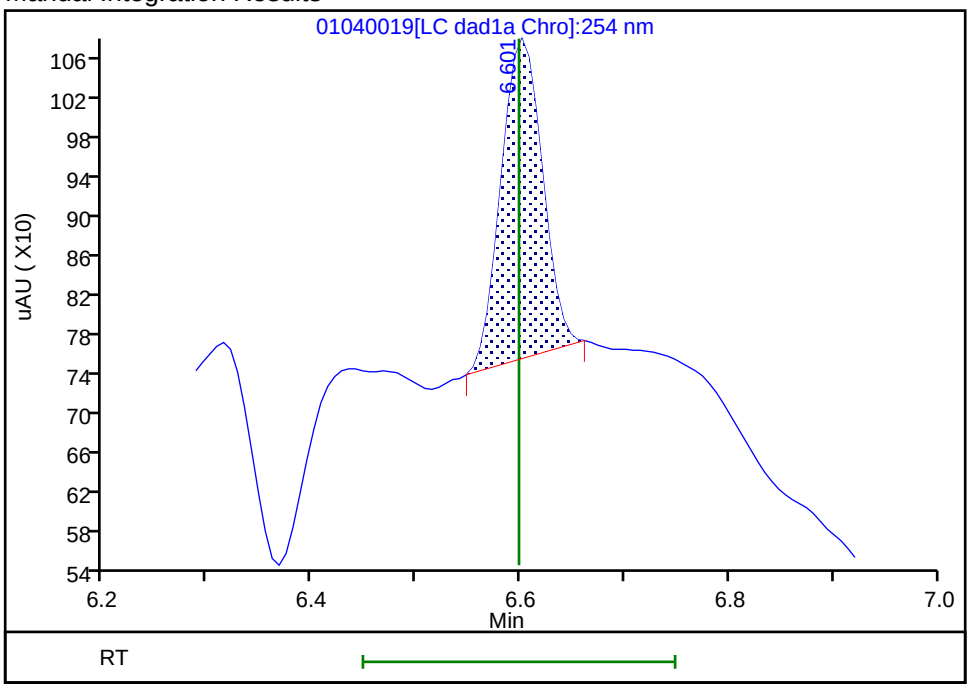
Processing Integration Results

RT: 6.60
Area: 995
Amount: 0.011724
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 901
Amount: 0.010748
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 11:59:58
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

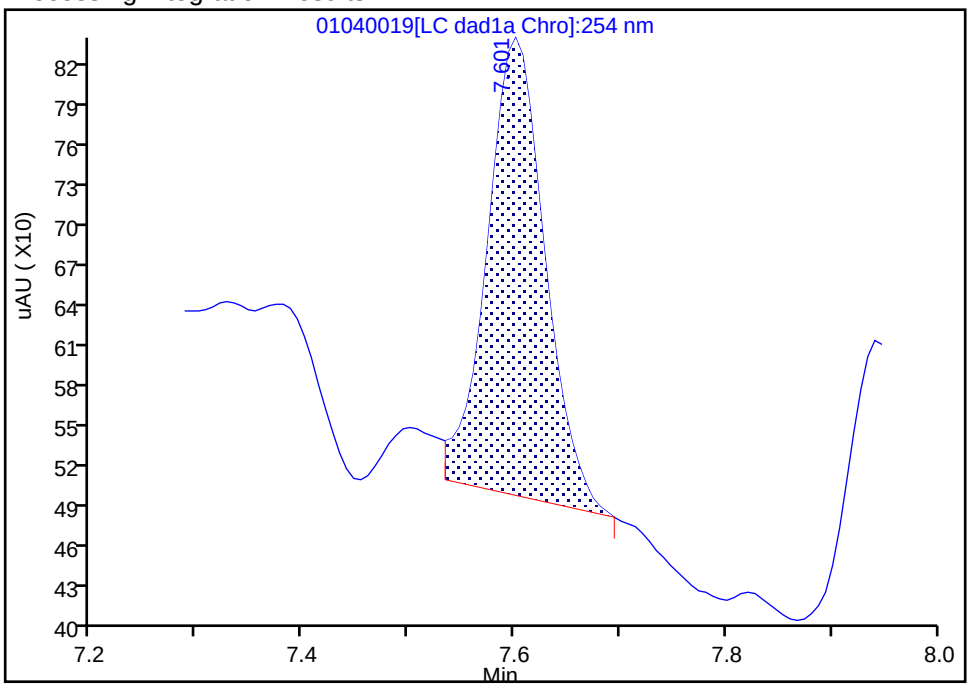
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040019.d				
Injection Date:	04-Jan-2022 21:31:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

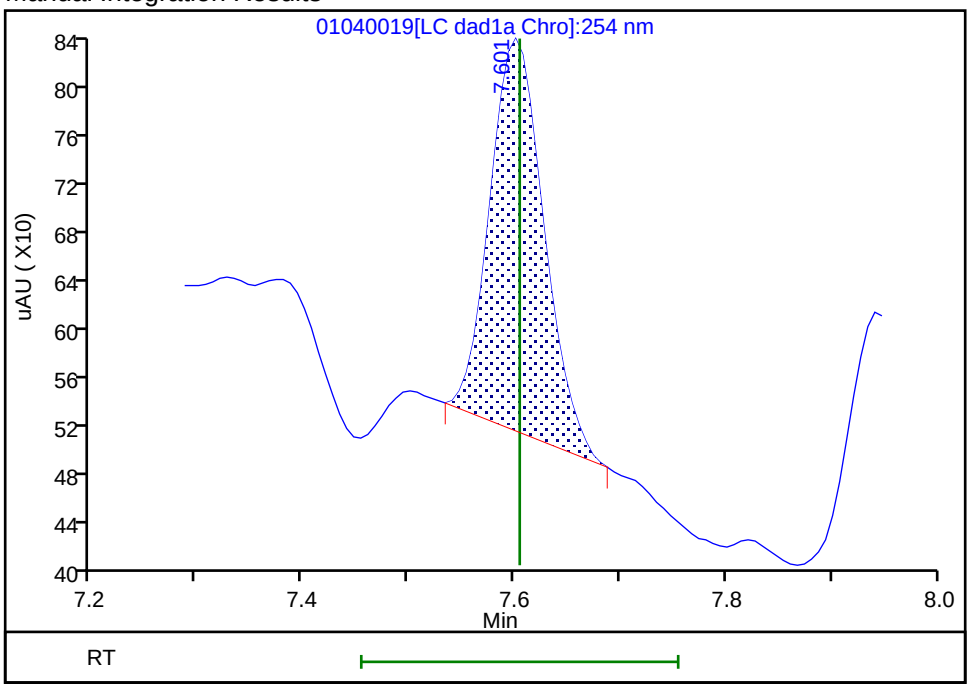
Processing Integration Results

RT: 7.60
Area: 1299
Amount: 0.011974
Amount Units: ug/mL



Manual Integration Results

RT: 7.60
Area: 1152
Amount: 0.011119
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:00:04
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

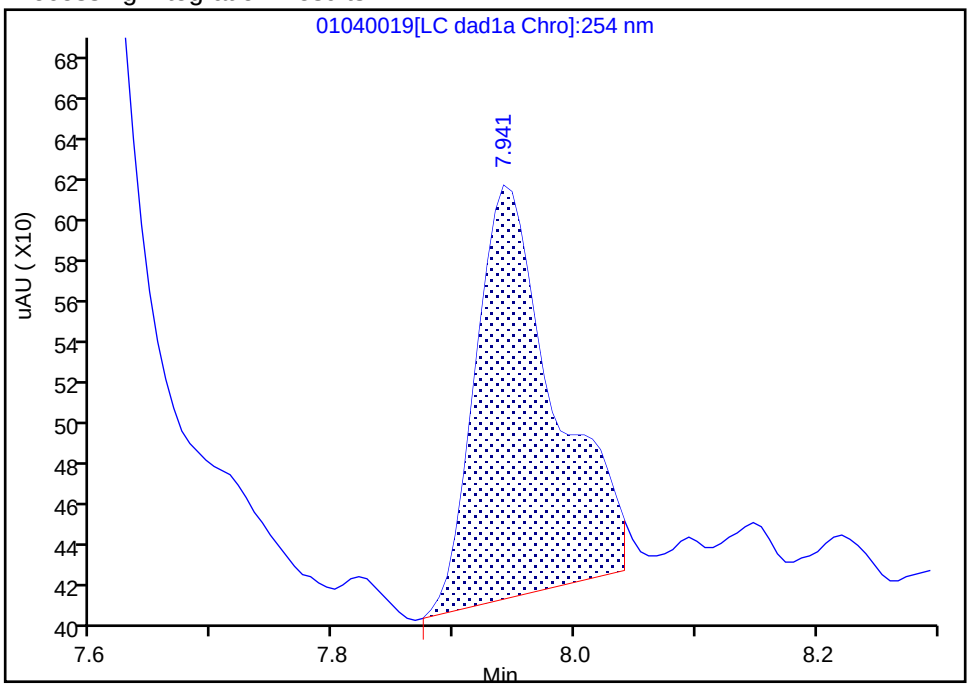
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040019.d				
Injection Date:	04-Jan-2022 21:31:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

9 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

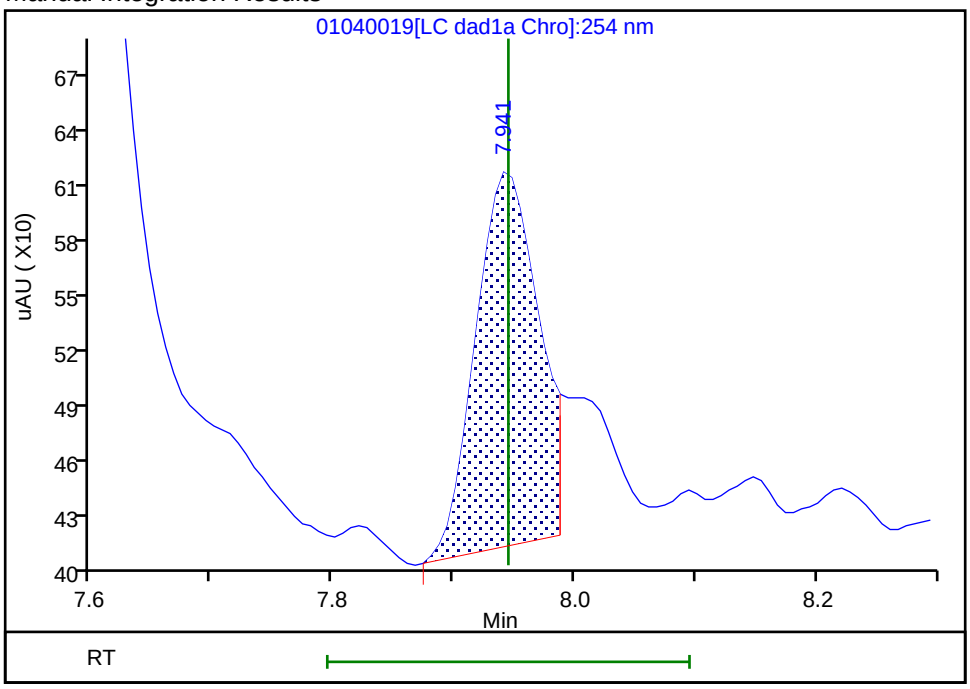
Processing Integration Results

RT: 7.94
Area: 903
Amount: 0.011263
Amount Units: ug/mL



Manual Integration Results

RT: 7.94
Area: 716
Amount: 0.009294
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:00:13
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

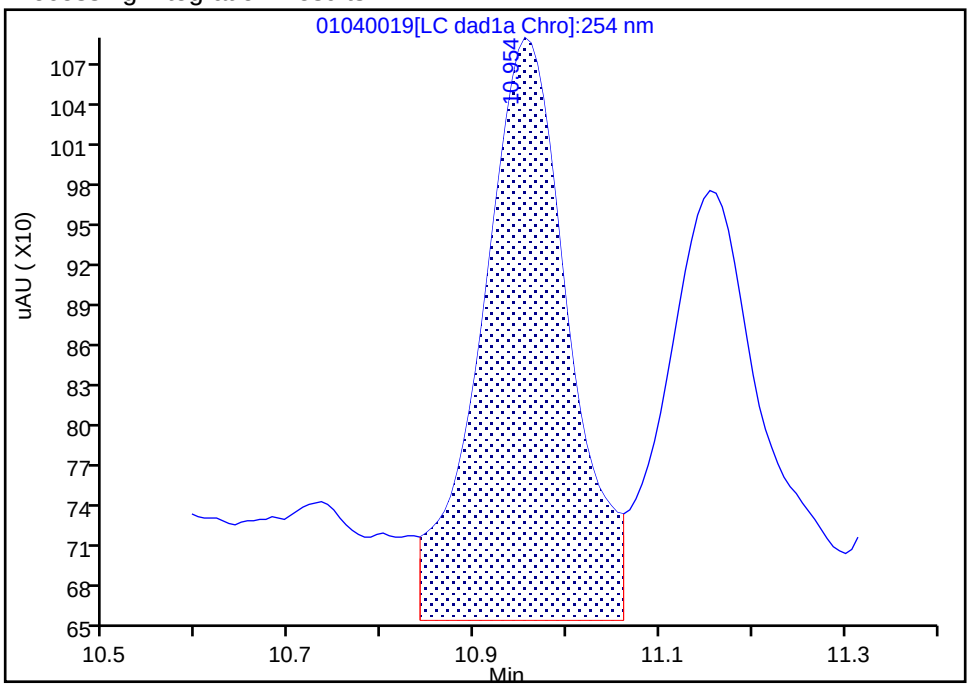
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040019.d				
Injection Date:	04-Jan-2022 21:31:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

17 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

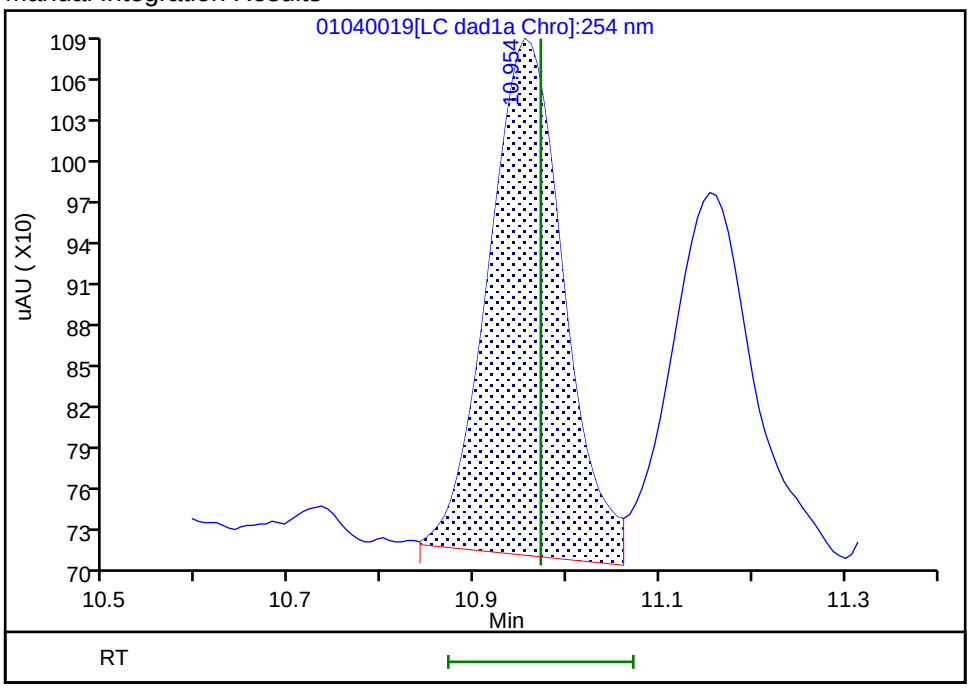
Processing Integration Results

RT: 10.95
Area: 2806
Amount: 0.013346
Amount Units: ug/mL



Manual Integration Results

RT: 10.95
Area: 2126
Amount: 0.010487
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:00:35
Audit Action: Assigned New Baseline Audit Reason: Baseline

Eurofins TestAmerica, Denver

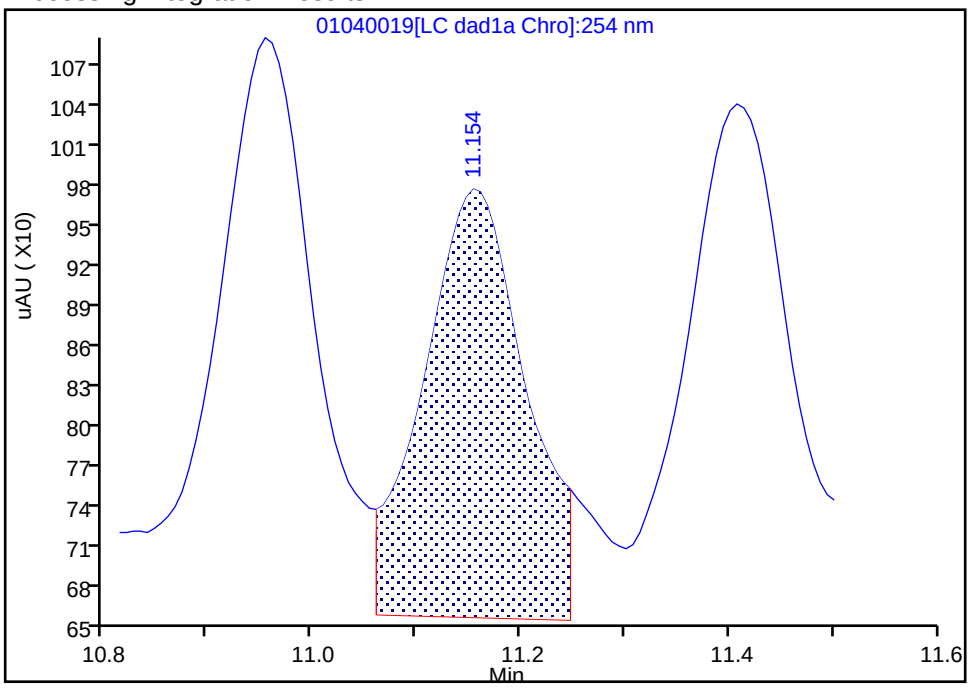
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040019.d				
Injection Date:	04-Jan-2022 21:31:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

18 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

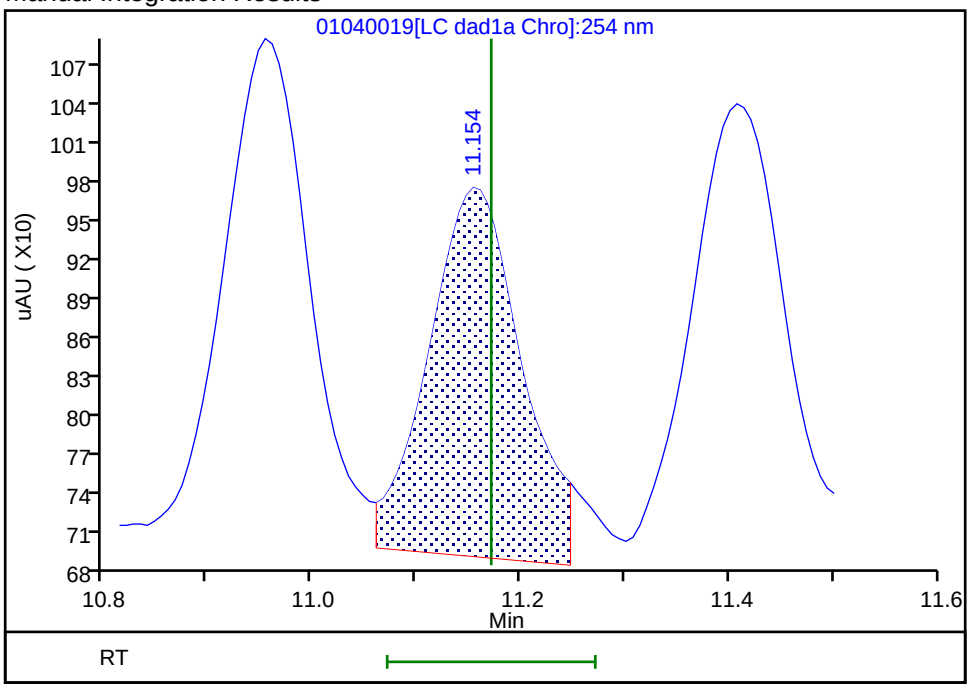
Processing Integration Results

RT: 11.15
Area: 2160
Amount: 0.013856
Amount Units: ug/mL



Manual Integration Results

RT: 11.15
Area: 1718
Amount: 0.011379
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:00:35
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

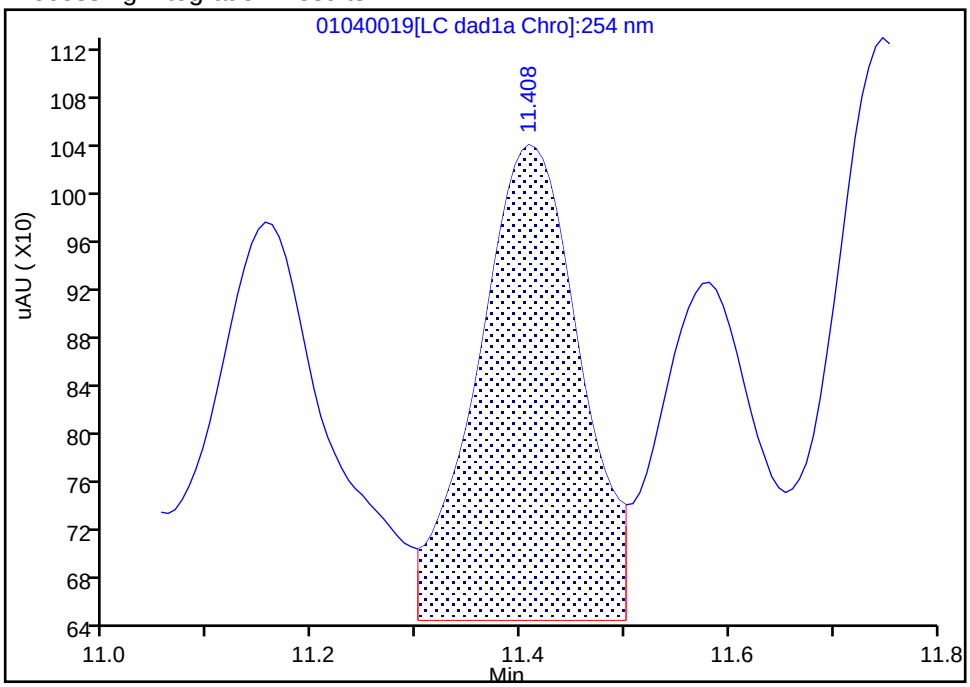
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040019.d				
Injection Date:	04-Jan-2022 21:31:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

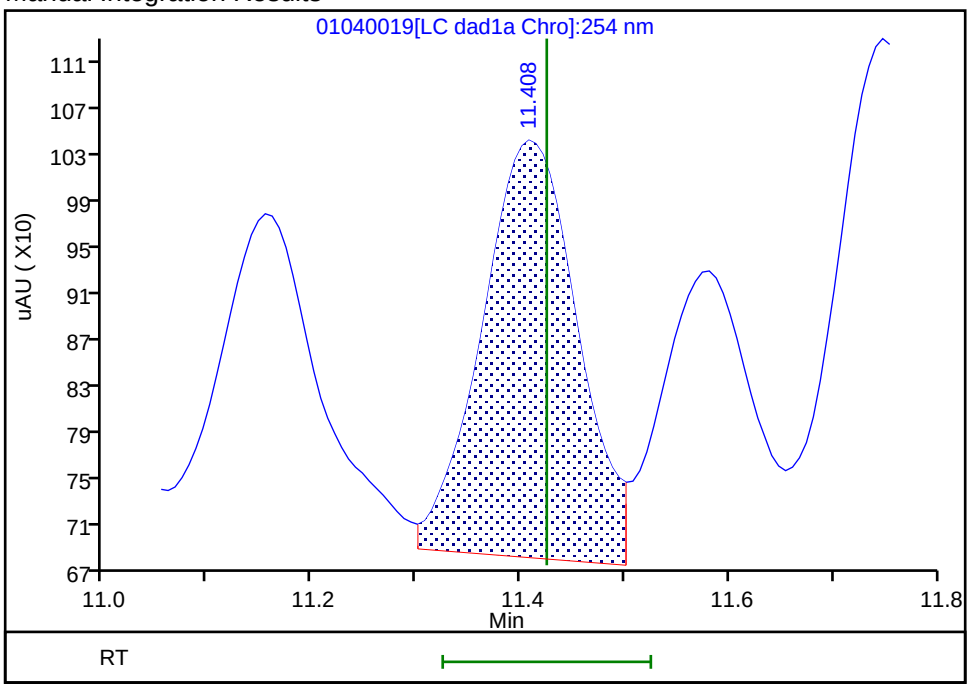
Processing Integration Results

RT: 11.41
Area: 2647
Amount: 0.012840
Amount Units: ug/mL



Manual Integration Results

RT: 11.41
Area: 2287
Amount: 0.011312
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:00:35
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

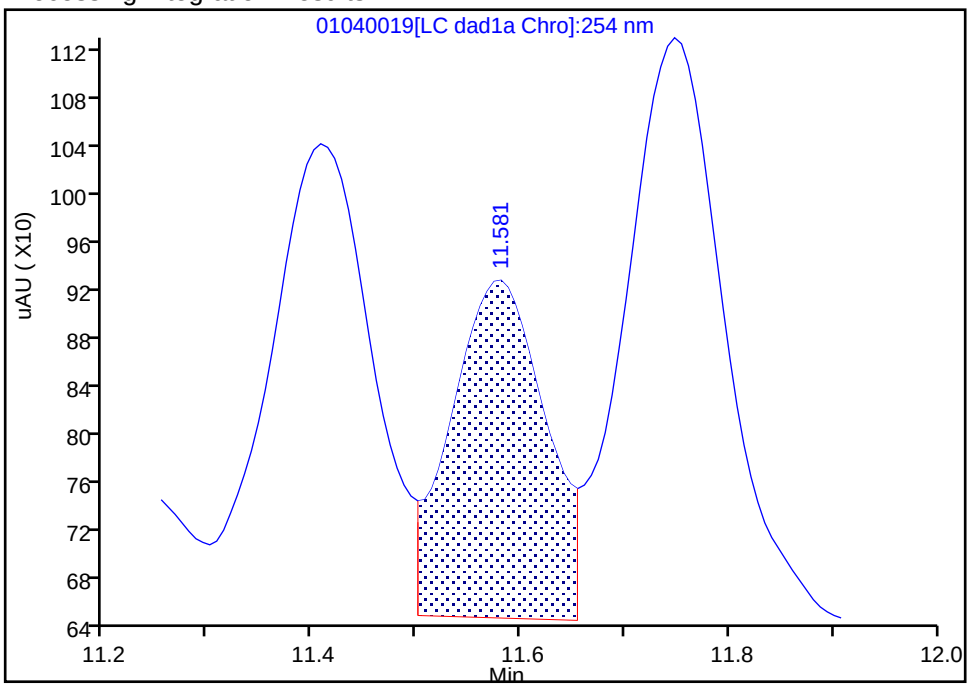
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040019.d				
Injection Date:	04-Jan-2022 21:31:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

20 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

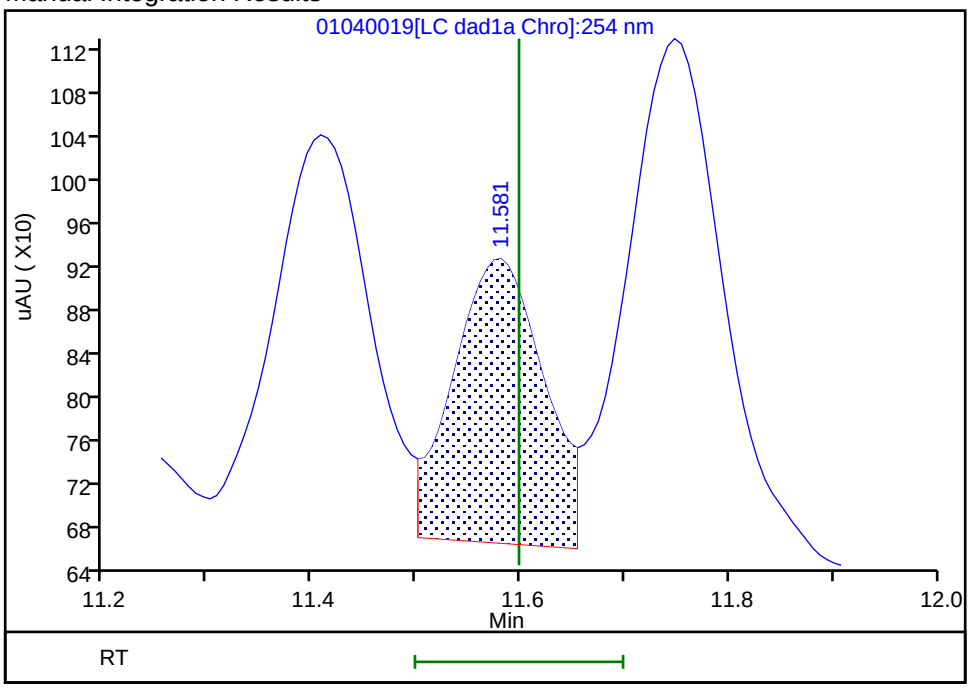
Processing Integration Results

RT: 11.58
Area: 1735
Amount: 0.011953
Amount Units: ug/mL



Manual Integration Results

RT: 11.58
Area: 1551
Amount: 0.010837
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:00:35
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

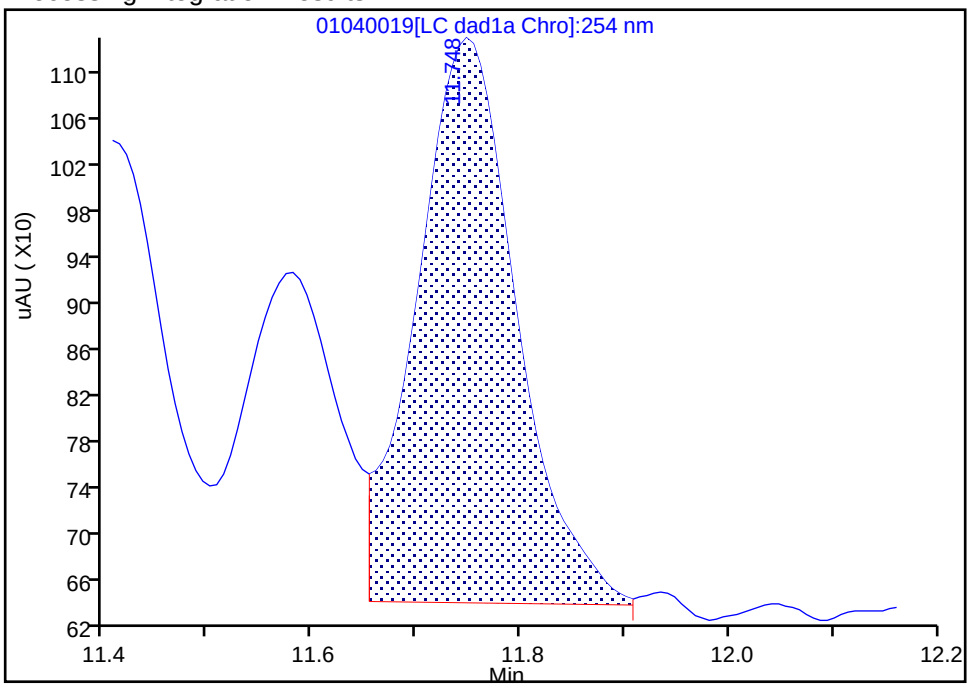
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040019.d				
Injection Date:	04-Jan-2022 21:31:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

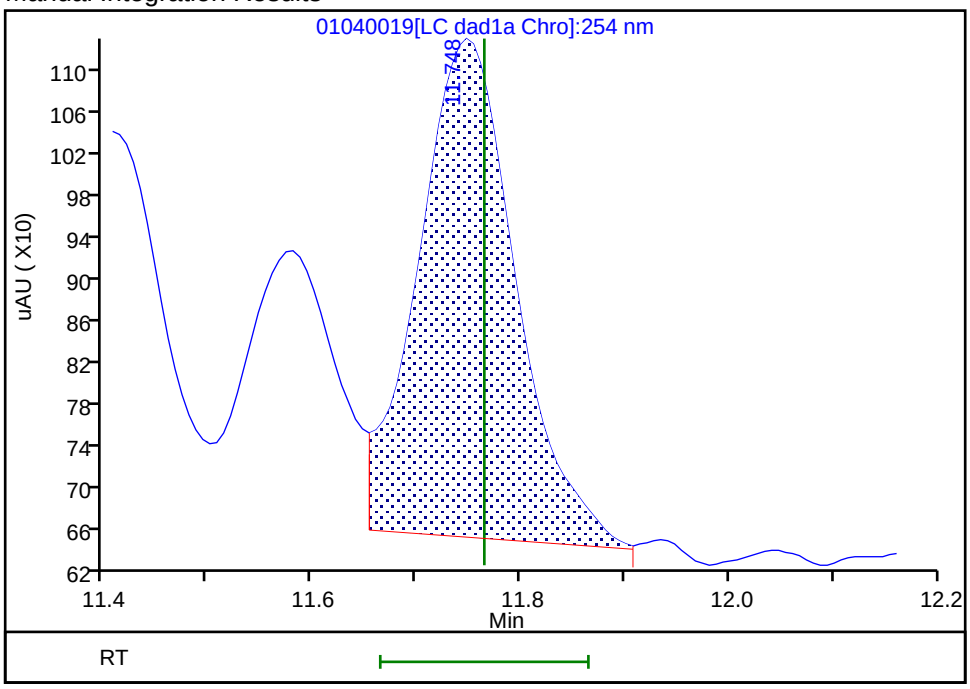
Processing Integration Results

RT: 11.75
Area: 3191
Amount: 0.010968
Amount Units: ug/mL



Manual Integration Results

RT: 11.75
Area: 3047
Amount: 0.010530
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:00:35

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

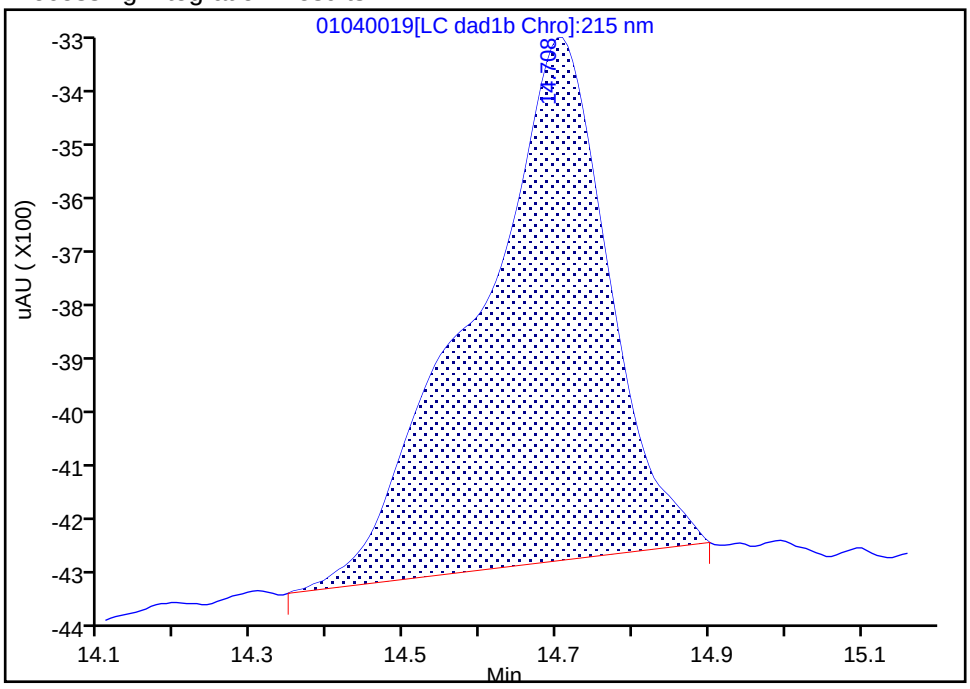
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040019.d
Injection Date: 04-Jan-2022 21:31:24 Instrument ID: CHHPLC_X3
Lims ID: IC INT 1
Client ID:
Operator ID: JZ ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: Detector LC DAD1C, 215 nm

25 PETN, CAS: 78-11-5

Signal: 1

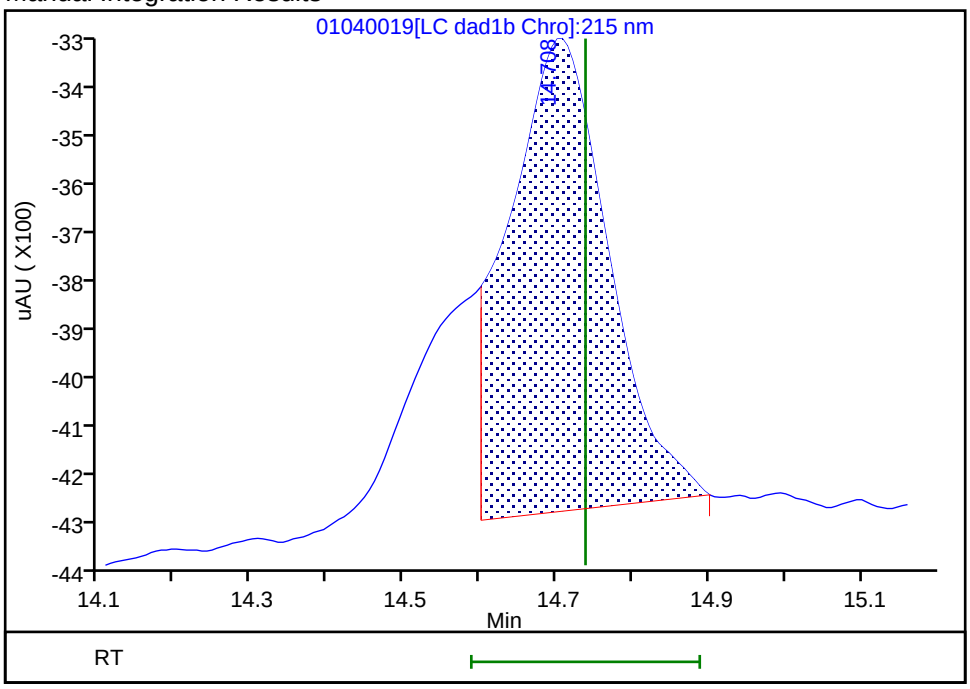
Processing Integration Results

RT: 14.71
Area: 11771
Amount: 0.142232
Amount Units: ug/mL



Manual Integration Results

RT: 14.71
Area: 8784
Amount: 0.102016
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:00:58
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Calibration / HMX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

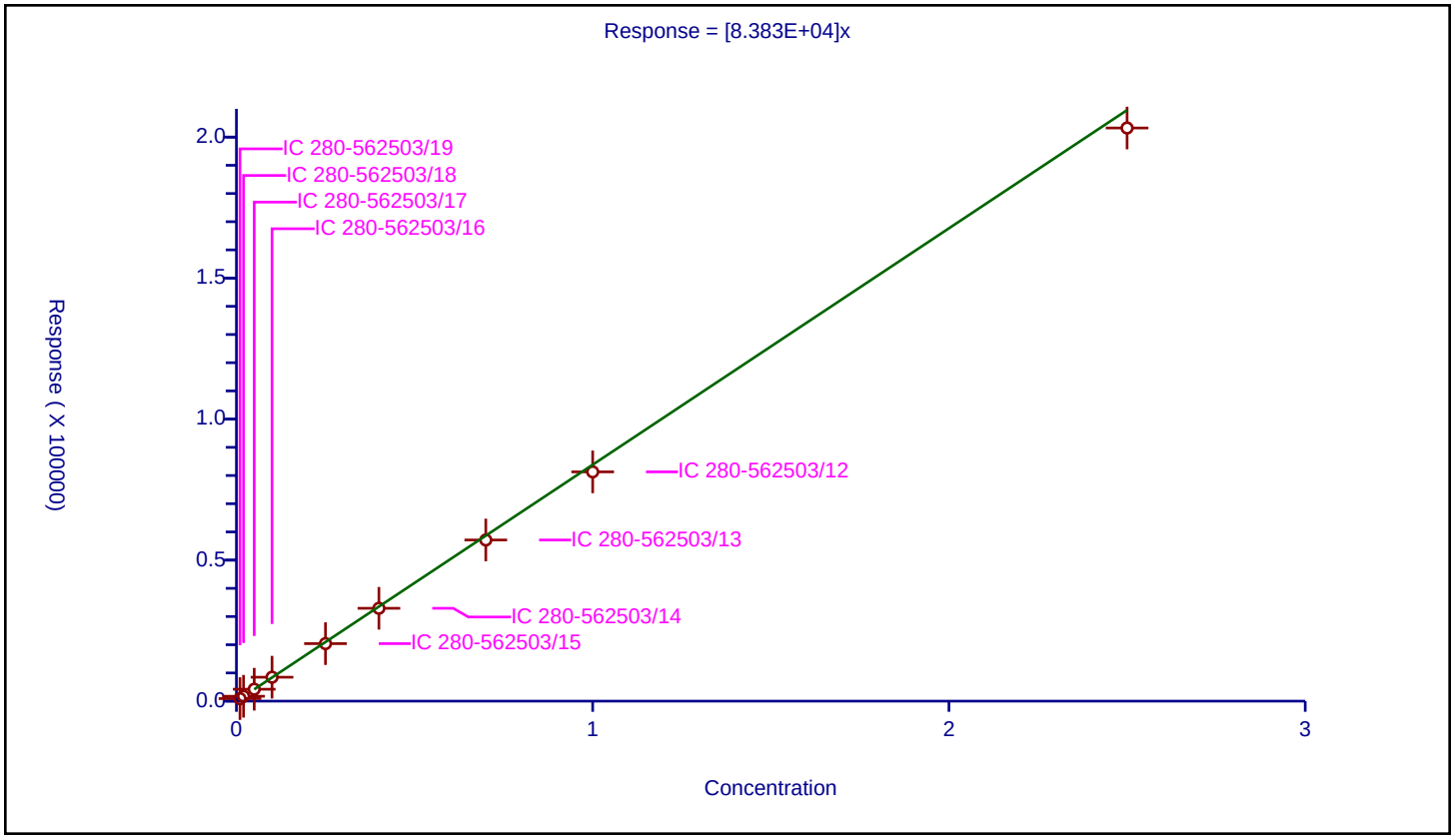
Curve Coefficients

Intercept:	0
Slope:	8.383E+04

Error Coefficients

Standard Error:	2490
Relative Standard Error:	3.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.01	901.0			90100.0	Y
2	IC 280-562503/18	0.02	1735.0			86750.0	Y
3	IC 280-562503/17	0.05	4230.0			84600.0	Y
4	IC 280-562503/16	0.1	8489.0			84890.0	Y
5	IC 280-562503/15	0.25	20395.0			81580.0	Y
6	IC 280-562503/14	0.4	32925.0			82312.5	Y
7	IC 280-562503/13	0.7	57138.0			81625.714286	Y
8	IC 280-562503/12	1.0	81295.0			81295.0	Y
9	IC 280-562503/11	2.5	203229.0			81291.6	Y



Calibration / RDX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

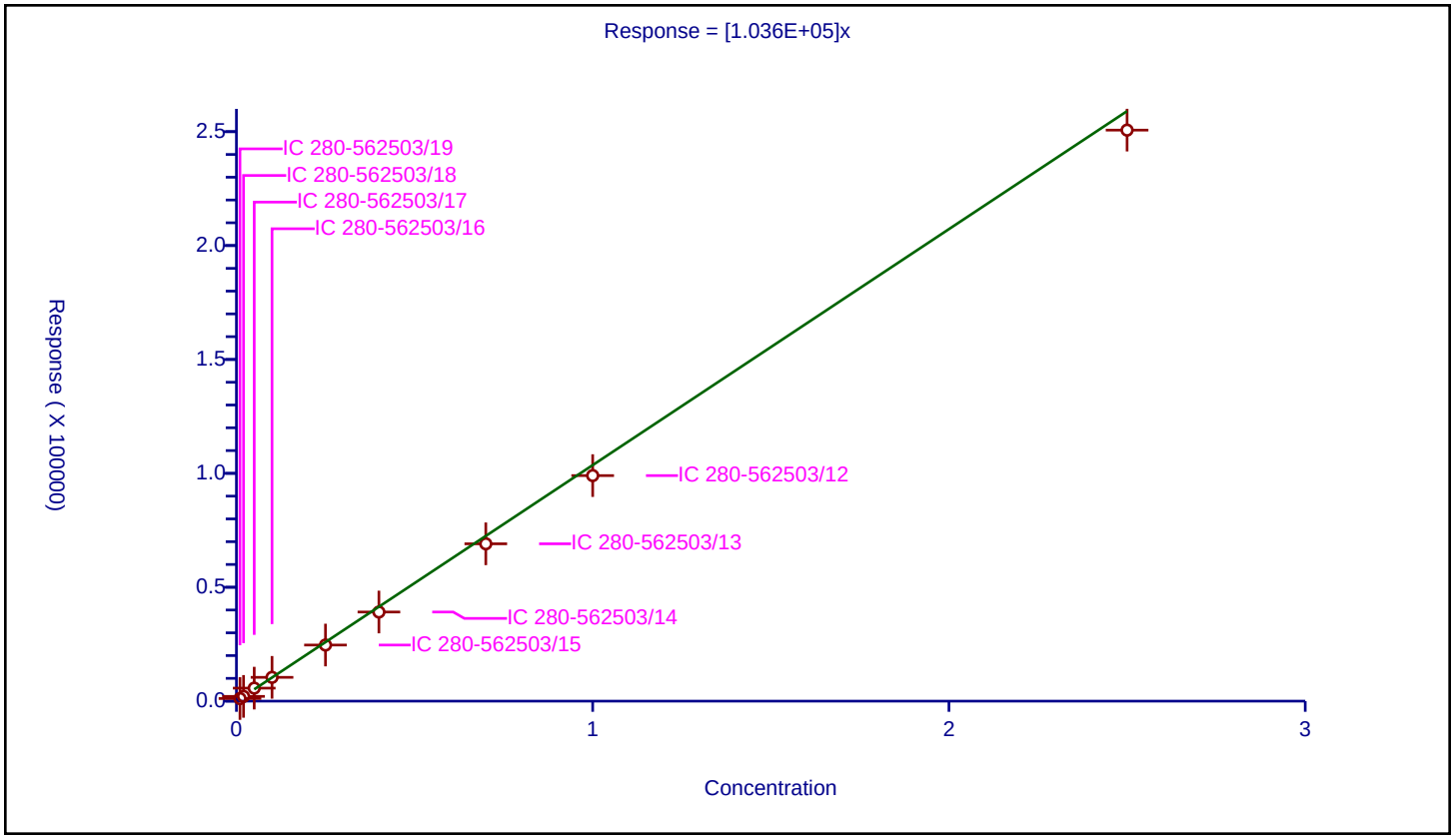
Curve Coefficients

Intercept:	0
Slope:	1.036E+05

Error Coefficients

Standard Error:	3710
Relative Standard Error:	6.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.01	1152.0			115200.0	Y
2	IC 280-562503/18	0.02	2084.0			104200.0	Y
3	IC 280-562503/17	0.05	5715.0			114300.0	Y
4	IC 280-562503/16	0.1	10447.0			104470.0	Y
5	IC 280-562503/15	0.25	24635.0			98540.0	Y
6	IC 280-562503/14	0.4	39126.0			97815.0	Y
7	IC 280-562503/13	0.7	69068.0			98668.571429	Y
8	IC 280-562503/12	1.0	99016.0			99016.0	Y
9	IC 280-562503/11	2.5	250683.0			100273.2	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

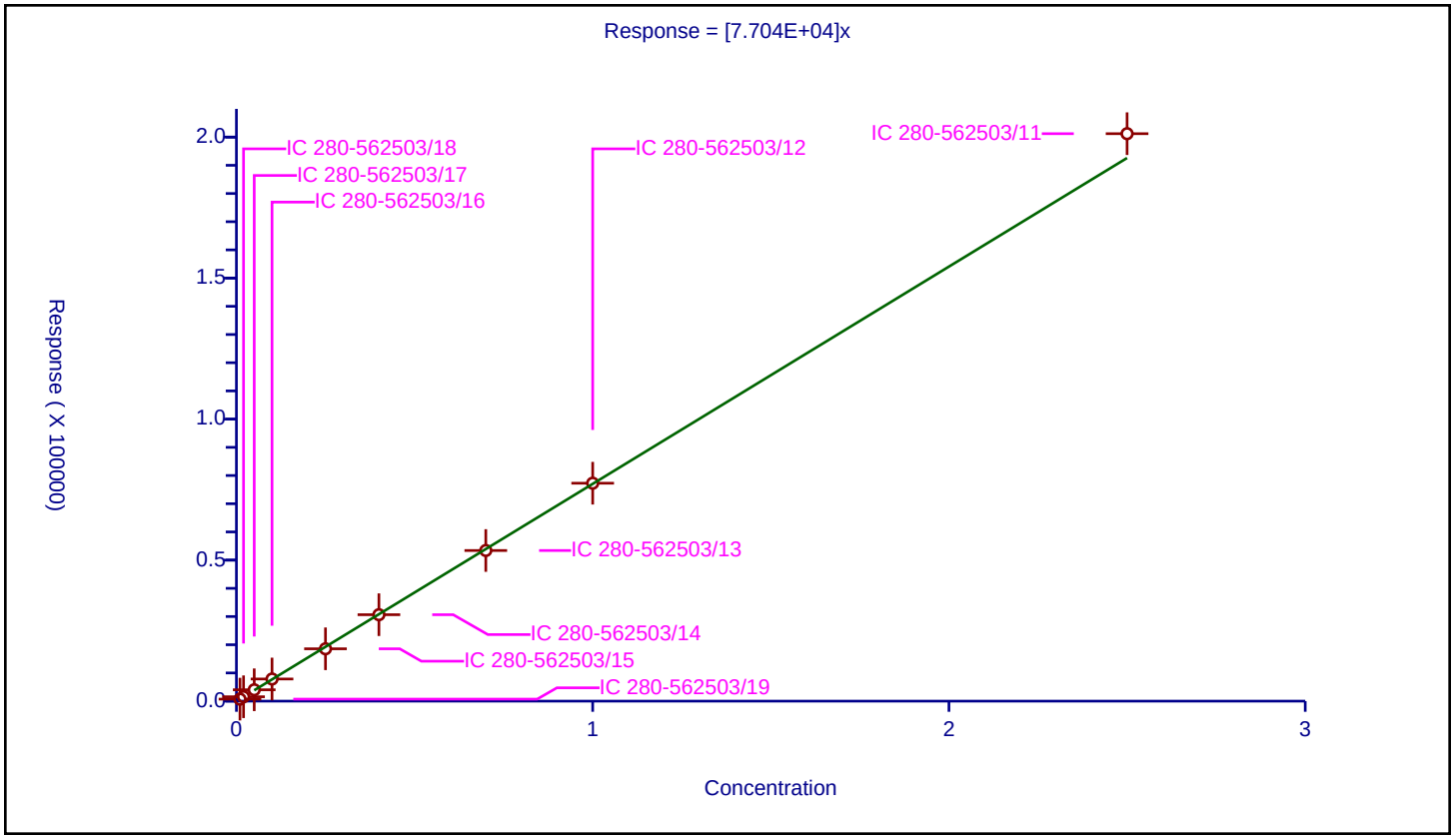
Curve Coefficients

Intercept:	0
Slope:	7.704E+04

Error Coefficients

Standard Error:	3060
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 280-562503/19	0.01	716.0			71600.0	Y
2	IC 280-562503/18	0.02	1554.0			77700.0	Y
3	IC 280-562503/17	0.05	4029.0			80580.0	Y
4	IC 280-562503/16	0.1	7855.0			78550.0	Y
5	IC 280-562503/15	0.25	18560.0			74240.0	Y
6	IC 280-562503/14	0.4	30649.0			76622.5	Y
7	IC 280-562503/13	0.7	53408.0			76297.142857	Y
8	IC 280-562503/12	1.0	77279.0			77279.0	Y
9	IC 280-562503/11	2.5	201210.0			80484.0	Y



Calibration / 1,2-Dinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

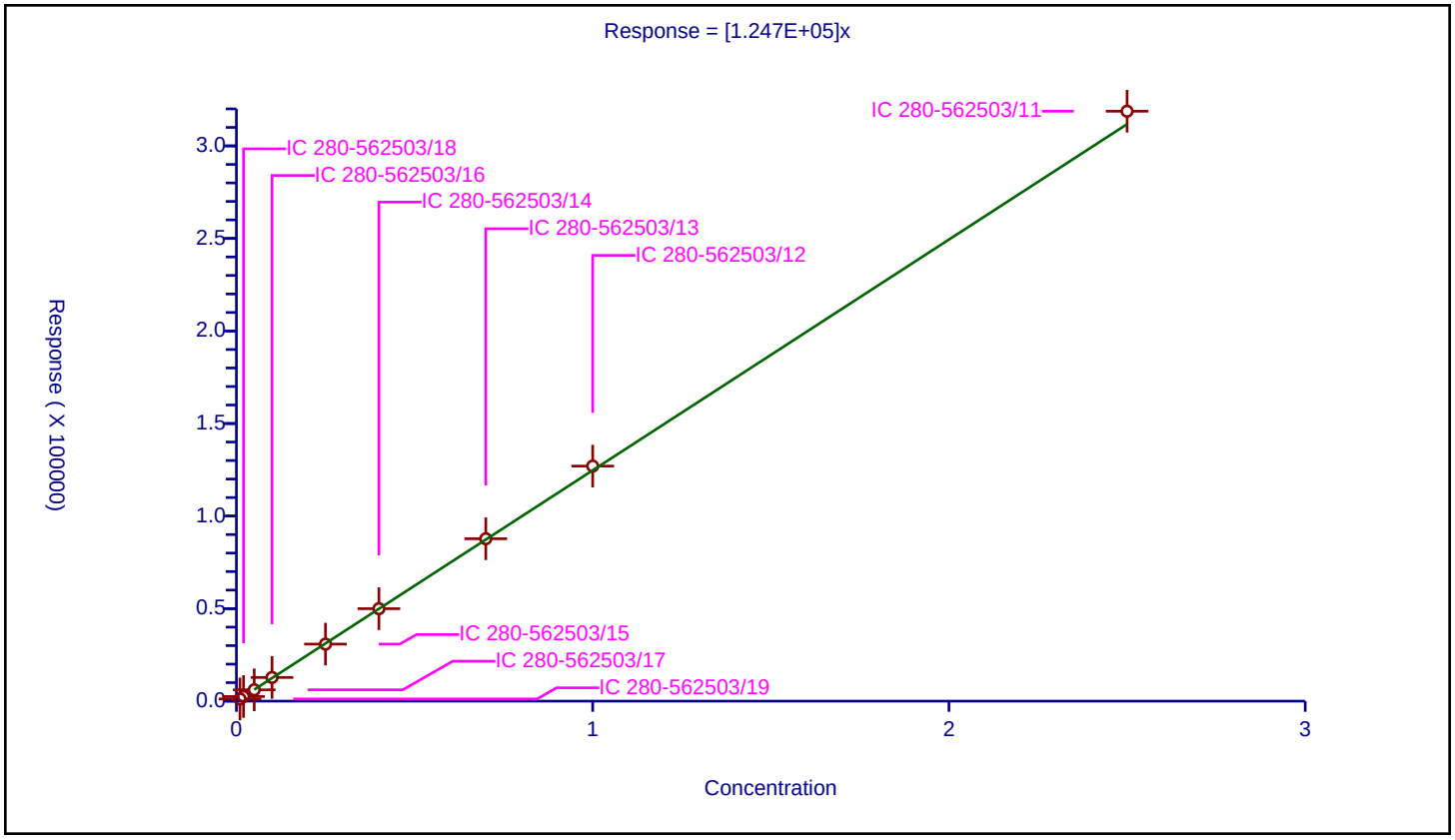
Curve Coefficients

Intercept:	0
Slope:	1.247E+05

Error Coefficients

Standard Error:	2620
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 280-562503/19	0.01	1188.0			118800.0	Y
2	IC 280-562503/18	0.02	2503.0			125150.0	Y
3	IC 280-562503/17	0.05	6127.0			122540.0	Y
4	IC 280-562503/16	0.1	12780.0			127800.0	Y
5	IC 280-562503/15	0.25	30811.0			123244.0	Y
6	IC 280-562503/14	0.4	49955.0			124887.5	Y
7	IC 280-562503/13	0.7	87746.0			125351.428571	Y
8	IC 280-562503/12	1.0	127011.0			127011.0	Y
9	IC 280-562503/11	2.5	318738.0			127495.2	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

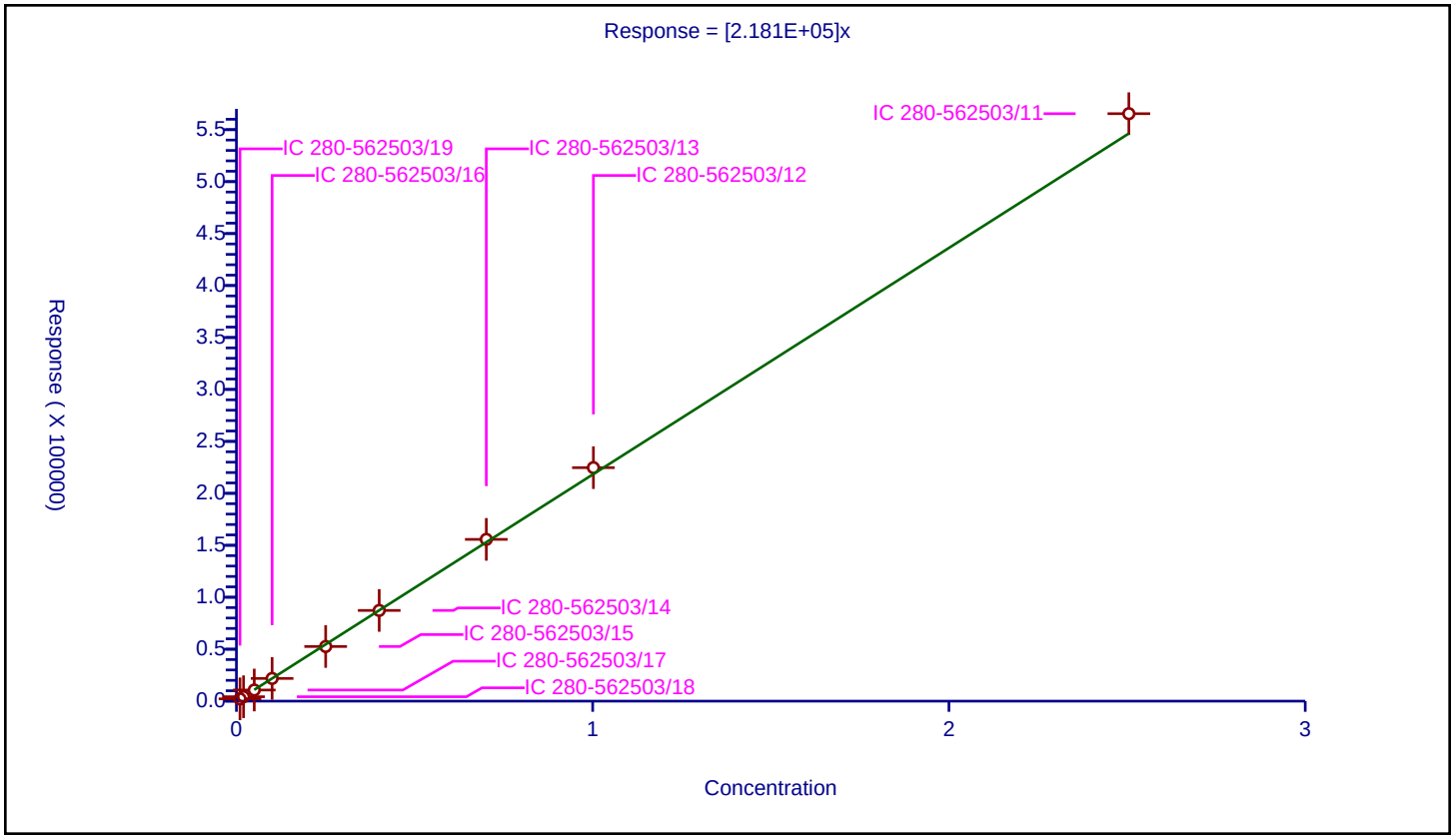
Curve Coefficients

Intercept:	0
Slope:	2.181E+05

Error Coefficients

Standard Error:	7180
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 280-562503/19	0.01002	2197.0			219261.477046	Y
2	IC 280-562503/18	0.02004	4249.0			212025.948104	Y
3	IC 280-562503/17	0.0501	10711.0			213792.41517	Y
4	IC 280-562503/16	0.1002	21856.0			218123.752495	Y
5	IC 280-562503/15	0.2505	52589.0			209936.127745	Y
6	IC 280-562503/14	0.4008	87295.0			217801.896208	Y
7	IC 280-562503/13	0.7014	155681.0			221957.513544	Y
8	IC 280-562503/12	1.002	224711.0			224262.47505	Y
9	IC 280-562503/11	2.505	565374.0			225698.203593	Y



Calibration / 1,3-Dinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

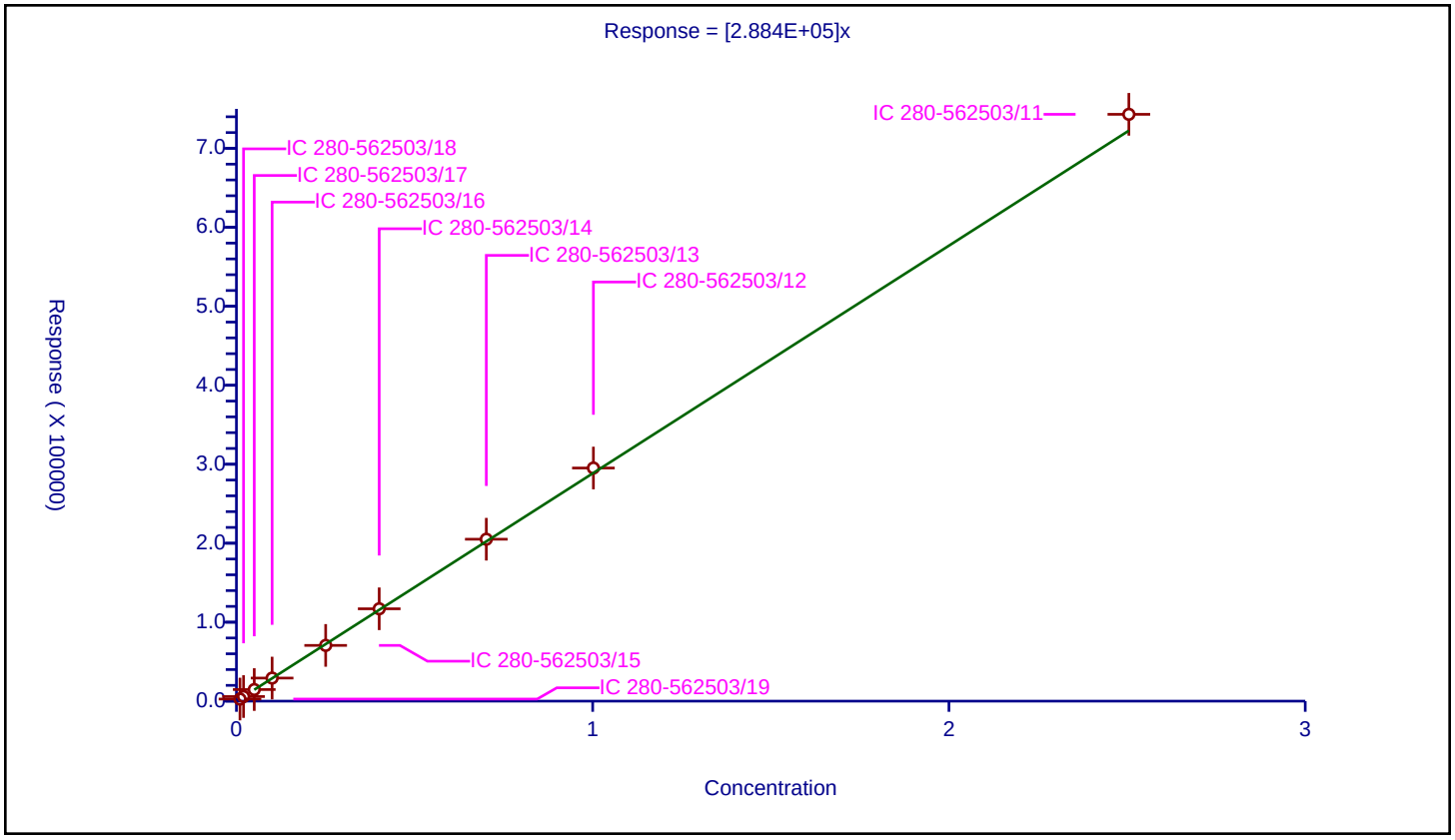
Curve Coefficients

Intercept:	0
Slope:	2.884E+05

Error Coefficients

Standard Error:	7740
Relative Standard Error:	3.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.01002	2633.0			262774.451098	Y
2	IC 280-562503/18	0.02004	5833.0			291067.864271	Y
3	IC 280-562503/17	0.0501	14683.0			293073.852295	Y
4	IC 280-562503/16	0.1002	29215.0			291566.866267	Y
5	IC 280-562503/15	0.2505	70569.0			281712.57485	Y
6	IC 280-562503/14	0.4008	116963.0			291823.852295	Y
7	IC 280-562503/13	0.7014	205039.0			292328.200741	Y
8	IC 280-562503/12	1.002	295195.0			294605.788423	Y
9	IC 280-562503/11	2.505	743133.0			296659.88024	Y



Calibration / Nitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

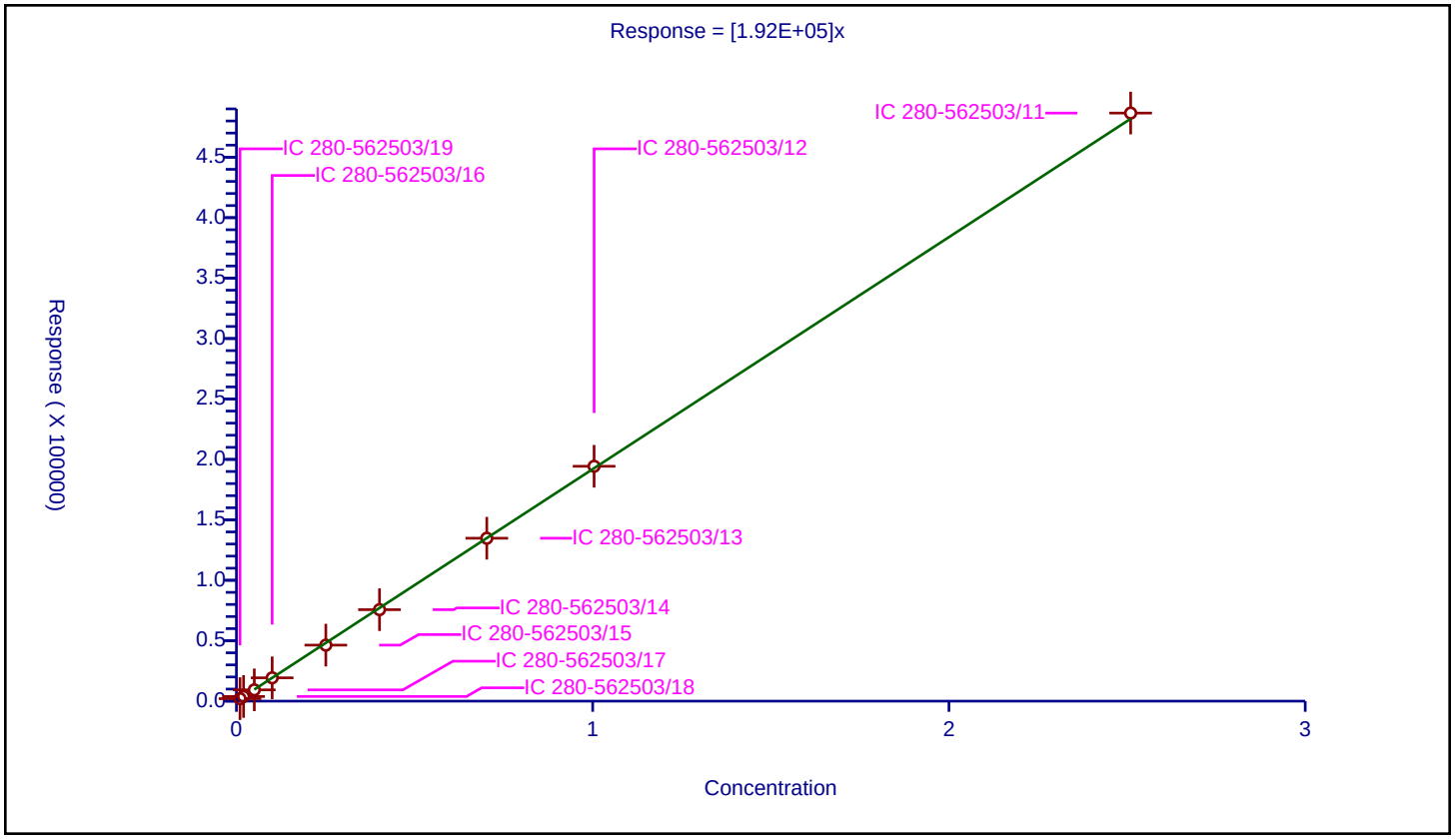
Curve Coefficients

Intercept:	0
Slope:	1.92E+05

Error Coefficients

Standard Error:	1950
Relative Standard Error:	3.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.01004	2067.0			205876.494024	Y
2	IC 280-562503/18	0.02008	3845.0			191484.063745	Y
3	IC 280-562503/17	0.0502	9329.0			185836.653386	Y
4	IC 280-562503/16	0.1004	19287.0			192101.593625	Y
5	IC 280-562503/15	0.251	46348.0			184653.386454	Y
6	IC 280-562503/14	0.4016	75688.0			188466.135458	Y
7	IC 280-562503/13	0.7028	134777.0			191771.485487	Y
8	IC 280-562503/12	1.004	194325.0			193550.796813	Y
9	IC 280-562503/11	2.51	486534.0			193838.247012	Y



Calibration / Tetryl

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

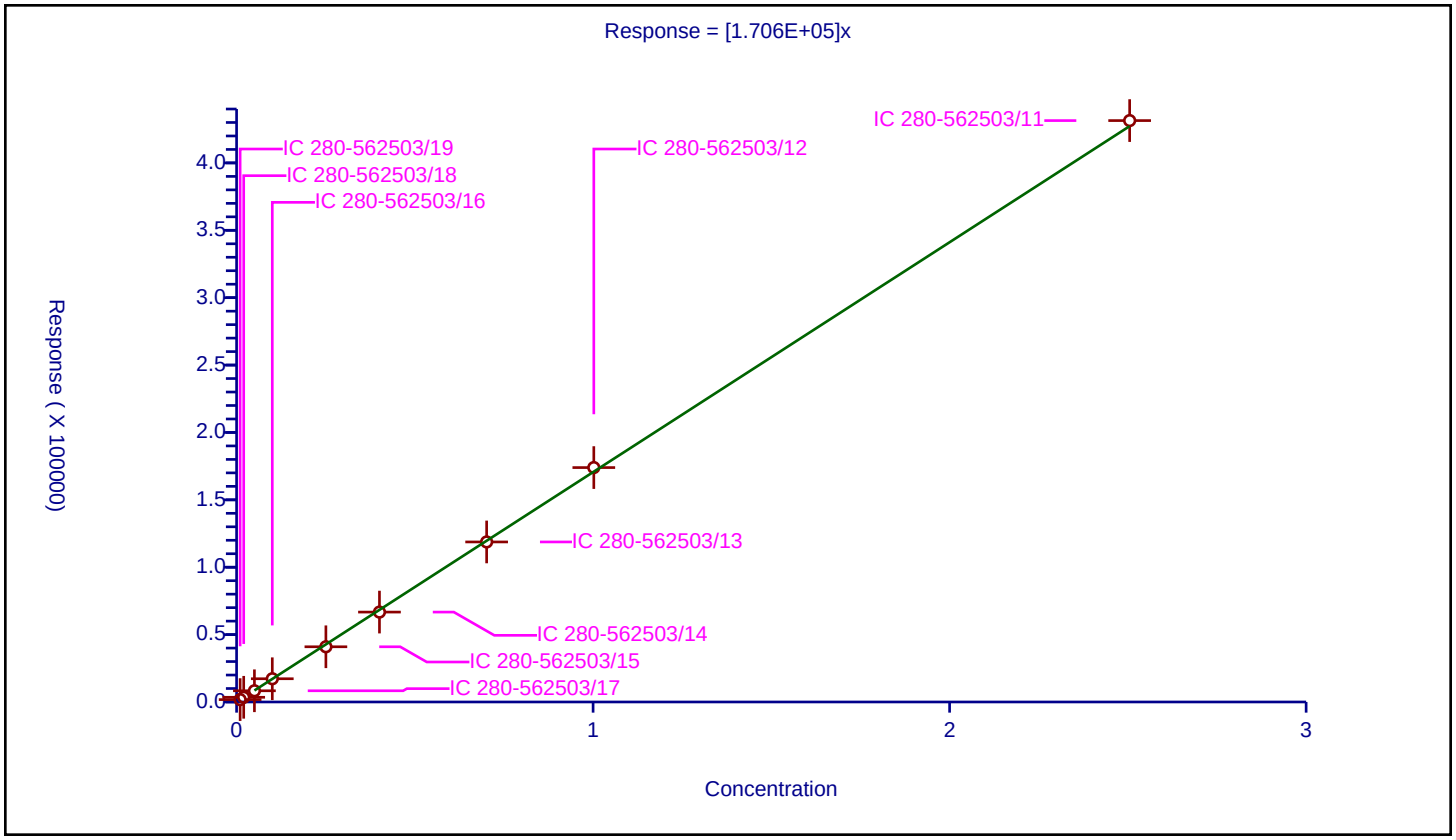
Curve Coefficients

Intercept:	0
Slope:	1.706E+05

Error Coefficients

Standard Error:	2030
Relative Standard Error:	2.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.01002	1778.0			177445.10978	Y
2	IC 280-562503/18	0.02004	3498.0			174550.898204	Y
3	IC 280-562503/17	0.0501	8315.0			165968.063872	Y
4	IC 280-562503/16	0.1002	17238.0			172035.928144	Y
5	IC 280-562503/15	0.2505	40968.0			163544.91018	Y
6	IC 280-562503/14	0.4008	66706.0			166432.135729	Y
7	IC 280-562503/13	0.7014	118756.0			169312.802965	Y
8	IC 280-562503/12	1.002	173941.0			173593.812375	Y
9	IC 280-562503/11	2.505	431404.0			172217.165669	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

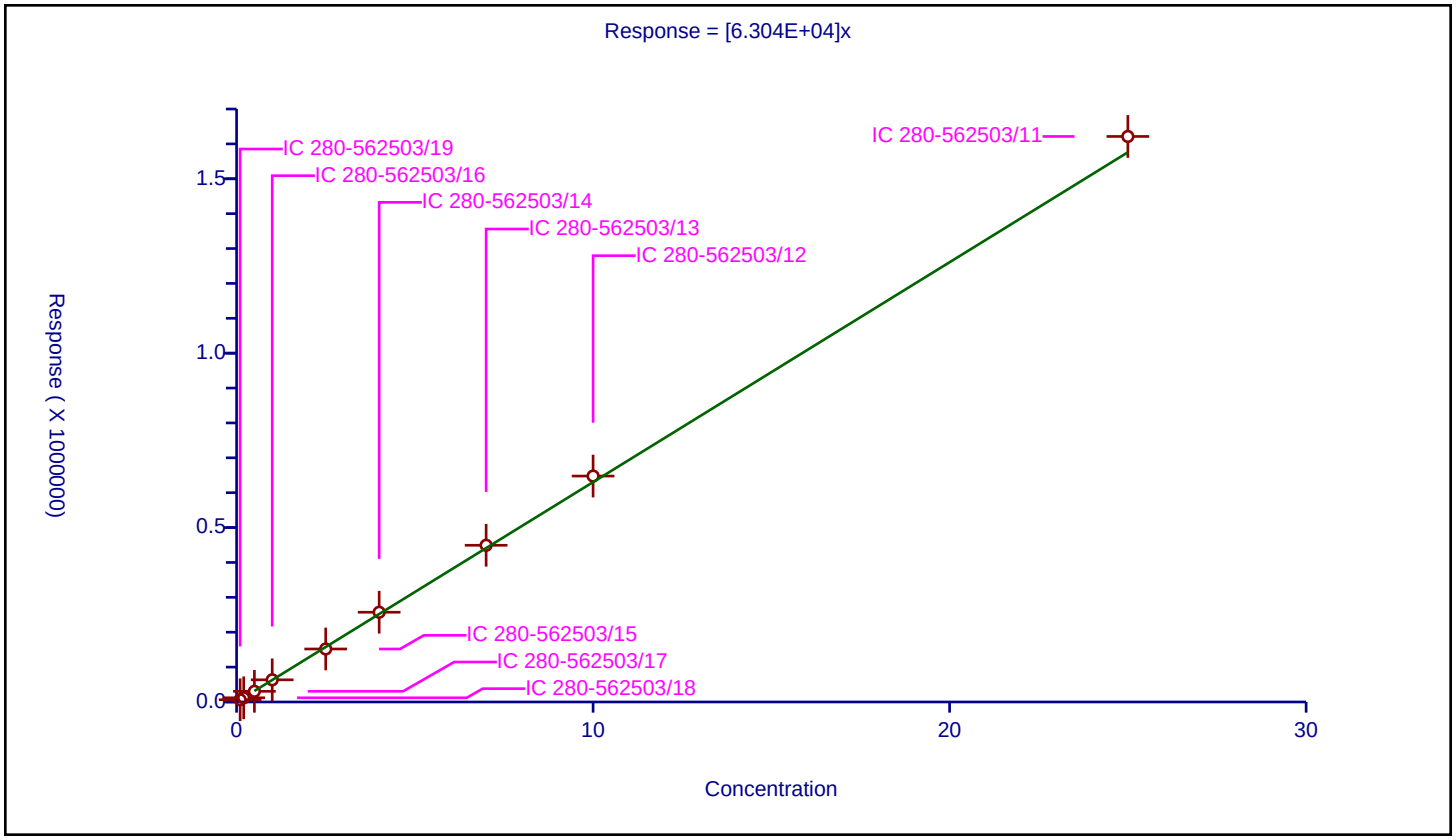
Curve Coefficients

Intercept:	0
Slope:	6.304E+04

Error Coefficients

Standard Error:	17600
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 280-562503/19	0.1	6348.0			63480.0	Y
2	IC 280-562503/18	0.2	12008.0			60040.0	Y
3	IC 280-562503/17	0.5	30651.0			61302.0	Y
4	IC 280-562503/16	1.0	63595.0			63595.0	Y
5	IC 280-562503/15	2.5	151977.0			60790.8	Y
6	IC 280-562503/14	4.0	257287.0			64321.75	Y
7	IC 280-562503/13	7.0	449283.0			64183.285714	Y
8	IC 280-562503/12	10.0	647703.0			64770.3	Y
9	IC 280-562503/11	25.0	1621311.0			64852.44	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

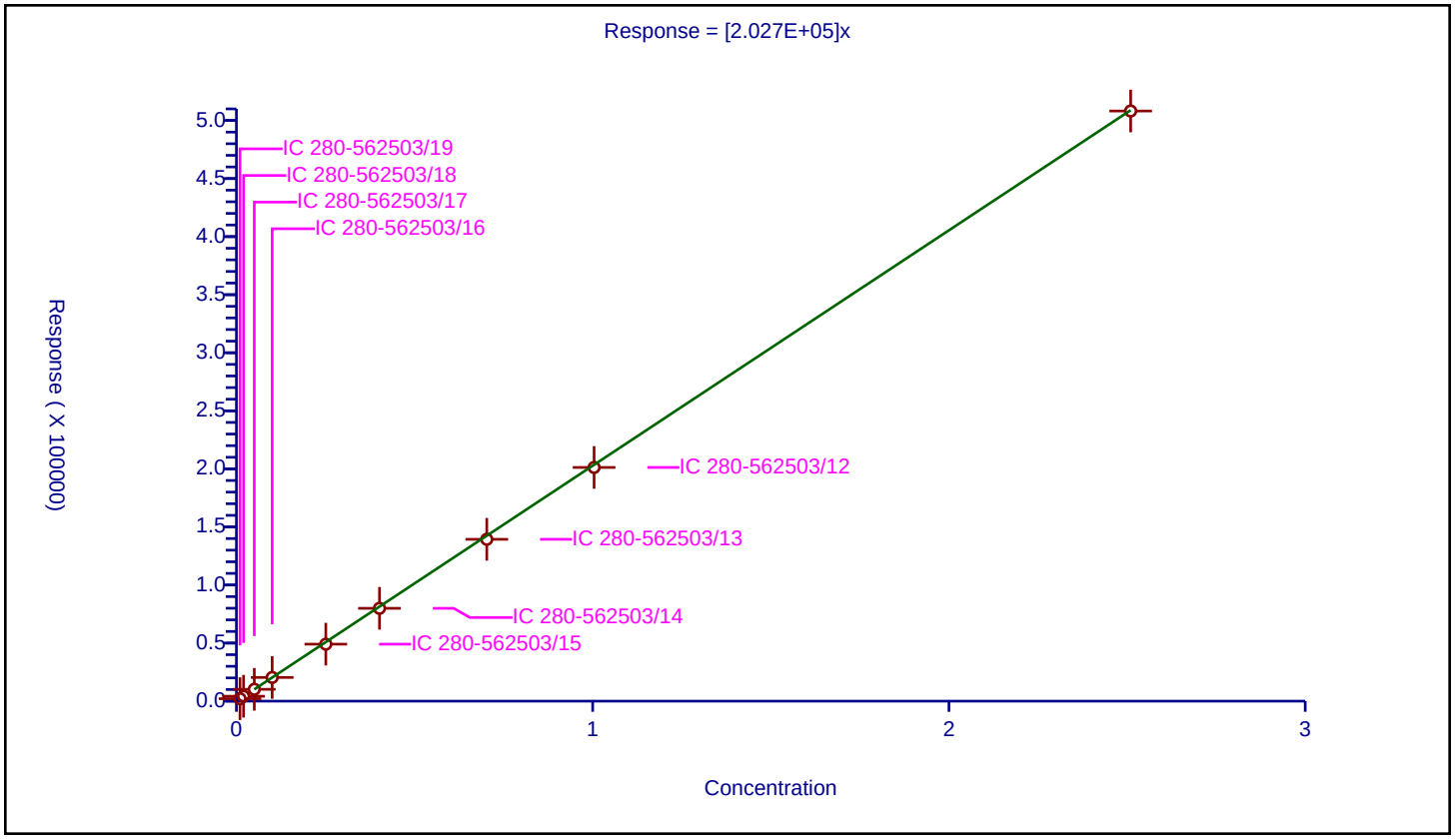
Curve Coefficients

Intercept:	0
Slope:	2.027E+05

Error Coefficients

Standard Error:	1610
Relative Standard Error:	2.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.01004	2126.0			211752.988048	Y
2	IC 280-562503/18	0.02008	4227.0			210507.968127	Y
3	IC 280-562503/17	0.0502	10202.0			203227.091633	Y
4	IC 280-562503/16	0.1004	20408.0			203266.932271	Y
5	IC 280-562503/15	0.251	49067.0			195486.055777	Y
6	IC 280-562503/14	0.4016	79951.0			199081.175299	Y
7	IC 280-562503/13	0.7028	139377.0			198316.733068	Y
8	IC 280-562503/12	1.004	201237.0			200435.258964	Y
9	IC 280-562503/11	2.51	508173.0			202459.36255	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

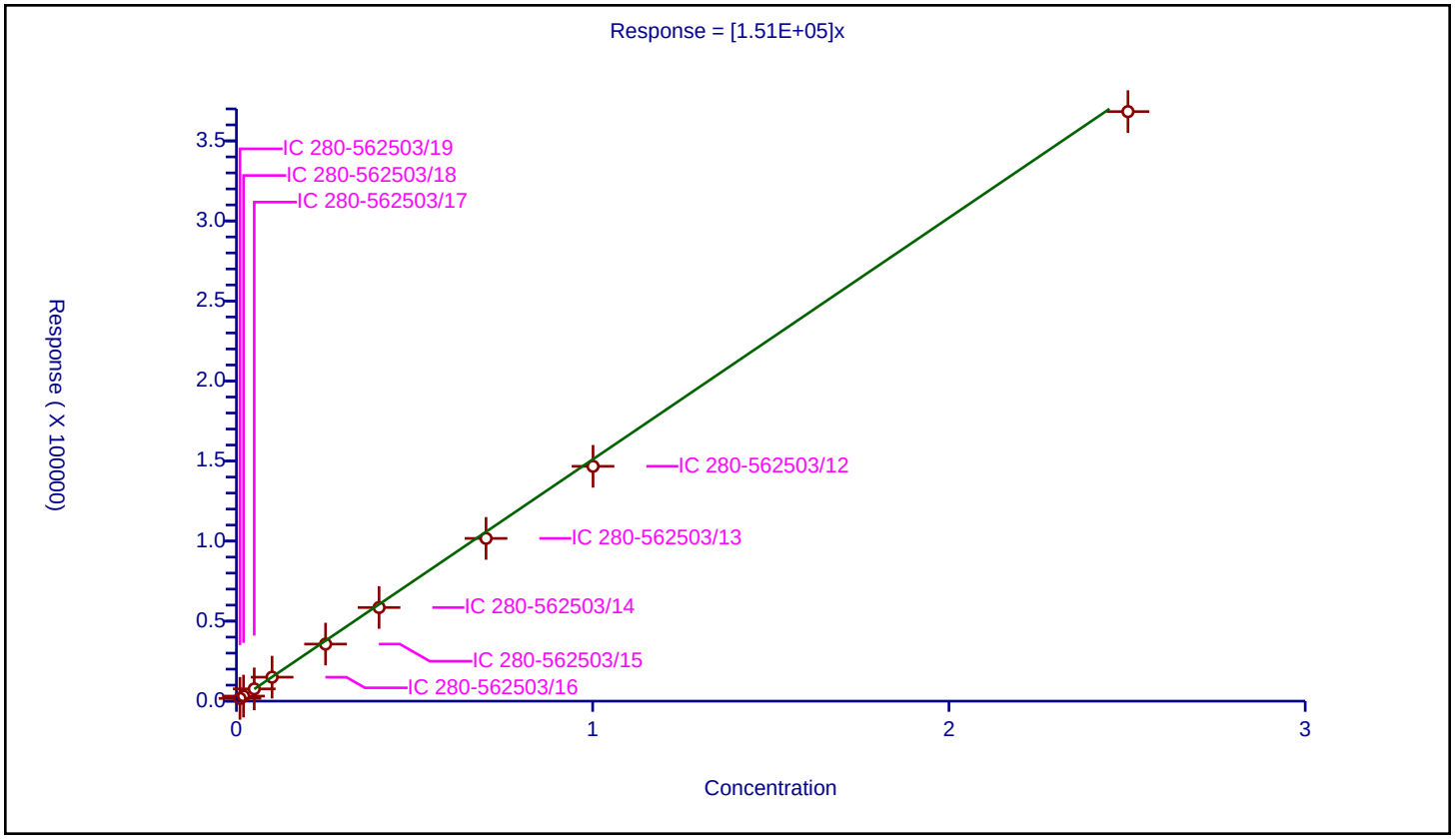
Curve Coefficients

Intercept:	0
Slope:	1.51E+05

Error Coefficients

Standard Error:	4130
Relative Standard Error:	5.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.01001	1718.0			171628.371628	Y
2	IC 280-562503/18	0.02002	3150.0			157342.657343	Y
3	IC 280-562503/17	0.05005	7656.0			152967.032967	Y
4	IC 280-562503/16	0.1001	14975.0			149600.3996	Y
5	IC 280-562503/15	0.25025	35644.0			142433.566434	Y
6	IC 280-562503/14	0.4004	58489.0			146076.423576	Y
7	IC 280-562503/13	0.7007	101665.0			145090.623662	Y
8	IC 280-562503/12	1.001	146703.0			146556.443556	Y
9	IC 280-562503/11	2.5025	368296.0			147171.228771	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

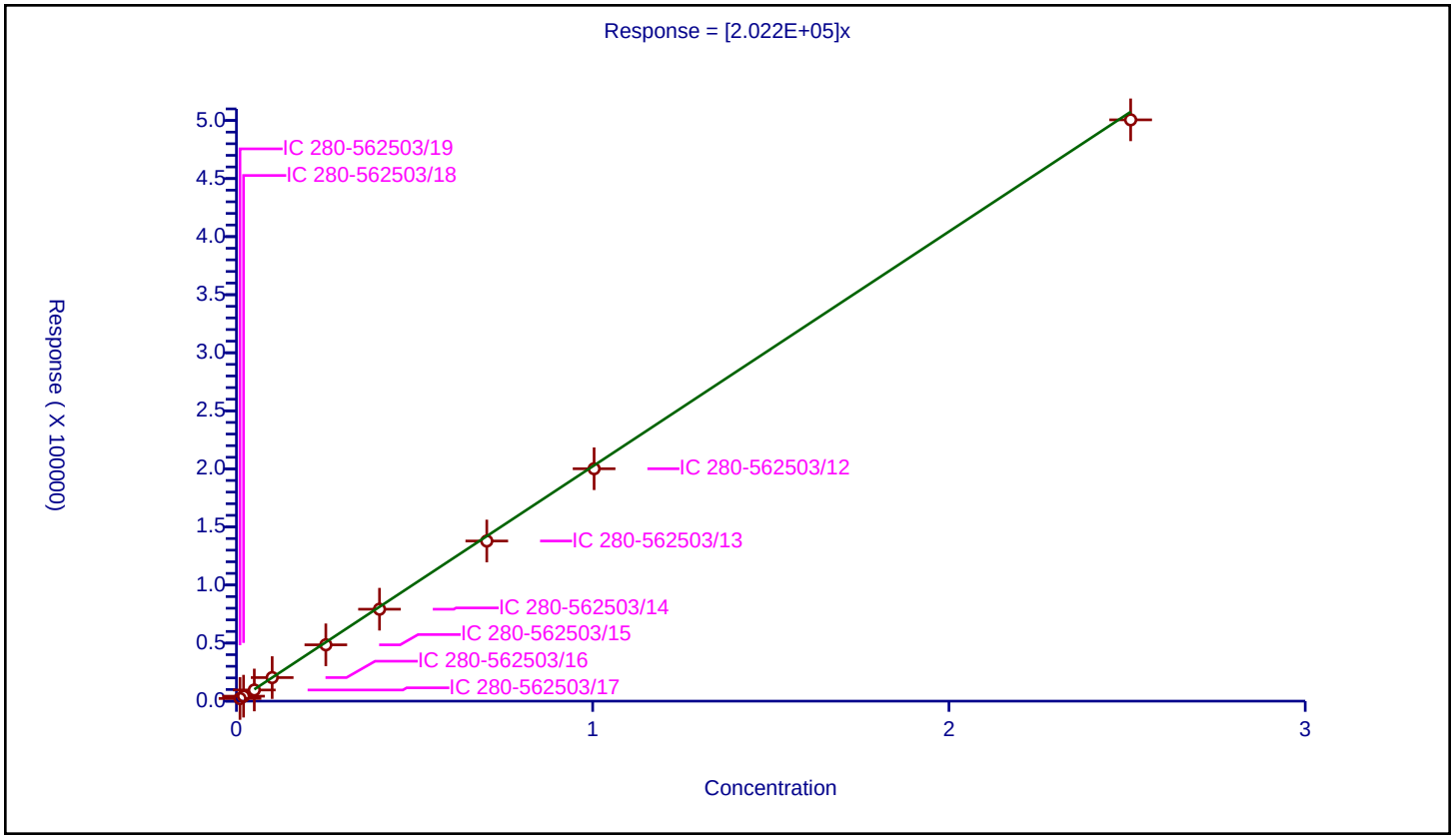
Curve Coefficients

Intercept:	0
Slope:	2.022E+05

Error Coefficients

Standard Error:	3210
Relative Standard Error:	5.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.01004	2287.0			227788.844622	Y
2	IC 280-562503/18	0.02008	4282.0			213247.011952	Y
3	IC 280-562503/17	0.0502	9600.0			191235.059761	Y
4	IC 280-562503/16	0.1004	20280.0			201992.031873	Y
5	IC 280-562503/15	0.251	48486.0			193171.314741	Y
6	IC 280-562503/14	0.4016	79169.0			197133.964143	Y
7	IC 280-562503/13	0.7028	137894.0			196206.602163	Y
8	IC 280-562503/12	1.004	200129.0			199331.673307	Y
9	IC 280-562503/11	2.51	500581.0			199434.661355	Y



Calibration / 2,6-Dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

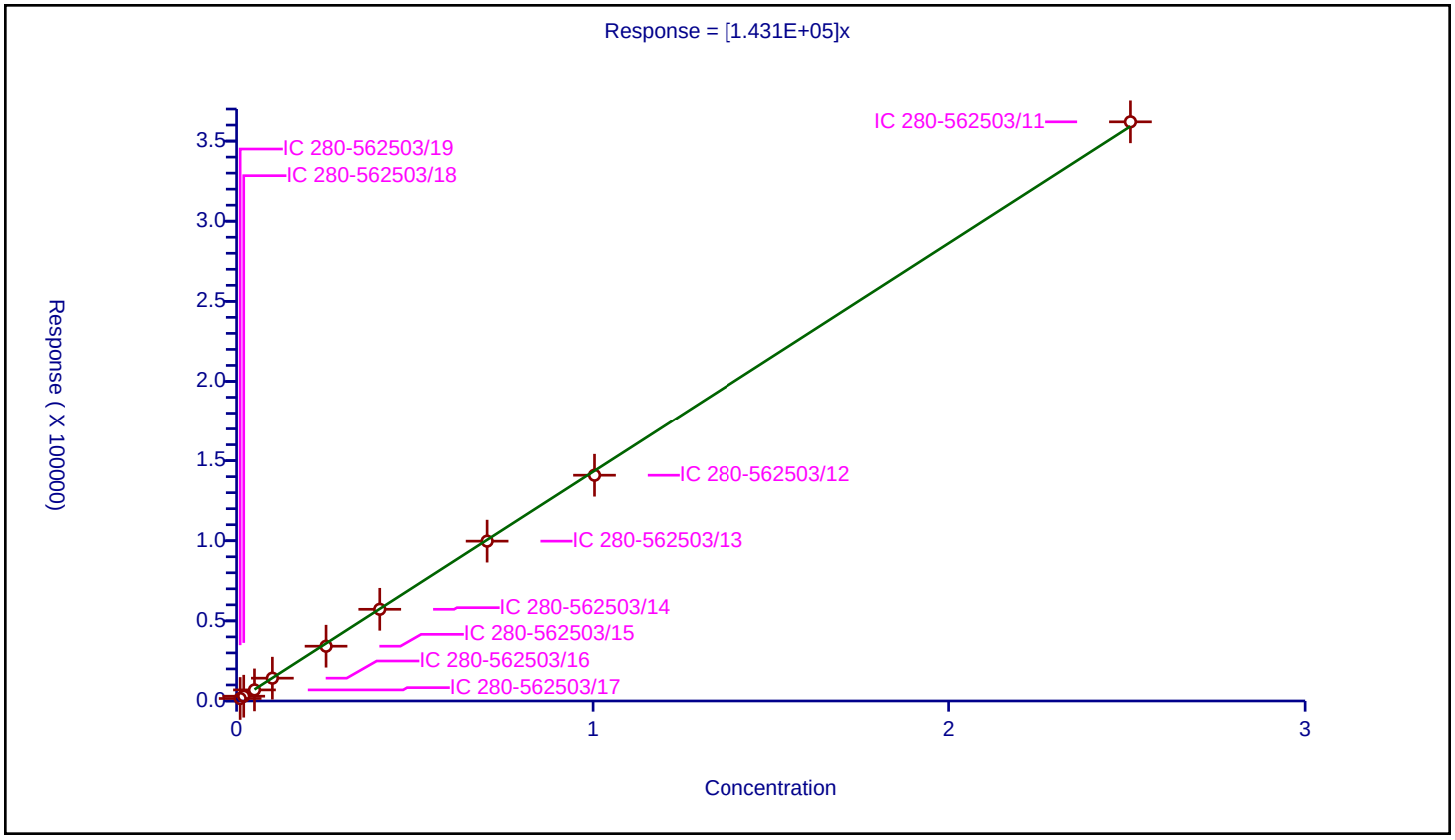
Curve Coefficients

Intercept:	0
Slope:	1.431E+05

Error Coefficients

Standard Error:	1560
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 280-562503/19	0.01004	1551.0			154482.071713	Y
2	IC 280-562503/18	0.02008	2993.0			149053.784861	Y
3	IC 280-562503/17	0.0502	6908.0			137609.561753	Y
4	IC 280-562503/16	0.1004	14234.0			141772.908367	Y
5	IC 280-562503/15	0.251	34177.0			136163.346614	Y
6	IC 280-562503/14	0.4016	57212.0			142460.159363	Y
7	IC 280-562503/13	0.7028	99747.0			141928.002277	Y
8	IC 280-562503/12	1.004	140901.0			140339.641434	Y
9	IC 280-562503/11	2.51	362011.0			144227.49004	Y



Calibration / 2,4-Dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

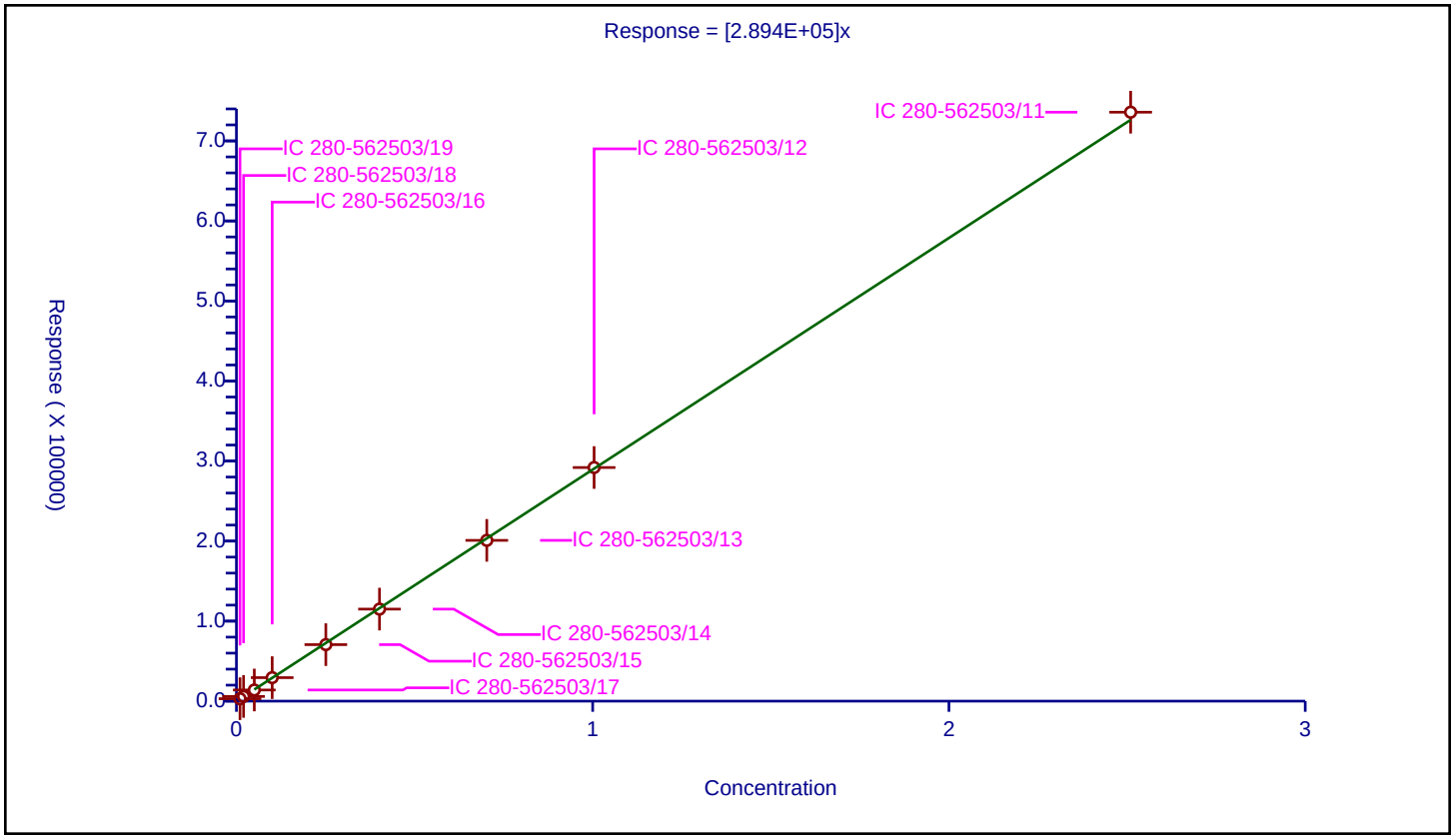
Curve Coefficients

Intercept:	0
Slope:	2.894E+05

Error Coefficients

Standard Error:	3650
Relative Standard Error:	2.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.01004	3047.0			303486.055777	Y
2	IC 280-562503/18	0.02008	5890.0			293326.693227	Y
3	IC 280-562503/17	0.0502	13933.0			277549.800797	Y
4	IC 280-562503/16	0.1004	29355.0			292380.478088	Y
5	IC 280-562503/15	0.251	70605.0			281294.820717	Y
6	IC 280-562503/14	0.4016	115000.0			286354.581673	Y
7	IC 280-562503/13	0.7028	200883.0			285832.384747	Y
8	IC 280-562503/12	1.004	291912.0			290749.003984	Y
9	IC 280-562503/11	2.51	735887.0			293182.071713	Y



Calibration / o-Nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

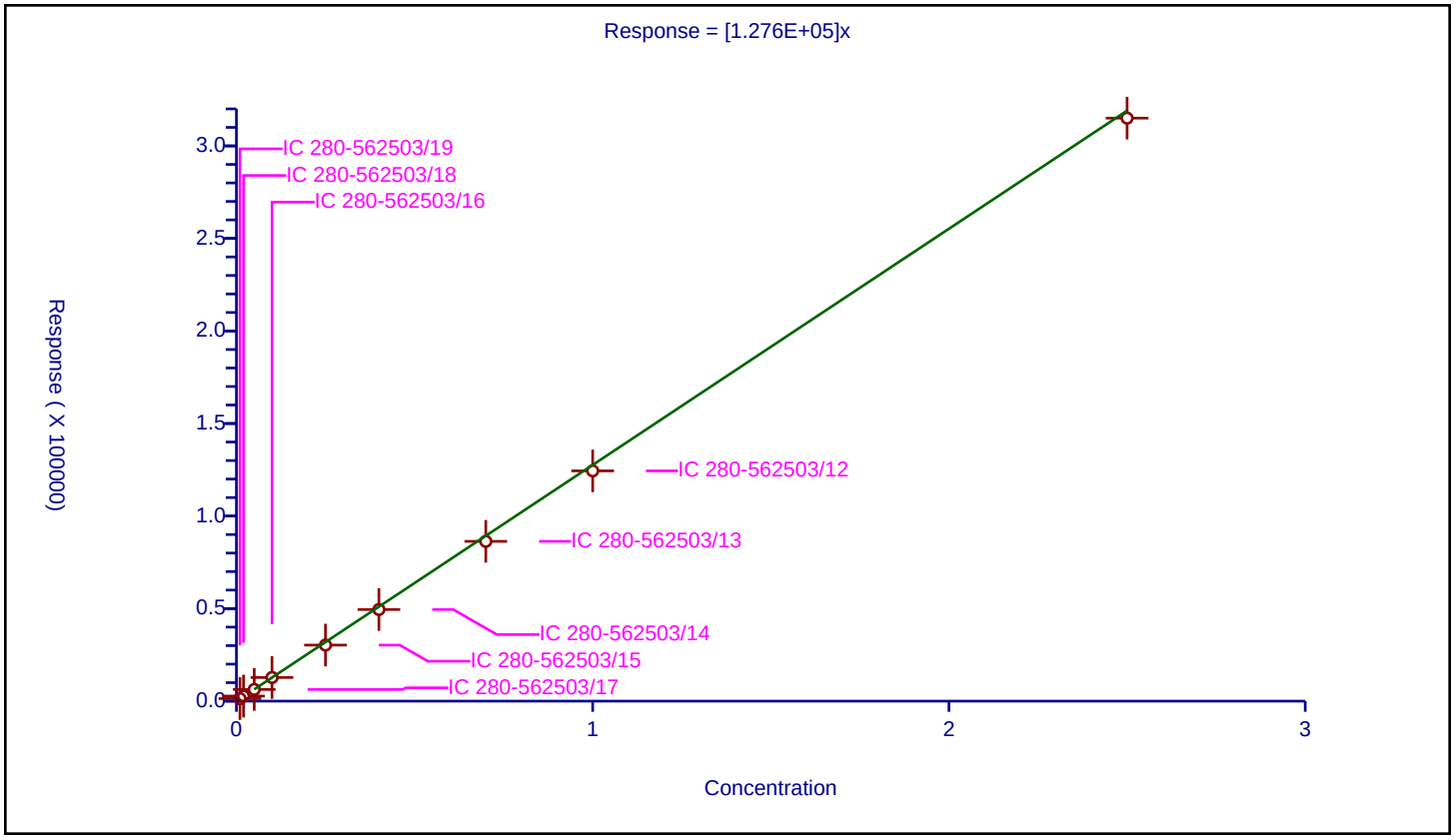
Curve Coefficients

Intercept:	0
Slope:	1.276E+05

Error Coefficients

Standard Error:	2250
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 280-562503/19	0.01	1387.0			138700.0	Y
2	IC 280-562503/18	0.02	2743.0			137150.0	Y
3	IC 280-562503/17	0.05	6314.0			126280.0	Y
4	IC 280-562503/16	0.1	12777.0			127770.0	Y
5	IC 280-562503/15	0.25	30280.0			121120.0	Y
6	IC 280-562503/14	0.4	49500.0			123750.0	Y
7	IC 280-562503/13	0.7	86333.0			123332.857143	Y
8	IC 280-562503/12	1.0	124418.0			124418.0	Y
9	IC 280-562503/11	2.5	315004.0			126001.6	Y



Calibration / p-Nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

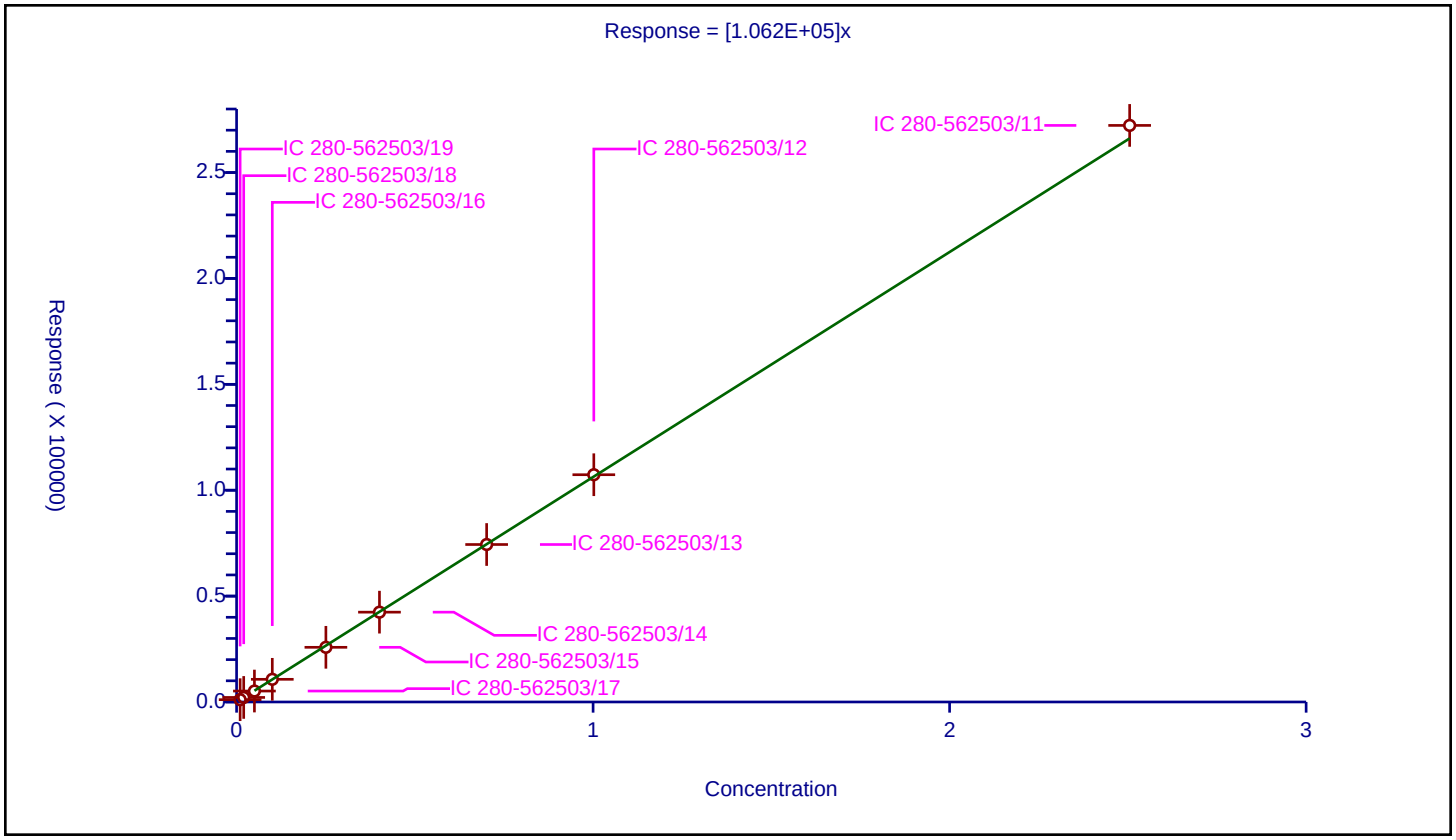
Curve Coefficients

Intercept:	0
Slope:	1.062E+05

Error Coefficients

Standard Error:	2210
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 280-562503/19	0.01002	1083.0			108083.832335	Y
2	IC 280-562503/18	0.02004	2151.0			107335.329341	Y
3	IC 280-562503/17	0.0501	5163.0			103053.892216	Y
4	IC 280-562503/16	0.1002	10715.0			106936.127745	Y
5	IC 280-562503/15	0.2505	25824.0			103089.820359	Y
6	IC 280-562503/14	0.4008	42415.0			105825.848303	Y
7	IC 280-562503/13	0.7014	74357.0			106012.261192	Y
8	IC 280-562503/12	1.002	107309.0			107094.810379	Y
9	IC 280-562503/11	2.505	272262.0			108687.42515	Y



Calibration / m-Nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

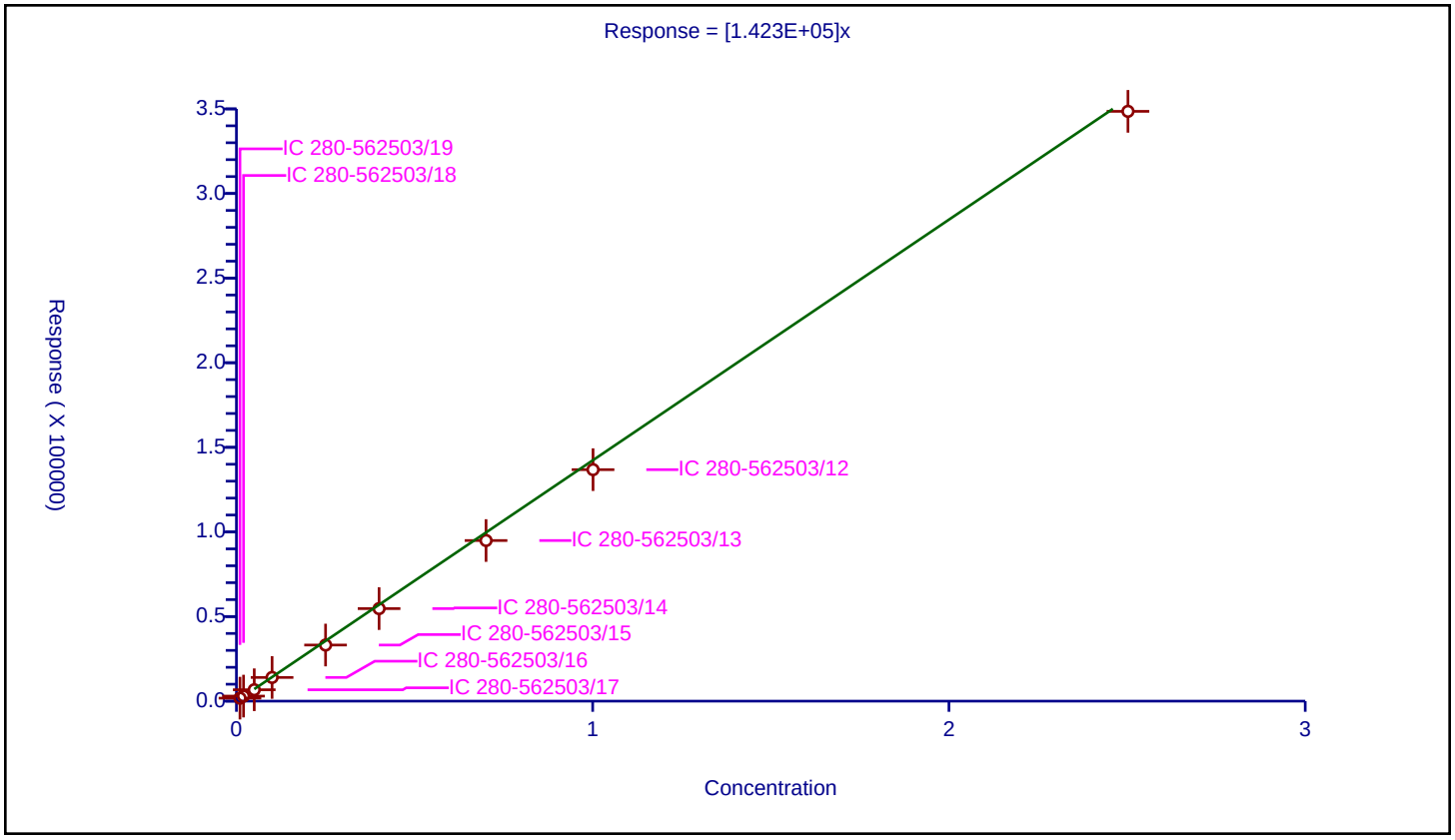
Curve Coefficients

Intercept:	0
Slope:	1.423E+05

Error Coefficients

Standard Error:	3900
Relative Standard Error:	9.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.01001	1764.0			176223.776224	Y
2	IC 280-562503/18	0.02002	2989.0			149300.699301	Y
3	IC 280-562503/17	0.05005	6733.0			134525.474525	Y
4	IC 280-562503/16	0.1001	14003.0			139890.10989	Y
5	IC 280-562503/15	0.25025	33160.0			132507.492507	Y
6	IC 280-562503/14	0.4004	54695.0			136600.899101	Y
7	IC 280-562503/13	0.7007	94920.0			135464.535465	Y
8	IC 280-562503/12	1.001	136801.0			136664.335664	Y
9	IC 280-562503/11	2.5025	348555.0			139282.717283	Y



Calibration / PETN

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

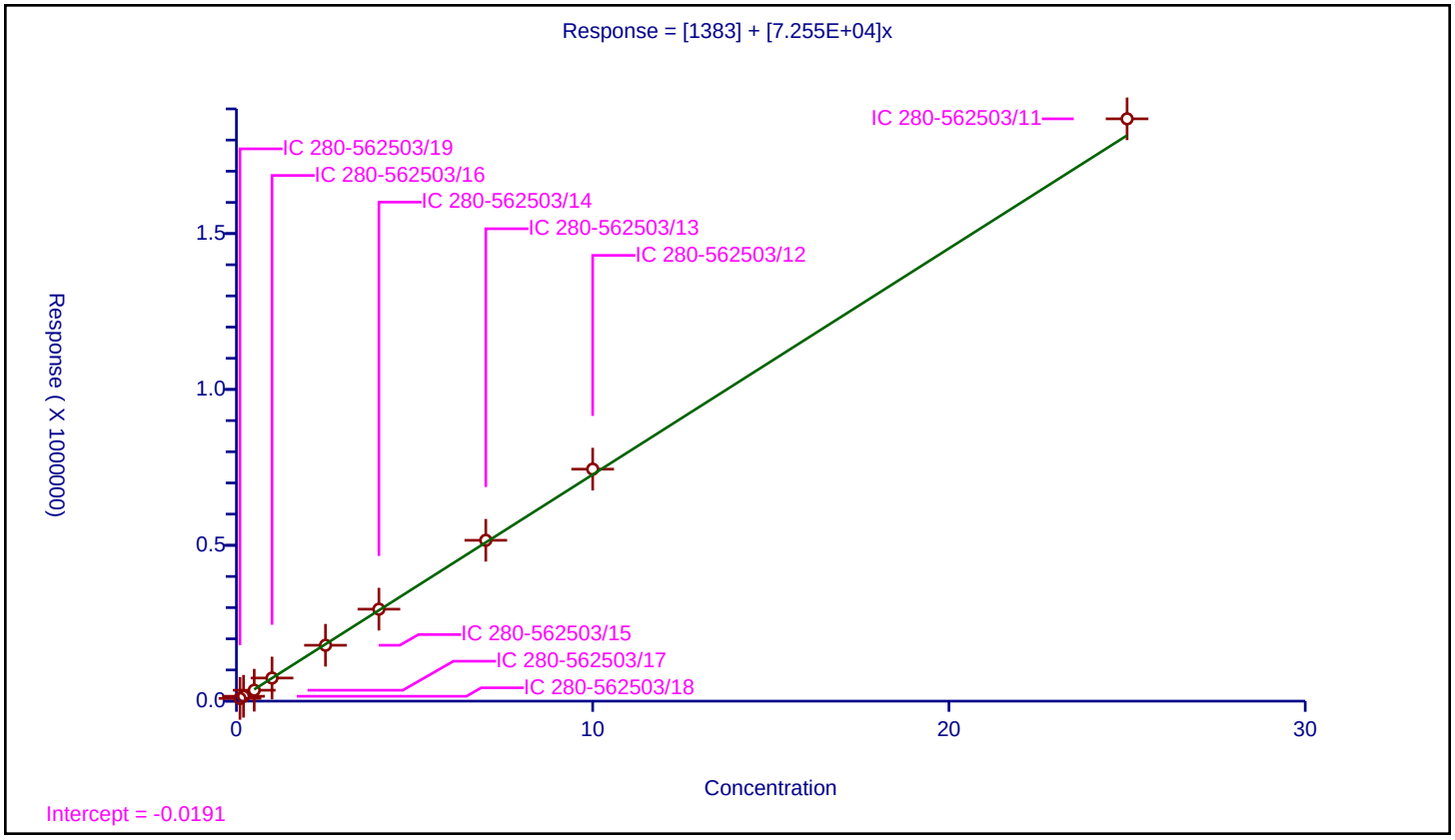
Curve Coefficients

Intercept:	1383
Slope:	7.255E+04

Error Coefficients

Standard Error:	21400
Relative Standard Error:	3.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.1	8784.0			87840.0	Y
2	IC 280-562503/18	0.2	15705.0			78525.0	Y
3	IC 280-562503/17	0.5	35084.0			70168.0	Y
4	IC 280-562503/16	1.0	74208.0			74208.0	Y
5	IC 280-562503/15	2.5	179275.0			71710.0	Y
6	IC 280-562503/14	4.0	295082.0			73770.5	Y
7	IC 280-562503/13	7.0	516042.0			73720.285714	Y
8	IC 280-562503/12	10.0	744274.0			74427.4	Y
9	IC 280-562503/11	25.0	1868141.0			74725.64	Y



FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1 Analy Batch No.: 562503

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/05/2022 01:43 Calibration End Date: 01/05/2022 04:24 Calibration ID: 61347

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-562503/37	01040037.D
Level 2	IC 280-562503/36	01040036.D
Level 3	IC 280-562503/35	01040035.D
Level 4	IC 280-562503/34	01040034.D
Level 5	IC 280-562503/33	01040033.D
Level 6	IC 280-562503/32	01040032.D
Level 7	IC 280-562503/31	01040031.D
Level 8	IC 280-562503/30	01040030.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
TNX	6.479	6.478	6.483	6.484	6.483	6.477	6.478	6.472			6.384 - 6.584	6.479
DNX	6.799	6.798	6.796	6.797	6.803	6.797	6.798	6.792			6.697 - 6.897	6.798
MNX	7.219	7.224	7.223	7.224	7.223	7.217	7.218	7.218			7.074 - 7.374	7.221

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-162622-1 Analy Batch No.: 562503

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/05/2022 01:43 Calibration End Date: 01/05/2022 04:24 Calibration ID: 61347

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-562503/37	01040037.D
Level 2	IC 280-562503/36	01040036.D
Level 3	IC 280-562503/35	01040035.D
Level 4	IC 280-562503/34	01040034.D
Level 5	IC 280-562503/33	01040033.D
Level 6	IC 280-562503/32	01040032.D
Level 7	IC 280-562503/31	01040031.D
Level 8	IC 280-562503/30	01040030.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	179820 181618	180440 185306	179710 183906	170821 188038	Ave		181207.471				2.8		20.0			
DNX	140709 139048	139620 138881	139141 137206	129534 140763	Ave		138112.950				2.6		20.0			
MNX	130334 127284	125073 127309	123719 126586	118458 129201	Ave		125995.416				2.9		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver Job No.: 280-162622-1 Analy Batch No.: 562503

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/05/2022 01:43 Calibration End Date: 01/05/2022 04:24 Calibration ID: 61347

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-562503/37	01040037.D
Level 2	IC 280-562503/36	01040036.D
Level 3	IC 280-562503/35	01040035.D
Level 4	IC 280-562503/34	01040034.D
Level 5	IC 280-562503/33	01040033.D
Level 6	IC 280-562503/32	01040032.D
Level 7	IC 280-562503/31	01040031.D
Level 8	IC 280-562503/30	01040030.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	3600 129844	9031 184090	17989 470565	42748	72720	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
DNX	Ave	2817 97314	6988 137343	13928 352260	32416	55675	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
MNX	Ave	3042 103999	7298 147726	14438 376943	34560	59416	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\20220104-107731.b\01040030.D				
Lims ID:	IC DMT 8				
Client ID:					
Sample Type:	IC	Calib Level:	8		
Inject. Date:	05-Jan-2022 01:43:42	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 8				
Misc. Info.:	280-0107731-030				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Jan-2022 12:10:05	Calib Date:	05-Jan-2022 04:24:15		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1613				
First Level Reviewer: zhangji		Date:	05-Jan-2022 12:07:13		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.472	6.484	-0.012	470565	2.50	2.60	M
6 DNX	1	6.792	6.797	-0.005	352260	2.50	2.55	M
7 MNX	1	7.218	7.224	-0.006	376943	2.92	2.99	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00010 Amount Added: 125.00 Units: uL

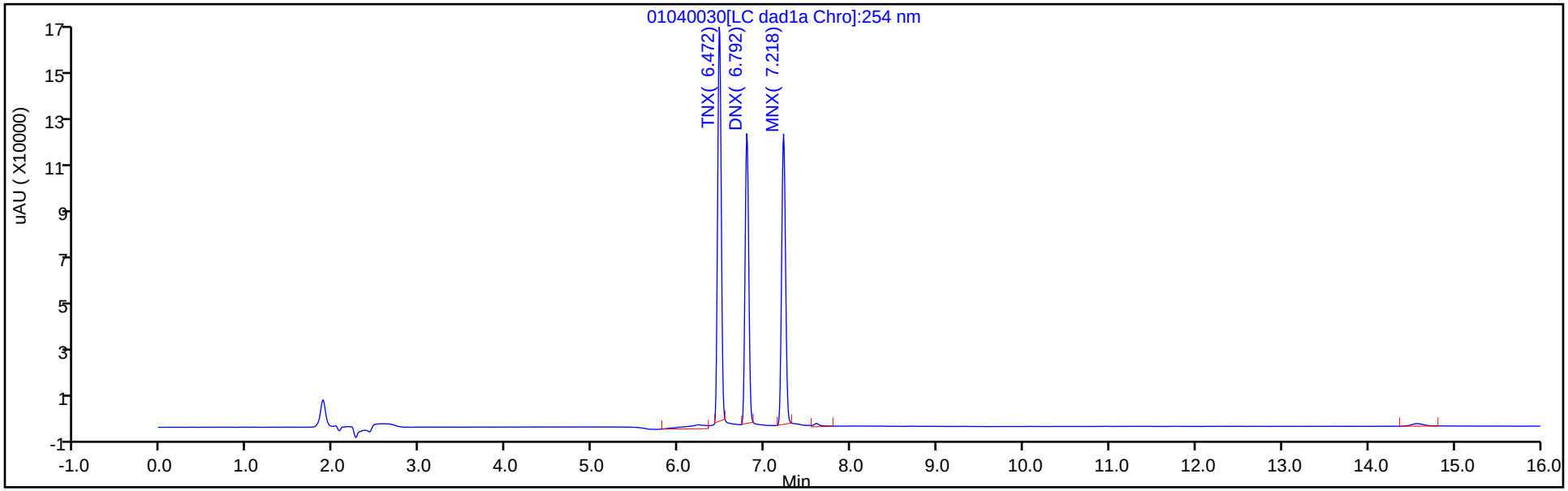
Report Date: 05-Jan-2022 12:10:05 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

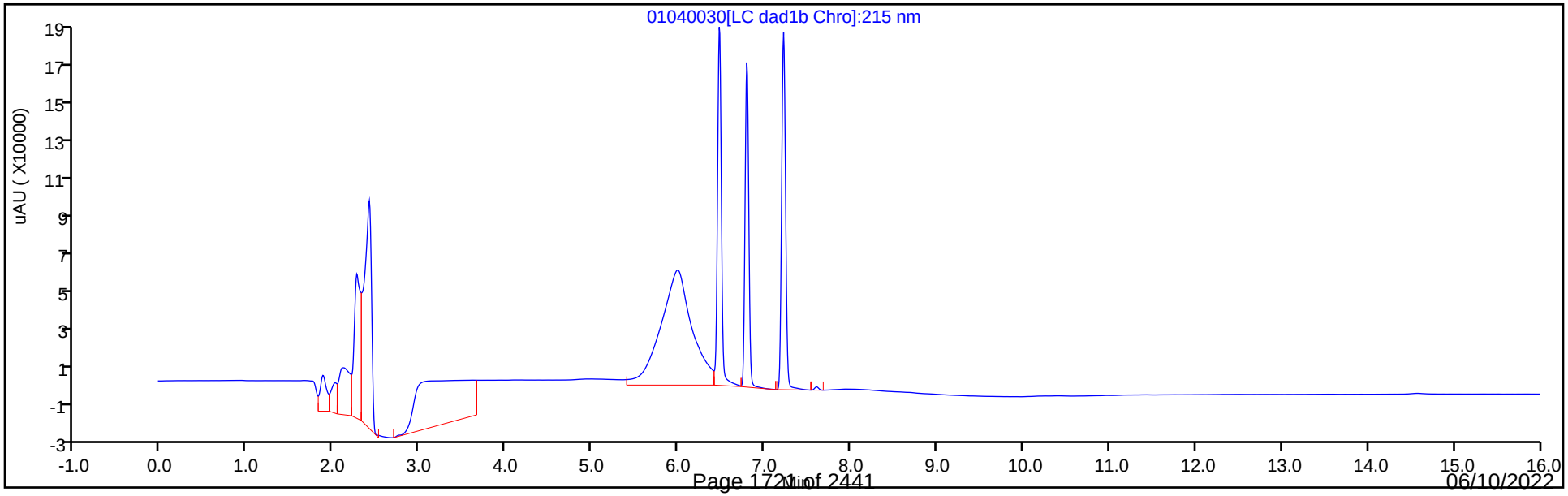
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040030.d

Injection Date:	05-Jan-2022 01:43:42	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	IC DMT 8			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

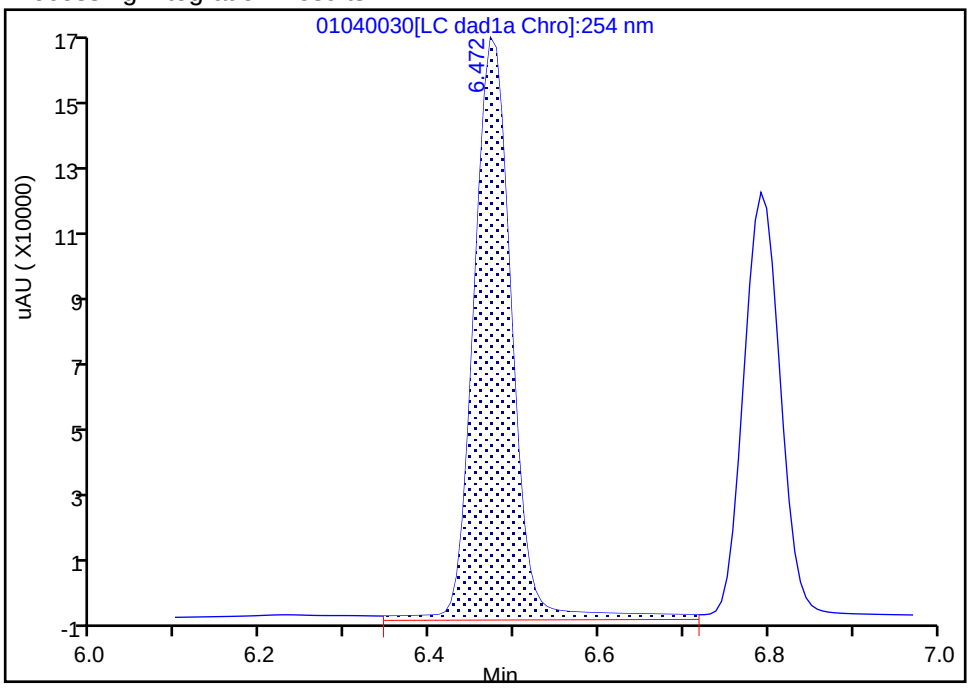
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040030.d				
Injection Date:	05-Jan-2022 01:43:42	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 8				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

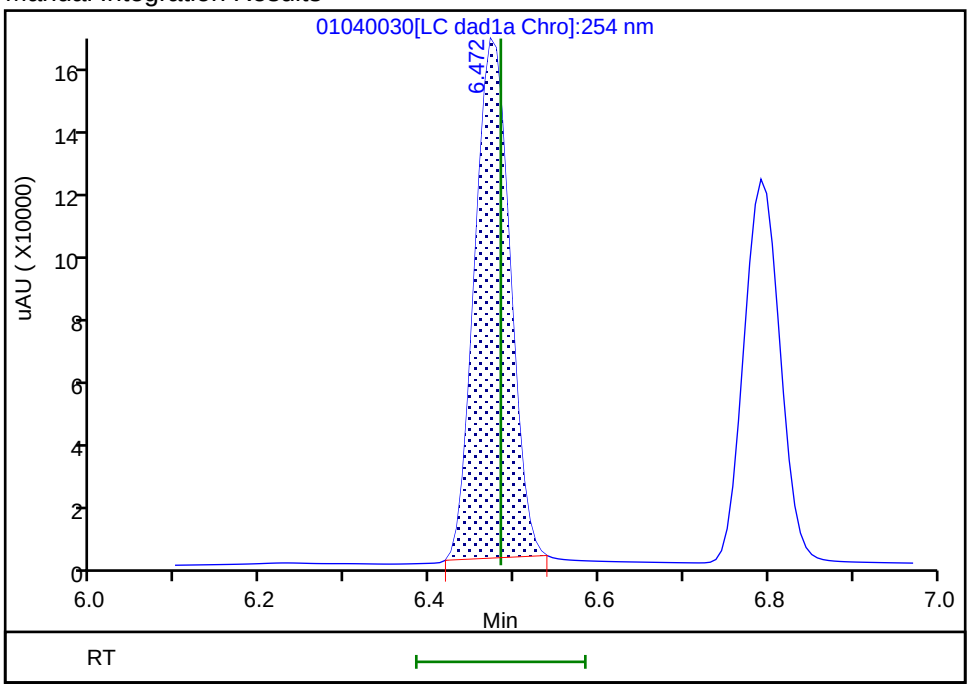
Processing Integration Results

RT: 6.47
Area: 518954
Amount: 2.391054
Amount Units: ug/mL



Manual Integration Results

RT: 6.47
Area: 470565
Amount: 2.596830
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:05:51
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

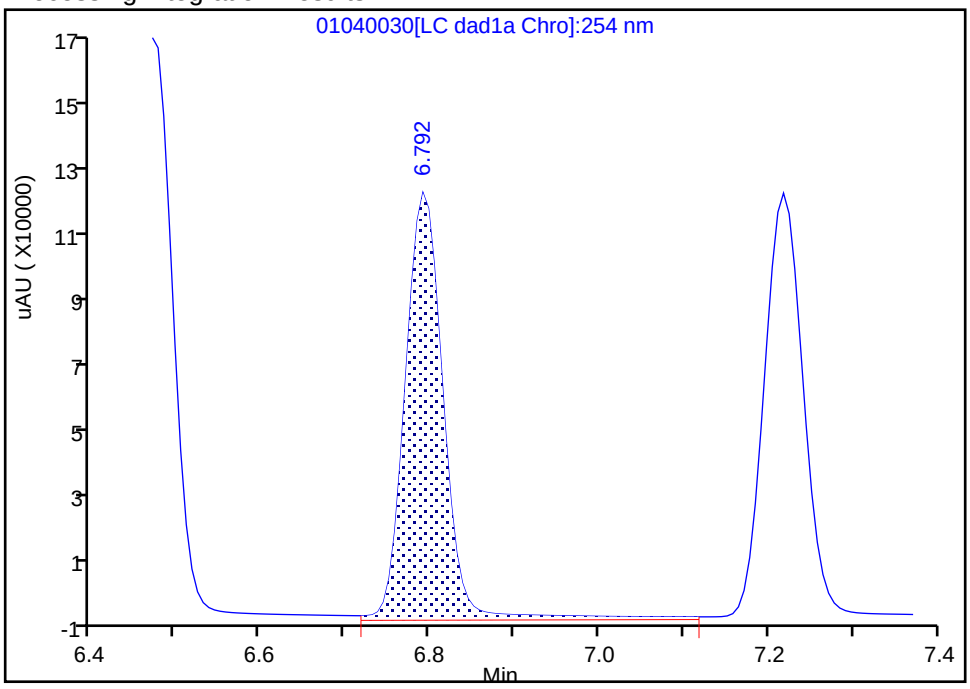
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040030.d				
Injection Date:	05-Jan-2022 01:43:42	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 8				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

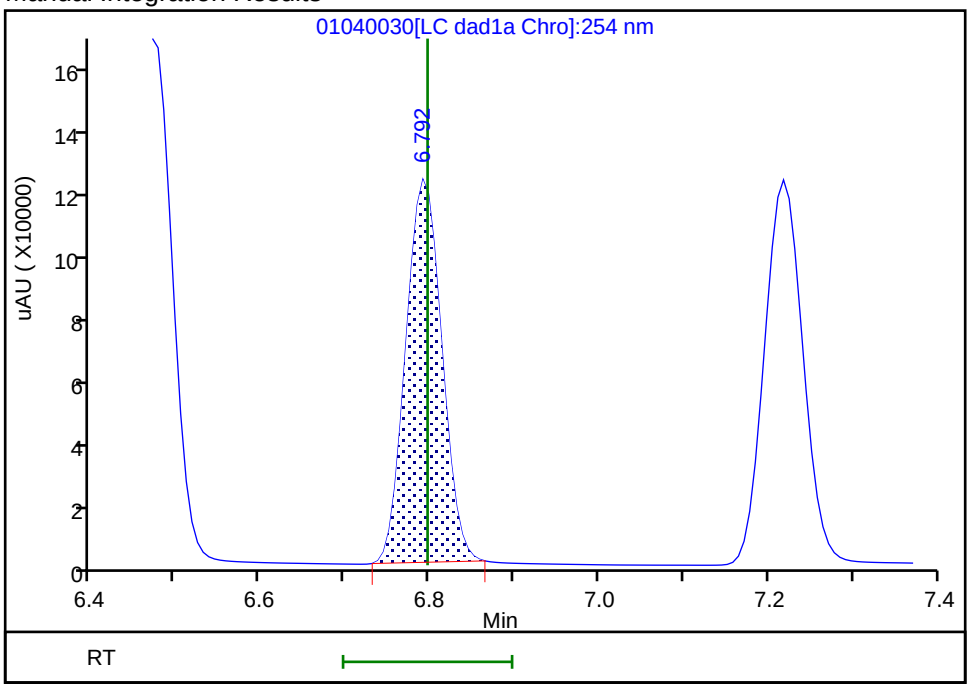
Processing Integration Results

RT: 6.79
Area: 385621
Amount: 2.575003
Amount Units: ug/mL



Manual Integration Results

RT: 6.79
Area: 352260
Amount: 2.550521
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:07:08
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

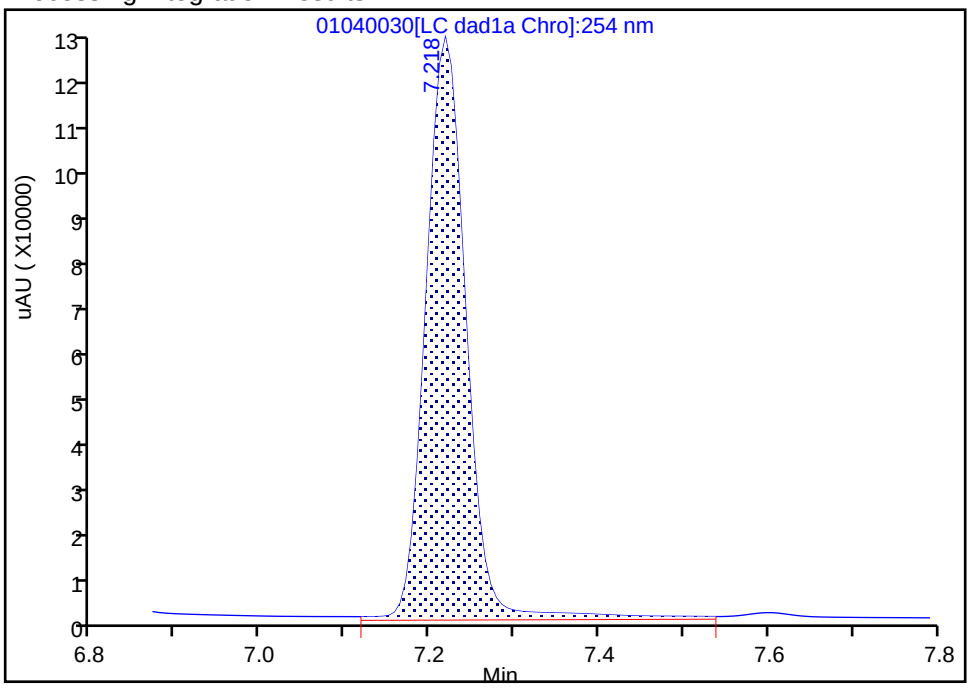
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040030.d				
Injection Date:	05-Jan-2022 01:43:42	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 8				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

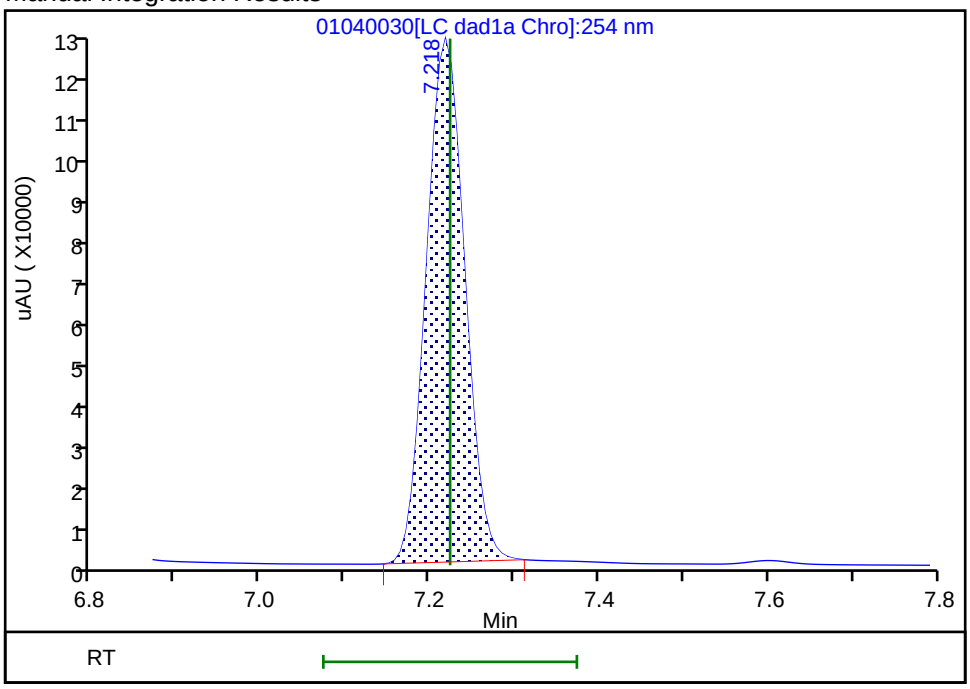
Processing Integration Results

RT: 7.22
Area: 403714
Amount: 3.070267
Amount Units: ug/mL



Manual Integration Results

RT: 7.22
Area: 376943
Amount: 2.991720
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:07:12
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040031.D
Lims ID: IC DMT 7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 05-Jan-2022 02:06:41 ALS Bottle#: 31 Worklist Smp#: 31
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT 7
Misc. Info.: 280-0107731-031
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Jan-2022 12:10:06 Calib Date: 05-Jan-2022 04:24:15
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1613

First Level Reviewer: zhangji Date: 05-Jan-2022 12:07:30

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.478	6.484	-0.006	184090	1.00	1.02	M
6 DNX	1	6.798	6.797	0.001	137343	1.00	0.99	M
7 MNX	1	7.218	7.224	-0.006	147726	1.17	1.17	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00010 Amount Added: 50.00 Units: uL

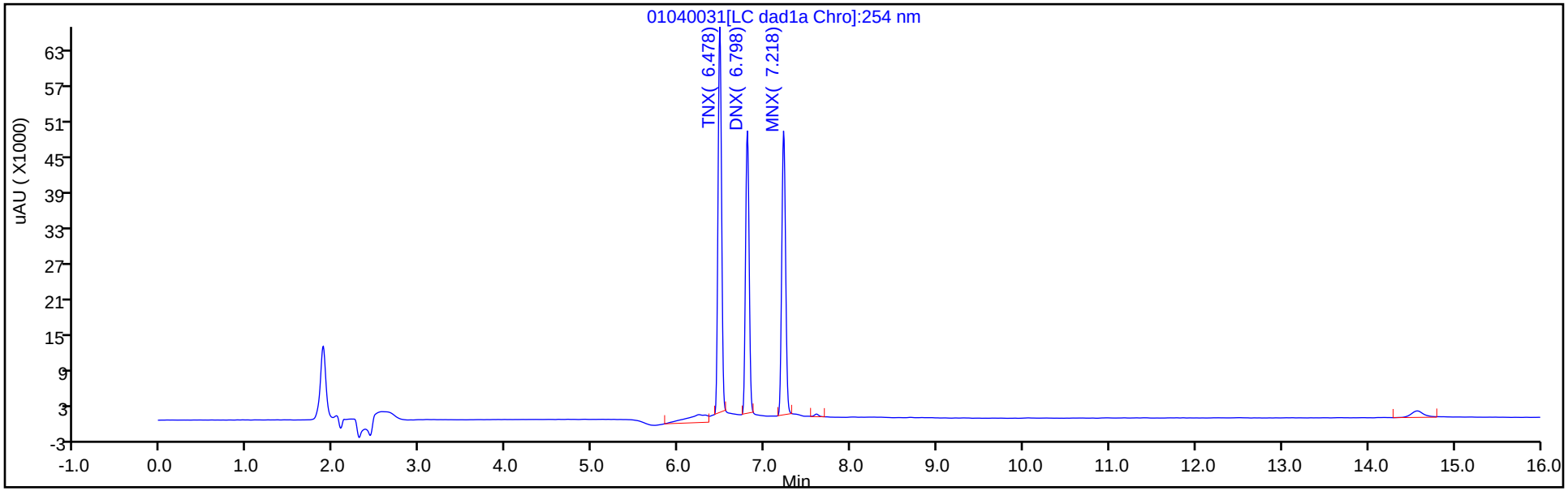
Report Date: 05-Jan-2022 12:10:06 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

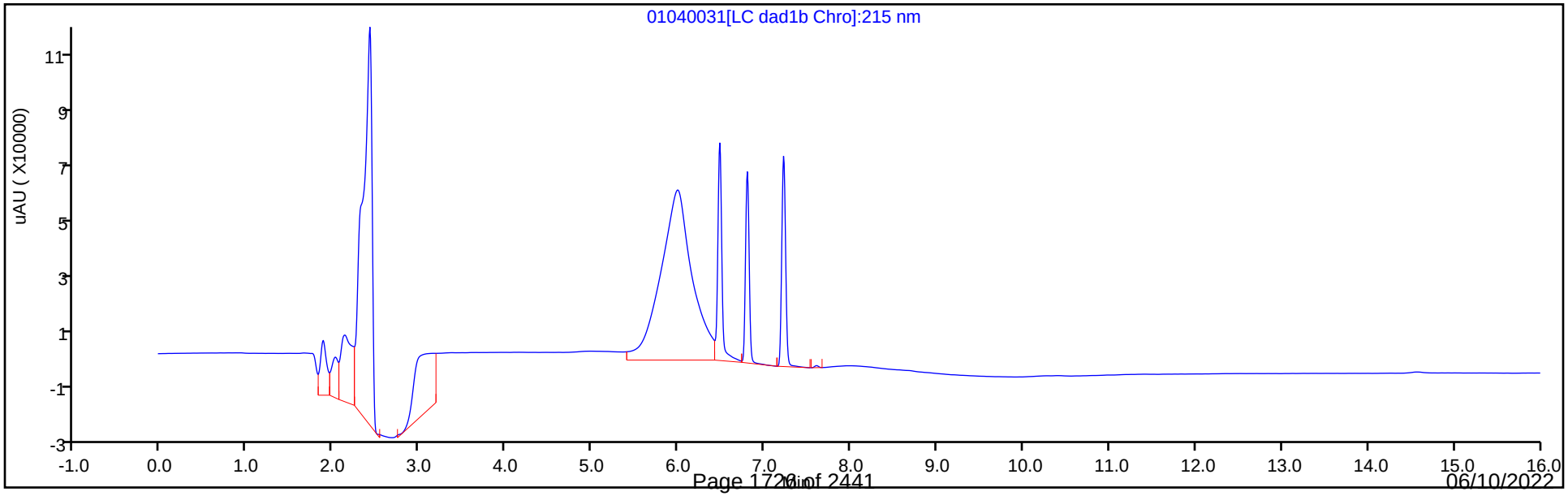
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040031.d

Injection Date:	05-Jan-2022 02:06:41	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	IC DMT 7			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

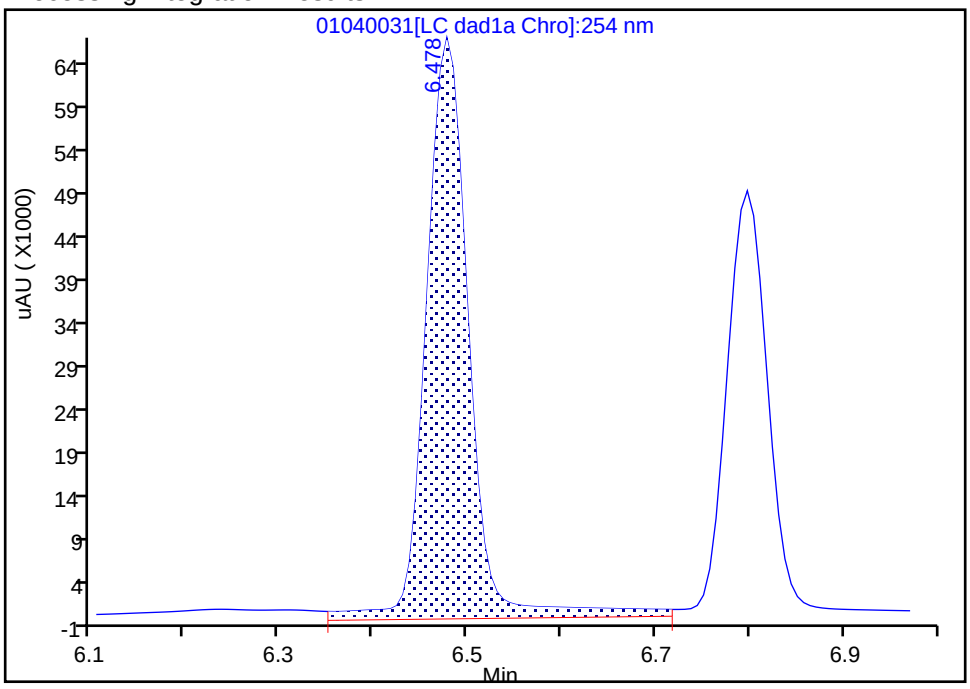
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040031.d				
Injection Date:	05-Jan-2022 02:06:41	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 7				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

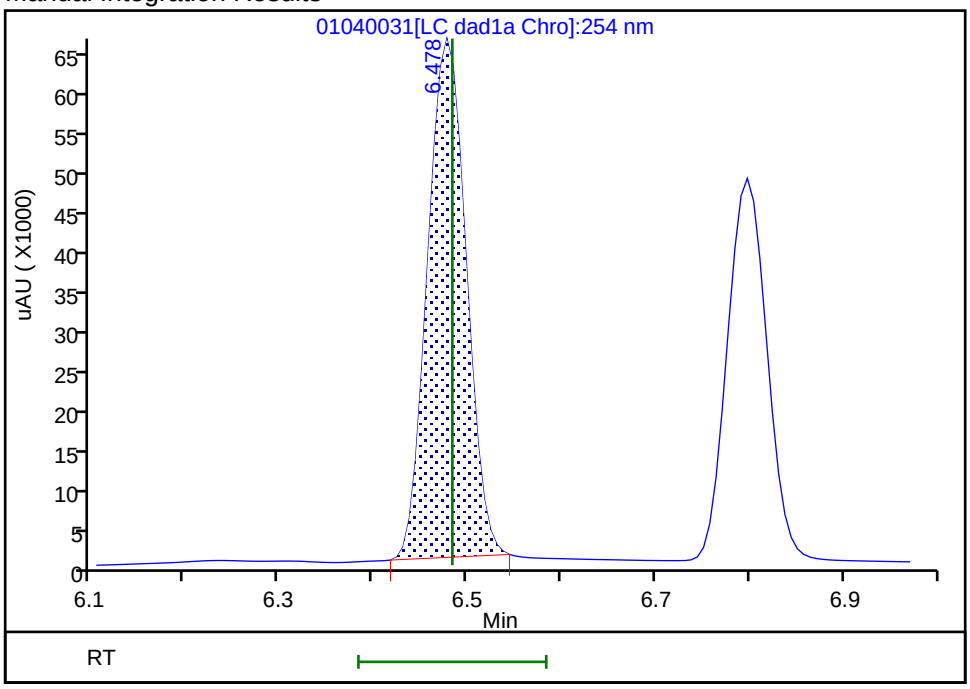
Processing Integration Results

RT: 6.48
Area: 210952
Amount: 0.982896
Amount Units: ug/mL



Manual Integration Results

RT: 6.48
Area: 184090
Amount: 1.015907
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:07:22

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

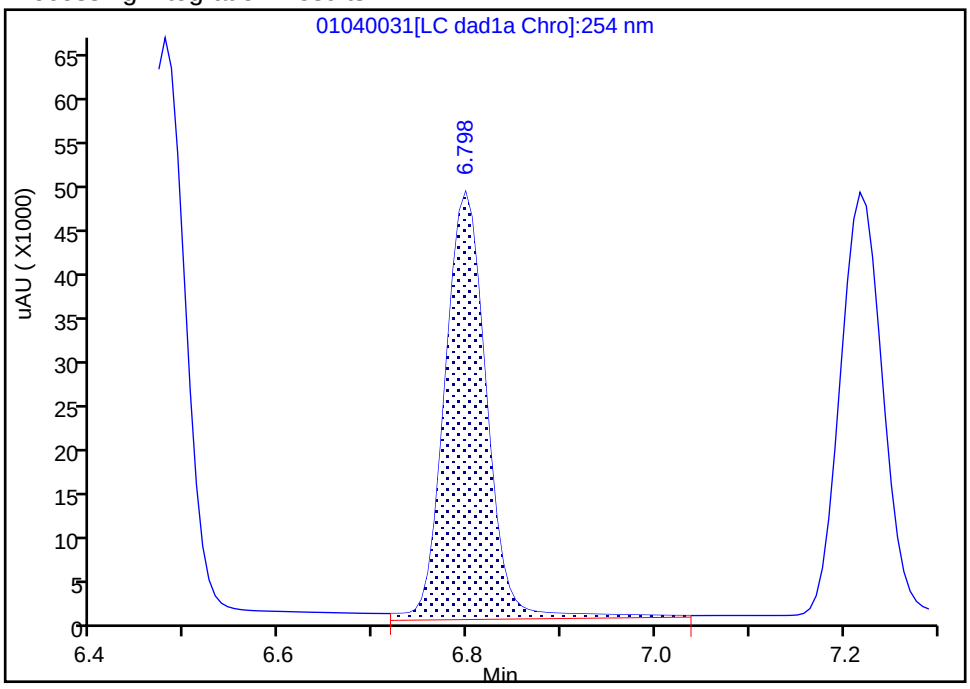
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040031.d				
Injection Date:	05-Jan-2022 02:06:41	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 7				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

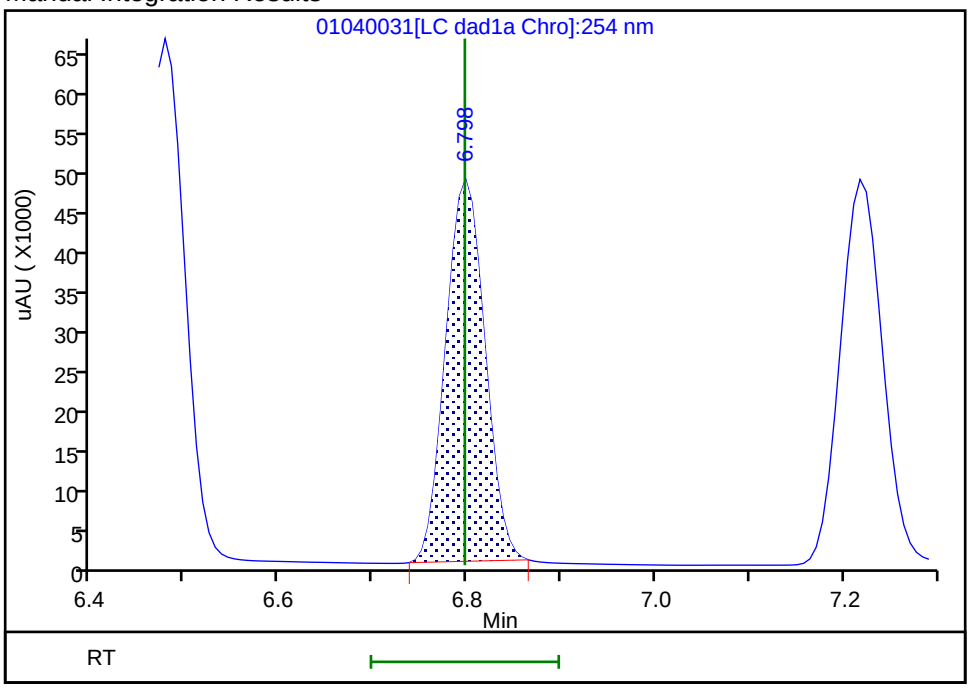
Processing Integration Results

RT: 6.80
Area: 149885
Amount: 1.012127
Amount Units: ug/mL



Manual Integration Results

RT: 6.80
Area: 137343
Amount: 0.994425
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:07:25

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

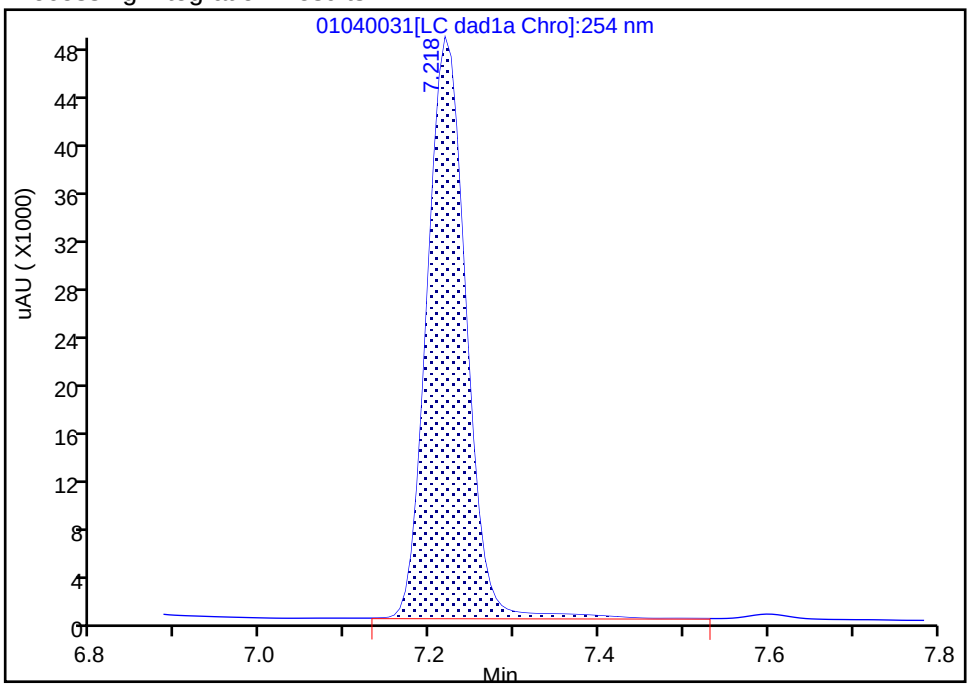
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040031.d				
Injection Date:	05-Jan-2022 02:06:41	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 7				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

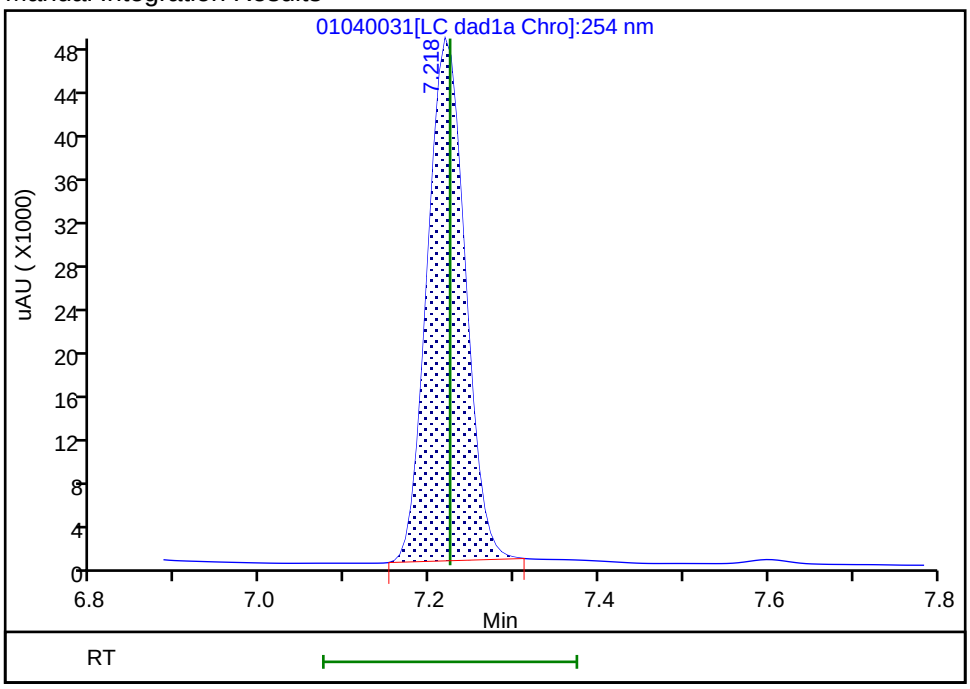
Processing Integration Results

RT: 7.22
Area: 153452
Amount: 1.177280
Amount Units: ug/mL



Manual Integration Results

RT: 7.22
Area: 147726
Amount: 1.172471
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:07:29

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040032.D
Lims ID: IC DMT 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 05-Jan-2022 02:29:42 ALS Bottle#: 32 Worklist Smp#: 32
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT 6
Misc. Info.: 280-0107731-032
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Jan-2022 12:10:06 Calib Date: 05-Jan-2022 04:24:15
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1613

First Level Reviewer: zhangji Date: 05-Jan-2022 12:07:46

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.477	6.484	-0.007	129844	0.7007	0.7165	M
6 DNX	1	6.797	6.797	0.000	97314	0.7007	0.7046	M
7 MNX	1	7.217	7.224	-0.007	103999	0.8169	0.8254	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00010 Amount Added: 35.00 Units: uL

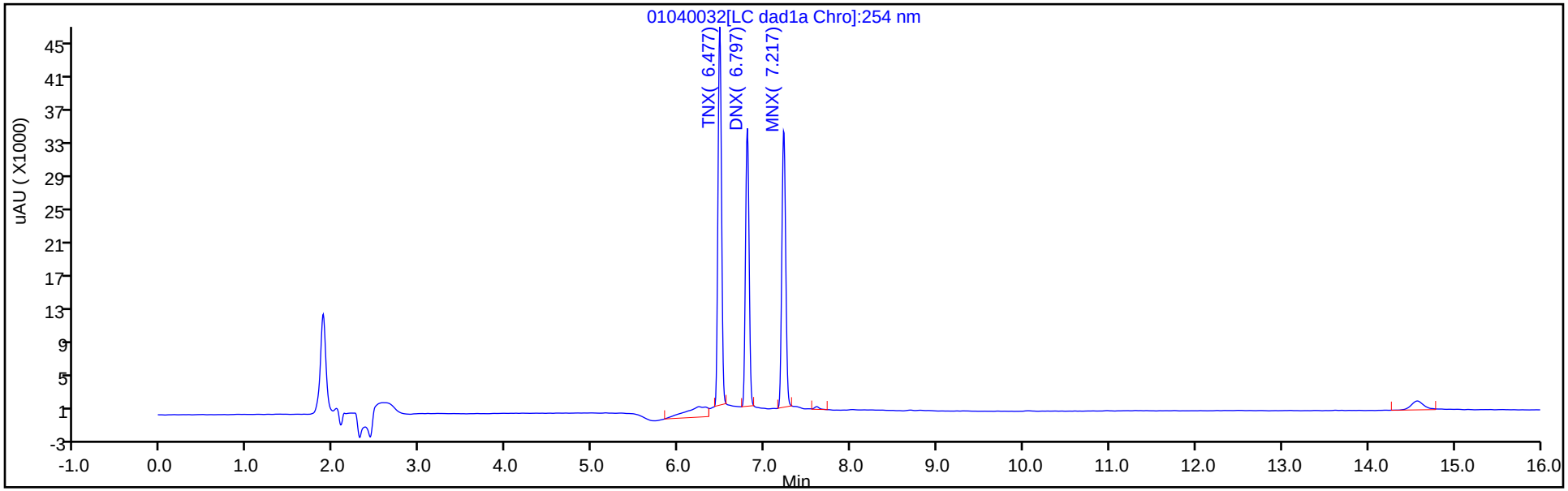
Report Date: 05-Jan-2022 12:10:06 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

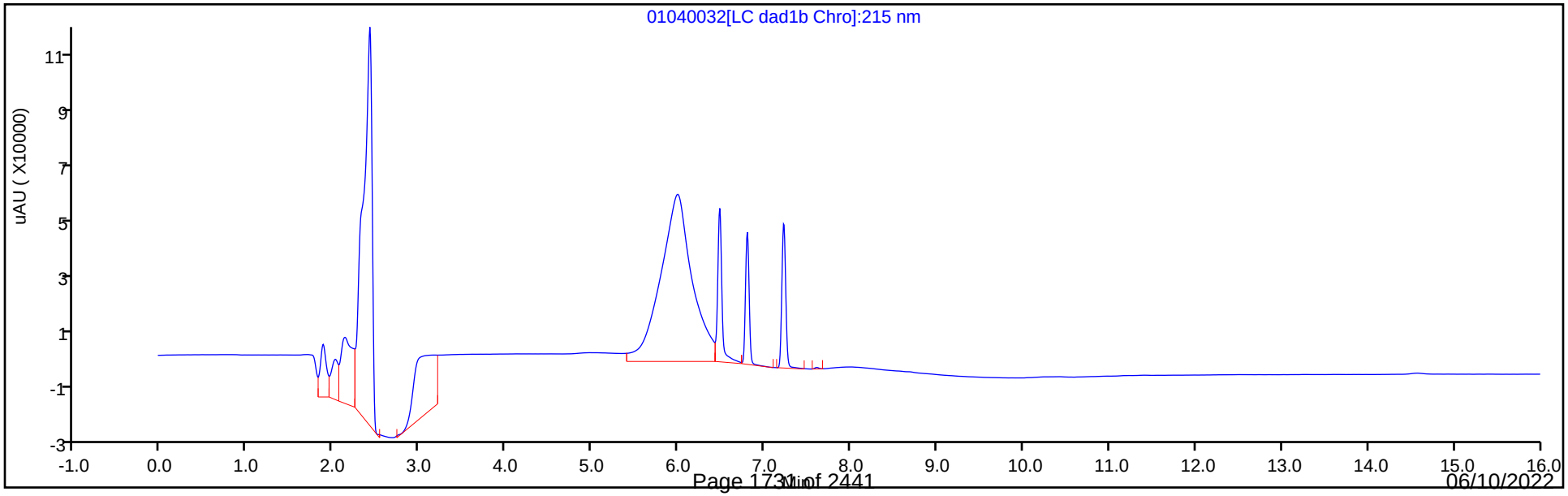
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040032.d

Injection Date:	05-Jan-2022 02:29:42	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	IC DMT 6			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

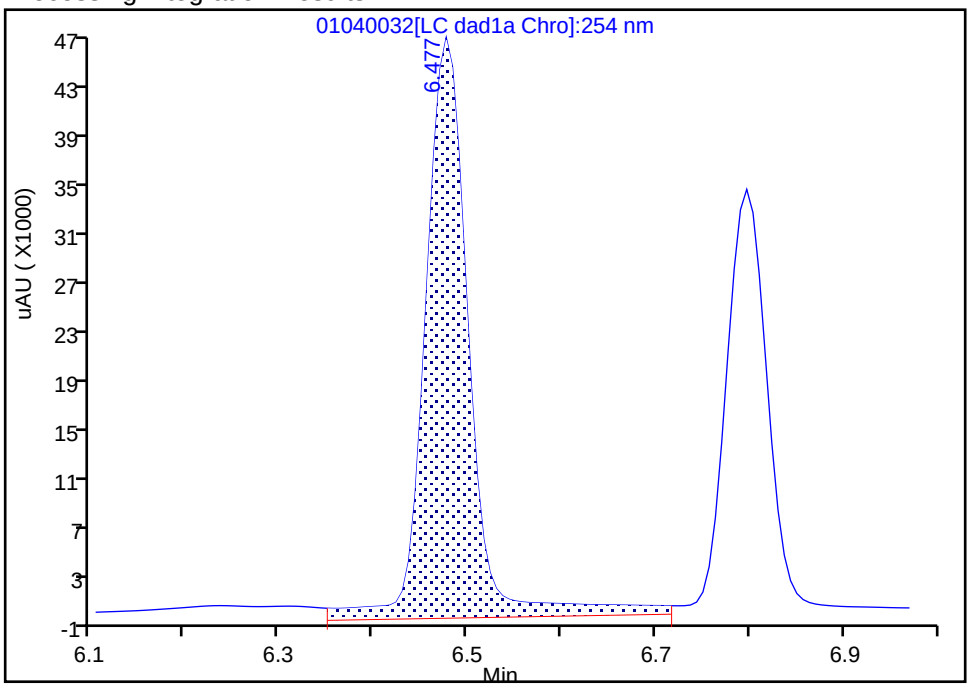
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040032.d				
Injection Date:	05-Jan-2022 02:29:42	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 6				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

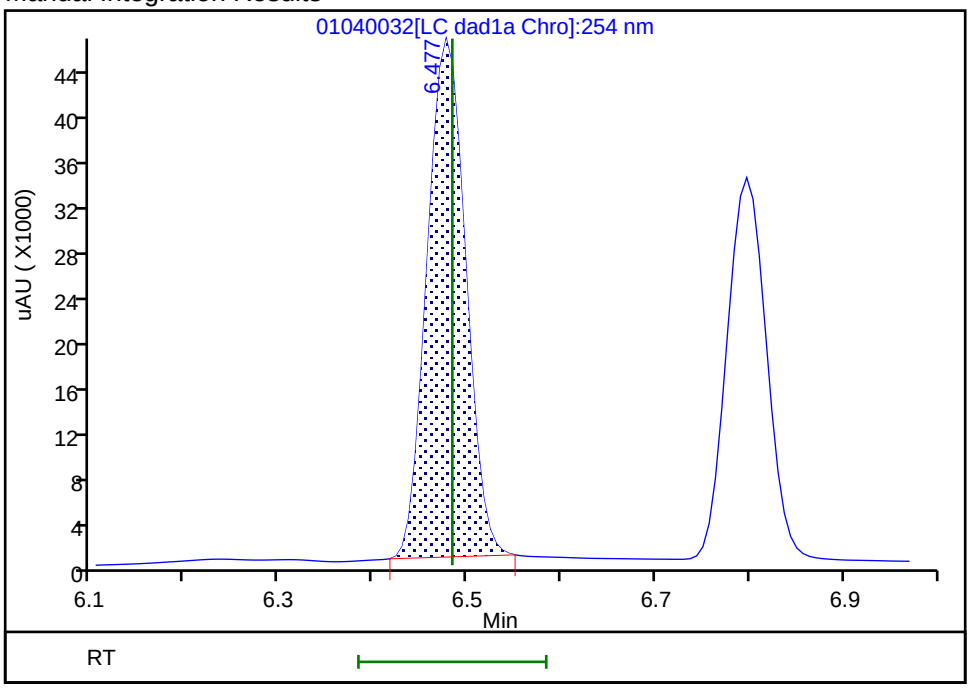
Processing Integration Results

RT: 6.48
Area: 152631
Amount: 0.722450
Amount Units: ug/mL



Manual Integration Results

RT: 6.48
Area: 129844
Amount: 0.716549
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:07:40

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

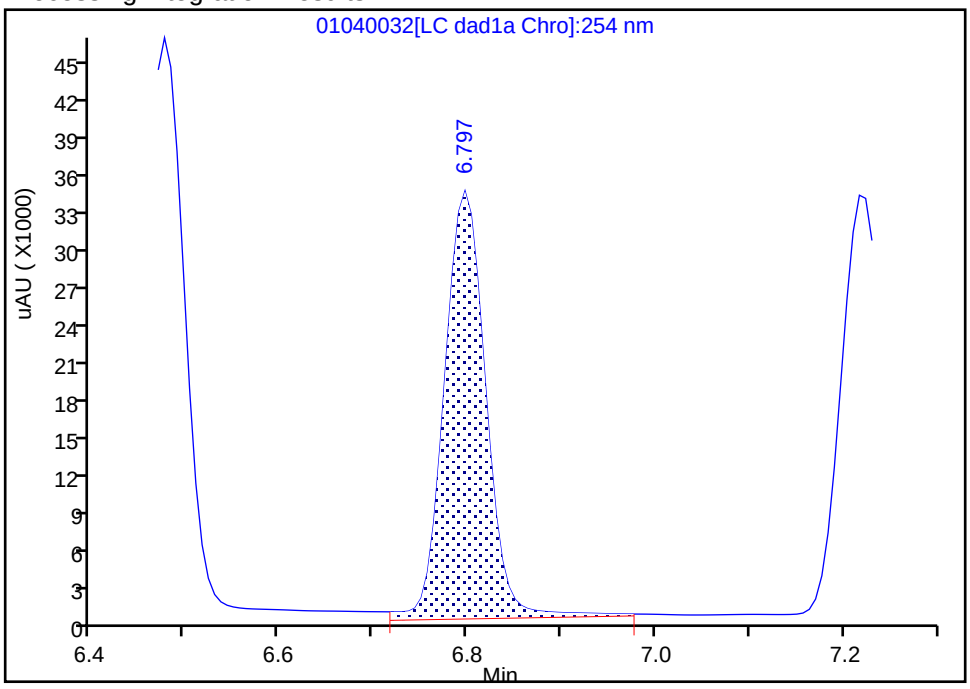
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040032.d				
Injection Date:	05-Jan-2022 02:29:42	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 6				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

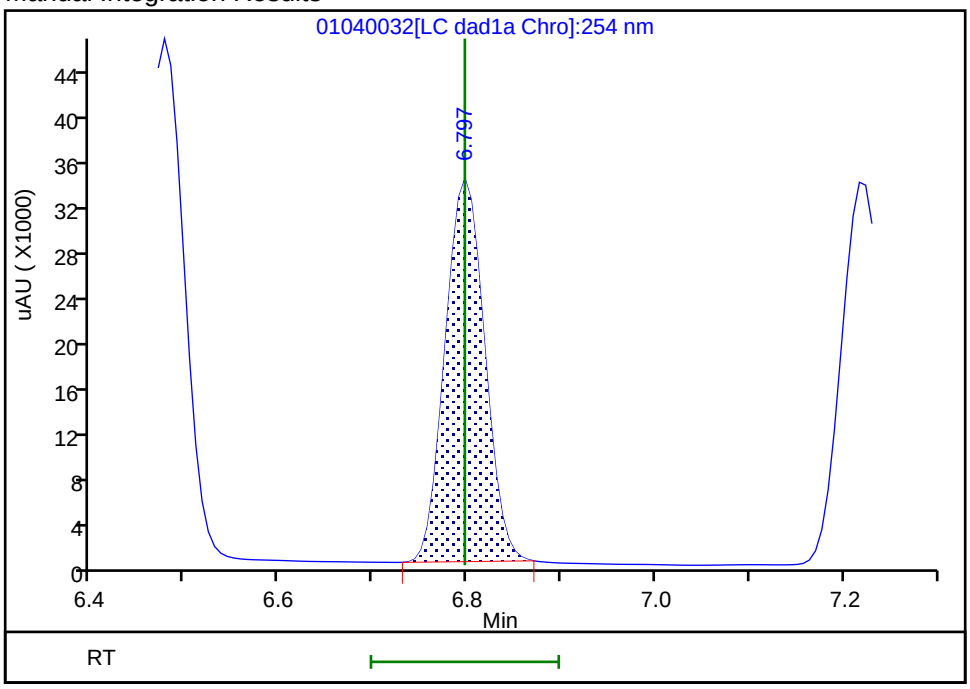
Processing Integration Results

RT: 6.80
Area: 105159
Amount: 0.717696
Amount Units: ug/mL



Manual Integration Results

RT: 6.80
Area: 97314
Amount: 0.704597
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:07:43

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

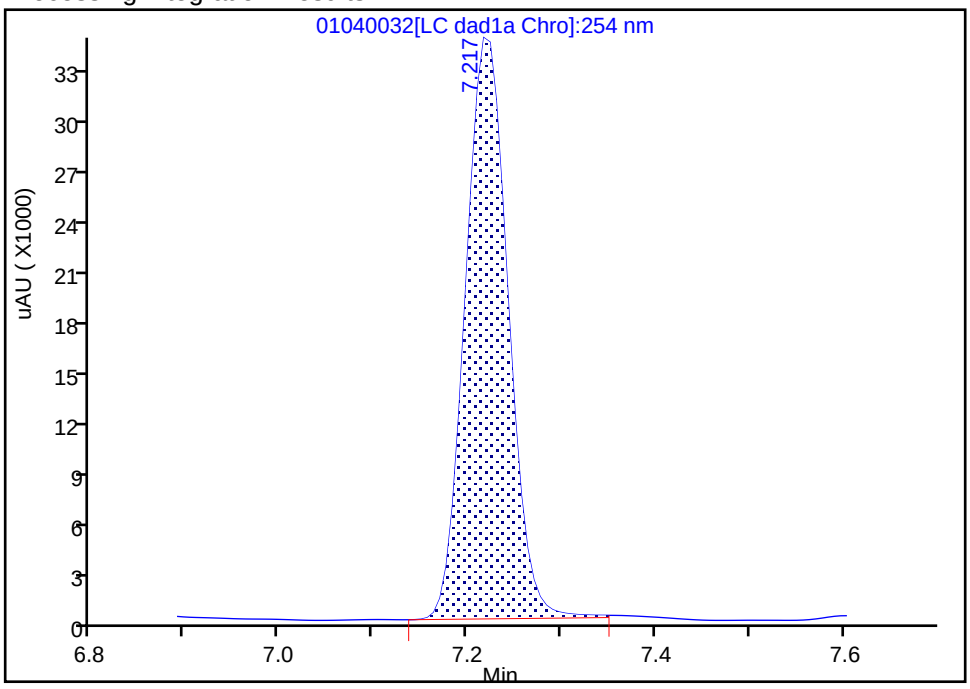
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040032.d				
Injection Date:	05-Jan-2022 02:29:42	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 6				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

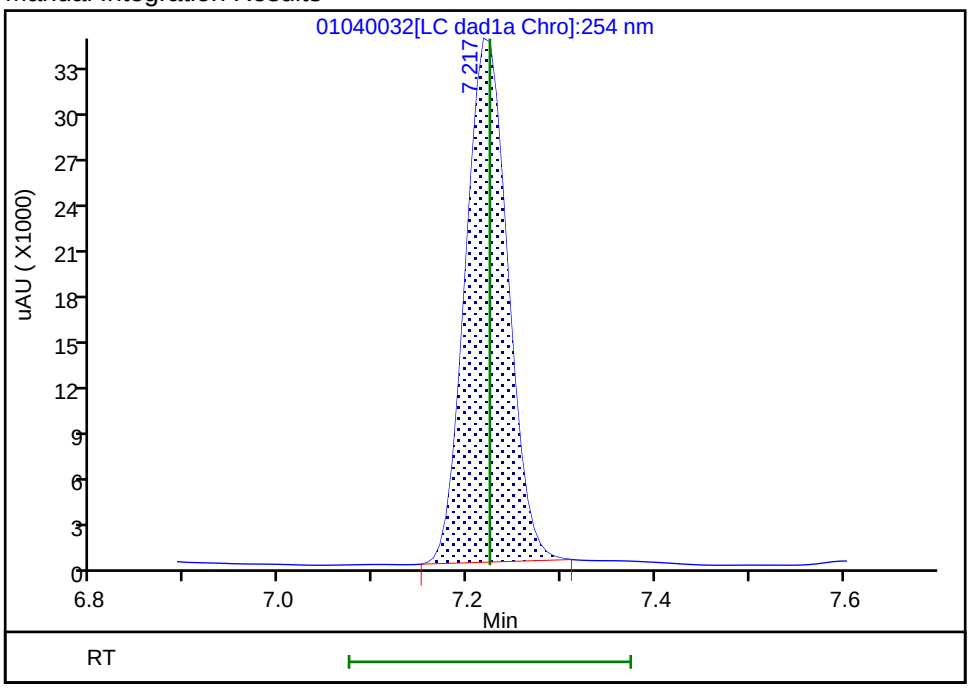
Processing Integration Results

RT: 7.22
Area: 105581
Amount: 0.816470
Amount Units: ug/mL



Manual Integration Results

RT: 7.22
Area: 103999
Amount: 0.825419
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:08:26

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040033.D
Lims ID: IC DMT 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 05-Jan-2022 02:52:35 ALS Bottle#: 33 Worklist Smp#: 33
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT 5
Misc. Info.: 280-0107731-033
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Jan-2022 12:10:07 Calib Date: 05-Jan-2022 04:24:15
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1613

First Level Reviewer: zhangji Date: 05-Jan-2022 12:08:18

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.483	6.484	-0.001	72720	0.4004	0.4013	M
6 DNX	1	6.803	6.797	0.006	55675	0.4004	0.4031	M
7 MNX	1	7.223	7.224	-0.001	59416	0.4668	0.4716	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00010 Amount Added: 20.00 Units: uL

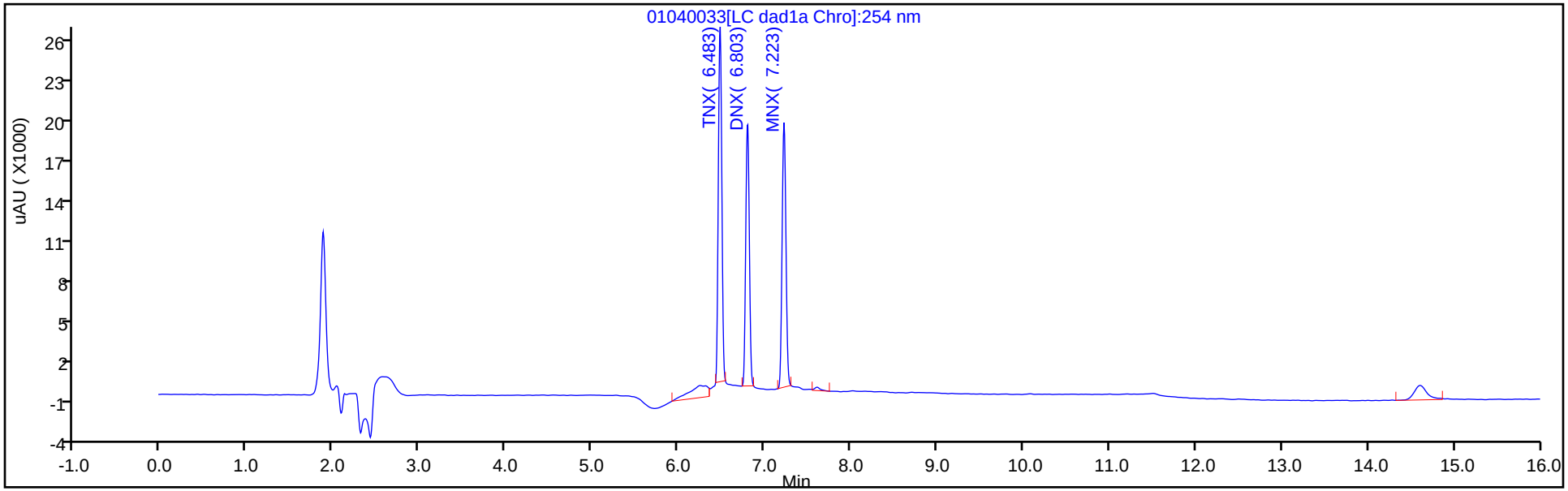
Report Date: 05-Jan-2022 12:10:07 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

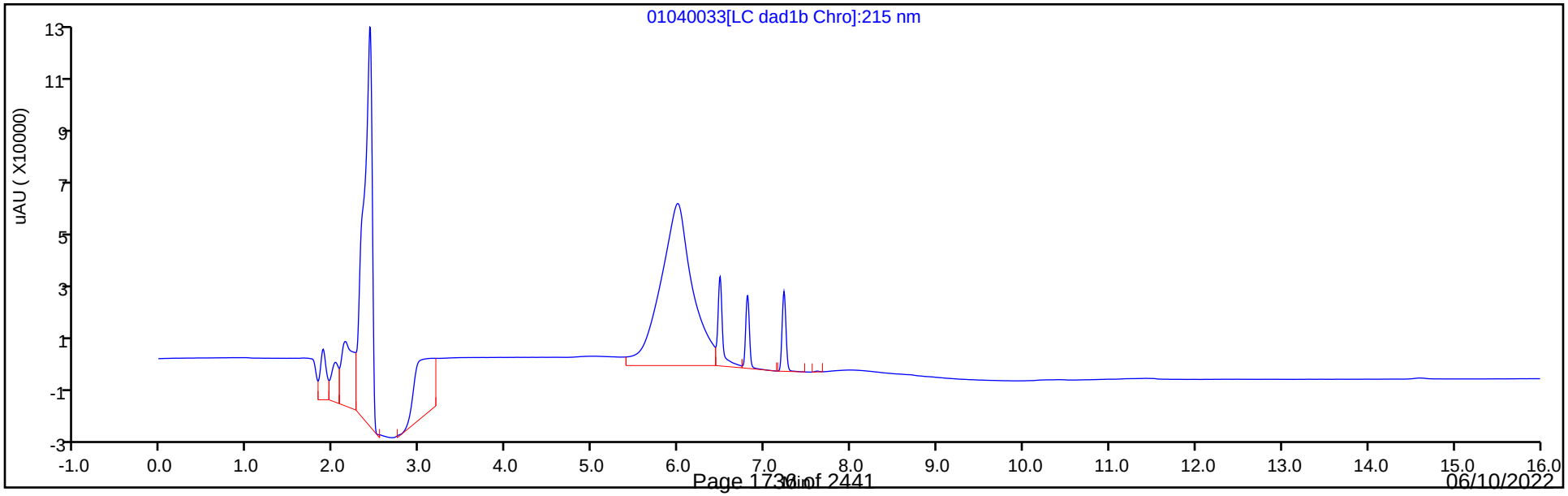
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040033.d

Injection Date:	05-Jan-2022 02:52:35	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	IC DMT 5			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

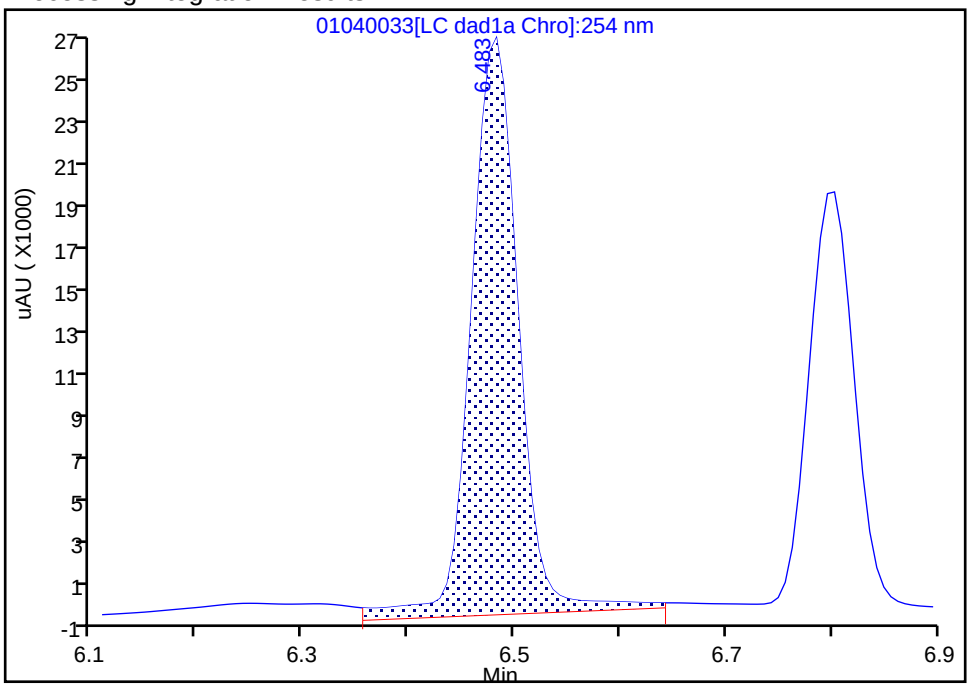
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040033.d				
Injection Date:	05-Jan-2022 02:52:35	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 5				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

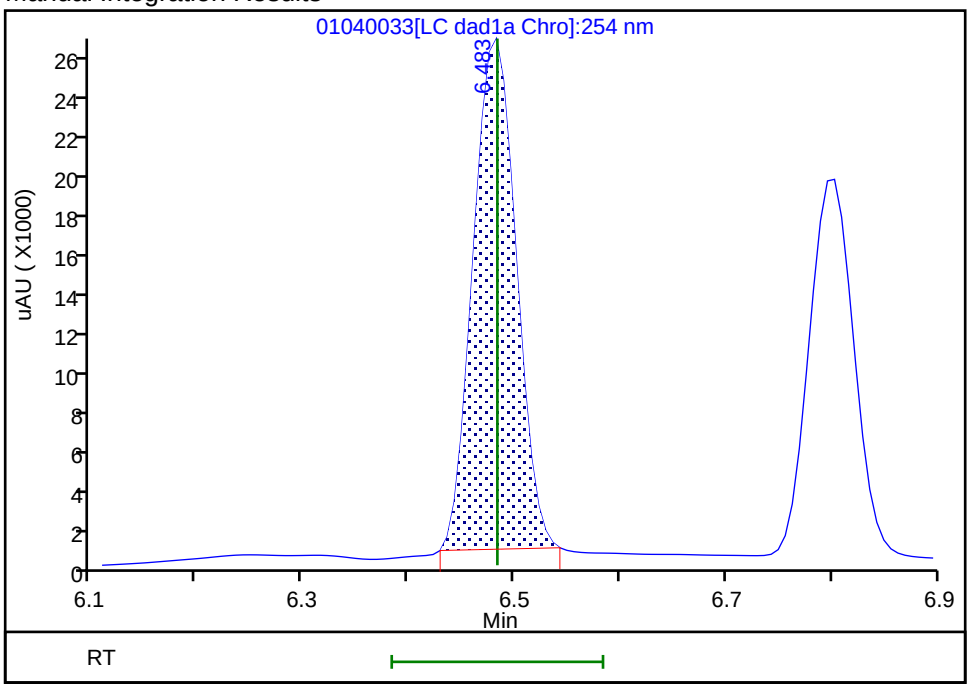
Processing Integration Results

RT: 6.48
Area: 83275
Amount: 0.401900
Amount Units: ug/mL



Manual Integration Results

RT: 6.48
Area: 72720
Amount: 0.401308
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:07:54
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

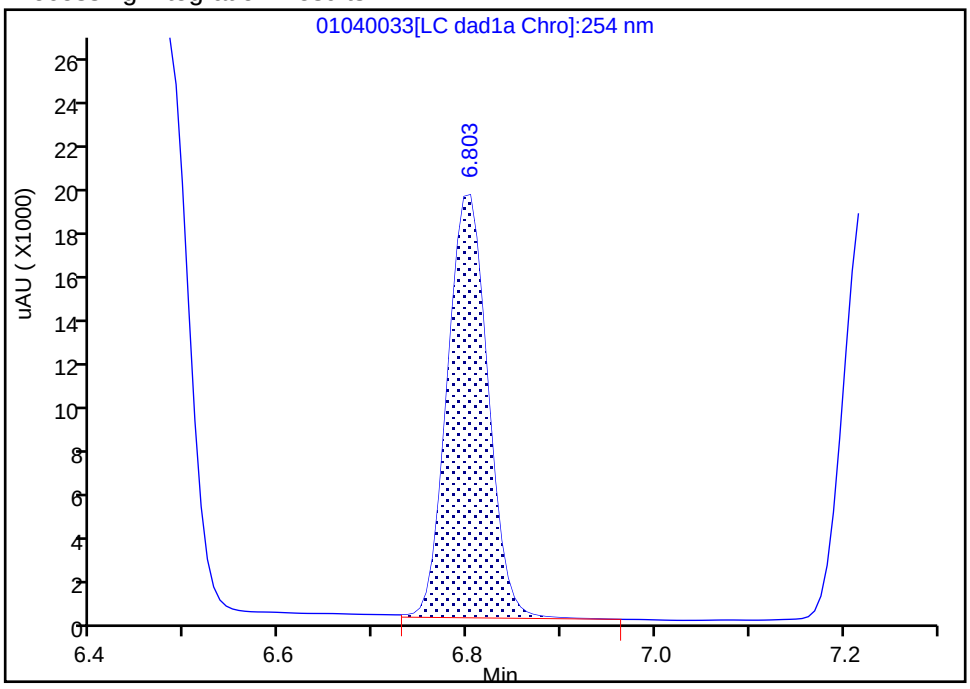
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040033.d				
Injection Date:	05-Jan-2022 02:52:35	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 5				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

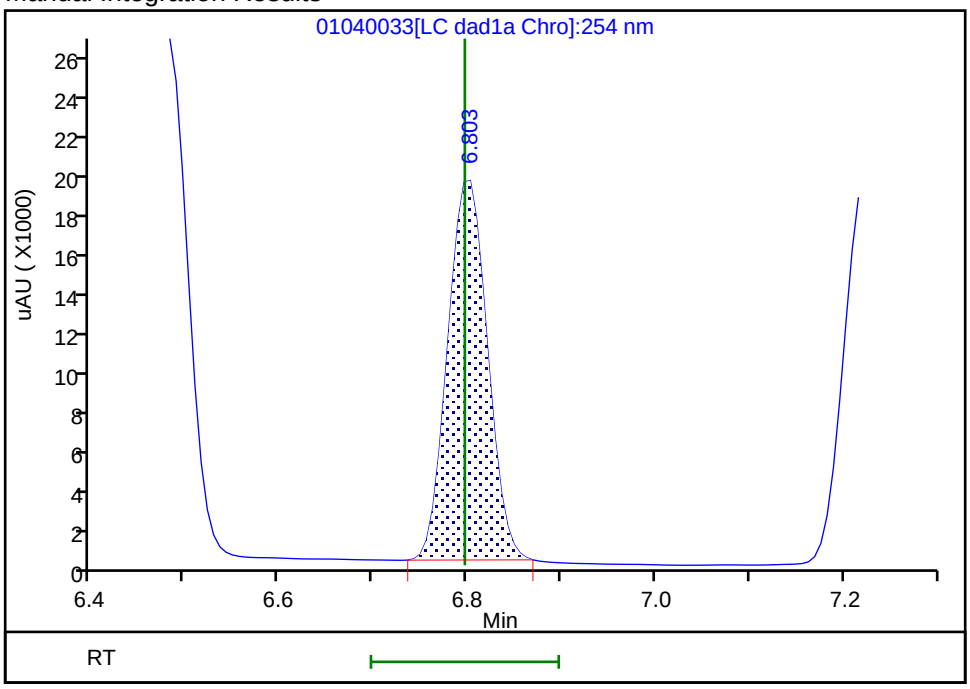
Processing Integration Results

RT: 6.80
Area: 57132
Amount: 0.393678
Amount Units: ug/mL



Manual Integration Results

RT: 6.80
Area: 55675
Amount: 0.403112
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:07:58
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

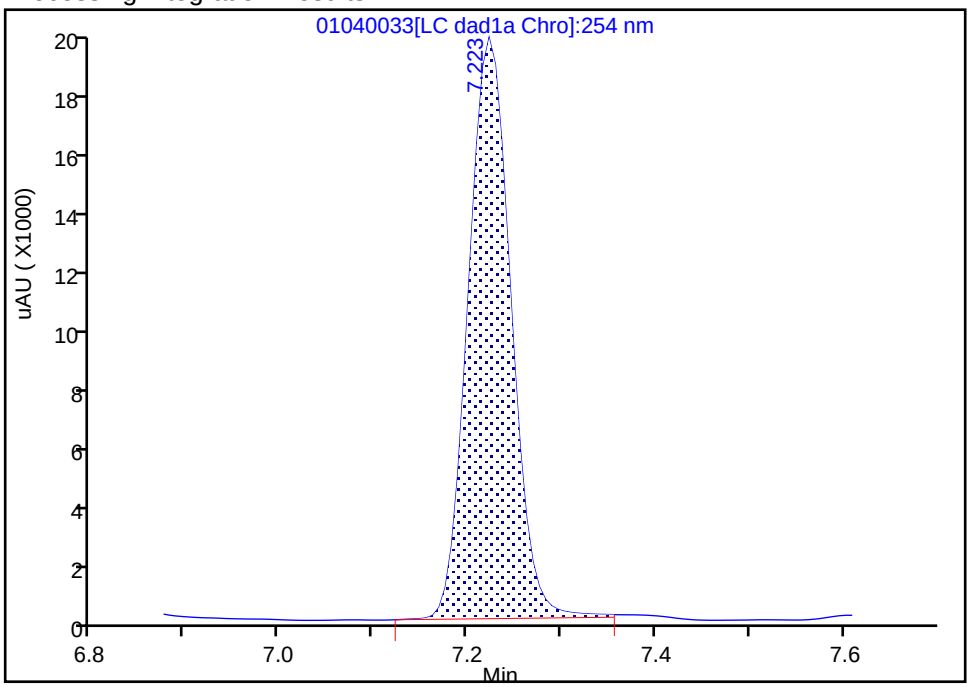
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040033.d				
Injection Date:	05-Jan-2022 02:52:35	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 5				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

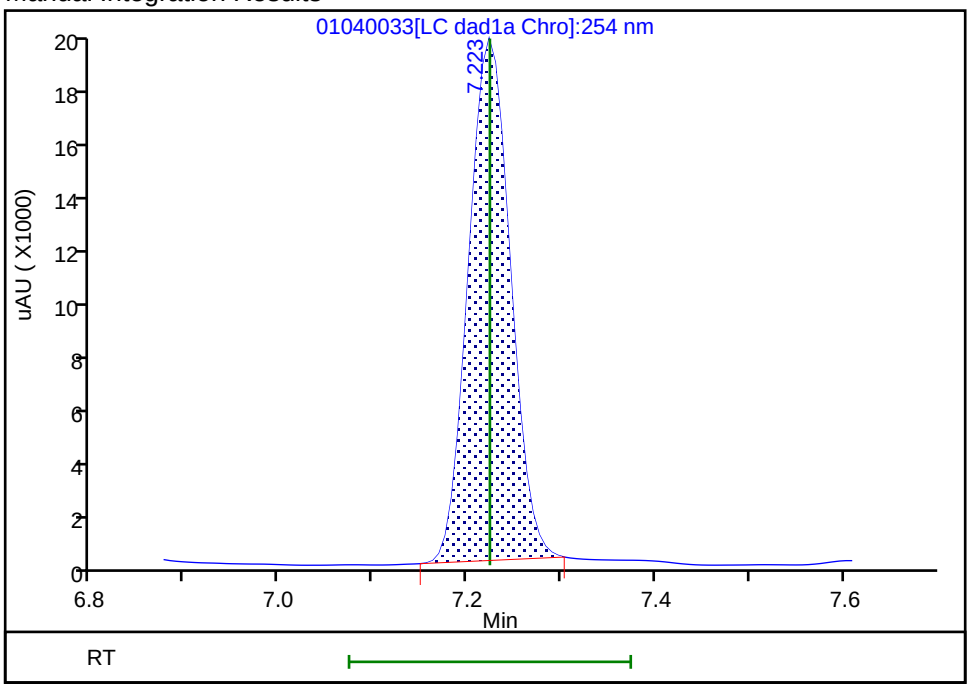
Processing Integration Results

RT: 7.22
Area: 60974
Amount: 0.470003
Amount Units: ug/mL



Manual Integration Results

RT: 7.22
Area: 59416
Amount: 0.471573
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:08:17

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040034.D
Lims ID: IC DMT 4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 05-Jan-2022 03:15:30 ALS Bottle#: 34 Worklist Smp#: 34
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT 4
Misc. Info.: 280-0107731-034
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Jan-2022 12:10:07 Calib Date: 05-Jan-2022 04:24:15
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1613

First Level Reviewer: zhangji Date: 05-Jan-2022 12:08:44

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.484	6.484	0.000	42748	0.2503	0.2359	M
6 DNX	1	6.797	6.797	0.000	32416	0.2503	0.2347	M
7 MNX	1	7.224	7.224	0.000	34560	0.2918	0.2743	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00010 Amount Added: 12.50 Units: uL

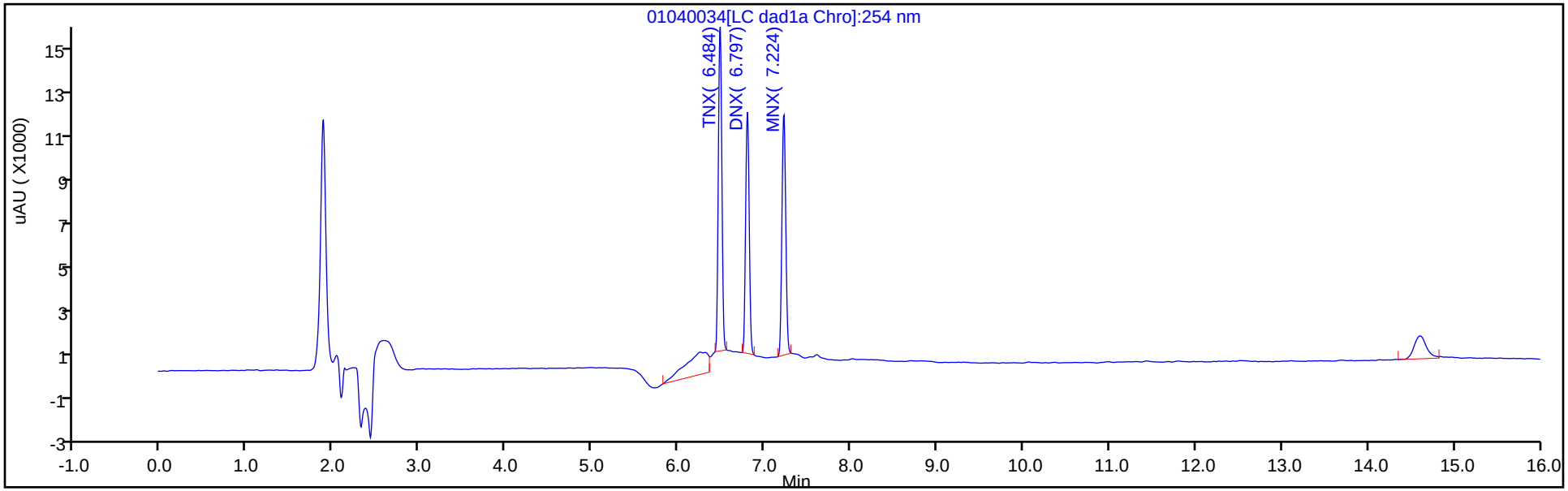
Report Date: 05-Jan-2022 12:10:07 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

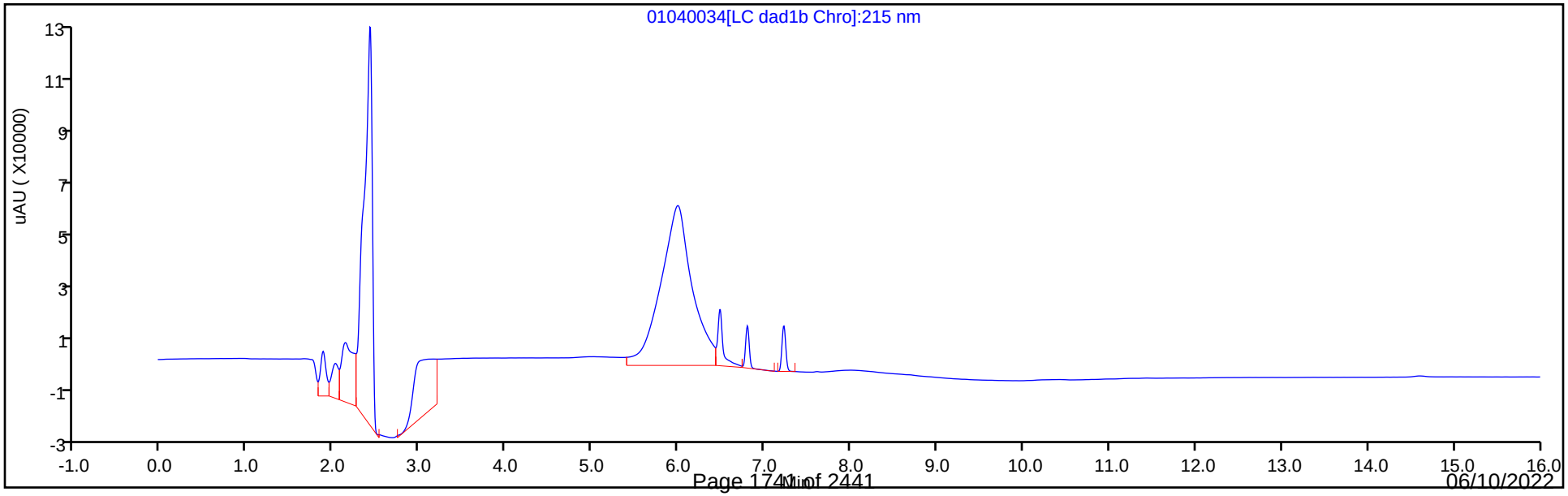
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040034.d

Injection Date:	05-Jan-2022 03:15:30	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	IC DMT 4			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

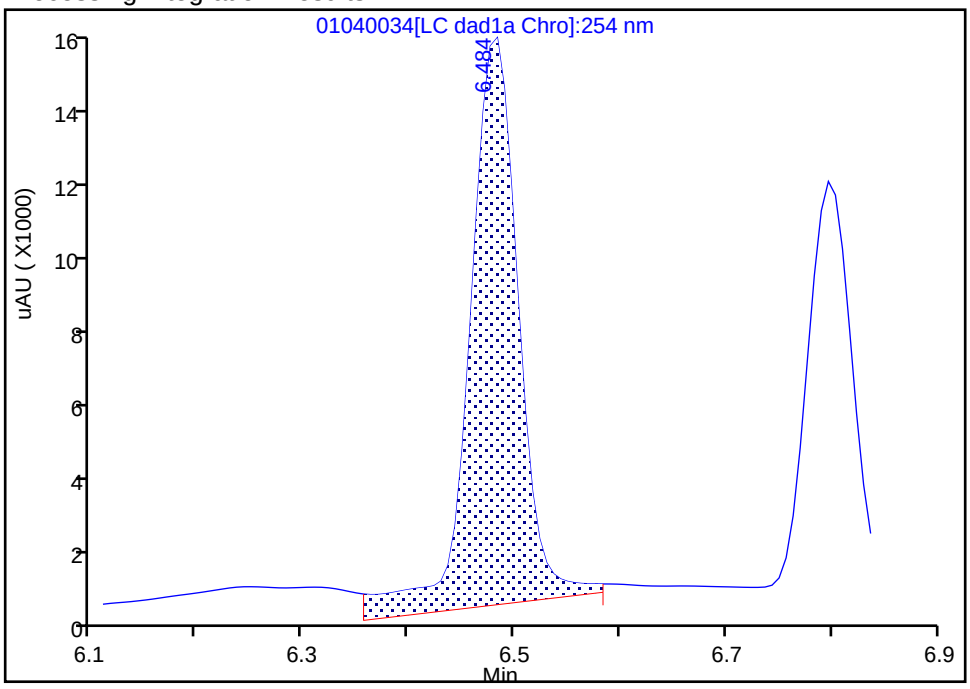
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040034.d				
Injection Date:	05-Jan-2022 03:15:30	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 4				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	34	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

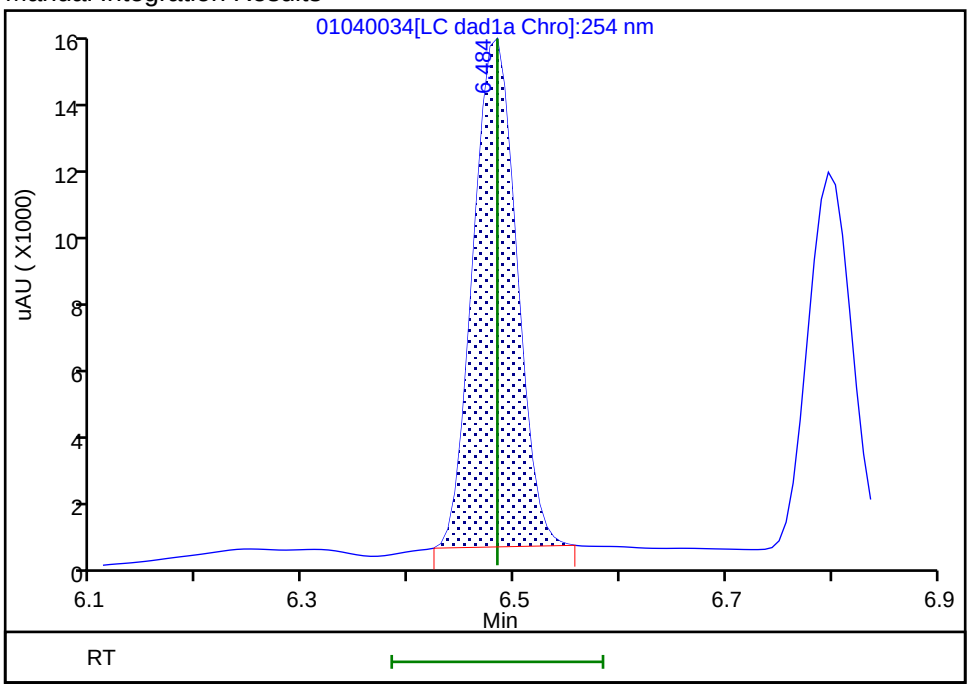
Processing Integration Results

RT: 6.48
Area: 50220
Amount: 0.246287
Amount Units: ug/mL



Manual Integration Results

RT: 6.48
Area: 42748
Amount: 0.235906
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:08:35
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

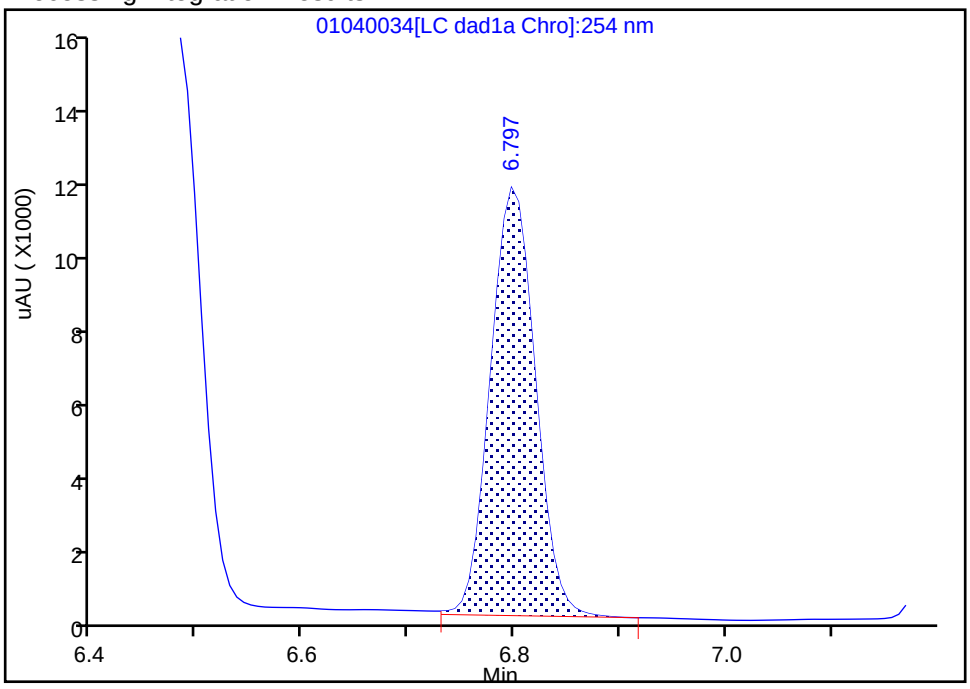
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040034.d				
Injection Date:	05-Jan-2022 03:15:30	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 4				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	34	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

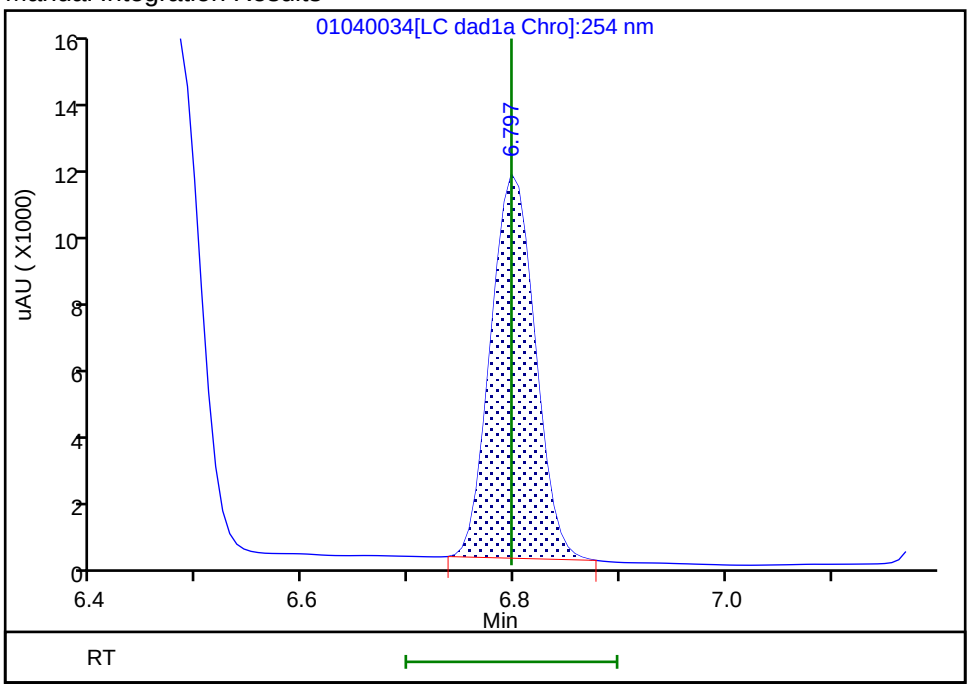
Processing Integration Results

RT: 6.80
Area: 33123
Amount: 0.228958
Amount Units: ug/mL



Manual Integration Results

RT: 6.80
Area: 32416
Amount: 0.234706
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:08:39

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

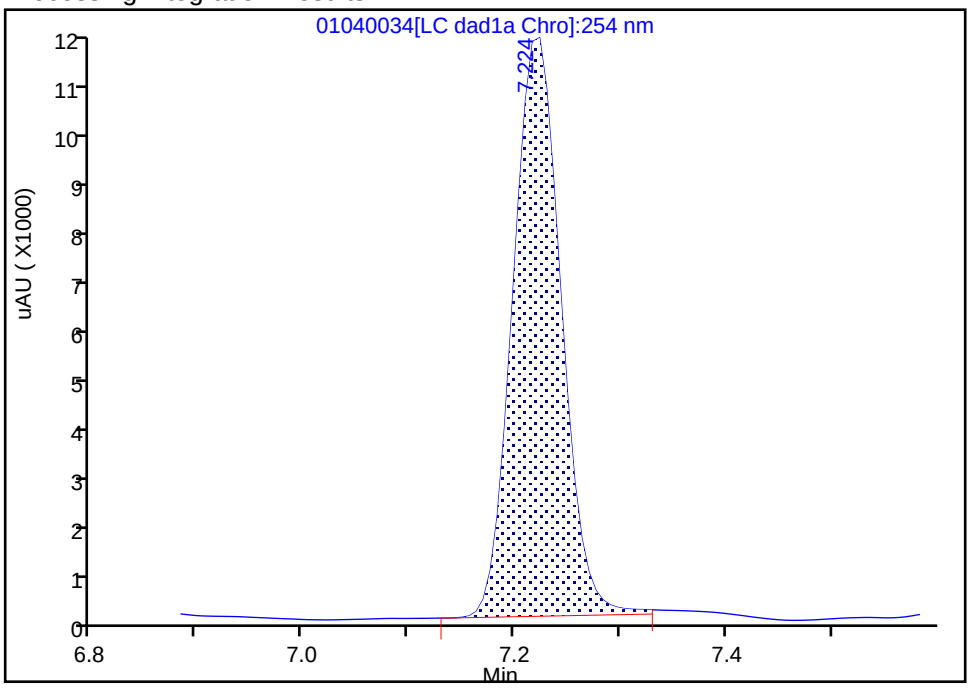
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040034.d				
Injection Date:	05-Jan-2022 03:15:30	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 4				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	34	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

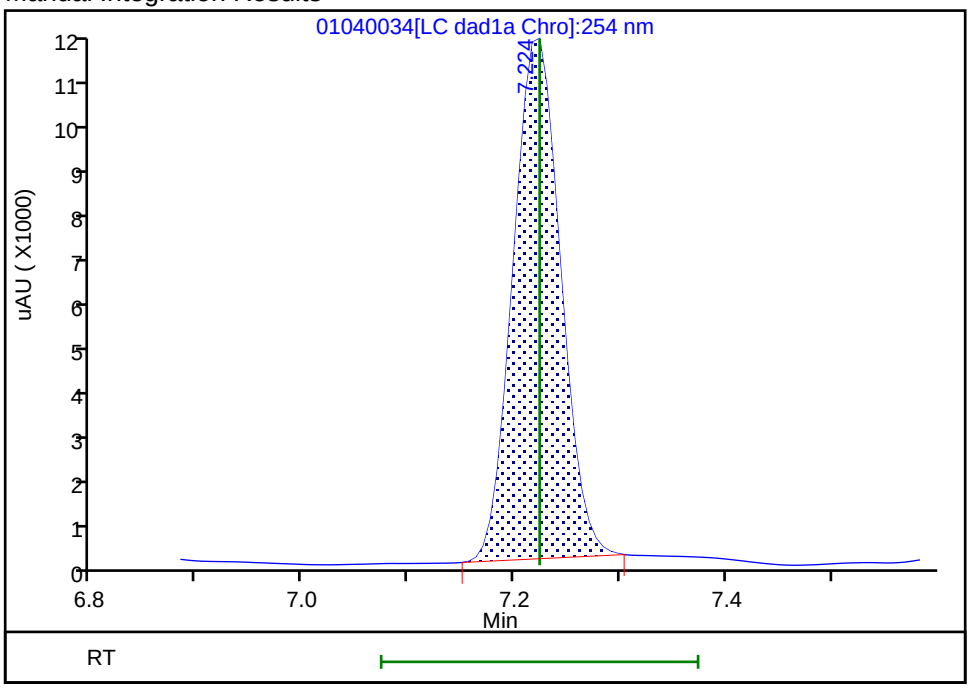
Processing Integration Results

RT: 7.22
Area: 35288
Amount: 0.273398
Amount Units: ug/mL



Manual Integration Results

RT: 7.22
Area: 34560
Amount: 0.274296
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:08:43

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040035.D
Lims ID: IC DMT 3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 05-Jan-2022 03:38:24 ALS Bottle#: 35 Worklist Smp#: 35
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT 3
Misc. Info.: 280-0107731-035
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Jan-2022 12:10:07 Calib Date: 05-Jan-2022 04:24:15
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1613

First Level Reviewer: zhangji Date: 05-Jan-2022 12:08:58

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.483	6.484	-0.001	17989	0.1001	0.0993	M
6 DNX	1	6.796	6.797	-0.001	13928	0.1001	0.1008	M
7 MNX	1	7.223	7.224	-0.001	14438	0.1167	0.1146	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00010 Amount Added: 5.00 Units: uL

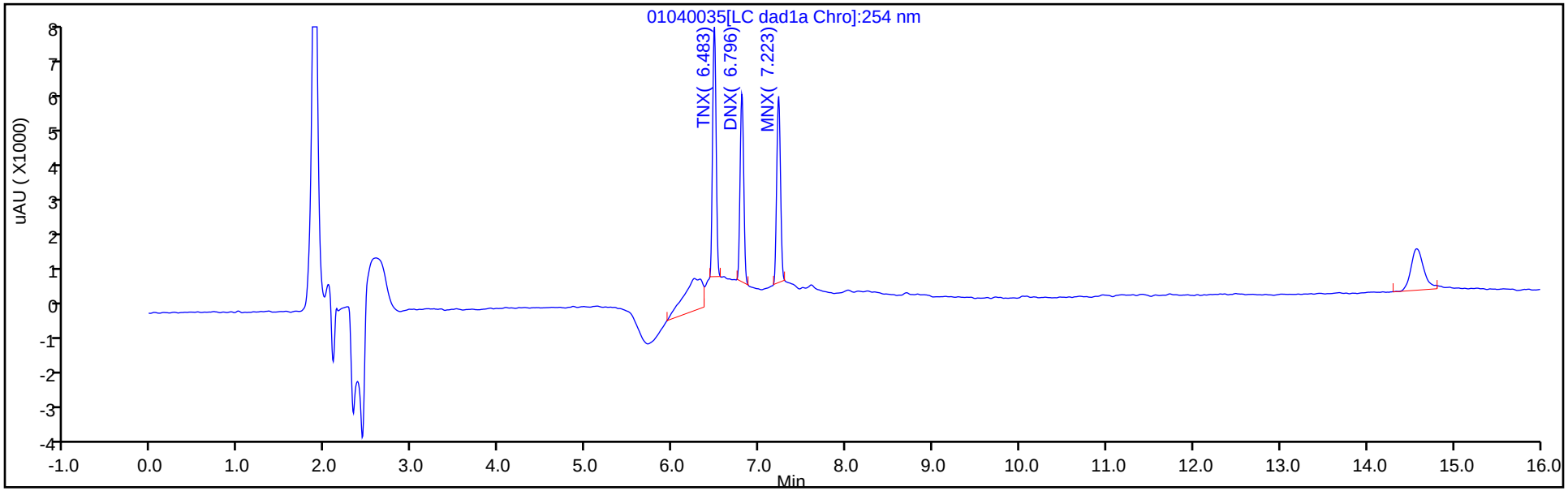
Report Date: 05-Jan-2022 12:10:08 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

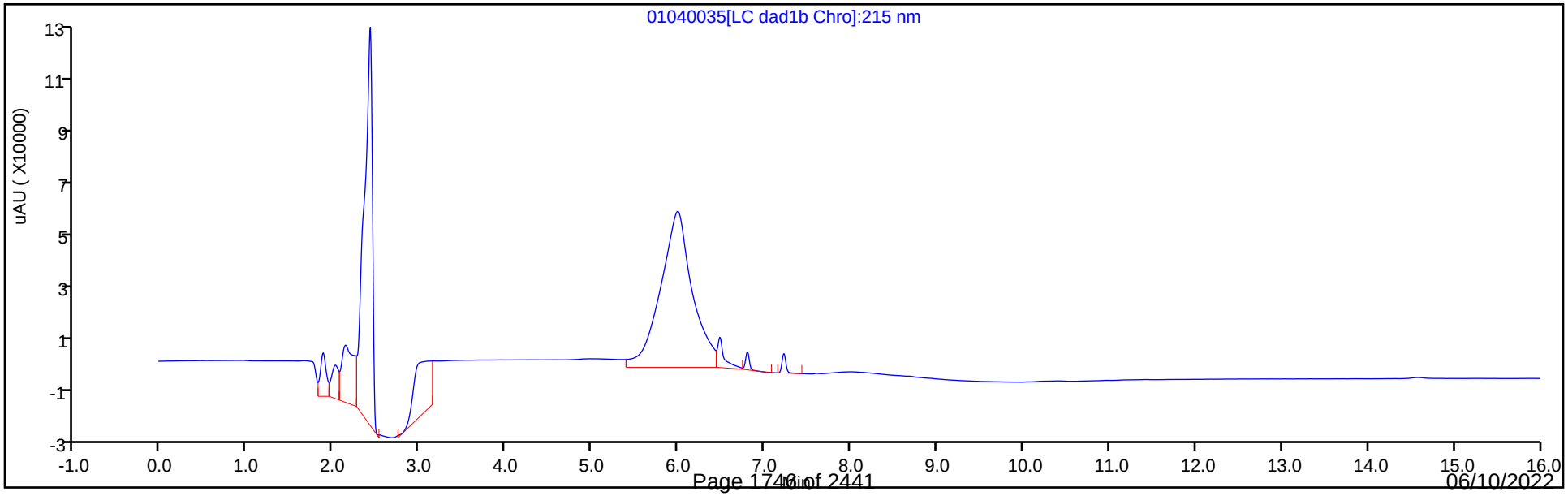
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040035.d

Injection Date:	05-Jan-2022 03:38:24	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	IC DMT 3			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

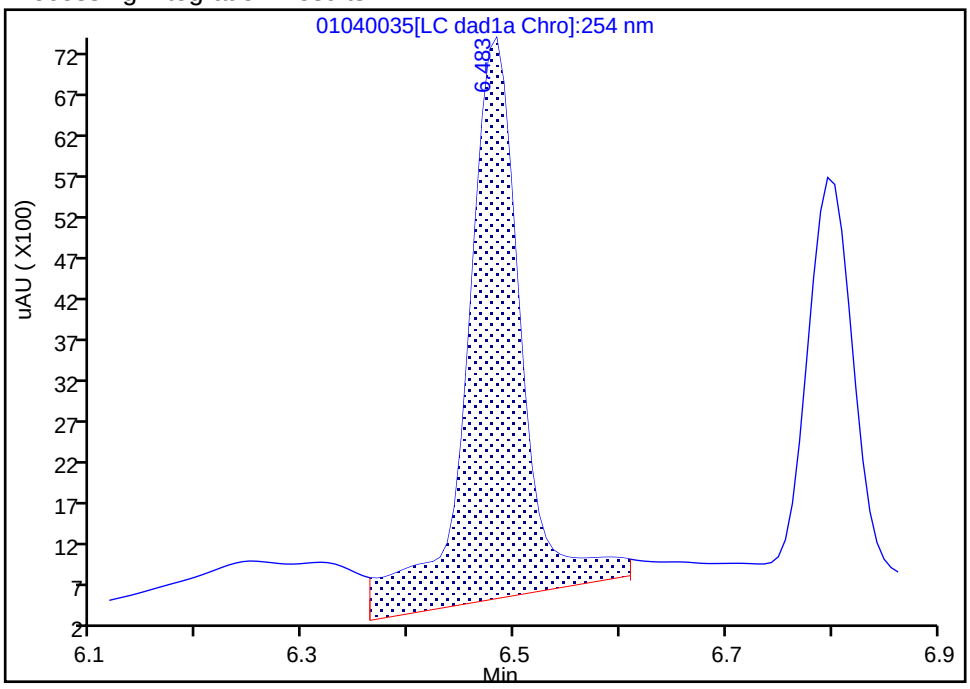
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040035.d				
Injection Date:	05-Jan-2022 03:38:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 3				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	35	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

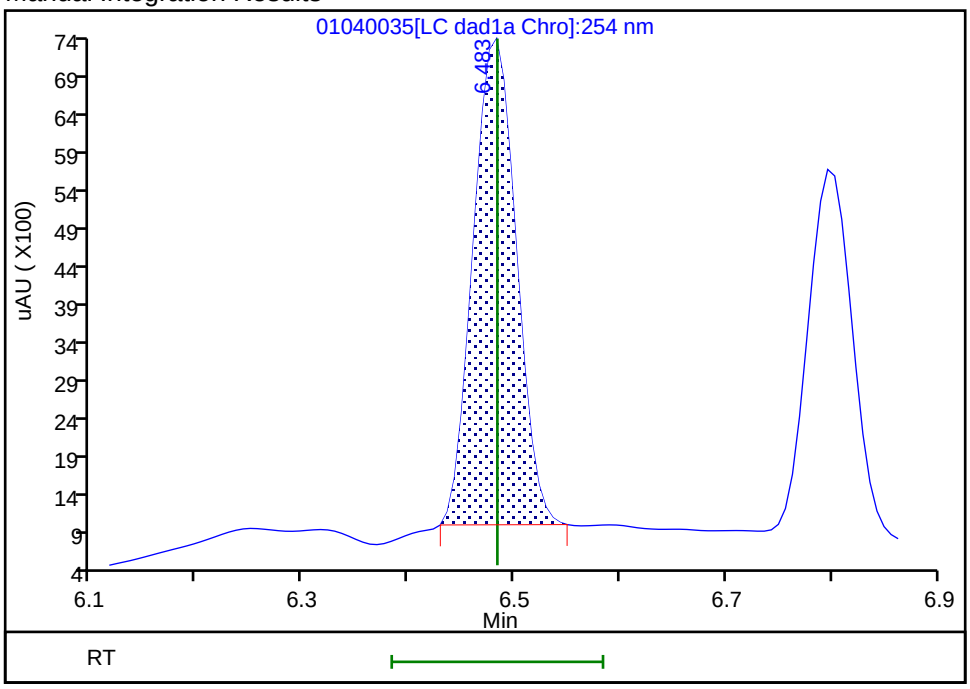
Processing Integration Results

RT: 6.48
Area: 24762
Amount: 0.123701
Amount Units: ug/mL



Manual Integration Results

RT: 6.48
Area: 17989
Amount: 0.099273
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:08:50
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

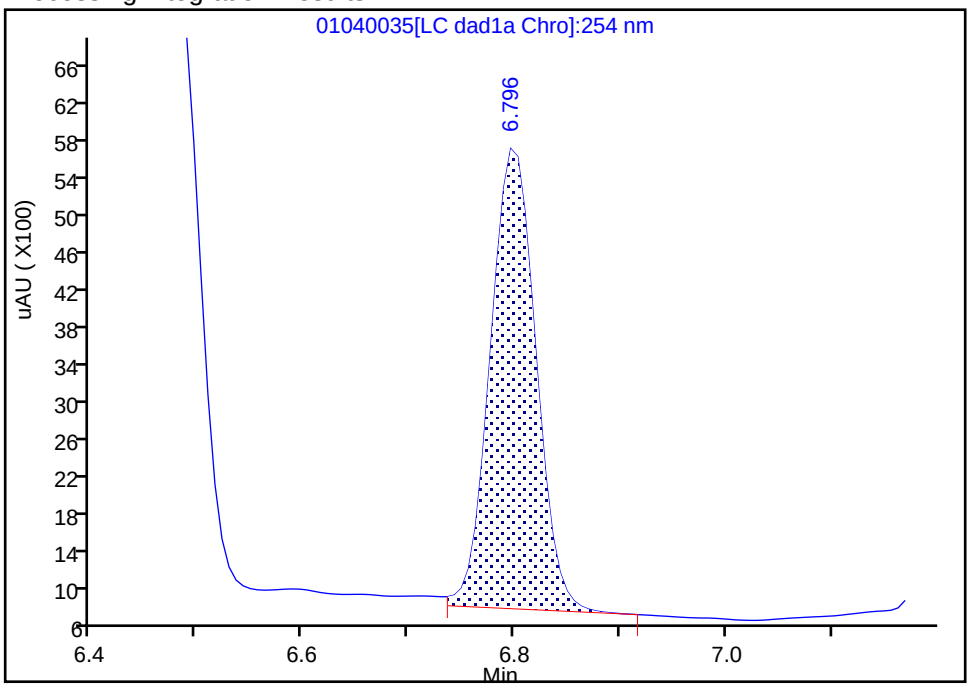
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040035.d				
Injection Date:	05-Jan-2022 03:38:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 3				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	35	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

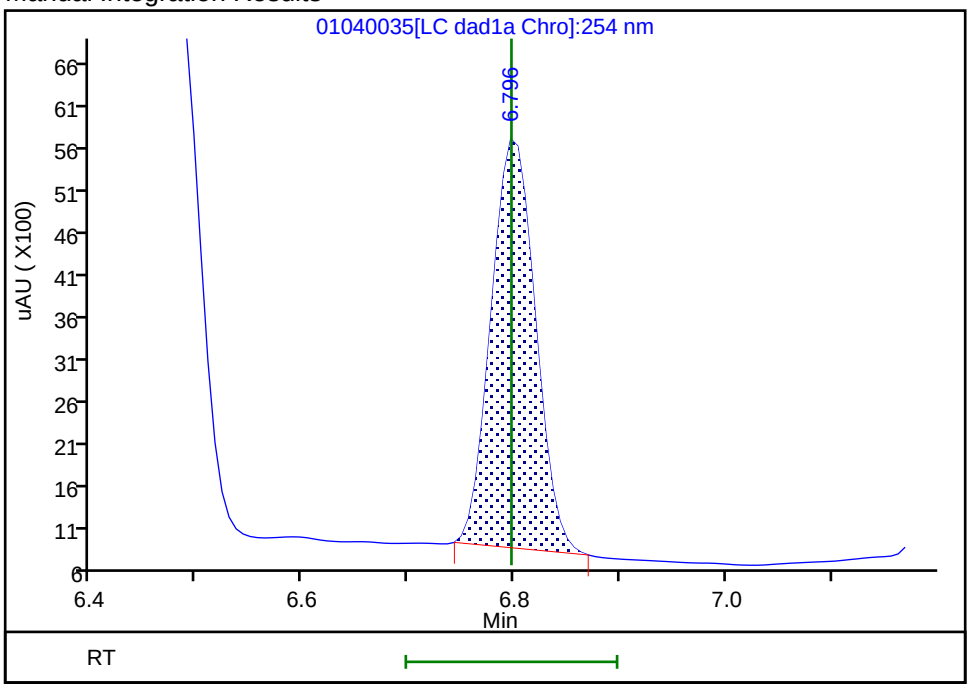
Processing Integration Results

RT: 6.80
Area: 14564
Amount: 0.100918
Amount Units: ug/mL



Manual Integration Results

RT: 6.80
Area: 13928
Amount: 0.100845
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:08:53

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

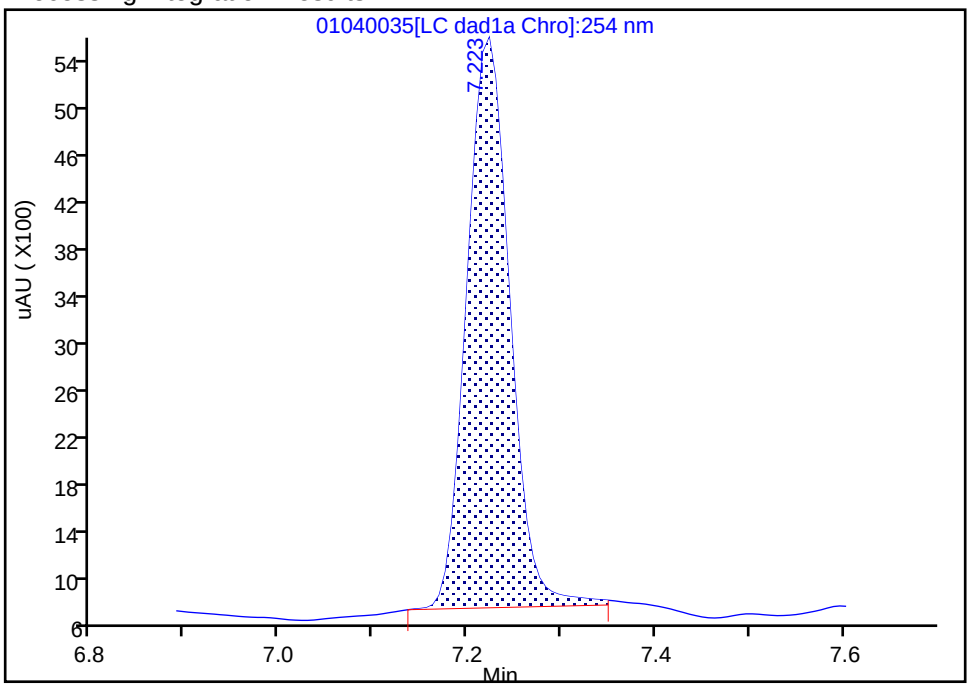
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040035.d				
Injection Date:	05-Jan-2022 03:38:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 3				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	35	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

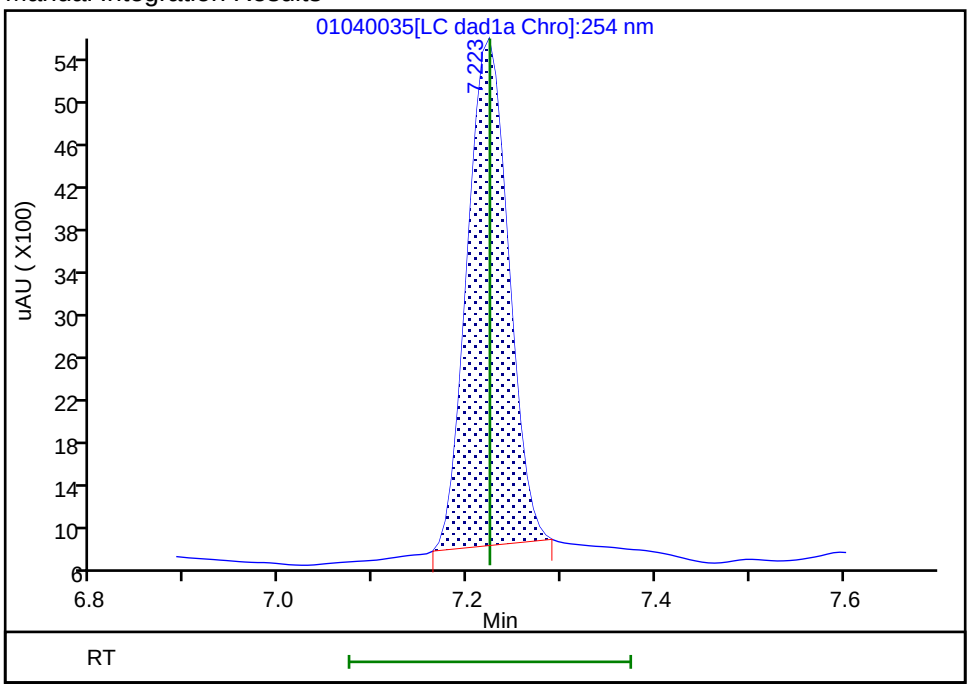
Processing Integration Results

RT: 7.22
Area: 15316
Amount: 0.118950
Amount Units: ug/mL



Manual Integration Results

RT: 7.22
Area: 14438
Amount: 0.114591
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:08:56

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040036.D				
Lims ID:	IC DMT 2				
Client ID:					
Sample Type:	IC	Calib Level:	2		
Inject. Date:	05-Jan-2022 04:01:20	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 2				
Misc. Info.:	280-0107731-036				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Jan-2022 12:10:08	Calib Date:	05-Jan-2022 04:24:15		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1613				
First Level Reviewer: zhangji		Date:	05-Jan-2022 12:09:13		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.478	6.484	-0.006	9031	0.0501	0.0498	M
6 DNX	1	6.798	6.797	0.001	6988	0.0501	0.0506	M
7 MNX	1	7.224	7.224	0.000	7298	0.0584	0.0579	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00010 Amount Added: 2.50 Units: uL

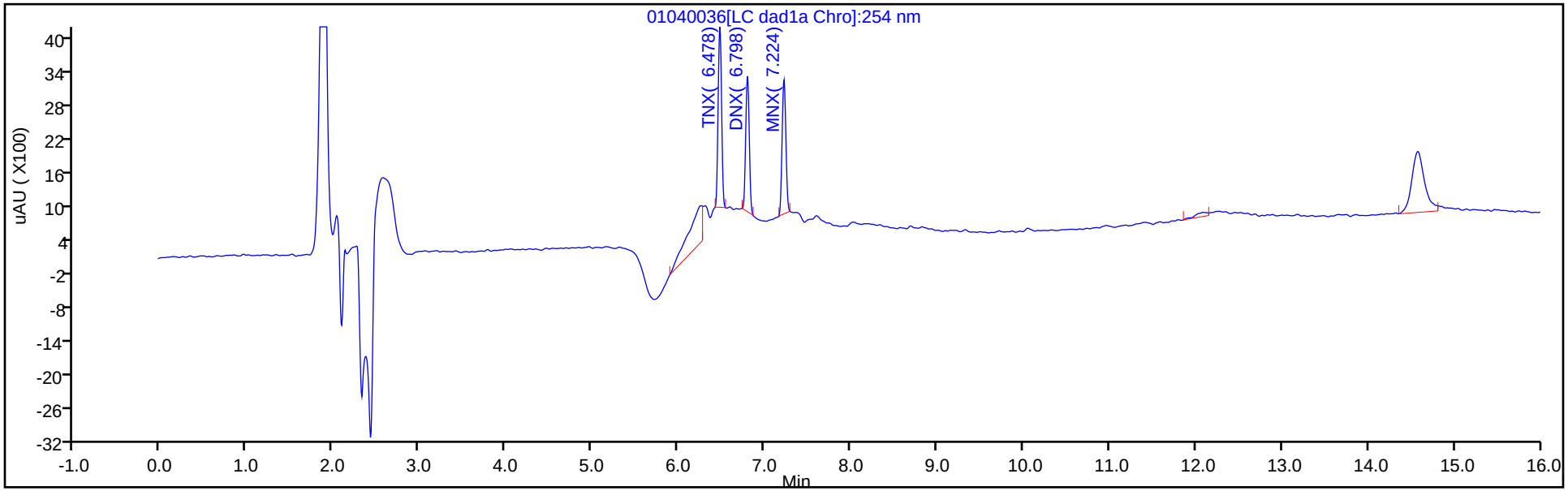
Report Date: 05-Jan-2022 12:10:08 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

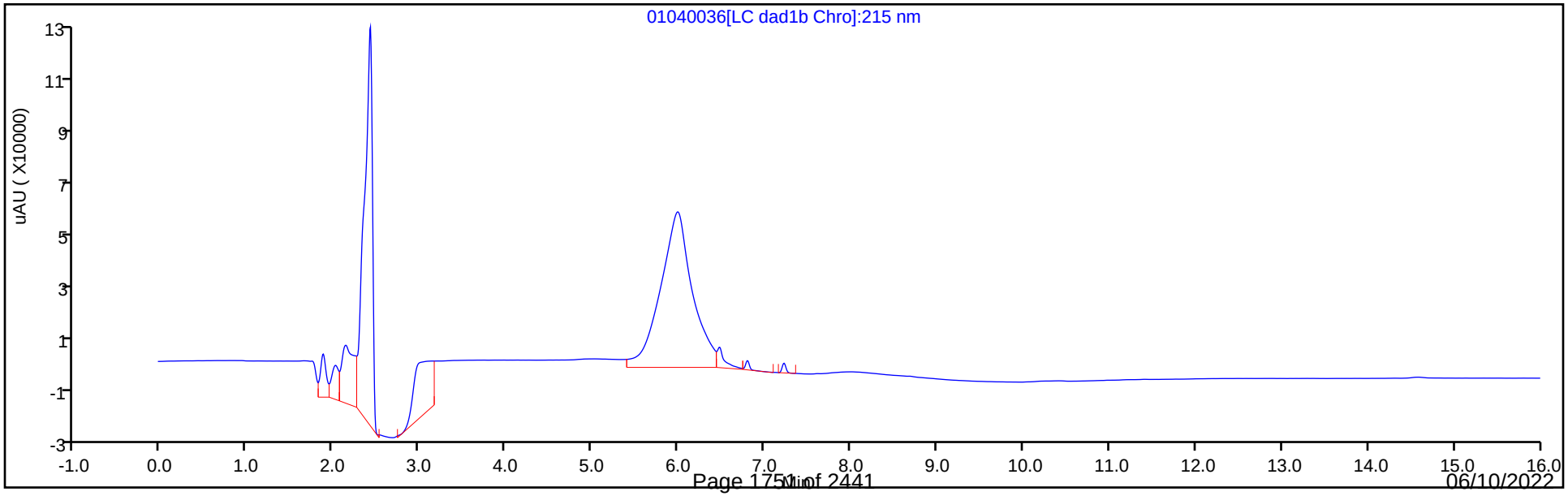
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040036.d

Injection Date:	05-Jan-2022 04:01:20	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	IC DMT 2			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

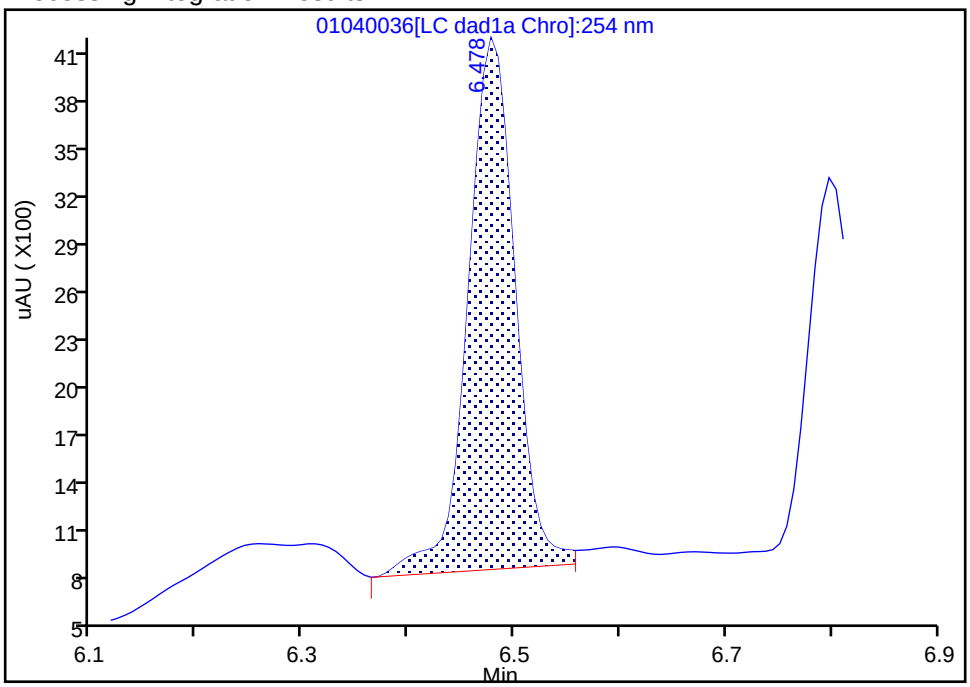
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040036.d				
Injection Date:	05-Jan-2022 04:01:20	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

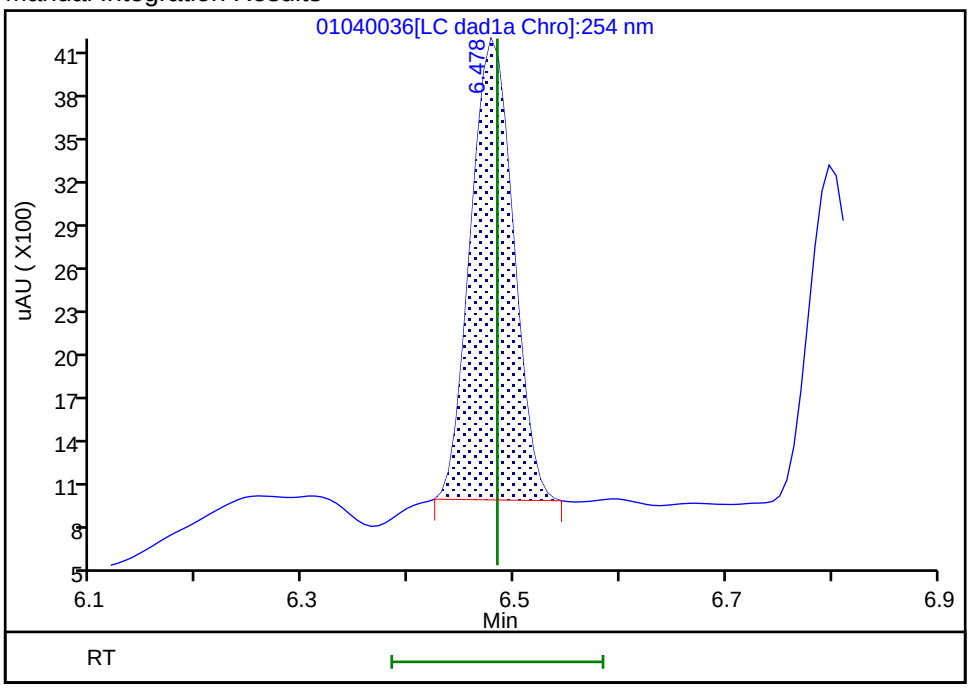
Processing Integration Results

RT: 6.48
Area: 10352
Amount: 0.053996
Amount Units: ug/mL



Manual Integration Results

RT: 6.48
Area: 9031
Amount: 0.049838
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:09:04
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

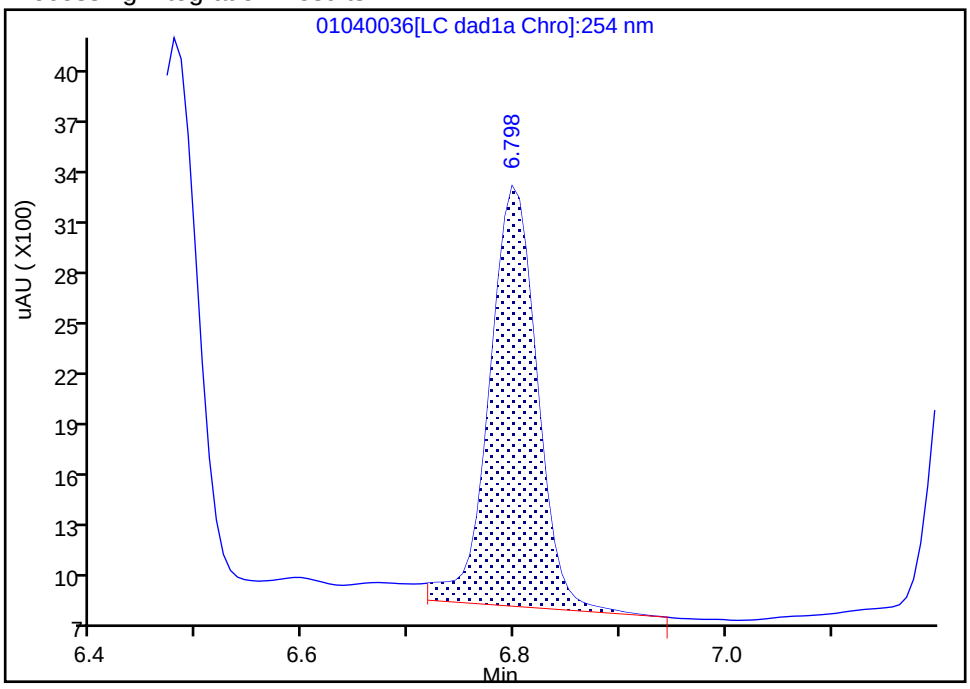
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040036.d				
Injection Date:	05-Jan-2022 04:01:20	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

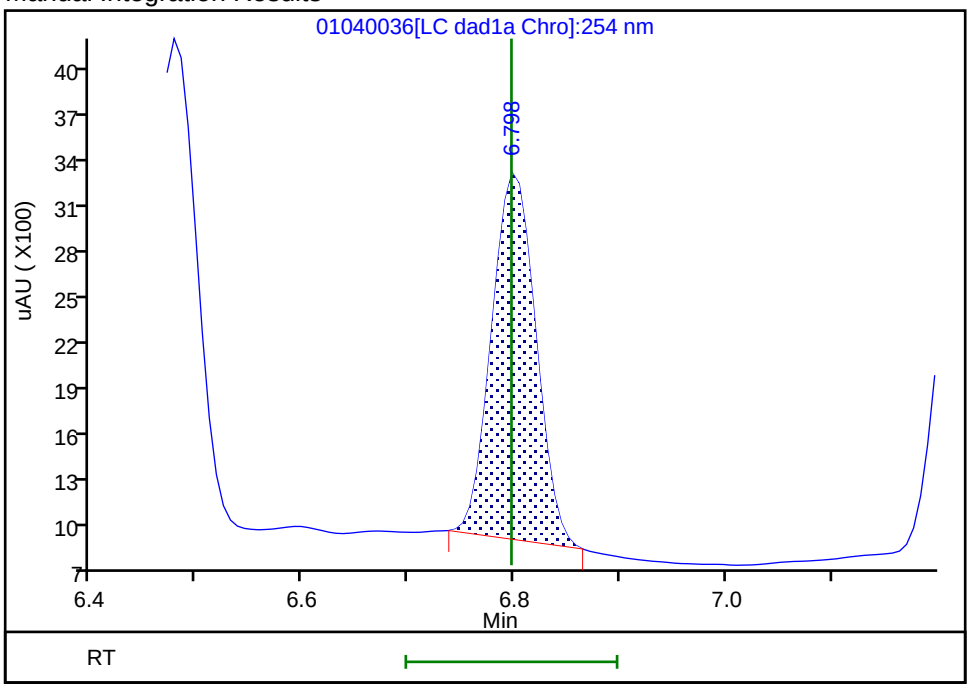
Processing Integration Results

RT: 6.80
Area: 7841
Amount: 0.054633
Amount Units: ug/mL



Manual Integration Results

RT: 6.80
Area: 6988
Amount: 0.050596
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:09:07

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

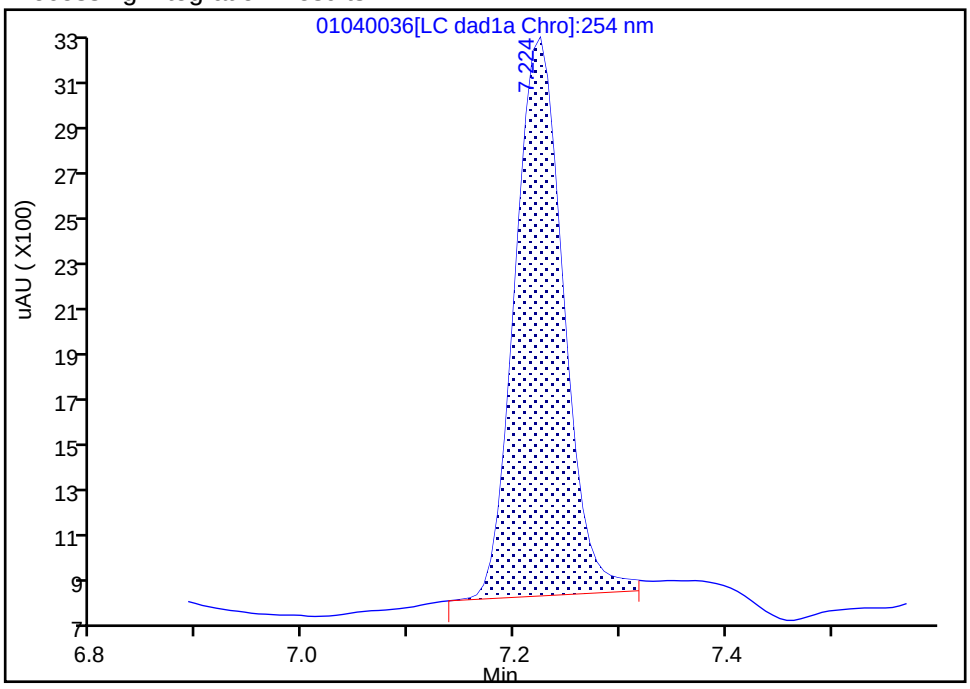
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040036.d				
Injection Date:	05-Jan-2022 04:01:20	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

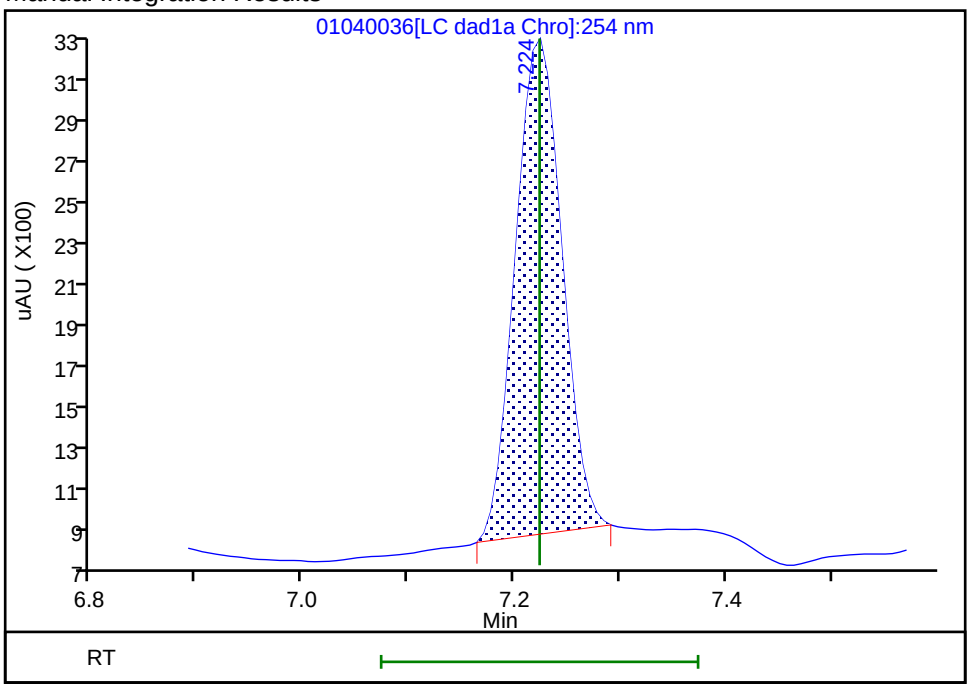
Processing Integration Results

RT: 7.22
Area: 7737
Amount: 0.060531
Amount Units: ug/mL



Manual Integration Results

RT: 7.22
Area: 7298
Amount: 0.057923
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:09:11

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D				
Lims ID:	IC DMT 1				
Client ID:					
Sample Type:	IC	Calib Level:	1		
Inject. Date:	05-Jan-2022 04:24:15	ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 1				
Misc. Info.:	280-0107731-037				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Jan-2022 12:10:08	Calib Date:	05-Jan-2022 04:24:15		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1613				
First Level Reviewer: zhangji		Date:	05-Jan-2022 12:09:28		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.479	6.484	-0.005	3600	0.0200	0.0199	M
6 DNX	1	6.799	6.797	0.002	2817	0.0200	0.0204	M
7 MNX	1	7.219	7.224	-0.005	3042	0.0233	0.0241	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00010 Amount Added: 1.00 Units: uL

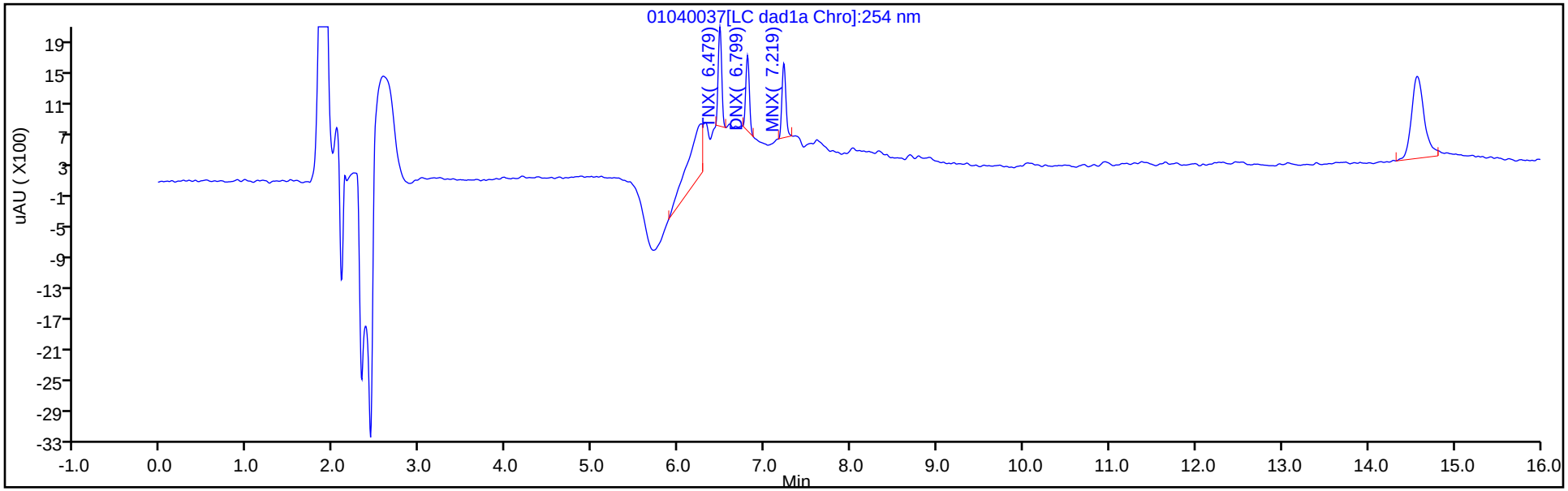
Report Date: 05-Jan-2022 12:10:09 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

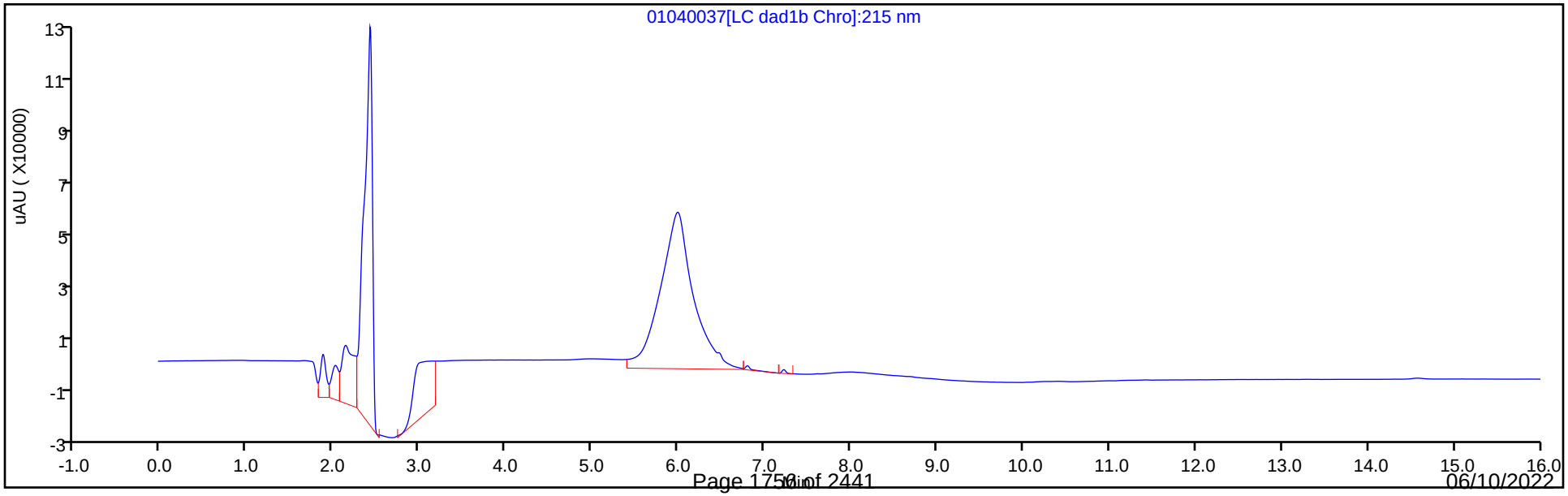
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040037.d

Injection Date:	05-Jan-2022 04:24:15	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	IC DMT 1			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

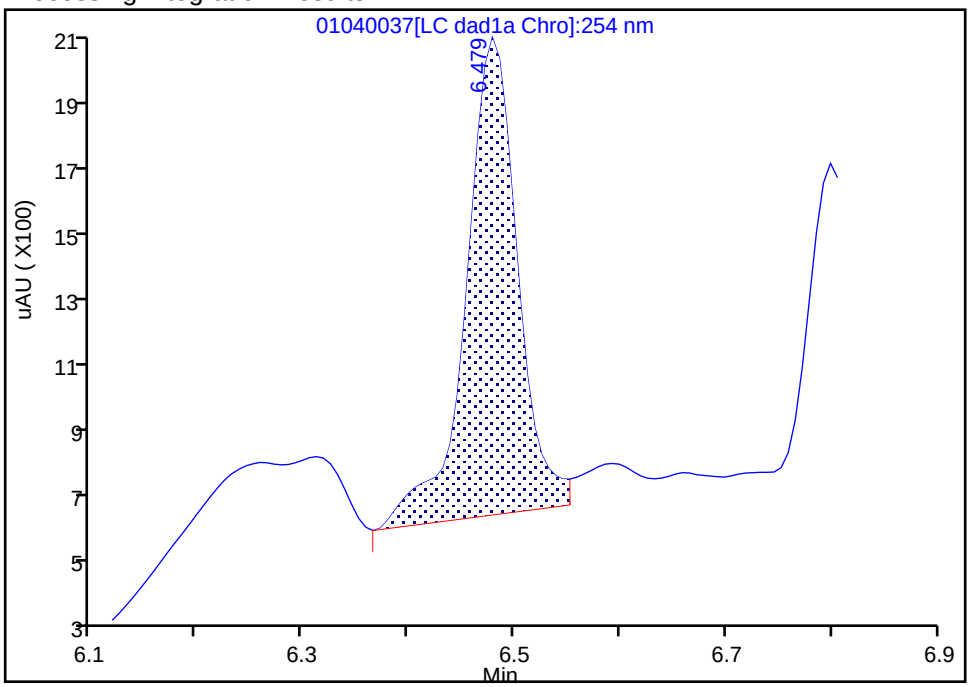
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040037.d				
Injection Date:	05-Jan-2022 04:24:15	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

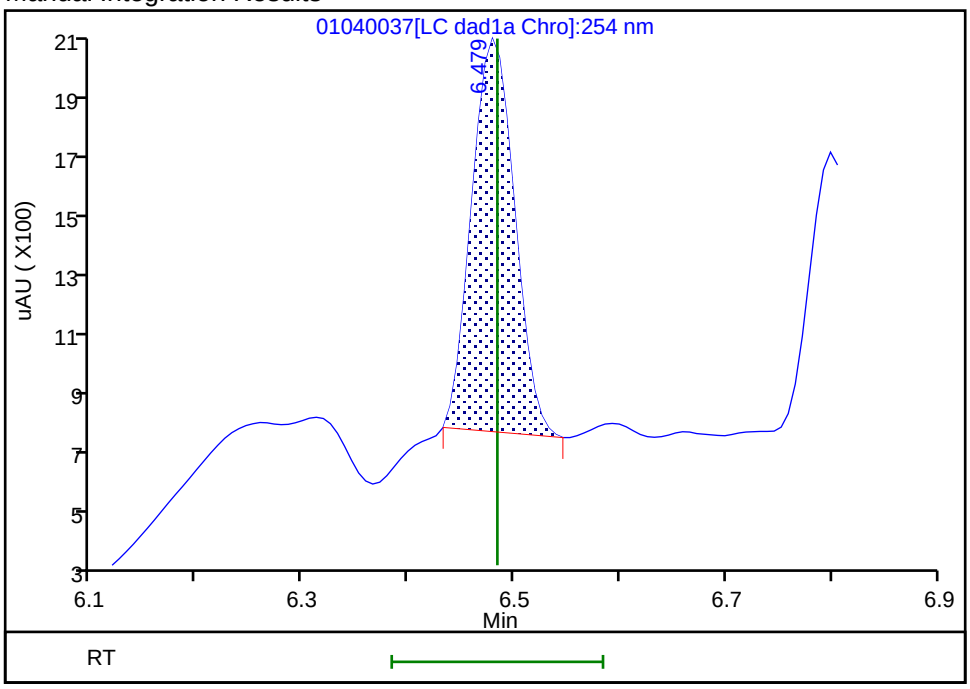
Processing Integration Results

RT: 6.48
Area: 4755
Amount: 0.025236
Amount Units: ug/mL



Manual Integration Results

RT: 6.48
Area: 3600
Amount: 0.019867
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:09:20

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

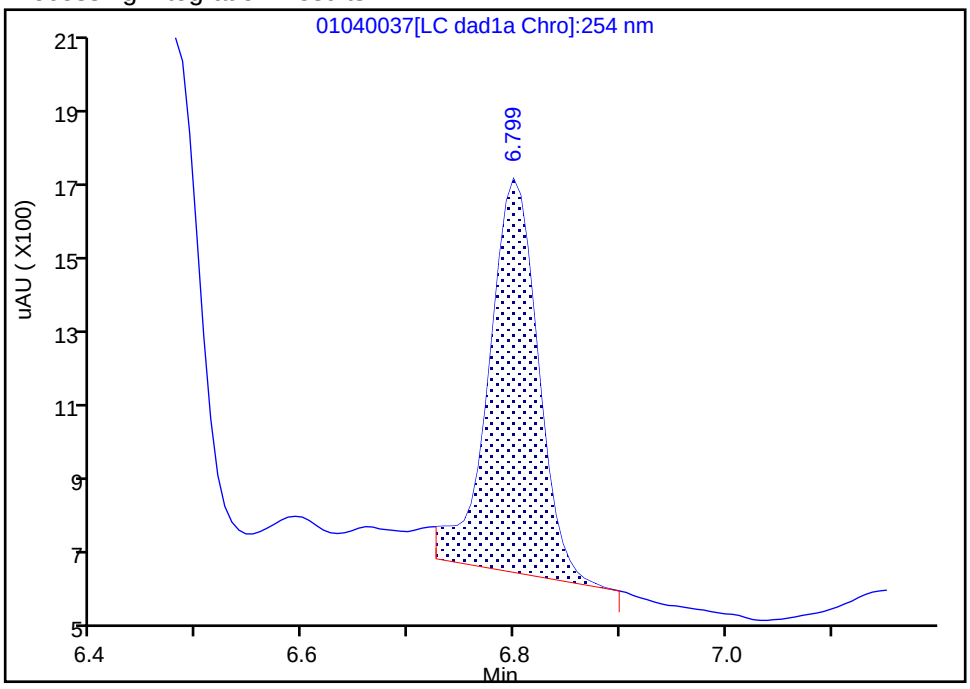
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040037.d				
Injection Date:	05-Jan-2022 04:24:15	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

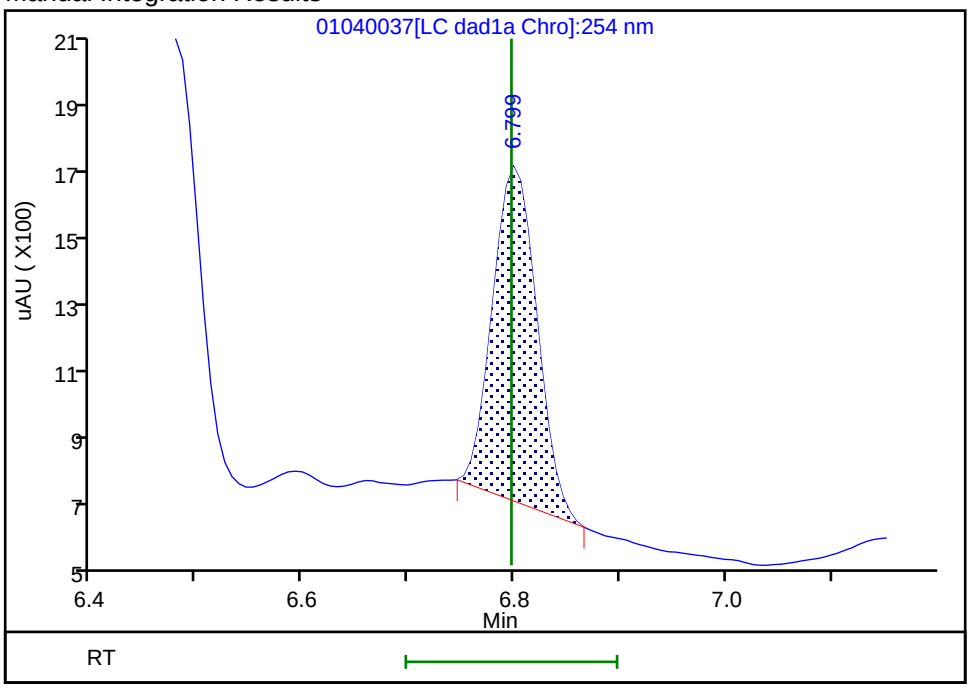
Processing Integration Results

RT: 6.80
Area: 3342
Amount: 0.023637
Amount Units: ug/mL



Manual Integration Results

RT: 6.80
Area: 2817
Amount: 0.020396
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:09:23

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

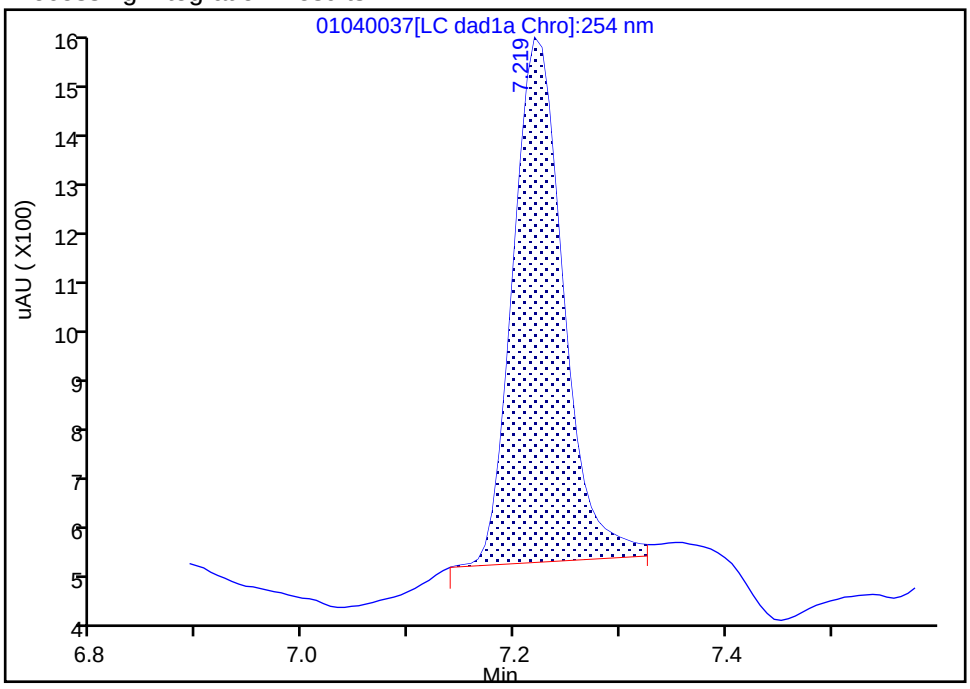
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040037.d				
Injection Date:	05-Jan-2022 04:24:15	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

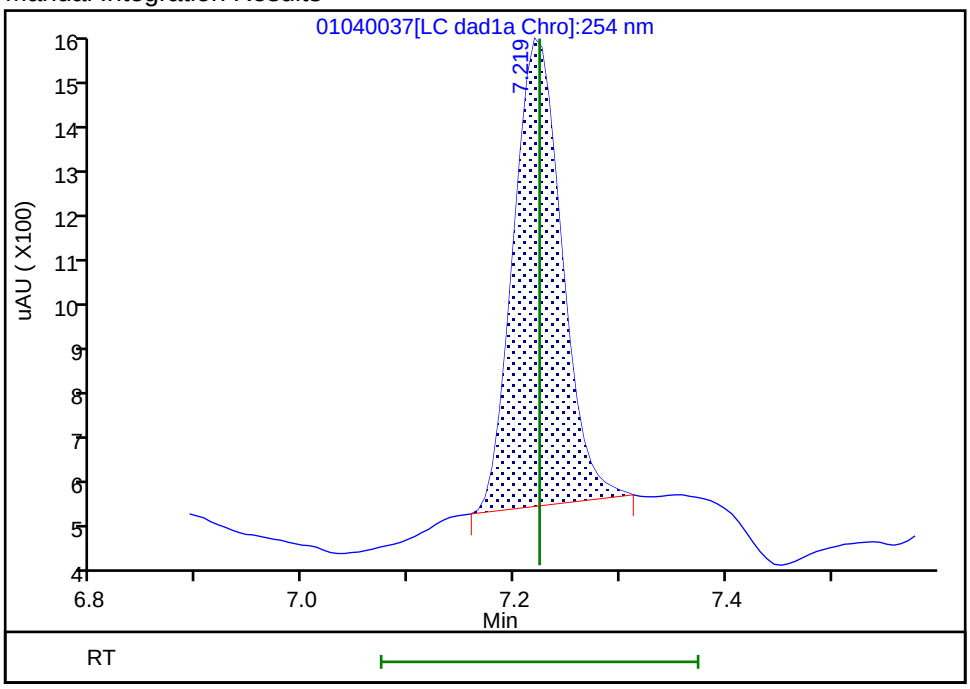
Processing Integration Results

RT: 7.22
Area: 3207
Amount: 0.025276
Amount Units: ug/mL



Manual Integration Results

RT: 7.22
Area: 3042
Amount: 0.024144
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:09:26

Audit Action: Manually Integrated Audit Reason: Baseline

Calibration / TNX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

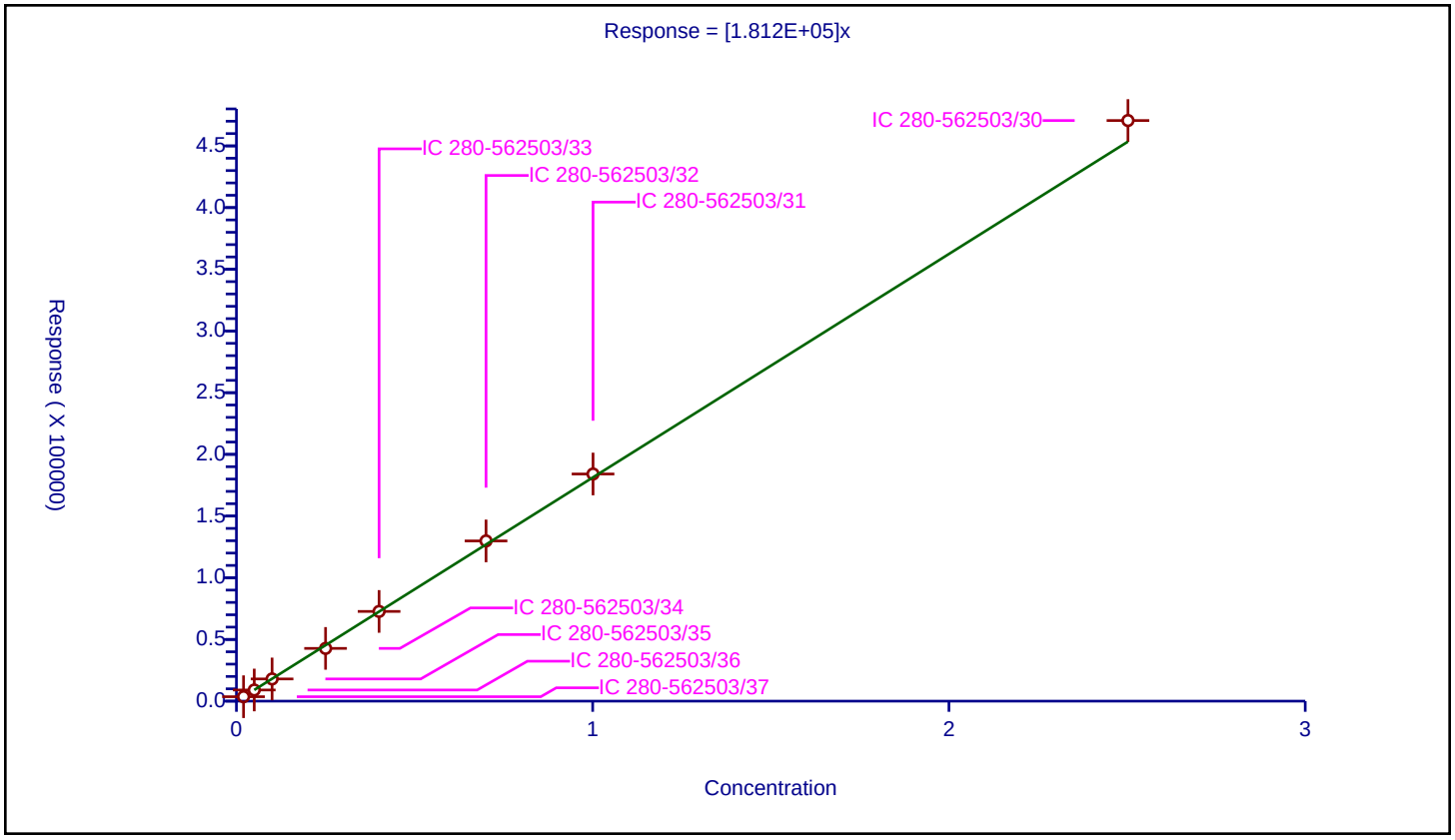
Curve Coefficients

Intercept:	0
Slope:	1.812E+05

Error Coefficients

Standard Error:	6700
Relative Standard Error:	2.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/37	0.02002	3600.0			179820.17982	Y
2	IC 280-562503/36	0.05005	9031.0			180439.56044	Y
3	IC 280-562503/35	0.1001	17989.0			179710.28971	Y
4	IC 280-562503/34	0.25025	42748.0			170821.178821	Y
5	IC 280-562503/33	0.4004	72720.0			181618.381618	Y
6	IC 280-562503/32	0.7007	129844.0			185306.122449	Y
7	IC 280-562503/31	1.001	184090.0			183906.093906	Y
8	IC 280-562503/30	2.5025	470565.0			188037.962038	Y



Calibration / DNX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

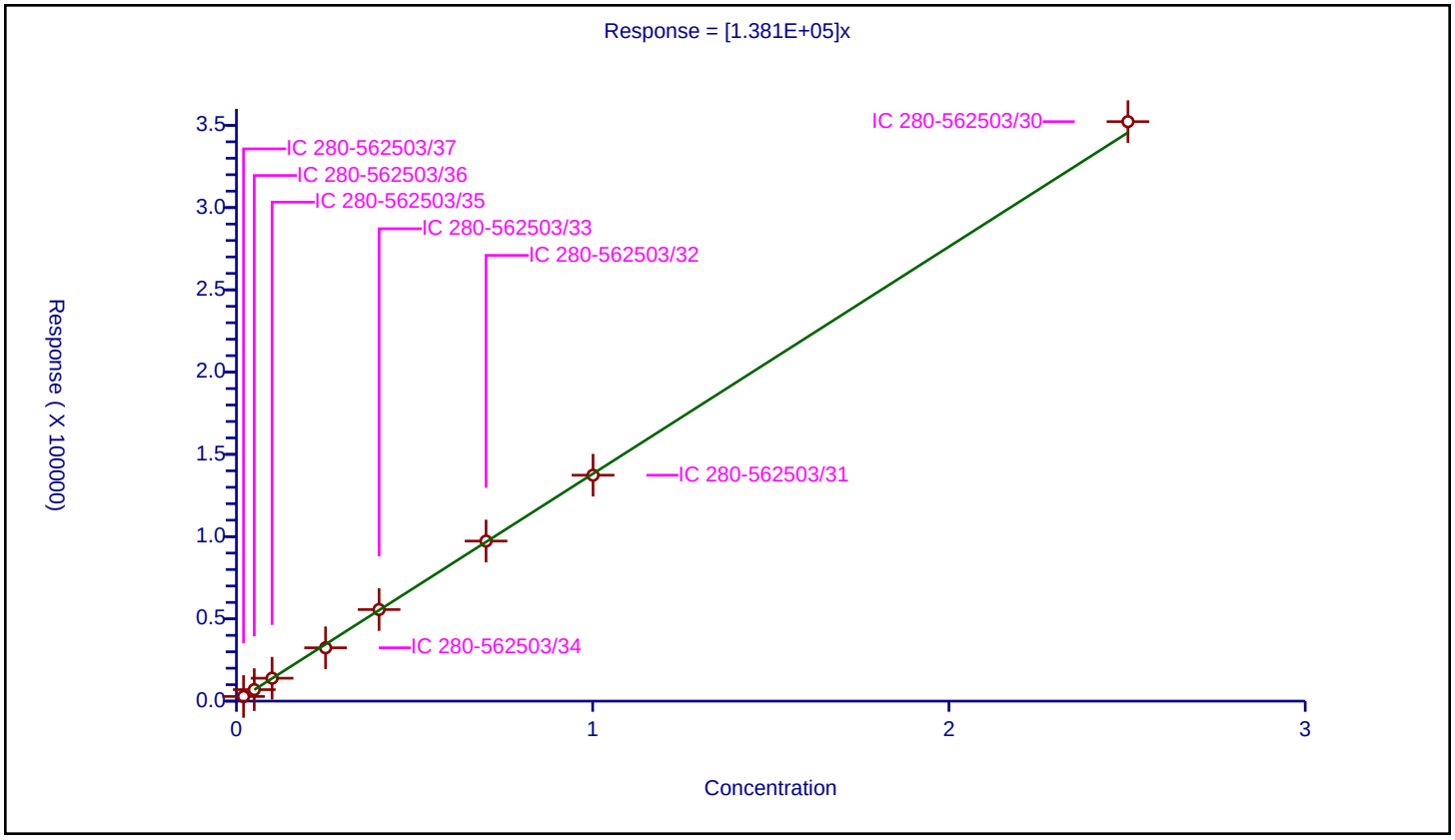
Curve Coefficients

Intercept:	0
Slope:	1.381E+05

Error Coefficients

Standard Error:	2670
Relative Standard Error:	2.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/37	0.02002	2817.0			140709.290709	Y
2	IC 280-562503/36	0.05005	6988.0			139620.37962	Y
3	IC 280-562503/35	0.1001	13928.0			139140.859141	Y
4	IC 280-562503/34	0.25025	32416.0			129534.465534	Y
5	IC 280-562503/33	0.4004	55675.0			139048.451548	Y
6	IC 280-562503/32	0.7007	97314.0			138881.118881	Y
7	IC 280-562503/31	1.001	137343.0			137205.794206	Y
8	IC 280-562503/30	2.5025	352260.0			140763.236763	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

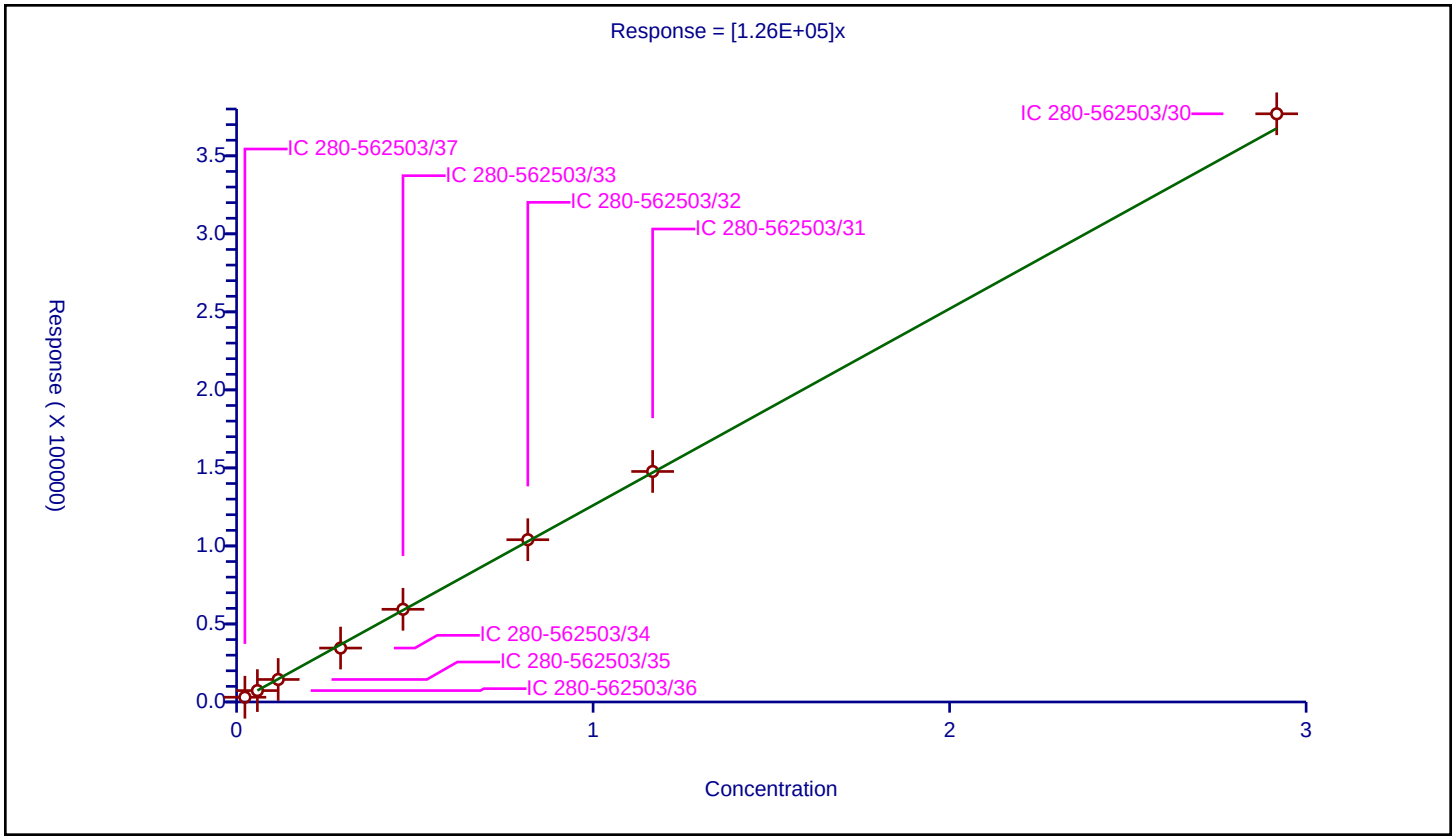
Curve Coefficients

Intercept:	0
Slope:	1.26E+05

Error Coefficients

Standard Error:	3670
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 280-562503/37	0.02334	3042.0			130334.190231	Y
2	IC 280-562503/36	0.05835	7298.0			125072.836332	Y
3	IC 280-562503/35	0.1167	14438.0			123718.937446	Y
4	IC 280-562503/34	0.29175	34560.0			118457.583548	Y
5	IC 280-562503/33	0.4668	59416.0			127283.633248	Y
6	IC 280-562503/32	0.8169	103999.0			127309.340189	Y
7	IC 280-562503/31	1.167	147726.0			126586.118252	Y
8	IC 280-562503/30	2.9175	376943.0			129200.685518	Y



FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1 Analy Batch No.: 567560

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/02/2022 21:22 Calibration End Date: 03/03/2022 02:03 Calibration ID: 62762

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-567560/18	03020018.D
Level 2	IC 280-567560/17	03020017.D
Level 3	IC 280-567560/16	03020016.D
Level 4	IC 280-567560/15	03020015.D
Level 5	IC 280-567560/14	03020014.D
Level 6	IC 280-567560/13	03020013.D
Level 7	IC 280-567560/12	03020012.D
Level 8	IC 280-567560/11	03020011.D
Level 9	IC 280-567560/10	03020010.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	6.887	6.896	6.894	6.896	6.889	6.880	6.863	6.860	6.791		6.739 - 7.039	6.873
Picric acid		7.863	7.767	7.696	7.602	7.527	7.430	7.346	7.231		7.452 - 7.752	7.558
RDX	9.114	9.129	9.120	9.129	9.115	9.100	9.083	9.066	8.985		8.965 - 9.265	9.093
Nitrobenzene	12.047	12.069	12.073	12.069	12.062	12.060	12.036	12.020	11.925		11.912 - 12.212	12.040
1,3-Dinitrobenzene	15.627	15.642	15.647	15.642	15.635	15.627	15.616	15.600	15.525		15.485 - 15.785	15.618
Nitroglycerin	16.054	16.062	16.073	16.062	16.055	16.054	16.050	16.033	15.971		15.905 - 16.205	16.046
2-Nitrotoluene	16.807	16.829	16.833	16.829	16.822	16.820	16.810	16.793	16.725		16.672 - 16.972	16.808
4-Nitrotoluene	17.147	17.129	17.147	17.136	17.129	17.127	17.123	17.100	17.018		16.979 - 17.279	17.117
4-Amino-2,6-dinitrotoluene	17.734	17.756	17.773	17.756	17.755	17.747	17.736	17.720	17.651		17.605 - 17.905	17.736
3-Nitrotoluene	18.094	18.116	18.120	18.109	18.102	18.100	18.090	18.073	18.005		17.952 - 18.252	18.090
2-Amino-4,6-dinitrotoluene	18.754	18.762	18.773	18.749	18.742	18.740	18.730	18.706	18.725		18.592 - 18.892	18.742
1,3,5-Trinitrobenzene	18.947	18.956	18.973	18.956	18.949	18.947	18.936	18.920	18.851		18.799 - 19.099	18.937
2,6-Dinitrotoluene	20.260	20.262	20.267	20.256	20.255	20.254	20.243	20.233	20.171		20.105 - 20.405	20.245
2,4-Dinitrotoluene	20.674	20.716	20.767	20.756	20.762	20.760	20.750	20.733	20.671		20.612 - 20.912	20.732
Tetryl	24.514	24.496	24.500	24.483	24.489	24.494	24.483	24.466	24.425		24.339 - 24.639	24.483
2,4,6-Trinitrotoluene	25.274	25.269	25.274	25.256	25.262	25.267	25.257	25.246	25.198		25.112 - 25.412	25.256
PETN	26.220	26.223	26.220	26.209	26.215	26.220	26.217	26.206	26.185		26.065 - 26.365	26.213
1,2-Dinitrobenzene	13.260	13.282	13.287	13.282	13.282	13.274	13.256	13.240	13.158		13.132 - 13.432	13.258

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-162622-1 Analy Batch No.: 567560

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/02/2022 21:22 Calibration End Date: 03/03/2022 02:03 Calibration ID: 62762

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-567560/18	03020018.D
Level 2	IC 280-567560/17	03020017.D
Level 3	IC 280-567560/16	03020016.D
Level 4	IC 280-567560/15	03020015.D
Level 5	IC 280-567560/14	03020014.D
Level 6	IC 280-567560/13	03020013.D
Level 7	IC 280-567560/12	03020012.D
Level 8	IC 280-567560/11	03020011.D
Level 9	IC 280-567560/10	03020010.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	204000 153272 187359	156350 157048	161060 156446	161090 158593	Ave		166135.268				10.5		20.0			
Picric acid	 137152 100000	115050 145895	127120 147056	140090 150719	Ave		132885.214				13.3		20.0			
RDX	209700 185668 192949	185950 191778	200560 191473	197500 193402	Ave		194331.017				3.8		20.0			
Nitrobenzene	387450 359546 376404	332968 370117	381454 369358	371225 366118	Ave		368293.361				4.2		20.0			
1,3-Dinitrobenzene	594910 544854 583320	531088 563411	602415 562742	594182 568076	Ave		571666.383				4.2		20.0			
Nitroglycerin	106640 123863 126320	108750 129921	119788 126936	133241 127202	Ave		122517.801				7.5		20.0			
2-Nitrotoluene	249100 224884 232108	230350 232660	241140 230763	238570 232476	Ave		234672.317				3.1		20.0			
4-Nitrotoluene	219860 201816 215781	203493 209224	211477 208958	215818 210922	Ave		210816.657				2.8		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-162622-1 Analy Batch No.: 567560

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/02/2022 21:22 Calibration End Date: 03/03/2022 02:03 Calibration ID: 62762

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	260739 258018 268817	263287 267340	268232 265560	271888 269422	Lin2	-62.900141	267244.423							1.0000		0.9900
3-Nitrotoluene	254046 256344 271648	240010 266386	267473 265219	269510 267544	Lin2	-189.49318	266002.360							0.9990		0.9900
2-Amino-4,6-dinitrotoluene	369024 350637 335952	343576 365448	369761 366702	370299 373422	Ave		360535.698				3.8		20.0			
1,3,5-Trinitrobenzene	393912 409485 468023	347804 424182	425928 421012	424291 424539	Ave		415464.126				7.7		20.0			
2,6-Dinitrotoluene	269323 256928 267124	260608 264846	274044 264869	265807 267408	Ave		265661.838				1.8		20.0			
2,4-Dinitrotoluene	1185259 555279 545162	839791 549871	675657 543624	639313 546924	Lin2	6399.59049	541564.591							0.9990		0.9900
Tetryl	471257 308379 316049	345958 315734	361477 313195	331218 316267	Ave		342170.507				15.0		20.0			
2,4,6-Trinitrotoluene	370518 363896 385306	324054 376581	369641 378025	370568 384024	Ave		369179.221				5.0		20.0			
PETN	108420 131804 136767	109615 136247	134164 135887	134076 136984	Ave		129329.182				9.0		20.0			
1,2-Dinitrobenzene	246100 244792 252426	240450 249510	257280 250511	254990 251717	Ave		249752.937				2.1		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 Denver Job No.: 280-162622-1 Analy Batch No.: 567560

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/02/2022 21:22 Calibration End Date: 03/03/2022 02:03 Calibration ID: 62762

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-567560/18	03020018.D
Level 2	IC 280-567560/17	03020017.D
Level 3	IC 280-567560/16	03020016.D
Level 4	IC 280-567560/15	03020015.D
Level 5	IC 280-567560/14	03020014.D
Level 6	IC 280-567560/13	03020013.D
Level 7	IC 280-567560/12	03020012.D
Level 8	IC 280-567560/11	03020011.D
Level 9	IC 280-567560/10	03020010.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	2040 62819	3127 109512	8053 158593	16109 468398	38318	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Picric acid	Ave	 58358	2301 102939	6356 150719	14009 250000	34288	 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
RDX	Ave	2097 76711	3719 134031	10028 193402	19750 482372	46417	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Nitrobenzene	Ave	3890 148639	6686 259585	19149 367582	37271 944774	90246	0.0100 0.402	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251
1,3-Dinitrobenzene	Ave	5961 225815	10643 394707	30181 569212	59537 1461217	136486	0.0100 0.401	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251
Nitroglycerin	Ave	10664 519683	21750 888552	59894 1272015	133241 3158004	309657	0.100 4.00	0.200 7.00	0.500 10.0	1.00 25.0	2.50
2-Nitrotoluene	Ave	2491 93064	4607 161534	12057 232476	23857 580270	56221	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
4-Nitrotoluene	Ave	2203 83857	4078 146563	10595 211344	21625 540531	50555	0.0100 0.401	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251
4-Amino-2,6-dinitrotoluene	Lin2	2610 107043	5271 186078	13425 269691	27216 672715	64569	0.0100 0.400	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250
3-Nitrotoluene	Lin2	2543 106661	4805 185839	13387 267812	26978 679800	64150	0.0100 0.400	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250
2-Amino-4,6-dinitrotoluene	Ave	3705 146764	6899 257718	18562 374916	37178 843240	88010	0.0100 0.402	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251
1,3,5-Trinitrobenzene	Ave	3947 170012	6970 295298	21339 425388	42514 1172398	102576	0.0100 0.401	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251
2,6-Dinitrotoluene	Ave	2704	5233	13757	26687	64489	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 Denver Job No.: 280-162622-1 Analy Batch No.: 567560

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/02/2022 21:22 Calibration End Date: 03/03/2022 02:03 Calibration ID: 62762

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
		106362	186150	268478	670482		0.402	0.703	1.00	2.51	
2,4-Dinitrotoluene	Lin2	11900 220828	16863 382059	33918 549112	64187 1368356	139375	0.0100 0.402	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251
Tetryl	Ave	4722 126546	6933 219675	18110 316900	33188 791703	77249	0.0100 0.401	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251
2,4,6-Trinitrotoluene	Ave	3720 151235	6507 265676	18556 385560	37205 967117	91338	0.0100 0.402	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251
PETN	Ave	10842 544987	21923 951206	67082 1369840	134076 3419168	329509	0.100 4.00	0.200 7.00	0.500 10.0	1.00 25.0	2.50
1,2-Dinitrobenzene	Ave	2461 99804	4809 175358	12864 251717	25499 631065	61198	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250

Curve Type Legend
Ave = Average
Lin2 = Linear 1/conc^2

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020010.D
Lims ID: IC INT/ADD 9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 02-Mar-2022 21:22:03 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 9
Misc. Info.: 280-0108949-010
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 03-Mar-2022 12:49:12 Calib Date: 03-Mar-2022 07:19:48
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 03-Mar-2022 12:05:51

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.071	4.142	-0.071	1053484	2.50	2.59	M
2 2,4-diamino-6-nitrotoluene	1	4.698	4.669	0.029	475027	2.50	2.09	M
5 HMX	1	6.791	6.889	-0.098	468398	2.50	2.82	
7 2,4,6-Trinitrophenol	1	7.231	7.602	-0.371	250000	2.50	1.88	
8 RDX	1	8.985	9.115	-0.130	482372	2.50	2.48	
9 Nitrobenzene	1	11.925	12.062	-0.137	944774	2.51	2.57	
$ 10 1,2-Dinitrobenzene	1	13.158	13.282	-0.124	631065	2.50	2.53	
11 3,5-Dinitroaniline	1	15.151	15.269	-0.118	1039131	2.50	2.53	
12 1,3-Dinitrobenzene	1	15.525	15.635	-0.110	1461217	2.51	2.56	
13 Nitroglycerin	2	15.971	16.055	-0.084	3158004	25.0	25.8	
14 o-Nitrotoluene	1	16.725	16.822	-0.097	580270	2.50	2.47	
16 p-Nitrotoluene	1	17.018	17.129	-0.111	540531	2.51	2.56	
17 4-Amino-2,6-dinitrotoluene	1	17.651	17.755	-0.104	672715	2.50	2.52	
18 m-Nitrotoluene	1	18.005	18.102	-0.097	679800	2.50	2.56	
19 2-Amino-4,6-dinitrotoluene	1	18.725	18.742	-0.017	843240	2.51	2.34	M
20 1,3,5-Trinitrobenzene	1	18.851	18.949	-0.098	1172398	2.51	2.82	M
21 2,6-Dinitrotoluene	1	20.171	20.255	-0.084	670482	2.51	2.52	
22 2,4-Dinitrotoluene	1	20.671	20.762	-0.091	1368356	2.51	2.51	
23 Tetryl	1	24.425	24.489	-0.064	791703	2.51	2.31	
24 2,4,6-Trinitrotoluene	1	25.198	25.262	-0.064	967117	2.51	2.62	
25 PETN	2	26.185	26.215	-0.030	3419168	25.0	26.4	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00070	Amount Added: 250.00	Units: uL
8330_ADDs_00031	Amount Added: 125.00	Units: uL

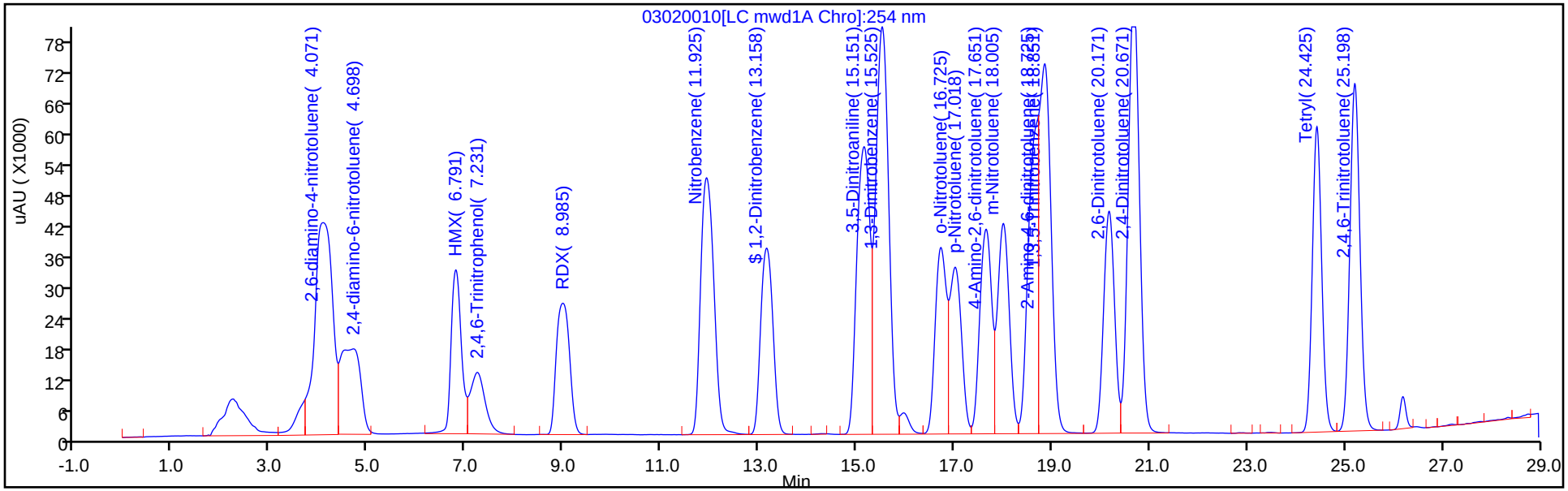
Report Date: 03-Mar-2022 12:49:12 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

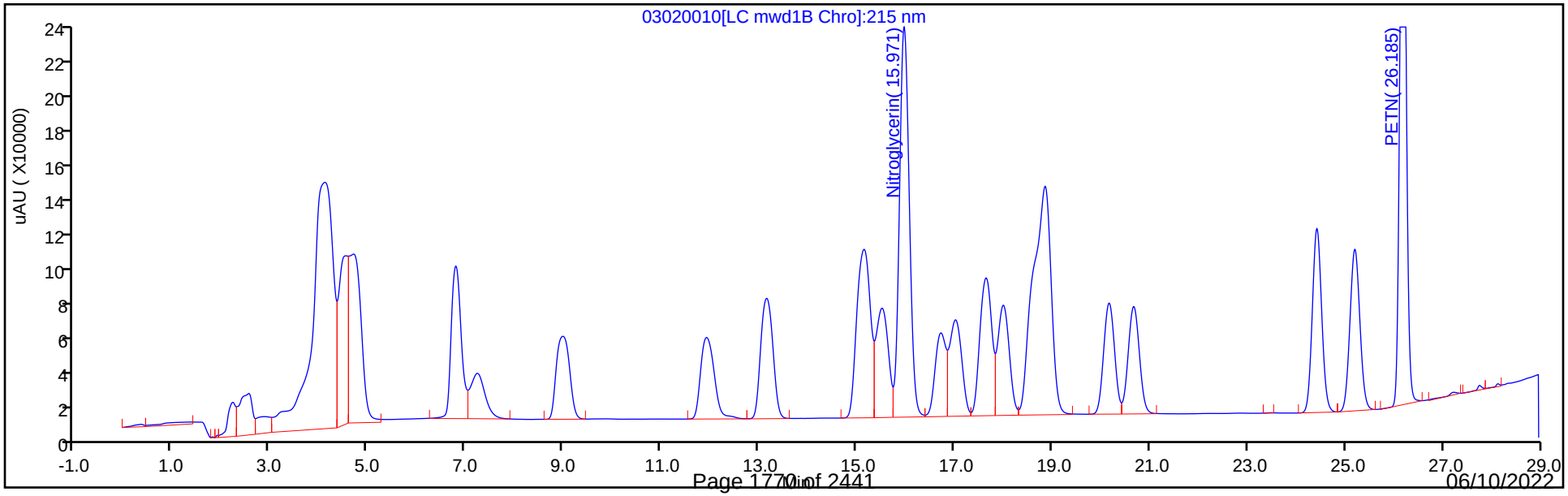
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020010.D

Injection Date:	02-Mar-2022 21:22:03	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 Denver

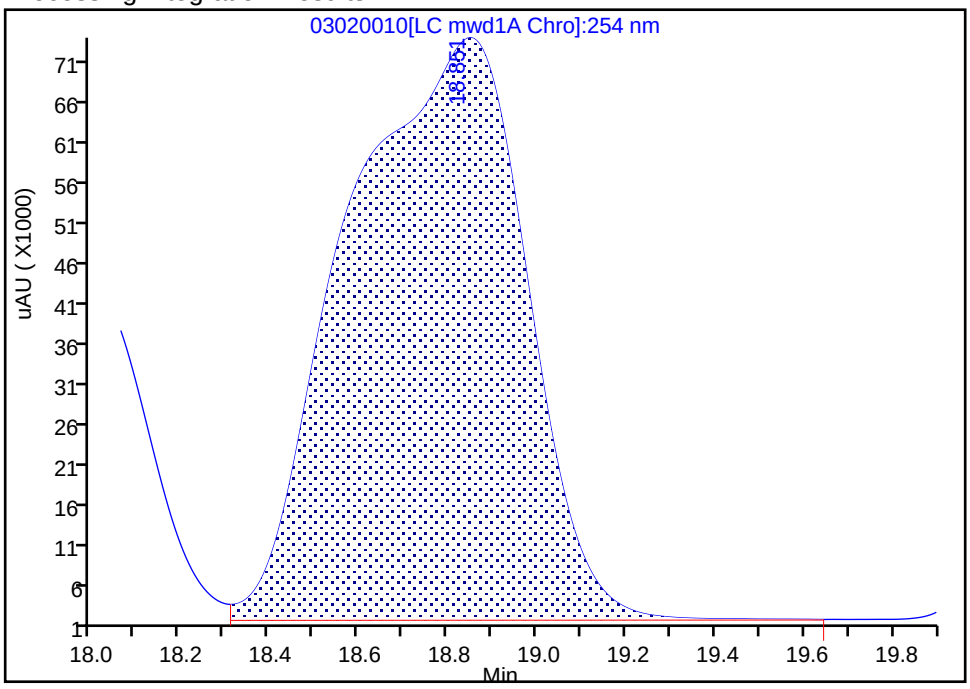
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020010.D
Injection Date: 02-Mar-2022 21:22:03 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 9
Client ID:
Operator ID: JZ ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC mwd1A, 254 nm

20 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

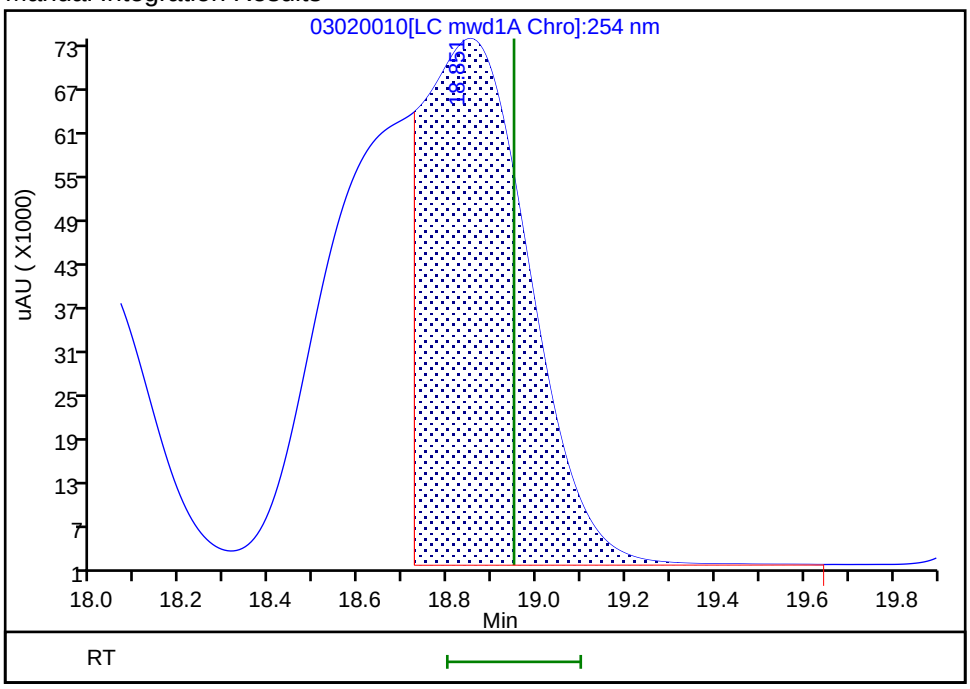
Processing Integration Results

RT: 18.85
Area: 2015640
Amount: 4.231891
Amount Units: ug/ml



Manual Integration Results

RT: 18.85
Area: 1172398
Amount: 2.821899
Amount Units: ug/ml



Reviewer: zhangji, 03-Mar-2022 12:08:36
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020011.D
Lims ID: IC INT/ADD 8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 02-Mar-2022 21:57:13 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 8
Misc. Info.: 280-0108949-011
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 03-Mar-2022 12:49:13 Calib Date: 03-Mar-2022 07:19:48
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 03-Mar-2022 12:09:27

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.093	4.142	-0.049	386260	1.00	0.9503	M
2 2,4-diamino-6-nitrotoluene	1	4.713	4.669	0.044	247885	1.00	1.09	M
5 HMX	1	6.860	6.889	-0.029	158593	1.00	0.9546	
7 2,4,6-Trinitrophenol	1	7.346	7.602	-0.256	150719	1.00	1.13	
8 RDX	1	9.066	9.115	-0.049	193402	1.00	1.00	
9 Nitrobenzene	1	12.020	12.062	-0.042	367582	1.00	1.00	
$ 10 1,2-Dinitrobenzene	1	13.240	13.282	-0.042	251717	1.00	1.01	
11 3,5-Dinitroaniline	1	15.226	15.269	-0.043	419224	1.00	1.02	
12 1,3-Dinitrobenzene	1	15.600	15.635	-0.035	569212	1.00	1.00	
13 Nitroglycerin	2	16.033	16.055	-0.022	1272015	10.0	10.4	
14 o-Nitrotoluene	1	16.793	16.822	-0.029	232476	1.00	0.99	
16 p-Nitrotoluene	1	17.100	17.129	-0.029	211344	1.00	1.00	
17 4-Amino-2,6-dinitrotoluene	1	17.720	17.755	-0.035	269691	1.00	1.01	
18 m-Nitrotoluene	1	18.073	18.102	-0.029	267812	1.00	1.01	
19 2-Amino-4,6-dinitrotoluene	1	18.706	18.742	-0.036	374916	1.00	1.04	
20 1,3,5-Trinitrobenzene	1	18.920	18.949	-0.029	425388	1.00	1.02	
21 2,6-Dinitrotoluene	1	20.233	20.255	-0.022	268478	1.00	1.01	
22 2,4-Dinitrotoluene	1	20.733	20.762	-0.029	549112	1.00	1.00	
23 Tetryl	1	24.466	24.489	-0.023	316900	1.00	0.9261	
24 2,4,6-Trinitrotoluene	1	25.246	25.262	-0.016	385560	1.00	1.04	
25 PETN	2	26.206	26.215	-0.009	1369840	10.0	10.6	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00070	Amount Added: 100.00	Units: uL
8330_ADDs_00031	Amount Added: 50.00	Units: uL

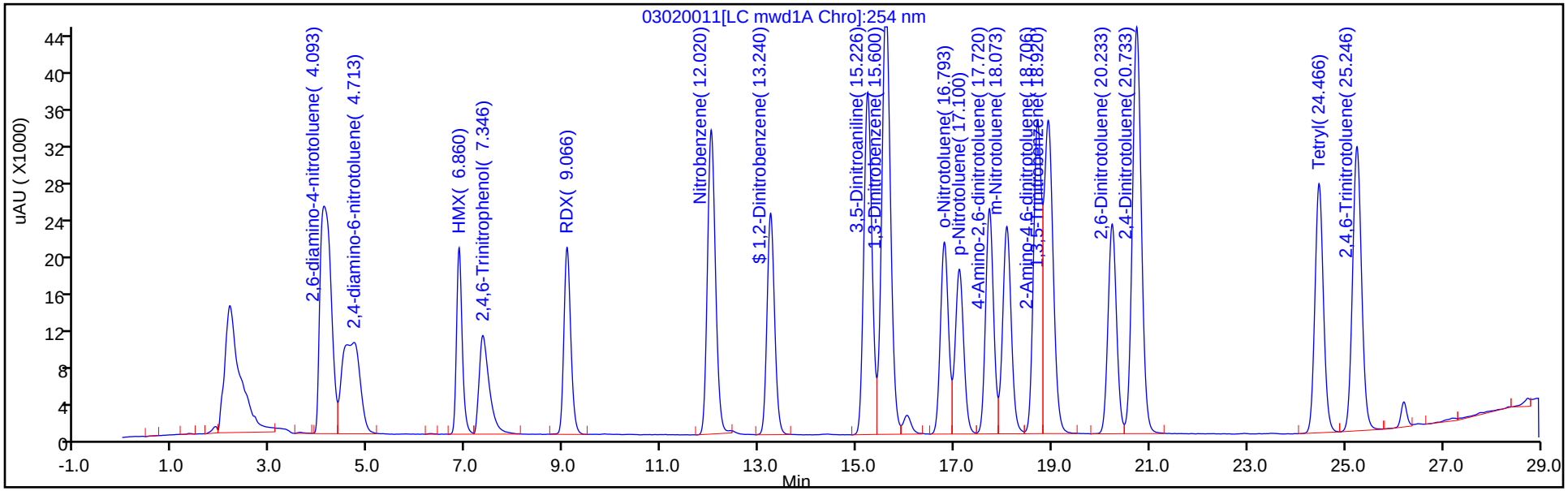
Report Date: 03-Mar-2022 12:49:13 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

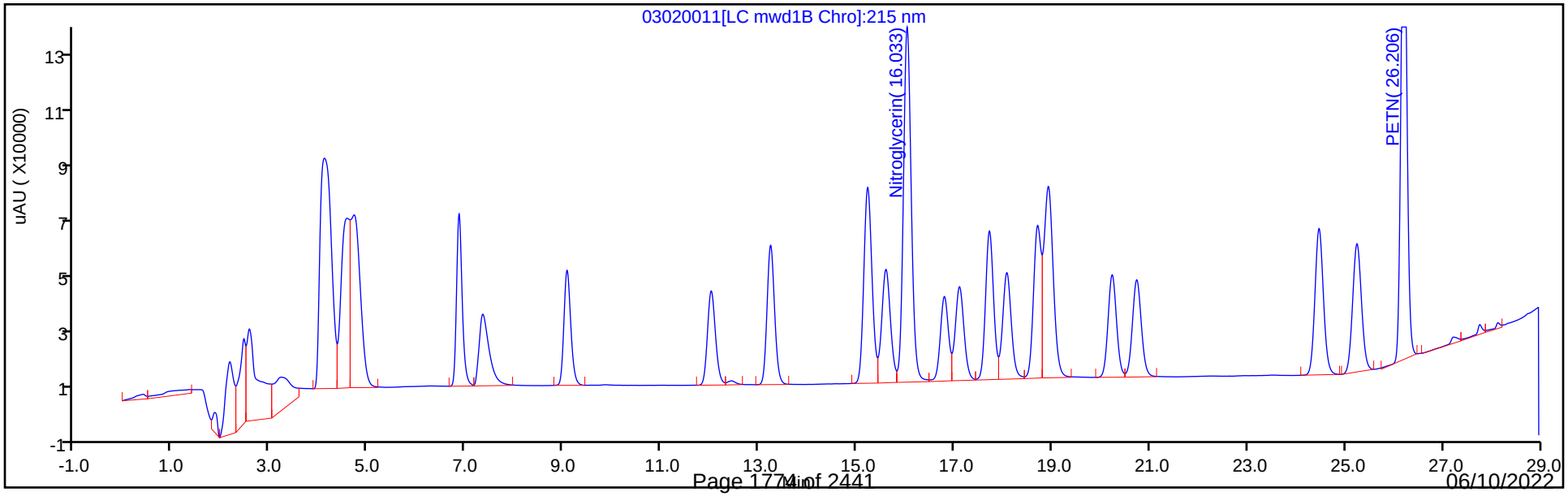
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020011.D

Injection Date:	02-Mar-2022 21:57:13	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



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020012.D
Lims ID: IC INT/ADD 7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 02-Mar-2022 22:32:16 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 7
Misc. Info.: 280-0108949-012
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 03-Mar-2022 12:49:14 Calib Date: 03-Mar-2022 07:19:48
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 03-Mar-2022 12:09:45

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 2,6-diamino-4-nitrotoluene	1	4.110	4.142	-0.032	273235	0.7000	0.6722	M
	2 2,4-diamino-6-nitrotoluene	1	4.710	4.669	0.041	172644	0.7000	0.7557	M
	5 HMX	1	6.863	6.889	-0.026	109512	0.7000	0.6592	
	7 2,4,6-Trinitrophenol	1	7.430	7.602	-0.172	102939	0.7000	0.7746	
	8 RDX	1	9.083	9.115	-0.032	134031	0.7000	0.6897	
	9 Nitrobenzene	1	12.036	12.062	-0.026	259585	0.7028	0.7048	
$	10 1,2-Dinitrobenzene	1	13.256	13.282	-0.026	175358	0.7000	0.7021	
	11 3,5-Dinitroaniline	1	15.243	15.269	-0.026	294648	0.7000	0.7162	
	12 1,3-Dinitrobenzene	1	15.616	15.635	-0.019	394707	0.7014	0.6904	
	13 Nitroglycerin	2	16.050	16.055	-0.005	888552	7.00	7.25	
	14 o-Nitrotoluene	1	16.810	16.822	-0.012	161534	0.7000	0.6883	
	16 p-Nitrotoluene	1	17.123	17.129	-0.006	146563	0.7014	0.6952	
	17 4-Amino-2,6-dinitrotoluene	1	17.736	17.755	-0.019	186078	0.7007	0.6965	
	18 m-Nitrotoluene	1	18.090	18.102	-0.012	185839	0.7007	0.6993	
	19 2-Amino-4,6-dinitrotoluene	1	18.730	18.742	-0.012	257718	0.7028	0.7148	
	20 1,3,5-Trinitrobenzene	1	18.936	18.949	-0.013	295298	0.7014	0.7108	
	21 2,6-Dinitrotoluene	1	20.243	20.255	-0.012	186150	0.7028	0.7007	
	22 2,4-Dinitrotoluene	1	20.750	20.762	-0.012	382059	0.7028	0.6937	
	23 Tetryl	1	24.483	24.489	-0.006	219675	0.7014	0.6420	
	24 2,4,6-Trinitrotoluene	1	25.257	25.262	-0.005	265676	0.7028	0.7196	
	25 PETN	2	26.217	26.215	0.002	951206	7.00	7.35	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00070	Amount Added:	70.00	Units: uL
8330_ADDs_00031	Amount Added:	35.00	Units: uL

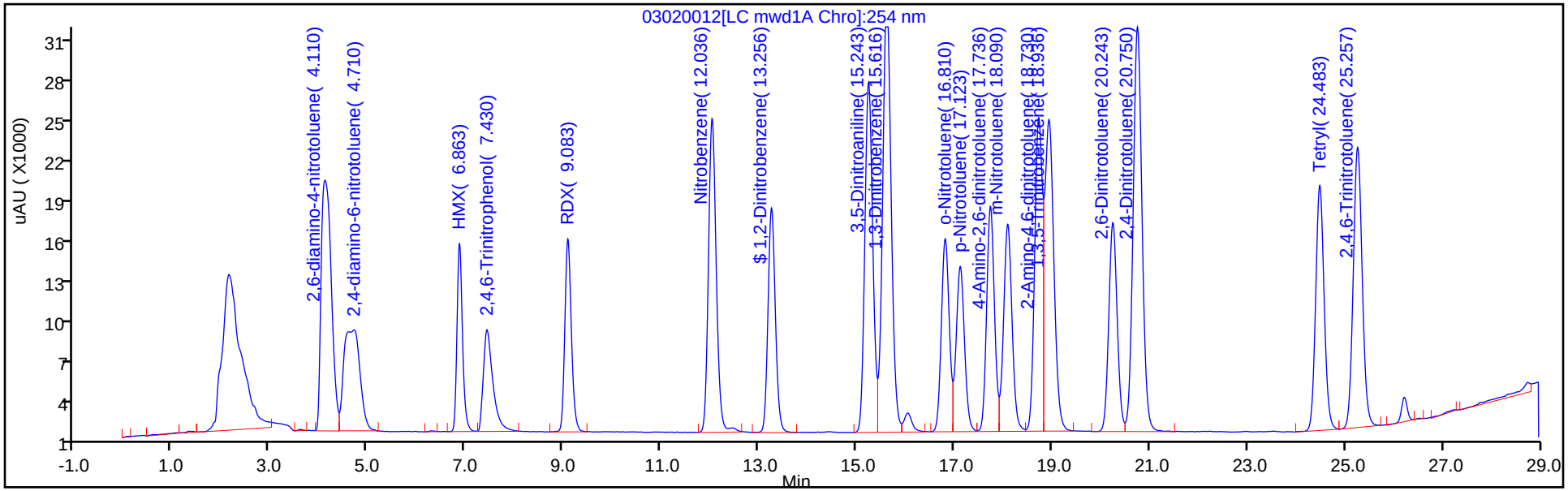
Report Date: 03-Mar-2022 12:49:14 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

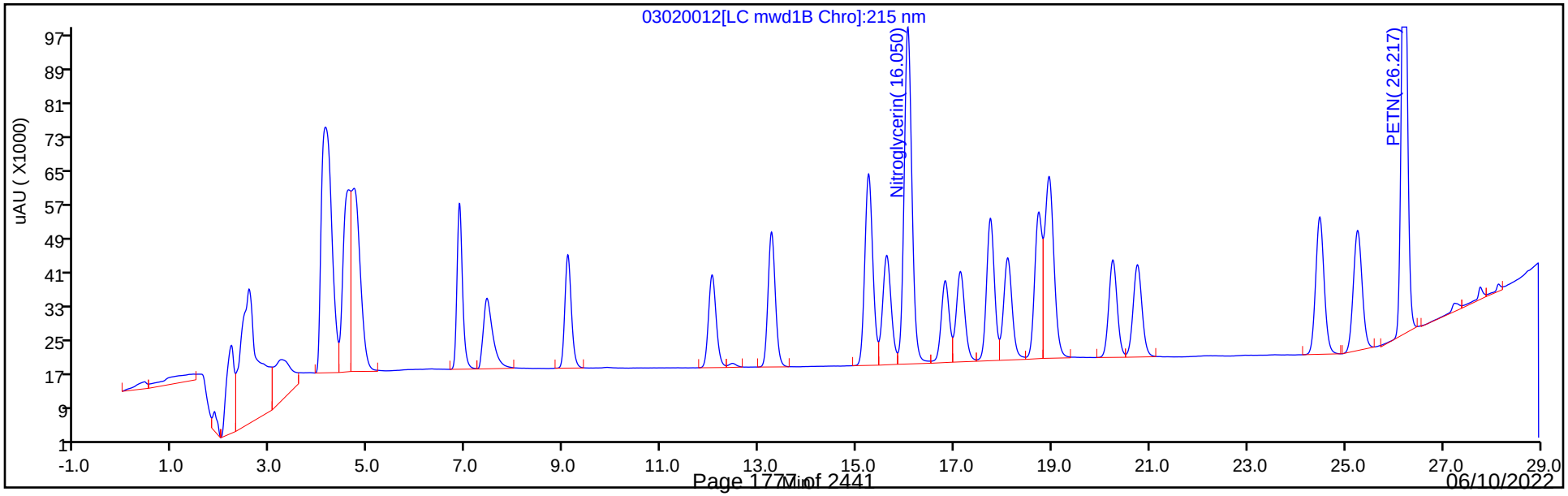
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020012.D

Injection Date:	02-Mar-2022 22:32:16	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



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020013.D
Lims ID: IC INT/ADD 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 02-Mar-2022 23:07:23 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 6
Misc. Info.: 280-0108949-013
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 03-Mar-2022 12:49:14 Calib Date: 03-Mar-2022 07:19:48
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.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
1 2,6-diamino-4-nitrotoluene	1	4.127	4.142	-0.015	147662	0.4000	0.3633	
2 2,4-diamino-6-nitrotoluene	1	4.700	4.669	0.031	93419	0.4000	0.4055	
5 HMX	1	6.880	6.889	-0.009	62819	0.4000	0.3781	
7 2,4,6-Trinitrophenol	1	7.527	7.602	-0.075	58358	0.4000	0.4392	
8 RDX	1	9.100	9.115	-0.015	76711	0.4000	0.3947	
9 Nitrobenzene	1	12.060	12.062	-0.002	148639	0.4016	0.4036	
$ 10 1,2-Dinitrobenzene	1	13.274	13.282	-0.008	99804	0.4000	0.3996	
11 3,5-Dinitroaniline	1	15.260	15.269	-0.009	157805	0.4000	0.3835	
12 1,3-Dinitrobenzene	1	15.627	15.635	-0.008	225815	0.4008	0.3950	
13 Nitroglycerin	2	16.054	16.055	-0.001	519683	4.00	4.24	
14 o-Nitrotoluene	1	16.820	16.822	-0.002	93064	0.4000	0.3966	
16 p-Nitrotoluene	1	17.127	17.129	-0.002	83857	0.4008	0.3978	
17 4-Amino-2,6-dinitrotoluene	1	17.747	17.755	-0.008	107043	0.4004	0.4008	
18 m-Nitrotoluene	1	18.100	18.102	-0.002	106661	0.4004	0.4017	
19 2-Amino-4,6-dinitrotoluene	1	18.740	18.742	-0.002	146764	0.4016	0.4071	
20 1,3,5-Trinitrobenzene	1	18.947	18.949	-0.002	170012	0.4008	0.4092	
21 2,6-Dinitrotoluene	1	20.254	20.255	-0.001	106362	0.4016	0.4004	
22 2,4-Dinitrotoluene	1	20.760	20.762	-0.002	220828	0.4016	0.3959	
23 Tetryl	1	24.494	24.489	0.005	126546	0.4008	0.3698	
24 2,4,6-Trinitrotoluene	1	25.267	25.262	0.005	151235	0.4016	0.4097	
25 PETN	2	26.220	26.215	0.005	544987	4.00	4.21	

Reagents:

8330IntermStk_00070 Amount Added: 40.00 Units: uL
8330_ADDs_00031 Amount Added: 20.00 Units: uL

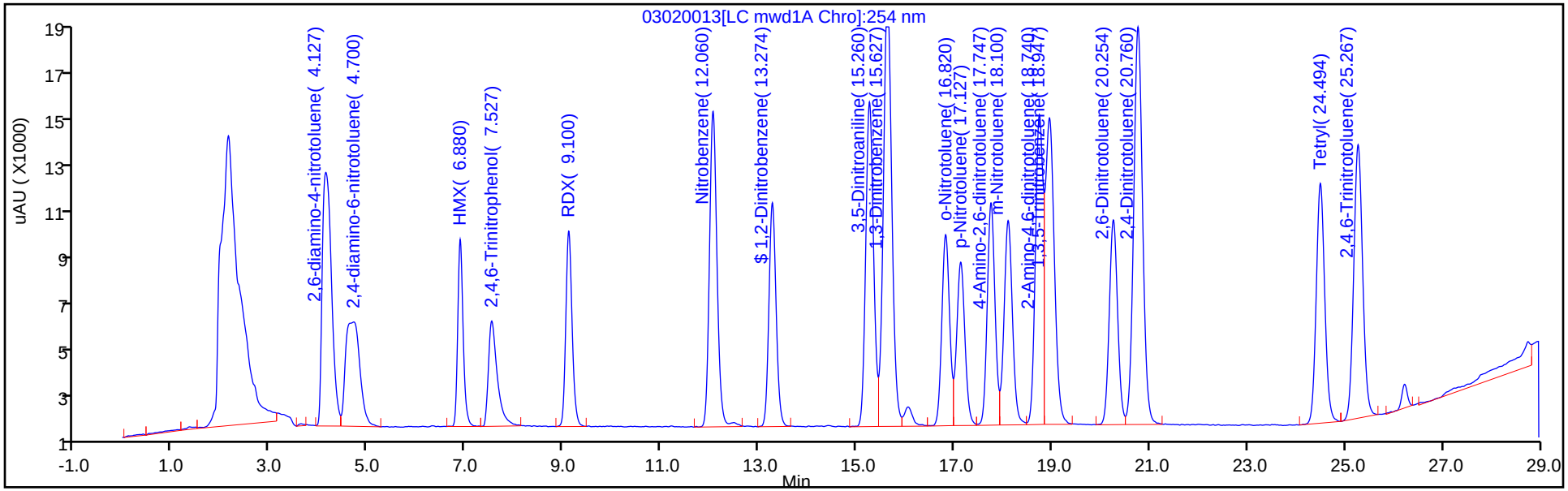
Report Date: 03-Mar-2022 12:49:14 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

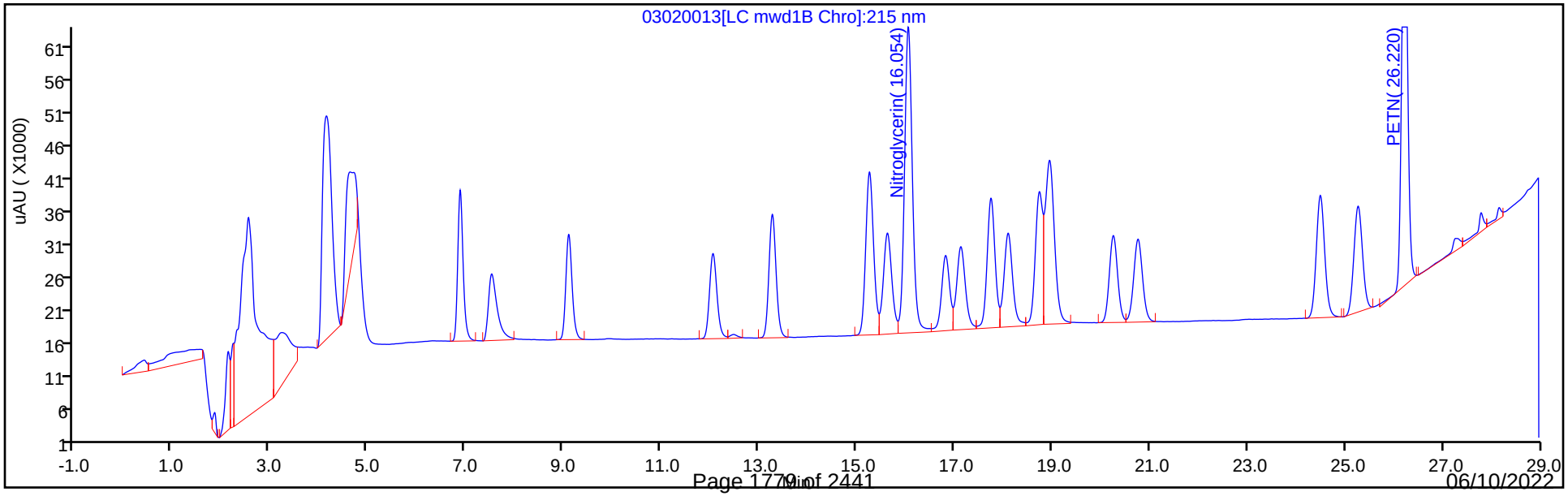
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020013.D

Injection Date:	02-Mar-2022 23:07:23	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



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020014.D
Lims ID: IC INT/ADD 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 02-Mar-2022 23:42:39 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 5
Misc. Info.: 280-0108949-014
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 03-Mar-2022 12:49:15 Calib Date: 03-Mar-2022 07:19:48
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 03-Mar-2022 12:06:29

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	4.142	4.142	0.000	96596	0.2500	0.2377	
2 2,4-diamino-6-nitrotoluene	1	4.669	4.669	0.000	59944	0.2500	0.2576	
5 HMX	1	6.889	6.889	0.000	38318	0.2500	0.2306	
7 2,4,6-Trinitrophenol	1	7.602	7.602	0.000	34288	0.2500	0.2580	
8 RDX	1	9.115	9.115	0.000	46417	0.2500	0.2389	
9 Nitrobenzene	1	12.062	12.062	0.000	90246	0.2510	0.2450	
$ 10 1,2-Dinitrobenzene	1	13.282	13.282	0.000	61198	0.2500	0.2450	
11 3,5-Dinitroaniline	1	15.269	15.269	0.000	102787	0.2500	0.2497	
12 1,3-Dinitrobenzene	1	15.635	15.635	0.000	136486	0.2505	0.2388	
13 Nitroglycerin	2	16.055	16.055	0.000	309657	2.50	2.53	
14 o-Nitrotoluene	1	16.822	16.822	0.000	56221	0.2500	0.2396	
16 p-Nitrotoluene	1	17.129	17.129	0.000	50555	0.2505	0.2398	
17 4-Amino-2,6-dinitrotoluene	1	17.755	17.755	0.000	64569	0.2503	0.2418	
18 m-Nitrotoluene	1	18.102	18.102	0.000	64150	0.2503	0.2419	
19 2-Amino-4,6-dinitrotoluene	1	18.742	18.742	0.000	88010	0.2510	0.2441	
20 1,3,5-Trinitrobenzene	1	18.949	18.949	0.000	102576	0.2505	0.2469	
21 2,6-Dinitrotoluene	1	20.255	20.255	0.000	64489	0.2510	0.2427	
22 2,4-Dinitrotoluene	1	20.762	20.762	0.000	139375	0.2510	0.2455	
23 Tetryl	1	24.489	24.489	0.000	77249	0.2505	0.2258	
24 2,4,6-Trinitrotoluene	1	25.262	25.262	0.000	91338	0.2510	0.2474	
25 PETN	2	26.215	26.215	0.000	329509	2.50	2.55	

QC Flag Legend
Processing Flags

Reagents:

8330IntermStk_00070	Amount Added:	25.00	Units: uL
8330_ADDs_00031	Amount Added:	12.50	Units: uL

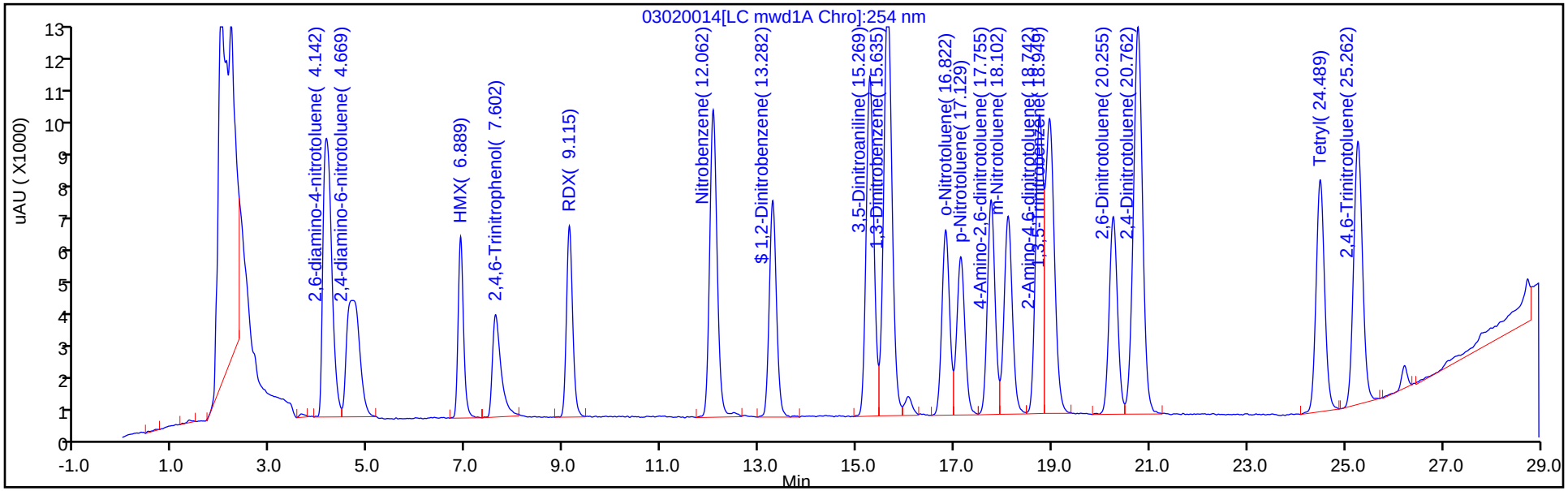
Report Date: 03-Mar-2022 12:49:15 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

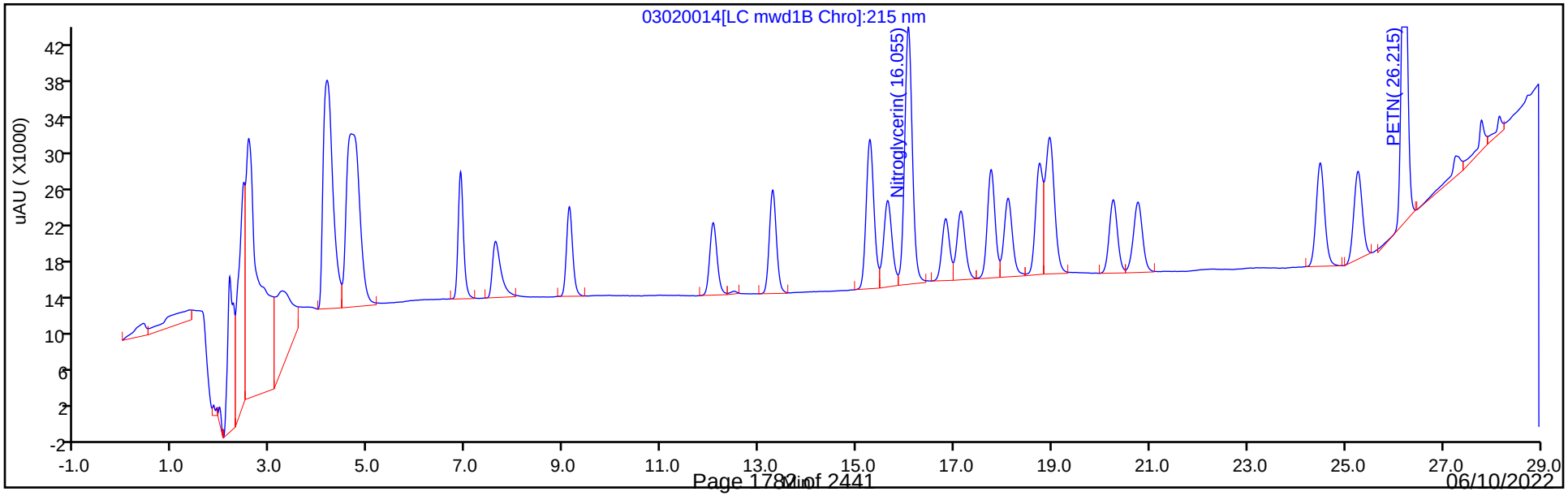
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020014.D

Injection Date:	02-Mar-2022 23:42:39	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



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020015.D
Lims ID: IC INT/ADD 4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 03-Mar-2022 00:17:55 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 4
Misc. Info.: 280-0108949-015
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 03-Mar-2022 12:49:16 Calib Date: 03-Mar-2022 07:19:48
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 03-Mar-2022 12:12:37

	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	4.149	4.142	0.007	41030	0.1000	0.1009	
	2 2,4-diamino-6-nitrotoluene	1	4.669	4.669	0.000	24932	0.1000	0.1028	
	5 HMX	1	6.896	6.889	0.007	16109	0.1000	0.0970	
	7 2,4,6-Trinitrophenol	1	7.696	7.602	0.094	14009	0.1000	0.1054	
	8 RDX	1	9.129	9.115	0.014	19750	0.1000	0.1016	
	9 Nitrobenzene	1	12.069	12.062	0.007	37271	0.1004	0.1012	
$	10 1,2-Dinitrobenzene	1	13.282	13.282	0.000	25499	0.1000	0.1021	
	11 3,5-Dinitroaniline	1	15.276	15.269	0.007	42107	0.1000	0.1022	
	12 1,3-Dinitrobenzene	1	15.642	15.635	0.007	59537	0.1002	0.1041	
	13 Nitroglycerin	2	16.062	16.055	0.007	133241	1.00	1.09	
	14 o-Nitrotoluene	1	16.829	16.822	0.007	23857	0.1000	0.1017	
	16 p-Nitrotoluene	1	17.136	17.129	0.007	21625	0.1002	0.1026	
	17 4-Amino-2,6-dinitrotoluene	1	17.756	17.755	0.001	27216	0.1001	0.1021	
	18 m-Nitrotoluene	1	18.109	18.102	0.007	26978	0.1001	0.1021	
	19 2-Amino-4,6-dinitrotoluene	1	18.749	18.742	0.007	37178	0.1004	0.1031	
	20 1,3,5-Trinitrobenzene	1	18.956	18.949	0.007	42514	0.1002	0.1023	
	21 2,6-Dinitrotoluene	1	20.256	20.255	0.001	26687	0.1004	0.1005	
	22 2,4-Dinitrotoluene	1	20.756	20.762	-0.006	64187	0.1004	0.1067	
	23 Tetryl	1	24.483	24.489	-0.006	33188	0.1002	0.0970	
	24 2,4,6-Trinitrotoluene	1	25.256	25.262	-0.006	37205	0.1004	0.1008	
	25 PETN	2	26.209	26.215	-0.006	134076	1.00	1.04	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00070	Amount Added:	10.00	Units: uL
8330_ADDs_00031	Amount Added:	5.00	Units: uL

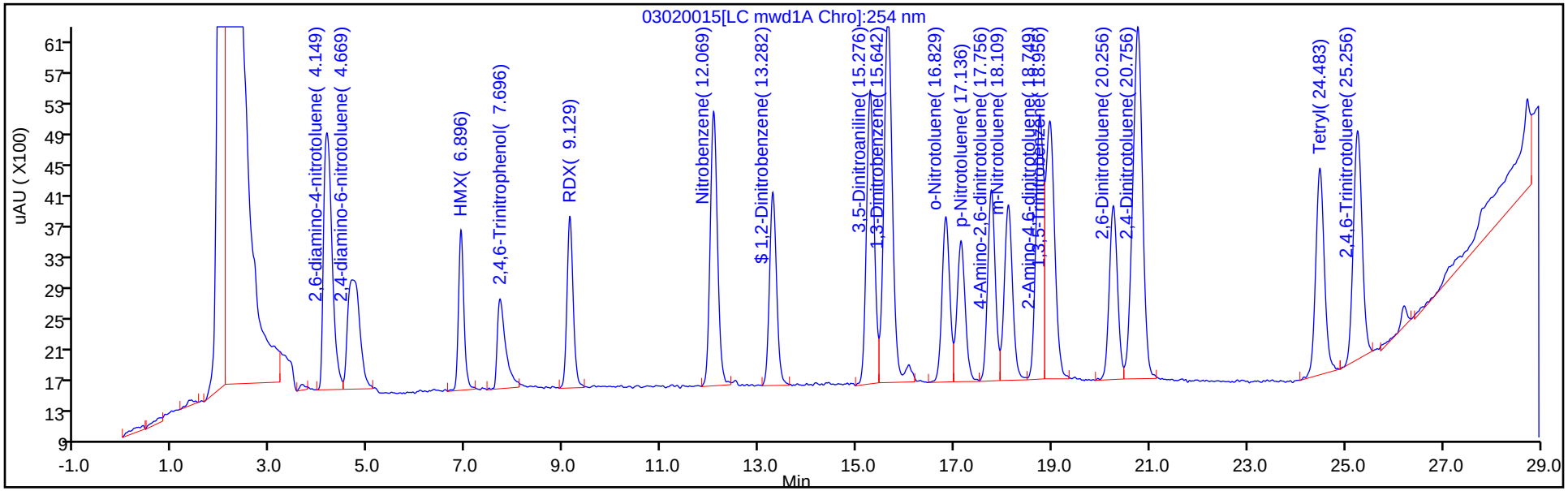
Report Date: 03-Mar-2022 12:49:16 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

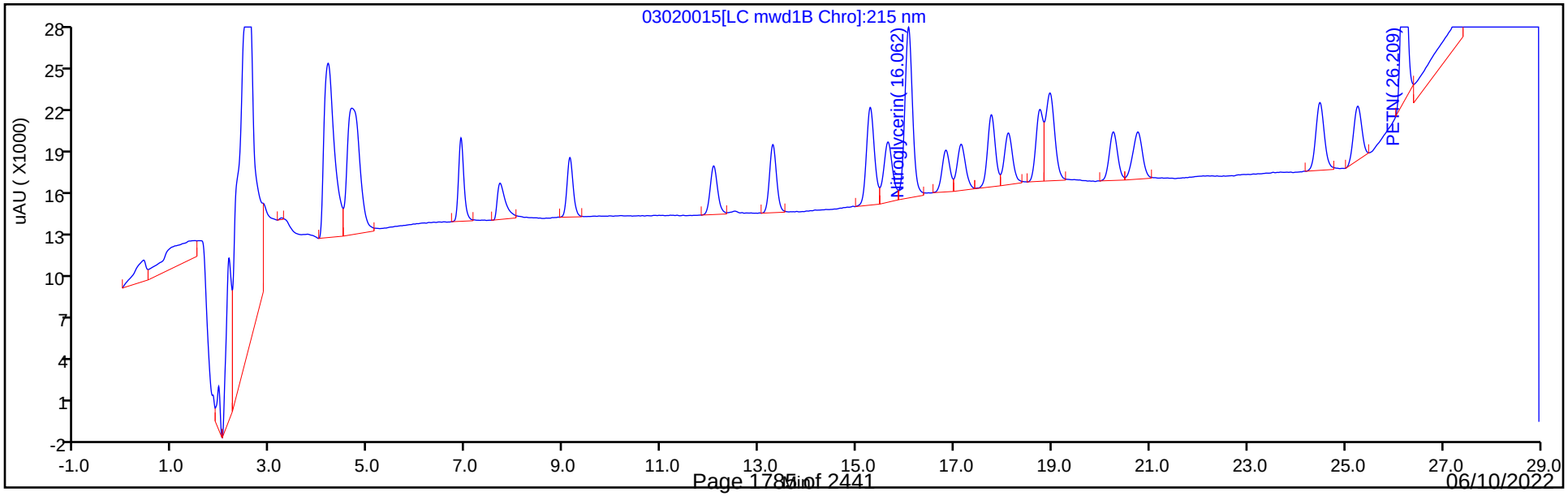
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020015.D

Injection Date:	03-Mar-2022 00:17:55	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 Denver

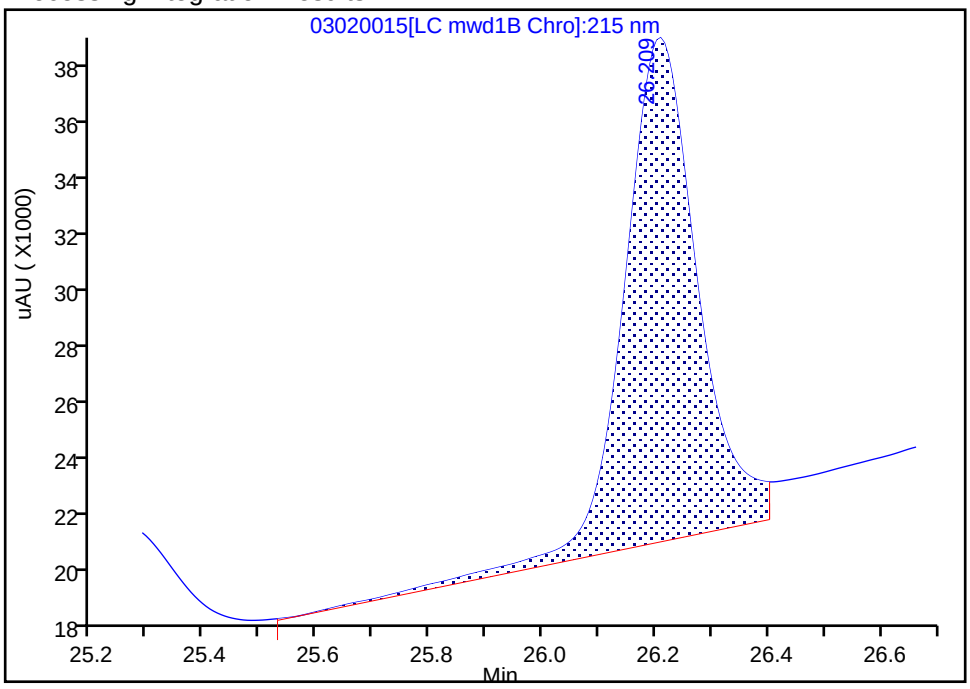
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020015.D				
Injection Date:	03-Mar-2022 00:17:55	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT/ADD 4				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:		Detector	LC mwd1B, 215 nm		

25 PETN, CAS: 78-11-5

Signal: 1

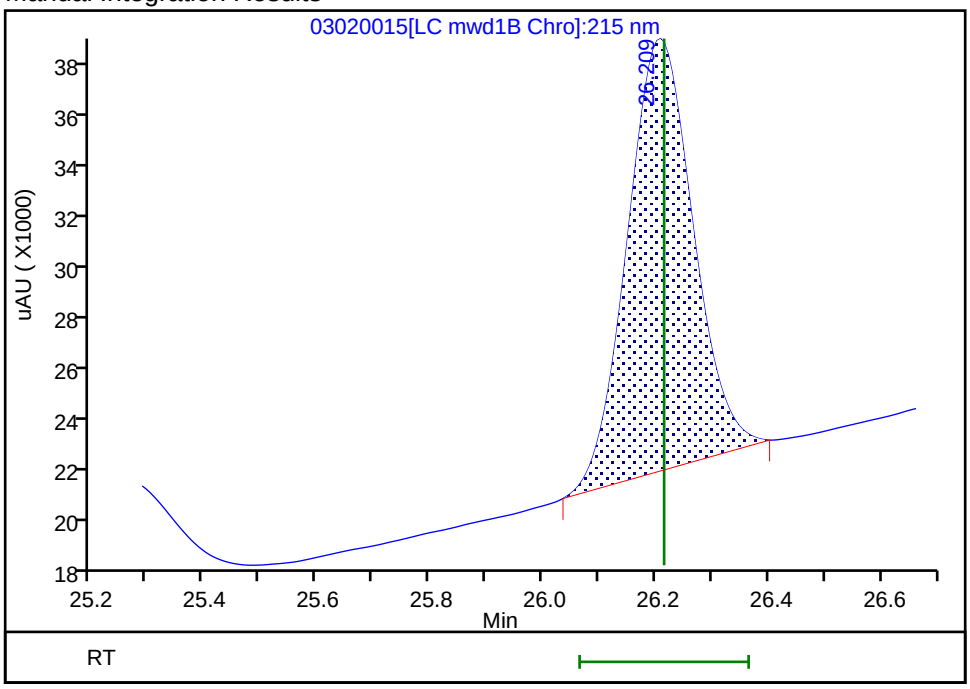
Processing Integration Results

RT: 26.21
Area: 159234
Amount: 1.166681
Amount Units: ug/ml



Manual Integration Results

RT: 26.21
Area: 134076
Amount: 1.036703
Amount Units: ug/ml



Reviewer: zhangji, 03-Mar-2022 12:12:35
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020016.D
Lims ID: IC INT/ADD 3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 03-Mar-2022 00:53:03 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 3
Misc. Info.: 280-0108949-016
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 03-Mar-2022 12:49:16 Calib Date: 03-Mar-2022 07:19:48
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 03-Mar-2022 12:09:56

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 2,6-diamino-4-nitrotoluene	1	4.154	4.142	0.012	21526	0.0500	0.0530	
	2 2,4-diamino-6-nitrotoluene	1	4.674	4.669	0.005	12869	0.0500	0.0495	
	5 HMX	1	6.894	6.889	0.005	8053	0.0500	0.0485	
	7 2,4,6-Trinitrophenol	1	7.767	7.602	0.165	6356	0.0500	0.0478	
	8 RDX	1	9.120	9.115	0.005	10028	0.0500	0.0516	
	9 Nitrobenzene	1	12.073	12.062	0.011	19149	0.0502	0.0520	
$	10 1,2-Dinitrobenzene	1	13.287	13.282	0.005	12864	0.0500	0.0515	
	11 3,5-Dinitroaniline	1	15.287	15.269	0.018	20966	0.0500	0.0508	
	12 1,3-Dinitrobenzene	1	15.647	15.635	0.012	30181	0.0501	0.0528	
	13 Nitroglycerin	2	16.073	16.055	0.018	59894	0.5000	0.4889	M
	14 o-Nitrotoluene	1	16.833	16.822	0.011	12057	0.0500	0.0514	
	16 p-Nitrotoluene	1	17.147	17.129	0.018	10595	0.0501	0.0503	
	17 4-Amino-2,6-dinitrotoluene	1	17.773	17.755	0.018	13425	0.0501	0.0505	
	18 m-Nitrotoluene	1	18.120	18.102	0.018	13387	0.0501	0.0510	
	19 2-Amino-4,6-dinitrotoluene	1	18.773	18.742	0.031	18562	0.0502	0.0515	
	20 1,3,5-Trinitrobenzene	1	18.973	18.949	0.024	21339	0.0501	0.0514	
	21 2,6-Dinitrotoluene	1	20.267	20.255	0.012	13757	0.0502	0.0518	
	22 2,4-Dinitrotoluene	1	20.767	20.762	0.005	33918	0.0502	0.0508	
	23 Tetryl	1	24.500	24.489	0.011	18110	0.0501	0.0529	
	24 2,4,6-Trinitrotoluene	1	25.274	25.262	0.012	18556	0.0502	0.0503	
	25 PETN	2	26.220	26.215	0.005	67082	0.5000	0.5187	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00070	Amount Added:	5.00	Units: uL
8330_ADDs_00031	Amount Added:	2.50	Units: uL

Report Date: 03-Mar-2022 12:49:17 Chrom Revision: 2.3 16-Feb-2022 17:52:00

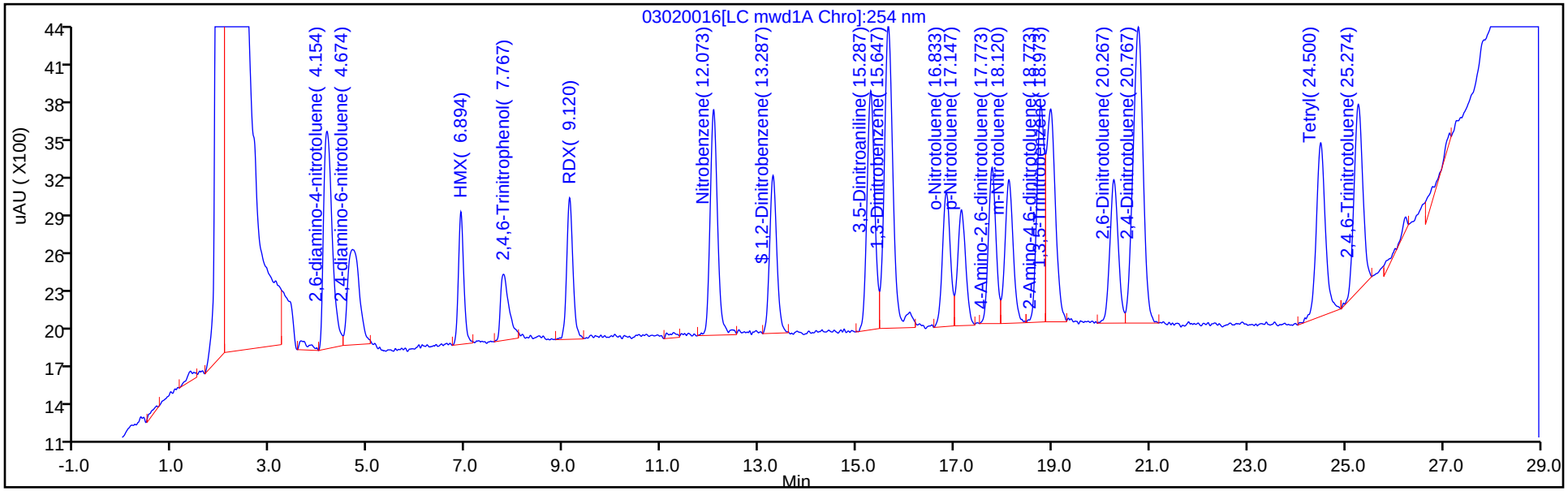
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020016.D

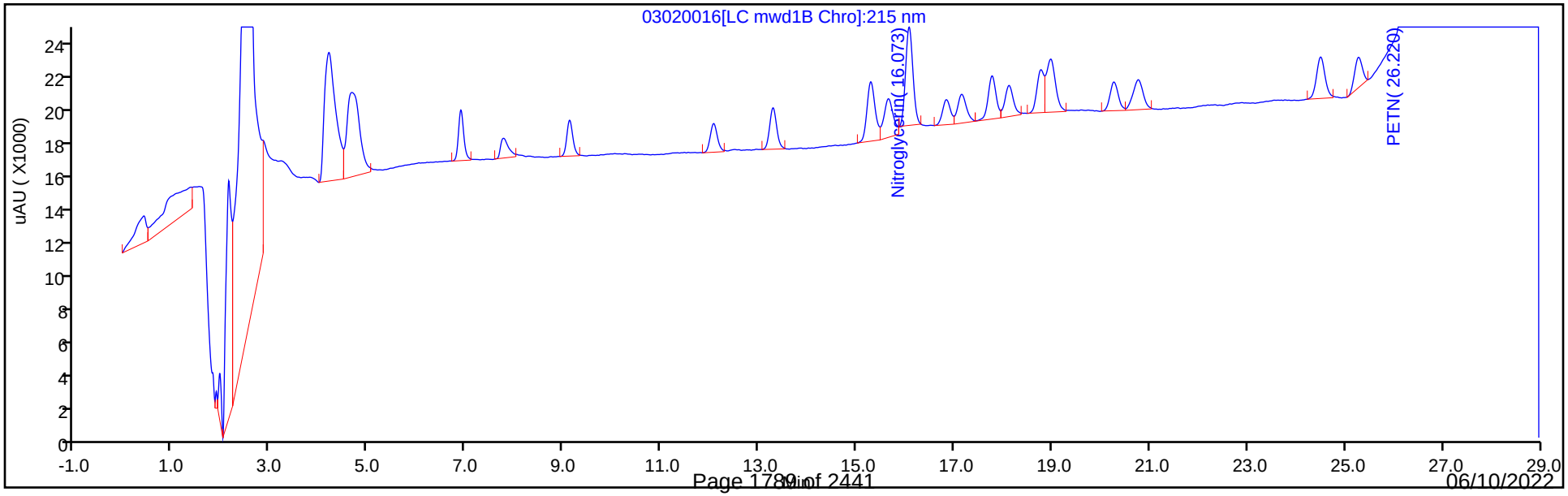
Injection Date:	03-Mar-2022 00:53:03	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC INT/ADD 3			Worklist Smp#:	16
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

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 Denver

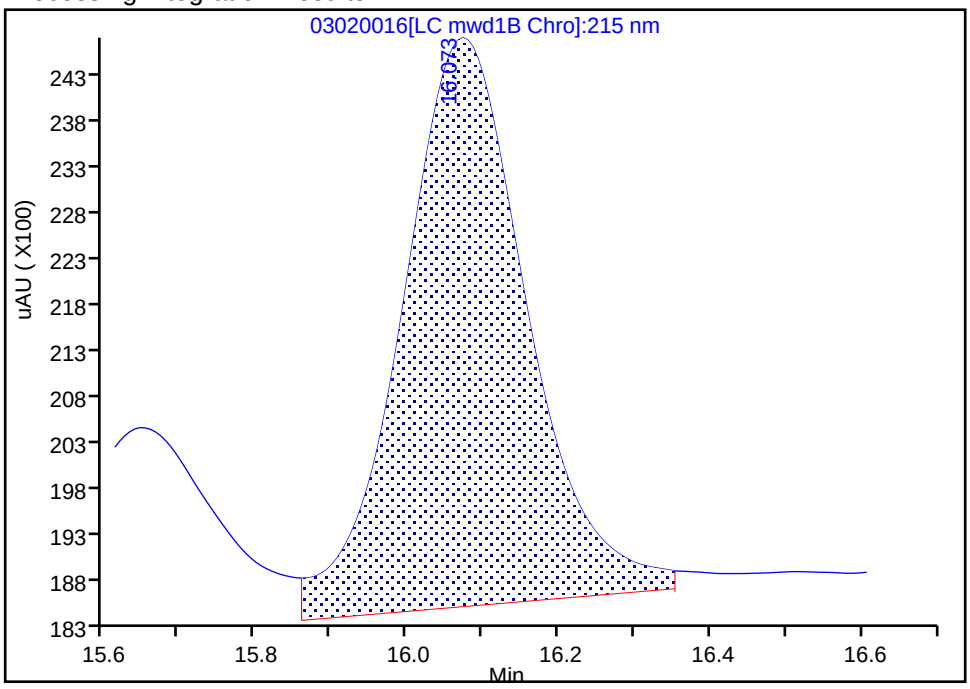
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020016.D
Injection Date: 03-Mar-2022 00:53:03 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 3
Client ID:
Operator ID: JZ ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

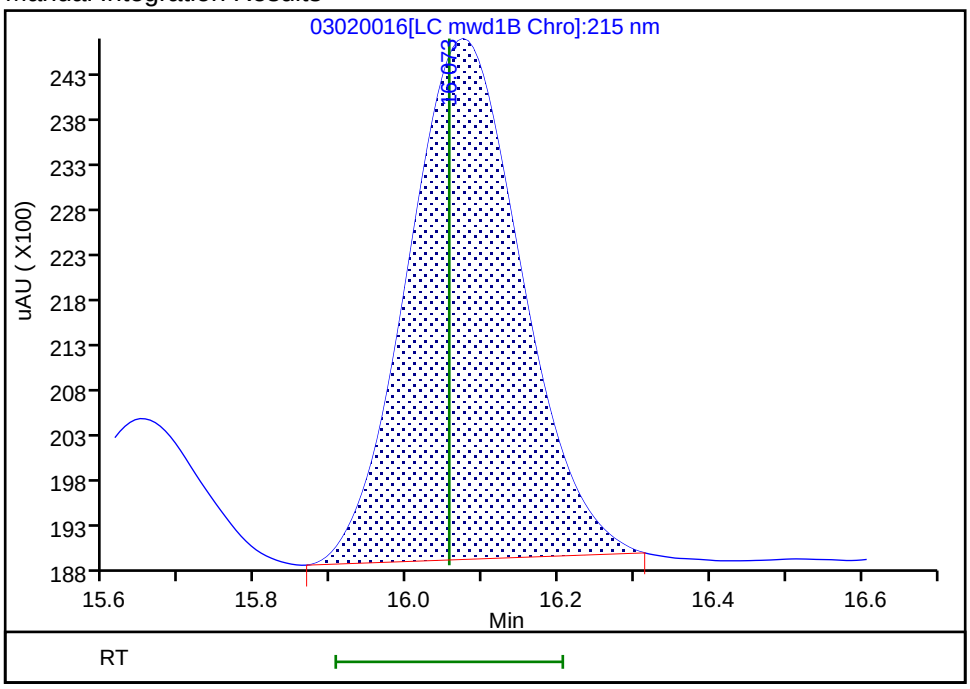
Processing Integration Results

RT: 16.07
Area: 70358
Amount: 0.563571
Amount Units: ug/ml



Manual Integration Results

RT: 16.07
Area: 59894
Amount: 0.488860
Amount Units: ug/ml



Reviewer: zhangji, 03-Mar-2022 12:12:24
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

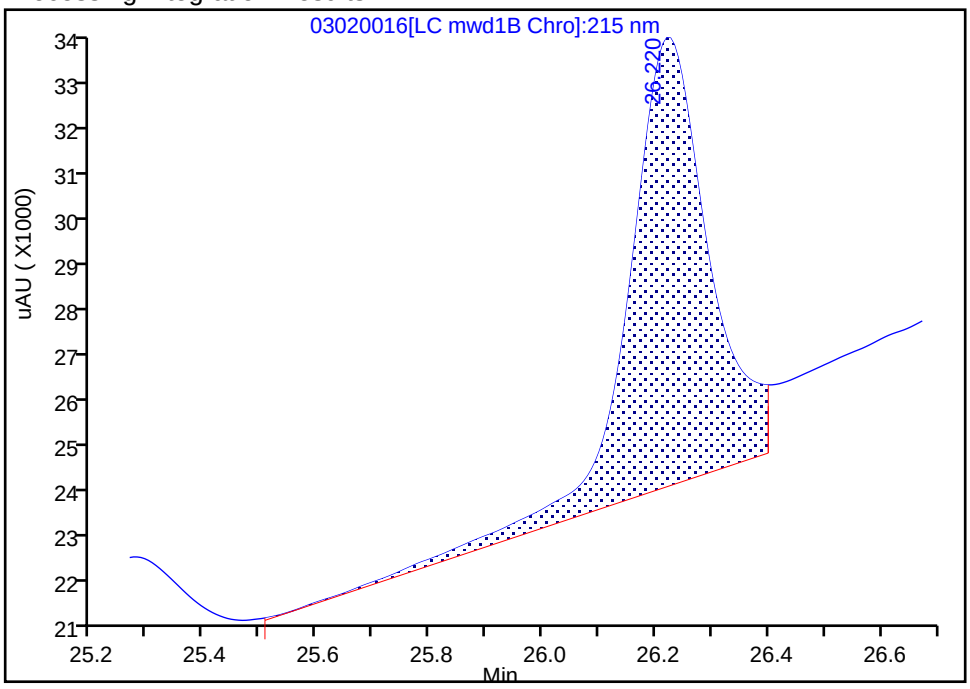
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020016.D
Injection Date: 03-Mar-2022 00:53:03 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 3
Client ID:
Operator ID: JZ ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

25 PETN, CAS: 78-11-5

Signal: 1

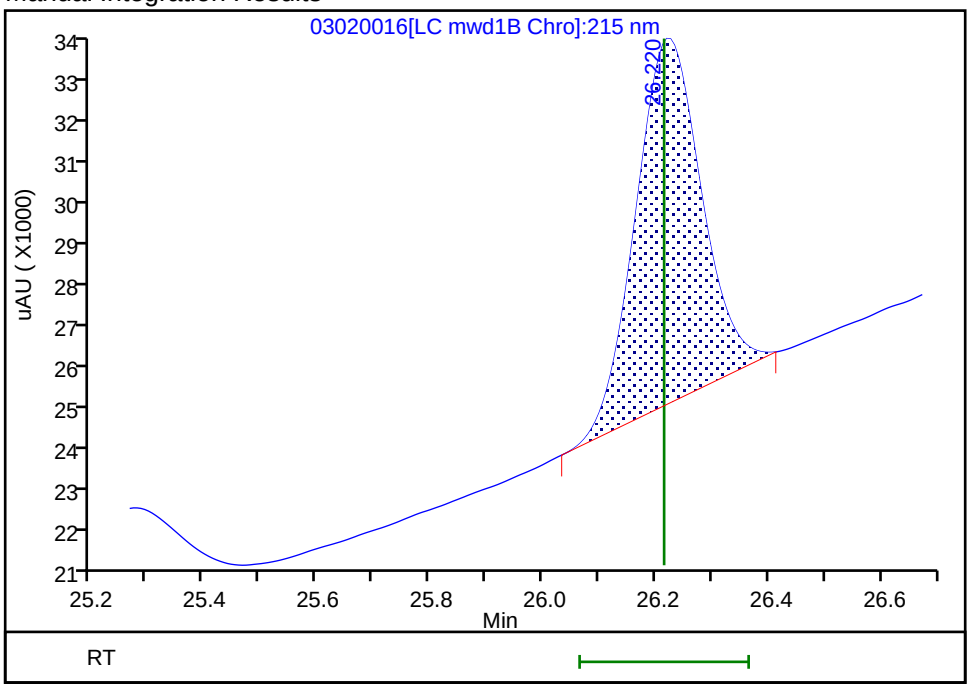
Processing Integration Results

RT: 26.22
Area: 91339
Amount: 0.654475
Amount Units: ug/ml



Manual Integration Results

RT: 26.22
Area: 67082
Amount: 0.518692
Amount Units: ug/ml



Reviewer: zhangji, 03-Mar-2022 12:12:20
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020017.D
Lims ID: IC INT/ADD 2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 03-Mar-2022 01:28:22 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 2
Misc. Info.: 280-0108949-017
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 03-Mar-2022 12:49:17 Calib Date: 03-Mar-2022 07:19:48
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 03-Mar-2022 12:10:52

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	4.169	4.142	0.027	9145	0.0200	0.0225	
2 2,4-diamino-6-nitrotoluene	1	4.716	4.669	0.047	5618	0.0200	0.0175	
5 HMX	1	6.896	6.889	0.007	3127	0.0200	0.0188	
7 2,4,6-Trinitrophenol	1	7.863	7.602	0.261	2301	0.0200	0.0173	
8 RDX	1	9.129	9.115	0.014	3719	0.0200	0.0191	
9 Nitrobenzene	1	12.069	12.062	0.007	6686	0.0201	0.0182	
$ 10 1,2-Dinitrobenzene	1	13.282	13.282	0.000	4809	0.0200	0.0193	
11 3,5-Dinitroaniline	1	15.282	15.269	0.013	7621	0.0200	0.0183	
12 1,3-Dinitrobenzene	1	15.642	15.635	0.007	10643	0.0200	0.0186	
13 Nitroglycerin	2	16.062	16.055	0.007	21750	0.2000	0.1775	M
14 o-Nitrotoluene	1	16.829	16.822	0.007	4607	0.0200	0.0196	
16 p-Nitrotoluene	1	17.129	17.129	0.000	4078	0.0200	0.0193	
17 4-Amino-2,6-dinitrotoluene	1	17.756	17.755	0.001	5271	0.0200	0.0200	
18 m-Nitrotoluene	1	18.116	18.102	0.014	4805	0.0200	0.0188	
19 2-Amino-4,6-dinitrotoluene	1	18.762	18.742	0.020	6899	0.0201	0.0191	M
20 1,3,5-Trinitrobenzene	1	18.956	18.949	0.007	6970	0.0200	0.0168	M
21 2,6-Dinitrotoluene	1	20.262	20.255	0.007	5233	0.0201	0.0197	
22 2,4-Dinitrotoluene	1	20.716	20.762	-0.046	16863	0.0201	0.0193	
23 Tetryl	1	24.496	24.489	0.007	6933	0.0200	0.0203	
24 2,4,6-Trinitrotoluene	1	25.269	25.262	0.007	6507	0.0201	0.0176	
25 PETN	2	26.223	26.215	0.008	21923	0.2000	0.1695	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00070	Amount Added:	2.00	Units: uL
8330_ADDs_00031	Amount Added:	1.00	Units: uL

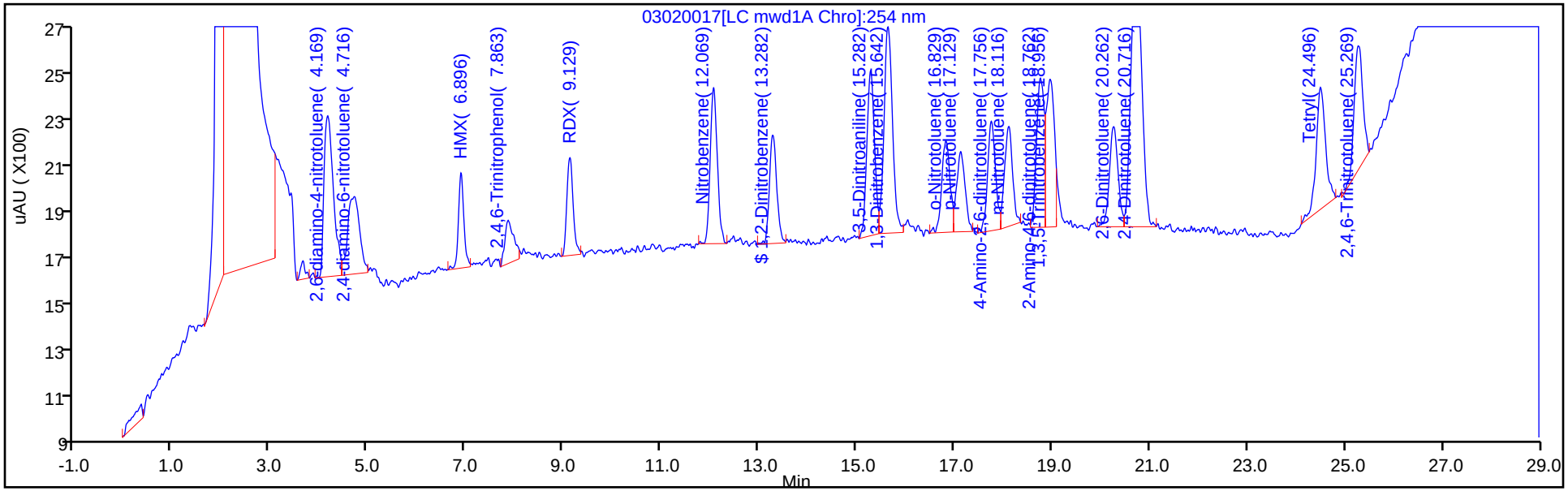
Report Date: 03-Mar-2022 12:49:17 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

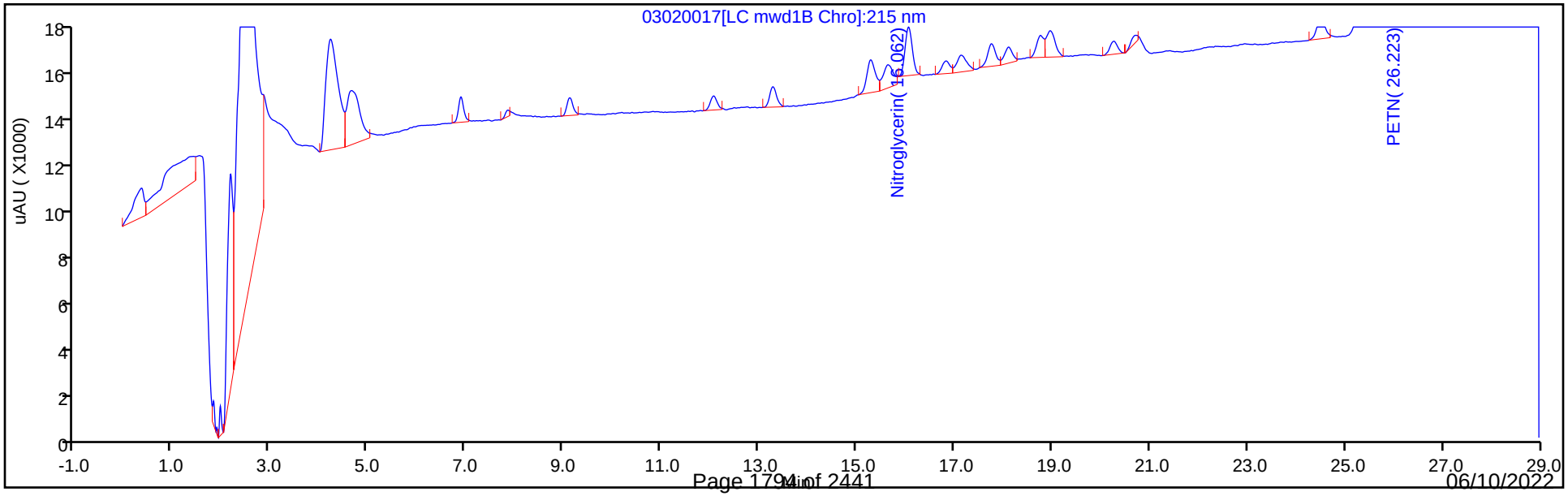
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020017.D

Injection Date:	03-Mar-2022 01:28:22	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 Denver

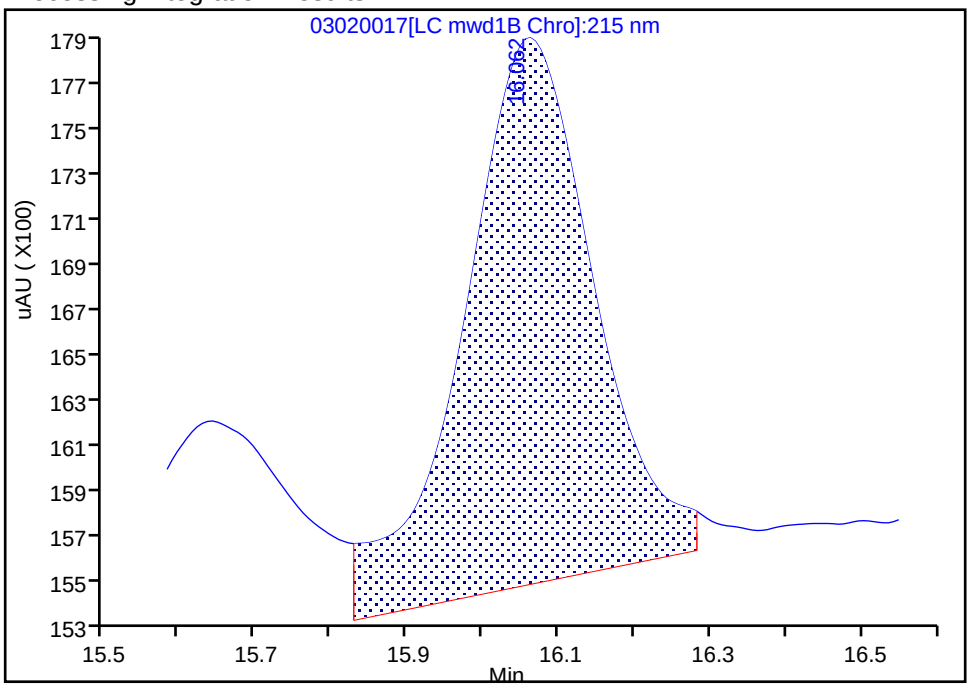
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020017.D
Injection Date: 03-Mar-2022 01:28:22 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 2
Client ID:
Operator ID: JZ ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

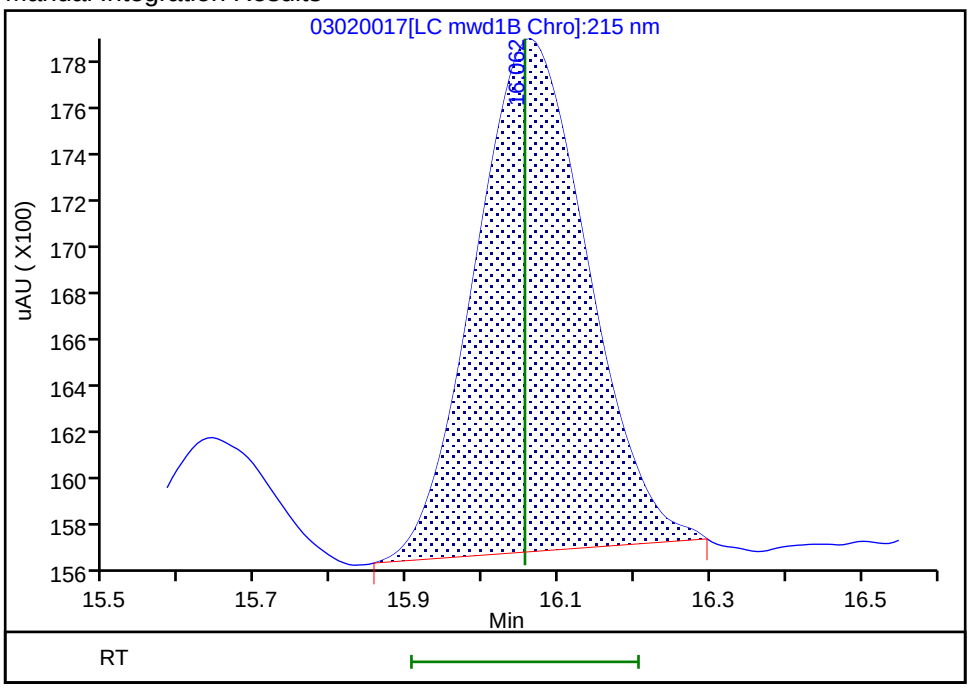
Processing Integration Results

RT: 16.06
Area: 28042
Amount: 0.218500
Amount Units: ug/ml



Manual Integration Results

RT: 16.06
Area: 21750
Amount: 0.177525
Amount Units: ug/ml



Reviewer: zhangji, 03-Mar-2022 12:12:09
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

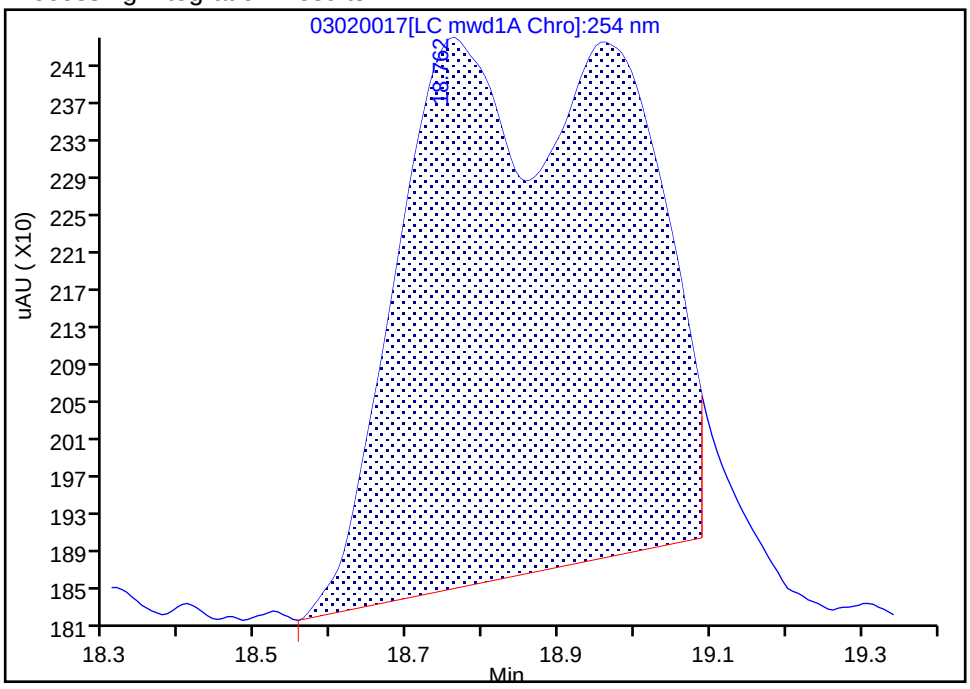
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020017.D				
Injection Date:	03-Mar-2022 01:28:22	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT/ADD 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

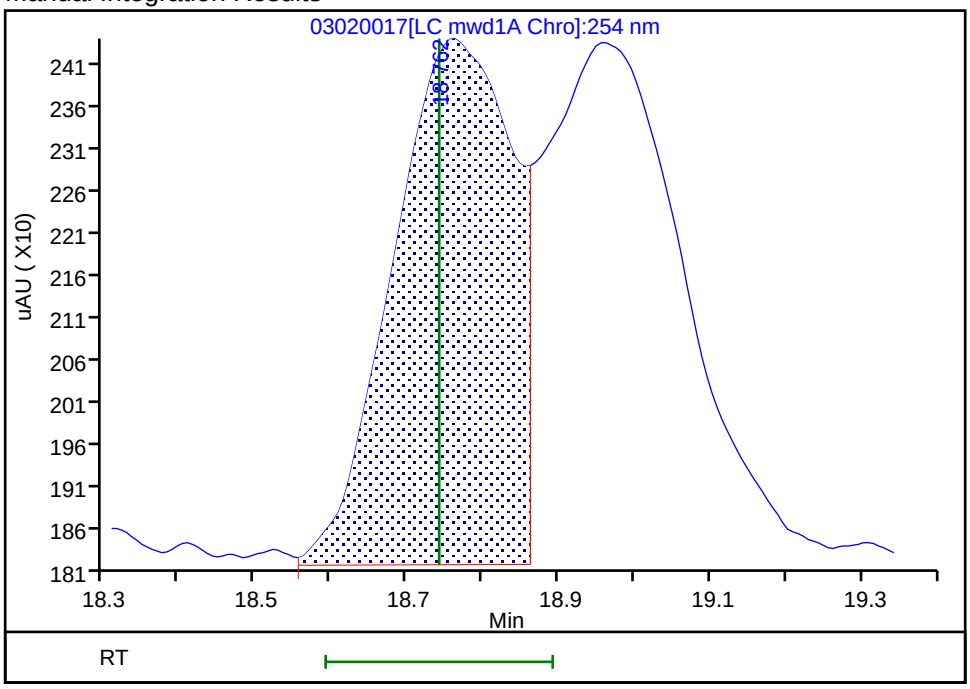
Processing Integration Results

RT: 18.76
Area: 12210
Amount: 0.025658
Amount Units: ug/ml



Manual Integration Results

RT: 18.76
Area: 6899
Amount: 0.019135
Amount Units: ug/ml



Reviewer: zhangji, 03-Mar-2022 12:10:14
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

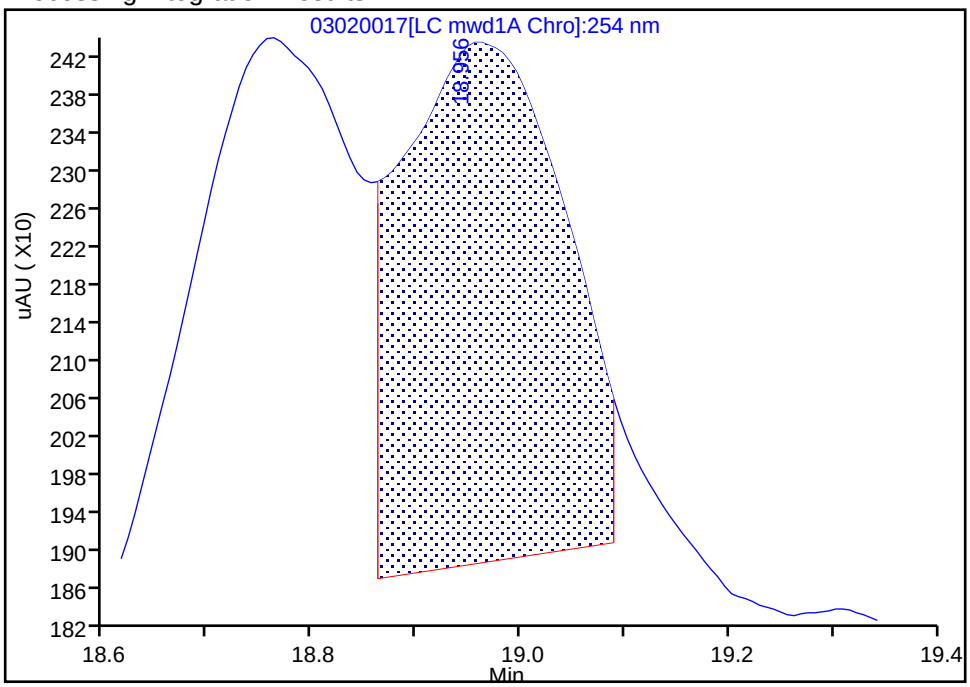
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020017.D
Injection Date: 03-Mar-2022 01:28:22 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 2
Client ID:
Operator ID: JZ ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC mwd1A, 254 nm

20 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

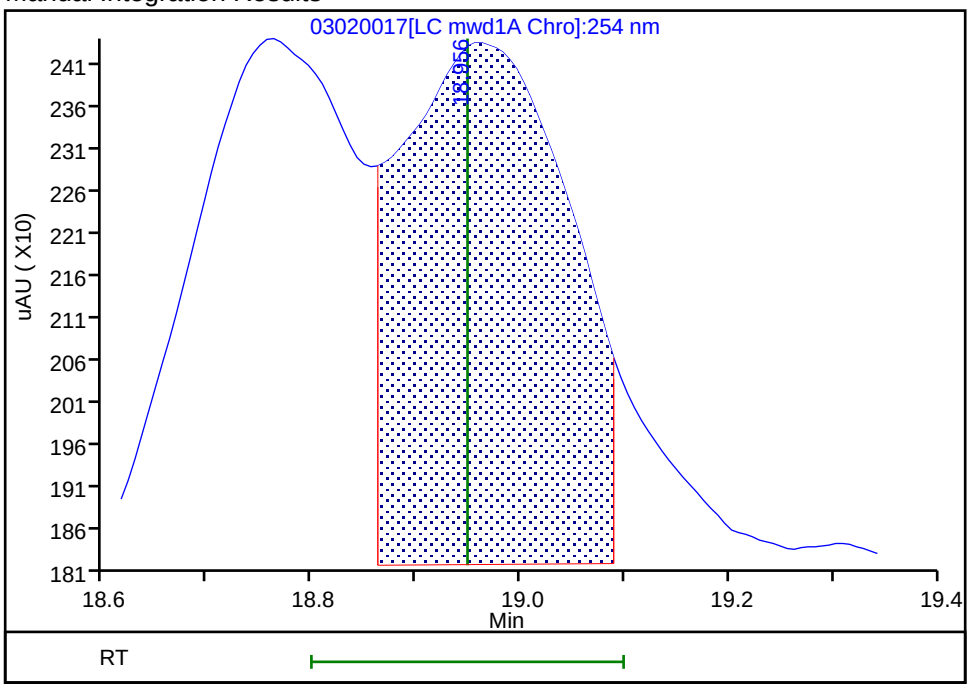
Processing Integration Results

RT: 18.96
Area: 5936
Amount: 0.014418
Amount Units: ug/ml



Manual Integration Results

RT: 18.96
Area: 6970
Amount: 0.016776
Amount Units: ug/ml



Reviewer: zhangji, 03-Mar-2022 12:10:14
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

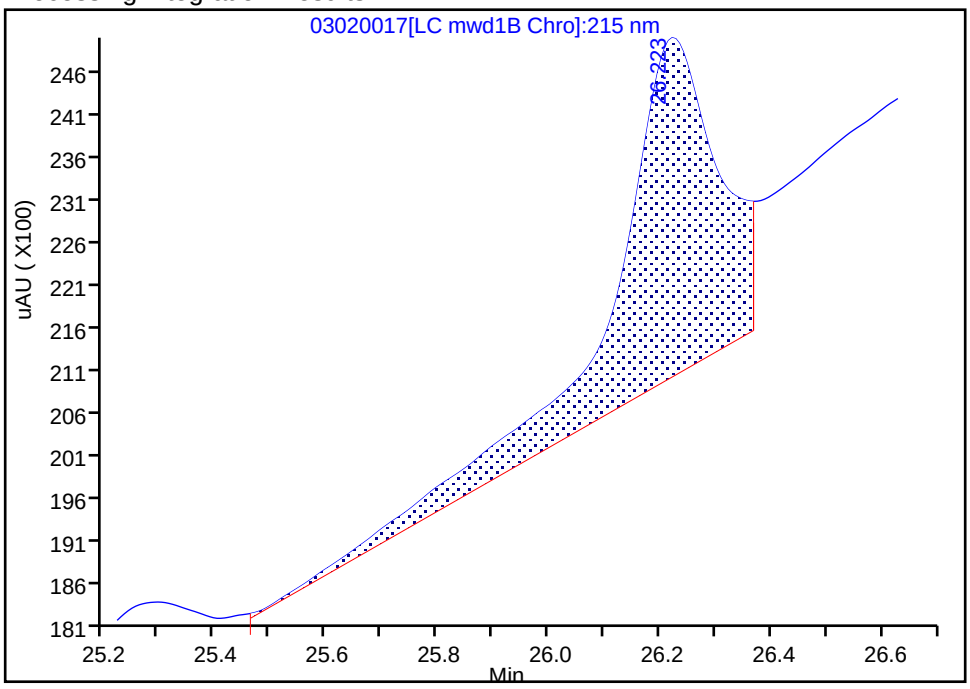
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020017.D
Injection Date: 03-Mar-2022 01:28:22 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 2
Client ID:
Operator ID: JZ ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

25 PETN, CAS: 78-11-5

Signal: 1

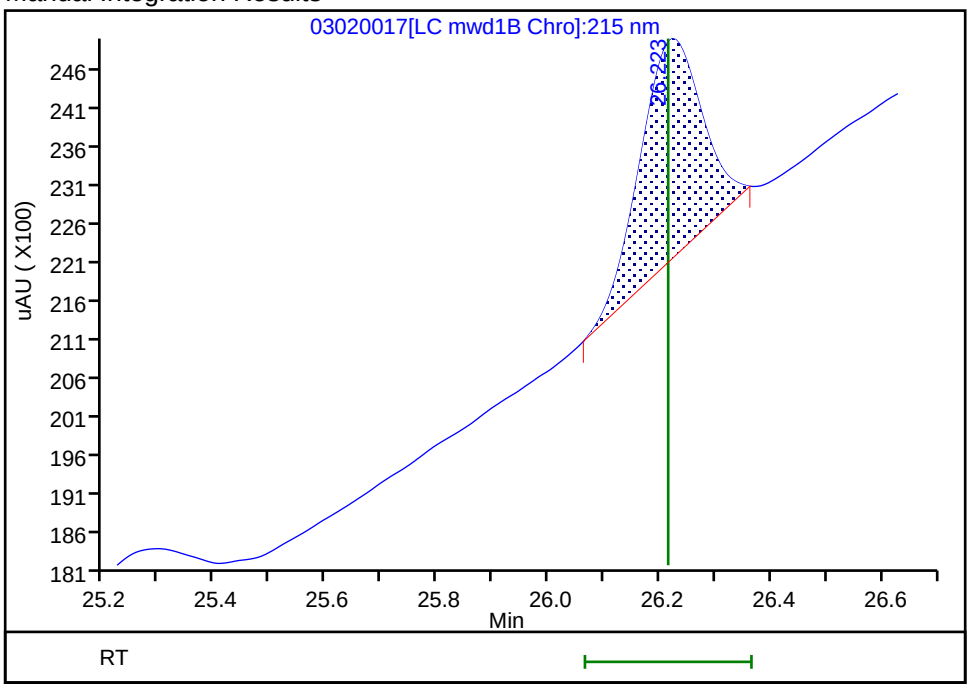
Processing Integration Results

RT: 26.22
Area: 51157
Amount: 0.330478
Amount Units: ug/ml



Manual Integration Results

RT: 26.22
Area: 21923
Amount: 0.169513
Amount Units: ug/ml



Reviewer: zhangji, 03-Mar-2022 12:12:13
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020018.D
Lims ID: IC INT/ADD 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 03-Mar-2022 02:03:29 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 1
Misc. Info.: 280-0108949-018
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 03-Mar-2022 12:49:18 Calib Date: 03-Mar-2022 07:19:48
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 03-Mar-2022 12:07:10

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	4.174	4.142	0.032	6283	0.0100	0.0155	
2 2,4-diamino-6-nitrotoluene	1	4.714	4.669	0.045	4064	0.0100	0.0106	
5 HMX	1	6.887	6.889	-0.002	2040	0.0100	0.0123	
7 2,4,6-Trinitrophenol	1		7.602			ND	ND	
8 RDX	1	9.114	9.115	-0.001	2097	0.0100	0.0108	
9 Nitrobenzene	1	12.047	12.062	-0.015	3890	0.0100	0.0106	
$ 10 1,2-Dinitrobenzene	1	13.260	13.282	-0.022	2461	0.0100	0.009854	
11 3,5-Dinitroaniline	1	15.287	15.269	0.018	4362	0.0100	0.0104	
12 1,3-Dinitrobenzene	1	15.627	15.635	-0.008	5961	0.0100	0.0104	
13 Nitroglycerin	2	16.054	16.055	-0.001	10664	0.1000	0.0870	M
14 o-Nitrotoluene	1	16.807	16.822	-0.015	2491	0.0100	0.0106	
16 p-Nitrotoluene	1	17.147	17.129	0.018	2203	0.0100	0.0104	
17 4-Amino-2,6-dinitrotoluene	1	17.734	17.755	-0.021	2610	0.0100	0.0100	
18 m-Nitrotoluene	1	18.094	18.102	-0.008	2543	0.0100	0.0103	
19 2-Amino-4,6-dinitrotoluene	1	18.754	18.742	0.012	3705	0.0100	0.0103	M
20 1,3,5-Trinitrobenzene	1	18.947	18.949	-0.002	3947	0.0100	0.009500	Ma
21 2,6-Dinitrotoluene	1	20.260	20.255	0.005	2704	0.0100	0.0102	
22 2,4-Dinitrotoluene	1	20.674	20.762	-0.088	11900	0.0100	0.0102	
23 Tetryl	1	24.514	24.489	0.025	4722	0.0100	0.0138	
24 2,4,6-Trinitrotoluene	1	25.274	25.262	0.012	3720	0.0100	0.0101	
25 PETN	2	26.220	26.215	0.005	10842	0.1000	0.0838	M

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

8330IntermStk_00070	Amount Added:	1.00	Units: uL
8330_ADDs_00031	Amount Added:	0.50	Units: uL

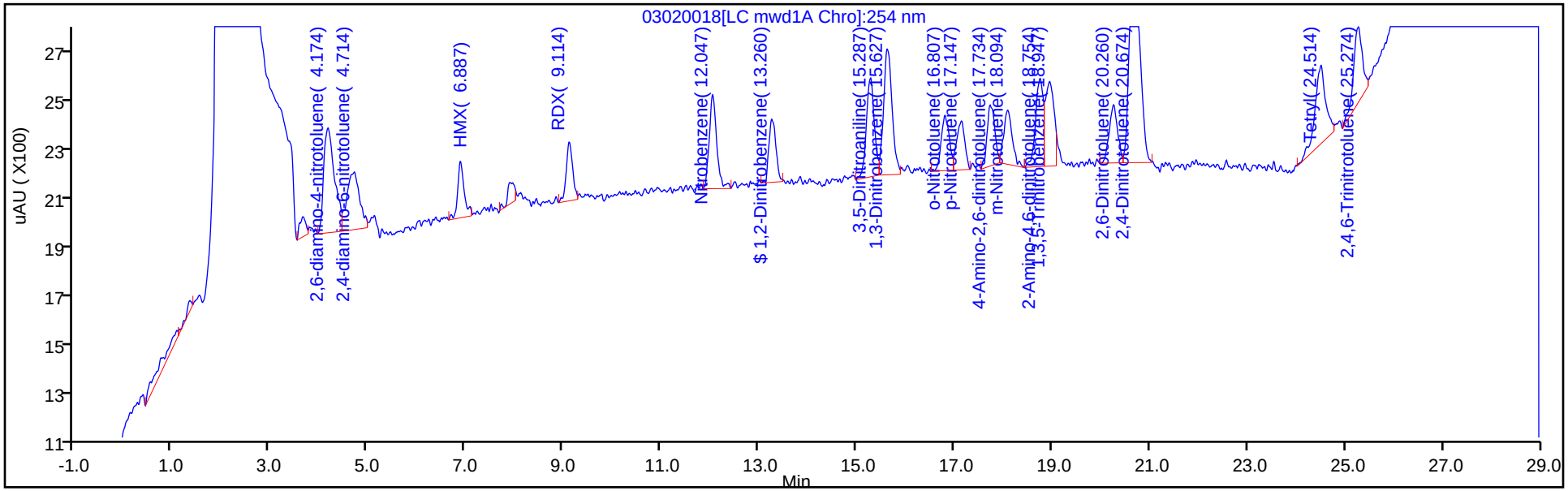
Report Date: 03-Mar-2022 12:49:18 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

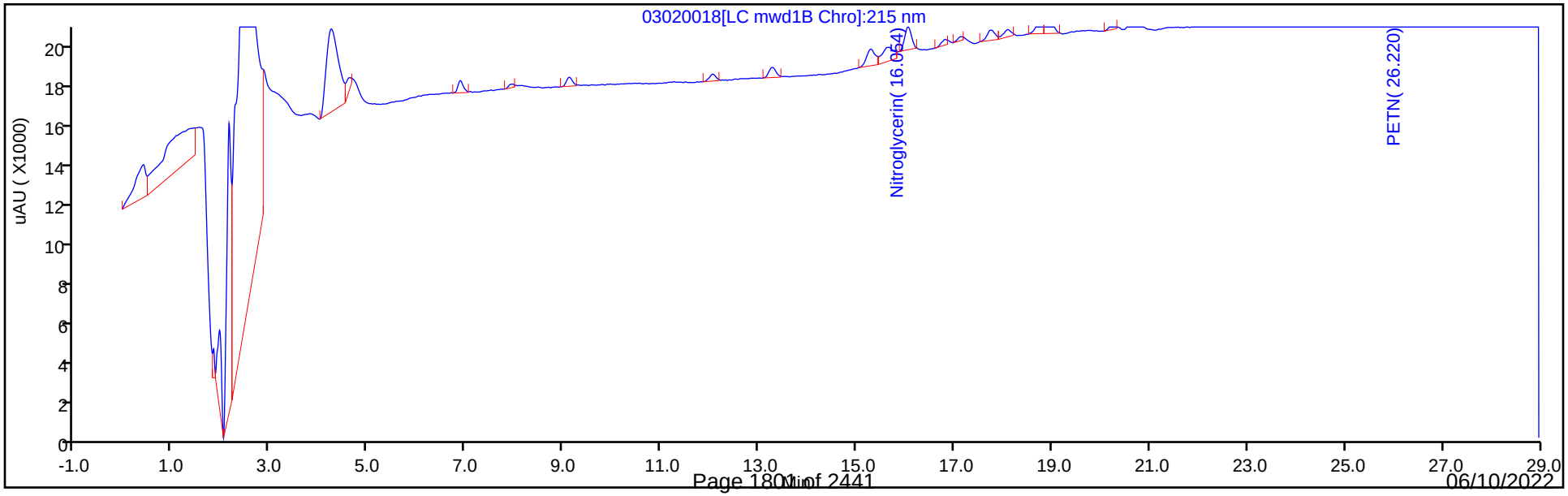
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020018.D

Injection Date:	03-Mar-2022 02:03:29	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 Denver

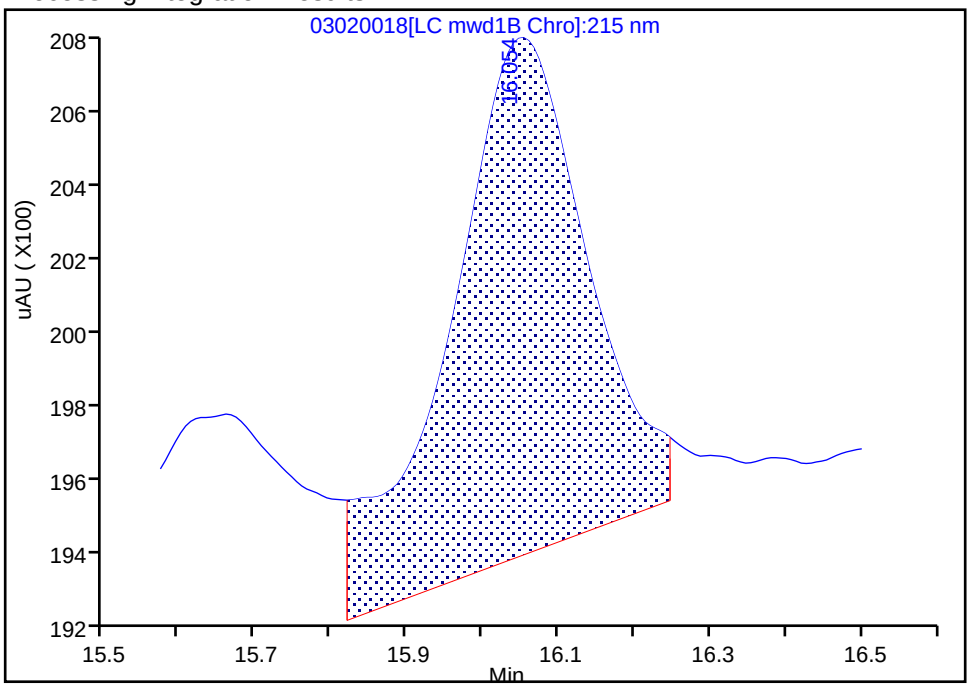
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020018.D
Injection Date: 03-Mar-2022 02:03:29 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 1
Client ID:
Operator ID: JZ ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

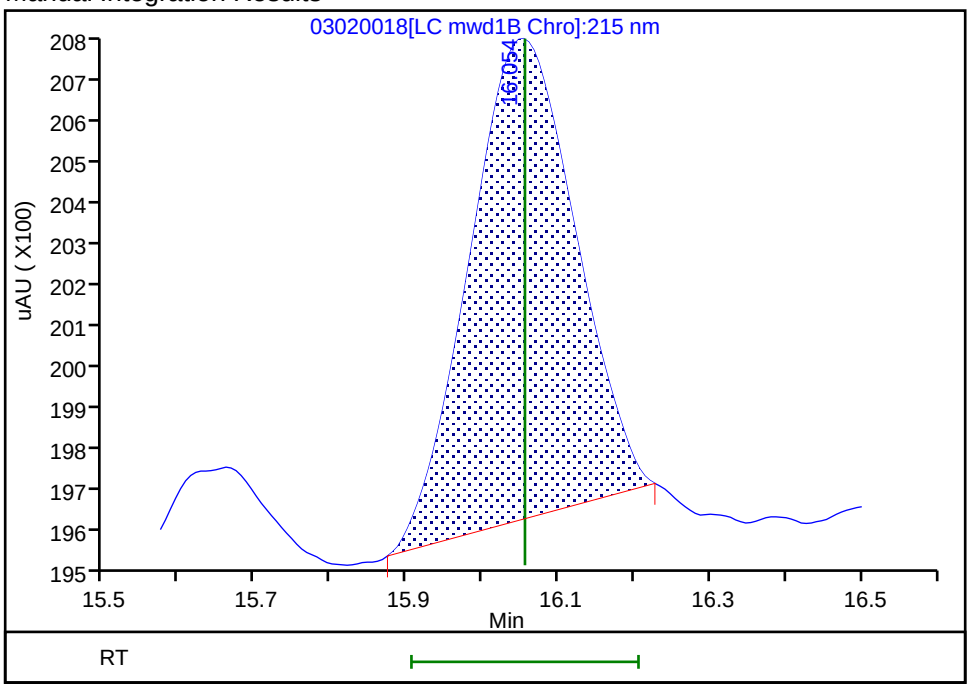
Processing Integration Results

RT: 16.05
Area: 17086
Amount: 0.126120
Amount Units: ug/ml



Manual Integration Results

RT: 16.05
Area: 10664
Amount: 0.087040
Amount Units: ug/ml



Reviewer: zhangji, 03-Mar-2022 12:12:01
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

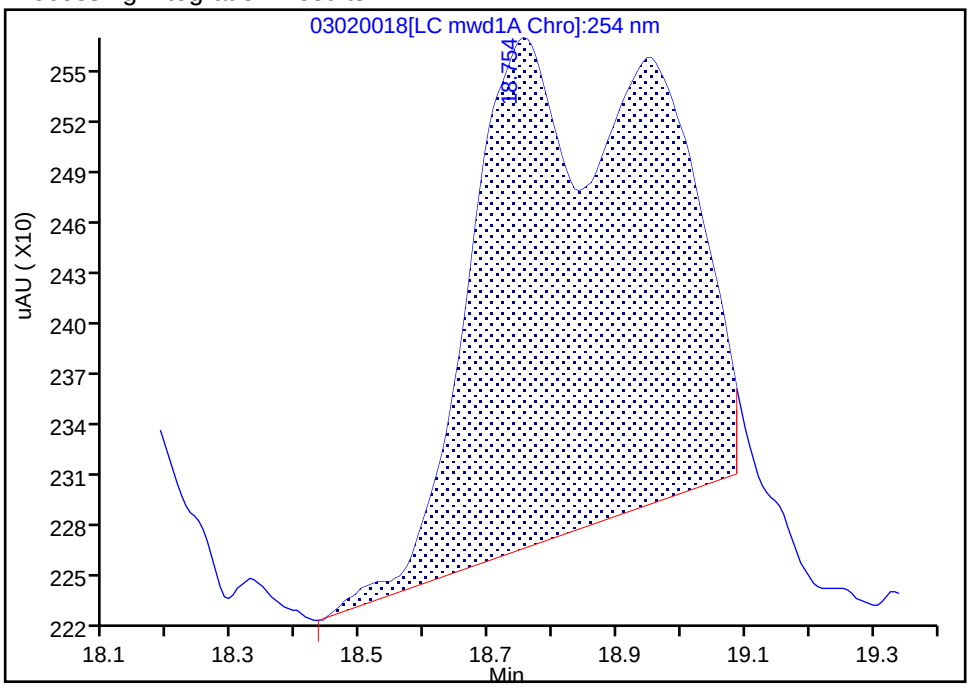
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020018.D				
Injection Date:	03-Mar-2022 02:03:29	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT/ADD 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

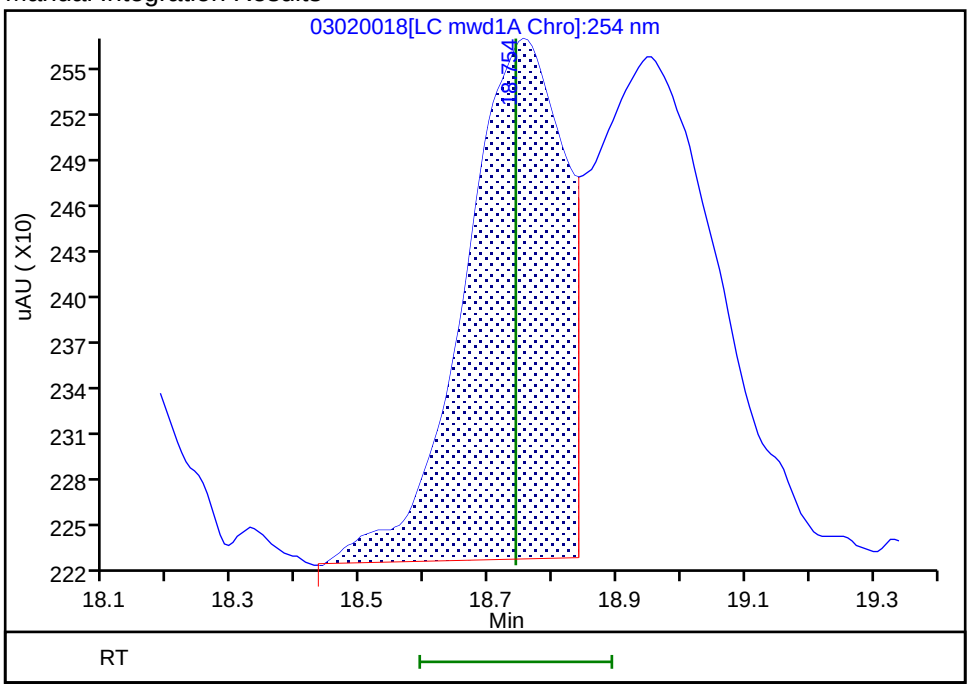
Processing Integration Results

RT: 18.75
Area: 6109
Amount: 0.012300
Amount Units: ug/ml



Manual Integration Results

RT: 18.75
Area: 3705
Amount: 0.010276
Amount Units: ug/ml



Reviewer: zhangji, 03-Mar-2022 12:11:46
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

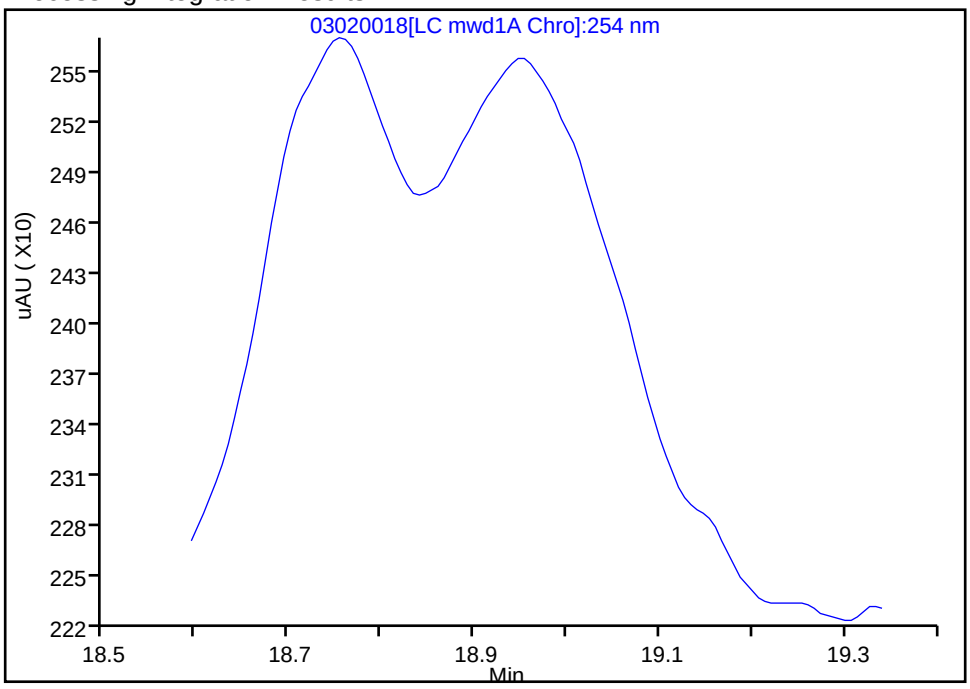
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020018.D				
Injection Date:	03-Mar-2022 02:03:29	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT/ADD 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

20 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

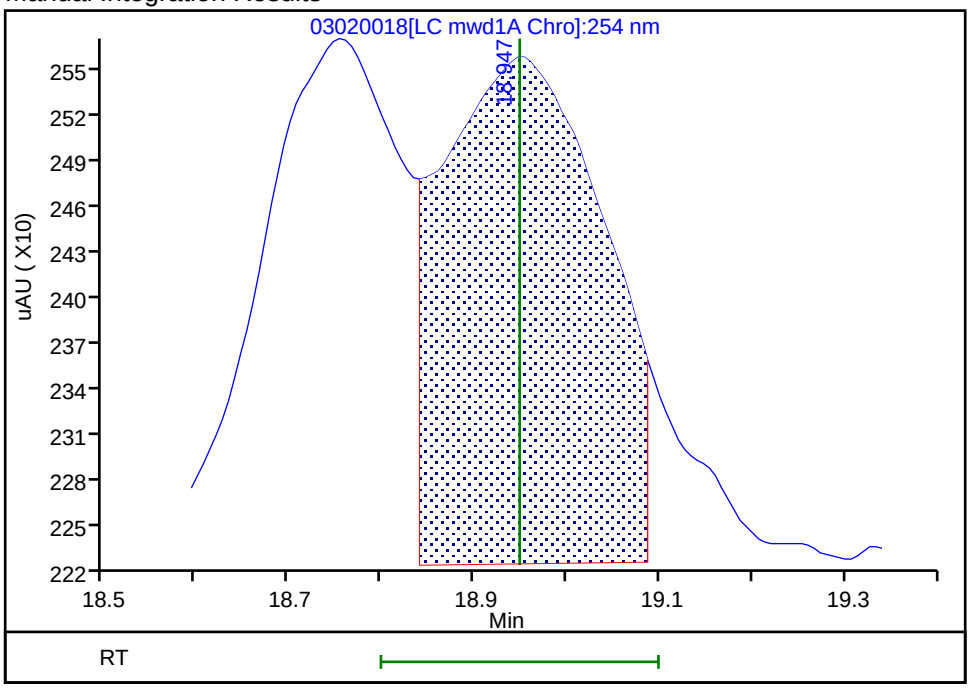
Not Detected
Expected RT: 18.95

Processing Integration Results



Manual Integration Results

RT: 18.95
Area: 3947
Amount: 0.009500
Amount Units: ug/ml



Reviewer: zhangji, 03-Mar-2022 12:11:46
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

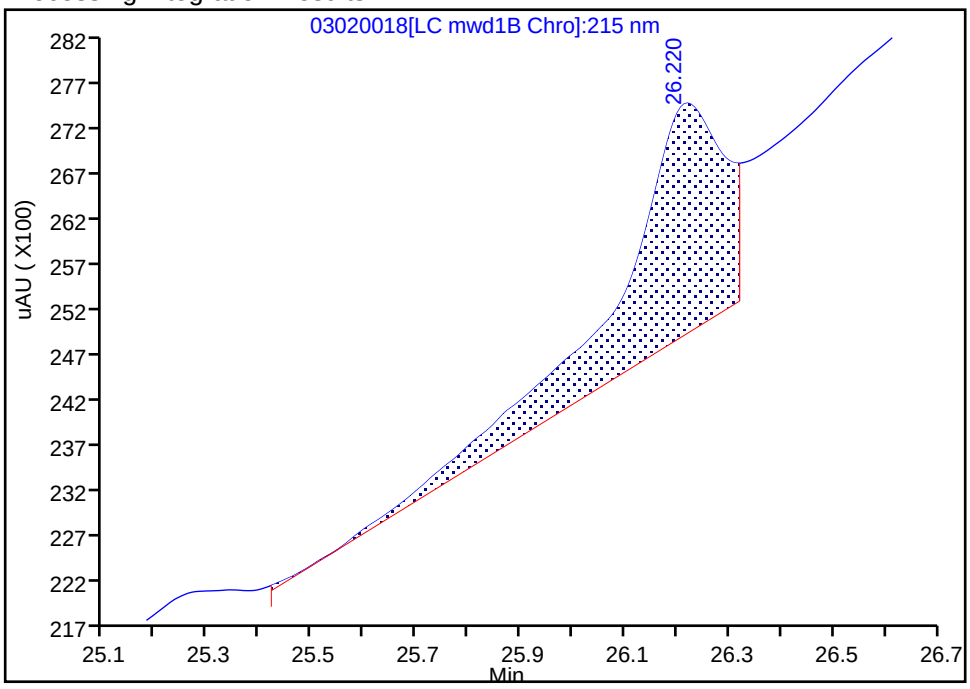
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020018.D
Injection Date: 03-Mar-2022 02:03:29 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 1
Client ID:
Operator ID: JZ ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

25 PETN, CAS: 78-11-5

Signal: 1

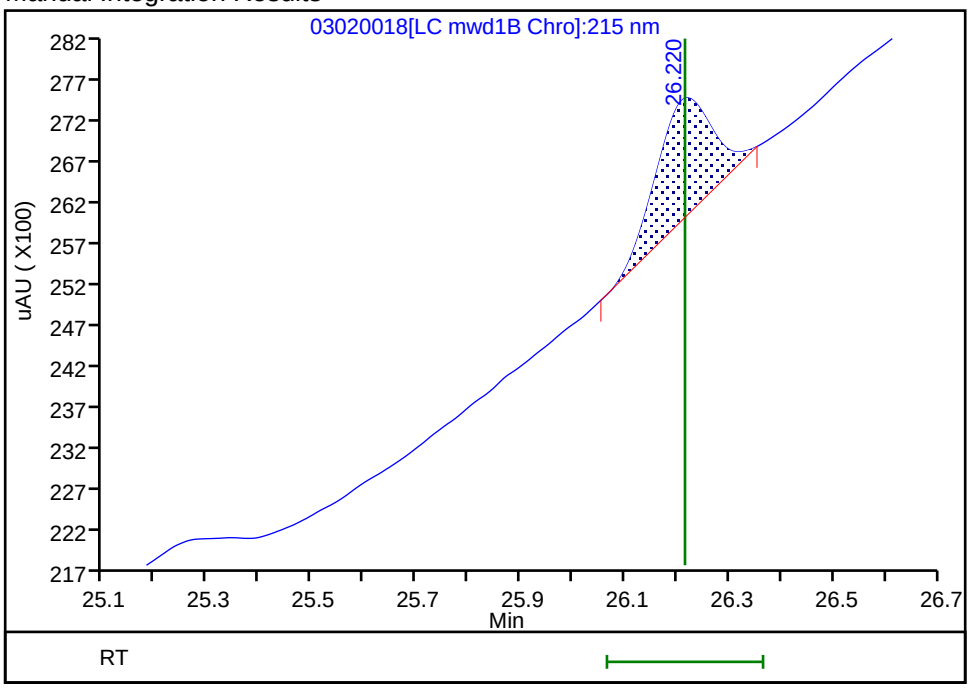
Processing Integration Results

RT: 26.22
Area: 35507
Amount: 0.096197
Amount Units: ug/ml



Manual Integration Results

RT: 26.22
Area: 10842
Amount: 0.083833
Amount Units: ug/ml



Reviewer: zhangji, 03-Mar-2022 12:11:57
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Calibration / HMX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

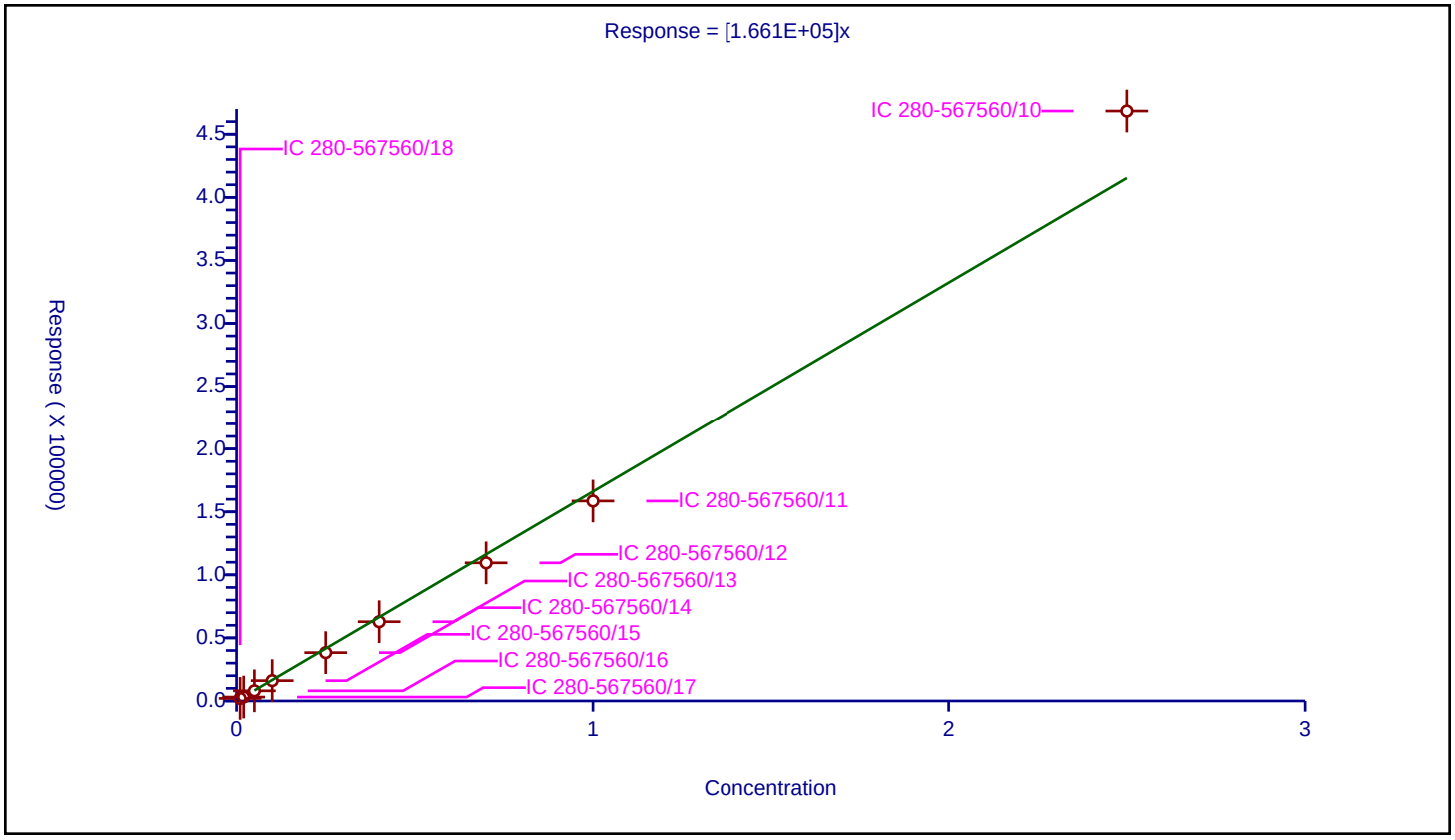
Curve Coefficients

Intercept:	0
Slope:	1.661E+05

Error Coefficients

Standard Error:	19200
Relative Standard Error:	10.5
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-567560/18	0.01	2040.0			204000.0	Y
2	IC 280-567560/17	0.02	3127.0			156350.0	Y
3	IC 280-567560/16	0.05	8053.0			161060.0	Y
4	IC 280-567560/15	0.1	16109.0			161090.0	Y
5	IC 280-567560/14	0.25	38318.0			153272.0	Y
6	IC 280-567560/13	0.4	62819.0			157047.5	Y
7	IC 280-567560/12	0.7	109512.0			156445.714286	Y
8	IC 280-567560/11	1.0	158593.0			158593.0	Y
9	IC 280-567560/10	2.5	468398.0			187359.2	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

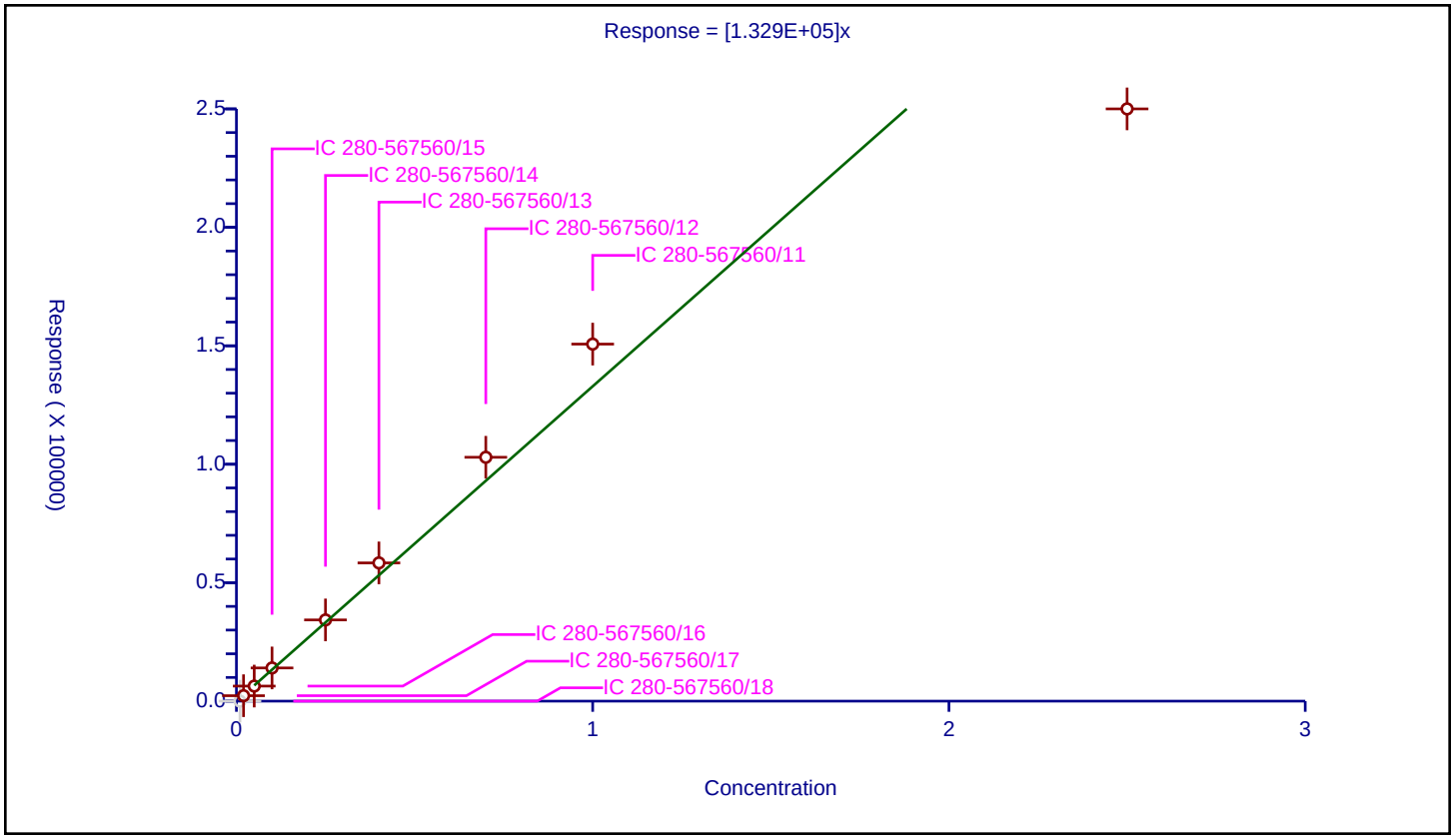
Curve Coefficients

Intercept:	0
Slope:	1.329E+05

Error Coefficients

Standard Error:	32100
Relative Standard Error:	13.3
Correlation Coefficient:	0.955
Coefficient of Determination (Adjusted):	0.979

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-567560/18	0.01	0.0			0.0	N
2	IC 280-567560/17	0.02	2301.0			115050.0	Y
3	IC 280-567560/16	0.05	6356.0			127120.0	Y
4	IC 280-567560/15	0.1	14009.0			140090.0	Y
5	IC 280-567560/14	0.25	34288.0			137152.0	Y
6	IC 280-567560/13	0.4	58358.0			145895.0	Y
7	IC 280-567560/12	0.7	102939.0			147055.714286	Y
8	IC 280-567560/11	1.0	150719.0			150719.0	Y
9	IC 280-567560/10	2.5	250000.0			100000.0	Y



Calibration / RDX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

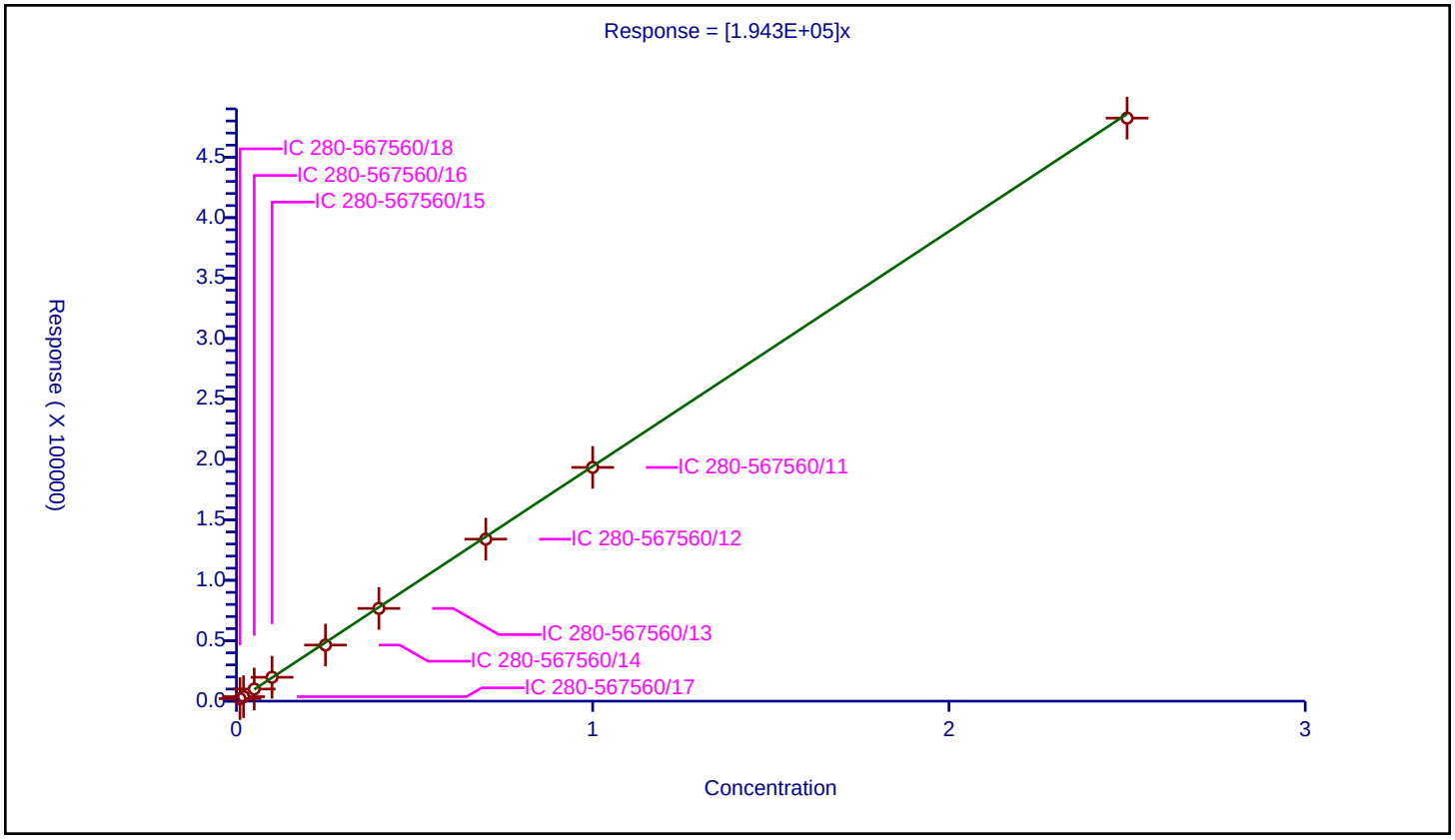
Curve Coefficients

Intercept:	0
Slope:	1.943E+05

Error Coefficients

Standard Error:	1690
Relative Standard Error:	3.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-567560/18	0.01	2097.0			209700.0	Y
2	IC 280-567560/17	0.02	3719.0			185950.0	Y
3	IC 280-567560/16	0.05	10028.0			200560.0	Y
4	IC 280-567560/15	0.1	19750.0			197500.0	Y
5	IC 280-567560/14	0.25	46417.0			185668.0	Y
6	IC 280-567560/13	0.4	76711.0			191777.5	Y
7	IC 280-567560/12	0.7	134031.0			191472.857143	Y
8	IC 280-567560/11	1.0	193402.0			193402.0	Y
9	IC 280-567560/10	2.5	482372.0			192948.8	Y



Calibration / Nitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

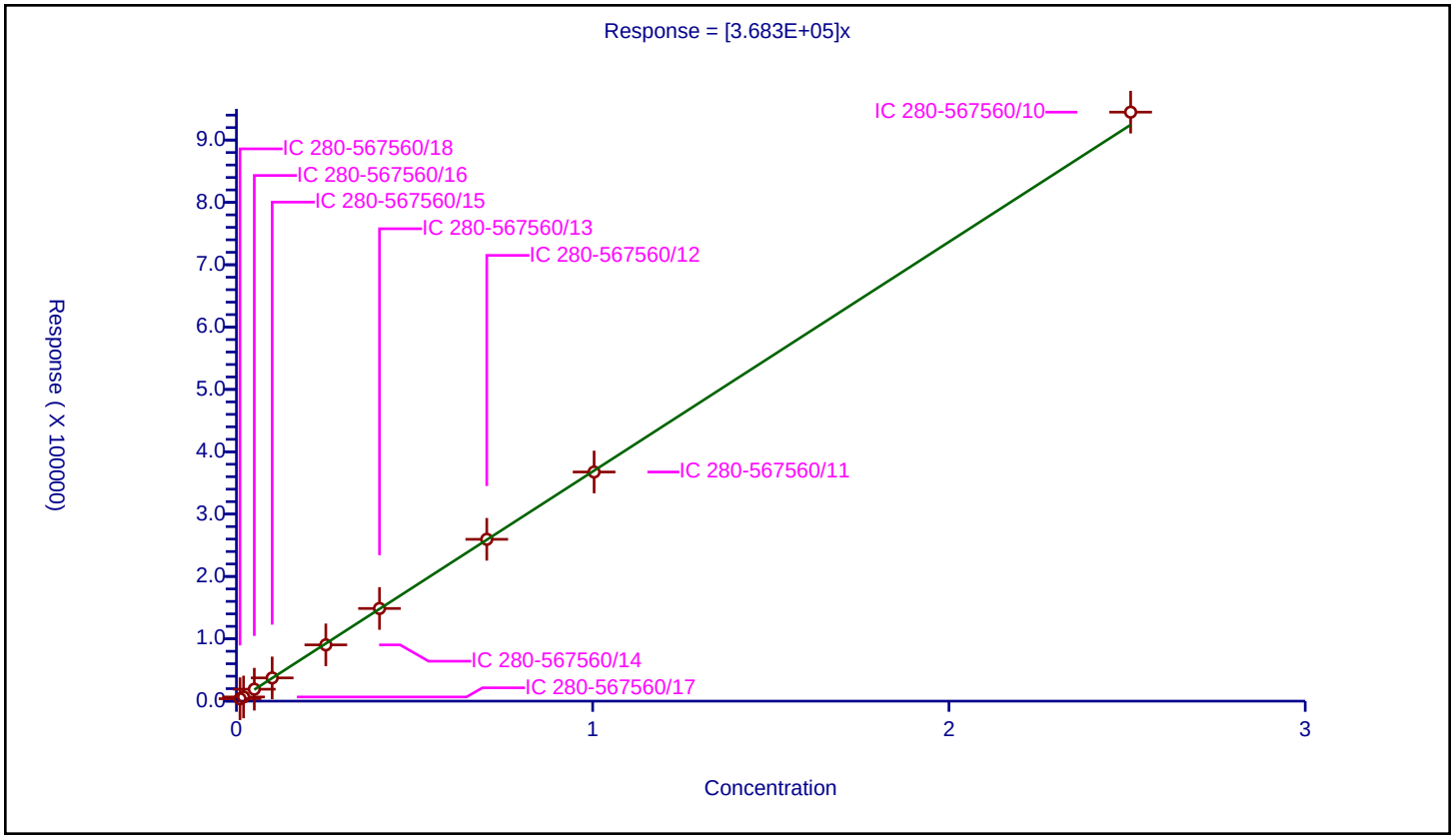
Curve Coefficients

Intercept:	0
Slope:	3.683E+05

Error Coefficients

Standard Error:	7300
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 280-567560/18	0.01004	3890.0			387450.199203	Y
2	IC 280-567560/17	0.02008	6686.0			332968.12749	Y
3	IC 280-567560/16	0.0502	19149.0			381454.183267	Y
4	IC 280-567560/15	0.1004	37271.0			371225.099602	Y
5	IC 280-567560/14	0.251	90246.0			359545.816733	Y
6	IC 280-567560/13	0.4016	148639.0			370117.031873	Y
7	IC 280-567560/12	0.7028	259585.0			369358.281161	Y
8	IC 280-567560/11	1.004	367582.0			366117.52988	Y
9	IC 280-567560/10	2.51	944774.0			376403.984064	Y



Calibration / 1,2-Dinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

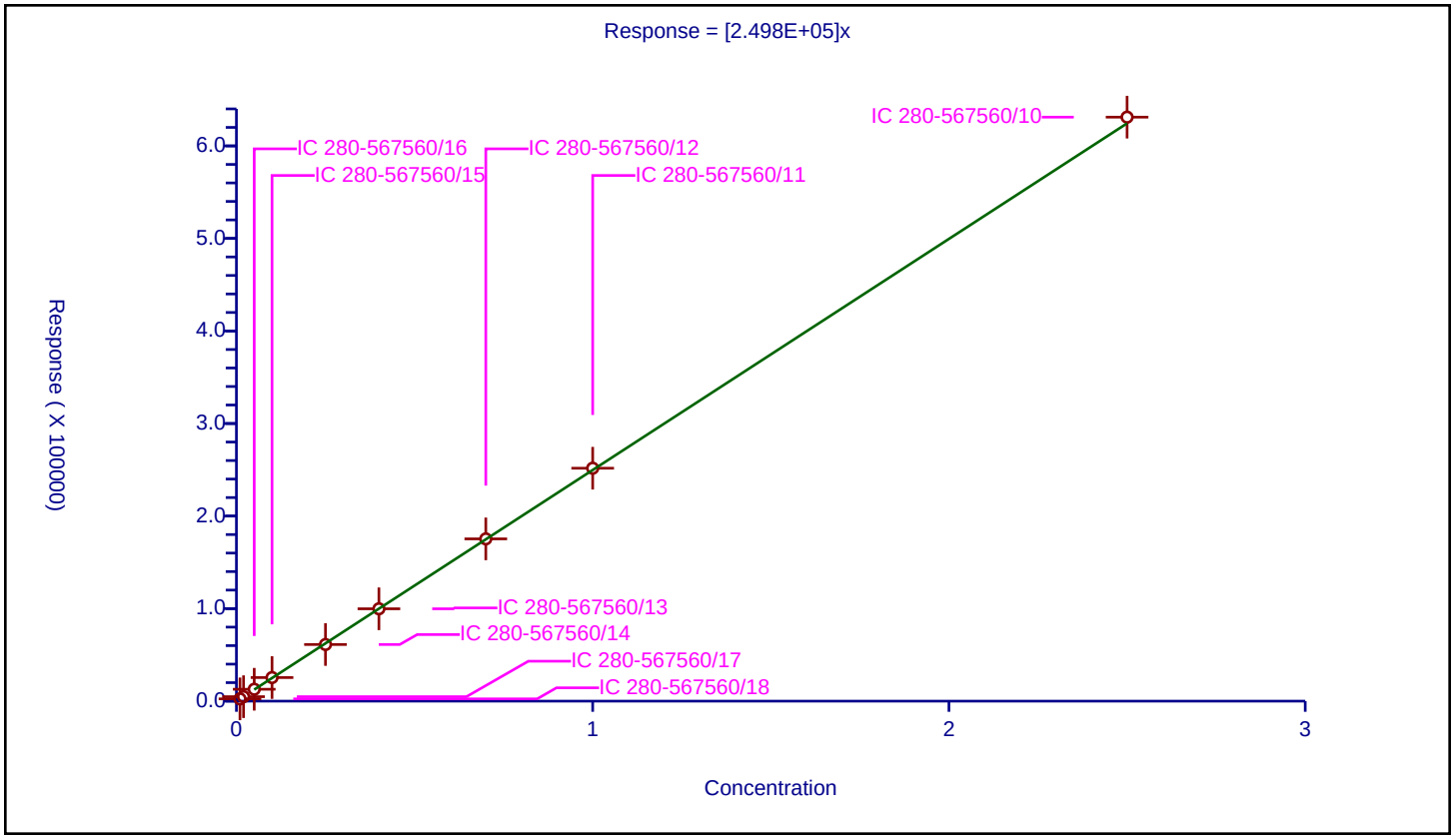
Curve Coefficients

Intercept:	0
Slope:	2.498E+05

Error Coefficients

Standard Error:	2520
Relative Standard Error:	2.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-567560/18	0.01	2461.0			246100.0	Y
2	IC 280-567560/17	0.02	4809.0			240450.0	Y
3	IC 280-567560/16	0.05	12864.0			257280.0	Y
4	IC 280-567560/15	0.1	25499.0			254990.0	Y
5	IC 280-567560/14	0.25	61198.0			244792.0	Y
6	IC 280-567560/13	0.4	99804.0			249510.0	Y
7	IC 280-567560/12	0.7	175358.0			250511.428571	Y
8	IC 280-567560/11	1.0	251717.0			251717.0	Y
9	IC 280-567560/10	2.5	631065.0			252426.0	Y



Calibration / 1,3-Dinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

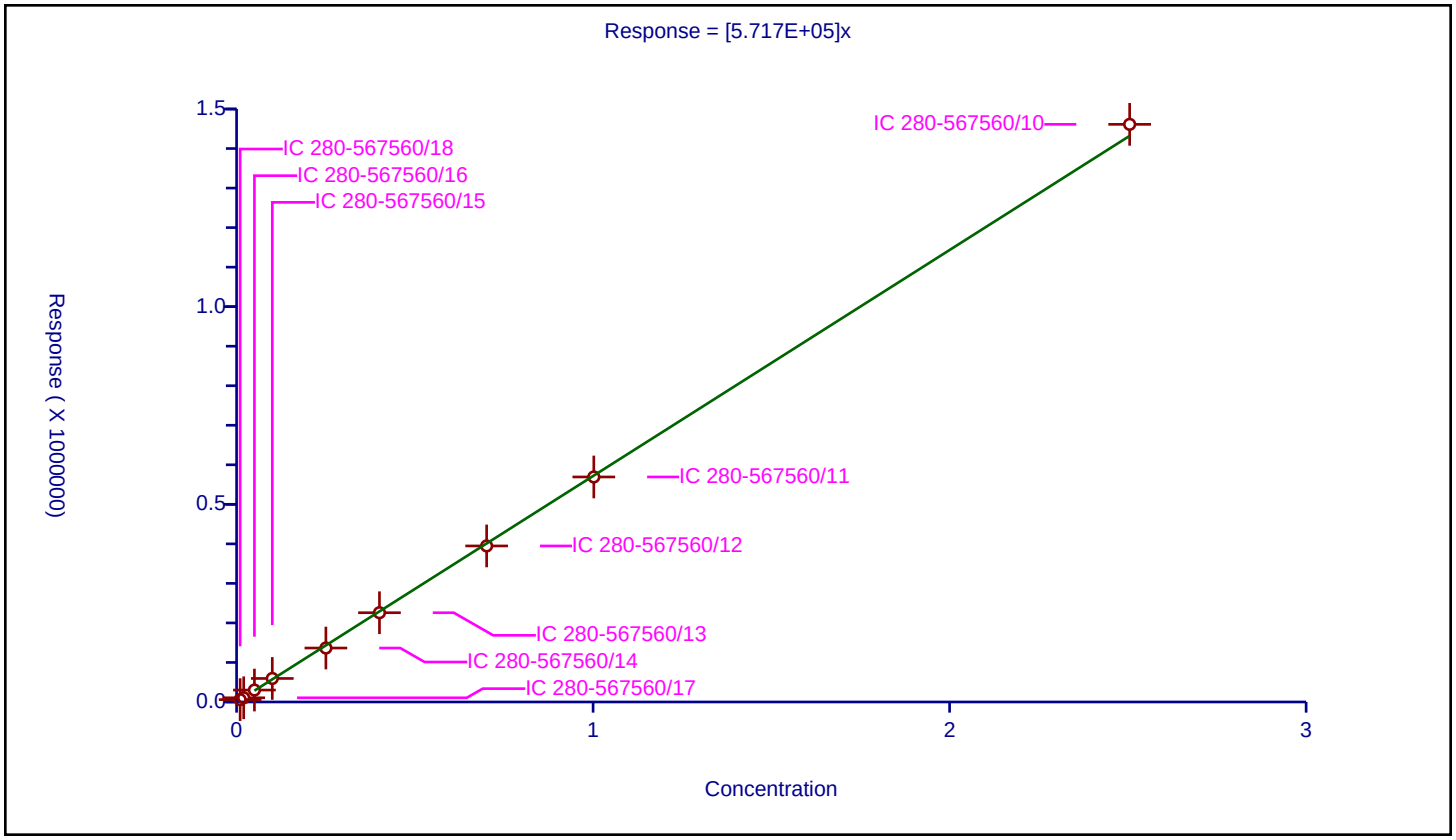
Curve Coefficients

Intercept:	0
Slope:	5.717E+05

Error Coefficients

Standard Error:	11000
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 280-567560/18	0.01002	5961.0			594910.179641	Y
2	IC 280-567560/17	0.02004	10643.0			531087.824351	Y
3	IC 280-567560/16	0.0501	30181.0			602415.169661	Y
4	IC 280-567560/15	0.1002	59537.0			594181.636727	Y
5	IC 280-567560/14	0.2505	136486.0			544854.291417	Y
6	IC 280-567560/13	0.4008	225815.0			563410.678643	Y
7	IC 280-567560/12	0.7014	394707.0			562741.659538	Y
8	IC 280-567560/11	1.002	569212.0			568075.848303	Y
9	IC 280-567560/10	2.505	1461217.0			583320.159681	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

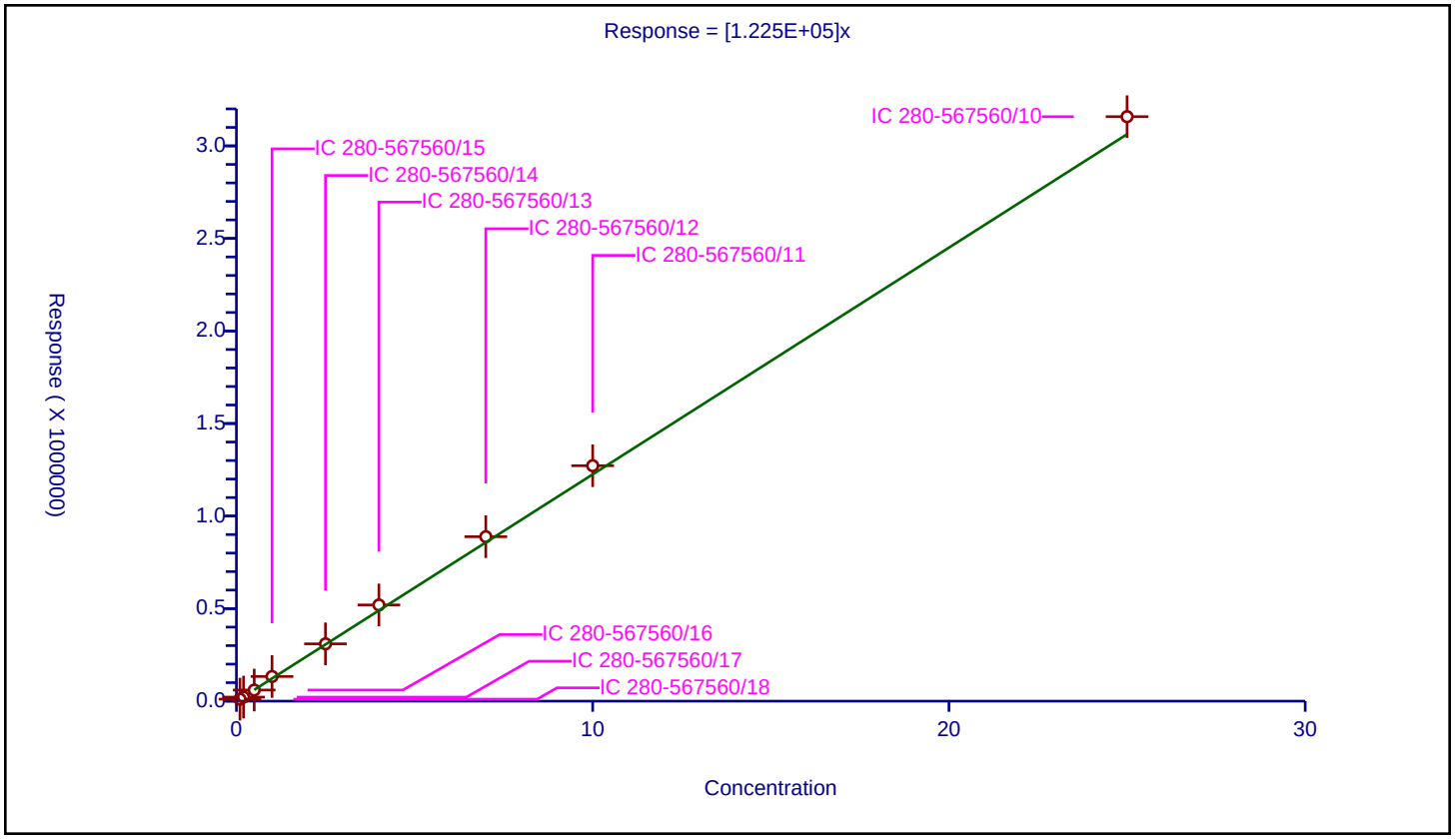
Curve Coefficients

Intercept:	0
Slope:	1.225E+05

Error Coefficients

Standard Error:	40600
Relative Standard Error:	7.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-567560/18	0.1	10664.0			106640.0	Y
2	IC 280-567560/17	0.2	21750.0			108750.0	Y
3	IC 280-567560/16	0.5	59894.0			119788.0	Y
4	IC 280-567560/15	1.0	133241.0			133241.0	Y
5	IC 280-567560/14	2.5	309657.0			123862.8	Y
6	IC 280-567560/13	4.0	519683.0			129920.75	Y
7	IC 280-567560/12	7.0	888552.0			126936.0	Y
8	IC 280-567560/11	10.0	1272015.0			127201.5	Y
9	IC 280-567560/10	25.0	3158004.0			126320.16	Y



Calibration / o-Nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

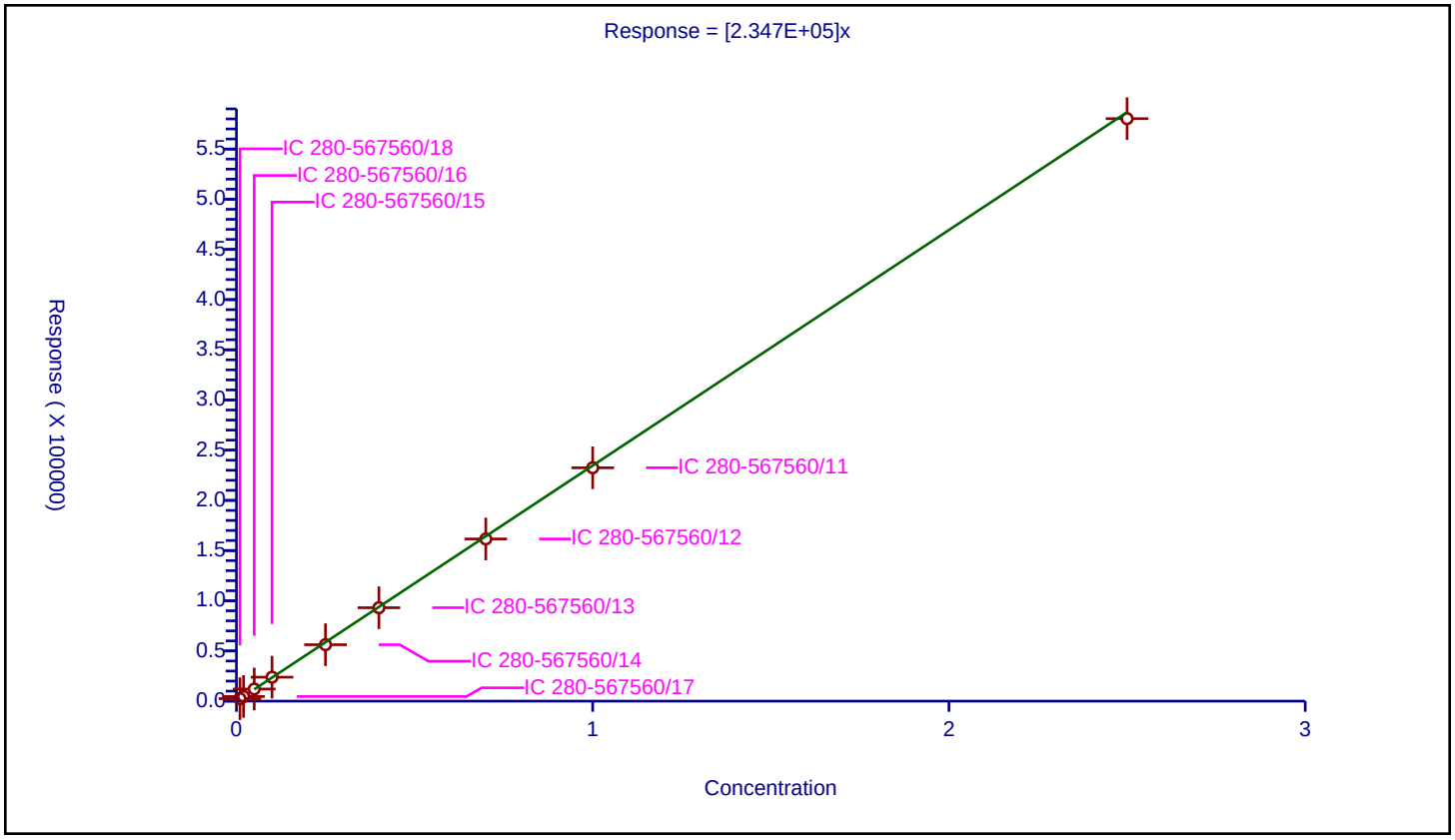
Curve Coefficients

Intercept:	0
Slope:	2.347E+05

Error Coefficients

Standard Error:	2750
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 280-567560/18	0.01	2491.0			249100.0	Y
2	IC 280-567560/17	0.02	4607.0			230350.0	Y
3	IC 280-567560/16	0.05	12057.0			241140.0	Y
4	IC 280-567560/15	0.1	23857.0			238570.0	Y
5	IC 280-567560/14	0.25	56221.0			224884.0	Y
6	IC 280-567560/13	0.4	93064.0			232660.0	Y
7	IC 280-567560/12	0.7	161534.0			230762.857143	Y
8	IC 280-567560/11	1.0	232476.0			232476.0	Y
9	IC 280-567560/10	2.5	580270.0			232108.0	Y



Calibration / p-Nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

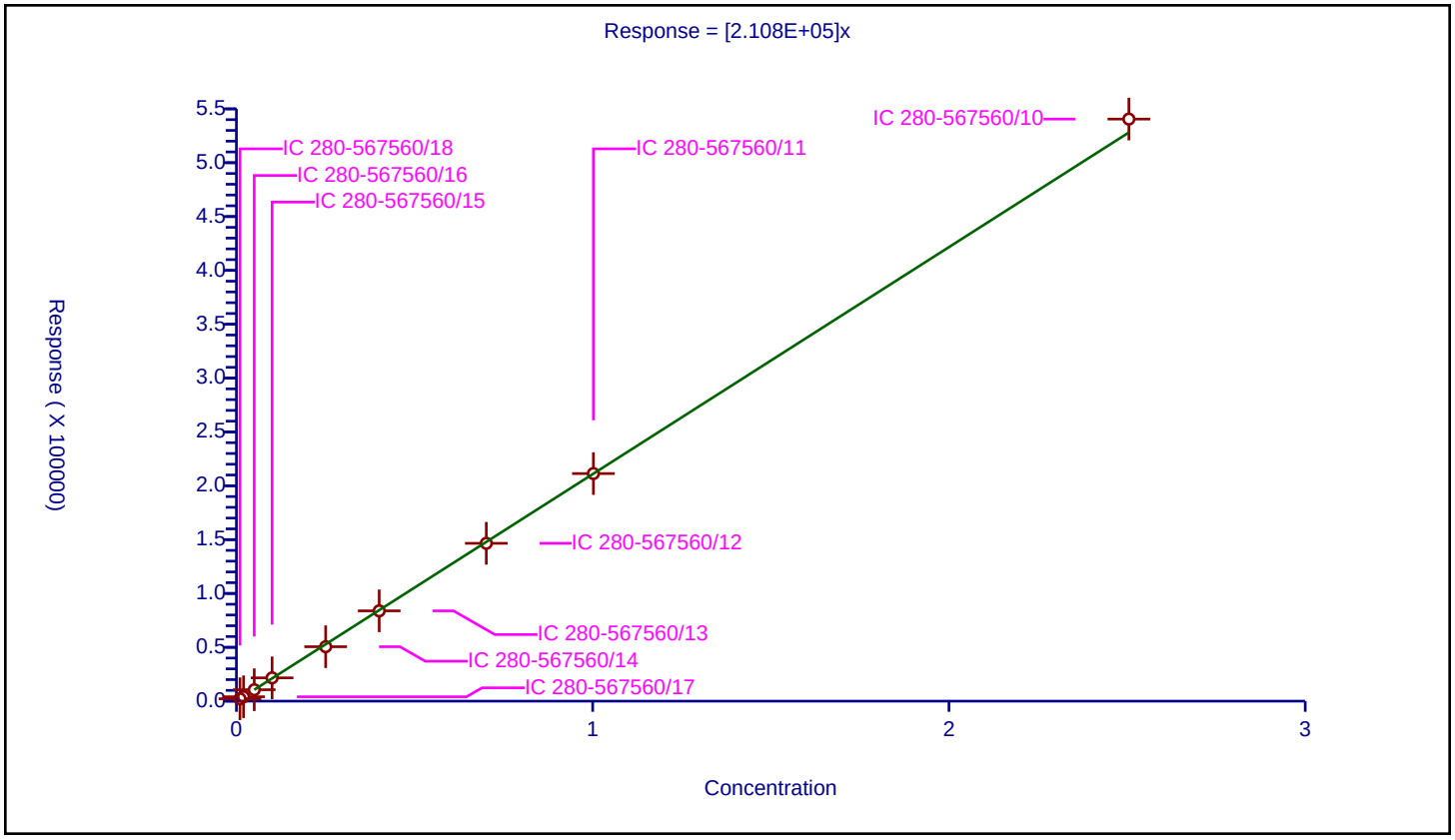
Curve Coefficients

Intercept:	0
Slope:	2.108E+05

Error Coefficients

Standard Error:	4500
Relative Standard Error:	2.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-567560/18	0.01002	2203.0			219860.279441	Y
2	IC 280-567560/17	0.02004	4078.0			203493.013972	Y
3	IC 280-567560/16	0.0501	10595.0			211477.045908	Y
4	IC 280-567560/15	0.1002	21625.0			215818.363273	Y
5	IC 280-567560/14	0.2505	50555.0			201816.367265	Y
6	IC 280-567560/13	0.4008	83857.0			209224.051896	Y
7	IC 280-567560/12	0.7014	146563.0			208957.798688	Y
8	IC 280-567560/11	1.002	211344.0			210922.155689	Y
9	IC 280-567560/10	2.505	540531.0			215780.838323	Y



Calibration / 4-Amino-2,6-dinitrotoluene

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

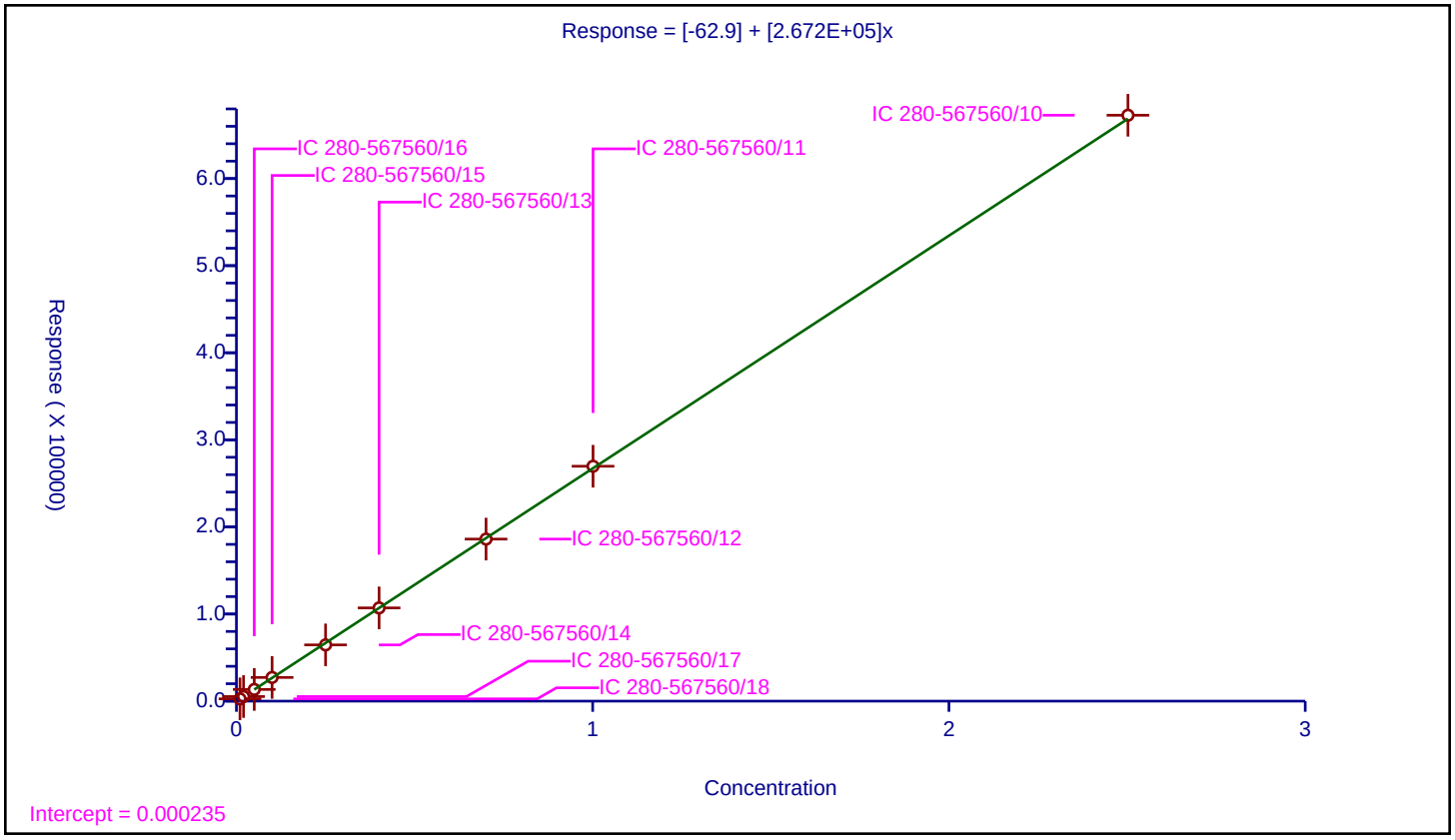
Curve Coefficients

Intercept:	-62.9
Slope:	2.672E+05

Error Coefficients

Standard Error:	1990
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 280-567560/18	0.01001	2610.0			260739.260739	Y
2	IC 280-567560/17	0.02002	5271.0			263286.713287	Y
3	IC 280-567560/16	0.05005	13425.0			268231.768232	Y
4	IC 280-567560/15	0.1001	27216.0			271888.111888	Y
5	IC 280-567560/14	0.25025	64569.0			258017.982018	Y
6	IC 280-567560/13	0.4004	107043.0			267340.15984	Y
7	IC 280-567560/12	0.7007	186078.0			265560.154132	Y
8	IC 280-567560/11	1.001	269691.0			269421.578422	Y
9	IC 280-567560/10	2.5025	672715.0			268817.182817	Y



Calibration / m-Nitrotoluene

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

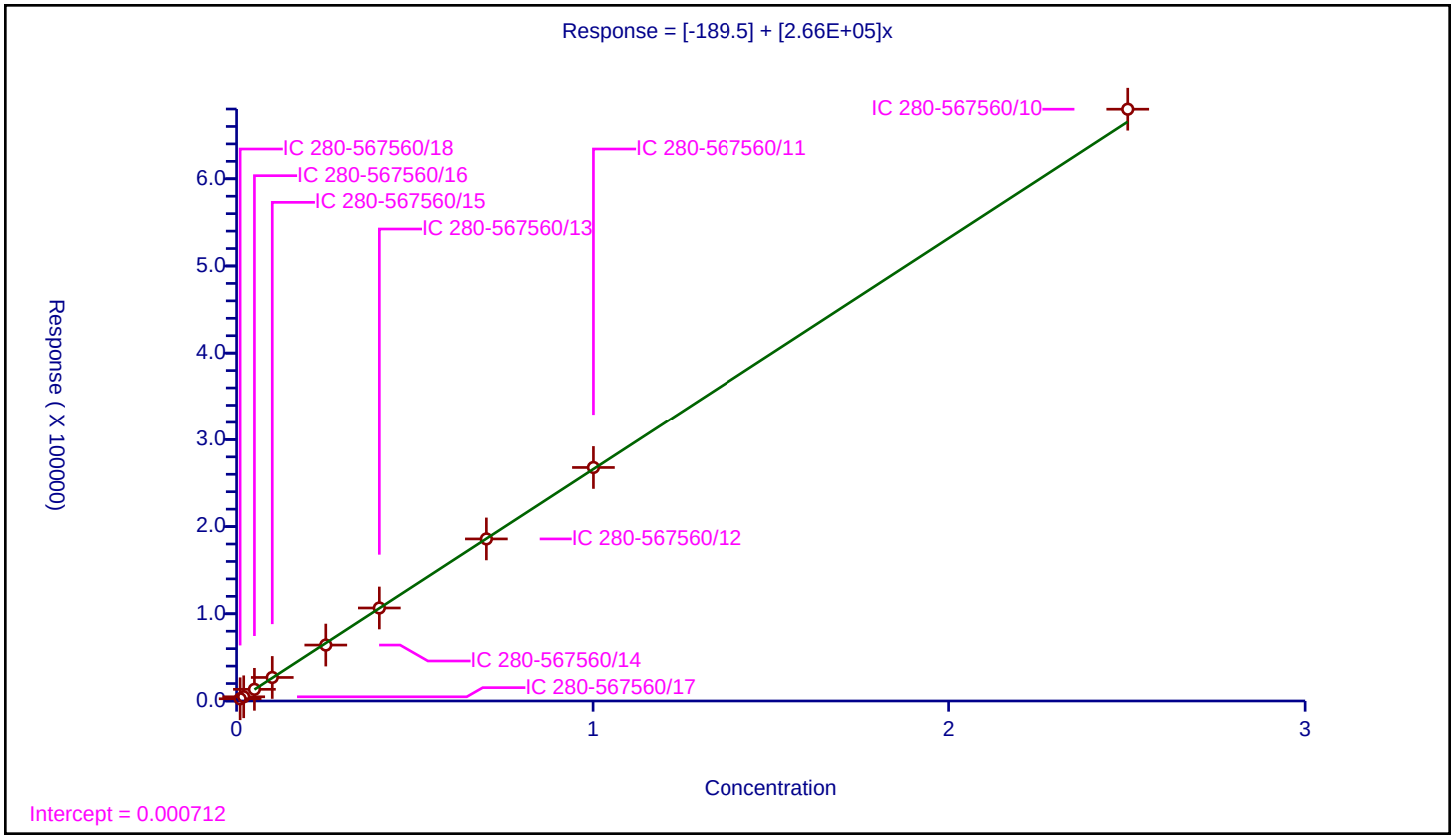
Curve Coefficients

Intercept:	-189.5
Slope:	2.66E+05

Error Coefficients

Standard Error:	5530
Relative Standard Error:	3.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-567560/18	0.01001	2543.0			254045.954046	Y
2	IC 280-567560/17	0.02002	4805.0			240009.99001	Y
3	IC 280-567560/16	0.05005	13387.0			267472.527473	Y
4	IC 280-567560/15	0.1001	26978.0			269510.48951	Y
5	IC 280-567560/14	0.25025	64150.0			256343.656344	Y
6	IC 280-567560/13	0.4004	106661.0			266386.113886	Y
7	IC 280-567560/12	0.7007	185839.0			265219.066648	Y
8	IC 280-567560/11	1.001	267812.0			267544.455544	Y
9	IC 280-567560/10	2.5025	679800.0			271648.351648	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

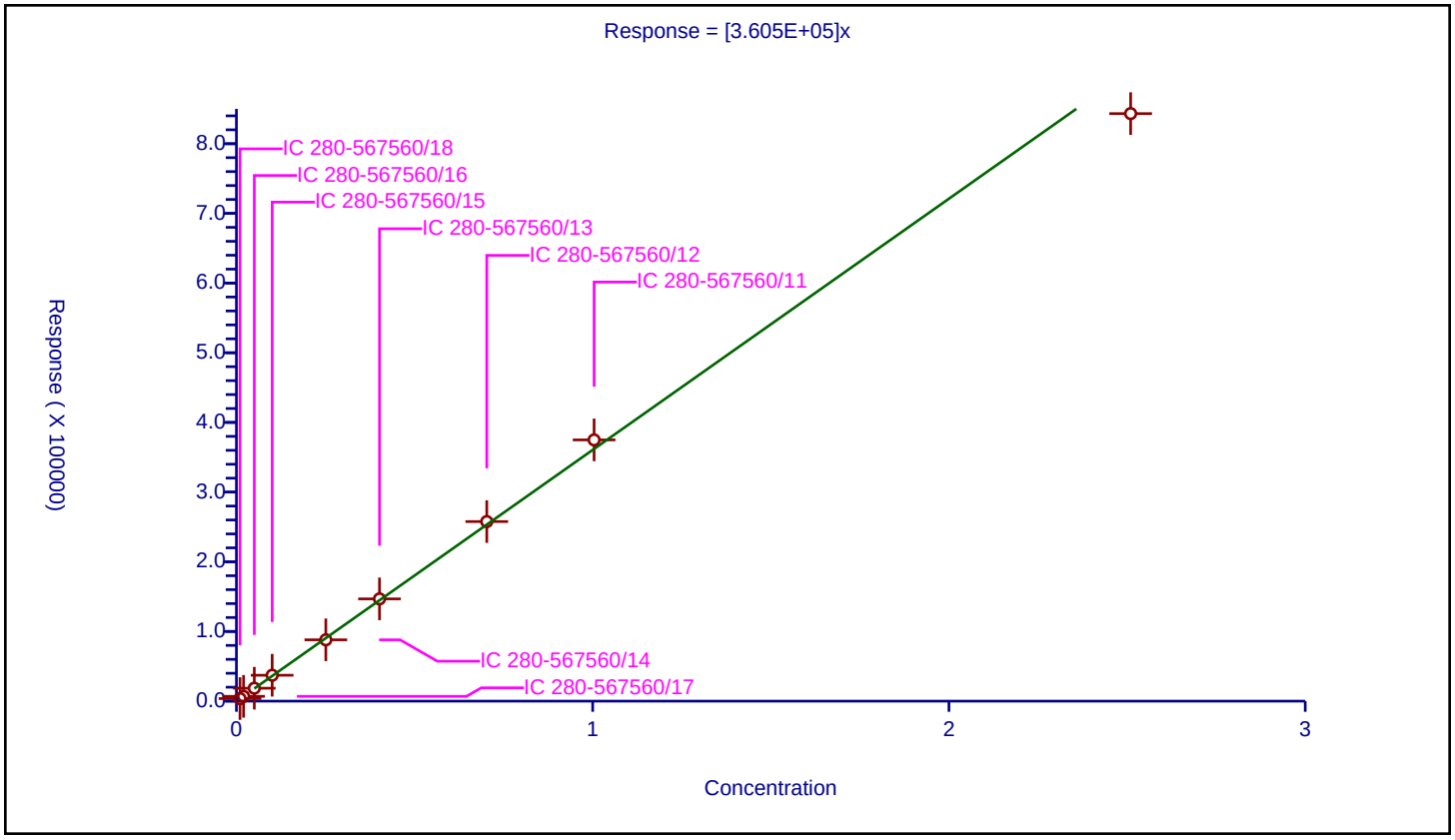
Curve Coefficients

Intercept:	0
Slope:	3.605E+05

Error Coefficients

Standard Error:	22400
Relative Standard Error:	3.8
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-567560/18	0.01004	3705.0			369023.904382	Y
2	IC 280-567560/17	0.02008	6899.0			343575.697211	Y
3	IC 280-567560/16	0.0502	18562.0			369760.956175	Y
4	IC 280-567560/15	0.1004	37178.0			370298.804781	Y
5	IC 280-567560/14	0.251	88010.0			350637.450199	Y
6	IC 280-567560/13	0.4016	146764.0			365448.207171	Y
7	IC 280-567560/12	0.7028	257718.0			366701.764371	Y
8	IC 280-567560/11	1.004	374916.0			373422.310757	Y
9	IC 280-567560/10	2.51	843240.0			335952.191235	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

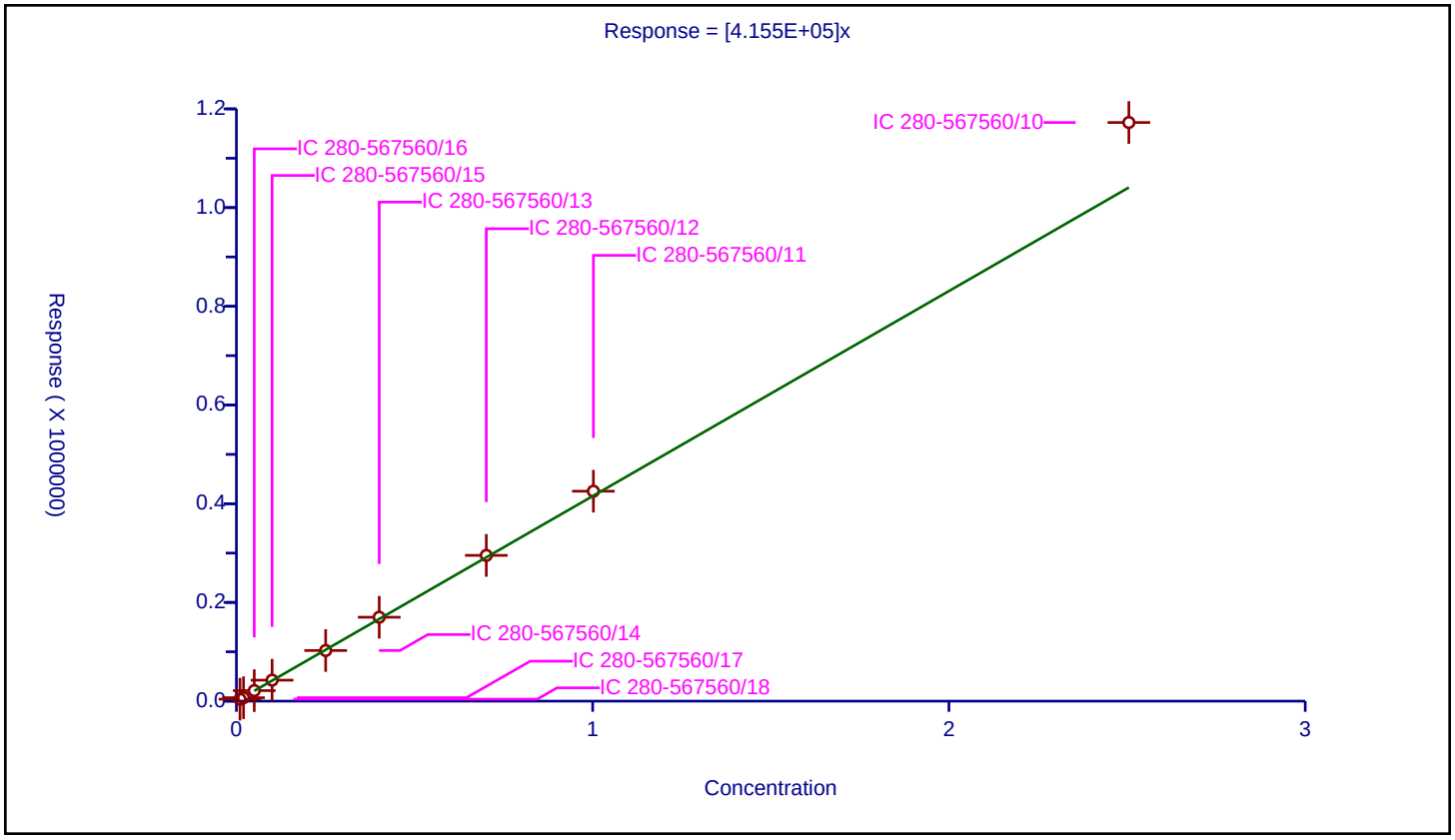
Curve Coefficients

Intercept:	0
Slope:	4.155E+05

Error Coefficients

Standard Error:	46700
Relative Standard Error:	7.7
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-567560/18	0.01002	3947.0			393912.175649	Y
2	IC 280-567560/17	0.02004	6970.0			347804.391218	Y
3	IC 280-567560/16	0.0501	21339.0			425928.143713	Y
4	IC 280-567560/15	0.1002	42514.0			424291.417166	Y
5	IC 280-567560/14	0.2505	102576.0			409485.02994	Y
6	IC 280-567560/13	0.4008	170012.0			424181.636727	Y
7	IC 280-567560/12	0.7014	295298.0			421012.261192	Y
8	IC 280-567560/11	1.002	425388.0			424538.922156	Y
9	IC 280-567560/10	2.505	1172398.0			468023.153693	Y



Calibration / 2,6-Dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

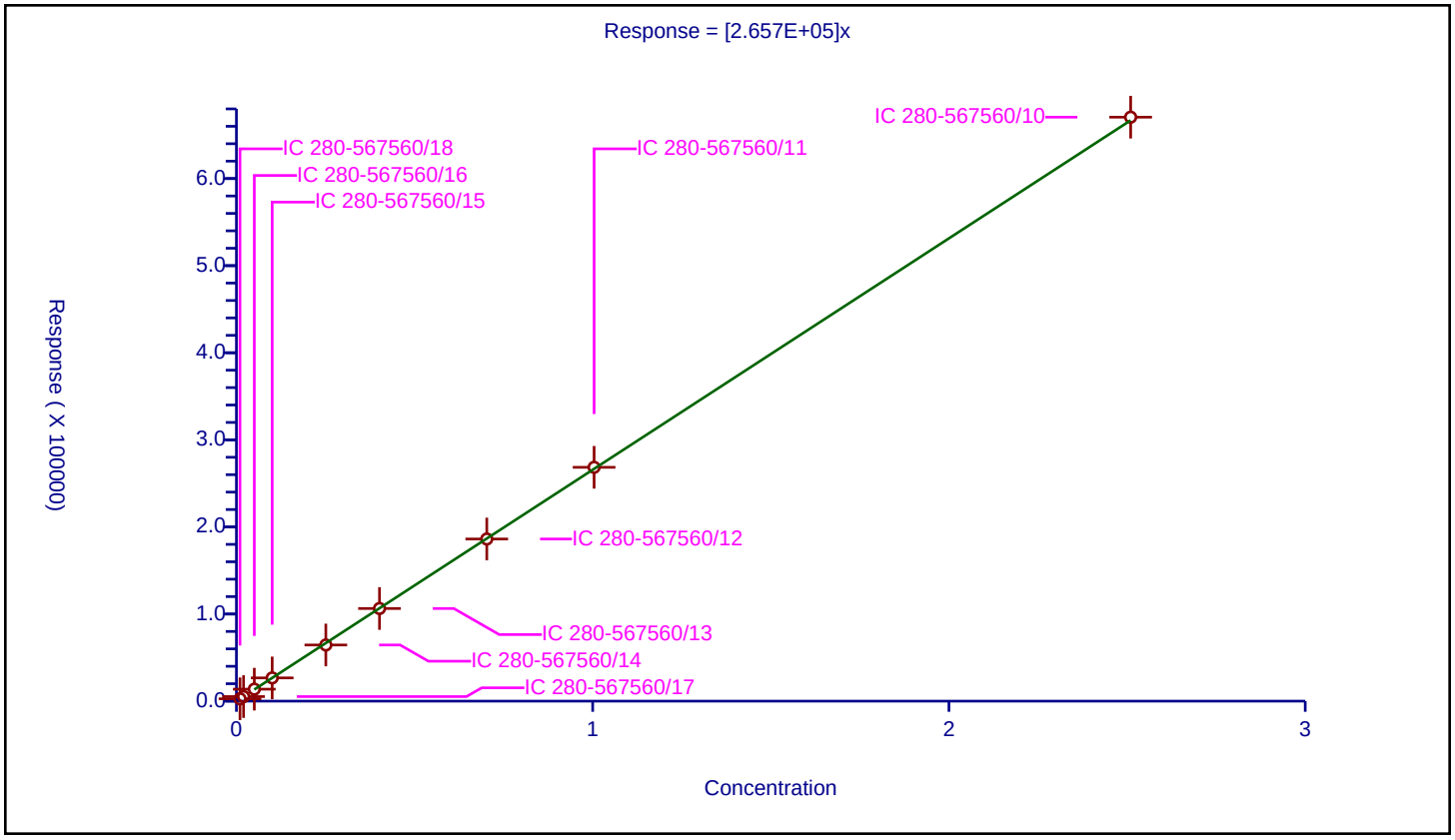
Curve Coefficients

Intercept:	0
Slope:	2.657E+05

Error Coefficients

Standard Error:	1660
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 280-567560/18	0.01004	2704.0			269322.709163	Y
2	IC 280-567560/17	0.02008	5233.0			260607.569721	Y
3	IC 280-567560/16	0.0502	13757.0			274043.824701	Y
4	IC 280-567560/15	0.1004	26687.0			265806.772908	Y
5	IC 280-567560/14	0.251	64489.0			256928.286853	Y
6	IC 280-567560/13	0.4016	106362.0			264845.61753	Y
7	IC 280-567560/12	0.7028	186150.0			264869.095048	Y
8	IC 280-567560/11	1.004	268478.0			267408.366534	Y
9	IC 280-567560/10	2.51	670482.0			267124.302789	Y



Calibration / 2,4-Dinitrotoluene

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

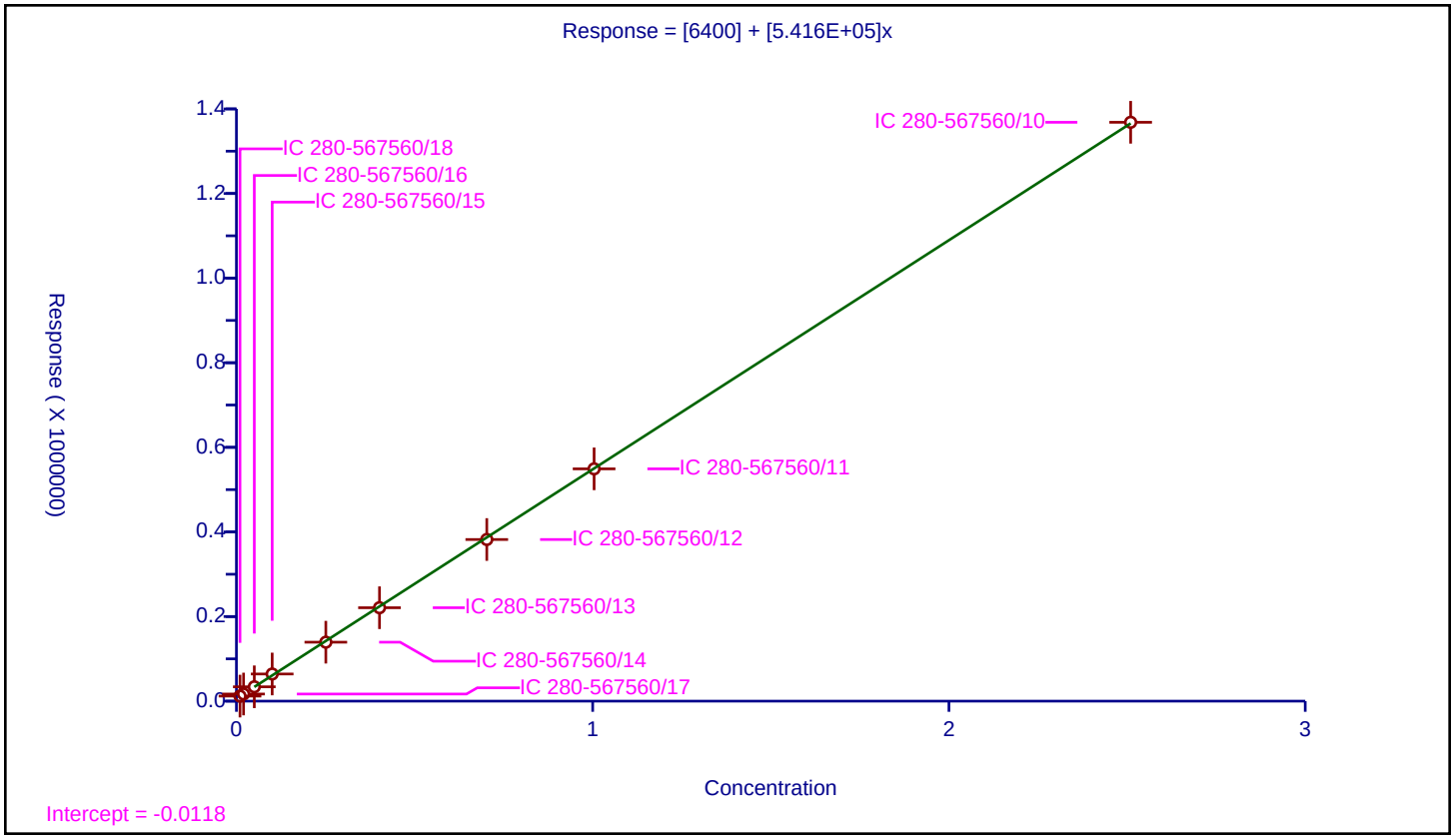
Curve Coefficients

Intercept:	6400
Slope:	5.416E+05

Error Coefficients

Standard Error:	2990
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 280-567560/18	0.01004	11900.0			1185258.964143	Y
2	IC 280-567560/17	0.02008	16863.0			839790.836653	Y
3	IC 280-567560/16	0.0502	33918.0			675657.370518	Y
4	IC 280-567560/15	0.1004	64187.0			639312.749004	Y
5	IC 280-567560/14	0.251	139375.0			555278.884462	Y
6	IC 280-567560/13	0.4016	220828.0			549870.517928	Y
7	IC 280-567560/12	0.7028	382059.0			543624.075128	Y
8	IC 280-567560/11	1.004	549112.0			546924.302789	Y
9	IC 280-567560/10	2.51	1368356.0			545161.752988	Y



Calibration / Tetryl

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

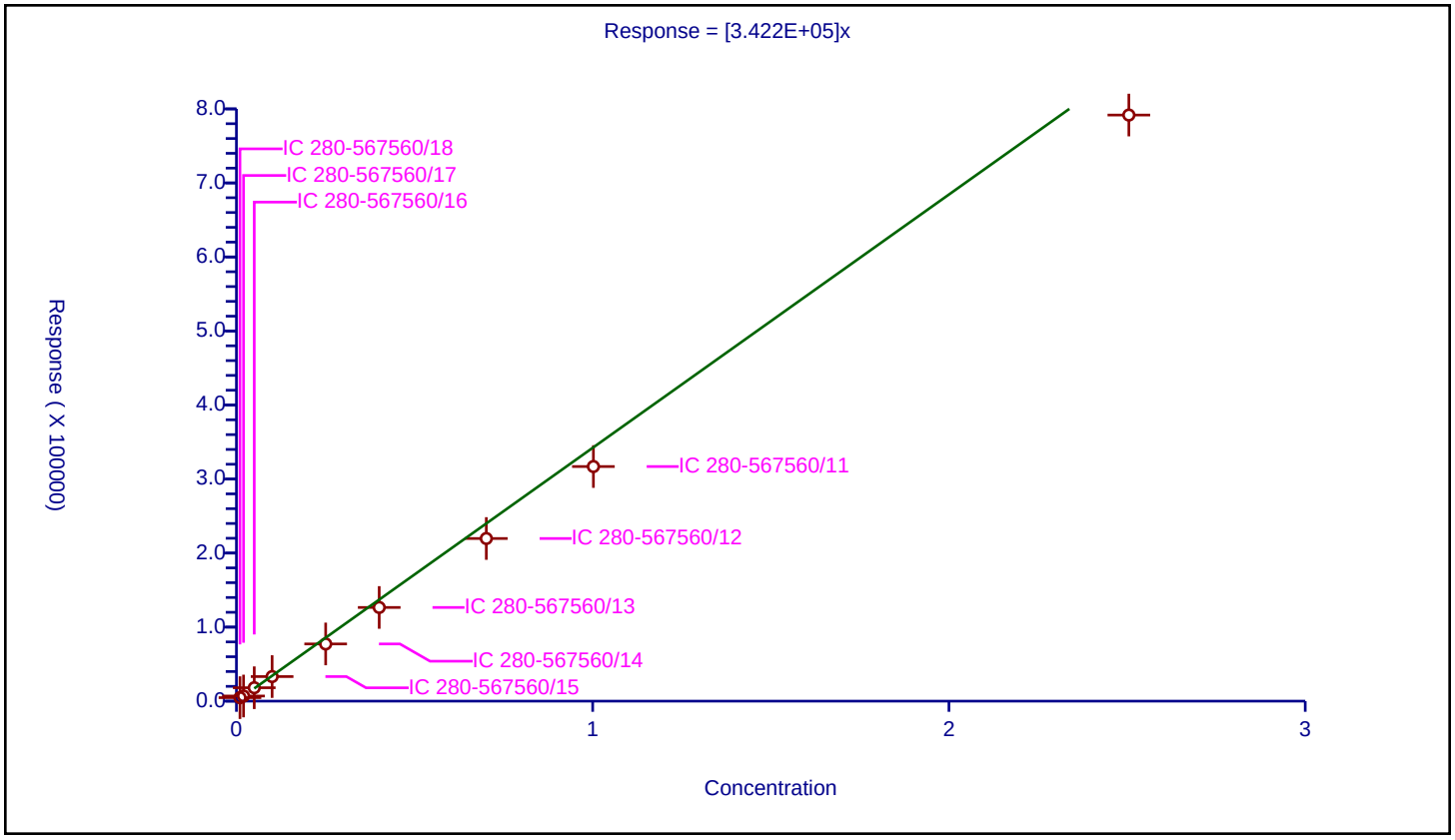
Curve Coefficients

Intercept:	0
Slope:	3.422E+05

Error Coefficients

Standard Error:	26400
Relative Standard Error:	15.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.965

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-567560/18	0.01002	4722.0			471257.48503	Y
2	IC 280-567560/17	0.02004	6933.0			345958.083832	Y
3	IC 280-567560/16	0.0501	18110.0			361477.045908	Y
4	IC 280-567560/15	0.1002	33188.0			331217.56487	Y
5	IC 280-567560/14	0.2505	77249.0			308379.241517	Y
6	IC 280-567560/13	0.4008	126546.0			315733.532934	Y
7	IC 280-567560/12	0.7014	219675.0			313195.038494	Y
8	IC 280-567560/11	1.002	316900.0			316267.46507	Y
9	IC 280-567560/10	2.505	791703.0			316049.101796	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

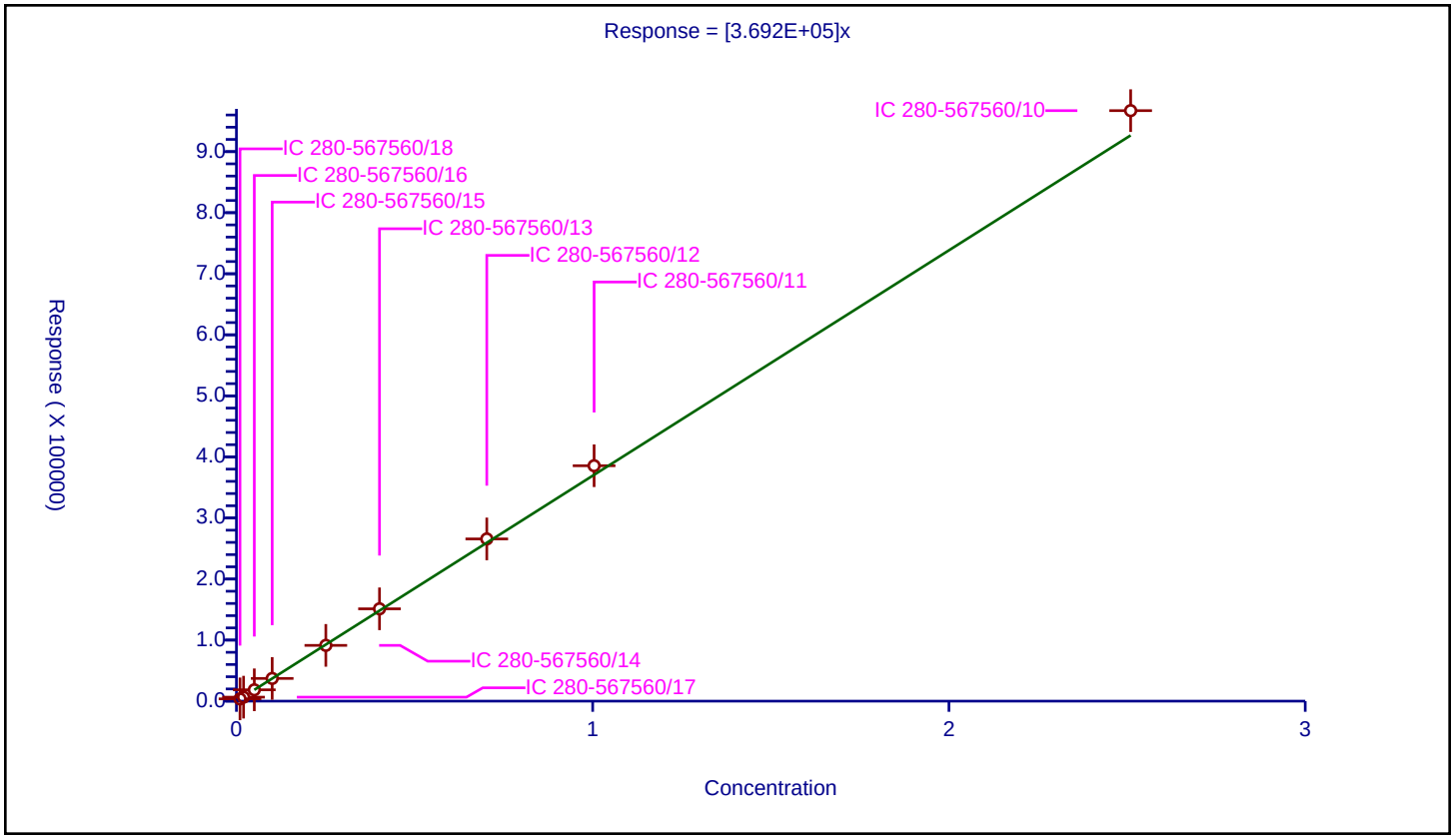
Curve Coefficients

Intercept:	0
Slope:	3.692E+05

Error Coefficients

Standard Error:	15500
Relative Standard Error:	5.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-567560/18	0.01004	3720.0			370517.928287	Y
2	IC 280-567560/17	0.02008	6507.0			324053.784861	Y
3	IC 280-567560/16	0.0502	18556.0			369641.434263	Y
4	IC 280-567560/15	0.1004	37205.0			370567.729084	Y
5	IC 280-567560/14	0.251	91338.0			363896.414343	Y
6	IC 280-567560/13	0.4016	151235.0			376581.175299	Y
7	IC 280-567560/12	0.7028	265676.0			378025.042686	Y
8	IC 280-567560/11	1.004	385560.0			384023.904382	Y
9	IC 280-567560/10	2.51	967117.0			385305.577689	Y



Calibration / PETN

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

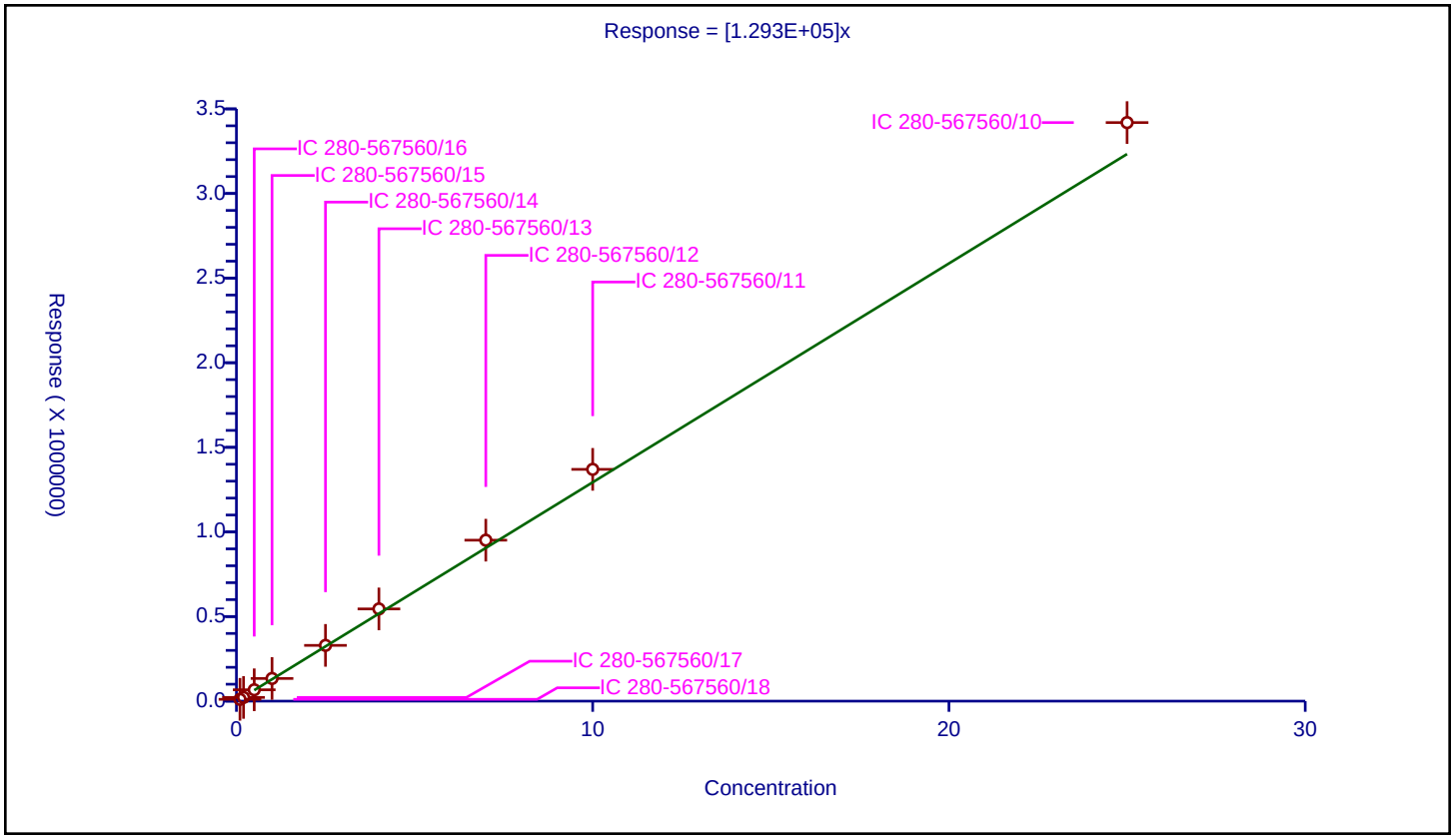
Curve Coefficients

Intercept:	0
Slope:	1.293E+05

Error Coefficients

Standard Error:	73600
Relative Standard Error:	9.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-567560/18	0.1	10842.0			108420.0	Y
2	IC 280-567560/17	0.2	21923.0			109615.0	Y
3	IC 280-567560/16	0.5	67082.0			134164.0	Y
4	IC 280-567560/15	1.0	134076.0			134076.0	Y
5	IC 280-567560/14	2.5	329509.0			131803.6	Y
6	IC 280-567560/13	4.0	544987.0			136246.75	Y
7	IC 280-567560/12	7.0	951206.0			135886.571429	Y
8	IC 280-567560/11	10.0	1369840.0			136984.0	Y
9	IC 280-567560/10	25.0	3419168.0			136766.72	Y



FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1 Analy Batch No.: 567560

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/03/2022 03:13 Calibration End Date: 03/03/2022 07:19 Calibration ID: 62763

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-567560/27	03020027.D
Level 2	IC 280-567560/26	03020026.D
Level 3	IC 280-567560/25	03020025.D
Level 4	IC 280-567560/24	03020024.D
Level 5	IC 280-567560/23	03020023.D
Level 6	IC 280-567560/22	03020022.D
Level 7	IC 280-567560/21	03020021.D
Level 8	IC 280-567560/20	03020020.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
TNX	5.170	5.168	5.172	5.164	5.171	5.157	5.156	5.140			5.021 - 5.321	5.162
DNX	6.030	6.028	6.032	6.024	6.031	6.017	6.016	6.000			5.881 - 6.181	6.022
MNX	7.624	7.621	7.625	7.617	7.625	7.610	7.602	7.593			7.475 - 7.775	7.615

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver | Job No.: 280-162622-1 | Analy Batch No.: 567560

SDG No.:

Instrument ID: CHHPLC_X5 | GC Column: Luna-phenyl ID: 4.6(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 03/03/2022 03:13 | Calibration End Date: 03/03/2022 07:19 | Calibration ID: 62763

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-567560/27	03020027.D
Level 2	IC 280-567560/26	03020026.D
Level 3	IC 280-567560/25	03020025.D
Level 4	IC 280-567560/24	03020024.D
Level 5	IC 280-567560/23	03020023.D
Level 6	IC 280-567560/22	03020022.D
Level 7	IC 280-567560/21	03020021.D
Level 8	IC 280-567560/20	03020020.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	349201 351611	355385 355367	353267 354987	350933 361808	Ave		354069.850				1.1		20.0			
DNX	317133 267552	289031 269316	277622 267891	269419 271146	Ave		278638.900				6.2		20.0			
MNX	257326 246598	252785 247481	254053 246929	246461 249015	Ave		250081.020				1.6		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver Job No.: 280-162622-1 Analy Batch No.: 567560

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/03/2022 03:13 Calibration End Date: 03/03/2022 07:19 Calibration ID: 62763

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-567560/27	03020027.D
Level 2	IC 280-567560/26	03020026.D
Level 3	IC 280-567560/25	03020025.D
Level 4	IC 280-567560/24	03020024.D
Level 5	IC 280-567560/23	03020023.D
Level 6	IC 280-567560/22	03020022.D
Level 7	IC 280-567560/21	03020021.D
Level 8	IC 280-567560/20	03020020.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	6991 249006	17787 355342	35362 905425	87821	140785	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
DNX	Ave	6349 188710	14466 268159	27790 678544	67422	107128	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
MNX	Ave	6006 202167	14750 288166	29648 726501	71905	115112	0.0233 0.817	0.0584 1.17	0.117 2.92	0.292	0.467

Curve Type Legend
Ave = Average

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020020.D				
Lims ID:	IC DMT 8				
Client ID:					
Sample Type:	IC	Calib Level:	8		
Inject. Date:	03-Mar-2022 03:13:58	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 8				
Misc. Info.:	280-0108949-020				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Sublist:	chrom-8330_X5_Luna*sub2				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	03-Mar-2022 12:49:18	Calib Date:	03-Mar-2022 07:19:48		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.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	5.140	5.171	-0.031	905425	2.50	2.56	
4 DNX	1	6.000	6.031	-0.031	678544	2.50	2.44	
6 MNX	1	7.593	7.625	-0.032	726501	2.92	2.91	

Reagents:

8330 DMT_00010 Amount Added: 125.00 Units: uL

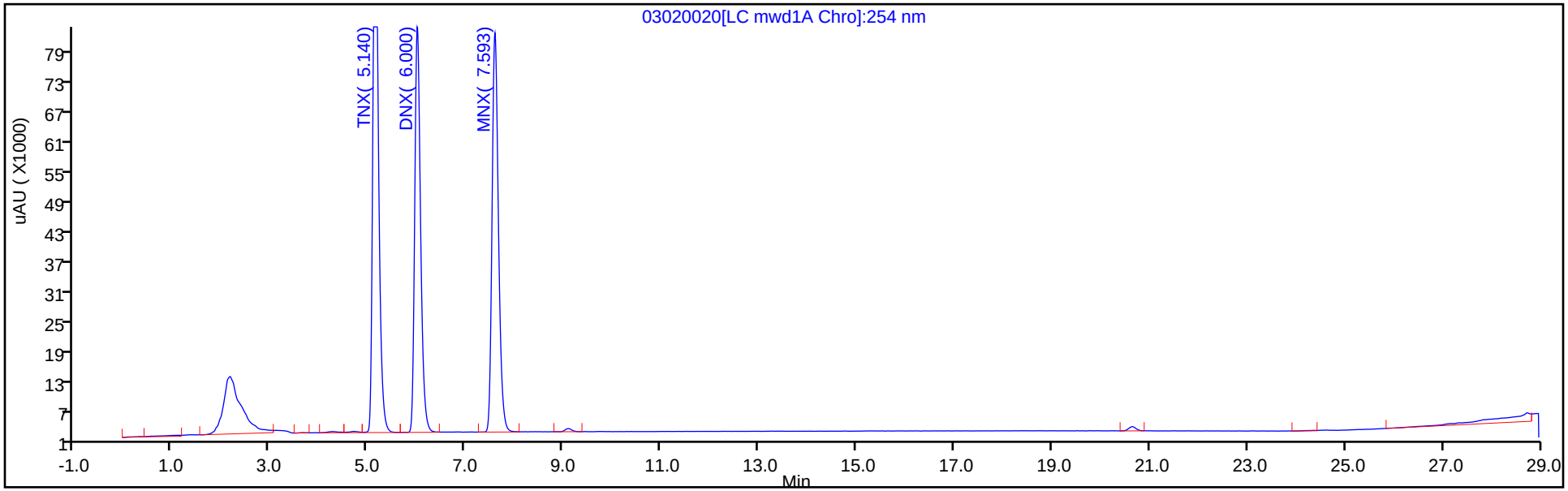
Report Date: 03-Mar-2022 12:49:19 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

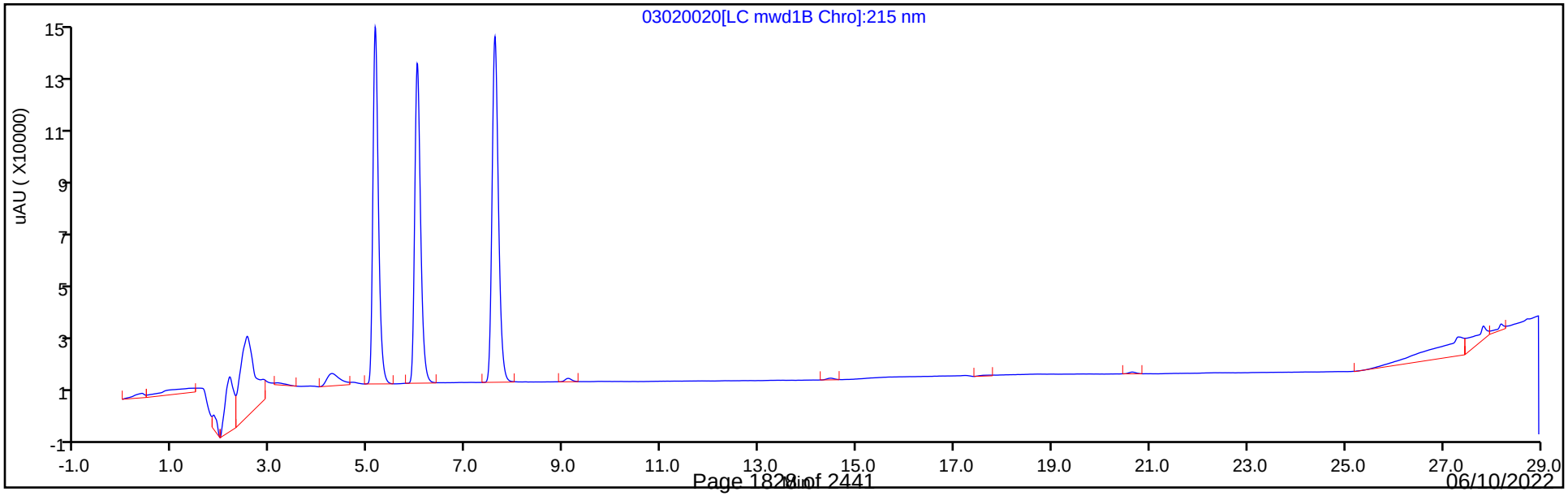
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020020.D

Injection Date:	03-Mar-2022 03:13:58	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 Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020021.D				
Lims ID:	IC DMT 7				
Client ID:					
Sample Type:	IC	Calib Level:	7		
Inject. Date:	03-Mar-2022 03:49:08	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 7				
Misc. Info.:	280-0108949-021				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Sublist:	chrom-8330_X5_Luna*sub2				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	03-Mar-2022 12:49:19	Calib Date:	03-Mar-2022 07:19:48		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.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	5.156	5.171	-0.015	355342	1.00	1.00	
4 DNX	1	6.016	6.031	-0.015	268159	1.00	0.9624	
6 MNX	1	7.602	7.625	-0.023	288166	1.17	1.15	

Reagents:

8330 DMT_00010 Amount Added: 50.00 Units: uL

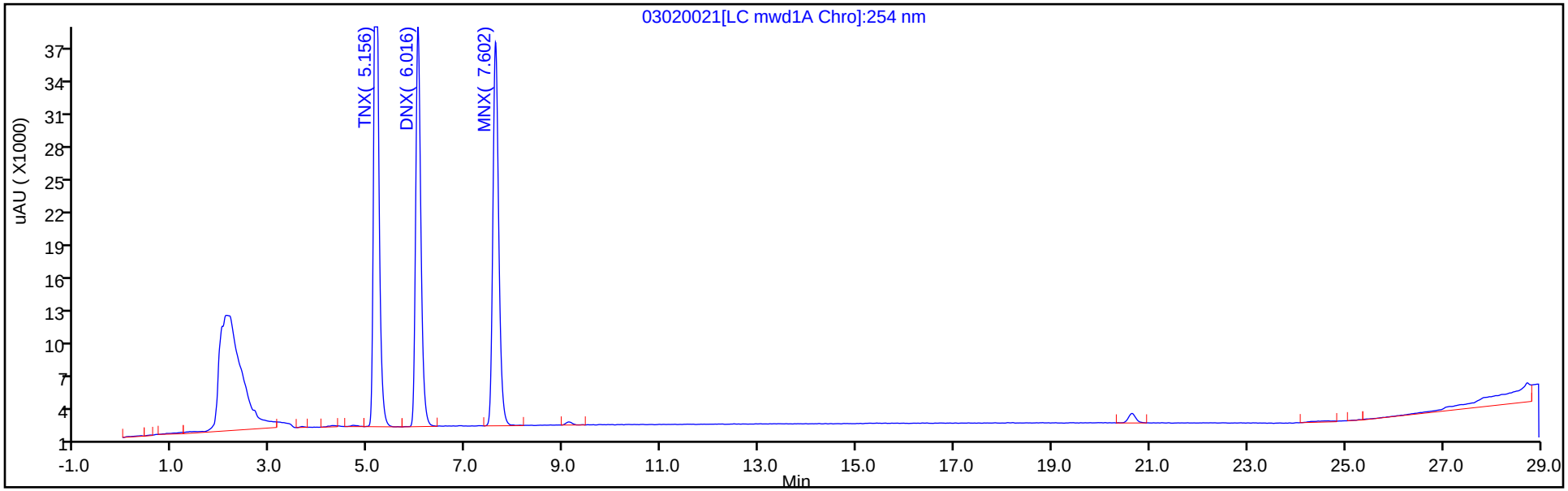
Report Date: 03-Mar-2022 12:49:19 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

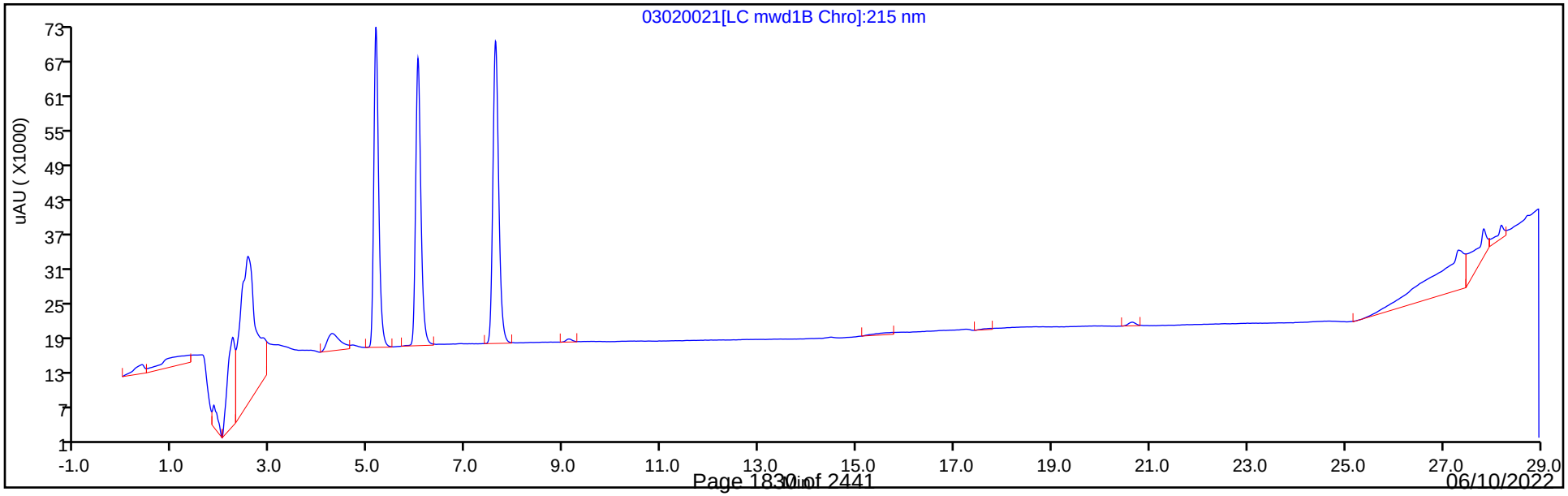
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020021.D

Injection Date:	03-Mar-2022 03:49:08	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 Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020022.D
Lims ID: IC DMT 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 03-Mar-2022 04:24:13 ALS Bottle#: 22 Worklist Smp#: 22
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT 6
Misc. Info.: 280-0108949-022
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub2

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 03-Mar-2022 12:49:19 Calib Date: 03-Mar-2022 07:19:48
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.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	5.157	5.171	-0.014	249006	0.7007	0.7033	
4 DNX	1	6.017	6.031	-0.014	188710	0.7007	0.6773	
6 MNX	1	7.610	7.625	-0.015	202167	0.8169	0.8084	

Reagents:

8330 DMT_00010 Amount Added: 35.00 Units: uL

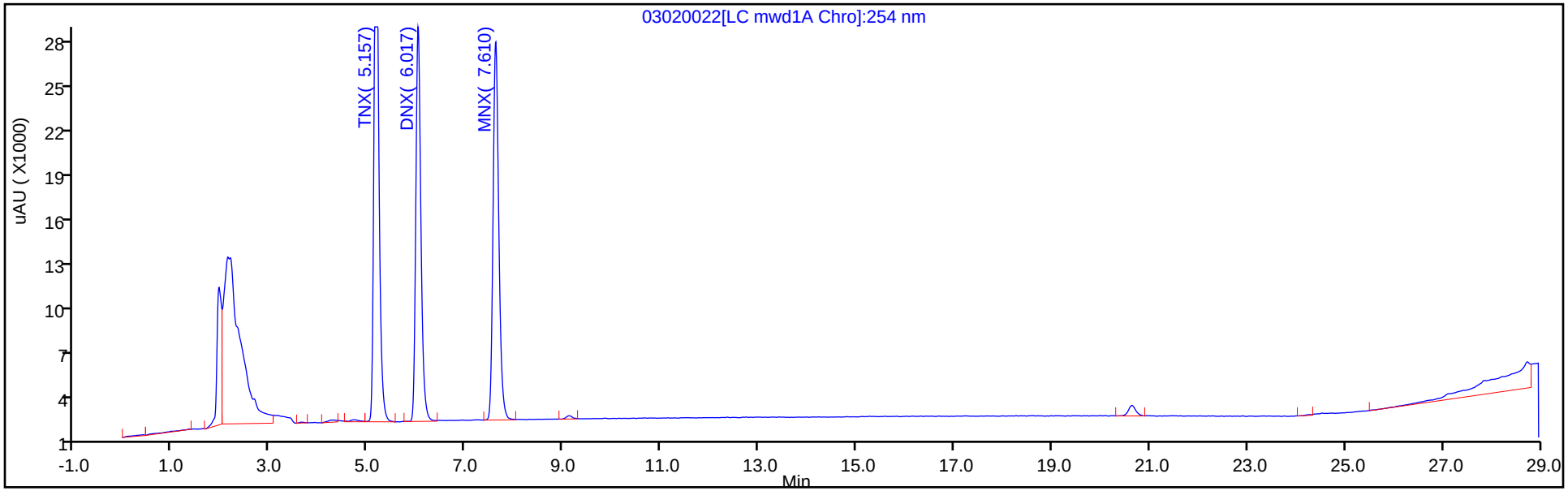
Report Date: 03-Mar-2022 12:49:19 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

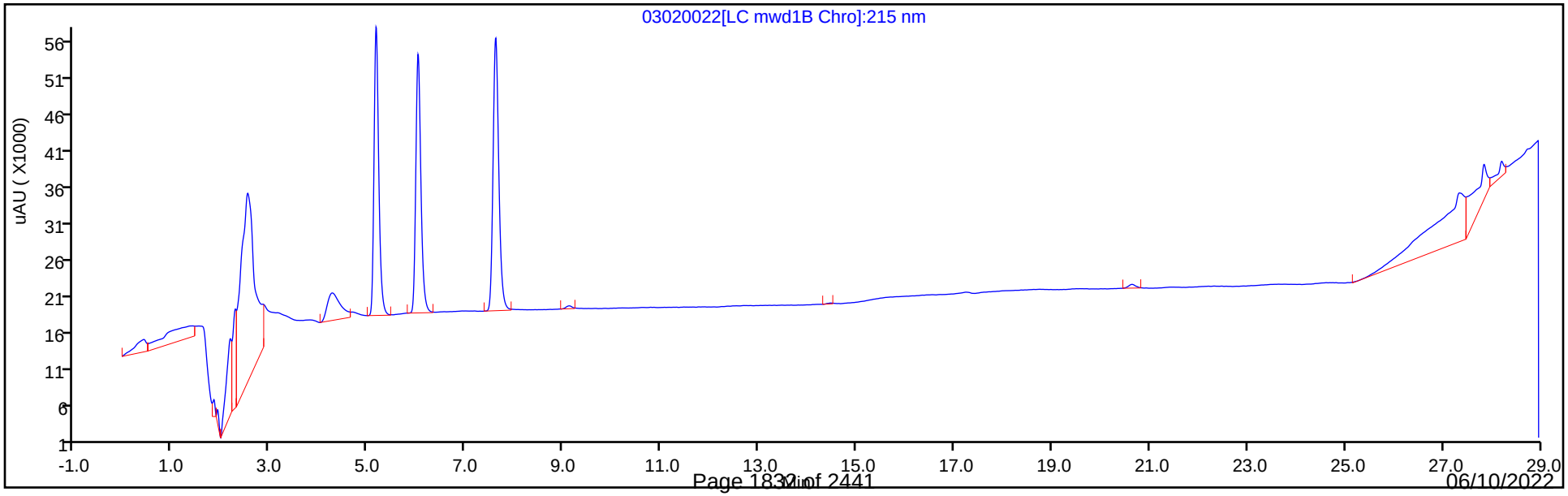
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020022.D

Injection Date:	03-Mar-2022 04:24:13	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 Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020023.D				
Lims ID:	IC DMT 5				
Client ID:					
Sample Type:	IC	Calib Level:	5		
Inject. Date:	03-Mar-2022 04:59:22	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 5				
Misc. Info.:	280-0108949-023				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Sublist:	chrom-8330_X5_Luna*sub2				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	03-Mar-2022 12:49:20	Calib Date:	03-Mar-2022 07:19:48		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.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	5.171	5.171	0.000	140785	0.4004	0.3976	
4 DNX	1	6.031	6.031	0.000	107128	0.4004	0.3845	
6 MNX	1	7.625	7.625	0.000	115112	0.4668	0.4603	

Reagents:

8330 DMT_00010 Amount Added: 20.00 Units: uL

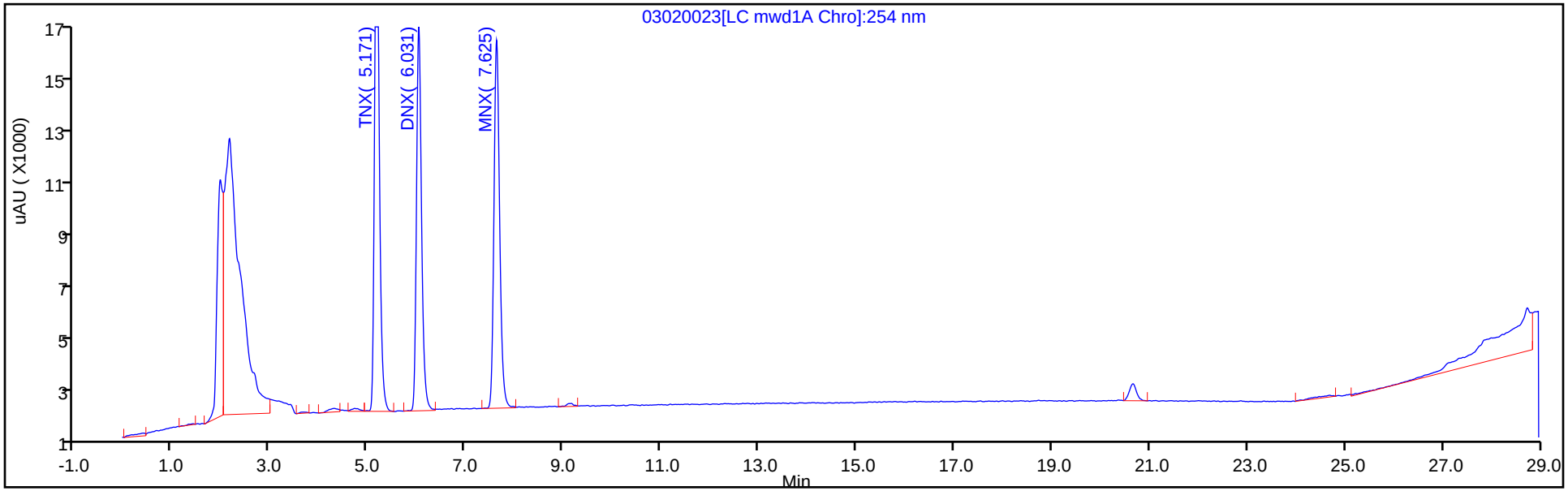
Report Date: 03-Mar-2022 12:49:20 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

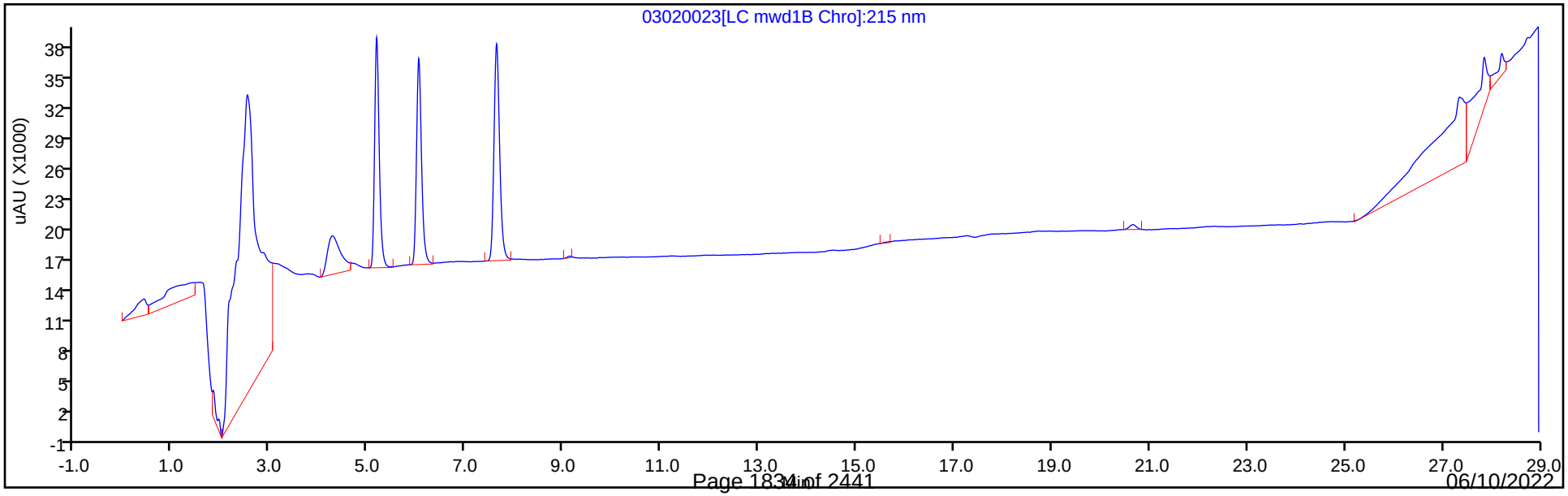
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020023.D

Injection Date:	03-Mar-2022 04:59:22	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 Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020024.D
Lims ID: IC DMT 4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 03-Mar-2022 05:34:27 ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT 4
Misc. Info.: 280-0108949-024
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub2

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 03-Mar-2022 12:49:20 Calib Date: 03-Mar-2022 07:19:48
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.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	5.164	5.171	-0.007	87821	0.2503	0.2480	
4 DNX	1	6.024	6.031	-0.007	67422	0.2503	0.2420	
6 MNX	1	7.617	7.625	-0.008	71905	0.2918	0.2875	

Reagents:

8330 DMT_00010 Amount Added: 12.50 Units: uL

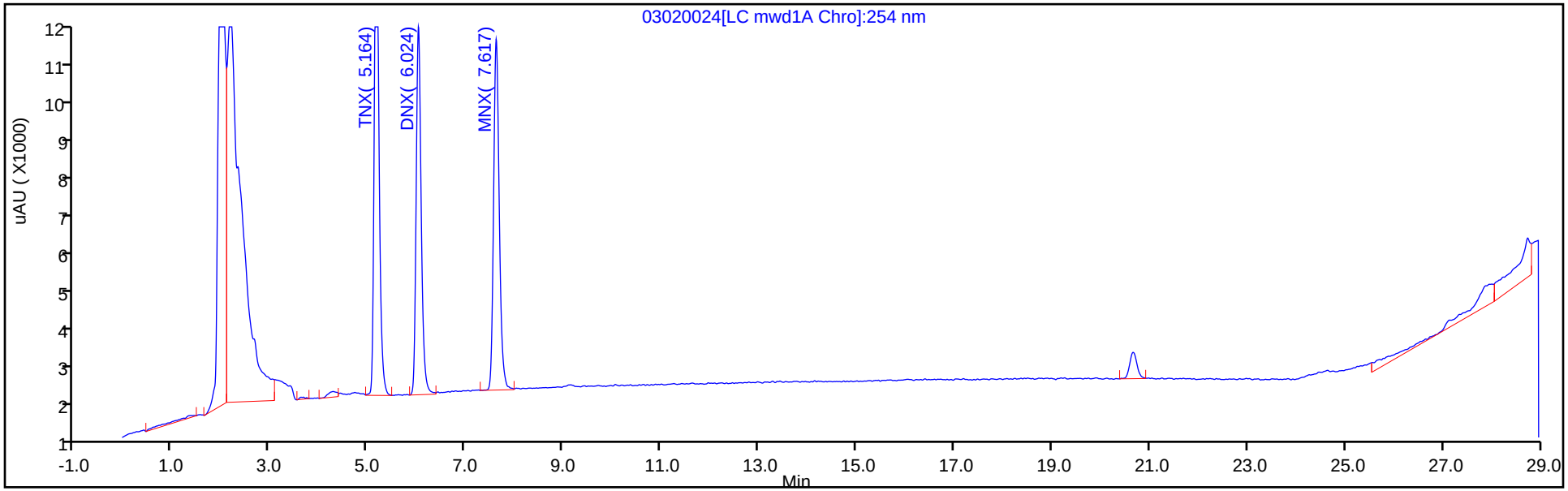
Report Date: 03-Mar-2022 12:49:20 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

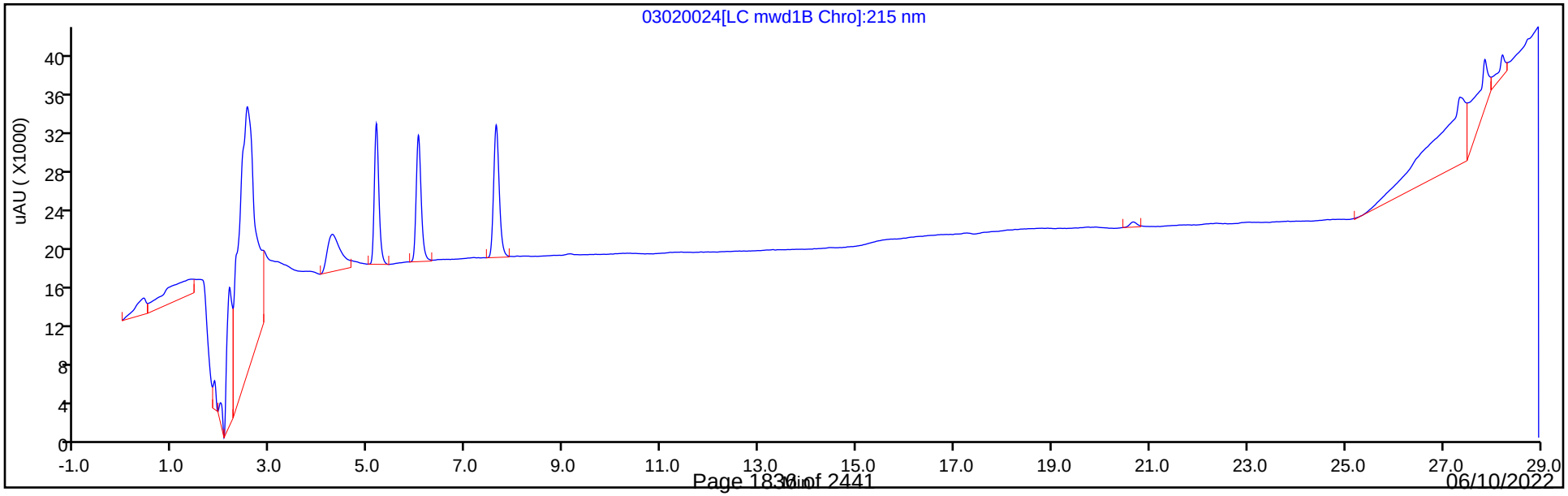
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020024.D

Injection Date:	03-Mar-2022 05:34:27	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 Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020025.D
Lims ID: IC DMT 3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 03-Mar-2022 06:09:35 ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT 3
Misc. Info.: 280-0108949-025
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub2

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 03-Mar-2022 12:49:21 Calib Date: 03-Mar-2022 07:19:48
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.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	5.172	5.171	0.001	35362	0.1001	0.0999	
4 DNX	1	6.032	6.031	0.001	27790	0.1001	0.0997	
6 MNX	1	7.625	7.625	0.000	29648	0.1167	0.1186	

Reagents:

8330 DMT_00010 Amount Added: 5.00 Units: uL

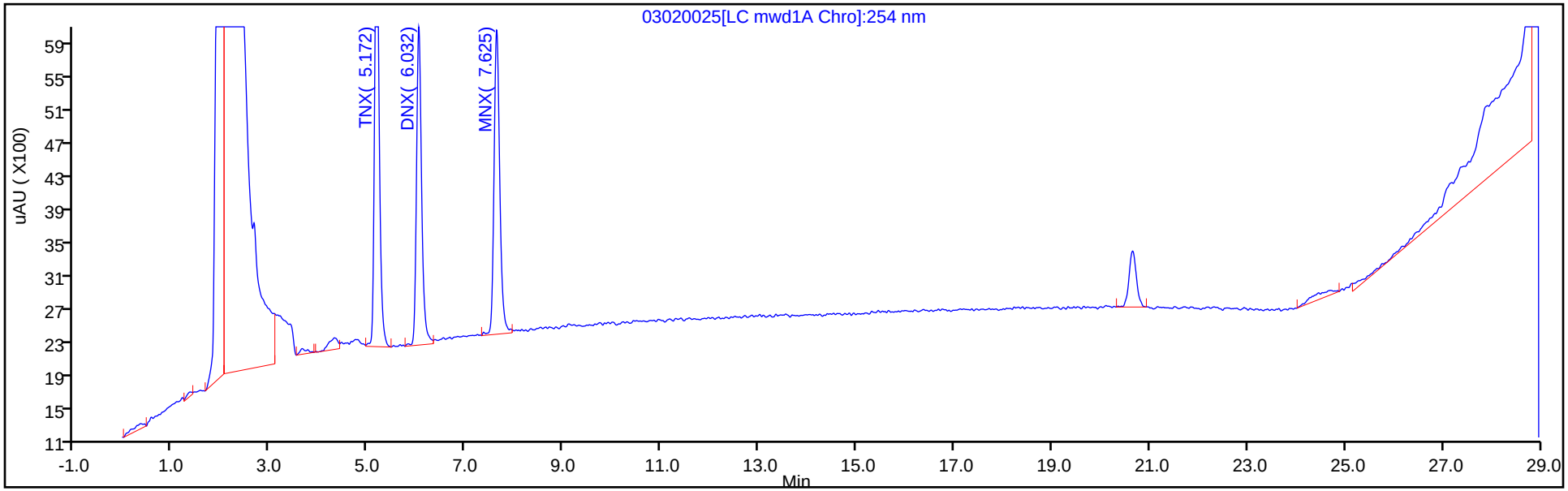
Report Date: 03-Mar-2022 12:49:21 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

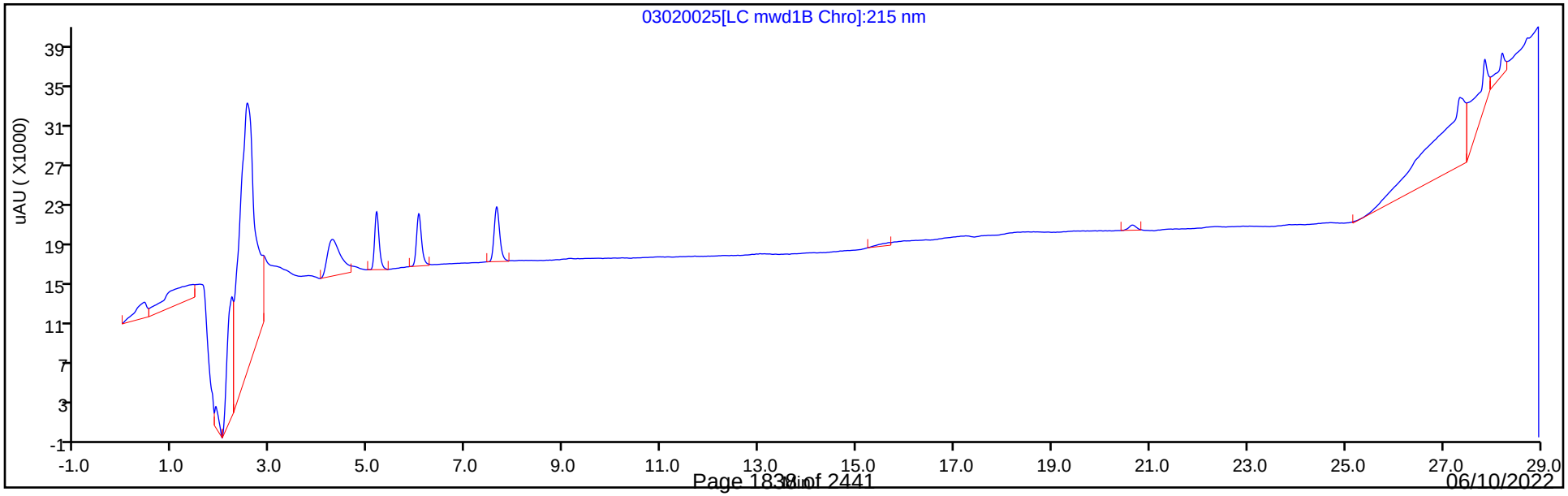
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020025.D

Injection Date:	03-Mar-2022 06:09:35	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 Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020026.D				
Lims ID:	IC DMT 2				
Client ID:					
Sample Type:	IC	Calib Level:	2		
Inject. Date:	03-Mar-2022 06:44:40	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 2				
Misc. Info.:	280-0108949-026				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Sublist:	chrom-8330_X5_Luna*sub2				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	03-Mar-2022 12:49:21	Calib Date:	03-Mar-2022 07:19:48		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.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	5.168	5.171	-0.003	17787	0.0501	0.0502	
4 DNX	1	6.028	6.031	-0.003	14466	0.0501	0.0519	
6 MNX	1	7.621	7.625	-0.004	14750	0.0584	0.0590	

Reagents:

8330 DMT_00010 Amount Added: 2.50 Units: uL

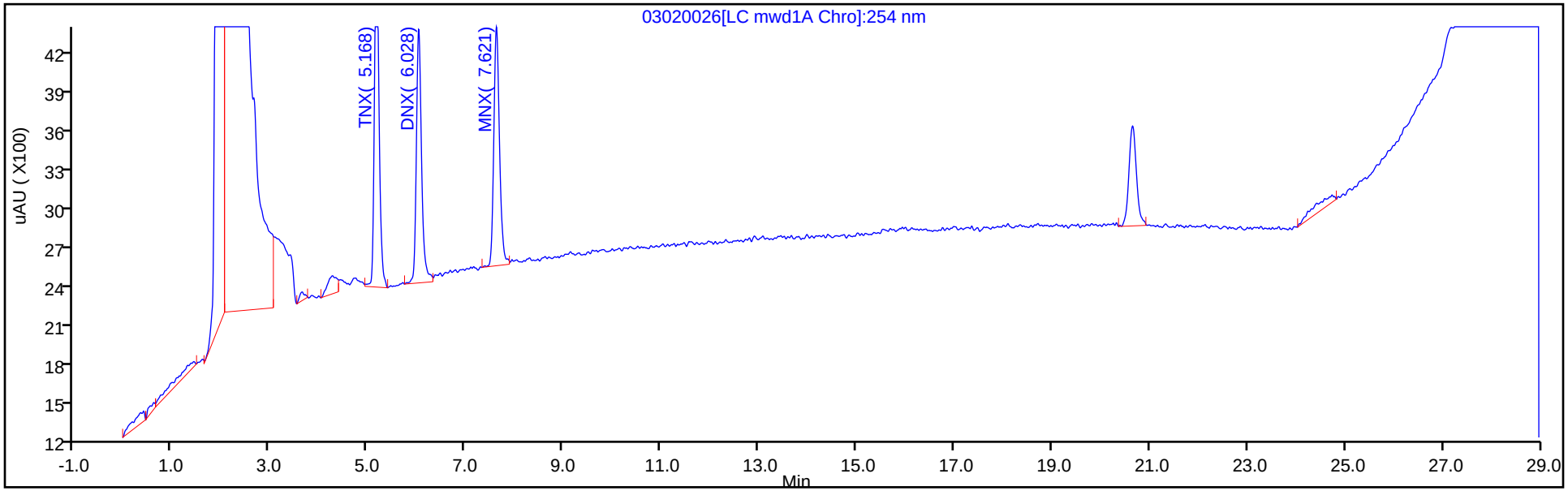
Report Date: 03-Mar-2022 12:49:21 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

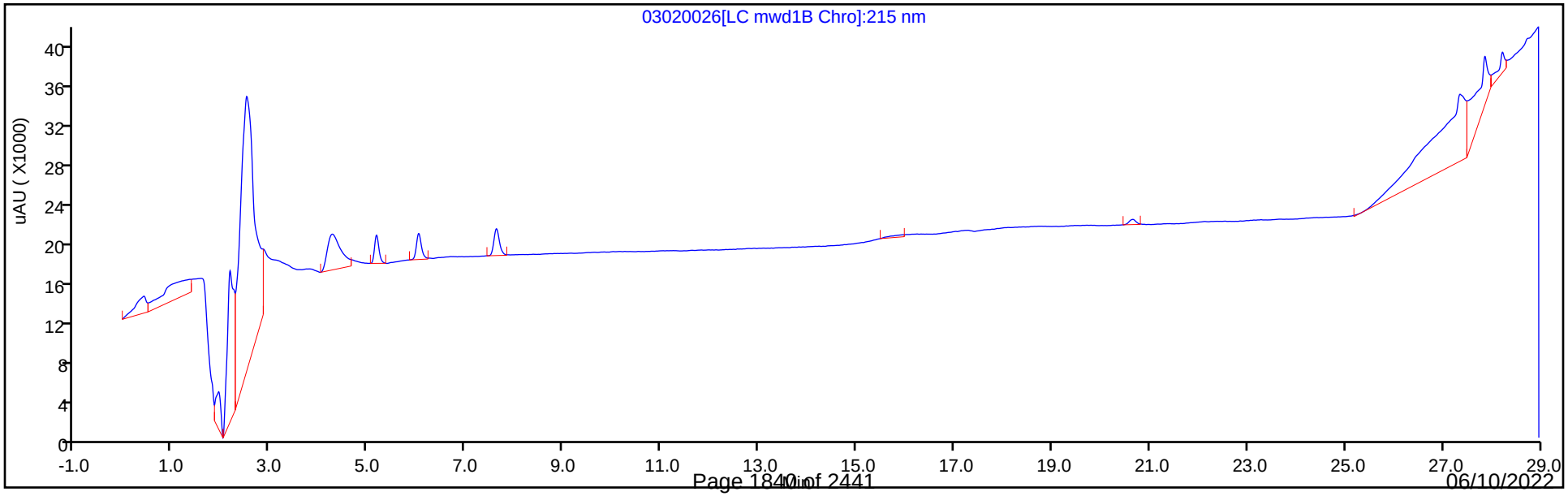
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020026.D

Injection Date:	03-Mar-2022 06:44:40	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 Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D				
Lims ID:	IC DMT 1				
Client ID:					
Sample Type:	IC	Calib Level:	1		
Inject. Date:	03-Mar-2022 07:19:48	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 1				
Misc. Info.:	280-0108949-027				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Sublist:	chrom-8330_X5_Luna*sub2				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	03-Mar-2022 12:49:22	Calib Date:	03-Mar-2022 07:19:48		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.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	5.170	5.171	-0.001	6991	0.0200	0.0197	
4 DNX	1	6.030	6.031	-0.001	6349	0.0200	0.0228	
6 MNX	1	7.624	7.625	-0.001	6006	0.0233	0.0240	

Reagents:

8330 DMT_00010 Amount Added: 1.00 Units: uL

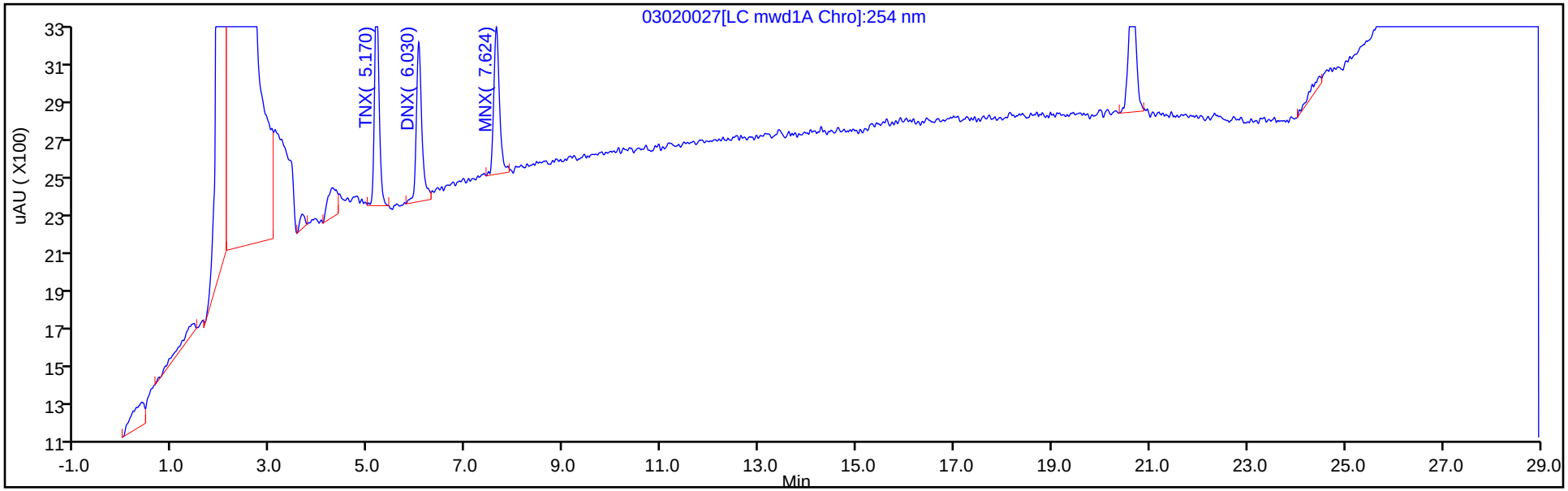
Report Date: 03-Mar-2022 12:49:22 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

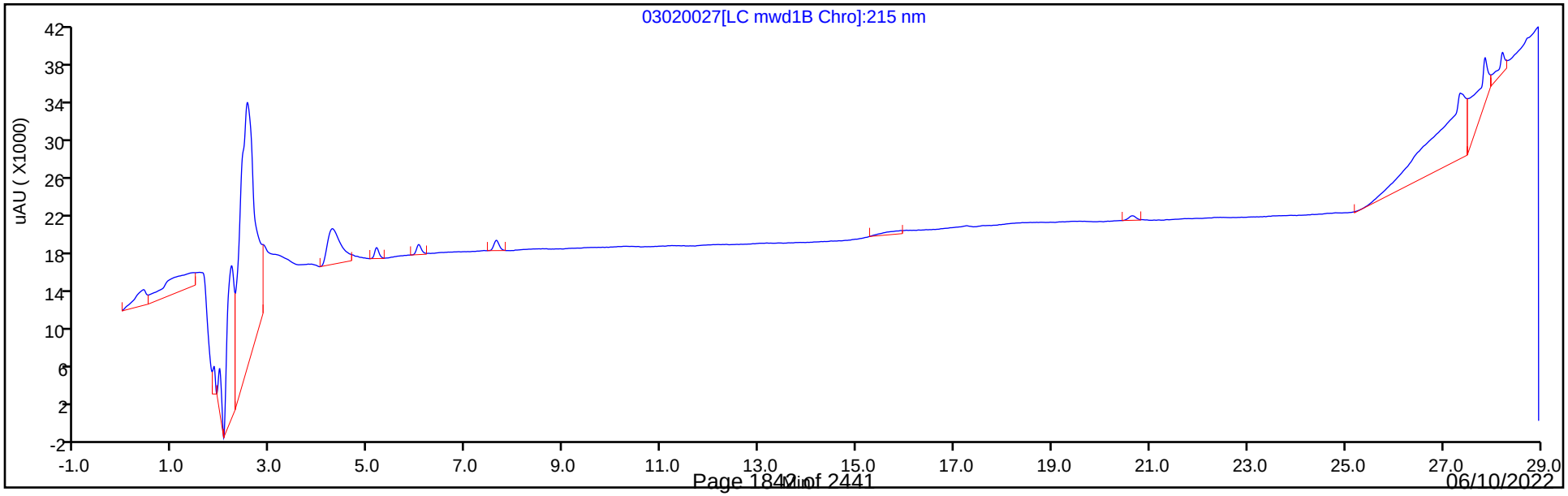
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D

Injection Date:	03-Mar-2022 07:19:48	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



Calibration / TNX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

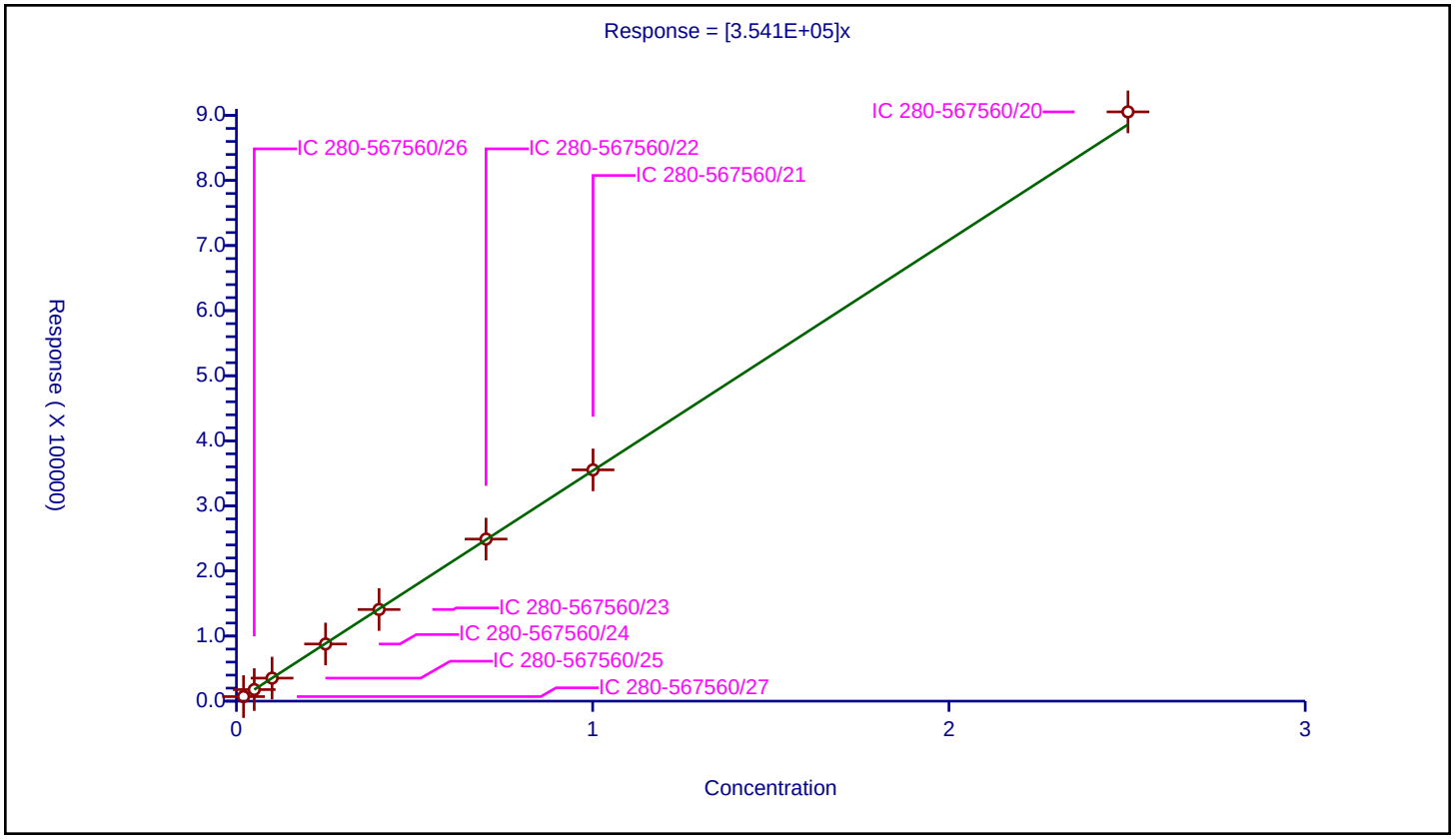
Curve Coefficients

Intercept:	0
Slope:	3.541E+05

Error Coefficients

Standard Error:	7350
Relative Standard Error:	1.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-567560/27	0.02002	6991.0			349200.799201	Y
2	IC 280-567560/26	0.05005	17787.0			355384.615385	Y
3	IC 280-567560/25	0.1001	35362.0			353266.733267	Y
4	IC 280-567560/24	0.25025	87821.0			350933.066933	Y
5	IC 280-567560/23	0.4004	140785.0			351610.889111	Y
6	IC 280-567560/22	0.7007	249006.0			355367.489653	Y
7	IC 280-567560/21	1.001	355342.0			354987.012987	Y
8	IC 280-567560/20	2.5025	905425.0			361808.191808	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

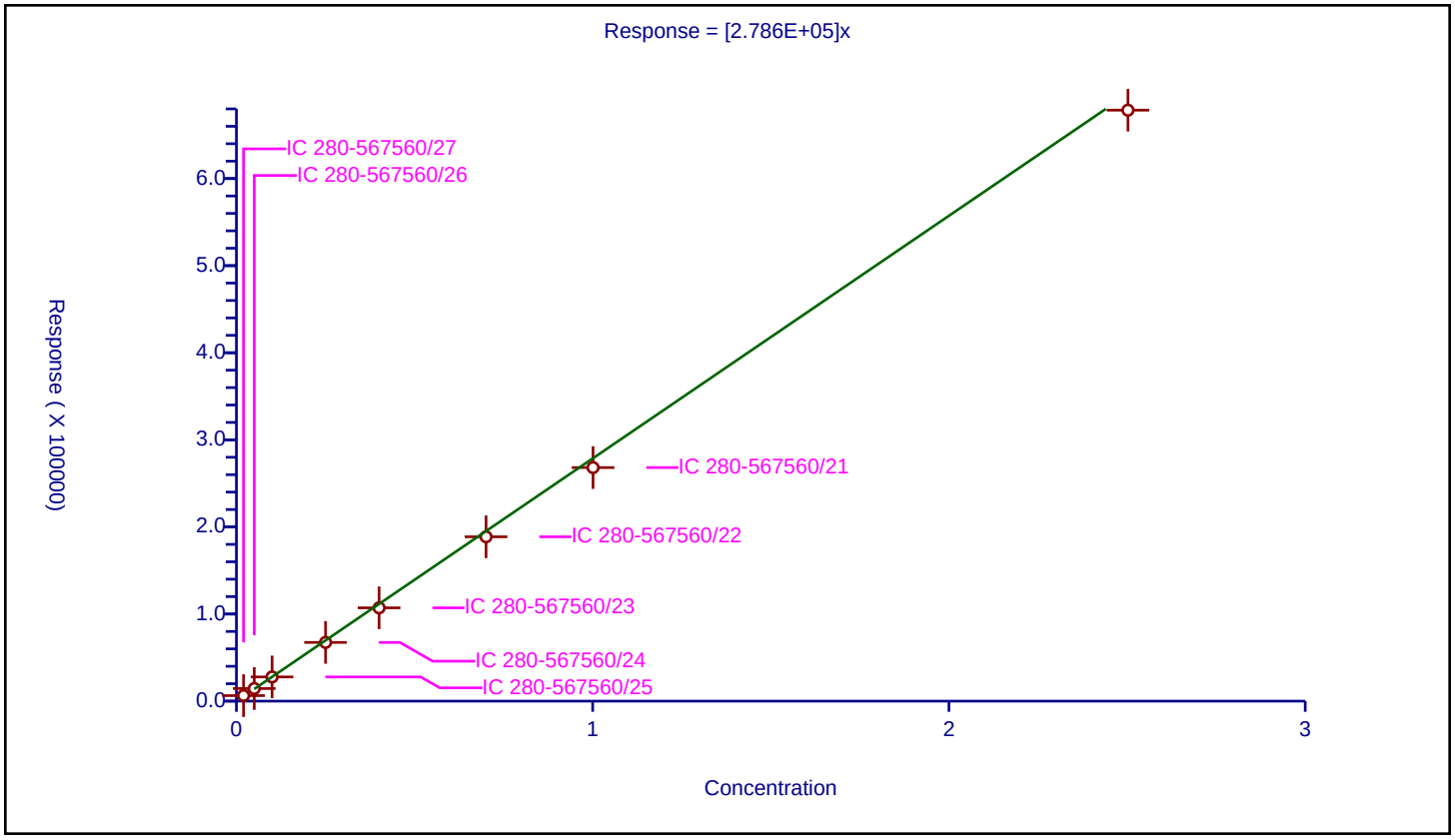
Curve Coefficients

Intercept:	0
Slope:	2.786E+05

Error Coefficients

Standard Error:	8750
Relative Standard Error:	6.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-567560/27	0.02002	6349.0			317132.867133	Y
2	IC 280-567560/26	0.05005	14466.0			289030.969031	Y
3	IC 280-567560/25	0.1001	27790.0			277622.377622	Y
4	IC 280-567560/24	0.25025	67422.0			269418.581419	Y
5	IC 280-567560/23	0.4004	107128.0			267552.447552	Y
6	IC 280-567560/22	0.7007	188710.0			269316.397888	Y
7	IC 280-567560/21	1.001	268159.0			267891.108891	Y
8	IC 280-567560/20	2.5025	678544.0			271146.453546	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

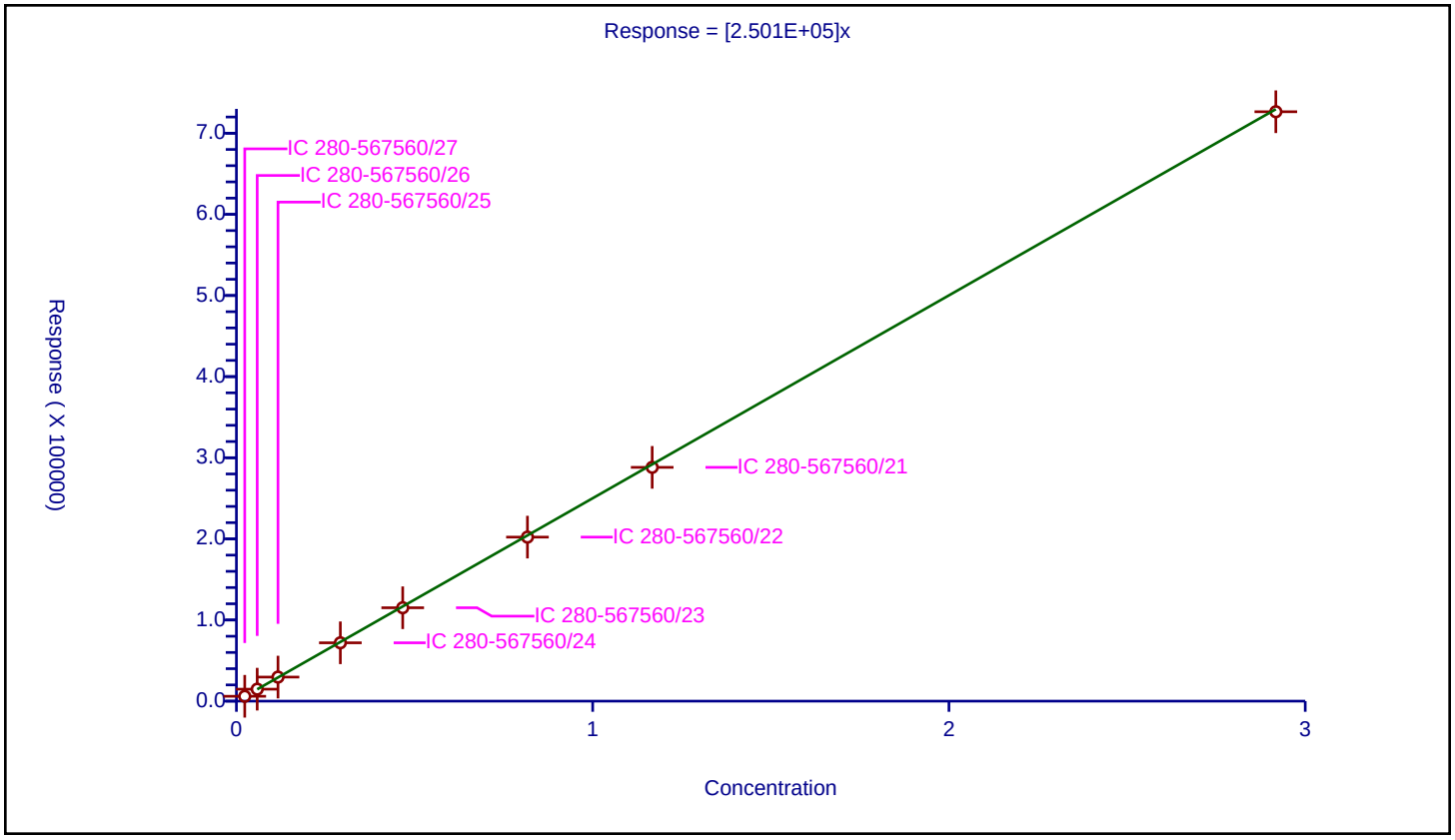
Curve Coefficients

Intercept:	0
Slope:	2.501E+05

Error Coefficients

Standard Error:	2130
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 280-567560/27	0.02334	6006.0			257326.478149	Y
2	IC 280-567560/26	0.05835	14750.0			252784.918595	Y
3	IC 280-567560/25	0.1167	29648.0			254053.127678	Y
4	IC 280-567560/24	0.29175	71905.0			246461.01114	Y
5	IC 280-567560/23	0.4668	115112.0			246598.114824	Y
6	IC 280-567560/22	0.8169	202167.0			247480.719794	Y
7	IC 280-567560/21	1.167	288166.0			246928.877464	Y
8	IC 280-567560/20	2.9175	726501.0			249014.910026	Y



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: ICV 280-562503/20 Calibration Date: 01/04/2022 21:54

Instrument ID: CHHPLC_X3 Calib Start Date: 01/04/2022 18:28

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/04/2022 21:31

Lab File ID: 01040020.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	83827	81972		489	500	-2.2	15.0
RDX	Ave	103609	97016		468	500	-6.4	15.0
Picric acid	Ave	77039	79050		513	500	2.6	15.0
1,3,5-Trinitrobenzene	Ave	218096	225924		518	500	3.6	15.0
1,3-Dinitrobenzene	Ave	288401	300348		521	500	4.1	15.0
Nitrobenzene	Ave	191953	197872		515	500	3.1	15.0
Tetryl	Ave	170567	173346		508	500	1.6	15.0
Nitroglycerin	Ave	63037	66420		5270	5000	5.4	15.0
2,4,6-Trinitrotoluene	Ave	202726	207174		511	500	2.2	15.0
4-Amino-2,6-dinitrotoluene	Ave	150985	149862		496	500	-0.7	15.0
2-Amino-4,6-dinitrotoluene	Ave	202171	202042		500	500	-0.0	15.0
2,6-Dinitrotoluene	Ave	143115	146810		513	500	2.6	15.0
2,4-Dinitrotoluene	Ave	289351	286440		495	500	-1.0	15.0
2-Nitrotoluene	Ave	127614	127510		500	500	-0.0	15.0
4-Nitrotoluene	Ave	106235	113254		533	500	6.6	15.0
3-Nitrotoluene	Ave	142273	134496		473	500	-5.5	15.0
PETN	Lin2		76139		5230	5000	4.6	15.0
1,2-Dinitrobenzene	Ave	124698	132072		530	500	5.9	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: ICV 280-562503/20 Calibration Date: 01/04/2022 21:54

Instrument ID: CHHPLC_X3 Calib Start Date: 01/04/2022 18:28

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/04/2022 21:31

Lab File ID: 01040020.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.60	6.45	6.75
RDX	7.60	7.46	7.76
Picric acid	7.92	7.80	8.10
1,3,5-Trinitrobenzene	8.68	8.54	8.84
1,3-Dinitrobenzene	9.32	9.18	9.48
Nitrobenzene	9.71	9.58	9.88
Tetryl	10.04	9.91	10.21
Nitroglycerin	10.50	10.37	10.67
2,4,6-Trinitrotoluene	10.96	10.87	11.07
4-Amino-2,6-dinitrotoluene	11.16	11.07	11.27
2-Amino-4,6-dinitrotoluene	11.41	11.33	11.53
2,6-Dinitrotoluene	11.58	11.50	11.70
2,4-Dinitrotoluene	11.75	11.67	11.87
2-Nitrotoluene	12.62	12.49	12.79
4-Nitrotoluene	13.05	12.92	13.22
3-Nitrotoluene	13.63	13.50	13.80
PETN	14.72	14.59	14.89
1,2-Dinitrobenzene	8.56	8.42	8.72

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040020.D
Lims ID: ICV INT
Client ID:
Sample Type: ICV
Inject. Date: 04-Jan-2022 21:54:19 ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICV INT
Misc. Info.: 280-0107731-020
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist:

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Jan-2022 20:07:47 Calib Date: 04-Jan-2022 21:31:24
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1641

First Level Reviewer: zhangji Date: 06-Jan-2022 20:07:47

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.602	6.598	0.004	40986	0.5000	0.4889	
8 RDX	1	7.602	7.605	-0.003	48508	0.5000	0.4682	M
9 2,4,6-Trinitrophenol	1	7.915	7.945	-0.030	39525	0.5000	0.5131	M
$ 10 1,2-Dinitrobenzene	1	8.562	8.572	-0.010	66036	0.5000	0.5296	
11 1,3,5-Trinitrobenzene	1	8.682	8.692	-0.010	112962	0.5000	0.5179	
12 1,3-Dinitrobenzene	1	9.315	9.331	-0.016	150174	0.5000	0.5207	
13 Nitrobenzene	1	9.708	9.725	-0.017	98936	0.5000	0.5154	
15 Tetryl	1	10.042	10.058	-0.016	86673	0.5000	0.5081	
16 Nitroglycerin	2	10.502	10.518	-0.016	332100	5.00	5.27	
17 2,4,6-Trinitrotoluene	1	10.955	10.971	-0.016	103587	0.5000	0.5110	
18 4-Amino-2,6-dinitrotoluene	1	11.155	11.171	-0.016	74931	0.5000	0.4963	
19 2-Amino-4,6-dinitrotoluene	1	11.408	11.425	-0.017	101021	0.5000	0.4997	
20 2,6-Dinitrotoluene	1	11.582	11.598	-0.016	73405	0.5000	0.5129	
21 2,4-Dinitrotoluene	1	11.748	11.765	-0.017	143220	0.5000	0.4950	
22 o-Nitrotoluene	1	12.615	12.638	-0.023	63755	0.5000	0.4996	
23 p-Nitrotoluene	1	13.048	13.071	-0.023	56627	0.5000	0.5330	
24 m-Nitrotoluene	1	13.628	13.651	-0.023	67248	0.5000	0.4727	
25 PETN	2	14.715	14.738	-0.023	380697	5.00	5.23	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330Surrogate_00127 Amount Added: 50.00 Units: uL
8330 LCS_00111 Amount Added: 50.00 Units: uL

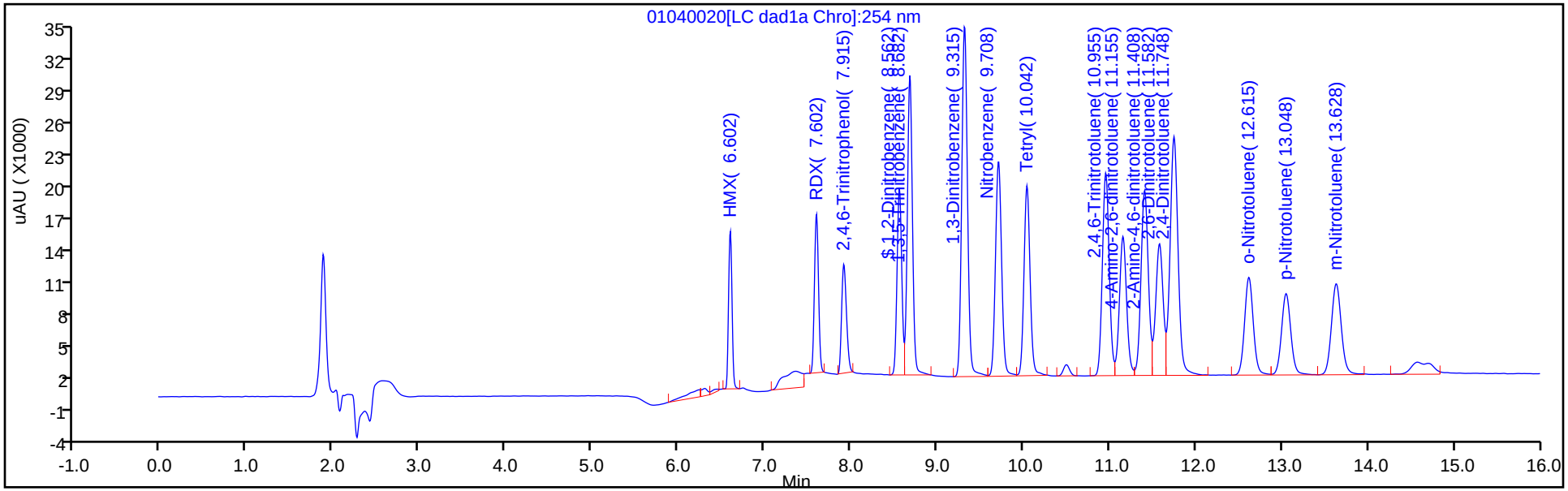
Report Date: 06-Jan-2022 20:08:00 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

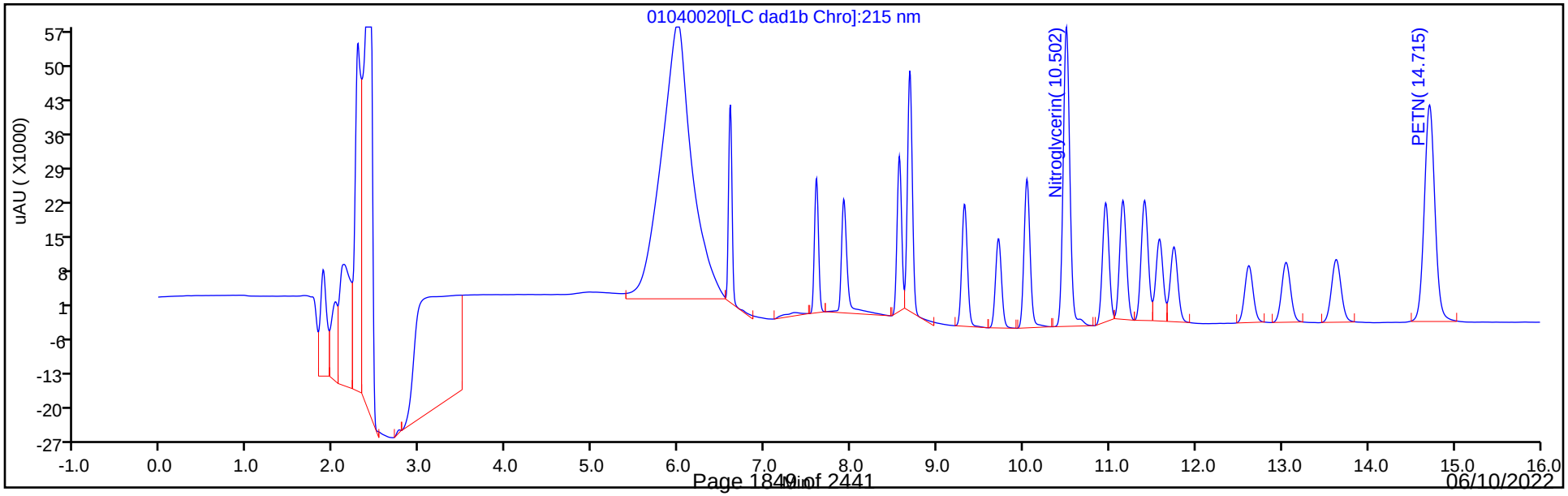
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040020.d

Injection Date:	04-Jan-2022 21:54:19	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

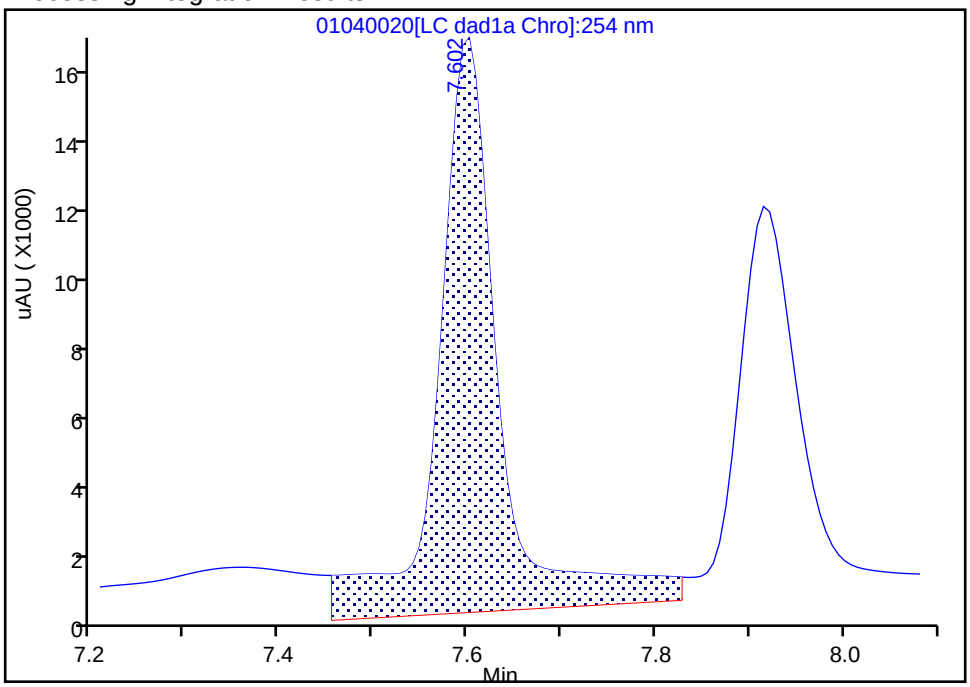
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040020.d				
Injection Date:	04-Jan-2022 21:54:19	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

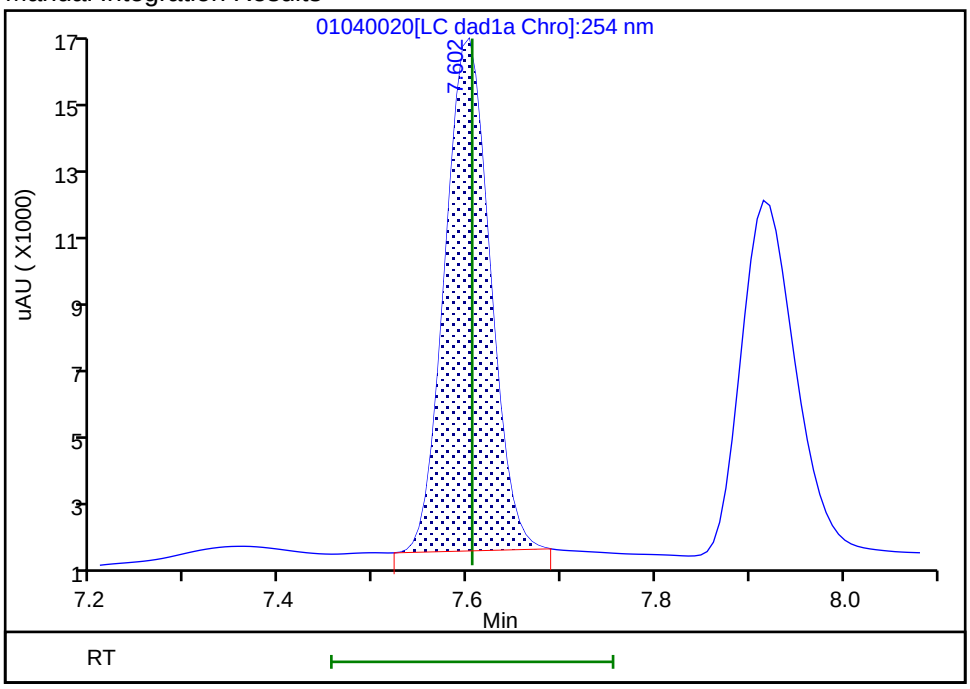
Processing Integration Results

RT: 7.60
Area: 71144
Amount: 0.655784
Amount Units: ug/mL



Manual Integration Results

RT: 7.60
Area: 48508
Amount: 0.468182
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 11:59:11
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

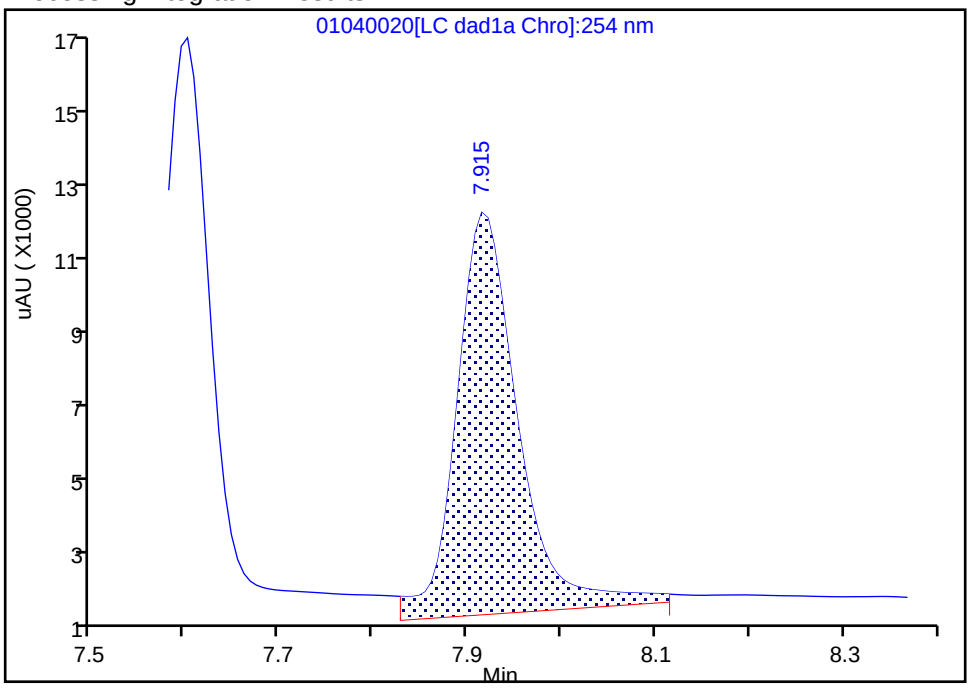
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040020.d				
Injection Date:	04-Jan-2022 21:54:19	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

9 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

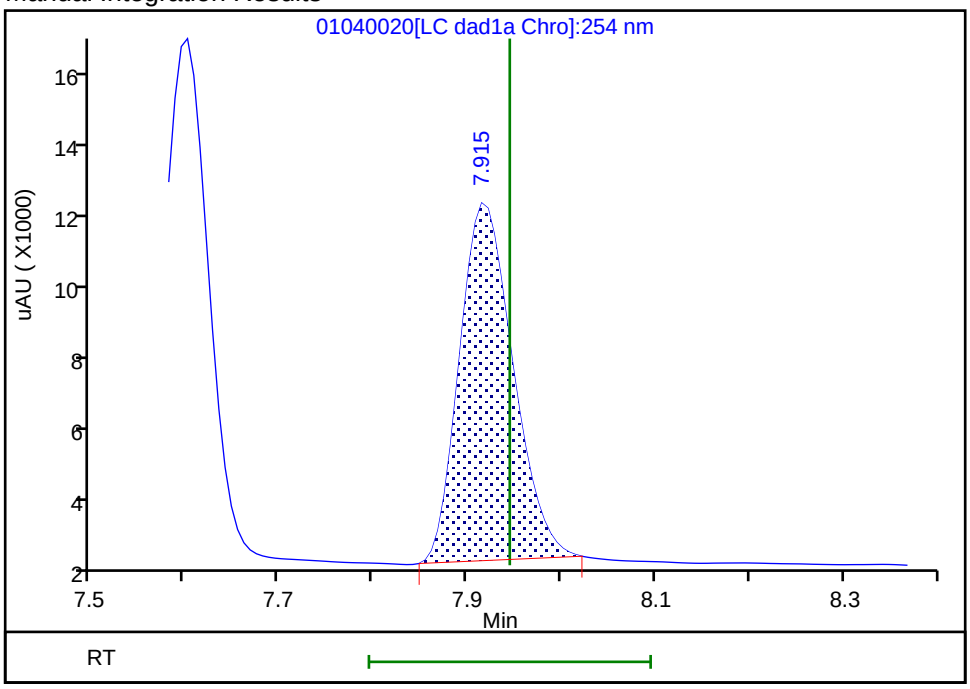
Processing Integration Results

RT: 7.92
Area: 48188
Amount: 0.601054
Amount Units: ug/mL



Manual Integration Results

RT: 7.92
Area: 39525
Amount: 0.513051
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 11:59:15
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: ICV 280-562503/38 Calibration Date: 01/05/2022 04:47

Instrument ID: CHHPLC_X3 Calib Start Date: 01/05/2022 01:43

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/05/2022 04:24

Lab File ID: 01040038.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	181207	178414		493	501	-1.5	15.0
DNX	Ave	138113	139363		505	501	0.9	15.0
MNX	Ave	125995	128593		596	584	2.1	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: ICV 280-562503/38 Calibration Date: 01/05/2022 04:47

Instrument ID: CHHPLC_X3 Calib Start Date: 01/05/2022 01:43

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/05/2022 04:24

Lab File ID: 01040038.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.48	6.38	6.58
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\20220104-107731.b\01040038.D
Lims ID: ICV DMT
Client ID:
Sample Type: ICV
Inject. Date: 05-Jan-2022 04:47:17 ALS Bottle#: 38 Worklist Smp#: 38
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICV DMT
Misc. Info.: 280-0107731-038
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist:

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Jan-2022 12:18:54 Calib Date: 05-Jan-2022 04:24:15
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1613

First Level Reviewer: zhangji Date: 05-Jan-2022 12:09:42

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.482	6.484	-0.002	89296	0.5005	0.4928	M
6 DNX	1	6.796	6.797	-0.001	69751	0.5005	0.5050	M
7 MNX	1	7.222	7.224	-0.002	75034	0.5835	0.5955	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330_OP_DMT_00012 Amount Added: 50.00 Units: uL

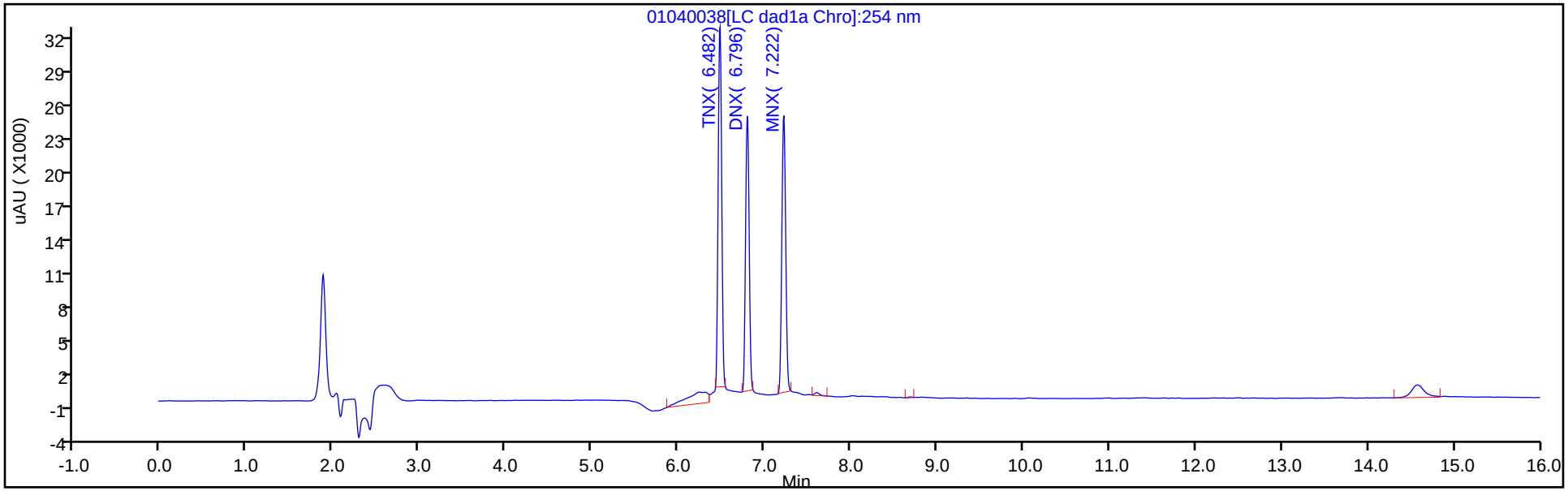
Report Date: 05-Jan-2022 12:19:19 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

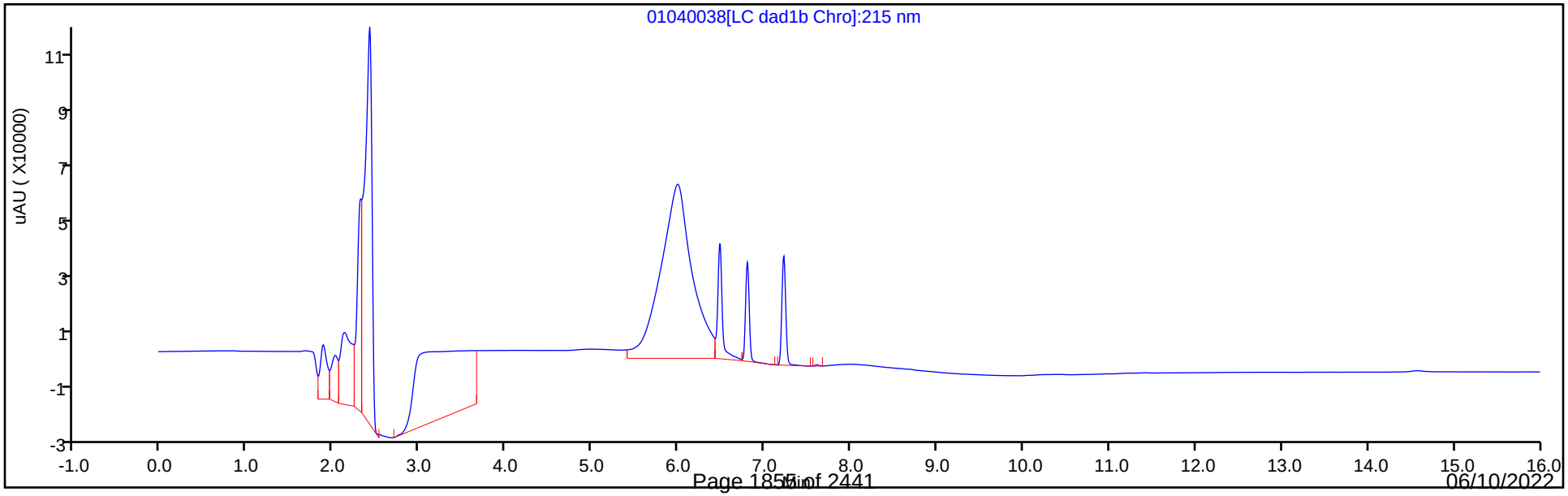
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040038.d

Injection Date:	05-Jan-2022 04:47:17	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	ICV DMT			Worklist Smp#:	38
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	38
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

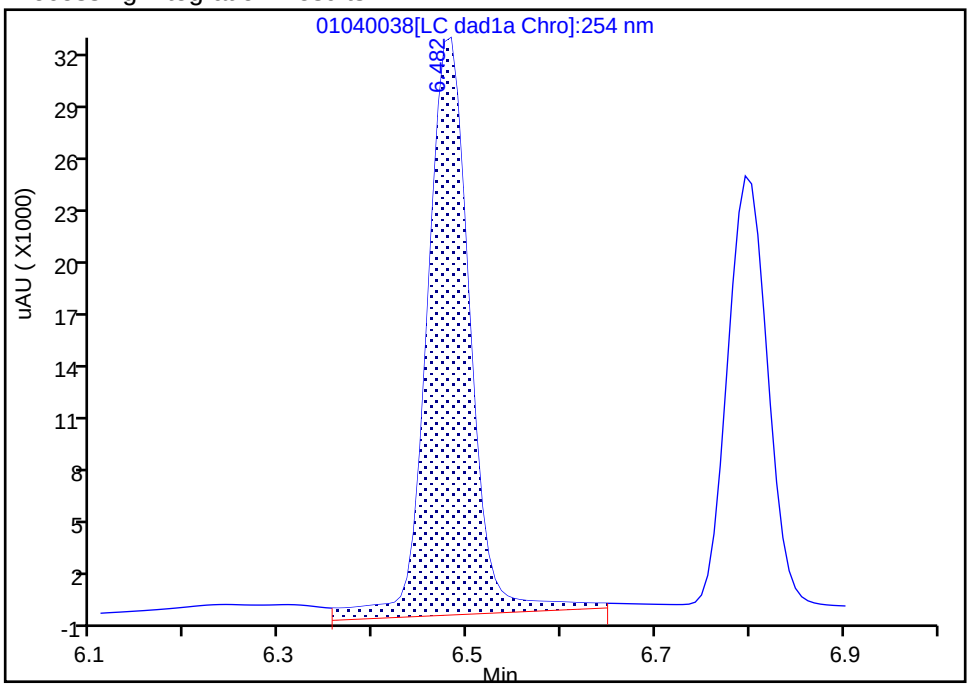
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040038.d				
Injection Date:	05-Jan-2022 04:47:17	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	38	Worklist Smp#:	38
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

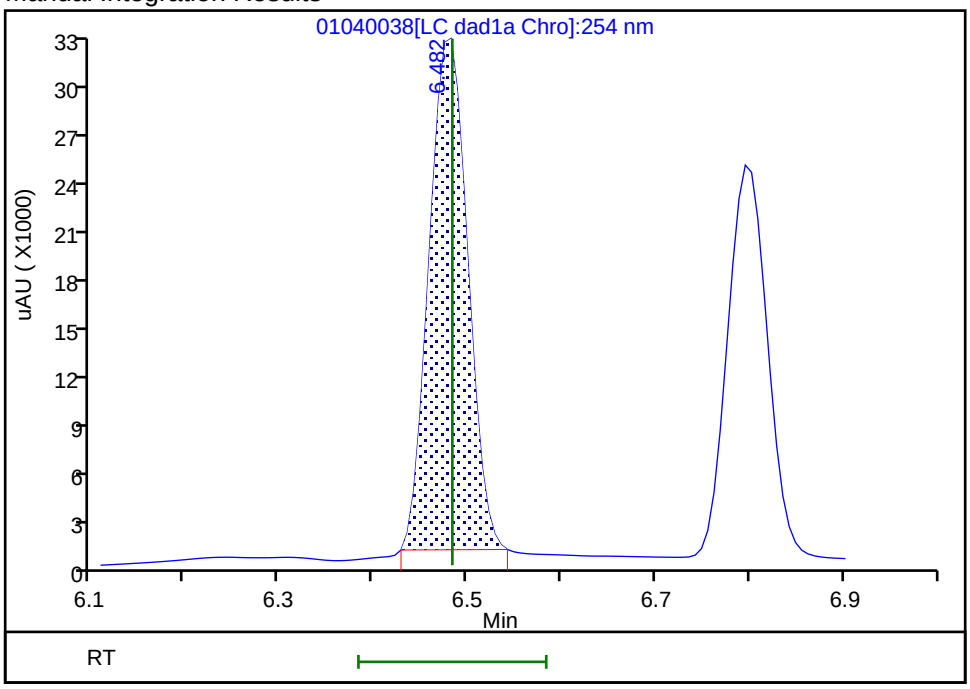
Processing Integration Results

RT: 6.48
Area: 102738
Amount: 0.566963
Amount Units: ug/mL



Manual Integration Results

RT: 6.48
Area: 89296
Amount: 0.492783
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:09:35

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

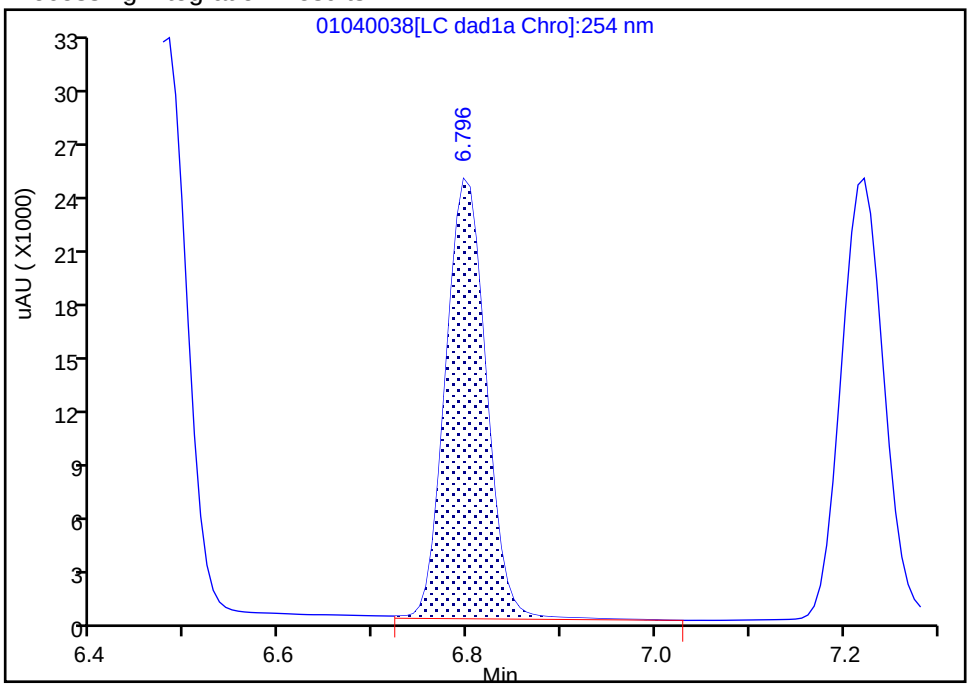
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040038.d				
Injection Date:	05-Jan-2022 04:47:17	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	38	Worklist Smp#:	38
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

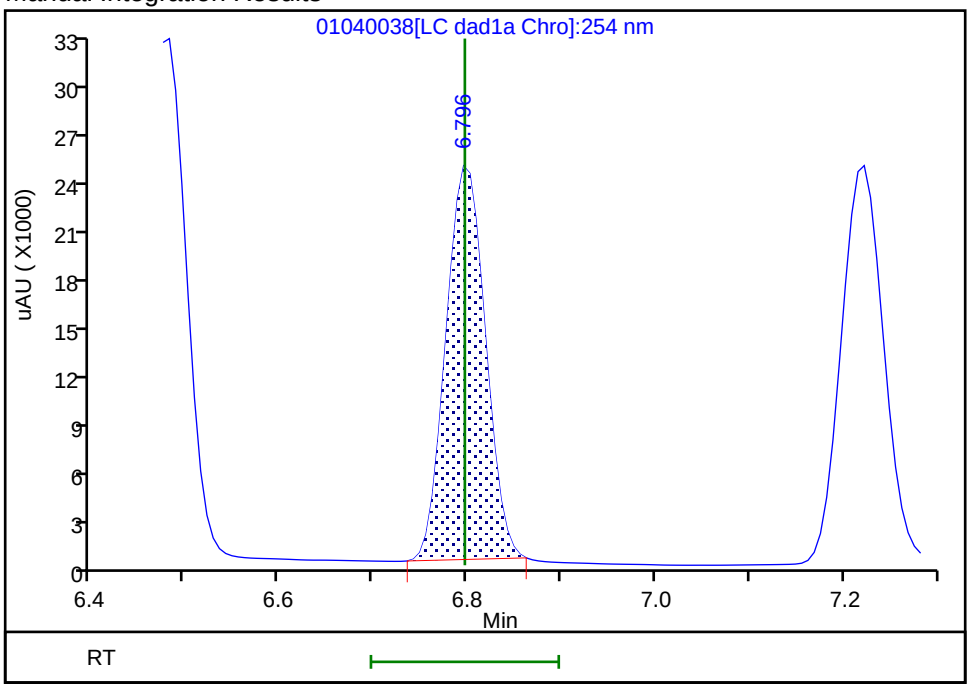
Processing Integration Results

RT: 6.80
Area: 72644
Amount: 0.525975
Amount Units: ug/mL



Manual Integration Results

RT: 6.80
Area: 69751
Amount: 0.505029
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:09:38

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

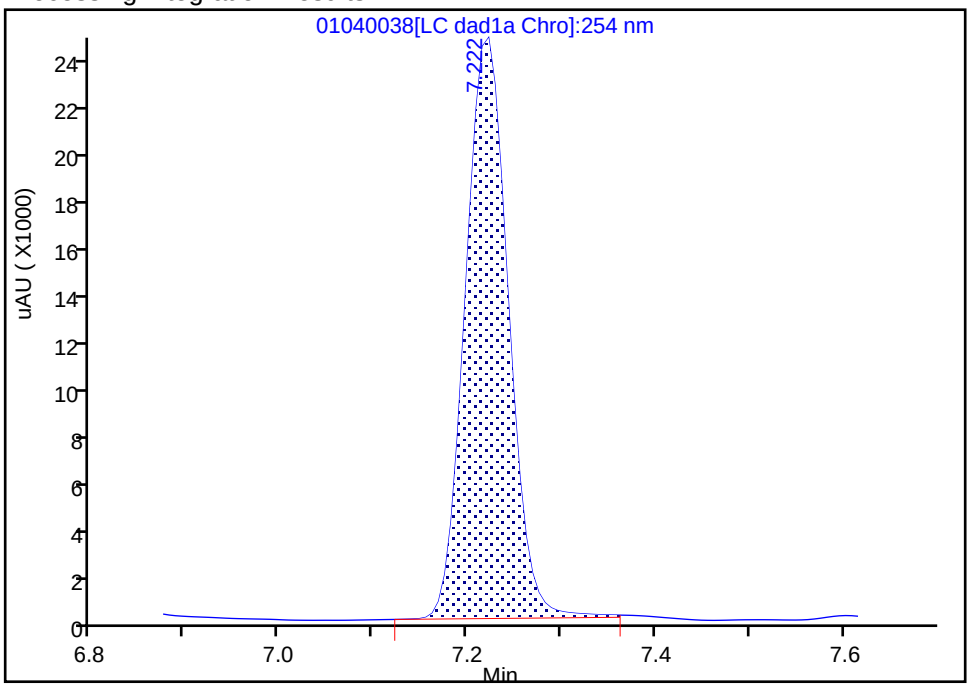
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040038.d				
Injection Date:	05-Jan-2022 04:47:17	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	38	Worklist Smp#:	38
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

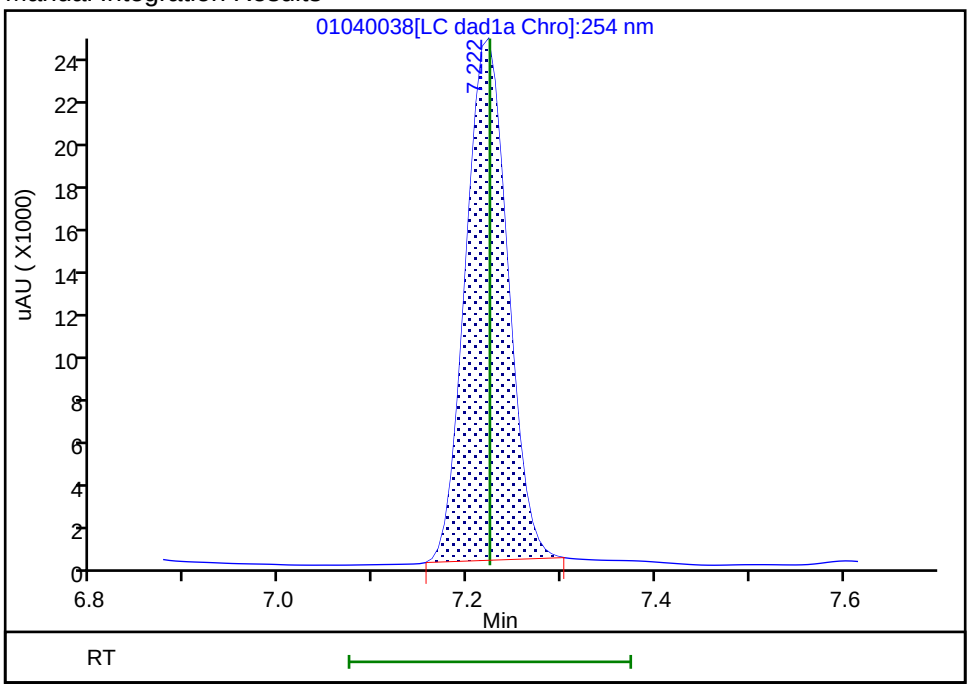
Processing Integration Results

RT: 7.22
Area: 76990
Amount: 0.611054
Amount Units: ug/mL



Manual Integration Results

RT: 7.22
Area: 75034
Amount: 0.595530
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:09:41

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576310/7 | Calibration Date: 05/26/2022 16:42

Instrument ID: CHHPLC_X3 | Calib Start Date: 01/04/2022 18:28

GC Column: UltraCarb5uODS ID: 4.60(mm) | Calib End Date: 01/04/2022 21:31

Lab File ID: 05260007.D | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	83827	90656		270	250	8.1	15.0
RDX	Ave	103609	107936		260	250	4.2	15.0
Picric acid	Ave	77039	78088		253	250	1.4	15.0
1,3,5-Trinitrobenzene	Ave	218096	213180		244	250	-2.3	15.0
1,3-Dinitrobenzene	Ave	288401	296072		257	250	2.7	15.0
Nitrobenzene	Ave	191953	193300		252	250	0.7	15.0
Tetryl	Ave	170567	164172		241	250	-3.7	15.0
Nitroglycerin	Ave	63037	66426		2630	2500	5.4	15.0
2,4,6-Trinitrotoluene	Ave	202726	212484		262	250	4.8	15.0
4-Amino-2,6-dinitrotoluene	Ave	150985	144852		240	250	-4.1	15.0
2-Amino-4,6-dinitrotoluene	Ave	202171	197424		244	250	-2.3	15.0
2,6-Dinitrotoluene	Ave	143115	142636		249	250	-0.3	15.0
2,4-Dinitrotoluene	Ave	289351	290104		251	250	0.3	15.0
2-Nitrotoluene	Ave	127614	125480		246	250	-1.7	15.0
4-Nitrotoluene	Ave	106235	106744		251	250	0.5	15.0
3-Nitrotoluene	Ave	142273	135992		239	250	-4.4	15.0
PETN	Lin2		72585		2480	2500	-0.7	15.0
1,2-Dinitrobenzene	Ave	124698	130160		261	250	4.4	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576310/7 Calibration Date: 05/26/2022 16:42

Instrument ID: CHHPLC_X3 Calib Start Date: 01/04/2022 18:28

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/04/2022 21:31

Lab File ID: 05260007.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.59	6.44	6.74
RDX	7.59	7.44	7.74
Picric acid	7.93	7.78	8.08
1,3,5-Trinitrobenzene	8.67	8.52	8.82
1,3-Dinitrobenzene	9.30	9.15	9.45
Nitrobenzene	9.69	9.54	9.84
Tetryl	10.01	9.86	10.16
Nitroglycerin	10.47	10.32	10.62
2,4,6-Trinitrotoluene	10.92	10.82	11.02
4-Amino-2,6-dinitrotoluene	11.12	11.02	11.22
2-Amino-4,6-dinitrotoluene	11.37	11.27	11.47
2,6-Dinitrotoluene	11.53	11.43	11.63
2,4-Dinitrotoluene	11.71	11.61	11.81
2-Nitrotoluene	12.56	12.41	12.71
4-Nitrotoluene	12.99	12.84	13.14
3-Nitrotoluene	13.57	13.42	13.72
PETN	14.62	14.47	14.77
1,2-Dinitrobenzene	8.55	8.40	8.70

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\05260007.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 26-May-2022 16:42:48 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0111383-007
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 27-May-2022 13:18:48 Calib Date: 25-Mar-2022 16:30:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220325-109559.b\03250017.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1651

First Level Reviewer: zhangji Date: 26-May-2022 17:08:10

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.593	6.593	0.000	22664	0.2500	0.2704	
8 RDX	1	7.586	7.586	0.000	26984	0.2500	0.2604	
9 2,4,6-Trinitrophenol	1	7.926	7.926	0.000	19522	0.2500	0.2534	
$ 10 1,2-Dinitrobenzene	1	8.546	8.546	0.000	32540	0.2500	0.2610	
11 1,3,5-Trinitrobenzene	1	8.666	8.666	0.000	53295	0.2500	0.2444	
12 1,3-Dinitrobenzene	1	9.299	9.299	0.000	74018	0.2500	0.2566	
13 Nitrobenzene	1	9.686	9.686	0.000	48325	0.2500	0.2518	
15 Tetryl	1	10.013	10.013	0.000	41043	0.2500	0.2406	
16 Nitroglycerin	2	10.466	10.466	0.000	166066	2.50	2.63	
17 2,4,6-Trinitrotoluene	1	10.919	10.919	0.000	53121	0.2500	0.2620	
18 4-Amino-2,6-dinitrotoluene	1	11.119	11.119	0.000	36213	0.2500	0.2398	
19 2-Amino-4,6-dinitrotoluene	1	11.373	11.373	0.000	49356	0.2500	0.2441	
20 2,6-Dinitrotoluene	1	11.533	11.533	0.000	35659	0.2500	0.2492	
21 2,4-Dinitrotoluene	1	11.706	11.706	0.000	72526	0.2500	0.2507	
22 o-Nitrotoluene	1	12.559	12.559	0.000	31370	0.2500	0.2458	
23 p-Nitrotoluene	1	12.993	12.993	0.000	26686	0.2500	0.2512	
24 m-Nitrotoluene	1	13.566	13.566	0.000	33998	0.2500	0.2390	
25 PETN	2	14.619	14.619	0.000	181462	2.50	2.48	

QC Flag Legend
Processing Flags

Reagents:
8330IntermStk_00072 Amount Added: 25.00 Units: uL

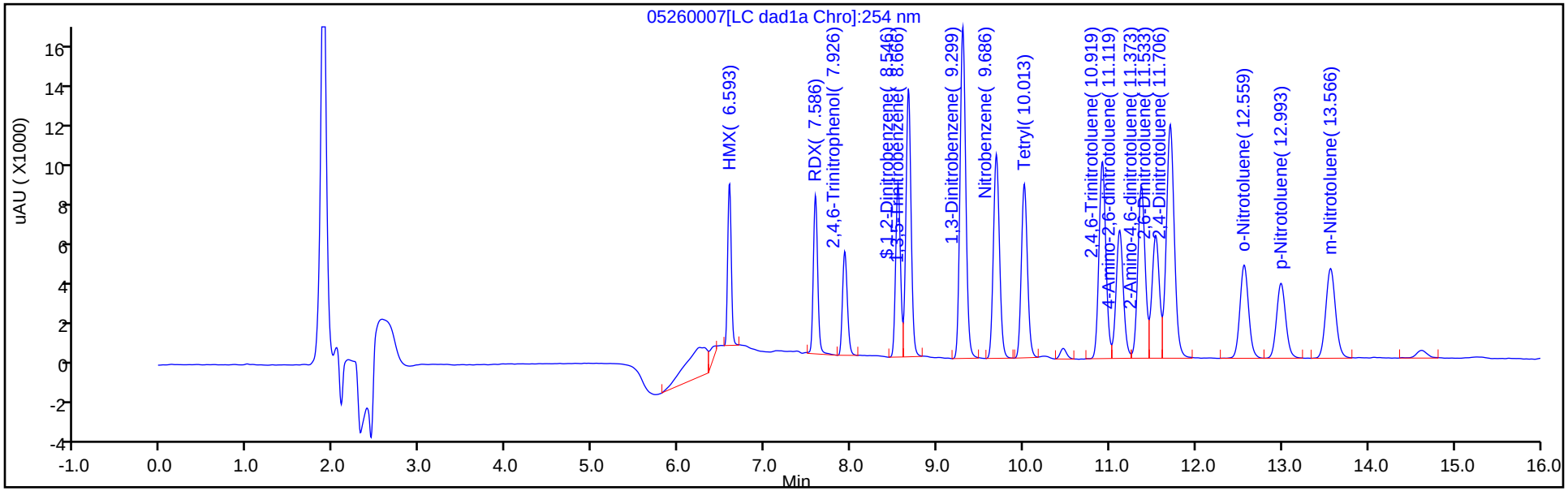
Report Date: 27-May-2022 13:18:48 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

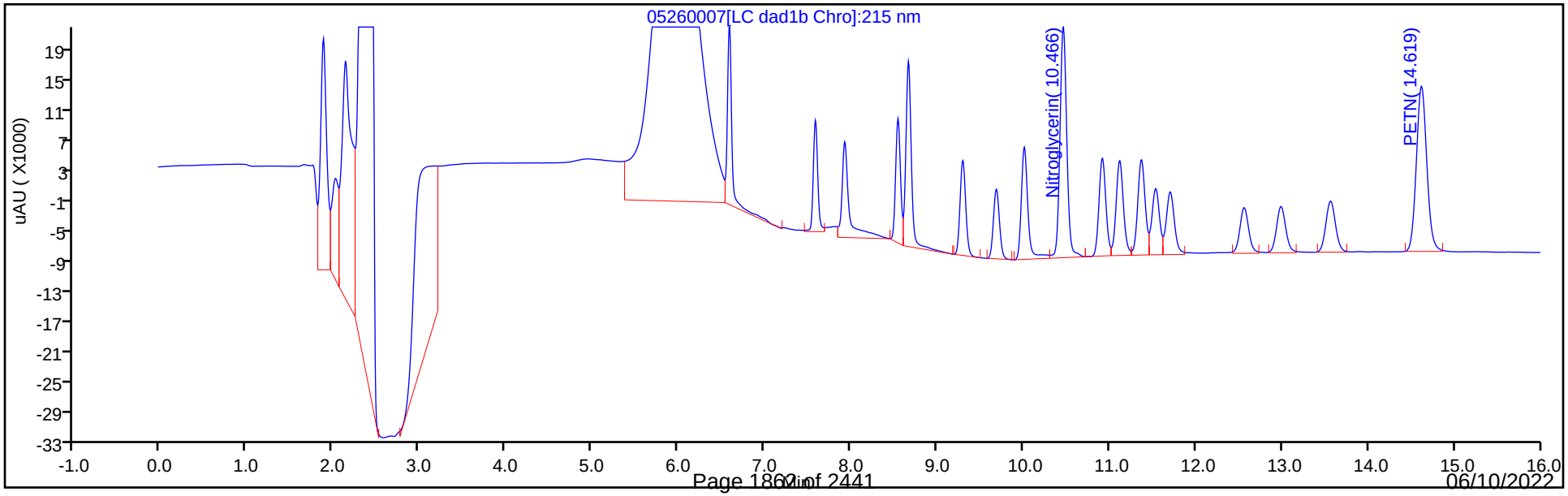
Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260007.d

Injection Date:	26-May-2022 16:42:48	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 Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576310/9 Calibration Date: 05/26/2022 17:05

Instrument ID: CHHPLC_X3 Calib Start Date: 01/05/2022 01:43

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/05/2022 04:24

Lab File ID: 05260009.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	181207	189928		262	250	4.8	15.0
DNX	Ave	138113	139876		254	251	1.3	15.0
MNX	Ave	125995	130174		302	293	3.3	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576310/9 Calibration Date: 05/26/2022 17:05

Instrument ID: CHHPLC_X3 Calib Start Date: 01/05/2022 01:43

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/05/2022 04:24

Lab File ID: 05260009.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.47	6.37	6.57
DNX	6.79	6.69	6.89
MNX	7.21	7.06	7.36

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\05260009.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	26-May-2022 17:05:43	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0111383-009				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	27-May-2022 13:18:48	Calib Date:	25-Mar-2022 16:30:08		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220325-109559.b\03250017.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1651				
First Level Reviewer: zhangji		Date:	26-May-2022 18:04:51		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.471	6.471	0.000	47482	0.2500	0.2620	M
6 DNX	1	6.791	6.791	0.000	35109	0.2510	0.2542	M
7 MNX	1	7.211	7.211	0.000	38076	0.2925	0.3022	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00011 Amount Added: 12.50 Units: uL

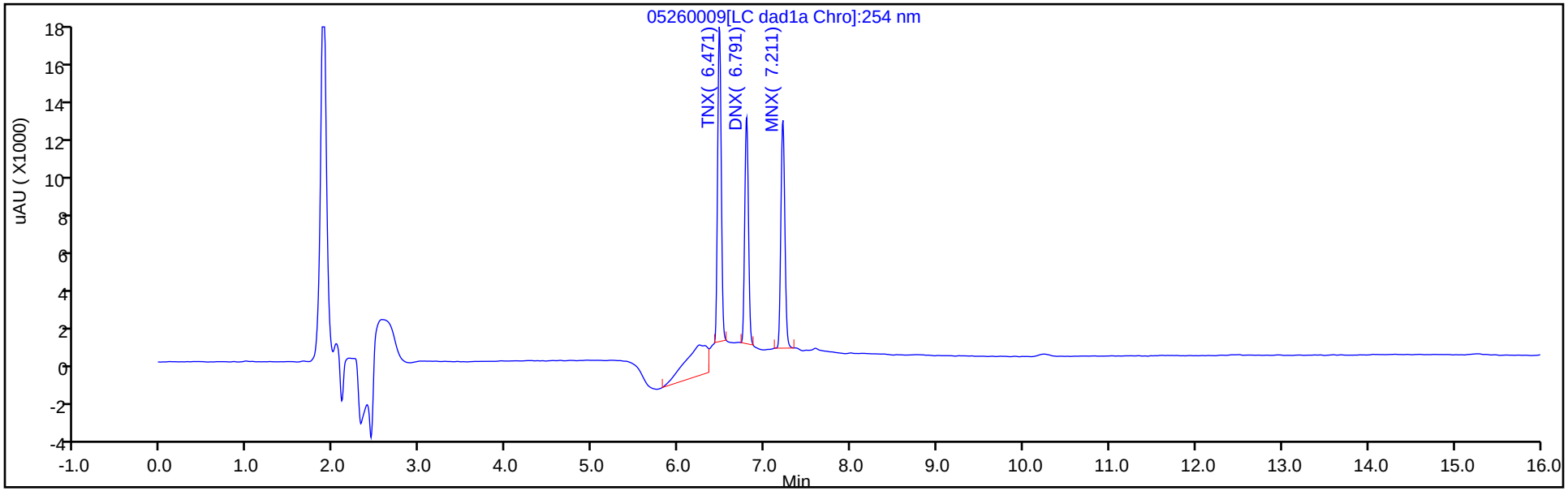
Report Date: 27-May-2022 13:18:48 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

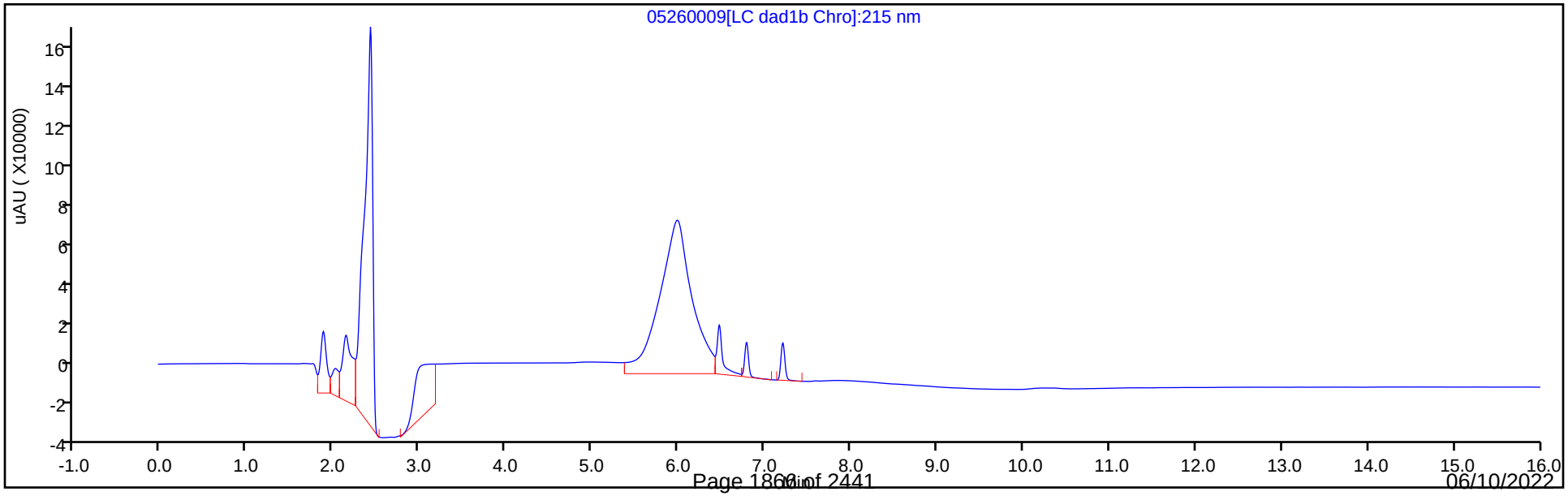
Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260009.d

Injection Date:	26-May-2022 17:05:43	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 Denver

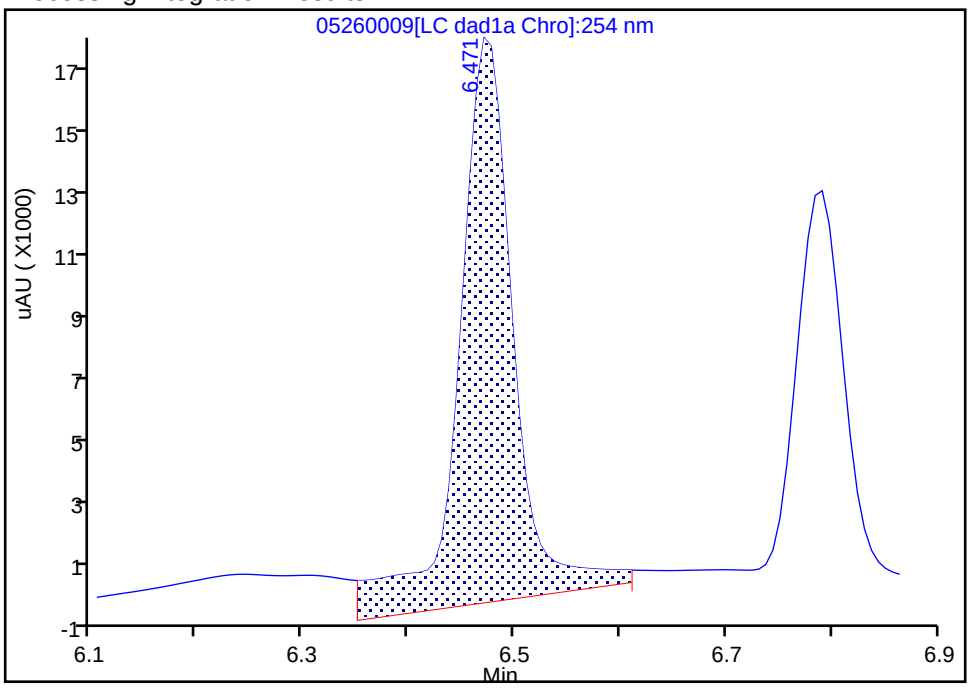
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260009.d				
Injection Date:	26-May-2022 17:05:43	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

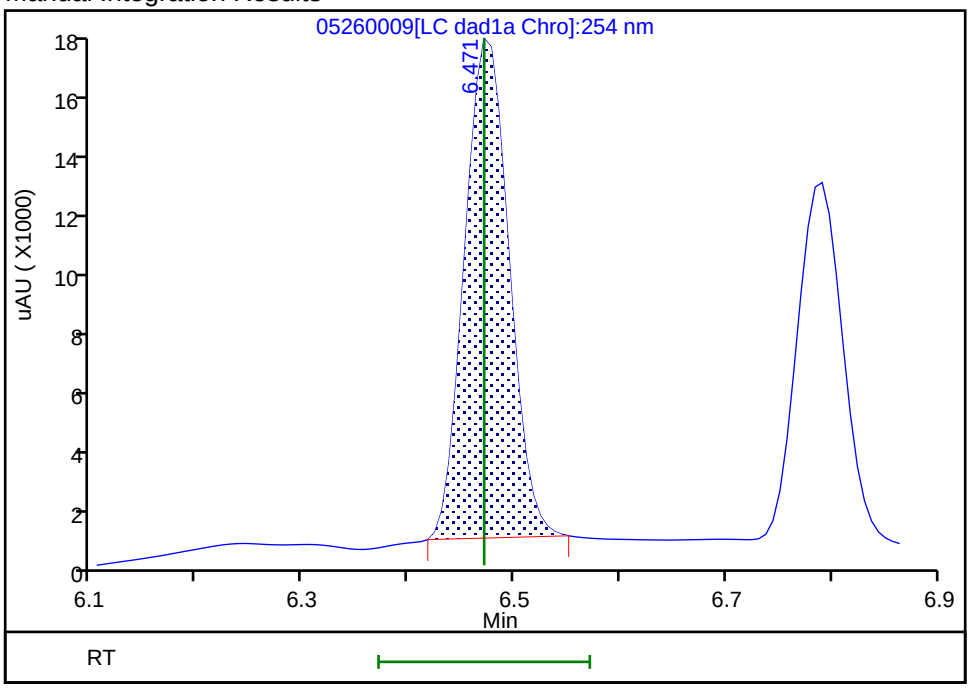
Processing Integration Results

RT: 6.47
Area: 62291
Amount: 0.343755
Amount Units: ug/mL



Manual Integration Results

RT: 6.47
Area: 47482
Amount: 0.262031
Amount Units: ug/mL



Reviewer: zhangji, 26-May-2022 18:04:45

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

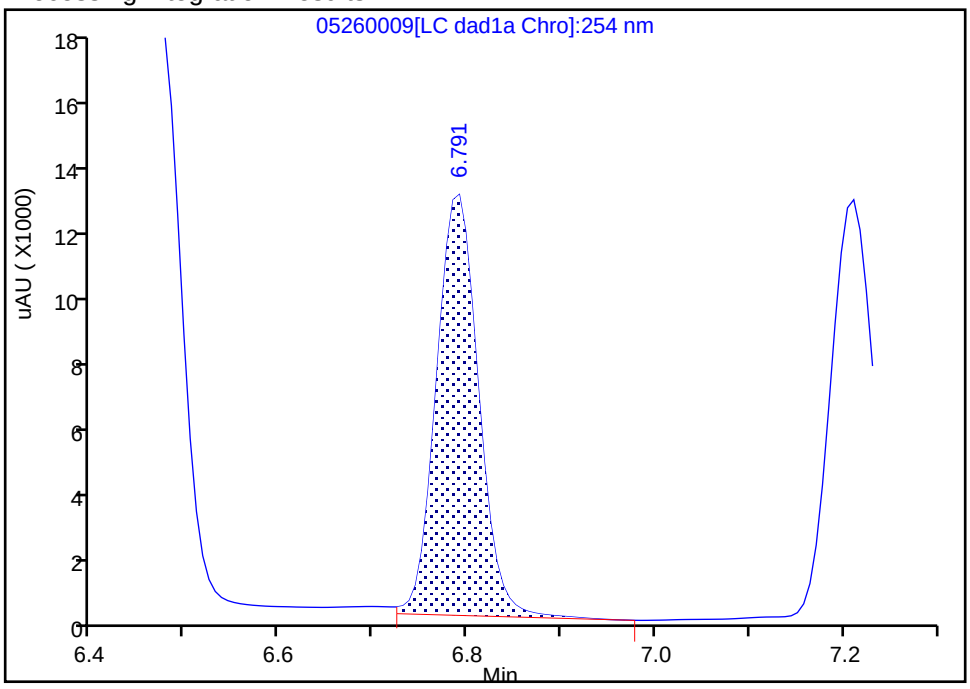
Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260009.d
Injection Date: 26-May-2022 17:05:43 Instrument ID: CHHPLC_X3
Lims ID: CCV DMT
Client ID:
Operator ID: JZ ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

6 DNX, CAS: 80251-29-2

Signal: 1

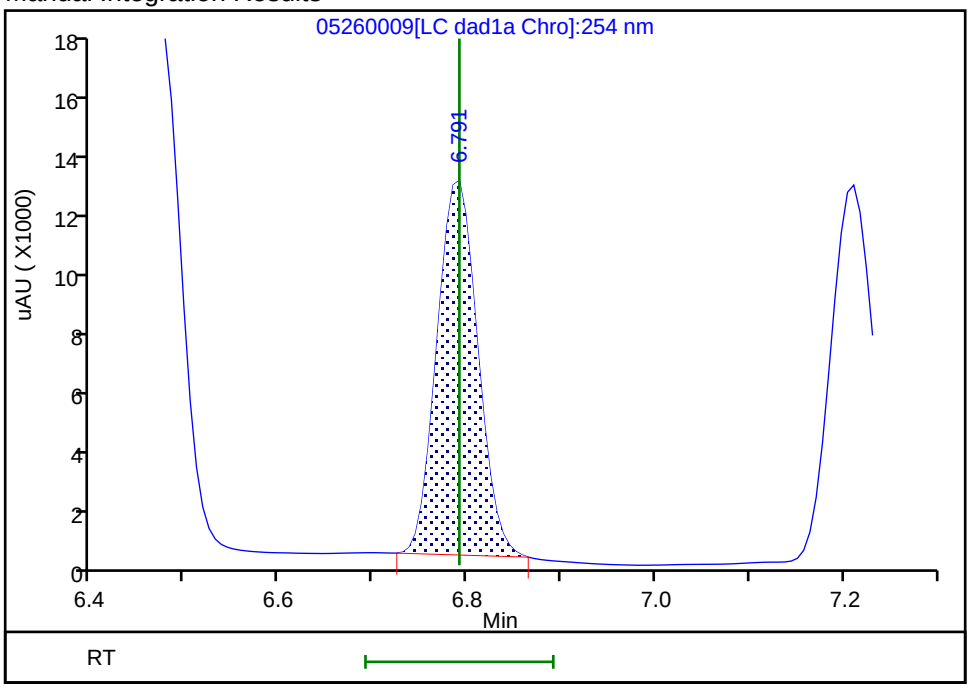
Processing Integration Results

RT: 6.79
Area: 36899
Amount: 0.267165
Amount Units: ug/mL



Manual Integration Results

RT: 6.79
Area: 35109
Amount: 0.254205
Amount Units: ug/mL



Reviewer: zhangji, 26-May-2022 18:04:48
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576310/21 Calibration Date: 05/26/2022 21:40

Instrument ID: CHHPLC_X3 Calib Start Date: 01/04/2022 18:28

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/04/2022 21:31

Lab File ID: 05260021.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	83827	90044		269	250	7.4	15.0
RDX	Ave	103609	104600		252	250	1.0	15.0
Picric acid	Ave	77039	78084		253	250	1.4	15.0
1,3,5-Trinitrobenzene	Ave	218096	214536		246	250	-1.6	15.0
1,3-Dinitrobenzene	Ave	288401	296620		257	250	2.8	15.0
Nitrobenzene	Ave	191953	191256		249	250	-0.4	15.0
Tetryl	Ave	170567	166160		244	250	-2.6	15.0
Nitroglycerin	Ave	63037	66419		2630	2500	5.4	15.0
2,4,6-Trinitrotoluene	Ave	202726	213348		263	250	5.2	15.0
4-Amino-2,6-dinitrotoluene	Ave	150985	146504		243	250	-3.0	15.0
2-Amino-4,6-dinitrotoluene	Ave	202171	197748		245	250	-2.2	15.0
2,6-Dinitrotoluene	Ave	143115	143348		250	250	0.2	15.0
2,4-Dinitrotoluene	Ave	289351	291616		252	250	0.8	15.0
2-Nitrotoluene	Ave	127614	123848		243	250	-3.0	15.0
4-Nitrotoluene	Ave	106235	106004		249	250	-0.2	15.0
3-Nitrotoluene	Ave	142273	134672		237	250	-5.3	15.0
PETN	Lin2		72778		2490	2500	-0.4	15.0
1,2-Dinitrobenzene	Ave	124698	129024		259	250	3.5	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576310/21 Calibration Date: 05/26/2022 21:40

Instrument ID: CHHPLC_X3 Calib Start Date: 01/04/2022 18:28

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/04/2022 21:31

Lab File ID: 05260021.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.59	6.44	6.74
RDX	7.59	7.44	7.74
Picric acid	7.93	7.78	8.08
1,3,5-Trinitrobenzene	8.67	8.52	8.82
1,3-Dinitrobenzene	9.29	9.15	9.45
Nitrobenzene	9.68	9.54	9.84
Tetryl	10.01	9.86	10.16
Nitroglycerin	10.46	10.32	10.62
2,4,6-Trinitrotoluene	10.91	10.82	11.02
4-Amino-2,6-dinitrotoluene	11.11	11.02	11.22
2-Amino-4,6-dinitrotoluene	11.37	11.27	11.47
2,6-Dinitrotoluene	11.53	11.43	11.63
2,4-Dinitrotoluene	11.70	11.61	11.81
2-Nitrotoluene	12.55	12.41	12.71
4-Nitrotoluene	12.98	12.84	13.14
3-Nitrotoluene	13.56	13.42	13.72
PETN	14.61	14.47	14.77
1,2-Dinitrobenzene	8.54	8.40	8.70

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\05260021.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 26-May-2022 21:40:44 ALS Bottle#: 7 Worklist Smp#: 21
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0111383-021
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 27-May-2022 13:18:41 Calib Date: 25-Mar-2022 16:30:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220325-109559.b\03250017.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1651

First Level Reviewer: zhangji Date: 27-May-2022 12:49:34

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.586	6.593	-0.007	22511	0.2500	0.2685	M
8 RDX	1	7.586	7.586	0.000	26150	0.2500	0.2524	
9 2,4,6-Trinitrophenol	1	7.926	7.926	0.000	19521	0.2500	0.2534	
$ 10 1,2-Dinitrobenzene	1	8.540	8.546	-0.006	32256	0.2500	0.2587	
11 1,3,5-Trinitrobenzene	1	8.666	8.666	0.000	53634	0.2500	0.2459	
12 1,3-Dinitrobenzene	1	9.293	9.299	-0.006	74155	0.2500	0.2571	
13 Nitrobenzene	1	9.679	9.686	-0.007	47814	0.2500	0.2491	
15 Tetryl	1	10.006	10.013	-0.007	41540	0.2500	0.2435	
16 Nitroglycerin	2	10.459	10.466	-0.007	166047	2.50	2.63	
17 2,4,6-Trinitrotoluene	1	10.913	10.919	-0.006	53337	0.2500	0.2631	
18 4-Amino-2,6-dinitrotoluene	1	11.113	11.119	-0.006	36626	0.2500	0.2426	
19 2-Amino-4,6-dinitrotoluene	1	11.366	11.373	-0.007	49437	0.2500	0.2445	
20 2,6-Dinitrotoluene	1	11.533	11.533	0.000	35837	0.2500	0.2504	
21 2,4-Dinitrotoluene	1	11.699	11.706	-0.007	72904	0.2500	0.2520	
22 o-Nitrotoluene	1	12.553	12.559	-0.006	30962	0.2500	0.2426	
23 p-Nitrotoluene	1	12.979	12.993	-0.014	26501	0.2500	0.2495	
24 m-Nitrotoluene	1	13.559	13.566	-0.007	33668	0.2500	0.2366	
25 PETN	2	14.613	14.619	-0.006	181946	2.50	2.49	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00072 Amount Added: 25.00 Units: uL

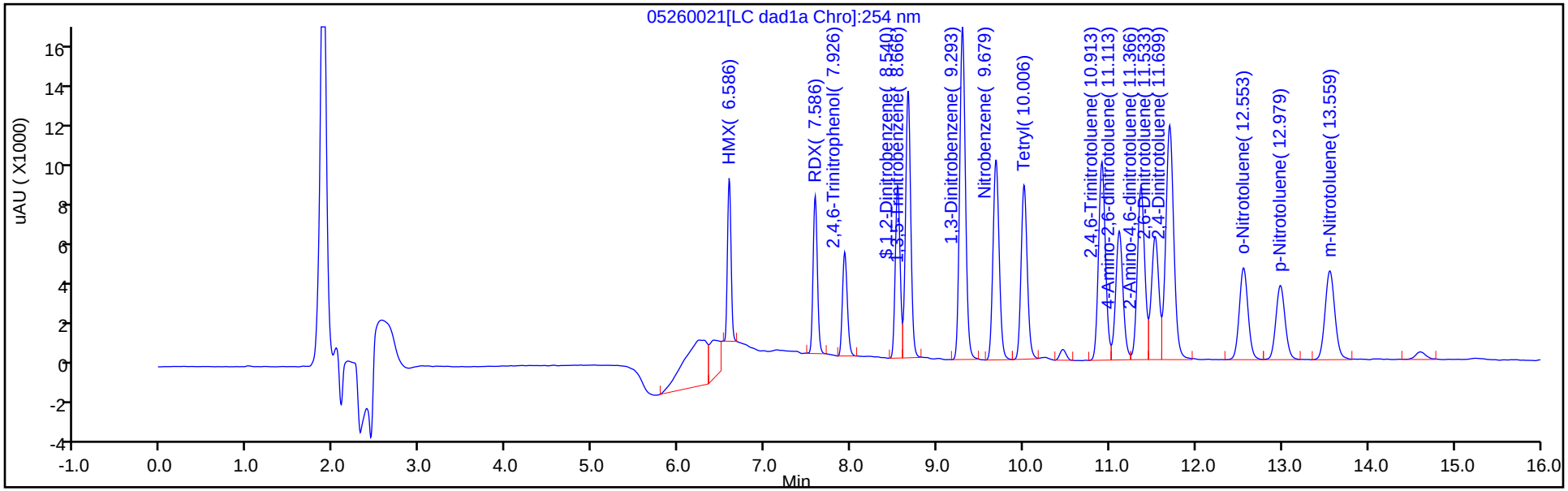
Report Date: 27-May-2022 13:18:41 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

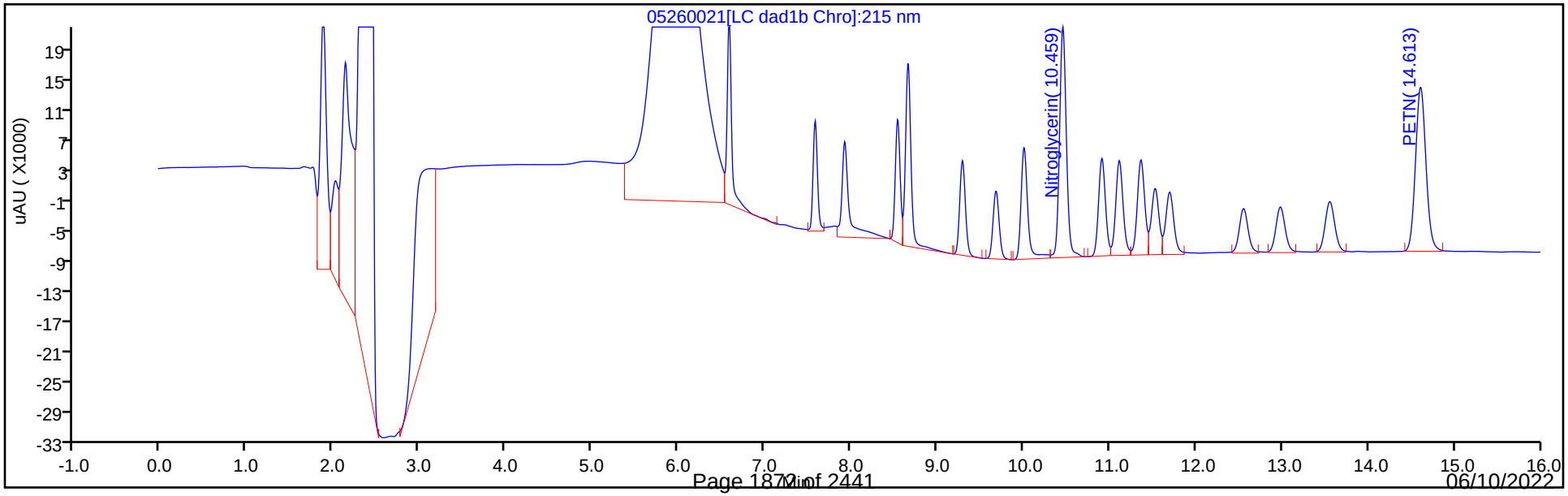
Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260021.d

Injection Date:	26-May-2022 21:40:44	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 Denver

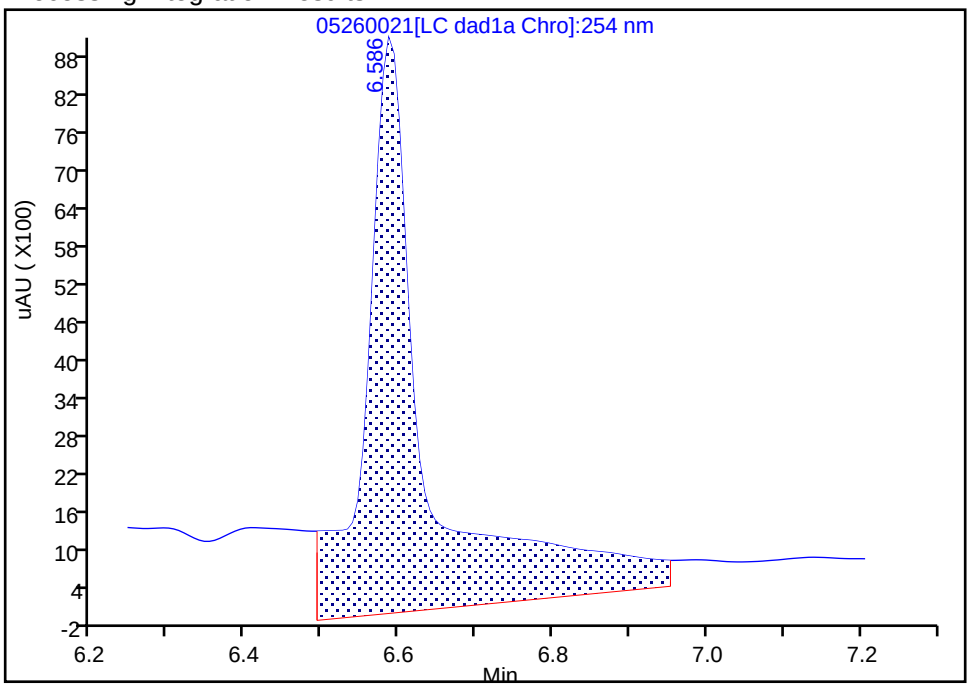
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260021.d				
Injection Date:	26-May-2022 21:40:44	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

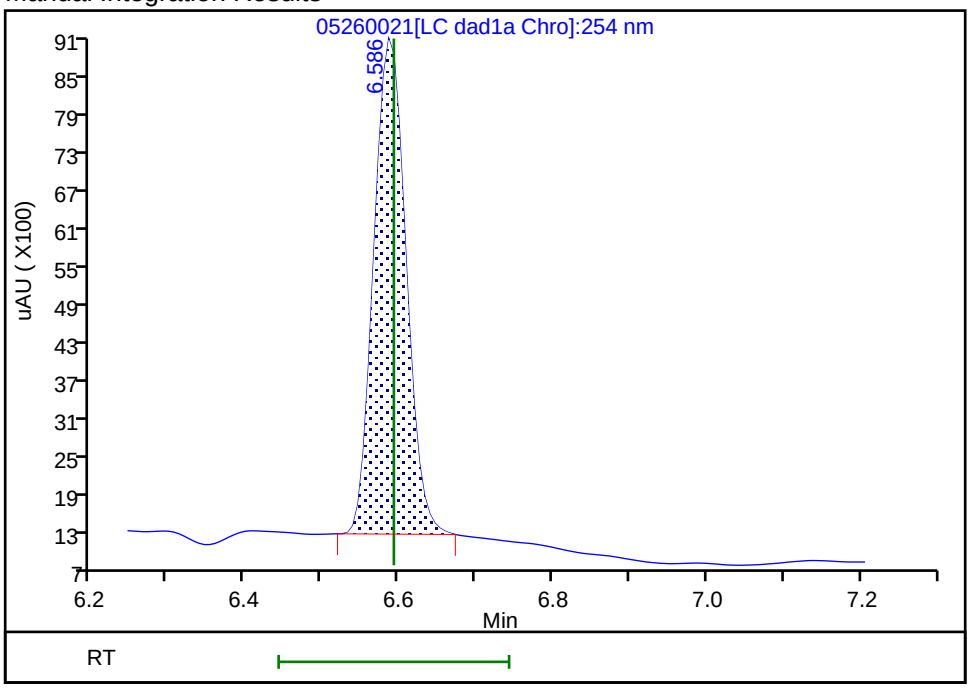
Processing Integration Results

RT: 6.59
Area: 49919
Amount: 0.595499
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 22511
Amount: 0.268541
Amount Units: ug/mL



Reviewer: zhangji, 27-May-2022 12:49:33

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576310/22 | Calibration Date: 05/26/2022 22:03

Instrument ID: CHHPLC_X3 | Calib Start Date: 01/05/2022 01:43

GC Column: UltraCarb5uODS ID: 4.60(mm) | Calib End Date: 01/05/2022 04:24

Lab File ID: 05260022.D | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	181207	185384		256	250	2.3	15.0
DNX	Ave	138113	138805		252	251	0.5	15.0
MNX	Ave	125995	130379		303	293	3.5	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576310/22 Calibration Date: 05/26/2022 22:03

Instrument ID: CHHPLC_X3 Calib Start Date: 01/05/2022 01:43

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/05/2022 04:24

Lab File ID: 05260022.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.47	6.37	6.57
DNX	6.79	6.69	6.89
MNX	7.21	7.06	7.36

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\05260022.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	26-May-2022 22:03:43	ALS Bottle#:	9	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0111383-022				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	27-May-2022 13:18:40	Calib Date:	25-Mar-2022 16:30:08		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220325-109559.b\03250017.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1651				
First Level Reviewer: zhangji		Date:	27-May-2022 12:49:48		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.472	6.471	0.001	46346	0.2500	0.2558	M
6 DNX	1	6.785	6.791	-0.006	34840	0.2510	0.2523	M
7 MNX	1	7.205	7.211	-0.006	38136	0.2925	0.3027	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00011 Amount Added: 12.50 Units: uL

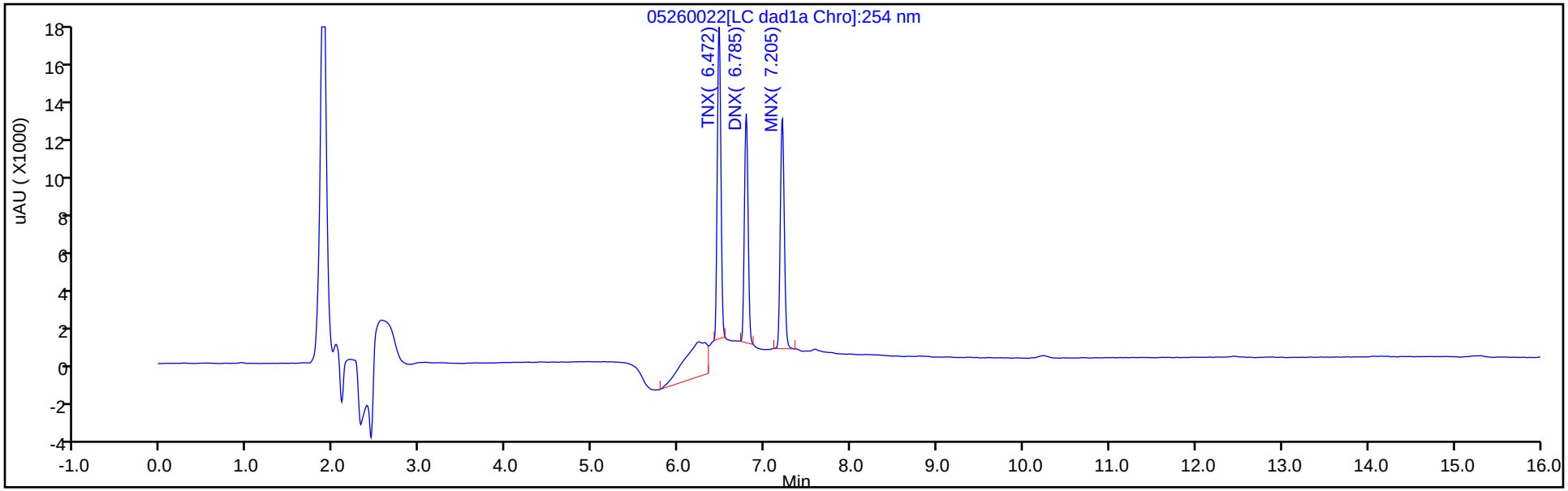
Report Date: 27-May-2022 13:18:40 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

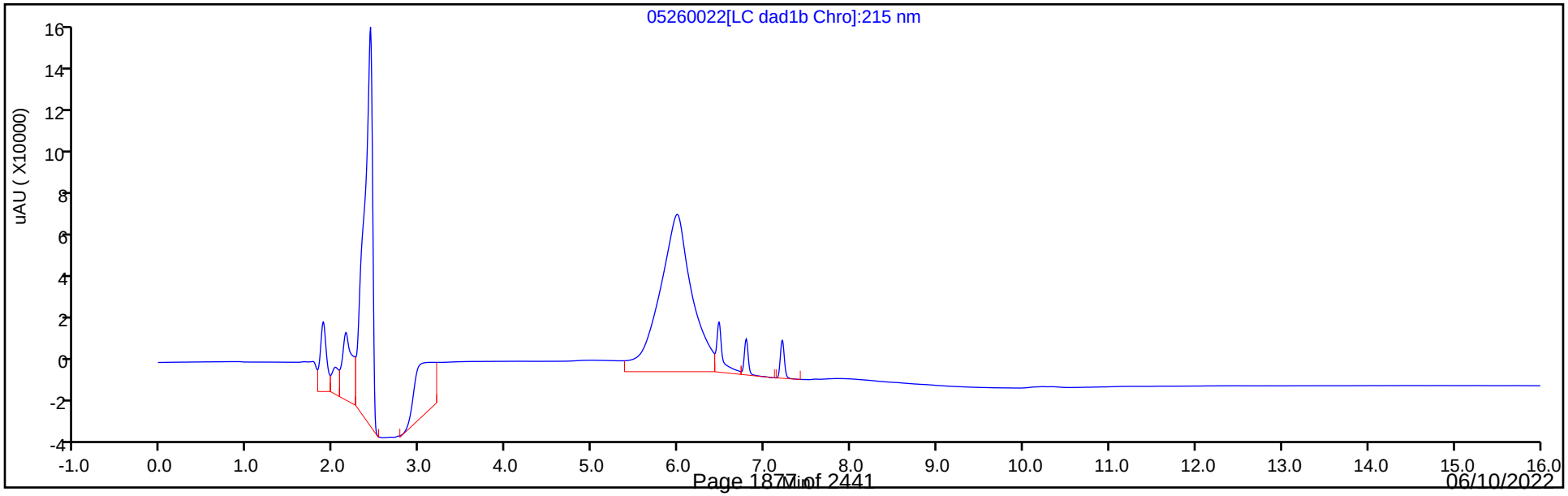
Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260022.d

Injection Date:	26-May-2022 22:03:43	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	22
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

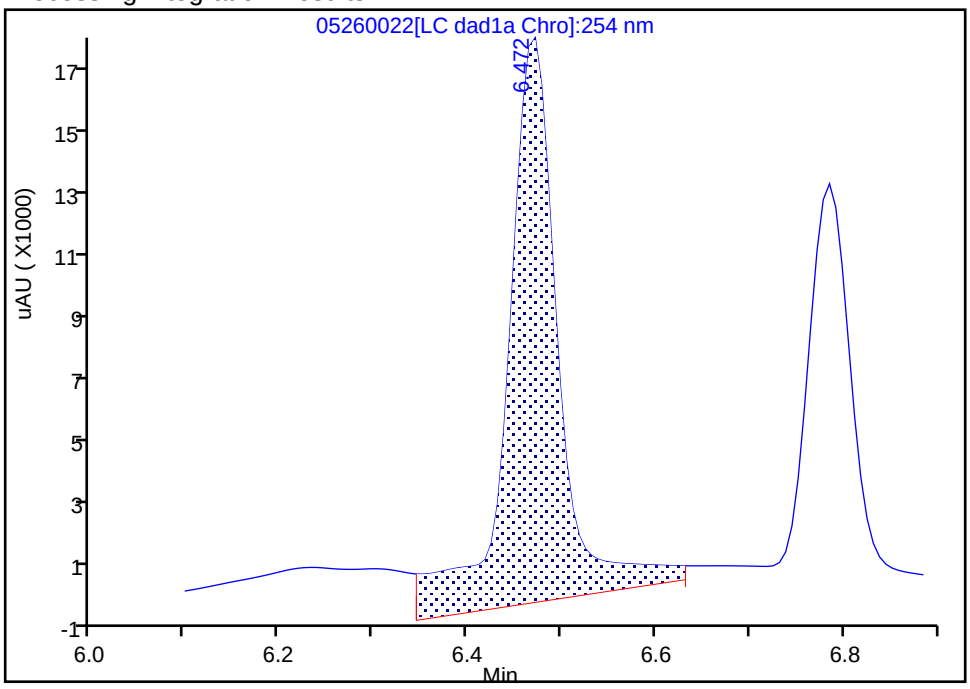
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260022.d				
Injection Date:	26-May-2022 22:03:43	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

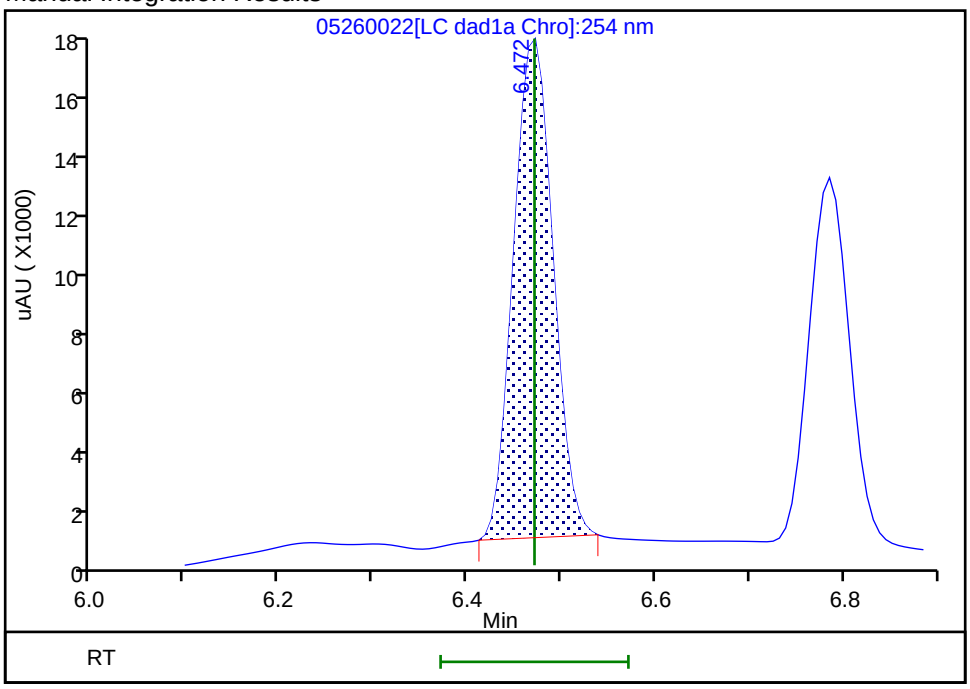
Processing Integration Results

RT: 6.47
Area: 64858
Amount: 0.357921
Amount Units: ug/mL



Manual Integration Results

RT: 6.47
Area: 46346
Amount: 0.255762
Amount Units: ug/mL



Reviewer: zhangji, 27-May-2022 12:49:41

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

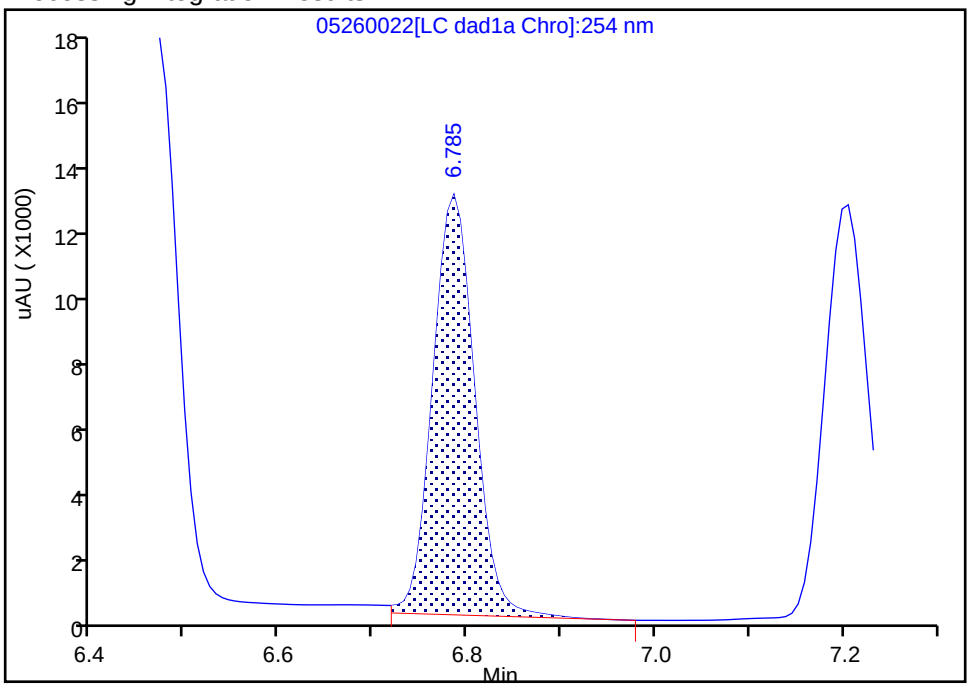
Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260022.d
Injection Date: 26-May-2022 22:03:43 Instrument ID: CHHPLC_X3
Lims ID: CCV DMT
Client ID:
Operator ID: JZ ALS Bottle#: 9 Worklist Smp#: 22
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

6 DNX, CAS: 80251-29-2

Signal: 1

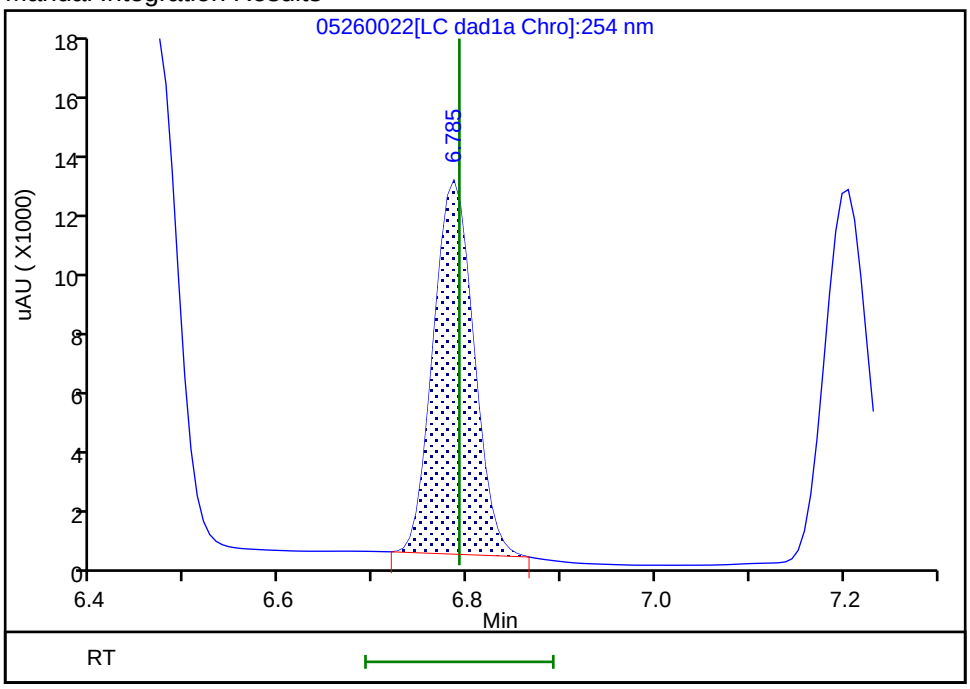
Processing Integration Results

RT: 6.79
Area: 36747
Amount: 0.266065
Amount Units: ug/mL



Manual Integration Results

RT: 6.79
Area: 34840
Amount: 0.252257
Amount Units: ug/mL



Reviewer: zhangji, 27-May-2022 12:49:44
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576310/33 Calibration Date: 05/27/2022 02:15

Instrument ID: CHHPLC_X3 Calib Start Date: 01/04/2022 18:28

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/04/2022 21:31

Lab File ID: 05260033.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	83827	89932		268	250	7.3	15.0
RDX	Ave	103609	104704		253	250	1.1	15.0
Picric acid	Ave	77039	78500		255	250	1.9	15.0
1,3,5-Trinitrobenzene	Ave	218096	217740		250	250	-0.2	15.0
1,3-Dinitrobenzene	Ave	288401	298460		259	250	3.5	15.0
Nitrobenzene	Ave	191953	188528		246	250	-1.8	15.0
Tetryl	Ave	170567	165076		242	250	-3.2	15.0
Nitroglycerin	Ave	63037	64598		2560	2500	2.5	15.0
2,4,6-Trinitrotoluene	Ave	202726	212100		262	250	4.6	15.0
4-Amino-2,6-dinitrotoluene	Ave	150985	144776		240	250	-4.1	15.0
2-Amino-4,6-dinitrotoluene	Ave	202171	196884		243	250	-2.6	15.0
2,6-Dinitrotoluene	Ave	143115	143336		250	250	0.2	15.0
2,4-Dinitrotoluene	Ave	289351	291904		252	250	0.9	15.0
2-Nitrotoluene	Ave	127614	122720		240	250	-3.8	15.0
4-Nitrotoluene	Ave	106235	104804		247	250	-1.3	15.0
3-Nitrotoluene	Ave	142273	132436		233	250	-6.9	15.0
PETN	Lin2		73124		2500	2500	0.0	15.0
1,2-Dinitrobenzene	Ave	124698	128852		258	250	3.3	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576310/33 Calibration Date: 05/27/2022 02:15

Instrument ID: CHHPLC_X3 Calib Start Date: 01/04/2022 18:28

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/04/2022 21:31

Lab File ID: 05260033.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.59	6.44	6.74
RDX	7.58	7.44	7.74
Picric acid	7.93	7.78	8.08
1,3,5-Trinitrobenzene	8.66	8.52	8.82
1,3-Dinitrobenzene	9.29	9.15	9.45
Nitrobenzene	9.68	9.54	9.84
Tetryl	10.00	9.86	10.16
Nitroglycerin	10.46	10.32	10.62
2,4,6-Trinitrotoluene	10.91	10.82	11.02
4-Amino-2,6-dinitrotoluene	11.11	11.02	11.22
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	11.61	11.81
2-Nitrotoluene	12.55	12.41	12.71
4-Nitrotoluene	12.98	12.84	13.14
3-Nitrotoluene	13.56	13.42	13.72
PETN	14.61	14.47	14.77
1,2-Dinitrobenzene	8.54	8.40	8.70

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\05260033.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 27-May-2022 02:15:59 ALS Bottle#: 7 Worklist Smp#: 33
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0111383-033
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 27-May-2022 13:18:33 Calib Date: 25-Mar-2022 16:30:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220325-109559.b\03250017.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1651

First Level Reviewer: zhangji Date: 27-May-2022 13:11:28

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.590	6.593	-0.003	22483	0.2500	0.2682	M
8 RDX	1	7.584	7.586	-0.002	26176	0.2500	0.2526	
9 2,4,6-Trinitrophenol	1	7.930	7.926	0.004	19625	0.2500	0.2547	
$ 10 1,2-Dinitrobenzene	1	8.537	8.546	-0.009	32213	0.2500	0.2583	
11 1,3,5-Trinitrobenzene	1	8.664	8.666	-0.002	54435	0.2500	0.2496	
12 1,3-Dinitrobenzene	1	9.290	9.299	-0.009	74615	0.2500	0.2587	
13 Nitrobenzene	1	9.684	9.686	-0.002	47132	0.2500	0.2455	
15 Tetryl	1	10.004	10.013	-0.009	41269	0.2500	0.2420	
16 Nitroglycerin	2	10.457	10.466	-0.009	161496	2.50	2.56	
17 2,4,6-Trinitrotoluene	1	10.910	10.919	-0.009	53025	0.2500	0.2616	
18 4-Amino-2,6-dinitrotoluene	1	11.110	11.119	-0.009	36194	0.2500	0.2397	
19 2-Amino-4,6-dinitrotoluene	1	11.364	11.373	-0.009	49221	0.2500	0.2435	
20 2,6-Dinitrotoluene	1	11.530	11.533	-0.003	35834	0.2500	0.2504	
21 2,4-Dinitrotoluene	1	11.697	11.706	-0.009	72976	0.2500	0.2522	
22 o-Nitrotoluene	1	12.550	12.559	-0.009	30680	0.2500	0.2404	
23 p-Nitrotoluene	1	12.984	12.993	-0.009	26201	0.2500	0.2466	
24 m-Nitrotoluene	1	13.557	13.566	-0.009	33109	0.2500	0.2327	
25 PETN	2	14.610	14.619	-0.009	182811	2.50	2.50	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00072 Amount Added: 25.00 Units: uL

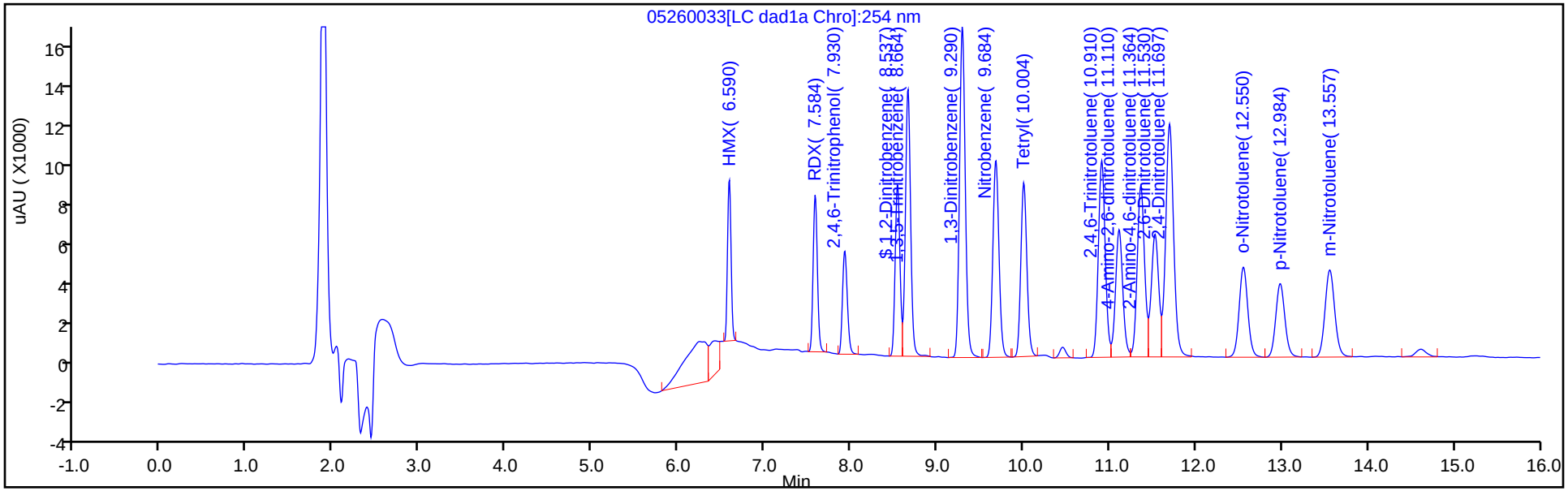
Report Date: 27-May-2022 13:18:33 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

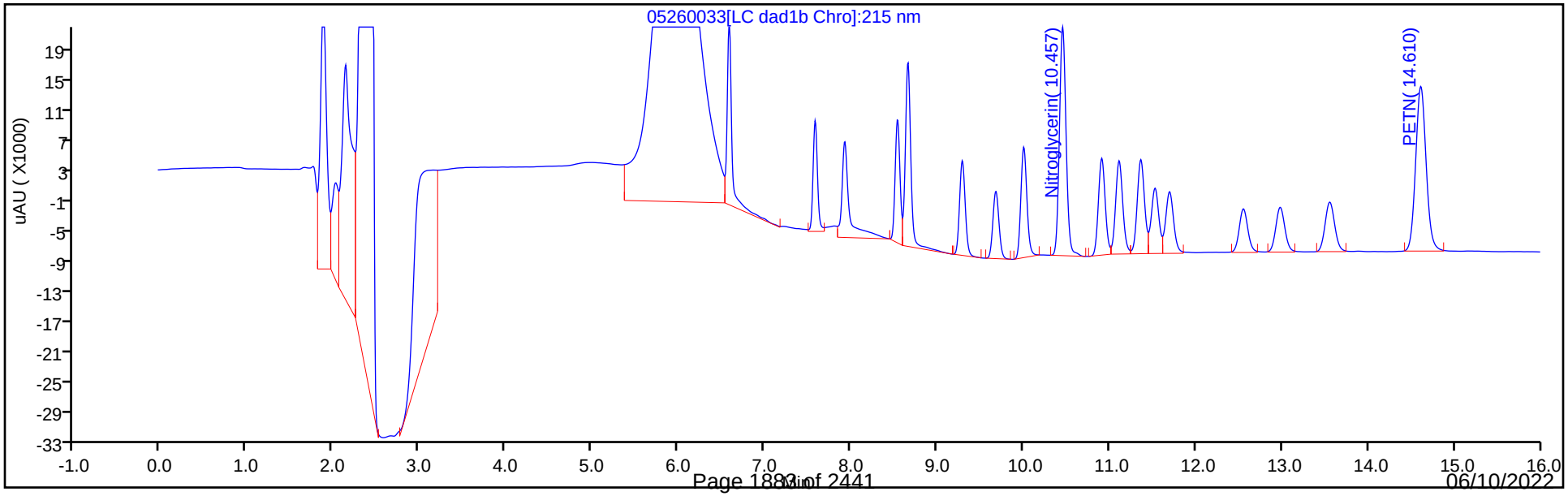
Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260033.d

Injection Date:	27-May-2022 02:15:59	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV INT			Worklist Smp#:	33
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

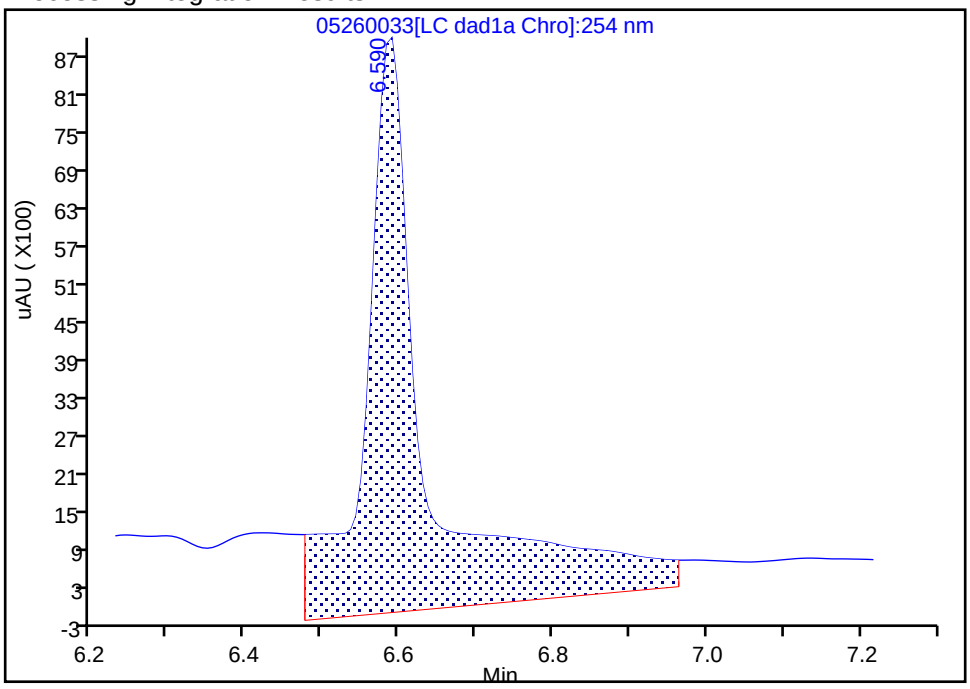
Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260033.d
Injection Date: 27-May-2022 02:15:59 Instrument ID: CHHPLC_X3
Lims ID: CCV INT
Client ID:
Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 33
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

4 HMX, CAS: 2691-41-0

Signal: 1

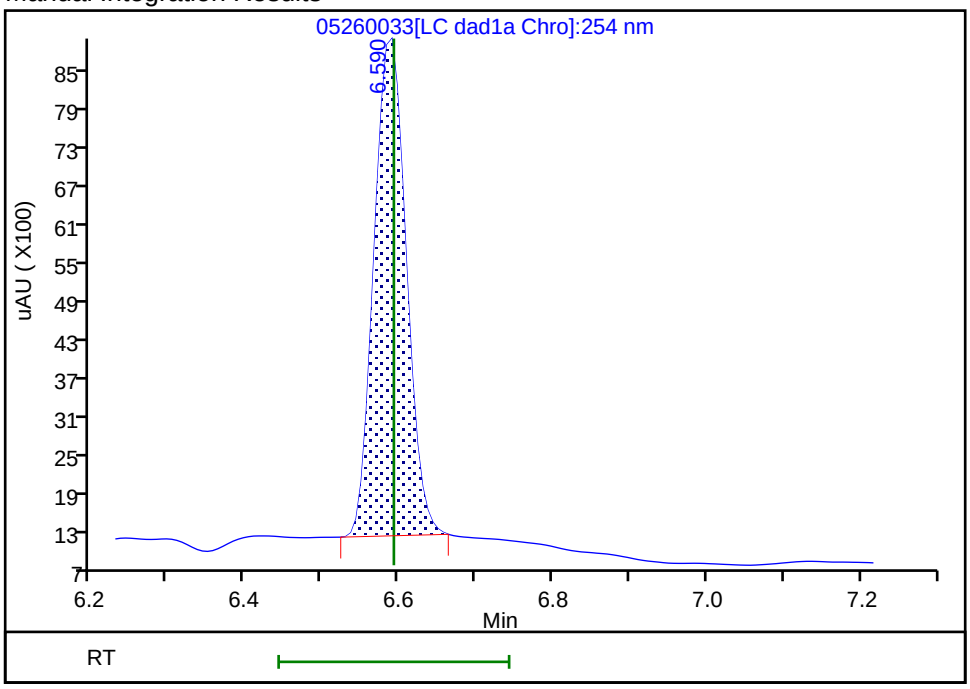
Processing Integration Results

RT: 6.59
Area: 51155
Amount: 0.610243
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 22483
Amount: 0.268206
Amount Units: ug/mL



Reviewer: zhangji, 27-May-2022 13:11:27
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576310/34 Calibration Date: 05/27/2022 02:38

Instrument ID: CHHPLC_X3 Calib Start Date: 01/05/2022 01:43

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/05/2022 04:24

Lab File ID: 05260034.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	181207	182676		252	250	0.8	15.0
DNX	Ave	138113	136614		248	251	-1.1	15.0
MNX	Ave	125995	130123		302	293	3.3	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576310/34 Calibration Date: 05/27/2022 02:38

Instrument ID: CHHPLC_X3 Calib Start Date: 01/05/2022 01:43

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/05/2022 04:24

Lab File ID: 05260034.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.47	6.37	6.57
DNX	6.78	6.69	6.89
MNX	7.20	7.06	7.36

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\05260034.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	27-May-2022 02:38:54	ALS Bottle#:	9	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0111383-034				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	27-May-2022 13:18:33	Calib Date:	25-Mar-2022 16:30:08		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220325-109559.b\03250017.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1651				
First Level Reviewer: zhangji		Date:	27-May-2022 13:13:07		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.469	6.471	-0.002	45669	0.2500	0.2520	M
6 DNX	1	6.783	6.791	-0.008	34290	0.2510	0.2483	M
7 MNX	1	7.203	7.211	-0.008	38061	0.2925	0.3021	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00011 Amount Added: 12.50 Units: uL

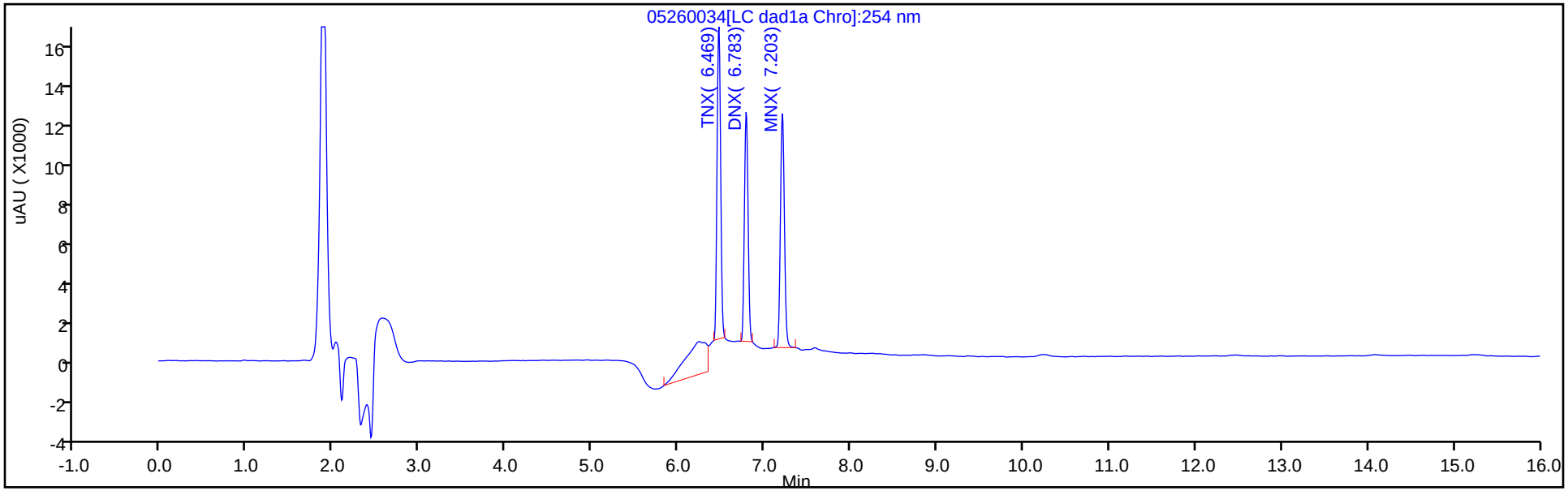
Report Date: 27-May-2022 13:18:33 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

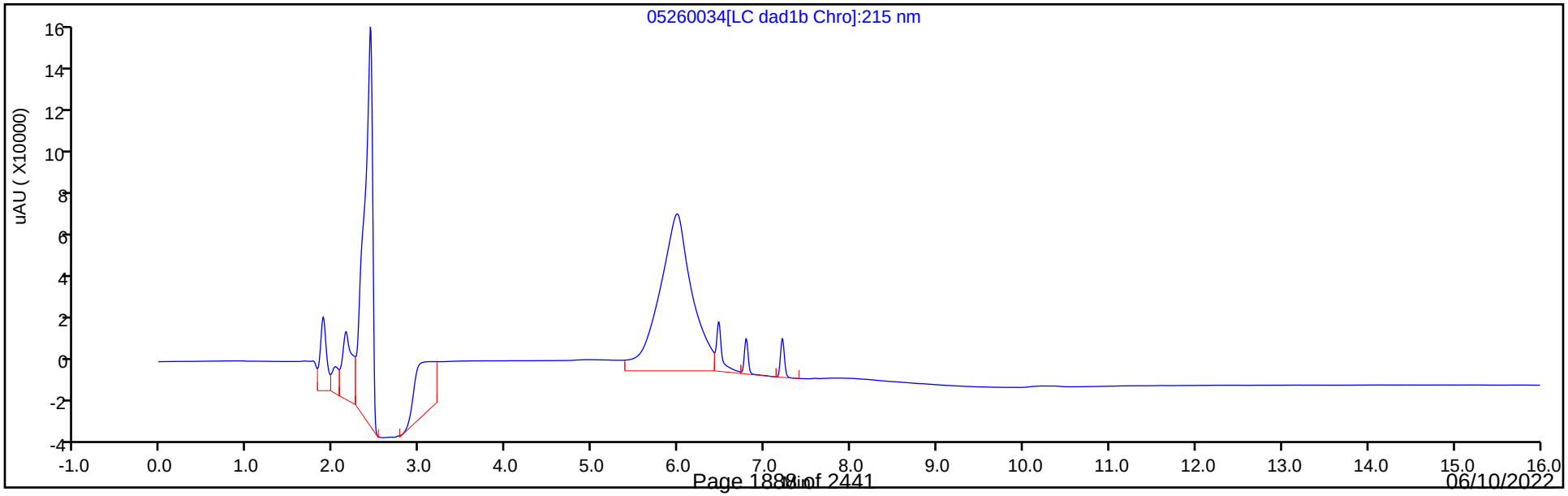
Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260034.d

Injection Date:	27-May-2022 02:38:54	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	34
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 Denver

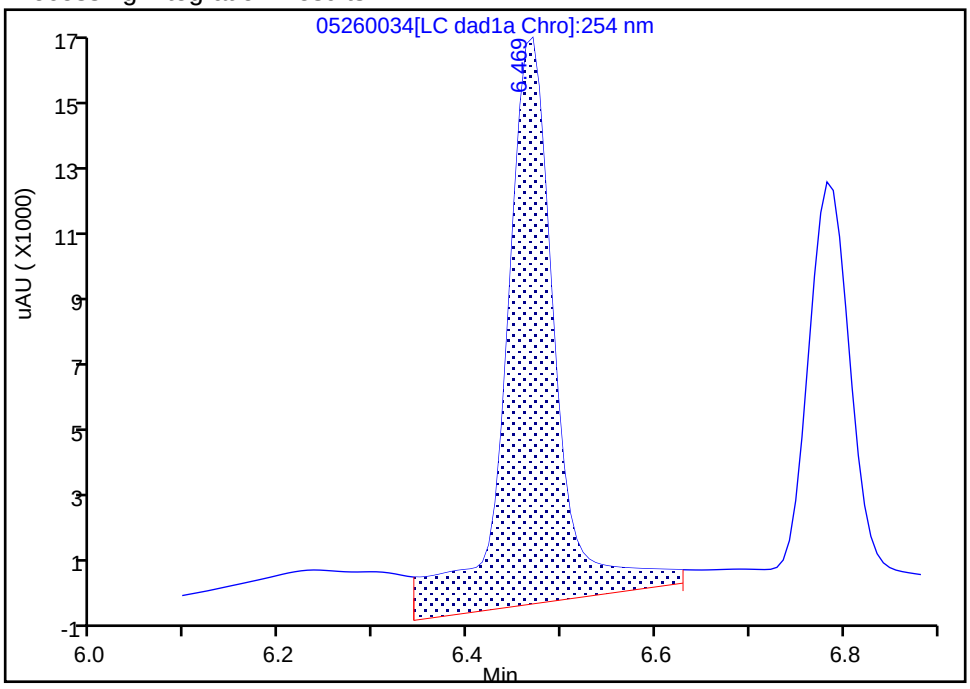
Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260034.d
Injection Date: 27-May-2022 02:38:54 Instrument ID: CHHPLC_X3
Lims ID: CCV DMT
Client ID:
Operator ID: JZ ALS Bottle#: 9 Worklist Smp#: 34
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 TNX, CAS: 13980-04-6

Signal: 1

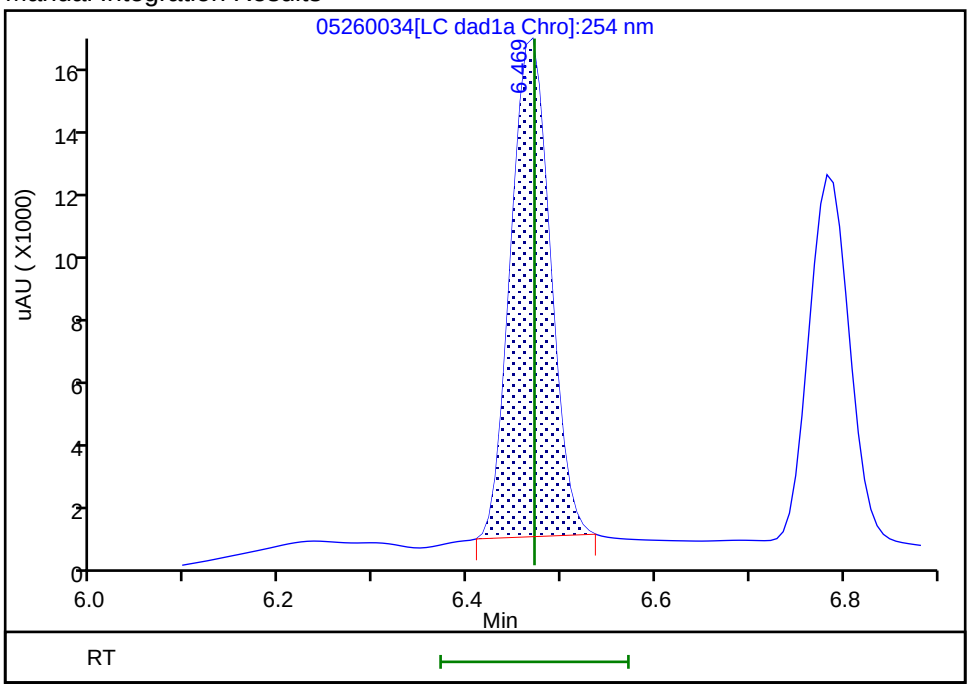
Processing Integration Results

RT: 6.47
Area: 62938
Amount: 0.347326
Amount Units: ug/mL



Manual Integration Results

RT: 6.47
Area: 45669
Amount: 0.252026
Amount Units: ug/mL



Reviewer: zhangji, 27-May-2022 13:13:02
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

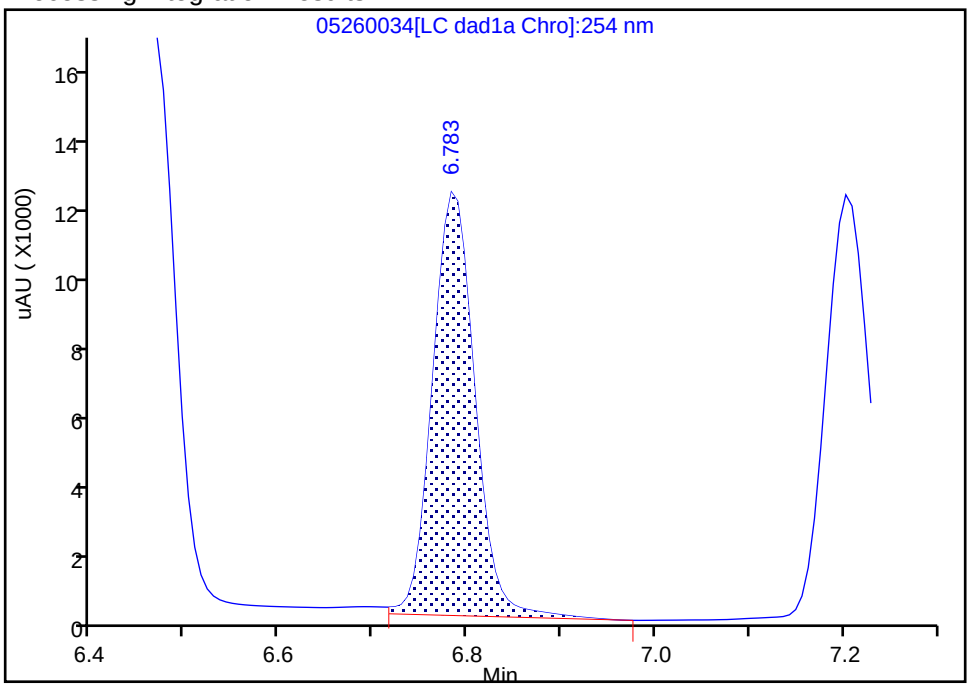
Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260034.d
Injection Date: 27-May-2022 02:38:54 Instrument ID: CHHPLC_X3
Lims ID: CCV DMT
Client ID:
Operator ID: JZ ALS Bottle#: 9 Worklist Smp#: 34
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

6 DNX, CAS: 80251-29-2

Signal: 1

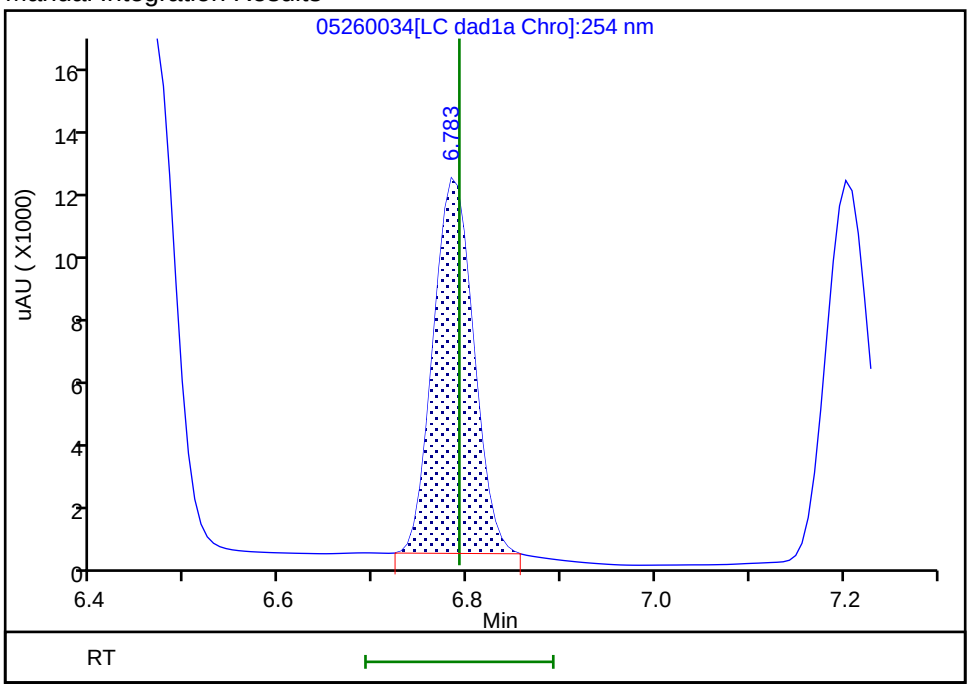
Processing Integration Results

RT: 6.78
Area: 36814
Amount: 0.266550
Amount Units: ug/mL



Manual Integration Results

RT: 6.78
Area: 34290
Amount: 0.248275
Amount Units: ug/mL



Reviewer: zhangji, 27-May-2022 13:13:05
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Lab Sample ID: ICV 280-567560/19 | Calibration Date: 03/03/2022 02:38

Instrument ID: CHHPLC_X5 | Calib Start Date: 03/02/2022 21:22

GC Column: Luna-phenylhex ID: 4.60(mm) | Calib End Date: 03/03/2022 02:03

Lab File ID: 03020019.D | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	166135	152908		460	500	-8.0	15.0
Picric acid	Ave	132885	149388		562	500	12.4	15.0
RDX	Ave	194331	186788		481	500	-3.9	15.0
Nitrobenzene	Ave	368293	368460		500	500	0.0	15.0
1,3-Dinitrobenzene	Ave	571666	563218		493	500	-1.5	15.0
Nitroglycerin	Ave	122518	128779		5260	5000	5.1	15.0
2-Nitrotoluene	Ave	234672	232836		496	500	-0.8	15.0
4-Nitrotoluene	Ave	210817	216650		514	500	2.8	15.0
4-Amino-2,6-dinitrotoluene	Lin2		269688		505	500	1.0	15.0
3-Nitrotoluene	Lin2		254816		480	500	-4.1	15.0
2-Amino-4,6-dinitrotoluene	Ave	360536	361200		501	500	0.2	15.0
1,3,5-Trinitrobenzene	Ave	415464	433072		521	500	4.2	15.0
2,6-Dinitrotoluene	Ave	265662	266814		502	500	0.4	15.0
2,4-Dinitrotoluene	Lin2		522322		470	500	-5.9	15.0
Tetryl	Ave	342171	323254		472	500	-5.5	15.0
2,4,6-Trinitrotoluene	Ave	369179	384614		521	500	4.2	15.0
PETN	Ave	129329	137808		5330	5000	6.6	15.0
1,2-Dinitrobenzene	Ave	249753	254466		509	500	1.9	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: ICV 280-567560/19 Calibration Date: 03/03/2022 02:38

Instrument ID: CHHPLC_X5 Calib Start Date: 03/02/2022 21:22

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 03/03/2022 02:03

Lab File ID: 03020019.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.87	6.74	7.04
Picric acid	7.62	7.45	7.75
RDX	9.08	8.97	9.27
Nitrobenzene	12.01	11.91	12.21
1,3-Dinitrobenzene	15.60	15.49	15.79
Nitroglycerin	16.04	15.91	16.21
2-Nitrotoluene	16.78	16.67	16.97
4-Nitrotoluene	17.08	16.98	17.28
4-Amino-2,6-dinitrotoluene	17.72	17.61	17.91
3-Nitrotoluene	18.06	17.95	18.25
2-Amino-4,6-dinitrotoluene	18.72	18.59	18.89
1,3,5-Trinitrobenzene	18.92	18.80	19.10
2,6-Dinitrotoluene	20.22	20.11	20.41
2,4-Dinitrotoluene	20.73	20.61	20.91
Tetryl	24.48	24.34	24.64
2,4,6-Trinitrotoluene	25.24	25.11	25.41
PETN	26.21	26.07	26.37
1,2-Dinitrobenzene	13.24	13.13	13.43

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020019.D
Lims ID: ICV INT
Client ID:
Sample Type: ICV
Inject. Date: 03-Mar-2022 02:38:50 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICV INT
Misc. Info.: 280-0108949-019
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist:

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 03-Mar-2022 12:52:22 Calib Date: 03-Mar-2022 02:03:29
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020018.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 03-Mar-2022 12:42:44
Second Level Reviewer: zhangji Date: 03-Mar-2022 12:52:22

	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	4.143	4.142	0.001	223893	0.5000	0.5509	
2	2,4-diamino-6-nitrotoluene	1	4.749	4.669	0.080	110582	0.5000	0.4814	M
5	HMX	1	6.869	6.889	-0.020	76454	0.5000	0.4602	
7	2,4,6-Trinitrophenol	1	7.623	7.602	0.021	74694	0.5000	0.5621	
8	RDX	1	9.076	9.115	-0.039	93394	0.5000	0.4806	
9	Nitrobenzene	1	12.009	12.062	-0.053	184230	0.5000	0.5002	
$ 10	1,2-Dinitrobenzene	1	13.236	13.282	-0.046	127233	0.5000	0.5094	
11	3,5-Dinitroaniline	1	15.229	15.269	-0.040	225413	0.5000	0.5479	
12	1,3-Dinitrobenzene	1	15.596	15.635	-0.039	281609	0.5000	0.4926	
13	Nitroglycerin	2	16.036	16.055	-0.019	643894	5.00	5.26	
14	o-Nitrotoluene	1	16.776	16.822	-0.046	116418	0.5000	0.4961	
16	p-Nitrotoluene	1	17.083	17.129	-0.046	108325	0.5000	0.5138	
17	4-Amino-2,6-dinitrotoluene	1	17.716	17.755	-0.039	134844	0.5000	0.5048	
18	m-Nitrotoluene	1	18.056	18.102	-0.046	127408	0.5000	0.4797	
19	2-Amino-4,6-dinitrotoluene	1	18.716	18.742	-0.026	180600	0.5000	0.5009	
20	1,3,5-Trinitrobenzene	1	18.916	18.949	-0.033	216536	0.5000	0.5212	
21	2,6-Dinitrotoluene	1	20.223	20.255	-0.032	133407	0.5000	0.5022	
22	2,4-Dinitrotoluene	1	20.729	20.762	-0.033	261161	0.5000	0.4704	
23	Tetryl	1	24.476	24.489	-0.013	161627	0.5000	0.4724	
24	2,4,6-Trinitrotoluene	1	25.243	25.262	-0.019	192307	0.5000	0.5209	
25	PETN	2	26.209	26.215	-0.006	689039	5.00	5.33	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 LCS_00111	Amount Added:	50.00	Units: uL
8330Surrogate_00127	Amount Added:	50.00	Units: uL
3,5-DNA LCS_00040	Amount Added:	50.00	Units: uL
8330DiaminLCS_00047	Amount Added:	50.00	Units: uL

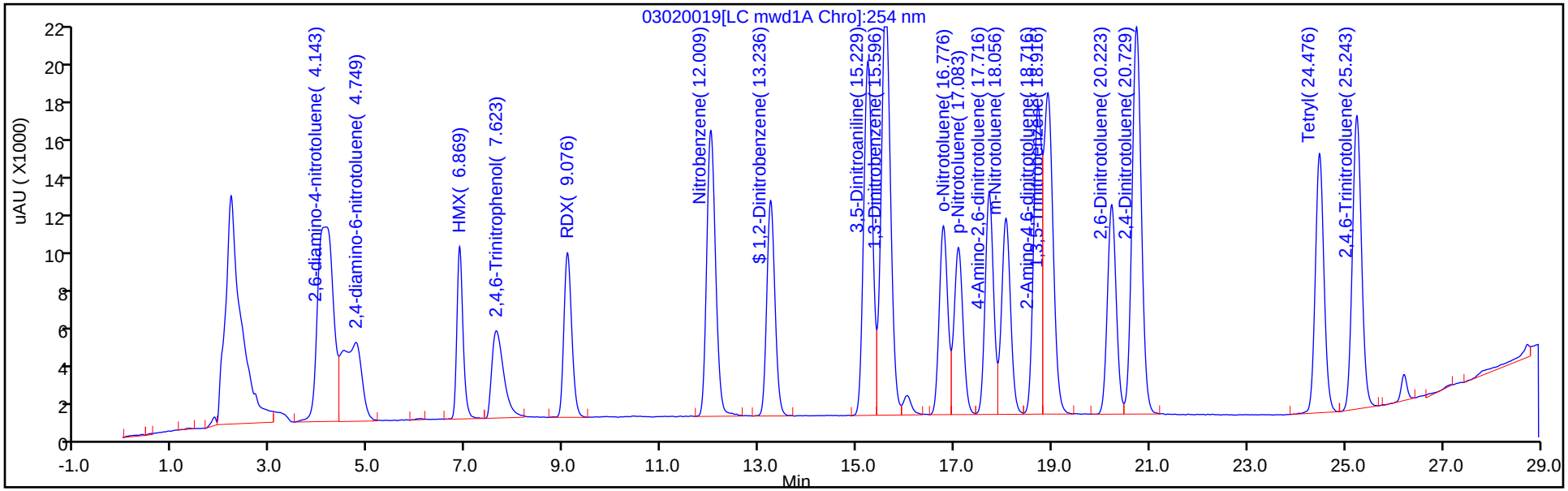
Report Date: 03-Mar-2022 12:52:29 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

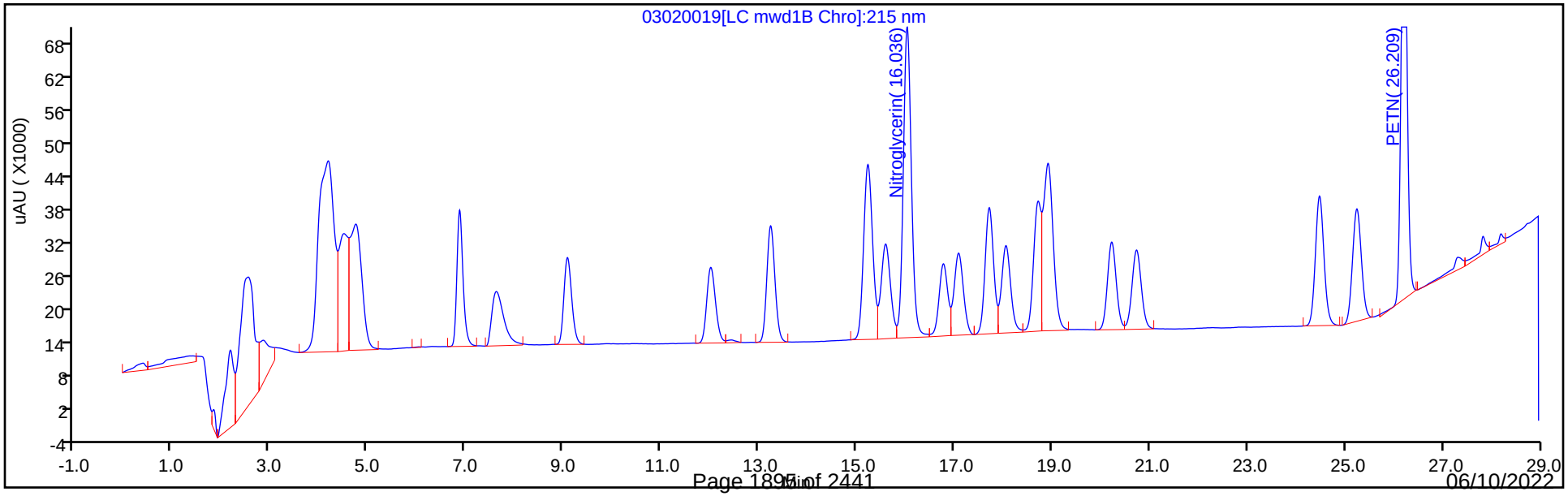
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020019.D

Injection Date:	03-Mar-2022 02:38:50	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	ICV INT			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



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: ICV 280-567560/28 Calibration Date: 03/03/2022 07:54

Instrument ID: CHHPLC_X5 Calib Start Date: 03/03/2022 03:13

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 03/03/2022 07:19

Lab File ID: 03020028.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	354070	354839		502	501	0.2	15.0
DNX	Ave	278639	276448		497	501	-0.8	15.0
MNX	Ave	250081	253925		592	584	1.5	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: ICV 280-567560/28 Calibration Date: 03/03/2022 07:54

Instrument ID: CHHPLC_X5 Calib Start Date: 03/03/2022 03:13

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 03/03/2022 07:19

Lab File ID: 03020028.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.16	5.02	5.32
DNX	6.02	5.88	6.18
MNX	7.61	7.48	7.78

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020028.D				
Lims ID:	ICV DMT				
Client ID:					
Sample Type:	ICV				
Inject. Date:	03-Mar-2022 07:54:47	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	ICV DMT				
Misc. Info.:	280-0108949-028				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Sublist:					
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	03-Mar-2022 13:02:36	Calib Date:	03-Mar-2022 07:19:48		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.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	5.157	5.171	-0.014	177597	0.5005	0.5016	
4 DNX	1	6.017	6.031	-0.014	138362	0.5005	0.4966	
6 MNX	1	7.610	7.625	-0.015	148165	0.5835	0.5925	

Reagents:

8330_OP_DMT_00012 Amount Added: 50.00 Units: uL

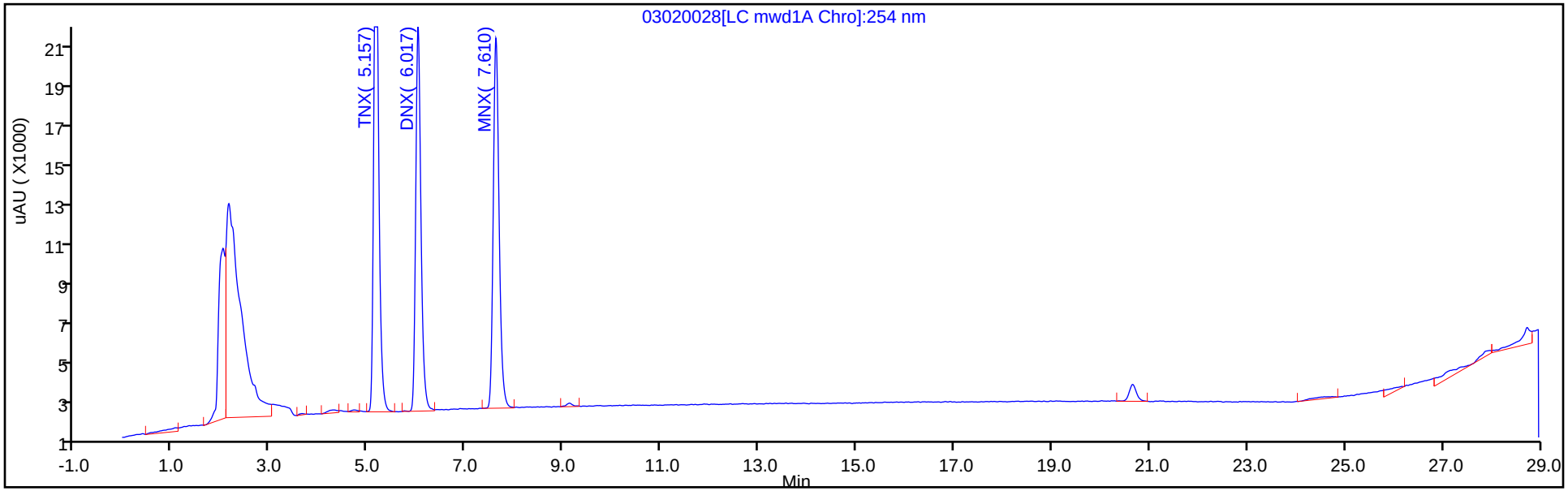
Report Date: 03-Mar-2022 13:02:44 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

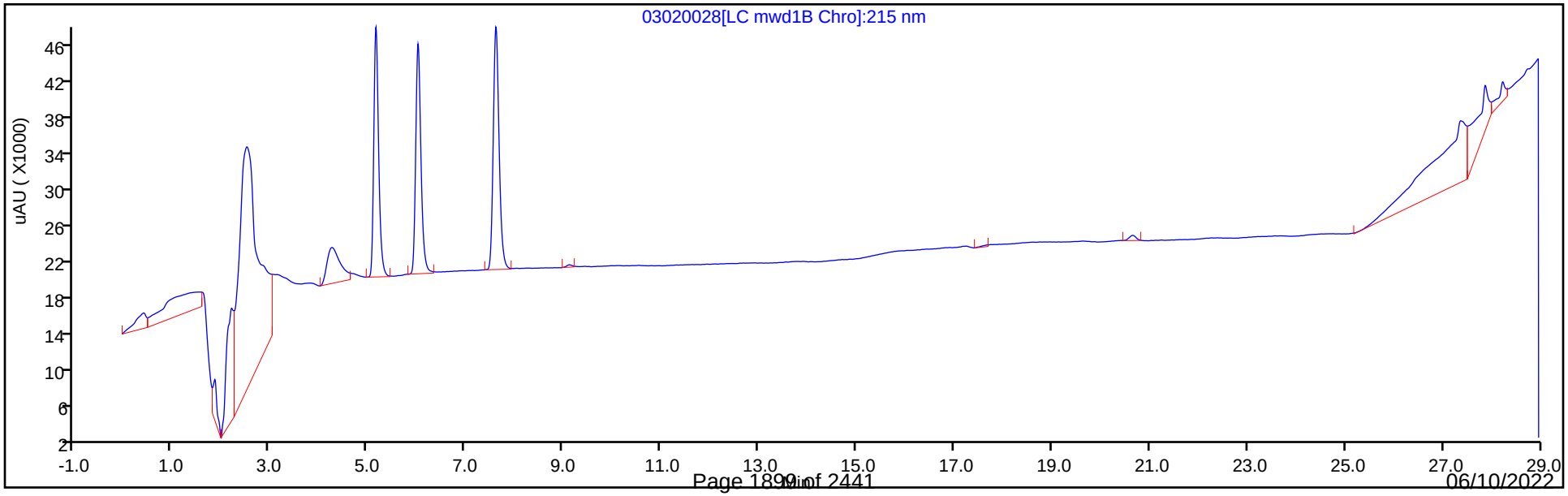
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020028.D

Injection Date:	03-Mar-2022 07:54:47	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 Denver | Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576448/7 | Calibration Date: 05/27/2022 17:22

Instrument ID: CHHPLC_X5 | Calib Start Date: 03/02/2022 21:22

GC Column: Luna-phenylhex ID: 4.60(mm) | Calib End Date: 03/03/2022 02:03

Lab File ID: 05270007.D | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	166135	182060		274	250	9.6	15.0
Picric acid	Ave	132885	152860		288	250	15.0	15.0
RDX	Ave	194331	193480		249	250	-0.4	15.0
Nitrobenzene	Ave	368293	401260		272	250	9.0	15.0
1,3-Dinitrobenzene	Ave	571666	630736		276	250	10.3	15.0
Nitroglycerin	Ave	122518	134260		2740	2500	9.6	15.0
2-Nitrotoluene	Ave	234672	223604		238	250	-4.7	15.0
4-Nitrotoluene	Ave	210817	233036		276	250	10.5	15.0
4-Amino-2,6-dinitrotoluene	Lin2		250868		235	250	-6.0	15.0
3-Nitrotoluene	Lin2		295768		279	250	11.5	15.0
2-Amino-4,6-dinitrotoluene	Ave	360536	335524		233	250	-6.9	15.0
1,3,5-Trinitrobenzene	Ave	415464	464564		280	250	11.8	15.0
2,6-Dinitrotoluene	Ave	265662	266248		251	250	0.2	15.0
2,4-Dinitrotoluene	Lin2		555908		245	250	-2.1	15.0
Tetryl	Ave	342171	315500		231	250	-7.8	15.0
2,4,6-Trinitrotoluene	Ave	369179	403296		273	250	9.2	15.0
PETN	Ave	129329	131797		2550	2500	1.9	15.0
1,2-Dinitrobenzene	Ave	249753	257276		258	250	3.0	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576448/7 Calibration Date: 05/27/2022 17:22

Instrument ID: CHHPLC_X5 Calib Start Date: 03/02/2022 21:22

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 03/03/2022 02:03

Lab File ID: 05270007.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.74	6.56	6.86
Picric acid	8.13	7.83	8.13
RDX	8.88	8.69	8.99
Nitrobenzene	11.76	11.56	11.86
1,3-Dinitrobenzene	15.31	15.08	15.38
Nitroglycerin	15.62	15.38	15.68
2-Nitrotoluene	16.41	16.18	16.48
4-Nitrotoluene	16.71	16.48	16.78
4-Amino-2,6-dinitrotoluene	17.34	17.10	17.40
3-Nitrotoluene	17.67	17.42	17.72
2-Amino-4,6-dinitrotoluene	18.34	18.08	18.38
1,3,5-Trinitrobenzene	18.58	18.34	18.64
2,6-Dinitrotoluene	19.84	19.57	19.87
2,4-Dinitrotoluene	20.35	20.08	20.38
Tetryl	23.99	23.73	24.03
2,4,6-Trinitrotoluene	24.78	24.53	24.83
PETN	25.75	25.50	25.80
1,2-Dinitrobenzene	12.94	12.72	13.02

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270007.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 27-May-2022 17:22:14 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0111418-007
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 28-May-2022 14:15:40 Calib Date: 03-Mar-2022 07:19:48
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1652

First Level Reviewer: zhangji Date: 28-May-2022 14:15:40

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1	2,6-diamino-4-nitrotoluene	1	4.196	4.140	0.056	38004	0.2500	0.0935	
2	2,4-diamino-6-nitrotoluene	1		4.574			ND	ND	
5	HMX	1	6.742	6.713	0.029	45515	0.2500	0.2740	
7	2,4,6-Trinitrophenol	1	8.129	7.980	0.149	38215	0.2500	0.2876	
8	RDX	1	8.876	8.840	0.036	48370	0.2500	0.2489	M
9	Nitrobenzene	1	11.762	11.707	0.055	100315	0.2500	0.2724	
$ 10	1,2-Dinitrobenzene	1	12.942	12.867	0.075	64319	0.2500	0.2575	
11	3,5-Dinitroaniline	1	14.942	14.860	0.082	100612	0.2500	0.2444	
12	1,3-Dinitrobenzene	1	15.309	15.233	0.076	157684	0.2500	0.2758	
13	Nitroglycerin	2	15.616	15.533	0.083	335651	2.50	2.74	
14	o-Nitrotoluene	1	16.409	16.327	0.082	55901	0.2500	0.2382	
16	p-Nitrotoluene	1	16.709	16.627	0.082	58259	0.2500	0.2763	
17	4-Amino-2,6-dinitrotoluene	1	17.342	17.247	0.095	62717	0.2500	0.2349	
18	m-Nitrotoluene	1	17.669	17.573	0.096	73942	0.2500	0.2787	
19	2-Amino-4,6-dinitrotoluene	1	18.342	18.233	0.109	83881	0.2500	0.2327	
20	1,3,5-Trinitrobenzene	1	18.576	18.487	0.089	116141	0.2500	0.2795	
21	2,6-Dinitrotoluene	1	19.836	19.720	0.116	66562	0.2500	0.2506	
22	2,4-Dinitrotoluene	1	20.349	20.233	0.116	138977	0.2500	0.2448	
23	Tetryl	1	23.989	23.880	0.109	78875	0.2500	0.2305	
24	2,4,6-Trinitrotoluene	1	24.782	24.680	0.102	100824	0.2500	0.2731	
25	PETN	2	25.749	25.647	0.102	329493	2.50	2.55	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00072	Amount Added:	25.00	Units: uL
8330_ADDs_00031	Amount Added:	12.50	Units: uL

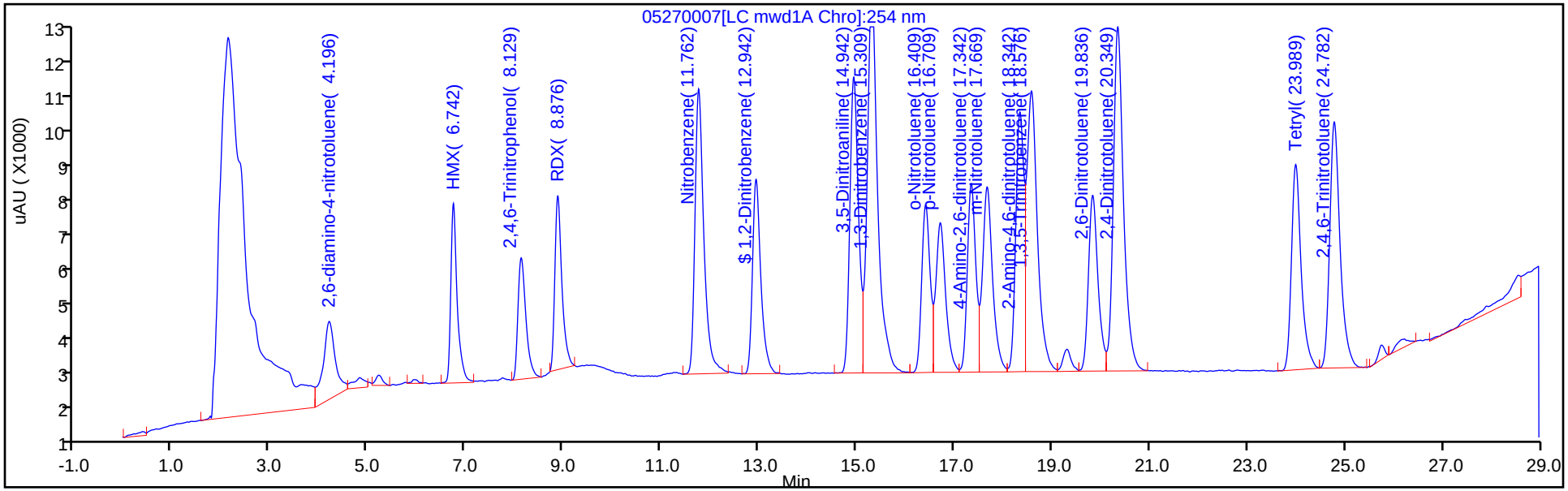
Report Date: 28-May-2022 14:15:40 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

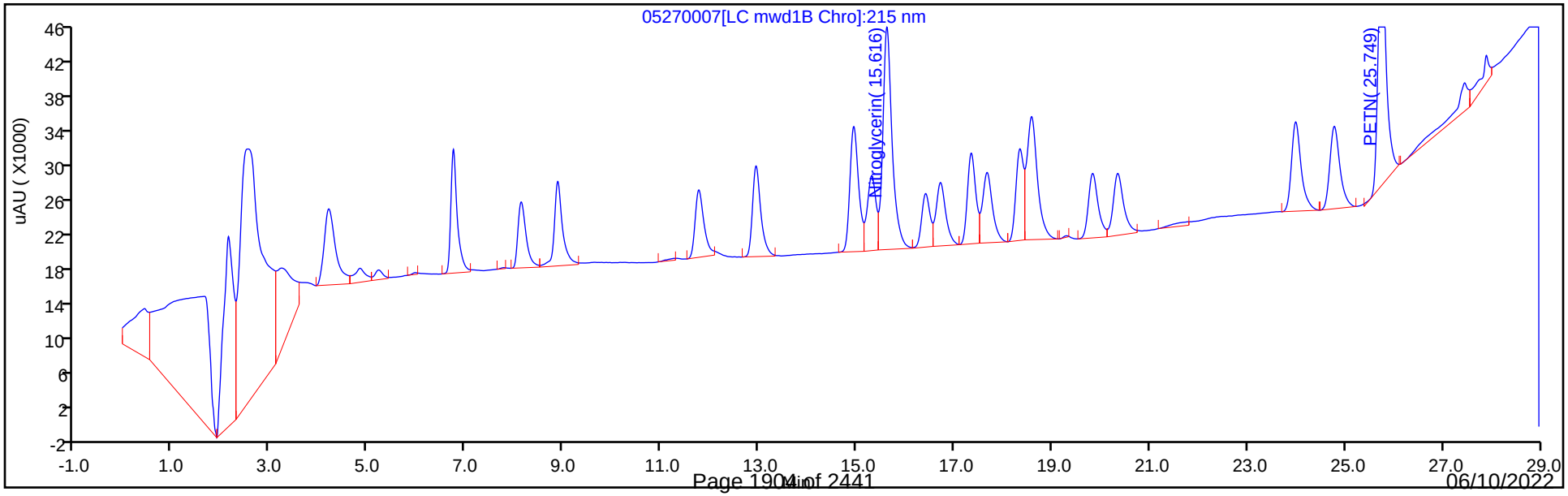
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270007.D

Injection Date:	27-May-2022 17:22:14	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



Manual Integration/User Assign Peak Report

Eurofins Denver

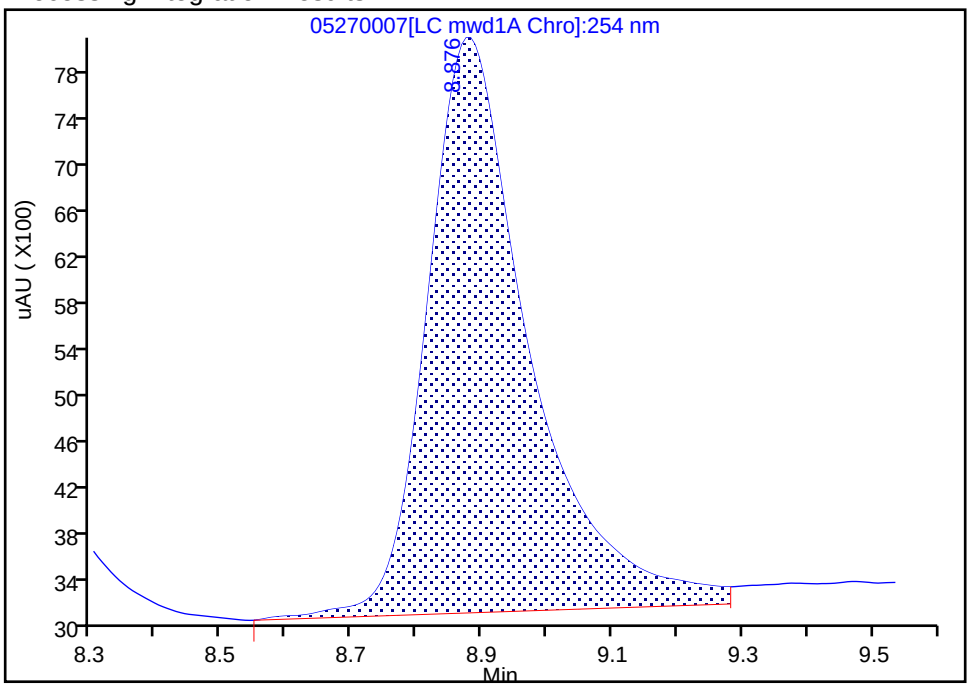
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270007.D				
Injection Date:	27-May-2022 17:22:14	Instrument ID:	CHHPLC_X5		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

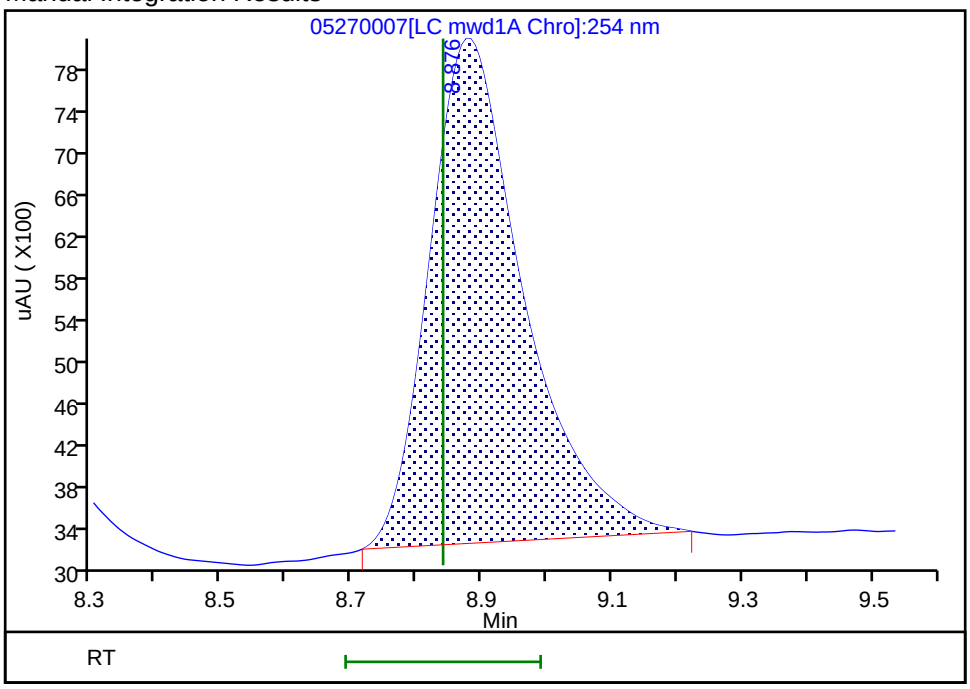
Processing Integration Results

RT: 8.88
Area: 54182
Amount: 0.278813
Amount Units: ug/ml



Manual Integration Results

RT: 8.88
Area: 48370
Amount: 0.248905
Amount Units: ug/ml



Reviewer: zhangji, 27-May-2022 18:08:32
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576448/8 Calibration Date: 05/27/2022 17:57

Instrument ID: CHHPLC_X5 Calib Start Date: 03/03/2022 03:13

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 03/03/2022 07:19

Lab File ID: 05270008.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	354070	366480		259	250	3.5	15.0
DNX	Ave	278639	271578		245	251	-2.5	15.0
MNX	Ave	250081	250865		293	293	0.3	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576448/8 Calibration Date: 05/27/2022 17:57

Instrument ID: CHHPLC_X5 Calib Start Date: 03/03/2022 03:13

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 03/03/2022 07:19

Lab File ID: 05270008.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.09	4.94	5.24
DNX	5.91	5.76	6.06
MNX	7.44	7.29	7.59

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270008.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	27-May-2022 17:57:28	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0111418-008				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Sublist:	chrom-8330_X5_Luna*sub2				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	28-May-2022 14:12:39	Calib Date:	03-Mar-2022 07:19:48		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1652				
First Level Reviewer: zhangji		Date:	27-May-2022 18:37:40		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.094	5.094	0.000	91620	0.2500	0.2588	
4 DNX	1	5.914	5.914	0.000	68166	0.2510	0.2446	
6 MNX	1	7.440	7.440	0.000	73378	0.2925	0.2934	

Reagents:

8330 DMT_00011 Amount Added: 12.50 Units: uL

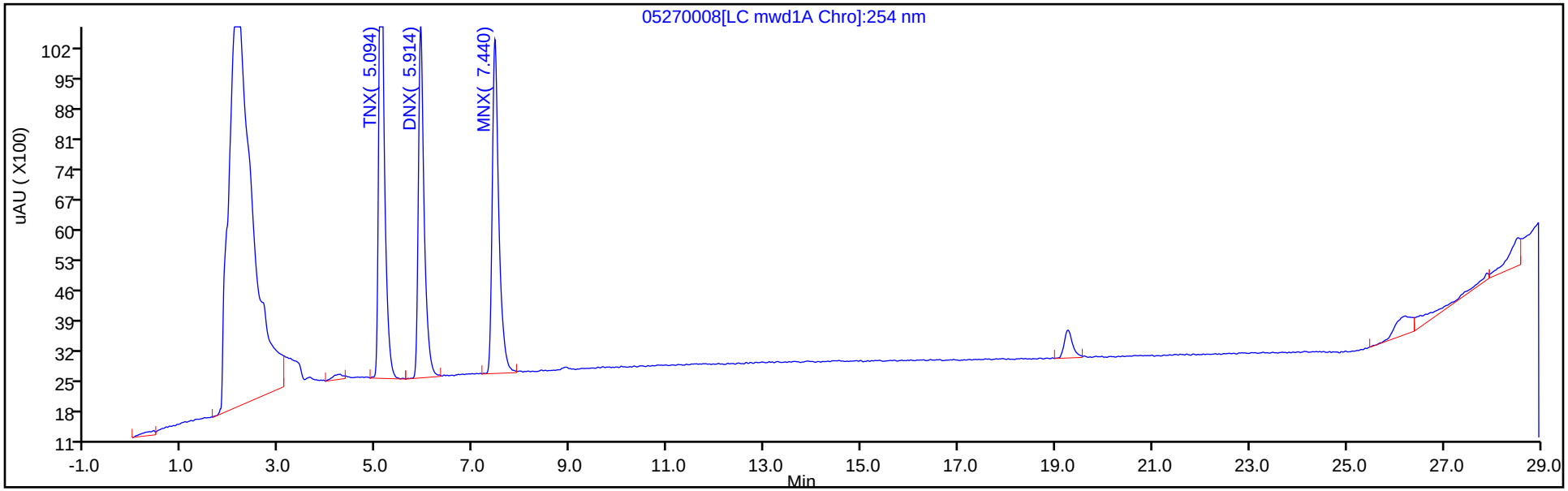
Report Date: 28-May-2022 14:12:39 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

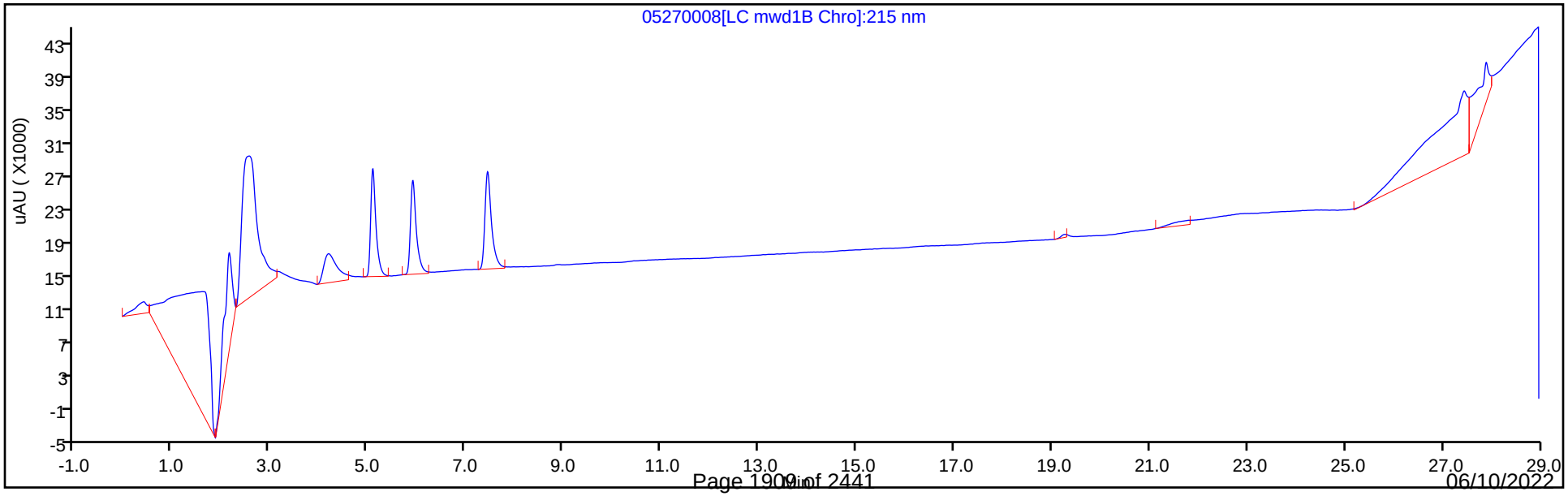
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270008.D

Injection Date:	27-May-2022 17:57:28	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 Denver | Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576448/20 | Calibration Date: 05/28/2022 00:23

Instrument ID: CHHPLC_X5 | Calib Start Date: 03/02/2022 21:22

GC Column: Luna-phenylhex ID: 4.60(mm) | Calib End Date: 03/03/2022 02:03

Lab File ID: 05270020.D | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	166135	183368		276	250	10.4	15.0
Picric acid	Ave	132885	153216		288	250	15.3*	15.0
RDX	Ave	194331	208296		268	250	7.2	15.0
Nitrobenzene	Ave	368293	402312		273	250	9.2	15.0
1,3-Dinitrobenzene	Ave	571666	625392		273	250	9.4	15.0
Nitroglycerin	Ave	122518	136468		2780	2500	11.4	15.0
2-Nitrotoluene	Ave	234672	218560		233	250	-6.9	15.0
4-Nitrotoluene	Ave	210817	232740		276	250	10.4	15.0
4-Amino-2,6-dinitrotoluene	Lin2		252324		236	250	-5.5	15.0
3-Nitrotoluene	Lin2		292132		275	250	10.1	15.0
2-Amino-4,6-dinitrotoluene	Ave	360536	335964		233	250	-6.8	15.0
1,3,5-Trinitrobenzene	Ave	415464	465488		280	250	12.0	15.0
2,6-Dinitrotoluene	Ave	265662	266156		250	250	0.2	15.0
2,4-Dinitrotoluene	Lin2		556316		245	250	-2.0	15.0
Tetryl	Ave	342171	314804		230	250	-8.0	15.0
2,4,6-Trinitrotoluene	Ave	369179	402788		273	250	9.1	15.0
PETN	Ave	129329	131984		2550	2500	2.1	15.0
1,2-Dinitrobenzene	Ave	249753	257704		258	250	3.2	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576448/20 Calibration Date: 05/28/2022 00:23

Instrument ID: CHHPLC_X5 Calib Start Date: 03/02/2022 21:22

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 03/03/2022 02:03

Lab File ID: 05270020.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.71	6.56	6.86
Picric acid	7.98	7.83	8.13
RDX	8.84	8.69	8.99
Nitrobenzene	11.71	11.56	11.86
1,3-Dinitrobenzene	15.23	15.08	15.38
Nitroglycerin	15.53	15.38	15.68
2-Nitrotoluene	16.33	16.18	16.48
4-Nitrotoluene	16.63	16.48	16.78
4-Amino-2,6-dinitrotoluene	17.25	17.10	17.40
3-Nitrotoluene	17.57	17.42	17.72
2-Amino-4,6-dinitrotoluene	18.23	18.08	18.38
1,3,5-Trinitrobenzene	18.49	18.34	18.64
2,6-Dinitrotoluene	19.72	19.57	19.87
2,4-Dinitrotoluene	20.23	20.08	20.38
Tetryl	23.88	23.73	24.03
2,4,6-Trinitrotoluene	24.68	24.53	24.83
PETN	25.65	25.50	25.80
1,2-Dinitrobenzene	12.87	12.72	13.02

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270020.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 28-May-2022 00:23:41 ALS Bottle#: 7 Worklist Smp#: 20
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0111418-020
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 28-May-2022 14:15:48 Calib Date: 03-Mar-2022 07:19:48
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1652

First Level Reviewer: zhangji Date: 28-May-2022 10:16:50

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1	2,6-diamino-4-nitrotoluene	1	4.140	4.140	0.000	44575	0.2500	0.1097	
2	2,4-diamino-6-nitrotoluene	1		4.574			ND	ND	
5	HMX	1	6.713	6.713	0.000	45842	0.2500	0.2759	
7	2,4,6-Trinitrophenol	1	7.980	7.980	0.000	38304	0.2500	0.2882	
8	RDX	1	8.840	8.840	0.000	52074	0.2500	0.2680	M
9	Nitrobenzene	1	11.707	11.707	0.000	100578	0.2500	0.2731	
$ 10	1,2-Dinitrobenzene	1	12.867	12.867	0.000	64426	0.2500	0.2580	
11	3,5-Dinitroaniline	1	14.860	14.860	0.000	100547	0.2500	0.2443	
12	1,3-Dinitrobenzene	1	15.233	15.233	0.000	156348	0.2500	0.2735	
13	Nitroglycerin	2	15.533	15.533	0.000	341170	2.50	2.78	
14	o-Nitrotoluene	1	16.327	16.327	0.000	54640	0.2500	0.2328	
16	p-Nitrotoluene	1	16.627	16.627	0.000	58185	0.2500	0.2760	
17	4-Amino-2,6-dinitrotoluene	1	17.247	17.247	0.000	63081	0.2500	0.2363	
18	m-Nitrotoluene	1	17.573	17.573	0.000	73033	0.2500	0.2753	
19	2-Amino-4,6-dinitrotoluene	1	18.233	18.233	0.000	83991	0.2500	0.2330	
20	1,3,5-Trinitrobenzene	1	18.487	18.487	0.000	116372	0.2500	0.2801	
21	2,6-Dinitrotoluene	1	19.720	19.720	0.000	66539	0.2500	0.2505	
22	2,4-Dinitrotoluene	1	20.233	20.233	0.000	139079	0.2500	0.2450	
23	Tetryl	1	23.880	23.880	0.000	78701	0.2500	0.2300	
24	2,4,6-Trinitrotoluene	1	24.680	24.680	0.000	100697	0.2500	0.2728	
25	PETN	2	25.647	25.647	0.000	329961	2.50	2.55	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00072	Amount Added:	25.00	Units: uL
8330_ADDs_00031	Amount Added:	12.50	Units: uL

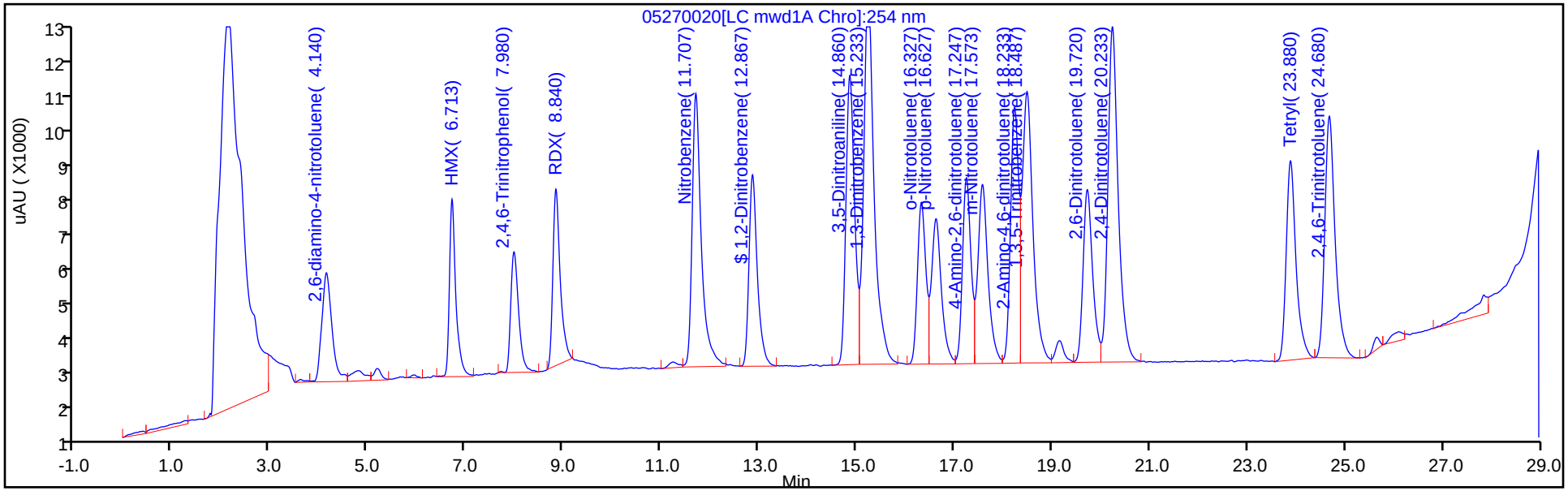
Report Date: 28-May-2022 14:15:48 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

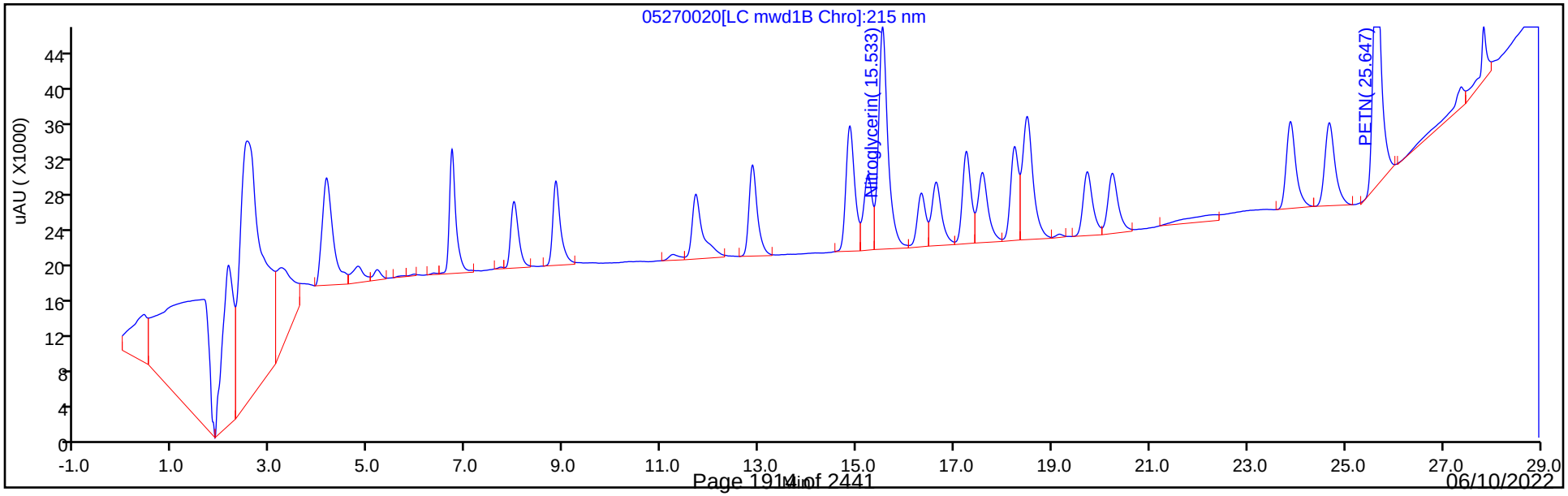
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270020.D

Injection Date:	28-May-2022 00:23:41	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



Manual Integration/User Assign Peak Report

Eurofins Denver

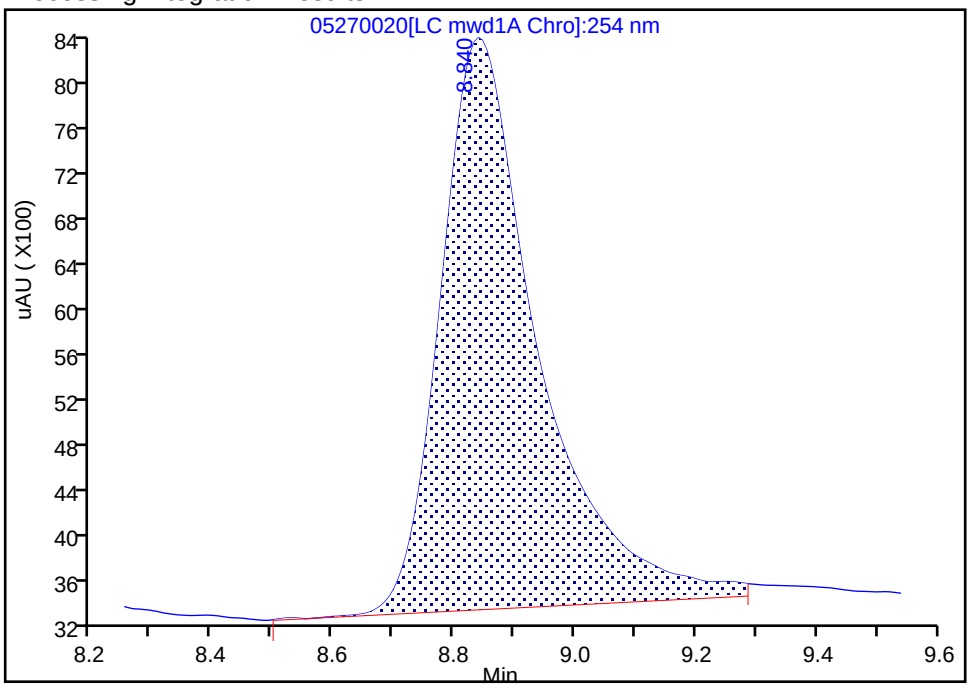
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270020.D				
Injection Date:	28-May-2022 00:23:41	Instrument ID:	CHHPLC_X5		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

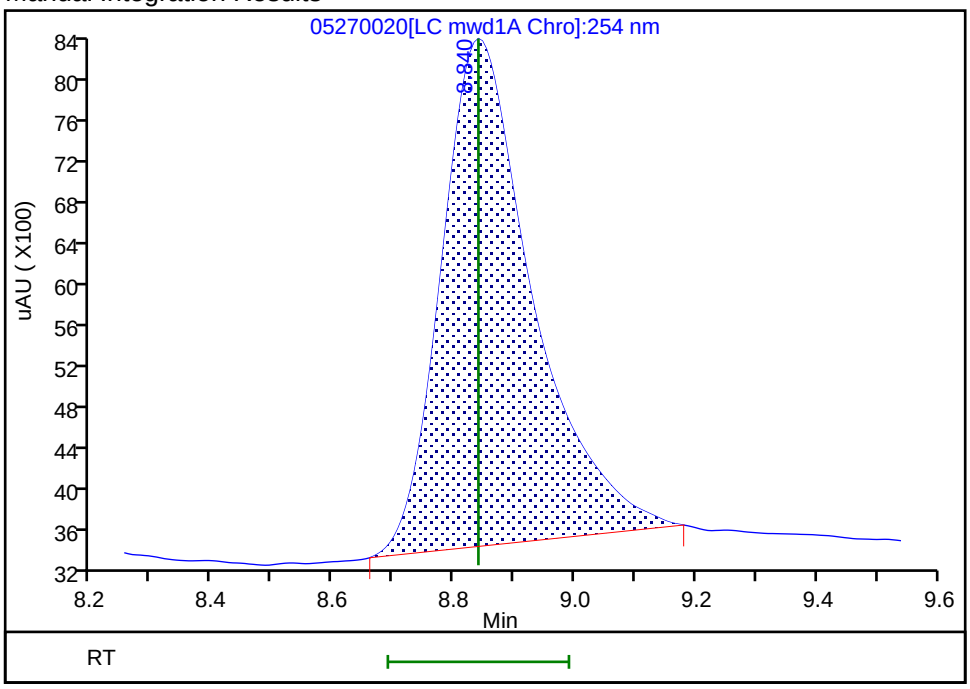
Processing Integration Results

RT: 8.84
Area: 56797
Amount: 0.292269
Amount Units: ug/ml



Manual Integration Results

RT: 8.84
Area: 52074
Amount: 0.267965
Amount Units: ug/ml



Reviewer: zhangji, 28-May-2022 14:15:46

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576448/21 Calibration Date: 05/28/2022 00:58

Instrument ID: CHHPLC_X5 Calib Start Date: 03/03/2022 03:13

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 03/03/2022 07:19

Lab File ID: 05270021.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	354070	358264		253	250	1.2	15.0
DNX	Ave	278639	269574		243	251	-3.3	15.0
MNX	Ave	250081	250113		293	293	0.0	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576448/21 Calibration Date: 05/28/2022 00:58

Instrument ID: CHHPLC_X5 Calib Start Date: 03/03/2022 03:13

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 03/03/2022 07:19

Lab File ID: 05270021.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.06	4.94	5.24
DNX	5.87	5.76	6.06
MNX	7.39	7.29	7.59

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270021.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	28-May-2022 00:58:46	ALS Bottle#:	8	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0111418-021				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Sublist:	chrom-8330_X5_Luna*sub2				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	28-May-2022 14:12:44	Calib Date:	03-Mar-2022 07:19:48		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.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	5.060	5.094	-0.034	89566	0.2500	0.2530	
4 DNX	1	5.867	5.914	-0.047	67663	0.2510	0.2428	
6 MNX	1	7.393	7.440	-0.047	73158	0.2925	0.2925	

Reagents:

8330 DMT_00011 Amount Added: 12.50 Units: uL

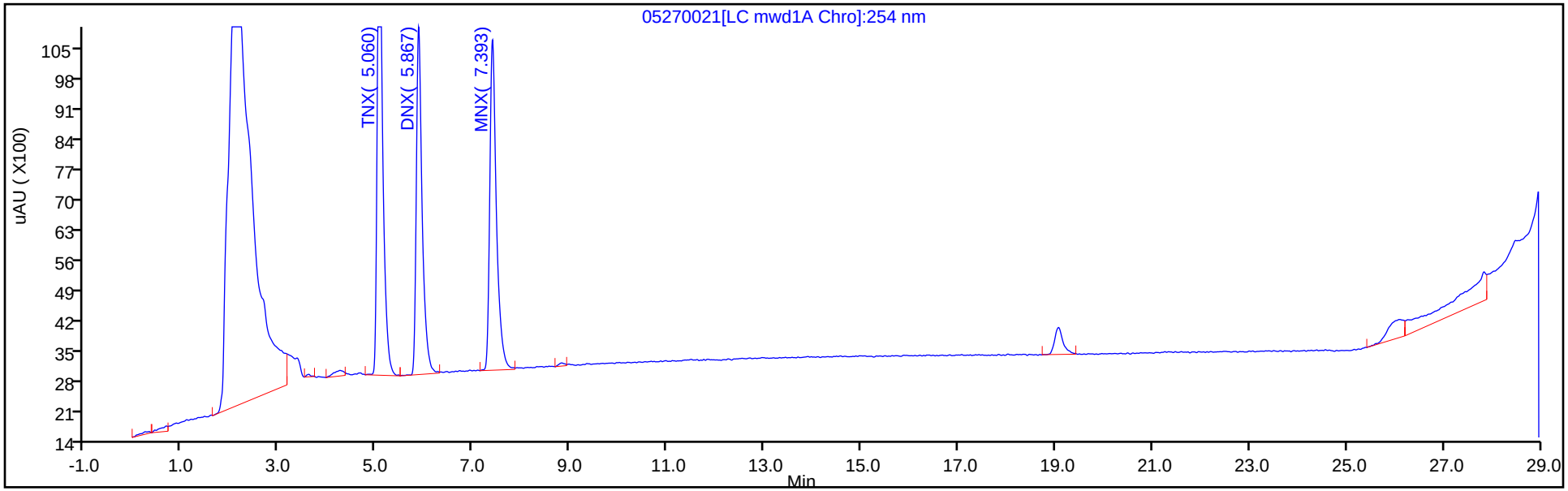
Report Date: 28-May-2022 14:12:44 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

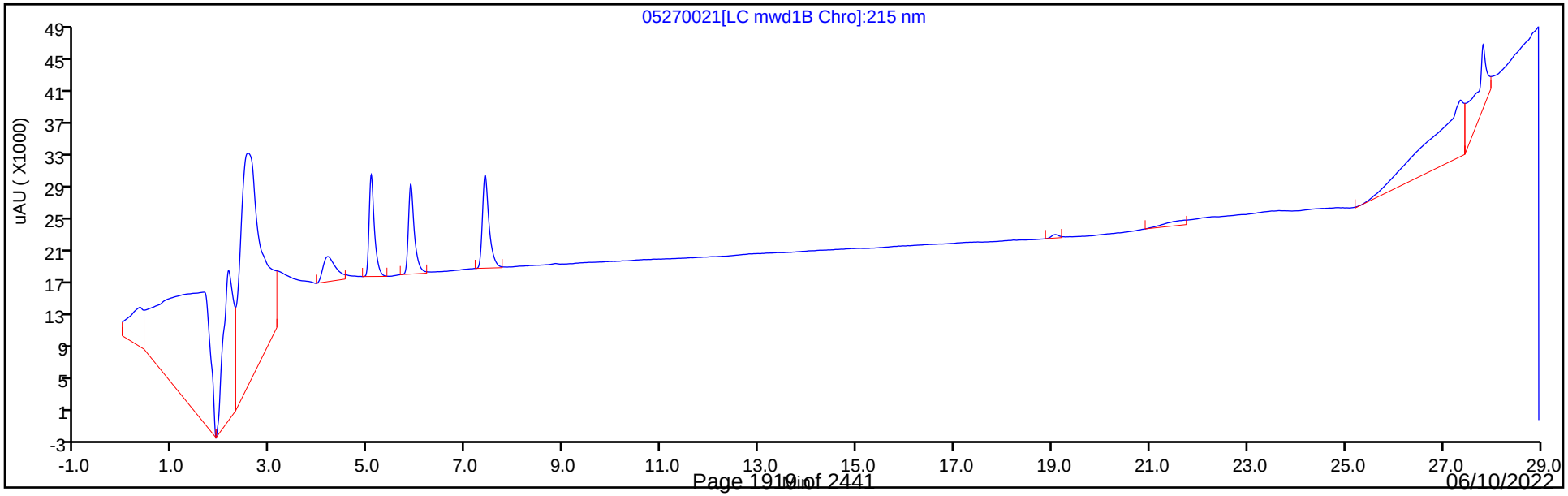
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270021.D

Injection Date:	28-May-2022 00:58:46	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 Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576448/32 Calibration Date: 05/28/2022 07:24

Instrument ID: CHHPLC_X5 Calib Start Date: 03/02/2022 21:22

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 03/03/2022 02:03

Lab File ID: 05270032.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	166135	184196		277	250	10.9	15.0
Picric acid	Ave	132885	153416		289	250	15.5*	15.0
RDX	Ave	194331	205792		265	250	5.9	15.0
Nitrobenzene	Ave	368293	398160		270	250	8.1	15.0
1,3-Dinitrobenzene	Ave	571666	629708		275	250	10.2	15.0
Nitroglycerin	Ave	122518	138656		2830	2500	13.2	15.0
2-Nitrotoluene	Ave	234672	212820		227	250	-9.3	15.0
4-Nitrotoluene	Ave	210817	226260		268	250	7.3	15.0
4-Amino-2,6-dinitrotoluene	Lin2		252604		237	250	-5.4	15.0
3-Nitrotoluene	Lin2		284356		268	250	7.2	15.0
2-Amino-4,6-dinitrotoluene	Ave	360536	339776		236	250	-5.8	15.0
1,3,5-Trinitrobenzene	Ave	415464	459648		277	250	10.6	15.0
2,6-Dinitrotoluene	Ave	265662	265060		249	250	-0.2	15.0
2,4-Dinitrotoluene	Lin2		553972		244	250	-2.4	15.0
Tetryl	Ave	342171	315208		230	250	-7.9	15.0
2,4,6-Trinitrotoluene	Ave	369179	404156		274	250	9.5	15.0
PETN	Ave	129329	129995		2510	2500	0.5	15.0
1,2-Dinitrobenzene	Ave	249753	256708		257	250	2.8	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576448/32 Calibration Date: 05/28/2022 07:24

Instrument ID: CHHPLC_X5 Calib Start Date: 03/02/2022 21:22

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 03/03/2022 02:03

Lab File ID: 05270032.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.68	6.56	6.86
Picric acid	7.92	7.83	8.13
RDX	8.80	8.69	8.99
Nitrobenzene	11.65	11.56	11.86
1,3-Dinitrobenzene	15.17	15.08	15.38
Nitroglycerin	15.45	15.38	15.68
2-Nitrotoluene	16.25	16.18	16.48
4-Nitrotoluene	16.54	16.48	16.78
4-Amino-2,6-dinitrotoluene	17.17	17.10	17.40
3-Nitrotoluene	17.49	17.42	17.72
2-Amino-4,6-dinitrotoluene	18.16	18.08	18.38
1,3,5-Trinitrobenzene	18.42	18.34	18.64
2,6-Dinitrotoluene	19.64	19.57	19.87
2,4-Dinitrotoluene	20.15	20.08	20.38
Tetryl	23.79	23.73	24.03
2,4,6-Trinitrotoluene	24.59	24.53	24.83
PETN	25.54	25.50	25.80
1,2-Dinitrobenzene	12.81	12.72	13.02

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270032.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 28-May-2022 07:24:13 ALS Bottle#: 7 Worklist Smp#: 32
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0111418-032
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 28-May-2022 14:16:00 Calib Date: 03-Mar-2022 07:19:48
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1652

First Level Reviewer: zhangji Date: 28-May-2022 10:16:54

	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	4.140	4.140	0.000	36776	0.2500	0.0905	
2	2,4-diamino-6-nitrotoluene	1		4.574			ND	ND	
5	HMX	1	6.680	6.713	-0.033	46049	0.2500	0.2772	
7	2,4,6-Trinitrophenol	1	7.920	7.980	-0.060	38354	0.2500	0.2886	
8	RDX	1	8.800	8.840	-0.040	51448	0.2500	0.2647	M
9	Nitrobenzene	1	11.653	11.707	-0.054	99540	0.2500	0.2703	
$ 10	1,2-Dinitrobenzene	1	12.813	12.867	-0.054	64177	0.2500	0.2570	
11	3,5-Dinitroaniline	1	14.800	14.860	-0.060	100648	0.2500	0.2445	
12	1,3-Dinitrobenzene	1	15.173	15.233	-0.060	157427	0.2500	0.2754	
13	Nitroglycerin	2	15.453	15.533	-0.080	346639	2.50	2.83	
14	o-Nitrotoluene	1	16.246	16.327	-0.081	53205	0.2500	0.2267	
16	p-Nitrotoluene	1	16.540	16.627	-0.087	56565	0.2500	0.2683	
17	4-Amino-2,6-dinitrotoluene	1	17.166	17.247	-0.081	63151	0.2500	0.2365	
18	m-Nitrotoluene	1	17.493	17.573	-0.080	71089	0.2500	0.2680	
19	2-Amino-4,6-dinitrotoluene	1	18.160	18.233	-0.073	84944	0.2500	0.2356	
20	1,3,5-Trinitrobenzene	1	18.420	18.487	-0.067	114912	0.2500	0.2766	
21	2,6-Dinitrotoluene	1	19.640	19.720	-0.080	66265	0.2500	0.2494	
22	2,4-Dinitrotoluene	1	20.153	20.233	-0.080	138493	0.2500	0.2439	
23	Tetryl	1	23.786	23.880	-0.094	78802	0.2500	0.2303	
24	2,4,6-Trinitrotoluene	1	24.586	24.680	-0.094	101039	0.2500	0.2737	
25	PETN	2	25.540	25.647	-0.107	324987	2.50	2.51	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00072	Amount Added:	25.00	Units: uL
8330_ADDs_00031	Amount Added:	12.50	Units: uL

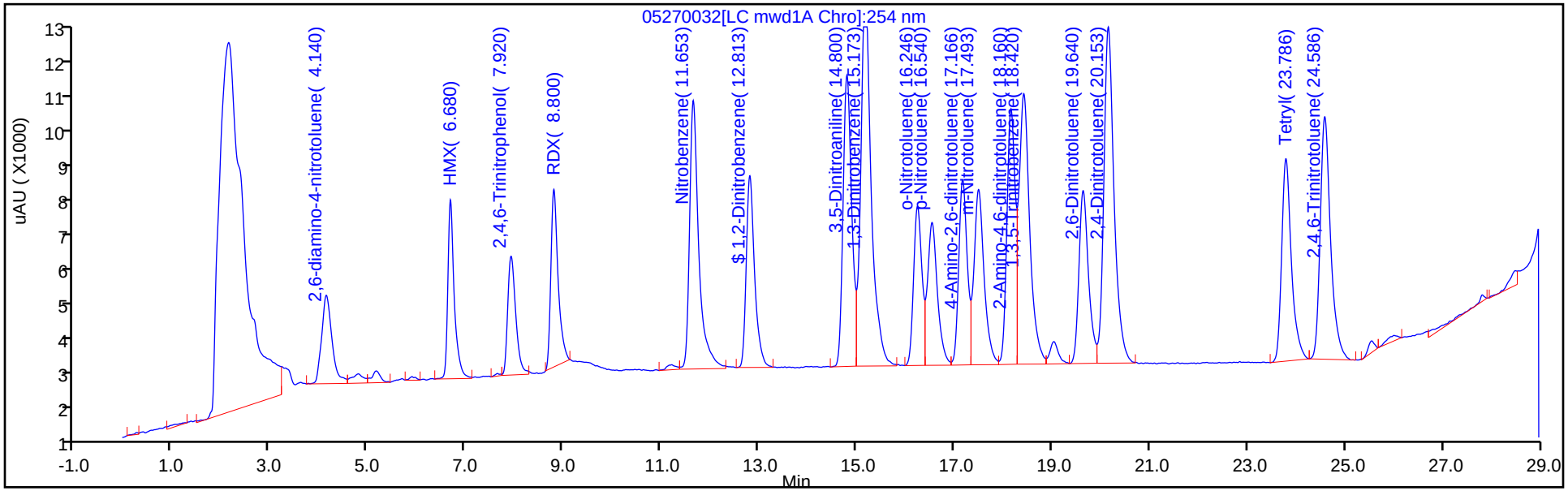
Report Date: 28-May-2022 14:16:00 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

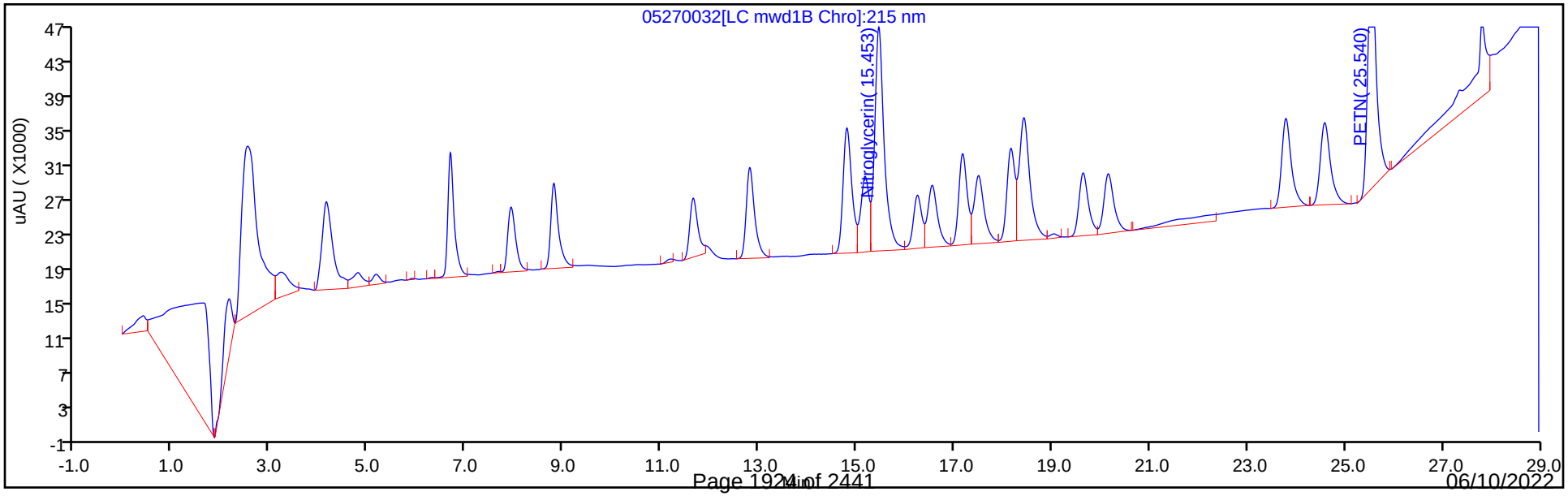
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270032.D

Injection Date:	28-May-2022 07:24:13	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	CCV			Worklist Smp#:	32
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



Manual Integration/User Assign Peak Report

Eurofins Denver

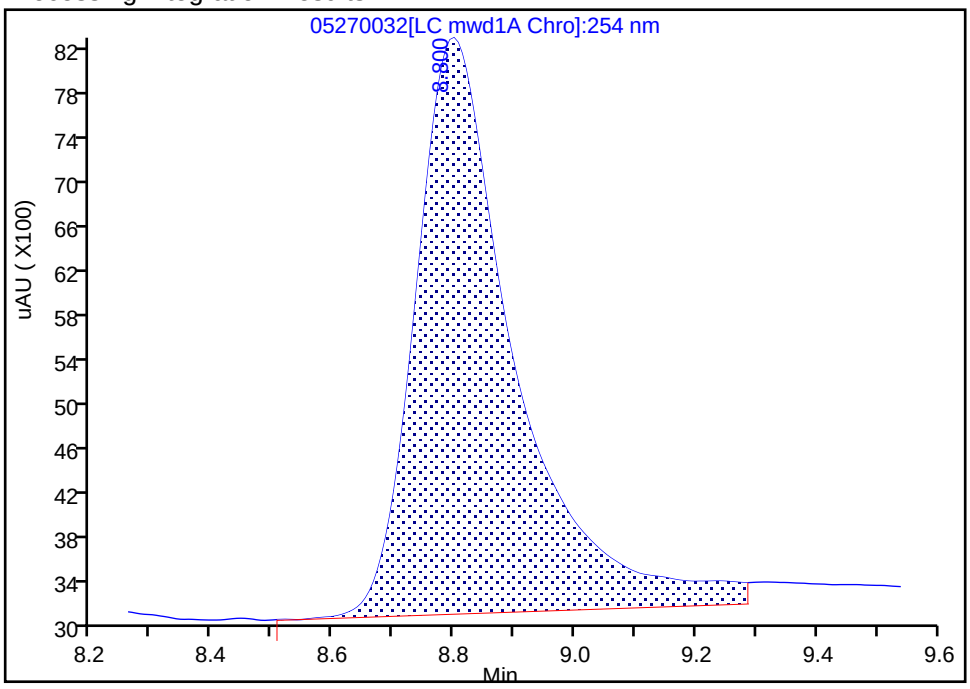
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270032.D				
Injection Date:	28-May-2022 07:24:13	Instrument ID:	CHHPLC_X5		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

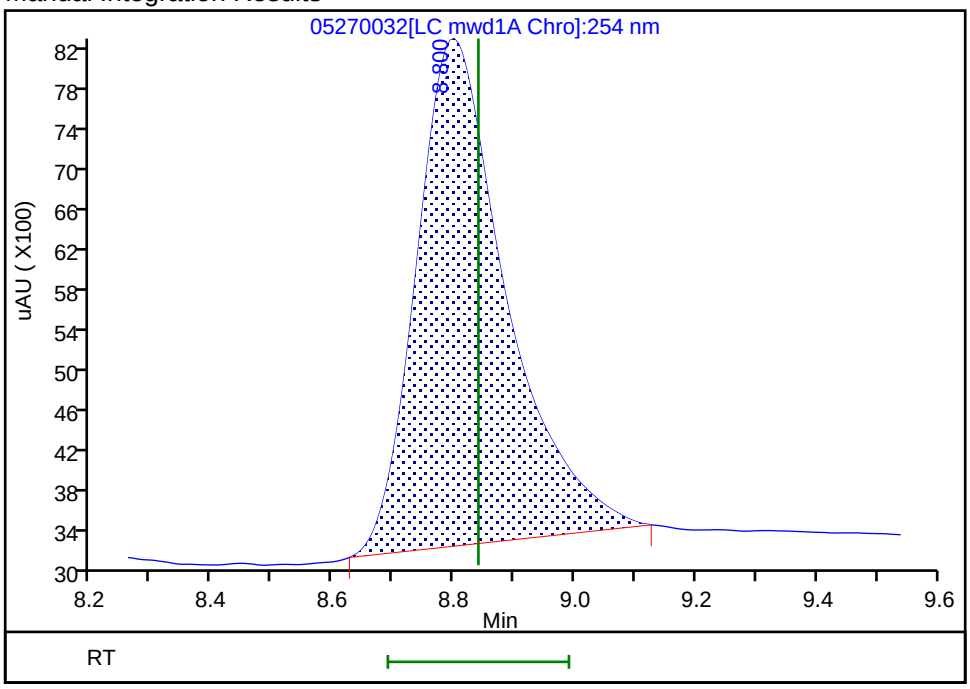
Processing Integration Results

RT: 8.80
Area: 58706
Amount: 0.302093
Amount Units: ug/ml



Manual Integration Results

RT: 8.80
Area: 51448
Amount: 0.264744
Amount Units: ug/ml



Reviewer: zhangji, 28-May-2022 14:15:57

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576448/33 Calibration Date: 05/28/2022 07:59

Instrument ID: CHHPLC_X5 Calib Start Date: 03/03/2022 03:13

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 03/03/2022 07:19

Lab File ID: 05270033.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	354070	353720		250	250	-0.1	15.0
DNX	Ave	278639	268371		242	251	-3.7	15.0
MNX	Ave	250081	248168		290	293	-0.8	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Lab Sample ID: CCV 280-576448/33 Calibration Date: 05/28/2022 07:59

Instrument ID: CHHPLC_X5 Calib Start Date: 03/03/2022 03:13

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 03/03/2022 07:19

Lab File ID: 05270033.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.05	4.94	5.24
DNX	5.86	5.76	6.06
MNX	7.37	7.29	7.59

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270033.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	28-May-2022 07:59:21	ALS Bottle#:	8	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0111418-033				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Sublist:	chrom-8330_X5_Luna*sub2				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	28-May-2022 14:12:50	Calib Date:	03-Mar-2022 07:19:48		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.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	5.049	5.094	-0.045	88430	0.2500	0.2498	
4 DNX	1	5.856	5.914	-0.058	67361	0.2510	0.2418	
6 MNX	1	7.369	7.440	-0.071	72589	0.2925	0.2903	

Reagents:

8330 DMT_00011 Amount Added: 12.50 Units: uL

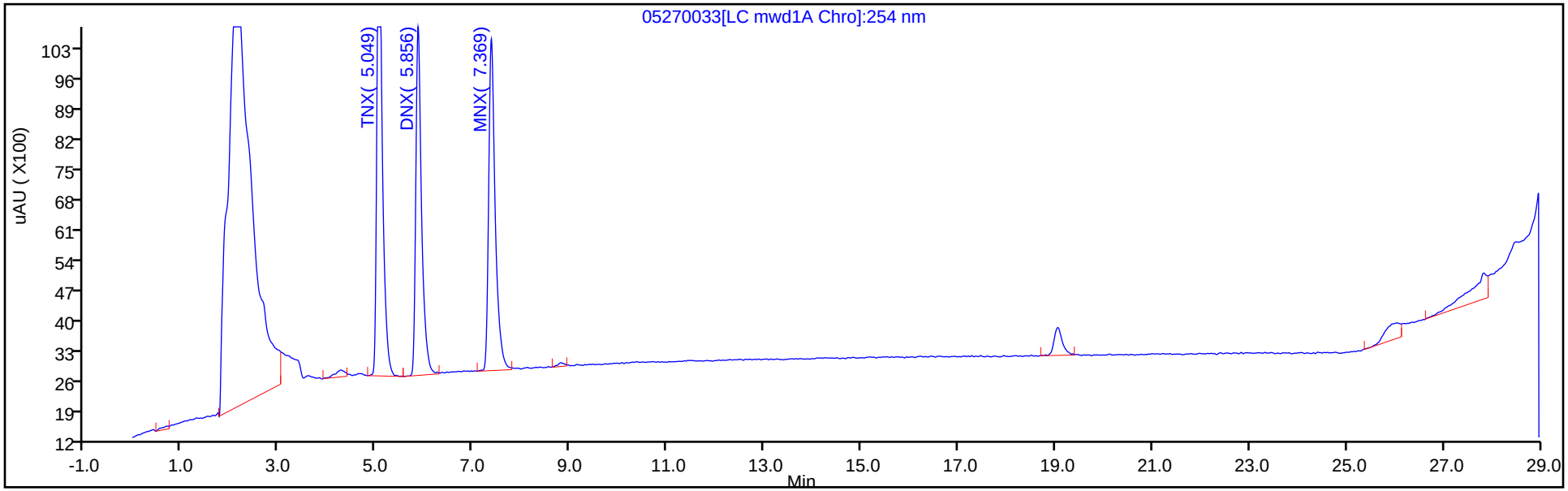
Report Date: 28-May-2022 14:12:50 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

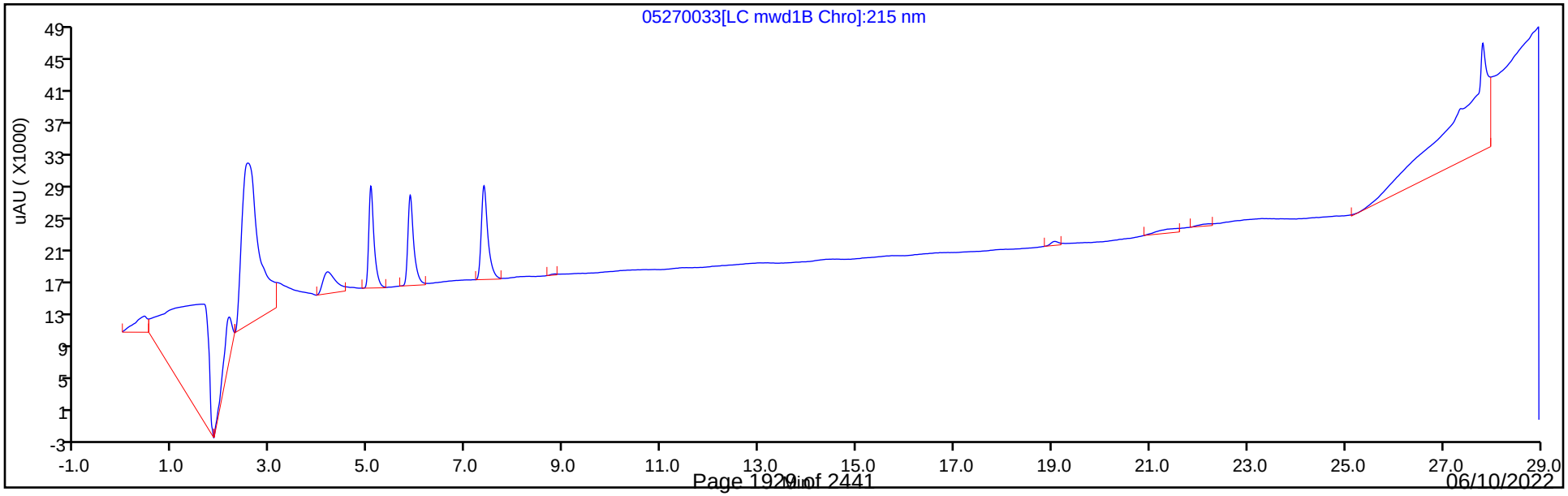
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220527-111418.b\05270033.D

Injection Date:	28-May-2022 07:59:21	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	33
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 I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-576154/1-A

Matrix: Water | Lab File ID: 05260011.D

Analysis Method: 8330A | Date Collected:

Extraction Method: 3535 | Date Extracted: 05/25/2022 15:23

Sample wt/vol: 500(mL) | Date Analyzed: 05/26/2022 17:28

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 576310 | 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	103	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\05260011.D
Lims ID: MB 280-576154/1-A
Client ID:
Sample Type: MB
Inject. Date: 26-May-2022 17:28:40 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-576154/1-
Misc. Info.: 280-0111383-011
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 27-May-2022 13:18:41 Calib Date: 25-Mar-2022 16:30:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220325-109559.b\03250017.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1651

First Level Reviewer: zhangji Date: 26-May-2022 18:05:01

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
1 Triamine Trinitrobenzene	1		2.454				ND	
2 2,6-diamino-4-nitrotoluene	1		6.467				ND	U
3 TNX	1		6.471				ND	
4 HMX	1		6.593				ND	
5 2,4-diamino-6-nitrotoluene	1		6.647				ND	
6 DNX	1		6.791				ND	
7 MNX	1		7.211				ND	
8 RDX	1		7.586				ND	
9 2,4,6-Trinitrophenol	1		7.926				ND	
$ 10 1,2-Dinitrobenzene	1	8.538	8.546	-0.008	25586	0.2000	0.2052	M
11 1,3,5-Trinitrobenzene	1		8.666				ND	
12 1,3-Dinitrobenzene	1		9.299				ND	
13 Nitrobenzene	1		9.686				ND	
14 3,5-Dinitroaniline	1		9.906				ND	
15 Tetryl	1		10.013				ND	
16 Nitroglycerin	2		10.466				ND	
17 2,4,6-Trinitrotoluene	1		10.919				ND	
18 4-Amino-2,6-dinitrotoluene	1		11.119				ND	
19 2-Amino-4,6-dinitrotoluene	1		11.373				ND	
20 2,6-Dinitrotoluene	1		11.533				ND	
21 2,4-Dinitrotoluene	1		11.706				ND	
22 o-Nitrotoluene	1		12.559				ND	
23 p-Nitrotoluene	1		12.993				ND	
24 m-Nitrotoluene	1		13.566				ND	
25 PETN	2		14.619				ND	
26 Ammonium Picrate	1		0.000				ND	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
U - Marked Undetected

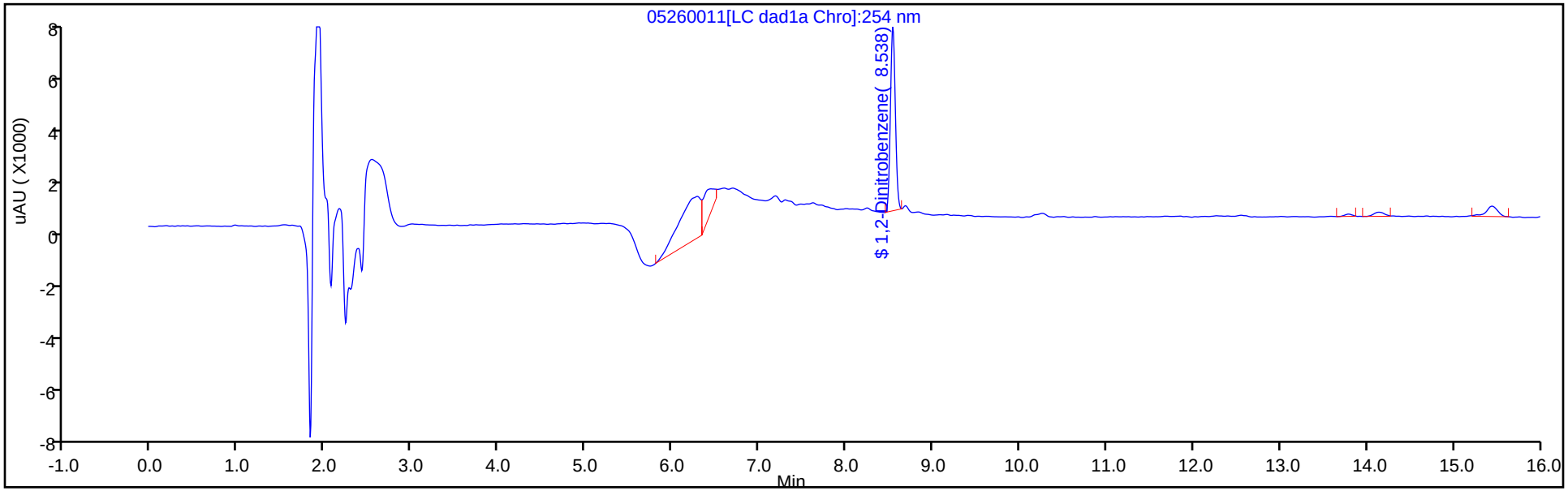
Report Date: 27-May-2022 13:18:47 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

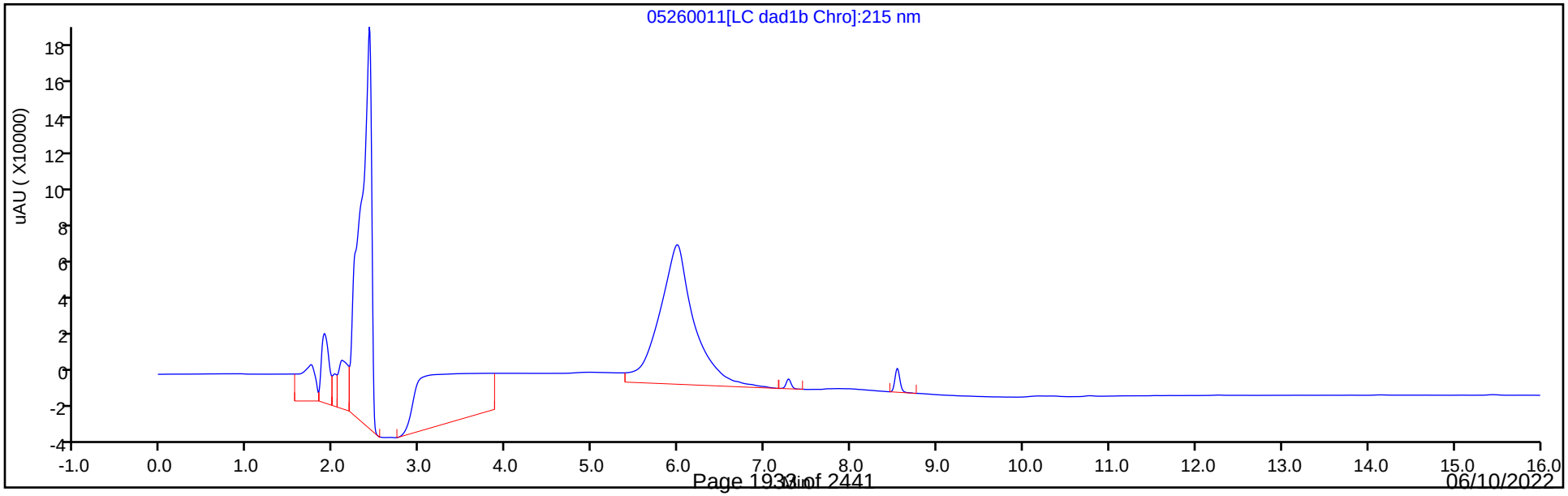
Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260011.d

Injection Date:	26-May-2022 17:28:40	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	MB 280-576154/1-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 Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\05260011.D				
Lims ID:	MB 280-576154/1-A				
Client ID:					
Sample Type:	MB				
Inject. Date:	26-May-2022 17:28:40	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	MB 280-576154/1-				
Misc. Info.:	280-0111383-011				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	27-May-2022 13:18:41	Calib Date:	25-Mar-2022 16:30:08		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220325-109559.b\03250017.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1651				
First Level Reviewer: zhangji		Date:	26-May-2022 18:05:01		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2052	102.59

Manual Integration/User Assign Peak Report

Eurofins Denver

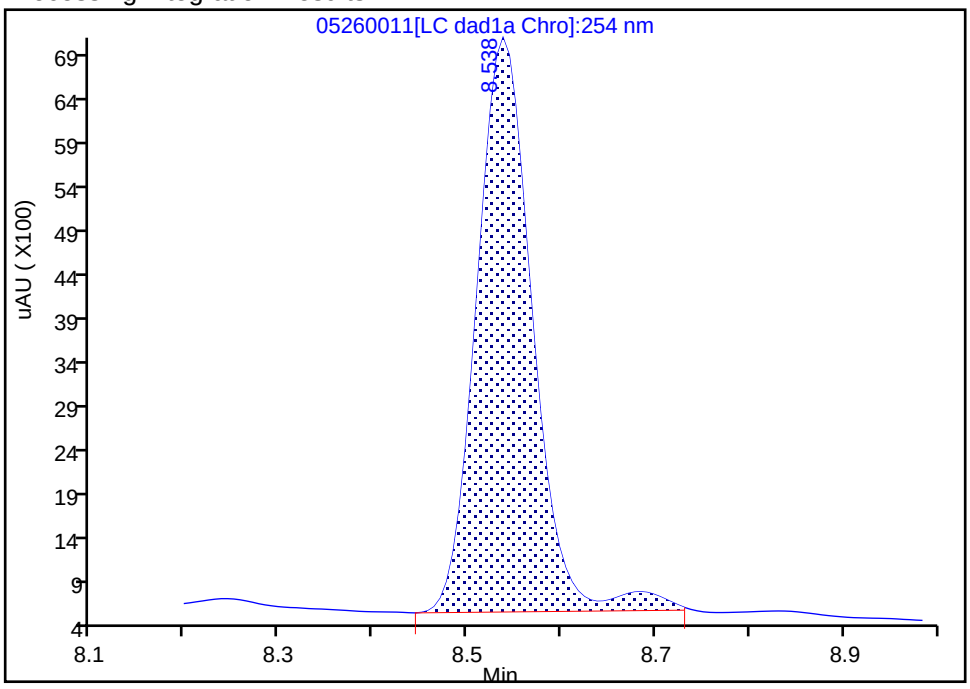
Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260011.d
Injection Date: 26-May-2022 17:28:40 Instrument ID: CHHPLC_X3
Lims ID: MB 280-576154/1-A
Client ID:
Operator ID: JZ ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

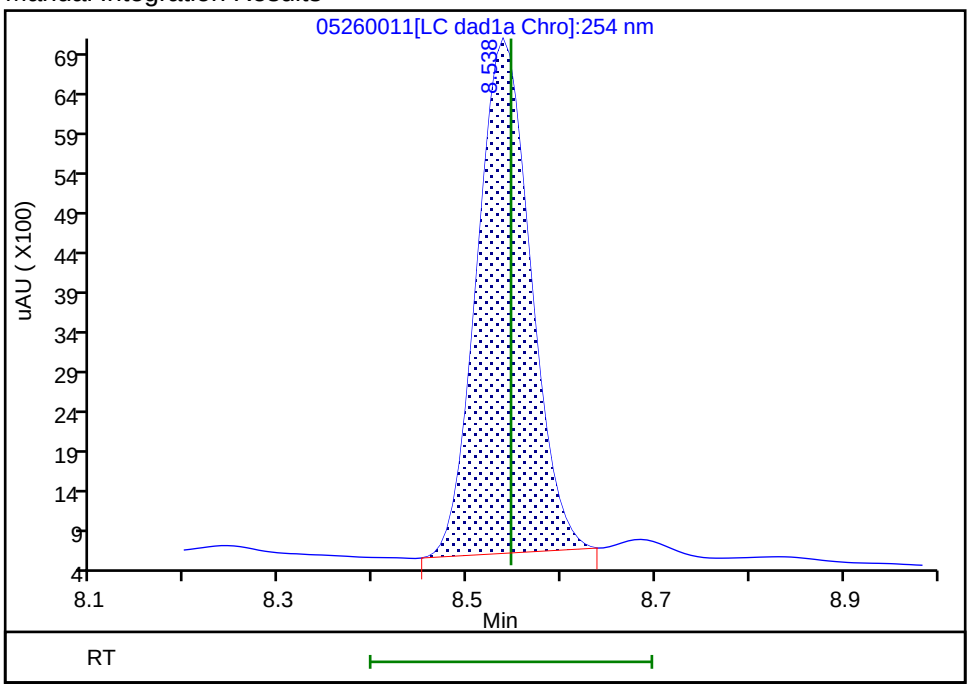
Processing Integration Results

RT: 8.54
Area: 27065
Amount: 0.217045
Amount Units: ug/mL



Manual Integration Results

RT: 8.54
Area: 25586
Amount: 0.205184
Amount Units: ug/mL



Reviewer: zhangji, 26-May-2022 18:04:59
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-576154/2-A

Matrix: Water | Lab File ID: 05260012.D

Analysis Method: 8330A | Date Collected:

Extraction Method: 3535 | Date Extracted: 05/25/2022 15:23

Sample wt/vol: 500(mL) | Date Analyzed: 05/26/2022 17:51

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 576310 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.07		0.21	0.20	0.084
99-65-0	1,3-Dinitrobenzene	1.98		0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	1.98		0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	1.80		0.10	0.080	0.027
606-20-2	2,6-Dinitrotoluene	1.90		0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	1.86		0.11	0.10	0.051
88-72-2	2-Nitrotoluene	1.62		0.21	0.20	0.086
99-08-1	3-Nitrotoluene	1.49		0.40	0.40	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.76		0.15	0.12	0.058
99-99-0	4-Nitrotoluene	1.67		0.41	0.40	0.10
2691-41-0	HMX	1.92	M	0.21	0.20	0.088
98-95-3	Nitrobenzene	1.81		0.21	0.20	0.091
121-82-4	RDX	1.92		0.21	0.20	0.052
479-45-8	Tetryl	1.88		0.11	0.10	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	96		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\05260012.D
Lims ID: LCS 280-576154/2-A
Client ID:
Sample Type: LCS
Inject. Date: 26-May-2022 17:51:36 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-576154/2
Misc. Info.: 280-0111383-012
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 27-May-2022 13:18:41 Calib Date: 25-Mar-2022 16:30:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220325-109559.b\03250017.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1651

First Level Reviewer: zhangji Date: 26-May-2022 18:13:33

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.590	6.593	-0.003	16105	0.2000	0.1921	M
8 RDX	1	7.583	7.586	-0.003	19924	0.2000	0.1923	
9 2,4,6-Trinitrophenol	1	7.917	7.926	-0.009	16241	0.2000	0.2108	
$ 10 1,2-Dinitrobenzene	1	8.543	8.546	-0.003	23981	0.2000	0.1923	
11 1,3,5-Trinitrobenzene	1	8.663	8.666	-0.003	45077	0.2000	0.2067	
12 1,3-Dinitrobenzene	1	9.296	9.299	-0.003	57139	0.2000	0.1981	
13 Nitrobenzene	1	9.683	9.686	-0.003	34698	0.2000	0.1808	
15 Tetryl	1	10.010	10.013	-0.003	31986	0.2000	0.1875	
16 Nitroglycerin	2	10.463	10.466	-0.003	130486	2.00	2.07	
17 2,4,6-Trinitrotoluene	1	10.916	10.919	-0.003	40211	0.2000	0.1984	
18 4-Amino-2,6-dinitrotoluene	1	11.116	11.119	-0.003	26510	0.2000	0.1756	
19 2-Amino-4,6-dinitrotoluene	1	11.363	11.373	-0.010	37538	0.2000	0.1857	
20 2,6-Dinitrotoluene	1	11.530	11.533	-0.003	27174	0.2000	0.1899	
21 2,4-Dinitrotoluene	1	11.696	11.706	-0.010	52127	0.2000	0.1802	
22 o-Nitrotoluene	1	12.556	12.559	-0.003	20712	0.2000	0.1623	
23 p-Nitrotoluene	1	12.983	12.993	-0.010	17762	0.2000	0.1672	
24 m-Nitrotoluene	1	13.563	13.566	-0.003	21220	0.2000	0.1491	
25 PETN	2	14.616	14.619	-0.003	150994	2.00	2.06	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

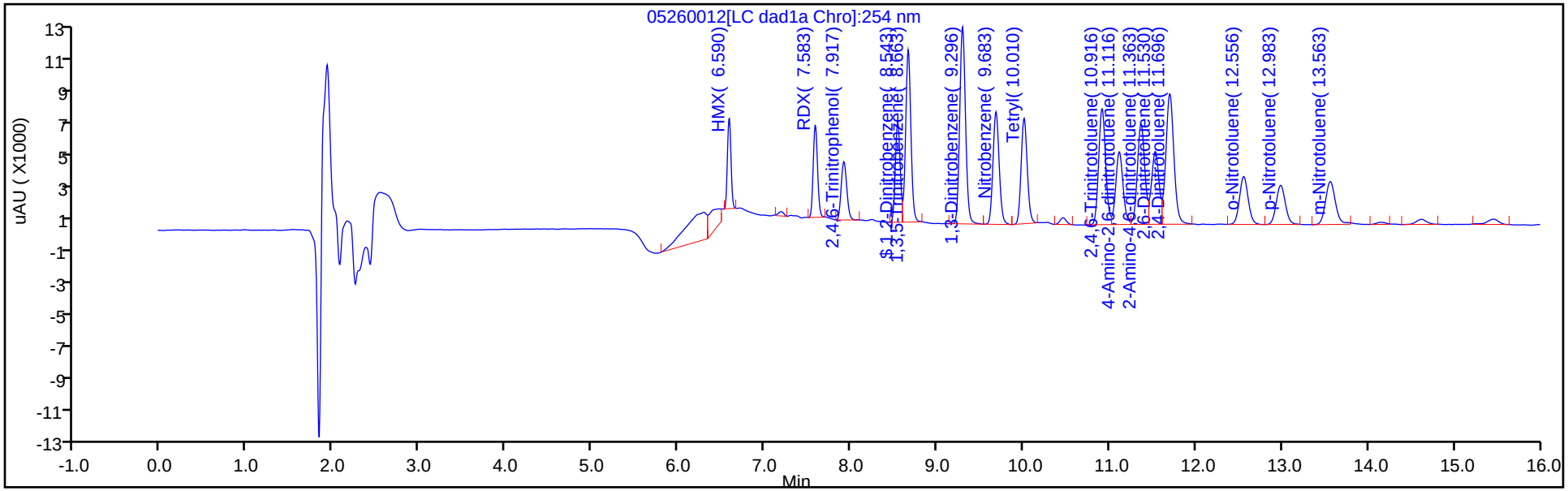
Report Date: 27-May-2022 13:18:47 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

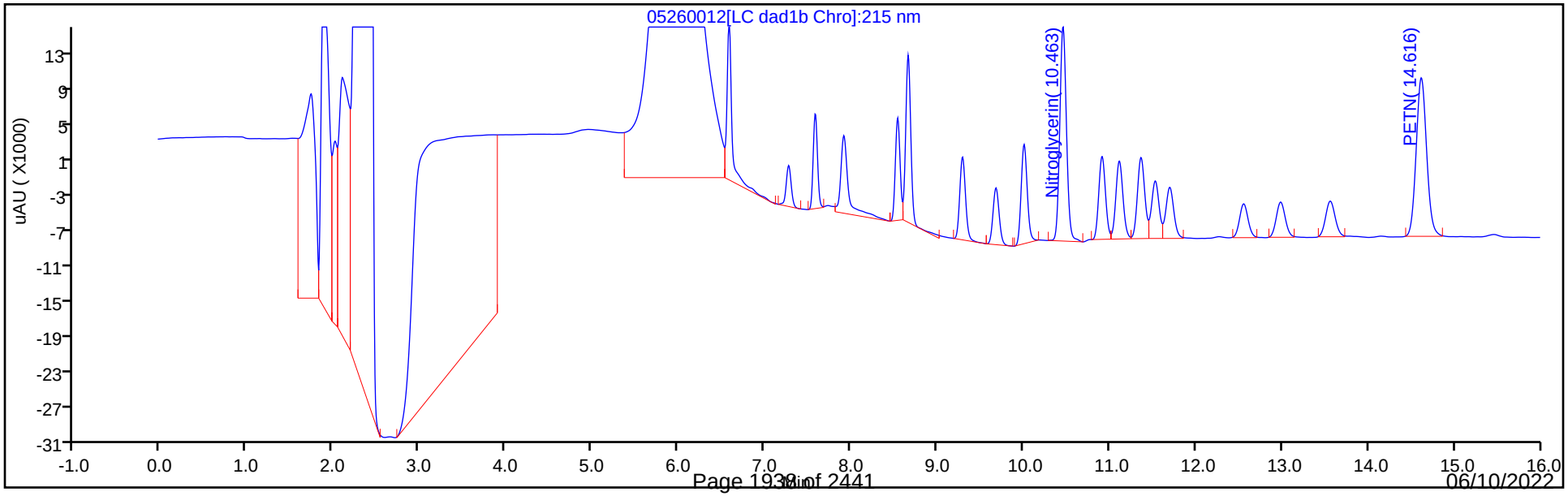
Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260012.d

Injection Date:	26-May-2022 17:51:36	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	LCS 280-576154/2-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 Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\05260012.D				
Lims ID:	LCS 280-576154/2-A				
Client ID:					
Sample Type:	LCS				
Inject. Date:	26-May-2022 17:51:36	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCS 280-576154/2				
Misc. Info.:	280-0111383-012				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	27-May-2022 13:18:41	Calib Date:	25-Mar-2022 16:30:08		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220325-109559.b\03250017.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1651				

First Level Reviewer: zhangji Date: 26-May-2022 18:13:33

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1923	96.16

Manual Integration/User Assign Peak Report

Eurofins Denver

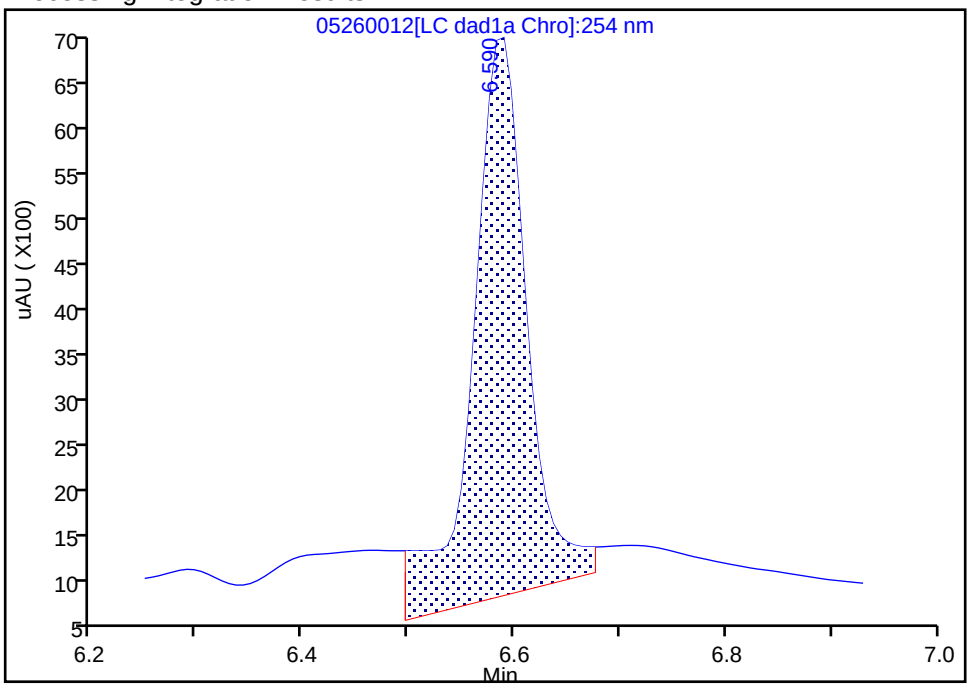
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260012.d				
Injection Date:	26-May-2022 17:51:36	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-576154/2-A				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

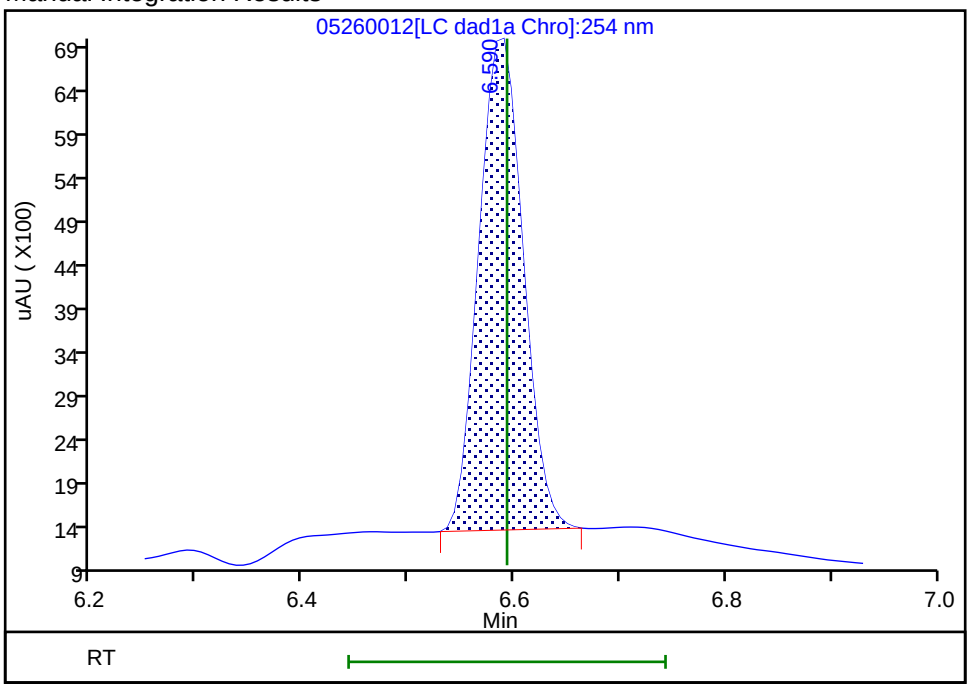
Processing Integration Results

RT: 6.59
Area: 21694
Amount: 0.258794
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 16105
Amount: 0.192121
Amount Units: ug/mL



Reviewer: zhangji, 26-May-2022 18:13:32
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-576154/4-A

Matrix: Water | Lab File ID: 05260014.D

Analysis Method: 8330A | Date Collected:

Extraction Method: 3535 | Date Extracted: 05/25/2022 15:23

Sample wt/vol: 500(mL) | Date Analyzed: 05/26/2022 18:37

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 576310 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
5755-27-1	MNX	2.31	M	2.0	0.40	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	97	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\05260014.D				
Lims ID:	LCS 280-576154/4-A				
Client ID:					
Sample Type:	LCS				
Inject. Date:	26-May-2022 18:37:22	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCS 280-576154/4				
Misc. Info.:	280-0111383-014				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	27-May-2022 13:18:41	Calib Date:	25-Mar-2022 16:30:08		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220325-109559.b\03250017.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1651				
First Level Reviewer: zhangji		Date:	26-May-2022 19:04:41		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.471	6.471	0.000	35191	0.2000	0.1942	M
6 DNX	1	6.784	6.791	-0.007	26686	0.2008	0.1932	M
7 MNX	1	7.204	7.211	-0.007	29120	0.2340	0.2311	M
$ 10 1,2-Dinitrobenzene	1	8.538	8.546	-0.008	24223	0.2000	0.1943	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

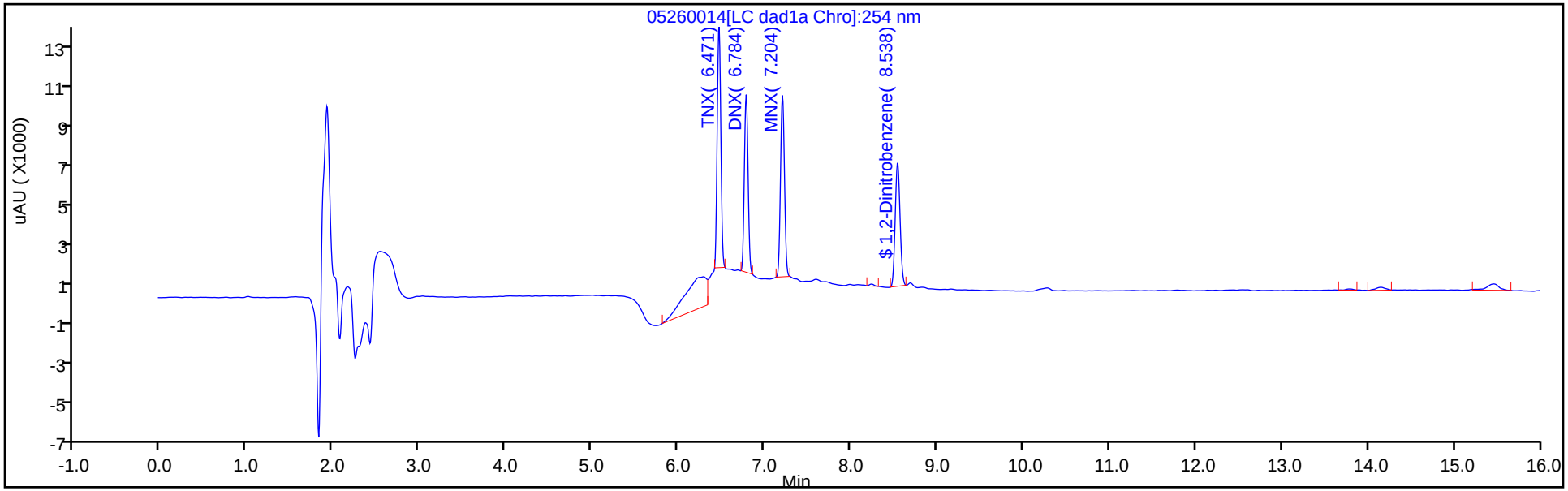
Report Date: 27-May-2022 13:18:45 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

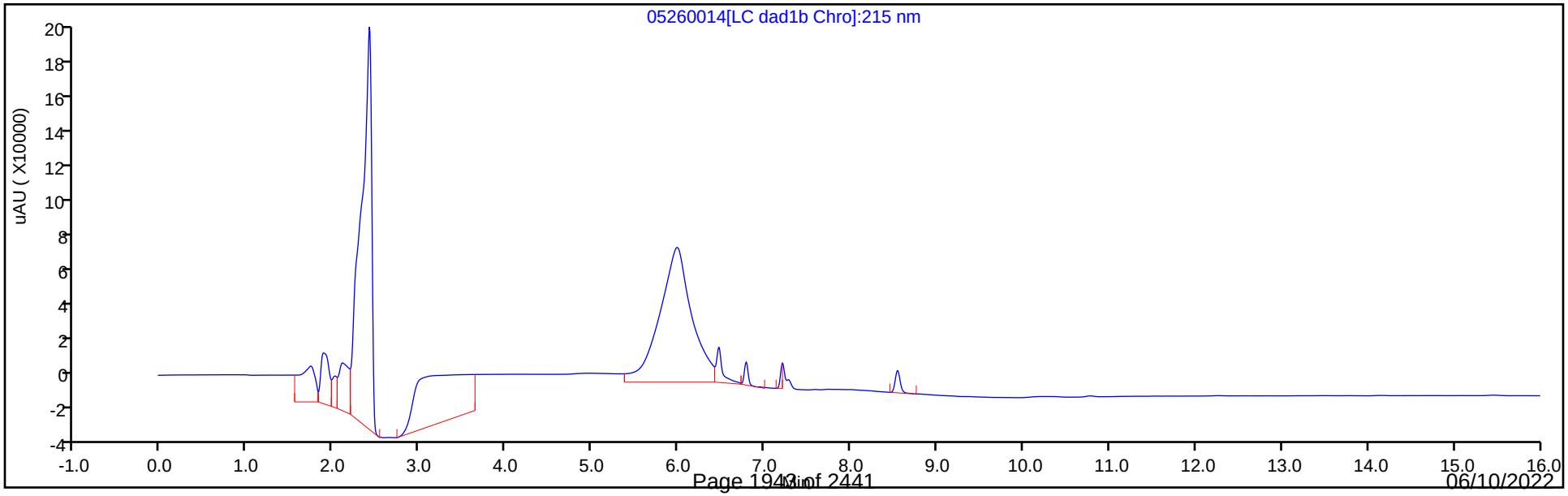
Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260014.d

Injection Date:	26-May-2022 18:37:22	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	LCS 280-576154/4-A			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



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\05260014.D				
Lims ID:	LCS 280-576154/4-A				
Client ID:					
Sample Type:	LCS				
Inject. Date:	26-May-2022 18:37:22	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCS 280-576154/4				
Misc. Info.:	280-0111383-014				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	27-May-2022 13:18:41	Calib Date:	25-Mar-2022 16:30:08		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220325-109559.b\03250017.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1651				
First Level Reviewer: zhangji		Date:	26-May-2022 19:04:41		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1943	97.13

Manual Integration/User Assign Peak Report

Eurofins Denver

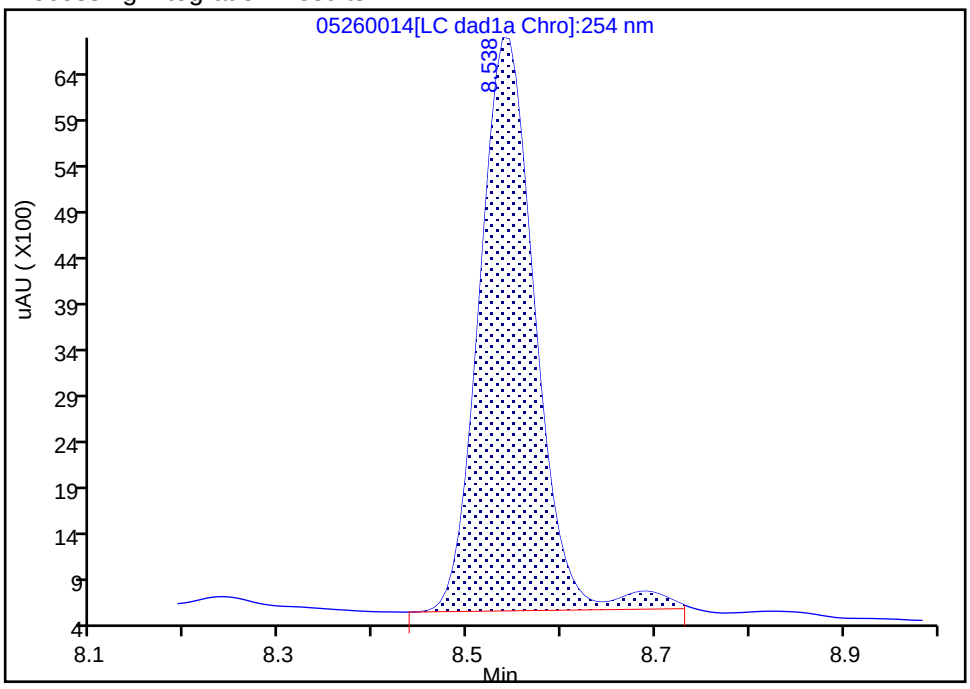
Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260014.d
Injection Date: 26-May-2022 18:37:22 Instrument ID: CHHPLC_X3
Lims ID: LCS 280-576154/4-A
Client ID:
Operator ID: JZ ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

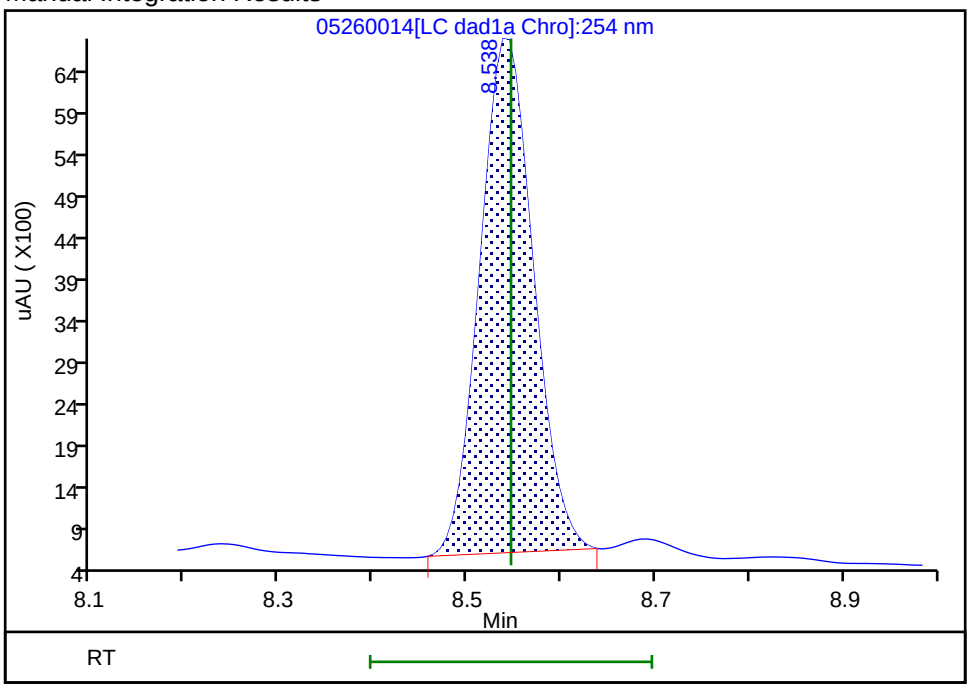
Processing Integration Results

RT: 8.54
Area: 25493
Amount: 0.204438
Amount Units: ug/mL



Manual Integration Results

RT: 8.54
Area: 24223
Amount: 0.194254
Amount Units: ug/mL



Reviewer: zhangji, 26-May-2022 19:04:40
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

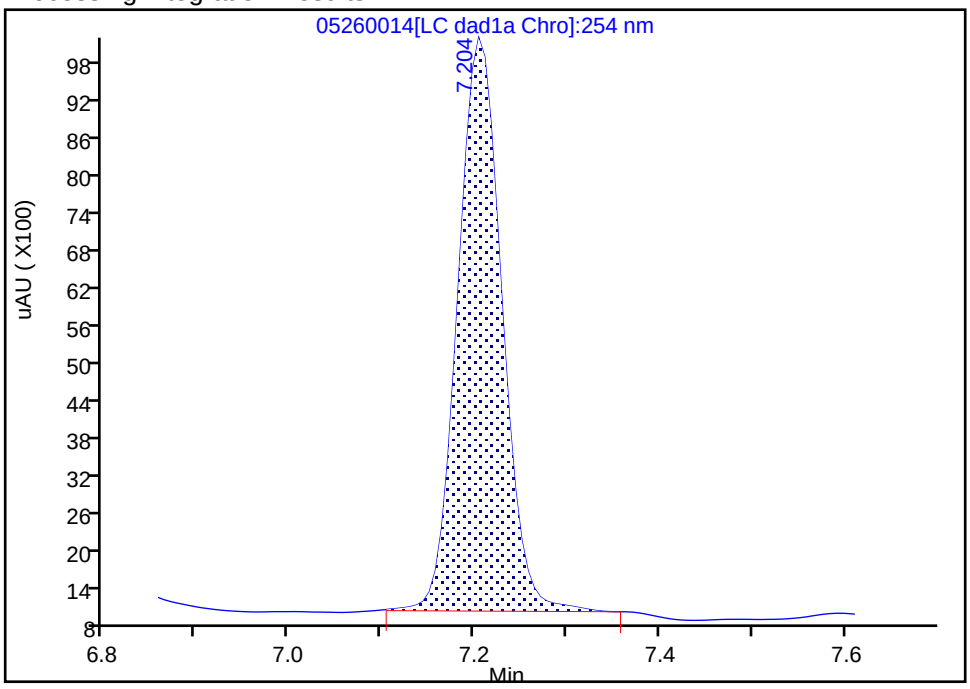
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260014.d				
Injection Date:	26-May-2022 18:37:22	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-576154/4-A				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

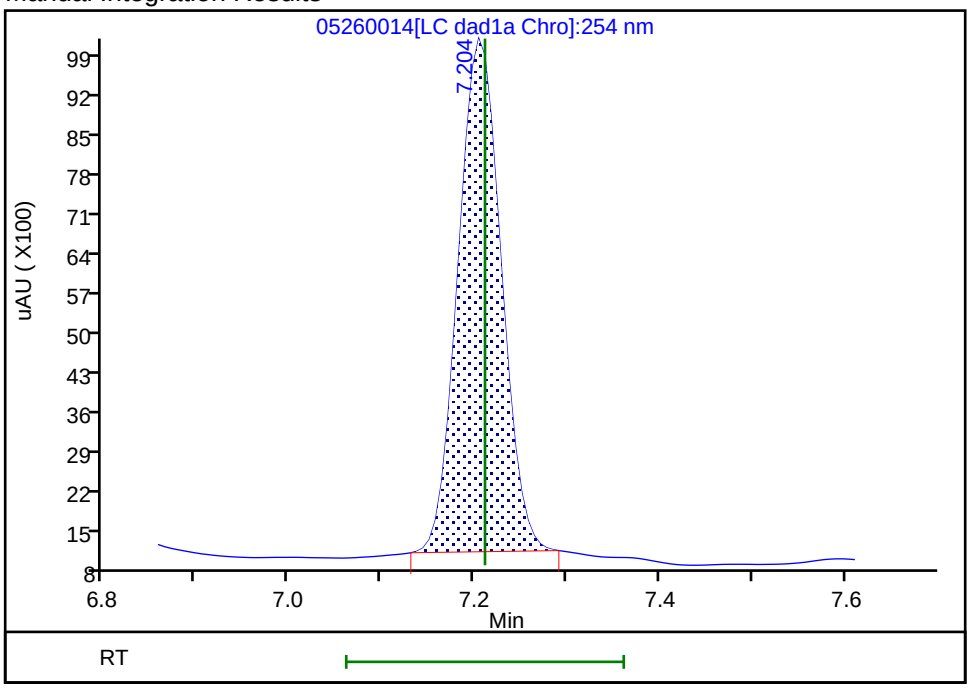
Processing Integration Results

RT: 7.20
Area: 30236
Amount: 0.239977
Amount Units: ug/mL



Manual Integration Results

RT: 7.20
Area: 29120
Amount: 0.231120
Amount Units: ug/mL



Reviewer: zhangji, 26-May-2022 19:04:35

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 280-576154/3-A

Matrix: Water | Lab File ID: 0526X013.D

Analysis Method: 8330A | Date Collected:

Extraction Method: 3535 | Date Extracted: 05/25/2022 15:23

Sample wt/vol: 500(mL) | Date Analyzed: 05/26/2022 19:23

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 576310 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.06		0.21	0.20	0.084
99-65-0	1,3-Dinitrobenzene	1.99		0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	1.98		0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	1.82		0.10	0.080	0.027
606-20-2	2,6-Dinitrotoluene	1.91		0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	1.86		0.11	0.10	0.051
88-72-2	2-Nitrotoluene	1.64		0.21	0.20	0.086
99-08-1	3-Nitrotoluene	1.46		0.40	0.40	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.77		0.15	0.12	0.058
99-99-0	4-Nitrotoluene	1.72		0.41	0.40	0.10
2691-41-0	HMX	1.93	M	0.21	0.20	0.088
98-95-3	Nitrobenzene	1.77	M	0.21	0.20	0.091
121-82-4	RDX	1.93		0.21	0.20	0.052
479-45-8	Tetryl	1.88		0.11	0.10	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	97		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\0526X013.D
Lims ID: LCSD 280-576154/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 26-May-2022 19:23:14 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 280-576154/
Misc. Info.: 280-0111383-013
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 27-May-2022 13:18:41 Calib Date: 25-Mar-2022 16:30:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220325-109559.b\03250017.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1651

First Level Reviewer: zhangji Date: 26-May-2022 19:47:46

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.585	6.593	-0.008	16152	0.2000	0.1927	M
8 RDX	1	7.585	7.586	-0.001	19955	0.2000	0.1926	
9 2,4,6-Trinitrophenol	1	7.912	7.926	-0.014	16170	0.2000	0.2099	
$ 10 1,2-Dinitrobenzene	1	8.538	8.546	-0.008	24281	0.2000	0.1947	
11 1,3,5-Trinitrobenzene	1	8.665	8.666	-0.001	44847	0.2000	0.2056	
12 1,3-Dinitrobenzene	1	9.291	9.299	-0.008	57388	0.2000	0.1990	
13 Nitrobenzene	1	9.678	9.686	-0.008	33907	0.2000	0.1766	M
15 Tetryl	1	10.005	10.013	-0.008	32050	0.2000	0.1879	
16 Nitroglycerin	2	10.458	10.466	-0.008	130486	2.00	2.07	
17 2,4,6-Trinitrotoluene	1	10.911	10.919	-0.008	40147	0.2000	0.1980	
18 4-Amino-2,6-dinitrotoluene	1	11.111	11.119	-0.008	26751	0.2000	0.1772	
19 2-Amino-4,6-dinitrotoluene	1	11.365	11.373	-0.008	37521	0.2000	0.1856	
20 2,6-Dinitrotoluene	1	11.531	11.533	-0.002	27371	0.2000	0.1913	
21 2,4-Dinitrotoluene	1	11.698	11.706	-0.008	52638	0.2000	0.1819	
22 o-Nitrotoluene	1	12.551	12.559	-0.008	20980	0.2000	0.1644	
23 p-Nitrotoluene	1	12.978	12.993	-0.015	18248	0.2000	0.1718	
24 m-Nitrotoluene	1	13.551	13.566	-0.015	20818	0.2000	0.1463	
25 PETN	2	14.605	14.619	-0.014	151458	2.00	2.07	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

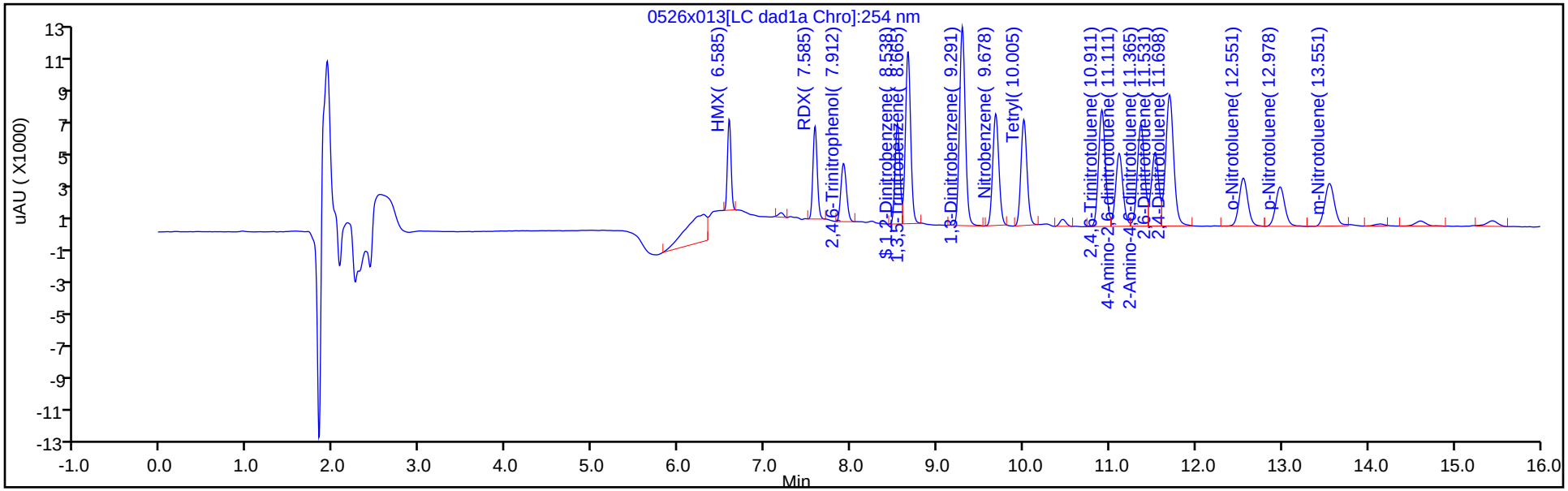
Report Date: 27-May-2022 13:18:46 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

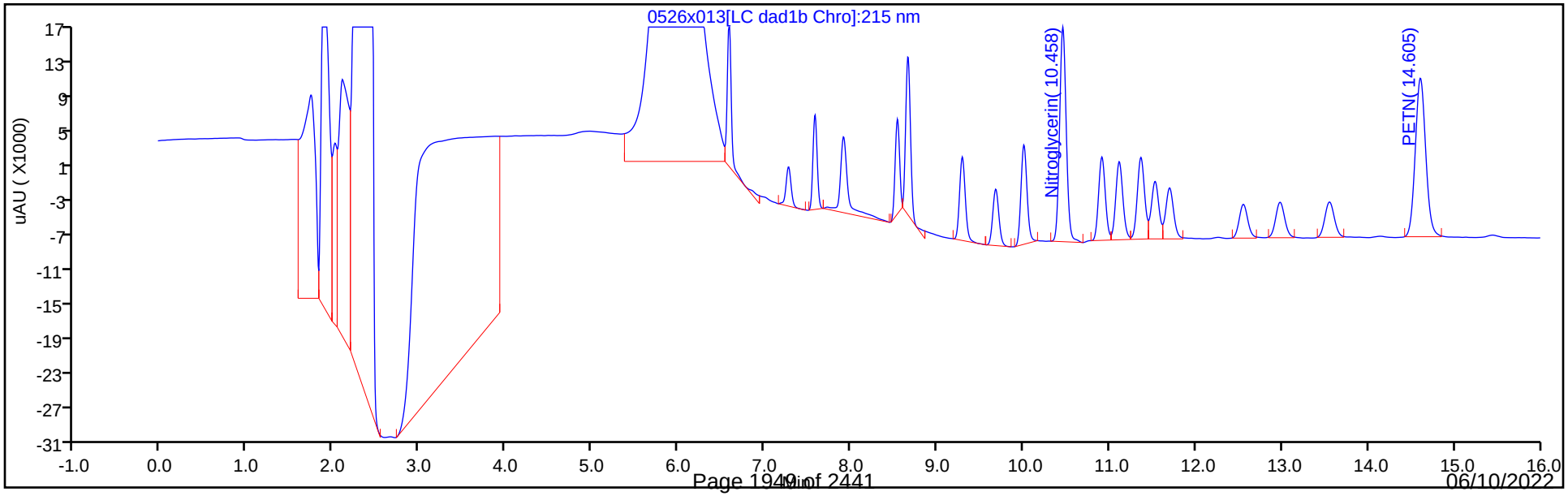
Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\0526x013.d

Injection Date:	26-May-2022 19:23:14	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	LCSD 280-576154/3-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 Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\0526X013.D				
Lims ID:	LCSD 280-576154/3-A				
Client ID:					
Sample Type:	LCSD				
Inject. Date:	26-May-2022 19:23:14	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCSD 280-576154/				
Misc. Info.:	280-0111383-013				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	27-May-2022 13:18:41	Calib Date:	25-Mar-2022 16:30:08		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220325-109559.b\03250017.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1651				
First Level Reviewer: zhangji		Date:	26-May-2022 19:47:46		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1947	97.36

Manual Integration/User Assign Peak Report

Eurofins Denver

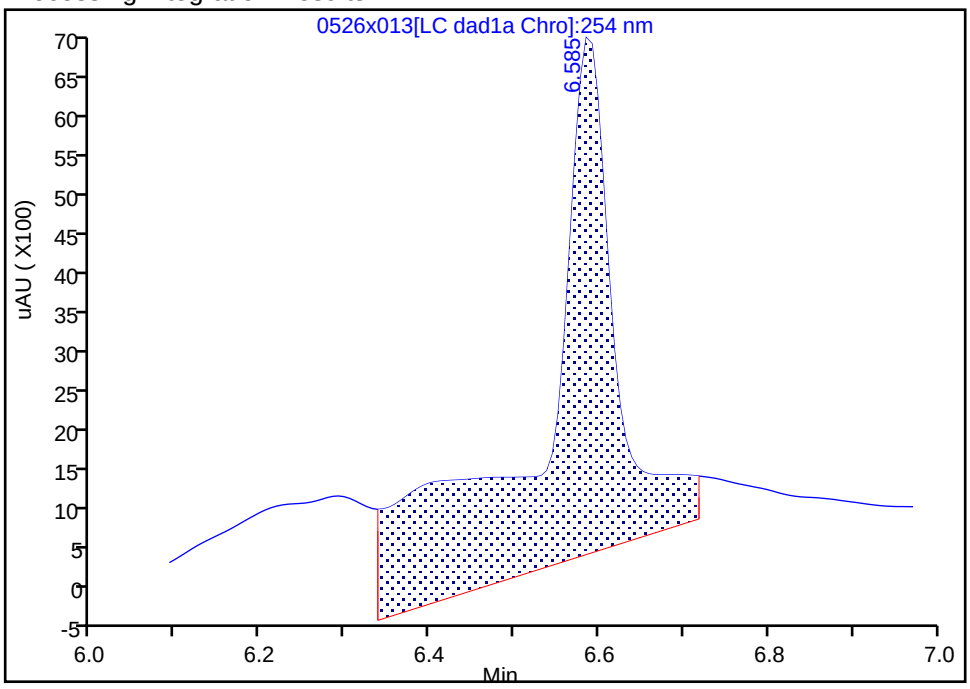
Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\0526x013.d
Injection Date: 26-May-2022 19:23:14 Instrument ID: CHHPLC_X3
Lims ID: LCSD 280-576154/3-A
Client ID:
Operator ID: JZ ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

4 HMX, CAS: 2691-41-0

Signal: 1

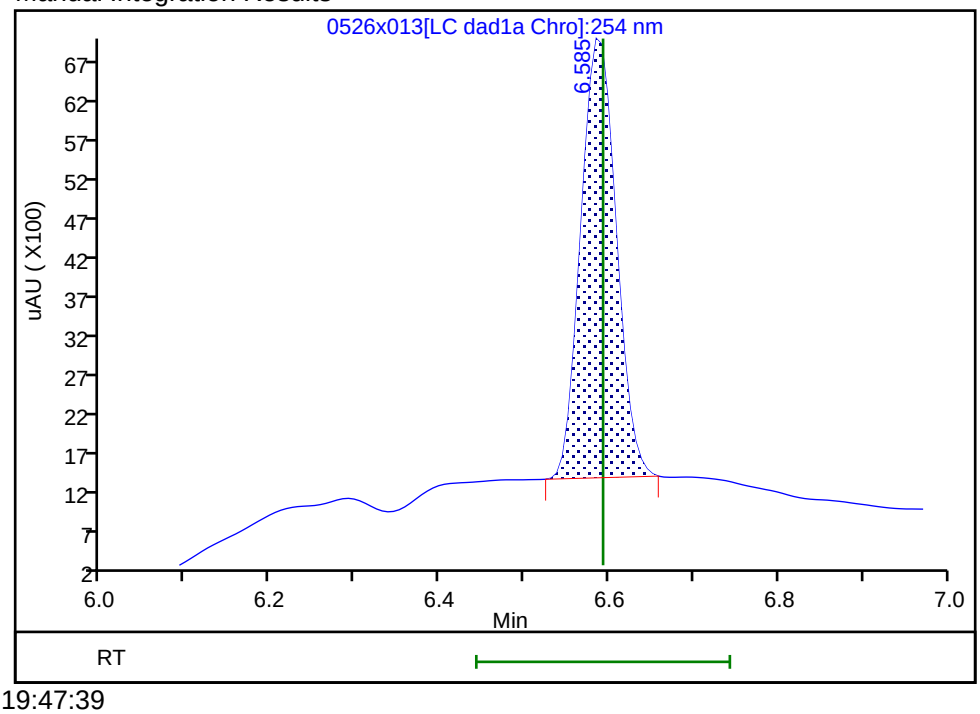
Processing Integration Results

RT: 6.58
Area: 42170
Amount: 0.503059
Amount Units: ug/mL



Manual Integration Results

RT: 6.58
Area: 16152
Amount: 0.192682
Amount Units: ug/mL



Reviewer: zhangji, 26-May-2022 19:47:39
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

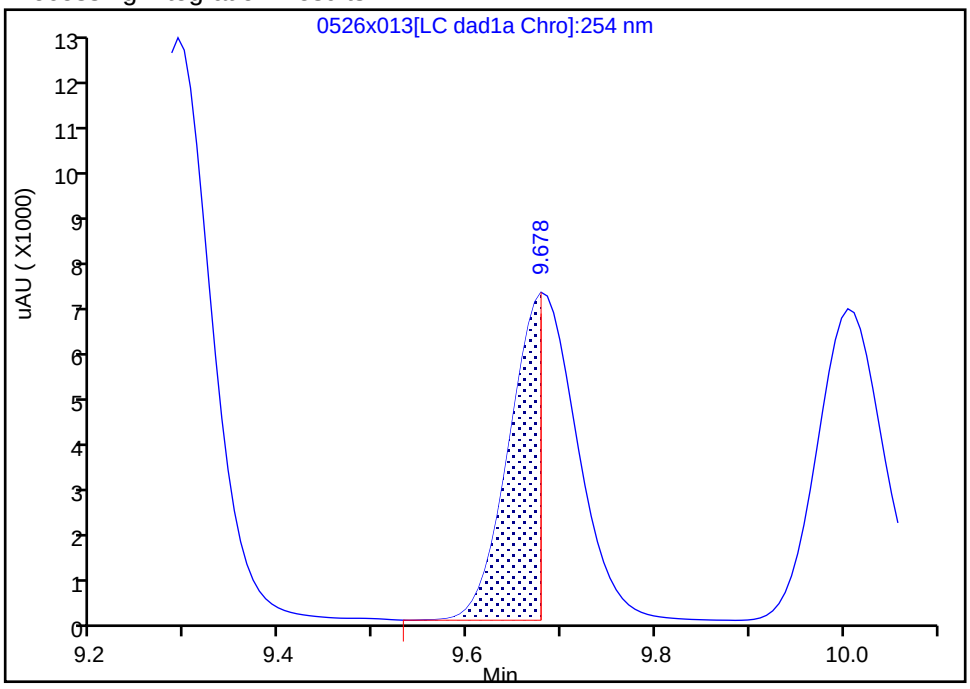
Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\0526x013.d
Injection Date: 26-May-2022 19:23:14 Instrument ID: CHHPLC_X3
Lims ID: LCSD 280-576154/3-A
Client ID:
Operator ID: JZ ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

13 Nitrobenzene, CAS: 98-95-3

Signal: 1

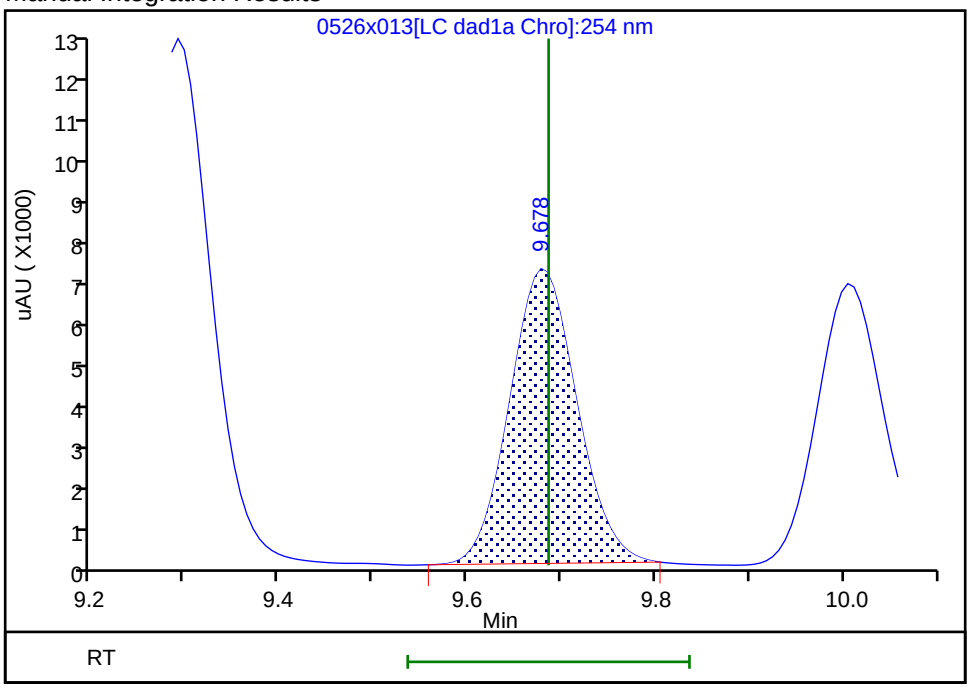
Processing Integration Results

RT: 9.68
Area: 15874
Amount: 0.082697
Amount Units: ug/mL



Manual Integration Results

RT: 9.68
Area: 33907
Amount: 0.176642
Amount Units: ug/mL



Reviewer: zhangji, 26-May-2022 19:47:42
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-162622-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 280-576154/5-A

Matrix: Water | Lab File ID: 05260015.D

Analysis Method: 8330A | Date Collected:

Extraction Method: 3535 | Date Extracted: 05/25/2022 15:23

Sample wt/vol: 500(mL) | Date Analyzed: 05/26/2022 19:00

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 576310 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
5755-27-1	MNX	2.39	M	2.0	0.40	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	101	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\05260015.D
Lims ID: LCSD 280-576154/5-A
Client ID:
Sample Type: LCSD
Inject. Date: 26-May-2022 19:00:16 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 280-576154/
Misc. Info.: 280-0111383-015
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 27-May-2022 13:18:41 Calib Date: 25-Mar-2022 16:30:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220325-109559.b\03250017.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1651

First Level Reviewer: zhangji Date: 26-May-2022 19:47:11

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.466	6.471	-0.005	36848	0.2000	0.2033	M
6 DNX	1	6.786	6.791	-0.005	27839	0.2008	0.2016	M
7 MNX	1	7.206	7.211	-0.005	30065	0.2340	0.2386	M
$ 10 1,2-Dinitrobenzene	1	8.539	8.546	-0.007	25238	0.2000	0.2024	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

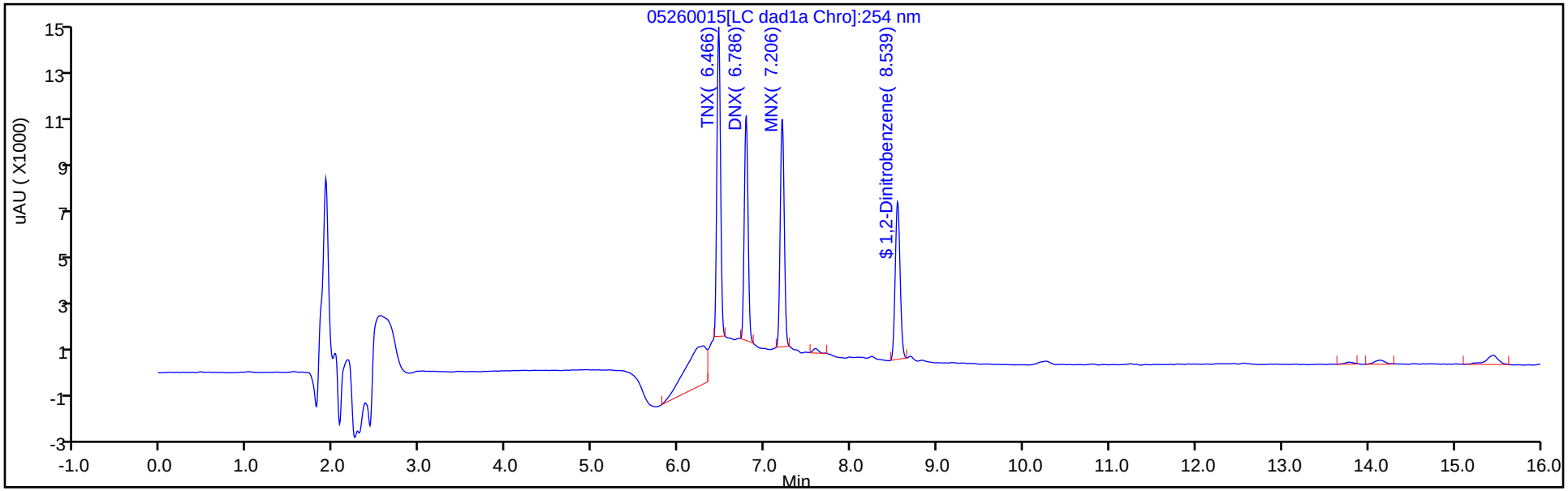
Report Date: 27-May-2022 13:18:45 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

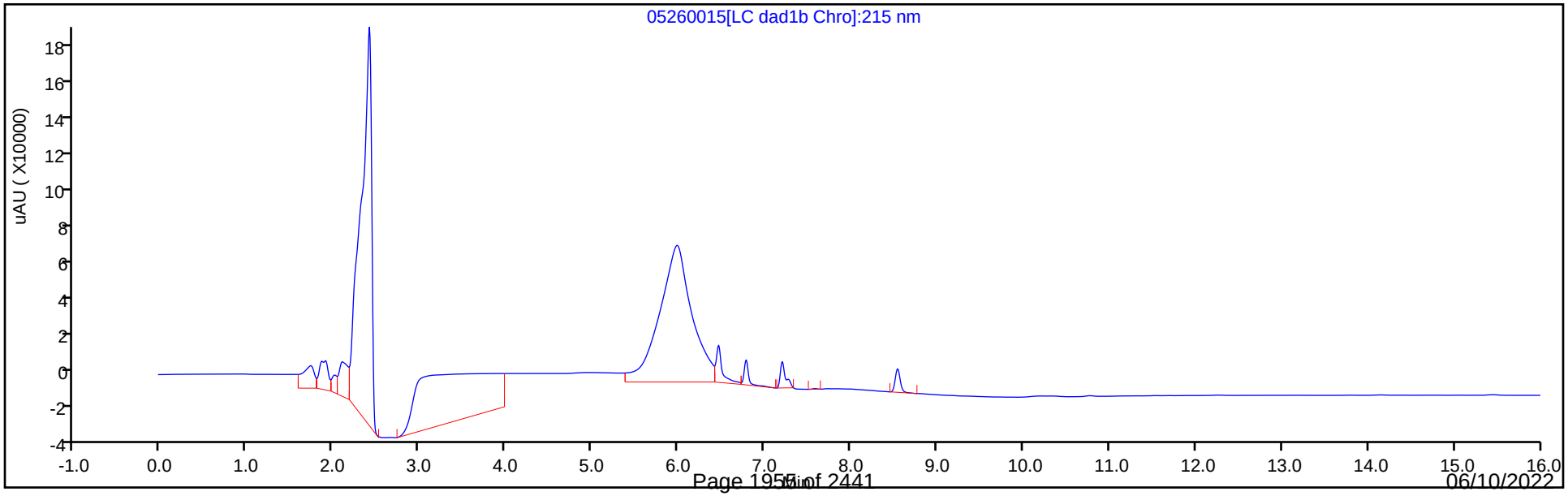
Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260015.d

Injection Date:	26-May-2022 19:00:16	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	LCSD 280-576154/5-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 Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\05260015.D				
Lims ID:	LCSD 280-576154/5-A				
Client ID:					
Sample Type:	LCSD				
Inject. Date:	26-May-2022 19:00:16	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCSD 280-576154/				
Misc. Info.:	280-0111383-015				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220526-111383.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	27-May-2022 13:18:41	Calib Date:	25-Mar-2022 16:30:08		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220325-109559.b\03250017.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1651				

First Level Reviewer: zhangji Date: 26-May-2022 19:47:11

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2024	101.20

Manual Integration/User Assign Peak Report

Eurofins Denver

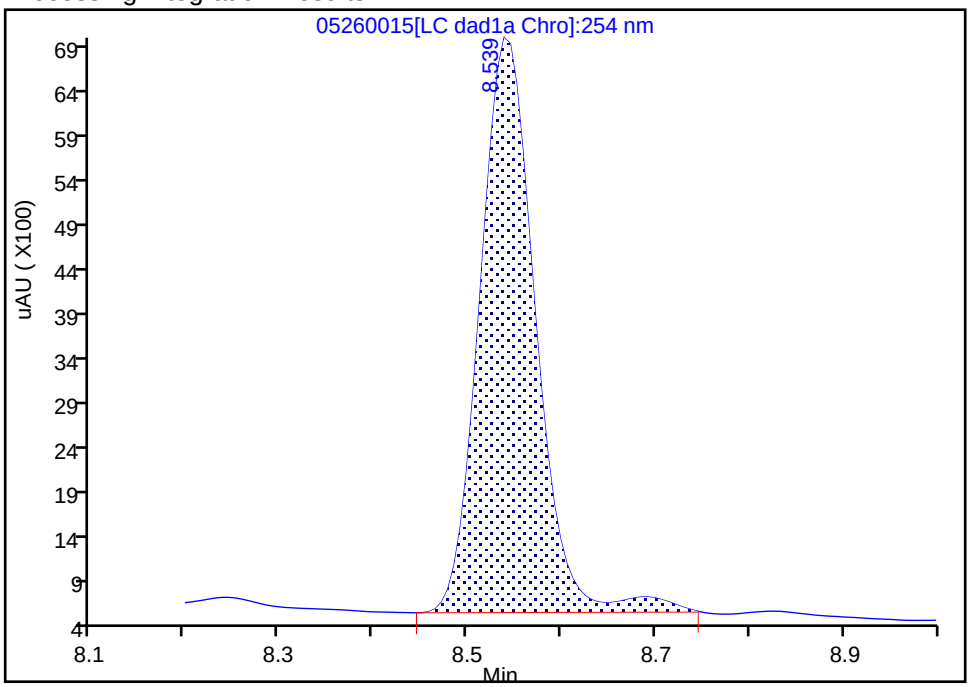
Data File: \\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260015.d
Injection Date: 26-May-2022 19:00:16 Instrument ID: CHHPLC_X3
Lims ID: LCSD 280-576154/5-A
Client ID:
Operator ID: JZ ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

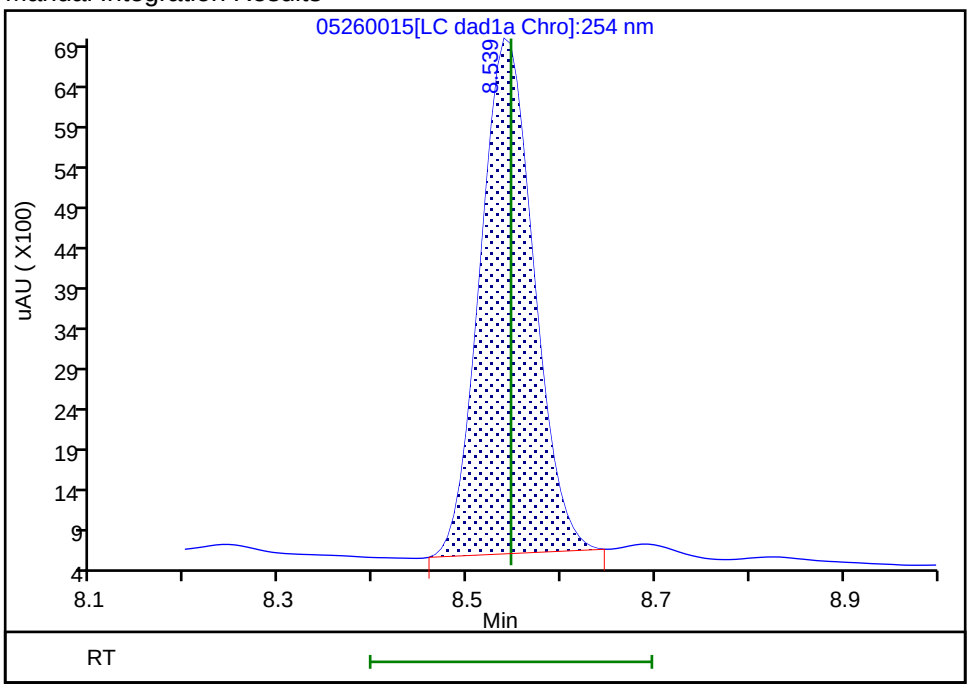
Processing Integration Results

RT: 8.54
Area: 26608
Amount: 0.213380
Amount Units: ug/mL



Manual Integration Results

RT: 8.54
Area: 25238
Amount: 0.202393
Amount Units: ug/mL



Reviewer: zhangji, 26-May-2022 19:47:02
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

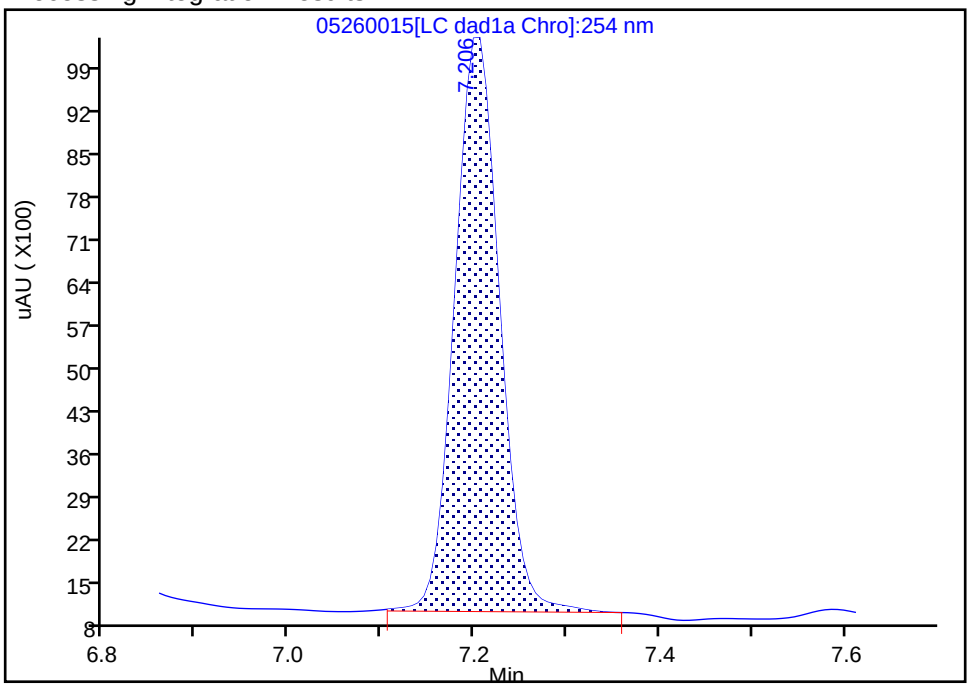
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220526-111383.b\05260015.d				
Injection Date:	26-May-2022 19:00:16	Instrument ID:	CHHPLC_X3		
Lims ID:	LCSD 280-576154/5-A				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

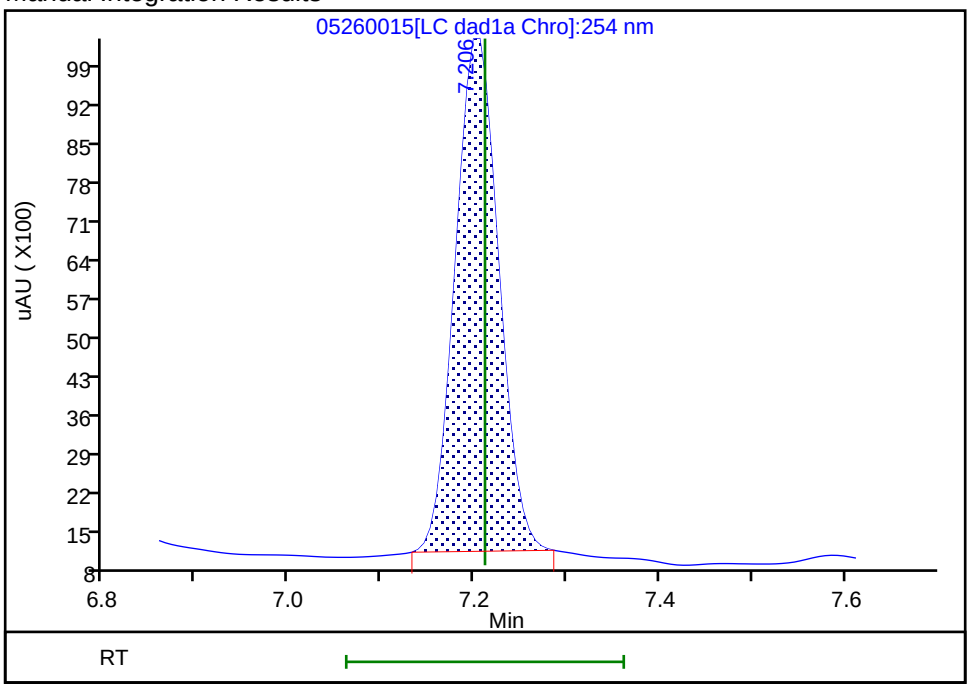
Processing Integration Results

RT: 7.21
Area: 31367
Amount: 0.248954
Amount Units: ug/mL



Manual Integration Results

RT: 7.21
Area: 30065
Amount: 0.238620
Amount Units: ug/mL



Reviewer: zhangji, 26-May-2022 19:46:58

Audit Action: Manually Integrated Audit Reason: Baseline

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 01/04/2022 18:28

Analysis Batch Number: 562503 End Date: 01/05/2022 04:47

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-562503/11		01/04/2022 18:28	1	01040011.D	UltraCarb5uODS 4.6(mm)
IC 280-562503/12		01/04/2022 18:51	1	01040012.D	UltraCarb5uODS 4.6(mm)
IC 280-562503/13		01/04/2022 19:13	1	01040013.D	UltraCarb5uODS 4.6(mm)
IC 280-562503/14		01/04/2022 19:36	1	01040014.D	UltraCarb5uODS 4.6(mm)
IC 280-562503/15		01/04/2022 19:59	1	01040015.D	UltraCarb5uODS 4.6(mm)
IC 280-562503/16		01/04/2022 20:22	1	01040016.D	UltraCarb5uODS 4.6(mm)
IC 280-562503/17		01/04/2022 20:45	1	01040017.D	UltraCarb5uODS 4.6(mm)
IC 280-562503/18		01/04/2022 21:08	1	01040018.D	UltraCarb5uODS 4.6(mm)
IC 280-562503/19		01/04/2022 21:31	1	01040019.D	UltraCarb5uODS 4.6(mm)
ICV 280-562503/20		01/04/2022 21:54	1	01040020.D	UltraCarb5uODS 4.6(mm)
IC 280-562503/21		01/04/2022 22:17	1		UltraCarb5uODS 4.6(mm)
IC 280-562503/22		01/04/2022 22:40	1		UltraCarb5uODS 4.6(mm)
IC 280-562503/23		01/04/2022 23:03	1		UltraCarb5uODS 4.6(mm)
IC 280-562503/24		01/04/2022 23:26	1		UltraCarb5uODS 4.6(mm)
IC 280-562503/25		01/04/2022 23:49	1		UltraCarb5uODS 4.6(mm)
IC 280-562503/26		01/05/2022 00:11	1		UltraCarb5uODS 4.6(mm)
IC 280-562503/27		01/05/2022 00:34	1		UltraCarb5uODS 4.6(mm)
IC 280-562503/28		01/05/2022 00:57	1		UltraCarb5uODS 4.6(mm)
ICV 280-562503/29		01/05/2022 01:20	1		UltraCarb5uODS 4.6(mm)
IC 280-562503/30		01/05/2022 01:43	1	01040030.D	UltraCarb5uODS 4.6(mm)
IC 280-562503/31		01/05/2022 02:06	1	01040031.D	UltraCarb5uODS 4.6(mm)
IC 280-562503/32		01/05/2022 02:29	1	01040032.D	UltraCarb5uODS 4.6(mm)
IC 280-562503/33		01/05/2022 02:52	1	01040033.D	UltraCarb5uODS 4.6(mm)
IC 280-562503/34		01/05/2022 03:15	1	01040034.D	UltraCarb5uODS 4.6(mm)
IC 280-562503/35		01/05/2022 03:38	1	01040035.D	UltraCarb5uODS 4.6(mm)
IC 280-562503/36		01/05/2022 04:01	1	01040036.D	UltraCarb5uODS 4.6(mm)
IC 280-562503/37		01/05/2022 04:24	1	01040037.D	UltraCarb5uODS 4.6(mm)
ICV 280-562503/38		01/05/2022 04:47	1	01040038.D	UltraCarb5uODS 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: CHHPLC_X5 Start Date: 03/02/2022 21:22

Analysis Batch Number: 567560 End Date: 03/03/2022 07:54

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-567560/10		03/02/2022 21:22	1	03020010.D	Luna-phenylhex 4.6(mm)
IC 280-567560/11		03/02/2022 21:57	1	03020011.D	Luna-phenylhex 4.6(mm)
IC 280-567560/12		03/02/2022 22:32	1	03020012.D	Luna-phenylhex 4.6(mm)
IC 280-567560/13		03/02/2022 23:07	1	03020013.D	Luna-phenylhex 4.6(mm)
IC 280-567560/14		03/02/2022 23:42	1	03020014.D	Luna-phenylhex 4.6(mm)
IC 280-567560/15		03/03/2022 00:17	1	03020015.D	Luna-phenylhex 4.6(mm)
IC 280-567560/16		03/03/2022 00:53	1	03020016.D	Luna-phenylhex 4.6(mm)
IC 280-567560/17		03/03/2022 01:28	1	03020017.D	Luna-phenylhex 4.6(mm)
IC 280-567560/18		03/03/2022 02:03	1	03020018.D	Luna-phenylhex 4.6(mm)
ICV 280-567560/19		03/03/2022 02:38	1	03020019.D	Luna-phenylhex 4.6(mm)
IC 280-567560/20		03/03/2022 03:13	1	03020020.D	Luna-phenylhex 4.6(mm)
IC 280-567560/21		03/03/2022 03:49	1	03020021.D	Luna-phenylhex 4.6(mm)
IC 280-567560/22		03/03/2022 04:24	1	03020022.D	Luna-phenylhex 4.6(mm)
IC 280-567560/23		03/03/2022 04:59	1	03020023.D	Luna-phenylhex 4.6(mm)
IC 280-567560/24		03/03/2022 05:34	1	03020024.D	Luna-phenylhex 4.6(mm)
IC 280-567560/25		03/03/2022 06:09	1	03020025.D	Luna-phenylhex 4.6(mm)
IC 280-567560/26		03/03/2022 06:44	1	03020026.D	Luna-phenylhex 4.6(mm)
IC 280-567560/27		03/03/2022 07:19	1	03020027.D	Luna-phenylhex 4.6(mm)
ICV 280-567560/28		03/03/2022 07:54	1	03020028.D	Luna-phenylhex 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 05/26/2022 16:42

Analysis Batch Number: 576310 End Date: 05/27/2022 05:19

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-576310/7		05/26/2022 16:42	1	05260007.D	UltraCarb5uODS 4.6(mm)
CCV 280-576310/9		05/26/2022 17:05	1	05260009.D	UltraCarb5uODS 4.6(mm)
MB 280-576154/1-A		05/26/2022 17:28	1	05260011.D	UltraCarb5uODS 4.6(mm)
LCS 280-576154/2-A		05/26/2022 17:51	1	05260012.D	UltraCarb5uODS 4.6(mm)
LCS 280-576154/4-A		05/26/2022 18:37	1	05260014.D	UltraCarb5uODS 4.6(mm)
LCSD 280-576154/5-A		05/26/2022 19:00	1	05260015.D	UltraCarb5uODS 4.6(mm)
LCSD 280-576154/3-A		05/26/2022 19:23	1	0526X013.D	UltraCarb5uODS 4.6(mm)
280-162622-1	G0119-22A	05/26/2022 19:46	1	05260016.D	UltraCarb5uODS 4.6(mm)
280-162622-2	G0121-22A	05/26/2022 20:09	1	05260017.D	UltraCarb5uODS 4.6(mm)
280-162622-3	G0101-22A	05/26/2022 20:31	1	05260018.D	UltraCarb5uODS 4.6(mm)
280-162622-4	G0100-22A	05/26/2022 20:54	1	05260019.D	UltraCarb5uODS 4.6(mm)
280-162622-5	G0122-22A	05/26/2022 21:17	1	05260020.D	UltraCarb5uODS 4.6(mm)
CCV 280-576310/21		05/26/2022 21:40	1	05260021.D	UltraCarb5uODS 4.6(mm)
CCV 280-576310/22		05/26/2022 22:03	1	05260022.D	UltraCarb5uODS 4.6(mm)
280-162622-6	G0066R-22A	05/26/2022 22:26	1	05260023.D	UltraCarb5uODS 4.6(mm)
280-162622-7	G0024-22A	05/26/2022 22:49	1	05260024.D	UltraCarb5uODS 4.6(mm)
280-162622-8	G0115-22A	05/26/2022 23:12	1	05260025.D	UltraCarb5uODS 4.6(mm)
280-162622-9	G0095-22A	05/26/2022 23:35	1	05260026.D	UltraCarb5uODS 4.6(mm)
280-162622-10	PZ018-22A	05/26/2022 23:58	1	05260027.D	UltraCarb5uODS 4.6(mm)
280-162622-11	PZ020-22A	05/27/2022 00:21	1	05260028.D	UltraCarb5uODS 4.6(mm)
280-162622-12	G0077-22A	05/27/2022 00:44	1	05260029.D	UltraCarb5uODS 4.6(mm)
280-162622-16	G0311-22A	05/27/2022 01:07	1	05260030.D	UltraCarb5uODS 4.6(mm)
280-162622-17	G0111-22A	05/27/2022 01:30	1	05260031.D	UltraCarb5uODS 4.6(mm)
280-162622-18	G0123-22A	05/27/2022 01:53	1	05260032.D	UltraCarb5uODS 4.6(mm)
CCV 280-576310/33		05/27/2022 02:15	1	05260033.D	UltraCarb5uODS 4.6(mm)
CCV 280-576310/34		05/27/2022 02:38	1	05260034.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		05/27/2022 03:01	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/27/2022 03:24	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/27/2022 03:47	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/27/2022 04:10	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/27/2022 04:33	1		UltraCarb5uODS 4.6(mm)
CCV 280-576310/40		05/27/2022 04:56	1		UltraCarb5uODS 4.6(mm)
CCV 280-576310/41		05/27/2022 05:19	1		UltraCarb5uODS 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: CHHPLC_X5 Start Date: 05/27/2022 17:22

Analysis Batch Number: 576448 End Date: 05/28/2022 07:59

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-576448/7		05/27/2022 17:22	1	05270007.D	Luna-phenylhex 4.6(mm)
CCV 280-576448/8		05/27/2022 17:57	1	05270008.D	Luna-phenylhex 4.6(mm)
ZZZZZ		05/27/2022 18:32	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/27/2022 19:07	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/27/2022 19:42	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/27/2022 20:17	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/27/2022 20:53	1		Luna-phenylhex 4.6(mm)
280-162622-1	G0119-22A	05/27/2022 21:28	1	05270015.D	Luna-phenylhex 4.6(mm)
280-162622-2	G0121-22A	05/27/2022 22:03	1	05270016.D	Luna-phenylhex 4.6(mm)
280-162622-4	G0100-22A	05/27/2022 22:38	1	05270017.D	Luna-phenylhex 4.6(mm)
280-162622-5	G0122-22A	05/27/2022 23:13	1	05270018.D	Luna-phenylhex 4.6(mm)
280-162622-6	G0066R-22A	05/27/2022 23:48	1	05270019.D	Luna-phenylhex 4.6(mm)
CCV 280-576448/20		05/28/2022 00:23	1	05270020.D	Luna-phenylhex 4.6(mm)
CCV 280-576448/21		05/28/2022 00:58	1	05270021.D	Luna-phenylhex 4.6(mm)
280-162622-7	G0024-22A	05/28/2022 01:33	1	05270022.D	Luna-phenylhex 4.6(mm)
280-162622-10	PZ018-22A	05/28/2022 02:08	1	05270023.D	Luna-phenylhex 4.6(mm)
280-162622-11	PZ020-22A	05/28/2022 02:43	1	05270024.D	Luna-phenylhex 4.6(mm)
280-162622-12	G0077-22A	05/28/2022 03:18	1	05270025.D	Luna-phenylhex 4.6(mm)
280-162622-16	G0311-22A	05/28/2022 03:53	1	05270026.D	Luna-phenylhex 4.6(mm)
280-162622-17	G0111-22A	05/28/2022 04:28	1	05270027.D	Luna-phenylhex 4.6(mm)
280-162622-18	G0123-22A	05/28/2022 05:03	1	05270028.D	Luna-phenylhex 4.6(mm)
ZZZZZ		05/28/2022 05:38	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/28/2022 06:14	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/28/2022 06:49	1		Luna-phenylhex 4.6(mm)
CCV 280-576448/32		05/28/2022 07:24	1	05270032.D	Luna-phenylhex 4.6(mm)
CCV 280-576448/33		05/28/2022 07:59	1	05270033.D	Luna-phenylhex 4.6(mm)

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 562503 Batch Start Date: 01/04/22 18:28 Batch Analyst: Zhang, Jian

Batch Method: 8330A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	8330 DMT 00010	8330 LCS 00111	8330_OP_DMT 00012	8330IntermStk 00070	8330Surrogate 00127
IC 280-562503/11		8330A		1.0 mL				250 uL	
IC 280-562503/12		8330A		1.0 mL				100 uL	
IC 280-562503/13		8330A		1.0 mL				70 uL	
IC 280-562503/14		8330A		1.0 mL				40 uL	
IC 280-562503/15		8330A		1.0 mL				25 uL	
IC 280-562503/16		8330A		1.0 mL				10 uL	
IC 280-562503/17		8330A		1.0 mL				5 uL	
IC 280-562503/18		8330A		1.0 mL				2 uL	
IC 280-562503/19		8330A		1.0 mL				1 uL	
ICV 280-562503/20		8330A		1.0 mL		50 uL			50 uL
IC 280-562503/30		8330A			125 uL				
IC 280-562503/31		8330A			50 uL				
IC 280-562503/32		8330A			35 uL				
IC 280-562503/33		8330A			20 uL				
IC 280-562503/34		8330A			12.5 uL				
IC 280-562503/35		8330A			5 uL				
IC 280-562503/36		8330A			2.5 uL				
IC 280-562503/37		8330A			1 uL				
ICV 280-562503/38		8330A					50 uL		

Batch Notes	
Methanol ID	214340

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 Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 562503 Batch Start Date: 01/04/22 18:28 Batch Analyst: Zhang, Jian

Batch Method: 8330A Batch End Date:

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.

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 567560 Batch Start Date: 03/02/22 21:22 Batch Analyst: Zhang, Jian

Batch Method: 8330A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	3,5-DNA LCS 00040	8330 DMT 00010	8330 LCS 00111	8330_ADDs 00031	8330_OP_DMT 00012
IC 280-567560/10		8330A		1.0 mL				125 uL	
IC 280-567560/11		8330A		1.0 mL				50 uL	
IC 280-567560/12		8330A		1.0 mL				35 uL	
IC 280-567560/13		8330A		1.0 mL				20 uL	
IC 280-567560/14		8330A		1.0 mL				12.5 uL	
IC 280-567560/15		8330A		1.0 mL				5 uL	
IC 280-567560/16		8330A		1.0 mL				2.5 uL	
IC 280-567560/17		8330A		1.0 mL				1 uL	
IC 280-567560/18		8330A		1.0 mL				0.5 uL	
ICV 280-567560/19		8330A		1.0 mL	50 uL		50 uL		
IC 280-567560/20		8330A		1.0 mL		125 uL			
IC 280-567560/21		8330A		1.0 mL		50 uL			
IC 280-567560/22		8330A		1.0 mL		35 uL			
IC 280-567560/23		8330A		1.0 mL		20 uL			
IC 280-567560/24		8330A		1.0 mL		12.5 uL			
IC 280-567560/25		8330A		1.0 mL		5 uL			
IC 280-567560/26		8330A		1.0 mL		2.5 uL			
IC 280-567560/27		8330A		1.0 mL		1 uL			
ICV 280-567560/28		8330A							50 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330DiaminLCS 00047	8330IntermStk 00070	8330Surrogate 00127			

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 Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 567560 Batch Start Date: 03/02/22 21:22 Batch Analyst: Zhang, Jian

Batch Method: 8330A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330DiaminLCS 00047	8330IntermStk 00070	8330Surrogate 00127			
IC 280-567560/10		8330A			250 uL				
IC 280-567560/11		8330A			100 uL				
IC 280-567560/12		8330A			70 uL				
IC 280-567560/13		8330A			40 uL				
IC 280-567560/14		8330A			25 uL				
IC 280-567560/15		8330A			10 uL				
IC 280-567560/16		8330A			5 uL				
IC 280-567560/17		8330A			2 uL				
IC 280-567560/18		8330A			1 uL				
ICV 280-567560/19		8330A		50 uL		50 uL			
IC 280-567560/20		8330A							
IC 280-567560/21		8330A							
IC 280-567560/22		8330A							
IC 280-567560/23		8330A							
IC 280-567560/24		8330A							
IC 280-567560/25		8330A							
IC 280-567560/26		8330A							
IC 280-567560/27		8330A							
ICV 280-567560/28		8330A							

Batch Notes	
Methanol ID	214340

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 Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 567560 Batch Start Date: 03/02/22 21:22 Batch Analyst: Zhang, Jian

Batch Method: 8330A Batch End Date:

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.

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 576154 Batch Start Date: 05/25/22 15:23 Batch Analyst: Alwes, Ashley A

Batch Method: 3535 Batch End Date: 05/25/22 19:49

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	8330 LCS 00113	8330_OP_DMT 00014
MB 280-576154/1		3535, 8330A				500 mL	5 mL		
LCS 280-576154/2		3535, 8330A				500 mL	5 mL	0.1 mL	
LCSD 280-576154/3		3535, 8330A				500 mL	5 mL	0.1 mL	
LCS 280-576154/4		3535, 8330A				500 mL	5 mL		0.1 mL
LCSD 280-576154/5		3535, 8330A				500 mL	5 mL		0.1 mL
280-162622-A-1	G0119-22A	3535, 8330A	T	772.9 g	285.0 g	487.9 mL	5 mL		
280-162622-A-2	G0121-22A	3535, 8330A	T	804.0 g	285.0 g	519 mL	5 mL		
280-162622-A-3	G0101-22A	3535, 8330A	T	802.9 g	285.5 g	517.4 mL	5 mL		
280-162622-A-4	G0100-22A	3535, 8330A	T	740.0 g	286.9 g	453.1 mL	5 mL		
280-162622-A-5	G0122-22A	3535, 8330A	T	749.3 g	285.9 g	463.4 mL	5 mL		
280-162622-A-6	G0066R-22A	3535, 8330A	T	725.7 g	287.6 g	438.1 mL	5 mL		
280-162622-A-7	G0024-22A	3535, 8330A	T	765.3 g	285.7 g	479.6 mL	5 mL		
280-162622-A-8	G0115-22A	3535, 8330A	T	807.9 g	285.4 g	522.5 mL	5 mL		
280-162622-A-9	G0095-22A	3535, 8330A	T	756.0 g	287.4 g	468.6 mL	5 mL		
280-162622-A-10	PZ018-22A	3535, 8330A	T	748.4 g	284.9 g	463.5 mL	5 mL		
280-162622-A-11	PZ020-22A	3535, 8330A	T	752.1 g	285.3 g	466.8 mL	5 mL		
280-162622-A-12	G0077-22A	3535, 8330A	T	759.8 g	287.8 g	472 mL	5 mL		
280-162622-A-16	G0311-22A	3535, 8330A	T	742.1 g	287.3 g	454.8 mL	5 mL		
280-162622-A-17	G0111-22A	3535, 8330A	T	757.3 g	288.0 g	469.3 mL	5 mL		
280-162622-A-18	G0123-22A	3535, 8330A	T	796.9 g	286.2 g	510.7 mL	5 mL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330Surrogate 00128	AnalysisComment				
MB 280-576154/1		3535, 8330A		0.1 mL					
LCS 280-576154/2		3535, 8330A		0.1 mL	8330LCS				
LCSD 280-576154/3		3535, 8330A		0.1 mL	8330LCS				
LCS 280-576154/4		3535, 8330A		0.1 mL	DMT				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 576154 Batch Start Date: 05/25/22 15:23 Batch Analyst: Alwes, Ashley A

Batch Method: 3535 Batch End Date: 05/25/22 19:49

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330Surrogate 00128	AnalysisComment				
LCSD 280-576154/5		3535, 8330A		0.1 mL	DMT				
280-162622-A-1	G0119-22A	3535, 8330A	T	0.1 mL					
280-162622-A-2	G0121-22A	3535, 8330A	T	0.1 mL					
280-162622-A-3	G0101-22A	3535, 8330A	T	0.1 mL					
280-162622-A-4	G0100-22A	3535, 8330A	T	0.1 mL					
280-162622-A-5	G0122-22A	3535, 8330A	T	0.1 mL					
280-162622-A-6	G0066R-22A	3535, 8330A	T	0.1 mL					
280-162622-A-7	G0024-22A	3535, 8330A	T	0.1 mL					
280-162622-A-8	G0115-22A	3535, 8330A	T	0.1 mL					
280-162622-A-9	G0095-22A	3535, 8330A	T	0.1 mL					
280-162622-A-10	PZ018-22A	3535, 8330A	T	0.1 mL					
280-162622-A-11	PZ020-22A	3535, 8330A	T	0.1 mL					
280-162622-A-12	G0077-22A	3535, 8330A	T	0.1 mL					
280-162622-A-16	G0311-22A	3535, 8330A	T	0.1 mL					
280-162622-A-17	G0111-22A	3535, 8330A	T	0.1 mL					
280-162622-A-18	G0123-22A	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 Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 576154 Batch Start Date: 05/25/22 15:23 Batch Analyst: Alwes, Ashley A

Batch Method: 3535 Batch End Date: 05/25/22 19:49

Batch Notes	
First Start time	05/25/2022 15:50
First End time	05/25/2022 18:15
SPE Cartridge Type	Porapak RDX
SPE Cartridge Lot ID	005632063A
Balance ID	24350888
Pipette/Syringe/Dispenser ID	JiJi, Soot, DOD
Solvent Name	Acetonitrile
Solvent Lot #	Acetonitrile_0065
Rinse Solvent Name	0.1%AAinACN
Rinse Solvent Lot	0.1%AAinACN_0079
Acid Name	Ca2Cl
Acid ID	Ca2Cl_Sol_00080
Analyst ID - Spike Analyst	AA
Analyst ID - Spike Witness Analyst	Reviewer: ARC
Batch Comment	DV-OP-0017; Mantel: A/B

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 Denver Job Number: 280-162622-1

SDG No.:

Project: Cornhusker (CHAAP)

Client Sample ID	Lab Sample ID
G0119-22A	280-162622-1
G0121-22A	280-162622-2
G0101-22A	280-162622-3
G0100-22A	280-162622-4
G0122-22A	280-162622-5
G0066R-22A	280-162622-6
G0024-22A	280-162622-7
G0115-22A	280-162622-8
G0095-22A	280-162622-9
PZ018-22A	280-162622-10
PZ020-22A	280-162622-11
G0077-22A	280-162622-12
G0069-22A	280-162622-13
SHGW03-22A	280-162622-14
SHGW04-22A	280-162622-15
G0311-22A	280-162622-16
G0111-22A	280-162622-17
G0123-22A	280-162622-18
SHGW02-22A	280-162622-19
SHGW05-22A	280-162622-20
G0053-22A	280-162622-21
SAMW1-22A	280-162622-26

Comments:

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0119-22A
Lab Sample ID: 280-162622-1
Lab Name: Eurofins Denver
Job No.: 280-162622-1
SDG ID.:
Matrix: Water
Date Sampled: 05/19/2022 10:50
Reporting Basis: WET
Date Received: 05/20/2022 10:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.56	0.20	0.10	0.058	mg/L			2	350.1
Nitrogen, Total Kjeldahl	1.3	1.0	0.80	0.69	mg/L			1	351.2
Nitrate Nitrite as N	0.050	0.10	0.050	0.044	mg/L	U		1	353.2
Sulfide	2.0	4.0	2.0	1.6	mg/L	U		1	9034
Sulfate	740	25	13	5.2	mg/L		D	5	9056A
Total Alkalinity as CaCO3	530	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0119-22A
Lab Sample ID: 280-162622-1
Lab Name: Eurofins Denver
Job No.: 280-162622-1
SDG ID.:
Matrix: Water
Date Sampled: 05/19/2022 10:50
Reporting Basis: WET
Date Received: 05/20/2022 10:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	5.7	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0121-22A
Lab Sample ID: 280-162622-2
Lab Name: Eurofins Denver
Job No.: 280-162622-1
SDG ID.:
Matrix: Water
Date Sampled: 05/19/2022 12:05
Reporting Basis: WET
Date Received: 05/20/2022 10:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	8.6	2.0	1.0	0.58	mg/L			20	350.1
Nitrogen, Total Kjeldahl	14	5.0	4.0	3.4	mg/L			1	351.2
Nitrate Nitrite as N	0.050	0.10	0.050	0.044	mg/L	U		1	353.2
Sulfide	2.4	4.0	2.0	1.6	mg/L	J		1	9034
Sulfate	290	25	13	5.2	mg/L		D M	5	9056A
Total Alkalinity as CaCO3	640	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0121-22A
Lab Sample ID: 280-162622-2
Lab Name: Eurofins Denver
Job No.: 280-162622-1
SDG ID.:
Matrix: Water
Date Sampled: 05/19/2022 12:05
Reporting Basis: WET
Date Received: 05/20/2022 10:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	29	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0101-22A
Lab Sample ID: 280-162622-3
Lab Name: Eurofins Denver
Job No.: 280-162622-1
SDG ID.:
Matrix: Water
Date Sampled: 05/19/2022 09:45
Reporting Basis: WET
Date Received: 05/20/2022 10:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	2.1	0.10	0.050	0.029	mg/L			1	350.1
Nitrogen, Total Kjeldahl	4.0	1.0	0.80	0.69	mg/L			1	351.2
Nitrate Nitrite as N	0.050	0.10	0.050	0.044	mg/L	U		1	353.2
Sulfide	2.0	4.0	2.0	1.6	mg/L	U		1	9034
Sulfate	290	25	13	5.2	mg/L		D	5	9056A
Total Alkalinity as CaCO3	830	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0101-22A
Lab Sample ID: 280-162622-3
Lab Name: Eurofins Denver
Job No.: 280-162622-1
SDG ID.:
Matrix: Water
Date Sampled: 05/19/2022 09:45
Reporting Basis: WET
Date Received: 05/20/2022 10:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	14	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0100-22A
Lab Sample ID: 280-162622-4
Lab Name: Eurofins Denver
Job No.: 280-162622-1
SDG ID.:
Matrix: Water
Date Sampled: 05/19/2022 09:50
Reporting Basis: WET
Date Received: 05/20/2022 10:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	2.7	0.50	0.25	0.15	mg/L			5	350.1
Nitrogen, Total Kjeldahl	4.4	1.0	0.80	0.69	mg/L			1	351.2
Nitrate Nitrite as N	0.050	0.10	0.050	0.044	mg/L	U		1	353.2
Sulfide	2.0	4.0	2.0	1.6	mg/L	U		1	9034
Sulfate	470	25	13	5.2	mg/L		D	5	9056A
Total Alkalinity as CaCO3	720	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0100-22A
Lab Sample ID: 280-162622-4
Lab Name: Eurofins Denver
Job No.: 280-162622-1
SDG ID.:
Matrix: Water
Date Sampled: 05/19/2022 09:50
Reporting Basis: WET
Date Received: 05/20/2022 10:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	9.8	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0122-22A
Lab Sample ID: 280-162622-5
Lab Name: Eurofins Denver
Job No.: 280-162622-1
SDG ID.:
Matrix: Water
Date Sampled: 05/19/2022 12:10
Reporting Basis: WET
Date Received: 05/20/2022 10:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	4.7	0.10	0.050	0.029	mg/L			1	350.1
Nitrogen, Total Kjeldahl	6.4	1.0	0.80	0.69	mg/L			1	351.2
Nitrate Nitrite as N	0.050	0.10	0.050	0.044	mg/L	U		1	353.2
Sulfide	2.0	4.0	2.0	1.6	mg/L	U		1	9034
Sulfate	690	25	13	5.2	mg/L		D	5	9056A
Total Alkalinity as CaCO3	740	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0122-22A
Lab Sample ID: 280-162622-5
Lab Name: Eurofins Denver
Job No.: 280-162622-1
SDG ID.:
Matrix: Water
Date Sampled: 05/19/2022 12:10
Reporting Basis: WET
Date Received: 05/20/2022 10:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	14	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0066R-22A
Lab Sample ID: 280-162622-6
Lab Name: Eurofins Denver
Job No.: 280-162622-1
SDG ID.:
Matrix: Water
Date Sampled: 05/19/2022 10:55
Reporting Basis: WET
Date Received: 05/20/2022 10:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	3.1	0.10	0.050	0.029	mg/L			1	350.1
Nitrogen, Total Kjeldahl	3.6	1.0	0.80	0.69	mg/L			1	351.2
Nitrate Nitrite as N	0.050	0.10	0.050	0.044	mg/L	U		1	353.2
Sulfide	2.0	4.0	2.0	1.6	mg/L	U	J1	1	9034
Sulfate	530	25	13	5.2	mg/L		D	5	9056A
Total Alkalinity as CaCO3	600	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0066R-22A
Lab Sample ID: 280-162622-6
Lab Name: Eurofins Denver
Job No.: 280-162622-1
SDG ID.:
Matrix: Water
Date Sampled: 05/19/2022 10:55
Reporting Basis: WET
Date Received: 05/20/2022 10:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	7.2	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0024-22A
Lab Sample ID: 280-162622-7
Lab Name: Eurofins Denver
Job No.: 280-162622-1
SDG ID.:
Matrix: Water
Date Sampled: 05/18/2022 14:50
Reporting Basis: WET
Date Received: 05/20/2022 10:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.050	0.10	0.050	0.029	mg/L	U		1	350.1
Nitrogen, Total Kjeldahl	0.80	1.0	0.80	0.69	mg/L	U		1	351.2
Nitrate Nitrite as N	11	0.20	0.10	0.088	mg/L		J1	2	353.2
Sulfide	2.0	4.0	2.0	1.6	mg/L	U		1	9034
Sulfate	64	5.0	2.5	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	100	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0024-22A
Lab Sample ID: 280-162622-7
Lab Name: Eurofins Denver
Job No.: 280-162622-1
SDG ID.:
Matrix: Water
Date Sampled: 05/18/2022 14:50
Reporting Basis: WET
Date Received: 05/20/2022 10:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	3.6	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0115-22A
Lab Sample ID: 280-162622-8
Lab Name: Eurofins Denver
Job No.: 280-162622-1
SDG ID.:
Matrix: Water
Date Sampled: 05/19/2022 08:45
Reporting Basis: WET
Date Received: 05/20/2022 10:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	2.9	0.10	0.050	0.029	mg/L			1	350.1
Nitrogen, Total Kjeldahl	3.8	1.0	0.80	0.69	mg/L			1	351.2
Nitrate Nitrite as N	0.050	0.10	0.050	0.044	mg/L	U		1	353.2
Sulfide	2.0	4.0	2.0	1.6	mg/L	U		1	9034
Sulfate	490	25	13	5.2	mg/L		D	5	9056A
Total Alkalinity as CaCO3	700	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0115-22A
Lab Sample ID: 280-162622-8
Lab Name: Eurofins Denver
Job No.: 280-162622-1
SDG ID.:
Matrix: Water
Date Sampled: 05/19/2022 08:45
Reporting Basis: WET
Date Received: 05/20/2022 10:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	8.8	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0095-22A
Lab Sample ID: 280-162622-9
Lab Name: Eurofins Denver
Job No.: 280-162622-1
SDG ID.:
Matrix: Water
Date Sampled: 05/19/2022 08:45
Reporting Basis: WET
Date Received: 05/20/2022 10:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	2.2	0.10	0.050	0.029	mg/L			1	350.1
Nitrogen, Total Kjeldahl	3.7	1.0	0.80	0.69	mg/L			1	351.2
Nitrate Nitrite as N	0.050	0.10	0.050	0.044	mg/L	U		1	353.2
Sulfide	2.0	4.0	2.0	1.6	mg/L	U		1	9034
Sulfate	520	25	13	5.2	mg/L		D	5	9056A
Total Alkalinity as CaCO3	780	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0095-22A
Lab Sample ID: 280-162622-9
Lab Name: Eurofins Denver
Job No.: 280-162622-1
SDG ID.:
Matrix: Water
Date Sampled: 05/19/2022 08:45
Reporting Basis: WET
Date Received: 05/20/2022 10:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	12	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: PZ018-22A
Lab Sample ID: 280-162622-10
Lab Name: Eurofins Denver
Job No.: 280-162622-1
SDG ID.:
Matrix: Water
Date Sampled: 05/18/2022 10:05
Reporting Basis: WET
Date Received: 05/20/2022 10:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.93	0.10	0.050	0.029	mg/L			1	350.1
Nitrogen, Total Kjeldahl	3.0	1.0	0.80	0.69	mg/L			1	351.2
Nitrate Nitrite as N	2.8	0.10	0.050	0.044	mg/L			1	353.2
Sulfide	2.0	4.0	2.0	1.6	mg/L	U		1	9034
Sulfate	39	5.0	2.5	1.0	mg/L			1	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: PZ018-22A
Lab Sample ID: 280-162622-10
Lab Name: Eurofins Denver
Job No.: 280-162622-1
SDG ID.:
Matrix: Water
Date Sampled: 05/18/2022 10:05
Reporting Basis: WET
Date Received: 05/20/2022 10:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	13	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: PZ020-22A
Lab Sample ID: 280-162622-11
Lab Name: Eurofins Denver
Job No.: 280-162622-1
SDG ID.:
Matrix: Water
Date Sampled: 05/18/2022 13:05
Reporting Basis: WET
Date Received: 05/20/2022 10:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.050	0.10	0.050	0.029	mg/L	U		1	350.1
Nitrogen, Total Kjeldahl	0.80	1.0	0.80	0.69	mg/L	U	J1	1	351.2
Nitrate Nitrite as N	15	0.50	0.25	0.22	mg/L			5	353.2
Sulfide	2.0	4.0	2.0	1.6	mg/L	U		1	9034
Sulfate	140	25	13	5.2	mg/L		D	5	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: PZ020-22A
Lab Sample ID: 280-162622-11
Lab Name: Eurofins Denver
Job No.: 280-162622-1
SDG ID.:
Matrix: Water
Date Sampled: 05/18/2022 13:05
Reporting Basis: WET
Date Received: 05/20/2022 10:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	3.6	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0077-22A
Lab Sample ID: 280-162622-12
Lab Name: Eurofins Denver
Job No.: 280-162622-1
SDG ID.:
Matrix: Water
Date Sampled: 05/18/2022 16:20
Reporting Basis: WET
Date Received: 05/20/2022 10:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.050	0.10	0.050	0.029	mg/L	U		1	350.1
Nitrogen, Total Kjeldahl	0.80	1.0	0.80	0.69	mg/L	U		1	351.2
Nitrate Nitrite as N	12	0.50	0.25	0.22	mg/L			5	353.2
Sulfide	2.0	4.0	2.0	1.6	mg/L	U		1	9034
Sulfate	150	5.0	2.5	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	340	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0077-22A
Lab Sample ID: 280-162622-12
Lab Name: Eurofins Denver
Job No.: 280-162622-1
SDG ID.:
Matrix: Water
Date Sampled: 05/18/2022 16:20
Reporting Basis: WET
Date Received: 05/20/2022 10:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	4.7	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0069-22A
Lab Sample ID: 280-162622-13
Lab Name: Eurofins Denver
Job No.: 280-162622-1
SDG ID.:
Matrix: Water
Date Sampled: 05/18/2022 11:15
Reporting Basis: WET
Date Received: 05/20/2022 10:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Nitrate Nitrite as N	0.18	0.10	0.050	0.044	mg/L			1	353.2
Sulfate	32	5.0	2.5	1.0	mg/L		M	1	9056A
Total Alkalinity as CaCO3	100	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: SHGW03-22A
Lab Sample ID: 280-162622-14
Lab Name: Eurofins Denver
Job No.: 280-162622-1
SDG ID.:
Matrix: Water
Date Sampled: 05/18/2022 15:20
Reporting Basis: WET
Date Received: 05/20/2022 10:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Nitrate Nitrite as N	3.7	0.10	0.050	0.044	mg/L			1	353.2
Sulfate	31	25	13	5.2	mg/L		D	5	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: SHGW04-22A
Lab Sample ID: 280-162622-15
Lab Name: Eurofins Denver
Job No.: 280-162622-1
SDG ID.:
Matrix: Water
Date Sampled: 05/18/2022 12:35
Reporting Basis: WET
Date Received: 05/20/2022 10:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Nitrate Nitrite as N	0.050	0.10	0.050	0.044	mg/L	U		1	353.2
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

Client Sample ID: G0311-22A
Lab Sample ID: 280-162622-16
Lab Name: Eurofins Denver
Job No.: 280-162622-1
SDG ID.:
Matrix: Water
Date Sampled: 05/19/2022 08:00
Reporting Basis: WET
Date Received: 05/20/2022 10:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.45	0.10	0.050	0.029	mg/L			1	350.1
Nitrogen, Total Kjeldahl	2.2	1.0	0.80	0.69	mg/L			1	351.2
Nitrate Nitrite as N	0.050	0.10	0.050	0.044	mg/L	U		1	353.2
Sulfide	2.0	4.0	2.0	1.6	mg/L	U		1	9034
Sulfate	190	5.0	2.5	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	900	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0311-22A
Lab Sample ID: 280-162622-16
Lab Name: Eurofins Denver
Job No.: 280-162622-1
SDG ID.:
Matrix: Water
Date Sampled: 05/19/2022 08:00
Reporting Basis: WET
Date Received: 05/20/2022 10:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	14	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0111-22A
Lab Sample ID: 280-162622-17
Lab Name: Eurofins Denver
Job No.: 280-162622-1
SDG ID.:
Matrix: Water
Date Sampled: 05/19/2022 13:15
Reporting Basis: WET
Date Received: 05/20/2022 10:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.44	0.10	0.050	0.029	mg/L			1	350.1
Nitrogen, Total Kjeldahl	2.5	1.0	0.80	0.69	mg/L			1	351.2
Nitrate Nitrite as N	0.087	0.10	0.050	0.044	mg/L	J		1	353.2
Sulfide	2.0	4.0	2.0	1.6	mg/L	U		1	9034
Sulfate	190	5.0	2.5	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	900	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0111-22A
Lab Sample ID: 280-162622-17
Lab Name: Eurofins Denver
Job No.: 280-162622-1
SDG ID.:
Matrix: Water
Date Sampled: 05/19/2022 13:15
Reporting Basis: WET
Date Received: 05/20/2022 10:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	13	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0123-22A
Lab Sample ID: 280-162622-18
Lab Name: Eurofins Denver
Job No.: 280-162622-1
SDG ID.:
Matrix: Water
Date Sampled: 05/19/2022 13:20
Reporting Basis: WET
Date Received: 05/20/2022 10:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	1.2	0.10	0.050	0.029	mg/L			1	350.1
Nitrogen, Total Kjeldahl	2.4	1.0	0.80	0.69	mg/L			1	351.2
Nitrate Nitrite as N	0.050	0.10	0.050	0.044	mg/L	U		1	353.2
Sulfide	2.0	4.0	2.0	1.6	mg/L	U		1	9034
Sulfate	410	25	13	5.2	mg/L		D	5	9056A
Total Alkalinity as CaCO3	620	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0123-22A
Lab Sample ID: 280-162622-18
Lab Name: Eurofins Denver
Job No.: 280-162622-1
SDG ID.:
Matrix: Water
Date Sampled: 05/19/2022 13:20
Reporting Basis: WET
Date Received: 05/20/2022 10:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	6.5	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: SHGW02-22A
Lab Sample ID: 280-162622-19
Lab Name: Eurofins Denver
Job No.: 280-162622-1
SDG ID.:
Matrix: Water
Date Sampled: 05/18/2022 09:05
Reporting Basis: WET
Date Received: 05/20/2022 10:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Nitrate Nitrite as N	0.46	0.10	0.050	0.044	mg/L		J1	1	353.2
Sulfate	21	25	13	5.2	mg/L	J	D	5	9056A
Total Alkalinity as CaCO3	210	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: SHGW05-22A
Lab Sample ID: 280-162622-20
Lab Name: Eurofins Denver
Job No.: 280-162622-1
SDG ID.:
Matrix: Water
Date Sampled: 05/18/2022 09:20
Reporting Basis: WET
Date Received: 05/20/2022 10:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Nitrate Nitrite as N	0.51	0.10	0.050	0.044	mg/L			1	353.2
Sulfate	25	5.0	2.5	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	210	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0053-22A
Lab Sample ID: 280-162622-21
Lab Name: Eurofins Denver
Job No.: 280-162622-1
SDG ID.:
Matrix: Water
Date Sampled: 05/18/2022 10:10
Reporting Basis: WET
Date Received: 05/20/2022 10:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Nitrate Nitrite as N	13	0.50	0.25	0.22	mg/L			5	353.2
Sulfate	50	5.0	2.5	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	140	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: SAMW1-22A
Lab Sample ID: 280-162622-26
Lab Name: Eurofins Denver
Job No.: 280-162622-1
SDG ID.:
Matrix: Water
Date Sampled: 05/18/2022 14:10
Reporting Basis: WET
Date Received: 05/20/2022 10:00

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Nitrate Nitrite as N	0.54	0.10	0.050	0.044	mg/L			1	353.2
Sulfate	26	25	13	5.2	mg/L		D	5	9056A
Total Alkalinity as CaCO3	140	10	6.4	3.1	mg/L			1	SM 2320B

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Analyst: MMP Batch Start Date: 06/08/2022

Reporting Units: mg/L Analytical Batch No.: 577536

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
14	ICV	13:24	Ammonia	2.49	2.51	99	90-110		350.1 ICV_00525
15	ICVL	13:26	Ammonia	0.494	0.501	99	90-110		350.1 ICV_00525
16	ICB	13:28	Ammonia	0.050				U	
33	CCVL	14:02	Ammonia	0.481	0.500	96	90-110		350.1 cal_00539
34	CCV	14:04	Ammonia	2.52	2.50	101	90-110		350.1 cal_00539
35	CCB	14:06	Ammonia	0.050				U	
49	CCVL	14:34	Ammonia	0.481	0.500	96	90-110		350.1 cal_00539
50	CCV	14:36	Ammonia	2.59	2.50	104	90-110		350.1 cal_00539
51	CCB	14:38	Ammonia	0.050				U	
65	CCVL	15:06	Ammonia	0.476	0.500	95	90-110		350.1 cal_00539
66	CCV	15:08	Ammonia	2.55	2.50	102	90-110		350.1 cal_00539
67	CCB	15:10	Ammonia	0.050				U	
81	CCVL	15:46	Ammonia	0.486	0.500	97	90-110		350.1 cal_00539
82	CCV	15:48	Ammonia	2.52	2.50	101	90-110		350.1 cal_00539
83	CCB	15:50	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 Denver Job No.: 280-162622-1

SDG No.:

Analyst: MMP Batch Start Date: 06/09/2022

Reporting Units: mg/L Analytical Batch No.: 577664

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
14	ICV	09:58	Ammonia	2.49	2.51	99	90-110		350.1 ICV_00525
15	ICVL	09:59	Ammonia	0.502	0.501	100	90-110		350.1 ICV_00525
16	ICB	10:02	Ammonia	0.050				U	
28	CCV	10:35	Ammonia	2.68	2.50	107	90-110		350.1 cal_00539
30	CCB	10:39	Ammonia	0.050				U	
42	CCV	11:12	Ammonia	2.51	2.50	100	90-110		350.1 cal_00539
44	CCB	11:17	Ammonia	0.050				U	
58	CCV	11:55	Ammonia	2.54	2.50	101	90-110		350.1 cal_00539
59	CCVL	11:57	Ammonia	0.499	0.500	100	90-110		350.1 cal low 01660
60	CCB	11:59	Ammonia	0.050				U	
72	CCV	12:32	Ammonia	2.47	2.50	99	90-110		350.1 cal_00539
73	CCVL	12:34	Ammonia	0.497	0.500	99	90-110		350.1 cal low 01660
74	CCB	12:37	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 Denver Job No.: 280-162622-1

SDG No.:

Analyst: SVC Batch Start Date: 06/03/2022

Reporting Units: mg/L Analytical Batch No.: 577123

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
7	ICV	17:54	Nitrogen, Total Kjeldahl	5.24	5.00	105	90-110		TKN ICV 25_00118
8	ICB	17:54	Nitrogen, Total Kjeldahl	1.0				U	
18	CCV	18:00	Nitrogen, Total Kjeldahl	5.16	5.00	103	90-110		TKN 25ppm_00832
19	CCB	18:00	Nitrogen, Total Kjeldahl	1.0				U	
30	CCV	18:05	Nitrogen, Total Kjeldahl	5.19	5.00	104	90-110		TKN 25ppm_00832
31	CCB	18:06	Nitrogen, Total Kjeldahl	1.0				U	
42	CCV	18:11	Nitrogen, Total Kjeldahl	5.18	5.00	104	90-110		TKN 25ppm_00832
43	CCB	18:11	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 Denver Job No.: 280-162622-1

SDG No.:

Analyst: SVC Batch Start Date: 06/07/2022

Reporting Units: mg/L Analytical Batch No.: 577382

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
17	ICV	12:25	Nitrate Nitrite as N	4.99	5.00	100	90-110		NXN ICV INT_00599
18	ICVL	12:27	Nitrate Nitrite as N	2.09	2.00	104	90-110		NXN ICV INT_00599
19	ICB	12:29	Nitrate Nitrite as N	0.050				U	
51	CCV	13:34	Nitrate Nitrite as N	4.84	5.00	97	90-110		NXN CAL INT_00623
53	CCB	13:38	Nitrate Nitrite as N	0.050				U	
67	CCV	14:06	Nitrate Nitrite as N	4.87	5.00	97	90-110		NXN CAL INT_00623
68	CCVL	14:08	Nitrate Nitrite as N	1.01	1.00	101	90-110		NXN CAL INT_00623
69	CCB	14:10	Nitrate Nitrite as N	0.050				U	
83	CCV	14:38	Nitrate Nitrite as N	4.75	5.00	95	90-110		NXN CAL INT_00623
84	CCVL	14:40	Nitrate Nitrite as N	1.00	1.00	100	90-110		NXN CAL INT_00623
85	CCB	14:42	Nitrate Nitrite as N	0.050				U	
99	CCV	15:10	Nitrate Nitrite as N	4.77	5.00	95	90-110		NXN CAL INT_00623
100	CCVL	15:12	Nitrate Nitrite as N	1.01	1.00	101	90-110		NXN CAL INT_00623
101	CCB	15:14	Nitrate Nitrite as N	0.050				U	
118	CCV	15:48	Nitrate Nitrite as N	4.70	5.00	94	90-110		NXN CAL INT_00623
119	CCVL	15:50	Nitrate Nitrite as N	0.990	1.00	99	90-110		NXN CAL INT_00623
120	CCB	15:52	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 Denver Job No.: 280-162622-1

SDG No.:

Analyst: RAF Batch Start Date: 05/16/2022

Reporting Units: mg/L Analytical Batch No.: 575123

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
8	ICV	19:10	Sulfate	83.8	80.0	105	90-110		IC SO4 ICV_00022
9	ICB	19:26	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 Denver Job No.: 280-162622-1

SDG No.:

Analyst: RAF Batch Start Date: 06/01/2022

Reporting Units: mg/L Analytical Batch No.: 576720

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	CCV	13:41	Sulfate	101	100	101	90-110		IC LCS_01879
2	CCB	13:57	Sulfate	2.5				U	
17	CCV	19:40	Sulfate	101	100	101	90-110		IC LCS_01879
18	CCB	19:56	Sulfate	2.5				U	
29	CCV	22:52	Sulfate	101	100	101	90-110		IC LCS_01879
30	CCB	23:08	Sulfate	2.5				U	
44	CCV	02:04	Sulfate	102	100	102	90-110		IC LCS_01879
45	CCB	02:20	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 Denver Job No.: 280-162622-1

SDG No.:

Analyst: RAF Batch Start Date: 06/02/2022

Reporting Units: mg/L Analytical Batch No.: 576886

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	CCV	11:06	Sulfate	99.9	100	100	90-110		IC LCS_01879
2	CCB	11:22	Sulfate	2.5				U	
17	CCV	15:22	Sulfate	99.6	100	100	90-110		IC LCS_01879
18	CCB	15:38	Sulfate	2.5				U	
29	CCV	18:34	Sulfate	99.7	100	100	90-110		IC LCS_01879
30	CCB	18:50	Sulfate	2.5				U	
47	CCV	21:46	Sulfate	99.5	100	99	90-110		IC LCS_01879
48	CCB	22:02	Sulfate	2.5				U	
59	CCV	00:57	Sulfate	99.8	100	100	90-110		IC LCS_01879
60	CCB	01:13	Sulfate	2.5				U	
73	CCV	04:09	Sulfate	100	100	100	90-110		IC LCS_01879
74	CCB	04:25	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 Denver Job No.: 280-162622-1

SDG No.:

Analyst: CAI Batch Start Date: 05/31/2022

Reporting Units: mg/L Analytical Batch No.: 576714

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	ICV	14:47	Dissolved Organic Carbon - Quad	18.7	20.0	93	90-110		TOC ICV Std_00049
2	ICB	15:06	Dissolved Organic Carbon - Quad	0.80				U	
15	CCV	18:33	Dissolved Organic Carbon - Quad	24.7	25.0	99	90-110		TOC LCS Std_00054
16	CCB	18:48	Dissolved Organic Carbon - Quad	0.80				U	
27	CCV	21:45	Dissolved Organic Carbon - Quad	24.7	25.0	99	90-110		TOC LCS Std_00054
28	CCB	22:00	Dissolved Organic Carbon - Quad	0.80				U	
39	CCV	00:54	Dissolved Organic Carbon - Quad	24.8	25.0	99	90-110		TOC LCS Std_00054
40	CCB	01:09	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 Denver Job No.: 280-162622-1

SDG No.:

Analyst: KEG Batch Start Date: 05/26/2022

Reporting Units: mg/L Analytical Batch No.: 576371

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
17	CCV	14:48	Total Alkalinity as CaCO3	203	200	101	90-110		Alk daily lcs 01041
18	CCB	14:53	Total Alkalinity as CaCO3	6.4				U	
29	CCV	16:20	Total Alkalinity as CaCO3	200	200	100	90-110		Alk daily lcs 01041
30	CCB	16:25	Total Alkalinity as CaCO3	6.4				U	
43	CCV	18:29	Total Alkalinity as CaCO3	202	200	101	90-110		Alk daily lcs 01041
44	CCB	18:34	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 Denver Job No.: 280-162622-1

SDG No.:

Method	Lab Sample ID	Analyte	Result	Qual	Units	LOQ	Dil
Batch ID: 577536 Date: 06/08/2022 13:36							
350.1	MB 280-577536/20	Ammonia	0.050	U	mg/L	0.10	1
Batch ID: 577536 Date: 06/08/2022 14:54							
350.1	MB 280-577536/59	Ammonia	0.050	U	mg/L	0.10	1
Batch ID: 577664 Date: 06/09/2022 10:10							
350.1	MB 280-577664/19	Ammonia	0.050	U	mg/L	0.10	1
Batch ID: 577664 Date: 06/09/2022 11:49							
350.1	MB 280-577664/56	Ammonia	0.050	U	mg/L	0.10	1
Batch ID: 577123 Date: 06/03/2022 17:55 Prep Batch: 576945 Date: 06/02/2022 15:03							
351.2	MB 280-576945/2-A	Nitrogen, Total Kjeldahl	0.80	U	mg/L	1.0	1
Batch ID: 577123 Date: 06/03/2022 18:08 Prep Batch: 576946 Date: 06/02/2022 15:06							
351.2	MB 280-576946/2-A	Nitrogen, Total Kjeldahl	0.80	U	mg/L	1.0	1
Batch ID: 577382 Date: 06/07/2022 13:52							
353.2	MB 280-577382/60	Nitrate Nitrite as N	0.050	U	mg/L	0.10	1
Batch ID: 577382 Date: 06/07/2022 15:20							
353.2	MB 280-577382/104	Nitrate Nitrite as N	0.050	U	mg/L	0.10	1
Batch ID: 575993 Date: 05/24/2022 11:10 Prep Batch: 575967 Date: 05/24/2022 09:13							
9034	MB 280-575967/2-A	Sulfide	2.0	U	mg/L	4.0	1
Batch ID: 576138 Date: 05/25/2022 10:57 Prep Batch: 576110 Date: 05/25/2022 09:18							
9034	MB 280-576110/2-A	Sulfide	2.0	U	mg/L	4.0	1
Batch ID: 576720 Date: 06/01/2022 15:01							
9056A	MB 280-576720/6	Sulfate	2.5	U	mg/L	5.0	1
Batch ID: 576886 Date: 06/02/2022 12:26							
9056A	MB 280-576886/6	Sulfate	2.5	U	mg/L	5.0	1
Batch ID: 576886 Date: 06/02/2022 23:05							
9056A	MB 280-576886/52	Sulfate	2.5	U	mg/L	5.0	1
Batch ID: 576714 Date: 05/31/2022 16:21							
9060A	MB 280-576568/2-A	Dissolved Organic Carbon - Quad	0.80	U	mg/L	1.0	1
Batch ID: 576371 Date: 05/26/2022 13:12							
SM 2320B	MB 280-576371/6	Total Alkalinity as CaCO3	6.4	U	mg/L	10	1
Batch ID: 576371 Date: 05/26/2022 16:37							
SM 2320B	MB 280-576371/32	Total Alkalinity as CaCO3	6.4	U	mg/L	10	1

5-IN
MATRIX SPIKE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 577123	Date: 06/03/2022 18:02		Prep Batch: 576945		Date: 06/02/2022 15:03						
351.2	280-162622-1	Nitrogen, Total Kjeldahl	1.3		mg/L						
351.2 MS	280-162622-1	Nitrogen, Total Kjeldahl	4.37		mg/L	3.00	102	90-110			
Batch ID: 577123	Date: 06/03/2022 18:09		Prep Batch: 576946		Date: 06/02/2022 15:06						
351.2	280-162622-11	Nitrogen, Total Kjeldahl	0.80	U	mg/L						J1
351.2 MS	280-162622-11	Nitrogen, Total Kjeldahl	1.73		mg/L	3.00	58	90-110			J1
Batch ID: 577382	Date: 06/07/2022 14:32										
353.2	280-162622-19	Nitrate Nitrite as N	0.46		mg/L						J1
353.2 MS	280-162622-19	Nitrate Nitrite as N	3.95		mg/L	4.00	87	90-110			J1
Batch ID: 577382	Date: 06/07/2022 15:24										
353.2	280-162622-7	Nitrate Nitrite as N	11		mg/L						J1
353.2 MS	280-162622-7	Nitrate Nitrite as N	17.7		mg/L	8.00	82	90-110			J1
Batch ID: 575993	Date: 05/24/2022 11:10		Prep Batch: 575967		Date: 05/24/2022 09:13						
9034	280-162622-6	Sulfide	2.0	U	mg/L						J1
9034 MS	280-162622-6	Sulfide	11.2		mg/L	19.8	57	44-110			
Batch ID: 576720	Date: 06/01/2022 23:40										
9056A	280-162622-7	Sulfate	64		mg/L						
9056A MS	280-162622-7	Sulfate	116		mg/L	50.0	104	87-112			
Batch ID: 576886	Date: 06/02/2022 23:53										
9056A	280-162622-13	Sulfate	32		mg/L						M
9056A MS	280-162622-13	Sulfate	81.4		mg/L	50.0	99	87-112			M
Batch ID: 576714	Date: 05/31/2022 16:53										
9060A	280-162622-1	Dissolved Organic Carbon - Quad	5.7		mg/L						
9060A MS	280-162622-1	Dissolved Organic Carbon - Quad	30.5		mg/L	25.0	99	88-112			
Batch ID: 576714	Date: 05/31/2022 20:41										
9060A	280-162622-11	Dissolved Organic Carbon - Quad	3.6		mg/L						
9060A MS	280-162622-11	Dissolved Organic Carbon - Quad	28.2		mg/L	25.0	98	88-112			

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

FORM V-IN

5-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 577123	Date: 06/03/2022 18:02		Prep Batch: 576945		Date: 06/02/2022 15:03						
351.2	280-162622-1 MSD	Nitrogen, Total Kjeldahl	4.39		mg/L	3.00	103	90-110	0	25	
Batch ID: 577123	Date: 06/03/2022 18:10		Prep Batch: 576946		Date: 06/02/2022 15:06						
351.2	280-162622-11 MSD	Nitrogen, Total Kjeldahl	1.73		mg/L	3.00	58	90-110	0	25	J1
Batch ID: 577382	Date: 06/07/2022 14:46										
353.2	280-162622-19 MSD	Nitrate Nitrite as N	3.97		mg/L	4.00	88	90-110	0	10	J1
Batch ID: 577382	Date: 06/07/2022 15:26										
353.2	280-162622-7 MSD	Nitrate Nitrite as N	17.6		mg/L	8.00	81	90-110	1	10	J1
Batch ID: 575993	Date: 05/24/2022 11:10		Prep Batch: 575967		Date: 05/24/2022 09:13						
9034	280-162622-6 MSD	Sulfide	16.8		mg/L	19.8	85	44-110	40	20	J1
Batch ID: 576720	Date: 06/01/2022 23:56										
9056A	280-162622-7 MSD	Sulfate	118		mg/L	50.0	109	87-112	2	10	
Batch ID: 576886	Date: 06/03/2022 00:09										
9056A	280-162622-13 MSD	Sulfate	82.0		mg/L	50.0	101	87-112	1	10	M
Batch ID: 576714	Date: 05/31/2022 17:08										
9060A	280-162622-1 MSD	Dissolved Organic Carbon - Quad	30.6		mg/L	25.0	100	88-112	0	15	
Batch ID: 576714	Date: 05/31/2022 20:55										
9060A	280-162622-11 MSD	Dissolved Organic Carbon - Quad	28.0		mg/L	25.0	97	88-112	1	15	

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

FORM V-IN

6-IN
DUPLICATE
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Matrix: Water

Method	Client Sample ID	Lab Sample ID	Analyte	Result	Unit	RPD	RPD Limit	Qual
Batch ID: 576720 Date: 06/01/2022 23:24								
9056A	G0024-22A	280-162622-7	Sulfate	64	mg/L			
9056A	G0024-22A	280-162622-7 DU	Sulfate	64.2	mg/L	0.05	10	
Batch ID: 576886 Date: 06/02/2022 23:37								
9056A	G0069-22A	280-162622-13	Sulfate	32	mg/L			
9056A	G0069-22A	280-162622-13 DU	Sulfate	31.6	mg/L	0.3	10	M
Batch ID: 576371 Date: 05/26/2022 17:01								
SM 2320B	G0111-22A	280-162622-17	Total Alkalinity as CaCO3	900	mg/L			
SM 2320B	G0111-22A	280-162622-17 DU	Total Alkalinity as CaCO3	907	mg/L	1	10	

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

FORM VI-IN

7A-IN
LAB CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 577536	Date: 06/08/2022 13:32										
						LCS Source: 350.1 cal_00539					
350.1	LCS 280-577536/18	Ammonia	2.46		mg/L	2.50	98	90-110	3	10	
Batch ID: 577536	Date: 06/08/2022 14:50										
						LCS Source: 350.1 cal_00539					
350.1	LCS 280-577536/57	Ammonia	2.56		mg/L	2.50	102	90-110	1	10	
Batch ID: 577664	Date: 06/09/2022 11:44										
						LCS Source: 350.1 cal_00539					
350.1	LCS 280-577664/54	Ammonia	2.54		mg/L	2.50	102	90-110	0	10	
Batch ID: 577123	Date: 06/03/2022 17:55	Prep Batch: 576945	Date: 06/02/2022 15:03								
						LCS Source: TKN 25ppm_00832					
351.2	LCS 280-576945/1-A	Nitrogen, Total Kjeldahl	6.28		mg/L	6.00	105	90-110			
Batch ID: 577123	Date: 06/03/2022 18:08	Prep Batch: 576946	Date: 06/02/2022 15:06								
						LCS Source: TKN 25ppm_00832					
351.2	LCS 280-576946/1-A	Nitrogen, Total Kjeldahl	6.19		mg/L	6.00	103	90-110			
Batch ID: 577382	Date: 06/07/2022 13:50										
						LCS Source: NXN CAL INT_00623					
353.2	LCS 280-577382/59	Nitrate Nitrite as N	4.87		mg/L	5.00	97	90-110			
Batch ID: 577382	Date: 06/07/2022 15:18										
						LCS Source: NXN CAL INT_00623					
353.2	LCS 280-577382/103	Nitrate Nitrite as N	4.73		mg/L	5.00	95	90-110			
Batch ID: 575993	Date: 05/24/2022 11:10	Prep Batch: 575967	Date: 05/24/2022 09:13								
						LCS Source: SFD CAL INT_02185					
9034	LCS 280-575967/1-A	Sulfide	16.0		mg/L	19.8	81	44-110			
Batch ID: 576138	Date: 05/25/2022 10:57	Prep Batch: 576110	Date: 05/25/2022 09:18								
						LCS Source: SFD CAL INT_02186					
9034	LCS 280-576110/1-A	Sulfide	14.4		mg/L	19.8	73	44-110			
Batch ID: 576720	Date: 06/01/2022 14:29										
						LCS Source: IC LCS_01879					
9056A	LCS 280-576720/4	Sulfate	101		mg/L	100	101	87-112	0	10	M
Batch ID: 576886	Date: 06/02/2022 11:54										
						LCS Source: IC LCS_01879					
9056A	LCS 280-576886/4	Sulfate	99.1		mg/L	100	99	87-112	1	10	M

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 Denver Job No.: 280-162622-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 576886	Date: 06/02/2022 22:34										
						LCS Source: IC LCS_01879					
9056A	LCS 280-576886/50	Sulfate	99.7		mg/L	100	100	87-112	0	10	M
Batch ID: 576714	Date: 05/31/2022 16:07										
						LCS Source: TOC LCS Std_00054					
9060A	LCS 280-576568/1-A	Dissolved Organic Carbon - Quad	24.7		mg/L	25.0	99	88-112			
Batch ID: 576371	Date: 05/26/2022 12:59										
						LCS Source: Alk daily lcs_01041					
SM 2320B	LCS 280-576371/4	Total Alkalinity as CaCO3	197		mg/L	200	99	89-109	0	10	
Batch ID: 576371	Date: 05/26/2022 16:32										
						LCS Source: Alk daily lcs_01041					
SM 2320B	LCS 280-576371/31	Total Alkalinity as CaCO3	200		mg/L	200	100	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 Denver Job No.: 280-162622-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 577536	Date: 06/08/2022 13:34										
						LCSD Source: 350.1 cal_00539					
350.1	LCSD 280-577536/19	Ammonia	2.53		mg/L	2.50	101	90-110	3	10	
Batch ID: 577536	Date: 06/08/2022 14:52										
						LCSD Source: 350.1 cal_00539					
350.1	LCSD 280-577536/58	Ammonia	2.53		mg/L	2.50	101	90-110	1	10	
Batch ID: 577664	Date: 06/09/2022 11:46										
						LCSD Source: 350.1 cal_00539					
350.1	LCSD 280-577664/55	Ammonia	2.53		mg/L	2.50	101	90-110	0	10	
Batch ID: 576720	Date: 06/01/2022 14:45										
						LCSD Source: IC LCS_01879					
9056A	LCSD 280-576720/5	Sulfate	101		mg/L	100	101	87-112	0	10	M
Batch ID: 576886	Date: 06/02/2022 12:10										
						LCSD Source: IC LCS_01879					
9056A	LCSD 280-576886/5	Sulfate	99.8		mg/L	100	100	87-112	1	10	
Batch ID: 576886	Date: 06/02/2022 22:50										
						LCSD Source: IC LCS_01879					
9056A	LCSD 280-576886/51	Sulfate	99.9		mg/L	100	100	87-112	0	10	M
Batch ID: 576371	Date: 05/26/2022 13:06										
						LCSD Source: Alk daily lcs_01041					
SM 2320B	LCSD 280-576371/5	Total Alkalinity as CaCO3	198		mg/L	200	99	89-109	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 Denver Job No.: 280-162622-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 576720	Date: 06/01/2022 14:13										
						LCS Source: IC CAL cl/so4_00424					
9056A	MRL 280-576720/3	Sulfate	4.19	J	mg/L	5.00	84	50-150			M
Batch ID: 576886	Date: 06/02/2022 11:38										
						LCS Source: IC CAL cl/so4_00424					
9056A	MRL 280-576886/3	Sulfate	4.06	J	mg/L	5.00	81	50-150			M

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 Denver Job Number: 280-162622-1

SDG Number:

Matrix: Water Instrument ID: WC_Alp 4

Method: 350.1 DL Date: 04/29/2022 13:46

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Ammonia		0.1	0.029

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job Number: 280-162622-1

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 Denver Job Number: 280-162622-1

SDG Number:

Matrix: Water Instrument ID: WC_SKALAR_01

Method: 350.1 DL Date: 04/29/2022 13:46

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Ammonia		0.1	0.029

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job Number: 280-162622-1

SDG Number:

Matrix: Water Instrument ID: WC_SKALAR_01

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 Denver Job Number: 280-162622-1

SDG Number:

Matrix: Water Instrument ID: WC_GAL1

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 Denver Job Number: 280-162622-1

SDG Number:

Matrix: Water Instrument ID: WC_GAL1

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 Denver Job Number: 280-162622-1

SDG Number:

Matrix: Water Instrument ID: WC_Alp 2

Method: 353.2 DL Date: 04/15/2022 12:31

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Nitrate Nitrite as N		0.1	0.044

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job Number: 280-162622-1

SDG Number:

Matrix: Water Instrument ID: WC_Alp 2

Method: 353.2 XMDL Date: 04/15/2022 12:31

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Nitrate Nitrite as N		0.1	0.044

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job Number: 280-162622-1

SDG Number:

Matrix: Water Instrument ID: NOEQUIP

Method: 9034 DL Date: 04/15/2022 13:08

Prep Method: 9030B

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Sulfide		4	1.6

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job Number: 280-162622-1

SDG Number:

Matrix: Water Instrument ID: NOEQUIP

Method: 9034 XMDL Date: 04/15/2022 13:09

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Sulfide		4	1.6

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job Number: 280-162622-1

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 Denver Job Number: 280-162622-1

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 Denver Job Number: 280-162622-1

SDG Number:

Matrix: Water Instrument ID: WC_SHI3

Method: 9060A DL Date: 06/21/2019 00:00

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Dissolved Organic Carbon - Quad		1	0.345

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY - DISSOLVED

Lab Name: Eurofins Denver Job Number: 280-162622-1

SDG Number:

Matrix: Water Instrument ID: WC_SHI3

Method: 9060A XMDL Date: 06/21/2019 00:00

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Dissolved Organic Carbon - Quad		1	0.345

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job Number: 280-162622-1

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 Denver Job Number: 280-162622-1

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 Denver Job No.: 280-162622-1

SDG No.:

Prep Method: 351.2

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-576945/1-A	06/02/2022 15:03	576945		25	25
MB 280-576945/2-A	06/02/2022 15:03	576945		25	25
280-162622-2	06/02/2022 15:03	576945		5	25
280-162622-3	06/02/2022 15:03	576945		25	25
280-162622-4	06/02/2022 15:03	576945		25	25
280-162622-5	06/02/2022 15:03	576945		25	25
280-162622-1	06/02/2022 15:03	576945		25	25
280-162622-1 MS	06/02/2022 15:03	576945		25	25
280-162622-1 MSD	06/02/2022 15:03	576945		25	25
280-162622-6	06/02/2022 15:03	576945		25	25
280-162622-7	06/02/2022 15:03	576945		25	25
280-162622-8	06/02/2022 15:03	576945		25	25
280-162622-9	06/02/2022 15:03	576945		25	25
280-162622-10	06/02/2022 15:03	576945		25	25
280-162622-12	06/02/2022 15:03	576945		25	25
280-162622-16	06/02/2022 15:03	576945		25	25
280-162622-17	06/02/2022 15:03	576945		25	25
280-162622-18	06/02/2022 15:03	576945		25	25

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Prep Method: 351.2

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-576946/1-A	06/02/2022 15:06	576946		25	25
MB 280-576946/2-A	06/02/2022 15:06	576946		25	25
280-162622-11	06/02/2022 15:06	576946		25	25
280-162622-11 MS	06/02/2022 15:06	576946		25	25
280-162622-11 MSD	06/02/2022 15:06	576946		25	25

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Prep Method: 9030B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-575967/1-A	05/24/2022 09:13	575967		50	50
MB 280-575967/2-A	05/24/2022 09:13	575967		50	50
280-162622-6	05/24/2022 09:13	575967		50	50
280-162622-6 MS	05/24/2022 09:13	575967		50	50
280-162622-6 MSD	05/24/2022 09:13	575967		50	50
280-162622-7	05/24/2022 09:13	575967		50	50
280-162622-8	05/24/2022 09:13	575967		50	50
280-162622-9	05/24/2022 09:13	575967		50	50
280-162622-10	05/24/2022 09:13	575967		50	50
280-162622-11	05/24/2022 09:13	575967		50	50
280-162622-12	05/24/2022 09:13	575967		50	50

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Prep Method: 9030B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-576110/1-A	05/25/2022 09:18	576110		50	50
MB 280-576110/2-A	05/25/2022 09:18	576110		50	50
280-162622-1	05/25/2022 09:18	576110		50	50
280-162622-2	05/25/2022 09:18	576110		50	50
280-162622-3	05/25/2022 09:18	576110		50	50
280-162622-4	05/25/2022 09:18	576110		50	50
280-162622-5	05/25/2022 09:18	576110		50	50
280-162622-16	05/25/2022 09:18	576110		50	50
280-162622-17	05/25/2022 09:18	576110		50	50
280-162622-18	05/25/2022 09:18	576110		50	50

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: WC_Alp 4 Analysis Method: 350.1

Start Date: 06/08/2022 12:58 End Date: 06/08/2022 17:01

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
ZZZZZZ			12:58																									
ZZZZZZ			13:00																									
ZZZZZZ			13:02																									
IC 280-577536/4			13:04	X																								
IC 280-577536/5			13:06	X																								
IC 280-577536/6			13:08	X																								
IC 280-577536/7			13:10	X																								
IC 280-577536/8			13:12	X																								
IC 280-577536/9			13:14	X																								
IC 280-577536/10			13:16	X																								
IC 280-577536/11			13:18	X																								
ZZZZZZ			13:20																									
ZZZZZZ			13:22																									
ICV 280-577536/14	1		13:24	X																								
ICVL 280-577536/15	1		13:26	X																								
ICB 280-577536/16	1		13:28	X																								
ZZZZZZ			13:30																									
LCS 280-577536/18	1	T	13:32	X																								
LCSD 280-577536/19	1	T	13:34	X																								
MB 280-577536/20	1	T	13:36	X																								
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																									
CCVL 280-577536/33	1		14:02	X																								
CCV 280-577536/34	1		14:04	X																								
CCB 280-577536/35	1		14:06	X																								
ZZZZZZ			14:08																									
ZZZZZZ			14:10																									
ZZZZZZ			14:12																									
ZZZZZZ			14:14																									
ZZZZZZ			14:16																									
ZZZZZZ			14:18																									

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: WC_Alp 4 Analysis Method: 350.1

Start Date: 06/08/2022 12:58 End Date: 06/08/2022 17:01

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
ZZZZZZ			14:20																									
280-162622-2	20	T	14:22	X																								
280-162622-3	1	T	14:24	X																								
280-162622-4	5	T	14:26	X																								
280-162622-5	1	T	14:28	X																								
ZZZZZZ			14:30																									
ZZZZZZ			14:32																									
CCVL 280-577536/49	1		14:34	X																								
CCV 280-577536/50	1		14:36	X																								
CCB 280-577536/51	1		14:38	X																								
ZZZZZZ			14:40																									
280-162622-6	1	T	14:42	X																								
280-162622-7	1	T	14:44	X																								
280-162622-8	1	T	14:46	X																								
280-162622-9	1	T	14:48	X																								
LCS 280-577536/57	1	T	14:50	X																								
LCSD 280-577536/58	1	T	14:52	X																								
MB 280-577536/59	1	T	14:54	X																								
ZZZZZZ			14:56																									
ZZZZZZ			14:58																									
ZZZZZZ			15:00																									
ZZZZZZ			15:02																									
ZZZZZZ			15:04																									
CCVL 280-577536/65	1		15:06	X																								
CCV 280-577536/66	1		15:08	X																								
CCB 280-577536/67	1		15:10	X																								
ZZZZZZ			15:12																									
280-162622-10	1	T	15:22	X																								
280-162622-11	1	T	15:24	X																								
280-162622-12	1	T	15:26	X																								
280-162622-16	1	T	15:28	X																								
280-162622-17	1	T	15:30	X																								
280-162622-18	1	T	15:32	X																								
ZZZZZZ			15:34																									
ZZZZZZ			15:36																									
ZZZZZZ			15:38																									
ZZZZZZ			15:40																									
ZZZZZZ			15:42																									
ZZZZZZ			15:44																									
CCVL 280-577536/81	1		15:46	X																								
CCV 280-577536/82	1		15:48	X																								

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: WC_Alp 4 Analysis Method: 350.1

Start Date: 06/08/2022 12:58 End Date: 06/08/2022 17:01

Lab Sample Id	D/F	Type	Time	Analytes
				NH3
CCB 280-577536/83	1		15:50	X
ZZZZZZ			15:52	
ZZZZZZ			15:54	
ZZZZZZ			15:56	
ZZZZZZ			15:58	
ZZZZZZ			16:00	
ZZZZZZ			16:02	
ZZZZZZ			16:04	
ZZZZZZ			16:06	
ZZZZZZ			16:08	
ZZZZZZ			16:10	
ZZZZZZ			16:12	
ZZZZZZ			16:14	
ZZZZZZ			16:16	
CCVL 280-577536/97			16:18	
CCV 280-577536/98			16:20	
CCB 280-577536/99			16:22	
ZZZZZZ			16:24	
ZZZZZZ			16:26	
ZZZZZZ			16:33	
ZZZZZZ			16:35	
ZZZZZZ			16:37	
ZZZZZZ			16:39	
ZZZZZZ			16:41	
ZZZZZZ			16:43	
ZZZZZZ			16:45	
ZZZZZZ			16:47	
ZZZZZZ			16:49	
ZZZZZZ			16:51	
ZZZZZZ			16:53	
CCVL 280-577536/113			16:55	
CCV 280-577536/114			16:57	
CCB 280-577536/115			16:59	
ZZZZZZ			17:01	

Prep Types:
T = Total/NA

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: WC_SKALAR_01 Analysis Method: 350.1

Start Date: 06/09/2022 09:22 End Date: 06/09/2022 16:50

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
ZZZZZZ			09:22																									
ZZZZZZ			09:24																									
ZZZZZZ			09:27																									
ZZZZZZ			09:30																									
ZZZZZZ			09:34																									
ZZZZZZ			09:35																									
ZZZZZZ			09:37																									
ZZZZZZ			09:41																									
ZZZZZZ			09:43																									
ZZZZZZ			09:46																									
ZZZZZZ			09:49																									
ZZZZZZ			09:51																									
ZZZZZZ			09:54																									
ICV 280-577664/14	1		09:58	X																								
ICVL 280-577664/15	1		09:59	X																								
ICB 280-577664/16	1		10:02	X																								
ZZZZZZ			10:05																									
ZZZZZZ			10:07																									
MB 280-577664/19	1	T	10:10	X																								
ZZZZZZ			10:13																									
ZZZZZZ			10:15																									
ZZZZZZ			10:18																									
ZZZZZZ			10:20																									
ZZZZZZ			10:23																									
ZZZZZZ			10:26																									
ZZZZZZ			10:29																									
ZZZZZZ			10:31																									
CCV 280-577664/28	1		10:35	X																								
CCVL 280-577664/29			10:36																									
CCB 280-577664/30	1		10:39	X																								
ZZZZZZ			10:42																									
ZZZZZZ			10:44																									
ZZZZZZ			10:47																									
ZZZZZZ			10:50																									
ZZZZZZ			10:53																									
ZZZZZZ			10:56																									
ZZZZZZ			10:58																									
ZZZZZZ			11:01																									
ZZZZZZ			11:03																									
ZZZZZZ			11:06																									
ZZZZZZ			11:09																									

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: WC_SKALAR_01 Analysis Method: 350.1

Start Date: 06/09/2022 09:22 End Date: 06/09/2022 16:50

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
CCV 280-577664/42	1		11:12	X																								
CCVL 280-577664/43			11:14																									
CCB 280-577664/44	1		11:17	X																								
ZZZZZZ			11:19																									
ZZZZZZ			11:22																									
ZZZZZZ			11:25																									
ZZZZZZ			11:28																									
ZZZZZZ			11:30																									
ZZZZZZ			11:33																									
ZZZZZZ			11:36																									
ZZZZZZ			11:38																									
ZZZZZZ			11:41																									
LCS 280-577664/54	1	T	11:44	X																								
LCSD 280-577664/55	1	T	11:46	X																								
MB 280-577664/56	1	T	11:49	X																								
ZZZZZZ			11:51																									
CCV 280-577664/58	1		11:55	X																								
CCVL 280-577664/59	1		11:57	X																								
CCB 280-577664/60	1		11:59	X																								
ZZZZZZ			12:02																									
ZZZZZZ			12:04																									
ZZZZZZ			12:07																									
ZZZZZZ			12:10																									
ZZZZZZ			12:13																									
ZZZZZZ			12:16																									
280-162622-1	2	T	12:18	X																								
ZZZZZZ			12:21																									
ZZZZZZ			12:24																									
ZZZZZZ			12:27																									
ZZZZZZ			12:29																									
CCV 280-577664/72	1		12:32	X																								
CCVL 280-577664/73	1		12:34	X																								
CCB 280-577664/74	1		12:37	X																								
ZZZZZZ			12:40																									
ZZZZZZ			12:42																									
ZZZZZZ			12:44																									
ZZZZZZ			12:48																									
ZZZZZZ			12:50																									
ZZZZZZ			12:53																									
ZZZZZZ			12:55																									
ZZZZZZ			12:58																									

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: WC_SKALAR_01 Analysis Method: 350.1

Start Date: 06/09/2022 09:22 End Date: 06/09/2022 16:50

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
ZZZZZZ			13:00																									
ZZZZZZ			13:04																									
ZZZZZZ			13:06																									
ZZZZZZ			13:09																									
ZZZZZZ			13:11																									
CCV 280-577664/88			13:15																									
CCVL 280-577664/89			13:16																									
CCB 280-577664/90			13:19																									
ZZZZZZ			13:22																									
ZZZZZZ			13:25																									
ZZZZZZ			13:27																									
ZZZZZZ			13:30																									
ZZZZZZ			13:33																									
ZZZZZZ			13:35																									
ZZZZZZ			13:38																									
ZZZZZZ			13:41																									
ZZZZZZ			13:43																									
ZZZZZZ			13:46																									
ZZZZZZ			13:49																									
CCV 280-577664/102			13:52																									
CCVL 280-577664/103			13:54																									
CCB 280-577664/104			13:58																									
ZZZZZZ			14:01																									
ZZZZZZ			14:04																									
ZZZZZZ			14:06																									
ZZZZZZ			14:09																									
ZZZZZZ			14:12																									
ZZZZZZ			14:15																									
ZZZZZZ			14:18																									
ZZZZZZ			14:21																									
ZZZZZZ			14:24																									
ZZZZZZ			14:26																									
ZZZZZZ			14:29																									
ZZZZZZ			14:31																									
ZZZZZZ			14:34																									
CCV 280-577664/118			14:36																									
CCVL 280-577664/119			14:39																									
CCB 280-577664/120			14:42																									
ZZZZZZ			14:45																									
ZZZZZZ			14:47																									
ZZZZZZ			14:50																									

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: WC_SKALAR_01 Analysis Method: 350.1

Start Date: 06/09/2022 09:22 End Date: 06/09/2022 16:50

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
ZZZZZZ			14:53																									
ZZZZZZ			14:56																									
ZZZZZZ			14:58																									
ZZZZZZ			15:01																									
ZZZZZZ			15:03																									
ZZZZZZ			15:06																									
ZZZZZZ			15:09																									
ZZZZZZ			15:11																									
CCV 280-577664/132			15:14																									
CCVL 280-577664/133			15:17																									
CCB 280-577664/134			15:20																									
ZZZZZZ			15:22																									
ZZZZZZ			15:25																									
ZZZZZZ			15:29																									
ZZZZZZ			15:31																									
ZZZZZZ			15:33																									
ZZZZZZ			15:35																									
ZZZZZZ			15:38																									
ZZZZZZ			15:40																									
ZZZZZZ			15:44																									
ZZZZZZ			15:47																									
ZZZZZZ			15:49																									
ZZZZZZ			15:52																									
ZZZZZZ			15:54																									
CCV 280-577664/148			15:56																									
CCVL 280-577664/149			15:59																									
CCB 280-577664/150			16:02																									
ZZZZZZ			16:05																									
ZZZZZZ			16:08																									
ZZZZZZ			16:10																									
ZZZZZZ			16:12																									
ZZZZZZ			16:16																									
ZZZZZZ			16:18																									
ZZZZZZ			16:21																									
ZZZZZZ			16:24																									
ZZZZZZ			16:26																									
ZZZZZZ			16:29																									
ZZZZZZ			16:32																									
ZZZZZZ			16:34																									
CCV 280-577664/163			16:38																									
CCVL 280-577664/164			16:40																									

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: WC_SKALAR_01 Analysis Method: 350.1

Start Date: 06/09/2022 09:22 End Date: 06/09/2022 16:50

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
CCB 280-577664/165			16:42																									
ZZZZZZ			16:45																									
ZZZZZZ			16:47																									
ZZZZZZ			16:50																									

Prep Types:
T = Total/NA

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: WC_GAL1 Analysis Method: 351.2

Start Date: 06/01/2022 16:45 End Date: 06/03/2022 19:07

Lab Sample Id	D/F	Type	Time	Analytes
				TKN
IC 280-576527/1-A			16:45	X
IC 280-576527/2-A			16:45	X
IC 280-576527/3-A			16:46	X
IC 280-576527/4-A			16:46	X
IC 280-576527/5-A			16:46	X
IC 280-576527/6-A			16:47	X
ICV 280-576527/7-A	1		17:54	X
ICB 280-576527/8-A	1		17:54	X
LCS 280-576945/1-A	1	T	17:55	X
MB 280-576945/2-A	1	T	17:55	X
ZZZZZZ			17:56	
ZZZZZZ			17:56	
ZZZZZZ			17:56	
ZZZZZZ			17:56	
ZZZZZZ			17:57	
280-162622-2	1	T	17:59	X
280-162622-3	1	T	18:00	X
CCV 280-576527/9-A	1		18:00	X
CCB 280-576527/10-A	1		18:00	X
280-162622-4	1	T	18:01	X
280-162622-5	1	T	18:01	X
280-162622-1	1	T	18:02	X
280-162622-1 MS	1	T	18:02	X
280-162622-1 MSD	1	T	18:02	X
280-162622-6	1	T	18:03	X
280-162622-7	1	T	18:04	X
280-162622-8	1	T	18:04	X
280-162622-9	1	T	18:04	X
280-162622-10	1	T	18:04	X
CCV 280-576527/9-A	1		18:05	X
CCB 280-576527/10-A	1		18:06	X
280-162622-12	1	T	18:06	X
280-162622-16	1	T	18:06	X
280-162622-17	1	T	18:07	X
280-162622-18	1	T	18:07	X
LCS 280-576946/1-A	1	T	18:08	X
MB 280-576946/2-A	1	T	18:08	X
280-162622-11	1	T	18:09	X
280-162622-11 MS	1	T	18:09	X
280-162622-11 MSD	1	T	18:10	X
ZZZZZZ			18:10	

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: WC_GAL1 Analysis Method: 351.2

Start Date: 06/01/2022 16:45 End Date: 06/03/2022 19:07

Lab Sample Id	D/F	Type	Time	Analytes																								
				TKN																								
CCV 280-576527/9-A	1		18:11	X																								
CCB 280-576527/10-A	1		18:11	X																								
ZZZZZZ			18:11																									
ZZZZZZ			18:13																									
ZZZZZZ			18:13																									
ZZZZZZ			18:13																									
ZZZZZZ			18:14																									
ZZZZZZ			18:15																									
ZZZZZZ			18:15																									
ZZZZZZ			18:15																									
CCV 280-576527/9-A			18:18																									
CCB 280-576527/10-A			18:19																									
ZZZZZZ			18:19																									
ZZZZZZ			18:19																									
ZZZZZZ			18:20																									
ZZZZZZ			18:20																									
ZZZZZZ			18:20																									
ZZZZZZ			18:21																									
CCV 280-576527/9-A			18:22																									
CCB 280-576527/10-A			18:22																									
ZZZZZZ			18:25																									
ZZZZZZ			18:26																									
ZZZZZZ			18:35																									
ZZZZZZ			18:42																									
ZZZZZZ			18:43																									
ZZZZZZ			18:44																									
CCV 280-576527/9-A			19:07																									
CCB 280-576527/10-A			19:07																									

Prep Types:
T = Total/NA

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: WC_Alp 2 Analysis Method: 353.2

Start Date: 06/07/2022 11:53 End Date: 06/07/2022 15:54

Lab Sample Id	D/F	Type	Time	Analytes
				NNO32
ZZZZZZ			11:53	
ZZZZZZ			11:55	
ZZZZZZ			11:57	
ZZZZZZ			11:59	
IC 280-577382/5			12:01	X
IC 280-577382/6			12:03	X
IC 280-577382/7			12:05	X
IC 280-577382/8			12:07	X
IC 280-577382/9			12:09	X
IC 280-577382/10			12:11	X
IC 280-577382/11			12:13	X
IC 280-577382/12			12:15	X
IC 280-577382/13			12:17	X
ZZZZZZ			12:19	
ZZZZZZ			12:21	
ZZZZZZ			12:23	
ICV 280-577382/17	1		12:25	X
ICVL 280-577382/18	1		12:27	X
ICB 280-577382/19	1		12:29	X
ZZZZZZ			12:31	
ZZZZZZ			12:33	
ZZZZZZ			12:35	
ZZZZZZ			12:37	
ZZZZZZ			12:39	
ZZZZZZ			12:41	
ZZZZZZ			12:43	
ZZZZZZ			12:45	
ZZZZZZ			12:47	
ZZZZZZ			12:49	
ZZZZZZ			12:51	
ZZZZZZ			12:53	
ZZZZZZ			12:55	
RINSE 280-577382/33			12:57	
ZZZZZZ			12:59	
CCV 280-577382/35			13:01	
CCVL 280-577382/36			13:03	
CCB 280-577382/37			13:05	
ZZZZZZ			13:07	
ZZZZZZ			13:09	

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: WC_Alp 2 Analysis Method: 353.2

Start Date: 06/07/2022 11:53 End Date: 06/07/2022 15:54

Lab Sample Id	D/F	Type	Time	Analytes
				NNO32
ZZZZZZ			13:11	
ZZZZZZ			13:13	
ZZZZZZ			13:15	
ZZZZZZ			13:18	
ZZZZZZ			13:20	
ZZZZZZ			13:22	
ZZZZZZ			13:24	
ZZZZZZ			13:26	
ZZZZZZ			13:28	
RINSE 280-577382/49			13:30	
ZZZZZZ			13:32	
CCV 280-577382/51	1		13:34	X
CCVL 280-577382/52			13:36	
CCB 280-577382/53	1		13:38	X
ZZZZZZ			13:40	
ZZZZZZ			13:42	
ZZZZZZ			13:44	
ZZZZZZ			13:46	
ZZZZZZ			13:48	
LCS 280-577382/59	1	T	13:50	X
MB 280-577382/60	1	T	13:52	X
ZZZZZZ			13:54	
ZZZZZZ			13:56	
ZZZZZZ			13:58	
ZZZZZZ			14:00	
RINSE 280-577382/65			14:02	
ZZZZZZ			14:04	
CCV 280-577382/67	1		14:06	X
CCVL 280-577382/68	1		14:08	X
CCB 280-577382/69	1		14:10	X
ZZZZZZ			14:12	
ZZZZZZ			14:14	
ZZZZZZ			14:16	
ZZZZZZ			14:18	
ZZZZZZ			14:20	
ZZZZZZ			14:22	
280-162622-13	1	T	14:24	X
280-162622-14	1	T	14:26	X
280-162622-15	1	T	14:28	X

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: WC_Alp 2 Analysis Method: 353.2

Start Date: 06/07/2022 11:53 End Date: 06/07/2022 15:54

Lab Sample Id	D/F	Type	Time	Analytes
				NNO32
280-162622-19	1	T	14:30	X
280-162622-19 MS	1	T	14:32	X
RINSE 280-577382/81			14:34	
ZZZZZZ			14:36	
CCV 280-577382/83	1		14:38	X
CCVL 280-577382/84	1		14:40	X
CCB 280-577382/85	1		14:42	X
ZZZZZZ			14:44	
280-162622-19 MSD	1	T	14:46	X
280-162622-20	1	T	14:48	X
280-162622-21	5	T	14:50	X
280-162622-26	1	T	14:52	X
280-162622-1	1	T	14:54	X
280-162622-2	1	T	14:56	X
280-162622-3	1	T	14:58	X
280-162622-4	1	T	15:00	X
280-162622-5	1	T	15:02	X
280-162622-6	1	T	15:04	X
RINSE 280-577382/97			15:06	
ZZZZZZ			15:08	
CCV 280-577382/99	1		15:10	X
CCVL 280-577382/100	1		15:12	X
CCB 280-577382/101	1		15:14	X
ZZZZZZ			15:16	
LCS 280-577382/103	1	T	15:18	X
MB 280-577382/104	1	T	15:20	X
280-162622-7	2	T	15:22	X
280-162622-7 MS	2	T	15:24	X
280-162622-7 MSD	2	T	15:26	X
280-162622-8	1	T	15:28	X
280-162622-9	1	T	15:30	X
280-162622-10	1	T	15:32	X
280-162622-11	5	T	15:34	X
280-162622-12	5	T	15:36	X
280-162622-16	1	T	15:38	X
280-162622-17	1	T	15:40	X
280-162622-18	1	T	15:42	X
RINSE 280-577382/116			15:44	
ZZZZZZ			15:46	

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: WC_Alp 2 Analysis Method: 353.2

Start Date: 06/07/2022 11:53 End Date: 06/07/2022 15:54

Lab Sample Id	D/F	Type	Time	Analytes
				NNO32
CCV 280-577382/118	1		15:48	X
CCVL 280-577382/119	1		15:50	X
CCB 280-577382/120	1		15:52	X
ZZZZZZ			15:54	

Prep Types:
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: 9034

Start Date: 05/24/2022 11:10 End Date: 05/24/2022 11:10

Lab Sample Id	D/F	Type	Time	Analytes																								
				S2																								
LCS 280-575967/1-A	1	T	11:10	X																								
MB 280-575967/2-A	1	T	11:10	X																								
280-162622-6	1	T	11:10	X																								
280-162622-6 MS	1	T	11:10	X																								
280-162622-6 MSD	1	T	11:10	X																								
280-162622-7	1	T	11:10	X																								
280-162622-8	1	T	11:10	X																								
280-162622-9	1	T	11:10	X																								
280-162622-10	1	T	11:10	X																								
280-162622-11	1	T	11:10	X																								
280-162622-12	1	T	11:10	X																								
ZZZZZZ			11:10																									
ZZZZZZ			11:10																									
ZZZZZZ			11:10																									
ZZZZZZ			11:10																									

Prep Types:
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: 9034

Start Date: 05/25/2022 10:57 End Date: 05/25/2022 10:57

Lab Sample Id	D/F	Type	Time	Analytes																								
				S2																								
LCS 280-576110/1-A	1	T	10:57	X																								
MB 280-576110/2-A	1	T	10:57	X																								
ZZZZZZ			10:57																									
ZZZZZZ			10:57																									
ZZZZZZ			10:57																									
ZZZZZZ			10:57																									
ZZZZZZ			10:57																									
280-162622-1	1	T	10:57	X																								
280-162622-2	1	T	10:57	X																								
280-162622-3	1	T	10:57	X																								
280-162622-4	1	T	10:57	X																								
280-162622-5	1	T	10:57	X																								
280-162622-16	1	T	10:57	X																								
280-162622-17	1	T	10:57	X																								
280-162622-18	1	T	10:57	X																								

Prep Types:
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Method: 9056A

Start Date: 05/16/2022 17:34 End Date: 05/18/2022 08:17

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
STD 280-575123/2 IC	1		17:34	X																								
STD 280-575123/3 IC	1		17:50	X																								
STD 280-575123/4 IC	1		18:06	X																								
STD 280-575123/5 IC	1		18:22	X																								
STD 280-575123/6 IC	1		18:38	X																								
STD 280-575123/7 IC	1		18:54	X																								
ICV 280-575123/8	1		19:10	X																								
ICB 280-575123/9	1		19:26	X																								
ZZZZZZ			19:42																									
ZZZZZZ			19:58																									
ZZZZZZ			20:14																									
ZZZZZZ			20:30																									
ZZZZZZ			11:58																									
ZZZZZZ			12:14																									
ZZZZZZ			12:30																									
ZZZZZZ			12:46																									
ZZZZZZ			13:02																									
ZZZZZZ			13:18																									
ZZZZZZ			13:34																									
ZZZZZZ			13:50																									
ZZZZZZ			14:06																									
ZZZZZZ			14:22																									
CCV 280-575123/24			14:38																									
CCB 280-575123/25			14:54																									
ZZZZZZ			15:10																									
ZZZZZZ			15:26																									
ZZZZZZ			15:43																									
ZZZZZZ			15:59																									
ZZZZZZ			16:15																									
ZZZZZZ			16:31																									
ZZZZZZ			16:47																									
ZZZZZZ			17:03																									
ZZZZZZ			17:19																									
ZZZZZZ			17:35																									
CCV 280-575123/36			17:51																									
CCB 280-575123/37			18:07																									
ZZZZZZ			18:23																									
ZZZZZZ			18:39																									
ZZZZZZ			18:55																									
ZZZZZZ			19:11																									
ZZZZZZ			19:27																									

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13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Method: 9056A

Start Date: 05/16/2022 17:34 End Date: 05/18/2022 08:17

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
ZZZZZZ			19:43																									
ZZZZZZ			19:59																									
ZZZZZZ			20:15																									
ZZZZZZ			20:31																									
ZZZZZZ			20:47																									
CCV 280-575123/48			21:03																									
CCB 280-575123/49			21:19																									
ZZZZZZ			21:35																									
ZZZZZZ			21:51																									
ZZZZZZ			22:07																									
ZZZZZZ			22:23																									
ZZZZZZ			22:39																									
ZZZZZZ			22:55																									
ZZZZZZ			23:11																									
ZZZZZZ			23:27																									
ZZZZZZ			23:43																									
ZZZZZZ			23:59																									
CCV 280-575123/60			00:15																									
CCB 280-575123/61			00:31																									
ZZZZZZ			00:47																									
ZZZZZZ			01:03																									
ZZZZZZ			01:19																									
ZZZZZZ			01:35																									
ZZZZZZ			01:51																									
ZZZZZZ			02:07																									
ZZZZZZ			02:23																									
ZZZZZZ			02:39																									
ZZZZZZ			02:55																									
ZZZZZZ			03:11																									
CCV 280-575123/72			03:27																									
CCB 280-575123/73			03:43																									
ZZZZZZ			03:59																									
ZZZZZZ			04:15																									
ZZZZZZ			04:31																									
ZZZZZZ			04:47																									
ZZZZZZ			05:03																									
ZZZZZZ			05:19																									
ZZZZZZ			05:36																									
ZZZZZZ			05:52																									
ZZZZZZ			06:08																									
ZZZZZZ			06:24																									

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13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Method: 9056A

Start Date: 05/16/2022 17:34 End Date: 05/18/2022 08:17

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
CCV 280-575123/84			06:40																									
CCB 280-575123/85			06:56																									
ZZZZZZ			07:12																									
ZZZZZZ			07:29																									
ZZZZZZ			07:45																									
CCV 280-575123/121			08:01																									
CCB 280-575123/122			08:17																									

Prep Types:
=

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Method: 9056A

Start Date: 06/01/2022 13:41 End Date: 06/02/2022 06:35

Lab Sample Id	D/F	Type	Time	Analytes
				SO4
CCV 280-576720/1	1		13:41	X
CCB 280-576720/2	1		13:57	X
MRL 280-576720/3	1	T	14:13	X
LCS 280-576720/4	1	T	14:29	X
LCSD 280-576720/5	1	T	14:45	X
MB 280-576720/6	1	T	15:01	X
ZZZZZZ			17:00	
ZZZZZZ			17:16	
ZZZZZZ			17:32	
ZZZZZZ			17:48	
ZZZZZZ			18:04	
ZZZZZZ			18:20	
ZZZZZZ			18:36	
ZZZZZZ			18:52	
ZZZZZZ			19:08	
ZZZZZZ			19:24	
CCV 280-576720/17	1		19:40	X
CCB 280-576720/18	1		19:56	X
ZZZZZZ			20:12	
ZZZZZZ			20:28	
ZZZZZZ			20:44	
280-162622-1	5	T	21:00	X
ZZZZZZ			21:16	
ZZZZZZ			21:32	
ZZZZZZ			21:48	
280-162622-5	5	T	22:04	X
280-162622-6	5	T	22:20	X
280-162622-7	1	T	22:36	X
CCV 280-576720/29	1		22:52	X
CCB 280-576720/30	1		23:08	X
280-162622-7 DU	1	T	23:24	X
280-162622-7 MS	1	T	23:40	X
280-162622-7 MSD	1	T	23:56	X
ZZZZZZ			00:12	
ZZZZZZ			00:28	
280-162622-10	1	T	00:44	X
ZZZZZZ			01:00	
ZZZZZZ			01:16	
ZZZZZZ			01:32	
ZZZZZZ			01:48	
CCV 280-576720/44	1		02:04	X

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Method: 9056A

Start Date: 06/01/2022 13:41 End Date: 06/02/2022 06:35

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
CCB 280-576720/45	1		02:20	X																								
ZZZZZZ			02:36																									
ZZZZZZ			02:52																									
ZZZZZZ			03:08																									
ZZZZZZ			03:24																									
ZZZZZZ			03:40																									
ZZZZZZ			03:56																									
ZZZZZZ			04:12																									
ZZZZZZ			04:28																									
ZZZZZZ			04:44																									
CCV 280-576720/55			05:00																									
CCB 280-576720/56			05:15																									
ZZZZZZ			05:31																									
ZZZZZZ			05:47																									
ZZZZZZ			06:03																									
CCV 280-576720/60			06:19																									
CCB 280-576720/61			06:35																									

Prep Types:
T = Total/NA

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Method: 9056A

Start Date: 06/02/2022 11:06 End Date: 06/03/2022 09:29

Lab Sample Id	D/F	Type	Time	Analytes
				SO4
CCV 280-576886/1	1		11:06	X
CCB 280-576886/2	1		11:22	X
MRL 280-576886/3	1	T	11:38	X
LCS 280-576886/4	1	T	11:54	X
LCSD 280-576886/5	1	T	12:10	X
MB 280-576886/6	1	T	12:26	X
ZZZZZZ			12:42	
ZZZZZZ			12:58	
ZZZZZZ			13:14	
ZZZZZZ			13:30	
ZZZZZZ			13:46	
ZZZZZZ			14:02	
280-162622-2	5	T	14:18	X
280-162622-3	5	T	14:34	X
280-162622-4	5	T	14:50	X
280-162622-8	5	T	15:06	X
CCV 280-576886/17	1		15:22	X
CCB 280-576886/18	1		15:38	X
280-162622-9	5	T	15:54	X
ZZZZZZ			16:10	
ZZZZZZ			16:26	
ZZZZZZ			16:42	
ZZZZZZ			16:58	
ZZZZZZ			17:14	
ZZZZZZ			17:30	
ZZZZZZ			17:46	
ZZZZZZ			18:02	
ZZZZZZ			18:18	
CCV 280-576886/29	1		18:34	X
CCB 280-576886/30	1		18:50	X
ZZZZZZ			19:06	
ZZZZZZ			19:22	
ZZZZZZ			19:38	
ZZZZZZ			19:54	
ZZZZZZ			20:10	
ZZZZZZ			20:26	
ZZZZZZ			20:42	
ZZZZZZ			20:58	
ZZZZZZ			21:14	
280-162622-11	5	T	21:30	X
CCV 280-576886/47	1		21:46	X

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Method: 9056A

Start Date: 06/02/2022 11:06 End Date: 06/03/2022 09:29

Lab Sample Id	D/F	Type	Time	Analytes
				SO4
CCB 280-576886/48	1		22:02	X
280-162622-12	1	T	22:18	X
LCS 280-576886/50	1	T	22:34	X
LCSD 280-576886/51	1	T	22:50	X
MB 280-576886/52	1	T	23:05	X
280-162622-13	1	T	23:21	X
280-162622-13 DU	1	T	23:37	X
280-162622-13 MS	1	T	23:53	X
280-162622-13 MSD	1	T	00:09	X
280-162622-14	5	T	00:25	X
280-162622-15	1	T	00:41	X
CCV 280-576886/59	1		00:57	X
CCB 280-576886/60	1		01:13	X
280-162622-16	1	T	01:29	X
280-162622-17	1	T	01:45	X
280-162622-18	5	T	02:01	X
280-162622-19	5	T	02:17	X
280-162622-20	1	T	02:33	X
280-162622-21	1	T	02:49	X
280-162622-26	5	T	03:05	X
ZZZZZZ			03:21	
ZZZZZZ			03:37	
ZZZZZZ			03:53	
CCV 280-576886/73	1		04:09	X
CCB 280-576886/74	1		04:25	X
ZZZZZZ			04:41	
ZZZZZZ			04:57	
ZZZZZZ			05:13	
ZZZZZZ			05:29	
ZZZZZZ			05:45	
ZZZZZZ			06:01	
ZZZZZZ			06:17	
ZZZZZZ			06:33	
ZZZZZZ			06:49	
ZZZZZZ			07:05	
CCV 280-576886/85			07:21	
CCB 280-576886/86			07:37	
ZZZZZZ			07:53	
ZZZZZZ			08:09	
ZZZZZZ			08:25	
ZZZZZZ			08:41	

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Method: 9056A

Start Date: 06/02/2022 11:06 End Date: 06/03/2022 09:29

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
ZZZZZZ			08:57																									
CCV 280-576886/92			09:13																									
CCB 280-576886/93			09:29																									

Prep Types:
T = Total/NA

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: WC_SHI3 Analysis Method: 9060A

Start Date: 05/31/2022 14:47 End Date: 06/01/2022 09:54

Lab Sample Id	D/F	Type	Time	Analytes
				DOCQ
ICV 280-576714/1	1		14:47	X
ICB 280-576714/2	1		15:06	X
ZZZZZZ			15:23	
ZZZZZZ			15:37	
ZZZZZZ			15:52	
LCS 280-576568/1-A	1	D	16:07	X
MB 280-576568/2-A	1	D	16:21	X
280-162622-1	1	D	16:39	X
280-162622-1 MS	1	D	16:53	X
280-162622-1 MSD	1	D	17:08	X
280-162622-2	1	D	17:25	X
280-162622-3	1	D	17:42	X
280-162622-4	1	D	18:02	X
280-162622-5	1	D	18:19	X
CCV 280-576714/15	1		18:33	X
CCB 280-576714/16	1		18:48	X
280-162622-6	1	D	19:07	X
280-162622-7	1	D	19:21	X
280-162622-8	1	D	19:36	X
280-162622-9	1	D	19:55	X
280-162622-10	1	D	20:09	X
280-162622-11	1	D	20:24	X
280-162622-11 MS	1	D	20:41	X
280-162622-11 MSD	1	D	20:55	X
280-162622-12	1	D	21:14	X
280-162622-16	1	D	21:31	X
CCV 280-576714/27	1		21:45	X
CCB 280-576714/28	1		22:00	X
280-162622-17	1	D	22:19	X
280-162622-18	1	D	22:33	X
ZZZZZZ			22:48	
ZZZZZZ			23:03	
ZZZZZZ			23:17	
ZZZZZZ			23:34	
ZZZZZZ			23:49	
ZZZZZZ			00:03	
ZZZZZZ			00:20	
ZZZZZZ			00:40	
CCV 280-576714/39	1		00:54	X
CCB 280-576714/40	1		01:09	X

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: WC_SHI3 Analysis Method: 9060A

Start Date: 05/31/2022 14:47 End Date: 06/01/2022 09:54

Lab Sample Id	D/F	Type	Time	Analytes																									
				DOCQ																									
ZZZZZZ			01:28																										
ZZZZZZ			01:44																										
ZZZZZZ			02:03																										
ZZZZZZ			02:17																										
ZZZZZZ			02:34																										
ZZZZZZ			02:49																										
ZZZZZZ			03:06																										
ZZZZZZ			03:22																										
ZZZZZZ			03:37																										
ZZZZZZ			03:52																										
CCV 280-576714/51			04:06																										
CCB 280-576714/52			04:23																										
ZZZZZZ			04:43																										
ZZZZZZ			04:59																										
ZZZZZZ			05:14																										
ZZZZZZ			05:31																										
ZZZZZZ			05:49																										
ZZZZZZ			06:06																										
ZZZZZZ			06:21																										
ZZZZZZ			06:35																										
ZZZZZZ			06:50																										
ZZZZZZ			07:07																										
CCV 280-576714/63			07:21																										
CCB 280-576714/64			07:36																										
ZZZZZZ			07:51																										
ZZZZZZ			08:05																										
ZZZZZZ			08:22																										
ZZZZZZ			08:37																										
ZZZZZZ			08:54																										
ZZZZZZ			09:08																										
ZZZZZZ			09:25																										
CCV 280-576714/72			09:40																										
CCB 280-576714/73			09:54																										

Prep Types:
D = Dissolved

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: WC_AT4 Analysis Method: SM 2320B

Start Date: 05/26/2022 12:42 End Date: 05/27/2022 06:43

Lab Sample Id	D/F	Type	Time	Analytes																								
				Alk																								
RINSE 280-576371/1			12:42																									
ZZZZZZ			12:50																									
ZZZZZZ			12:53																									
LCS 280-576371/4	1	T	12:59	X																								
LCSD 280-576371/5	1	T	13:06	X																								
MB 280-576371/6	1	T	13:12	X																								
ZZZZZZ			13:17																									
ZZZZZZ			13:23																									
ZZZZZZ			13:29																									
ZZZZZZ			13:40																									
280-162622-1	1	T	13:49	X																								
280-162622-2	1	T	13:59	X																								
280-162622-3	1	T	14:10	X																								
280-162622-4	1	T	14:20	X																								
280-162622-5	1	T	14:31	X																								
280-162622-6	1	T	14:40	X																								
CCV 280-576371/17	1		14:48	X																								
CCB 280-576371/18	1		14:53	X																								
280-162622-7	1	T	14:59	X																								
280-162622-8	1	T	15:09	X																								
280-162622-9	1	T	15:19	X																								
280-162622-10	1	T	15:27	X																								
280-162622-11	1	T	15:35	X																								
280-162622-12	1	T	15:42	X																								
280-162622-13	1	T	15:48	X																								
280-162622-14	1	T	15:54	X																								
280-162622-15	1	T	16:01	X																								
280-162622-16	1	T	16:13	X																								
CCV 280-576371/29	1		16:20	X																								
CCB 280-576371/30	1		16:25	X																								
LCS 280-576371/31	1	T	16:32	X																								
MB 280-576371/32	1	T	16:37	X																								
280-162622-17	1	T	16:49	X																								
280-162622-17 DU	1	T	17:01	X																								
280-162622-18	1	T	17:11	X																								
280-162622-19	1	T	17:18	X																								
280-162622-20	1	T	17:24	X																								
280-162622-21	1	T	17:30	X																								
280-162622-26	1	T	17:36	X																								
ZZZZZZ			17:48																									
ZZZZZZ			18:04																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: WC_AT4 Analysis Method: SM 2320B

Start Date: 05/26/2022 12:42 End Date: 05/27/2022 06:43

Lab Sample Id	D/F	Type	Time	Analytes																								
				Alk																								
ZZZZZZ			18:21																									
CCV 280-576371/43	1		18:29	X																								
CCB 280-576371/44	1		18:34	X																								
ZZZZZZ			18:43																									
ZZZZZZ			18:53																									
ZZZZZZ			19:10																									
ZZZZZZ			19:25																									
ZZZZZZ			19:45																									
ZZZZZZ			20:06																									
ZZZZZZ			20:13																									
ZZZZZZ			20:19																									
ZZZZZZ			20:28																									
ZZZZZZ			20:36																									
CCV 280-576371/55			20:43																									
CCB 280-576371/56			20:49																									
ZZZZZZ			20:56																									
ZZZZZZ			21:01																									
ZZZZZZ			21:11																									
ZZZZZZ			21:22																									
ZZZZZZ			21:32																									
ZZZZZZ			21:41																									
ZZZZZZ			21:49																									
ZZZZZZ			21:57																									
ZZZZZZ			22:07																									
ZZZZZZ			22:14																									
ZZZZZZ			22:22																									
ZZZZZZ			22:29																									
CCV 280-576371/69			22:37																									
CCB 280-576371/70			22:42																									
ZZZZZZ			22:50																									
ZZZZZZ			22:57																									
ZZZZZZ			23:05																									
ZZZZZZ			23:10																									
ZZZZZZ			23:17																									
ZZZZZZ			23:22																									
ZZZZZZ			23:30																									
ZZZZZZ			23:35																									
ZZZZZZ			23:40																									
ZZZZZZ			23:47																									
CCV 280-576371/81			23:54																									
CCB 280-576371/82			00:00																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: WC_AT4 Analysis Method: SM 2320B

Start Date: 05/26/2022 12:42 End Date: 05/27/2022 06:43

Lab Sample Id	D/F	Type	Time	Analytes																								
				Alk																								
ZZZZZZ			00:07																									
ZZZZZZ			00:13																									
ZZZZZZ			00:18																									
ZZZZZZ			00:23																									
ZZZZZZ			00:28																									
ZZZZZZ			00:33																									
ZZZZZZ			00:39																									
ZZZZZZ			00:45																									
ZZZZZZ			00:50																									
ZZZZZZ			00:58																									
ZZZZZZ			01:06																									
ZZZZZZ			01:15																									
CCV 280-576371/95			01:22																									
CCB 280-576371/96			01:27																									
ZZZZZZ			01:36																									
ZZZZZZ			01:46																									
ZZZZZZ			01:54																									
ZZZZZZ			01:59																									
ZZZZZZ			02:06																									
ZZZZZZ			02:09																									
ZZZZZZ			02:14																									
ZZZZZZ			02:18																									
ZZZZZZ			02:23																									
ZZZZZZ			02:29																									
CCV 280-576371/107			02:35																									
CCB 280-576371/108			02:41																									
ZZZZZZ			02:47																									
ZZZZZZ			02:53																									
ZZZZZZ			02:59																									
ZZZZZZ			03:05																									
ZZZZZZ			03:11																									
ZZZZZZ			03:17																									
ZZZZZZ			03:24																									
ZZZZZZ			03:30																									
ZZZZZZ			03:37																									
ZZZZZZ			03:44																									
ZZZZZZ			03:52																									
ZZZZZZ			04:01																									
CCV 280-576371/121			04:08																									
CCB 280-576371/122			04:13																									
ZZZZZZ			04:20																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Instrument ID: WC_AT4 Analysis Method: SM 2320B

Start Date: 05/26/2022 12:42 End Date: 05/27/2022 06:43

Lab Sample Id	D/F	Type	Time	Analytes																								
				Alk																								
ZZZZZZ			04:27																									
ZZZZZZ			04:48																									
ZZZZZZ			05:03																									
ZZZZZZ			05:23																									
ZZZZZZ			05:42																									
ZZZZZZ			05:58																									
ZZZZZZ			06:16																									
ZZZZZZ			06:24																									
ZZZZZZ			06:31																									
CCV 280-576371/133			06:37																									
CCB 280-576371/134			06:43																									

Prep Types:
T = Total/NA

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 577536 Batch Start Date: 06/08/22 12:58 Batch Analyst: Peterson, McKenzy M

Batch Method: 350.1 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	ClResPres	InitialAmount	FinalAmount	Initial pH	350.1 cal 00539	350.1 ICV 00525
ICV 280-577536/14		350.1		no	100 mL	100 mL	<2 SU		2.5 mL
ICVL 280-577536/15		350.1		no	100 mL	100 mL	<2 SU		0.5 mL
ICB 280-577536/16		350.1		no	10 mL	10 mL	<2 SU		
LCS 280-577536/18		350.1		no	100 mL	100 mL	<2 SU	2.5 mL	
LCSD 280-577536/19		350.1		no	100 mL	100 mL	<2 SU	2.5 mL	
MB 280-577536/20		350.1		no	10 mL	10 mL	<2 SU		
CCVL 280-577536/33		350.1		no	100 mL	100 mL	<2 SU	0.5 mL	
CCV 280-577536/34		350.1		no	100 mL	100 mL	<2 SU	2.5 mL	
CCB 280-577536/35		350.1		no	10 mL	10 mL	<2 SU		
280-162622-C-2	G0121-22A	350.1	T	no	10 mL	10 mL	<2 SU		
280-162622-C-3	G0101-22A	350.1	T	no	10 mL	10 mL	<2 SU		
280-162622-C-4	G0100-22A	350.1	T	no	10 mL	10 mL	<2 SU		
280-162622-C-5	G0122-22A	350.1	T	no	10 mL	10 mL	<2 SU		
CCVL 280-577536/49		350.1		no	100 mL	100 mL	<2 SU	0.5 mL	
CCV 280-577536/50		350.1		no	100 mL	100 mL	<2 SU	2.5 mL	
CCB 280-577536/51		350.1		no	10 mL	10 mL	<2 SU		
280-162622-C-6	G0066R-22A	350.1	T	no	10 mL	10 mL	<2 SU		
280-162622-C-7	G0024-22A	350.1	T	no	10 mL	10 mL	<2 SU		
280-162622-C-8	G0115-22A	350.1	T	no	10 mL	10 mL	<2 SU		
280-162622-C-9	G0095-22A	350.1	T	no	10 mL	10 mL	<2 SU		
LCS 280-577536/57		350.1		no	100 mL	100 mL	<2 SU	2.5 mL	
LCSD 280-577536/58		350.1		no	100 mL	100 mL	<2 SU	2.5 mL	
MB 280-577536/59		350.1		no	10 mL	10 mL	<2 SU		
CCVL 280-577536/65		350.1		no	100 mL	100 mL	<2 SU	0.5 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 Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 577536 Batch Start Date: 06/08/22 12:58 Batch Analyst: Peterson, McKenzy M

Batch Method: 350.1 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	ClResPres	InitialAmount	FinalAmount	Initial pH	350.1 cal 00539	350.1 ICV 00525
CCV 280-577536/66		350.1		no	100 mL	100 mL	<2 SU	2.5 mL	
CCB 280-577536/67		350.1		no	10 mL	10 mL	<2 SU		
280-162622-C-10	PZ018-22A	350.1	T	no	10 mL	10 mL	<2 SU		
280-162622-C-11	PZ020-22A	350.1	T	no	10 mL	10 mL	<2 SU		
280-162622-C-12	G0077-22A	350.1	T	no	10 mL	10 mL	<2 SU		
280-162622-C-16	G0311-22A	350.1	T	no	10 mL	10 mL	<2 SU		
280-162622-C-17	G0111-22A	350.1	T	no	10 mL	10 mL	<2 SU		
280-162622-C-18	G0123-22A	350.1	T	no	10 mL	10 mL	<2 SU		
CCVL 280-577536/81		350.1		no	100 mL	100 mL	<2 SU	0.5 mL	
CCV 280-577536/82		350.1		no	100 mL	100 mL	<2 SU	2.5 mL	
CCB 280-577536/83		350.1		no	10 mL	10 mL	<2 SU		

Batch Notes	
Acid used for pH adjustment	Sulfuric Acid_00288
Sodium Nitroprusside ID	350.1 color_00284
Hypochlorite ID	350.1 bleach_01624
Carrier Identification	complex_00614
Sodium Salicylate ID	sodium sal_00024
Pipette/Syringe/Dispenser ID	SAH5000, 1000INTERCESSOR, 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 Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 577664 Batch Start Date: 06/09/22 09:22 Batch Analyst: Peterson, McKenzy M

Batch Method: 350.1 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	ClResPres	InitialAmount	FinalAmount	Initial pH	350.1 cal 00539	350.1 cal low 01660
ICV 280-577664/14		350.1			100 mL	100 mL	<2 SU		
ICVL 280-577664/15		350.1			100 mL	100 mL	<2 SU		
ICB 280-577664/16		350.1		no	10 mL	10 mL	<2 SU		
MB 280-577664/19		350.1		no	10 mL	10 mL	<2 SU		
CCV 280-577664/28		350.1			100 mL	100 mL	<2 SU	2.5 mL	
CCB 280-577664/30		350.1		no	10 mL	10 mL	<2 SU		
CCV 280-577664/42		350.1			100 mL	100 mL	<2 SU	2.5 mL	
CCB 280-577664/44		350.1		no	10 mL	10 mL	<2 SU		
LCS 280-577664/54		350.1			100 mL	100 mL	<2 SU	2.5 mL	
LCSD 280-577664/55		350.1			100 mL	100 mL	<2 SU	2.5 mL	
MB 280-577664/56		350.1		no	10 mL	10 mL	<2 SU		
CCV 280-577664/58		350.1			100 mL	100 mL	<2 SU	2.5 mL	
CCVL 280-577664/59		350.1			100 mL	100 mL	<2 SU		5 mL
CCB 280-577664/60		350.1		no	10 mL	10 mL	<2 SU		
280-162622-C-1	G0119-22A	350.1	T	no	10 mL	10 mL	<2 SU		
CCV 280-577664/72		350.1			100 mL	100 mL	<2 SU	2.5 mL	
CCVL 280-577664/73		350.1			100 mL	100 mL	<2 SU		5 mL
CCB 280-577664/74		350.1		no	10 mL	10 mL	<2 SU		

Lab Sample ID	Client Sample ID	Method Chain	Basis	350.1 ICV 00525					
ICV 280-577664/14		350.1		2.5 mL					
ICVL 280-577664/15		350.1		0.5 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 Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 577664 Batch Start Date: 06/09/22 09:22 Batch Analyst: Peterson, McKenzy M

Batch Method: 350.1 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	350.1 ICV 00525					
ICB 280-577664/16		350.1							
MB 280-577664/19		350.1							
CCV 280-577664/28		350.1							
CCB 280-577664/30		350.1							
CCV 280-577664/42		350.1							
CCB 280-577664/44		350.1							
LCS 280-577664/54		350.1							
LCSD 280-577664/55		350.1							
MB 280-577664/56		350.1							
CCV 280-577664/58		350.1							
CCVL 280-577664/59		350.1							
CCB 280-577664/60		350.1							
280-162622-C-1	G0119-22A	350.1	T						
CCV 280-577664/72		350.1							
CCVL 280-577664/73		350.1							
CCB 280-577664/74		350.1							

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 577664 Batch Start Date: 06/09/22 09:22 Batch Analyst: Peterson, McKenzy M

Batch Method: 350.1 Batch End Date:

Batch Notes	
Acid used for pH adjustment	Sulfuric Acid_00288
Sodium Nitroprusside ID	Na Nalicylate_00011 & Na Nitro_00008
Hypochlorite ID	Na hypo_00008
EDTA Buffer ID	Buffer A_00006
Potassium Sodium Tartrate ID	Buffer B_00009
Carrier Identification	Ammonia Rinse_00008
Sodium Salicylate ID	Sodium Sal_000024
Pipette/Syringe/Dispenser ID	SAH5000, 1000INTERCESSOR, 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 Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 576527 Batch Start Date: 05/30/22 14:59 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 00832	TKN ICV 25 00118		
ICV 280-576527/7		351.2, 351.2		25 mL	25 mL		5 mL		
ICB 280-576527/8		351.2, 351.2		25 mL	25 mL				
CCV 280-576527/9		351.2, 351.2		25 mL	25 mL	5 mL			
CCB 280-576527/10		351.2, 351.2		25 mL	25 mL				

Batch Notes	
Block Digestor ID	TKN Hotblock
Digestion Solution ID	TKN digestion_00146
Oven, Bath or Block Temperature 1	160 Degrees C
Block Digestion Temperature Start Date	05/30/2022 15:40
Oven, Bath or Block Temperature 2	380 Degrees C
Bl;ock Digestion Temperature End Date	05/30/2022 21:40
Pipette/Syringe/Dispenser ID	5000ad, 1000ad
pH Indicator ID	hc902937

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 Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 576945 Batch Start Date: 06/02/22 15:03 Batch Analyst: Cherry, Scott V

Batch Method: 351.2 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	ResidualChloCheck	InitialAmount	FinalAmount	TKN 25ppm 00832	
LCS 280-576945/1		351.2, 351.2				25 mL	25 mL	6 mL	
MB 280-576945/2		351.2, 351.2				25 mL	25 mL		
280-162622-C-2	G0121-22A	351.2, 351.2	T	<2	n	5 mL	25 mL		
280-162622-C-3	G0101-22A	351.2, 351.2	T	<2	n	25 mL	25 mL		
280-162622-C-4	G0100-22A	351.2, 351.2	T	<2	n	25 mL	25 mL		
280-162622-C-5	G0122-22A	351.2, 351.2	T	<2	n	25 mL	25 mL		
280-162622-C-1	G0119-22A	351.2, 351.2	T	<2	n	25 mL	25 mL		
280-162622-C-1 MS	G0119-22A	351.2, 351.2	T	<2	n	25 mL	25 mL	3 mL	
280-162622-C-1 MSD	G0119-22A	351.2, 351.2	T	<2	n	25 mL	25 mL	3 mL	
280-162622-C-6	G0066R-22A	351.2, 351.2	T	<2	n	25 mL	25 mL		
280-162622-C-7	G0024-22A	351.2, 351.2	T	<2	n	25 mL	25 mL		
280-162622-C-8	G0115-22A	351.2, 351.2	T	<2	n	25 mL	25 mL		
280-162622-C-9	G0095-22A	351.2, 351.2	T	<2	n	25 mL	25 mL		
280-162622-C-10	PZ018-22A	351.2, 351.2	T	<2	n	25 mL	25 mL		
280-162622-C-12	G0077-22A	351.2, 351.2	T	<2	n	25 mL	25 mL		
280-162622-C-16	G0311-22A	351.2, 351.2	T	<2	n	25 mL	25 mL		
280-162622-C-17	G0111-22A	351.2, 351.2	T	<2	n	25 mL	25 mL		
280-162622-C-18	G0123-22A	351.2, 351.2	T	<2	n	25 mL	25 mL		

Batch Notes	
Block Digestor ID	TKN Hotblock
Digestion Solution ID	TKN digestion_00146
Oven, Bath or Block Temperature 1	160 Degrees C
Block Digestion Temperature Start Date	06/02/2022 15:40
Oven, Bath or Block Temperature 2	380 Degrees C
Bl;ock Digestion Temperature End Date	06/02/2022 21:40
Pipette/Syringe/Dispenser ID	5000ad, 1000ad
pH Indicator ID	hc902937

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 Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 576945 Batch Start Date: 06/02/22 15:03 Batch Analyst: Cherry, Scott V

Batch Method: 351.2 Batch End Date:

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 576946 Batch Start Date: 06/02/22 15:06 Batch Analyst: Cherry, Scott V

Batch Method: 351.2 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	ResidualChloCheck	InitialAmount	FinalAmount	TKN 25ppm 00832	
LCS 280-576946/1		351.2, 351.2				25 mL	25 mL	6 mL	
MB 280-576946/2		351.2, 351.2				25 mL	25 mL		
280-162622-C-11	PZ020-22A	351.2, 351.2	T	<2	n	25 mL	25 mL		
280-162622-C-11 MS	PZ020-22A	351.2, 351.2	T	<2	n	25 mL	25 mL	3 mL	
280-162622-C-11 MSD	PZ020-22A	351.2, 351.2	T	<2	n	25 mL	25 mL	3 mL	

Batch Notes	
Block Digestor ID	TKN Hotblock
Digestion Solution ID	TKN digestion_00146
Oven, Bath or Block Temperature 1	160 Degrees C
Block Digestion Temperature Start Date	06/02/2022 15:40
Oven, Bath or Block Temperature 2	380 Degrees C
Bl;ock Digestion Temperature End Date	06/02/2022 21:40
Pipette/Syringe/Dispenser ID	5000ad, 1000ad
pH Indicator ID	hc902937

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 Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 577123 Batch Start Date: 06/01/22 16:45 Batch Analyst: Cherry, Scott V

Batch Method: 351.2 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount					
ICV 280-576527/7-A		351.2		2 mL					
ICB 280-576527/8-A		351.2		2 mL					
LCS 280-576945/1-A		351.2		2 mL					
MB 280-576945/2-A		351.2		2 mL					
280-162622-C-2-A	G0121-22A	351.2	T	2 mL					
280-162622-C-3-A	G0101-22A	351.2	T	2 mL					
CCV 280-576527/9-A		351.2		2 mL					
CCB 280-576527/10-A		351.2		2 mL					
280-162622-C-4-A	G0100-22A	351.2	T	2 mL					
280-162622-C-5-A	G0122-22A	351.2	T	2 mL					
280-162622-C-1-A	G0119-22A	351.2	T	2 mL					
280-162622-C-1-B MS	G0119-22A	351.2	T	2 mL					
280-162622-C-1-C MSD	G0119-22A	351.2	T	2 mL					
280-162622-C-6-A	G0066R-22A	351.2	T	2 mL					
280-162622-C-7-A	G0024-22A	351.2	T	2 mL					
280-162622-C-8-A	G0115-22A	351.2	T	2 mL					
280-162622-C-9-A	G0095-22A	351.2	T	2 mL					
280-162622-C-10-A	PZ018-22A	351.2	T	2 mL					
CCV 280-576527/9-A		351.2		2 mL					
CCB 280-576527/10-A		351.2		2 mL					
280-162622-C-12-A	G0077-22A	351.2	T	2 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 Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 577123 Batch Start Date: 06/01/22 16:45 Batch Analyst: Cherry, Scott V

Batch Method: 351.2 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount					
280-162622-C-16-A	G0311-22A	351.2	T	2 mL					
280-162622-C-17-A	G0111-22A	351.2	T	2 mL					
280-162622-C-18-A	G0123-22A	351.2	T	2 mL					
LCS 280-576946/1-A		351.2		2 mL					
MB 280-576946/2-A		351.2		2 mL					
280-162622-C-11-A	PZ020-22A	351.2	T	2 mL					
280-162622-C-11-B MS	PZ020-22A	351.2	T	2 mL					
280-162622-C-11-C MSD	PZ020-22A	351.2	T	2 mL					
CCV 280-576527/9-A		351.2		2 mL					
CCB 280-576527/10-A		351.2		2 mL					

Batch Notes	
Hypochlorite ID	TKN hypo_00677
Buffer Reagent ID	TKN buffer_00134
Pipette/Syringe/Dispenser ID	5000ad, 1000ad
Sodium Nitroprusside ID	sodium nitro_00109

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 Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 577382 Batch Start Date: 06/07/22 11:53 Batch Analyst: Cherry, Scott V

Batch Method: 353.2 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	NXN CAL INT 00623	NXN ICV INT 00599		
ICV 280-577382/17		353.2		100 mL	100 mL		5 mL		
ICVL 280-577382/18		353.2		100 mL	100 mL		2 mL		
ICB 280-577382/19		353.2		100 mL	100 mL				
CCV 280-577382/51		353.2		100 mL	100 mL	5 mL			
CCB 280-577382/53		353.2		100 mL	100 mL				
LCS 280-577382/59		353.2		100 mL	100 mL	5 mL			
MB 280-577382/60		353.2		100 mL	100 mL				
CCV 280-577382/67		353.2		100 mL	100 mL	5 mL			
CCVL 280-577382/68		353.2		100 mL	100 mL	1 mL			
CCB 280-577382/69		353.2		100 mL	100 mL				
280-162622-C-13	G0069-22A	353.2	T	100 mL	100 mL				
280-162622-C-14	SHGW03-22A	353.2	T	100 mL	100 mL				
280-162622-C-15	SHGW04-22A	353.2	T	100 mL	100 mL				
280-162622-A-19	SHGW02-22A	353.2	T	100 mL	100 mL				
280-162622-A-19 MS	SHGW02-22A	353.2	T	5 mL	5 mL	0.2 mL			
CCV 280-577382/83		353.2		100 mL	100 mL	5 mL			
CCVL 280-577382/84		353.2		100 mL	100 mL	1 mL			
CCB 280-577382/85		353.2		100 mL	100 mL				
280-162622-A-19 MSD	SHGW02-22A	353.2	T	5 mL	5 mL	0.2 mL			
280-162622-A-20	SHGW05-22A	353.2	T	100 mL	100 mL				
280-162622-A-21	G0053-22A	353.2	T	100 mL	100 mL				
280-162622-A-26	SAMW1-22A	353.2	T	100 mL	100 mL				
280-162622-C-1	G0119-22A	353.2	T	100 mL	100 mL				
280-162622-C-2	G0121-22A	353.2	T	100 mL	100 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 577382 Batch Start Date: 06/07/22 11:53 Batch Analyst: Cherry, Scott V

Batch Method: 353.2 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	NXN CAL INT 00623	NXN ICV INT 00599		
280-162622-C-3	G0101-22A	353.2	T	100 mL	100 mL				
280-162622-C-4	G0100-22A	353.2	T	100 mL	100 mL				
280-162622-C-5	G0122-22A	353.2	T	100 mL	100 mL				
280-162622-C-6	G0066R-22A	353.2	T	100 mL	100 mL				
CCV 280-577382/99		353.2		100 mL	100 mL	5 mL			
CCVL 280-577382/100		353.2		100 mL	100 mL	1 mL			
CCB 280-577382/101		353.2		100 mL	100 mL				
LCS 280-577382/103		353.2		100 mL	100 mL	5 mL			
MB 280-577382/104		353.2		100 mL	100 mL				
280-162622-C-7	G0024-22A	353.2	T	100 mL	100 mL				
280-162622-C-7 MS	G0024-22A	353.2	T	5 mL	5 mL	0.2 mL			
280-162622-C-7 MSD	G0024-22A	353.2	T	5 mL	5 mL	0.2 mL			
280-162622-C-8	G0115-22A	353.2	T	100 mL	100 mL				
280-162622-C-9	G0095-22A	353.2	T	100 mL	100 mL				
280-162622-C-10	PZ018-22A	353.2	T	100 mL	100 mL				
280-162622-C-11	PZ020-22A	353.2	T	100 mL	100 mL				
280-162622-C-12	G0077-22A	353.2	T	100 mL	100 mL				
280-162622-C-16	G0311-22A	353.2	T	100 mL	100 mL				
280-162622-C-17	G0111-22A	353.2	T	100 mL	100 mL				
280-162622-C-18	G0123-22A	353.2	T	100 mL	100 mL				
CCV 280-577382/118		353.2		100 mL	100 mL	5 mL			
CCVL 280-577382/119		353.2		100 mL	100 mL	1 mL			
CCB 280-577382/120		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 Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 577382 Batch Start Date: 06/07/22 11:53 Batch Analyst: Cherry, Scott V

Batch Method: 353.2 Batch End Date:

Batch Notes	
pH Indicator ID	hc155968
Buffer Reagent ID	NOXT Buffer_00224
Color Reagent ID	NOXT CR_00124
Pipette/Syringe/Dispenser ID	5000ad, 1000ad
Cadmium Column Lot ID	q11513937102-450-0721
Copper Sulfate ID	CuSO4 NOXT_0015
Hydrochloric Acid ID	0.5N HCl_0086

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 Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 575967 Batch Start Date: 05/24/22 09:13 Batch Analyst: Mayer, Zachary P

Batch Method: 9030B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	DistillUnitPort	Initial pH	Final pH	AcidVolAdded
LCS 280-575967/1		9030B, 9034		50 mL	50 mL	1	7 SU	<2 SU	5 mL
MB 280-575967/2		9030B, 9034		50 mL	50 mL	2	7 SU	<2 SU	5 mL
280-162622-E-6	G0066R-22A	9030B, 9034	T	50 mL	50 mL	3	12+ SU	<2 SU	5 mL
280-162622-E-6 MS	G0066R-22A	9030B, 9034	T	50 mL	50 mL	4	12+ SU	<2 SU	5 mL
280-162622-E-6 MSD	G0066R-22A	9030B, 9034	T	50 mL	50 mL	5	12+ SU	<2 SU	5 mL
280-162622-E-7	G0024-22A	9030B, 9034	T	50 mL	50 mL	6	12+ SU	<2 SU	5 mL
280-162622-E-8	G0115-22A	9030B, 9034	T	50 mL	50 mL	7	12+ SU	<2 SU	5 mL
280-162622-E-9	G0095-22A	9030B, 9034	T	50 mL	50 mL	8	12+ SU	<2 SU	5 mL
280-162622-E-10	PZ018-22A	9030B, 9034	T	50 mL	50 mL	9	12+ SU	<2 SU	5 mL
280-162622-E-11	PZ020-22A	9030B, 9034	T	50 mL	50 mL	10	12+ SU	<2 SU	5 mL
280-162622-E-12	G0077-22A	9030B, 9034	T	50 mL	50 mL	11	12+ SU	<2 SU	5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	SFD CAL INT 02185					
LCS 280-575967/1		9030B, 9034		1 mL					
MB 280-575967/2		9030B, 9034							
280-162622-E-6	G0066R-22A	9030B, 9034	T						
280-162622-E-6 MS	G0066R-22A	9030B, 9034	T	1 mL					
280-162622-E-6 MSD	G0066R-22A	9030B, 9034	T	1 mL					
280-162622-E-7	G0024-22A	9030B, 9034	T						
280-162622-E-8	G0115-22A	9030B, 9034	T						
280-162622-E-9	G0095-22A	9030B, 9034	T						
280-162622-E-10	PZ018-22A	9030B, 9034	T						
280-162622-E-11	PZ020-22A	9030B, 9034	T						
280-162622-E-12	G0077-22A	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 Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 575967 Batch Start Date: 05/24/22 09:13 Batch Analyst: Mayer, Zachary P

Batch Method: 9030B Batch End Date:

Batch Notes	
Formaldehyde ID	form_00123
Zinc Acetate Buffer ID	znac_00122
Pipette/Syringe/Dispenser ID	Tesla 5000, ARM1000
Sulfuric Acid Reagent ID Number	SulfuricAcid_00288
pH Indicator ID	HC157843
Oven, Bath or Block Temperature 1	80 Degrees C
Distillation Start Time	05/24/2022 09:55
Uncorrected Temperature 2	80 Degrees C
Oven, Bath or Block Temperature 2	80 Degrees C
Distillation End Time	05/24/2022 11:25
Batch Comment	ZM

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 Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 575993 Batch Start Date: 05/24/22 11:10 Batch Analyst: Mayer, Zachary P

Batch Method: 9034 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	BuretStart1	BuretStop1	IodineAmount	TitrantVolume1	FinalAmount	
LCS 280-575967/1-A		9034		0 mL	3 mL	5 mL	3 mL	50 mL	
MB 280-575967/2-A		9034		3 mL	4 mL	1 mL	1 mL	50 mL	
280-162622-E-6-A	G0066R-22A	9034	T	4 mL	5 mL	1 mL	1 mL	50 mL	
280-162622-E-6-B MS	G0066R-22A	9034	T	5 mL	8.6 mL	5 mL	3.6 mL	50 mL	
280-162622-E-6-C MSD	G0066R-22A	9034	T	8.6 mL	11.5 mL	5 mL	2.9 mL	50 mL	
280-162622-E-7-A	G0024-22A	9034	T	11.5 mL	12.5 mL	1 mL	1 mL	50 mL	
280-162622-E-8-A	G0115-22A	9034	T	12.5 mL	13.5 mL	1 mL	1 mL	50 mL	
280-162622-E-9-A	G0095-22A	9034	T	13.5 mL	14.5 mL	1 mL	1 mL	50 mL	
280-162622-E-10-A	PZ018-22A	9034	T	14.5 mL	15.5 mL	1 mL	1 mL	50 mL	
280-162622-E-11-A	PZ020-22A	9034	T	15.5 mL	16.5 mL	1 mL	1 mL	50 mL	
280-162622-E-12-A	G0077-22A	9034	T	16.5 mL	17.5 mL	1 mL	1 mL	50 mL	

Batch Notes	
Normality of First Titrant	0.0250 N
Normality of Iodine Solution	0.0250 N
Zinc Acetate Buffer ID	znac_00122
Iodine ID	Iod_00275
Hydrochloric Acid ID	HCl Sol_00200
Sodium Thiosulfate ID	Na Thio_00178
Starch Reagent ID	Starch ind_00067
Pipette/Syringe/Dispenser ID	Tesla 5000, ARM1000
Batch Comment	ZM

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 Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 576110 Batch Start Date: 05/25/22 09:18 Batch Analyst: Mayer, Zachary P

Batch Method: 9030B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	DistillUnitPort	Initial pH	Final pH	AcidVolAdded
LCS 280-576110/1		9030B, 9034		50 mL	50 mL	1	7 SU	<2 SU	5 mL
MB 280-576110/2		9030B, 9034		50 mL	50 mL	2	7 SU	<2 SU	5 mL
280-162622-E-1	G0119-22A	9030B, 9034	T	50 mL	50 mL	8	12+ SU	<2 SU	5 mL
280-162622-E-2	G0121-22A	9030B, 9034	T	50 mL	50 mL	9	12+ SU	<2 SU	5 mL
280-162622-E-3	G0101-22A	9030B, 9034	T	50 mL	50 mL	10	12+ SU	<2 SU	5 mL
280-162622-E-4	G0100-22A	9030B, 9034	T	50 mL	50 mL	11	12+ SU	<2 SU	5 mL
280-162622-E-5	G0122-22A	9030B, 9034	T	50 mL	50 mL	12	12+ SU	<2 SU	5 mL
280-162622-E-16	G0311-22A	9030B, 9034	T	50 mL	50 mL	13	12+ SU	<2 SU	5 mL
280-162622-E-17	G0111-22A	9030B, 9034	T	50 mL	50 mL	14	12+ SU	<2 SU	5 mL
280-162622-E-18	G0123-22A	9030B, 9034	T	50 mL	50 mL	15	12+ SU	<2 SU	5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	SFD CAL INT 02186					
LCS 280-576110/1		9030B, 9034		1 mL					
MB 280-576110/2		9030B, 9034							
280-162622-E-1	G0119-22A	9030B, 9034	T						
280-162622-E-2	G0121-22A	9030B, 9034	T						
280-162622-E-3	G0101-22A	9030B, 9034	T						
280-162622-E-4	G0100-22A	9030B, 9034	T						
280-162622-E-5	G0122-22A	9030B, 9034	T						
280-162622-E-16	G0311-22A	9030B, 9034	T						
280-162622-E-17	G0111-22A	9030B, 9034	T						
280-162622-E-18	G0123-22A	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 Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 576110 Batch Start Date: 05/25/22 09:18 Batch Analyst: Mayer, Zachary P

Batch Method: 9030B Batch End Date:

Batch Notes	
Formaldehyde ID	form_00123
Zinc Acetate Buffer ID	znac_00122
Pipette/Syringe/Dispenser ID	Tesla 5000, ARM1000
Sulfuric Acid Reagent ID Number	SulfuricAcid_00288
pH Indicator ID	HC157843
Oven, Bath or Block Temperature 1	80 Degrees C
Distillation Start Time	05/25/2022 09:55
Uncorrected Temperature 2	80 Degrees C
Oven, Bath or Block Temperature 2	80 Degrees C
Distillation End Time	05/25/2022 11:25
Batch Comment	ZM

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 Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 576138 Batch Start Date: 05/25/22 10:57 Batch Analyst: Mayer, Zachary P

Batch Method: 9034 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	BuretStart1	BuretStop1	IodineAmount	TitrantVolume1	FinalAmount	
LCS 280-576110/1-A		9034		0 mL	3.2 mL	5 mL	3.2 mL	50 mL	
MB 280-576110/2-A		9034		3.2 mL	4.2 mL	1 mL	1 mL	50 mL	
280-162622-E-1-A	G0119-22A	9034	T	13.2 mL	14.2 mL	1 mL	1 mL	50 mL	
280-162622-E-2-A	G0121-22A	9034	T	14.2 mL	14.9 mL	1 mL	0.700000000000001 mL	50 mL	
280-162622-E-3-A	G0101-22A	9034	T	14.9 mL	15.9 mL	1 mL	1 mL	50 mL	
280-162622-E-4-A	G0100-22A	9034	T	15.9 mL	16.9 mL	1 mL	0.999999999999998 mL	50 mL	
280-162622-E-5-A	G0122-22A	9034	T	16.9 mL	17.9 mL	1 mL	1 mL	50 mL	
280-162622-E-16-A	G0311-22A	9034	T	17.9 mL	18.9 mL	1 mL	1 mL	50 mL	
280-162622-E-17-A	G0111-22A	9034	T	18.9 mL	19.9 mL	1 mL	1 mL	50 mL	
280-162622-E-18-A	G0123-22A	9034	T	19.9 mL	20.9 mL	1 mL	1 mL	50 mL	

Batch Notes	
Normality of First Titrant	0.0250 N
Normality of Iodine Solution	0.0250 N
Zinc Acetate Buffer ID	znac_00122
Iodine ID	Iod_00275
Hydrochloric Acid ID	HCl Sol_00200
Sodium Thiosulfate ID	Na Thio_00178
Starch Reagent ID	Starch ind_00067
Pipette/Syringe/Dispenser ID	Tesla 5000, ARM1000
Batch Comment	ZM

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 Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 575123 Batch Start Date: 05/16/22 17:34 Batch Analyst: Fox, Regan A

Batch Method: 9056A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Cl ICV Std 00005	IC CAL cl/so4 00419	IC Cal low 00637	IC ICV 5 00364
STD 280-575123/2 IC		9056A		5 mL	5 mL		0.02 mL	0.02 mL	
STD 280-575123/3 IC		9056A		5 mL	5 mL		0.05 mL	0.05 mL	
STD 280-575123/4 IC		9056A		5 mL	5 mL		0.1 mL	0.1 mL	
STD 280-575123/5 IC		9056A		5 mL	5 mL		1.2 mL	0.4 mL	
STD 280-575123/6 IC		9056A		5 mL	5 mL		2.4 mL	0.8 mL	
STD 280-575123/7 IC		9056A		5 mL	5 mL		4 mL	1 mL	
ICV 280-575123/8		9056A		5 mL	5 mL	0.8 mL			0.8 mL
ICB 280-575123/9		9056A		5 mL	5 mL				

Lab Sample ID	Client Sample ID	Method Chain	Basis	IC SO4 ICV 00022					
STD 280-575123/2 IC		9056A							
STD 280-575123/3 IC		9056A							
STD 280-575123/4 IC		9056A							
STD 280-575123/5 IC		9056A							
STD 280-575123/6 IC		9056A							
STD 280-575123/7 IC		9056A							
ICV 280-575123/8		9056A		0.8 mL					
ICB 280-575123/9		9056A							

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 575123 Batch Start Date: 05/16/22 17:34 Batch Analyst: Fox, Regan A

Batch Method: 9056A Batch End Date:

Batch Notes	
Filter ID	SF020E
Pipette/Syringe/Dispenser ID	ARM5000, 1000HEX, 200CJ, IC100
Sufficient Volume for Batch QC	yes
Eluent 1 ID	IC10 Eluent_00003
Batch Comment	Run by JM, reviewed by RF

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 Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 576720 Batch Start Date: 06/01/22 13:41 Batch Analyst: Fox, Regan A

Batch Method: 9056A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	IC CAL cl/so4 00424	IC Cal low 00642	IC LCS 01879	ICMS/MSD WEEK 00760
CCV 280-576720/1		9056A		10 mL	10 mL			10 mL	
CCB 280-576720/2		9056A		10 mL	10 mL				
MRL 280-576720/3		9056A		10 mL	10 mL	0.2 mL	0.1 mL		
LCS 280-576720/4		9056A		10 mL	10 mL			10 mL	
LCSD 280-576720/5		9056A		10 mL	10 mL			10 mL	
MB 280-576720/6		9056A		10 mL	10 mL				
CCV 280-576720/17		9056A		10 mL	10 mL			10 mL	
CCB 280-576720/18		9056A		10 mL	10 mL				
280-162622-F-1	G0119-22A	9056A	T	10 mL	10 mL				
280-162622-F-2	G0121-22A	9056A	T	10 mL	10 mL				
280-162622-F-3	G0101-22A	9056A	T	10 mL	10 mL				
280-162622-F-4	G0100-22A	9056A	T	10 mL	10 mL				
280-162622-F-5	G0122-22A	9056A	T	10 mL	10 mL				
280-162622-F-6	G0066R-22A	9056A	T	10 mL	10 mL				
280-162622-F-7	G0024-22A	9056A	T	10 mL	10 mL				
CCV 280-576720/29		9056A		10 mL	10 mL			10 mL	
CCB 280-576720/30		9056A		10 mL	10 mL				
280-162622-F-7 DU	G0024-22A	9056A	T	10 mL	10 mL				
280-162622-F-7 MS	G0024-22A	9056A	T	10 mL	10 mL				0.1 mL
280-162622-F-7 MSD	G0024-22A	9056A	T	10 mL	10 mL				0.1 mL
280-162622-F-8	G0115-22A	9056A	T	10 mL	10 mL				
280-162622-F-9	G0095-22A	9056A	T	10 mL	10 mL				
280-162622-F-10	PZ018-22A	9056A	T	10 mL	10 mL				
CCV 280-576720/44		9056A		10 mL	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 Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 576720 Batch Start Date: 06/01/22 13:41 Batch Analyst: Fox, Regan A

Batch Method: 9056A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	IC CAL cl/so4 00424	IC Cal low 00642	IC LCS 01879	ICMS/MSD WEEK 00760
CCB 280-576720/45		9056A		10 mL	10 mL				

Batch Notes	
Filter ID	SF020E
Pipette/Syringe/Dispenser ID	ARM5000, 1000HEX, 200CJ, IC100
Sufficient Volume for Batch QC	yes
Eluent 1 ID	IC10 Eluent_00003
Batch Comment	RAF

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 Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 576886 Batch Start Date: 06/02/22 11:06 Batch Analyst: Fox, Regan A

Batch Method: 9056A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	IC CAL cl/so4 00424	IC Cal low 00642	IC LCS 01879	ICMS/MSD WEEK 00760
CCV 280-576886/1		9056A		10 mL	10 mL			10 mL	
CCB 280-576886/2		9056A		10 mL	10 mL				
MRL 280-576886/3		9056A		10 mL	10 mL	0.2 mL	0.1 mL		
LCS 280-576886/4		9056A		10 mL	10 mL			10 mL	
LCSD 280-576886/5		9056A		10 mL	10 mL			10 mL	
MB 280-576886/6		9056A		10 mL	10 mL				
280-162622-F-2	G0121-22A	9056A	T	10 mL	10 mL				
280-162622-F-3	G0101-22A	9056A	T	10 mL	10 mL				
280-162622-F-4	G0100-22A	9056A	T	10 mL	10 mL				
280-162622-F-8	G0115-22A	9056A	T	10 mL	10 mL				
CCV 280-576886/17		9056A		10 mL	10 mL			10 mL	
CCB 280-576886/18		9056A		10 mL	10 mL				
280-162622-F-9	G0095-22A	9056A	T	10 mL	10 mL				
CCV 280-576886/29		9056A		10 mL	10 mL			10 mL	
CCB 280-576886/30		9056A		10 mL	10 mL				
280-162622-F-11	PZ020-22A	9056A	T	10 mL	10 mL				
CCV 280-576886/47		9056A		10 mL	10 mL			10 mL	
CCB 280-576886/48		9056A		10 mL	10 mL				
280-162622-F-12	G0077-22A	9056A	T	10 mL	10 mL				
LCS 280-576886/50		9056A		10 mL	10 mL			10 mL	
LCSD 280-576886/51		9056A		10 mL	10 mL			10 mL	
MB 280-576886/52		9056A		10 mL	10 mL				
280-162622-D-13	G0069-22A	9056A	T	10 mL	10 mL				
280-162622-D-13 DU	G0069-22A	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 Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 576886 Batch Start Date: 06/02/22 11:06 Batch Analyst: Fox, Regan A

Batch Method: 9056A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	IC CAL cl/so4 00424	IC Cal low 00642	IC LCS 01879	ICMS/MSD WEEK 00760
280-162622-D-13 MS	G0069-22A	9056A	T	10 mL	10 mL				0.1 mL
280-162622-D-13 MSD	G0069-22A	9056A	T	10 mL	10 mL				0.1 mL
280-162622-D-14	SHGW03-22A	9056A	T	10 mL	10 mL				
280-162622-D-15	SHGW04-22A	9056A	T	10 mL	10 mL				
CCV 280-576886/59		9056A		10 mL	10 mL			10 mL	
CCB 280-576886/60		9056A		10 mL	10 mL				
280-162622-F-16	G0311-22A	9056A	T	10 mL	10 mL				
280-162622-F-17	G0111-22A	9056A	T	10 mL	10 mL				
280-162622-F-18	G0123-22A	9056A	T	10 mL	10 mL				
280-162622-B-19	SHGW02-22A	9056A	T	10 mL	10 mL				
280-162622-B-20	SHGW05-22A	9056A	T	10 mL	10 mL				
280-162622-B-21	G0053-22A	9056A	T	10 mL	10 mL				
280-162622-B-26	SAMW1-22A	9056A	T	10 mL	10 mL				
CCV 280-576886/73		9056A		10 mL	10 mL			10 mL	
CCB 280-576886/74		9056A		10 mL	10 mL				

Batch Notes	
Filter ID	SF020E
Pipette/Syringe/Dispenser ID	ARM5000, HEX1000, 200CJ, IC100
Sufficient Volume for Batch QC	yes
Eluent 1 ID	AS14 Eluent_00021
Batch Comment	RAF

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 Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 576713 Batch Start Date: 05/31/22 14:47 Batch Analyst: Ince, Connor A

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	AnalysisComment			
LCS 280-576568/1-A		9060A				The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.			
MB 280-576568/2-A		9060A				The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.			
280-162622-D-1-A	G0119-22A	9060A	D			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.			
280-162622-D-1-B MS	G0119-22A	9060A	D			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.			
280-162622-D-1-C MSD	G0119-22A	9060A	D			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.			
280-162622-D-2-A	G0121-22A	9060A	D			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.			
280-162622-D-3-A	G0101-22A	9060A	D			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 Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 576713 Batch Start Date: 05/31/22 14:47 Batch Analyst: Ince, Connor A

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	AnalysisComment			
280-162622-D-4-A	G0100-22A	9060A	D			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.			
280-162622-D-5-A	G0122-22A	9060A	D			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.			
280-162622-D-6-A	G0066R-22A	9060A	D			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.			
280-162622-D-7-A	G0024-22A	9060A	D			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.			
280-162622-D-8-A	G0115-22A	9060A	D			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.			
280-162622-D-9-A	G0095-22A	9060A	D			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.			
280-162622-D-10-A	PZ018-22A	9060A	D			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 Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 576713 Batch Start Date: 05/31/22 14:47 Batch Analyst: Ince, Connor A

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	AnalysisComment			
280-162622-D-11-A	PZ020-22A	9060A	D			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.			
280-162622-D-11-B MS	PZ020-22A	9060A	D			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.			
280-162622-D-11-C MSD	PZ020-22A	9060A	D			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.			
280-162622-D-12-A	G0077-22A	9060A	D			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.			
280-162622-D-16-A	G0311-22A	9060A	D			The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.			
280-162622-D-17-A	G0111-22A	9060A	D	20 mL	20 mL	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.			
280-162622-D-18-A	G0123-22A	9060A	D	20 mL	20 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 Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 576713 Batch Start Date: 05/31/22 14:47 Batch Analyst: Ince, Connor A

Batch Method: 9060A Batch End Date:

Batch Notes	
Acid ID	0.2% H2SO4_00431,H2SO4_00214
Combustion Catylyst ID	19003D-03
Pipette/Syringe/Dispenser ID	BWH 5000, 1000 MS,1272995
pH Paper ID	HC178690
Filter ID	R1MB55774-2036-DS
Batch Comment	Run and reviewed by ABW

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 Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 576714 Batch Start Date: 05/31/22 14:47 Batch Analyst: Ince, Connor A

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	Final pH	TOC ICV Std 00049	TOC LCS Std 00054
ICV 280-576714/1		9060A		50 mL	50 mL	<2 SU	<2 SU	1 mL	
ICB 280-576714/2		9060A		20 mL	20 mL	<2 SU	<2 SU		
LCS 280-576568/1-A		9060A		200 mL	200 mL	<2 SU	<2 SU		5 mL
MB 280-576568/2-A		9060A		20 mL	20 mL	<2 SU	<2 SU		
280-162622-D-1-A	G0119-22A	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-162622-D-1-B MS	G0119-22A	9060A	D	50 mL	50 mL	>2 SU	<2 SU		1.25 mL
280-162622-D-1-C MSD	G0119-22A	9060A	D	50 mL	50 mL	>2 SU	<2 SU		1.25 mL
280-162622-D-2-A	G0121-22A	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-162622-D-3-A	G0101-22A	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-162622-D-4-A	G0100-22A	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-162622-D-5-A	G0122-22A	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
CCV 280-576714/15		9060A		200 mL	200 mL	<2 SU	<2 SU		5 mL
CCB 280-576714/16		9060A		20 mL	20 mL	<2 SU	<2 SU		
280-162622-D-6-A	G0066R-22A	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-162622-D-7-A	G0024-22A	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-162622-D-8-A	G0115-22A	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-162622-D-9-A	G0095-22A	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-162622-D-10-A	PZ018-22A	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-162622-D-11-A	PZ020-22A	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-162622-D-11-B MS	PZ020-22A	9060A	D	50 mL	50 mL	>2 SU	<2 SU		1.25 mL
280-162622-D-11-C MSD	PZ020-22A	9060A	D	50 mL	50 mL	>2 SU	<2 SU		1.25 mL

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 576714 Batch Start Date: 05/31/22 14:47 Batch Analyst: Ince, Connor A

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	Final pH	TOC ICV Std 00049	TOC LCS Std 00054
280-162622-D-12-A	G0077-22A	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-162622-D-16-A	G0311-22A	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
CCV 280-576714/27		9060A		200 mL	200 mL	<2 SU	<2 SU		5 mL
CCB 280-576714/28		9060A		20 mL	20 mL	<2 SU	<2 SU		
280-162622-D-17-A	G0111-22A	9060A	D	20 mL	20 mL	<2 SU	<2 SU		
280-162622-D-18-A	G0123-22A	9060A	D	20 mL	20 mL	<2 SU	<2 SU		
CCV 280-576714/39		9060A		200 mL	200 mL	<2 SU	<2 SU		5 mL
CCB 280-576714/40		9060A		20 mL	20 mL	<2 SU	<2 SU		

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
ICV 280-576714/1		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
ICB 280-576714/2		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
LCS 280-576568/1-A		9060A		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 Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 576714 Batch Start Date: 05/31/22 14:47 Batch Analyst: Ince, Connor A

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
MB 280-576568/2-A		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-162622-D-1-A	G0119-22A	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-162622-D-1-B MS	G0119-22A	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-162622-D-1-C MSD	G0119-22A	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-162622-D-2-A	G0121-22A	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-162622-D-3-A	G0101-22A	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-162622-D-4-A	G0100-22A	9060A	D	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 Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 576714 Batch Start Date: 05/31/22 14:47 Batch Analyst: Ince, Connor A

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
280-162622-D-5-A	G0122-22A	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
CCV 280-576714/15		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
CCB 280-576714/16		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-162622-D-6-A	G0066R-22A	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-162622-D-7-A	G0024-22A	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-162622-D-8-A	G0115-22A	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-162622-D-9-A	G0095-22A	9060A	D	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 Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 576714 Batch Start Date: 05/31/22 14:47 Batch Analyst: Ince, Connor A

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
280-162622-D-10-A	PZ018-22A	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-162622-D-11-A	PZ020-22A	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-162622-D-11-B MS	PZ020-22A	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-162622-D-11-C MSD	PZ020-22A	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-162622-D-12-A	G0077-22A	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-162622-D-16-A	G0311-22A	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
CCV 280-576714/27		9060A		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 Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 576714 Batch Start Date: 05/31/22 14:47 Batch Analyst: Ince, Connor A

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
CCB 280-576714/28		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-162622-D-17 -A	G0111-22A	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-162622-D-18 -A	G0123-22A	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
CCV 280-576714/39		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
CCB 280-576714/40		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					

Batch Notes	
Acid ID	0.2% H2SO4_00431,H2SO4_00214
Combustion Catylyst ID	19003D-03
Pipette/Syringe/Dispenser ID	BWH 5000, 1000 MS,1272995
Filter ID	R1MB55774-2036-DS
pH Paper ID	HC178690
Batch Comment	Run and reviewed by ABW

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 Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 576714 Batch Start Date: 05/31/22 14:47 Batch Analyst: Ince, Connor A

Batch Method: 9060A Batch End Date:

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 Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 576371 Batch Start Date: 05/26/22 12:42 Batch Analyst: Guillen, Kristela E

Batch Method: SM 2320B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	CalcMsg	Alk daily lcs 01041				
LCS 280-576371/4		SM 2320B		InitialAmount is blank	10 mL				
LCSD 280-576371/5		SM 2320B		InitialAmount is blank	10 mL				
MB 280-576371/6		SM 2320B		InitialAmount is blank					
280-162622-F-1	G0119-22A	SM 2320B	T	InitialAmount is blank					
280-162622-F-2	G0121-22A	SM 2320B	T	InitialAmount is blank					
280-162622-F-3	G0101-22A	SM 2320B	T	InitialAmount is blank					
280-162622-F-4	G0100-22A	SM 2320B	T	InitialAmount is blank					
280-162622-F-5	G0122-22A	SM 2320B	T	InitialAmount is blank					
280-162622-F-6	G0066R-22A	SM 2320B	T	InitialAmount is blank					
CCV 280-576371/17		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-576371/18		SM 2320B		InitialAmount is blank					
280-162622-F-7	G0024-22A	SM 2320B	T	InitialAmount is blank					
280-162622-F-8	G0115-22A	SM 2320B	T	InitialAmount is blank					
280-162622-F-9	G0095-22A	SM 2320B	T	InitialAmount is blank					
280-162622-F-10	PZ018-22A	SM 2320B	T	InitialAmount is blank					
280-162622-F-11	PZ020-22A	SM 2320B	T	InitialAmount is blank					
280-162622-F-12	G0077-22A	SM 2320B	T	InitialAmount is blank					
280-162622-D-13	G0069-22A	SM 2320B	T	InitialAmount is blank					
280-162622-D-14	SHGW03-22A	SM 2320B	T	InitialAmount is blank					
280-162622-D-15	SHGW04-22A	SM 2320B	T	InitialAmount is blank					
280-162622-F-16	G0311-22A	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 Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 576371 Batch Start Date: 05/26/22 12:42 Batch Analyst: Guillen, Kristela E

Batch Method: SM 2320B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	CalcMsg	Alk daily lcs 01041				
CCV 280-576371/29		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-576371/30		SM 2320B		InitialAmount is blank					
LCS 280-576371/31		SM 2320B		InitialAmount is blank	10 mL				
MB 280-576371/32		SM 2320B		InitialAmount is blank					
280-162622-F-17	G0111-22A	SM 2320B	T	InitialAmount is blank					
280-162622-F-17 DU	G0111-22A	SM 2320B	T	InitialAmount is blank					
280-162622-F-18	G0123-22A	SM 2320B	T	InitialAmount is blank					
280-162622-B-19	SHGW02-22A	SM 2320B	T	InitialAmount is blank					
280-162622-B-20	SHGW05-22A	SM 2320B	T	InitialAmount is blank					
280-162622-B-21	G0053-22A	SM 2320B	T	InitialAmount is blank					
280-162622-B-26	SAMW1-22A	SM 2320B	T	InitialAmount is blank					
CCV 280-576371/43		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-576371/44		SM 2320B		InitialAmount is blank					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-162622-1

SDG No.:

Batch Number: 576371 Batch Start Date: 05/26/22 12:42 Batch Analyst: Guillen, Kristela E

Batch Method: SM 2320B Batch End Date:

Batch Notes	
Nominal Amount Used	10 mL
Acid ID	0.02 H2SO4_00296
Normality of First Titrant	0.02 N
Sodium Carbonate ID	Alk Stk Std_00022
pH Buffer 1 ID	pH 2.0 buffer_00096
pH Buffer 2 ID	pH 4.0 buffer_00207
pH Buffer 3 ID	pH 7.0 buffer_00312
pH Buffer 4 ID	pH 7.0 buffer_00313
pH Buffer 5 ID	pH 10 buffer_00156
pH Buffer 6 ID	pH 12 buffer_00178
Probe ID	PCE 80 pH 1200D_8918
Batch Comment	KG

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: 08-Jun-22

Cup	Name	Type	R	Dil	Wt	Vial	Comment
106	Sync	SYNC	1	1	1		
0	Carry Over	CO	1	1	1		
0	Blank	BLNK	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	280-162454-A-3	U	1	1	1		
202	ms 280-162454-A-3	U	1	1	1		
203	msd 280-162454-A-3	U	1	1	1		
204	280-162454-A-10	U	1	1	1		
205	280-162609-E-1	U	1	5	1		
206	280-162609-D-2	U	1	5	1		
207	280-162609-D-4	U	1	5	1		
208	280-162609-D-6	U	1	1	1		
209	280-162609-D-8	U	1	1	1		
210	280-162609-D-12	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	280-162609-D-15	U	1	10	1		
212	280-162609-D-16	U	1	10	1		
213	280-162609-E-10	U	1	1	1		
214	ms 280-162609-E-10	U	1	1	1		
215	msd 280-162609-E-10	U	1	1	1		
216	280-162622-C-1	U	1	5	1		
217	280-162622-C-2	U	1	20	1		
218	280-162622-C-3	U	1	1	1		
219	280-162622-C-4	U	1	5	1		
220	280-162622-C-5	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		
221	280-162622-C-6	U	1	1	1		
222	280-162622-C-7	U	1	1	1		
223	280-162622-C-8	U	1	2	1		
224	280-162622-C-9	U	1	1	1		
107	LCS	U	1	1	1		
107	LCSD	U	1	1	1		
111	MB	U	1	1	1		
225	280-162777-A-4	U	1	1	1		
226	ms 280-162777-A-4	U	1	1	1		

Cup	Name	Type	R	Dil	Wt	Vial	Comment
227	msd 280-162777-A-4	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		
228	280-162622-C-10	U	1	1	1		
229	280-162622-C-11	U	1	1	1		
230	280-162622-C-12	U	1	1	1		
231	280-162622-C-16	U	1	1	1		
232	280-162622-C-17	U	1	1	1		
233	280-162622-C-18	U	1	1	1		
234	280-162525-E-1	U	1	500	1		
235	280-162609-E-1	U	1	5	1		
236	280-162609-D-2	U	1	5	1		
237	280-162777-A-3	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		
238	280-162777-A-1	U	1	1	1		
239	280-162777-A-5	U	1	1	1		
240	280-162777-A-20	U	1	1	1		
241	ms 280-162777-A-20	U		1	1	1	
242	msd 280-162777-A-20	U		1	1	1	
243	280-162777-A-7	U	1	1	1		
244	280-162777-A-8	U	1	1	1		
245	280-162777-A-10	U	1	1	1		
246	280-162777-A-11	U	1	1	1		
247	280-162777-A-12	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		
248	280-162777-A-13	U	1	1	1		
249	280-162777-A-15	U	1	1	1		
250	280-162777-A-16	U	1	1	1		
251	280-162777-A-17	U	1	1	1		
107	LCS	U	1	1	1		
107	LCSD	U	1	1	1		
111	MB	U	1	1	1		
201	590-17655-D-1	U	1	1	1		
202	ms 590-17655-D-1	U		1	1	1	
203	msd 590-17655-D-1	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		
203	280-162777-A-18	U	1	1	1		
204	280-162777-A-19	U	1	1	1		
205	280-162777-A-21	U	1	1	1		
206	280-162777-A-22	U	1	1	1		
207	280-162777-A-23	U	1	1	1		
208	280-162802-A-1	U	1	1	1		
209	280-162802-A-2	U	1	1	1		
210	280-162802-A-3	U	1	1	1		
211	280-162802-A-4	U	1	1	1		
212	Dilution?	U	1	1	1		

Cup	Name	Type	R	Dil	Wt	Vial	Comment
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\060822B.RST
Date: 08-Jun-22
Operator: mp

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
1	106	Sync	1	SYNC	1	1	22867	994.517273	
2	0	Carry Over	1	CO	1	1	2	-57.204544	LO
3	0	Blank	1	BLNK	1	1	-83	-61.098560	LO
4	101	Cal 0 ppb	1	C	1	1	247	-46.048615	LO
5	102	Cal 25 ppb	1	C	1	1	2154	41.123478	
6	103	Cal 50 ppb	1	C	1	1	2950	77.511307	
7	104	Cal 100 ppb	1	C	1	1	4061	128.397263	
8	105	Cal 500 ppb	1	C	1	1	11747	481.141266	
9	106	Cal 1000 ppb	1	C	1	1	22666	985.233459	
10	107	Cal 2500 ppb	1	C	1	1	55231	2509.297363	
11	108	Cal 5000 ppb	1	C	1	1	107051	4998.354004	
12	0	Blank	1	BLNK	1	1	95	-52.948765	LO
B	0	Read Baseline	1	RB	1	1	0	-57.307453	BL
14	109	ICVL 500.0 ppb	1	U	1	1	54785	2488.218018	
15	110	ICV 2500.0 ppb	1	U	1	1	12016	493.511444	
16	111	ICB	1	U	1	1	1347	4.239704	
B	0	read baseline	1	RB	1	1	0	-57.307453	BL
18	107	LCS	1	U	1	1	54204	2460.765625	
19	107	LCSD	1	U	1	1	55635	2528.411133	
20	111	MB	1	U	1	1	1382	5.829020	
21	201	280-162454-A-3	1	U	1	1	66071	3023.489990	
22	202	ms 280-162454-A-3	1	U	1	1	86745	4013.688477	
23	203	msd 280-162454-A-3	1	U	1	1	86768	4014.795410	
24	204	280-162454-A-10	1	U	1	1	617	-29.112434	LO
25	205	280-162609-E-1	1	U	5	1	25302	5537.185547	
26	206	280-162609-D-2	1	U	5	1	26044	5709.353027	
27	207	280-162609-D-4	1	U	5	1	1750	113.210220	
28	208	280-162609-D-6	1	U	1	1	352	-41.229256	LO
29	209	280-162609-D-8	1	U	1	1	28717	1266.067871	
30	210	280-162609-D-12	1	U	1	1	791	-21.171259	LO
31	0	Blank	1	BLNK	1	1	-30	-58.680359	LO
B	0	Read Baseline	1	RB	1	1	0	-57.307453	BL
33	105	CCVL 500.0 ppb	1	U	1	1	11743	480.957123	
34	107	CCV 2500.0 ppb	1	U	1	1	55378	2516.242188	
35	111	CCB	1	U	1	1	1414	7.305543	
B	0	Read Baseline	1	RB	1	1	0	-57.307453	BL
37	211	280-162609-D-15	1	U	10	1	287594	142827.156250	HI
38	212	280-162609-D-16	1	U	10	1	277991	137649.140625	HI
39	213	280-162609-E-10	1	U	1	1	994	-11.918867	LO FL
40	214	ms 280-162609-E-10	1	U	1	1	22428	974.179810	FL
41	215	msd 280-162609-E-10	1	U	1	1	23206	1010.231445	
42	216	280-162622-C-1	1	U	5	1	2328	245.289307	
43	217	280-162622-C-2	1	U	20	1	10667	8628.741211	
44	218	280-162622-C-3	1	U	1	1	47032	2122.636475	
45	219	280-162622-C-4	1	U	5	1	12950	2682.447754	
46	220	280-162622-C-5	1	U	1	1	100188	4664.197266	
47	0	Blank	1	BLNK	1	1	63	-54.428989	LO
B	0	Read Baseline	1	RB	1	1	0	-57.307453	BL
49	105	CCVL 500.0 ppb	1	U	1	1	11745	481.048798	
50	107	CCV 2500.0 ppb	1	U	1	1	56926	2589.474365	
51	111	CCB	1	U	1	1	1336	3.736619	
B	0	Read Baseline	1	RB	1	1	0	-57.307453	BL
53	221	280-162622-C-6	1	U	1	1	67895	3110.343506	
54	222	280-162622-C-7	1	U	1	1	171	-49.507275	LO
55	223	280-162622-C-8	1	U	2	1	32348	2870.228027	
56	224	280-162622-C-9	1	U	1	1	48123	2173.980957	
57	107	LCS	1	U	1	1	56210	2555.606445	
58	107	LCSD	1	U	1	1	55772	2534.883789	
59	111	MB	1	U	1	1	1075	-8.180919	LO
60	225	280-162777-A-4	1	U	1	1	9793	391.280029	
61	226	ms 280-162777-A-4	1	U	1	1	31273	1385.022095	
62	227	msd 280-162777-A-4	1	U	1	1	31660	1403.048218	
63	0	Blank	1	BLNK	1	1	-16	-58.017090	LO
B	0	Read Baseline	1	RB	1	1	0	-57.307453	BL
65	105	CCVL 500.0 ppb	1	U	1	1	11638	476.121552	
66	107	CCV 2500.0 ppb	1	U	1	1	56049	2547.964844	
67	111	CCB	1	U	1	1	1042	-9.705616	LO
B	0	Read Baseline	1	RB	1	1	0	-57.307453	BL
69	228	280-162622-C-10	1	U	1	1	21451	928.965759	
70	229	280-162622-C-11	1	U	1	1	970	-13.018057	LO

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
71	230	280-162622-C-12	1	U	1	1	145	-50.684860	LO
72	231	280-162622-C-16	1	U	1	1	10968	445.302979	
73	232	280-162622-C-17	1	U	1	1	10801	437.634796	
74	233	280-162622-C-18	1	U	1	1	27256	1198.159546	
75	234	280-162525-E-1	1	U	500	1	114321	2676905.250000	HI
76	235	280-162609-E-1	1	U	5	1	25782	5648.656738	FL
77	236	280-162609-D-2	1	U	5	1	25445	5570.324219	FL
78	237	280-162777-A-3	1	U	1	1	564229	30354.541016	HI
79	0	Blank	1	BLNK	1	1	1302	2.190559	
B	0	Read Baseline	1	RB	1	1	0	-57.307453	BL
81	105	CCVL 500.0 ppb	1	U	1	1	11859	486.285309	
82	107	CCV 2500.0 ppb	1	U	1	1	55543	2524.067871	
83	111	CCB	1	U	1	1	1092	-7.430710	LO
B	0	Read Baseline	1	RB	1	1	0	-57.307453	BL
85	238	280-162777-A-1	1	U	1	1	661	-27.095633	LO
86	239	280-162777-A-5	1	U	1	1	1907	29.848547	
87	240	280-162777-A-20	1	U	1	1	815	-20.075397	LO
88	241	ms 280-162777-A-20	1	U	1	1	24087	1051.067505	
89	242	msd 280-162777-A-20	1	U	1	1	24158	1054.371094	
90	243	280-162777-A-7	1	U	1	1	12443	513.133667	
91	244	280-162777-A-8	1	U	1	1	407033	20947.791016	HI
92	245	280-162777-A-10	1	U	1	1	8328	323.986328	FL
93	246	280-162777-A-11	1	U	1	1	385452	19712.662109	HI
94	247	280-162777-A-12	1	U	1	1	7556	288.553589	FL
95	0	Blank	1	BLNK	1	1	451	-36.698441	LO
B	0	Read Baseline	1	RB	1	1	0	-57.307453	BL
97	105	CCVL 500.0 ppb	1	U	1	1	11577	473.292328	
98	107	CCV 2500.0 ppb	1	U	1	1	52981	2402.993408	
99	111	CCB	1	U	1	1	1100	-7.055923	LO
B	0	Read Baseline	1	RB	1	1	0	-57.307453	BL
101	248	280-162777-A-13	1	U	1	1	398948	20483.433594	HI
102	249	280-162777-A-15	1	U	1	1	11008	447.141083	
103	250	280-162777-A-16	1	U	1	1	-56329	-2583.211182	LO
104	251	280-162777-A-17	1	U	1	1	-50054	-2306.433838	LO
105	107	LCS	1	U	1	1	8369	325.899109	
106	107	LCSD	1	U	1	1	13124	544.507019	
107	111	MB	1	U	1	1	-30269	-1426.122925	LO
108	201	590-17655-D-1	1	U	1	1	-6110	-335.777435	LO
109	202	ms 590-17655-D-1	1	U	1	1	22496	977.356995	
110	203	msd 590-17655-D-1	1	U	1	1	29010	1279.684082	
111	0	Blank	1	BLNK	1	1	-6148	-337.500244	LO
B	0	Read Baseline	1	RB	1	1	0	-57.307274	BL
113	105	CCVL 500.0 ppb	1	U	1	1	18002	769.446777	

NH3:Calibration 1: Peak 4-116

File name: C:\FLOW_4\060822B.RST
Date: 08-Jun-22
Operator: mp

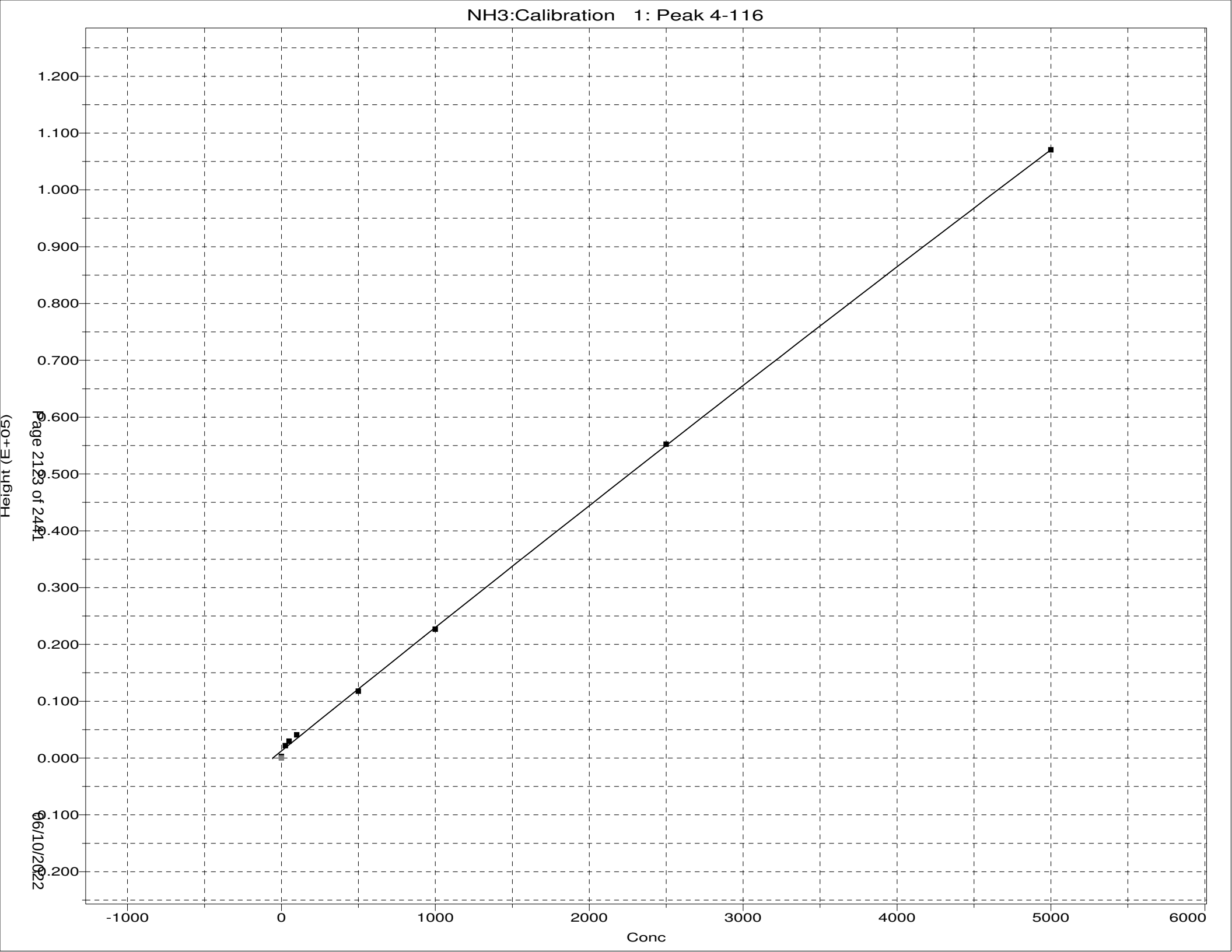
*	Name	Conc	Height
*	Cal 0 ppb	0.000000	246.537842
*	Cal 25 ppb	25.000000	2154.055664
*	Cal 50 ppb	50.000000	2949.614746
*	Cal 100 ppb	100.000000	4061.475098
*	Cal 500 ppb	500.000000	11747.376953
*	Cal 1000 ppb	1000.000000	22666.380859
*	Cal 2500 ppb	2500.000000	55231.015625
*	Cal 5000 ppb	5000.000000	107050.859375

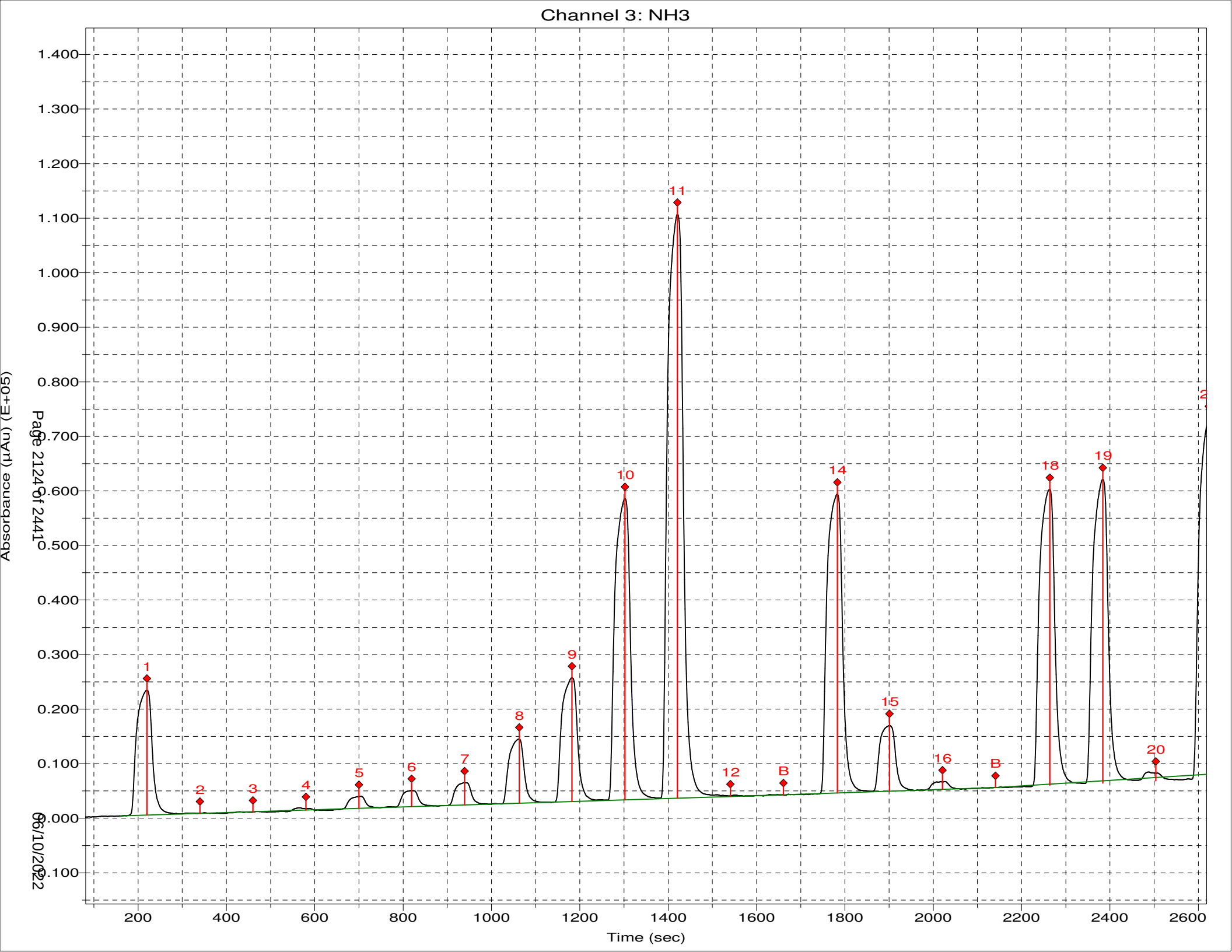
Calib Coef:
x=cyy+by+a
a: (intercept) -5.7307e+01
b: 4.5664e-02
c: 1.4596e-08

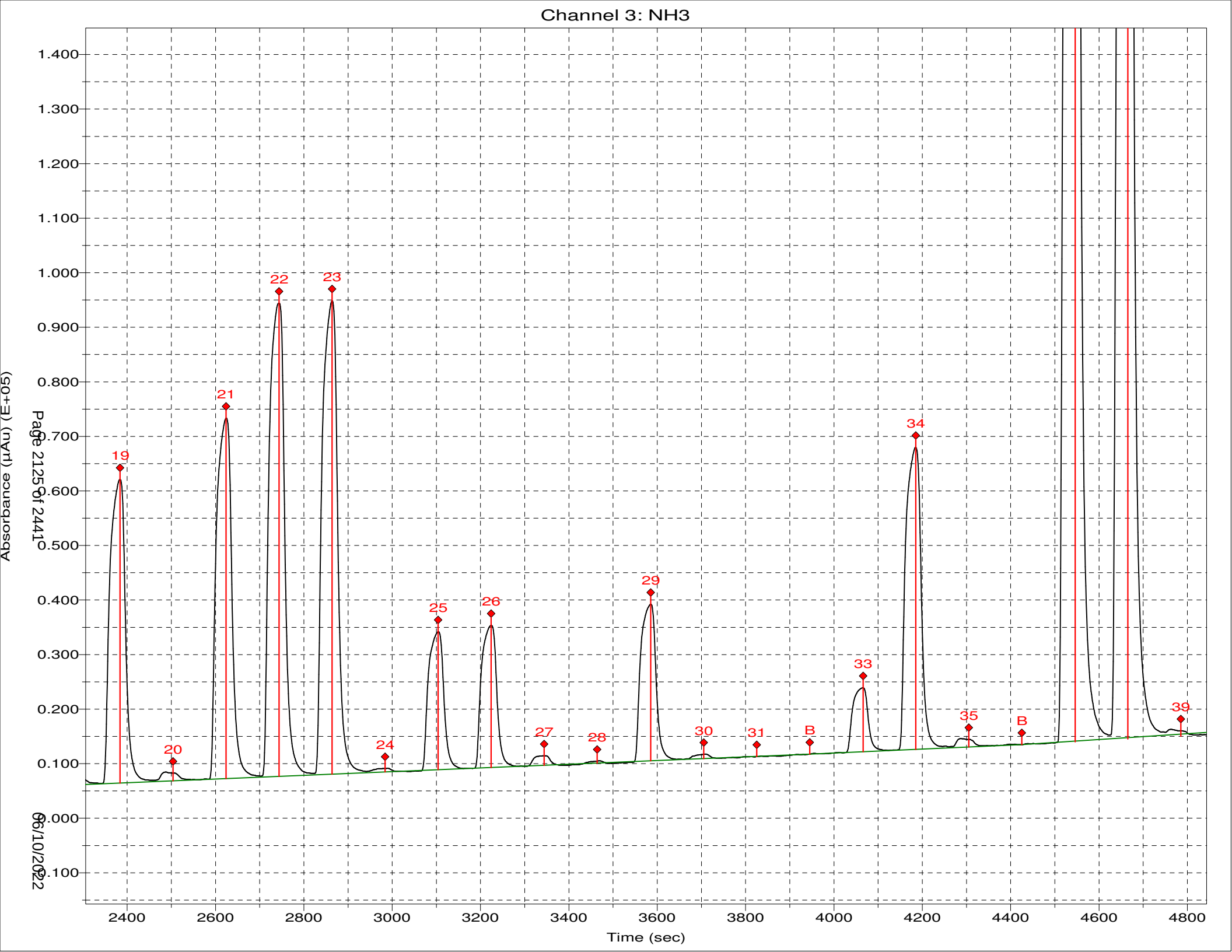
Corr Coef: 0.999895

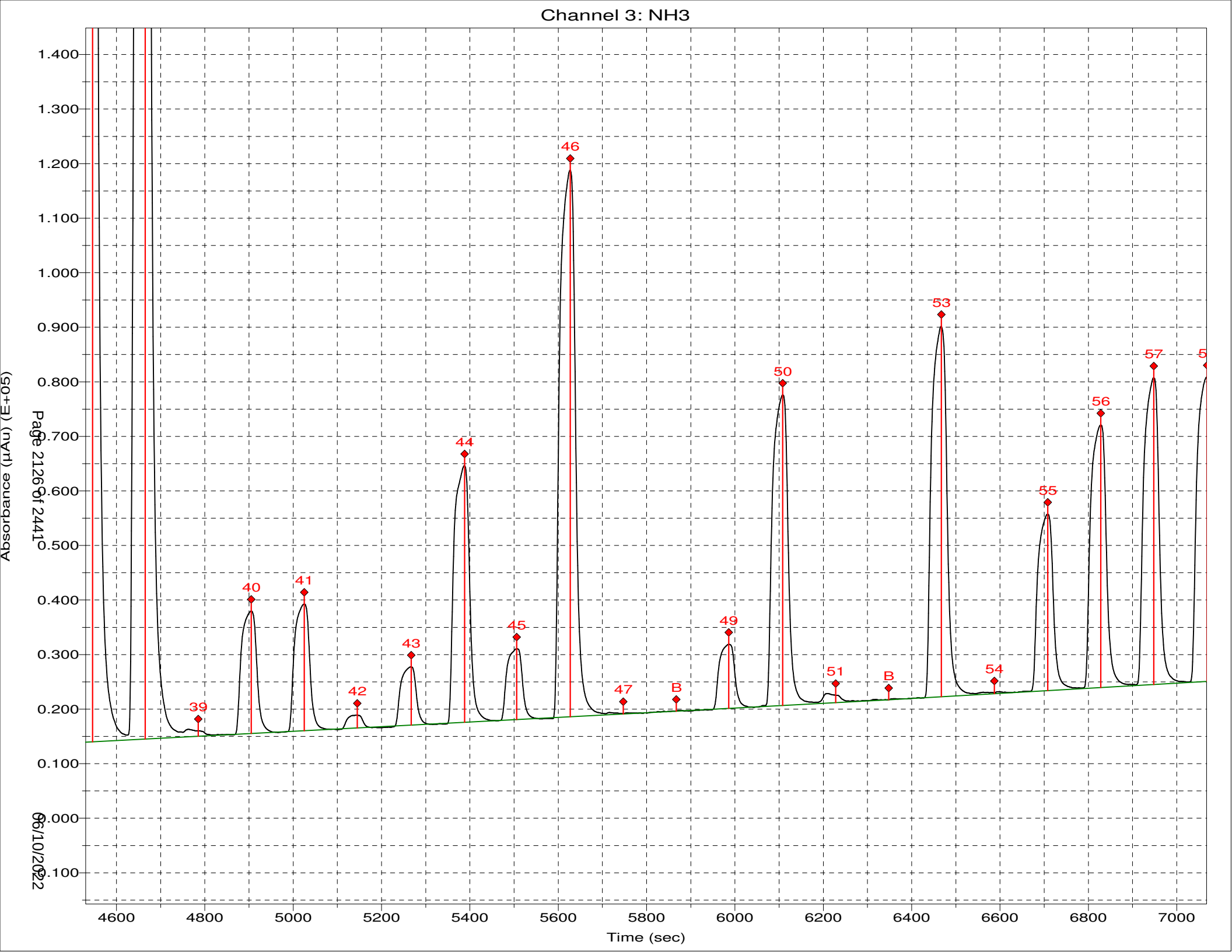
Carryover: 0.00986%

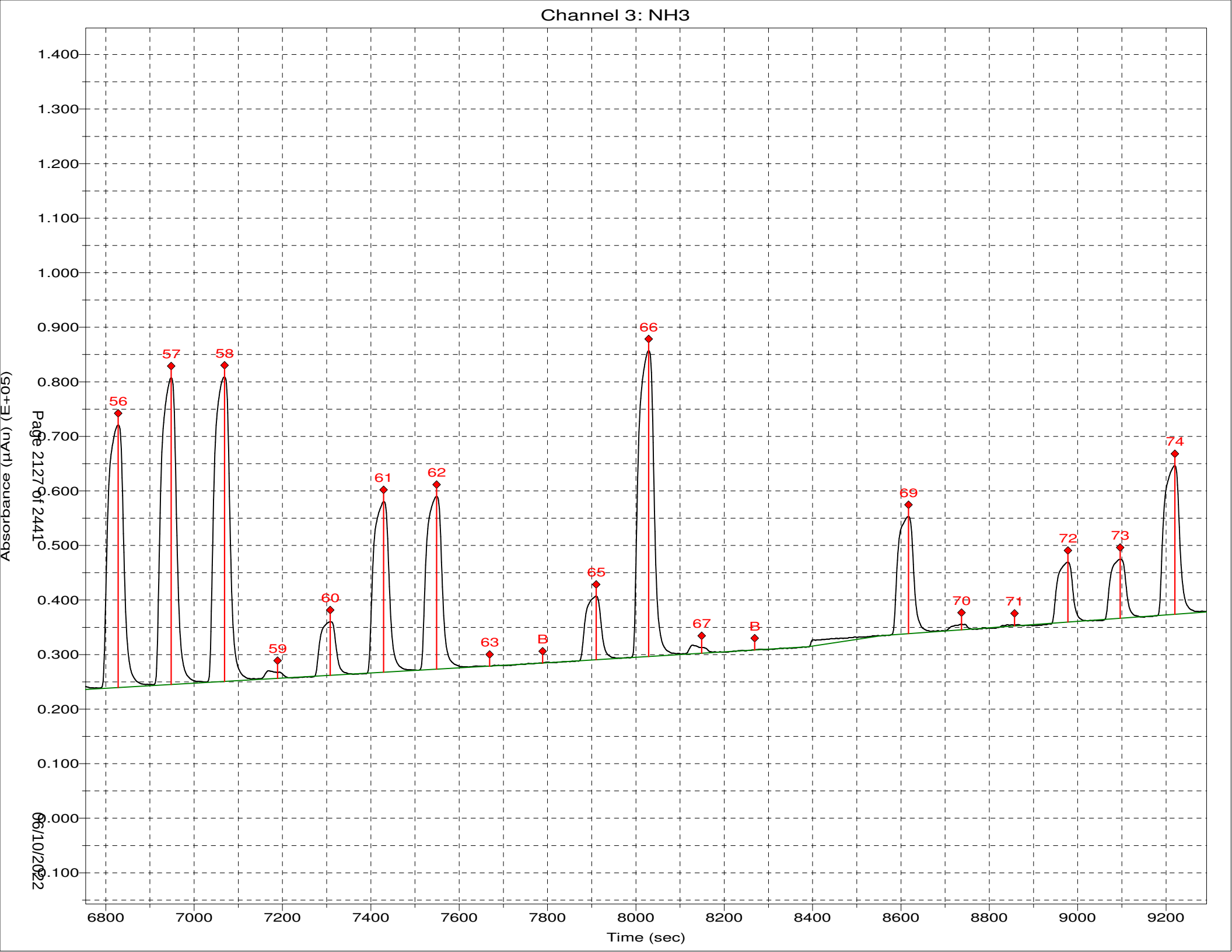
No Drift Peaks

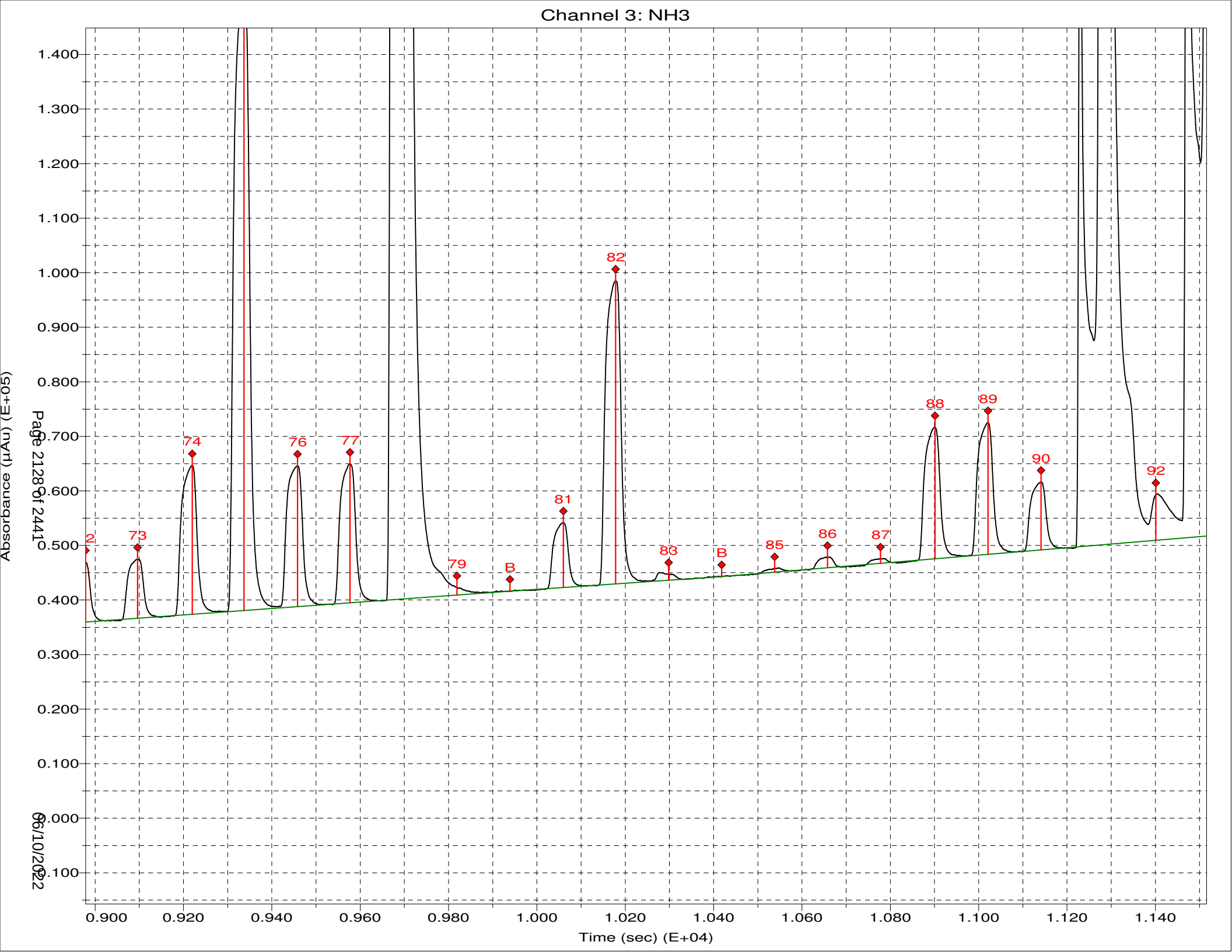

NH3:Calibration 1: Peak 4-116
1.200
1.100
1.000
0.900
0.800
0.700
0.600
0.500
0.400
0.300
0.200
0.100
0.000
-0.100
-0.200
Height (E+05)
-1000
0
1000
2000
3000
4000
5000
6000
Conc

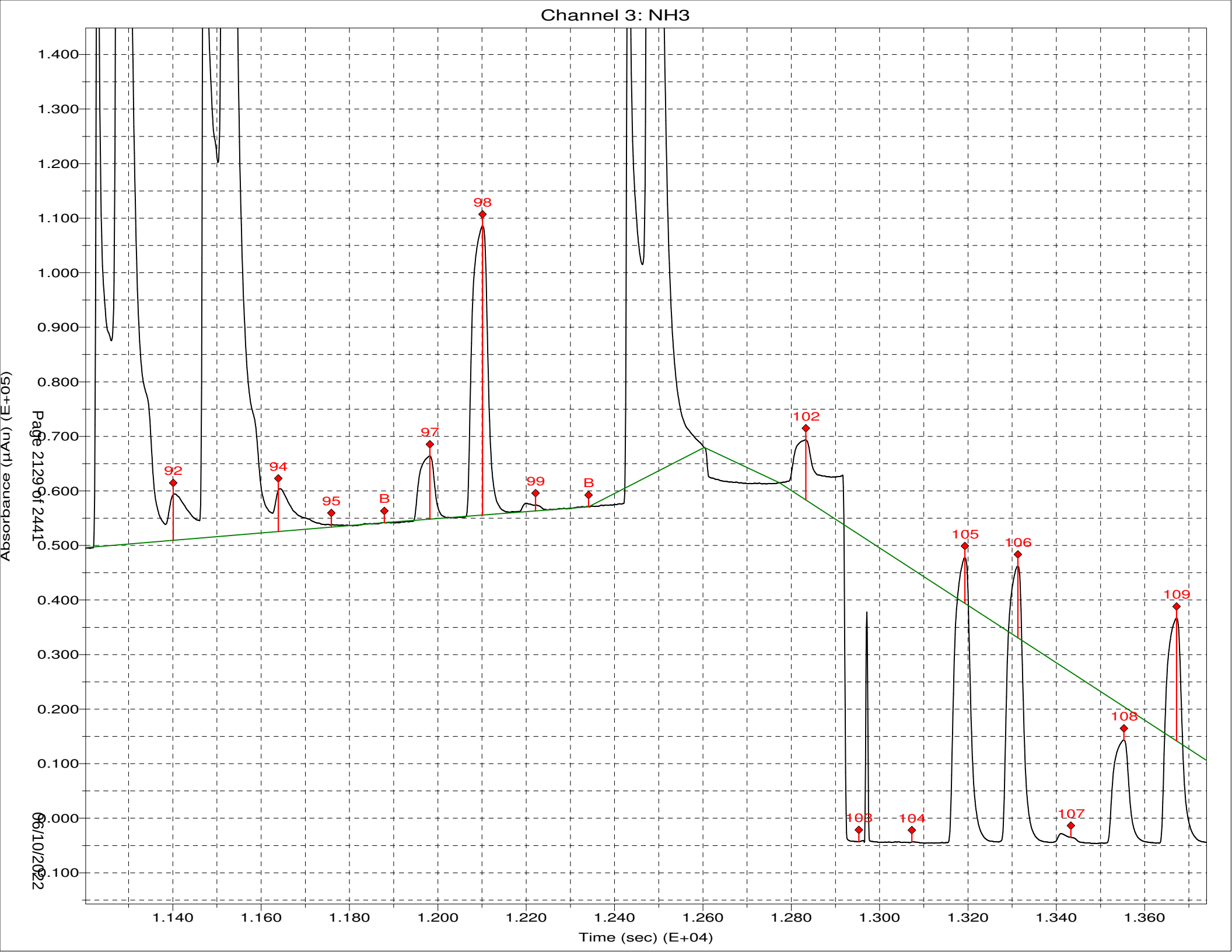

Channel 3: NH3
Absorbance (µAu) (E+05)
Time (sec)
1.400
1.300
1.200
1.100
1.000
0.900
0.800
0.700
0.600
0.500
0.400
0.300
0.200
0.100
0.000
-0.100
200
400
600
800
1000
1200
1400
1600
1800
2000
2200
2400
2600
1
2
3
4
5
6
7
8
9
10
11
12
B
14
15
16
B
18
19
20


Channel 3: NH3
Absorbance (µAu) (E+05)
1.400
1.300
1.200
1.100
1.000
0.900
0.800
0.700
0.600
0.500
0.400
0.300
0.200
0.100
0.000
-0.100
19
20
21
22
23
24
25
26
27
28
29
30
31
B
33
34
35
B
39
2400
2600
2800
3000
3200
3400
3600
3800
4000
4200
4400
4600
4800
Time (sec)


Channel 3: NH3
Absorbance (µAu) (E+05)
1.400
1.300
1.200
1.100
1.000
0.900
0.800
0.700
0.600
0.500
0.400
0.300
0.200
0.100
0.000
-0.100
39
40
41
42
43
44
45
46
47
B
49
50
51
B
53
54
55
56
57
4600
4800
5000
5200
5400
5600
5800
6000
6200
6400
6600
6800
7000
Time (sec)
Page 2126 of 2441
06/10/2022


Channel 3: NH3
Absorbance (µAu) (E+05)
1.400
1.300
1.200
1.100
1.000
0.900
0.800
0.700
0.600
0.500
0.400
0.300
0.200
0.100
0.000
-0.100
56
57
58
59
60
61
62
63
B
65
66
67
B
69
70
71
72
73
74
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
Time (sec)


Channel 3: NH3
Absorbance (µAu) (E+05)
Time (sec) (E+04)
Page 2128 of 2441
06/10/2022
1.400
1.300
1.200
1.100
1.000
0.900
0.800
0.700
0.600
0.500
0.400
0.300
0.200
0.100
0.000
-0.100
0.900
0.920
0.940
0.960
0.980
1.000
1.020
1.040
1.060
1.080
1.100
1.120
1.140
2
73
74
76
77
79
B
81
82
83
B
85
86
87
88
89
90
92


Channel 3: NH3
Absorbance (µAu) (E+05)
1.400
1.300
1.200
1.100
1.000
0.900
0.800
0.700
0.600
0.500
0.400
0.300
0.200
0.100
0.000
-0.100
92
94
95
B
97
98
99
B
102
103
104
105
106
107
108
109
1.140
1.160
1.180
1.200
1.220
1.240
1.260
1.280
1.300
1.320
1.340
1.360
Time (sec) (E+04)
Page 21298 of 24411
06/10/2022

TestAmerica Calibration Spreadsheet, Work Instruction No. CA-Q-WI-13; dated 8/10/2011

Method		350.1
Analyte/Da	NH3	6/8/2022

Input Calibration Data

Amount	Response	ISTD Amt	ISTD Resp	Response
0.000	246.538			246.53800
25.000	2154.056			2154.05566
50.000	2949.615			2949.61470
100.000	4061.475			4061.47500
500.000	11747.377			11747.37690
1000.000	22666.381			22666.38086
2500.000	55231.016			55231.01562
5000.000	107050.859			107050.85938
				0.00000
				0.00000

Relative Errors in X

	Average	Linear (1/x2)	Linear (1/X)	Linear Forced	Linear	Quadratic
	#DIV/0!	#DIV/0!	#DIV/0!	287.11%	56.83%	47.49%
	#DIV/0!	#DIV/0!	#DIV/0!	165.04%	52.32%	49.04%
	#DIV/0!	#DIV/0!	#DIV/0!	82.47%	27.80%	27.09%
	#DIV/0!	#DIV/0!	#DIV/0!	5.56%	-3.04%	-2.14%
	#DIV/0!	#DIV/0!	#DIV/0!	1.84%	-0.81%	0.03%
	#DIV/0!	#DIV/0!	#DIV/0!	-0.74%	0.18%	0.01%
	#DIV/0!	#DIV/0!	#DIV/0!	-3.81%	-1.77%	-3.64%
RSE in X:	#DIV/0!	#DIV/0!	#DIV/0!	139.4%	36.7%	36.8%

Curve Fit Statistics

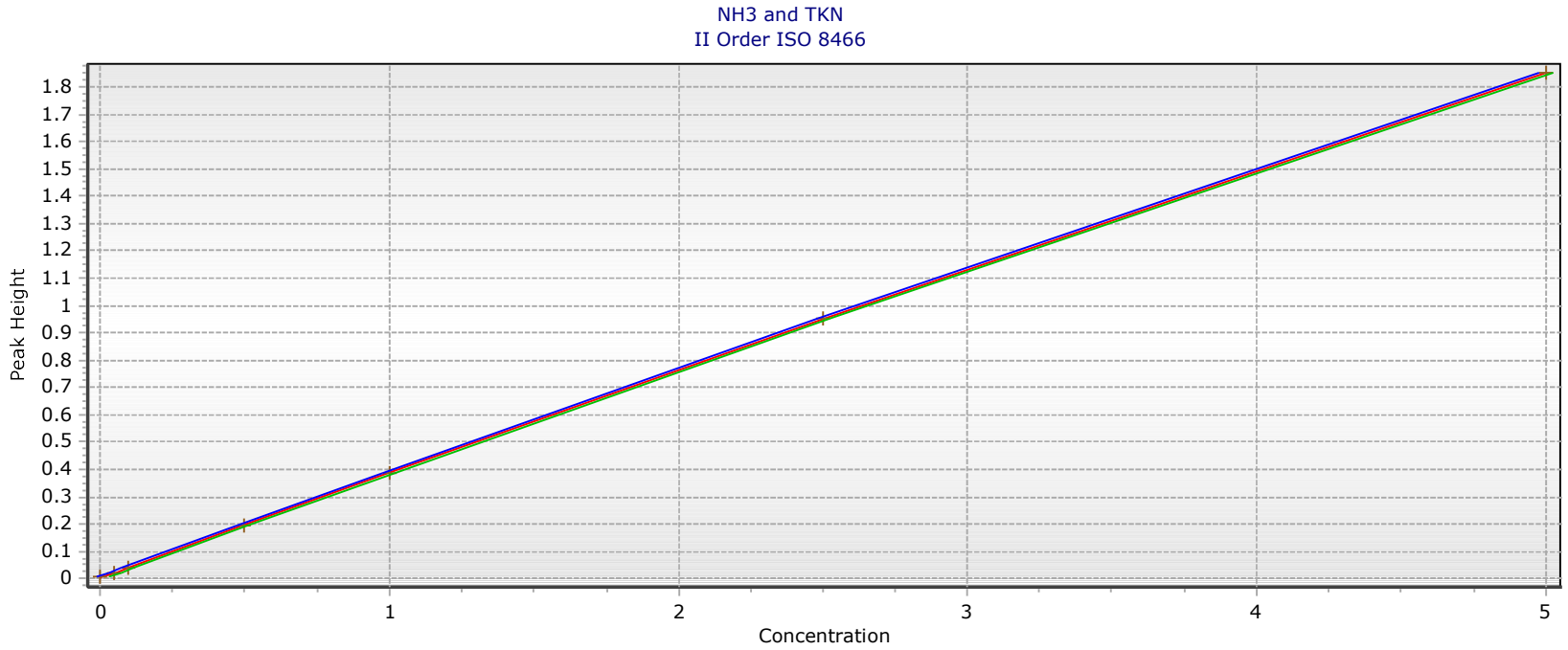
	Constant	1ST Degree Coefficient	2ND Degree Coefficient	X-Intercept	r²	r
Weighted (1/Amt^2)						
Average		#DIV/0!		0	#DIV/0!	#DIV/0!
Linear	#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!	#DIV/0!
Weighted (1/Amt)						
Linear	#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!	#DIV/0!
Unweighted						
Forced Zero		2.2258E+01		0	0.99815	0.99908
Linear	1.3099E+03	2.1530E+01		-60.84	0.99942	0.99971
Quadratic	1.3753E+03	2.1113E+01	1.7044E-04	-65.17	0.99805	0.99903
	c	b	a			

Sample Results

	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5
Instrum.Responses:	2,154.056	11,747.377			
IS Response:					
Avg RF Result:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Linear(1/x2) Result:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Linear(1/x) Result:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Linear Forced:	96.778	527.789	0.000	0.000	0.000
Linear Result:	39.207	484.791	-60.843	-60.843	-60.843
Quad Result (no IS):	36.873	489.320	-65.174	-65.174	-65.174
Quad Result (with IS):					

FlowAccessV3

Date:May 9 2022 4:59PM

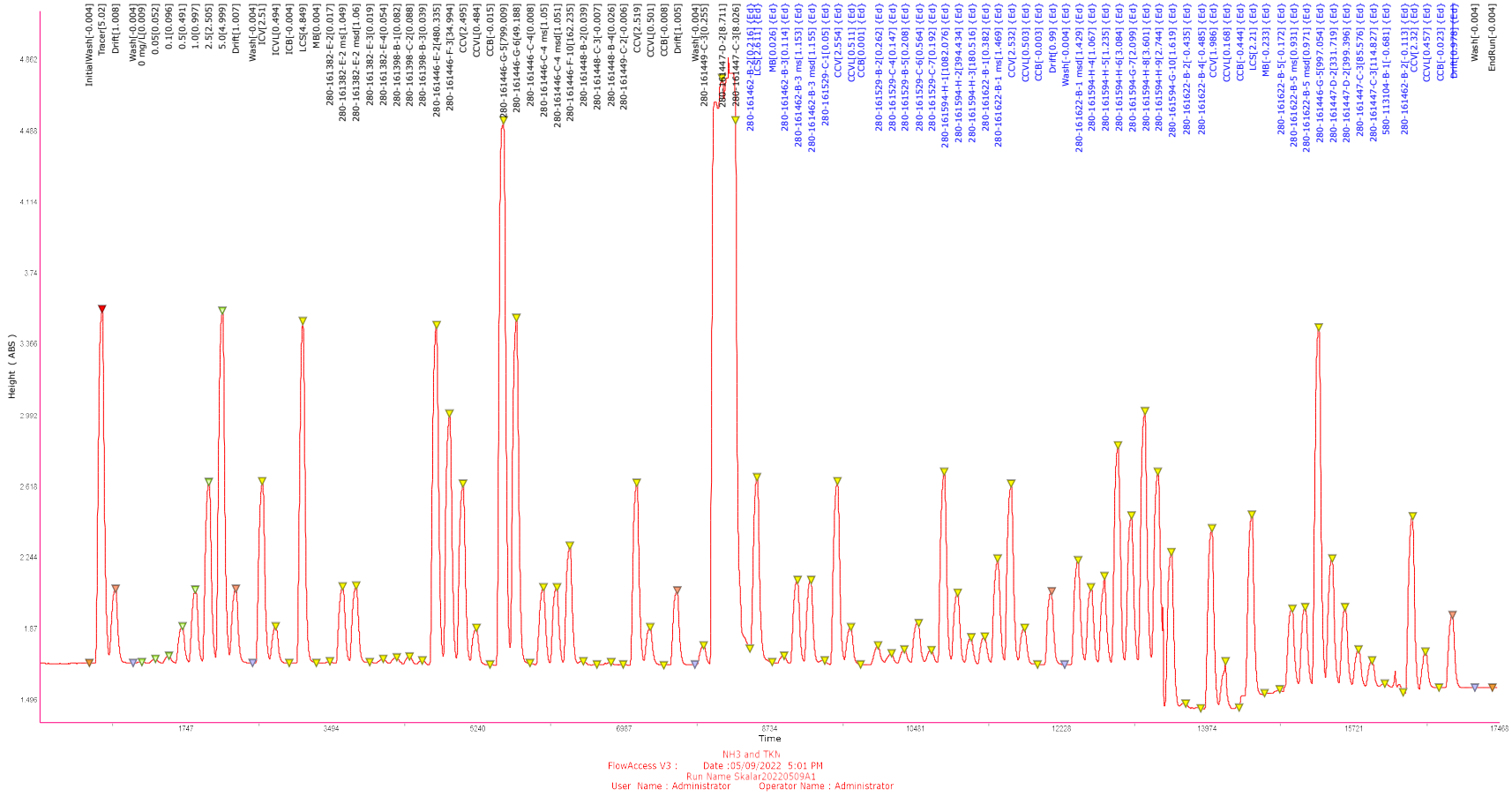


a = 0.0017073086508046 b = 0.3900625095913590 c =-0.0040081903671831 RSD = 0.00286714668515

r =0.99989523480588 R2 = 0.99998835999608

Run Name : Skalar20220509A1

User Name : Administrator Operator Name : Administrator

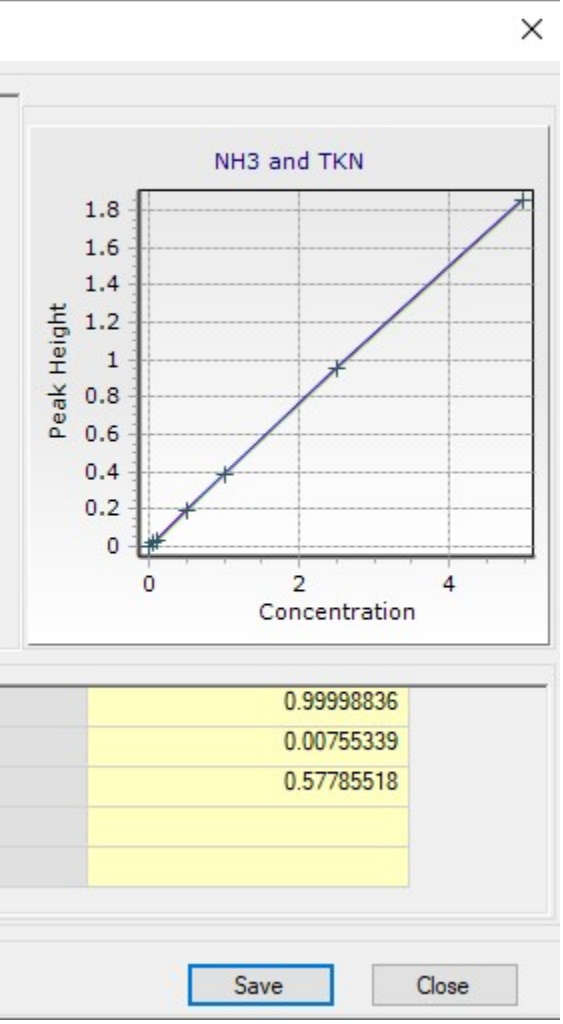

InitialWash[-0.004]
Tracer[5.02]
Drift[1.008]
Wash[-0.004]
0 msd[0.0009]
0.05[0.052]
0.1[0.096]
0.5[0.491]
1.0[0.997]
2.5[2.505]
5.0[4.999]
Drift[1.007]
Wash[-0.004]
ICV[2.51]
ICV[0.494]
ICB[-0.004]
LCS[4.849]
MB[0.004]
280-161382-E-2[0.017]
280-161382-E-2 ms[1.049]
280-161382-E-2 msd[1.06]
280-161382-E-3[0.019]
280-161382-E-4[0.054]
280-161398-B-1[0.082]
280-161398-C-2[0.088]
280-161398-B-3[0.039]
280-161446-E-2[480.335]
280-161446-F-3[34.994]
CCV[2.495]
CCV[0.484]
CCB[-0.015]
280-161446-G-5[799.009]
280-161446-G-6[49.188]
280-161446-C-4[0.008]
280-161446-C-4 ms[1.05]
280-161446-C-4 msd[1.051]
280-161446-F-10[162.235]
280-161448-B-2[0.039]
280-161448-C-3[-0.007]
280-161448-B-4[0.026]
280-161449-C-2[-0.006]
CCV[2-519]
CCV[0.501]
CCB[-0.008]
Drift[1.005]
Wash[-0.004]
280-161449-C-3[0.255]
280-161447-D-2[8.711]
280-161447-C-3[8.026]
280-161462-E-2[0.218]
MB[0.026] (Ed)
280-161462-B-3[0.114] (Ed)
280-161462-B-3 ms[1.153] (Ed)
280-161462-B-3 msd[1.155] (Ed)
280-161529-C-1[0.05] (Ed)
CCV[2.554] (Ed)
CCV[0.511] (Ed)
CCB[0.001] (Ed)
280-161529-B-2[0.262] (Ed)
280-161529-C-4[0.147] (Ed)
280-161529-B-5[0.208] (Ed)
280-161529-C-6[0.564] (Ed)
280-161529-C-7[0.192] (Ed)
280-161594-H-1[108.076] (Ed)
280-161594-H-2[394.434] (Ed)
280-161594-H-3[180.516] (Ed)
280-161622-B-1[0.382] (Ed)
280-161622-B-1 ms[1.469] (Ed)
CCV[2.532] (Ed)
CCV[0.503] (Ed)
CCB[-0.003] (Ed)
Drift[0.99] (Ed)
Wash[-0.004] (Ed)
280-161622-B-1 msd[1.429] (Ed)
280-161594-H-4[1.067] (Ed)
280-161594-H-5[1.235] (Ed)
280-161594-H-6[3.084] (Ed)
280-161594-G-7[2.099] (Ed)
280-161594-H-8[3.601] (Ed)
280-161594-H-9[2.744] (Ed)
280-161594-G-10[1.619] (Ed)
280-161622-B-2[-0.435] (Ed)
280-161622-B-4[-0.485] (Ed)
CCV[1.986] (Ed)
CCV[0.168] (Ed)
CCB[-0.444] (Ed)
LCS[2.21] (Ed)
MB[-0.233] (Ed)
280-161622-B-5[-0.172] (Ed)
280-161622-B-5 ms[0.931] (Ed)
280-161622-B-5 msd[0.971] (Ed)
280-161446-G-5[997.054] (Ed)
280-161447-D-2[331.719] (Ed)
280-161447-D-2[399.396] (Ed)
280-161447-C-3[85.576] (Ed)
280-161447-C-3[114.827] (Ed)
580-113104-B-1[-0.681] (Ed)
280-161462-B-2[-0.113] (Ed)
CCV[0.532] (Ed)
CCV[0.457] (Ed)
CCB[-0.023] (Ed)
Drift[0.978] (Ed)
Wash[-0.004]
EndRun[-0.004]
4.862
4.488
4.114
3.74
3.366
2.992
2.618
2.244
1.87
1.496
Height (ABS)
1747
3494
5240
6987
8734
10481
12228
13974
15721
17468
Time
NH3 and TKN
FlowAccess V3 : Date :05/09/2022 5:01 PM
Run Name Skalar20220509A1
User Name : Administrator Operator Name : Administrator

Select/deselect Standards

	SerialNumber	Cup position	Sample Type	Identity	Concentration	Corrected Height	Result	Use this	Y Residuals	Relative Error(%)
1	4	ST1	S1	0 mg/L	0.000	0.005	0.009	☑		
2	5	ST2	S2	0.05	0.050	0.022	0.052	☑	4.32%	4.91%
3	6	ST3	S3	0.1	0.100	0.039	0.096	☑	-4.22%	-4.23%
4	7	ST4	S4	0.5	0.500	0.192	0.491	☑	-1.74%	-1.73%
5	8	ST5	S5	1	1.000	0.387	0.997	☑	-0.28%	-0.29%
6	9	ST6	S6	2.5	2.500	0.954	2.505	☑	0.21%	0.22%
7	10	ST7	S7	5	5.000	1.851	4.999	☑	-0.02%	-0.02%

Method Name	Ammonia	a	0.00170731	R Squared
Module Name	NH3 and TKN	b	0.39006251	Constant Sx0
Calibration Order	II Order ISO 8466	c	-0.00400819	Constant Vx0
Residual Std. Dev. (Sy)	0.00286714668515	d		
		Correlation Coefficient	0.99989523	

Calibration Order: II Order ISO 8466



	0.99998836
	0.00755339
	0.57785518

Save Close

FlowAccessV3 Results Report

Run Name : Skalar20220509A1
DateTime :May 9 2022 11:53AM
User Name : Administrator Operator Name : Administrator

	Position	SampleType	SampleIdentity	Comments	ExternalDilution
1	IW	IW	InitialWash		1.0000
2	ST7	T	Tracer		1.0000
3	ST5	D	Drift		1.0000
4	WT	W	Wash		1.0000
5	ST1	S1	0 mg/L		1.0000
6	ST2	S2	0.05		1.0000
7	ST3	S3	0.1		1.0000
8	ST4	S4	0.5		1.0000
9	ST5	S5	1.0		1.0000
10	ST6	S6	2.5		1.0000
11	ST7	S7	5.0		1.0000
12	ST5	D	Drift		1.0000
13	WT	W	Wash		1.0000
14	ST8	U	ICV		1.0000
15	ST9	U	ICVL		1.0000
16	WT	U	ICB		1.0000
17	A1	U	LCS		1.0000
18	WT	U	MB		1.0000
19	A2	U	280-161382-E-2		1.0000
20	A3	U	280-161382-E-2 ms		1.0000
21	A4	U	280-161382-E-2 msd		1.0000
22	A5	U	280-161382-E-3		1.0000
23	A6	U	280-161382-E-4		1.0000
24	A7	U	280-161398-B-1		1.0000
25	A8	U	280-161398-C-2		1.0000
26	A9	U	280-161398-B-3		1.0000
27	A10	U	280-161446-E-2		100.0000
28	A11	U	280-161446-F-3		10.0000
29	ST6	U	CCV		1.0000
30	ST4	U	CCVL		1.0000
31	WT	U	CCB		1.0000
32	A12	U	280-161446-G-5		100.0000
33	A13	U	280-161446-G-6		10.0000
34	A14	U	280-161446-C-4		1.0000
35	A15	U	280-161446-C-4 ms		1.0000
36	A16	U	280-161446-C-4 msd		1.0000
37	A17	U	280-161446-F-10		100.0000
38	A18	U	280-161448-B-2		1.0000
39	A19	U	280-161448-C-3		1.0000
40	A20	U	280-161448-B-4		1.0000

Run Name : Skalar20220509A1
DateTime :May 9 2022 11:53AM
User Name : Administrator Operator Name : Administrator

	Position	SampleType	SampleIdentity	Comments	ExternalDilution
41	A21	U	280-161449-C-2		1.0000
42	ST6	U	CCV		1.0000
43	ST4	U	CCVL		1.0000
44	WT	U	CCB		1.0000
45	ST5	D	Drift		1.0000
46	WT	W	Wash		1.0000
47	A22	U	280-161449-C-3		1.0000
48	A23	U	280-161447-D-2		1.0000
49	A24	U	280-161447-C-3		1.0000
50	A25	U	280-161462-B-2		1.0000
51	A26	U	LCS		1.0000
52	WT	U	MB		1.0000
53	A27	U	280-161462-B-3		1.0000
54	A28	U	280-161462-B-3 ms		1.0000
55	A29	U	280-161462-B-3 msd		1.0000
56	A30	U	280-161529-C-1		1.0000
57	ST6	U	CCV		1.0000
58	ST4	U	CCVL		1.0000
59	WT	U	CCB		1.0000
60	A31	U	280-161529-B-2		1.0000
61	A32	U	280-161529-C-4		1.0000
62	A33	U	280-161529-B-5		1.0000
63	A34	U	280-161529-C-6		1.0000
64	A35	U	280-161529-C-7		1.0000
65	B1	U	280-161594-H-1	pH=6 Adj. pH= <2	400.0000
66	B2	U	280-161594-H-2		400.0000
67	B3	U	280-161594-H-3		500.0000
68	B4	U	280-161622-B-1		1.0000
69	B5	U	280-161622-B-1 ms		1.0000
70	ST6	U	CCV		1.0000
71	ST4	U	CCVL		1.0000
72	WT	U	CCB		1.0000
73	ST5	D	Drift		1.0000
74	WT	W	Wash		1.0000
75	B6	U	280-161622-B-1 msd		1.0000
76	B7	U	280-161594-H-4		500.0000
77	B8	U	280-161594-H-5		500.0000
78	B9	U	280-161594-H-6	pH= 3 Adj. pH= <2	200.0000
79	B10	U	280-161594-G-7	pH=7 Adj .pH= <2	500.0000
80	B11	U	280-161594-H-8	pH=8 Adj. pH= <2	500.0000

Run Name : Skalar20220509A1
DateTime :May 9 2022 11:53AM
User Name : Administrator Operator Name : Administrator

	Position	SampleType	SampleIdentity	Comments	ExternalDilution
81	B12	U	280-161594-H-9	pH=8 Adj. pH= <2	500.0000
82	B13	U	280-161594-G-10	pH=6 Adj. pH= <2	500.0000
83	B14	U	280-161622-B-2		1.0000
84	B15	U	280-161622-B-4		1.0000
85	ST6	U	CCV		1.0000
86	ST4	U	CCVL		1.0000
87	WT	U	CCB		1.0000
88	B16	U	LCS		1.0000
89	WT	U	MB		1.0000
90	B17	U	280-161622-B-5		1.0000
91	B18	U	280-161622-B-5 ms		1.0000
92	B19	U	280-161622-B-5 msd		1.0000
93	B20	U	280-161446-G-5		200.0000
94	B21	U	280-161447-D-2		200.0000
95	B22	U	280-161447-D-2		400.0000
96	B23	U	280-161447-C-3		200.0000
97	B24	U	280-161447-C-3		400.0000
98	B25	U	580-113104-B-1		100.0000
99	B26	U	280-161462-B-2		1.0000
100	ST6	U	CCV		1.0000
101	ST4	U	CCVL		1.0000
102	WT	U	CCB		1.0000
103	ST5	D	Drift		1.0000
104	WT	W	Wash		1.0000
105	E	E	EndRun		1.0000

Run Name : Skalar20220509A1
DateTime :May 9 2022 11:53AM
User Name : Administrator Operator Name : Administrator

	NH3 and TKN- Results	NH3 and TKN-	NH3 and TKN-
1	-0.004	0.0000	May 9 2022 12:03PM
2	5.020	1.8590	May 9 2022 12:06PM
3	1.008	0.3908	May 9 2022 12:10PM
4	-0.004	0.0000	May 9 2022 12:12PM
5	0.009	0.0053	May 9 2022 12:16PM
6	0.052	0.0222	May 9 2022 12:18PM
7	0.096	0.0390	May 9 2022 12:20PM
8	0.491	0.1924	May 9 2022 12:23PM
9	0.997	0.3867	May 9 2022 12:26PM
10	2.505	0.9538	May 9 2022 12:28PM
11	4.999	1.8514	May 9 2022 12:31PM
12	1.007	0.3904	May 9 2022 12:34PM
13	-0.004	0.0000	May 9 2022 12:36PM
14	2.510	0.9554	May 9 2022 12:40PM
15	0.494	0.1936	May 9 2022 12:42PM
16	-0.004	0.0002	May 9 2022 12:44PM
17	4.849	1.7989	May 9 2022 12:47PM
18	0.004	0.0031	May 9 2022 12:50PM
19	0.017	0.0084	May 9 2022 12:53PM
20	1.049	0.4065	May 9 2022 12:55PM
21	1.060	0.4108	May 9 2022 12:58PM
22	0.019	0.0091	May 9 2022 1:01PM
23	0.054	0.0228	May 9 2022 1:03PM
24	0.082	0.0338	May 9 2022 1:06PM
25	0.088	0.0358	May 9 2022 1:09PM
26	0.039	0.0168	May 9 2022 1:11PM
27	480.335	1.7828	May 9 2022 1:14PM
28	34.994	1.3176	May 9 2022 1:17PM
29	2.495	0.9499	May 9 2022 1:19PM
30	0.484	0.1897	May 9 2022 1:22PM
31	-0.015	-0.0041	May 9 2022 1:25PM
32	799.009	2.8625	May 9 2022 1:27PM
33	49.188	1.8234	May 9 2022 1:30PM
34	0.008	0.0050	May 9 2022 1:33PM
35	1.050	0.4068	May 9 2022 1:35PM
36	1.051	0.4074	May 9 2022 1:38PM
37	162.235	0.6240	May 9 2022 1:41PM
38	0.039	0.0170	May 9 2022 1:43PM
39	-0.007	-0.0010	May 9 2022 1:46PM
40	0.026	0.0119	May 9 2022 1:48PM

Run Name : Skalar20220509A1
DateTime :May 9 2022 11:53AM
User Name : Administrator Operator Name : Administrator

	NH3 and TKN- Results	NH3 and TKN-	NH3 and TKN-
41	-0.006	-0.0006	May 9 2022 1:51PM
42	2.519	0.9587	May 9 2022 1:54PM
43	0.501	0.1963	May 9 2022 1:57PM
44	-0.008	-0.0013	May 9 2022 1:59PM
45	1.005	0.3897	May 9 2022 2:02PM
46	-0.004	0.0000	May 9 2022 2:05PM
47	0.255	0.1007	May 9 2022 2:08PM
48	8.711	3.0956	May 9 2022 2:10PM
49	8.026	2.8742	May 9 2022 2:14PM
50	0.216	0.0857	May 9 2022 2:16PM
51	2.611	0.9929	May 9 2022 2:20PM
52	0.026	0.0117	May 9 2022 2:22PM
53	0.114	0.0463	May 9 2022 2:26PM
54	1.153	0.4461	May 9 2022 2:29PM
55	1.155	0.4470	May 9 2022 2:31PM
56	0.050	0.0212	May 9 2022 2:34PM
57	2.554	0.9720	May 9 2022 2:37PM
58	0.511	0.2002	May 9 2022 2:39PM
59	0.001	0.0022	May 9 2022 2:42PM
60	0.262	0.1035	May 9 2022 2:44PM
61	0.147	0.0591	May 9 2022 2:47PM
62	0.208	0.0825	May 9 2022 2:50PM
63	0.564	0.2204	May 9 2022 2:53PM
64	0.192	0.0763	May 9 2022 2:55PM
65	1082.076	1.0276	May 9 2022 2:58PM
66	394.434	0.3824	May 9 2022 3:01PM
67	180.516	0.1420	May 9 2022 3:03PM
68	0.382	0.1503	May 9 2022 3:06PM
69	1.469	0.5661	May 9 2022 3:09PM
70	2.532	0.9635	May 9 2022 3:11PM
71	0.503	0.1971	May 9 2022 3:14PM
72	-0.003	0.0006	May 9 2022 3:17PM
73	0.990	0.3841	May 9 2022 3:19PM
74	-0.004	0.0000	May 9 2022 3:22PM
75	1.429	0.5510	May 9 2022 3:26PM
76	1.067	0.4133	May 9 2022 3:27PM
77	1.235	0.4774	May 9 2022 3:30PM
78	3.084	1.1666	May 9 2022 3:33PM
79	2.099	0.8028	May 9 2022 3:35PM
80	3.601	1.3545	May 9 2022 3:38PM

Run Name : Skalar20220509A1
DateTime :May 9 2022 11:53AM
User Name : Administrator Operator Name : Administrator

	NH3 and TKN- Results	NH3 and TKN-	NH3 and TKN-
81	2.744	1.0418	May 9 2022 3:41PM
82	1.619	0.6225	May 9 2022 3:43PM
83	-0.435	-0.1688	May 9 2022 3:46PM
84	-0.485	-0.1883	May 9 2022 3:49PM
85	1.986	0.7606	May 9 2022 3:51PM
86	0.168	0.0672	May 9 2022 3:54PM
87	-0.444	-0.1724	May 9 2022 3:58PM
88	2.210	0.8443	May 9 2022 3:59PM
89	-0.233	-0.0896	May 9 2022 4:02PM
90	-0.172	-0.0656	May 9 2022 4:05PM
91	0.931	0.3612	May 9 2022 4:07PM
92	0.971	0.3767	May 9 2022 4:10PM
93	997.054	1.8467	May 9 2022 4:13PM
94	331.719	0.6376	May 9 2022 4:15PM
95	399.396	0.3872	May 9 2022 4:18PM
96	85.576	0.1679	May 9 2022 4:20PM
97	114.827	0.1134	May 9 2022 4:23PM
98	-0.681	-0.0010	May 9 2022 4:26PM
99	-0.113	-0.0425	May 9 2022 4:28PM
100	2.320	0.8849	May 9 2022 4:31PM
101	0.457	0.1791	May 9 2022 4:34PM
102	-0.023	-0.0072	May 9 2022 4:37PM
103	0.978	0.3794	May 9 2022 4:39PM
104	-0.004	0.0000	May 9 2022 4:42PM
105	-0.004	0.0000	May 9 2022 4:44PM

Run Name : Skalar20220509A1
DateTime :May 9 2022 11:53AM
User Name : Administrator Operator Name : Administrator

	NH3 and TKN-
1	-0.004
2	5.020
3	1.008
4	-0.004
5	0.009
6	0.052
7	0.096
8	0.491
9	0.997
10	2.505
11	4.999
12	1.007
13	-0.004
14	2.510
15	0.494
16	-0.004
17	4.849
18	0.004
19	0.017
20	1.049
21	1.060
22	0.019
23	0.054
24	0.082
25	0.088
26	0.039
27	4.803
28	3.499
29	2.495
30	0.484
31	-0.015
32	7.990
33	4.919
34	0.008
35	1.050
36	1.051
37	1.622
38	0.039
39	-0.007
40	0.026

Run Name : Skalar20220509A1
DateTime :May 9 2022 11:53AM
User Name : Administrator Operator Name : Administrator

	NH3 and TKN-
41	-0.006
42	2.519
43	0.501
44	-0.008
45	1.005
46	-0.004
47	0.255
48	8.711
49	8.026
50	0.216
51	2.611
52	0.026
53	0.114
54	1.153
55	1.155
56	0.050
57	2.554
58	0.511
59	0.001
60	0.262
61	0.147
62	0.208
63	0.564
64	0.192
65	2.705
66	0.986
67	0.361
68	0.382
69	1.469
70	2.532
71	0.503
72	-0.003
73	0.990
74	-0.004
75	1.429
76	1.067
77	1.235
78	3.084
79	2.099
80	3.601

Run Name : Skalar20220509A1
DateTime :May 9 2022 11:53AM
User Name : Administrator Operator Name : Administrator

	NH3 and TKN-
81	2.744
82	1.619
83	-0.435
84	-0.485
85	1.986
86	0.168
87	-0.444
88	2.210
89	-0.233
90	-0.172
91	0.931
92	0.971
93	4.985
94	1.659
95	0.998
96	0.428
97	0.287
98	-0.007
99	-0.113
100	2.320
101	0.457
102	-0.023
103	0.978
104	-0.004
105	-0.004

Calibration results

TKN Version number 1.5 WC_GAL1

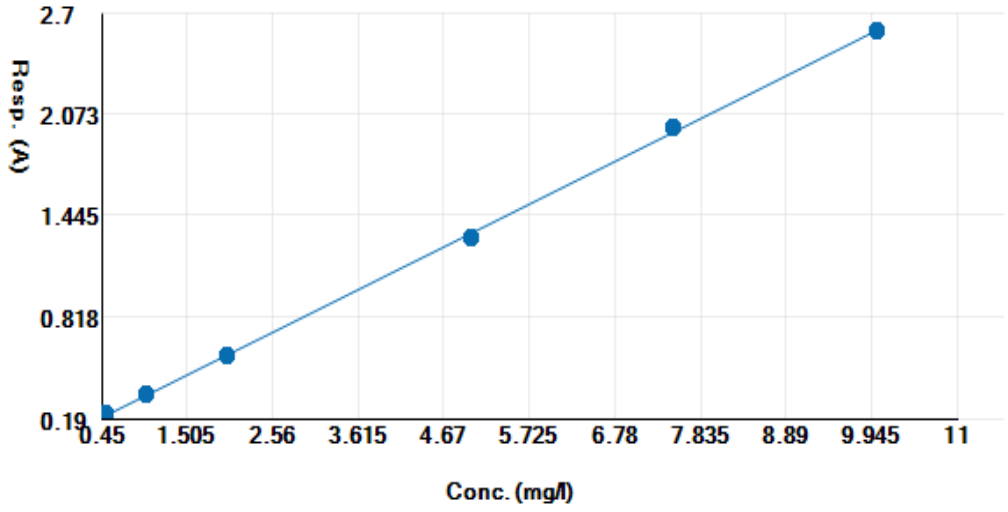
Date 6/3/2022 **User** Dealer

Time 7:26:56PM **Software version: 7.0**

Analyzer name WC_GAL1

Test	TKN	**Coeff. of deter.**	0.999583
Status	Accepted	**Total factor**	3.987
Accepted	6/1/2022 4:56 PM		
Checked	6/1/2022 4:56 PM		
User name	Dealer		
Comment			
Errors			
Factor	3.987		
Bias	0.084		

Cal/Ctrl	Response	Calc. conc.	Given conc.	Lot	Errors
TKN 10.0	0.221	0.54970600	0.50000000	Default	
TKN 10.0	0.337	1.01085900	1.00000000	Default	
TKN 10.0	0.583	1.98947800	2.00000000	Default	
TKN 10.0	1.302	4.85815300	5.00000000	Default	
TKN 7.5	1.987	7.58938900	7.50000000	Default	
TKN 10.0	2.592	10.00241000	10.00000000	Default	



Test results report

WC_GAL1

Test name TKN

Date 6/3/2022 **User** Dealer

Time 7:24:18PM **Software version: 7.0**

Test TKN **Group ID** [All] **Acceptance** Not accepted

Sample ID [All] **Group name** [All] **Request type** All

Test	Sample/ctrl ID	Test version	Result	Unit	Note	Dil. 1 +	Status	Errors
TKN	icv	1.5	5.2420120	mg/l		0.0	calc	
TKN	icb	1.5	0.1426120	mg/l		0.0	calc	
TKN	LCS 280-576945/1-A	1.5	6.2800700	mg/l		0.0	calc	
TKN	MB 280-576945/2-A	1.5	0.1419422	mg/l		0.0	calc	
TKN	280-162609-D-10-A	1.5	0.4784623	mg/l		0.0	calc	
TKN	280-162609-D-10-B MS	1.5	3.4079170	mg/l		0.0	calc	
TKN	280-162609-D-10-C MS	1.5	3.4090890	mg/l		0.0	calc	
TKN	280-162609-E-8-A	1.5	0.0482660	mg/l		0.0	calc	
TKN	280-162609-E-12-A	1.5	0.2757288	mg/l		0.0	calc	
TKN	280-162622-C-2-A	1.5	2.7519740	mg/l		0.0	calc	
TKN	280-162622-C-3-A	1.5	3.9665340	mg/l		0.0	calc	
TKN	ccv1	1.5	5.1554930	mg/l		0.0	calc	
TKN	ccb1	1.5	0.1489146	mg/l		0.0	calc	
TKN	280-162622-C-4-A	1.5	4.3573500	mg/l		0.0	calc	
TKN	280-162622-C-5-A	1.5	6.4211970	mg/l		0.0	calc	
TKN	280-162622-C-1-A	1.5	1.3078260	mg/l		0.0	calc	
TKN	280-162622-C-1-B MS	1.5	4.3660800	mg/l		0.0	calc	
TKN	280-162622-C-1-C MSD	1.5	4.3862590	mg/l		0.0	calc	
TKN	280-162622-C-6-A	1.5	3.6251800	mg/l		0.0	calc	
TKN	280-162622-C-7-A	1.5	0.0283755	mg/l		0.0	calc	
TKN	280-162622-C-8-A	1.5	3.8189670	mg/l		0.0	calc	

Test	Sample/ctrl ID	Test version	Result	Unit	Note	Dil. 1 +	Status	Errors
TKN	280-162622-C-9-A	1.5	3.7312120	mg/l		0.0	calc	
TKN	280-162622-C-10-A	1.5	3.0238970	mg/l		0.0	calc	
TKN	ccv2	1.5	5.1940560	mg/l		0.0	calc	
TKN	ccb2	1.5	0.1413922	mg/l		0.0	calc	
TKN	280-162622-C-12-A	1.5	-0.0189596	mg/l		0.0	calc	
TKN	280-162622-C-16-A	1.5	2.2100050	mg/l		0.0	calc	
TKN	280-162622-C-17-A	1.5	2.4614190	mg/l		0.0	calc	
TKN	280-162622-C-18-A	1.5	2.4175610	mg/l		0.0	calc	
TKN	LCS 280-576946/1-A	1.5	6.1939460	mg/l		0.0	calc	
TKN	MB 280-576946/2-A	1.5	0.1464359	mg/l		0.0	calc	
TKN	280-162622-C-11-A	1.5	-0.0132639	mg/l		0.0	calc	
TKN	280-162622-C-11-B MS	1.5	1.7300850	mg/l		0.0	calc	
TKN	280-162622-C-11-C MS	1.5	1.7342220	mg/l		0.0	calc	
TKN	590-17574-D-1-A	1.5	7.0721630	mg/l		0.0	calc	
TKN	ccv3	1.5	5.1810360	mg/l		0.0	calc	
TKN	ccb3	1.5	0.1478647	mg/l		0.0	calc	
TKN	590-17575-D-1-A	1.5	8.1330640	mg/l		0.0	calc	
TKN	590-17577-D-1-A	1.5	7.7068110	mg/l		0.0	calc	
TKN	280-162553-C-2-A	1.5	0.7731084	mg/l		0.0	calc	
TKN	280-162553-C-3-A	1.5	5.8010900	mg/l		0.0	calc	
TKN	280-162553-C-4-A	1.5	1.0527260	mg/l		0.0	calc	
TKN	280-162553-C-5-A	1.5	0.6217798	mg/l		0.0	calc	
TKN	280-162553-C-1-A	1.5	-0.0158276	mg/l		0.0	calc	
TKN	280-162553-C-1-B MS	1.5	-0.0030677	mg/l		0.0	calc	
TKN	ccv4	1.5	5.2216470	mg/l		0.0	calc	
TKN	ccb4	1.5	0.1485209	mg/l		0.0	calc	
TKN	280-162553-C-1-C MSD	1.5	-0.0003956	mg/l		0.0	calc	

Test	Sample/ctrl ID	Test version	Result	Unit	Note	Dil. 1 +	Status	Errors
TKN	280-162553-C-6-A	1.5	6.1725010	mg/l		0.0	calc	
TKN	280-162553-C-7-A	1.5	9.4833620	mg/l		0.0	calc	
TKN	280-162553-C-8-A	1.5	0.0428227	mg/l		0.0	calc	
TKN	280-162553-C-9-A	1.5	2.2615990	mg/l		0.0	calc	
TKN	280-162553-C-10-A	1.5	2.1249400	mg/l		0.0	calc	
TKN	ccv5	1.5	5.2387800	mg/l		0.0	calc	
TKN	ccb5	1.5	0.1500682	mg/l		0.0	calc	
TKN	590-17576-D-1-A	1.5	38.2216300	mg/l		4.0	calc	
TKN	590-17578-D-1-A	1.5	10.7818200	mg/l		4.0	calc	
TKN	590-17579-F-1-A	1.5	11.3941700	mg/l		4.0	calc	
TKN	280-162609-D-15-A	1.5	143.3528000	mg/l		19.0	calc	
TKN	280-162609-D-16-A	1.5	144.2489000	mg/l		19.0	calc	
TKN	280-162170-G-2-A	1.5	114.0422000	mg/l		19.0	calc	
TKN	ccv6	1.5	5.1742650	mg/l		0.0	calc	
TKN	ccb6	1.5	0.1447154	mg/l		0.0	calc	

Run Results Report

Facility Name	
Facility Location	
Department	
Operator Name	svc
Operator ID	svc
Platform	FS III/IV/3100
Software Rev Code	240
Data system ID	54
Result path	C:\FLOW_4\060722.RST
Sample table path	C:\FLOW_4\060722.tbl
Method path	C:\FLOW_4\nox.mth
Date acquired	07-Jun-22
Time acquired	16:01

Date	Time	Cup	Name
07-Jun-22	11:53	109	SYNC
07-Jun-22	11:55	0	Carryover
07-Jun-22	11:57	0	Carryover (Statistics)
07-Jun-22	11:59	0	read baseline
07-Jun-22	12:01	101	Cal 0.00 ppb
07-Jun-22	12:03	102	Cal 50.0 ppb
07-Jun-22	12:05	103	Cal 100 ppb
07-Jun-22	12:07	104	Cal 500 ppb
07-Jun-22	12:09	105	Cal 1000 ppb
07-Jun-22	12:11	106	Cal 2500 ppb
07-Jun-22	12:13	107	Cal 5000 ppb
07-Jun-22	12:15	108	Cal 7500 ppb
07-Jun-22	12:17	109	Cal 10000 ppb
07-Jun-22	12:19	0	Blank
07-Jun-22	12:21	0	Read Baseline
07-Jun-22	12:23	110	5000 PPB NO2
07-Jun-22	12:25	111	ICV 5000 PPB
07-Jun-22	12:27	112	ICV 2000 PPB
07-Jun-22	12:29	0	ICB
07-Jun-22	12:31	0	Read Baseline
07-Jun-22	12:33	107	LCS
07-Jun-22	12:35	0	MB
07-Jun-22	12:37	113	280-162561-B-1
07-Jun-22	12:39	114	ms 280-162561-B-1
07-Jun-22	12:41	115	msd 280-162561-B-1
07-Jun-22	12:43	116	280-162561-B-2
07-Jun-22	12:45	117	280-162561-B-3
07-Jun-22	12:47	118	280-162561-B-4
07-Jun-22	12:49	119	280-162561-B-5
07-Jun-22	12:51	120	280-162561-B-6
07-Jun-22	12:53	121	280-162673-H-2
07-Jun-22	12:55	122	580-114168-E-3
07-Jun-22	12:57	0	Rinse
07-Jun-22	12:59	0	Read Baseline
07-Jun-22	13:01	107	CCV 5000 ppb
07-Jun-22	13:03	105	CCVL 1000 ppb
07-Jun-22	13:05	0	CCB
07-Jun-22	13:07	0	Read Baseline
07-Jun-22	13:09	123	280-162592-B-1
07-Jun-22	13:11	124	280-162592-B-2
07-Jun-22	13:13	125	280-162592-B-3
07-Jun-22	13:15	126	ms 280-162592-B-3
07-Jun-22	13:18	127	msd 280-162592-B-3
07-Jun-22	13:20	128	280-162592-B-4

Result path	C:\FLOW_4\060722.RST
Sample table path	C:\FLOW_4\060722.tbl
Method path	C:\FLOW_4\nox.mth
Date acquired	07-Jun-22
Time acquired	16:01

Date	Time	Cup	Name
07-Jun-22	13:22	129	280-162592-B-5
07-Jun-22	13:24	130	280-162592-B-6
07-Jun-22	13:26	131	280-162592-B-7
07-Jun-22	13:28	132	280-162732-B-1
07-Jun-22	13:30	0	Rinse
07-Jun-22	13:32	0	Read Baseline
07-Jun-22	13:34	107	CCV 5000 ppb
07-Jun-22	13:36	105	CCVL 1000 ppb
07-Jun-22	13:38	0	CCB
07-Jun-22	13:40	0	Read Baseline
07-Jun-22	13:42	133	280-162732-B-2
07-Jun-22	13:44	134	280-162732-B-3
07-Jun-22	13:46	135	280-162609-D-1
07-Jun-22	13:48	136	280-162609-E-2
07-Jun-22	13:50	107	LCS
07-Jun-22	13:52	0	MB
07-Jun-22	13:54	137	280-162609-D-10
07-Jun-22	13:56	138	ms 280-162609-D-10
07-Jun-22	13:58	139	msd 280-162609-D-10
07-Jun-22	14:00	140	280-162609-E-4
07-Jun-22	14:02	0	Rinse
07-Jun-22	14:04	0	Read Baseline
07-Jun-22	14:06	107	CCV 5000 ppb
07-Jun-22	14:08	105	CCVL 1000 ppb
07-Jun-22	14:10	0	CCB
07-Jun-22	14:12	0	Read Baseline
07-Jun-22	14:14	141	280-162609-E-6
07-Jun-22	14:16	142	280-162609-E-8
07-Jun-22	14:18	143	280-162609-E-12
07-Jun-22	14:20	144	280-162609-E-15
07-Jun-22	14:22	145	280-162609-E-16
07-Jun-22	14:24	146	280-162622-C-13
07-Jun-22	14:26	147	280-162622-C-14
07-Jun-22	14:28	148	280-162622-C-15
07-Jun-22	14:30	149	280-162622-A-19
07-Jun-22	14:32	150	ms 280-162622-A-19
07-Jun-22	14:34	0	Rinse
07-Jun-22	14:36	0	Read Baseline
07-Jun-22	14:38	107	CCV 5000 ppb
07-Jun-22	14:40	105	CCVL 1000 ppb
07-Jun-22	14:42	0	CCB
07-Jun-22	14:44	0	Read Baseline
07-Jun-22	14:46	151	msd 280-162622-A-19
07-Jun-22	14:48	152	280-162622-A-20
07-Jun-22	14:50	153	280-162622-A-21
07-Jun-22	14:52	154	280-162622-A-26
07-Jun-22	14:54	155	280-162622-C-1
07-Jun-22	14:56	156	280-162622-C-2
07-Jun-22	14:58	157	280-162622-C-3
07-Jun-22	15:00	158	280-162622-C-4
07-Jun-22	15:02	159	280-162622-C-5
07-Jun-22	15:04	160	280-162622-C-6
07-Jun-22	15:06	0	Rinse
07-Jun-22	15:08	0	Read Baseline
07-Jun-22	15:10	107	CCV 5000 ppb
07-Jun-22	15:12	105	CCVL 1000 ppb
07-Jun-22	15:14	0	CCB

Result path	C:\FLOW_4\060722.RST
Sample table path	C:\FLOW_4\060722.tbl
Method path	C:\FLOW_4\nox.mth
Date acquired	07-Jun-22
Time acquired	16:01

Date	Time	Cup	Name
07-Jun-22	15:16	0	Read Baseline
07-Jun-22	15:18	107	LCS
07-Jun-22	15:20	0	MB
07-Jun-22	15:22	201	280-162622-C-7
07-Jun-22	15:24	202	ms 280-162622-C-7
07-Jun-22	15:26	203	msd 280-162622-C-7
07-Jun-22	15:28	204	280-162622-C-8
07-Jun-22	15:30	205	280-162622-C-9
07-Jun-22	15:32	206	280-162622-C-10
07-Jun-22	15:34	207	280-162622-C-11
07-Jun-22	15:36	208	280-162622-C-12
07-Jun-22	15:38	209	280-162622-C-16
07-Jun-22	15:40	210	280-162622-C-17
07-Jun-22	15:42	211	280-162622-C-18
07-Jun-22	15:44	0	Rinse
07-Jun-22	15:46	0	Read Baseline
07-Jun-22	15:48	107	CCV 5000 ppb
07-Jun-22	15:50	105	CCVL 1000 ppb
07-Jun-22	15:52	0	CCB
07-Jun-22	15:54	0	Read Baseline

Run Results Report

Facility Name	
Facility Location	
Department	
Operator Name	svc
Operator ID	svc
Platform	FS III/IV/3100
Software Rev Code	240
Data system ID	54
Result path	C:\FLOW_4\060722.RST
Sample table path	C:\FLOW_4\060722.tbl
Method path	C:\FLOW_4\nox.mth
Date acquired	07-Jun-22
Time acquired	16:01

	Nitrate as N					
Name	Response	Calc [ppb]	Flags	Mean Response	Mean Calc [ppb]	
SYNC	2451514	9944.909				
Carryover	4038	2.915				
Carryover	886	-9.887	LO			
(Statistics)				2462	-3.486	N
read baseline	0	-13.487	BL			
Cal 0.00 ppb	84	-13.144	LO			
Cal 50.0 ppb	12707	38.129				
Cal 100 ppb	25512	90.148				
Cal 500 ppb	128777	509.624				
Cal 1000 ppb	256402	1028.053				
Cal 2500 ppb	628881	2541.115				
Cal 5000 ppb	1228602	4977.270				
Cal 7500 ppb	1830779	7423.395				
Cal 10000 ppb	2478718	10055.412	HI			
Blank	-1564	-19.841	LO			
Read Baseline	0	-13.487	BL			
5000 PPB NO2	1228690	4977.624				
ICV 5000 PPB	1232787	4994.267				
ICV 2000 PPB	517655	2089.299				
ICB	-343	-14.879	LO			
Read Baseline	0	-13.487	BL			
LCS	1234175	4999.906				
MB	-1497	-19.568	LO			
280-162561-B-1	736	-10.499	LO			
ms 280-162561-B-1	827083	3346.241				
msd 280-162561-B-1	829651	3356.671				
280-162561-B-2	277	-12.361	LO			
280-162561-B-3	560	-11.212	LO			
280-162561-B-4	410	-11.821	LO			
280-162561-B-5	4904	6.434				
280-162561-B-6	1608	-6.957	LO			
280-162673-H-2	785209	3176.142				
580-114168-E-3	1466058	11883.695				
Rinse	-1086	-17.900	LO			
Read Baseline	0	-13.487	BL			
CCV 5000 ppb	1174265	4756.542				
CCVL 1000 ppb	251549	1008.339				
CCB	-166	-14.162	LO			
Read Baseline	0	-13.487	BL			
280-162592-B-1	503466	2031.663				
280-162592-B-2	676826	2735.876				
280-162592-B-3	837122	3387.020				
ms 280-162592-B-3	1679300	6808.064				
msd 280-162592-B-3	1683940	6826.916				
280-162592-B-4	773836	3129.943				

Result path C:\FLOW_4\060722.RST
Sample table path C:\FLOW_4\060722.tbl
Method path C:\FLOW_4\nox.mth
Date acquired 07-Jun-22
Time acquired 16:01

	Nitrate as N				
Name	Response	Calc [ppb]	Flags	Mean Response	Mean Calc [ppb]
280-162592-B-5	726323	2936.941			
280-162592-B-6	737467	2982.209			
280-162592-B-7	-93	-13.864	LO		
280-162732-B-1	1573416	12755.904			
Rinse	-1070	-17.834	LO		
Read Baseline	0	-13.487	BL		
CCV 5000 ppb	1193671	4835.371			
CCVL 1000 ppb	250282	1003.193			
CCB	-107	-13.923	LO		
Read Baseline	0	-13.487	BL		
280-162732-B-2	1103875	4470.610			
280-162732-B-3	1124790	9111.138			
280-162609-D-1	347843	6997.503			
280-162609-E-2	361050	7265.740			
LCS	1201309	4866.397			
MB	-240	-14.462	LO		
280-162609-D-10	47760	180.519			
ms 280-162609-D-10	988727	4002.861			
msd 280-162609-D-10	999679	4047.349			
280-162609-E-4	13466	41.216			
Rinse	148	-12.887	LO		
Read Baseline	0	-13.487	BL		
CCV 5000 ppb	1203209	4874.117			
CCVL 1000 ppb	251032	1006.242			
CCB	188	-12.722	LO		
Read Baseline	0	-13.487	BL		
280-162609-E-6	135791	538.115			
280-162609-E-8	498859	100647.391			
280-162609-E-12	39197	145.737			
280-162609-E-15	504206	2034.667			
280-162609-E-16	505117	2038.368			
280-162622-C-13	47469	179.338			
280-162622-C-14	908835	3678.328			
280-162622-C-15	521	-11.372	LO		
280-162622-A-19	116873	461.267			
ms 280-162622-A-19	976322	3952.468			
Rinse	-437	-15.261	LO		
Read Baseline	0	-13.487	BL		
CCV 5000 ppb	1173732	4754.376			
CCVL 1000 ppb	249818	1001.308			
CCB	62	-13.234	LO		
Read Baseline	0	-13.487	BL		
msd 280-162622-A-19	979599	3965.782			
280-162622-A-20	128039	506.625			
280-162622-A-21	644420	13021.178			
280-162622-A-26	135088	535.259			
280-162622-C-1	7198	15.751			
280-162622-C-2	6145	11.474			
280-162622-C-3	5486	8.798			
280-162622-C-4	1737	-6.430	LO		
280-162622-C-5	11011	31.240			
280-162622-C-6	1656	-6.760	LO		
Rinse	109	-13.045	LO		
Read Baseline	0	-13.487	BL		
CCV 5000 ppb	1178453	4773.555			
CCVL 1000 ppb	252031	1010.298			
CCB	170	-12.797	LO		

Result path C:\FLOW_4\060722.RST
Sample table path C:\FLOW_4\060722.tbl
Method path C:\FLOW_4\nox.mth
Date acquired 07-Jun-22
Time acquired 16:01

	Nitrate as N				
Name	Response	Calc [ppb]	Flags	Mean Response	Mean Calc [ppb]
Read Baseline	0	-13.487	BL		
LCS	1166809	4726.256			
MB	-669	-16.203	LO		
280-162622-C-7	1369373	11098.195			
ms 280-162622-C-7	2181553	17696.576			
msd 280-162622-C-7	2165177	17563.533			
280-162622-C-8	1959	-5.529	LO		
280-162622-C-9	4137	3.316			
280-162622-C-10	702206	2838.973			
280-162622-C-11	741258	14988.047			
280-162622-C-12	604673	12213.896			
280-162622-C-16	10139	27.699			
280-162622-C-17	24832	87.384			
280-162622-C-18	2116	-4.892	LO		
Rinse	-152	-14.106	LO		
Read Baseline	0	-13.487	BL		
CCV 5000 ppb	1159348	4695.948			
CCVL 1000 ppb	247075	990.166			
CCB	-57	-13.719	LO		
Read Baseline	0	-13.487	BL		

Peak Table:Nitrate as N

File name: C:\FLOW_4\060722.RST
Date: 07-Jun-22
Operator: svc

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
1	109	SYNC	1	SYNC	1	1	2451514	9944.909180	
2	0	Carryover	1	CO	1	1	4038	2.915184	
3	0	Carryover	2	CO	1	1	886	-9.886901	LO
B	0	read baseline	1	RB	1	1	0	-13.486929	BL
5	101	Cal 0.00 ppb	1	C	1	1	84	-13.144357	LO
6	102	Cal 50.0 ppb	1	C	1	1	12707	38.128754	
7	103	Cal 100 ppb	1	C	1	1	25512	90.148132	
8	104	Cal 500 ppb	1	C	1	1	128777	509.623535	
9	105	Cal 1000 ppb	1	C	1	1	256402	1028.053467	
10	106	Cal 2500 ppb	1	C	1	1	628881	2541.114746	
11	107	Cal 5000 ppb	1	C	1	1	1228602	4977.269531	
12	108	Cal 7500 ppb	1	C	1	1	1830779	7423.394531	
13	109	Cal 10000 ppb	1	C	1	1	2478718	10055.412109	HI
14	0	Blank	1	BLNK	1	1	-1564	-19.841000	LO
B	0	Read Baseline	1	RB	1	1	0	-13.486929	BL
16	110	5000 PPB NO2	1	U	1	1	1228690	4977.623535	
17	111	ICV 5000 PPB	1	CCV	1	1	1232787	4994.266602	
18	112	ICV 2000 PPB	1	CCV	1	1	517655	2089.298828	
19	0	ICB	1	U	1	1	-343	-14.878505	LO
B	0	Read Baseline	1	RB	1	1	0	-13.486929	BL
21	107	LCS	1	U	1	1	1234175	4999.906250	
22	0	MB	1	U	1	1	-1497	-19.567844	LO
23	113	280-162561-B-1	1	U	1	1	736	-10.498894	LO
24	114	ms 280-162561-B-1	1	U	1	1	827083	3346.241211	
25	115	msd 280-162561-B-1	1	U	1	1	829651	3356.670898	
26	116	280-162561-B-2	1	U	1	1	277	-12.361161	LO
27	117	280-162561-B-3	1	U	1	1	560	-11.212364	LO
28	118	280-162561-B-4	1	U	1	1	410	-11.821467	LO
29	119	280-162561-B-5	1	U	1	1	4904	6.434407	
30	120	280-162561-B-6	1	U	1	1	1608	-6.956631	LO
31	121	280-162673-H-2	1	U	1	1	785209	3176.142334	
32	122	580-114168-E-3	1	U	2	1	1466058	11883.695312	
33	0	Rinse	1	U	1	1	-1086	-17.899904	LO
B	0	Read Baseline	1	RB	1	1	0	-13.486929	BL
35	107	CCV 5000 ppb	1	CCV	1	1	1174265	4756.541504	
36	105	CCVL 1000 ppb	1	CCV	1	1	251549	1008.339417	
37	0	CCB	1	U	1	1	-166	-14.161559	LO
B	0	Read Baseline	1	RB	1	1	0	-13.486929	BL
39	123	280-162592-B-1	1	U	1	1	503466	2031.662842	
40	124	280-162592-B-2	1	U	1	1	676826	2735.876221	
41	125	280-162592-B-3	1	U	1	1	837122	3387.019531	
42	126	ms 280-162592-B-3	1	U	1	1	1679300	6808.064453	
43	127	msd 280-162592-B-3	1	U	1	1	1683940	6826.916016	
44	128	280-162592-B-4	1	U	1	1	773836	3129.942871	
45	129	280-162592-B-5	1	U	1	1	726323	2936.940918	
46	130	280-162592-B-6	1	U	1	1	737467	2982.208740	
47	131	280-162592-B-7	1	U	1	1	-93	-13.864083	LO
48	132	280-162732-B-1	1	U	2	1	1573416	12755.904297	
49	0	Rinse	1	U	1	1	-1070	-17.833559	LO
B	0	Read Baseline	1	RB	1	1	0	-13.486929	BL
51	107	CCV 5000 ppb	1	CCV	1	1	1193671	4835.371094	
52	105	CCVL 1000 ppb	1	CCV	1	1	250282	1003.192993	
53	0	CCB	1	U	1	1	-107	-13.923159	LO
B	0	Read Baseline	1	RB	1	1	0	-13.486929	BL
55	133	280-162732-B-2	1	U	1	1	1103875	4470.610352	
56	134	280-162732-B-3	1	U	2	1	1124790	9111.137695	
57	135	280-162609-D-1	1	U	5	1	347843	6997.502930	
58	136	280-162609-E-2	1	U	5	1	361050	7265.740234	
59	107	LCS	1	U	1	1	1201309	4866.397461	
60	0	MB	1	U	1	1	-240	-14.461699	LO
61	137	280-162609-D-10	1	U	1	1	47760	180.519440	
62	138	ms 280-162609-D-10	1	U	1	1	988727	4002.861084	
63	139	msd 280-162609-D-10	1	U	1	1	999679	4047.348633	
64	140	280-162609-E-4	1	U	1	1	13466	41.215656	
65	0	Rinse	1	U	1	1	148	-12.887012	LO
B	0	Read Baseline	1	RB	1	1	0	-13.486929	BL
67	107	CCV 5000 ppb	1	CCV	1	1	1203209	4874.116699	
68	105	CCVL 1000 ppb	1	CCV	1	1	251032	1006.241882	
69	0	CCB	1	U	1	1	188	-12.721520	LO
B	0	Read Baseline	1	RB	1	1	0	-13.486929	BL

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
71	141	280-162609-E-6	1	U	1	1	135791	538.114624	
72	142	280-162609-E-8	1	U	50	1	498859	100647.390625	
73	143	280-162609-E-12	1	U	1	1	39197	145.736786	
74	144	280-162609-E-15	1	U	1	1	504206	2034.667114	
75	145	280-162609-E-16	1	U	1	1	505117	2038.367920	
76	146	280-162622-C-13	1	U	1	1	47469	179.338165	
77	147	280-162622-C-14	1	U	1	1	908835	3678.328369	
78	148	280-162622-C-15	1	U	1	1	521	-11.372346	LO
79	149	280-162622-A-19	1	U	1	1	116873	461.267120	
80	150	ms 280-162622-A-19	1	U	1	1	976322	3952.468262	
81	0	Rinse	1	U	1	1	-437	-15.260689	LO
B	0	Read Baseline	1	RB	1	1	0	-13.486929	BL
83	107	CCV 5000 ppb	1	CCV	1	1	1173732	4754.375977	
84	105	CCVL 1000 ppb	1	CCV	1	1	249818	1001.308044	
85	0	CCB	1	U	1	1	62	-13.234299	LO
B	0	Read Baseline	1	RB	1	1	0	-13.486929	BL
87	151	msd 280-162622-A-19	1	U	1	1	979599	3965.781982	
88	152	280-162622-A-20	1	U	1	1	128039	506.624542	
89	153	280-162622-A-21	1	U	5	1	644420	13021.177734	
90	154	280-162622-A-26	1	U	1	1	135088	535.258789	
91	155	280-162622-C-1	1	U	1	1	7198	15.750604	
92	156	280-162622-C-2	1	U	1	1	6145	11.474204	
93	157	280-162622-C-3	1	U	1	1	5486	8.798220	
94	158	280-162622-C-4	1	U	1	1	1737	-6.429836	LO
95	159	280-162622-C-5	1	U	1	1	11011	31.240276	
96	160	280-162622-C-6	1	U	1	1	1656	-6.760113	LO
97	0	Rinse	1	U	1	1	109	-13.044594	LO
B	0	Read Baseline	1	RB	1	1	0	-13.486929	BL
99	107	CCV 5000 ppb	1	CCV	1	1	1178453	4773.554688	
100	105	CCVL 1000 ppb	1	CCV	1	1	252031	1010.297852	
101	0	CCB	1	U	1	1	170	-12.797274	LO
B	0	Read Baseline	1	RB	1	1	0	-13.486929	BL
103	107	LCS	1	U	1	1	1166809	4726.256348	
104	0	MB	1	U	1	1	-669	-16.203468	LO
105	201	280-162622-C-7	1	U	2	1	1369373	11098.195312	
106	202	ms 280-162622-C-7	1	U	2	1	2181553	17696.576172	
107	203	msd 280-162622-C-7	1	U	2	1	2165177	17563.533203	
108	204	280-162622-C-8	1	U	1	1	1959	-5.529097	LO
109	205	280-162622-C-9	1	U	1	1	4137	3.316371	
110	206	280-162622-C-10	1	U	1	1	702206	2838.972900	
111	207	280-162622-C-11	1	U	5	1	741258	14988.046875	
112	208	280-162622-C-12	1	U	5	1	604673	12213.896484	
113	209	280-162622-C-16	1	U	1	1	10139	27.698879	
114	210	280-162622-C-17	1	U	1	1	24832	87.384125	
115	211	280-162622-C-18	1	U	1	1	2116	-4.892102	LO
116	0	Rinse	1	U	1	1	-152	-14.106273	LO
B	0	Read Baseline	1	RB	1	1	0	-13.486929	BL
118	107	CCV 5000 ppb	1	CCV	1	1	1159348	4695.948242	
119	105	CCVL 1000 ppb	1	CCV	1	1	247075	990.165771	
120	0	CCB	1	U	1	1	-57	-13.718861	LO
B	0	Read Baseline	1	RB	1	1	0	-13.486929	BL

Nitrate as N:Calibration 1: Peak 5-121

File name: C:\FLOW_4\060722.RST
Date: 07-Jun-22
Operator: svc

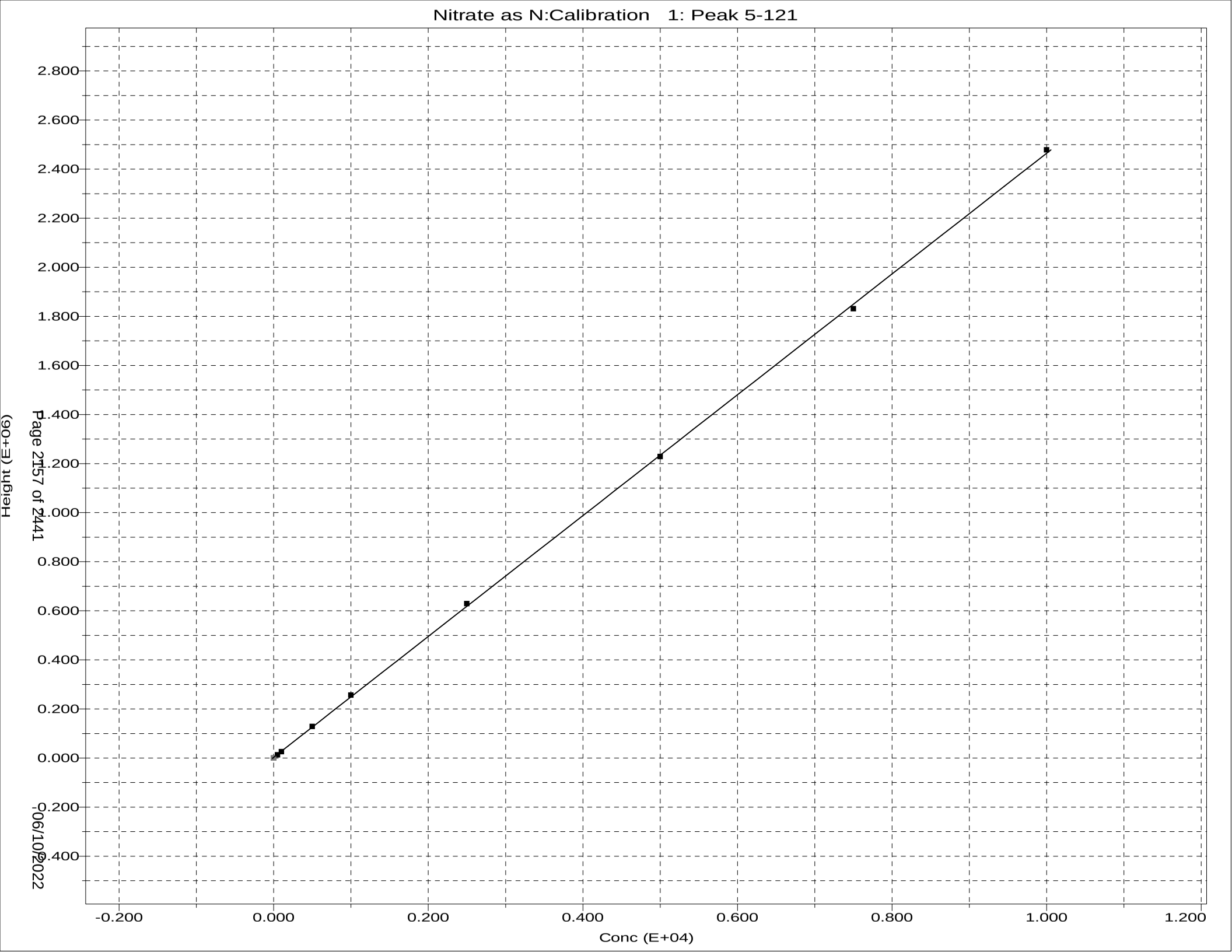
*	Name	Conc	Height
*	Cal 0.00 ppb	0.000000	84.333008
*	Cal 50.0 ppb	50.000000	12706.522461
*	Cal 100 ppb	100.000000	25512.425781
*	Cal 500 ppb	500.000000	128777.039062
*	Cal 1000 ppb	1000.000000	256401.859375
*	Cal 2500 ppb	2500.000000	628880.687500
*	Cal 5000 ppb	5000.000000	1228602.500000
*	Cal 7500 ppb	7500.000000	1830779.000000
*	Cal 10000 ppb	10000.000000	2478717.500000

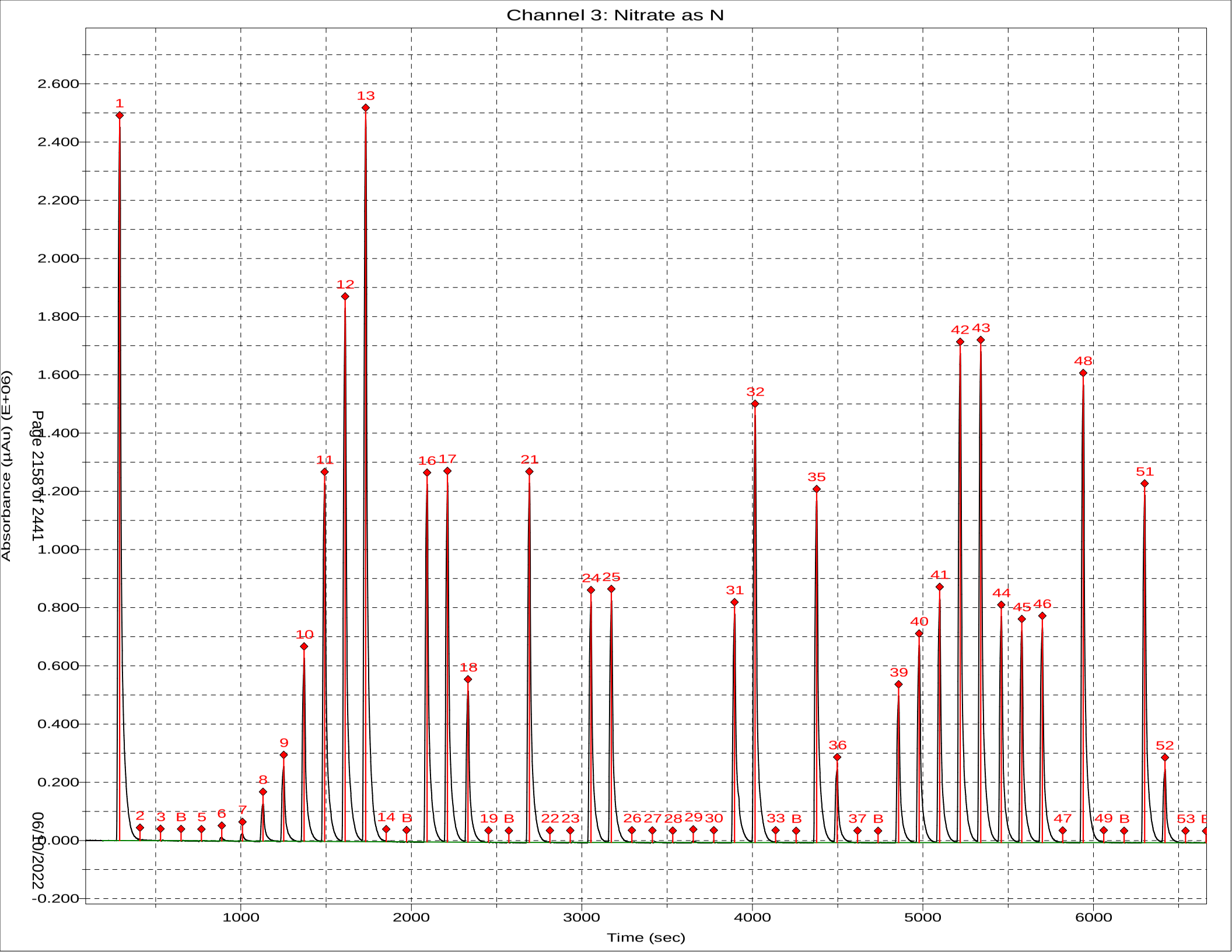
Calib Coef:
y=bx+a
a: (intercept) 3.3202e+03
b: 2.4618e+02

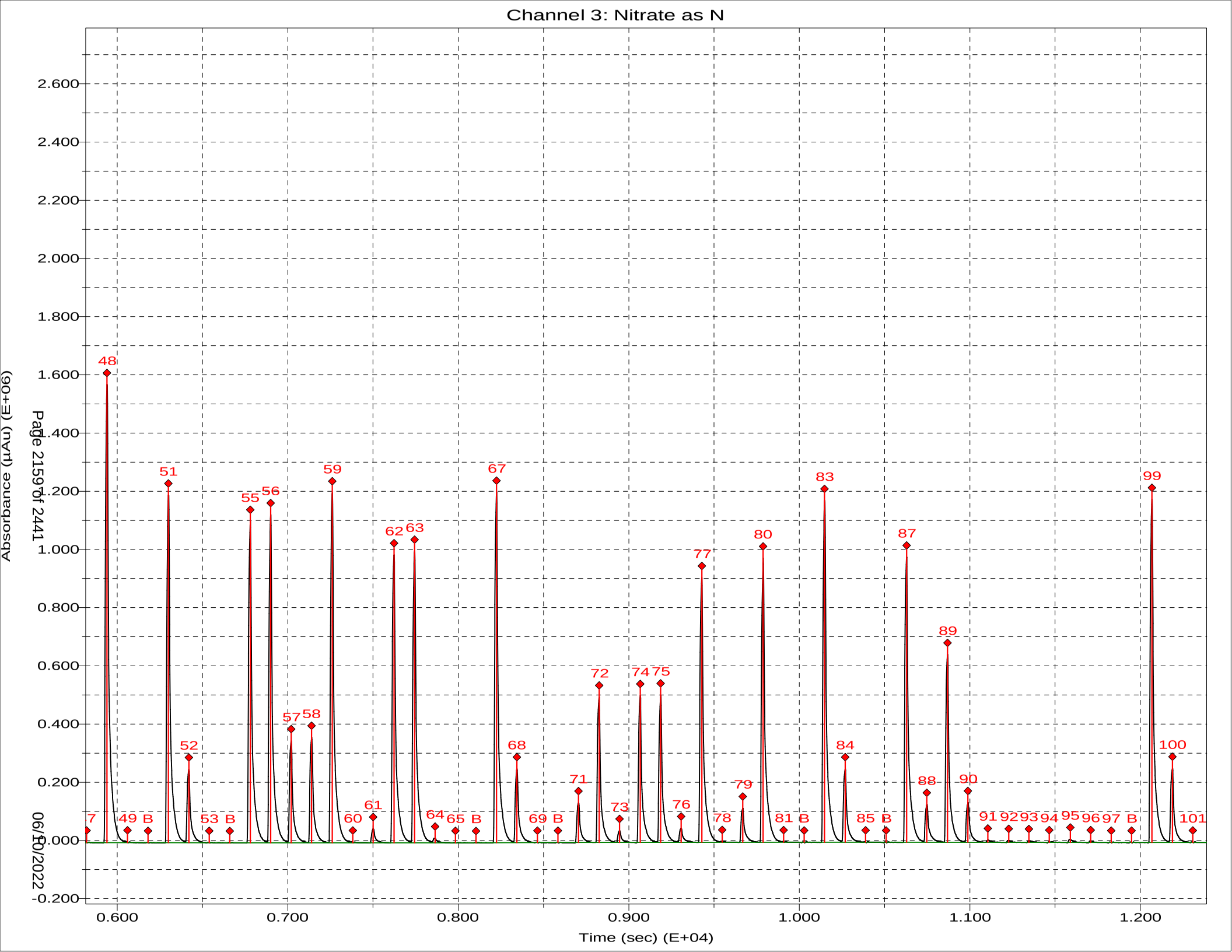
Corr Coef: 0.999943

Carryover: 0.165%

No Drift Peaks


Nitrate as N:Calibration 1: Peak 5-121
Height (E+06)
Conc (E+04)
2.800
2.600
2.400
2.200
2.000
1.800
1.600
1.400
1.200
1.000
0.800
0.600
0.400
0.200
0.000
-0.200
-0.400
-0.200
0.000
0.200
0.400
0.600
0.800
1.000
1.200


Channel 3: Nitrate as N
Absorbance (µAu) (E+06)
Time (sec)
Page 2158 of 2441
06/10/2022
2.600
2.400
2.200
2.000
1.800
1.600
1.400
1.200
1.000
0.800
0.600
0.400
0.200
0.000
-0.200
1000
2000
3000
4000
5000
6000
1 2 3 B 5 6 7 8 9 10 11 12 13 14 B 16 17 18 19 B 21 22 23 24 25 26 27 28 29 30 31 32 33 B 35 36 37 B 39 40 41 42 43 44 45 46 47 48 49 B 51 52 53


Channel 3: Nitrate as N
Absorbance (µAu) (E+06)
Time (sec) (E+04)
Page 2159 of 2441
06/10/2022
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
0.600
0.700
0.800
0.900
1.000
1.100
1.200
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48
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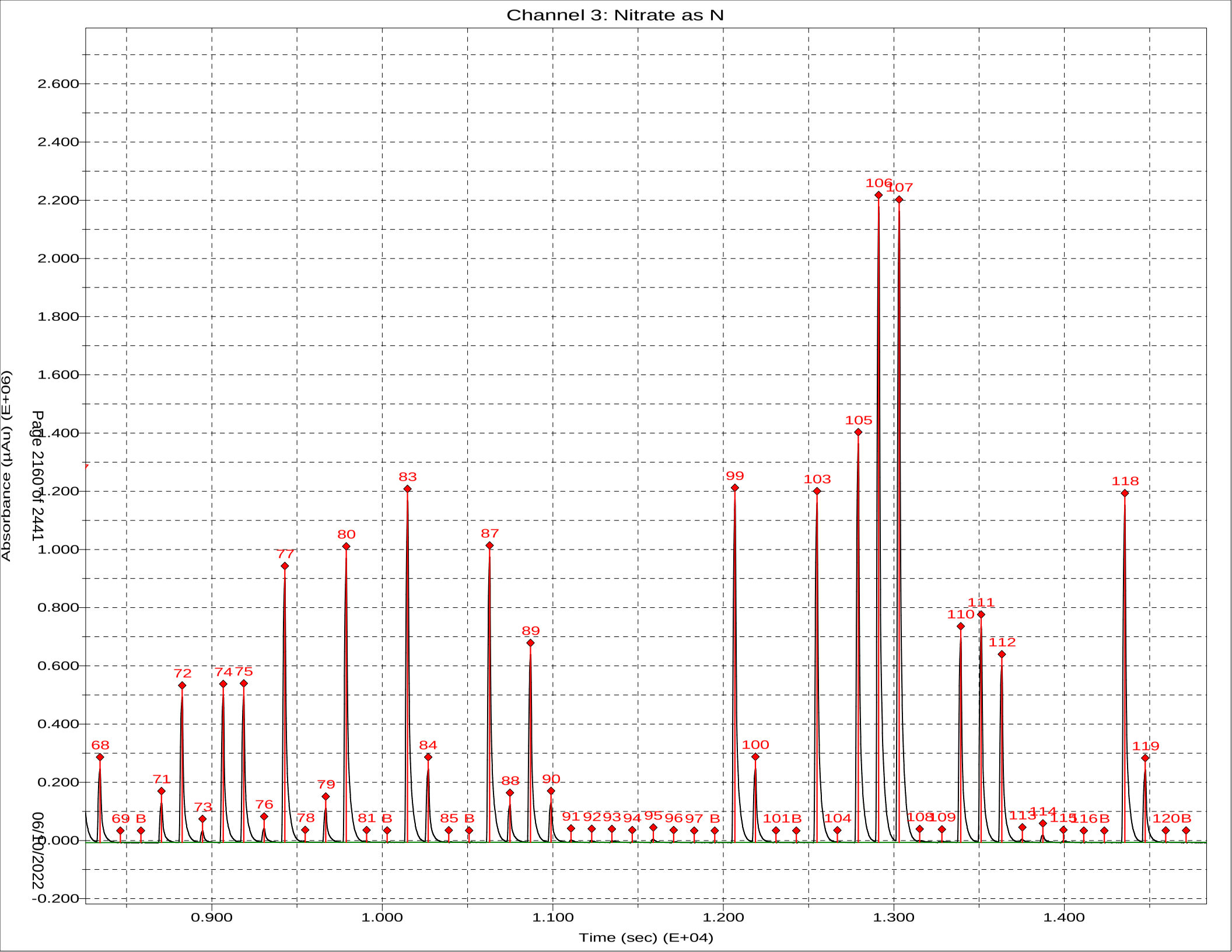
Channel 3: Nitrate as N
Absorbance (µAu) (E+06)
Time (sec) (E+04)
2.600
2.400
2.200
2.000
1.800
1.600
1.400
1.200
1.000
0.800
0.600
0.400
0.200
0.000
-0.200
0.900
1.000
1.100
1.200
1.300
1.400
68
69 B
71
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80
81 B
83
84
85 B
87
88
89
90
91
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97 B
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101 B
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116 B
118
119
120 B

Sample Table - 060722.tbl

File name: C:\FLOW_4\060722.TBL
Date: 07-Jun-22

Cup	Name	Type	R	Dil	Wt	Vial	Comment
109	SYNC	SYNC	1	1	1		
0	Carryover	CO	1	1	1		
0	Carryover	CO	1	1	1		
0	read baseline	RB	1	1	1		
101	Cal 0.00 ppb	C	1	1	1		
102	Cal 50.0 ppb	C	1	1	1		
103	Cal 100 ppb	C	1	1	1		
104	Cal 500 ppb	C	1	1	1		
105	Cal 1000 ppb	C	1	1	1		
106	Cal 2500 ppb	C	1	1	1		
107	Cal 5000 ppb	C	1	1	1		
108	Cal 7500 ppb	C	1	1	1		
109	Cal 10000 ppb	C	1	1	1		
0	Blank	BLNK	1	1	1		
0	Read Baseline	RB	1	1	1		
110	5000 PPB NO2	U	1	1	1		
111	ICV 5000 PPB	CCV	1	1	1		
112	ICV 2000 PPB	CCV	1	1	1		
0	ICB	U	1	1	1		pH
0	Read Baseline	RB	1	1	1		
107	LCS	U	1	1	1		
0	MB	U	1	1	1		
113	280-162561-B-1	U	1	1	1		AL
114	ms 280-162561-B-1	U	1	1	1		AL
115	msd 280-162561-B-1	U	1	1	1		AL
116	280-162561-B-2	U	1	1	1		AL
117	280-162561-B-3	U	1	1	1		AL
118	280-162561-B-4	U	1	1	1		AL
119	280-162561-B-5	U	1	1	1		AL
120	280-162561-B-6	U	1	1	1		AL
121	280-162673-H-2	U	1	1	1		7
122	580-114168-E-3	U	1	2	1		AL
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	280-162592-B-1	U	1	1	1		AL
124	280-162592-B-2	U	1	1	1		AL
125	280-162592-B-3	U	1	1	1		AL
126	ms 280-162592-B-3	U	1	1	1		AL
127	msd 280-162592-B-3	U	1	1	1		AL
128	280-162592-B-4	U	1	1	1		AL
129	280-162592-B-5	U	1	1	1		AL
130	280-162592-B-6	U	1	1	1		AL
131	280-162592-B-7	U	1	1	1		AL
132	280-162732-B-1	U	1	2	1		AL
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	280-162732-B-2	U	1	1	1		AL
134	280-162732-B-3	U	1	2	1		AL
135	280-162609-D-1	U	1	5	1		AL
136	280-162609-E-2	U	1	5	1		AL
107	LCS	U	1	1	1		
0	MB	U	1	1	1		
137	280-162609-D-10	U	1	1	1		AL

Cup	Name	Type	R	Dil	Wt	Vial	Comment
138	ms 280-162609-D-10 U			1	1	1	
139	msd 280-162609-D-10 U			1	1	1	
140	280-162609-E-4	U	1	1	1		
0	Rinse	U	1	1	1		
0	Read Baseline	RB	1	1	1		
107	CCV 5000 ppb	CCV	1	1	1		
105	CCVL 1000 ppb	CCV	1	1	1		
0	CCB	U	1	1	1		
0	Read Baseline	RB	1	1	1		
141	280-162609-E-6	U	1	1	1		
142	280-162609-E-8	U	1	50	1		
143	280-162609-E-12	U	1	1	1		
144	280-162609-E-15	U	1	1	1		
145	280-162609-E-16	U	1	1	1		
146	280-162622-C-13	U	1	1	1		
147	280-162622-C-14	U	1	1	1		
148	280-162622-C-15	U	1	1	1		
149	280-162622-A-19	U	1	1	1		
150	ms 280-162622-A-19 U			1	1	1	
0	Rinse	U	1	1	1		
0	Read Baseline	RB	1	1	1		
107	CCV 5000 ppb	CCV	1	1	1		
105	CCVL 1000 ppb	CCV	1	1	1		
0	CCB	U	1	1	1		
0	Read Baseline	RB	1	1	1		
151	msd 280-162622-A-19 U			1	1	1	
152	280-162622-A-20	U	1	1	1		
153	280-162622-A-21	U	1	5	1		
154	280-162622-A-26	U	1	1	1		
155	280-162622-C-1	U	1	1	1		
156	280-162622-C-2	U	1	1	1		
157	280-162622-C-3	U	1	1	1		
158	280-162622-C-4	U	1	1	1		
159	280-162622-C-5	U	1	1	1		
160	280-162622-C-6	U	1	1	1		
0	Rinse	U	1	1	1		
0	Read Baseline	RB	1	1	1		
107	CCV 5000 ppb	CCV	1	1	1		
105	CCVL 1000 ppb	CCV	1	1	1		
0	CCB	U	1	1	1		
0	Read Baseline	RB	1	1	1		
107	LCS	U	1	1	1		
0	MB	U	1	1	1		
201	280-162622-C-7	U	1	2	1		
202	ms 280-162622-C-7 U			1	2	1	
203	msd 280-162622-C-7 U			1	2	1	
204	280-162622-C-8	U	1	1	1		
205	280-162622-C-9	U	1	1	1		
206	280-162622-C-10	U	1	1	1		
207	280-162622-C-11	U	1	5	1		
208	280-162622-C-12	U	1	5	1		
209	280-162622-C-16	U	1	1	1		
210	280-162622-C-17	U	1	1	1		
211	280-162622-C-18	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: 280-162622-1

Batch: 575993 | **Analyst Initials: ZPM**

Method: 9034 | **Instrument: No Equipment Used for this Test**

Lab Sample ID: LCS 280-575967/1-A

Analysis Date: May 24, 2022 11:10

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	16	mg/L	50 mL	50 mL

Lab Sample ID: MB 280-575967/2-A

Analysis Date: May 24, 2022 11:10

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-162622-E-6-A

Analysis Date: May 24, 2022 11:10

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-162622-E-6-B MS

Analysis Date: May 24, 2022 11:10

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	11.2	mg/L	50 mL	50 mL

Lab Sample ID: 280-162622-E-6-C MSD

Analysis Date: May 24, 2022 11:10

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	16.8	mg/L	50 mL	50 mL

Lab Sample ID: 280-162622-E-7-A

Analysis Date: May 24, 2022 11:10

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-162622-E-8-A

Analysis Date: May 24, 2022 11:10

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-162622-E-9-A

Analysis Date: May 24, 2022 11:10

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-162622-E-10-A

Analysis Date: May 24, 2022 11:10

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-162622-E-11-A

Analysis Date: May 24, 2022 11:10

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-162622-E-12-A

Analysis Date: May 24, 2022 11:10

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Sulfide by Titration

Analyst:	LRB	SOP Information:	
Date:	5/24/2022	Number:	91
Titration Solutions		**Calibration Information**	
Solution 1:	Iodine	Source/Ver-Lot#:	INT_0218
TALS ID	Iod_00275	Prep Date:	5/24/2022
Normality:	0.025	Made By:	LRB
Solution 2:	sodium thiosulfate	Concentration:	988
TALS ID	Na Thio_00178	Expiration Date:	8/24/2022
Normality:	0.025		
	Starch Indicator		
TALS ID	Starch IND_00067		

ICV Information	
Source/Ver-Lot#:	INT_0214
Prep Date:	5/24/2022
Made By:	LRB
Concentration:	980
Expiration Date:	8/24/2022

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
CAL	5	0.00	7.60	20	7.60	992.000
CAL	5	7.70	15.40	20	7.70	984.000

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
ICV	5	0.00	7.80	20	7.80	976.000
ICV	5	7.80	15.50	20	7.70	984.000

TALS Raw Data Report

Job Number: 280-162588-1
LIMS Batch: 575993
Equipment: NOEQUIP

Laboratory: Eurofins Denver

RS# 1 Lab ID: **LCS 280-575967/1-A** Inj Date: 5/24/2022 11:10:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16 mg/L	mg/L	81	44 110		
Sulfide as H2S		17 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-575967/2-A** Inj Date: 5/24/2022 11:10:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	mg/L				
Sulfide as H2S		0 mg/L	mg/L				

RS# 3 Lab ID: **280-162622-E-6-A** Inj Date: 5/24/2022 11:10:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	mg/L				
Sulfide as H2S		0 mg/L	mg/L				

RS# 4 Lab ID: **280-162622-E-6-B MS** Inj Date: 5/24/2022 11:10:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		11.2 mg/L	mg/L	57	44 110		
Sulfide as H2S		11.9 mg/L	mg/L				

RS# 5 Lab ID: **280-162622-E-6-C MSD** Inj Date: 5/24/2022 11:10:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16.8 mg/L	mg/L	85	44 110	40	20
Sulfide as H2S		17.85 mg/L	mg/L				

RS# 12 Lab ID: **280-162588-F-1-A** Inj Date: 5/24/2022 11:10:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		4 mg/L	mg/L				
Sulfide as H2S		4.25 mg/L	mg/L				

RS# 13 Lab ID: **280-162588-F-2-A** Inj Date: 5/24/2022 11:10:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	mg/L				
Sulfide as H2S		0 mg/L	mg/L				

TALS Raw Data Report

Job Number: 280-162590-1
LIMS Batch: 575993
Equipment: NOEQUIP

Laboratory: Eurofins Denver

RS# 1 Lab ID: **LCS 280-575967/1-A** Inj Date: 5/24/2022 11:10:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16 mg/L	mg/L	81	44 110		
Sulfide as H2S		17 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-575967/2-A** Inj Date: 5/24/2022 11:10:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	mg/L				
Sulfide as H2S		0 mg/L	mg/L				

RS# 3 Lab ID: **280-162622-E-6-A** Inj Date: 5/24/2022 11:10:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	mg/L				
Sulfide as H2S		0 mg/L	mg/L				

RS# 4 Lab ID: **280-162622-E-6-B MS** Inj Date: 5/24/2022 11:10:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		11.2 mg/L	mg/L	57	44 110		
Sulfide as H2S		11.9 mg/L	mg/L				

RS# 5 Lab ID: **280-162622-E-6-C MSD** Inj Date: 5/24/2022 11:10:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16.8 mg/L	mg/L	85	44 110	40	20
Sulfide as H2S		17.85 mg/L	mg/L				

RS# 14 Lab ID: **280-162590-F-1-A** Inj Date: 5/24/2022 11:10:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	mg/L				
Sulfide as H2S		0 mg/L	mg/L				

TALS Raw Data Report

Job Number: 280-162622-1
LIMS Batch: 575993
Equipment: NOEQUIP

Laboratory: Eurofins Denver

RS# 1 Lab ID: **LCS 280-575967/1-A** Inj Date: 5/24/2022 11:10:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16 mg/L	mg/L	81	44 110		
Sulfide as H2S		17 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-575967/2-A** Inj Date: 5/24/2022 11:10:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	2.0 U mg/L				
Sulfide as H2S		0 mg/L	2.1 U mg/L				

RS# 3 Lab ID: **280-162622-E-6-A** Inj Date: 5/24/2022 11:10:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	2.0 U mg/L				
Sulfide as H2S		0 mg/L	2.1 U mg/L				

RS# 4 Lab ID: **280-162622-E-6-B MS** Inj Date: 5/24/2022 11:10:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		11.2 mg/L	mg/L	57	44 110		
Sulfide as H2S		11.9 mg/L	mg/L				

RS# 5 Lab ID: **280-162622-E-6-C MSD** Inj Date: 5/24/2022 11:10:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16.8 mg/L	mg/L	85	44 110	40	20
Sulfide as H2S		17.85 mg/L	mg/L				

RS# 6 Lab ID: **280-162622-E-7-A** Inj Date: 5/24/2022 11:10:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	2.0 U mg/L				
Sulfide as H2S		0 mg/L	2.1 U mg/L				

RS# 7 Lab ID: **280-162622-E-8-A** Inj Date: 5/24/2022 11:10:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	2.0 U mg/L				
Sulfide as H2S		0 mg/L	2.1 U mg/L				

RS# 8 Lab ID: **280-162622-E-9-A** Inj Date: 5/24/2022 11:10:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	2.0 U mg/L				
Sulfide as H2S		0 mg/L	2.1 U mg/L				

RS# 9 Lab ID: **280-162622-E-10-A** Inj Date: 5/24/2022 11:10:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	2.0 U mg/L				
Sulfide as H2S		0 mg/L	2.1 U mg/L				

RS# 10 Lab ID: **280-162622-E-11-A** Inj Date: 5/24/2022 11:10:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	2.0 U mg/L				
Sulfide as H2S		0 mg/L	2.1 U mg/L				

TALS Raw Data Report

RS# 11 Lab ID: **280-162622-E-12-A** Inj Date: 5/24/2022 11:10:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	2.0 U mg/L				
Sulfide as H2S		0 mg/L	2.1 U mg/L				

TALS Raw Data Report

Job Number: 280-162647-1
LIMS Batch: 575993
Equipment: NOEQUIP

Laboratory: Eurofins Denver

RS# 1 Lab ID: **LCS 280-575967/1-A** Inj Date: 5/24/2022 11:10:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16 mg/L	mg/L	81	44 110		
Sulfide as H2S		17 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-575967/2-A** Inj Date: 5/24/2022 11:10:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	2.0 U mg/L				
Sulfide as H2S		0 mg/L	2.1 U mg/L				

RS# 3 Lab ID: **280-162622-E-6-A** Inj Date: 5/24/2022 11:10:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	2.0 U mg/L				
Sulfide as H2S		0 mg/L	2.1 U mg/L				

RS# 4 Lab ID: **280-162622-E-6-B MS** Inj Date: 5/24/2022 11:10:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		11.2 mg/L	mg/L	57	44 110		
Sulfide as H2S		11.9 mg/L	mg/L				

RS# 5 Lab ID: **280-162622-E-6-C MSD** Inj Date: 5/24/2022 11:10:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16.8 mg/L	mg/L	85	44 110	40	20
Sulfide as H2S		17.85 mg/L	mg/L				

RS# 15 Lab ID: **280-162647-E-10-A** Inj Date: 5/24/2022 11:10:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	2.0 U mg/L				
Sulfide as H2S		0 mg/L	2.1 U mg/L				

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Titration Data Review Checklist

LIMS Batch Number: 575993	**Method (circle one):**	**QC Type (circle):**
Analyst/1st Reviewer: ZM	**2310B 2320B 2340C**	**Standard DoD QAPP Other**
Date: 5/24/22	**4500 S2 F 4500 SO3 B 9030B/9034**	
Matrix (circle): Water Solid	**Automated or Manual (circle one)**	**Instrument ID (circle one if applicable):**
		AT2 AT3

Review Items	Yes	No	2nd Rev	If No, why is data reportable?
A. Sample Storage and Pretreatment				
1. Is sample pH verified and documented prior to analysis? (if required)	✓		✓	
2. For samples requiring pH adjustment is the amount of acid/base used documented?	✓			If no, list details:
3. Are samples analyzed within the required hold time?	✓		✓	NCM:
4. Pre-treatment reagents used to remove interferences are documented.	✓			
B. Calibration / Instrument				
5. Was the normality of the titrant verified and found acceptable?	✓		✓	Comments:
6. For potentiometric titration, the pH meter is calibrated with 5 buffers bracketing range of samples and QC.	✓			Comments:
7. Calibration standards are analyzed at the beginning and end of the analytical sequence and after every 10 sample analyses. (samples/dilutions/reanalyses).	✓			Comments:
8. Calibrations standards (ICV/CCV) are within 90-110% recovery.	✓			
C. Sample and Batch QC				
9. Blanks are analyzed at the beginning, end and after every 10 sample analyses in the sequence.	✓			
10. Results of blank analyses (MB, ICB, CCB) are < ½ RL (<RL for alkalinity unless DoD)	✓		✓	☐ No analyte > ½ RL in associated samples ☐ Sample results >10x blank
11. A standard from a second source (SRM, CRM, LCS) is included in the analytical sequence.	✓		✓	
12. The recovery of the 2nd source material falls within 90-110% or manufacturer's limits.	✓		✓	
13. Samples analyses are bracketing by acceptable CCV/CCBs.	✓			☐ No analyte > RL in associated samples ☐ Sample results >10x blank ☐ Sample results qualified
14. MS/MSD analyzed at required frequency and recoveries within limits. (If recoveries out of limits, verify not due to lab error) (Required for 2340C, 4500 S2 F, 9030B/9034)	✓		✓	☐ Non-conformance (NCM) added WCB 5/24/22 ☐ Sample results >4X spike conc. RPD failed
15. Duplicate analyzed at required frequency and RPD within limits. (Required for 2310B, 2320B, 4500 SO3 B)	✓			☐ Non-conformance (NCM) added ☐ Sample results ND or <2X RL

Review Items	Yes	No	2nd Rev	If No, why is data reportable?
16. Are all MS/MSD RPDs <50%? Note: Excessive RPDs (>50%) require evaluation, correction or explanation.	/		✓	Non-conformance (NCM) added 651832
D. Raw Data & TALS Data Entry				
17. Raw Data				
a. Unused data is clearly identified with reason	/		✓	
b. All crossed out data is initialed and dated	/		✓	
c. Out of control QC is clearly identified	/		✓	
d. Any data that has a qualifier is commented on with appropriate action taken	/		✓	
e. The first page of the run includes the filename, instrument, and analyst initials/signature	/		✓	
f. 100% of manual calculations are verified.	/		✓	
18. TALS Samples Tab				
a. LIMS Sample IDs / Containers are correct	/		✓	
b. Method and matrix are correct	/		✓	
c. Date and time match raw data	/		✓	
d. Dilutions are correct	/		✓	
e. Correct suffix designated (where applicable)	/		✓	
19. TALS Worksheet Tab is complete and correct	/		✓	
20. TALS Reagent Tab is complete and correct	/		✓	
21. TALS QC Links Tab is correct	/		✓	
22. TALS Sample Results Tab	/			
a. All unused data are marked Rejected or Accepted	/		✓	
b. All reported analytes are marked Primary or Secondary	/		✓	
c. Data manually transcribed from benchsheet into TALS verified 100% including significant figures SM 4500 SO3 B).	/		✓	
d. TALS Batch Information Screen documentation is complete	/		✓	
e. TALS Status set to appropriate review level	/		✓	
E. Final Report and NCMs (2nd level review only)				
f. Were all job/project requirements met?			✓	
g. Results for samples and QC correct on final report?			✓	
h. Are all necessary scanned documents in TALS?			✓	
i. NCMs reviewed for applicability, correct references to batches, grammar/typographical errors?			✓	

Comments: _____

2nd Reviewer: VRB **Review Date:** 5/26/22

General Chemistry Raw Data Report

Job ID: 280-162622-1

Batch: 576138 **Analyst Initials: ZPM**

Method: 9034 **Instrument: No Equipment Used for this Test**

Lab Sample ID: LCS 280-576110/1-A **Analysis Date: May 25, 2022 10:57**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	14.4	mg/L	50 mL	50 mL

Lab Sample ID: MB 280-576110/2-A **Analysis Date: May 25, 2022 10:57**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-162622-E-1-A **Analysis Date: May 25, 2022 10:57**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-162622-E-2-A **Analysis Date: May 25, 2022 10:57**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	2.4	mg/L	50 mL	50 mL

Lab Sample ID: 280-162622-E-3-A **Analysis Date: May 25, 2022 10:57**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-162622-E-4-A **Analysis Date: May 25, 2022 10:57**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-162622-E-5-A **Analysis Date: May 25, 2022 10:57**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-162622-E-16-A **Analysis Date: May 25, 2022 10:57**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-162622-E-17-A **Analysis Date: May 25, 2022 10:57**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-162622-E-18-A **Analysis Date: May 25, 2022 10:57**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Sulfide by Titration

Analyst:	ZM	SOP Information:	
Date:	5/25/2022	Number:	91
Titration Solutions		**Calibration Information**	
Solution 1:	Iodine	Source/Ver-Lot#:	INT_0218
TALS ID	Iod_00275	Prep Date:	5/24/2022
Normality:	0.025	Made By:	LRB
Solution 2:	sodium thiosulfate	Concentration:	992
TALS ID	Na Thio_00178	Expiration Date:	8/24/2022
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	7.80	20	7.80	976.000
CAL	5	7.80	15.20	20	7.40	1008.000

ICV Information	
Source/Ver-Lot#:	INT_0214
Prep Date:	5/24/2022
Made By:	LRB
Concentration:	1600
Expiration Date:	8/24/2022

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
ICV	5			20	0.00	1600.000
ICV	5			20	0.00	1600.000

TALS Raw Data Report

Job Number: 280-162622-1
LIMS Batch: 576138
Equipment: NOEQUIP

Laboratory: Eurofins Denver

RS# 1 Lab ID: **LCS 280-576110/1-A** Inj Date: 5/25/2022 10:57:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		14.4 mg/L	mg/L	73	44 110		
Sulfide as H2S		15.3 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-576110/2-A** Inj Date: 5/25/2022 10:57:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	2.0 U mg/L				
Sulfide as H2S		0 mg/L	2.1 U mg/L				

RS# 3 Lab ID: **280-162647-E-11-A** Inj Date: 5/25/2022 10:57:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	2.0 U mg/L				
Sulfide as H2S		0 mg/L	2.1 U mg/L				

RS# 4 Lab ID: **280-162647-E-11-B MS** Inj Date: 5/25/2022 10:57:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16 mg/L	mg/L	81	44 110		
Sulfide as H2S		17 mg/L	mg/L				

RS# 5 Lab ID: **280-162647-E-11-C MSD** Inj Date: 5/25/2022 10:57:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16 mg/L	mg/L	81	44 110	0	20
Sulfide as H2S		17 mg/L	mg/L				

RS# 8 Lab ID: **280-162622-E-1-A** Inj Date: 5/25/2022 10:57:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	2.0 U mg/L				
Sulfide as H2S		0 mg/L	2.1 U mg/L				

RS# 9 Lab ID: **280-162622-E-2-A** Inj Date: 5/25/2022 10:57:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		2.4 mg/L	2.4 J mg/L				
Sulfide as H2S		2.55 mg/L	2.6 J mg/L				

RS# 10 Lab ID: **280-162622-E-3-A** Inj Date: 5/25/2022 10:57:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	2.0 U mg/L				
Sulfide as H2S		0 mg/L	2.1 U mg/L				

RS# 11 Lab ID: **280-162622-E-4-A** Inj Date: 5/25/2022 10:57:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	2.0 U mg/L				
Sulfide as H2S		0 mg/L	2.1 U mg/L				

RS# 12 Lab ID: **280-162622-E-5-A** Inj Date: 5/25/2022 10:57:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	2.0 U mg/L				
Sulfide as H2S		0 mg/L	2.1 U mg/L				

RS# 13 Lab ID: **280-162622-E-16-A** Inj Date: 5/25/2022 10:57:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	2.0 U mg/L				
Sulfide as H2S		0 mg/L	2.1 U mg/L				

RS# 14 Lab ID: **280-162622-E-17-A** Inj Date: 5/25/2022 10:57:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	2.0 U mg/L				
Sulfide as H2S		0 mg/L	2.1 U mg/L				

RS# 15 Lab ID: **280-162622-E-18-A** Inj Date: 5/25/2022 10:57:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	2.0 U mg/L				
Sulfide as H2S		0 mg/L	2.1 U mg/L				

TALS Raw Data Report

Job Number: 280-162647-1
LIMS Batch: 576138
Equipment: NOEQUIP

Laboratory: Eurofins Denver

RS# 1 Lab ID: **LCS 280-576110/1-A** Inj Date: 5/25/2022 10:57:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		14.4 mg/L	mg/L	73	44 110		
Sulfide as H2S		15.3 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-576110/2-A** Inj Date: 5/25/2022 10:57:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	2.0 U mg/L				
Sulfide as H2S		0 mg/L	2.1 U mg/L				

RS# 3 Lab ID: **280-162647-E-11-A** Inj Date: 5/25/2022 10:57:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	2.0 U mg/L				
Sulfide as H2S		0 mg/L	2.1 U mg/L				

RS# 4 Lab ID: **280-162647-E-11-B MS** Inj Date: 5/25/2022 10:57:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16 mg/L	mg/L	81	44 110		
Sulfide as H2S		17 mg/L	mg/L				

RS# 5 Lab ID: **280-162647-E-11-C MSD** Inj Date: 5/25/2022 10:57:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16 mg/L	mg/L	81	44 110	0	20
Sulfide as H2S		17 mg/L	mg/L				

RS# 6 Lab ID: **280-162647-E-1-A** Inj Date: 5/25/2022 10:57:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	2.0 U mg/L				
Sulfide as H2S		0 mg/L	2.1 U mg/L				

RS# 7 Lab ID: **280-162647-E-2-A** Inj Date: 5/25/2022 10:57:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	2.0 U mg/L				
Sulfide as H2S		0 mg/L	2.1 U mg/L				

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Titration Data Review Checklist

LIMS Batch Number: 576138	**Method (circle one):**	**QC Type (circle):**
Analyst/1st Reviewer: ZM	**2310B 2320B 2340C**	**Standard DoD QAPP Other**
Date: 5/23/22	**4500 S2 F 4500 SO3 B 9030B/9034**	
Matrix (circle): Water Solid	**Automated or Manual (circle one)**	**Instrument ID (circle one if applicable):**
		AT2 AT3

Review Items	Yes	No	2nd Rev	If No, why is data reportable?
A. Sample Storage and Pretreatment				
1. Is sample pH verified and documented prior to analysis? (if required)	✓		✓	
2. For samples requiring pH adjustment is the amount of acid/base used documented?	✓			If no, list details:
3. Are samples analyzed within the required hold time?	✓		✓	NCM:
4. Pre-treatment reagents used to remove interferences are documented.	✓			
B. Calibration / Instrument				
5. Was the normality of the titrant verified and found acceptable?	✓		✓	Comments:
6. For potentiometric titration, the pH meter is calibrated with 5 buffers bracketing range of samples and QC.	✓			Comments:
7. Calibration standards are analyzed at the beginning and end of the analytical sequence and after every 10 sample analyses. (samples/dilutions/reanalyses).	✓			Comments:
8. Calibrations standards (ICV/CCV) are within 90-110% recovery.	✓			
C. Sample and Batch QC				
9. Blanks are analyzed at the beginning, end and after every 10 sample analyses in the sequence.	✓			
10. Results of blank analyses (MB, ICB, CCB) are < ½ RL (<RL for alkalinity unless DoD)	✓		✓	□ No analyte > ½ RL in associated samples □ Sample results >10x blank
11. A standard from a second source (SRM, CRM, LCS) is included in the analytical sequence.	✓		✓	
12. The recovery of the 2nd source material falls within 90-110% or manufacturer's limits.	✓		✓	
13. Samples analyses are bracketing by acceptable CCV/CCBs.	✓			□ No analyte > RL in associated samples □ Sample results >10x blank □ Sample results qualified
14. MS/MSD analyzed at required frequency and recoveries within limits. (If recoveries out of limits, verify not due to lab error) (Required for 2340C, 4500 S2 F, 9030B/9034)	✓		✓	□ Non-conformance (NCM) added □ Sample results >4X spike conc.
15. Duplicate analyzed at required frequency and RPD within limits. (Required for 2310B, 2320B, 4500 SO3 B)	✓			□ Non-conformance (NCM) added □ Sample results ND or <2X RL

Review Items	Yes	No	2nd Rev	If No, why is data reportable?
16. Are all MS/MSD RPDs <50%? Note: Excessive RPDs (>50%) require evaluation, correction or explanation.	/		✓	☐ Non-conformance (NCM) added
D. Raw Data & TALS Data Entry				
17. Raw Data				
a. Unused data is clearly identified with reason	/		✓	
b. All crossed out data is initialed and dated	/		✓	
c. Out of control QC is clearly identified	/		✓	
d. Any data that has a qualifier is commented on with appropriate action taken	/		✓	
e. The first page of the run includes the filename, instrument, and analyst initials/signature	/		✓	
f. 100% of manual calculations are verified.	/		✓	
18. TALS Samples Tab				
a. LIMS Sample IDs / Containers are correct	/		✓	
b. Method and matrix are correct	/		✓	
c. Date and time match raw data	/		✓	
d. Dilutions are correct	/		✓	
e. Correct suffix designated (where applicable)	/		✓	
19. TALS Worksheet Tab is complete and correct	/		✓	
20. TALS Reagent Tab is complete and correct	/		✓	
21. TALS QC Links Tab is correct	/		✓	
22. TALS Sample Results Tab	/			
a. All unused data are marked Rejected or Accepted	/		✓	
b. All reported analytes are marked Primary or Secondary	/		✓	
c. Data manually transcribed from benchsheet into TALS verified 100% including significant figures SM 4500 SO3 B).	/		✓	
d. TALS Batch Information Screen documentation is complete	/		✓	
e. TALS Status set to appropriate review level	/		✓	
E. Final Report and NCMs (2nd level review only)				
f. Were all job/project requirements met?			✓	
g. Results for samples and QC correct on final report?			✓	
h. Are all necessary scanned documents in TALS?			✓	
i. NCMs reviewed for applicability, correct references to batches, grammar/typographical errors?			✓	

Comments: _____

_____

_____

2nd Reviewer: URB **Review Date:** 5/26/22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-175
Lims ID: std L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 16-May-2022 17:34:00 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0111056-002
Misc. Info.: 280-0111056-002
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 17-May-2022 16:38:05 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1686

First Level Reviewer: jindaratc Date: 16-May-2022 18:42:07

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.388	3.388	0.000	4412713	0.2000	0.2447	M
2 Chloride	4.843	4.843	0.000	11659033	1.00	1.03	
3 Nitrite as N	5.760	5.760	0.000	5450264	NC	NC	
4 Bromide	7.353	7.353	0.000	859089	0.2000	0.2218	
5 Nitrate as N	8.440	8.440	0.000	5447078	NC	NC	
7 Orthophosphate as P	10.468	10.468	0.000	2110652	NC	NC	a
6 Sulfate	11.525	11.525	0.000	8433467	1.00	1.12	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

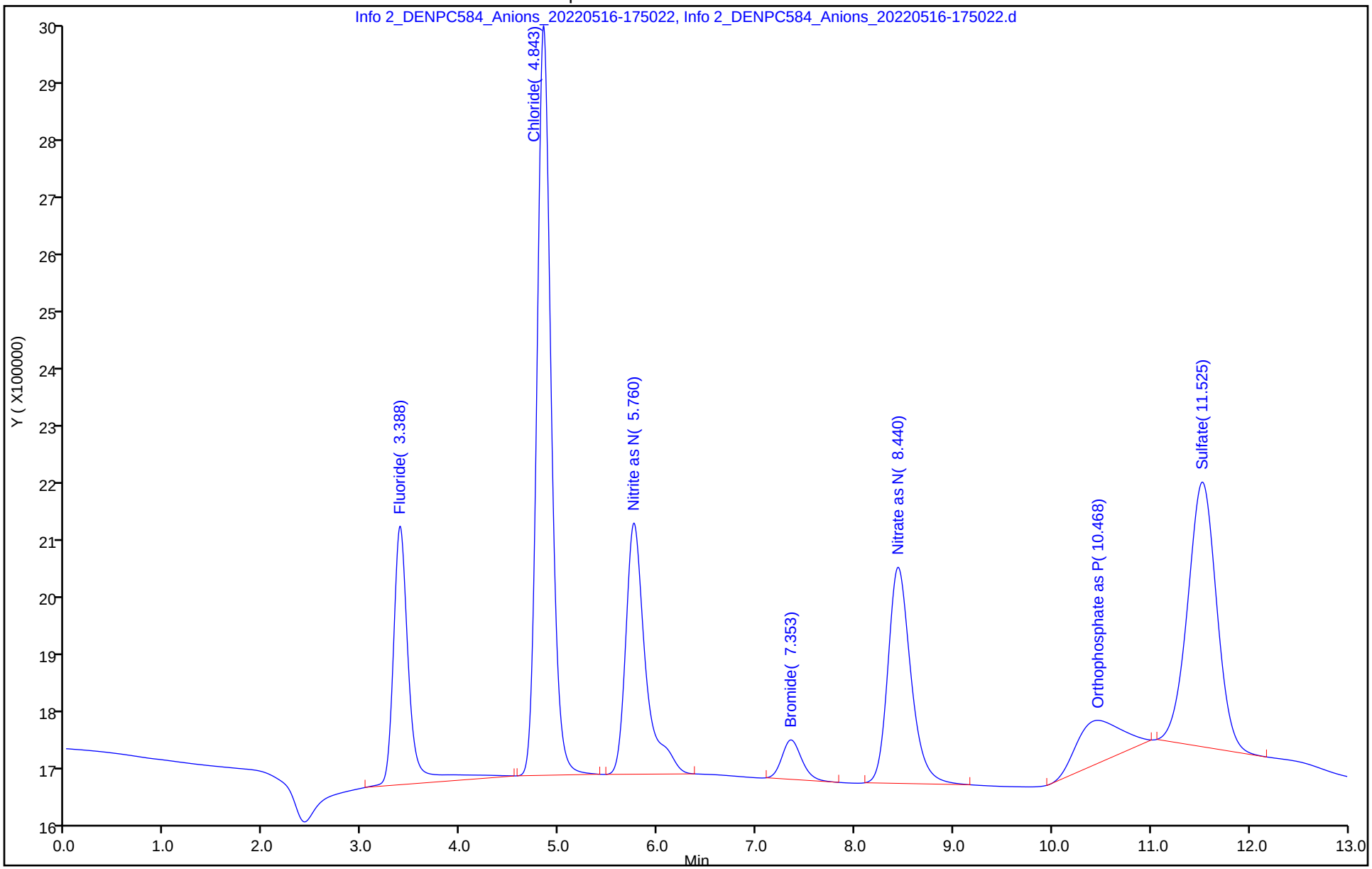
Reagents:

IC CAL cl/so4_00419 Amount Added: 0.02 Units: mL
IC Cal low_00637 Amount Added: 0.02 Units: mL

Report Date: 17-May-2022 16:38:05 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-175022.d				
Injection Date:	16-May-2022 17:34:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	std L1			Worklist Smp#:	2
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-175

Injection Date: 16-May-2022 17:34:00 Instrument ID: WC_IonChrom13

Lims ID: std L1

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 2

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

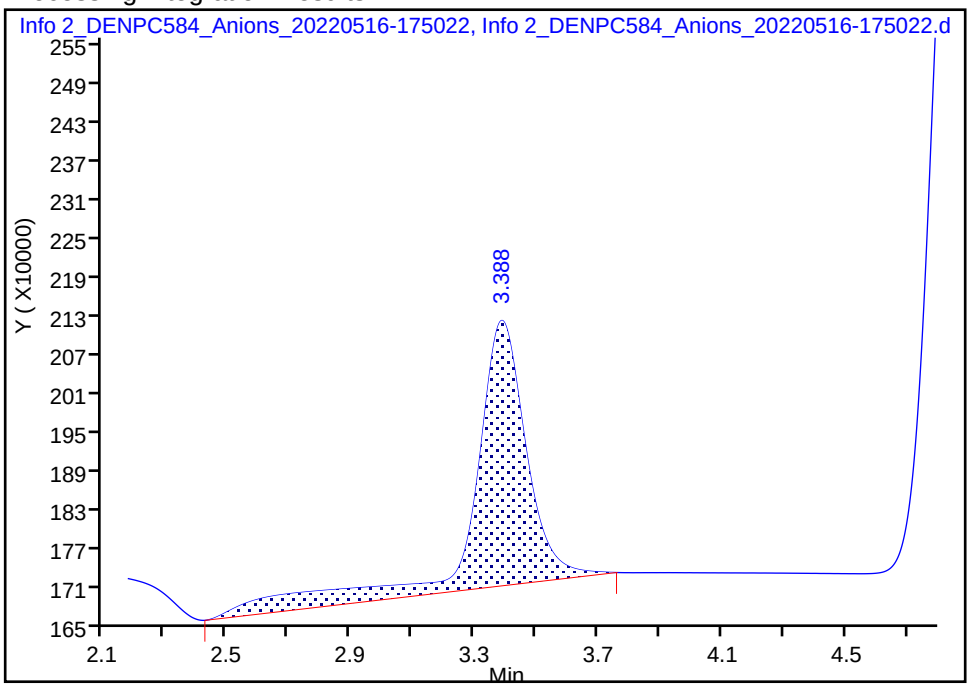
Column: Detector 0005

1 Fluoride, CAS: 16984-48-8

Signal: 1

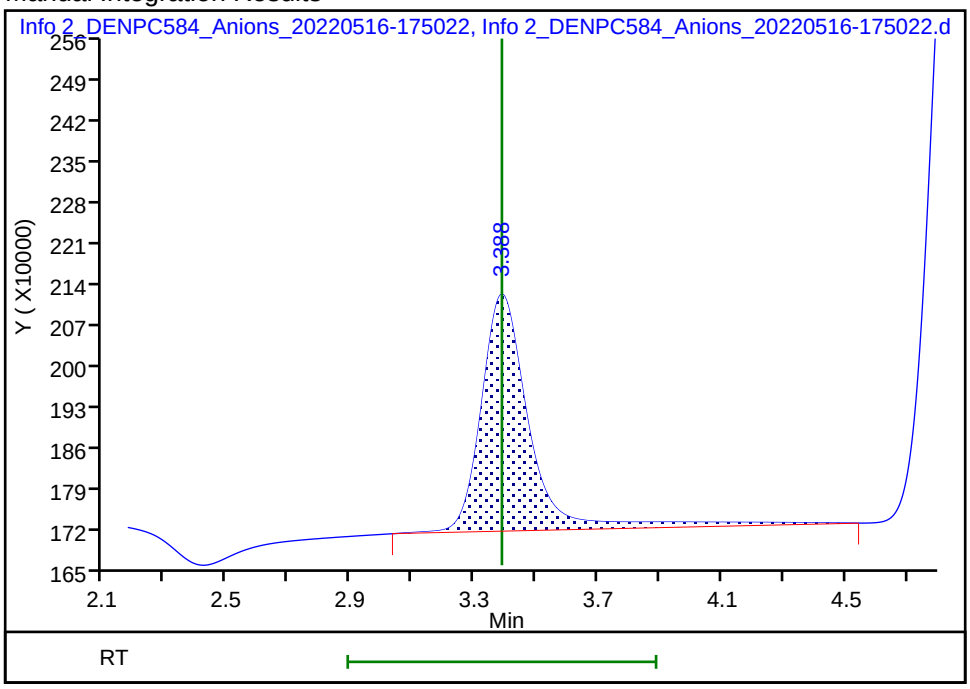
Processing Integration Results

RT: 3.39
Area: 5073159
Amount: 0.233064
Amount Units: ug/ml



Manual Integration Results

RT: 3.39
Area: 4412713
Amount: 0.244724
Amount Units: ug/ml



Reviewer: jindaratc, 16-May-2022 19:10:58

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-175

Injection Date: 16-May-2022 17:34:00 Instrument ID: WC_IonChrom13

Lims ID: std L1

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 2

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

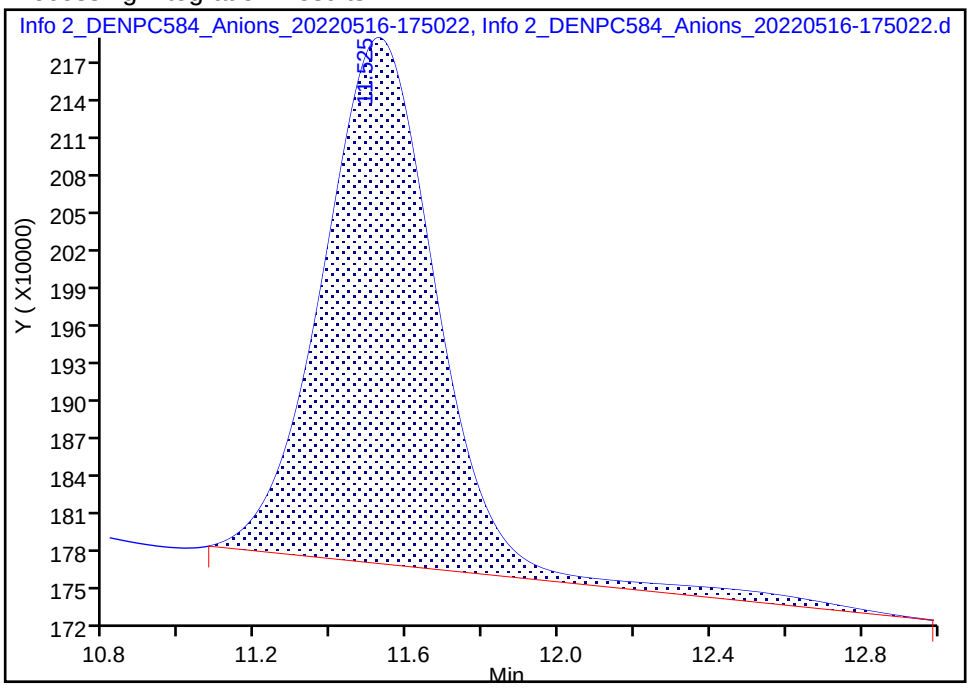
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

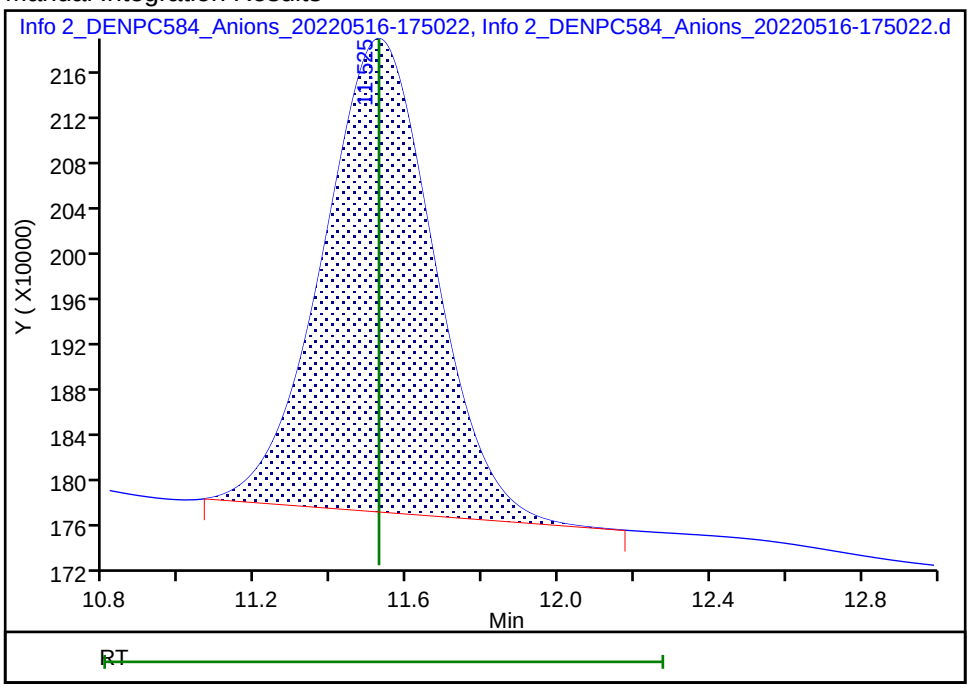
Processing Integration Results

RT: 11.53
Area: 8832678
Amount: 1.128319
Amount Units: ug/ml



Manual Integration Results

RT: 11.53
Area: 8433467
Amount: 1.122740
Amount Units: ug/ml



Reviewer: mitchellj, 17-May-2022 09:48:34

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-180
Lims ID: std L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 16-May-2022 17:50:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0111056-003
Misc. Info.: 280-0111056-003
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 17-May-2022 16:38:05 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1686

First Level Reviewer: jindaratc Date: 16-May-2022 18:42:16

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.395	3.395	0.000	10409686	0.5000	0.4559	M
2 Chloride	4.857	4.857	0.000	32101000	2.50	2.46	
3 Nitrite as N	5.777	5.777	0.000	14711403	NC	NC	
4 Bromide	7.377	7.377	0.000	2249159	0.5000	0.4938	
5 Nitrate as N	8.447	8.447	0.000	14500376	NC	NC	
7 Orthophosphate as P	10.430	10.430	0.000	6276830	NC	NC	a
6 Sulfate	11.587	11.587	0.000	21407179	2.50	2.39	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

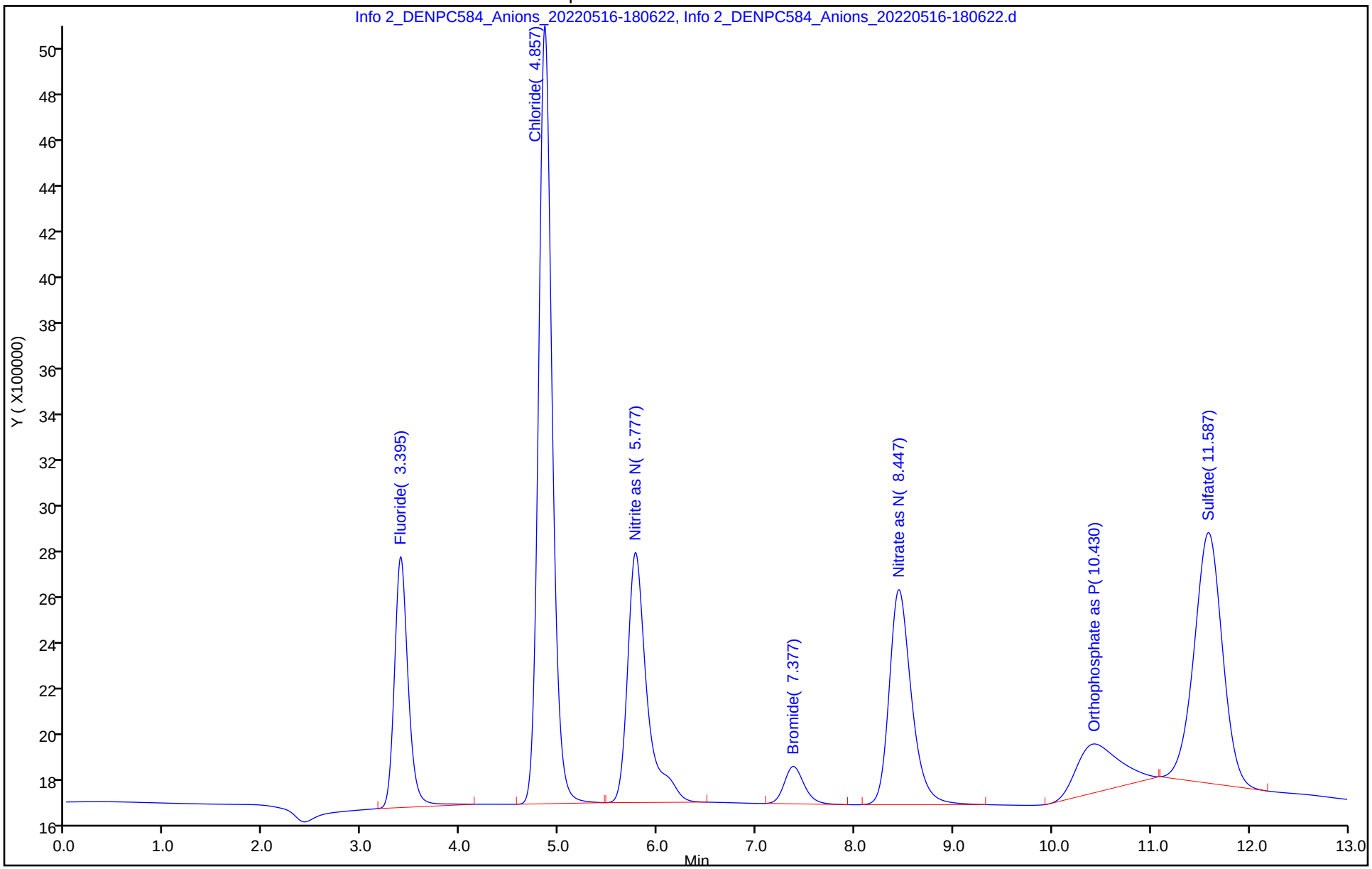
Reagents:

IC CAL cl/so4_00419 Amount Added: 0.05 Units: mL
IC Cal low_00637 Amount Added: 0.05 Units: mL

Report Date: 17-May-2022 16:38:06 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-180622.d				
Injection Date:	16-May-2022 17:50:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	std L2			Worklist Smp#:	3
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-180

Injection Date: 16-May-2022 17:50:00 Instrument ID: WC_IonChrom13

Lims ID: std L2

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 3

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

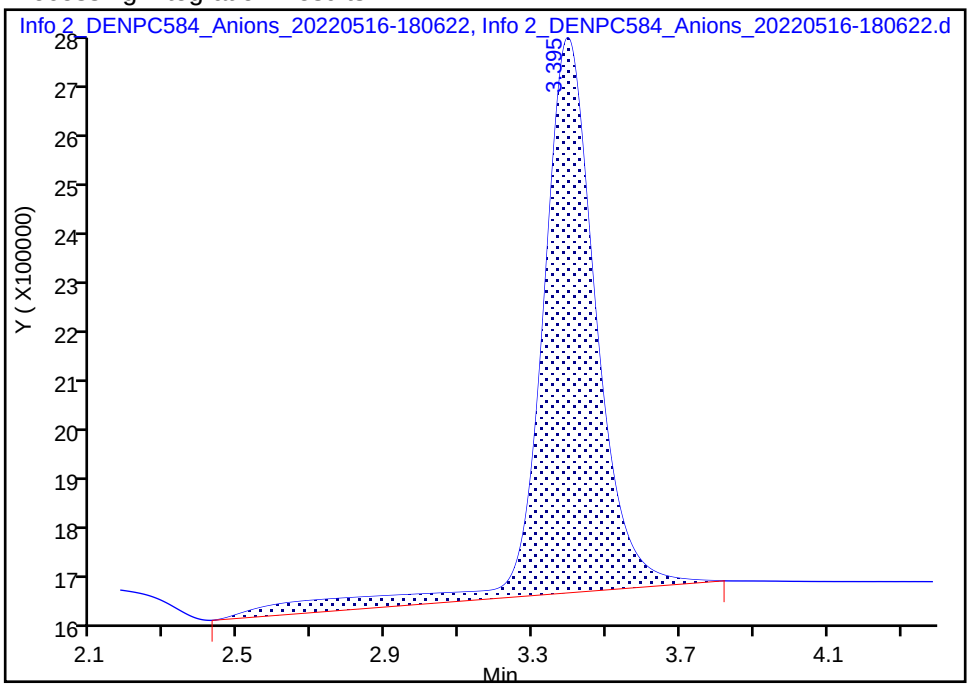
Column: Detector 0005

1 Fluoride, CAS: 16984-48-8

Signal: 1

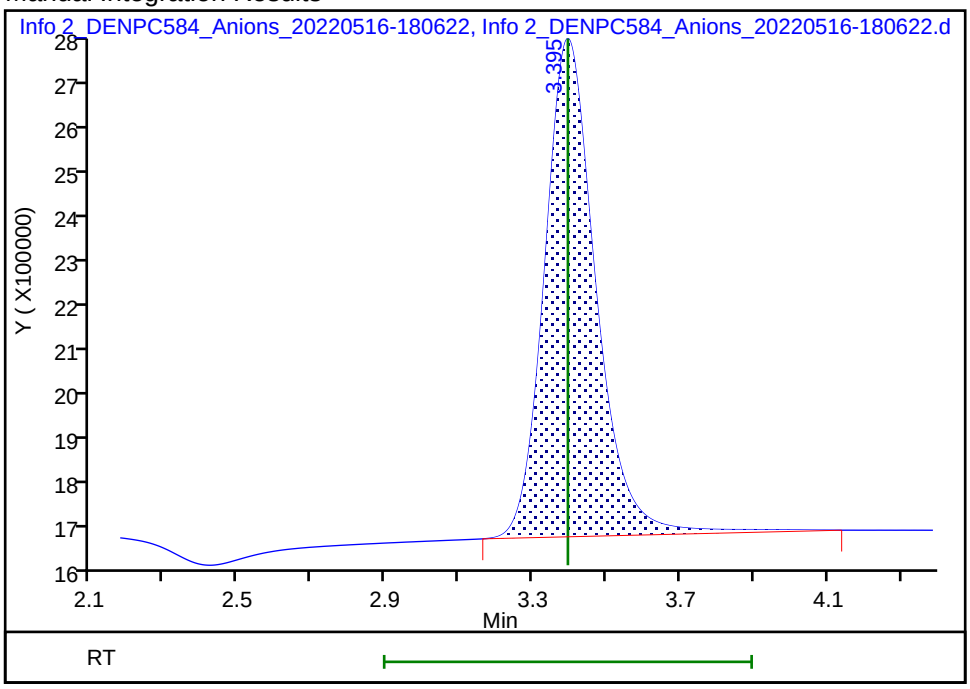
Processing Integration Results

RT: 3.40
Area: 11330273
Amount: 0.483646
Amount Units: ug/ml



Manual Integration Results

RT: 3.40
Area: 10409686
Amount: 0.455890
Amount Units: ug/ml



Reviewer: mitchellj, 17-May-2022 09:49:01

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

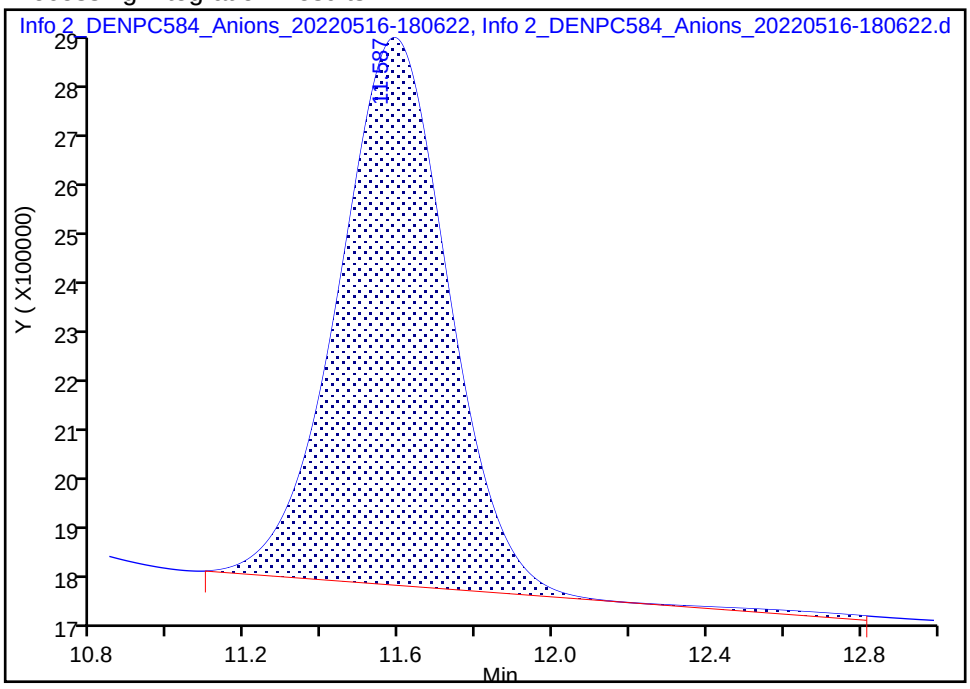
Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-180
Injection Date: 16-May-2022 17:50:00 Instrument ID: WC_IonChrom13
Lims ID: std L2
Client ID:
Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions-IC13 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

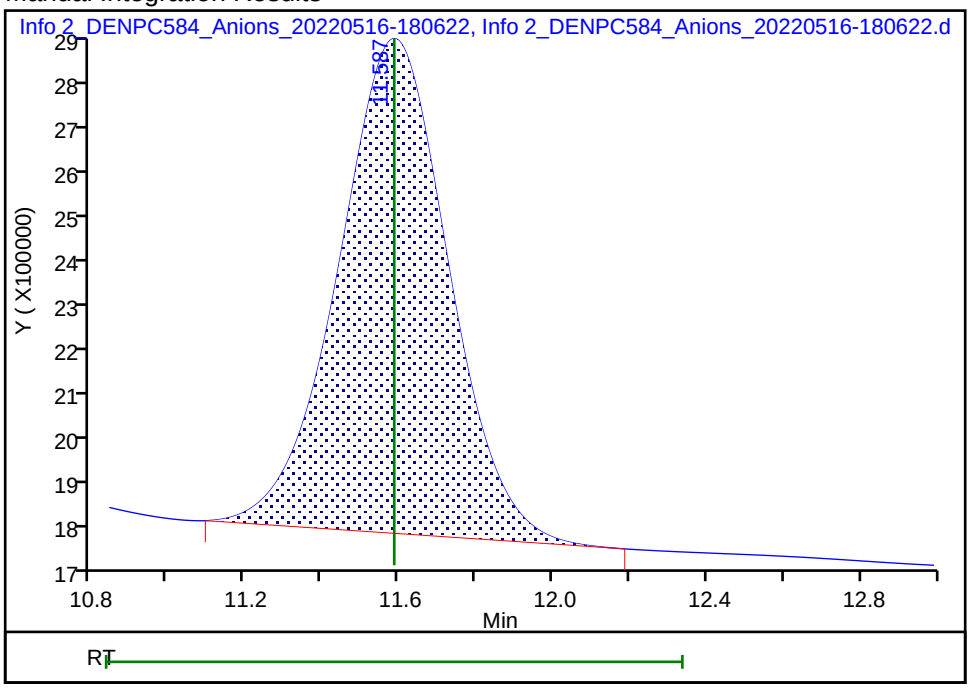
Processing Integration Results

RT: 11.59
Area: 21602155
Amount: 2.395938
Amount Units: ug/ml



Manual Integration Results

RT: 11.59
Area: 21407179
Amount: 2.388647
Amount Units: ug/ml



Reviewer: mitchellj, 17-May-2022 09:49:19
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-182				
Lims ID:	std L3				
Client ID:					
Sample Type:	IC	Calib Level:	3		
Inject. Date:	16-May-2022 18:06:00	ALS Bottle#:	0	Worklist Smp#:	4
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0111056-004				
Misc. Info.:	280-0111056-004				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom13		
Sublist:	chrom-Anions-IC13*sub1				
Method:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Anions-IC13.m				
Limit Group:	Wet - Anions 28D				
Last Update:	17-May-2022 16:38:06	Calib Date:	16-May-2022 18:54:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191				
Column 1 :			Det: 0005		
Process Host:	CTX1686				
First Level Reviewer: jindaratc		Date:	16-May-2022 18:42:26		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.390	3.390	0.000	22759491	1.00	0.8908	M
2 Chloride	4.842	4.842	0.000	68705864	5.00	5.02	
3 Nitrite as N	5.757	5.757	0.000	31465657	NC	NC	
4 Bromide	7.345	7.345	0.000	4610780	1.00	0.9559	
5 Nitrate as N	8.393	8.393	0.000	30914952	NC	NC	
7 Orthophosphate as P	10.317	10.317	0.000	16934127	NC	NC	a
6 Sulfate	11.525	11.525	0.000	44956370	5.00	4.69	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

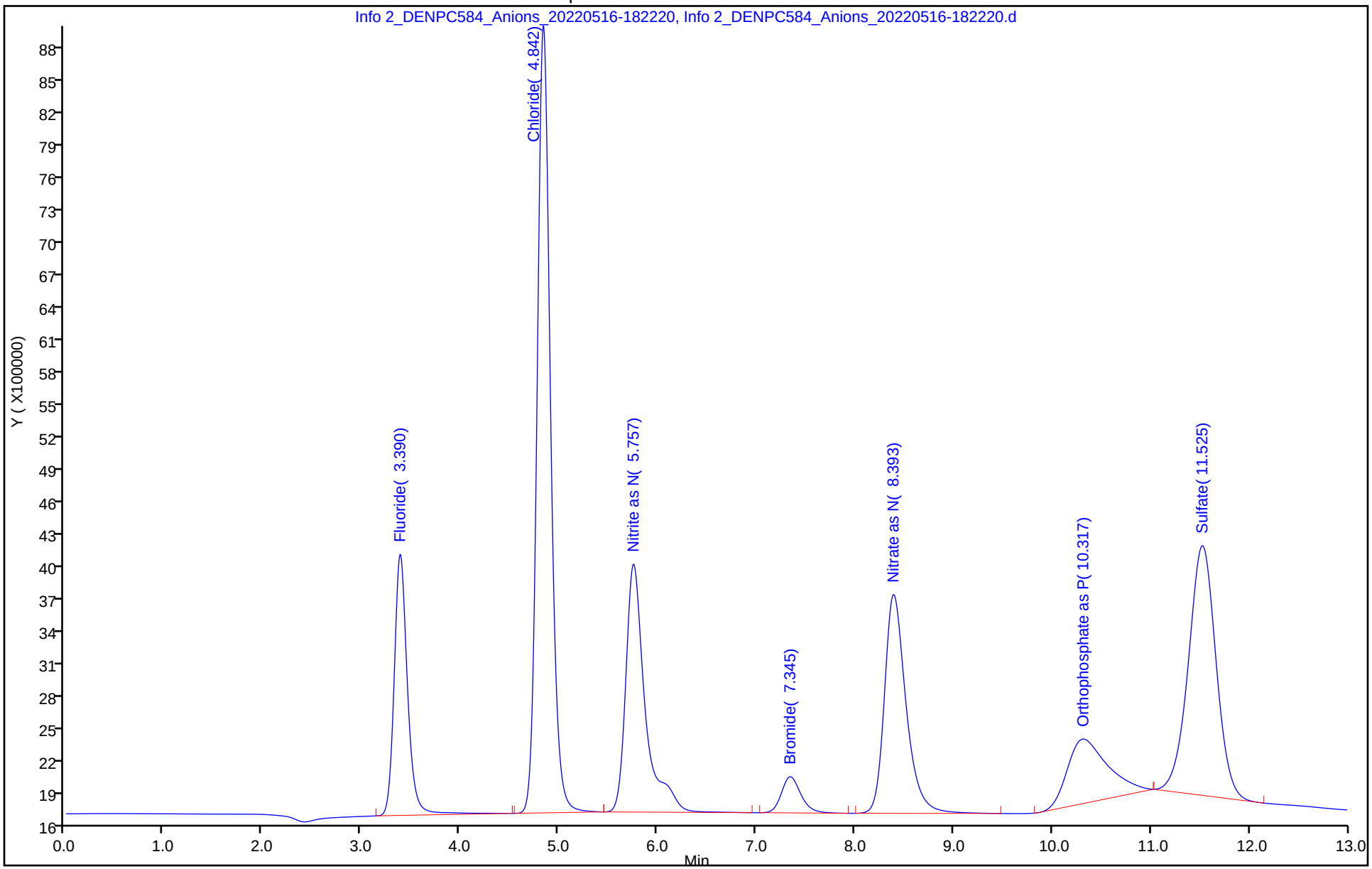
Reagents:

IC CAL cl/so4_00419	Amount Added:	0.10	Units: mL
IC Cal low_00637	Amount Added:	0.10	Units: mL

Report Date: 17-May-2022 16:38:06 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-182220.d				
Injection Date:	16-May-2022 18:06:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	std L3			Worklist Smp#:	4
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-182

Injection Date: 16-May-2022 18:06:00 Instrument ID: WC_IonChrom13

Lims ID: std L3

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 4

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

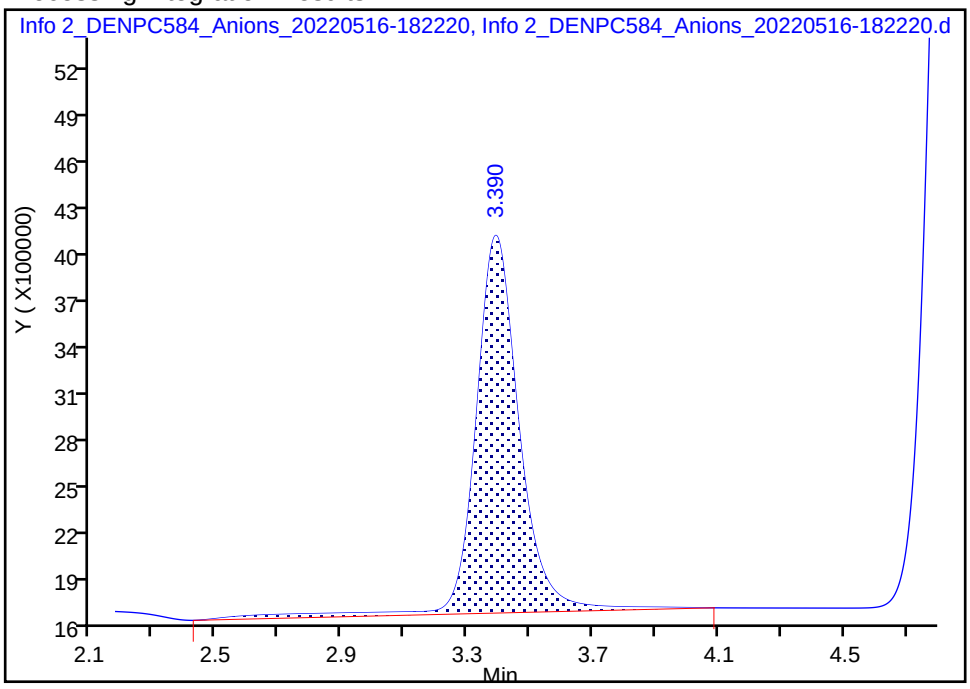
Column: Detector 0005

1 Fluoride, CAS: 16984-48-8

Signal: 1

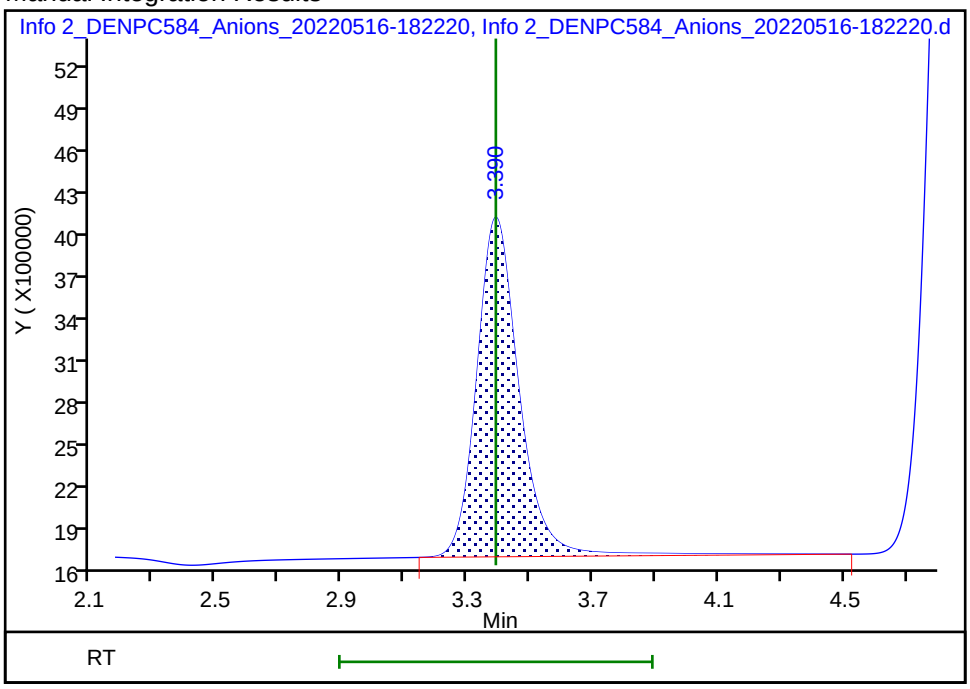
Processing Integration Results

RT: 3.39
Area: 23846856
Amount: 0.935869
Amount Units: ug/ml



Manual Integration Results

RT: 3.39
Area: 22759491
Amount: 0.890754
Amount Units: ug/ml



Reviewer: mitchellj, 17-May-2022 09:49:46

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-182

Injection Date: 16-May-2022 18:06:00 Instrument ID: WC_IonChrom13

Lims ID: std L3

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 4

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

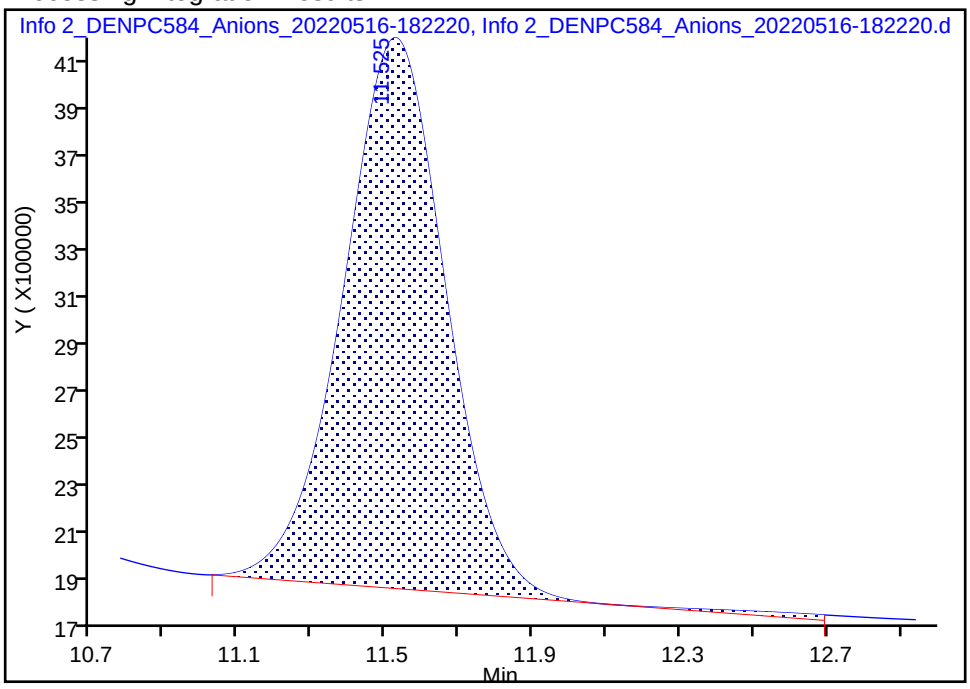
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

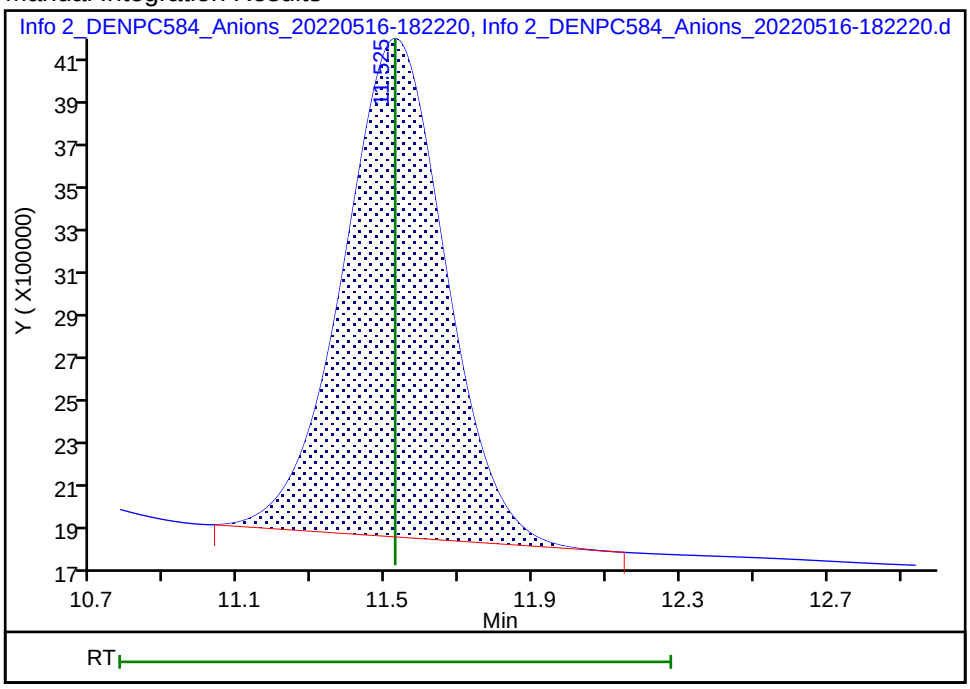
Processing Integration Results

RT: 11.53
Area: 45368182
Amount: 4.714089
Amount Units: ug/ml



Manual Integration Results

RT: 11.53
Area: 44956370
Amount: 4.686453
Amount Units: ug/ml



Reviewer: mitchellj, 17-May-2022 09:49:59

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-183
Lims ID: std L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 16-May-2022 18:22:00 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0111056-005
Misc. Info.: 280-0111056-005
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 17-May-2022 16:38:07 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1686

First Level Reviewer: jindaratc Date: 16-May-2022 18:43:11

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.003	3.003	0.000	104149841	4.00	3.76	M
2 Chloride	4.283	4.283	0.000	852385867	60.0	59.8	a
3 Nitrite as N	5.062	5.062	0.000	126377817	NC	NC	M
4 Bromide	6.452	6.452	0.000	18437619	4.00	3.66	a
5 Nitrate as N	7.317	7.317	0.000	129439113	NC	NC	a
7 Orthophosphate as P	9.025	9.025	0.000	101511529	NC	NC	
6 Sulfate	10.165	10.165	0.000	604480306	60.0	59.3	Ma

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

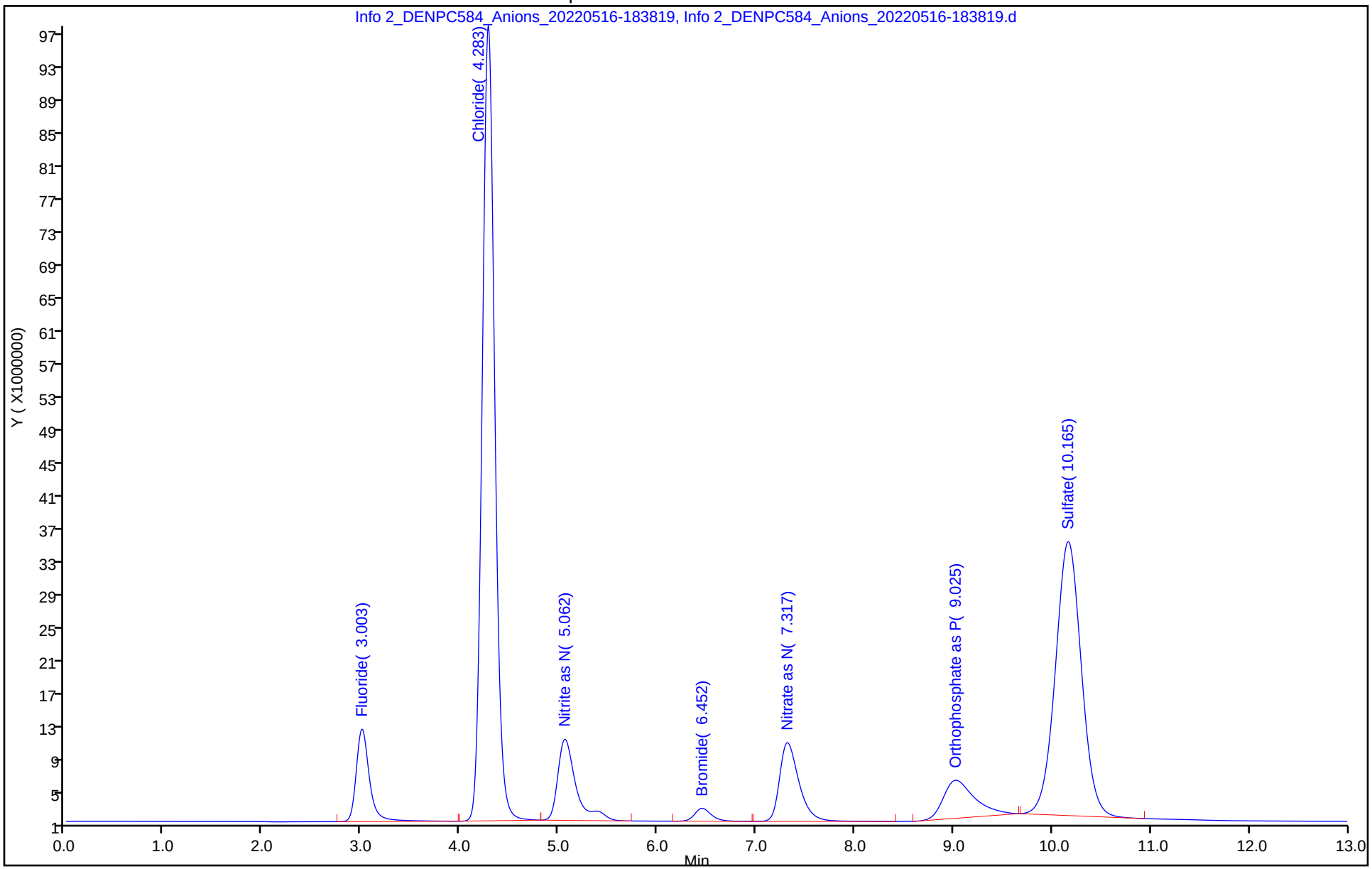
Reagents:

IC CAL cl/so4_00419 Amount Added: 1.20 Units: mL
IC Cal low_00637 Amount Added: 0.40 Units: mL

Report Date: 17-May-2022 16:38:07 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-183819.d				
Injection Date:	16-May-2022 18:22:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	std L4			Worklist Smp#:	5
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-183

Injection Date: 16-May-2022 18:22:00 Instrument ID: WC_IonChrom13

Lims ID: std L4

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 5

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

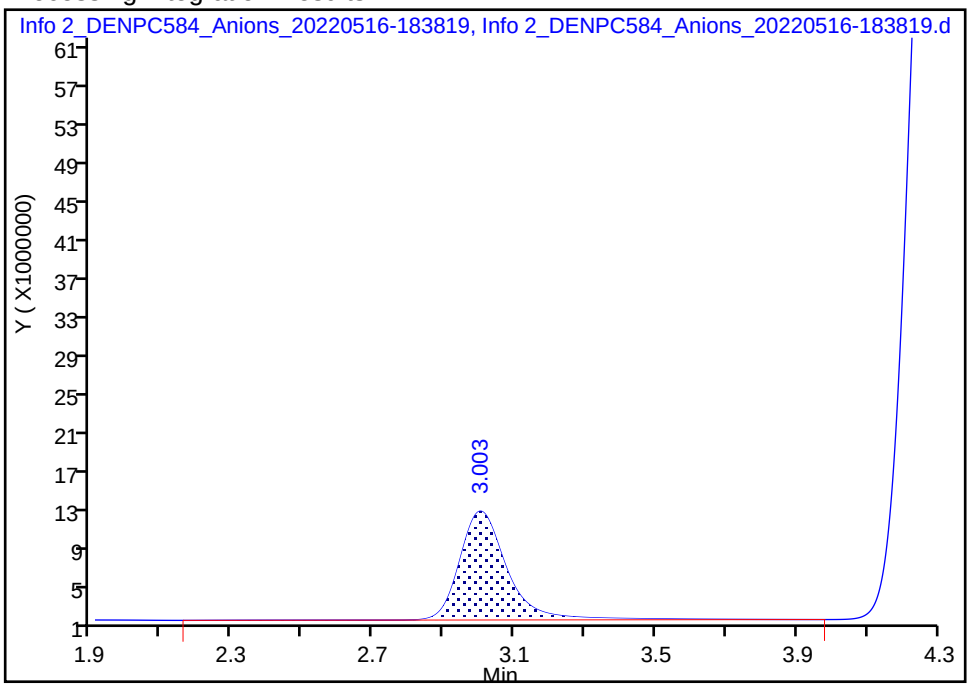
Column: Detector 0005

1 Fluoride, CAS: 16984-48-8

Signal: 1

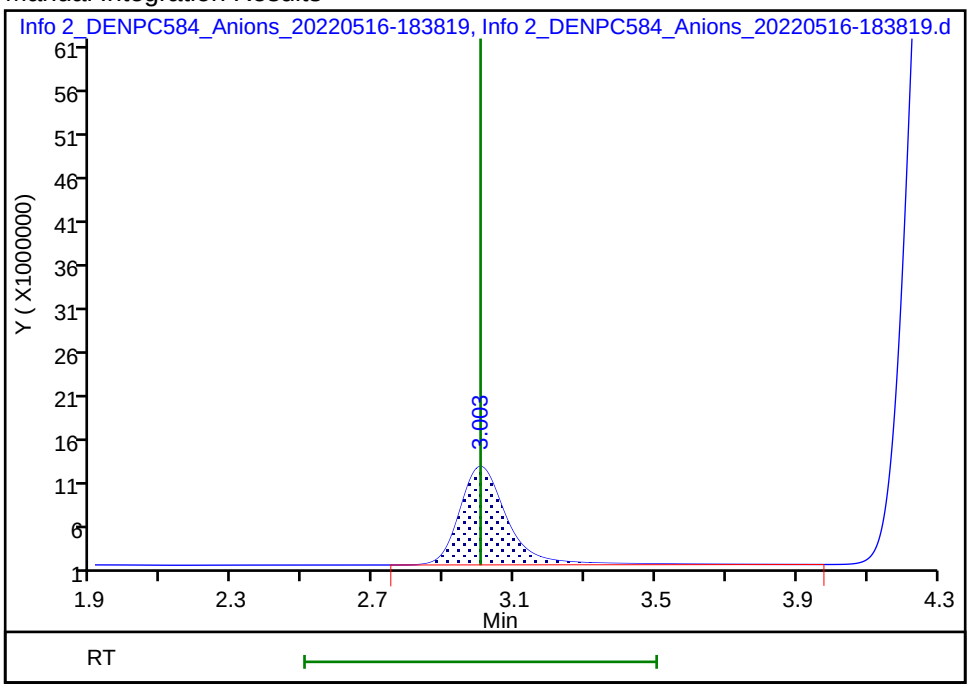
Processing Integration Results

RT: 3.00
Area: 104339066
Amount: 3.867875
Amount Units: ug/ml



Manual Integration Results

RT: 3.00
Area: 104149841
Amount: 3.756685
Amount Units: ug/ml



Reviewer: jindaratc, 16-May-2022 19:11:48

Audit Action: Manually Integrated Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-183

Injection Date: 16-May-2022 18:22:00 Instrument ID: WC_IonChrom13

Lims ID: std L4

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 5

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

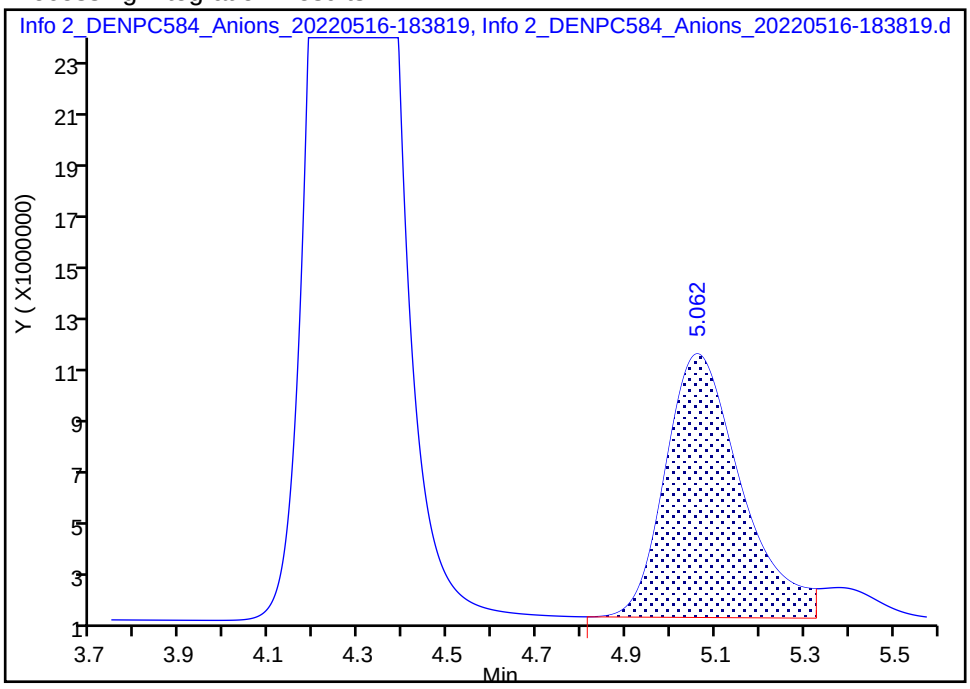
Column: Detector 0005

2 Chloride, CAS: 16887-00-6

Signal: 1

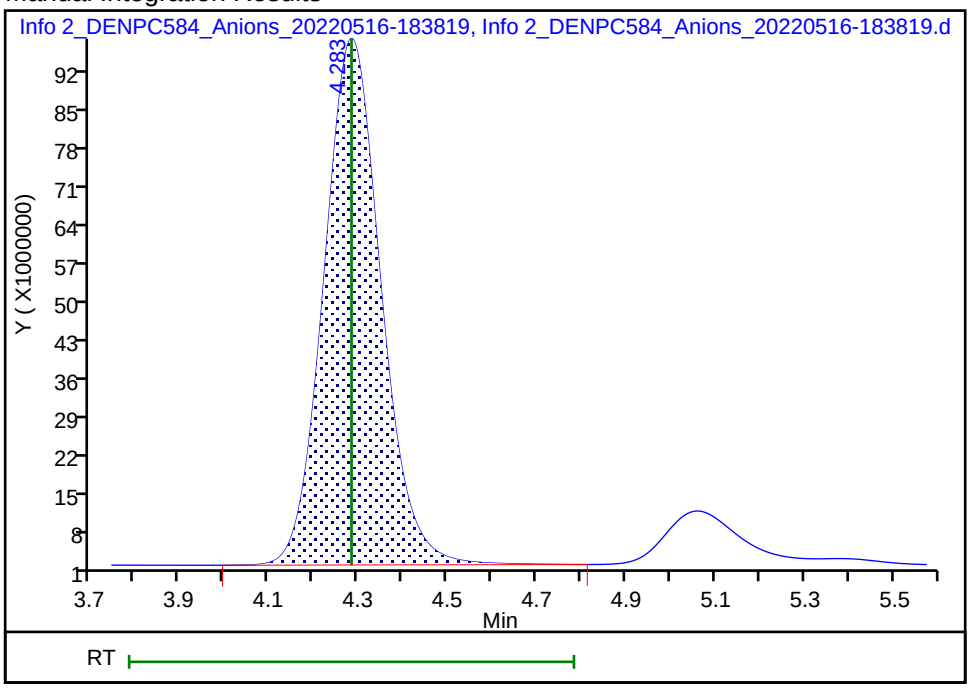
Processing Integration Results

RT: 5.06
Area: 115443110
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 4.28
Area: 852385867
Amount: 59.824737
Amount Units: ug/ml



Reviewer: jindaratc, 16-May-2022 18:42:42

Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-183

Injection Date: 16-May-2022 18:22:00 Instrument ID: WC_IonChrom13

Lims ID: std L4

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 5

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

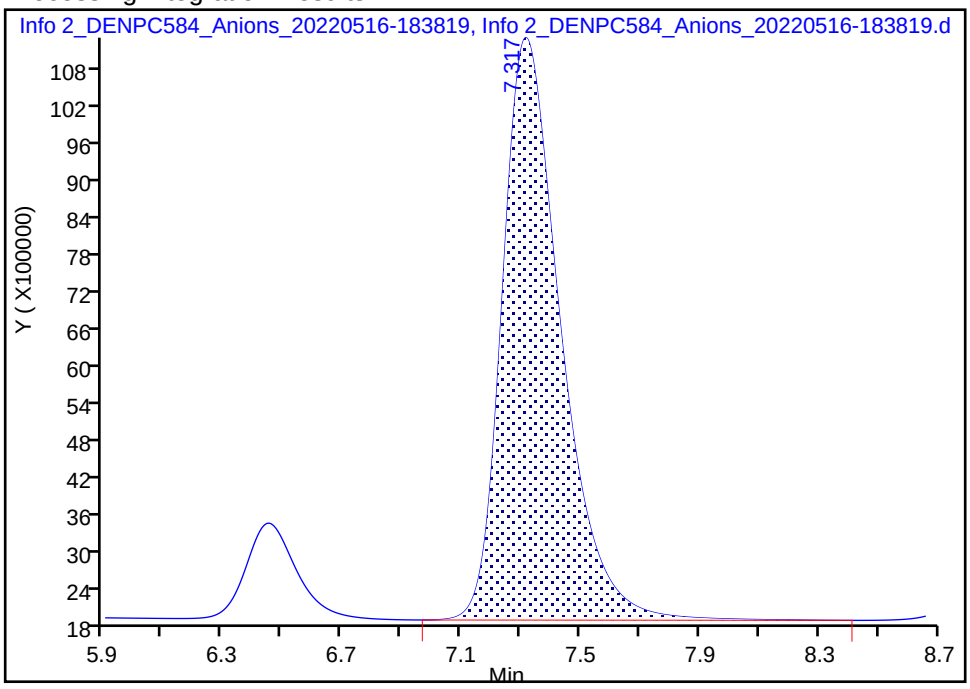
Column: Detector 0005

4 Bromide, CAS: 24959-67-9

Signal: 1

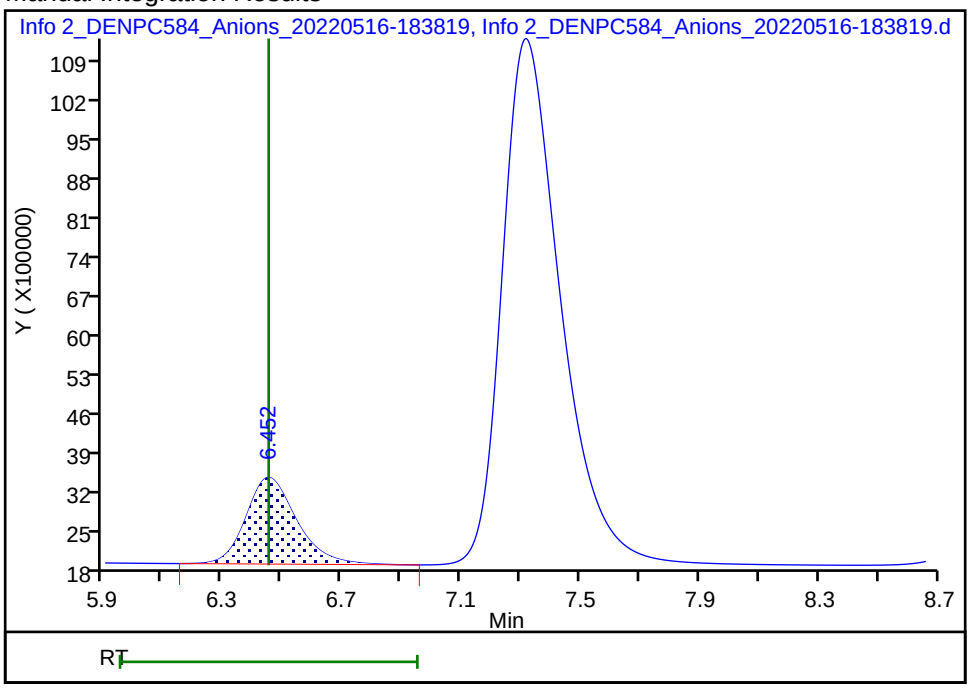
Processing Integration Results

RT: 7.32
Area: 129439113
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 6.45
Area: 18437619
Amount: 3.661238
Amount Units: ug/ml



Reviewer: jindaratc, 16-May-2022 18:42:38

Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-183

Injection Date: 16-May-2022 18:22:00 Instrument ID: WC_IonChrom13

Lims ID: std L4

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 5

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

Column: Detector 0005

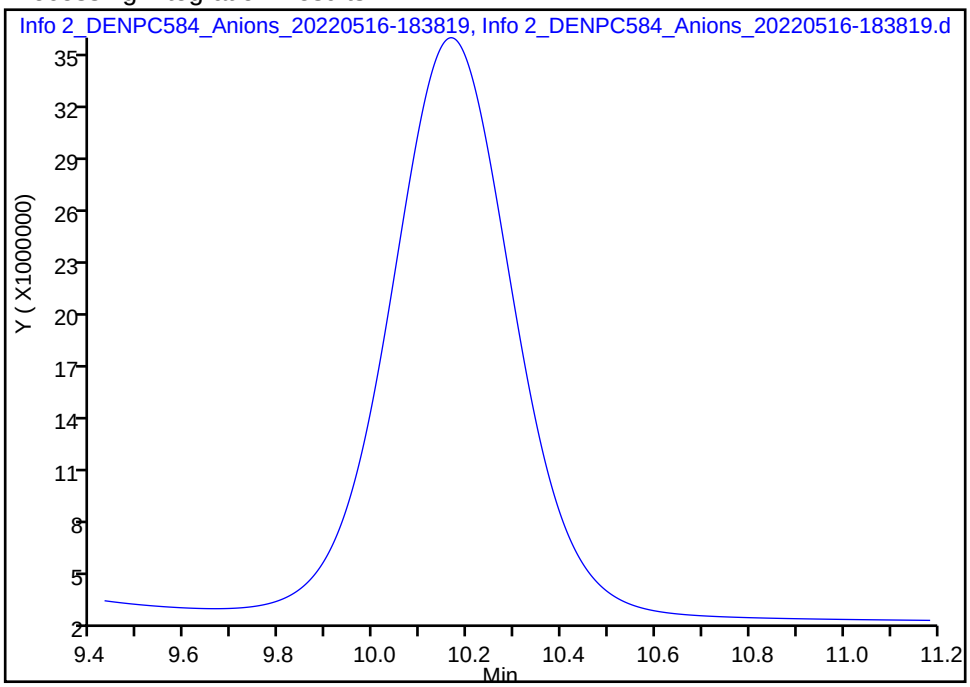
6 Sulfate, CAS: 14808-79-8

Signal: 1

Not Detected

Expected RT: 10.17

Processing Integration Results



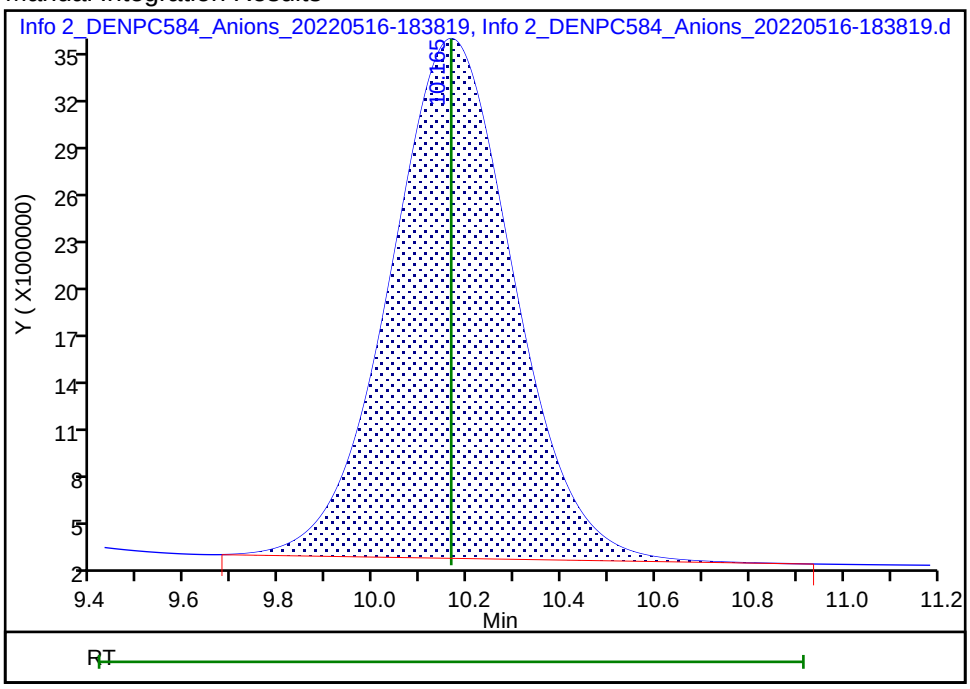
Manual Integration Results

RT: 10.17

Area: 604480306

Amount: 59.281866

Amount Units: ug/ml



Reviewer: mitchellj, 17-May-2022 09:50:36

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-185
Lims ID: std L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 16-May-2022 18:38:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0111056-006
Misc. Info.: 280-0111056-006
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 17-May-2022 16:38:08 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1686

First Level Reviewer: jindaratc Date: 16-May-2022 19:01:02

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.007	3.007	0.000	224066163	8.00	7.98	
2 Chloride	4.295	4.295	0.000	1673785026	120.0	117.3	a
3 Nitrite as N	5.035	5.035	0.000	256222089	NC	NC	Ma
4 Bromide	6.427	6.427	0.000	39667629	8.00	7.82	a
5 Nitrate as N	7.258	7.258	0.000	270760556	NC	NC	a
7 Orthophosphate as P	8.965	8.965	0.000	181549150	NC	NC	a
6 Sulfate	10.118	10.118	0.000	1200244426	120.0	117.4	Ma

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

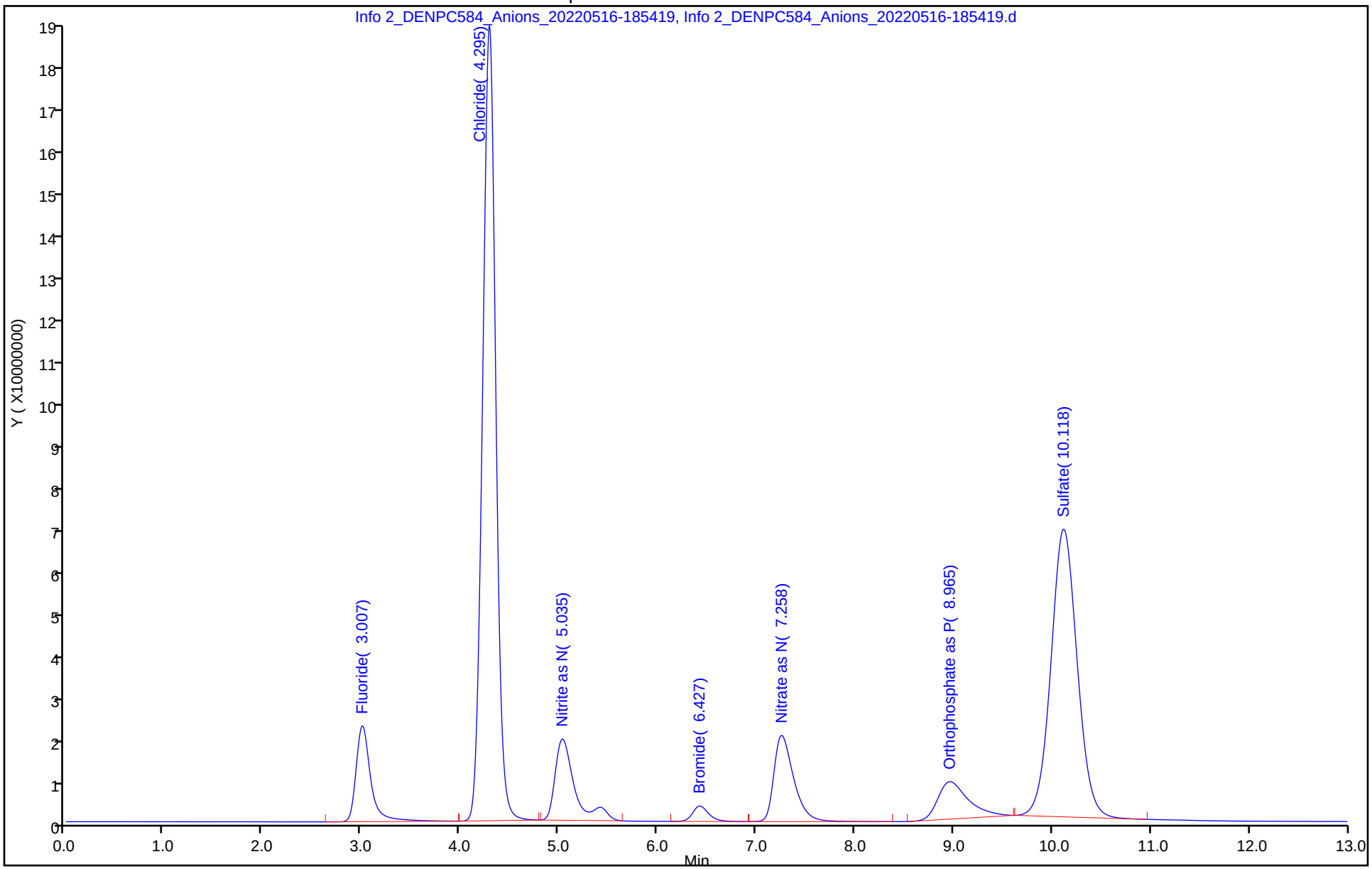
Reagents:

IC CAL cl/so4_00419 Amount Added: 2.40 Units: mL
IC Cal low_00637 Amount Added: 0.80 Units: mL

Report Date: 17-May-2022 16:38:08 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-185419.d				
Injection Date:	16-May-2022 18:38:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	std L5			Worklist Smp#:	6
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-185

Injection Date: 16-May-2022 18:38:00 Instrument ID: WC_IonChrom13

Lims ID: std L5

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 6

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

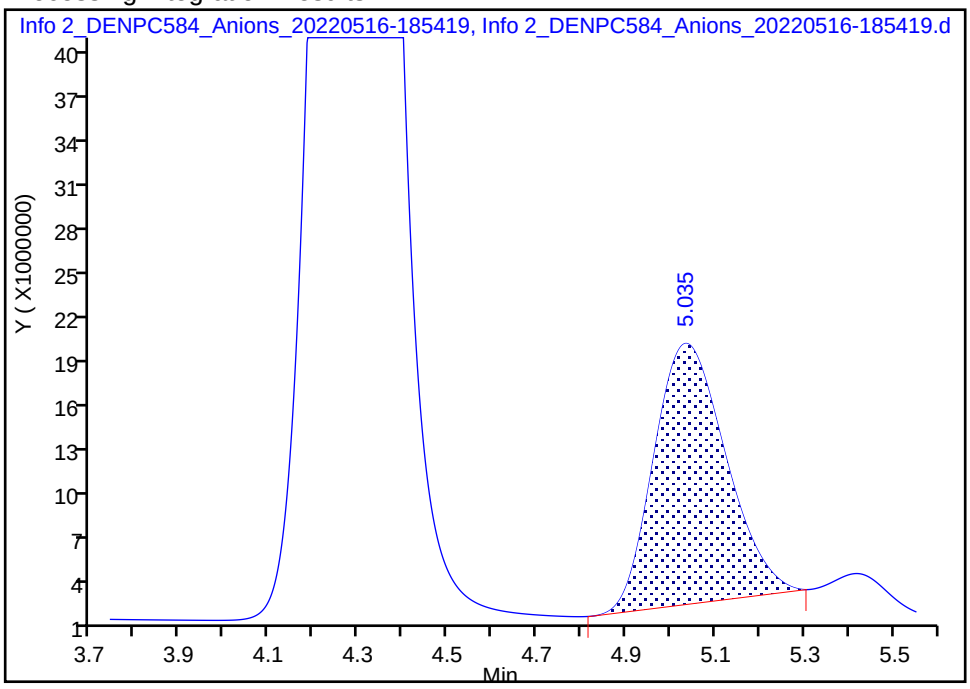
Column: Detector 0005

2 Chloride, CAS: 16887-00-6

Signal: 1

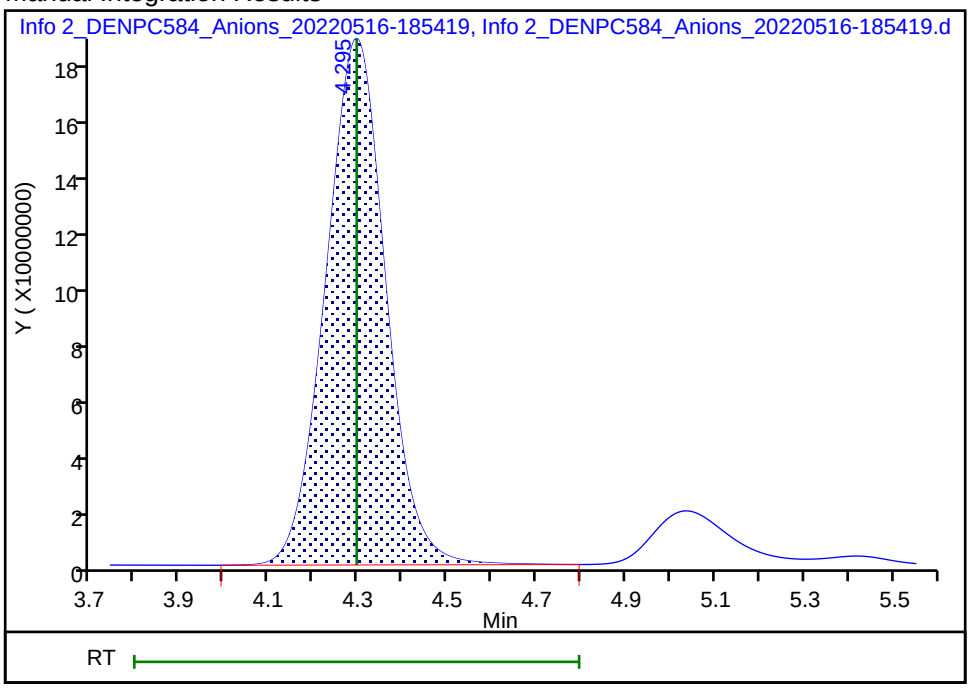
Processing Integration Results

RT: 5.04
Area: 196027803
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 4.30
Area: 1673785026
Amount: 117.2719
Amount Units: ug/ml



Reviewer: jindaratc, 16-May-2022 19:00:21

Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-185

Injection Date: 16-May-2022 18:38:00 Instrument ID: WC_IonChrom13

Lims ID: std L5

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 6

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

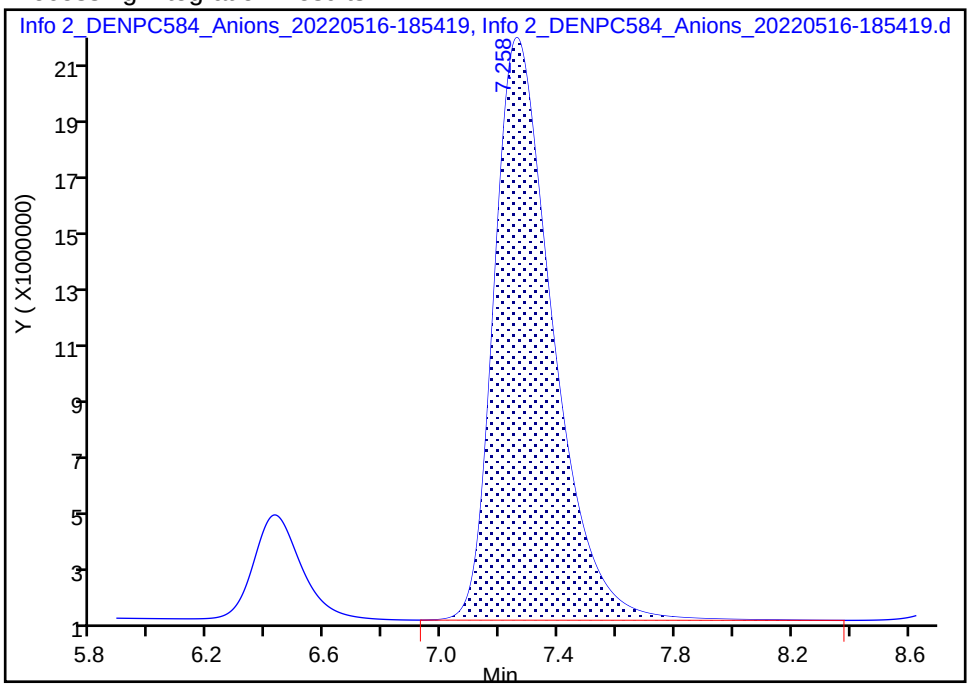
Column: Detector 0005

4 Bromide, CAS: 24959-67-9

Signal: 1

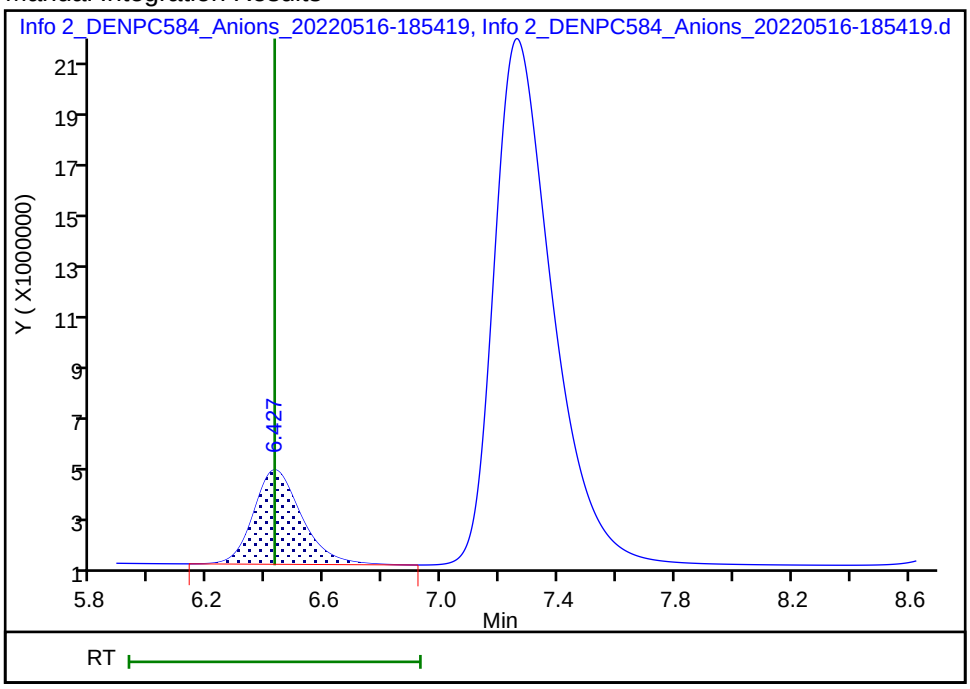
Processing Integration Results

RT: 7.26
Area: 270760556
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 6.43
Area: 39667629
Amount: 7.815104
Amount Units: ug/ml



Reviewer: jindaratc, 16-May-2022 19:00:18

Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-185

Injection Date: 16-May-2022 18:38:00 Instrument ID: WC_IonChrom13

Lims ID: std L5

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 6

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

Column: Detector 0005

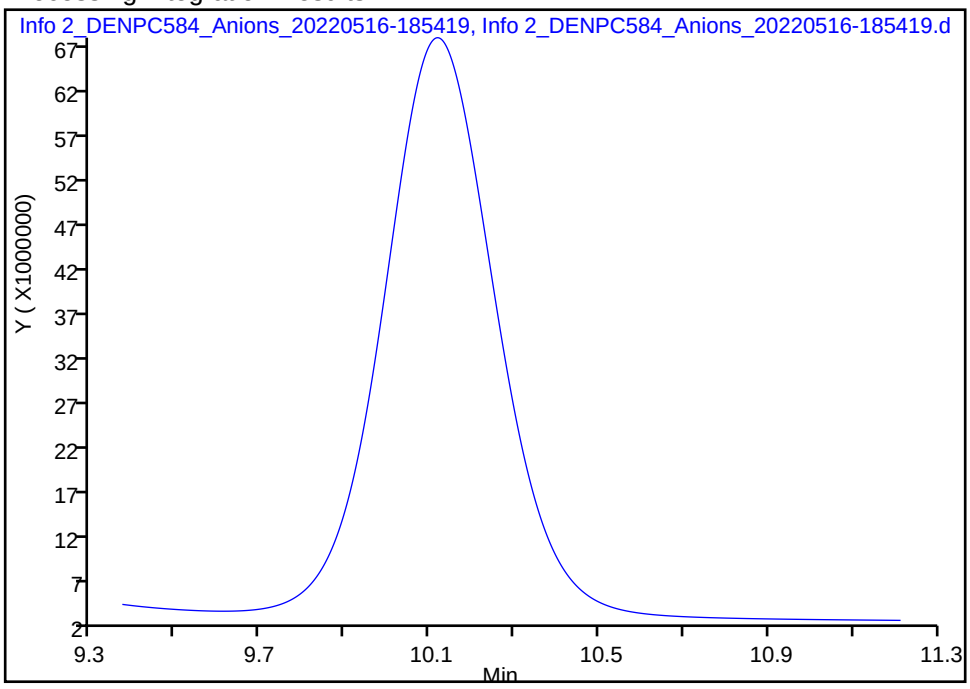
6 Sulfate, CAS: 14808-79-8

Signal: 1

Not Detected

Expected RT: 10.12

Processing Integration Results



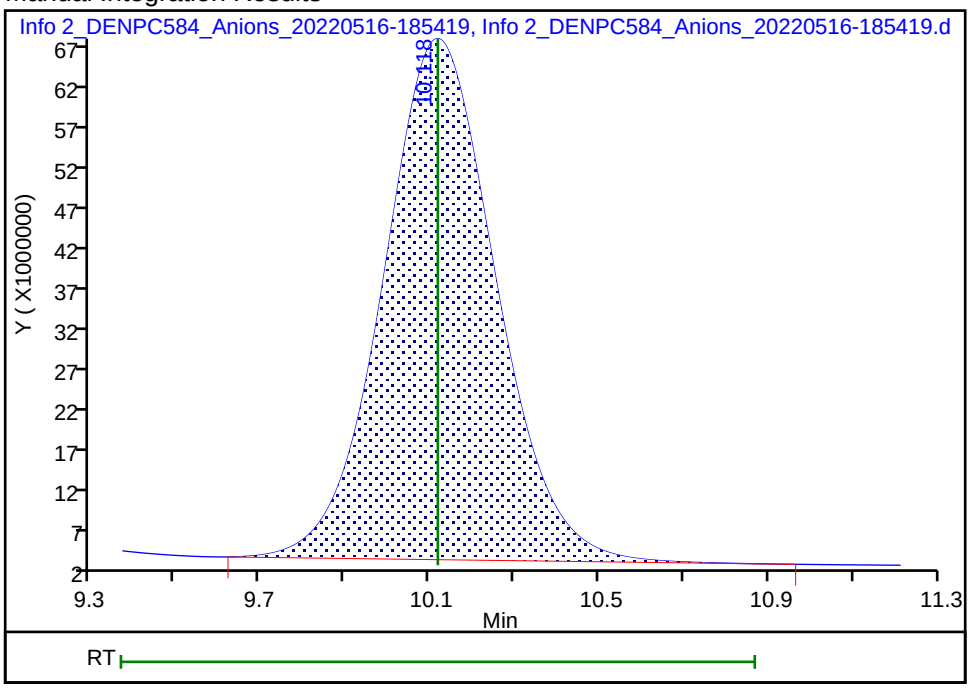
Manual Integration Results

RT: 10.12

Area: 1200244426

Amount: 117.4134

Amount Units: ug/ml



Reviewer: mitchellj, 17-May-2022 09:51:03

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191
Lims ID: std L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 16-May-2022 18:54:00 ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0111056-007
Misc. Info.: 280-0111056-007
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 17-May-2022 16:38:08 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1686

First Level Reviewer: jindaratc Date: 16-May-2022 19:13:17

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.008	3.008	0.000	292041123	10.0	10.4	
2 Chloride	4.325	4.325	0.000	2898216814	200.0	202.9	Ma
3 Nitrite as N	5.028	5.028	0.000	334812084	NC	NC	M
4 Bromide	6.422	6.422	0.000	53656450	10.0	10.6	a
5 Nitrate as N	7.243	7.243	0.000	356636332	NC	NC	a
7 Orthophosphate as P	8.958	8.958	0.000	220410536	NC	NC	a
6 Sulfate	10.098	10.098	0.000	2083602807	200.0	203.6	Ma

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

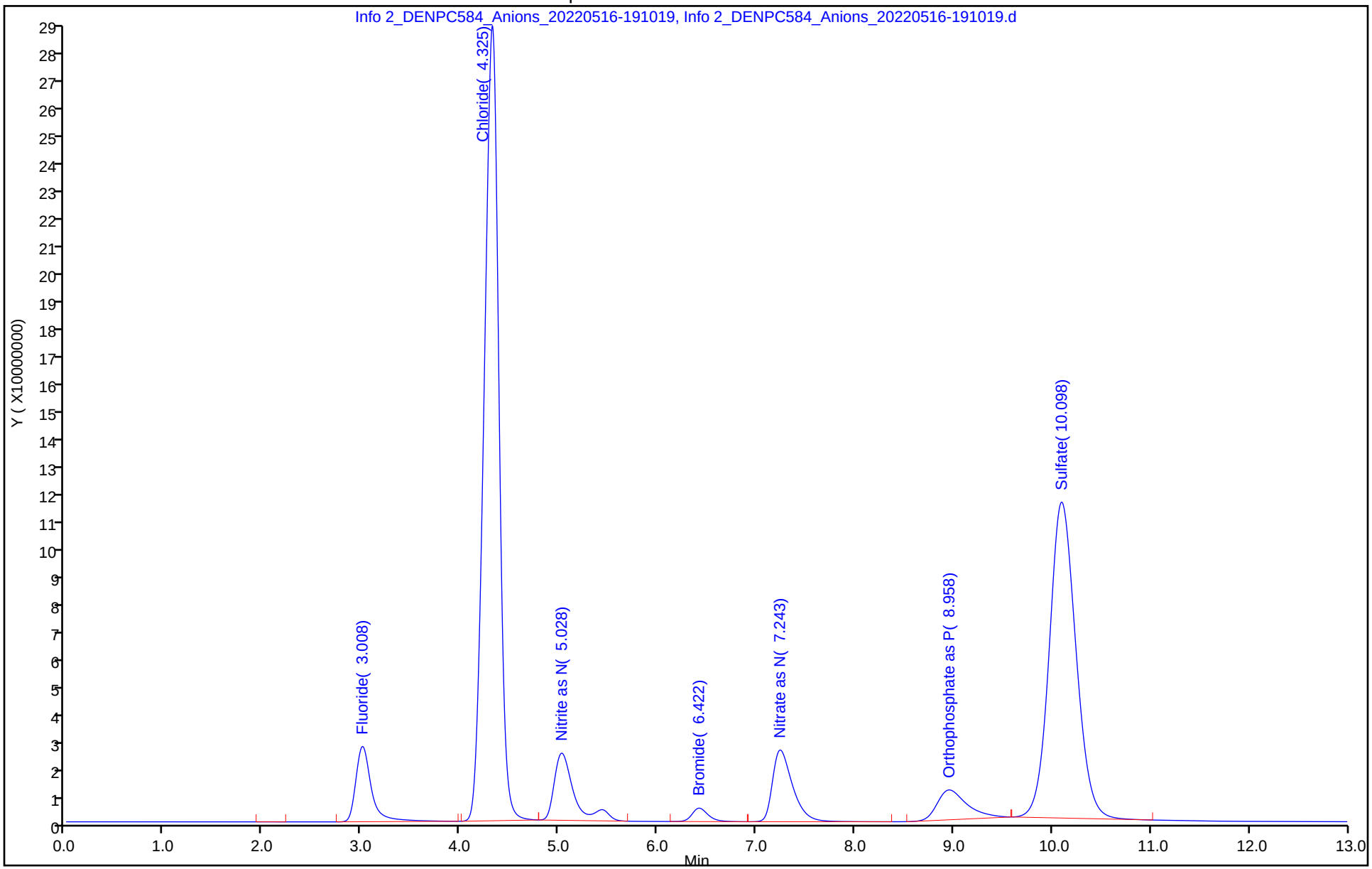
Reagents:

IC CAL cl/so4_00419 Amount Added: 4.00 Units: mL
IC Cal low_00637 Amount Added: 1.00 Units: mL

Report Date: 17-May-2022 16:38:09 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191019.d				
Injection Date:	16-May-2022 18:54:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	std L6			Worklist Smp#:	7
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

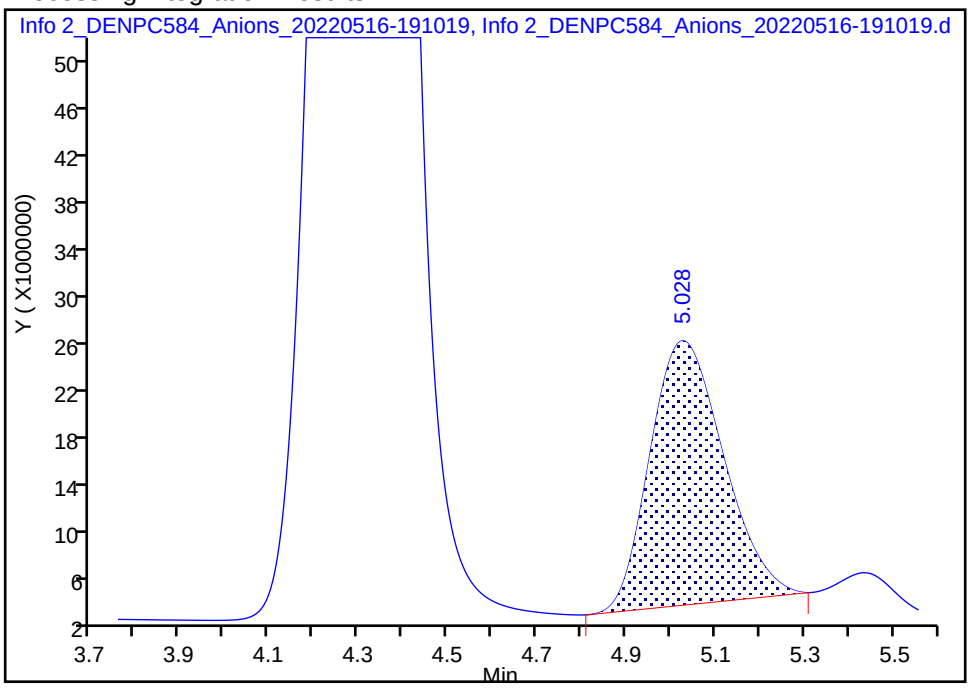
Injection Date:	16-May-2022 18:54:00	Instrument ID:	WC_IonChrom13		
Lims ID:	std L6				
Client ID:					
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	7
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

2 Chloride, CAS: 16887-00-6

Signal: 1

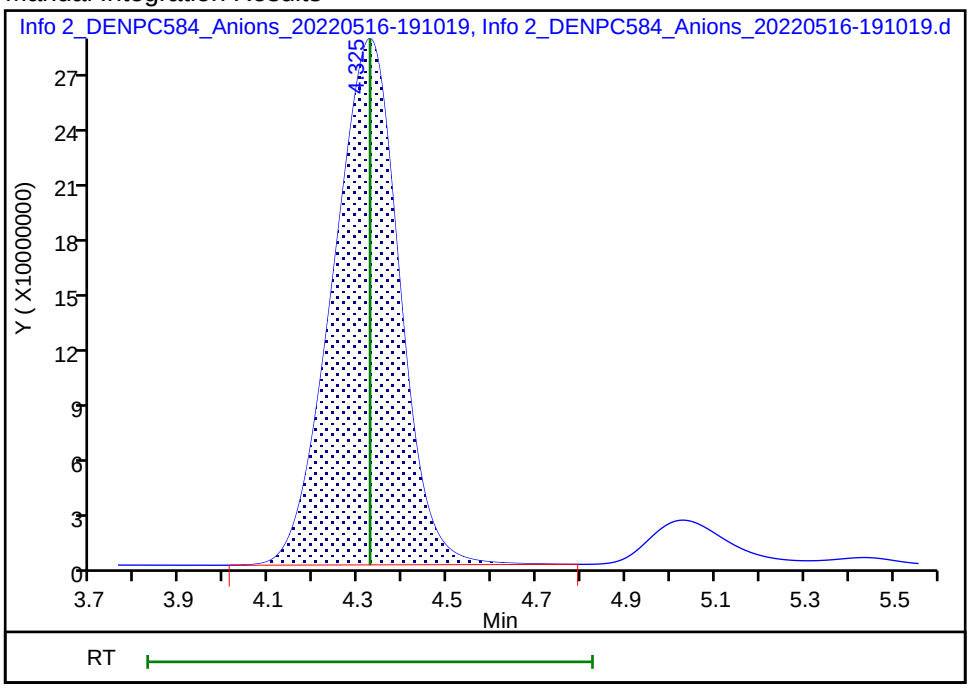
Processing Integration Results

RT: 5.03
Area: 259494000
Amount: 33.830738
Amount Units: ug/ml



Manual Integration Results

RT: 4.33
Area: 2898216814
Amount: 202.9065
Amount Units: ug/ml



Reviewer: jindaratc, 16-May-2022 19:13:11

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Injection Date: 16-May-2022 18:54:00 Instrument ID: WC_IonChrom13

Lims ID: std L6

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 7

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

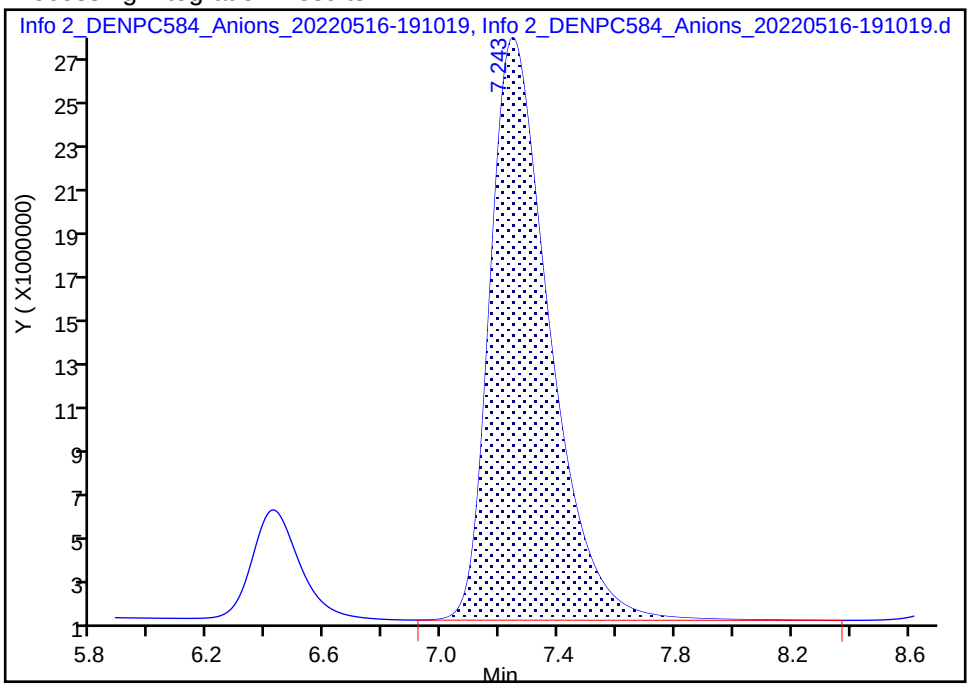
Column: Detector 0005

4 Bromide, CAS: 24959-67-9

Signal: 1

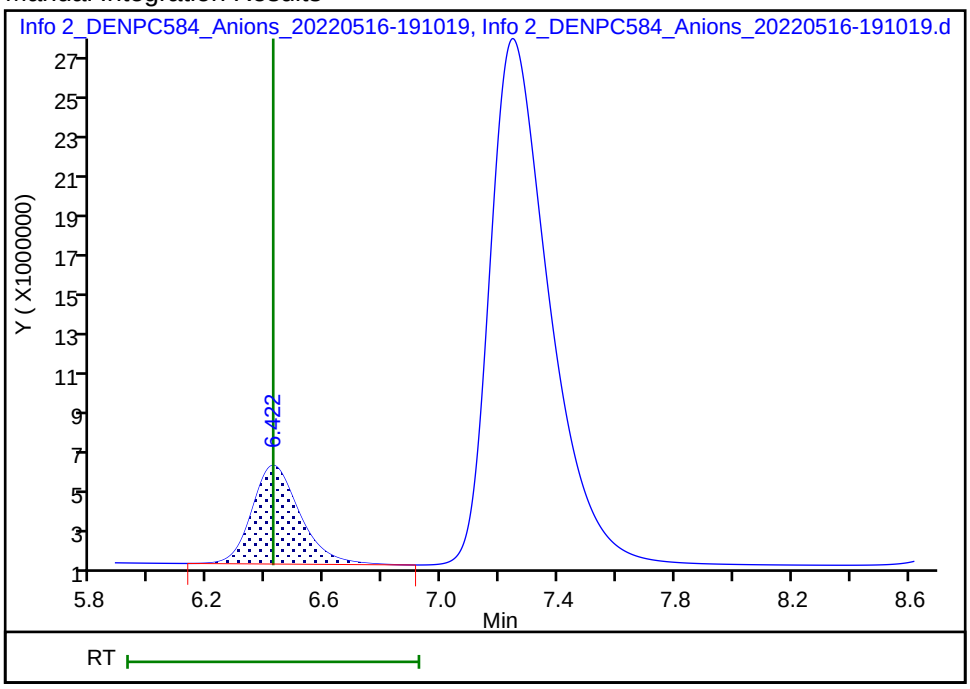
Processing Integration Results

RT: 7.24
Area: 356636332
Amount: 18.565454
Amount Units: ug/ml



Manual Integration Results

RT: 6.42
Area: 53656450
Amount: 10.552158
Amount Units: ug/ml



Reviewer: jindaratc, 16-May-2022 19:12:25

Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Injection Date: 16-May-2022 18:54:00 Instrument ID: WC_IonChrom13

Lims ID: std L6

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 7

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

Column: Detector 0005

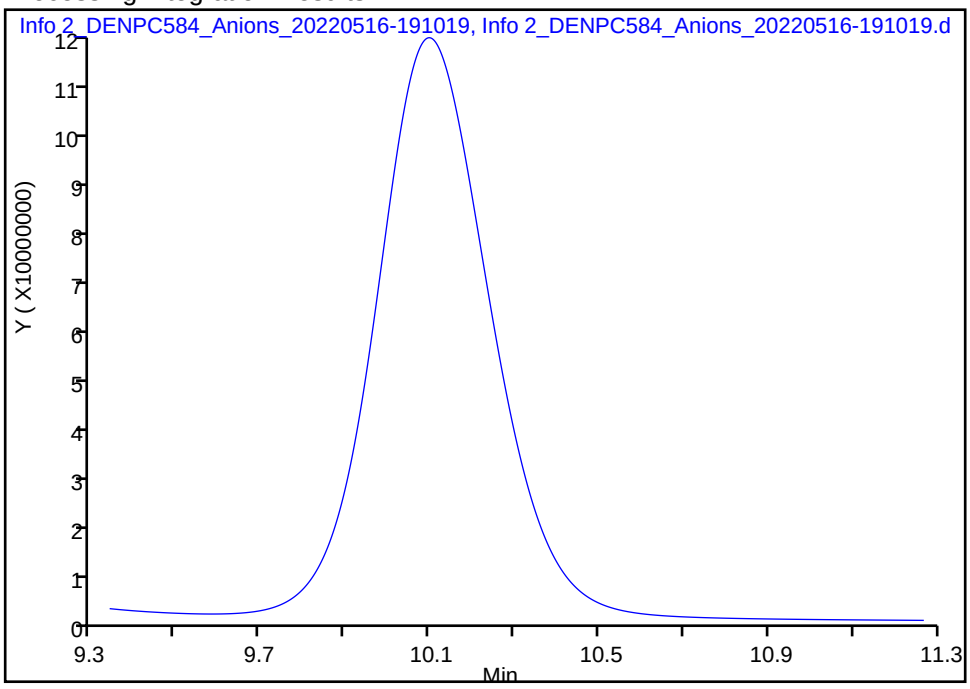
6 Sulfate, CAS: 14808-79-8

Signal: 1

Not Detected

Expected RT: 10.10

Processing Integration Results



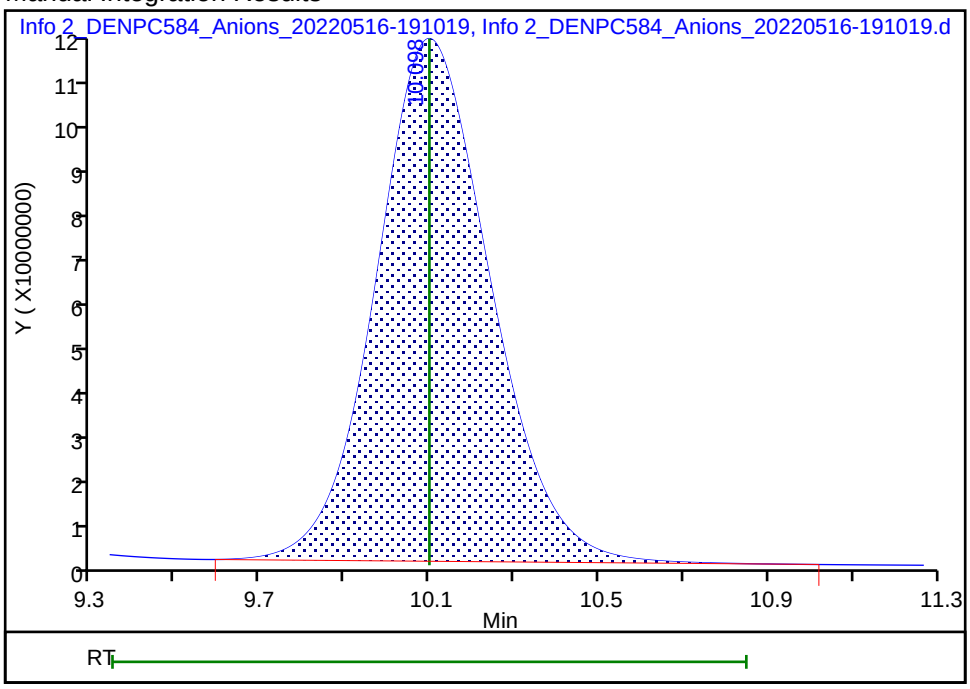
Manual Integration Results

RT: 10.10

Area: 2083602807

Amount: 203.6069

Amount Units: ug/ml



Reviewer: mitchellj, 17-May-2022 09:51:33

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

IC Instrument Information

WL: 111056 **Inst ID:** IC13 **Analysis Date:** 5/17/21 **Analyst:** SM

Rush	Job No.	Samples	Anions	QC Req	HT Exp
☐	161730	2	F Cl NO2 Br (NO3) PO4 SO4	MS/D	
☐	161689	3	F Cl NO2 Br (NO3) PO4 SO4	MS/D	
☐	161851	2	(F) Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	161983	2	(F) Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	161941	3	(F) (Cl) NO2 (Br) NO3 PO4 (SO4)	MS/D	
☐	161987	6	(F) Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	162040	12	(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
689	3	F Cl NO2 Br (NO3) PO4 SO4	20,50	Rerun
983	2	(F) Cl NO2 Br NO3 PO4 SO4	5,10	Rerun
941	3	(F) (Cl) NO2 (Br) NO3 PO4 (SO4)	1,10,20	Test
040	12	(F) (Cl) NO2 Br NO3 PO4 (SO4)	1,5,10,20,100,200	↓
		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\20220516-111056.b\Anions-IC13.m

Instrument:	WC_IonChrom13	Lims Location:	280
Lock State:	Initial Calib Locked	Cpnd Order:	Retention Time
Integrator:	Falcon	Last Modified:	17-May-2022 16:42:13

No.Compounds:7

Initial Calibration Batches

Ical Batch: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b
Inj Date : 16-May-2022 17:34:00, Sublist: chrom-Anions-IC13*sub1

Detector 1: 0005

	Wet - Anions				Wet - Anions 28D			
Compound	b	M1	M2	Err	b	M1	M2	Err
1 Fluoride					-253726	2839926		0.997
2 Chloride					-300840	1429833		1.000
3 Nitrite as N	-135857	3279286		0.999				
4 Bromide					-274617	5110904		0.996
5 Nitrate as N	-222268	3464280		0.998				
7 Orthophosphate as P	-340970	2317515	R1	).994*				
6 Sulfate					-307299	1024855		1.000

ICalib Error Legend
R1, Curve Fit Fail Error Limit Test

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Anions-IC13.m
Instrument: WC_IonChrom13 Lims Location: 280
Lock State: Initial Calib Locked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 17-May-2022 16:42:13
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: 0.000-15.917 No. Points: 1561

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-17502
Inj Date: 16-May-2022 17:34:00 Worklist: 111056 Sample#: 2
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-18062
Inj Date: 16-May-2022 17:50:00 Worklist: 111056 Sample#: 3
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-18222
Inj Date: 16-May-2022 18:06:00 Worklist: 111056 Sample#: 4
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-18381
Inj Date: 16-May-2022 18:22:00 Worklist: 111056 Sample#: 5
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-18541
Inj Date: 16-May-2022 18:38:00 Worklist: 111056 Sample#: 6
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-19101
Inj Date: 16-May-2022 18:54:00 Worklist: 111056 Sample#: 7

Start Cal Date: 16-May-2022 17:19:00 End Cal Date: 16-May-2022 18:54:00

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					
27251320	29422806	31465657	31594454	32027761	33481208	-1358579			0.999
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		32792860		
5450264	14711403	31465657	M126377817	M256222089	M334812084				
111056(2)	111056(3)	111056(4)	111056(5)	111056(6)	111056(7)				
5 Nitrate as N				Signal: 1					
Error: CorrCoef									
27235390	29000752	30914952	32359778	33845070	35663633	-2222686			0.998
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		34642807		
5447078	14500376	30914952	M129439113	M270760556	M356636332				
111056(2)	111056(3)	111056(4)	111056(5)	111056(6)	111056(7)				
7 Orthophosphate as P				Signal: 1				R1	
10553260	12553660	16934127	25377882	22693644	22041054	-3409708			*0.994
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		23175151		
M2110652	M6276830	M16934127	101511529	M181549150	M220410536				
111056(2)	111056(3)	111056(4)	111056(5)	111056(6)	111056(7)				

ICalib Error Legend
R1, Curve Fit Fail Error Limit Test

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Anions-IC13.m
Instrument: WC_IonChrom13 Lims Location: 280
Lock State: Initial Calib Locked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 17-May-2022 16:42:13
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: 0.000-15.917 No. Points: 1561

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-17502
Inj Date: 16-May-2022 17:34:00 Worklist: 111056 Sample#: 2
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-18062
Inj Date: 16-May-2022 17:50:00 Worklist: 111056 Sample#: 3
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-18222
Inj Date: 16-May-2022 18:06:00 Worklist: 111056 Sample#: 4
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-18381
Inj Date: 16-May-2022 18:22:00 Worklist: 111056 Sample#: 5
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-18541
Inj Date: 16-May-2022 18:38:00 Worklist: 111056 Sample#: 6
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-19101
Inj Date: 16-May-2022 18:54:00 Worklist: 111056 Sample#: 7

Start Cal Date: 16-May-2022 17:19:00 End Cal Date: 16-May-2022 18:54:00

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									
22063565	20819372	22759491	26037460	28008270	29204112	-2537266			0.997
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		28399266		
M4412713	M10409686	M22759491	M104149841	224066163	292041123				
111056(2)	111056(3)	111056(4)	111056(5)	111056(6)	111056(7)				
2 Chloride				Signal: 1					
11659033	12840400	13741173	14206431	13948209	14491084	-3008401			1.000
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		14298337		
11659033	32101000	68705864	M852385867	M1673785026	M2898216814				
111056(2)	111056(3)	111056(4)	111056(5)	111056(6)	111056(7)				
4 Bromide				Signal: 1					
4295445	4498318	4610780	4609405	4958454	5365645	-274617			0.996
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		5110904		
859089	2249159	4610780	M18437619	M39667629	M53656450				
111056(2)	111056(3)	111056(4)	111056(5)	111056(6)	111056(7)				
6 Sulfate				Signal: 1					
Error: raw_COD									
8433467	8562872	8991274	10074672	10002037	10418014	-3072992			1.000
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		10248552		
M8433467	M21407179	M44956370	M604480306	M1200244426	M2083602807				
111056(2)	111056(3)	111056(4)	111056(5)	111056(6)	111056(7)				

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-192
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 16-May-2022 19:10:00 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0111056-008
Misc. Info.: 280-0111056-008
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist:

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 17-May-2022 16:54:01 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1686

First Level Reviewer: foxr Date: 17-May-2022 16:54:01

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.000	3.000	0.000	103863715	4.00	3.75	M
2 Chloride	4.288	4.288	0.000	1193181581	80.0	83.7	
3 Nitrite as N	5.058	5.058	0.000	119495939	NC	NC	M
4 Bromide	6.445	6.445	0.000	19140618	4.00	3.80	
5 Nitrate as N	7.312	7.312	0.000	130351577	NC	NC	
7 Orthophosphate as P	9.002	9.002	0.000	88395481	NC	NC	
6 Sulfate	10.130	10.130	0.000	855978859	80.0	83.8	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

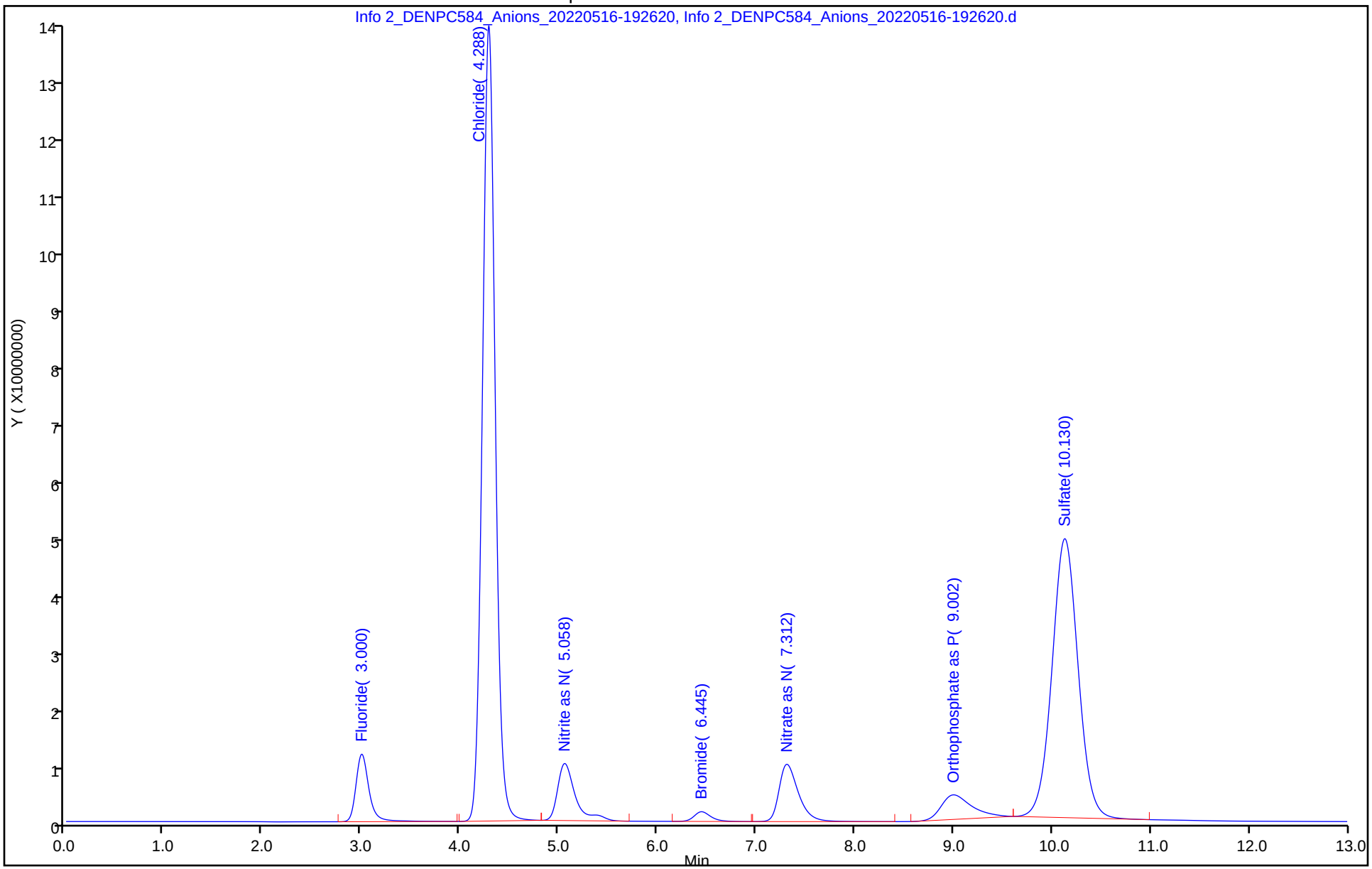
Reagents:

IC SO4 ICV_00022	Amount Added:	0.80	Units: mL
Cl ICV Std_00005	Amount Added:	0.80	Units: mL
IC ICV 5_00364	Amount Added:	0.80	Units: mL

Report Date: 17-May-2022 16:54:01 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-192620.d				
Injection Date:	16-May-2022 19:10:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ICV			Worklist Smp#:	8
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-192

Injection Date: 16-May-2022 19:10:00 Instrument ID: WC_IonChrom13

Lims ID: ICV

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 8

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

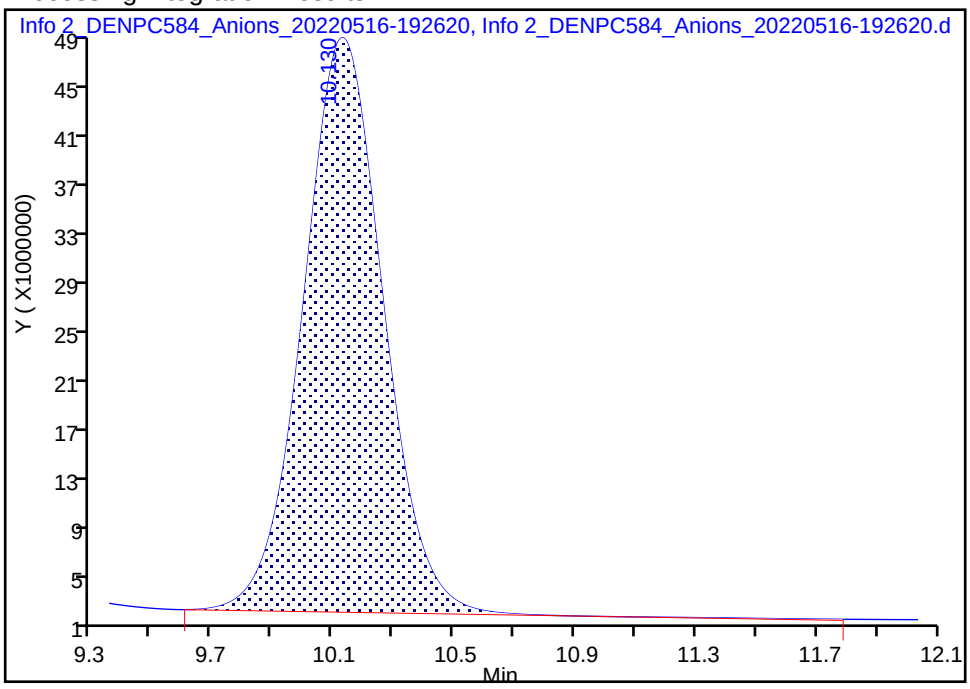
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

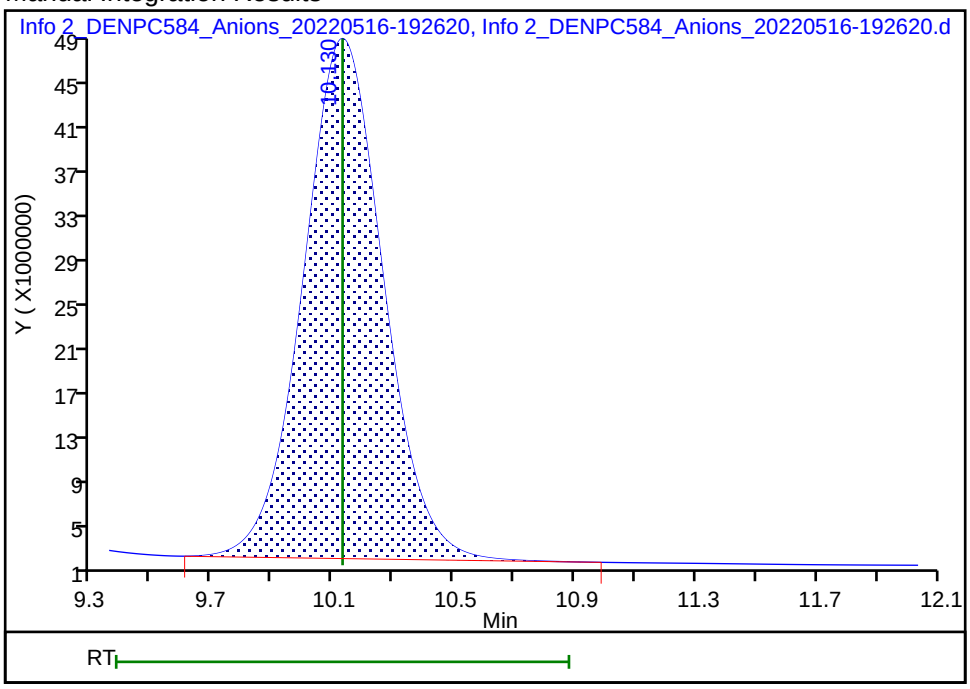
Processing Integration Results

RT: 10.13
Area: 857521281
Amount: 83.972278
Amount Units: ug/ml



Manual Integration Results

RT: 10.13
Area: 855978859
Amount: 83.821777
Amount Units: ug/ml



Reviewer: mitchellj, 17-May-2022 09:53:01

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-194
Lims ID: ICB
Client ID:
Sample Type: ICB
Inject. Date: 16-May-2022 19:26:00 ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0111056-009
Misc. Info.: 280-0111056-009
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 17-May-2022 16:43:22 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1686

First Level Reviewer: mitchellj Date: 17-May-2022 09:59:51

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.107	3.000	0.107	25038		0.0902	M
2 Chloride		4.288				ND	
3 Nitrite as N		5.058				ND	
4 Bromide		6.445				ND	
5 Nitrate as N		7.312				ND	
7 Orthophosphate as P	10.210	9.002	1.208	342663		NC	
6 Sulfate		10.130				ND	

QC Flag Legend

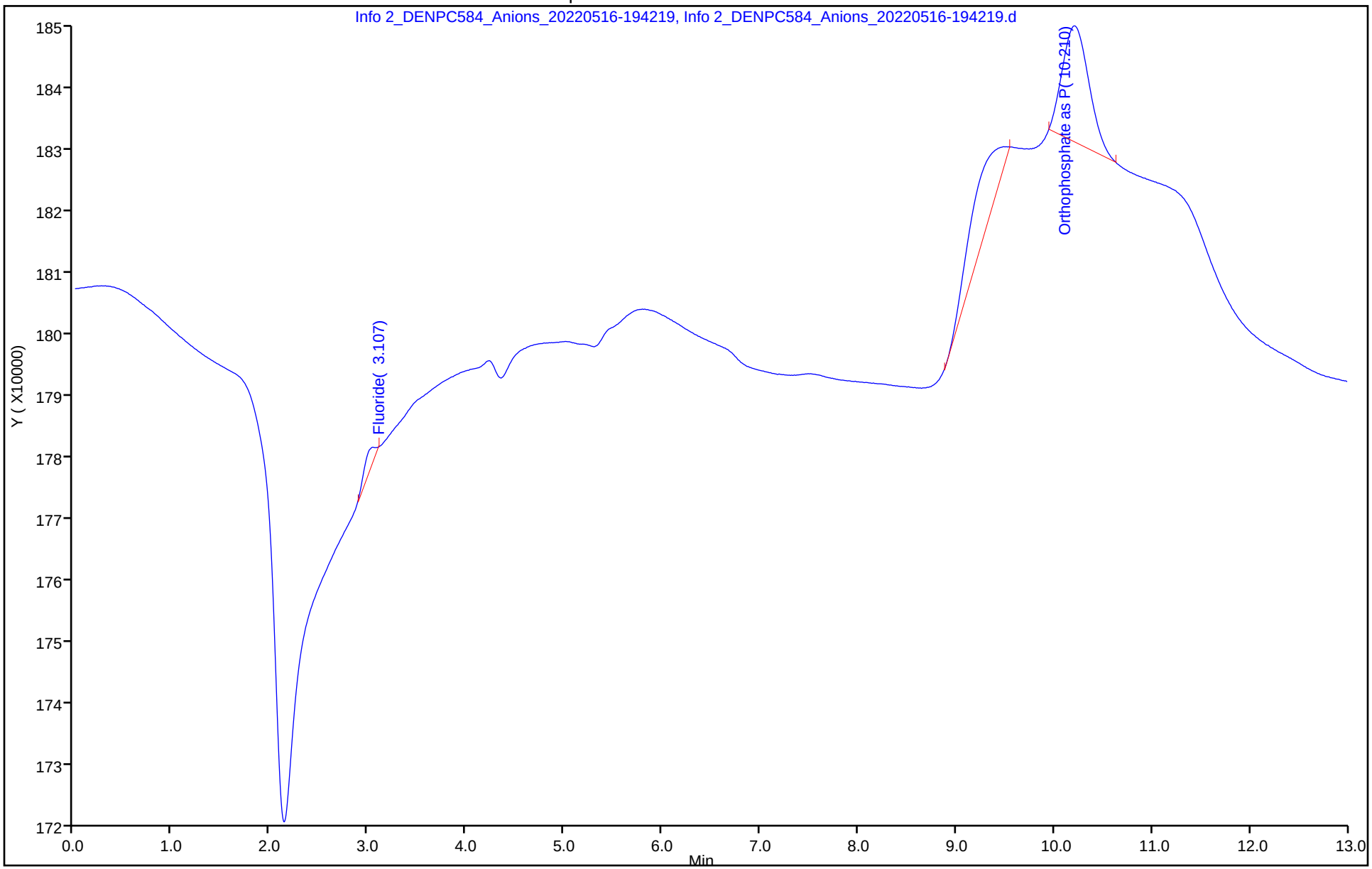
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 17-May-2022 16:43:22 Chrom Revision: 2.3 12-Apr-2022 20:29:44

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-194219.d

Injection Date:	16-May-2022 19:26:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ICB			Worklist Smp#:	9
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



IC Instrument Information

WL: 111493 **Inst ID:** IC13 **Analysis Date:** 6-01-22 **Analyst:** RF

Rush	Job No.	Samples	Anions	QC Req	HT Exp
☐	162553	10	F Cl NO2 Br NO3 PO4 **SO4**	MS/D	
☐	162622	10	F Cl NO2 Br NO3 PO4 **SO4**	MS/D	
☐	162952	7	F **Cl** NO2 Br **NO3** PO4 **SO4**	MS/D	
☐	162954	3	F **Cl** NO2 Br **NO3** PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			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
553	6	F Cl NO2 Br NO3 PO4 **SO4**	2x5x10x	test
622	4	F Cl NO2 Br NO3 PO4 **SO4**	2x5x	test
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		

Eurofins Environment Testing America
Initial Calibration Summary Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Anions-IC13.m
Instrument: WC_IonChrom13 Lims Location: 280
Lock State: Initial Calib Locked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 17-May-2022 16:42:13
No.Compounds:7

Initial Calibration Batches

Ical Batch: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b
Inj Date : 16-May-2022 17:34:00, Sublist: chrom-Anions-IC13*sub1

Detector 1: 0005

	Wet - Anions				Wet - Anions 28D			
Compound	b	M1	M2	Err	b	M1	M2	Err
1 Fluoride					-253726	2839926		0.997
2 Chloride					-300840	1429833		1.000
3 Nitrite as N	-135857	3279286		0.999				
4 Bromide					-274617	5110904		0.996
5 Nitrate as N	-222268	3464280		0.998				
7 Orthophosphate as P	-340970	2317515	R1	).994*				
6 Sulfate					-307299	1024855		1.000

ICalib Error Legend
R1, Curve Fit Fail Error Limit Test

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Anions-IC13.m
Instrument: WC_IonChrom13 Lims Location: 280
Lock State: Initial Calib Locked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 17-May-2022 16:42:13
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: 0.000-15.917 No. Points: 1561

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-17502
Inj Date: 16-May-2022 17:34:00 Worklist: 111056 Sample#: 2
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-18062
Inj Date: 16-May-2022 17:50:00 Worklist: 111056 Sample#: 3
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-18222
Inj Date: 16-May-2022 18:06:00 Worklist: 111056 Sample#: 4
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-18381
Inj Date: 16-May-2022 18:22:00 Worklist: 111056 Sample#: 5
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-18541
Inj Date: 16-May-2022 18:38:00 Worklist: 111056 Sample#: 6
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-19101
Inj Date: 16-May-2022 18:54:00 Worklist: 111056 Sample#: 7

Start Cal Date: 16-May-2022 17:19:00 End Cal Date: 16-May-2022 18:54:00

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					
27251320	29422806	31465657	31594454	32027761	33481208	-1358579			0.999
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		32792860		
5450264	14711403	31465657	M126377817	M256222089	M334812084				
111056(2)	111056(3)	111056(4)	111056(5)	111056(6)	111056(7)				
5 Nitrate as N				Signal: 1					
Error: CorrCoef									
27235390	29000752	30914952	32359778	33845070	35663633	-2222686			0.998
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		34642807		
5447078	14500376	30914952	M129439113	M270760556	M356636332				
111056(2)	111056(3)	111056(4)	111056(5)	111056(6)	111056(7)				
7 Orthophosphate as P				Signal: 1				R1	
10553260	12553660	16934127	25377882	22693644	22041054	-3409708			*0.994
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		23175151		
M2110652	M6276830	M16934127	101511529	M181549150	M220410536				
111056(2)	111056(3)	111056(4)	111056(5)	111056(6)	111056(7)				

ICalib Error Legend
R1, Curve Fit Fail Error Limit Test

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Anions-IC13.m
Instrument: WC_IonChrom13 Lims Location: 280
Lock State: Initial Calib Locked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 17-May-2022 16:42:13
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: 0.000-15.917 No. Points: 1561

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-17502
Inj Date: 16-May-2022 17:34:00 Worklist: 111056 Sample#: 2
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-18062
Inj Date: 16-May-2022 17:50:00 Worklist: 111056 Sample#: 3
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-18222
Inj Date: 16-May-2022 18:06:00 Worklist: 111056 Sample#: 4
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-18381
Inj Date: 16-May-2022 18:22:00 Worklist: 111056 Sample#: 5
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-18541
Inj Date: 16-May-2022 18:38:00 Worklist: 111056 Sample#: 6
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-19101
Inj Date: 16-May-2022 18:54:00 Worklist: 111056 Sample#: 7

Start Cal Date: 16-May-2022 17:19:00 End Cal Date: 16-May-2022 18:54:00

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									
22063565	20819372	22759491	26037460	28008270	29204112	-2537266			0.997
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		28399266		
M4412713	M10409686	M22759491	M104149841	224066163	292041123				
111056(2)	111056(3)	111056(4)	111056(5)	111056(6)	111056(7)				
2 Chloride				Signal: 1					
11659033	12840400	13741173	14206431	13948209	14491084	-3008401			1.000
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		14298337		
11659033	32101000	68705864	M852385867	M1673785026	M2898216814				
111056(2)	111056(3)	111056(4)	111056(5)	111056(6)	111056(7)				
4 Bromide				Signal: 1					
4295445	4498318	4610780	4609405	4958454	5365645	-274617			0.996
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		5110904		
859089	2249159	4610780	M18437619	M39667629	M53656450				
111056(2)	111056(3)	111056(4)	111056(5)	111056(6)	111056(7)				
6 Sulfate				Signal: 1					
Error: raw_COD									
8433467	8562872	8991274	10074672	10002037	10418014	-3072992			1.000
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		10248552		
M8433467	M21407179	M44956370	M604480306	M1200244426	M2083602807				
111056(2)	111056(3)	111056(4)	111056(5)	111056(6)	111056(7)				

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Info 2_DENPC584_Anions_20220601-135
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 01-Jun-2022 13:41:00 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0111493-001
Misc. Info.: 280-0111493-001
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub5

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 02-Jun-2022 13:38:00 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1617

First Level Reviewer: foxr Date: 01-Jun-2022 14:24:10

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.047	3.047	0.000	130047659	5.00	4.67	M
2 Chloride	4.343	4.343	0.000	1438178519	100.0	100.8	
3 Nitrite as N	5.100	5.100	0.000	161363126	NC	NC	M
4 Bromide	6.483	6.483	0.000	24120365	5.00	4.77	
5 Nitrate as N	7.340	7.340	0.000	165754471	NC	NC	
7 Orthophosphate as P	8.947	8.947	0.000	123199646	NC	NC	
6 Sulfate	10.022	10.022	0.000	1031526550	100.0	101.0	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

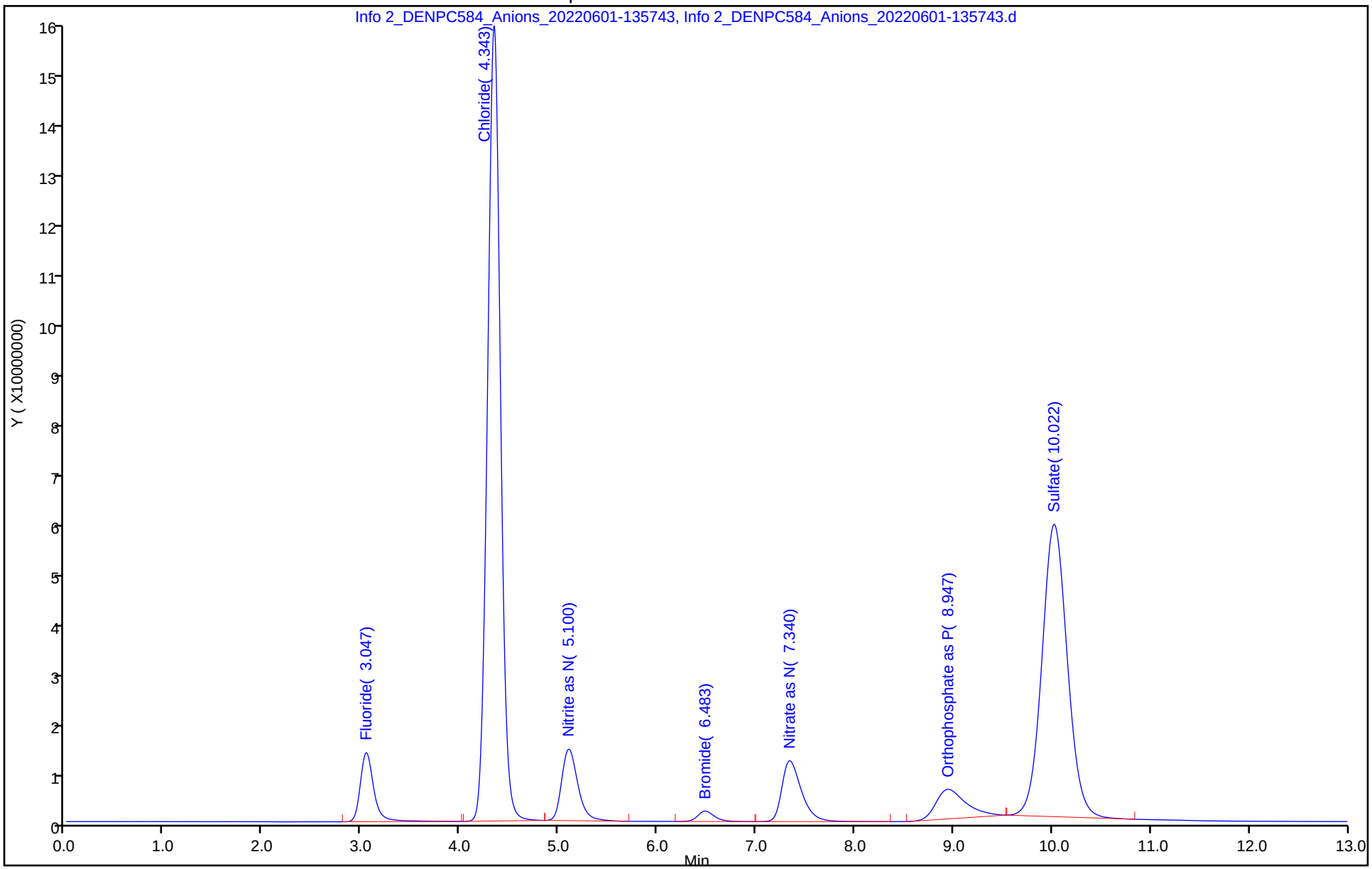
IC LCS_01879 Amount Added: 10.00 Units: mL

Report Date: 02-Jun-2022 13:38:00 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Info 2_DENPC584_Anions_20220601-135743.d

Injection Date:	01-Jun-2022 13:41:00	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		



Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Info 2_DENPC584_Anions_20220601-135

Injection Date: 01-Jun-2022 13:41:00 Instrument ID: WC_IonChrom13

Lims ID: CCV

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 1

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

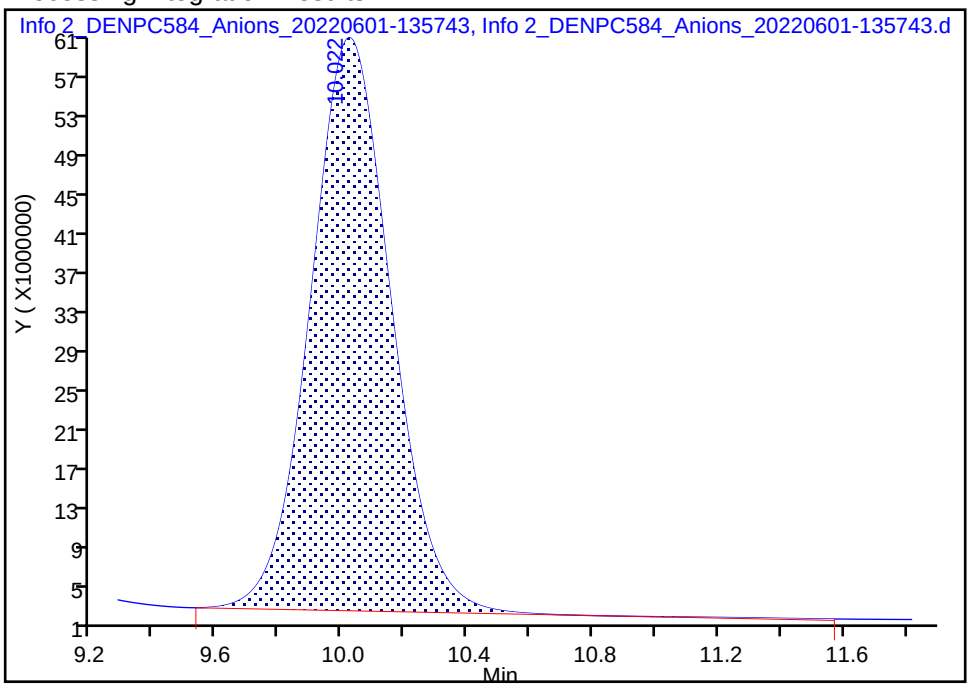
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

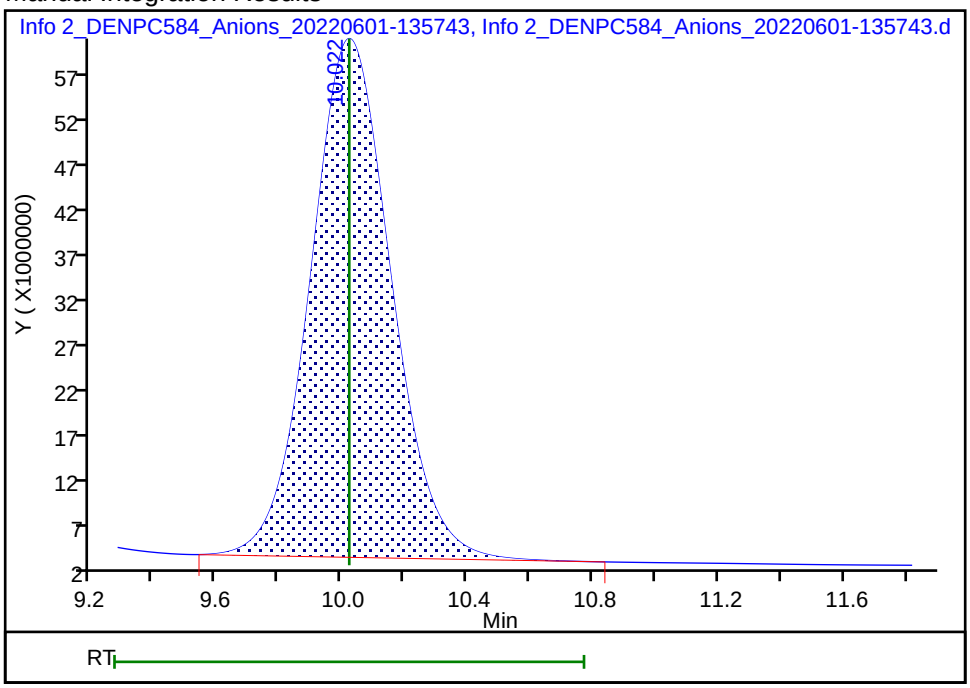
Processing Integration Results

RT: 10.02
Area: 1034510374
Amount: 101.2419
Amount Units: ug/ml



Manual Integration Results

RT: 10.02
Area: 1031526550
Amount: 100.9508
Amount Units: ug/ml



Reviewer: foxr, 01-Jun-2022 14:24:01

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Info 2_DENPC584_Anions_20220601-141
Lims ID: CCB
Client ID:
Sample Type: CCB
Inject. Date: 01-Jun-2022 13:57:00 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0111493-002
Misc. Info.: 280-0111493-002
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 02-Jun-2022 13:38:00 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1617

First Level Reviewer: foxr Date: 01-Jun-2022 14:24:29

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.047				ND	
2 Chloride		4.343				ND	U
3 Nitrite as N		5.100				ND	
4 Bromide		6.483				ND	U
5 Nitrate as N		7.340				ND	
7 Orthophosphate as P		8.947				ND	U
6 Sulfate	10.130	10.022	0.108	775740		0.3755	

QC Flag Legend

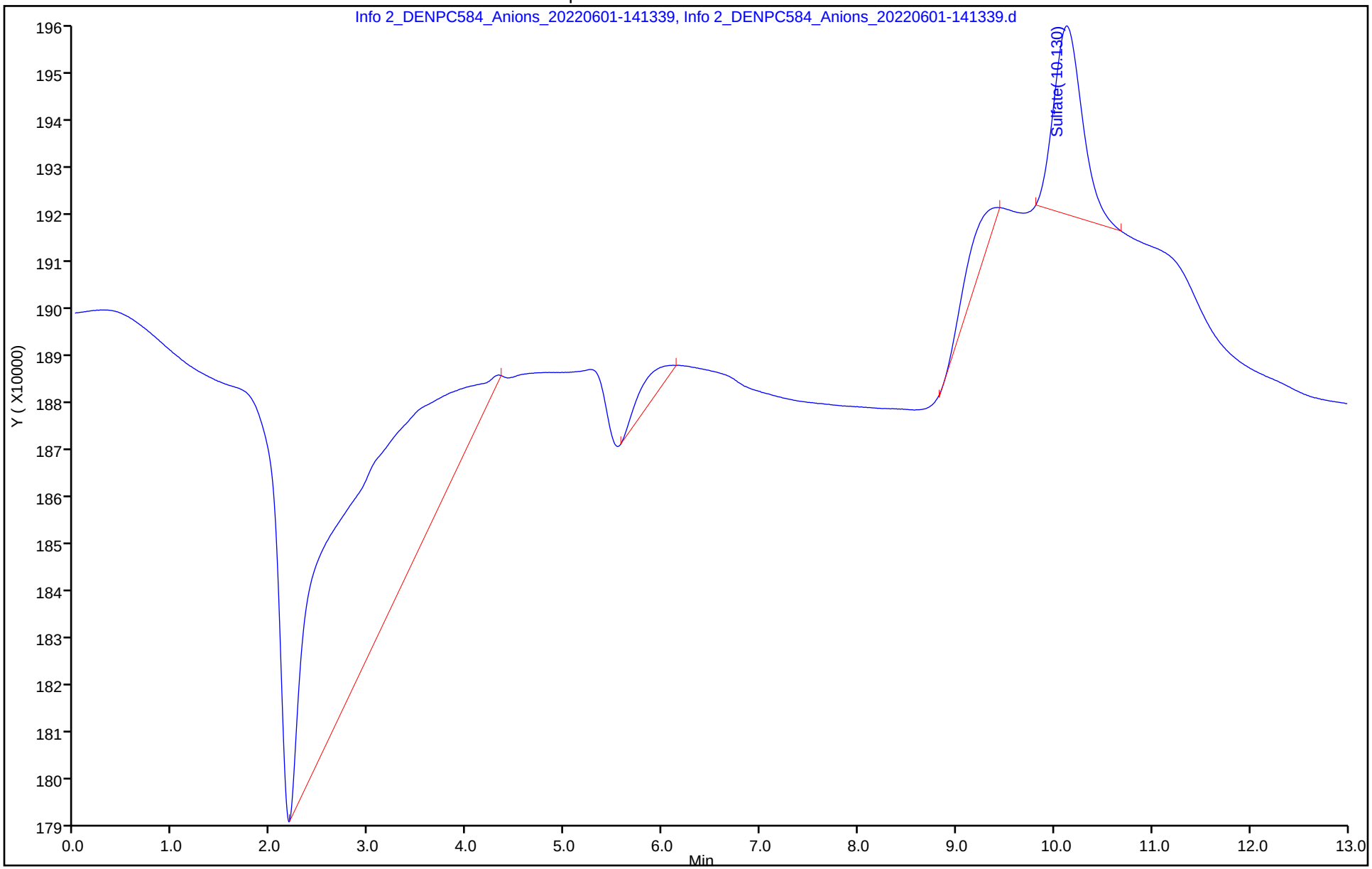
Processing Flags
Review Flags
U - Marked Undetected

Report Date: 02-Jun-2022 13:38:01 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Info 2_DENPC584_Anions_20220601-141339.d

Injection Date:	01-Jun-2022 13:57:00	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 Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Info 2_DENPC584_Anions_20220601-142
Lims ID: MRL
Client ID:
Sample Type: MRL
Inject. Date: 01-Jun-2022 14:13:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0111493-003
Misc. Info.: 280-0111493-003
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 02-Jun-2022 13:38:00 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1617

First Level Reviewer: foxr Date: 01-Jun-2022 16:02:31

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.043	3.047	-0.004	8986589	0.5000	0.4058	M
2 Chloride	4.328	4.343	-0.015	60167425	5.00	4.42	
3 Nitrite as N	5.137	5.100	0.037	12491757	NC	NC	
4 Bromide	6.535	6.483	0.052	2030754	0.5000	0.4511	
5 Nitrate as N	7.473	7.340	0.133	12128758	NC	NC	
7 Orthophosphate as P	9.087	8.947	0.140	4107877	NC	NC	
6 Sulfate	10.067	10.022	0.045	39843294	5.00	4.19	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

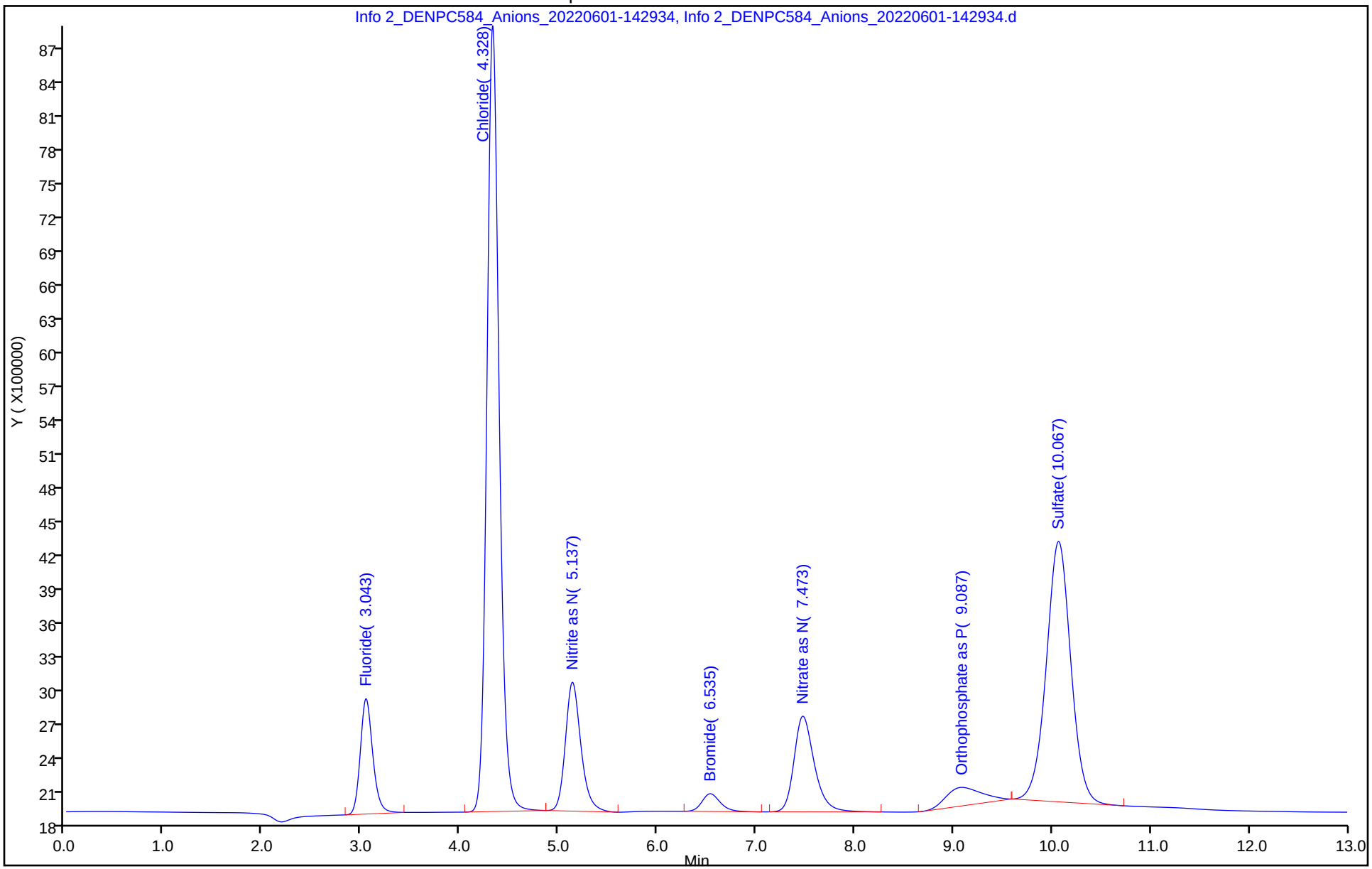
Reagents:

IC Cal low_00642 Amount Added: 0.10 Units: mL
IC CAL cl/so4_00424 Amount Added: 0.20 Units: mL

Report Date: 02-Jun-2022 13:38:01 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Info 2_DENPC584_Anions_20220601-142934.d				
Injection Date:	01-Jun-2022 14:13:00	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		



Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Info 2_DENPC584_Anions_20220601-142

Injection Date: 01-Jun-2022 14:13:00 Instrument ID: WC_IonChrom13

Lims ID: MRL

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

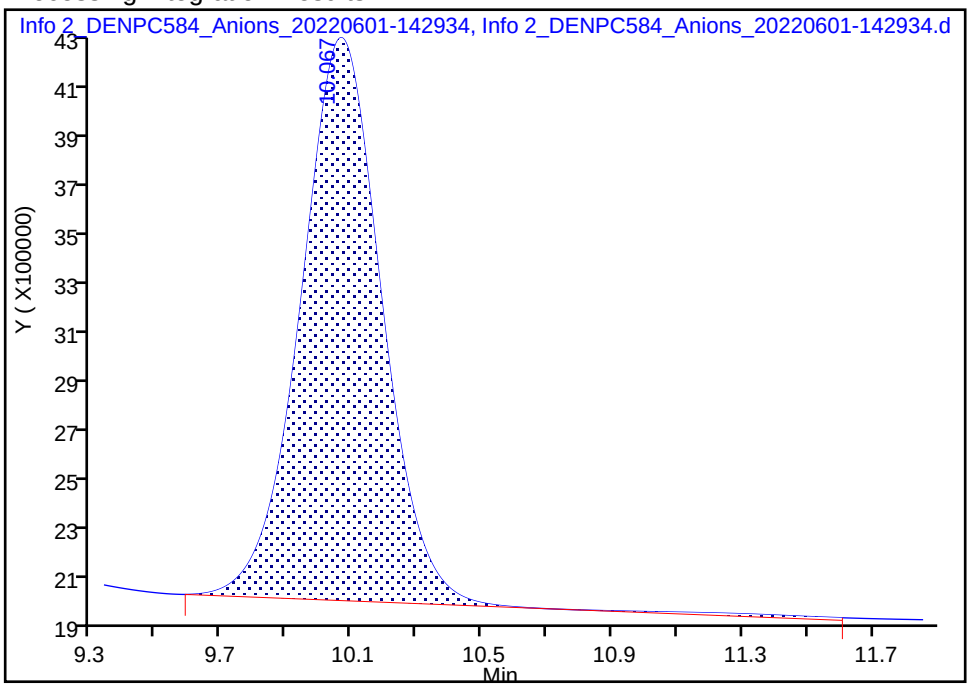
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

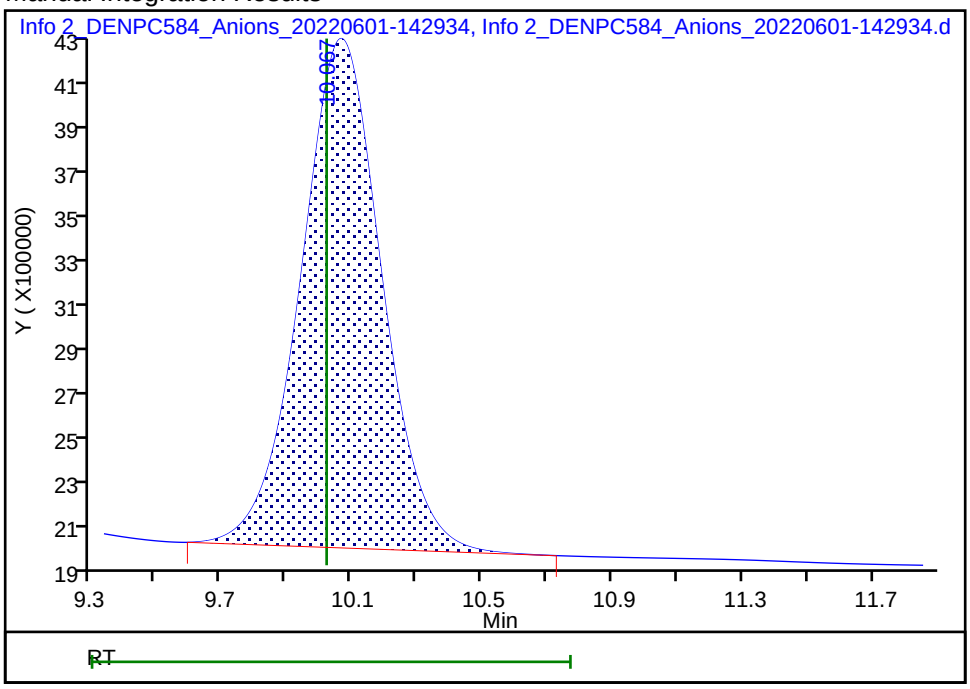
Processing Integration Results

RT: 10.07
Area: 40211179
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 10.07
Area: 39843294
Amount: 4.187546
Amount Units: ug/ml



Reviewer: foxr, 01-Jun-2022 16:02:23

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Info 2_DENPC584_Anions_20220601-144
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 01-Jun-2022 14:29:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0111493-004
Misc. Info.: 280-0111493-004
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 02-Jun-2022 13:38:00 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1617

First Level Reviewer: foxr Date: 01-Jun-2022 16:03:07

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.050	3.047	0.003	131797130	5.00	4.73	M
2 Chloride	4.347	4.343	0.004	1431675297	100.0	100.3	
3 Nitrite as N	5.103	5.100	0.003	160361489	NC	NC	M
4 Bromide	6.490	6.483	0.007	24015360	5.00	4.75	
5 Nitrate as N	7.345	7.340	0.005	165017012	NC	NC	
7 Orthophosphate as P	8.950	8.947	0.003	127701602	NC	NC	
6 Sulfate	10.033	10.022	0.011	1027388767	100.0	100.5	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

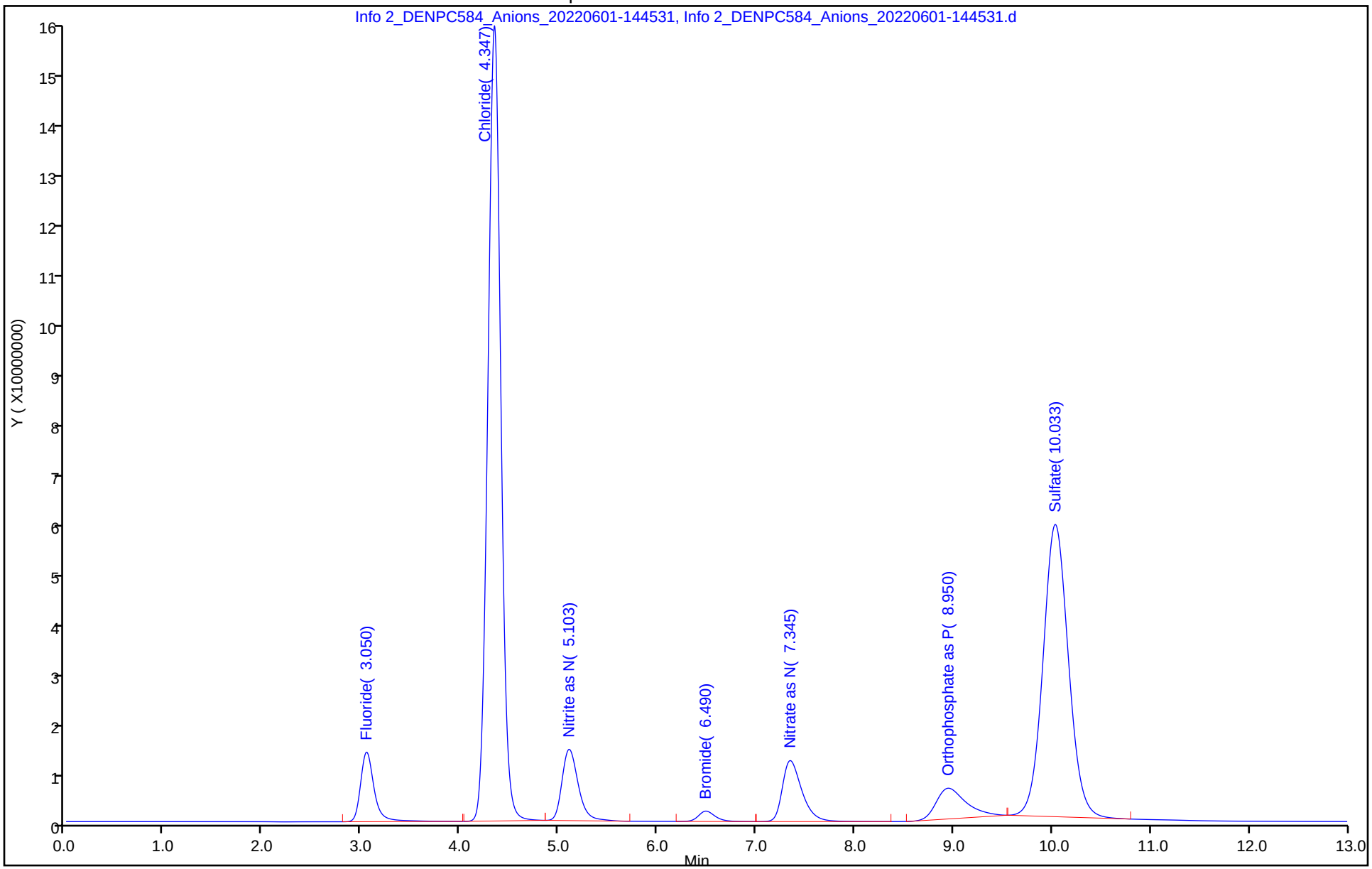
IC LCS_01879 Amount Added: 10.00 Units: mL

Report Date: 02-Jun-2022 13:38:02 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Info 2_DENPC584_Anions_20220601-144531.d

Injection Date:	01-Jun-2022 14:29:00	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		



Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Info 2_DENPC584_Anions_20220601-144

Injection Date: 01-Jun-2022 14:29:00 Instrument ID: WC_IonChrom13

Lims ID: LCS

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

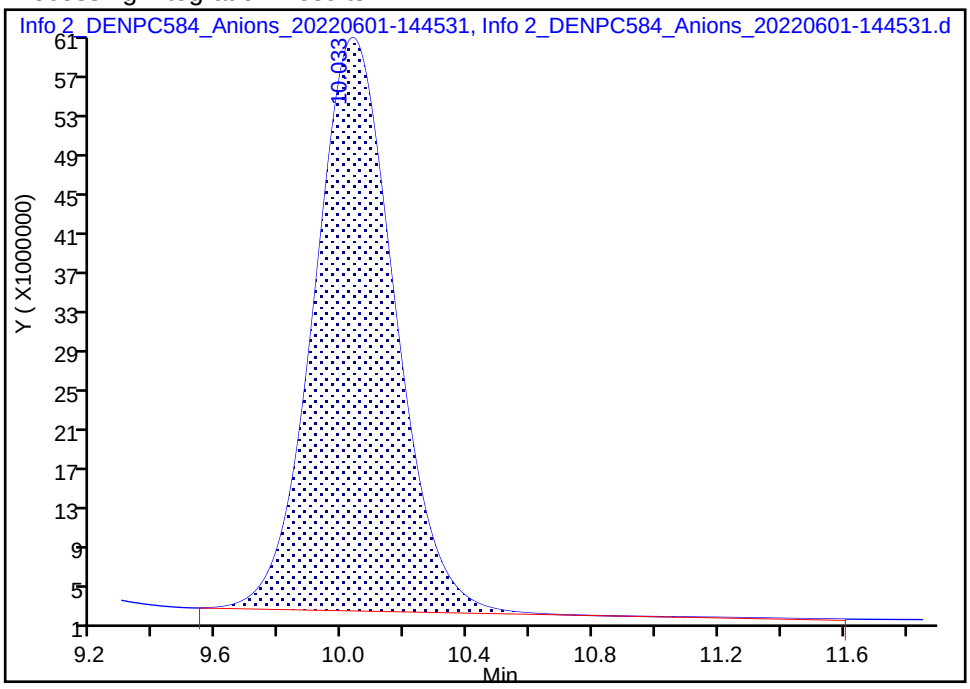
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

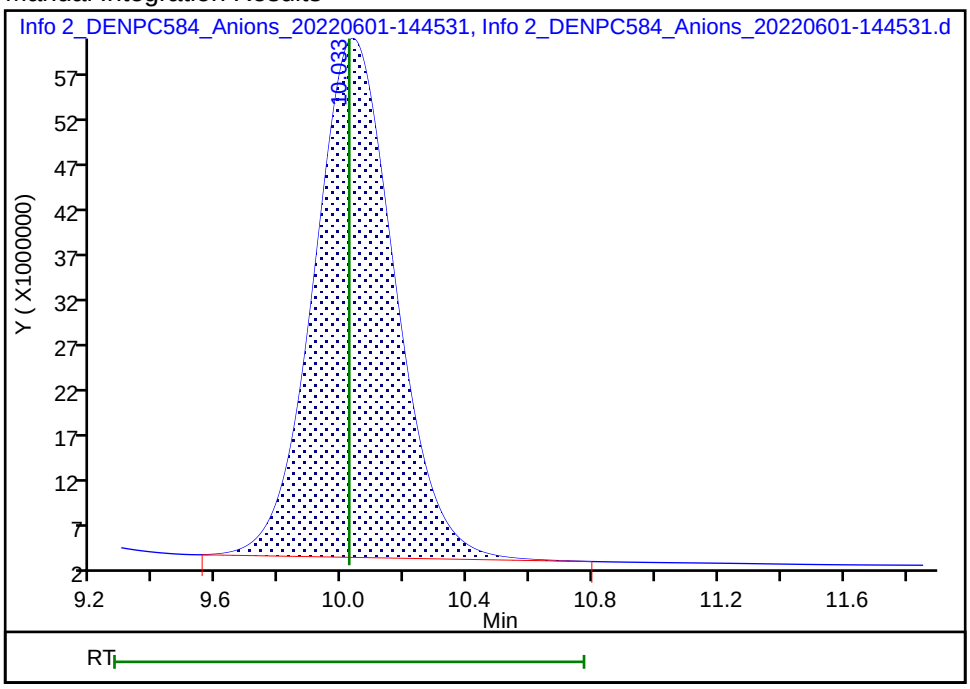
Processing Integration Results

RT: 10.03
Area: 1030200415
Amount: 100.8214
Amount Units: ug/ml



Manual Integration Results

RT: 10.03
Area: 1027388767
Amount: 100.5471
Amount Units: ug/ml



Reviewer: foxr, 01-Jun-2022 16:03:01

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Info 2_DENPC584_Anions_20220601-150
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 01-Jun-2022 14:45:00 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0111493-005
Misc. Info.: 280-0111493-005
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 02-Jun-2022 13:38:00 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1617

First Level Reviewer: foxr Date: 01-Jun-2022 16:03:42

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.050	3.047	0.003	132510595	5.00	4.76	M
2 Chloride	4.347	4.343	0.004	1437315082	100.0	100.7	
3 Nitrite as N	5.103	5.100	0.003	160339083	NC	NC	M
4 Bromide	6.497	6.483	0.014	24073638	5.00	4.76	
5 Nitrate as N	7.353	7.340	0.013	165603719	NC	NC	
7 Orthophosphate as P	8.952	8.947	0.005	125325690	NC	NC	
6 Sulfate	10.038	10.022	0.016	1031124326	100.0	100.9	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

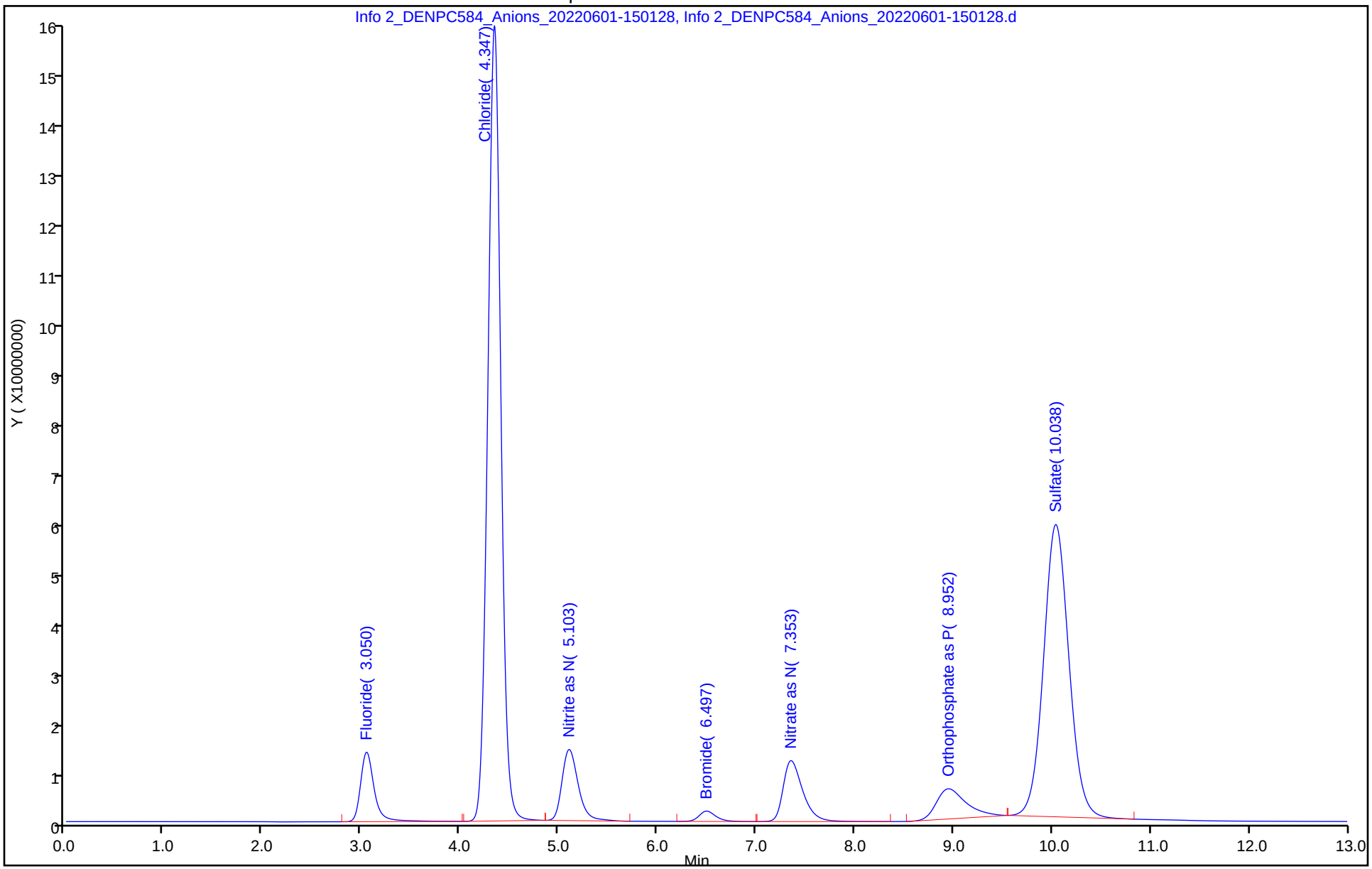
IC LCS_01879 Amount Added: 10.00 Units: mL

Report Date: 02-Jun-2022 13:38:03 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Info 2_DENPC584_Anions_20220601-150128.d

Injection Date:	01-Jun-2022 14:45:00	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		



Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Info 2_DENPC584_Anions_20220601-150

Injection Date: 01-Jun-2022 14:45:00 Instrument ID: WC_IonChrom13

Lims ID: LCSD

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

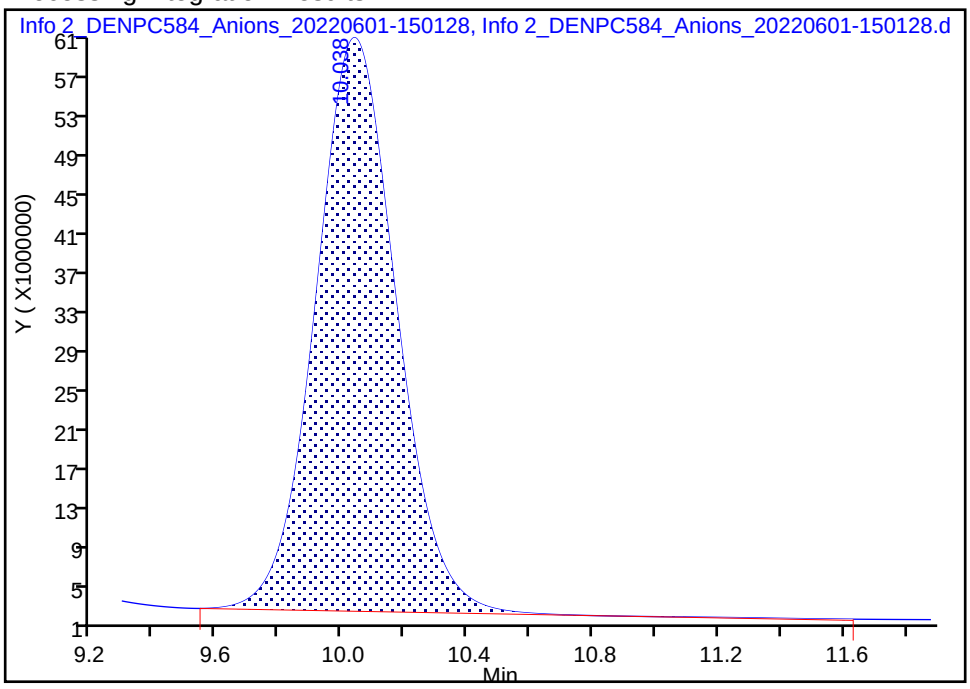
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

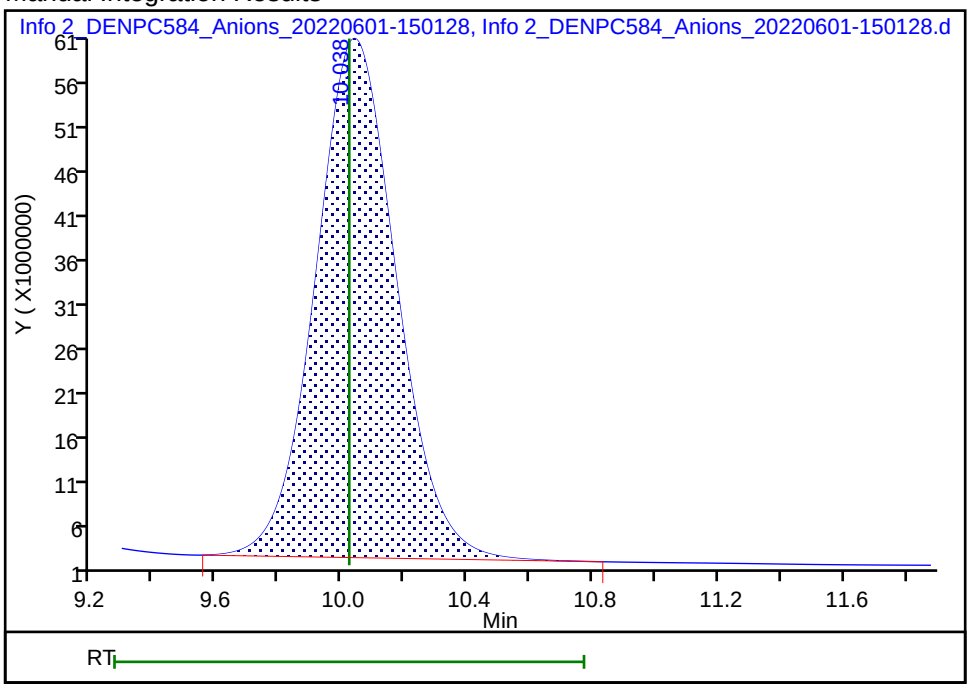
Processing Integration Results

RT: 10.04
Area: 1034020830
Amount: 101.1942
Amount Units: ug/ml



Manual Integration Results

RT: 10.04
Area: 1031124326
Amount: 100.9116
Amount Units: ug/ml



Reviewer: foxr, 01-Jun-2022 16:03:39

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Info 2_DENPC584_Anions_20220601-151
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 01-Jun-2022 15:01:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0111493-006
Misc. Info.: 280-0111493-006
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 02-Jun-2022 13:38:00 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1617

First Level Reviewer: foxr Date: 01-Jun-2022 16:04:08

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.047				ND	
2 Chloride	4.330	4.343	-0.013	13079		0.2113	M
3 Nitrite as N		5.100				ND	
4 Bromide		6.483				ND	U
5 Nitrate as N		7.340				ND	
7 Orthophosphate as P		8.947				ND	U
6 Sulfate	10.142	10.022	0.120	844726		0.3823	

QC Flag Legend

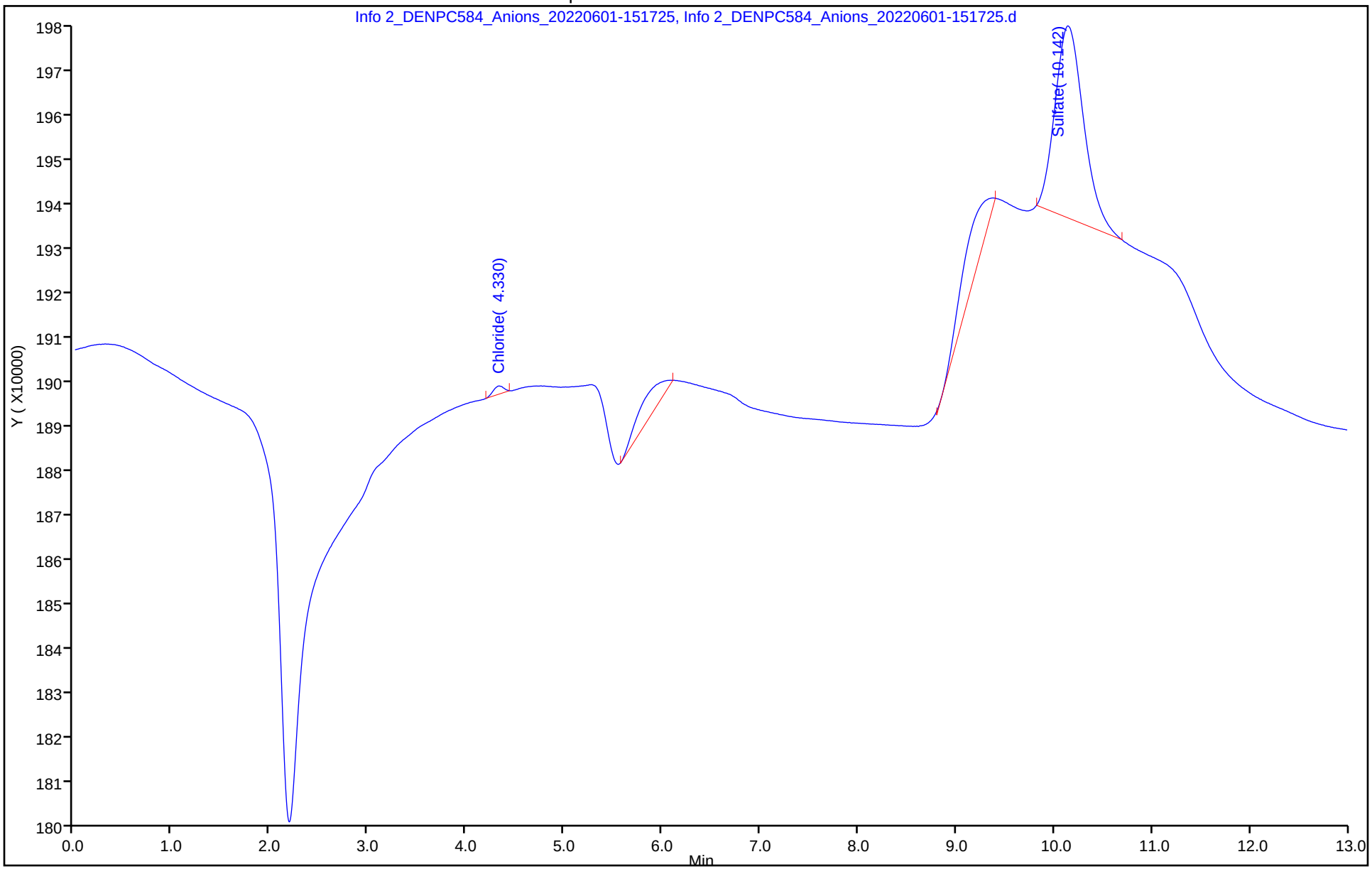
Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 02-Jun-2022 13:38:03 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Info 2_DENPC584_Anions_20220601-151725.d

Injection Date:	01-Jun-2022 15:01:00	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 Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Info 2_DENPC584_Anions_20220601-195
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 01-Jun-2022 19:40:00 ALS Bottle#: 0 Worklist Smp#: 17
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0111493-017
Misc. Info.: 280-0111493-017
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub5

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 02-Jun-2022 13:38:08 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1617

First Level Reviewer: foxr Date: 02-Jun-2022 12:26:17

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.053	3.047	0.006	125867774	5.00	4.52	M
2 Chloride	4.362	4.343	0.019	1441493948	100.0	101.0	
3 Nitrite as N	5.127	5.100	0.027	161434477	NC	NC	M
4 Bromide	6.525	6.483	0.042	24220735	5.00	4.79	
5 Nitrate as N	7.398	7.340	0.058	166370742	NC	NC	
7 Orthophosphate as P	9.020	8.947	0.073	98876341	NC	NC	
6 Sulfate	10.050	10.022	0.028	1031523533	100.0	101.0	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

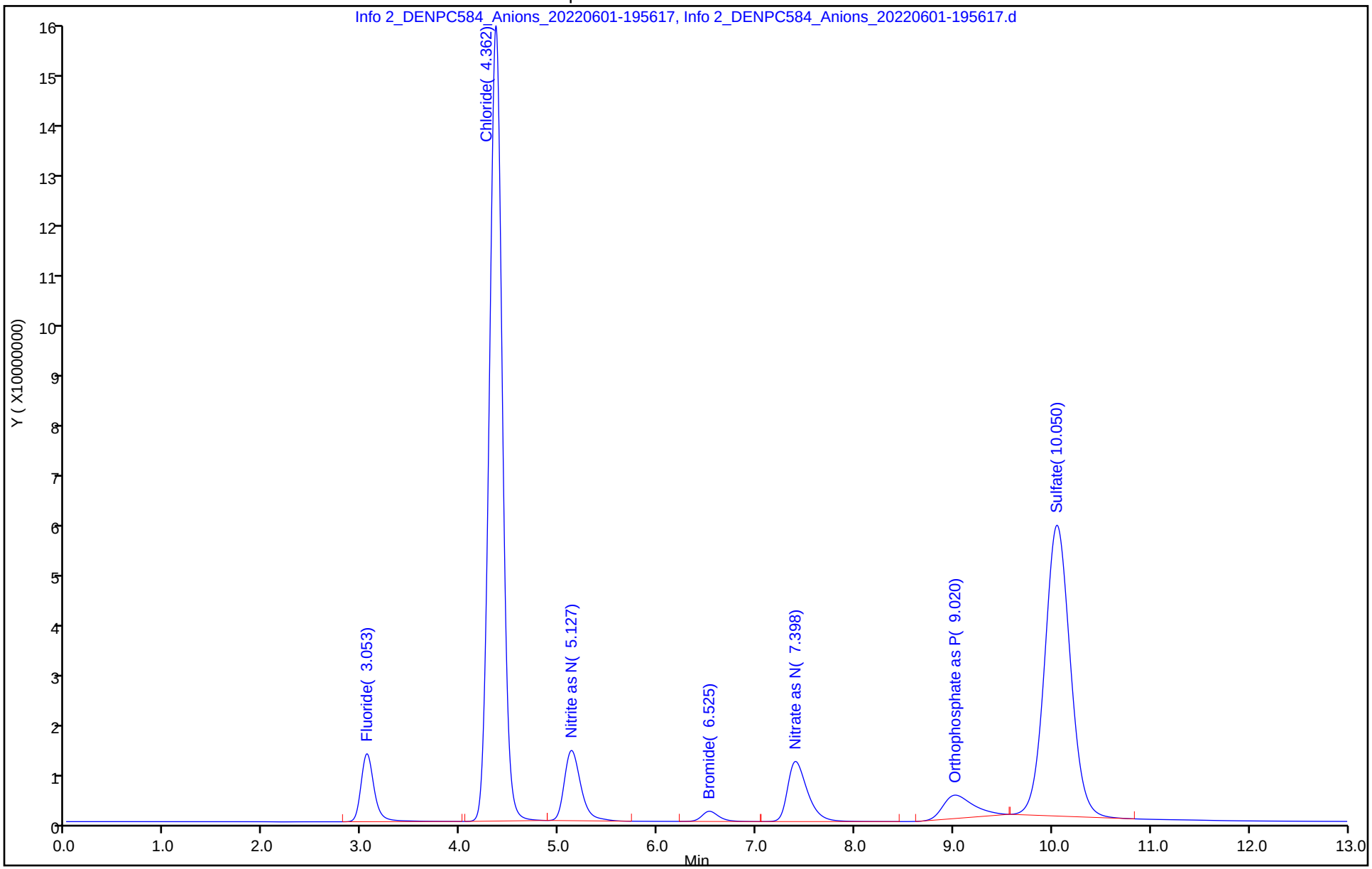
IC LCS_01879 Amount Added: 10.00 Units: mL

Report Date: 02-Jun-2022 13:38:08 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Info 2_DENPC584_Anions_20220601-195617.d

Injection Date:	01-Jun-2022 19:40:00	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		



Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Info 2_DENPC584_Anions_20220601-195

Injection Date: 01-Jun-2022 19:40:00 Instrument ID: WC_IonChrom13

Lims ID: ccv

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 17

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

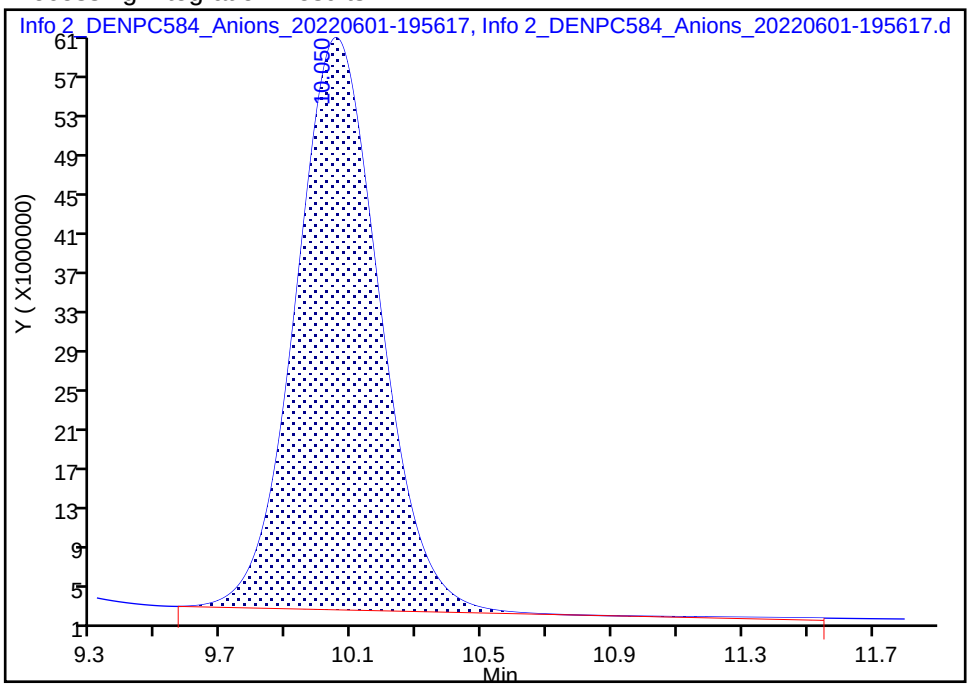
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

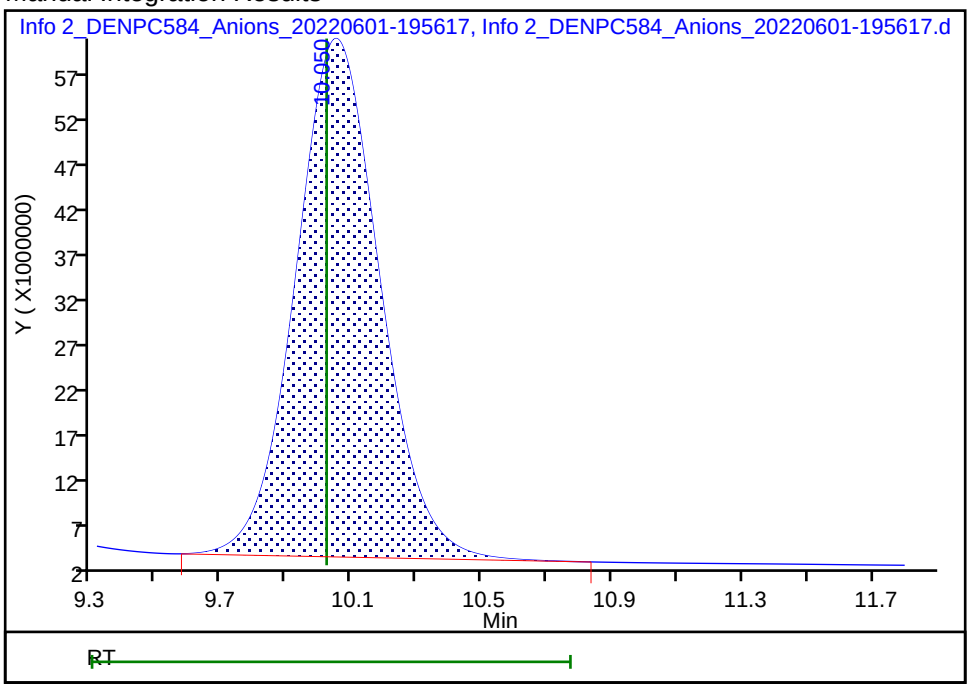
Processing Integration Results

RT: 10.05
Area: 1035575164
Amount: 101.3458
Amount Units: ug/ml



Manual Integration Results

RT: 10.05
Area: 1031523533
Amount: 100.9505
Amount Units: ug/ml



Reviewer: foxr, 02-Jun-2022 12:26:14

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Info 2_DENPC584_Anions_20220601-201
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 01-Jun-2022 19:56:00 ALS Bottle#: 0 Worklist Smp#: 18
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0111493-018
Misc. Info.: 280-0111493-018
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 02-Jun-2022 13:38:08 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1617

First Level Reviewer: foxr Date: 02-Jun-2022 12:26:34

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.047				ND	
2 Chloride	4.347	4.343	0.004	17409		0.2116	M
3 Nitrite as N		5.100				ND	
4 Bromide		6.483				ND	
5 Nitrate as N		7.340				ND	
7 Orthophosphate as P		8.947				ND	
6 Sulfate	10.147	10.022	0.125	870021		0.3847	M

QC Flag Legend

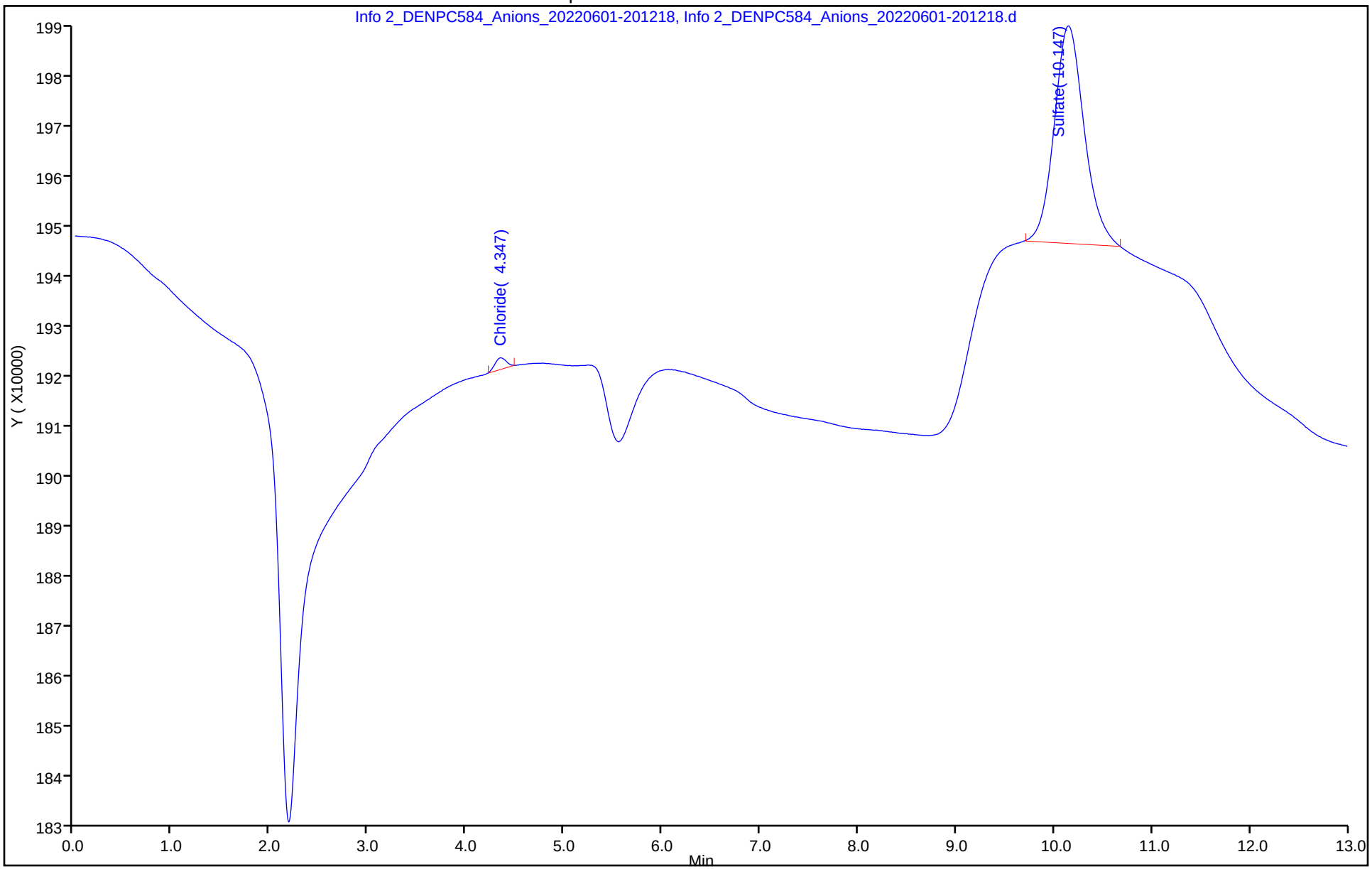
Processing Flags
Review Flags
M - Manually Integrated

Report Date: 02-Jun-2022 13:38:08 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Info 2_DENPC584_Anions_20220601-201218.d

Injection Date:	01-Jun-2022 19:56:00	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		



Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Info 2_DENPC584_Anions_20220601-201

Injection Date: 01-Jun-2022 19:56:00 Instrument ID: WC_IonChrom13

Lims ID: ccb

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 18

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

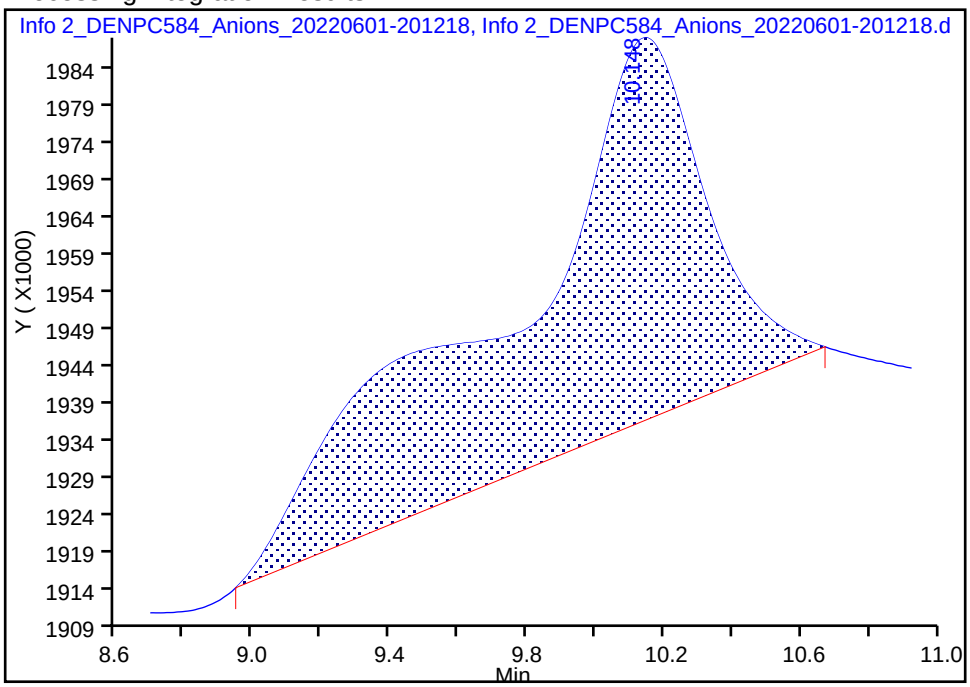
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

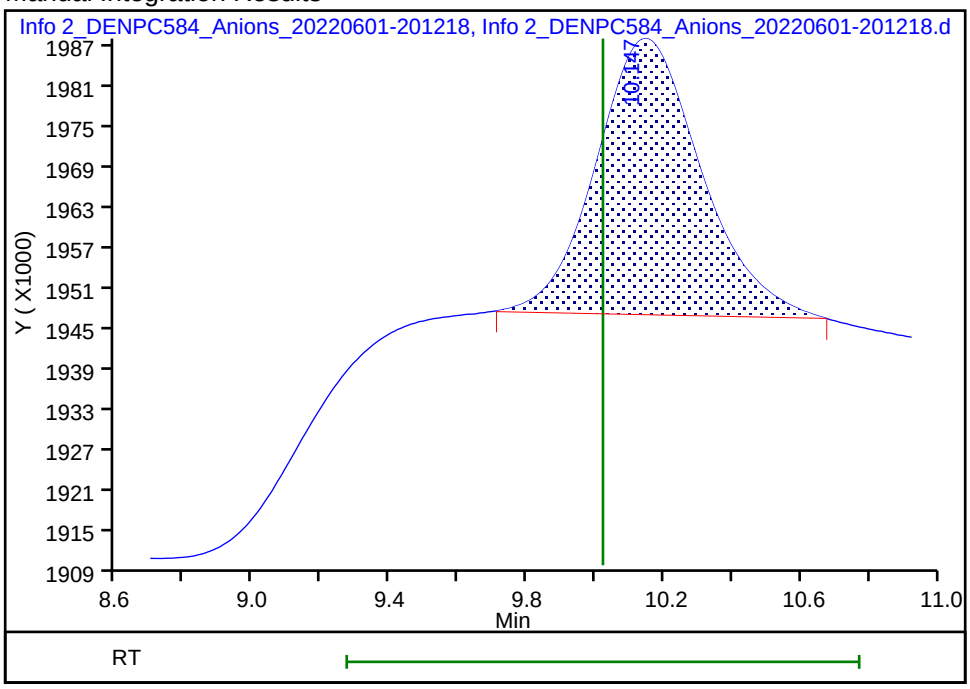
Processing Integration Results

RT: 10.15
Area: 2119094
Amount: 0.506617
Amount Units: ug/ml



Manual Integration Results

RT: 10.15
Area: 870021
Amount: 0.384739
Amount Units: ug/ml



Reviewer: foxr, 02-Jun-2022 12:26:27

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Info 2_DENPC584_Anions_20220601-211
Lims ID: 280-162622-F-1
Client ID: G0119-22A
Sample Type: Client
Inject. Date: 01-Jun-2022 21:00:00 ALS Bottle#: 0 Worklist Smp#: 22
Injection Vol: 5.0 ul Dil. Factor: 5.0000
Sample Info: 280-0111493-022
Misc. Info.: 280-0111493-022
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 02-Jun-2022 13:38:08 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

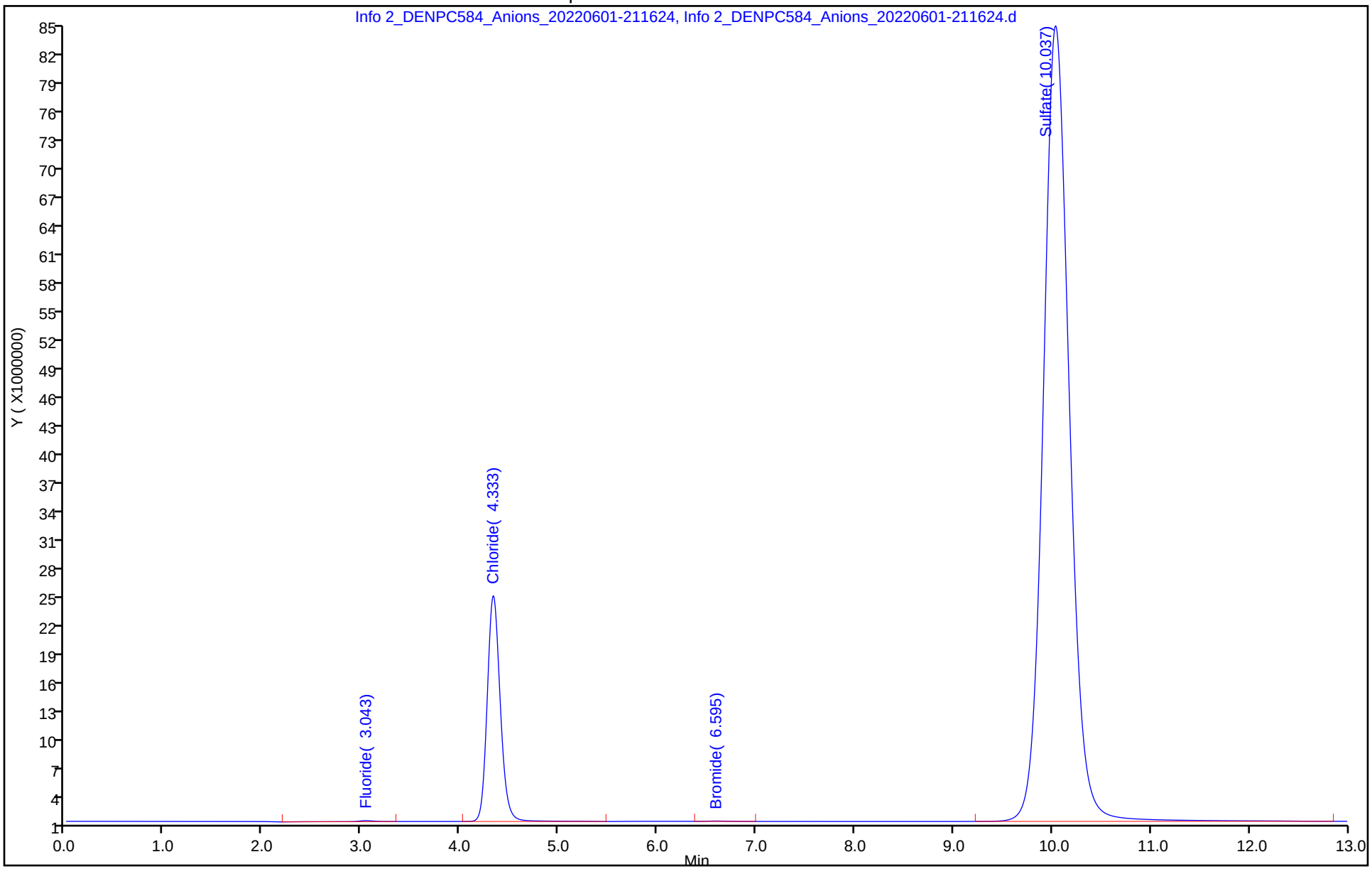
Column 1 : Det: 0005
Process Host: CTX1617

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.043	3.047	-0.004	1335198	0.1364	
2 Chloride	4.333	4.343	-0.010	215369946	15.3	
3 Nitrite as N		5.100			ND	
4 Bromide	6.595	6.483	0.112	479260	0.1475	
5 Nitrate as N		7.340			ND	
7 Orthophosphate as P		8.947			ND	
6 Sulfate	10.037	10.022	0.015	1515746985	148.2	

Report Date: 02-Jun-2022 13:38:10 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Info 2_DENPC584_Anions_20220601-211624.d				
Injection Date:	01-Jun-2022 21:00:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-162622-F-1	Lab Sample ID:	280-162622-1	Worklist Smp#:	22
Client ID:	G0119-22A				
Injection Vol:	5.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Info 2_DENPC584_Anions_20220601-222
Lims ID: 280-162622-F-5
Client ID: G0122-22A
Sample Type: Client
Inject. Date: 01-Jun-2022 22:04:00 ALS Bottle#: 0 Worklist Smp#: 26
Injection Vol: 5.0 ul Dil. Factor: 5.0000
Sample Info: 280-0111493-026
Misc. Info.: 280-0111493-026
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 02-Jun-2022 13:38:08 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1617

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.045	3.047	-0.002	1479026	0.1414	
2 Chloride	4.338	4.343	-0.005	249086582	17.6	
3 Nitrite as N		5.100			ND	
4 Bromide	6.603	6.483	0.120	453749	0.1425	
5 Nitrate as N		7.340			ND	
7 Orthophosphate as P	9.257	8.947	0.310	12345312	NC	
6 Sulfate	10.038	10.022	0.016	1421462630	139.0	

QC Flag Legend

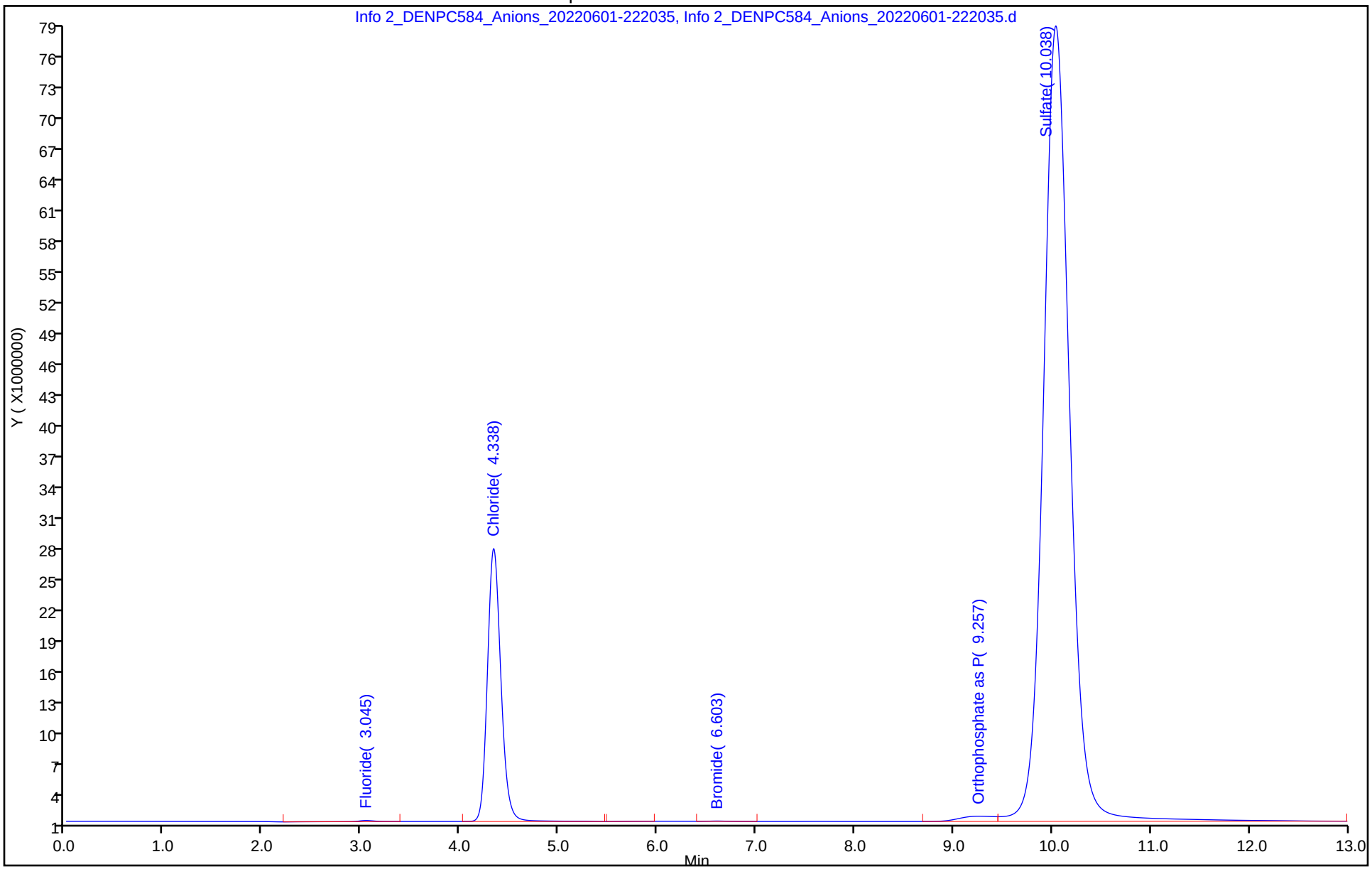
Processing Flags
NC - Not Calibrated

Report Date: 02-Jun-2022 13:38:11 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Info 2_DENPC584_Anions_20220601-222035.d

Injection Date:	01-Jun-2022 22:04:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-162622-F-5	Lab Sample ID:	280-162622-5	Worklist Smp#:	26
Client ID:	G0122-22A				
Injection Vol:	5.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Info 2_DENPC584_Anions_20220601-223
Lims ID: 280-162622-F-6
Client ID: G0066R-22A
Sample Type: Client
Inject. Date: 01-Jun-2022 22:20:00 ALS Bottle#: 0 Worklist Smp#: 27
Injection Vol: 5.0 ul Dil. Factor: 5.0000
Sample Info: 280-0111493-027
Misc. Info.: 280-0111493-027
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 02-Jun-2022 13:38:08 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

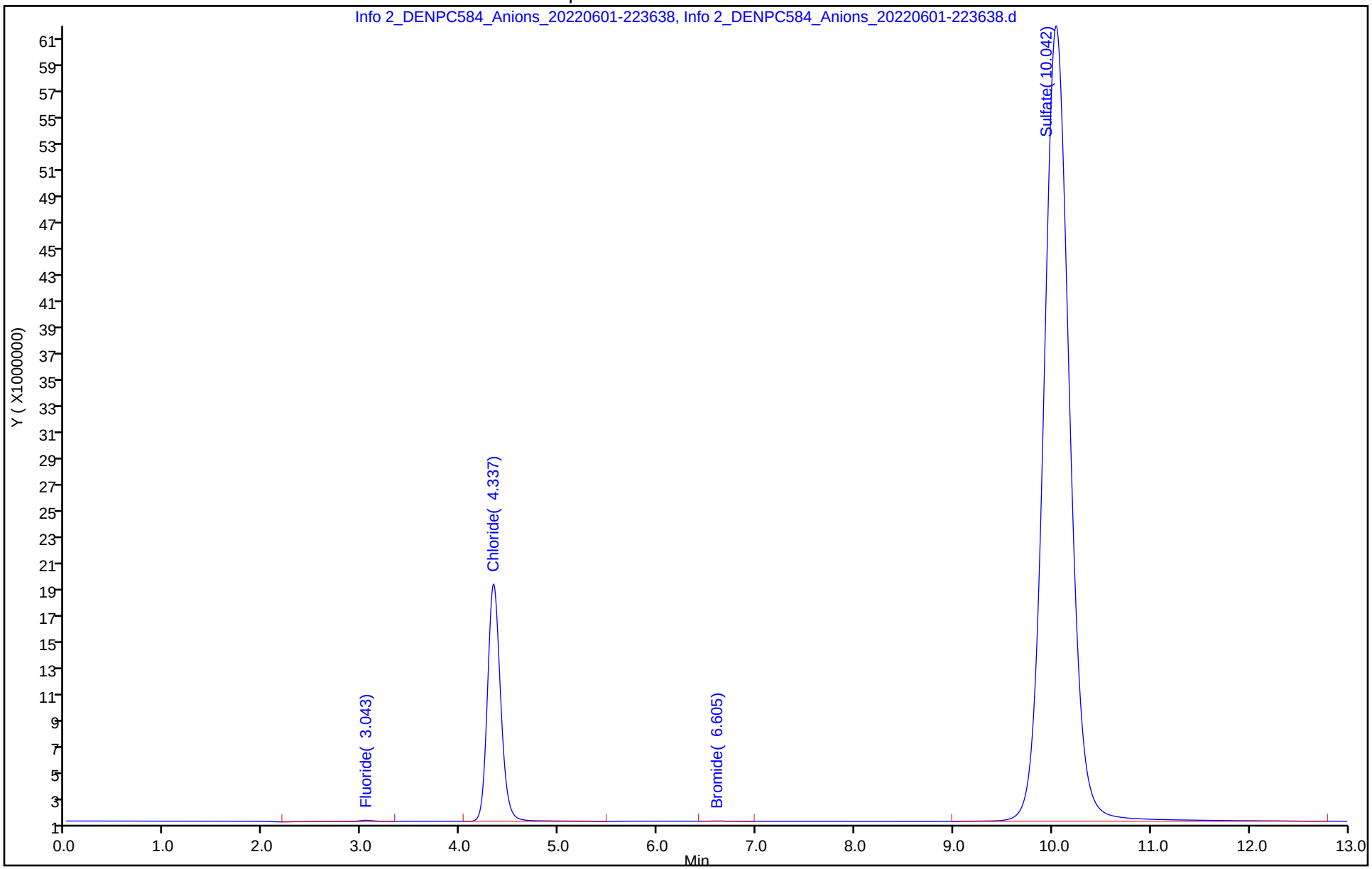
Column 1 : Det: 0005
Process Host: CTX1617

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.043	3.047	-0.004	1366989	0.1375	
2 Chloride	4.337	4.343	-0.006	165497500	11.8	
3 Nitrite as N		5.100			ND	
4 Bromide	6.605	6.483	0.122	262282	0.1050	
5 Nitrate as N		7.340			ND	
7 Orthophosphate as P		8.947			ND	
6 Sulfate	10.042	10.022	0.020	1091610679	106.8	

Report Date: 02-Jun-2022 13:38:12 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Info 2_DENPC584_Anions_20220601-223638.d				
Injection Date:	01-Jun-2022 22:20:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-162622-F-6	Lab Sample ID:	280-162622-6	Worklist Smp#:	27
Client ID:	G0066R-22A				
Injection Vol:	5.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Info 2_DENPC584_Anions_20220601-225
Lims ID: 280-162622-F-7
Client ID: G0024-22A
Sample Type: Client
Inject. Date: 01-Jun-2022 22:36:00 ALS Bottle#: 0 Worklist Smp#: 28
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0111493-028
Misc. Info.: 280-0111493-028
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 02-Jun-2022 13:38:08 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1617

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.045	3.047	-0.002	2856001	0.1899	
2 Chloride	4.337	4.343	-0.006	185678676	13.2	
3 Nitrite as N		5.100			ND	
4 Bromide	6.597	6.483	0.114	220081	0.0968	
5 Nitrate as N	7.348	7.340	0.008	386936658	NC	
7 Orthophosphate as P	9.122	8.947	0.175	22226625	NC	
6 Sulfate	10.055	10.022	0.033	654947622	64.2	

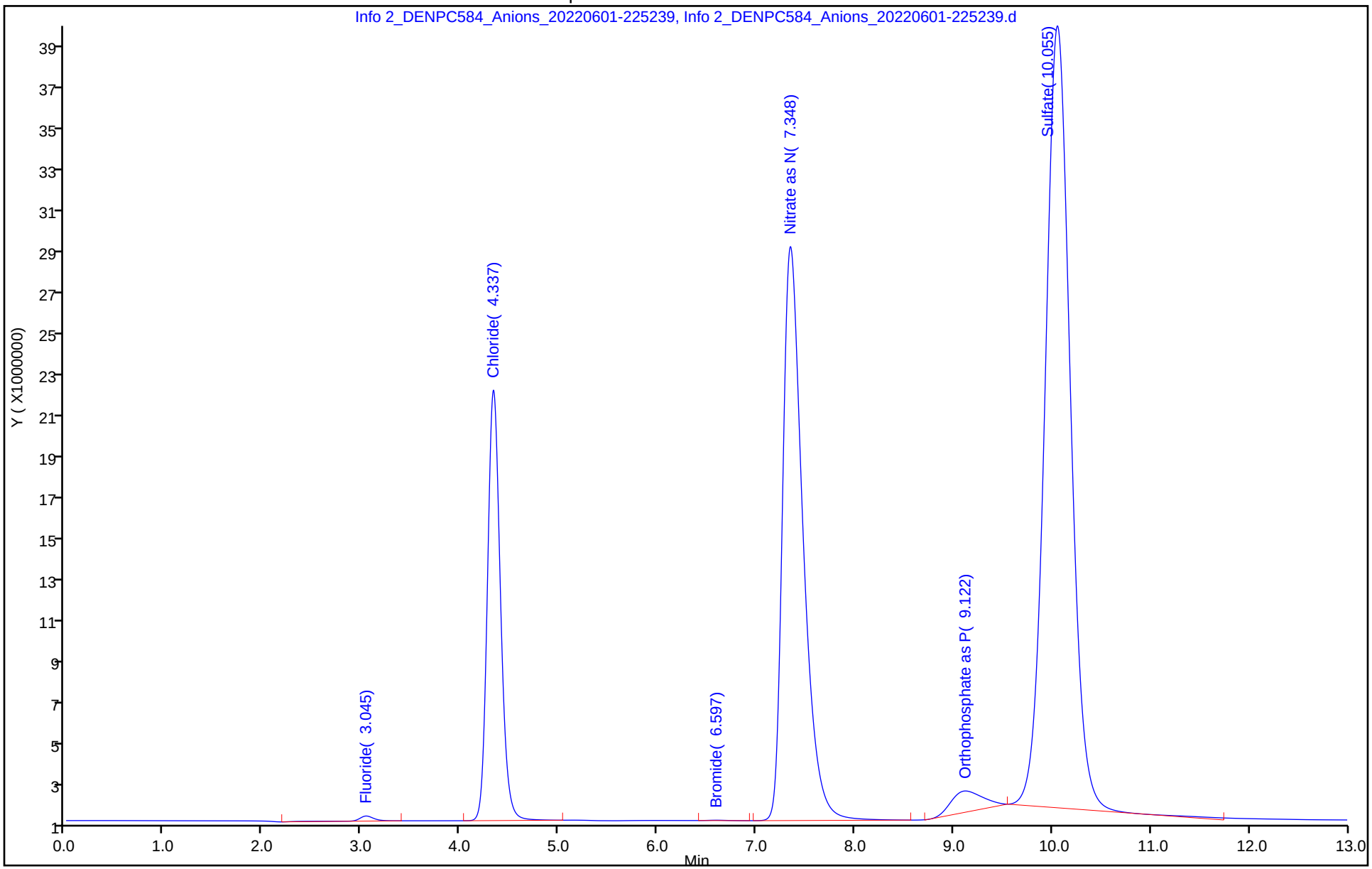
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 02-Jun-2022 13:38:12 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Info 2_DENPC584_Anions_20220601-225239.d				
Injection Date:	01-Jun-2022 22:36:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-162622-F-7	Lab Sample ID:	280-162622-7	Worklist Smp#:	28
Client ID:	G0024-22A				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Info 2_DENPC584_Anions_20220601-230
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 01-Jun-2022 22:52:00 ALS Bottle#: 0 Worklist Smp#: 29
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0111493-029
Misc. Info.: 280-0111493-029
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub5

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 02-Jun-2022 13:38:12 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1617

First Level Reviewer: foxr Date: 02-Jun-2022 12:28:36

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.047	3.047	0.000	124102388	5.00	4.46	M
2 Chloride	4.357	4.343	0.014	1444436084	100.0	101.2	
3 Nitrite as N	5.125	5.100	0.025	162594240	NC	NC	M
4 Bromide	6.525	6.483	0.042	24150956	5.00	4.78	
5 Nitrate as N	7.402	7.340	0.062	166580431	NC	NC	
7 Orthophosphate as P	8.990	8.947	0.043	99675218	NC	NC	
6 Sulfate	10.038	10.022	0.016	1033415050	100.0	101.1	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

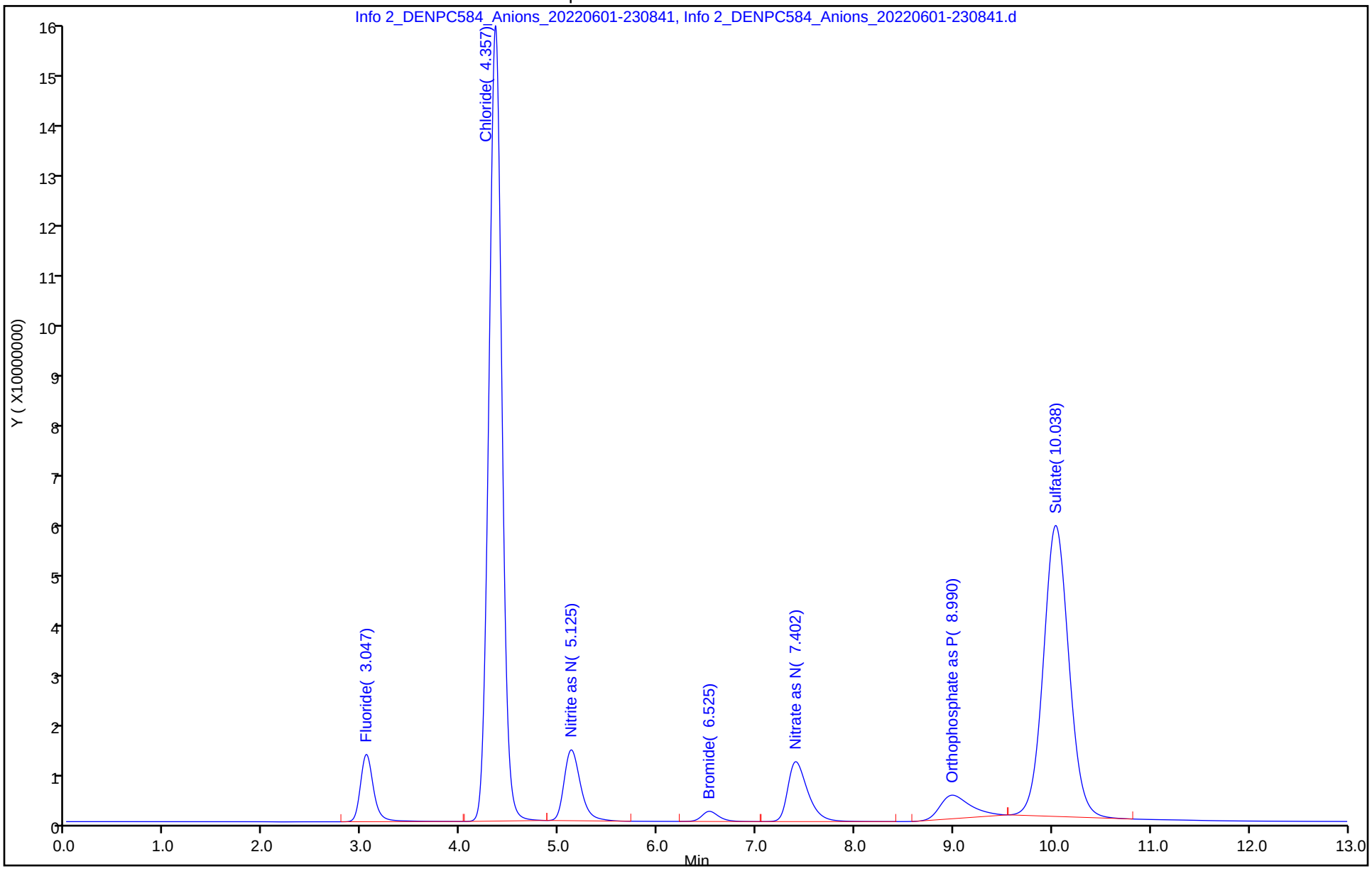
IC LCS_01879 Amount Added: 10.00 Units: mL

Report Date: 02-Jun-2022 13:38:13 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Info 2_DENPC584_Anions_20220601-230841.d

Injection Date:	01-Jun-2022 22:52:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	29
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Info 2_DENPC584_Anions_20220601-230

Injection Date: 01-Jun-2022 22:52:00 Instrument ID: WC_IonChrom13

Lims ID: ccv

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 29

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

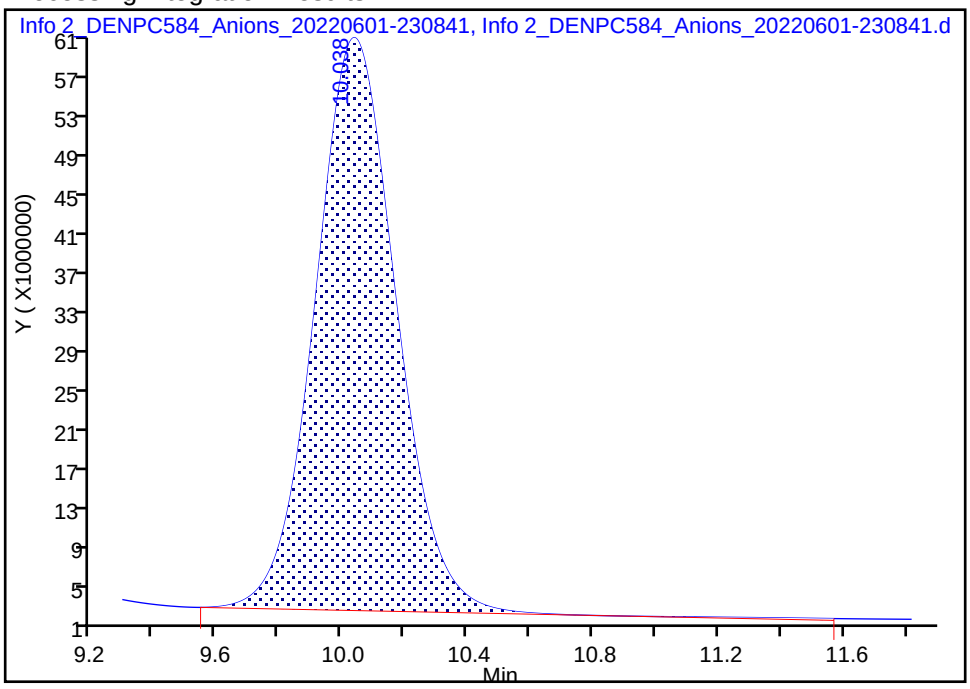
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

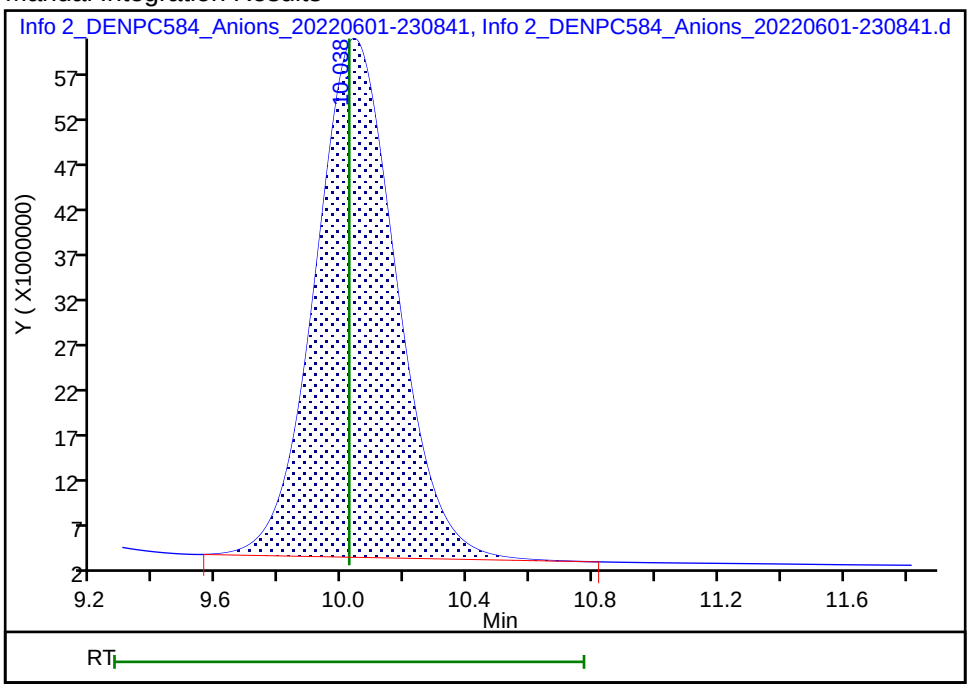
Processing Integration Results

RT: 10.04
Area: 1037296839
Amount: 101.5138
Amount Units: ug/ml



Manual Integration Results

RT: 10.04
Area: 1033415050
Amount: 101.1351
Amount Units: ug/ml



Reviewer: foxr, 02-Jun-2022 12:28:32

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Info 2_DENPC584_Anions_20220601-232
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 01-Jun-2022 23:08:00 ALS Bottle#: 0 Worklist Smp#: 30
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0111493-030
Misc. Info.: 280-0111493-030
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 02-Jun-2022 13:38:12 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1617

First Level Reviewer: foxr Date: 02-Jun-2022 12:28:52

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.047				ND	
2 Chloride	4.343	4.343	0.000	15018		0.2115	Ma
3 Nitrite as N		5.100				ND	
4 Bromide		6.483				ND	
5 Nitrate as N		7.340				ND	
7 Orthophosphate as P		8.947				ND	
6 Sulfate	10.130	10.022	0.108	757177		0.3737	

QC Flag Legend

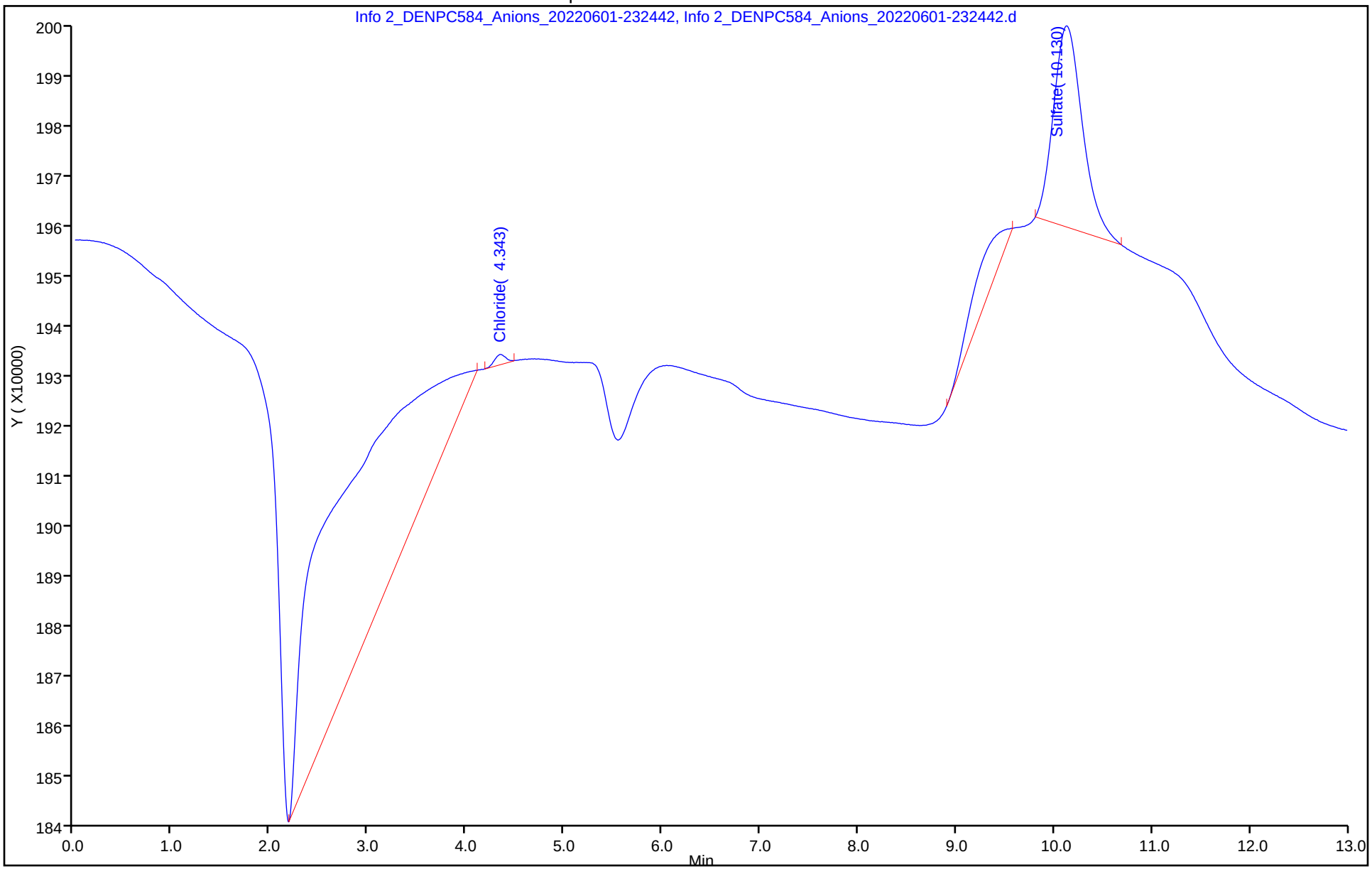
Processing Flags
Review Flags
M - Manually Integrated
a - User Assigned ID

Report Date: 02-Jun-2022 13:38:13 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Info 2_DENPC584_Anions_20220601-232442.d

Injection Date:	01-Jun-2022 23:08:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	30
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Info 2_DENPC584_Anions_20220601-234
Lims ID: 280-162622-F-7 DU
Client ID:
Sample Type: DU
Inject. Date: 01-Jun-2022 23:24:00 ALS Bottle#: 0 Worklist Smp#: 31
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0111493-031
Misc. Info.: 280-0111493-031
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 02-Jun-2022 13:38:12 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1617

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.045	3.047	-0.002	2951118		0.1933	
2 Chloride	4.337	4.343	-0.006	185627959		13.2	
3 Nitrite as N		5.100				ND	
4 Bromide	6.607	6.483	0.124	217068		0.0962	
5 Nitrate as N	7.362	7.340	0.022	386705391		NC	
7 Orthophosphate as P	9.070	8.947	0.123	31185714		NC	
6 Sulfate	10.068	10.022	0.046	654626633		64.2	

QC Flag Legend

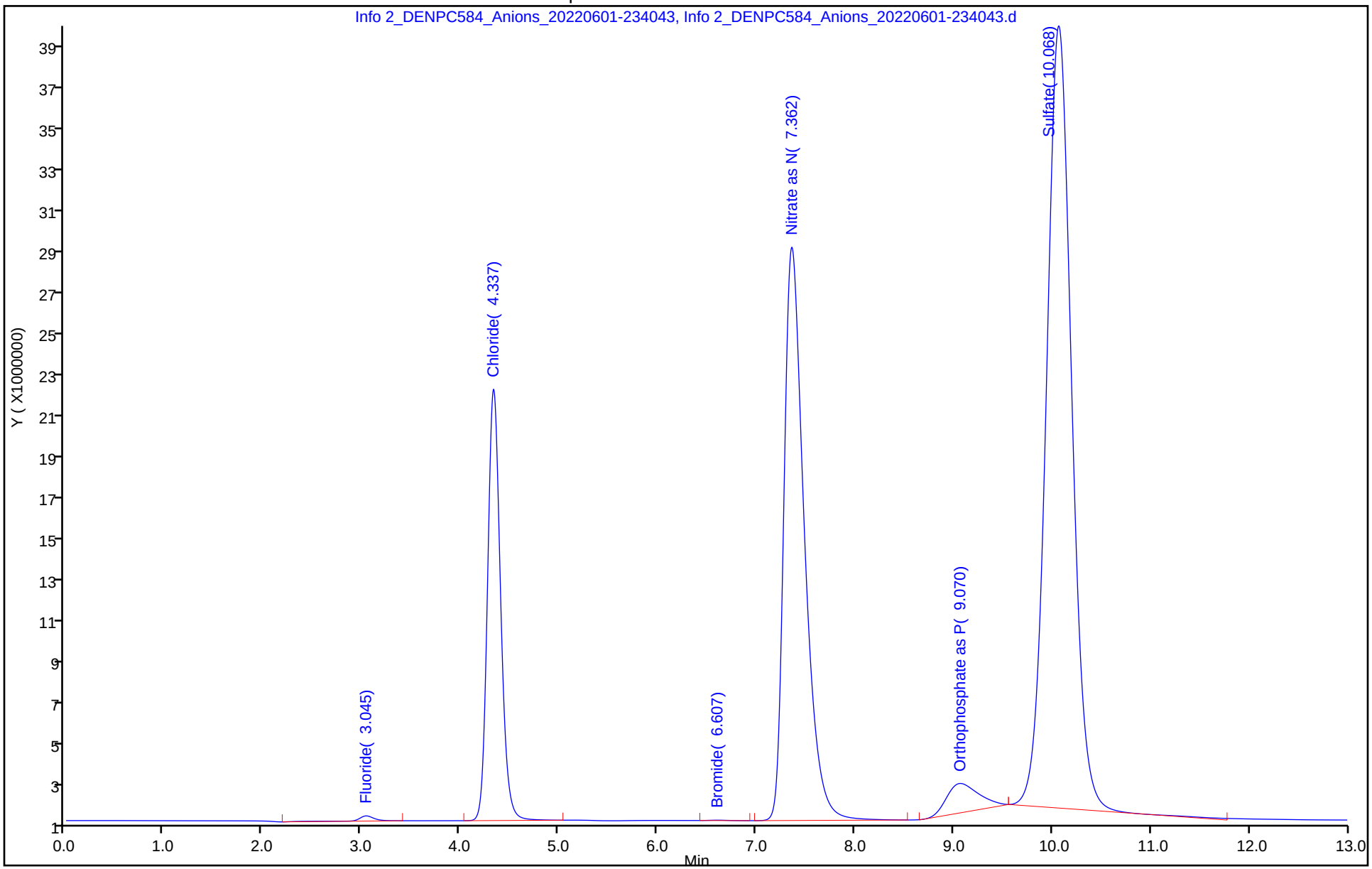
Processing Flags
NC - Not Calibrated

Report Date: 02-Jun-2022 13:38:13 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Info 2_DENPC584_Anions_20220601-234043.d

Injection Date:	01-Jun-2022 23:24:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-162622-F-7 DU			Worklist Smp#:	31
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Info 2_DENPC584_Anions_20220601-235
Lims ID: 280-162622-F-7 MS
Client ID:
Sample Type: MS
Inject. Date: 01-Jun-2022 23:40:00 ALS Bottle#: 0 Worklist Smp#: 32
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0111493-032
Misc. Info.: 280-0111493-032
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 02-Jun-2022 13:38:12 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1617

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.048	3.047	0.001	136125855	5.00	4.88	
2 Chloride	4.338	4.343	-0.005	933198309	50.0	65.5	
3 Nitrite as N	5.127	5.100	0.027	81311906	NC	NC	
4 Bromide	6.542	6.483	0.059	22967237	5.00	4.55	
5 Nitrate as N	7.322	7.340	-0.018	565931761	NC	NC	
7 Orthophosphate as P	8.970	8.947	0.023	156369957	NC	NC	
6 Sulfate	10.038	10.022	0.016	1188910718	50.0	116.3	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

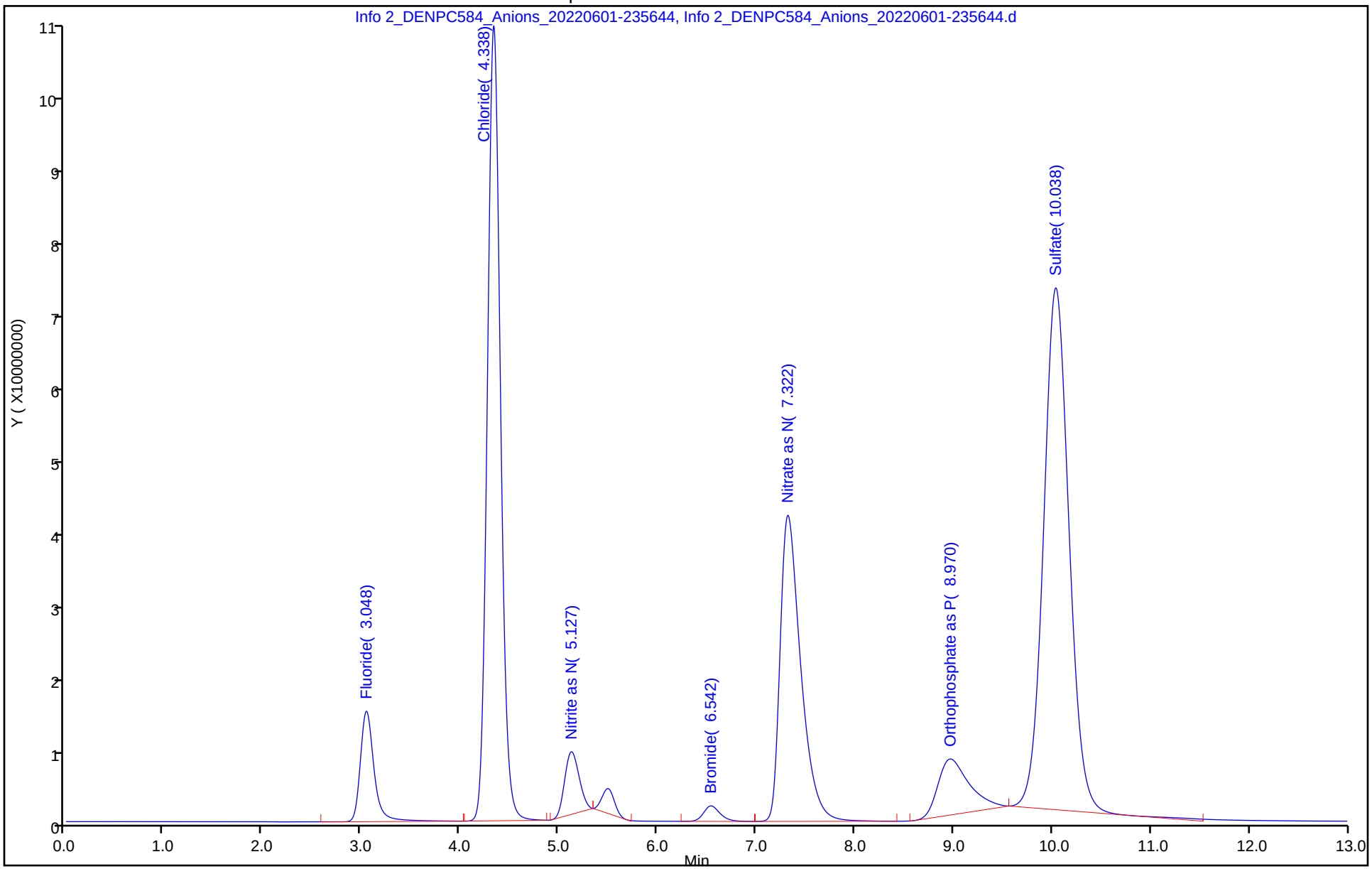
ICMS/MSD WEEK_00760 Amount Added: 0.10 Units: mL

Report Date: 02-Jun-2022 13:38:14 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Info 2_DENPC584_Anions_20220601-235644.d

Injection Date:	01-Jun-2022 23:40:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-162622-F-7 MS			Worklist Smp#:	32
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Info 2_DENPC584_Anions_20220602-001
Lims ID: 280-162622-F-7 MSD
Client ID:
Sample Type: MSD
Inject. Date: 01-Jun-2022 23:56:00 ALS Bottle#: 0 Worklist Smp#: 33
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0111493-033
Misc. Info.: 280-0111493-033
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 02-Jun-2022 13:38:12 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1617

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.048	3.047	0.001	139845613	5.00	5.01	
2 Chloride	4.343	4.343	0.000	960630392	50.0	67.4	
3 Nitrite as N	5.132	5.100	0.032	83789721	NC	NC	
4 Bromide	6.550	6.483	0.067	23853876	5.00	4.72	
5 Nitrate as N	7.333	7.340	-0.007	574359761	NC	NC	
7 Orthophosphate as P	8.985	8.947	0.038	152950737	NC	NC	
6 Sulfate	10.048	10.022	0.026	1211286127	50.0	118.5	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

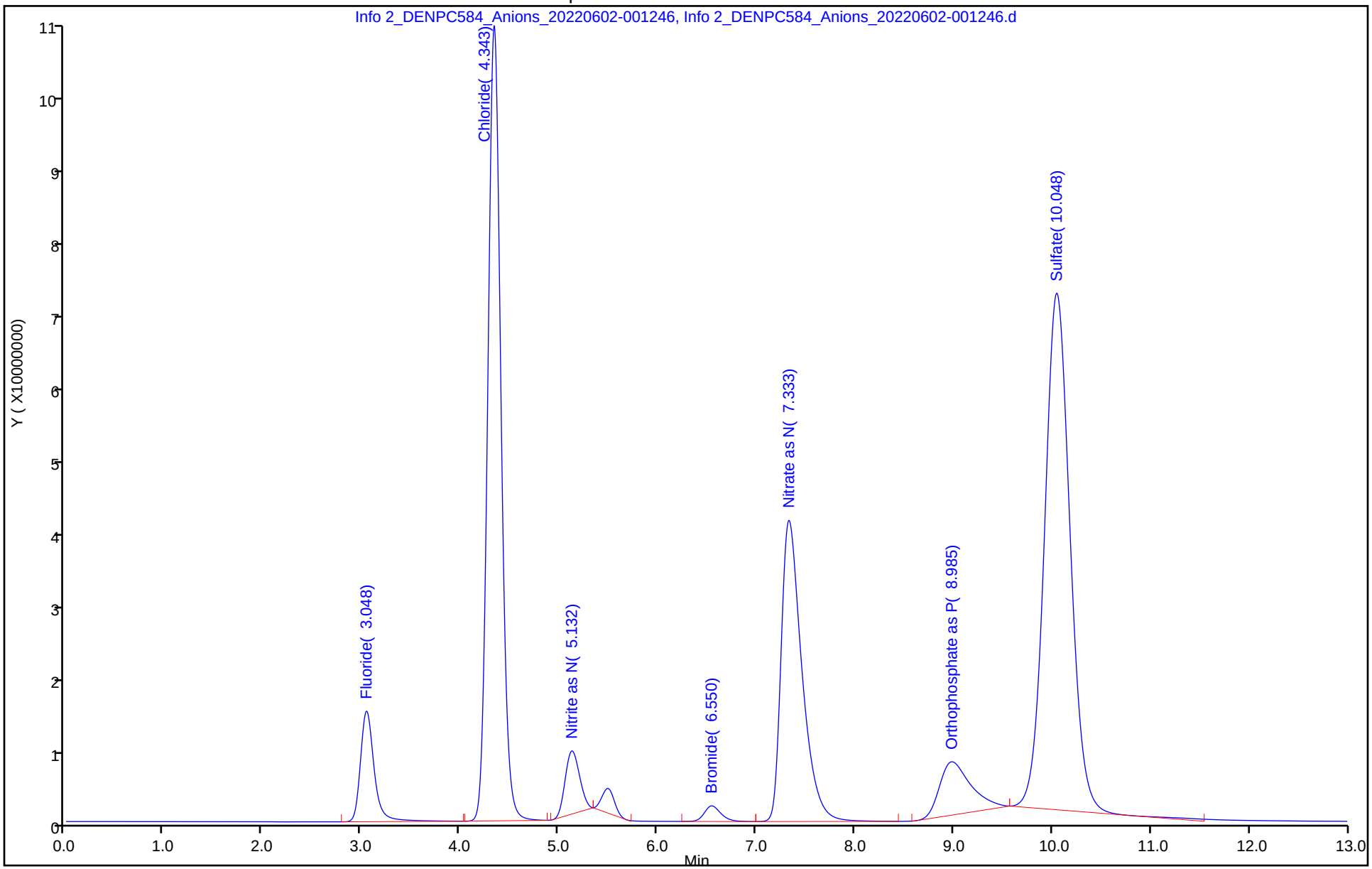
ICMS/MSD WEEK_00760 Amount Added: 0.10 Units: mL

Report Date: 02-Jun-2022 13:38:14 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Info 2_DENPC584_Anions_20220602-001246.d

Injection Date:	01-Jun-2022 23:56:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-162622-F-7 MSD			Worklist Smp#:	33
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Info 2_DENPC584_Anions_20220602-010
Lims ID: 280-162622-F-10
Client ID: PZ018-22A
Sample Type: Client
Inject. Date: 02-Jun-2022 00:44:00 ALS Bottle#: 0 Worklist Smp#: 36
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0111493-036
Misc. Info.: 280-0111493-036
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 02-Jun-2022 13:38:12 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1617

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.063	3.047	0.016	6371423	0.3137	
2 Chloride	4.415	4.343	0.072	564002951	39.7	
3 Nitrite as N		5.100			ND	
4 Bromide	6.680	6.483	0.197	641249	0.1792	
5 Nitrate as N	7.515	7.340	0.175	100501556	NC	
7 Orthophosphate as P		8.947			ND	
6 Sulfate	10.117	10.022	0.095	396983426	39.0	

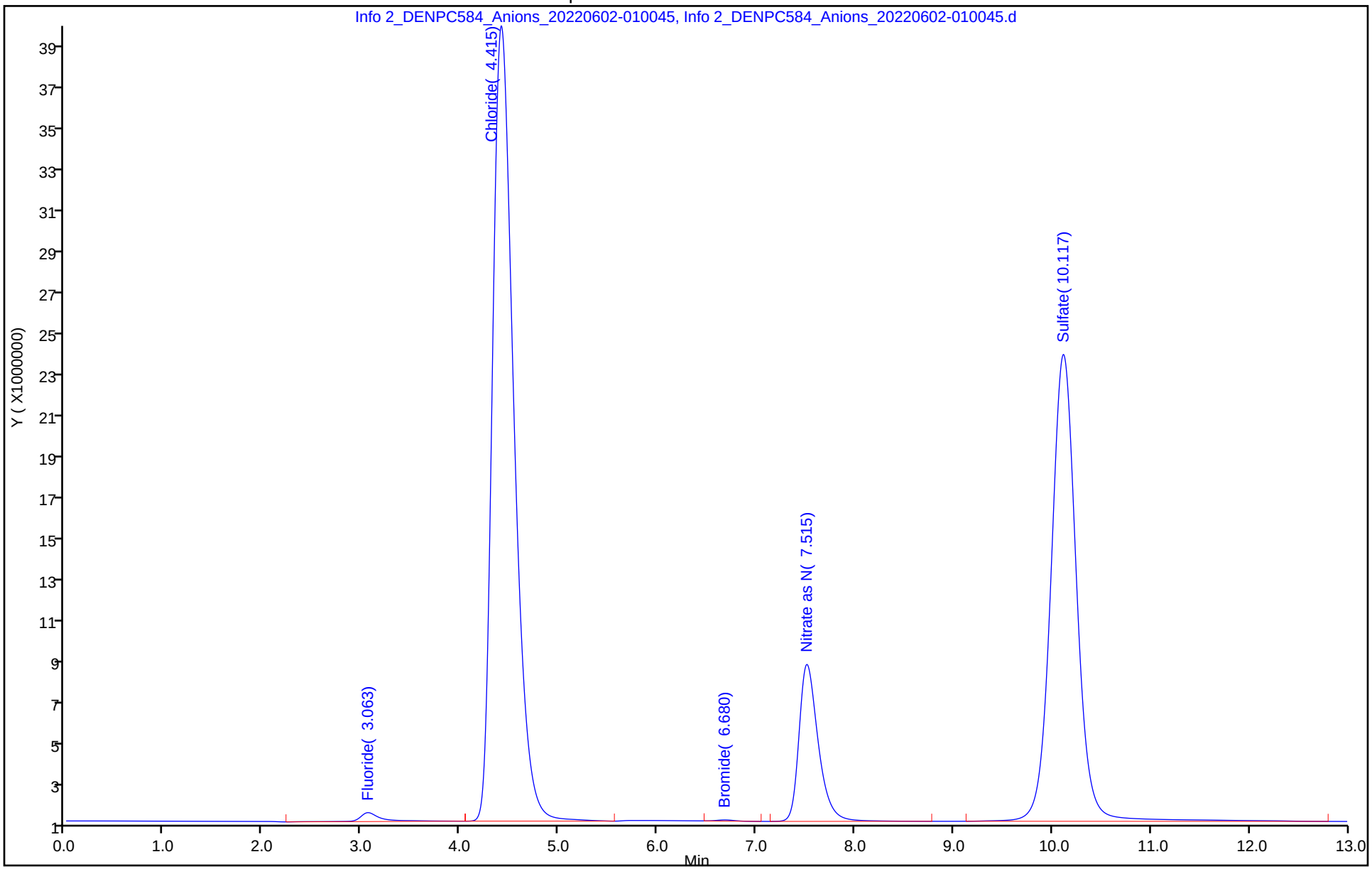
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 02-Jun-2022 13:38:15 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Info 2_DENPC584_Anions_20220602-010045.d				
Injection Date:	02-Jun-2022 00:44:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-162622-F-10	Lab Sample ID:	280-162622-10	Worklist Smp#:	36
Client ID:	PZ018-22A				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Info 2_DENPC584_Anions_20220602-022
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 02-Jun-2022 02:04:00 ALS Bottle#: 0 Worklist Smp#: 44
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0111493-044
Misc. Info.: 280-0111493-044
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub5

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 02-Jun-2022 13:38:18 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1617

First Level Reviewer: foxr Date: 02-Jun-2022 13:31:24

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.045	3.047	-0.002	125761001	5.00	4.52	M
2 Chloride	4.353	4.343	0.010	1447923314	100.0	101.5	
3 Nitrite as N	5.123	5.100	0.023	161856839	NC	NC	M
4 Bromide	6.533	6.483	0.050	24031318	5.00	4.76	
5 Nitrate as N	7.410	7.340	0.070	167252556	NC	NC	
7 Orthophosphate as P	8.942	8.947	-0.005	110551146	NC	NC	
6 Sulfate	10.022	10.022	0.000	1038886411	100.0	101.7	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

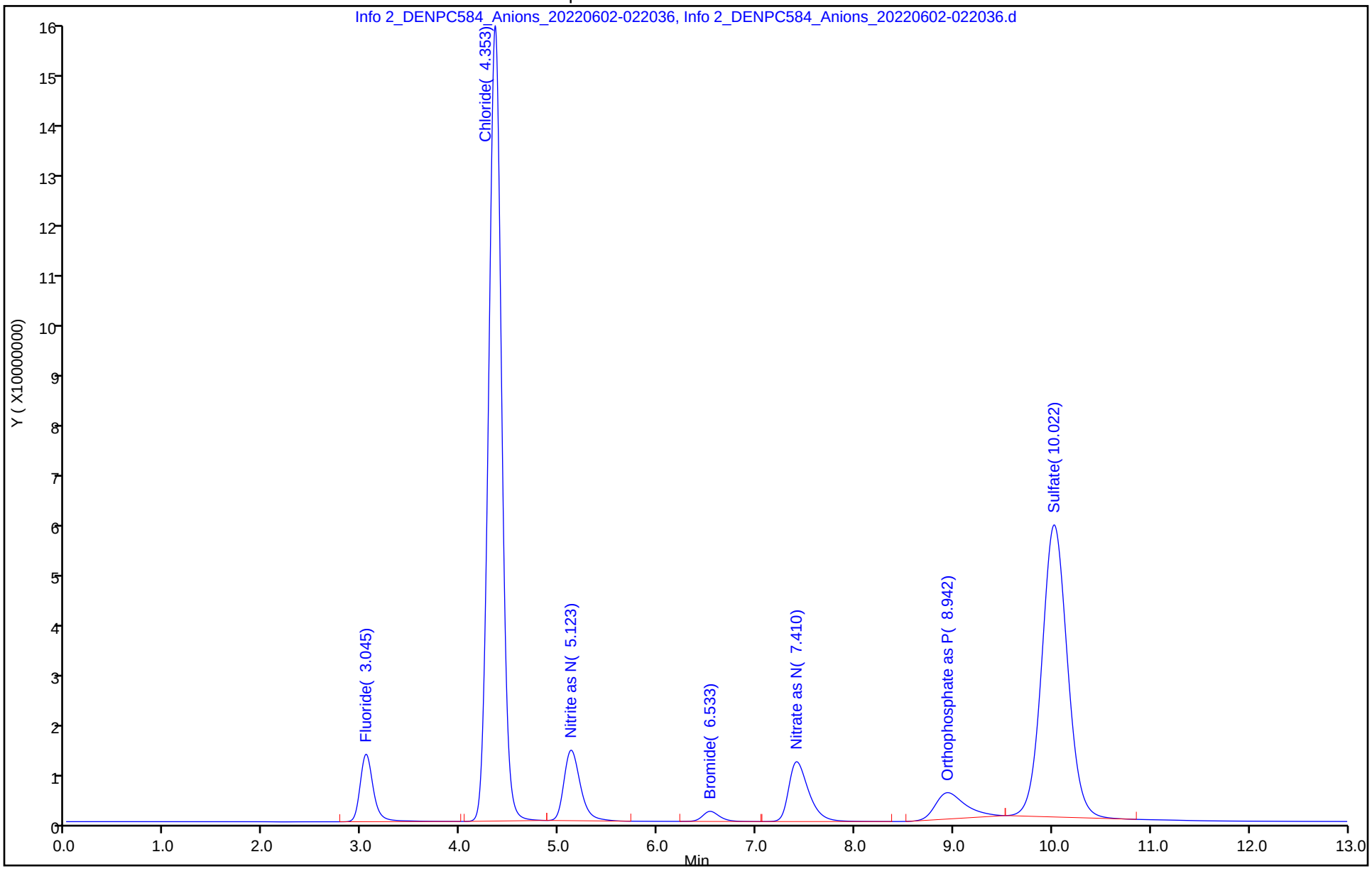
IC LCS_01879 Amount Added: 10.00 Units: mL

Report Date: 02-Jun-2022 13:38:18 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Info 2_DENPC584_Anions_20220602-022036.d

Injection Date:	02-Jun-2022 02:04:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	44
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 Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Info 2_DENPC584_Anions_20220602-022

Injection Date: 02-Jun-2022 02:04:00 Instrument ID: WC_IonChrom13

Lims ID: ccv

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 44

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

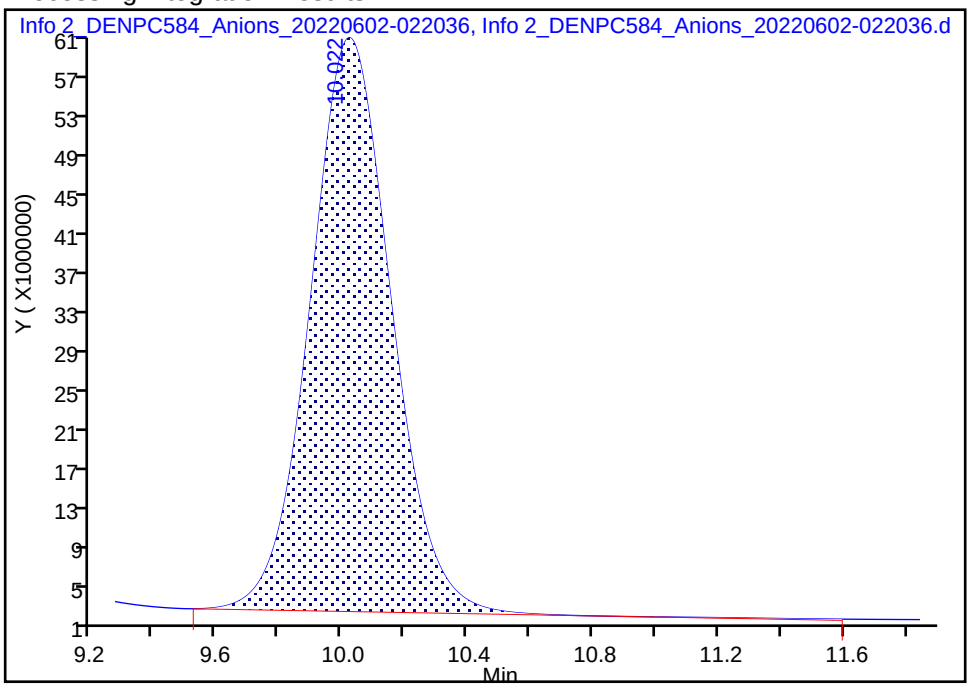
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

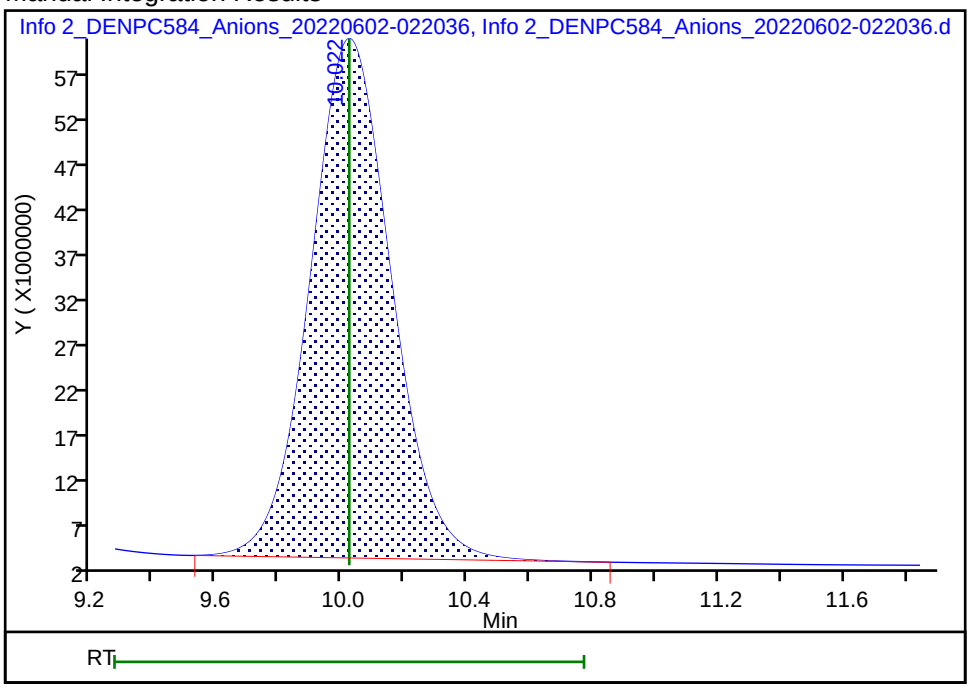
Processing Integration Results

RT: 10.02
Area: 1041450675
Amount: 101.9191
Amount Units: ug/ml



Manual Integration Results

RT: 10.02
Area: 1038886411
Amount: 101.6689
Amount Units: ug/ml



Reviewer: foxr, 02-Jun-2022 13:31:21

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Info 2_DENPC584_Anions_20220602-023
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 02-Jun-2022 02:20:00 ALS Bottle#: 0 Worklist Smp#: 45
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0111493-045
Misc. Info.: 280-0111493-045
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 02-Jun-2022 13:38:18 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1617

First Level Reviewer: foxr Date: 02-Jun-2022 13:31:57

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.047				ND	
2 Chloride	4.333	4.343	-0.010	34433		0.2128	Ma
3 Nitrite as N		5.100				ND	
4 Bromide		6.483				ND	
5 Nitrate as N		7.340				ND	
7 Orthophosphate as P		8.947				ND	U
6 Sulfate	10.128	10.022	0.106	830387		0.3809	

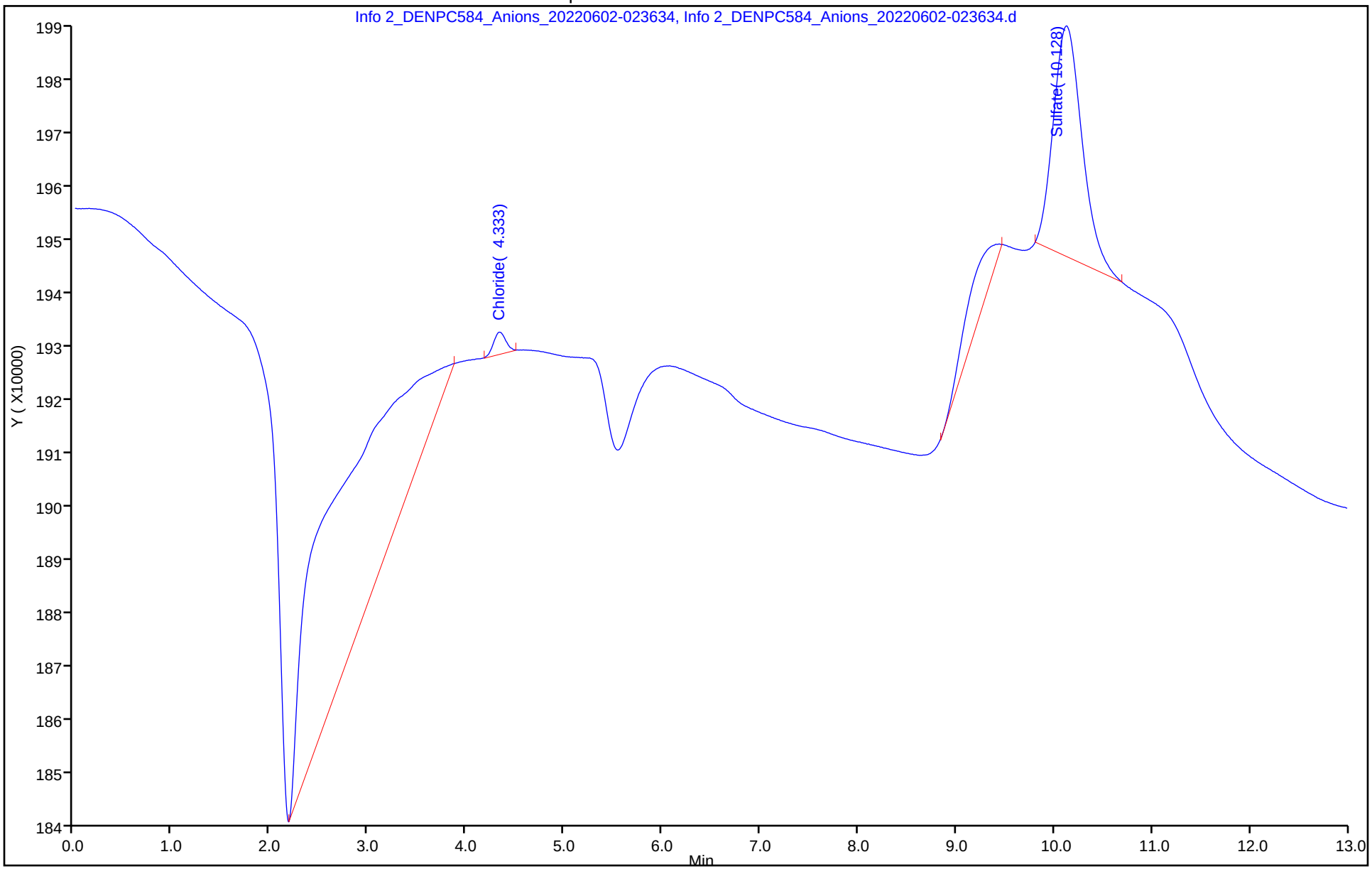
QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected
a - User Assigned ID

Report Date: 02-Jun-2022 13:38:19 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220601-111493.b\Info 2_DENPC584_Anions_20220602-023634.d				
Injection Date:	02-Jun-2022 02:20:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	45
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: 111527 **Inst ID:** IC13 **Analysis Date:** 6-02-22 **Analyst:** RF

Rush	Job No.	Samples	Anions	QC Req	HT Exp
☐	162494	1	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	162553	2	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	162622	5	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	162450	2	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	162445	1	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	162521	3	F Cl NO2 Br NO3 PO4 SO4	MS/D # 1	
☐	162503	1	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	162526	3	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	162622	12	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	162530	6	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
494	1	F Cl NO2 Br NO3 PO4 SO4	5X	rerun
553	2	F Cl NO2 Br NO3 PO4 SO4	5X	rerun
622	5	F Cl NO2 Br NO3 PO4 SO4	5X	rerun
450	2	F Cl NO2 Br NO3 PO4 SO4	5X10X	test
445	1	F Cl NO2 Br NO3 PO4 SO4	5X	test
521	3	F Cl NO2 Br NO3 PO4 SO4	5X	rerun
503	1	F Cl NO2 Br NO3 PO4 SO4	10X	test
526	2	F Cl NO2 Br NO3 PO4 SO4	5X	test
622	5	F Cl NO2 Br NO3 PO4 SO4	5X	test
530	6	Cl SO4	5X10X 20X	test

Eurofins Environment Testing America
Initial Calibration Summary Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Anions-IC13.m
Instrument: WC_IonChrom13 Lims Location: 280
Lock State: Initial Calib Locked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 17-May-2022 16:42:13
No.Compounds:7

Initial Calibration Batches

Ical Batch: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b
Inj Date : 16-May-2022 17:34:00, Sublist: chrom-Anions-IC13*sub1

Detector 1: 0005

	Wet - Anions				Wet - Anions 28D			
Compound	b	M1	M2	Err	b	M1	M2	Err
1 Fluoride					-253726	2839926		0.997
2 Chloride					-300840	1429833		1.000
3 Nitrite as N	-135857	3279286		0.999				
4 Bromide					-274617	5110904		0.996
5 Nitrate as N	-222268	3464280		0.998				
7 Orthophosphate as P	-340970	2317515	R1	).994*				
6 Sulfate					-307299	1024855		1.000

ICalib Error Legend
R1, Curve Fit Fail Error Limit Test

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Anions-IC13.m
Instrument: WC_IonChrom13 Lims Location: 280
Lock State: Initial Calib Locked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 17-May-2022 16:42:13
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: 0.000-15.917 No. Points: 1561

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-17502
Inj Date: 16-May-2022 17:34:00 Worklist: 111056 Sample#: 2
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-18062
Inj Date: 16-May-2022 17:50:00 Worklist: 111056 Sample#: 3
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-18222
Inj Date: 16-May-2022 18:06:00 Worklist: 111056 Sample#: 4
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-18381
Inj Date: 16-May-2022 18:22:00 Worklist: 111056 Sample#: 5
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-18541
Inj Date: 16-May-2022 18:38:00 Worklist: 111056 Sample#: 6
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-19101
Inj Date: 16-May-2022 18:54:00 Worklist: 111056 Sample#: 7

Start Cal Date: 16-May-2022 17:19:00 End Cal Date: 16-May-2022 18:54:00

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					
27251320	29422806	31465657	31594454	32027761	33481208	-1358579			0.999
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		32792860		
5450264	14711403	31465657	M126377817	M256222089	M334812084				
111056(2)	111056(3)	111056(4)	111056(5)	111056(6)	111056(7)				
5 Nitrate as N				Signal: 1					
Error: CorrCoef									
27235390	29000752	30914952	32359778	33845070	35663633	-2222686			0.998
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		34642807		
5447078	14500376	30914952	M129439113	M270760556	M356636332				
111056(2)	111056(3)	111056(4)	111056(5)	111056(6)	111056(7)				
7 Orthophosphate as P				Signal: 1				R1	
10553260	12553660	16934127	25377882	22693644	22041054	-3409708			*0.994
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		23175151		
M2110652	M6276830	M16934127	101511529	M181549150	M220410536				
111056(2)	111056(3)	111056(4)	111056(5)	111056(6)	111056(7)				

ICalib Error Legend
R1, Curve Fit Fail Error Limit Test

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Anions-IC13.m
Instrument: WC_IonChrom13 Lims Location: 280
Lock State: Initial Calib Locked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 17-May-2022 16:42:13
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: 0.000-15.917 No. Points: 1561

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-17502
Inj Date: 16-May-2022 17:34:00 Worklist: 111056 Sample#: 2
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-18062
Inj Date: 16-May-2022 17:50:00 Worklist: 111056 Sample#: 3
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-18222
Inj Date: 16-May-2022 18:06:00 Worklist: 111056 Sample#: 4
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-18381
Inj Date: 16-May-2022 18:22:00 Worklist: 111056 Sample#: 5
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-18541
Inj Date: 16-May-2022 18:38:00 Worklist: 111056 Sample#: 6
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-19101
Inj Date: 16-May-2022 18:54:00 Worklist: 111056 Sample#: 7

Start Cal Date: 16-May-2022 17:19:00 End Cal Date: 16-May-2022 18:54:00

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									
22063565	20819372	22759491	26037460	28008270	29204112	-2537266			0.997
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		28399266		
M4412713	M10409686	M22759491	M104149841	224066163	292041123				
111056(2)	111056(3)	111056(4)	111056(5)	111056(6)	111056(7)				
2 Chloride				Signal: 1					
11659033	12840400	13741173	14206431	13948209	14491084	-3008401			1.000
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		14298337		
11659033	32101000	68705864	M852385867	M1673785026	M2898216814				
111056(2)	111056(3)	111056(4)	111056(5)	111056(6)	111056(7)				
4 Bromide				Signal: 1					
4295445	4498318	4610780	4609405	4958454	5365645	-274617			0.996
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		5110904		
859089	2249159	4610780	M18437619	M39667629	M53656450				
111056(2)	111056(3)	111056(4)	111056(5)	111056(6)	111056(7)				
6 Sulfate				Signal: 1					
Error: raw_COD									
8433467	8562872	8991274	10074672	10002037	10418014	-3072992			1.000
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		10248552		
M8433467	M21407179	M44956370	M604480306	M1200244426	M2083602807				
111056(2)	111056(3)	111056(4)	111056(5)	111056(6)	111056(7)				

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-112
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 02-Jun-2022 11:06:00 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0111527-001
Misc. Info.: 280-0111527-001
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub5

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 03-Jun-2022 13:11:28 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1621

First Level Reviewer: foxr Date: 02-Jun-2022 11:32:32

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.058	3.058	0.000	133457296	5.00	4.79	
2 Chloride	4.355	4.355	0.000	1428065123	100.0	100.1	
3 Nitrite as N	5.108	5.108	0.000	161356250	NC	NC	M
4 Bromide	6.497	6.497	0.000	23595020	5.00	4.67	
5 Nitrate as N	7.350	7.350	0.000	165250123	NC	NC	
7 Orthophosphate as P	9.028	9.028	0.000	124964333	NC	NC	
6 Sulfate	10.123	10.123	0.000	1020346465	100.0	99.9	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

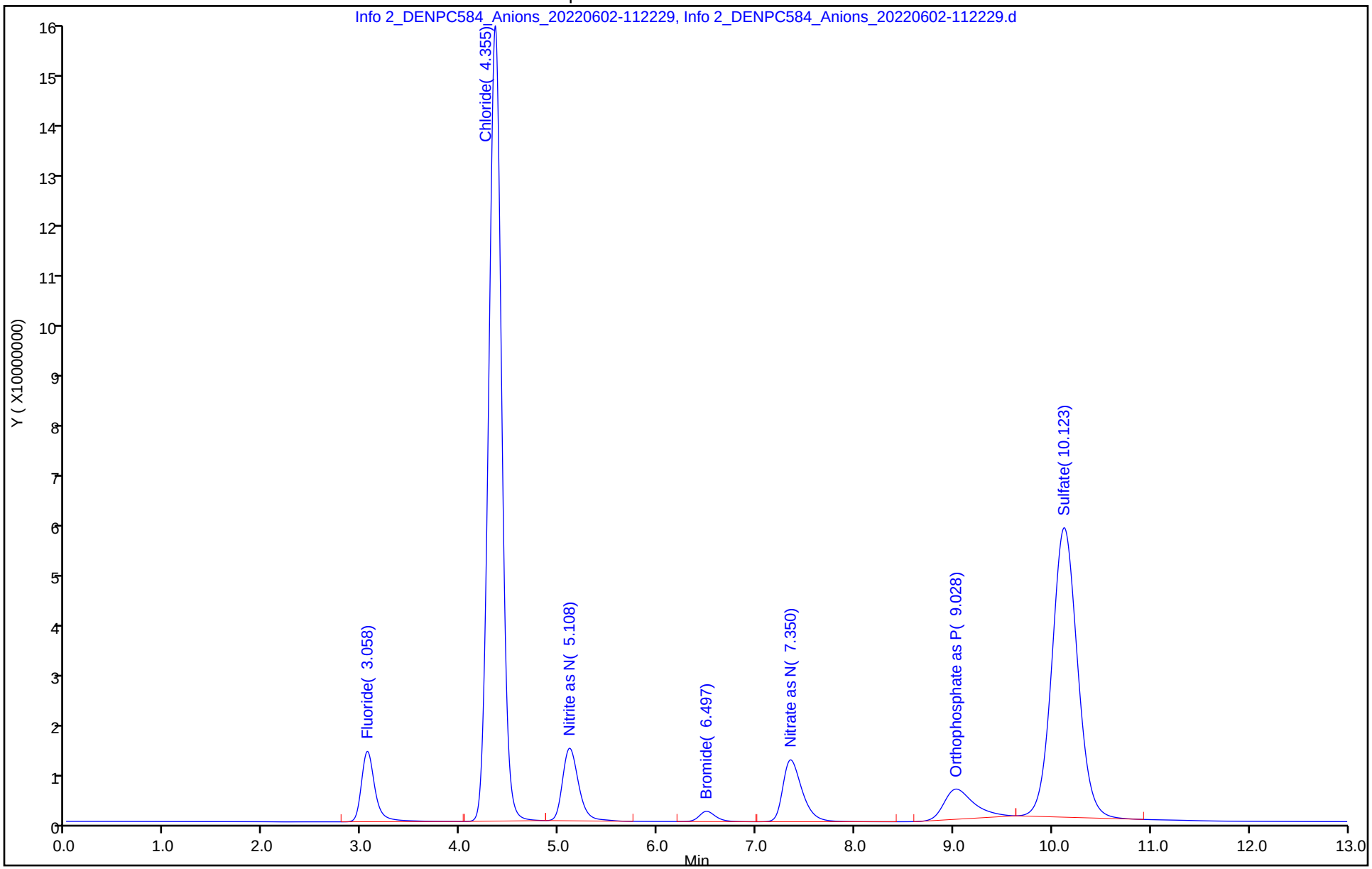
IC LCS_01879 Amount Added: 10.00 Units: mL

Report Date: 03-Jun-2022 13:11:28 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-112229.d

Injection Date:	02-Jun-2022 11:06:00	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		



Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-112

Injection Date: 02-Jun-2022 11:06:00 Instrument ID: WC_IonChrom13

Lims ID: CCV

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 1

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

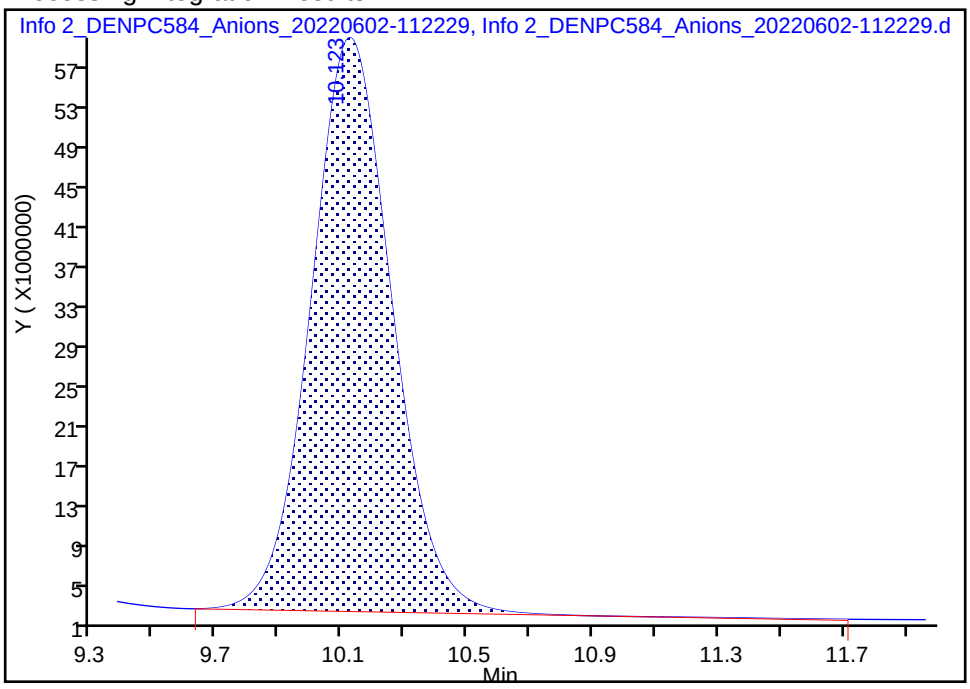
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

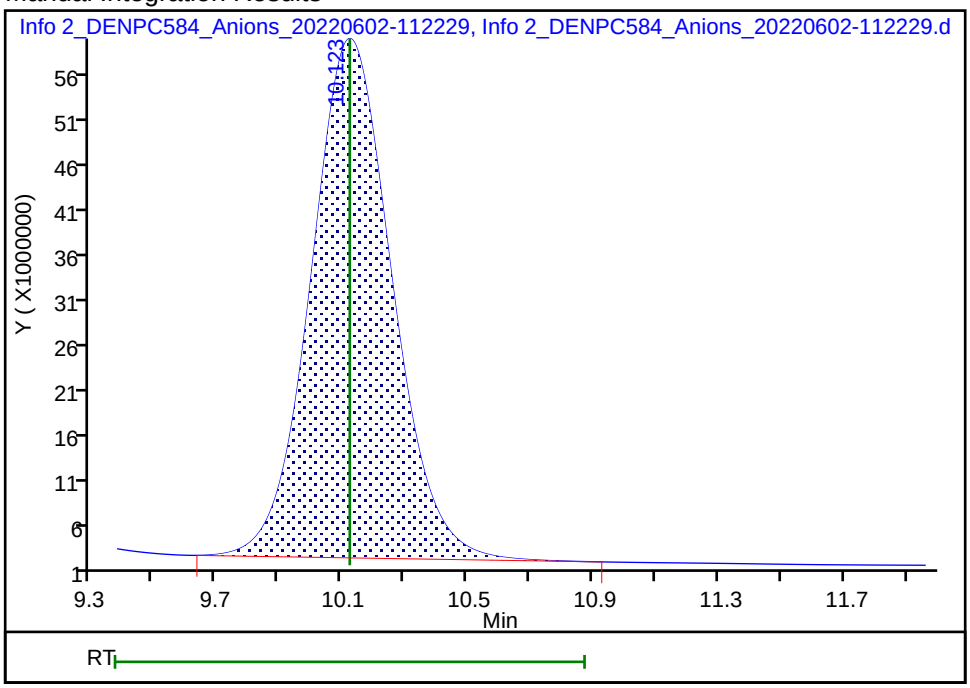
Processing Integration Results

RT: 10.12
Area: 1022401703
Amount: 100.0604
Amount Units: ug/ml



Manual Integration Results

RT: 10.12
Area: 1020346465
Amount: 99.859906
Amount Units: ug/ml



Reviewer: foxr, 02-Jun-2022 11:32:18

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-113
Lims ID: CCB
Client ID:
Sample Type: CCB
Inject. Date: 02-Jun-2022 11:22:00 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0111527-002
Misc. Info.: 280-0111527-002
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 03-Jun-2022 13:11:28 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1621

First Level Reviewer: foxr Date: 02-Jun-2022 11:57:59

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.058				ND	
2 Chloride		4.355				ND	U
3 Nitrite as N		5.108				ND	
4 Bromide		6.497				ND	
5 Nitrate as N		7.350				ND	
7 Orthophosphate as P		9.028				ND	U
6 Sulfate	10.228	10.123	0.105	470368		0.3457	

QC Flag Legend

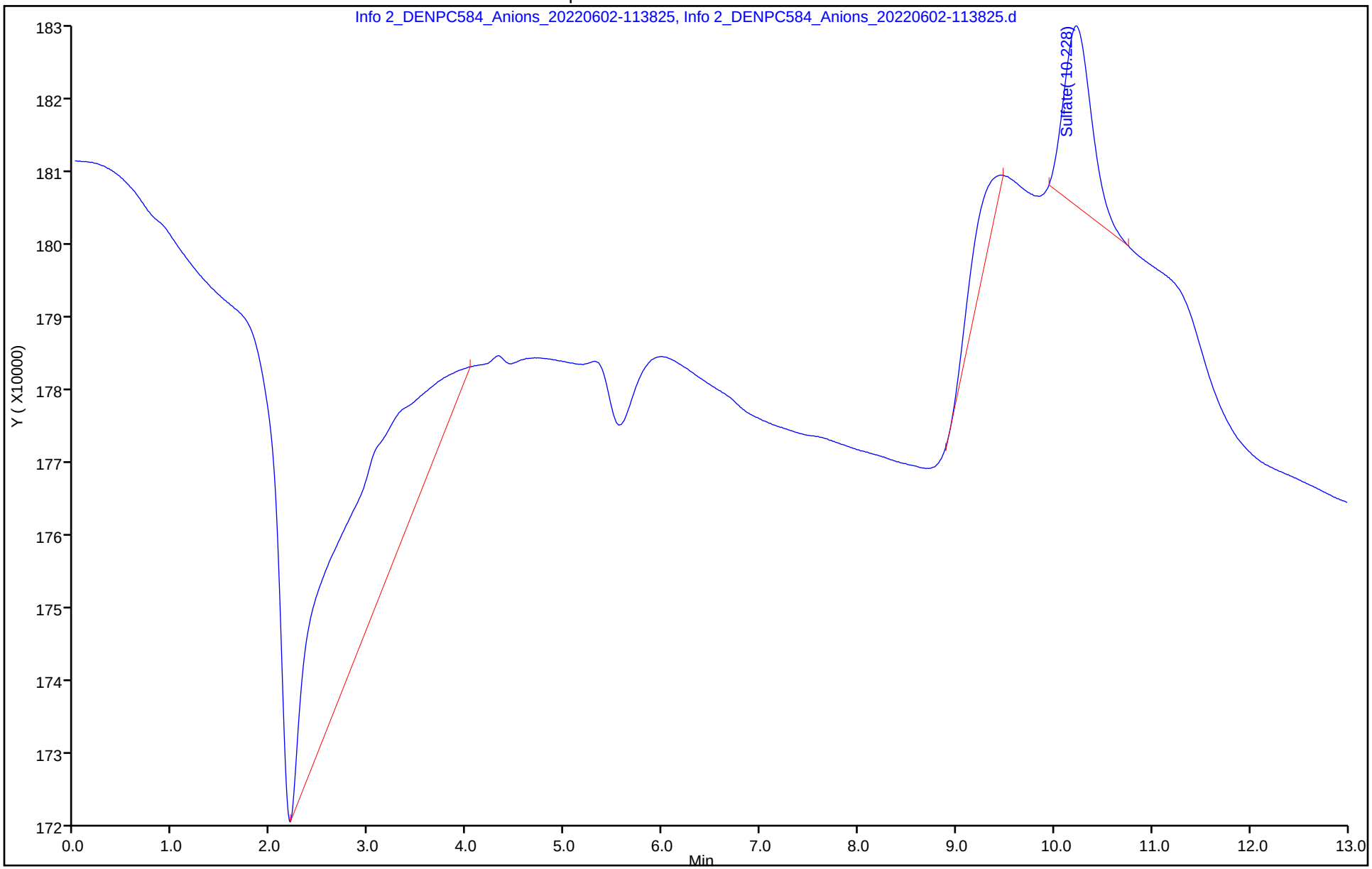
Processing Flags
Review Flags
U - Marked Undetected

Report Date: 03-Jun-2022 13:11:29 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-113825.d

Injection Date:	02-Jun-2022 11:22:00	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 Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-115
Lims ID: MRL
Client ID:
Sample Type: MRL
Inject. Date: 02-Jun-2022 11:38:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0111527-003
Misc. Info.: 280-0111527-003
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 03-Jun-2022 13:11:28 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1621

First Level Reviewer: foxr Date: 02-Jun-2022 11:58:22

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.053	3.058	-0.005	8686166	0.5000	0.3952	M
2 Chloride	4.335	4.355	-0.020	59458226	5.00	4.37	
3 Nitrite as N	5.140	5.108	0.032	12032387	NC	NC	
4 Bromide	6.535	6.497	0.038	1944685	0.5000	0.4342	
5 Nitrate as N	7.463	7.350	0.113	11756018	NC	NC	
7 Orthophosphate as P	9.148	9.028	0.120	3660016	NC	NC	
6 Sulfate	10.168	10.123	0.045	38499161	5.00	4.06	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

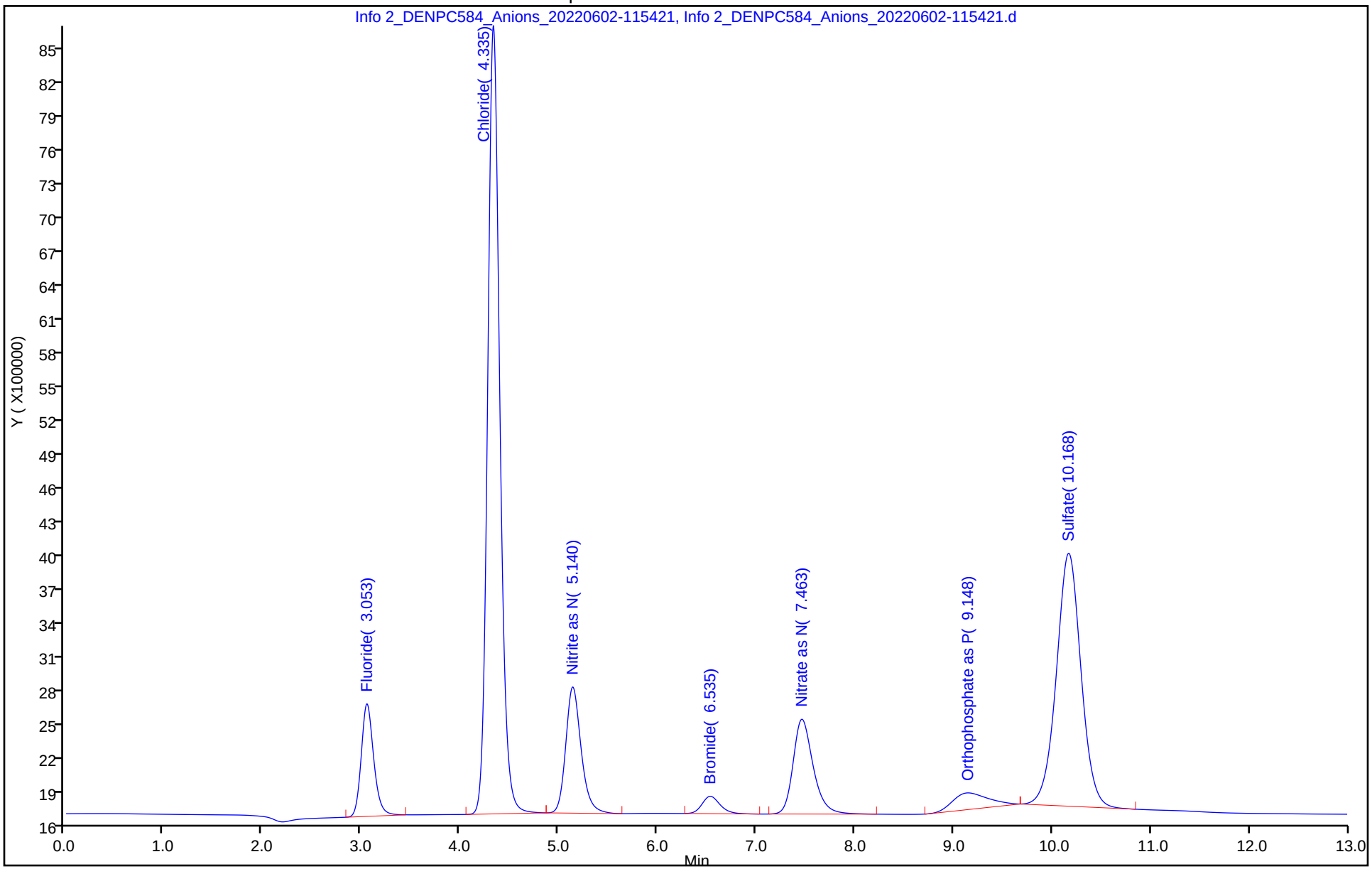
Reagents:

IC Cal low_00642 Amount Added: 0.10 Units: mL
IC CAL cl/so4_00424 Amount Added: 0.20 Units: mL

Report Date: 03-Jun-2022 13:11:30 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-115421.d				
Injection Date:	02-Jun-2022 11:38:00	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		



Manual Integration/User Assign Peak Report

Eurofins Denver

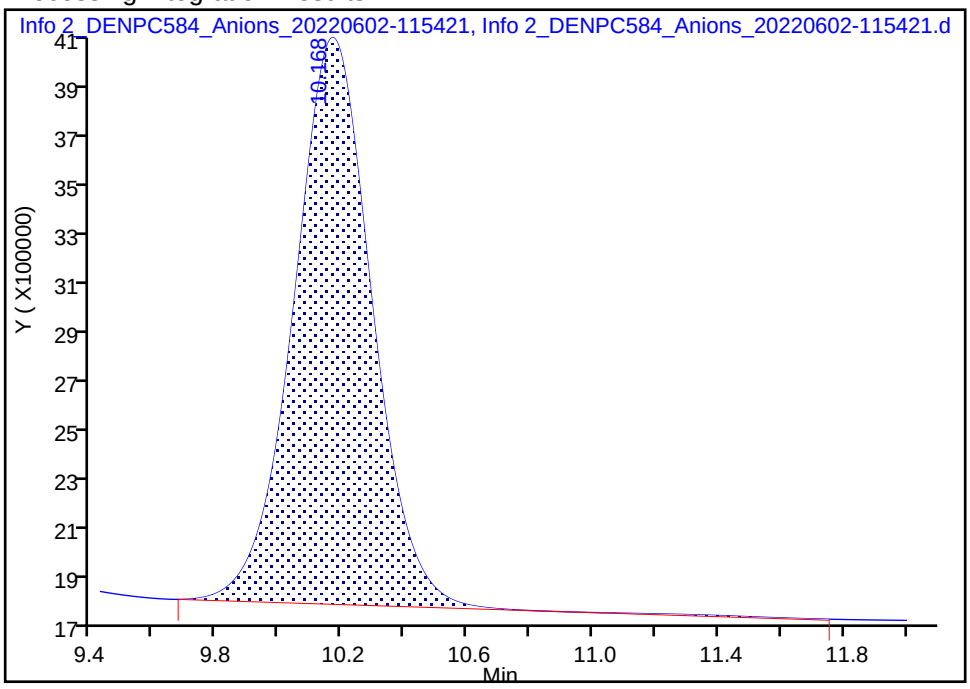
Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-115
Injection Date: 02-Jun-2022 11:38:00 Instrument ID: WC_IonChrom13
Lims ID: MRL
Client ID:
Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: Anions-IC13 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

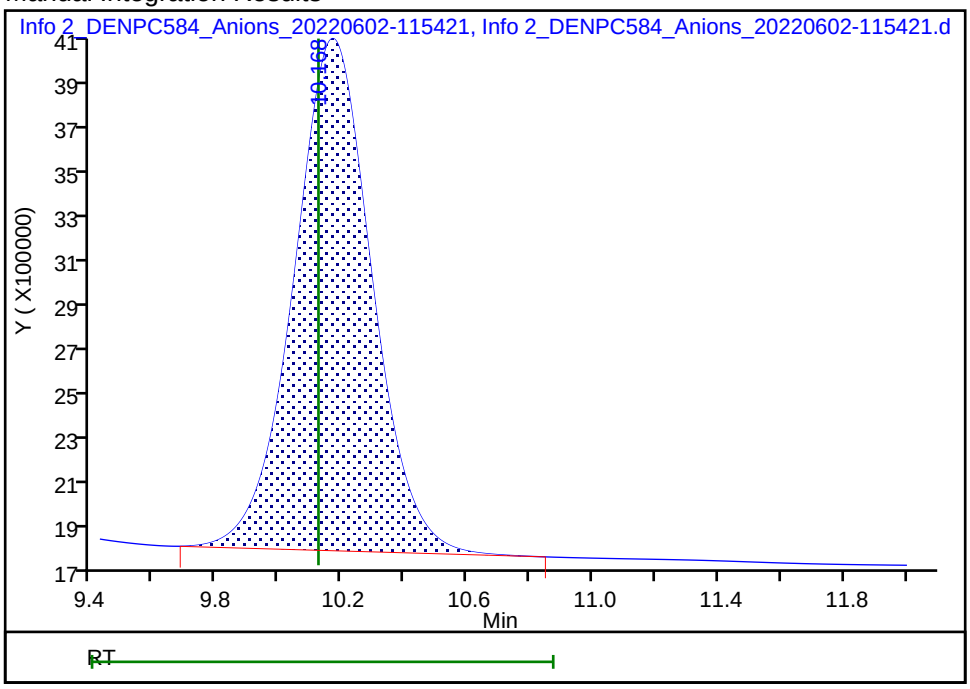
Processing Integration Results

RT: 10.17
Area: 38664087
Amount: 4.072485
Amount Units: ug/ml



Manual Integration Results

RT: 10.17
Area: 38499161
Amount: 4.056393
Amount Units: ug/ml



Reviewer: foxr, 02-Jun-2022 11:58:20
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-121
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 02-Jun-2022 11:54:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0111527-004
Misc. Info.: 280-0111527-004
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 03-Jun-2022 13:11:28 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1621

First Level Reviewer: foxr Date: 02-Jun-2022 12:11:36

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.062	3.058	0.004	132255663	5.00	4.75	M
2 Chloride	4.362	4.355	0.007	1416741399	100.0	99.3	
3 Nitrite as N	5.118	5.108	0.010	157043528	NC	NC	
4 Bromide	6.513	6.497	0.016	23397021	5.00	4.63	
5 Nitrate as N	7.368	7.350	0.018	163643157	NC	NC	
7 Orthophosphate as P	9.035	9.028	0.007	128556381	NC	NC	
6 Sulfate	10.137	10.123	0.014	1012401989	100.0	99.1	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

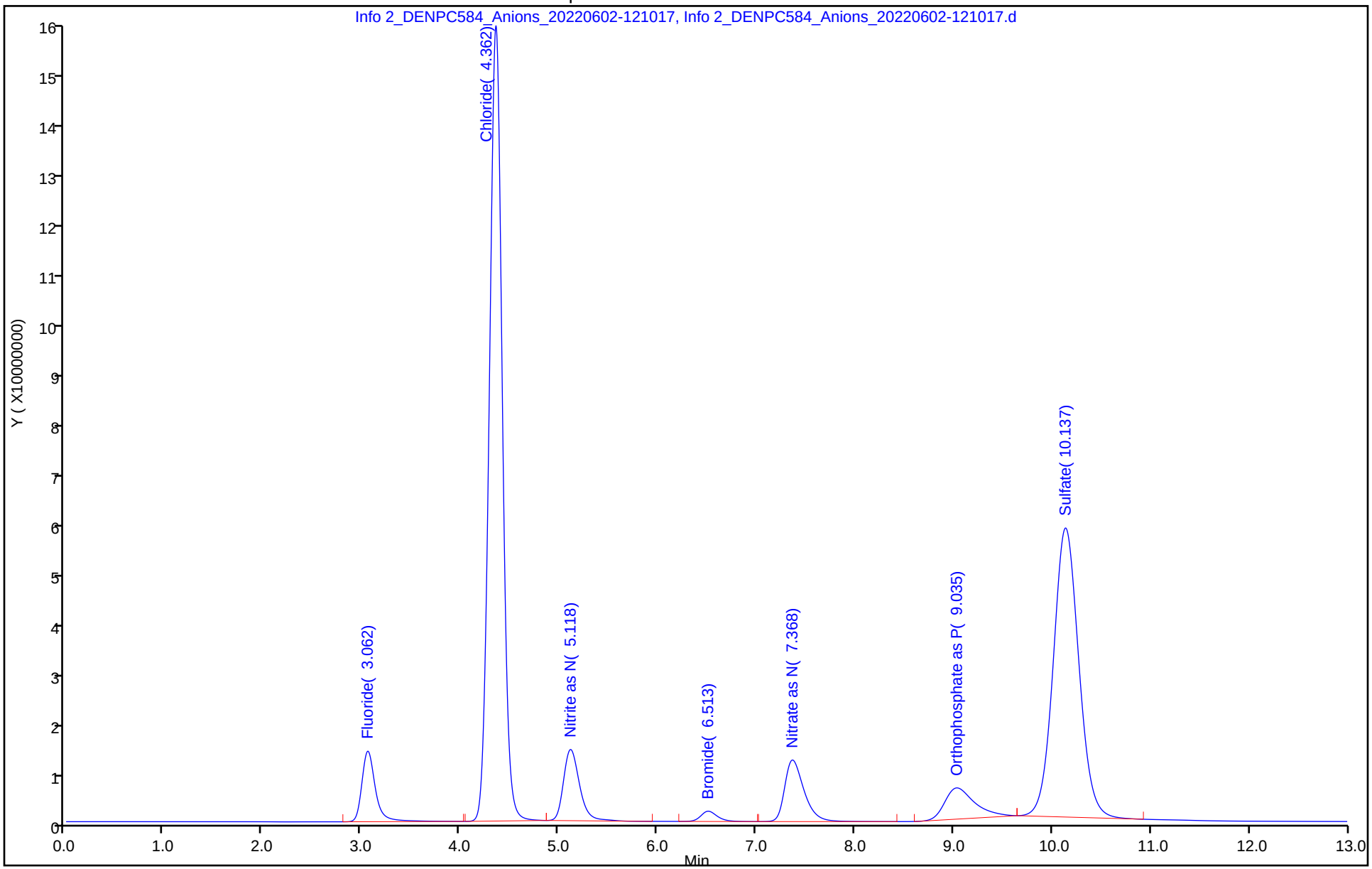
IC LCS_01879 Amount Added: 10.00 Units: mL

Report Date: 03-Jun-2022 13:11:30 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-121017.d

Injection Date:	02-Jun-2022 11:54:00	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		



Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-121

Injection Date: 02-Jun-2022 11:54:00 Instrument ID: WC_IonChrom13

Lims ID: LCS

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

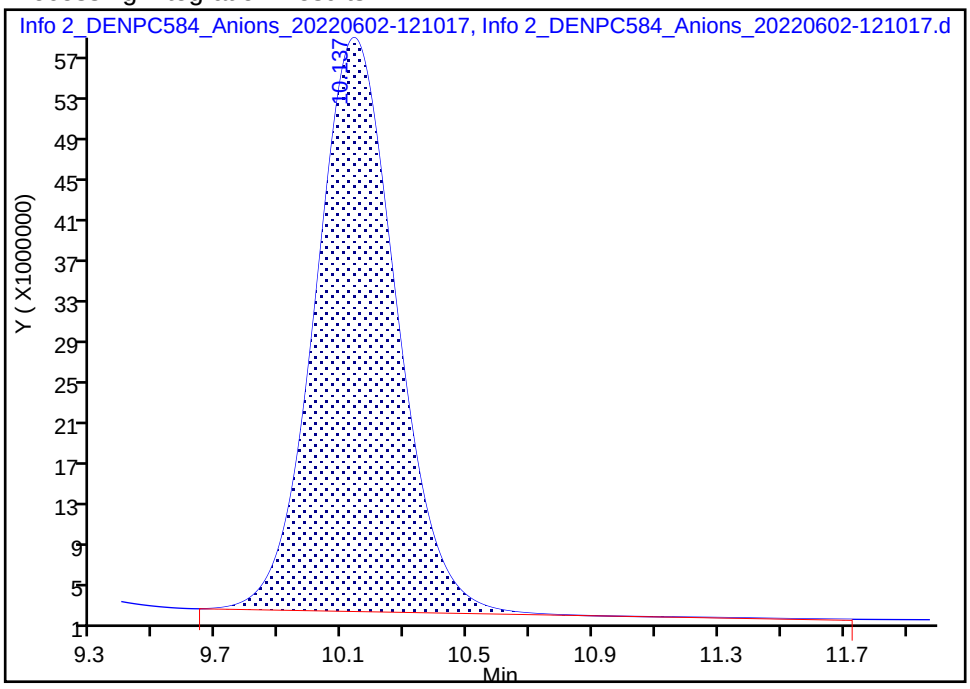
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

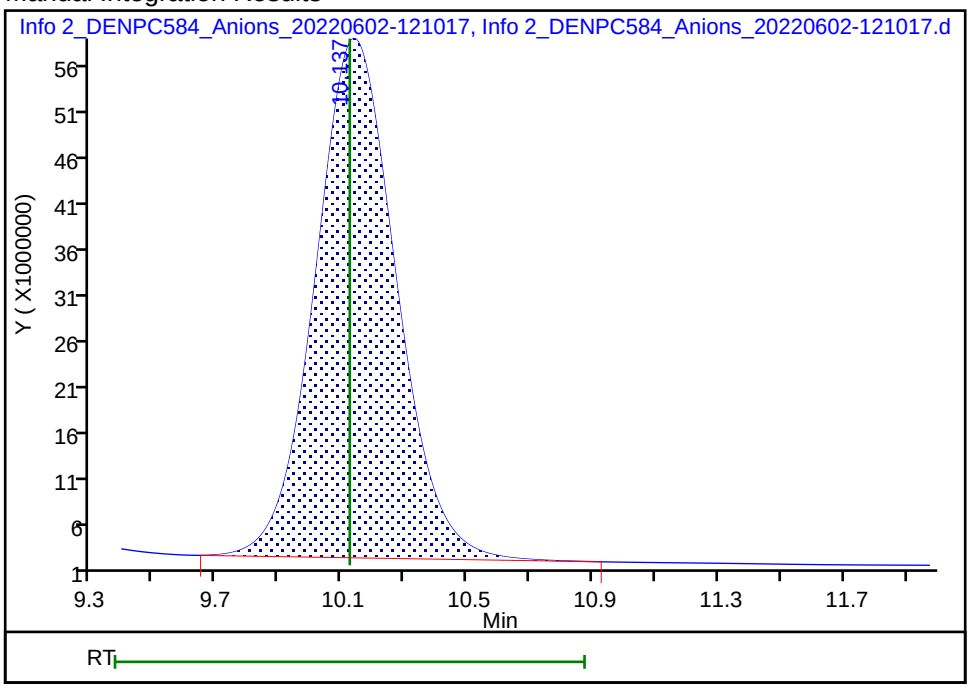
Processing Integration Results

RT: 10.14
Area: 1014596186
Amount: 99.298824
Amount Units: ug/ml



Manual Integration Results

RT: 10.14
Area: 1012401989
Amount: 99.084726
Amount Units: ug/ml



Reviewer: foxr, 02-Jun-2022 12:11:32

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-122
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 02-Jun-2022 12:10:00 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0111527-005
Misc. Info.: 280-0111527-005
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 03-Jun-2022 13:11:28 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1621

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.063	3.058	0.005	132465944	5.00	4.75	
2 Chloride	4.362	4.355	0.007	1424025170	100.0	99.8	
3 Nitrite as N	5.117	5.108	0.009	157530525	NC	NC	
4 Bromide	6.510	6.497	0.013	23587020	5.00	4.67	
5 Nitrate as N	7.363	7.350	0.013	164720851	NC	NC	
7 Orthophosphate as P	9.037	9.028	0.009	127072156	NC	NC	
6 Sulfate	10.142	10.123	0.019	1019644544	100.0	99.8	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

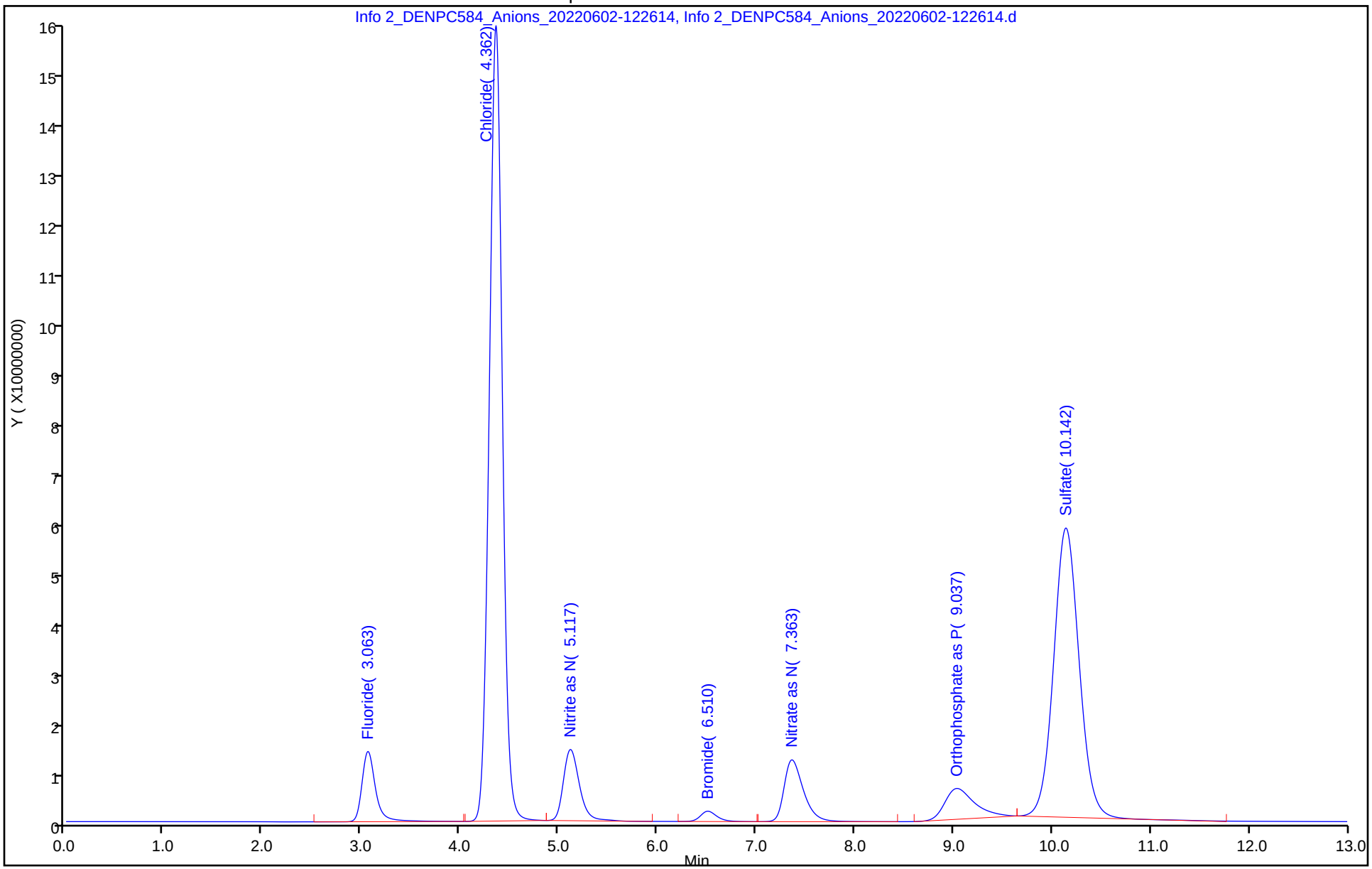
IC LCS_01879 Amount Added: 10.00 Units: mL

Report Date: 03-Jun-2022 13:11:31 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-122614.d

Injection Date:	02-Jun-2022 12:10:00	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 Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-124
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 02-Jun-2022 12:26:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0111527-006
Misc. Info.: 280-0111527-006
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 03-Jun-2022 13:11:28 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1621

First Level Reviewer: foxr Date: 03-Jun-2022 12:54:21

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.058				ND	
2 Chloride	4.337	4.355	-0.018	13954		0.2114	M
3 Nitrite as N		5.108				ND	
4 Bromide		6.497				ND	
5 Nitrate as N		7.350				ND	
7 Orthophosphate as P		9.028				ND	U
6 Sulfate	10.243	10.123	0.120	465150		0.3452	

QC Flag Legend

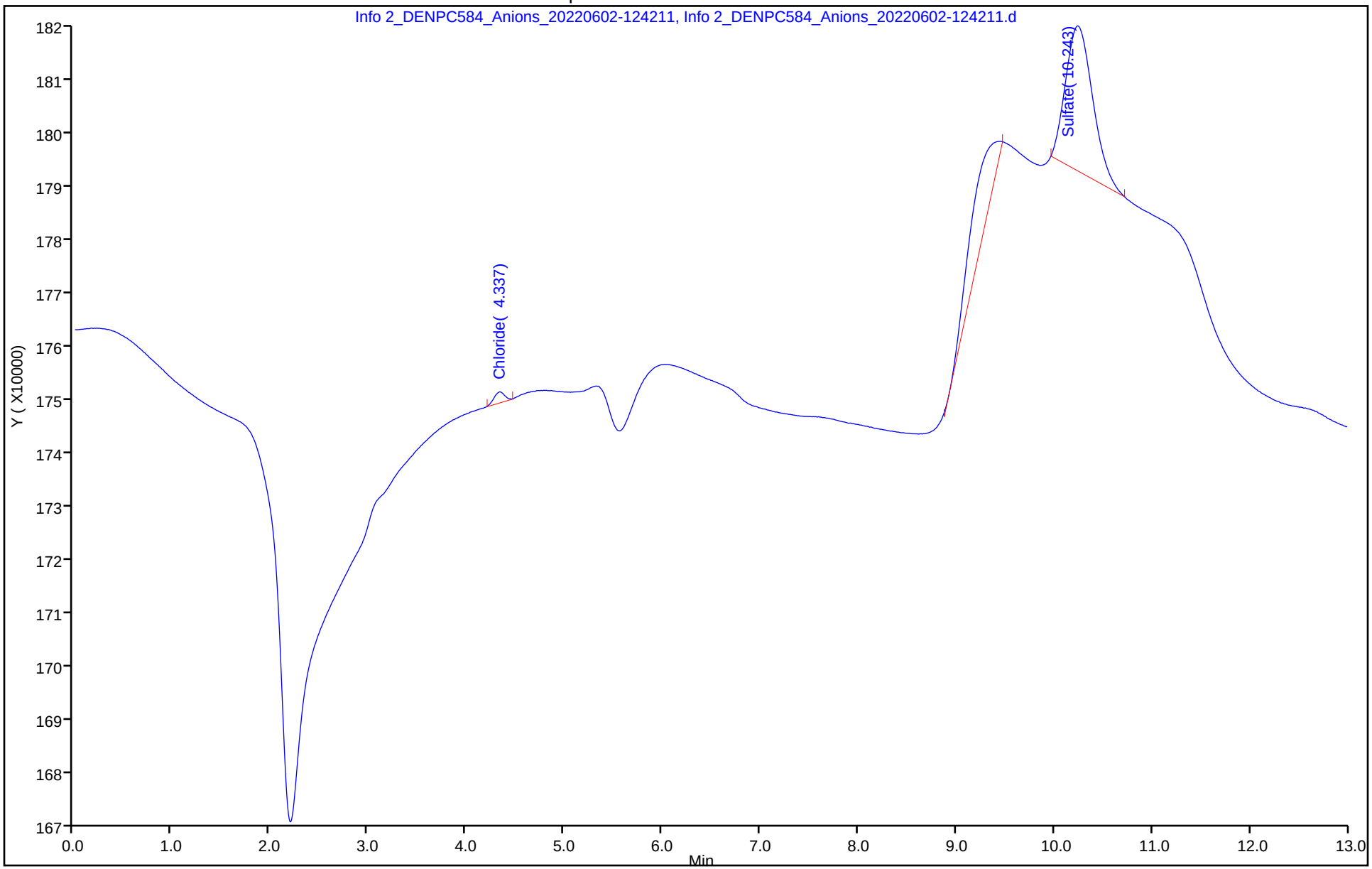
Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 03-Jun-2022 13:11:32 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-124211.d

Injection Date:	02-Jun-2022 12:26:00	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 Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-143
Lims ID: 280-162622-F-2
Client ID: G0121-22A
Sample Type: Client
Inject. Date: 02-Jun-2022 14:18:00 ALS Bottle#: 0 Worklist Smp#: 13
Injection Vol: 5.0 ul Dil. Factor: 5.0000
Sample Info: 280-0111527-013
Misc. Info.: 280-0111527-013
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 03-Jun-2022 13:11:28 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1621

First Level Reviewer: foxr Date: 03-Jun-2022 12:56:02

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.060	3.058	0.002	1107866	0.1284	
2 Chloride	4.345	4.355	-0.010	171530526	12.2	
3 Nitrite as N		5.108			ND	
4 Bromide	6.573	6.497	0.076	277445	0.1080	
5 Nitrate as N		7.350			ND	
7 Orthophosphate as P	9.235	9.028	0.207	21636394	NC	
6 Sulfate	10.170	10.123	0.047	584752902	57.4	M

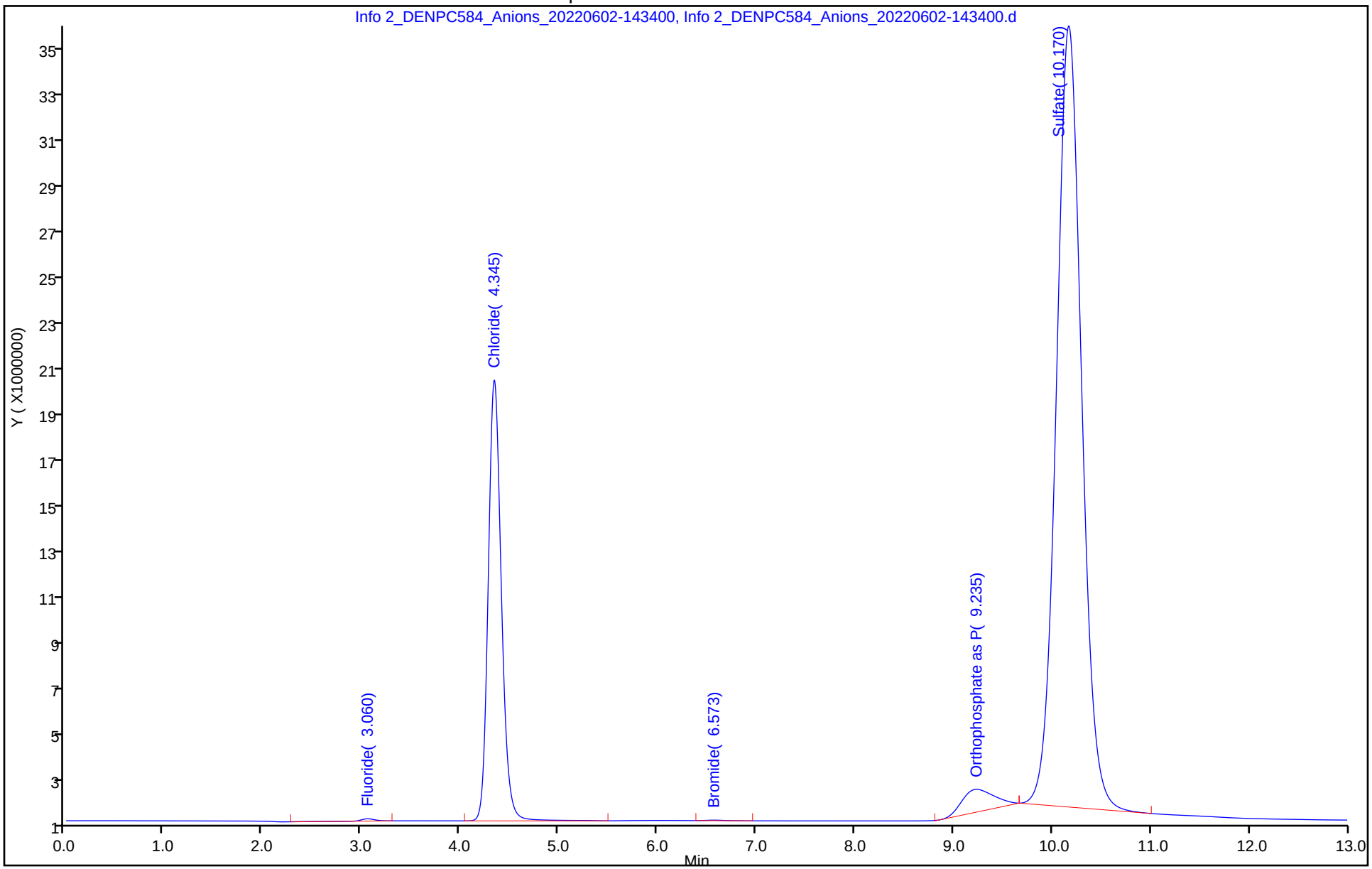
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 03-Jun-2022 13:11:34 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-143400.d				
Injection Date:	02-Jun-2022 14:18:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-162622-F-2	Lab Sample ID:	280-162622-2	Worklist Smp#:	13
Client ID:	G0121-22A				
Injection Vol:	5.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

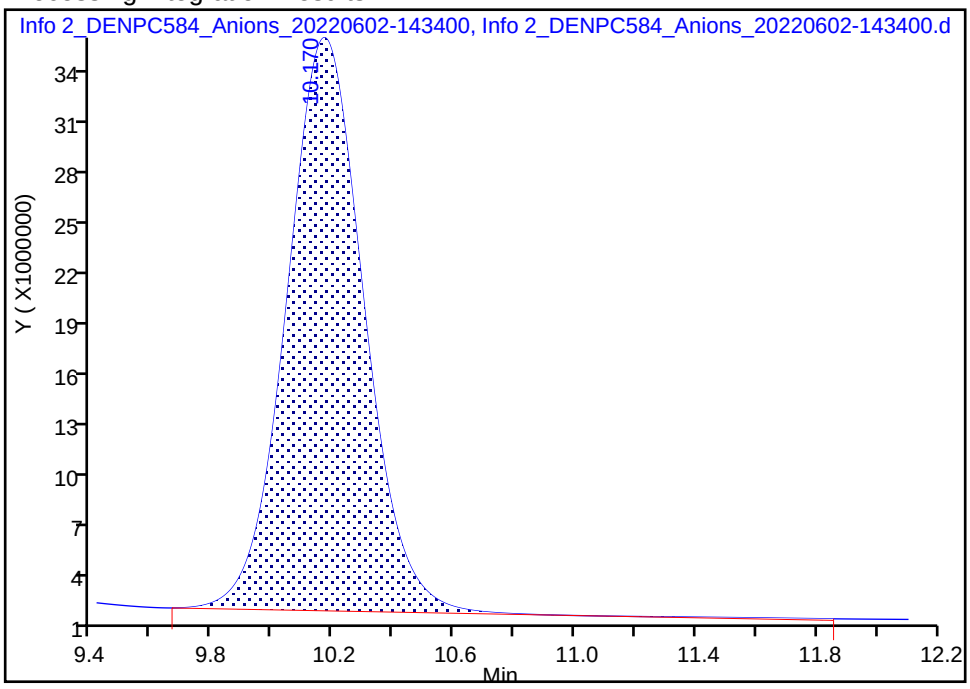
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-143				
Injection Date:	02-Jun-2022 14:18:00	Instrument ID:	WC_IonChrom13		
Lims ID:	280-162622-F-2	Lab Sample ID:	280-162622-2		
Client ID:	G0121-22A				
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	13
Injection Vol:	5.0 ul	Dil. Factor:	5.0000		
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

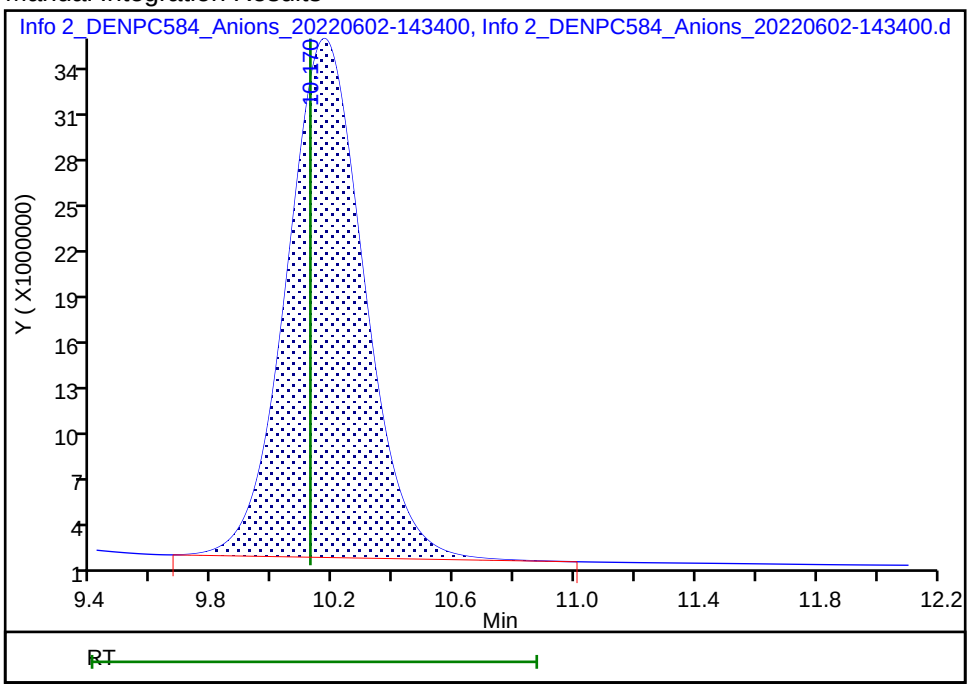
Processing Integration Results

RT: 10.17
Area: 586871131
Amount: 57.563655
Amount Units: ug/ml



Manual Integration Results

RT: 10.17
Area: 584752902
Amount: 57.356970
Amount Units: ug/ml



Reviewer: foxr, 03-Jun-2022 12:55:59
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-144
Lims ID: 280-162622-F-3
Client ID: G0101-22A
Sample Type: Client
Inject. Date: 02-Jun-2022 14:34:00 ALS Bottle#: 0 Worklist Smp#: 14
Injection Vol: 5.0 ul Dil. Factor: 5.0000
Sample Info: 280-0111527-014
Misc. Info.: 280-0111527-014
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 03-Jun-2022 13:11:28 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

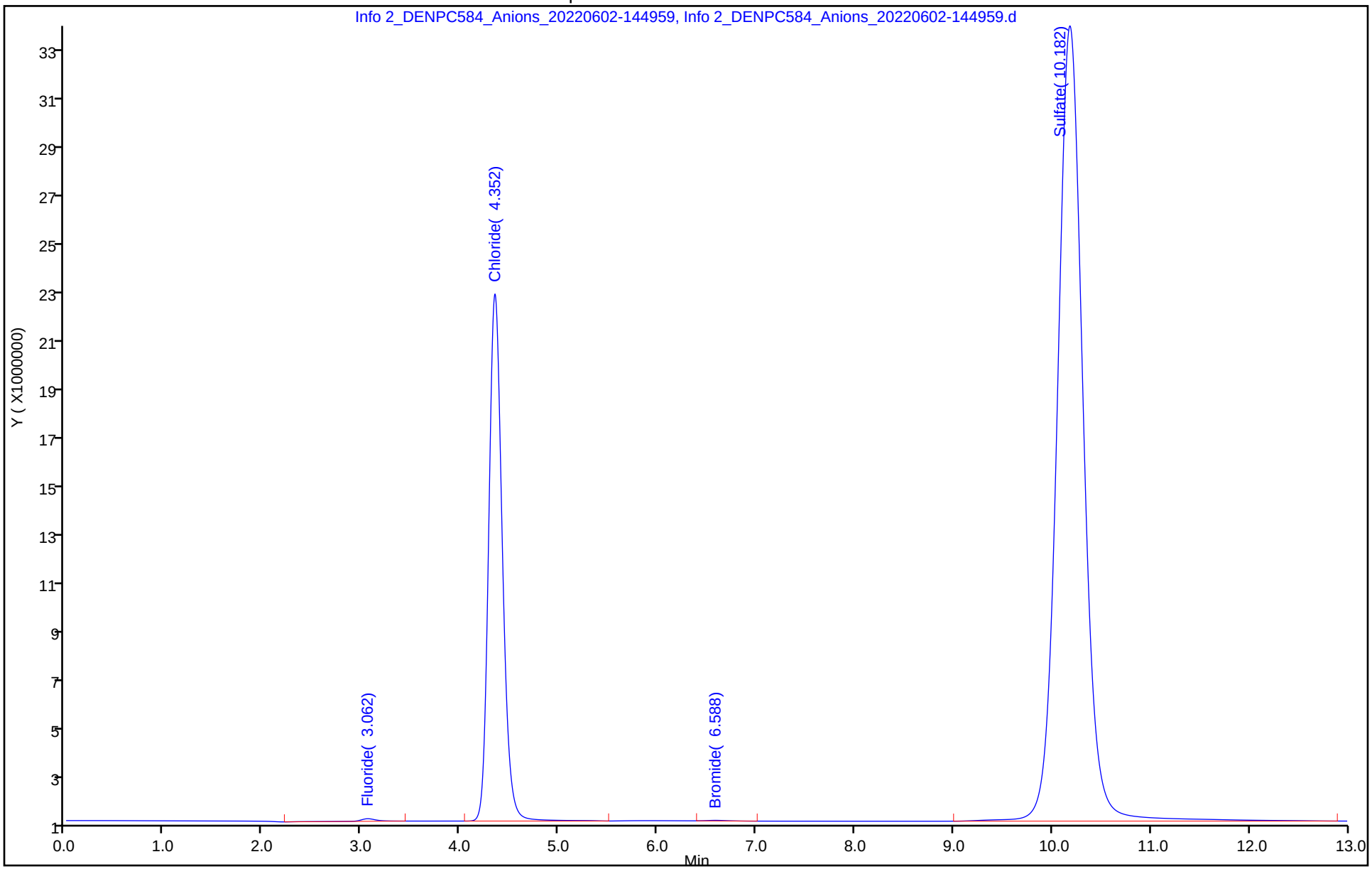
Column 1 : Det: 0005
Process Host: CTX1621

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.062	3.058	0.004	1312518	0.1356	
2 Chloride	4.352	4.355	-0.003	204090810	14.5	
3 Nitrite as N		5.108			ND	
4 Bromide	6.588	6.497	0.091	307558	0.1139	
5 Nitrate as N		7.350			ND	
7 Orthophosphate as P		9.028			ND	
6 Sulfate	10.182	10.123	0.059	586053586	57.5	

Report Date: 03-Jun-2022 13:11:35 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-144959.d				
Injection Date:	02-Jun-2022 14:34:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-162622-F-3	Lab Sample ID:	280-162622-3	Worklist Smp#:	14
Client ID:	G0101-22A				
Injection Vol:	5.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-150
Lims ID: 280-162622-F-4
Client ID: G0100-22A
Sample Type: Client
Inject. Date: 02-Jun-2022 14:50:00 ALS Bottle#: 0 Worklist Smp#: 15
Injection Vol: 5.0 ul Dil. Factor: 5.0000
Sample Info: 280-0111527-015
Misc. Info.: 280-0111527-015
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 03-Jun-2022 13:11:28 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

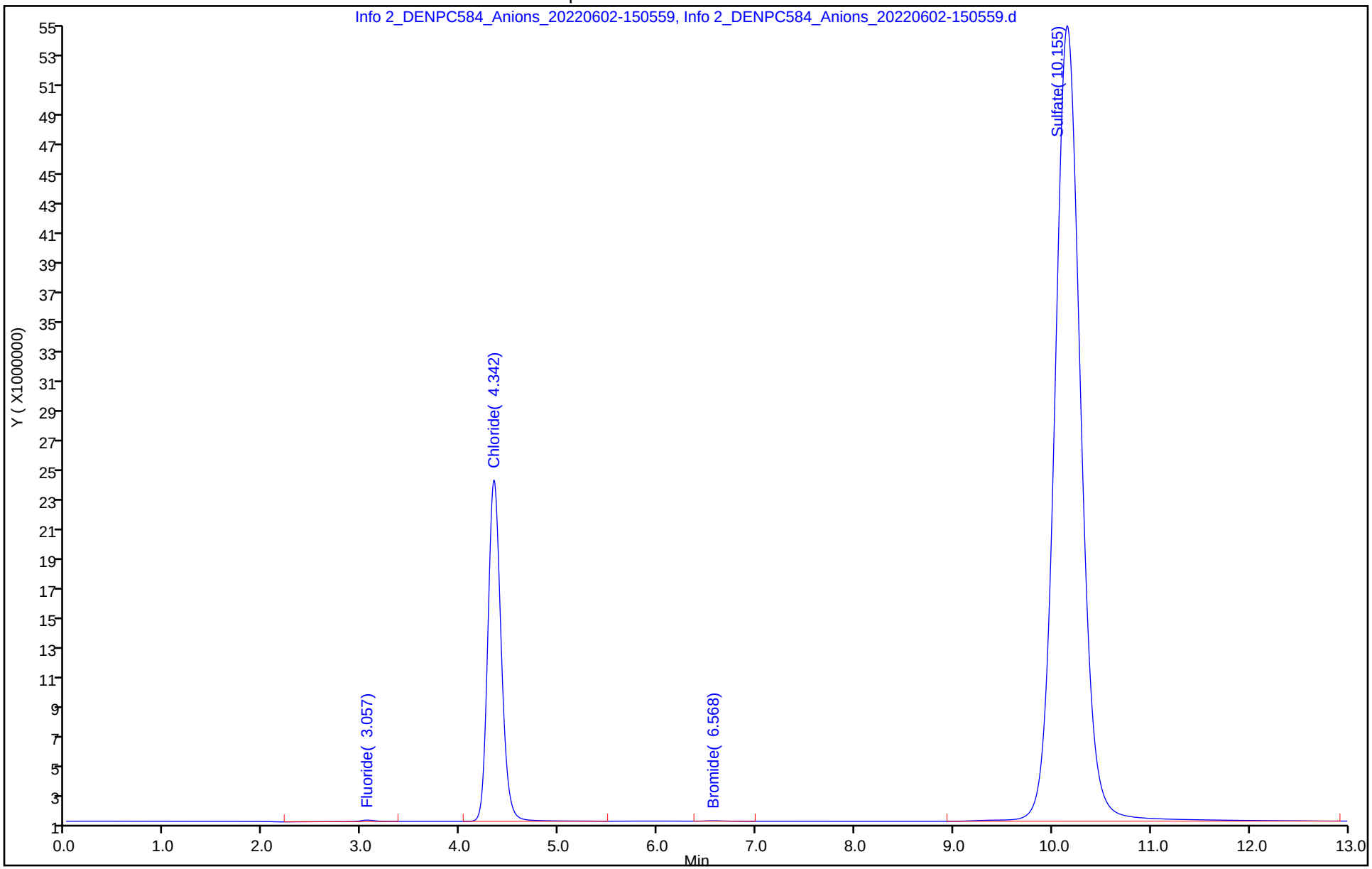
Column 1 : Det: 0005
Process Host: CTX1621

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.057	3.058	-0.001	1120077	0.1288	
2 Chloride	4.342	4.355	-0.013	211378261	15.0	
3 Nitrite as N		5.108			ND	
4 Bromide	6.568	6.497	0.071	371719	0.1265	
5 Nitrate as N		7.350			ND	
7 Orthophosphate as P		9.028			ND	
6 Sulfate	10.155	10.123	0.032	967387110	94.7	

Report Date: 03-Jun-2022 13:11:35 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-150559.d				
Injection Date:	02-Jun-2022 14:50:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-162622-F-4	Lab Sample ID:	280-162622-4	Worklist Smp#:	15
Client ID:	G0100-22A				
Injection Vol:	5.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-152
Lims ID: 280-162622-F-8
Client ID: G0115-22A
Sample Type: Client
Inject. Date: 02-Jun-2022 15:06:00 ALS Bottle#: 0 Worklist Smp#: 16
Injection Vol: 5.0 ul Dil. Factor: 5.0000
Sample Info: 280-0111527-016
Misc. Info.: 280-0111527-016
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 03-Jun-2022 13:11:28 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

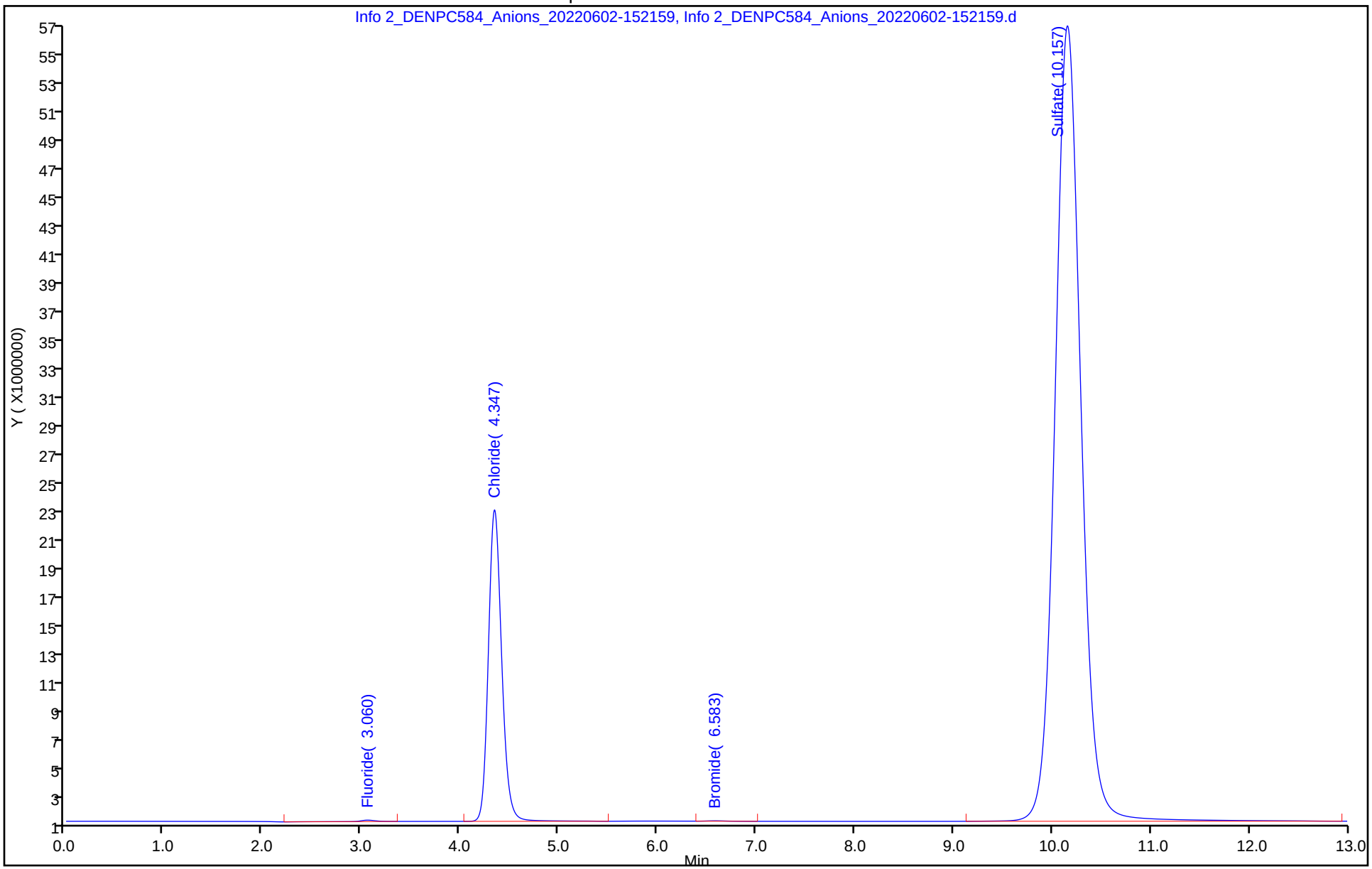
Column 1 : Det: 0005
Process Host: CTX1621

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.060	3.058	0.002	1105321	0.1283	
2 Chloride	4.347	4.355	-0.008	202974778	14.4	
3 Nitrite as N		5.108			ND	
4 Bromide	6.583	6.497	0.086	335665	0.1194	
5 Nitrate as N		7.350			ND	
7 Orthophosphate as P		9.028			ND	
6 Sulfate	10.157	10.123	0.034	1010504015	98.9	

Report Date: 03-Jun-2022 13:11:36 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-152159.d				
Injection Date:	02-Jun-2022 15:06:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-162622-F-8	Lab Sample ID:	280-162622-8	Worklist Smp#:	16
Client ID:	G0115-22A				
Injection Vol:	5.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-153
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 02-Jun-2022 15:22:00 ALS Bottle#: 0 Worklist Smp#: 17
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0111527-017
Misc. Info.: 280-0111527-017
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub5

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 03-Jun-2022 13:11:36 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1621

First Level Reviewer: foxr Date: 03-Jun-2022 12:56:47

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.062	3.058	0.004	124174519	5.00	4.46	
2 Chloride	4.365	4.355	0.010	1425160305	100.0	99.9	
3 Nitrite as N	5.122	5.108	0.014	159547582	NC	NC	
4 Bromide	6.498	6.497	0.001	23663219	5.00	4.68	
5 Nitrate as N	7.358	7.350	0.008	164878243	NC	NC	
7 Orthophosphate as P	9.090	9.028	0.062	110778162	NC	NC	
6 Sulfate	10.145	10.123	0.022	1017634252	100.0	99.6	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

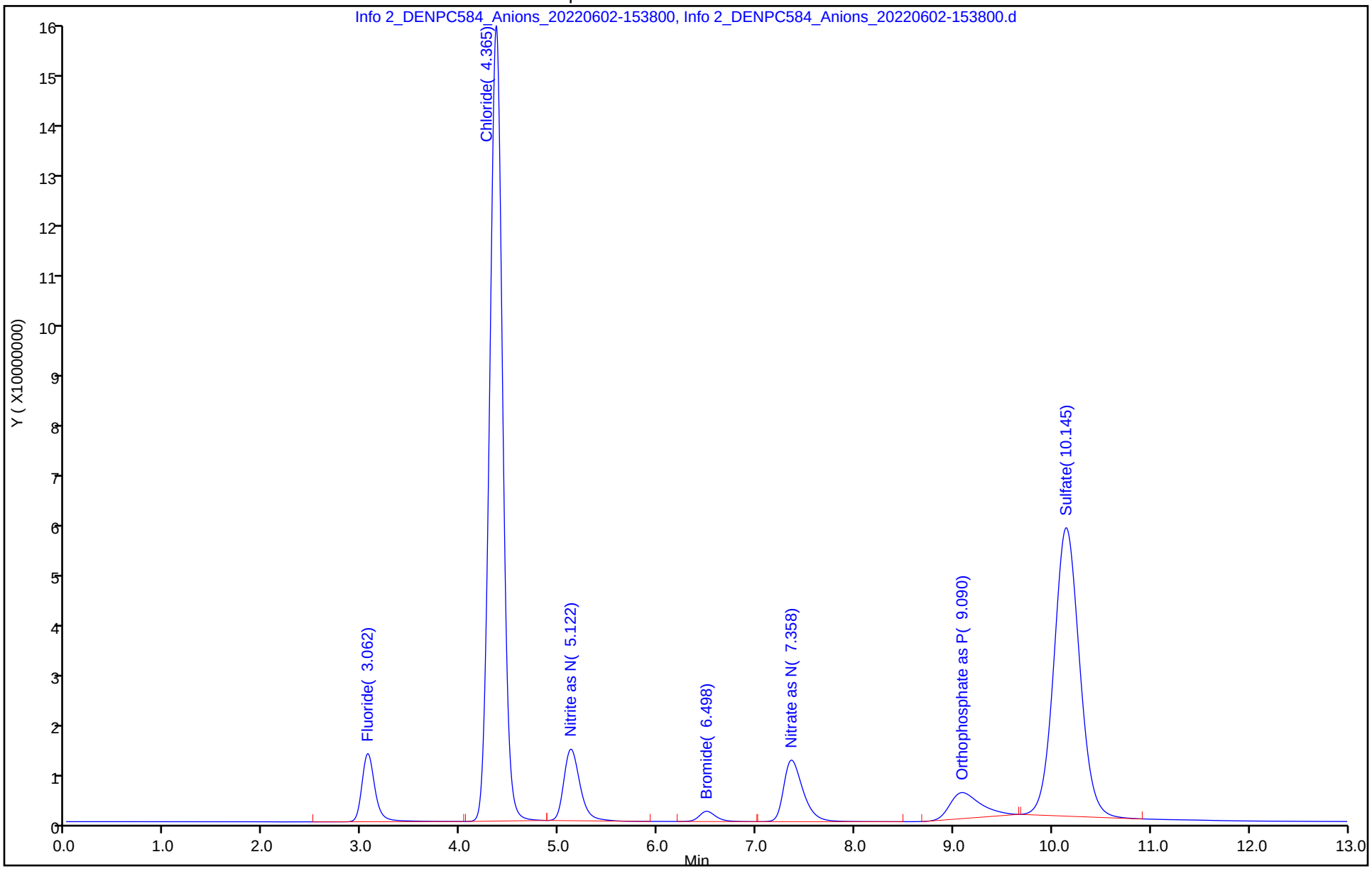
IC LCS_01879 Amount Added: 10.00 Units: mL

Report Date: 03-Jun-2022 13:11:36 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-153800.d

Injection Date:	02-Jun-2022 15:22:00	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		



Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-153

Injection Date: 02-Jun-2022 15:22:00 Instrument ID: WC_IonChrom13

Lims ID: ccv

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 17

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

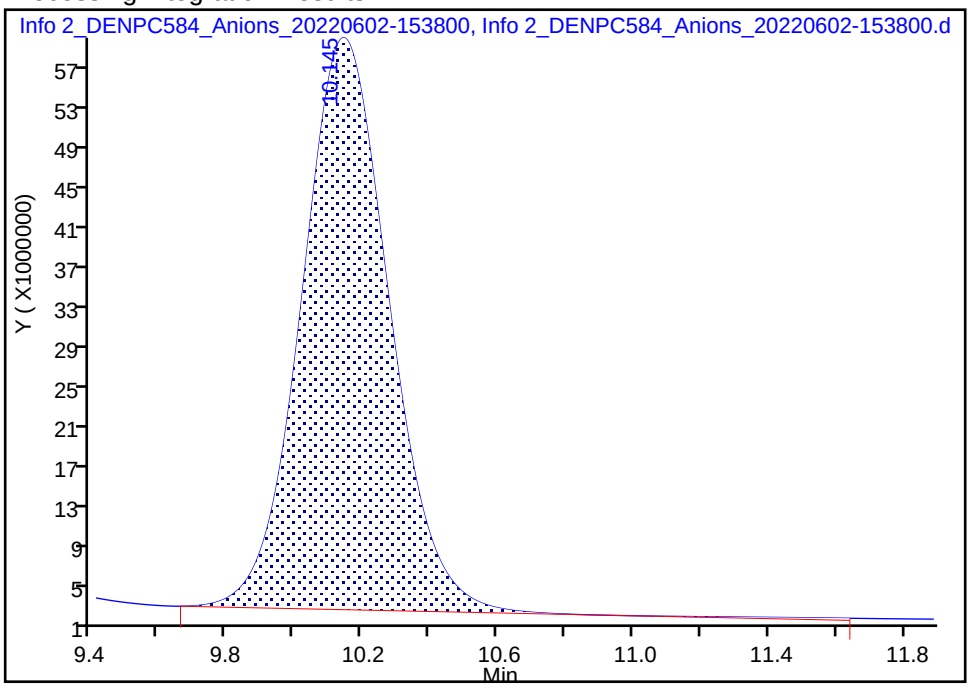
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

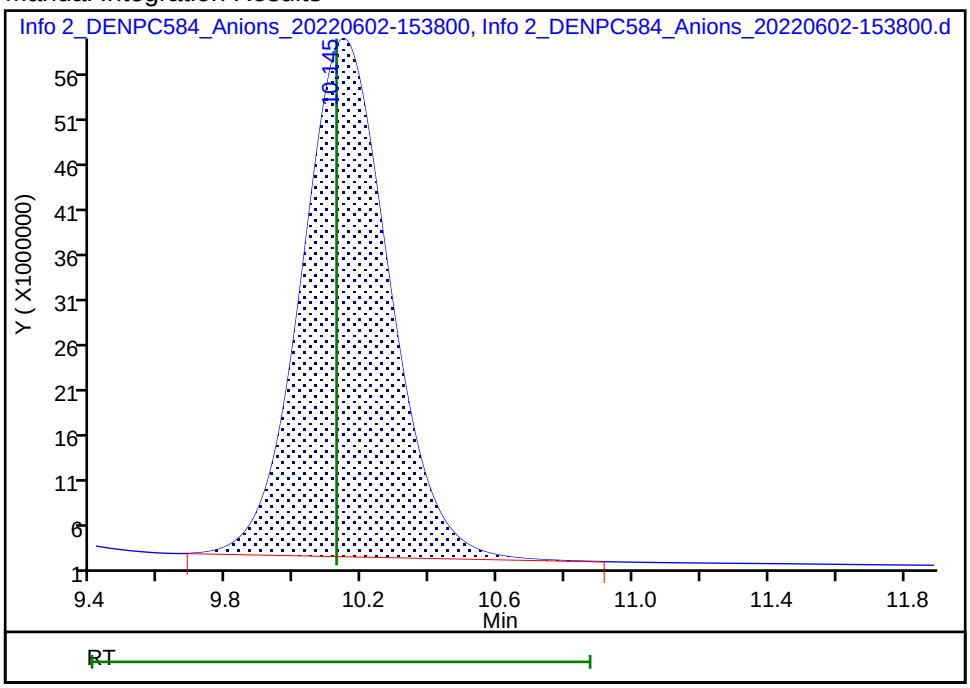
Processing Integration Results

RT: 10.15
Area: 1020600243
Amount: 99.884669
Amount Units: ug/ml



Manual Integration Results

RT: 10.15
Area: 1017634252
Amount: 99.595263
Amount Units: ug/ml



Reviewer: foxr, 03-Jun-2022 12:56:45

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-155
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 02-Jun-2022 15:38:00 ALS Bottle#: 0 Worklist Smp#: 18
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0111527-018
Misc. Info.: 280-0111527-018
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 03-Jun-2022 13:11:36 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1621

First Level Reviewer: foxr Date: 03-Jun-2022 12:57:03

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.058				ND	
2 Chloride	4.345	4.355	-0.010	25579		0.2122	Ma
3 Nitrite as N		5.108				ND	
4 Bromide		6.497				ND	
5 Nitrate as N		7.350				ND	
7 Orthophosphate as P		9.028				ND	
6 Sulfate	10.240	10.123	0.117	427686		0.3416	

QC Flag Legend

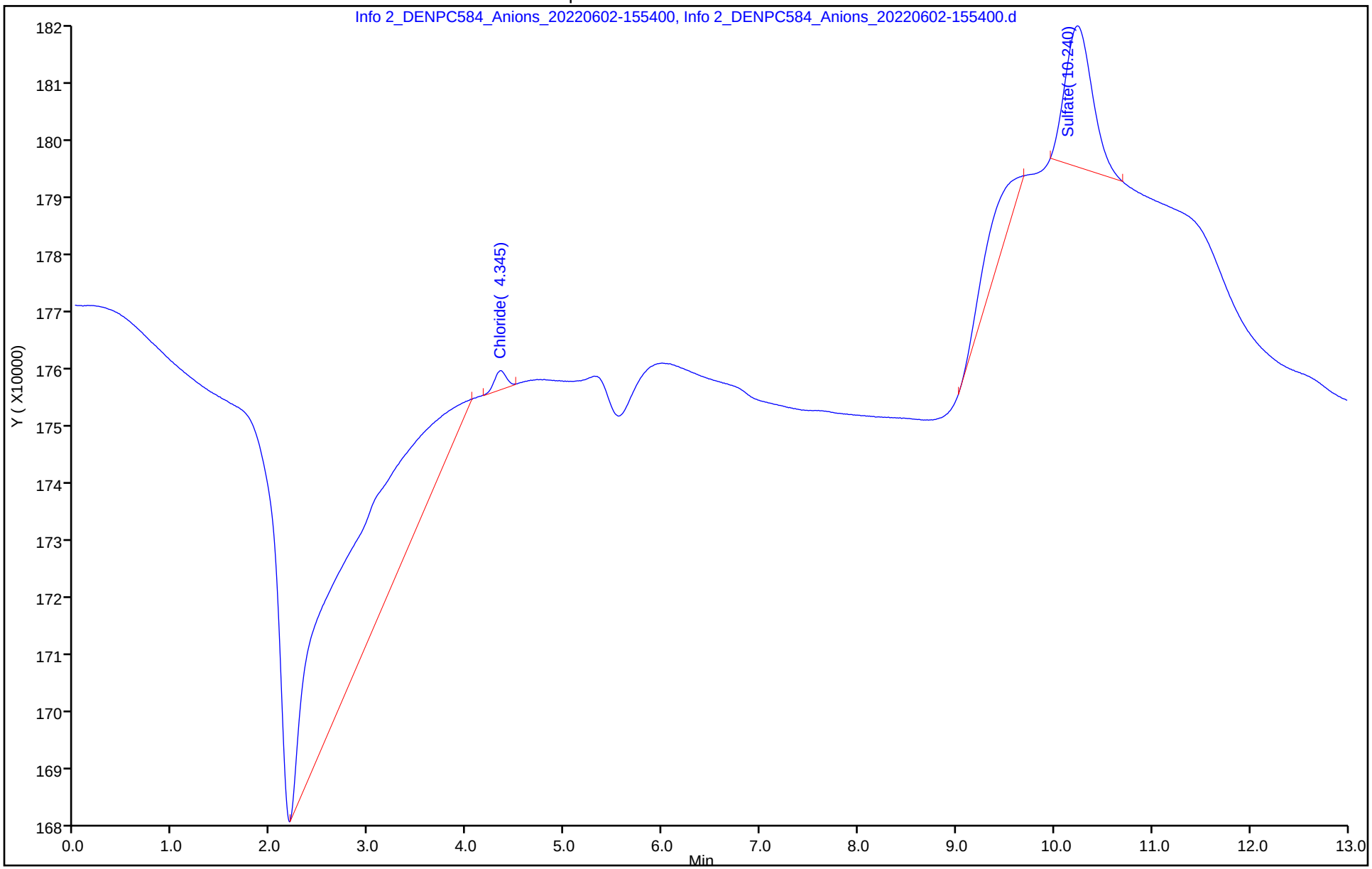
Processing Flags
Review Flags
M - Manually Integrated
a - User Assigned ID

Report Date: 03-Jun-2022 13:11:37 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-155400.d

Injection Date:	02-Jun-2022 15:38:00	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		



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-161
Lims ID: 280-162622-F-9
Client ID: G0095-22A
Sample Type: Client
Inject. Date: 02-Jun-2022 15:54:00 ALS Bottle#: 0 Worklist Smp#: 19
Injection Vol: 5.0 ul Dil. Factor: 5.0000
Sample Info: 280-0111527-019
Misc. Info.: 280-0111527-019
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 03-Jun-2022 13:11:36 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

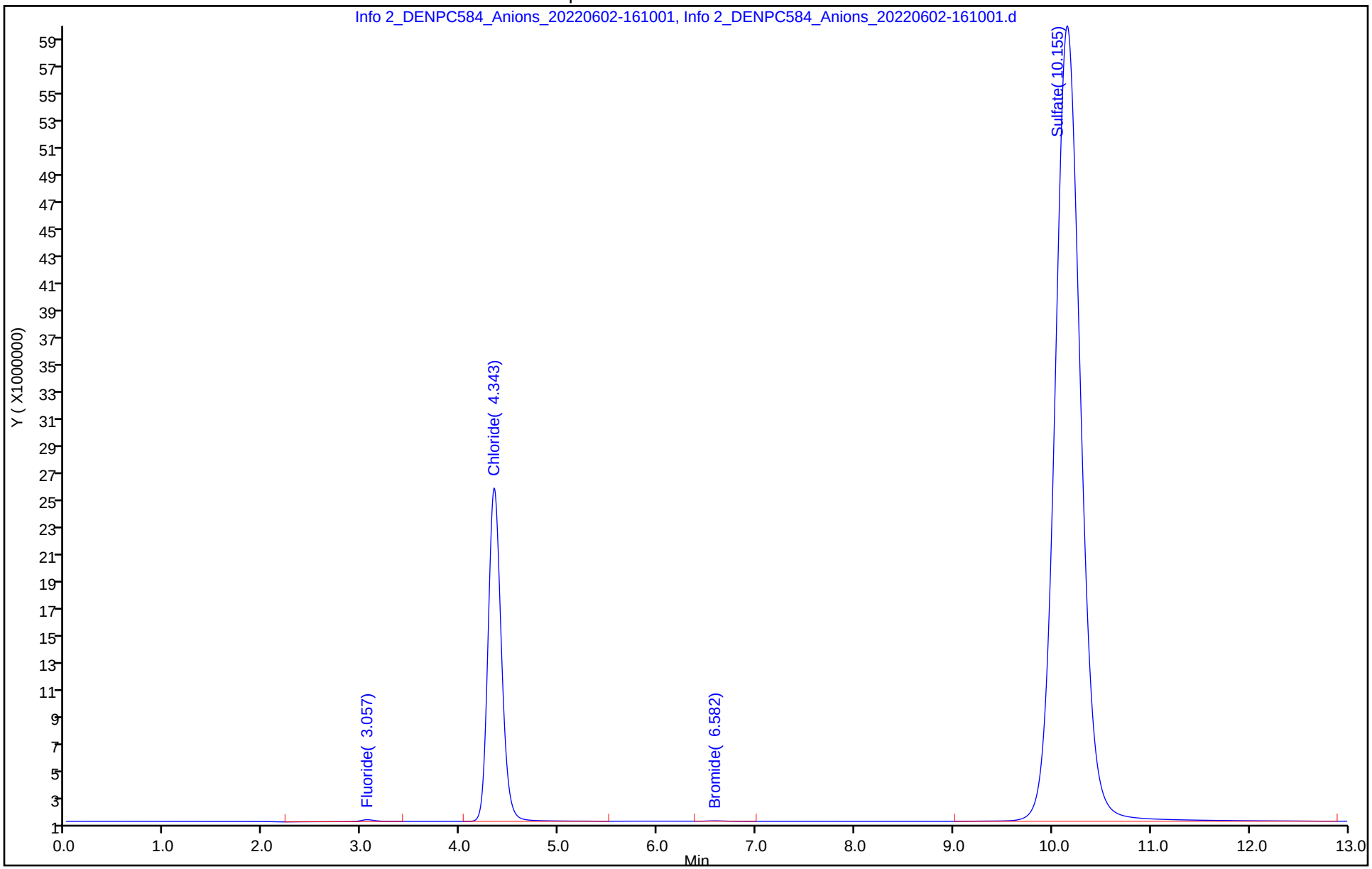
Column 1 : Det: 0005
Process Host: CTX1621

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.057	3.058	-0.001	1518683	0.1428	
2 Chloride	4.343	4.355	-0.012	228584928	16.2	
3 Nitrite as N		5.108			ND	
4 Bromide	6.582	6.497	0.085	416464	0.1352	
5 Nitrate as N		7.350			ND	
7 Orthophosphate as P		9.028			ND	
6 Sulfate	10.155	10.123	0.032	1061437785	103.9	

Report Date: 03-Jun-2022 13:11:37 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-161001.d				
Injection Date:	02-Jun-2022 15:54:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-162622-F-9	Lab Sample ID:	280-162622-9	Worklist Smp#:	19
Client ID:	G0095-22A				
Injection Vol:	5.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-185
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 02-Jun-2022 18:34:00 ALS Bottle#: 0 Worklist Smp#: 29
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0111527-029
Misc. Info.: 280-0111527-029
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub5

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 03-Jun-2022 13:11:41 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1621

First Level Reviewer: foxr Date: 03-Jun-2022 12:59:13

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.058	3.058	0.000	123577679	5.00	4.44	
2 Chloride	4.368	4.355	0.013	1427685308	100.0	100.1	
3 Nitrite as N	5.133	5.108	0.025	160246338	NC	NC	
4 Bromide	6.525	6.497	0.028	23551471	5.00	4.66	
5 Nitrate as N	7.397	7.350	0.047	164196738	NC	NC	
7 Orthophosphate as P	9.058	9.028	0.030	109881697	NC	NC	
6 Sulfate	10.127	10.123	0.004	1018547341	100.0	99.7	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

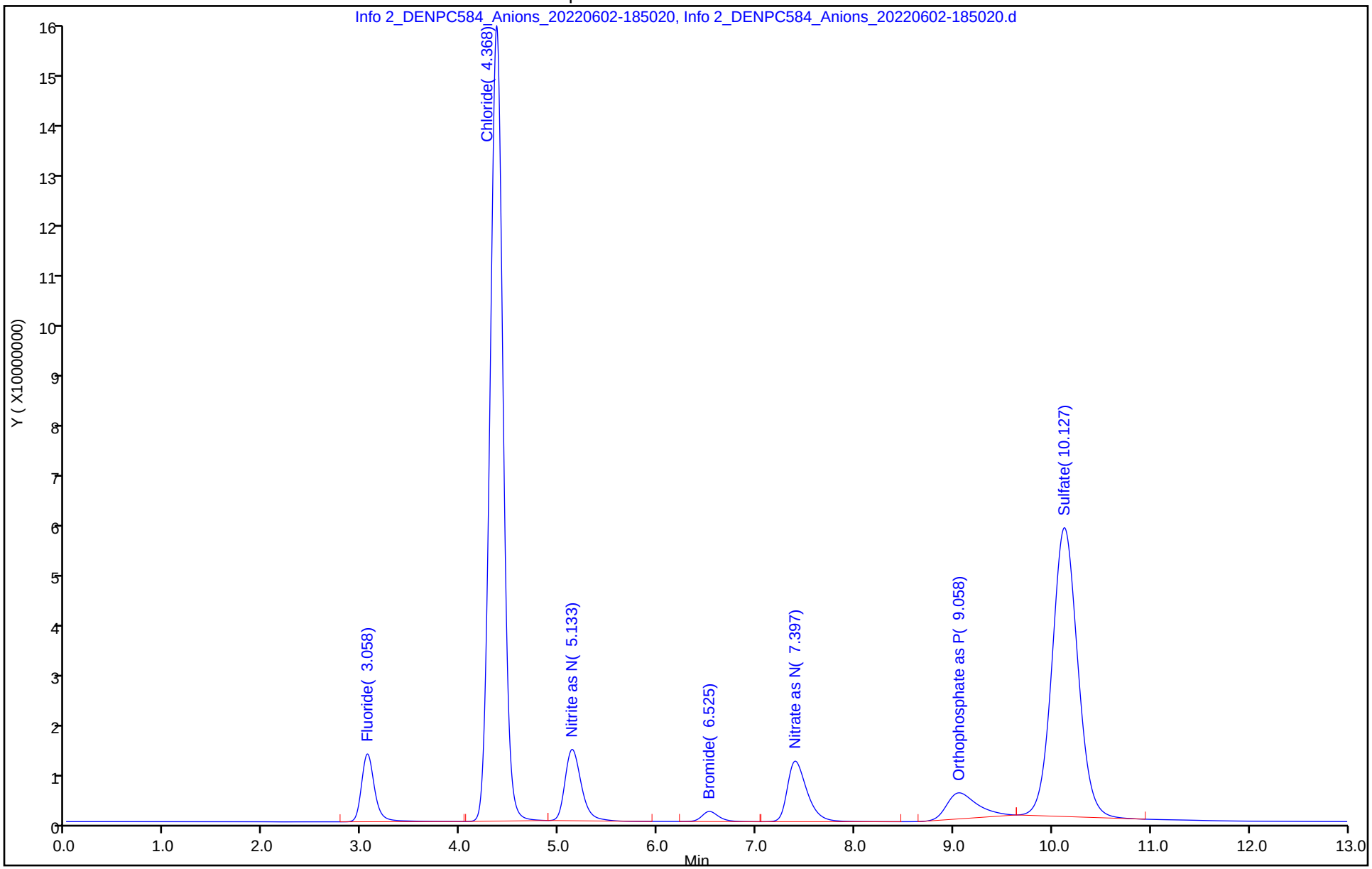
IC LCS_01879 Amount Added: 10.00 Units: mL

Report Date: 03-Jun-2022 13:11:41 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-185020.d

Injection Date:	02-Jun-2022 18:34:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	29
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-185

Injection Date: 02-Jun-2022 18:34:00 Instrument ID: WC_IonChrom13

Lims ID: ccv

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 29

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

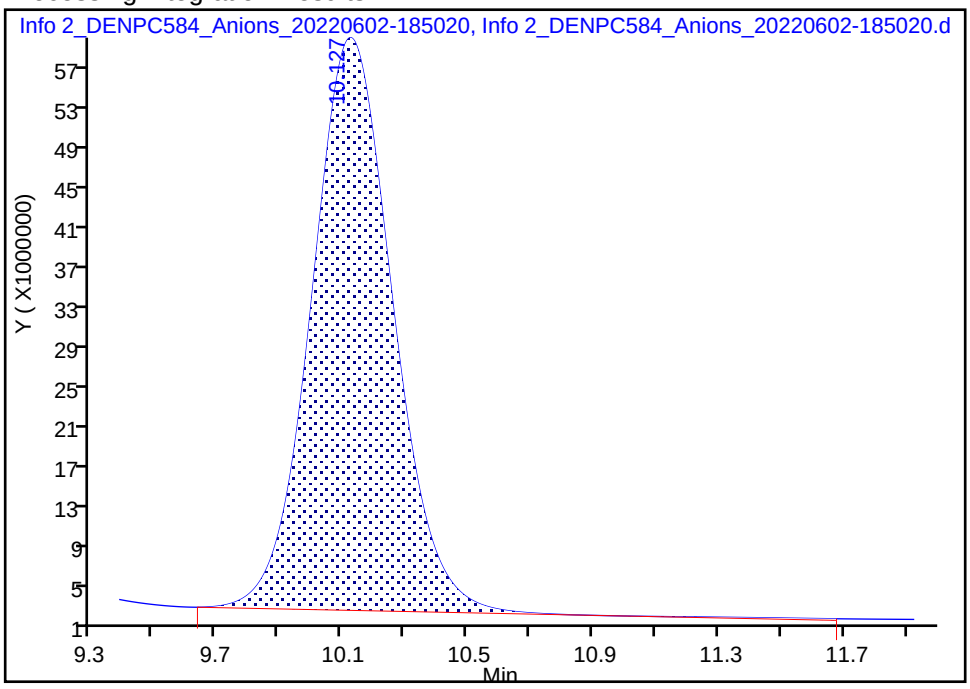
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

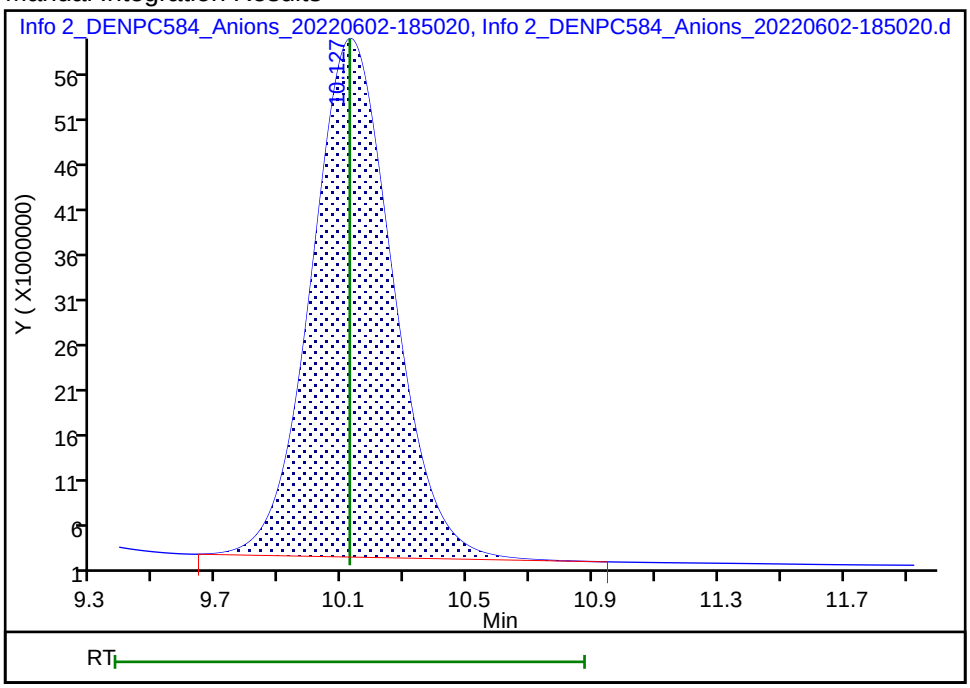
Processing Integration Results

RT: 10.13
Area: 1021863715
Amount: 100.0080
Amount Units: ug/ml



Manual Integration Results

RT: 10.13
Area: 1018547341
Amount: 99.684357
Amount Units: ug/ml



Reviewer: foxr, 03-Jun-2022 12:59:11

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-190
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 02-Jun-2022 18:50:00 ALS Bottle#: 0 Worklist Smp#: 30
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0111527-030
Misc. Info.: 280-0111527-030
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 03-Jun-2022 13:11:41 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1621

First Level Reviewer: foxr Date: 03-Jun-2022 12:59:25

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.058				ND	
2 Chloride	4.358	4.355	0.003	91557		0.2168	M
3 Nitrite as N		5.108				ND	
4 Bromide		6.497				ND	
5 Nitrate as N		7.350				ND	
7 Orthophosphate as P		9.028				ND	
6 Sulfate	10.200	10.123	0.077	650020		0.3633	

QC Flag Legend

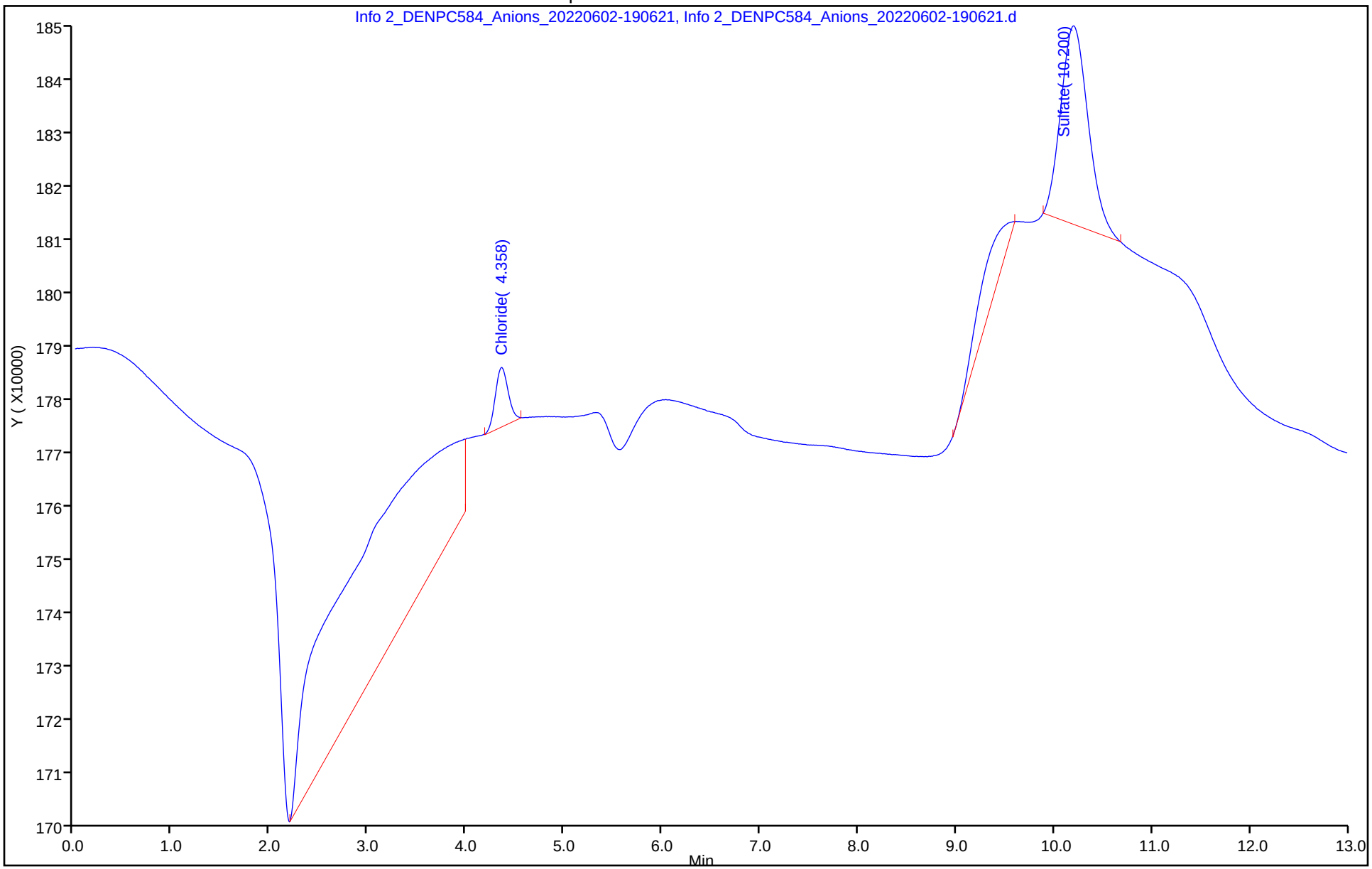
Processing Flags
Review Flags
M - Manually Integrated

Report Date: 03-Jun-2022 13:11:41 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-190621.d

Injection Date:	02-Jun-2022 18:50:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	30
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-214
Lims ID: 280-162622-F-11
Client ID: PZ020-22A
Sample Type: Client
Inject. Date: 02-Jun-2022 21:30:00 ALS Bottle#: 0 Worklist Smp#: 46
Injection Vol: 5.0 ul Dil. Factor: 5.0000
Sample Info: 280-0111527-046
Misc. Info.: 280-0111527-046
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 03-Jun-2022 13:11:41 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1621

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.052	3.058	-0.006	1387484	0.1382	
2 Chloride	4.343	4.355	-0.012	66861621	4.89	
3 Nitrite as N	5.178	5.108	0.070	342052	NC	
4 Bromide	6.583	6.497	0.086	115017	0.0762	
5 Nitrate as N	7.435	7.350	0.085	84479946	NC	
7 Orthophosphate as P		9.028			ND	
6 Sulfate	10.150	10.123	0.027	289185509	28.5	

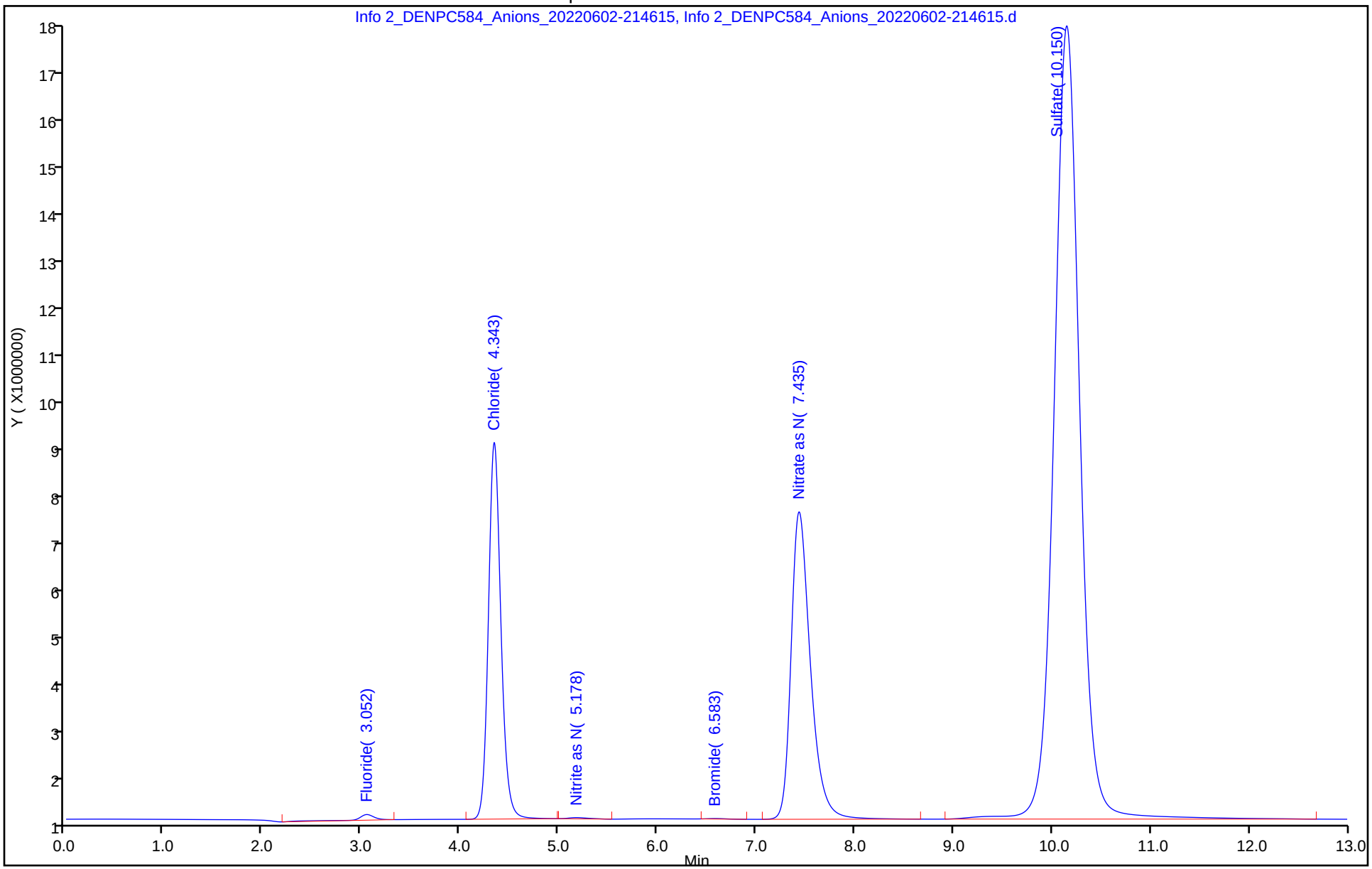
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 03-Jun-2022 13:11:45 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-214615.d				
Injection Date:	02-Jun-2022 21:30:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-162622-F-11	Lab Sample ID:	280-162622-11	Worklist Smp#:	46
Client ID:	PZ020-22A				
Injection Vol:	5.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-220
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 02-Jun-2022 21:46:00 ALS Bottle#: 0 Worklist Smp#: 47
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0111527-047
Misc. Info.: 280-0111527-047
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub5

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 03-Jun-2022 13:11:45 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1621

First Level Reviewer: foxr Date: 03-Jun-2022 13:02:58

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.058	3.058	0.000	124310024	5.00	4.47	
2 Chloride	4.367	4.355	0.012	1425340079	100.0	99.9	
3 Nitrite as N	5.130	5.108	0.022	159239068	NC	NC	
4 Bromide	6.520	6.497	0.023	23400705	5.00	4.63	
5 Nitrate as N	7.392	7.350	0.042	163778818	NC	NC	
7 Orthophosphate as P	9.045	9.028	0.017	110227396	NC	NC	
6 Sulfate	10.122	10.123	-0.001	1016392676	100.0	99.5	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

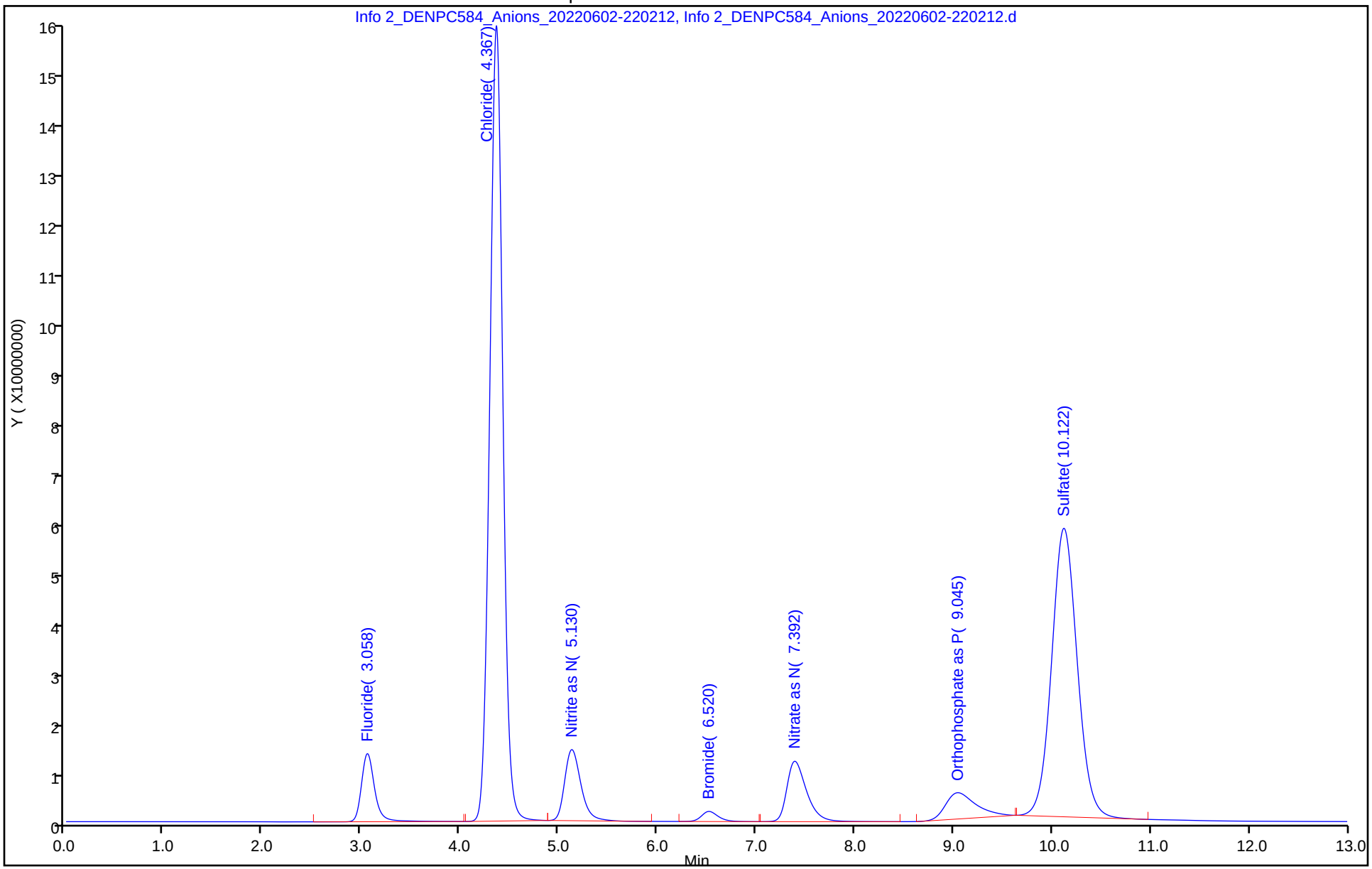
IC LCS_01879 Amount Added: 10.00 Units: mL

Report Date: 03-Jun-2022 13:11:45 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-220212.d

Injection Date:	02-Jun-2022 21:46:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ccv			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		



Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-220

Injection Date: 02-Jun-2022 21:46:00 Instrument ID: WC_IonChrom13

Lims ID: ccv

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 47

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

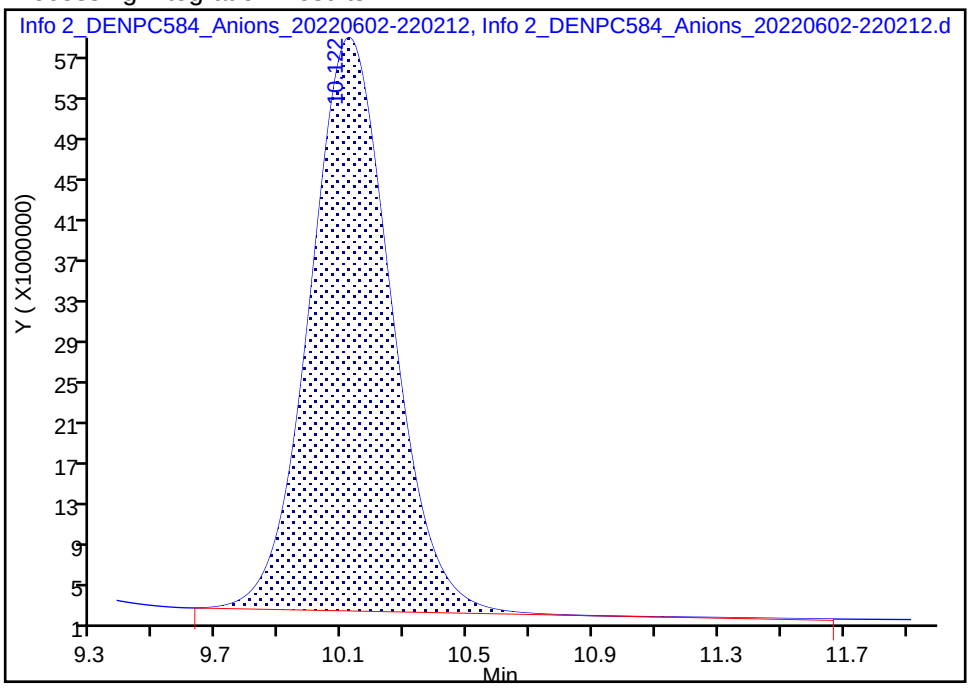
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

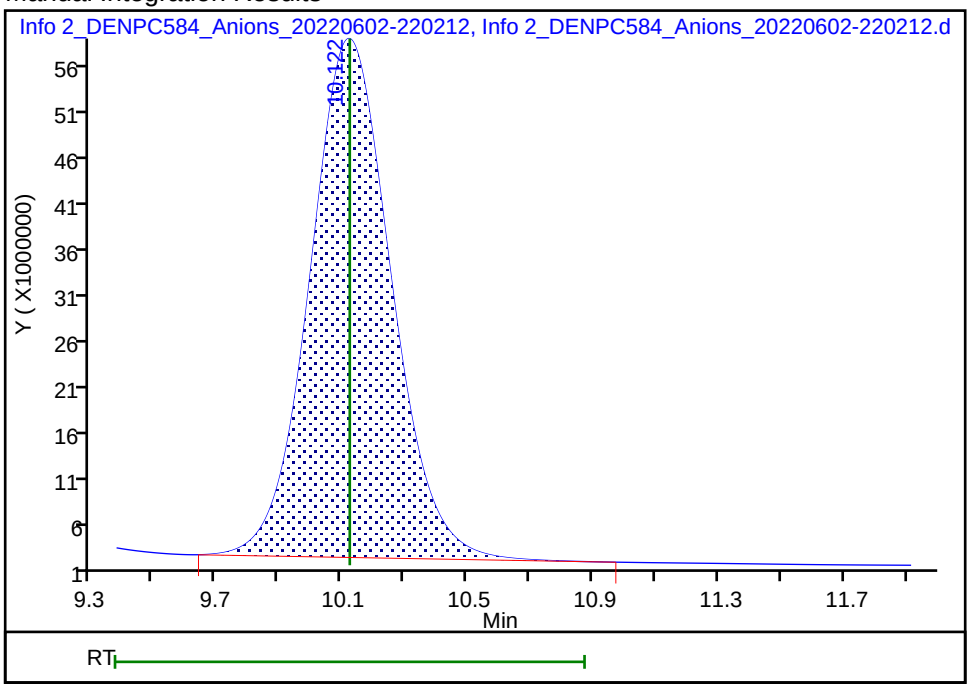
Processing Integration Results

RT: 10.12
Area: 1018918446
Amount: 99.720568
Amount Units: ug/ml



Manual Integration Results

RT: 10.12
Area: 1016392676
Amount: 99.474116
Amount Units: ug/ml



Reviewer: foxr, 03-Jun-2022 13:02:54

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-221
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 02-Jun-2022 22:02:00 ALS Bottle#: 0 Worklist Smp#: 48
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0111527-048
Misc. Info.: 280-0111527-048
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 03-Jun-2022 13:11:45 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1621

First Level Reviewer: foxr Date: 03-Jun-2022 13:03:09

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.058				ND	
2 Chloride	4.368	4.355	0.013	13948		0.2114	M
3 Nitrite as N		5.108				ND	
4 Bromide		6.497				ND	
5 Nitrate as N		7.350				ND	
7 Orthophosphate as P		9.028				ND	
6 Sulfate	10.220	10.123	0.097	347760		0.3338	

QC Flag Legend

Processing Flags

Review Flags

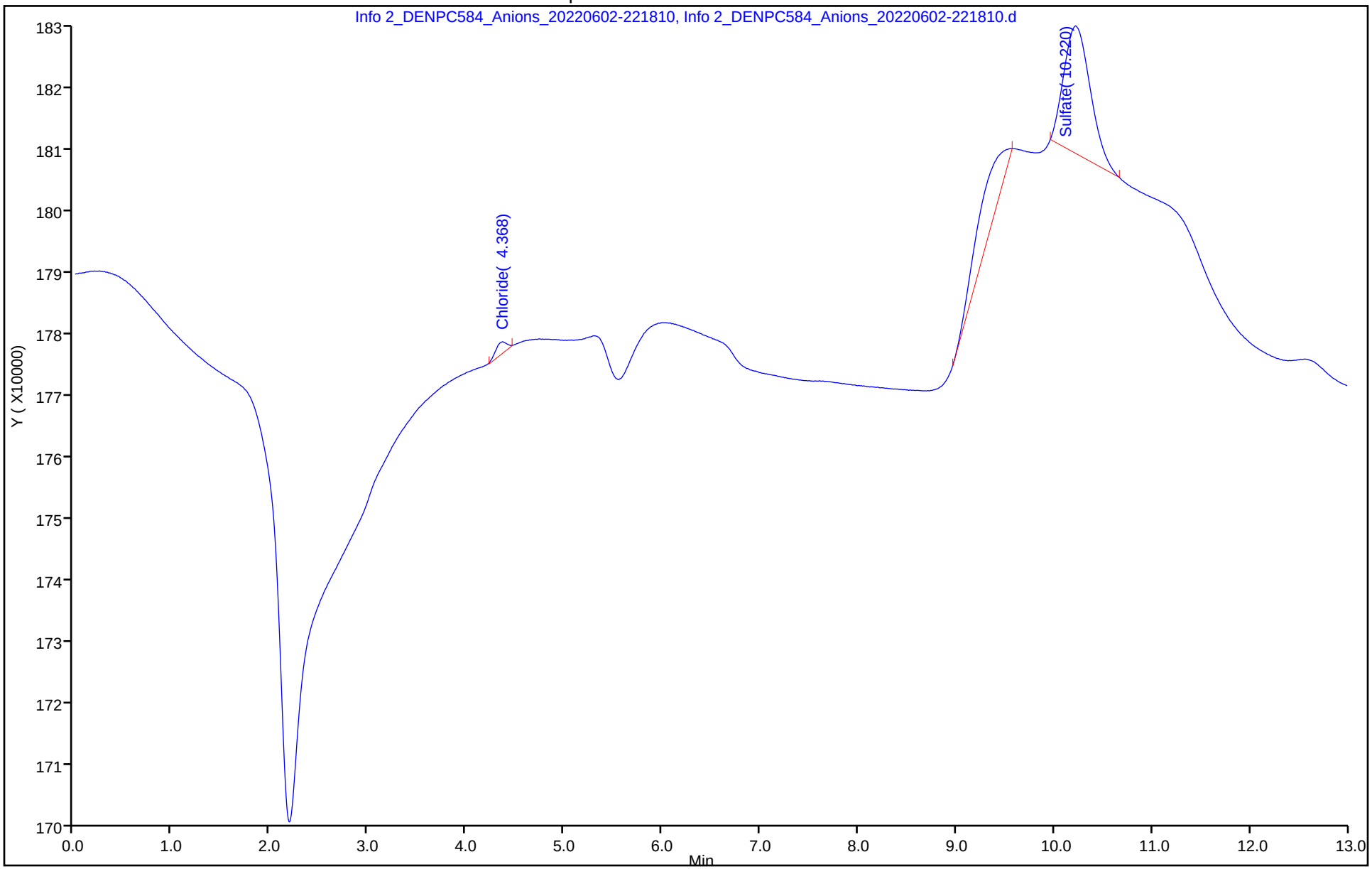
M - Manually Integrated

Report Date: 03-Jun-2022 13:11:46 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-221810.d

Injection Date:	02-Jun-2022 22:02:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ccb			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 Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-223
Lims ID: 280-162622-F-12
Client ID: G0077-22A
Sample Type: Client
Inject. Date: 02-Jun-2022 22:18:00 ALS Bottle#: 0 Worklist Smp#: 49
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0111527-049
Misc. Info.: 280-0111527-049
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 03-Jun-2022 13:11:45 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1621

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.053	3.058	-0.005	5513047	0.2835	
2 Chloride	4.370	4.355	0.015	467410534	32.9	
3 Nitrite as N		5.108			ND	
4 Bromide	6.612	6.497	0.115	840632	0.2182	
5 Nitrate as N	7.362	7.350	0.012	415613524	NC	
7 Orthophosphate as P	9.313	9.028	0.285	10980126	NC	
6 Sulfate	10.142	10.123	0.019	1495836941	146.3	

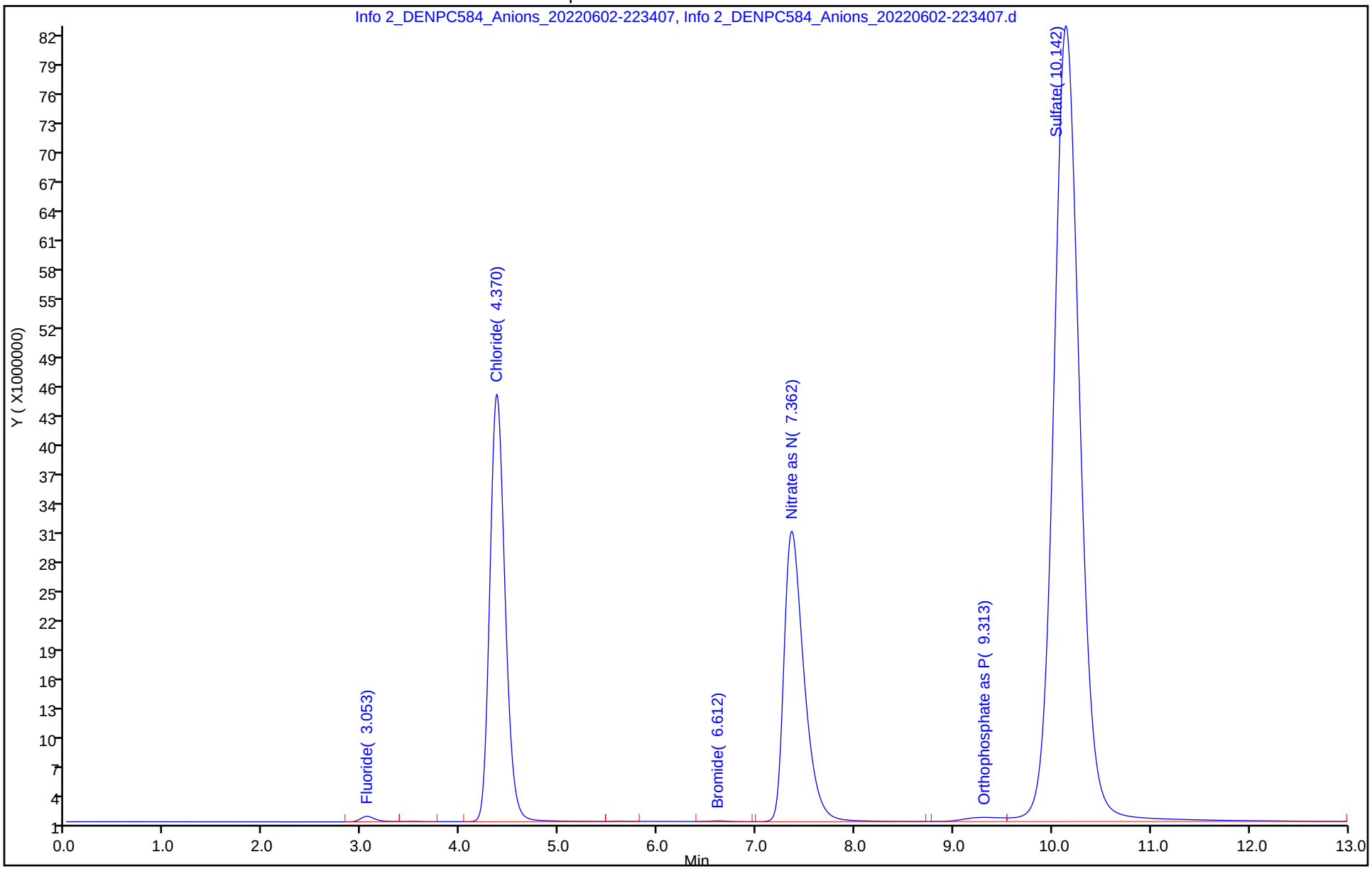
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 03-Jun-2022 13:11:46 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-223407.d				
Injection Date:	02-Jun-2022 22:18:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-162622-F-12	Lab Sample ID:	280-162622-12	Worklist Smp#:	49
Client ID:	G0077-22A				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-225
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 02-Jun-2022 22:34:00 ALS Bottle#: 0 Worklist Smp#: 50
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0111527-050
Misc. Info.: 280-0111527-050
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 03-Jun-2022 13:11:45 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1621

First Level Reviewer: foxr Date: 03-Jun-2022 13:03:34

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.060	3.058	0.002	124935112	5.00	4.49	
2 Chloride	4.368	4.355	0.013	1427536929	100.0	100.0	
3 Nitrite as N	5.133	5.108	0.025	159793055	NC	NC	
4 Bromide	6.528	6.497	0.031	23458164	5.00	4.64	
5 Nitrate as N	7.400	7.350	0.050	163965942	NC	NC	
7 Orthophosphate as P	9.065	9.028	0.037	105775666	NC	NC	
6 Sulfate	10.125	10.123	0.002	1018838858	100.0	99.7	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

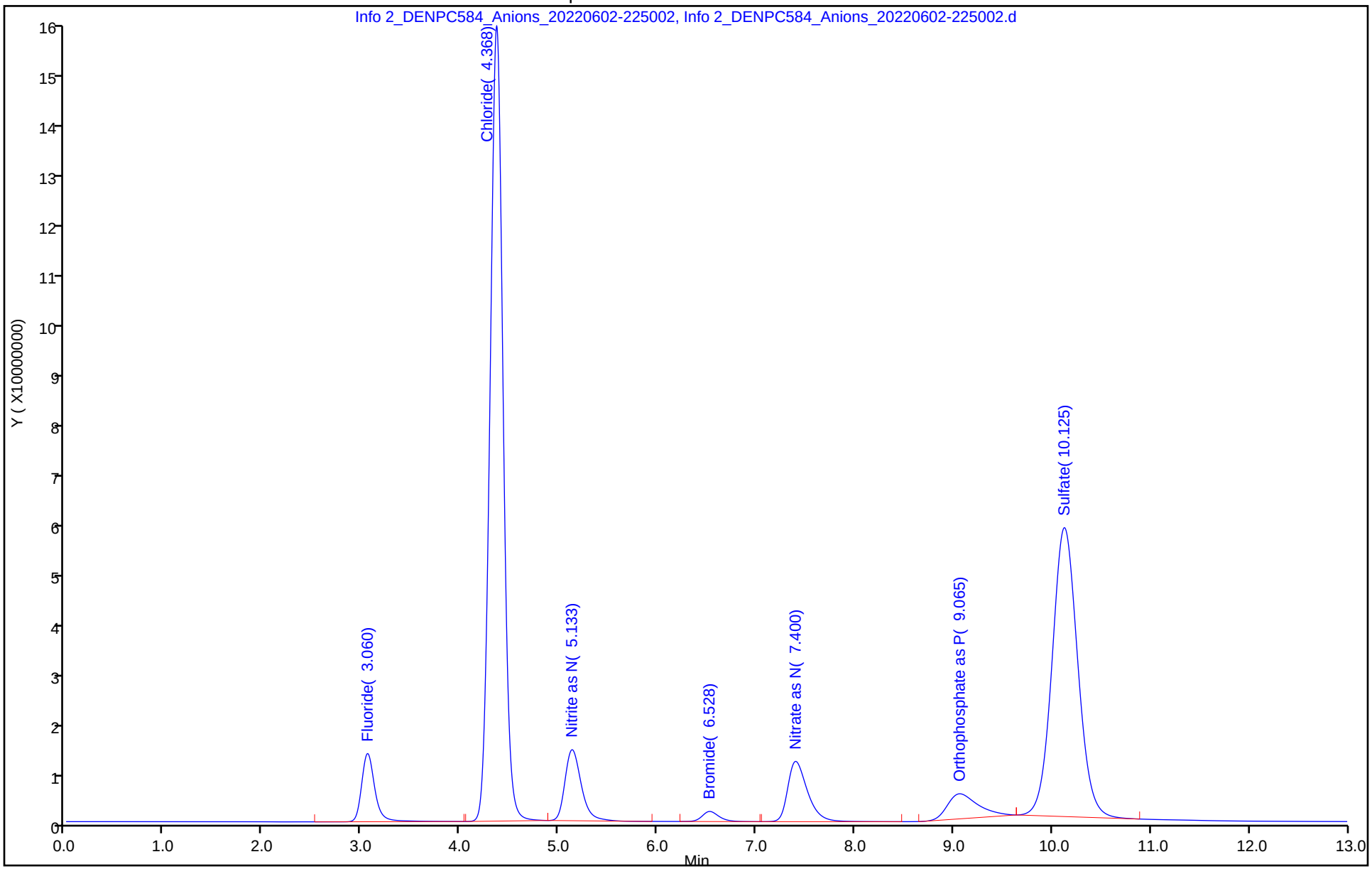
Reagents:

IC LCS_01879 Amount Added: 10.00 Units: mL

Report Date: 03-Jun-2022 13:11:46 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-225002.d				
Injection Date:	02-Jun-2022 22:34:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	lcs			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 Denver

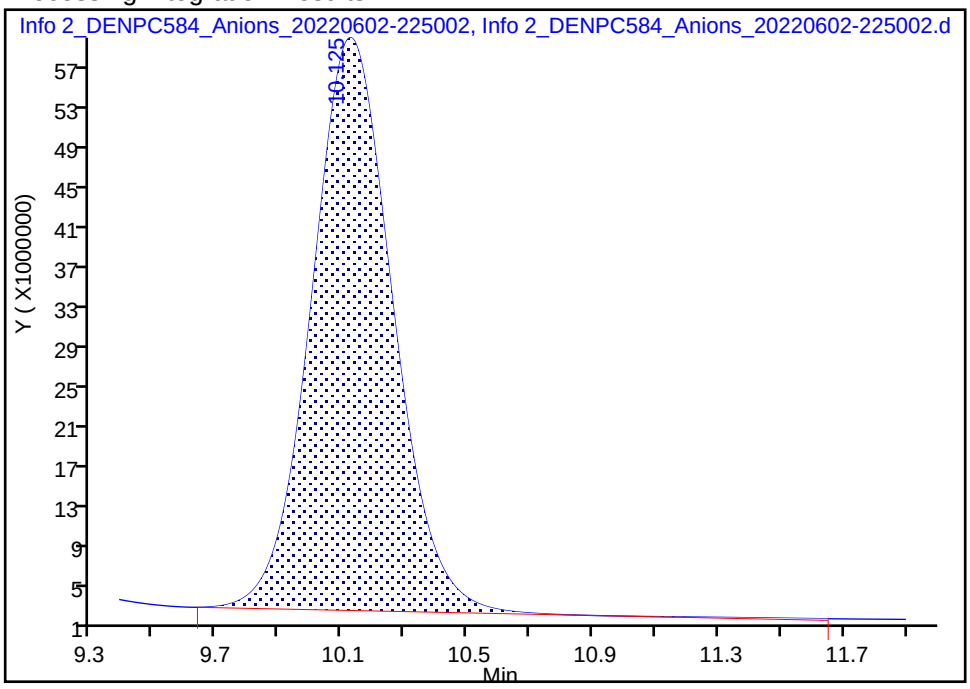
Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-225
Injection Date: 02-Jun-2022 22:34:00 Instrument ID: WC_IonChrom13
Lims ID: lcs
Client ID:
Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 50
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: Anions-IC13 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

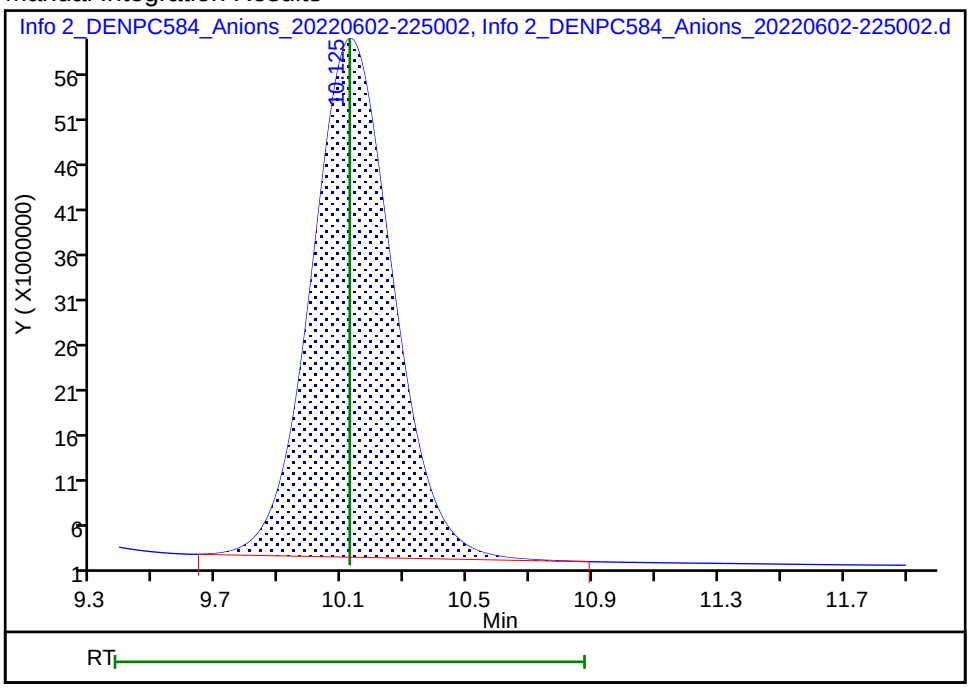
Processing Integration Results

RT: 10.13
Area: 1021808245
Amount: 100.0025
Amount Units: ug/ml



Manual Integration Results

RT: 10.13
Area: 1018838858
Amount: 99.712802
Amount Units: ug/ml



Reviewer: foxr, 03-Jun-2022 13:03:28
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-230
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 02-Jun-2022 22:50:00 ALS Bottle#: 0 Worklist Smp#: 51
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0111527-051
Misc. Info.: 280-0111527-051
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 03-Jun-2022 13:11:45 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1621

First Level Reviewer: foxr Date: 03-Jun-2022 13:03:46

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.062	3.058	0.004	131064554	5.00	4.70	
2 Chloride	4.370	4.355	0.015	1429577525	100.0	100.2	
3 Nitrite as N	5.135	5.108	0.027	157057773	NC	NC	
4 Bromide	6.540	6.497	0.043	23440445	5.00	4.64	
5 Nitrate as N	7.408	7.350	0.058	164042535	NC	NC	
7 Orthophosphate as P	9.052	9.028	0.024	118376509	NC	NC	
6 Sulfate	10.135	10.123	0.012	1020496637	100.0	99.9	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

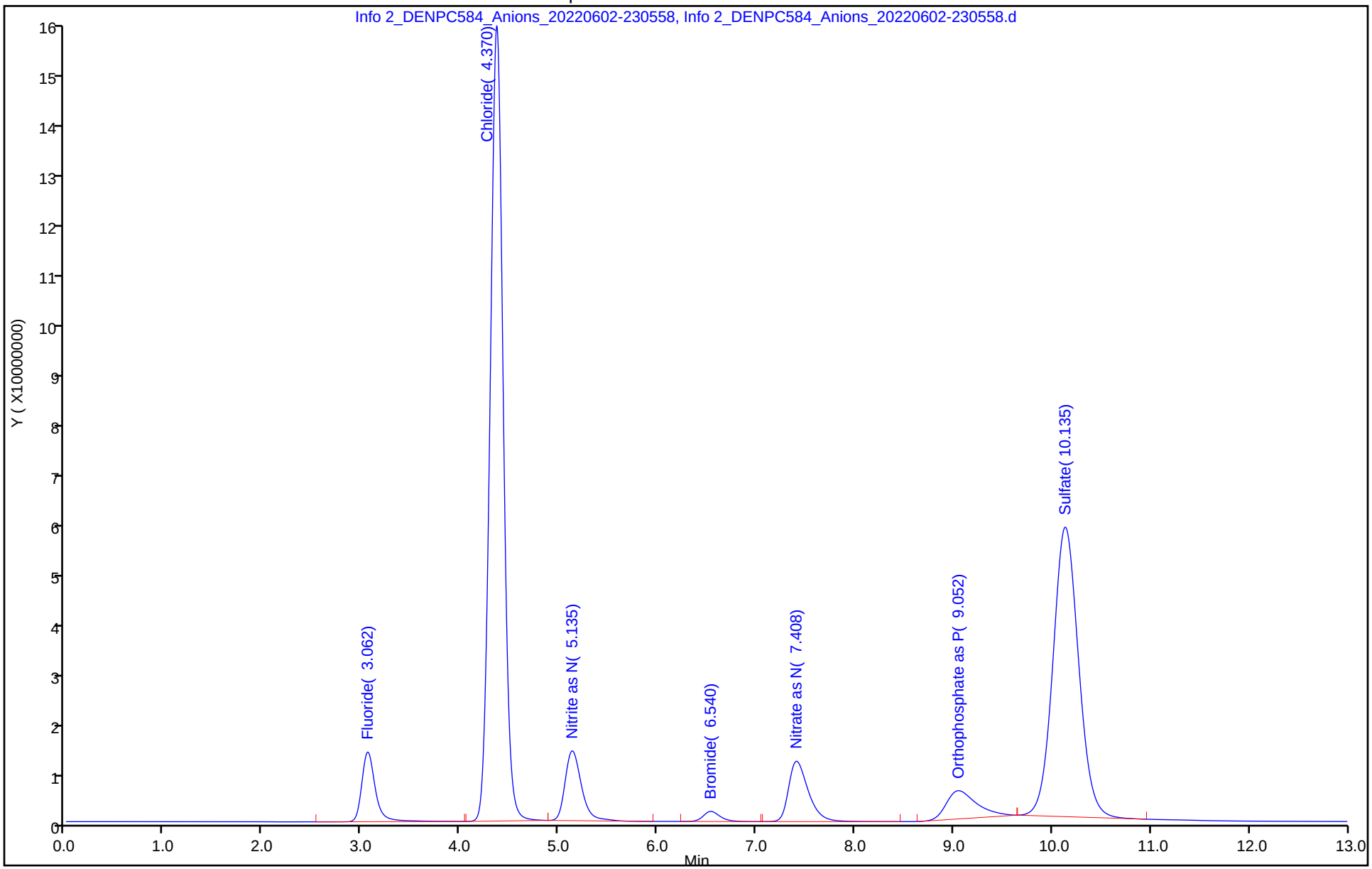
IC LCS_01879 Amount Added: 10.00 Units: mL

Report Date: 03-Jun-2022 13:11:48 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-230558.d

Injection Date:	02-Jun-2022 22:50:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	lcsd			Worklist Smp#:	51
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 Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-230

Injection Date: 02-Jun-2022 22:50:00 Instrument ID: WC_IonChrom13

Lims ID: lcsd

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 51

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

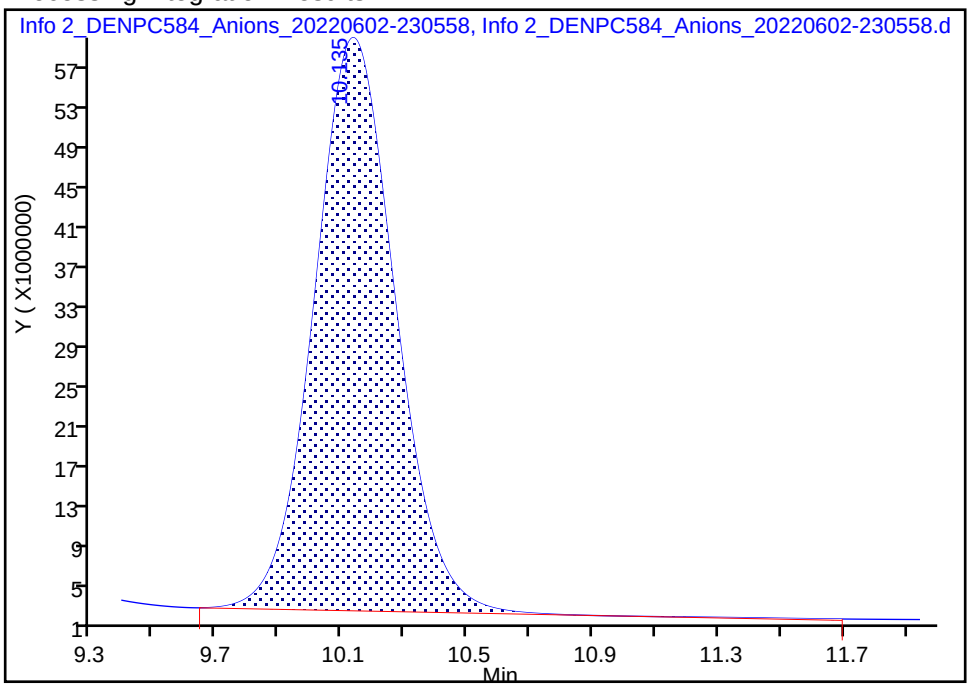
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

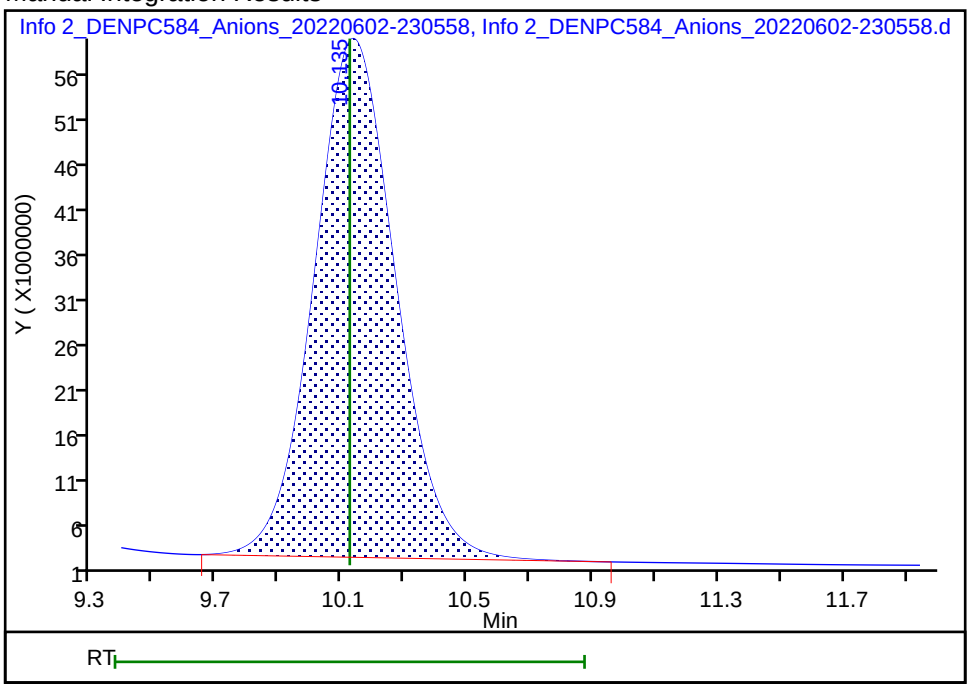
Processing Integration Results

RT: 10.14
Area: 1023579535
Amount: 100.1754
Amount Units: ug/ml



Manual Integration Results

RT: 10.14
Area: 1020496637
Amount: 99.874559
Amount Units: ug/ml



Reviewer: foxr, 03-Jun-2022 13:03:44

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-232
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 02-Jun-2022 23:05:00 ALS Bottle#: 0 Worklist Smp#: 52
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0111527-052
Misc. Info.: 280-0111527-052
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 03-Jun-2022 13:11:45 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1621

First Level Reviewer: foxr Date: 03-Jun-2022 13:04:00

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.058				ND	
2 Chloride	4.360	4.355	0.005	19928		0.2118	Ma
3 Nitrite as N		5.108				ND	
4 Bromide		6.497				ND	
5 Nitrate as N		7.350				ND	
7 Orthophosphate as P		9.028				ND	
6 Sulfate	10.225	10.123	0.102	447518		0.3435	

QC Flag Legend

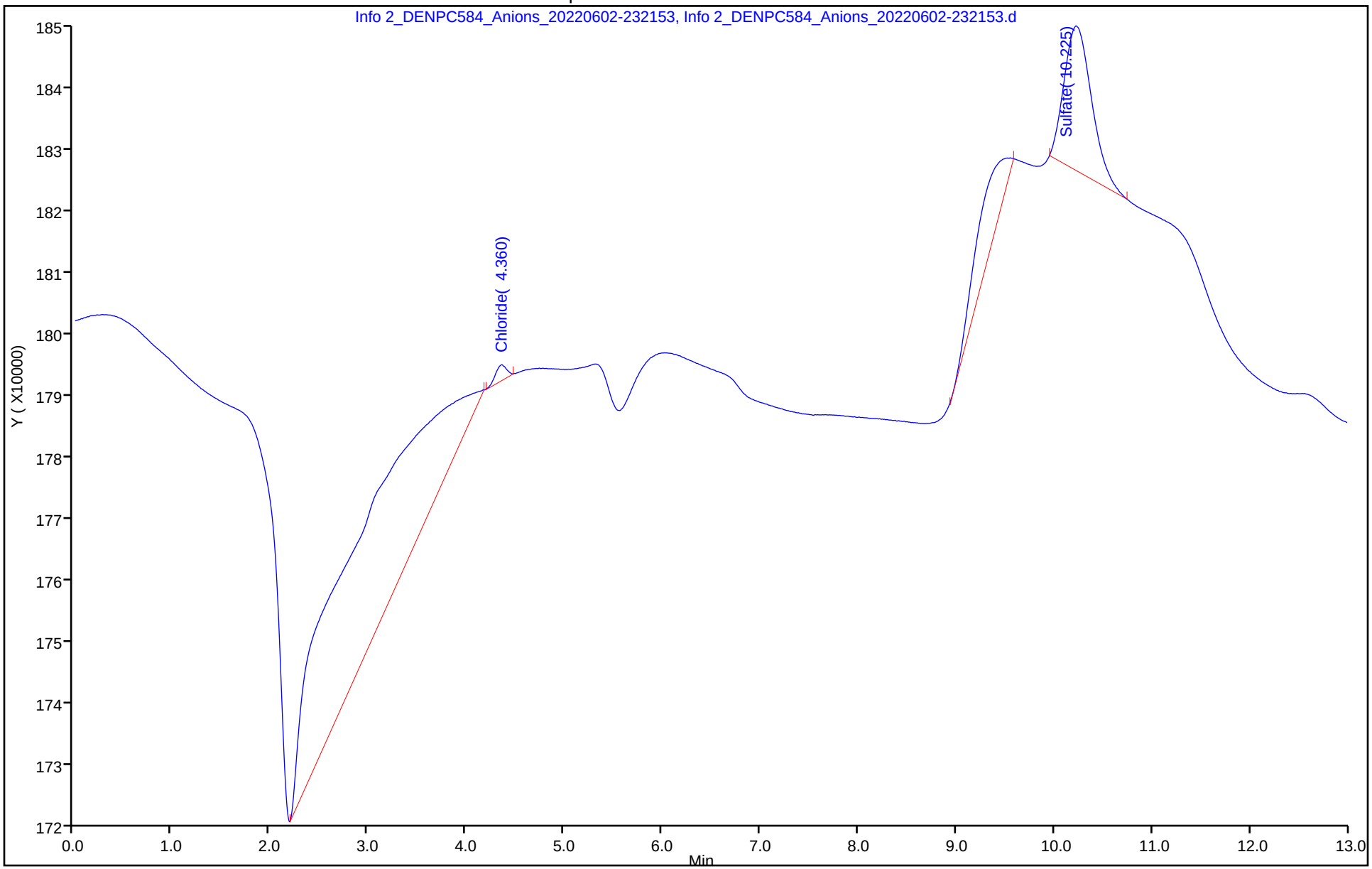
Processing Flags
Review Flags
M - Manually Integrated
a - User Assigned ID

Report Date: 03-Jun-2022 13:11:48 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-232153.d

Injection Date:	02-Jun-2022 23:05:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	mb			Worklist Smp#:	52
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-233
Lims ID: 280-162622-D-13
Client ID: G0069-22A
Sample Type: Client
Inject. Date: 02-Jun-2022 23:21:00 ALS Bottle#: 0 Worklist Smp#: 53
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0111527-053
Misc. Info.: 280-0111527-053
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 03-Jun-2022 13:11:45 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1621

First Level Reviewer: foxr Date: 03-Jun-2022 13:04:21

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.065	3.058	0.007	3972665	0.2292	
2 Chloride	4.358	4.355	0.003	35264821	2.68	
3 Nitrite as N		5.108			ND	
4 Bromide		6.497			ND	
5 Nitrate as N	7.592	7.350	0.242	3196415	NC	
7 Orthophosphate as P	9.237	9.028	0.209	3923919	NC	
6 Sulfate	10.175	10.123	0.052	321594025	31.7	M

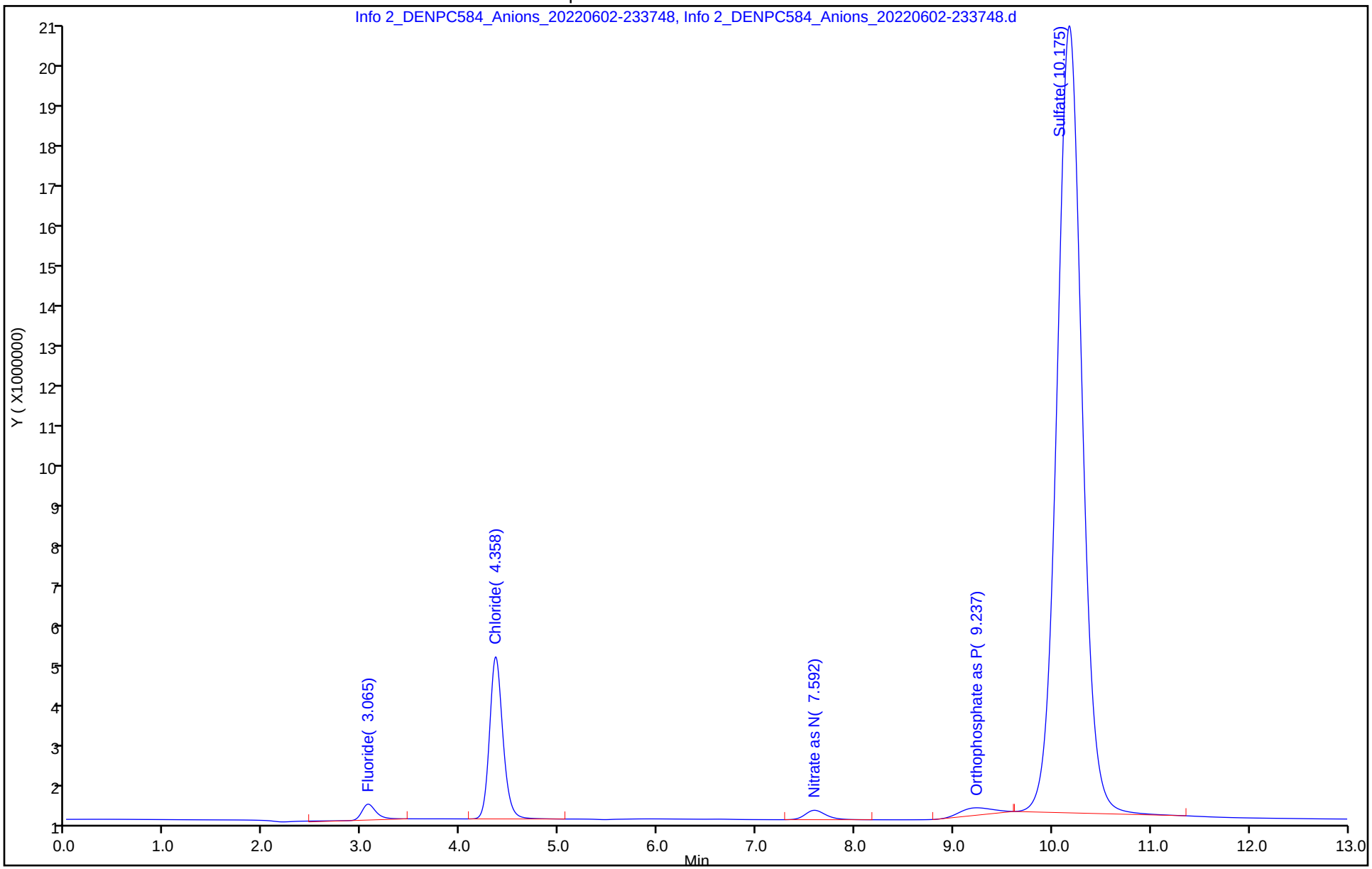
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 03-Jun-2022 13:11:48 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-233748.d				
Injection Date:	02-Jun-2022 23:21:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-162622-D-13	Lab Sample ID:	280-162622-13	Worklist Smp#:	53
Client ID:	G0069-22A				
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 Denver

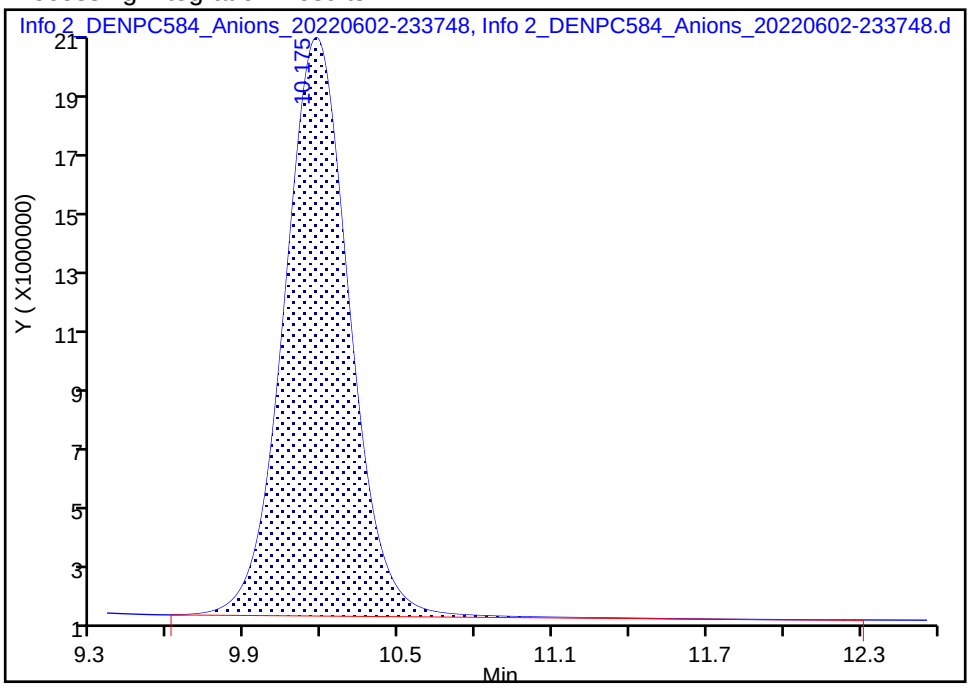
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-233				
Injection Date:	02-Jun-2022 23:21:00	Instrument ID:	WC_IonChrom13		
Lims ID:	280-162622-D-13	Lab Sample ID:	280-162622-13		
Client ID:	G0069-22A				
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	53
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

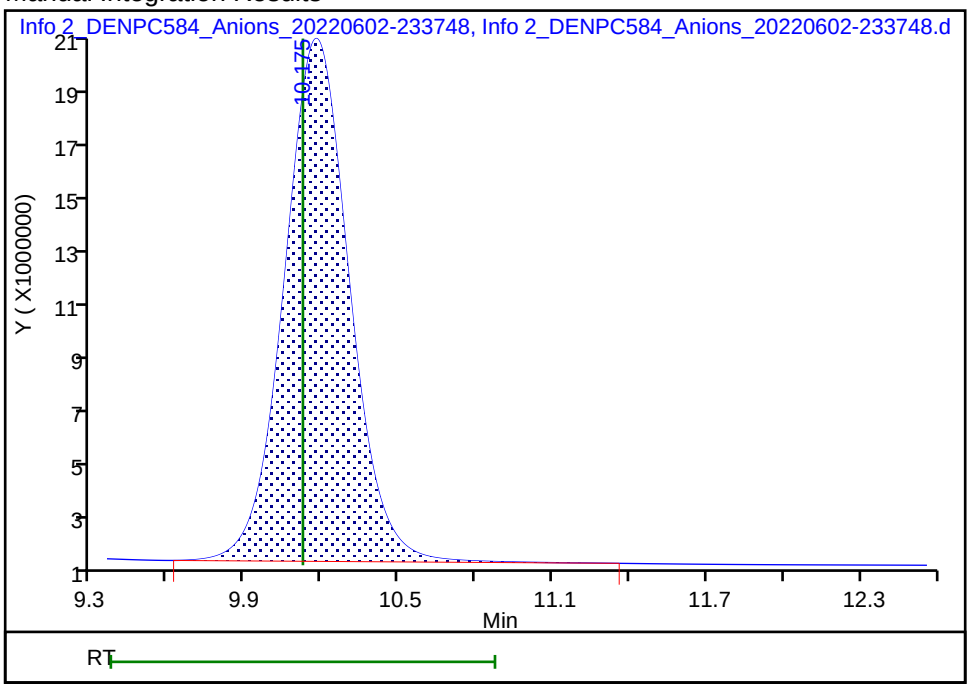
Processing Integration Results

RT: 10.18
Area: 322476083
Amount: 31.765372
Amount Units: ug/ml



Manual Integration Results

RT: 10.18
Area: 321594025
Amount: 31.679306
Amount Units: ug/ml



Reviewer: foxr, 03-Jun-2022 13:04:18
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-235
Lims ID: 280-162622-D-13 DU
Client ID:
Sample Type: DU
Inject. Date: 02-Jun-2022 23:37:00 ALS Bottle#: 0 Worklist Smp#: 54
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0111527-054
Misc. Info.: 280-0111527-054
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 03-Jun-2022 13:11:45 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1621

First Level Reviewer: foxr Date: 03-Jun-2022 13:04:36

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.063	3.058	0.005	3821169		0.2239	
2 Chloride	4.358	4.355	0.003	35131376		2.67	
3 Nitrite as N		5.108				ND	
4 Bromide		6.497				ND	
5 Nitrate as N	7.590	7.350	0.240	2931319		NC	
7 Orthophosphate as P	9.238	9.028	0.210	3876396		NC	
6 Sulfate	10.172	10.123	0.049	320665282		31.6	M

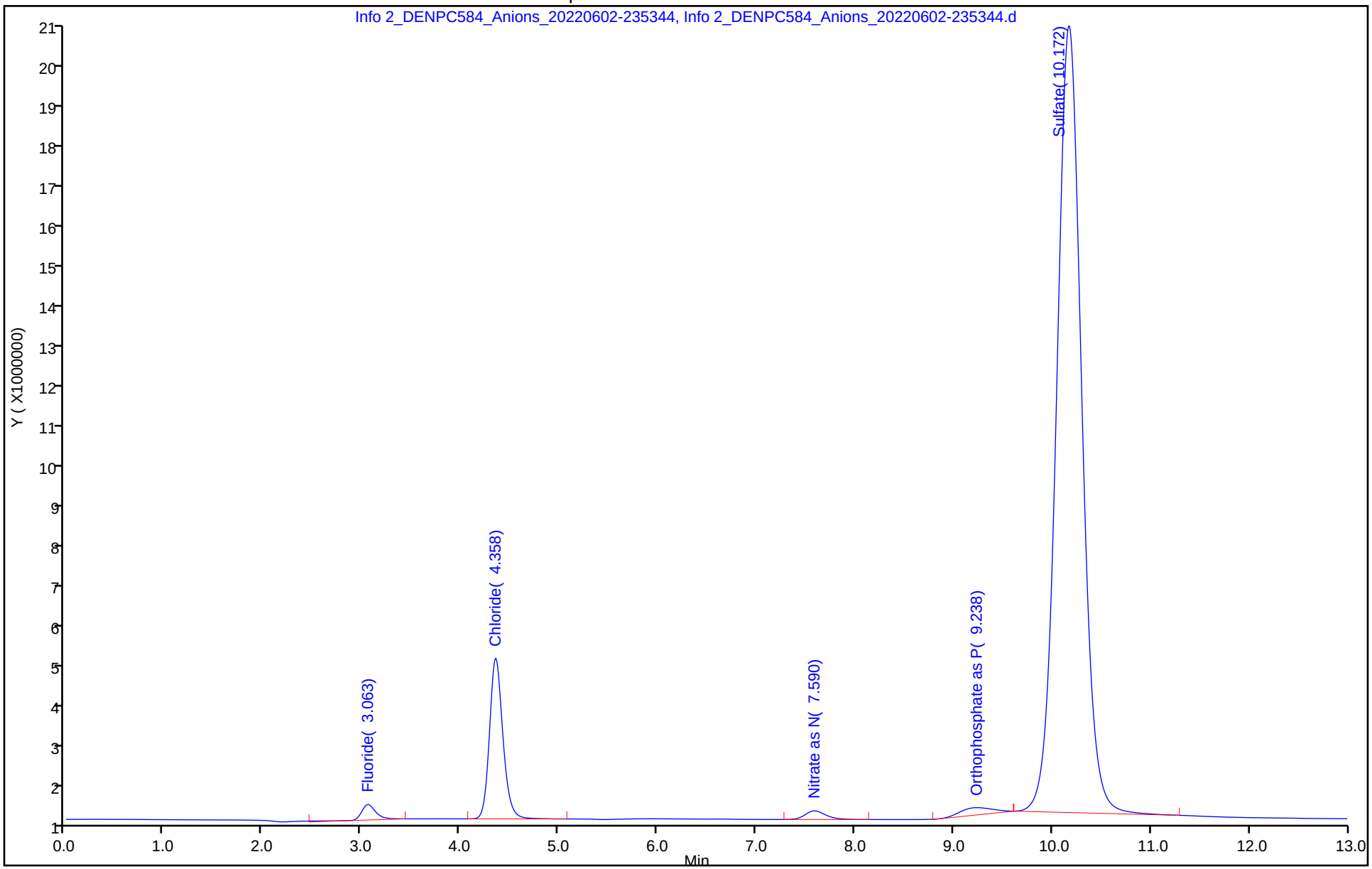
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 03-Jun-2022 13:11:49 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-235344.d				
Injection Date:	02-Jun-2022 23:37:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-162622-D-13 DU			Worklist Smp#:	54
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 Denver

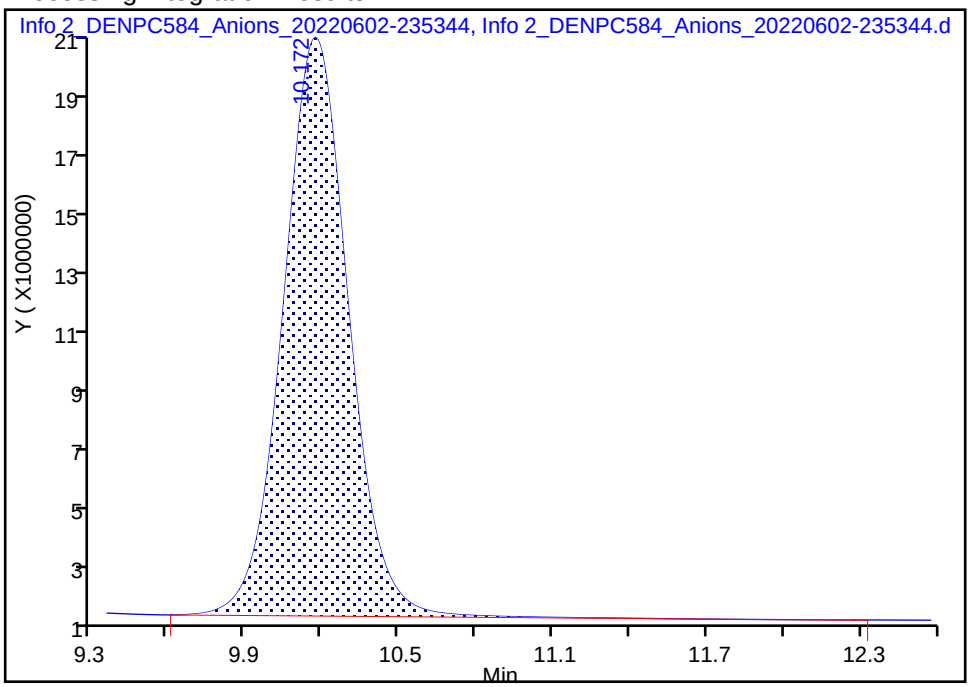
Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220602-235
Injection Date: 02-Jun-2022 23:37:00 Instrument ID: WC_IonChrom13
Lims ID: 280-162622-D-13 DU
Client ID:
Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 54
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: Anions-IC13 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

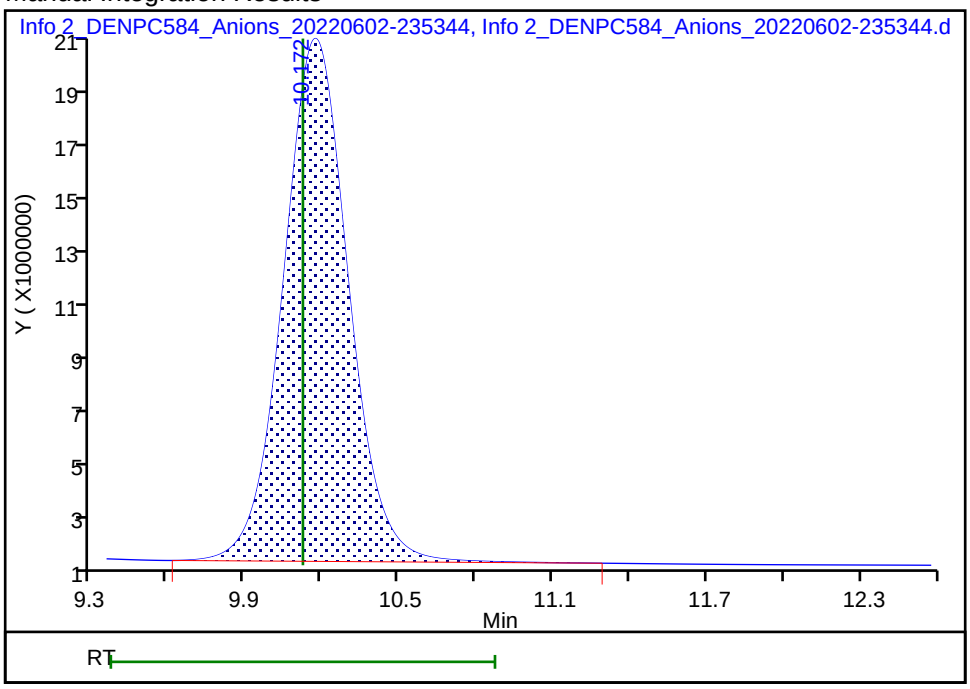
Processing Integration Results

RT: 10.17
Area: 321565528
Amount: 31.676525
Amount Units: ug/ml



Manual Integration Results

RT: 10.17
Area: 320665282
Amount: 31.588684
Amount Units: ug/ml



Reviewer: foxr, 03-Jun-2022 13:04:32
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220603-000
Lims ID: 280-162622-D-13 MS
Client ID:
Sample Type: MS
Inject. Date: 02-Jun-2022 23:53:00 ALS Bottle#: 0 Worklist Smp#: 55
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0111527-055
Misc. Info.: 280-0111527-055
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 03-Jun-2022 13:11:45 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1621

First Level Reviewer: foxr Date: 03-Jun-2022 13:04:50

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.067	3.058	0.009	141083516	5.00	5.06	
2 Chloride	4.355	4.355	0.000	741168298	50.0	52.0	
3 Nitrite as N	5.148	5.108	0.040	55505733	NC	NC	
4 Bromide	6.572	6.497	0.075	21091692	5.00	4.18	
5 Nitrate as N	7.433	7.350	0.083	158573633	NC	NC	
7 Orthophosphate as P	9.055	9.028	0.027	150675529	NC	NC	
6 Sulfate	10.152	10.123	0.029	831327569	50.0	81.4	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

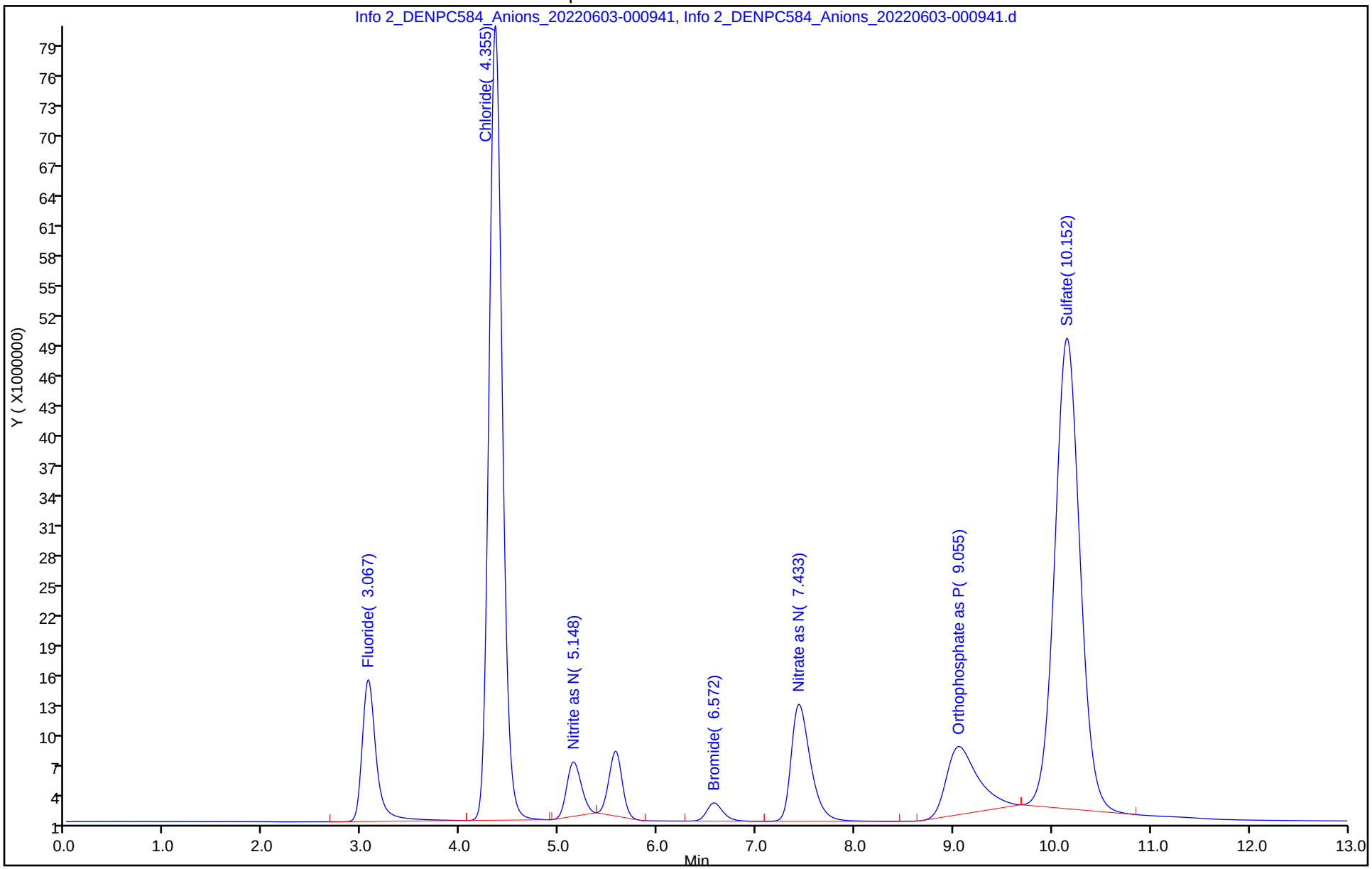
Reagents:

ICMS/MSD WEEK_00760 Amount Added: 0.10 Units: mL

Report Date: 03-Jun-2022 13:11:49 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220603-000941.d				
Injection Date:	02-Jun-2022 23:53:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-162622-D-13 MS			Worklist Smp#:	55
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 Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220603-000

Injection Date: 02-Jun-2022 23:53:00 Instrument ID: WC_IonChrom13

Lims ID: 280-162622-D-13 MS

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 55

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

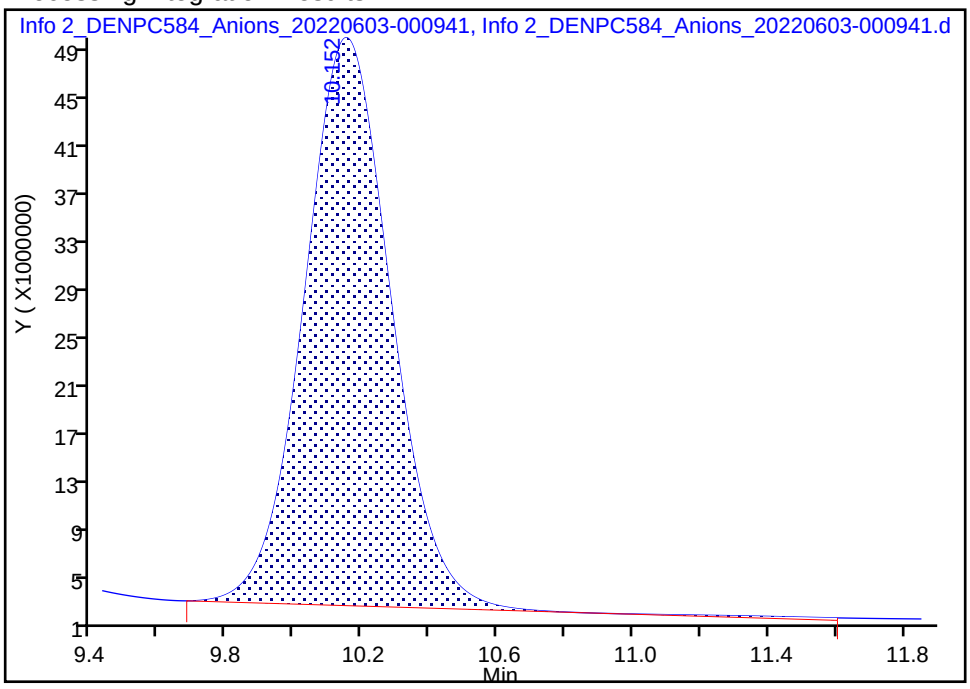
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

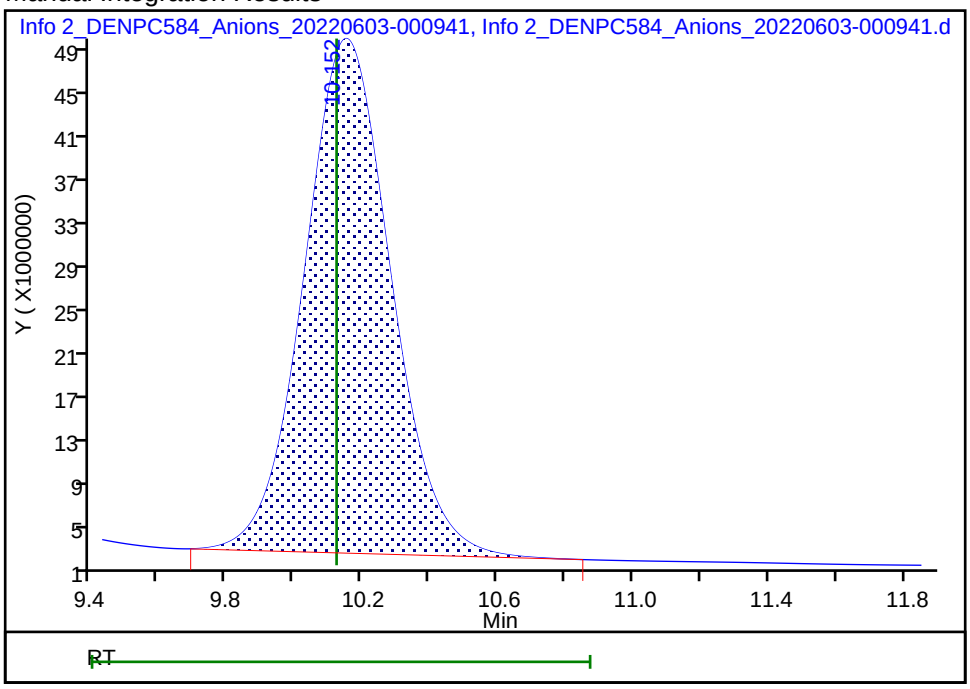
Processing Integration Results

RT: 10.15
Area: 835920700
Amount: 81.864607
Amount Units: ug/ml



Manual Integration Results

RT: 10.15
Area: 831327569
Amount: 81.416433
Amount Units: ug/ml



Reviewer: foxr, 03-Jun-2022 13:04:47

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220603-002
Lims ID: 280-162622-D-13 MSD
Client ID:
Sample Type: MSD
Inject. Date: 03-Jun-2022 00:09:00 ALS Bottle#: 0 Worklist Smp#: 56
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0111527-056
Misc. Info.: 280-0111527-056
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 03-Jun-2022 13:11:45 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1621

First Level Reviewer: foxr Date: 03-Jun-2022 13:05:04

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.067	3.058	0.009	138164587	5.00	4.95	
2 Chloride	4.355	4.355	0.000	750628456	50.0	52.7	
3 Nitrite as N	5.147	5.108	0.039	61251356	NC	NC	
4 Bromide	6.565	6.497	0.068	21431479	5.00	4.25	
5 Nitrate as N	7.428	7.350	0.078	160591497	NC	NC	
7 Orthophosphate as P	9.058	9.028	0.030	147925800	NC	NC	
6 Sulfate	10.150	10.123	0.027	837077112	50.0	82.0	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

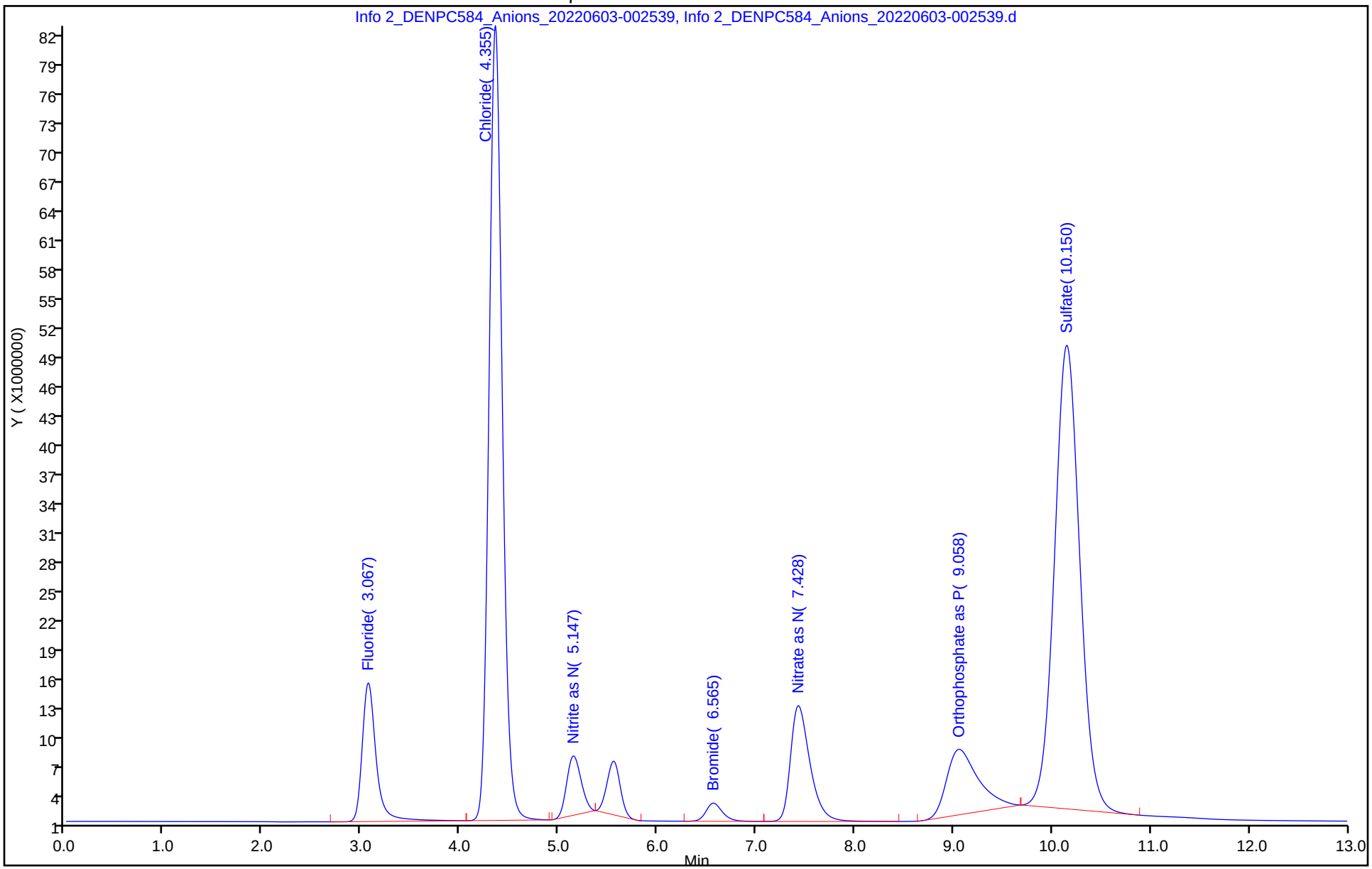
ICMS/MSD WEEK_00760 Amount Added: 0.10 Units: mL

Report Date: 03-Jun-2022 13:11:50 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220603-002539.d

Injection Date:	03-Jun-2022 00:09:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-162622-D-13 MSD			Worklist Smp#:	56
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 Denver

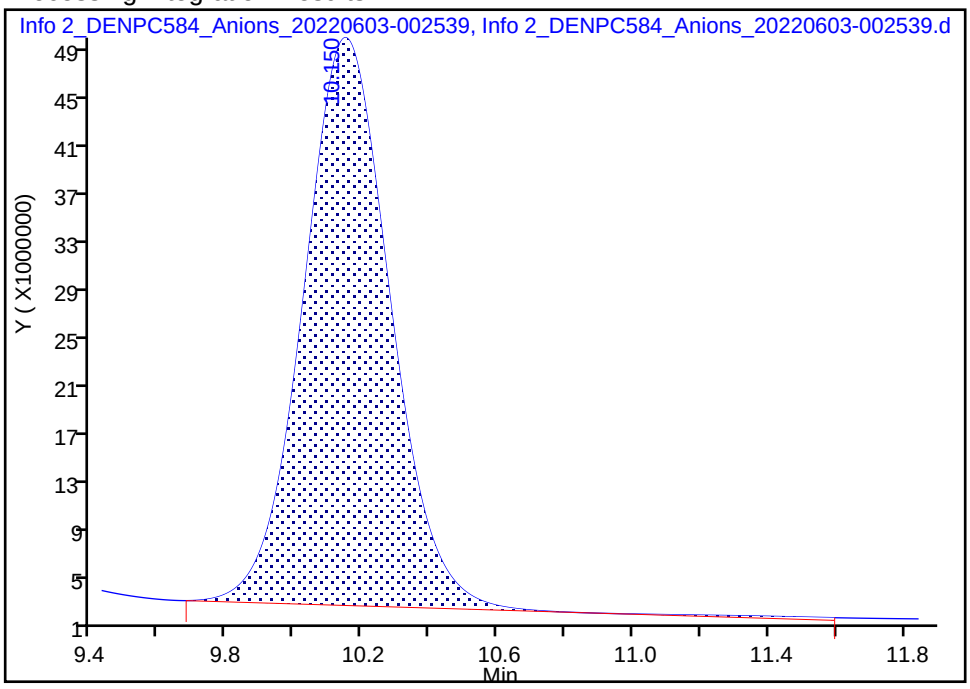
Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220603-002
Injection Date: 03-Jun-2022 00:09:00 Instrument ID: WC_IonChrom13
Lims ID: 280-162622-D-13 MSD
Client ID:
Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 56
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: Anions-IC13 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

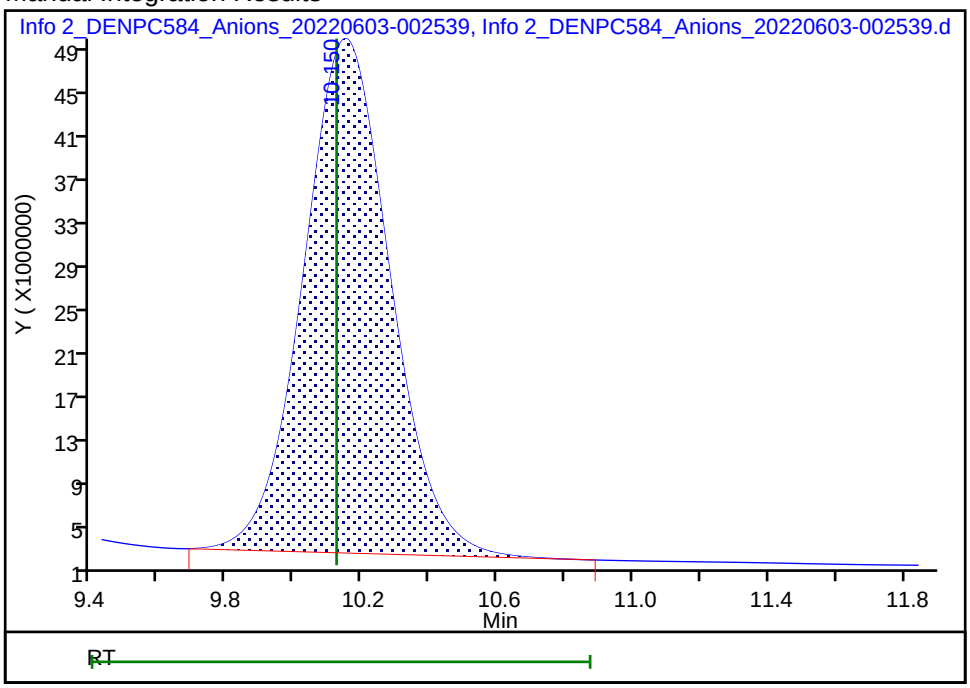
Processing Integration Results

RT: 10.15
Area: 842227140
Amount: 82.479956
Amount Units: ug/ml



Manual Integration Results

RT: 10.15
Area: 837077112
Amount: 81.977443
Amount Units: ug/ml



Reviewer: foxr, 03-Jun-2022 13:05:01
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220603-004
Lims ID: 280-162622-D-14
Client ID: SHGW03-22A
Sample Type: Client
Inject. Date: 03-Jun-2022 00:25:00 ALS Bottle#: 0 Worklist Smp#: 57
Injection Vol: 5.0 ul Dil. Factor: 5.0000
Sample Info: 280-0111527-057
Misc. Info.: 280-0111527-057
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 03-Jun-2022 13:11:45 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1621

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.058	3.058	0.000	1008325	0.1248	
2 Chloride	4.348	4.355	-0.007	32301816	2.47	
3 Nitrite as N	5.180	5.108	0.072	434182	NC	
4 Bromide		6.497			ND	
5 Nitrate as N	7.513	7.350	0.163	18085085	NC	
7 Orthophosphate as P	9.413	9.028	0.385	2844152	NC	
6 Sulfate	10.158	10.123	0.035	60723897	6.22	

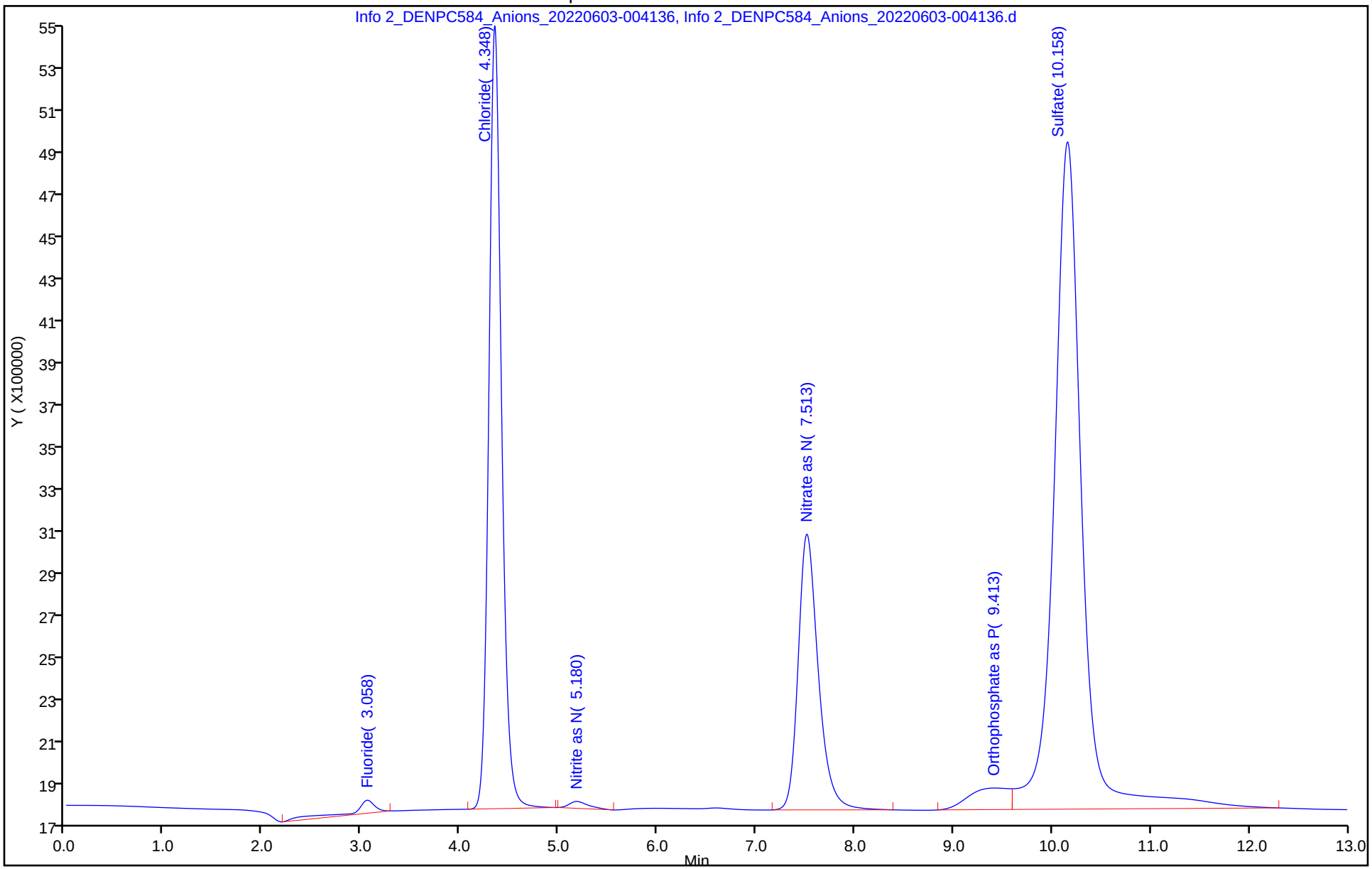
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 03-Jun-2022 13:11:50 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220603-004136.d				
Injection Date:	03-Jun-2022 00:25:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-162622-D-14	Lab Sample ID:	280-162622-14	Worklist Smp#:	57
Client ID:	SHGW03-22A				
Injection Vol:	5.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220603-005
Lims ID: 280-162622-D-15
Client ID: SHGW04-22A
Sample Type: Client
Inject. Date: 03-Jun-2022 00:41:00 ALS Bottle#: 0 Worklist Smp#: 58
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0111527-058
Misc. Info.: 280-0111527-058
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 03-Jun-2022 13:11:45 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1621

First Level Reviewer: foxr Date: 03-Jun-2022 13:05:27

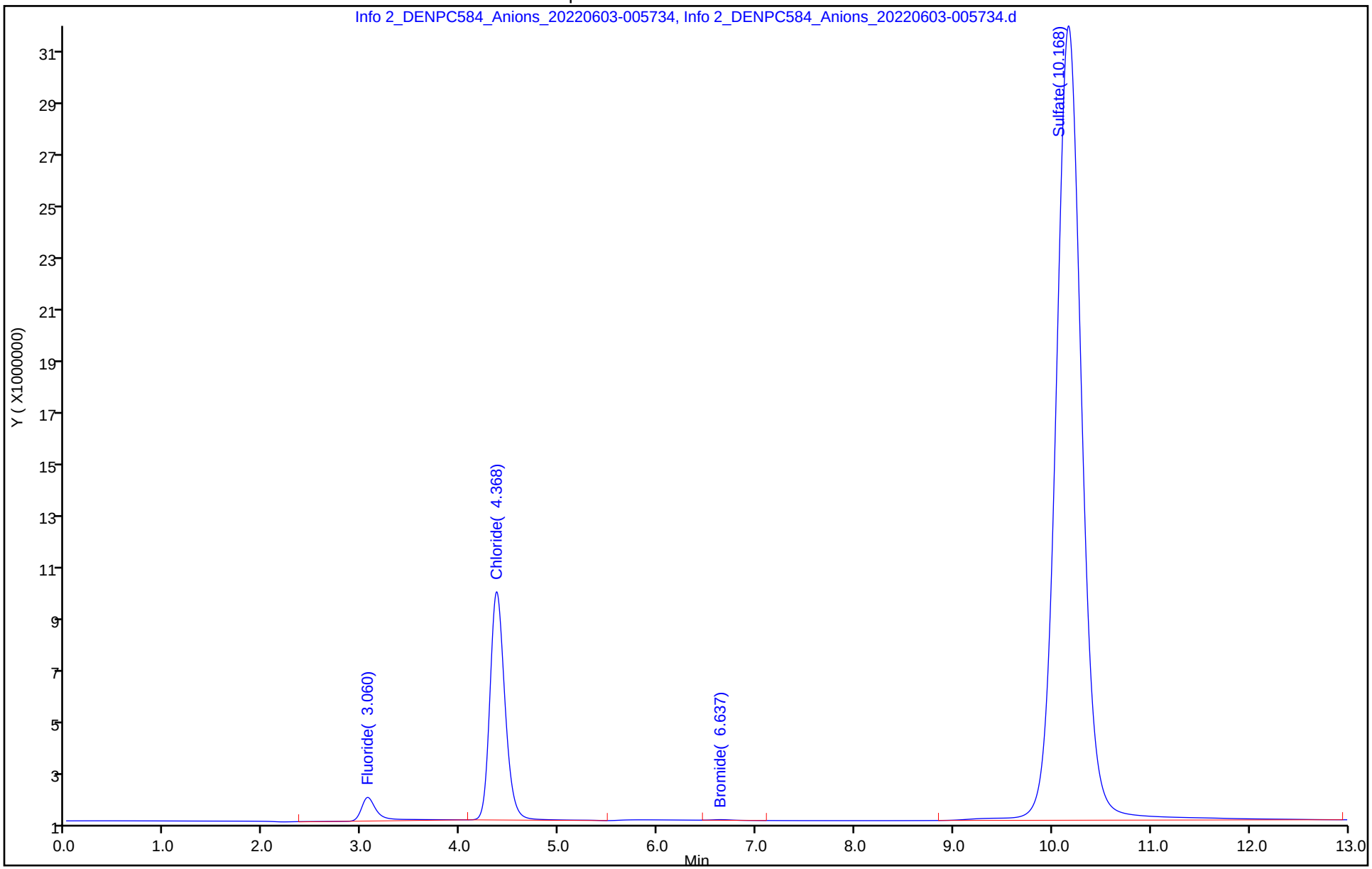
Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.060	3.058	0.002	10578380	0.4618	
2 Chloride	4.368	4.355	0.013	91833767	6.63	
3 Nitrite as N		5.108			ND	
4 Bromide	6.637	6.497	0.140	294377	0.1113	
5 Nitrate as N		7.350			ND	
7 Orthophosphate as P		9.028			ND	
6 Sulfate	10.168	10.123	0.045	553486085	54.3	

QC Flag Legend
Processing Flags

Report Date: 03-Jun-2022 13:11:50 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220603-005734.d				
Injection Date:	03-Jun-2022 00:41:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-162622-D-15	Lab Sample ID:	280-162622-15	Worklist Smp#:	58
Client ID:	SHGW04-22A				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220603-011
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 03-Jun-2022 00:57:00 ALS Bottle#: 0 Worklist Smp#: 59
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0111527-059
Misc. Info.: 280-0111527-059
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub5

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 03-Jun-2022 13:11:51 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1621

First Level Reviewer: foxr Date: 03-Jun-2022 13:05:40

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.057	3.058	-0.001	125201654	5.00	4.50	
2 Chloride	4.368	4.355	0.013	1429786701	100.0	100.2	
3 Nitrite as N	5.135	5.108	0.027	159619196	NC	NC	
4 Bromide	6.540	6.497	0.043	23584603	5.00	4.67	
5 Nitrate as N	7.413	7.350	0.063	163968782	NC	NC	
7 Orthophosphate as P	9.043	9.028	0.015	112086536	NC	NC	
6 Sulfate	10.117	10.123	-0.006	1019837305	100.0	99.8	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

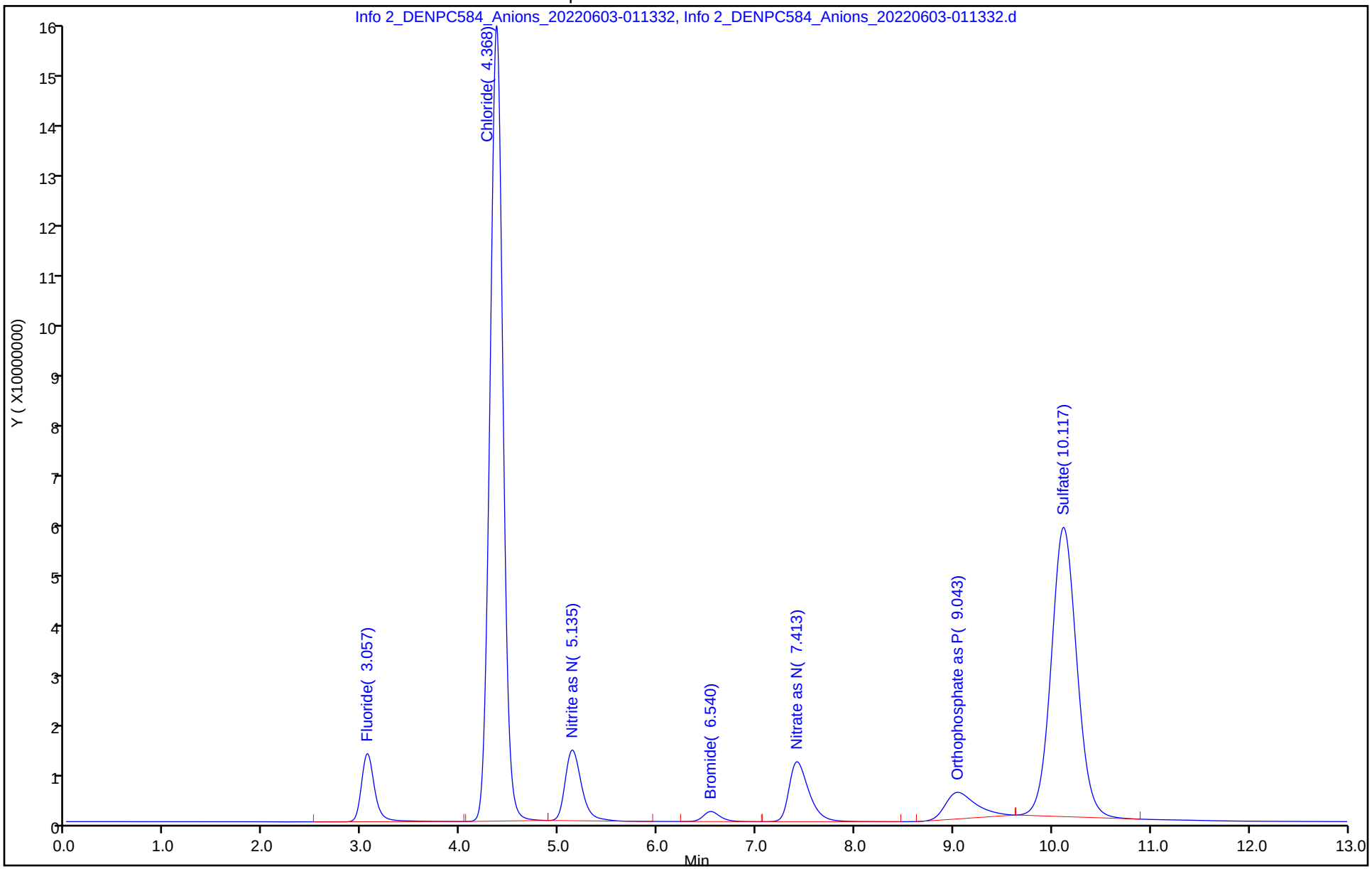
Reagents:

IC LCS_01879 Amount Added: 10.00 Units: mL

Report Date: 03-Jun-2022 13:11:51 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220603-011332.d				
Injection Date:	03-Jun-2022 00:57:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	59
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 Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220603-011

Injection Date: 03-Jun-2022 00:57:00 Instrument ID: WC_IonChrom13

Lims ID: ccv

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 59

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

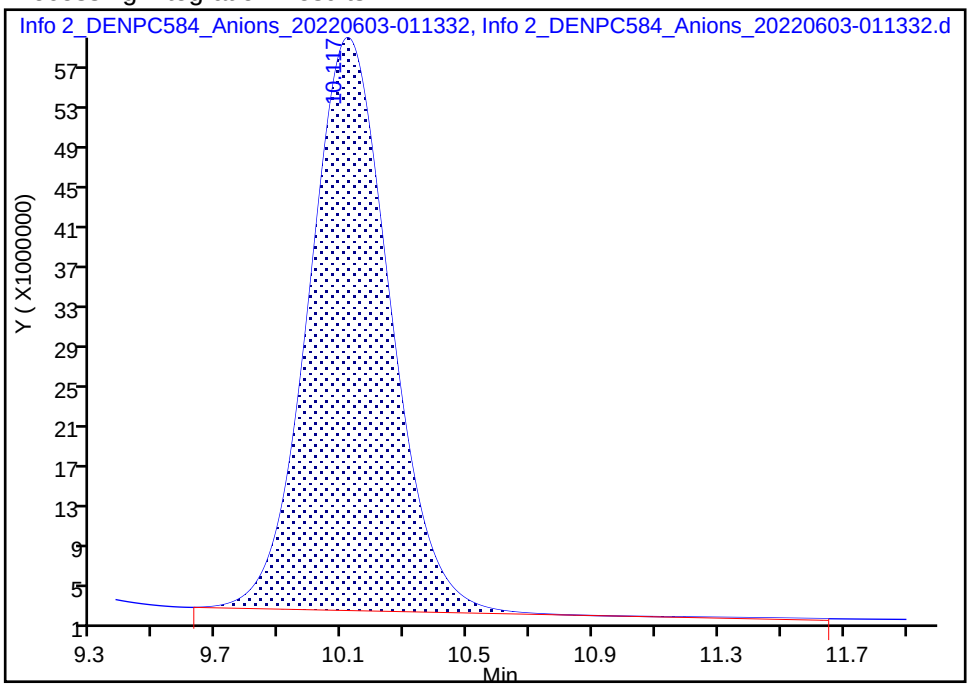
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

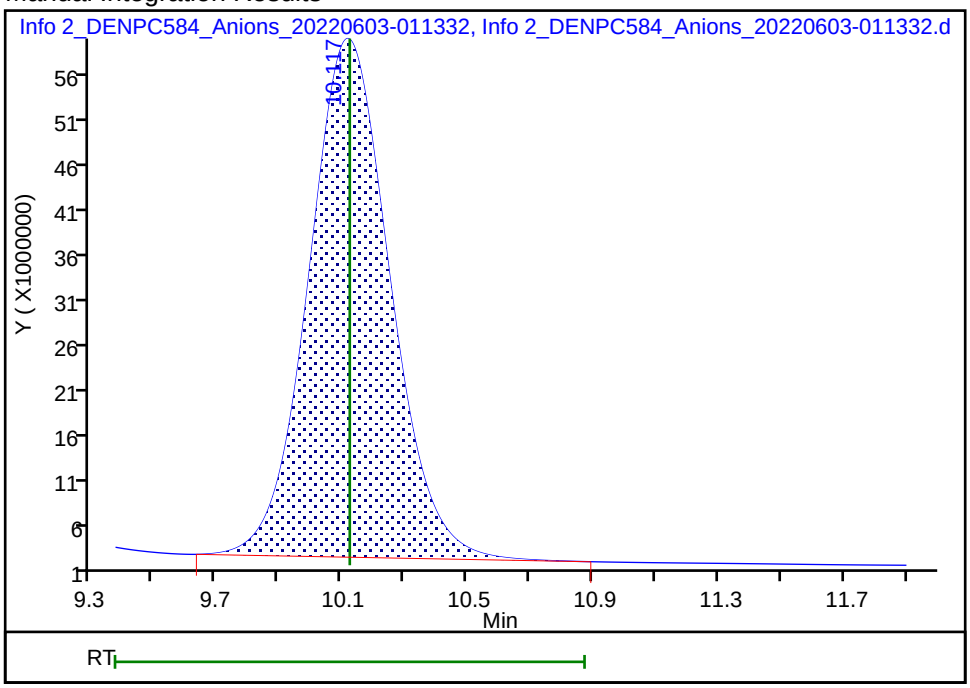
Processing Integration Results

RT: 10.12
Area: 1023229046
Amount: 100.1412
Amount Units: ug/ml



Manual Integration Results

RT: 10.12
Area: 1019837305
Amount: 99.810225
Amount Units: ug/ml



Reviewer: foxr, 03-Jun-2022 13:05:38

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220603-012
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 03-Jun-2022 01:13:00 ALS Bottle#: 0 Worklist Smp#: 60
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0111527-060
Misc. Info.: 280-0111527-060
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 03-Jun-2022 13:11:51 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1621

First Level Reviewer: foxr Date: 03-Jun-2022 13:05:53

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.058				ND	
2 Chloride	4.362	4.355	0.007	9194		0.2110	M
3 Nitrite as N		5.108				ND	
4 Bromide		6.497				ND	
5 Nitrate as N		7.350				ND	
7 Orthophosphate as P		9.028				ND	
6 Sulfate	10.218	10.123	0.095	406315		0.3395	

QC Flag Legend

Processing Flags

Review Flags

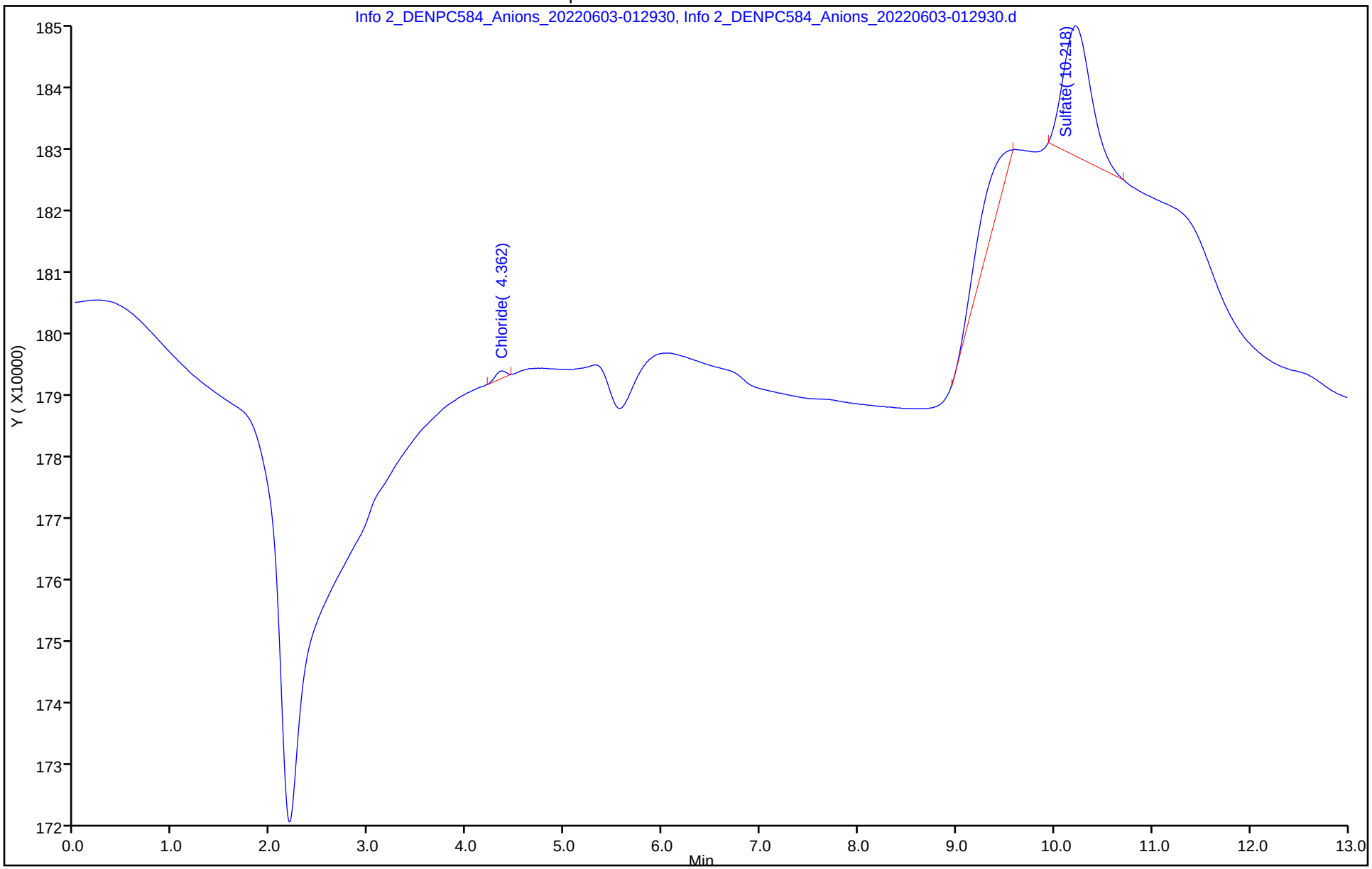
M - Manually Integrated

Report Date: 03-Jun-2022 13:11:51 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220603-012930.d

Injection Date:	03-Jun-2022 01:13:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	60
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220603-014
Lims ID: 280-162622-F-16
Client ID: G0311-22A
Sample Type: Client
Inject. Date: 03-Jun-2022 01:29:00 ALS Bottle#: 0 Worklist Smp#: 61
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0111527-061
Misc. Info.: 280-0111527-061
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 03-Jun-2022 13:11:51 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1621

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.060	3.058	0.002	4104679	0.2339	
2 Chloride	4.472	4.355	0.117	1343491357	94.2	
3 Nitrite as N		5.108			ND	
4 Bromide	6.705	6.497	0.208	2213982	0.4869	
5 Nitrate as N	7.702	7.350	0.352	635791	NC	
7 Orthophosphate as P		9.028			ND	
6 Sulfate	10.163	10.123	0.040	1987953074	194.3	

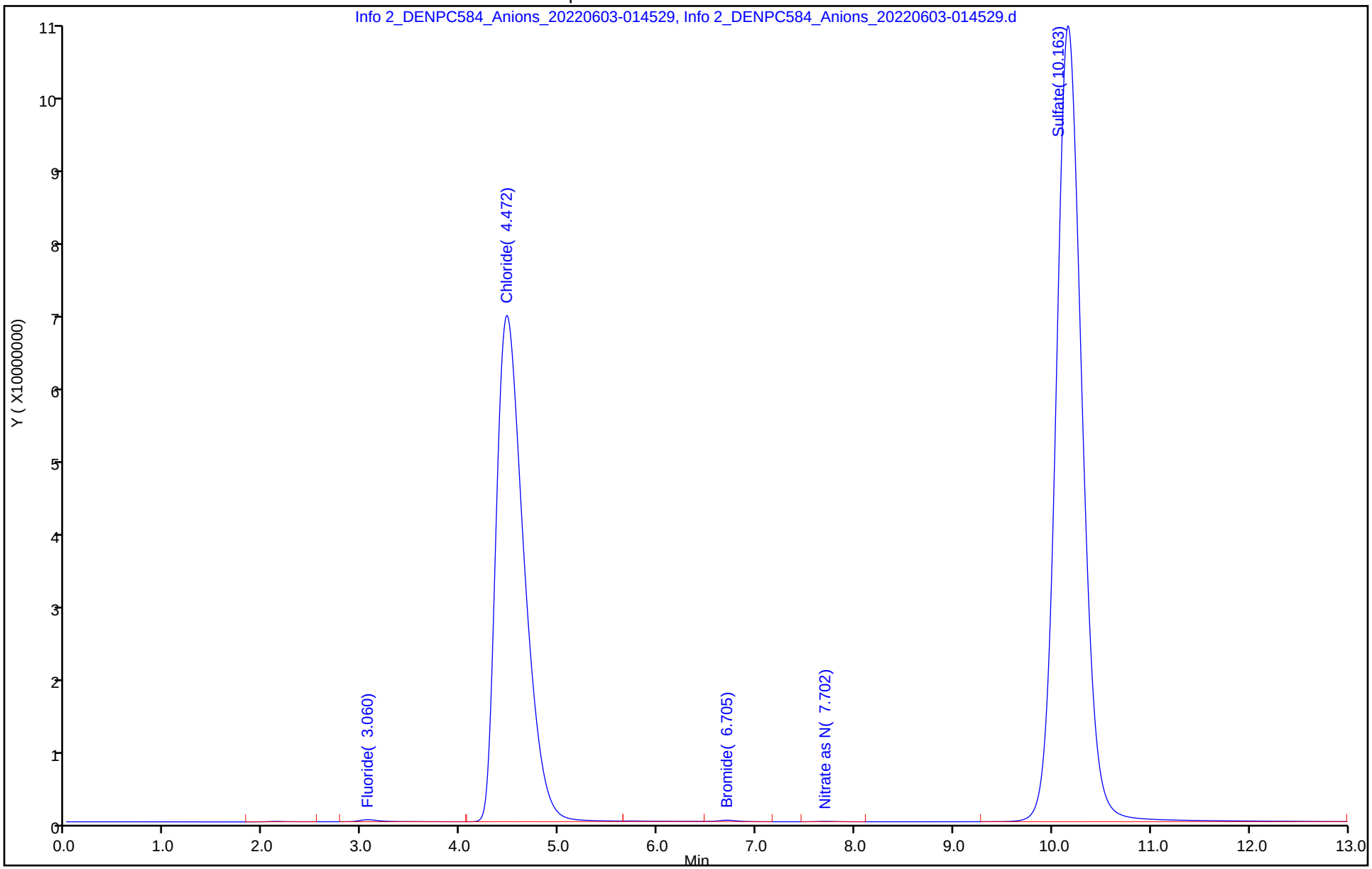
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 03-Jun-2022 13:11:52 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220603-014529.d				
Injection Date:	03-Jun-2022 01:29:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-162622-F-16	Lab Sample ID:	280-162622-16	Worklist Smp#:	61
Client ID:	G0311-22A				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220603-02				
Lims ID:	280-162622-F-17				
Client ID:	G0111-22A				
Sample Type:	Client				
Inject. Date:	03-Jun-2022 01:45:00	ALS Bottle#:	0	Worklist Smp#:	62
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0111527-062				
Misc. Info.:	280-0111527-062				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom13		
Method:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Anions-IC13.m				
Limit Group:	Wet - Anions 28D				
Last Update:	03-Jun-2022 13:11:51	Calib Date:	16-May-2022 18:54:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-19				
Column 1 :			Det: 0005		
Process Host:	CTX1621				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.060	3.058	0.002	4044068	0.2317	
2 Chloride	4.493	4.355	0.138	1342017459	94.1	
3 Nitrite as N		5.108			ND	
4 Bromide	6.710	6.497	0.213	2223651	0.4888	
5 Nitrate as N	7.713	7.350	0.363	609053	NC	
7 Orthophosphate as P		9.028			ND	
6 Sulfate	10.158	10.123	0.035	1983090818	193.8	

QC Flag Legend

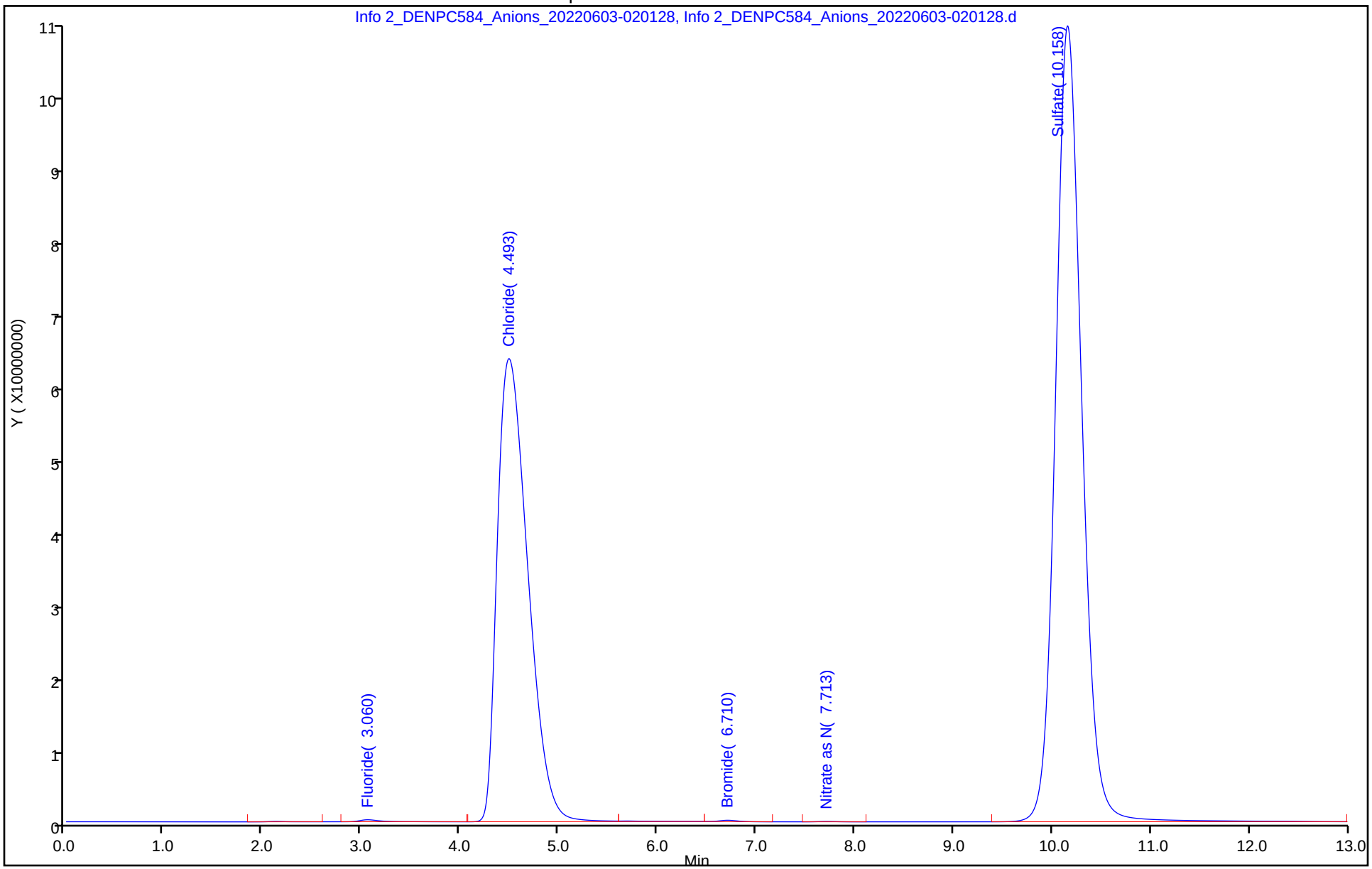
Processing Flags

NC - Not Calibrated

Report Date: 03-Jun-2022 13:11:52 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220603-020128.d				
Injection Date:	03-Jun-2022 01:45:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-162622-F-17	Lab Sample ID:	280-162622-17	Worklist Smp#:	62
Client ID:	G0111-22A				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220603-021
Lims ID: 280-162622-F-18
Client ID: G0123-22A
Sample Type: Client
Inject. Date: 03-Jun-2022 02:01:00 ALS Bottle#: 0 Worklist Smp#: 63
Injection Vol: 5.0 ul Dil. Factor: 5.0000
Sample Info: 280-0111527-063
Misc. Info.: 280-0111527-063
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 03-Jun-2022 13:11:51 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

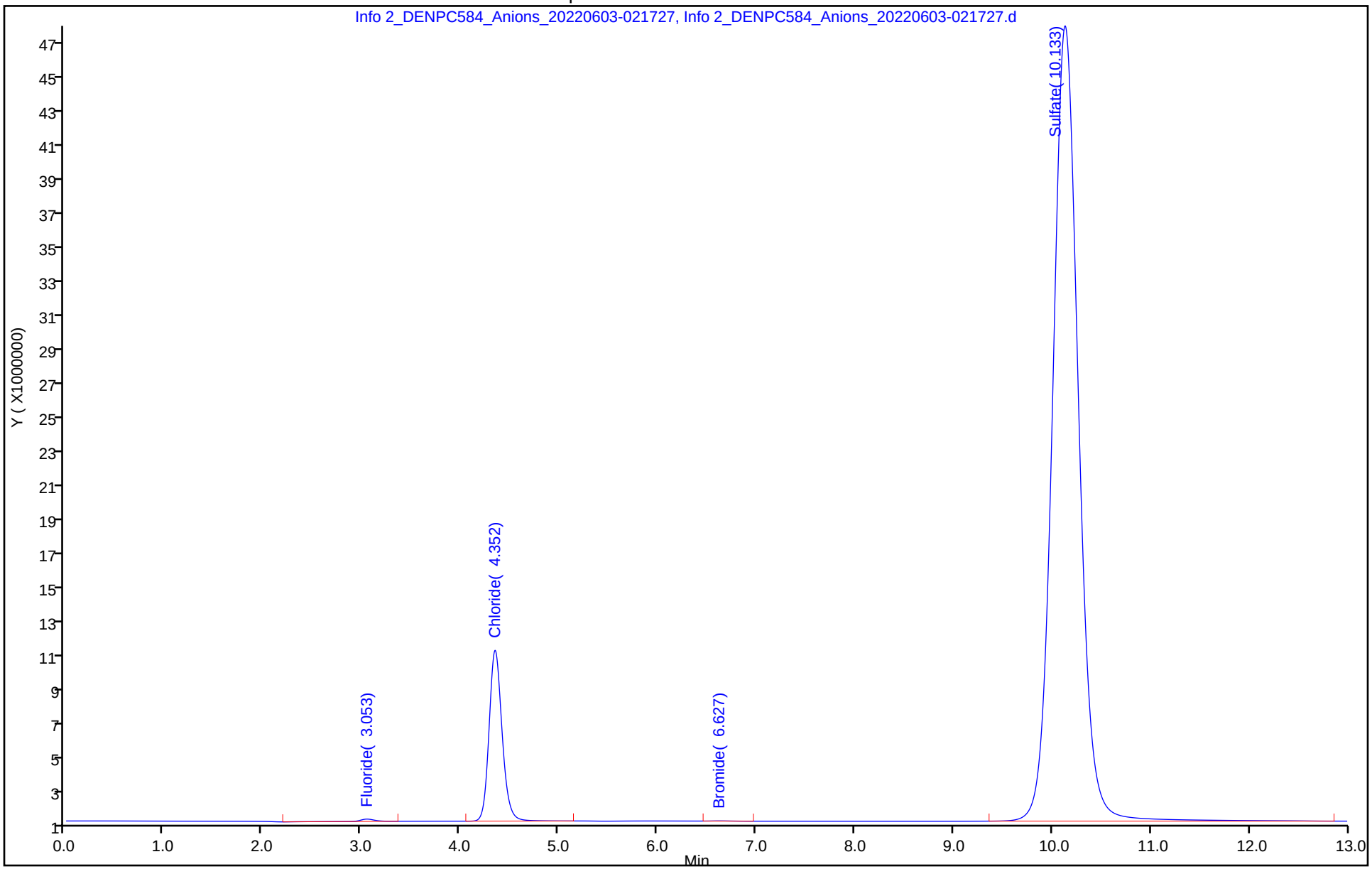
Column 1 : Det: 0005
Process Host: CTX1621

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.053	3.058	-0.005	1524015	0.1430	
2 Chloride	4.352	4.355	-0.003	90836569	6.56	
3 Nitrite as N		5.108			ND	
4 Bromide	6.627	6.497	0.130	162733	0.0856	
5 Nitrate as N		7.350			ND	
7 Orthophosphate as P		9.028			ND	
6 Sulfate	10.133	10.123	0.010	839543571	82.2	

Report Date: 03-Jun-2022 13:11:52 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220603-021727.d				
Injection Date:	03-Jun-2022 02:01:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-162622-F-18	Lab Sample ID:	280-162622-18	Worklist Smp#:	63
Client ID:	G0123-22A				
Injection Vol:	5.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220603-023
Lims ID: 280-162622-B-19
Client ID: SHGW02-22A
Sample Type: Client
Inject. Date: 03-Jun-2022 02:17:00 ALS Bottle#: 0 Worklist Smp#: 64
Injection Vol: 5.0 ul Dil. Factor: 5.0000
Sample Info: 280-0111527-064
Misc. Info.: 280-0111527-064
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 03-Jun-2022 13:11:51 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

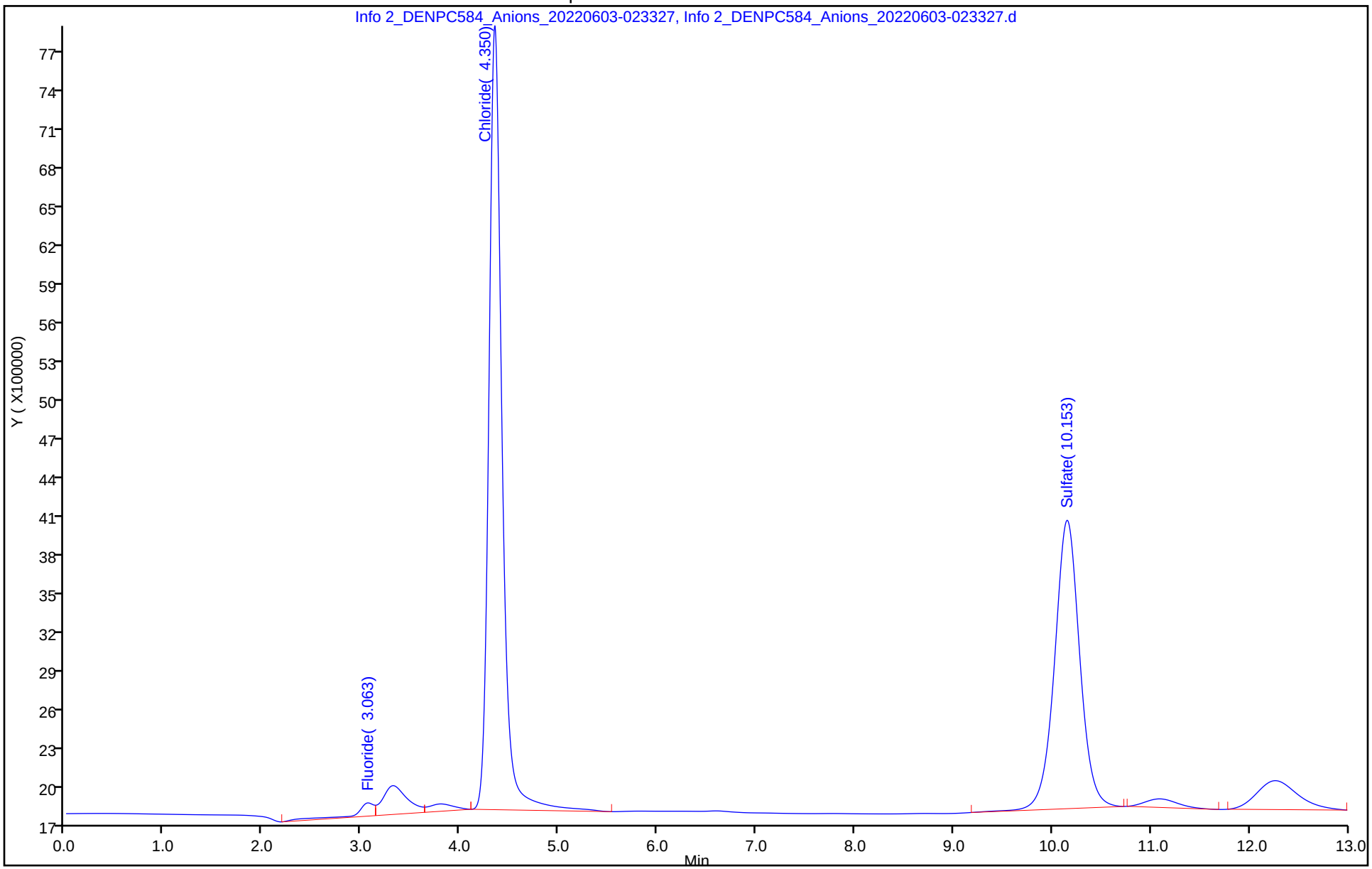
Column 1 : Det: 0005
Process Host: CTX1621

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.063	3.058	0.005	1342839	0.1366	
2 Chloride	4.350	4.355	-0.005	55557183	4.10	
3 Nitrite as N		5.108			ND	
4 Bromide		6.497			ND	
5 Nitrate as N		7.350			ND	
7 Orthophosphate as P		9.028			ND	
6 Sulfate	10.153	10.123	0.030	39008920	4.11	

Report Date: 03-Jun-2022 13:11:53 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220603-023327.d				
Injection Date:	03-Jun-2022 02:17:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-162622-B-19	Lab Sample ID:	280-162622-19	Worklist Smp#:	64
Client ID:	SHGW02-22A				
Injection Vol:	5.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220603-024
Lims ID: 280-162622-B-20
Client ID: SHGW05-22A
Sample Type: Client
Inject. Date: 03-Jun-2022 02:33:00 ALS Bottle#: 0 Worklist Smp#: 65
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0111527-065
Misc. Info.: 280-0111527-065
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 03-Jun-2022 13:11:51 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1621

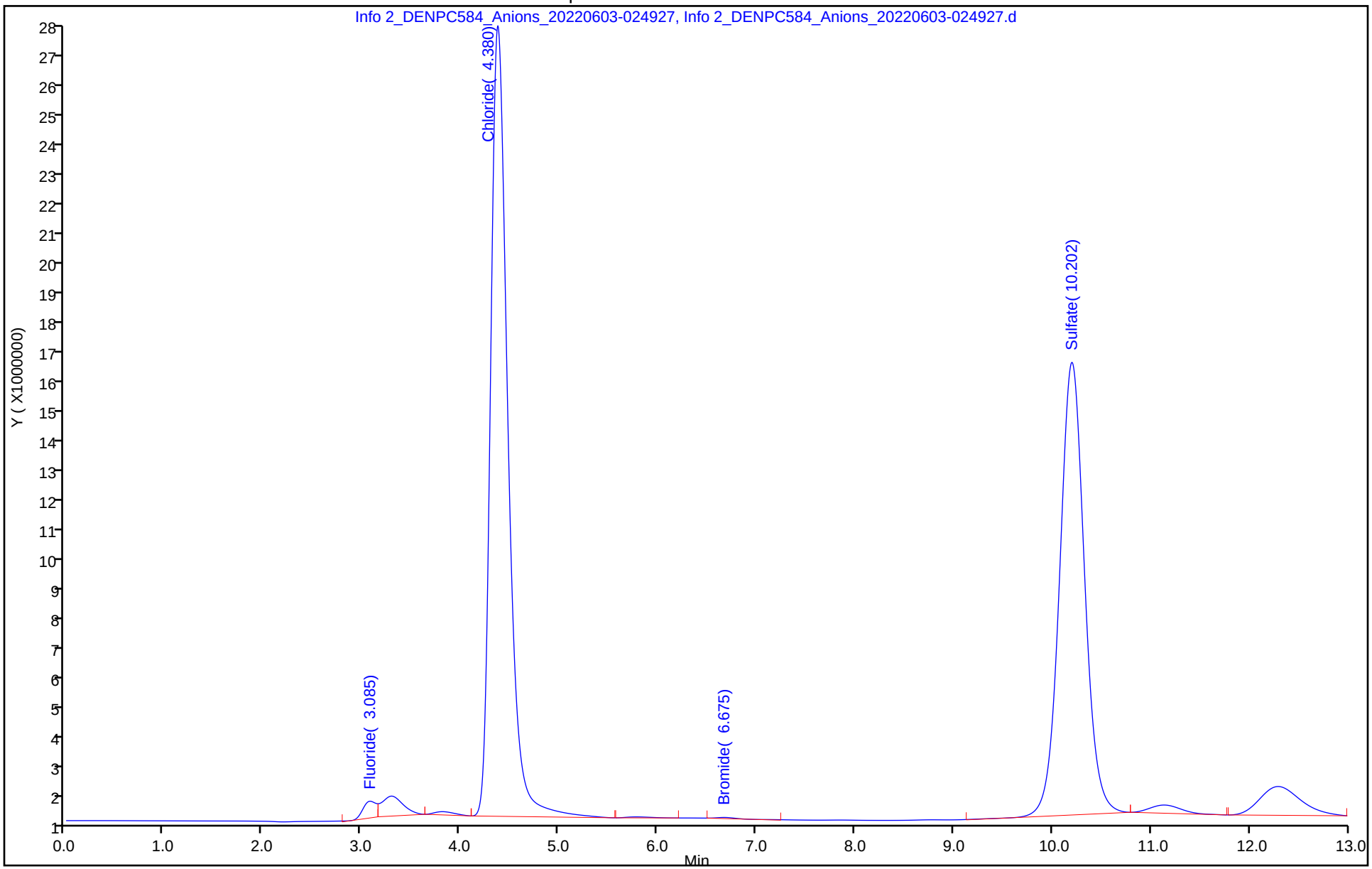
Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.085	3.058	0.027	5099721	0.2689	
2 Chloride	4.380	4.355	0.025	312631163	22.1	
3 Nitrite as N		5.108			ND	
4 Bromide	6.675	6.497	0.178	565795	0.1644	
5 Nitrate as N		7.350			ND	
7 Orthophosphate as P		9.028			ND	
6 Sulfate	10.202	10.123	0.079	255914296	25.3	

Report Date: 03-Jun-2022 13:11:53 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220603-024927.d

Injection Date:	03-Jun-2022 02:33:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-162622-B-20	Lab Sample ID:	280-162622-20	Worklist Smp#:	65
Client ID:	SHGW05-22A				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220603-030				
Lims ID:	280-162622-B-21				
Client ID:	G0053-22A				
Sample Type:	Client				
Inject. Date:	03-Jun-2022 02:49:00	ALS Bottle#:	0	Worklist Smp#:	66
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0111527-066				
Misc. Info.:	280-0111527-066				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom13		
Method:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Anions-IC13.m				
Limit Group:	Wet - Anions 28D				
Last Update:	03-Jun-2022 13:11:51	Calib Date:	16-May-2022 18:54:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191				
Column 1 :			Det: 0005		
Process Host:	CTX1621				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.057	3.058	-0.001	2376483	0.1730	
2 Chloride	4.353	4.355	-0.002	192870374	13.7	
3 Nitrite as N	5.167	5.108	0.059	384678	NC	
4 Bromide	6.633	6.497	0.136	345935	0.1214	
5 Nitrate as N	7.378	7.350	0.028	440028414	NC	
7 Orthophosphate as P		9.028			ND	
6 Sulfate	10.158	10.123	0.035	508265041	49.9	

QC Flag Legend

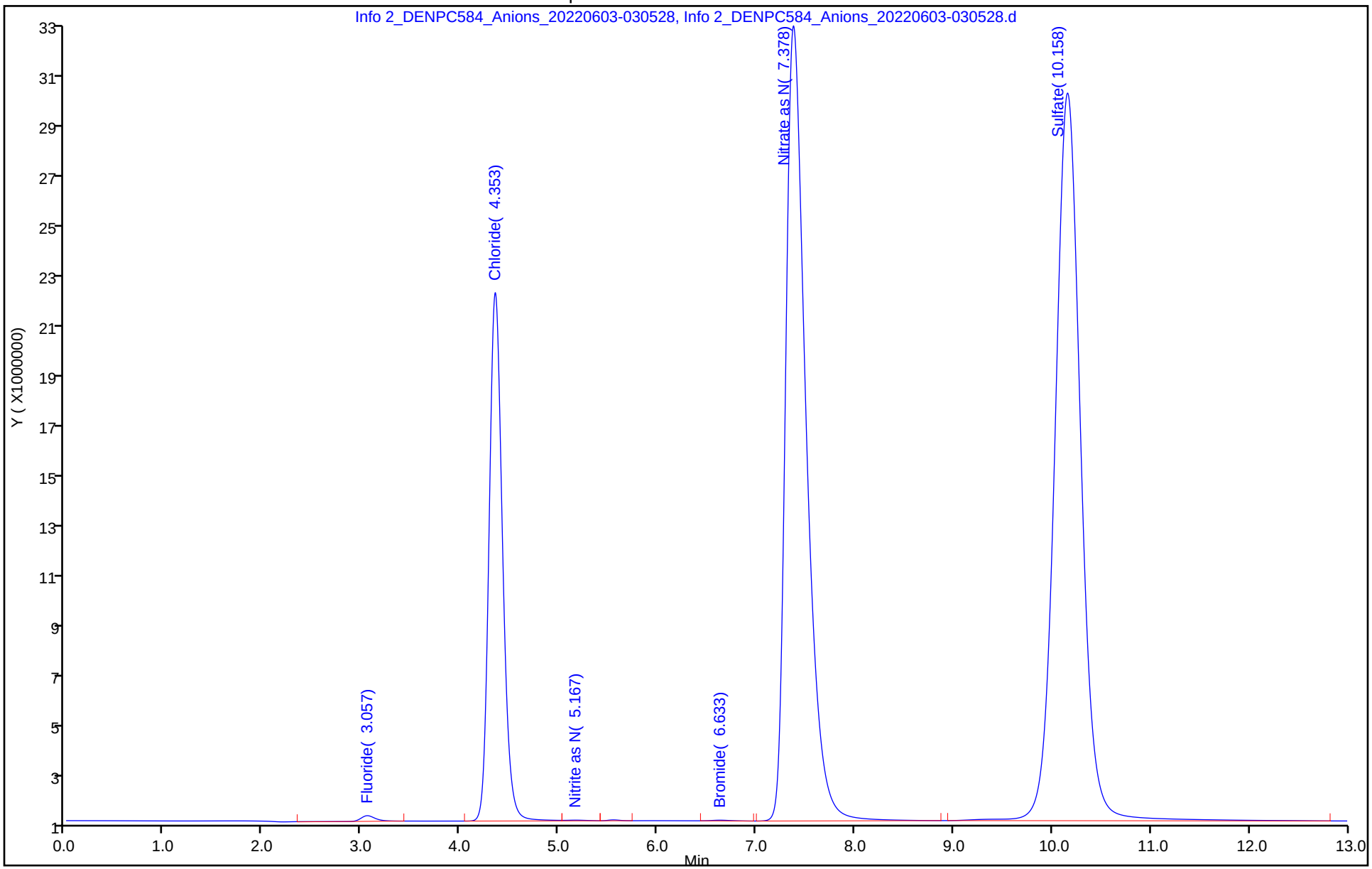
Processing Flags

NC - Not Calibrated

Report Date: 03-Jun-2022 13:11:53 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220603-030528.d				
Injection Date:	03-Jun-2022 02:49:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-162622-B-21	Lab Sample ID:	280-162622-21	Worklist Smp#:	66
Client ID:	G0053-22A				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220603-032
Lims ID: 280-162622-B-26
Client ID: SAMW1-22A
Sample Type: Client
Inject. Date: 03-Jun-2022 03:05:00 ALS Bottle#: 0 Worklist Smp#: 67
Injection Vol: 5.0 ul Dil. Factor: 5.0000
Sample Info: 280-0111527-067
Misc. Info.: 280-0111527-067
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 03-Jun-2022 13:11:51 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1621

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.055	3.058	-0.003	1072660	0.1271	
2 Chloride	4.353	4.355	-0.002	24256736	1.91	
3 Nitrite as N	5.188	5.108	0.080	325741	NC	
4 Bromide		6.497			ND	
5 Nitrate as N	7.608	7.350	0.258	1793636	NC	
7 Orthophosphate as P	9.370	9.028	0.342	2655117	NC	
6 Sulfate	10.148	10.123	0.025	49984967	5.18	

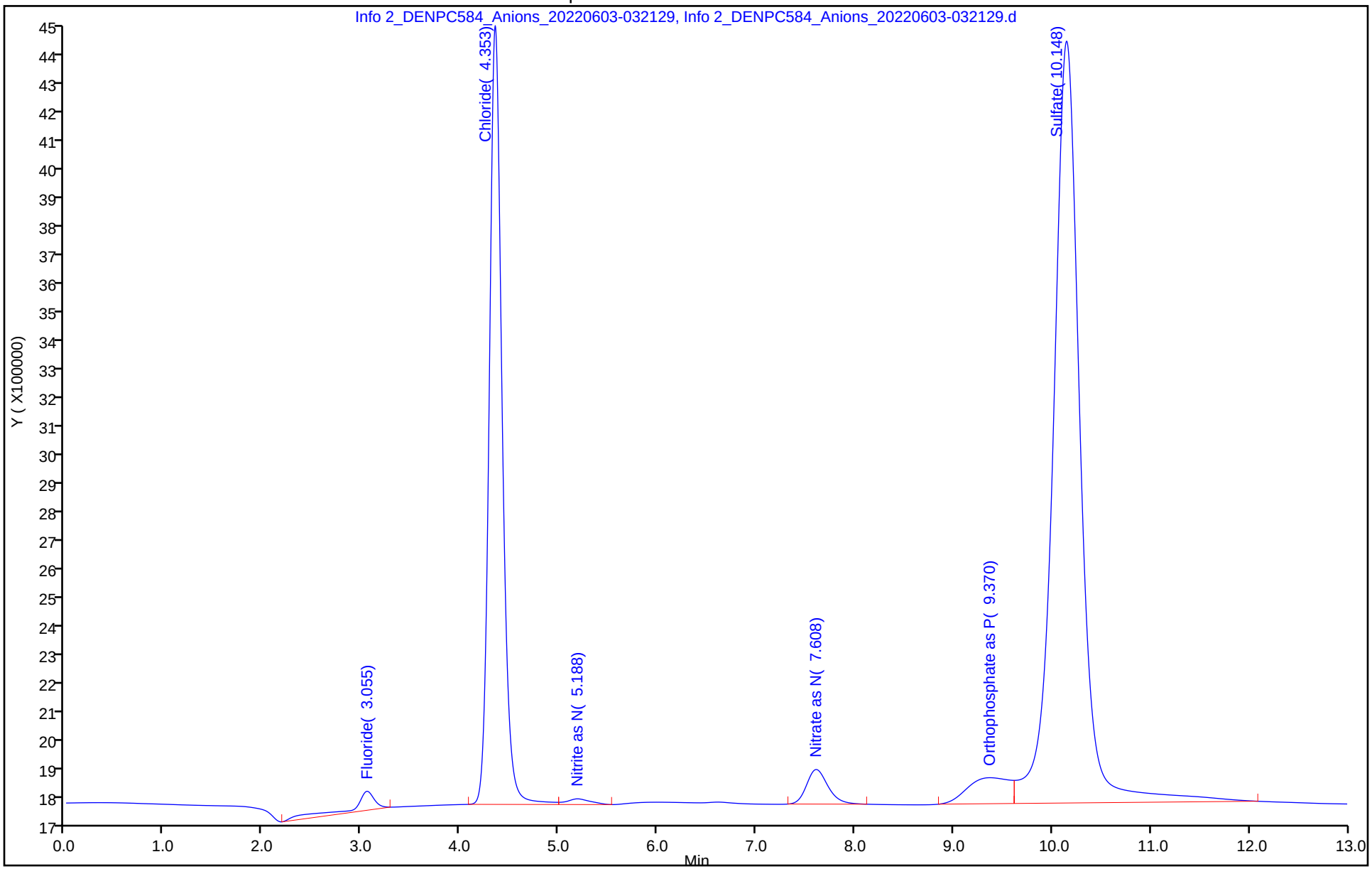
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 03-Jun-2022 13:11:54 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220603-032129.d				
Injection Date:	03-Jun-2022 03:05:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-162622-B-26	Lab Sample ID:	280-162622-26	Worklist Smp#:	67
Client ID:	SAMW1-22A				
Injection Vol:	5.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220603-042
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 03-Jun-2022 04:09:00 ALS Bottle#: 0 Worklist Smp#: 73
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0111527-073
Misc. Info.: 280-0111527-073
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub5

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 03-Jun-2022 13:11:55 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1621

First Level Reviewer: foxr Date: 03-Jun-2022 13:07:11

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.052	3.058	-0.006	122698878	5.00	4.41	
2 Chloride	4.367	4.355	0.012	1434228895	100.0	100.5	
3 Nitrite as N	5.138	5.108	0.030	161628296	NC	NC	
4 Bromide	6.548	6.497	0.051	23549445	5.00	4.66	
5 Nitrate as N	7.432	7.350	0.082	164172718	NC	NC	
7 Orthophosphate as P	9.047	9.028	0.019	99856413	NC	NC	
6 Sulfate	10.102	10.123	-0.021	1023776876	100.0	100.2	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

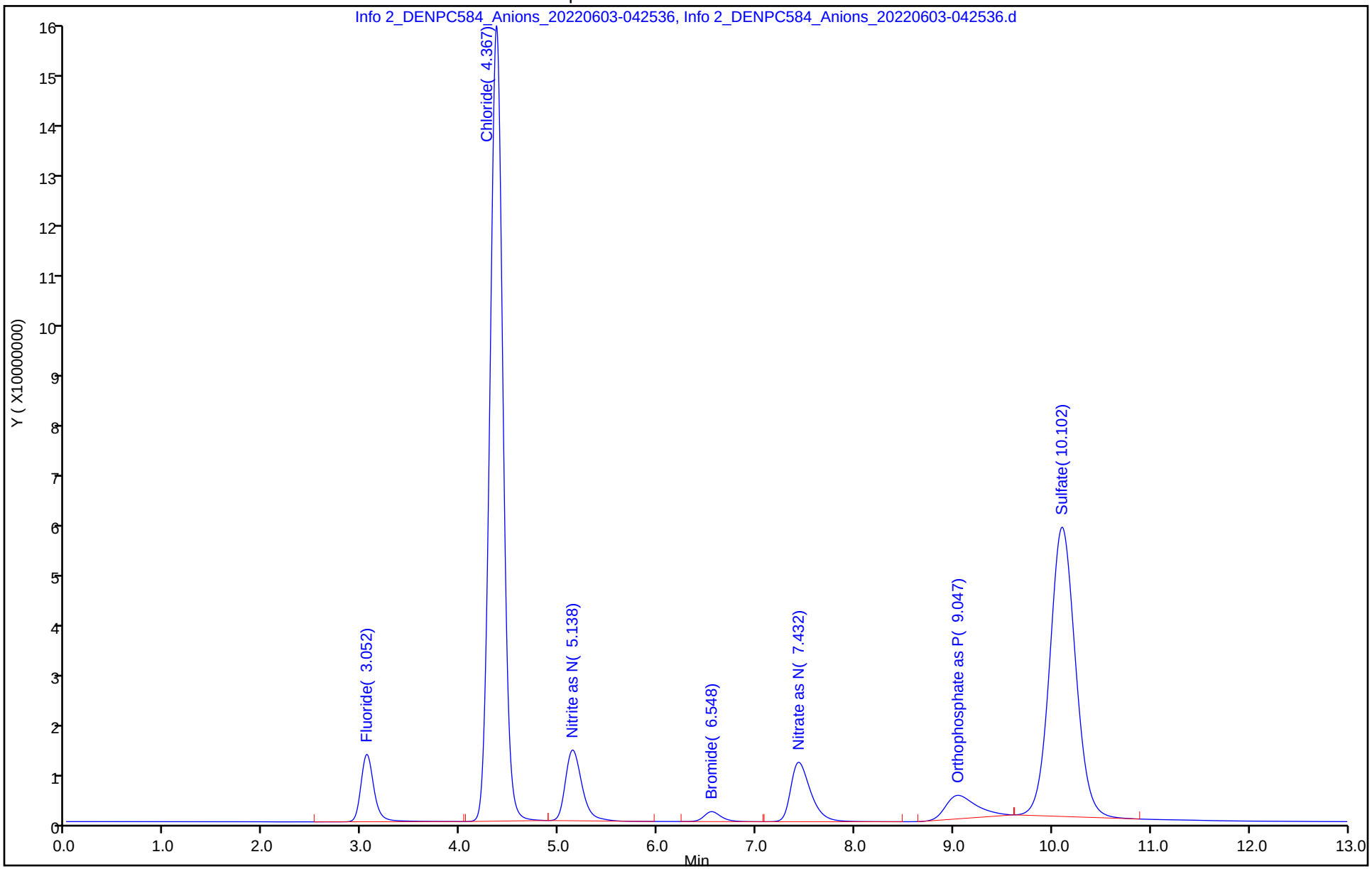
Reagents:

IC LCS_01879 Amount Added: 10.00 Units: mL

Report Date: 03-Jun-2022 13:11:55 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220603-042536.d				
Injection Date:	03-Jun-2022 04:09:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	73
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 Denver

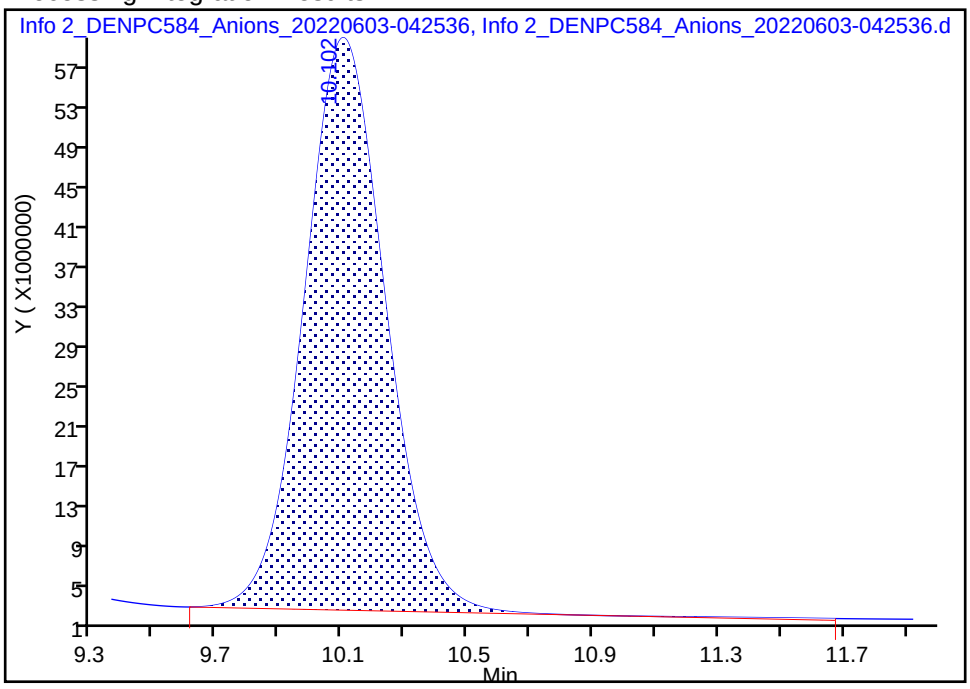
Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220603-042
Injection Date: 03-Jun-2022 04:09:00 Instrument ID: WC_IonChrom13
Lims ID: ccv
Client ID:
Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 73
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: Anions-IC13 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

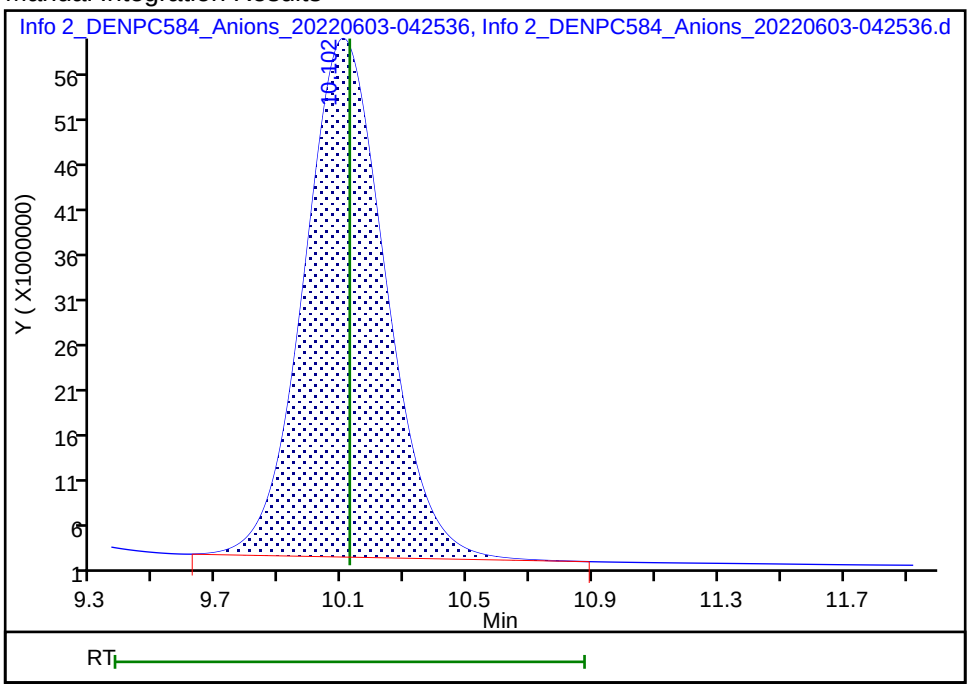
Processing Integration Results

RT: 10.10
Area: 1027439019
Amount: 100.5520
Amount Units: ug/ml



Manual Integration Results

RT: 10.10
Area: 1023776876
Amount: 100.1946
Amount Units: ug/ml



Reviewer: foxr, 03-Jun-2022 13:07:08
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220603-044
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 03-Jun-2022 04:25:00 ALS Bottle#: 0 Worklist Smp#: 74
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0111527-074
Misc. Info.: 280-0111527-074
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 03-Jun-2022 13:11:55 Calib Date: 16-May-2022 18:54:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220516-111056.b\Info 2_DENPC584_Anions_20220516-191

Column 1 : Det: 0005
Process Host: CTX1621

First Level Reviewer: foxr Date: 03-Jun-2022 13:07:23

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.058				ND	
2 Chloride	4.358	4.355	0.003	20224		0.2118	M
3 Nitrite as N		5.108				ND	
4 Bromide		6.497				ND	
5 Nitrate as N		7.350				ND	
7 Orthophosphate as P		9.028				ND	
6 Sulfate	10.195	10.123	0.072	535763		0.3521	

QC Flag Legend

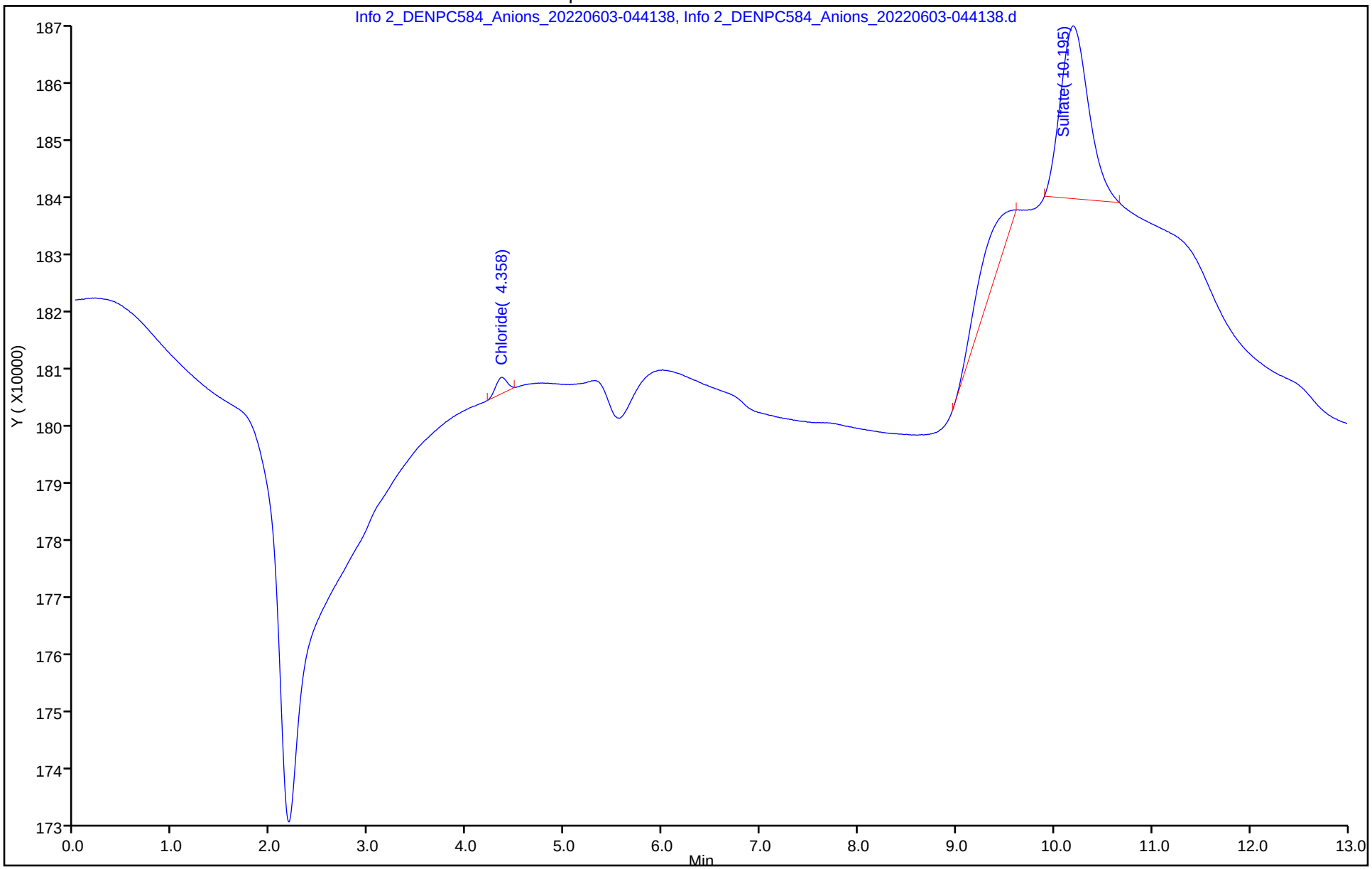
Processing Flags
Review Flags
M - Manually Integrated

Report Date: 03-Jun-2022 13:11:56 Chrom Revision: 2.3 18-May-2022 20:00:04

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220602-111527.b\Info 2_DENPC584_Anions_20220603-044138.d

Injection Date:	03-Jun-2022 04:25:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	74
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 280-576568

Analyst: Wondimu, Akewak B

Batch Open: 5/31/2022 9:54:00AM

Batch End:

06/10/2022

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~280-576568/1 N/A	N/A				N/A	N/A	N/A		LCS 280-576568/1-A
2	MB~280-576568/2 N/A	N/A				N/A	N/A	N/A		MB 280-576568/2-A
3	280-162622-D-1 (9060A_Diss)	N/A (280-162622-1)	Water			6/7/22	18_Days	4		280-162622-D-1-A
4	280-162622-D-1~MS (9060A_Diss)	N/A (280-162622-1)	Water			6/7/22	18_Days	4		280-162622-D-1-B MS
5	280-162622-D-1~MSD (9060A_Diss)	N/A (280-162622-1)	Water			6/7/22	18_Days	4		280-162622-D-1-C MSD
6	280-162622-D-2 (9060A_Diss)	N/A (280-162622-1)	Water			6/7/22	18_Days	4		280-162622-D-2-A
7	280-162622-D-3 (9060A_Diss)	N/A (280-162622-1)	Water			6/7/22	18_Days	4		280-162622-D-3-A
8	280-162622-D-4 (9060A_Diss)	N/A (280-162622-1)	Water			6/7/22	18_Days	4		280-162622-D-4-A
9	280-162622-D-5 (9060A_Diss)	N/A (280-162622-1)	Water			6/7/22	18_Days	4		280-162622-D-5-A
10	280-162622-D-6 (9060A_Diss)	N/A (280-162622-1)	Water			6/7/22	18_Days	4		280-162622-D-6-A
11	280-162622-D-7 (9060A_Diss)	N/A (280-162622-1)	Water			6/7/22	18_Days	4		280-162622-D-7-A
12	280-162622-D-8 (9060A_Diss)	N/A (280-162622-1)	Water			6/7/22	18_Days	4		280-162622-D-8-A
13	280-162622-D-9 (9060A_Diss)	N/A (280-162622-1)	Water			6/7/22	18_Days	4		280-162622-D-9-A
14	280-162622-D-10 (9060A_Diss)	N/A (280-162622-1)	Water			6/7/22	18_Days	4		280-162622-D-10-A

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FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 280-576568 Analyst: Wondimu, Akewak B Batch Open: 5/31/2022 9:54:00AM

Batch End:

15	280-162622-D-11 (9060A_Diss)	N/A (280-162622-1)	Water			6/7/22	18_Days	4	
16	280-162622-D-11~MS (9060A_Diss)	N/A (280-162622-1)	Water			6/7/22	18_Days	4	
17	280-162622-D-11~MSD (9060A_Diss)	N/A (280-162622-1)	Water			6/7/22	18_Days	4	
18	280-162622-D-12 (9060A_Diss)	N/A (280-162622-1)	Water			6/7/22	18_Days	4	
19	280-162622-D-16 (9060A_Diss)	N/A (280-162622-1)	Water			6/7/22	18_Days	4	
20	280-162622-D-17 (9060A_Diss)	N/A (280-162622-1)	Water			6/7/22	18_Days	4	
21	280-162622-D-18 (9060A_Diss)	N/A (280-162622-1)	Water			6/7/22	18_Days	4	
22	N/A	N/A				N/A	N/A	N/A	
23	N/A	N/A				N/A	N/A	N/A	
24	N/A	N/A				N/A	N/A	N/A	

06/10/2022

Page 2374 of 2441

FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 280-576568

Analyst: Wondimu, Akewak B

Batch Open: 5/31/2022 9:54:00AM

Batch End:

06/10/2022

Batch Notes

Pipette/Syringe/Dispenser ID	1272995
Filter ID	R1MB55774-2036-DS
Nitric Acid ID	N/A
Batch Comment	DOC Filtration

FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 280-576568

Analyst: Wondimu, Akewak B

Batch Open: 5/31/2022 9:54:00AM

Batch End:

06/10/2022

Comments

280-162622-D-1	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-162622-D-1~MS	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-162622-D-1~MS	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-162622-D-2	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-162622-D-3	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-162622-D-4	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-162622-D-5	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-162622-D-6	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-162622-D-7	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-162622-D-8	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-162622-D-9	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-162622-D-10	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-162622-D-11	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-162622-D-11~M	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-162622-D-11~M	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-162622-D-12		

FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

06/10/2022

Batch Number: 280-576568

Analyst: Wondimu, Akewak B

Batch Open: 5/31/2022 9:54:00AM

Batch End:

	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-162622-D-16		
	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-162622-D-17		
	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-162622-D-18		
	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal

FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

06/10/2022

Batch Number: 280-576568

Analyst: Wondimu, Akewak B

Batch Open: 5/31/2022 9:54:00AM

Batch End:

Reagent Additions Worksheet

Lab ID	Reagent Code	Amount Added	Final Amount	By	Witness

Other Reagents:

Reagent	Amount/Units	Lot#:

	Type	Analysis	Sample Name	Sample ID	ObjectID	Origin
1	Unknown	NPOC	ICV		0A-103108-04335027-1348A731B335-0000	NPOC.met
2	Unknown	NPOC	ICB		0A-103108-04335027-1348A731B335-0001	NPOC.met
3	Unknown	NPOC	LCS		0A-103108-04335027-1348A731B335-0002	NPOC.met
4	Unknown	NPOC	MB		0A-103108-04335027-1348A731B335-0003	NPOC.met
5	Unknown	NPOC	TIC		0A-103108-04335027-1348A731B335-0004	NPOC.met
6	Unknown	NPOC	LCS 280-576568/1-A		0A-103108-04335027-1348A731B335-0005	NPOC.met
7	Unknown	NPOC	MB 280-576568/2-A		0A-103108-04335027-1348A731B335-0006	NPOC.met
8	Unknown	NPOC	280-162622-D-1-A		0A-103108-04335027-1348A731B335-0007	NPOC.met
9	Unknown	NPOC	280-162622-D-1-B MS		0A-103108-04335027-1348A731B335-0008	NPOC.met
10	Unknown	NPOC	280-162622-D-1-C MSD		0A-103108-04335027-1348A731B335-0009	NPOC.met
11	Unknown	NPOC	280-162622-D-2-A		0A-103108-04335027-1348A731B335-000A	NPOC.met
12	Unknown	NPOC	280-162622-D-3-A		0A-103108-04335027-1348A731B335-000B	NPOC.met
13	Unknown	NPOC	280-162622-D-4-A		0A-103108-04335027-1348A731B335-000C	NPOC.met
14	Unknown	NPOC	280-162622-D-5-A		0A-103108-04335027-1348A731B335-000D	NPOC.met
15	Unknown	NPOC	CCV		0A-103108-04335027-1348A731B335-000E	NPOC.met
16	Unknown	NPOC	CCB		0A-103108-04335027-1348A731B335-000F	NPOC.met
17	Unknown	NPOC	280-162622-D-6-A		0A-103108-04335027-1348A731B335-0010	NPOC.met
18	Unknown	NPOC	280-162622-D-7-A		0A-103108-04335027-1348A731B335-0011	NPOC.met
19	Unknown	NPOC	280-162622-D-8-A		0A-103108-04335027-1348A731B335-0012	NPOC.met
20	Unknown	NPOC	280-162622-D-9-A		0A-103108-04335027-1348A731B335-0013	NPOC.met
21	Unknown	NPOC	280-162622-D-10-A		0A-103108-04335027-1348A731B335-0014	NPOC.met
22	Unknown	NPOC	280-162622-D-11-A		0A-103108-04335027-1348A731B335-0015	NPOC.met
23	Unknown	NPOC	280-162622-D-11-B MS		0A-103108-04335027-1348A731B335-0016	NPOC.met
24	Unknown	NPOC	280-162622-D-11-C MSD		0A-103108-04335027-1348A731B335-0017	NPOC.met
25	Unknown	NPOC	280-162622-D-12-A		0A-103108-04335027-1348A731B335-0018	NPOC.met
26	Unknown	NPOC	280-162622-D-16-A		0A-103108-04335027-1348A731B335-0019	NPOC.met
27	Unknown	NPOC	CCV		0A-103108-04335027-1348A731B335-001A	NPOC.met
28	Unknown	NPOC	CCB		0A-103108-04335027-1348A731B335-001B	NPOC.met
29	Unknown	NPOC	280-162622-D-17-A		0A-103108-04335027-1348A731B335-001C	NPOC.met
30	Unknown	NPOC	280-162622-D-18-A		0A-103108-04335027-1348A731B335-001D	NPOC.met
31	Unknown	NPOC	LCS		0A-103108-04335027-1348A731B335-001E	NPOC.met
32	Unknown	NPOC	MB		0A-103108-04335027-1348A731B335-001F	NPOC.met
33	Unknown	NPOC	TIC		0A-103108-04335027-1348A731B335-0020	NPOC.met
34	Unknown	NPOC	590-17563-a-1		0A-103108-04335027-1348A731B335-0021	NPOC.met
35	Unknown	NPOC	MS 590-17563-a-1		0A-103108-04335027-1348A731B335-0022	NPOC.met
36	Unknown	NPOC	MSD 590-17563-a-1		0A-103108-04335027-1348A731B335-0023	NPOC.met
37	Unknown	NPOC	590-17563-a-2		0A-103108-04335027-1348A731B335-0024	NPOC.met
38	Unknown	NPOC	590-17563-a-3		0A-103108-04335027-1348A731B335-0025	NPOC.met
39	Unknown	NPOC	CCV		0A-103108-04335027-1348A731B335-0026	NPOC.met
40	Unknown	NPOC	CCB		0A-103108-04335027-1348A731B335-0027	NPOC.met
41	Unknown	NPOC	590-17563-a-4		0A-103108-04335027-1348A731B335-0028	NPOC.met
42	Unknown	NPOC	590-17563-a-5		0A-103108-04335027-1348A731B335-0029	NPOC.met
43	Unknown	NPOC	590-17563-a-6		0A-103108-04335027-1348A731B335-002A	NPOC.met
44	Unknown	NPOC	590-17563-a-7		0A-103108-04335027-1348A731B336-0000	NPOC.met
45	Unknown	NPOC	280-162614-b-1		0A-103108-04335027-1348A731B336-0001	NPOC.met
46	Unknown	NPOC	280-162614-b-2		0A-103108-04335027-1348A731B336-0002	NPOC.met
47	Unknown	NPOC	280-162614-b-3		0A-103108-04335027-1348A731B336-0003	NPOC.met
48	Unknown	NPOC	280-162614-b-4		0A-103108-04335027-1348A731B336-0004	NPOC.met
49	Unknown	NPOC	MS 280-162614-b-4		0A-103108-04335027-1348A731B336-0005	NPOC.met
50	Unknown	NPOC	MSD 280-162614-b-4		0A-103108-04335027-1348A731B336-0006	NPOC.met
51	Unknown	NPOC	CCV		0A-103108-04335027-1348A731B336-0007	NPOC.met
52	Unknown	NPOC	CCB		0A-103108-04335027-1348A731B336-0008	NPOC.met
53	Unknown	NPOC	280-162614-b-5		0A-103108-04335027-1348A731B336-0009	NPOC.met

	Manual Dilution	Result	Notes	Comment	Status	Action	Vial
1	1.000	NPOC:18.70mg/L			Completed		1
2	1.000	NPOC:0.1450mg/L			Completed		2
3	1.000	NPOC:24.65mg/L			Completed		3
4	1.000	NPOC:0.1086mg/L			Completed		4
5	1.000	NPOC:0.2038mg/L			Completed		5
6	1.000	NPOC:24.67mg/L			Completed		6
7	1.000	NPOC:0.1960mg/L			Completed		7
8	1.000	NPOC:5.709mg/L			Completed		8
9	1.000	NPOC:30.50mg/L			Completed		9
10	1.000	NPOC:30.61mg/L			Completed		10
11	1.000	NPOC:29.18mg/L			Completed		11
12	1.000	NPOC:13.72mg/L			Completed		12
13	1.000	NPOC:9.835mg/L			Completed		13
14	1.000	NPOC:13.84mg/L			Completed		14
15	1.000	NPOC:24.65mg/L			Completed		15
16	1.000	NPOC:0.1501mg/L			Completed		16
17	1.000	NPOC:7.201mg/L			Completed		17
18	1.000	NPOC:3.615mg/L			Completed		18
19	1.000	NPOC:8.768mg/L			Completed		19
20	1.000	NPOC:12.34mg/L			Completed		20
21	1.000	NPOC:12.89mg/L			Completed		21
22	1.000	NPOC:3.627mg/L			Completed		22
23	1.000	NPOC:28.22mg/L			Completed		23
24	1.000	NPOC:27.99mg/L			Completed		24
25	1.000	NPOC:4.729mg/L			Completed		25
26	1.000	NPOC:13.64mg/L			Completed		26
27	1.000	NPOC:24.75mg/L			Completed		27
28	1.000	NPOC:0.1311mg/L			Completed		28
29	1.000	NPOC:13.33mg/L			Completed		29
30	1.000	NPOC:6.531mg/L			Completed		30
31	1.000	NPOC:24.07mg/L			Completed		31
32	1.000	NPOC:0.1366mg/L			Completed		32
33	1.000	NPOC:0.2063mg/L			Completed		33
34	1.000	NPOC:2.274mg/L			Completed		34
35	1.000	NPOC:26.42mg/L			Completed		35
36	1.000	NPOC:26.43mg/L			Completed		36
37	1.000	NPOC:11.27mg/L			Completed		37
38	1.000	NPOC:3.042mg/L			Completed		38
39	1.000	NPOC:24.75mg/L			Completed		39
40	1.000	NPOC:0.1409mg/L			Completed		40
41	1.000	NPOC:1.813mg/L			Completed		41
42	1.000	NPOC:2.266mg/L			Completed		42
43	1.000	NPOC:39.06mg/L			Completed		43
44	1.000	NPOC:6.393mg/L			Completed		44
45	1.000	NPOC:1.356mg/L			Completed		45
46	1.000	NPOC:1.280mg/L			Completed		46
47	1.000	NPOC:0.7747mg/L			Completed		47
48	1.000	NPOC:0.5994mg/L			Completed		48
49	1.000	NPOC:24.70mg/L			Completed		49
50	1.000	NPOC:24.79mg/L			Completed		50
51	1.000	NPOC:24.80mg/L			Completed		51
52	1.000	NPOC:0.1384mg/L			Completed		52
53	1.000	NPOC:3.927mg/L			Completed		53

	Type	Analysis	Sample Name	Sample ID	ObjectID	Origin
54	Unknown	NPOC	280-162614-b-6		0A-103108-04335027-1348A731B336-000A	NPOC.met
55	Unknown	NPOC	280-162614-b-7		0A-103108-04335027-1348A731B336-000B	NPOC.met
56	Unknown	NPOC	280-162614-b-8		0A-103108-04335027-1348A731B336-000C	NPOC.met
57	Unknown	NPOC	280-162614-b-9		0A-103108-04335027-1348A731B336-000D	NPOC.met
58	Unknown	NPOC	280-162614-b-10		0A-103108-04335027-1348A731B336-000E	NPOC.met
59	Unknown	NPOC	280-162614-b-11		0A-103108-04335027-1348A731B336-000F	NPOC.met
60	Unknown	NPOC	280-162614-b-12		0A-103108-04335027-1348A731B336-0010	NPOC.met
61	Unknown	NPOC	280-162614-b-13		0A-103108-04335027-1348A731B336-0011	NPOC.met
62	Unknown	NPOC	280-162574-c-1		0A-103108-04335027-1348A731B336-0012	NPOC.met
63	Unknown	NPOC	CCV		0A-103108-04335027-1348A731B336-0013	NPOC.met
64	Unknown	NPOC	CCB		0A-103108-04335027-1348A731B336-0014	NPOC.met
65	Unknown	NPOC	MS 280-162574-c-1		0A-103108-04335027-1348A731B336-0015	NPOC.met
66	Unknown	NPOC	MSD 280-162574-c-1		0A-103108-04335027-1348A731B336-0016	NPOC.met
67	Unknown	NPOC	280-162574-c-2		0A-103108-04335027-1348A731B336-0017	NPOC.met
68	Unknown	NPOC	280-162574-c-3		0A-103108-04335027-1348A731B336-0018	NPOC.met
69	Unknown	NPOC	280-162574-d-4		0A-103108-04335027-1348A731B336-0019	NPOC.met
70	Unknown	NPOC	310-231240-h-1		0A-103108-04335027-1348A731B336-001A	NPOC.met
71	Unknown	NPOC	590-17556-g-1		0A-103108-04335027-1348A731B336-001B	NPOC.met
72	Unknown	NPOC	CCV		0A-103108-04335027-1348A731B336-001C	NPOC.met
73	Unknown	NPOC	CCB		0A-103108-04335027-1348A731B336-001D	NPOC.met

	Manual Dilution	Result	Notes	Comment	Status	Action	Vial
54	1.000	NPOC:4.476mg/L			Completed		54
55	1.000	NPOC:0.8738mg/L			Completed		55
56	1.000	NPOC:3.486mg/L			Completed		56
57	1.000	NPOC:2.792mg/L			Completed		57
58	1.000	NPOC:2.560mg/L			Completed		58
59	1.000	NPOC:5.994mg/L			Completed		59
60	1.000	NPOC:0.2074mg/L			Completed		60
61	1.000	NPOC:0.3228mg/L			Completed		61
62	1.000	NPOC:1.319mg/L			Completed		62
63	1.000	NPOC:24.95mg/L			Completed		63
64	1.000	NPOC:0.1387mg/L			Completed		64
65	1.000	NPOC:25.50mg/L			Completed		65
66	1.000	NPOC:25.69mg/L			Completed		66
67	1.000	NPOC:1.438mg/L			Completed		67
68	1.000	NPOC:0.7539mg/L			Completed		68
69	1.000	NPOC:0.9508mg/L			Completed		69
70	50.00	NPOC:263.3mg/L			Completed		70
71	1.000	NPOC:1.515mg/L			Completed		71
72	1.000	NPOC:24.84mg/L			Completed		72
73	1.000	NPOC:0.1163mg/L			Completed		73

TOC-V Cal Curve Information
C:¥TOC3201¥CalCurves¥TOC3.2022_05_26_16_41_56.cal

Date of Creation 5:49:08 PM 5/26/2022
User 3654+
System TOC-V cpn 3

Cal. Curve

Sample Name: CAL
Sample ID:
Object ID 0A-103108-04335027-1348A6E272B0-0000
Cal. Curve: TOC3.2022_05_26_16_41_56.cal
Status Completed
Comment:

Type	Anal.
Standard	NPOC

Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	0.7759	50uL	1	*******	E	5/26/2022 4:50:00 PM
2	0.1376	50uL	1	*******		5/26/2022 4:52:03 PM
3	0.1579	50uL	1	*******		5/26/2022 4:54:06 PM

Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 0.1477
SD Area 0.01435
CV Area 9.72%
Vial 88

Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	2.662	50uL	1	*******		5/26/2022 5:02:58 PM
2	2.533	50uL	1	*******		5/26/2022 5:05:01 PM

Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 2.598
SD Area 0.09122
CV Area 3.51%
Vial 89

Conc: 5.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	11.97	50uL	1	*******		5/26/2022 5:13:58 PM
2	11.98	50uL	1	*******		5/26/2022 5:16:00 PM

Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 11.98
SD Area 0.00707
CV Area 0.06%
Vial 90

Conc: 10.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	26.41	50uL	1	*******		5/26/2022 5:24:58 PM
2	26.88	50uL	1	*******		5/26/2022 5:27:10 PM

Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 26.65
SD Area 0.3323
CV Area 1.25%
Vial 91

Conc: 25.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	62.97	50uL	1	*******		5/26/2022 5:36:06 PM
2	62.69	50uL	1	*******		5/26/2022 5:38:09 PM

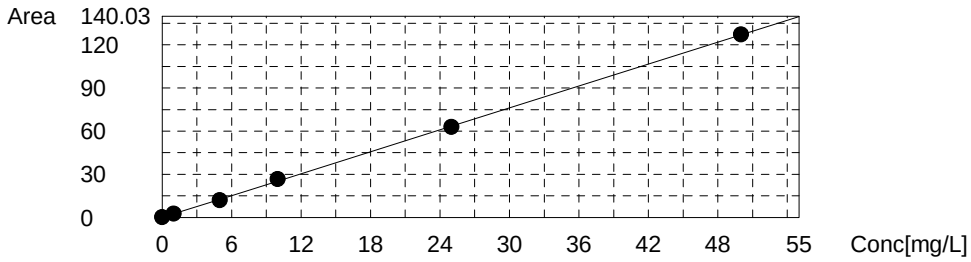
Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 62.83
SD Area 0.1980
CV Area 0.32%
Vial 92

Conc: 50.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	127.5	50uL	1	*******		5/26/2022 5:47:06 PM
2	127.1	50uL	1	*******		5/26/2022 5:49:08 PM

Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 127.3
SD Area 0.2828
CV Area 0.22%
Vial 93

Slope: 2.541
Intercept 0.04507
r^2 0.9998
r 0.9999
Zero Shift No



Instr.Information

System	TOC-V cpn 3
Instrument Options	TOC/ASI/
Catalyst	Regular Sensitivity

Sample

Sample Name:	ICV
Sample ID:	
Origin:	NPOC.met
Status	Completed
Chk. Result	

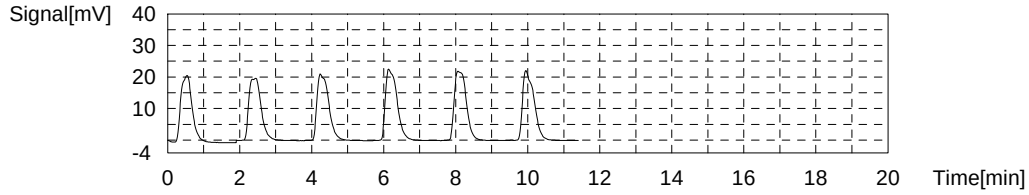
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:18.70mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	46.14	18.14mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 2:47:49 PM
2	46.79	18.40mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 2:49:51 PM
3	48.18	18.94mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 2:51:54 PM
4	51.26	20.16mg/L	50uL	1	E	TOC3.2022_05_26_16_41_56.cal	5/31/2022 2:53:57 PM
5	51.48	20.24mg/L	50uL	1	E	TOC3.2022_05_26_16_41_56.cal	5/31/2022 2:56:10 PM
6	49.10	19.31mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 2:58:13 PM

Mean Area 47.55
Mean Conc. 18.70mg/L



Sample

Sample Name:	ICB
Sample ID:	
Origin:	NPOC.met
Status	Completed
Chk. Result	

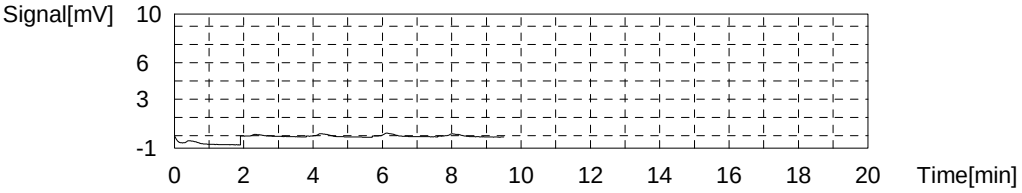
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1450mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3453	0.1182mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 3:06:37 PM
2	0.2193	0.06857mg/L	50uL	1	E	TOC3.2022_05_26_16_41_56.cal	5/31/2022 3:08:39 PM
3	0.3781	0.1311mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 3:10:42 PM
4	0.5032	0.1803mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 3:12:45 PM
5	0.4273	0.1504mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 3:14:48 PM

Mean Area 0.4135
Mean Conc. 0.1450mg/L



Sample

Sample Name: LCS
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

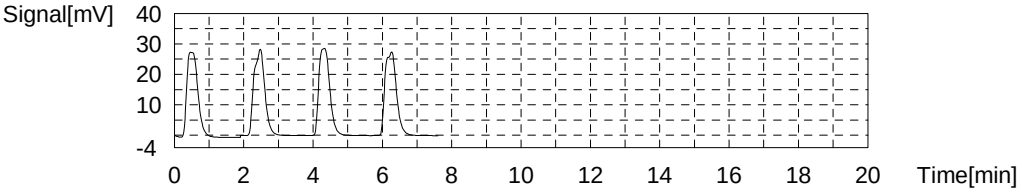
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.65mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	61.81	24.31mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 3:23:18 PM
2	62.22	24.47mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 3:25:20 PM
3	63.15	24.84mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 3:27:23 PM
4	63.51	24.98mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 3:29:26 PM

Mean Area 62.67
Mean Conc. 24.65mg/L



Sample

Sample Name: MB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

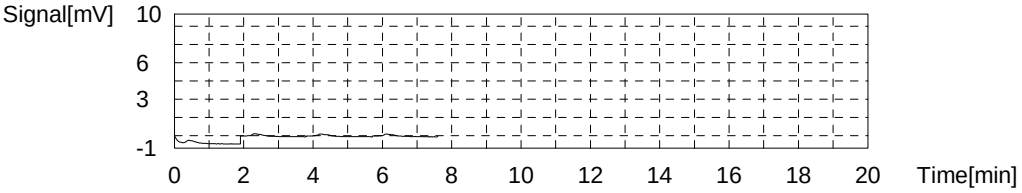
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1086mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3016	0.1010mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 3:37:57 PM
2	0.3707	0.1282mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 3:39:59 PM
3	0.3250	0.1102mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 3:42:02 PM
4	0.2869	0.09518mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 3:44:05 PM

Mean Area 0.3211
Mean Conc. 0.1086mg/L



Sample

Sample Name: TIC
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

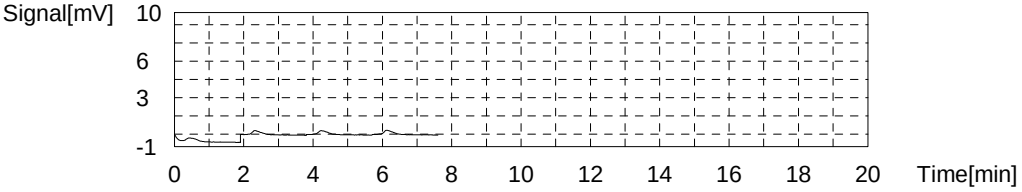
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2038mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4207	0.1478mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 3:52:37 PM
2	0.5853	0.2126mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 3:54:39 PM
3	0.6047	0.2202mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 3:56:42 PM
4	0.6411	0.2346mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 3:58:45 PM

Mean Area 0.5630
Mean Conc. 0.2038mg/L



Sample

Sample Name: LCS 280-576568/1-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

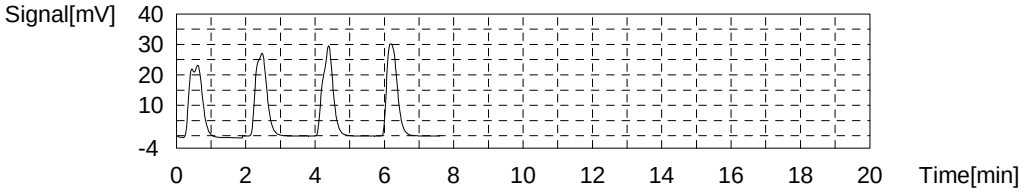
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.67mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	62.17	24.45mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 4:07:17 PM
2	62.44	24.56mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 4:09:19 PM
3	62.20	24.46mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 4:11:22 PM
4	64.12	25.22mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 4:13:25 PM

Mean Area 62.73
Mean Conc. 24.67mg/L



Sample

Sample Name: MB 280-576568/2-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

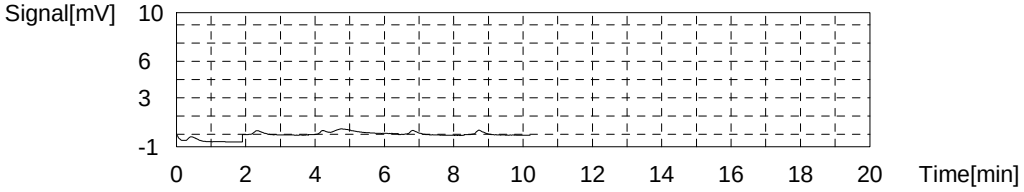
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1960mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4741	0.1688mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 4:21:56 PM
2	0.5535	0.2001mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 4:23:58 PM
3	2.501	0.9665mg/L	50uL	1	E	TOC3.2022_05_26_16_41_56.cal	5/31/2022 4:26:43 PM
4	0.5489	0.1983mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 4:28:46 PM
5	0.5961	0.2169mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 4:30:49 PM

Mean Area 0.5432
Mean Conc. 0.1960mg/L



Sample

Sample Name: 280-162622-D-1-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

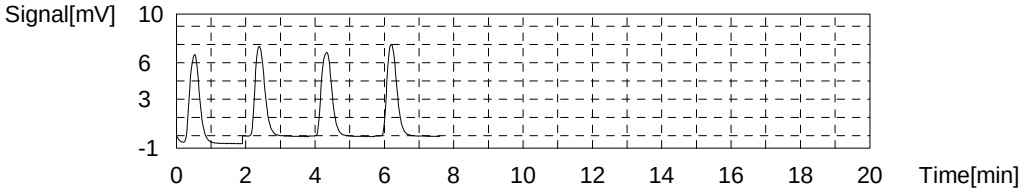
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.709mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	14.29	5.606mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 4:39:19 PM
2	14.39	5.646mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 4:41:21 PM
3	14.63	5.740mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 4:43:24 PM
4	14.90	5.846mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 4:45:27 PM

Mean Area 14.55
Mean Conc. 5.709mg/L



Sample

Sample Name: 280-162622-D-1-B MS
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

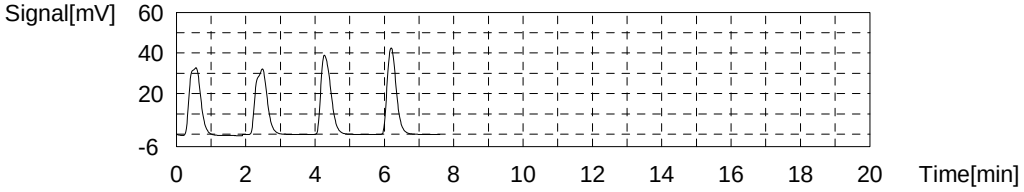
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:30.50mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	77.03	30.30mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 4:53:58 PM
2	75.83	29.83mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 4:56:00 PM
3	78.69	30.95mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 4:58:03 PM
4	78.62	30.92mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 5:00:06 PM

Mean Area 77.54
Mean Conc. 30.50mg/L



Sample

Sample Name: 280-162622-D-1-C MSD
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

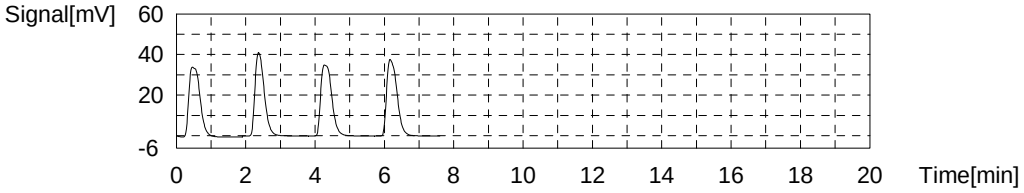
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:30.61mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	77.66	30.55mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 5:08:37 PM
2	76.78	30.20mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 5:10:40 PM
3	77.97	30.67mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 5:12:43 PM
4	78.93	31.05mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 5:14:46 PM

Mean Area 77.84
Mean Conc. 30.61mg/L



Sample

Sample Name: 280-162622-D-2-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

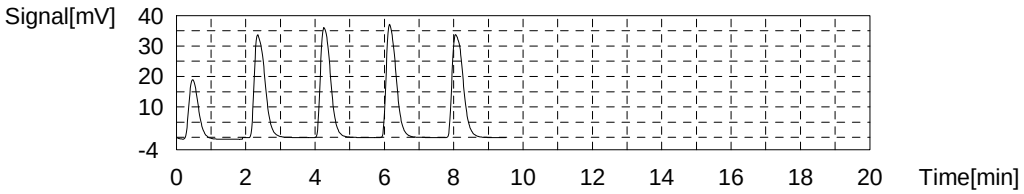
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:29.18mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	37.25	14.64mg/L	50uL	1	E	TOC3.2022_05_26_16_41_56.cal	5/31/2022 5:23:17 PM
2	72.63	28.57mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 5:25:19 PM
3	73.81	29.03mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 5:27:22 PM
4	74.33	29.24mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 5:29:25 PM
5	75.98	29.88mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 5:31:28 PM

Mean Area 74.19
Mean Conc. 29.18mg/L



Sample

Sample Name: 280-162622-D-3-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

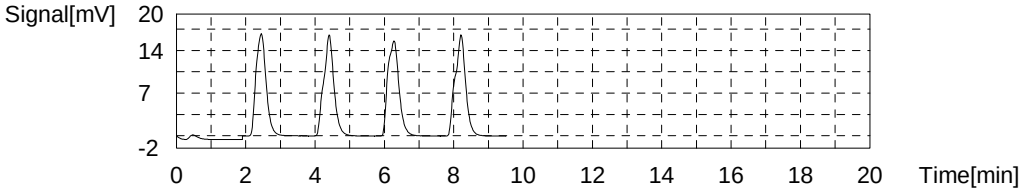
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:13.72mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.182	0.4474mg/L	50uL	1	E	TOC3.2022_05_26_16_41_56.cal	5/31/2022 5:39:58 PM
2	34.41	13.52mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 5:42:00 PM
3	34.22	13.45mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 5:44:03 PM
4	35.45	13.93mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 5:46:06 PM
5	35.52	13.96mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 5:48:09 PM

Mean Area 34.90
Mean Conc. 13.72mg/L



Sample

Sample Name: 280-162622-D-4-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

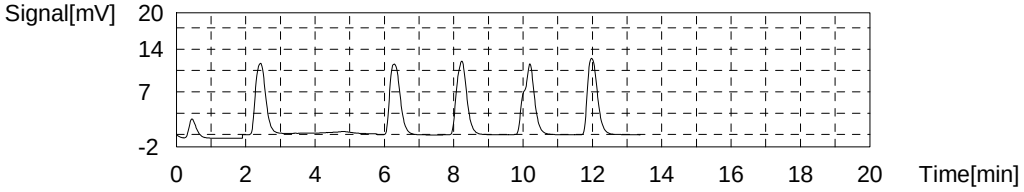
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.835mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.547	1.772mg/L	50uL	1	E	TOC3.2022_05_26_16_41_56.cal	5/31/2022 5:56:38 PM
2	27.89	10.96mg/L	50uL	1	E	TOC3.2022_05_26_16_41_56.cal	5/31/2022 6:00:40 PM
3	24.57	9.652mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 6:02:43 PM
4	25.05	9.841mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 6:04:46 PM
5	25.32	9.947mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 6:06:49 PM
6	25.20	9.900mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 6:08:52 PM

Mean Area 25.04
Mean Conc. 9.835mg/L



Sample

Sample Name: 280-162622-D-5-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

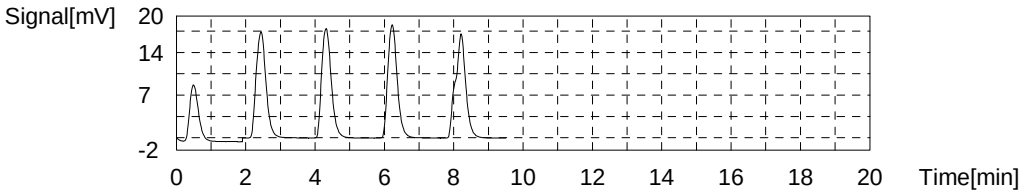
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:13.84mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	16.33	6.409mg/L	50uL	1	E	TOC3.2022_05_26_16_41_56.cal	5/31/2022 6:17:17 PM
2	34.59	13.60mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 6:19:19 PM
3	35.01	13.76mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 6:21:22 PM
4	35.51	13.96mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 6:23:25 PM
5	35.74	14.05mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 6:25:28 PM

Mean Area 35.21
Mean Conc. 13.84mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

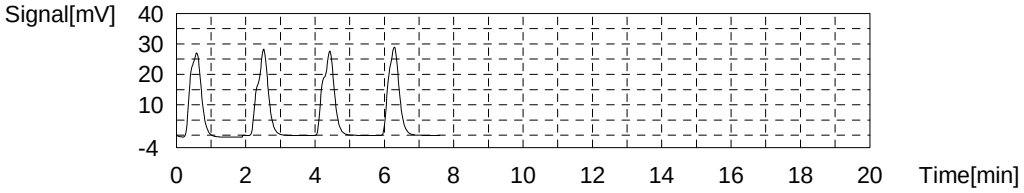
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.65mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	62.74	24.67mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 6:33:58 PM
2	61.38	24.14mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 6:36:00 PM
3	63.20	24.86mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 6:38:03 PM
4	63.44	24.95mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 6:40:06 PM

Mean Area 62.69
Mean Conc. 24.65mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

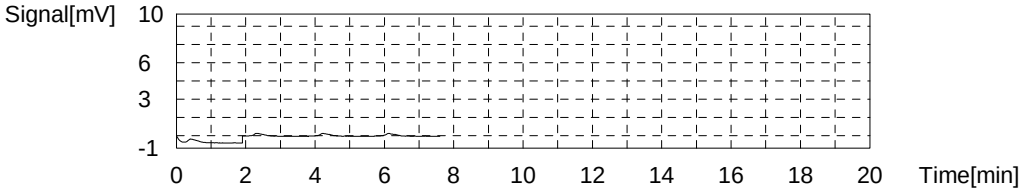
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1501mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4335	0.1529mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 6:48:37 PM
2	0.4415	0.1560mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 6:50:40 PM
3	0.4200	0.1476mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 6:52:43 PM
4	0.4107	0.1439mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 6:54:46 PM

Mean Area 0.4264
Mean Conc. 0.1501mg/L



Sample

Sample Name: 280-162622-D-6-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

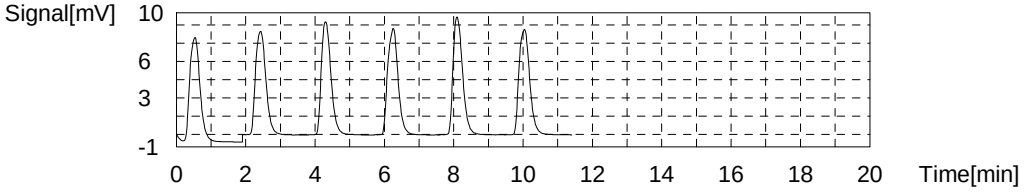
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:7.201mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	17.24	6.767mg/L	50uL	1	E	TOC3.2022_05_26_16_41_56.cal	5/31/2022 7:03:17 PM
2	17.67	6.936mg/L	50uL	1	E	TOC3.2022_05_26_16_41_56.cal	5/31/2022 7:05:19 PM
3	17.94	7.043mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 7:07:22 PM
4	18.29	7.180mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 7:09:25 PM
5	18.58	7.295mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 7:11:28 PM
6	18.56	7.287mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 7:13:31 PM

Mean Area 18.34
Mean Conc. 7.201mg/L



Sample

Sample Name: 280-162622-D-7-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

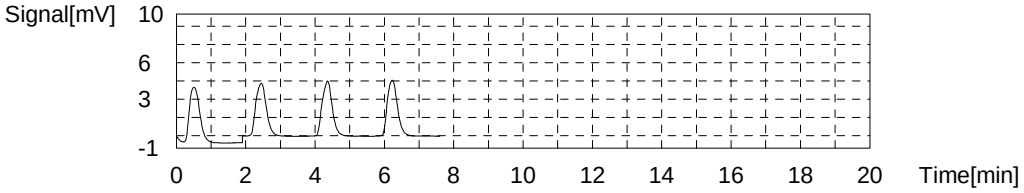
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.615mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.258	3.626mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 7:21:55 PM
2	9.143	3.581mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 7:23:58 PM
3	9.175	3.593mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 7:26:01 PM
4	9.351	3.662mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 7:28:04 PM

Mean Area 9.232
Mean Conc. 3.615mg/L



Sample

Sample Name: 280-162622-D-8-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

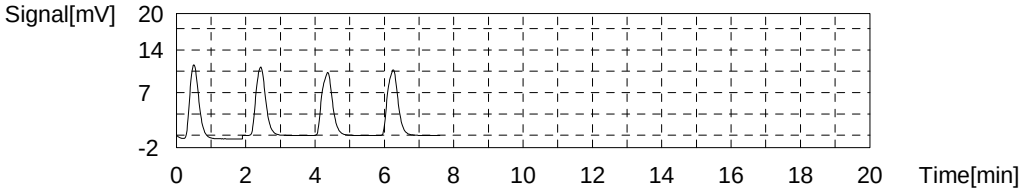
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:8.768mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	22.10	8.680mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 7:36:35 PM
2	22.08	8.672mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 7:38:38 PM
3	22.30	8.759mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 7:40:41 PM
4	22.82	8.963mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 7:42:44 PM

Mean Area 22.33
Mean Conc. 8.768mg/L



Sample

Sample Name: 280-162622-D-9-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

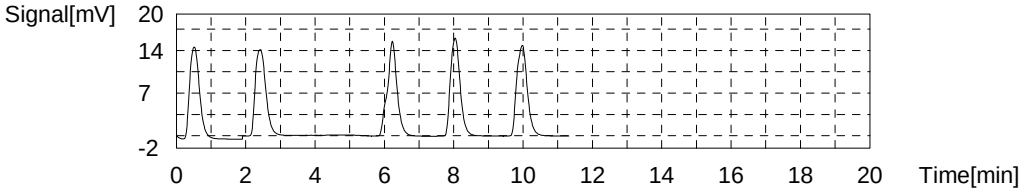
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:12.34mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	30.08	11.82mg/L	50uL	1	E	TOC3.2022_05_26_16_41_56.cal	5/31/2022 7:51:15 PM
2	31.86	12.52mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 7:55:07 PM
3	30.64	12.04mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 7:57:10 PM
4	31.41	12.34mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 7:59:13 PM
5	31.72	12.47mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 8:01:16 PM

Mean Area 31.41
Mean Conc. 12.34mg/L



Sample

Sample Name: 280-162622-D-10-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

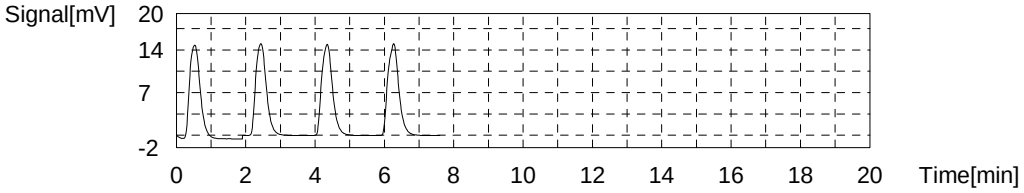
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:12.89mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	32.68	12.84mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 8:09:45 PM
2	32.30	12.69mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 8:11:48 PM
3	32.63	12.82mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 8:13:51 PM
4	33.56	13.19mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 8:15:54 PM

Mean Area 32.79
Mean Conc. 12.89mg/L



Sample

Sample Name: 280-162622-D-11-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

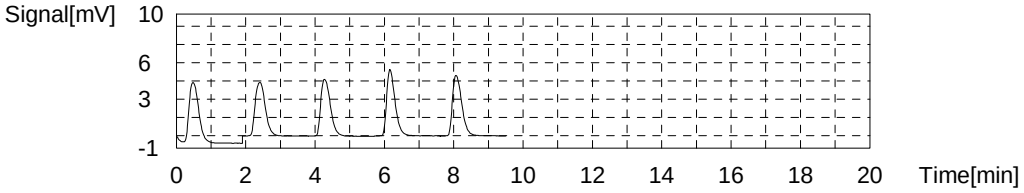
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.627mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.411	3.686mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 8:24:24 PM
2	8.986	3.519mg/L	50uL	1	E	TOC3.2022_05_26_16_41_56.cal	5/31/2022 8:26:27 PM
3	9.036	3.538mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 8:28:30 PM
4	9.246	3.621mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 8:30:33 PM
5	9.355	3.664mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 8:32:36 PM

Mean Area 9.262
Mean Conc. 3.627mg/L



Sample

Sample Name: 280-162622-D-11-B MS
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

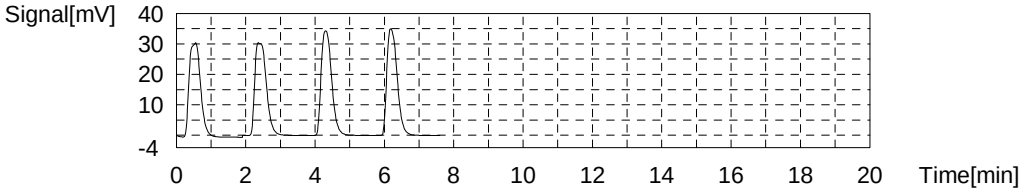
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:28.22mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	70.77	27.83mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 8:41:05 PM
2	70.55	27.75mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 8:43:08 PM
3	72.65	28.57mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 8:45:11 PM
4	73.02	28.72mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 8:47:14 PM

Mean Area 71.75
Mean Conc. 28.22mg/L



Sample

Sample Name: 280-162622-D-11-C MSD
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

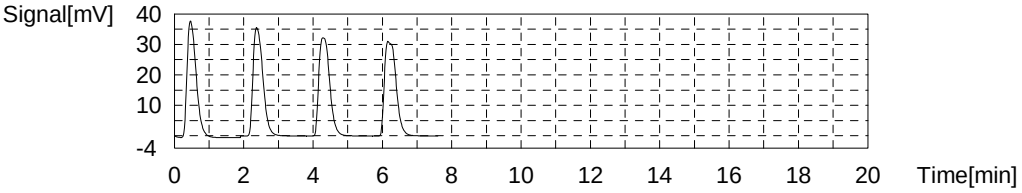
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:27.99mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	70.57	27.76mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 8:55:45 PM
2	70.85	27.87mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 8:57:48 PM
3	70.46	27.71mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 8:59:51 PM
4	72.83	28.64mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 9:01:54 PM

Mean Area 71.18
Mean Conc. 27.99mg/L



Sample

Sample Name: 280-162622-D-12-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

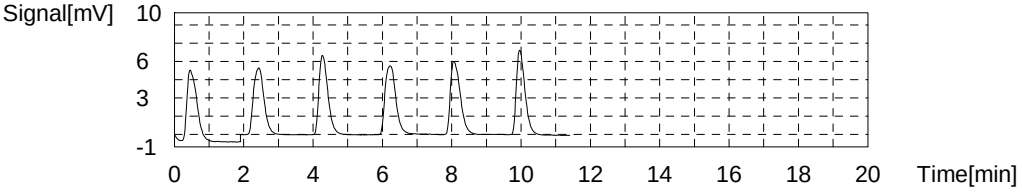
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.729mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.46	4.492mg/L	50uL	1	E	TOC3.2022_05_26_16_41_56.cal	5/31/2022 9:10:24 PM
2	11.65	4.567mg/L	50uL	1	E	TOC3.2022_05_26_16_41_56.cal	5/31/2022 9:12:27 PM
3	11.86	4.650mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 9:14:30 PM
4	12.30	4.823mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 9:16:33 PM
5	12.01	4.709mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 9:18:36 PM
6	12.07	4.732mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 9:20:39 PM

Mean Area 12.06
Mean Conc. 4.729mg/L



Sample

Sample Name: 280-162622-D-16-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

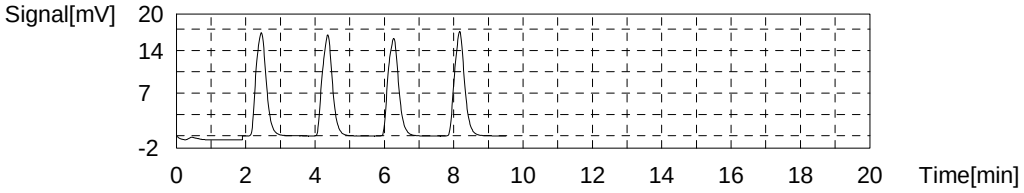
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:13.64mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.6037	0.2199mg/L	50uL	1	E	TOC3.2022_05_26_16_41_56.cal	5/31/2022 9:29:03 PM
2	35.13	13.81mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 9:31:06 PM
3	34.19	13.44mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 9:33:09 PM
4	34.56	13.58mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 9:35:12 PM
5	34.95	13.74mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 9:37:15 PM

Mean Area 34.71
Mean Conc. 13.64mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

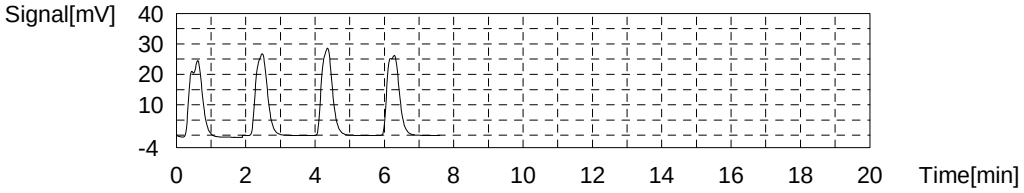
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.75mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	62.74	24.67mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 9:45:44 PM
2	62.41	24.54mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 9:47:47 PM
3	62.31	24.50mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 9:49:50 PM
4	64.26	25.27mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 9:51:53 PM

Mean Area 62.93
Mean Conc. 24.75mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

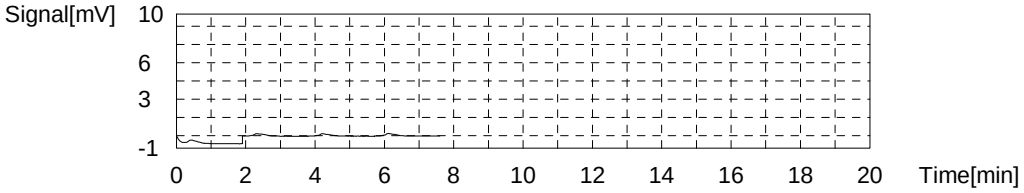
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1311mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3468	0.1187mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 10:00:24 PM
2	0.4058	0.1420mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 10:02:27 PM
3	0.3750	0.1298mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 10:04:30 PM
4	0.3849	0.1337mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 10:06:33 PM

Mean Area 0.3781
Mean Conc. 0.1311mg/L



Sample

Sample Name: 280-162622-D-17-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

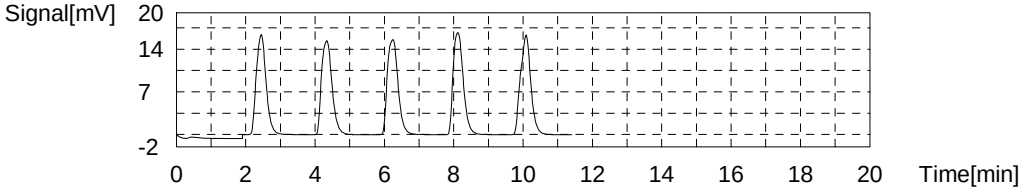
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:13.33mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3689	0.1274mg/L	50uL	1	E	TOC3.2022_05_26_16_41_56.cal	5/31/2022 10:15:04 PM
2	32.49	12.77mg/L	50uL	1	E	TOC3.2022_05_26_16_41_56.cal	5/31/2022 10:17:07 PM
3	32.85	12.91mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 10:19:10 PM
4	33.97	13.35mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 10:21:13 PM
5	34.62	13.61mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 10:23:16 PM
6	34.25	13.46mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 10:25:19 PM

Mean Area 33.92
Mean Conc. 13.33mg/L



Sample

Sample Name: 280-162622-D-18-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

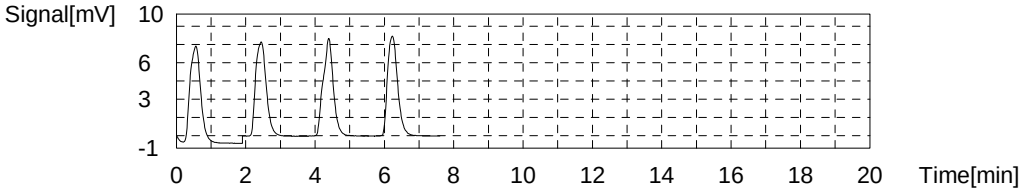
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:6.531mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	16.91	6.637mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 10:33:43 PM
2	16.53	6.488mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 10:35:46 PM
3	16.35	6.417mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 10:37:49 PM
4	16.77	6.582mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 10:39:52 PM

Mean Area 16.64
Mean Conc. 6.531mg/L



Sample

Sample Name: LCS
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

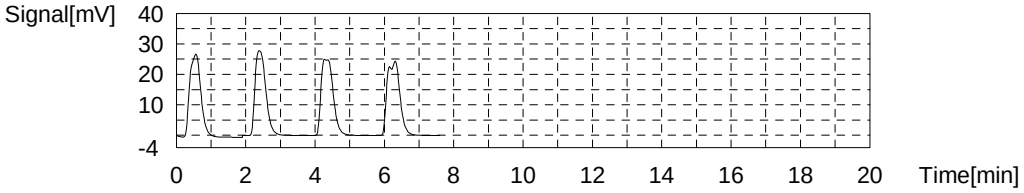
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.07mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	61.25	24.09mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 10:48:23 PM
2	60.14	23.65mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 10:50:26 PM
3	60.98	23.98mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 10:52:29 PM
4	62.45	24.56mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 10:54:32 PM

Mean Area 61.20
Mean Conc. 24.07mg/L



Sample

Sample Name: MB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

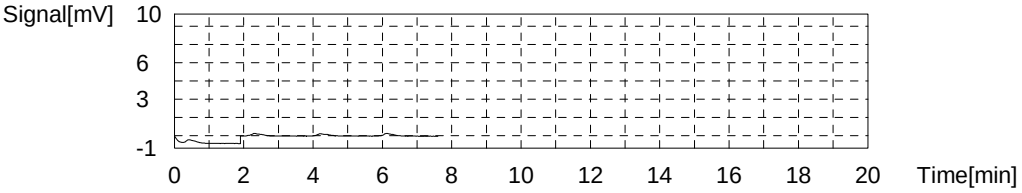
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1366mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3836	0.1332mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 11:03:03 PM
2	0.4296	0.1513mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 11:05:06 PM
3	0.3713	0.1284mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 11:07:09 PM
4	0.3845	0.1336mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 11:09:12 PM

Mean Area 0.3923
Mean Conc. 0.1366mg/L



Sample

Sample Name: TIC
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

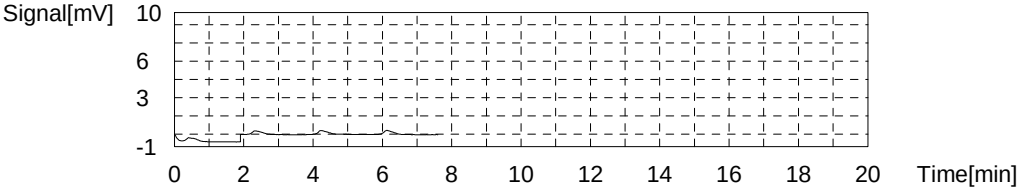
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2063mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.5144	0.1847mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 11:17:43 PM
2	0.5712	0.2071mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 11:19:46 PM
3	0.5875	0.2135mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 11:21:49 PM
4	0.6038	0.2199mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 11:23:52 PM

Mean Area 0.5692
Mean Conc. 0.2063mg/L



Sample

Sample Name: 590-17563-a-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

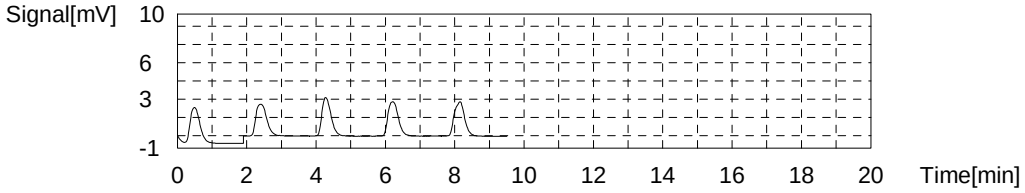
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.274mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.487	2.142mg/L	50uL	1	E	TOC3.2022_05_26_16_41_56.cal	5/31/2022 11:32:23 PM
2	5.699	2.225mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 11:34:26 PM
3	5.829	2.276mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 11:36:29 PM
4	5.876	2.295mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 11:38:32 PM
5	5.891	2.301mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 11:40:35 PM

Mean Area 5.824
Mean Conc. 2.274mg/L



Sample

Sample Name: MS 590-17563-a-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

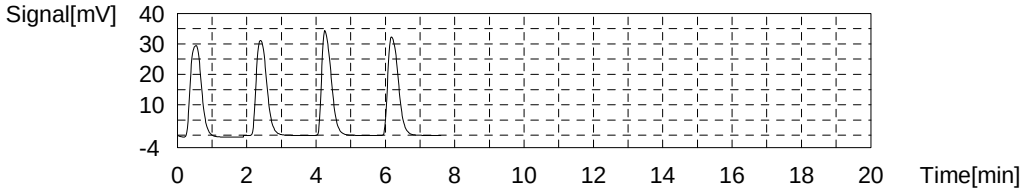
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.42mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	67.07	26.38mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 11:49:05 PM
2	66.51	26.16mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 11:51:08 PM
3	66.41	26.12mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 11:53:11 PM
4	68.75	27.04mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	5/31/2022 11:55:14 PM

Mean Area 67.19
Mean Conc. 26.42mg/L



Sample

Sample Name: MSD 590-17563-a-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

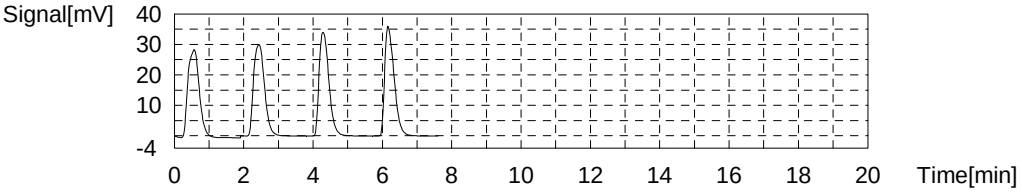
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.43mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	66.40	26.11mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 12:03:45 AM
2	66.38	26.11mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 12:05:48 AM
3	67.37	26.50mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 12:07:51 AM
4	68.68	27.01mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 12:09:54 AM

Mean Area 67.21
Mean Conc. 26.43mg/L



Sample

Sample Name: 590-17563-a-2
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

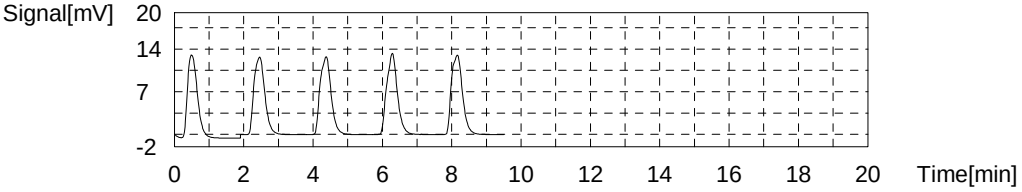
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:11.27mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	26.85	10.55mg/L	50uL	1	E	TOC3.2022_05_26_16_41_56.cal	6/1/2022 12:18:25 AM
2	28.04	11.02mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 12:20:28 AM
3	28.43	11.17mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 12:22:31 AM
4	28.96	11.38mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 12:24:34 AM
5	29.27	11.50mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 12:26:37 AM

Mean Area 28.68
Mean Conc. 11.27mg/L



Sample

Sample Name: 590-17563-a-3
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

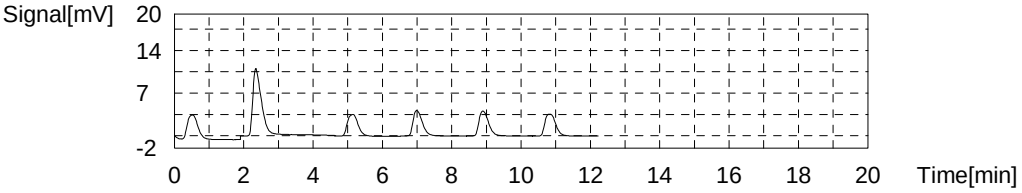
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.042mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.240	3.225mg/L	50uL	1	E	TOC3.2022_05_26_16_41_56.cal	6/1/2022 12:35:07 AM
2	20.82	8.176mg/L	50uL	1	E	TOC3.2022_05_26_16_41_56.cal	6/1/2022 12:37:59 AM
3	7.635	2.987mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 12:40:02 AM
4	7.803	3.053mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 12:42:05 AM
5	7.853	3.073mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 12:44:08 AM
6	7.812	3.057mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 12:46:11 AM

Mean Area 7.776
Mean Conc. 3.042mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

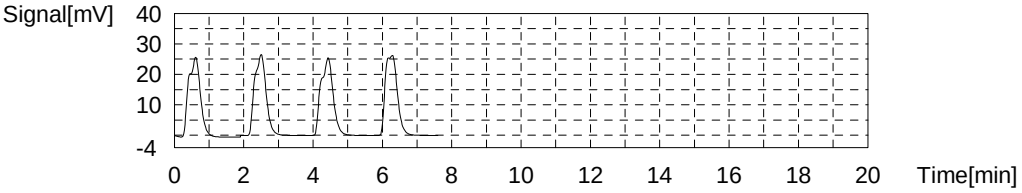
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.75mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	62.70	24.66mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 12:54:35 AM
2	61.96	24.37mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 12:56:38 AM
3	62.64	24.63mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 12:58:41 AM
4	64.47	25.35mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 1:00:44 AM

Mean Area 62.94
Mean Conc. 24.75mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

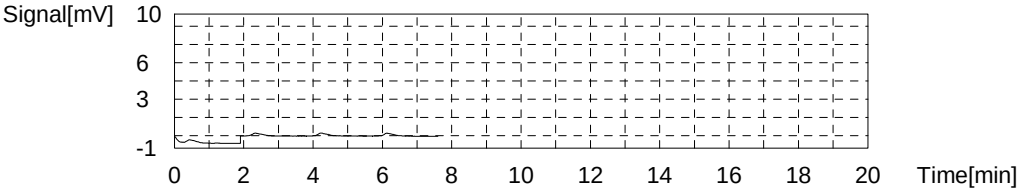
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1409mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3378	0.1152mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 1:09:15 AM
2	0.4092	0.1433mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 1:11:18 AM
3	0.4287	0.1510mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 1:13:21 AM
4	0.4370	0.1542mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 1:15:24 AM

Mean Area 0.4032
Mean Conc. 0.1409mg/L



Sample

Sample Name: 590-17563-a-4
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

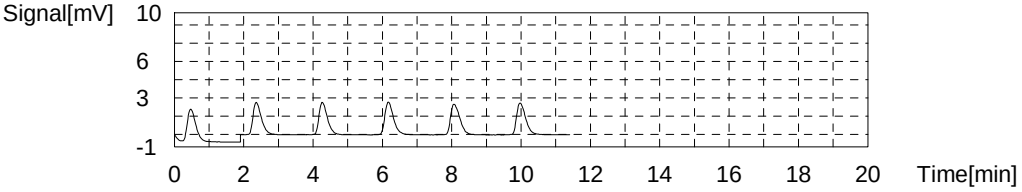
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.813mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.391	1.710mg/L	50uL	1	E	TOC3.2022_05_26_16_41_56.cal	6/1/2022 1:23:55 AM
2	4.505	1.755mg/L	50uL	1	E	TOC3.2022_05_26_16_41_56.cal	6/1/2022 1:25:58 AM
3	4.538	1.768mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 1:28:01 AM
4	4.714	1.837mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 1:30:04 AM
5	4.685	1.826mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 1:32:07 AM
6	4.671	1.821mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 1:34:10 AM

Mean Area 4.652
Mean Conc. 1.813mg/L



Sample

Sample Name: 590-17563-a-5
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

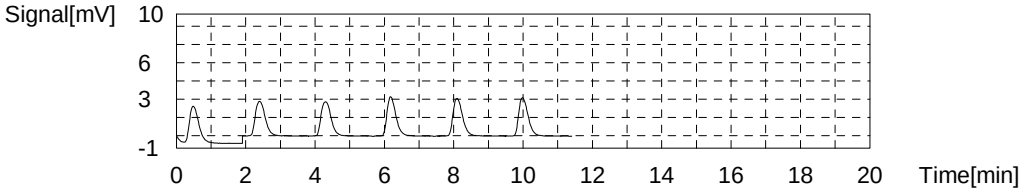
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.266mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.408	2.111mg/L	50uL	1	E	TOC3.2022_05_26_16_41_56.cal	6/1/2022 1:42:35 AM
2	5.613	2.191mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 1:44:38 AM
3	5.606	2.189mg/L	50uL	1	E	TOC3.2022_05_26_16_41_56.cal	6/1/2022 1:46:41 AM
4	5.826	2.275mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 1:48:44 AM
5	5.887	2.299mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 1:50:47 AM
6	5.889	2.300mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 1:52:50 AM

Mean Area 5.804
Mean Conc. 2.266mg/L



Sample

Sample Name: 590-17563-a-6
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

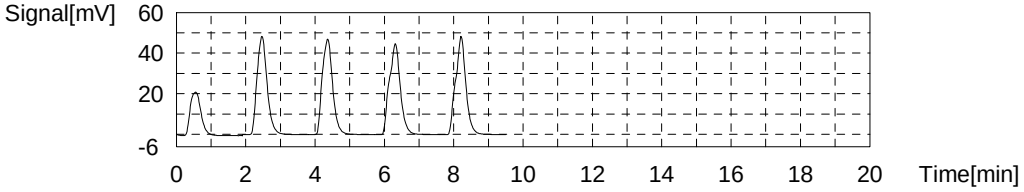
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:39.06mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	46.38	18.24mg/L	50uL	1	E	TOC3.2022_05_26_16_41_56.cal	6/1/2022 2:01:15 AM
2	98.48	38.74mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 2:03:18 AM
3	98.57	38.78mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 2:05:21 AM
4	99.91	39.30mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 2:07:24 AM
5	100.2	39.42mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 2:09:27 AM

Mean Area 99.29
Mean Conc. 39.06mg/L



Sample

Sample Name: 590-17563-a-7
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

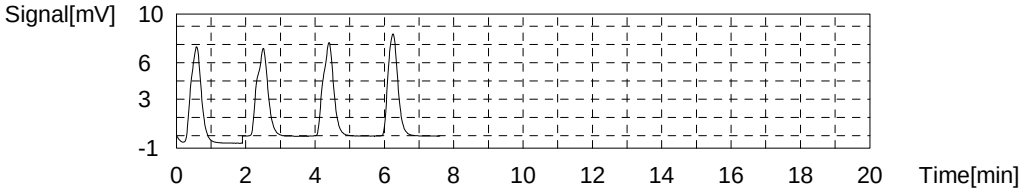
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:6.393mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	16.30	6.397mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 2:17:57 AM
2	15.91	6.244mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 2:20:00 AM
3	16.32	6.405mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 2:22:03 AM
4	16.63	6.527mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 2:24:06 AM

Mean Area 16.29
Mean Conc. 6.393mg/L



Sample

Sample Name: 280-162614-b-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

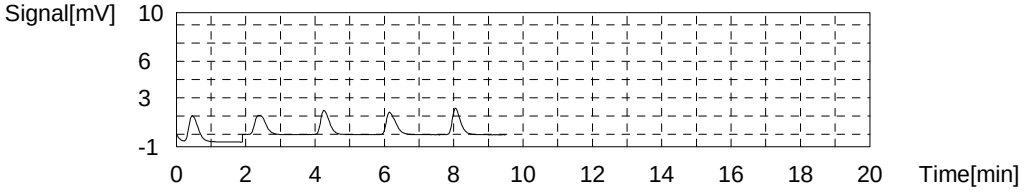
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.356mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.670	1.427mg/L	50uL	1	E	TOC3.2022_05_26_16_41_56.cal	6/1/2022 2:32:37 AM
2	3.475	1.350mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 2:34:40 AM
3	3.415	1.326mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 2:36:43 AM
4	3.489	1.355mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 2:38:46 AM
5	3.588	1.394mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 2:40:49 AM

Mean Area 3.492
Mean Conc. 1.356mg/L



Sample

Sample Name: 280-162614-b-2
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

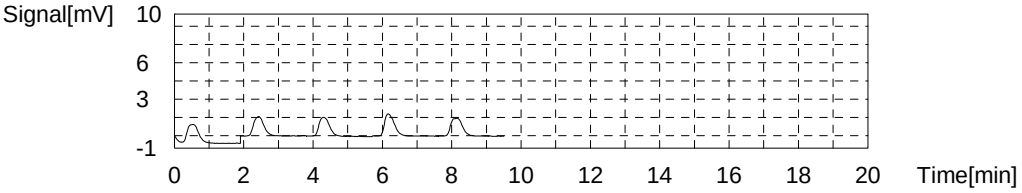
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.280mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.232	1.254mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 2:49:19 AM
2	3.305	1.283mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 2:51:22 AM
3	3.237	1.256mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 2:53:25 AM
4	3.582	1.392mg/L	50uL	1	E	TOC3.2022_05_26_16_41_56.cal	6/1/2022 2:55:28 AM
5	3.415	1.326mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 2:57:31 AM

Mean Area 3.297
Mean Conc. 1.280mg/L



Sample

Sample Name: 280-162614-b-3
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

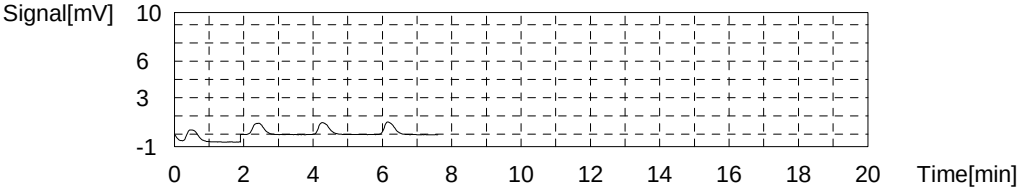
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.7747mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.891	0.7265mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 3:06:01 AM
2	2.047	0.7879mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 3:08:04 AM
3	2.037	0.7839mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 3:10:07 AM
4	2.079	0.8005mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 3:12:10 AM

Mean Area 2.014
Mean Conc. 0.7747mg/L



Sample

Sample Name: 280-162614-b-4
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

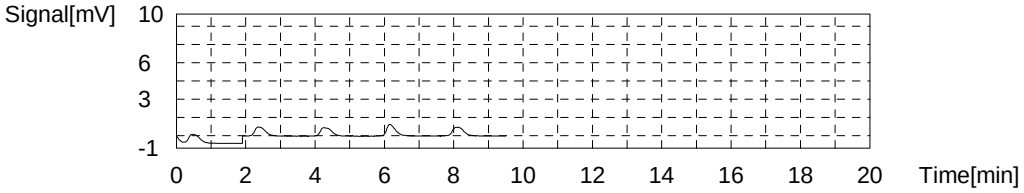
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.5994mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.324	0.5033mg/L	50uL	1	E	TOC3.2022_05_26_16_41_56.cal	6/1/2022 3:20:41 AM
2	1.554	0.5939mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 3:22:44 AM
3	1.516	0.5789mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 3:24:47 AM
4	1.643	0.6289mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 3:26:50 AM
5	1.559	0.5958mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 3:28:53 AM

Mean Area 1.568
Mean Conc. 0.5994mg/L



Sample

Sample Name: MS 280-162614-b-4
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

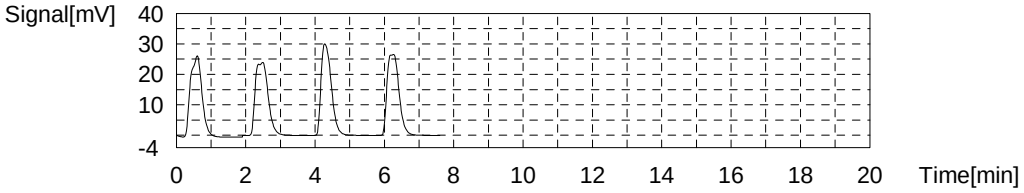
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.70mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	62.45	24.56mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 3:37:23 AM
2	62.10	24.42mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 3:39:26 AM
3	62.32	24.51mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 3:41:29 AM
4	64.36	25.31mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 3:43:32 AM

Mean Area 62.81
Mean Conc. 24.70mg/L



Sample

Sample Name: MSD 280-162614-b-4
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

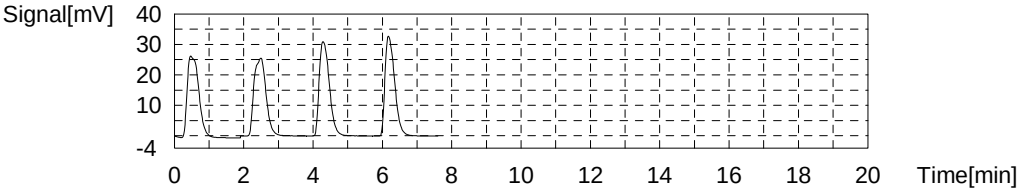
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.79mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	62.60	24.62mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 3:52:03 AM
2	62.04	24.40mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 3:54:06 AM
3	63.43	24.95mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 3:56:09 AM
4	64.07	25.20mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 3:58:12 AM

Mean Area 63.04
Mean Conc. 24.79mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

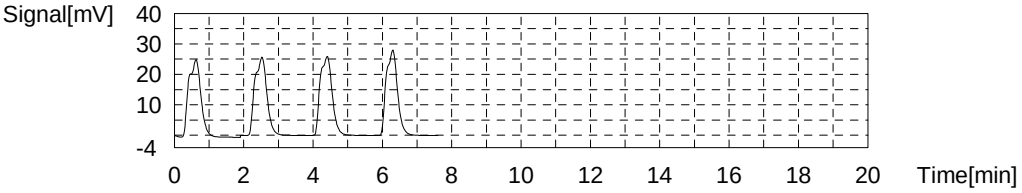
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.80mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	62.86	24.72mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 4:06:43 AM
2	62.56	24.60mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 4:08:46 AM
3	62.84	24.71mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 4:10:49 AM
4	64.03	25.18mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 4:12:52 AM

Mean Area 63.07
Mean Conc. 24.80mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

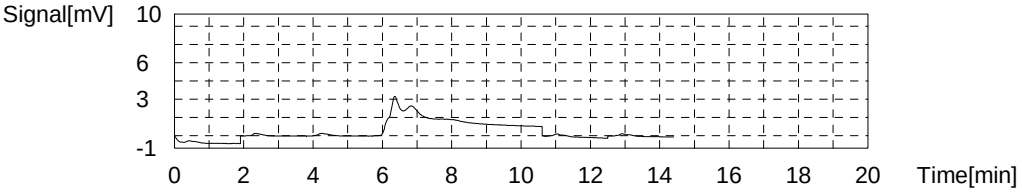
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1384mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.1792	0.05279mg/L	50uL	1	E	TOC3.2022_05_26_16_41_56.cal	6/1/2022 4:21:23 AM
2	0.3487	0.1195mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 4:23:26 AM
3	0.4377	0.1545mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 4:25:29 AM
4	25.78	10.13mg/L	50uL	1	E	TOC3.2022_05_26_16_41_56.cal	6/1/2022 4:30:32 AM
5	0.4114	0.1442mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 4:32:35 AM
6	0.3887	0.1352mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 4:34:38 AM

Mean Area 0.3966
Mean Conc. 0.1384mg/L



Sample

Sample Name: 280-162614-b-5
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

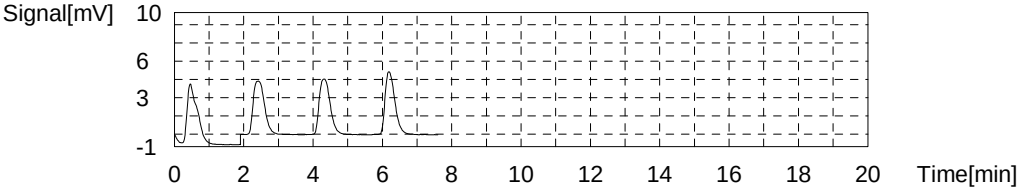
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.927mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.795	3.837mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 4:43:03 AM
2	9.993	3.915mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 4:45:06 AM
3	10.08	3.949mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 4:47:09 AM
4	10.23	4.008mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 4:49:12 AM

Mean Area 10.02
Mean Conc. 3.927mg/L



Sample

Sample Name: 280-162614-b-6
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

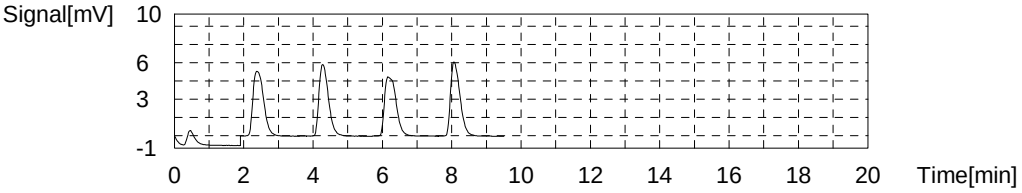
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.476mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.673	0.6407mg/L	50uL	1	E	TOC3.2022_05_26_16_41_56.cal	6/1/2022 4:57:43 AM
2	11.46	4.492mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 4:59:46 AM
3	11.26	4.414mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 5:01:49 AM
4	11.32	4.437mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 5:03:52 AM
5	11.63	4.559mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 5:05:55 AM

Mean Area 11.42
Mean Conc. 4.476mg/L



Sample

Sample Name: 280-162614-b-7
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

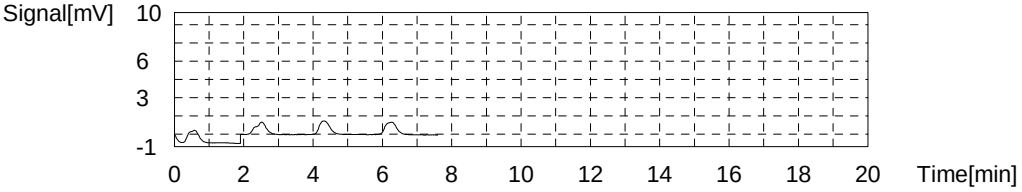
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.8738mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.163	0.8335mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 5:14:25 AM
2	2.201	0.8485mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 5:16:28 AM
3	2.324	0.8969mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 5:18:31 AM
4	2.373	0.9162mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 5:20:34 AM

Mean Area 2.265
Mean Conc. 0.8738mg/L



Sample

Sample Name: 280-162614-b-8
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

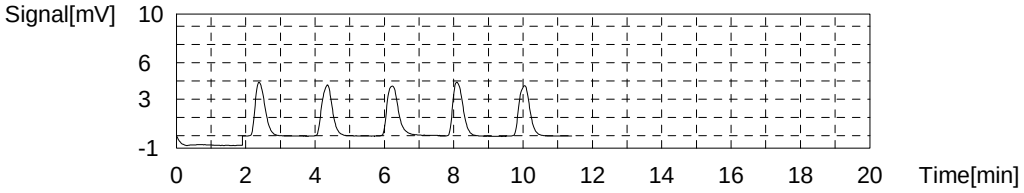
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.486mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.000	-0.01774mg/L	50uL	1	E	TOC3.2022_05_26_16_41_56.cal	6/1/2022 5:29:06 AM
2	8.657	3.389mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 5:31:09 AM
3	8.801	3.446mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 5:33:12 AM
4	9.466	3.708mg/L	50uL	1	E	TOC3.2022_05_26_16_41_56.cal	6/1/2022 5:35:15 AM
5	9.154	3.585mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 5:37:18 AM
6	8.995	3.522mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 5:39:21 AM

Mean Area 8.902
Mean Conc. 3.486mg/L



Sample

Sample Name: 280-162614-b-9
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

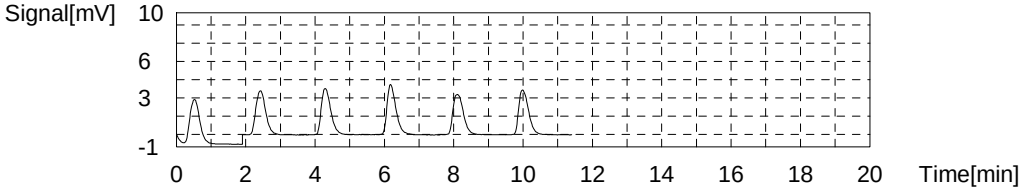
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.792mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.924	2.707mg/L	50uL	1	E	TOC3.2022_05_26_16_41_56.cal	6/1/2022 5:47:47 AM
2	7.155	2.798mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 5:49:50 AM
3	7.244	2.833mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 5:51:53 AM
4	7.479	2.926mg/L	50uL	1	E	TOC3.2022_05_26_16_41_56.cal	6/1/2022 5:53:56 AM
5	6.938	2.713mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 5:55:59 AM
6	7.219	2.823mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 5:58:02 AM

Mean Area 7.139
Mean Conc. 2.792mg/L



Sample

Sample Name: 280-162614-b-10
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

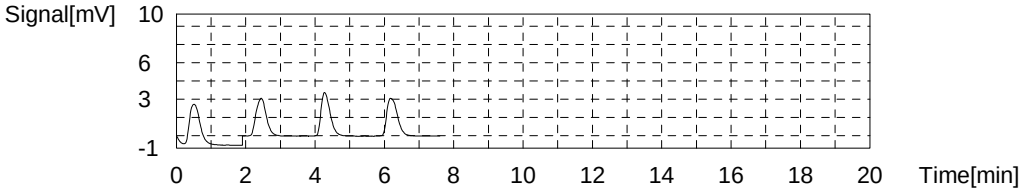
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.560mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.636	2.594mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 6:06:27 AM
2	6.415	2.507mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 6:08:30 AM
3	6.557	2.563mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 6:10:33 AM
4	6.591	2.576mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 6:12:36 AM

Mean Area 6.550
Mean Conc. 2.560mg/L



Sample

Sample Name: 280-162614-b-11
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

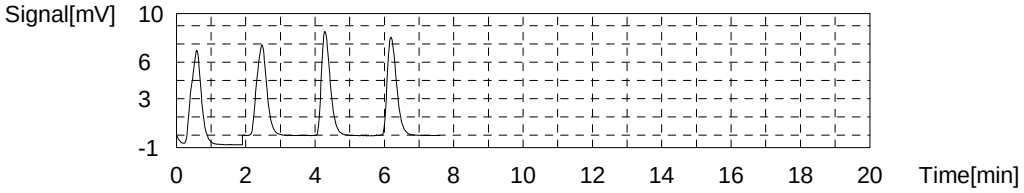
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.994mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	15.49	6.078mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 6:21:08 AM
2	15.17	5.953mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 6:23:11 AM
3	15.22	5.972mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 6:25:14 AM
4	15.22	5.972mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 6:27:17 AM

Mean Area 15.28
Mean Conc. 5.994mg/L



Sample

Sample Name: 280-162614-b-12
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

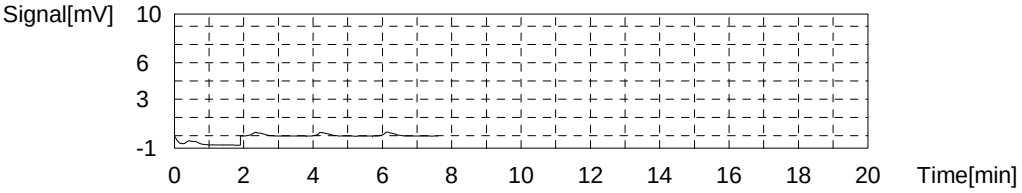
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2074mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4597	0.1632mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 6:35:49 AM
2	0.5988	0.2179mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 6:37:52 AM
3	0.5948	0.2164mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 6:39:55 AM
4	0.6349	0.2321mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 6:41:58 AM

Mean Area 0.5720
Mean Conc. 0.2074mg/L



Sample

Sample Name: 280-162614-b-13
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

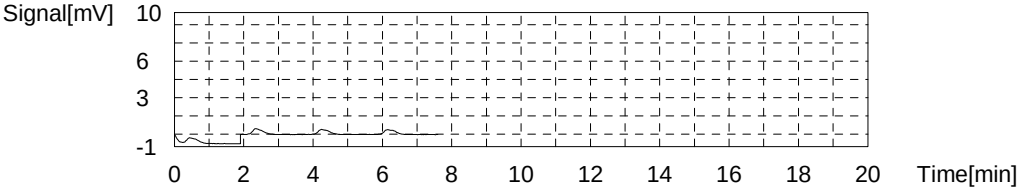
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3228mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.7756	0.2875mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 6:50:30 AM
2	0.9598	0.3600mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 6:52:33 AM
3	0.8583	0.3201mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 6:54:36 AM
4	0.8674	0.3236mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 6:56:39 AM

Mean Area 0.8653
Mean Conc. 0.3228mg/L



Sample

Sample Name: 280-162574-c-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

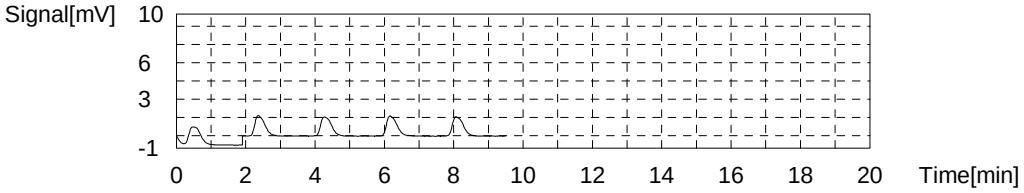
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.319mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.080	1.194mg/L	50uL	1	E	TOC3.2022_05_26_16_41_56.cal	6/1/2022 7:05:11 AM
2	3.383	1.314mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 7:07:14 AM
3	3.336	1.295mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 7:09:17 AM
4	3.439	1.336mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 7:11:20 AM
5	3.424	1.330mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 7:13:23 AM

Mean Area 3.396
Mean Conc. 1.319mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

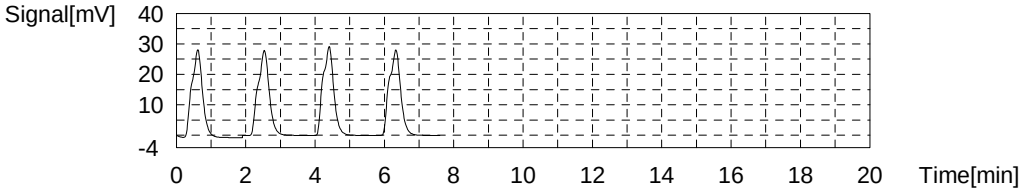
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.95mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	62.17	24.45mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 7:21:54 AM
2	62.80	24.70mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 7:23:57 AM
3	63.78	25.08mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 7:26:00 AM
4	64.97	25.55mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 7:28:03 AM

Mean Area 63.43
Mean Conc. 24.95mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

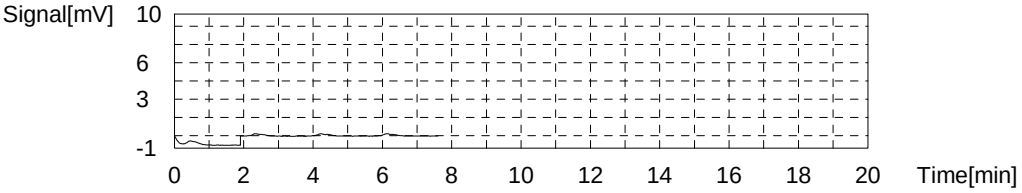
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1387mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4634	0.1646mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 7:36:35 AM
2	0.4235	0.1489mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 7:38:38 AM
3	0.3360	0.1145mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 7:40:41 AM
4	0.3675	0.1269mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 7:42:44 AM

Mean Area 0.3976
Mean Conc. 0.1387mg/L



Sample

Sample Name: MS 280-162574-c-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

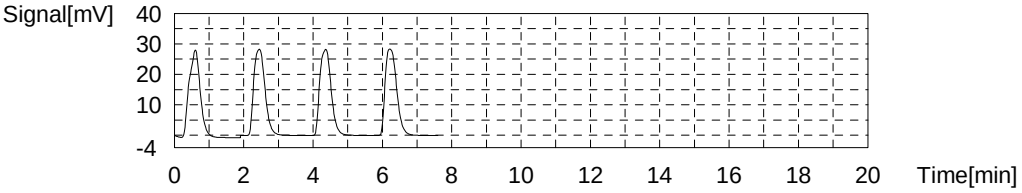
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.50mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	64.49	25.36mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 7:51:16 AM
2	64.15	25.23mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 7:53:19 AM
3	64.70	25.45mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 7:55:22 AM
4	66.05	25.98mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 7:57:25 AM

Mean Area 64.85
Mean Conc. 25.50mg/L



Sample

Sample Name: MSD 280-162574-c-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

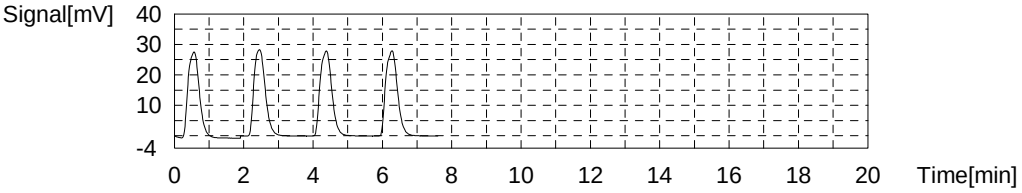
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.69mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	64.62	25.41mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 8:05:57 AM
2	64.50	25.37mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 8:08:00 AM
3	65.82	25.89mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 8:10:03 AM
4	66.39	26.11mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 8:12:06 AM

Mean Area 65.33
Mean Conc. 25.69mg/L



Sample

Sample Name: 280-162574-c-2
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

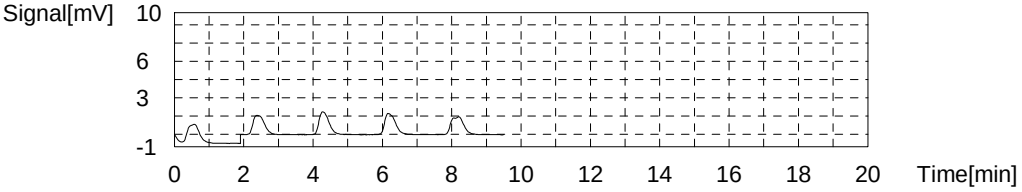
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.438mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.313	1.286mg/L	50uL	1	E	TOC3.2022_05_26_16_41_56.cal	6/1/2022 8:20:38 AM
2	3.570	1.387mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 8:22:41 AM
3	3.764	1.464mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 8:24:44 AM
4	3.725	1.448mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 8:26:47 AM
5	3.738	1.453mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 8:28:50 AM

Mean Area 3.699
Mean Conc. 1.438mg/L



Sample

Sample Name: 280-162574-c-3
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

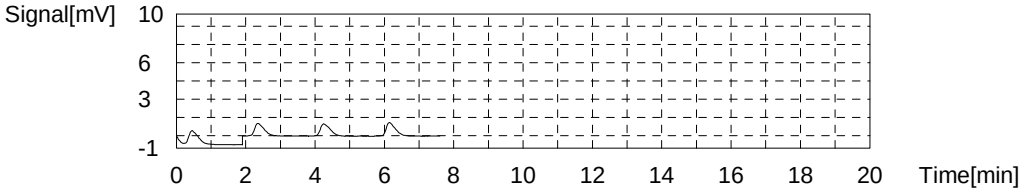
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.7539mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.883	0.7233mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 8:37:21 AM
2	1.970	0.7576mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 8:39:24 AM
3	1.974	0.7591mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 8:41:27 AM
4	2.016	0.7757mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 8:43:30 AM

Mean Area 1.961
Mean Conc. 0.7539mg/L



Sample

Sample Name: 280-162574-d-4
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

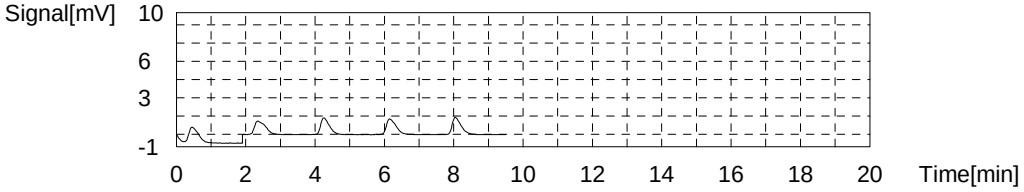
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.9508mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.173	0.8375mg/L	50uL	1	E	TOC3.2022_05_26_16_41_56.cal	6/1/2022 8:52:02 AM
2	2.442	0.9433mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 8:54:05 AM
3	2.366	0.9134mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 8:56:08 AM
4	2.487	0.9610mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 8:58:11 AM
5	2.549	0.9854mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 9:00:14 AM

Mean Area 2.461
Mean Conc. 0.9508mg/L



Sample

Sample Name: 310-231240-h-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

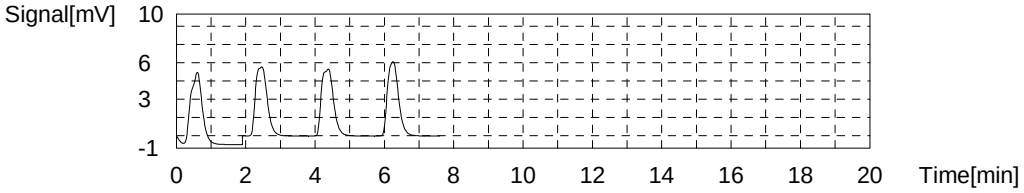
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	50.00	NPOC:263.3mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	13.34	261.6mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 9:08:45 AM
2	13.35	261.8mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 9:10:48 AM
3	13.40	262.8mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 9:12:51 AM
4	13.62	267.1mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 9:14:54 AM

Mean Area 13.43
Mean Conc. 263.3mg/L



Sample

Sample Name: 590-17556-g-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

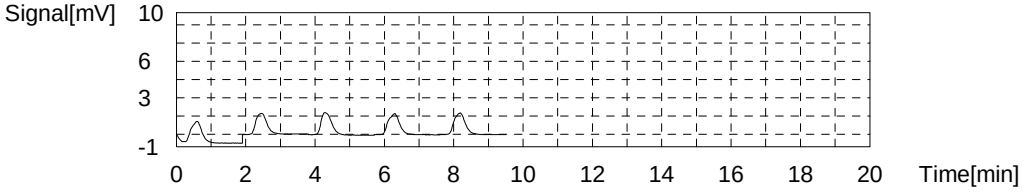
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.515mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.632	1.412mg/L	50uL	1	E	TOC3.2022_05_26_16_41_56.cal	6/1/2022 9:23:26 AM
2	3.827	1.488mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 9:25:29 AM
3	3.833	1.491mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 9:27:32 AM
4	3.926	1.527mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 9:29:35 AM
5	3.993	1.554mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 9:31:38 AM

Mean Area 3.895
Mean Conc. 1.515mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

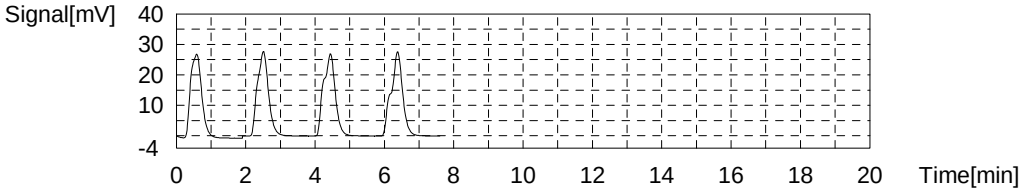
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.84mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	62.05	24.40mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 9:40:09 AM
2	62.13	24.43mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 9:42:12 AM
3	64.17	25.24mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 9:44:15 AM
4	64.30	25.29mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 9:46:18 AM

Mean Area 63.16
Mean Conc. 24.84mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

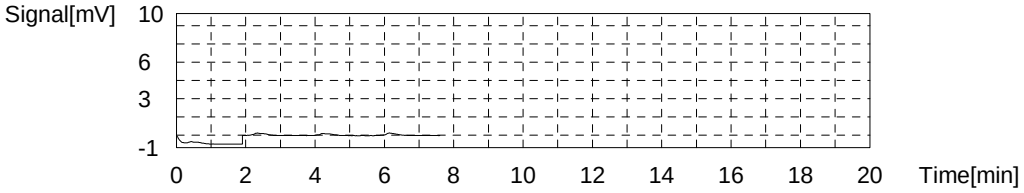
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1163mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.1962	0.05948mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 9:54:51 AM
2	0.3782	0.1311mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 9:56:54 AM
3	0.4099	0.1436mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 9:58:57 AM
4	0.3775	0.1308mg/L	50uL	1		TOC3.2022_05_26_16_41_56.cal	6/1/2022 10:01:00 AM

Mean Area 0.3405
Mean Conc. 0.1163mg/L



5-31-22

Shi 3 TOC

9060

ICV
ICB
LCS
MB
TIC
LCS 280-576568/1-A
MB 280-576568/2-A
280-162622-D-1-A
280-162622-D-1-B MS
280-162622-D-1-C MSD
280-162622-D-2-A
280-162622-D-3-A
280-162622-D-4-A
280-162622-D-5-A
CCV
CCB
280-162622-D-6-A
280-162622-D-7-A
280-162622-D-8-A
280-162622-D-9-A
280-162622-D-10-A
280-162622-D-11-A
280-162622-D-11-B MS

Filtration DOC pH >2

-1-

Shi 3 TOC

280-162622-D-11-C MSD	
280-162622-D-12-A	
280-162622-D-16-A	
CCV	
CCB	
280-162622-D-17-A	Filtration DOC PH >2
280-162622-D-18-A	
LCS	
MB	
TIC	
590-17563-a-1	
MS 590-17563-a-1	
MSD 590-17563-a-1	
590-17563-a-2	
590-17563-a-3	
CCV	
CCB	
590-17563-a-4	
590-17563-a-5	
590-17563-a-6	
590-17563-a-7	
280-162614-b-1	
280-162614-b-2	
280-162614-b-3	

5310

Shi 3 TOC

280-162614-b-4
MS 280-162614-b-4
MSD 280-162614-b-4
CCV
CCB
280-162614-b-5
280-162614-b-6
280-162614-b-7
280-162614-b-8
280-162614-b-9
280-162614-b-10
280-162614-b-11
280-162614-b-12
280-162614-b-13
280-162574-c-1
CCV
CCB
MS 280-162574-c-1
MSD 280-162574-c-1
280-162574-c-2
280-162574-c-3
280-162574-d-4
310-231240-h-1 SOx Dil color, odor
590-17556-g-1

Shi 3 TOC

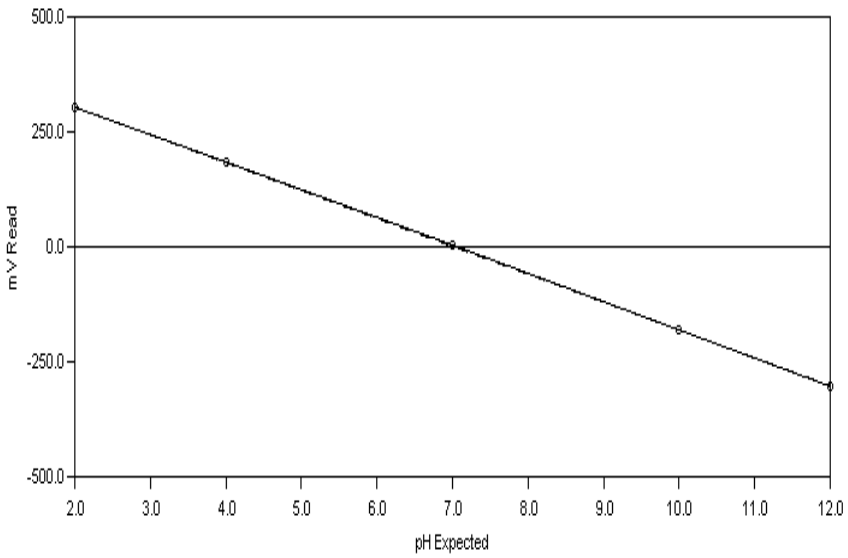
CCV
CCB

BWH 5000, 1000 MS

MANTECH INC.

Calibration Report

Calibration Record # 513



Calibration Settings

Calibration ID	PH	Date	5/26/2022	
Channel	1	Time	9:44 AM	
Probe Type	pH	Temperature	294.34 K	21.19 C
Probe ID	PH ELECTRODE	Analysis Type	Single Line Fit	

Calibration Results

Slope	-60.708	CorrCoeff	1.0000
Intercept	1.098	Equation:	Y = (-60.708) X + (1.098)

Calibration Validity **True** Operator

	Result	Minimum	Maximum
Slope	-60.708	-65.00	-53.00
Intercept	1.098	-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	303.10
	4.00	184.57
	7.00	2.31
	10.00	-181.76
	12.00	-302.73

Test America

AT4 Analyst:_____

Water Analysis Report

Run Number 1534 **Order Number** 20220526-2

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	5/26/2022	12:42 PM	20.55	-1.00	5.72	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
INITIAL CHECK	5/26/2022	12:50 PM	20.30	-1.00	10.62	112.28	193.44	.00	162.32	31.12	1.12	1.93	-1.00	.02
BUFFER 7	5/26/2022	12:53 PM	19.94	-1.00	6.99	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
LCS	5/26/2022	12:59 PM	19.97	-1.00	10.65	111.51	197.34	.00	171.65	25.69	1.12	1.97	-1.00	.02
LCSD	5/26/2022	1:06 PM	20.34	-1.00	10.66	112.66	197.80	.00	170.27	27.53	1.13	1.98	-1.00	.02
MB	5/26/2022	1:12 PM	20.56	-1.00	8.22	.00	2.55	2.55	.00	.00	.00	.03	.04	.02
280-162601-a-2	5/26/2022	1:17 PM	20.51	-1.00	6.51	.00	160.15	160.15	.00	.00	.00	1.60	-1.00	.02
DU 280-162601-a-2	5/26/2022	1:23 PM	20.52	-1.00	6.54	.00	160.84	160.84	.00	.00	.00	1.61	-1.00	.02
280-162601-a-9	5/26/2022	1:29 PM	20.58	-1.00	6.54	.00	162.13	162.13	.00	.00	.00	1.62	-1.00	.02
280-162530-g-3	5/26/2022	1:40 PM	20.84	-1.00	7.24	.00	683.19	683.19	.00	.00	.00	6.83	-1.00	.02
280-162622-f-1	5/26/2022	1:49 PM	21.22	-1.00	7.24	.00	531.17	531.17	.00	.00	.00	5.31	-1.00	.02
280-162622-f-2	5/26/2022	1:59 PM	21.01	-1.00	7.00	.00	644.82	644.82	.00	.00	.00	6.45	-1.00	.02
280-162622-f-3	5/26/2022	2:10 PM	20.78	-1.00	6.89	.00	834.30	834.30	.00	.00	.00	8.34	-1.00	.02
280-162622-f-4	5/26/2022	2:20 PM	20.70	-1.00	6.92	.00	721.23	721.23	.00	.00	.00	7.21	-1.00	.02
280-162622-f-5	5/26/2022	2:31 PM	20.67	-1.00	7.04	.00	738.12	738.12	.00	.00	.00	7.38	-1.00	.02
280-162622-f-6	5/26/2022	2:40 PM	20.70	-1.00	7.03	.00	601.84	601.84	.00	.00	.00	6.02	-1.00	.02
CCV	5/26/2022	2:48 PM	20.80	-1.00	10.59	115.05	202.56	.00	175.02	27.54	1.15	2.03	-1.00	.02
CCB	5/26/2022	2:53 PM	20.84	-1.00	8.16	.00	2.53	2.53	.00	.00	.00	.03	.04	.02
280-162622-f-7	5/26/2022	2:59 PM	20.83	-1.00	6.55	.00	101.64	101.64	.00	.00	.00	1.02	-1.00	.02
280-162622-f-8	5/26/2022	3:09 PM	20.81	-1.00	6.94	.00	697.67	697.67	.00	.00	.00	6.98	-1.00	.02
280-162622-f-9	5/26/2022	3:19 PM	21.19	-1.00	7.03	.00	777.58	777.58	.00	.00	.00	7.78	-1.00	.02
280-162622-f-10	5/26/2022	3:27 PM	21.53	-1.00	6.54	.00	394.49	394.49	.00	.00	.00	3.94	-1.00	.02
280-162622-f-11	5/26/2022	3:35 PM	21.61	-1.00	7.08	.00	307.60	307.60	.00	.00	.00	3.08	-1.00	.02
280-162622-f-12	5/26/2022	3:42 PM	21.34	-1.00	7.06	.00	336.00	336.00	.00	.00	.00	3.36	-1.00	.02
280-162622-d-13	5/26/2022	3:48 PM	21.03	-1.00	6.43	.00	104.34	104.34	.00	.00	.00	1.04	-1.00	.02
280-162622-d-14	5/26/2022	3:54 PM	20.88	-1.00	6.43	.00	162.40	162.40	.00	.00	.00	1.62	-1.00	.02
280-162622-d-15	5/26/2022	4:01 PM	20.77	-1.00	6.55	.00	216.28	216.28	.00	.00	.00	2.16	-1.00	.02

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Run Number 1534 **Order Number** 20220526-2

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)
280-162622-f-16	5/26/2022	4:13 PM	20.80	-1.00	6.93	.00	904.73	904.73	.00	.00	.00	9.05	-1.00	.02
CCV	5/26/2022	4:20 PM	21.01	-1.00	10.55	113.06	200.33	.00	174.54	25.79	1.13	2.00	-1.00	.02
CCB	5/26/2022	4:25 PM	21.06	-1.00	8.07	.00	2.49	2.49	.00	.00	.00	.03	.04	.02
LCS	5/26/2022	4:32 PM	21.02	-1.00	10.57	110.66	200.17	.00	179.02	21.15	1.11	2.00	-1.00	.02
MB	5/26/2022	4:37 PM	21.30	-1.00	8.13	.00	2.55	2.55	.00	.00	.00	.03	.04	.02
280-162622-f-17	5/26/2022	4:49 PM	21.45	-1.00	6.92	.00	896.27	896.27	.00	.00	.00	8.96	-1.00	.02
DU 280-162622-f-17	5/26/2022	5:01 PM	21.77	-1.00	7.13	.00	906.55	906.55	.00	.00	.00	9.07	-1.00	.02
280-162622-f-18	5/26/2022	5:11 PM	21.66	-1.00	7.05	.00	623.07	623.07	.00	.00	.00	6.23	-1.00	.02
280-162622-b-19	5/26/2022	5:18 PM	21.30	-1.00	6.48	.00	209.76	209.76	.00	.00	.00	2.10	-1.00	.02
280-162622-b-20	5/26/2022	5:24 PM	21.11	-1.00	6.43	.00	213.88	213.88	.00	.00	.00	2.14	-1.00	.02
280-162622-b-21	5/26/2022	5:30 PM	21.03	-1.00	6.45	.00	143.23	143.23	.00	.00	.00	1.43	-1.00	.02
280-162622-b-26	5/26/2022	5:36 PM	20.98	-1.00	6.59	.00	144.79	144.79	.00	.00	.00	1.45	-1.00	.02
320-88072-e-1	5/26/2022	5:48 PM	20.89	-1.00	7.63	.00	888.58	888.58	.00	.00	.00	8.89	-1.00	.02
320-88072-e-3	5/26/2022	6:04 PM	21.01	-1.00	7.76	.00	1,415.26	1,415.26	.00	.00	.00	14.15	-1.00	.02
320-88072-d-4	5/26/2022	6:21 PM	21.14	-1.00	7.60	.00	1,632.50	1,632.50	.00	.00	.00	16.33	-1.00	.02
CCV	5/26/2022	6:29 PM	21.24	-1.00	10.53	113.44	201.81	.00	176.75	25.07	1.13	2.02	-1.00	.02
CCB	5/26/2022	6:34 PM	21.30	-1.00	8.10	.00	2.51	2.51	.00	.00	.00	.03	.04	.02
320-88072-e-5	5/26/2022	6:43 PM	21.38	-1.00	7.43	.00	574.81	574.81	.00	.00	.00	5.75	-1.00	.02
320-88072-e-6	5/26/2022	6:53 PM	21.60	-1.00	7.48	.00	575.42	575.42	.00	.00	.00	5.75	-1.00	.02
320-88072-d-7	5/26/2022	7:10 PM	21.35	-1.00	8.04	.00	1,705.60	1,705.60	.00	.00	.00	17.06	-1.00	.02
320-88072-d-8	5/26/2022	7:25 PM	21.24	-1.00	8.32	10.13	1,325.12	1,304.86	20.25	.00	.10	13.25	-1.00	.02
320-88072-e-9	5/26/2022	7:45 PM	21.01	-1.00	7.93	.00	2,276.51	2,276.51	.00	.00	.00	22.77	-1.00	.02
320-88072-e-10	5/26/2022	8:06 PM	20.96	-1.00	7.86	.00	2,240.91	2,240.91	.00	.00	.00	22.41	-1.00	.02
280-162492-c-6	5/26/2022	8:13 PM	20.96	-1.00	8.20	.00	187.09	187.09	.00	.00	.00	1.87	-1.00	.02
280-162528-d-2	5/26/2022	8:19 PM	20.92	-1.00	7.23	.00	150.56	150.56	.00	.00	.00	1.51	-1.00	.02
280-162551-c-1	5/26/2022	8:28 PM	20.87	-1.00	6.85	.00	516.29	516.29	.00	.00	.00	5.16	-1.00	.02
280-162551-c-2	5/26/2022	8:36 PM	20.87	-1.00	7.55	.00	363.09	363.09	.00	.00	.00	3.63	-1.00	.02
CCV	5/26/2022	8:43 PM	20.96	-1.00	10.46	110.04	208.43	.00	196.78	11.65	1.10	2.08	-1.00	.02
CCB	5/26/2022	8:49 PM	21.06	-1.00	8.09	.00	2.55	2.55	.00	.00	.00	.03	.04	.02
LCS	5/26/2022	8:56 PM	21.18	-1.00	10.47	106.19	197.83	.00	183.29	14.54	1.06	1.98	-1.00	.02

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Run Number 1534 **Order Number** 20220526-2

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)
MB	5/26/2022	9:01 PM	21.35	-1.00	8.10	.00	2.49	2.49	.00	.00	.00	.03	.04	.02
280-162551-c-3	5/26/2022	9:11 PM	21.15	-1.00	7.00	.00	730.83	730.83	.00	.00	.00	7.31	-1.00	.02
DU 280-162551-c-3	5/26/2022	9:22 PM	21.05	-1.00	7.03	.00	735.94	735.94	.00	.00	.00	7.36	-1.00	.02
280-162551-c-4	5/26/2022	9:32 PM	20.89	-1.00	7.16	.00	699.78	699.78	.00	.00	.00	7.00	-1.00	.02
280-162551-c-5	5/26/2022	9:41 PM	20.85	-1.00	7.18	.00	560.16	560.16	.00	.00	.00	5.60	-1.00	.02
280-162551-c-6	5/26/2022	9:49 PM	20.84	-1.00	7.29	.00	348.37	348.37	.00	.00	.00	3.48	-1.00	.02
280-162551-c-7	5/26/2022	9:57 PM	20.78	-1.00	7.24	.00	336.90	336.90	.00	.00	.00	3.37	-1.00	.02
280-162551-c-8	5/26/2022	10:07 PM	20.78	-1.00	7.15	.00	687.15	687.15	.00	.00	.00	6.87	-1.00	.02
280-162551-c-9	5/26/2022	10:14 PM	20.85	-1.00	7.47	.00	345.15	345.15	.00	.00	.00	3.45	-1.00	.02
280-162551-c-10	5/26/2022	10:22 PM	20.92	-1.00	7.36	.00	296.56	296.56	.00	.00	.00	2.97	-1.00	.02
280-162551-c-11	5/26/2022	10:29 PM	21.05	-1.00	7.65	.00	347.34	347.34	.00	.00	.00	3.47	-1.00	.02
CCV	5/26/2022	10:37 PM	21.40	-1.00	10.45	109.15	202.05	.00	185.80	16.25	1.09	2.02	-1.00	.02
CCB	5/26/2022	10:42 PM	21.27	-1.00	8.05	.00	2.43	2.43	.00	.00	.00	.03	.04	.02
280-162551-c-13	5/26/2022	10:50 PM	21.08	-1.00	7.57	.00	342.74	342.74	.00	.00	.00	3.43	-1.00	.02
280-162551-c-14	5/26/2022	10:57 PM	20.95	-1.00	7.27	.00	302.94	302.94	.00	.00	.00	3.03	-1.00	.02
280-162551-c-15	5/26/2022	11:05 PM	20.83	-1.00	7.15	.00	347.81	347.81	.00	.00	.00	3.48	-1.00	.02
280-162614-A-1	5/26/2022	11:10 PM	20.77	-1.00	7.01	.00	69.94	69.94	.00	.00	.00	.70	-1.00	.02
280-162614-c-2	5/26/2022	11:17 PM	20.69	-1.00	7.67	.00	285.33	285.33	.00	.00	.00	2.85	-1.00	.02
280-162614-c-3	5/26/2022	11:22 PM	20.77	-1.00	6.84	.00	72.88	72.88	.00	.00	.00	.73	-1.00	.02
280-162614-c-4	5/26/2022	11:30 PM	20.76	-1.00	7.33	.00	375.31	375.31	.00	.00	.00	3.75	-1.00	.02
280-162614-c-5	5/26/2022	11:35 PM	20.77	-1.00	6.81	.00	25.70	25.70	.00	.00	.00	.26	-1.00	.02
280-162614-c-6	5/26/2022	11:40 PM	20.84	-1.00	6.15	.00	12.78	12.78	.00	.00	.00	.13	.14	.02
280-162614-c-7	5/26/2022	11:47 PM	20.96	-1.00	7.53	.00	293.56	293.56	.00	.00	.00	2.94	-1.00	.02
CCV	5/26/2022	11:54 PM	21.24	-1.00	10.46	106.63	199.08	.00	184.91	14.17	1.07	1.99	-1.00	.02
CCB	5/27/2022	12:00 AM	21.09	-1.00	8.07	.00	2.60	2.60	.00	.00	.00	.03	.04	.02
LCS	5/27/2022	12:07 AM	20.94	-1.00	10.42	105.65	205.99	.00	200.69	5.30	1.06	2.06	-1.00	.02
MB	5/27/2022	12:13 AM	20.84	-1.00	8.09	.00	2.59	2.59	.00	.00	.00	.03	.04	.02
280-162614-c-8	5/27/2022	12:18 AM	20.73	-1.00	6.53	.00	32.76	32.76	.00	.00	.00	.33	-1.00	.02
DU 280-162614-c-8	5/27/2022	12:23 AM	20.63	-1.00	6.69	.00	35.15	35.15	.00	.00	.00	.35	-1.00	.02
280-162614-c-9	5/27/2022	12:28 AM	20.60	-1.00	8.49	25.13	60.74	10.48	50.26	.00	.25	.61	-1.00	.02

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Run Number 1534 **Order Number** 20220526-2

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)
280-162614-c-10	5/27/2022	12:33 AM	20.62	-1.00	7.90	.00	68.59	68.59	.00	.00	.00	.69	-1.00	.02
280-162614-c-11	5/27/2022	12:39 AM	20.67	-1.00	7.82	.00	130.81	130.81	.00	.00	.00	1.31	-1.00	.02
280-162614-c-12	5/27/2022	12:45 AM	20.77	-1.00	6.38	.00	1.67	1.67	.00	.00	.00	.03	.04	.02
280-162614-c-13	5/27/2022	12:50 AM	20.83	-1.00	5.50	.00	.28	.28	.00	.00	.00	.02	.03	.02
280-162619-c-1	5/27/2022	12:58 AM	21.15	-1.00	7.97	.00	370.19	370.19	.00	.00	.00	3.70	-1.00	.02
280-162619-c-3	5/27/2022	1:06 AM	21.08	-1.00	7.90	.00	497.67	497.67	.00	.00	.00	4.98	-1.00	.02
280-162619-c-5	5/27/2022	1:15 AM	20.92	-1.00	8.20	.00	493.58	493.58	.00	.00	.00	4.94	-1.00	.02
CCV	5/27/2022	1:22 AM	20.78	-1.00	10.41	106.52	206.96	.00	200.89	6.08	1.07	2.07	-1.00	.02
CCB	5/27/2022	1:27 AM	20.78	-1.00	8.05	.00	2.44	2.44	.00	.00	.00	.03	.04	.02
280-162619-c-7	5/27/2022	1:36 AM	20.72	-1.00	7.74	.00	473.31	473.31	.00	.00	.00	4.73	-1.00	.02
280-162619-c-9	5/27/2022	1:46 AM	20.69	-1.00	7.85	.00	675.70	675.70	.00	.00	.00	6.76	-1.00	.02
280-162645-a-2	5/27/2022	1:54 AM	20.70	-1.00	7.51	.00	331.56	331.56	.00	.00	.00	3.32	-1.00	.02
280-162561-a-1	5/27/2022	1:59 AM	20.66	-1.00	6.32	.00	86.15	86.15	.00	.00	.00	.86	-1.00	.02
280-162561-a-2	5/27/2022	2:06 AM	20.65	-1.00	7.44	.00	218.86	218.86	.00	.00	.00	2.19	-1.00	.02
280-162561-a-3	5/27/2022	2:09 AM	20.62	-1.00	3.97	.00	.00	.00	.00	.00	.00	.00	.00	.02
280-162561-a-4	5/27/2022	2:14 AM	20.69	-1.00	6.63	.00	43.53	43.53	.00	.00	.00	.44	-1.00	.02
280-162561-a-5	5/27/2022	2:18 AM	20.88	-1.00	4.30	.00	-1.57	-1.57	.00	.00	.00	.00	.02	.02
280-162561-a-6	5/27/2022	2:23 AM	20.84	-1.00	6.68	.00	44.64	44.64	.00	.00	.00	.45	-1.00	.02
280-162574-a-1	5/27/2022	2:29 AM	20.74	-1.00	7.09	.00	174.45	174.45	.00	.00	.00	1.74	-1.00	.02
CCV	5/27/2022	2:35 AM	20.69	-1.00	10.39	106.45	202.43	.00	191.94	10.48	1.06	2.02	-1.00	.02
CCB	5/27/2022	2:41 AM	20.72	-1.00	8.04	.00	2.33	2.33	.00	.00	.00	.03	.04	.02
LCS	5/27/2022	2:47 AM	20.63	-1.00	10.39	105.53	204.21	.00	197.35	6.85	1.06	2.04	-1.00	.02
MB	5/27/2022	2:53 AM	20.67	-1.00	8.10	.00	2.36	2.36	.00	.00	.00	.03	.04	.02
280-162574-a-2	5/27/2022	2:59 AM	20.67	-1.00	6.55	.00	163.97	163.97	.00	.00	.00	1.64	-1.00	.02
DU 280-162574-a-2	5/27/2022	3:05 AM	20.63	-1.00	6.65	.00	160.14	160.14	.00	.00	.00	1.60	-1.00	.02
280-162574-a-3	5/27/2022	3:11 AM	20.60	-1.00	7.17	.00	140.67	140.67	.00	.00	.00	1.41	-1.00	.02
280-162574-a-4	5/27/2022	3:17 AM	20.63	-1.00	7.19	.00	139.63	139.63	.00	.00	.00	1.40	-1.00	.02
280-162615-a-2	5/27/2022	3:24 AM	20.98	-1.00	7.58	.00	219.21	219.21	.00	.00	.00	2.19	-1.00	.02
280-162615-a-3	5/27/2022	3:30 AM	20.88	-1.00	7.09	.00	200.14	200.14	.00	.00	.00	2.00	-1.00	.02
280-162615-a-4	5/27/2022	3:37 AM	20.76	-1.00	7.48	.00	259.45	259.45	.00	.00	.00	2.59	-1.00	.02

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Run Number 1534 **Order Number** 20220526-2

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)
280-162615-a-5	5/27/2022	3:44 AM	20.70	-1.00	7.56	.00	220.95	220.95	.00	.00	.00	2.21	-1.00	.02
280-162615-a-6	5/27/2022	3:52 AM	20.65	-1.00	7.36	.00	449.22	449.22	.00	.00	.00	4.49	-1.00	.02
280-162615-a-7	5/27/2022	4:01 AM	20.58	-1.00	7.49	.00	450.12	450.12	.00	.00	.00	4.50	-1.00	.02
CCV	5/27/2022	4:08 AM	20.56	-1.00	10.37	103.02	203.47	.00	200.90	2.57	1.03	2.03	-1.00	.02
CCB	5/27/2022	4:13 AM	20.48	-1.00	8.03	.00	2.52	2.52	.00	.00	.00	.03	.04	.02
280-162615-a-8	5/27/2022	4:20 AM	20.45	-1.00	7.43	.00	186.04	186.04	.00	.00	.00	1.86	-1.00	.02
280-162615-a-9	5/27/2022	4:27 AM	20.47	-1.00	7.62	.00	304.27	304.27	.00	.00	.00	3.04	-1.00	.02
280-162588-c-1	5/27/2022	4:48 AM	20.36	-1.00	7.93	.00	.00	.00	.00	.00	.00	.00	.00	.02
280-162588-c-2	5/27/2022	5:03 AM	20.30	-1.00	9.94	500.63	1,319.11	317.86	1,001.26	.00	5.01	13.19	-1.00	.02
280-162524-j-1	5/27/2022	5:23 AM	20.60	-1.00	8.03	.00	2,311.68	2,311.68	.00	.00	.00	23.12	-1.00	.02
280-162525-c-1	5/27/2022	5:42 AM	20.41	-1.00	8.28	.00	.00	.00	.00	.00	.00	.00	.00	.02
280-162641-c-2	5/27/2022	5:58 AM	20.33	-1.00	7.92	.00	1,487.23	1,487.23	.00	.00	.00	14.87	-1.00	.02
280-162641-a-3	5/27/2022	6:16 AM	20.43	-1.00	7.86	.00	1,811.94	1,811.94	.00	.00	.00	18.12	-1.00	.02
280-162641-c-4	5/27/2022	6:24 AM	20.52	-1.00	7.09	.00	202.17	202.17	.00	.00	.00	2.02	-1.00	.02
280-162641-c-5	5/27/2022	6:31 AM	20.51	-1.00	6.65	.00	217.81	217.81	.00	.00	.00	2.18	-1.00	.02
CCV	5/27/2022	6:37 AM	20.52	-1.00	10.43	153.81	212.95	.00	118.27	94.68	1.54	2.13	-1.00	.02
CCB	5/27/2022	6:43 AM	20.60	-1.00	7.94	.00	2.75	2.75	.00	.00	.00	.04	.05	.02

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Shipping and Receiving Documents

AECOM
12120 Shamrock Plaza Suite 300, Omaha, NE 68154 (402) 334-8181 Fax (402) 334-1984

CHAIN OF CUSTODY RECORD

Project Name: CHAAP 2019	AECOM Project Number: 60565355
Project Location: Grand Island, Nebraska	AECOM Project Manager: Dean Converse
Sampler(s): ~~BB~~ AG JO	

Bill to: Brice Engineering

Remarks: standard TAT

Sample Date	Sample Time	Type Comp.	Type Grab	Sample Identification	Matrix	Containers No.	Containers Type	Explosives (MNX (8330A)	TKN (351.2), NH_3 (350.1), NO_2/NO_3 (353.2)	SO_4 (9056A), Alkalinity (2320B)	Sulfide (9034)	DOC (9060A)*	Methane (RSK 175)		Remarks
5-19-22	1050		X	GO119-22A	AQ	9	ABCDEF	X	X	X	X	X	X		6°C
5-19-22	1205		X	GO121-22A	AQ	9	ABCDEF	X	X	X	X	X	X		6°
5-19-22	0945		X	GO101-22A	AQ	9	ABCDEF	X	X	X	X	X	X		6°

280-162622 Chain of Custody

Signatures	Date	Time	Shipping Details	Special Instructions
Relinquished by:	5-19-22	1600	Method of Shipment: Federal Express	* Filter groundwater sample before analyzing for DOC
Received by: ETA - Den	5/20/22	1000	Airbill Number: 8172 5304 6123	(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

Temp. 1.9+0.1 IR#12

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06/10/2022

2021017

AECOM
12120 Shamrock Plaza Suite 300, Omaha, NE 68154 (402) 334-8181 Fax (402) 334-1984

CHAIN OF CUSTODY RECORD

Project Name: CHAAP 2019	AECOM Project Number: 60565355	Bill to: Brice Engineering
Project Location: Grand Island, Nebraska	AECOM Project Manager: Dean Converse	Remarks
Sampler(s): BE SS		standard TAT

Sample Date	Sample Time	Type Comp.	Type Grab	Sample Identification	Matrix	Containers No.	Containers Type	Explosives+MNX (8330A)	TKN (351.2), NH_3 (350.1), NO_2/NO_3 (353.2)	SO_4 (9056A), Alkalinity (2320B)	Sulfide (9034)	DOC (9060A)*	Methane (RSK 175)		Remarks
5-19-22	0950		X	GO100-22A	AQ	9	ABCDEF	X	X	X	X	X	X		6°C
5-19-22	1210		X	GO122-22A	AQ	9	ABCDEF	X	X	X	X	X	X		6°
5-19-22	1055		X	GO66E-22A	AQ	9	ABCDEF	X	X	X	X	X	X		6°

Signatures		Date	Time	Shipping Details	Special Instructions
Relinquished by:		5-19-22	1600	Method of Shipment: Federal Express	* Filter groundwater sample before analyzing for DOC
Received by:	Jeff Camp ETA-Den	5/20/22	1000	Airbill Number: 8172 5304 6112	(A) (2) 500mL Ambers (Explosives) (B) (1) 500mL HDPE w/ H_2SO_4 (TKN, NH_3, NO_2/NO_3) (C) (1) 250mL HDPE (SO_4, Alkalinity) (D) (1) 250mL HDPE w/ ZnOAc/NaOH (Sulfide) (E) (1) 250mL Amber (DOC)* (F) (3) 40 mL VOA w/ HCl (Methane)
Relinquished by:				**Lab Address:** TestAmerica Lab, Inc. Attn: Patrick McEntee 4955 Yarrow St. Arvada, CO 80002 (303) 736-0107	
Received for Laboratory by:					TAL/Brice Project #: 28017805

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2021015

06/20/2022

AECOM
12120 Shamrock Plaza Suite 300, Omaha, NE 68154 (402) 334-8181 Fax (402) 334-1984

CHAIN OF CUSTODY RECORD

Project Name: CHAAP 2019	AECOM Project Number: 60565355
Project Location: Grand Island, Nebraska	AECOM Project Manager: Dean Converse
Sampler(s): BE SS AG JO	

Bill to: Brice Engineering

Remarks: standard TAT

Sample Date	Sample Time	Type Comp.	Type Grab	Sample Identification	Matrix	Containers No.	Containers Type	Explosives+MNX (8330A)	TKN (351.2), NH_3 (350.1), NO_2, NO_3 (353.2)	SO_4 (9056A), Alkalinity (2320B)	Sulfide (9034)	DOC (9060A)*	Methane (RSK 175)		Remarks
5-18-22	1450		X	G0024-22A	AQ	9	ABCDEF	X	X	X	X	X	X		6°C
5-18-22	0845		X	G0115-22A	↓	9	ABCDEF	X	X	X	X	X	X		6°
5-19-22	0845		X	G0095-22A	↓	9	ABCDEF	X	X	X	X	X	X		6°

Signatures		Date	Time	Shipping Details	Special Instructions
Relinquished by:		5-19-22	1600	Method of Shipment: Federal Express	* Filter groundwater sample before analyzing for DOC
Received by:	ETA-DEN	5/20/22	1000	Airbill Number: 501866410990	(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

Temp. 4.8+0.1 IR#12

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2021014

AECOM
12120 Shamrock Plaza Suite 300, Omaha, NE 68154 (402) 334-8181 Fax (402) 334-1984

CHAIN OF CUSTODY RECORD

Project Name: CHAAP 2019	AECOM Project Number: 60565355
Project Location: Grand Island, Nebraska	AECOM Project Manager: Dean Converse
Sampler(s): BE SS	

Bill to: Brice Engineering

Remarks: standard TAT

Sample Date	Sample Time	Type Comp.	Type Grab	Sample Identification	Matrix	Containers No	Containers Type	Explosives+MNX (8330A)	TKN (351.2), NH_3 (350.1), NO_2/NO_3 (353.2)	SO_4 (9056A), Alkalinity (2320B)	Sulfide (9034)	DOC (9060A)*	Methane (RSK 175)		Remarks
5-18-22	1005		X	PZ018-22A	AQ	9	ABCDEF	X	X	XX	X	X			6°C
5-18-22	1305		X	PZ020-22A	AQ	9	ABCDEF	X	X	X	X	X	X		6°C
5-18-22	1620		X	GW077-22A	AQ	9	ABCDEF	X	X	X	X	X	X		6°C

Signatures		Date	Time	Shipping Details	Special Instructions
Relinquished by:		5-19-22	1600	Method of Shipment: Federal Express	* Filter groundwater sample before analyzing for DOC
Received by:	ETA-DEN	5/20/22	1000	Airbill Number: 5018 6641 1015	(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

Temp. 2.6+0.1 IR#12

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06/10/2022

2021013

AECOM
12120 Shamrock Plaza Suite 300, Omaha, NE 68154 (402) 334-8181 Fax (402) 334-1984

CHAIN OF CUSTODY RECORD

Project Name: CHAAP
AECOM Project Number: 60565355
Project Location: Grand Island, NE
AECOM Project Manager: Dean Converse
Sampler(s): BE SS

Bill to: Brice Engineering

Remarks: standard TAT

Sample Date	Sample Time	Type Comp.	Type Grab	Sample Identification	Matrix	Containers No.	Containers Type	Analytical Parameters: NO2/NO3 353.2	SO4 A1K 9056A 2320B	DRO 8015B					Remarks
5-18-22	1115			GW069-22A	AQ	1	500 HDPE	X							6°C H_2SO_4
						1	250 HDPE		X						
						2	1L Amber			X					
5-18-22	1520			SHGW03-22A	AQ	1	500 HDPE	X							H_2SO_4
						1	250 HDPE		X						
						2	1L Amber			X					
5-18-22	1235			SHGW04-22A	AQ	1	500 HDPE	X							H_2SO_4
						1	250 HDPE		X						
						2	1L Amber			X					

Signatures		Date	Time	Shipping Details	Special Instructions
Relinquished by:		5-19-22	1600	Method of Shipment: Federal Express	
Received by:	ETA-DEN	5/20/22	1000	Airbill Number: 501866411004	
Relinquished by:				**Lab Address:** TestAmerica Lab, Inc. Attn: Patrick McEntee 4955 Yarrow St. Arvada, CO 80002 (303) 736-0107	
Received for Laboratory by:					

Temp. 0.4+0.1 IR #12

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06/10/2022

2020162

AECOM
12120 Shamrock Plaza Suite 300, Omaha, NE 68154 (402) 334-8181 Fax (402) 334-1984

CHAIN OF CUSTODY RECORD

Project Name: CHAAP 2019	AECOM Project Number: 60565355
Project Location: Grand Island, Nebraska	AECOM Project Manager: Dean Converse
Sampler(s): BE SS AG JO	

Bill to: Brice Engineering

Remarks: standard TAT

Sample Date	Sample Time	Type Comp.	Type Grab	Sample Identification	Matrix	Containers No.	Containers Type	Explosives+MNX (8330A)	TKN (351.2), NH_3 (350.1), NO_2/NO_3 (353.2)	SO_4 (9056A), Alkalinity (2320B)	Sulfide (9034)	DOC (9060A)*	Methane (RSK 175)		Remarks
5-19-22	0800		X	GO311-22A	AQ	9	ABCDEF	X	X	X	X	X	X		6°C
5-19-22	1315		X	GO111-22A	AQ	9	ABCDEF	X	X	X	X	X	X		6°
5-19-22	1320		X	GO123-22A	AQ	9	ABCDEF	X	X	X	X	X	X		6°

Signatures		Date	Time	Shipping Details	Special Instructions
Relinquished by:		5-19-21	1600	Method of Shipment: Federal Express	* Filter groundwater sample before analyzing for DOC
Received by:	ETA-Den	5/20/22	1000	Airbill Number: 817253046134	(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

Temp. 1.8 +0.1 IR#12

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06/10/2022

2021018

AECOM
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CHAIN OF CUSTODY RECORD

Project Name: CHAAP 2022	AECOM Project Number: 60565355
Project Location: Grand Island, NE	AECOM Project Manager: Dean Converse
Sampler(s): AG JO	

Analytical Parameters: 8260B VOC 5030B; MEE RSK 175; NO2/NO3 353.2; AlK 2320B; SO4 9056A

Bill to: Brice Engineering

Remarks: standard TAT

Sample Date	Sample Time	Type Comp.	Type Grab	Sample Identification	Matrix	Containers No.	Containers Type	Analytical Parameters	Remarks
5-18	0905		X	SHGW02-22A	AQ	3	40ml VOA	X	6°C
↓	↓		X	↓	↓	3	40 ml VOA	X	↓
↓	↓		X	↓	↓	1	500ml HDPE	X	↓
↓	↓		X	↓	↓	1	250ml HDPE	X	↓
5-18	0920		X	SHGW05-22A	AQ	3	40 ml VOA	X	6°C
↓	↓		X	↓	↓	3	40 ml VOA	X	↓
↓	↓		X	↓	↓	1	500 ml HDPE	X	↓
↓	↓		X	↓	↓	1	250 ml HDPE	X	↓
5-18	1010		X	GW053-22A	AQ	3	40ml VOA	X	6°C
↓	↓		X	↓	↓	3	40ml VOA	X	↓
↓	↓		X	↓	↓	1	500ml HDPE	X	↓
↓	↓		X	↓	↓	1	250ml HDPE	X	↓
5-18	1115		X	GW069-22A	AQ	3	40 ml VOA	X	
↓	↓		X	↓	↓	3	40 ml VOA	X	
5-18	0800		X	5-18 TB	AQ	1	40ml VOA	X	

Signatures	Date	Time	Shipping Details	Special Instructions
Relinquished by:	5-19-22	1600	Method of Shipment: Federal Express	
Received by: ETA-DEN	5/20/22	1000	Airbill Number: 501866411037	
Relinquished by:			**Lab Address:** TestAmerica Lab, Inc. Attn: Patrick McEntee 4955 Yarrow St. Arvada, CO 80002 (303) 736-0107	
Received for Laboratory by:				

Temp. 0.1 + 0.1 IR #12

White copy - Laboratory Yellow copy - Laboratory Pink copy - Sampler

06/10/2022

2020151

AECOM
12120 Shamrock Plaza Suite 300, Omaha, NE 68154 (402) 334-8181 Fax (402) 334-1984

CHAIN OF CUSTODY RECORD

Project Name: CHAAP 2022	AECOM Project Number: 60565355
Project Location: Grand Island, NE	AECOM Project Manager: DEAN Converse
Sampler(s): AG JO	

Sample Date	Sample Time	Type Comp.	Type Grab	Sample Identification	Matrix	Containers No.	Containers Type	Analytical Parameters: 8260 B 5030B VOC	MEE RSK 175	NO2 / NO3 353.2	AIK 2320B	SO4 4054			Bill to: Brice Engineering Remarks standard TAT
5-18-22	1235		X	SHGW04-22A	AG	3	40 ml	X							6°C
↓	↓		X	↓	↓	3	40 ml		X						6°C
5-18-22	1520		X	SHGW03-22A	AQ	3	40 ml	X							↓
↓	↓		X	↓	↓	3	40 ml	X	X						
5-18-22	1410		X	SAMW1-22A	AQ	3	40 ml	X	X						
↓	↓		X	↓	↓	3	40 ml		X						
			X			1	500ml HDPE			X					
			X			1	250ml HDPE				X				

Signatures		Date	Time	Shipping Details	Special Instructions
Relinquished by:		5-19-22	1600	Method of Shipment: Federal Express	
Received by:	ETA-Den	5/20/22	1000	Airbill Number: 5018 6641 1037	
Relinquished by:				**Lab Address:** TestAmerica Lab, Inc. Attn: Patrick McEntee 4955 Yarrow St. Arvada, CO 80002 (303) 736-0107	
Received for Laboratory by:					

Temp. 0.1 +0.1 IR#12

White copy - Laboratory Yellow copy - Laboratory Pink copy - Sampler

06/10/2022

2020174

Login Sample Receipt Checklist

Client: Brice Environmental Services, Corp

Job Number: 280-162622-1

Login Number: 162622
List Number: 1
Creator: Roehsner, Karen P

List Source: Eurofins Denver

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	Refer to Job Narrative for details.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	False	Narrative to indicate if headspace container used for analysis.
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	