

## ANALYTICAL REPORT

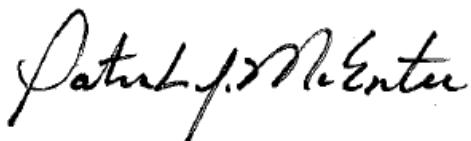
Job Number: 280-155048-1

Job Description: Cornhusker (CHAAP)

For:

Brice Environmental Services, Corp  
3800 Centerpoint Drive, Suite 520  
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Attention: Corey Schwabenlander



Approved for release.  
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11/29/2021 9:47 AM

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The Lab Certification ID# is 4025.

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

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# Definitions/Glossary

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

Job ID: 280-155048-1

## Qualifiers

### GC VOA

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

### HPLC/IC

Qualifier	Qualifier Description
M	Manual integrated compound.
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)
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: 280-155048-1**

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 11/3/2021 10:55 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 5.3° C.

### **DISSOLVED GASES (GC)**

Samples CA211-7 (280-155048-1), CA212-7 (280-155048-2), NW061-7 (280-155048-3), G0076-7 (280-155048-4), NW060-7 (280-155048-5), CA210-7 (280-155048-6), NW062-7 (280-155048-7) and G0070-7 (280-155048-8) were analyzed for Dissolved Gases (GC) in accordance with RSK\_175. The samples were analyzed on 11/09/2021 and 11/10/2021.

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

### **NITROAROMATICS AND NITRAMINES (HPLC)**

Samples CA211-7 (280-155048-1), CA212-7 (280-155048-2), NW061-7 (280-155048-3), G0076-7 (280-155048-4), NW060-7 (280-155048-5), CA210-7 (280-155048-6), NW062-7 (280-155048-7) and G0070-7 (280-155048-8) were analyzed for Nitroaromatics and Nitramines (HPLC) in accordance with 8330A. The samples were prepared on 11/04/2021 and analyzed on 11/05/2021 and 11/06/2021.

In preparation batch 280-556180, the following samples required filtration to reduce matrix interferences: G0076-7 (280-155048-4), NW062-7 (280-155048-7), NW062-7 (280-155048-7[MS]), NW062-7 (280-155048-7[MSD]), G0070-7 (280-155048-8), G0070-7 (280-155048-8[MS]) and G0070-7 (280-155048-8[MSD]).

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

### **ALKALINITY**

Samples CA211-7 (280-155048-1), CA212-7 (280-155048-2), NW061-7 (280-155048-3), G0076-7 (280-155048-4), NW060-7 (280-155048-5), CA210-7 (280-155048-6), NW062-7 (280-155048-7) and G0070-7 (280-155048-8) were analyzed for Alkalinity in accordance with SM20 2320B. The samples were analyzed on 11/13/2021.

Total Alkalinity as CaCO<sub>3</sub> was detected in method blank MB 280-557616/32 at a level that was below one half the LOQ.

Total Alkalinity as CaCO<sub>3</sub> was detected in method blank MB 280-557616/58 at a level that was below one half the LOQ.

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

### **AMMONIA**

Samples CA211-7 (280-155048-1), CA212-7 (280-155048-2), NW061-7 (280-155048-3), G0076-7 (280-155048-4), NW060-7 (280-155048-5), CA210-7 (280-155048-6), NW062-7 (280-155048-7) and G0070-7 (280-155048-8) were analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 11/21/2021 and 11/22/2021.

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

### **TOTAL KJELDAHL NITROGEN**

Samples CA211-7 (280-155048-1), CA212-7 (280-155048-2), NW061-7 (280-155048-3), G0076-7 (280-155048-4), NW060-7 (280-155048-5), CA210-7 (280-155048-6), NW062-7 (280-155048-7) and G0070-7 (280-155048-8) were analyzed for total kjeldahl nitrogen in accordance with EPA Method 351.2. The samples were prepared on 11/16/2021 and analyzed on 11/17/2021.

Nitrogen, Total Kjeldahl failed the recovery criteria high for the MS of sample G0070-7MS (280-155048-8) in batch 280-557899.

Nitrogen, Total Kjeldahl failed the recovery criteria high for the MSD of sample G0070-7MSD (280-155048-8) in batch 280-557899.

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

#### **NITRATE-NITRITE AS NITROGEN**

Samples CA211-7 (280-155048-1), CA212-7 (280-155048-2), NW061-7 (280-155048-3), G0076-7 (280-155048-4), NW060-7 (280-155048-5), CA210-7 (280-155048-6), NW062-7 (280-155048-7) and G0070-7 (280-155048-8) were analyzed for nitrate-nitrite as nitrogen in accordance with EPA Method 353.2. The samples were analyzed on 11/17/2021.

Samples CA211-7 (280-155048-1)[10X], CA212-7 (280-155048-2)[10X], NW061-7 (280-155048-3)[5X] and CA210-7 (280-155048-6)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

#### **SULFIDE**

Samples CA211-7 (280-155048-1), CA212-7 (280-155048-2), NW061-7 (280-155048-3), G0076-7 (280-155048-4), NW060-7 (280-155048-5), CA210-7 (280-155048-6), NW062-7 (280-155048-7) and G0070-7 (280-155048-8) were analyzed for sulfide in accordance with EPA SW-846 Method 9034. The samples were prepared and analyzed on 11/07/2021 and 11/09/2021.

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

#### **ANIONS (28 DAYS)**

Samples CA211-7 (280-155048-1), CA212-7 (280-155048-2), NW061-7 (280-155048-3), G0076-7 (280-155048-4), NW060-7 (280-155048-5), CA210-7 (280-155048-6), NW062-7 (280-155048-7) and G0070-7 (280-155048-8) were analyzed for anions (28 days) in accordance with 9056A (28 Days). The samples were analyzed on 11/19/2021, 11/20/2021 and 11/24/2021.

Sulfate failed the recovery criteria high for the MS of sample NW062-7MS (280-155048-7) in batch 280-558091. Sulfate failed the recovery criteria high for the MSD of sample NW062-7MSD (280-155048-7) in batch 280-558091.

Sulfate failed the recovery criteria high for the MS of sample G0070-7MS (280-155048-8) in batch 280-558091. Sulfate failed the recovery criteria high for the MSD of sample G0070-7MSD (280-155048-8) in batch 280-558091.

Samples G0076-7 (280-155048-4)[5X] and CA210-7 (280-155048-6)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

#### **DISSOLVED ORGANIC CARBON**

Samples CA211-7 (280-155048-1), CA212-7 (280-155048-2), NW061-7 (280-155048-3), G0076-7 (280-155048-4), NW060-7 (280-155048-5), CA210-7 (280-155048-6), NW062-7 (280-155048-7) and G0070-7 (280-155048-8) were analyzed for dissolved organic carbon in accordance with EPA SW-846 Method 9060A. The samples were analyzed on 11/05/2021.

The following samples had a pH >2 measured at the bench, it was reduced to <2 using concentrated sulfuric acid after filtration prior to analysis. CA211-7 (280-155048-1), CA212-7 (280-155048-2), NW061-7 (280-155048-3), G0076-7 (280-155048-4), NW060-7 (280-155048-5), CA210-7 (280-155048-6), NW062-7 (280-155048-7), NW062-7 (280-155048-7[MS]), NW062-7 (280-155048-7[MSD]), G0070-7 (280-155048-8), G0070-7 (280-155048-8[MS]) and G0070-7 (280-155048-8[MSD])

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

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

# Detection Summary

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

Job ID: 280-155048-1

## Client Sample ID: CA211-7

## Lab Sample ID: 280-155048-1

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Nitrate Nitrite as N	36		1.0	0.50	0.19	mg/L	10		353.2	Total/NA
Sulfide	1.6	J	4.0	1.9	0.79	mg/L	1		9034	Total/NA
Sulfate	110		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO <sub>3</sub>	220		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	4.9		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

## Client Sample ID: CA212-7

## Lab Sample ID: 280-155048-2

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Nitrate Nitrite as N	17		1.0	0.50	0.19	mg/L	10		353.2	Total/NA
Sulfide	0.80	J	4.0	1.9	0.79	mg/L	1		9034	Total/NA
Sulfate	84		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO <sub>3</sub>	200		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	2.7		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

## Client Sample ID: NW061-7

## Lab Sample ID: 280-155048-3

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	0.074		0.0050	0.0013	0.00063	mg/L	1		RSK-175	Total/NA
Ammonia	3.9		0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	2.8		1.0	1.0	0.69	mg/L	1		351.2	Total/NA
Nitrate Nitrite as N	12		0.50	0.25	0.095	mg/L	5		353.2	Total/NA
Sulfate	140		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO <sub>3</sub>	300		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	5.1		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

## Client Sample ID: G0076-7

## Lab Sample ID: 280-155048-4

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	0.49		0.0050	0.0013	0.00063	mg/L	1		RSK-175	Total/NA
Ammonia	1.8		0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	2.0		1.0	1.0	0.69	mg/L	1		351.2	Total/NA
Sulfide	0.80	J	4.0	1.9	0.79	mg/L	1		9034	Total/NA
Sulfate	280	D	25	13	5.2	mg/L	5		9056A	Total/NA
Total Alkalinity as CaCO <sub>3</sub>	380		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	5.2		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

## Client Sample ID: NW060-7

## Lab Sample ID: 280-155048-5

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Nitrate Nitrite as N	3.6		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	30		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO <sub>3</sub>	58		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	2.7		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

## Client Sample ID: CA210-7

## Lab Sample ID: 280-155048-6

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	0.00074	J	0.0050	0.0013	0.00063	mg/L	1		RSK-175	Total/NA
Nitrate Nitrite as N	29		1.0	0.50	0.19	mg/L	10		353.2	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Denver

# Detection Summary

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

Job ID: 280-155048-1

## Client Sample ID: CA210-7 (Continued)

## Lab Sample ID: 280-155048-6

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Sulfide	0.80	J	4.0	1.9	0.79	mg/L	1	9034		Total/NA
Sulfate	210	D	25	13	5.2	mg/L	5	9056A		Total/NA
Total Alkalinity as CaCO <sub>3</sub>	410		10	6.4	3.1	mg/L	1	SM 2320B		Total/NA
Dissolved Organic Carbon - Quad	10		1.0	0.80	0.35	mg/L	1	9060A		Dissolved

## Client Sample ID: NW062-7

## Lab Sample ID: 280-155048-7

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	0.024		0.0050	0.0013	0.00063	mg/L	1	RSK-175		Total/NA
Ammonia	1.2		0.10	0.050	0.022	mg/L	1	350.1		Total/NA
Nitrogen, Total Kjeldahl	1.6		1.0	1.0	0.69	mg/L	1	351.2		Total/NA
Sulfate	200	J1	5.0	2.5	1.0	mg/L	1	9056A		Total/NA
Total Alkalinity as CaCO <sub>3</sub>	290		10	6.4	3.1	mg/L	1	SM 2320B		Total/NA
Dissolved Organic Carbon - Quad	3.0		1.0	0.80	0.35	mg/L	1	9060A		Dissolved

## Client Sample ID: G0070-7

## Lab Sample ID: 280-155048-8

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	0.00085	J	0.0050	0.0013	0.00063	mg/L	1	RSK-175		Total/NA
Sulfide	0.80	J	4.0	1.9	0.79	mg/L	1	9034		Total/NA
Sulfate	47	J1	5.0	2.5	1.0	mg/L	1	9056A		Total/NA
Total Alkalinity as CaCO <sub>3</sub>	230		10	6.4	3.1	mg/L	1	SM 2320B		Total/NA
Dissolved Organic Carbon - Quad	1.1		1.0	0.80	0.35	mg/L	1	9060A		Dissolved

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Denver

# Client Sample Results

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

Job ID: 280-155048-1

**Client Sample ID: CA211-7**

**Lab Sample ID: 280-155048-1**

Matrix: Water

Date Collected: 11/02/21 10:55

Date Received: 11/03/21 10:55

**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		11/10/21 16:25	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 M	0.21	0.20	0.083	ug/L		11/05/21 21:44	1
1,3-Dinitrobenzene	0.099	U M	0.11	0.099	0.036	ug/L		11/05/21 21:44	1
2,4,6-Trinitrotoluene	0.099	U	0.11	0.099	0.044	ug/L		11/05/21 21:44	1
2,4-Dinitrotoluene	0.079	U	0.099	0.079	0.027	ug/L		11/05/21 21:44	1
2,6-Dinitrotoluene	0.079	U	0.099	0.079	0.040	ug/L		11/05/21 21:44	1
2-Amino-4,6-dinitrotoluene	0.099	U	0.11	0.099	0.050	ug/L		11/05/21 21:44	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.084	ug/L		11/05/21 21:44	1
3-Nitrotoluene	0.39	U	0.39	0.39	0.19	ug/L		11/05/21 21:44	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.057	ug/L		11/05/21 21:44	1
4-Nitrotoluene	0.39	U	0.40	0.39	0.099	ug/L		11/05/21 21:44	1
HMX	0.20	U	0.21	0.20	0.086	ug/L		11/05/21 21:44	1
MNX	0.39	U	2.0	0.39	0.15	ug/L		11/05/21 21:44	1
Nitrobenzene	0.20	U	0.21	0.20	0.090	ug/L		11/05/21 21:44	1
RDX	0.20	U	0.21	0.20	0.051	ug/L		11/05/21 21:44	1
Tetryl	0.099	U	0.11	0.099	0.031	ug/L		11/05/21 21:44	1

**Surrogate**

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dinitrobenzene	88	M	83 - 119	11/04/21 14:13	11/05/21 21:44	1

**General Chemistry**

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	0.050	U	0.10	0.050	0.022	mg/L		11/21/21 11:46	1
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		11/17/21 19:42	1
<b>Nitrate Nitrite as N</b>	<b>36</b>		1.0	0.50	0.19	mg/L		11/17/21 17:23	10
Sulfide	1.6	J	4.0	1.9	0.79	mg/L		11/09/21 14:38	1
Sulfate	110		5.0	2.5	1.0	mg/L		11/19/21 23:45	1
Total Alkalinity as CaCO <sub>3</sub>	220		10	6.4	3.1	mg/L		11/13/21 00:56	1

**General Chemistry - Dissolved**

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	4.9		1.0	0.80	0.35	mg/L		11/05/21 02:33	1

**Client Sample ID: CA212-7**

**Lab Sample ID: 280-155048-2**

Matrix: Water

Date Collected: 11/02/21 12:05

Date Received: 11/03/21 10:55

**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		11/10/21 16:38	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 M	0.21	0.20	0.083	ug/L		11/05/21 22:07	1
1,3-Dinitrobenzene	0.099	U M	0.11	0.099	0.037	ug/L		11/05/21 22:07	1
2,4,6-Trinitrotoluene	0.099	U	0.11	0.099	0.045	ug/L		11/05/21 22:07	1
2,4-Dinitrotoluene	0.079	U	0.099	0.079	0.027	ug/L		11/05/21 22:07	1
2,6-Dinitrotoluene	0.079	U	0.099	0.079	0.040	ug/L		11/05/21 22:07	1

Eurofins TestAmerica, Denver

# Client Sample Results

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

Job ID: 280-155048-1

**Client Sample ID: CA212-7**

Date Collected: 11/02/21 12:05

Date Received: 11/03/21 10:55

**Lab Sample ID: 280-155048-2**

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2-Amino-4,6-dinitrotoluene	0.099	U	0.11	0.099	0.050	ug/L		11/05/21 22:07	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.085	ug/L		11/05/21 22:07	1
3-Nitrotoluene	0.40	U	0.40	0.40	0.19	ug/L		11/05/21 22:07	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.057	ug/L		11/05/21 22:07	1
4-Nitrotoluene	0.40	U M	0.41	0.40	0.099	ug/L		11/05/21 22:07	1
HMX	0.20	U	0.21	0.20	0.087	ug/L		11/05/21 22:07	1
MNX	0.40	U	2.0	0.40	0.15	ug/L		11/05/21 22:07	1
Nitrobenzene	0.20	U	0.21	0.20	0.090	ug/L		11/05/21 22:07	1
RDX	0.20	U	0.21	0.20	0.051	ug/L		11/05/21 22:07	1
Tetryl	0.099	U	0.11	0.099	0.031	ug/L		11/05/21 22:07	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dinitrobenzene	91	M	83 - 119				11/04/21 14:13	11/05/21 22:07	1

**General Chemistry**

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	0.050	U	0.10	0.050	0.022	mg/L		11/21/21 11:20	1
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		11/17/21 19:43	1
<b>Nitrate Nitrite as N</b>	<b>17</b>		1.0	0.50	0.19	mg/L		11/17/21 17:25	10
<b>Sulfide</b>	<b>0.80</b>	<b>J</b>	4.0	1.9	0.79	mg/L		11/09/21 12:10	1
<b>Sulfate</b>	<b>84</b>		5.0	2.5	1.0	mg/L		11/19/21 23:59	1
<b>Total Alkalinity as CaCO<sub>3</sub></b>	<b>200</b>		10	6.4	3.1	mg/L		11/13/21 01:50	1

**General Chemistry - Dissolved**

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	2.7		1.0	0.80	0.35	mg/L		11/05/21 02:50	1

**Client Sample ID: NW061-7**

Date Collected: 11/02/21 11:30

Date Received: 11/03/21 10:55

**Lab Sample ID: 280-155048-3**

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	0.074		0.0050	0.0013	0.00063	mg/L		11/10/21 16:51	1

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.20	U	0.21	0.20	0.085	ug/L		11/05/21 22:30	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037	ug/L		11/05/21 22:30	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045	ug/L		11/05/21 22:30	1
2,4-Dinitrotoluene	0.081	U	0.10	0.081	0.028	ug/L		11/05/21 22:30	1
2,6-Dinitrotoluene	0.081	U	0.10	0.081	0.040	ug/L		11/05/21 22:30	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051	ug/L		11/05/21 22:30	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.086	ug/L		11/05/21 22:30	1
3-Nitrotoluene	0.40	U	0.40	0.40	0.20	ug/L		11/05/21 22:30	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.058	ug/L		11/05/21 22:30	1
4-Nitrotoluene	0.40	U	0.41	0.40	0.10	ug/L		11/05/21 22:30	1
HMX	0.20	U	0.21	0.20	0.088	ug/L		11/05/21 22:30	1
MNX	0.40	U	2.0	0.40	0.16	ug/L		11/05/21 22:30	1
Nitrobenzene	0.20	U M	0.21	0.20	0.092	ug/L		11/05/21 22:30	1
RDX	0.20	U	0.21	0.20	0.052	ug/L		11/05/21 22:30	1

Eurofins TestAmerica, Denver

# Client Sample Results

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

Job ID: 280-155048-1

**Client Sample ID: NW061-7**

**Lab Sample ID: 280-155048-3**

Matrix: Water

Date Collected: 11/02/21 11:30

Date Received: 11/03/21 10:55

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Tetryl	0.10	U	0.11	0.10	0.032	ug/L		11/05/21 22:30	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dinitrobenzene	90	M	83 - 119				11/04/21 14:13	11/05/21 22:30	1

**General Chemistry**

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	3.9		0.10	0.050	0.022	mg/L		11/22/21 10:54	1
Nitrogen, Total Kjeldahl	2.8		1.0	1.0	0.69	mg/L		11/17/21 19:43	1
Nitrate Nitrite as N	12		0.50	0.25	0.095	mg/L		11/17/21 17:27	5
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		11/09/21 12:10	1
Sulfate	140		5.0	2.5	1.0	mg/L		11/20/21 01:23	1
Total Alkalinity as CaCO <sub>3</sub>	300		10	6.4	3.1	mg/L		11/13/21 00:51	1

**General Chemistry - Dissolved**

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	5.1		1.0	0.80	0.35	mg/L		11/05/21 03:05	1

**Client Sample ID: G0076-7**

**Lab Sample ID: 280-155048-4**

Matrix: Water

Date Collected: 11/01/21 13:10

Date Received: 11/03/21 10:55

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	0.49		0.0050	0.0013	0.00063	mg/L		11/09/21 20:11	1

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.20	U	0.21	0.20	0.084	ug/L		11/05/21 22:53	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037	ug/L		11/05/21 22:53	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045	ug/L		11/05/21 22:53	1
2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.027	ug/L		11/05/21 22:53	1
2,6-Dinitrotoluene	0.080	U	0.10	0.080	0.040	ug/L		11/05/21 22:53	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051	ug/L		11/05/21 22:53	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.085	ug/L		11/05/21 22:53	1
3-Nitrotoluene	0.40	U	0.40	0.40	0.19	ug/L		11/05/21 22:53	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.058	ug/L		11/05/21 22:53	1
4-Nitrotoluene	0.40	U	0.41	0.40	0.10	ug/L		11/05/21 22:53	1
HMX	0.20	U M	0.21	0.20	0.087	ug/L		11/05/21 22:53	1
MNX	0.40	U	2.0	0.40	0.15	ug/L		11/05/21 22:53	1
Nitrobenzene	0.20	U	0.21	0.20	0.091	ug/L		11/05/21 22:53	1
RDX	0.20	U	0.21	0.20	0.051	ug/L		11/05/21 22:53	1
Tetryl	0.10	U	0.11	0.10	0.032	ug/L		11/05/21 22:53	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dinitrobenzene	93	M	83 - 119				11/04/21 14:13	11/05/21 22:53	1

**General Chemistry**

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	1.8		0.10	0.050	0.022	mg/L		11/21/21 11:48	1
Nitrogen, Total Kjeldahl	2.0		1.0	1.0	0.69	mg/L		11/17/21 19:43	1

Eurofins TestAmerica, Denver

# Client Sample Results

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

Job ID: 280-155048-1

**Client Sample ID: G0076-7**

Date Collected: 11/01/21 13:10

Date Received: 11/03/21 10:55

**Lab Sample ID: 280-155048-4**

Matrix: Water

## General Chemistry (Continued)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		11/17/21 17:29	1
Sulfide	0.80	J	4.0	1.9	0.79	mg/L		11/07/21 12:16	1
Sulfate	280	D	25	13	5.2	mg/L		11/24/21 13:00	5
Total Alkalinity as CaCO <sub>3</sub>	380		10	6.4	3.1	mg/L		11/13/21 00:45	1

## General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	5.2		1.0	0.80	0.35	mg/L		11/05/21 03:49	1

**Client Sample ID: NW060-7**

Date Collected: 11/02/21 10:10

Date Received: 11/03/21 10:55

**Lab Sample ID: 280-155048-5**

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		11/10/21 17:04	1

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.20	U	0.21	0.20	0.084	ug/L		11/05/21 23:16	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037	ug/L		11/05/21 23:16	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045	ug/L		11/05/21 23:16	1
2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.027	ug/L		11/05/21 23:16	1
2,6-Dinitrotoluene	0.080	U	0.10	0.080	0.040	ug/L		11/05/21 23:16	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051	ug/L		11/05/21 23:16	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.086	ug/L		11/05/21 23:16	1
3-Nitrotoluene	0.40	U	0.40	0.40	0.20	ug/L		11/05/21 23:16	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.058	ug/L		11/05/21 23:16	1
4-Nitrotoluene	0.40	U	0.41	0.40	0.10	ug/L		11/05/21 23:16	1
HMX	0.20	U	0.21	0.20	0.088	ug/L		11/05/21 23:16	1
MNX	0.40	U	2.0	0.40	0.15	ug/L		11/05/21 23:16	1
Nitrobenzene	0.20	U	0.21	0.20	0.091	ug/L		11/05/21 23:16	1
RDX	0.20	U	0.21	0.20	0.052	ug/L		11/05/21 23:16	1
Tetryl	0.10	U	0.11	0.10	0.032	ug/L		11/05/21 23:16	1

## Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dinitrobenzene	92	M	83 - 119	11/04/21 14:13	11/05/21 23:16	1

## General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	0.050	U	0.10	0.050	0.022	mg/L		11/21/21 11:22	1
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		11/17/21 19:46	1
<b>Nitrate Nitrite as N</b>	<b>3.6</b>		0.10	0.050	0.019	mg/L		11/17/21 17:44	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		11/09/21 12:10	1
<b>Sulfate</b>	<b>30</b>		5.0	2.5	1.0	mg/L		11/20/21 01:51	1
<b>Total Alkalinity as CaCO<sub>3</sub></b>	<b>58</b>		10	6.4	3.1	mg/L		11/13/21 01:54	1

## General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	2.7		1.0	0.80	0.35	mg/L		11/05/21 04:04	1

Eurofins TestAmerica, Denver

# Client Sample Results

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

Job ID: 280-155048-1

**Client Sample ID: CA210-7**

Date Collected: 11/02/21 09:50

Date Received: 11/03/21 10:55

**Lab Sample ID: 280-155048-6**

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	0.00074	J	0.0050	0.0013	0.00063	mg/L		11/10/21 17:17	1

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.20	U	0.21	0.20	0.084	ug/L		11/06/21 10:55	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037	ug/L		11/06/21 00:25	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045	ug/L		11/06/21 00:25	1
2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.027	ug/L		11/06/21 00:25	1
2,6-Dinitrotoluene	0.080	U	0.10	0.080	0.040	ug/L		11/06/21 00:25	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051	ug/L		11/06/21 00:25	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.085	ug/L		11/06/21 00:25	1
3-Nitrotoluene	0.40	U	0.40	0.40	0.19	ug/L		11/06/21 00:25	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.058	ug/L		11/06/21 00:25	1
4-Nitrotoluene	0.40	U	0.41	0.40	0.10	ug/L		11/06/21 00:25	1
HMX	0.20	U	0.21	0.20	0.087	ug/L		11/06/21 00:25	1
MNX	0.40	U	2.0	0.40	0.15	ug/L		11/06/21 00:25	1
Nitrobenzene	0.20	U	0.21	0.20	0.091	ug/L		11/06/21 00:25	1
RDX	0.20	U	0.21	0.20	0.051	ug/L		11/06/21 00:25	1
Tetryl	0.10	U	0.11	0.10	0.032	ug/L		11/06/21 00:25	1

**Surrogate**

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac	
1,2-Dinitrobenzene	99	M	83 - 119		11/04/21 14:13	11/06/21 00:25	1
1,2-Dinitrobenzene	88		83 - 119		11/04/21 14:13	11/06/21 10:55	1

**General Chemistry**

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	0.050	U	0.10	0.050	0.022	mg/L		11/21/21 11:52	1
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		11/17/21 19:46	1
Nitrate Nitrite as N	29		1.0	0.50	0.19	mg/L		11/17/21 17:46	10
Sulfide	0.80	J	4.0	1.9	0.79	mg/L		11/09/21 12:10	1
Sulfate	210	D	25	13	5.2	mg/L		11/24/21 13:16	5
Total Alkalinity as CaCO <sub>3</sub>	410		10	6.4	3.1	mg/L		11/13/21 01:25	1

**General Chemistry - Dissolved**

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	10		1.0	0.80	0.35	mg/L		11/05/21 04:21	1

**Client Sample ID: NW062-7**

**Lab Sample ID: 280-155048-7**

Date Collected: 11/02/21 12:50

Matrix: Water

Date Received: 11/03/21 10:55

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	0.024		0.0050	0.0013	0.00063	mg/L		11/10/21 15:19	1

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.20	U	0.21	0.20	0.085	ug/L		11/06/21 00:48	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037	ug/L		11/06/21 00:48	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.046	ug/L		11/06/21 00:48	1
2,4-Dinitrotoluene	0.081	U	0.10	0.081	0.028	ug/L		11/06/21 00:48	1

Eurofins TestAmerica, Denver

# Client Sample Results

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

Job ID: 280-155048-1

**Client Sample ID: NW062-7**

Date Collected: 11/02/21 12:50

Date Received: 11/03/21 10:55

**Lab Sample ID: 280-155048-7**

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2,6-Dinitrotoluene	0.081	U	0.10	0.081	0.041	ug/L		11/06/21 00:48	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051	ug/L		11/06/21 00:48	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.087	ug/L		11/06/21 00:48	1
3-Nitrotoluene	0.41	U	0.41	0.41	0.20	ug/L		11/06/21 00:48	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.058	ug/L		11/06/21 00:48	1
4-Nitrotoluene	0.41	U M	0.42	0.41	0.10	ug/L		11/06/21 00:48	1
HMX	0.20	U	0.21	0.20	0.089	ug/L		11/06/21 00:48	1
MNX	0.41	U	2.0	0.41	0.16	ug/L		11/06/21 00:48	1
Nitrobenzene	0.20	U M	0.21	0.20	0.092	ug/L		11/06/21 00:48	1
RDX	0.20	U	0.21	0.20	0.052	ug/L		11/06/21 00:48	1
Tetryl	0.10	U	0.11	0.10	0.032	ug/L		11/06/21 00:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dinitrobenzene	91	M	83 - 119	11/04/21 14:13	11/06/21 00:48	1

**General Chemistry**

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	1.2		0.10	0.050	0.022	mg/L		11/21/21 14:25	1
Nitrogen, Total Kjeldahl	1.6		1.0	1.0	0.69	mg/L		11/17/21 19:42	1
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		11/17/21 17:48	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		11/09/21 10:11	1
Sulfate	200	J1	5.0	2.5	1.0	mg/L		11/20/21 02:47	1
Total Alkalinity as CaCO <sub>3</sub>	290		10	6.4	3.1	mg/L		11/13/21 01:38	1

**General Chemistry - Dissolved**

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	3.0		1.0	0.80	0.35	mg/L		11/05/21 04:38	1

**Client Sample ID: G0070-7**

Date Collected: 11/01/21 14:25

Date Received: 11/03/21 10:55

**Lab Sample ID: 280-155048-8**

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	0.00085	J	0.0050	0.0013	0.00063	mg/L		11/09/21 20:37	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	0.21	0.20	0.084	ug/L		11/06/21 03:28	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037	ug/L		11/06/21 03:28	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045	ug/L		11/06/21 03:28	1
2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.027	ug/L		11/06/21 03:28	1
2,6-Dinitrotoluene	0.080	U	0.10	0.080	0.040	ug/L		11/06/21 03:28	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051	ug/L		11/06/21 03:28	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.086	ug/L		11/06/21 03:28	1
3-Nitrotoluene	0.40	U	0.40	0.40	0.20	ug/L		11/06/21 03:28	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.058	ug/L		11/06/21 03:28	1
4-Nitrotoluene	0.40	U M	0.41	0.40	0.10	ug/L		11/06/21 03:28	1
HMX	0.20	U	0.21	0.20	0.088	ug/L		11/06/21 03:28	1
MNX	0.40	U	2.0	0.40	0.15	ug/L		11/06/21 03:28	1
Nitrobenzene	0.20	U M	0.21	0.20	0.091	ug/L		11/06/21 03:28	1

Eurofins TestAmerica, Denver

# Client Sample Results

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

Job ID: 280-155048-1

**Client Sample ID: G0070-7**

Date Collected: 11/01/21 14:25

Date Received: 11/03/21 10:55

**Lab Sample ID: 280-155048-8**

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
RDX	0.20	U	0.21	0.20	0.052	ug/L		11/06/21 03:28	1
Tetryl	0.10	U	0.11	0.10	0.032	ug/L		11/06/21 03:28	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dinitrobenzene	94		83 - 119				11/04/21 14:13	11/06/21 03:28	1

**General Chemistry**

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	0.050	U	0.10	0.050	0.022	mg/L		11/21/21 11:40	1
Nitrogen, Total Kjeldahl	1.0	U J1	1.0	1.0	0.69	mg/L		11/17/21 19:48	1
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		11/17/21 18:30	1
<b>Sulfide</b>	<b>0.80</b>	<b>J</b>	<b>4.0</b>	<b>1.9</b>	<b>0.79</b>	<b>mg/L</b>		11/07/21 12:16	1
<b>Sulfate</b>	<b>47</b>	<b>J1</b>	<b>5.0</b>	<b>2.5</b>	<b>1.0</b>	<b>mg/L</b>		11/20/21 04:11	1
<b>Total Alkalinity as CaCO<sub>3</sub></b>	<b>230</b>		<b>10</b>	<b>6.4</b>	<b>3.1</b>	<b>mg/L</b>		11/13/21 01:43	1

**General Chemistry - Dissolved**

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	1.1		1.0	0.80	0.35	mg/L		11/05/21 05:23	1

# Default Detection Limits

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

Job ID: 280-155048-1

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

Analyte	LOQ	DL	Units
Methane	0.0050	0.00063	mg/L

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

Prep: 3535

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

## General Chemistry

Analyte	LOQ	DL	Units
Ammonia	0.10	0.022	mg/L
Nitrate Nitrite as N	0.10	0.019	mg/L
Sulfate	5.0	1.0	mg/L
Total Alkalinity as CaCO <sub>3</sub>	10	3.1	mg/L

## General Chemistry

Prep: 351.2

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

## General Chemistry

Prep: 9030B

Analyte	LOQ	DL	Units
Sulfide	4.0	0.79	mg/L

## General Chemistry - Dissolved

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

# Surrogate Summary

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

Job ID: 280-155048-1

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

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

#### 12DNB1

#### (83-119)

Lab Sample ID	Client Sample ID	Percent Recovery
280-155048-1	CA211-7	88 M
280-155048-2	CA212-7	91 M
280-155048-3	NW061-7	90 M
280-155048-4	G0076-7	93 M
280-155048-5	NW060-7	92 M
280-155048-6	CA210-7	99 M
280-155048-7	NW062-7	91 M
280-155048-7 MS	NW062-7	90 M
280-155048-7 MS	NW062-7	93 M
280-155048-7 MSD	NW062-7	91 M
280-155048-7 MSD	NW062-7	92 M
280-155048-8	G0070-7	94
280-155048-8 MS	G0070-7	89
280-155048-8 MS	G0070-7	91 M
280-155048-8 MSD	G0070-7	93
280-155048-8 MSD	G0070-7	95 M
LCS 280-556180/2-A	Lab Control Sample	90
LCS 280-556180/3-A	Lab Control Sample	89 M
MB 280-556180/1-A	Method Blank	92

#### Surrogate Legend

12DNB = 1,2-Dinitrobenzene

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

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

#### 12DNB2

#### (83-119)

Lab Sample ID	Client Sample ID	Percent Recovery
280-155048-6	CA210-7	88

#### Surrogate Legend

12DNB = 1,2-Dinitrobenzene

# QC Sample Results

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

Job ID: 280-155048-1

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

**Lab Sample ID:** MB 280-556811/4

**Matrix:** Water

**Analysis Batch:** 556811

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		11/09/21 18:13	1

**Lab Sample ID:** LCS 280-556811/2

**Matrix:** Water

**Analysis Batch:** 556811

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Methane	0.0657	0.0659		mg/L		100	73 - 125

**Lab Sample ID:** LCSD 280-556811/3

**Matrix:** Water

**Analysis Batch:** 556811

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec.	RPD	Limit
Methane	0.0657	0.0665		mg/L		101	73 - 125	1

**Lab Sample ID:** 280-155048-8 MS

**Matrix:** Water

**Analysis Batch:** 556811

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	RPD	Limit
Methane	0.00085	J	0.0657	0.0669		mg/L		100	73 - 125	

**Lab Sample ID:** 280-155048-8 MSD

**Matrix:** Water

**Analysis Batch:** 556811

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	RPD	Limit
Methane	0.00085	J	0.0657	0.0669		mg/L		101	73 - 125	0

**Lab Sample ID:** 280-155048-8 DU

**Matrix:** Water

**Analysis Batch:** 556811

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Methane	0.00085	J	0.000782	J	mg/L		8	20

**Lab Sample ID:** MB 280-556939/4

**Matrix:** Water

**Analysis Batch:** 556939

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		11/10/21 12:30	1

**Lab Sample ID:** LCS 280-556939/2

**Matrix:** Water

**Analysis Batch:** 556939

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Methane	0.0657	0.0669		mg/L		102	73 - 125

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# QC Sample Results

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

Job ID: 280-155048-1

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

**Lab Sample ID: LCSD 280-556939/3**

**Matrix: Water**

**Analysis Batch: 556939**

**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	0.0661		mg/L		101	73 - 125	1	20

**Lab Sample ID: 280-155048-7 MS**

**Matrix: Water**

**Analysis Batch: 556939**

**Client Sample ID: NW062-7**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Methane	0.024		0.0657	0.0884		mg/L		97	73 - 125

**Lab Sample ID: 280-155048-7 MSD**

**Matrix: Water**

**Analysis Batch: 556939**

**Client Sample ID: NW062-7**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methane	0.024		0.0657	0.0891		mg/L		99	73 - 125	1	20

**Lab Sample ID: 280-155048-7 DU**

**Matrix: Water**

**Analysis Batch: 556939**

**Client Sample ID: NW062-7**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Methane	0.024		0.0238		mg/L		2	20

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

**Lab Sample ID: MB 280-556180/1-A**

**Matrix: Water**

**Analysis Batch: 556359**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 556180**

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		11/05/21 15:15	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037	ug/L		11/05/21 15:15	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045	ug/L		11/05/21 15:15	1
2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.027	ug/L		11/05/21 15:15	1
2,6-Dinitrotoluene	0.080	U	0.10	0.080	0.040	ug/L		11/05/21 15:15	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051	ug/L		11/05/21 15:15	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.086	ug/L		11/05/21 15:15	1
3-Nitrotoluene	0.40	U	0.40	0.40	0.20	ug/L		11/05/21 15:15	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.058	ug/L		11/05/21 15:15	1
4-Nitrotoluene	0.40	U	0.41	0.40	0.10	ug/L		11/05/21 15:15	1
HMX	0.20	U	0.21	0.20	0.088	ug/L		11/05/21 15:15	1
MNX	0.40	U	2.0	0.40	0.15	ug/L		11/05/21 15:15	1
Nitrobenzene	0.20	U	0.21	0.20	0.091	ug/L		11/05/21 15:15	1
RDX	0.20	U	0.21	0.20	0.052	ug/L		11/05/21 15:15	1
Tetryl	0.10	U	0.11	0.10	0.032	ug/L		11/05/21 15:15	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dinitrobenzene	92		83 - 119	11/04/21 14:13	11/05/21 15:15	1

Eurofins TestAmerica, Denver

# QC Sample Results

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

Job ID: 280-155048-1

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

### Lab Sample ID: LCS 280-556180/2-A

Matrix: Water

Analysis Batch: 556359

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.	
	Added	Result	Qualifier					
1,3,5-Trinitrobenzene	2.00	2.07		ug/L		104	73 - 125	
1,3-Dinitrobenzene	2.00	1.98		ug/L		99	78 - 120	
2,4,6-Trinitrotoluene	2.00	2.00		ug/L		100	71 - 123	
2,4-Dinitrotoluene	2.00	1.94		ug/L		97	78 - 120	
2,6-Dinitrotoluene	2.00	1.93		ug/L		96	77 - 127	
2-Amino-4,6-dinitrotoluene	2.00	1.84		ug/L		92	79 - 120	
2-Nitrotoluene	2.00	1.57		ug/L		78	70 - 127	
3-Nitrotoluene	2.00	1.55	M	ug/L		77	73 - 125	
4-Amino-2,6-dinitrotoluene	2.00	1.82		ug/L		91	76 - 125	
4-Nitrotoluene	2.00	1.61		ug/L		81	71 - 127	
HMX	2.00	1.95	M	ug/L		97	65 - 135	
Nitrobenzene	2.00	1.77		ug/L		88	65 - 134	
RDX	2.00	1.88		ug/L		94	68 - 130	
Tetryl	2.00	1.91		ug/L		95	64 - 128	
<i>Surrogate</i>		LCS	LCS					
		%Recovery	Qualifier					
1,2-Dinitrobenzene		90		Limits				

### Lab Sample ID: LCS 280-556180/3-A

Matrix: Water

Analysis Batch: 556359

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.	
	Added	Result	Qualifier					
MNX	2.33	2.16	M	ug/L		93	57 - 132	
<i>Surrogate</i>		LCS	LCS					
		%Recovery	Qualifier	Limits				
1,2-Dinitrobenzene		89	M	83 - 119				

### Lab Sample ID: 280-155048-7 MS

Matrix: Water

Analysis Batch: 556359

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
1,3,5-Trinitrobenzene	0.20	U	2.04	2.10	M	ug/L		103	73 - 125
1,3-Dinitrobenzene	0.10	U	2.04	1.99	M	ug/L		97	78 - 120
2,4,6-Trinitrotoluene	0.10	U	2.04	2.03		ug/L		99	71 - 123
2,4-Dinitrotoluene	0.081	U	2.04	1.96		ug/L		96	78 - 120
2,6-Dinitrotoluene	0.081	U	2.04	1.99		ug/L		98	77 - 127
2-Amino-4,6-dinitrotoluene	0.10	U	2.04	1.90		ug/L		93	79 - 120
2-Nitrotoluene	0.20	U	2.04	1.60		ug/L		78	70 - 127
3-Nitrotoluene	0.41	U	2.04	1.51		ug/L		74	73 - 125
4-Amino-2,6-dinitrotoluene	0.12	U	2.04	1.85		ug/L		91	76 - 125
4-Nitrotoluene	0.41	U M	2.04	1.65		ug/L		81	71 - 127
HMX	0.20	U	2.04	2.09	M	ug/L		102	65 - 135
Nitrobenzene	0.20	U M	2.04	1.98	M	ug/L		97	65 - 134
RDX	0.20	U	2.04	1.87	M	ug/L		92	68 - 130
Tetryl	0.10	U	2.04	2.03		ug/L		99	64 - 128
<i>Surrogate</i>		LCS	LCS						
		%Recovery	Qualifier	Limits					
1,2-Dinitrobenzene		89	M	83 - 119					

### Client Sample ID: NW062-7

Prep Type: Total/NA

Prep Batch: 556180

# QC Sample Results

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

Job ID: 280-155048-1

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

**Lab Sample ID: 280-155048-7 MS**

**Matrix: Water**

**Analysis Batch: 556359**

**Client Sample ID: NW062-7**

**Prep Type: Total/NA**

**Prep Batch: 556180**

Surrogate	MS		Limits
	%Recovery	Qualifier	
1,2-Dinitrobenzene	90	M	83 - 119

**Lab Sample ID: 280-155048-7 MS**

**Matrix: Water**

**Analysis Batch: 556359**

**Client Sample ID: NW062-7**

**Prep Type: Total/NA**

**Prep Batch: 556180**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier				
MNX	0.41	U	2.36	2.29	M	ug/L	97	57 - 132	
<b>Surrogate</b>		<b>MS</b>		<b>MS</b>					
<b>1,2-Dinitrobenzene</b>		<b>%Recovery</b>		<b>Qualifier</b>		<b>Limits</b>			
1,2-Dinitrobenzene		93		M		83 - 119			

**Lab Sample ID: 280-155048-7 MSD**

**Matrix: Water**

**Analysis Batch: 556359**

**Client Sample ID: NW062-7**

**Prep Type: Total/NA**

**Prep Batch: 556180**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
1,3,5-Trinitrobenzene	0.20	U	2.00	2.11	M	ug/L	105	73 - 125	0	30	
1,3-Dinitrobenzene	0.10	U	2.00	2.00	M	ug/L	100	78 - 120	1	30	
2,4,6-Trinitrotoluene	0.10	U	2.00	2.04		ug/L	102	71 - 123	1	30	
2,4-Dinitrotoluene	0.081	U	2.00	1.98		ug/L	99	78 - 120	1	30	
2,6-Dinitrotoluene	0.081	U	2.00	2.00		ug/L	100	77 - 127	0	30	
2-Amino-4,6-dinitrotoluene	0.10	U	2.00	1.90		ug/L	95	79 - 120	0	30	
2-Nitrotoluene	0.20	U	2.00	1.60		ug/L	80	70 - 127	0	30	
3-Nitrotoluene	0.41	U	2.00	1.49		ug/L	75	73 - 125	1	30	
4-Amino-2,6-dinitrotoluene	0.12	U	2.00	1.86		ug/L	93	76 - 125	1	30	
4-Nitrotoluene	0.41	U M	2.00	1.64		ug/L	82	71 - 127	0	30	
HMX	0.20	U	2.00	2.10	M	ug/L	105	65 - 135	1	30	
Nitrobenzene	0.20	U M	2.00	1.99	M	ug/L	99	65 - 134	1	30	
RDX	0.20	U	2.00	1.84	M	ug/L	92	68 - 130	2	30	
Tetryl	0.10	U	2.00	2.06		ug/L	103	64 - 128	1	30	
<b>Surrogate</b>		<b>MSD</b>		<b>MSD</b>							
<b>1,2-Dinitrobenzene</b>		<b>%Recovery</b>		<b>Qualifier</b>		<b>Limits</b>					
1,2-Dinitrobenzene		91		M		83 - 119					

**Lab Sample ID: 280-155048-7 MSD**

**Matrix: Water**

**Analysis Batch: 556359**

**Client Sample ID: NW062-7**

**Prep Type: Total/NA**

**Prep Batch: 556180**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
MNX	0.41	U	2.36	2.24	M	ug/L	95	57 - 132	2	30	
<b>Surrogate</b>		<b>MSD</b>		<b>MSD</b>							
<b>1,2-Dinitrobenzene</b>		<b>%Recovery</b>		<b>Qualifier</b>		<b>Limits</b>					
1,2-Dinitrobenzene		92		M		83 - 119					

# QC Sample Results

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

Job ID: 280-155048-1

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

**Lab Sample ID: 280-155048-8 MS**

**Matrix: Water**

**Analysis Batch: 556359**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier				
1,3,5-Trinitrobenzene	0.20	U	2.03	2.03		ug/L		100	73 - 125
1,3-Dinitrobenzene	0.10	U	2.03	1.99		ug/L		98	78 - 120
2,4,6-Trinitrotoluene	0.10	U	2.03	1.99		ug/L		98	71 - 123
2,4-Dinitrotoluene	0.080	U	2.03	1.87		ug/L		92	78 - 120
2,6-Dinitrotoluene	0.080	U	2.03	1.92		ug/L		94	77 - 127
2-Amino-4,6-dinitrotoluene	0.10	U	2.03	1.81		ug/L		89	79 - 120
2-Nitrotoluene	0.20	U	2.03	1.50		ug/L		74	70 - 127
3-Nitrotoluene	0.40	U	2.03	1.58		ug/L		78	73 - 125
4-Amino-2,6-dinitrotoluene	0.12	U	2.03	1.76		ug/L		87	76 - 125
4-Nitrotoluene	0.40	U M	2.03	1.63		ug/L		80	71 - 127
HMX	0.20	U	2.03	2.02	M	ug/L		99	65 - 135
Nitrobenzene	0.20	U M	2.03	1.86		ug/L		92	65 - 134
RDX	0.20	U	2.03	1.92	M	ug/L		94	68 - 130
Tetryl	0.10	U	2.03	1.96		ug/L		96	64 - 128
<hr/>									
<b>Surrogate</b>									
<b>MS MS</b>									
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>					
1,2-Dinitrobenzene		89		83 - 119					

**Lab Sample ID: 280-155048-8 MS**

**Matrix: Water**

**Analysis Batch: 556359**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier				
MNX	0.40	U	2.29	2.19	M	ug/L		96	57 - 132
<hr/>									
<b>Surrogate</b>									
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>					
1,2-Dinitrobenzene		91	M	83 - 119					

**Lab Sample ID: 280-155048-8 MSD**

**Matrix: Water**

**Analysis Batch: 556359**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	
	Result	Qualifier	Added	Result	Qualifier						
1,3,5-Trinitrobenzene	0.20	U	2.01	2.21		ug/L		110	73 - 125	9	30
1,3-Dinitrobenzene	0.10	U	2.01	2.11		ug/L		105	78 - 120	6	30
2,4,6-Trinitrotoluene	0.10	U	2.01	2.11		ug/L		105	71 - 123	6	30
2,4-Dinitrotoluene	0.080	U	2.01	2.01		ug/L		100	78 - 120	7	30
2,6-Dinitrotoluene	0.080	U	2.01	2.00		ug/L		99	77 - 127	4	30
2-Amino-4,6-dinitrotoluene	0.10	U	2.01	1.97		ug/L		98	79 - 120	8	30
2-Nitrotoluene	0.20	U	2.01	1.58		ug/L		79	70 - 127	6	30
3-Nitrotoluene	0.40	U	2.01	1.52		ug/L		76	73 - 125	4	30
4-Amino-2,6-dinitrotoluene	0.12	U	2.01	1.90		ug/L		95	76 - 125	8	30
4-Nitrotoluene	0.40	U M	2.01	1.72		ug/L		86	71 - 127	6	30
HMX	0.20	U	2.01	2.08	M	ug/L		103	65 - 135	3	30
Nitrobenzene	0.20	U M	2.01	1.94		ug/L		97	65 - 134	4	30
RDX	0.20	U	2.01	1.98	M	ug/L		98	68 - 130	3	30
Tetryl	0.10	U	2.01	2.05	M	ug/L		102	64 - 128	4	30

**Client Sample ID: G0070-7**

**Prep Type: Total/NA**

**Prep Batch: 556180**

# QC Sample Results

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

Job ID: 280-155048-1

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

**Lab Sample ID:** 280-155048-8 MSD

**Matrix:** Water

**Analysis Batch:** 556359

**Client Sample ID:** G0070-7

**Prep Type:** Total/NA

**Prep Batch:** 556180

Surrogate	MSD	MSD	%Recovery	Qualifier	Limits
1,2-Dinitrobenzene			93		83 - 119

**Lab Sample ID:** 280-155048-8 MSD

**Matrix:** Water

**Analysis Batch:** 556359

**Client Sample ID:** G0070-7

**Prep Type:** Total/NA

**Prep Batch:** 556180

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	RPD	Limit	
	Result	Qualifier	Added	Result	Qualifier						
MNX	0.40	U	2.28	2.23	M	ug/L		98	57 - 132	2	30

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

## Method: 350.1 - Nitrogen, Ammonia

**Lab Sample ID:** MB 280-558260/20

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Analysis Batch:** 558260

Analyte	MB	MB	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia			0.050	U	0.10	0.050	0.022	mg/L		11/21/21 11:02	1

**Lab Sample ID:** LCS 280-558260/18

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Analysis Batch:** 558260

Analyte	Spike	LCS	LCS	Result	Qualifier	Unit	D	%Rec	Limits	%Rec.	Dil Fac
	Added	Result	Qualifier								
Ammonia		2.50	2.45			mg/L		98	90 - 110		

**Lab Sample ID:** LCSD 280-558260/19

**Client Sample ID:** Lab Control Sample Dup

**Prep Type:** Total/NA

**Analysis Batch:** 558260

Analyte	Spike	LCSD	LCSD	Result	Qualifier	Unit	D	%Rec	Limits	%Rec.	RPD	Limit
	Added	Result	Qualifier									
Ammonia		2.50	2.45			mg/L		98	90 - 110		0	10

**Lab Sample ID:** 280-155048-8 MS

**Client Sample ID:** G0070-7

**Prep Type:** Total/NA

**Matrix:** Water

**Analysis Batch:** 558260

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits	%Rec.	Dil Fac
	Result	Qualifier	Added	Result	Qualifier						
Ammonia		U	1.00	1.02		mg/L		102	90 - 110		

**Lab Sample ID:** 280-155048-8 MSD

**Client Sample ID:** G0070-7

**Prep Type:** Total/NA

**Matrix:** Water

**Analysis Batch:** 558260

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

Eurofins TestAmerica, Denver

# QC Sample Results

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

Job ID: 280-155048-1

## Method: 350.1 - Nitrogen, Ammonia (Continued)

**Lab Sample ID:** MB 280-558270/20

**Matrix:** Water

**Analysis Batch:** 558270

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	0.050	U	0.10	0.050	0.022	mg/L		11/21/21 13:47	1

**Lab Sample ID:** LCS 280-558270/18

**Matrix:** Water

**Analysis Batch:** 558270

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Ammonia	2.50	2.55		mg/L		102	90 - 110

**Lab Sample ID:** LCSD 280-558270/19

**Matrix:** Water

**Analysis Batch:** 558270

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec.	Limits	RPD	RPD Limit
Ammonia	2.50	2.53		mg/L		101	90 - 110	1	10

**Lab Sample ID:** 280-155048-7 MS

**Matrix:** Water

**Analysis Batch:** 558270

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	Limits
Ammonia	1.2		1.00	2.14		mg/L		97	90 - 110

**Lab Sample ID:** 280-155048-7 MSD

**Matrix:** Water

**Analysis Batch:** 558270

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	Limits	RPD	RPD Limit
Ammonia	1.2		1.00	2.09		mg/L		92	90 - 110	2	10

**Lab Sample ID:** MB 280-558390/20

**Matrix:** Water

**Analysis Batch:** 558390

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	0.050	U	0.10	0.050	0.022	mg/L		11/22/21 10:46	1

**Lab Sample ID:** LCS 280-558390/18

**Matrix:** Water

**Analysis Batch:** 558390

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Ammonia	2.50	2.51		mg/L		100	90 - 110

**Lab Sample ID:** LCSD 280-558390/19

**Matrix:** Water

**Analysis Batch:** 558390

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec.	Limits	RPD	RPD Limit
Ammonia	2.50	2.51		mg/L		100	90 - 110	0	10

Eurofins TestAmerica, Denver

# QC Sample Results

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

Job ID: 280-155048-1

## Method: 351.2 - Nitrogen, Total Kjeldahl

**Lab Sample ID:** MB 280-557729/2-A

**Matrix:** Water

**Analysis Batch:** 557899

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		11/17/21 19:34	1

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 557729

**Lab Sample ID:** LCS 280-557729/1-A

**Matrix:** Water

**Analysis Batch:** 557899

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Nitrogen, Total Kjeldahl	6.00	5.92		mg/L		99	90 - 110

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Prep Batch:** 557729

**Lab Sample ID:** 280-155048-7 MS

**Matrix:** Water

**Analysis Batch:** 557899

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	Limits
Nitrogen, Total Kjeldahl	1.6		3.00	4.44		mg/L		95	90 - 110

**Client Sample ID:** NW062-7

**Prep Type:** Total/NA

**Prep Batch:** 557729

**Lab Sample ID:** 280-155048-7 MSD

**Matrix:** Water

**Analysis Batch:** 557899

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	RPD	RPD Limit
Nitrogen, Total Kjeldahl	1.6		3.00	4.42		mg/L		94	90 - 110	0 25

**Client Sample ID:** NW062-7

**Prep Type:** Total/NA

**Prep Batch:** 557729

**Lab Sample ID:** MB 280-557730/2-A

**Matrix:** Water

**Analysis Batch:** 557899

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		11/17/21 19:47	1

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 557730

**Lab Sample ID:** LCS 280-557730/1-A

**Matrix:** Water

**Analysis Batch:** 557899

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Nitrogen, Total Kjeldahl	6.00	5.71		mg/L		95	90 - 110

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Prep Batch:** 557730

**Lab Sample ID:** 280-155048-8 MS

**Matrix:** Water

**Analysis Batch:** 557899

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	Limits
Nitrogen, Total Kjeldahl	1.0	U J1	3.00	3.40	J1	mg/L		113	90 - 110

**Client Sample ID:** G0070-7

**Prep Type:** Total/NA

**Prep Batch:** 557730

**Lab Sample ID:** 280-155048-8 MSD

**Matrix:** Water

**Analysis Batch:** 557899

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	RPD	RPD Limit
Nitrogen, Total Kjeldahl	1.0	U J1	3.00	3.41	J1	mg/L		114	90 - 110	0 25

**Client Sample ID:** G0070-7

**Prep Type:** Total/NA

**Prep Batch:** 557730

Eurofins TestAmerica, Denver

# QC Sample Results

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

Job ID: 280-155048-1

## Method: 353.2 - Nitrogen, Nitrate-Nitrite

**Lab Sample ID:** MB 280-557898/22

**Matrix:** Water

**Analysis Batch:** 557898

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		11/17/21 17:09	1

**Lab Sample ID:** MB 280-557898/61

**Matrix:** Water

**Analysis Batch:** 557898

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		11/17/21 18:28	1

**Lab Sample ID:** LCS 280-557898/21

**Matrix:** Water

**Analysis Batch:** 557898

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

**Lab Sample ID:** LCS 280-557898/59

**Matrix:** Water

**Analysis Batch:** 557898

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate Nitrite as N	5.00	5.35		mg/L		107	90 - 110

**Lab Sample ID:** LCSD 280-557898/60

**Matrix:** Water

**Analysis Batch:** 557898

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD	RPD
Nitrate Nitrite as N	5.00	5.07		mg/L		101	90 - 110	5	5	10

**Lab Sample ID:** 280-155048-7 MS

**Matrix:** Water

**Analysis Batch:** 557898

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate Nitrite as N	0.050	U	4.00	3.90		mg/L		97	90 - 110

**Lab Sample ID:** 280-155048-7 MSD

**Matrix:** Water

**Analysis Batch:** 557898

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD	RPD
Nitrate Nitrite as N	0.050	U	4.00	3.97		mg/L		99	90 - 110	2	2	10

**Lab Sample ID:** 280-155048-8 MS

**Matrix:** Water

**Analysis Batch:** 557898

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate Nitrite as N	0.050	U	4.00	4.19		mg/L		105	90 - 110

**Client Sample ID:** NW062-7  
**Prep Type:** Total/NA

**Client Sample ID:** NW062-7  
**Prep Type:** Total/NA

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

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

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

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

**Client Sample ID:** G0070-7  
**Prep Type:** Total/NA

Eurofins TestAmerica, Denver

# QC Sample Results

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

Job ID: 280-155048-1

## Method: 353.2 - Nitrogen, Nitrate-Nitrite

**Lab Sample ID:** 280-155048-8 MSD

**Matrix:** Water

**Analysis Batch:** 557898

**Client Sample ID:** G0070-7

**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	0.050	U	4.00	4.07		mg/L		102	90 - 110	3	10

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

**Lab Sample ID:** MB 280-556494/2-A

**Matrix:** Water

**Analysis Batch:** 556496

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 556494

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfide	1.9	U		4.0	0.79	mg/L		11/07/21 12:16	1

**Lab Sample ID:** LCS 280-556494/1-A

**Matrix:** Water

**Analysis Batch:** 556496

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Prep Batch:** 556494

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide		21.3	16.0	mg/L		75	44 - 110

**Lab Sample ID:** 280-155048-8 MS

**Matrix:** Water

**Analysis Batch:** 556496

**Client Sample ID:** G0070-7

**Prep Type:** Total/NA

**Prep Batch:** 556494

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	0.80	J		21.3	16.8	mg/L		75	44 - 110

**Lab Sample ID:** 280-155048-8 MSD

**Matrix:** Water

**Analysis Batch:** 556496

**Client Sample ID:** G0070-7

**Prep Type:** Total/NA

**Prep Batch:** 556494

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfide	0.80	J		21.3	16.8	mg/L		75	44 - 110	0	20

**Lab Sample ID:** MB 280-556700/3-A

**Matrix:** Water

**Analysis Batch:** 556715

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 556700

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfide	1.9	U		4.0	0.79	mg/L		11/09/21 10:11	1

**Lab Sample ID:** LCS 280-556700/1-A

**Matrix:** Water

**Analysis Batch:** 556715

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Prep Batch:** 556700

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide		20.2	16.0	mg/L		79	44 - 110

# QC Sample Results

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

Job ID: 280-155048-1

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

**Lab Sample ID: LCSD 280-556700/2-A**

**Matrix: Water**

**Analysis Batch: 556715**

Analyte		Spike	LCSD	LCSD	Unit	D	%Rec.	RPD
		Added	Result	Qualifier				
Sulfide		20.2	15.2		mg/L	75	44 - 110	5

**Lab Sample ID: 280-155048-7 MS**

**Matrix: Water**

**Analysis Batch: 556715**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec.
	Result	Qualifier	Added	Result	Qualifier			
Sulfide	1.9	U	20.2	16.8		mg/L	83	44 - 110

**Lab Sample ID: 280-155048-7 MSD**

**Matrix: Water**

**Analysis Batch: 556715**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec.
	Result	Qualifier	Added	Result	Qualifier			
Sulfide	1.9	U	20.2	15.2		mg/L	75	44 - 110

**Lab Sample ID: MB 280-556749/2-A**

**Matrix: Water**

**Analysis Batch: 556751**

Analyte	MB	MB	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
	Result	Qualifier							
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		11/09/21 12:10	1

**Lab Sample ID: LCS 280-556749/1-A**

**Matrix: Water**

**Analysis Batch: 556751**

Analyte	Spike	LCS	LCS	Unit	D	%Rec.
	Added	Result	Qualifier			
Sulfide	20.2	16.4		mg/L	81	44 - 110

**Lab Sample ID: MB 280-556787/2-A**

**Matrix: Water**

**Analysis Batch: 556789**

Analyte	MB	MB	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
	Result	Qualifier							
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		11/09/21 14:38	1

**Lab Sample ID: LCS 280-556787/1-A**

**Matrix: Water**

**Analysis Batch: 556789**

Analyte	Spike	LCS	LCS	Unit	D	%Rec.
	Added	Result	Qualifier			
Sulfide	20.2	16.0		mg/L	79	44 - 110

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 556700**

**Client Sample ID: NW062-7**

**Prep Type: Total/NA**

**Prep Batch: 556700**

**Client Sample ID: NW062-7**

**Prep Type: Total/NA**

**Prep Batch: 556700**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 556749**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 556749**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 556787**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 556787**

# QC Sample Results

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

Job ID: 280-155048-1

## Method: 9056A - Anions, Ion Chromatography

**Lab Sample ID:** MB 280-558091/45

**Matrix:** Water

**Analysis Batch:** 558091

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		11/20/21 01:09	1

**Lab Sample ID:** MB 280-558091/6

**Matrix:** Water

**Analysis Batch:** 558091

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		11/19/21 15:50	1

**Lab Sample ID:** LCS 280-558091/4

**Matrix:** Water

**Analysis Batch:** 558091

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

**Lab Sample ID:** LCS 280-558091/43

**Matrix:** Water

**Analysis Batch:** 558091

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

**Lab Sample ID:** LCSD 280-558091/44

**Matrix:** Water

**Analysis Batch:** 558091

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	100	102	M	mg/L		102	87 - 112	2	10

**Lab Sample ID:** LCSD 280-558091/5

**Matrix:** Water

**Analysis Batch:** 558091

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	100	102	M	mg/L		102	87 - 112	0	10

**Lab Sample ID:** MRL 280-558091/3

**Matrix:** Water

**Analysis Batch:** 558091

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	5.00	2.61	J	mg/L		52	50 - 150

**Lab Sample ID:** 280-155048-7 MS

**Matrix:** Water

**Analysis Batch:** 558091

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	200	J1	50.0	255	J1	mg/L		116	87 - 112

**Client Sample ID:** NW062-7  
Prep Type: Total/NA

# QC Sample Results

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

Job ID: 280-155048-1

## Method: 9056A - Anions, Ion Chromatography

**Lab Sample ID: 280-155048-7 MSD**

**Matrix: Water**

**Analysis Batch: 558091**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD Limit
	Result	Qualifier	Added	Result	Qualifier						
Sulfate	200	J1	50.0	255	J1	mg/L		115	87 - 112	0	10

**Client Sample ID: NW062-7**

**Prep Type: Total/NA**

**Lab Sample ID: 280-155048-8 MS**

**Matrix: Water**

**Analysis Batch: 558091**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	RPD	RPD Limit
	Result	Qualifier	Added	Result	Qualifier						
Sulfate	47	J1	50.0	106	J1	mg/L		118	87 - 112		

**Client Sample ID: G0070-7**

**Prep Type: Total/NA**

**Lab Sample ID: 280-155048-8 MSD**

**Matrix: Water**

**Analysis Batch: 558091**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD Limit
	Result	Qualifier	Added	Result	Qualifier						
Sulfate	47	J1	50.0	112	J1	mg/L		130	87 - 112	6	10

**Client Sample ID: G0070-7**

**Prep Type: Total/NA**

**Lab Sample ID: 280-155048-7 DU**

**Matrix: Water**

**Analysis Batch: 558091**

Analyte	Sample	Sample	Spike	DU	DU	Unit	D	RPD	RPD Limit
	Result	Qualifier	Added	Result	Qualifier				
Sulfate	200	J1		197		mg/L		0.1	10

**Client Sample ID: NW062-7**

**Prep Type: Total/NA**

**Lab Sample ID: 280-155048-8 DU**

**Matrix: Water**

**Analysis Batch: 558091**

Analyte	Sample	Sample	Spike	DU	DU	Unit	D	RPD	RPD Limit
	Result	Qualifier	Added	Result	Qualifier				
Sulfate	47	J1		46.9		mg/L		0.07	10

**Client Sample ID: G0070-7**

**Prep Type: Total/NA**

**Lab Sample ID: MB 280-558093/100**

**Matrix: Water**

**Analysis Batch: 558093**

Analyte	MB	MB	Spike	LOQ	LOD	Unit	D	Analyzed	Dil Fac
	Result	Qualifier	Added	Result	Qualifier				
Sulfate	2.5	U		5.0	2.5	mg/L		11/19/21 20:49	1

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Lab Sample ID: MB 280-558093/6**

**Matrix: Water**

**Analysis Batch: 558093**

Analyte	MB	MB	Spike	LOQ	LOD	Unit	D	Analyzed	Dil Fac
	Result	Qualifier	Added	Result	Qualifier				
Sulfate	2.5	U		5.0	2.5	mg/L		11/19/21 11:06	1

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Lab Sample ID: LCS 280-558093/98**

**Matrix: Water**

**Analysis Batch: 558093**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.	RPD	RPD Limit
	Added	Result	Qualifier						
Sulfate		100	104	mg/L		104	87 - 112		

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

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# QC Sample Results

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

Job ID: 280-155048-1

## Method: 9056A - Anions, Ion Chromatography

**Lab Sample ID: LCSD 280-558093/99**

**Matrix: Water**

**Analysis Batch: 558093**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	100	104		mg/L		104	87 - 112	0	10

**Lab Sample ID: MRL 280-558093/3**

**Matrix: Water**

**Analysis Batch: 558093**

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	5.00	4.48	J	mg/L		90	50 - 150

**Lab Sample ID: MB 280-558640/6**

**Matrix: Water**

**Analysis Batch: 558640**

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	11/24/21 11:38	1

**Lab Sample ID: LCS 280-558640/4**

**Matrix: Water**

**Analysis Batch: 558640**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	100	96.3	M	mg/L		96	87 - 112

**Lab Sample ID: LCSD 280-558640/5**

**Matrix: Water**

**Analysis Batch: 558640**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	100	96.5	M	mg/L		97	87 - 112	0	10

**Lab Sample ID: MRL 280-558640/3**

**Matrix: Water**

**Analysis Batch: 558640**

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	5.00	4.09	J	mg/L		82	50 - 150

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

**Lab Sample ID: MB 280-556213/2-A**

**Matrix: Water**

**Analysis Batch: 556344**

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	11/05/21 02:18	1

**Client Sample ID: Method Blank**  
**Prep Type: Dissolved**

# QC Sample Results

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

Job ID: 280-155048-1

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

**Lab Sample ID: LCS 280-556213/1-A**

**Matrix: Water**

**Analysis Batch: 556344**

Analyte		Spike	LCS	LCS	Unit	D	%Rec	%Rec.
		Added	Result	Qualifier				
Dissolved Organic Carbon - Quad		25.0	23.2		mg/L	93	88 - 112	

**Lab Sample ID: 280-155048-7 MS**

**Matrix: Water**

**Analysis Batch: 556344**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
Dissolved Organic Carbon - Quad	3.0		25.0	26.2		mg/L	93	88 - 112	

**Lab Sample ID: 280-155048-7 MSD**

**Matrix: Water**

**Analysis Batch: 556344**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD Limit
	Result	Qualifier	Added	Result	Qualifier						
Dissolved Organic Carbon - Quad	3.0		25.0	26.2		mg/L	93	88 - 112		0	15

**Lab Sample ID: 280-155048-8 MS**

**Matrix: Water**

**Analysis Batch: 556344**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
Dissolved Organic Carbon - Quad	1.1		25.0	23.9		mg/L	91	88 - 112	

**Lab Sample ID: 280-155048-8 MSD**

**Matrix: Water**

**Analysis Batch: 556344**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD Limit
	Result	Qualifier	Added	Result	Qualifier						
Dissolved Organic Carbon - Quad	1.1		25.0	23.9		mg/L	91	88 - 112		0	15

## Method: SM 2320B - Alkalinity

**Lab Sample ID: MB 280-557616/32**

**Matrix: Water**

**Analysis Batch: 557616**

Analyte	MB	MB	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
	Result	Qualifier							
Total Alkalinity as CaCO <sub>3</sub>	3.47	J	10	6.4	3.1	mg/L	11/12/21 22:01		1

**Lab Sample ID: MB 280-557616/58**

**Matrix: Water**

**Analysis Batch: 557616**

Analyte	MB	MB	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
	Result	Qualifier							
Total Alkalinity as CaCO <sub>3</sub>	3.11	J	10	6.4	3.1	mg/L	11/13/21 01:18		1

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

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# QC Sample Results

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

Job ID: 280-155048-1

## Method: SM 2320B - Alkalinity (Continued)

**Lab Sample ID: LCS 280-557616/31**

**Matrix: Water**

**Analysis Batch: 557616**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
Total Alkalinity as CaCO <sub>3</sub>	200	209		mg/L	105	89 - 109	

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

**Lab Sample ID: LCS 280-557616/57**

**Matrix: Water**

**Analysis Batch: 557616**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
Total Alkalinity as CaCO <sub>3</sub>	200	207		mg/L	103	89 - 109	

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

**Lab Sample ID: 280-155048-6 DU**

**Matrix: Water**

**Analysis Batch: 557616**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity as CaCO <sub>3</sub>	410		416		mg/L		1	10

**Client Sample ID: CA210-7**  
**Prep Type: Total/NA**

# QC Association Summary

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

Job ID: 280-155048-1

## GC VOA

### Analysis Batch: 556811

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155048-4	G0076-7	Total/NA	Water	RSK-175	
280-155048-8	G0070-7	Total/NA	Water	RSK-175	
MB 280-556811/4	Method Blank	Total/NA	Water	RSK-175	
LCS 280-556811/2	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 280-556811/3	Lab Control Sample Dup	Total/NA	Water	RSK-175	
280-155048-8 MS	G0070-7	Total/NA	Water	RSK-175	
280-155048-8 MSD	G0070-7	Total/NA	Water	RSK-175	
280-155048-8 DU	G0070-7	Total/NA	Water	RSK-175	

### Analysis Batch: 556939

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155048-1	CA211-7	Total/NA	Water	RSK-175	
280-155048-2	CA212-7	Total/NA	Water	RSK-175	
280-155048-3	NW061-7	Total/NA	Water	RSK-175	
280-155048-5	NW060-7	Total/NA	Water	RSK-175	
280-155048-6	CA210-7	Total/NA	Water	RSK-175	
280-155048-7	NW062-7	Total/NA	Water	RSK-175	
MB 280-556939/4	Method Blank	Total/NA	Water	RSK-175	
LCS 280-556939/2	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 280-556939/3	Lab Control Sample Dup	Total/NA	Water	RSK-175	
280-155048-7 MS	NW062-7	Total/NA	Water	RSK-175	
280-155048-7 MSD	NW062-7	Total/NA	Water	RSK-175	
280-155048-7 DU	NW062-7	Total/NA	Water	RSK-175	

## HPLC/IC

### Prep Batch: 556180

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155048-1	CA211-7	Total/NA	Water	3535	
280-155048-2	CA212-7	Total/NA	Water	3535	
280-155048-3	NW061-7	Total/NA	Water	3535	
280-155048-4	G0076-7	Total/NA	Water	3535	
280-155048-5	NW060-7	Total/NA	Water	3535	
280-155048-6	CA210-7	Total/NA	Water	3535	
280-155048-7	NW062-7	Total/NA	Water	3535	
280-155048-8	G0070-7	Total/NA	Water	3535	
MB 280-556180/1-A	Method Blank	Total/NA	Water	3535	
LCS 280-556180/2-A	Lab Control Sample	Total/NA	Water	3535	
LCS 280-556180/3-A	Lab Control Sample	Total/NA	Water	3535	
280-155048-7 MS	NW062-7	Total/NA	Water	3535	
280-155048-7 MS	NW062-7	Total/NA	Water	3535	
280-155048-7 MSD	NW062-7	Total/NA	Water	3535	
280-155048-8 MS	G0070-7	Total/NA	Water	3535	
280-155048-8 MS	G0070-7	Total/NA	Water	3535	
280-155048-8 MSD	G0070-7	Total/NA	Water	3535	
280-155048-8 MSD	G0070-7	Total/NA	Water	3535	

### Analysis Batch: 556359

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155048-1	CA211-7	Total/NA	Water	8330A	556180

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# QC Association Summary

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

Job ID: 280-155048-1

## HPLC/IC (Continued)

### Analysis Batch: 556359 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155048-2	CA212-7	Total/NA	Water	8330A	556180
280-155048-3	NW061-7	Total/NA	Water	8330A	556180
280-155048-4	G0076-7	Total/NA	Water	8330A	556180
280-155048-5	NW060-7	Total/NA	Water	8330A	556180
280-155048-6	CA210-7	Total/NA	Water	8330A	556180
280-155048-7	NW062-7	Total/NA	Water	8330A	556180
280-155048-8	G0070-7	Total/NA	Water	8330A	556180
MB 280-556180/1-A	Method Blank	Total/NA	Water	8330A	556180
LCS 280-556180/2-A	Lab Control Sample	Total/NA	Water	8330A	556180
LCS 280-556180/3-A	Lab Control Sample	Total/NA	Water	8330A	556180
280-155048-7 MS	NW062-7	Total/NA	Water	8330A	556180
280-155048-7 MS	NW062-7	Total/NA	Water	8330A	556180
280-155048-7 MSD	NW062-7	Total/NA	Water	8330A	556180
280-155048-7 MSD	NW062-7	Total/NA	Water	8330A	556180
280-155048-8 MS	G0070-7	Total/NA	Water	8330A	556180
280-155048-8 MS	G0070-7	Total/NA	Water	8330A	556180
280-155048-8 MSD	G0070-7	Total/NA	Water	8330A	556180
280-155048-8 MSD	G0070-7	Total/NA	Water	8330A	556180

### Analysis Batch: 556366

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155048-6	CA210-7	Total/NA	Water	8330A	556180

## General Chemistry

### Filtration Batch: 556213

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155048-1	CA211-7	Dissolved	Water	FILTRATION	
280-155048-2	CA212-7	Dissolved	Water	FILTRATION	
280-155048-3	NW061-7	Dissolved	Water	FILTRATION	
280-155048-4	G0076-7	Dissolved	Water	FILTRATION	
280-155048-5	NW060-7	Dissolved	Water	FILTRATION	
280-155048-6	CA210-7	Dissolved	Water	FILTRATION	
280-155048-7	NW062-7	Dissolved	Water	FILTRATION	
280-155048-8	G0070-7	Dissolved	Water	FILTRATION	
MB 280-556213/2-A	Method Blank	Dissolved	Water	FILTRATION	
LCS 280-556213/1-A	Lab Control Sample	Dissolved	Water	FILTRATION	
280-155048-7 MS	NW062-7	Dissolved	Water	FILTRATION	
280-155048-7 MSD	NW062-7	Dissolved	Water	FILTRATION	
280-155048-8 MS	G0070-7	Dissolved	Water	FILTRATION	
280-155048-8 MSD	G0070-7	Dissolved	Water	FILTRATION	

### Analysis Batch: 556344

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155048-1	CA211-7	Dissolved	Water	9060A	556213
280-155048-2	CA212-7	Dissolved	Water	9060A	556213
280-155048-3	NW061-7	Dissolved	Water	9060A	556213
280-155048-4	G0076-7	Dissolved	Water	9060A	556213
280-155048-5	NW060-7	Dissolved	Water	9060A	556213
280-155048-6	CA210-7	Dissolved	Water	9060A	556213
280-155048-7	NW062-7	Dissolved	Water	9060A	556213

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# QC Association Summary

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

Job ID: 280-155048-1

## General Chemistry (Continued)

### Analysis Batch: 556344 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155048-8	G0070-7	Dissolved	Water	9060A	556213
MB 280-556213/2-A	Method Blank	Dissolved	Water	9060A	556213
LCS 280-556213/1-A	Lab Control Sample	Dissolved	Water	9060A	556213
280-155048-7 MS	NW062-7	Dissolved	Water	9060A	556213
280-155048-7 MSD	NW062-7	Dissolved	Water	9060A	556213
280-155048-8 MS	G0070-7	Dissolved	Water	9060A	556213
280-155048-8 MSD	G0070-7	Dissolved	Water	9060A	556213

### Prep Batch: 556494

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155048-4	G0076-7	Total/NA	Water	9030B	
280-155048-8	G0070-7	Total/NA	Water	9030B	
MB 280-556494/2-A	Method Blank	Total/NA	Water	9030B	
LCS 280-556494/1-A	Lab Control Sample	Total/NA	Water	9030B	
280-155048-8 MS	G0070-7	Total/NA	Water	9030B	
280-155048-8 MSD	G0070-7	Total/NA	Water	9030B	

### Analysis Batch: 556496

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155048-4	G0076-7	Total/NA	Water	9034	556494
280-155048-8	G0070-7	Total/NA	Water	9034	556494
MB 280-556494/2-A	Method Blank	Total/NA	Water	9034	556494
LCS 280-556494/1-A	Lab Control Sample	Total/NA	Water	9034	556494
280-155048-8 MS	G0070-7	Total/NA	Water	9034	556494
280-155048-8 MSD	G0070-7	Total/NA	Water	9034	556494

### Prep Batch: 556700

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155048-7	NW062-7	Total/NA	Water	9030B	
MB 280-556700/3-A	Method Blank	Total/NA	Water	9030B	
LCS 280-556700/1-A	Lab Control Sample	Total/NA	Water	9030B	
LCSD 280-556700/2-A	Lab Control Sample Dup	Total/NA	Water	9030B	
280-155048-7 MS	NW062-7	Total/NA	Water	9030B	
280-155048-7 MSD	NW062-7	Total/NA	Water	9030B	

### Analysis Batch: 556715

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155048-7	NW062-7	Total/NA	Water	9034	556700
MB 280-556700/3-A	Method Blank	Total/NA	Water	9034	556700
LCS 280-556700/1-A	Lab Control Sample	Total/NA	Water	9034	556700
LCSD 280-556700/2-A	Lab Control Sample Dup	Total/NA	Water	9034	556700
280-155048-7 MS	NW062-7	Total/NA	Water	9034	556700
280-155048-7 MSD	NW062-7	Total/NA	Water	9034	556700

### Prep Batch: 556749

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155048-2	CA212-7	Total/NA	Water	9030B	
280-155048-3	NW061-7	Total/NA	Water	9030B	
280-155048-5	NW060-7	Total/NA	Water	9030B	
280-155048-6	CA210-7	Total/NA	Water	9030B	
MB 280-556749/2-A	Method Blank	Total/NA	Water	9030B	

# QC Association Summary

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

Job ID: 280-155048-1

## General Chemistry (Continued)

### Prep Batch: 556749 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 280-556749/1-A	Lab Control Sample	Total/NA	Water	9030B	

### Analysis Batch: 556751

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155048-2	CA212-7	Total/NA	Water	9034	556749
280-155048-3	NW061-7	Total/NA	Water	9034	556749
280-155048-5	NW060-7	Total/NA	Water	9034	556749
280-155048-6	CA210-7	Total/NA	Water	9034	556749
MB 280-556749/2-A	Method Blank	Total/NA	Water	9034	556749
LCS 280-556749/1-A	Lab Control Sample	Total/NA	Water	9034	556749

### Prep Batch: 556787

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155048-1	CA211-7	Total/NA	Water	9030B	
MB 280-556787/2-A	Method Blank	Total/NA	Water	9030B	
LCS 280-556787/1-A	Lab Control Sample	Total/NA	Water	9030B	

### Analysis Batch: 556789

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155048-1	CA211-7	Total/NA	Water	9034	556787
MB 280-556787/2-A	Method Blank	Total/NA	Water	9034	556787
LCS 280-556787/1-A	Lab Control Sample	Total/NA	Water	9034	556787

### Analysis Batch: 557616

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155048-1	CA211-7	Total/NA	Water	SM 2320B	
280-155048-2	CA212-7	Total/NA	Water	SM 2320B	
280-155048-3	NW061-7	Total/NA	Water	SM 2320B	
280-155048-4	G0076-7	Total/NA	Water	SM 2320B	
280-155048-5	NW060-7	Total/NA	Water	SM 2320B	
280-155048-6	CA210-7	Total/NA	Water	SM 2320B	
280-155048-7	NW062-7	Total/NA	Water	SM 2320B	
280-155048-8	G0070-7	Total/NA	Water	SM 2320B	
MB 280-557616/32	Method Blank	Total/NA	Water	SM 2320B	
MB 280-557616/58	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-557616/31	Lab Control Sample	Total/NA	Water	SM 2320B	
LCS 280-557616/57	Lab Control Sample	Total/NA	Water	SM 2320B	
280-155048-6 DU	CA210-7	Total/NA	Water	SM 2320B	

### Prep Batch: 557729

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155048-1	CA211-7	Total/NA	Water	351.2	
280-155048-2	CA212-7	Total/NA	Water	351.2	
280-155048-3	NW061-7	Total/NA	Water	351.2	
280-155048-4	G0076-7	Total/NA	Water	351.2	
280-155048-5	NW060-7	Total/NA	Water	351.2	
280-155048-6	CA210-7	Total/NA	Water	351.2	
280-155048-7	NW062-7	Total/NA	Water	351.2	
MB 280-557729/2-A	Method Blank	Total/NA	Water	351.2	
LCS 280-557729/1-A	Lab Control Sample	Total/NA	Water	351.2	
280-155048-7 MS	NW062-7	Total/NA	Water	351.2	

Eurofins TestAmerica, Denver

# QC Association Summary

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

Job ID: 280-155048-1

## General Chemistry (Continued)

### Prep Batch: 557729 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155048-7 MSD	NW062-7	Total/NA	Water	351.2	

### Prep Batch: 557730

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155048-8	G0070-7	Total/NA	Water	351.2	
MB 280-557730/2-A	Method Blank	Total/NA	Water	351.2	
LCS 280-557730/1-A	Lab Control Sample	Total/NA	Water	351.2	
280-155048-8 MS	G0070-7	Total/NA	Water	351.2	
280-155048-8 MSD	G0070-7	Total/NA	Water	351.2	

### Analysis Batch: 557898

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155048-1	CA211-7	Total/NA	Water	353.2	
280-155048-2	CA212-7	Total/NA	Water	353.2	
280-155048-3	NW061-7	Total/NA	Water	353.2	
280-155048-4	G0076-7	Total/NA	Water	353.2	
280-155048-5	NW060-7	Total/NA	Water	353.2	
280-155048-6	CA210-7	Total/NA	Water	353.2	
280-155048-7	NW062-7	Total/NA	Water	353.2	
280-155048-8	G0070-7	Total/NA	Water	353.2	
MB 280-557898/22	Method Blank	Total/NA	Water	353.2	
MB 280-557898/61	Method Blank	Total/NA	Water	353.2	
LCS 280-557898/21	Lab Control Sample	Total/NA	Water	353.2	
LCS 280-557898/59	Lab Control Sample	Total/NA	Water	353.2	
LCSD 280-557898/60	Lab Control Sample Dup	Total/NA	Water	353.2	
280-155048-7 MS	NW062-7	Total/NA	Water	353.2	
280-155048-7 MSD	NW062-7	Total/NA	Water	353.2	
280-155048-8 MS	G0070-7	Total/NA	Water	353.2	
280-155048-8 MSD	G0070-7	Total/NA	Water	353.2	

### Analysis Batch: 557899

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155048-1	CA211-7	Total/NA	Water	351.2	557729
280-155048-2	CA212-7	Total/NA	Water	351.2	557729
280-155048-3	NW061-7	Total/NA	Water	351.2	557729
280-155048-4	G0076-7	Total/NA	Water	351.2	557729
280-155048-5	NW060-7	Total/NA	Water	351.2	557729
280-155048-6	CA210-7	Total/NA	Water	351.2	557729
280-155048-7	NW062-7	Total/NA	Water	351.2	557729
280-155048-8	G0070-7	Total/NA	Water	351.2	557730
MB 280-557729/2-A	Method Blank	Total/NA	Water	351.2	557729
MB 280-557730/2-A	Method Blank	Total/NA	Water	351.2	557730
LCS 280-557729/1-A	Lab Control Sample	Total/NA	Water	351.2	557729
LCS 280-557730/1-A	Lab Control Sample	Total/NA	Water	351.2	557730
280-155048-7 MS	NW062-7	Total/NA	Water	351.2	557729
280-155048-7 MSD	NW062-7	Total/NA	Water	351.2	557729
280-155048-8 MS	G0070-7	Total/NA	Water	351.2	557730
280-155048-8 MSD	G0070-7	Total/NA	Water	351.2	557730

# QC Association Summary

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

Job ID: 280-155048-1

## General Chemistry

### Analysis Batch: 558091

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155048-1	CA211-7	Total/NA	Water	9056A	
280-155048-2	CA212-7	Total/NA	Water	9056A	
280-155048-3	NW061-7	Total/NA	Water	9056A	
280-155048-5	NW060-7	Total/NA	Water	9056A	
280-155048-7	NW062-7	Total/NA	Water	9056A	
280-155048-8	G0070-7	Total/NA	Water	9056A	
MB 280-558091/45	Method Blank	Total/NA	Water	9056A	
MB 280-558091/6	Method Blank	Total/NA	Water	9056A	
LCS 280-558091/4	Lab Control Sample	Total/NA	Water	9056A	
LCS 280-558091/43	Lab Control Sample	Total/NA	Water	9056A	
LCSD 280-558091/44	Lab Control Sample Dup	Total/NA	Water	9056A	
LCSD 280-558091/5	Lab Control Sample Dup	Total/NA	Water	9056A	
MRL 280-558091/3	Lab Control Sample	Total/NA	Water	9056A	
280-155048-7 MS	NW062-7	Total/NA	Water	9056A	
280-155048-7 MSD	NW062-7	Total/NA	Water	9056A	
280-155048-8 MS	G0070-7	Total/NA	Water	9056A	
280-155048-8 MSD	G0070-7	Total/NA	Water	9056A	
280-155048-7 DU	NW062-7	Total/NA	Water	9056A	
280-155048-8 DU	G0070-7	Total/NA	Water	9056A	

### Analysis Batch: 558093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-558093/100	Method Blank	Total/NA	Water	9056A	
MB 280-558093/6	Method Blank	Total/NA	Water	9056A	
LCS 280-558093/98	Lab Control Sample	Total/NA	Water	9056A	
LCSD 280-558093/99	Lab Control Sample Dup	Total/NA	Water	9056A	
MRL 280-558093/3	Lab Control Sample	Total/NA	Water	9056A	

### Analysis Batch: 558260

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155048-1	CA211-7	Total/NA	Water	350.1	
280-155048-2	CA212-7	Total/NA	Water	350.1	
280-155048-4	G0076-7	Total/NA	Water	350.1	
280-155048-5	NW060-7	Total/NA	Water	350.1	
280-155048-6	CA210-7	Total/NA	Water	350.1	
280-155048-8	G0070-7	Total/NA	Water	350.1	
MB 280-558260/20	Method Blank	Total/NA	Water	350.1	
LCS 280-558260/18	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-558260/19	Lab Control Sample Dup	Total/NA	Water	350.1	
280-155048-8 MS	G0070-7	Total/NA	Water	350.1	
280-155048-8 MSD	G0070-7	Total/NA	Water	350.1	

### Analysis Batch: 558270

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155048-7	NW062-7	Total/NA	Water	350.1	
MB 280-558270/20	Method Blank	Total/NA	Water	350.1	
LCS 280-558270/18	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-558270/19	Lab Control Sample Dup	Total/NA	Water	350.1	
280-155048-7 MS	NW062-7	Total/NA	Water	350.1	
280-155048-7 MSD	NW062-7	Total/NA	Water	350.1	

# QC Association Summary

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

Job ID: 280-155048-1

## General Chemistry

### Analysis Batch: 558390

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155048-3	NW061-7	Total/NA	Water	350.1	
MB 280-558390/20	Method Blank	Total/NA	Water	350.1	
LCS 280-558390/18	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-558390/19	Lab Control Sample Dup	Total/NA	Water	350.1	

### Analysis Batch: 558640

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155048-4	G0076-7	Total/NA	Water	9056A	
280-155048-6	CA210-7	Total/NA	Water	9056A	
MB 280-558640/6	Method Blank	Total/NA	Water	9056A	
LCS 280-558640/4	Lab Control Sample	Total/NA	Water	9056A	
LCSD 280-558640/5	Lab Control Sample Dup	Total/NA	Water	9056A	
MRL 280-558640/3	Lab Control Sample	Total/NA	Water	9056A	

# Lab Chronicle

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

Job ID: 280-155048-1

**Client Sample ID: CA211-7**

**Lab Sample ID: 280-155048-1**

**Matrix: Water**

Date Collected: 11/02/21 10:55

Date Received: 11/03/21 10:55

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	556939	11/10/21 16:25	CAS	TAL DEN
Total/NA	Prep	3535			506.7 mL	5 mL	556180	11/04/21 14:13	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556359	11/05/21 21:44	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	558260	11/21/21 11:46	JJM	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	557729	11/16/21 18:04	SVC	TAL DEN
Total/NA	Analysis	351.2		1			557899	11/17/21 19:42	SVC	TAL DEN
Total/NA	Analysis	353.2		10	100 mL	100 mL	557898	11/17/21 17:23	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	556787	11/09/21 14:32	JJM	TAL DEN
Total/NA	Analysis	9034		1			556789	11/09/21 14:38	JJM	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	558091	11/19/21 23:45	CJ	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	556213	11/04/21 12:58	RAF	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	556344	11/05/21 02:33	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			557616	11/13/21 00:56	ECC	TAL DEN

**Client Sample ID: CA212-7**

**Lab Sample ID: 280-155048-2**

**Matrix: Water**

Date Collected: 11/02/21 12:05

Date Received: 11/03/21 10:55

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	556939	11/10/21 16:38	CAS	TAL DEN
Total/NA	Prep	3535			505.4 mL	5 mL	556180	11/04/21 14:13	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556359	11/05/21 22:07	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	558260	11/21/21 11:20	JJM	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	557729	11/16/21 18:04	SVC	TAL DEN
Total/NA	Analysis	351.2		1			557899	11/17/21 19:43	SVC	TAL DEN
Total/NA	Analysis	353.2		10	100 mL	100 mL	557898	11/17/21 17:25	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	556749	11/09/21 12:07	JJM	TAL DEN
Total/NA	Analysis	9034		1			556751	11/09/21 12:10	JJM	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	558091	11/19/21 23:59	CJ	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	556213	11/04/21 12:58	RAF	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	556344	11/05/21 02:50	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			557616	11/13/21 01:50	ECC	TAL DEN

**Client Sample ID: NW061-7**

**Lab Sample ID: 280-155048-3**

**Matrix: Water**

Date Collected: 11/02/21 11:30

Date Received: 11/03/21 10:55

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	556939	11/10/21 16:51	CAS	TAL DEN
Total/NA	Prep	3535			496.7 mL	5 mL	556180	11/04/21 14:13	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556359	11/05/21 22:30	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	558390	11/22/21 10:54	RKD	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	557729	11/16/21 18:04	SVC	TAL DEN
Total/NA	Analysis	351.2		1			557899	11/17/21 19:43	SVC	TAL DEN

Eurofins TestAmerica, Denver

# Lab Chronicle

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

Job ID: 280-155048-1

**Client Sample ID: NW061-7**

**Lab Sample ID: 280-155048-3**

**Matrix: Water**

Date Collected: 11/02/21 11:30

Date Received: 11/03/21 10:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	353.2		5	100 mL	100 mL	557898	11/17/21 17:27	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	556749	11/09/21 12:07	JJM	TAL DEN
Total/NA	Analysis	9034		1			556751	11/09/21 12:10	JJM	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	558091	11/20/21 01:23	CJ	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	556213	11/04/21 12:58	RAF	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	556344	11/05/21 03:05	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			557616	11/13/21 00:51	ECC	TAL DEN

**Client Sample ID: G0076-7**

**Lab Sample ID: 280-155048-4**

**Matrix: Water**

Date Collected: 11/01/21 13:10

Date Received: 11/03/21 10:55

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	556811	11/09/21 20:11	CAS	TAL DEN
Total/NA	Prep	3535			501 mL	5 mL	556180	11/04/21 14:13	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556359	11/05/21 22:53	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	558260	11/21/21 11:48	JJM	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	557729	11/16/21 18:04	SVC	TAL DEN
Total/NA	Analysis	351.2		1			557899	11/17/21 19:43	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	557898	11/17/21 17:29	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	556494	11/07/21 11:29	JJM	TAL DEN
Total/NA	Analysis	9034		1			556496	11/07/21 12:16	JJM	TAL DEN
Total/NA	Analysis	9056A		5	5 mL	5 mL	558640	11/24/21 13:00	CJ	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	556213	11/04/21 12:58	RAF	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	556344	11/05/21 03:49	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			557616	11/13/21 00:45	ECC	TAL DEN

**Client Sample ID: NW060-7**

**Lab Sample ID: 280-155048-5**

**Matrix: Water**

Date Collected: 11/02/21 10:10

Date Received: 11/03/21 10:55

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	556939	11/10/21 17:04	CAS	TAL DEN
Total/NA	Prep	3535			498.8 mL	5 mL	556180	11/04/21 14:13	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556359	11/05/21 23:16	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	558260	11/21/21 11:22	JJM	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	557729	11/16/21 18:04	SVC	TAL DEN
Total/NA	Analysis	351.2		1			557899	11/17/21 19:46	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	557898	11/17/21 17:44	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	556749	11/09/21 12:07	JJM	TAL DEN
Total/NA	Analysis	9034		1			556751	11/09/21 12:10	JJM	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	558091	11/20/21 01:51	CJ	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	556213	11/04/21 12:58	RAF	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	556344	11/05/21 04:04	RAF	TAL DEN

Eurofins TestAmerica, Denver

# Lab Chronicle

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

Job ID: 280-155048-1

**Client Sample ID: NW060-7**

**Date Collected: 11/02/21 10:10**

**Date Received: 11/03/21 10:55**

**Lab Sample ID: 280-155048-5**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2320B		1			557616	11/13/21 01:54	ECC	TAL DEN

**Client Sample ID: CA210-7**

**Date Collected: 11/02/21 09:50**

**Date Received: 11/03/21 10:55**

**Lab Sample ID: 280-155048-6**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	20 mL	20 mL	556939	11/10/21 17:17	CAS	TAL DEN
Total/NA	Prep	3535			501.7 mL	5 mL	556180	11/04/21 14:13	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556359	11/06/21 00:25	JZ	TAL DEN
Total/NA	Prep	3535			501.7 mL	5 mL	556180	11/04/21 14:13	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556366	11/06/21 10:55	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	558260	11/21/21 11:52	JJM	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	557729	11/16/21 18:04	SVC	TAL DEN
Total/NA	Analysis	351.2		1			557899	11/17/21 19:46	SVC	TAL DEN
Total/NA	Analysis	353.2		10	100 mL	100 mL	557898	11/17/21 17:46	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	556749	11/09/21 12:07	JJM	TAL DEN
Total/NA	Analysis	9034		1			556751	11/09/21 12:10	JJM	TAL DEN
Total/NA	Analysis	9056A		5	5 mL	5 mL	558640	11/24/21 13:16	CJ	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	556213	11/04/21 12:58	RAF	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	556344	11/05/21 04:21	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			557616	11/13/21 01:25	ECC	TAL DEN

**Client Sample ID: NW062-7**

**Date Collected: 11/02/21 12:50**

**Date Received: 11/03/21 10:55**

**Lab Sample ID: 280-155048-7**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	20 mL	20 mL	556939	11/10/21 15:19	CAS	TAL DEN
Total/NA	Prep	3535			493.6 mL	5 mL	556180	11/04/21 14:13	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556359	11/06/21 00:48	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	558270	11/21/21 14:25	JJM	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	557729	11/16/21 18:04	SVC	TAL DEN
Total/NA	Analysis	351.2		1			557899	11/17/21 19:42	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	557898	11/17/21 17:48	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	556700	11/09/21 09:08	JJM	TAL DEN
Total/NA	Analysis	9034		1			556715	11/09/21 10:11	JJM	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	558091	11/20/21 02:47	CJ	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	556213	11/04/21 12:58	RAF	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	556344	11/05/21 04:38	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			557616	11/13/21 01:38	ECC	TAL DEN

Eurofins TestAmerica, Denver

# Lab Chronicle

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

Job ID: 280-155048-1

**Client Sample ID: G0070-7**

**Lab Sample ID: 280-155048-8**

**Matrix: Water**

**Date Collected: 11/01/21 14:25**

**Date Received: 11/03/21 10:55**

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	556811	11/09/21 20:37	CAS	TAL DEN
Total/NA	Prep	3535			499.1 mL	5 mL	556180	11/04/21 14:13	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556359	11/06/21 03:28	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	558260	11/21/21 11:40	JJM	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	557730	11/16/21 18:07	SVC	TAL DEN
Total/NA	Analysis	351.2		1			557899	11/17/21 19:48	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	557898	11/17/21 18:30	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	556494	11/07/21 11:29	JJM	TAL DEN
Total/NA	Analysis	9034		1			556496	11/07/21 12:16	JJM	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	558091	11/20/21 04:11	CJ	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	556213	11/04/21 12:58	RAF	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	556344	11/05/21 05:23	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			557616	11/13/21 01:43	ECC	TAL DEN

**Laboratory References:**

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

# Accreditation/Certification Summary

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

Job ID: 280-155048-1

## Laboratory: Eurofins TestAmerica, Denver

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

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	2907.01	11-30-21

# Method Summary

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

Job ID: 280-155048-1

Method	Method Description	Protocol	Laboratory
RSK-175	Dissolved Gases (GC)	RSK	TAL DEN
8330A	Nitroaromatics and Nitramines (HPLC)	EPA	TAL DEN
350.1	Nitrogen, Ammonia	MCAWW	TAL DEN
351.2	Nitrogen, Total Kjeldahl	MCAWW	TAL DEN
353.2	Nitrogen, Nitrate-Nitrite	MCAWW	TAL DEN
9034	Sulfide, Acid Soluble and Insoluble (Titrimetric)	SW846	TAL DEN
9056A	Anions, Ion Chromatography	SW846	TAL DEN
9060A	Organic Carbon, Dissolved (DOC)	SW846	TAL DEN
SM 2320B	Alkalinity	SM	TAL DEN
351.2	Nitrogen, Total Kjeldahl	MCAWW	TAL DEN
3535	Solid-Phase Extraction (SPE)	SW846	TAL DEN
9030B	Sulfide, Distillation (Acid Soluble and Insoluble)	SW846	TAL DEN
FILTRATION	Sample Filtration	None	TAL DEN

## Protocol References:

EPA = US Environmental Protection Agency

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

None = None

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

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

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

## Laboratory References:

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

# Sample Summary

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

Job ID: 280-155048-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-155048-1	CA211-7	Water	11/02/21 10:55	11/03/21 10:55
280-155048-2	CA212-7	Water	11/02/21 12:05	11/03/21 10:55
280-155048-3	NW061-7	Water	11/02/21 11:30	11/03/21 10:55
280-155048-4	G0076-7	Water	11/01/21 13:10	11/03/21 10:55
280-155048-5	NW060-7	Water	11/02/21 10:10	11/03/21 10:55
280-155048-6	CA210-7	Water	11/02/21 09:50	11/03/21 10:55
280-155048-7	NW062-7	Water	11/02/21 12:50	11/03/21 10:55
280-155048-8	G0070-7	Water	11/01/21 14:25	11/03/21 10:55

## GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

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 TestAmerica, Denver Job No.: 280-155048-1

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

## GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Instrument ID: VGC\_J Analysis Batch Number: 550959Lab 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 TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Instrument ID: VGC\_J Analysis Batch Number: 556811

Lab Sample ID: CCVRT 280-556811/1 Client Sample ID: \_\_\_\_\_

Date Analyzed: 11/09/21 17:35 Lab File ID: 001F0101.D GC Column: Rt-Alumina KC ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	4.03	Peak assignment corrected	sciannac	11/10/21 09:18

Lab Sample ID: CCVRT 280-556811/1 Client Sample ID: \_\_\_\_\_

Date Analyzed: 11/09/21 17:35 Lab File ID: 001F0101.D GC Column: HP-Plot Q ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	2.76	Peak assignment corrected	sciannac	11/10/21 09:18

Lab Sample ID: CCV 280-556811/28 Client Sample ID: \_\_\_\_\_

Date Analyzed: 11/09/21 23:25 Lab File ID: 028F2801.D GC Column: Rt-Alumina KC ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	4.24	Wrong Peak	sciannac	11/12/21 10:25

Lab Sample ID: CCV 280-556811/28 Client Sample ID: \_\_\_\_\_

Date Analyzed: 11/09/21 23:25 Lab File ID: 028F2801.D GC Column: HP-Plot Q ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	2.74	Wrong Peak	sciannac	11/12/21 10:24

## GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Instrument ID: VGC\_J Analysis Batch Number: 556939Lab Sample ID: CCVRT 280-556939/1 Client Sample ID: \_\_\_\_\_Date Analyzed: 11/10/21 11:51 Lab File ID: 001F0101.D GC Column: Rt-Alumina KC ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	4.11	Peak assignment corrected	sciannac	11/12/21 10:26

Lab Sample ID: CCVRT 280-556939/1 Client Sample ID: \_\_\_\_\_Date Analyzed: 11/10/21 11:51 Lab File ID: 001F0101.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	11/12/21 10:26

Lab Sample ID: CCV 280-556939/16 Client Sample ID: \_\_\_\_\_Date Analyzed: 11/10/21 15:06 Lab File ID: 016F1601.D GC Column: HP-Plot Q ID: 0.53 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	2.59	Shouldering	meierg	11/15/21 15:32

## HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Instrument ID: CHHPLC\_X3 Analysis Batch Number: 527768

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

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

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

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

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

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

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

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

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

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

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

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

## HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Instrument ID: CHHPLC\_X3 Analysis Batch Number: 527768

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

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

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

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

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

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

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

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

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

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

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

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

## HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Instrument ID: CHHPLC\_X3 Analysis Batch Number: 527768Lab Sample ID: ICV 280-527768/37 Client Sample ID: \_\_\_\_\_Date Analyzed: 03/03/21 02:53 Lab File ID: 03020037.D GC Column: UltraCarb5uOD ID: 4.6 (mm)

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

## HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Instrument ID: CHHPLC\_X3 Analysis Batch Number: 534622

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

## HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Instrument ID: CHHPLC\_X3 Analysis Batch Number: 534622

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

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

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

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

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

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

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

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

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

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

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

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

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Instrument ID: CHHPLC\_X3 Analysis Batch Number: 534622

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

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

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

## HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Instrument ID: CHHPLC\_X3 Analysis Batch Number: 556359

Lab Sample ID: CCV 280-556359/7 Client Sample ID: \_\_\_\_\_

Date Analyzed: 11/05/21 14:27 Lab File ID: 11050007.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.61	Baseline	zhangji	11/05/21 14:53

Lab Sample ID: CCV 280-556359/9 Client Sample ID: \_\_\_\_\_

Date Analyzed: 11/05/21 14:50 Lab File ID: 11050009.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.49	Baseline	zhangji	11/05/21 15:50
DNX	6.81	Baseline	zhangji	11/05/21 15:50

Lab Sample ID: LCS 280-556180/2-A Client Sample ID: \_\_\_\_\_

Date Analyzed: 11/05/21 15:38 Lab File ID: 11050012.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.61	Baseline	zhangji	11/05/21 16:07
3-Nitrotoluene	13.68	Baseline	zhangji	11/05/21 16:07

Lab Sample ID: LCS 280-556180/3-A Client Sample ID: \_\_\_\_\_

Date Analyzed: 11/05/21 16:00 Lab File ID: 11050013.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.23	Baseline	zhangji	11/05/21 17:38
1,2-Dinitrobenzene	8.58	Baseline	zhangji	11/05/21 17:38

## HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Instrument ID: CHHPLC\_X3 Analysis Batch Number: 556359

Lab Sample ID: CCV 280-556359/21 Client Sample ID: \_\_\_\_\_

Date Analyzed: 11/05/21 19:04 Lab File ID: 11050021.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.60	Baseline	zhangji	11/05/21 19:59

Lab Sample ID: CCV 280-556359/22 Client Sample ID: \_\_\_\_\_

Date Analyzed: 11/05/21 19:27 Lab File ID: 11050022.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.48	Baseline	zhangji	11/05/21 20:00
DNX	6.80	Baseline	zhangji	11/05/21 20:00

Lab Sample ID: 280-155048-1 Client Sample ID: CA211-7

Date Analyzed: 11/05/21 21:44 Lab File ID: 11050028.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.58	Baseline	zhangji	11/06/21 10:12
1,3,5-Trinitrobenzene		Invalid Compound ID	zhangji	11/06/21 10:11
1,3-Dinitrobenzene		Invalid Compound ID	zhangji	11/06/21 10:11

Lab Sample ID: 280-155048-2 Client Sample ID: CA212-7

Date Analyzed: 11/05/21 22:07 Lab File ID: 11050029.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.58	Baseline	zhangji	11/06/21 10:12
1,3,5-Trinitrobenzene		Invalid Compound ID	zhangji	11/06/21 10:12
1,3-Dinitrobenzene		Invalid Compound ID	zhangji	11/06/21 10:12
4-Nitrotoluene		Invalid Compound ID	zhangji	11/06/21 10:12

## HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Instrument ID: CHHPLC\_X3 Analysis Batch Number: 556359

Lab Sample ID: 280-155048-3 Client Sample ID: NW061-7

Date Analyzed: 11/05/21 22:30 Lab File ID: 11050030.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.58	Baseline	zhangji	11/06/21 10:12
Nitrobenzene		Invalid Compound ID	zhangji	11/06/21 10:12

Lab Sample ID: 280-155048-4 Client Sample ID: G0076-7

Date Analyzed: 11/05/21 22:53 Lab File ID: 11050031.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.57	Baseline	zhangji	11/06/21 10:12
HMX		Invalid Compound ID	zhangji	11/06/21 10:12

Lab Sample ID: 280-155048-5 Client Sample ID: NW060-7

Date Analyzed: 11/05/21 23:16 Lab File ID: 11050032.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.58	Baseline	zhangji	11/06/21 10:12

Lab Sample ID: CCV 280-556359/33 Client Sample ID: \_\_\_\_\_

Date Analyzed: 11/05/21 23:39 Lab File ID: 11050033.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.60	Baseline	zhangji	11/06/21 10:12

## HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Instrument ID: CHHPLC\_X3 Analysis Batch Number: 556359

Lab Sample ID: CCV 280-556359/34 Client Sample ID: \_\_\_\_\_

Date Analyzed: 11/06/21 00:02 Lab File ID: 11050034.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.48	Baseline	zhangji	11/06/21 10:13
DNX	6.80	Baseline	zhangji	11/06/21 10:13

Lab Sample ID: 280-155048-6 Client Sample ID: CA210-7

Date Analyzed: 11/06/21 00:25 Lab File ID: 11050035.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.57	Baseline	zhangji	11/06/21 10:14
1,3,5-Trinitrobenzene	8.72	Baseline	zhangji	11/06/21 10:14

Lab Sample ID: 280-155048-7 Client Sample ID: NW062-7

Date Analyzed: 11/06/21 00:48 Lab File ID: 11050036.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.57	Baseline	zhangji	11/06/21 10:15
4-Nitrotoluene		Invalid Compound ID	zhangji	11/06/21 10:14
Nitrobenzene		Invalid Compound ID	zhangji	11/06/21 10:14

## HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Instrument ID: CHHPLC\_X3 Analysis Batch Number: 556359

Lab Sample ID: 280-155048-7 MS Client Sample ID: NW062-7 MS

Date Analyzed: 11/06/21 01:11 Lab File ID: 11050037.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.60	Baseline	zhangji	11/06/21 10:15
RDX	7.61	Baseline	zhangji	11/06/21 10:15
1,2-Dinitrobenzene	8.58	Baseline	zhangji	11/06/21 10:15
1,3,5-Trinitrobenzene	8.70	Baseline	zhangji	11/06/21 10:15
1,3-Dinitrobenzene	9.33	Baseline	zhangji	11/06/21 10:15
Nitrobenzene	9.73	Baseline	zhangji	11/06/21 10:15

Lab Sample ID: 280-155048-7 MSD Client Sample ID: NW062-7 MSD

Date Analyzed: 11/06/21 01:34 Lab File ID: 11050038.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.60	Baseline	zhangji	11/06/21 10:16
RDX	7.60	Baseline	zhangji	11/06/21 10:16
1,2-Dinitrobenzene	8.58	Baseline	zhangji	11/06/21 10:16
1,3,5-Trinitrobenzene	8.69	Baseline	zhangji	11/06/21 10:16
1,3-Dinitrobenzene	9.33	Baseline	zhangji	11/06/21 10:16
Nitrobenzene	9.72	Baseline	zhangji	11/06/21 10:16

Lab Sample ID: 280-155048-7 MS Client Sample ID: NW062-7 MS

Date Analyzed: 11/06/21 01:57 Lab File ID: 11050039.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.22	Baseline	zhangji	11/06/21 10:16
1,2-Dinitrobenzene	8.57	Baseline	zhangji	11/06/21 10:17

## HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Instrument ID: CHHPLC\_X3 Analysis Batch Number: 556359

Lab Sample ID: 280-155048-7 MSD Client Sample ID: NW062-7 MSD

Date Analyzed: 11/06/21 02:20 Lab File ID: 11050040.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.22	Baseline	zhangji	11/06/21 10:17
1,2-Dinitrobenzene	8.58	Baseline	zhangji	11/06/21 10:17

Lab Sample ID: CCV 280-556359/42 Client Sample ID: \_\_\_\_\_

Date Analyzed: 11/06/21 03:05 Lab File ID: 11050042.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.49	Baseline	zhangji	11/06/21 10:17
DNX	6.81	Baseline	zhangji	11/06/21 10:17

Lab Sample ID: 280-155048-8 Client Sample ID: G0070-7

Date Analyzed: 11/06/21 03:28 Lab File ID: 11050043.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Nitrotoluene		Invalid Compound ID	zhangji	11/06/21 10:17
Nitrobenzene		Invalid Compound ID	zhangji	11/06/21 10:17

Lab Sample ID: 280-155048-8 MS Client Sample ID: G0070-7 MS

Date Analyzed: 11/06/21 03:51 Lab File ID: 11050044.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.60	Baseline	zhangji	11/06/21 10:18
RDX	7.61	Baseline	zhangji	11/06/21 10:18

## HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.:

Instrument ID: CHHPLC\_X3 Analysis Batch Number: 556359

Lab Sample ID: 280-155048-8 MSD Client Sample ID: G0070-7 MSD

Date Analyzed: 11/06/21 04:14 Lab File ID: 11050045.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.60	Baseline	zhangji	11/06/21 10:18
RDX	7.61	Baseline	zhangji	11/06/21 10:18
Tetryl	10.07	Baseline	zhangji	11/06/21 10:18

Lab Sample ID: 280-155048-8 MS Client Sample ID: G0070-7 MS

Date Analyzed: 11/06/21 04:37 Lab File ID: 11050046.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.22	Baseline	zhangji	11/06/21 10:23
1,2-Dinitrobenzene	8.57	Baseline	zhangji	11/06/21 10:23

Lab Sample ID: 280-155048-8 MSD Client Sample ID: G0070-7 MSD

Date Analyzed: 11/06/21 05:00 Lab File ID: 11050047.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.22	Baseline	zhangji	11/06/21 10:24
1,2-Dinitrobenzene	8.58	Baseline	zhangji	11/06/21 10:24

Lab Sample ID: CCV 280-556359/48 Client Sample ID:

Date Analyzed: 11/06/21 05:23 Lab File ID: 11050048.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.60	Baseline	zhangji	11/06/21 10:24

## HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Instrument ID: CHHPLC\_X3 Analysis Batch Number: 556359Lab Sample ID: CCV 280-556359/49 Client Sample ID: \_\_\_\_\_Date Analyzed: 11/06/21 05:46 Lab File ID: 11050049.D GC Column: UltraCarb5uOD ID: 4.6 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.48	Baseline	zhangji	11/06/21 10:24
DNX	6.80	Baseline	zhangji	11/06/21 10:24

## HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Instrument ID: CHHPLC\_X5 Analysis Batch Number: 534620

Lab Sample ID: IC 280-534620/10 Client Sample ID: \_\_\_\_\_

Date Analyzed: 05/01/21 18:54 Lab File ID: 010-0501.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PETN	26.16	Baseline Smoothing	zhangji	05/04/21 13:40

Lab Sample ID: IC 280-534620/11 Client Sample ID: \_\_\_\_\_

Date Analyzed: 05/01/21 19:29 Lab File ID: 011-0601.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PETN	26.14	Baseline Smoothing	zhangji	05/04/21 13:40

Lab Sample ID: IC 280-534620/12 Client Sample ID: \_\_\_\_\_

Date Analyzed: 05/01/21 20:04 Lab File ID: 012-0701.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PETN	26.18	Baseline Smoothing	zhangji	05/04/21 13:40

Lab Sample ID: IC 280-534620/13 Client Sample ID: \_\_\_\_\_

Date Analyzed: 05/01/21 20:39 Lab File ID: 013-0801.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PETN	26.15	Baseline Smoothing	zhangji	05/04/21 13:40

Lab Sample ID: IC 280-534620/14 Client Sample ID: \_\_\_\_\_

Date Analyzed: 05/01/21 21:15 Lab File ID: 014-0901.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PETN	26.19	Baseline Smoothing	zhangji	05/04/21 13:40

## HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Instrument ID: CHHPLC\_X5 Analysis Batch Number: 534620

Lab Sample ID: IC 280-534620/15 Client Sample ID: \_\_\_\_\_

Date Analyzed: 05/01/21 21:50 Lab File ID: 015-1001.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PETN	26.17	Baseline Smoothing	zhangji	05/04/21 13:40

Lab Sample ID: IC 280-534620/16 Client Sample ID: \_\_\_\_\_

Date Analyzed: 05/01/21 22:25 Lab File ID: 016-1101.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PETN	26.15	Baseline Smoothing	zhangji	05/04/21 13:40

Lab Sample ID: IC 280-534620/17 Client Sample ID: \_\_\_\_\_

Date Analyzed: 05/01/21 23:00 Lab File ID: 017-1201.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PETN	26.18	Baseline Smoothing	zhangji	05/04/21 13:41

Lab Sample ID: IC 280-534620/18 Client Sample ID: \_\_\_\_\_

Date Analyzed: 05/01/21 23:35 Lab File ID: 018-1301.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PETN	26.15	Baseline Smoothing	zhangji	05/04/21 13:41

Lab Sample ID: ICV 280-534620/19 Client Sample ID: \_\_\_\_\_

Date Analyzed: 05/02/21 00:10 Lab File ID: 019-1401.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PETN	26.19	Baseline Smoothing	zhangji	05/04/21 13:43

## HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Instrument ID: CHHPLC\_X5 Analysis Batch Number: 556366Lab Sample ID: 280-155048-6 Client Sample ID: CA210-7Date Analyzed: 11/06/21 10:55 Lab File ID: 11050049.D GC Column: Luna-phenylhe ID: 4.6 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Nitrotoluene	16.56	Baseline Smoothing	zhangji	11/06/21 12:41
2-Amino-4,6-dinitrotoluene	18.23	Baseline Smoothing	zhangji	11/06/21 12:41

## GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Instrument ID: WC\_IonChrom10 Analysis Batch Number: 557415

Lab Sample ID: STD1 280-557415/2 IC Client Sample ID: \_\_\_\_\_

Date Analyzed: 11/14/21 16:43 Lab File ID: Info 2\_DENPC179\_Anions\_20 GC Column: Metrosepp A S ID: \_\_\_\_\_

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.77	Unspecified	jindaratc	11/14/21 17:21
Chloride	3.81	Unspecified	jindaratc	11/14/21 17:21
Bromide	5.52	Baseline Smoothing	jindaratc	11/14/21 17:21
Sulfate	8.80	Baseline Smoothing	gonzalezs p	11/15/21 14:59

Lab Sample ID: STD2 280-557415/3 IC Client Sample ID: \_\_\_\_\_

Date Analyzed: 11/14/21 16:57 Lab File ID: Info 2\_DENPC179\_Anions\_20 GC Column: Metrosepp A S ID: \_\_\_\_\_

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.77	Peak not integrated	jindaratc	11/14/21 17:20
Chloride	3.81	Peak not integrated	jindaratc	11/14/21 17:20
Sulfate	8.79	Peak not integrated	jindaratc	11/14/21 17:21

Lab Sample ID: STD3 280-557415/4 IC Client Sample ID: \_\_\_\_\_

Date Analyzed: 11/14/21 17:11 Lab File ID: Info 2\_DENPC179\_Anions\_20 GC Column: Metrosepp A S ID: \_\_\_\_\_

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.77	Peak not integrated	jindaratc	11/14/21 17:32
Chloride	3.81	Peak not integrated	jindaratc	11/14/21 17:32
Sulfate	8.79	Baseline Smoothing	jindaratc	11/14/21 17:57

## GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Instrument ID: WC\_IonChrom10 Analysis Batch Number: 557415

Lab Sample ID: STD4 280-557415/5 IC Client Sample ID: \_\_\_\_\_

Date Analyzed: 11/14/21 17:25 Lab File ID: Info 2\_DENPC179\_Anions\_20 GC Column: Metrosepp A S ID: \_\_\_\_\_

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.77	Peak not integrated	jindaratc	11/14/21 17:43
Chloride	3.83	Peak not integrated	jindaratc	11/14/21 17:43
Sulfate	8.76	Peak not integrated	jindaratc	11/14/21 17:43

Lab Sample ID: STD5 280-557415/6 IC Client Sample ID: \_\_\_\_\_

Date Analyzed: 11/14/21 17:39 Lab File ID: Info 2\_DENPC179\_Anions\_20 GC Column: Metrosepp A S ID: \_\_\_\_\_

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.77	Peak not integrated	jindaratc	11/14/21 17:56
Chloride	3.85	Baseline Smoothing	gonzalezs p	11/15/21 07:53
Sulfate	8.73	Baseline Smoothing	gonzalezs p	11/15/21 07:53

Lab Sample ID: STD6 280-557415/7 IC Client Sample ID: \_\_\_\_\_

Date Analyzed: 11/14/21 17:53 Lab File ID: Info 2\_DENPC179\_Anions\_20 GC Column: Metrosepp A S ID: \_\_\_\_\_

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.77	Peak not integrated	gonzalezs p	11/15/21 07:54
Chloride	3.88	Baseline Smoothing	gonzalezs p	11/15/21 07:54
Sulfate	8.69	Baseline Smoothing	gonzalezs p	11/15/21 07:54

## GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Instrument ID: WC\_IonChrom10 Analysis Batch Number: 557415Lab Sample ID: ICB 280-557415/8 Client Sample ID: \_\_\_\_\_Date Analyzed: 11/14/21 18:07 Lab File ID: Info 2\_DENPC179\_Anions\_20 GC Column: Metrosepp A S ID: \_\_\_\_\_

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	8.80	Baseline Smoothing	gonzalezs p	11/15/21 15:09

Lab Sample ID: ICV 280-557415/9 Client Sample ID: \_\_\_\_\_Date Analyzed: 11/14/21 18:21 Lab File ID: Info 2\_DENPC179\_Anions\_20 GC Column: Metrosepp A S ID: \_\_\_\_\_

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.77	Peak not integrated	gonzalezs p	11/15/21 07:55
Chloride	3.84	Baseline Smoothing	gonzalezs p	11/15/21 07:55
Sulfate	8.74	Baseline Smoothing	gonzalezs p	11/15/21 07:56

## GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Instrument ID: WC\_IonChrom10 Analysis Batch Number: 558091

Lab Sample ID: CCV 280-558091/1 Client Sample ID: \_\_\_\_\_

Date Analyzed: 11/19/21 14:40 Lab File ID: Info 2\_DENPC179\_Anions\_20 GC Column: Metrosepp A S ID: \_\_\_\_\_

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.75	Peak not integrated	jindaratc	11/19/21 15:14
Chloride	3.80	Baseline Smoothing	jindaratc	11/20/21 18:31
Sulfate	8.52	Baseline Smoothing	jindaratc	11/20/21 18:31

Lab Sample ID: LCS 280-558091/4 Client Sample ID: \_\_\_\_\_

Date Analyzed: 11/19/21 15:22 Lab File ID: Info 2\_DENPC179\_Anions\_20 GC Column: Metrosepp A S ID: \_\_\_\_\_

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	8.63	Peak not integrated	jindaratc	11/20/21 18:33

Lab Sample ID: LCSD 280-558091/5 Client Sample ID: \_\_\_\_\_

Date Analyzed: 11/19/21 15:36 Lab File ID: Info 2\_DENPC179\_Anions\_20 GC Column: Metrosepp A S ID: \_\_\_\_\_

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	8.63	Baseline Smoothing	jindaratc	11/20/21 18:35

Lab Sample ID: CCV 280-558091/17 Client Sample ID: \_\_\_\_\_

Date Analyzed: 11/19/21 18:36 Lab File ID: Info 2\_DENPC179\_Anions\_20 GC Column: Metrosepp A S ID: \_\_\_\_\_

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.76	Peak not integrated	jindaratc	11/19/21 19:20
Chloride	3.82	Baseline Smoothing	jindaratc	11/20/21 18:40
Sulfate	8.64	Baseline Smoothing	jindaratc	11/20/21 18:40

## GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Instrument ID: WC\_IonChrom10 Analysis Batch Number: 558091

Lab Sample ID: CCV 280-558091/29 Client Sample ID: \_\_\_\_\_

Date Analyzed: 11/19/21 21:24 Lab File ID: Info 2\_DENPC179\_Anions\_20 GC Column: Metrosepp A S ID: \_\_\_\_\_

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.76	Peak not integrated	jindaratc	11/20/21 18:43
Chloride	3.82	Peak not integrated	jindaratc	11/20/21 18:44
Sulfate	8.64	Peak not integrated	jindaratc	11/20/21 18:44

Lab Sample ID: CCV 280-558091/41 Client Sample ID: \_\_\_\_\_

Date Analyzed: 11/20/21 00:13 Lab File ID: Info 2\_DENPC179\_Anions\_20 GC Column: Metrosepp A S ID: \_\_\_\_\_

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.76	Peak not integrated	jindaratc	11/20/21 18:47
Chloride	3.81	Peak not integrated	jindaratc	11/20/21 18:47
Sulfate	8.64	Peak not integrated	jindaratc	11/20/21 18:48

Lab Sample ID: LCS 280-558091/43 Client Sample ID: \_\_\_\_\_

Date Analyzed: 11/20/21 00:41 Lab File ID: Info 2\_DENPC179\_Anions\_20 GC Column: Metrosepp A S ID: \_\_\_\_\_

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	8.64	Peak not integrated	jindaratc	11/20/21 18:49

Lab Sample ID: LCSD 280-558091/44 Client Sample ID: \_\_\_\_\_

Date Analyzed: 11/20/21 00:55 Lab File ID: Info 2\_DENPC179\_Anions\_20 GC Column: Metrosepp A S ID: \_\_\_\_\_

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	8.64	Baseline Smoothing	jindaratc	11/20/21 18:52

## GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Instrument ID: WC\_IonChrom10 Analysis Batch Number: 558091Lab Sample ID: CCV 280-558091/56 Client Sample ID: \_\_\_\_\_Date Analyzed: 11/20/21 03:43 Lab File ID: Info 2\_DENPC179\_Anions\_20 GC Column: Metrosepp A S ID: \_\_\_\_\_

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.76	Peak not integrated	jindaratc	11/20/21 18:55
Chloride	3.82	Peak not integrated	jindaratc	11/20/21 18:55
Bromide	5.39	Peak not integrated	jindaratc	11/20/21 18:55
Sulfate	8.64	Peak not integrated	jindaratc	11/20/21 18:56

Lab Sample ID: CCV 280-558091/68 Client Sample ID: \_\_\_\_\_Date Analyzed: 11/20/21 06:31 Lab File ID: Info 2\_DENPC179\_Anions\_20 GC Column: Metrosepp A S ID: \_\_\_\_\_

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.76	Peak not integrated	jindaratc	11/20/21 18:58
Chloride	3.82	Peak not integrated	jindaratc	11/20/21 18:59
Sulfate	8.64	Baseline Smoothing	jindaratc	11/20/21 18:59

## GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Instrument ID: WC\_IonChrom11 Analysis Batch Number: 557417

Lab Sample ID: STD 280-557417/2 IC Client Sample ID: \_\_\_\_\_

Date Analyzed: 11/14/21 17:29 Lab File ID: 0004.d GC Column: Ion PAC AS 14 ID: \_\_\_\_\_

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.52	Baseline Smoothing	jindarac	11/14/21 17:52
Sulfate	10.06	Baseline Smoothing	gonzalezs p	11/15/21 07:43

Lab Sample ID: STD 280-557417/3 IC Client Sample ID: \_\_\_\_\_

Date Analyzed: 11/14/21 17:45 Lab File ID: 0005.d GC Column: Ion PAC AS 14 ID: \_\_\_\_\_

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.51	Baseline Smoothing	gonzalezs p	11/14/21 20:06

Lab Sample ID: STD 280-557417/4 IC Client Sample ID: \_\_\_\_\_

Date Analyzed: 11/14/21 18:02 Lab File ID: 0006.d GC Column: Ion PAC AS 14 ID: \_\_\_\_\_

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.51	Baseline Smoothing	gonzalezs p	11/14/21 20:06

Lab Sample ID: STD 280-557417/5 IC Client Sample ID: \_\_\_\_\_

Date Analyzed: 11/14/21 18:18 Lab File ID: 0007.d GC Column: Ion PAC AS 14 ID: \_\_\_\_\_

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.51	Baseline Smoothing	gonzalezs p	11/14/21 20:06
Sulfate	10.12	Baseline Smoothing	gonzalezs p	11/15/21 07:44

## GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Instrument ID: WC\_IonChrom11 Analysis Batch Number: 557417

Lab Sample ID: STD 280-557417/6 IC

Client Sample ID: \_\_\_\_\_

Date Analyzed: 11/14/21 18:35

Lab File ID: 0008.d

GC Column: Ion PAC AS 14 ID: \_\_\_\_\_

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.17	Baseline Smoothing	gonzalezs p	11/15/21 07:45

Lab Sample ID: STD 280-557417/7 IC

Client Sample ID: \_\_\_\_\_

Date Analyzed: 11/14/21 18:51

Lab File ID: 0009.d

GC Column: Ion PAC AS 14 ID: \_\_\_\_\_

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.23	Baseline Smoothing	gonzalezs p	11/15/21 07:45

Lab Sample ID: ICV 280-557417/8

Client Sample ID: \_\_\_\_\_

Date Analyzed: 11/14/21 19:07

Lab File ID: 0010.d

GC Column: Ion PAC AS 14 ID: \_\_\_\_\_

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.51	Baseline Smoothing	gonzalezs p	11/14/21 20:07
Sulfate	10.13	Baseline Smoothing	gonzalezs p	11/15/21 07:46

## GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Instrument ID: WC\_IonChrom11 Analysis Batch Number: 558640

Lab Sample ID: CCV 280-558640/1 Client Sample ID: \_\_\_\_\_

Date Analyzed: 11/24/21 10:16 Lab File ID: 0001.d GC Column: Ion PAC AS 14 ID: \_\_\_\_\_

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	9.77	Baseline Smoothing	jindaratc	11/24/21 16:08

Lab Sample ID: LCS 280-558640/4 Client Sample ID: \_\_\_\_\_

Date Analyzed: 11/24/21 11:05 Lab File ID: 0004.d GC Column: Ion PAC AS 14 ID: \_\_\_\_\_

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	9.77	Baseline Smoothing	jindaratc	11/24/21 16:08

Lab Sample ID: LCSD 280-558640/5 Client Sample ID: \_\_\_\_\_

Date Analyzed: 11/24/21 11:22 Lab File ID: 0005.d GC Column: Ion PAC AS 14 ID: \_\_\_\_\_

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	9.78	Baseline Smoothing	jindaratc	11/24/21 16:09

Lab Sample ID: CCV 280-558640/17 Client Sample ID: \_\_\_\_\_

Date Analyzed: 11/24/21 14:38 Lab File ID: 0017.d GC Column: Ion PAC AS 14 ID: \_\_\_\_\_

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	9.78	Baseline Smoothing	jindaratc	11/24/21 16:11

## GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Instrument ID: WC\_IonChrom7 Analysis Batch Number: 557096

Lab Sample ID: STD 280-557096/4 IC Client Sample ID: \_\_\_\_\_

Date Analyzed: 11/11/21 16:07 Lab File ID: 0004.d GC Column: Ion PAC AS 17 ID: \_\_\_\_\_

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.67	Baseline Smoothing	jindaratc	11/11/21 18:07
Chloride	3.96	Baseline Smoothing	gonzalezs p	11/12/21 07:10
Bromide	5.84	Baseline Smoothing	gonzalezs p	11/12/21 07:09
Sulfate	10.95	Baseline Smoothing	jindaratc	11/11/21 16:35

Lab Sample ID: STD 280-557096/5 IC Client Sample ID: \_\_\_\_\_

Date Analyzed: 11/11/21 16:22 Lab File ID: 0005.d GC Column: Ion PAC AS 17 ID: \_\_\_\_\_

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.63	Baseline Smoothing	jindaratc	11/11/21 18:07
Chloride	3.90	Baseline Smoothing	gonzalezs p	11/12/21 07:10
Bromide	5.79	Peak assignment corrected	jindaratc	11/11/21 17:22
Sulfate	10.98	Peak assignment corrected	jindaratc	11/11/21 17:22

Lab Sample ID: STD 280-557096/6 IC Client Sample ID: \_\_\_\_\_

Date Analyzed: 11/11/21 16:36 Lab File ID: 0006.d GC Column: Ion PAC AS 17 ID: \_\_\_\_\_

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.45	Baseline Smoothing	jindaratc	11/11/21 18:08
Chloride	3.65	Baseline Smoothing	gonzalezs p	11/12/21 07:12

## GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Instrument ID: WC\_IonChrom7 Analysis Batch Number: 557096

Lab Sample ID: STD 280-557096/7 IC Client Sample ID: \_\_\_\_\_

Date Analyzed: 11/11/21 16:51 Lab File ID: 0007.d GC Column: Ion PAC AS 17 ID: \_\_\_\_\_

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.64	Baseline Smoothing	jindarac	11/11/21 18:08
Chloride	3.93	Baseline Smoothing	gonzalezs p	11/12/21 07:13
Bromide	5.63	Baseline Smoothing	gonzalezs p	11/12/21 07:13

Lab Sample ID: STD 280-557096/8 IC Client Sample ID: \_\_\_\_\_

Date Analyzed: 11/11/21 17:06 Lab File ID: 0008.d GC Column: Ion PAC AS 17 ID: \_\_\_\_\_

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.65	Baseline Smoothing	jindarac	11/11/21 18:08
Chloride	4.08	Baseline Smoothing	gonzalezs p	11/12/21 07:15
Bromide	5.88	Baseline Smoothing	gonzalezs p	11/12/21 07:15
Sulfate	11.13	Peak assignment corrected	jindarac	11/11/21 18:03

Lab Sample ID: STD 280-557096/9 IC Client Sample ID: \_\_\_\_\_

Date Analyzed: 11/11/21 17:21 Lab File ID: 0009.d GC Column: Ion PAC AS 17 ID: \_\_\_\_\_

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloride	3.94	Baseline Smoothing	gonzalezs p	11/12/21 07:16
Bromide	5.56	Baseline Smoothing	gonzalezs p	11/12/21 07:17

## GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Instrument ID: WC\_IonChrom7 Analysis Batch Number: 557096Lab Sample ID: ICV 280-557096/10 Client Sample ID: \_\_\_\_\_Date Analyzed: 11/11/21 17:36 Lab File ID: 0010.d GC Column: Ion PAC AS 17 ID: \_\_\_\_\_

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloride	3.88	Baseline Smoothing	gonzalezs p	11/12/21 09:21

## GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Instrument ID: WC\_IonChrom7 Analysis Batch Number: 558093

Lab Sample ID: CCV 280-558093/71 Client Sample ID: \_\_\_\_\_

Date Analyzed: 11/19/21 13:50 Lab File ID: 0017.d GC Column: Ion PAC AS 17 ID: \_\_\_\_\_

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	9.71	Peak assignment corrected	gonzalezs p	11/19/21 15:20

Lab Sample ID: CCV 280-558093/96 Client Sample ID: \_\_\_\_\_

Date Analyzed: 11/19/21 19:49 Lab File ID: 41.0000.d GC Column: Ion PAC AS 17 ID: \_\_\_\_\_

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.27	Incomplete Integration	jindaratc	11/20/21 19:34

## REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration	
					Reagent ID	Volume Added			
350.1 cal 00509	11/28/21	11/21/21	Di Water, Lot na	100 mL	NH3 CAL STD_00033	10 mL	Ammonia	100 mg/L	
.NH3 CAL STD_00033	02/28/22		Ricca, Lot 4008G09		(Purchased Reagent)		Ammonia	1000 mg/L	
350.1 ICV 00494	11/28/21	11/21/21	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	
8330 DMT_00008	05/31/21	01/08/21	Acetonitrile, Lot 257727	5 mL	MNX,TNX,DXN_00051	1 mL	DNX	20.02 ug/mL	
							MNX	23.34 ug/mL	
							TNX	20.02 ug/mL	
	05/31/21	Agilent, Lot 0006535619			(Purchased Reagent)		DNX	100.1 ug/mL	
							MNX	116.7 ug/mL	
8330 DMT_00009	12/02/21	06/02/21	Acetonitrile, Lot ACN_237	5 mL	MNX,TNX,DXN_00059	1 mL	MNX	23.34 ug/mL	
.MNX,TNX,DXN_00059	04/30/22		Agilent, Lot 0006599273		(Purchased Reagent)		MNX	116.7 ug/mL	
8330 LCS_00108	09/02/21	03/31/21	Acetonitrile, Lot Acetonitrile_00050	100 mL	8330LCMix1_00121	1 mL	1,3,5-Trinitrobenzene	10 ug/mL	
							1,3-Dinitrobenzene	10 ug/mL	
							2,4,6-Trinitrotoluene	10 ug/mL	
							2,4-Dinitrotoluene	10 ug/mL	
							HMX	10 ug/mL	
	08/31/25	Restek, Lot A0163590			(Purchased Reagent)		Nitrobenzene	10 ug/mL	
							RDX	10 ug/mL	
							2,6-Dinitrotoluene	10 ug/mL	
							2-Amino-4,6-dinitrotoluene	10 ug/mL	
							2-Nitrotoluene	10 ug/mL	
.8330LCMix1_00121	11/30/25	Restek, Lot A0165983			(Purchased Reagent)		3-Nitrotoluene	10 ug/mL	
							4-Amino-2,6-dinitrotoluene	10 ug/mL	
							4-Nitrotoluene	10 ug/mL	
							Tetryl	10 ug/mL	
							1,3,5-Trinitrobenzene	1000 ug/mL	
.8330LCMix2_00023	09/10/22	Restek, Lot A0163590			(Purchased Reagent)		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	
8330 LCS_00110	09/10/22	09/10/21	Acetonitrile, Lot Acetonitrile_00056	100 mL	8330_NG_Stk_00105	1 mL	Nitroglycerin	100 ug/mL	
							8330_NG_Stk_00106	100 ug/mL	

## REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					8330_PETN_Stk_00106	1 mL	PETN	100 ug/mL
					8330_PETN_Stk_00108	1 mL	PETN	100 ug/mL
					8330LCSMix1_00124	1 mL	1,3,5-Trinitrobenzene 1,3-Dinitrobenzene 2,4,6-Trinitrotoluene 2,4-Dinitrotoluene HMX Nitrobenzene RDX	10 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL
					8330LCSmix2_00024	1 mL	2,6-Dinitrotoluene 2-Amino-4,6-dinitrotoluene 2-Nitrotoluene 3-Nitrotoluene 4-Amino-2,6-dinitrotoluene 4-Nitrotoluene Tetryl	10 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL 10 ug/mL
					PicricARestek_00098	1 mL	2,4,6-Trinitrophenol	10 ug/mL
.8330 NG Stk 00105	09/10/22	Restek, Lot A0172805			(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330 NG Stk 00106	09/10/22	Restek, Lot A0172805			(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330 PETN Stk 00106	09/10/22	Restek, Lot A0168448			(Purchased Reagent)		PETN	5000 ug/mL
.8330 PETN Stk 00108	09/10/22	Restek, Lot A0168448			(Purchased Reagent)		PETN	5000 ug/mL
.8330LCSMix1_00124	09/10/22	Restek, Lot A0163590			(Purchased Reagent)		1,3,5-Trinitrobenzene 1,3-Dinitrobenzene 2,4,6-Trinitrotoluene 2,4-Dinitrotoluene HMX Nitrobenzene RDX	1000 ug/mL 1000 ug/mL 1000 ug/mL 1000 ug/mL 1000 ug/mL 1000 ug/mL 1000 ug/mL
.8330LCSmix2_00024	09/10/22	Restek, Lot A0165983			(Purchased Reagent)		2,6-Dinitrotoluene 2-Amino-4,6-dinitrotoluene 2-Nitrotoluene 3-Nitrotoluene 4-Amino-2,6-dinitrotoluene 4-Nitrotoluene Tetryl	1000 ug/mL 1000 ug/mL 1000 ug/mL 1000 ug/mL 1000 ug/mL 1000 ug/mL 1000 ug/mL
.PicricARestek_00098	09/10/22	Restek, Lot A0164473			(Purchased Reagent)		2,4,6-Trinitrophenol	1000 ug/mL
8330_OP_DMT_00009	05/31/21	08/14/20	Acetonitrile, Lot Acetonitrile_00045	25 mL	MNX, TNX, DNX_00048	1 mL	MNX	11.67 ug/mL
					MNX, TNX, DNX_00049	0.5 mL	MNX	11.67 ug/mL
					MNX, TNX, DNX_00050	1 mL	MNX	11.67 ug/mL
.MNX, TNX, DNX_00048	05/31/21	Agilent, Lot 0006535619			(Purchased Reagent)		MNX	116.7 ug/mL
.MNX, TNX, DNX_00049	05/31/21	Agilent, Lot 0006535619			(Purchased Reagent)		MNX	116.7 ug/mL
.MNX, TNX, DNX_00050	05/31/21	Agilent, Lot 0006535619			(Purchased Reagent)		MNX	116.7 ug/mL
8330_OP_DMT_00010	05/31/21	03/03/21	Acetonitrile, Lot Acetonitrile_00051	20 mL	MNX, TNX, DNX_00052	1 mL	MNX	11.67 ug/mL
					MNX, TNX, DNX_00053	1 mL	MNX	11.67 ug/mL
.MNX, TNX, DNX_00052	05/31/21	Agilent, Lot 0006535619			(Purchased Reagent)		MNX	116.7 ug/mL

## REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration	
					Reagent ID	Volume Added			
.MNX, TNX, DNX_00053	05/31/21		Agilent, Lot 0006535619		(Purchased Reagent)		MNX	116.7 ug/mL	
8330_OP_DMT_00011	04/30/22	06/01/21	Acetonitrile, Lot Acetonitrile_00054	10 mL	MNX, TNX, DNX_00054	1 mL	DNX	10.01 ug/mL	
							MNX	11.67 ug/mL	
							TNX	10.01 ug/mL	
.MNX, TNX, DNX_00054	04/30/22	Agilent, Lot 0006594482		(Purchased Reagent)		DNX	100.1 ug/mL		
							MNX	116.7 ug/mL	
							TNX	100.1 ug/mL	
8330IntermStk_00067	05/22/21	11/18/20	Acetonitrile, Lot 130057	10 mL	8330_NG_Stk_00094	200 uL	Nitroglycerin	100 ug/mL	
					8330_PETN_Stk_00087	200 uL	PETN	100 ug/mL	
					8330ICALStock_00030	1 mL	1,3,5-Trinitrobenzene	10.02 ug/mL	
							1,3-Dinitrobenzene	10.02 ug/mL	
							2,4,6-Trinitrotoluene	10.04 ug/mL	
							2,4-Dinitrotoluene	10.04 ug/mL	
							2,6-Dinitrotoluene	10.04 ug/mL	
							2-Amino-4,6-dinitrotoluene	10.04 ug/mL	
							2-Nitrotoluene	10 ug/mL	
							3-Nitrotoluene	10.01 ug/mL	
							4-Amino-2,6-dinitrotoluene	10.01 ug/mL	
							4-Nitrotoluene	10.02 ug/mL	
							HMX	10 ug/mL	
							Nitrobenzene	10.04 ug/mL	
							RDX	10 ug/mL	
							Tetryl	10.02 ug/mL	
							1,2-Dinitrobenzene	10 ug/mL	
					8330PASTkPS_00064	1 mL	2,4,6-Trinitrophenol	10 ug/mL	
.8330_NG_Stk_00094	06/30/23		Restek, Lot A0161480		(Purchased Reagent)		Nitroglycerin	5000 ug/mL	
.8330_PETN_Stk_00087	11/30/22		Restek, Lot A0154763		(Purchased Reagent)		PETN	5000 ug/mL	
.8330ICALStock_00030	03/03/22	01/09/20	Acetonitrile, Lot 130057	10 mL	8330_Stock_TS_00015	1 mL	1,3,5-Trinitrobenzene	100.2 ug/mL	
							1,3-Dinitrobenzene	100.2 ug/mL	
							2,4,6-Trinitrotoluene	100.4 ug/mL	
							2,4-Dinitrotoluene	100.4 ug/mL	
							2,6-Dinitrotoluene	100.4 ug/mL	
							2-Amino-4,6-dinitrotoluene	100.4 ug/mL	
							2-Nitrotoluene	100 ug/mL	
							3-Nitrotoluene	100.1 ug/mL	
							4-Amino-2,6-dinitrotoluene	100.1 ug/mL	
							4-Nitrotoluene	100.2 ug/mL	
							HMX	100 ug/mL	
							Nitrobenzene	100.4 ug/mL	
							RDX	100 ug/mL	
							Tetryl	100.2 ug/mL	
					8330SurrStock_00164	1 mL	1,2-Dinitrobenzene	100 ug/mL	
							1,3,5-Trinitrobenzene	1002 ug/mL	
							1,3-Dinitrobenzene	1002 ug/mL	
							2,4,6-Trinitrotoluene	1004 ug/mL	
..8330_Stock_TS_00015	03/31/22		Ultra Scientific, Lot CT-0801		(Purchased Reagent)				

## REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4-Dinitrotoluene	1004 ug/mL
							2,6-Dinitrotoluene	1004 ug/mL
							2-Amino-4,6-dinitrotoluene	1004 ug/mL
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1001 ug/mL
							4-Amino-2,6-dinitrotoluene	1001 ug/mL
							4-Nitrotoluene	1002 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1004 ug/mL
							RDX	1000 ug/mL
							Tetryl	1002 ug/mL
.8330SurrStock_00164	07/01/26	AccuStandard, Lot 216071012			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330PASTkPS_00064	05/22/21	AccuStandard, Lot 214121302-02			(Purchased Reagent)		2,4,6-Trinitrophenol	100 ug/mL
8330IntermStk_00069	03/31/22	10/22/21	Acetonitrile, Lot ACN_237	10 mL	8330ICALStock_00031	1 mL	1,3,5-Trinitrobenzene	10.02 ug/mL
							1,3-Dinitrobenzene	10.02 ug/mL
							2,4,6-Trinitrotoluene	10.04 ug/mL
							2,4-Dinitrotoluene	10.04 ug/mL
							2,6-Dinitrotoluene	10.04 ug/mL
							2-Amino-4,6-dinitrotoluene	10.04 ug/mL
							2-Nitrotoluene	10 ug/mL
							3-Nitrotoluene	10.01 ug/mL
							4-Amino-2,6-dinitrotoluene	10.01 ug/mL
							4-Nitrotoluene	10.02 ug/mL
							HMX	10 ug/mL
							Nitrobenzene	10.04 ug/mL
							RDX	10 ug/mL
							Tetryl	10.02 ug/mL
							1,2-Dinitrobenzene	10 ug/mL
.8330ICALStock_00031	03/31/22	04/30/21	Acetonitrile, Lot ACN_237	10 mL	8330 Stock_TS_00018	1 mL	1,3,5-Trinitrobenzene	100.2 ug/mL
							1,3-Dinitrobenzene	100.2 ug/mL
							2,4,6-Trinitrotoluene	100.4 ug/mL
							2,4-Dinitrotoluene	100.4 ug/mL
							2,6-Dinitrotoluene	100.4 ug/mL
							2-Amino-4,6-dinitrotoluene	100.4 ug/mL
							2-Nitrotoluene	100 ug/mL
							3-Nitrotoluene	100.1 ug/mL
							4-Amino-2,6-dinitrotoluene	100.1 ug/mL
							4-Nitrotoluene	100.2 ug/mL
							HMX	100 ug/mL
							Nitrobenzene	100.4 ug/mL
							RDX	100 ug/mL
							Tetryl	100.2 ug/mL
					8330SurrStock_00168	1 mL	1,2-Dinitrobenzene	100 ug/mL
..8330 Stock_TS_00018	03/31/22	Ultra Scientific, Lot CT-0801			(Purchased Reagent)		1,3,5-Trinitrobenzene	1002 ug/mL
							1,3-Dinitrobenzene	1002 ug/mL
							2,4,6-Trinitrotoluene	1004 ug/mL

## REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4-Dinitrotoluene	1004 ug/mL
							2,6-Dinitrotoluene	1004 ug/mL
							2-Amino-4,6-dinitrotoluene	1004 ug/mL
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1001 ug/mL
							4-Amino-2,6-dinitrotoluene	1001 ug/mL
							4-Nitrotoluene	1002 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1004 ug/mL
							RDX	1000 ug/mL
							Tetryl	1002 ug/mL
..8330SurrStock_00168	04/30/22	AccuStandard, Lot 219051500			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
8330Surrogate_00124	09/29/21	03/29/21	Acetonitrile, Lot Acetonitrile_00050	400 mL	8330SurrStkSS_00185	1 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00188	1 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00192	1 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00193	1 mL	1,2-Dinitrobenzene	10 ug/mL
.8330SurrStkSS_00185	05/31/25	Restek, Lot A0160559			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00188	09/30/25	Restek, Lot A0164261			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00192	09/30/25	Restek, Lot A0164261			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00193	09/30/25	Restek, Lot A0164261			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
8330Surrogate_00126	03/09/22	09/09/21	Acetonitrile, Lot Acetonitrile_00056	500 mL	8330SurrStkSS_00187	1 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00195	1 mL	1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00197	1 mL	1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00200	1 mL	1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00202	1 mL	1,2-Dinitrobenzene (Surr)	10 ug/mL
.8330SurrStkSS_00187	09/30/25	Restek, Lot A0164261			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00195	09/30/25	Restek, Lot A0164261			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00197	09/30/25	Restek, Lot A0164261			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00200	09/30/25	Restek, Lot A0164261			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00202	09/30/25	Restek, Lot A0164261			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
Alk daily lcs_01005	11/16/21	11/09/21	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
IC CAL cl/so4_00393	11/17/21	11/10/21	Di Water, Lot na	100 mL	IC CL cal_00064	25 mL	Chloride	250 mg/L
					IC sulfatecal_00062	25 mL	Sulfate	250 mg/L
.IC CL cal_00064	02/28/22	SPEX CertiPrep, Lot 5-67CL-2Y			(Purchased Reagent)		Chloride	1000 mg/L

## REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.IC sulfatecal_00062	12/30/21		SPEX CertiPrep, Lot 5-48SO4-2x		(Purchased Reagent)		Sulfate	1000 mg/L
<b>IC CAL cl/so4_00394</b>	11/23/21	11/16/21	Di Water, Lot na	100 mL	IC sulfatecal_00062	25 mL	Sulfate	250 mg/L
.IC sulfatecal_00062	12/30/21		SPEX CertiPrep, Lot 5-48SO4-2x		(Purchased Reagent)		Sulfate	1000 mg/L
<b>IC CAL cl/so4_00395</b>	12/01/21	11/24/21	Di Water, Lot na	100 mL	IC sulfatecal_00062	25 mL	Sulfate	250 mg/L
.IC sulfatecal_00062	12/30/21		SPEX CertiPrep, Lot 5-48SO4-2x		(Purchased Reagent)		Sulfate	1000 mg/L
<b>IC Cal low_00607</b>	11/17/21	11/10/21	Di Water, Lot NA	100 mL	IC BR ICV_00021	5 mL	Bromide	50 mg/L
					IC FL cal_00016	5 mL	Fluoride	50 mg/L
.IC BR ICV_00021	04/01/22		ricca, Lot 4010N41		(Purchased Reagent)		Bromide	1000 mg/L
.IC FL cal_00016	01/31/22		Ricca, Lot 2007C85		(Purchased Reagent)		Fluoride	1000 mg/L
<b>IC LCS_01845</b>	11/23/21	11/16/21	Di Water, Lot 27	200 mL	IC sulfatecal_00063	20 mL	Sulfate	100 mg/L as N
.IC sulfatecal_00063	02/28/22		SPEX CertiPrep, Lot 5-48SO4-2x		(Purchased Reagent)		Sulfate	1000 mg/L
<b>IC LCS_01846</b>	12/01/21	11/24/21	Di Water, Lot 27	200 mL	IC sulfatecal_00063	20 mL	Sulfate	100 mg/L as N
.IC sulfatecal_00063	02/28/22		SPEX CertiPrep, Lot 5-48SO4-2x		(Purchased Reagent)		Sulfate	1000 mg/L
<b>IC SO4 ICV_00022</b>	07/06/22		ERA, Lot 060720m		(Purchased Reagent)		Sulfate	1000 mg/L
<b>ICMS/MSD WEEK_00731</b>	11/23/21	11/16/21	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
<b>NXN CAL INT_00601</b>	11/22/21	11/15/21	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
<b>NXN ICV INT_00577</b>	11/22/21	11/15/21	Di Water, Lot NA	100 mL	NOXT ICV STD_00024	10 mL	Nitrate Nitrite as N	100 mg/L
.NOXT ICV STD_00024	02/10/22		ERA, Lot 190220m		(Purchased Reagent)		Nitrate Nitrite as N	1000 mg/L
<b>RSK175methane_00010</b>	04/16/22		Supelco Analytical, Lot 160-401480003-1		(Purchased Reagent)		Methane	650500 ug/L
<b>RSK7gasMathes_00031</b>	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
<b>RSK7gasMathes_00034</b>	03/22/23		Matheson, Lot 9301615705		(Purchased Reagent)		Methane	6570.3 ug/L
<b>SFD ICV INT_02020</b>	01/10/22	10/10/21	Di Water, Lot N/A	500 mL	50% NaOH_00022	2 mL	Sodium Hydroxide	2000 mg/L
					SFD ICV STK 00008	3.9851 g	Sulfide	1064.02 mg/L
.50% NaOH_00022	06/30/23		RICCA, Lot 1006F87		(Purchased Reagent)		Sodium Hydroxide	50 %
.SFD ICV STK 00008	04/03/24		Acros, Lot A0412804		(Purchased Reagent)		Sulfide	0.1335 g/g
<b>SFD ICV INT_02023</b>	01/10/22	10/10/21	Di Water, Lot N/A	500 mL	50% NaOH_00022	2 mL	Sodium Hydroxide	2000 mg/L
					SFD ICV STK 00008	3.7753 g	Sulfide	1008.01 mg/L
.50% NaOH_00022	06/30/23		RICCA, Lot 1006F87		(Purchased Reagent)		Sodium Hydroxide	50 %
.SFD ICV STK 00008	04/03/24		Acros, Lot A0412804		(Purchased Reagent)		Sulfide	0.1335 g/g
<b>TKN 25ppm_00826</b>	12/14/21	11/14/21	Di Water, Lot 1	100 mL	TKN 100PPM_00139	25 mL	Nitrogen, Total Kjeldahl	25 mg/L
.TKN 100PPM_00139	12/14/21	11/14/21	Di Water, Lot 1	500 mL	TKN CAL STD_00019	50 mL	Nitrogen, Total Kjeldahl	100 mg/L
..TKN CAL STD_00019	08/31/24		nsi lab solutions, Lot 200817		(Purchased Reagent)		Nitrogen, Total Kjeldahl	1000 mg/L
<b>TKN ICV 25_00112</b>	12/14/21	11/14/21	DI water, Lot 1	100 mL	TKN ICV 100_00101	25 mL	Nitrogen, Total Kjeldahl	25 mg/L
.TKN ICV 100_00101	12/14/21	11/14/21	Di Water, Lot 1	500 mL	TKN ICV 00013	50 mL	Nitrogen, Total Kjeldahl	100 mg/L
..TKN ICV 00013	07/02/22		ERA, Lot 200220m		(Purchased Reagent)		Nitrogen, Total Kjeldahl	1000 mg/L

## REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
<b>TOC ICV Std_00047</b>	01/31/22		Ricca, Lot 1102654		(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
<b>TOC LCS Std_00052</b>	06/30/23		Agilent, Lot 0006606278		(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

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**50% NaOH\_00022**



# Certificate of Analysis

## Sodium Hydroxide, 50% (w/w) (760 g/L), Analytical Reagent Grade

Lot Number: 1006F87

Product Number: 7291

Manufacture Date: JUN 23, 2020

Expiration Date: JUN 2023

The specifications below are equivalent to the ACS Reagent Grade specifications for Sodium Hydroxide pellets, corrected for assay.

There is no ACS specification for 50% (w/w) Sodium Hydroxide solution.

Name	CAS#	Grade
Water	7732-18-5	Reagent
Sodium Hydroxide	1310-73-2	Reagent

Test	Specification	Result	NIST SRM#
Appearance	Colorless liquid	Passed	
Assay (vs. Sulfuric Acid/Phenolphthalein)	50-52 % (w/w)	50 % (w/w)	723
Chloride (Cl)	max 0.002 %	< 0.002 %	
Heavy Metals (as Ag)	max 0.001 %	< 0.001 %	
Iron (Fe)	max 5 ppm	0.2 ppm	3126
NH <sub>4</sub> OH Precipitate	max 0.01 %	0.004 %	
Nickel (Ni)	max 5 ppm	0.04 ppm	3136
Nitrogen Compounds (as N)	max 5 ppm	< 5 ppm	
Phosphate (PO <sub>4</sub> )	max 5 ppm	< 5 ppm	
Potassium (K)	max 0.01 %	0.001 %	3141
Sodium Carbonate (Na <sub>2</sub> CO <sub>3</sub> )	max 0.1 %	0.02 %	
Sulfate (SO <sub>4</sub> )	max 0.001 %	< 0.001 %	

Specification	Reference
Sodium Hydroxide Solution, 50%	ASTM (D 2187 E)
Sodium Hydroxide Solution, 50%	ASTM (D 2187 F)
Sodium hydroxide stock solution, about 50%	TAPPI (T 235 cm-85)
Sodium Hydroxide Solution	ASTM (D 2187 G)
Sodium Hydroxide Solution, 50%	ASTM (D 4548)
Sodium Hydroxide Solution (50% w/w)	ASTM (D 2036 A)
Sodium Hydroxide Solution (50% w/w)	ASTM (D 2036 B)
Sodium Hydroxide Solution (50% w/w)	ASTM (D 2036 C)
Sodium Hydroxide Solution (50% w/w)	ASTM (D 2036 D)

Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
7291-16	500 mL natural poly	36 months
7291-5HP	20 L Ropak™	36 months

**Recommended Storage:** 15°C - 30°C (59°F - 86°F)



Israel Alamudun (06/23/2020)

Quality Control Supervisor

This Certificate of Analysis is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

This test report shall not be reproduced, except in full, without the written approval of Ricca Chemical Company.

Reagent

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**8330 LCS\_00108**

## Preliminary Report

Eurofins TestAmerica, Denver  
LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210401-100246.b\04010006.D  
 Lims ID: Phenyl-Hexyl:H20-014671 Inj. Date: 01-Apr-2021 16:25:43  
 Worklist ID: 280-0100246-006 Instrument: CHHPLC\_X5  
 Method: 8330\_X5\_Luna

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 0B_Sonc_	Limits 2 3535
6 HMX	0.5000	0.4313	86.3	65-135	
5 2,4,6-Trinitrophenol	0.5000	0.4984	99.7	73-124	80-120
8 RDX	0.5000	0.4421	88.4	68-130	
9 Nitrobenzene	0.5000	0.4453	89.1	65-134	
12 1,3-Dinitrobenzene	0.5000	0.4523	90.5	78-120	
13 Nitroglycerin	5.00	4.36	87.2	74-127	
14 o-Nitrotoluene	0.5000	0.4357	87.1	70-127	
15 p-Nitrotoluene	0.5000	0.4531	90.6	71-127	
16 4AMD	0.5000	0.4354	87.1	76-125	
17 m-Nitrotoluene	0.5000	0.4468	89.4	73-125	
18 2-Amino-4,6-dinitrotolu	0.5000	0.4371	87.4	79-120	
19 1,3,5-Trinitrobenzene	0.5000	0.4516	90.3	73-125	
20 2,6-Dinitrotoluene	0.5000	0.4547	90.9	77-127	
21 2,4-Dinitrotoluene	0.5000	0.4375	87.5	78-120	
22 Tetryl	0.5000	0.4501	90.0	64-128	
23 2,4,6-Trinitrotoluene	0.5000	0.4624	92.5	71-123	
24 PETN	5.00	4.48	89.6	73-127	

Samples for Limit Group: 1, Lims Prep Method: 8330B\_Sonc\_10g  
 280-146741-A-1-A 280-146741-A-2-A

Samples for Limit Group: 2, Lims Prep Method: 3535  
 280-146623-B-5-A 160-41555-D-1-A 160-41555-D-3-A  
 160-41555-C-5-A

Reagent

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**8330 LCS\_00110**

## Preliminary Report

Eurofins TestAmerica, Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC\_X\20210911-104610.b\09110006.D  
 Lims ID: 8330 LCS 110 Inj. Date: 11-Sep-2021 13:02:26  
 Worklist ID: 280-0104610-006 Instrument: CHHPLC\_X3  
 Method: 8330\_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 0B_Sonc_
3 HMX	0.5000	0.4719	94.4	80-120
7 RDX	0.5000	0.4840	96.8	80-124
8 2,4,6-Trinitrophenol	0.5000	0.5056	101.1	38-154
10 1,3,5-Trinitrobenzene	0.5000	0.5057	101.1	80-120
11 1,3-Dinitrobenzene	0.5000	0.5048	101.0	80-120
12 Nitrobenzene	0.5000	0.5000	100.0	76-122
14 Tetryl	0.5000	0.4937	98.7	80-120
15 Nitroglycerin	5.00	5.08	101.6	75-120
16 2,4,6-Trinitrotoluene	0.5000	0.5028	100.6	80-120
17 4AMD	0.5000	0.4802	96.0	80-120
18 2-Amino-4,6-dinitrotoluene	0.5000	0.4763	95.3	78-120
19 2,6-Dinitrotoluene	0.5000	0.5084	101.7	80-120
20 2,4-Dinitrotoluene	0.5000	0.4893	97.9	80-120
21 o-Nitrotoluene	0.5000	0.4885	97.7	80-124
22 p-Nitrotoluene	0.5000	0.4844	96.9	80-120
23 m-Nitrotoluene	0.5000	0.4840	96.8	80-122
24 PETN	5.00	4.97	99.5	80-120

Samples for Limit Group: 1, Lims Prep Method: 8330B\_Sonc\_10g

410-53698-B-2-C

410-53723-B-2-C

410-53698-B-4-C

410-53723-B-4-C

410-53698-B-6-K

Reagent

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**8330 Stock\_TS\_00015**



# 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.



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

# 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

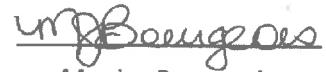
Expiration Date: 31-Mar-2022

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

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**8330 Stock\_TS\_00018**



# 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.

<b>Analyte</b>	<b>CAS#</b>	<b>Analyte Lot</b>	<b>True Value</b>
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.



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

# 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

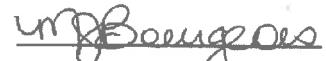
Expiration Date: 31-Mar-2022

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

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**8330\_NG\_Stk\_00094**

# RESTEK® CERTIFIED REFERENCE MATERIAL

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

[www.restek.com](http://www.restek.com)



## Certificate of Composition



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

**Catalog No. :** 568871

**Lot No.:** A0161450

**Description :** Custom Nitroglycerin Standard

Custom Nitroglycerin Standard 5,000 $\mu$ g/mL, Acetonitrile, 1mL/ampul

**Container Size :** 2 mL

**Pkg Amt:** > 1 mL

**Expiration Date :** June 30, 2023

**Storage:** 10°C or colder

### C E R T I F I E D   V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Nitroglycerin <b>CAS #</b> 55-63-0 <b>Purity</b> 99%	5,020.0 $\mu$ g/mL	+/- 46.6833 $\mu$ g/mL	+/- 277.3466 $\mu$ g/mL	Gravimetric Unstressed Stressed

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

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

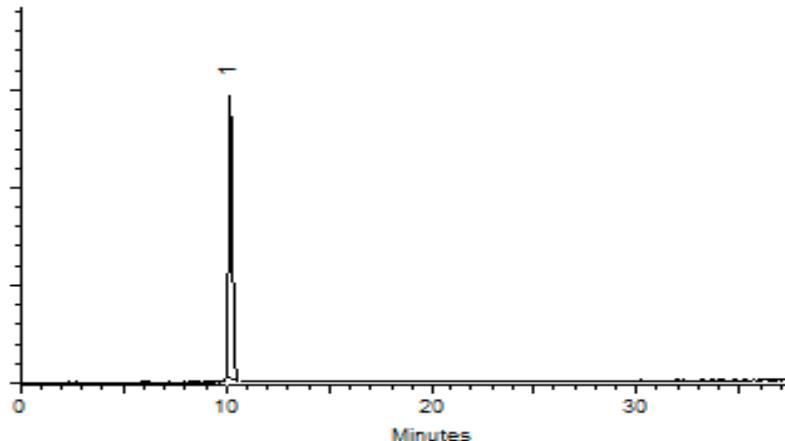
**Flow Rate:**  
1.0 ml/min.

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

**Mobile Phase B:**

**Mobile Phase Composition:**  
100%A

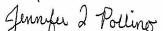
**Det. Type:**  
Wavelength: 210nm & 254nm



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.

  
**Matt Fragassi - Mix Technician**

**Date Mixed:** 03-Jun-2020      **Balance:** 1128342314

  
**Jennifer Pollino - Operations Tech-ARM QC**

**Date Passed:** 04-Jun-2020

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ $\mu$ ECD, 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:

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

*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 [| 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 \(Freezer\)<br>-20°C or colder \(Deep Freezer\) | < 25°C              | ≥ 25°C up to 7 days     |](http://www.restek.com>Contact-Us</a> for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.</li><li>• 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.</li></ul></div><div data-bbox=)

- 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 [### Manufacturing Notes:](http://www.restek.com>Contact-Us</a>.</li><li>• 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.</li></ul></div><div data-bbox=)

- 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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**8330\_NG\_Stk\_00105**



# CERTIFIED REFERENCE MATERIAL

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

[www.restek.com](http://www.restek.com)



## Certificate of Composition



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

**Catalog No.:** 568871

**Lot No.:** A0172805

**Description :** Custom Nitroglycerin Standard

Custom Nitroglycerin Standard 5,000 $\mu$ g/mL, Acetonitrile, 1mL/ampul

**Container Size :** 2 mL

**Pkg Amt:** > 1 mL

**Expiration Date :** May 31, 2024

**Storage:** 10°C or colder

**Ship:** Ambient

### C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Nitroglycerin <b>CAS #</b> 55-63-0 <b>Purity</b> 99%	5,000.0 $\mu$ g/mL	+/- 46.4973	$\mu$ g/mL	Gravimetric
	(Lot 200507JLM)		+/- 276.2417	$\mu$ g/mL	Unstressed
			+/- 321.4093	$\mu$ g/mL	Stressed

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

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

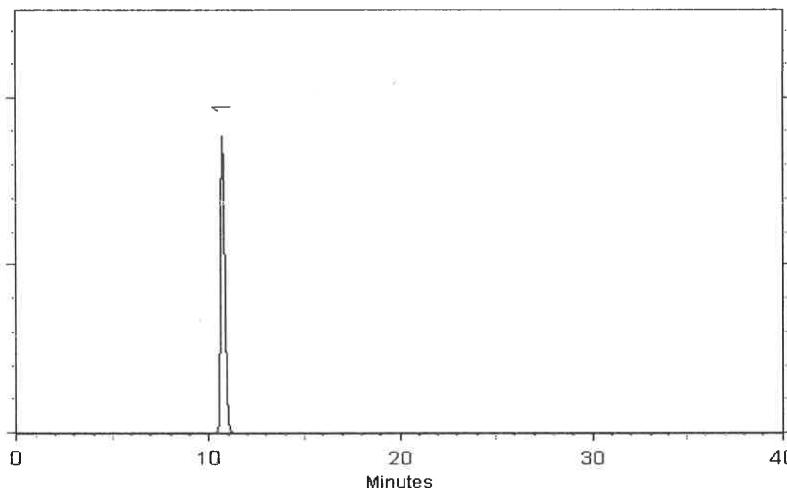
**Flow Rate:**  
1.0 ml/min.

**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.

*Cathleen Soltis*  
Cathleen Soltis - Mix Technician

Date Mixed: 26-May-2021 Balance: 1128360905

*Jennifer J Pollino*  
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 01-Jun-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/ $\mu$ ECD, 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:

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

*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 [| 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 \(Freezer\)<br>-20°C or colder \(Deep Freezer\) | < 25°C              | ≥ 25°C up to 7 days     |](http://www.restek.com>Contact-Us</a> for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.</li><li>• 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.</li></ul></div><div data-bbox=)

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- 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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**8330\_NG\_Stk\_00106**



# CERTIFIED REFERENCE MATERIAL

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

[www.restek.com](http://www.restek.com)



## Certificate of Composition



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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**Catalog No.:** 568871

**Lot No.:** A0172805

**Description :** Custom Nitroglycerin Standard

Custom Nitroglycerin Standard 5,000 $\mu$ g/mL, Acetonitrile, 1mL/ampul

**Container Size :** 2 mL

**Pkg Amt:** > 1 mL

**Expiration Date :** May 31, 2024

**Storage:** 10°C or colder

**Ship:** Ambient

### C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Nitroglycerin <b>CAS #</b> 55-63-0 <b>Purity</b> 99%	5,000.0 $\mu$ g/mL	+/- 46.4973	$\mu$ g/mL	Gravimetric
	(Lot 200507JLM)		+/- 276.2417	$\mu$ g/mL	Unstressed
			+/- 321.4093	$\mu$ g/mL	Stressed

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

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

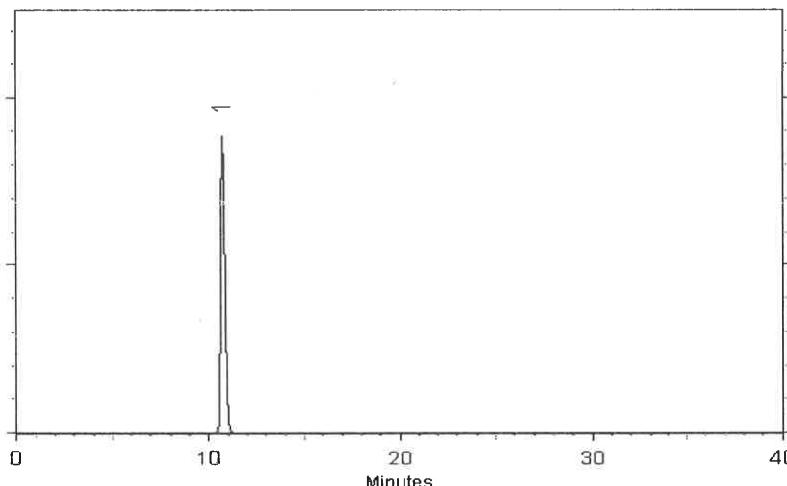
**Flow Rate:**  
1.0 ml/min.

**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.

*Cathleen Soltis*  
Cathleen Soltis - Mix Technician

Date Mixed: 26-May-2021 Balance: 1128360905

*Jennifer J Pollino*  
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 01-Jun-2021

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

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- Purity values are rounded to the nearest whole number.

### Certified Uncertainty Value Notes:

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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 [| Label Conditions  | Standard Conditions | Non-Standard Conditions |
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| 10°C or colder \(Refrigerate\)                              | < 40°C              | ≥ 40°C up to 7 days     |
| 0°C or colder \(Freezer\)<br>-20°C or colder \(Deep Freezer\) | < 25°C              | ≥ 25°C up to 7 days     |](http://www.restek.com>Contact-Us</a> for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.</li><li>• 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.</li></ul></div><div data-bbox=)

- 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 [### Manufacturing Notes:](http://www.restek.com>Contact-Us</a>.</li><li>• 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.</li></ul></div><div data-bbox=)

- 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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**8330\_OP\_DMT\_00009**

## Preliminary Report

Eurofins TestAmerica, Denver  
LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC\_X\20200818-94226.b\08180006.D  
 Lims ID: C18column:B16162 Inj. Date: 18-Aug-2020 16:53:53  
 Worklist ID: 280-0094226-006 Instrument: CHHPLC\_X3  
 Method: 8330\_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 3535	Limits 2 3535	Limits 3 3535
2 TNX	0.2503	0.2275	90.9	50-150		
5 DNX	0.2503	0.2475	98.9	66-119	50-150	
6 MNX	0.2918	0.2601	89.2	57-132	68-123	

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

280-139502-A-1-A	280-139502-A-2-A	280-139502-A-3-A
280-139502-A-4-A	280-139485-A-1-A	280-139485-A-2-A
280-139485-A-3-A	280-139485-A-4-A	280-139485-A-5-A
280-139362-A-1-A	280-139362-A-2-A	280-139362-A-3-A
280-139434-A-12-A	280-139434-A-14-A	280-139434-A-16-A
280-139434-A-18-A	280-139434-A-20-A	280-139434-A-22-A
280-139434-A-28-A	280-139434-A-35-A	280-139434-A-41-A
280-139466-A-6-A	280-139466-A-13-A	280-139472-A-4-A
280-139472-A-15-A	280-139435-A-1-A	280-139467-A-9-A
280-139469-A-6-A	280-139469-A-17-A	280-139470-A-4-A
280-139470-A-14-A		

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

600-209588-G-1-A	280-139486-A-1-A	280-139486-A-2-A
280-139514-A-1-A	280-139514-A-2-A	280-139514-A-3-A
280-139514-A-4-A		

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

280-139522-A-1-A	280-139524-A-1-A
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Reagent

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**8330\_OP\_DMT\_00011**

## Preliminary Report

Eurofins TestAmerica, Denver  
LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC\_X\20210602-102004.b\06020006.D  
 Lims ID: C18column:B16162 Inj. Date: 02-Jun-2021 16:51:12  
 Worklist ID: 280-0102004-006 Instrument: CHHPLC\_X3  
 Method: 8330\_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 3535
2 TNX	0.5005	0.5222	104.3	50-150
5 DNX	0.5005	0.5023	100.4	66-119
6 MNX	0.5835	0.5910	101.3	57-132

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

280-149049-A-5-A	280-149049-A-11-A	280-149049-A-12-A
280-149013-A-16-A	280-149013-A-17-A	280-149013-A-18-A
280-149013-B-19-A	280-149013-B-21-A	280-149013-A-22-A
280-149013-A-23-A	280-149013-B-24-A	280-149013-B-25-A
280-149013-B-26-A	280-149013-B-27-A	280-149013-A-28-A
280-149013-A-29-A	280-149013-A-30-A	280-149013-B-31-A
280-149013-B-32-A	280-149013-B-33-A	280-149013-A-34-A
280-149013-B-35-A	280-149013-B-36-A	

Reagent

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**8330\_PETN\_Stk\_00087**

# RESTEK® CERTIFIED REFERENCE MATERIAL

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

[www.restek.com](http://www.restek.com)



## Certificate of Composition



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

**Catalog No. :** 568872

**Lot No.:** A0154763

**Description :** Custom PETN Standard

Custom PETN Standard 5,000 $\mu$ g/mL, Acetonitrile, 1mL/ampul

**Container Size :** 2 mL

**Pkg Amt:** > 1 mL

**Expiration Date :** November 30, 2022

**Storage:** 10°C or colder

### C E R T I F I E D   V A L U E S

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

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

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

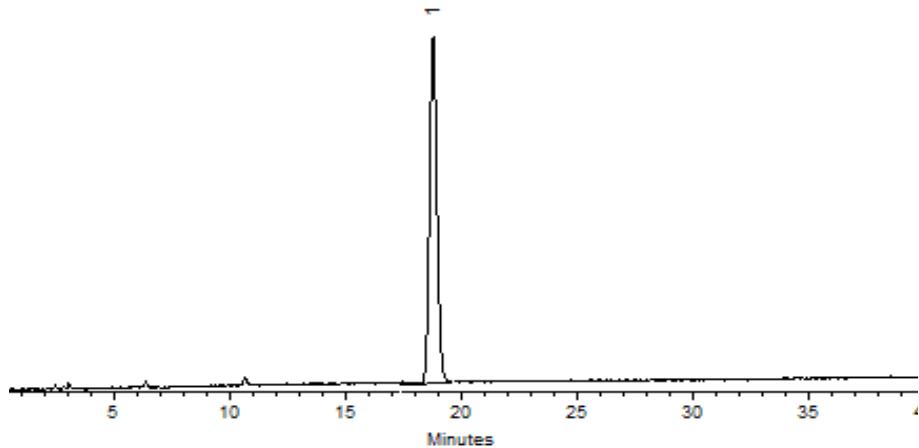
**Flow Rate:**  
1.0 ml/min.

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

**Mobile Phase B:**

**Mobile Phase Composition:**  
100%A

**Det. Type:**  
Wavelength: 210 nm



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

Clara Windle - Operations Technician I

Date Mixed: 05-Nov-2019      Balance: B442140311

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 08-Nov-2019

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ $\mu$ ECD, 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:

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

$k$  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 [| 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     |](http://www.restek.com>Contact-Us</a> for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.</li><li>• 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.</li></ul></div><div data-bbox=)

- 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 [### Manufacturing Notes:](http://www.restek.com>Contact-Us</a>.</li><li>• 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.</li></ul></div><div data-bbox=)

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

### Handling Notes:

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

Reagent

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**8330\_PETN\_Stk\_00106**



# CERTIFIED REFERENCE MATERIAL

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

[www.restek.com](http://www.restek.com)



## Certificate of Composition



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

**Catalog No.:** 568872

**Lot No.:** A0168448

**Description :** Custom PETN Standard

Custom PETN Standard 5,000 $\mu$ g/mL, Acetonitrile, 1mL/ampul

**Container Size :** 2 mL

**Pkg Amt:** > 1 mL

**Expiration Date :** January 31, 2024

**Storage:** 10°C or colder

**Ship:** Ambient

### C E R T I F I E D   V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	PETN	5,008.0 $\mu$ g/mL	+/- 46.5717	$\mu$ g/mL	Gravimetric
	CAS # 78-11-5		+/- 276.6836	$\mu$ g/mL	Unstressed
	Purity 99%		+/- 321.9236	$\mu$ g/mL	Stressed

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

Reel 2121/21 3 vials  
AL

Reagent

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**8330\_PETN\_Stk\_00108**



# CERTIFIED REFERENCE MATERIAL

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

[www.restek.com](http://www.restek.com)

## Certificate of Composition



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

**Catalog No.:** 568872

**Lot No.:** A0168448

**Description :** Custom PETN Standard

Custom PETN Standard 5,000 $\mu$ g/mL, Acetonitrile, 1mL/ampul

**Container Size :** 2 mL

**Pkg Amt:** > 1 mL

**Expiration Date :** January 31, 2024

**Storage:** 10°C or colder

**Ship:** Ambient

### C E R T I F I E D   V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	PETN	5,008.0 $\mu$ g/mL	+/-	46.5717 $\mu$ g/mL	Gravimetric
	CAS # 78-11-5		+/-	276.6836 $\mu$ g/mL	Unstressed
	Purity 99%		+/-	321.9236 $\mu$ g/mL	Stressed

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

Rec 2121/21 3 viials  
AL

Reagent

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**8330LCSM**ix1\_00121****

4 vials Rec. 10/6/20  
8330 Cali mix #1



# CERTIFIED REFERENCE MATERIAL

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

[www.restek.com](http://www.restek.com)



## Certificate of Analysis

### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

**Catalog No. :** 31450

**Lot No.:** A0163590

**Description :** 8330 Calibration Mix #1

8330 Calibration Std #1 1000 $\mu$ g/mL, Acetonitrile, 1mL/ampul

**Container Size :** 2 mL

**Pkg Amt:** > 1 mL

**Expiration Date :** August 31, 2025

**Storage:** 10°C or colder

**Ship:** Ambient

### C E R T I F I E D V A L U E S

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	HMX <b>CAS #</b> 2691-41-0 <b>Purity</b> 98%	(Lot 191003JLM)	1,002.5 $\mu$ g/mL	+/- 5.9548 +/- 54.9222 +/- 64.0446	$\mu$ g/mL $\mu$ g/mL $\mu$ g/mL	Gravimetric Unstressed Stressed
2	RDX <b>CAS #</b> 121-82-4 <b>Purity</b> 99%	(Lot 080228JLM)	1,005.0 $\mu$ g/mL	+/- 5.9694 +/- 55.0569 +/- 64.2018	$\mu$ g/mL $\mu$ g/mL $\mu$ g/mL	Gravimetric Unstressed Stressed
3	1,3,5-Trinitrobenzene <b>CAS #</b> 99-35-4 <b>Purity</b> 99%	(Lot A6TDK)	1,005.0 $\mu$ g/mL	+/- 5.9694 +/- 55.0569 +/- 64.2018	$\mu$ g/mL $\mu$ g/mL $\mu$ g/mL	Gravimetric Unstressed Stressed
4	1,3-Dinitrobenzene <b>CAS #</b> 99-65-0 <b>Purity</b> 99%	(Lot BCBN4329V)	1,007.0 $\mu$ g/mL	+/- 5.9813 +/- 55.1665 +/- 64.3295	$\mu$ g/mL $\mu$ g/mL $\mu$ g/mL	Gravimetric Unstressed Stressed
5	Nitrobenzene <b>CAS #</b> 98-95-3 <b>Purity</b> 99%	(Lot SHBJ3622)	1,000.0 $\mu$ g/mL	+/- 5.9397 +/- 54.7830 +/- 63.8824	$\mu$ g/mL $\mu$ g/mL $\mu$ g/mL	Gravimetric Unstressed Stressed
6	2,4,6-Trinitrotoluene <b>CAS #</b> 118-96-7 <b>Purity</b> 99%	(Lot 5737200)	1,006.0 $\mu$ g/mL	+/- 5.9753 +/- 55.1117 +/- 64.2657	$\mu$ g/mL $\mu$ g/mL $\mu$ g/mL	Gravimetric Unstressed Stressed
7	2,4-Dinitrotoluene <b>CAS #</b> 121-14-2 <b>Purity</b> 99%	(Lot MKAA0690V)	1,009.0 $\mu$ g/mL	+/- 5.9932 +/- 55.2761 +/- 64.4573	$\mu$ g/mL $\mu$ g/mL $\mu$ g/mL	Gravimetric Unstressed Stressed

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

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

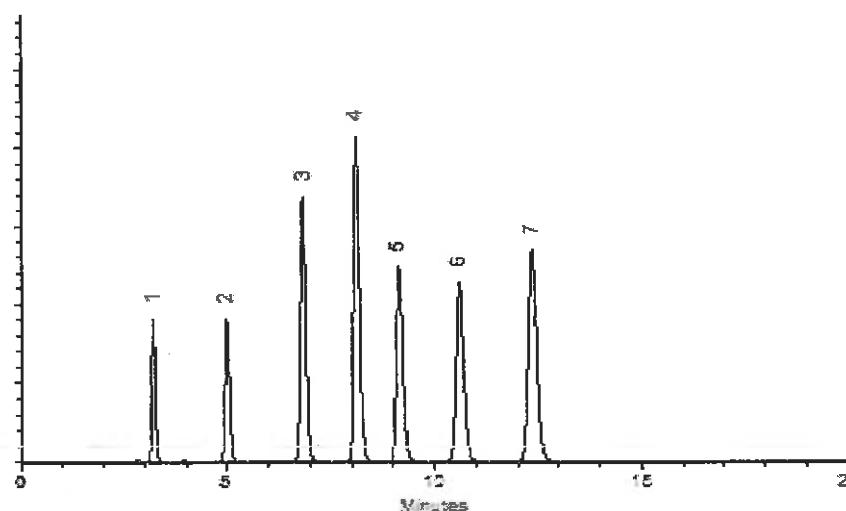
**Flow Rate:**  
1.0 ml/min.

**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.

*Dalton Stover*  
\_\_\_\_\_  
Dalton Stover - Operations Technician I

Date Mixed: 17-Aug-2020 Balance: 1128353505

*Jennifer Pollino*  
\_\_\_\_\_  
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 19-Aug-2020

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

Reagent

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**8330LCSM**ix1\_00124****

4 vials Rec. 10/6/20  
8330 Cali mix #1



# CERTIFIED REFERENCE MATERIAL

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

[www.restek.com](http://www.restek.com)



## Certificate of Analysis

### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

**Catalog No. :** 31450

**Lot No.:** A0163590

**Description :** 8330 Calibration Mix #1

8330 Calibration Std #1 1000 $\mu$ g/mL, Acetonitrile, 1mL/ampul

**Container Size :** 2 mL

**Pkg Amt:** > 1 mL

**Expiration Date :** August 31, 2025

**Storage:** 10°C or colder

**Ship:** Ambient

### C E R T I F I E D V A L U E S

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	HMX <b>CAS #</b> 2691-41-0 <b>Purity</b> 98%	(Lot 191003JLM)	1,002.5 $\mu$ g/mL	+/- +/- +/-	5.9548 54.9222 64.0446	$\mu$ g/mL $\mu$ g/mL $\mu$ g/mL	Gravimetric Unstressed Stressed
2	RDX <b>CAS #</b> 121-82-4 <b>Purity</b> 99%	(Lot 080228JLM)	1,005.0 $\mu$ g/mL	+/- +/- +/-	5.9694 55.0569 64.2018	$\mu$ g/mL $\mu$ g/mL $\mu$ g/mL	Gravimetric Unstressed Stressed
3	1,3,5-Trinitrobenzene <b>CAS #</b> 99-35-4 <b>Purity</b> 99%	(Lot A6TDK)	1,005.0 $\mu$ g/mL	+/- +/- +/-	5.9694 55.0569 64.2018	$\mu$ g/mL $\mu$ g/mL $\mu$ g/mL	Gravimetric Unstressed Stressed
4	1,3-Dinitrobenzene <b>CAS #</b> 99-65-0 <b>Purity</b> 99%	(Lot BCBN4329V)	1,007.0 $\mu$ g/mL	+/- +/- +/-	5.9813 55.1665 64.3295	$\mu$ g/mL $\mu$ g/mL $\mu$ g/mL	Gravimetric Unstressed Stressed
5	Nitrobenzene <b>CAS #</b> 98-95-3 <b>Purity</b> 99%	(Lot SHBJ3622)	1,000.0 $\mu$ g/mL	+/- +/- +/-	5.9397 54.7830 63.8824	$\mu$ g/mL $\mu$ g/mL $\mu$ g/mL	Gravimetric Unstressed Stressed
6	2,4,6-Trinitrotoluene <b>CAS #</b> 118-96-7 <b>Purity</b> 99%	(Lot 5737200)	1,006.0 $\mu$ g/mL	+/- +/- +/-	5.9753 55.1117 64.2657	$\mu$ g/mL $\mu$ g/mL $\mu$ g/mL	Gravimetric Unstressed Stressed
7	2,4-Dinitrotoluene <b>CAS #</b> 121-14-2 <b>Purity</b> 99%	(Lot MKAA0690V)	1,009.0 $\mu$ g/mL	+/- +/- +/-	5.9932 55.2761 64.4573	$\mu$ g/mL $\mu$ g/mL $\mu$ g/mL	Gravimetric Unstressed Stressed

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

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

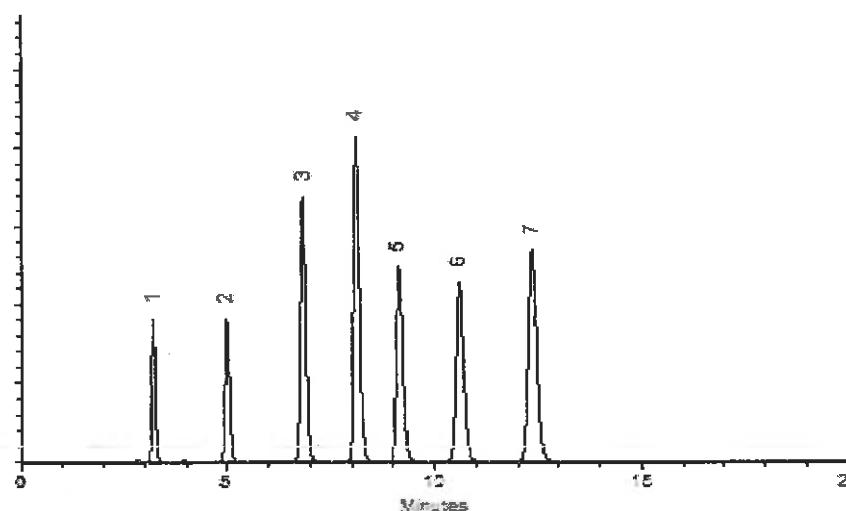
**Flow Rate:**  
1.0 ml/min.

**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.

*Dalton Stover*  
\_\_\_\_\_  
Dalton Stover - Operations Technician I

Date Mixed: 17-Aug-2020 Balance: 1128353505

*Jennifer Pollino*  
\_\_\_\_\_  
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 19-Aug-2020

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

Reagent

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**8330LCSmix2\_00023**



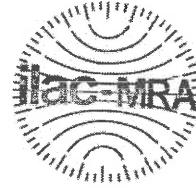
Rec 1/22/21 in 2 vials  
**CERTIFIED REFERENCE MATERIAL**

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

[www.restek.com](http://www.restek.com)



## Certificate of Analysis



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

**Catalog No. :** 31451

**Lot No.:** A0165983

**Description :** 8330 Calibration Mix #2

8330 Calibration Std #2 1000 $\mu$ g/mL, Acetonitrile, 1mL/ampul

**Container Size :** 2 mL

**Pkg Amt:** > 1 mL

**Expiration Date :** November 30, 2025

**Storage:** 10°C or colder

**Ship:** Ambient

### C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Tetryl <b>CAS #</b> 479-45-8 <b>Purity</b> 99%	1,000.6 $\mu$ g/mL	+/- 5.9433	$\mu$ g/mL	Gravimetric
			+/- 54.8159	$\mu$ g/mL	Unstressed
			+/- 63.9207	$\mu$ g/mL	Stressed
2	4-Amino-2,6-dinitrotoluene <b>CAS #</b> 19406-51-0 <b>Purity</b> 99%	1,000.8 $\mu$ g/mL	+/- 5.9444	$\mu$ g/mL	Gravimetric
			+/- 54.8268	$\mu$ g/mL	Unstressed
			+/- 63.9335	$\mu$ g/mL	Stressed
3	2-Amino-4,6-dinitrotoluene <b>CAS #</b> 35572-78-2 <b>Purity</b> 99%	1,001.0 $\mu$ g/mL	+/- 5.9456	$\mu$ g/mL	Gravimetric
			+/- 54.8378	$\mu$ g/mL	Unstressed
			+/- 63.9463	$\mu$ g/mL	Stressed
4	2,6-Dinitrotoluene <b>CAS #</b> 606-20-2 <b>Purity</b> 99%	1,001.0 $\mu$ g/mL	+/- 5.9456	$\mu$ g/mL	Gravimetric
			+/- 54.8378	$\mu$ g/mL	Unstressed
			+/- 63.9463	$\mu$ g/mL	Stressed
5	2-Nitrotoluene <b>CAS #</b> 88-72-2 <b>Purity</b> 99%	1,000.6 $\mu$ g/mL	+/- 5.9433	$\mu$ g/mL	Gravimetric
			+/- 54.8159	$\mu$ g/mL	Unstressed
			+/- 63.9207	$\mu$ g/mL	Stressed
6	4-Nitrotoluene <b>CAS #</b> 99-99-0 <b>Purity</b> 99%	1,001.2 $\mu$ g/mL	+/- 5.9468	$\mu$ g/mL	Gravimetric
			+/- 54.8487	$\mu$ g/mL	Unstressed
			+/- 63.9590	$\mu$ g/mL	Stressed
7	3-Nitrotoluene <b>CAS #</b> 99-08-1 <b>Purity</b> 99%	1,000.4 $\mu$ g/mL	+/- 5.9421	$\mu$ g/mL	Gravimetric
			+/- 54.8049	$\mu$ g/mL	Unstressed
			+/- 63.9079	$\mu$ g/mL	Stressed

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

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

### Certified Uncertainty Value Notes:

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

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

*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 [| 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 \(Freezer\)<br>-20°C or colder \(Deep Freezer\) | < 25°C              | ≥ 25°C up to 7 days     |](http://www.restek.com>Contact-Us</a> for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.</li><li>• 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.</li></ul></div><div data-bbox=)

- 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 [### Manufacturing Notes:](http://www.restek.com>Contact-Us</a>.</li><li>• 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.</li></ul></div><div data-bbox=)

- 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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**8330LCSmix2\_00024**



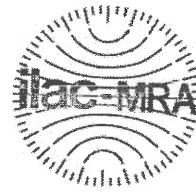
Rec 1/22/21 in 2 vials  
**CERTIFIED REFERENCE MATERIAL**

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

[www.restek.com](http://www.restek.com)



## Certificate of Analysis



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. :	31451	Lot No.:	A0165983
Description :	8330 Calibration Mix #2		
	8330 Calibration Std #2 1000 $\mu$ g/mL, Acetonitrile, 1mL/ampul		
Container Size :	2 mL	Pkg Amt:	> 1 mL
Expiration Date :	November 30, 2025	Storage:	10°C or colder
		Ship:	Ambient

### C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Tetryl CAS # 479-45-8 Purity 99%	1,000.6 $\mu$ g/mL	+/- 5.9433 $\mu$ g/mL	+/- 54.8159 $\mu$ g/mL	+/- 63.9207 $\mu$ g/mL
	(Lot 091120JLM)				
2	4-Amino-2,6-dinitrotoluene CAS # 19406-51-0 Purity 99%	1,000.8 $\mu$ g/mL	+/- 5.9444 $\mu$ g/mL	+/- 54.8268 $\mu$ g/mL	+/- 63.9335 $\mu$ g/mL
	(Lot ER070908-01)				
3	2-Amino-4,6-dinitrotoluene CAS # 35572-78-2 Purity 99%	1,001.0 $\mu$ g/mL	+/- 5.9456 $\mu$ g/mL	+/- 54.8378 $\mu$ g/mL	+/- 63.9463 $\mu$ g/mL
	(Lot 29550-55)				
4	2,6-Dinitrotoluene CAS # 606-20-2 Purity 99%	1,001.0 $\mu$ g/mL	+/- 5.9456 $\mu$ g/mL	+/- 54.8378 $\mu$ g/mL	+/- 63.9463 $\mu$ g/mL
	(Lot BCBB8606)				
5	2-Nitrotoluene CAS # 88-72-2 Purity 99%	1,000.6 $\mu$ g/mL	+/- 5.9433 $\mu$ g/mL	+/- 54.8159 $\mu$ g/mL	+/- 63.9207 $\mu$ g/mL
	(Lot BCBZ7826)				
6	4-Nitrotoluene CAS # 99-99-0 Purity 99%	1,001.2 $\mu$ g/mL	+/- 5.9468 $\mu$ g/mL	+/- 54.8487 $\mu$ g/mL	+/- 63.9590 $\mu$ g/mL
	(Lot FAU01)				
7	3-Nitrotoluene CAS # 99-08-1 Purity 99%	1,000.4 $\mu$ g/mL	+/- 5.9421 $\mu$ g/mL	+/- 54.8049 $\mu$ g/mL	+/- 63.9079 $\mu$ g/mL
	(Lot 07329LG)				

## 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:

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

*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 [| 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 \(Freezer\)<br>-20°C or colder \(Deep Freezer\) | < 25°C              | ≥ 25°C up to 7 days     |](http://www.restek.com>Contact-Us</a> for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.</li><li>• 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.</li></ul></div><div data-bbox=)

- 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 [### Manufacturing Notes:](http://www.restek.com>Contact-Us</a>.</li><li>• 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.</li></ul></div><div data-bbox=)

- 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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**8330PASTkPS\_00064**



# CERTIFICATE OF ANALYSIS

**Catalog No:** M-8330-ADD-3

**Description:** Picric acid

**Lot:** 218031154-01

**Solvent:** Acetonitrile (50%)  
Methanol (50%)

**Hazards:** Refer to SDS for complete safety information



Signal Word: Danger

**Date Certified:** Apr 22, 2019

**Expiration:** May 22, 2021

**Sample Size:** 1 mL

**Components:** 1

**Storage Condition:** Ambient (>5 °C)

## Certified Reference Material



Component	CAS #	Purity % (HPLC)	Prepared Concentration <sup>2</sup> ( $\mu$ g/mL)	Certified Analyte Concentration <sup>1</sup> ( $\mu$ g/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.

<sup>2</sup> All weights are traceable through NIST, Test No. 822-275872-11

<sup>1</sup> Certified Analyte Concentration = Purity x Prepared Concentration.

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

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

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

Certified By:

  
Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

Reagent

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**8330Surrogate\_00124**

## Preliminary Report

Eurofins TestAmerica, Denver  
LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC\_X\20210330-100173.b\03300006.D  
 Lims ID: C18column:B16162 Inj. Date: 30-Mar-2021 16:29:09  
 Worklist ID: 280-0100173-006 Instrument: CHHPLC\_X3  
 Method: 8330\_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 3535	Limits 2 3535	Limits 3 3535	Limits 4 3535
\$ 9 1,2-Dinitrobenzene	0.5000	0.4768	95.4	63-127	83-119		

Samples for Limit Group: 1, Lims Prep Method: 3535  
860-270-C-1-A

Samples for Limit Group: 2, Lims Prep Method: 3535  
280-146579-B-1-A

Samples for Limit Group: 3, Lims Prep Method: 3535  
280-146648-A-7-A 280-146741-A-1-A 280-146741-A-2-A  
280-146741-A-3-A 280-146741-G-8-A

Samples for Limit Group: 4, Lims Prep Method: 3535  
280-146625-B-1-A 280-146625-B-2-A 280-146623-A-1-A  
280-146623-B-2-A 280-146623-A-3-A 280-146623-A-4-A  
280-146623-B-5-A 280-146623-A-6-A 280-146623-B-7-A

Reagent

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**8330Surrogate\_00126**

## Preliminary Report

Eurofins TestAmerica, Denver  
LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC\_X\20210909-104566.b\09090006.D  
 Lims ID: Surr126 Inj. Date: 09-Sep-2021 17:47:23  
 Worklist ID: 280-0104566-006 Instrument: CHHPLC\_X3  
 Method: 8330\_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 0B_Sonc_	Limits 2 3535
\$ 9 1,2-Dinitrobenzene	0.5000	0.5068	101.4	63-127	83-119

Samples for Limit Group: 1, Lims Prep Method: 8330B\_Sonc\_10g

280-152693-A-1-A	280-152693-A-2-A	280-152693-A-3-A
280-152693-B-4-A	400-207943-E-1-A	

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

280-152643-B-1-A	280-152643-B-2-A	280-152643-B-3-A
280-152643-B-4-A	280-152643-A-5-A	280-152538-B-1-A
280-152538-B-6-A		

Reagent

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**8330SurrStkSS\_00185**



# CERTIFIED REFERENCE MATERIAL

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

[www.restek.com](http://www.restek.com)



## Certificate of Analysis



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

**Catalog No.:** 31453

**Lot No.:** A0160559

**Description :** 8330 Surrogate Mix

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

**Container Size :** 2 mL

**Pkg Amt:** > 1 mL

**Expiration Date :** May 31, 2025

**Storage:** 10°C or colder

### C E R T I F I E D   V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,2-Dinitrobenzene <b>CAS #</b> 528-29-0 <b>Purity</b> 99%	1,002.0 µg/mL	+/- 5.9516 µg/mL	+/- 56.1943 µg/mL	+/- 57.5086 µg/mL

**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:**

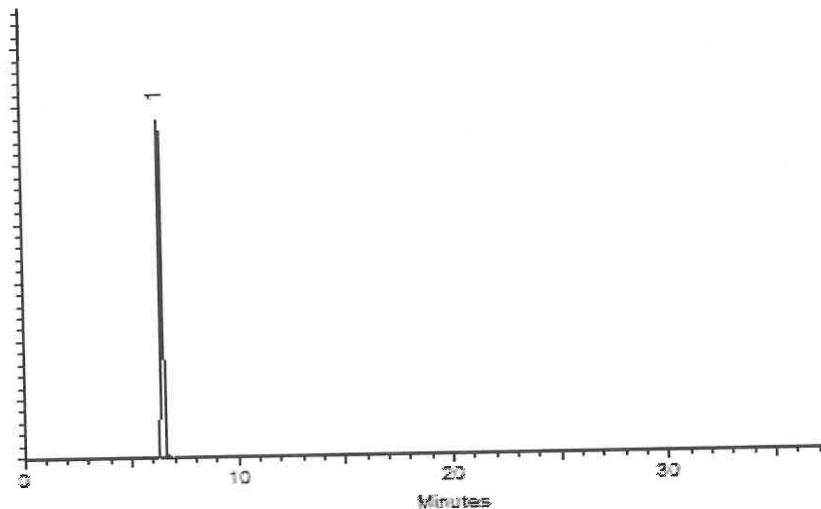
water:methanol (44:56 V/V)

**Mobile Phase B:****Mobile Phase Composition:**

100%A

**Det. Type:**

Wavelength: 210nm &amp; 254nm



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

  
Tom Suckar - Mix Technician

Date Mixed: 05-May-2020      Balance: B442140311

  
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 08-May-2020

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

Reagent

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**8330SurrStkSS\_00187**



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

[www.restek.com](http://www.restek.com)

Rec 1/22/21 ac 2 vials  
CERTIFIED REFERENCE MATERIAL



## Certificate of Analysis



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

**Catalog No. :** 31453

**Lot No.:** A0164261

**Description :** 8330 Surrogate Mix

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

**Container Size :** 2 mL

**Pkg Amt:** > 1 mL

**Expiration Date :** September 30, 2025

**Storage:** 10°C or colder

**Ship:** Ambient

### C E R T I F I E D   V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,2-Dinitrobenzene <b>CAS #</b> 528-29-0 <b>Purity</b> 99%	1,007.0 µg/mL	+/- 5.9813	µg/mL	Gravimetric
	(Lot MKCH6067)		+/- 56.4747	µg/mL	Unstressed
			+/- 57.7956	µg/mL	Stressed

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ $\mu$ ECD, 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:

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

$k$  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 [| 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 \(Freezer\)<br>-20°C or colder \(Deep Freezer\) | < 25°C              | ≥ 25°C up to 7 days     |](http://www.restek.com>Contact-Us</a> for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.</li><li>• 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.</li></ul></div><div data-bbox=)

- 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 [### Manufacturing Notes:](http://www.restek.com>Contact-Us</a>.</li><li>• 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.</li></ul></div><div data-bbox=)

- 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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**8330SurrStkSS\_00188**



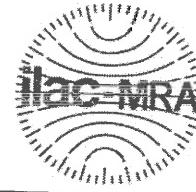
110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: (800)356-1688  
Fax: (814)353-1309

[www.restek.com](http://www.restek.com)

Rec 1/22/21 ac 2 vials  
CERTIFIED REFERENCE MATERIAL



## Certificate of Analysis



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

**Catalog No. :** 31453

**Lot No.:** A0164261

**Description :** 8330 Surrogate Mix

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

**Container Size :** 2 mL

**Pkg Amt:** > 1 mL

**Expiration Date :** September 30, 2025

**Storage:** 10°C or colder

**Ship:** Ambient

### C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,2-Dinitrobenzene <b>CAS #</b> 528-29-0 <b>Purity</b> 99%	1,007.0 µg/mL	+/- 5.9813	µg/mL	Gravimetric
	(Lot MKCH6067)		+/- 56.4747	µg/mL	Unstressed
			+/- 57.7956	µg/mL	Stressed

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ $\mu$ ECD, 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:

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

*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 [| 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 \(Freezer\)<br>-20°C or colder \(Deep Freezer\) | < 25°C              | ≥ 25°C up to 7 days     |](http://www.restek.com>Contact-Us</a> for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.</li><li>• 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.</li></ul></div><div data-bbox=)

- 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 [### Manufacturing Notes:](http://www.restek.com>Contact-Us</a>.</li><li>• 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.</li></ul></div><div data-bbox=)

- 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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**8330SurrStkSS\_00192**



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

[www.restek.com](http://www.restek.com)

Rec 1/22/21 ac 2 vials  
CERTIFIED REFERENCE MATERIAL



## Certificate of Analysis



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

**Catalog No. :** 31453

**Lot No.:** A0164261

**Description :** 8330 Surrogate Mix

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

**Container Size :** 2 mL

**Pkg Amt:** > 1 mL

**Expiration Date :** September 30, 2025

**Storage:** 10°C or colder

**Ship:** Ambient

### C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,2-Dinitrobenzene <b>CAS #</b> 528-29-0 <b>Purity</b> 99%	1,007.0 µg/mL	+/- 5.9813	µg/mL	Gravimetric
	(Lot MKCH6067)		+/- 56.4747	µg/mL	Unstressed
			+/- 57.7956	µg/mL	Stressed

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ $\mu$ ECD, 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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$k$  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 [| 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 \(Freezer\)<br>-20°C or colder \(Deep Freezer\) | < 25°C              | ≥ 25°C up to 7 days     |](http://www.restek.com>Contact-Us</a> for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.</li><li>• 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.</li></ul></div><div data-bbox=)

- 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 [### Manufacturing Notes:](http://www.restek.com>Contact-Us</a>.</li><li>• 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.</li></ul></div><div data-bbox=)

- 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.

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Reagent

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**8330SurrStkSS\_00193**



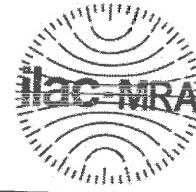
110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: (800)356-1688  
Fax: (814)353-1309

[www.restek.com](http://www.restek.com)

Rec 1/22/21 ac 2 vials  
CERTIFIED REFERENCE MATERIAL



## Certificate of Analysis



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

**Catalog No. :** 31453

**Lot No.:** A0164261

**Description :** 8330 Surrogate Mix

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

**Container Size :** 2 mL

**Pkg Amt:** > 1 mL

**Expiration Date :** September 30, 2025

**Storage:** 10°C or colder

**Ship:** Ambient

### C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,2-Dinitrobenzene <b>CAS #</b> 528-29-0 <b>Purity</b> 99%	1,007.0 µg/mL	+/- 5.9813	µg/mL	Gravimetric
	(Lot MKCH6067)		+/- 56.4747	µg/mL	Unstressed
			+/- 57.7956	µg/mL	Stressed

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ $\mu$ ECD, 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:

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

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|---|---------------------|-------------------------|
| 25°C Nominal \(Room Temperature\)                           | < 60°C              | ≥ 60°C up to 7 days     |
| 10°C or colder \(Refrigerate\)                              | < 40°C              | ≥ 40°C up to 7 days     |
| 0°C or colder \(Freezer\)<br>-20°C or colder \(Deep Freezer\) | < 25°C              | ≥ 25°C up to 7 days     |](http://www.restek.com>Contact-Us</a> for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.</li><li>• 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.</li></ul></div><div data-bbox=)

- 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 [### Manufacturing Notes:](http://www.restek.com>Contact-Us</a>.</li><li>• 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.</li></ul></div><div data-bbox=)

- 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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**8330SurrStkSS\_00195**



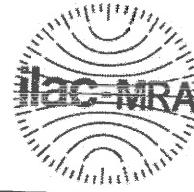
110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: (800)356-1688  
Fax: (814)353-1309

[www.restek.com](http://www.restek.com)

Rec 1/22/21 ac 2 vials  
CERTIFIED REFERENCE MATERIAL



## Certificate of Analysis



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

**Catalog No. :** 31453

**Lot No.:** A0164261

**Description :** 8330 Surrogate Mix

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

**Container Size :** 2 mL

**Pkg Amt:** > 1 mL

**Expiration Date :** September 30, 2025

**Storage:** 10°C or colder

**Ship:** Ambient

### C E R T I F I E D   V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,2-Dinitrobenzene <b>CAS #</b> 528-29-0 <b>Purity</b> 99%	1,007.0 µg/mL	+/- 5.9813	µg/mL	Gravimetric
	(Lot MKCH6067)		+/- 56.4747	µg/mL	Unstressed
			+/- 57.7956	µg/mL	Stressed

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ $\mu$ ECD, 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:

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

$k$  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 [| 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 \(Freezer\)<br>-20°C or colder \(Deep Freezer\) | < 25°C              | ≥ 25°C up to 7 days     |](http://www.restek.com>Contact-Us</a> for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.</li><li>• 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.</li></ul></div><div data-bbox=)

- 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 [### Manufacturing Notes:](http://www.restek.com>Contact-Us</a>.</li><li>• 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.</li></ul></div><div data-bbox=)

- 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.

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Reagent

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**8330SurrStkSS\_00197**



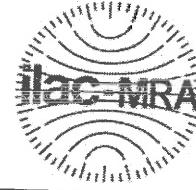
110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: (800)356-1688  
Fax: (814)353-1309

[www.restek.com](http://www.restek.com)

Rec 1/22/21 ac 2 vials  
CERTIFIED REFERENCE MATERIAL



## Certificate of Analysis



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

**Catalog No. :** 31453

**Lot No.:** A0164261

**Description :** 8330 Surrogate Mix

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

**Container Size :** 2 mL

**Pkg Amt:** > 1 mL

**Expiration Date :** September 30, 2025

**Storage:** 10°C or colder

**Ship:** Ambient

### C E R T I F I E D   V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,2-Dinitrobenzene <b>CAS #</b> 528-29-0 <b>Purity</b> 99%	1,007.0 µg/mL	+/- 5.9813	µg/mL	Gravimetric
	(Lot MKCH6067)		+/- 56.4747	µg/mL	Unstressed
			+/- 57.7956	µg/mL	Stressed

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ $\mu$ ECD, 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:

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

*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 [| 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 \(Freezer\)<br>-20°C or colder \(Deep Freezer\) | < 25°C              | ≥ 25°C up to 7 days     |](http://www.restek.com>Contact-Us</a> for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.</li><li>• 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.</li></ul></div><div data-bbox=)

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- 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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**8330SurrStkSS\_00200**



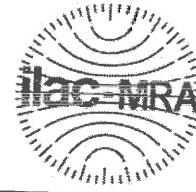
110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: (800)356-1688  
Fax: (814)353-1309

[www.restek.com](http://www.restek.com)

Rec 1/22/21 ac 2 vials  
CERTIFIED REFERENCE MATERIAL



## Certificate of Analysis



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

**Catalog No. :** 31453

**Lot No.:** A0164261

**Description :** 8330 Surrogate Mix

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

**Container Size :** 2 mL

**Pkg Amt:** > 1 mL

**Expiration Date :** September 30, 2025

**Storage:** 10°C or colder

**Ship:** Ambient

### C E R T I F I E D   V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,2-Dinitrobenzene <b>CAS #</b> 528-29-0 <b>Purity</b> 99%	1,007.0 µg/mL	+/- 5.9813	µg/mL	Gravimetric
	(Lot MKCH6067)		+/- 56.4747	µg/mL	Unstressed
			+/- 57.7956	µg/mL	Stressed

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

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- 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.

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Reagent

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**8330SurrStkSS\_00202**



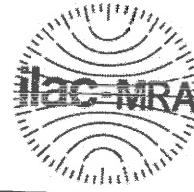
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Bellefonte, PA 16823-8812  
Tel: (800)356-1688  
Fax: (814)353-1309

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Rec 1/22/21 ac 2 vials  
CERTIFIED REFERENCE MATERIAL



## Certificate of Analysis



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

**Catalog No. :** 31453

**Lot No.:** A0164261

**Description :** 8330 Surrogate Mix

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

**Container Size :** 2 mL

**Pkg Amt:** > 1 mL

**Expiration Date :** September 30, 2025

**Storage:** 10°C or colder

**Ship:** Ambient

### C E R T I F I E D   V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,2-Dinitrobenzene <b>CAS #</b> 528-29-0 <b>Purity</b> 99%	1,007.0 µg/mL	+/- 5.9813	µg/mL	Gravimetric
	(Lot MKCH6067)		+/- 56.4747	µg/mL	Unstressed
			+/- 57.7956	µg/mL	Stressed

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

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Reagent

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**8330SurrStock\_00164**



# CERTIFICATE OF ANALYSIS

Catalog No: M-8330-SS

Description: 1,2-Dinitrobenzene

Lot: 216071012

Solvent: Methanol

Hazards: HIGHLY FLAMMABLE - Refer to SDS for safety info



Danger 2

Date Certified: Jul 1, 2016

Expiration: Jul 1, 2026

Sample Size: 1 mL

Components: 1

Storage Condition: Ambient (>5 °C)

Included on ISO/IEC 17025 Scope of Accreditation: Yes

Included on ISO Guide 34 Scope of Accreditation: Yes

Component	CAS #	Purity %	Prepared Concentration <sup>1</sup> (GC/FID) ( $\mu$ g/mL)	Certified Analyte Concentration <sup>2</sup> ( $\mu$ g/mL)
1,2-Dinitrobenzene	528-29-0	100.0	100.1	1001

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

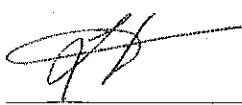
<sup>1</sup> All weights are traceable through NIST, Test No. 822-275872-11

<sup>2</sup> Certified Analyte Concentration = Purity x Prepared Concentration. The Uncertainty associated with the gravimetric values reported on this certificate is  $\pm 0.24\%$ . The CRM Uncertainty calculated for this product is  $\pm 5\%$ . These values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

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

See reverse side for additional information

Certified By:

  
Larry Decker, Organic QC Manager

Reagent

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**8330SurrStock\_00168**



# 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



Component	CAS #	Purity % (GC/FID)	Prepared Concentration <sup>2</sup> (µg/mL)	Certified Analyte Concentration <sup>1</sup> (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.

<sup>2</sup> All weights are traceable through NIST, Test No. 684/289871-17

<sup>1</sup> Certified Analyte Concentration = Purity x Prepared Concentration.

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

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

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

Certified By:

Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

Reagent

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**Alk daily lcs\_01005**



# ***SPEXertificate®***

## *Certificate of Reference Material*



**Catalog Number:** VTACO-3

**Lot No.:** 2-85BT

**Description:** Custom Standard

**Matrix:** H<sub>2</sub>O

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<sub>2</sub>CO<sub>3</sub>) Lot# H04155 and ASTM Type I water, using Class A laboratory ware to give precise concentration.

**Certified Value:**

Analyte: Na<sub>2</sub>CO<sub>3</sub>

Alkalinity: 50,000 µg/mL as CaCO<sub>3</sub>

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

Page 1 of 2  
Rev. 0

# 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: Quantifying 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
- $U = k u_c$  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  $u_c = \sqrt{\sum u_i^2}$

## 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.

Reagent

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**Alk stk std\_00022**

Reference Materials Producer  
Cert# 2495.01

# ***SPEXertificate®***

## *Certificate of Reference Material*

Chemical Testing  
Cert# 2495.02**Catalog Number:** VTACO-3**Lot No.:** 2-85BT**Description:** Custom Standard**Matrix:** H<sub>2</sub>O

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<sub>2</sub>CO<sub>3</sub>) Lot# H04155 and ASTM Type I water, using Class A laboratory ware to give precise concentration.

**Certified Value:**

Analyte: Na<sub>2</sub>CO<sub>3</sub>  
Alkalinity: 50,000 µg/mL as CaCO<sub>3</sub>  
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 -- 2021Certifying Officer: Katherine Cullinan  
Katherine Cullinan, QC ManagerPage 1 of 2  
Rev. 0

# 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: Quantifying 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
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- $u_c$  = combined standard uncertainty obtained by combining the individual element standard uncertainty components  $u_i$  and  $u_c = \sqrt{\sum u_i^2}$

## 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:

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Reagent

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**IC BR ICV\_00021**



# Certificate of Analysis

## Bromide Standard, 1000 ppm Br

**Lot Number:** 4010N41**Product Number:** 1180**Manufacture Date:** OCT 26, 2020**Expiration Date:** APR 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
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 <sup>-</sup> )	ASTM (D 3869 D)
Standard Bromide Solution, 1000 mg/L	APHA (4110 B)
Bromide Stock Solution (1.00 mL = 1.00 mg Br <sup>-</sup> )	EPA (SW-846) (9056)
Sodium Bromide Standard Solution, 1000 mg/L	ASTM (D 1246)
Bromide Stock Solution (1.00 mL = 1.00 mg Br <sup>-</sup> )?	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)

Chris Collins (10/26/2020)

Quality Control Supervisor

This Certificate of Analysis is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

This test report shall not be reproduced, except in full, without the written approval of Ricca Chemical Company.

Reagent

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**IC CL cal\_00064**



Reference Materials Producer  
Cert #2495.01



Chemical Testing  
Cert #2495.02

# SPEXertificate®

## Certificate of Reference Material

**Catalog Number:** AS-CL9-2X

**Lot No.** 5-67CL-2X

**Description:** 1000 µg/mL Chloride

**Matrix:** H<sub>2</sub>O

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 <sup>-</sup>	<0.01	NO <sub>3</sub> <sup>-</sup>	<0.06
F <sup>-</sup>	<0.05	PO <sub>4</sub> <sup>-3</sup>	<0.03
NO <sub>2</sub> <sup>-</sup>	<0.05	SO <sub>4</sub> <sup>-2</sup>	<0.08

Balances are calibrated regularly with weight sets traceable to NIST #32856, #32867 and others. This CRM is guaranteed stable and accurate to +/- 0.5% of the certified value. This includes uncertainty components due to preparation, homogeneity by the most precise method, and short-term and long-term stability. This guarantee is valid for a period of one year from the date of certification only when the material is kept tightly capped and stored under ambient laboratory conditions.

Date of Certification:

FEB - - 2021

Certifying Officer:

Katherine Cullinan, QC Manager

Page 1 of 2

Rev. 0

# Report of Certification

This Certified Reference Material (CRM) has been prepared and certified under an ISO 9001 (certified by DQS), ISO 17025 (accredited by A2LA) and ISO 17034 (accredited by A2LA) quality system consistent with the following guides:

- ISO 9001: Quality management systems – Requirements
- ISO/IEC 17025: General requirements for the competence of testing and calibration laboratories
- ISO 17034: General requirements for the competence of reference material producers
- ISO Guide 30: Reference Materials – Selected terms and definitions
- ISO Guide 31: Reference Materials – Contents of certificates and labels
- ISO Guide 35: Reference Materials – General and principals for certification
- Guide to the Expression of Uncertainty in Measurement, 2008
- EURACHEM/CITAC Guide: Quantifying Uncertainty in Analytical Measurement – Third Edition
- NIST Technical Note 1297

## Material Source:

All analytes and matrix materials are obtained and verified by SPEX CertiPrep from pre-qualified vendors as per ISO 9001, ISO 17025, and ISO 17034 guidelines. Vendor identifications are proprietary; however, sources of all materials used in the preparation and testing of SPEX CertiPrep CRMs are tracked and documented. For further assistance, please contact Sales Support at [crmsales@spexcsp.com](mailto:crmsales@spexcsp.com).

## Instructions for Use:

Primary usage of this CRM is in neat form or diluted serially with matrix of a purity at or greater than the purity of the original matrix solution. If dilution is required, the diluent must be compatible with all certified analytes and contain stabilizers appropriate for the period of intended use. The CRM can also be used as a spike or with a spike, again with appropriate compatibility considerations. All solutions should be thoroughly mixed, by shaking, prior to use and never pipetted directly from the bottle. Do not return excess solution to the bottle. All surfaces that come in contact with the solution must be thoroughly cleaned and leached prior to use. Dilutions should be performed only with Class A volumetric glassware. See SDS for health and safety information.

## Method of Preparation:

Clean laboratory procedures and techniques have been used throughout the preparation. All materials, equipment, analytical instrumentation and personnel have been qualified prior to use. The highest purity acids applicable, 18 megohm, double deionized water, acid-leached triple-rinsed bottles (where appropriate), and Class A/calibrated volumetrics have been used in all preparations.

## Homogeneity:

The homogeneity of the CRM has been confirmed by procedures consistent with ISO 17025, ISO 17034, and ASTM D6362-98 Appendix X2. Random, replicate samples of the final, packaged material have been analyzed to prove homogeneity in accordance with our internal procedure 4600-HOMOGEN-1A. Since the product is highly homogeneous, any sample size taken for analysis would be within the uncertainty budget. This is consistent with the intended use of the CRM.

## Statistical Estimator and Confidence Limits:

The certified value 'X' listed on the reverse of this document is at the 95% level of confidence and can be expressed as:

- $X = x \pm U$  where X=certified value, U=expanded uncertainty, x=property value
- $U = k u_c$  where  $k=2$  is the coverage factor at the 95% confidence level
- $u_c = \text{combined standard uncertainty obtained by combining the individual element standard uncertainty components } u_i, \text{ and } u_c = \sqrt{\sum u_i^2}$

## Certification Report:

All certified values reported were derived from the Certification Report, SPEX CertiPrep's traceability documentation, identified by the lot number of this CRM. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further assistance, please contact Sales Support at [crmsales@spexcsp.com](mailto:crmsales@spexcsp.com).

## Legal Notice:

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Reagent

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**IC FL cal\_00016**



## Certificate of Analysis

### Fluoride Standard, 1000 ppm F

Lot Number: 2007C85

Product Number: 3173

Manufacture Date: JUL 17, 2020

Expiration Date: JAN 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.

The concentration is confirmed by Fluoride ISE and is certified traceable to NIST SRM 2203.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Sodium Fluoride	7681-49-4	High Purity

Test	Specification	Result
Appearance	Colorless liquid	Passed
Fluoride (F)	995-1005 ppm	1000 ppm

Specification	Reference
Fluoride Solution, Stock (1.00 mL = 1.00 mg F)	ASTM (D 5542)
Fluoride Stock Solution (1.00 mL = 1.00 mg F <sup>-</sup> )	EPA (SW-846) (9056)
Fluoride Calibration Stock Solution (1,000 mg/L F <sup>-</sup> )	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 <sup>-</sup> )	ASTM (D 5996)
Fluoride Stock Solution (1.00 mL = 1.00 mg F <sup>-</sup> )	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
3173-4	120 mL natural poly	18 months

Recommended Storage: 15°C - 30°C (59°F - 86°F)

Reagent

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**IC MS/MSD S04\_00006**



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



*Edgar E. Haas*

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

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**IC SO4 ICV\_00022**



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:**  $1.0001 \pm 0.0010$  mg/L at  $21.2^{\circ}C$  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 <sup>1</sup>	Uncertainty <sup>2</sup> %	NIST Traceability	
	mg/L		SRM Number <sup>3</sup>	Recovery %
Sulfate	1000	0.984	3181	97.7

Reagent

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**IC sulfatecal\_00062**



Reference Materials Producer  
Cert #2495.01



Chemical Testing  
Cert #2495.02

# SPEXertificate®

## Certificate of Reference Material

**Catalog Number:** AS-SO49-2X

**Lot No.** 5-48SO4-2X

**Description:** 1000 µg/mL Sulfate

**Matrix:** H<sub>2</sub>O

This Ion Chromatography Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for ion chromatography instrumentation. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

**Certified Value:** 1000 µg/mL ±5 µg/mL

**Certified Value is Traceable to:** 3181\*

\* - indicates NIST SRM      † - indicates SPEX CertiPrep CRM (when NIST SRM is not available)      ‡ - prepared gravimetrically

The CRM is prepared gravimetrically using high purity Potassium Sulfate, Lot# MAN1018SO4. The certified value listed is the average of values obtained by classical wet assay and ion chromatography analysis.

Refer to side 2 for details of measurement uncertainties.

**Classical Wet Assay:** 997 µg/mL

**Method:** Precipitation using Barium Chloride. Filter, ignite, and weigh as BaSO<sub>4</sub>.

**Instrumental Analysis by Ion Chromatography:** 1002 µg/mL

### Uncertified Properties

### Trace Ionic Impurities in the Actual Solution via IC Analysis:

Element	µg/mL	Element	µg/mL
Br <sup>-</sup>	<0.006	NO <sub>2</sub> <sup>-</sup>	<0.004
Cl <sup>-</sup>	<0.01	NO <sub>3</sub> <sup>-</sup>	<0.006
F <sup>-</sup>	<0.008	PO <sub>4</sub> <sup>3-</sup>	<0.01

Balances are calibrated regularly with weight sets traceable to NIST #32856, #32867 and others. This CRM is guaranteed stable and accurate to +/- 0.5% of the certified value. This includes uncertainty components due to preparation, homogeneity by the most precise method, and short-term and long-term stability. This guarantee is valid for a period of one year from the date of certification only when the material is kept tightly capped and stored under ambient laboratory conditions.

Date of Certification:

DEC -- 2020

Certifying Officer:

Katherine Cullinan, QC Manager

Page 1 of 2  
Rev. 0

Reagent

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**IC sulfatecal\_00063**



Reference Materials Producer  
Cert #2495.01



Chemical Testing  
Cert #2495.02

# SPEXertificate®

## Certificate of Reference Material

**Catalog Number:** AS-SO49-2X

**Lot No.** 5-48SO4-2X

**Description:** 1000 µg/mL Sulfate

**Matrix:** H<sub>2</sub>O

This Ion Chromatography Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for ion chromatography instrumentation. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

**Certified Value:** 1000 µg/mL ±5 µg/mL

**Certified Value is Traceable to:** 3181\*

\* - indicates NIST SRM      † - indicates SPEX CertiPrep CRM (when NIST SRM is not available)

‡ - prepared gravimetrically

The CRM is prepared gravimetrically using high purity Potassium Sulfate, Lot# MAN1018SO4. The certified value listed is the average of values obtained by classical wet assay and ion chromatography analysis.

Refer to side 2 for details of measurement uncertainties.

**Classical Wet Assay:** 997 µg/mL

**Method:** Precipitation using Barium Chloride. Filter, ignite, and weigh as BaSO<sub>4</sub>.

**Instrumental Analysis by Ion Chromatography:** 1002 µg/mL

### Uncertified Properties

### Trace Ionic Impurities in the Actual Solution via IC Analysis:

Element	µg/mL	Element	µg/mL
Br <sup>-</sup>	<0.006	NO <sub>2</sub> <sup>-</sup>	<0.004
Cl <sup>-</sup>	<0.01	NO <sub>3</sub> <sup>-</sup>	<0.006
F <sup>-</sup>	<0.008	PO <sub>4</sub> <sup>-3</sup>	<0.01

Balances are calibrated regularly with weight sets traceable to NIST #32856, #32867 and others. This CRM is guaranteed stable and accurate to +/- 0.5% of the certified value. This includes uncertainty components due to preparation, homogeneity by the most precise method, and short-term and long-term stability. This guarantee is valid for a period of one year from the date of certification only when the material is kept tightly capped and stored under ambient laboratory conditions.

Date of Certification:

**FEB -- 2021**

Certifying Officer:

Katherine Cullinan, QC Manager

Page 1 of 2  
Rev. 0

# Report of Certification

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- ISO Guide 31: Reference Materials – Contents of certificates and labels
- ISO Guide 35: Reference Materials – General and principals for certification
- Guide to the Expression of Uncertainty in Measurement, 2008
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## Material Source:

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## Method of Preparation:

Clean laboratory procedures and techniques have been used throughout the preparation. All materials, equipment, analytical instrumentation and personnel have been qualified prior to use. The highest purity acids applicable, 18 megohm, double deionized water, acid-leached triple-rinsed bottles (where appropriate), and Class A/calibrated volumetrics have been used in all preparations.

## Homogeneity:

The homogeneity of the CRM has been confirmed by procedures consistent with ISO 17025, ISO 17034, and ASTM D6362-98 Appendix X2. Random, replicate samples of the final, packaged material have been analyzed to prove homogeneity in accordance with our internal procedure 4600-HOMOGEN-1A. Since the product is highly homogeneous, any sample size taken for analysis would be within the uncertainty budget. This is consistent with the intended use of the CRM.

## Statistical Estimator and Confidence Limits:

The certified value 'X' listed on the reverse of this document is at the 95% level of confidence and can be expressed as:

- $X = x \pm U$  where  $X$ =certified value,  $U$ =expanded uncertainty,  $x$ =property value
- $U = k u_c$  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  $u_c = \sqrt{\sum u_i^2}$

## Certification Report:

All certified values reported were derived from the Certification Report, SPEX CertiPrep's traceability documentation, identified by the lot number of this CRM. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further assistance, please contact Sales Support at [crmsales@spexcsp.com](mailto:crmsales@spexcsp.com).

## Legal Notice:

SPEX CertiPrep reference materials are not for any cosmetic, drug or household application and are to be used only by qualified individuals who are trained in appropriate procedures. No claims against SPEX CertiPrep, LLC. of any kind whatsoever, whether based on breach of warranty, alleged negligence, or otherwise, with respect to this Reference Material shall be greater than the purchase price. In no event shall SPEX CertiPrep, LLC. be liable for any loss of profits or any incidental, special, or consequential damages.

Reagent

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**MNX , TNX , DNX \_00048**



# Certificate of Analysis

**Product Name:** Custom Standard

**Product Number:** CUS-23984

**Lot Issue Date:** 27-Apr-2020

**Lot Number:** 0006535619

**Expiration Date:** 31-May-2021

## Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system, and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
1-nitro-3,5-dinitroso-1,3,5-triazacyclohexane (DNX)	N/A	RM12428	100.4 ± 0.5 µg/mL
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)	N/A	RM12426	100.3 ± 0.5 µg/mL
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane (MNX)	N/A	RM12428	117.0 ± 0.6 µg/mL

**Matrix:** acetonitrile

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

## Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

## Homogeneity:

This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

## Intended Use:

This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

## Instructions for Use:

Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

## Hazards:

Refer to the Safety Data Sheet on [www.agilent.com](http://www.agilent.com) for information regarding this RM.

## Expiration of Certification:

The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.



RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

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ISO 17034 Cert No.  
AR-1936

[www.agilent.com/quality/](http://www.agilent.com/quality/)  
CSD-QA-015.1



ISO 17025 Cert  
No. AT-1937

Reagent

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**MNX , TNX , DNX \_00049**



# Certificate of Analysis

**Product Name:** Custom Standard

**Product Number:** CUS-23984

**Lot Issue Date:** 27-Apr-2020

**Lot Number:** 0006535619

**Expiration Date:** 31-May-2021

## Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system, and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

<b>Analyte</b>	<b>CAS#</b>	<b>Analyte Lot</b>	<b>Concentration ± Uncertainty</b>
1-nitro-3,5-dinitroso-1,3,5-triazacyclohexane (DNX)	N/A	RM12428	100.4 ± 0.5 µg/mL
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)	N/A	RM12426	100.3 ± 0.5 µg/mL
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane (MNX)	N/A	RM12428	117.0 ± 0.6 µg/mL

**Matrix:** acetonitrile

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

## Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

## Homogeneity:

This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

## Intended Use:

This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

## Instructions for Use:

Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

## Hazards:

Refer to the Safety Data Sheet on [www.agilent.com](http://www.agilent.com) for information regarding this RM.

## Expiration of Certification:

The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.



RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

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ISO 17034 Cert No.  
AR-1936

[www.agilent.com/quality/](http://www.agilent.com/quality/)  
CSD-QA-015.1



ISO 17025 Cert  
No. AT-1937

Reagent

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**MNX , TNX , DNX\_00050**



# Certificate of Analysis

**Product Name:** Custom Standard

**Product Number:** CUS-23984

**Lot Issue Date:** 27-Apr-2020

**Lot Number:** 0006535619

**Expiration Date:** 31-May-2021

## Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system, and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
1-nitro-3,5-dinitroso-1,3,5-triazacyclohexane (DNX)	N/A	RM12428	100.4 ± 0.5 µg/mL
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)	N/A	RM12426	100.3 ± 0.5 µg/mL
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane (MNX)	N/A	RM12428	117.0 ± 0.6 µg/mL

**Matrix:** acetonitrile

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

## Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

## Homogeneity:

This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

## Intended Use:

This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

## Instructions for Use:

Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

## Hazards:

Refer to the Safety Data Sheet on [www.agilent.com](http://www.agilent.com) for information regarding this RM.

## Expiration of Certification:

The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.



RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

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ISO 17034 Cert No.  
AR-1936

[www.agilent.com/quality/](http://www.agilent.com/quality/)  
CSD-QA-015.1



ISO 17025 Cert  
No. AT-1937

Reagent

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**MNX , TNX , DNX\_00051**



# Certificate of Analysis

**Product Name:** Custom Standard

**Product Number:** CUS-23984

**Lot Issue Date:** 27-Apr-2020

**Lot Number:** 0006535619

**Expiration Date:** 31-May-2021

## Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system, and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

<b>Analyte</b>	<b>CAS#</b>	<b>Analyte Lot</b>	<b>Concentration ± Uncertainty</b>
1-nitro-3,5-dinitroso-1,3,5-triazacyclohexane (DNX)	N/A	RM12428	100.4 ± 0.5 µg/mL
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)	N/A	RM12426	100.3 ± 0.5 µg/mL
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane (MNX)	N/A	RM12428	117.0 ± 0.6 µg/mL

**Matrix:** acetonitrile

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

## Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

## Homogeneity:

This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

## Intended Use:

This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

## Instructions for Use:

Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

## Hazards:

Refer to the Safety Data Sheet on [www.agilent.com](http://www.agilent.com) for information regarding this RM.

## Expiration of Certification:

The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.



RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

Page: 1 of 2

ISO 17034 Cert No.  
AR-1936

[www.agilent.com/quality/](http://www.agilent.com/quality/)  
CSD-QA-015.1



ISO 17025 Cert  
No. AT-1937

Reagent

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**MNX , TNX , DNX\_00052**



# Certificate of Analysis

**Product Name:** Custom Standard

**Product Number:** CUS-23984

**Lot Issue Date:** 27-Apr-2020

**Lot Number:** 0006535619

**Expiration Date:** 31-May-2021

## Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system, and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

<b>Analyte</b>	<b>CAS#</b>	<b>Analyte Lot</b>	<b>Concentration ± Uncertainty</b>
1-nitro-3,5-dinitroso-1,3,5-triazacyclohexane (DNX)	N/A	RM12428	100.4 ± 0.5 µg/mL
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)	N/A	RM12426	100.3 ± 0.5 µg/mL
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane (MNX)	N/A	RM12428	117.0 ± 0.6 µg/mL

**Matrix:** acetonitrile

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

## Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

## Homogeneity:

This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

## Intended Use:

This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

## Instructions for Use:

Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

## Hazards:

Refer to the Safety Data Sheet on [www.agilent.com](http://www.agilent.com) for information regarding this RM.

## Expiration of Certification:

The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.



RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

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ISO 17034 Cert No.  
AR-1936

[www.agilent.com/quality/](http://www.agilent.com/quality/)  
CSD-QA-015.1



ISO 17025 Cert  
No. AT-1937

Reagent

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**MNX , TNX , DNX\_00053**



# Certificate of Analysis

**Product Name:** Custom Standard

**Product Number:** CUS-23984

**Lot Issue Date:** 27-Apr-2020

**Lot Number:** 0006535619

**Expiration Date:** 31-May-2021

## Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system, and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
1-nitro-3,5-dinitroso-1,3,5-triazacyclohexane (DNX)	N/A	RM12428	100.4 ± 0.5 µg/mL
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)	N/A	RM12426	100.3 ± 0.5 µg/mL
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane (MNX)	N/A	RM12428	117.0 ± 0.6 µg/mL

**Matrix:** acetonitrile

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

## Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

## Homogeneity:

This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

## Intended Use:

This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

## Instructions for Use:

Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

## Hazards:

Refer to the Safety Data Sheet on [www.agilent.com](http://www.agilent.com) for information regarding this RM.

## Expiration of Certification:

The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.



RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

Page: 1 of 2

ISO 17034 Cert No.  
AR-1936

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CSD-QA-015.1



ISO 17025 Cert  
No. AT-1937

Reagent

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**MNX , TNX , DNX \_00054**



# 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.

<b>Analyte</b>	<b>CAS#</b>	<b>Analyte Lot</b>	<b>Concentration ± Uncertainty</b>
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](http://www.agilent.com) for information regarding this RM.



ISO 17034 Cert  
No. AR-1936

RM was produced in accordance with the LRQA registered ISO 9001:2015 Quality Management System. Cert # 10303760

Page: 1 of 2

[www.agilent.com/quality/](http://www.agilent.com/quality/)  
CSD-QA-015.1



ISO 17025 Cert  
No. AT-1937

# Certificate of Analysis

Product Number: CUS-23984

Lot Number: 0006594482

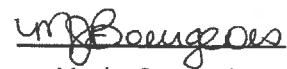
**Expiration of Certification:**

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



ISO 17034 Cert  
No. AR-1936

RM was produced in accordance with the LROA registered ISO 9001:2015 Quality Management System. Cert # 10303760  
Page: 2 of 2

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CSD-QA-015.1



ISO 17025 Cert  
No. AT-1937

Reagent

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**MNX , TNX , DNX\_00059**



# Certificate of Analysis

**Product Name:** Custom Standard

**Product Number:** CUS-23984

**Lot Issue Date:** 02-Apr-2021

**Lot Number:** 0006599273

**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**

	<b>CAS#</b>	<b>Analyte Lot</b>	<b>Concentration ± Uncertainty</b>
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](http://www.agilent.com) for information regarding this RM.



ISO 17034 Cert  
No. AR-1936

RM was produced in accordance with the LRQA registered ISO 9001:2015 Quality Management System. Cert # 10303760  
Page: 1 of 2

[www.agilent.com/quality/](http://www.agilent.com/quality/)  
CSD-QA-015.1



ISO 17025 Cert  
No. AT-1937

# Certificate of Analysis

Product Number: CUS-23984

Lot Number: 0006599273

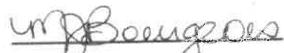
**Expiration of Certification:**

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



ISO 17034 Cert  
No. AR-1936

RM was produced in accordance with the LRQA registered ISO 9001:2015 Quality Management System. Cert # 10303760

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CSD-QA-015.1



ISO 17025 Cert  
No. AT-1937

Reagent

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**NH3 CAL STD\_00033**



# Certificate of Analysis

## Ammonia Nitrogen Standard, 1000 ppm N (1216 ppm NH<sub>3</sub>)

**Lot Number:** 4008G09**Product Number:** 5455**Manufacture Date:** AUG 17, 2020**Expiration Date:** FEB 2022

The certified value reported is the prepared value based upon the method of preparation of the material. The uncertainty in the prepared value is based upon the volumetric method of preparation.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Ammonium Chloride	12125-02-9	High Purity

Test	Specification	Result
Appearance	Colorless liquid	Passed
Nitrogen (N)	995-1005 ppm	1000 ppm

Specification	Reference
Ammonia Solution, Stock (1.0 mL = 1.0 mg ammonia nitrogen)	ASTM (D 3590 A)
Ammonia Solution, Stock (1.0 mL = 1.0 mg ammonium nitrogen)	ASTM (D 3590 B)
Stock Ammonium Chloride Solution	APHA (4500-CN-L)
Stock Ammonium Solution	APHA (4500-NH3 C)
Stock Ammonium chloride Solution	APHA (4500-NH3 D)
Stock Ammonium Solution	APHA (4500-NH3 F)
Ammonium Chloride, Stock Solution, 1.0 mL = 1.0 mg NH3-N	EPA (351.2)
Ammonium Chloride, Stock Solution, 1.0 mL = 1.0 mg NH3-N	EPA (350.2)
Ammonium Chloride, Stock Solution, 1.0 mL = 1.0 mg NH3-N	EPA (350.3)
Ammonium Chloride, Stock Solution, 1.0 mL = 1.0 mg NH3-N	EPA (351.4)
Stock Solution, 1.0 mL = 1.0 mg NH3-N	EPA (350.1)
Ammonium Chloride, Stock Solution, 1.0 mL = 1.0 mg NH3-N	EPA (351.3)

Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
5455-16	500 mL natural poly	18 months
5455-4	120 mL natural poly	18 months

**Recommended Storage:** 15°C - 30°C (59°F - 86°F)



Chris Collins (08/17/2020)

Quality Control Supervisor

This Certificate of Analysis is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

This test report shall not be reproduced, except in full, without the written approval of Ricca Chemical Company.

Reagent

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**NH3 ICV STD\_00032**

**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).

**2.0 PRODUCT DESCRIPTION**

Product Code: Single Analyte Ion Chromatography Solution  
Catalog Number: ICNNH41  
Lot Number: N2-NH669544  
Matrix: H<sub>2</sub>O  
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 °C)

**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 by two independent methods    Characterization of CRM by one method

### Characterization of CRM/RM by Two Methods

Certified Value,  $X_{CRM/RM}$ , where two methods of characterization are used is the weighted mean of the two results:

$$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$$

$X_a$  = mean of Assay Method A with standard uncertainty  $u_{char\ a}$

$X_b$  = mean of Assay Method B with standard uncertainty  $u_{char\ b}$

$w_a$  and  $w_b$  = the weighting factors for each method calculated using the inverse square of the variance:

$$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2)$$

$$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2)$$

$$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$$

$k$  = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2(u_{char\ a})^2 + (w_b)^2(u_{char\ b})^2]^{1/2}$  where  $u_{char\ a}$  and  $u_{char\ b}$  are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

$u_{bb}$  = bottle to bottle homogeneity standard uncertainty

$u_{lts}$  = long term stability standard uncertainty (storage)

$u_{ts}$  = transport stability standard uncertainty

### Characterization of CRM/RM by One Method

Certified Value,  $X_{CRM/RM}$ , where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = \text{mean of Assay Method A with standard uncertainty } u_{char\ a}$$

$$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$$

$k$  = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$  = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

$u_{bb}$  = bottle to bottle homogeneity standard uncertainty

$u_{lts}$  = long term stability standard uncertainty (storage)

$u_{ts}$  = transport stability standard uncertainty

## 4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

### 4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

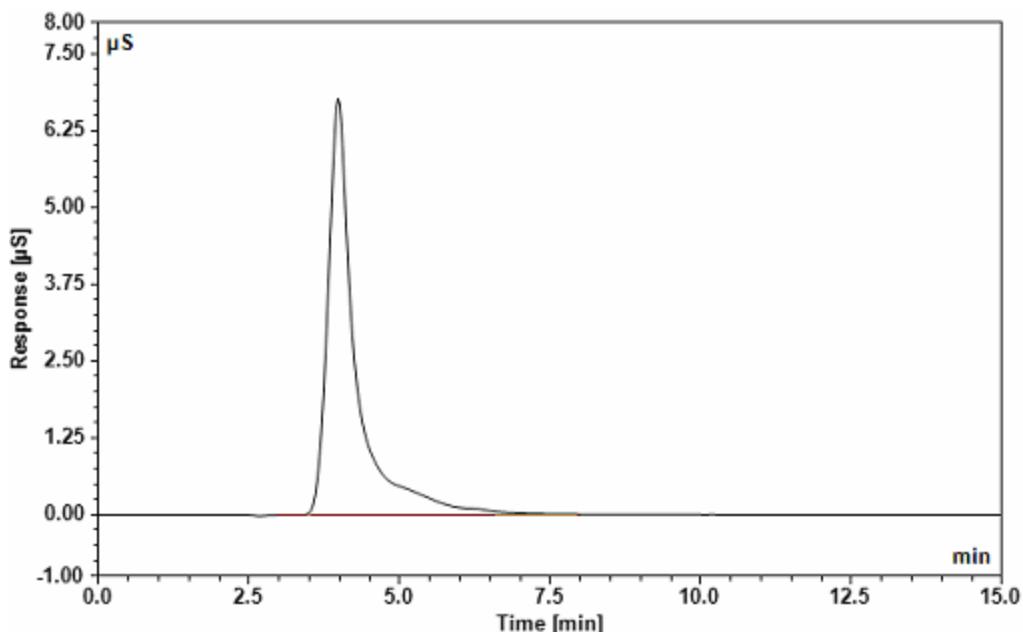
### 4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

### 4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

## 5.0 CHROMATOGRAM



#### Dionex ICS-2000 Ion Chromatograph

<b>Analytical Column:</b>	IonPac CS18 2 x 250 mm	<b>Eluent:</b>	10 mM MSA
<b>Guard Column:</b>	IonPac CG18 2 x 50 mm	<b>Eluent Flow Rate:</b>	0.25 mL/min
<b>Anion Self Regen Suppressor/ Chemical Suppression:</b>	N/A	<b>Column Temp:</b>	35 °C
<b>Cation Self Regen Suppressor/ Chemical Suppression:</b>	CERS 500 2mm	<b>Cell Temp:</b>	35 °C
<b>Suppressor Current/ Chemical Suppressant:</b>	8 mA	<b>Scale X-Axis:</b>	minutes
		<b>Scale Y-Axis:</b>	8 µS/cm
		<b>Concentration:</b>	10 µg/g

#### 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](http://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](http://inorganicventures.com); [info@inorganicventures.com](mailto: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

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**NOXT Cal STD\_00025**



## Certificate of Analysis

### Nitrate Nitrogen Standard, 1000 ppm N (4427 ppm NO<sub>3</sub>)

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 NO <sub>3</sub> -N)	ASTM (D 3867 A)
Nitrate Solution, Stock (1.0 mL = 1.0 mg NO <sub>3</sub> -N)	ASTM (D 3867 B)
Stock Nitrate Solution: 1 mL = 1.0 mg NO <sub>3</sub> -N	EPA (353.2)
Stock Nitrate Solution: 1.0 mL = 1.00 mg NO <sub>3</sub> -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

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**NOXT ICV STD\_00024**



A Waters Company

# Certificate of Analysis

<b>PRODUCT:</b>	1000 mg/L Nitrate as N (NO <sub>3</sub> -N)
<b>CATALOG NUMBER:</b>	052 -125 mL; 991 - 500 mL
<b>LOT NUMBER:</b>	190220m
<b>ISSUE DATE:</b>	February 19, 2020
<b>REVISION DATE:</b>	Original
<b>STARTING MATERIAL:</b>	Potassium Nitrate (KNO <sub>3</sub> )
<b>CERTIFIED CONCENTRATION<sup>1</sup>:</b>	1000 mg/L
<b>UNCERTAINTY<sup>2</sup>:</b>	0.6%
<b>MATRIX:</b>	18 megohm deionized water
<b>DENSITY:</b>	0.9988 ± 0.0020 g/mL at 19.4°C and 753 mm Hg
<b>TRACEABILITY<sup>3</sup>:</b>	101%
<b>NIST/SRM:</b>	3185 Nitrate
<b>VERIFICATION METHOD:</b>	Ion Chromatography
<b>STORAGE:</b>	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 2/10/2022**. 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](mailto:info@eraqc.com)

Certifying Officer: Brian Miller - Product Line Manager

ISO/IEC GUIDE 34:2009

ISO/IEC 17025:2005



REFERENCE MATERIAL PRODUCER  
CERTIFICATE NO. 1539.03



CHEMICAL TESTING LABORATORY  
CERTIFICATE NO. 1539.02

Reagent

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**PicricARestek\_00098**



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

[www.restek.com](http://www.restek.com)

# CERTIFIED REFERENCE MATERIAL

## Certificate of Analysis



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31499

Lot No.: A0164473

Description : Picric Acid Standard

Picric Acid Standard 1000 $\mu$ g/mL, Methanol, 1mL/1000 $\mu$ g/mL \*PGI BOX  
REQUIRED\* SHIP FED EX GROUND ONLY

Container Size : 2 mL

Pkg Amt: > 1 mL

Expiration Date : September 30, 2025

Storage: 10°C or colder

Ship: Ambient

### C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Picric Acid CAS # 88-89-1 Purity 97%	(Lot 06130CU) 1,006.9 $\mu$ g/mL	+/- 5.9804 $\mu$ g/mL	+/- 55.1588 $\mu$ g/mL	+/- 64.3206 $\mu$ g/mL

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

Rec 2/10/21 2 vials

Al

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

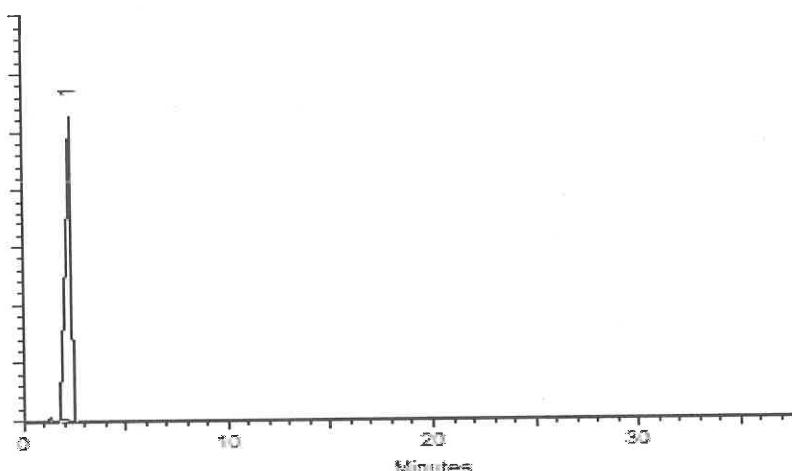
**Flow Rate:**  
1.0 ml/min.

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

**Mobile Phase B:**

**Mobile Phase Composition:**  
100%A

**Det. Type:**  
Wavelength: 210nm & 254nm



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

*Kylie Struble*  
Kylie Struble - Operations Technician I

Date Mixed: 16-Sep-2020 Balance: B251644995

*Jennifer Pollino*  
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 24-Sep-2020

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

Reagent

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**RSK175methane\_00010**

**CERTIFICATE OF BATCH ANALYSIS**  
**Grade of Product: CP**

Customer: SIGMA-ALDRICH  
Part Number: ME CPP14C514  
Cylinder Analyzed: ST0000198540  
Laboratory: 124 - Plumsteadville - PA  
Analysis Date: Apr 16, 2019  
Lot Number: 160-401480003-1

Reference Number: 160-401480003-1  
Cylinder Volume: 14.0 LG  
Cylinder Pressure: 240 PSIG  
Valve Outlet: 160

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.

Reagent

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**RSK7gasMatthes\_00031**



### Analysis Report

		To: MATHESON LINWELD 4705 NOME ST P O BOX 39126 DENVER, CO 80239	MTG Customer No: 504445		
Manufacturing Location 1700 SCIFTER ROAD WAVERLY, TN 37185		Product: Multi-Component Mixture	Cylinder Size: 4 Value: CGA 350 SS		
		Grade: CERTIFIED MTG Part No: G2882238	Contents: Net: 7.57 ft <sup>3</sup> ; 0.21 m <sup>3</sup>		
CYLINDER NUMBER(S) *DL039162		Pressure: 1400 psia @ 70°F; 9653 kPa @ 21°C.			
	Requested Concentration	Certified Concentration	Units	Blend Tolerance	Certified Accuracy
Bulane	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](http://www.matheson-trigas.com).

*Eric Popa*  
Eric Popa - Analyst

03/09/2020  
Date

*Mariel Boyett*  
Mariel Boyett - QA Approval

03/09/2020  
Date

Reagent

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**RSK7gasMatthes\_00034**

**MATHESON**  
The Gas Professionals™

Matheson Gasoline  
100 SHERIDAN ROAD  
WENONAH, NEW JERSEY

Matheson Online  
100 SHERIDAN ROAD  
WENONAH, NEW JERSEY 08090  
PO BOX 39126  
CENTER, CO 80239

MTG Customer No: 504445

Component	Mixture	Cylinder Size: 4 Valve: CGA 350SS		
FIED 82238		Contents: Net: 7.57 ft <sup>3</sup> ; 0.21 m <sup>3</sup>		
		Pressure: 1400 psia @ 70°F; 9653 kPa @ 21°C		
Requested Concentration	Certified Concentration	Units	Blend Tolerance	Certified Accuracy
1.00	1.00	%	±10%	±2%
1.00	1.00	%	±10%	±2%
1.00	1.00	%	±10%	±2%
1.00	1.00	%	±10%	±2%
1.00	1.00	%	±10%	±2%
1.00	1.01	%	±10%	±2%
Source	Balance			

**TRACEABILITY**

**COMMENTS**

For further information concerning this product, visit [www.matheson-trigas.com](http://www.matheson-trigas.com). This document was generated by Matheson.

Tri-Gas Systems, Inc. © 2002. All rights reserved.

Printed on 03/22/2021

Approved: *[Signature]* Date: 03/23/2021

MTG Part No: 3400660

1400 psia @ 70°F; 9653 kPa @ 21°C

**CYLINDER NUMBER(S)**

\*DMD19038

\* 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.mathesontrigas.com](http://www.mathesontrigas.com).

Eric Bogen 03/22/2021 Don McLe 03/23/2021  
Date Date  
 - QA Approval

Eric Popa - Analyst

03/22/2021

Date

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## COMMENTS:

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Reagent

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**SFD ICV STK\_00008**



ACROS ORGANICS part of Thermo Fisher Scientific

**ACROS**  
**ORGANICS**

Version	1
Molecular weight	240.18
Molecular formula	Na <sub>2</sub> S · 9 H <sub>2</sub> O
CAS No	1313-84-4
Linear formula	Na <sub>2</sub> S·9H <sub>2</sub> O
Flash point (°C)	

## Certificate of Analysis

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Acros Organics expressly disclaims all warranties, expressed or implied, including the implied

warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to human or animals. It is the responsibility of the purchaser, formulator or those performing further manufacturing to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

Catalog Number	38706	Quality Test / Release Date	22 April 2021
Lot Number	A0412804	Suggested Retest Date	April 2024
Description	Sodium sulfide nonahydrate, 98+%, extra pure		
Country of Origin	INDIA		
Declaration of Origin	synthetic		

Origin Comment
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Result Name	Specifications	Test Value
Appearance (Color)	Colorless to light yellow	Light yellow
Appearance (Form)	Adhering crystals and/or chunks	Adhering crystals
Titration Iodimetric	32.0 to 38.0 % (Na <sub>2</sub> S)	32.3 % (Na <sub>2</sub> S)
Total nitrogen (as N)	=<0.005 %	=<0.005 %
Sulfite (as SO <sub>2</sub> )	=<2000 ppm	=<1000 ppm
Thiosulphate (S <sub>2</sub> O <sub>3</sub> )	=<5000 ppm	=<1000 ppm



C. Wygaerts, QA Manager

Issued: 27 April 2021

Acros Organics  
ENA23, zone 1, nr 1350, Janssen Pharmaceuticalaan 3a, B-2440 Geel, Belgium  
Tel +32 14/57.52.11 - Fax +32 14/59.34.34 Internet: <http://www.acros.com>  
1 Reagent Lane, Fair Lawn, NJ 07410, USA Fax 201-796-1329

Reagent

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**TKN CAL STD\_00019**

# Certificate of Analysis

## TKN Calibration Standard - 1000 mg/L

**Catalog Number:** IS-009, IS-009-500

**Expiration:** 08/31/2024

**Lot Number:** 200817

**Matrix:** Water

**Manufacture Date:** 08/17/20

**Hazards:** Irritant

**Certified Date:** 08/17/20

(See MSDS)

<u>Bulk Number</u>	<u>Analyte</u>	<u>CAS #</u>	<u>Purity</u>	<u>Certified Concentration</u> (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.



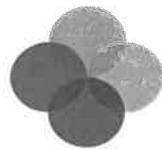
ISO 17034:2016  
Certificate AR-1571

ISO 9001:2015 UL Registered Firm - Certificate # 10002343 QM15

Page 1 of 2



ISO/IEC 17025:2017  
Certificate AT-1690



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  $\pm$  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*

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Ewart Morris, Inorganics Technical Manager

*Mark Hammersla*

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Mark Hammersla, President



ISO 17034:2016  
Certificate AR-1571

ISO 9001:2015 UL Registered Firm - Certificate # 10002343 QM15

Page 2 of 2



ISO/IEC 17025:2017  
Certificate AT-1690

Reagent

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**TKN ICV\_00013**



A Waters Company

# Certificate of Analysis

<b>PRODUCT:</b>	1000 mg/L Total Kjeldahl Nitrogen (TKN)
<b>CATALOG NUMBER:</b>	043 -125 mL; 996 - 500 mL
<b>LOT NUMBER:</b>	200220m
<b>ISSUE DATE:</b>	March 20, 2020
<b>REVISION DATE:</b>	Original
<b>STARTING MATERIAL:</b>	Glycine ( $\text{NH}_2\text{CH}_2\text{COOH}$ )
<b>CERTIFIED CONCENTRATION<sup>1</sup>:</b>	1000 mg/L
<b>UNCERTAINTY<sup>2</sup>:</b>	6.1%
<b>MATRIX:</b>	18 megohm deionized water and 1% (v/v) HCl
<b>DENSITY:</b>	$0.9966 \pm 0.0020 \text{ g/mL}$ at $19.4^\circ\text{C}$ and 753 mm Hg
<b>TRACEABILITY<sup>3</sup>:</b>	98.3%
<b>NIST/SRM:</b>	194a Ammonium Dihydrogen Phosphate
<b>VERIFICATION METHOD:</b>	Ion Selective Electrode (ISE)
<b>STORAGE:</b>	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](mailto:info@eraqc.com)

Certifying Officer: Brian Miller - Product Line Manager

ISO/IEC GUIDE 34:2009

ISO/IEC 17025:2005



REFERENCE MATERIAL PRODUCER  
CERTIFICATE NO. 1539.03



CHEMICAL TESTING LABORATORY  
CERTIFICATE NO. 1539.02

Reagent

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**TOC ICV Std\_00047**



# Certificate of Analysis

## Organic Carbon Standard, 1000 ppm C

Lot Number: 1102654

Product Number: 1847

Manufacture Date: FEB 02, 2021

Expiration Date: JAN 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
Phosphoric Acid	7664-38-2	ACS
Potassium Acid Phthalate	877-24-7	ACS Acidimetric

Test	Specification	Result
Appearance	Colorless liquid	Passed
Carbon (C)	995-1005 ppm	1000 ppm

Specification	Reference
Organic Carbon Stock Solution	APHA (5310 B)
Potassium Hydrogen Phthalate, Stock Solution	EPA (SW-846) (9060)
Potassium Hydrogen Phthalate, Stock Solution, 1000 mg Carbon/liter	EPA (415.1)
Organic Carbon Solution, Standard (1 mL = 1 mg C)	ASTM (D 2579)

Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
1847-16	500 mL amber glass	12 months
1847-32	1 L amber glass	12 months
1847-4	120 mL amber glass	12 months
1847-8	250 mL amber glass	12 months

Recommended Storage: 15°C - 30°C (59°F - 86°F)

Israel Alamudun (02/02/2021)

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

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**TOC LCS Std\_00052**



# Certificate of Analysis

**Product Name:** Total Organic Carbon (TOC) Standard

**Product Number:** IQC-106

**Lot Issue Date:** 07-May-2021

**Lot Number:** 0006606278

**Expiration Date:** 30-Jun-2023

## Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system. The analyte concentration(s) were prepared and verified by an ISO 17034 / ISO 17025 accredited laboratory and compared to calibration standards independently prepared using NIST SRM(s) when available. The certified value and uncertainty value at the 95% confidence level for each analyte is determined gravimetrically.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
potassium hydrogen phthalate (KHP) (as TOC)	000877-24-7	RM17581	1001 ± 5 mg/L

**Matrix:** water (low TOC, < 50 ppb)

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

## Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

## Homogeneity:

This RM was utilized 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](http://www.agilent.com) for information regarding this RM.

## Expiration of Certification:

The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

## Maintenance of Certification:

If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

## Sample lot approver:

Monica Bourgeois  
QMS Representative



ISO 17034 Cert  
No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026  
Page: 1 of 1

[www.agilent.com/quality/](http://www.agilent.com/quality/)  
CSD-QA-040.1



ISO 17025 Cert  
No. AT-1937

**RSK 175 DOD5**

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**Dissolved Gases (GC)**

FORM III  
GC VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Matrix: Water Level: Low Lab File ID: 002F0201.D

Lab ID: LCS 280-556811/2 Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
Methane	0.0657	0.0659	100	73-125	

# Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III  
GC VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Matrix: Water Level: Low Lab File ID: 002F0201.D

Lab ID: LCS 280-556939/2 Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
Methane	0.0657	0.0669	102	73-125	

# Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III  
GC VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Matrix: Water Level: Low Lab File ID: 003F0301.D

Lab ID: LCSD 280-556811/3 Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (mg/L)	LCSD CONCENTRATION (mg/L)	LCSD %	REC	QC LIMITS		#
					RPD	REC	
Methane	0.0657	0.0665	101	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 TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Matrix: Water Level: Low Lab File ID: 003F0301.D

Lab ID: LCSD 280-556939/3 Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (mg/L)	LCSD CONCENTRATION (mg/L)	LCSD %	REC	QC LIMITS		#
					RPD	REC	
Methane	0.0657	0.0661	101	1	20	73-125	

# Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III  
GC VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Matrix: Water Level: Low Lab File ID: 019F1901.D

Lab ID: 280-155048-7 MS Client ID: NW062-7 MS

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENTRATION (mg/L)	MS CONCENTRATION (mg/L)	MS % REC	QC LIMITS REC	#
Methane	0.0657	0.024	0.0884	97	73-125	

# Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III  
GC VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Matrix: Water Level: Low Lab File ID: 017F1701.D

Lab ID: 280-155048-8 MS Client ID: G0070-7 MS

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENTRATION (mg/L)	MS CONCENTRATION (mg/L)	MS % REC	QC LIMITS REC	#
Methane	0.0657	0.00085 J	0.0669	100	73-125	

# Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III  
GC VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Matrix: Water Level: Low Lab File ID: 020F2001.D

Lab ID: 280-155048-7 MSD Client ID: NW062-7 MSD

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENTRATION (mg/L)	MSD %	%	QC LIMITS		#
					REC	RPD	
Methane	0.0657	0.0891	99	1	20	73-125	

# Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III  
GC VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Matrix: Water Level: Low Lab File ID: 018F1801.D

Lab ID: 280-155048-8 MSD Client ID: G0070-7 MSD

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENTRATION (mg/L)	MSD %	REC	QC LIMITS		#
					RPD	REC	
Methane	0.0657	0.0669	101	0	20	73-125	

# Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM IV  
GC VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: MB 280-556811/4  
Matrix: Water Date Extracted: \_\_\_\_\_  
Lab File ID: (1) 004F0401.D Lab File ID: (2) 004F0401.D  
Date Analyzed: (1) 11/09/2021 18:13 Date Analyzed: (2) 11/09/2021 18:13  
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 280-556811/2	11/09/2021 17:48	11/09/2021 17:48
	LCSD 280-556811/3	11/09/2021 18:00	11/09/2021 18:00
G0076-7	280-155048-4	11/09/2021 20:11	11/09/2021 20:11
G0070-7	280-155048-8	11/09/2021 20:37	11/09/2021 20:37
G0070-7 DU	280-155048-8 DU	11/09/2021 20:50	11/09/2021 20:50
G0070-7 MS	280-155048-8 MS	11/09/2021 21:03	11/09/2021 21:03
G0070-7 MSD	280-155048-8 MSD	11/09/2021 21:16	11/09/2021 21:16

FORM IV  
GC VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: MB 280-556939/4  
Matrix: Water Date Extracted: \_\_\_\_\_  
Lab File ID: (1) 004F0401.D Lab File ID: (2) 004F0401.D  
Date Analyzed: (1) 11/10/2021 12:30 Date Analyzed: (2) 11/10/2021 12:30  
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 280-556939/2	11/10/2021 12:04	11/10/2021 12:04
	LCSD 280-556939/3	11/10/2021 12:17	11/10/2021 12:17
NW062-7	280-155048-7	11/10/2021 15:19	11/10/2021 15:19
NW062-7 DU	280-155048-7 DU	11/10/2021 15:32	11/10/2021 15:32
NW062-7 MS	280-155048-7 MS	11/10/2021 15:45	11/10/2021 15:45
NW062-7 MSD	280-155048-7 MSD	11/10/2021 15:58	11/10/2021 15:58
CA211-7	280-155048-1	11/10/2021 16:25	11/10/2021 16:25
CA212-7	280-155048-2	11/10/2021 16:38	11/10/2021 16:38
NW061-7	280-155048-3	11/10/2021 16:51	11/10/2021 16:51
NW060-7	280-155048-5	11/10/2021 17:04	11/10/2021 17:04
CA210-7	280-155048-6	11/10/2021 17:17	11/10/2021 17:17

FORM X  
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Client Sample ID: NW061-7 Lab Sample ID: 280-155048-3

Instrument ID (1): VGC\_J Instrument ID (2): VGC\_J

Date Analyzed (1): 11/10/2021 16:51 Date Analyzed (2): 11/10/2021 16:51

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	1.65	1.73	0.074		5.4
	2		1.29	1.26	1.34	0.078		

FORM X  
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Client Sample ID: G0076-7 Lab Sample ID: 280-155048-4

Instrument ID (1): VGC\_J Instrument ID (2): VGC\_J

Date Analyzed (1): 11/09/2021 20:11 Date Analyzed (2): 11/09/2021 20:11

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		1.67	1.65	1.73	0.49		6.9
	2		1.29	1.26	1.34	0.53		

FORM X  
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Client Sample ID: CA210-7 Lab Sample ID: 280-155048-6

Instrument ID (1): VGC\_J Instrument ID (2): VGC\_J

Date Analyzed (1): 11/10/2021 17:17 Date Analyzed (2): 11/10/2021 17:17

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.67	1.65	1.73	0.00074		23.7
	2		1.28	1.26	1.34	0.00094		

FORM X  
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Client Sample ID: NW062-7 Lab Sample ID: 280-155048-7

Instrument ID (1): VGC\_J Instrument ID (2): VGC\_J

Date Analyzed (1): 11/10/2021 15:19 Date Analyzed (2): 11/10/2021 15:19

GC Column (1): HP-Plot Q ID: 0.53 (mm) GC Column (2): Rt-Alumina KC ID: 0.53 (mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.67	1.65	1.73	0.024		5.2
	2		1.29	1.26	1.34	0.026		

FORM X  
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Client Sample ID: NW062-7 MS Lab Sample ID: 280-155048-7 MS

Instrument ID (1): VGC\_J Instrument ID (2): VGC\_J

Date Analyzed (1): 11/10/2021 15:45 Date Analyzed (2): 11/10/2021 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		1.67	1.65	1.73	0.0884		0.5
	2		1.29	1.26	1.34	0.0888		

FORM X  
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Client Sample ID: NW062-7 MSD Lab Sample ID: 280-155048-7 MSD

Instrument ID (1): VGC\_J Instrument ID (2): VGC\_J

Date Analyzed (1): 11/10/2021 15:58 Date Analyzed (2): 11/10/2021 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		1.67	1.65	1.73	0.0891		0.6
	2		1.29	1.26	1.34	0.0897		

FORM X  
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Client Sample ID: NW062-7 DU Lab Sample ID: 280-155048-7 DU

Instrument ID (1): VGC\_J Instrument ID (2): VGC\_J

Date Analyzed (1): 11/10/2021 15:32 Date Analyzed (2): 11/10/2021 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		1.67	1.65	1.73	0.0238		4.7
	2		1.29	1.26	1.34	0.0250		

FORM X  
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Client Sample ID: G0070-7 Lab Sample ID: 280-155048-8

Instrument ID (1): VGC\_J Instrument ID (2): VGC\_J

Date Analyzed (1): 11/09/2021 20:37 Date Analyzed (2): 11/09/2021 20:37

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	1.65	1.73	0.00085		17.2
	2		1.28	1.26	1.34	0.0010		

FORM X  
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Client Sample ID: G0070-7 MS Lab Sample ID: 280-155048-8 MS

Instrument ID (1): VGC\_J Instrument ID (2): VGC\_J

Date Analyzed (1): 11/09/2021 21:03 Date Analyzed (2): 11/09/2021 21:03

GC Column (1): HP-Plot Q ID: 0.53 (mm) GC Column (2): Rt-Alumina KC ID: 0.53 (mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.67	1.65	1.73	0.0669		0.6
	2		1.29	1.26	1.34	0.0673		

FORM X  
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Client Sample ID: G0070-7 MSD Lab Sample ID: 280-155048-8 MSD

Instrument ID (1): VGC\_J Instrument ID (2): VGC\_J

Date Analyzed (1): 11/09/2021 21:16 Date Analyzed (2): 11/09/2021 21:16

GC Column (1): HP-Plot Q ID: 0.53 (mm) GC Column (2): Rt-Alumina KC ID: 0.53 (mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.67	1.65	1.73	0.0669		0.4
	2		1.29	1.26	1.34	0.0672		

FORM X  
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Client Sample ID: G0070-7 DU Lab Sample ID: 280-155048-8 DU

Instrument ID (1): VGC\_J Instrument ID (2): VGC\_J

Date Analyzed (1): 11/09/2021 20:50 Date Analyzed (2): 11/09/2021 20:50

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.67	1.65	1.73	0.000782		21.1
	2		1.28	1.26	1.34	0.000967		

FORM X  
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Client Sample ID: \_\_\_\_\_ Lab Sample ID: LCS 280-556811/2

Instrument ID (1): VGC\_J Instrument ID (2): VGC\_J

Date Analyzed (1): 11/09/2021 17:48 Date Analyzed (2): 11/09/2021 17:48

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.69	1.65	1.73	0.0659		2.1
	2		1.30	1.26	1.34	0.0645		

FORM X  
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Client Sample ID: \_\_\_\_\_ Lab Sample ID: LCSD 280-556811/3

Instrument ID (1): VGC\_J Instrument ID (2): VGC\_J

Date Analyzed (1): 11/09/2021 18:00 Date Analyzed (2): 11/09/2021 18:00

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		1.68	1.65	1.73	0.0665		1.9
	2		1.30	1.26	1.34	0.0653		

FORM X  
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Client Sample ID: \_\_\_\_\_ Lab Sample ID: LCS 280-556939/2

Instrument ID (1): VGC\_J Instrument ID (2): VGC\_J

Date Analyzed (1): 11/10/2021 12:04 Date Analyzed (2): 11/10/2021 12:04

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		1.68	1.65	1.73	0.0669		1.9
	2		1.30	1.26	1.34	0.0657		

FORM X  
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Client Sample ID: \_\_\_\_\_ Lab Sample ID: LCSD 280-556939/3

Instrument ID (1): VGC\_J Instrument ID (2): VGC\_J

Date Analyzed (1): 11/10/2021 12:17 Date Analyzed (2): 11/10/2021 12:17

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.68	1.65	1.73	0.0661		1.7
	2		1.29	1.26	1.34	0.0649		

FORM I  
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: CA211-7 Lab Sample ID: 280-155048-1  
Matrix: Water Lab File ID: 022F2201.D  
Analysis Method: RSK-175 Date Collected: 11/02/2021 10:55  
Sample wt/vol: 20 (mL) Date Analyzed: 11/10/2021 16:25  
Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
Soil Extract Vol.: \_\_\_\_\_ GC Column: HP-Plot Q ID: 0.53 (mm)  
% Moisture: \_\_\_\_\_ Level: (low/med) Low  
Analysis Batch No.: 556939 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 TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211110-106374.b\022F2201.D  
 Lims ID: 280-155048-I-1  
 Client ID: CA211-7  
 Sample Type: Client  
 Inject. Date: 10-Nov-2021 16:25:05 ALS Bottle#: 22 Worklist Smp#: 22  
 Purge Vol: 18.000 mL Dil. Factor: 1.0000  
 Sample Info: 280-155048-I-1  
 Operator ID: sciannac Instrument ID: VGC\_J  
 Method: \\chromfs\Denver\ChromData\VGC\_J\20211110-106374.b\RSK\_J.m  
 Limit Group: GCV - RSK 175  
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175  
 Last Update: 15-Nov-2021 15:36:04 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: CTX1649

First Level Reviewer: meierg Date: 15-Nov-2021 15:34:34

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 7

1	1.299	ND
2	1.686	

3 Ethane

1	1.553	ND
2	3.024	

4 Ethylene

1	1.844	ND
2	2.608	

5 Propane

1	2.648	ND
2	4.928	

6 Acetylene

1	4.113	ND
2	2.751	

7 Butane

1	4.481	ND
2	6.428	

8 isobutylene

1	5.348	ND
2	6.269	

## QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Report Date: 15-Nov-2021 15:36:07

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211110-106374.b\022F2201.D

Injection Date: 10-Nov-2021 16:25:05

Instrument ID: VGC\_J

Operator ID: sciannac

Lims ID: 280-155048-I-1

Lab Sample ID: 280-155048-1

Worklist Smp#: 22

Client ID: CA211-7

Dil. Factor: 1.0000

ALS Bottle#: 22

Purge Vol: 18.000 mL

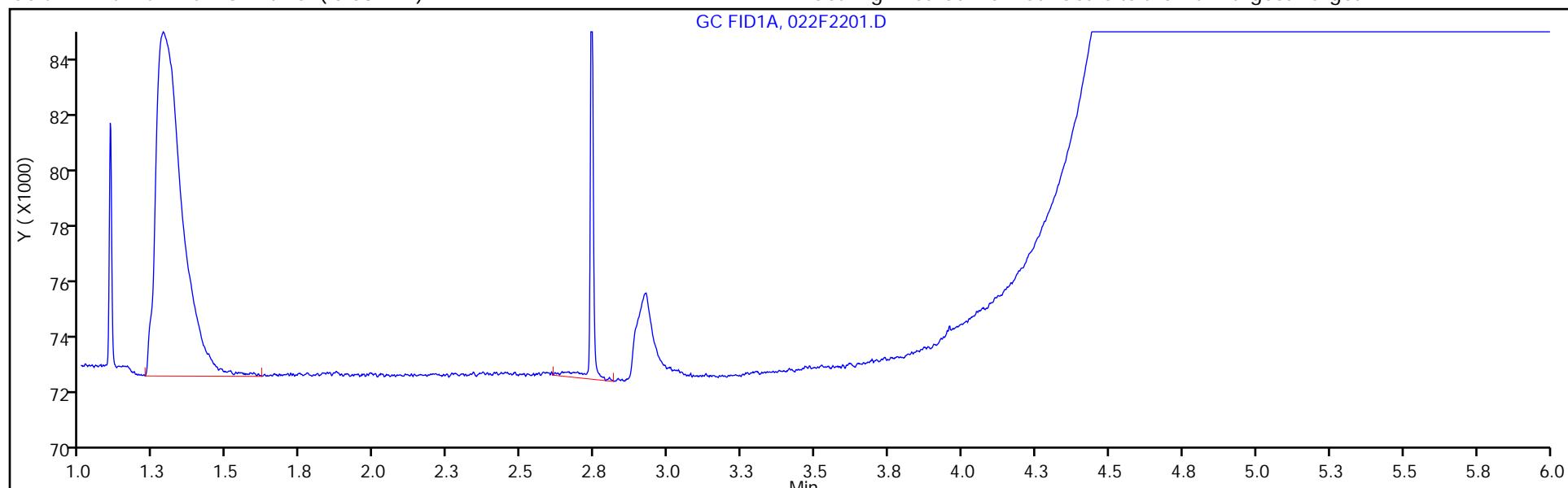
Limit Group: GCV - RSK 175

Method: RSK\_J

Column: Rt-Alumina BOND/KCl ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

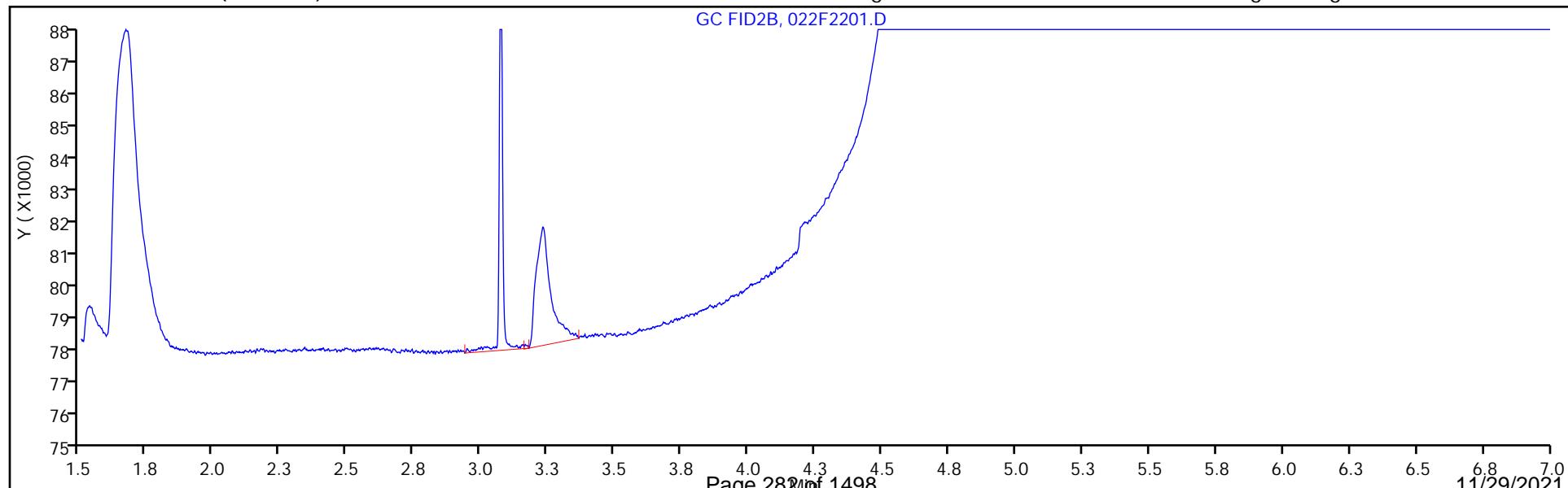
GC FID1A, 022F2201.D



Column: HP-PLOT/Q ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

GC FID2B, 022F2201.D



FORM I  
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: CA212-7 Lab Sample ID: 280-155048-2  
Matrix: Water Lab File ID: 023F2301.D  
Analysis Method: RSK-175 Date Collected: 11/02/2021 12:05  
Sample wt/vol: 20 (mL) Date Analyzed: 11/10/2021 16:38  
Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
Soil Extract Vol.: \_\_\_\_\_ GC Column: HP-Plot Q ID: 0.53 (mm)  
% Moisture: \_\_\_\_\_ Level: (low/med) Low  
Analysis Batch No.: 556939 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 TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211110-106374.b\023F2301.D  
 Lims ID: 280-155048-G-2  
 Client ID: CA212-7  
 Sample Type: Client  
 Inject. Date: 10-Nov-2021 16:38:11 ALS Bottle#: 23 Worklist Smp#: 23  
 Purge Vol: 18.000 mL Dil. Factor: 1.0000  
 Sample Info: 280-155048-G-2  
 Operator ID: sciannac Instrument ID: VGC\_J  
 Method: \\chromfs\Denver\ChromData\VGC\_J\20211110-106374.b\RSK\_J.m  
 Limit Group: GCV - RSK 175  
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175  
 Last Update: 15-Nov-2021 15:36:04 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: CTX1649

First Level Reviewer: meierg Date: 15-Nov-2021 15:34:40

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
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\$ 1 1,1,1-Trifluoroethane

1	4.362	ND
2	5.458	

2 Methane

1	1.299	ND
2	1.686	

3 Ethane

1	1.553	ND
2	3.024	

4 Ethylene

1	1.844	ND
2	2.608	

5 Propane

1	2.648	ND
2	4.928	

6 Acetylene

1	4.113	ND
2	2.751	

7 Butane

1	4.481	ND
2	6.428	

8 isobutylene

1	5.348	ND
2	6.269	

**QC Flag Legend**

Processing Flags

7 - Failed Limit of Detection

Report Date: 15-Nov-2021 15:36:07

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211110-106374.b\023F2301.D

Injection Date: 10-Nov-2021 16:38:11

Instrument ID: VGC\_J

Operator ID: sciannac

Lims ID: 280-155048-G-2

Lab Sample ID: 280-155048-2

Worklist Smp#: 23

Client ID: CA212-7

Dil. Factor: 1.0000

ALS Bottle#: 23

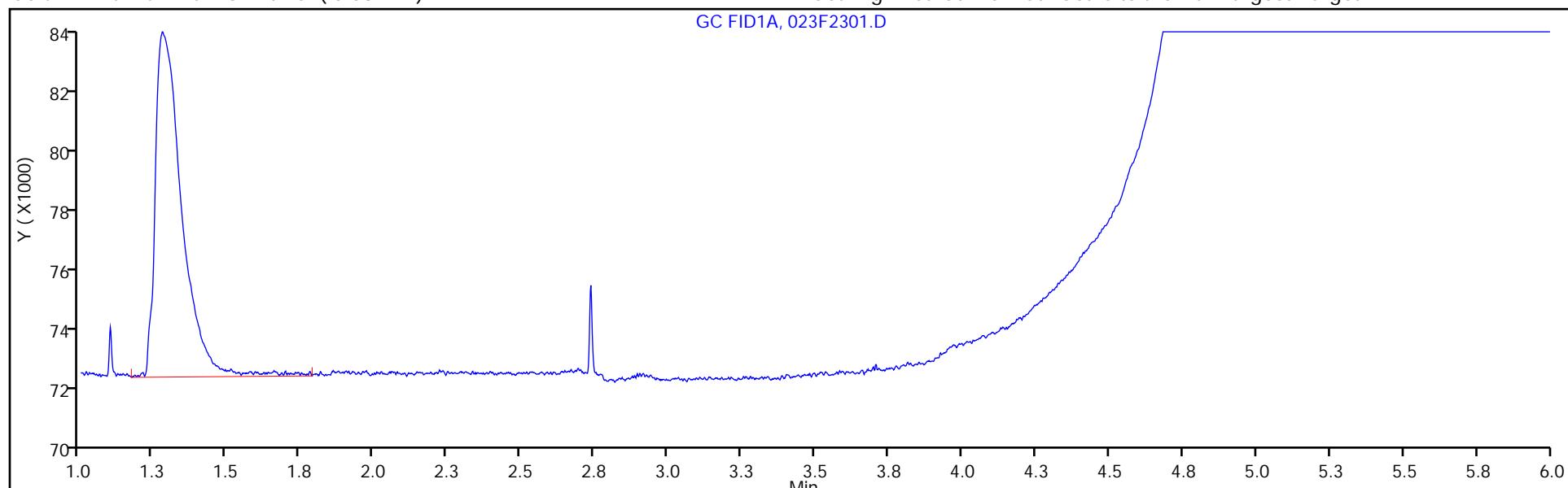
Purge Vol: 18.000 mL

Limit Group: GCV - RSK 175

Method: RSK\_J

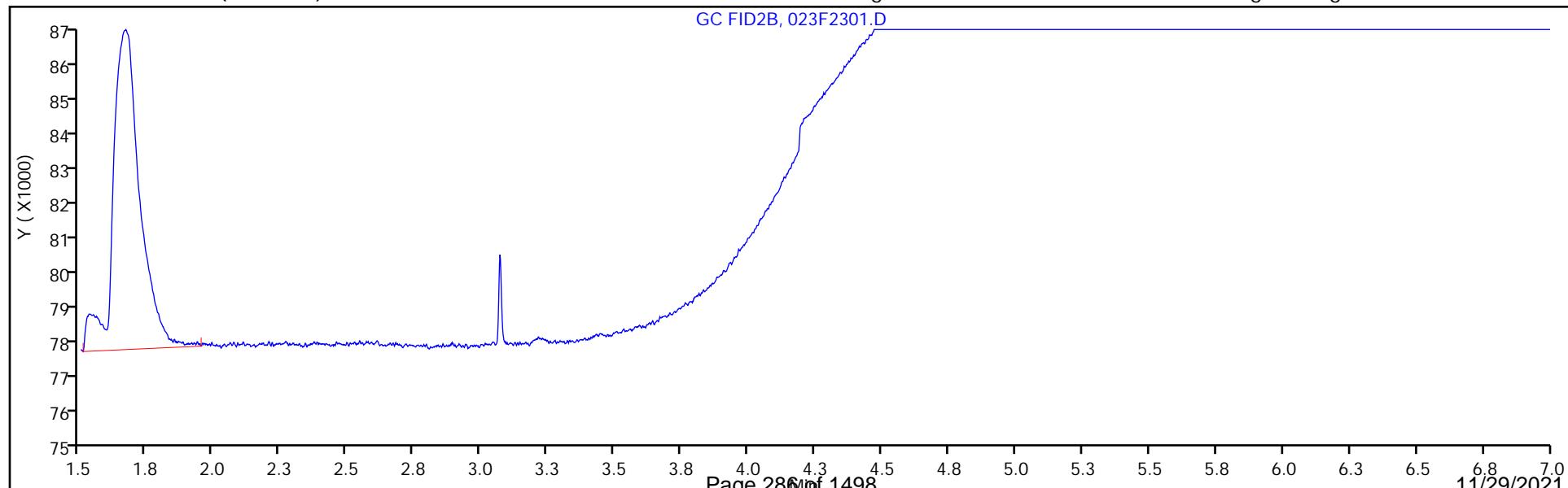
Column: Rt-Alumina BOND/KCl ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I  
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.:  
Client Sample ID: NW061-7 Lab Sample ID: 280-155048-3  
Matrix: Water Lab File ID: 024F2401.D  
Analysis Method: RSK-175 Date Collected: 11/02/2021 11:30  
Sample wt/vol: 20 (mL) Date Analyzed: 11/10/2021 16:51  
Soil Aliquot Vol: Dilution Factor: 1  
Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53 (mm)  
% Moisture: Level: (low/med) Low  
Analysis Batch No.: 556939 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.074		0.0050	0.0013	0.00063

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211110-106374.b\024F2401.D  
 Lims ID: 280-155048-G-3  
 Client ID: NW061-7  
 Sample Type: Client  
 Inject. Date: 10-Nov-2021 16:51:08 ALS Bottle#: 24 Worklist Smp#: 24  
 Purge Vol: 18.000 mL Dil. Factor: 1.0000  
 Sample Info: 280-155048-G-3  
 Operator ID: sciannac Instrument ID: VGC\_J  
 Method: \\chromfs\Denver\ChromData\VGC\_J\20211110-106374.b\RSK\_J.m  
 Limit Group: GCV - RSK 175  
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175  
 Last Update: 15-Nov-2021 15:36:04 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: CTX1649

First Level Reviewer: meierg Date: 15-Nov-2021 15:34:44

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
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## \$ 1 1,1,1-Trifluoroethane

1	4.362	ND
2	5.458	

## 2 Methane

1	1.291	1.299	-0.008	2810210	78.0	
2	1.672	1.686	-0.014	2731633	73.9	

RPD = 5.42

## 3 Ethane

1	1.553	ND
2	3.024	

## 4 Ethylene

1	1.844	ND
2	2.608	

## 5 Propane

1	2.648	ND
2	4.928	

## 6 Acetylene

1	4.113	ND
2	2.751	

## 7 Butane

1	4.481	ND
2	6.428	

## 8 isobutylene

1	5.348	ND
2	6.269	

**QC Flag Legend**

Processing Flags

Report Date: 15-Nov-2021 15:36:07

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211110-106374.b\024F2401.D

Injection Date: 10-Nov-2021 16:51:08

Instrument ID: VGC\_J

Operator ID: sciannac

Lims ID: 280-155048-G-3

Lab Sample ID: 280-155048-3

Worklist Smp#: 24

Client ID: NW061-7

Dil. Factor: 1.0000

ALS Bottle#: 24

Purge Vol: 18.000 mL

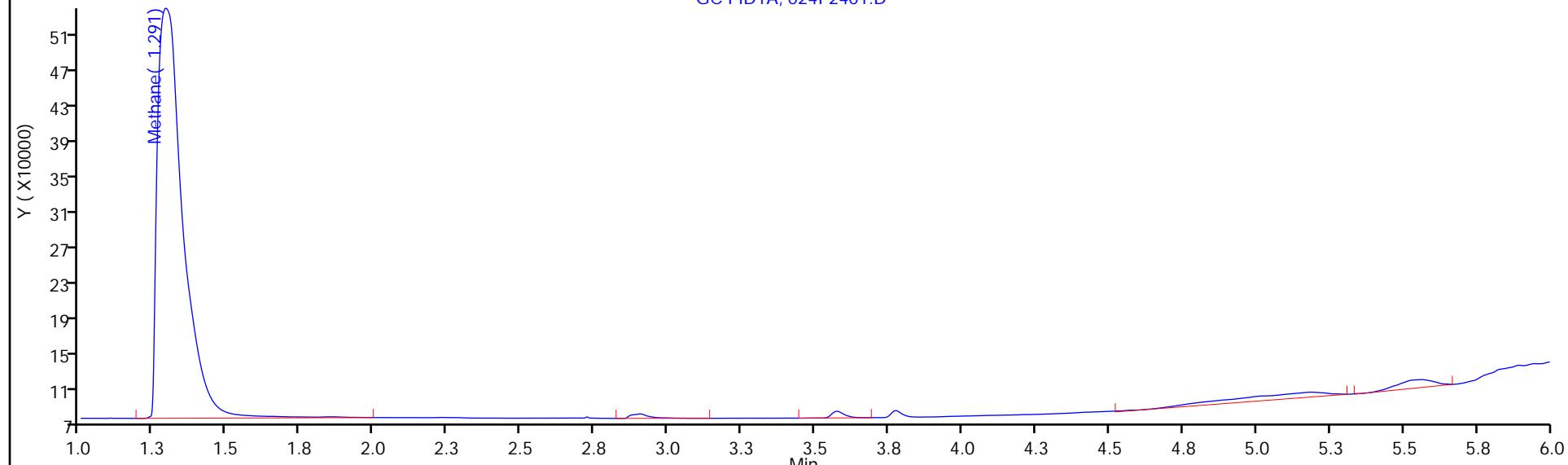
Limit Group: GCV - RSK 175

Method: RSK\_J

Column: Rt-Alumina BOND/KCl ( 0.53 mm)

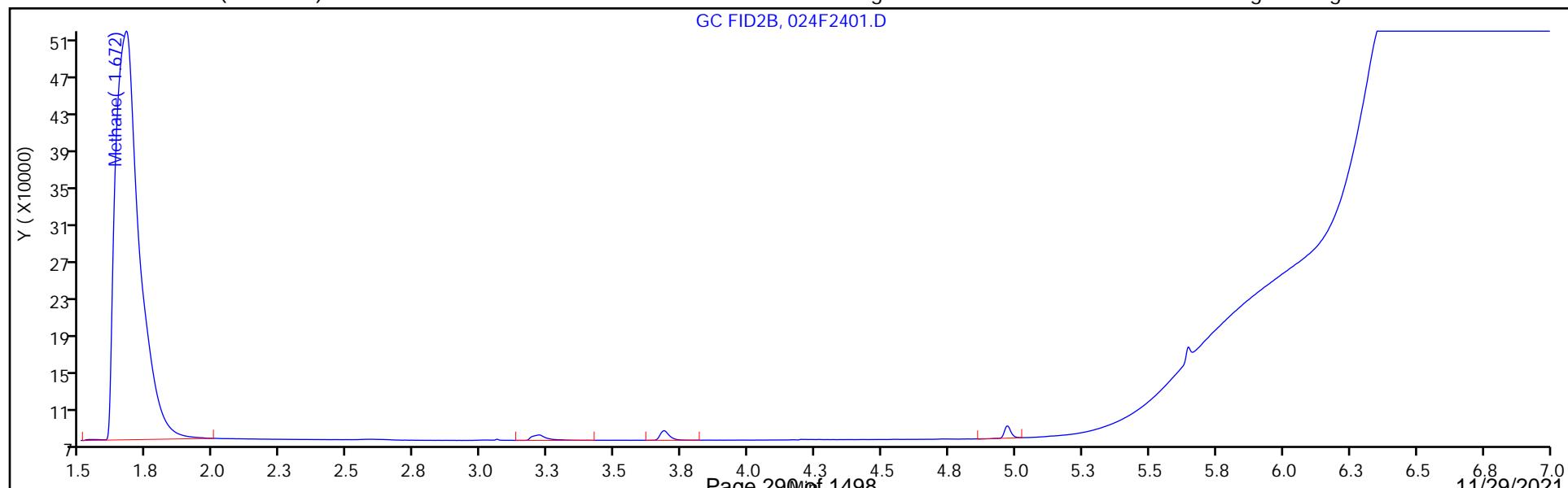
Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

GC FID1A, 024F2401.D



Column: HP-PLOT/Q ( 0.53 mm)

GC FID2B, 024F2401.D



FORM I  
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.:  
Client Sample ID: G0076-7 Lab Sample ID: 280-155048-4  
Matrix: Water Lab File ID: 013F1301.D  
Analysis Method: RSK-175 Date Collected: 11/01/2021 13:10  
Sample wt/vol: 20 (mL) Date Analyzed: 11/09/2021 20:11  
Soil Aliquot Vol: Dilution Factor: 1  
Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53 (mm)  
% Moisture: Level: (low/med) Low  
Analysis Batch No.: 556811 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.49		0.0050	0.0013	0.00063

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211109-106343.b\013F1301.D  
 Lims ID: 280-155048-I-4  
 Client ID: G0076-7  
 Sample Type: Client  
 Inject. Date: 09-Nov-2021 20:11:20 ALS Bottle#: 13 Worklist Smp#: 13  
 Purge Vol: 18.000 mL Dil. Factor: 1.0000  
 Sample Info: 280-155048-I-4  
 Operator ID: sciannac Instrument ID: VGC\_J  
 Method: \\chromfs\Denver\ChromData\VGC\_J\20211109-106343.b\RSK\_J.m  
 Limit Group: GCV - RSK 175  
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175  
 Last Update: 15-Nov-2021 12:57:13 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: CTX1658

First Level Reviewer: sciannac Date: 12-Nov-2021 09:46:30

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
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## \$ 1 1,1,1-Trifluoroethane

1	4.362	ND
2	5.458	

## 2 Methane

1	1.288	1.302	-0.014	18648838	528.4	
2	1.670	1.690	-0.020	17868257	493.2	

RPD = 6.89

## 3 Ethane

1	1.550	ND
2	3.030	

## 4 Ethylene

1	1.828	ND
2	2.612	

## 5 Propane

1	2.608	ND
2	4.930	

## 6 Acetylene

1	4.032	ND
2	2.755	

## 7 Butane

1	4.423	ND
2	6.428	

## 8 isobutylene

1	5.282	ND
2	6.270	

**QC Flag Legend**

Processing Flags

Report Date: 15-Nov-2021 12:57:20

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211109-106343.b\013F1301.D

Injection Date: 09-Nov-2021 20:11:20

Instrument ID: VGC\_J

Operator ID: sciannac

Lims ID: 280-155048-I-4

Lab Sample ID: 280-155048-4

Worklist Smp#: 13

Client ID: G0076-7

Dil. Factor: 1.0000

ALS Bottle#: 13

Purge Vol: 18.000 mL

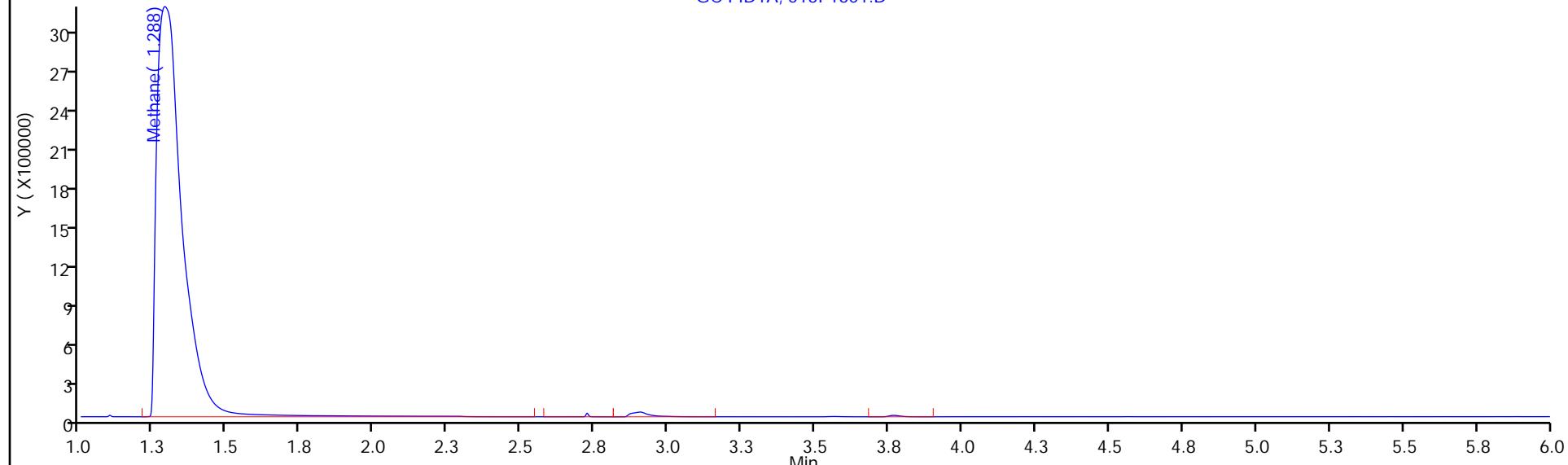
Limit Group: GCV - RSK 175

Method: RSK\_J

Column: Rt-Alumina BOND/KCl ( 0.53 mm)

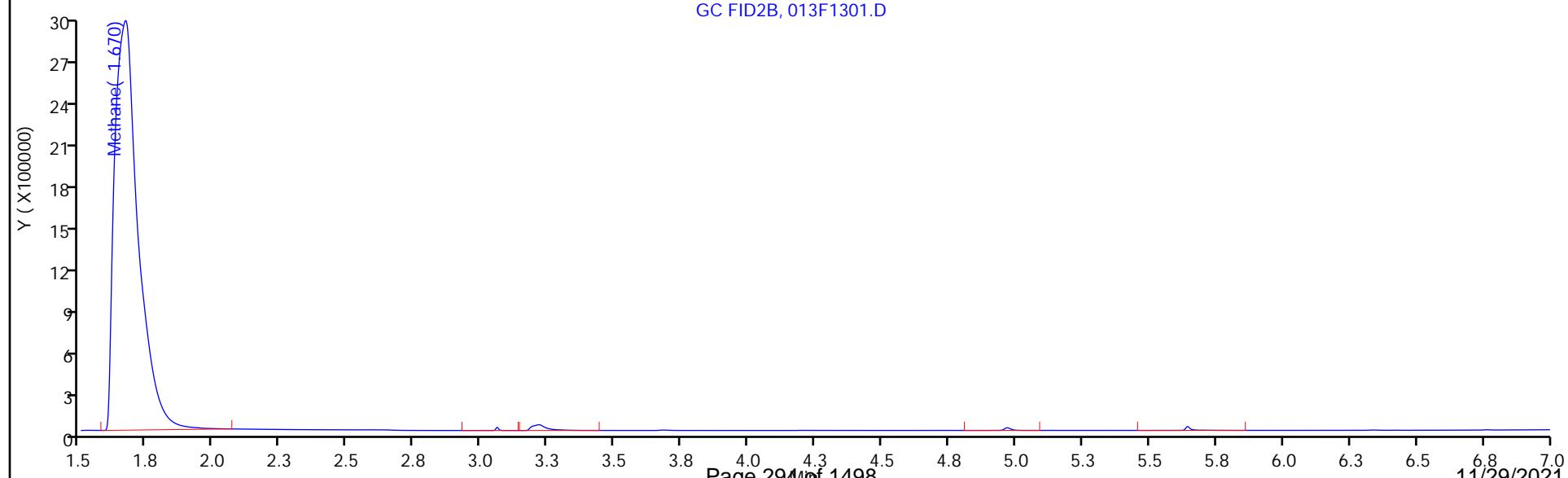
Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

GC FID1A, 013F1301.D



Column: HP-PLOT/Q ( 0.53 mm)

GC FID2B, 013F1301.D



FORM I  
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.:  
Client Sample ID: NW060-7 Lab Sample ID: 280-155048-5  
Matrix: Water Lab File ID: 025F2501.D  
Analysis Method: RSK-175 Date Collected: 11/02/2021 10:10  
Sample wt/vol: 20 (mL) Date Analyzed: 11/10/2021 17:04  
Soil Aliquot Vol: Dilution Factor: 1  
Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53 (mm)  
% Moisture: Level: (low/med) Low  
Analysis Batch No.: 556939 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 TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211110-106374.b\025F2501.D  
 Lims ID: 280-155048-I-5  
 Client ID: NW060-7  
 Sample Type: Client  
 Inject. Date: 10-Nov-2021 17:04:08 ALS Bottle#: 25 Worklist Smp#: 25  
 Purge Vol: 18.000 mL Dil. Factor: 1.0000  
 Sample Info: 280-155048-I-5  
 Operator ID: sciannac Instrument ID: VGC\_J  
 Method: \\chromfs\Denver\ChromData\VGC\_J\20211110-106374.b\RSK\_J.m  
 Limit Group: GCV - RSK 175  
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175  
 Last Update: 15-Nov-2021 15:36:04 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: CTX1649

First Level Reviewer: meierg Date: 15-Nov-2021 15:34:49

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
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## \$ 1 1,1,1-Trifluoroethane

1	4.362	ND
2	5.458	

## 2 Methane

1	1.299	ND
2	1.686	

## 3 Ethane

1	1.553	ND
2	3.024	

## 4 Ethylene

1	1.844	ND
2	2.608	

## 5 Propane

1	2.648	ND
2	4.928	

## 6 Acetylene

1	4.113	ND
2	2.751	

## 7 Butane

1	4.481	ND
2	6.428	

## 8 isobutylene

1	5.348	ND
2	6.269	

## QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Report Date: 15-Nov-2021 15:36:08

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211110-106374.b\025F2501.D

Injection Date: 10-Nov-2021 17:04:08

Instrument ID: VGC\_J

Operator ID: sciannac

Lims ID: 280-155048-I-5

Lab Sample ID: 280-155048-5

Worklist Smp#: 25

Client ID: NW060-7

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

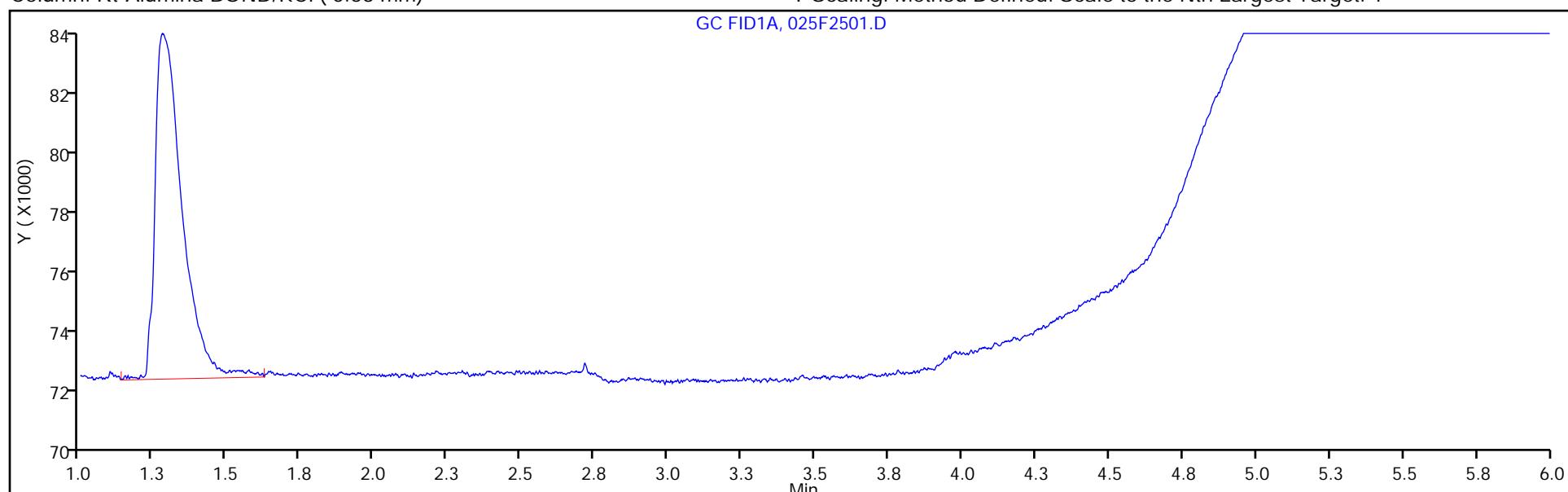
ALS Bottle#: 25

Method: RSK\_J

Limit Group: GCV - RSK 175

Column: Rt-Alumina BOND/KCl ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I  
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.:  
Client Sample ID: CA210-7 Lab Sample ID: 280-155048-6  
Matrix: Water Lab File ID: 026F2601.D  
Analysis Method: RSK-175 Date Collected: 11/02/2021 09:50  
Sample wt/vol: 20 (mL) Date Analyzed: 11/10/2021 17:17  
Soil Aliquot Vol: Dilution Factor: 1  
Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53 (mm)  
% Moisture: Level: (low/med) Low  
Analysis Batch No.: 556939 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.00074	J	0.0050	0.0013	0.00063

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211110-106374.b\026F2601.D  
 Lims ID: 280-155048-I-6  
 Client ID: CA210-7  
 Sample Type: Client  
 Inject. Date: 10-Nov-2021 17:17:12 ALS Bottle#: 26 Worklist Smp#: 26  
 Purge Vol: 18.000 mL Dil. Factor: 1.0000  
 Sample Info: 280-155048-I-6  
 Operator ID: sciannac Instrument ID: VGC\_J  
 Method: \\chromfs\Denver\ChromData\VGC\_J\20211110-106374.b\RSK\_J.m  
 Limit Group: GCV - RSK 175  
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175  
 Last Update: 15-Nov-2021 15:36:04 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: CTX1649

First Level Reviewer: meierg Date: 15-Nov-2021 15:34:54

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
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\$ 1 1,1,1-Trifluoroethane

1	4.362	ND
2	5.458	

2 Methane

1	1.283	1.299	-0.016	98407	0.9401
2	1.674	1.686	-0.012	89376	0.7407

RPD = 23.73

3 Ethane

1	1.553	ND
2	3.024	

4 Ethylene

1	1.844	ND
2	2.608	

5 Propane

1	2.648	ND
2	4.928	

6 Acetylene

1	4.113	ND
2	2.751	

7 Butane

1	4.481	ND
2	6.428	

8 isobutylene

1	5.348	ND
2	6.269	

**QC Flag Legend**

Processing Flags

Report Date: 15-Nov-2021 15:36:08

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211110-106374.b\026F2601.D

Injection Date: 10-Nov-2021 17:17:12

Instrument ID: VGC\_J

Operator ID: sciannac

Lims ID: 280-155048-I-6

Lab Sample ID: 280-155048-6

Worklist Smp#: 26

Client ID: CA210-7

Dil. Factor: 1.0000

ALS Bottle#: 26

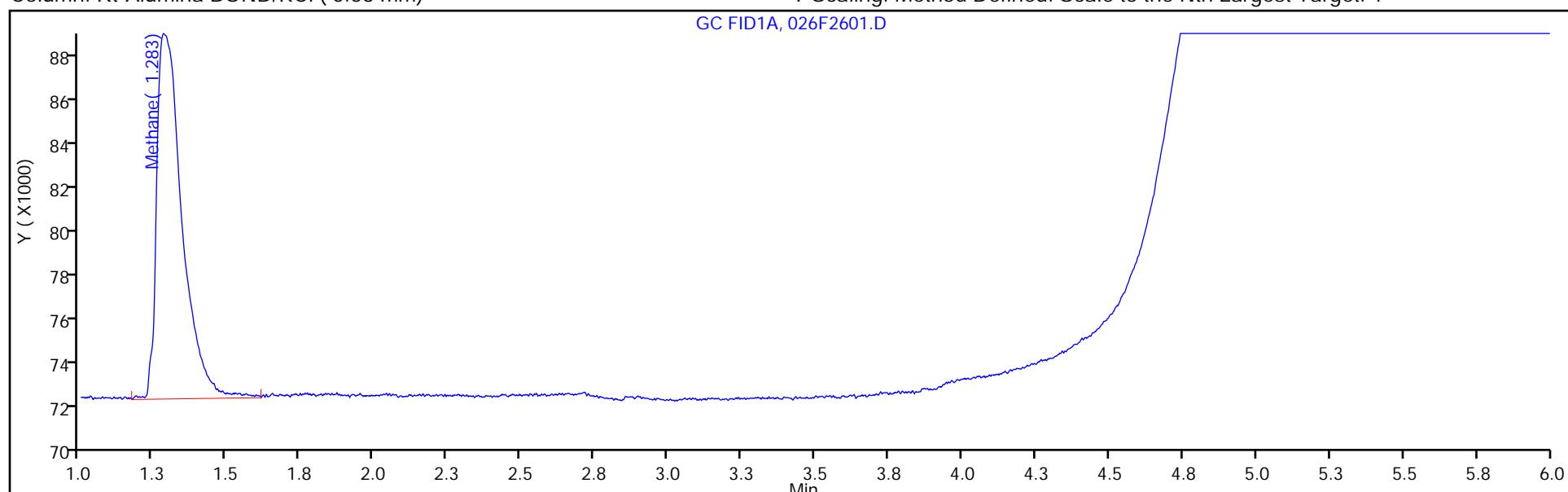
Purge Vol: 18.000 mL

Limit Group: GCV - RSK 175

Method: RSK\_J

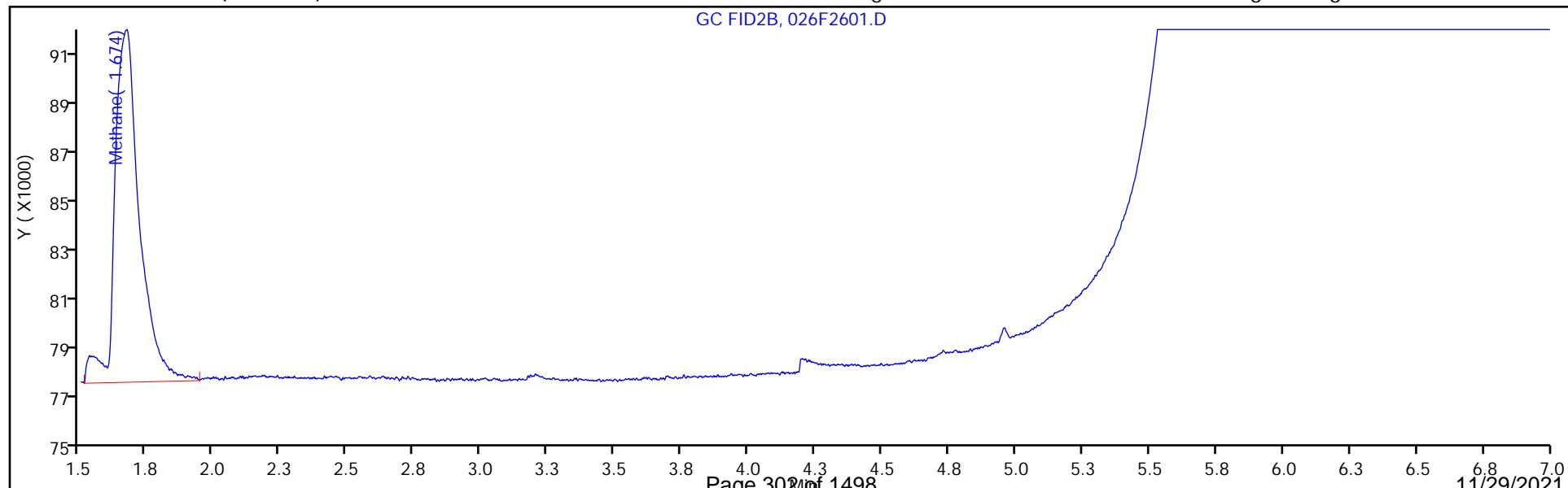
Column: Rt-Alumina BOND/KCl ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I  
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.:  
Client Sample ID: NW062-7 Lab Sample ID: 280-155048-7  
Matrix: Water Lab File ID: 017F1701.D  
Analysis Method: RSK-175 Date Collected: 11/02/2021 12:50  
Sample wt/vol: 20 (mL) Date Analyzed: 11/10/2021 15:19  
Soil Aliquot Vol: Dilution Factor: 1  
Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53 (mm)  
% Moisture: Level: (low/med) Low  
Analysis Batch No.: 556939 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.024		0.0050	0.0013	0.00063

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211110-106374.b\017F1701.D  
 Lims ID: 280-155048-H-7  
 Client ID: NW062-7  
 Sample Type: Client  
 Inject. Date: 10-Nov-2021 15:19:37 ALS Bottle#: 17 Worklist Smp#: 17  
 Purge Vol: 18.000 mL Dil. Factor: 1.0000  
 Sample Info: 280-155048-H-7  
 Operator ID: sciannac Instrument ID: VGC\_J  
 Method: \\chromfs\Denver\ChromData\VGC\_J\20211110-106374.b\RSK\_J.m  
 Limit Group: GCV - RSK 175  
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175  
 Last Update: 15-Nov-2021 15:36:04 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: CTX1649

First Level Reviewer: meierg Date: 15-Nov-2021 15:33:25

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
-----	-----------	---------------	---------------	----------	----------------	-------

\$ 1 1,1,1-Trifluoroethane

1	4.362	ND
2	5.458	

2 Methane

1	1.288	1.299	-0.011	967261	25.6
2	1.672	1.686	-0.014	941792	24.4

RPD = 5.17

3 Ethane

1	1.553	ND
2	3.024	

4 Ethylene

1	1.844	ND
2	2.608	

5 Propane

1	2.648	ND
2	4.928	

6 Acetylene

1	4.113	ND
2	2.751	

7 Butane

1	4.481	ND
2	6.428	

8 isobutylene

1	5.348	ND
2	6.269	

**QC Flag Legend**

Processing Flags

Report Date: 15-Nov-2021 15:36:05

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211110-106374.b\017F1701.D

Injection Date: 10-Nov-2021 15:19:37

Instrument ID: VGC\_J

Operator ID: sciannac

Lims ID: 280-155048-H-7

Lab Sample ID: 280-155048-7

Worklist Smp#: 17

Client ID: NW062-7

Dil. Factor: 1.0000

ALS Bottle#: 17

Purge Vol: 18.000 mL

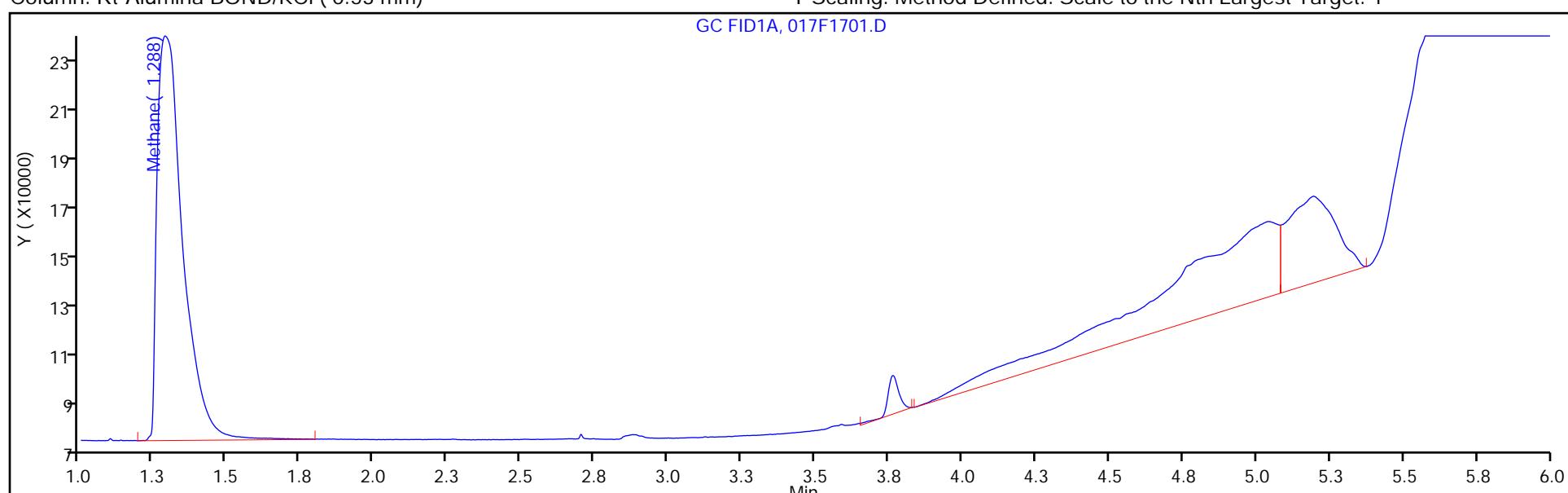
Limit Group: GCV - RSK 175

Method: RSK\_J

Column: Rt-Alumina BOND/KCl ( 0.53 mm)

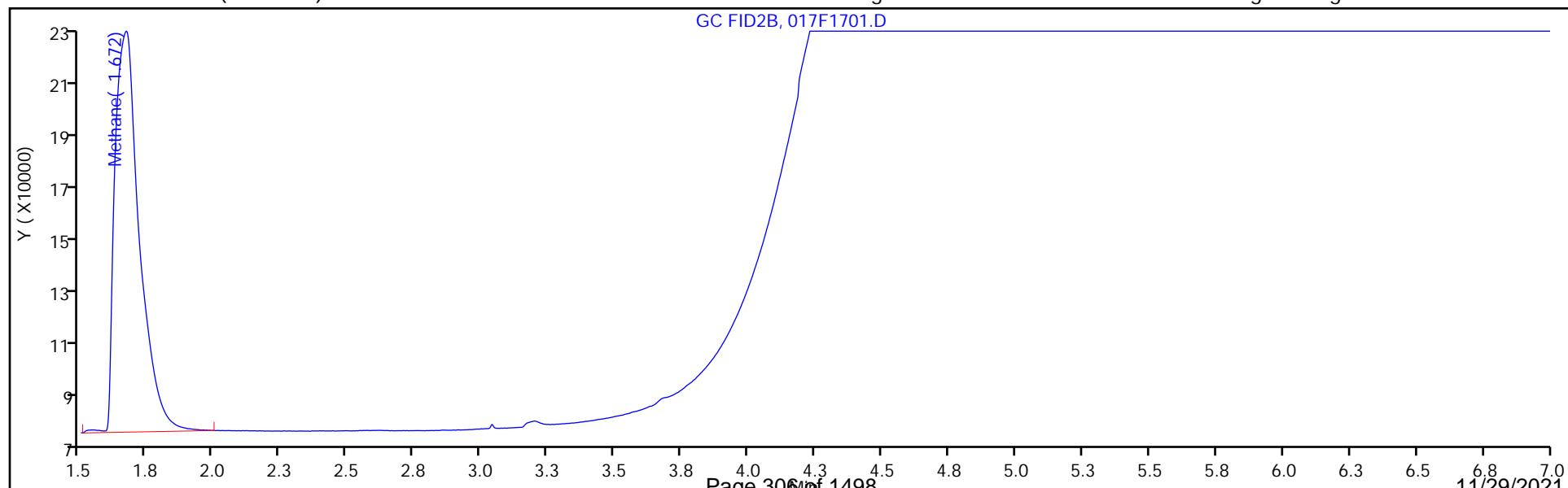
Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

GC FID1A, 017F1701.D



Column: HP-PLOT/Q ( 0.53 mm)

GC FID2B, 017F1701.D



FORM I  
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.:  
Client Sample ID: G0070-7 Lab Sample ID: 280-155048-8  
Matrix: Water Lab File ID: 015F1501.D  
Analysis Method: RSK-175 Date Collected: 11/01/2021 14:25  
Sample wt/vol: 20 (mL) Date Analyzed: 11/09/2021 20:37  
Soil Aliquot Vol: Dilution Factor: 1  
Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53 (mm)  
% Moisture: Level: (low/med) Low  
Analysis Batch No.: 556811 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.00085	J	0.0050	0.0013	0.00063

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211109-106343.b\015F1501.D  
 Lims ID: 280-155048-I-8  
 Client ID: G0070-7  
 Sample Type: Client  
 Inject. Date: 09-Nov-2021 20:37:12 ALS Bottle#: 15 Worklist Smp#: 15  
 Purge Vol: 18.000 mL Dil. Factor: 1.0000  
 Sample Info: 280-155048-H-8  
 Operator ID: sciannac Instrument ID: VGC\_J  
 Method: \\chromfs\Denver\ChromData\VGC\_J\20211109-106343.b\RSK\_J.m  
 Limit Group: GCV - RSK 175  
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175  
 Last Update: 15-Nov-2021 12:57:20 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: 12-Nov-2021 10:06:25

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
-----	-----------	---------------	---------------	----------	----------------	-------

## \$ 1 1,1,1-Trifluoroethane

1	4.362	ND
2	5.458	

## 2 Methane

1	1.281	1.302	-0.021	100887	1.01	
2	1.669	1.690	-0.021	93350	0.8508	

RPD = 17.18

## 3 Ethane

1	1.550	ND
2	3.030	

## 4 Ethylene

1	1.828	ND
2	2.612	

## 5 Propane

1	2.608	ND
2	4.930	

## 6 Acetylene

1	4.032	ND
2	2.755	

## 7 Butane

1	4.423	ND
2	6.428	

## 8 isobutylene

1	5.282	ND
2	6.270	

**QC Flag Legend**

Processing Flags

Report Date: 15-Nov-2021 12:57:21

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211109-106343.b\015F1501.D

Injection Date: 09-Nov-2021 20:37:12

Instrument ID: VGC\_J

Operator ID: sciannac

Lims ID: 280-155048-I-8

Lab Sample ID: 280-155048-8

Worklist Smp#: 15

Client ID: G0070-7

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

ALS Bottle#: 15

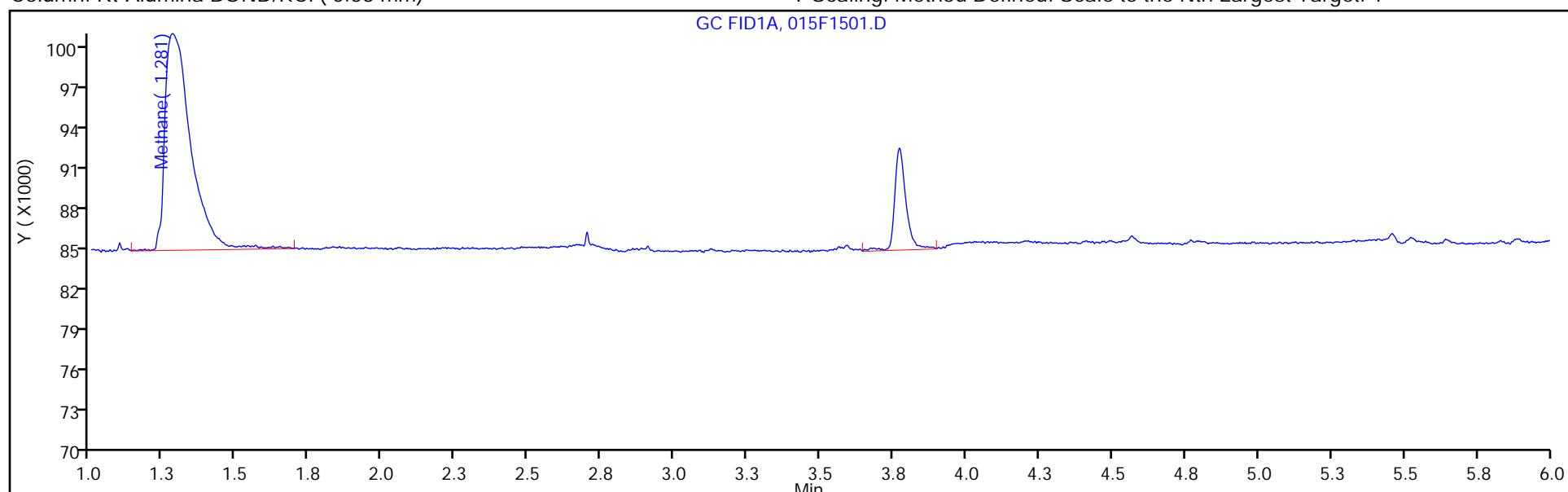
Method: RSK\_J

Limit Group: GCV - RSK 175

Column: Rt-Alumina BOND/KCl ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

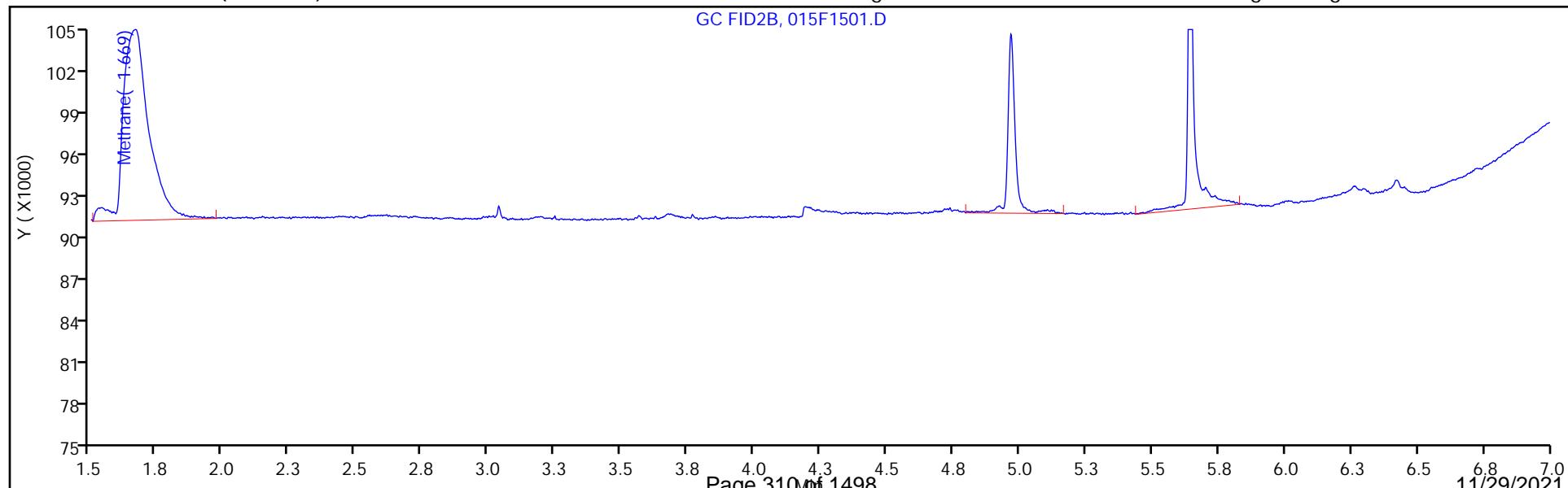
GC FID1A, 015F1501.D



Column: HP-PLOT/Q ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

GC FID2B, 015F1501.D



FORM VI  
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA  
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1 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 TestAmerica, Denver Job No.: 280-155048-1 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 2	LVL 3	LVL 4		B	M1	M2								
Methane	113753 36593 34286	77207 30893	37613 37193	37343 37763	Lin2	65341.474 9	35170.836 2							0.9950		0.9900
Ethane	30155 35527	35278 30441	32231	35816	Ave		33241.272 2				7.9	20.0				
Ethylene	33189 37346	37318 31937	33977	37589	Ave		35225.967 5				7.1	20.0				
Acetylene	26445 29412	29909 25729	27524	29815	Ave		28139.019 5				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 TestAmerica, Denver Job No.: 280-155048-1 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							
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							
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							
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							
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							
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							
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							
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

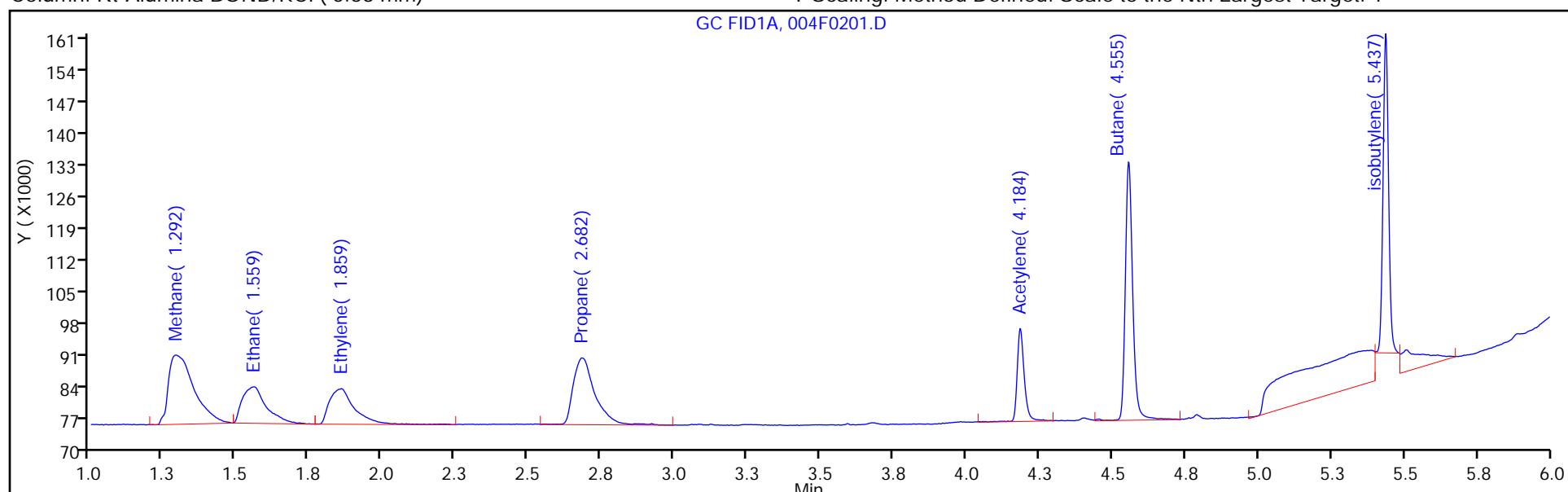
ALS Bottle#: 4

Method: RSK\_J

Limit Group: GCV - RSK 175

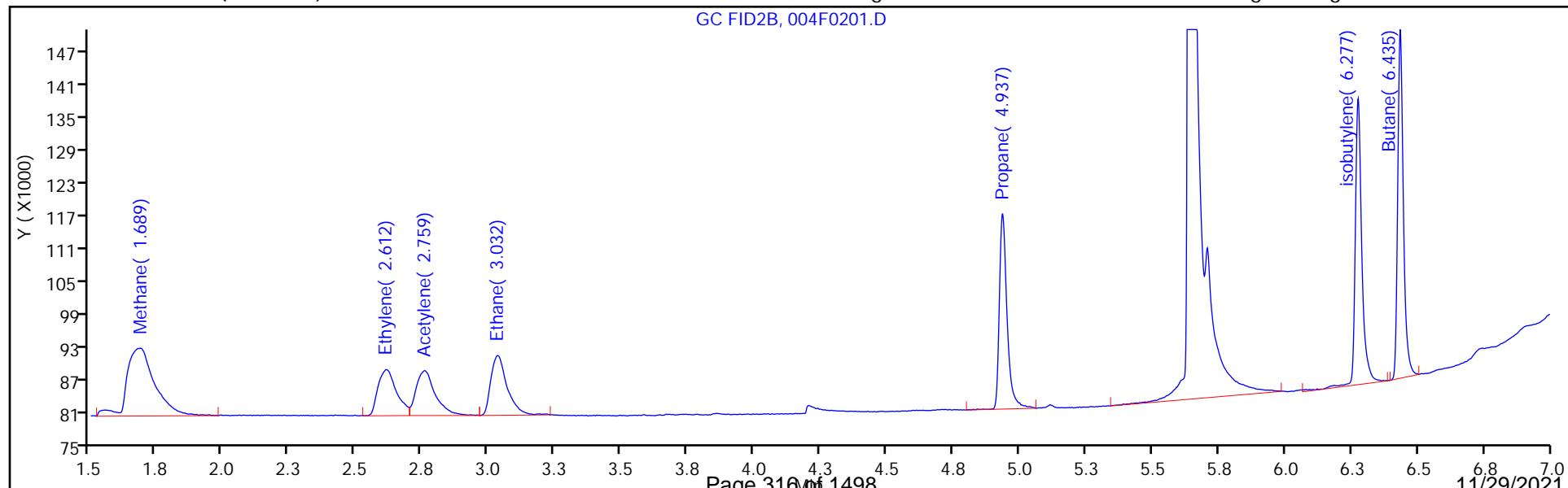
Column: Rt-Alumina BOND/KCl ( 0.53 mm)

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



Eurofins TestAmerica, Denver

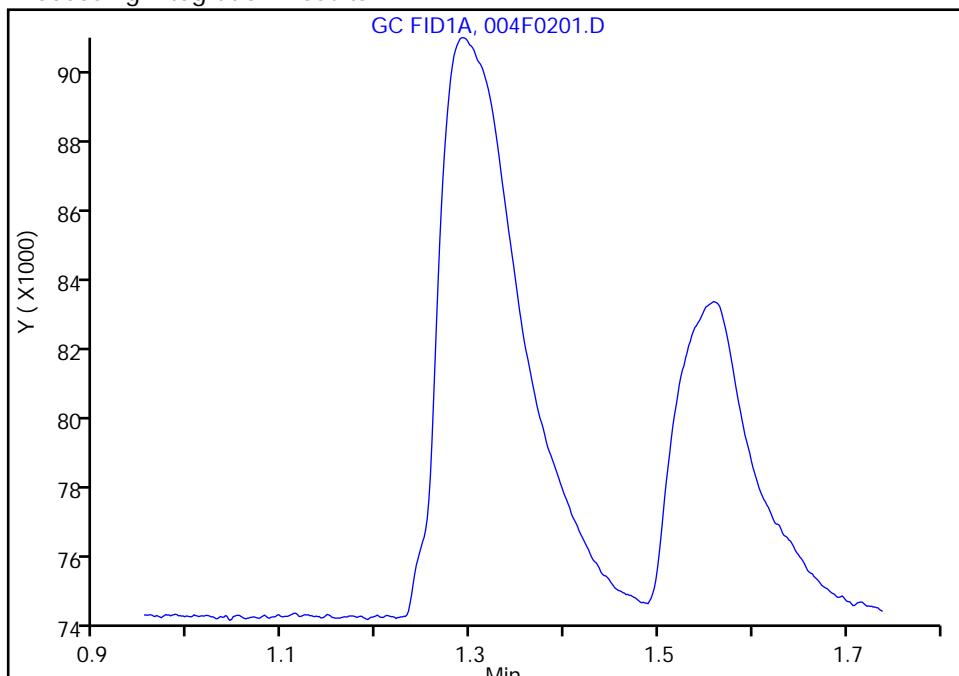
Data File: \\chromfs\Denver\ChromData\VGC\_J\20210923-104922.b\004F0201.D  
 Injection Date: 24-Sep-2021 13:28:57 Instrument ID: VGC\_J  
 Lims ID: ic  
 Client ID:  
 Operator ID: sciannac ALS Bottle#: 4 Worklist Smp#: 2  
 Purge Vol: 18.000 mL Dil. Factor: 1.0000  
 Method: RSK\_J Limit Group: GCV - RSK 175  
 Column: Rt-Alumina BOND/KCl ( 0.53 mm) Detector: GC FID1A

**2 Methane, CAS: 74-82-8**

Signal: 1

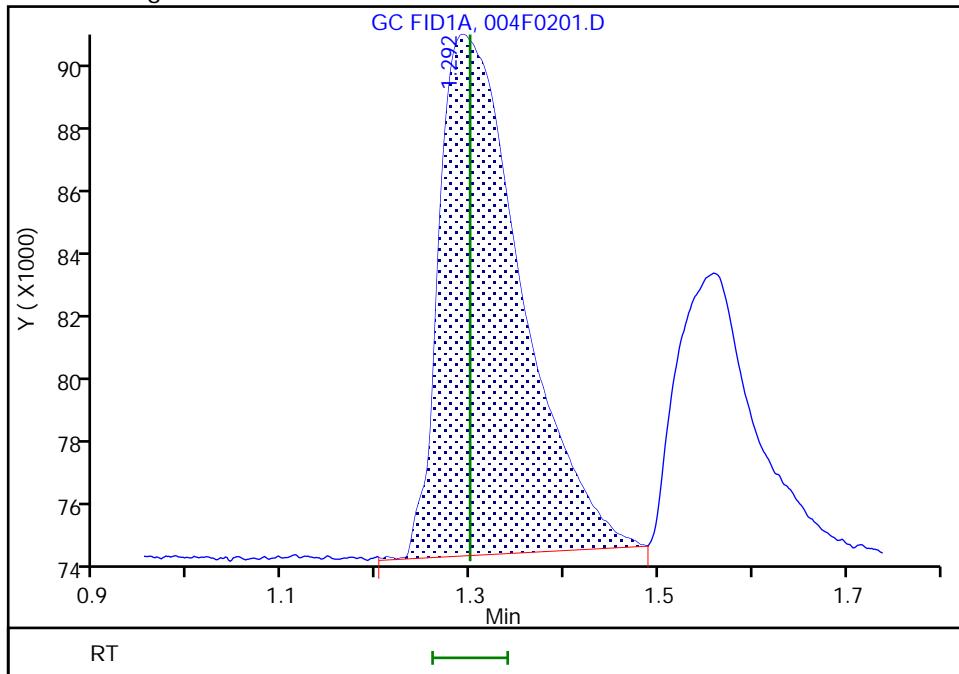
Not Detected  
 Expected RT: 1.30

## Processing Integration Results



RT: 1.29  
 Area: 93424  
 Amount: 0.798461  
 Amount Units: ug/l

## Manual Integration Results



Reviewer: sciannac, 24-Sep-2021 13:54:22

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

## Eurofins TestAmerica, Denver

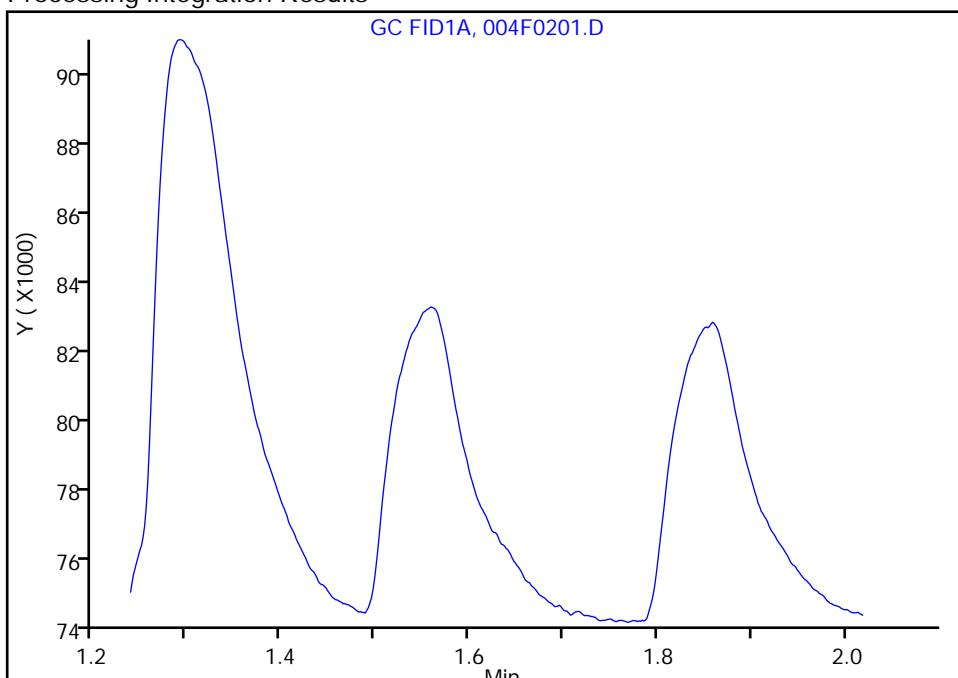
Data File: \\chromfs\Denver\ChromData\VGC\_J\20210923-104922.b\004F0201.D  
 Injection Date: 24-Sep-2021 13:28:57 Instrument ID: VGC\_J  
 Lims ID: ic  
 Client ID:  
 Operator ID: sciannac ALS Bottle#: 4 Worklist Smp#: 2  
 Purge Vol: 18.000 mL Dil. Factor: 1.0000  
 Method: RSK\_J Limit Group: GCV - RSK 175  
 Column: Rt-Alumina BOND/KCl ( 0.53 mm) Detector: GC FID1A

## 3 Ethane, CAS: 74-84-0

Signal: 1

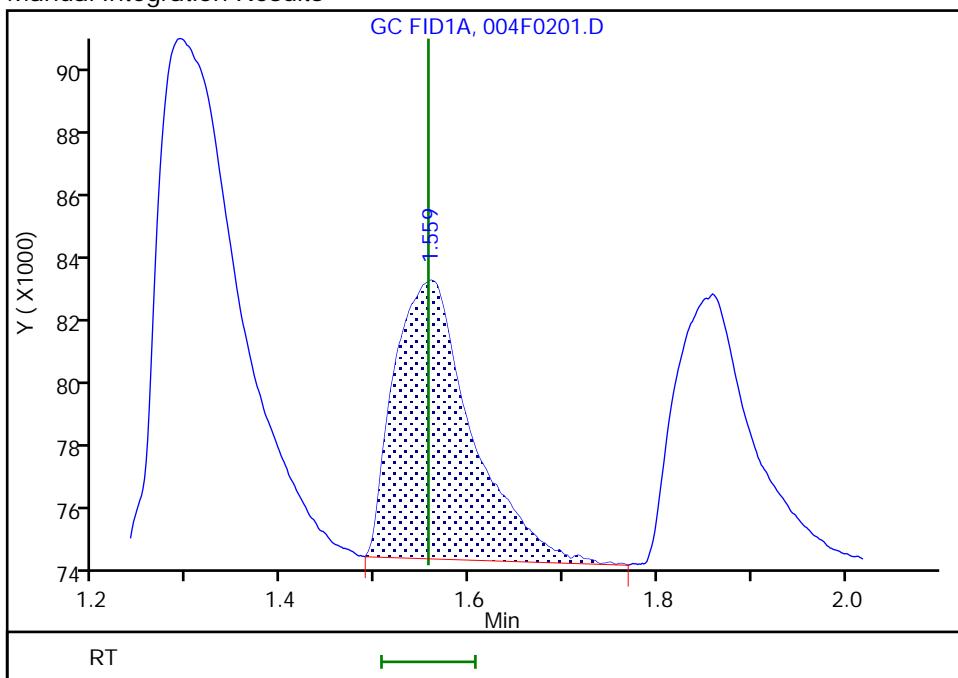
Not Detected  
 Expected RT: 1.56

## Processing Integration Results



RT: 1.56  
 Area: 46427  
 Amount: 1.396667  
 Amount Units: ug/l

## Manual Integration Results



Reviewer: sciannac, 24-Sep-2021 13:54:28

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Denver

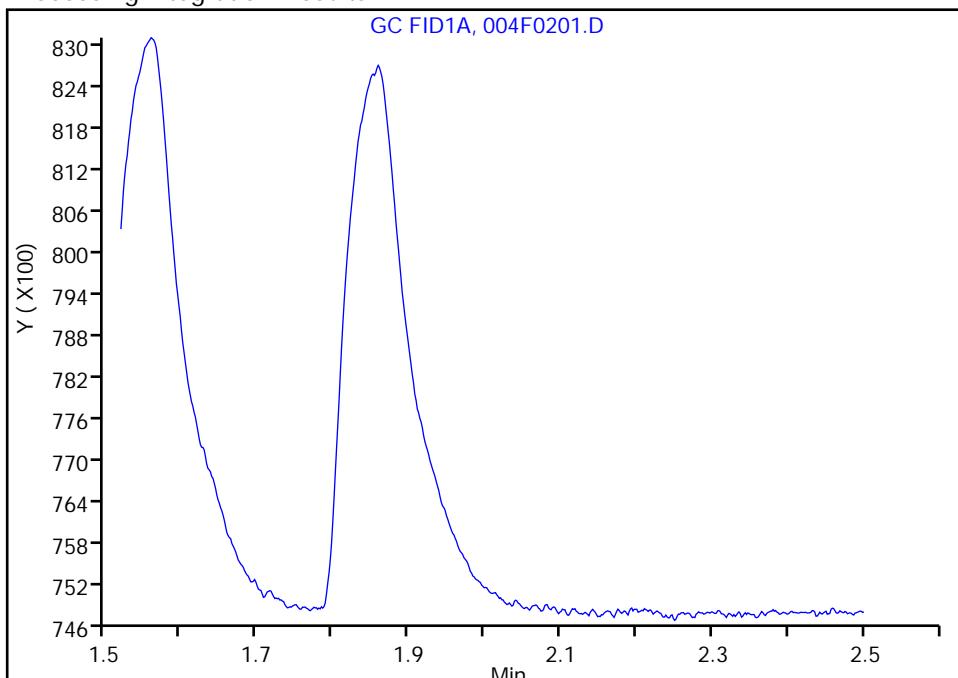
Data File: \\chromfs\Denver\ChromData\VGC\_J\20210923-104922.b\004F0201.D  
 Injection Date: 24-Sep-2021 13:28:57 Instrument ID: VGC\_J  
 Lims ID: ic  
 Client ID:  
 Operator ID: sciannac ALS Bottle#: 4 Worklist Smp#: 2  
 Purge Vol: 18.000 mL Dil. Factor: 1.0000  
 Method: RSK\_J Limit Group: GCV - RSK 175  
 Column: Rt-Alumina BOND/KCl ( 0.53 mm) Detector: GC FID1A

**4 Ethylene, CAS: 74-85-1**

Signal: 1

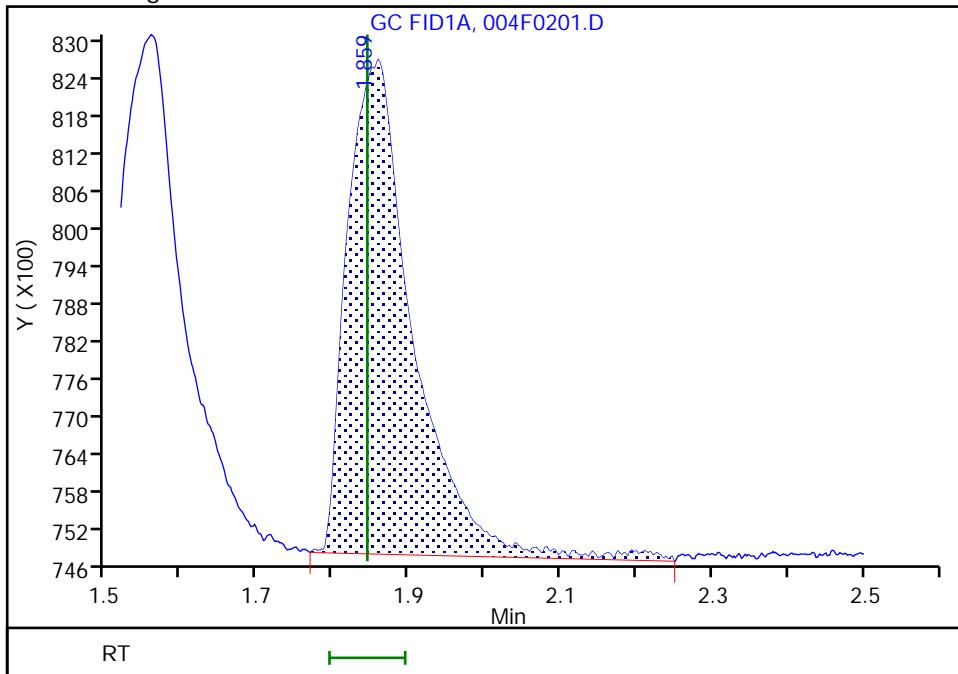
Not Detected  
 Expected RT: 1.84

## Processing Integration Results



RT: 1.86  
 Area: 47667  
 Amount: 1.353178  
 Amount Units: ug/l

## Manual Integration Results



Reviewer: sciannac, 24-Sep-2021 13:54:47

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Denver

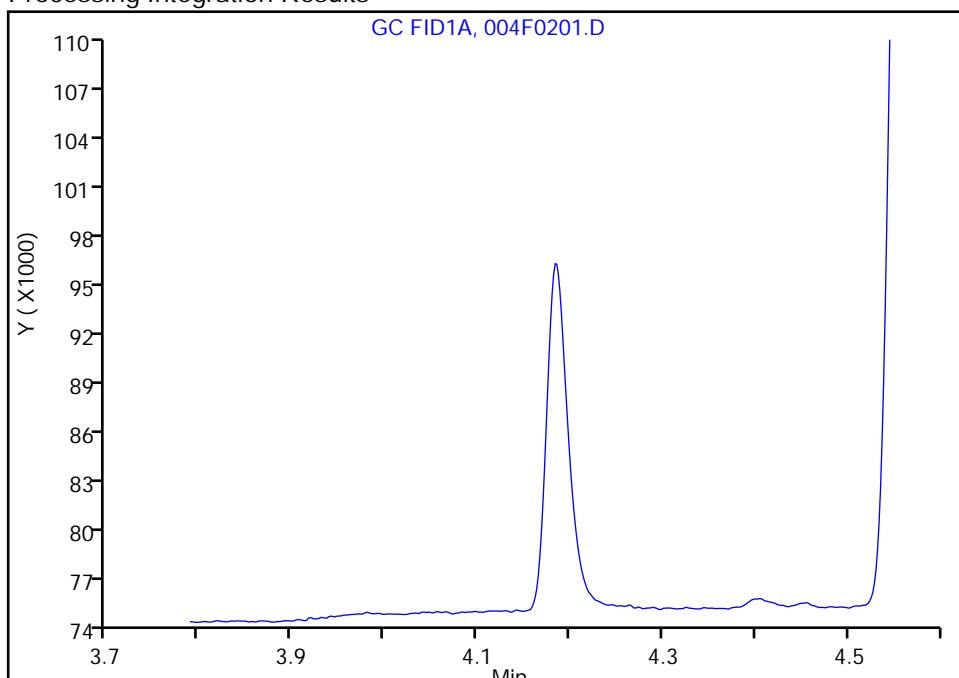
Data File: \\chromfs\Denver\ChromData\VGC\_J\20210923-104922.b\004F0201.D  
 Injection Date: 24-Sep-2021 13:28:57 Instrument ID: VGC\_J  
 Lims ID: ic  
 Client ID:  
 Operator ID: sciannac ALS Bottle#: 4 Worklist Smp#: 2  
 Purge Vol: 18.000 mL Dil. Factor: 1.0000  
 Method: RSK\_J Limit Group: GCV - RSK 175  
 Column: Rt-Alumina BOND/KCl ( 0.53 mm) Detector: GC FID1A

**6 Acetylene, CAS: 74-86-2**

Signal: 1

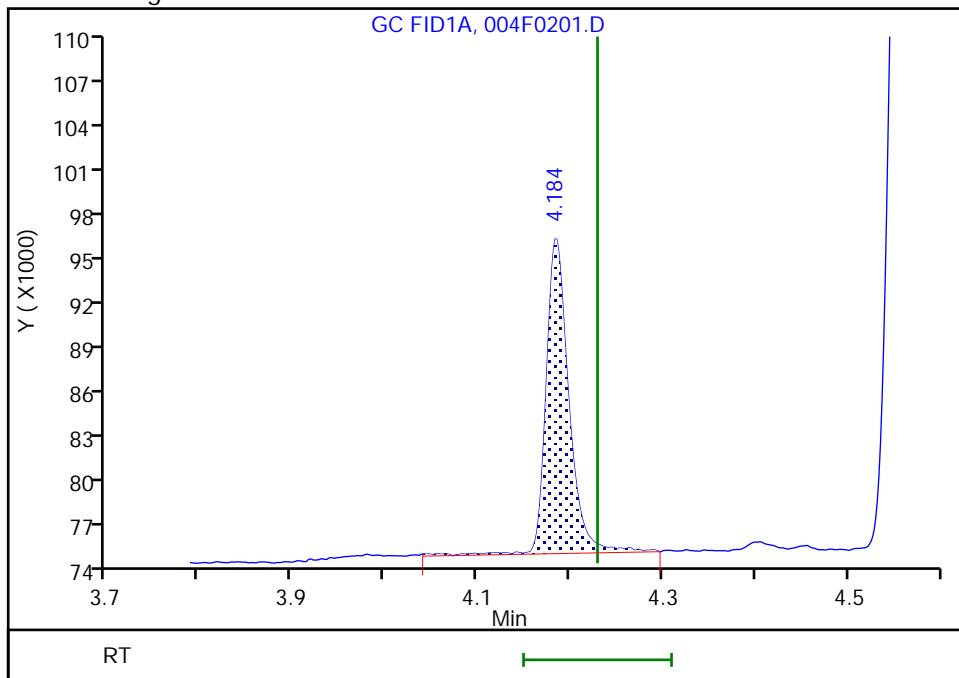
Not Detected  
 Expected RT: 4.23

Processing Integration Results



RT: 4.18  
 Area: 35261  
 Amount: 1.253100  
 Amount Units: ug/l

Manual Integration Results



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
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## 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

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

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

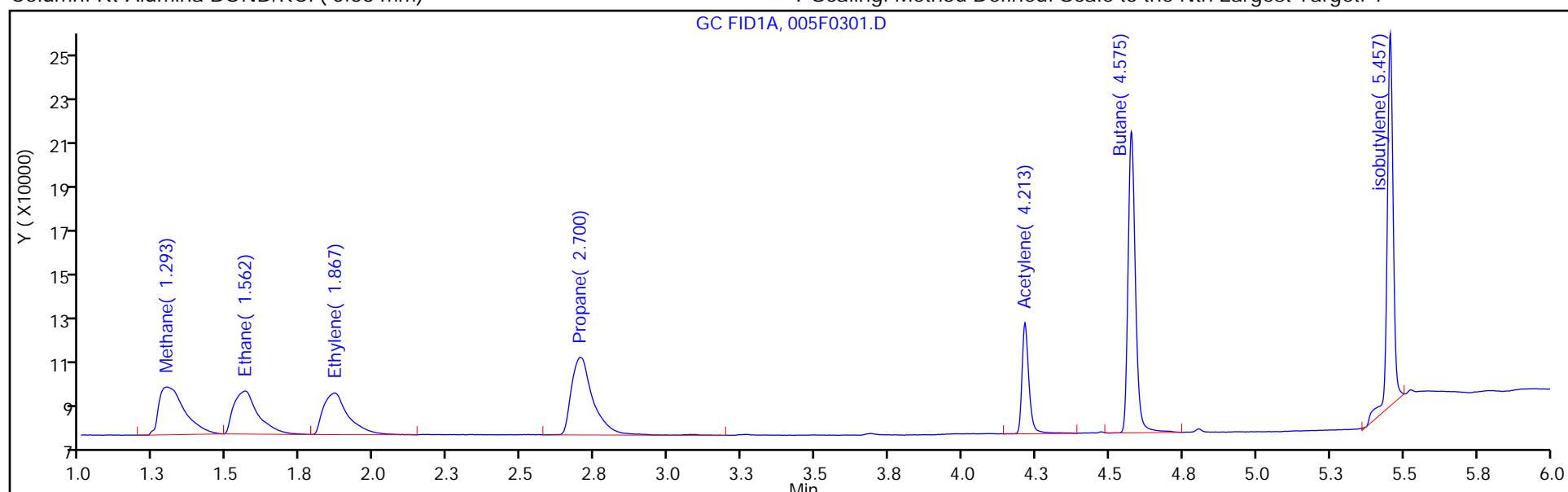
ALS Bottle#: 5

Method: RSK\_J

Limit Group: GCV - RSK 175

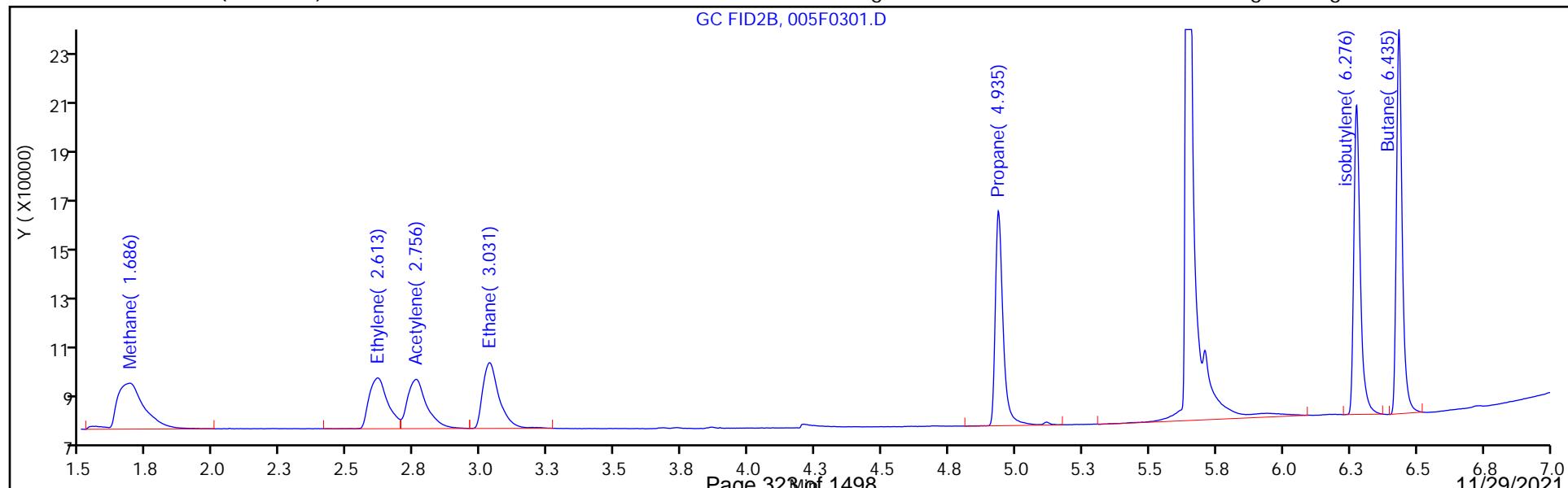
Column: Rt-Alumina BOND/KCl ( 0.53 mm)

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
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## 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

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

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

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

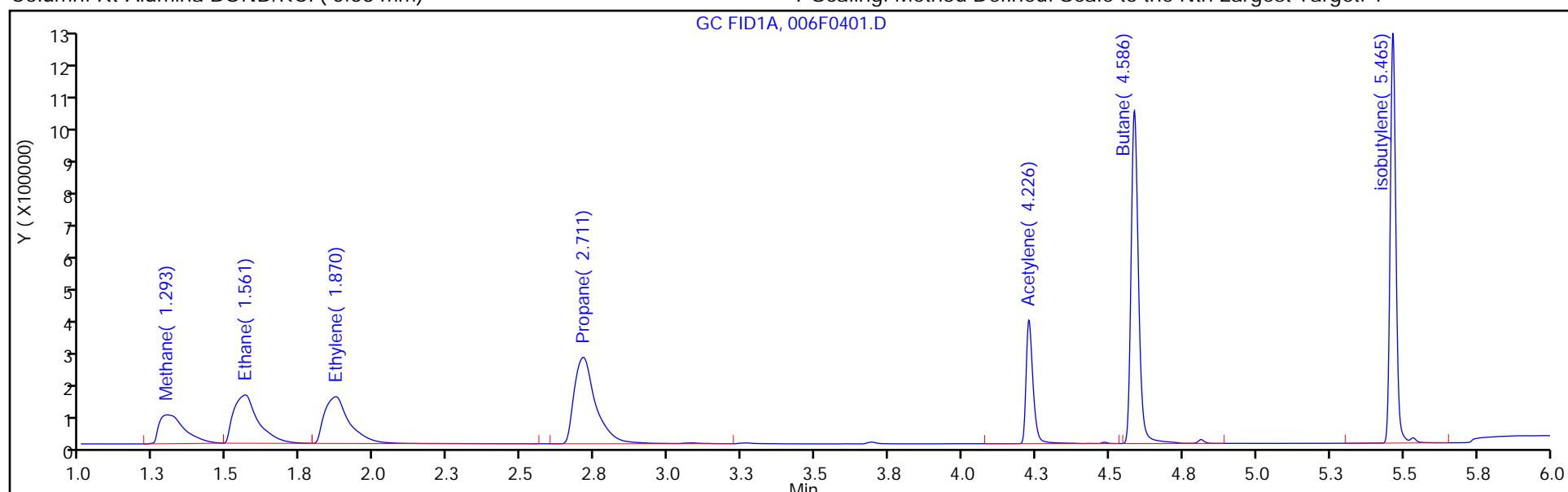
ALS Bottle#: 6

Method: RSK\_J

Limit Group: GCV - RSK 175

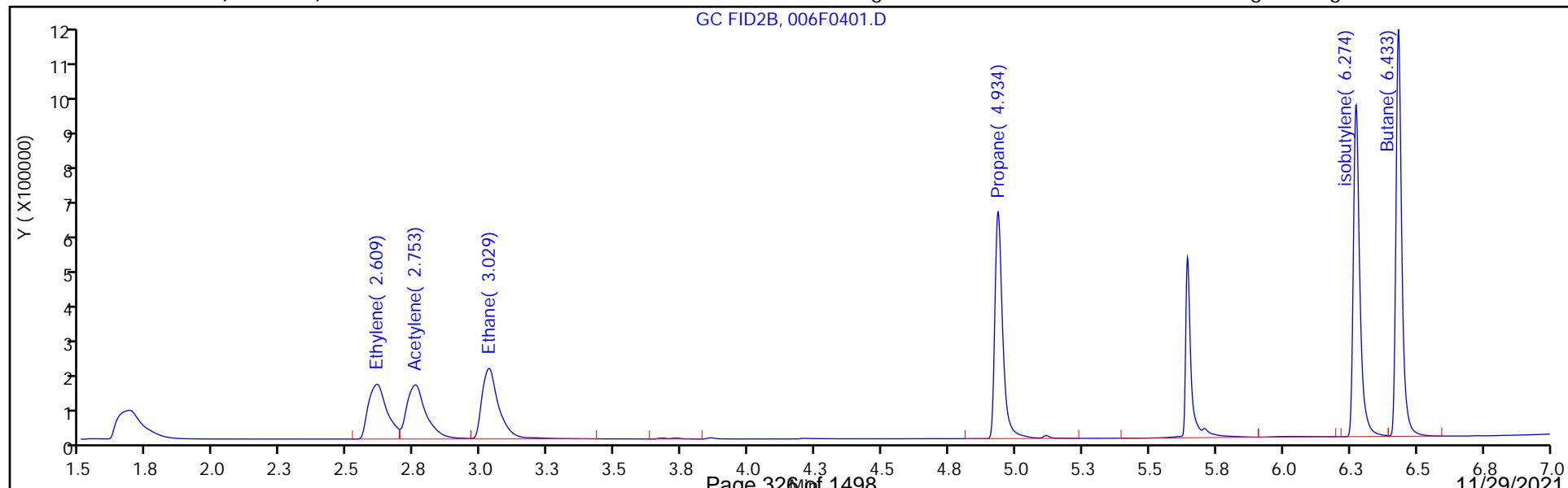
Column: Rt-Alumina BOND/KCl ( 0.53 mm)

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



## 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

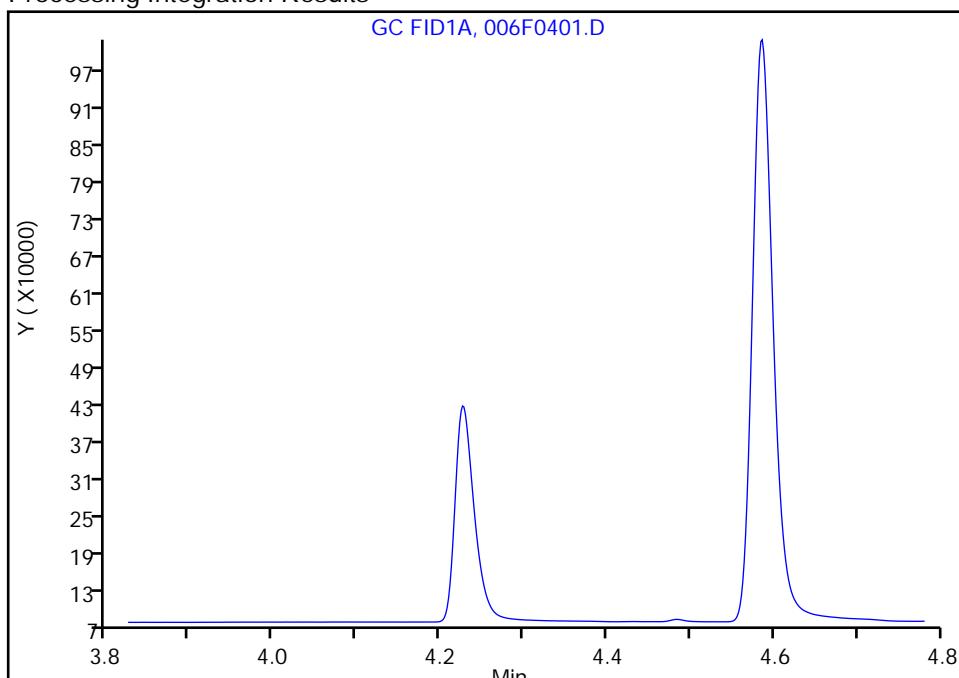
**6 Acetylene, CAS: 74-86-2**

Signal: 1

Not Detected

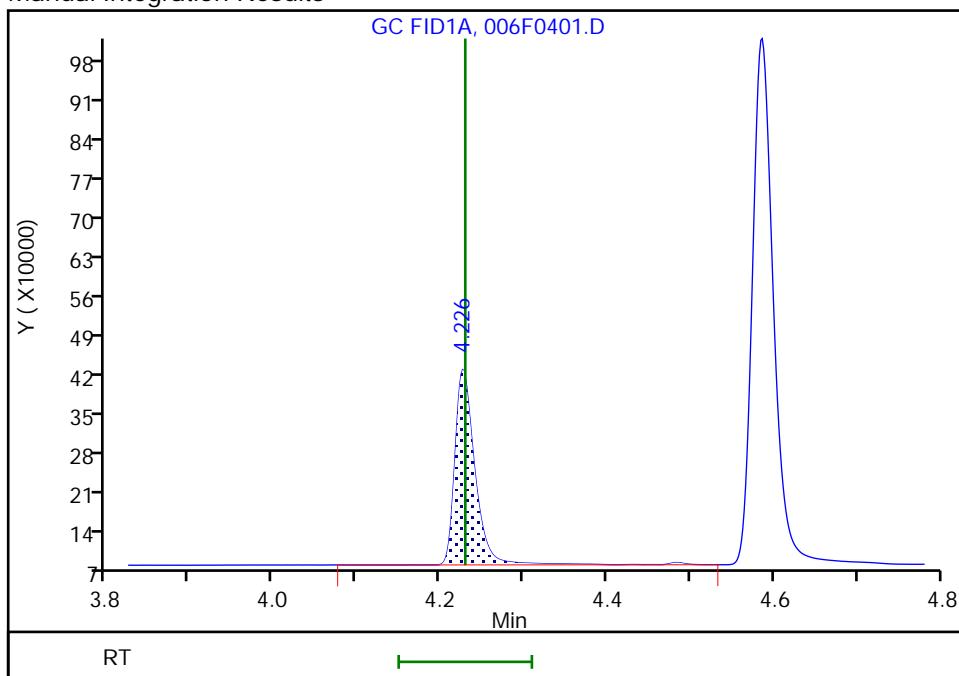
Expected RT: 4.23

## 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
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## 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

1	1.561	1.561	0.000	4411499	123.2	132.7	Ma
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

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

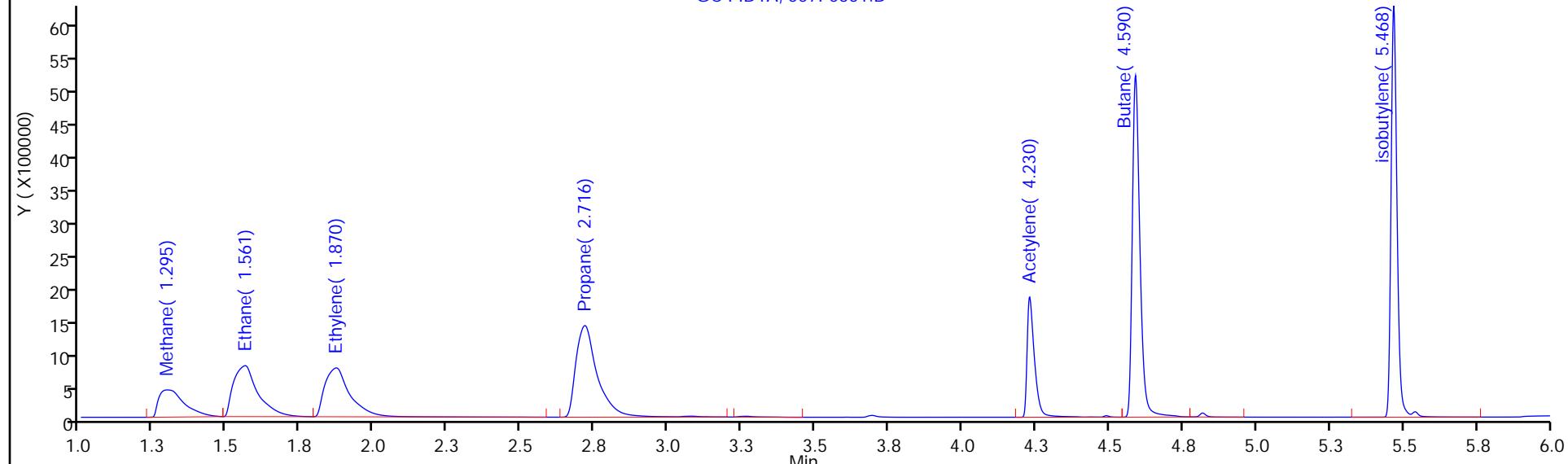
Method: RSK\_J

Limit Group: GCV - RSK 175

Column: Rt-Alumina BOND/KCl ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

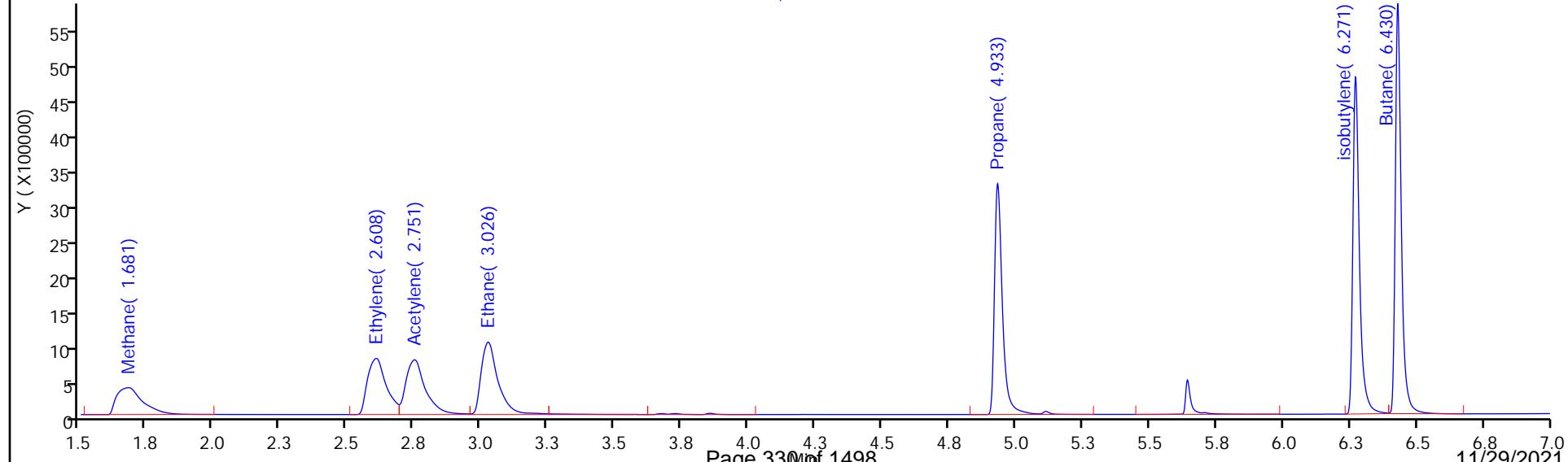
GC FID1A, 007F0501.D



Column: HP-PLOT/Q ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

GC FID2B, 007F0501.D



Eurofins TestAmerica, Denver

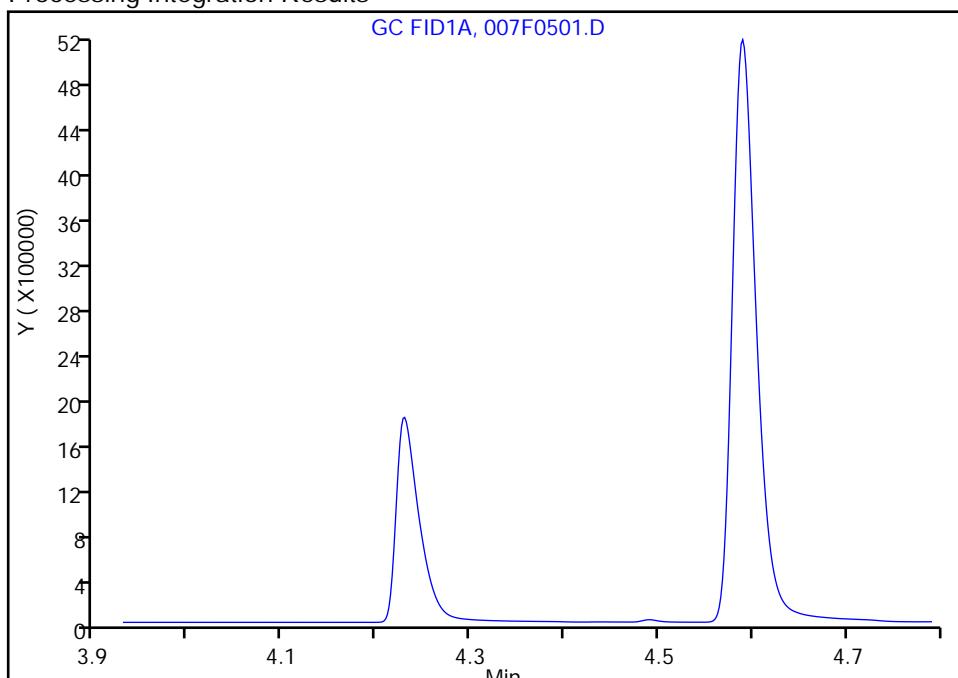
Data File: \\chromfs\Denver\ChromData\VGC\_J\20210923-104922.b\007F0501.D  
 Injection Date: 24-Sep-2021 14:07:45 Instrument ID: VGC\_J  
 Lims ID: ic  
 Client ID:  
 Operator ID: sciannac ALS Bottle#: 7 Worklist Smp#: 5  
 Purge Vol: 18.000 mL Dil. Factor: 1.0000  
 Method: RSK\_J Limit Group: GCV - RSK 175  
 Column: Rt-Alumina BOND/KCl ( 0.53 mm) Detector: GC FID1A

**6 Acetylene, CAS: 74-86-2**

Signal: 1

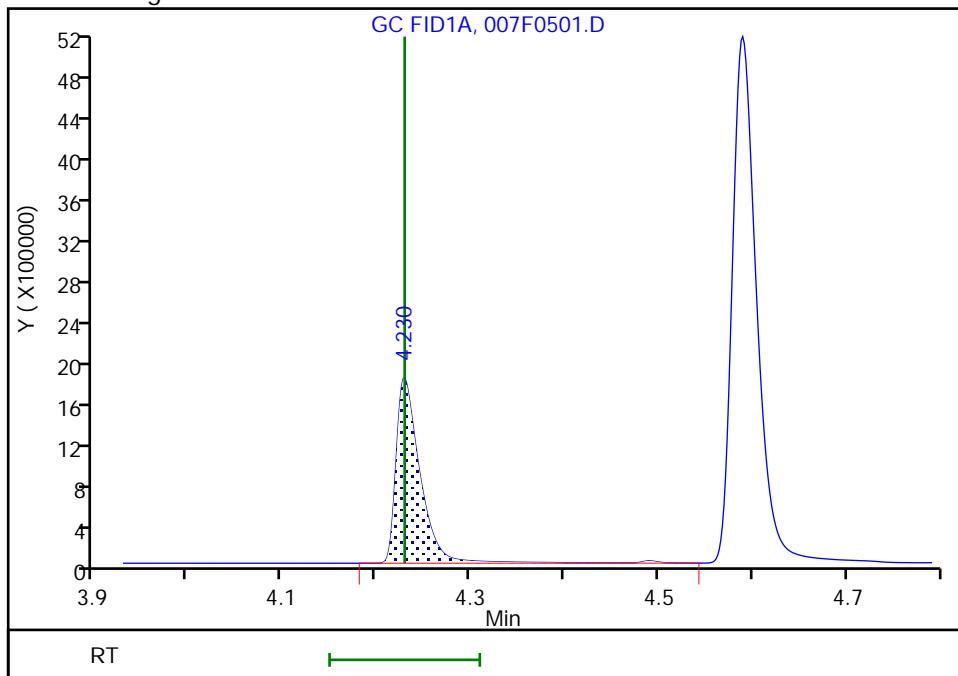
Not Detected  
 Expected RT: 4.23

## Processing Integration Results



RT: 4.23  
 Area: 3180347  
 Amount: 113.0227  
 Amount Units: ug/l

## Manual Integration Results



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
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2 Methane							
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							
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							
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							
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							
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

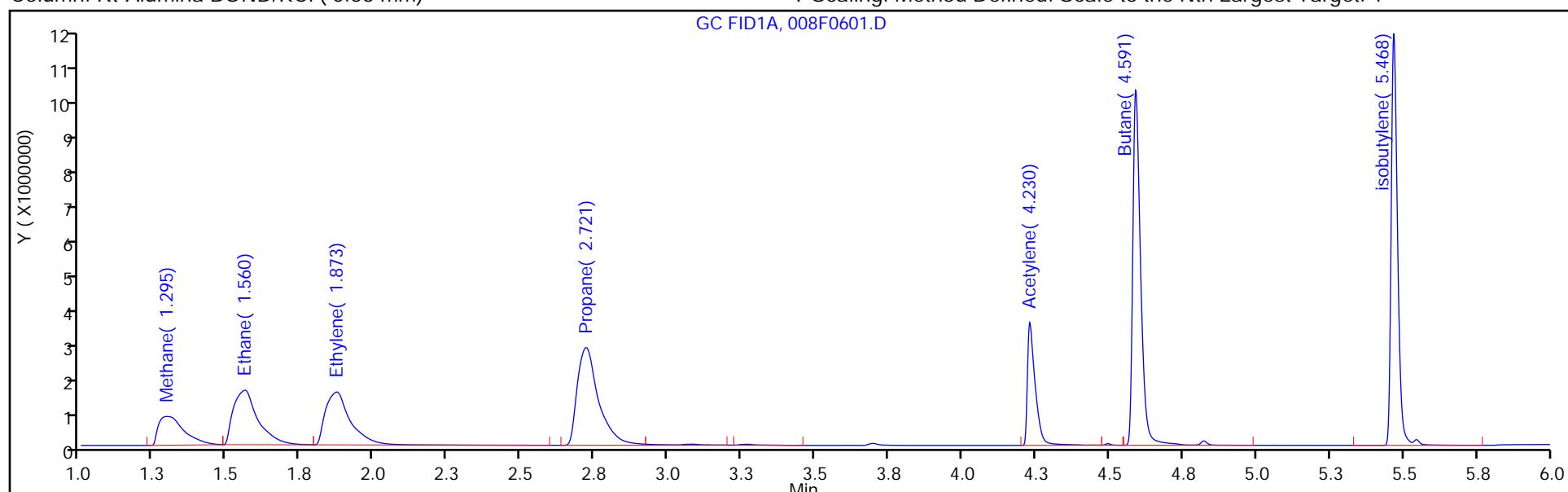
ALS Bottle#: 8

Method: RSK\_J

Limit Group: GCV - RSK 175

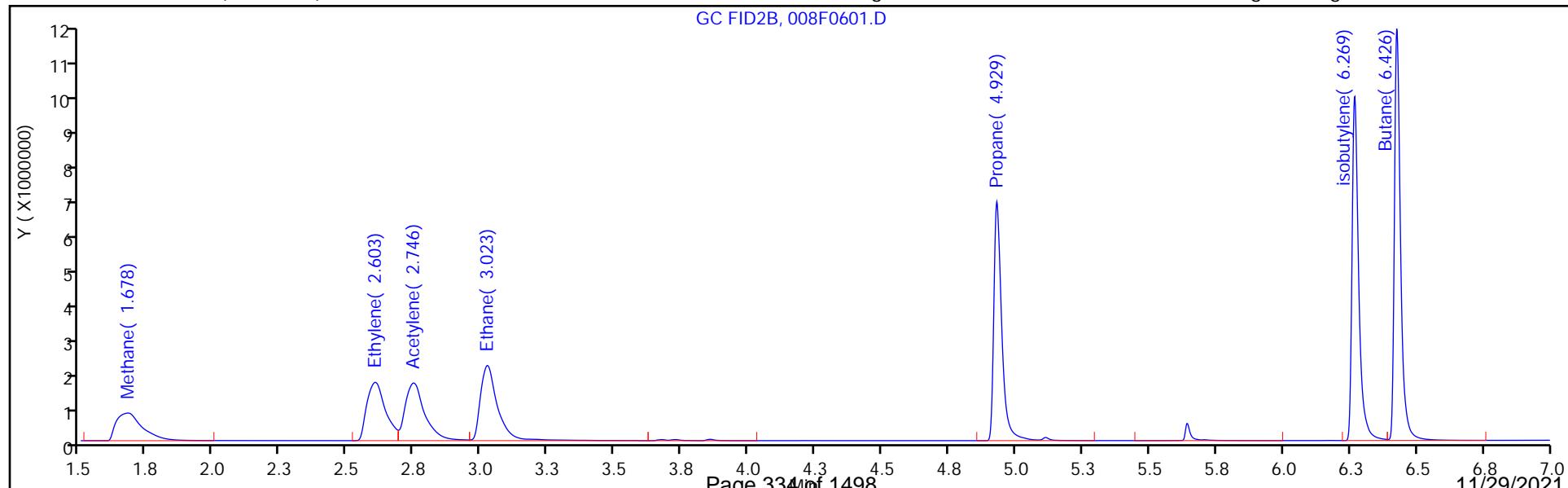
Column: Rt-Alumina BOND/KCl ( 0.53 mm)

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



## Eurofins TestAmerica, Denver

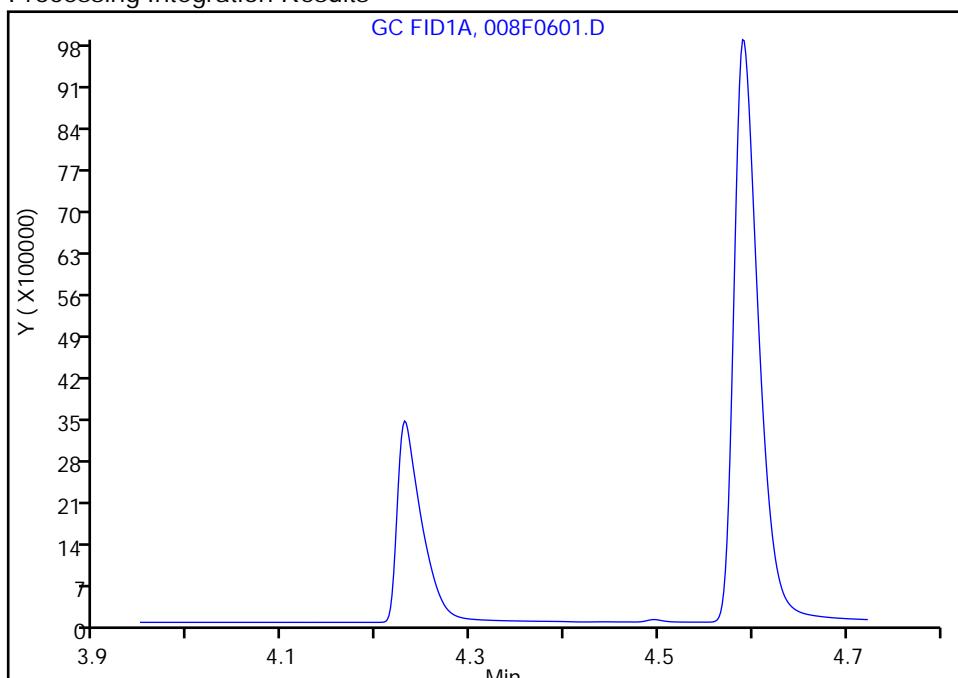
Data File: \\chromfs\Denver\ChromData\VGC\_J\20210923-104922.b\008F0601.D  
 Injection Date: 24-Sep-2021 14:20:44 Instrument ID: VGC\_J  
 Lims ID: ic  
 Client ID:  
 Operator ID: sciannac ALS Bottle#: 8 Worklist Smp#: 6  
 Purge Vol: 18.000 mL Dil. Factor: 1.0000  
 Method: RSK\_J Limit Group: GCV - RSK 175  
 Column: Rt-Alumina BOND/KCl ( 0.53 mm) Detector: GC FID1A

**6 Acetylene, CAS: 74-86-2**

Signal: 1

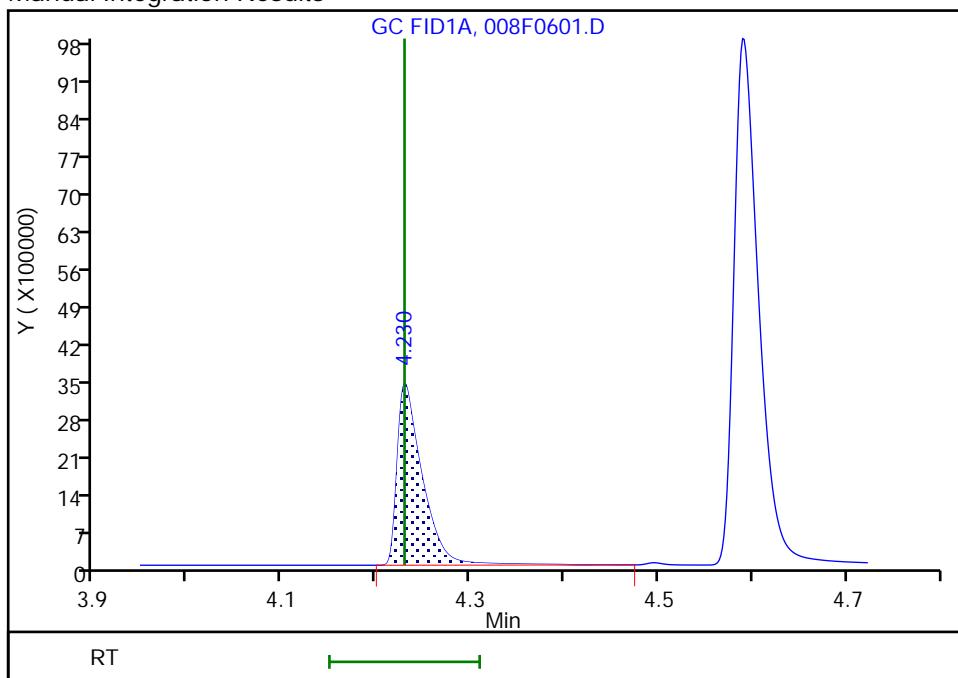
Not Detected  
 Expected RT: 4.23

## 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
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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

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

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

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

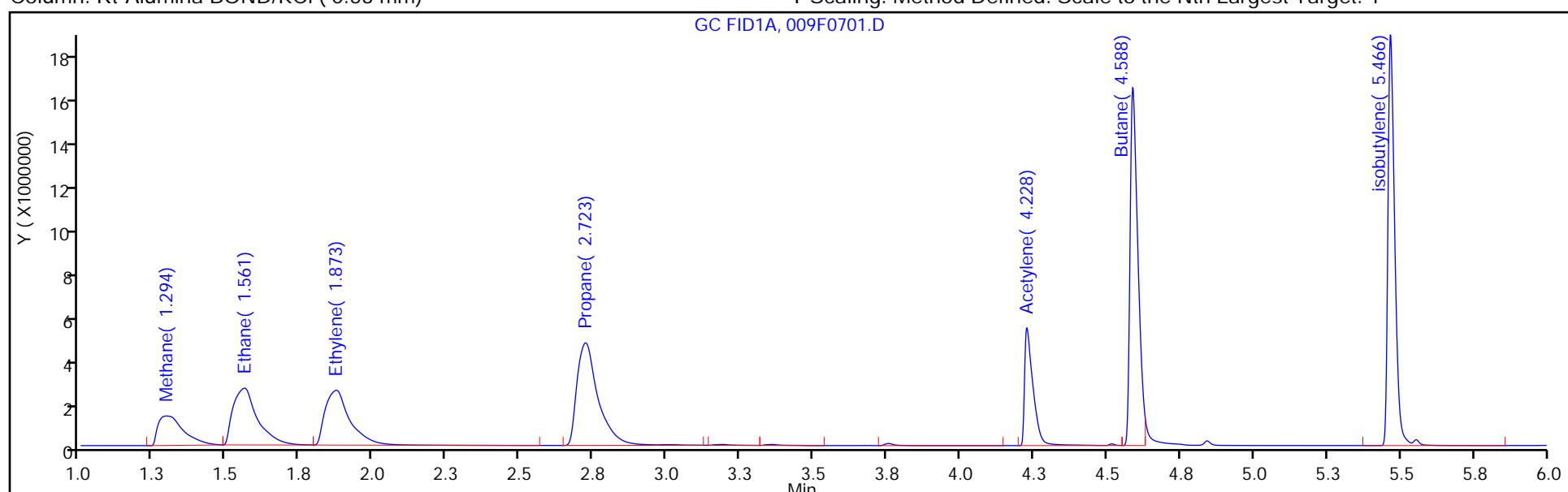
Method: RSK\_J

Limit Group: GCV - RSK 175

Column: Rt-Alumina BOND/KCl ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

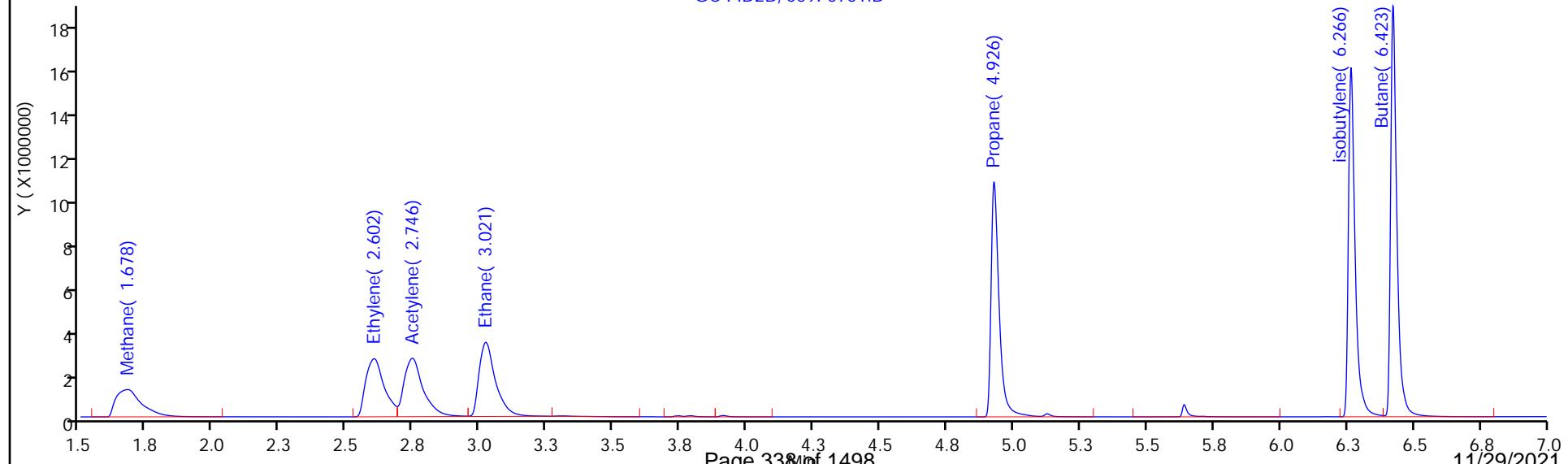
GC FID1A, 009F0701.D



Column: HP-PLOT/Q ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

GC FID2B, 009F0701.D



Eurofins TestAmerica, Denver

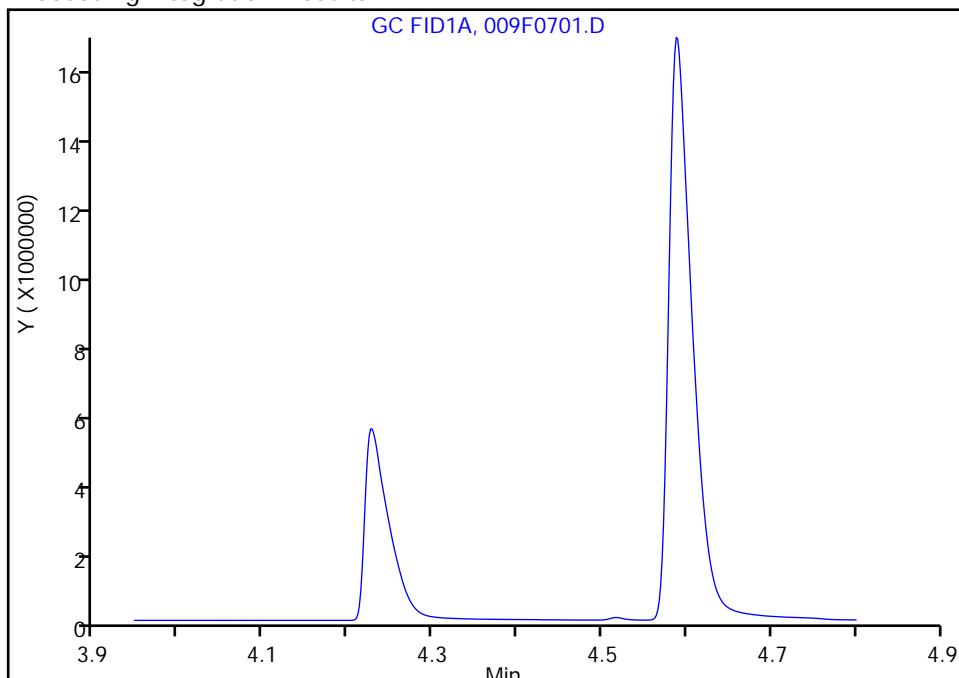
Data File: \\chromfs\Denver\ChromData\VGC\_J\20210923-104922.b\009F0701.D  
 Injection Date: 24-Sep-2021 14:33:44 Instrument ID: VGC\_J  
 Lims ID: ic  
 Client ID:  
 Operator ID: sciannac ALS Bottle#: 9 Worklist Smp#: 7  
 Purge Vol: 18.000 mL Dil. Factor: 1.0000  
 Method: RSK\_J Limit Group: GCV - RSK 175  
 Column: Rt-Alumina BOND/KCl ( 0.53 mm) Detector: GC FID1A

**6 Acetylene, CAS: 74-86-2**

Signal: 1

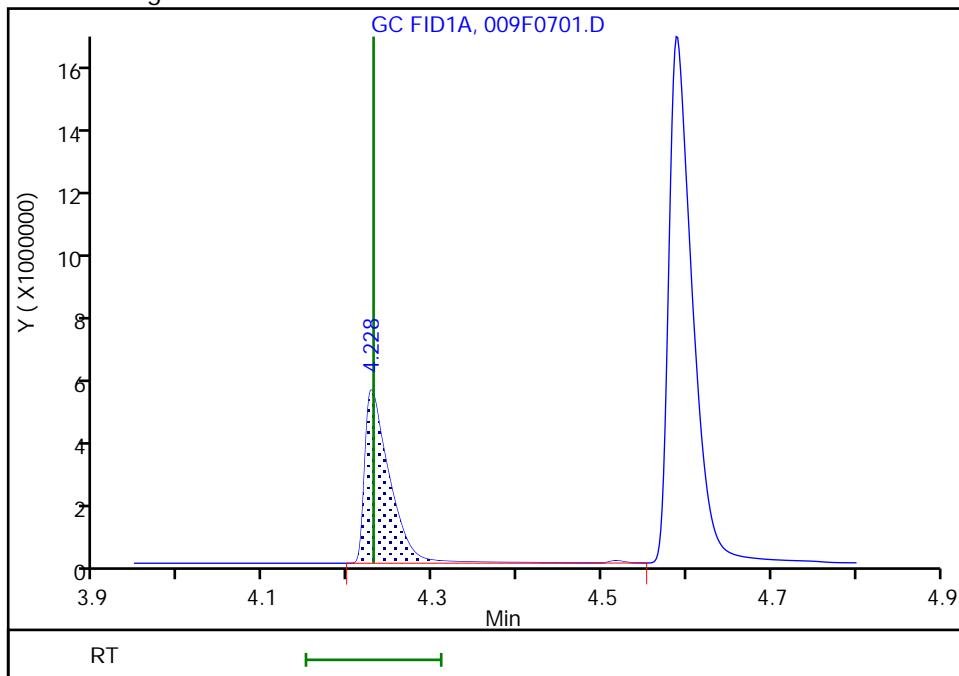
Not Detected  
 Expected RT: 4.23

## Processing Integration Results



RT: 4.23  
 Area: 10977943  
 Amount: 390.1324  
 Amount Units: ug/l

## Manual Integration Results



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
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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

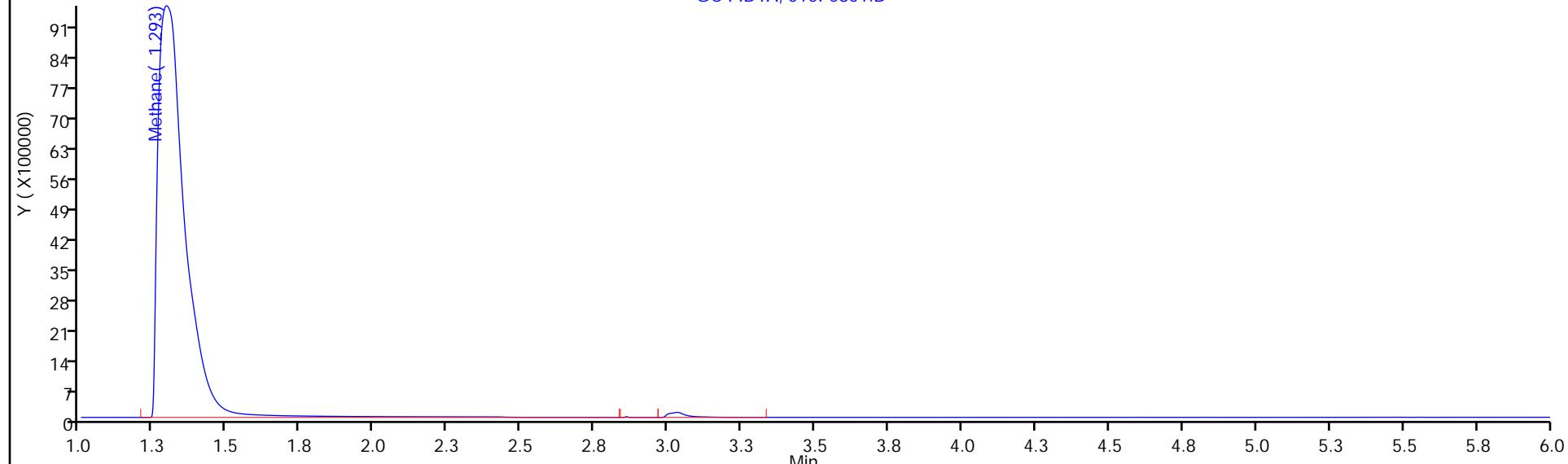
Method: RSK\_J

Limit Group: GCV - RSK 175

Column: Rt-Alumina BOND/KCl ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

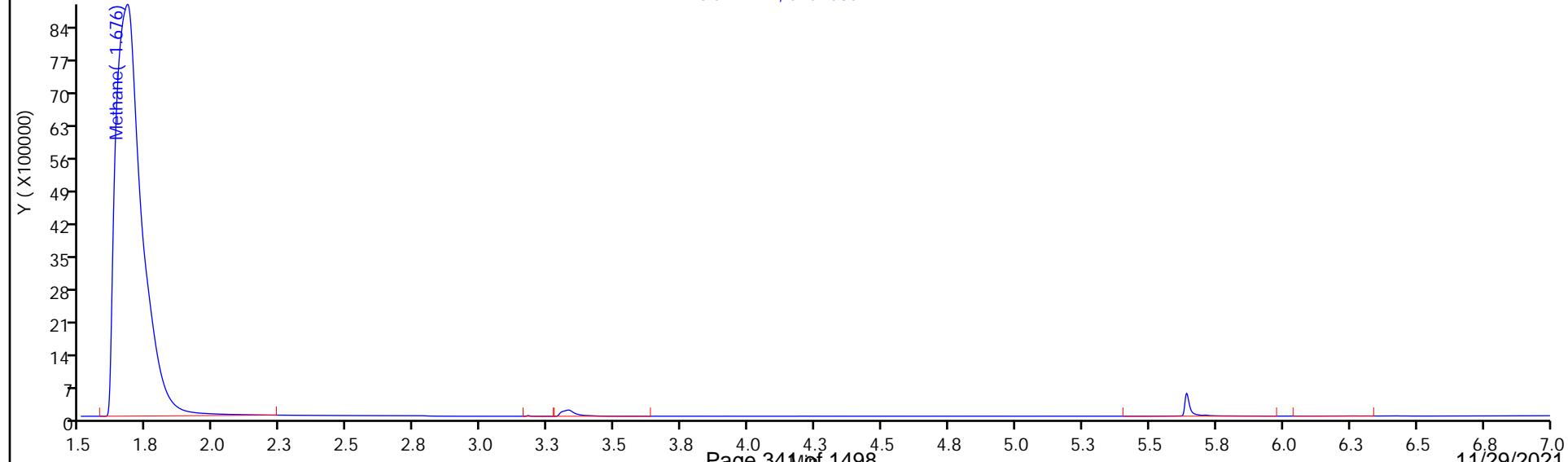
GC FID1A, 010F0801.D



Column: HP-PLOT/Q ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

GC FID2B, 010F0801.D



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
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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

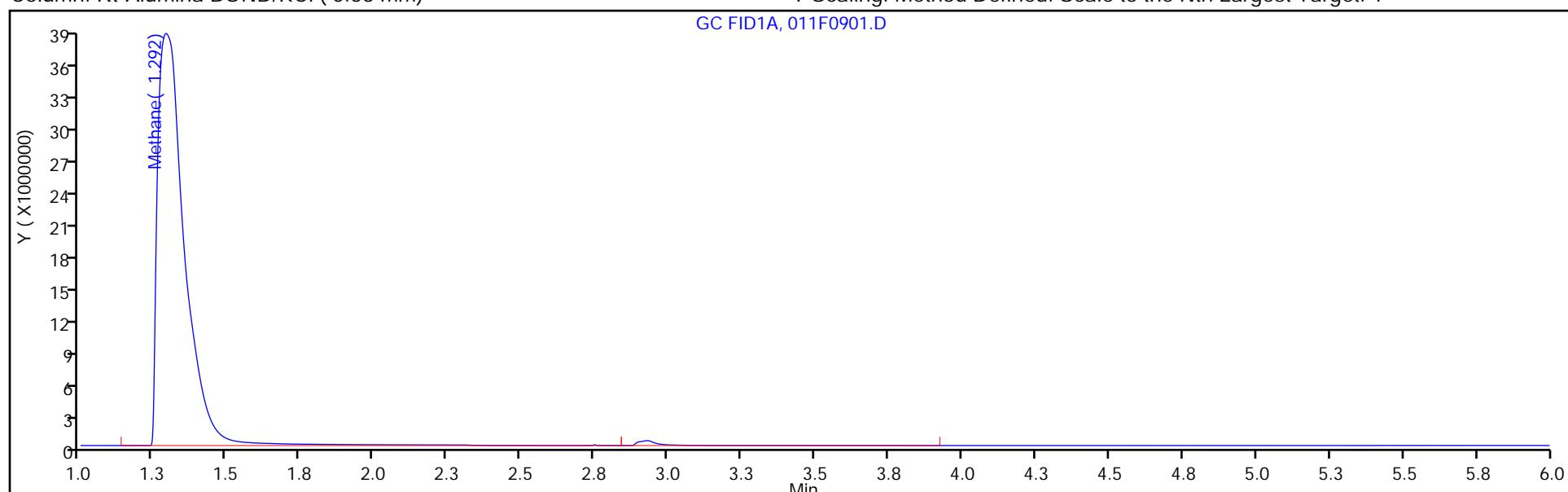
ALS Bottle#: 11

Method: RSK\_J

Limit Group: GCV - RSK 175

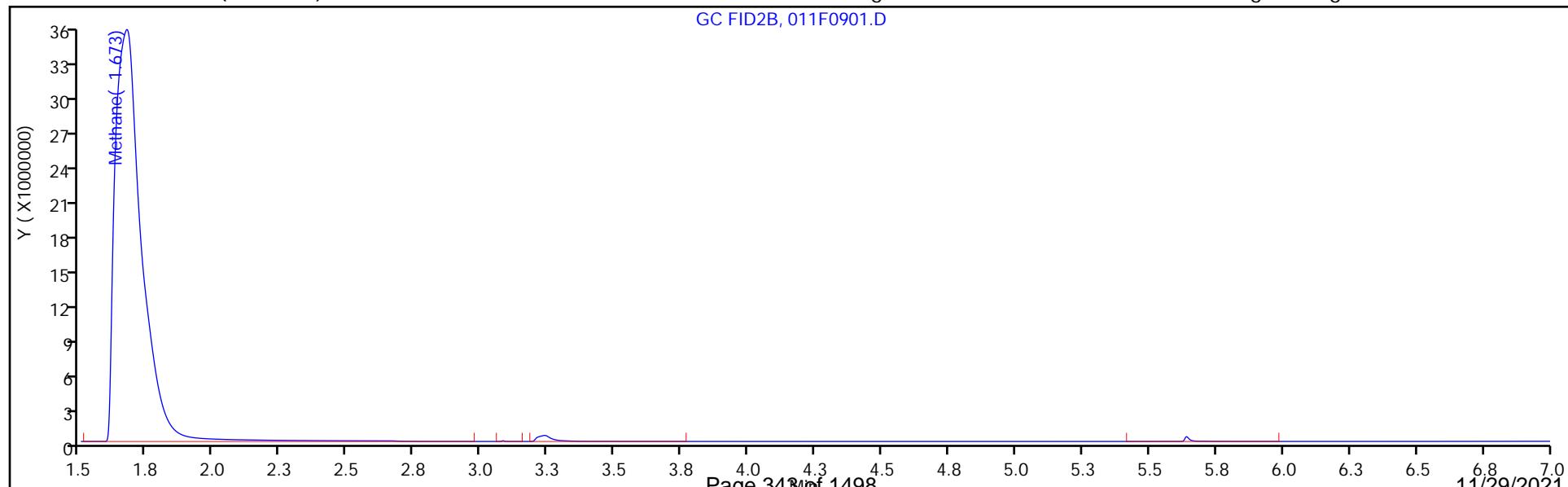
Column: Rt-Alumina BOND/KCl ( 0.53 mm)

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
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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

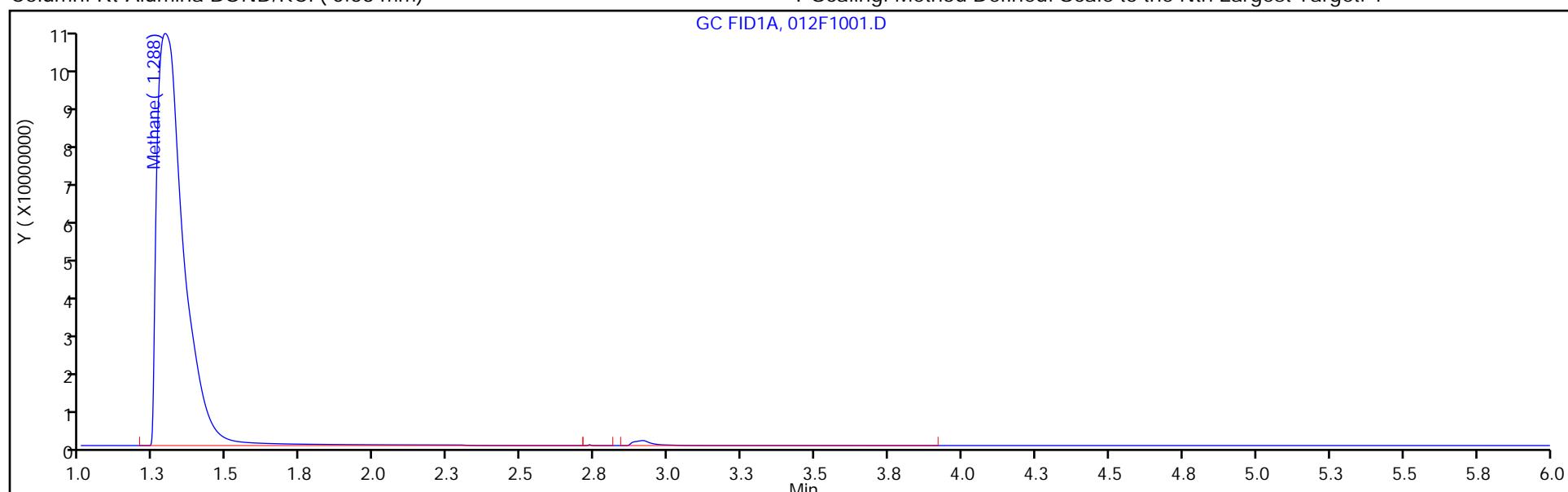
Method: RSK\_J

Limit Group: GCV - RSK 175

Column: Rt-Alumina BOND/KCl ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

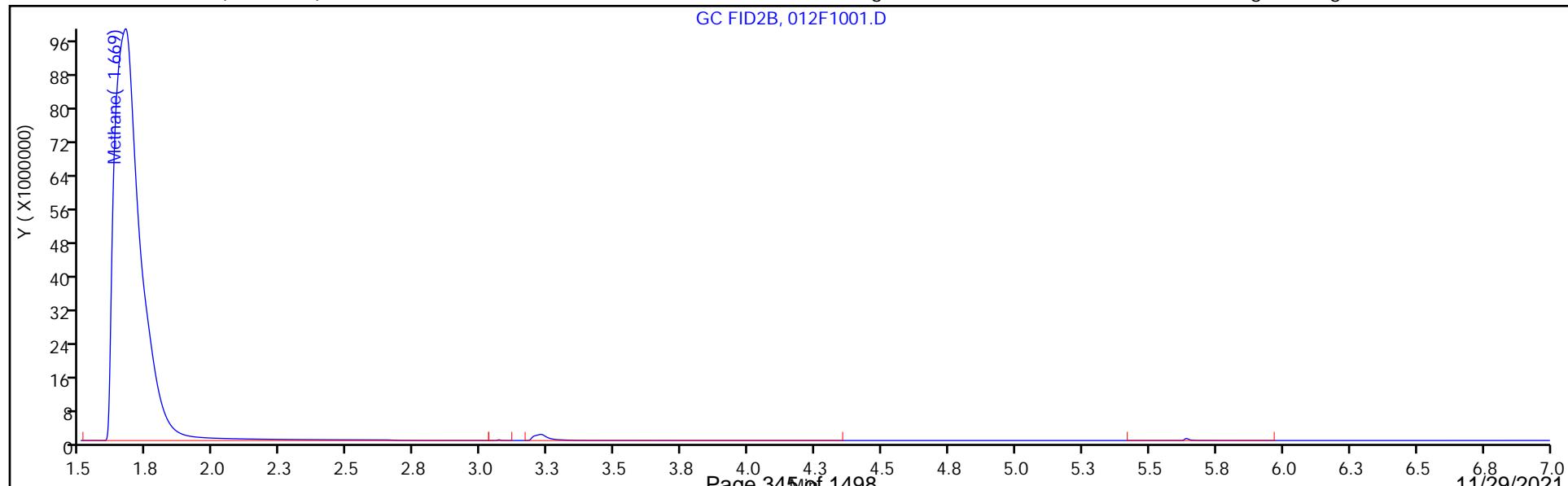
GC FID1A, 012F1001.D



Column: HP-PLOT/Q ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

GC FID2B, 012F1001.D



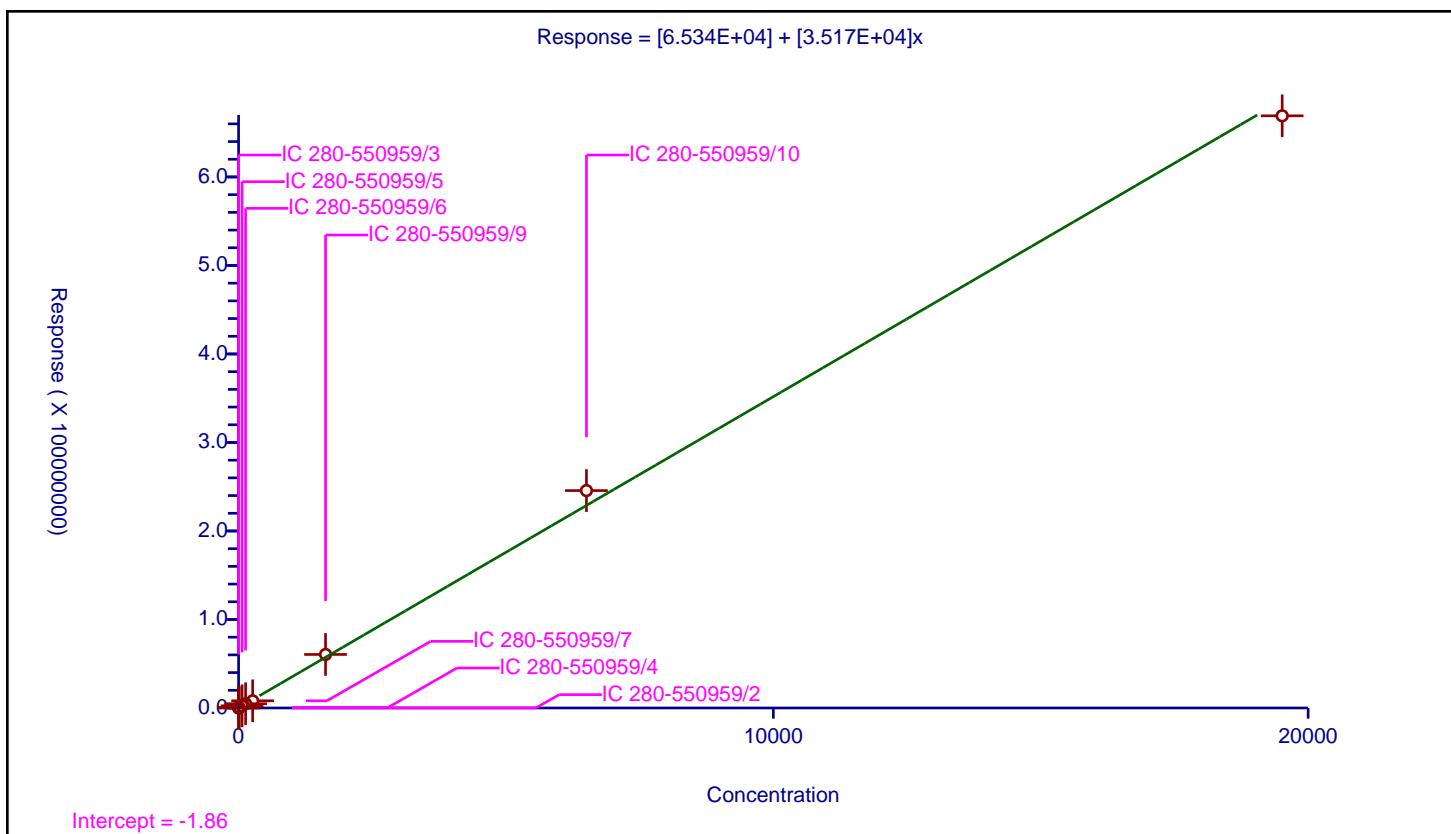
## Calibration

/ 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



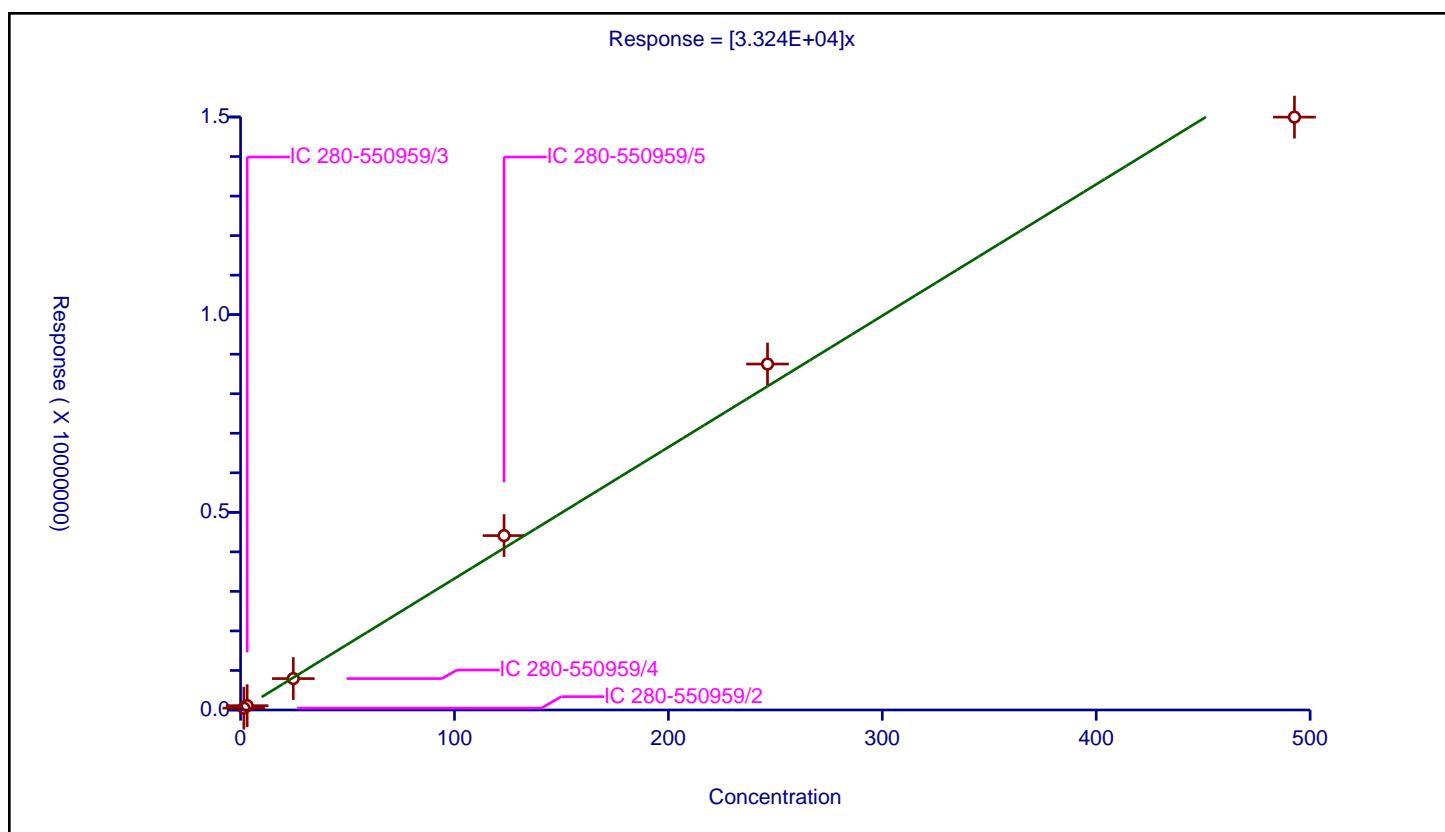
## Calibration

/ 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



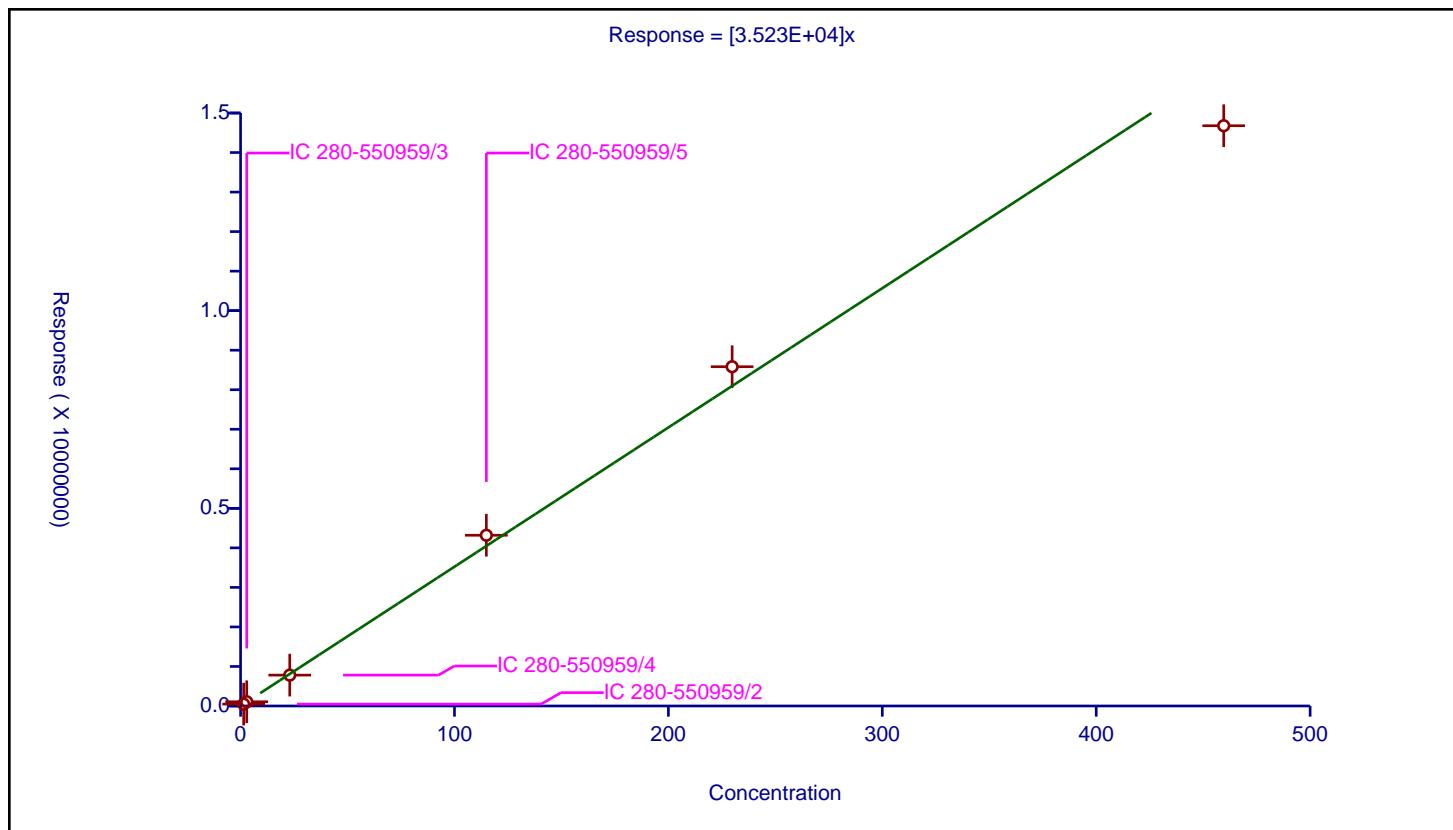
## Calibration

/ 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



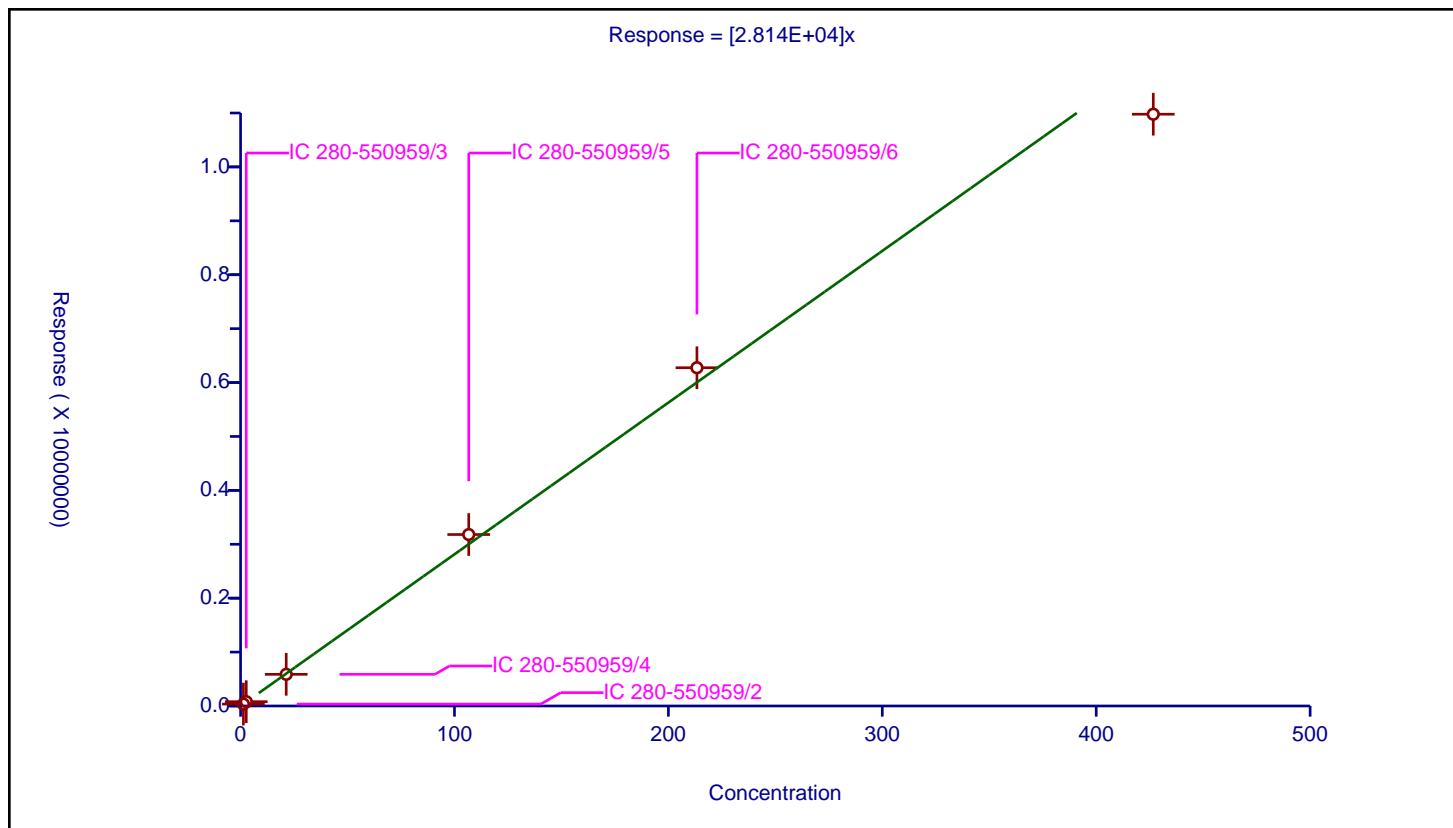
## Calibration

/ 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 TestAmerica, Denver Job No.: 280-155048-1 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 TestAmerica, Denver Job No.: 280-155048-1 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 2	LVL 3	LVL 4		B	M1	M2								
Methane	111078 38545 34620	77031 32174	38745 36771	38865 37979	Lin2	62633.779 5	36102.935 5							0.9950		0.9900
Ethylene	28704 32846	33128 28088	29931	33185	Ave		30980.267 6				7.6	20.0				
Acetylene	31126 36867	35548 31529	33443	36560	Ave		34178.794 4				7.4	20.0				
Ethane	30517 36441	34894 29685	32629	36129	Ave		33382.581 7				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 TestAmerica, Denver Job No.: 280-155048-1 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
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2 Methane							
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							
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							
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							
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							
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							
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							
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

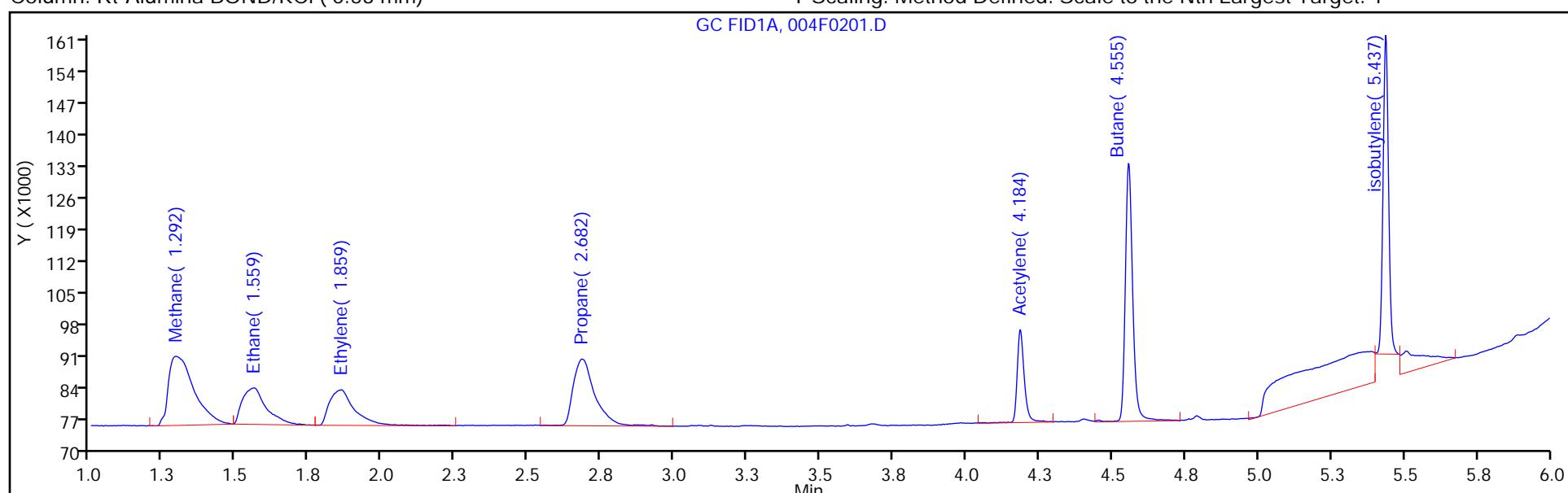
ALS Bottle#: 4

Method: RSK\_J

Limit Group: GCV - RSK 175

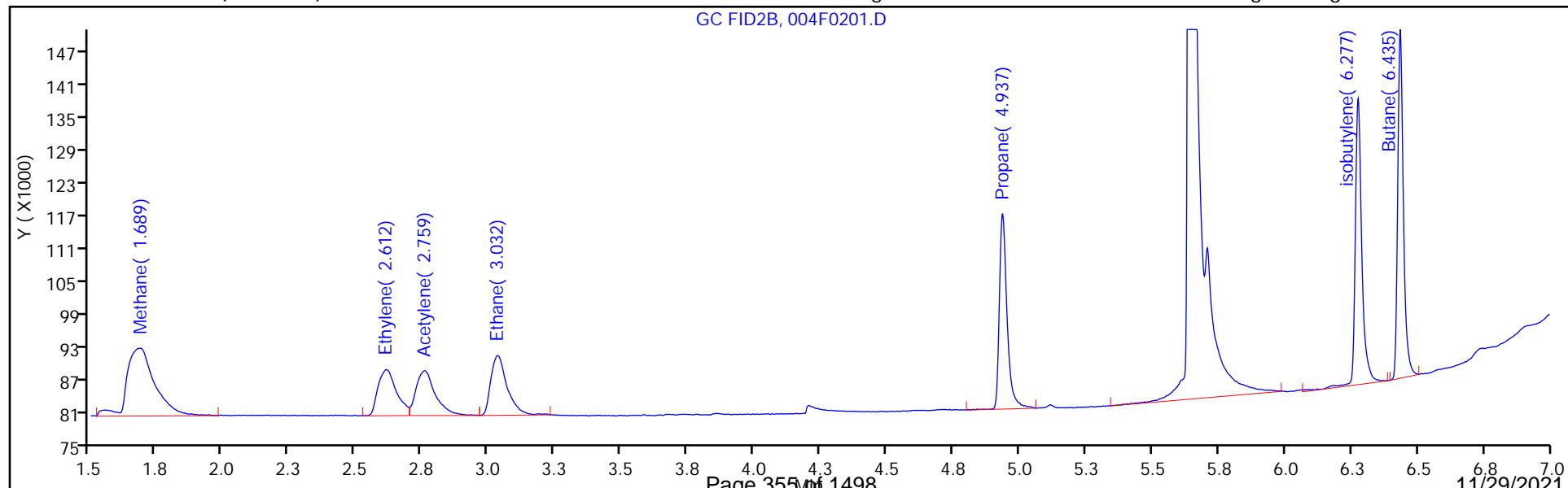
Column: Rt-Alumina BOND/KCl ( 0.53 mm)

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



Eurofins TestAmerica, Denver

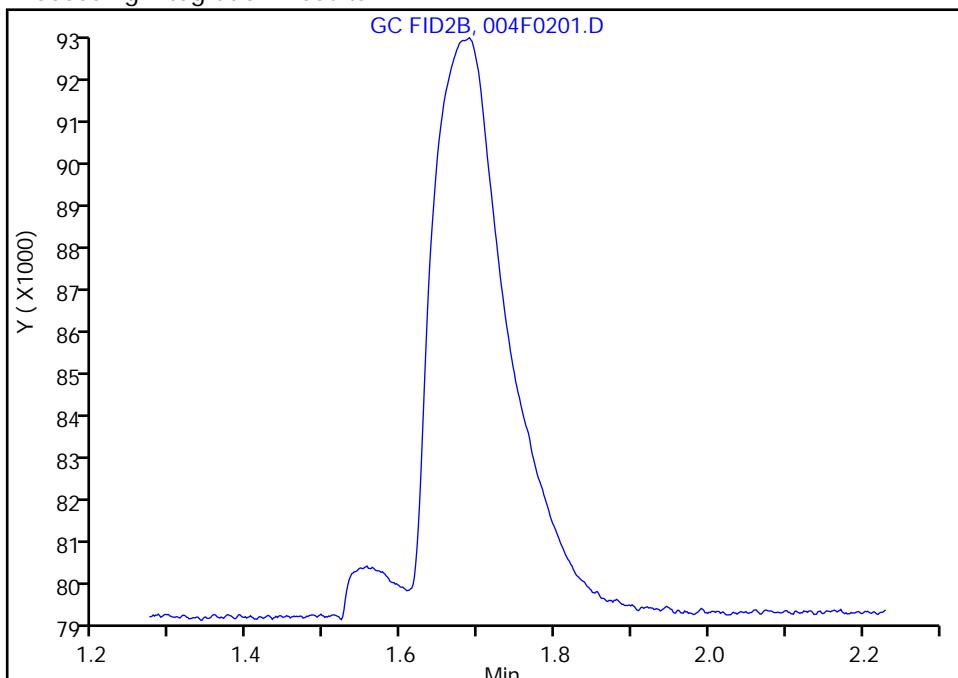
Data File: \\chromfs\Denver\ChromData\VGC\_J\20210923-104922.b\004F0201.D  
 Injection Date: 24-Sep-2021 13:28:57 Instrument ID: VGC\_J  
 Lims ID: ic  
 Client ID:  
 Operator ID: sciannac ALS Bottle#: 4 Worklist Smp#: 2  
 Purge Vol: 18.000 mL Dil. Factor: 1.0000  
 Method: RSK\_J Limit Group: GCV - RSK 175  
 Column: HP-PLOT/Q ( 0.53 mm) Detector: GC FID2B

**2 Methane, CAS: 74-82-8**

Signal: 2

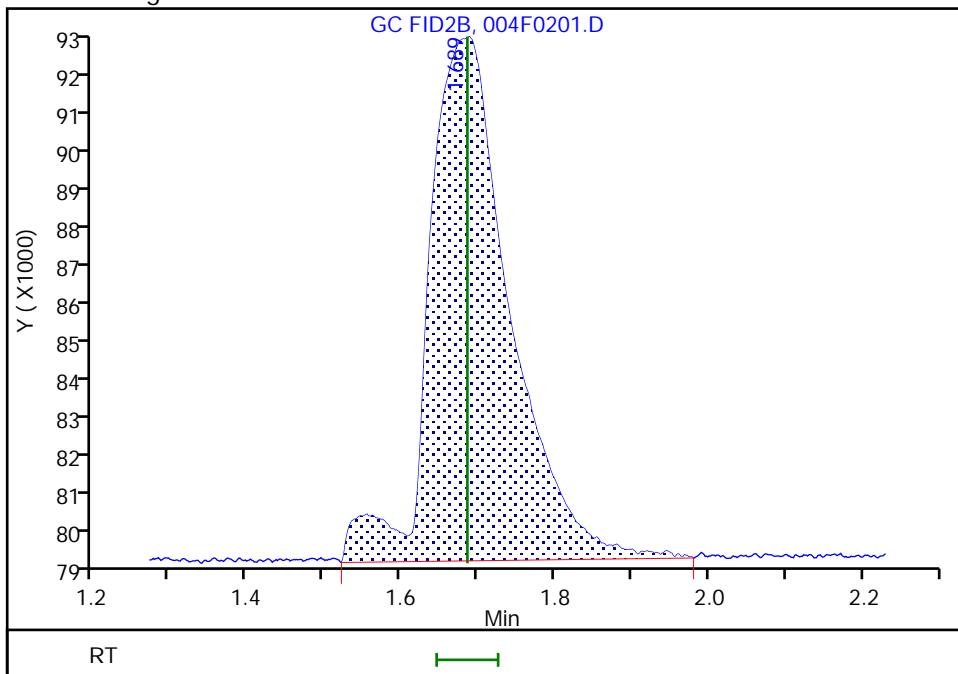
Not Detected  
 Expected RT: 1.69

## Processing Integration Results



RT: 1.69  
 Area: 91227  
 Amount: 0.791992  
 Amount Units: ug/l

## Manual Integration Results



Reviewer: sciannac, 24-Sep-2021 13:54:25

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Denver

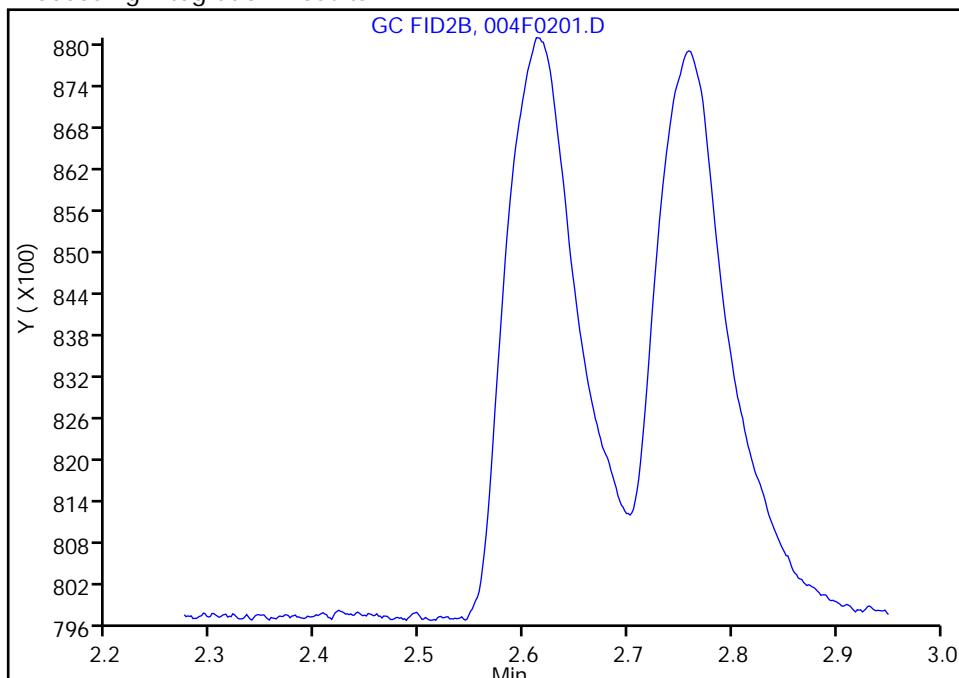
Data File: \\chromfs\Denver\ChromData\VGC\_J\20210923-104922.b\004F0201.D  
 Injection Date: 24-Sep-2021 13:28:57 Instrument ID: VGC\_J  
 Lims ID: ic  
 Client ID:  
 Operator ID: sciannac ALS Bottle#: 4 Worklist Smp#: 2  
 Purge Vol: 18.000 mL Dil. Factor: 1.0000  
 Method: RSK\_J Limit Group: GCV - RSK 175  
 Column: HP-PLOT/Q ( 0.53 mm) Detector: GC FID2B

**4 Ethylene, CAS: 74-85-1**

Signal: 2

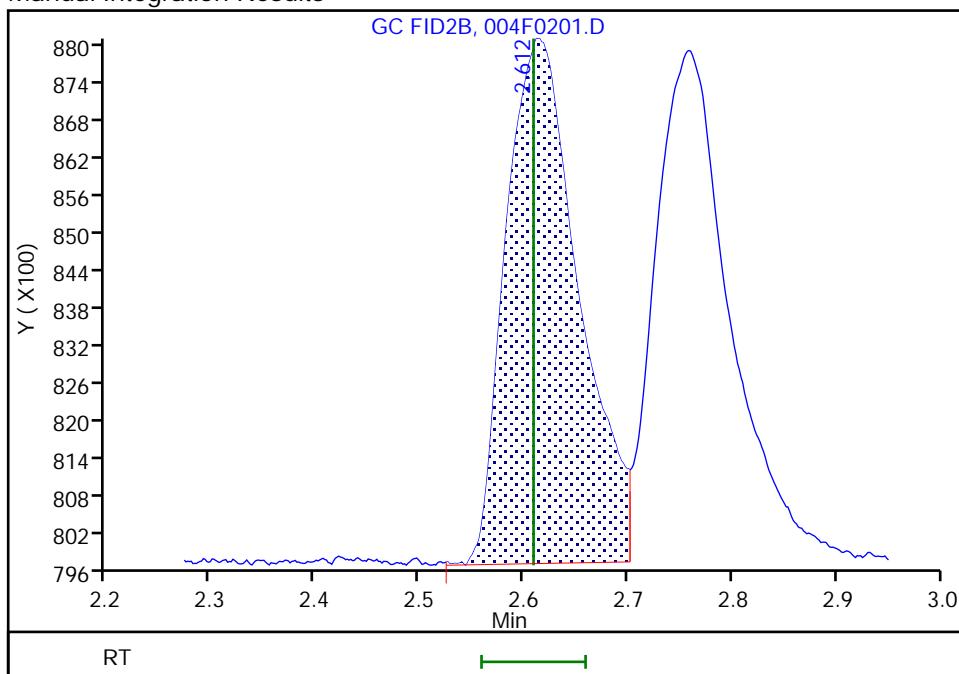
Not Detected  
 Expected RT: 2.61

## 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

## Eurofins TestAmerica, Denver

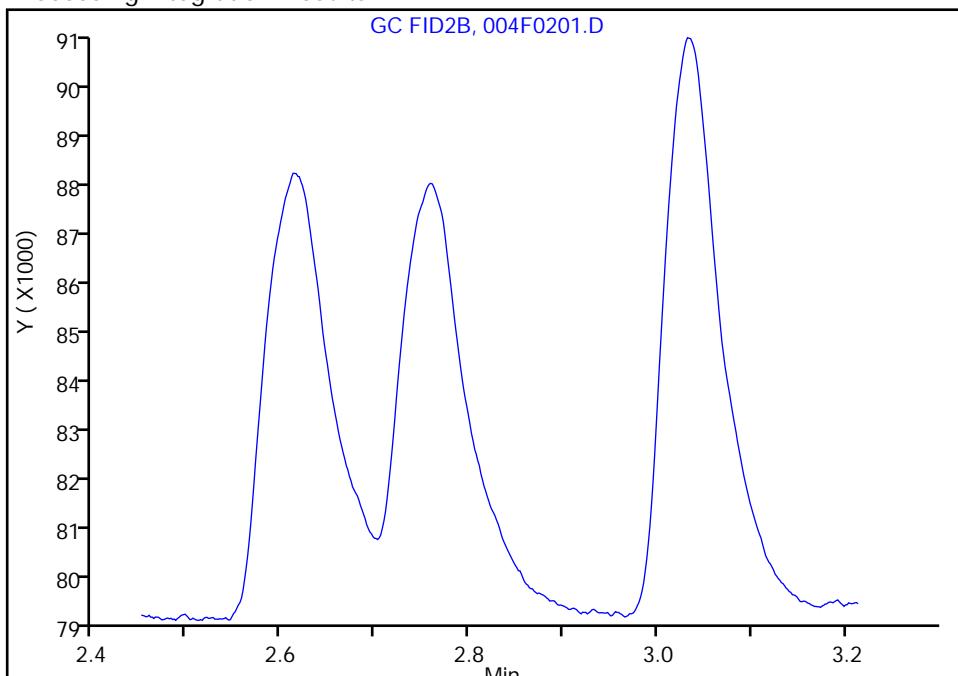
Data File: \\chromfs\Denver\ChromData\VGC\_J\20210923-104922.b\004F0201.D  
 Injection Date: 24-Sep-2021 13:28:57 Instrument ID: VGC\_J  
 Lims ID: ic  
 Client ID:  
 Operator ID: sciannac ALS Bottle#: 4 Worklist Smp#: 2  
 Purge Vol: 18.000 mL Dil. Factor: 1.0000  
 Method: RSK\_J Limit Group: GCV - RSK 175  
 Column: HP-PLOT/Q ( 0.53 mm) Detector: GC FID2B

**6 Acetylene, CAS: 74-86-2**

Signal: 2

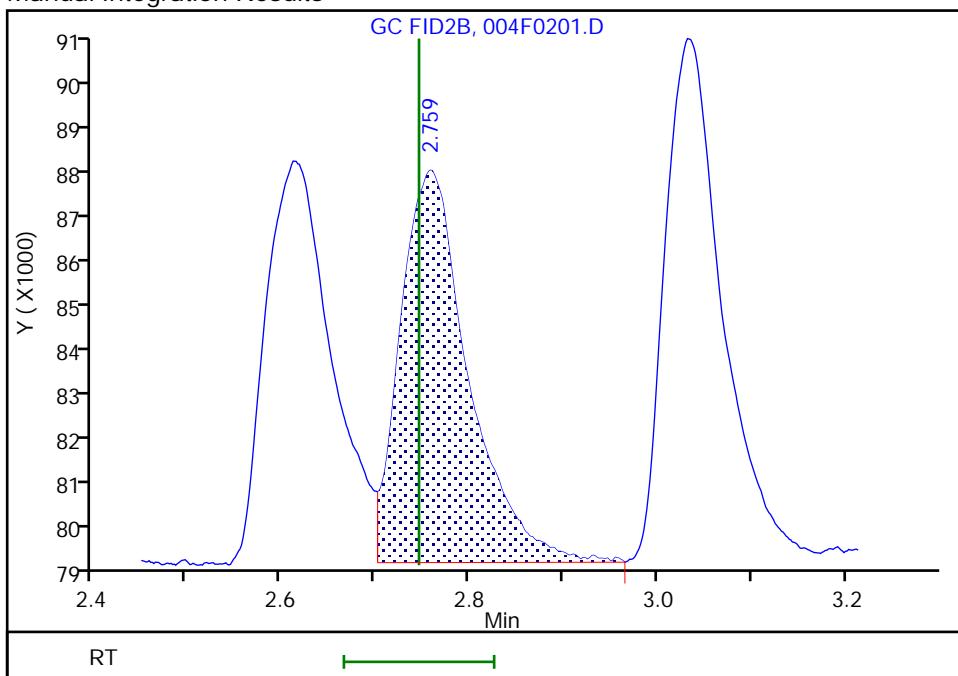
Not Detected  
 Expected RT: 2.75

## 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

## Eurofins TestAmerica, Denver

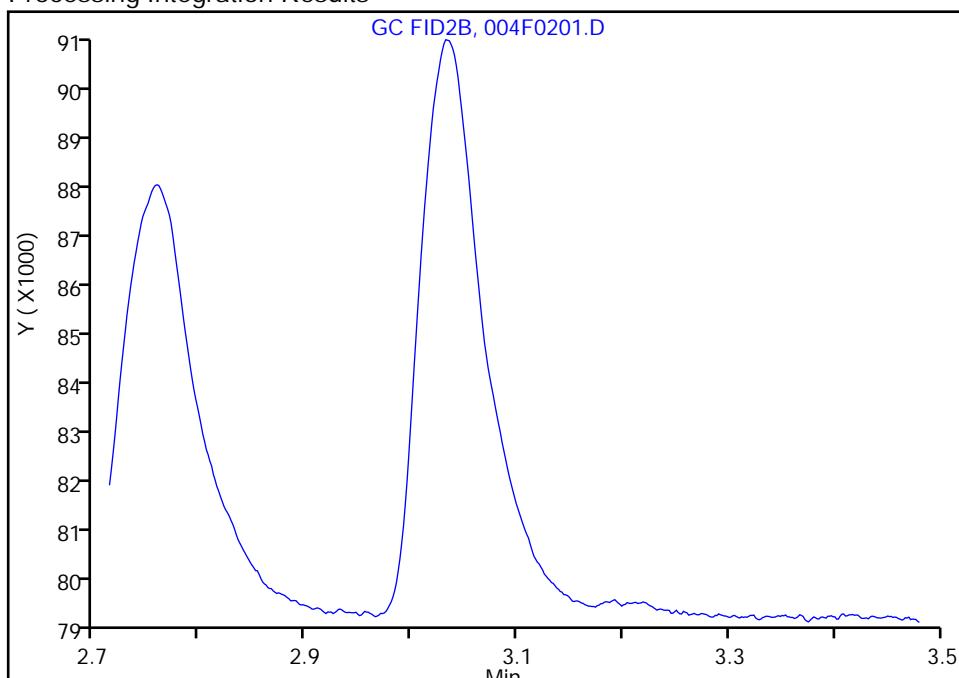
Data File: \\chromfs\Denver\ChromData\VGC\_J\20210923-104922.b\004F0201.D  
 Injection Date: 24-Sep-2021 13:28:57 Instrument ID: VGC\_J  
 Lims ID: ic  
 Client ID:  
 Operator ID: sciannac ALS Bottle#: 4 Worklist Smp#: 2  
 Purge Vol: 18.000 mL Dil. Factor: 1.0000  
 Method: RSK\_J Limit Group: GCV - RSK 175  
 Column: HP-PLOT/Q ( 0.53 mm) Detector: GC FID2B

## 3 Ethane, CAS: 74-84-0

Signal: 2

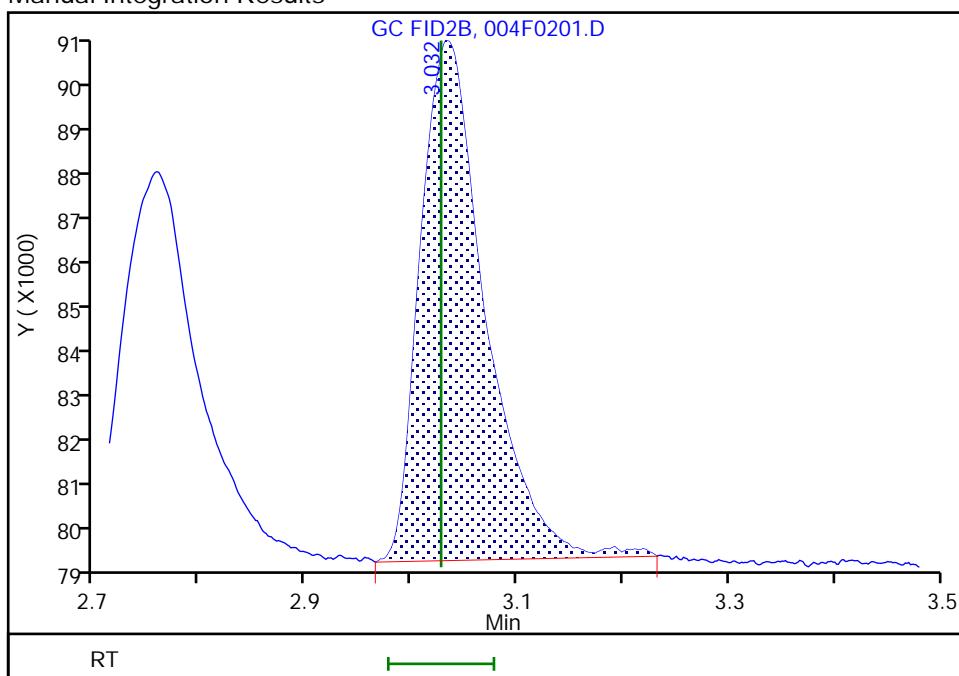
Not Detected  
 Expected RT: 3.03

## 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
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## 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

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

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

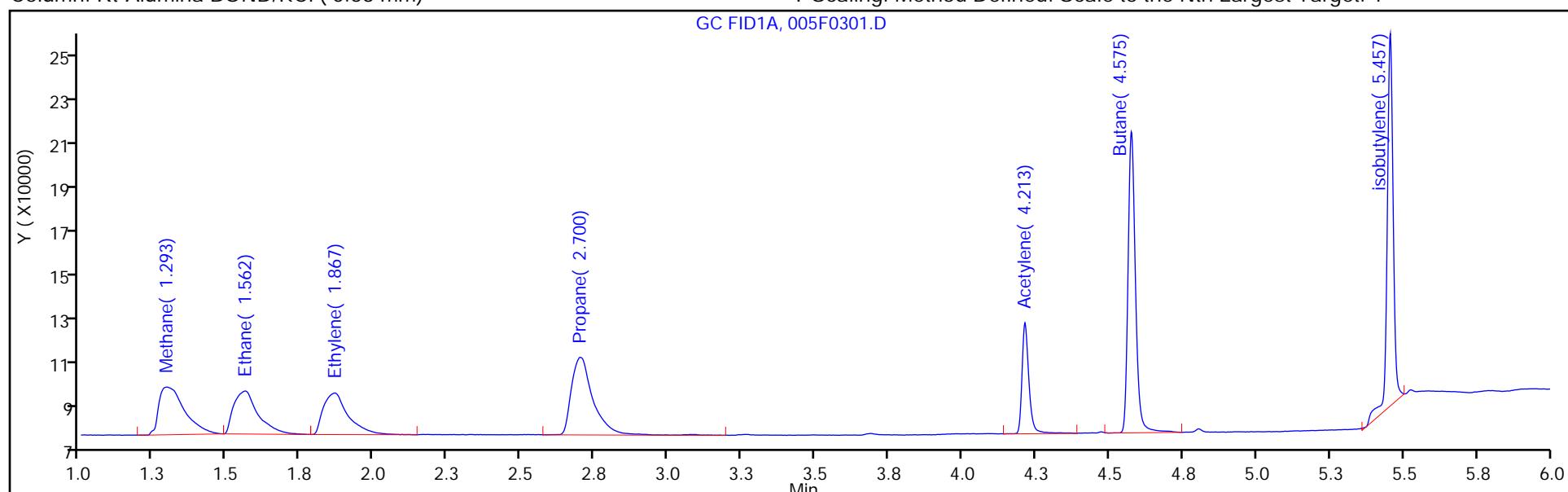
ALS Bottle#: 5

Method: RSK\_J

Limit Group: GCV - RSK 175

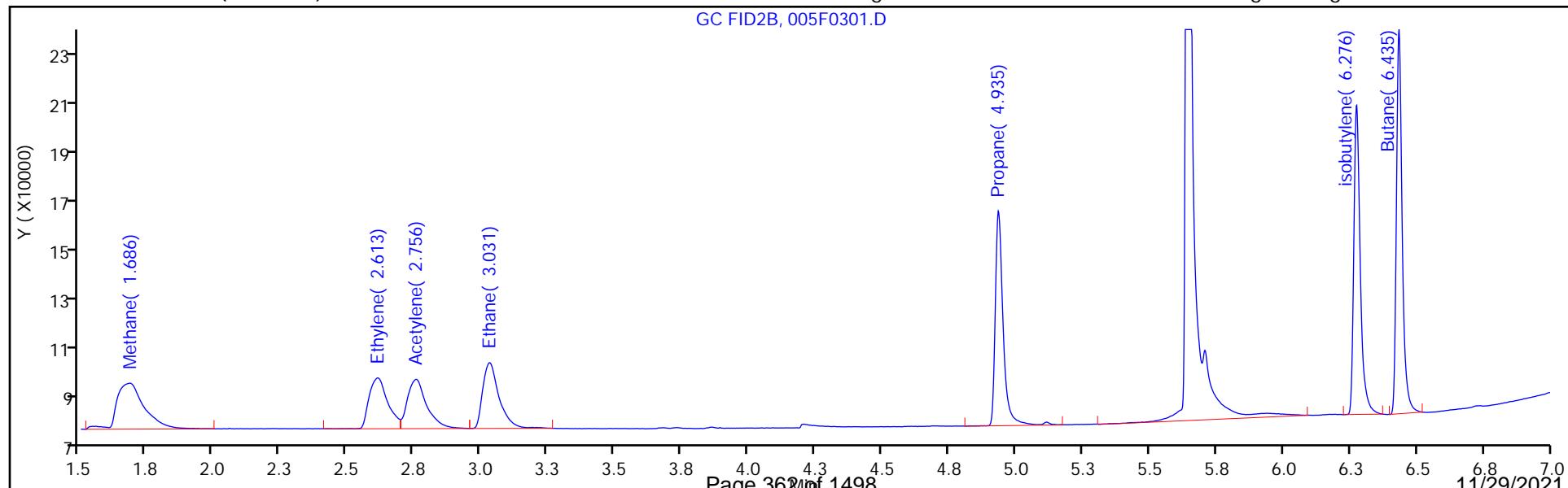
Column: Rt-Alumina BOND/KCl ( 0.53 mm)

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
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## 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

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

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

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

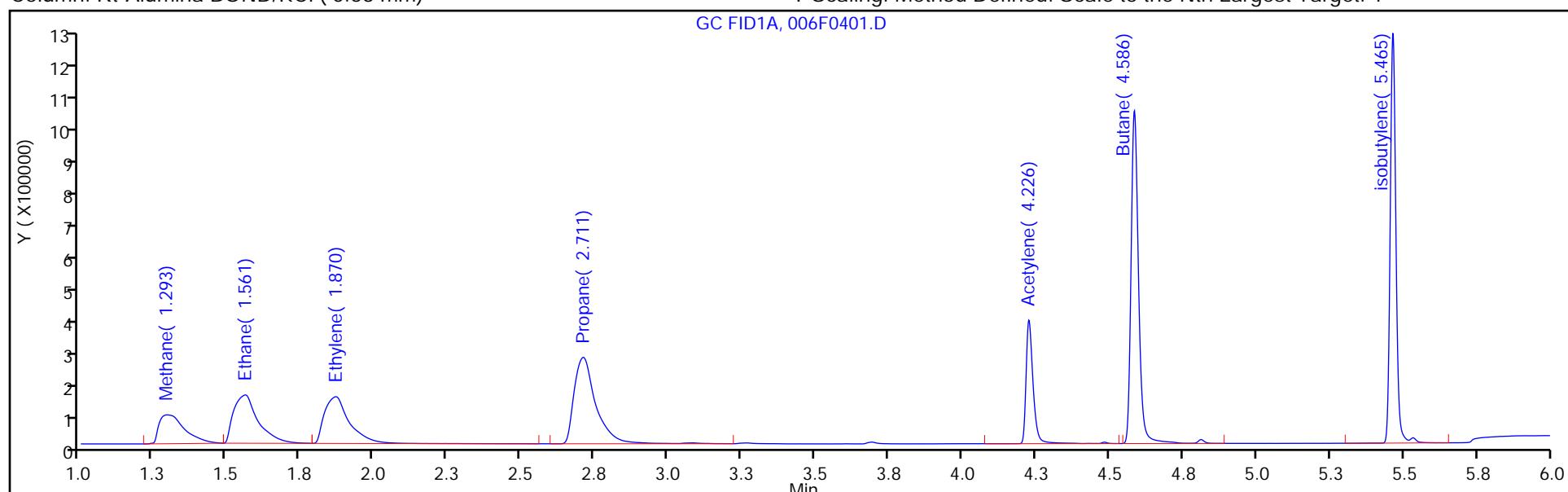
ALS Bottle#: 6

Method: RSK\_J

Limit Group: GCV - RSK 175

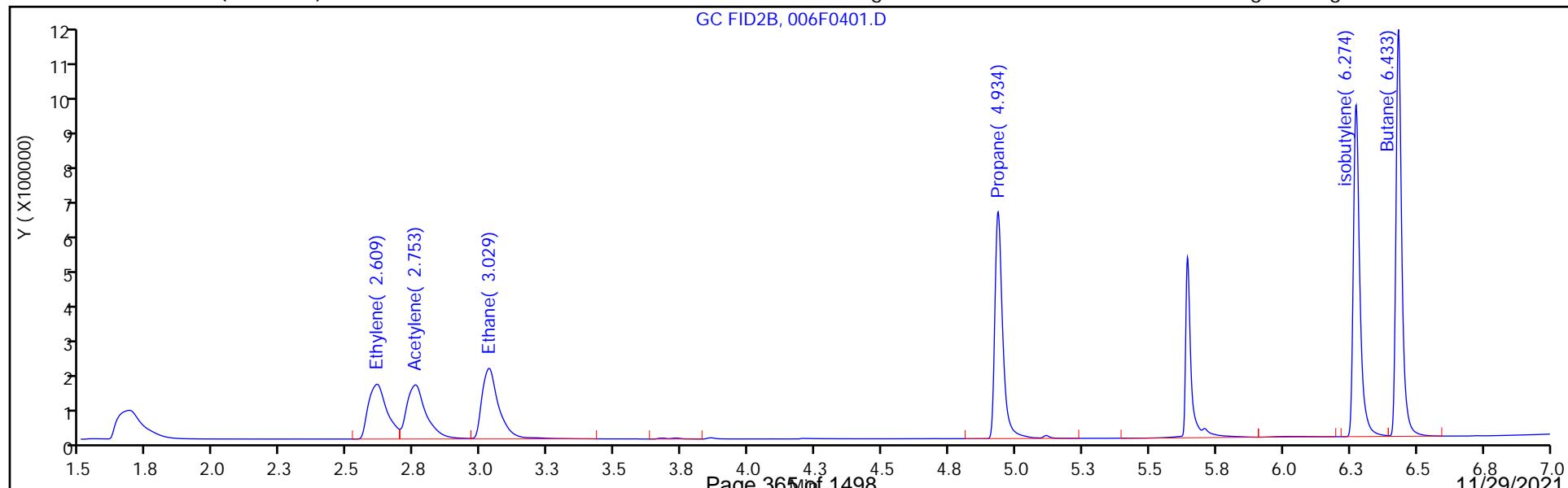
Column: Rt-Alumina BOND/KCl ( 0.53 mm)

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



## 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

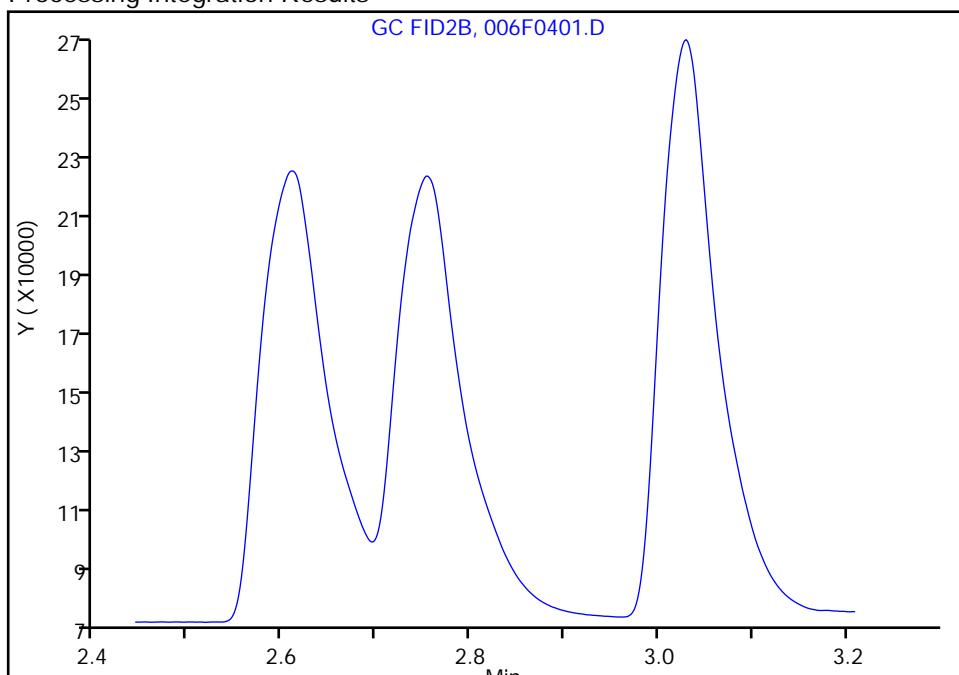
**6 Acetylene, CAS: 74-86-2**

Signal: 2

Not Detected

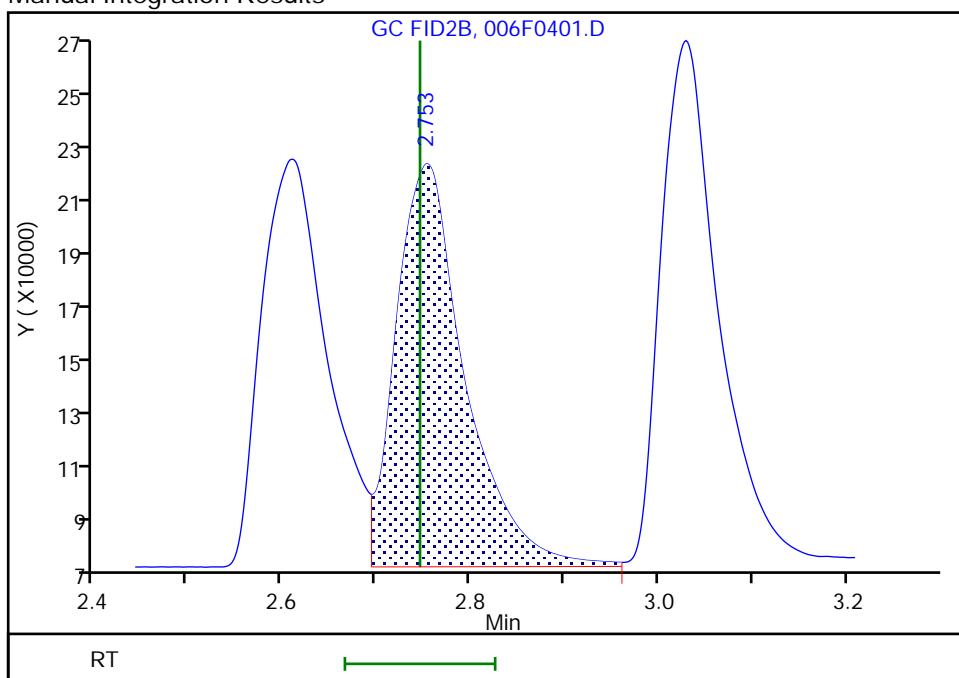
Expected RT: 2.75

## 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
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## 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

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

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

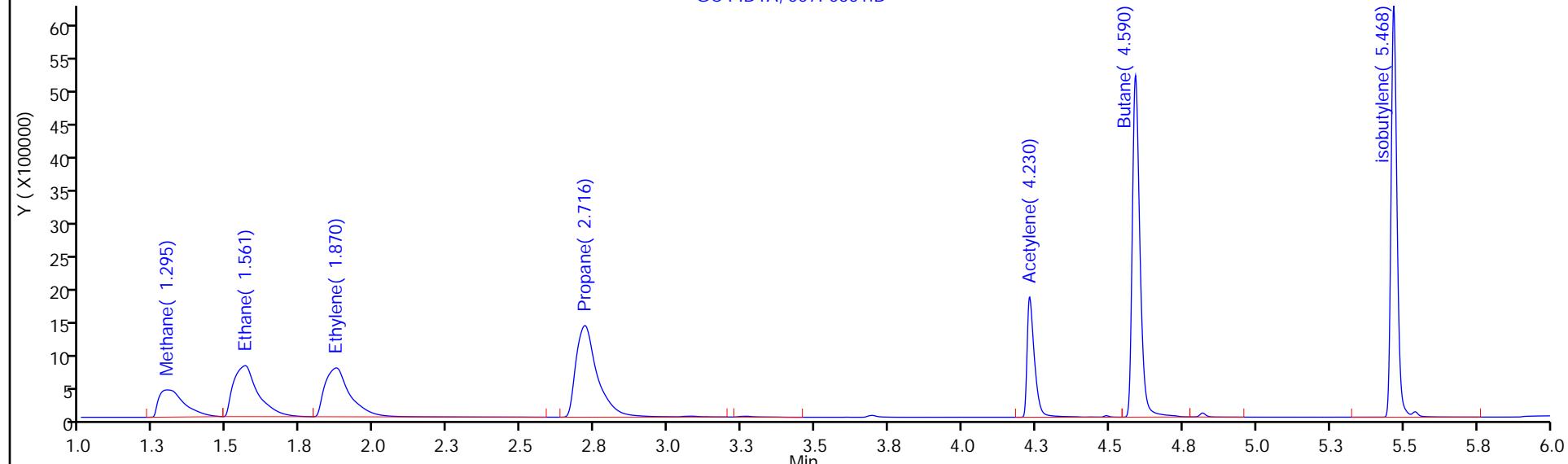
Method: RSK\_J

Limit Group: GCV - RSK 175

Column: Rt-Alumina BOND/KCl ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

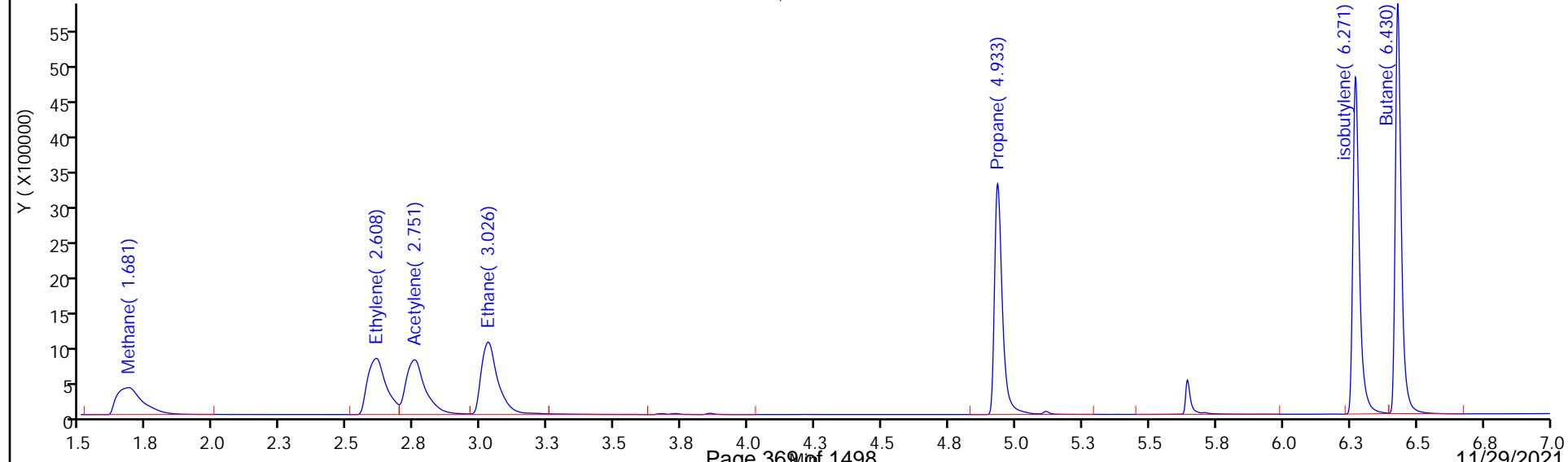
GC FID1A, 007F0501.D



Column: HP-PLOT/Q ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

GC FID2B, 007F0501.D



## 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

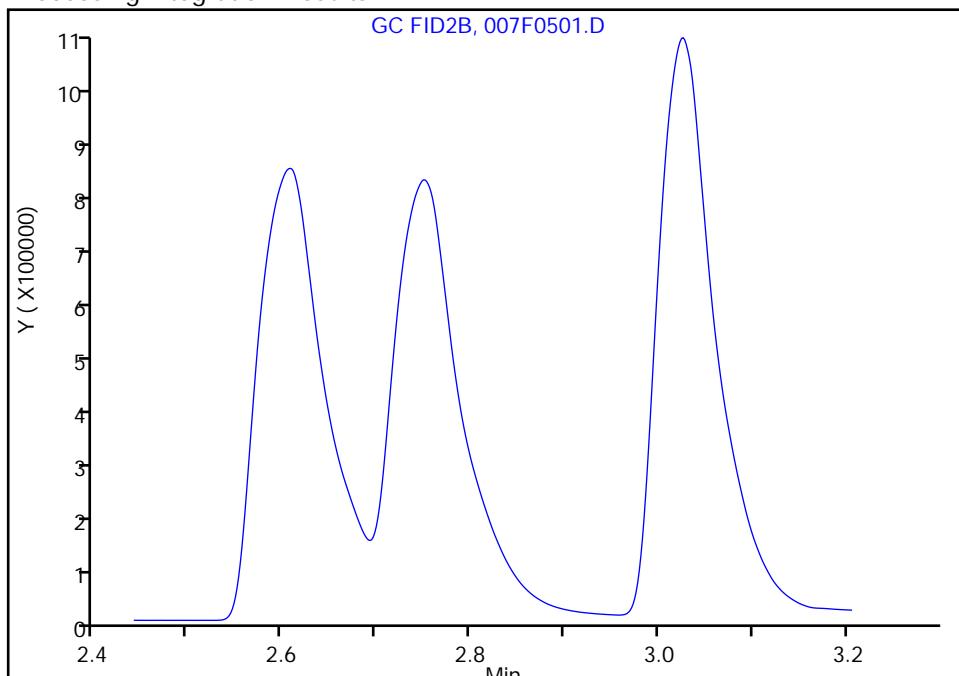
**6 Acetylene, CAS: 74-86-2**

Signal: 2

Not Detected

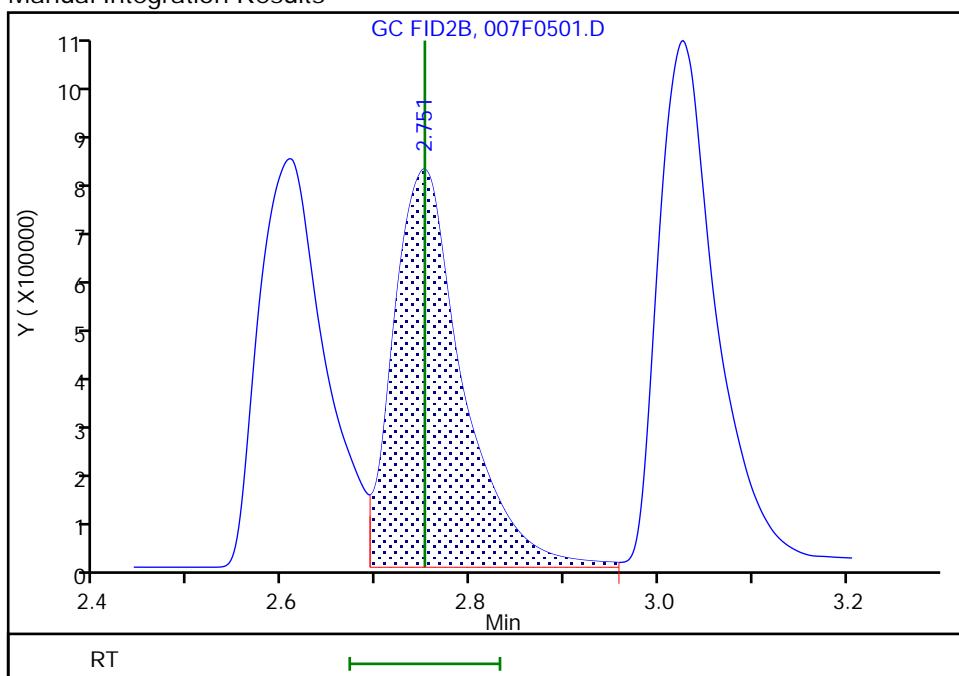
Expected RT: 2.75

## 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

## Eurofins TestAmerica, Denver

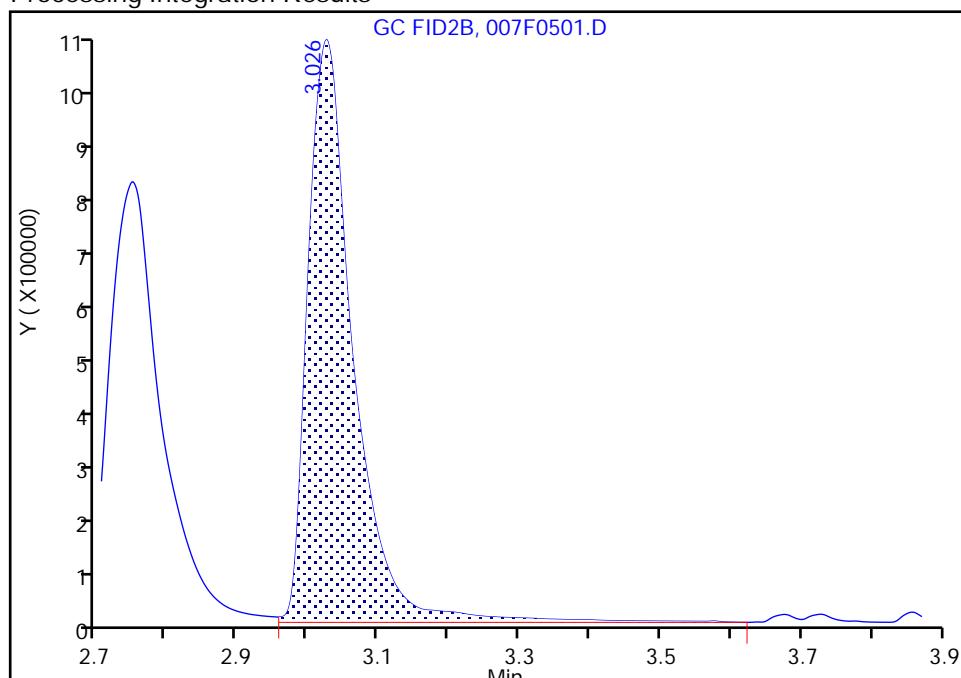
Data File: \\chromfs\Denver\ChromData\VGC\_J\20210923-104922.b\007F0501.D  
 Injection Date: 24-Sep-2021 14:07:45 Instrument ID: VGC\_J  
 Lims ID: ic  
 Client ID:  
 Operator ID: sciannac ALS Bottle#: 7 Worklist Smp#: 5  
 Purge Vol: 18.000 mL Dil. Factor: 1.0000  
 Method: RSK\_J Limit Group: GCV - RSK 175  
 Column: HP-PLOT/Q ( 0.53 mm) Detector: GC FID2B

## 3 Ethane, CAS: 74-84-0

Signal: 2

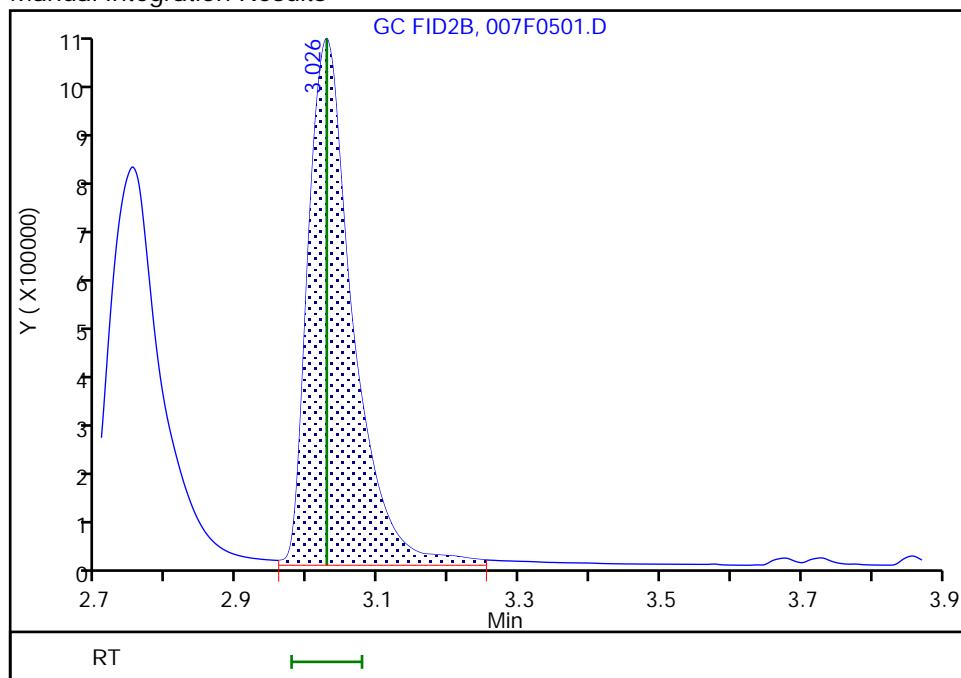
RT: 3.03  
 Area: 4534073  
 Amount: 134.6635  
 Amount Units: ug/l

## Processing Integration Results



RT: 3.03  
 Area: 4450065  
 Amount: 133.3050  
 Amount Units: ug/l

## Manual Integration Results



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
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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

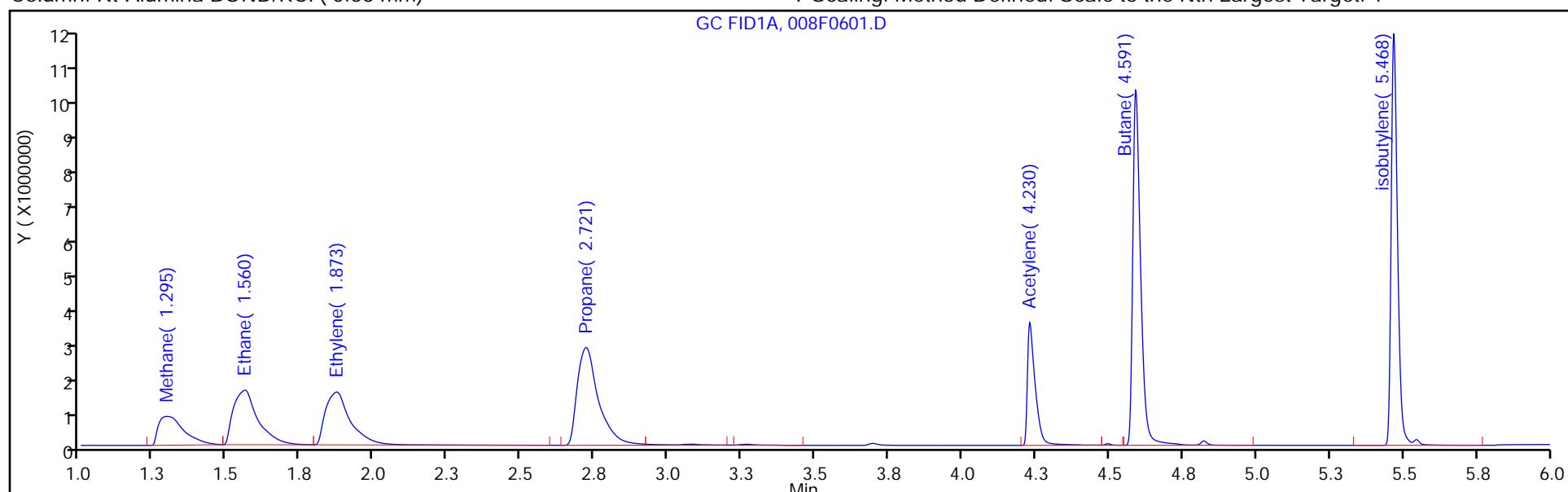
ALS Bottle#: 8

Method: RSK\_J

Limit Group: GCV - RSK 175

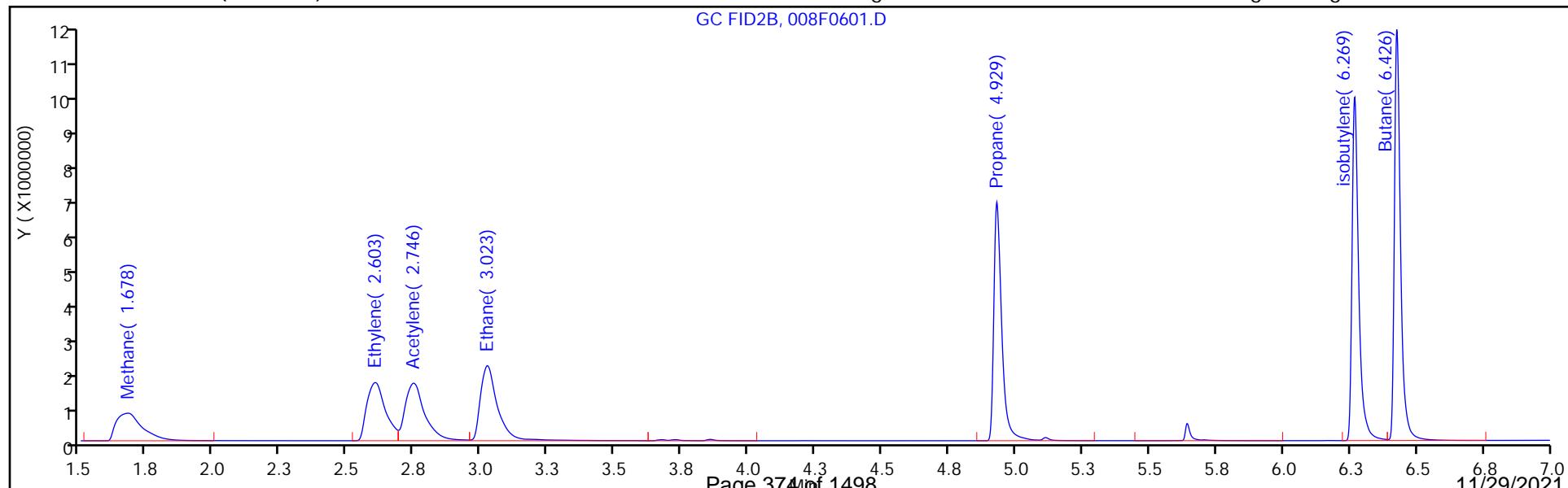
Column: Rt-Alumina BOND/KCl ( 0.53 mm)

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



## Eurofins TestAmerica, Denver

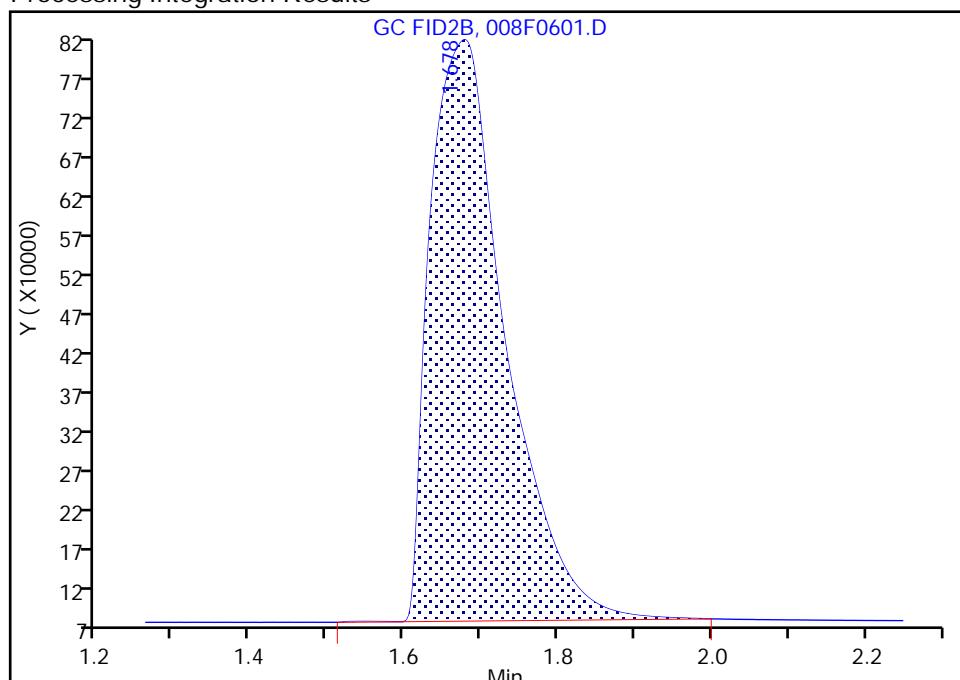
Data File: \\chromfs\Denver\ChromData\VGC\_J\20210923-104922.b\008F0601.D  
 Injection Date: 24-Sep-2021 14:20:44 Instrument ID: VGC\_J  
 Lims ID: ic  
 Client ID:  
 Operator ID: sciannac ALS Bottle#: 8 Worklist Smp#: 6  
 Purge Vol: 18.000 mL Dil. Factor: 1.0000  
 Method: RSK\_J Limit Group: GCV - RSK 175  
 Column: HP-PLOT/Q ( 0.53 mm) Detector: GC FID2B

**2 Methane, CAS: 74-82-8**

Signal: 2

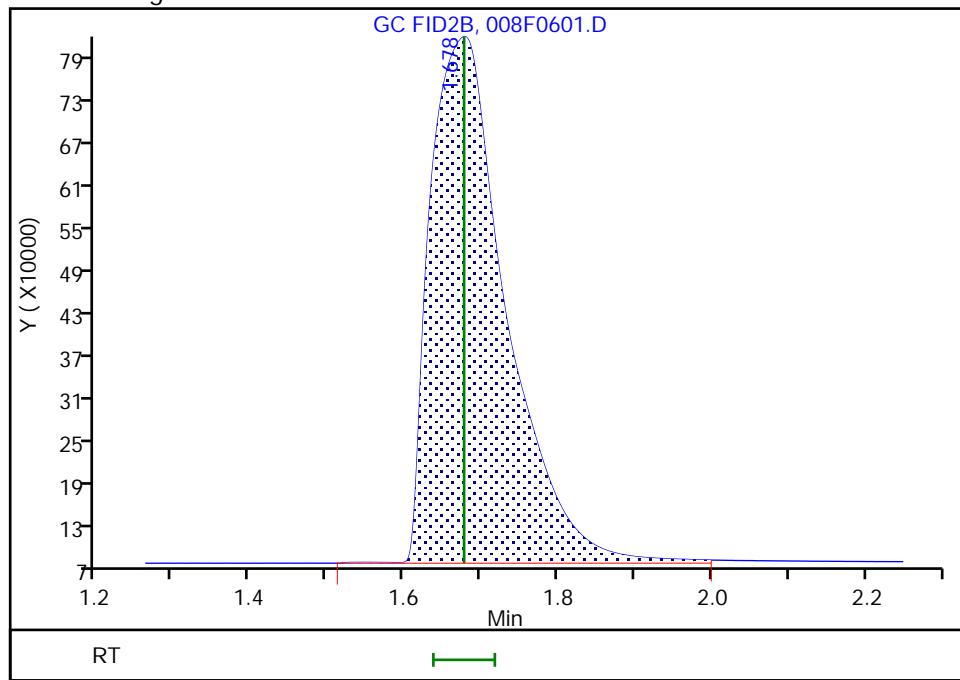
RT: 1.68  
 Area: 5002633  
 Amount: 137.0848  
 Amount Units: ug/l

## Processing Integration Results



RT: 1.68  
 Area: 5065048  
 Amount: 138.5598  
 Amount Units: ug/l

## Manual Integration Results



Reviewer: sciannac, 29-Sep-2021 09:21:50

Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

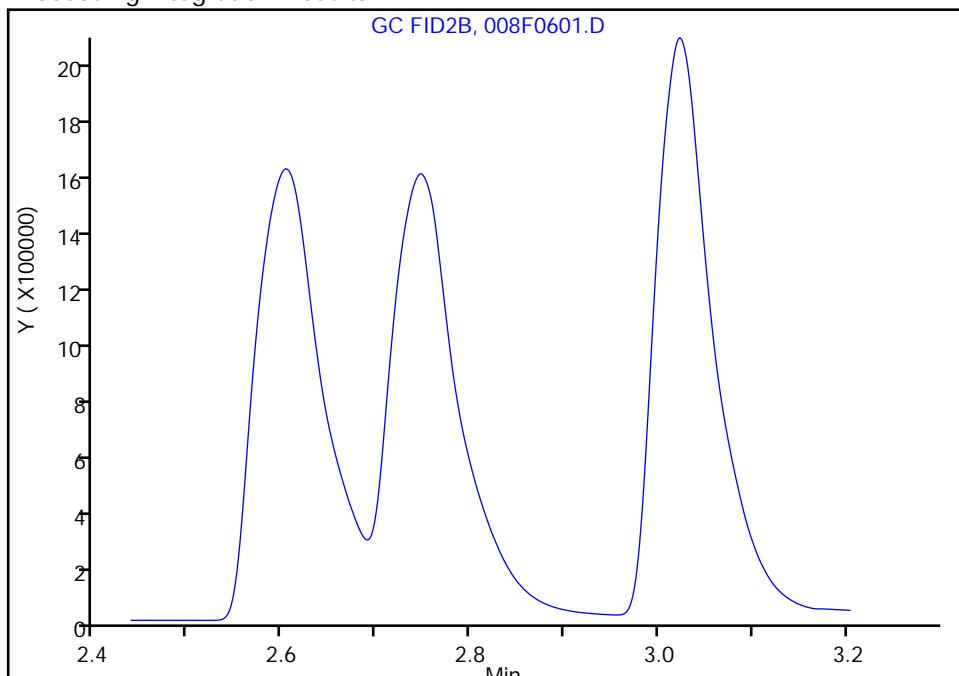
Data File: \\chromfs\Denver\ChromData\VGC\_J\20210923-104922.b\008F0601.D  
 Injection Date: 24-Sep-2021 14:20:44 Instrument ID: VGC\_J  
 Lims ID: ic  
 Client ID:  
 Operator ID: sciannac ALS Bottle#: 8 Worklist Smp#: 6  
 Purge Vol: 18.000 mL Dil. Factor: 1.0000  
 Method: RSK\_J Limit Group: GCV - RSK 175  
 Column: HP-PLOT/Q ( 0.53 mm) Detector: GC FID2B

**6 Acetylene, CAS: 74-86-2**

Signal: 2

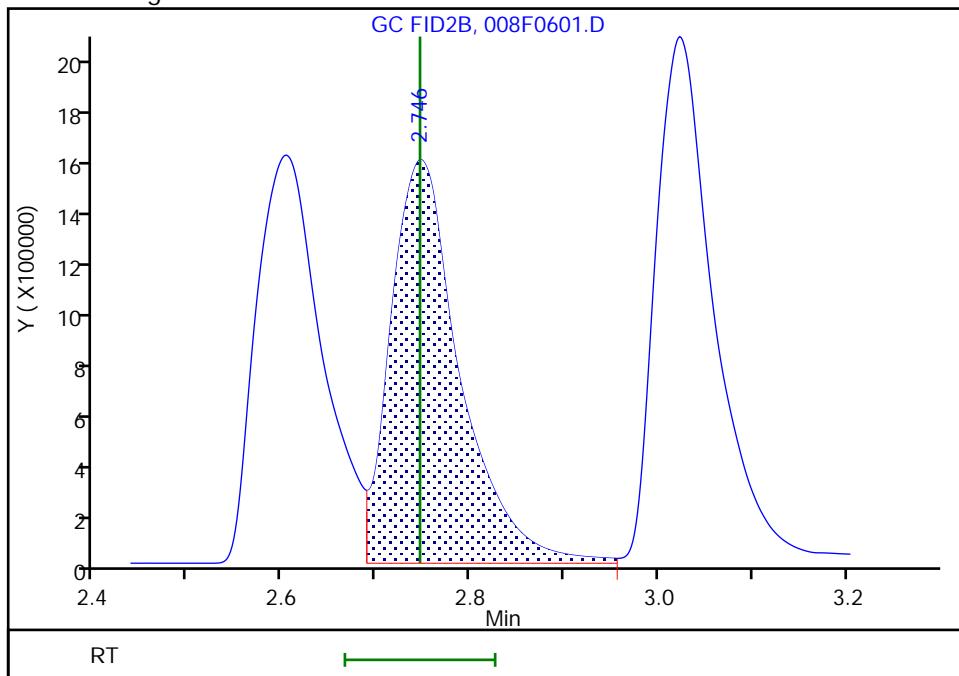
Not Detected  
 Expected RT: 2.75

Processing Integration Results



RT: 2.75  
 Area: 7865310  
 Amount: 230.1225  
 Amount Units: ug/l

Manual Integration Results



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
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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

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

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

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

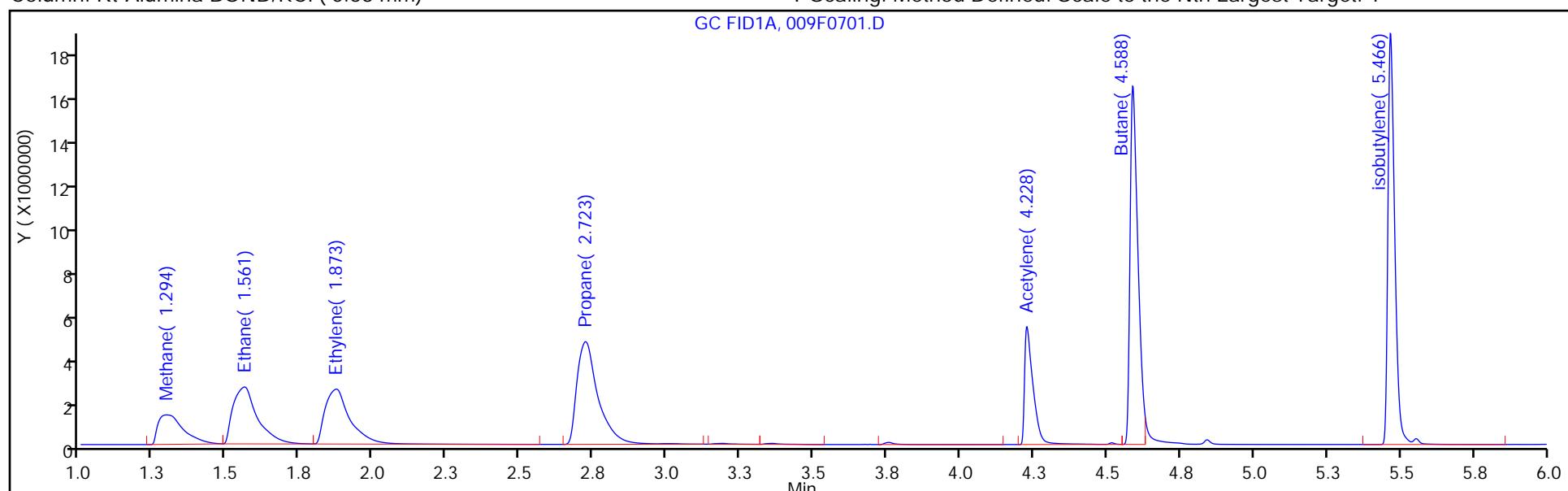
Method: RSK\_J

Limit Group: GCV - RSK 175

Column: Rt-Alumina BOND/KCl ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

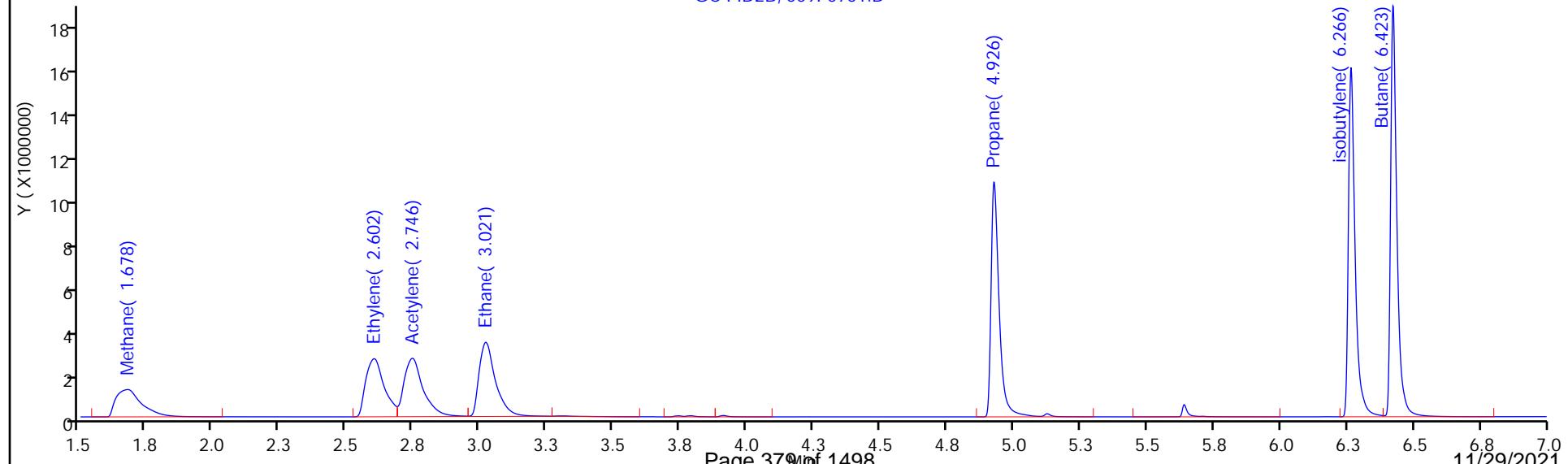
GC FID1A, 009F0701.D



Column: HP-PLOT/Q ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

GC FID2B, 009F0701.D



## 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

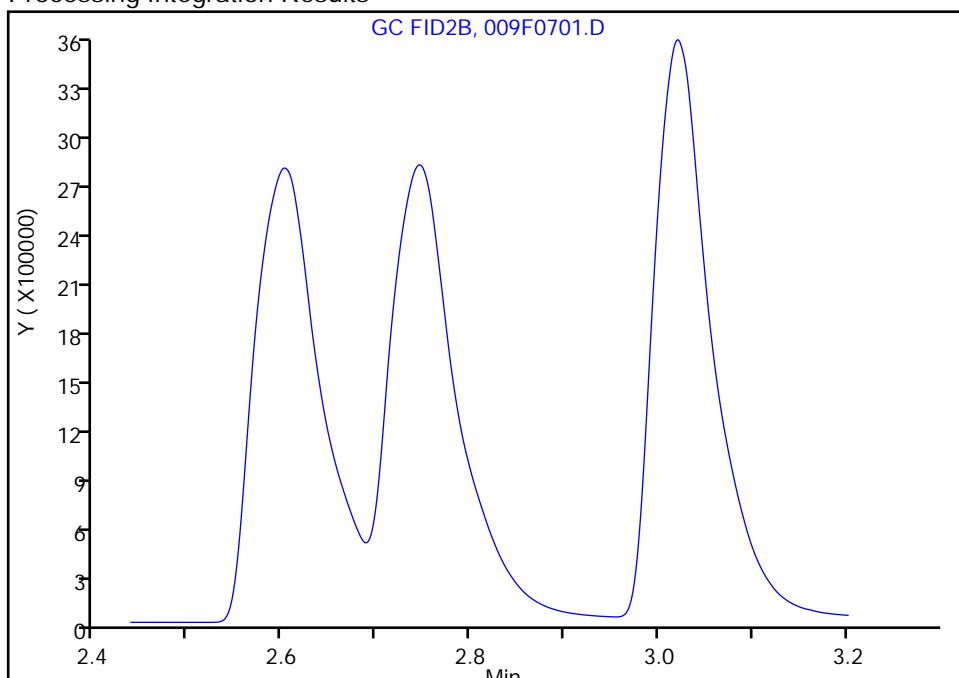
**6 Acetylene, CAS: 74-86-2**

Signal: 2

Not Detected

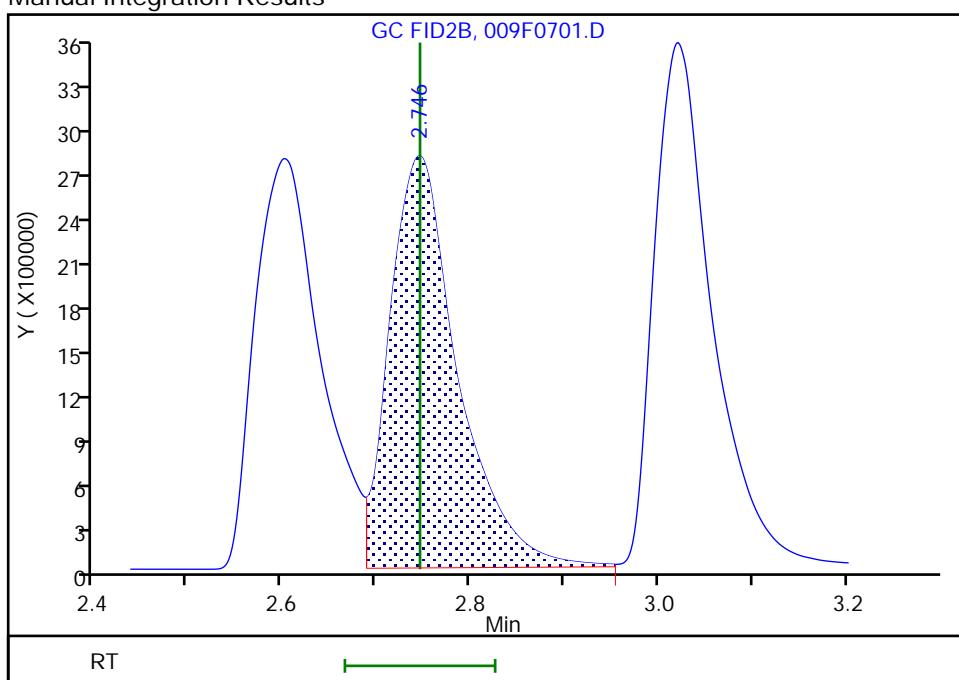
Expected RT: 2.75

## 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
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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

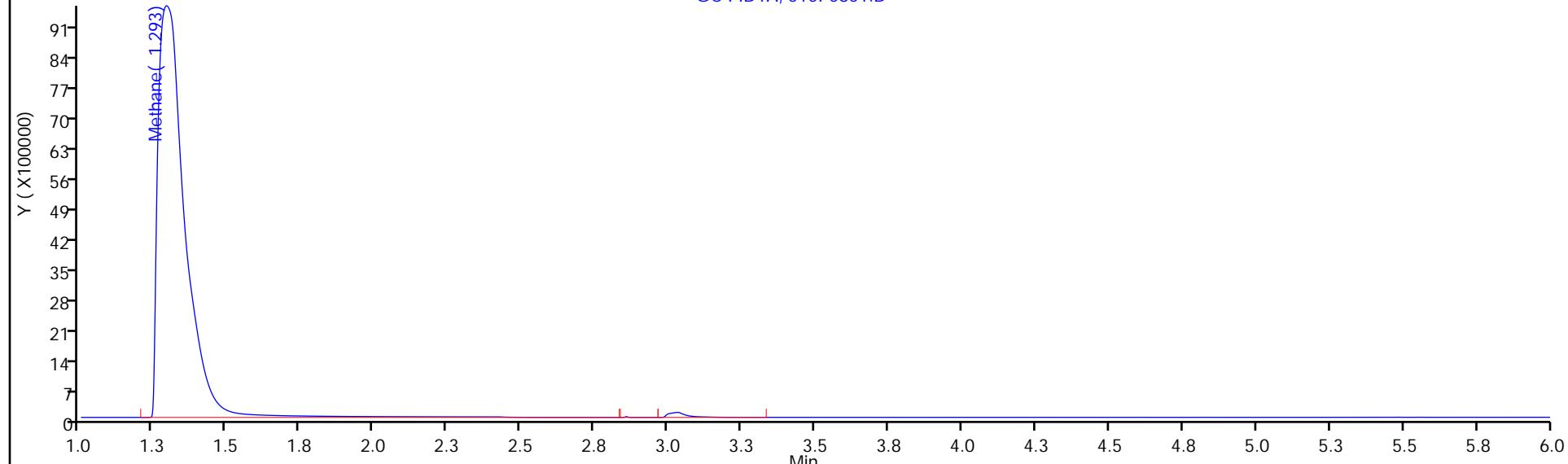
Method: RSK\_J

Limit Group: GCV - RSK 175

Column: Rt-Alumina BOND/KCl ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

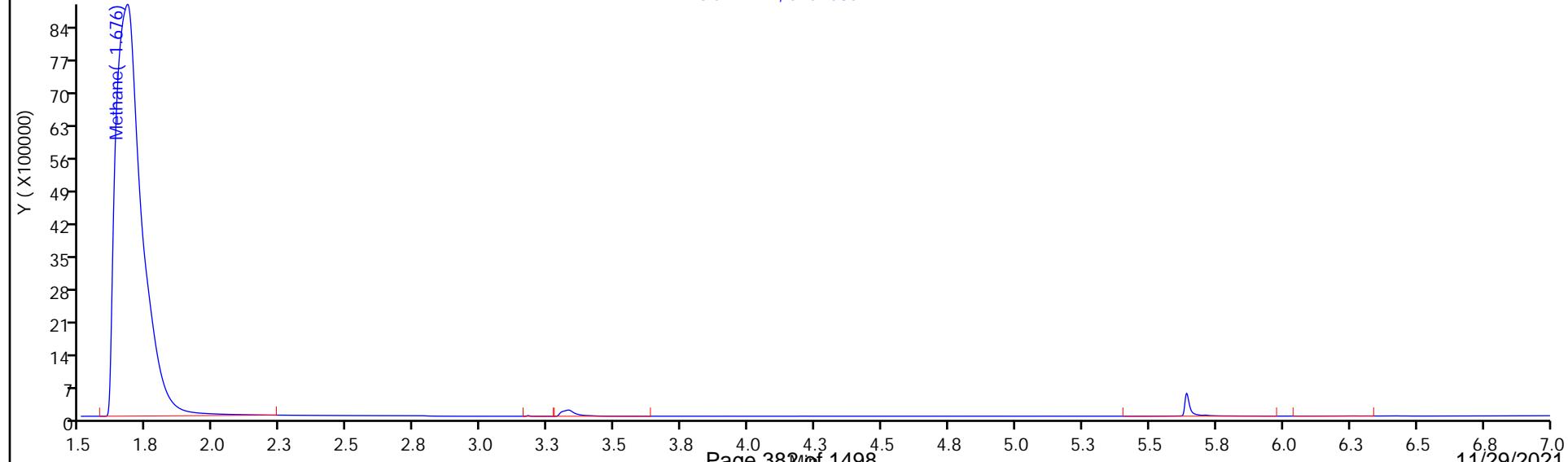
GC FID1A, 010F0801.D



Column: HP-PLOT/Q ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

GC FID2B, 010F0801.D



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
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#### 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

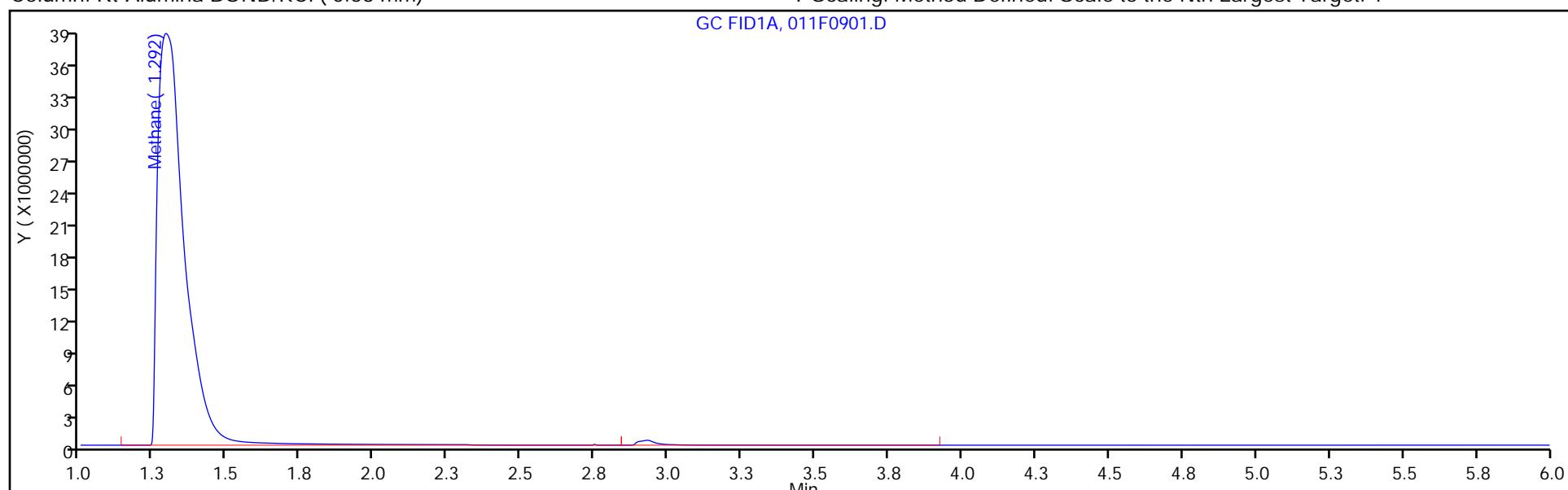
ALS Bottle#: 11

Method: RSK\_J

Limit Group: GCV - RSK 175

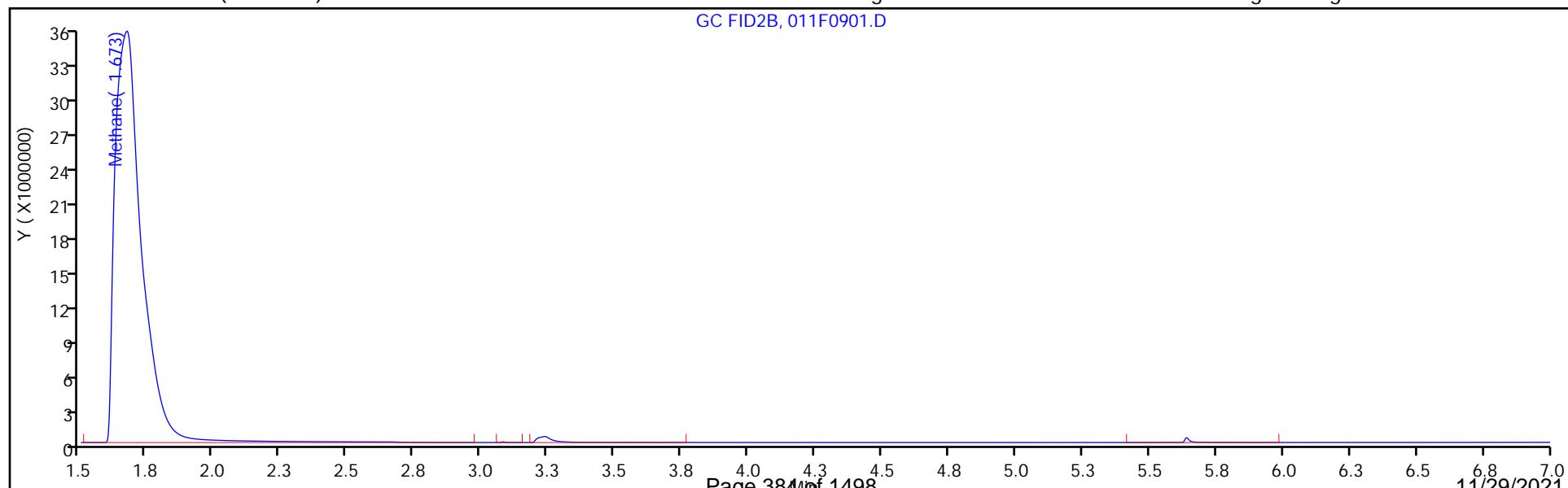
Column: Rt-Alumina BOND/KCl ( 0.53 mm)

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

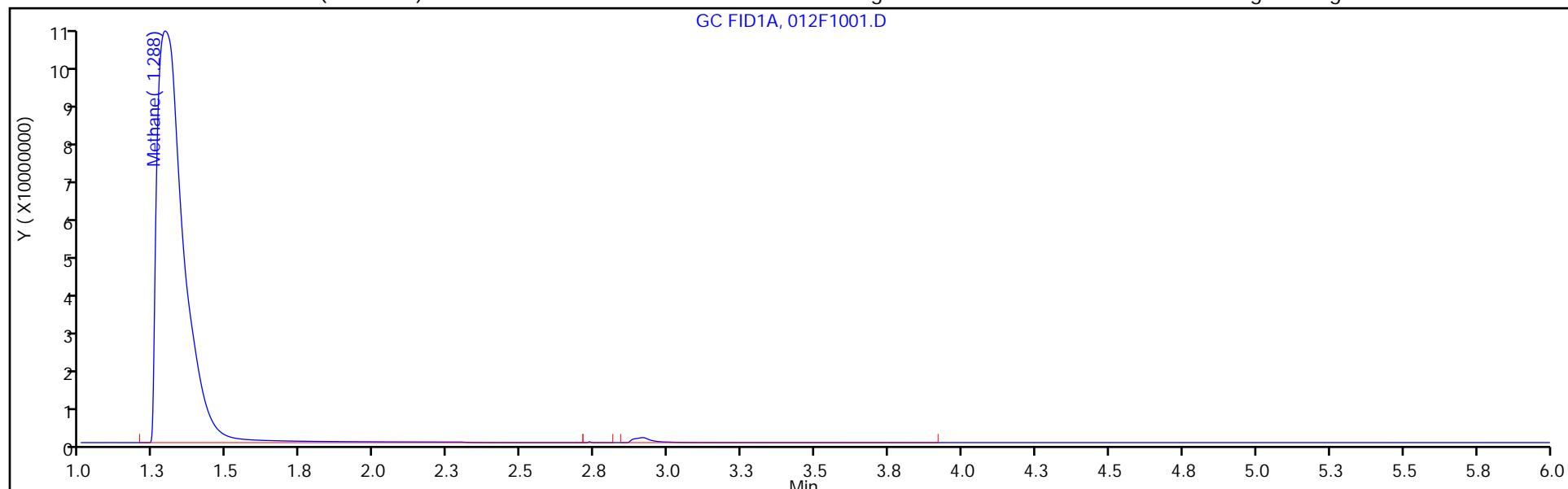
ALS Bottle#: 12

Method: RSK\_J

Limit Group: GCV - RSK 175

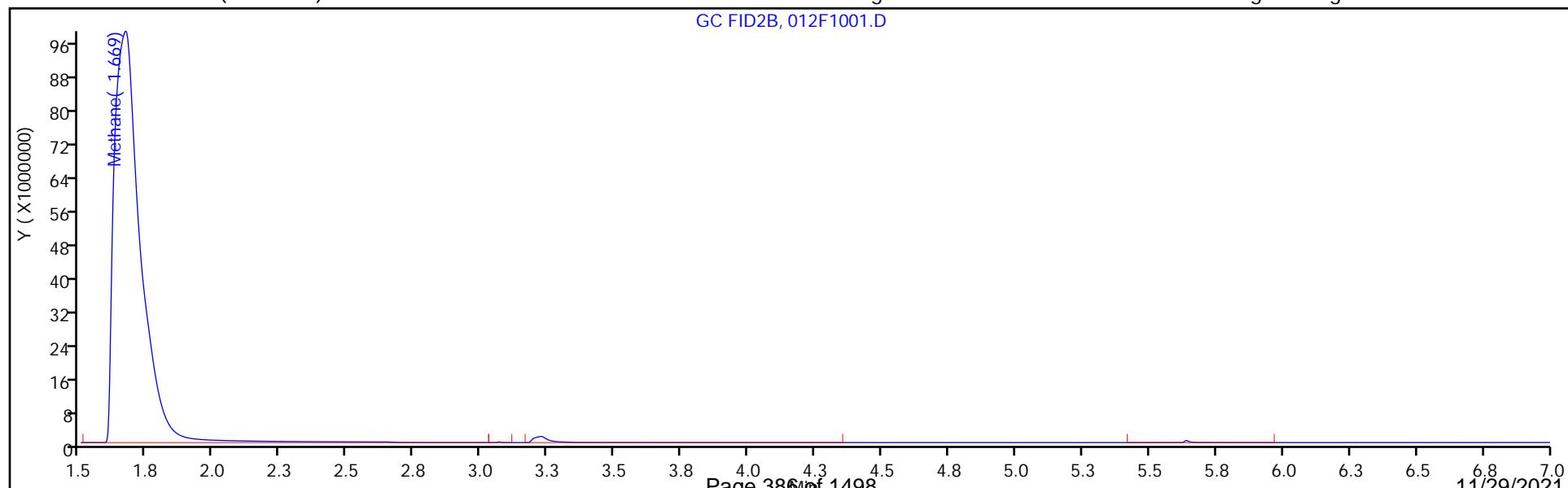
Column: Rt-Alumina BOND/KCl ( 0.53 mm)

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



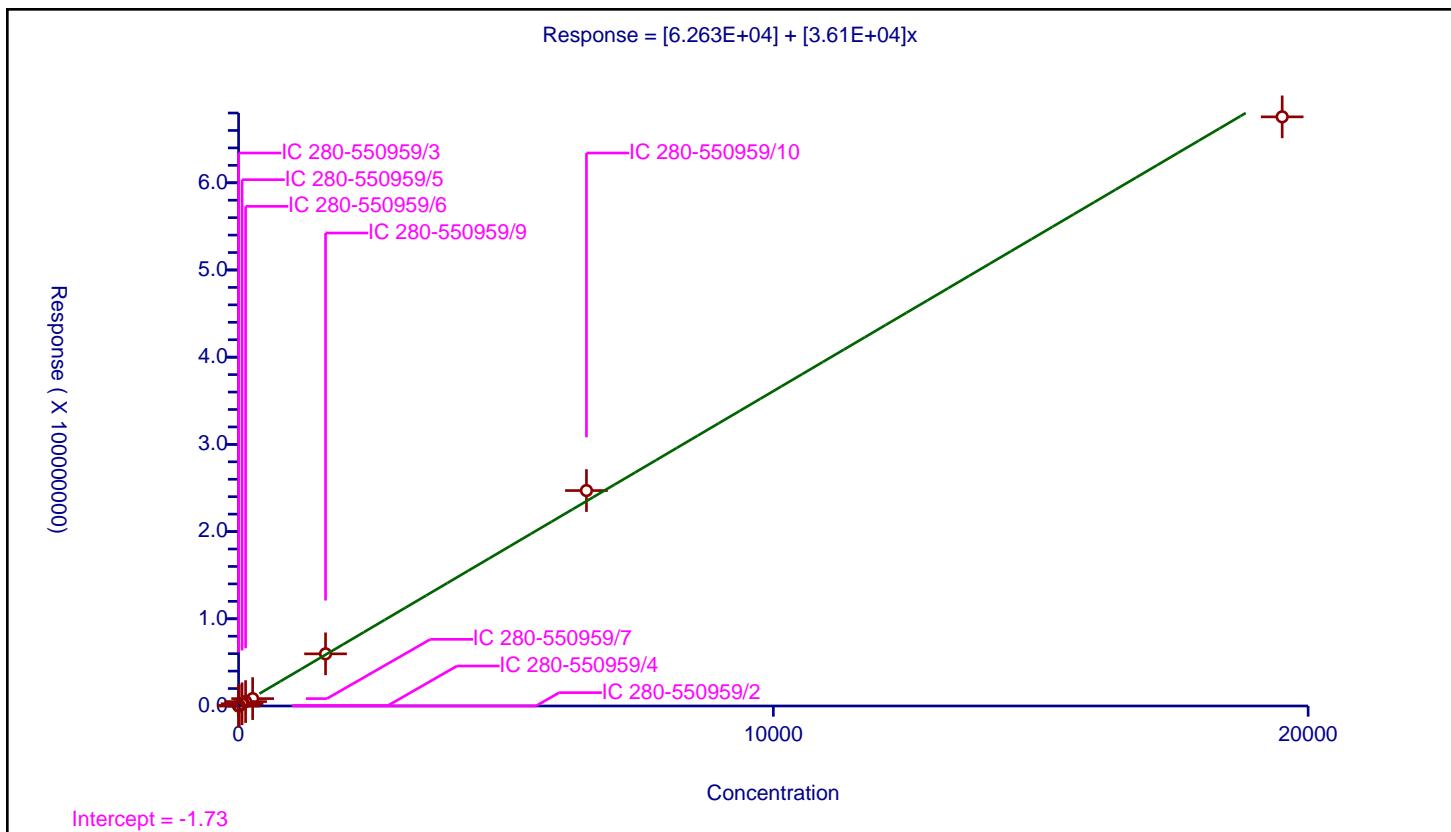
## Calibration

/ 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



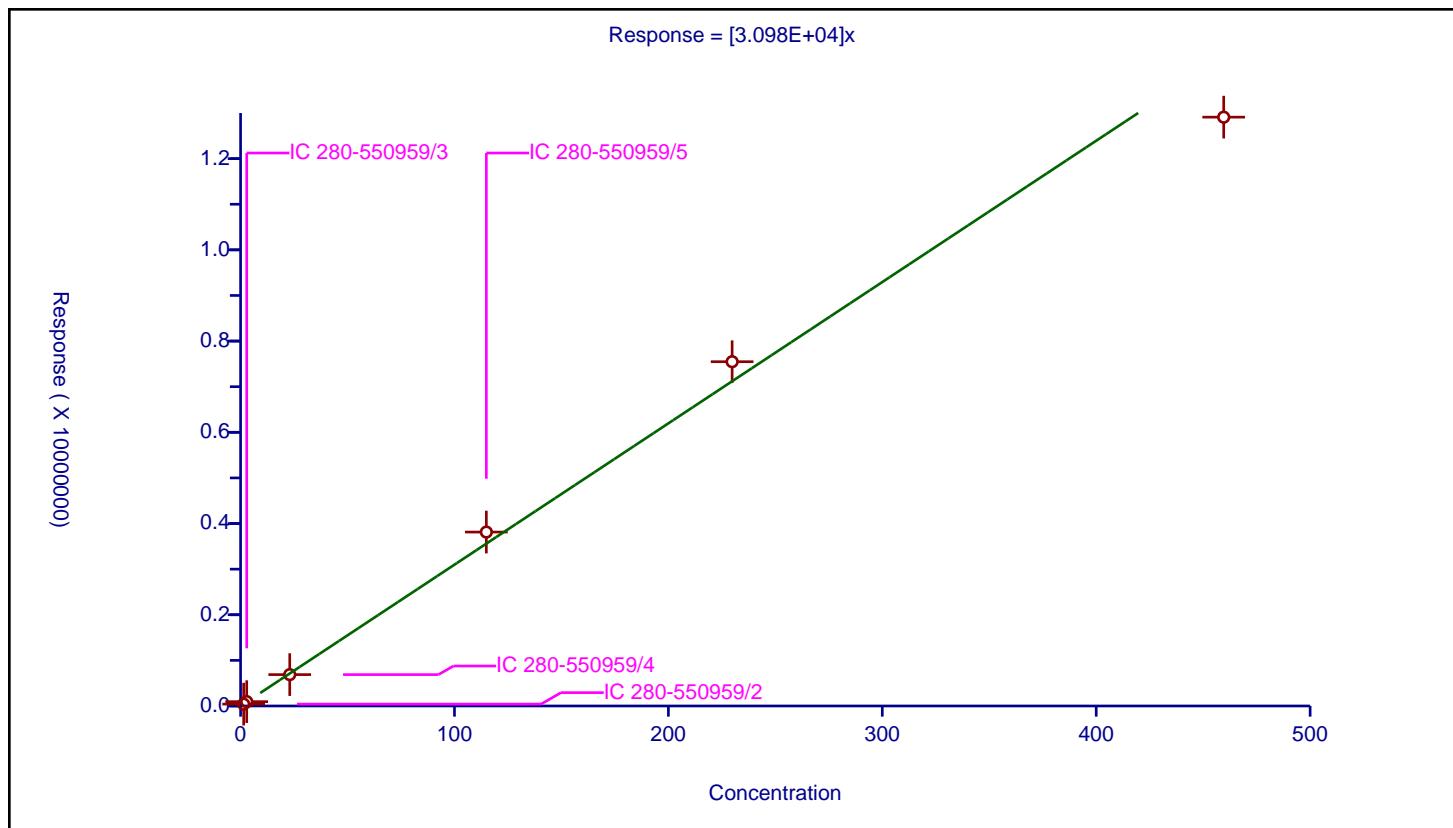
## Calibration

/ 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

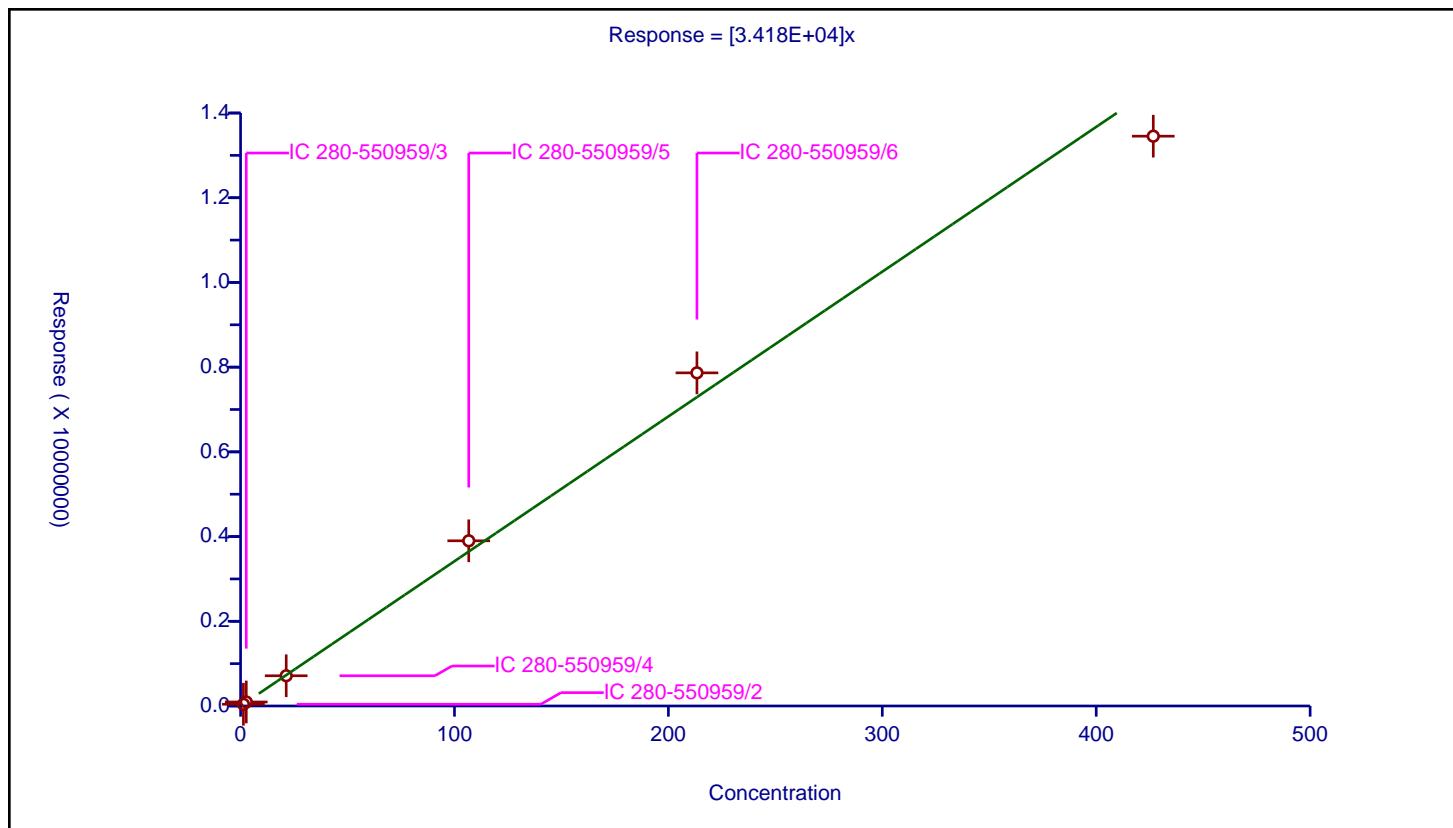
ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-550959/2	1.43625	41226.0			28703.916449	Y
2	IC 280-550959/3	2.8725	95159.0			33127.589208	Y
3	IC 280-550959/4	22.98	687818.0			29931.157528	Y
4	IC 280-550959/5	114.9	3812973.0			33185.143603	Y
5	IC 280-550959/6	229.8	7548044.0			32846.144473	Y
6	IC 280-550959/7	459.6	12909086.0			28087.654482	Y



**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



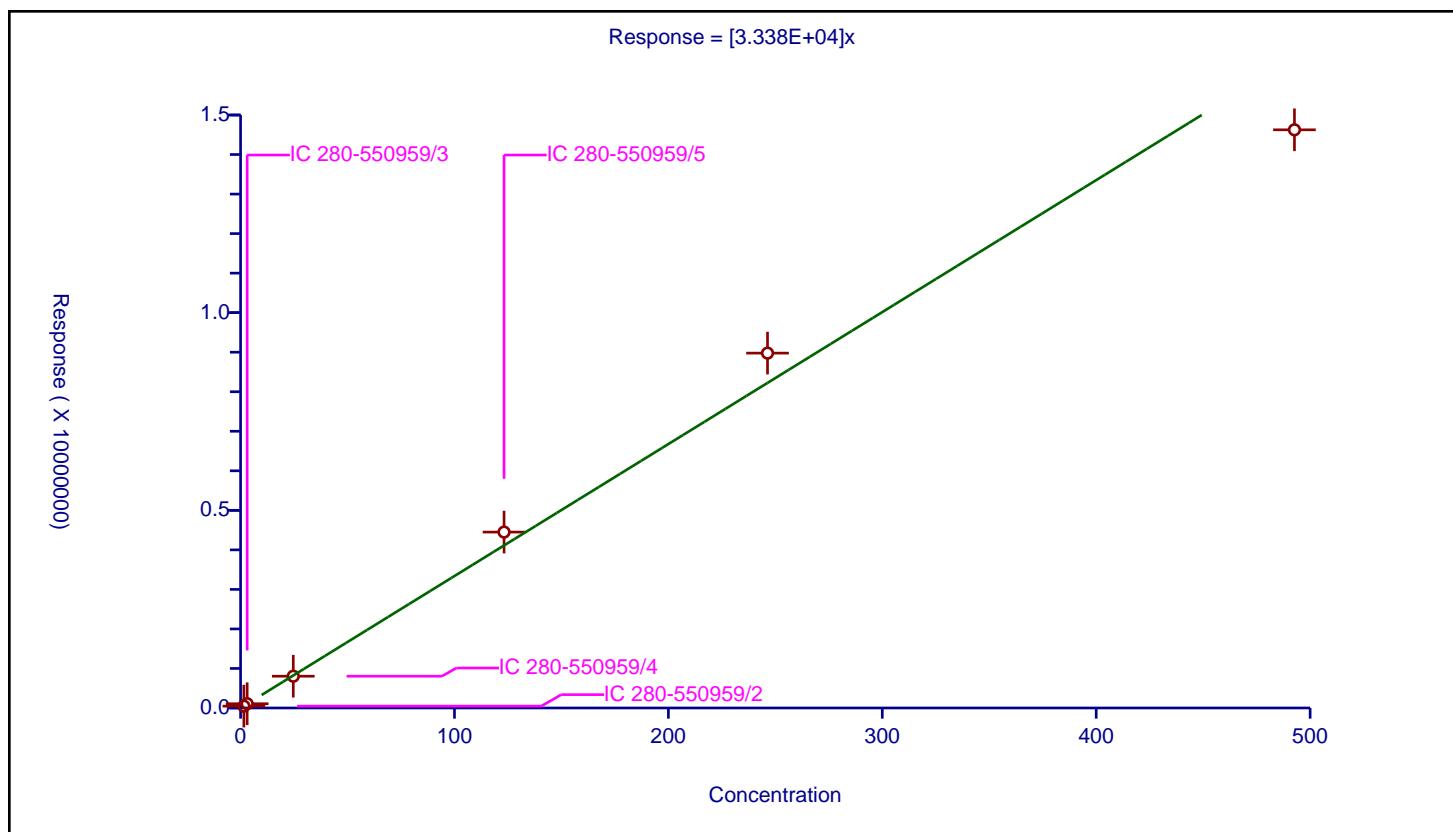
## Calibration

/ 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 TestAmerica, Denver Job No.: 280-155048-1  
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 TestAmerica, Denver Job No.: 280-155048-1  
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
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## 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

1	4.599	4.528	0.071	9349199	238.1	256.7	Ma
2	6.426	6.426	0.000	8946550	238.1	254.6	a M
						RPD = 0.82	

## 8 isobutylene

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

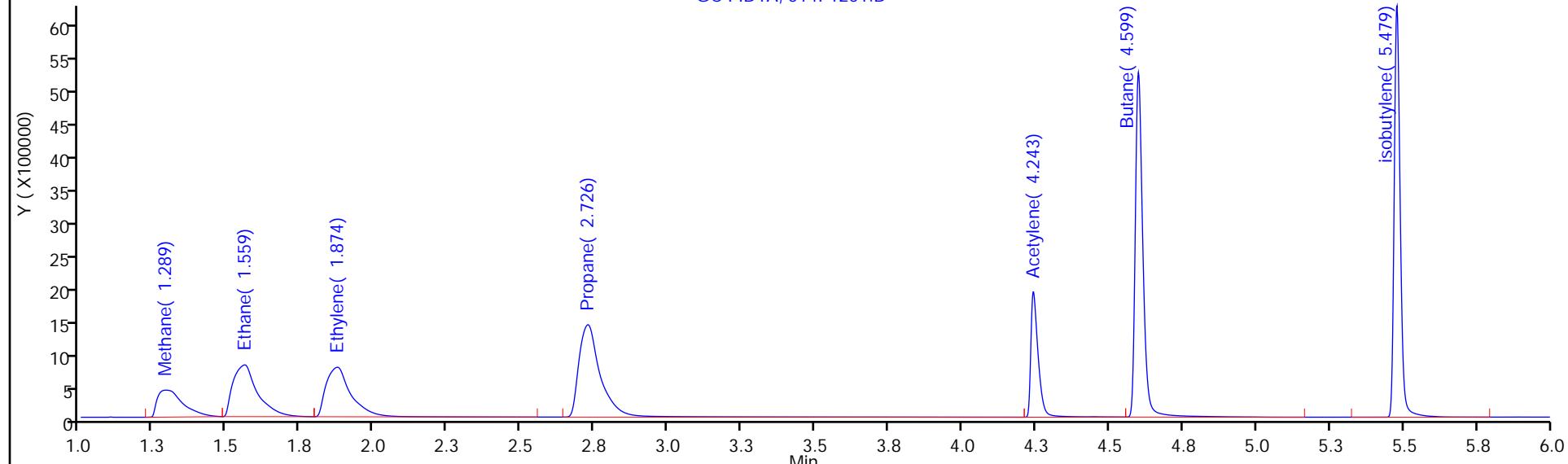
Method: RSK\_J

Limit Group: GCV - RSK 175

Column: Rt-Alumina BOND/KCl ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

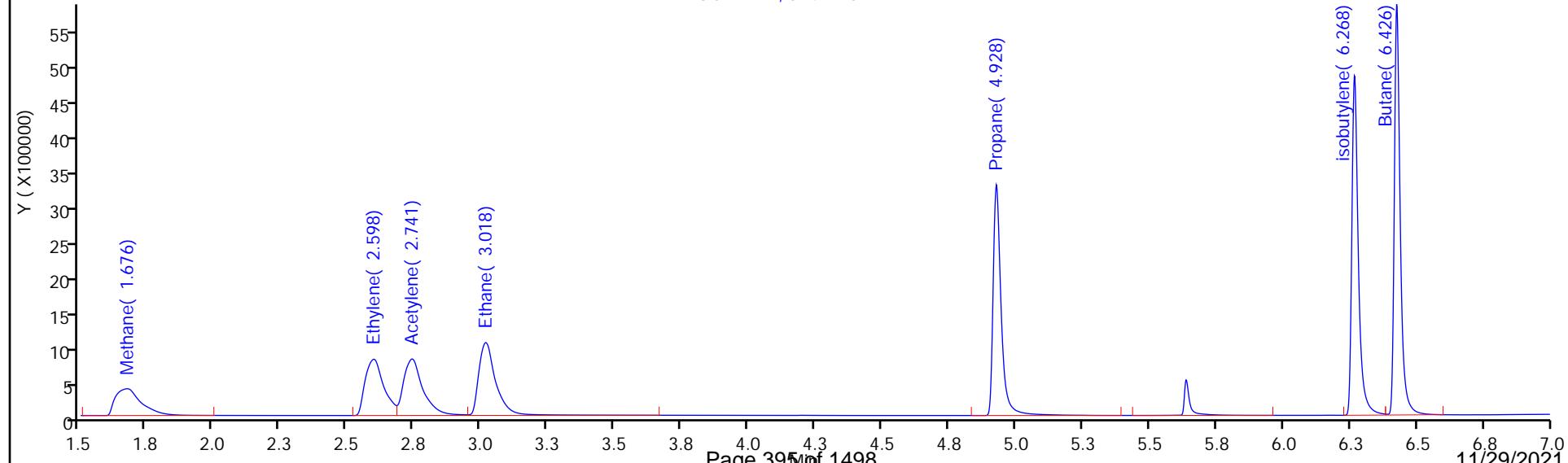
GC FID1A, 014F1201.D



Column: HP-PLOT/Q ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

GC FID2B, 014F1201.D



FORM VII  
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
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 TestAmerica, Denver Job No.: 280-155048-1

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

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

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

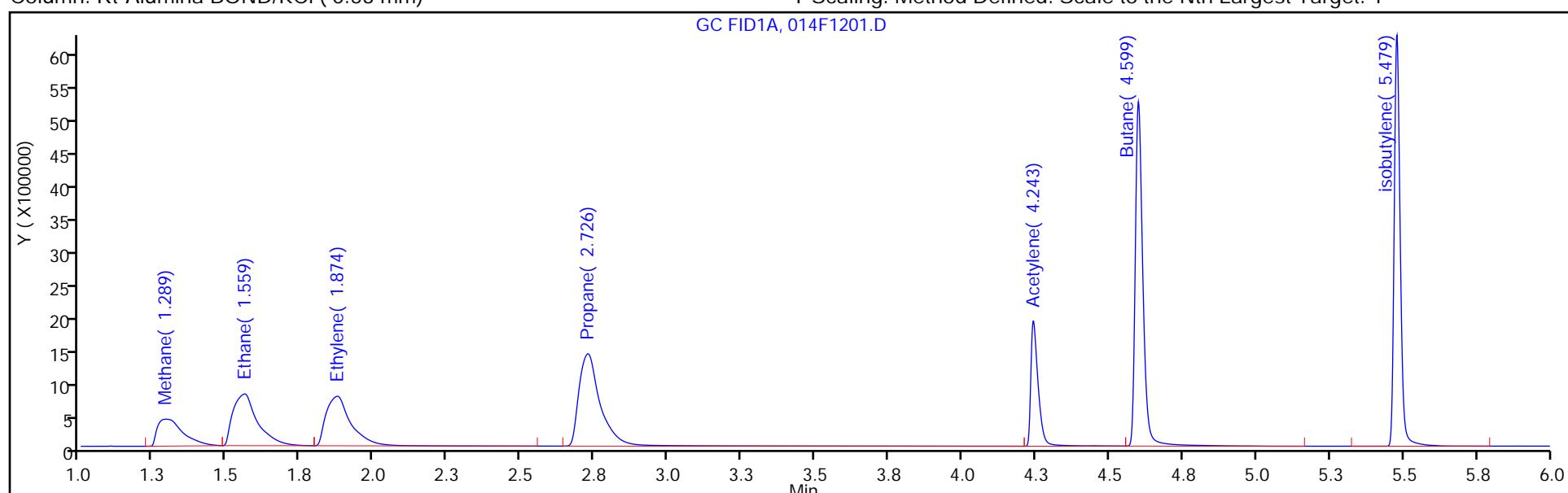
ALS Bottle#: 14

Method: RSK\_J

Limit Group: GCV - RSK 175

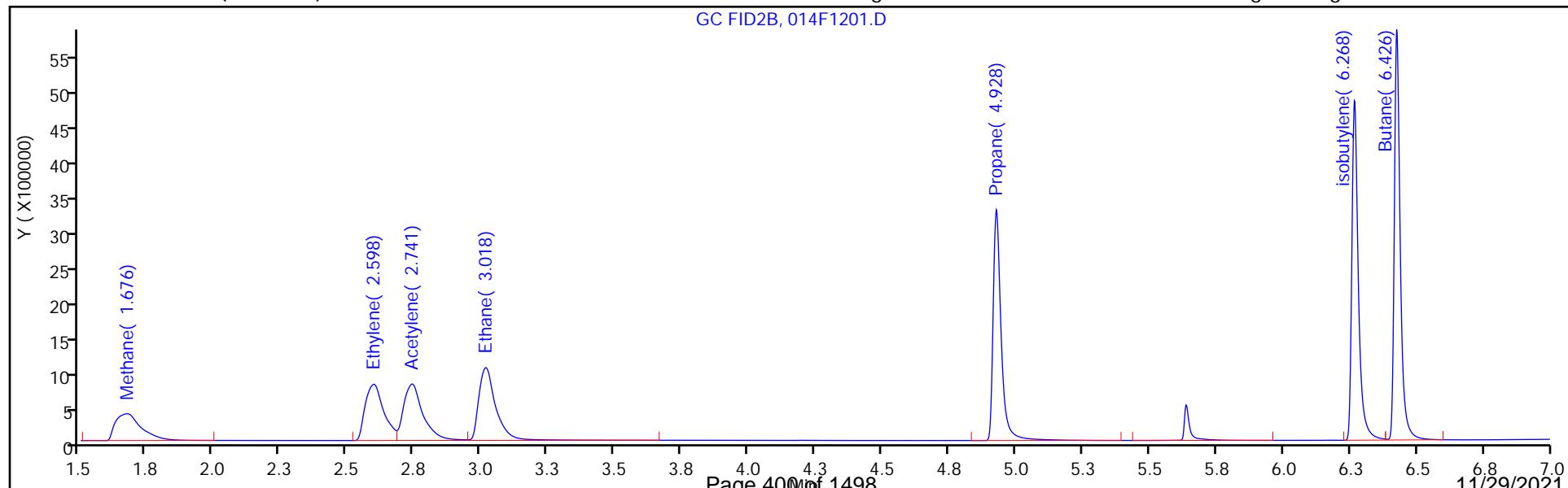
Column: Rt-Alumina BOND/KCl ( 0.53 mm)

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 TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCVRT 280-556811/1 Calibration Date: 11/09/2021 17:35  
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: 001F0101.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		36039		65.5	65.7	-0.4	20.0
Ethane	Ave	33241	34150		127	123	2.7	20.0
Ethylene	Ave	35226	36209		118	115	2.8	20.0
Acetylene	Ave	28139	29206		111	107	3.8	20.0

FORM VII  
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCVRT 280-556811/1 Calibration Date: 11/09/2021 17:35  
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: 001F0101.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.30	1.26	1.34
Ethane	1.55	1.50	1.60
Ethylene	1.83	1.78	1.88
Acetylene	4.03	3.95	4.11

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211109-106343.b\001F0101.D  
 Lims ID: ccvrt  
 Client ID:  
 Sample Type: CCVRT  
 Inject. Date: 09-Nov-2021 17:35:06 ALS Bottle#: 1 Worklist Smp#: 1  
 Purge Vol: 18.000 mL Dil. Factor: 1.0000  
 Sample Info: rtc  
 Operator ID: sciannac Instrument ID: VGC\_J  
 Sublist: chrom-RSK\_J\*sub5

Method: \\chromfs\Denver\ChromData\VGC\_J\20211109-106343.b\RSK\_J.m  
 Limit Group: GCV - RSK 175  
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175  
 Last Update: 15-Nov-2021 12:57:13 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: CTX1658

First Level Reviewer: sciannac Date: 10-Nov-2021 09:19:10

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
-----	-----------	---------------	---------------	----------	--------------	----------------	-------

2 Methane

1	1.302	1.302	0.000	2367893	65.7	65.5	
2	1.690	1.690	0.000	2489769	65.7	67.2	
						RPD = 2.65	

3 Ethane

1	1.550	1.550	0.000	4206303	123.2	126.5	
2	3.030	3.030	0.000	4328589	123.2	129.7	
						RPD = 2.44	

4 Ethylene

1	1.828	1.828	0.000	4160465	114.9	118.1	
2	2.612	2.612	0.000	3673687	114.9	118.6	
						RPD = 0.40	

5 Propane

1	2.608	2.608	0.000	6634907	180.6	184.2	a
2	4.930	4.930	0.000	6402005	180.6	182.9	a
						RPD = 0.76	

6 Acetylene

1	4.032	4.032	0.000	3115418	106.7	110.7	a
2	2.755	2.755	0.000	3899838	106.7	114.1	a
						RPD = 3.01	

7 Butane

1	4.423	4.423	0.000	8524120	238.1	234.0	a
2	6.428	6.428	0.000	8255667	238.1	234.9	M
						RPD = 0.39	

8 isobutylene

1	5.282	5.282	0.000	8170450	229.8	226.2	
2	6.270	6.270	0.000	7463944	229.8	224.8	M
						RPD = 0.61	

**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: 15-Nov-2021 12:57:13

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211109-106343.b\001F0101.D

Injection Date: 09-Nov-2021 17:35:06

Instrument ID: VGC\_J

Operator ID: sciannac

Lims ID: ccvrt

Worklist Smp#: 1

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

ALS Bottle#: 1

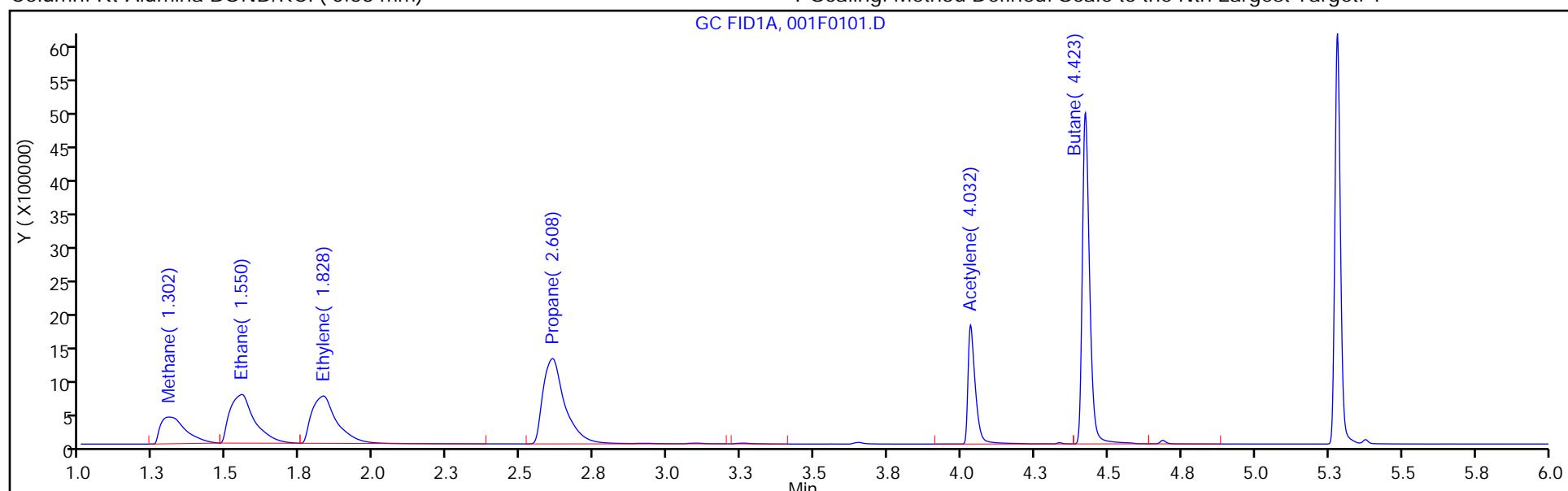
Method: RSK\_J

Limit Group: GCV - RSK 175

Column: Rt-Alumina BOND/KCl ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

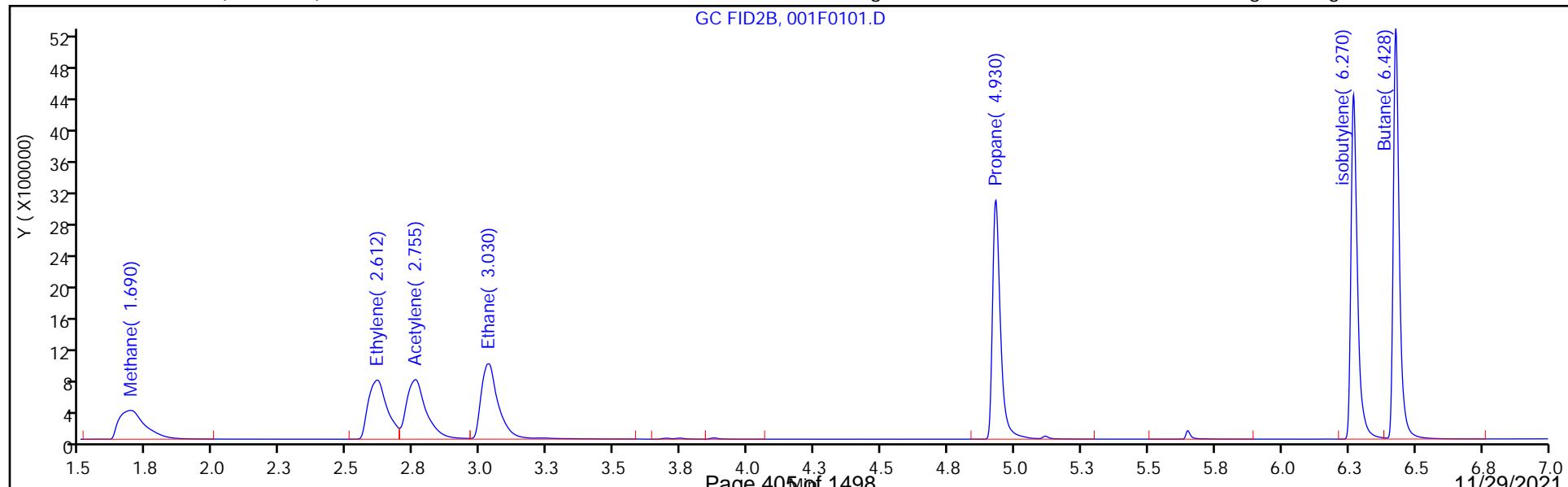
GC FID1A, 001F0101.D



Column: HP-PLOT/Q ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

GC FID2B, 001F0101.D



Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211109-106343.b\001F0101.D  
 Injection Date: 09-Nov-2021 17:35:06 Instrument ID: VGC\_J  
 Lims ID: ccvrt  
 Client ID:  
 Operator ID: sciannac ALS Bottle#: 1 Worklist Smp#: 1  
 Purge Vol: 18.000 mL Dil. Factor: 1.0000  
 Method: RSK\_J Limit Group: GCV - RSK 175  
 Column: Rt-Alumina BOND/KCl ( 0.53 mm) Detector: GC FID1A

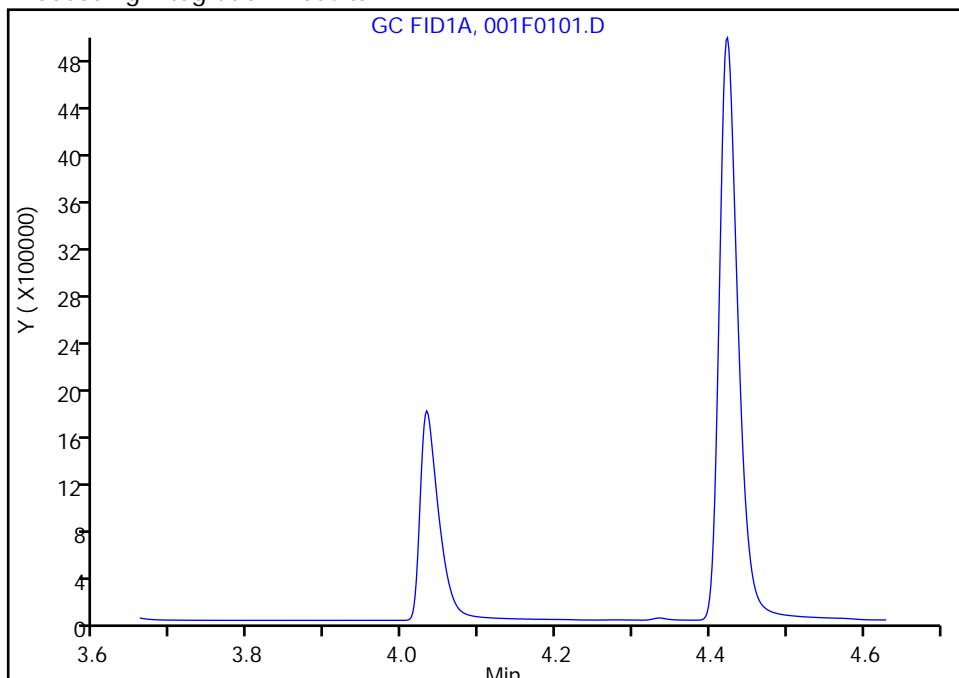
**6 Acetylene, CAS: 74-86-2**

Signal: 1

Not Detected

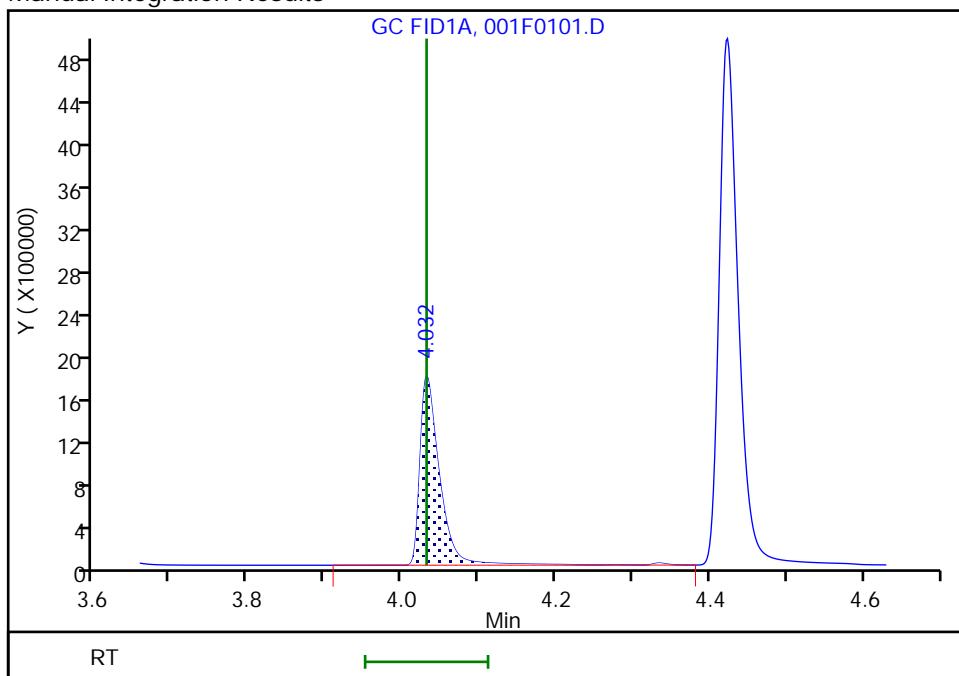
Expected RT: 4.03

Processing Integration Results



Manual Integration Results

RT: 4.03  
 Area: 3115418  
 Amount: 110.7152  
 Amount Units: ug/l



Reviewer: sciannac, 10-Nov-2021 09:18:34

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

FORM VII  
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Lab Sample ID: CCVRT 280-556811/1 Calibration Date: 11/09/2021 17:35

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: 001F0101.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		37894		67.2	65.7	2.3	20.0
Ethylene	Ave	30980	31973		119	115	3.2	20.0
Acetylene	Ave	34179	36560		114	107	7.0	20.0
Ethane	Ave	33383	35143		130	123	5.3	20.0

FORM VII  
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCVRT 280-556811/1 Calibration Date: 11/09/2021 17:35  
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: 001F0101.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.69	1.65	1.73
Ethylene	2.61	2.56	2.66
Acetylene	2.76	2.68	2.84
Ethane	3.03	2.98	3.08

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211109-106343.b\001F0101.D  
 Lims ID: ccvrt  
 Client ID:  
 Sample Type: CCVRT  
 Inject. Date: 09-Nov-2021 17:35:06 ALS Bottle#: 1 Worklist Smp#: 1  
 Purge Vol: 18.000 mL Dil. Factor: 1.0000  
 Sample Info: rtc  
 Operator ID: sciannac Instrument ID: VGC\_J  
 Sublist: chrom-RSK\_J\*sub5

Method: \\chromfs\Denver\ChromData\VGC\_J\20211109-106343.b\RSK\_J.m  
 Limit Group: GCV - RSK 175  
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175  
 Last Update: 15-Nov-2021 12:57:13 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: CTX1658

First Level Reviewer: sciannac Date: 10-Nov-2021 09:19:10

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
-----	-----------	---------------	---------------	----------	--------------	----------------	-------

2 Methane

1	1.302	1.302	0.000	2367893	65.7	65.5	
2	1.690	1.690	0.000	2489769	65.7	67.2	
						RPD = 2.65	

3 Ethane

1	1.550	1.550	0.000	4206303	123.2	126.5	
2	3.030	3.030	0.000	4328589	123.2	129.7	
						RPD = 2.44	

4 Ethylene

1	1.828	1.828	0.000	4160465	114.9	118.1	
2	2.612	2.612	0.000	3673687	114.9	118.6	
						RPD = 0.40	

5 Propane

1	2.608	2.608	0.000	6634907	180.6	184.2	a
2	4.930	4.930	0.000	6402005	180.6	182.9	a
						RPD = 0.76	

6 Acetylene

1	4.032	4.032	0.000	3115418	106.7	110.7	a
2	2.755	2.755	0.000	3899838	106.7	114.1	a
						RPD = 3.01	

7 Butane

1	4.423	4.423	0.000	8524120	238.1	234.0	a
2	6.428	6.428	0.000	8255667	238.1	234.9	M
						RPD = 0.39	

8 isobutylene

1	5.282	5.282	0.000	8170450	229.8	226.2	
2	6.270	6.270	0.000	7463944	229.8	224.8	M
						RPD = 0.61	

**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: 15-Nov-2021 12:57:13

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211109-106343.b\001F0101.D

Injection Date: 09-Nov-2021 17:35:06

Instrument ID: VGC\_J

Operator ID: sciannac

Lims ID: ccvrt

Worklist Smp#: 1

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

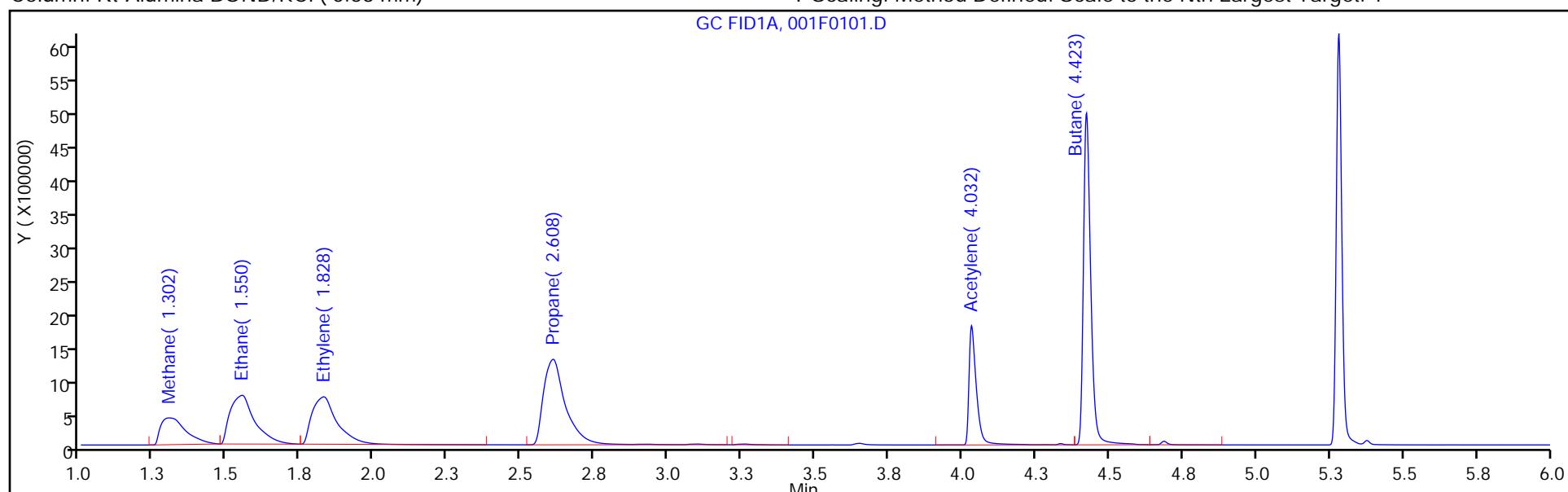
ALS Bottle#: 1

Method: RSK\_J

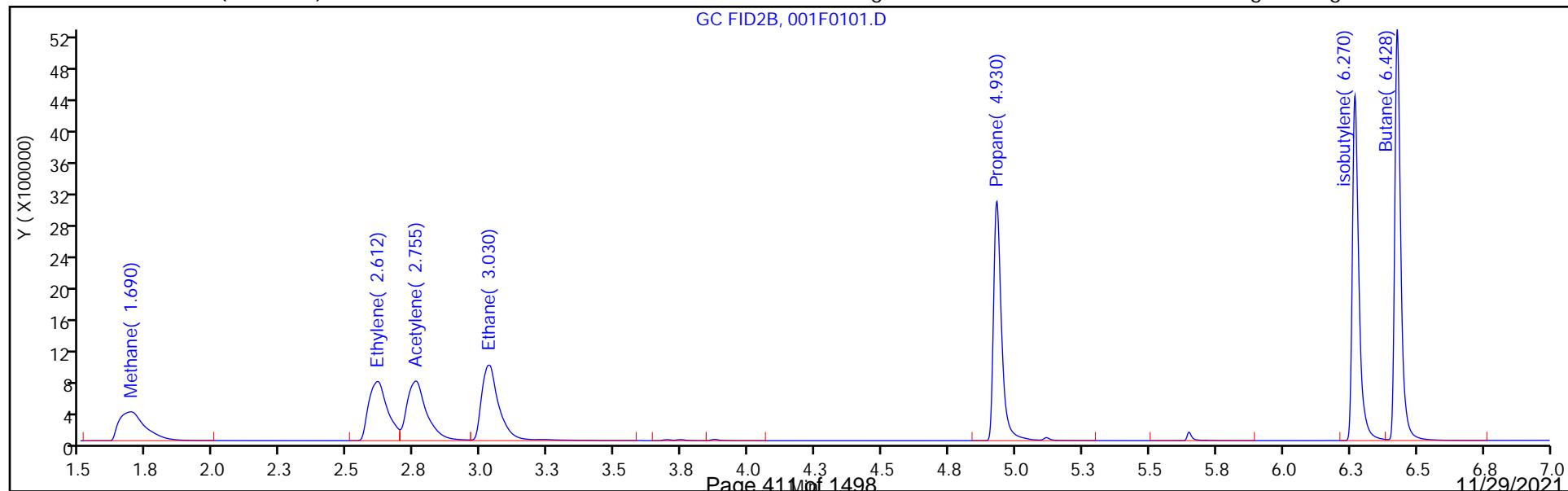
Limit Group: GCV - RSK 175

Column: Rt-Alumina BOND/KCl ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q ( 0.53 mm)



## Eurofins TestAmerica, Denver

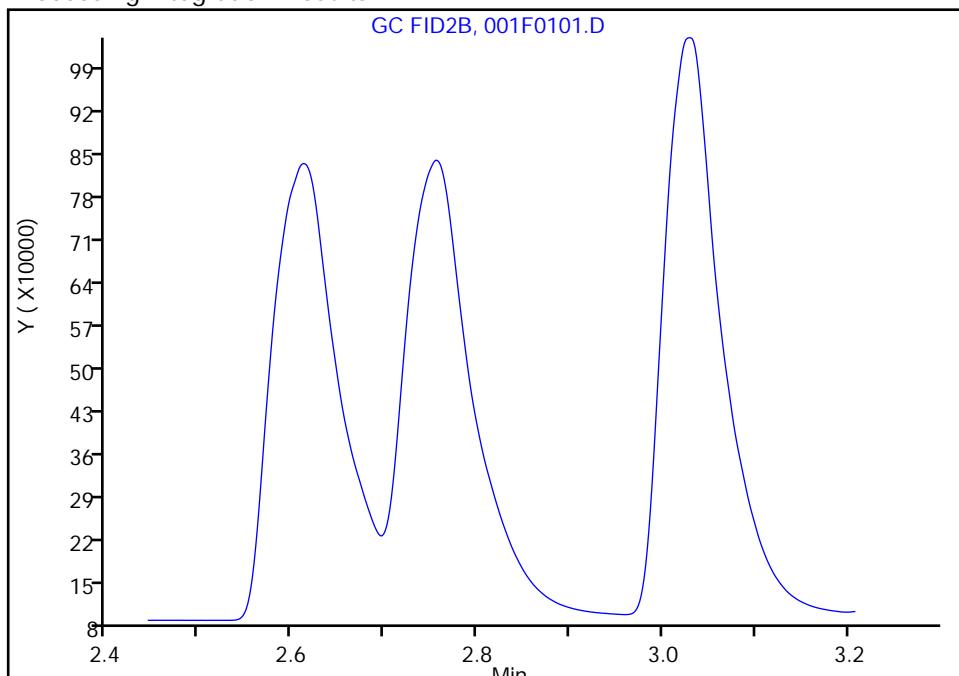
Data File: \\chromfs\Denver\ChromData\VGC\_J\20211109-106343.b\001F0101.D  
 Injection Date: 09-Nov-2021 17:35:06 Instrument ID: VGC\_J  
 Lims ID: ccvrt  
 Client ID:  
 Operator ID: sciannac ALS Bottle#: 1 Worklist Smp#: 1  
 Purge Vol: 18.000 mL Dil. Factor: 1.0000  
 Method: RSK\_J Limit Group: GCV - RSK 175  
 Column: HP-PLOT/Q ( 0.53 mm) Detector: GC FID2B

**6 Acetylene, CAS: 74-86-2**

Signal: 2

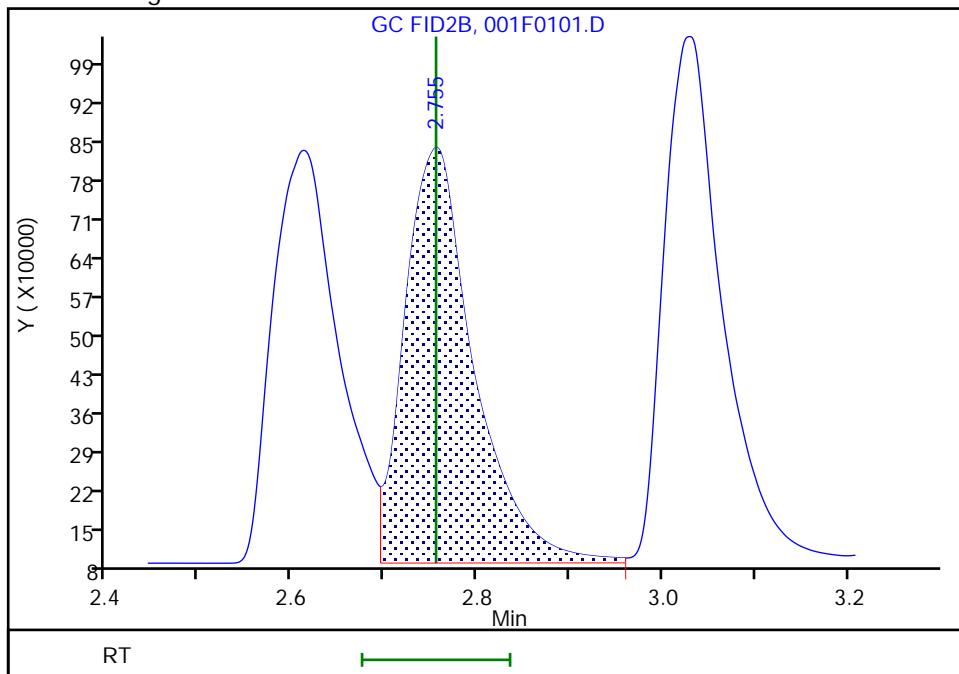
Not Detected  
 Expected RT: 2.76

## Processing Integration Results



RT: 2.76  
 Area: 3899838  
 Amount: 114.1011  
 Amount Units: ug/l

## Manual Integration Results



Reviewer: sciannac, 10-Nov-2021 09:18:36

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

FORM VII  
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCV 280-556811/14 Calibration Date: 11/09/2021 20:24  
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: 014F1401.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		37187		67.6	65.7	2.9	20.0
Ethane	Ave	33241	35402		131	123	6.5	20.0
Ethylene	Ave	35226	37261		122	115	5.8	20.0
Acetylene	Ave	28139	29132		110	107	3.5	20.0

FORM VII  
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Lab Sample ID: CCV 280-556811/14 Calibration Date: 11/09/2021 20:24

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: 014F1401.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.29	1.26	1.34
Ethane	1.55	1.50	1.60
Ethylene	1.86	1.78	1.88
Acetylene	4.24	3.95	4.11

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211109-106343.b\014F1401.D  
 Lims ID: ccv  
 Client ID:  
 Sample Type: CCV  
 Inject. Date: 09-Nov-2021 20:24:17 ALS Bottle#: 14 Worklist Smp#: 14  
 Purge Vol: 18.000 mL Dil. Factor: 1.0000  
 Sample Info: ccv  
 Operator ID: sciannac Instrument ID: VGC\_J  
 Sublist:  
 Method: \\chromfs\Denver\ChromData\VGC\_J\20211109-106343.b\RSK\_J.m  
 Limit Group: GCV - RSK 175  
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175  
 Last Update: 15-Nov-2021 13:09:40 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: ornelasg Date: 15-Nov-2021 13:09:40

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	1.286	1.302	-0.016	2443296	65.7	67.6
2	1.670	1.690	-0.020	2525279	65.7	68.2

RPD = 0.88

## 3 Ethane

1	1.550	1.550	0.000	4360453	123.2	131.2
2	3.012	3.030	-0.018	4457352	123.2	133.5

RPD = 1.77

## 4 Ethylene

1	1.861	1.828	0.033	4281335	114.9	121.5
2	2.593	2.612	-0.019	3748331	114.9	121.0

RPD = 0.45

## 5 Propane

1	2.693	2.608	0.085	6836920	180.6	189.9
2	4.922	4.930	-0.008	6581443	180.6	188.0

RPD = 0.99

## 6 Acetylene

1	4.243	4.032	0.211	3107560	106.7	110.4
2	2.737	2.755	-0.018	3937912	106.7	115.2

RPD = 4.24

## 7 Butane

1	4.563	4.423	0.140	8926091	238.1	245.1
2	6.422	6.428	-0.006	8603988	238.1	244.9

RPD = 0.09

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
-----	--------------	------------------	------------------	----------	-----------------	-------------------	-------

8 isobutylene Ma  
1 5.451 5.282 0.169 8656838 229.8 239.6 M  
2 6.265 6.270 -0.005 7736052 229.8 233.0  
RPD = 2.81

### 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: 15-Nov-2021 13:09:40

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211109-106343.b\014F1401.D

Injection Date: 09-Nov-2021 20:24:17

Instrument ID: VGC\_J

Operator ID: sciannac

Lims ID: ccv

Worklist Smp#: 14

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

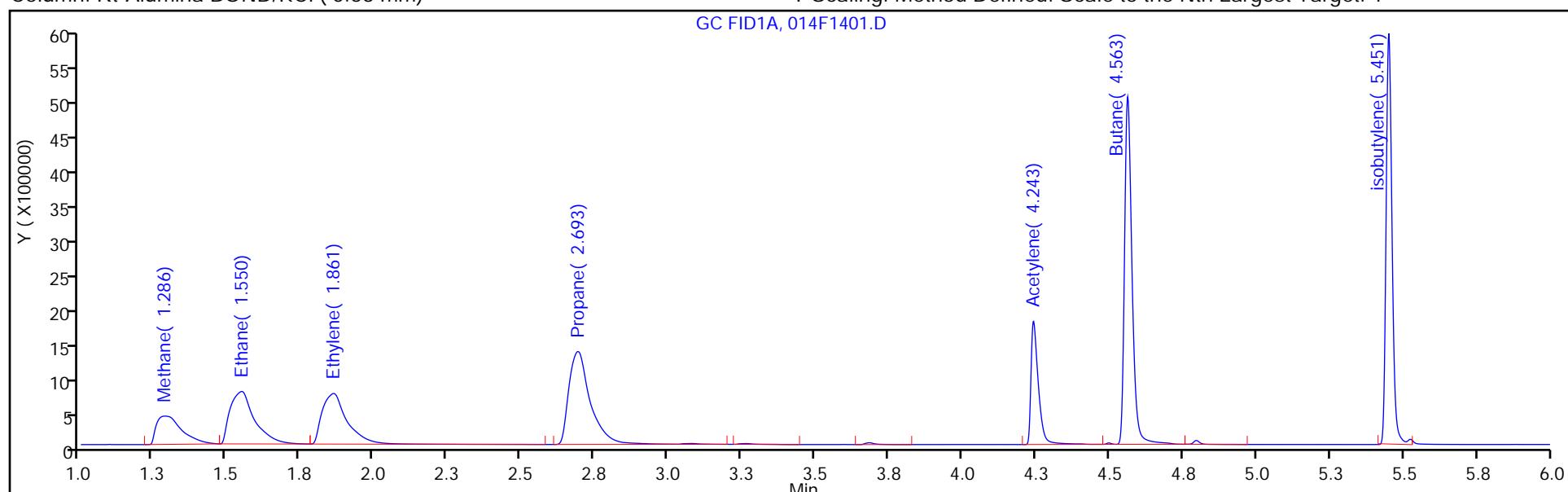
ALS Bottle#: 14

Method: RSK\_J

Limit Group: GCV - RSK 175

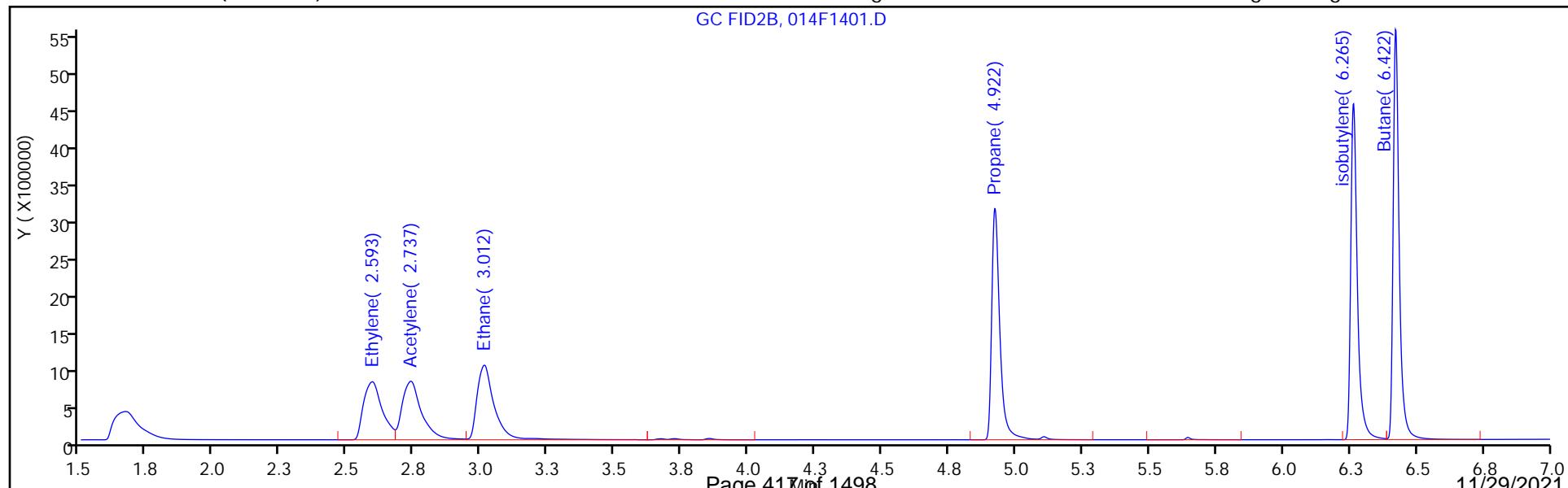
Column: Rt-Alumina BOND/KCl ( 0.53 mm)

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 TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCV 280-556811/14 Calibration Date: 11/09/2021 20:24  
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: 014F1401.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		38435		68.2	65.7	3.8	20.0
Ethylene	Ave	30980	32623		121	115	5.3	20.0
Acetylene	Ave	34179	36917		115	107	8.0	20.0
Ethane	Ave	33383	36189		134	123	8.4	20.0

FORM VII  
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Lab Sample ID: CCV 280-556811/14 Calibration Date: 11/09/2021 20:24

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: 014F1401.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.67	1.65	1.73
Ethylene	2.59	2.56	2.66
Acetylene	2.74	2.68	2.84
Ethane	3.01	2.98	3.08

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211109-106343.b\014F1401.D  
 Lims ID: ccv  
 Client ID:  
 Sample Type: CCV  
 Inject. Date: 09-Nov-2021 20:24:17 ALS Bottle#: 14 Worklist Smp#: 14  
 Purge Vol: 18.000 mL Dil. Factor: 1.0000  
 Sample Info: ccv  
 Operator ID: sciannac Instrument ID: VGC\_J  
 Sublist:  
 Method: \\chromfs\Denver\ChromData\VGC\_J\20211109-106343.b\RSK\_J.m  
 Limit Group: GCV - RSK 175  
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175  
 Last Update: 15-Nov-2021 13:09:40 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: ornelasg Date: 15-Nov-2021 13:09:40

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	1.286	1.302	-0.016	2443296	65.7	67.6
2	1.670	1.690	-0.020	2525279	65.7	68.2

RPD = 0.88

## 3 Ethane

1	1.550	1.550	0.000	4360453	123.2	131.2
2	3.012	3.030	-0.018	4457352	123.2	133.5

RPD = 1.77

## 4 Ethylene

1	1.861	1.828	0.033	4281335	114.9	121.5
2	2.593	2.612	-0.019	3748331	114.9	121.0

RPD = 0.45

## 5 Propane

1	2.693	2.608	0.085	6836920	180.6	189.9
2	4.922	4.930	-0.008	6581443	180.6	188.0

RPD = 0.99

## 6 Acetylene

1	4.243	4.032	0.211	3107560	106.7	110.4
2	2.737	2.755	-0.018	3937912	106.7	115.2

RPD = 4.24

## 7 Butane

1	4.563	4.423	0.140	8926091	238.1	245.1
2	6.422	6.428	-0.006	8603988	238.1	244.9

RPD = 0.09

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
-----	--------------	------------------	------------------	----------	-----------------	-------------------	-------

8 isobutylene Ma  
1 5.451 5.282 0.169 8656838 229.8 239.6 M  
2 6.265 6.270 -0.005 7736052 229.8 233.0  
RPD = 2.81

### 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: 15-Nov-2021 13:09:41

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211109-106343.b\014F1401.D

Injection Date: 09-Nov-2021 20:24:17

Instrument ID: VGC\_J

Operator ID: sciannac

Lims ID: ccv

Worklist Smp#: 14

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

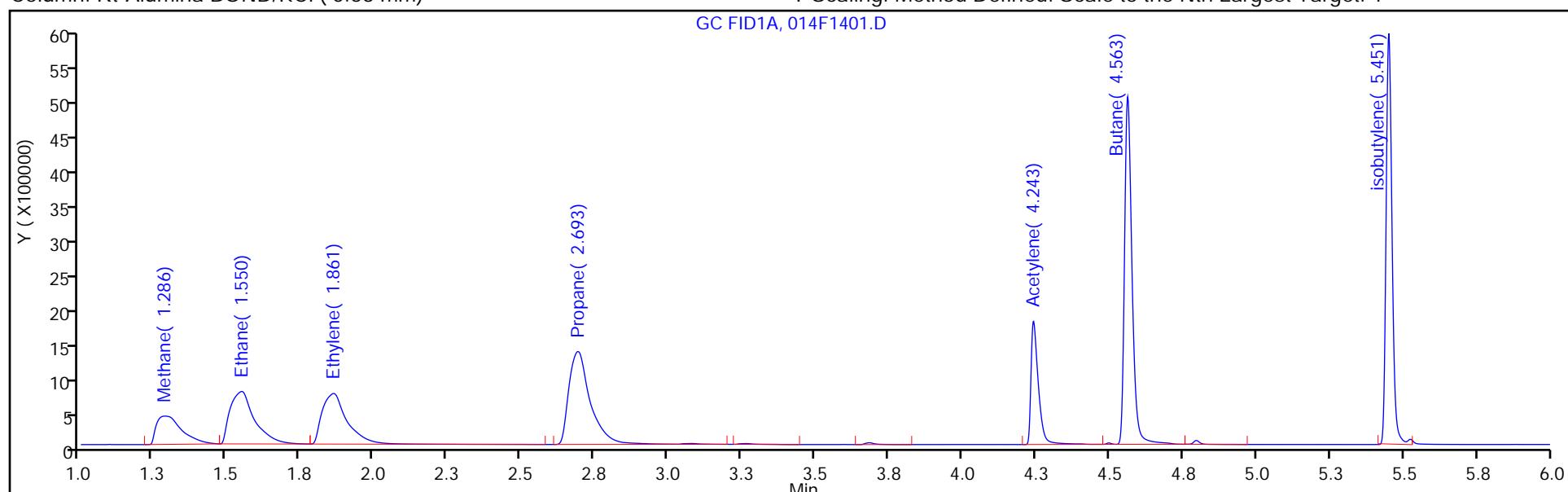
ALS Bottle#: 14

Method: RSK\_J

Limit Group: GCV - RSK 175

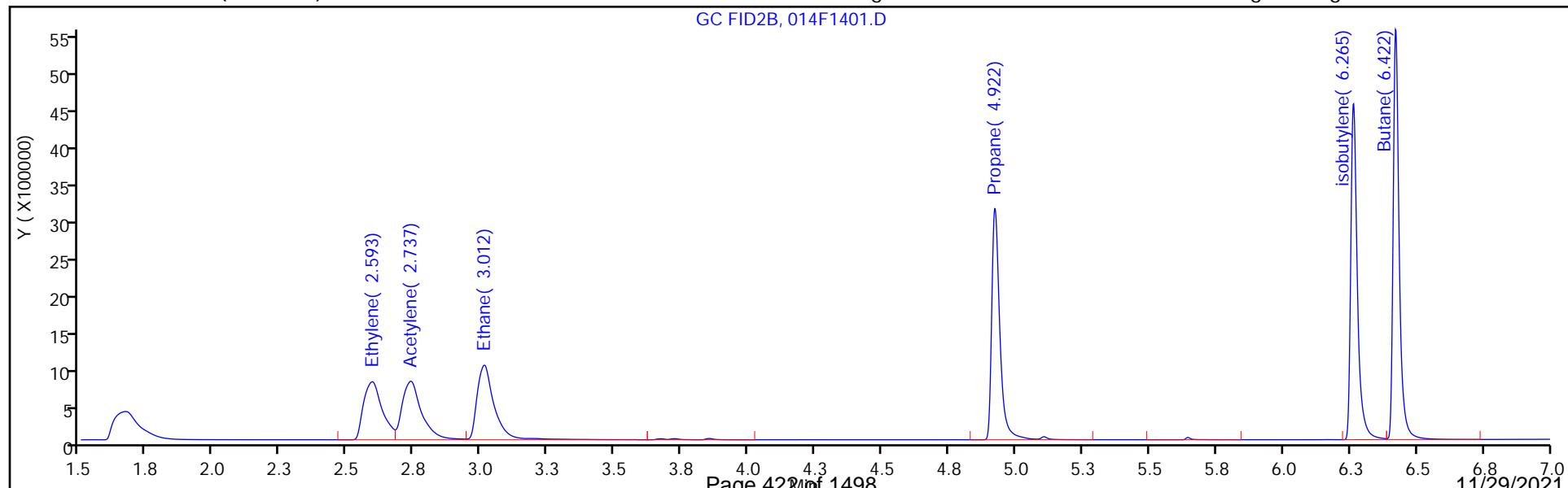
Column: Rt-Alumina BOND/KCl ( 0.53 mm)

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 TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCV 280-556811/28 Calibration Date: 11/09/2021 23:25  
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		37122		67.5	65.7	2.7	20.0
Ethane	Ave	33241	35391		131	123	6.5	20.0
Ethylene	Ave	35226	37163		121	115	5.5	20.0
Acetylene	Ave	28139	29961		114	107	6.5	20.0

FORM VII  
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Lab Sample ID: CCV 280-556811/28 Calibration Date: 11/09/2021 23:25

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	1.29	1.26	1.34
Ethane	1.55	1.50	1.60
Ethylene	1.86	1.78	1.88
Acetylene	4.24	3.95	4.11

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211109-106343.b\028F2801.D  
 Lims ID: ccv  
 Client ID:  
 Sample Type: CCV  
 Inject. Date: 09-Nov-2021 23:25:30 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\20211109-106343.b\RSK\_J.m  
 Limit Group: GCV - RSK 175  
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175  
 Last Update: 15-Nov-2021 12:59:05 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: 12-Nov-2021 10:25:57

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
-----	-----------	---------------	---------------	----------	--------------	----------------	-------

## 2 Methane

1	1.288	1.302	-0.014	2439054	65.7	67.5	
2	1.671	1.690	-0.019	2523384	65.7	68.2	
RPD = 0.99							

## 3 Ethane

1	1.551	1.550	0.001	4359097	123.2	131.1	
2	3.011	3.030	-0.019	4364152	123.2	130.7	
RPD = 0.31							

## 4 Ethylene

1	1.864	1.828	0.036	4270048	114.9	121.2	
2	2.593	2.612	-0.019	3742208	114.9	120.8	
RPD = 0.35							

## 5 Propane

1	2.696	2.608	0.088	6915331	180.6	192.0	a
2	4.923	4.930	-0.007	6558425	180.6	187.3	a
RPD = 2.48							

## 6 Acetylene

1	4.244	4.032	0.212	3195950	106.7	113.6	a
2	2.736	2.755	-0.019	3972279	106.7	116.2	a
RPD = 2.30							

## 7 Butane

1	4.566	4.423	0.143	9005046	238.1	247.2	a
2	6.423	6.428	-0.005	9100557	238.1	259.0	M
RPD = 4.64							

## 8 isobutylene

1	5.454	5.282	0.172	8492325	229.8	235.1	a
2	6.265	6.270	-0.005	8005212	229.8	241.1	M
RPD = 2.53							

**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: 15-Nov-2021 12:59:05

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211109-106343.b\028F2801.D

Injection Date: 09-Nov-2021 23:25:30

Instrument ID: VGC\_J

Operator ID: sciannac

Lims ID: ccv

Worklist Smp#: 28

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

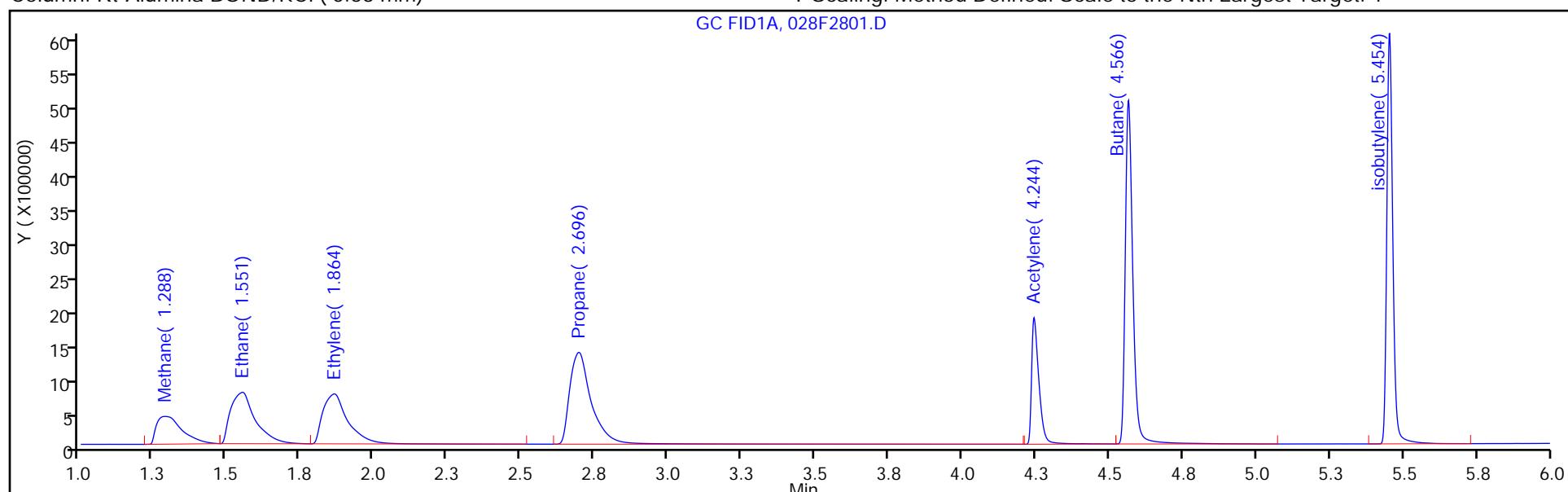
ALS Bottle#: 28

Method: RSK\_J

Limit Group: GCV - RSK 175

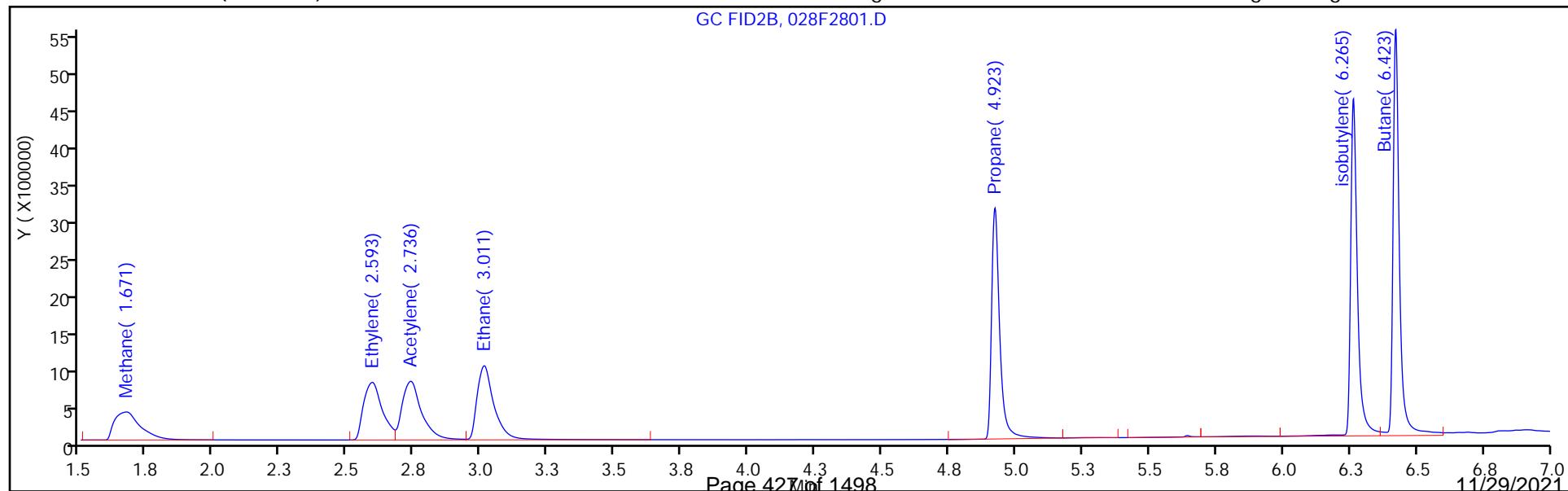
Column: Rt-Alumina BOND/KCl ( 0.53 mm)

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



Eurofins TestAmerica, Denver

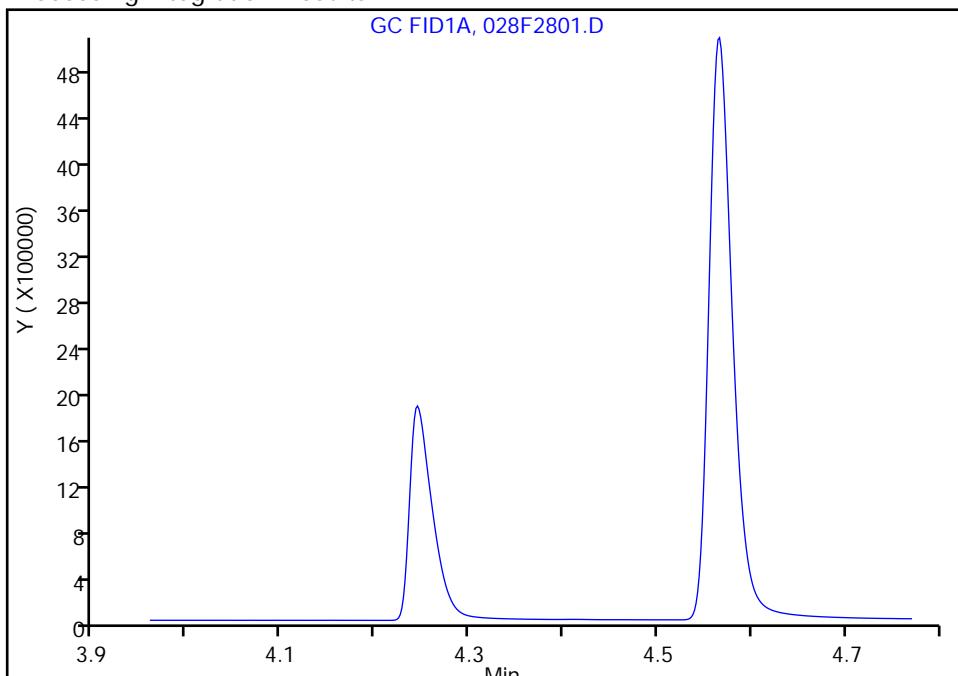
Data File: \\chromfs\Denver\ChromData\VGC\_J\20211109-106343.b\028F2801.D  
 Injection Date: 09-Nov-2021 23:25:30 Instrument ID: VGC\_J  
 Lims ID: ccv  
 Client ID:  
 Operator ID: sciannac ALS Bottle#: 28 Worklist Smp#: 28  
 Purge Vol: 18.000 mL Dil. Factor: 1.0000  
 Method: RSK\_J Limit Group: GCV - RSK 175  
 Column: Rt-Alumina BOND/KCl ( 0.53 mm) Detector: GC FID1A

**6 Acetylene, CAS: 74-86-2**

Signal: 1

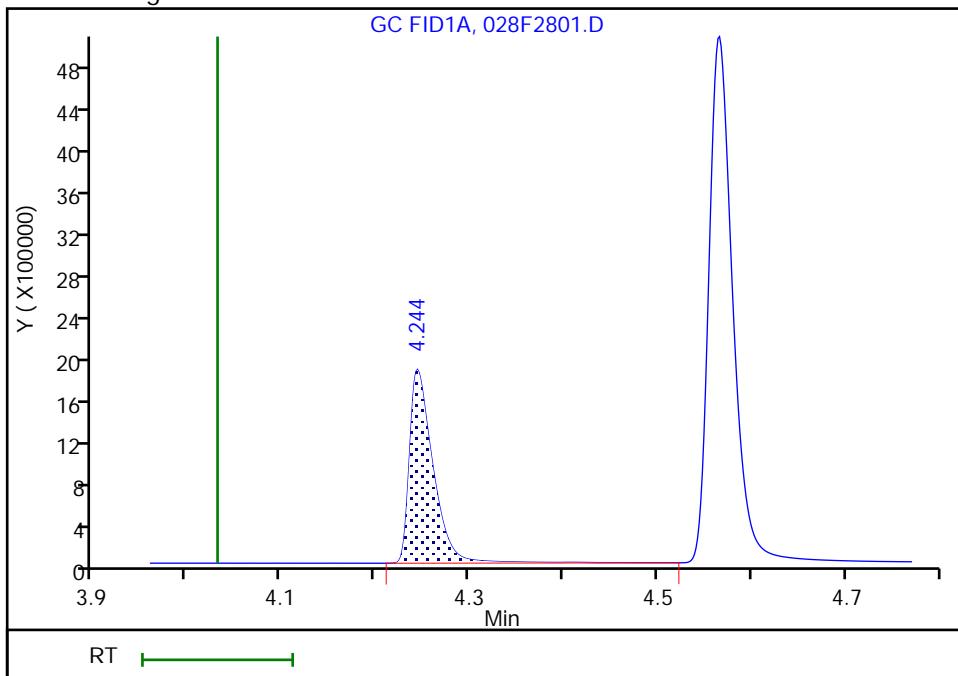
Not Detected  
 Expected RT: 4.03

Processing Integration Results



RT: 4.24  
 Area: 3195950  
 Amount: 113.5772  
 Amount Units: ug/l

Manual Integration Results



Reviewer: sciannac, 12-Nov-2021 10:25:02

Audit Action: Assigned Compound ID

Audit Reason: Wrong Peak

FORM VII  
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCV 280-556811/28 Calibration Date: 11/09/2021 23:25  
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		38406		68.2	65.7	3.7	20.0
Ethylene	Ave	30980	32569		121	115	5.1	20.0
Acetylene	Ave	34179	37239		116	107	9.0	20.0
Ethane	Ave	33383	35432		131	123	6.1	20.0

FORM VII  
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCV 280-556811/28 Calibration Date: 11/09/2021 23:25  
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	1.67	1.65	1.73
Ethylene	2.59	2.56	2.66
Acetylene	2.74	2.68	2.84
Ethane	3.01	2.98	3.08

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211109-106343.b\028F2801.D  
 Lims ID: ccv  
 Client ID:  
 Sample Type: CCV  
 Inject. Date: 09-Nov-2021 23:25:30 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\20211109-106343.b\RSK\_J.m  
 Limit Group: GCV - RSK 175  
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175  
 Last Update: 15-Nov-2021 12:59:05 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: 12-Nov-2021 10:25:57

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
-----	-----------	---------------	---------------	----------	--------------	----------------	-------

2 Methane

1	1.288	1.302	-0.014	2439054	65.7	67.5	
2	1.671	1.690	-0.019	2523384	65.7	68.2	
						RPD = 0.99	

3 Ethane

1	1.551	1.550	0.001	4359097	123.2	131.1	
2	3.011	3.030	-0.019	4364152	123.2	130.7	
						RPD = 0.31	

4 Ethylene

1	1.864	1.828	0.036	4270048	114.9	121.2	
2	2.593	2.612	-0.019	3742208	114.9	120.8	
						RPD = 0.35	

5 Propane

1	2.696	2.608	0.088	6915331	180.6	192.0	a
2	4.923	4.930	-0.007	6558425	180.6	187.3	a
						RPD = 2.48	

6 Acetylene

1	4.244	4.032	0.212	3195950	106.7	113.6	a
2	2.736	2.755	-0.019	3972279	106.7	116.2	a
						RPD = 2.30	

7 Butane

1	4.566	4.423	0.143	9005046	238.1	247.2	a
2	6.423	6.428	-0.005	9100557	238.1	259.0	M
						RPD = 4.64	

8 isobutylene

1	5.454	5.282	0.172	8492325	229.8	235.1	a
2	6.265	6.270	-0.005	8005212	229.8	241.1	M
						RPD = 2.53	

**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: 15-Nov-2021 12:59:05

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211109-106343.b\028F2801.D

Injection Date: 09-Nov-2021 23:25:30

Instrument ID: VGC\_J

Operator ID: sciannac

Lims ID: ccv

Worklist Smp#: 28

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

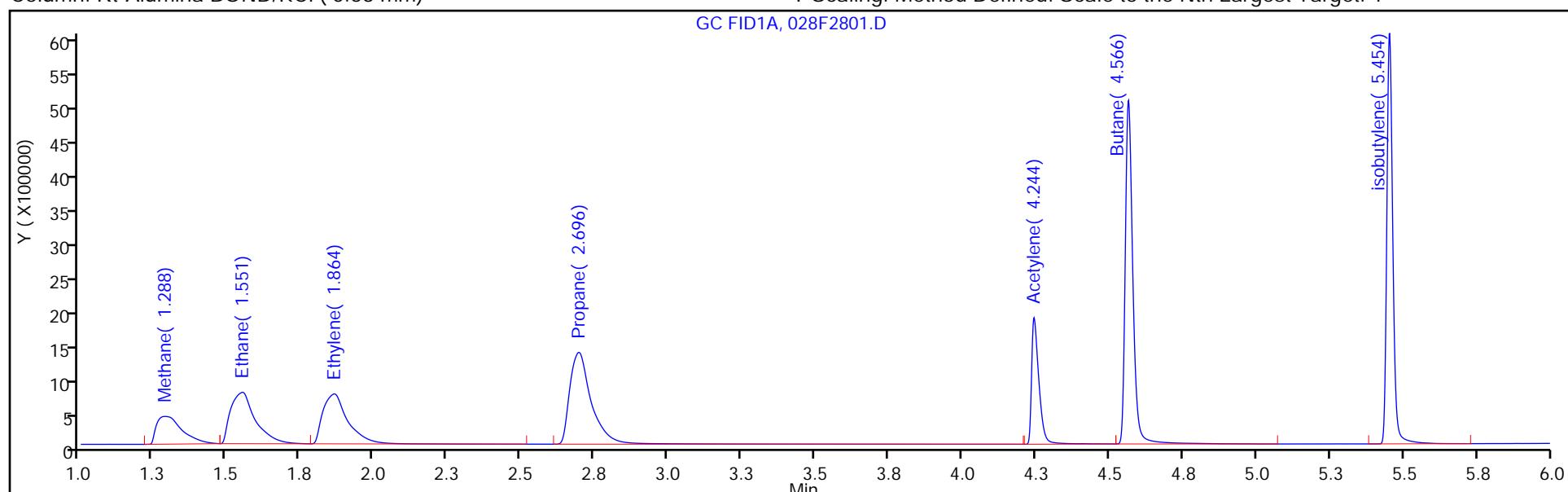
ALS Bottle#: 28

Method: RSK\_J

Limit Group: GCV - RSK 175

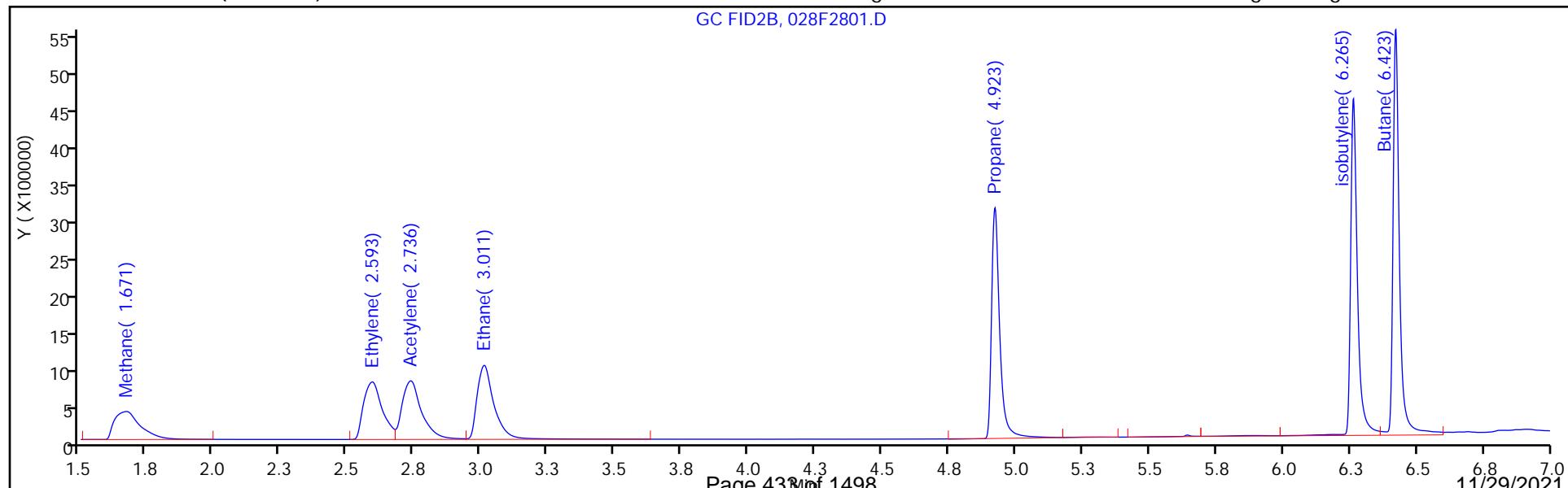
Column: Rt-Alumina BOND/KCl ( 0.53 mm)

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



Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211109-106343.b\028F2801.D  
 Injection Date: 09-Nov-2021 23:25:30 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

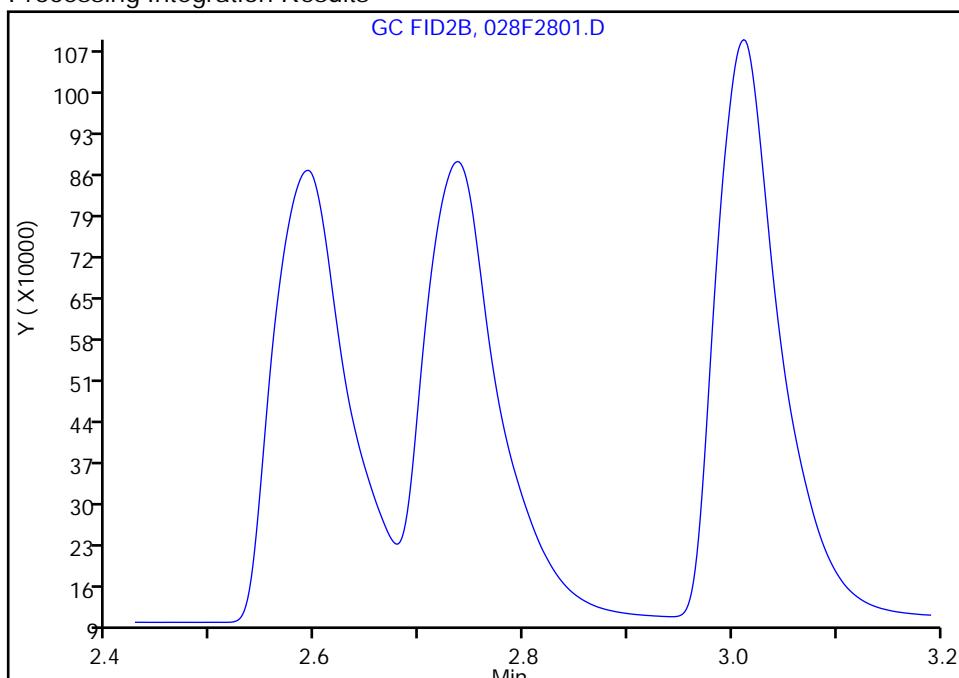
**6 Acetylene, CAS: 74-86-2**

Signal: 2

Not Detected

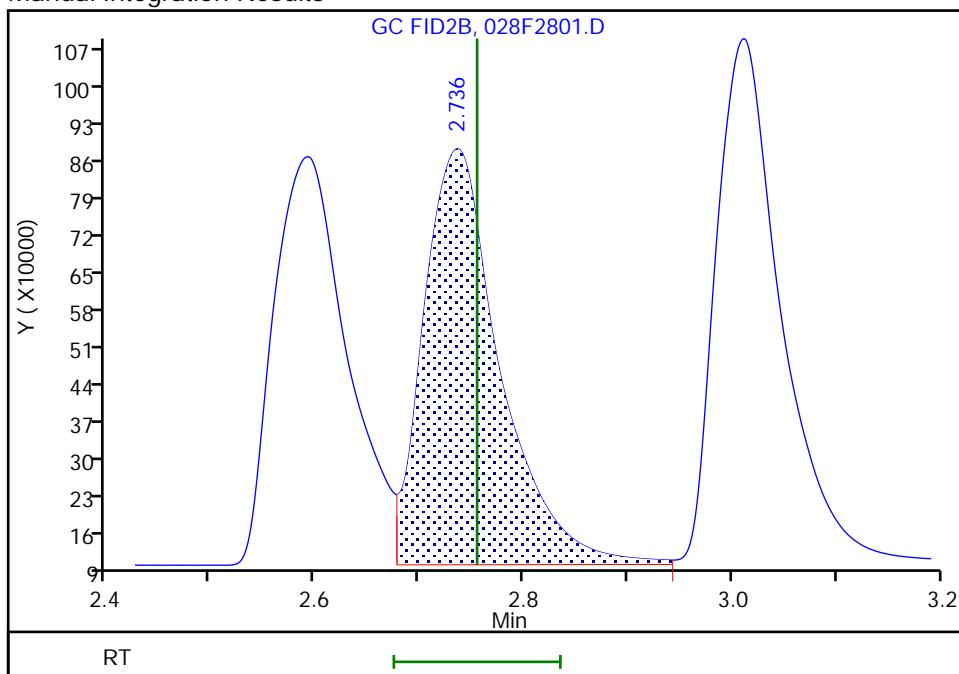
Expected RT: 2.76

Processing Integration Results



Manual Integration Results

RT: 2.74  
 Area: 3972279  
 Amount: 116.2206  
 Amount Units: ug/l



Reviewer: sciannac, 12-Nov-2021 10:24:40

Audit Action: Assigned Compound ID

Audit Reason: Wrong Peak

FORM VII  
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCVRT 280-556939/1 Calibration Date: 11/10/2021 11:51  
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: 001F0101.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		34908		63.4	65.7	-3.6	20.0
Ethane	Ave	33241	31735		118	123	-4.5	20.0
Ethylene	Ave	35226	33892		111	115	-3.8	20.0
Acetylene	Ave	28139	27091		103	107	-3.7	20.0

FORM VII  
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCVRT 280-556939/1 Calibration Date: 11/10/2021 11:51  
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: 001F0101.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.30	1.26	1.34
Ethane	1.55	1.50	1.60
Ethylene	1.84	1.79	1.89
Acetylene	4.11	4.03	4.19

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211110-106374.b\001F0101.D  
 Lims ID: ccvrt  
 Client ID:  
 Sample Type: CCVRT  
 Inject. Date: 10-Nov-2021 11:51:48 ALS Bottle#: 1 Worklist Smp#: 1  
 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\20211110-106374.b\RSK\_J.m  
 Limit Group: GCV - RSK 175  
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175  
 Last Update: 15-Nov-2021 15:35:57 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: CTX1649

First Level Reviewer: sciannac Date: 12-Nov-2021 10:27:40

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
-----	-----------	---------------	---------------	----------	--------------	----------------	-------

## 2 Methane

1	1.299	1.299	0.000	2293546	65.7	63.4	
2	1.686	1.686	0.000	2397445	65.7	64.7	
						RPD = 2.06	

## 3 Ethane

1	1.553	1.553	0.000	3908794	123.2	117.6	
2	3.024	3.024	0.000	4016738	123.2	120.3	
						RPD = 2.30	

## 4 Ethylene

1	1.844	1.844	0.000	3894182	114.9	110.5	
2	2.608	2.608	0.000	3433066	114.9	110.8	
						RPD = 0.24	

## 5 Propane

1	2.648	2.648	0.000	5818169	180.6	161.6	
2	4.928	4.928	0.000	5604099	180.6	160.1	
						RPD = 0.93	

## 6 Acetylene

1	4.113	4.113	0.000	2889761	106.7	102.7	a
2	2.751	2.751	0.000	3614832	106.7	105.8	a
						RPD = 2.94	

## 7 Butane

1	4.481	4.481	0.000	6643558	238.1	182.4	
2	6.428	6.428	0.000	6314970	238.1	179.7	
						RPD = 1.49	

## 8 isobutylene

1	5.348	5.348	0.000	6380602	229.8	176.6	
2	6.269	6.269	0.000	5835330	229.8	175.7	
						RPD = 0.50	

**QC Flag Legend**

Processing Flags

Review Flags

a - User Assigned ID

**Reagents:**

RSK7gasMathes\_00034

Amount Added: 200.00

Units: uL

Report Date: 15-Nov-2021 15:35:57

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211110-106374.b\001F0101.D

Injection Date: 10-Nov-2021 11:51:48

Instrument ID: VGC\_J

Operator ID: sciannac

Lims ID: ccvrt

Worklist Smp#: 1

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

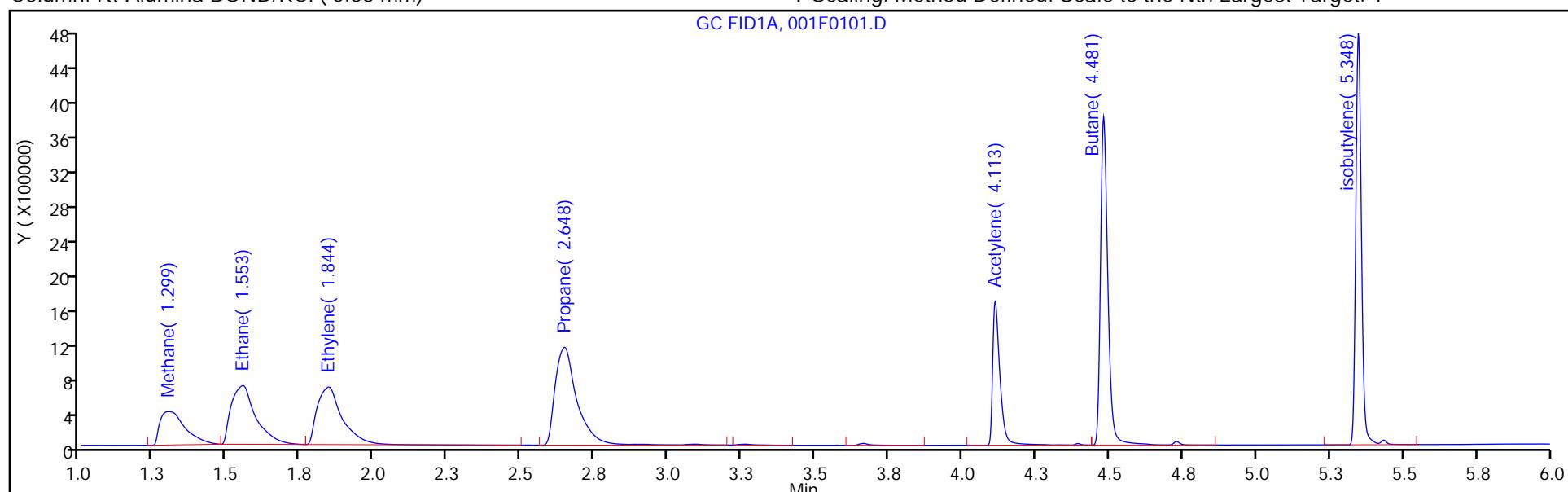
ALS Bottle#: 1

Method: RSK\_J

Limit Group: GCV - RSK 175

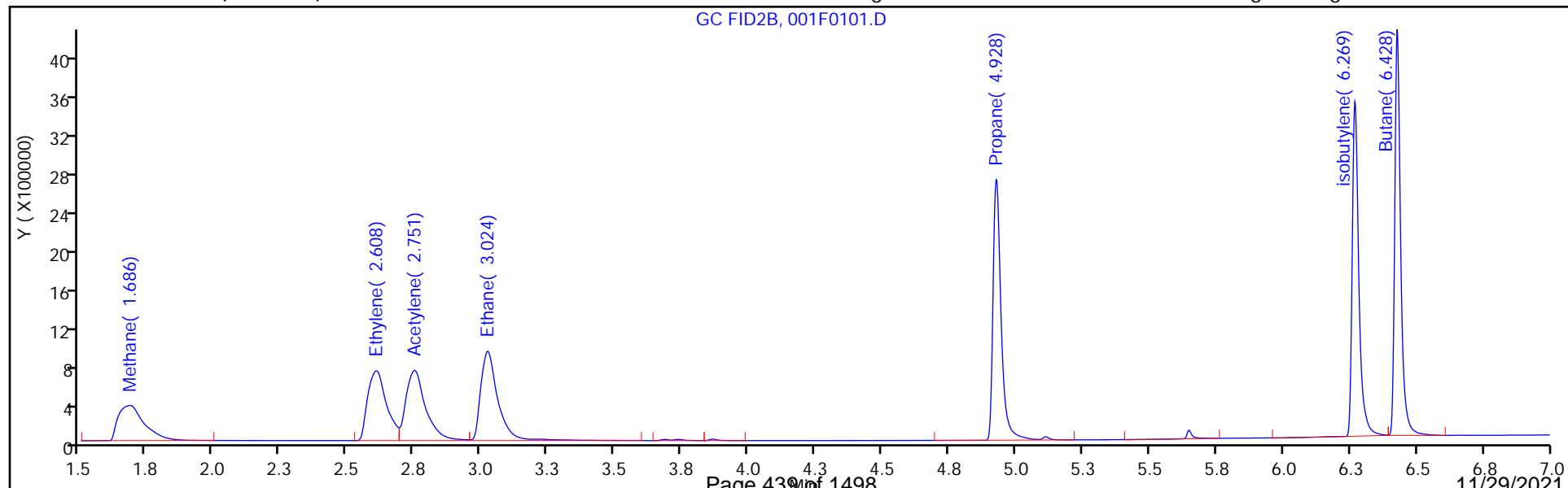
Column: Rt-Alumina BOND/KCl ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



## Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211110-106374.b\001F0101.D  
 Injection Date: 10-Nov-2021 11:51:48 Instrument ID: VGC\_J  
 Lims ID: ccvrt  
 Client ID:  
 Operator ID: sciannac ALS Bottle#: 1 Worklist Smp#: 1  
 Purge Vol: 18.000 mL Dil. Factor: 1.0000  
 Method: RSK\_J Limit Group: GCV - RSK 175  
 Column: Rt-Alumina BOND/KCl ( 0.53 mm) Detector: GC FID1A

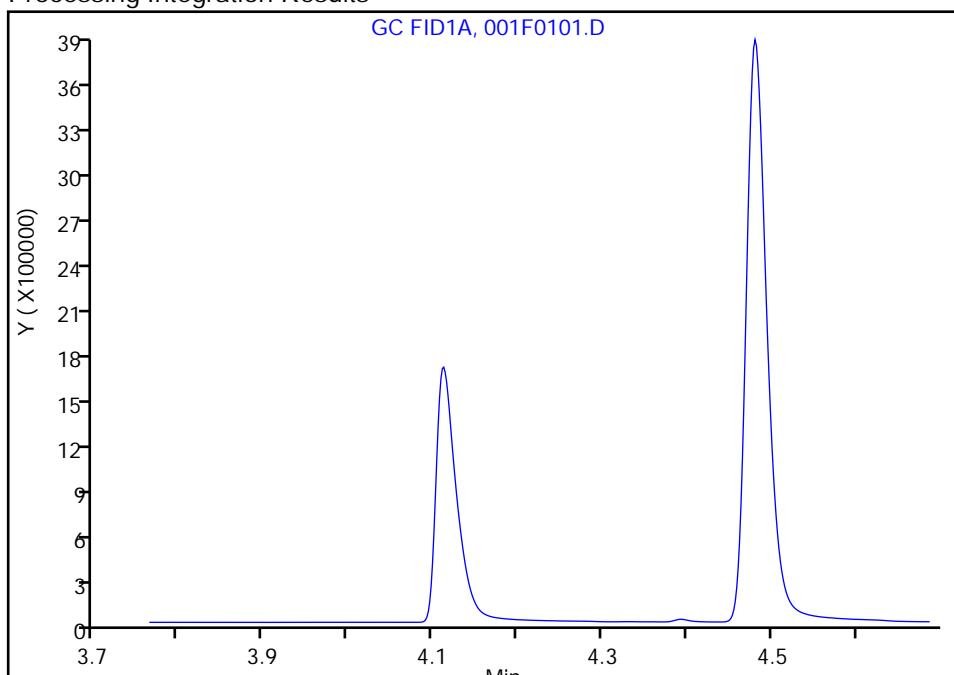
**6 Acetylene, CAS: 74-86-2**

Signal: 1

Not Detected

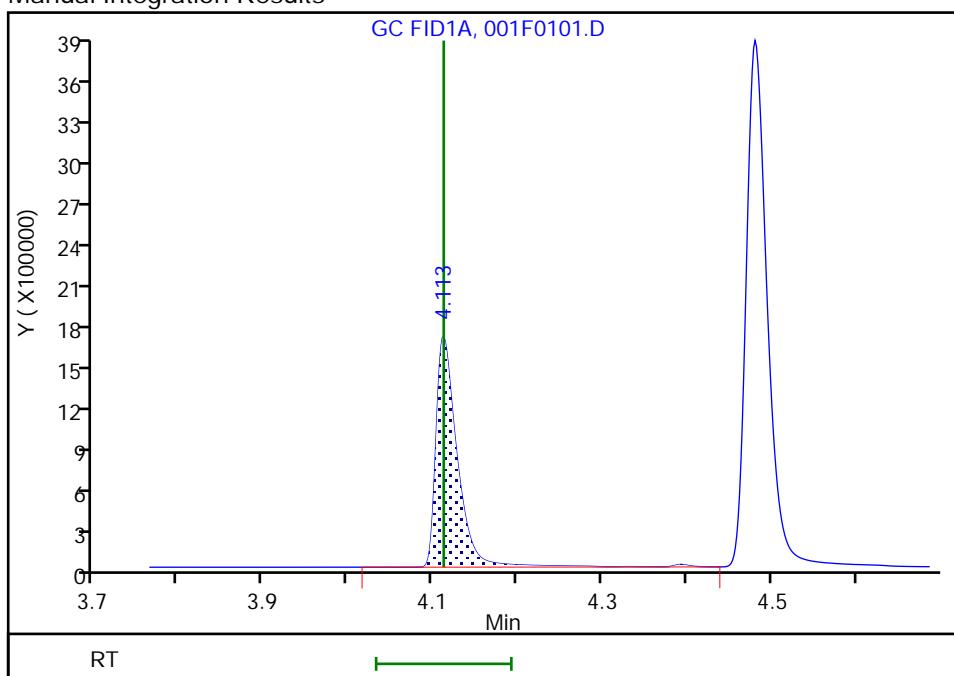
Expected RT: 4.11

## Processing Integration Results



## Manual Integration Results

RT: 4.11  
 Area: 2889761  
 Amount: 102.6959  
 Amount Units: ug/l



Reviewer: sciannac, 12-Nov-2021 10:26:18

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

FORM VII  
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Lab Sample ID: CCVRT 280-556939/1 Calibration Date: 11/10/2021 11:51

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: 001F0101.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		36489		64.7	65.7	-1.6	20.0
Ethylene	Ave	30980	29879		111	115	-3.6	20.0
Acetylene	Ave	34179	33888		106	107	-0.9	20.0
Ethane	Ave	33383	32611		120	123	-2.3	20.0

FORM VII  
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCVRT 280-556939/1 Calibration Date: 11/10/2021 11:51  
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: 001F0101.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.69	1.65	1.73
Ethylene	2.61	2.56	2.66
Acetylene	2.75	2.67	2.83
Ethane	3.02	2.97	3.07

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211110-106374.b\001F0101.D  
 Lims ID: ccvrt  
 Client ID:  
 Sample Type: CCVRT  
 Inject. Date: 10-Nov-2021 11:51:48 ALS Bottle#: 1 Worklist Smp#: 1  
 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\20211110-106374.b\RSK\_J.m  
 Limit Group: GCV - RSK 175  
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175  
 Last Update: 15-Nov-2021 15:35:57 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: CTX1649

First Level Reviewer: sciannac Date: 12-Nov-2021 10:27:40

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
-----	-----------	---------------	---------------	----------	--------------	----------------	-------

## 2 Methane

1	1.299	1.299	0.000	2293546	65.7	63.4	
2	1.686	1.686	0.000	2397445	65.7	64.7	
						RPD = 2.06	

## 3 Ethane

1	1.553	1.553	0.000	3908794	123.2	117.6	
2	3.024	3.024	0.000	4016738	123.2	120.3	
						RPD = 2.30	

## 4 Ethylene

1	1.844	1.844	0.000	3894182	114.9	110.5	
2	2.608	2.608	0.000	3433066	114.9	110.8	
						RPD = 0.24	

## 5 Propane

1	2.648	2.648	0.000	5818169	180.6	161.6	
2	4.928	4.928	0.000	5604099	180.6	160.1	
						RPD = 0.93	

## 6 Acetylene

1	4.113	4.113	0.000	2889761	106.7	102.7	a
2	2.751	2.751	0.000	3614832	106.7	105.8	a
						RPD = 2.94	

## 7 Butane

1	4.481	4.481	0.000	6643558	238.1	182.4	
2	6.428	6.428	0.000	6314970	238.1	179.7	
						RPD = 1.49	

## 8 isobutylene

1	5.348	5.348	0.000	6380602	229.8	176.6	
2	6.269	6.269	0.000	5835330	229.8	175.7	
						RPD = 0.50	

**QC Flag Legend**

Processing Flags

Review Flags

a - User Assigned ID

**Reagents:**

RSK7gasMathes\_00034

Amount Added: 200.00

Units: uL

Report Date: 15-Nov-2021 15:35:57

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211110-106374.b\001F0101.D

Injection Date: 10-Nov-2021 11:51:48

Instrument ID: VGC\_J

Operator ID: sciannac

Lims ID: ccvrt

Worklist Smp#: 1

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

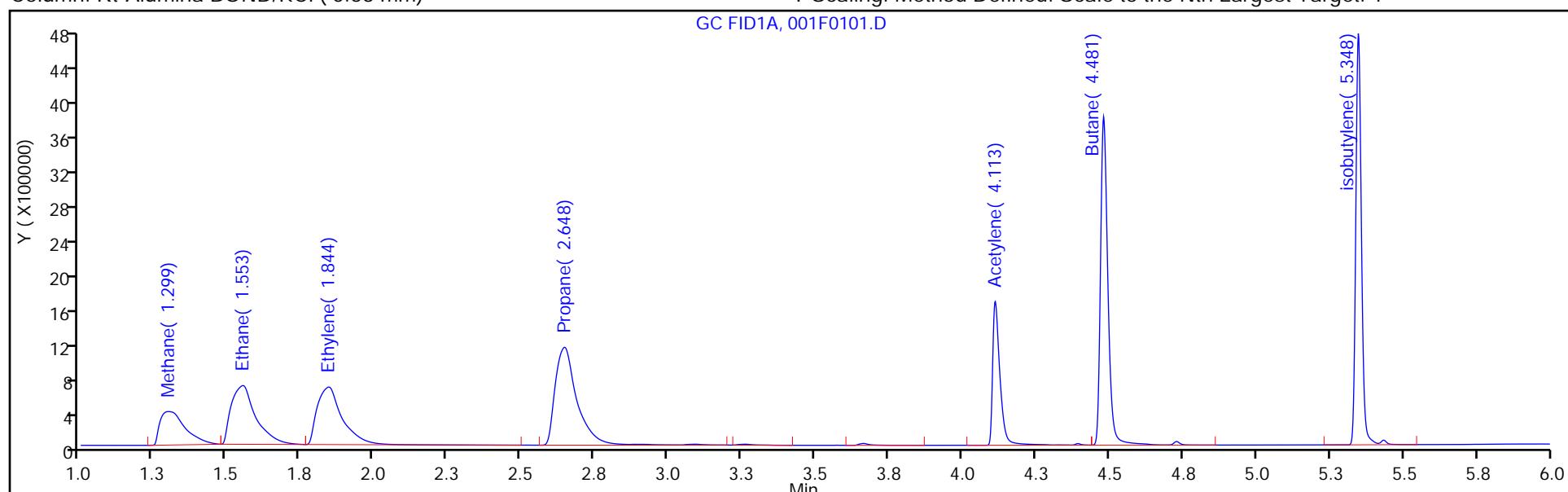
ALS Bottle#: 1

Method: RSK\_J

Limit Group: GCV - RSK 175

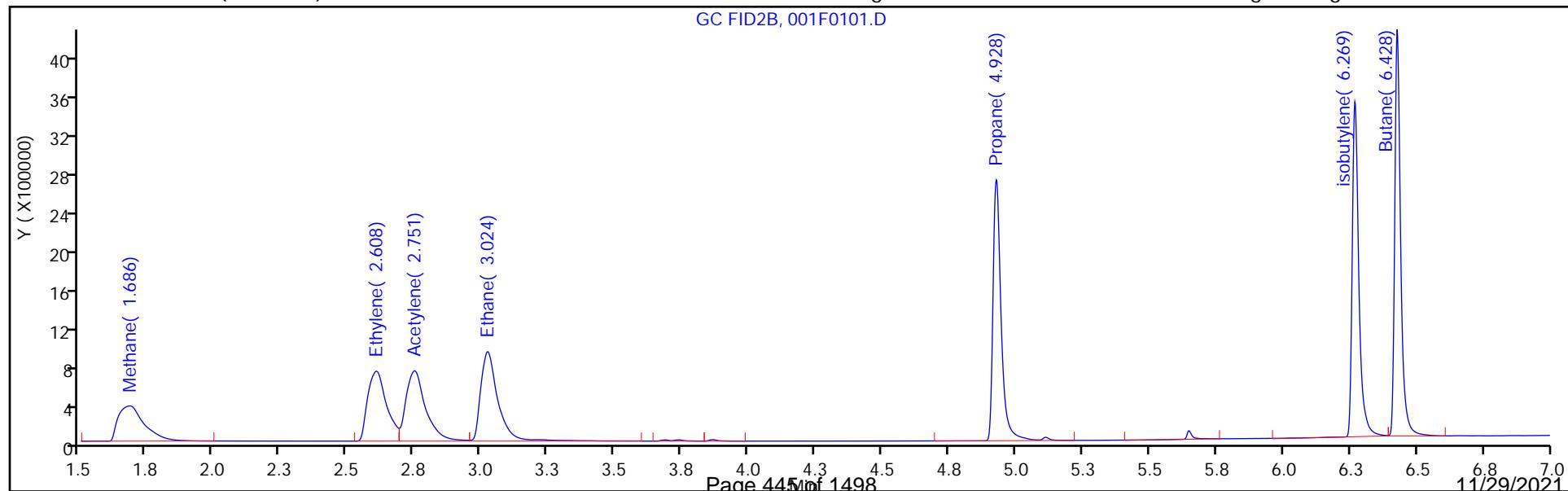
Column: Rt-Alumina BOND/KCl ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211110-106374.b\001F0101.D  
 Injection Date: 10-Nov-2021 11:51:48 Instrument ID: VGC\_J  
 Lims ID: ccvt  
 Client ID:  
 Operator ID: sciannac ALS Bottle#: 1 Worklist Smp#: 1  
 Purge Vol: 18.000 mL Dil. Factor: 1.0000  
 Method: RSK\_J Limit Group: GCV - RSK 175  
 Column: HP-PLOT/Q ( 0.53 mm) Detector: GC FID2B

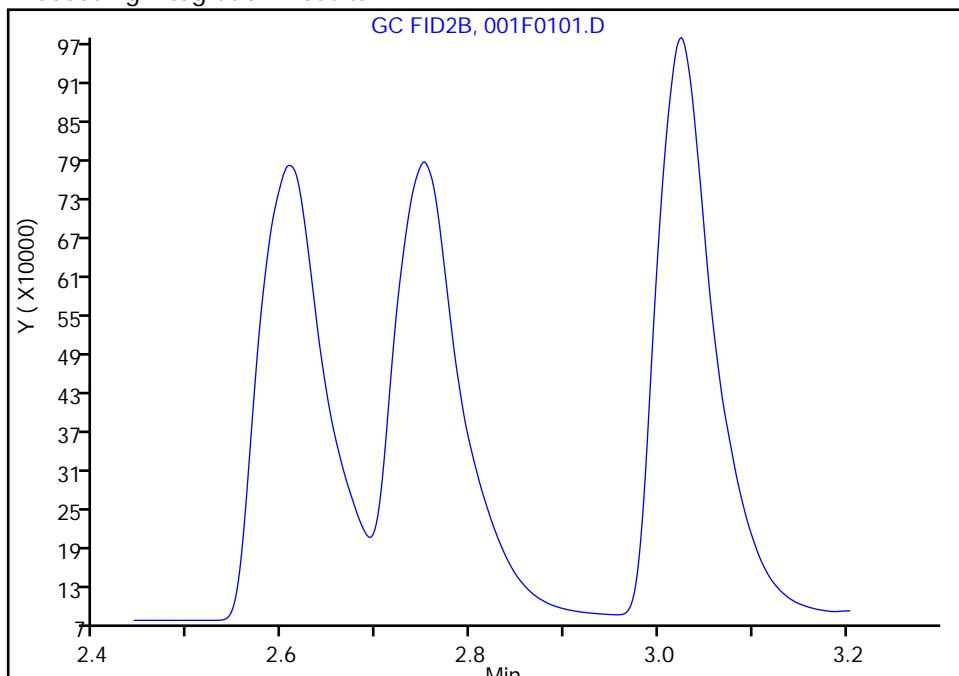
**6 Acetylene, CAS: 74-86-2**

Signal: 2

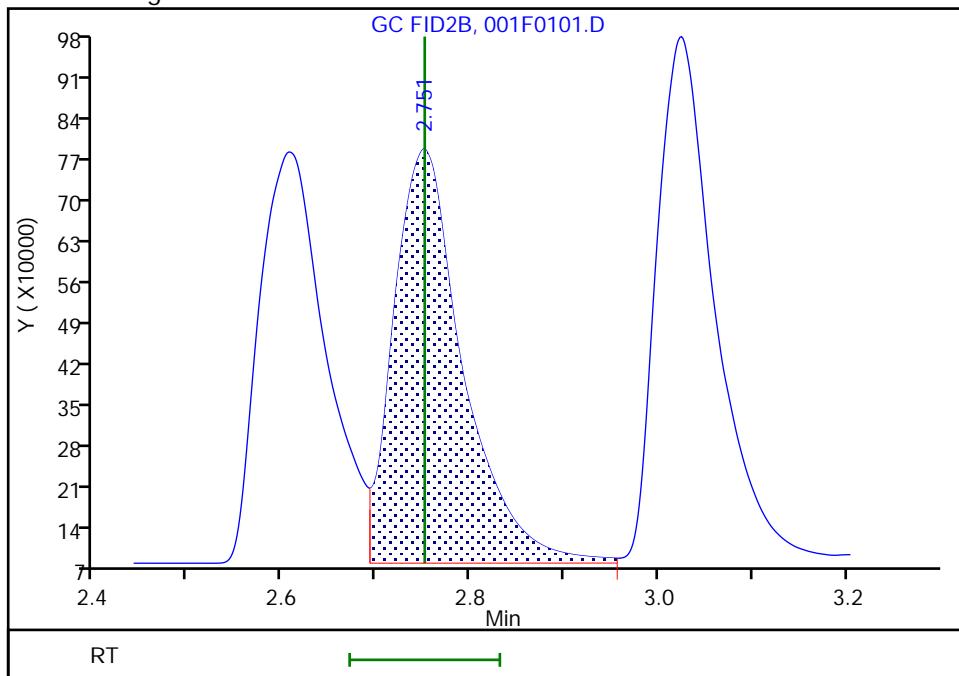
Not Detected

Expected RT: 2.75

Processing Integration Results



Manual Integration Results



Reviewer: sciannac, 12-Nov-2021 10:26:25

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

FORM VII  
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCV 280-556939/16 Calibration Date: 11/10/2021 15:06  
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: 016F1601.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		36000		65.4	65.7	-0.5	20.0
Ethane	Ave	33241	34296		127	123	3.2	20.0
Ethylene	Ave	35226	36142		118	115	2.6	20.0
Acetylene	Ave	28139			3.70	107		

FORM VII  
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCV 280-556939/16 Calibration Date: 11/10/2021 15:06  
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: 016F1601.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.29	1.26	1.34
Ethane	1.55	1.50	1.60
Ethylene	1.86	1.79	1.89
Acetylene			

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211110-106374.b\016F1601.D  
 Lims ID: ccv  
 Client ID:  
 Sample Type: CCV  
 Inject. Date: 10-Nov-2021 15:06:43 ALS Bottle#: 16 Worklist Smp#: 16  
 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\20211110-106374.b\RSK\_J.m  
 Limit Group: GCV - RSK 175  
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175  
 Last Update: 15-Nov-2021 15:36:04 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: CTX1649

First Level Reviewer: meierg Date: 15-Nov-2021 15:33:20

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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## 2 Methane

1	1.288	1.299	-0.011	2365329	65.7	65.4	
2	1.670	1.686	-0.016	2461644	65.7	66.4	
						RPD = 1.60	

## 3 Ethane

1	1.550	1.553	-0.003	4224202	123.2	127.1	
2	3.002	3.024	-0.022	4062713	123.2	121.7	
						RPD = 4.32	

## 4 Ethylene

1	1.862	1.844	0.018	4152681	114.9	117.9	M
2	2.587	2.608	-0.021	3713951	114.9	119.9	M
						RPD = 1.68	

## 5 Propane

1	2.680	2.648	0.032	6621088	180.6	183.9	M
2	4.909	4.928	-0.019	4362642	180.6	124.6	M
						RPD = 38.42	

## 6 Acetylene

1		4.113			ND	ND	
2		2.751					

## 7 Butane

1		4.481			ND	ND	
2		6.428					

## 8 isobutylene

1		5.348			ND	ND	
2		6.269					

**QC Flag Legend**

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

**Reagents:**

RSK7gasMathes\_00034

Amount Added: 200.00

Units: uL

Report Date: 15-Nov-2021 15:36:04

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211110-106374.b\016F1601.D

Injection Date: 10-Nov-2021 15:06:43

Instrument ID: VGC\_J

Operator ID: sciannac

Lims ID: ccv

Worklist Smp#: 16

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

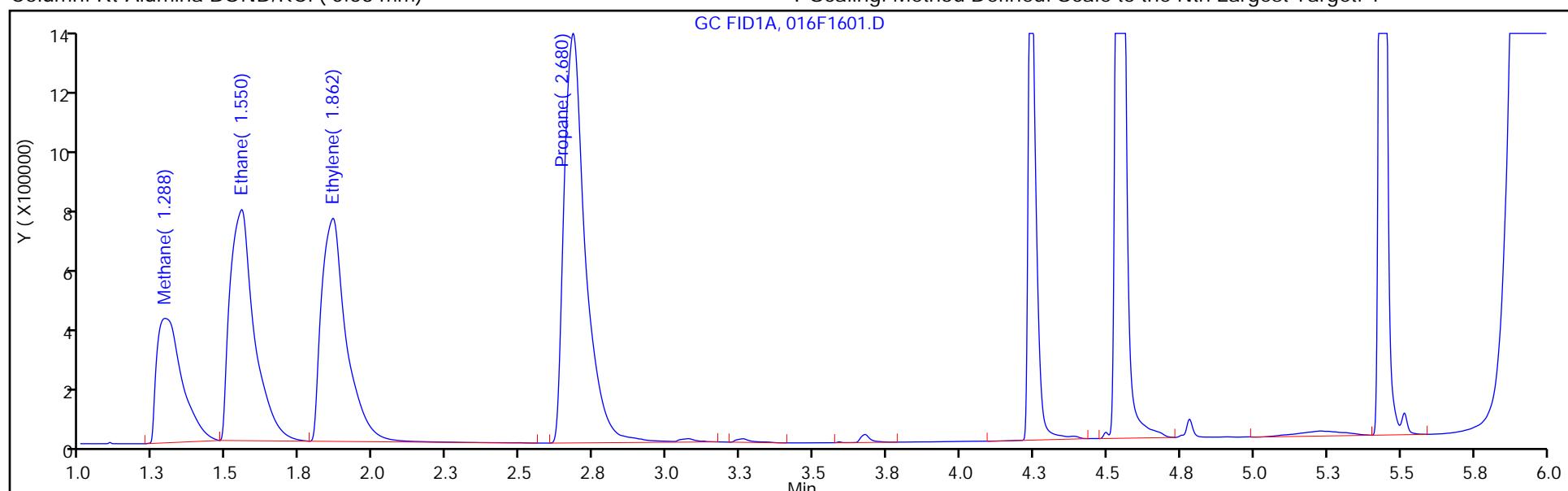
ALS Bottle#: 16

Method: RSK\_J

Limit Group: GCV - RSK 175

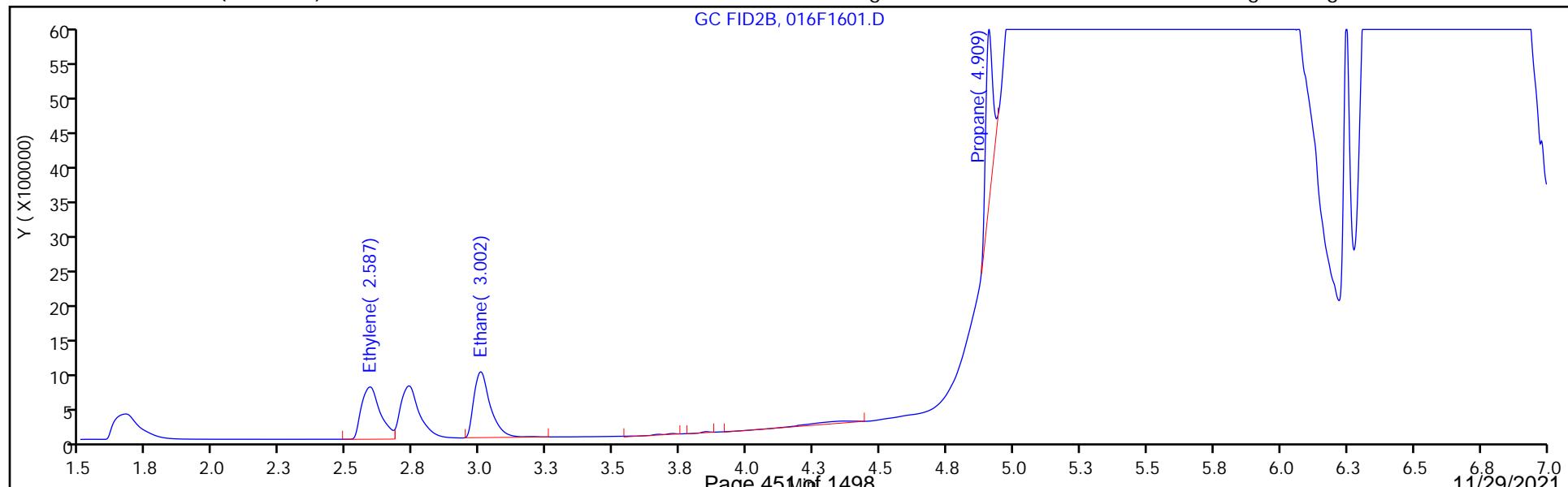
Column: Rt-Alumina BOND/KCl ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII  
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Lab Sample ID: CCV 280-556939/16 Calibration Date: 11/10/2021 15:06

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: 016F1601.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		37466		66.4	65.7	1.1	20.0
Ethylene	Ave	30980	32323		120	115	4.3	20.0
Ethane	Ave	33383	32985		122	123	-1.2	20.0
Acetylene	Ave	34179			3.70	107		

FORM VII  
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCV 280-556939/16 Calibration Date: 11/10/2021 15:06  
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: 016F1601.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.67	1.65	1.73
Ethylene	2.59	2.56	2.66
Ethane	3.00	2.97	3.07
Acetylene			

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211110-106374.b\016F1601.D  
 Lims ID: ccv  
 Client ID:  
 Sample Type: CCV  
 Inject. Date: 10-Nov-2021 15:06:43 ALS Bottle#: 16 Worklist Smp#: 16  
 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\20211110-106374.b\RSK\_J.m  
 Limit Group: GCV - RSK 175  
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175  
 Last Update: 15-Nov-2021 15:36:04 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: CTX1649

First Level Reviewer: meierg Date: 15-Nov-2021 15:33:20

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
-----	-----------	---------------	---------------	----------	--------------	----------------	-------

## 2 Methane

1	1.288	1.299	-0.011	2365329	65.7	65.4	
2	1.670	1.686	-0.016	2461644	65.7	66.4	
						RPD = 1.60	

## 3 Ethane

1	1.550	1.553	-0.003	4224202	123.2	127.1	
2	3.002	3.024	-0.022	4062713	123.2	121.7	
						RPD = 4.32	

## 4 Ethylene

1	1.862	1.844	0.018	4152681	114.9	117.9	M
2	2.587	2.608	-0.021	3713951	114.9	119.9	M
						RPD = 1.68	

## 5 Propane

1	2.680	2.648	0.032	6621088	180.6	183.9	M
2	4.909	4.928	-0.019	4362642	180.6	124.6	M
						RPD = 38.42	

## 6 Acetylene

1		4.113			ND	ND	
2		2.751					

## 7 Butane

1		4.481			ND	ND	
2		6.428					

## 8 isobutylene

1		5.348			ND	ND	
2		6.269					

**QC Flag Legend**

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

**Reagents:**

RSK7gasMathes\_00034

Amount Added: 200.00

Units: uL

Report Date: 15-Nov-2021 15:36:04

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211110-106374.b\016F1601.D

Injection Date: 10-Nov-2021 15:06:43

Instrument ID: VGC\_J

Operator ID: sciannac

Lims ID: ccv

Worklist Smp#: 16

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

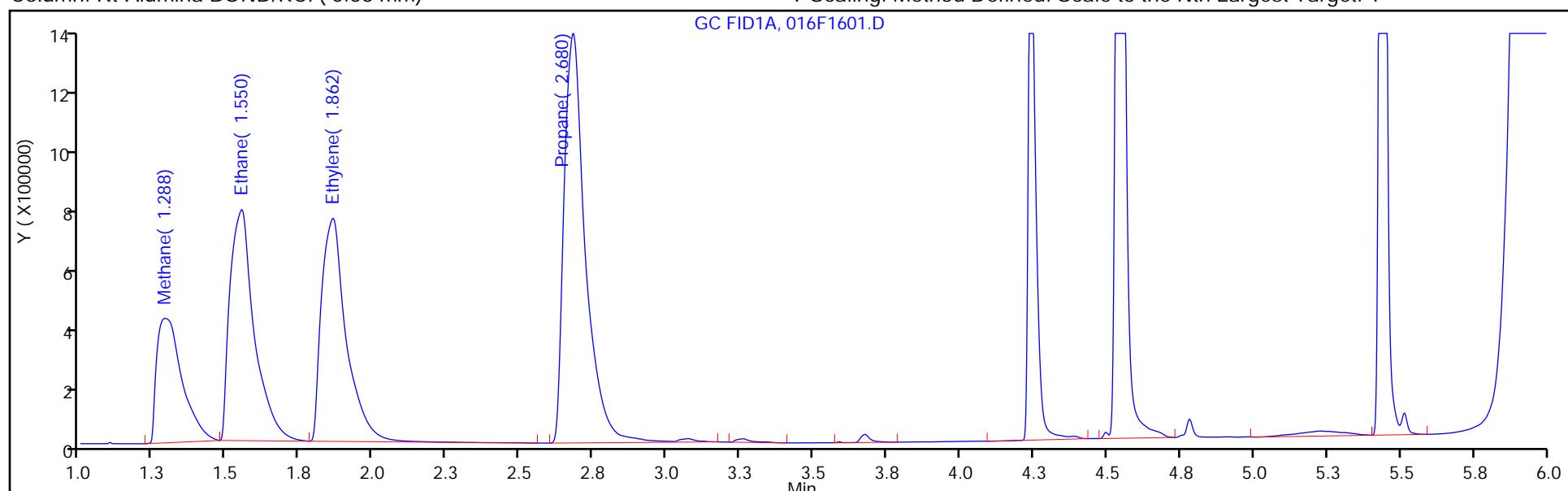
ALS Bottle#: 16

Method: RSK\_J

Limit Group: GCV - RSK 175

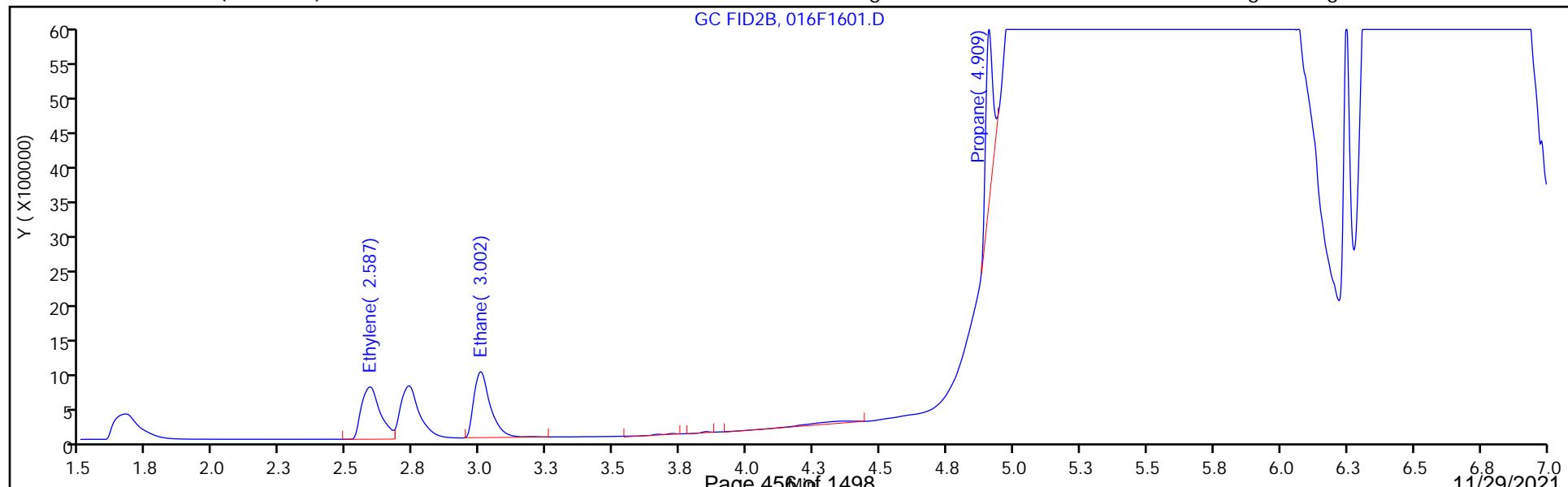
Column: Rt-Alumina BOND/KCl ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



## Eurofins TestAmerica, Denver

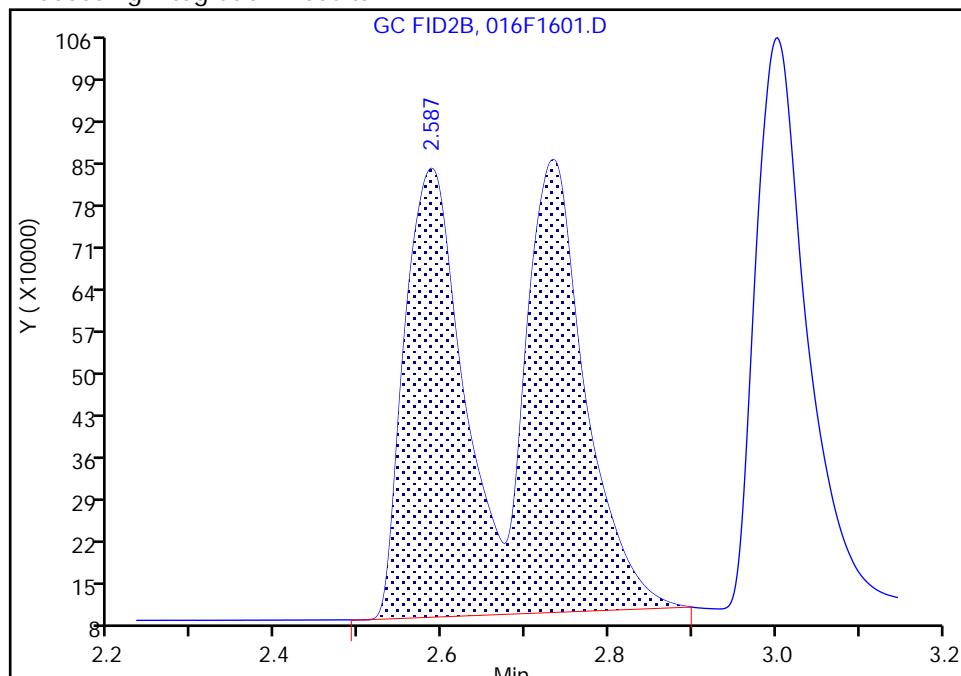
Data File: \\chromfs\Denver\ChromData\VGC\_J\20211110-106374.b\016F1601.D  
 Injection Date: 10-Nov-2021 15:06:43 Instrument ID: VGC\_J  
 Lims ID: ccv  
 Client ID:  
 Operator ID: sciannac ALS Bottle#: 16 Worklist Smp#: 16  
 Purge Vol: 18.000 mL Dil. Factor: 1.0000  
 Method: RSK\_J Limit Group: GCV - RSK 175  
 Column: HP-PLOT/Q ( 0.53 mm) Detector: GC FID2B

## 4 Ethylene, CAS: 74-85-1

Signal: 2

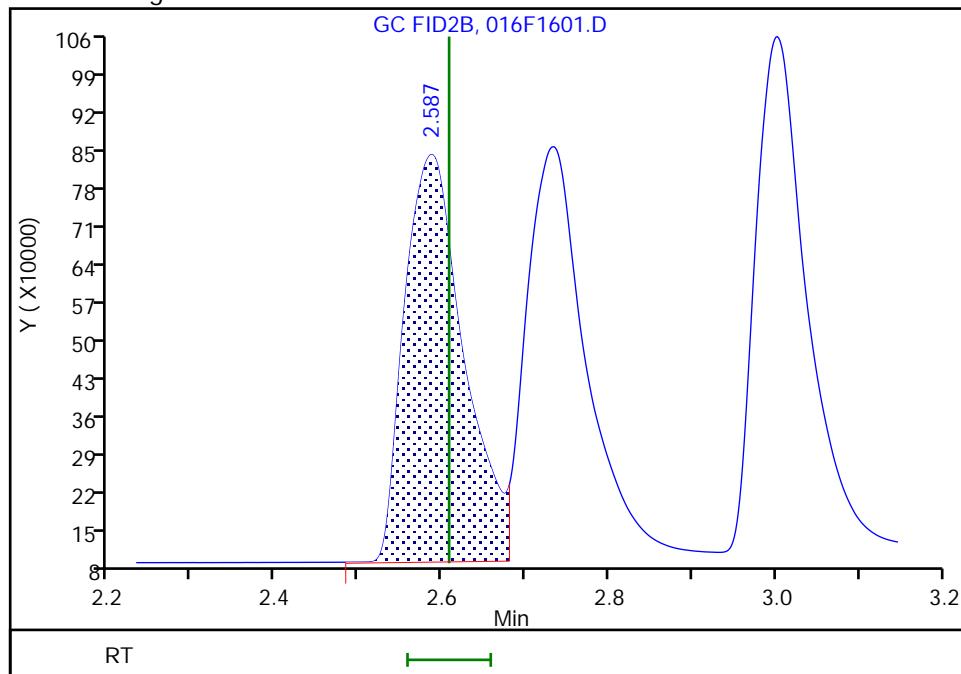
RT: 2.59  
 Area: 7315166  
 Amount: 236.1234  
 Amount Units: ug/l

## Processing Integration Results



RT: 2.59  
 Area: 3713951  
 Amount: 119.8812  
 Amount Units: ug/l

## Manual Integration Results



Reviewer: meierg, 15-Nov-2021 15:32:06

Audit Action: Manually Integrated

Audit Reason: Shouldering

FORM VII  
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCV 280-556939/30 Calibration Date: 11/10/2021 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: 030F3001.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		36669		66.6	65.7	1.4	20.0
Ethane	Ave	33241	35064		130	123	5.5	20.0
Ethylene	Ave	35226	36793		120	115	4.4	20.0
Acetylene	Ave	28139			3.70	107		

FORM VII  
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCV 280-556939/30 Calibration Date: 11/10/2021 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: 030F3001.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.29	1.26	1.34
Ethane	1.55	1.50	1.60
Ethylene	1.87	1.79	1.89
Acetylene			

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211110-106374.b\030F3001.D  
 Lims ID: ccv  
 Client ID:  
 Sample Type: CCV  
 Inject. Date: 10-Nov-2021 18:09:18 ALS Bottle#: 30 Worklist Smp#: 30  
 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\20211110-106374.b\RSK\_J.m  
 Limit Group: GCV - RSK 175  
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175  
 Last Update: 15-Nov-2021 15:36:09 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: CTX1649

First Level Reviewer: sciannac Date: 12-Nov-2021 16:00:29

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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## 2 Methane

1	1.289	1.299	-0.010	2409293	65.7	66.6	
2	1.674	1.686	-0.012	2497335	65.7	67.4	
						RPD = 1.18	

## 3 Ethane

1	1.554	1.553	0.001	4318826	123.2	129.9	
2	3.012	3.024	-0.012	4352831	123.2	130.4	
						RPD = 0.36	

## 4 Ethylene

1	1.865	1.844	0.021	4227465	114.9	120.0	
2	2.594	2.608	-0.014	3719392	114.9	120.1	
						RPD = 0.04	

## 5 Propane

1	2.699	2.648	0.051	6902958	180.6	191.7	
2	4.922	4.928	-0.006	6584025	180.6	188.1	
						RPD = 1.92	

## 6 Acetylene

1	4.113			ND	ND		
2	2.751						

## 7 Butane

1	4.481			ND	ND		
2	6.428						

## 8 isobutylene

1	5.348			ND	ND		
2	6.269						

**QC Flag Legend**

Processing Flags

ND - Not Detected or Marked ND

**Reagents:**

RSK7gasMathes\_00034

Amount Added: 200.00

Units: uL

Report Date: 15-Nov-2021 15:36:09

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211110-106374.b\030F3001.D

Injection Date: 10-Nov-2021 18:09:18

Instrument ID: VGC\_J

Operator ID: sciannac

Lims ID: ccv

Worklist Smp#: 30

Client ID:

Purge Vol: 18.000 mL

Method: RSK\_J

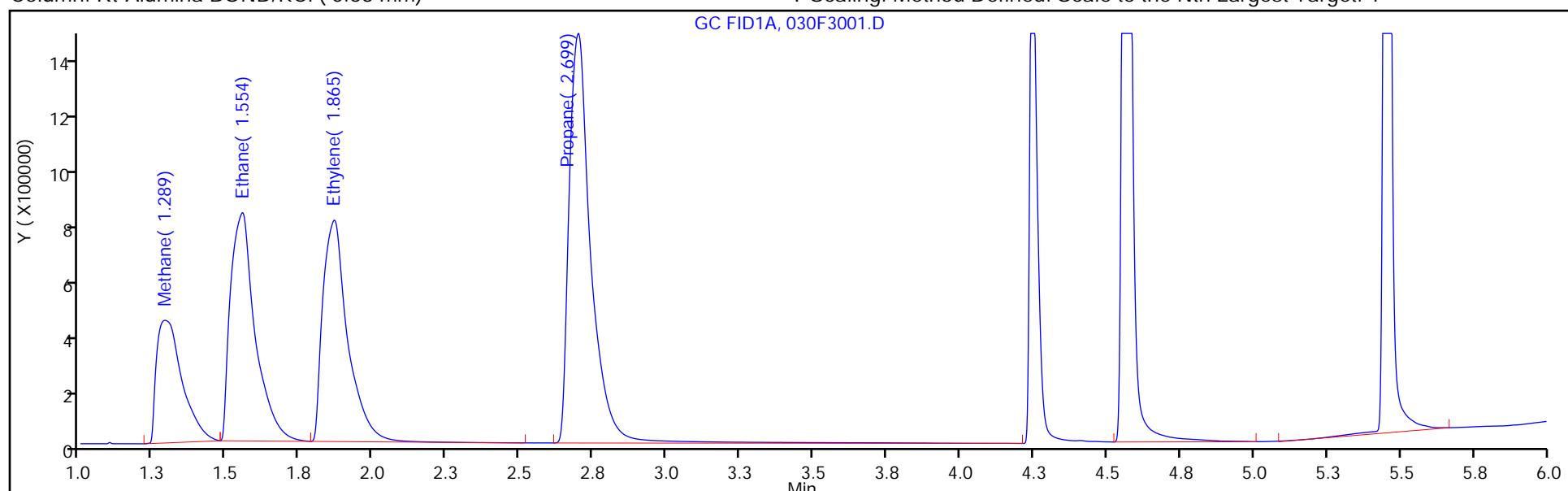
Column: Rt-Alumina BOND/KCl ( 0.53 mm)

Dil. Factor: 1.0000

Limit Group: GCV - RSK 175

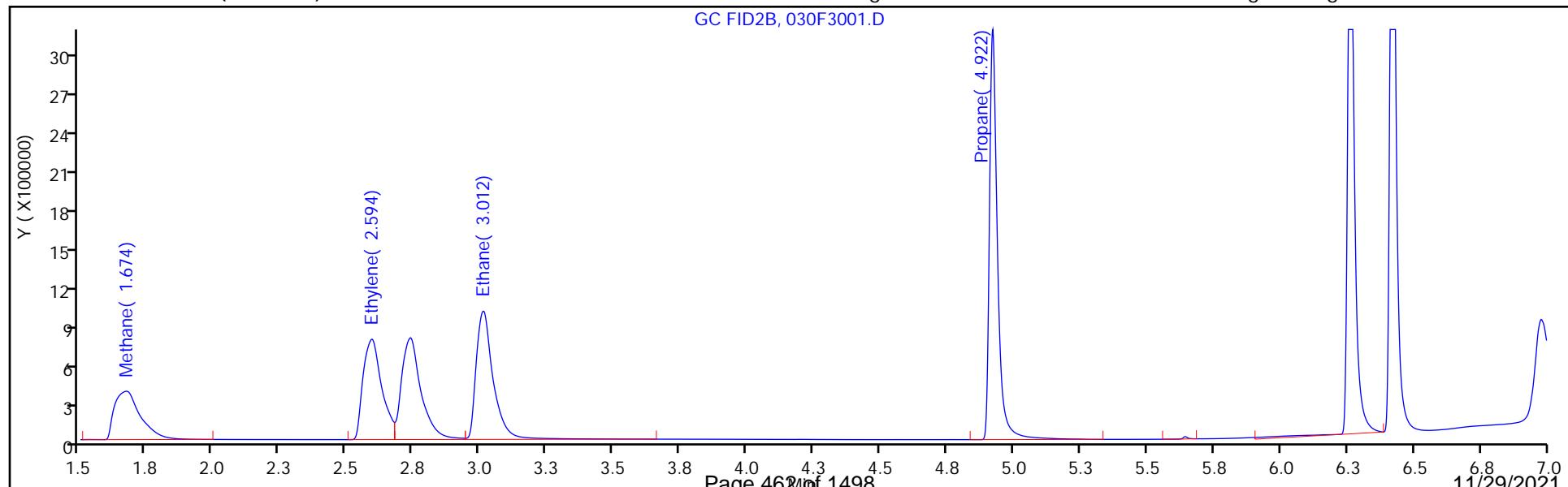
ALS Bottle#: 30

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII  
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Lab Sample ID: CCV 280-556939/30 Calibration Date: 11/10/2021 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: 030F3001.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		38009		67.4	65.7	2.6	20.0
Ethylene	Ave	30980	32371		120	115	4.5	20.0
Ethane	Ave	33383	35340		130	123	5.9	20.0
Acetylene	Ave	34179			3.70	107		

FORM VII  
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCV 280-556939/30 Calibration Date: 11/10/2021 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: 030F3001.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.67	1.65	1.73
Ethylene	2.59	2.56	2.66
Ethane	3.01	2.97	3.07
Acetylene			

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211110-106374.b\030F3001.D  
 Lims ID: ccv  
 Client ID:  
 Sample Type: CCV  
 Inject. Date: 10-Nov-2021 18:09:18 ALS Bottle#: 30 Worklist Smp#: 30  
 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\20211110-106374.b\RSK\_J.m  
 Limit Group: GCV - RSK 175  
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175  
 Last Update: 15-Nov-2021 15:36:09 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: CTX1649

First Level Reviewer: sciannac Date: 12-Nov-2021 16:00:29

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	2409293	65.7	66.6	
2	1.674	1.686	-0.012	2497335	65.7	67.4	
						RPD = 1.18	

## 3 Ethane

1	1.554	1.553	0.001	4318826	123.2	129.9	
2	3.012	3.024	-0.012	4352831	123.2	130.4	
						RPD = 0.36	

## 4 Ethylene

1	1.865	1.844	0.021	4227465	114.9	120.0	
2	2.594	2.608	-0.014	3719392	114.9	120.1	
						RPD = 0.04	

## 5 Propane

1	2.699	2.648	0.051	6902958	180.6	191.7	
2	4.922	4.928	-0.006	6584025	180.6	188.1	
						RPD = 1.92	

## 6 Acetylene

1	4.113			ND	ND		
2	2.751						

## 7 Butane

1	4.481			ND	ND		
2	6.428						

## 8 isobutylene

1	5.348			ND	ND		
2	6.269						

**QC Flag Legend**

Processing Flags

ND - Not Detected or Marked ND

**Reagents:**

RSK7gasMathes\_00034

Amount Added: 200.00

Units: uL

Report Date: 15-Nov-2021 15:36:10

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211110-106374.b\030F3001.D

Injection Date: 10-Nov-2021 18:09:18

Instrument ID: VGC\_J

Operator ID: sciannac

Lims ID: ccv

Worklist Smp#: 30

Client ID:

Purge Vol: 18.000 mL

Method: RSK\_J

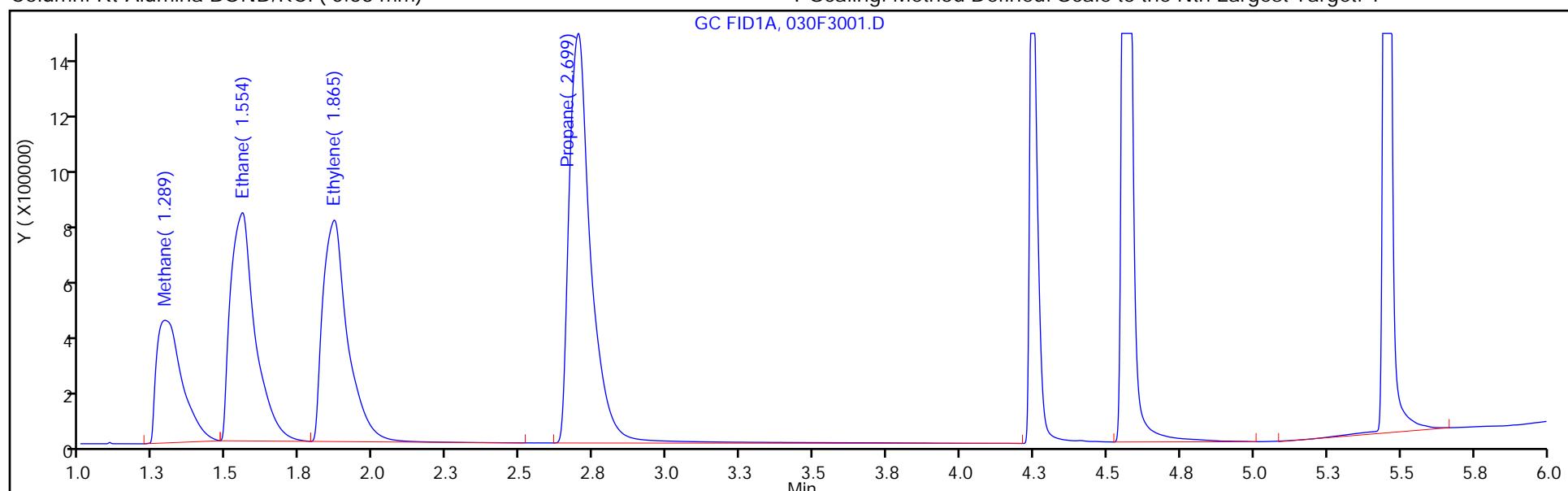
Column: Rt-Alumina BOND/KCl ( 0.53 mm)

Dil. Factor: 1.0000

Limit Group: GCV - RSK 175

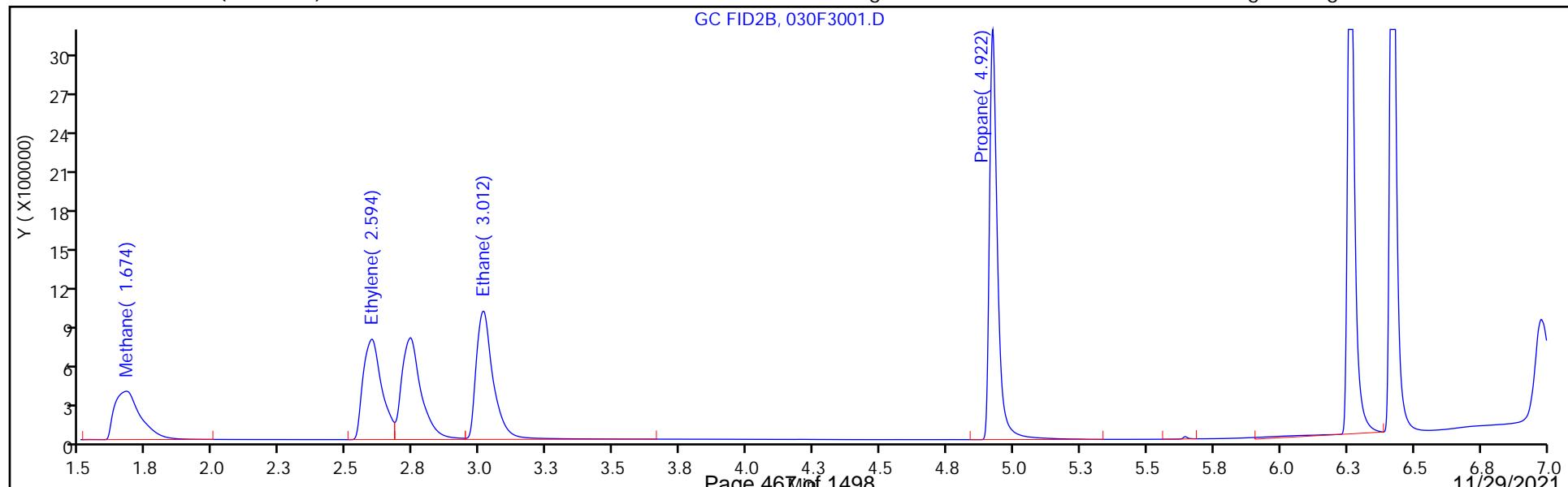
ALS Bottle#: 30

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I  
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 280-556811/4  
Matrix: Water Lab File ID: 004F0401.D  
Analysis Method: RSK-175 Date Collected: \_\_\_\_\_  
Sample wt/vol: 20 (mL) Date Analyzed: 11/09/2021 18:13  
Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
Soil Extract Vol.: \_\_\_\_\_ GC Column: HP-Plot Q ID: 0.53 (mm)  
% Moisture: \_\_\_\_\_ Level: (low/med) Low  
Analysis Batch No.: 556811 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 TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211109-106343.b\004F0401.D  
 Lims ID: mb  
 Client ID:  
 Sample Type: MB  
 Inject. Date: 09-Nov-2021 18:13:56 ALS Bottle#: 4 Worklist Smp#: 4  
 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\20211109-106343.b\RSK\_J.m  
 Limit Group: GCV - RSK 175  
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175  
 Last Update: 15-Nov-2021 12:57:13 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: CTX1658

First Level Reviewer: sciannac Date: 12-Nov-2021 09:18:16

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	1.302	ND
2	1.690	

3 Ethane

1	1.550	ND
2	3.030	

4 Ethylene

1	1.828	ND
2	2.612	

5 Propane

1	2.608	ND
2	4.930	

6 Acetylene

1	4.032	ND
2	2.755	

7 Butane

1	4.423	ND
2	6.428	

8 isobutylene

1	5.282	ND
2	6.270	

## QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Report Date: 15-Nov-2021 12:57:16

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211109-106343.b\004F0401.D

Injection Date: 09-Nov-2021 18:13:56

Instrument ID: VGC\_J

Operator ID: sciannac

Lims ID: mb

Worklist Smp#: 4

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

ALS Bottle#: 4

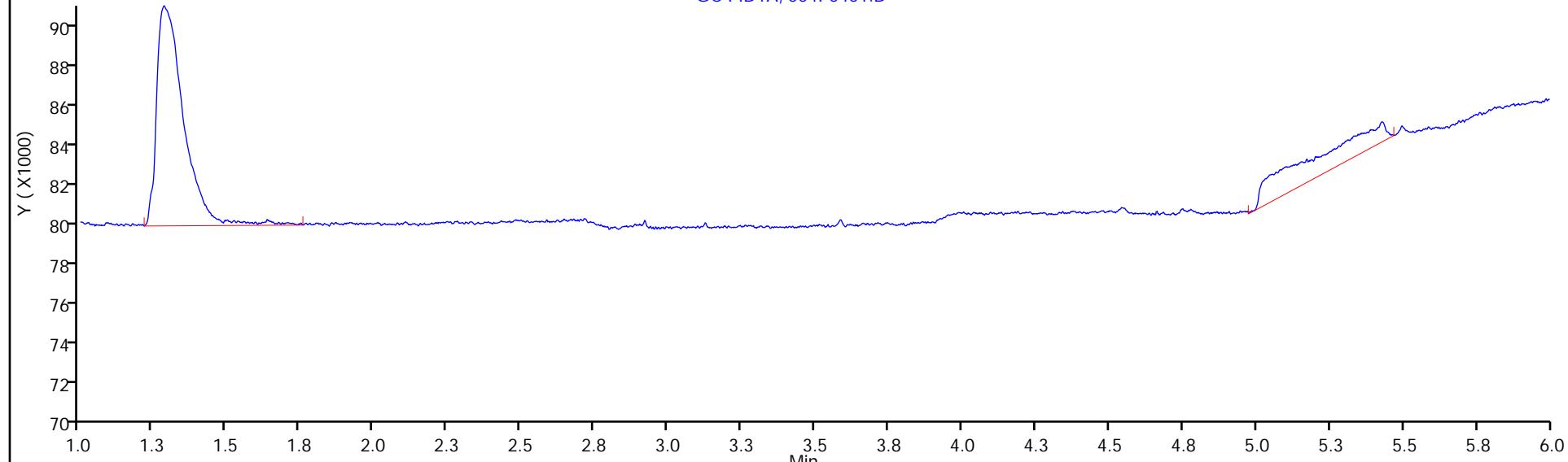
Method: RSK\_J

Limit Group: GCV - RSK 175

Column: Rt-Alumina BOND/KCl ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

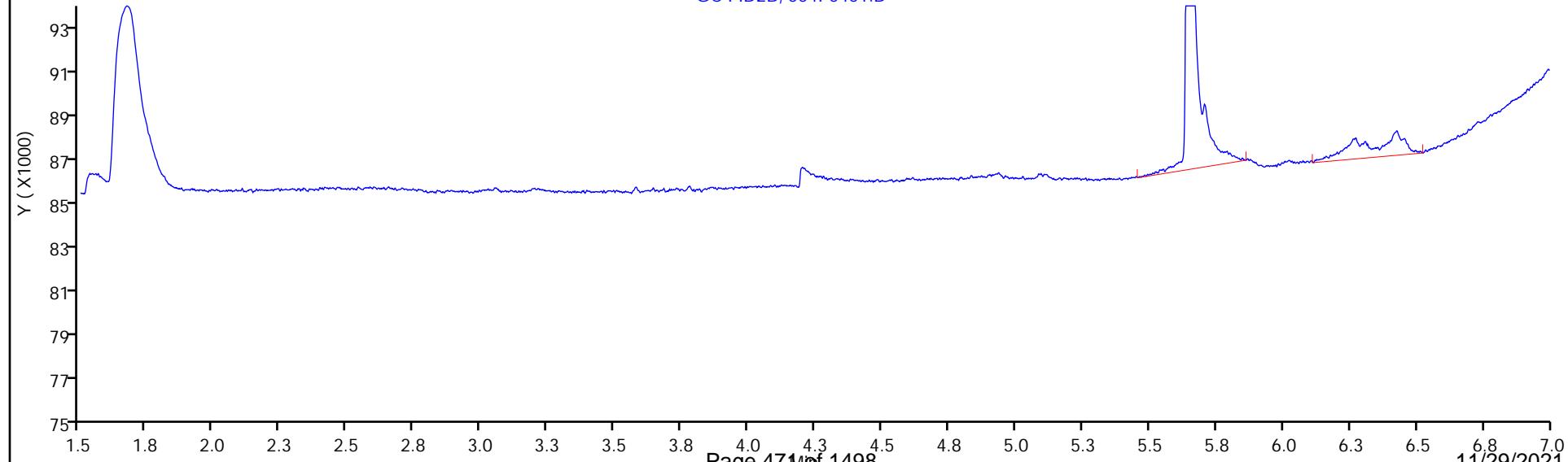
GC FID1A, 004F0401.D



Column: HP-PLOT/Q ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

GC FID2B, 004F0401.D



FORM I  
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 280-556939/4  
Matrix: Water Lab File ID: 004F0401.D  
Analysis Method: RSK-175 Date Collected: \_\_\_\_\_  
Sample wt/vol: 20 (mL) Date Analyzed: 11/10/2021 12:30  
Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
Soil Extract Vol.: \_\_\_\_\_ GC Column: HP-Plot Q ID: 0.53 (mm)  
% Moisture: \_\_\_\_\_ Level: (low/med) Low  
Analysis Batch No.: 556939 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 TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211110-106374.b\004F0401.D  
 Lims ID: mb  
 Client ID:  
 Sample Type: MB  
 Inject. Date: 10-Nov-2021 12:30:43 ALS Bottle#: 4 Worklist Smp#: 4  
 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\20211110-106374.b\RSK\_J.m  
 Limit Group: GCV - RSK 175  
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175  
 Last Update: 15-Nov-2021 15:35:57 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: CTX1649

First Level Reviewer: sciannac Date: 12-Nov-2021 10:32:03

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

1	1.299	ND
2	1.686	

3 Ethane

1	1.553	ND
2	3.024	

4 Ethylene

1	1.844	ND
2	2.608	

5 Propane

1	2.648	ND
2	4.928	

6 Acetylene

1	4.113	ND
2	2.751	

7 Butane

1	4.481	ND
2	6.428	

8 isobutylene

1	5.348	ND
2	6.269	

**QC Flag Legend**

Processing Flags

7 - Failed Limit of Detection

Report Date: 15-Nov-2021 15:35:59

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211110-106374.b\004F0401.D

Injection Date: 10-Nov-2021 12:30:43

Instrument ID: VGC\_J

Operator ID: sciannac

Lims ID: mb

Worklist Smp#: 4

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

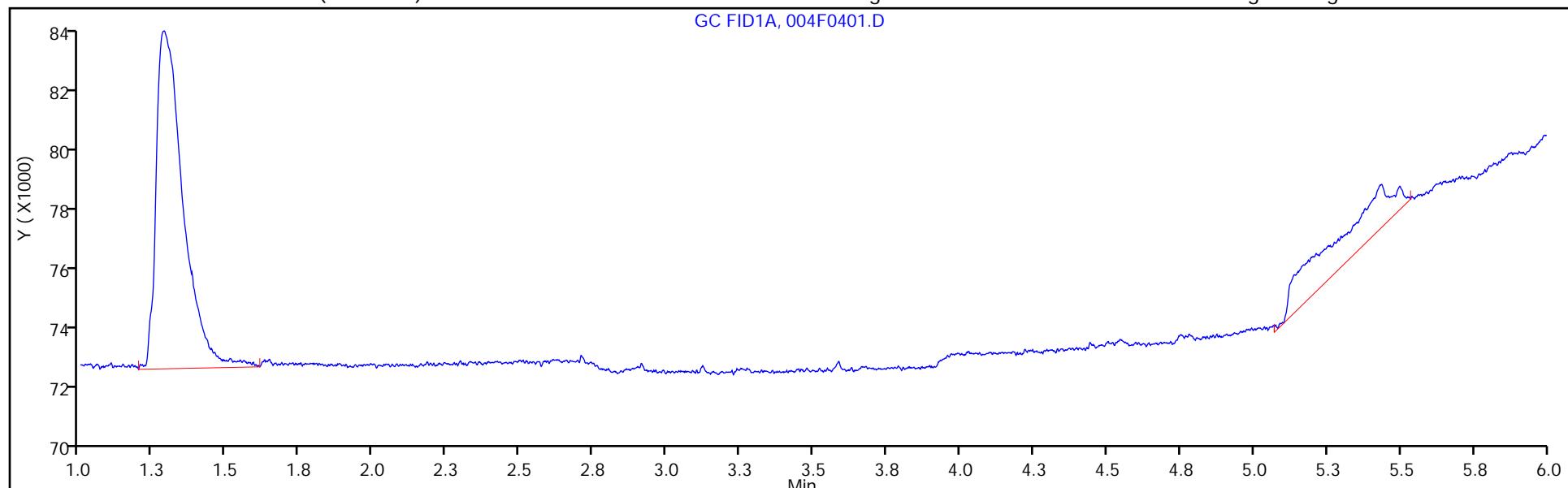
ALS Bottle#: 4

Method: RSK\_J

Limit Group: GCV - RSK 175

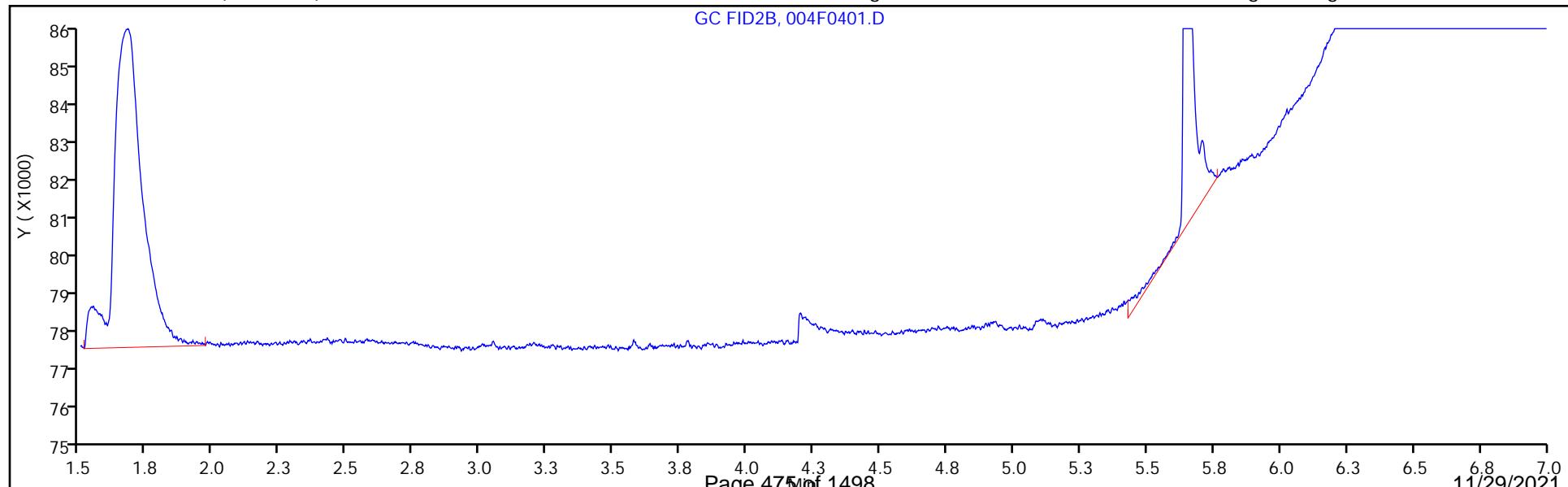
Column: Rt-Alumina BOND/KCl ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I  
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: \_\_\_\_\_ Lab Sample ID: LCS 280-556811/2  
Matrix: Water Lab File ID: 002F0201.D  
Analysis Method: RSK-175 Date Collected: \_\_\_\_\_  
Sample wt/vol: 20 (mL) Date Analyzed: 11/09/2021 17:48  
Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
Soil Extract Vol.: \_\_\_\_\_ GC Column: HP-Plot Q ID: 0.53 (mm)  
% Moisture: \_\_\_\_\_ Level: (low/med) Low  
Analysis Batch No.: 556811 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0659		0.0050	0.0013	0.00063

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211109-106343.b\002F0201.D  
 Lims ID: lcs  
 Client ID:  
 Sample Type: LCS  
 Inject. Date: 09-Nov-2021 17:48:02 ALS Bottle#: 2 Worklist Smp#: 2  
 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\20211109-106343.b\RSK\_J.m  
 Limit Group: GCV - RSK 175  
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175  
 Last Update: 15-Nov-2021 12:57:13 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: CTX1658

First Level Reviewer: sciannac Date: 10-Nov-2021 08:28:20

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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2 Methane

1	1.299	1.302	-0.003	2334253	65.7	64.5	
2	1.687	1.690	-0.003	2441711	65.7	65.9	
						RPD = 2.13	

3 Ethane

1	1.551	1.550	0.001	4188659	123.2	126.0	
2	3.032	3.030	0.002	4326877	123.2	129.6	
						RPD = 2.82	

4 Ethylene

1	1.834	1.828	0.006	4139064	114.9	117.5	
2	2.616	2.612	0.004	3666408	114.9	118.3	
						RPD = 0.72	

5 Propane

1	2.621	2.608	0.013	6670960	180.6	185.2	a
2	4.932	4.930	0.002	6420309	180.6	183.4	a
						RPD = 1.01	

6 Acetylene

1	4.111	4.032	0.079	3108348	106.7	110.5	a
2	2.759	2.755	0.004	3896519	106.7	114.0	a
						RPD = 3.15	

7 Butane

1	4.474	4.423	0.051	8856120	238.1	243.2	a
2	6.429	6.428	0.001	8536861	238.1	243.0	M
						RPD = 0.09	

8 isobutylene

1	5.362	5.282	0.080	8467430	229.8	234.4	a
2	6.271	6.270	0.001	7718160	229.8	232.5	M
						RPD = 0.83	

**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: 15-Nov-2021 12:57:14

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211109-106343.b\002F0201.D

Injection Date: 09-Nov-2021 17:48:02

Instrument ID: VGC\_J

Operator ID: sciannac

Lims ID: lcs

Worklist Smp#: 2

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

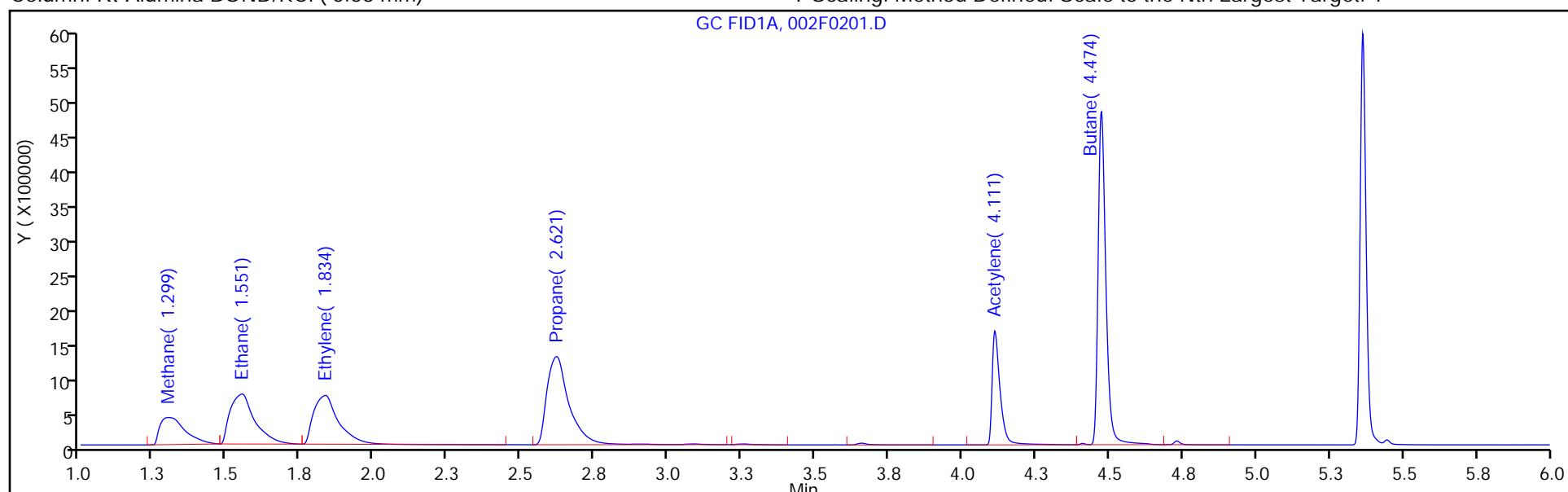
ALS Bottle#: 2

Method: RSK\_J

Limit Group: GCV - RSK 175

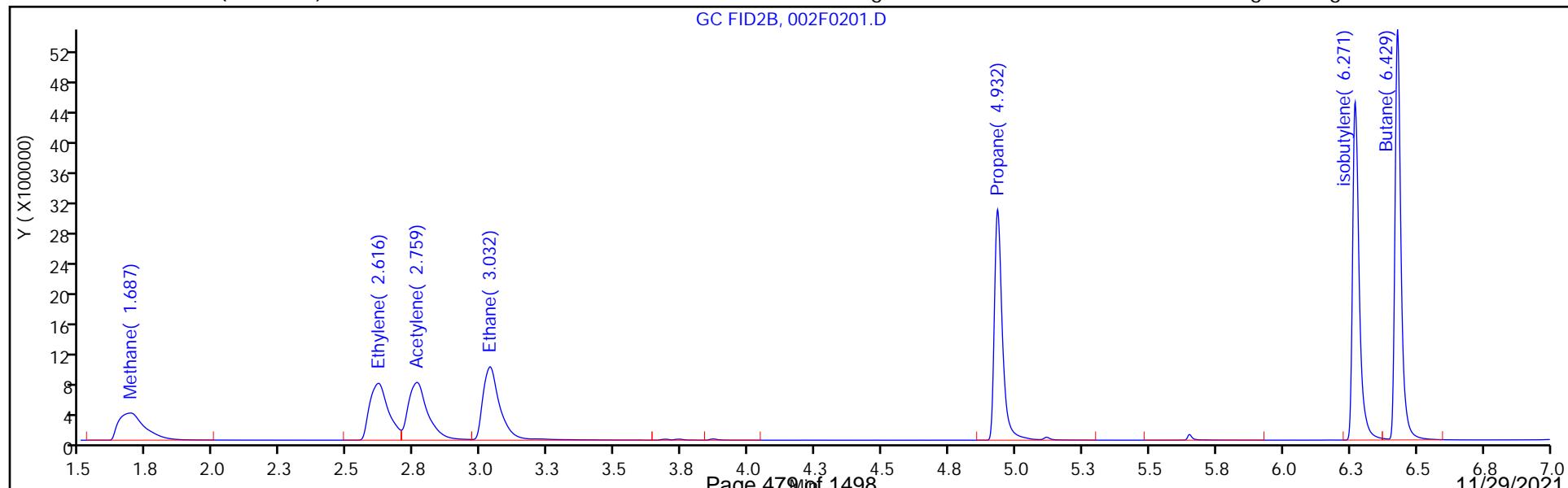
Column: Rt-Alumina BOND/KCl ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I  
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: \_\_\_\_\_ Lab Sample ID: LCS 280-556939/2  
Matrix: Water Lab File ID: 002F0201.D  
Analysis Method: RSK-175 Date Collected: \_\_\_\_\_  
Sample wt/vol: 20 (mL) Date Analyzed: 11/10/2021 12:04  
Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
Soil Extract Vol.: \_\_\_\_\_ GC Column: HP-Plot Q ID: 0.53 (mm)  
% Moisture: \_\_\_\_\_ Level: (low/med) Low  
Analysis Batch No.: 556939 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0669		0.0050	0.0013	0.00063

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211110-106374.b\002F0201.D  
 Lims ID: lcs  
 Client ID:  
 Sample Type: LCS  
 Inject. Date: 10-Nov-2021 12:04:53 ALS Bottle#: 2 Worklist Smp#: 2  
 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\20211110-106374.b\RSK\_J.m  
 Limit Group: GCV - RSK 175  
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175  
 Last Update: 15-Nov-2021 15:35:57 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: CTX1649

First Level Reviewer: sciannac Date: 12-Nov-2021 10:30:21

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
-----	-----------	---------------	---------------	----------	--------------	----------------	-------

2 Methane

1	1.298	1.299	-0.001	2374521	65.7	65.7	
2	1.684	1.686	-0.002	2478989	65.7	66.9	
						RPD = 1.92	

3 Ethane

1	1.553	1.553	0.000	4243377	123.2	127.7	
2	3.029	3.024	0.005	4375081	123.2	131.1	
						RPD = 2.63	

4 Ethylene

1	1.846	1.844	0.002	4173569	114.9	118.5	
2	2.613	2.608	0.005	3683442	114.9	118.9	
						RPD = 0.35	

5 Propane

1	2.648	2.648	0.000	6710052	180.6	186.3	
2	4.931	4.928	0.003	6472439	180.6	184.9	
						RPD = 0.79	

6 Acetylene

1	4.149	4.113	0.036	3048261	106.7	108.3	a
2	2.756	2.751	0.005	3850044	106.7	112.6	a
						RPD = 3.91	

7 Butane

1	4.499	4.481	0.018	8892743	238.1	244.2	
2	6.428	6.428	0.000	8506168	238.1	242.1	
						RPD = 0.86	

8 isobutylene

1	5.389	5.348	0.041	8341242	229.8	230.9	
2	6.271	6.269	0.002	7623792	229.8	229.6	
						RPD = 0.56	

**QC Flag Legend**

Processing Flags

Review Flags

a - User Assigned ID

**Reagents:**

RSK7gasMathes\_00034

Amount Added: 200.00

Units: uL

Report Date: 15-Nov-2021 15:35:58

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211110-106374.b\002F0201.D

Injection Date: 10-Nov-2021 12:04:53

Instrument ID: VGC\_J

Operator ID: sciannac

Lims ID: lcs

Worklist Smp#: 2

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

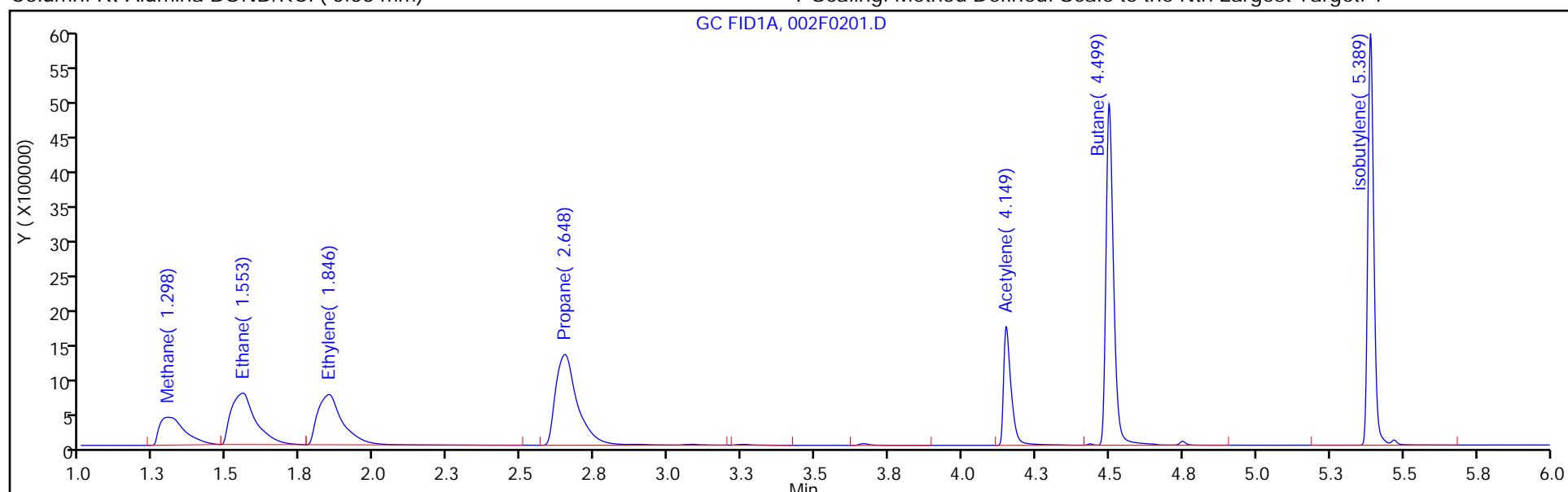
ALS Bottle#: 2

Method: RSK\_J

Limit Group: GCV - RSK 175

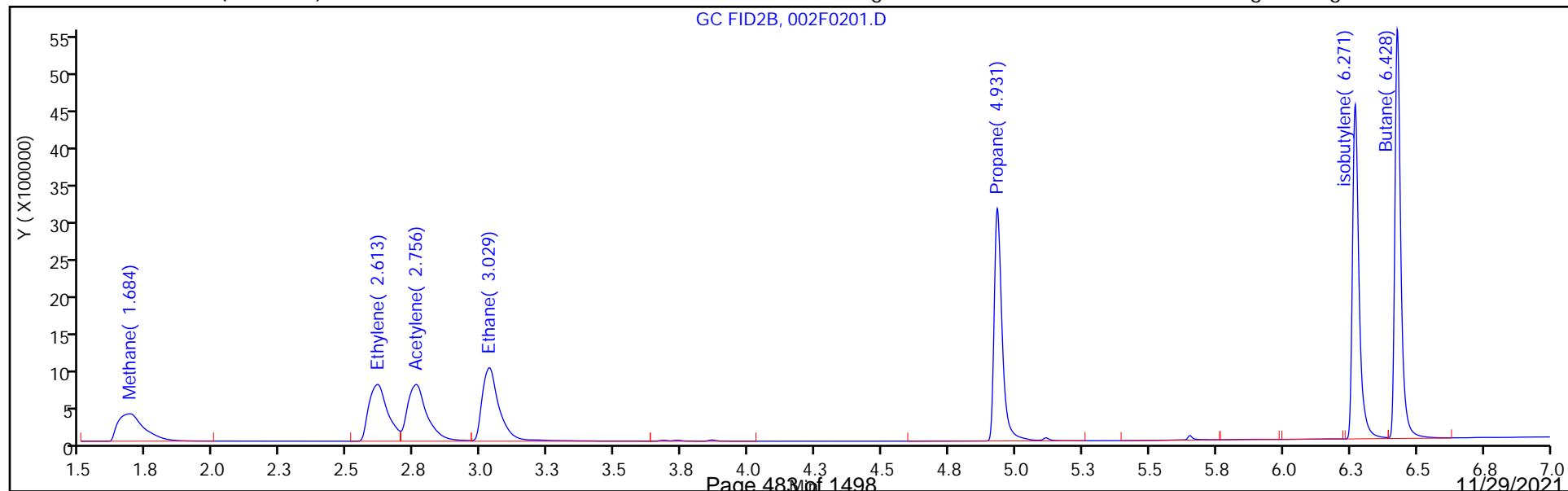
Column: Rt-Alumina BOND/KCl ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I  
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: \_\_\_\_\_ Lab Sample ID: LCSD 280-556811/3  
Matrix: Water Lab File ID: 003F0301.D  
Analysis Method: RSK-175 Date Collected: \_\_\_\_\_  
Sample wt/vol: 20 (mL) Date Analyzed: 11/09/2021 18:00  
Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
Soil Extract Vol.: \_\_\_\_\_ GC Column: HP-Plot Q ID: 0.53 (mm)  
% Moisture: \_\_\_\_\_ Level: (low/med) Low  
Analysis Batch No.: 556811 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0665		0.0050	0.0013	0.00063

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211109-106343.b\003F0301.D  
 Lims ID: lcsd  
 Client ID:  
 Sample Type: LCSD  
 Inject. Date: 09-Nov-2021 18:00:59 ALS Bottle#: 3 Worklist Smp#: 3  
 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\20211109-106343.b\RSK\_J.m  
 Limit Group: GCV - RSK 175  
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175  
 Last Update: 15-Nov-2021 12:57:13 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: CTX1658

First Level Reviewer: sciannac Date: 12-Nov-2021 09:18:09

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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## 2 Methane

1	1.296	1.302	-0.006	2361311	65.7	65.3	
2	1.682	1.690	-0.008	2464511	65.7	66.5	
RPD = 1.89							

## 3 Ethane

1	1.550	1.550	0.000	4246015	123.2	127.7	
2	3.028	3.030	-0.002	4359024	123.2	130.6	
RPD = 2.20							

## 4 Ethylene

1	1.840	1.828	0.012	4177601	114.9	118.6	
2	2.608	2.612	-0.004	3684639	114.9	118.9	
RPD = 0.29							

## 5 Propane

1	2.641	2.608	0.033	6763739	180.6	187.8	a
2	4.930	4.930	0.000	6511914	180.6	186.0	a
RPD = 0.98							

## 6 Acetylene

1	4.171	4.032	0.139	3096120	106.7	110.0	a
2	2.753	2.755	-0.002	3900587	106.7	114.1	a
RPD = 3.65							

## 7 Butane

1	4.511	4.423	0.088	9114747	238.1	250.3	a
2	6.428	6.428	0.000	8653308	238.1	246.3	a
RPD = 1.61							

## 8 isobutylene

1	5.398	5.282	0.116	8564739	229.8	237.1	a
2	6.270	6.270	0.000	7817510	229.8	235.4	a
RPD = 0.69							

**QC Flag Legend**

Processing Flags

Review Flags

a - User Assigned ID

**Reagents:**

RSK7gasMathes\_00034

Amount Added: 200.00

Units: uL

Report Date: 15-Nov-2021 12:57:15

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211109-106343.b\003F0301.D

Injection Date: 09-Nov-2021 18:00:59

Instrument ID: VGC\_J

Operator ID: sciannac

Lims ID: lc3d

Worklist Smp#: 3

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

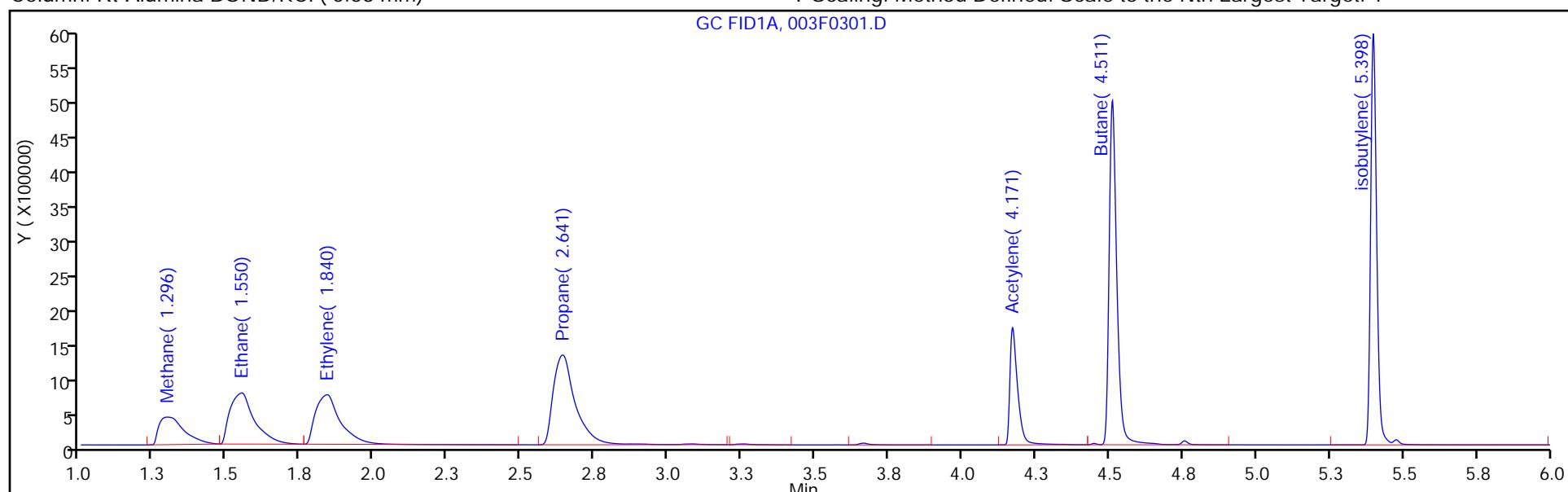
ALS Bottle#: 3

Method: RSK\_J

Limit Group: GCV - RSK 175

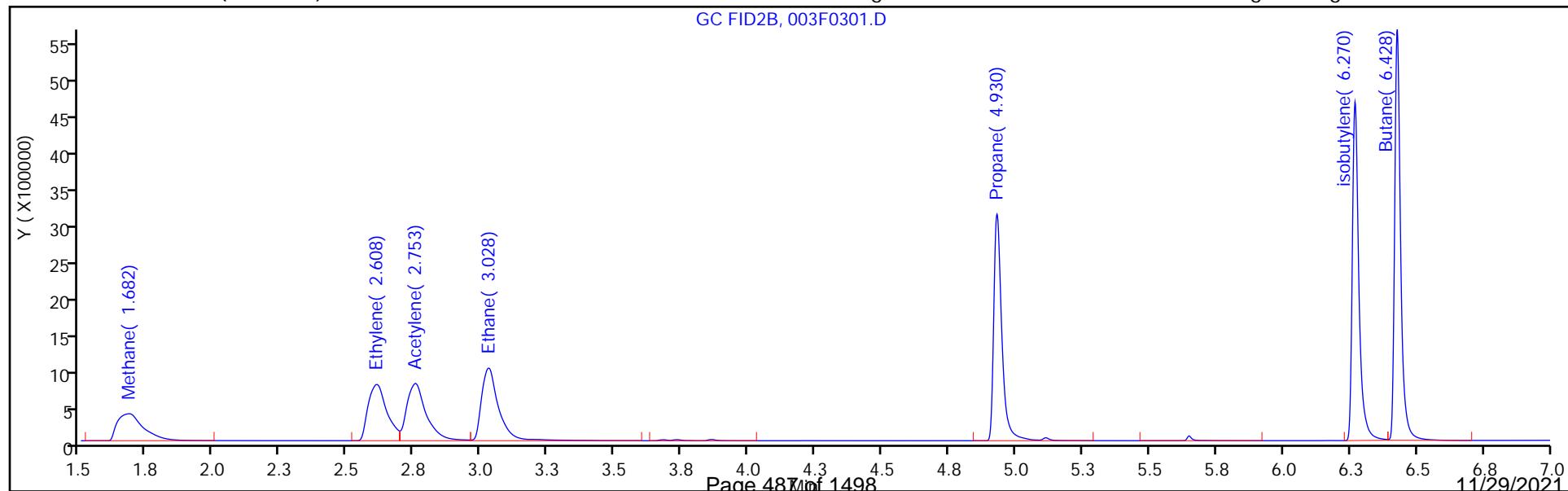
Column: Rt-Alumina BOND/KCl ( 0.53 mm)

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 TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: \_\_\_\_\_ Lab Sample ID: LCSD 280-556939/3  
Matrix: Water Lab File ID: 003F0301.D  
Analysis Method: RSK-175 Date Collected: \_\_\_\_\_  
Sample wt/vol: 20 (mL) Date Analyzed: 11/10/2021 12:17  
Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
Soil Extract Vol.: \_\_\_\_\_ GC Column: HP-Plot Q ID: 0.53 (mm)  
% Moisture: \_\_\_\_\_ Level: (low/med) Low  
Analysis Batch No.: 556939 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0661		0.0050	0.0013	0.00063

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211110-106374.b\003F0301.D  
 Lims ID: lcsd  
 Client ID:  
 Sample Type: LCSD  
 Inject. Date: 10-Nov-2021 12:17:48 ALS Bottle#: 3 Worklist Smp#: 3  
 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\20211110-106374.b\RSK\_J.m  
 Limit Group: GCV - RSK 175  
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175  
 Last Update: 15-Nov-2021 15:35:57 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: CTX1649

First Level Reviewer: sciannac Date: 12-Nov-2021 10:31:58

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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2 Methane

1	1.294	1.299	-0.005	2349240	65.7	64.9	
2	1.683	1.686	-0.003	2447627	65.7	66.1	
						RPD = 1.72	

3 Ethane

1	1.553	1.553	0.000	4129640	123.2	124.2	
2	3.028	3.024	0.004	4234747	123.2	126.9	
						RPD = 2.09	

4 Ethylene

1	1.849	1.844	0.005	4083002	114.9	115.9	
2	2.609	2.608	0.001	3594561	114.9	116.0	
						RPD = 0.10	

5 Propane

1	2.659	2.648	0.011	6380562	180.6	177.2	
2	4.929	4.928	0.001	6148584	180.6	175.6	
						RPD = 0.89	

6 Acetylene

1	4.189	4.113	0.076	2974775	106.7	105.7	a
2	2.753	2.751	0.002	3760025	106.7	110.0	a
						RPD = 3.98	

7 Butane

1	4.524	4.481	0.043	7980895	238.1	219.1	a
2	6.428	6.428	0.000	7695233	238.1	219.0	M
						RPD = 0.06	

8 isobutylene

1	5.413	5.348	0.065	7642472	229.8	211.6	
2	6.269	6.269	0.000	7007176	229.8	211.0	M
						RPD = 0.24	

**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: 15-Nov-2021 15:35:58

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211110-106374.b\003F0301.D

Injection Date: 10-Nov-2021 12:17:48

Instrument ID: VGC\_J

Operator ID: sciannac

Lims ID: lcsd

Worklist Smp#: 3

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

ALS Bottle#: 3

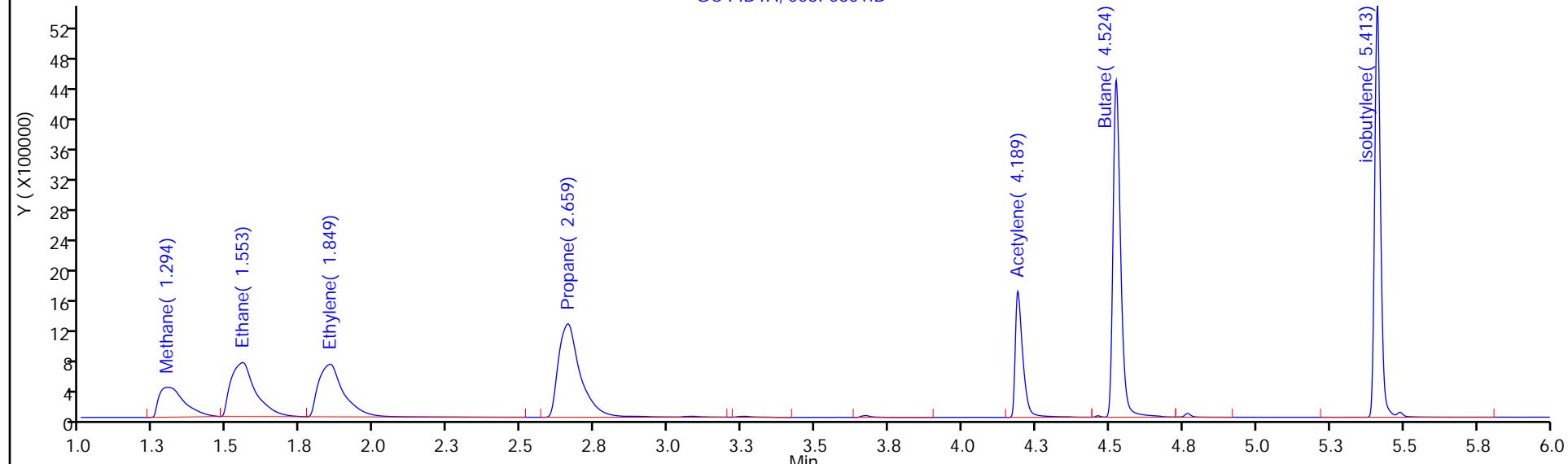
Method: RSK\_J

Limit Group: GCV - RSK 175

Column: Rt-Alumina BOND/KCl ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

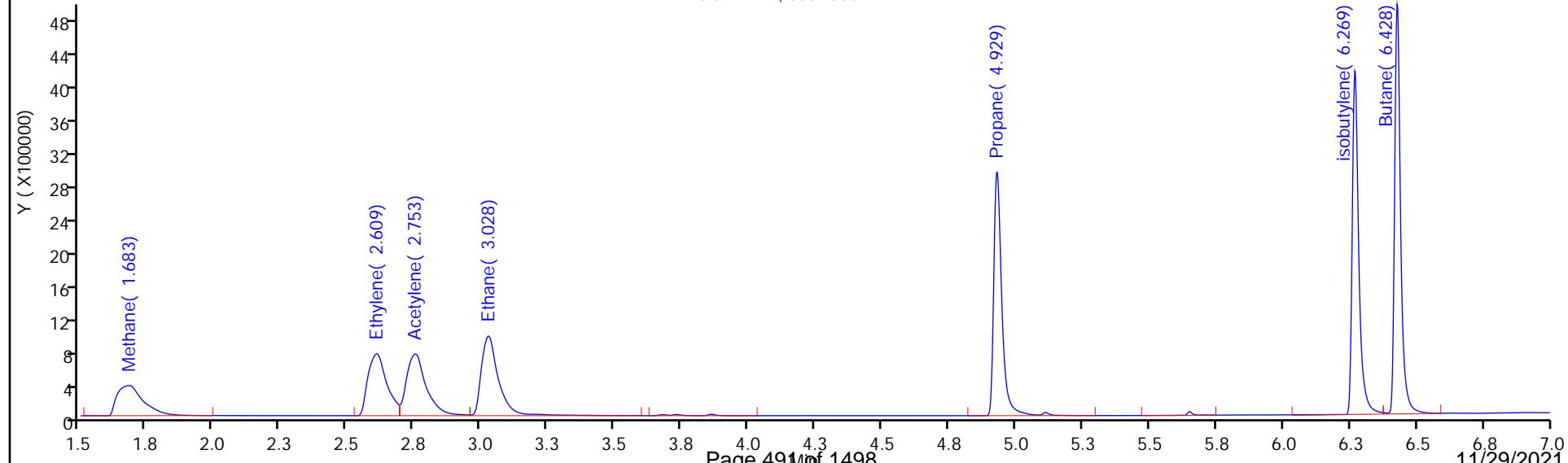
GC FID1A, 003F0301.D



Column: HP-PLOT/Q ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

GC FID2B, 003F0301.D



FORM I  
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.:  
Client Sample ID: NW062-7 MS Lab Sample ID: 280-155048-7 MS  
Matrix: Water Lab File ID: 019F1901.D  
Analysis Method: RSK-175 Date Collected: 11/02/2021 12:50  
Sample wt/vol: 20 (mL) Date Analyzed: 11/10/2021 15:45  
Soil Aliquot Vol: Dilution Factor: 1  
Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53 (mm)  
% Moisture: Level: (low/med) Low  
Analysis Batch No.: 556939 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0884		0.0050	0.0013	0.00063

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211110-106374.b\019F1901.D  
 Lims ID: 280-155048-I-7 MS  
 Client ID: NW062-7  
 Sample Type: MS  
 Inject. Date: 10-Nov-2021 15:45:28 ALS Bottle#: 19 Worklist Smp#: 19  
 Purge Vol: 18.000 mL Dil. Factor: 1.0000  
 Sample Info: 280-155048-I-7MS  
 Operator ID: sciannac Instrument ID: VGC\_J  
 Method: \\chromfs\Denver\ChromData\VGC\_J\20211110-106374.b\RSK\_J.m  
 Limit Group: GCV - RSK 175  
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175  
 Last Update: 15-Nov-2021 15:36:04 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: CTX1649

First Level Reviewer: meierg Date: 15-Nov-2021 15:34:09

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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## \$ 1 1,1,1-Trifluoroethane

1	4.362	ND
2	5.458	

## 2 Methane

1	1.289	1.299	-0.010	3188834	65.7	88.8
2	1.670	1.686	-0.016	3252607	65.7	88.4

RPD = 0.51

## 3 Ethane

1	1.550	1.553	-0.003	4215409	123.2	126.8
2	3.009	3.024	-0.015	4276609	123.2	128.1

RPD = 1.02

## 4 Ethylene

1	1.859	1.844	0.015	4151618	114.9	117.9
2	2.589	2.608	-0.019	3590174	114.9	115.9

M RPD = 1.69

## 5 Propane

1	2.677	2.648	0.029	6652971	180.6	184.7
2	4.917	4.928	-0.011	6577308	180.6	187.9

RPD = 1.67

## 6 Acetylene

1	4.113	ND	ND
2	2.751		

## 7 Butane

1	4.559	4.481	0.078	8620824	238.1	236.7
2	6.417	6.428	-0.011	67753294	238.1	1928.2

E RPD = 156.27

## 8 isobutylene

1	5.352	5.348	0.004	9536670	229.8	264.0
2	6.259	6.269	-0.010	43003404	229.8	1295.2

E RPD = 132.27

**QC Flag Legend**

Processing Flags

ND - Not Detected or Marked ND

E - Exceeded Maximum Amount

Review Flags

M - Manually Integrated

**Reagents:**

RSK7gasMathes\_00034

Amount Added: 200.00

Units: uL

Report Date: 15-Nov-2021 15:36:05

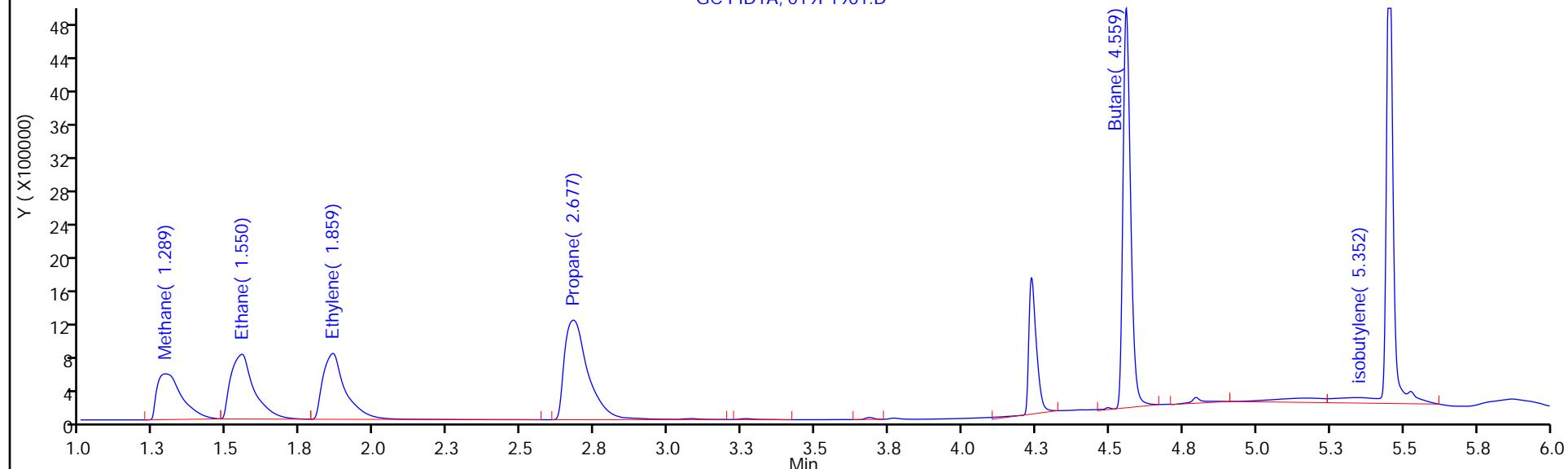
Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211110-106374.b\019F1901.D  
 Injection Date: 10-Nov-2021 15:45:28 Instrument ID: VGC\_J  
 Lims ID: 280-155048-I-7 MS Operator ID: sciannac  
 Client ID: NW062-7 Worklist Smp#: 19  
 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

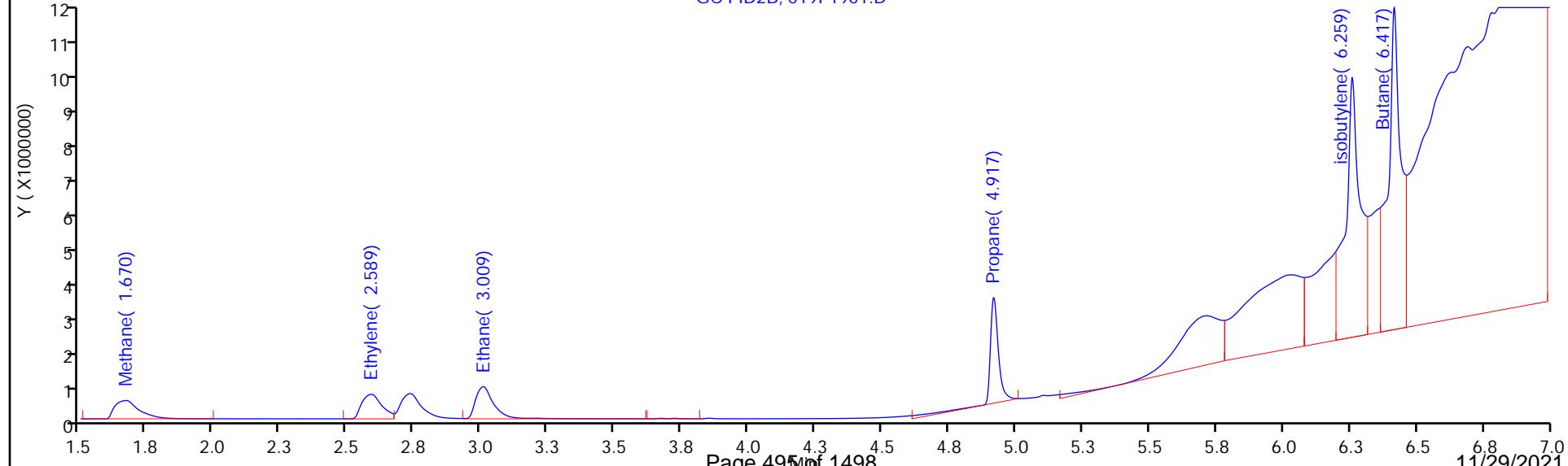
GC FID1A, 019F1901.D



Column: HP-PLOT/Q ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

GC FID2B, 019F1901.D



FORM I  
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.:  
Client Sample ID: G0070-7 MS Lab Sample ID: 280-155048-8 MS  
Matrix: Water Lab File ID: 017F1701.D  
Analysis Method: RSK-175 Date Collected: 11/01/2021 14:25  
Sample wt/vol: 20 (mL) Date Analyzed: 11/09/2021 21:03  
Soil Aliquot Vol: Dilution Factor: 1  
Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53 (mm)  
% Moisture: Level: (low/med) Low  
Analysis Batch No.: 556811 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0669		0.0050	0.0013	0.00063

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211109-106343.b\017F1701.D  
 Lims ID: 280-155048-H-8 MS  
 Client ID: G0070-7  
 Sample Type: MS  
 Inject. Date: 09-Nov-2021 21:03:06 ALS Bottle#: 17 Worklist Smp#: 17  
 Purge Vol: 18.000 mL Dil. Factor: 1.0000  
 Sample Info: 280-155048-I-8MS  
 Operator ID: sciannac Instrument ID: VGC\_J  
 Method: \\chromfs\Denver\ChromData\VGC\_J\20211109-106343.b\RSK\_J.m  
 Limit Group: GCV - RSK 175  
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175  
 Last Update: 15-Nov-2021 12:57:20 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: 12-Nov-2021 10:11:42

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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## \$ 1 1,1,1-Trifluoroethane

1	4.362	ND
2	5.458	

## 2 Methane

1	1.287	1.302	-0.015	2432576	65.7	67.3
2	1.669	1.690	-0.021	2477120	65.7	66.9

RPD = 0.64

## 3 Ethane

1	1.547	1.550	-0.003	4307585	123.2	129.6
2	3.010	3.030	-0.020	4349744	123.2	130.3

RPD = 0.55

## 4 Ethylene

1	1.859	1.828	0.031	4230768	114.9	120.1
2	2.590	2.612	-0.022	3560222	114.9	114.9 M

RPD = 4.41

## 5 Propane

1	2.680	2.608	0.072	6781161	180.6	188.3 a
2	4.922	4.930	-0.008	6492919	180.6	185.5 a

RPD = 1.53

## 6 Acetylene

1	4.235	4.032	0.203	3136147	106.7	111.5 a
2	2.735	2.755	-0.020	3787278	106.7	110.8 M

RPD = 0.58

## 7 Butane

1	4.564	4.423	0.141	9076516	238.1	249.2 a
2	6.422	6.428	-0.006	8676345	238.1	246.9 M

RPD = 0.92

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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8 isobutylene Ma  
1 5.455 5.282 0.173 8534201 229.8 236.2 a  
2 6.264 6.270 -0.006 7709513 229.8 232.2 M  
RPD = 1.73

### 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: 15-Nov-2021 12:57:23

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211109-106343.b\017F1701.D

Injection Date: 09-Nov-2021 21:03:06

Instrument ID: VGC\_J

Operator ID: sciannac

Lims ID: 280-155048-H-8 MS

Worklist Smp#: 17

Client ID: G0070-7

Purge Vol: 18.000 mL

Method: RSK\_J

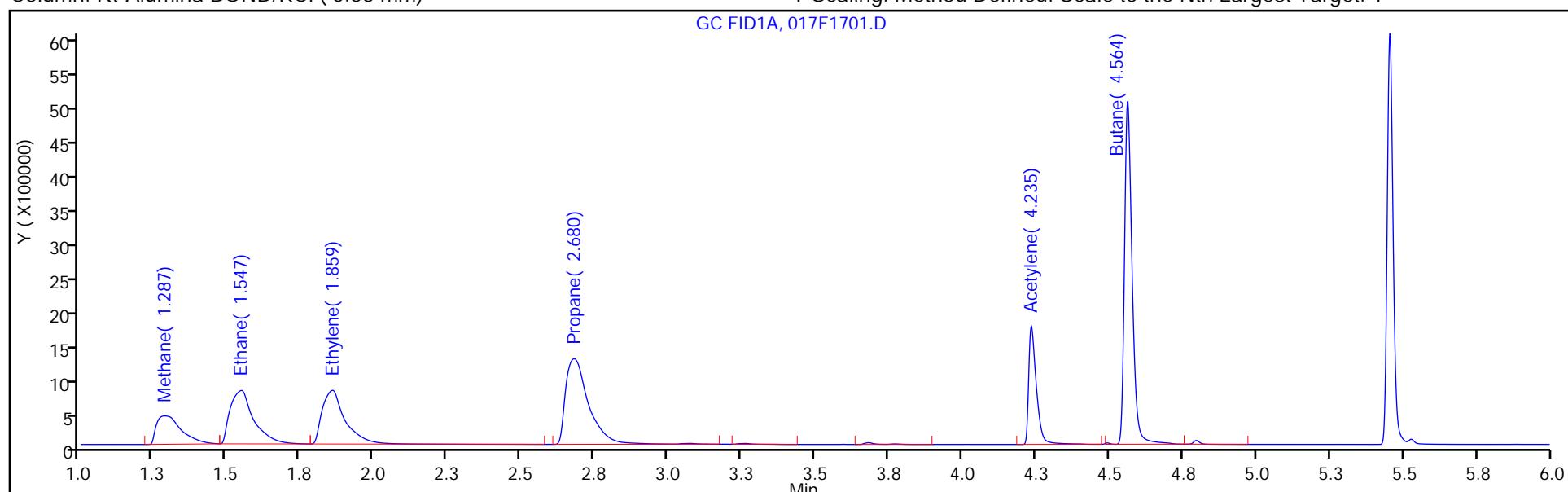
Dil. Factor: 1.0000

Limit Group: GCV - RSK 175

ALS Bottle#: 17

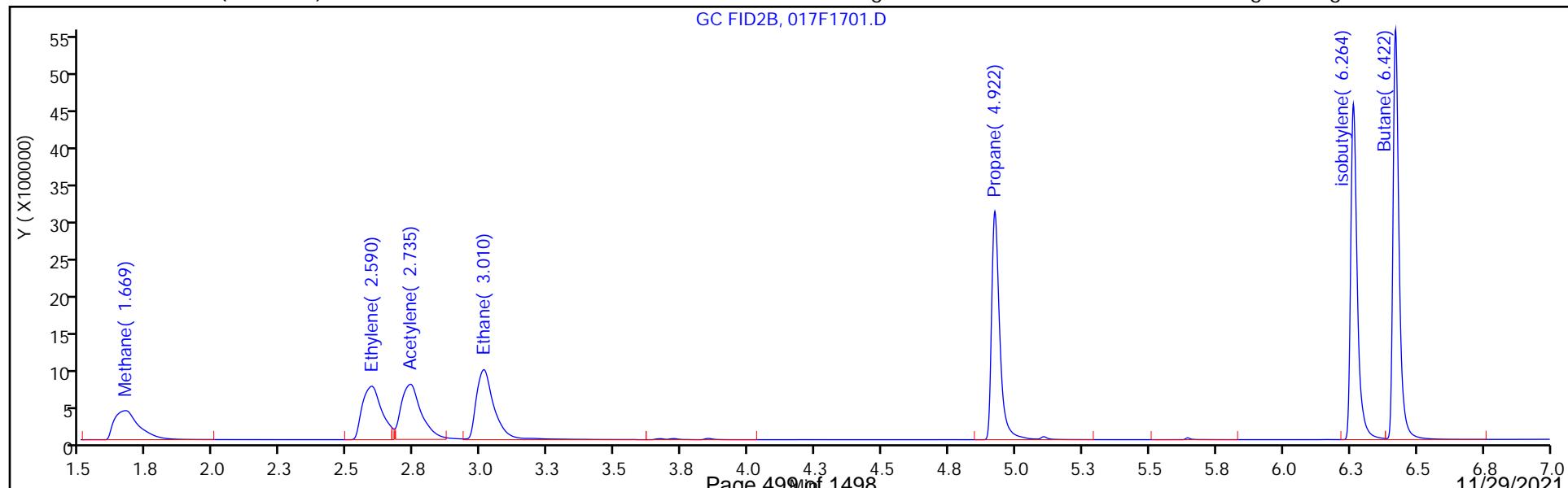
Column: Rt-Alumina BOND/KCl ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I  
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.:  
Client Sample ID: NW062-7 MSD Lab Sample ID: 280-155048-7 MSD  
Matrix: Water Lab File ID: 020F2001.D  
Analysis Method: RSK-175 Date Collected: 11/02/2021 12:50  
Sample wt/vol: 20 (mL) Date Analyzed: 11/10/2021 15:58  
Soil Aliquot Vol: Dilution Factor: 1  
Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53 (mm)  
% Moisture: Level: (low/med) Low  
Analysis Batch No.: 556939 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0891		0.0050	0.0013	0.00063

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211110-106374.b\020F2001.D  
 Lims ID: 280-155048-I-7 MSD  
 Client ID: NW062-7  
 Sample Type: MSD  
 Inject. Date: 10-Nov-2021 15:58:41 ALS Bottle#: 20 Worklist Smp#: 20  
 Purge Vol: 18.000 mL Dil. Factor: 1.0000  
 Sample Info: 280-155048-I-7MS  
 Operator ID: sciannac Instrument ID: VGC\_J  
 Method: \\chromfs\Denver\ChromData\VGC\_J\20211110-106374.b\RSK\_J.m  
 Limit Group: GCV - RSK 175  
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175  
 Last Update: 15-Nov-2021 15:36:04 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: CTX1649

First Level Reviewer: meierg Date: 15-Nov-2021 15:34:18

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
-----	-----------	---------------	---------------	----------	--------------	----------------	-------

## \$ 1 1,1,1-Trifluoroethane

1	4.362	ND
2	5.458	

## 2 Methane

1	1.290	1.299	-0.009	3219451	65.7	89.7
2	1.672	1.686	-0.014	3281145	65.7	89.1

RPD = 0.59

## 3 Ethane

1	1.550	1.553	-0.003	4223305	123.2	127.1
2	3.008	3.024	-0.016	4179042	123.2	125.2

RPD = 1.48

## 4 Ethylene

1	1.860	1.844	0.016	4155760	114.9	118.0
2	2.592	2.608	-0.016	3575245	114.9	115.4

RPD = 2.20

## 5 Propane

1	2.680	2.648	0.032	6676644	180.6	185.4
2	4.918	4.928	-0.010	6069328	180.6	173.4

RPD = 6.72

## 6 Acetylene

1	4.113	ND	ND
2	2.751		

## 7 Butane

1	4.481	ND	ND
2	6.428		

## 8 Isobutylene

1	5.272	5.348	-0.076	2085372	229.8	57.7
2	6.262	6.269	-0.007	49497515	229.8	1490.8 E

E

RPD = 185.09

**QC Flag Legend**

Processing Flags

ND - Not Detected or Marked ND

E - Exceeded Maximum Amount

**Reagents:**

RSK7gasMathes\_00034

Amount Added: 200.00

Units: uL

Report Date: 15-Nov-2021 15:36:06

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211110-106374.b\020F2001.D

Injection Date: 10-Nov-2021 15:58:41

Instrument ID: VGC\_J

Operator ID: sciannac

Lims ID: 280-155048-I-7 MSD

Worklist Smp#: 20

Client ID: NW062-7

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

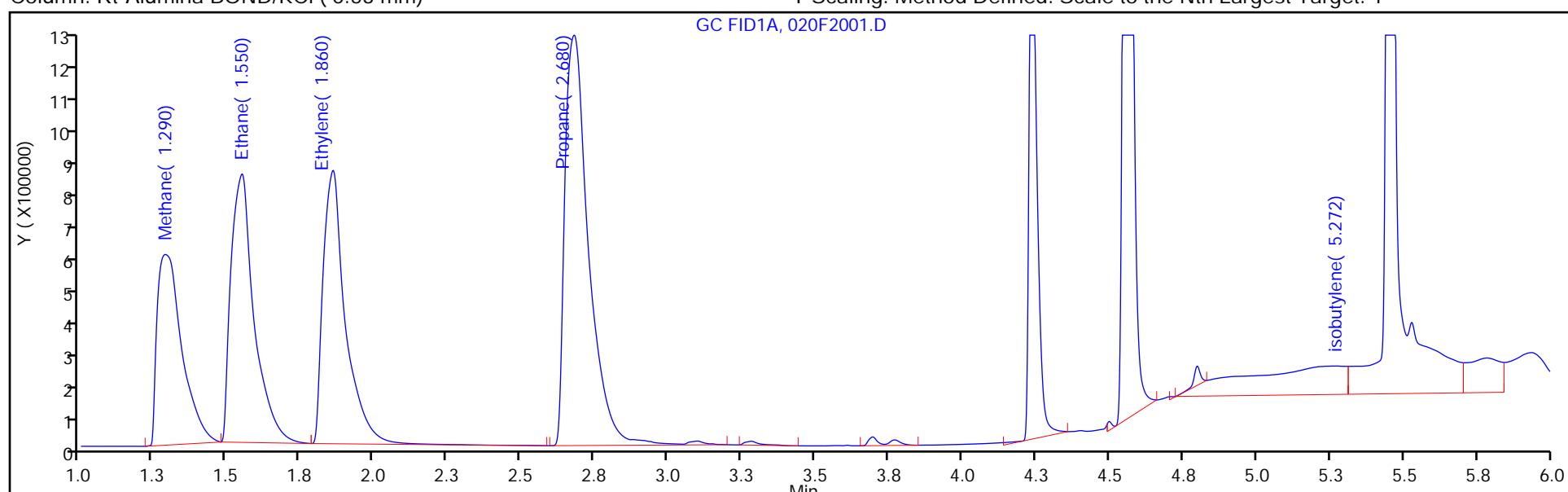
ALS Bottle#: 20

Method: RSK\_J

Limit Group: GCV - RSK 175

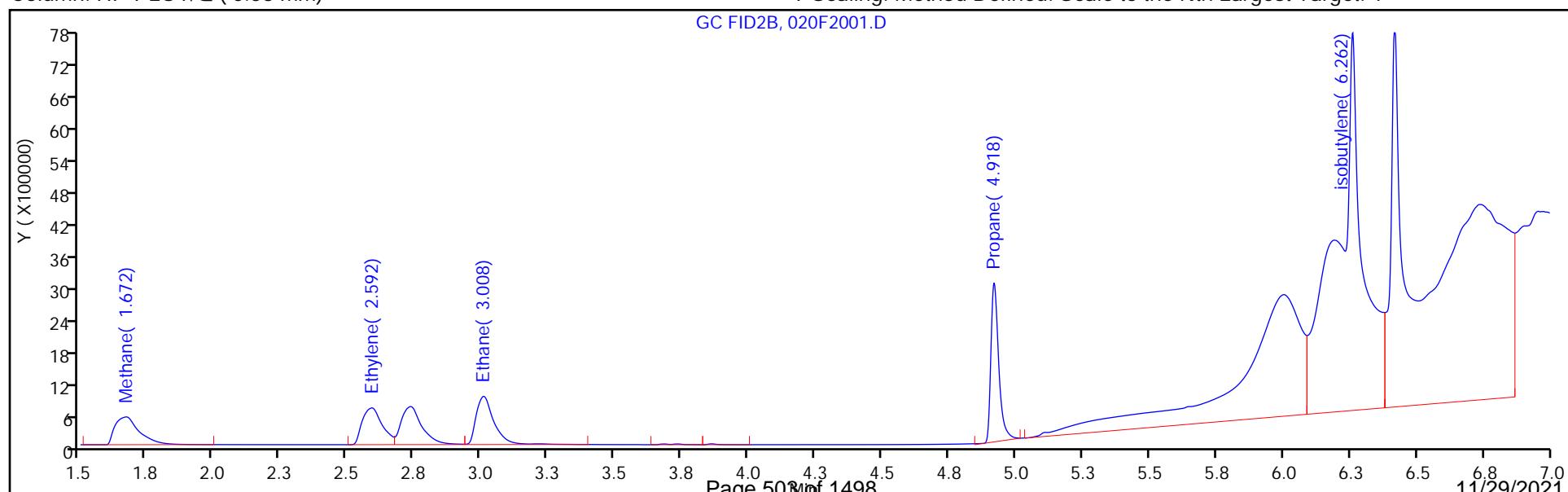
Column: Rt-Alumina BOND/KCl ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I  
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: G0070-7 MSD Lab Sample ID: 280-155048-8 MSD  
Matrix: Water Lab File ID: 018F1801.D  
Analysis Method: RSK-175 Date Collected: 11/01/2021 14:25  
Sample wt/vol: 20 (mL) Date Analyzed: 11/09/2021 21:16  
Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
Soil Extract Vol.: \_\_\_\_\_ GC Column: HP-Plot Q ID: 0.53 (mm)  
% Moisture: \_\_\_\_\_ Level: (low/med) Low  
Analysis Batch No.: 556811 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0669		0.0050	0.0013	0.00063

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211109-106343.b\018F1801.D  
 Lims ID: 280-155048-I-8 MSD  
 Client ID: G0070-7  
 Sample Type: MSD  
 Inject. Date: 09-Nov-2021 21:16:02 ALS Bottle#: 18 Worklist Smp#: 18  
 Purge Vol: 18.000 mL Dil. Factor: 1.0000  
 Sample Info: ccv  
 Operator ID: sciannac Instrument ID: VGC\_J  
 Method: \\chromfs\Denver\ChromData\VGC\_J\20211109-106343.b\RSK\_J.m  
 Limit Group: GCV - RSK 175  
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175  
 Last Update: 15-Nov-2021 15:27:35 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: CTX1649

First Level Reviewer: meierg Date: 15-Nov-2021 15:27:35

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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## \$ 1 1,1,1-Trifluoroethane

1	4.362	ND
2	5.458	

## 2 Methane

1	1.286	1.302	-0.016	2428819	65.7	67.2
2	1.670	1.690	-0.020	2479096	65.7	66.9

RPD = 0.40

## 3 Ethane

1	1.548	1.550	-0.002	4305166	123.2	129.5
2	3.008	3.030	-0.022	4342088	123.2	130.1

RPD = 0.43

## 4 Ethylene

1	1.858	1.828	0.030	4221108	114.9	119.8
2	2.590	2.612	-0.022	3612778	114.9	116.6 M

RPD = 2.72

## 5 Propane

1	2.681	2.608	0.073	6771407	180.6	188.0 a
2	4.923	4.930	-0.007	6480791	180.6	185.1 a

RPD = 1.57

## 6 Acetylene

1	4.236	4.032	0.204	3068563	106.7	109.1 a
2	2.735	2.755	-0.020	3676094	106.7	107.6 M

RPD = 1.38

## 7 Butane

1	4.563	4.423	0.140	9123859	238.1	250.5 a
2	6.423	6.428	-0.005	8611840	238.1	245.1 M

RPD = 2.19

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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8 isobutylene Ma  
1 5.455 5.282 0.173 8453577 229.8 234.0 a  
2 6.265 6.270 -0.005 7637111 229.8 230.0 M  
RPD = 1.72

### 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: 15-Nov-2021 15:27:35

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211109-106343.b\018F1801.D

Injection Date: 09-Nov-2021 21:16:02

Instrument ID: VGC\_J

Operator ID: sciannac

Lims ID: 280-155048-I-8 MSD

Worklist Smp#: 18

Client ID: G0070-7

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

ALS Bottle#: 18

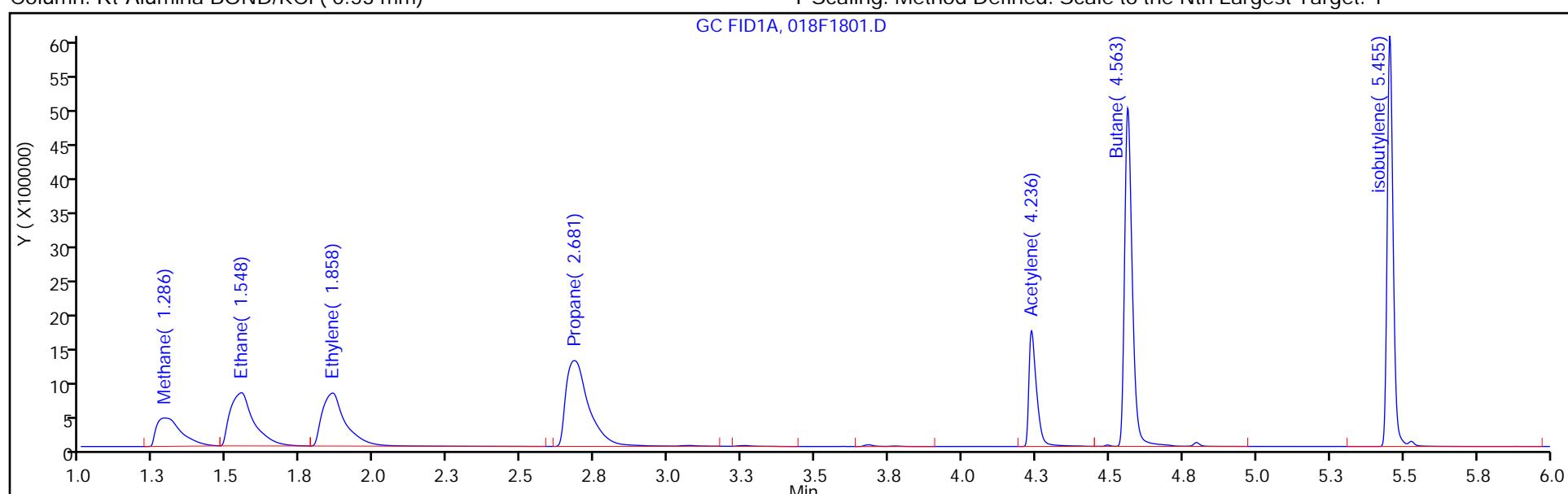
Method: RSK\_J

Limit Group: GCV - RSK 175

Column: Rt-Alumina BOND/KCl ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

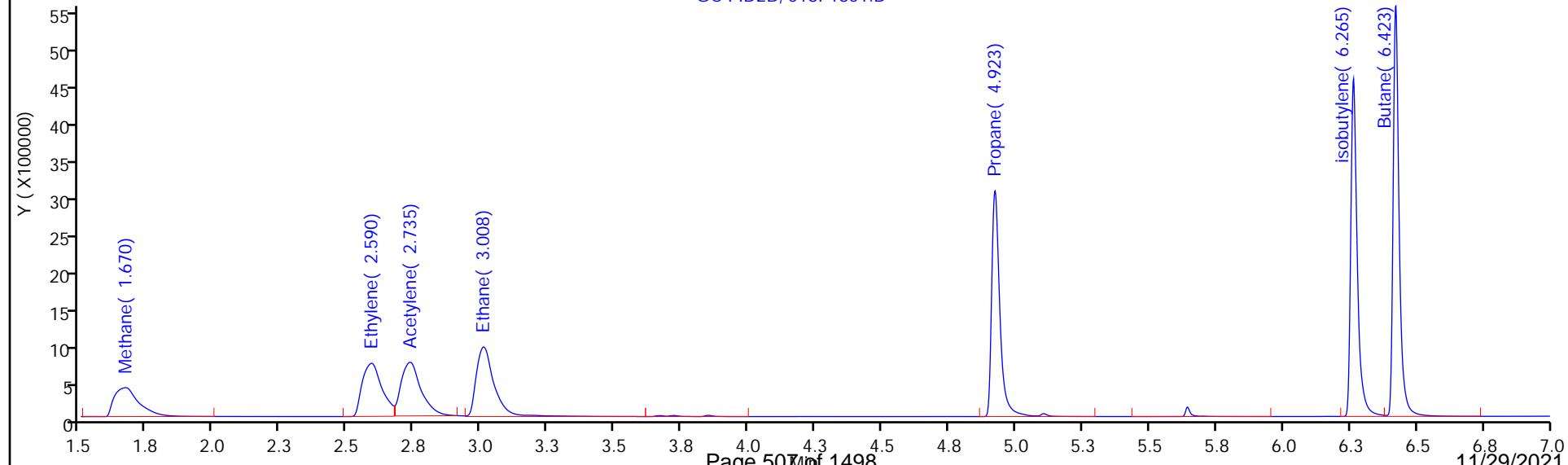
GC FID1A, 018F1801.D



Column: HP-PLOT/Q ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

GC FID2B, 018F1801.D



FORM I  
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.:  
Client Sample ID: NW062-7 DU Lab Sample ID: 280-155048-7 DU  
Matrix: Water Lab File ID: 018F1801.D  
Analysis Method: RSK-175 Date Collected: 11/02/2021 12:50  
Sample wt/vol: 20 (mL) Date Analyzed: 11/10/2021 15:32  
Soil Aliquot Vol: Dilution Factor: 1  
Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53 (mm)  
% Moisture: Level: (low/med) Low  
Analysis Batch No.: 556939 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0238		0.0050	0.0013	0.00063

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211110-106374.b\018F1801.D  
 Lims ID: 280-155048-G-7 DU  
 Client ID:  
 Sample Type: DU  
 Inject. Date: 10-Nov-2021 15:32:32 ALS Bottle#: 18 Worklist Smp#: 18  
 Purge Vol: 18.000 mL Dil. Factor: 1.0000  
 Sample Info: 280-155048-G-7  
 Operator ID: sciannac Instrument ID: VGC\_J  
 Method: \\chromfs\Denver\ChromData\VGC\_J\20211110-106374.b\RSK\_J.m  
 Limit Group: GCV - RSK 175  
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175  
 Last Update: 15-Nov-2021 15:36:04 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: CTX1649

First Level Reviewer: meierg Date: 15-Nov-2021 15:33:30

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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\$ 1 1,1,1-Trifluoroethane

1	4.362	ND
2	5.458	

2 Methane

1	1.289	1.299	-0.010	943462	25.0
2	1.671	1.686	-0.015	922310	23.8

RPD = 4.74

3 Ethane

1	1.553	ND
2	3.024	

4 Ethylene

1	1.844	ND
2	2.608	

5 Propane

1	2.648	ND
2	4.928	

6 Acetylene

1	4.113	ND
2	2.751	

7 Butane

1	4.481	ND
2	6.428	

8 isobutylene

1	5.348	ND
2	6.269	

**QC Flag Legend**

Processing Flags

Report Date: 15-Nov-2021 15:36:05

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211110-106374.b\018F1801.D

Injection Date: 10-Nov-2021 15:32:32

Instrument ID: VGC\_J

Operator ID: sciannac

Lims ID: 280-155048-G-7 DU

Worklist Smp#: 18

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

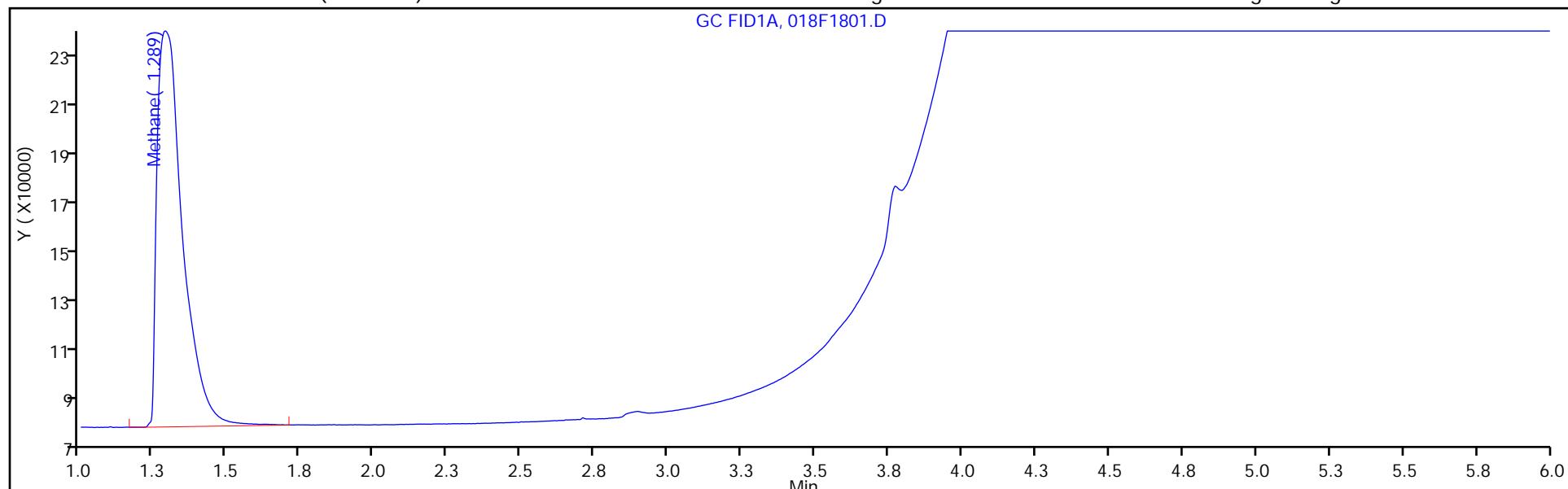
ALS Bottle#: 18

Method: RSK\_J

Limit Group: GCV - RSK 175

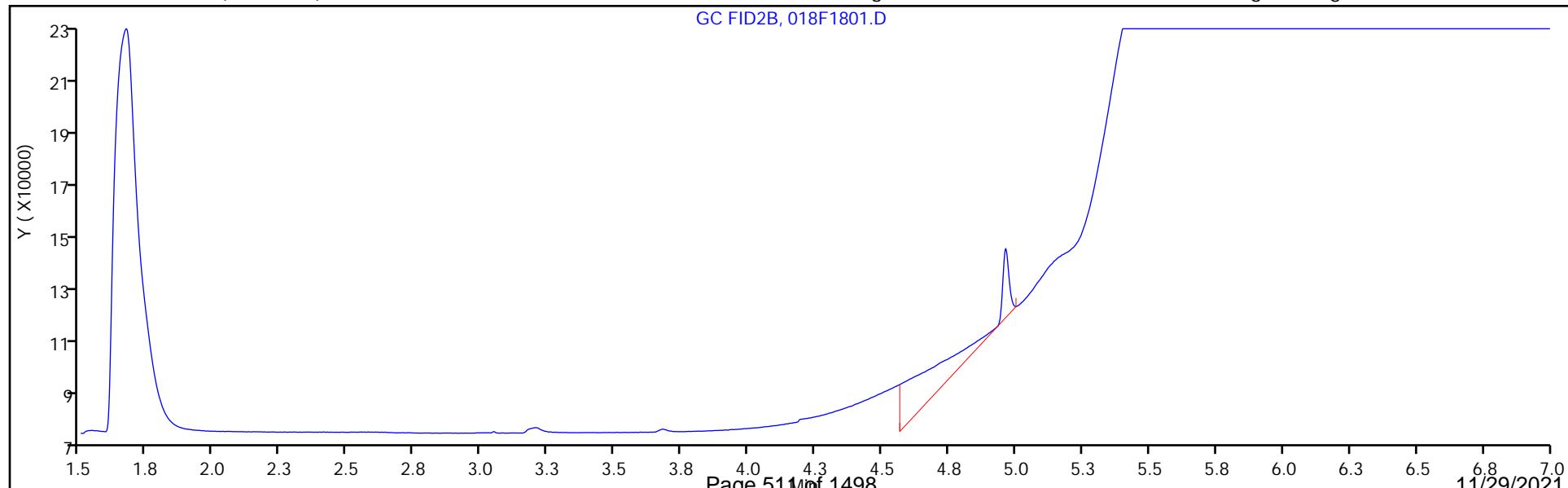
Column: Rt-Alumina BOND/KCl ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q ( 0.53 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I  
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.:  
Client Sample ID: G0070-7 DU Lab Sample ID: 280-155048-8 DU  
Matrix: Water Lab File ID: 016F1601.D  
Analysis Method: RSK-175 Date Collected: 11/01/2021 14:25  
Sample wt/vol: 20 (mL) Date Analyzed: 11/09/2021 20:50  
Soil Aliquot Vol: Dilution Factor: 1  
Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53 (mm)  
% Moisture: Level: (low/med) Low  
Analysis Batch No.: 556811 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.000782	J	0.0050	0.0013	0.00063

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211109-106343.b\016F1601.D  
 Lims ID: 280-155048-H-8 DU  
 Client ID:  
 Sample Type: DU  
 Inject. Date: 09-Nov-2021 20:50:09      ALS Bottle#: 16      Worklist Smp#: 16  
 Purge Vol: 18.000 mL      Dil. Factor: 1.0000  
 Sample Info: 280-155048-H-8MS  
 Operator ID: sciannac      Instrument ID: VGC\_J  
 Method: \\chromfs\Denver\ChromData\VGC\_J\20211109-106343.b\RSK\_J.m  
 Limit Group: GCV - RSK 175  
 Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175  
 Last Update: 15-Nov-2021 12:57:20      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: 12-Nov-2021 10:07:15

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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## \$ 1 1,1,1-Trifluoroethane

1	4.362	ND
2	5.458	

## 2 Methane

1	1.280	1.302	-0.022	99345	0.9668
2	1.668	1.690	-0.022	90864	0.7819

RPD = 21.14

## 3 Ethane

1	1.550	ND
2	3.030	

## 4 Ethylene

1	1.828	ND
2	2.612	

## 5 Propane

1	2.608	ND
2	4.930	

## 6 Acetylene

1	4.032	ND
2	2.755	

## 7 Butane

1	4.423	ND
2	6.428	

## 8 isobutylene

1	5.282	ND
2	6.270	

**QC Flag Legend**

Processing Flags

Report Date: 15-Nov-2021 12:57:22

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\VGC\_J\20211109-106343.b\016F1601.D

Injection Date: 09-Nov-2021 20:50:09

Instrument ID: VGC\_J

Operator ID: sciannac

Lims ID: 280-155048-H-8 DU

Worklist Smp#: 16

Client ID:

Purge Vol: 18.000 mL

Dil. Factor: 1.0000

ALS Bottle#: 16

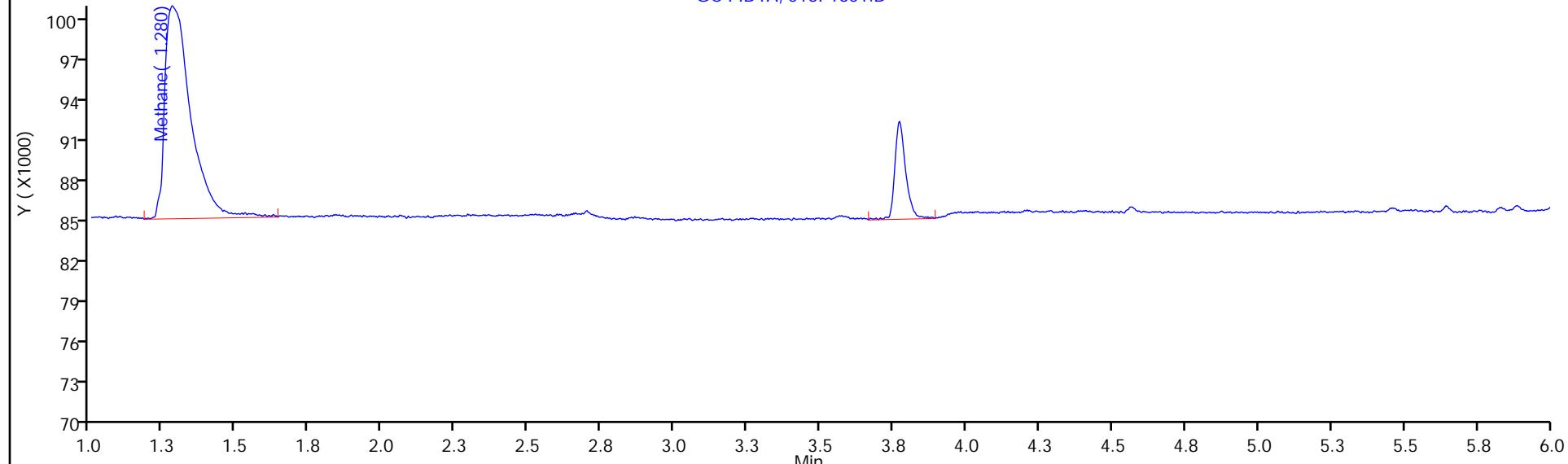
Method: RSK\_J

Limit Group: GCV - RSK 175

Column: Rt-Alumina BOND/KCl ( 0.53 mm)

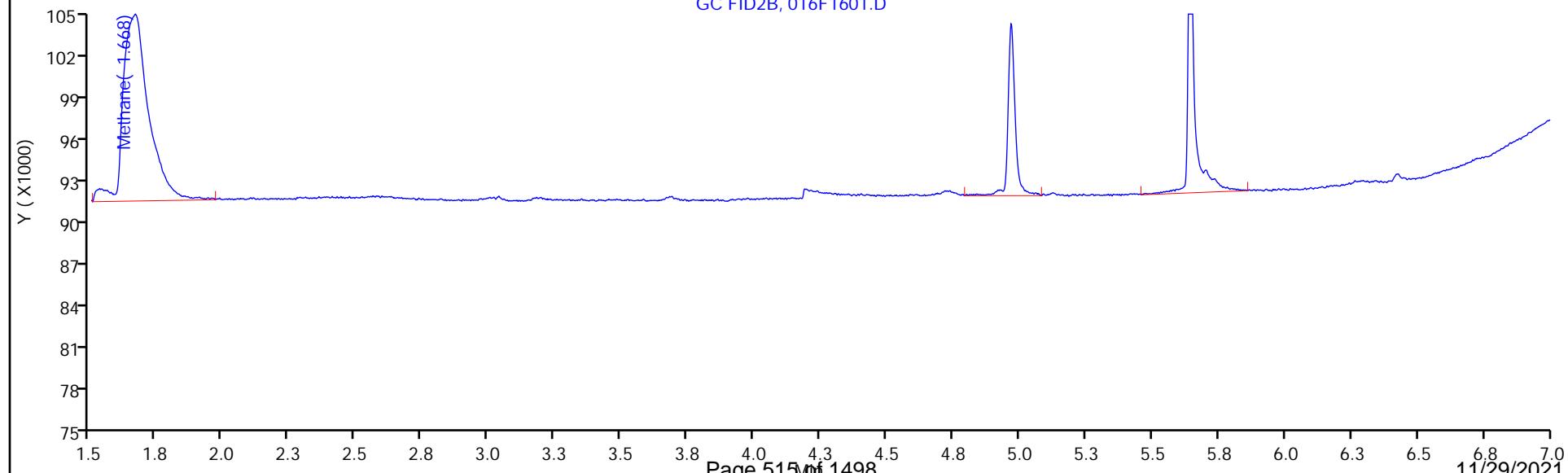
Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

GC FID1A, 016F1601.D



Column: HP-PLOT/Q ( 0.53 mm)

GC FID2B, 016F1601.D



## GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, DenverJob No.: 280-155048-1

SDG No.:

Instrument ID: VGC\_JStart Date: 09/24/2021 13:16Analysis Batch Number: 550959End 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 TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Instrument ID: VGC\_J

Start Date: 11/09/2021 17:35

Analysis Batch Number: 556811

End Date: 11/09/2021 23:25

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 280-556811/1		11/09/2021 17:35	1	001F0101.D	Rt-Alumina KCl 0.53(mm)
CCVRT 280-556811/1		11/09/2021 17:35	1	001F0101.D	HP-Plot Q 0.53(mm)
LCS 280-556811/2		11/09/2021 17:48	1	002F0201.D	Rt-Alumina KCl 0.53(mm)
LCS 280-556811/2		11/09/2021 17:48	1	002F0201.D	HP-Plot Q 0.53(mm)
LCSD 280-556811/3		11/09/2021 18:00	1	003F0301.D	Rt-Alumina KCl 0.53(mm)
LCSD 280-556811/3		11/09/2021 18:00	1	003F0301.D	HP-Plot Q 0.53(mm)
MB 280-556811/4		11/09/2021 18:13	1	004F0401.D	Rt-Alumina KCl 0.53(mm)
MB 280-556811/4		11/09/2021 18:13	1	004F0401.D	HP-Plot Q 0.53(mm)
ZZZZZ		11/09/2021 18:26	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/09/2021 18:26	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/09/2021 18:39	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/09/2021 18:39	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/09/2021 18:52	2		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/09/2021 18:52	2		HP-Plot Q 0.53(mm)
ZZZZZ		11/09/2021 19:05	2		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/09/2021 19:05	2		HP-Plot Q 0.53(mm)
ZZZZZ		11/09/2021 19:18	2		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/09/2021 19:18	2		HP-Plot Q 0.53(mm)
ZZZZZ		11/09/2021 19:32	2		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/09/2021 19:32	2		HP-Plot Q 0.53(mm)
ZZZZZ		11/09/2021 19:45	2		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/09/2021 19:45	2		HP-Plot Q 0.53(mm)
ZZZZZ		11/09/2021 19:58	2		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/09/2021 19:58	2		HP-Plot Q 0.53(mm)
280-155048-4	G0076-7	11/09/2021 20:11	1	013F1301.D	Rt-Alumina KCl 0.53(mm)
280-155048-4	G0076-7	11/09/2021 20:11	1	013F1301.D	HP-Plot Q 0.53(mm)
CCV 280-556811/14		11/09/2021 20:24	1	014F1401.D	Rt-Alumina KCl 0.53(mm)
CCV 280-556811/14		11/09/2021 20:24	1	014F1401.D	HP-Plot Q 0.53(mm)
280-155048-8	G0070-7	11/09/2021 20:37	1	015F1501.D	Rt-Alumina KCl 0.53(mm)
280-155048-8	G0070-7	11/09/2021 20:37	1	015F1501.D	HP-Plot Q 0.53(mm)
280-155048-8 DU	G0070-7 DU	11/09/2021 20:50	1	016F1601.D	Rt-Alumina KCl 0.53(mm)
280-155048-8 DU	G0070-7 DU	11/09/2021 20:50	1	016F1601.D	HP-Plot Q 0.53(mm)
280-155048-8 MS	G0070-7 MS	11/09/2021 21:03	1	017F1701.D	Rt-Alumina KCl 0.53(mm)
280-155048-8 MS	G0070-7 MS	11/09/2021 21:03	1	017F1701.D	HP-Plot Q 0.53(mm)
280-155048-8 MSD	G0070-7 MSD	11/09/2021 21:16	1	018F1801.D	Rt-Alumina KCl 0.53(mm)
280-155048-8 MSD	G0070-7 MSD	11/09/2021 21:16	1	018F1801.D	HP-Plot Q 0.53(mm)
ZZZZZ		11/09/2021 21:28	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/09/2021 21:28	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/09/2021 21:41	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/09/2021 21:41	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/09/2021 21:54	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/09/2021 21:54	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/09/2021 22:07	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/09/2021 22:07	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/09/2021 22:20	1		Rt-Alumina KCl 0.53(mm)

## GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, DenverJob No.: 280-155048-1

SDG No.:

Instrument ID: VGC\_JStart Date: 11/09/2021 17:35Analysis Batch Number: 556811End Date: 11/09/2021 23:25

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		11/09/2021 22:20	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/09/2021 22:33	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/09/2021 22:33	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/09/2021 22:46	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/09/2021 22:46	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/09/2021 22:59	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/09/2021 22:59	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/09/2021 23:12	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/09/2021 23:12	1		HP-Plot Q 0.53(mm)
CCV 280-556811/28		11/09/2021 23:25	1	028F2801.D	Rt-Alumina KCl 0.53(mm)
CCV 280-556811/28		11/09/2021 23:25	1	028F2801.D	HP-Plot Q 0.53(mm)

## GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Instrument ID: VGC\_J

Start Date: 11/10/2021 11:51

Analysis Batch Number: 556939

End Date: 11/10/2021 18:09

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 280-556939/1		11/10/2021 11:51	1	001F0101.D	Rt-Alumina KCl 0.53(mm)
CCVRT 280-556939/1		11/10/2021 11:51	1	001F0101.D	HP-Plot Q 0.53(mm)
LCS 280-556939/2		11/10/2021 12:04	1	002F0201.D	Rt-Alumina KCl 0.53(mm)
LCS 280-556939/2		11/10/2021 12:04	1	002F0201.D	HP-Plot Q 0.53(mm)
LCSD 280-556939/3		11/10/2021 12:17	1	003F0301.D	Rt-Alumina KCl 0.53(mm)
LCSD 280-556939/3		11/10/2021 12:17	1	003F0301.D	HP-Plot Q 0.53(mm)
MB 280-556939/4		11/10/2021 12:30	1	004F0401.D	Rt-Alumina KCl 0.53(mm)
MB 280-556939/4		11/10/2021 12:30	1	004F0401.D	HP-Plot Q 0.53(mm)
ZZZZZ		11/10/2021 12:43	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/10/2021 12:43	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/10/2021 12:56	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/10/2021 12:56	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/10/2021 13:09	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/10/2021 13:09	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/10/2021 13:22	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/10/2021 13:22	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/10/2021 13:35	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/10/2021 13:35	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/10/2021 13:48	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/10/2021 13:48	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/10/2021 14:01	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/10/2021 14:01	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/10/2021 14:14	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/10/2021 14:14	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/10/2021 14:27	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/10/2021 14:27	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/10/2021 14:40	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/10/2021 14:40	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/10/2021 14:53	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/10/2021 14:53	1		HP-Plot Q 0.53(mm)
CCV 280-556939/16		11/10/2021 15:06	1	016F1601.D	Rt-Alumina KCl 0.53(mm)
CCV 280-556939/16		11/10/2021 15:06	1	016F1601.D	HP-Plot Q 0.53(mm)
280-155048-7	NW062-7	11/10/2021 15:19	1	017F1701.D	Rt-Alumina KCl 0.53(mm)
280-155048-7	NW062-7	11/10/2021 15:19	1	017F1701.D	HP-Plot Q 0.53(mm)
280-155048-7 DU	NW062-7 DU	11/10/2021 15:32	1	018F1801.D	Rt-Alumina KCl 0.53(mm)
280-155048-7 DU	NW062-7 DU	11/10/2021 15:32	1	018F1801.D	HP-Plot Q 0.53(mm)
280-155048-7 MS	NW062-7 MS	11/10/2021 15:45	1	019F1901.D	Rt-Alumina KCl 0.53(mm)
280-155048-7 MS	NW062-7 MS	11/10/2021 15:45	1	019F1901.D	HP-Plot Q 0.53(mm)
280-155048-7 MSD	NW062-7 MSD	11/10/2021 15:58	1	020F2001.D	Rt-Alumina KCl 0.53(mm)
280-155048-7 MSD	NW062-7 MSD	11/10/2021 15:58	1	020F2001.D	HP-Plot Q 0.53(mm)
ZZZZZ		11/10/2021 16:11	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/10/2021 16:11	1		HP-Plot Q 0.53(mm)
280-155048-1	CA211-7	11/10/2021 16:25	1	022F2201.D	Rt-Alumina KCl 0.53(mm)
280-155048-1	CA211-7	11/10/2021 16:25	1	022F2201.D	HP-Plot Q 0.53(mm)
280-155048-2	CA212-7	11/10/2021 16:38	1	023F2301.D	Rt-Alumina KCl 0.53(mm)

## GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, DenverJob No.: 280-155048-1

SDG No.:

Instrument ID: VGC\_JStart Date: 11/10/2021 11:51Analysis Batch Number: 556939End Date: 11/10/2021 18:09

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
280-155048-2	CA212-7	11/10/2021 16:38	1	023F2301.D	HP-Plot Q 0.53(mm)
280-155048-3	NW061-7	11/10/2021 16:51	1	024F2401.D	Rt-Alumina KCl 0.53(mm)
280-155048-3	NW061-7	11/10/2021 16:51	1	024F2401.D	HP-Plot Q 0.53(mm)
280-155048-5	NW060-7	11/10/2021 17:04	1	025F2501.D	Rt-Alumina KCl 0.53(mm)
280-155048-5	NW060-7	11/10/2021 17:04	1	025F2501.D	HP-Plot Q 0.53(mm)
280-155048-6	CA210-7	11/10/2021 17:17	1	026F2601.D	Rt-Alumina KCl 0.53(mm)
280-155048-6	CA210-7	11/10/2021 17:17	1	026F2601.D	HP-Plot Q 0.53(mm)
ZZZZZ		11/10/2021 17:30	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/10/2021 17:30	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/10/2021 17:43	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/10/2021 17:43	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/10/2021 17:56	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/10/2021 17:56	1		HP-Plot Q 0.53(mm)
CCV 280-556939/30		11/10/2021 18:09	1	030F3001.D	Rt-Alumina KCl 0.53(mm)
CCV 280-556939/30		11/10/2021 18:09	1	030F3001.D	HP-Plot Q 0.53(mm)

## GC VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Batch Number: 556811

Batch Start Date: 11/09/21 17:35

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 280-556811/1		RSK-175		20 mL	20 mL	5 SU	200 uL		
LCS 280-556811/2		RSK-175		20 mL	20 mL	5 SU	200 uL		
LCSD 280-556811/3		RSK-175		20 mL	20 mL	5 SU	200 uL		
MB 280-556811/4		RSK-175		20 mL	20 mL	5 SU			
280-155048-I-4	G0076-7	RSK-175	T	20 mL	20 mL	<2 SU			
CCV 280-556811/14		RSK-175		20 mL	20 mL	5 SU	200 uL		
280-155048-I-8	G0070-7	RSK-175	T	20 mL	20 mL	<2 SU			
280-155048-H-8 DU	G0070-7	RSK-175	T	20 mL	20 mL	<2 SU			
280-155048-H-8 MS	G0070-7	RSK-175	T	20 mL	20 mL	<2 SU	200 uL		
280-155048-I-8 MSD	G0070-7	RSK-175	T	20 mL	20 mL	<2 SU	200 uL		
CCV 280-556811/28		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 TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Batch Number: 556939

Batch Start Date: 11/10/21 11:51

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 280-556939/1		RSK-175		20 mL	20 mL	5 SU	200 uL		
LCS 280-556939/2		RSK-175		20 mL	20 mL	5 SU	200 uL		
LCSD 280-556939/3		RSK-175		20 mL	20 mL	5 SU	200 uL		
MB 280-556939/4		RSK-175		20 mL	20 mL	5 SU			
CCV 280-556939/16		RSK-175		20 mL	20 mL	5 SU	200 uL		
280-155048-H-7	NW062-7	RSK-175	T	20 mL	20 mL	<2 SU			
280-155048-G-7 DU	NW062-7	RSK-175	T	20 mL	20 mL	<2 SU			
280-155048-I-7 MS	NW062-7	RSK-175	T	20 mL	20 mL	<2 SU	200 uL		
280-155048-I-7 MSD	NW062-7	RSK-175	T	20 mL	20 mL	<2 SU	200 uL		
280-155048-I-1	CA211-7	RSK-175	T	20 mL	20 mL	<2 SU			
280-155048-G-2	CA212-7	RSK-175	T	20 mL	20 mL	<2 SU			
280-155048-G-3	NW061-7	RSK-175	T	20 mL	20 mL	<2 SU			
280-155048-I-5	NW060-7	RSK-175	T	20 mL	20 mL	<2 SU			
280-155048-I-6	CA210-7	RSK-175	T	20 mL	20 mL	<2 SU			
CCV 280-556939/30		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.

# **8330A DOD5**

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**Nitroaromatics and Nitramines (HPLC)**

FORM II  
HPLC/IC SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

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 #
CA211-7	280-155048-1	88	M
CA212-7	280-155048-2	91	M
NW061-7	280-155048-3	90	M
G0076-7	280-155048-4	93	M
NW060-7	280-155048-5	92	M
CA210-7	280-155048-6	99	M
CA210-7	280-155048-6		88
NW062-7	280-155048-7	91	M
G0070-7	280-155048-8	94	
	MB 280-556180/1-A	92	
	LCS 280-556180/2-A	90	
	LCS 280-556180/3-A	89	M
NW062-7 MS	280-155048-7 MS	90	M
NW062-7 MS	280-155048-7 MS	93	M
G0070-7 MS	280-155048-8 MS	89	
G0070-7 MS	280-155048-8 MS	91	M
NW062-7 MSD	280-155048-7 MSD	91	M
NW062-7 MSD	280-155048-7 MSD	92	M
G0070-7 MSD	280-155048-8 MSD	93	
G0070-7 MSD	280-155048-8 MSD	95	M

12DNB = 1,2-Dinitrobenzene

QC LIMITS  
83-119

# Column to be used to flag recovery values

FORM II 8330A

FORM III  
HPLC/IC LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver      Job No.: 280-155048-1  
 SDG No.: \_\_\_\_\_  
 Matrix: Water      Level: Low      Lab File ID: 11050012.D  
 Lab ID: LCS 280-556180/2-A      Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.00	2.07	104	73-125	
1,3-Dinitrobenzene	2.00	1.98	99	78-120	
2,4,6-Trinitrotoluene	2.00	2.00	100	71-123	
2,4-Dinitrotoluene	2.00	1.94	97	78-120	
2,6-Dinitrotoluene	2.00	1.93	96	77-127	
2-Amino-4,6-dinitrotoluene	2.00	1.84	92	79-120	
2-Nitrotoluene	2.00	1.57	78	70-127	
3-Nitrotoluene	2.00	1.55	77	73-125	M
4-Amino-2,6-dinitrotoluene	2.00	1.82	91	76-125	
4-Nitrotoluene	2.00	1.61	81	71-127	
HMX	2.00	1.95	97	65-135	M
Nitrobenzene	2.00	1.77	88	65-134	
RDX	2.00	1.88	94	68-130	
Tetryl	2.00	1.91	95	64-128	

# Column to be used to flag recovery and RPD values

FORM III 8330A

FORM III  
HPLC/IC LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Matrix: Water Level: Low Lab File ID: 11050013.D

Lab ID: LCS 280-556180/3-A Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
MNX	2.33	2.16	93	57-132	M

# Column to be used to flag recovery and RPD values

FORM III 8330A

FORM III  
HPLC/IC MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Denver      Job No.: 280-155048-1  
 SDG No.:  
 Matrix: Water      Level: Low      Lab File ID: 11050037.D  
 Lab ID: 280-155048-7 MS      Client ID: NW062-7 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.04	0.20 U	2.10	103	73-125	M
1,3-Dinitrobenzene	2.04	0.10 U	1.99	97	78-120	M
2,4,6-Trinitrotoluene	2.04	0.10 U	2.03	99	71-123	
2,4-Dinitrotoluene	2.04	0.081 U	1.96	96	78-120	
2,6-Dinitrotoluene	2.04	0.081 U	1.99	98	77-127	
2-Amino-4,6-dinitrotoluene	2.04	0.10 U	1.90	93	79-120	
2-Nitrotoluene	2.04	0.20 U	1.60	78	70-127	
3-Nitrotoluene	2.04	0.41 U	1.51	74	73-125	
4-Amino-2,6-dinitrotoluene	2.04	0.12 U	1.85	91	76-125	
4-Nitrotoluene	2.04	0.41 U	1.65	81	71-127	
HMX	2.04	0.20 U	2.09	102	65-135	M
Nitrobenzene	2.04	0.20 U	1.98	97	65-134	M
RDX	2.04	0.20 U	1.87	92	68-130	M
Tetryl	2.04	0.10 U	2.03	99	64-128	

# Column to be used to flag recovery and RPD values

FORM III 8330A

FORM III  
HPLC/IC MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.:  
Matrix: Water Level: Low Lab File ID: 11050039.D  
Lab ID: 280-155048-7 MS Client ID: NW062-7 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
MNX	2.36	0.41 U	2.29	97	57-132	M

# Column to be used to flag recovery and RPD values

FORM III 8330A

FORM III  
HPLC/IC MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Denver      Job No.: 280-155048-1  
 SDG No.:  
 Matrix: Water      Level: Low      Lab File ID: 11050044.D  
 Lab ID: 280-155048-8 MS      Client ID: G0070-7 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.03	0.20 U	2.03	100	73-125	
1,3-Dinitrobenzene	2.03	0.10 U	1.99	98	78-120	
2,4,6-Trinitrotoluene	2.03	0.10 U	1.99	98	71-123	
2,4-Dinitrotoluene	2.03	0.080 U	1.87	92	78-120	
2,6-Dinitrotoluene	2.03	0.080 U	1.92	94	77-127	
2-Amino-4,6-dinitrotoluene	2.03	0.10 U	1.81	89	79-120	
2-Nitrotoluene	2.03	0.20 U	1.50	74	70-127	
3-Nitrotoluene	2.03	0.40 U	1.58	78	73-125	
4-Amino-2,6-dinitrotoluene	2.03	0.12 U	1.76	87	76-125	
4-Nitrotoluene	2.03	0.40 U	1.63	80	71-127	
HMX	2.03	0.20 U	2.02	99	65-135	M
Nitrobenzene	2.03	0.20 U	1.86	92	65-134	
RDX	2.03	0.20 U	1.92	94	68-130	M
Tetryl	2.03	0.10 U	1.96	96	64-128	

# Column to be used to flag recovery and RPD values

FORM III 8330A

FORM III  
HPLC/IC MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.:  
Matrix: Water Level: Low Lab File ID: 11050046.D  
Lab ID: 280-155048-8 MS Client ID: G0070-7 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
MNX	2.29	0.40 U	2.19	96	57-132	M

# Column to be used to flag recovery and RPD values

FORM III 8330A

FORM III  
HPLC/IC MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Matrix: Water Level: Low Lab File ID: 11050038.D

Lab ID: 280-155048-7 MSD Client ID: NW062-7 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
1,3,5-Trinitrobenzene	2.00	2.11	105	0	30	73-125	M
1,3-Dinitrobenzene	2.00	2.00	100	1	30	78-120	M
2,4,6-Trinitrotoluene	2.00	2.04	102	1	30	71-123	
2,4-Dinitrotoluene	2.00	1.98	99	1	30	78-120	
2,6-Dinitrotoluene	2.00	2.00	100	0	30	77-127	
2-Amino-4,6-dinitrotoluene	2.00	1.90	95	0	30	79-120	
2-Nitrotoluene	2.00	1.60	80	0	30	70-127	
3-Nitrotoluene	2.00	1.49	75	1	30	73-125	
4-Amino-2,6-dinitrotoluene	2.00	1.86	93	1	30	76-125	
4-Nitrotoluene	2.00	1.64	82	0	30	71-127	
HMX	2.00	2.10	105	1	30	65-135	M
Nitrobenzene	2.00	1.99	99	1	30	65-134	M
RDX	2.00	1.84	92	2	30	68-130	M
Tetryl	2.00	2.06	103	1	30	64-128	

# Column to be used to flag recovery and RPD values

FORM III 8330A

FORM III  
HPLC/IC MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Matrix: Water Level: Low Lab File ID: 11050040.D

Lab ID: 280-155048-7 MSD Client ID: NW062-7 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD %	REC	QC LIMITS		#
					RPD	REC	
MNX	2.36	2.24	95	2	30	57-132	M

# Column to be used to flag recovery and RPD values

FORM III 8330A

FORM III  
HPLC/IC MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Matrix: Water Level: Low Lab File ID: 11050045.D

Lab ID: 280-155048-8 MSD Client ID: G0070-7 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
1,3,5-Trinitrobenzene	2.01	2.21	110	9	30	73-125	
1,3-Dinitrobenzene	2.01	2.11	105	6	30	78-120	
2,4,6-Trinitrotoluene	2.01	2.11	105	6	30	71-123	
2,4-Dinitrotoluene	2.01	2.01	100	7	30	78-120	
2,6-Dinitrotoluene	2.01	2.00	99	4	30	77-127	
2-Amino-4,6-dinitrotoluene	2.01	1.97	98	8	30	79-120	
2-Nitrotoluene	2.01	1.58	79	6	30	70-127	
3-Nitrotoluene	2.01	1.52	76	4	30	73-125	
4-Amino-2,6-dinitrotoluene	2.01	1.90	95	8	30	76-125	
4-Nitrotoluene	2.01	1.72	86	6	30	71-127	
HMX	2.01	2.08	103	3	30	65-135	M
Nitrobenzene	2.01	1.94	97	4	30	65-134	
RDX	2.01	1.98	98	3	30	68-130	M
Tetryl	2.01	2.05	102	4	30	64-128	M

# Column to be used to flag recovery and RPD values

FORM III 8330A

FORM III  
HPLC/IC MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Matrix: Water Level: Low Lab File ID: 11050047.D

Lab ID: 280-155048-8 MSD Client ID: G0070-7 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD %	REC	QC LIMITS		#
					RPD	REC	
MNX	2.28	2.23	98	2	30	57-132	M

# Column to be used to flag recovery and RPD values

FORM III 8330A

FORM IV  
HPLC/IC METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: MB 280-556180/1-A  
Matrix: Water Date Extracted: 11/04/2021 14:13  
Lab File ID: (1) 11050011.D Lab File ID: (2) \_\_\_\_\_  
Date Analyzed: (1) 11/05/2021 15:15 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 280-556180/2-A	11/05/2021 15:38	
	LCS 280-556180/3-A	11/05/2021 16:00	
CA211-7	280-155048-1	11/05/2021 21:44	
CA212-7	280-155048-2	11/05/2021 22:07	
NW061-7	280-155048-3	11/05/2021 22:30	
G0076-7	280-155048-4	11/05/2021 22:53	
NW060-7	280-155048-5	11/05/2021 23:16	
CA210-7	280-155048-6	11/06/2021 00:25	11/06/2021 10:55
NW062-7	280-155048-7	11/06/2021 00:48	
NW062-7 MS	280-155048-7 MS	11/06/2021 01:11	
NW062-7 MSD	280-155048-7 MSD	11/06/2021 01:34	
NW062-7 MS	280-155048-7 MS	11/06/2021 01:57	
NW062-7 MSD	280-155048-7 MSD	11/06/2021 02:20	
G0070-7	280-155048-8	11/06/2021 03:28	
G0070-7 MS	280-155048-8 MS	11/06/2021 03:51	
G0070-7 MSD	280-155048-8 MSD	11/06/2021 04:14	
G0070-7 MS	280-155048-8 MS	11/06/2021 04:37	
G0070-7 MSD	280-155048-8 MSD	11/06/2021 05:00	

FORM I  
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: CA211-7 Lab Sample ID: 280-155048-1  
Matrix: Water Lab File ID: 11050028.D  
Analysis Method: 8330A Date Collected: 11/02/2021 10:55  
Extraction Method: 3535 Date Extracted: 11/04/2021 14:13  
Sample wt/vol: 506.7 (mL) Date Analyzed: 11/05/2021 21:44  
Con. Extract Vol.: 5 (mL) Dilution Factor: 1  
Injection Volume: 100 (uL) GC Column: UltraCarb5uODS ID: 4.6 (mm)  
% Moisture:  GPC Cleanup: (Y/N) N  
Analysis Batch No.: 556359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.20	U M	0.21	0.20	0.083
99-65-0	1,3-Dinitrobenzene	0.099	U M	0.11	0.099	0.036
118-96-7	2,4,6-Trinitrotoluene	0.099	U	0.11	0.099	0.044
121-14-2	2,4-Dinitrotoluene	0.079	U	0.099	0.079	0.027
606-20-2	2,6-Dinitrotoluene	0.079	U	0.099	0.079	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.099	U	0.11	0.099	0.050
88-72-2	2-Nitrotoluene	0.20	U	0.21	0.20	0.084
99-08-1	3-Nitrotoluene	0.39	U	0.39	0.39	0.19
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.057
99-99-0	4-Nitrotoluene	0.39	U	0.40	0.39	0.099
2691-41-0	HMX	0.20	U	0.21	0.20	0.086
5755-27-1	MNX	0.39	U	2.0	0.39	0.15
98-95-3	Nitrobenzene	0.20	U	0.21	0.20	0.090
121-82-4	RDX	0.20	U	0.21	0.20	0.051
479-45-8	Tetryl	0.099	U	0.11	0.099	0.031

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	88	M	83-119

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\11050028.D  
 Lims ID: 280-155048-A-1-A  
 Client ID: CA211-7  
 Sample Type: Client  
 Inject. Date: 05-Nov-2021 21:44:42 ALS Bottle#: 28 Worklist Smp#: 28  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-155048-A-1-A  
 Misc. Info.: 280-0106237-028  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Nov-2021 10:24:53 Calib Date: 27-Oct-2021 04:27:09  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211027-105955.b\1026T007.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 10:12:04

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1	6.612				ND	
7 MNX	1	7.239				ND	
8 RDX	1	7.632				ND	
\$ 10 1,2-Dinitrobenzene	1	8.579	8.606	-0.027	22576	0.1761	M
11 1,3,5-Trinitrobenzene	1	8.726				ND	U
12 1,3-Dinitrobenzene	1	9.365				ND	U
13 Nitrobenzene	1	9.765				ND	
15 Tetryl	1	10.112				ND	
17 2,4,6-Trinitrotoluene	1	11.025				ND	
18 4-Amino-2,6-dinitrotoluene	1	11.239				ND	
19 2-Amino-4,6-dinitrotoluene	1	11.499				ND	
20 2,6-Dinitrotoluene	1	11.665				ND	
21 2,4-Dinitrotoluene	1	11.832				ND	
22 o-Nitrotoluene	1	12.712				ND	
23 p-Nitrotoluene	1	13.152				ND	
24 m-Nitrotoluene	1	13.745				ND	

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

U - Marked Undetected

Report Date: 06-Nov-2021 10:24:56

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\\denver\\chromdata\\chhplc\_x\\20211105-106237.bl\\11050028.d

Injection Date: 05-Nov-2021 21:44:42

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: 280-155048-A-1-A

Lab Sample ID: 280-155048-1

Worklist Smp#: 28

Client ID: CA211-7

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

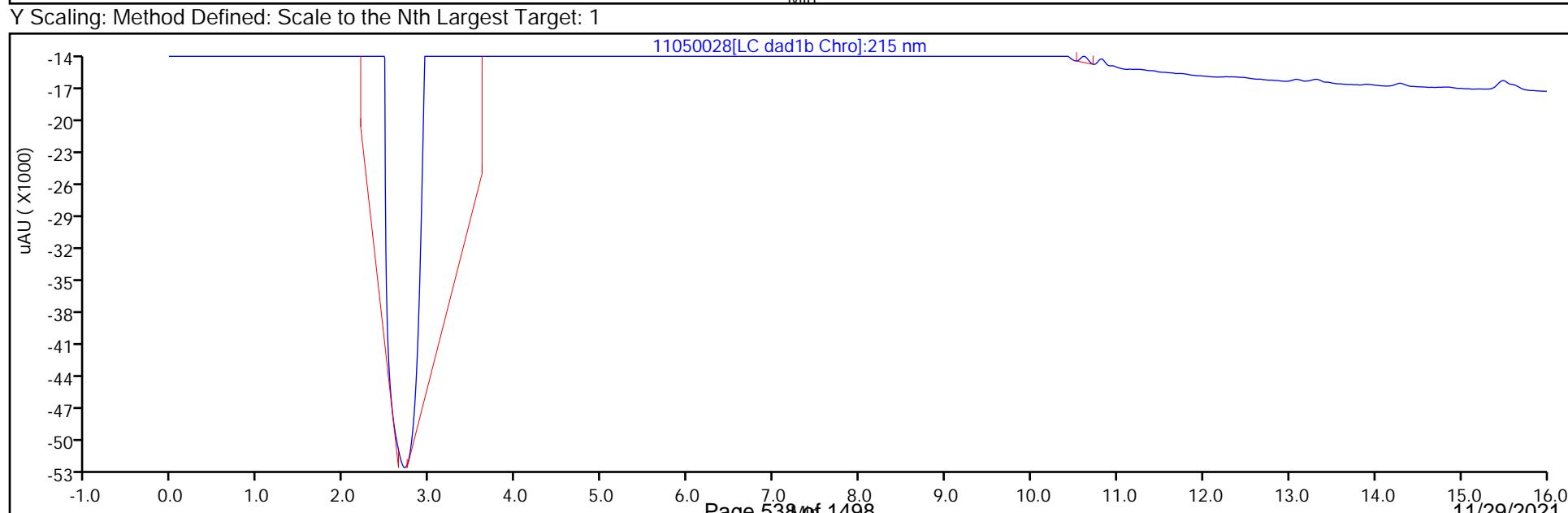
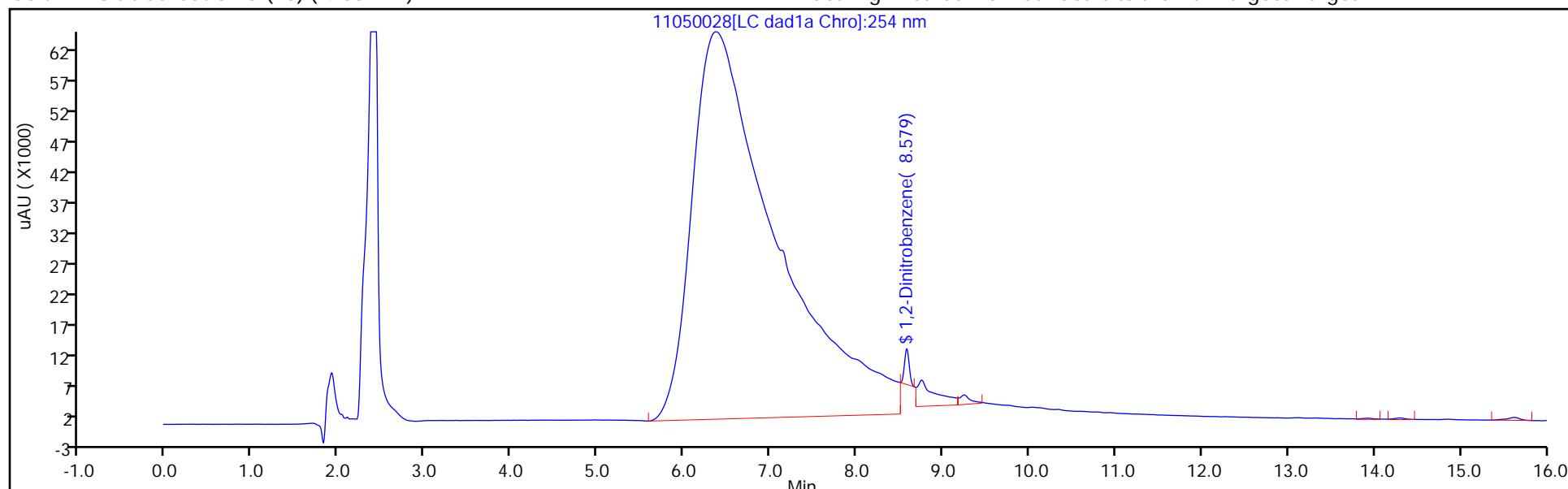
ALS Bottle#: 28

Method: 8330\_X3

Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver  
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\11050028.D  
 Lims ID: 280-155048-A-1-A  
 Client ID: CA211-7  
 Sample Type: Client  
 Inject. Date: 05-Nov-2021 21:44:42 ALS Bottle#: 28 Worklist Smp#: 28  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-155048-A-1-A  
 Misc. Info.: 280-0106237-028  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Nov-2021 10:24:53 Calib Date: 27-Oct-2021 04:27:09  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211027-105955.b\1026T007.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 10:12:04

Compound	Amount Added	Amount Recovered	% Rec.
\$ 10 1,2-Dinitrobenzene	0.2000	0.1761	88.04

## Eurofins TestAmerica, Denver

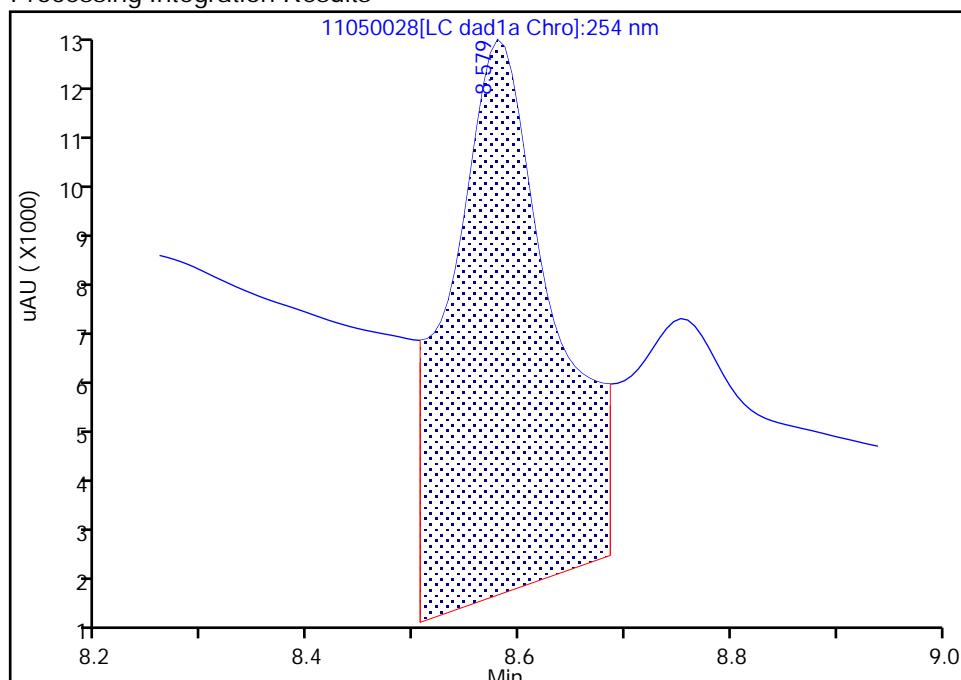
Data File: \\chromfs\denver\chromdata\chhplc\_x\20211105-106237.b\11050028.d  
 Injection Date: 05-Nov-2021 21:44:42 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-155048-A-1-A Lab Sample ID: 280-155048-1  
 Client ID: CA211-7  
 Operator ID: JZ ALS Bottle#: 28 Worklist Smp#: 28  
 Injection Vol: 100.0 ul 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

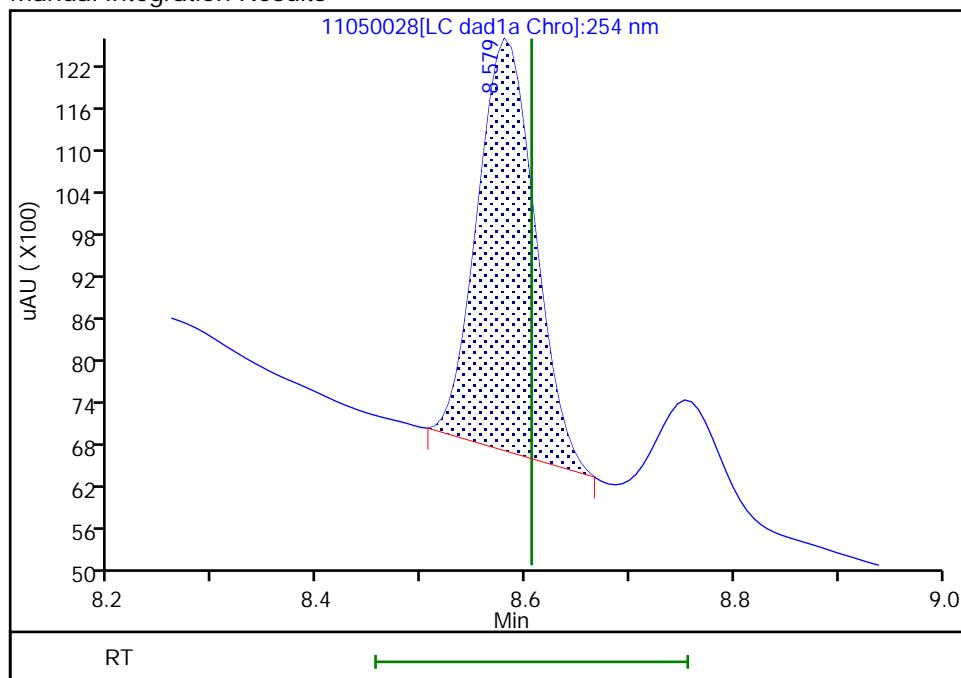
RT: 8.58  
 Area: 67887  
 Amount: 0.529469  
 Amount Units: ug/mL

## Processing Integration Results



RT: 8.58  
 Area: 22576  
 Amount: 0.176076  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 06-Nov-2021 10:12:03

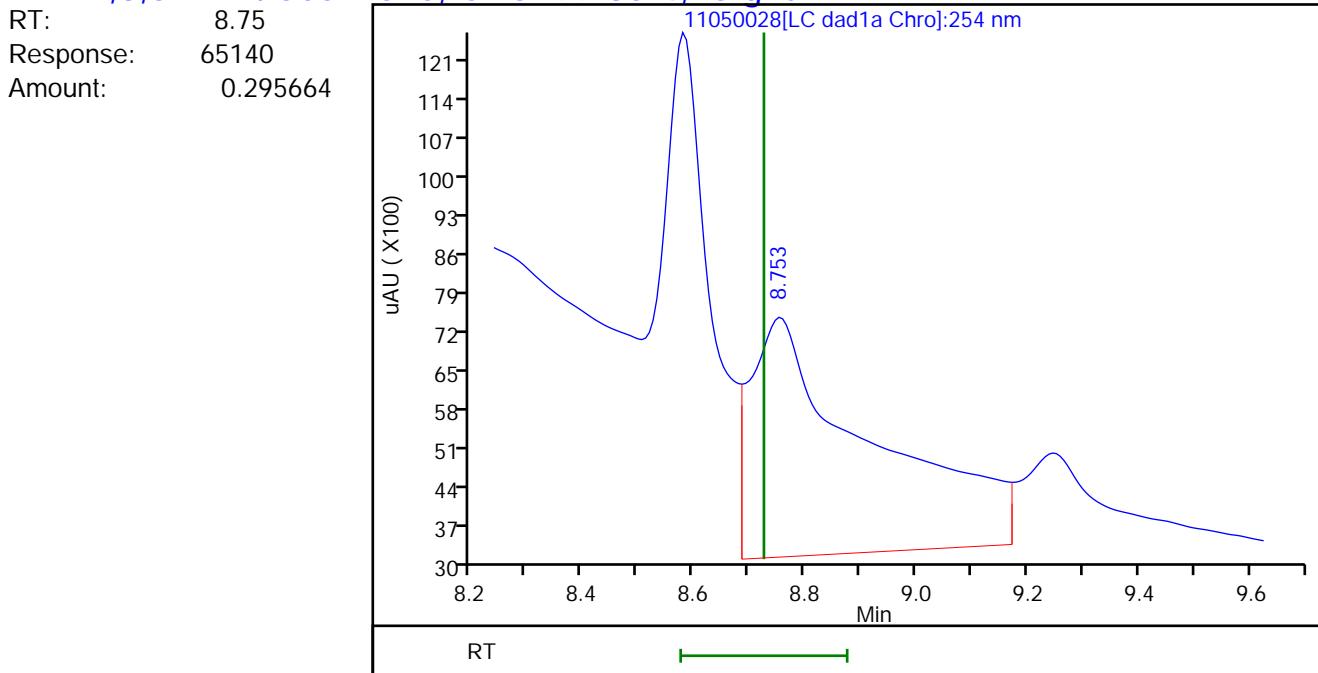
Audit Action: Manually Integrated

Audit Reason: Baseline

## Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20211105-106237.b\11050028.d  
Injection Date: 05-Nov-2021 21:44:42 Instrument ID: CHHPLC\_X3  
Lims ID: 280-155048-A-1-A Lab Sample ID: 280-155048-1  
Client ID: CA211-7  
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



Reviewer: zhangji, 06-Nov-2021 10:12:04

Audit Action: Marked Compound Undetected

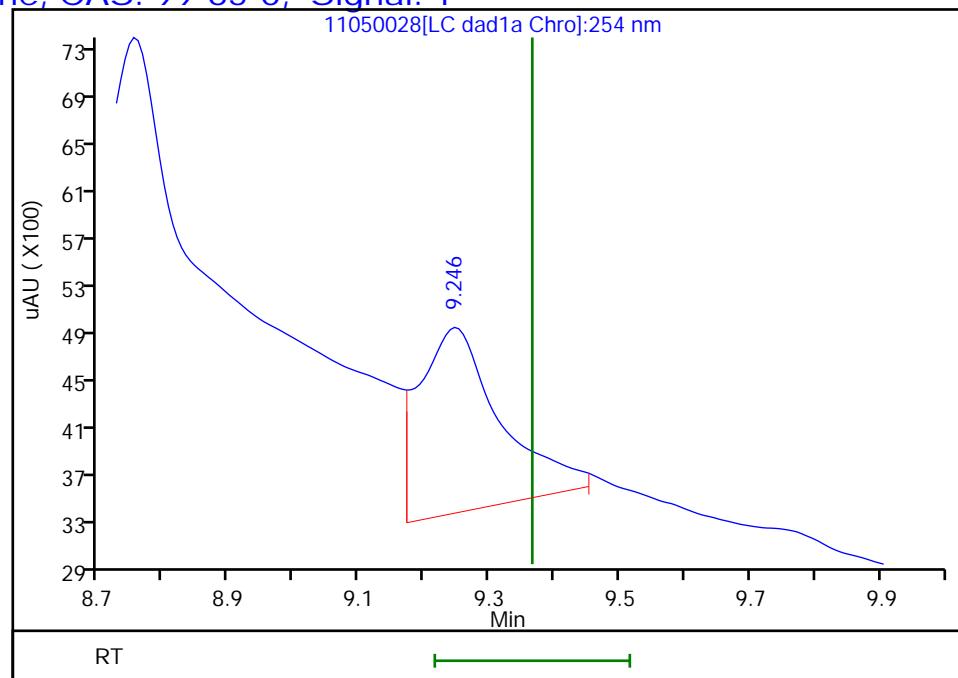
Audit Reason: Invalid Compound ID

## Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20211105-106237.b\11050028.d  
Injection Date: 05-Nov-2021 21:44:42 Instrument ID: CHHPLC\_X3  
Lims ID: 280-155048-A-1-A Lab Sample ID: 280-155048-1  
Client ID: CA211-7  
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

RT: 9.25  
Response: 13479  
Amount: 0.045487



Reviewer: zhangji, 06-Nov-2021 10:12:04

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I  
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: CA212-7 Lab Sample ID: 280-155048-2  
Matrix: Water Lab File ID: 11050029.D  
Analysis Method: 8330A Date Collected: 11/02/2021 12:05  
Extraction Method: 3535 Date Extracted: 11/04/2021 14:13  
Sample wt/vol: 505.4 (mL) Date Analyzed: 11/05/2021 22:07  
Con. Extract Vol.: 5 (mL) Dilution Factor: 1  
Injection Volume: 100 (uL) GC Column: UltraCarb5uODS ID: 4.6 (mm)  
% Moisture:                    GPC Cleanup: (Y/N) N  
Analysis Batch No.: 556359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.20	U M	0.21	0.20	0.083
99-65-0	1,3-Dinitrobenzene	0.099	U M	0.11	0.099	0.037
118-96-7	2,4,6-Trinitrotoluene	0.099	U	0.11	0.099	0.045
121-14-2	2,4-Dinitrotoluene	0.079	U	0.099	0.079	0.027
606-20-2	2,6-Dinitrotoluene	0.079	U	0.099	0.079	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.099	U	0.11	0.099	0.050
88-72-2	2-Nitrotoluene	0.20	U	0.21	0.20	0.085
99-08-1	3-Nitrotoluene	0.40	U	0.40	0.40	0.19
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.057
99-99-0	4-Nitrotoluene	0.40	U M	0.41	0.40	0.099
2691-41-0	HMX	0.20	U	0.21	0.20	0.087
5755-27-1	MNX	0.40	U	2.0	0.40	0.15
98-95-3	Nitrobenzene	0.20	U	0.21	0.20	0.090
121-82-4	RDX	0.20	U	0.21	0.20	0.051
479-45-8	Tetryl	0.099	U	0.11	0.099	0.031

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	91	M	83-119

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\11050029.D  
 Lims ID: 280-155048-A-2-A  
 Client ID: CA212-7  
 Sample Type: Client  
 Inject. Date: 05-Nov-2021 22:07:38 ALS Bottle#: 29 Worklist Smp#: 29  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-155048-A-2-A  
 Misc. Info.: 280-0106237-029  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Nov-2021 10:24:53 Calib Date: 27-Oct-2021 04:27:09  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211027-105955.b\1026T007.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 10:12:26

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1	6.612				ND	
7 MNX	1	7.239				ND	
8 RDX	1	7.632				ND	
\$ 10 1,2-Dinitrobenzene	1	8.578	8.606	-0.028	23453	0.1829	M
11 1,3,5-Trinitrobenzene	1	8.726				ND	U
12 1,3-Dinitrobenzene	1	9.365				ND	U
13 Nitrobenzene	1	9.765				ND	
15 Tetryl	1	10.112				ND	
17 2,4,6-Trinitrotoluene	1	11.025				ND	
18 4-Amino-2,6-dinitrotoluene	1	11.239				ND	
19 2-Amino-4,6-dinitrotoluene	1	11.499				ND	
20 2,6-Dinitrotoluene	1	11.665				ND	
21 2,4-Dinitrotoluene	1	11.832				ND	
22 o-Nitrotoluene	1	12.712				ND	
23 p-Nitrotoluene	1	13.152				ND	U
24 m-Nitrotoluene	1	13.745				ND	

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

U - Marked Undetected

Report Date: 06-Nov-2021 10:24:56

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\\denver\\chromdata\\chhplc\_x\\20211105-106237.bl\\11050029.d

Injection Date: 05-Nov-2021 22:07:38

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: 280-155048-A-2-A

Lab Sample ID: 280-155048-2

Worklist Smp#: 29

Client ID: CA212-7

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

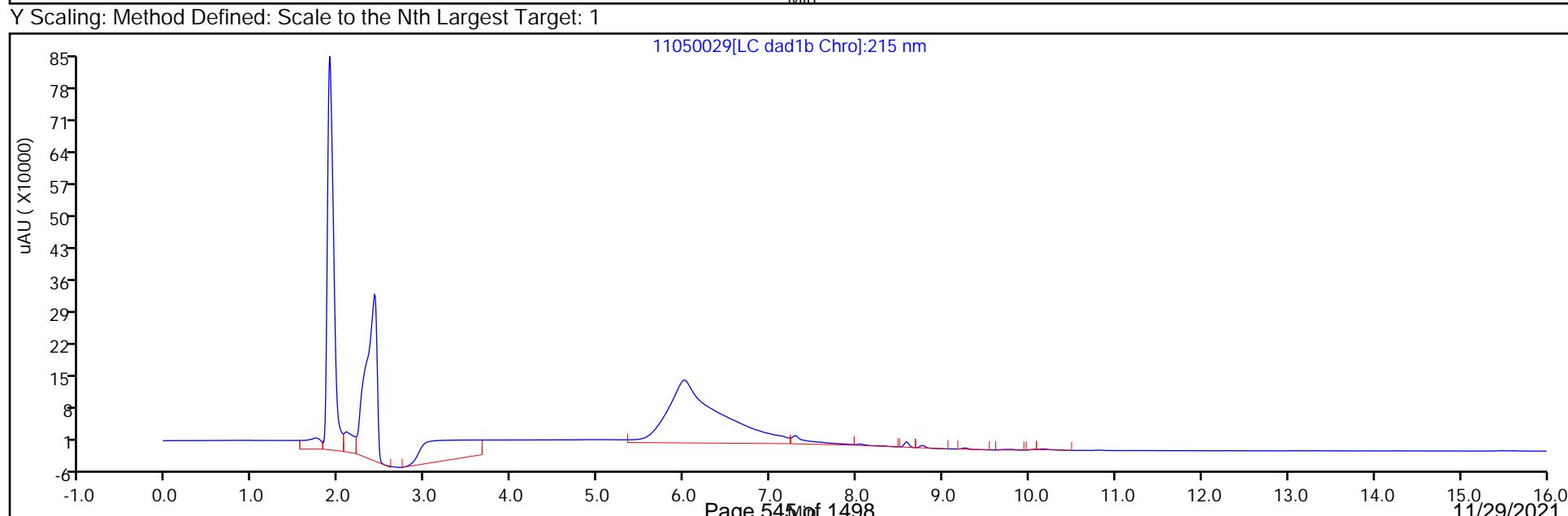
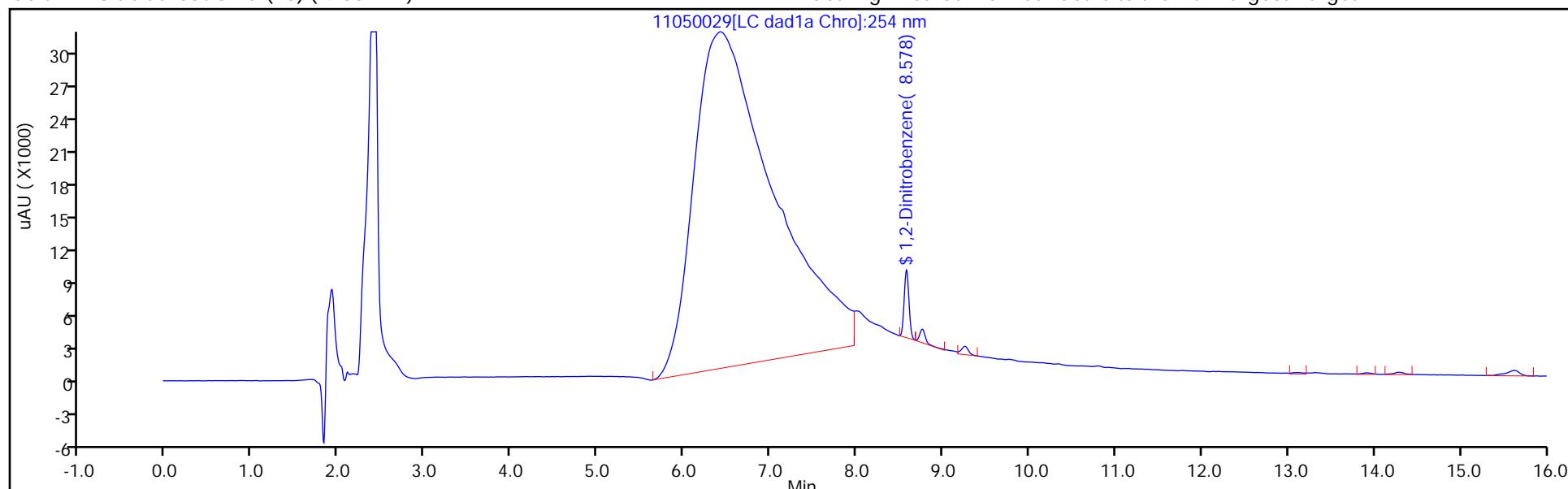
ALS Bottle#: 29

Method: 8330\_X3

Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver  
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\11050029.D  
 Lims ID: 280-155048-A-2-A  
 Client ID: CA212-7  
 Sample Type: Client  
 Inject. Date: 05-Nov-2021 22:07:38 ALS Bottle#: 29 Worklist Smp#: 29  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-155048-A-2-A  
 Misc. Info.: 280-0106237-029  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Nov-2021 10:24:53 Calib Date: 27-Oct-2021 04:27:09  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211027-105955.b\1026T007.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 10:12:26

Compound	Amount Added	Amount Recovered	% Rec.
\$ 10 1,2-Dinitrobenzene	0.2000	0.1829	91.46

## Eurofins TestAmerica, Denver

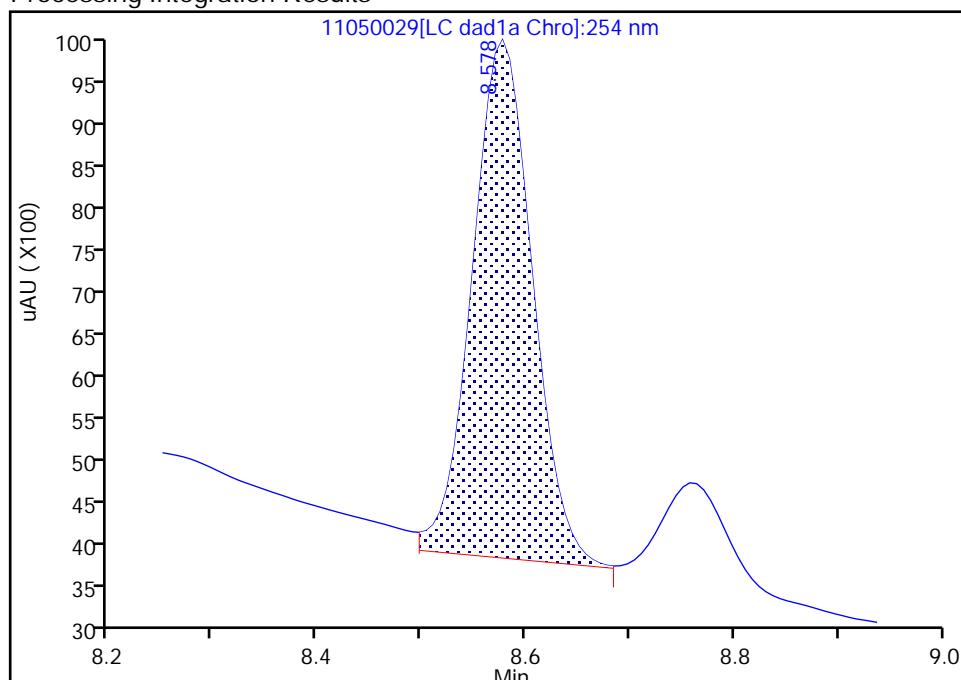
Data File: \\chromfs\denver\chromdata\chhplc\_x\20211105-106237.b\11050029.d  
 Injection Date: 05-Nov-2021 22:07:38 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-155048-A-2-A Lab Sample ID: 280-155048-2  
 Client ID: CA212-7  
 Operator ID: JZ ALS Bottle#: 29 Worklist Smp#: 29  
 Injection Vol: 100.0 ul 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

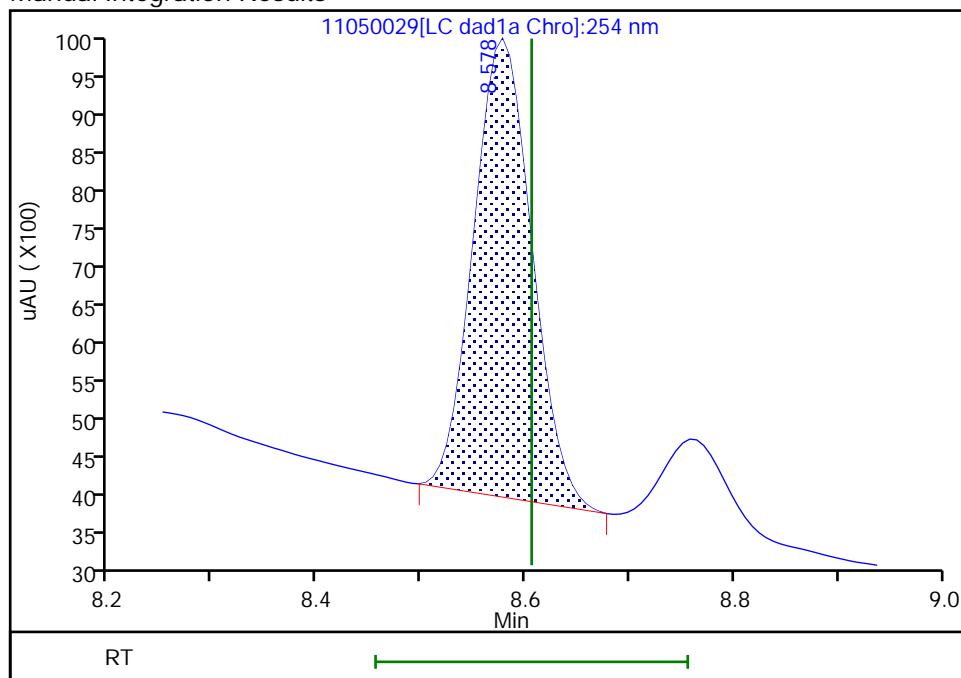
RT: 8.58  
 Area: 24779  
 Amount: 0.193258  
 Amount Units: ug/mL

## Processing Integration Results



RT: 8.58  
 Area: 23453  
 Amount: 0.182916  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 06-Nov-2021 10:12:16

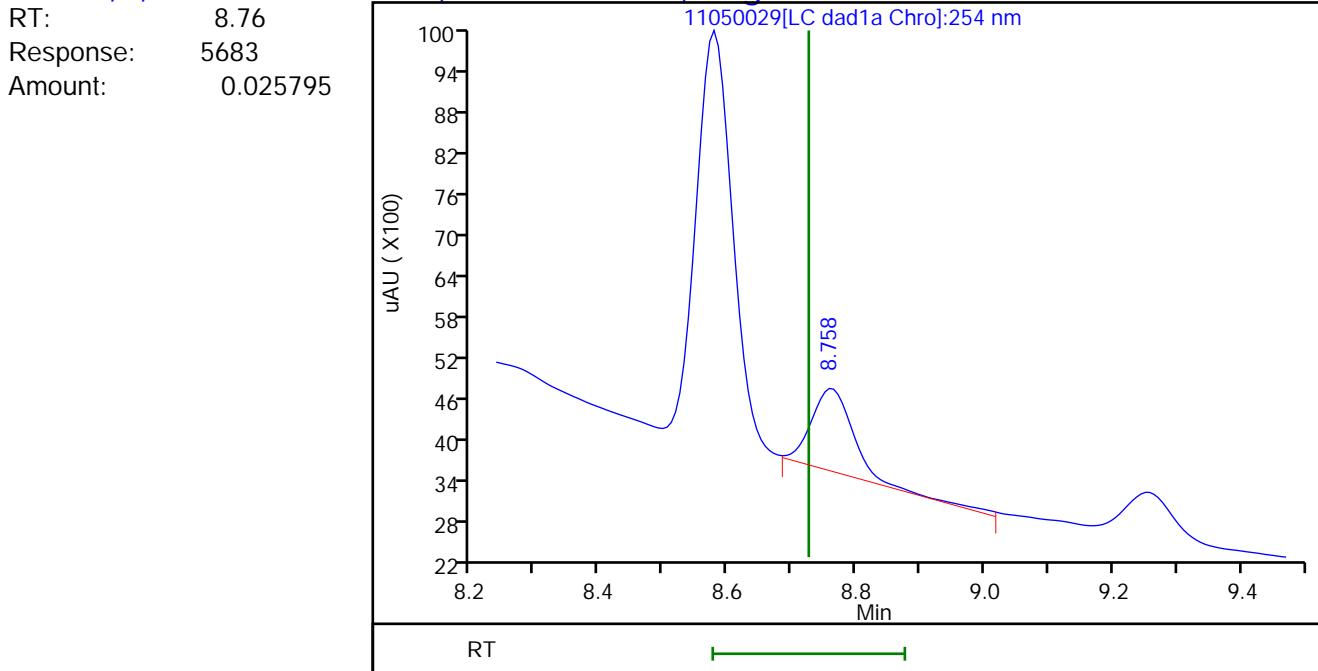
Audit Action: Manually Integrated

Audit Reason: Baseline

## Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20211105-106237.b\11050029.d  
Injection Date: 05-Nov-2021 22:07:38 Instrument ID: CHHPLC\_X3  
Lims ID: 280-155048-A-2-A Lab Sample ID: 280-155048-2  
Client ID: CA212-7  
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



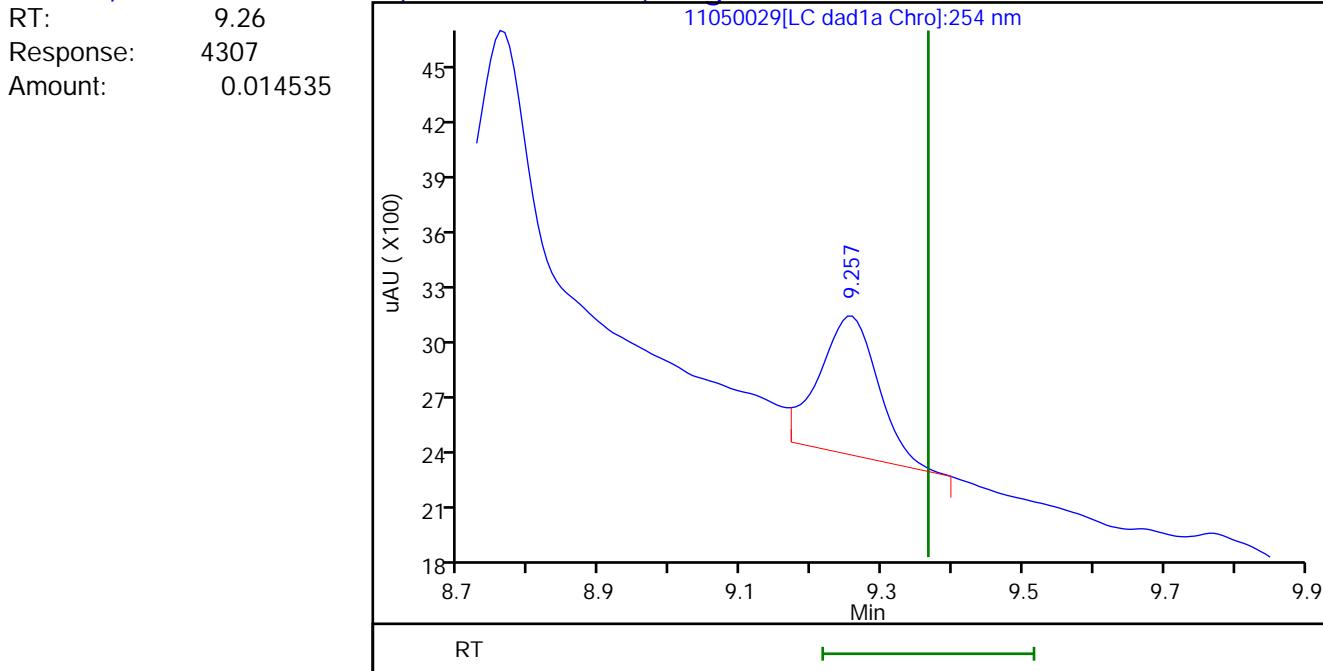
Reviewer: zhangji, 06-Nov-2021 10:12:26

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

## Eurofins TestAmerica, Denver

Data File: \\chromfs\\denver\\chromdata\\chhplc\_x\\20211105-106237.b\\11050029.d  
Injection Date: 05-Nov-2021 22:07:38 Instrument ID: CHHPLC\_X3  
Lims ID: 280-155048-A-2-A Lab Sample ID: 280-155048-2  
Client ID: CA212-7  
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**

Reviewer: zhangji, 06-Nov-2021 10:12:26

Audit Action: Marked Compound Undetected

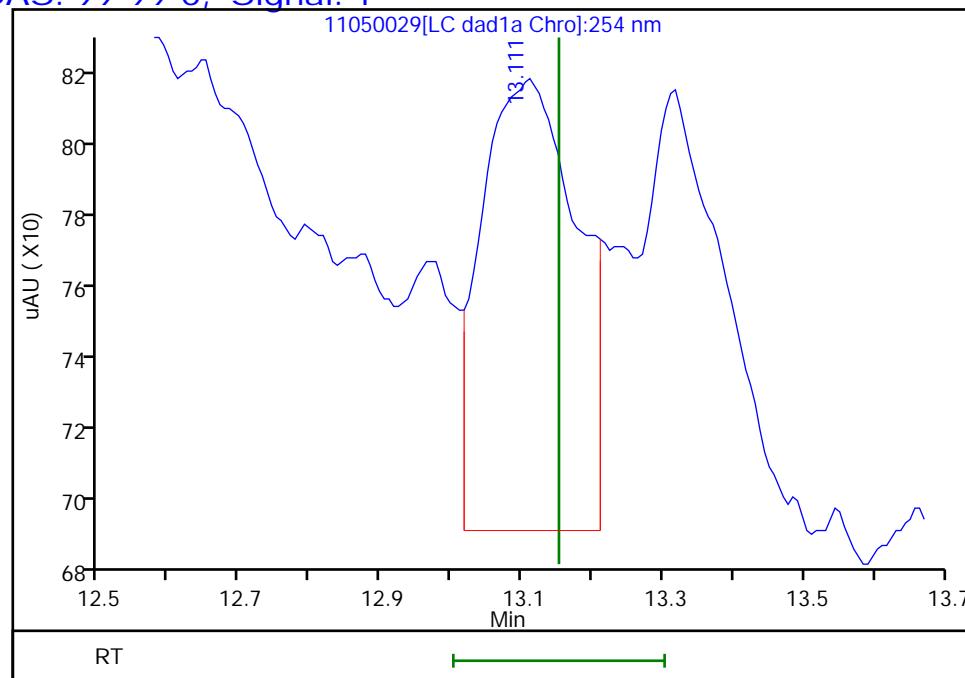
Audit Reason: Invalid Compound ID

## Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20211105-106237.b\11050029.d  
Injection Date: 05-Nov-2021 22:07:38 Instrument ID: CHHPLC\_X3  
Lims ID: 280-155048-A-2-A Lab Sample ID: 280-155048-2  
Client ID: CA212-7  
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

## 23 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 13.11  
Response: 1126  
Amount: 0.010061



Reviewer: zhangji, 06-Nov-2021 10:12:26

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I  
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.:  
Client Sample ID: NW061-7 Lab Sample ID: 280-155048-3  
Matrix: Water Lab File ID: 11050030.D  
Analysis Method: 8330A Date Collected: 11/02/2021 11:30  
Extraction Method: 3535 Date Extracted: 11/04/2021 14:13  
Sample wt/vol: 496.7 (mL) Date Analyzed: 11/05/2021 22:30  
Con. Extract Vol.: 5 (mL) Dilution Factor: 1  
Injection Volume: 100 (uL) GC Column: UltraCarb5uODS ID: 4.6 (mm)  
% Moisture: GPC Cleanup: (Y/N) N  
Analysis Batch No.: 556359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.20	U	0.21	0.20	0.085
99-65-0	1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	0.081	U	0.10	0.081	0.028
606-20-2	2,6-Dinitrotoluene	0.081	U	0.10	0.081	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051
88-72-2	2-Nitrotoluene	0.20	U	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	0.16
98-95-3	Nitrobenzene	0.20	U M	0.21	0.20	0.092
121-82-4	RDX	0.20	U	0.21	0.20	0.052
479-45-8	Tetryl	0.10	U	0.11	0.10	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	90	M	83-119

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\11050030.D  
 Lims ID: 280-155048-A-3-A  
 Client ID: NW061-7  
 Sample Type: Client  
 Inject. Date: 05-Nov-2021 22:30:38 ALS Bottle#: 30 Worklist Smp#: 30  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-155048-A-3-A  
 Misc. Info.: 280-0106237-030  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Nov-2021 10:24:53 Calib Date: 27-Oct-2021 04:27:09  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211027-105955.b\1026T007.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 10:12:36

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1	6.612				ND	
7 MNX	1	7.239				ND	
8 RDX	1	7.632				ND	
\$ 10 1,2-Dinitrobenzene	1	8.578	8.606	-0.028	23063	0.1799	M
11 1,3,5-Trinitrobenzene	1	8.726				ND	
12 1,3-Dinitrobenzene	1	9.365				ND	
13 Nitrobenzene	1	9.765				ND	U
15 Tetryl	1	10.112				ND	
17 2,4,6-Trinitrotoluene	1	11.025				ND	
18 4-Amino-2,6-dinitrotoluene	1	11.239				ND	
19 2-Amino-4,6-dinitrotoluene	1	11.499				ND	
20 2,6-Dinitrotoluene	1	11.665				ND	
21 2,4-Dinitrotoluene	1	11.832				ND	
22 o-Nitrotoluene	1	12.712				ND	
23 p-Nitrotoluene	1	13.152				ND	
24 m-Nitrotoluene	1	13.745				ND	

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

U - Marked Undetected

Report Date: 06-Nov-2021 10:24:56

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\\denver\\chromdata\\chhplc\_x\\20211105-106237.bl\\11050030.d

Injection Date: 05-Nov-2021 22:30:38

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: 280-155048-A-3-A

Lab Sample ID: 280-155048-3

Worklist Smp#: 30

Client ID: NW061-7

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

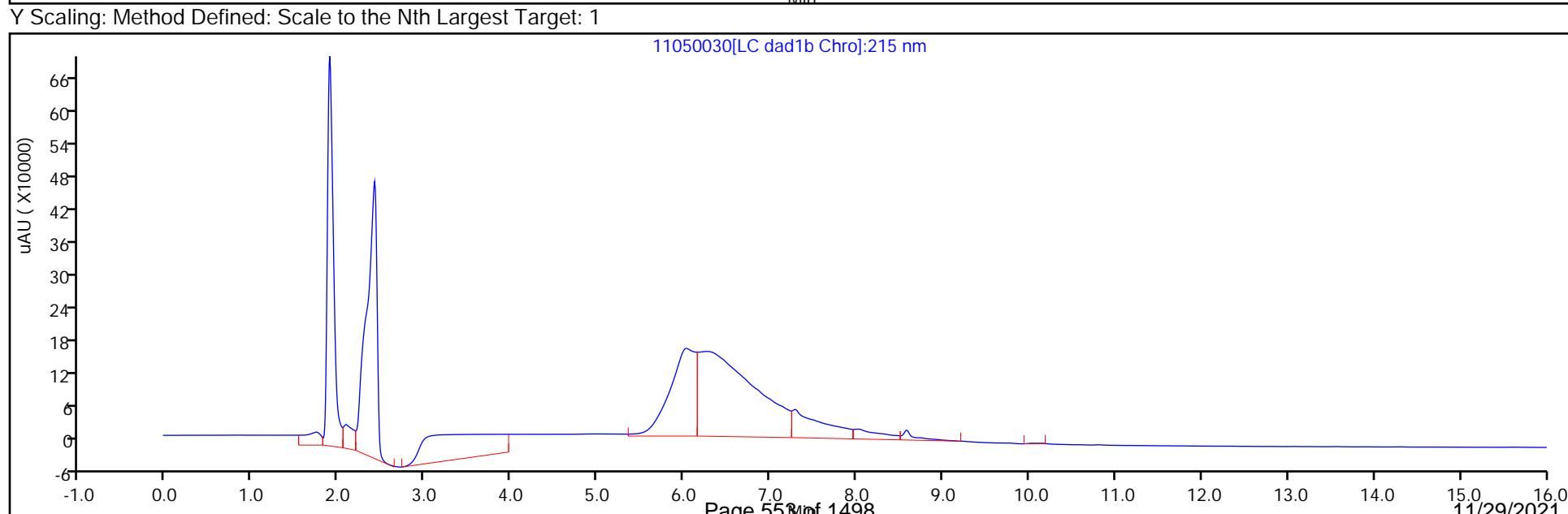
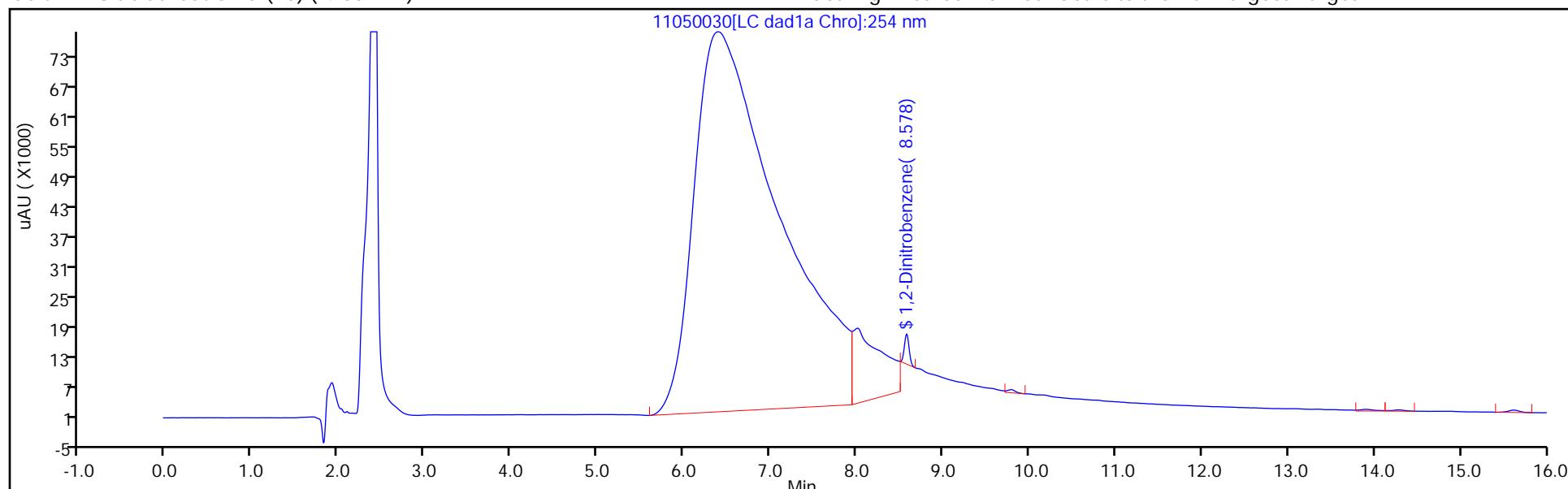
ALS Bottle#: 30

Method: 8330\_X3

Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver  
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\11050030.D  
 Lims ID: 280-155048-A-3-A  
 Client ID: NW061-7  
 Sample Type: Client  
 Inject. Date: 05-Nov-2021 22:30:38 ALS Bottle#: 30 Worklist Smp#: 30  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-155048-A-3-A  
 Misc. Info.: 280-0106237-030  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Nov-2021 10:24:53 Calib Date: 27-Oct-2021 04:27:09  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211027-105955.b\1026T007.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 10:12:36

Compound	Amount Added	Amount Recovered	% Rec.
\$ 10 1,2-Dinitrobenzene	0.2000	0.1799	89.94

## Eurofins TestAmerica, Denver

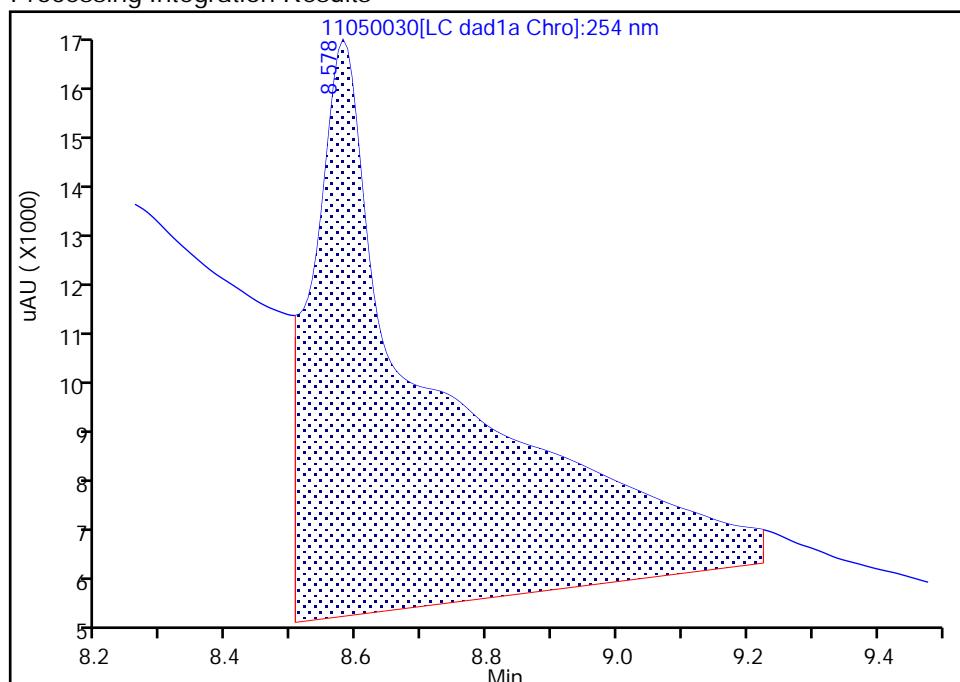
Data File: \\chromfs\denver\chromdata\chhplc\_x\20211105-106237.b\11050030.d  
 Injection Date: 05-Nov-2021 22:30:38 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-155048-A-3-A Lab Sample ID: 280-155048-3  
 Client ID: NW061-7  
 Operator ID: JZ ALS Bottle#: 30 Worklist Smp#: 30  
 Injection Vol: 100.0 ul 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

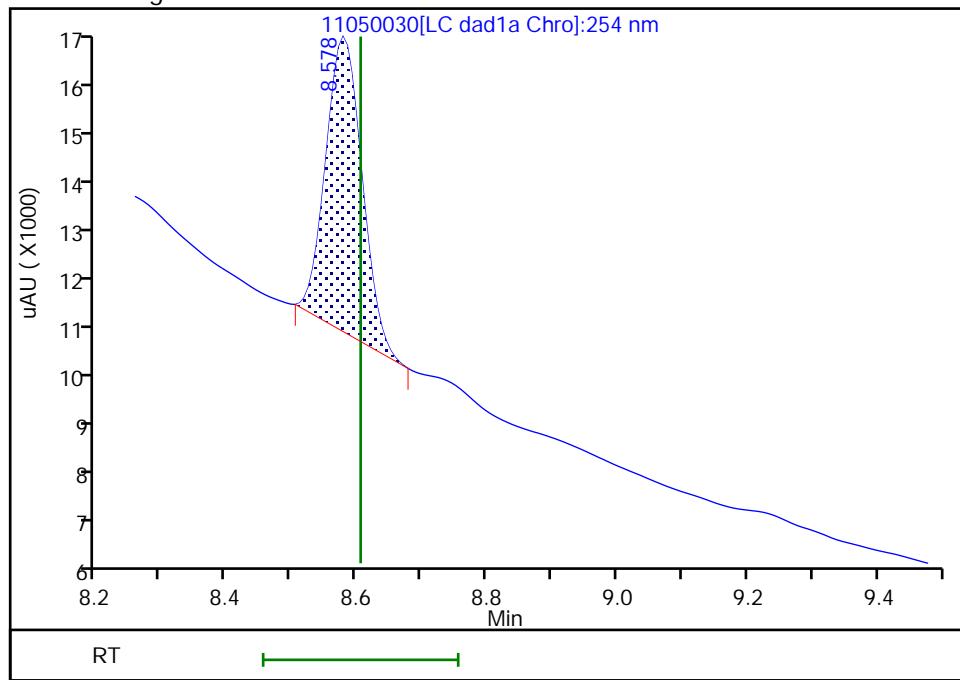
RT: 8.58  
 Area: 155862  
 Amount: 1.215609  
 Amount Units: ug/mL

## Processing Integration Results



RT: 8.58  
 Area: 23063  
 Amount: 0.179874  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 06-Nov-2021 10:12:34

Audit Action: Manually Integrated

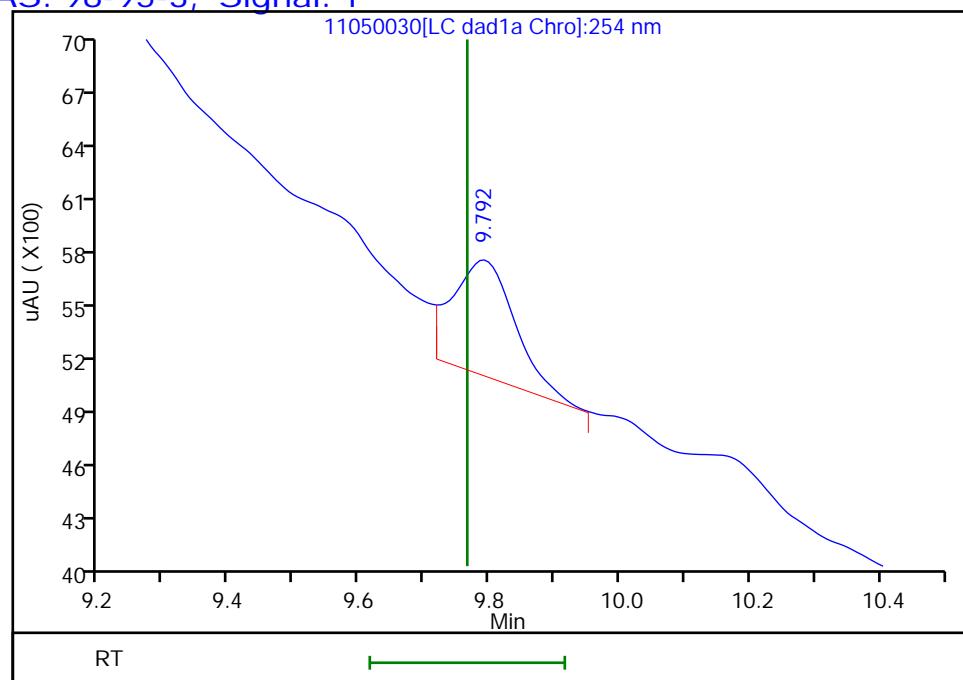
Audit Reason: Baseline

## Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20211105-106237.b\11050030.d  
Injection Date: 05-Nov-2021 22:30:38 Instrument ID: CHHPLC\_X3  
Lims ID: 280-155048-A-3-A Lab Sample ID: 280-155048-3  
Client ID: NW061-7  
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: 9.79  
Response: 4202  
Amount: 0.021517



Reviewer: zhangji, 06-Nov-2021 10:12:36

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I  
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: G0076-7 Lab Sample ID: 280-155048-4  
Matrix: Water Lab File ID: 11050031.D  
Analysis Method: 8330A Date Collected: 11/01/2021 13:10  
Extraction Method: 3535 Date Extracted: 11/04/2021 14:13  
Sample wt/vol: 501 (mL) Date Analyzed: 11/05/2021 22:53  
Con. Extract Vol.: 5 (mL) Dilution Factor: 1  
Injection Volume: 100 (uL) GC Column: UltraCarb5uODS ID: 4.6 (mm)  
% Moisture:                    GPC Cleanup: (Y/N) N  
Analysis Batch No.: 556359 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	0.085
99-08-1	3-Nitrotoluene	0.40	U	0.40	0.40	0.19
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 M	0.21	0.20	0.087
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	0.051
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	93	M	83-119

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\11050031.D  
 Lims ID: 280-155048-A-4-A  
 Client ID: G0076-7  
 Sample Type: Client  
 Inject. Date: 05-Nov-2021 22:53:39 ALS Bottle#: 31 Worklist Smp#: 31  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-155048-A-4-A  
 Misc. Info.: 280-0106237-031  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Nov-2021 10:24:53 Calib Date: 27-Oct-2021 04:27:09  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211027-105955.b\1026T007.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 10:12:45

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1	6.612			ND		U
7 MNX	1	7.239			ND		
8 RDX	1	7.632			ND		
\$ 10 1,2-Dinitrobenzene	1	8.572	8.606	-0.034	23947	0.1868	M
11 1,3,5-Trinitrobenzene	1	8.726			ND		
12 1,3-Dinitrobenzene	1	9.365			ND		
13 Nitrobenzene	1	9.765			ND		7
15 Tetryl	1	10.112			ND		
17 2,4,6-Trinitrotoluene	1	11.025			ND		
18 4-Amino-2,6-dinitrotoluene	1	11.239			ND		
19 2-Amino-4,6-dinitrotoluene	1	11.499			ND		
20 2,6-Dinitrotoluene	1	11.665			ND		
21 2,4-Dinitrotoluene	1	11.832			ND		
22 o-Nitrotoluene	1	12.712			ND		
23 p-Nitrotoluene	1	13.152			ND		
24 m-Nitrotoluene	1	13.745			ND		

### QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

U - Marked Undetected

Report Date: 06-Nov-2021 10:24:57

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\\denver\\chromdata\\chhplc\_x\\20211105-106237.bl\\11050031.d

Injection Date: 05-Nov-2021 22:53:39

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: 280-155048-A-4-A

Lab Sample ID: 280-155048-4

Worklist Smp#: 31

Client ID: G0076-7

Dil. Factor: 1.0000

ALS Bottle#: 31

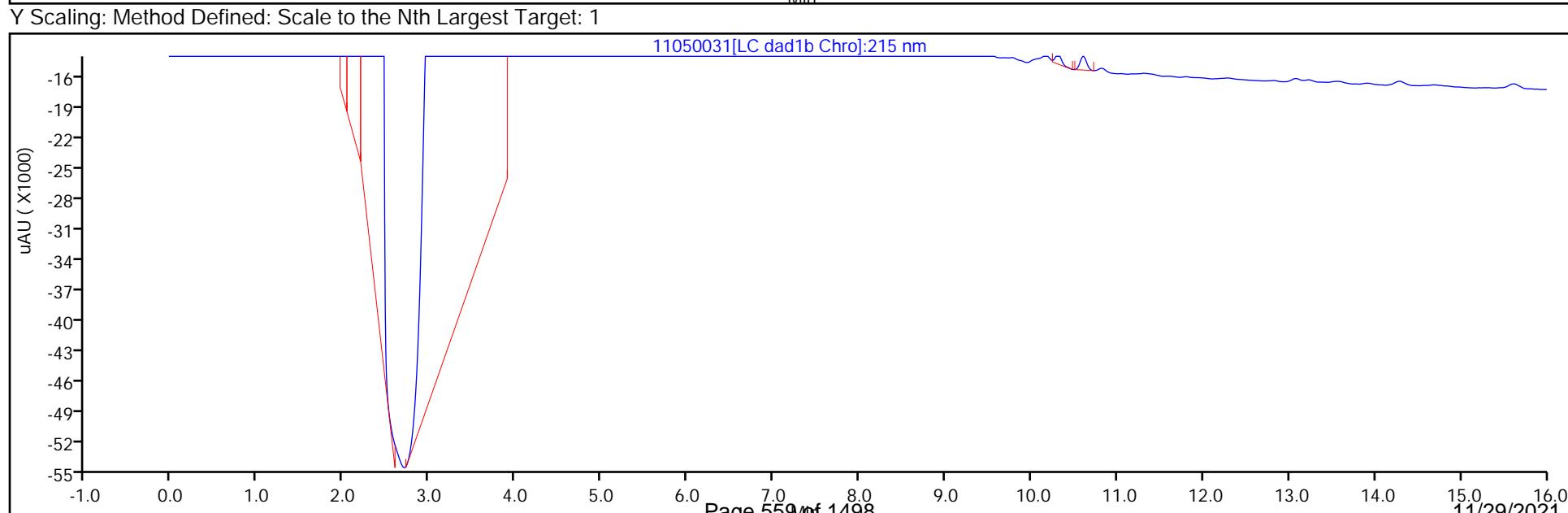
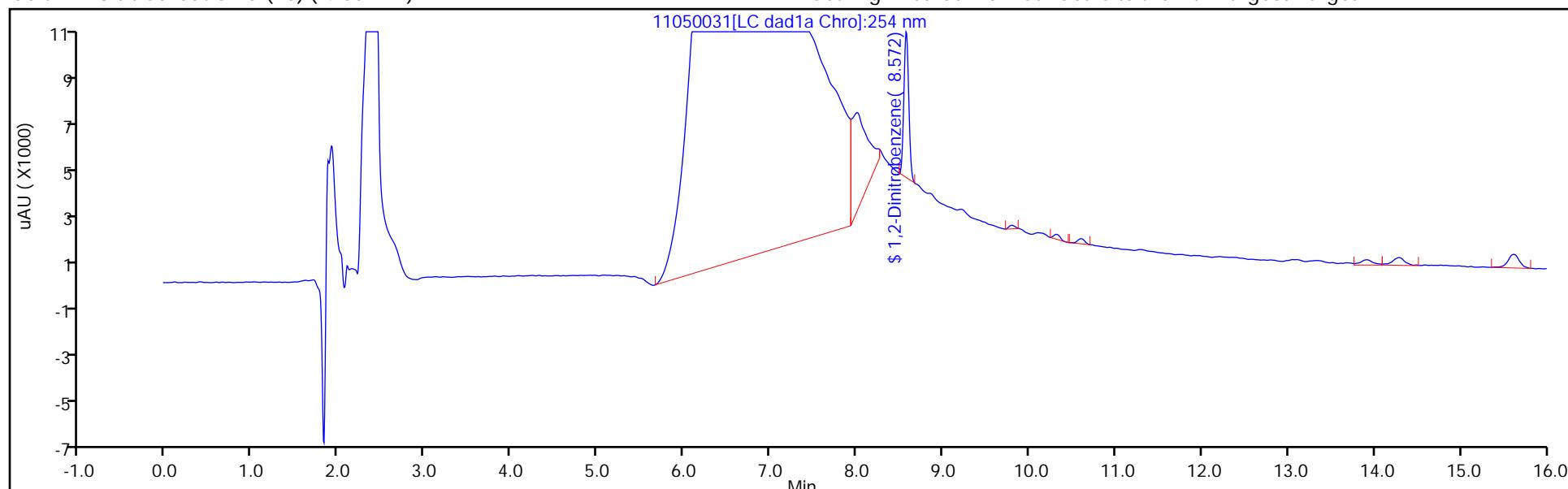
Injection Vol: 100.0 ul

Limit Group: GCSV - 8330

Method: 8330\_X3

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver  
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\11050031.D  
 Lims ID: 280-155048-A-4-A  
 Client ID: G0076-7  
 Sample Type: Client  
 Inject. Date: 05-Nov-2021 22:53:39 ALS Bottle#: 31 Worklist Smp#: 31  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-155048-A-4-A  
 Misc. Info.: 280-0106237-031  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Nov-2021 10:24:53 Calib Date: 27-Oct-2021 04:27:09  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211027-105955.b\1026T007.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 10:12:45

Compound	Amount Added	Amount Recovered	% Rec.
\$ 10 1,2-Dinitrobenzene	0.2000	0.1868	93.38

## Eurofins TestAmerica, Denver

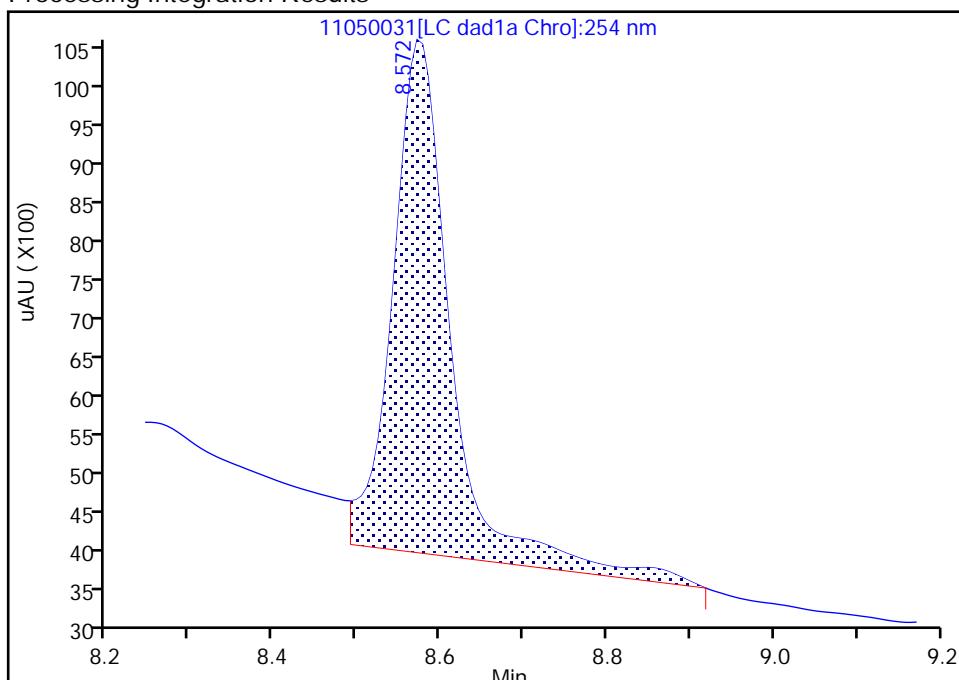
Data File: \\chromfs\denver\chromdata\chhplc\_x\20211105-106237.b\11050031.d  
 Injection Date: 05-Nov-2021 22:53:39 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-155048-A-4-A Lab Sample ID: 280-155048-4  
 Client ID: G0076-7  
 Operator ID: JZ ALS Bottle#: 31 Worklist Smp#: 31  
 Injection Vol: 100.0 ul 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

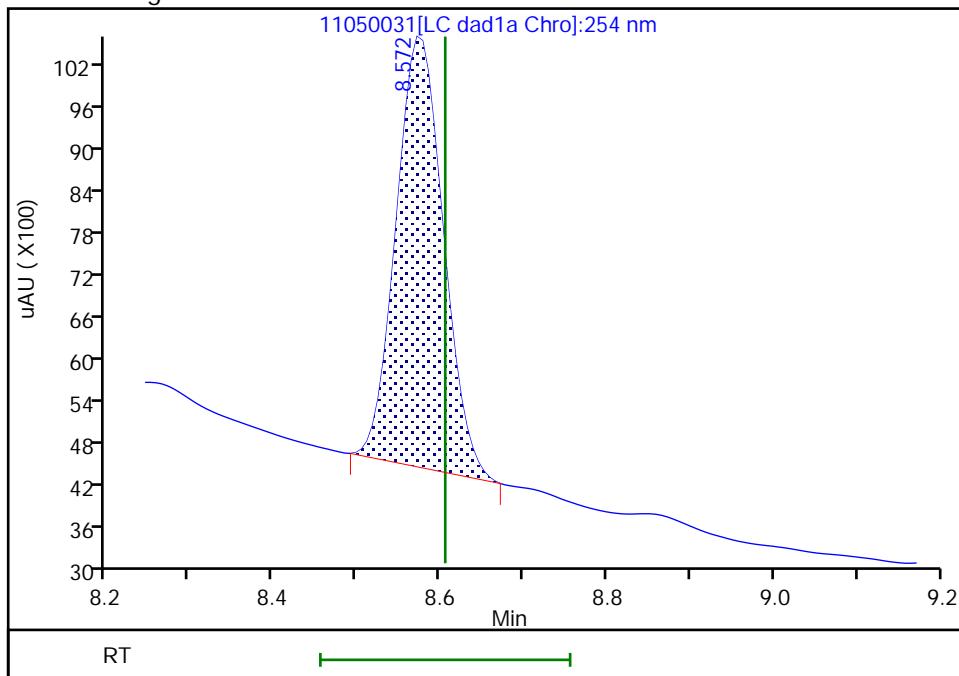
RT: 8.57  
 Area: 31797  
 Amount: 0.247993  
 Amount Units: ug/mL

## Processing Integration Results



RT: 8.57  
 Area: 23947  
 Amount: 0.186769  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 06-Nov-2021 10:12:44

Audit Action: Manually Integrated

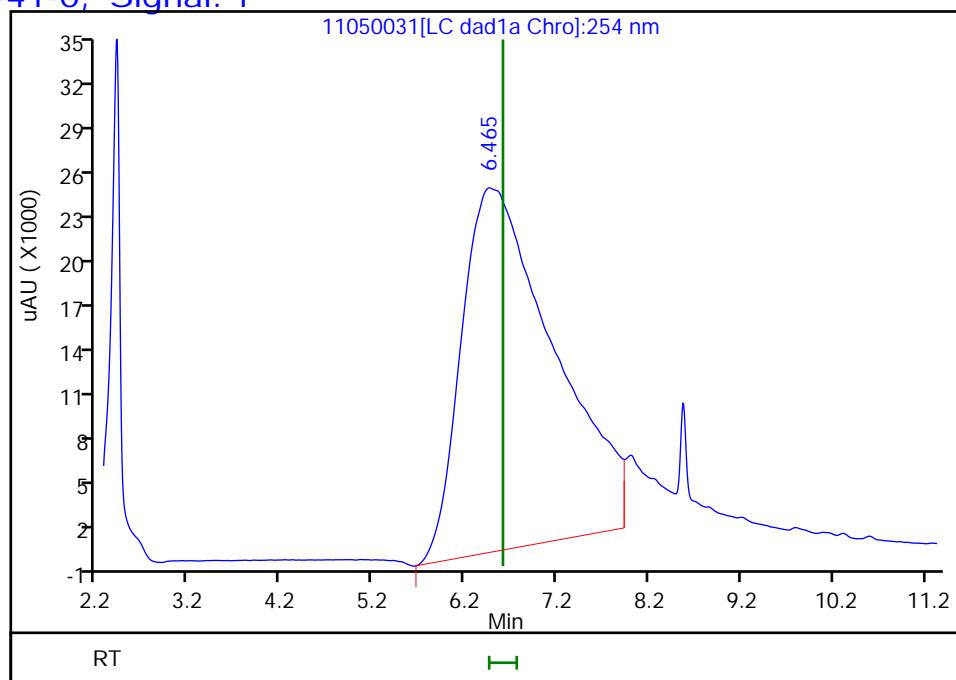
Audit Reason: Baseline

## Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20211105-106237.b\11050031.d  
 Injection Date: 05-Nov-2021 22:53:39 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-155048-A-4-A Lab Sample ID: 280-155048-4  
 Client ID: G0076-7  
 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: 6.47  
 Response: 1652394  
 Amount: 19.573157



Reviewer: zhangji, 06-Nov-2021 10:12:45

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I  
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: NW060-7 Lab Sample ID: 280-155048-5  
Matrix: Water Lab File ID: 11050032.D  
Analysis Method: 8330A Date Collected: 11/02/2021 10:10  
Extraction Method: 3535 Date Extracted: 11/04/2021 14:13  
Sample wt/vol: 498.8 (mL) Date Analyzed: 11/05/2021 23:16  
Con. Extract Vol.: 5 (mL) Dilution Factor: 1  
Injection Volume: 100 (uL) GC Column: UltraCarb5uODS ID: 4.6 (mm)  
% Moisture:  GPC Cleanup: (Y/N) N  
Analysis Batch No.: 556359 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	92	M	83-119

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\11050032.D  
 Lims ID: 280-155048-A-5-A  
 Client ID: NW060-7  
 Sample Type: Client  
 Inject. Date: 05-Nov-2021 23:16:33 ALS Bottle#: 32 Worklist Smp#: 32  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-155048-A-5-A  
 Misc. Info.: 280-0106237-032  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Nov-2021 10:24:53 Calib Date: 27-Oct-2021 04:27:09  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211027-105955.b\1026T007.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 10:12:53

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1	6.612				ND	
7 MNX	1	7.239				ND	
8 RDX	1	7.632				ND	
\$ 10 1,2-Dinitrobenzene	1	8.579	8.606	-0.027	23549	0.1837	M
11 1,3,5-Trinitrobenzene	1	8.726				ND	
12 1,3-Dinitrobenzene	1	9.365				ND	
13 Nitrobenzene	1	9.765				ND	
15 Tetryl	1	10.112				ND	
17 2,4,6-Trinitrotoluene	1	11.025				ND	
18 4-Amino-2,6-dinitrotoluene	1	11.239				ND	
19 2-Amino-4,6-dinitrotoluene	1	11.499				ND	
20 2,6-Dinitrotoluene	1	11.665				ND	
21 2,4-Dinitrotoluene	1	11.832				ND	
22 o-Nitrotoluene	1	12.712				ND	
23 p-Nitrotoluene	1	13.152				ND	
24 m-Nitrotoluene	1	13.745				ND	

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Report Date: 06-Nov-2021 10:24:57

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\\denver\\chromdata\\chhplc\_x\\20211105-106237.bl\\11050032.d

Injection Date: 05-Nov-2021 23:16:33

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: 280-155048-A-5-A

Lab Sample ID: 280-155048-5

Worklist Smp#: 32

Client ID: NW060-7

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

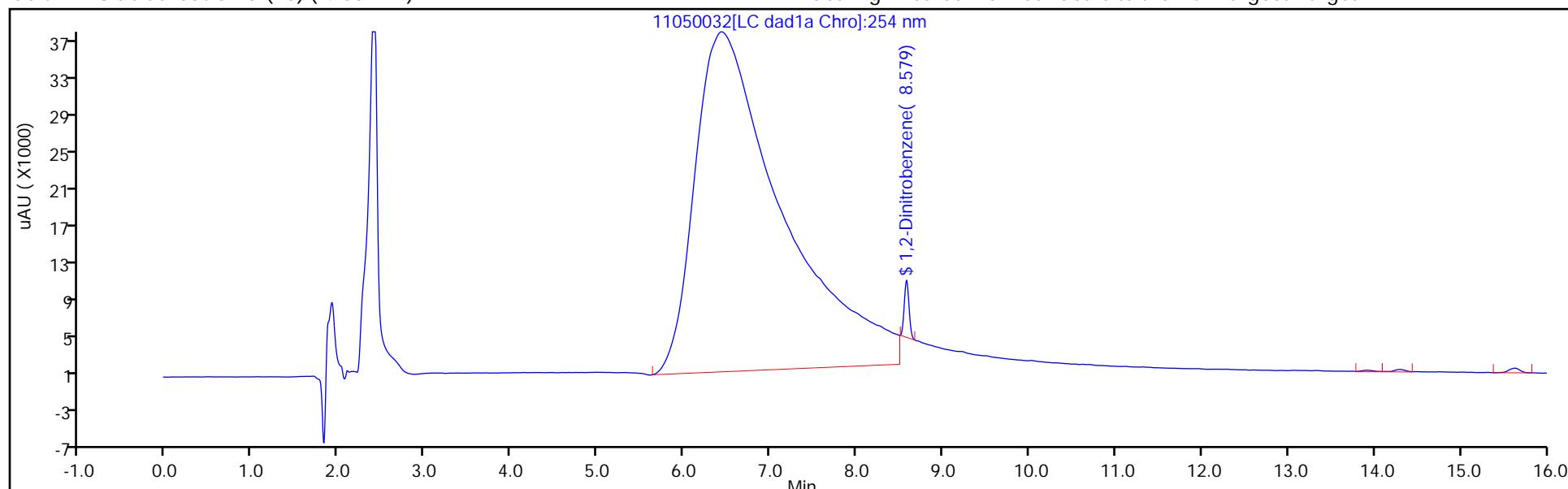
ALS Bottle#: 32

Method: 8330\_X3

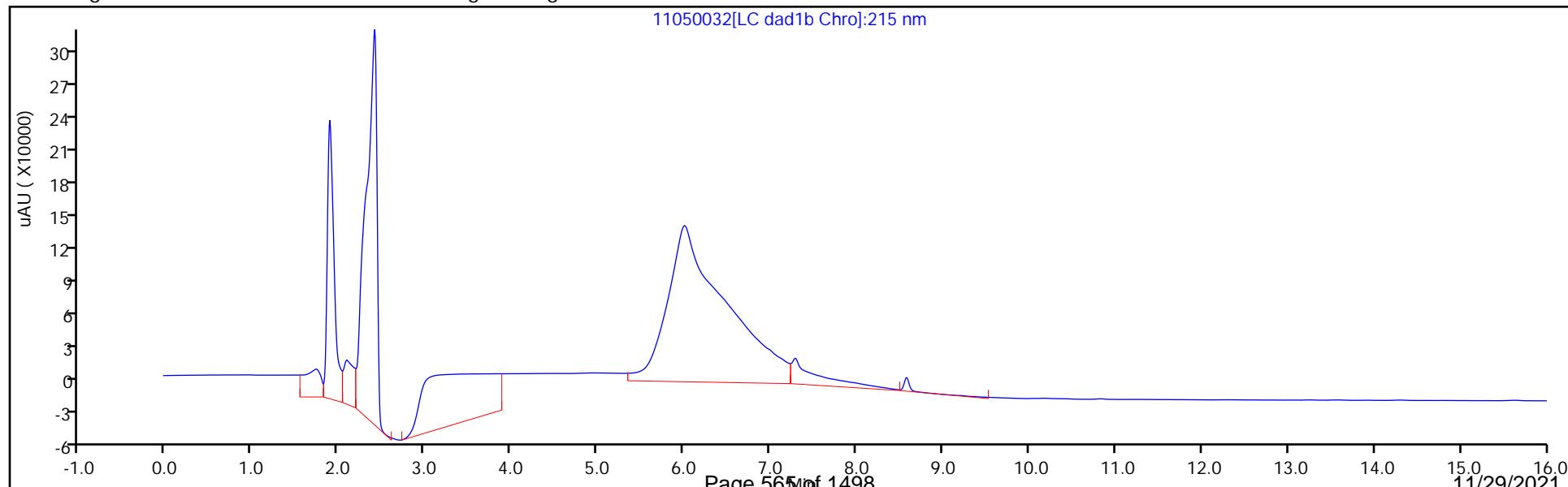
Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver  
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\11050032.D  
 Lims ID: 280-155048-A-5-A  
 Client ID: NW060-7  
 Sample Type: Client  
 Inject. Date: 05-Nov-2021 23:16:33 ALS Bottle#: 32 Worklist Smp#: 32  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-155048-A-5-A  
 Misc. Info.: 280-0106237-032  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Nov-2021 10:24:53 Calib Date: 27-Oct-2021 04:27:09  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211027-105955.b\1026T007.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 10:12:53

Compound	Amount Added	Amount Recovered	% Rec.
\$ 10 1,2-Dinitrobenzene	0.2000	0.1837	91.83

## Eurofins TestAmerica, Denver

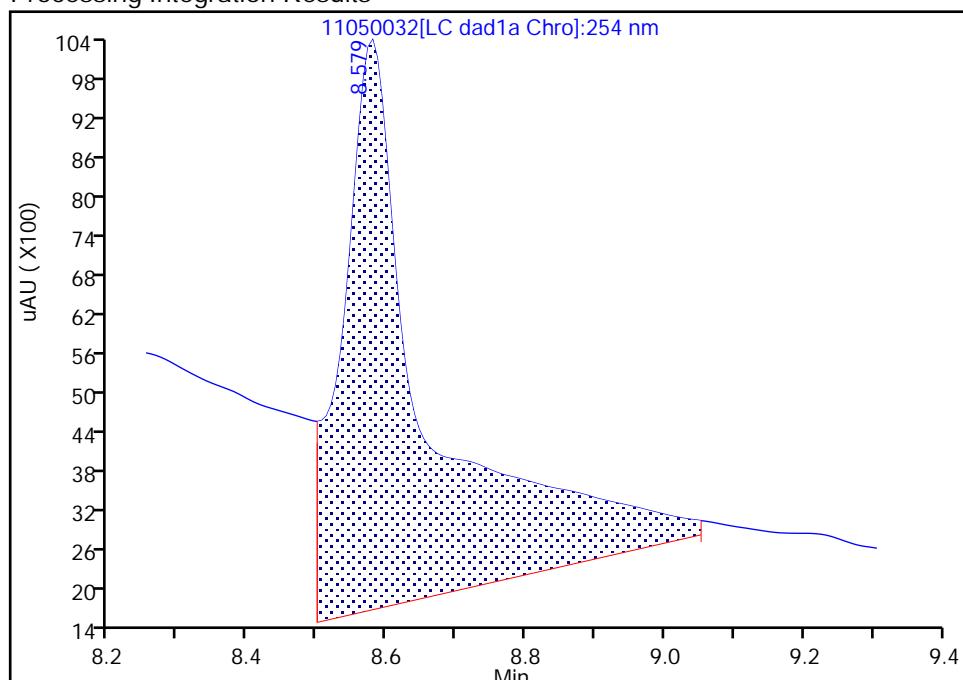
Data File: \\chromfs\denver\chromdata\chhplc\_x\20211105-106237.b\11050032.d  
 Injection Date: 05-Nov-2021 23:16:33 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-155048-A-5-A Lab Sample ID: 280-155048-5  
 Client ID: NW060-7  
 Operator ID: JZ ALS Bottle#: 32 Worklist Smp#: 32  
 Injection Vol: 100.0 ul 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

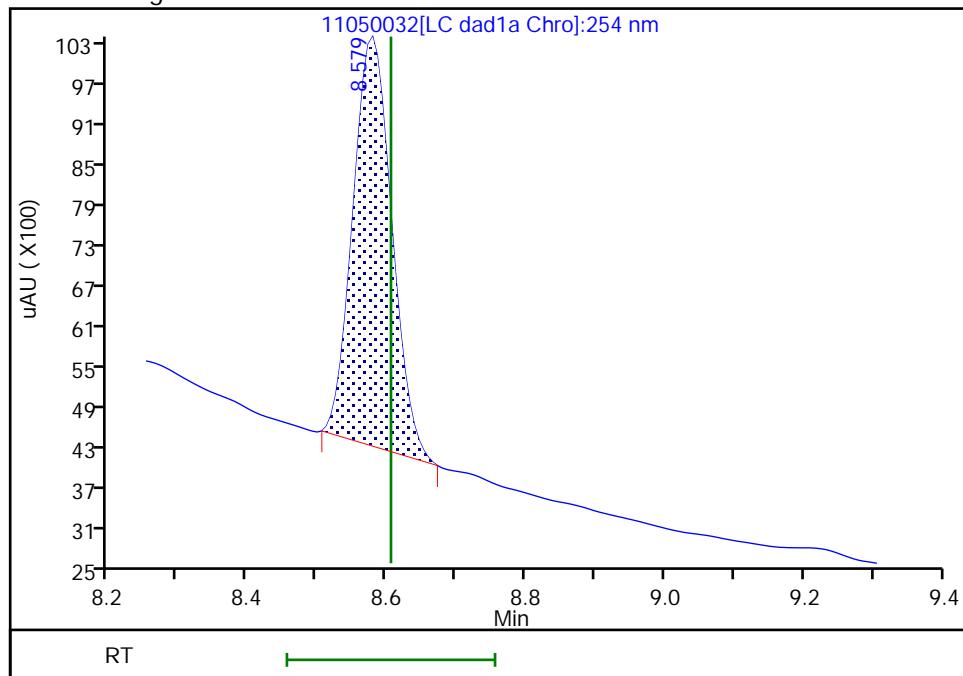
RT: 8.58  
 Area: 77271  
 Amount: 0.602657  
 Amount Units: ug/mL

## Processing Integration Results



RT: 8.58  
 Area: 23549  
 Amount: 0.183665  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 06-Nov-2021 10:12:52

Audit Action: Manually Integrated

Audit Reason: Baseline

FORM I  
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: CA210-7 Lab Sample ID: 280-155048-6  
Matrix: Water Lab File ID: 11050035.D  
Analysis Method: 8330A Date Collected: 11/02/2021 09:50  
Extraction Method: 3535 Date Extracted: 11/04/2021 14:13  
Sample wt/vol: 501.7 (mL) Date Analyzed: 11/06/2021 00:25  
Con. Extract Vol.: 5 (mL) Dilution Factor: 1  
Injection Volume: 100 (uL) GC Column: UltraCarb5uODS ID: 4.6 (mm)  
% Moisture:                    GPC Cleanup: (Y/N) N  
Analysis Batch No.: 556359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
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	0.085
99-08-1	3-Nitrotoluene	0.40	U	0.40	0.40	0.19
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	0.087
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	0.051
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	99	M	83-119

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\11050035.D  
 Lims ID: 280-155048-A-6-A  
 Client ID: CA210-7  
 Sample Type: Client  
 Inject. Date: 06-Nov-2021 00:25:22 ALS Bottle#: 35 Worklist Smp#: 35  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-155048-A-6-A  
 Misc. Info.: 280-0106237-035  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Nov-2021 10:24:58 Calib Date: 27-Oct-2021 04:27:09  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211027-105955.b\1026T007.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 10:14:46

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1	6.612				ND	
7 MNX	1	7.239				ND	
8 RDX	1	7.632				ND	
\$ 10 1,2-Dinitrobenzene	1	8.571	8.606	-0.035	25473	0.1987	M
11 1,3,5-Trinitrobenzene	1	8.724	8.726	-0.002	4593	0.0208	M
12 1,3-Dinitrobenzene	1	9.365				ND	
13 Nitrobenzene	1	9.765				ND	
15 Tetryl	1	10.112				ND	
17 2,4,6-Trinitrotoluene	1	11.025				ND	
18 4-Amino-2,6-dinitrotoluene	1	11.239				ND	
19 2-Amino-4,6-dinitrotoluene	1	11.499				ND	
20 2,6-Dinitrotoluene	1	11.665				ND	
21 2,4-Dinitrotoluene	1	11.832				ND	
22 o-Nitrotoluene	1	12.712				ND	
23 p-Nitrotoluene	1	13.152				ND	
24 m-Nitrotoluene	1	13.745				ND	

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Report Date: 06-Nov-2021 10:24:58

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\\denver\\chromdata\\chhplc\_x\\20211105-106237.bl\\11050035.d

Injection Date: 06-Nov-2021 00:25:22

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: 280-155048-A-6-A

Lab Sample ID: 280-155048-6

Worklist Smp#: 35

Client ID: CA210-7

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

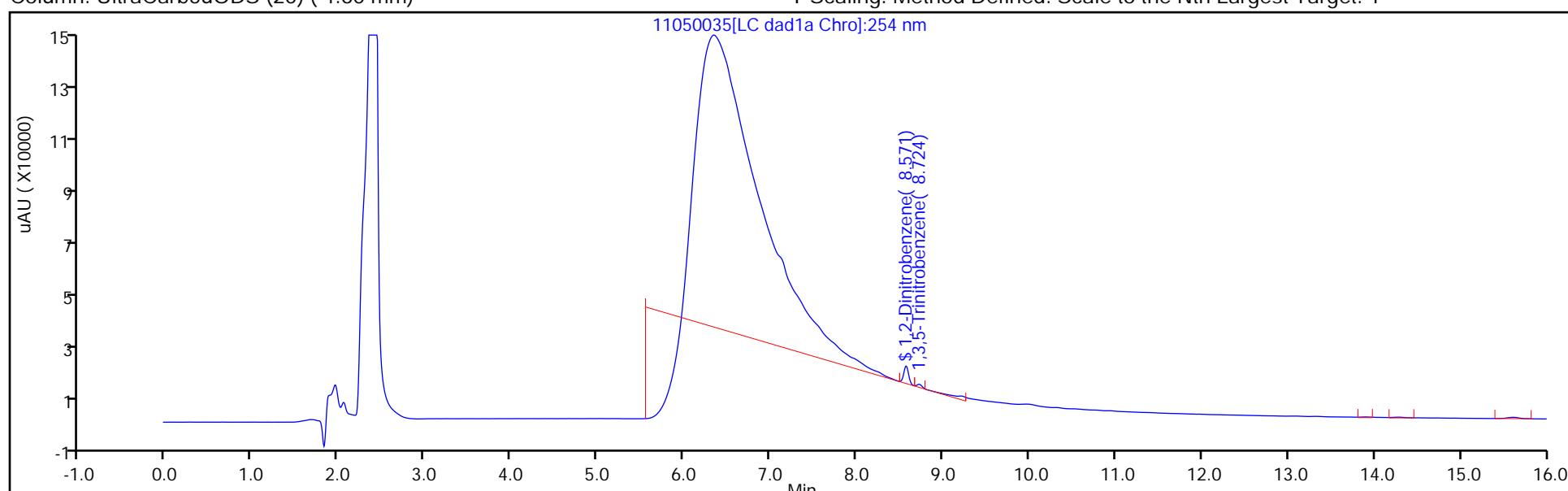
ALS Bottle#: 35

Method: 8330\_X3

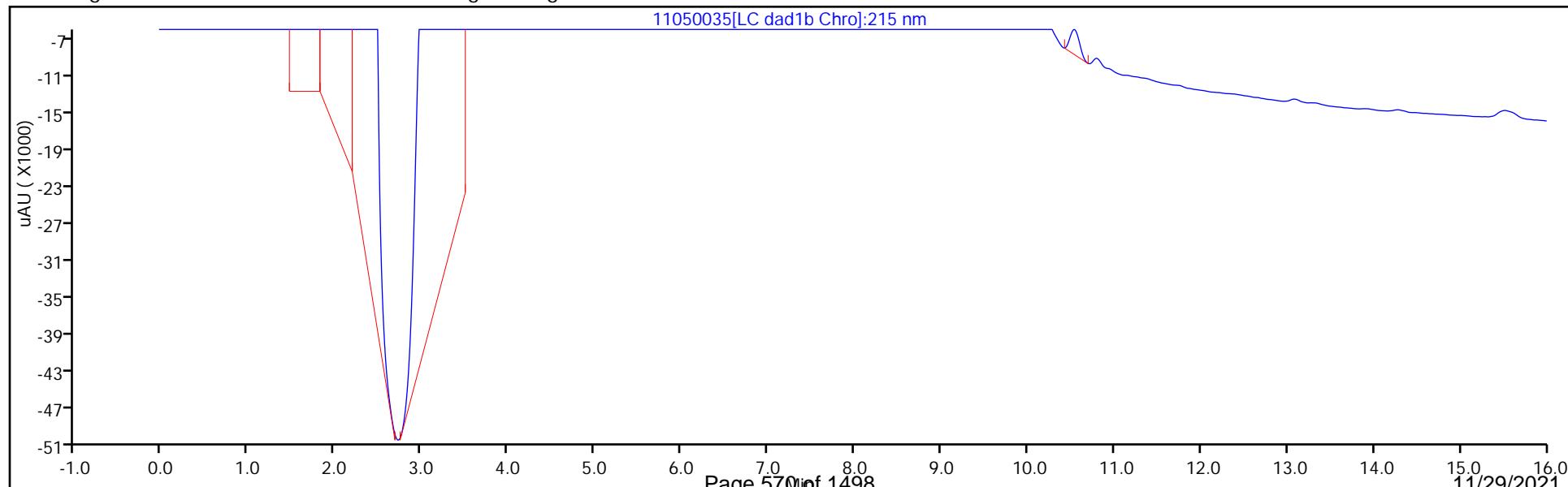
Limit Group: GCSV - 8330

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



Eurofins TestAmerica, Denver  
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\11050035.D  
 Lims ID: 280-155048-A-6-A  
 Client ID: CA210-7  
 Sample Type: Client  
 Inject. Date: 06-Nov-2021 00:25:22 ALS Bottle#: 35 Worklist Smp#: 35  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-155048-A-6-A  
 Misc. Info.: 280-0106237-035  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Nov-2021 10:24:58 Calib Date: 27-Oct-2021 04:27:09  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211027-105955.b\1026T007.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 10:14:46

Compound	Amount Added	Amount Recovered	% Rec.
\$ 10 1,2-Dinitrobenzene	0.2000	0.1987	99.34

## Eurofins TestAmerica, Denver

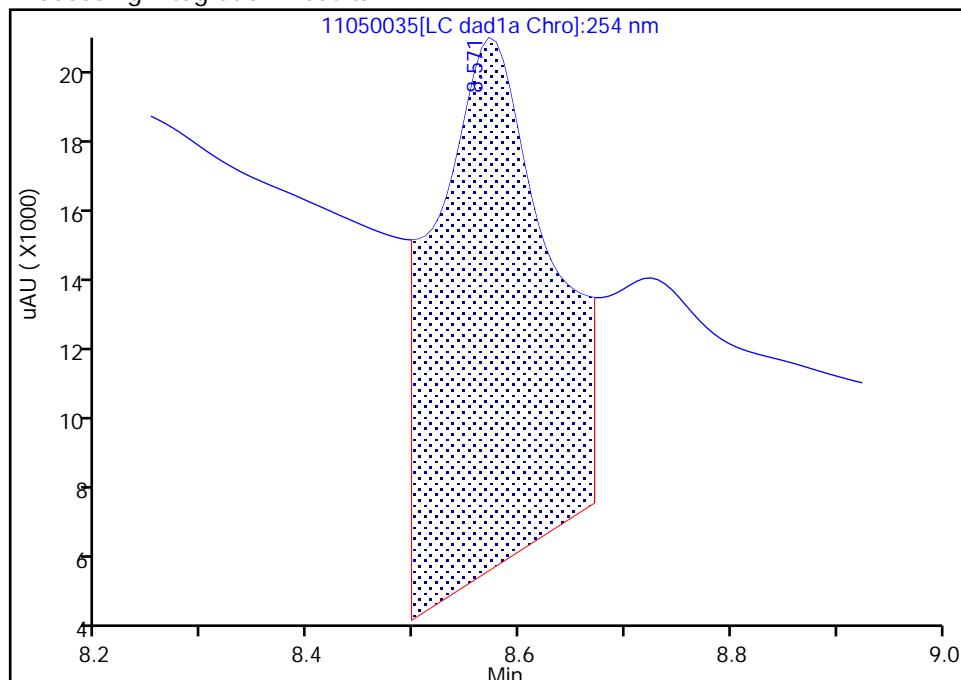
Data File: \\chromfs\denver\chromdata\chhplc\_x\20211105-106237.b\11050035.d  
 Injection Date: 06-Nov-2021 00:25:22 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-155048-A-6-A Lab Sample ID: 280-155048-6  
 Client ID: CA210-7  
 Operator ID: JZ ALS Bottle#: 35 Worklist Smp#: 35  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

## \$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

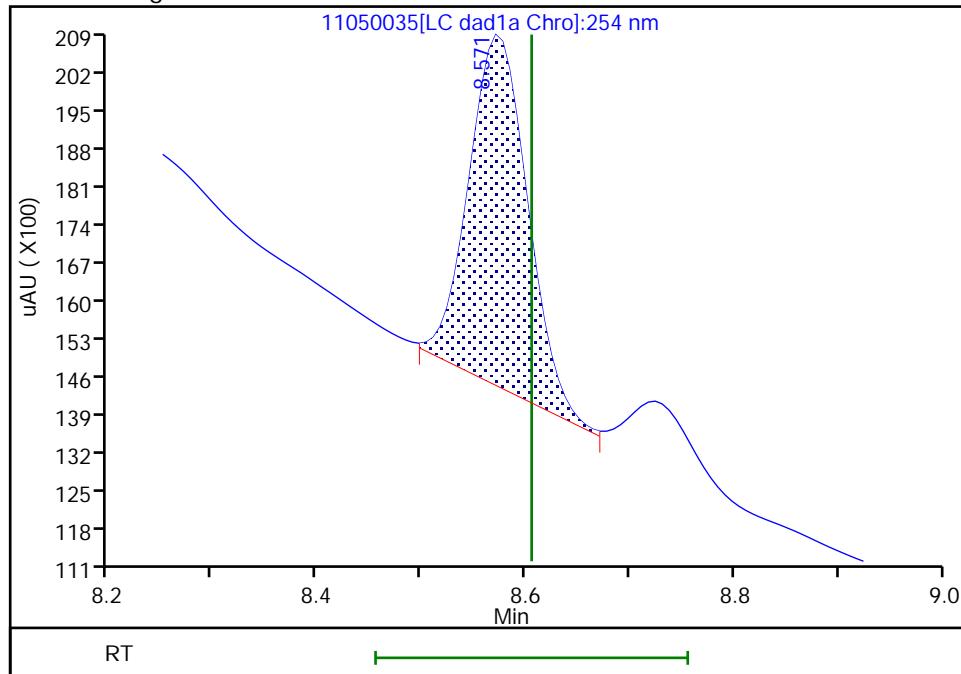
RT: 8.57  
 Area: 110087  
 Amount: 0.858598  
 Amount Units: ug/mL

## Processing Integration Results



RT: 8.57  
 Area: 25473  
 Amount: 0.198671  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 06-Nov-2021 10:14:41

Audit Action: Assigned New Baseline

Audit Reason: Baseline

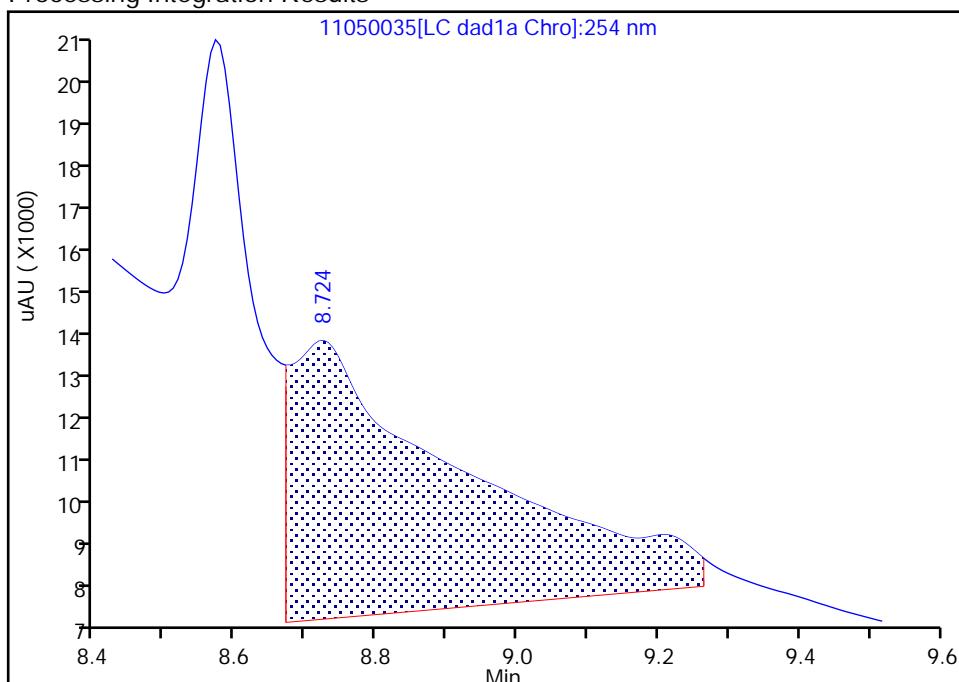
## Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20211105-106237.b\11050035.d  
 Injection Date: 06-Nov-2021 00:25:22 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-155048-A-6-A Lab Sample ID: 280-155048-6  
 Client ID: CA210-7  
 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

**11 1,3,5-Trinitrobenzene, CAS: 99-35-4**  
 Signal: 1

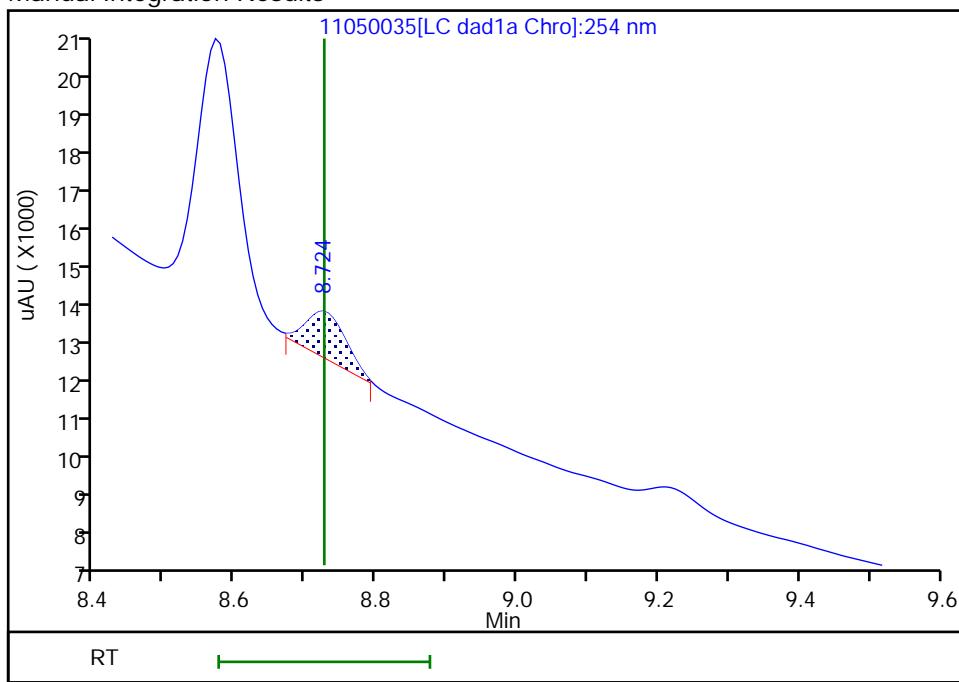
RT: 8.72  
 Area: 106371  
 Amount: 0.482808  
 Amount Units: ug/mL

## Processing Integration Results



RT: 8.72  
 Area: 4593  
 Amount: 0.020847  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 06-Nov-2021 10:14:45

Audit Action: Split an Integrated Peak

Audit Reason: Baseline

FORM I  
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: CA210-7 Lab Sample ID: 280-155048-6  
Matrix: Water Lab File ID: 11050049.D  
Analysis Method: 8330A Date Collected: 11/02/2021 09:50  
Extraction Method: 3535 Date Extracted: 11/04/2021 14:13  
Sample wt/vol: 501.7 (mL) Date Analyzed: 11/06/2021 10:55  
Con. Extract Vol.: 5 (mL) Dilution Factor: 1  
Injection Volume: 100 (uL) GC Column: Luna-phenylhex ID: 4.6 (mm)  
% Moisture:  GPC Cleanup: (Y/N) N  
Analysis Batch No.: 556366 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

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	88		83-119

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20211105-106238.b\11050049.D  
 Lims ID: 280-155048-A-6-A  
 Client ID: CA210-7  
 Sample Type: Client  
 Inject. Date: 06-Nov-2021 10:55:21 ALS Bottle#: 49 Worklist Smp#: 49  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-155048-A-6-A  
 Misc. Info.: 280-0106238-049  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20211105-106238.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Nov-2021 12:42:08 Calib Date: 02-May-2021 04:51:05  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\027-2201.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm) Det: LC mwd1A, 254 nm  
 Process Host: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 12:41:37

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
5 HMX	1	6.665				ND	
6 MNX	1	7.384				ND	
8 RDX	1	8.825				ND	
9 Nitrobenzene	1	11.885				ND	
\$ 10 1,2-Dinitrobenzene	1	12.879	12.978	-0.099	46779	0.1761	
12 1,3-Dinitrobenzene	1	15.398				ND	
14 o-Nitrotoluene	1	16.559	16.631	-0.072	1424	0.005720	7M
16 p-Nitrotoluene	1	16.918				ND	
17 4-Amino-2,6-dinitrotoluene	1	17.378				ND	
18 m-Nitrotoluene	1	17.885				ND	
19 2-Amino-4,6-dinitrotoluene	1	18.226	18.265	-0.039	17158	0.0408	M
20 1,3,5-Trinitrobenzene	1	18.785				ND	
21 2,6-Dinitrotoluene	1	20.045				ND	
22 2,4-Dinitrotoluene	1	20.505				ND	
23 Tetryl	1	24.112				ND	
24 2,4,6-Trinitrotoluene	1	25.098				ND	

### QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Report Date: 06-Nov-2021 12:42:11

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20211105-106238.b\11050049.D

Injection Date: 06-Nov-2021 10:55:21

Instrument ID: CHHPLC\_X5

Operator ID: JZ

Lims ID: 280-155048-A-6-A

Lab Sample ID: 280-155048-6

Worklist Smp#: 49

Client ID: CA210-7

Dil. Factor: 1.0000

ALS Bottle#: 49

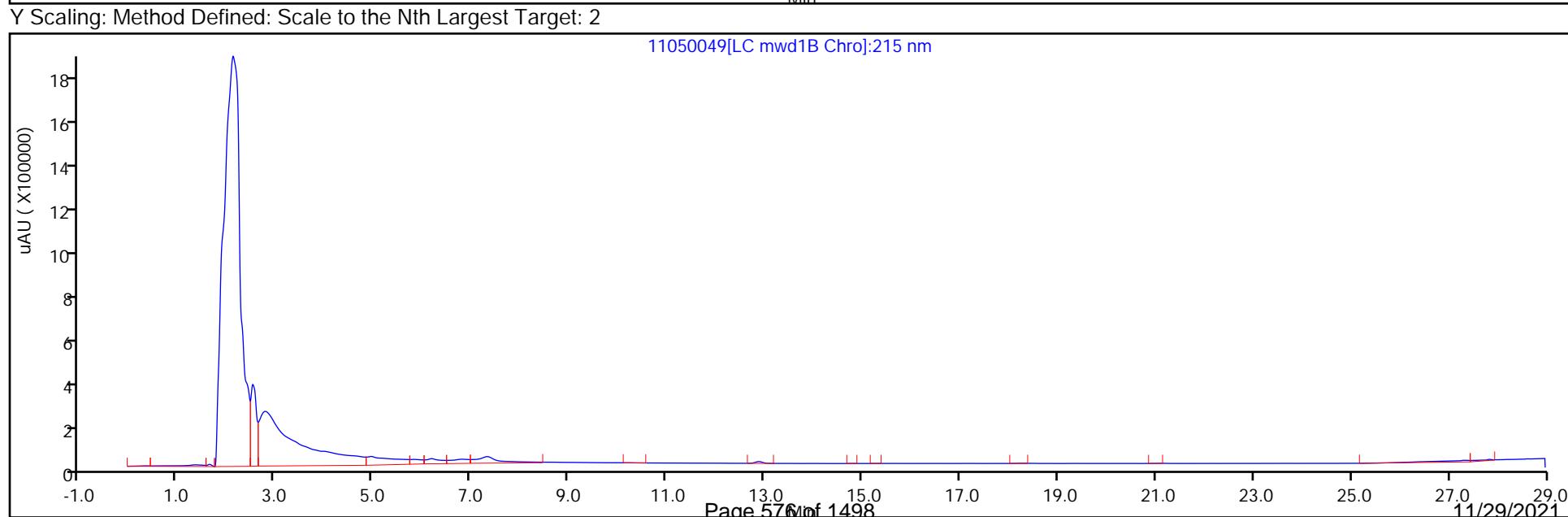
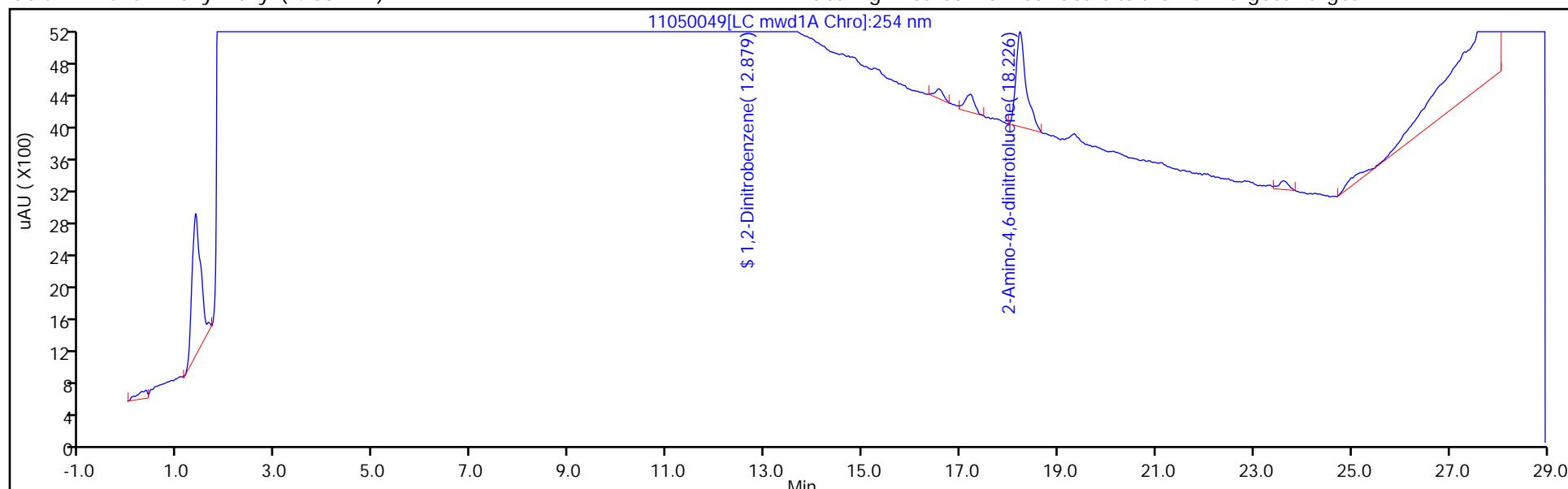
Injection Vol: 100.0 ul

Limit Group: GCSV - 8330

Method: 8330\_X5\_Luna

Column: Luna-Phenyl hexyl ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Denver  
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20211105-106238.b\11050049.D  
 Lims ID: 280-155048-A-6-A  
 Client ID: CA210-7  
 Sample Type: Client  
 Inject. Date: 06-Nov-2021 10:55:21 ALS Bottle#: 49 Worklist Smp#: 49  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-155048-A-6-A  
 Misc. Info.: 280-0106238-049  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20211105-106238.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Nov-2021 12:42:08 Calib Date: 02-May-2021 04:51:05  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\027-2201.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm) Det: LC mwd1A, 254 nm  
 Process Host: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 12:41:37

Compound	Amount Added	Amount Recovered	% Rec.
\$ 10 1,2-Dinitrobenzene	0.2000	0.1761	88.04

## Eurofins TestAmerica, Denver

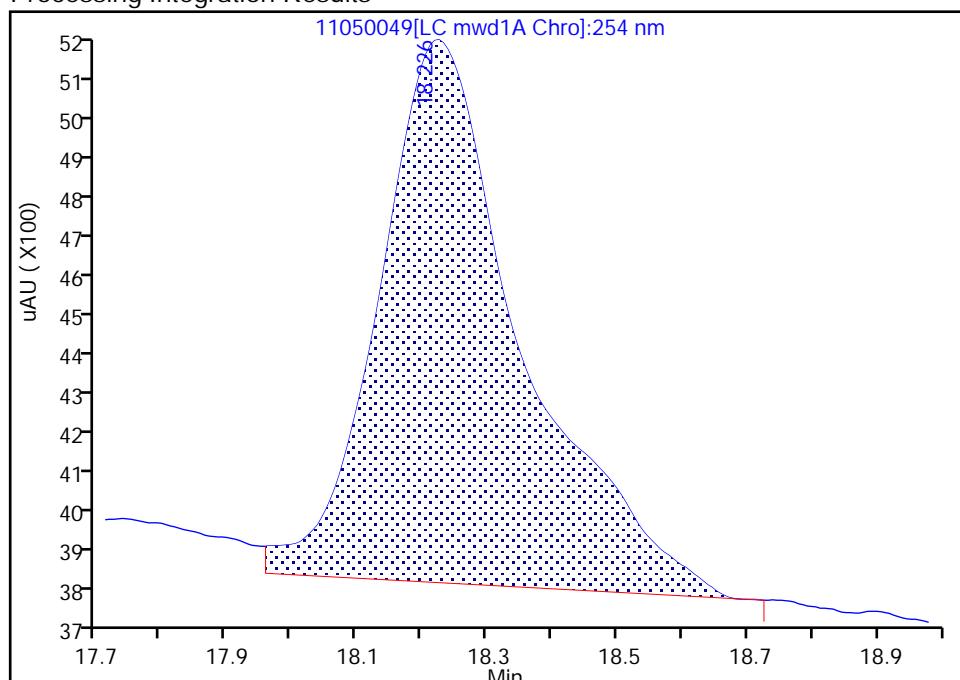
Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20211105-106238.b\11050049.D  
 Injection Date: 06-Nov-2021 10:55:21 Instrument ID: CHHPLC\_X5  
 Lims ID: 280-155048-A-6-A Lab Sample ID: 280-155048-6  
 Client ID: CA210-7  
 Operator ID: JZ ALS Bottle#: 49 Worklist Smp#: 49  
 Injection Vol: 100.0 ul 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

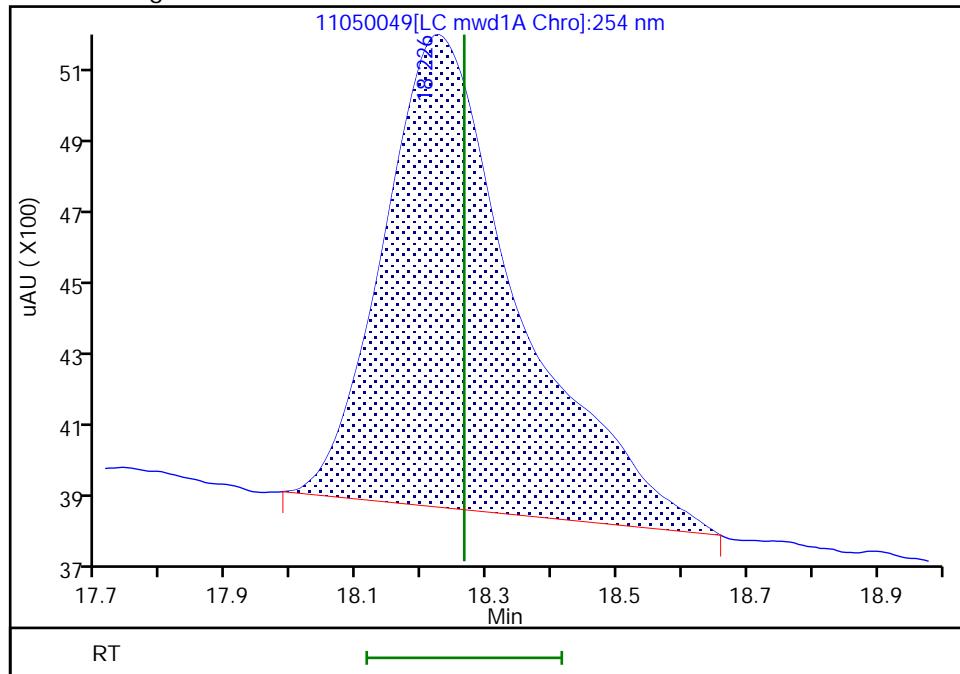
RT: 18.23  
 Area: 18775  
 Amount: 0.044943  
 Amount Units: ug/ml

## Processing Integration Results



RT: 18.23  
 Area: 17158  
 Amount: 0.040795  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: zhangji, 06-Nov-2021 12:41:29

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

## Eurofins TestAmerica, Denver

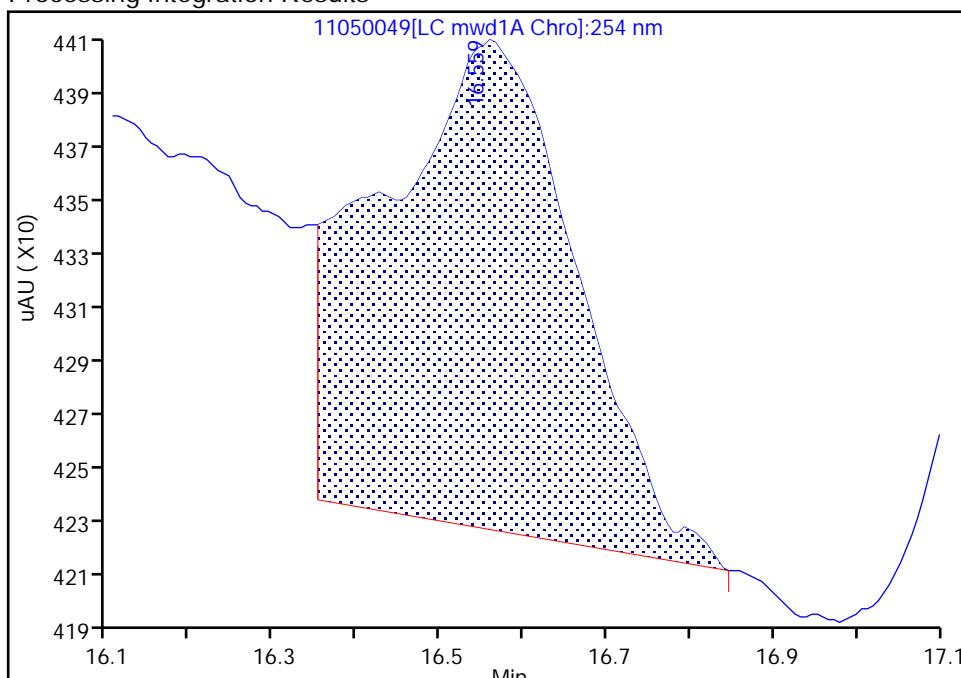
Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20211105-106238.b\11050049.D  
 Injection Date: 06-Nov-2021 10:55:21 Instrument ID: CHHPLC\_X5  
 Lims ID: 280-155048-A-6-A Lab Sample ID: 280-155048-6  
 Client ID: CA210-7  
 Operator ID: JZ ALS Bottle#: 49 Worklist Smp#: 49  
 Injection Vol: 100.0 ul 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

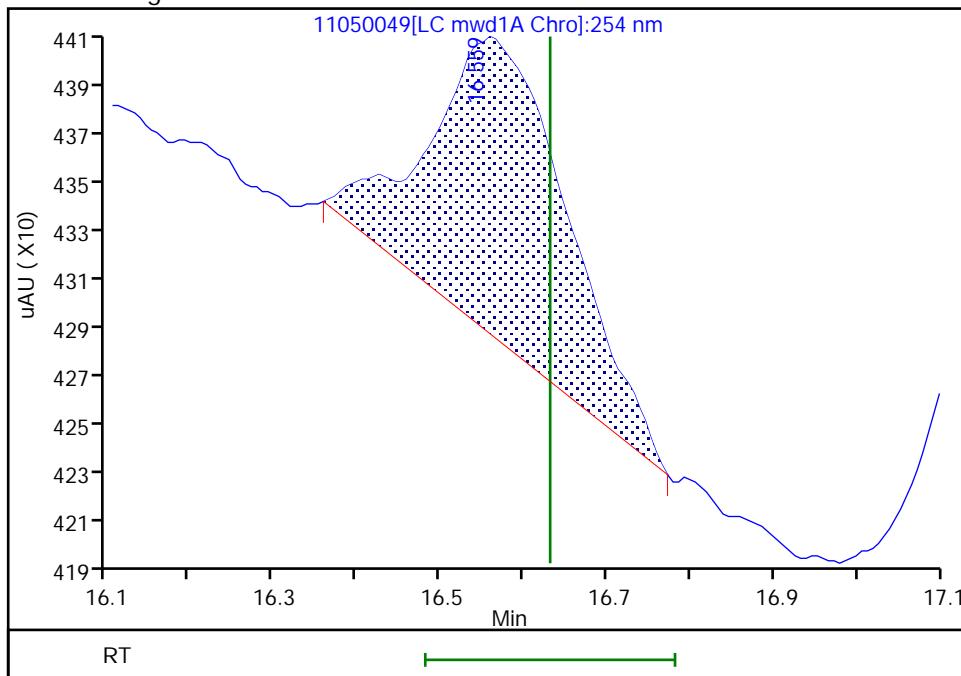
RT: 16.56  
 Area: 2934  
 Amount: 0.011785  
 Amount Units: ug/ml

## Processing Integration Results



RT: 16.56  
 Area: 1424  
 Amount: 0.005720  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: zhangji, 06-Nov-2021 12:41:34

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM I  
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.:  
Client Sample ID: NW062-7 Lab Sample ID: 280-155048-7  
Matrix: Water Lab File ID: 11050036.D  
Analysis Method: 8330A Date Collected: 11/02/2021 12:50  
Extraction Method: 3535 Date Extracted: 11/04/2021 14:13  
Sample wt/vol: 493.6 (mL) Date Analyzed: 11/06/2021 00:48  
Con. Extract Vol.: 5 (mL) Dilution Factor: 1  
Injection Volume: 100 (uL) GC Column: UltraCarb5uODS ID: 4.6 (mm)  
% Moisture: GPC Cleanup: (Y/N) N  
Analysis Batch No.: 556359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.20	U	0.21	0.20	0.085
99-65-0	1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.046
121-14-2	2,4-Dinitrotoluene	0.081	U	0.10	0.081	0.028
606-20-2	2,6-Dinitrotoluene	0.081	U	0.10	0.081	0.041
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	0.087
99-08-1	3-Nitrotoluene	0.41	U	0.41	0.41	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.058
99-99-0	4-Nitrotoluene	0.41	U M	0.42	0.41	0.10
2691-41-0	HMX	0.20	U	0.21	0.20	0.089
5755-27-1	MNX	0.41	U	2.0	0.41	0.16
98-95-3	Nitrobenzene	0.20	U M	0.21	0.20	0.092
121-82-4	RDX	0.20	U	0.21	0.20	0.052
479-45-8	Tetryl	0.10	U	0.11	0.10	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	91	M	83-119

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\11050036.D  
 Lims ID: 280-155048-A-7-A  
 Client ID: NW062-7  
 Sample Type: Client  
 Inject. Date: 06-Nov-2021 00:48:19 ALS Bottle#: 36 Worklist Smp#: 36  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-155048-A-7-A  
 Misc. Info.: 280-0106237-036  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Nov-2021 10:24:58 Calib Date: 27-Oct-2021 04:27:09  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211027-105955.b\1026T007.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 10:15:09

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
1 Triamine Trinitrobenzene	1	2.449			ND		
2 2,6-diamino-4-nitrotoluene	1	6.470			ND		U
3 TNX	1	6.493			ND		
4 HMX	1	6.612			ND		
5 2,4-diamino-6-nitrotoluene	1	6.650			ND		
6 DNX	1	6.813			ND		
7 MNX	1	7.239			ND		
8 RDX	1	7.632			ND		
9 2,4,6-Trinitrophenol	1	8.015	8.019	-0.004	6362	0.0769	M
\$ 10 1,2-Dinitrobenzene	1	8.568	8.606	-0.038	23372	0.1823	M
11 1,3,5-Trinitrobenzene	1	8.726			ND		
12 1,3-Dinitrobenzene	1	9.365			ND		
13 Nitrobenzene	1	9.765			ND		U
14 3,5-Dinitroaniline	1	9.930			ND		
15 Tetryl	1	10.112			ND		
16 Nitroglycerin	2	10.572			ND		
17 2,4,6-Trinitrotoluene	1	11.025			ND		
18 4-Amino-2,6-dinitrotoluene	1	11.239			ND		
19 2-Amino-4,6-dinitrotoluene	1	11.499			ND		
20 2,6-Dinitrotoluene	1	11.665			ND		
21 2,4-Dinitrotoluene	1	11.832			ND		
22 o-Nitrotoluene	1	12.712			ND		
23 p-Nitrotoluene	1	13.152			ND		U
24 m-Nitrotoluene	1	13.745			ND		
25 PETN	2	14.859			ND		
26 Ammonium Picrate	1	0.000			ND		

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

U - Marked Undetected

Report Date: 06-Nov-2021 10:24:58

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\\denver\\chromdata\\chhplc\_x\\20211105-106237.bl\\11050036.d

Injection Date: 06-Nov-2021 00:48:19

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: 280-155048-A-7-A

Lab Sample ID: 280-155048-7

Worklist Smp#: 36

Client ID: NW062-7

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

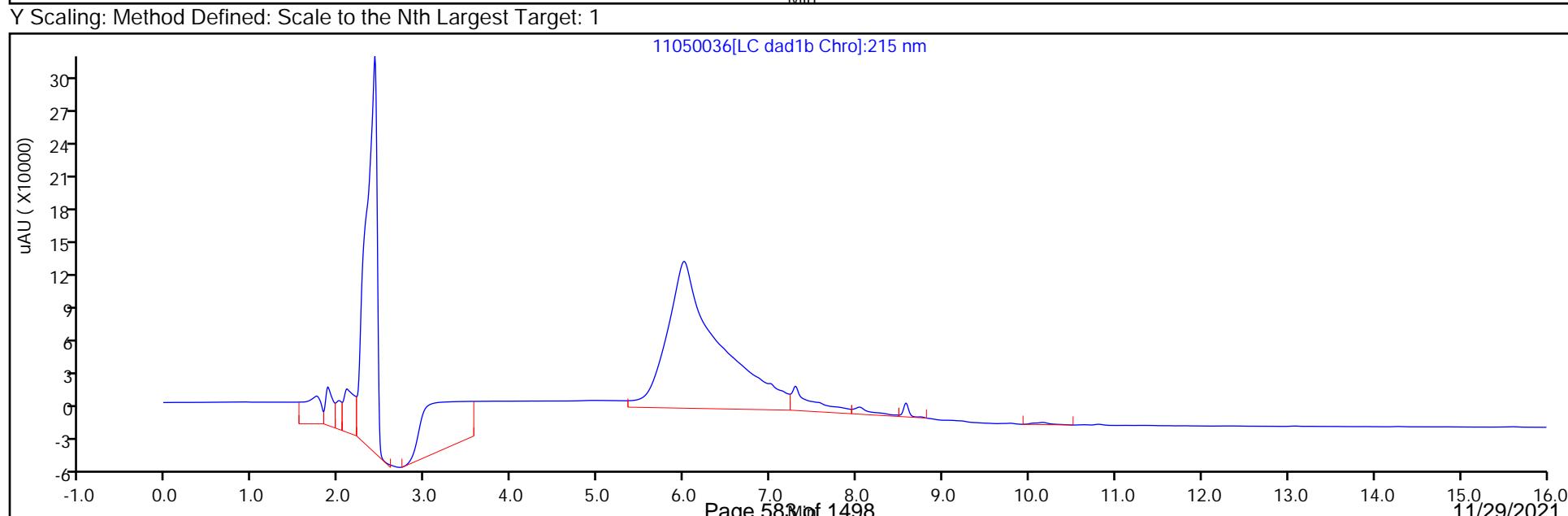
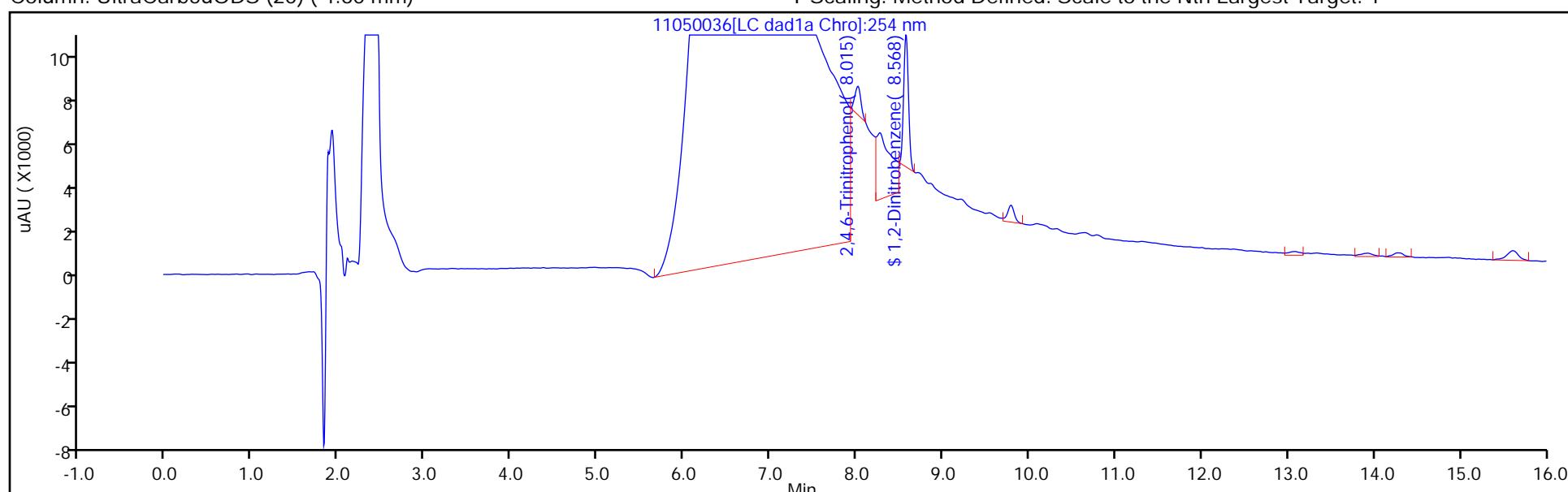
ALS Bottle#: 36

Method: 8330\_X3

Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver  
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\11050036.D  
 Lims ID: 280-155048-A-7-A  
 Client ID: NW062-7  
 Sample Type: Client  
 Inject. Date: 06-Nov-2021 00:48:19 ALS Bottle#: 36 Worklist Smp#: 36  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-155048-A-7-A  
 Misc. Info.: 280-0106237-036  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Nov-2021 10:24:58 Calib Date: 27-Oct-2021 04:27:09  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211027-105955.b\1026T007.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 10:15:09

Compound	Amount Added	Amount Recovered	% Rec.
\$ 10 1,2-Dinitrobenzene	0.2000	0.1823	91.14

## Eurofins TestAmerica, Denver

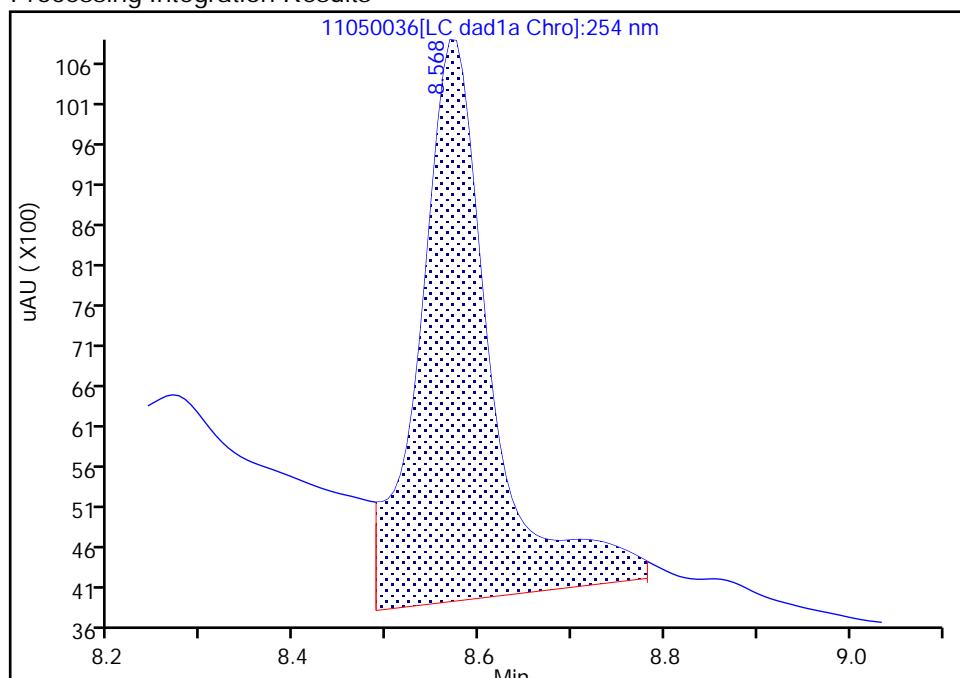
Data File: \\chromfs\denver\chromdata\chhplc\_x\20211105-106237.b\11050036.d  
 Injection Date: 06-Nov-2021 00:48:19 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-155048-A-7-A Lab Sample ID: 280-155048-7  
 Client ID: NW062-7  
 Operator ID: JZ ALS Bottle#: 36 Worklist Smp#: 36  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

## \$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

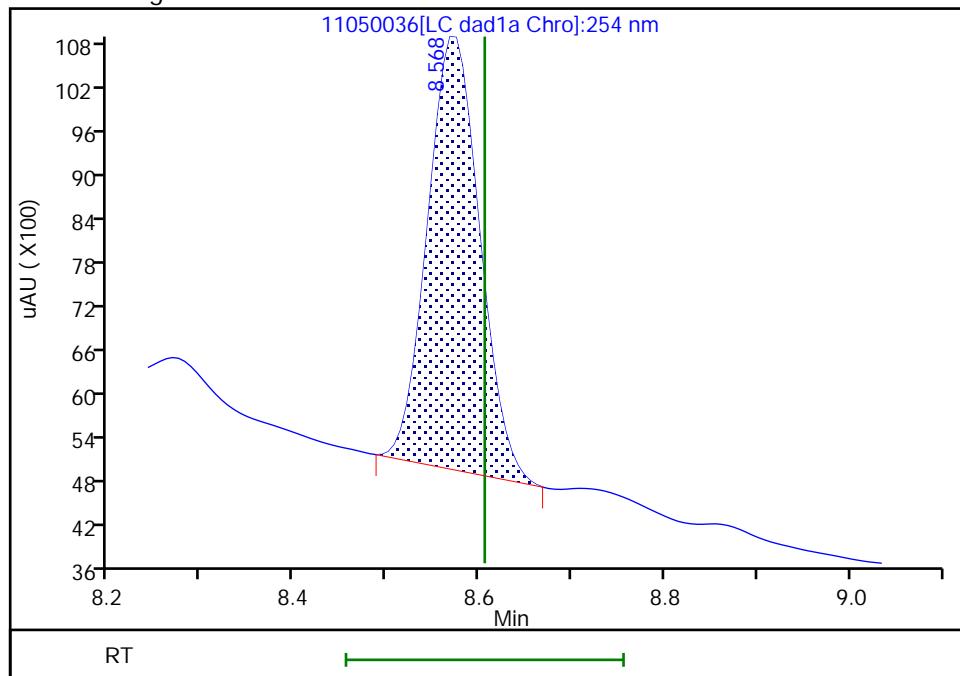
RT: 8.57  
 Area: 37570  
 Amount: 0.293018  
 Amount Units: ug/mL

## Processing Integration Results



RT: 8.57  
 Area: 23372  
 Amount: 0.182284  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 06-Nov-2021 10:15:04

Audit Action: Manually Integrated

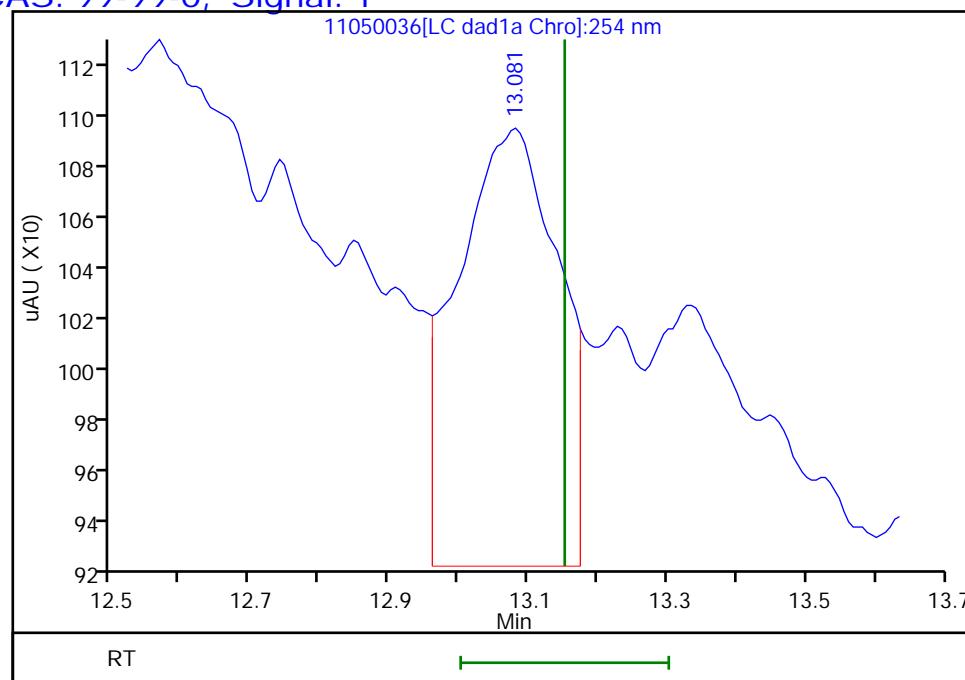
Audit Reason: Baseline

## Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20211105-106237.b\11050036.d  
Injection Date: 06-Nov-2021 00:48:19 Instrument ID: CHHPLC\_X3  
Lims ID: 280-155048-A-7-A Lab Sample ID: 280-155048-7  
Client ID: NW062-7  
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

## 23 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 13.08  
Response: 1680  
Amount: 0.015012



Reviewer: zhangji, 06-Nov-2021 10:15:09

Audit Action: Marked Compound Undetected

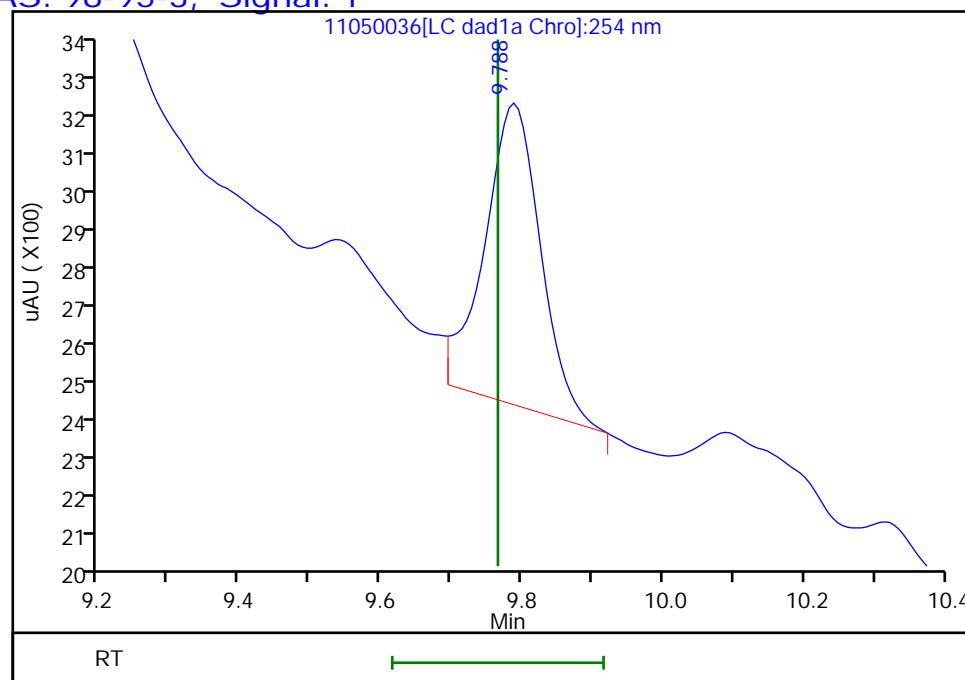
Audit Reason: Invalid Compound ID

## Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20211105-106237.b\11050036.d  
Injection Date: 06-Nov-2021 00:48:19 Instrument ID: CHHPLC\_X3  
Lims ID: 280-155048-A-7-A Lab Sample ID: 280-155048-7  
Client ID: NW062-7  
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

## 13 Nitrobenzene, CAS: 98-95-3, Signal: 1

RT: 9.79  
Response: 4207  
Amount: 0.021543



Reviewer: zhangji, 06-Nov-2021 10:15:09

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I  
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: G0070-7 Lab Sample ID: 280-155048-8  
Matrix: Water Lab File ID: 11050043.D  
Analysis Method: 8330A Date Collected: 11/01/2021 14:25  
Extraction Method: 3535 Date Extracted: 11/04/2021 14:13  
Sample wt/vol: 499.1 (mL) Date Analyzed: 11/06/2021 03:28  
Con. Extract Vol.: 5 (mL) Dilution Factor: 1  
Injection Volume: 100 (uL) GC Column: UltraCarb5uODS ID: 4.6 (mm)  
% Moisture:                    GPC Cleanup: (Y/N) N  
Analysis Batch No.: 556359 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 M	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 M	0.21	0.20	0.091
121-82-4	RDX	0.20	U	0.21	0.20	0.052
479-45-8	Tetryl	0.10	U	0.11	0.10	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	94		83-119

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\11050043.D  
 Lims ID: 280-155048-A-8-A  
 Client ID: G0070-7  
 Sample Type: Client  
 Inject. Date: 06-Nov-2021 03:28:43 ALS Bottle#: 43 Worklist Smp#: 43  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-155048-A-8-A  
 Misc. Info.: 280-0106237-043  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Nov-2021 10:25:01 Calib Date: 27-Oct-2021 04:27:09  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211027-105955.b\1026T007.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 10:17:59

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
1 Triamine Trinitrobenzene	1	2.449			ND		
2 2,6-diamino-4-nitrotoluene	1	6.470			ND		U
3 TNX	1	6.493			ND		
4 HMX	1	6.612			ND		
5 2,4-diamino-6-nitrotoluene	1	6.650			ND		
6 DNX	1	6.813			ND		U
7 MNX	1	7.239			ND		
8 RDX	1	7.632			ND		
9 2,4,6-Trinitrophenol	1	8.018	8.019	-0.001	13171	0.1592	M
\$ 10 1,2-Dinitrobenzene	1	8.578	8.606	-0.028	23989	0.1871	
11 1,3,5-Trinitrobenzene	1	8.726			ND		
12 1,3-Dinitrobenzene	1	9.365			ND		
13 Nitrobenzene	1	9.765			ND		U
14 3,5-Dinitroaniline	1	9.930			ND		
15 Tetryl	1	10.112			ND		
16 Nitroglycerin	2	10.572			ND		7
17 2,4,6-Trinitrotoluene	1	11.025			ND		
18 4-Amino-2,6-dinitrotoluene	1	11.239			ND		
19 2-Amino-4,6-dinitrotoluene	1	11.499			ND		
20 2,6-Dinitrotoluene	1	11.665			ND		
21 2,4-Dinitrotoluene	1	11.832			ND		
22 o-Nitrotoluene	1	12.712			ND		
23 p-Nitrotoluene	1	13.152			ND		U
24 m-Nitrotoluene	1	13.745			ND		
25 PETN	2	14.859			ND		
26 Ammonium Picrate	1	0.000			ND		

## QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

U - Marked Undetected

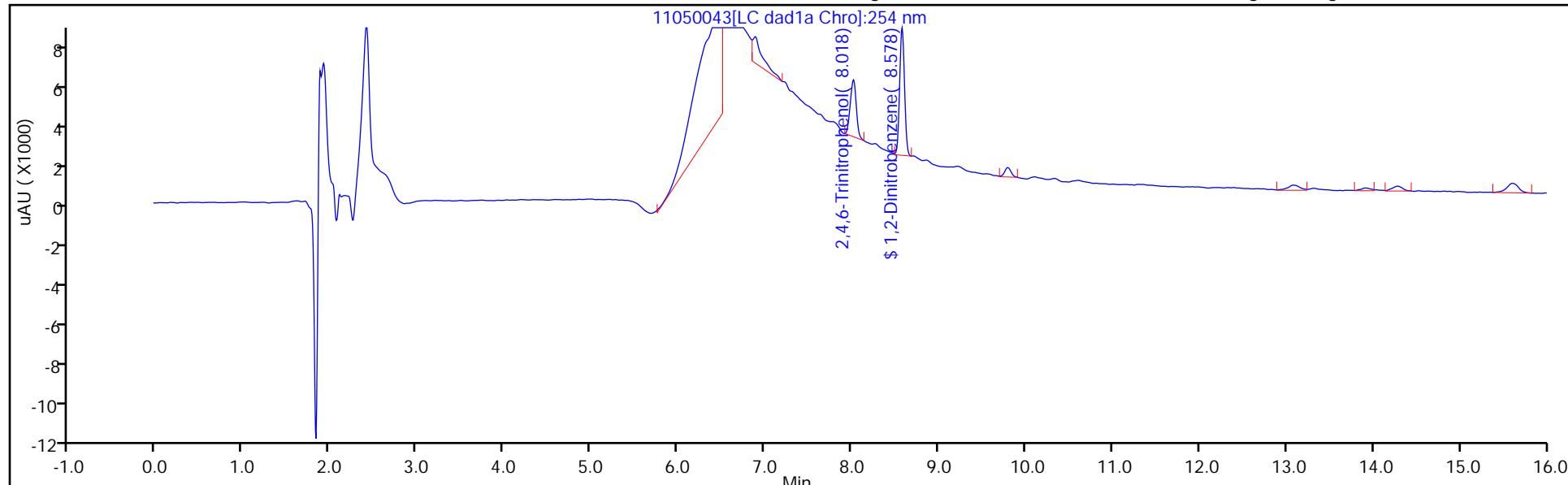
Report Date: 06-Nov-2021 10:25:02

Chrom Revision: 2.3 22-Sep-2021 15:38:46

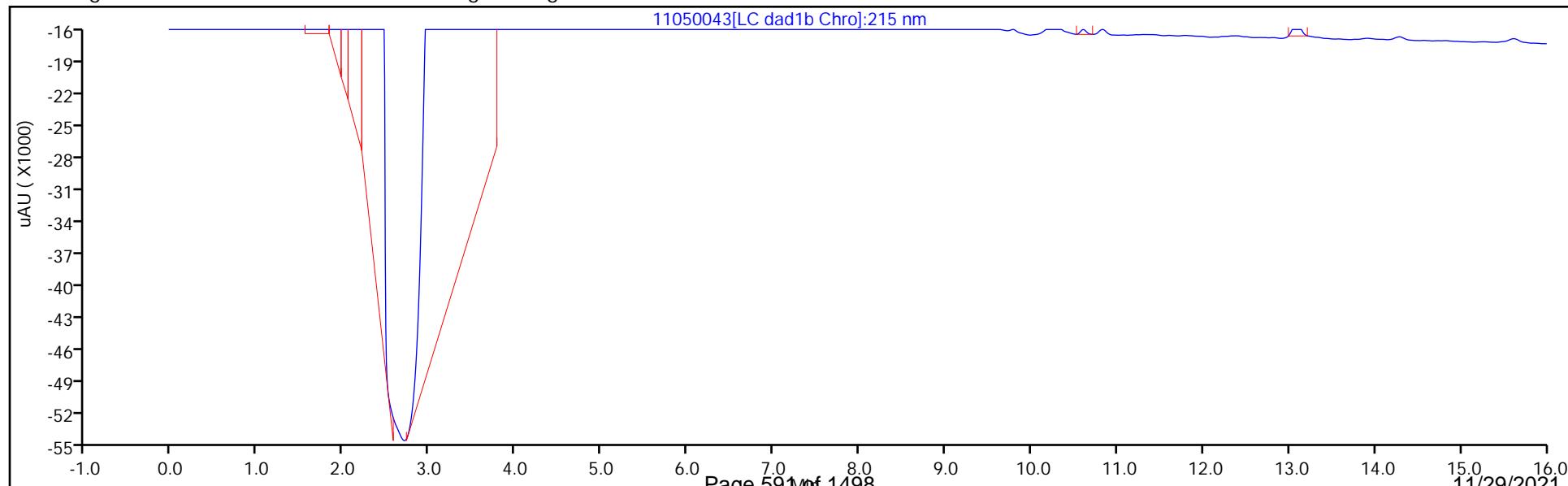
Eurofins TestAmerica, Denver

Data File: \\chromfs\\denver\\chromdata\\chhplc\_x\\20211105-106237.bl\\11050043.d  
Injection Date: 06-Nov-2021 03:28:43 Instrument ID: CHHPLC\_X3 Operator ID: JZ  
Lims ID: 280-155048-A-8-A Lab Sample ID: 280-155048-8 Worklist Smp#: 43  
Client ID: G0070-7  
Injection Vol: 100.0 ul Dil. Factor: 1.0000 ALS Bottle#: 43  
Method: 8330\_X3 Limit Group: GCSV - 8330  
Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver  
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\11050043.D  
 Lims ID: 280-155048-A-8-A  
 Client ID: G0070-7  
 Sample Type: Client  
 Inject. Date: 06-Nov-2021 03:28:43 ALS Bottle#: 43 Worklist Smp#: 43  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-155048-A-8-A  
 Misc. Info.: 280-0106237-043  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Nov-2021 10:25:01 Calib Date: 27-Oct-2021 04:27:09  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211027-105955.b\1026T007.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 10:17:59

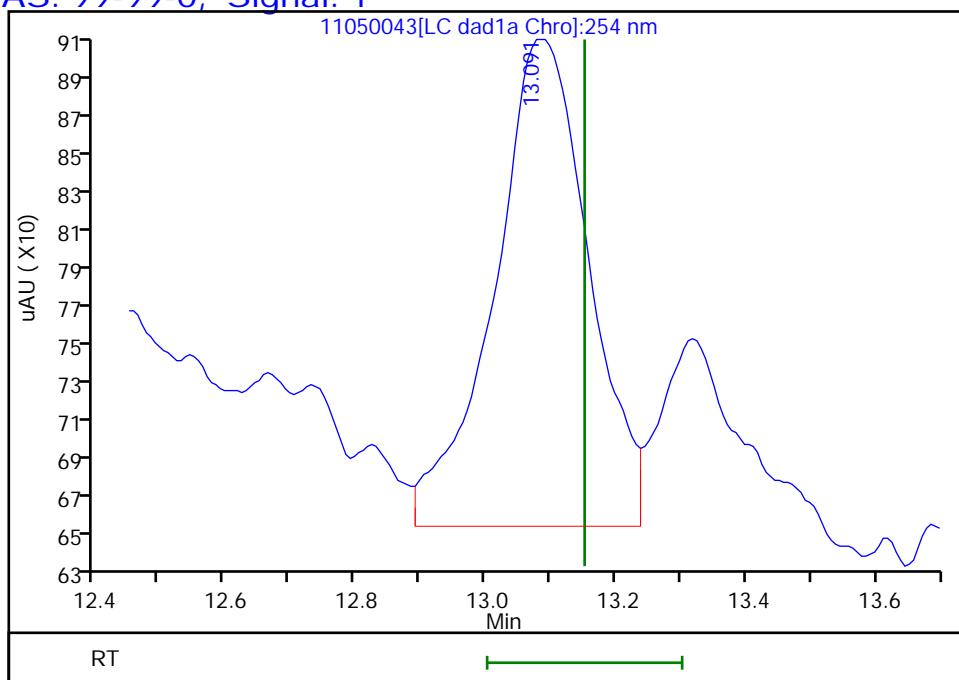
Compound	Amount Added	Amount Recovered	% Rec.
\$ 10 1,2-Dinitrobenzene	0.2000	0.1871	93.55

## Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20211105-106237.b\11050043.d  
Injection Date: 06-Nov-2021 03:28:43 Instrument ID: CHHPLC\_X3  
Lims ID: 280-155048-A-8-A Lab Sample ID: 280-155048-8  
Client ID: G0070-7  
Operator ID: JZ ALS Bottle#: 43 Worklist Smp#: 43  
Injection Vol: 100.0 ul Dil. Factor: 1.0000  
Method: 8330\_X3 Limit Group: GCSV - 8330  
Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

## 23 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 13.09  
Response: 2470  
Amount: 0.022071



Reviewer: zhangji, 06-Nov-2021 10:17:59

Audit Action: Marked Compound Undetected

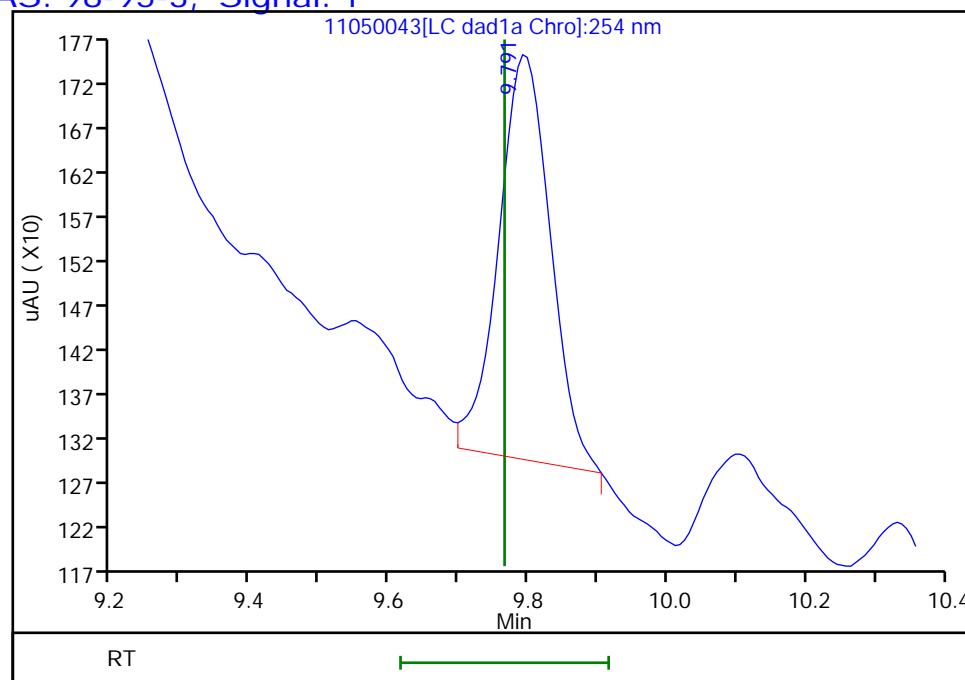
Audit Reason: Invalid Compound ID

## Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20211105-106237.b\11050043.d  
Injection Date: 06-Nov-2021 03:28:43 Instrument ID: CHHPLC\_X3  
Lims ID: 280-155048-A-8-A Lab Sample ID: 280-155048-8  
Client ID: G0070-7  
Operator ID: JZ ALS Bottle#: 43 Worklist Smp#: 43  
Injection Vol: 100.0 ul Dil. Factor: 1.0000  
Method: 8330\_X3 Limit Group: GCSV - 8330  
Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

## 13 Nitrobenzene, CAS: 98-95-3, Signal: 1

RT: 9.79  
Response: 2346  
Amount: 0.012013



Reviewer: zhangji, 06-Nov-2021 10:17:59

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM VI  
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA  
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1 Analy Batch No.: 527768

SDG No.: \_\_\_\_\_

Instrument ID: CHHPLC\_X3 GC Column: UltraCarb5u ID: 4.6 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/02/2021 23:49 Calibration End Date: 03/03/2021 02:30 Calibration ID: 51473

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-527768/36	03020036.D
Level 2	IC 280-527768/35	03020035.D
Level 3	IC 280-527768/34	03020034.D
Level 4	IC 280-527768/33	03020033.D
Level 5	IC 280-527768/32	03020032.D
Level 6	IC 280-527768/31	03020031.D
Level 7	IC 280-527768/30	03020030.D
Level 8	IC 280-527768/29	03020029.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
TNX	6.521	6.522	6.522	6.518	6.521	6.519	6.523	6.520			6.418 - 6.618	6.521
DNX	6.827	6.829	6.828	6.832	6.828	6.833	6.836	6.833			6.732 - 6.932	6.831
MNX	7.234	7.235	7.235	7.232	7.234	7.239	7.236	7.240			7.082 - 7.382	7.236

FORM VI  
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA  
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1 Analy Batch No.: 527768

SDG No.: \_\_\_\_\_

Instrument ID: CHHPLC\_X3 GC Column: UltraCarb5u ID: 4.6 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/02/2021 23:49 Calibration End Date: 03/03/2021 02:30 Calibration ID: 51473

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-527768/36	03020036.D
Level 2	IC 280-527768/35	03020035.D
Level 3	IC 280-527768/34	03020034.D
Level 4	IC 280-527768/33	03020033.D
Level 5	IC 280-527768/32	03020032.D
Level 6	IC 280-527768/31	03020031.D
Level 7	IC 280-527768/30	03020030.D
Level 8	IC 280-527768/29	03020029.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
TNX	183017 187800	186374 188250	185594 187339	176735 191339	Ave		185806.00 3				2.3		20.0			
DNX	149051 143511	142278 143240	139351 141711	133874 143939	Ave		142119.33 8				3.0		20.0			
MNX	132048 132243	129991 131443	130891 130291	124682 131132	Ave		130340.33 7				1.9		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI  
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA  
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1 Analy Batch No.: 527768

SDG No.: \_\_\_\_\_

Instrument ID: CHHPLC\_X3 GC Column: UltraCarb5u ID: 4.6 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/02/2021 23:49 Calibration End Date: 03/03/2021 02:30 Calibration ID: 51473

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-527768/36	03020036.D
Level 2	IC 280-527768/35	03020035.D
Level 3	IC 280-527768/34	03020034.D
Level 4	IC 280-527768/33	03020033.D
Level 5	IC 280-527768/32	03020032.D
Level 6	IC 280-527768/31	03020031.D
Level 7	IC 280-527768/30	03020030.D
Level 8	IC 280-527768/29	03020029.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
TNX	Ave	3664 131907	9328 187526	18578 478826	44228	75195	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
DNX	Ave	2984 100368	7121 141853	13949 360207	33502	57462	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
MNX	Ave	3082 107376	7585 152050	15275 382579	36376	61731	0.0233 0.817	0.0584 1.17	0.117 2.92	0.292	0.467

Curve Type Legend

Ave = Average

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20210302-99486.b\03020029.D  
 Lims ID: IC DMT 8  
 Client ID:  
 Sample Type: IC Calib Level: 8  
 Inject. Date: 02-Mar-2021 23:49:27 ALS Bottle#: 29 Worklist Smp#: 29  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Sample Info: IC DMT 8  
 Misc. Info.: 280-0099486-029  
 Operator ID: Instrument ID: CHHPLC\_X3  
 Sublist: chrom-8330\_X3\*sub17  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20210302-99486.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 03-Mar-2021 13:32:24 Calib Date: 03-Mar-2021 02:30:22  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20210302-99486.b\03020036.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1629

First Level Reviewer: zhangji Date: 03-Mar-2021 13:18:59

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.520	6.518	0.002	478826	2.50	2.58	M
5 DNX	1	6.833	6.832	0.001	360207	2.50	2.53	M
6 MNX	1	7.240	7.232	0.008	382579	2.92	2.94	M

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

### Reagents:

8330 DMT\_00008 Amount Added: 125.00 Units: uL

Report Date: 03-Mar-2021 13:32:24

Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Denver

Data File: \\chromfs\\denver\\chromdata\\chhplc\_x\\20210302-99486.b\\03020029.d

Injection Date: 02-Mar-2021 23:49:27

Instrument ID: CHHPLC\_X3

Operator ID:

Lims ID: IC DMT 8

Worklist Smp#: 29

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

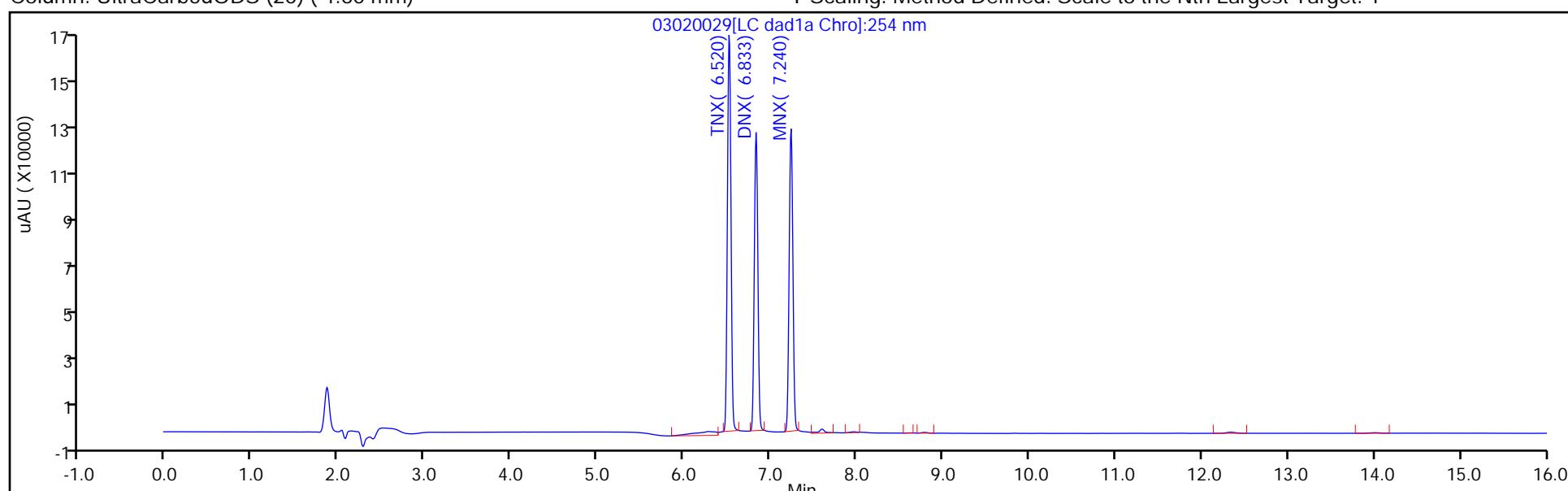
ALS Bottle#: 29

Method: 8330\_X3

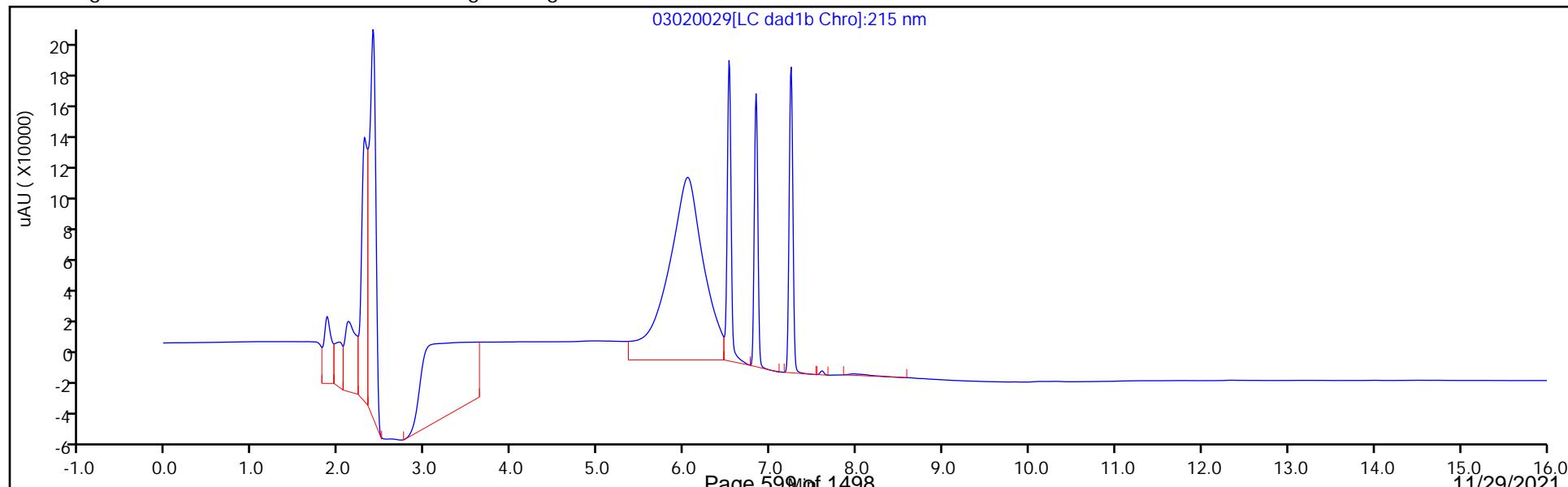
Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

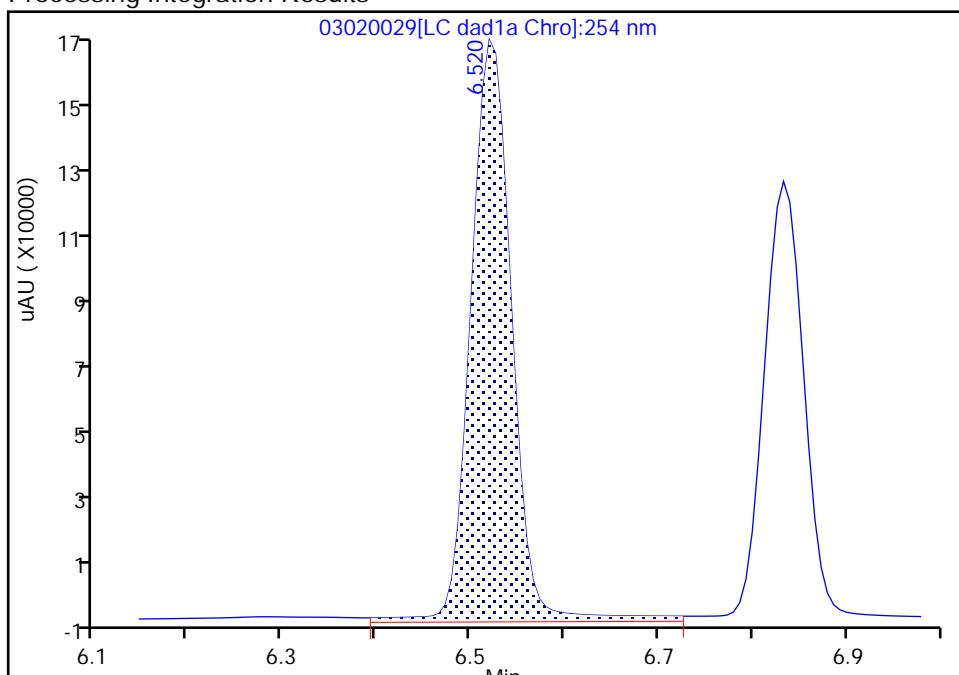
Data File: \\chromfs\denver\chromdata\chhplc\_x\20210302-99486.b\03020029.d  
 Injection Date: 02-Mar-2021 23:49:27 Instrument ID: CHHPLC\_X3  
 Lims ID: IC DMT 8  
 Client ID:  
 Operator ID: ALS Bottle#: 29 Worklist Smp#: 29  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

**2 TNX, CAS: 13980-04-6**

Signal: 1

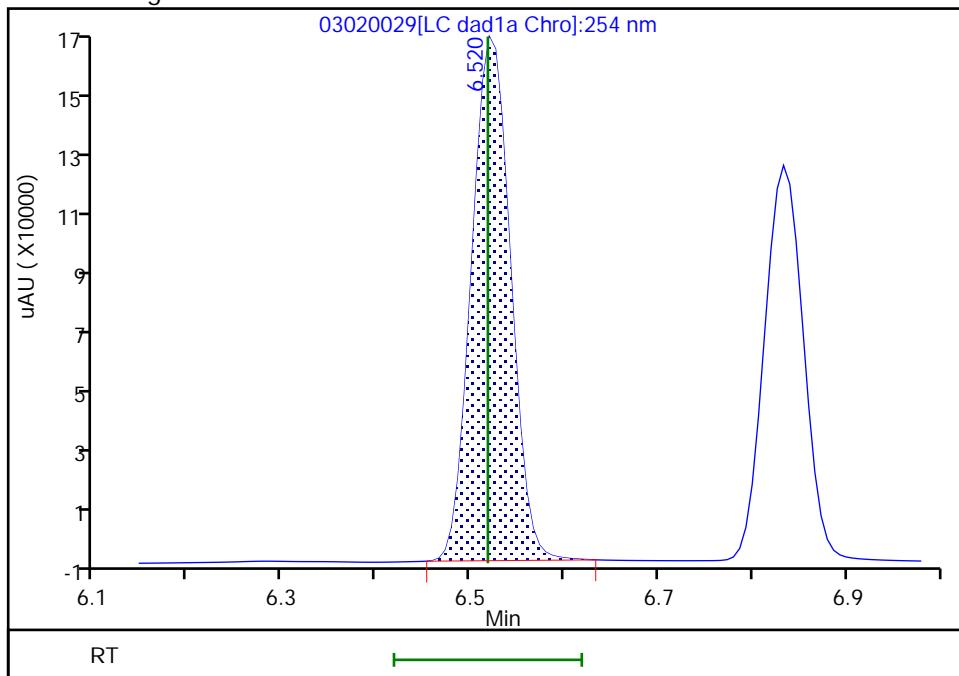
RT: 6.52  
 Area: 511017  
 Amount: 2.370738  
 Amount Units: ug/mL

## Processing Integration Results



RT: 6.52  
 Area: 478826  
 Amount: 2.577021  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 03-Mar-2021 13:18:46

Audit Action: Manually Integrated

Audit Reason: Baseline

## Eurofins TestAmerica, Denver

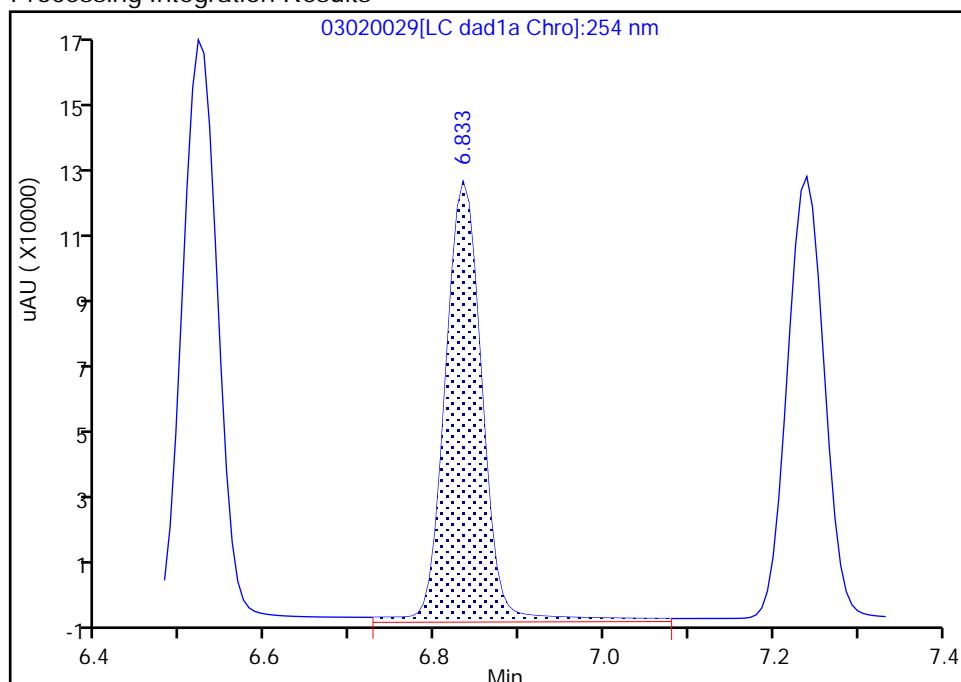
Data File: \\chromfs\denver\chromdata\chhplc\_x\20210302-99486.b\03020029.d  
 Injection Date: 02-Mar-2021 23:49:27 Instrument ID: CHHPLC\_X3  
 Lims ID: IC DMT 8  
 Client ID:  
 Operator ID: ALS Bottle#: 29 Worklist Smp#: 29  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

**5 DNX, CAS: 80251-29-2**

Signal: 1

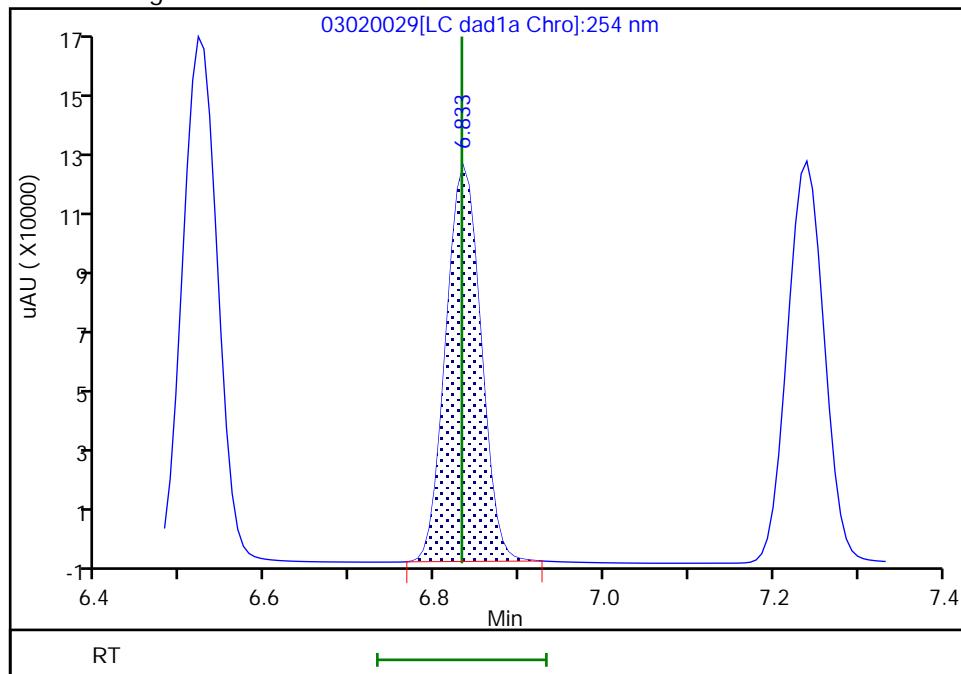
RT: 6.83  
 Area: 389383  
 Amount: 2.402937  
 Amount Units: ug/mL

## Processing Integration Results



RT: 6.83  
 Area: 360207  
 Amount: 2.534539  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 03-Mar-2021 13:18:53

Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Denver

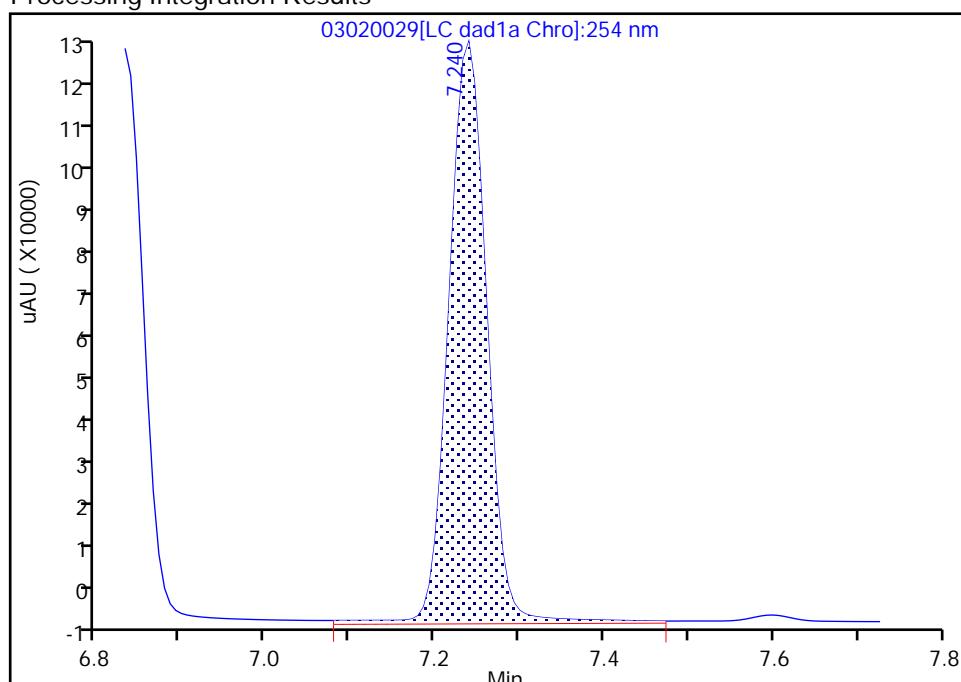
Data File: \\chromfs\denver\chromdata\chhplc\_x\20210302-99486.b\03020029.d  
 Injection Date: 02-Mar-2021 23:49:27 Instrument ID: CHHPLC\_X3  
 Lims ID: IC DMT 8  
 Client ID:  
 Operator ID: ALS Bottle#: 29 Worklist Smp#: 29  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

**6 MNX, CAS: 5755-27-1**

Signal: 1

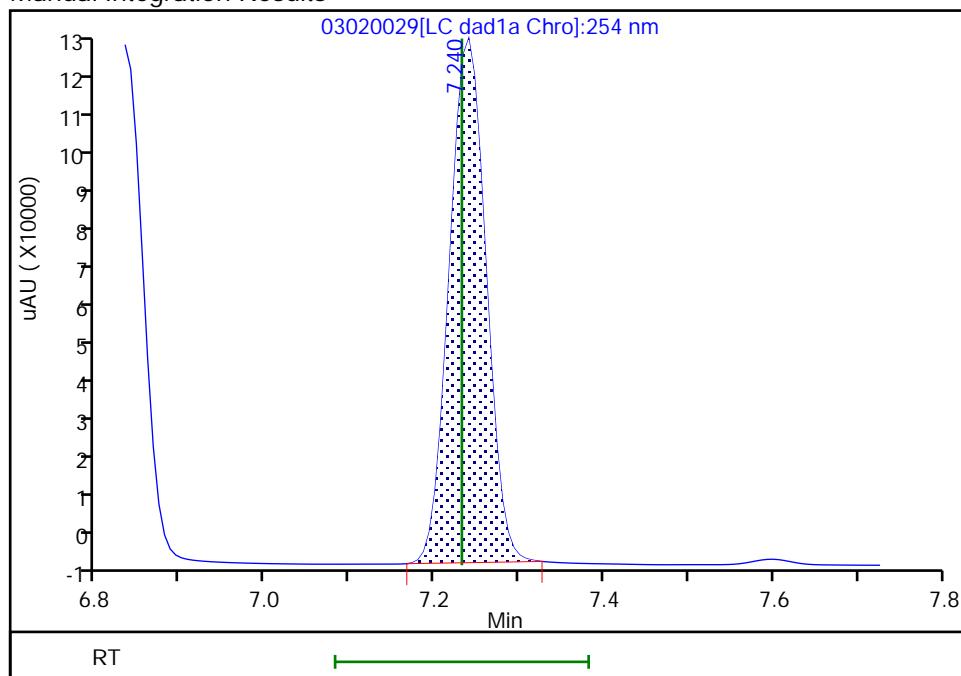
RT: 7.24  
 Area: 404536  
 Amount: 3.036153  
 Amount Units: ug/mL

## Processing Integration Results



RT: 7.24  
 Area: 382579  
 Amount: 2.935231  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 03-Mar-2021 13:18:57

Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20210302-99486.b\03020030.D  
 Lims ID: IC DMT 7  
 Client ID:  
 Sample Type: IC Calib Level: 7  
 Inject. Date: 03-Mar-2021 00:12:24 ALS Bottle#: 30 Worklist Smp#: 30  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Sample Info: IC DMT 7  
 Misc. Info.: 280-0099486-030  
 Operator ID: Instrument ID: CHHPLC\_X3  
 Sublist: chrom-8330\_X3\*sub17  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20210302-99486.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 03-Mar-2021 13:32:25 Calib Date: 03-Mar-2021 02:30:22  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20210302-99486.b\03020036.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1629

First Level Reviewer: zhangji Date: 03-Mar-2021 13:19:14

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.523	6.518	0.005	187526	1.00	1.01	M
5 DNX	1	6.836	6.832	0.004	141853	1.00	1.00	M
6 MNX	1	7.236	7.232	0.004	152050	1.17	1.17	M

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

### Reagents:

8330 DMT\_00008 Amount Added: 50.00 Units: uL

Report Date: 03-Mar-2021 13:32:25

Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Denver

Data File: \\chromfs\\denver\\chromdata\\chhplc\_x\\20210302-99486.b\\03020030.d

Injection Date: 03-Mar-2021 00:12:24

Instrument ID: CHHPLC\_X3

Operator ID:

Lims ID: IC DMT 7

Worklist Smp#: 30

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

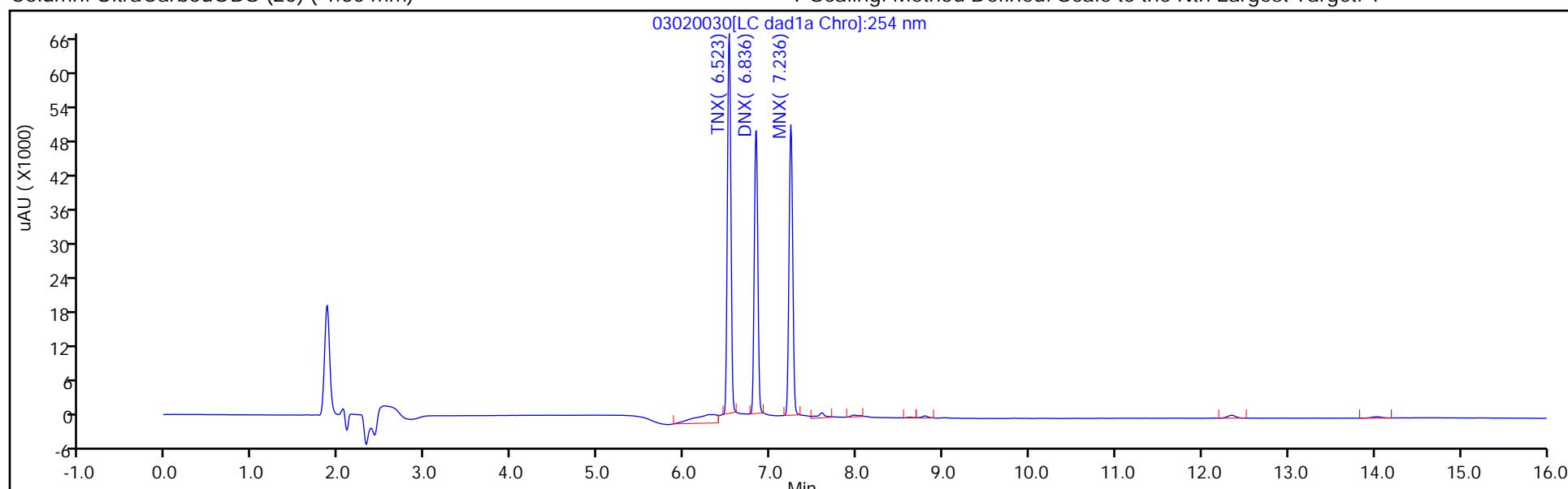
ALS Bottle#: 30

Method: 8330\_X3

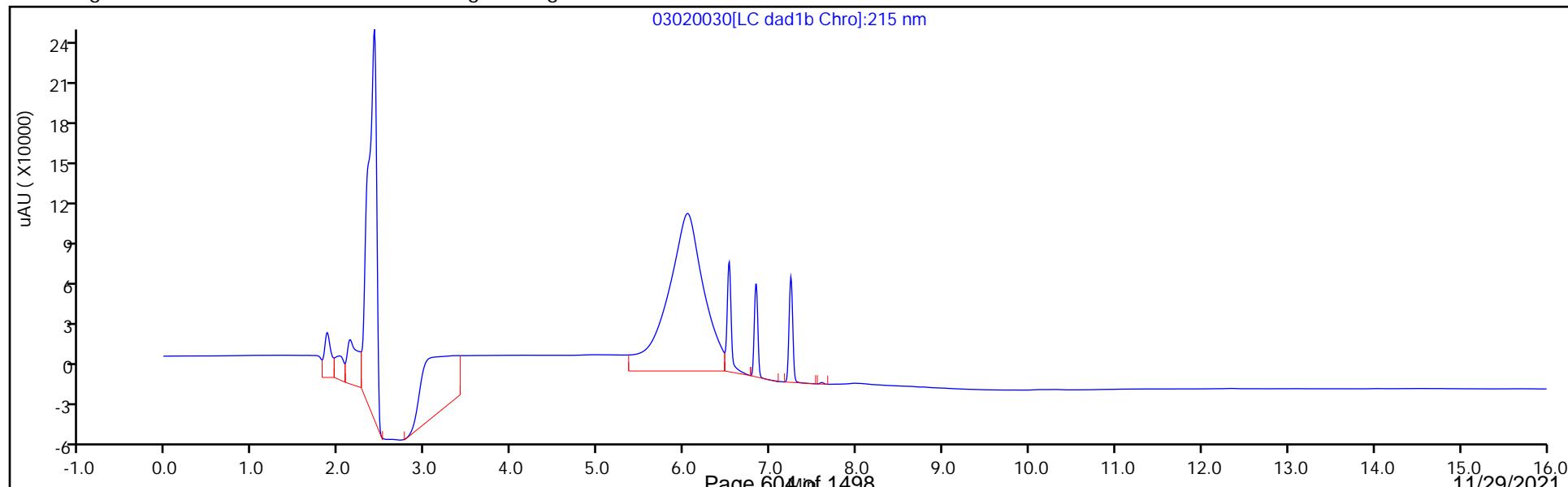
Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

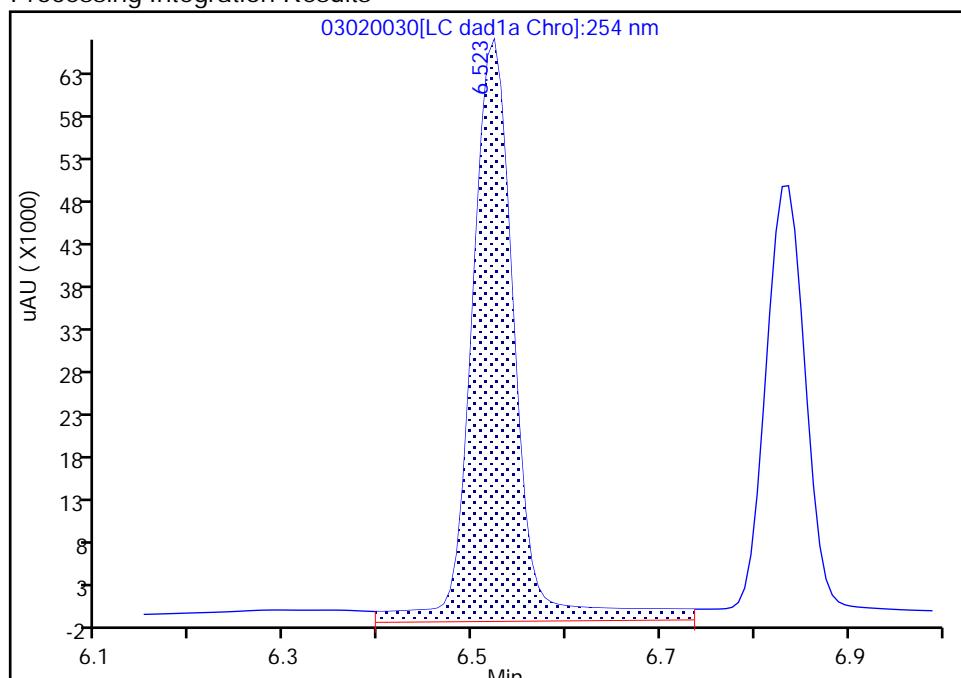
Data File: \\chromfs\denver\chromdata\chhplc\_x\20210302-99486.b\03020030.d  
 Injection Date: 03-Mar-2021 00:12:24 Instrument ID: CHHPLC\_X3  
 Lims ID: IC DMT 7  
 Client ID:  
 Operator ID: ALS Bottle#: 30 Worklist Smp#: 30  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

**2 TNX, CAS: 13980-04-6**

Signal: 1

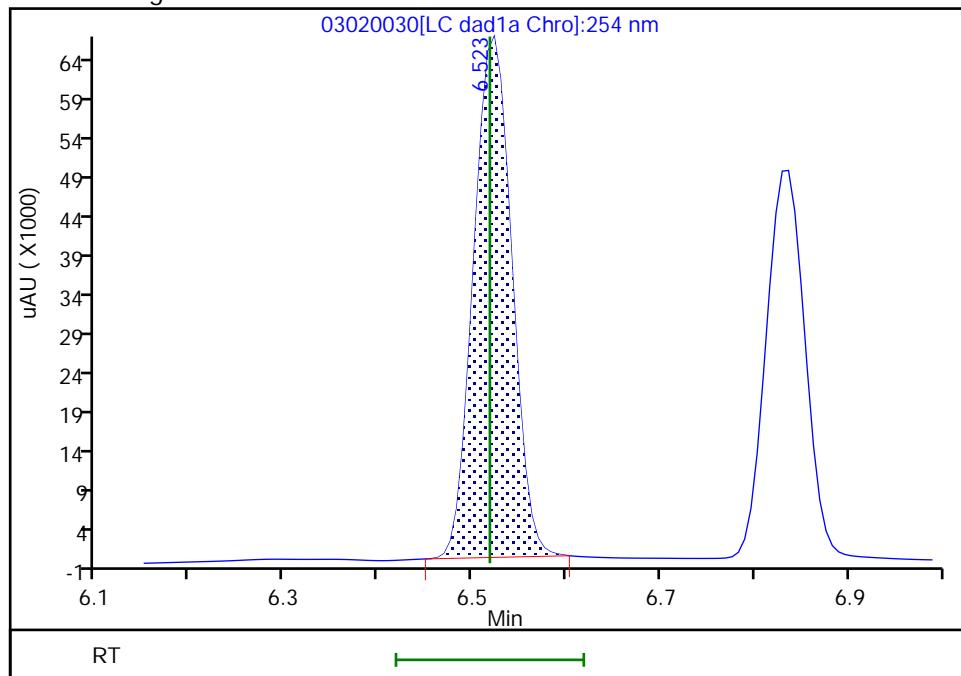
RT: 6.52  
 Area: 217440  
 Amount: 0.997461  
 Amount Units: ug/mL

## Processing Integration Results



RT: 6.52  
 Area: 187526  
 Amount: 1.009257  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 03-Mar-2021 13:19:13

Audit Action: Manually Integrated

Audit Reason: Baseline

## Eurofins TestAmerica, Denver

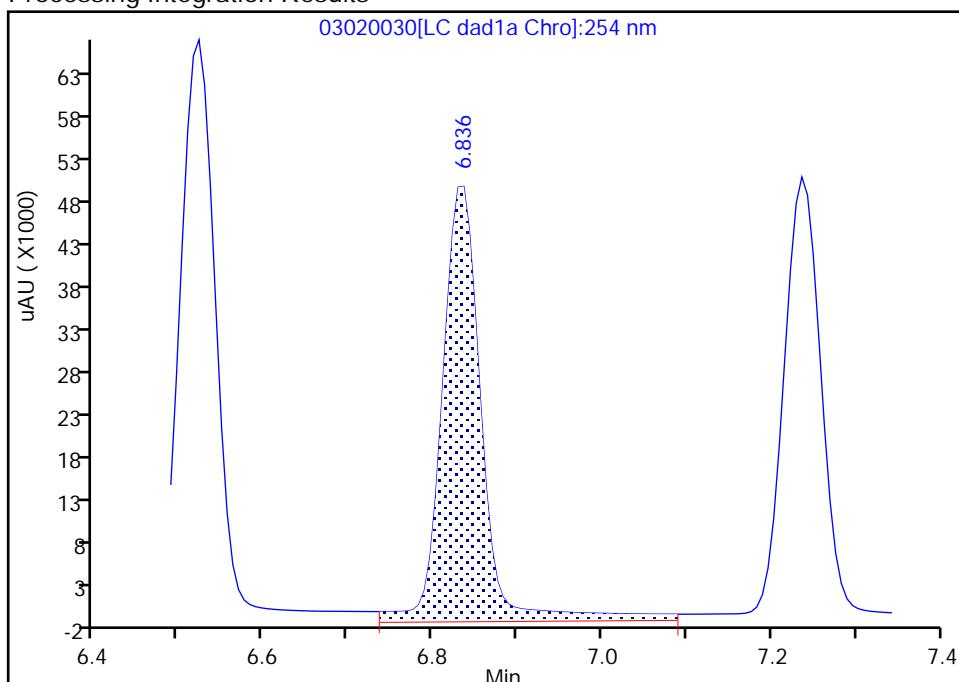
Data File: \\chromfs\denver\chromdata\chhplc\_x\20210302-99486.b\03020030.d  
 Injection Date: 03-Mar-2021 00:12:24 Instrument ID: CHHPLC\_X3  
 Lims ID: IC DMT 7  
 Client ID:  
 Operator ID: ALS Bottle#: 30 Worklist Smp#: 30  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

**5 DNX, CAS: 80251-29-2**

Signal: 1

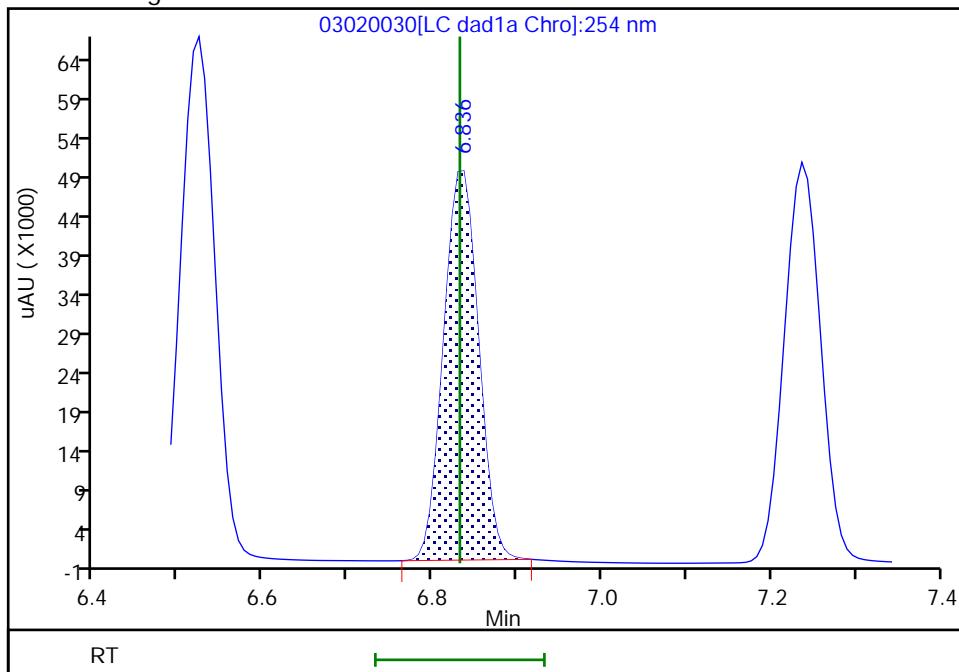
RT: 6.84  
 Area: 165195  
 Amount: 1.028693  
 Amount Units: ug/mL

## Processing Integration Results



RT: 6.84  
 Area: 141853  
 Amount: 0.998126  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 03-Mar-2021 13:19:09

Audit Action: Manually Integrated

Audit Reason: Baseline

## Eurofins TestAmerica, Denver

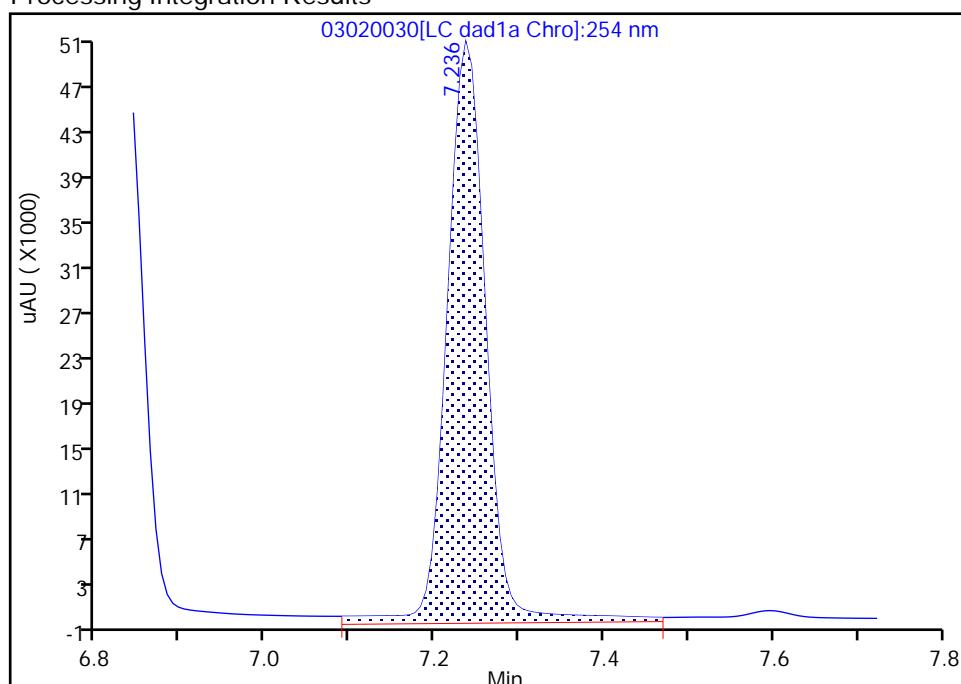
Data File: \\chromfs\denver\chromdata\chhplc\_x\20210302-99486.b\03020030.d  
 Injection Date: 03-Mar-2021 00:12:24 Instrument ID: CHHPLC\_X3  
 Lims ID: IC DMT 7  
 Client ID:  
 Operator ID: ALS Bottle#: 30 Worklist Smp#: 30  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

**6 MNX, CAS: 5755-27-1**

Signal: 1

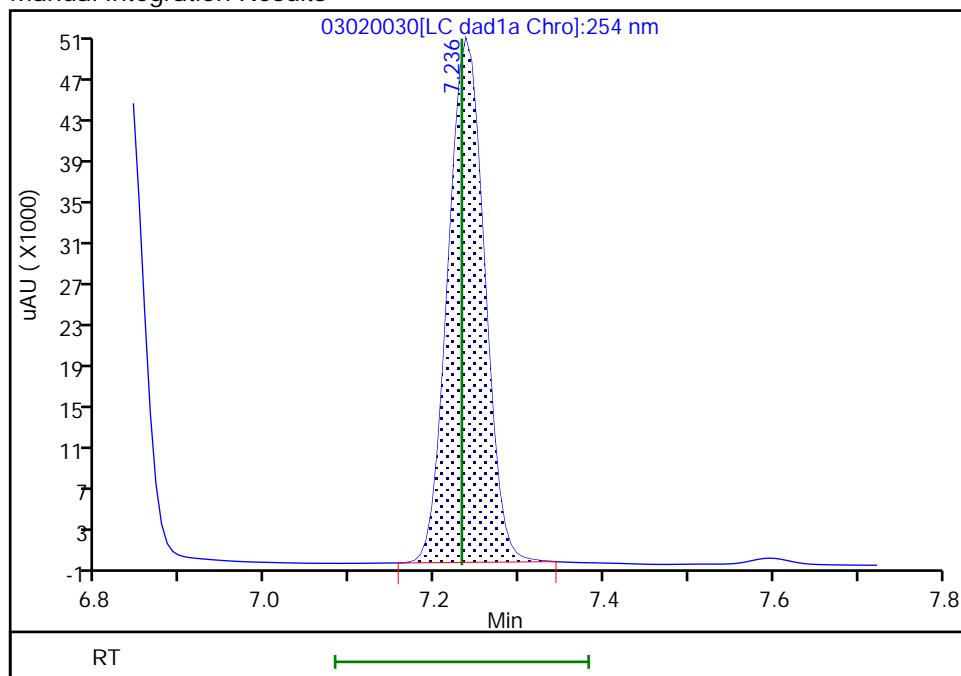
RT: 7.24  
 Area: 166888  
 Amount: 1.261447  
 Amount Units: ug/mL

## Processing Integration Results



RT: 7.24  
 Area: 152050  
 Amount: 1.166561  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 03-Mar-2021 13:19:05

Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20210302-99486.b\03020031.D  
 Lims ID: IC DMT 6  
 Client ID:  
 Sample Type: IC Calib Level: 6  
 Inject. Date: 03-Mar-2021 00:35:25 ALS Bottle#: 31 Worklist Smp#: 31  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: IC DMT 6  
 Misc. Info.: 280-0099486-031  
 Operator ID: Instrument ID: CHHPLC\_X3  
 Sublist: chrom-8330\_X3\*sub17  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20210302-99486.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 03-Mar-2021 13:32:26 Calib Date: 03-Mar-2021 02:30:22  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20210302-99486.b\03020036.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1629

First Level Reviewer: zhangji Date: 03-Mar-2021 13:19:33

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.519	6.518	0.001	131907	0.7007	0.7099	M
5 DNX	1	6.833	6.832	0.001	100368	0.7007	0.7062	M
6 MNX	1	7.239	7.232	0.007	107376	0.8169	0.8238	M

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

### Reagents:

8330 DMT\_00008 Amount Added: 35.00 Units: uL

Report Date: 03-Mar-2021 13:32:26

Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Denver

Data File: \\chromfs\\denver\\chromdata\\chhplc\_x\\20210302-99486.b\\03020031.d

Injection Date: 03-Mar-2021 00:35:25

Instrument ID: CHHPLC\_X3

Operator ID:

Lims ID: IC DMT 6

Worklist Smp#: 31

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

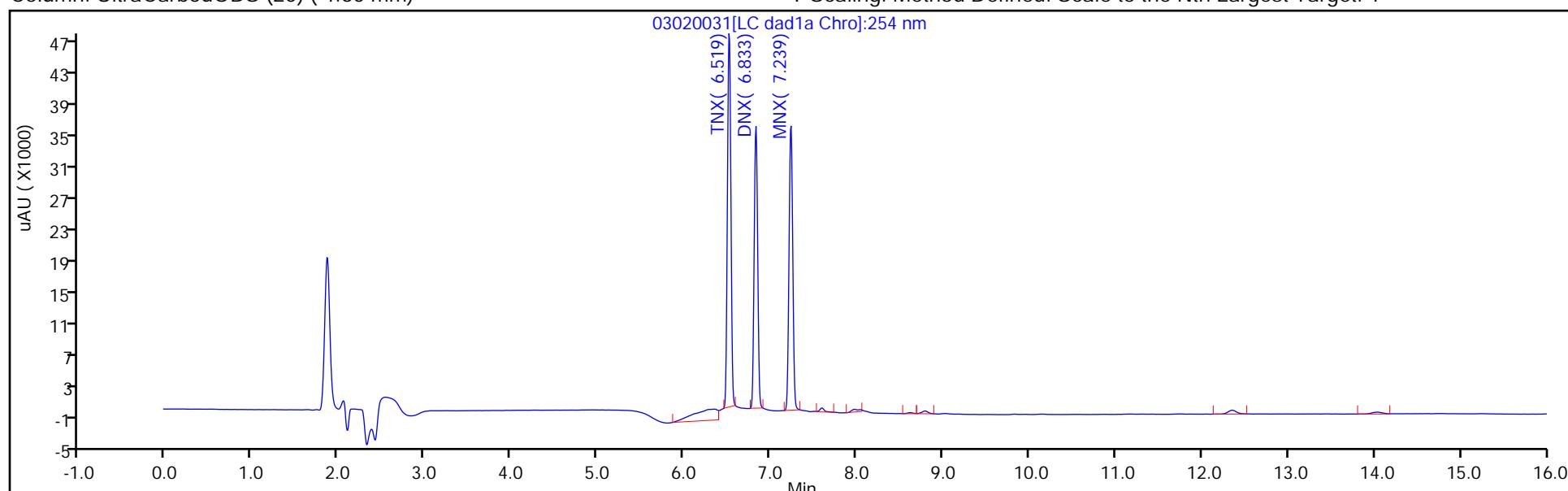
ALS Bottle#: 31

Method: 8330\_X3

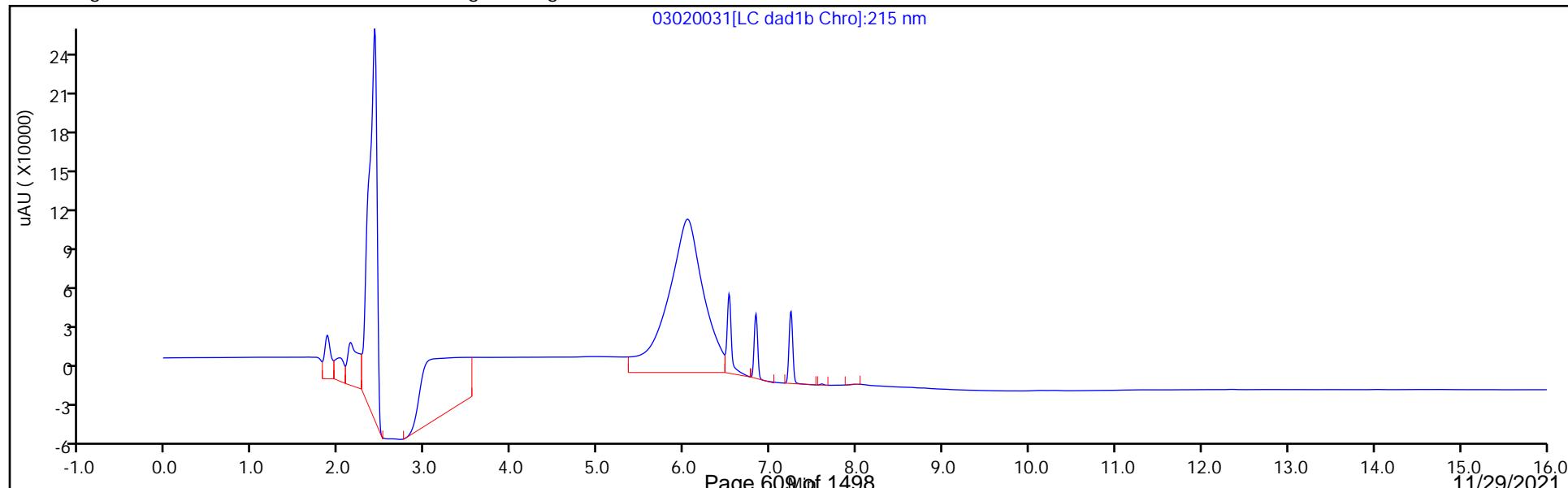
Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

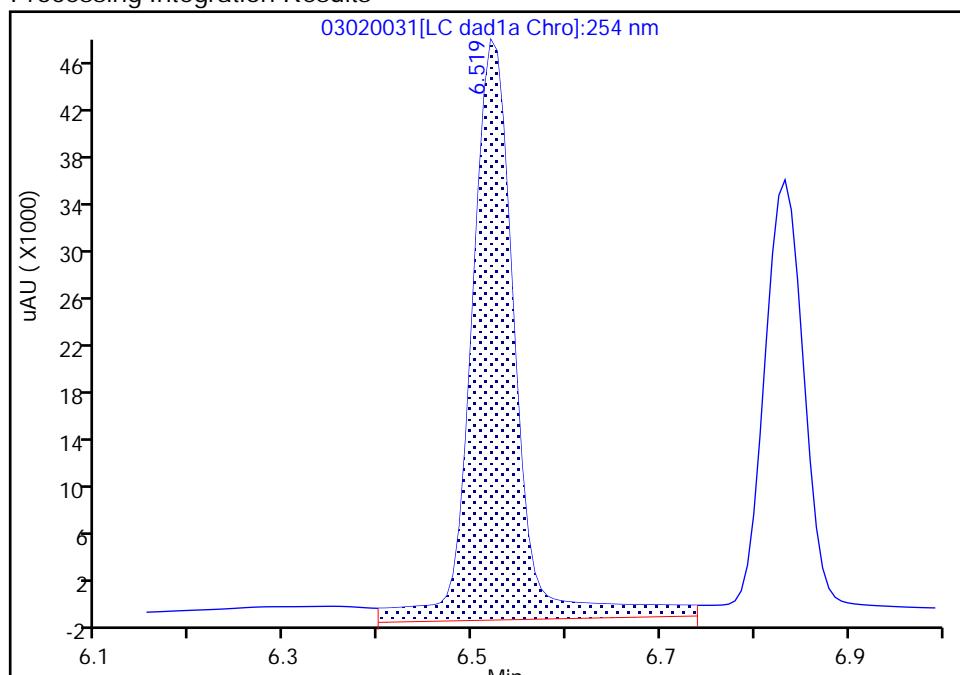
Data File: \\chromfs\denver\chromdata\chhplc\_x\20210302-99486.b\03020031.d  
 Injection Date: 03-Mar-2021 00:35:25 Instrument ID: CHHPLC\_X3  
 Lims ID: IC DMT 6  
 Client ID:  
 Operator ID: ALS Bottle#: 31 Worklist Smp#: 31  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

**2 TNX, CAS: 13980-04-6**

Signal: 1

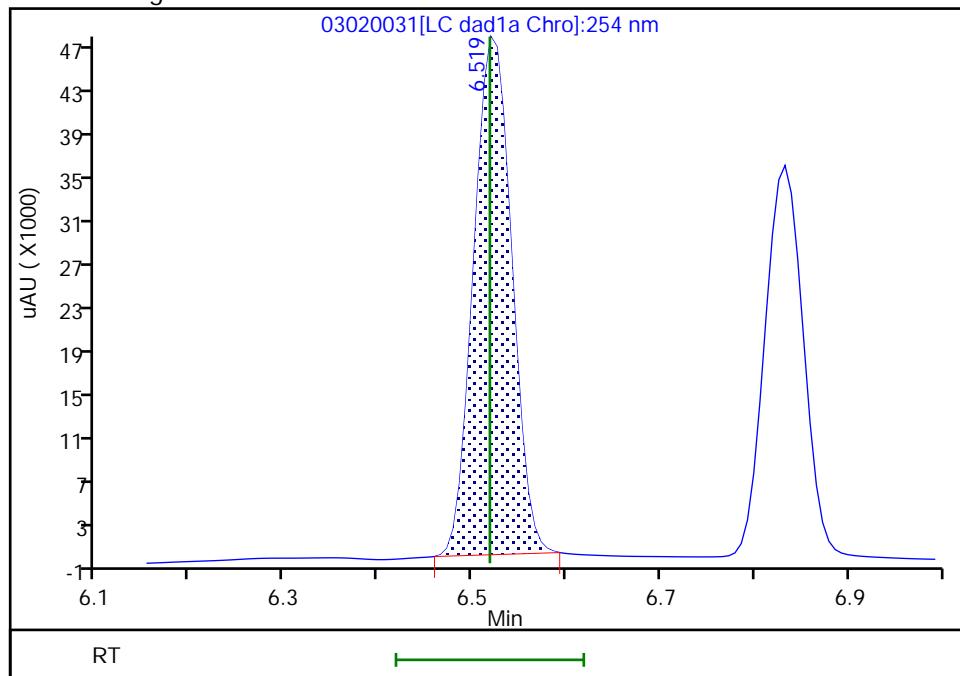
RT: 6.52  
 Area: 157523  
 Amount: 0.765441  
 Amount Units: ug/mL

## Processing Integration Results



RT: 6.52  
 Area: 131907  
 Amount: 0.709918  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 03-Mar-2021 13:19:21

Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Denver

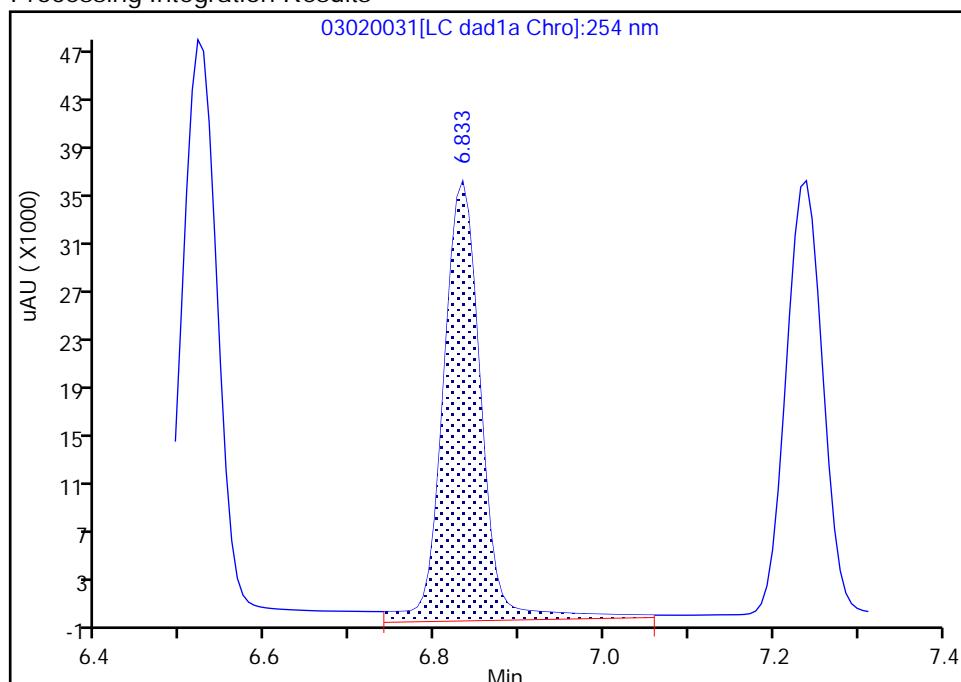
Data File: \\chromfs\denver\chromdata\chhplc\_x\20210302-99486.b\03020031.d  
 Injection Date: 03-Mar-2021 00:35:25 Instrument ID: CHHPLC\_X3  
 Lims ID: IC DMT 6  
 Client ID:  
 Operator ID: ALS Bottle#: 31 Worklist Smp#: 31  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

**5 DNX, CAS: 80251-29-2**

Signal: 1

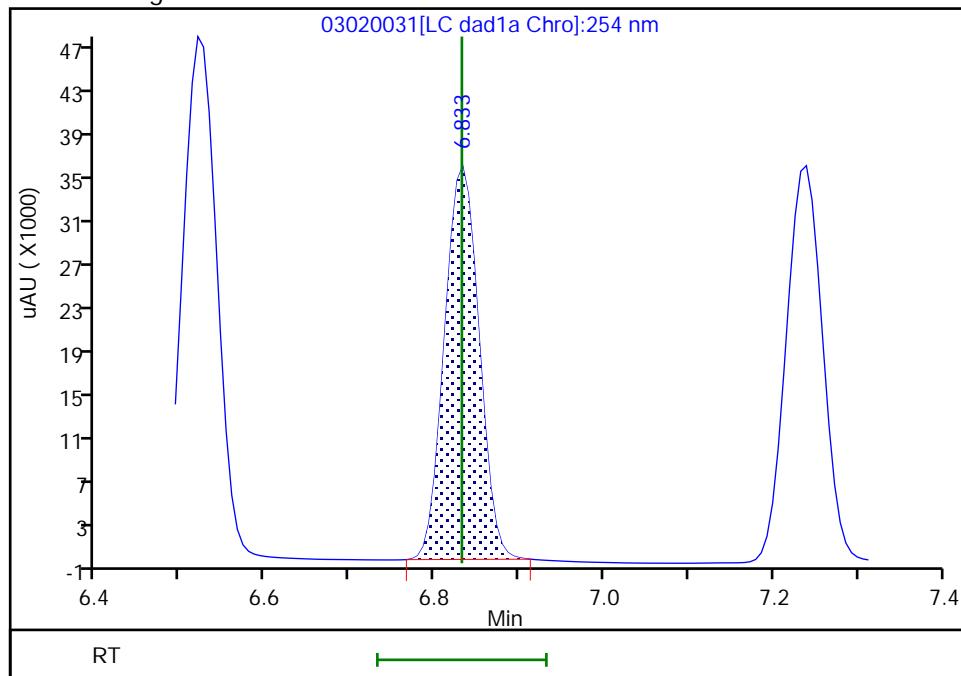
RT: 6.83  
 Area: 112441  
 Amount: 0.713130  
 Amount Units: ug/mL

## Processing Integration Results



RT: 6.83  
 Area: 100368  
 Amount: 0.706223  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 03-Mar-2021 13:19:27

Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Denver

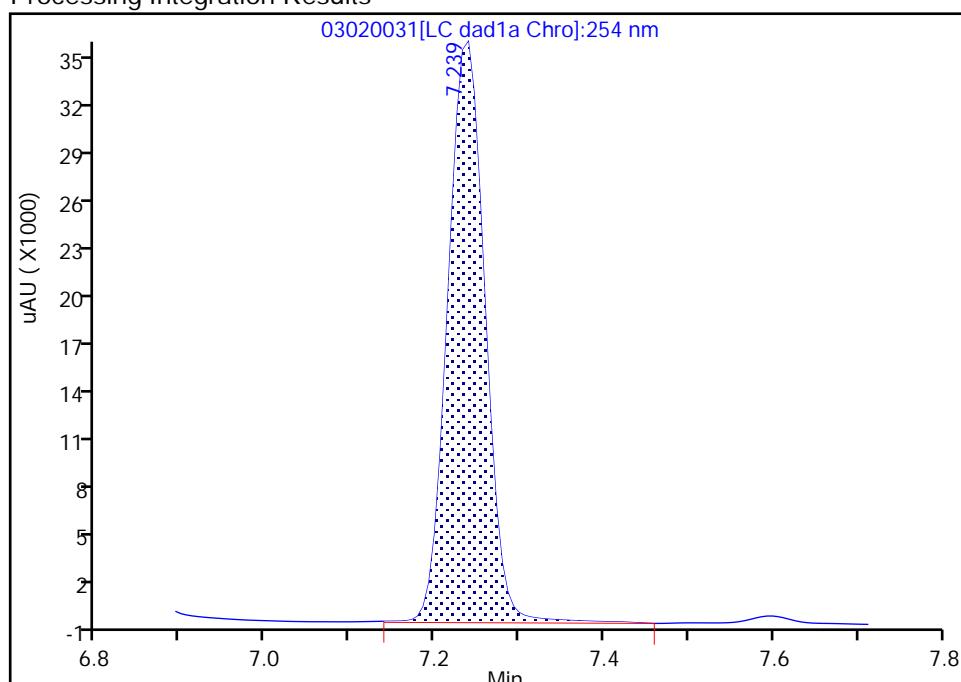
Data File: \\chromfs\denver\chromdata\chhplc\_x\20210302-99486.b\03020031.d  
 Injection Date: 03-Mar-2021 00:35:25 Instrument ID: CHHPLC\_X3  
 Lims ID: IC DMT 6  
 Client ID:  
 Operator ID: ALS Bottle#: 31 Worklist Smp#: 31  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

**6 MNX, CAS: 5755-27-1**

Signal: 1

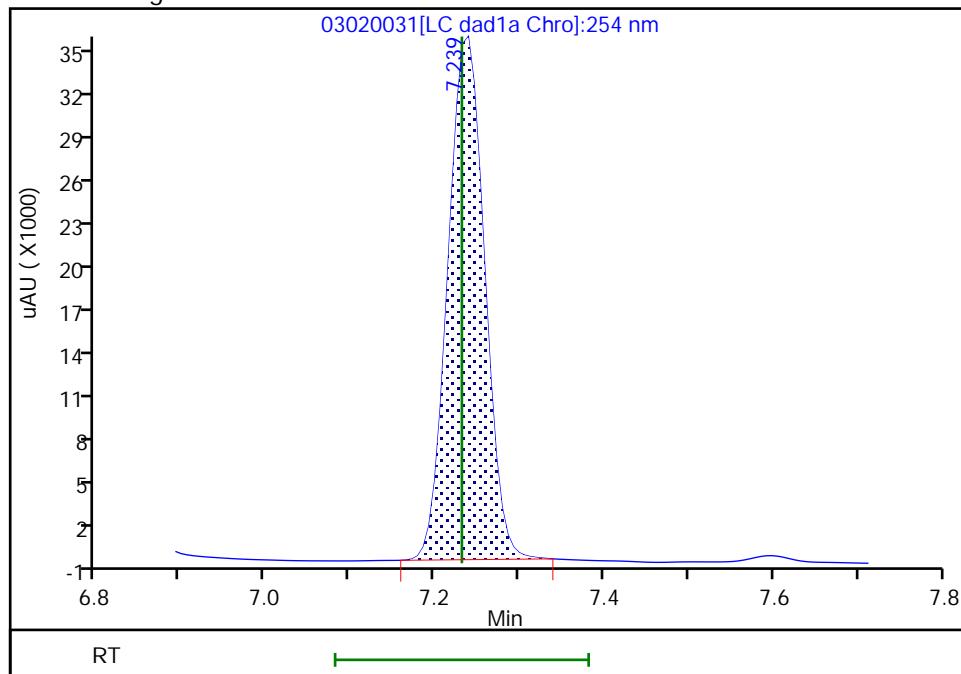
RT: 7.24  
 Area: 109789  
 Amount: 0.839946  
 Amount Units: ug/mL

## Processing Integration Results



RT: 7.24  
 Area: 107376  
 Amount: 0.823813  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 03-Mar-2021 13:19:32

Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20210302-99486.b\03020032.D  
 Lims ID: IC DMT 5  
 Client ID:  
 Sample Type: IC Calib Level: 5  
 Inject. Date: 03-Mar-2021 00:58:19 ALS Bottle#: 32 Worklist Smp#: 32  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Sample Info: IC DMT 5  
 Misc. Info.: 280-0099486-032  
 Operator ID: Instrument ID: CHHPLC\_X3  
 Sublist: chrom-8330\_X3\*sub17  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20210302-99486.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 03-Mar-2021 13:32:27 Calib Date: 03-Mar-2021 02:30:22  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20210302-99486.b\03020036.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1629

First Level Reviewer: zhangji Date: 03-Mar-2021 13:19:53

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.521	6.518	0.003	75195	0.4004	0.4047	M
5 DNX	1	6.828	6.832	-0.004	57462	0.4004	0.4043	M
6 MNX	1	7.234	7.232	0.002	61731	0.4668	0.4736	

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

### Reagents:

8330 DMT\_00008 Amount Added: 20.00 Units: uL

Report Date: 03-Mar-2021 13:32:27

Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Denver

Data File: \\chromfs\\denver\\chromdata\\chhplc\_x\\20210302-99486.b\\03020032.d

Injection Date: 03-Mar-2021 00:58:19

Instrument ID: CHHPLC\_X3

Operator ID:

Lims ID: IC DMT 5

Worklist Smp#: 32

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

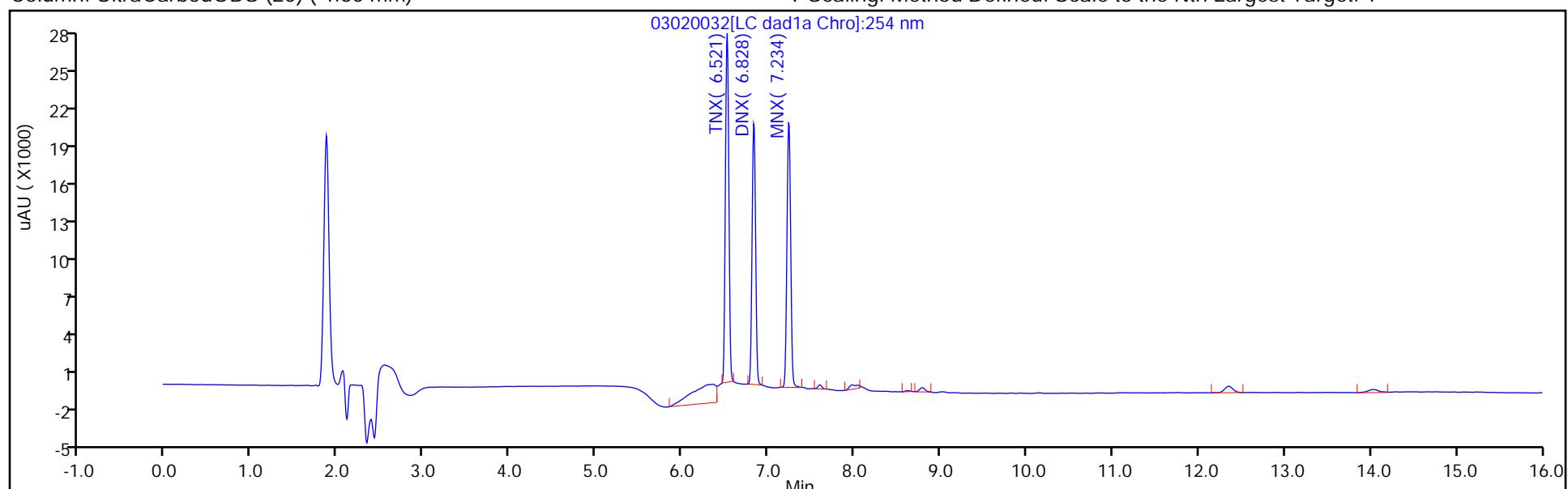
ALS Bottle#: 32

Method: 8330\_X3

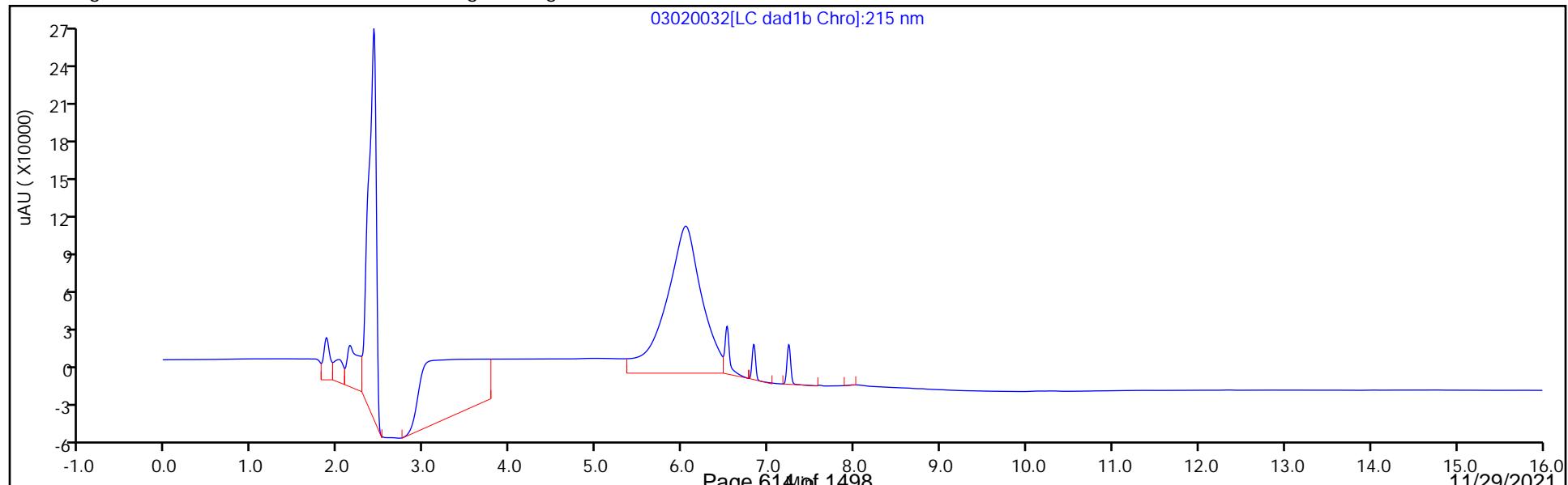
Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

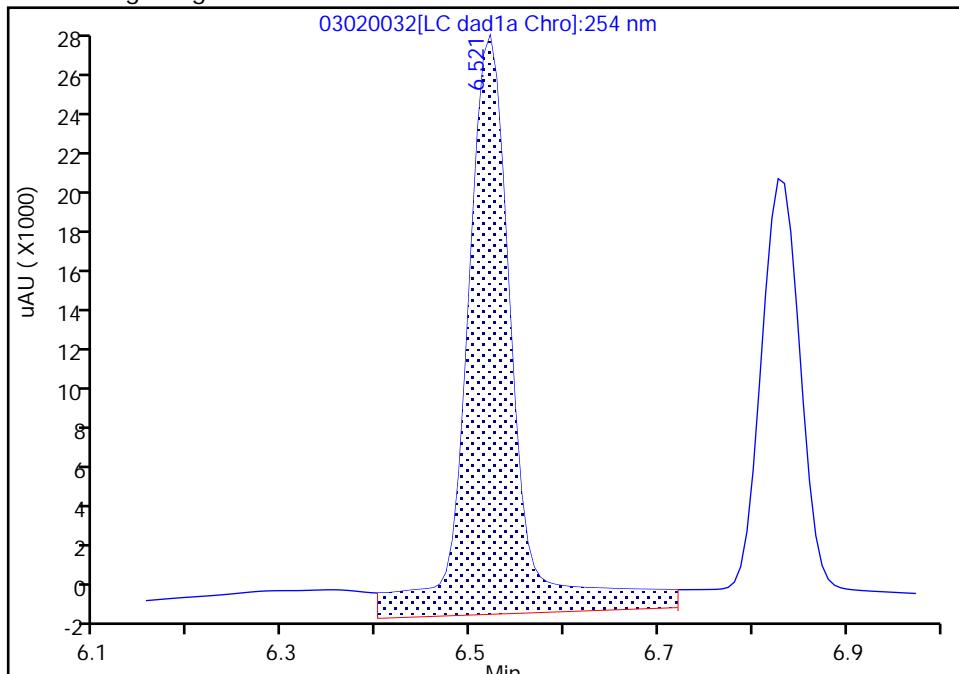
Data File: \\chromfs\denver\chromdata\chhplc\_x\20210302-99486.b\03020032.d  
 Injection Date: 03-Mar-2021 00:58:19 Instrument ID: CHHPLC\_X3  
 Lims ID: IC DMT 5  
 Client ID:  
 Operator ID: ALS Bottle#: 32 Worklist Smp#: 32  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

**2 TNX, CAS: 13980-04-6**

Signal: 1

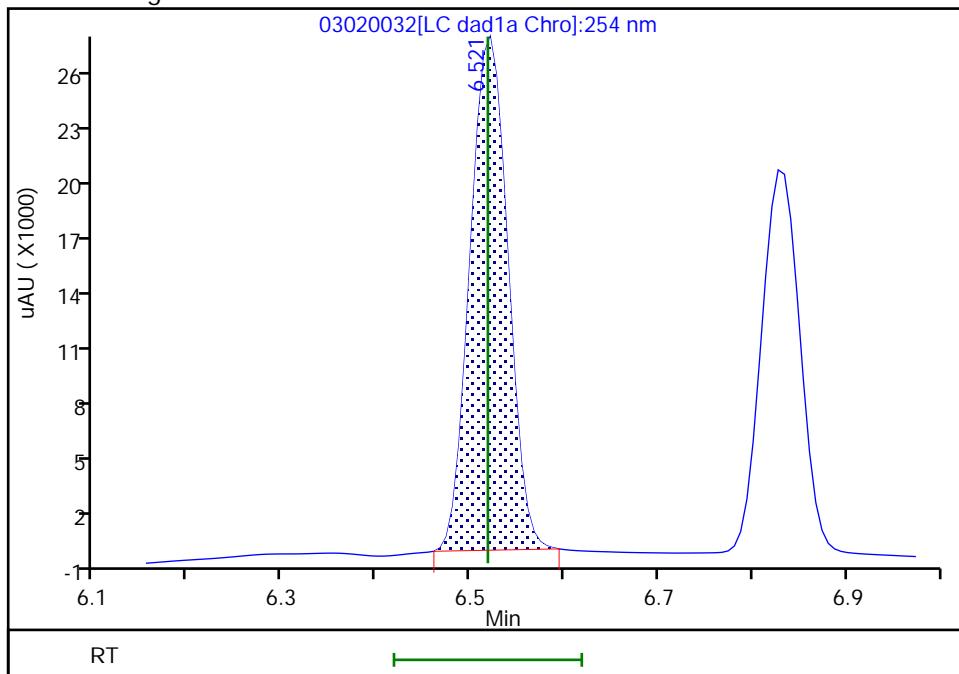
## Processing Integration Results

RT: 6.52  
 Area: 98522  
 Amount: 0.473037  
 Amount Units: ug/mL



## Manual Integration Results

RT: 6.52  
 Area: 75195  
 Amount: 0.404696  
 Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:19:45

Audit Action: Manually Integrated

Audit Reason: Baseline

## Eurofins TestAmerica, Denver

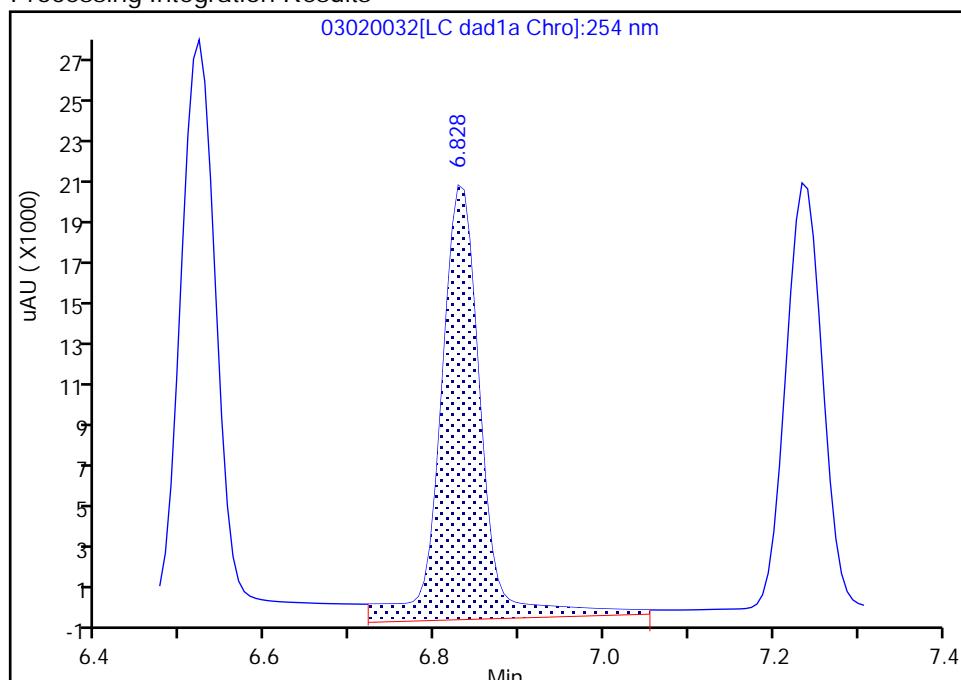
Data File: \\chromfs\denver\chromdata\chhplc\_x\20210302-99486.b\03020032.d  
 Injection Date: 03-Mar-2021 00:58:19 Instrument ID: CHHPLC\_X3  
 Lims ID: IC DMT 5  
 Client ID:  
 Operator ID: ALS Bottle#: 32 Worklist Smp#: 32  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

**5 DNX, CAS: 80251-29-2**

Signal: 1

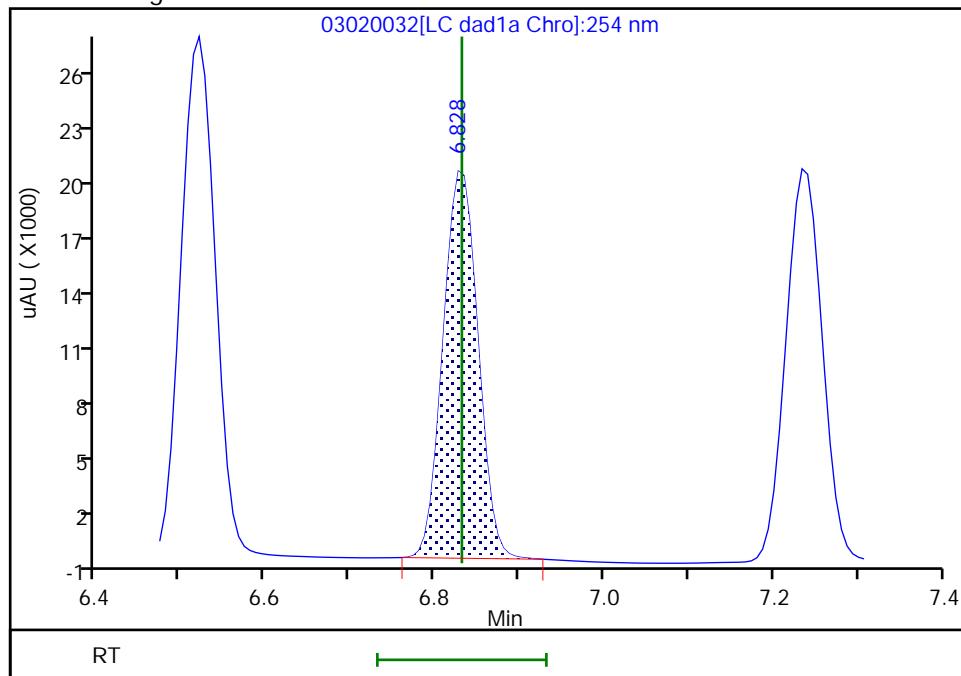
RT: 6.83  
 Area: 69186  
 Amount: 0.444873  
 Amount Units: ug/mL

## Processing Integration Results



RT: 6.83  
 Area: 57462  
 Amount: 0.404322  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 03-Mar-2021 13:19:42

Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20210302-99486.b\03020033.D  
 Lims ID: IC DMT 4  
 Client ID:  
 Sample Type: IC Calib Level: 4  
 Inject. Date: 03-Mar-2021 01:21:15 ALS Bottle#: 33 Worklist Smp#: 33  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Sample Info: IC DMT 4  
 Misc. Info.: 280-0099486-033  
 Operator ID: Instrument ID: CHHPLC\_X3  
 Sublist: chrom-8330\_X3\*sub17  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20210302-99486.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 03-Mar-2021 13:32:28 Calib Date: 03-Mar-2021 02:30:22  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20210302-99486.b\03020036.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1629

First Level Reviewer: zhangji Date: 03-Mar-2021 13:20:09

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.518	6.518	0.000	44228	0.2503	0.2380	M
5 DNX	1	6.832	6.832	0.000	33502	0.2503	0.2357	M
6 MNX	1	7.232	7.232	0.000	36376	0.2918	0.2791	

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

### Reagents:

8330 DMT\_00008 Amount Added: 12.50 Units: uL

Report Date: 03-Mar-2021 13:32:28

Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Denver

Data File: \\chromfs\\denver\\chromdata\\chhplc\_x\\20210302-99486.b\\03020033.d

Injection Date: 03-Mar-2021 01:21:15

Instrument ID: CHHPLC\_X3

Operator ID:

Lims ID: IC DMT 4

Worklist Smp#: 33

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

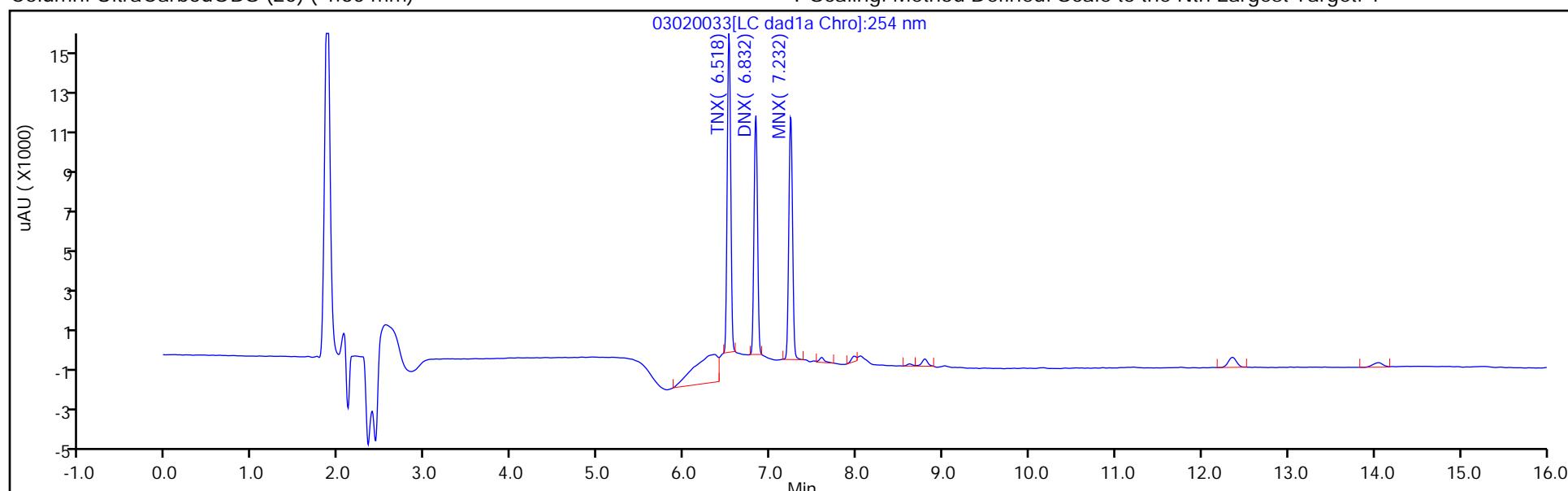
ALS Bottle#: 33

Method: 8330\_X3

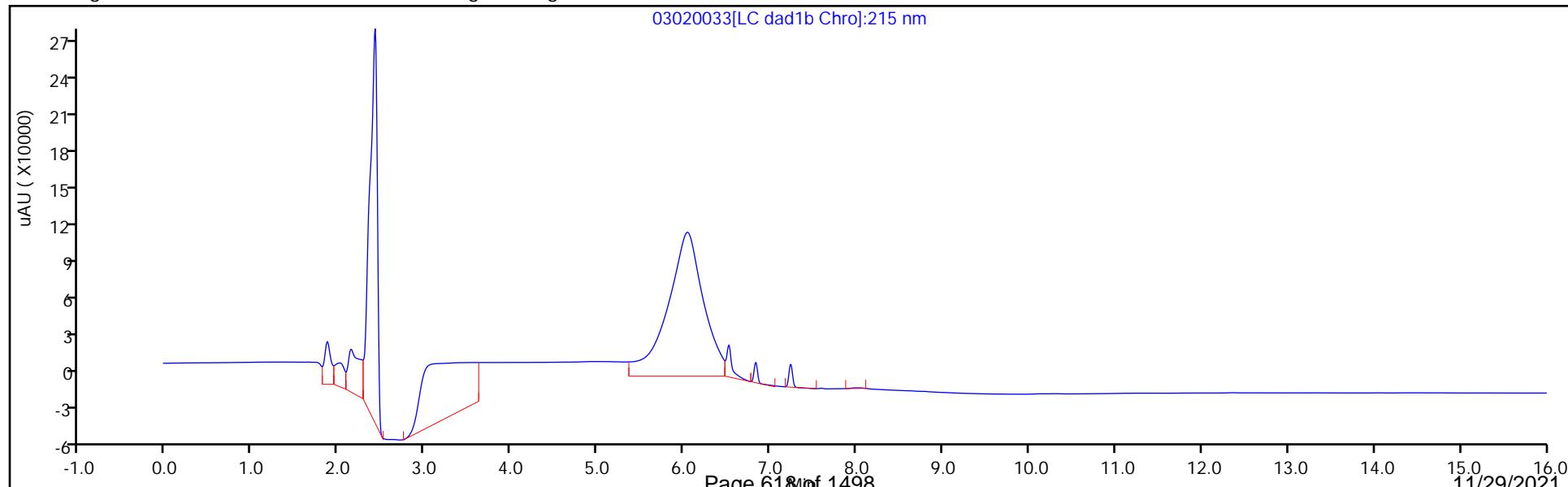
Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

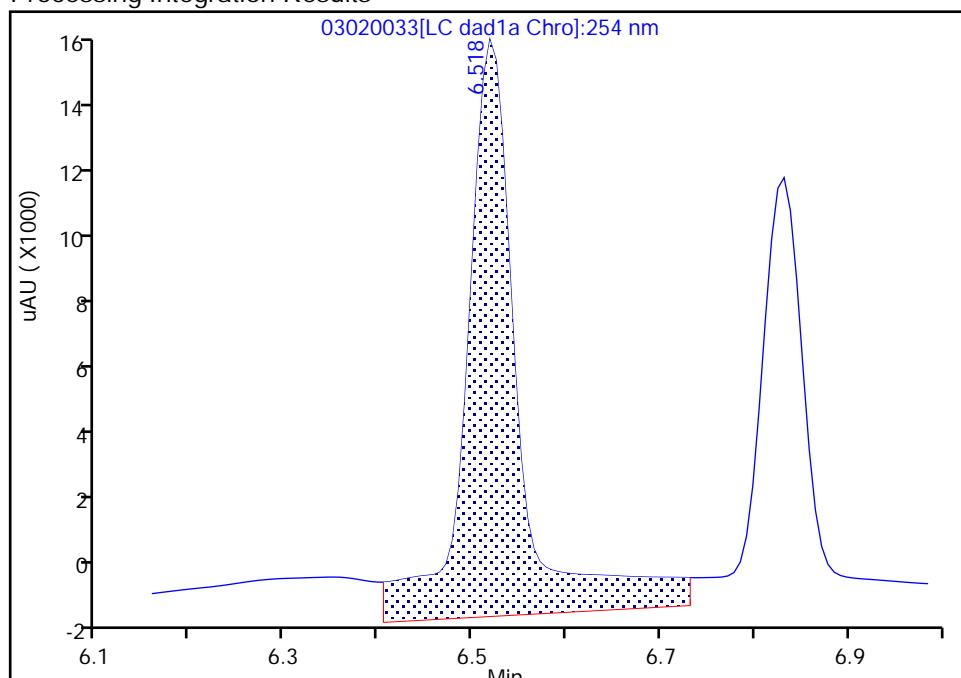
Data File: \\chromfs\denver\chromdata\chhplc\_x\20210302-99486.b\03020033.d  
 Injection Date: 03-Mar-2021 01:21:15 Instrument ID: CHHPLC\_X3  
 Lims ID: IC DMT 4  
 Client ID:  
 Operator ID: ALS Bottle#: 33 Worklist Smp#: 33  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

**2 TNX, CAS: 13980-04-6**

Signal: 1

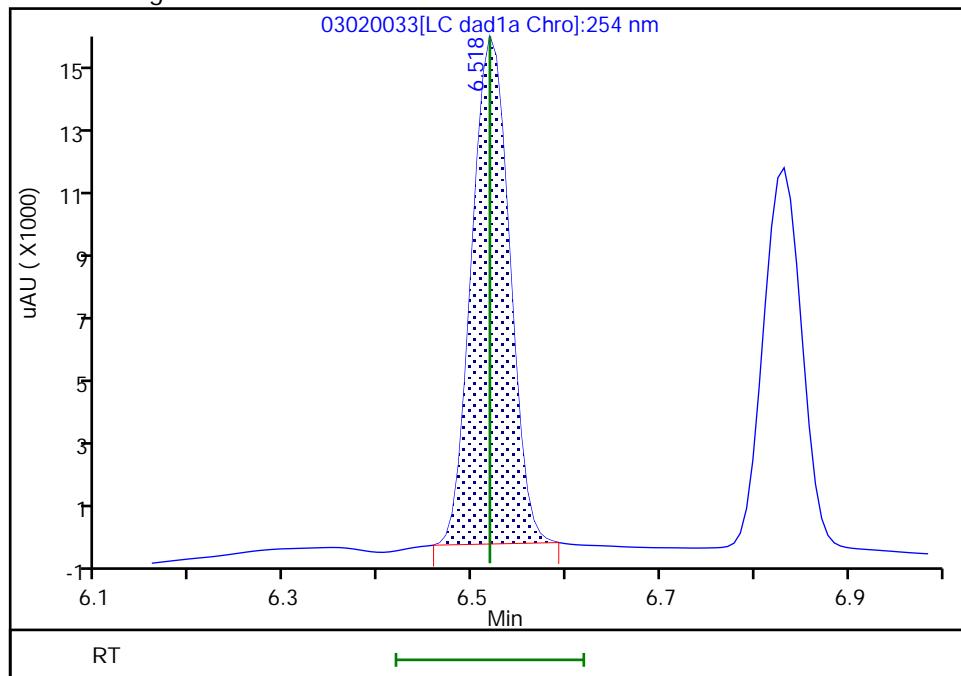
RT: 6.52  
 Area: 66731  
 Amount: 0.312730  
 Amount Units: ug/mL

## Processing Integration Results



RT: 6.52  
 Area: 44228  
 Amount: 0.238033  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 03-Mar-2021 13:20:00

Audit Action: Manually Integrated

Audit Reason: Baseline

## Eurofins TestAmerica, Denver

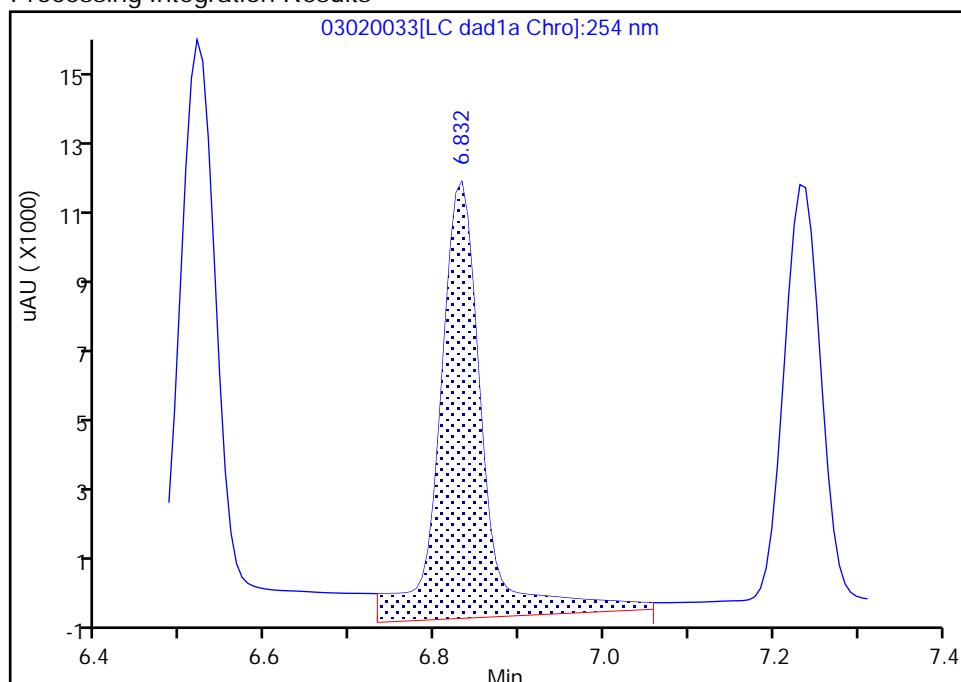
Data File: \\chromfs\denver\chromdata\chhplc\_x\20210302-99486.b\03020033.d  
 Injection Date: 03-Mar-2021 01:21:15 Instrument ID: CHHPLC\_X3  
 Lims ID: IC DMT 4  
 Client ID:  
 Operator ID: ALS Bottle#: 33 Worklist Smp#: 33  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

**5 DNX, CAS: 80251-29-2**

Signal: 1

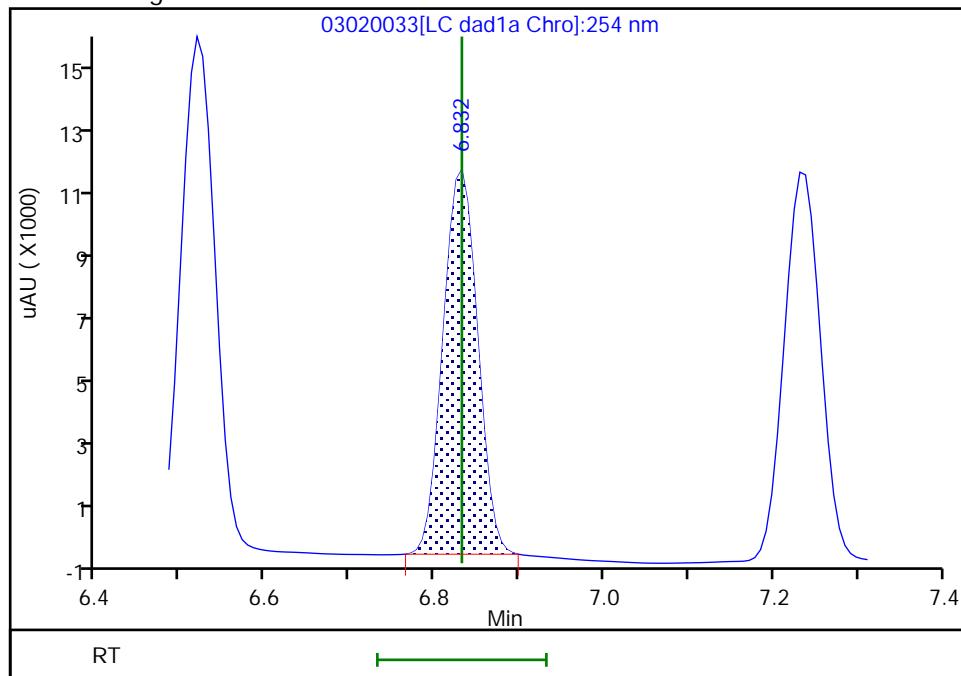
RT: 6.83  
 Area: 44700  
 Amount: 0.294353  
 Amount Units: ug/mL

## Processing Integration Results



RT: 6.83  
 Area: 33502  
 Amount: 0.235731  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 03-Mar-2021 13:20:06

Audit Action: Manually Integrated

Audit Reason: Baseline



Report Date: 03-Mar-2021 13:32:29

Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Denver

Data File: \\chromfs\\denver\\chromdata\\chhplc\_x\\20210302-99486.b\\03020034.d

Injection Date: 03-Mar-2021 01:44:28

Instrument ID: CHHPLC\_X3

Operator ID:

Lims ID: IC DMT 3

Worklist Smp#: 34

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

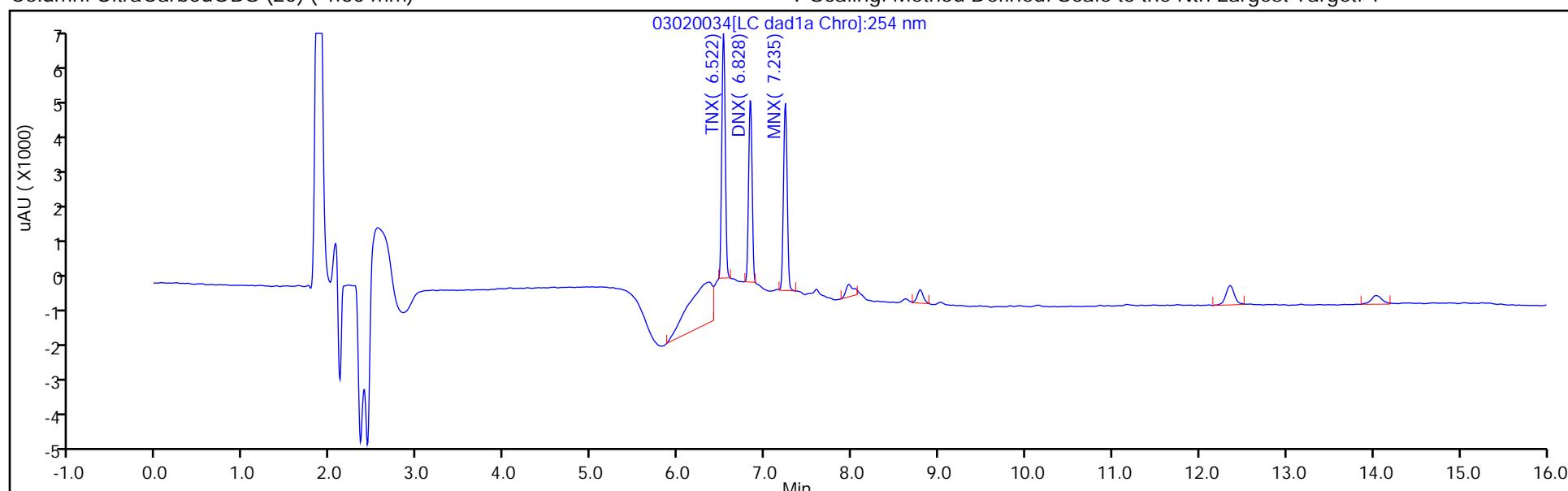
ALS Bottle#: 34

Method: 8330\_X3

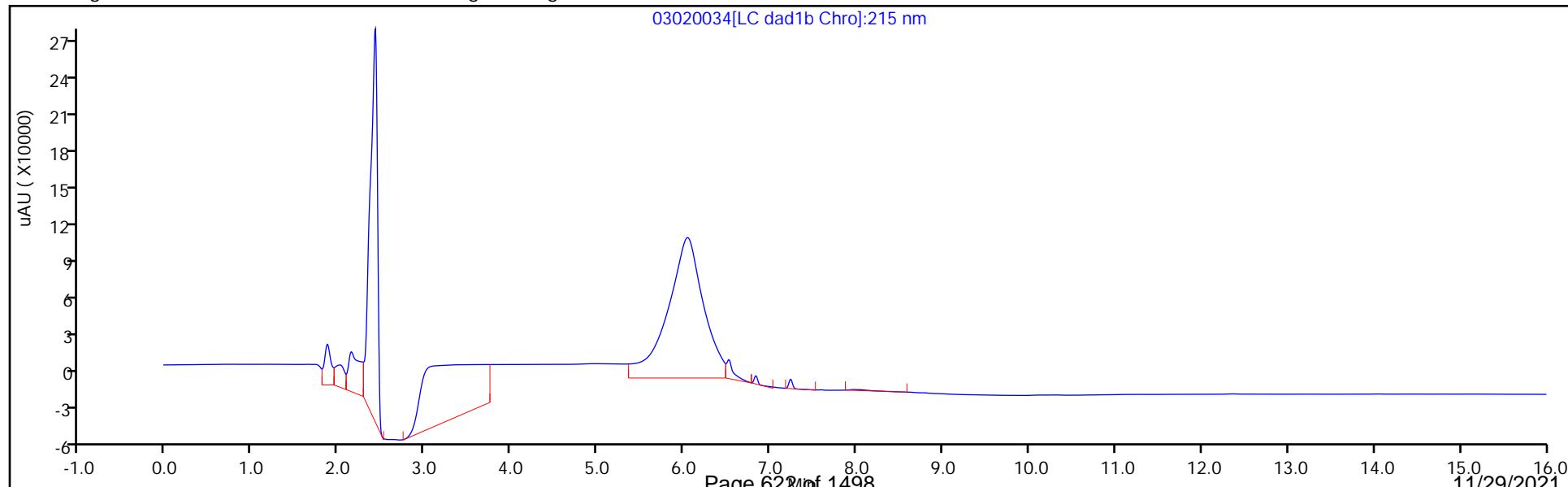
Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



## Eurofins TestAmerica, Denver

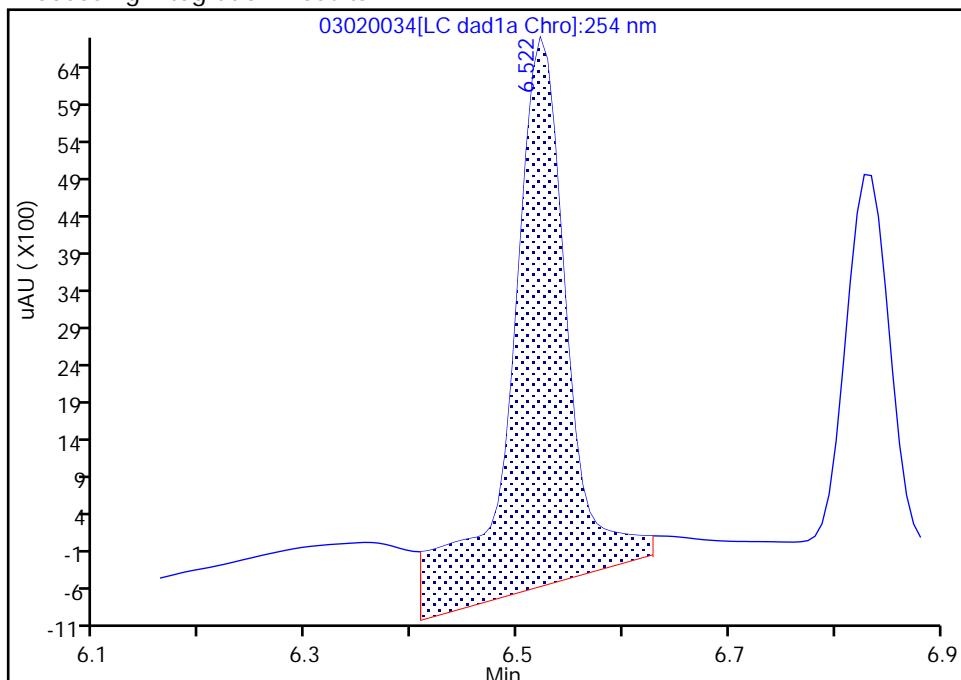
Data File: \\chromfs\denver\chromdata\chhplc\_x\20210302-99486.b\03020034.d  
 Injection Date: 03-Mar-2021 01:44:28 Instrument ID: CHHPLC\_X3  
 Lims ID: IC DMT 3  
 Client ID:  
 Operator ID: ALS Bottle#: 34 Worklist Smp#: 34  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

**2 TNX, CAS: 13980-04-6**

Signal: 1

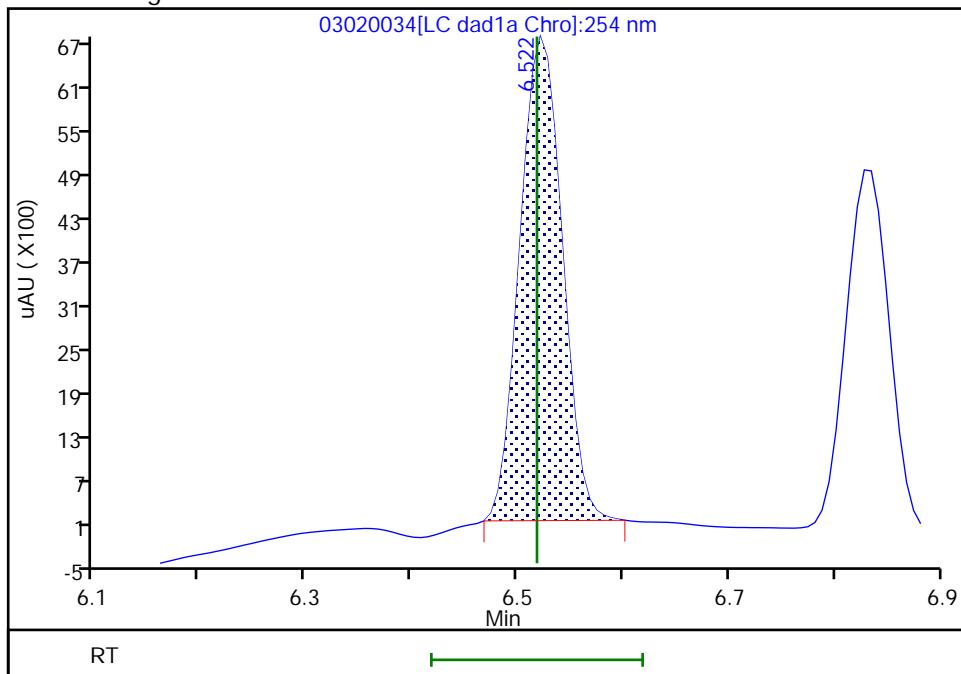
## Processing Integration Results

RT: 6.52  
 Area: 27541  
 Amount: 0.106458  
 Amount Units: ug/mL



## Manual Integration Results

RT: 6.52  
 Area: 18578  
 Amount: 0.099986  
 Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:20:18

Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Denver

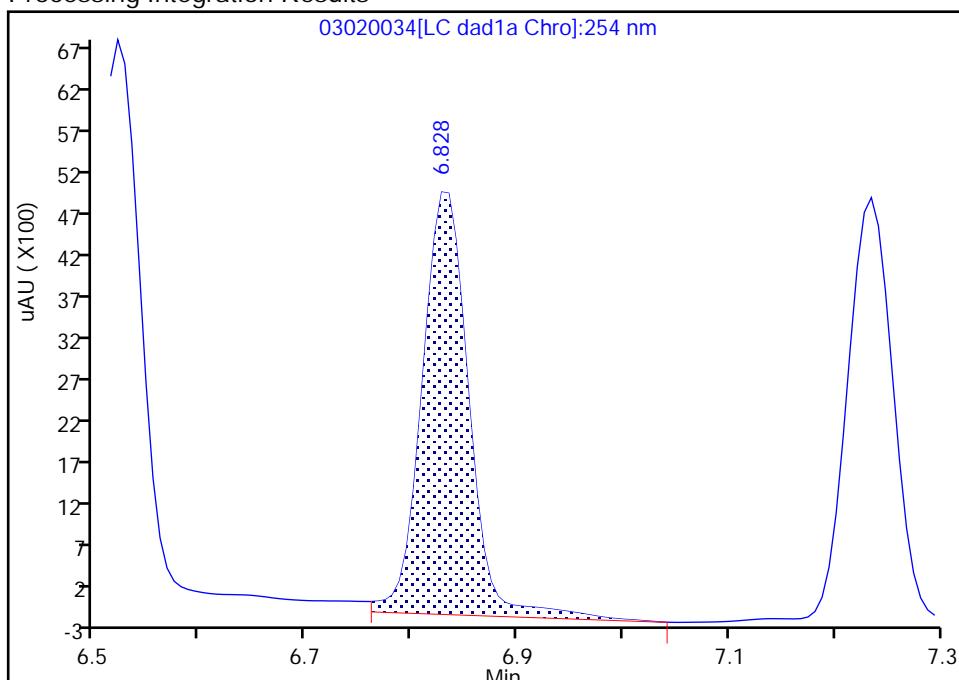
Data File: \\chromfs\denver\chromdata\chhplc\_x\20210302-99486.b\03020034.d  
 Injection Date: 03-Mar-2021 01:44:28 Instrument ID: CHHPLC\_X3  
 Lims ID: IC DMT 3  
 Client ID:  
 Operator ID: ALS Bottle#: 34 Worklist Smp#: 34  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

**5 DNX, CAS: 80251-29-2**

Signal: 1

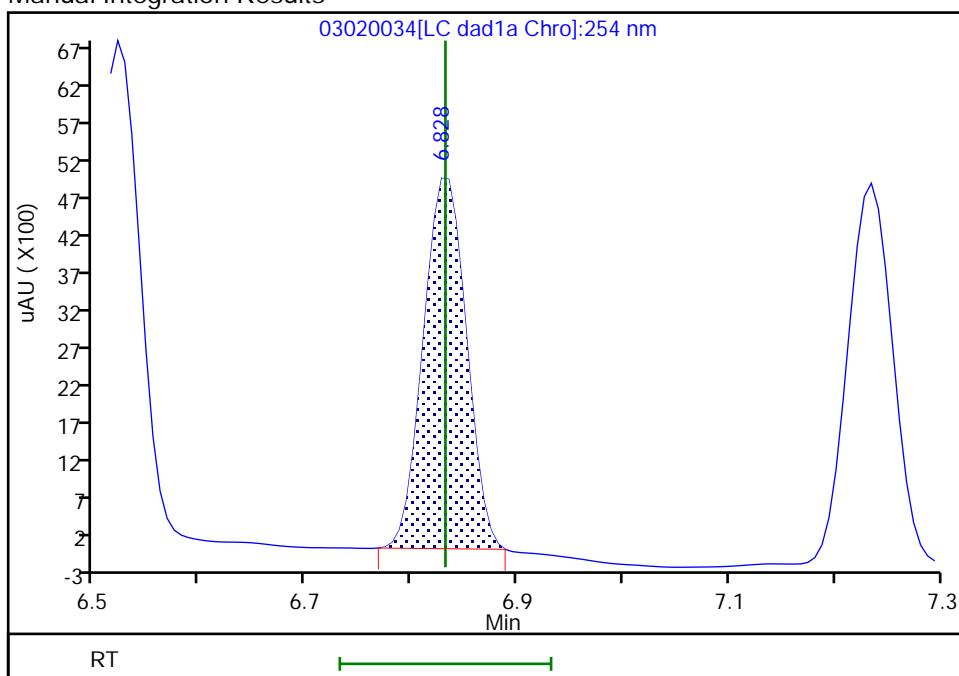
## Processing Integration Results

RT: 6.83  
 Area: 15711  
 Amount: 0.107414  
 Amount Units: ug/mL



## Manual Integration Results

RT: 6.83  
 Area: 13949  
 Amount: 0.098150  
 Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:20:22

Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20210302-99486.b\03020035.D  
 Lims ID: IC DMT 2  
 Client ID:  
 Sample Type: IC Calib Level: 2  
 Inject. Date: 03-Mar-2021 02:07:25 ALS Bottle#: 35 Worklist Smp#: 35  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Sample Info: IC DMT 2  
 Misc. Info.: 280-0099486-035  
 Operator ID: Instrument ID: CHHPLC\_X3  
 Sublist: chrom-8330\_X3\*sub17  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20210302-99486.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 03-Mar-2021 13:32:30 Calib Date: 03-Mar-2021 02:30:22  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20210302-99486.b\03020036.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1629

First Level Reviewer: zhangji Date: 03-Mar-2021 13:20:44

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.522	6.518	0.004	9328	0.0501	0.0502	M
5 DNX	1	6.829	6.832	-0.003	7121	0.0501	0.0501	M
6 MNX	1	7.235	7.232	0.003	7585	0.0584	0.0582	

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

### Reagents:

8330 DMT\_00008 Amount Added: 2.50 Units: uL

Report Date: 03-Mar-2021 13:32:30

Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Denver

Data File: \\chromfs\\denver\\chromdata\\chhplc\_x\\20210302-99486.b\\03020035.d

Injection Date: 03-Mar-2021 02:07:25

Instrument ID: CHHPLC\_X3

Operator ID:

Lims ID: IC DMT 2

Worklist Smp#: 35

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

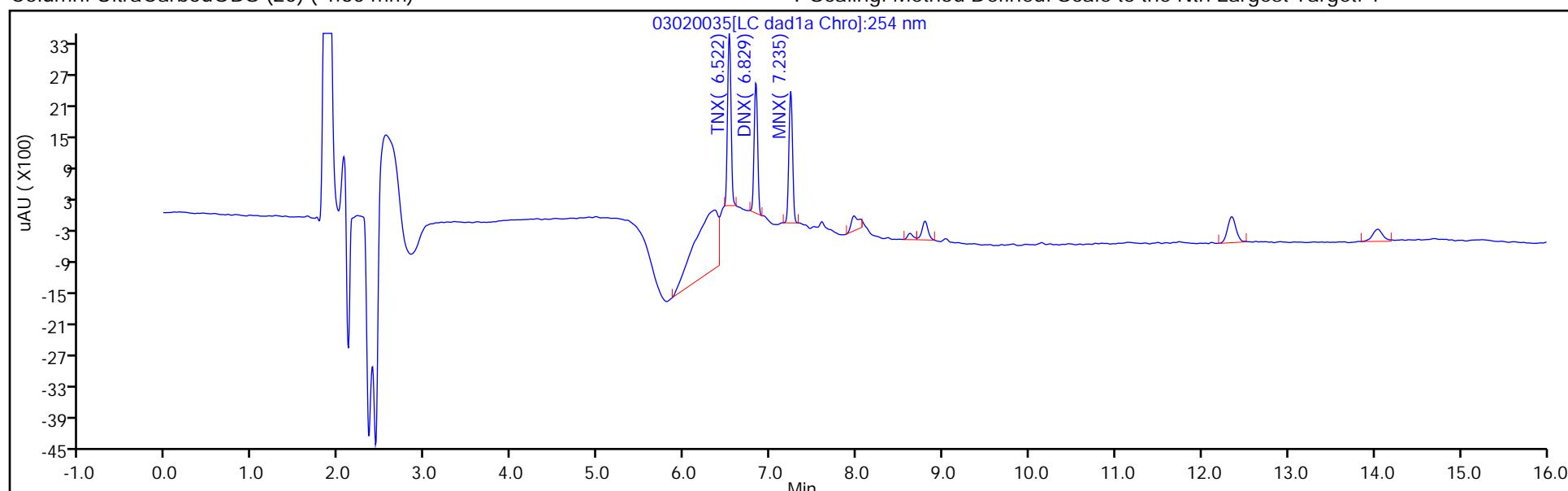
ALS Bottle#: 35

Method: 8330\_X3

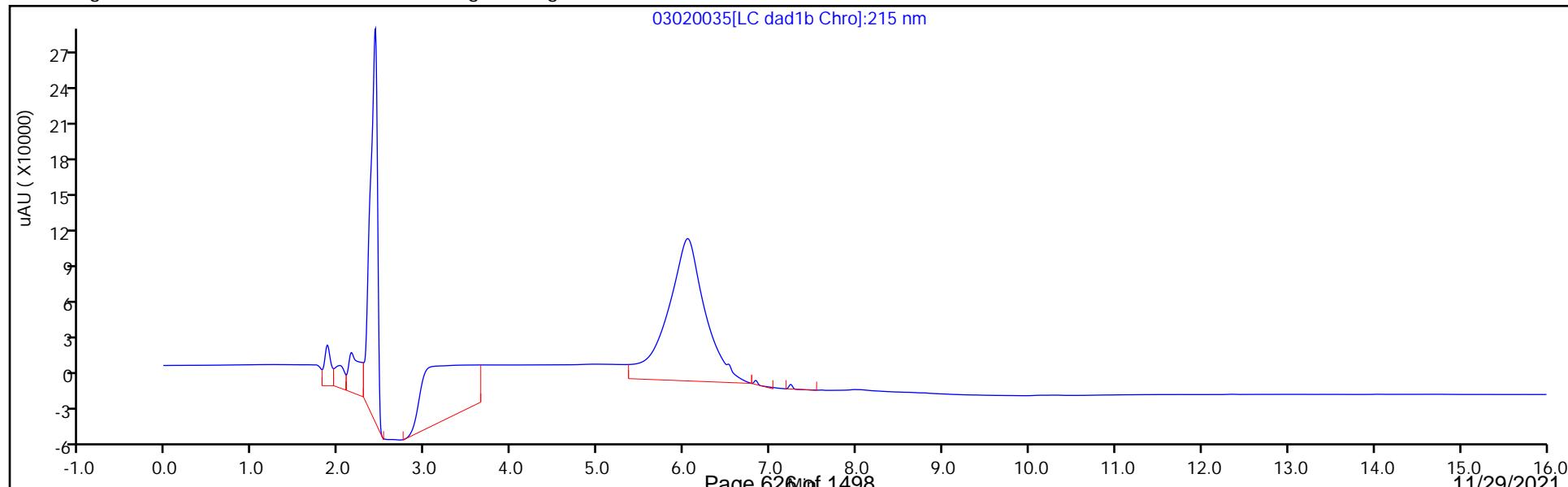
Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



## Eurofins TestAmerica, Denver

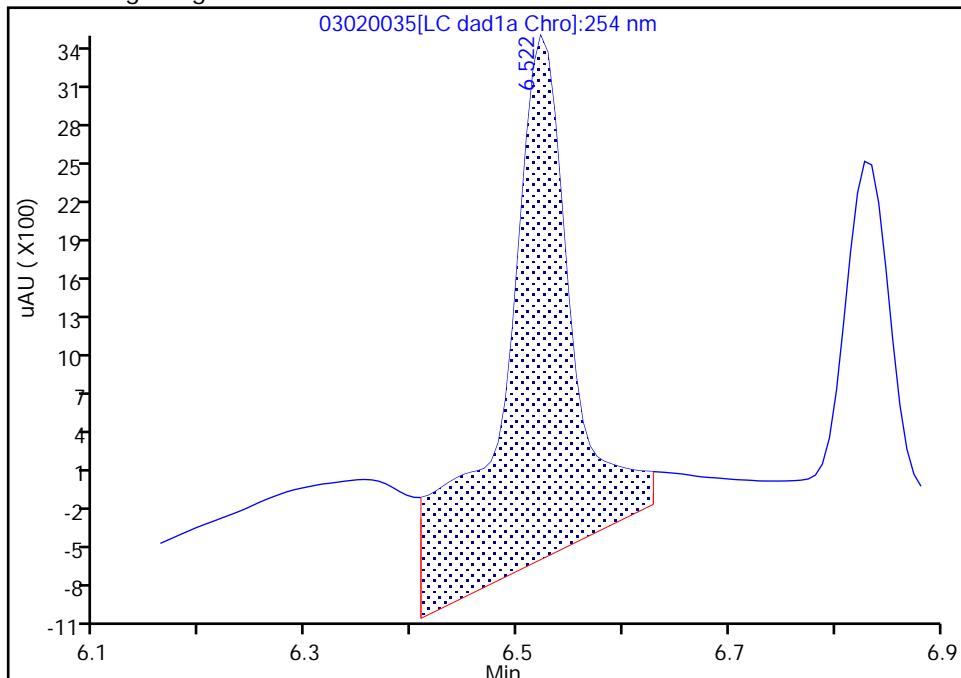
Data File: \\chromfs\denver\chromdata\chhplc\_x\20210302-99486.b\03020035.d  
 Injection Date: 03-Mar-2021 02:07:25 Instrument ID: CHHPLC\_X3  
 Lims ID: IC DMT 2  
 Client ID:  
 Operator ID: ALS Bottle#: 35 Worklist Smp#: 35  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

**2 TNX, CAS: 13980-04-6**

Signal: 1

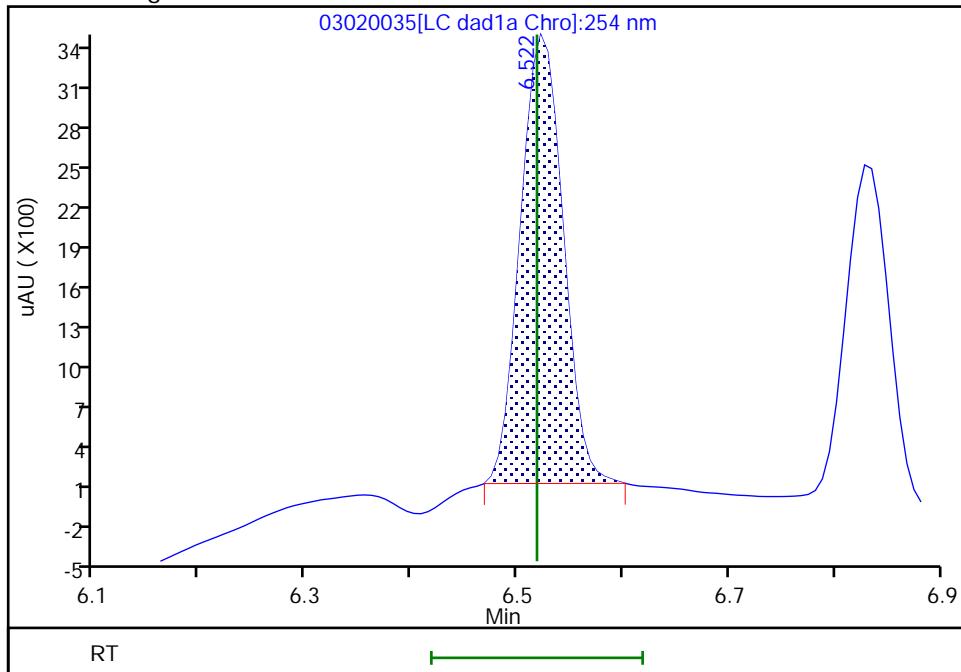
## Processing Integration Results

RT: 6.52  
 Area: 18356  
 Amount: 0.060447  
 Amount Units: ug/mL



## Manual Integration Results

RT: 6.52  
 Area: 9328  
 Amount: 0.050203  
 Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:20:37

Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Denver

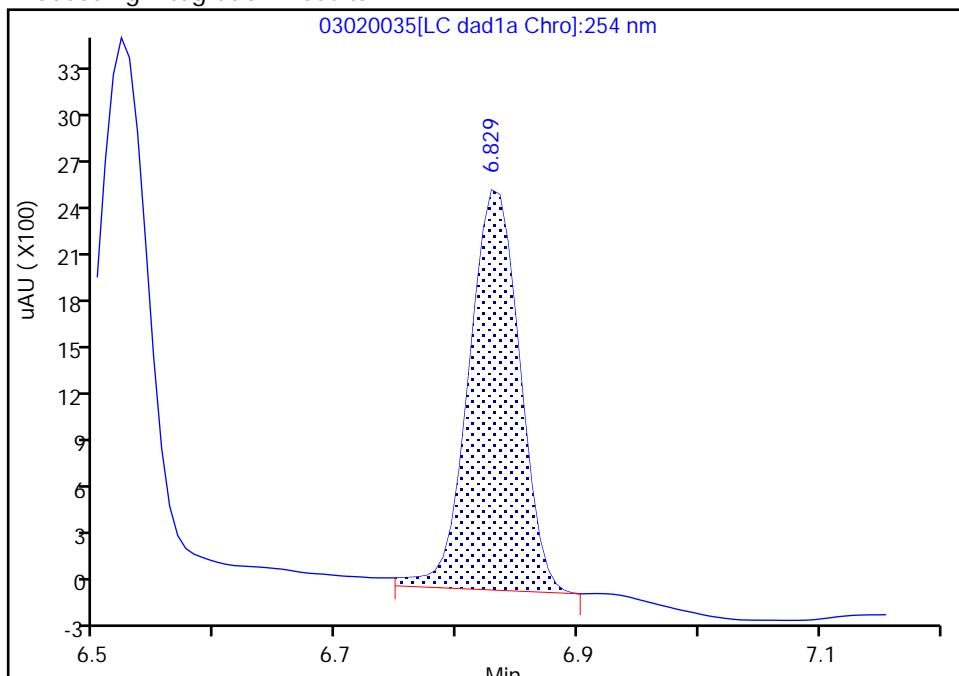
Data File: \\chromfs\denver\chromdata\chhplc\_x\20210302-99486.b\03020035.d  
 Injection Date: 03-Mar-2021 02:07:25 Instrument ID: CHHPLC\_X3  
 Lims ID: IC DMT 2  
 Client ID:  
 Operator ID: ALS Bottle#: 35 Worklist Smp#: 35  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

**5 DNX, CAS: 80251-29-2**

Signal: 1

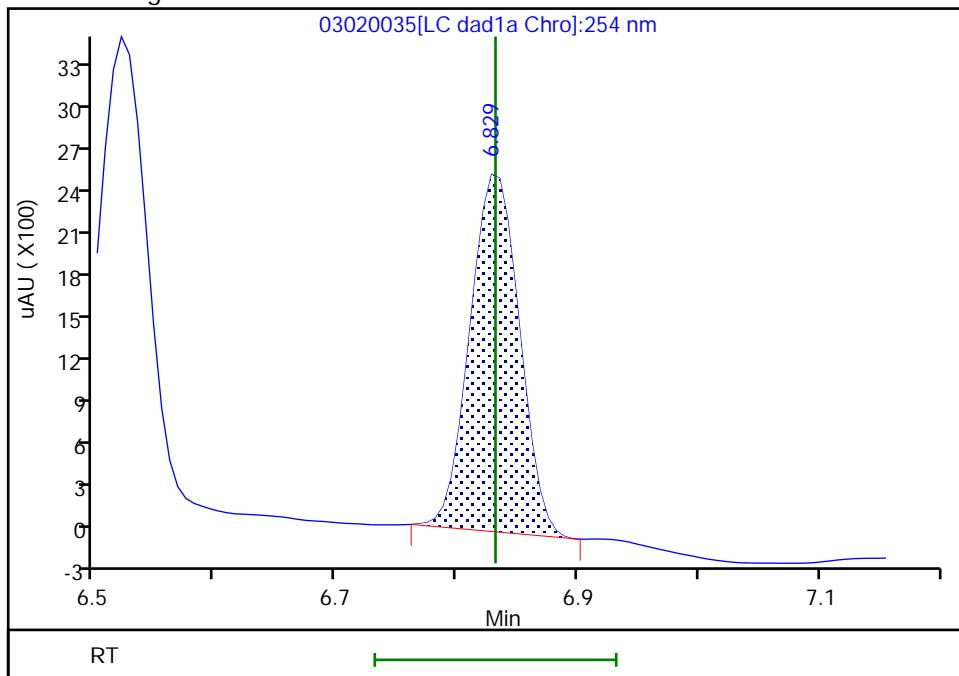
## Processing Integration Results

RT: 6.83  
 Area: 7405  
 Amount: 0.051400  
 Amount Units: ug/mL



## Manual Integration Results

RT: 6.83  
 Area: 7121  
 Amount: 0.050106  
 Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:20:41

Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20210302-99486.b\03020036.D  
 Lims ID: IC DMT 1  
 Client ID:  
 Sample Type: IC Calib Level: 1  
 Inject. Date: 03-Mar-2021 02:30:22 ALS Bottle#: 36 Worklist Smp#: 36  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Sample Info: IC DMT 1  
 Misc. Info.: 280-0099486-036  
 Operator ID: Instrument ID: CHHPLC\_X3  
 Sublist: chrom-8330\_X3\*sub17  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20210302-99486.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 03-Mar-2021 13:32:31 Calib Date: 03-Mar-2021 02:30:22  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20210302-99486.b\03020036.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1629

First Level Reviewer: zhangji Date: 03-Mar-2021 13:21:03

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.521	6.518	0.003	3664	0.0200	0.0197	M
5 DNX	1	6.827	6.832	-0.005	2984	0.0200	0.0210	M
6 MNX	1	7.234	7.232	0.002	3082	0.0233	0.0236	

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

### Reagents:

8330 DMT\_00008 Amount Added: 1.00 Units: uL

Report Date: 03-Mar-2021 13:32:31

Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Denver

Data File: \\chromfs\\denver\\chromdata\\chhplc\_x\\20210302-99486.b\\03020036.d

Injection Date: 03-Mar-2021 02:30:22

Instrument ID: CHHPLC\_X3

Operator ID:

Lims ID: IC DMT 1

Worklist Smp#: 36

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

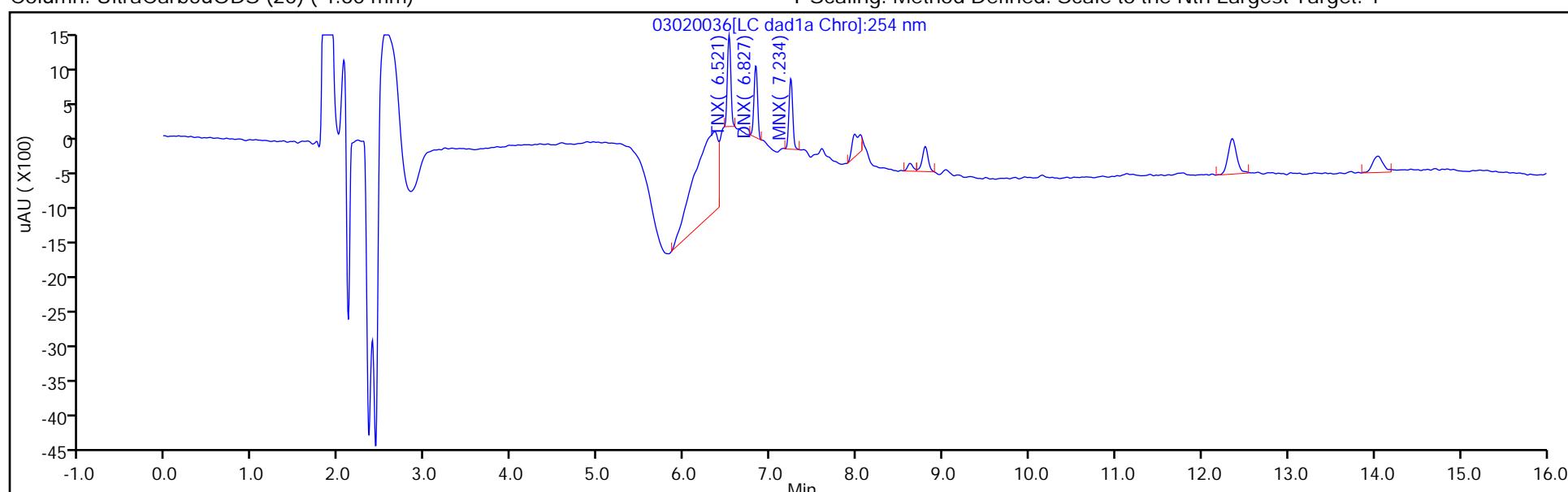
ALS Bottle#: 36

Method: 8330\_X3

Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

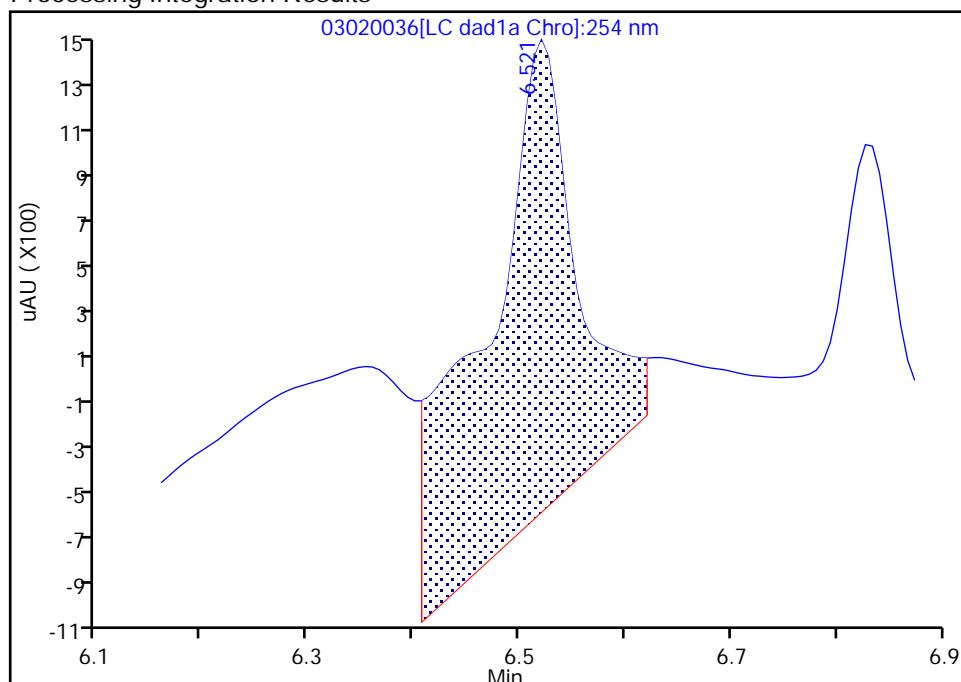
Data File: \\chromfs\denver\chromdata\chhplc\_x\20210302-99486.b\03020036.d  
 Injection Date: 03-Mar-2021 02:30:22 Instrument ID: CHHPLC\_X3  
 Lims ID: IC DMT 1  
 Client ID:  
 Operator ID: ALS Bottle#: 36 Worklist Smp#: 36  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

**2 TNX, CAS: 13980-04-6**

Signal: 1

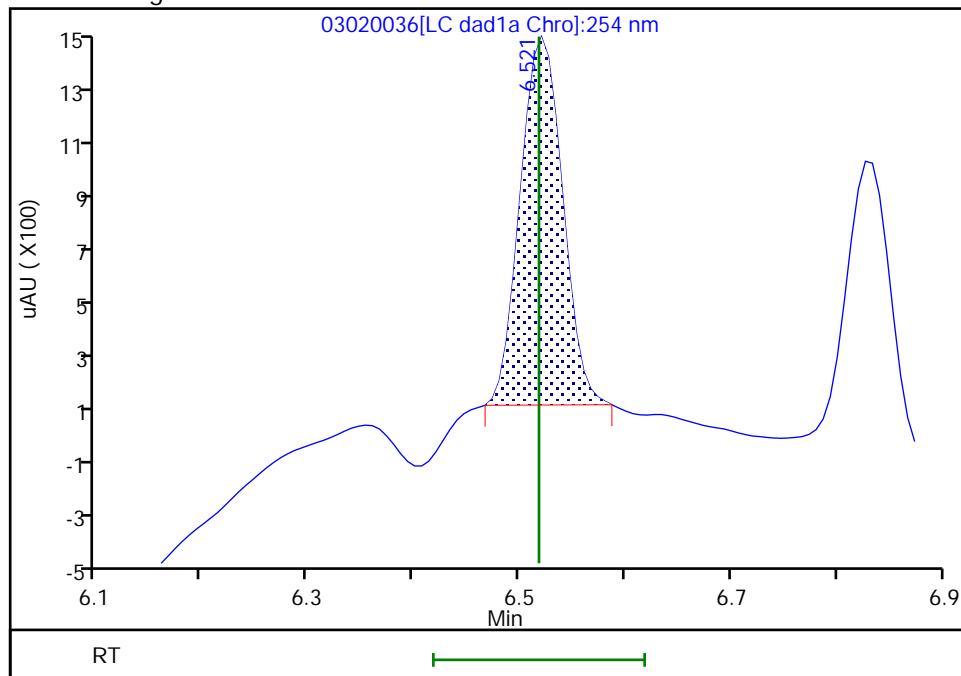
RT: 6.52  
 Area: 12511  
 Amount: 0.051903  
 Amount Units: ug/mL

## Processing Integration Results



RT: 6.52  
 Area: 3664  
 Amount: 0.019719  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 03-Mar-2021 13:20:52

Audit Action: Manually Integrated

Audit Reason: Baseline

## Eurofins TestAmerica, Denver

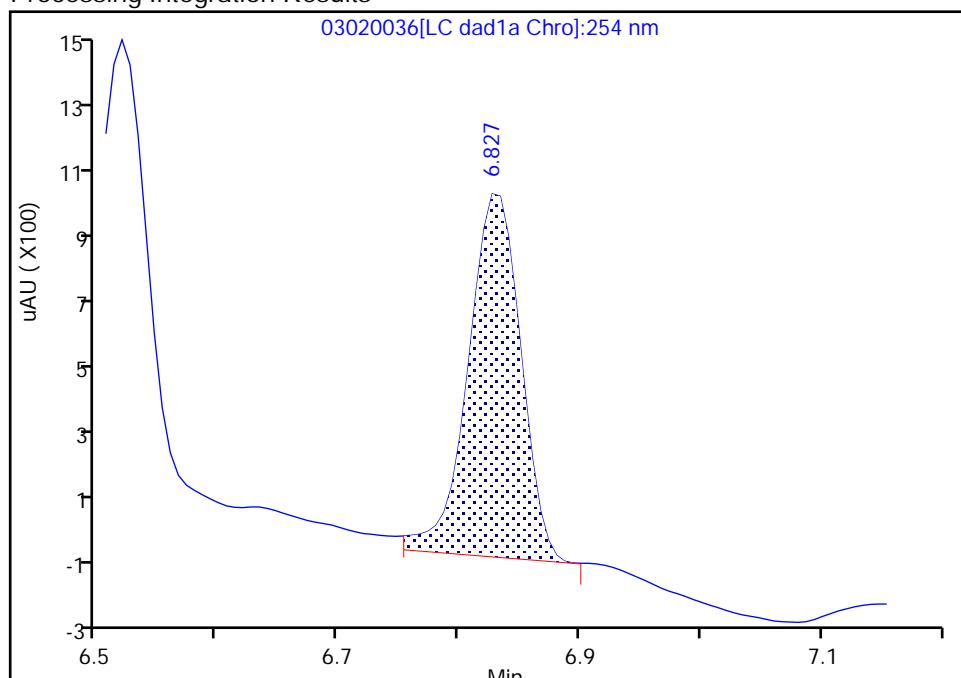
Data File: \\chromfs\denver\chromdata\chhplc\_x\20210302-99486.b\03020036.d  
 Injection Date: 03-Mar-2021 02:30:22 Instrument ID: CHHPLC\_X3  
 Lims ID: IC DMT 1  
 Client ID:  
 Operator ID: ALS Bottle#: 36 Worklist Smp#: 36  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

## 5 DNX, CAS: 80251-29-2

Signal: 1

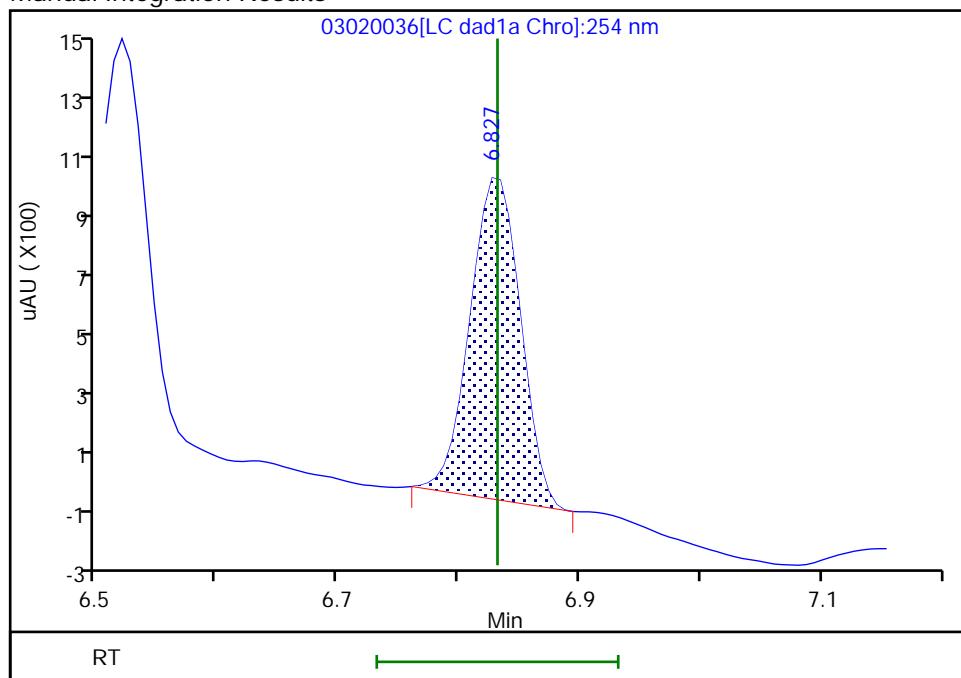
RT: 6.83  
 Area: 3182  
 Amount: 0.022197  
 Amount Units: ug/mL

## Processing Integration Results



RT: 6.83  
 Area: 2984  
 Amount: 0.020996  
 Amount Units: ug/mL

## Manual Integration Results



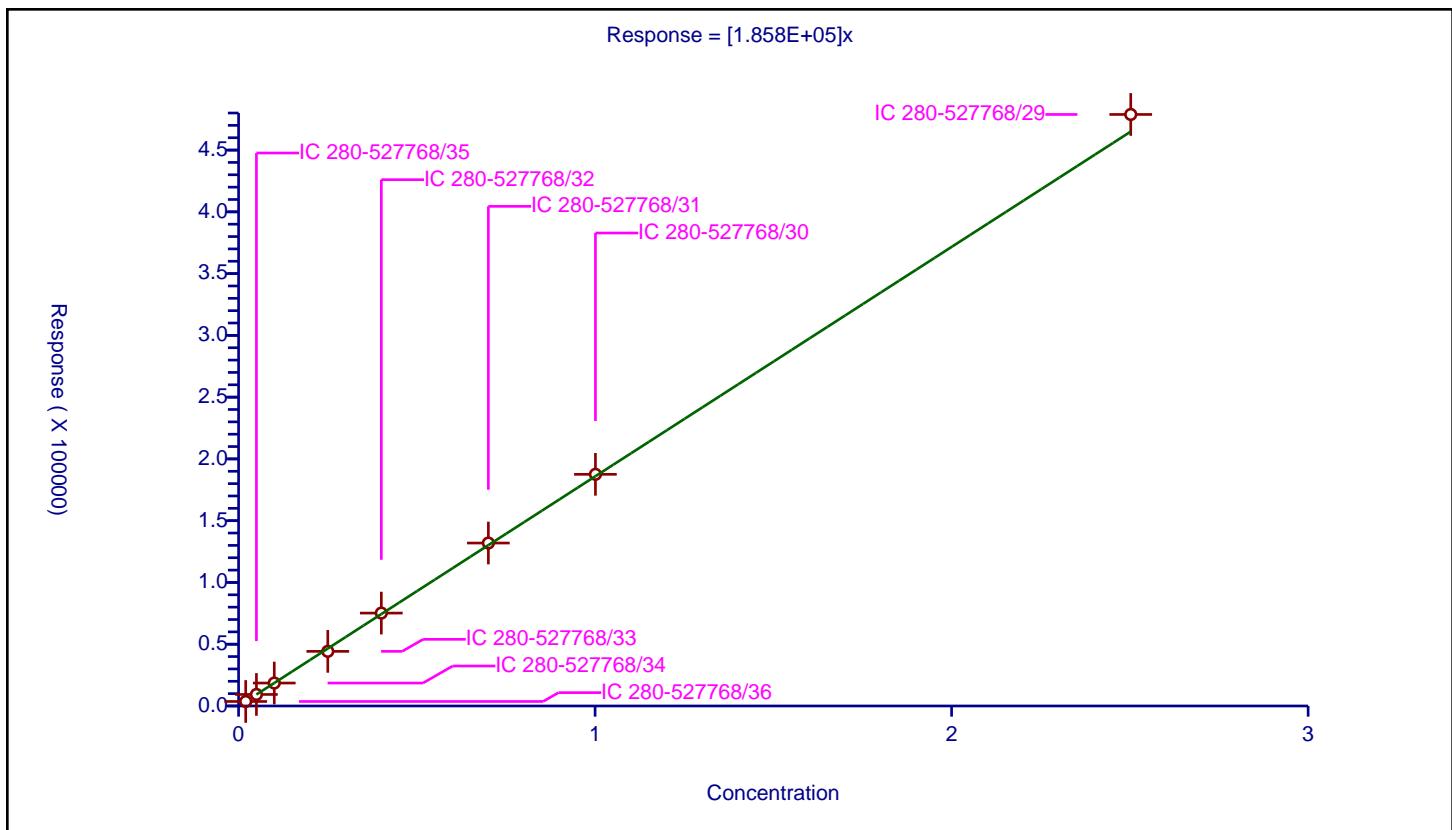
Reviewer: zhangji, 03-Mar-2021 13:20:57

Audit Action: Manually Integrated

Audit Reason: Baseline

		Curve Coefficients	
		Intercept:	0
		Slope:	1.858E+05
			Error Coefficients
		Standard Error:	5380
		Relative Standard Error:	2.3
		Correlation Coefficient:	1.000
		Coefficient of Determination (Adjusted):	0.999

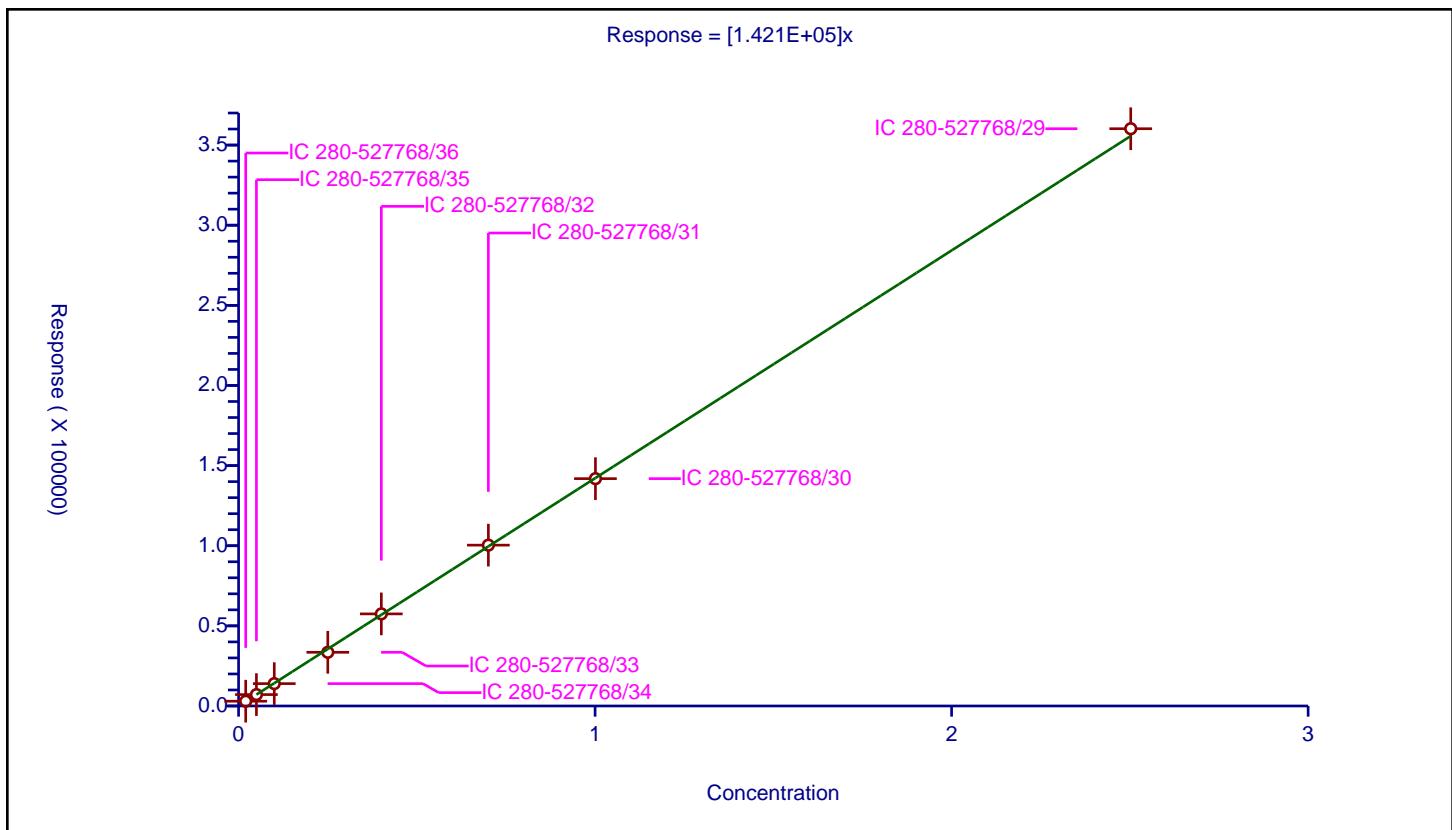
ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-527768/36	0.02002	3664.0			183016.983017	Y
2	IC 280-527768/35	0.05005	9328.0			186373.626374	Y
3	IC 280-527768/34	0.1001	18578.0			185594.405594	Y
4	IC 280-527768/33	0.25025	44228.0			176735.264735	Y
5	IC 280-527768/32	0.4004	75195.0			187799.7003	Y
6	IC 280-527768/31	0.7007	131907.0			188250.321107	Y
7	IC 280-527768/30	1.001	187526.0			187338.661339	Y
8	IC 280-527768/29	2.5025	478826.0			191339.060939	Y



**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	1.421E+05
Error Coefficients	
Standard Error:	1930
Relative Standard Error:	3.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

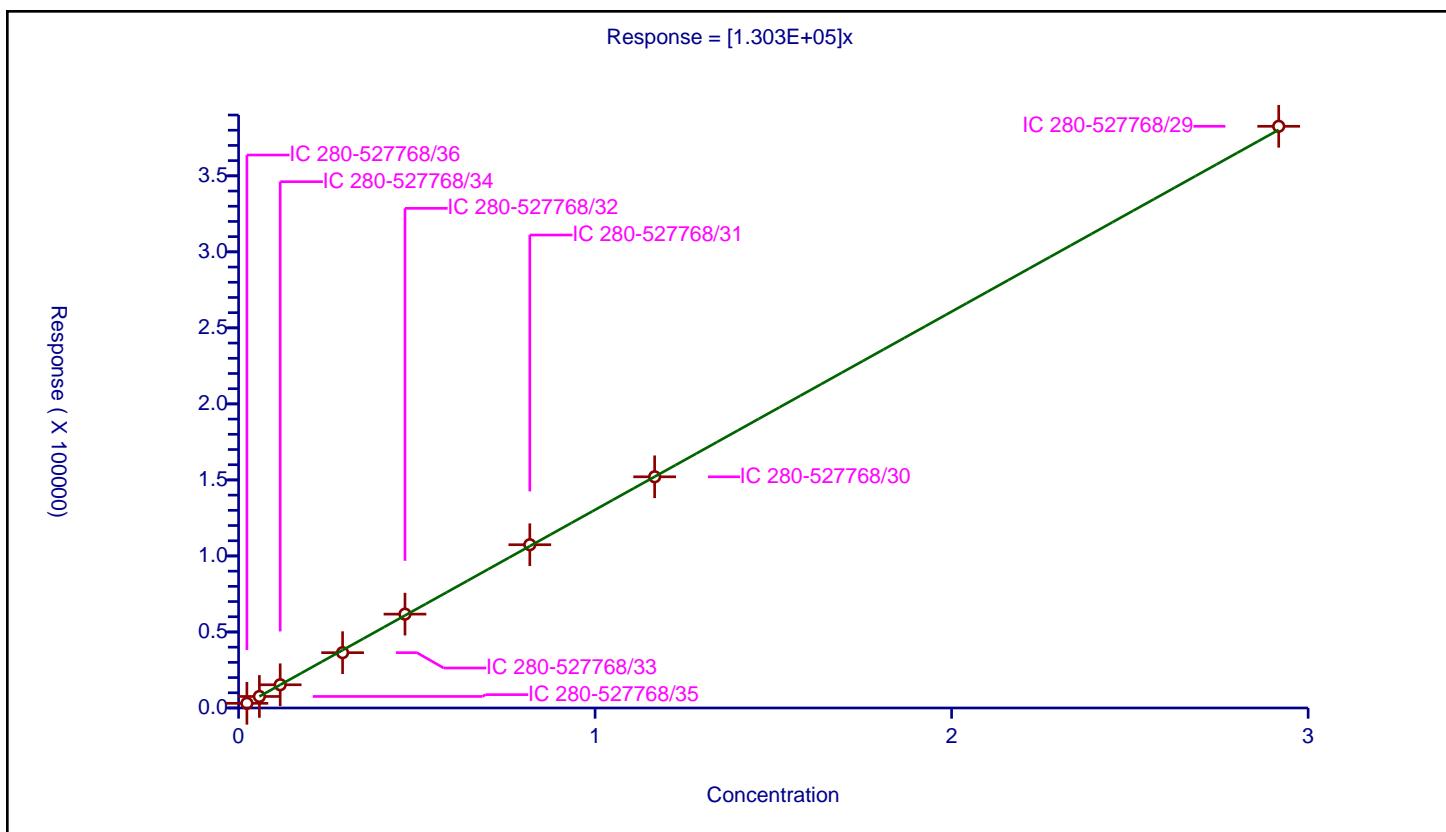
ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-527768/36	0.02002	2984.0			149050.949051	Y
2	IC 280-527768/35	0.05005	7121.0			142277.722278	Y
3	IC 280-527768/34	0.1001	13949.0			139350.649351	Y
4	IC 280-527768/33	0.25025	33502.0			133874.125874	Y
5	IC 280-527768/32	0.4004	57462.0			143511.488511	Y
6	IC 280-527768/31	0.7007	100368.0			143239.617525	Y
7	IC 280-527768/30	1.001	141853.0			141711.288711	Y
8	IC 280-527768/29	2.5025	360207.0			143938.861139	Y



**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	1.303E+05
Error Coefficients	
Standard Error:	1180
Relative Standard Error:	1.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-527768/36	0.02334	3082.0			132047.98629	Y
2	IC 280-527768/35	0.05835	7585.0			129991.43102	Y
3	IC 280-527768/34	0.1167	15275.0			130891.17395	Y
4	IC 280-527768/33	0.29175	36376.0			124682.090831	Y
5	IC 280-527768/32	0.4668	61731.0			132242.930591	Y
6	IC 280-527768/31	0.8169	107376.0			131443.261109	Y
7	IC 280-527768/30	1.167	152050.0			130291.34533	Y
8	IC 280-527768/29	2.9175	382579.0			131132.476435	Y



FORM VI  
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA  
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1 Analy Batch No.: 534622

SDG No.: \_\_\_\_\_

Instrument ID: CHHPLC\_X3 GC Column: UltraCarb5u ID: 4.6 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/01/2021 18:01 Calibration End Date: 05/01/2021 21:04 Calibration ID: 53145

**Calibration Files**

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-534622/19	019-1301.D
Level 2	IC 280-534622/18	018-1201.D
Level 3	IC 280-534622/17	017-1101.D
Level 4	IC 280-534622/16	016-1001.D
Level 5	IC 280-534622/15	015-0901.D
Level 6	IC 280-534622/14	014-0801.D
Level 7	IC 280-534622/13	013-0701.D
Level 8	IC 280-534622/12	012-0601.D
Level 9	IC 280-534622/11	011-0501.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8	LVL 9	RT WINDOW	AVG RT
HMX	6.629	6.626	6.628	6.631	6.631	6.627	6.631	6.626	6.626	6.481 - 6.781	6.628
RDX	+++++	7.606	7.602	7.598	7.597	7.601	7.604	7.593	7.592	7.448 - 7.748	7.599
Picric acid	+++++	7.966	7.968	7.958	7.951	7.947	7.937	7.920	7.879	7.808 - 8.108	7.941
1,3,5-Trinitrobenzene	8.649	8.653	8.655	8.651	8.651	8.654	8.651	8.646	8.646	8.501 - 8.801	8.651
1,3-Dinitrobenzene	9.275	9.280	9.282	9.278	9.271	9.281	9.277	9.273	9.265	9.128 - 9.428	9.276
Nitrobenzene	9.662	9.666	9.662	9.664	9.657	9.667	9.664	9.659	9.652	9.514 - 9.814	9.661
Tetryl	9.975	9.980	9.982	9.978	9.977	9.981	9.977	9.973	9.972	9.828 - 10.128	9.977
Nitroglycerin	10.435	10.440	10.442	10.438	10.437	10.441	10.437	10.433	10.425	10.288 - 10.588	10.436
2,4,6-Trinitrotoluene	10.902	10.906	10.908	10.904	10.904	10.907	10.904	10.899	10.899	10.804 - 11.004	10.904
4-Amino-2,6-dinitrotoluene	11.109	11.106	11.115	11.111	11.104	11.114	11.104	11.099	11.099	11.011 - 11.211	11.107
2-Amino-4,6-dinitrotoluene	11.369	11.366	11.375	11.371	11.364	11.374	11.364	11.359	11.352	11.271 - 11.471	11.366
2,6-Dinitrotoluene	11.529	11.533	11.535	11.531	11.531	11.541	11.531	11.526	11.519	11.431 - 11.631	11.531
2,4-Dinitrotoluene	11.702	11.706	11.708	11.704	11.704	11.714	11.704	11.699	11.692	11.604 - 11.804	11.704
2-Nitrotoluene	12.575	12.573	12.575	12.578	12.571	12.581	12.571	12.566	12.565	12.428 - 12.728	12.573
4-Nitrotoluene	13.015	13.006	13.015	13.011	13.011	13.021	13.011	13.006	12.999	12.861 - 13.161	13.011
3-Nitrotoluene	13.602	13.600	13.602	13.604	13.597	13.607	13.597	13.593	13.592	13.454 - 13.754	13.599
PETN	14.682	14.680	14.688	14.684	14.684	14.694	14.684	14.679	14.679	14.534 - 14.834	14.684
1,2-Dinitrobenzene	8.522	8.526	8.522	8.525	8.517	8.527	8.524	8.520	8.512	8.375 - 8.675	8.522

FORM VI  
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA  
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1 Analy Batch No.: 534622

SDG No.: \_\_\_\_\_

Instrument ID: CHHPLC\_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/01/2021 18:01 Calibration End Date: 05/01/2021 21:04 Calibration ID: 53145

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-534622/19	019-1301.D
Level 2	IC 280-534622/18	018-1201.D
Level 3	IC 280-534622/17	017-1101.D
Level 4	IC 280-534622/16	016-1001.D
Level 5	IC 280-534622/15	015-0901.D
Level 6	IC 280-534622/14	014-0801.D
Level 7	IC 280-534622/13	013-0701.D
Level 8	IC 280-534622/12	012-0601.D
Level 9	IC 280-534622/11	011-0501.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5 LVL 9	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
HMX	90600 81044 83266	84000 83153	84840 83381	85610 83899	Ave		84421.436 5				3.1		20.0			
RDX	+++++ 100772 100392	110350 101975	121080 101457	112450 101616	Ave		106261.46 8				7.1		20.0			
Picric acid	+++++ 78100 78816	92000 79550	91500 79403	83170 79230	Ave		82721.107 1				7.0		20.0			
1,3,5-Trinitrobenzene	247605 211904 216811	201497 217647	226766 220329	220699 219598	Ave		220317.35 4				5.6		20.0			
1,3-Dinitrobenzene	304591 284922 294659	300349 293466	297944 294726	300389 295917	Ave		296329.29 9				1.9		20.0			
Nitrobenzene	198705 187737 194447	197809 193367	197052 194434	199980 194044	Ave		195285.94 8				1.9		20.0			
Tetryl	170858 167980 172330	166218 172575	177046 172692	178842 173240	Ave		172419.99 8				2.3		20.0			
Nitroglycerin	107780 65334 64661	80810 65580	73966 62107	71053 65275	Lin2	4204.1302 6	64107.750 8						0.9980		0.9900	

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI  
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA  
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1 Analy Batch No.: 534622

SDG No.: \_\_\_\_\_

Instrument ID: CHHPLC\_X3 GC Column: UltraCarb5u ID: 4.6 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/01/2021 18:01 Calibration End Date: 05/01/2021 21:04 Calibration ID: 53145

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4		B	M1	M2								
2,4,6-Trinitrotoluene	211952 197876 204255	206972 203262	209442 203674	212012 204895	Ave		206037.86 8				2.2		20.0			
4-Amino-2,6-dinitrotoluene	159441 143209 145339	176424 145884	157203 145937	154895 146581	Ave		152767.99 4				7.0		20.0			
2-Amino-4,6-dinitrotoluene	211753 195992 200761	220767 202107	214920 201639	211185 203212	Ave		206926.21 9				3.9		20.0			
2,6-Dinitrotoluene	139841 139335 142809	146763 140697	146614 143092	144990 143569	Ave		143078.76 1				1.9		20.0			
2,4-Dinitrotoluene	293227 274622 284165	296066 283989	291773 282943	292450 283876	Ave		287012.27 2				2.4		20.0			
2-Nitrotoluene	134600 121368 124876	136850 124703	132320 124706	131380 124724	Ave		128391.84 6				4.2		20.0			
4-Nitrotoluene	117465 104032 107464	131387 107423	114251 107231	110609 107352	Ave		111912.73 2				7.5		20.0			
3-Nitrotoluene	157343 133626 137530	155894 136853	143596 136770	141648 136955	Ave		142246.28 1				6.1		20.0			
PETN	79010 71928 73997	74720 74156	74586 74227	75747 74637	Ave		74778.566 7				2.5		20.0			
1,2-Dinitrobenzene	119500 126156 131759	119950 130943	130080 131307	132180 132080	Ave		128217.20 5				4.0		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI  
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA  
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1 Analy Batch No.: 534622

SDG No.: \_\_\_\_\_

Instrument ID: CHHPLC\_X3 GC Column: UltraCarb5u ID: 4.6 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/01/2021 18:01 Calibration End Date: 05/01/2021 21:04 Calibration ID: 53145

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-534622/19	019-1301.D
Level 2	IC 280-534622/18	018-1201.D
Level 3	IC 280-534622/17	017-1101.D
Level 4	IC 280-534622/16	016-1001.D
Level 5	IC 280-534622/15	015-0901.D
Level 6	IC 280-534622/14	014-0801.D
Level 7	IC 280-534622/13	013-0701.D
Level 8	IC 280-534622/12	012-0601.D
Level 9	IC 280-534622/11	011-0501.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
HMX	Ave	906 33261	1680 58367	4242 83899	8561 208165	20261	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
RDX	Ave	+++++ 40790	2207 71020	6054 101616	11245 250979	25193	+++++ 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Picric acid	Ave	+++++ 31820	1840 55582	4575 79230	8317 197040	19525	+++++ 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
1,3,5-Trinitrobenzene	Ave	2481 87233	4038 154539	11361 220037	22114 543111	53082	0.0100 0.401	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251
1,3-Dinitrobenzene	Ave	3052 117621	6019 206721	14927 296509	30099 738121	71373	0.0100 0.401	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251
Nitrobenzene	Ave	1995 77656	3972 136648	9892 194820	20078 488061	47122	0.0100 0.402	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251
Tetryl	Ave	1712 69168	3331 121126	8870 173586	17920 431686	42079	0.0100 0.401	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251
Nitroglycerin	Lin2	10778 262320	16162 434747	36983 652752	71053 1616536	163334	0.100 4.00	0.200 7.00	0.500 10.0	1.00 25.0	2.50
2,4,6-Trinitrotoluene	Ave	2128 81630	4156 143142	10514 205715	21286 512679	49667	0.0100 0.402	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251
4-Amino-2,6-dinitrotoluene	Ave	1596 58412	3532 102258	7868 146728	15505 363710	35838	0.0100 0.400	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250
2-Amino-4,6-dinitrotoluene	Ave	2126 81166	4433 141712	10789 204025	21203 503909	49194	0.0100 0.402	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251
2,6-Dinitrotoluene	Ave	1404 56504	2947 100565	7360 144143	14557 358451	34973	0.0100 0.402	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251
2,4-Dinitrotoluene	Ave	2944	5945	14647	29362	68930	0.0100	0.0201	0.0502	0.100	0.251

FORM VI  
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA  
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1 Analy Batch No.: 534622

SDG No.: \_\_\_\_\_

Instrument ID: CHHPLC\_X3 GC Column: UltraCarb5u ID: 4.6 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/01/2021 18:01 Calibration End Date: 05/01/2021 21:04 Calibration ID: 53145

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
		114050	198852	285012	713254		0.402	0.703	1.00	2.51	
2-Nitrotoluene	Ave	1346 49881	2737 87294	6616 124724	13138 312191	30342	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
4-Nitrotoluene	Ave	1177 43055	2633 75212	5724 107567	11083 269197	26060	0.0100 0.401	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251
3-Nitrotoluene	Ave	1575 54796	3121 95835	7187 137092	14179 344169	33440	0.0100 0.400	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250
PETN	Ave	7901 296622	14944 519589	37293 746366	75747 1849935	179819	0.100 4.00	0.200 7.00	0.500 10.0	1.00 25.0	2.50
1,2-Dinitrobenzene	Ave	1195 52377	2399 91915	6504 132080	13218 329398	31539	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 TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20210501-101094.b\011-0501.D  
 Lims ID: IC INT 9  
 Client ID:  
 Sample Type: IC Calib Level: 9  
 Inject. Date: 01-May-2021 18:01:04 ALS Bottle#: 11 Worklist Smp#: 11  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: IC INT 9  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Sublist: chrom-8330\_X3\*sub9  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20210501-101094.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 04-May-2021 13:25:06 Calib Date: 01-May-2021 21:04:39  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20210501-101094.b\019-1301.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:15:51

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.626	6.631	-0.005	208165	2.50	2.47	M
7 RDX	1	7.592	7.598	-0.006	250979	2.50	2.36	
8 2,4,6-Trinitrophenol	1	7.879	7.958	-0.079	197040	2.50	2.38	
\$ 9 1,2-Dinitrobenzene	1	8.512	8.525	-0.013	329398	2.50	2.57	
10 1,3,5-Trinitrobenzene	1	8.646	8.651	-0.005	543111	2.51	2.47	
11 1,3-Dinitrobenzene	1	9.265	9.278	-0.013	738121	2.51	2.49	
12 Nitrobenzene	1	9.652	9.664	-0.012	488061	2.51	2.50	
14 Tetryl	1	9.972	9.978	-0.006	431686	2.51	2.50	
15 Nitroglycerin	2	10.425	10.438	-0.013	1616536	25.0	25.2	
16 2,4,6-Trinitrotoluene	1	10.899	10.904	-0.005	512679	2.51	2.49	
17 4-Amino-2,6-dinitrotoluene	1	11.099	11.111	-0.012	363710	2.50	2.38	
18 2-Amino-4,6-dinitrotoluene	1	11.352	11.371	-0.019	503909	2.51	2.44	
19 2,6-Dinitrotoluene	1	11.519	11.531	-0.012	358451	2.51	2.51	
20 2,4-Dinitrotoluene	1	11.692	11.704	-0.012	713254	2.51	2.49	
21 o-Nitrotoluene	1	12.565	12.578	-0.013	312191	2.50	2.43	
22 p-Nitrotoluene	1	12.999	13.011	-0.012	269197	2.51	2.41	
23 m-Nitrotoluene	1	13.592	13.604	-0.012	344169	2.50	2.42	
24 PETN	2	14.679	14.684	-0.005	1849935	25.0	24.7	

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

### Reagents:

8330IntermStk\_00067

Amount Added: 250.00

Units: uL

Report Date: 04-May-2021 13:25:06

Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20210501-101094.b\011-0501.d

Injection Date: 01-May-2021 18:01:04

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: IC INT 9

Worklist Smp#: 11

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

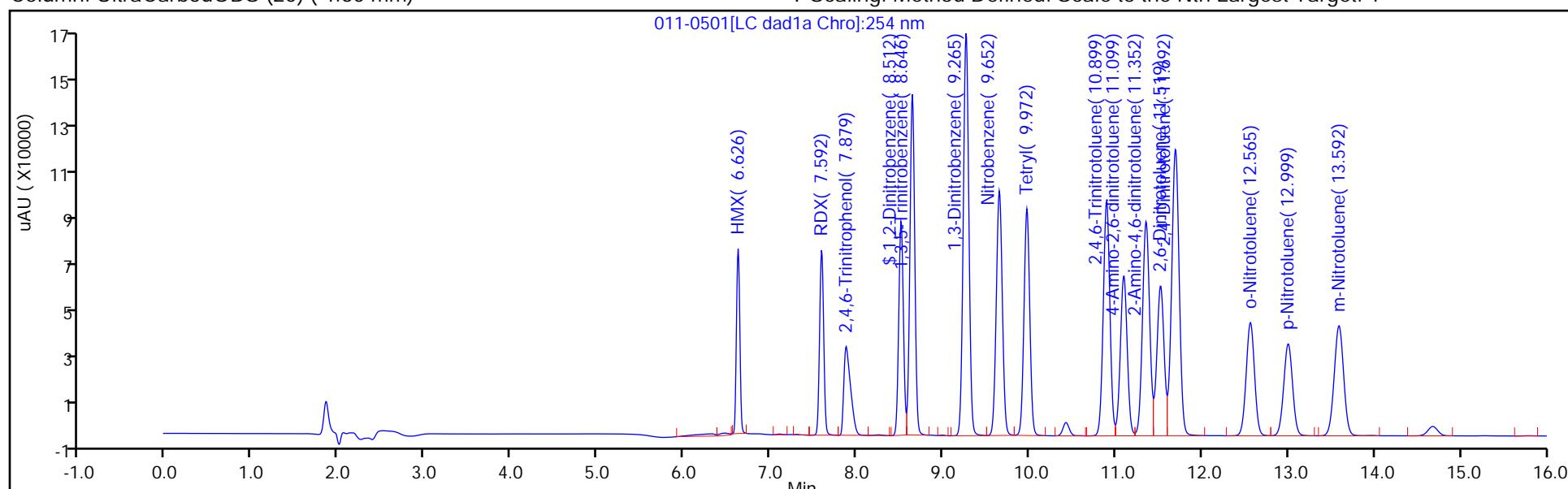
ALS Bottle#: 11

Method: 8330\_X3

Limit Group: GCSV - 8330

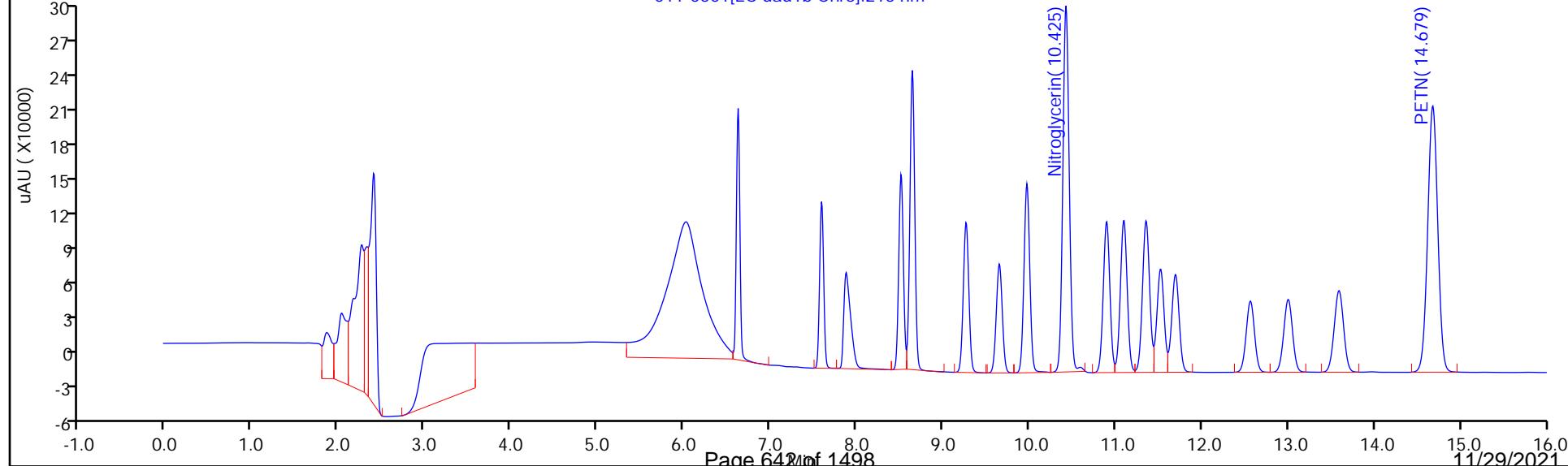
Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

011-0501[LC dad1b Chro]:215 nm



## Eurofins TestAmerica, Denver

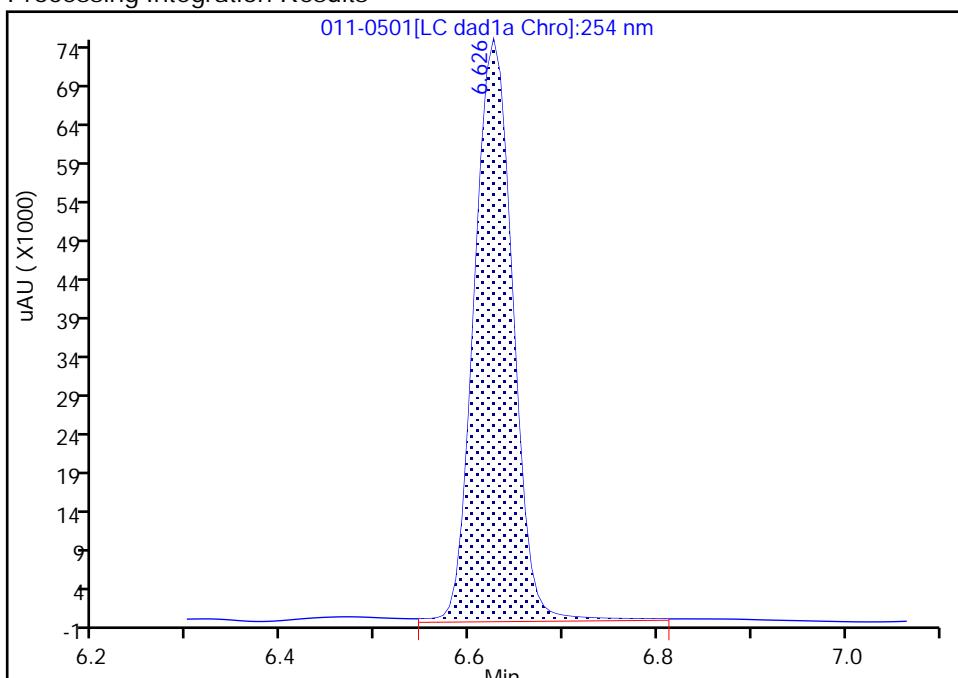
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 Injection Date: 01-May-2021 18:01:04 Instrument ID: CHHPLC\_X3  
 Lims ID: IC INT 9  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 11 Worklist Smp#: 11  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

**3 HMX, CAS: 2691-41-0**

Signal: 1

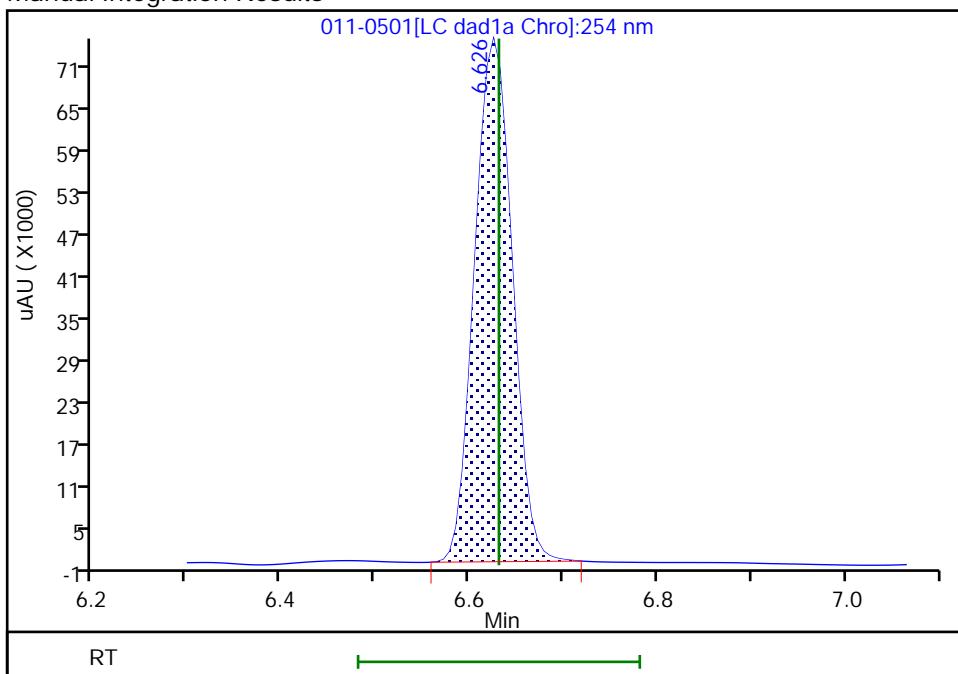
## Processing Integration Results

RT: 6.63  
 Area: 214677  
 Amount: 2.481723  
 Amount Units: ug/mL



## Manual Integration Results

RT: 6.63  
 Area: 208165  
 Amount: 2.465784  
 Amount Units: ug/mL



Reviewer: zhangji, 04-May-2021 13:15:42

Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20210501-101094.b\012-0601.D  
 Lims ID: IC INT 8  
 Client ID:  
 Sample Type: IC Calib Level: 8  
 Inject. Date: 01-May-2021 18:23:59 ALS Bottle#: 12 Worklist Smp#: 12  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Sample Info: IC INT 8  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Sublist: chrom-8330\_X3\*sub9  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20210501-101094.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 04-May-2021 13:25:07 Calib Date: 01-May-2021 21:04:39  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20210501-101094.b\019-1301.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:16:04

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.626	6.631	-0.005	83899	1.00	0.99	M
7 RDX	1	7.593	7.598	-0.005	101616	1.00	0.9563	
8 2,4,6-Trinitrophenol	1	7.920	7.958	-0.038	79230	1.00	0.9578	
\$ 9 1,2-Dinitrobenzene	1	8.520	8.525	-0.005	132080	1.00	1.03	
10 1,3,5-Trinitrobenzene	1	8.646	8.651	-0.005	220037	1.00	1.00	
11 1,3-Dinitrobenzene	1	9.273	9.278	-0.005	296509	1.00	1.00	
12 Nitrobenzene	1	9.659	9.664	-0.005	194820	1.00	1.00	
14 Tetryl	1	9.973	9.978	-0.005	173586	1.00	1.01	
15 Nitroglycerin	2	10.433	10.438	-0.005	652752	10.0	10.1	
16 2,4,6-Trinitrotoluene	1	10.899	10.904	-0.005	205715	1.00	1.00	
17 4-Amino-2,6-dinitrotoluene	1	11.099	11.111	-0.012	146728	1.00	0.9605	
18 2-Amino-4,6-dinitrotoluene	1	11.359	11.371	-0.012	204025	1.00	0.9860	
19 2,6-Dinitrotoluene	1	11.526	11.531	-0.005	144143	1.00	1.01	
20 2,4-Dinitrotoluene	1	11.699	11.704	-0.005	285012	1.00	0.99	
21 o-Nitrotoluene	1	12.566	12.578	-0.012	124724	1.00	0.9714	
22 p-Nitrotoluene	1	13.006	13.011	-0.005	107567	1.00	0.9612	
23 m-Nitrotoluene	1	13.593	13.604	-0.011	137092	1.00	0.9638	
24 PETN	2	14.679	14.684	-0.005	746366	10.0	9.98	

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

### Reagents:

8330IntermStk\_00067

Amount Added: 100.00

Units: uL

Report Date: 04-May-2021 13:25:07

Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20210501-101094.b\012-0601.d

Injection Date: 01-May-2021 18:23:59

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: IC INT 8

Worklist Smp#: 12

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

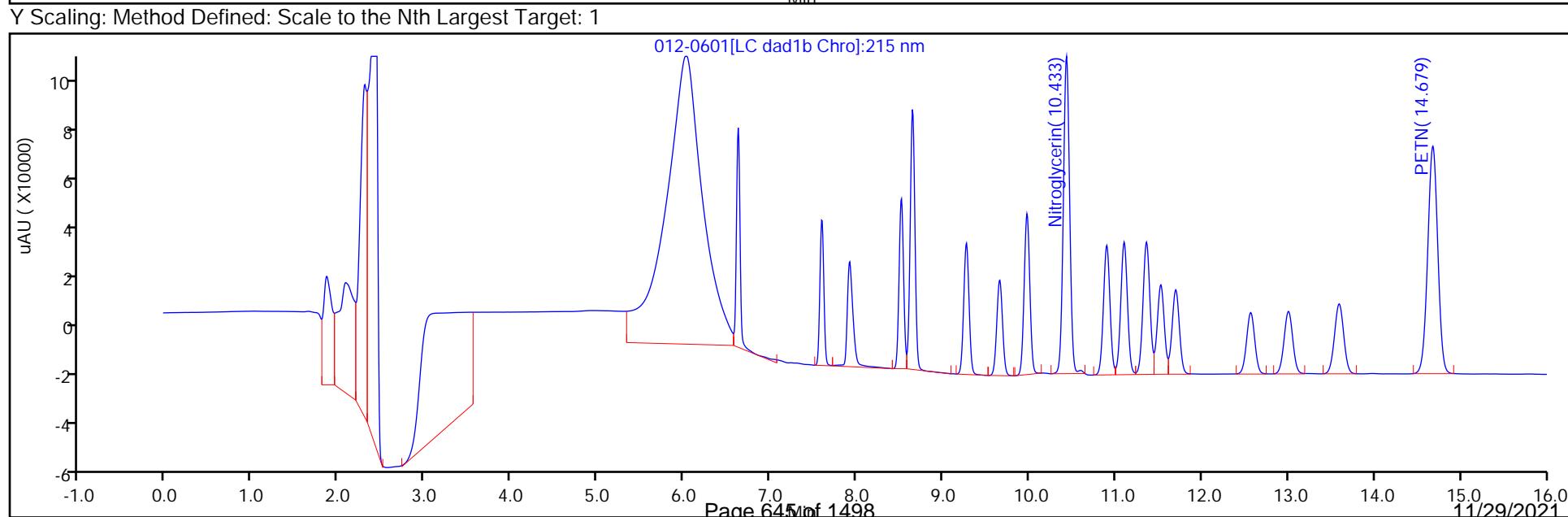
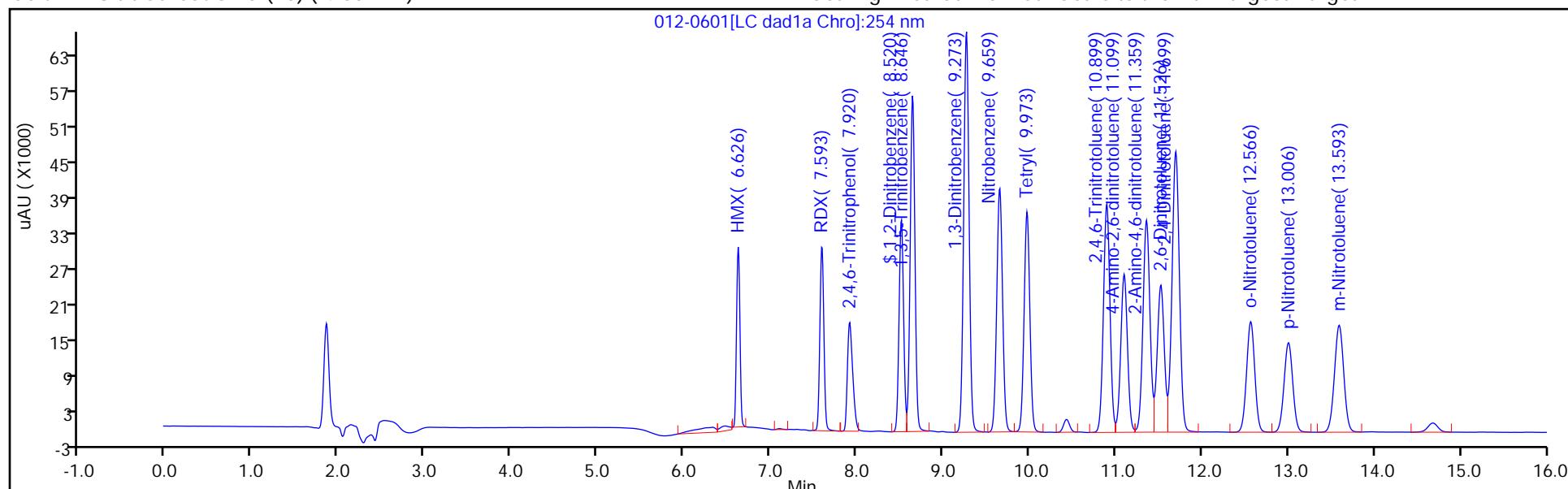
ALS Bottle#: 12

Method: 8330\_X3

Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



## Eurofins TestAmerica, Denver

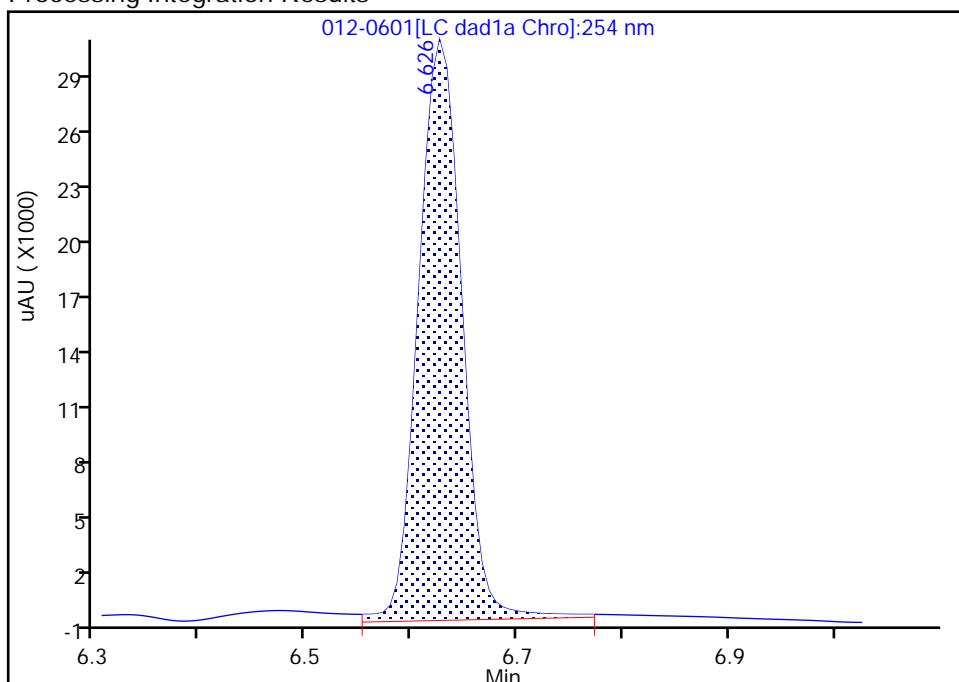
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 Injection Date: 01-May-2021 18:23:59 Instrument ID: CHHPLC\_X3  
 Lims ID: IC INT 8  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 12 Worklist Smp#: 12  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

## 3 HMX, CAS: 2691-41-0

Signal: 1

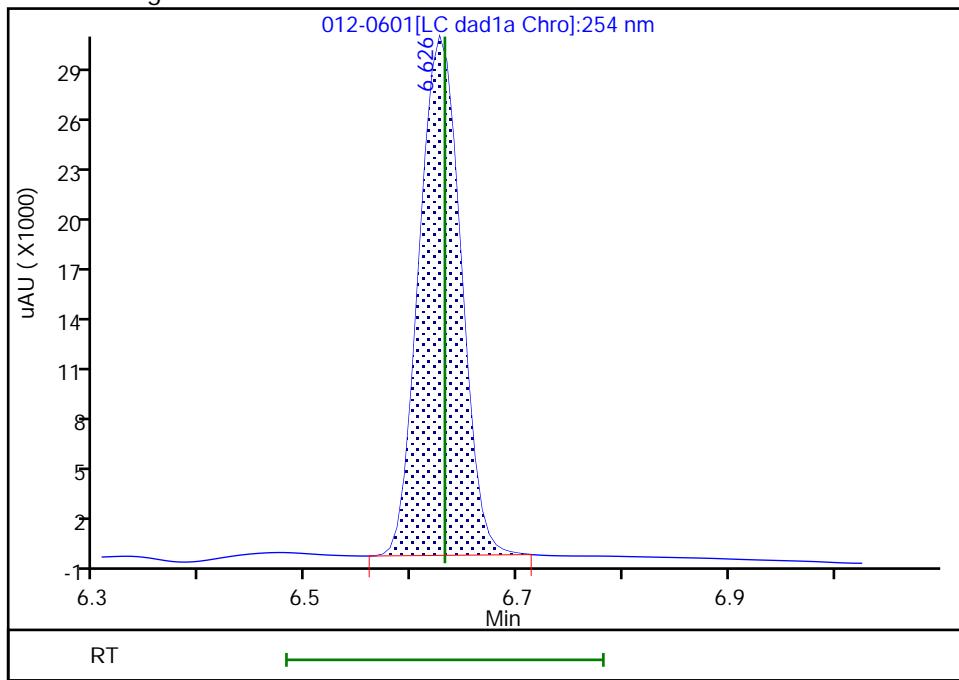
RT: 6.63  
 Area: 88052  
 Amount: 1.025258  
 Amount Units: ug/mL

## Processing Integration Results



RT: 6.63  
 Area: 83899  
 Amount: 0.993812  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 04-May-2021 13:15:59

Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20210501-101094.b\013-0701.D  
 Lims ID: IC INT 7  
 Client ID:  
 Sample Type: IC Calib Level: 7  
 Inject. Date: 01-May-2021 18:46:55 ALS Bottle#: 13 Worklist Smp#: 13  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Sample Info: IC INT 7  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Sublist: chrom-8330\_X3\*sub9  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20210501-101094.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 04-May-2021 13:25:07 Calib Date: 01-May-2021 21:04:39  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20210501-101094.b\019-1301.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:16:11

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.631	6.631	0.000	58367	0.7000	0.6914	M
7 RDX	1	7.604	7.598	0.006	71020	0.7000	0.6684	
8 2,4,6-Trinitrophenol	1	7.937	7.958	-0.021	55582	0.7000	0.6719	
\$ 9 1,2-Dinitrobenzene	1	8.524	8.525	-0.001	91915	0.7000	0.7169	
10 1,3,5-Trinitrobenzene	1	8.651	8.651	0.000	154539	0.7014	0.7014	
11 1,3-Dinitrobenzene	1	9.277	9.278	-0.001	206721	0.7014	0.6976	
12 Nitrobenzene	1	9.664	9.664	0.000	136648	0.7028	0.6997	
14 Tetryl	1	9.977	9.978	-0.001	121126	0.7014	0.7025	
15 Nitroglycerin	2	10.437	10.438	-0.001	434747	7.00	6.72	
16 2,4,6-Trinitrotoluene	1	10.904	10.904	0.000	143142	0.7028	0.6947	
17 4-Amino-2,6-dinitrotoluene	1	11.104	11.111	-0.007	102258	0.7007	0.6694	
18 2-Amino-4,6-dinitrotoluene	1	11.364	11.371	-0.007	141712	0.7028	0.6848	
19 2,6-Dinitrotoluene	1	11.531	11.531	0.000	100565	0.7028	0.7029	
20 2,4-Dinitrotoluene	1	11.704	11.704	0.000	198852	0.7028	0.6928	
21 o-Nitrotoluene	1	12.571	12.578	-0.007	87294	0.7000	0.6799	
22 p-Nitrotoluene	1	13.011	13.011	0.000	75212	0.7014	0.6721	
23 m-Nitrotoluene	1	13.597	13.604	-0.007	95835	0.7007	0.6737	
24 PETN	2	14.684	14.684	0.000	519589	7.00	6.95	

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

### Reagents:

8330IntermStk\_00067

Amount Added: 70.00

Units: uL

Report Date: 04-May-2021 13:25:07

Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20210501-101094.b\013-0701.d

Injection Date: 01-May-2021 18:46:55

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: IC INT 7

Worklist Smp#: 13

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

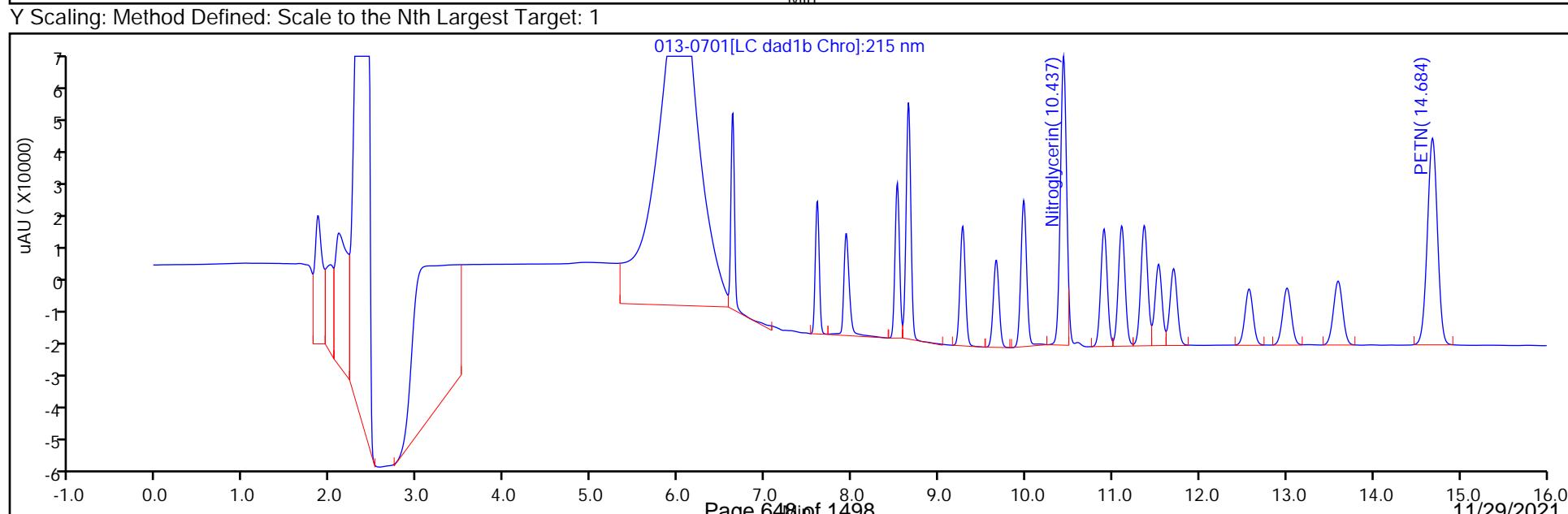
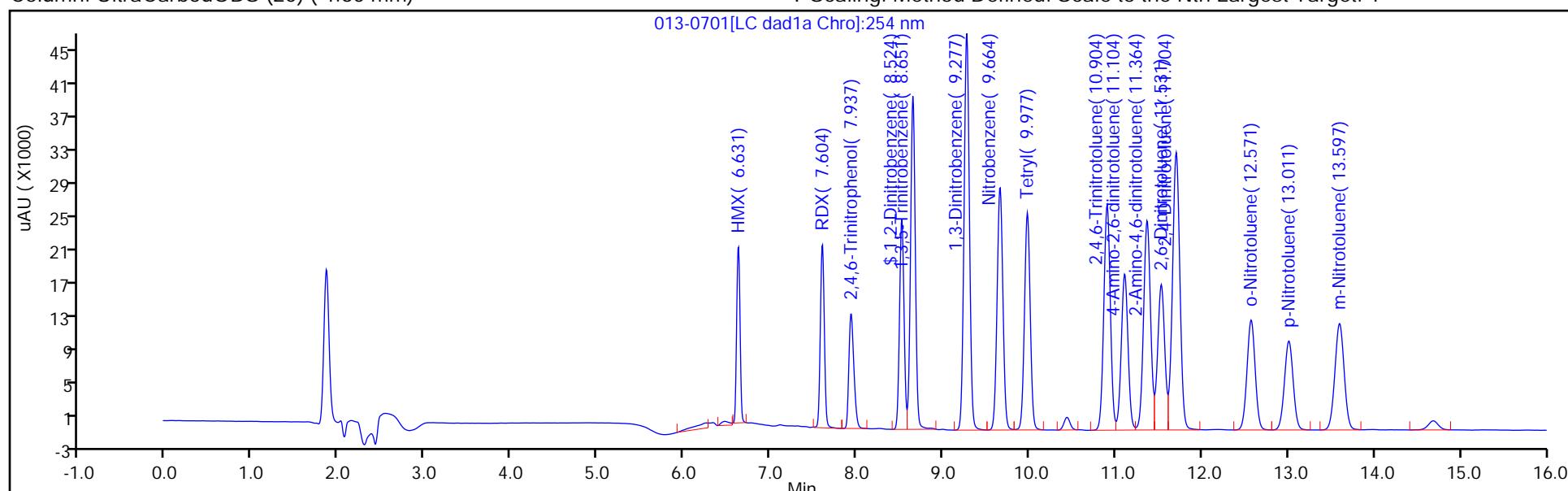
ALS Bottle#: 13

Method: 8330\_X3

Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



## Eurofins TestAmerica, Denver

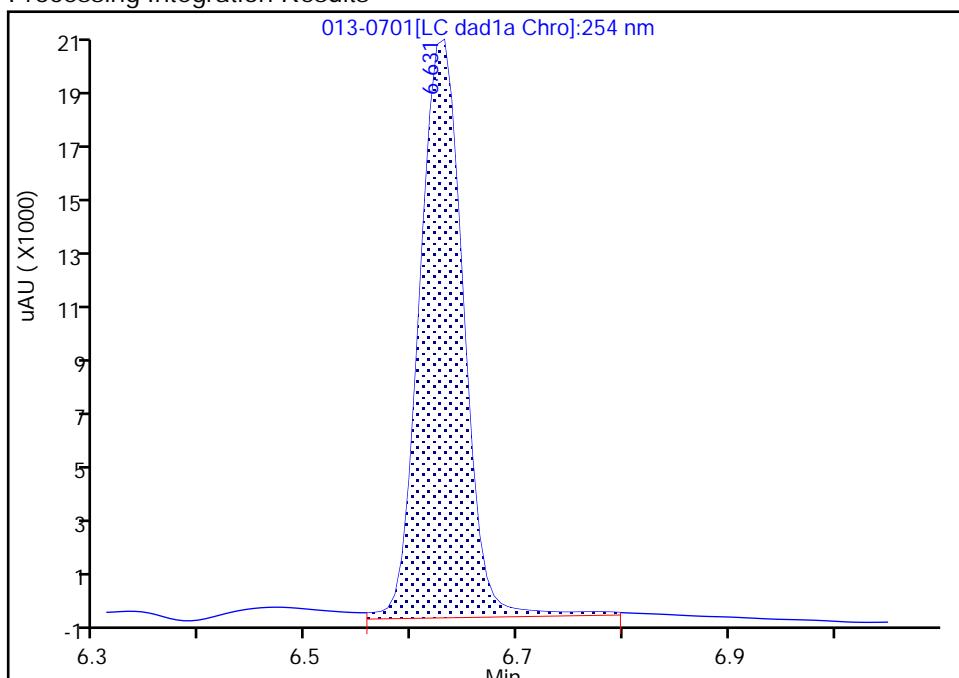
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 Lims ID: IC INT 7  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 13 Worklist Smp#: 13  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

## 3 HMX, CAS: 2691-41-0

Signal: 1

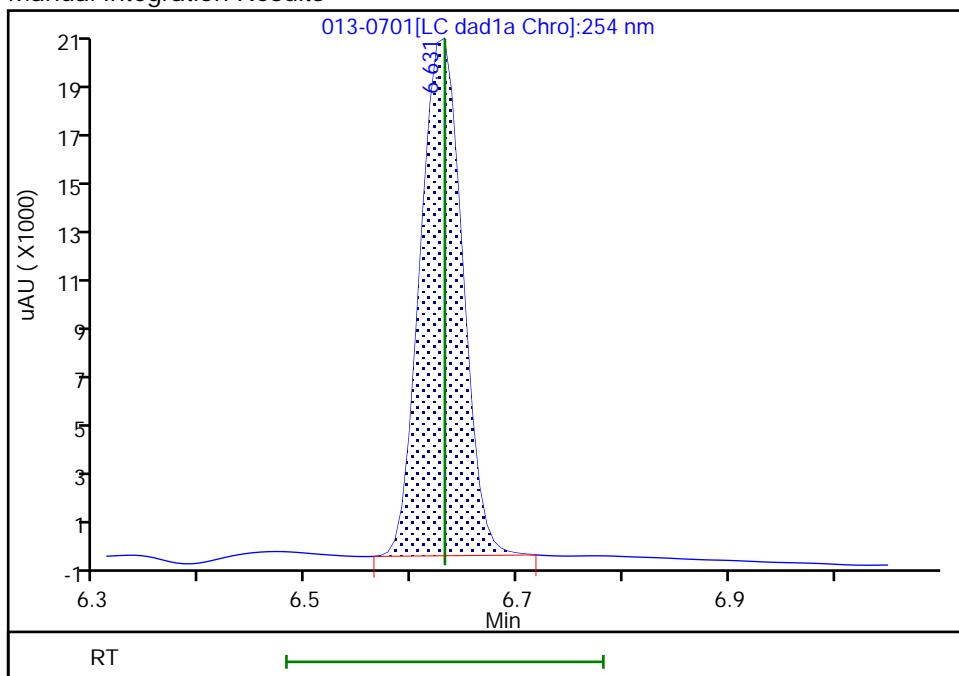
RT: 6.63  
 Area: 61109  
 Amount: 0.713851  
 Amount Units: ug/mL

## Processing Integration Results



RT: 6.63  
 Area: 58367  
 Amount: 0.691377  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 04-May-2021 13:16:10

Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20210501-101094.b\014-0801.D  
 Lims ID: IC INT 6  
 Client ID:  
 Sample Type: IC Calib Level: 6  
 Inject. Date: 01-May-2021 19:09:54 ALS Bottle#: 14 Worklist Smp#: 14  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Sample Info: IC INT 6  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Sublist: chrom-8330\_X3\*sub9  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20210501-101094.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 04-May-2021 13:25:08 Calib Date: 01-May-2021 21:04:39  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20210501-101094.b\019-1301.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:16:20

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.627	6.631	-0.004	33261	0.4000	0.3940	M
7 RDX	1	7.601	7.598	0.003	40790	0.4000	0.3839	
8 2,4,6-Trinitrophenol	1	7.947	7.958	-0.011	31820	0.4000	0.3847	
\$ 9 1,2-Dinitrobenzene	1	8.527	8.525	0.002	52377	0.4000	0.4085	
10 1,3,5-Trinitrobenzene	1	8.654	8.651	0.003	87233	0.4008	0.3959	
11 1,3-Dinitrobenzene	1	9.281	9.278	0.003	117621	0.4008	0.3969	
12 Nitrobenzene	1	9.667	9.664	0.003	77656	0.4016	0.3977	
14 Tetryl	1	9.981	9.978	0.003	69168	0.4008	0.4012	
15 Nitroglycerin	2	10.441	10.438	0.003	262320	4.00	4.03	
16 2,4,6-Trinitrotoluene	1	10.907	10.904	0.003	81630	0.4016	0.3962	
17 4-Amino-2,6-dinitrotoluene	1	11.114	11.111	0.003	58412	0.4004	0.3824	
18 2-Amino-4,6-dinitrotoluene	1	11.374	11.371	0.003	81166	0.4016	0.3922	
19 2,6-Dinitrotoluene	1	11.541	11.531	0.010	56504	0.4016	0.3949	
20 2,4-Dinitrotoluene	1	11.714	11.704	0.010	114050	0.4016	0.3974	
21 o-Nitrotoluene	1	12.581	12.578	0.003	49881	0.4000	0.3885	
22 p-Nitrotoluene	1	13.021	13.011	0.010	43055	0.4008	0.3847	
23 m-Nitrotoluene	1	13.607	13.604	0.003	54796	0.4004	0.3852	
24 PETN	2	14.694	14.684	0.010	296622	4.00	3.97	

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

### Reagents:

8330IntermStk\_00067

Amount Added: 40.00

Units: uL

Report Date: 04-May-2021 13:25:08

Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20210501-101094.b\014-0801.d

Injection Date: 01-May-2021 19:09:54

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: IC INT 6

Worklist Smp#: 14

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

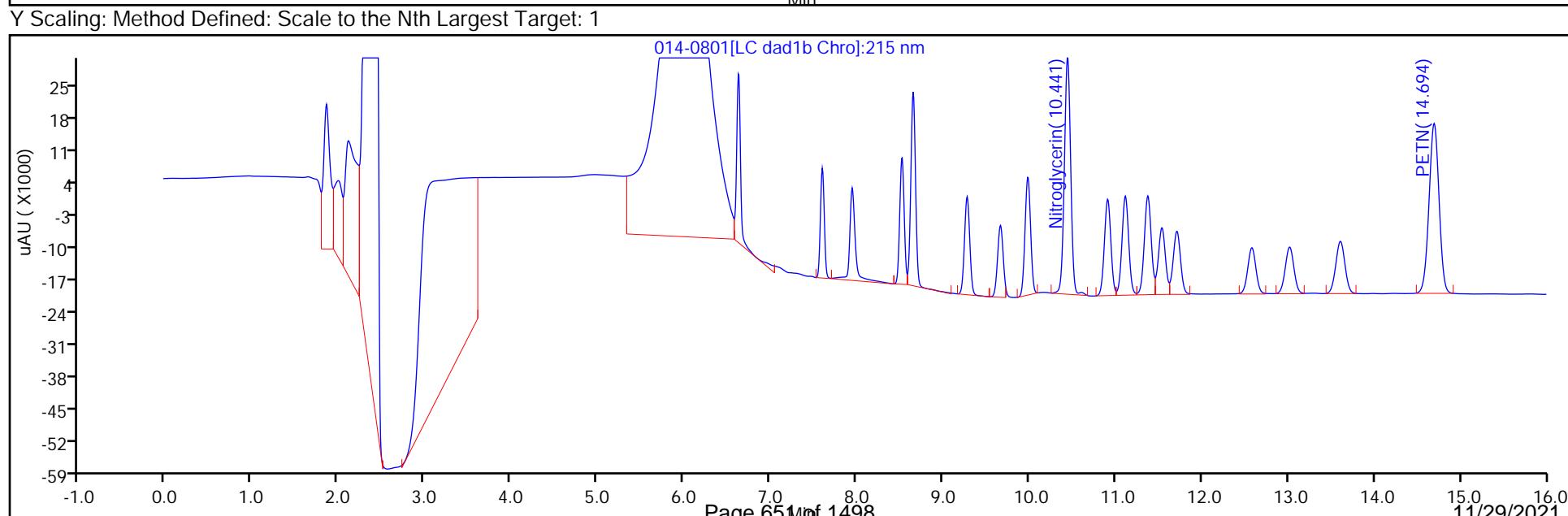
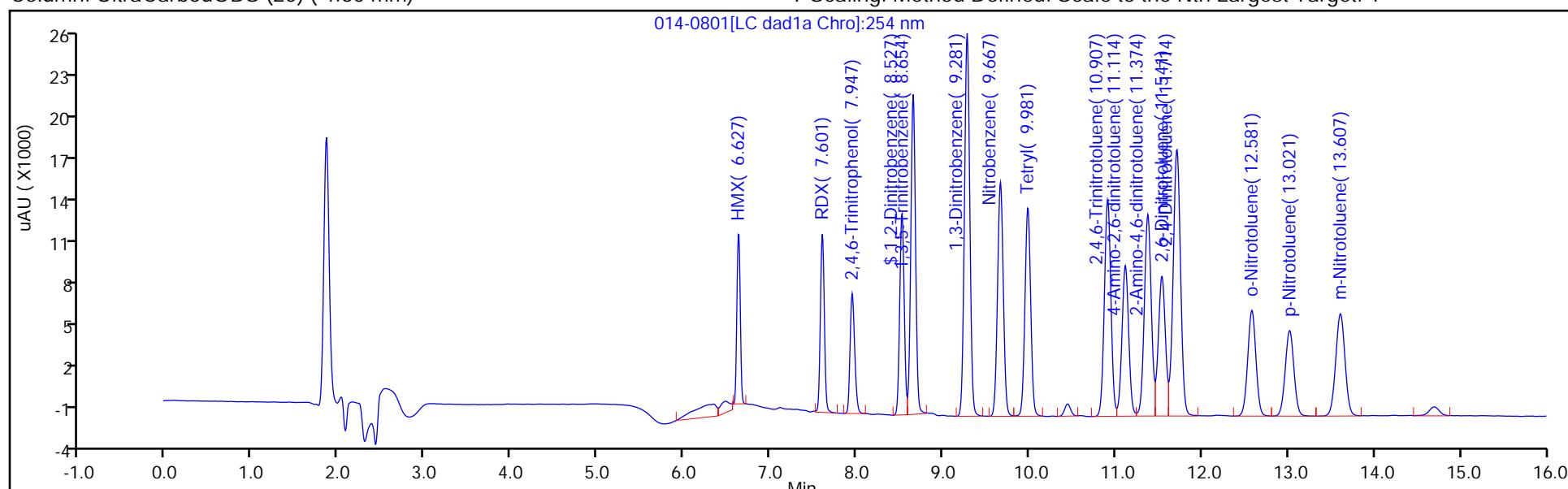
ALS Bottle#: 14

Method: 8330\_X3

Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



## Eurofins TestAmerica, Denver

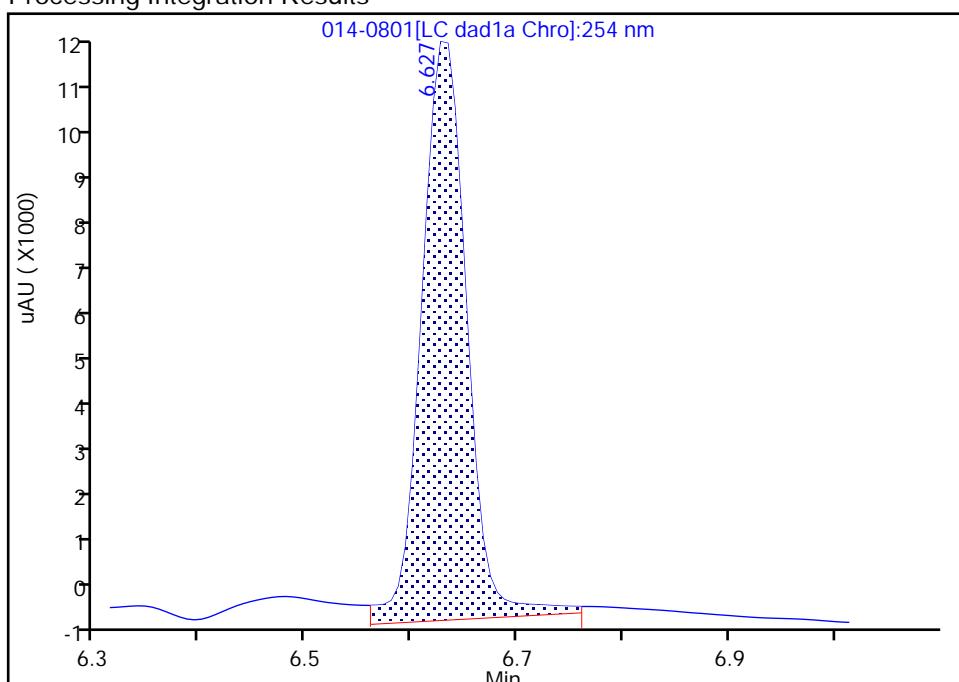
Data File: \\chromfs\denver\chromdata\chhplc\_x\20210501-101094.b\014-0801.d  
 Injection Date: 01-May-2021 19:09:54 Instrument ID: CHHPLC\_X3  
 Lims ID: IC INT 6  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 14 Worklist Smp#: 14  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

## 3 HMX, CAS: 2691-41-0

Signal: 1

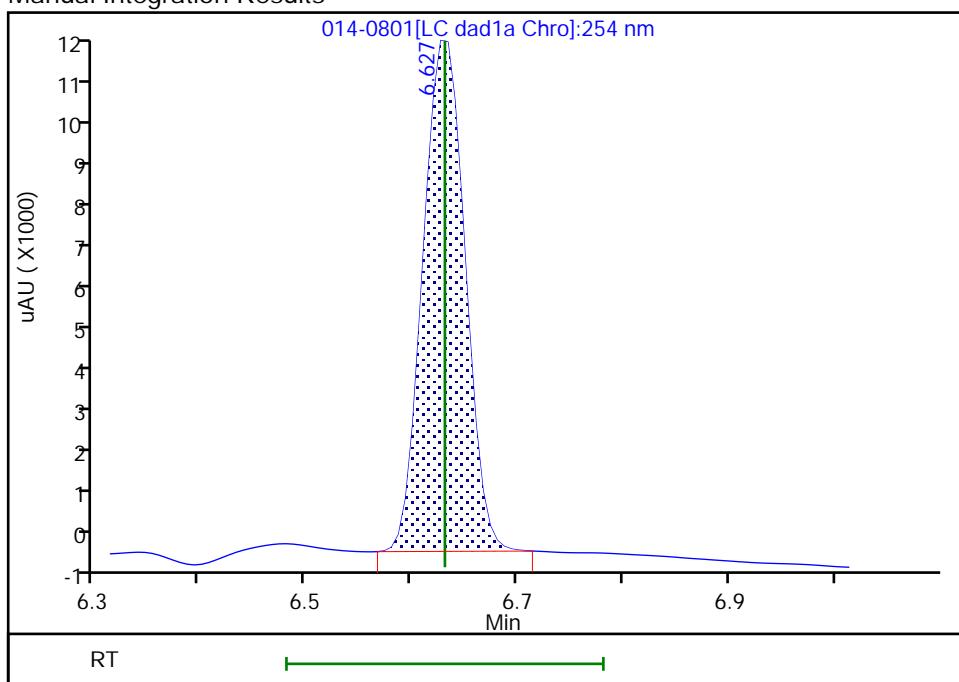
RT: 6.63  
 Area: 36722  
 Amount: 0.425419  
 Amount Units: ug/mL

## Processing Integration Results



RT: 6.63  
 Area: 33261  
 Amount: 0.393988  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 04-May-2021 13:16:17

Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20210501-101094.b\015-0901.D  
 Lims ID: IC INT 5  
 Client ID:  
 Sample Type: IC Calib Level: 5  
 Inject. Date: 01-May-2021 19:32:52 ALS Bottle#: 15 Worklist Smp#: 15  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Sample Info: IC INT 5  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Sublist: chrom-8330\_X3\*sub9  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20210501-101094.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 04-May-2021 13:25:08 Calib Date: 01-May-2021 21:04:39  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20210501-101094.b\019-1301.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:16:29

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.631	6.631	0.000	20261	0.2500	0.2400	M
7 RDX	1	7.597	7.598	-0.001	25193	0.2500	0.2371	
8 2,4,6-Trinitrophenol	1	7.951	7.958	-0.007	19525	0.2500	0.2360	
\$ 9 1,2-Dinitrobenzene	1	8.517	8.525	-0.008	31539	0.2500	0.2460	
10 1,3,5-Trinitrobenzene	1	8.651	8.651	0.000	53082	0.2505	0.2409	
11 1,3-Dinitrobenzene	1	9.271	9.278	-0.007	71373	0.2505	0.2409	
12 Nitrobenzene	1	9.657	9.664	-0.007	47122	0.2510	0.2413	
14 Tetryl	1	9.977	9.978	-0.001	42079	0.2505	0.2440	
15 Nitroglycerin	2	10.437	10.438	-0.001	163334	2.50	2.48	
16 2,4,6-Trinitrotoluene	1	10.904	10.904	0.000	49667	0.2510	0.2411	
17 4-Amino-2,6-dinitrotoluene	1	11.104	11.111	-0.007	35838	0.2503	0.2346	
18 2-Amino-4,6-dinitrotoluene	1	11.364	11.371	-0.007	49194	0.2510	0.2377	
19 2,6-Dinitrotoluene	1	11.531	11.531	0.000	34973	0.2510	0.2444	
20 2,4-Dinitrotoluene	1	11.704	11.704	0.000	68930	0.2510	0.2402	
21 o-Nitrotoluene	1	12.571	12.578	-0.007	30342	0.2500	0.2363	
22 p-Nitrotoluene	1	13.011	13.011	0.000	26060	0.2505	0.2329	
23 m-Nitrotoluene	1	13.597	13.604	-0.007	33440	0.2503	0.2351	
24 PETN	2	14.684	14.684	0.000	179819	2.50	2.40	

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

### Reagents:

8330IntermStk\_00067

Amount Added: 25.00

Units: uL

Report Date: 04-May-2021 13:25:08

Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20210501-101094.b\015-0901.d

Injection Date: 01-May-2021 19:32:52

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: IC INT 5

Worklist Smp#: 15

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

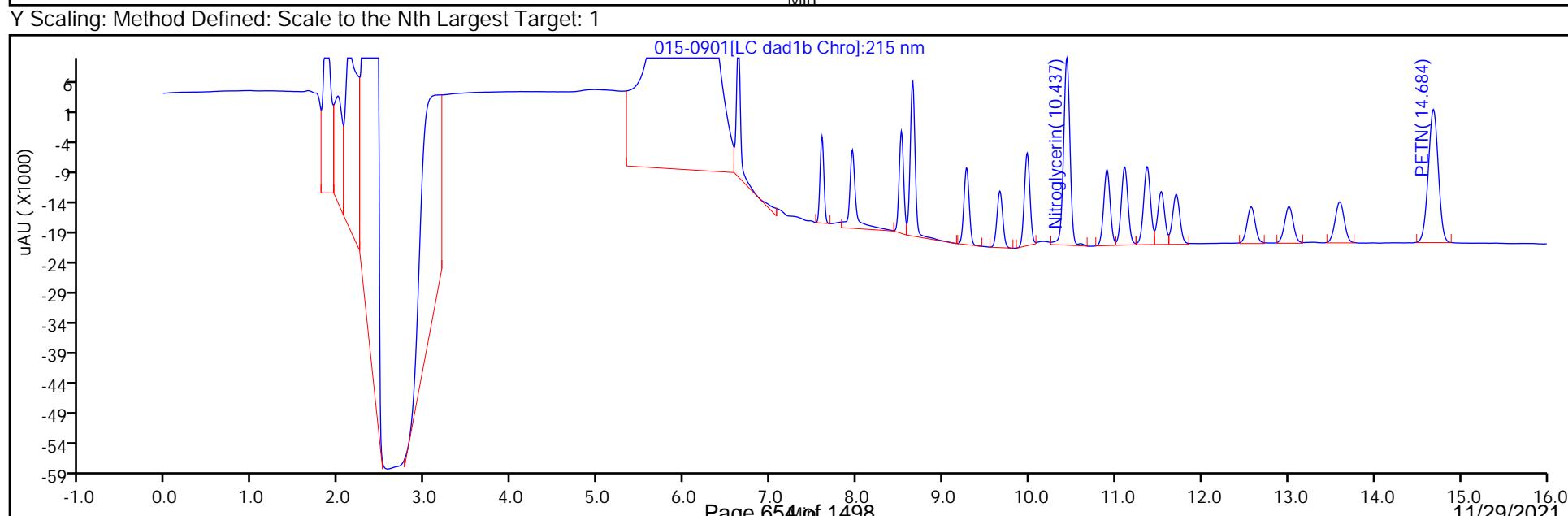
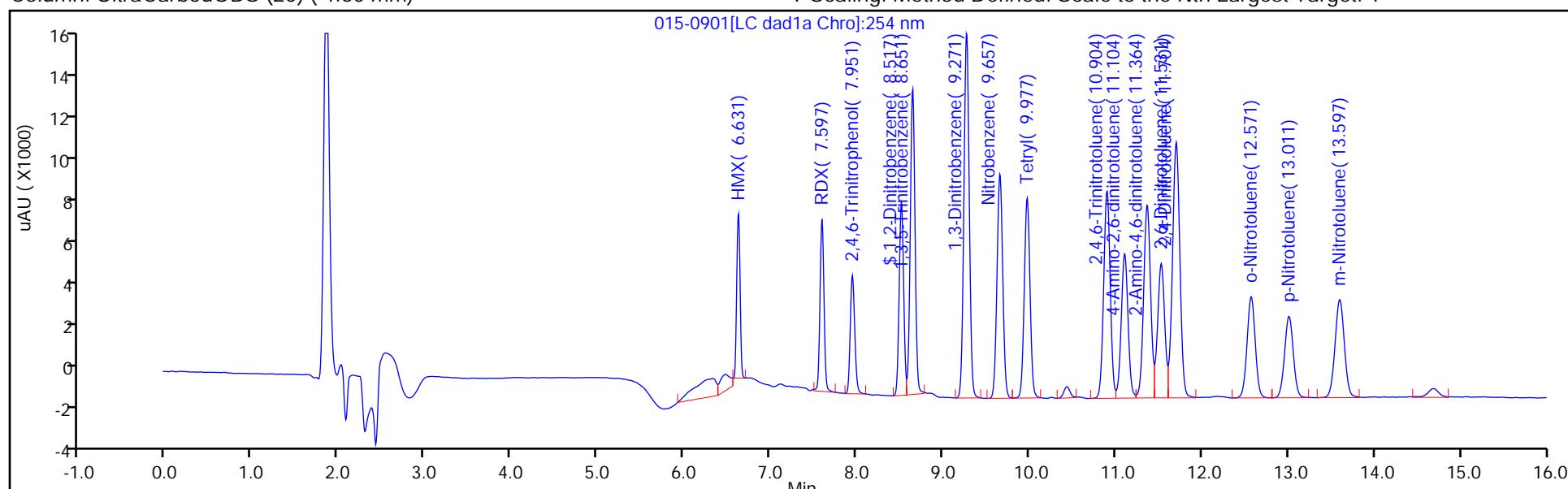
ALS Bottle#: 15

Method: 8330\_X3

Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



## Eurofins TestAmerica, Denver

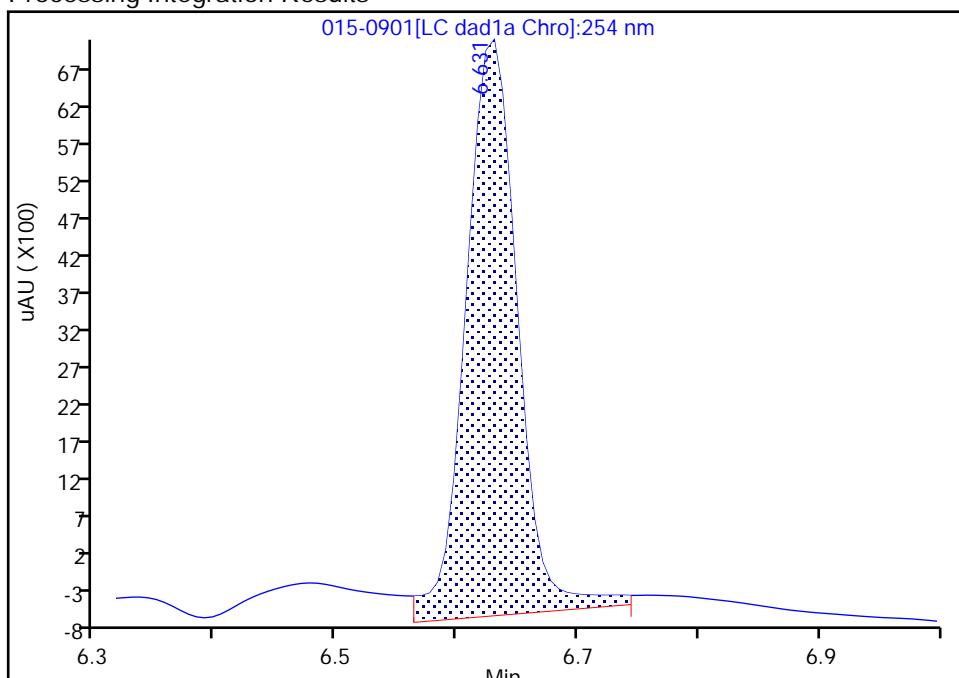
Data File: \\chromfs\denver\chromdata\chhplc\_x\20210501-101094.b\015-0901.d  
 Injection Date: 01-May-2021 19:32:52 Instrument ID: CHHPLC\_X3  
 Lims ID: IC INT 5  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 15 Worklist Smp#: 15  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

## 3 HMX, CAS: 2691-41-0

Signal: 1

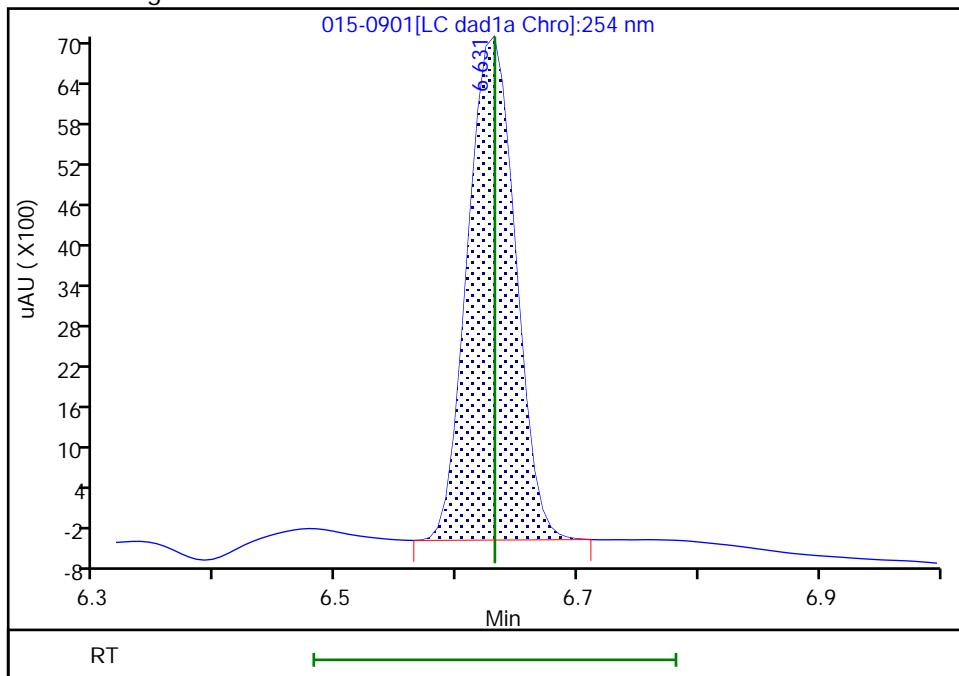
RT: 6.63  
 Area: 22828  
 Amount: 0.260662  
 Amount Units: ug/mL

## Processing Integration Results



RT: 6.63  
 Area: 20261  
 Amount: 0.239998  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 04-May-2021 13:16:27

Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20210501-101094.b\016-1001.D  
 Lims ID: IC INT 4  
 Client ID:  
 Sample Type: IC Calib Level: 4  
 Inject. Date: 01-May-2021 19:55:49 ALS Bottle#: 16 Worklist Smp#: 16  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Sample Info: IC INT 4  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Sublist: chrom-8330\_X3\*sub9  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20210501-101094.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 04-May-2021 13:25:09 Calib Date: 01-May-2021 21:04:39  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20210501-101094.b\019-1301.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:16:38

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.631	6.631	0.000	8561	0.1000	0.1014	M
7 RDX	1	7.598	7.598	0.000	11245	0.1000	0.1058	
8 2,4,6-Trinitrophenol	1	7.958	7.958	0.000	8317	0.1000	0.1005	
\$ 9 1,2-Dinitrobenzene	1	8.525	8.525	0.000	13218	0.1000	0.1031	
10 1,3,5-Trinitrobenzene	1	8.651	8.651	0.000	22114	0.1002	0.1004	
11 1,3-Dinitrobenzene	1	9.278	9.278	0.000	30099	0.1002	0.1016	
12 Nitrobenzene	1	9.664	9.664	0.000	20078	0.1004	0.1028	
14 Tetryl	1	9.978	9.978	0.000	17920	0.1002	0.1039	
15 Nitroglycerin	2	10.438	10.438	0.000	71053	1.00	1.04	
16 2,4,6-Trinitrotoluene	1	10.904	10.904	0.000	21286	0.1004	0.1033	
17 4-Amino-2,6-dinitrotoluene	1	11.111	11.111	0.000	15505	0.1001	0.1015	
18 2-Amino-4,6-dinitrotoluene	1	11.371	11.371	0.000	21203	0.1004	0.1025	
19 2,6-Dinitrotoluene	1	11.531	11.531	0.000	14557	0.1004	0.1017	
20 2,4-Dinitrotoluene	1	11.704	11.704	0.000	29362	0.1004	0.1023	
21 o-Nitrotoluene	1	12.578	12.578	0.000	13138	0.1000	0.1023	
22 p-Nitrotoluene	1	13.011	13.011	0.000	11083	0.1002	0.0990	
23 m-Nitrotoluene	1	13.604	13.604	0.000	14179	0.1001	0.0997	
24 PETN	2	14.684	14.684	0.000	75747	1.00	1.01	

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

### Reagents:

8330IntermStk\_00067

Amount Added: 10.00

Units: uL

Report Date: 04-May-2021 13:25:09

Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20210501-101094.b\016-1001.d

Injection Date: 01-May-2021 19:55:49

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: IC INT 4

Worklist Smp#: 16

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

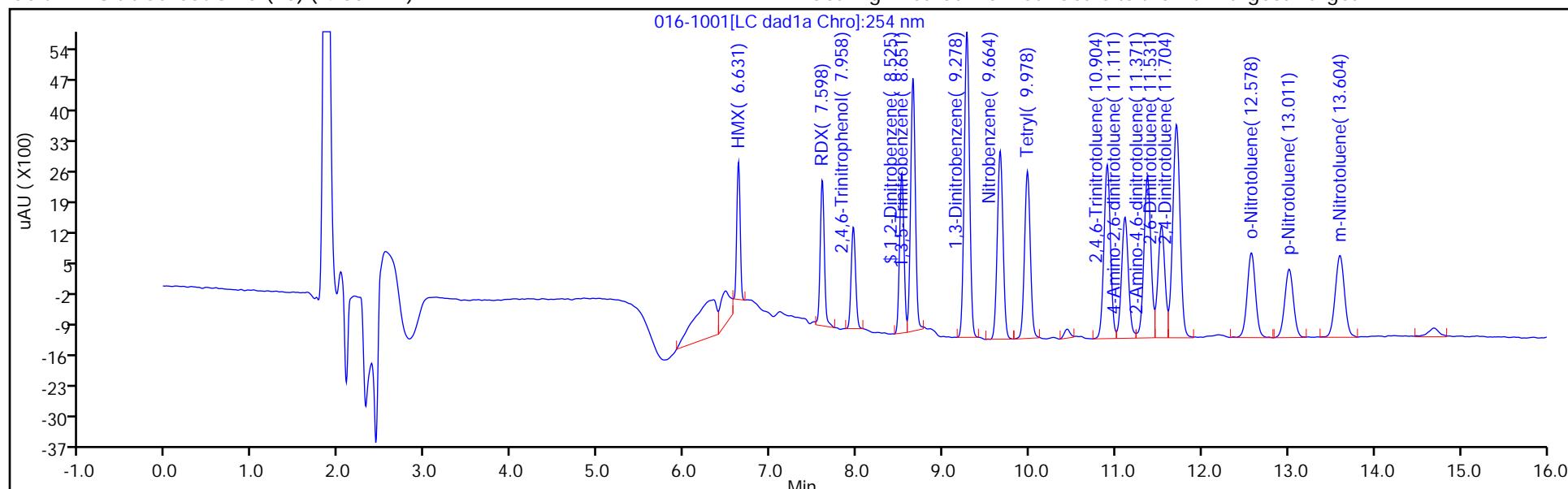
ALS Bottle#: 16

Method: 8330\_X3

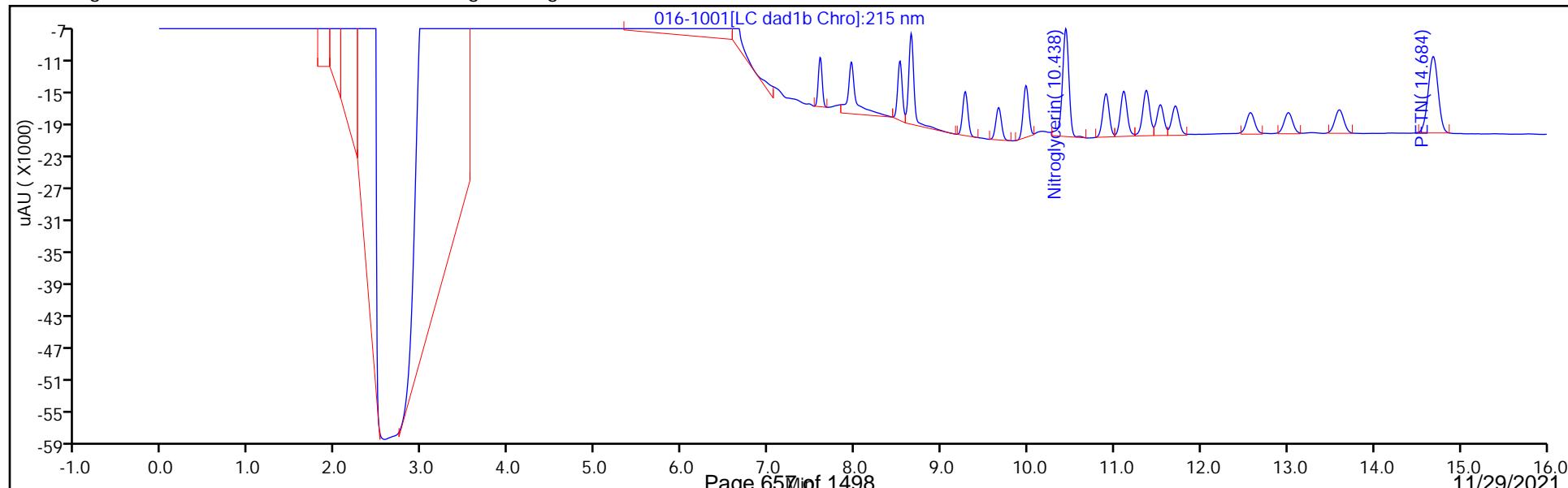
Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

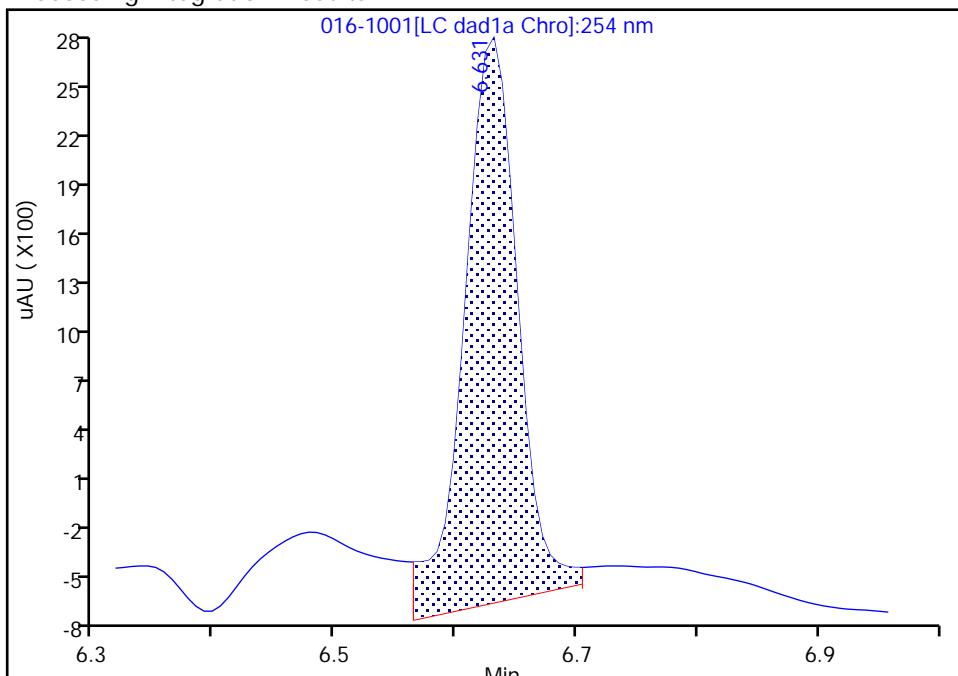
Data File: \\chromfs\denver\chromdata\chhplc\_x\20210501-101094.b\016-1001.d  
 Injection Date: 01-May-2021 19:55:49 Instrument ID: CHHPLC\_X3  
 Lims ID: IC INT 4  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 16 Worklist Smp#: 16  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

**3 HMX, CAS: 2691-41-0**

Signal: 1

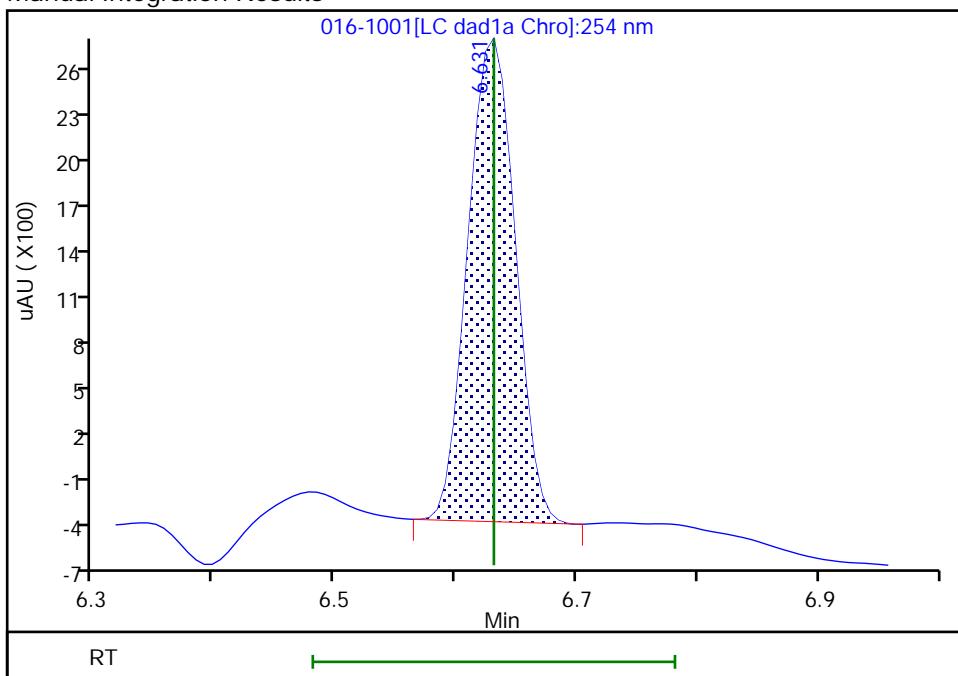
## Processing Integration Results

RT: 6.63  
 Area: 10439  
 Amount: 0.111561  
 Amount Units: ug/mL



## Manual Integration Results

RT: 6.63  
 Area: 8561  
 Amount: 0.101408  
 Amount Units: ug/mL



Reviewer: zhangji, 04-May-2021 13:16:35

Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20210501-101094.b\017-1101.D  
 Lims ID: IC INT 3  
 Client ID:  
 Sample Type: IC Calib Level: 3  
 Inject. Date: 01-May-2021 20:18:45 ALS Bottle#: 17 Worklist Smp#: 17  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Sample Info: IC INT 3  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Sublist: chrom-8330\_X3\*sub9  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20210501-101094.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 04-May-2021 13:25:10 Calib Date: 01-May-2021 21:04:39  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20210501-101094.b\019-1301.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:16:51

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.628	6.631	-0.003	4242	0.0500	0.0502	M
7 RDX	1	7.602	7.598	0.004	6054	0.0500	0.0570	
8 2,4,6-Trinitrophenol	1	7.968	7.958	0.010	4575	0.0500	0.0553	
\$ 9 1,2-Dinitrobenzene	1	8.522	8.525	-0.003	6504	0.0500	0.0507	
10 1,3,5-Trinitrobenzene	1	8.655	8.651	0.004	11361	0.0501	0.0516	
11 1,3-Dinitrobenzene	1	9.282	9.278	0.004	14927	0.0501	0.0504	
12 Nitrobenzene	1	9.662	9.664	-0.002	9892	0.0502	0.0507	
14 Tetryl	1	9.982	9.978	0.004	8870	0.0501	0.0514	
15 Nitroglycerin	2	10.442	10.438	0.004	36983	0.5000	0.5113	
16 2,4,6-Trinitrotoluene	1	10.908	10.904	0.004	10514	0.0502	0.0510	
17 4-Amino-2,6-dinitrotoluene	1	11.115	11.111	0.004	7868	0.0501	0.0515	
18 2-Amino-4,6-dinitrotoluene	1	11.375	11.371	0.004	10789	0.0502	0.0521	
19 2,6-Dinitrotoluene	1	11.535	11.531	0.004	7360	0.0502	0.0514	
20 2,4-Dinitrotoluene	1	11.708	11.704	0.004	14647	0.0502	0.0510	
21 o-Nitrotoluene	1	12.575	12.578	-0.003	6616	0.0500	0.0515	
22 p-Nitrotoluene	1	13.015	13.011	0.004	5724	0.0501	0.0511	
23 m-Nitrotoluene	1	13.602	13.604	-0.002	7187	0.0501	0.0505	
24 PETN	2	14.688	14.684	0.004	37293	0.5000	0.4987	

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

### Reagents:

8330IntermStk\_00067

Amount Added: 5.00

Units: uL

Report Date: 04-May-2021 13:25:10

Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20210501-101094.b\017-1101.d

Injection Date: 01-May-2021 20:18:45

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: IC INT 3

Worklist Smp#: 17

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

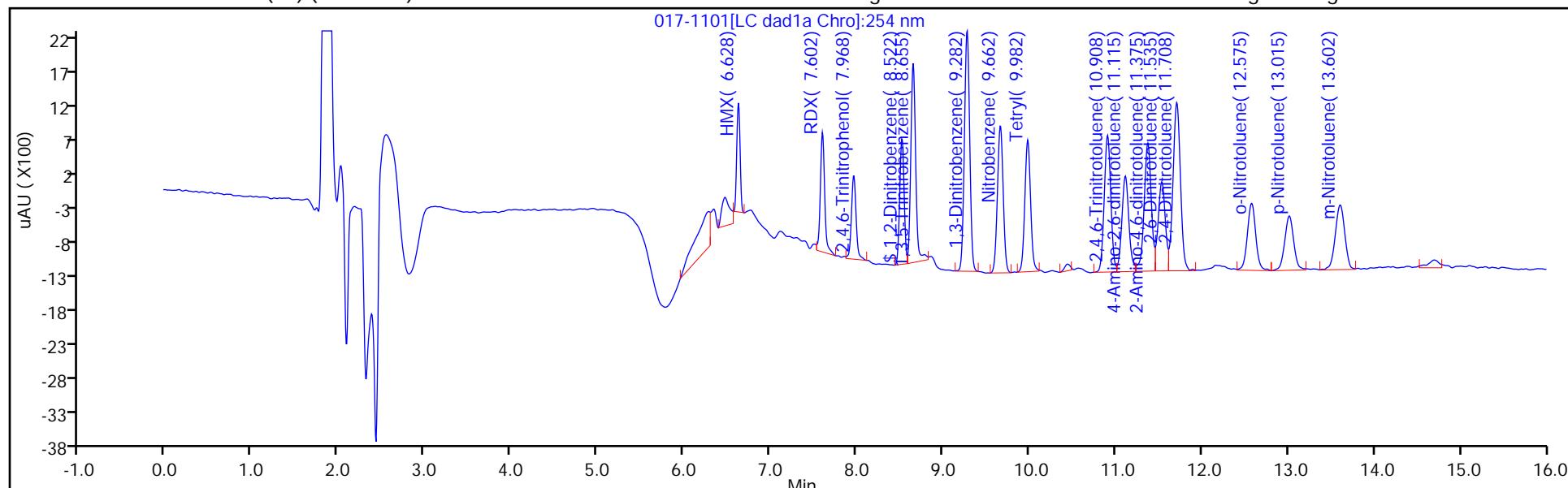
ALS Bottle#: 17

Method: 8330\_X3

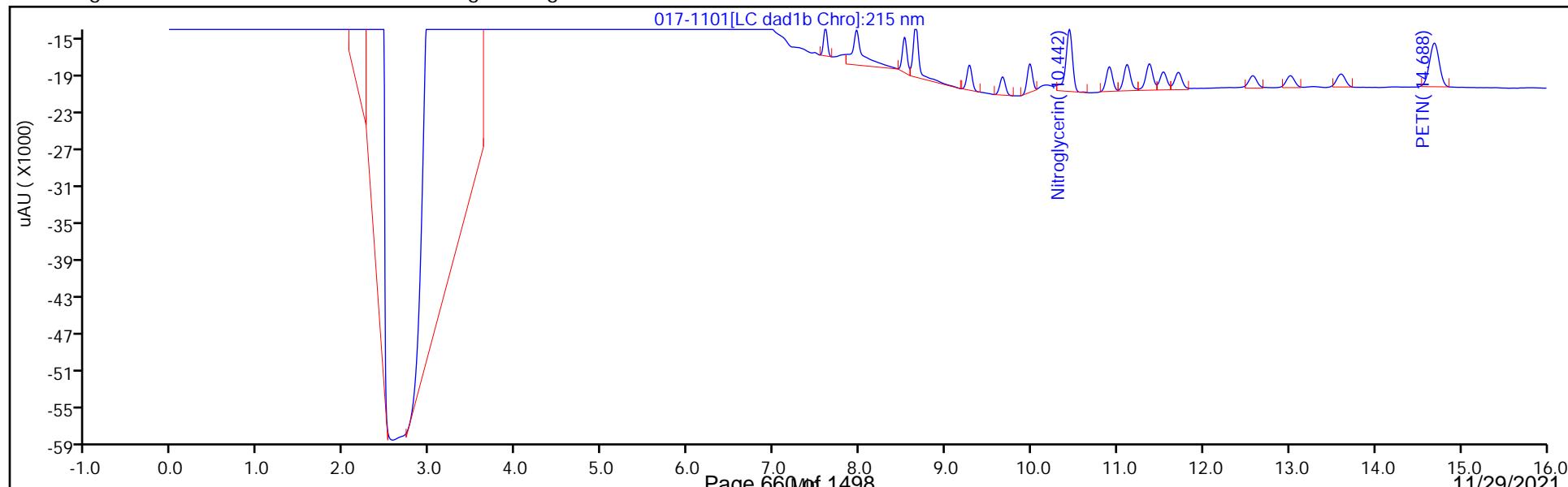
Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

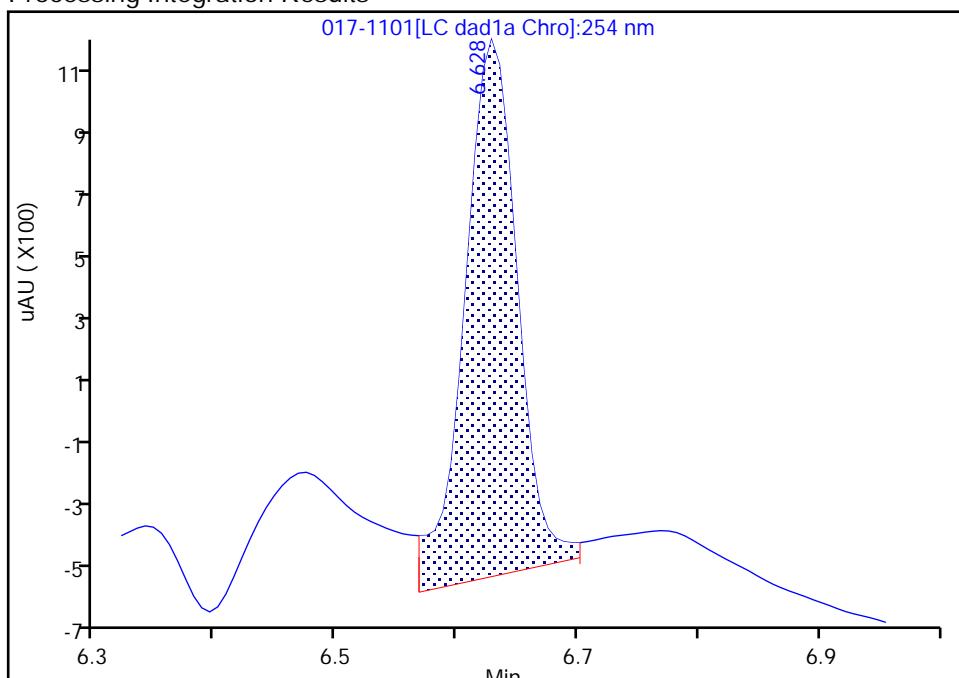
Data File: \\chromfs\denver\chromdata\chhplc\_x\20210501-101094.b\017-1101.d  
 Injection Date: 01-May-2021 20:18:45 Instrument ID: CHHPLC\_X3  
 Lims ID: IC INT 3  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 17 Worklist Smp#: 17  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

**3 HMX, CAS: 2691-41-0**

Signal: 1

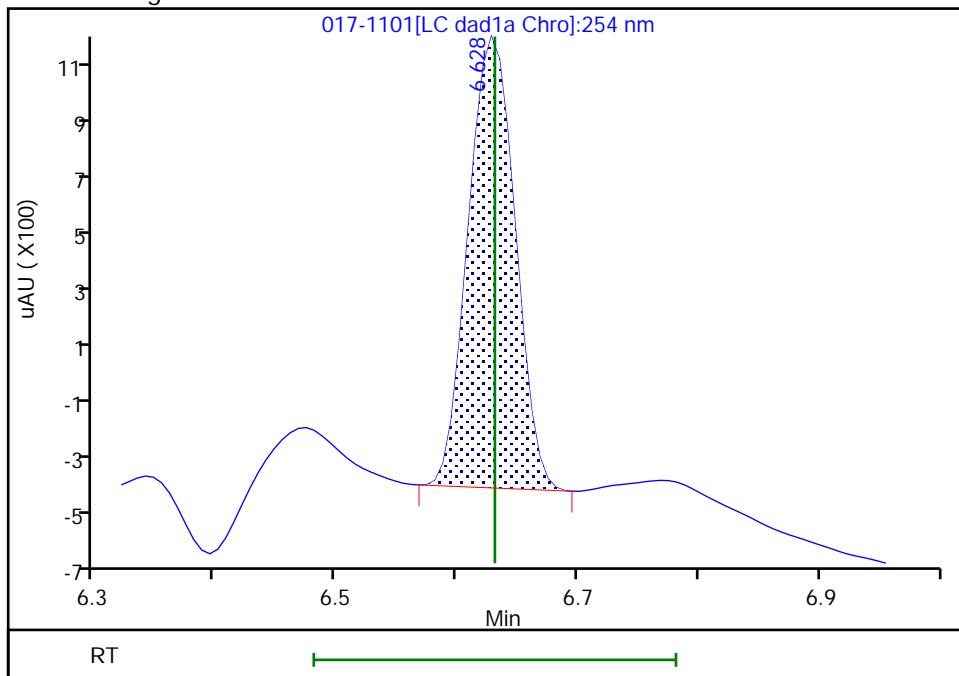
RT: 6.63  
 Area: 5138  
 Amount: 0.048188  
 Amount Units: ug/mL

## Processing Integration Results



RT: 6.63  
 Area: 4242  
 Amount: 0.050248  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 04-May-2021 13:16:49

Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20210501-101094.b\018-1201.D  
 Lims ID: IC INT 2  
 Client ID:  
 Sample Type: IC Calib Level: 2  
 Inject. Date: 01-May-2021 20:41:41 ALS Bottle#: 18 Worklist Smp#: 18  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Sample Info: IC INT 2  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Sublist: chrom-8330\_X3\*sub9  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20210501-101094.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 04-May-2021 13:25:10 Calib Date: 01-May-2021 21:04:39  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20210501-101094.b\019-1301.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:17:07

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.626	6.631	-0.005	1680	0.0200	0.0199	M
7 RDX	1	7.606	7.598	0.008	2207	0.0200	0.0208	M
8 2,4,6-Trinitrophenol	1	7.966	7.958	0.008	1840	0.0200	0.0222	
\$ 9 1,2-Dinitrobenzene	1	8.526	8.525	0.001	2399	0.0200	0.0187	
10 1,3,5-Trinitrobenzene	1	8.653	8.651	0.002	4038	0.0200	0.0183	
11 1,3-Dinitrobenzene	1	9.280	9.278	0.002	6019	0.0200	0.0203	
12 Nitrobenzene	1	9.666	9.664	0.002	3972	0.0201	0.0203	
14 Tetryl	1	9.980	9.978	0.002	3331	0.0200	0.0193	M
15 Nitroglycerin	2	10.440	10.438	0.002	16162	0.2000	0.1865	
16 2,4,6-Trinitrotoluene	1	10.906	10.904	0.002	4156	0.0201	0.0202	
17 4-Amino-2,6-dinitrotoluene	1	11.106	11.111	-0.005	3532	0.0200	0.0231	
18 2-Amino-4,6-dinitrotoluene	1	11.366	11.371	-0.005	4433	0.0201	0.0214	
19 2,6-Dinitrotoluene	1	11.533	11.531	0.002	2947	0.0201	0.0206	
20 2,4-Dinitrotoluene	1	11.706	11.704	0.002	5945	0.0201	0.0207	
21 o-Nitrotoluene	1	12.573	12.578	-0.005	2737	0.0200	0.0213	
22 p-Nitrotoluene	1	13.006	13.011	-0.005	2633	0.0200	0.0235	
23 m-Nitrotoluene	1	13.600	13.604	-0.004	3121	0.0200	0.0219	
24 PETN	2	14.680	14.684	-0.004	14944	0.2000	0.1998	M

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

### Reagents:

8330IntermStk\_00067

Amount Added: 2.00

Units: uL

Report Date: 04-May-2021 13:25:11

Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20210501-101094.b\018-1201.d

Injection Date: 01-May-2021 20:41:41

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: IC INT 2

Worklist Smp#: 18

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

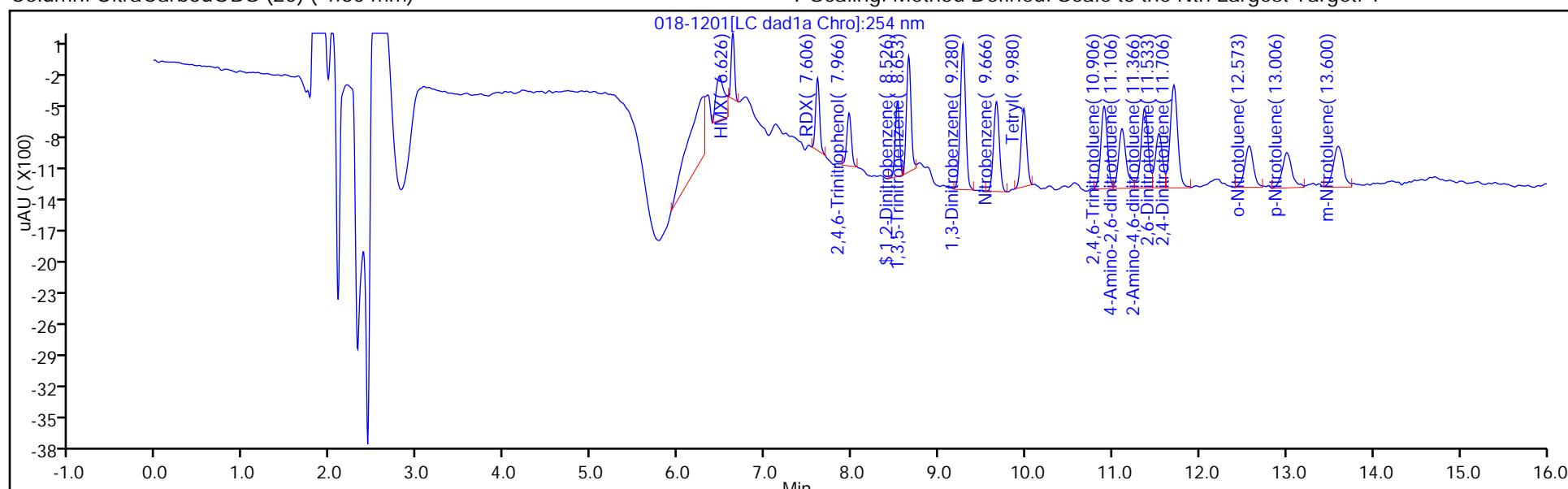
ALS Bottle#: 18

Method: 8330\_X3

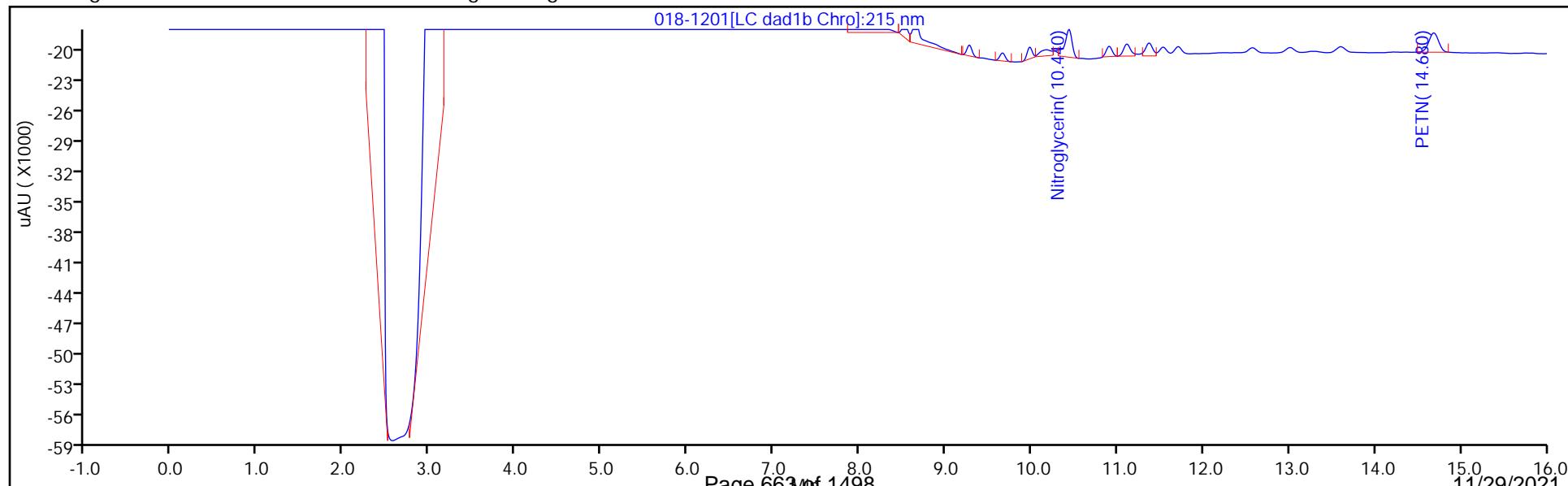
Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



## Eurofins TestAmerica, Denver

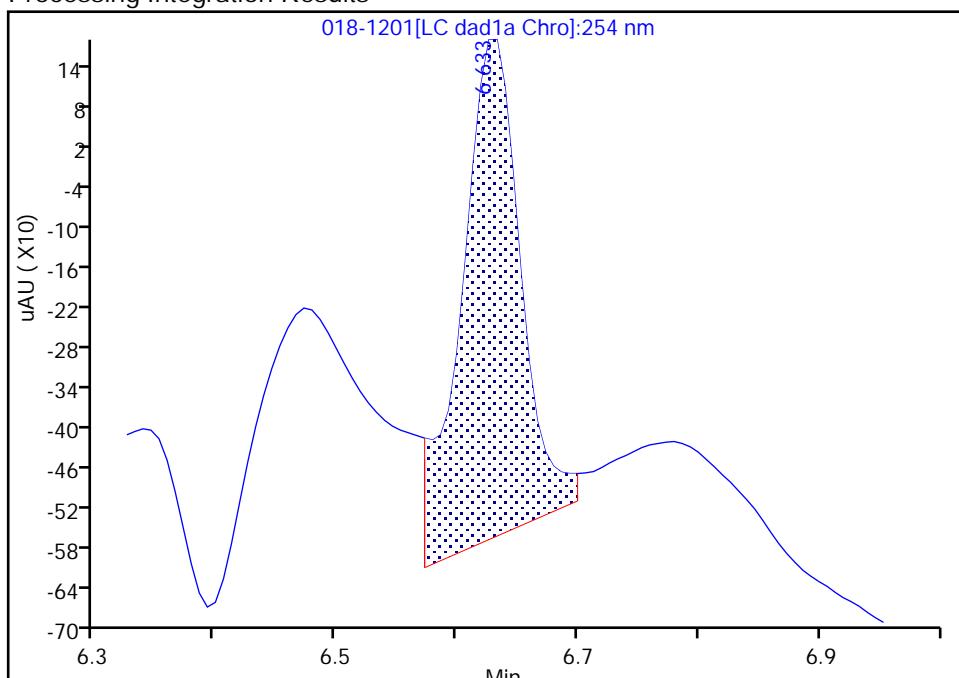
Data File: \\chromfs\denver\chromdata\chhplc\_x\20210501-101094.b\018-1201.d  
 Injection Date: 01-May-2021 20:41:41 Instrument ID: CHHPLC\_X3  
 Lims ID: IC INT 2  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 18 Worklist Smp#: 18  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

## 3 HMX, CAS: 2691-41-0

Signal: 1

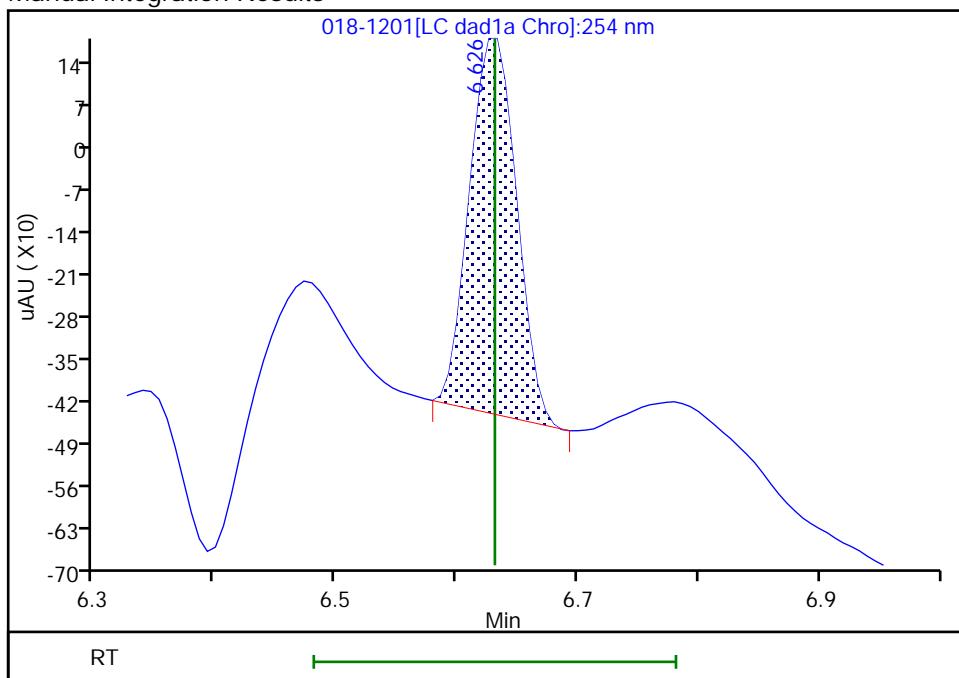
RT: 6.63  
 Area: 2563  
 Amount: 0.017888  
 Amount Units: ug/mL

## Processing Integration Results



RT: 6.63  
 Area: 1680  
 Amount: 0.019900  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 04-May-2021 13:16:58

Audit Action: Manually Integrated

Audit Reason: Baseline

## Eurofins TestAmerica, Denver

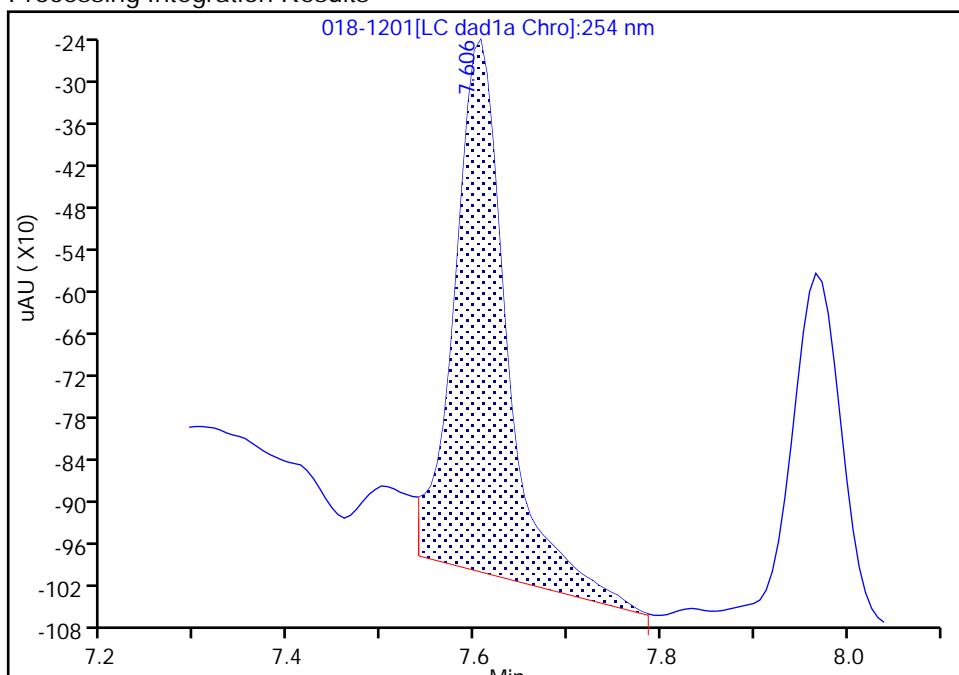
Data File: \\chromfs\denver\chromdata\chhplc\_x\20210501-101094.b\018-1201.d  
 Injection Date: 01-May-2021 20:41:41 Instrument ID: CHHPLC\_X3  
 Lims ID: IC INT 2  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 18 Worklist Smp#: 18  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

## 7 RDX, CAS: 121-82-4

Signal: 1

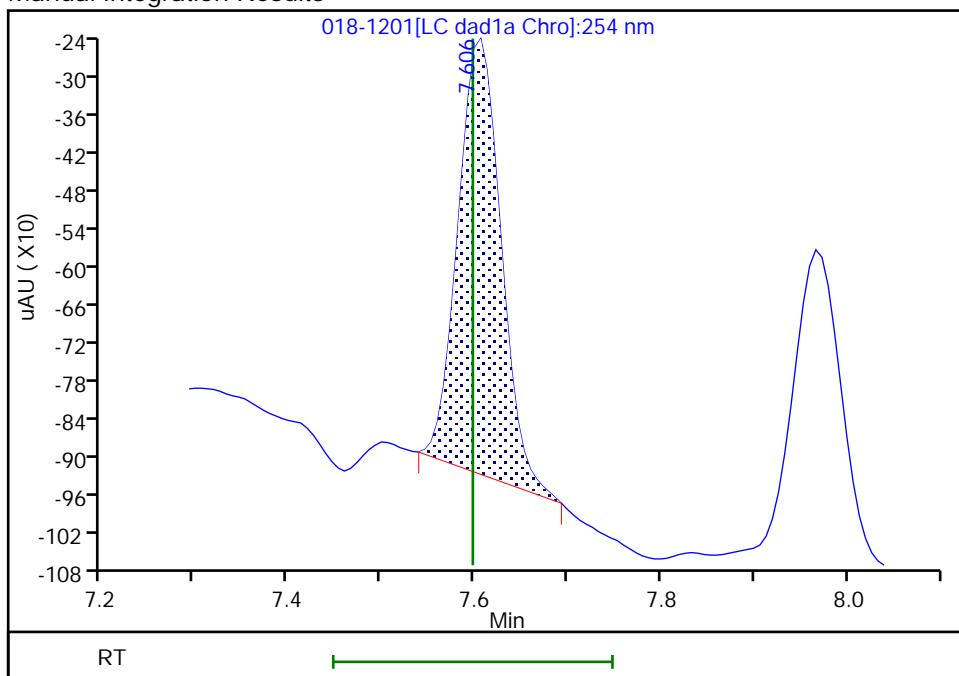
RT: 7.61  
 Area: 2982  
 Amount: 0.020729  
 Amount Units: ug/mL

## Processing Integration Results



RT: 7.61  
 Area: 2207  
 Amount: 0.020770  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 04-May-2021 13:18:38

Audit Action: Manually Integrated

Audit Reason: Baseline

## Eurofins TestAmerica, Denver

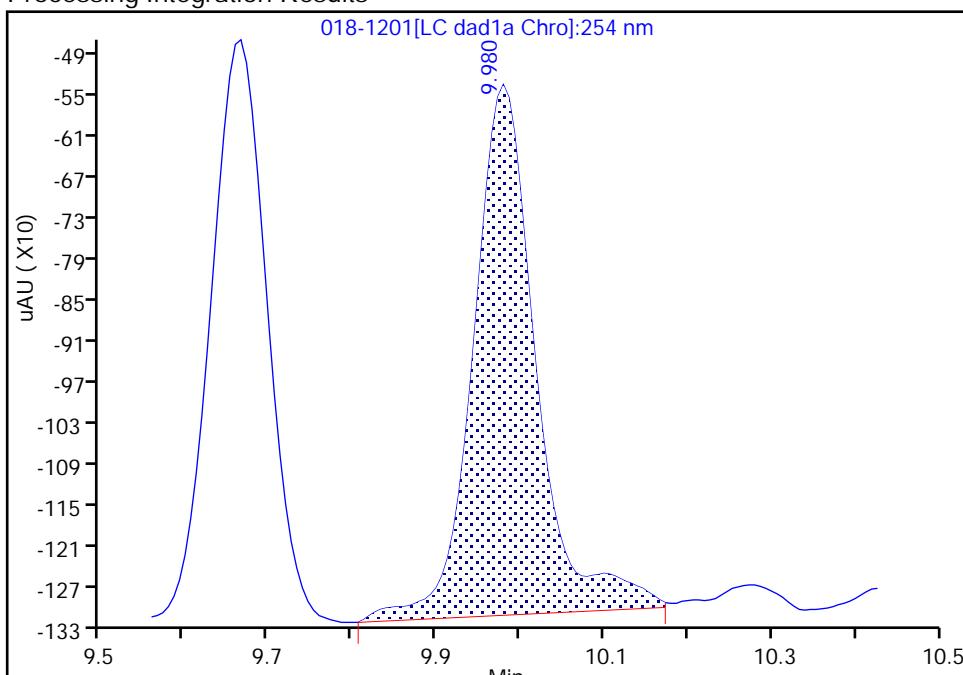
Data File: \\chromfs\denver\chromdata\chhplc\_x\20210501-101094.b\018-1201.d  
 Injection Date: 01-May-2021 20:41:41 Instrument ID: CHHPLC\_X3  
 Lims ID: IC INT 2  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 18 Worklist Smp#: 18  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

## 14 Tetryl, CAS: 479-45-8

Signal: 1

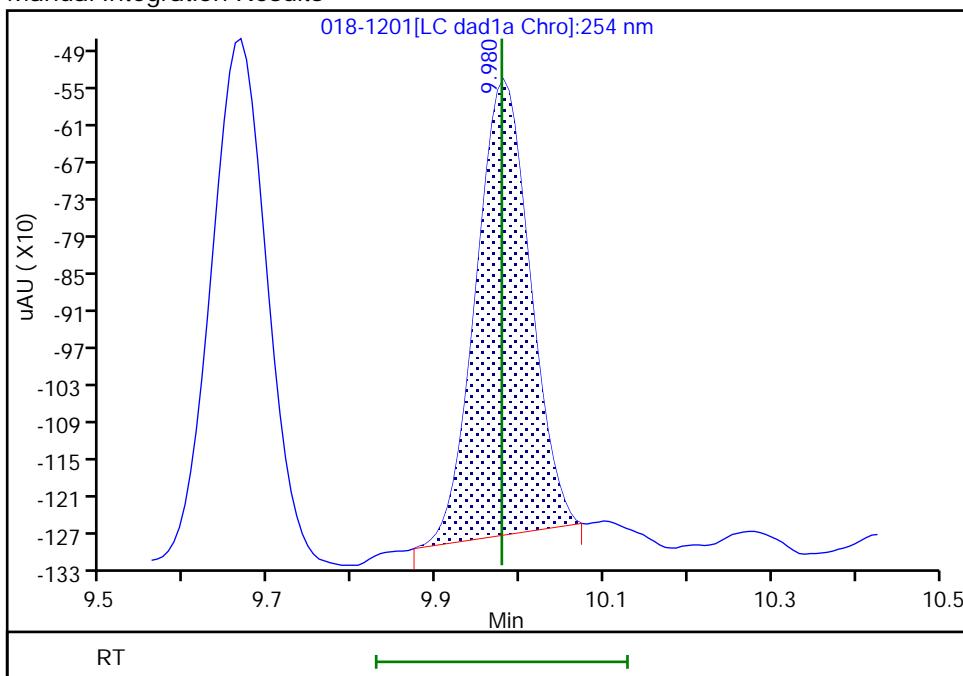
RT: 9.98  
 Area: 4075  
 Amount: 0.022280  
 Amount Units: ug/mL

## Processing Integration Results



RT: 9.98  
 Area: 3331  
 Amount: 0.019319  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 04-May-2021 13:23:27

Audit Action: Manually Integrated

Audit Reason: Baseline

## Eurofins TestAmerica, Denver

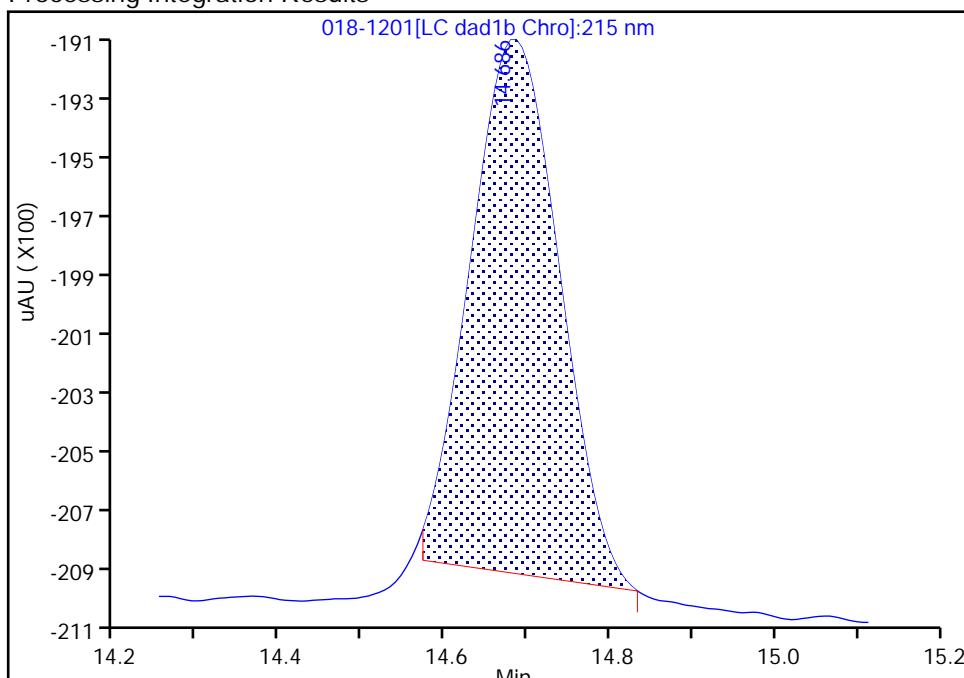
Data File: \\chromfs\denver\chromdata\chhplc\_x\20210501-101094.b\018-1201.d  
 Injection Date: 01-May-2021 20:41:41 Instrument ID: CHHPLC\_X3  
 Lims ID: IC INT 2  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 18 Worklist Smp#: 18  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: Detector LC DAD1C, 215 nm

## 24 PETN, CAS: 78-11-5

Signal: 1

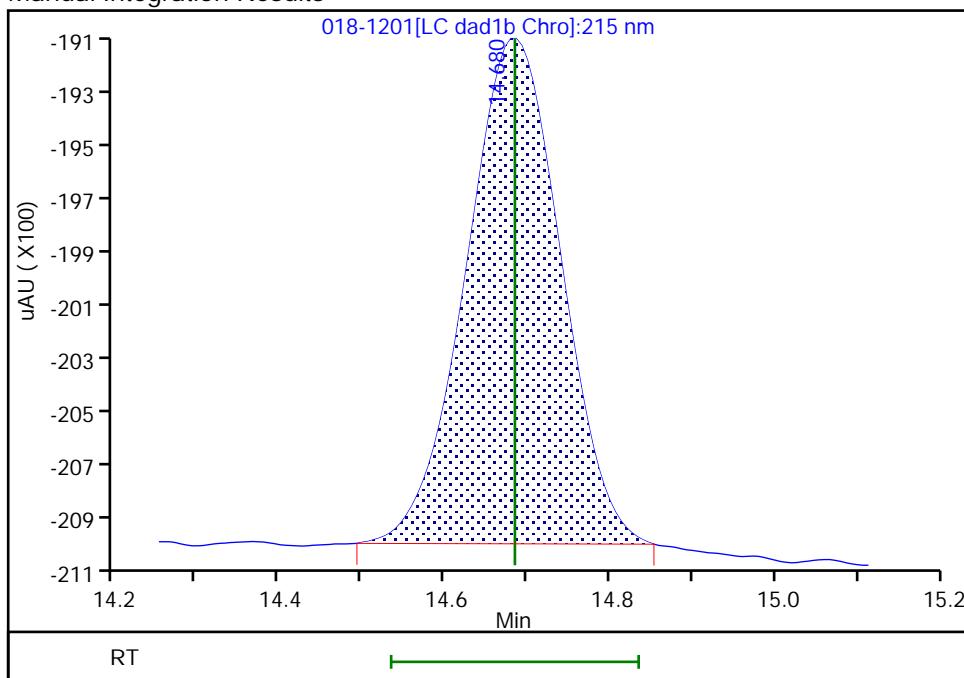
RT: 14.69  
 Area: 13412  
 Amount: 0.181421  
 Amount Units: ug/mL

## Processing Integration Results



RT: 14.68  
 Area: 14944  
 Amount: 0.199843  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 04-May-2021 13:18:31

Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20210501-101094.b\019-1301.D  
 Lims ID: IC INT 1  
 Client ID:  
 Sample Type: IC Calib Level: 1  
 Inject. Date: 01-May-2021 21:04:39 ALS Bottle#: 19 Worklist Smp#: 19  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: IC INT 1  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Sublist: chrom-8330\_X3\*sub9  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20210501-101094.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 04-May-2021 13:25:11 Calib Date: 01-May-2021 21:04:39  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20210501-101094.b\019-1301.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:18:18

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.629	6.631	-0.002	906	0.0100	0.0107	M
7 RDX	1	7.602	7.598	0.004	1876	0.0100	0.0177	
8 2,4,6-Trinitrophenol	1	7.962	7.958	0.004	1003	0.0100	0.0121	
\$ 9 1,2-Dinitrobenzene	1	8.522	8.525	-0.003	1195	0.0100	0.009320	
10 1,3,5-Trinitrobenzene	1	8.649	8.651	-0.002	2481	0.0100	0.0113	
11 1,3-Dinitrobenzene	1	9.275	9.278	-0.003	3052	0.0100	0.0103	
12 Nitrobenzene	1	9.662	9.664	-0.002	1995	0.0100	0.0102	
14 Tetryl	1	9.975	9.978	-0.003	1712	0.0100	0.0099	M
15 Nitroglycerin	2	10.435	10.438	-0.003	10778	0.1000	0.1025	M
16 2,4,6-Trinitrotoluene	1	10.902	10.904	-0.002	2128	0.0100	0.0103	
17 4-Amino-2,6-dinitrotoluene	1	11.109	11.111	-0.002	1596	0.0100	0.0104	
18 2-Amino-4,6-dinitrotoluene	1	11.369	11.371	-0.002	2126	0.0100	0.0103	
19 2,6-Dinitrotoluene	1	11.529	11.531	-0.002	1404	0.0100	0.009813	
20 2,4-Dinitrotoluene	1	11.702	11.704	-0.002	2944	0.0100	0.0103	
21 o-Nitrotoluene	1	12.575	12.578	-0.003	1346	0.0100	0.0105	
22 p-Nitrotoluene	1	13.015	13.011	0.004	1177	0.0100	0.0105	
23 m-Nitrotoluene	1	13.602	13.604	-0.002	1575	0.0100	0.0111	
24 PETN	2	14.682	14.684	-0.002	7901	0.1000	0.1057	Ma

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

### Reagents:

8330ltermStk\_00067

Amount Added: 1.00

Units: uL

Report Date: 04-May-2021 13:25:11

Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20210501-101094.b\019-1301.d

Injection Date: 01-May-2021 21:04:39

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: IC INT 1

Worklist Smp#: 19

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

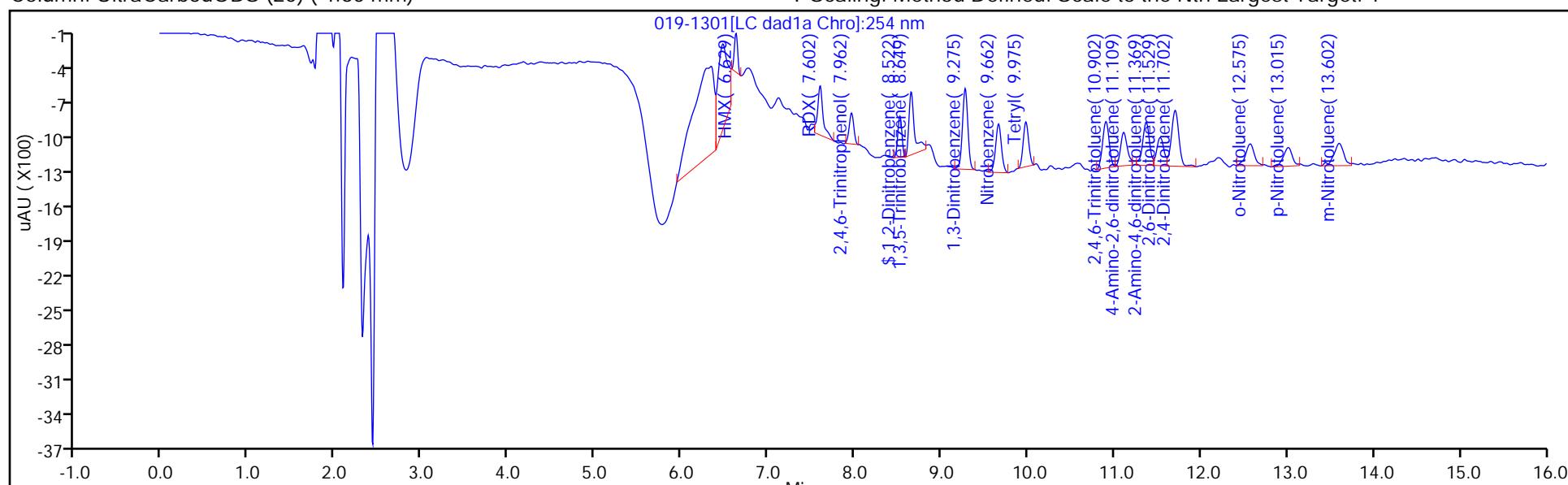
ALS Bottle#: 19

Method: 8330\_X3

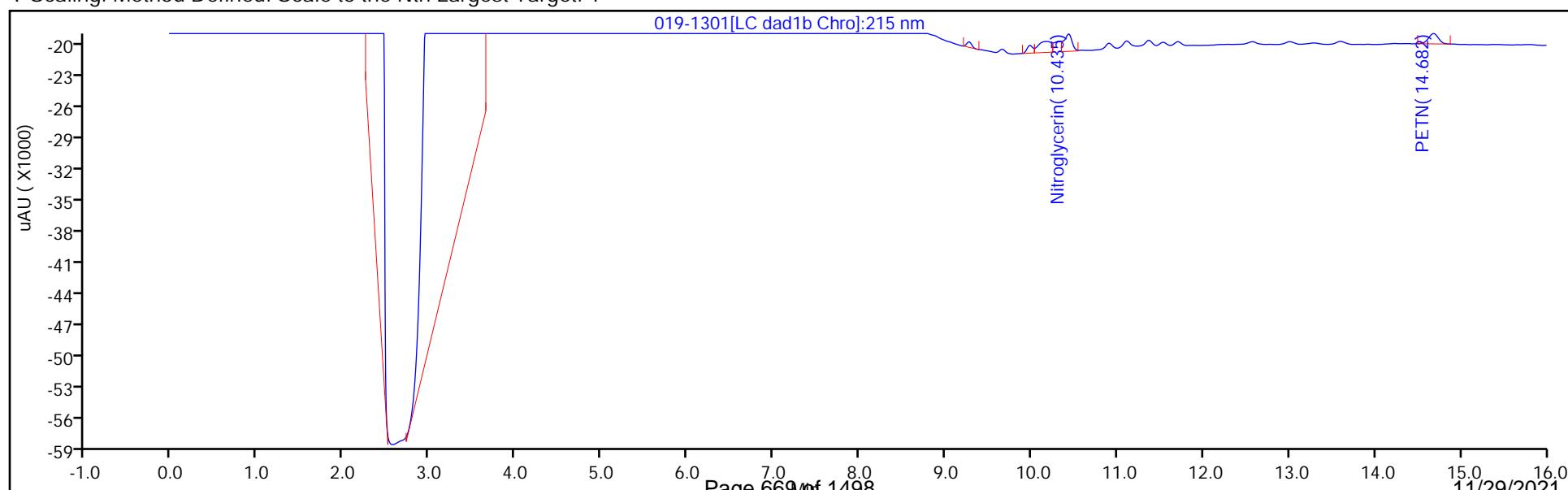
Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



## Eurofins TestAmerica, Denver

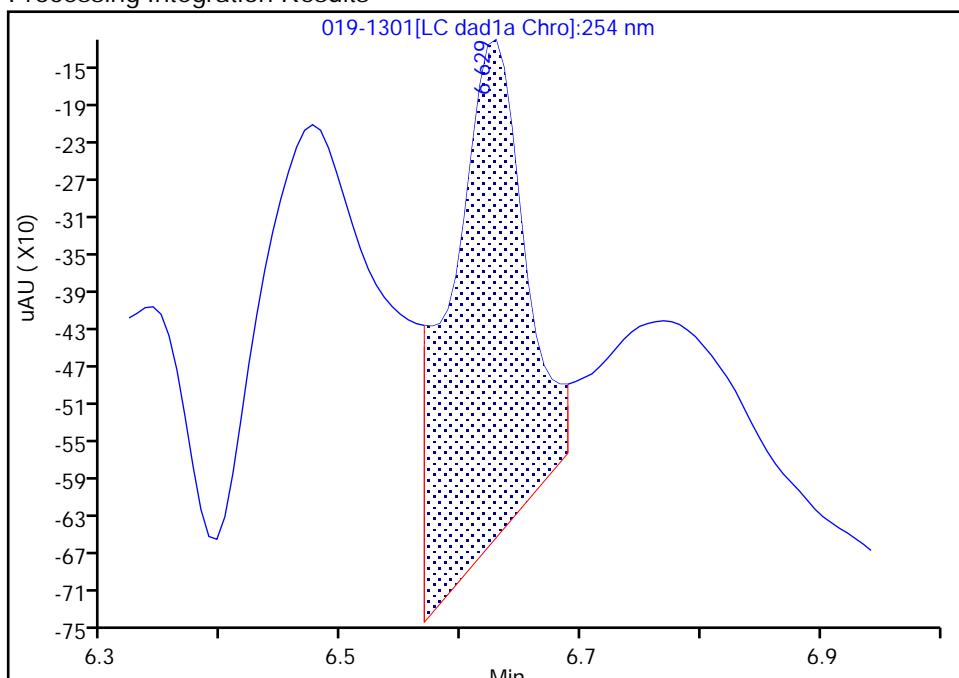
Data File: \\chromfs\denver\chromdata\chhplc\_x\20210501-101094.b\019-1301.d  
 Injection Date: 01-May-2021 21:04:39 Instrument ID: CHHPLC\_X3  
 Lims ID: IC INT 1  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 19 Worklist Smp#: 19  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

3 HMX, CAS: 2691-41-0

Signal: 1

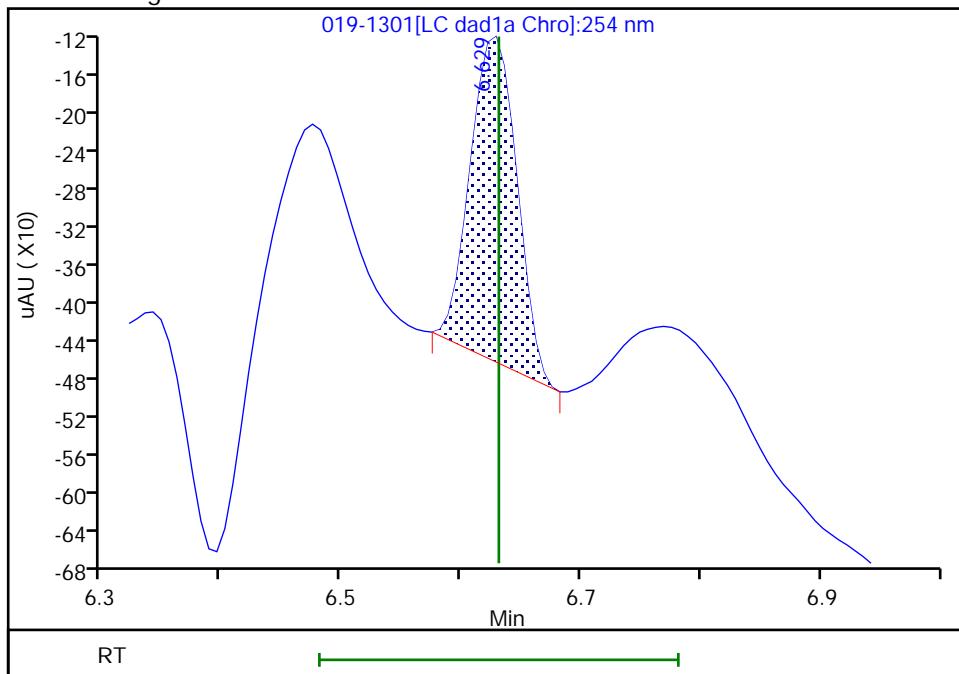
RT: 6.63  
 Area: 2314  
 Amount: 0.023125  
 Amount Units: ug/mL

## Processing Integration Results



RT: 6.63  
 Area: 906  
 Amount: 0.010732  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 04-May-2021 13:17:14

Audit Action: Manually Integrated

Audit Reason: Baseline

## Eurofins TestAmerica, Denver

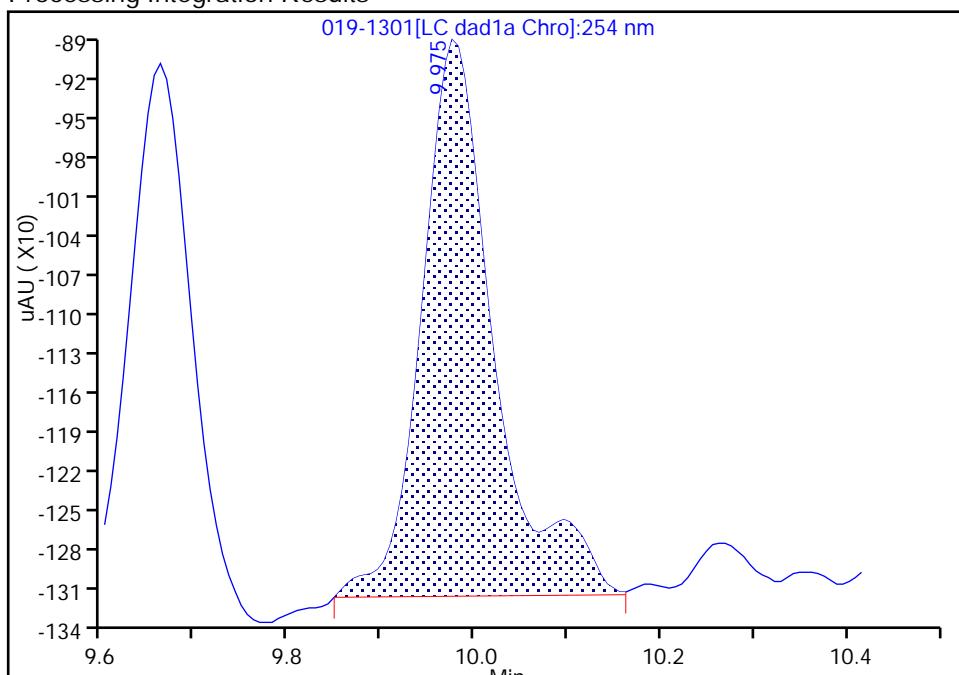
Data File: \\chromfs\denver\chromdata\chhplc\_x\20210501-101094.b\019-1301.d  
 Injection Date: 01-May-2021 21:04:39 Instrument ID: CHHPLC\_X3  
 Lims ID: IC INT 1  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 19 Worklist Smp#: 19  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

## 14 Tetryl, CAS: 479-45-8

Signal: 1

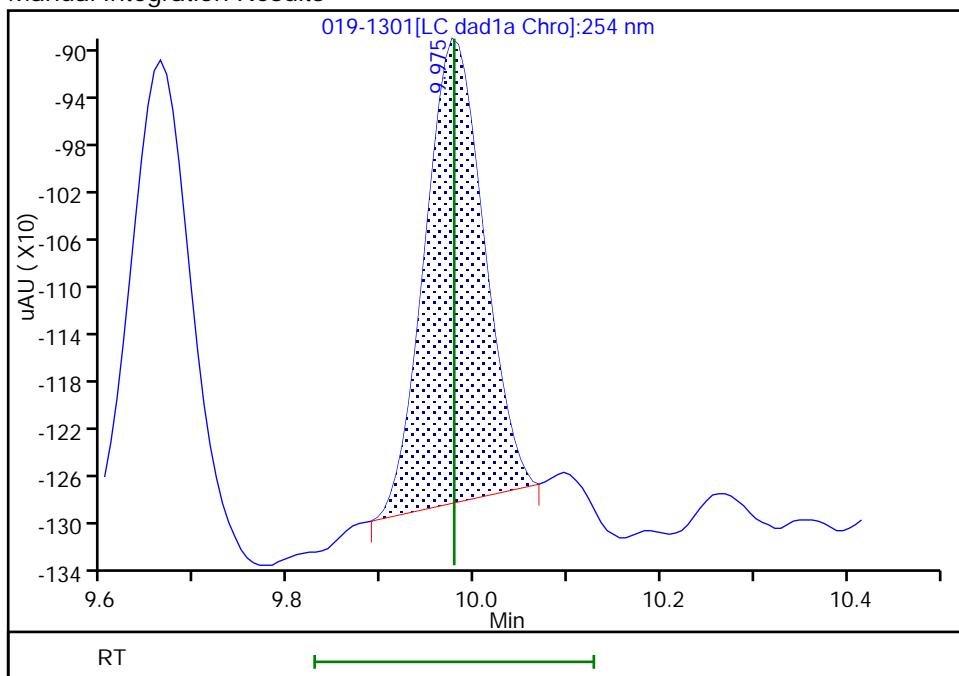
RT: 9.98  
 Area: 2285  
 Amount: 0.012782  
 Amount Units: ug/mL

## Processing Integration Results



RT: 9.98  
 Area: 1712  
 Amount: 0.009929  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 04-May-2021 13:23:41

Audit Action: Manually Integrated

Audit Reason: Baseline

## Eurofins TestAmerica, Denver

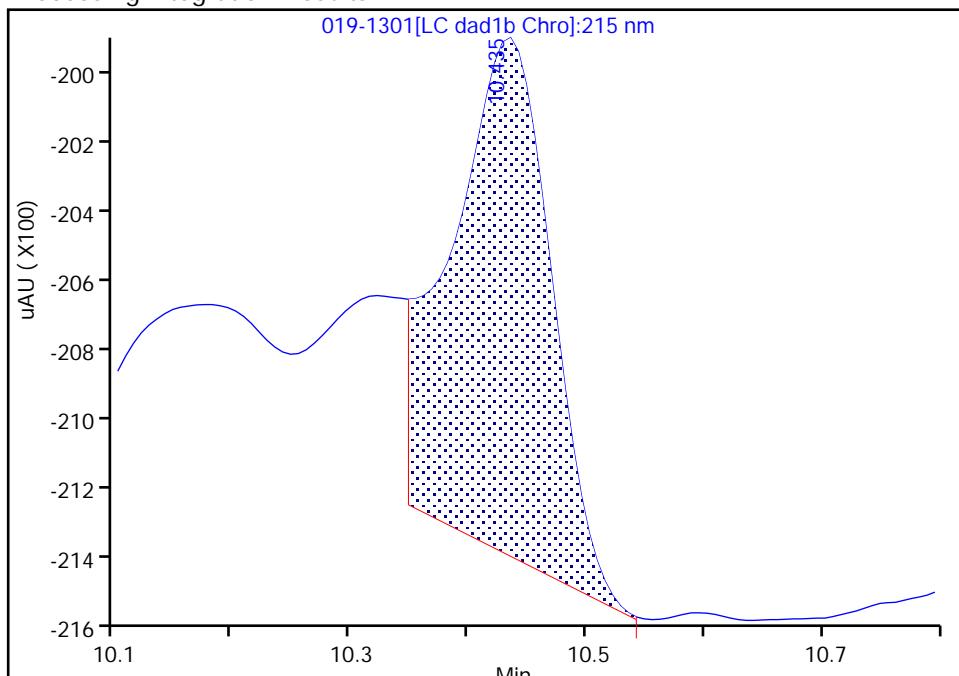
Data File: \\chromfs\denver\chromdata\chhplc\_x\20210501-101094.b\019-1301.d  
 Injection Date: 01-May-2021 21:04:39 Instrument ID: CHHPLC\_X3  
 Lims ID: IC INT 1  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 19 Worklist Smp#: 19  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: Detector LC DAD1C, 215 nm

**15 Nitroglycerin, CAS: 55-63-0**

Signal: 1

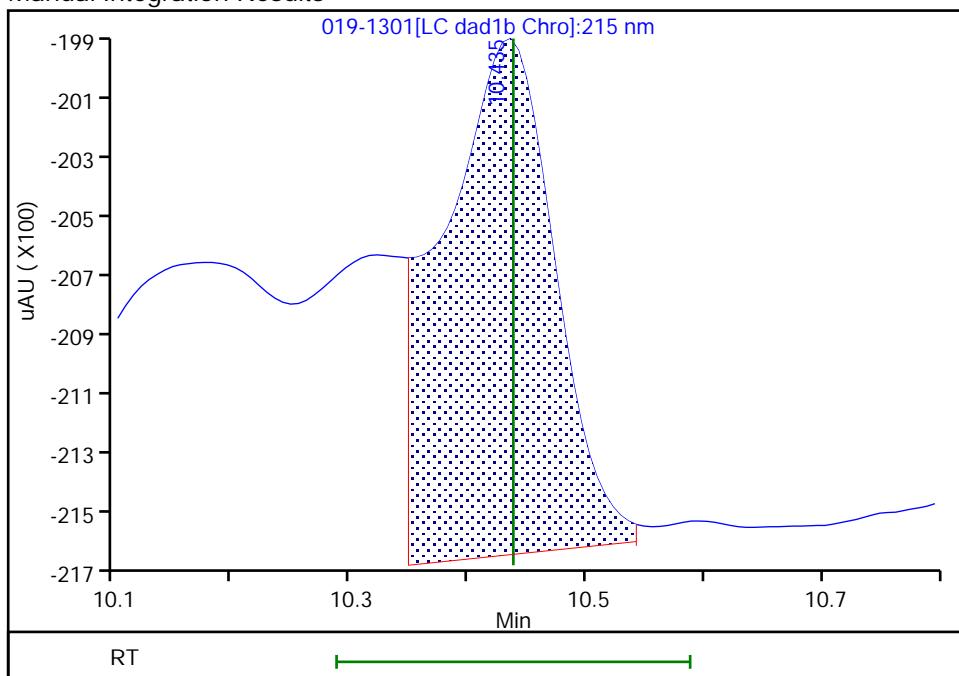
RT: 10.44  
 Area: 8028  
 Amount: 0.114856  
 Amount Units: ug/mL

## Processing Integration Results



RT: 10.44  
 Area: 10778  
 Amount: 0.102544  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 04-May-2021 13:18:01

Audit Action: Assigned New Baseline

Audit Reason: Baseline

## Eurofins TestAmerica, Denver

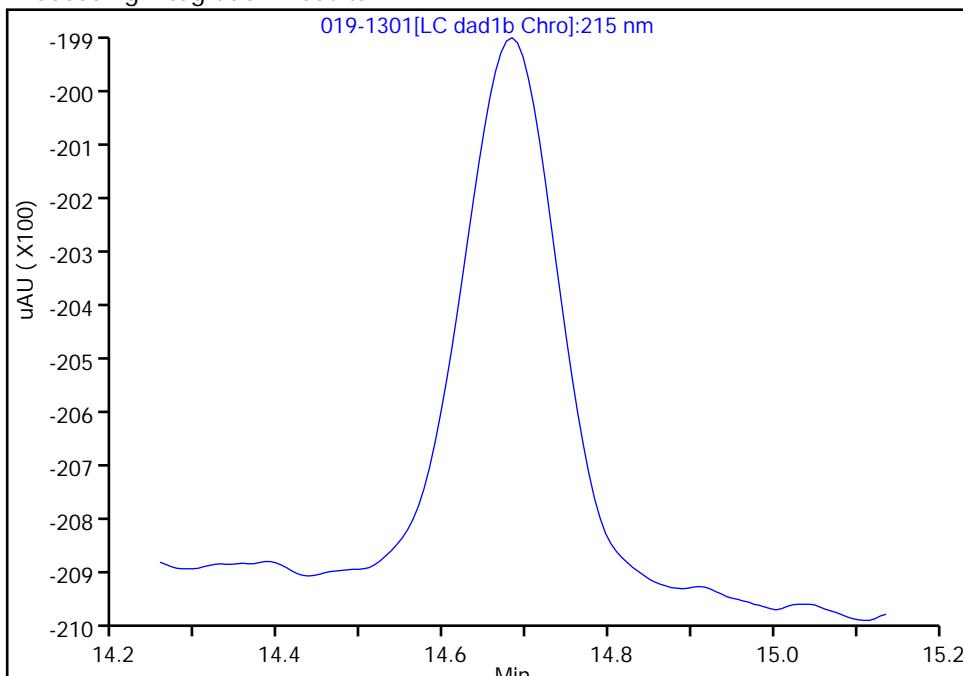
Data File: \\chromfs\denver\chromdata\chhplc\_x\20210501-101094.b\019-1301.d  
 Injection Date: 01-May-2021 21:04:39 Instrument ID: CHHPLC\_X3  
 Lims ID: IC INT 1  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 19 Worklist Smp#: 19  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: Detector LC DAD1C, 215 nm

## 24 PETN, CAS: 78-11-5

Signal: 1

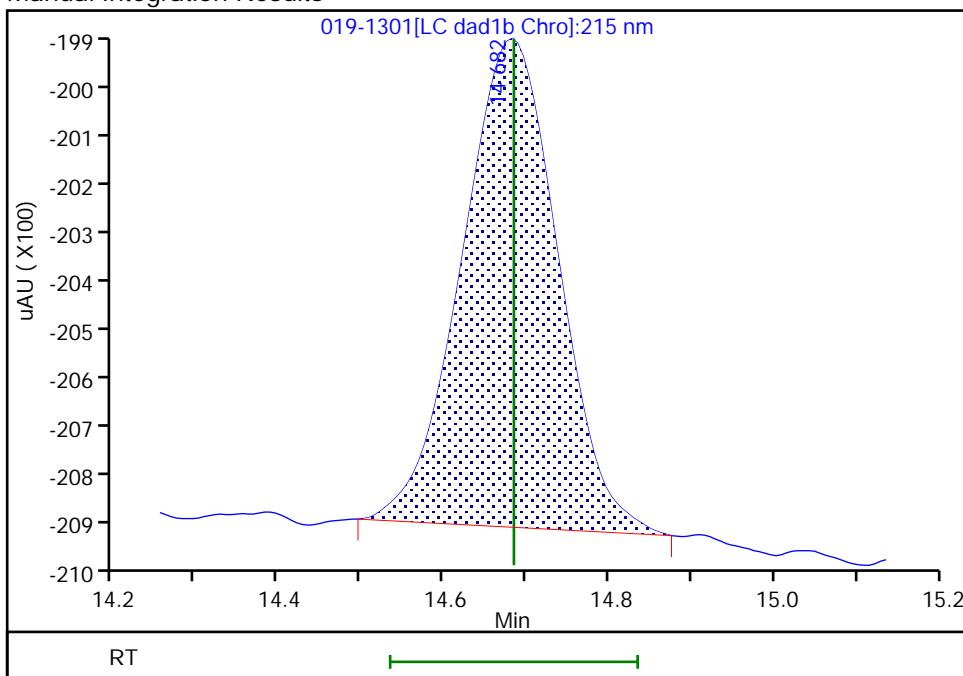
Not Detected  
 Expected RT: 14.68

## Processing Integration Results



RT: 14.68  
 Area: 7901  
 Amount: 0.105659  
 Amount Units: ug/mL

## Manual Integration Results



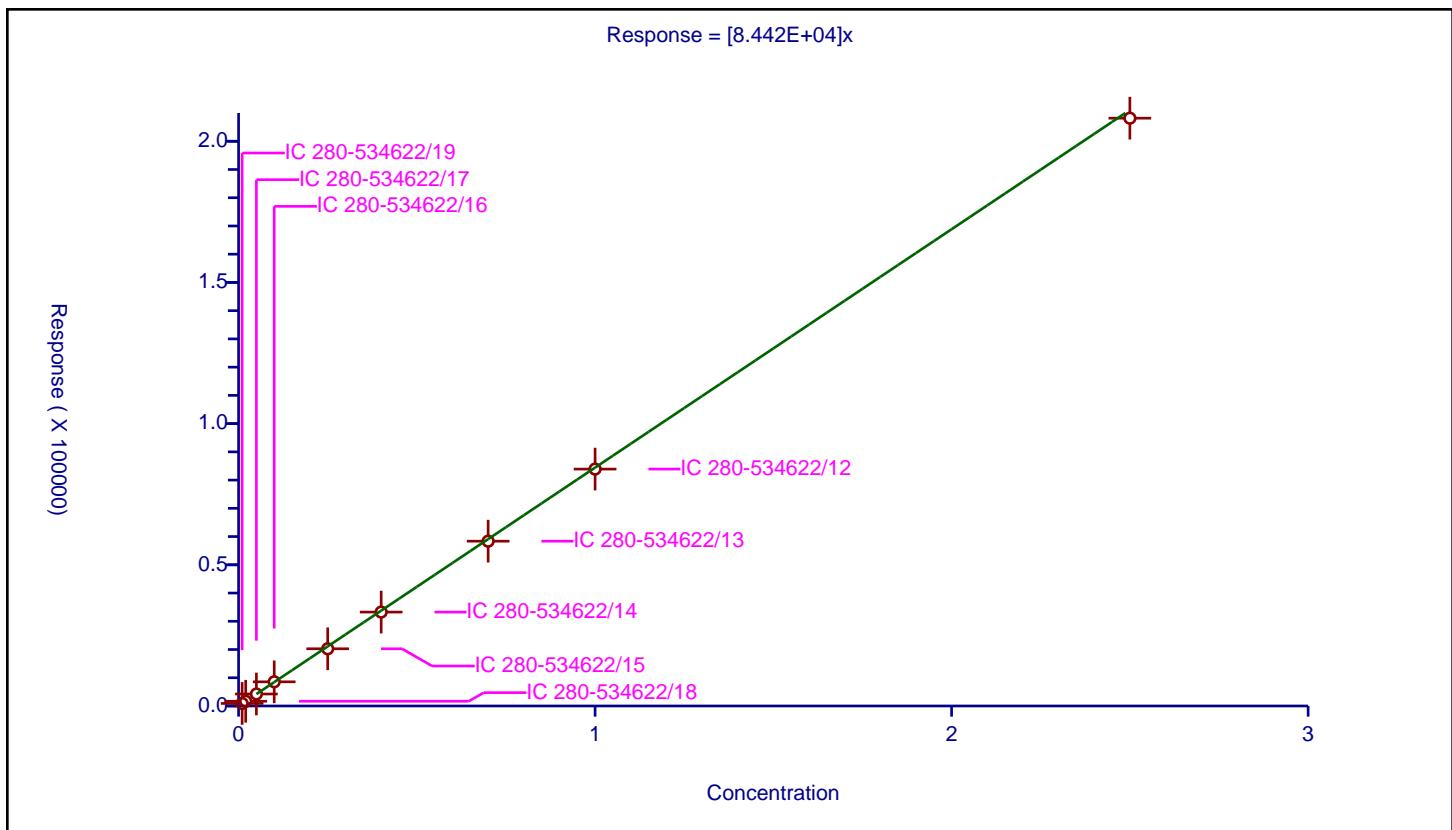
Reviewer: zhangji, 04-May-2021 13:17:51

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	8.442E+04
Error Coefficients	
Standard Error:	1130
Relative Standard Error:	3.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534622/19	0.01	906.0			90600.0	Y
2	IC 280-534622/18	0.02	1680.0			84000.0	Y
3	IC 280-534622/17	0.05	4242.0			84840.0	Y
4	IC 280-534622/16	0.1	8561.0			85610.0	Y
5	IC 280-534622/15	0.25	20261.0			81044.0	Y
6	IC 280-534622/14	0.4	33261.0			83152.5	Y
7	IC 280-534622/13	0.7	58367.0			83381.428571	Y
8	IC 280-534622/12	1.0	83899.0			83899.0	Y
9	IC 280-534622/11	2.5	208165.0			83266.0	Y



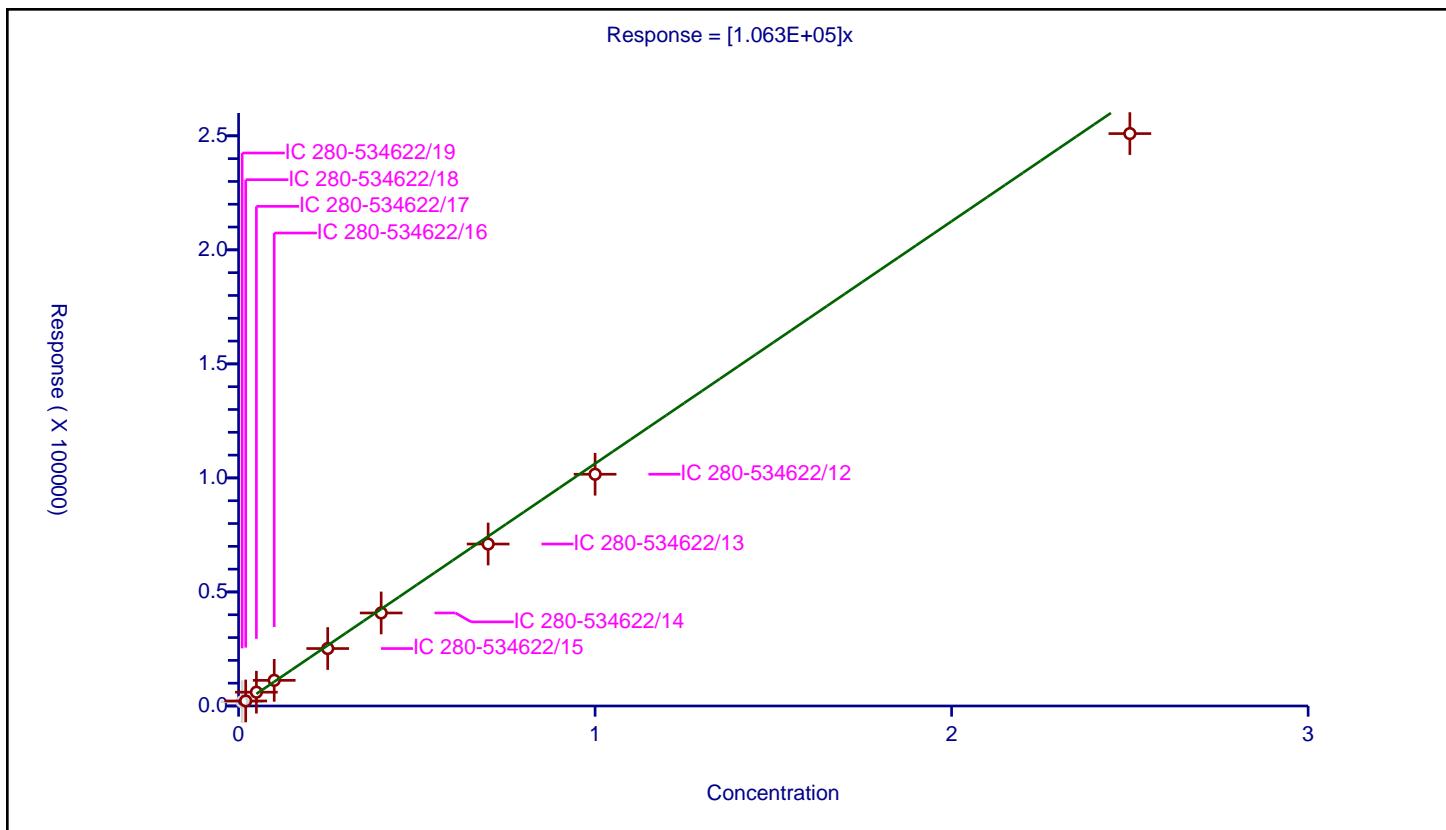
## Calibration

/ RDX

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	1.063E+05
Error Coefficients	
Standard Error:	6020
Relative Standard Error:	7.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534622/19	0.01	1876.0			187600.0	N
2	IC 280-534622/18	0.02	2207.0			110350.0	Y
3	IC 280-534622/17	0.05	6054.0			121080.0	Y
4	IC 280-534622/16	0.1	11245.0			112450.0	Y
5	IC 280-534622/15	0.25	25193.0			100772.0	Y
6	IC 280-534622/14	0.4	40790.0			101975.0	Y
7	IC 280-534622/13	0.7	71020.0			101457.142857	Y
8	IC 280-534622/12	1.0	101616.0			101616.0	Y
9	IC 280-534622/11	2.5	250979.0			100391.6	Y



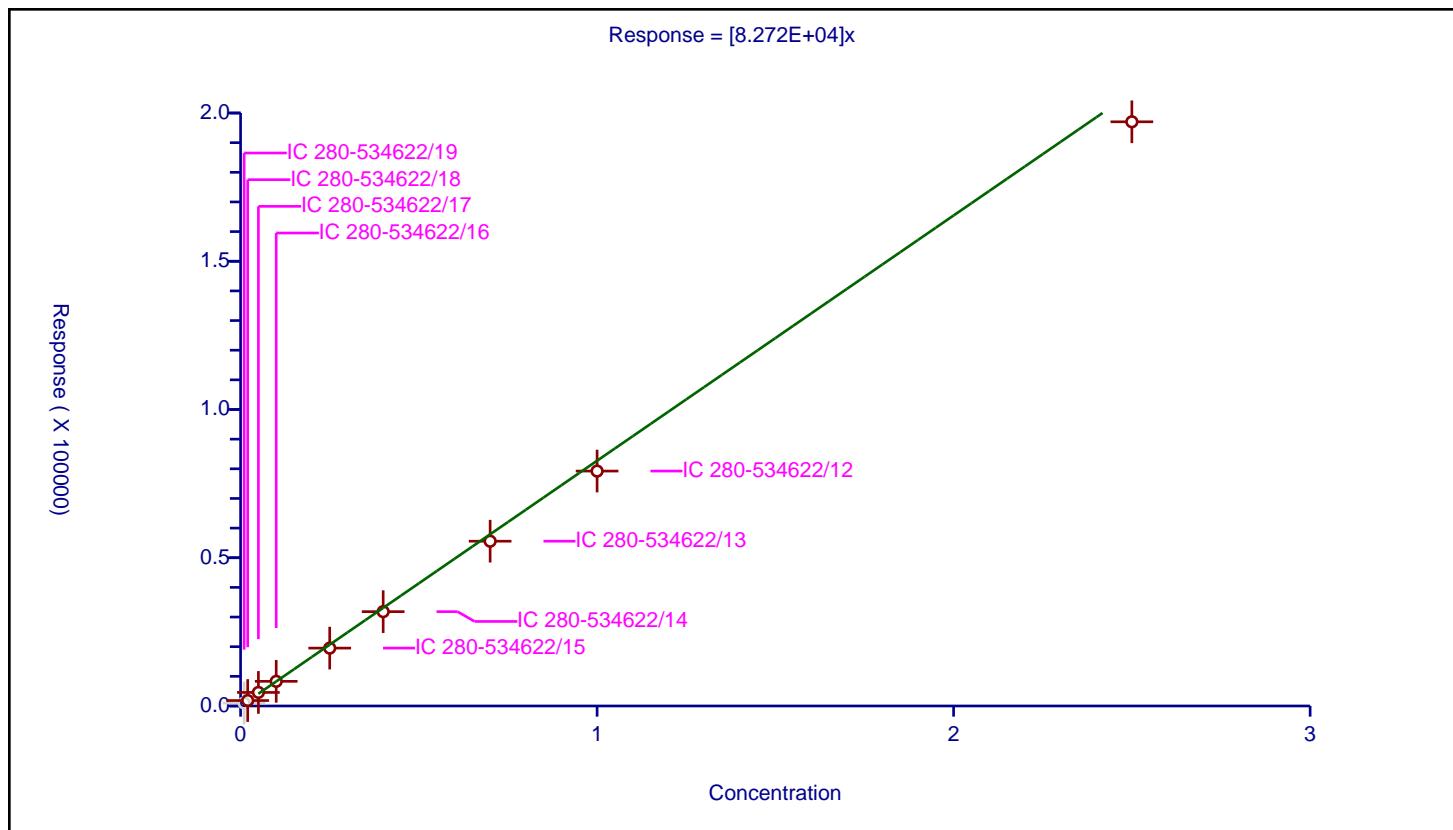
## Calibration

## / 2,4,6-Trinitrophenol

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	8.272E+04
Error Coefficients	
Standard Error:	4070
Relative Standard Error:	7.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534622/19	0.01	1003.0			100300.0	N
2	IC 280-534622/18	0.02	1840.0			92000.0	Y
3	IC 280-534622/17	0.05	4575.0			91500.0	Y
4	IC 280-534622/16	0.1	8317.0			83170.0	Y
5	IC 280-534622/15	0.25	19525.0			78100.0	Y
6	IC 280-534622/14	0.4	31820.0			79550.0	Y
7	IC 280-534622/13	0.7	55582.0			79402.857143	Y
8	IC 280-534622/12	1.0	79230.0			79230.0	Y
9	IC 280-534622/11	2.5	197040.0			78816.0	Y



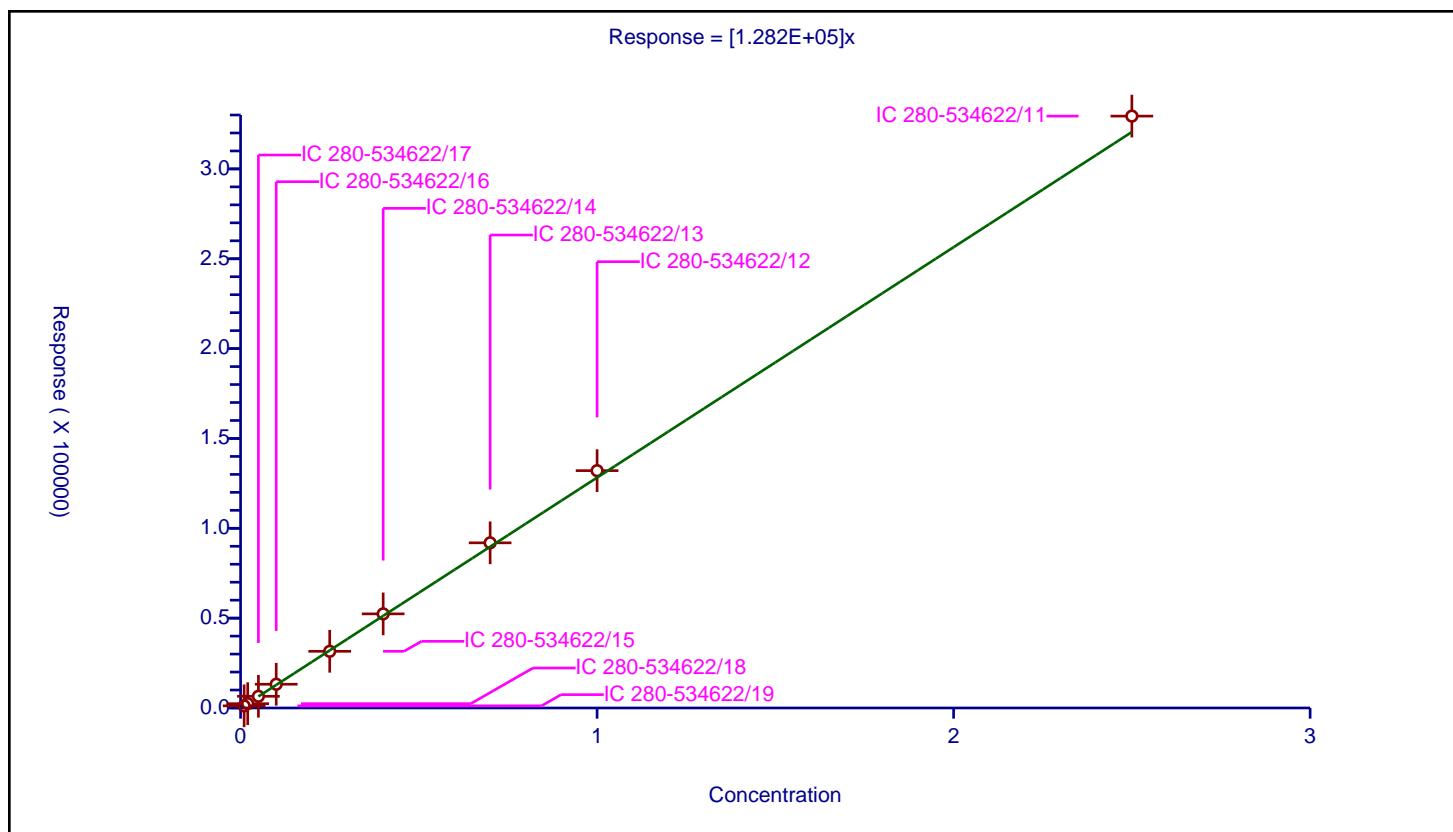
## Calibration

## / 1,2-Dinitrobenzene

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	1.282E+05
Error Coefficients	
Standard Error:	3530
Relative Standard Error:	4.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534622/19	0.01	1195.0			119500.0	Y
2	IC 280-534622/18	0.02	2399.0			119950.0	Y
3	IC 280-534622/17	0.05	6504.0			130080.0	Y
4	IC 280-534622/16	0.1	13218.0			132180.0	Y
5	IC 280-534622/15	0.25	31539.0			126156.0	Y
6	IC 280-534622/14	0.4	52377.0			130942.5	Y
7	IC 280-534622/13	0.7	91915.0			131307.142857	Y
8	IC 280-534622/12	1.0	132080.0			132080.0	Y
9	IC 280-534622/11	2.5	329398.0			131759.2	Y



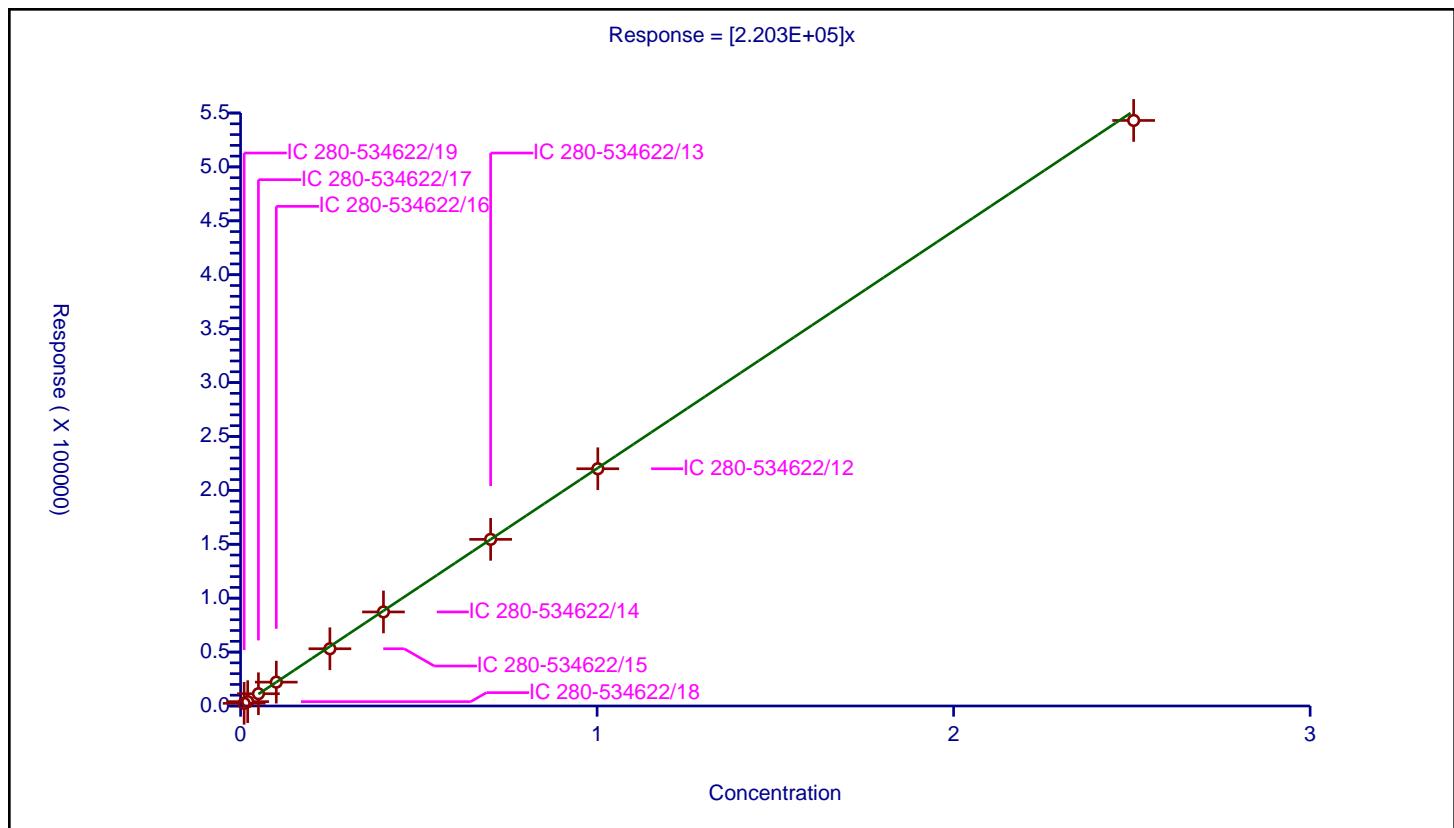
## Calibration

/ 1,3,5-Trinitrobenzene

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	2.203E+05
Error Coefficients	
Standard Error:	3230
Relative Standard Error:	5.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534622/19	0.01002	2481.0			247604.790419	Y
2	IC 280-534622/18	0.02004	4038.0			201497.005988	Y
3	IC 280-534622/17	0.0501	11361.0			226766.467066	Y
4	IC 280-534622/16	0.1002	22114.0			220698.602794	Y
5	IC 280-534622/15	0.2505	53082.0			211904.191617	Y
6	IC 280-534622/14	0.4008	87233.0			217647.205589	Y
7	IC 280-534622/13	0.7014	154539.0			220329.341317	Y
8	IC 280-534622/12	1.002	220037.0			219597.804391	Y
9	IC 280-534622/11	2.505	543111.0			216810.778443	Y



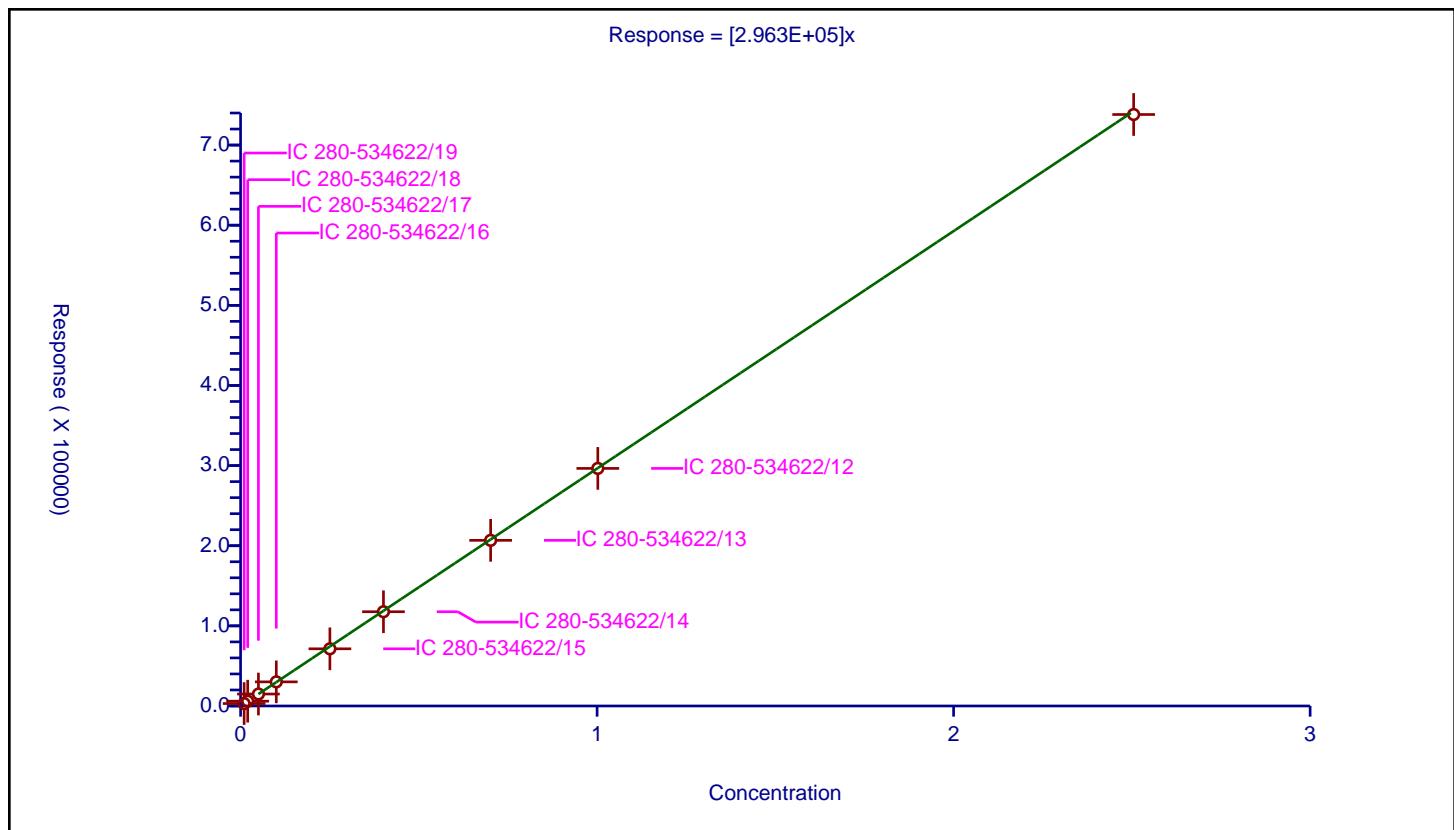
## Calibration

/ 1,3-Dinitrobenzene

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	2.963E+05
Error Coefficients	
Standard Error:	1890
Relative Standard Error:	1.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534622/19	0.01002	3052.0			304590.818363	Y
2	IC 280-534622/18	0.02004	6019.0			300349.301397	Y
3	IC 280-534622/17	0.0501	14927.0			297944.111776	Y
4	IC 280-534622/16	0.1002	30099.0			300389.221557	Y
5	IC 280-534622/15	0.2505	71373.0			284922.155689	Y
6	IC 280-534622/14	0.4008	117621.0			293465.568862	Y
7	IC 280-534622/13	0.7014	206721.0			294726.261762	Y
8	IC 280-534622/12	1.002	296509.0			295917.165669	Y
9	IC 280-534622/11	2.505	738121.0			294659.081836	Y



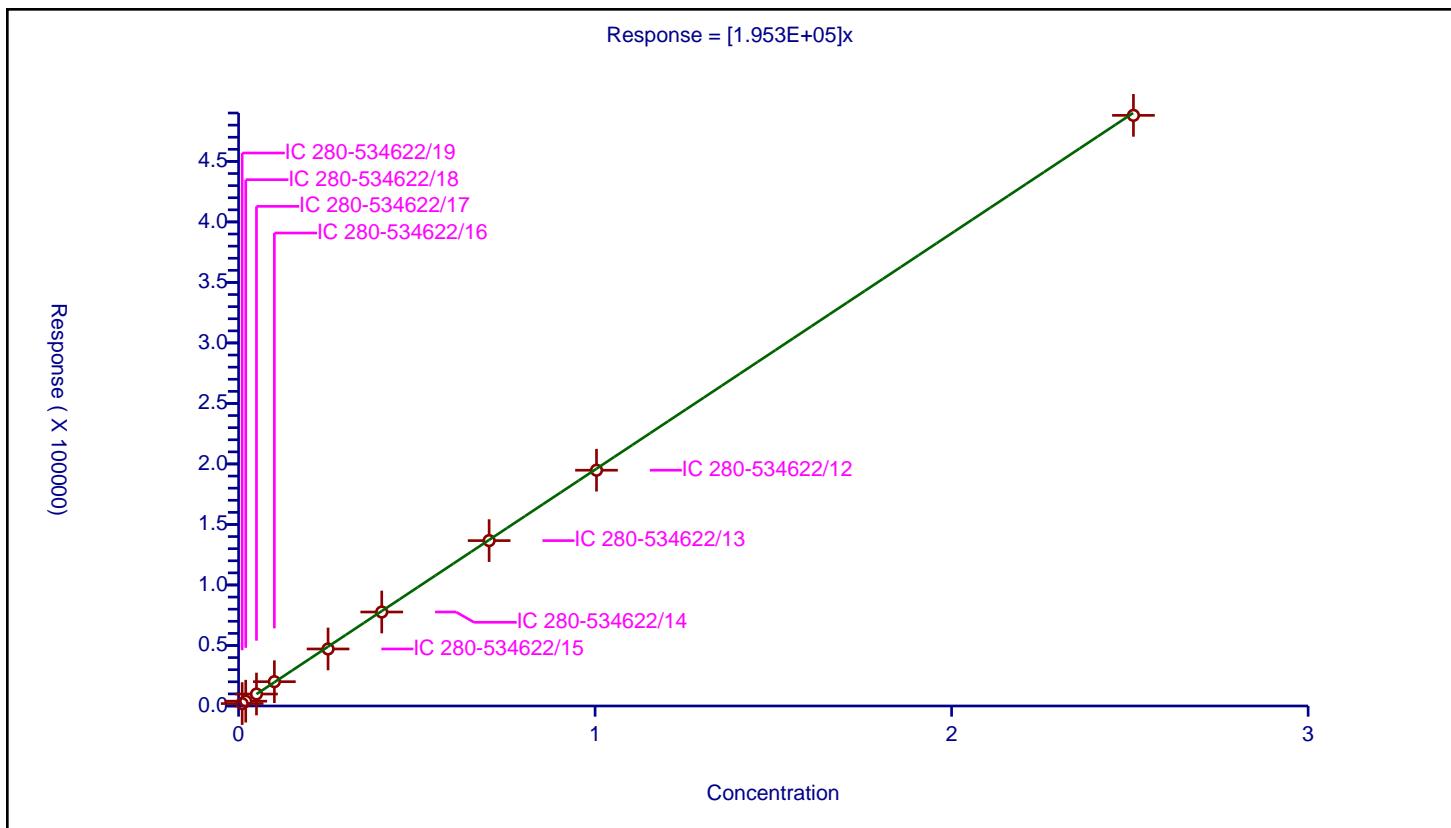
## Calibration

/ Nitrobenzene

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	1.953E+05
Error Coefficients	
Standard Error:	1160
Relative Standard Error:	1.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

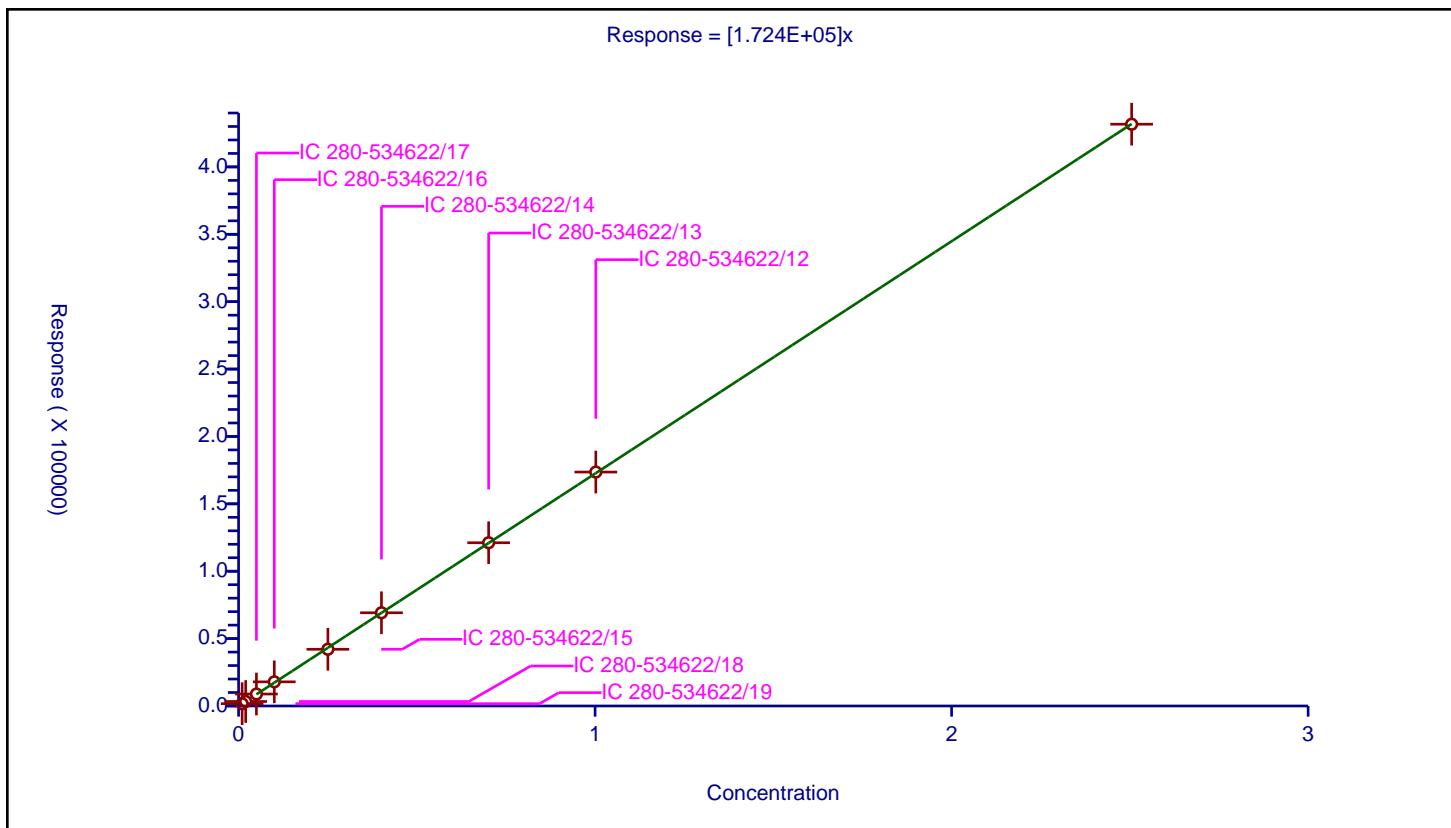
ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534622/19	0.01004	1995.0			198705.179283	Y
2	IC 280-534622/18	0.02008	3972.0			197808.76494	Y
3	IC 280-534622/17	0.0502	9892.0			197051.792829	Y
4	IC 280-534622/16	0.1004	20078.0			199980.079681	Y
5	IC 280-534622/15	0.251	47122.0			187737.051793	Y
6	IC 280-534622/14	0.4016	77656.0			193366.533865	Y
7	IC 280-534622/13	0.7028	136648.0			194433.693796	Y
8	IC 280-534622/12	1.004	194820.0			194043.824701	Y
9	IC 280-534622/11	2.51	488061.0			194446.613546	Y



**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	1.724E+05
Error Coefficients	
Standard Error:	557
Relative Standard Error:	2.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534622/19	0.01002	1712.0			170858.283433	Y
2	IC 280-534622/18	0.02004	3331.0			166217.56487	Y
3	IC 280-534622/17	0.0501	8870.0			177045.908184	Y
4	IC 280-534622/16	0.1002	17920.0			178842.315369	Y
5	IC 280-534622/15	0.2505	42079.0			167980.03992	Y
6	IC 280-534622/14	0.4008	69168.0			172574.850299	Y
7	IC 280-534622/13	0.7014	121126.0			172691.759338	Y
8	IC 280-534622/12	1.002	173586.0			173239.520958	Y
9	IC 280-534622/11	2.505	431686.0			172329.740519	Y



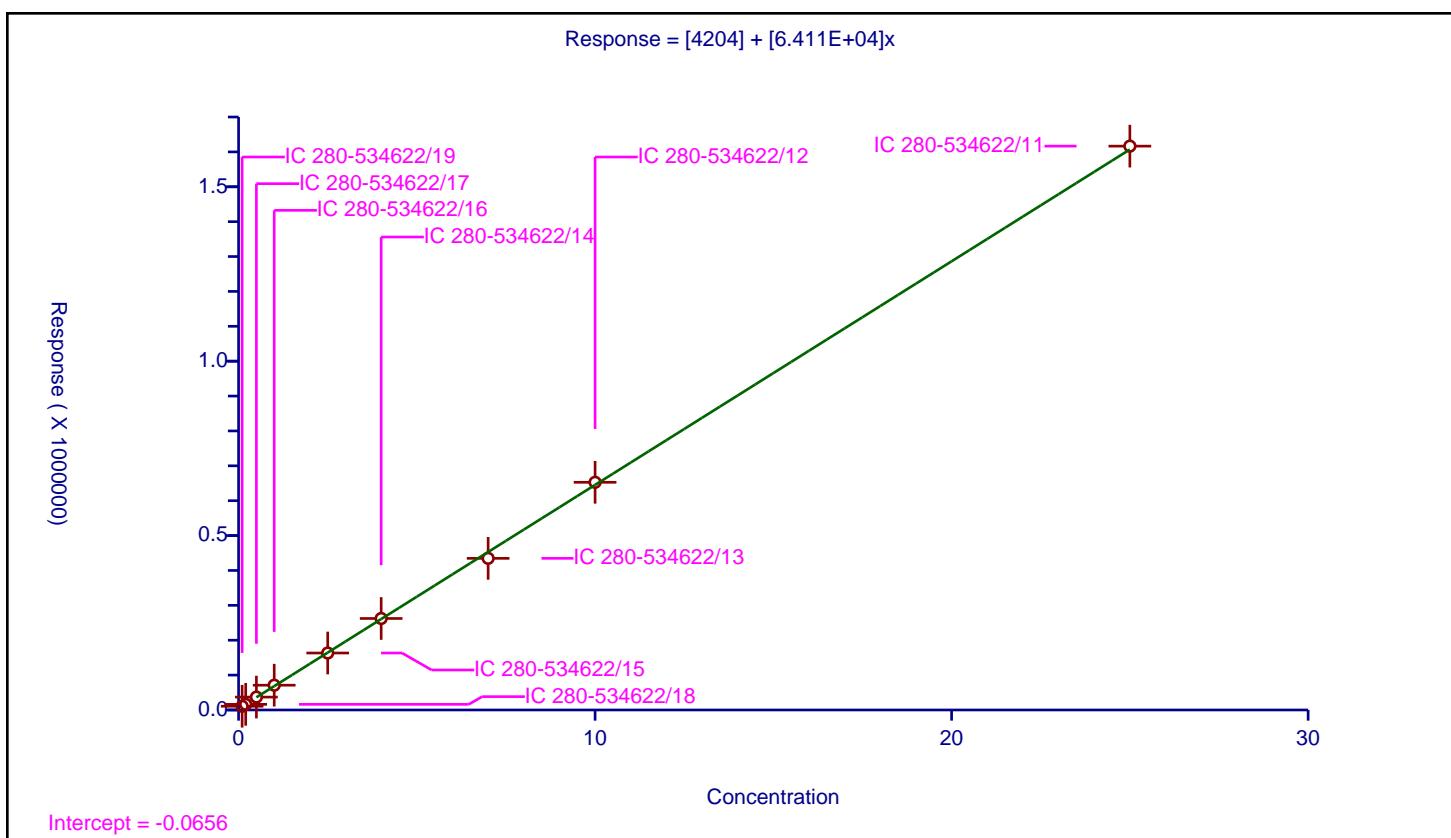
## Calibration

/ Nitroglycerin

**Curve Type:** Linear  
**Weighting:** Conc\_Sq  
**Origin:** None  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	4204
Slope:	6.411E+04
Error Coefficients	
Standard Error:	8390
Relative Standard Error:	3.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534622/19	0.1	10778.0			107780.0	Y
2	IC 280-534622/18	0.2	16162.0			80810.0	Y
3	IC 280-534622/17	0.5	36983.0			73966.0	Y
4	IC 280-534622/16	1.0	71053.0			71053.0	Y
5	IC 280-534622/15	2.5	163334.0			65333.6	Y
6	IC 280-534622/14	4.0	262320.0			65580.0	Y
7	IC 280-534622/13	7.0	434747.0			62106.714286	Y
8	IC 280-534622/12	10.0	652752.0			65275.2	Y
9	IC 280-534622/11	25.0	1616536.0			64661.44	Y



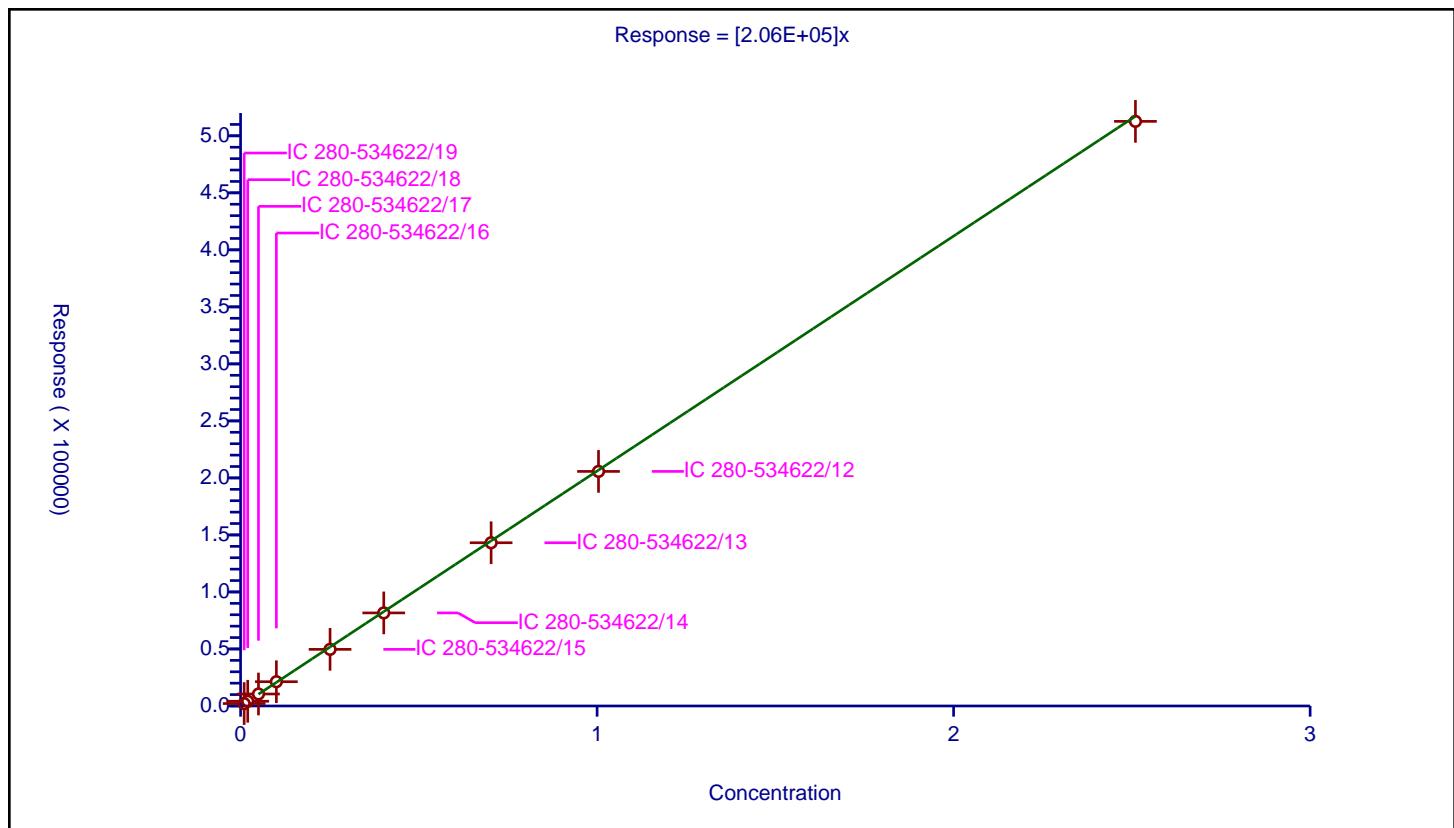
## Calibration

/ 2,4,6-Trinitrotoluene

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	2.06E+05
Error Coefficients	
Standard Error:	1930
Relative Standard Error:	2.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534622/19	0.01004	2128.0			211952.191235	Y
2	IC 280-534622/18	0.02008	4156.0			206972.111554	Y
3	IC 280-534622/17	0.0502	10514.0			209442.231076	Y
4	IC 280-534622/16	0.1004	21286.0			212011.952191	Y
5	IC 280-534622/15	0.251	49667.0			197876.494024	Y
6	IC 280-534622/14	0.4016	81630.0			203261.952191	Y
7	IC 280-534622/13	0.7028	143142.0			203673.875925	Y
8	IC 280-534622/12	1.004	205715.0			204895.418327	Y
9	IC 280-534622/11	2.51	512679.0			204254.581673	Y



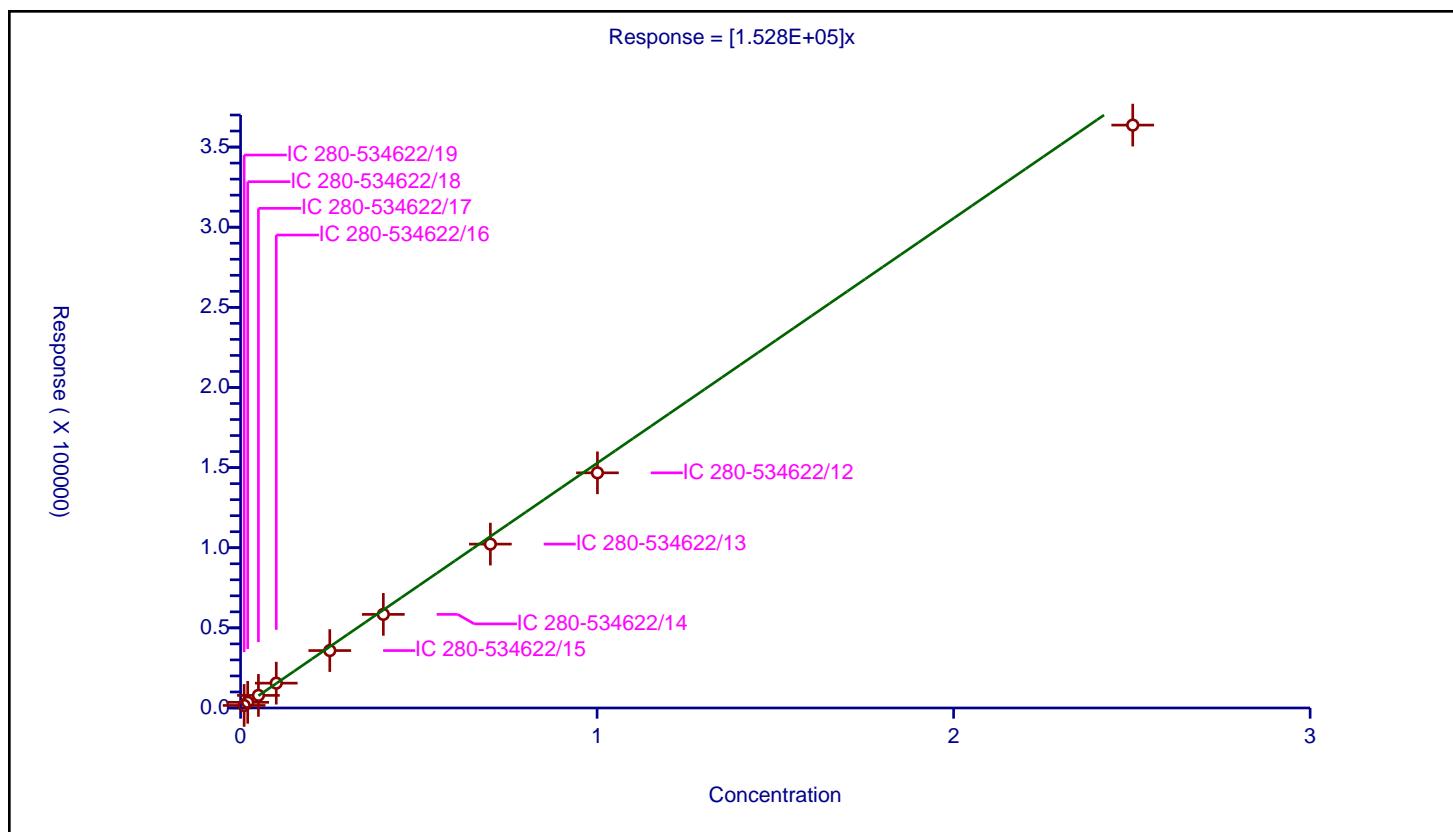
## Calibration

## / 4-Amino-2,6-dinitrotoluene

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	1.528E+05
Error Coefficients	
Standard Error:	7250
Relative Standard Error:	7.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534622/19	0.01001	1596.0			159440.559441	Y
2	IC 280-534622/18	0.02002	3532.0			176423.576424	Y
3	IC 280-534622/17	0.05005	7868.0			157202.797203	Y
4	IC 280-534622/16	0.1001	15505.0			154895.104895	Y
5	IC 280-534622/15	0.25025	35838.0			143208.791209	Y
6	IC 280-534622/14	0.4004	58412.0			145884.115884	Y
7	IC 280-534622/13	0.7007	102258.0			145936.920223	Y
8	IC 280-534622/12	1.001	146728.0			146581.418581	Y
9	IC 280-534622/11	2.5025	363710.0			145338.661339	Y



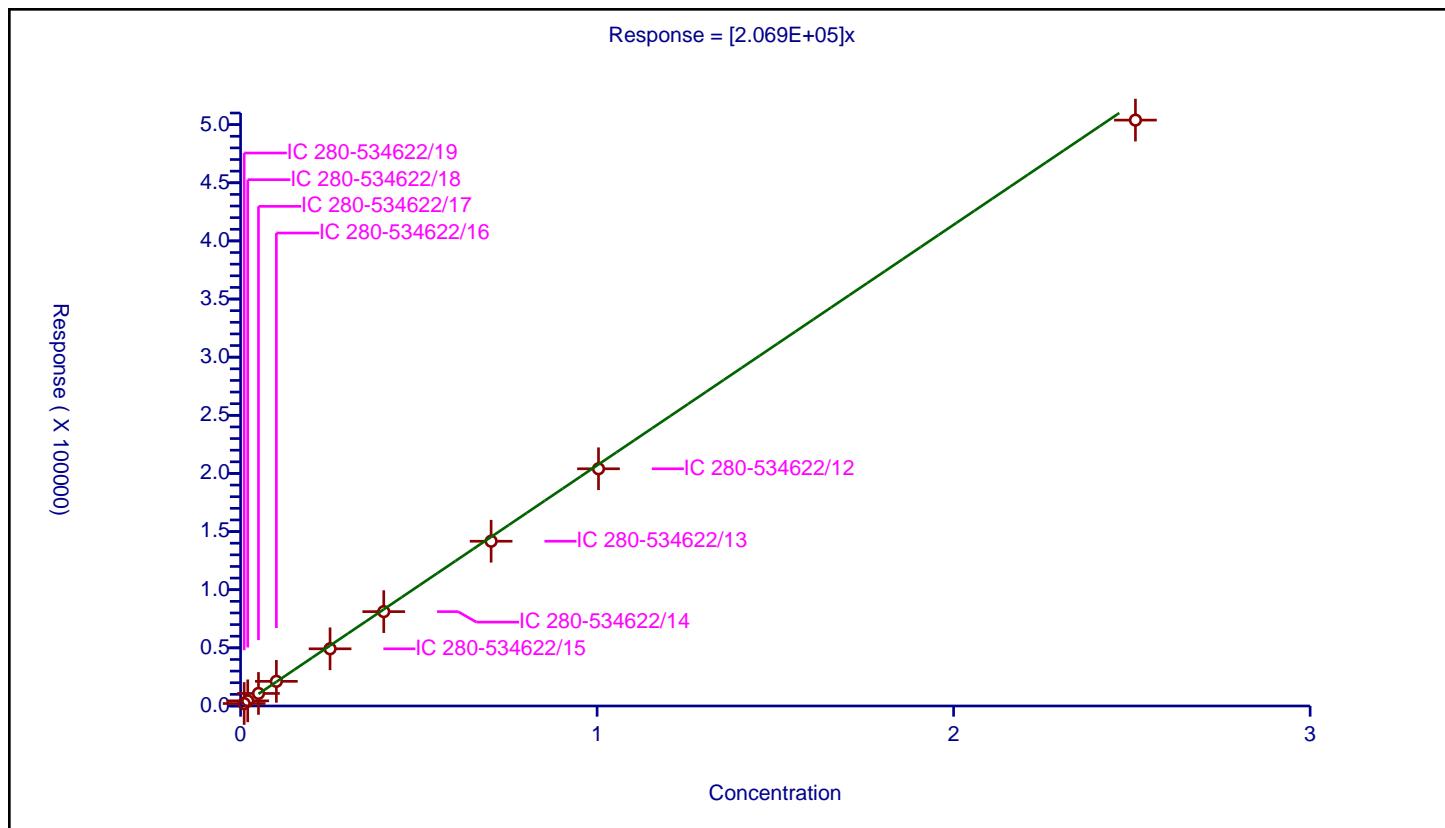
## Calibration

## / 2-Amino-4,6-dinitrotoluene

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	2.069E+05
Error Coefficients	
Standard Error:	5900
Relative Standard Error:	3.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534622/19	0.01004	2126.0			211752.988048	Y
2	IC 280-534622/18	0.02008	4433.0			220766.932271	Y
3	IC 280-534622/17	0.0502	10789.0			214920.318725	Y
4	IC 280-534622/16	0.1004	21203.0			211185.258964	Y
5	IC 280-534622/15	0.251	49194.0			195992.031873	Y
6	IC 280-534622/14	0.4016	81166.0			202106.573705	Y
7	IC 280-534622/13	0.7028	141712.0			201639.157655	Y
8	IC 280-534622/12	1.004	204025.0			203212.151394	Y
9	IC 280-534622/11	2.51	503909.0			200760.557769	Y



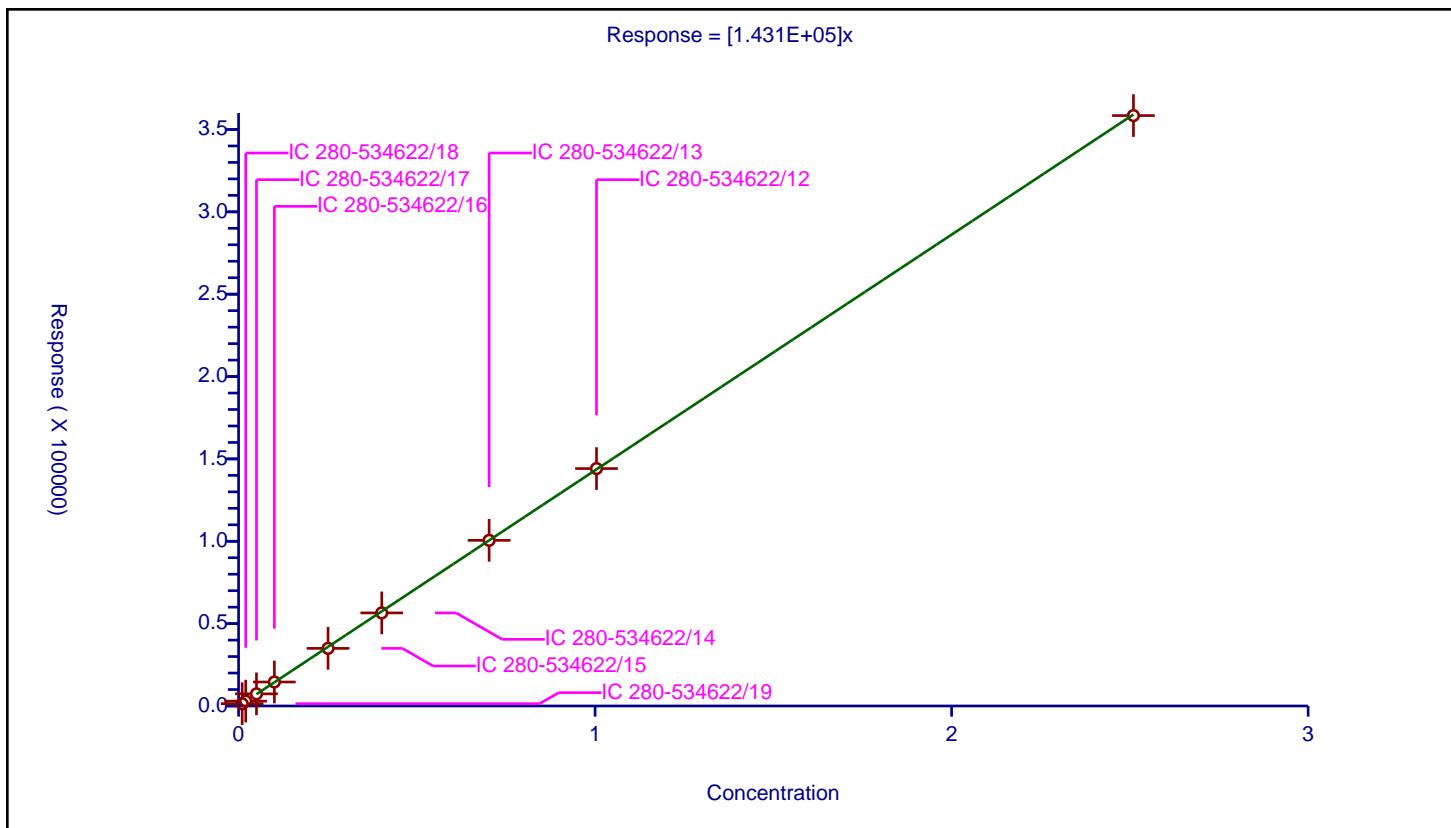
## Calibration

/ 2,6-Dinitrotoluene

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	1.431E+05
Error Coefficients	
Standard Error:	567
Relative Standard Error:	1.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534622/19	0.01004	1404.0			139840.63745	Y
2	IC 280-534622/18	0.02008	2947.0			146762.948207	Y
3	IC 280-534622/17	0.0502	7360.0			146613.545817	Y
4	IC 280-534622/16	0.1004	14557.0			144990.039841	Y
5	IC 280-534622/15	0.251	34973.0			139334.661355	Y
6	IC 280-534622/14	0.4016	56504.0			140697.211155	Y
7	IC 280-534622/13	0.7028	100565.0			143091.918042	Y
8	IC 280-534622/12	1.004	144143.0			143568.7251	Y
9	IC 280-534622/11	2.51	358451.0			142809.163347	Y



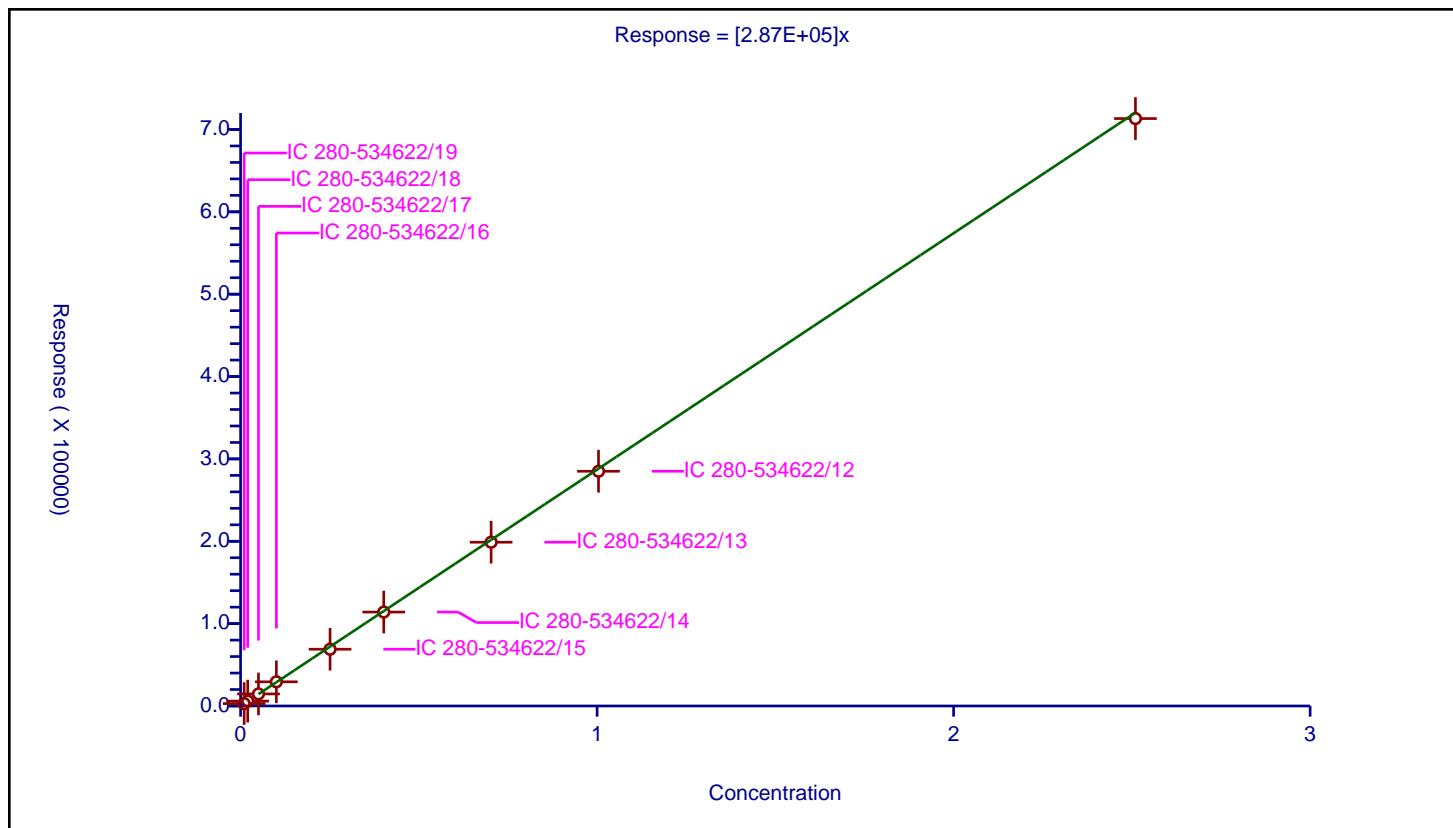
## Calibration

## / 2,4-Dinitrotoluene

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	2.87E+05
Error Coefficients	
Standard Error:	3180
Relative Standard Error:	2.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534622/19	0.01004	2944.0			293227.091633	Y
2	IC 280-534622/18	0.02008	5945.0			296065.737052	Y
3	IC 280-534622/17	0.0502	14647.0			291772.908367	Y
4	IC 280-534622/16	0.1004	29362.0			292450.199203	Y
5	IC 280-534622/15	0.251	68930.0			274621.513944	Y
6	IC 280-534622/14	0.4016	114050.0			283989.043825	Y
7	IC 280-534622/13	0.7028	198852.0			282942.515652	Y
8	IC 280-534622/12	1.004	285012.0			283876.494024	Y
9	IC 280-534622/11	2.51	713254.0			284164.940239	Y



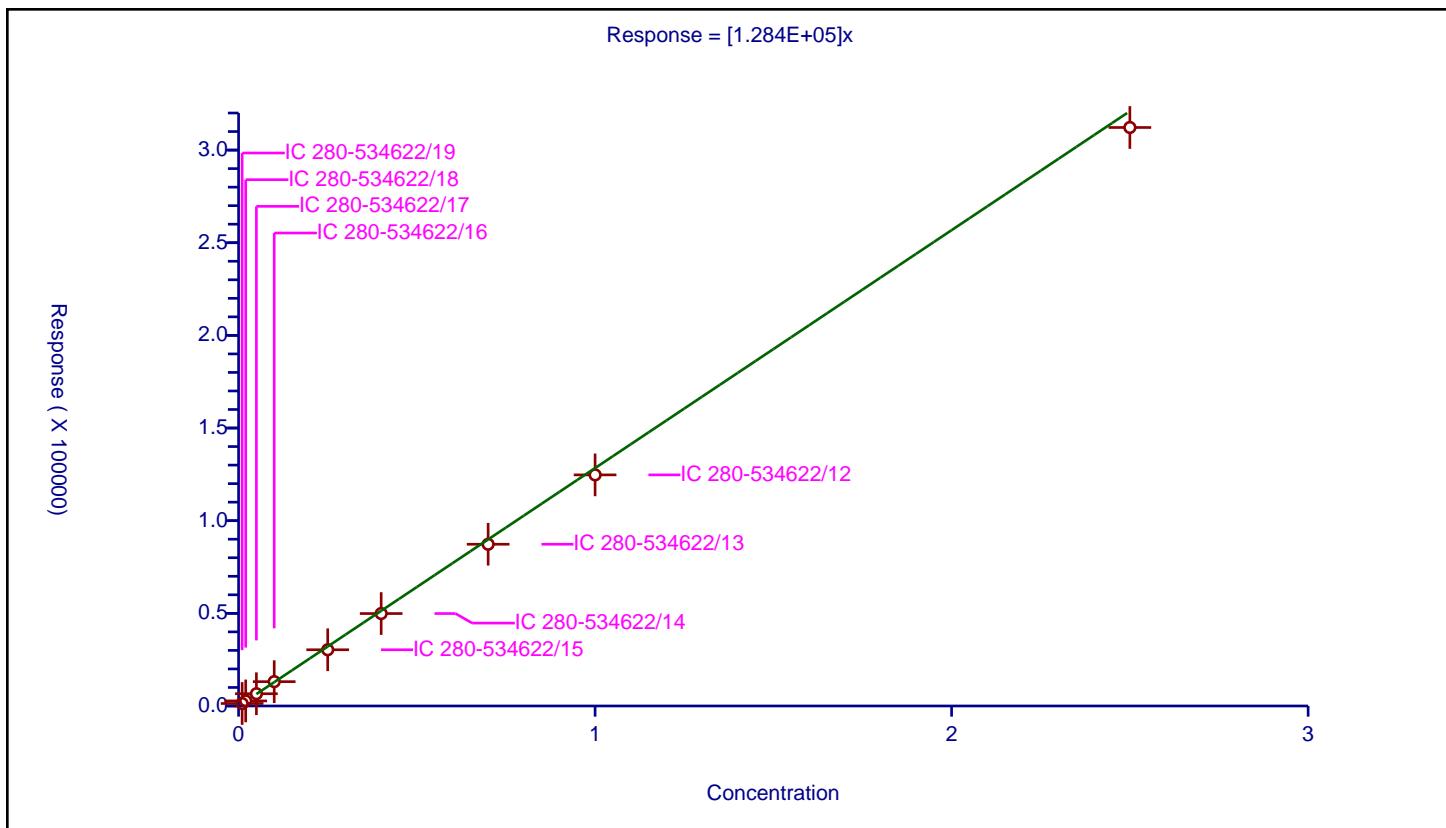
## Calibration

/ o-Nitrotoluene

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	1.284E+05
Error Coefficients	
Standard Error:	3580
Relative Standard Error:	4.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534622/19	0.01	1346.0			134600.0	Y
2	IC 280-534622/18	0.02	2737.0			136850.0	Y
3	IC 280-534622/17	0.05	6616.0			132320.0	Y
4	IC 280-534622/16	0.1	13138.0			131380.0	Y
5	IC 280-534622/15	0.25	30342.0			121368.0	Y
6	IC 280-534622/14	0.4	49881.0			124702.5	Y
7	IC 280-534622/13	0.7	87294.0			124705.714286	Y
8	IC 280-534622/12	1.0	124724.0			124724.0	Y
9	IC 280-534622/11	2.5	312191.0			124876.4	Y



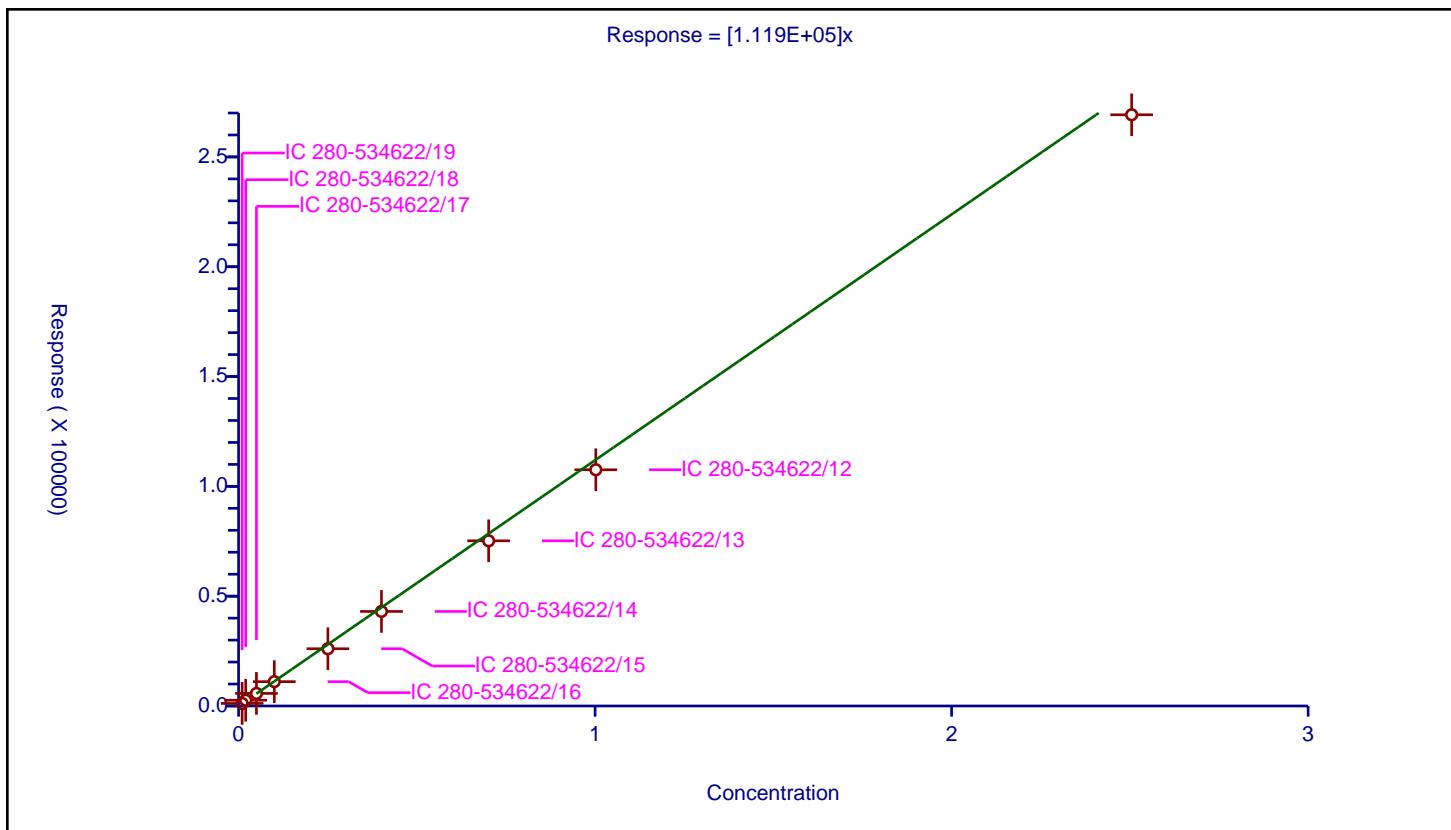
## Calibration

/ p-Nitrotoluene

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	1.119E+05
Error Coefficients	
Standard Error:	4520
Relative Standard Error:	7.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534622/19	0.01002	1177.0			117465.06986	Y
2	IC 280-534622/18	0.02004	2633.0			131387.225549	Y
3	IC 280-534622/17	0.0501	5724.0			114251.497006	Y
4	IC 280-534622/16	0.1002	11083.0			110608.782435	Y
5	IC 280-534622/15	0.2505	26060.0			104031.936128	Y
6	IC 280-534622/14	0.4008	43055.0			107422.654691	Y
7	IC 280-534622/13	0.7014	75212.0			107231.251782	Y
8	IC 280-534622/12	1.002	107567.0			107352.295409	Y
9	IC 280-534622/11	2.505	269197.0			107463.872255	Y



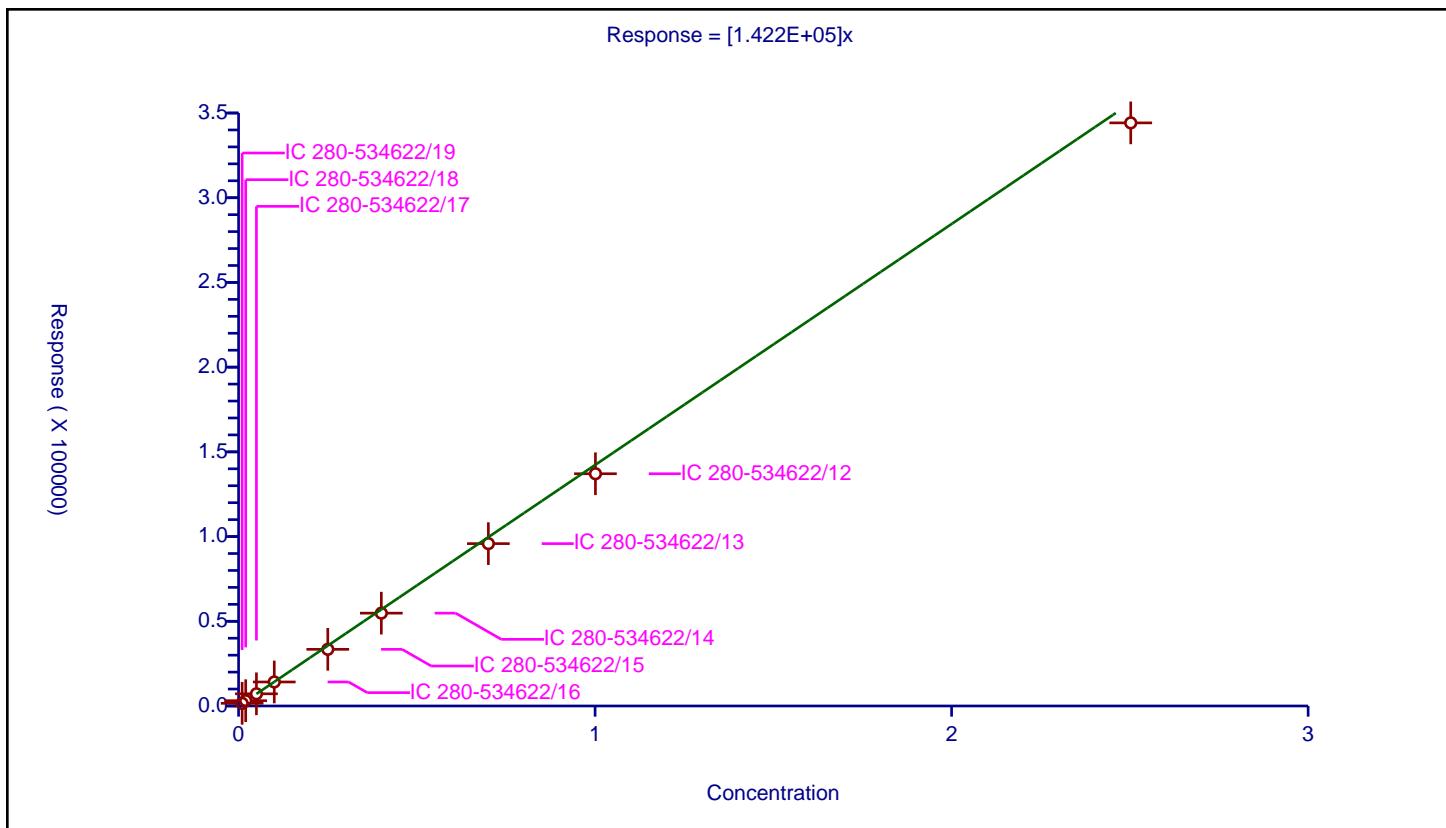
## Calibration

/ m-Nitrotoluene

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	1.422E+05
Error Coefficients	
Standard Error:	4890
Relative Standard Error:	6.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

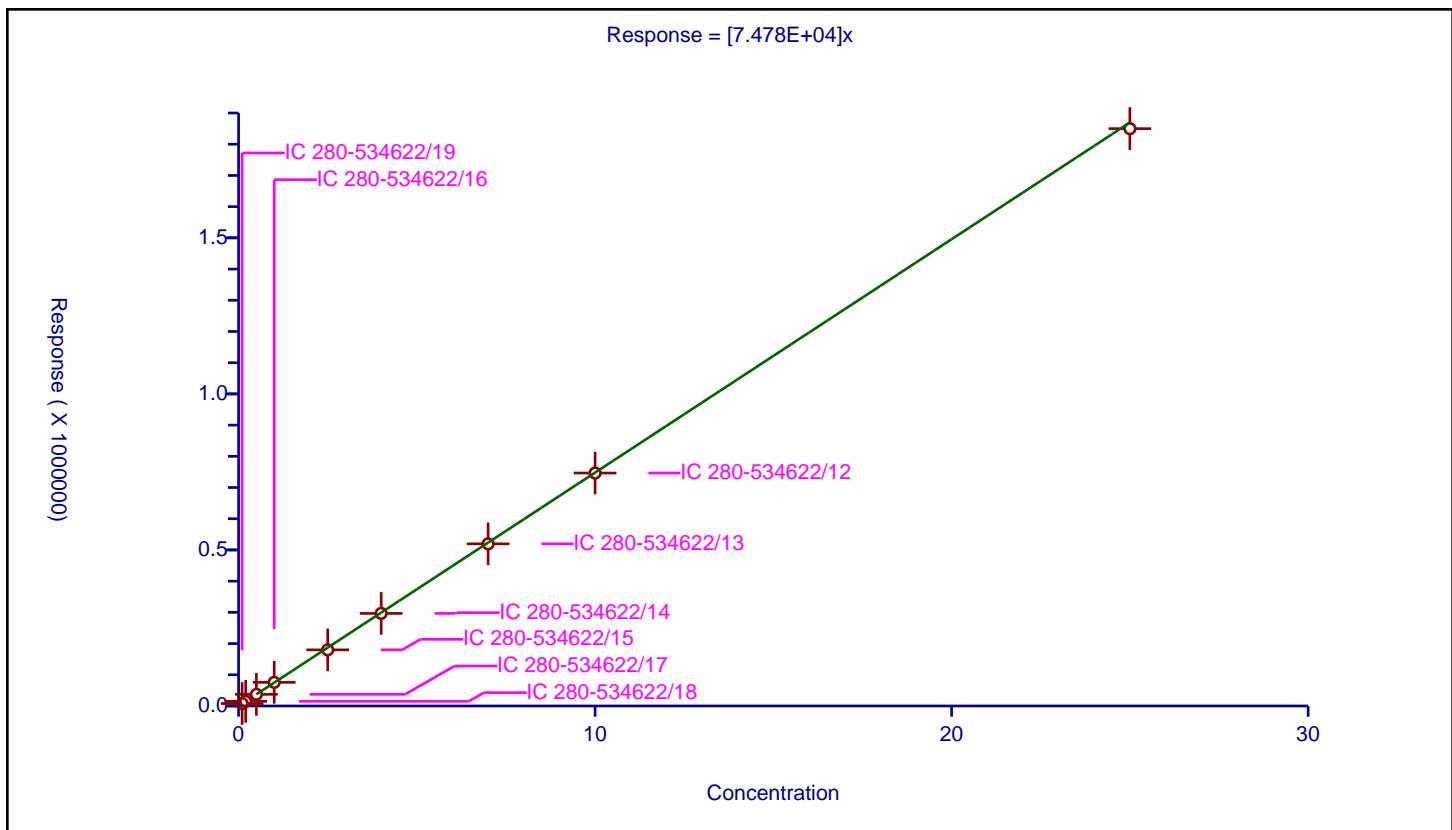
ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534622/19	0.01001	1575.0			157342.657343	Y
2	IC 280-534622/18	0.02002	3121.0			155894.105894	Y
3	IC 280-534622/17	0.05005	7187.0			143596.403596	Y
4	IC 280-534622/16	0.1001	14179.0			141648.351648	Y
5	IC 280-534622/15	0.25025	33440.0			133626.373626	Y
6	IC 280-534622/14	0.4004	54796.0			136853.146853	Y
7	IC 280-534622/13	0.7007	95835.0			136770.372485	Y
8	IC 280-534622/12	1.001	137092.0			136955.044955	Y
9	IC 280-534622/11	2.5025	344169.0			137530.06993	Y



**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	7.478E+04
Error Coefficients	
Standard Error:	7550
Relative Standard Error:	2.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534622/19	0.1	7901.0			79010.0	Y
2	IC 280-534622/18	0.2	14944.0			74720.0	Y
3	IC 280-534622/17	0.5	37293.0			74586.0	Y
4	IC 280-534622/16	1.0	75747.0			75747.0	Y
5	IC 280-534622/15	2.5	179819.0			71927.6	Y
6	IC 280-534622/14	4.0	296622.0			74155.5	Y
7	IC 280-534622/13	7.0	519589.0			74227.0	Y
8	IC 280-534622/12	10.0	746366.0			74636.6	Y
9	IC 280-534622/11	25.0	1849935.0			73997.4	Y



FORM VI  
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA  
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1 Analy Batch No.: 534620

SDG No.: \_\_\_\_\_

Instrument ID: CHHPLC\_X5 GC Column: Luna-phenyl ID: 4.6 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/01/2021 18:54 Calibration End Date: 05/01/2021 23:35 Calibration ID: 53146

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-534620/18	018-1301.D
Level 2	IC 280-534620/17	017-1201.D
Level 3	IC 280-534620/16	016-1101.D
Level 4	IC 280-534620/15	015-1001.D
Level 5	IC 280-534620/14	014-0901.D
Level 6	IC 280-534620/13	013-0801.D
Level 7	IC 280-534620/12	012-0701.D
Level 8	IC 280-534620/11	011-0601.D
Level 9	IC 280-534620/10	010-0501.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8	LVL 9	RT WINDOW	AVG RT
HMX	6.724	6.720	6.734	6.718	6.713	6.705	6.698	6.691	6.635	6.563 - 6.863	6.704
Picric acid	8.004	7.980	7.987	7.958	7.933	7.911	7.878	7.845	7.801	7.783 - 8.083	7.922
RDX	+++++	8.926	8.934	8.912	8.906	8.898	8.891	8.878	8.801	8.756 - 9.056	8.893
Nitrobenzene	+++++	11.973	11.994	11.971	11.973	11.951	11.951	11.924	11.854	11.823 - 12.123	11.949
1,3-Dinitrobenzene	15.524	15.533	15.547	15.518	15.519	15.491	15.504	15.471	15.421	15.369 - 15.669	15.503
Nitroglycerin	+++++	15.940	15.961	15.931	15.939	15.905	15.924	15.891	15.861	15.789 - 16.089	15.919
2-Nitrotoluene	16.751	16.740	16.781	16.751	16.759	16.725	16.744	16.704	16.668	16.609 - 16.909	16.736
4-Nitrotoluene	17.031	17.060	17.074	17.038	17.046	17.011	17.031	16.991	16.928	16.896 - 17.196	17.023
4-Amino-2,6-dinitrotoluene	17.511	17.520	17.541	17.511	17.526	17.485	17.504	17.458	17.421	17.376 - 17.676	17.497
3-Nitrotoluene	17.978	18.033	18.047	18.011	18.026	17.985	18.011	17.964	17.928	17.876 - 18.176	17.998
2-Amino-4,6-dinitrotoluene	18.418	18.426	18.441	18.418	18.426	18.385	18.411	18.364	18.321	18.276 - 18.576	18.401
1,3,5-Trinitrobenzene	18.904	18.946	18.954	18.931	18.939	18.905	18.924	18.884	18.861	18.789 - 19.089	18.916
2,6-Dinitrotoluene	20.191	20.200	20.201	20.185	20.199	20.158	20.184	20.138	20.114	20.049 - 20.349	20.174
2,4-Dinitrotoluene	20.644	20.666	20.674	20.652	20.666	20.625	20.651	20.605	20.581	20.516 - 20.816	20.640
Tetryl	24.271	24.306	24.287	24.298	24.313	24.258	24.304	24.245	24.248	24.163 - 24.463	24.281
2,4,6-Trinitrotoluene	25.258	25.280	25.254	25.265	25.280	25.231	25.271	25.218	25.221	25.130 - 25.430	25.253
PETN	26.151	26.180	26.154	26.172	26.186	26.145	26.184	26.138	26.155	26.036 - 26.336	26.163
1,2-Dinitrobenzene	+++++	13.093	13.114	13.091	13.093	13.065	13.071	13.044	12.988	12.943 - 13.243	13.070

FORM VI  
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA  
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1 Analy Batch No.: 534620

SDG No.: \_\_\_\_\_

Instrument ID: CHHPLC\_X5 GC Column: Luna-phenyl ID: 4.6 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/01/2021 18:54 Calibration End Date: 05/01/2021 23:35 Calibration ID: 53146

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-534620/18	018-1301.D
Level 2	IC 280-534620/17	017-1201.D
Level 3	IC 280-534620/16	016-1101.D
Level 4	IC 280-534620/15	015-1001.D
Level 5	IC 280-534620/14	014-0901.D
Level 6	IC 280-534620/13	013-0801.D
Level 7	IC 280-534620/12	012-0701.D
Level 8	IC 280-534620/11	011-0601.D
Level 9	IC 280-534620/10	010-0501.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5 LVL 9	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
HMX	254300 158320 162626	214300 160223	175820 158743	168500 161798	Lin2	980.65366 2	158773.73 3							0.9990		0.9900
Picric acid	178900 152888 141385	163500 155475	171560 152839	163400 155884	Ave		159536.70 8				7.0	20.0				
RDX	+++++ 194424 195542	226650 195463	221320 195131	206610 199019	Ave		204269.86 6				6.3	20.0				
Nitrobenzene	+++++ 361594 374427	392829 363362	384582 365280	379333 375807	Ave		374651.49 8				2.9	20.0				
1,3-Dinitrobenzene	707086 560267 567860	619311 564242	581677 563124	586467 575968	Lin2	1373.0397 6	562951.69 0							1.0000		0.9900
Nitroglycerin	+++++ 124192 125256	141495 124522	130832 124706	130447 127389	Ave		128604.80 7				4.5	20.0				
2-Nitrotoluene	302200 232764 241861	257550 236045	247460 236947	245280 240595	Ave		248966.92 7				8.5	20.0				
4-Nitrotoluene	260279 204571 203894	240669 205292	214770 204907	211786 208512	Ave		217186.80 9				9.1	20.0				

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI  
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA  
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1 Analy Batch No.: 534620

SDG No.: \_\_\_\_\_

Instrument ID: CHHPLC\_X5 GC Column: Luna-phenyl ID: 4.6 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/01/2021 18:54 Calibration End Date: 05/01/2021 23:35 Calibration ID: 53146

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4		B	M1	M2								
4-Amino-2,6-dinitrotoluene	395005 273762 275790	313487 274451	295744 274119	287902 280086	Ave		296705.05 7				13.2		20.0			
3-Nitrotoluene	351349 259473 262003	296104 260060	278581 260578	271848 265537	Ave		278392.53 8				10.7		20.0			
2-Amino-4,6-dinitrotoluene	512749 386737 391743	453884 388349	420538 388045	407410 395660	Lin2	1254.0060 4	389849.21 1							1.0000		0.9900
1,3,5-Trinitrobenzene	710180 416543 413420	525948 413743	469182 414112	445050 423023	Lin2	2883.2731 0	409600.29 1							0.9990		0.9900
2,6-Dinitrotoluene	354084 263195 266888	300100 265070	280498 266340	276106 272867	Lin2	857.02882 0	264837.01 6							1.0000		0.9900
2,4-Dinitrotoluene	659263 534514 542026	609014 537398	565657 537324	556155 550069	Ave		565713.34 2				7.4		20.0			
Tetryl	523453 323337 324746	378393 322206	350758 323640	340798 328709	Lin2	1889.6894 5	317664.73 0							0.9970		0.9900
2,4,6-Trinitrotoluene	544721 373793 382269	425697 377761	386454 378660	385857 387552	Lin2	1580.4568 1	371636.73 7							0.9980		0.9900
PETN	156590 132124 133721	137180 132892	138340 134943	136676 137199	Ave		137740.38 8				5.4		20.0			
1,2-Dinitrobenzene	+++++ 252324 253320	314000 253120	276720 251686	266780 257324	Ave		265659.21 4				8.1		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI  
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA  
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1 Analy Batch No.: 534620

SDG No.: \_\_\_\_\_

Instrument ID: CHHPLC\_X5 GC Column: Luna-phenyl ID: 4.6 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/01/2021 18:54 Calibration End Date: 05/01/2021 23:35 Calibration ID: 53146

**Calibration Files**

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-534620/18	018-1301.D
Level 2	IC 280-534620/17	017-1201.D
Level 3	IC 280-534620/16	016-1101.D
Level 4	IC 280-534620/15	015-1001.D
Level 5	IC 280-534620/14	014-0901.D
Level 6	IC 280-534620/13	013-0801.D
Level 7	IC 280-534620/12	012-0701.D
Level 8	IC 280-534620/11	011-0601.D
Level 9	IC 280-534620/10	010-0501.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
HMX	Lin2	2543 64089	4286 111120	8791 161798	16850 406565	39580	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Picric acid	Ave	1789 62190	3270 106987	8578 155884	16340 353462	38222	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
RDX	Ave	+++++ 78185	4533 136592	11066 199019	20661 488855	48606	+++++ 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Nitrobenzene	Ave	+++++ 145926	7888 256719	19306 377310	38085 939811	90760	+++++ 0.402	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251
1,3-Dinitrobenzene	Lin2	7085 226148	12411 394975	29142 577120	58764 1422490	140347	0.0100 0.401	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251
Nitroglycerin	Ave	+++++ 498088	28299 872941	65416 1273886	130447 3131400	310480	+++++ 4.00	0.200 7.00	0.500 10.0	1.00 25.0	2.50
2-Nitrotoluene	Ave	3022 94418	5151 165863	12373 240595	24528 604653	58191	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
4-Nitrotoluene	Ave	2608 82281	4823 143722	10760 208929	21221 510755	51245	0.0100 0.401	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251
4-Amino-2,6-dinitrotoluene	Ave	3954 109890	6276 192075	14802 280366	28819 690165	68509	0.0100 0.400	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250
3-Nitrotoluene	Ave	3517 104128	5928 182587	13943 265803	27212 655662	64933	0.0100 0.400	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250
2-Amino-4,6-dinitrotoluene	Lin2	5148 155961	9114 272718	21111 397243	40904 983275	97071	0.0100 0.402	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251
1,3,5-Trinitrobenzene	Lin2	7116 165828	10540 290458	23506 423869	44594 1035616	104344	0.0100 0.401	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251
2,6-Dinitrotoluene	Lin2	3555	6026	14081	27721	66062	0.0100	0.0201	0.0502	0.100	0.251

FORM VI  
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA  
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1 Analy Batch No.: 534620

SDG No.: \_\_\_\_\_

Instrument ID: CHHPLC\_X5 GC Column: Luna-phenyl ID: 4.6 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/01/2021 18:54 Calibration End Date: 05/01/2021 23:35 Calibration ID: 53146

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
		106452	187184	273958	669889		0.402	0.703	1.00	2.51	
2,4-Dinitrotoluene	Ave	6619 215819	12229 377631	28396 552269	55838 1360486	134163	0.0100 0.402	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251
Tetryl	Lin2	5245 129140	7583 227001	17573 329366	34148 813489	80996	0.0100 0.401	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251
2,4,6-Trinitrotoluene	Lin2	5469 151709	8548 266122	19400 389102	38740 959496	93822	0.0100 0.402	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251
PETN	Ave	15659 531566	27436 944599	69170 1371986	136676 3343027	330309	0.100 4.00	0.200 7.00	0.500 10.0	1.00 25.0	2.50
1,2-Dinitrobenzene	Ave	+++++ 101248	6280 176180	13836 257324	26678 633300	63081	+++++ 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 TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\010-0501.D  
 Lims ID: IC INT/ADD 9  
 Client ID:  
 Sample Type: IC Calib Level: 9  
 Inject. Date: 01-May-2021 18:54:50 ALS Bottle#: 10 Worklist Smp#: 10  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: IC INT/ADD 9  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Sublist: chrom-8330\_X5\_Luna\*sub1  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 04-May-2021 13:43:11 Calib Date: 02-May-2021 04:51:05  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\027-2201.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm) Det: LC mwd1A, 254 nm  
 Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:40:10

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.061	4.126	-0.065	1092989	2.50	2.67	
2 2,4-diamino-6-nitrotoluene	1	4.635	4.653	-0.018	538473	2.50	2.25	
6 HMX	1	6.635	6.713	-0.078	406565	2.50	2.55	
5 2,4,6-Trinitrophenol	1	7.801	7.933	-0.132	353462	2.50	2.22	
8 RDX	1	8.801	8.906	-0.105	488855	2.50	2.39	
9 Nitrobenzene	1	11.854	11.973	-0.119	939811	2.51	2.51	
\$ 10 1,2-Dinitrobenzene	1	12.988	13.093	-0.105	633300	2.50	2.38	
11 3,5-Dinitroaniline	1	14.868	14.979	-0.111	1143420	2.50	2.54	
12 1,3-Dinitrobenzene	1	15.421	15.519	-0.098	1422490	2.51	2.52	
13 Nitroglycerin	2	15.861	15.939	-0.078	3131400	25.0	24.3	
14 o-Nitrotoluene	1	16.668	16.759	-0.091	604653	2.50	2.43	
15 p-Nitrotoluene	1	16.928	17.046	-0.118	510755	2.51	2.35	
16 4-Amino-2,6-dinitrotoluene	1	17.421	17.526	-0.105	690165	2.50	2.33	
17 m-Nitrotoluene	1	17.928	18.026	-0.098	655662	2.50	2.36	
18 2-Amino-4,6-dinitrotoluene	1	18.321	18.426	-0.105	983275	2.51	2.52	
19 1,3,5-Trinitrobenzene	1	18.861	18.939	-0.078	1035616	2.51	2.52	
20 2,6-Dinitrotoluene	1	20.114	20.199	-0.085	669889	2.51	2.53	
21 2,4-Dinitrotoluene	1	20.581	20.666	-0.085	1360486	2.51	2.40	
22 Tetryl	1	24.248	24.313	-0.065	813489	2.51	2.55	
23 2,4,6-Trinitrotoluene	1	25.221	25.280	-0.059	959496	2.51	2.58	
24 PETN	2	26.155	26.186	-0.031	3343027	25.0	24.3	M

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

**Reagents:**

8330IntermStk\_00067

Amount Added: 250.00      Units: uL

8330\_ADDs\_00027

Amount Added: 125.00      Units: uL

Report Date: 04-May-2021 13:43:11

Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\010-0501.D

Injection Date: 01-May-2021 18:54:50

Instrument ID: CHHPLC\_X5

Operator ID: JZ

Lims ID: IC INT/ADD 9

Worklist Smp#: 10

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

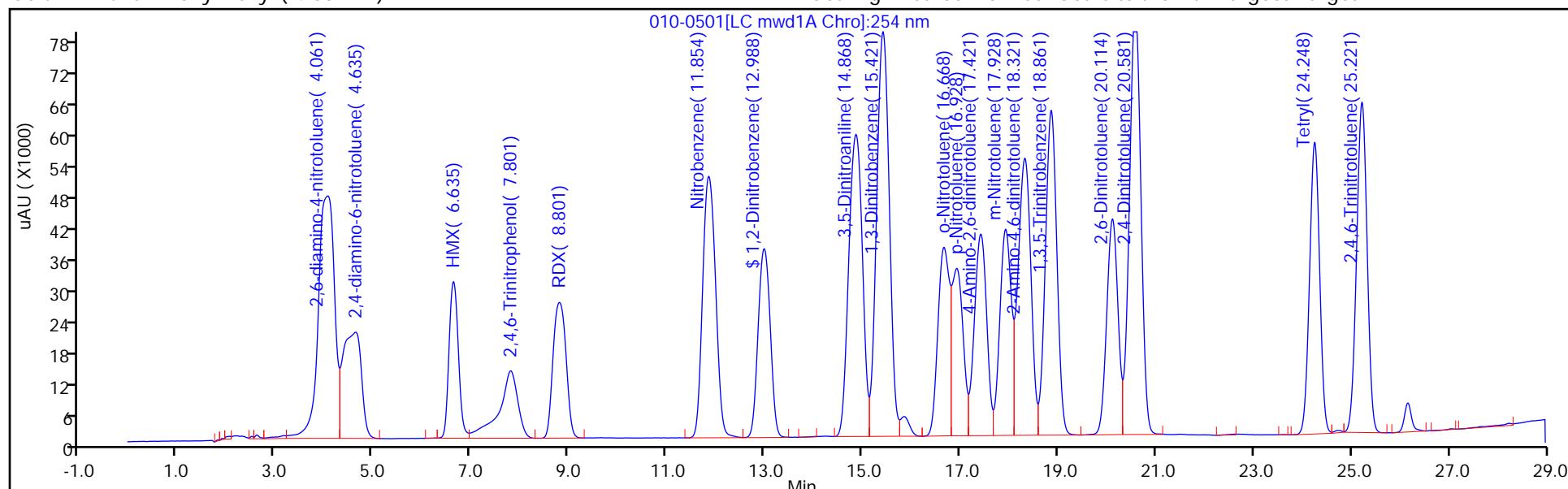
ALS Bottle#: 10

Method: 8330\_X5\_Luna

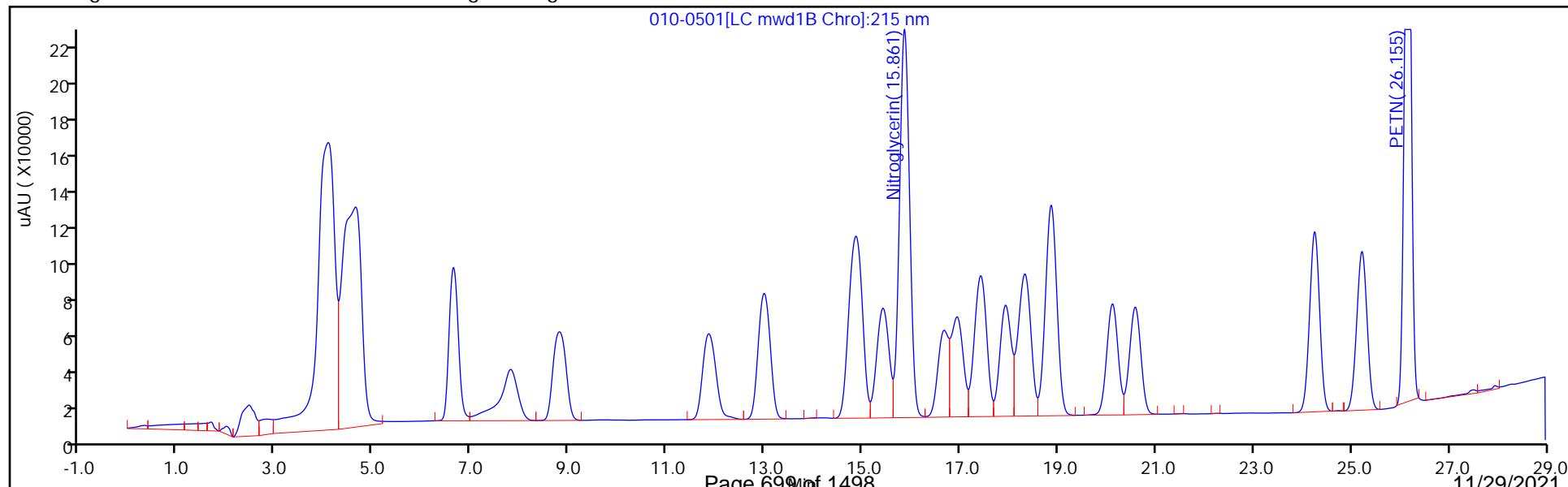
Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



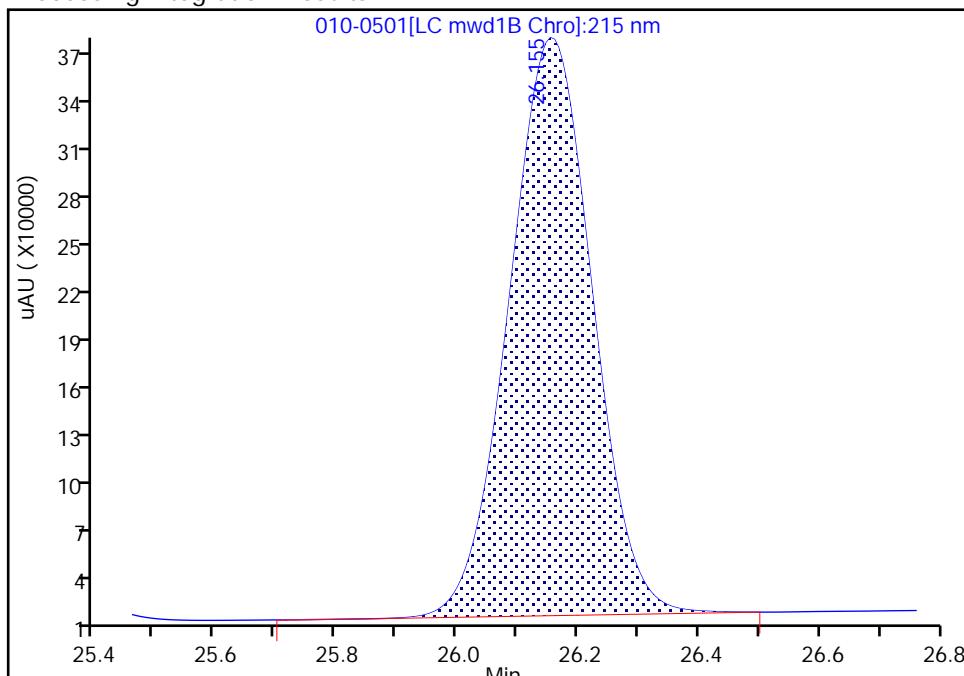
Eurofins TestAmerica, Denver  
 Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\010-0501.D  
 Injection Date: 01-May-2021 18:54:50 Instrument ID: CHHPLC\_X5  
 Lims ID: IC INT/ADD 9  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 10 Worklist Smp#: 10  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X5\_Luna Limit Group: GCSV - 8330  
 Column: Detector LC mwd1B, 215 nm

### 24 PETN, CAS: 78-11-5

Signal: 1

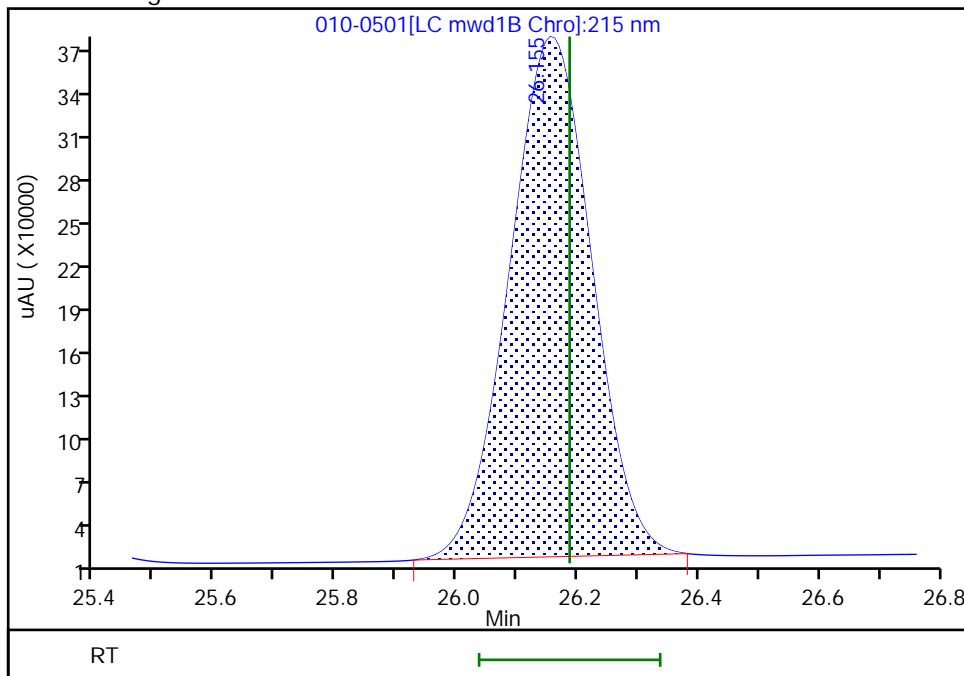
RT: 26.15  
 Area: 3390696  
 Amount: 25.717777  
 Amount Units: ug/ml

#### Processing Integration Results



RT: 26.15  
 Area: 3343027  
 Amount: 24.270492  
 Amount Units: ug/ml

#### Manual Integration Results



Reviewer: zhangji, 04-May-2021 13:40:09

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\011-0601.D  
 Lims ID: IC INT/ADD 8  
 Client ID:  
 Sample Type: IC Calib Level: 8  
 Inject. Date: 01-May-2021 19:29:53 ALS Bottle#: 11 Worklist Smp#: 11  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: IC INT/ADD 8  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Sublist: chrom-8330\_X5\_Luna\*sub1  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 04-May-2021 13:43:11 Calib Date: 02-May-2021 04:51:05  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\027-2201.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm) Det: LC mwd1A, 254 nm  
 Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:40:18

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.085	4.126	-0.041	410324	1.00	1.00	
2 2,4-diamino-6-nitrotoluene	1	4.598	4.653	-0.055	250474	1.00	1.04	
6 HMX	1	6.691	6.713	-0.022	161798	1.00	1.01	
5 2,4,6-Trinitrophenol	1	7.845	7.933	-0.088	155884	1.00	0.9771	
8 RDX	1	8.878	8.906	-0.028	199019	1.00	0.9743	
9 Nitrobenzene	1	11.924	11.973	-0.049	377310	1.00	1.01	
\$ 10 1,2-Dinitrobenzene	1	13.044	13.093	-0.049	257324	1.00	0.9686	
11 3,5-Dinitroaniline	1	14.918	14.979	-0.061	457283	1.00	1.01	
12 1,3-Dinitrobenzene	1	15.471	15.519	-0.048	577120	1.00	1.02	
13 Nitroglycerin	2	15.891	15.939	-0.048	1273886	10.0	9.91	
14 o-Nitrotoluene	1	16.704	16.759	-0.055	240595	1.00	0.9664	
15 p-Nitrotoluene	1	16.991	17.046	-0.055	208929	1.00	0.9620	
16 4-Amino-2,6-dinitrotoluene	1	17.458	17.526	-0.068	280366	1.00	0.9449	
17 m-Nitrotoluene	1	17.964	18.026	-0.062	265803	1.00	0.9548	
18 2-Amino-4,6-dinitrotoluene	1	18.364	18.426	-0.062	397243	1.00	1.02	
19 1,3,5-Trinitrobenzene	1	18.884	18.939	-0.055	423869	1.00	1.03	
20 2,6-Dinitrotoluene	1	20.138	20.199	-0.061	273958	1.00	1.03	
21 2,4-Dinitrotoluene	1	20.605	20.666	-0.062	552269	1.00	0.9762	
22 Tetryl	1	24.245	24.313	-0.068	329366	1.00	1.03	
23 2,4,6-Trinitrotoluene	1	25.218	25.280	-0.062	389102	1.00	1.04	
24 PETN	2	26.138	26.186	-0.048	1371986	10.0	9.96	M

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

**Reagents:**

8330IntermStk\_00067

Amount Added: 100.00      Units: uL

8330\_ADDs\_00027

Amount Added: 50.00      Units: uL

Report Date: 04-May-2021 13:43:12

Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\011-0601.D

Injection Date: 01-May-2021 19:29:53

Instrument ID: CHHPLC\_X5

Operator ID: JZ

Lims ID: IC INT/ADD 8

Worklist Smp#: 11

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

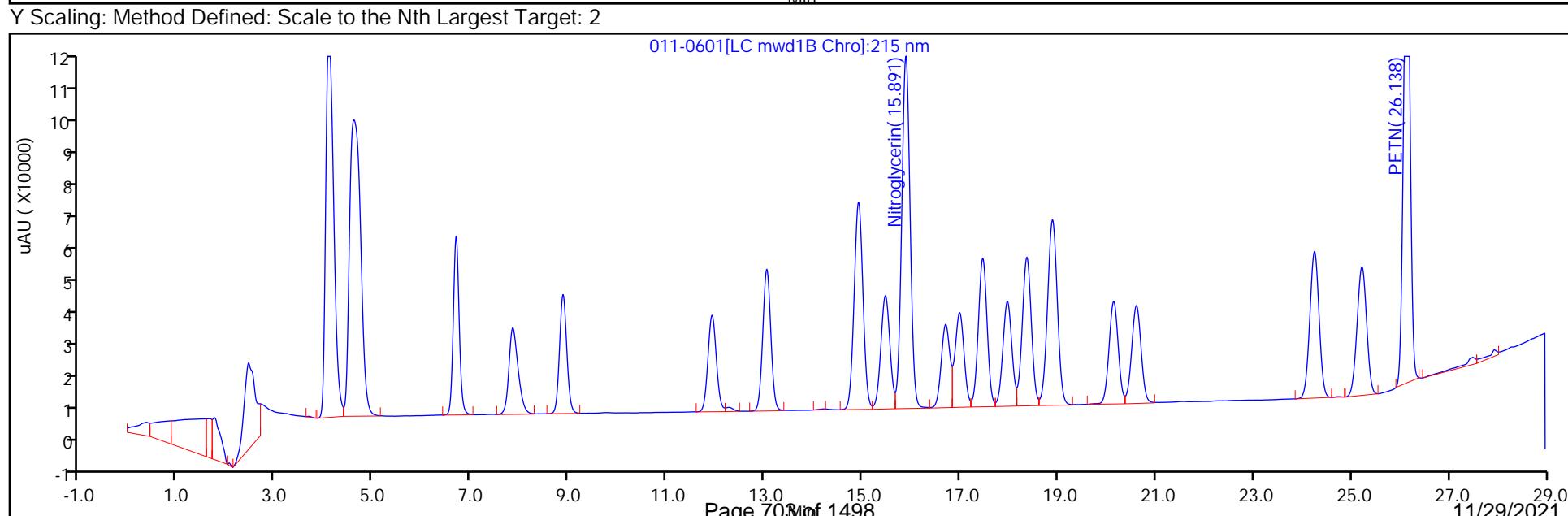
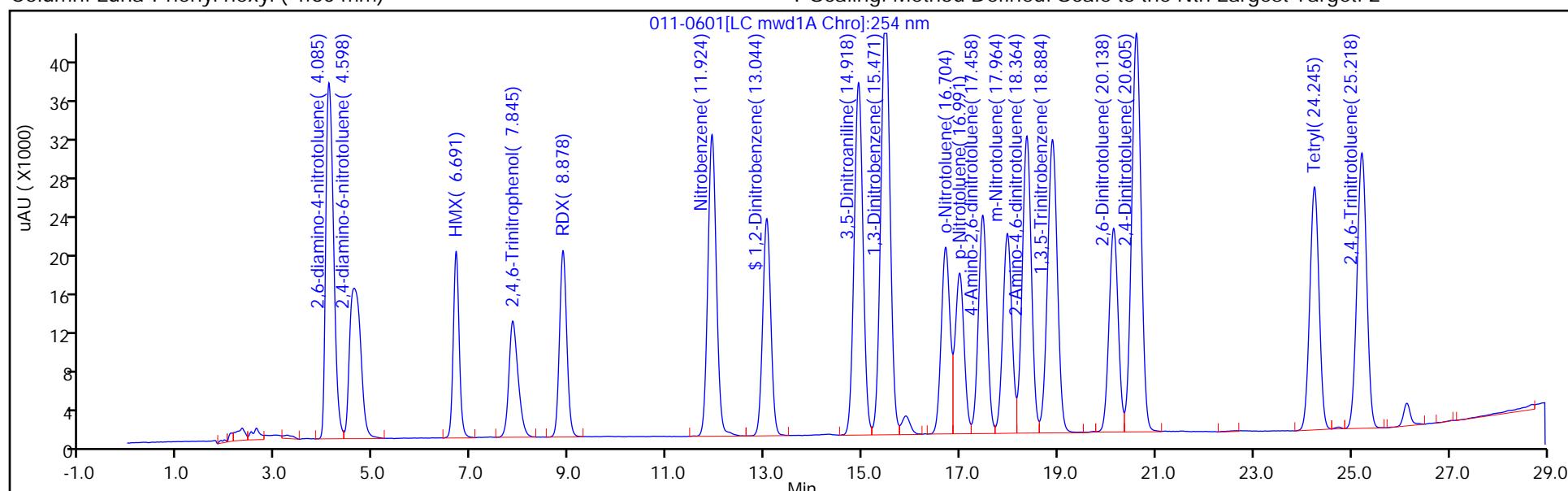
ALS Bottle#: 11

Method: 8330\_X5\_Luna

Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



## Eurofins TestAmerica, Denver

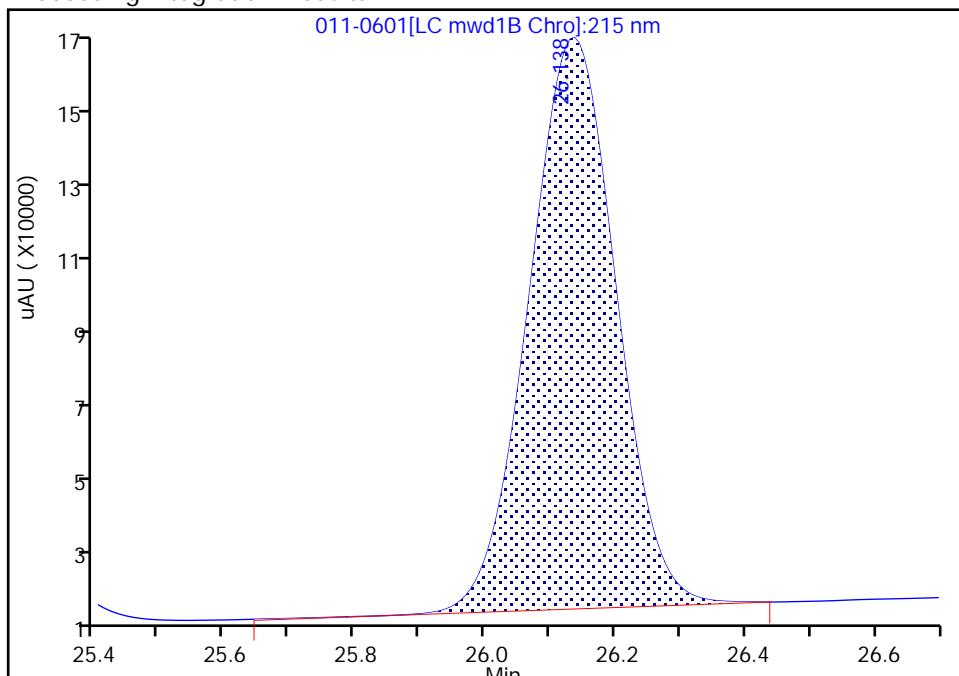
Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\011-0601.D  
 Injection Date: 01-May-2021 19:29:53 Instrument ID: CHHPLC\_X5  
 Lims ID: IC INT/ADD 8  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 11 Worklist Smp#: 11  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X5\_Luna Limit Group: GCSV - 8330  
 Column: Detector LC mwd1B, 215 nm

## 24 PETN, CAS: 78-11-5

Signal: 1

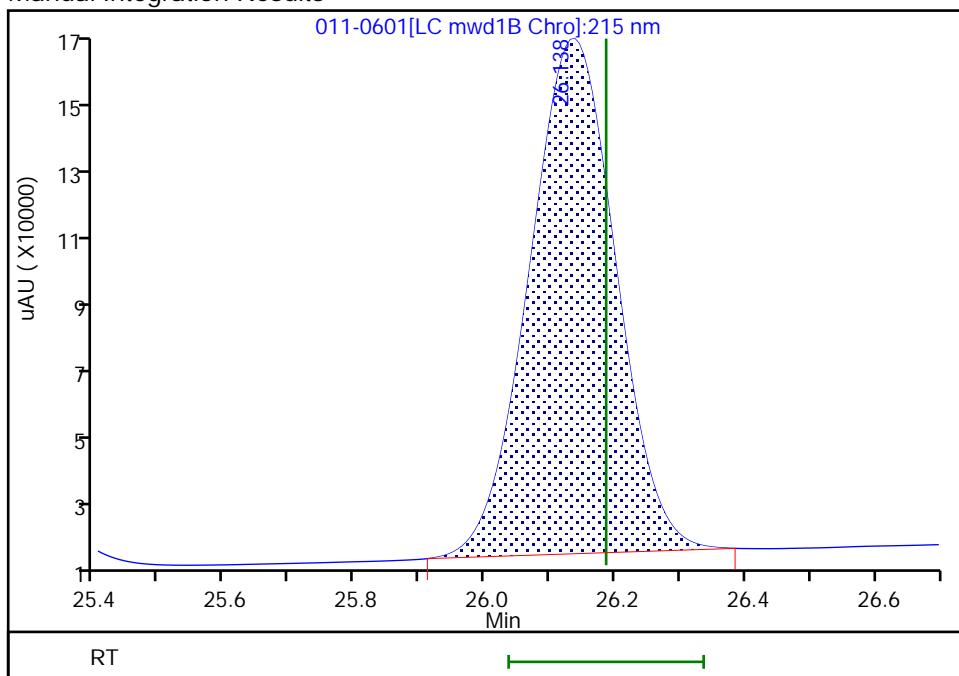
RT: 26.14  
 Area: 1384511  
 Amount: 10.424343  
 Amount Units: ug/ml

## Processing Integration Results



RT: 26.14  
 Area: 1371986  
 Amount: 9.960666  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: zhangji, 04-May-2021 13:40:17

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\012-0701.D  
 Lims ID: IC INT/ADD 7  
 Client ID:  
 Sample Type: IC Calib Level: 7  
 Inject. Date: 01-May-2021 20:04:53 ALS Bottle#: 12 Worklist Smp#: 12  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: IC INT/ADD 7  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Sublist: chrom-8330\_X5\_Luna\*sub1  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 04-May-2021 13:43:12 Calib Date: 02-May-2021 04:51:05  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\027-2201.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm) Det: LC mwd1A, 254 nm  
 Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:40:25

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.104	4.126	-0.022	286797	0.7000	0.6941	
2 2,4-diamino-6-nitrotoluene	1	4.618	4.653	-0.035	172168	0.7000	0.7152	
6 HMX	1	6.698	6.713	-0.015	111120	0.7000	0.6937	
5 2,4,6-Trinitrophenol	1	7.878	7.933	-0.055	106987	0.7000	0.6706	
8 RDX	1	8.891	8.906	-0.015	136592	0.7000	0.6687	
9 Nitrobenzene	1	11.951	11.973	-0.022	256719	0.7028	0.6852	
\$ 10 1,2-Dinitrobenzene	1	13.071	13.093	-0.022	176180	0.7000	0.6632	
11 3,5-Dinitroaniline	1	14.957	14.979	-0.022	318505	0.7000	0.7055	
12 1,3-Dinitrobenzene	1	15.504	15.519	-0.015	394975	0.7014	0.6992	
13 Nitroglycerin	2	15.924	15.939	-0.015	872941	7.00	6.79	
14 o-Nitrotoluene	1	16.744	16.759	-0.015	165863	0.7000	0.6662	
15 p-Nitrotoluene	1	17.031	17.046	-0.015	143722	0.7014	0.6617	
16 4-Amino-2,6-dinitrotoluene	1	17.504	17.526	-0.022	192075	0.7007	0.6474	
17 m-Nitrotoluene	1	18.011	18.026	-0.015	182587	0.7007	0.6559	
18 2-Amino-4,6-dinitrotoluene	1	18.411	18.426	-0.015	272718	0.7028	0.6963	
19 1,3,5-Trinitrobenzene	1	18.924	18.939	-0.015	290458	0.7014	0.7021	
20 2,6-Dinitrotoluene	1	20.184	20.199	-0.015	187184	0.7028	0.7036	
21 2,4-Dinitrotoluene	1	20.651	20.666	-0.015	377631	0.7028	0.6675	
22 Tetryl	1	24.304	24.313	-0.009	227001	0.7014	0.7086	
23 2,4,6-Trinitrotoluene	1	25.271	25.280	-0.009	266122	0.7028	0.7118	
24 PETN	2	26.184	26.186	-0.002	944599	7.00	6.86	M

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

**Reagents:**

8330IntermStk\_00067

Amount Added: 70.00      Units: uL

8330\_ADDs\_00027

Amount Added: 35.00      Units: uL

Report Date: 04-May-2021 13:43:12

Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\012-0701.D

Injection Date: 01-May-2021 20:04:53

Instrument ID: CHHPLC\_X5

Operator ID: JZ

Lims ID: IC INT/ADD 7

Worklist Smp#: 12

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

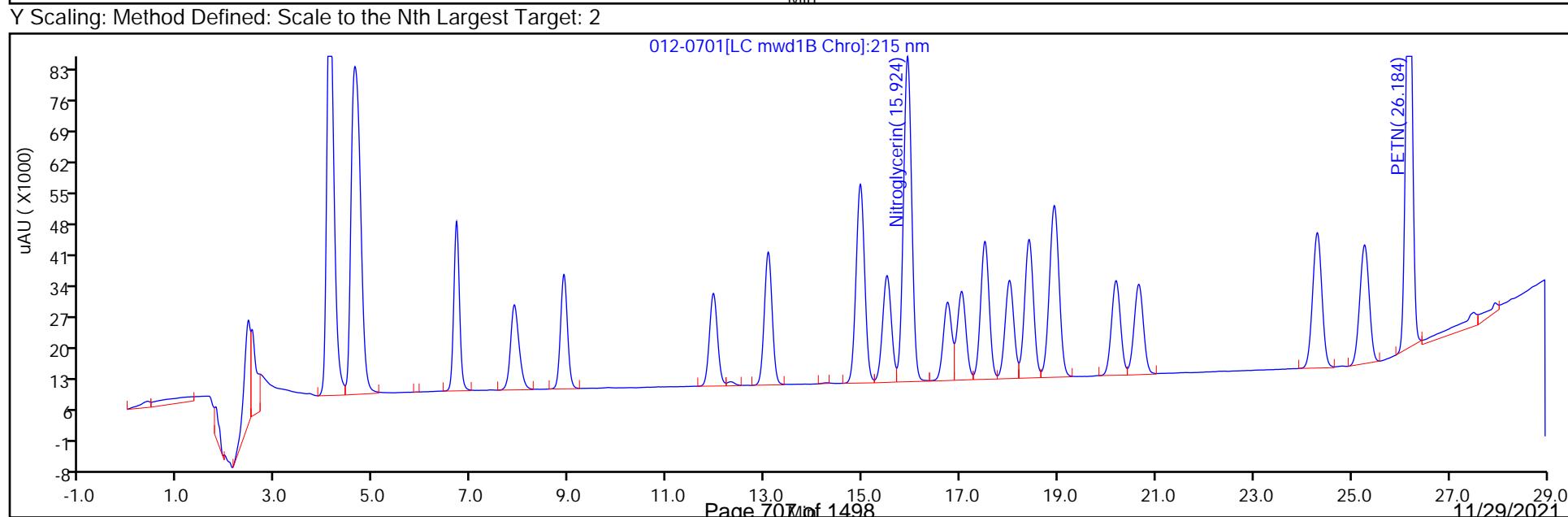
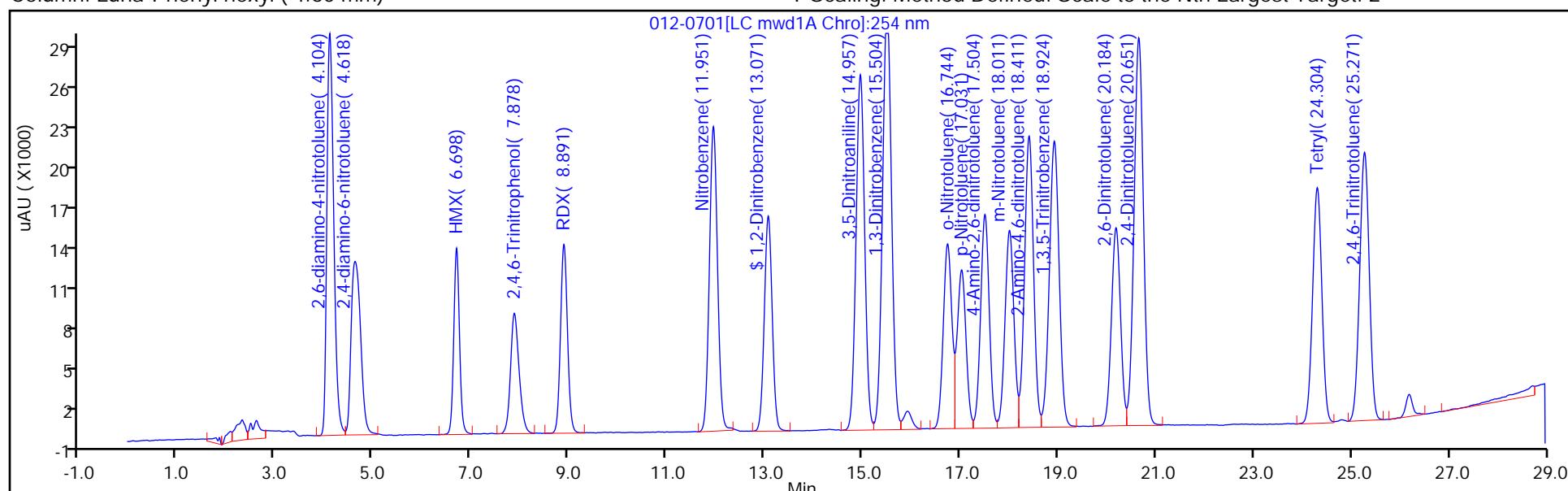
ALS Bottle#: 12

Method: 8330\_X5\_Luna

Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



## Eurofins TestAmerica, Denver

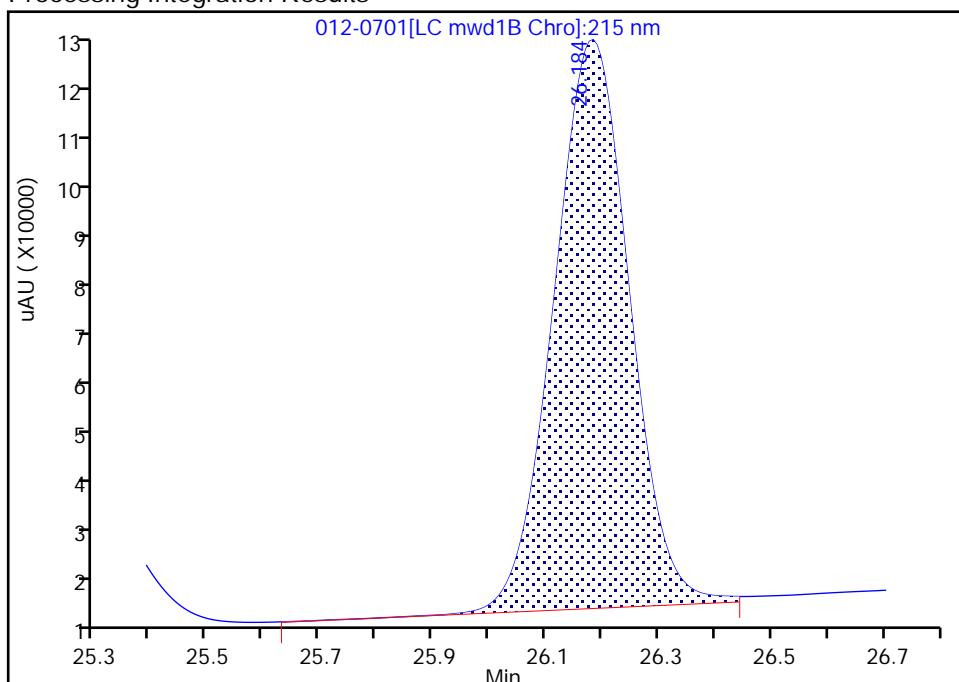
Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\012-0701.D  
 Injection Date: 01-May-2021 20:04:53 Instrument ID: CHHPLC\_X5  
 Lims ID: IC INT/ADD 7  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 12 Worklist Smp#: 12  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X5\_Luna Limit Group: GCSV - 8330  
 Column: Detector LC mwd1B, 215 nm

## 24 PETN, CAS: 78-11-5

Signal: 1

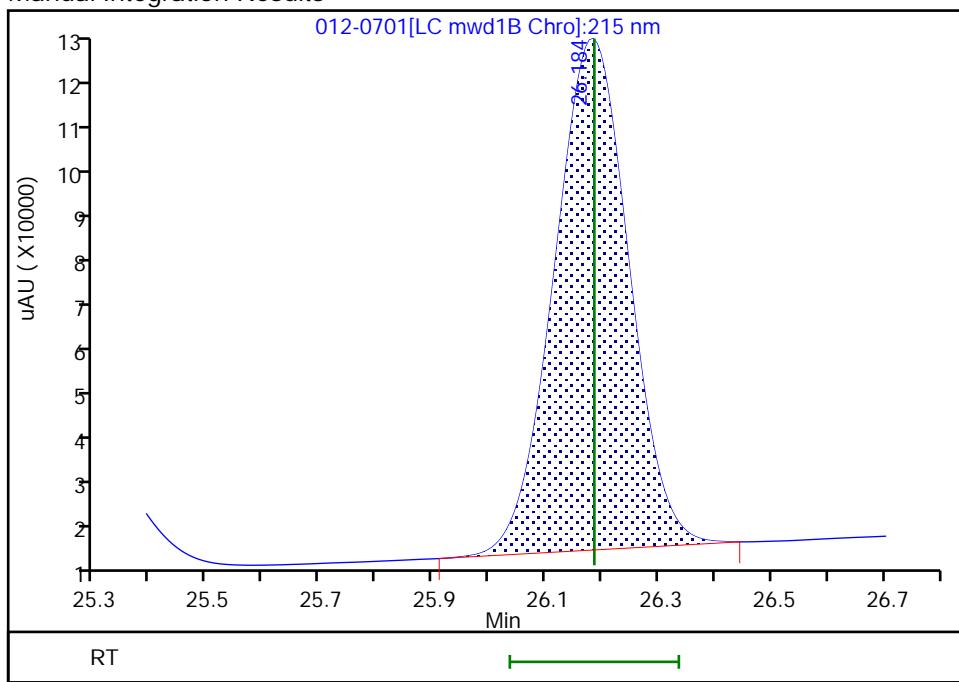
RT: 26.18  
 Area: 962158  
 Amount: 7.202862  
 Amount Units: ug/ml

## Processing Integration Results



RT: 26.18  
 Area: 944599  
 Amount: 6.857822  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: zhangji, 04-May-2021 13:40:24

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\013-0801.D  
 Lims ID: IC INT/ADD 6  
 Client ID:  
 Sample Type: IC Calib Level: 6  
 Inject. Date: 01-May-2021 20:39:55 ALS Bottle#: 13 Worklist Smp#: 13  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: IC INT/ADD 6  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Sublist: chrom-8330\_X5\_Luna\*sub1  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 04-May-2021 13:43:13 Calib Date: 02-May-2021 04:51:05  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\027-2201.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm) Det: LC mwd1A, 254 nm  
 Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:40:33

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.111	4.126	-0.015	166673	0.4000	0.3994	
2 2,4-diamino-6-nitrotoluene	1	4.631	4.653	-0.022	98867	0.4000	0.4084	
6 HMX	1	6.705	6.713	-0.008	64089	0.4000	0.3975	
5 2,4,6-Trinitrophenol	1	7.911	7.933	-0.022	62190	0.4000	0.3898	
8 RDX	1	8.898	8.906	-0.008	78185	0.4000	0.3828	
9 Nitrobenzene	1	11.951	11.973	-0.022	145926	0.4016	0.3895	
\$ 10 1,2-Dinitrobenzene	1	13.065	13.093	-0.028	101248	0.4000	0.3811	
11 3,5-Dinitroaniline	1	14.951	14.979	-0.028	183549	0.4000	0.4057	
12 1,3-Dinitrobenzene	1	15.491	15.519	-0.028	226148	0.4008	0.3993	
13 Nitroglycerin	2	15.905	15.939	-0.034	498088	4.00	3.87	
14 o-Nitrotoluene	1	16.725	16.759	-0.034	94418	0.4000	0.3792	
15 p-Nitrotoluene	1	17.011	17.046	-0.035	82281	0.4008	0.3788	
16 4-Amino-2,6-dinitrotoluene	1	17.485	17.526	-0.041	109890	0.4004	0.3704	
17 m-Nitrotoluene	1	17.985	18.026	-0.041	104128	0.4004	0.3740	
18 2-Amino-4,6-dinitrotoluene	1	18.385	18.426	-0.041	155961	0.4016	0.3968	
19 1,3,5-Trinitrobenzene	1	18.905	18.939	-0.034	165828	0.4008	0.3978	
20 2,6-Dinitrotoluene	1	20.158	20.199	-0.041	106452	0.4016	0.3987	
21 2,4-Dinitrotoluene	1	20.625	20.666	-0.041	215819	0.4016	0.3815	
22 Tetryl	1	24.258	24.313	-0.055	129140	0.4008	0.4006	
23 2,4,6-Trinitrotoluene	1	25.231	25.280	-0.049	151709	0.4016	0.4040	
24 PETN	2	26.145	26.186	-0.041	531566	4.00	3.86	M

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

**Reagents:**

8330IntermStk\_00067

Amount Added: 40.00      Units: uL

8330\_ADDs\_00027

Amount Added: 20.00      Units: uL

Report Date: 04-May-2021 13:43:13

Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\013-0801.D

Injection Date: 01-May-2021 20:39:55

Instrument ID: CHHPLC\_X5

Operator ID: JZ

Lims ID: IC INT/ADD 6

Worklist Smp#: 13

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

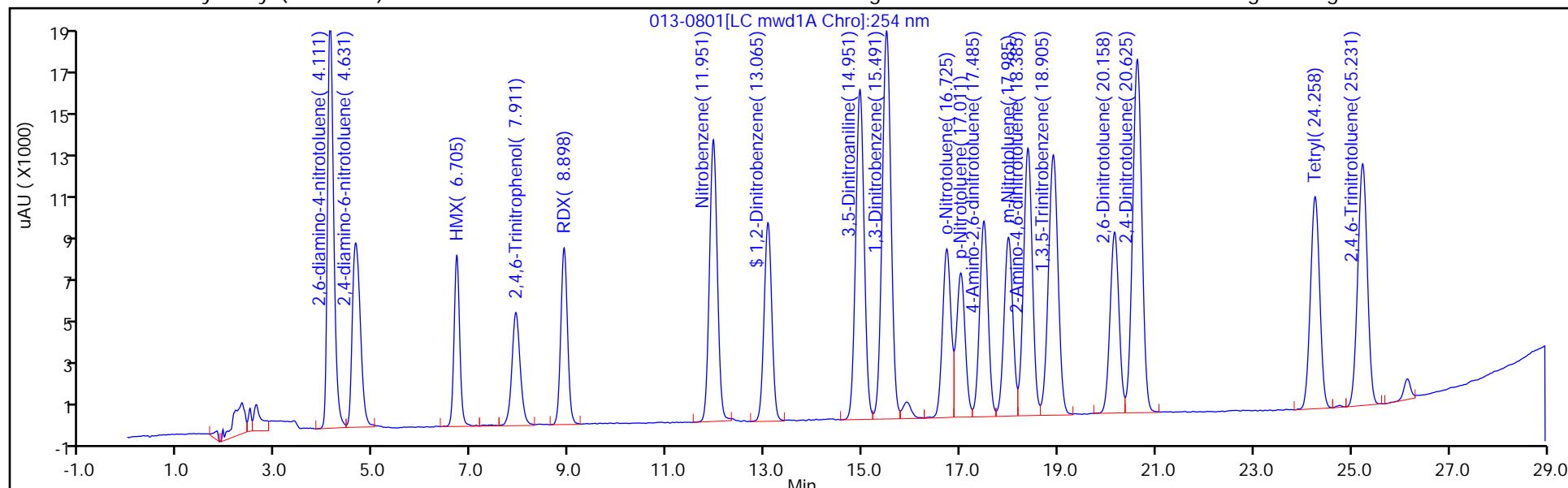
ALS Bottle#: 13

Method: 8330\_X5\_Luna

Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



## Eurofins TestAmerica, Denver

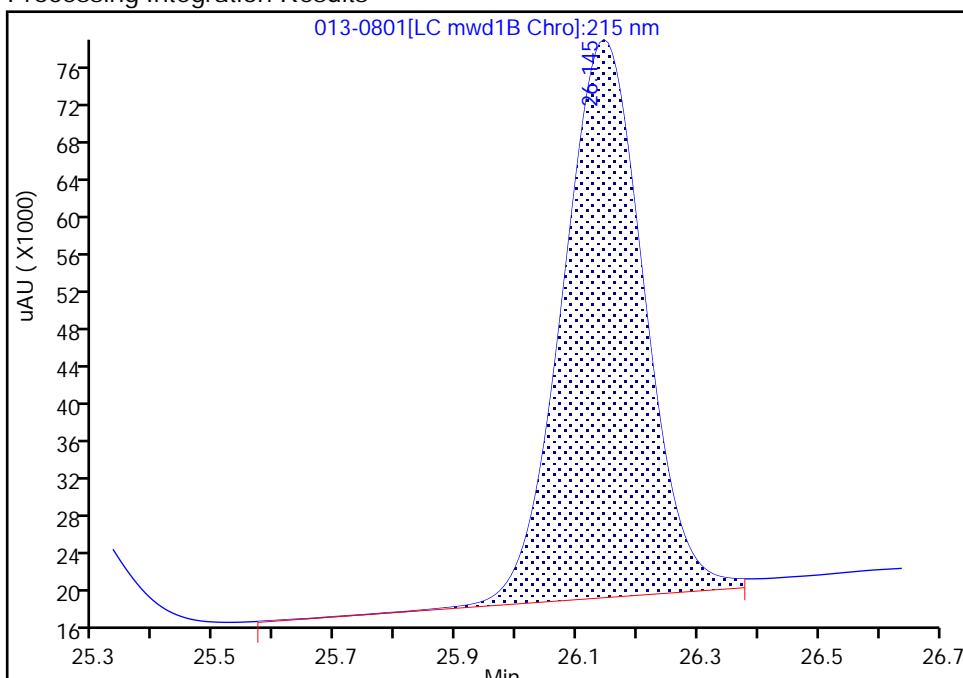
Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\013-0801.D  
 Injection Date: 01-May-2021 20:39:55 Instrument ID: CHHPLC\_X5  
 Lims ID: IC INT/ADD 6  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 13 Worklist Smp#: 13  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X5\_Luna Limit Group: GCSV - 8330  
 Column: Detector LC mwd1B, 215 nm

## 24 PETN, CAS: 78-11-5

Signal: 1

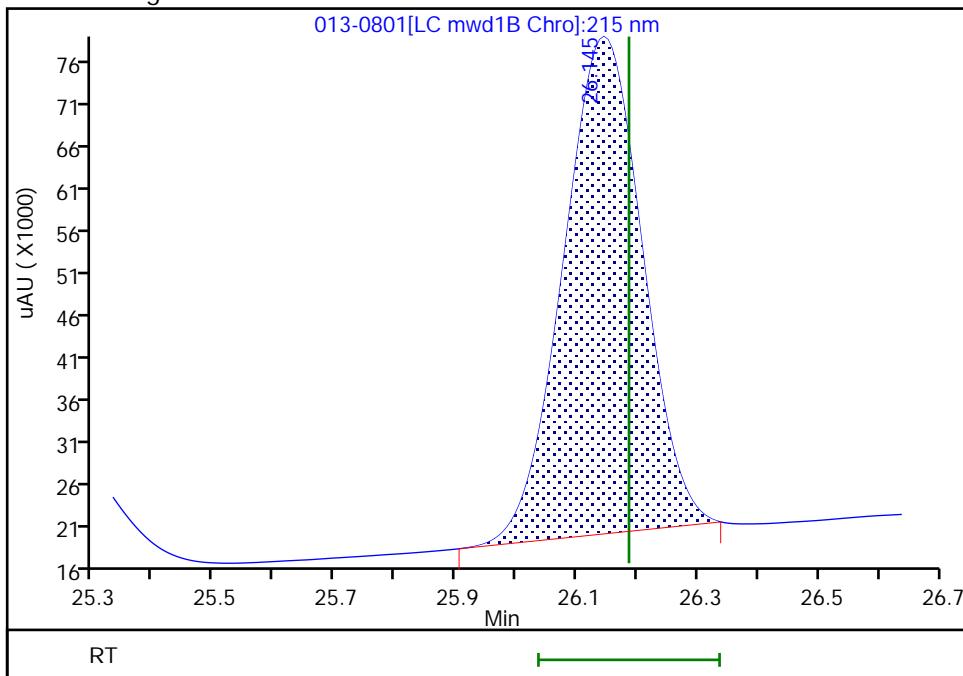
RT: 26.14  
 Area: 555116  
 Amount: 4.095081  
 Amount Units: ug/ml

## Processing Integration Results



RT: 26.14  
 Area: 531566  
 Amount: 3.859188  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: zhangji, 04-May-2021 13:40:32

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\014-0901.D  
 Lims ID: IC INT/ADD 5  
 Client ID:  
 Sample Type: IC Calib Level: 5  
 Inject. Date: 01-May-2021 21:15:02 ALS Bottle#: 14 Worklist Smp#: 14  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: IC INT/ADD 5  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Sublist: chrom-8330\_X5\_Luna\*sub1  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 04-May-2021 13:43:13 Calib Date: 02-May-2021 04:51:05  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\027-2201.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm) Det: LC mwd1A, 254 nm  
 Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:35:48

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.126	4.126	0.000	101396	0.2500	0.2392	
2 2,4-diamino-6-nitrotoluene	1	4.653	4.653	0.000	59623	0.2500	0.2442	
6 HMX	1	6.713	6.713	0.000	39580	0.2500	0.2431	
5 2,4,6-Trinitrophenol	1	7.933	7.933	0.000	38222	0.2500	0.2396	
8 RDX	1	8.906	8.906	0.000	48606	0.2500	0.2379	
9 Nitrobenzene	1	11.973	11.973	0.000	90760	0.2510	0.2423	
\$ 10 1,2-Dinitrobenzene	1	13.093	13.093	0.000	63081	0.2500	0.2375	
11 3,5-Dinitroaniline	1	14.979	14.979	0.000	110385	0.2500	0.2431	
12 1,3-Dinitrobenzene	1	15.519	15.519	0.000	140347	0.2505	0.2469	
13 Nitroglycerin	2	15.939	15.939	0.000	310480	2.50	2.41	
14 o-Nitrotoluene	1	16.759	16.759	0.000	58191	0.2500	0.2337	
15 p-Nitrotoluene	1	17.046	17.046	0.000	51245	0.2505	0.2359	
16 4-Amino-2,6-dinitrotoluene	1	17.526	17.526	0.000	68509	0.2503	0.2309	
17 m-Nitrotoluene	1	18.026	18.026	0.000	64933	0.2503	0.2332	
18 2-Amino-4,6-dinitrotoluene	1	18.426	18.426	0.000	97071	0.2510	0.2458	
19 1,3,5-Trinitrobenzene	1	18.939	18.939	0.000	104344	0.2505	0.2477	
20 2,6-Dinitrotoluene	1	20.199	20.199	0.000	66062	0.2510	0.2462	
21 2,4-Dinitrotoluene	1	20.666	20.666	0.000	134163	0.2510	0.2372	
22 Tetryl	1	24.313	24.313	0.000	80996	0.2505	0.2490	
23 2,4,6-Trinitrotoluene	1	25.280	25.280	0.000	93822	0.2510	0.2482	
24 PETN	2	26.186	26.186	0.000	330309	2.50	2.40	M

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

**Reagents:**

8330IntermStk\_00067

Amount Added: 25.00      Units: uL

8330\_ADDs\_00027

Amount Added: 12.50      Units: uL

Report Date: 04-May-2021 13:43:13

Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\014-0901.D

Injection Date: 01-May-2021 21:15:02

Instrument ID: CHHPLC\_X5

Operator ID: JZ

Lims ID: IC INT/ADD 5

Worklist Smp#: 14

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

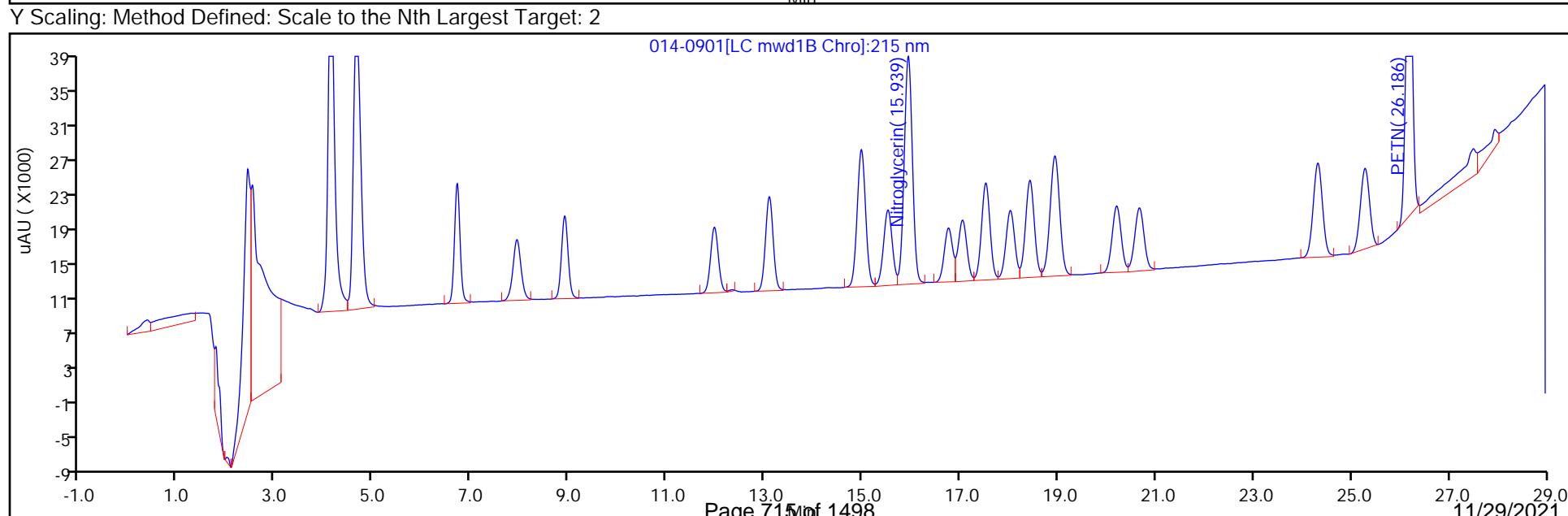
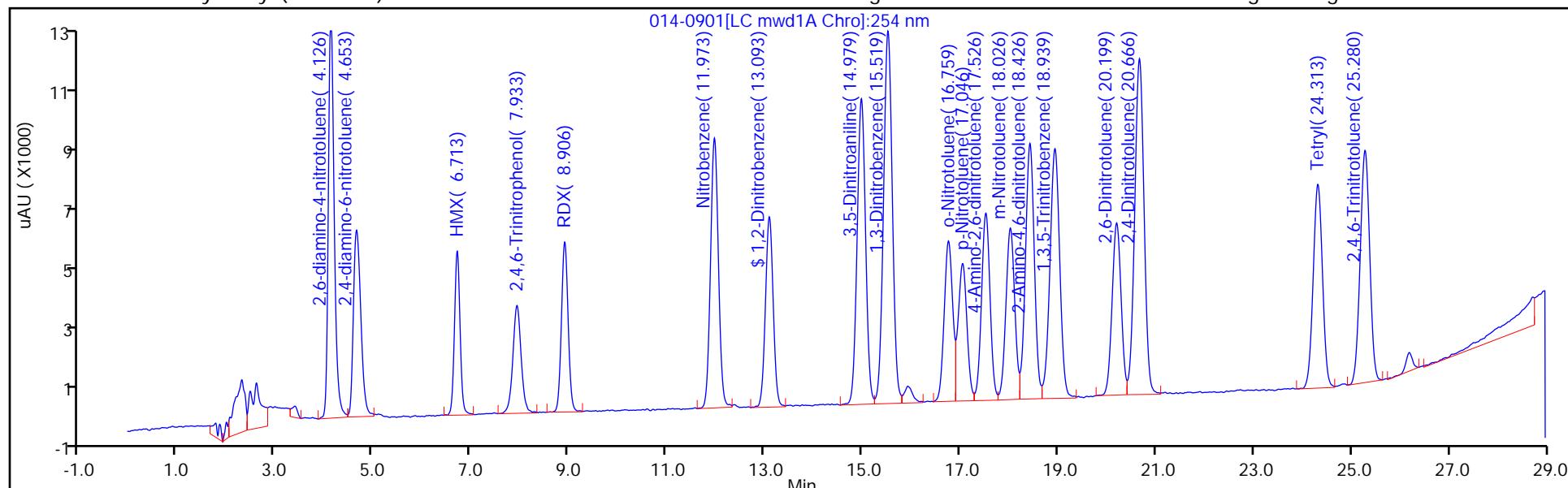
ALS Bottle#: 14

Method: 8330\_X5\_Luna

Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



## Eurofins TestAmerica, Denver

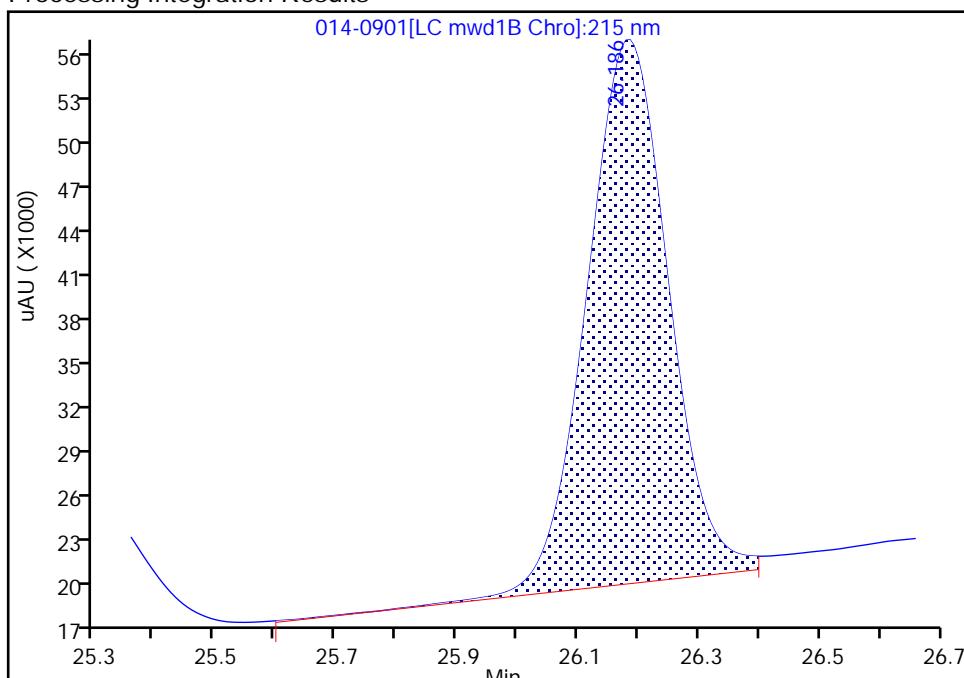
Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\014-0901.D  
 Injection Date: 01-May-2021 21:15:02 Instrument ID: CHHPLC\_X5  
 Lims ID: IC INT/ADD 5  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 14 Worklist Smp#: 14  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X5\_Luna Limit Group: GCSV - 8330  
 Column: Detector LC mwd1B, 215 nm

## 24 PETN, CAS: 78-11-5

Signal: 1

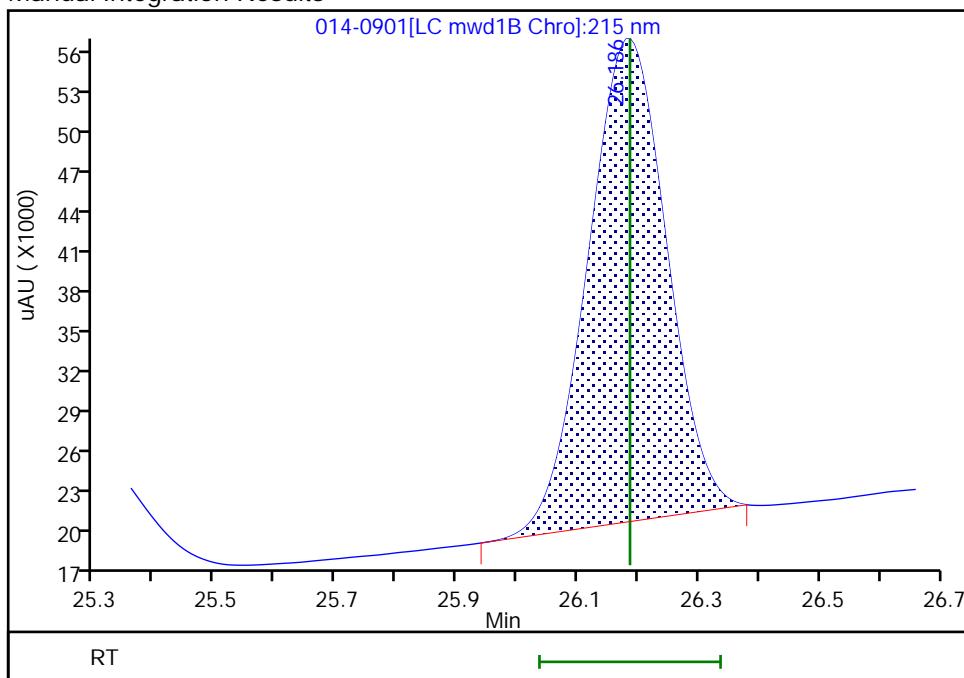
RT: 26.19  
 Area: 348444  
 Amount: 2.522976  
 Amount Units: ug/ml

## Processing Integration Results



RT: 26.19  
 Area: 330309  
 Amount: 2.398055  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: zhangji, 04-May-2021 13:40:41

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\015-1001.D  
 Lims ID: IC INT/ADD 4  
 Client ID:  
 Sample Type: IC Calib Level: 4  
 Inject. Date: 01-May-2021 21:50:04 ALS Bottle#: 15 Worklist Smp#: 15  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: IC INT/ADD 4  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Sublist: chrom-8330\_X5\_Luna\*sub1  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 04-May-2021 13:43:14 Calib Date: 02-May-2021 04:51:05  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\027-2201.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm) Det: LC mwd1A, 254 nm  
 Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:40:52

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.132	4.126	0.006	44112	0.1000	0.0987	
2 2,4-diamino-6-nitrotoluene	1	4.658	4.653	0.005	25556	0.1000	0.1016	
6 HMX	1	6.718	6.713	0.005	16850	0.1000	0.0999	
5 2,4,6-Trinitrophenol	1	7.958	7.933	0.025	16340	0.1000	0.1024	
8 RDX	1	8.912	8.906	0.006	20661	0.1000	0.1011	
9 Nitrobenzene	1	11.971	11.973	-0.002	38085	0.1004	0.1017	
\$ 10 1,2-Dinitrobenzene	1	13.091	13.093	-0.002	26678	0.1000	0.1004	
11 3,5-Dinitroaniline	1	14.971	14.979	-0.008	46817	0.1000	0.1019	
12 1,3-Dinitrobenzene	1	15.518	15.519	-0.001	58764	0.1002	0.1019	
13 Nitroglycerin	2	15.931	15.939	-0.008	130447	1.00	1.01	
14 o-Nitrotoluene	1	16.751	16.759	-0.008	24528	0.1000	0.0985	
15 p-Nitrotoluene	1	17.038	17.046	-0.008	21221	0.1002	0.0977	
16 4-Amino-2,6-dinitrotoluene	1	17.511	17.526	-0.015	28819	0.1001	0.0971	
17 m-Nitrotoluene	1	18.011	18.026	-0.015	27212	0.1001	0.0977	
18 2-Amino-4,6-dinitrotoluene	1	18.418	18.426	-0.008	40904	0.1004	0.1017	
19 1,3,5-Trinitrobenzene	1	18.931	18.939	-0.008	44594	0.1002	0.1018	
20 2,6-Dinitrotoluene	1	20.185	20.199	-0.014	27721	0.1004	0.1014	
21 2,4-Dinitrotoluene	1	20.652	20.666	-0.015	55838	0.1004	0.0987	
22 Tetryl	1	24.298	24.313	-0.015	34148	0.1002	0.1015	
23 2,4,6-Trinitrotoluene	1	25.265	25.280	-0.015	38740	0.1004	0.1000	
24 PETN	2	26.172	26.186	-0.014	136676	1.00	0.99	M

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

**Reagents:**

8330IntermStk\_00067

Amount Added: 10.00      Units: uL

8330\_ADDs\_00027

Amount Added: 5.00      Units: uL

Report Date: 04-May-2021 13:43:14

Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\015-1001.D

Injection Date: 01-May-2021 21:50:04

Instrument ID: CHHPLC\_X5

Operator ID: JZ

Lims ID: IC INT/ADD 4

Worklist Smp#: 15

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

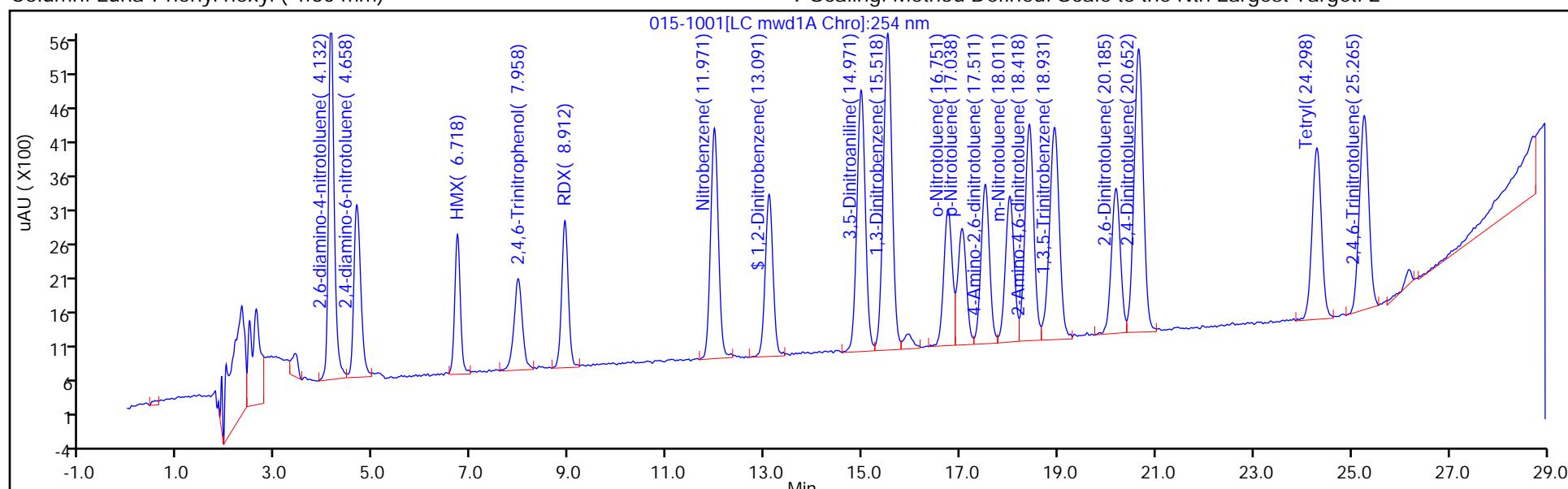
ALS Bottle#: 15

Method: 8330\_X5\_Luna

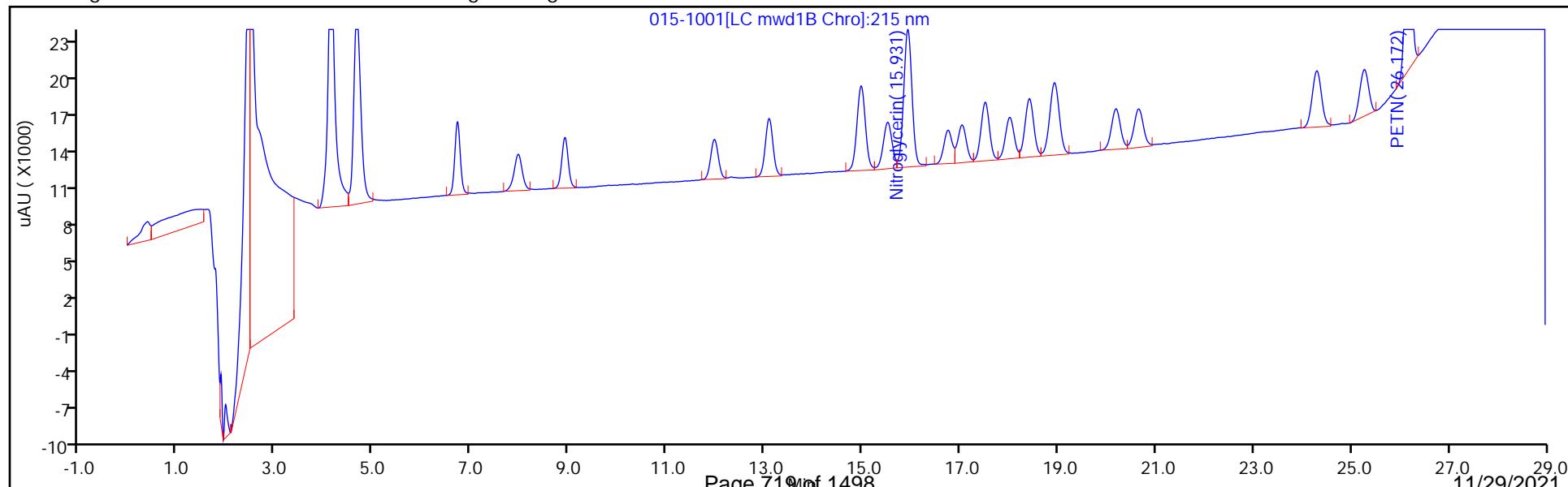
Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Denver

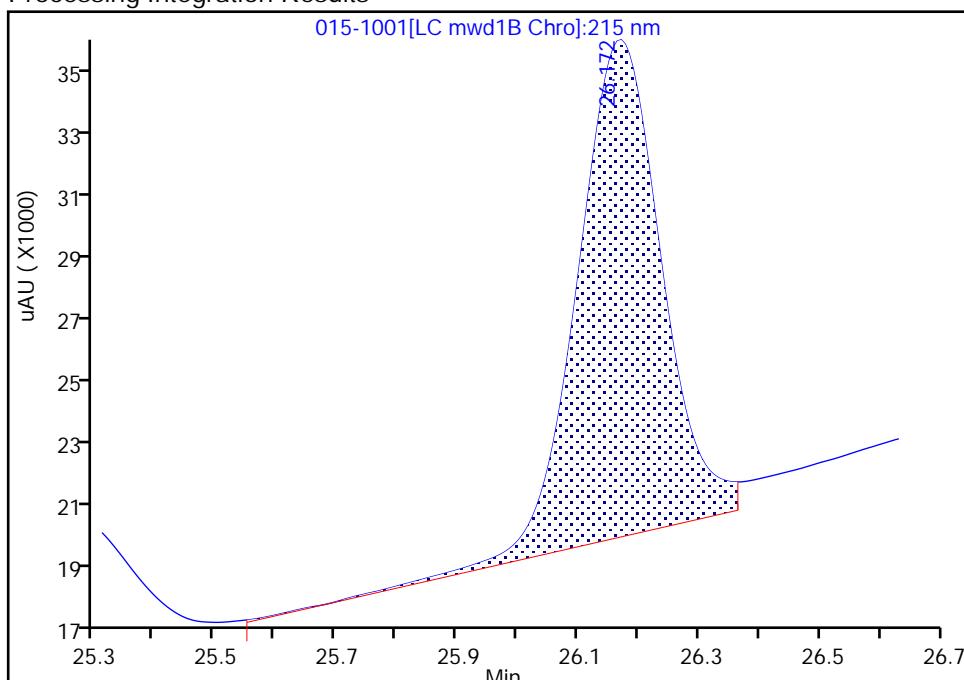
Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\015-1001.D  
 Injection Date: 01-May-2021 21:50:04 Instrument ID: CHHPLC\_X5  
 Lims ID: IC INT/ADD 4  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 15 Worklist Smp#: 15  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X5\_Luna Limit Group: GCSV - 8330  
 Column: Detector LC mwd1B, 215 nm

**24 PETN, CAS: 78-11-5**

Signal: 1

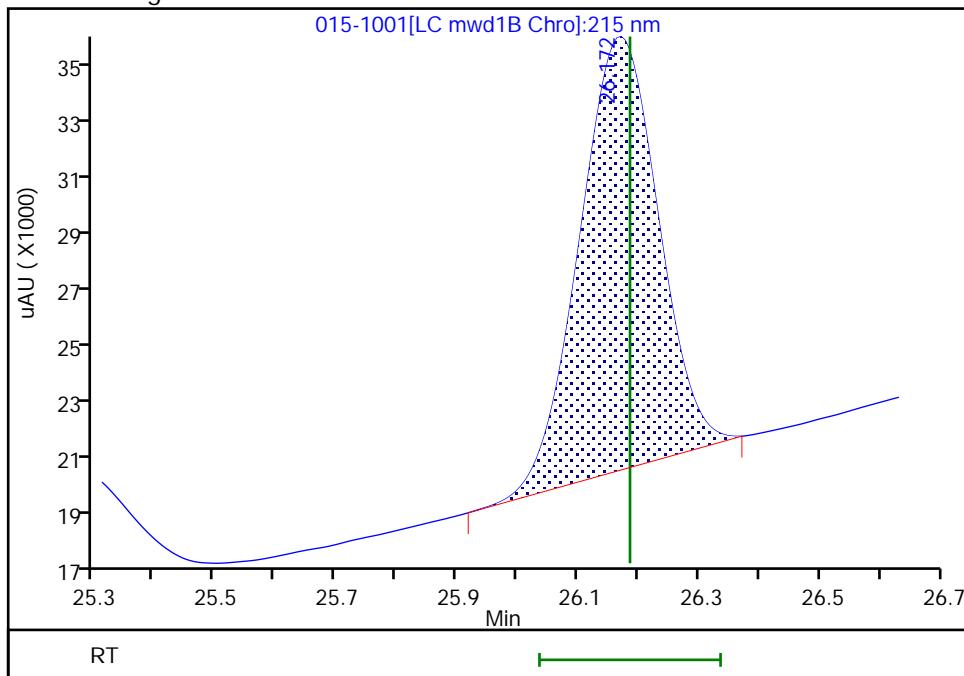
RT: 26.17  
 Area: 151513  
 Amount: 1.005886  
 Amount Units: ug/ml

## Processing Integration Results



RT: 26.17  
 Area: 136676  
 Amount: 0.992273  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: zhangji, 04-May-2021 13:40:50

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\016-1101.D  
 Lims ID: IC INT/ADD 3  
 Client ID:  
 Sample Type: IC Calib Level: 3  
 Inject. Date: 01-May-2021 22:25:05 ALS Bottle#: 16 Worklist Smp#: 16  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: IC INT/ADD 3  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Sublist: chrom-8330\_X5\_Luna\*sub1  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 04-May-2021 13:43:14 Calib Date: 02-May-2021 04:51:05  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\027-2201.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm) Det: LC mwd1A, 254 nm  
 Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:41:01

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.134	4.126	0.008	24575	0.0500	0.0507	
2 2,4-diamino-6-nitrotoluene	1	4.667	4.653	0.014	13602	0.0500	0.0516	
6 HMX	1	6.734	6.713	0.021	8791	0.0500	0.0492	
5 2,4,6-Trinitrophenol	1	7.987	7.933	0.054	8578	0.0500	0.0538	
8 RDX	1	8.934	8.906	0.028	11066	0.0500	0.0542	
9 Nitrobenzene	1	11.994	11.973	0.021	19306	0.0502	0.0515	
\$ 10 1,2-Dinitrobenzene	1	13.114	13.093	0.021	13836	0.0500	0.0521	
11 3,5-Dinitroaniline	1	15.007	14.979	0.028	23131	0.0500	0.0493	
12 1,3-Dinitrobenzene	1	15.547	15.519	0.028	29142	0.0501	0.0493	
13 Nitroglycerin	2	15.961	15.939	0.022	65416	0.5000	0.5087	
14 o-Nitrotoluene	1	16.781	16.759	0.022	12373	0.0500	0.0497	
15 p-Nitrotoluene	1	17.074	17.046	0.028	10760	0.0501	0.0495	
16 4-Amino-2,6-dinitrotoluene	1	17.541	17.526	0.015	14802	0.0501	0.0499	
17 m-Nitrotoluene	1	18.047	18.026	0.021	13943	0.0501	0.0501	
18 2-Amino-4,6-dinitrotoluene	1	18.441	18.426	0.015	21111	0.0502	0.0509	
19 1,3,5-Trinitrobenzene	1	18.954	18.939	0.015	23506	0.0501	0.0503	
20 2,6-Dinitrotoluene	1	20.201	20.199	0.002	14081	0.0502	0.0499	
21 2,4-Dinitrotoluene	1	20.674	20.666	0.008	28396	0.0502	0.0502	
22 Tetryl	1	24.287	24.313	-0.026	17573	0.0501	0.0494	
23 2,4,6-Trinitrotoluene	1	25.254	25.280	-0.026	19400	0.0502	0.0479	
24 PETN	2	26.154	26.186	-0.032	69170	0.5000	0.5022	M

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

**Reagents:**

8330IntermStk\_00067

Amount Added: 5.00 Units: uL

8330\_ADDs\_00027

Amount Added: 2.50 Units: uL

Report Date: 04-May-2021 13:43:14

Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\016-1101.D

Injection Date: 01-May-2021 22:25:05

Instrument ID: CHHPLC\_X5

Operator ID: JZ

Lims ID: IC INT/ADD 3

Worklist Smp#: 16

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

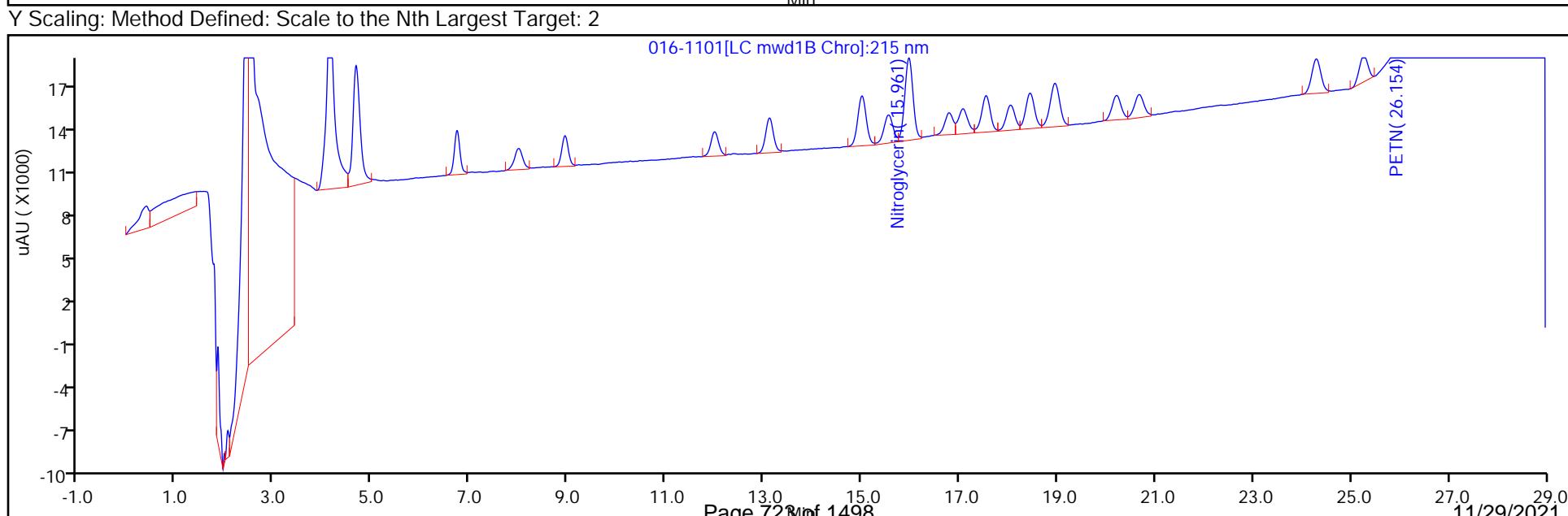
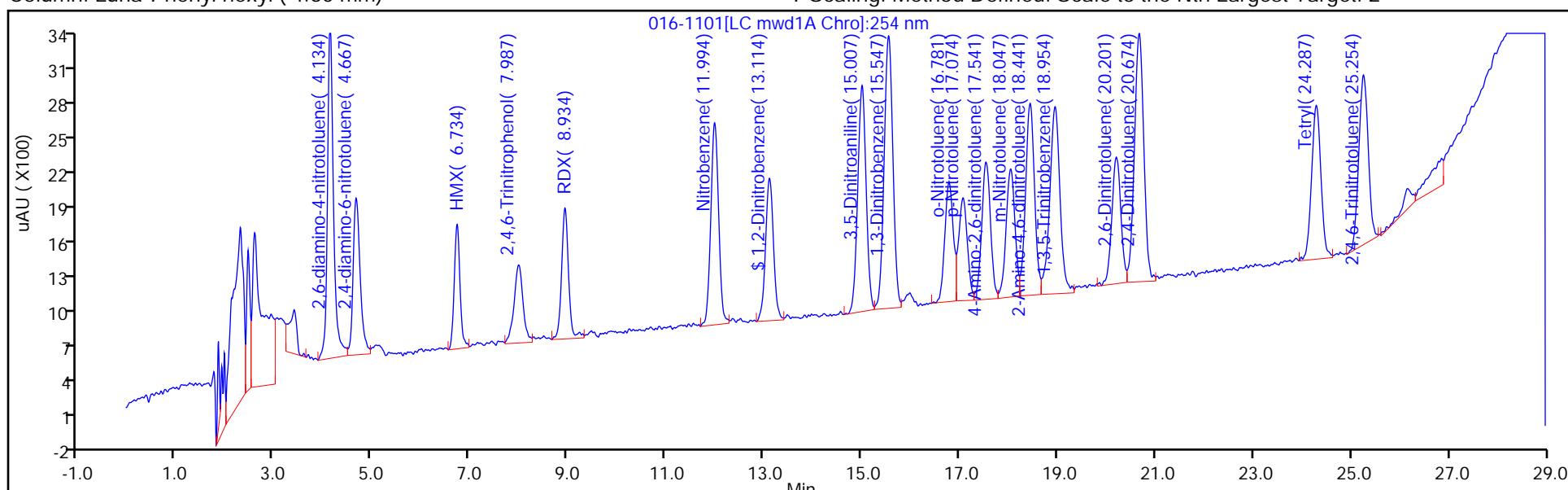
ALS Bottle#: 16

Method: 8330\_X5\_Luna

Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



## Eurofins TestAmerica, Denver

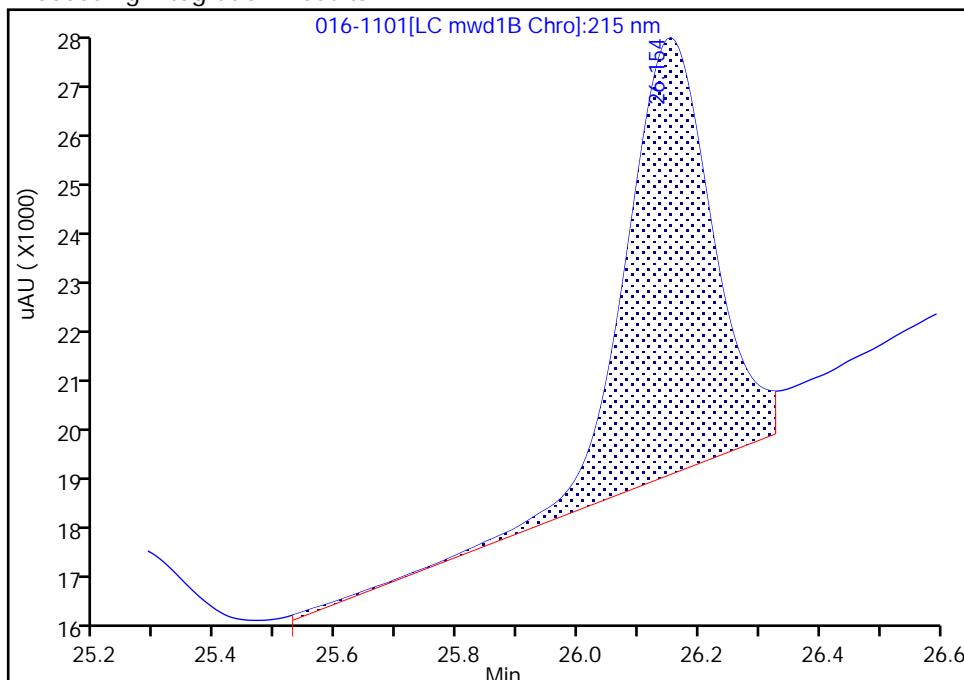
Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\016-1101.D  
 Injection Date: 01-May-2021 22:25:05 Instrument ID: CHHPLC\_X5  
 Lims ID: IC INT/ADD 3  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 16 Worklist Smp#: 16  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X5\_Luna Limit Group: GCSV - 8330  
 Column: Detector LC mwd1B, 215 nm

## 24 PETN, CAS: 78-11-5

Signal: 1

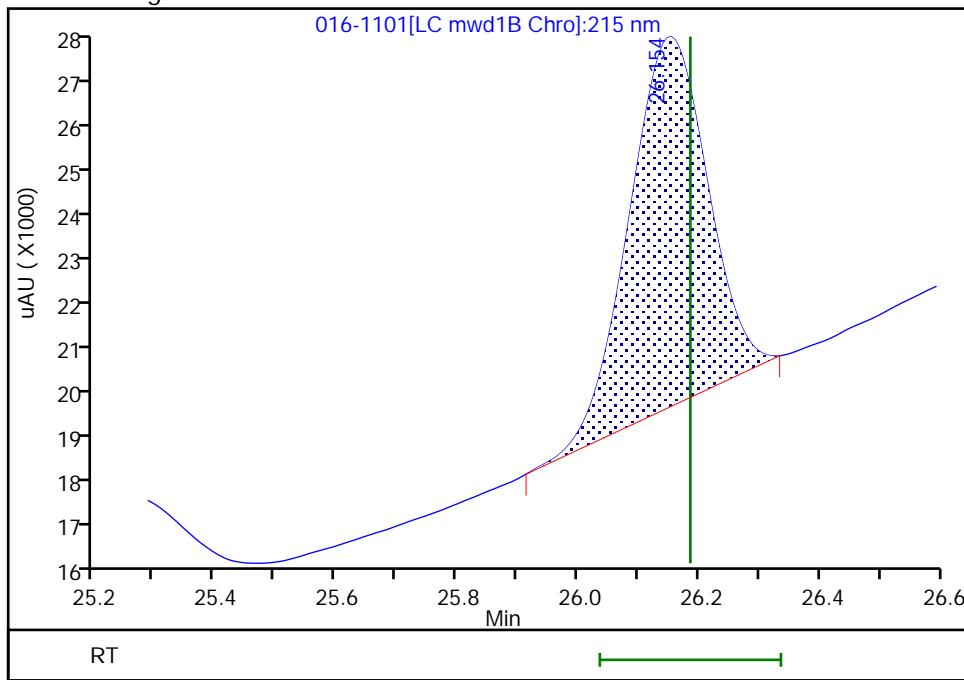
RT: 26.15  
 Area: 81816  
 Amount: 0.467715  
 Amount Units: ug/ml

## Processing Integration Results



RT: 26.15  
 Area: 69170  
 Amount: 0.502177  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: zhangji, 04-May-2021 13:40:59

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\017-1201.D  
 Lims ID: IC INT/ADD 2  
 Client ID:  
 Sample Type: IC Calib Level: 2  
 Inject. Date: 01-May-2021 23:00:06 ALS Bottle#: 17 Worklist Smp#: 17  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: IC INT/ADD 2  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Sublist: chrom-8330\_X5\_Luna\*sub1  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 04-May-2021 13:43:15 Calib Date: 02-May-2021 04:51:05  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\027-2201.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm) Det: LC mwd1A, 254 nm  
 Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:41:10

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.133	4.126	0.007	11811	0.0200	0.0194	
2 2,4-diamino-6-nitrotoluene	1	4.673	4.653	0.020	6051	0.0200	0.0200	
6 HMX	1	6.720	6.713	0.007	4286	0.0200	0.0208	
5 2,4,6-Trinitrophenol	1	7.980	7.933	0.047	3270	0.0200	0.0205	
8 RDX	1	8.926	8.906	0.020	4533	0.0200	0.0222	
9 Nitrobenzene	1	11.973	11.973	0.000	7888	0.0201	0.0211	
\$ 10 1,2-Dinitrobenzene	1	13.093	13.093	0.000	6280	0.0200	0.0236	
11 3,5-Dinitroaniline	1	14.980	14.979	0.001	9417	0.0200	0.0188	
12 1,3-Dinitrobenzene	1	15.533	15.519	0.014	12411	0.0200	0.0196	
13 Nitroglycerin	2	15.940	15.939	0.001	28299	0.2000	0.2200	
14 o-Nitrotoluene	1	16.740	16.759	-0.019	5151	0.0200	0.0207	
15 p-Nitrotoluene	1	17.060	17.046	0.014	4823	0.0200	0.0222	
16 4-Amino-2,6-dinitrotoluene	1	17.520	17.526	-0.006	6276	0.0200	0.0212	
17 m-Nitrotoluene	1	18.033	18.026	0.007	5928	0.0200	0.0213	
18 2-Amino-4,6-dinitrotoluene	1	18.426	18.426	0.000	9114	0.0201	0.0202	
19 1,3,5-Trinitrobenzene	1	18.946	18.939	0.007	10540	0.0200	0.0187	
20 2,6-Dinitrotoluene	1	20.200	20.199	0.001	6026	0.0201	0.0195	
21 2,4-Dinitrotoluene	1	20.666	20.666	0.000	12229	0.0201	0.0216	
22 Tetryl	1	24.306	24.313	-0.007	7583	0.0200	0.0179	
23 2,4,6-Trinitrotoluene	1	25.280	25.280	0.000	8548	0.0201	0.0187	
24 PETN	2	26.180	26.186	-0.006	27436	0.2000	0.1992	M

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

**Reagents:**

8330IntermStk\_00067

Amount Added: 2.00 Units: uL

8330\_ADDs\_00027

Amount Added: 1.00 Units: uL

Report Date: 04-May-2021 13:43:15

Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\017-1201.D

Injection Date: 01-May-2021 23:00:06

Instrument ID: CHHPLC\_X5

Operator ID: JZ

Lims ID: IC INT/ADD 2

Worklist Smp#: 17

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

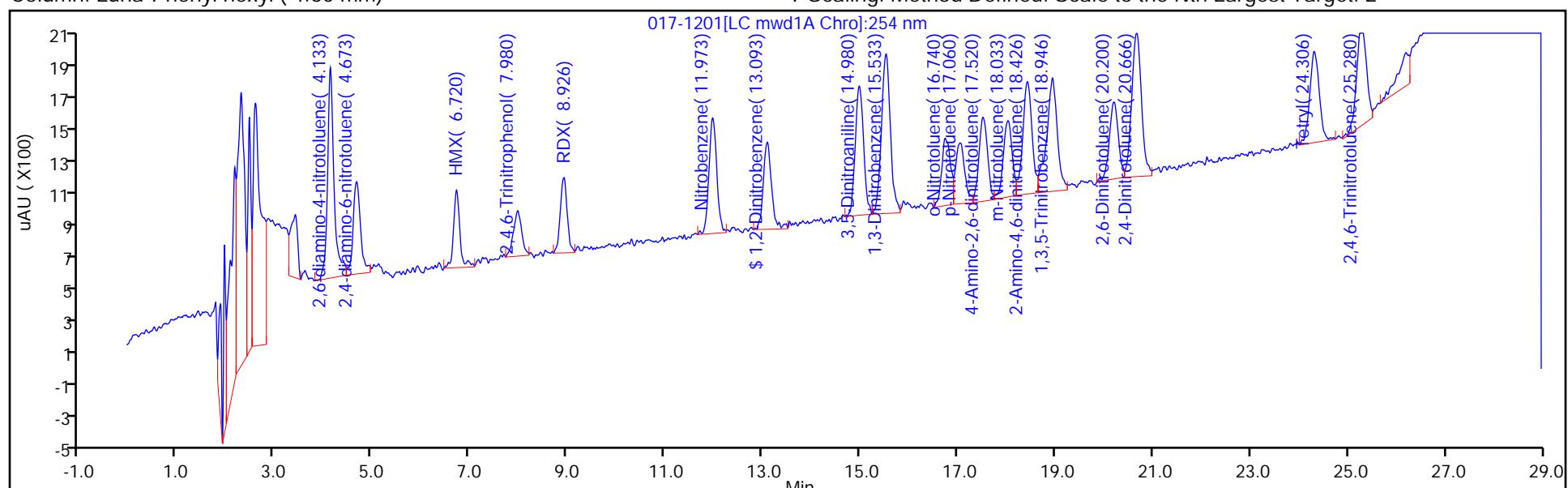
ALS Bottle#: 17

Method: 8330\_X5\_Luna

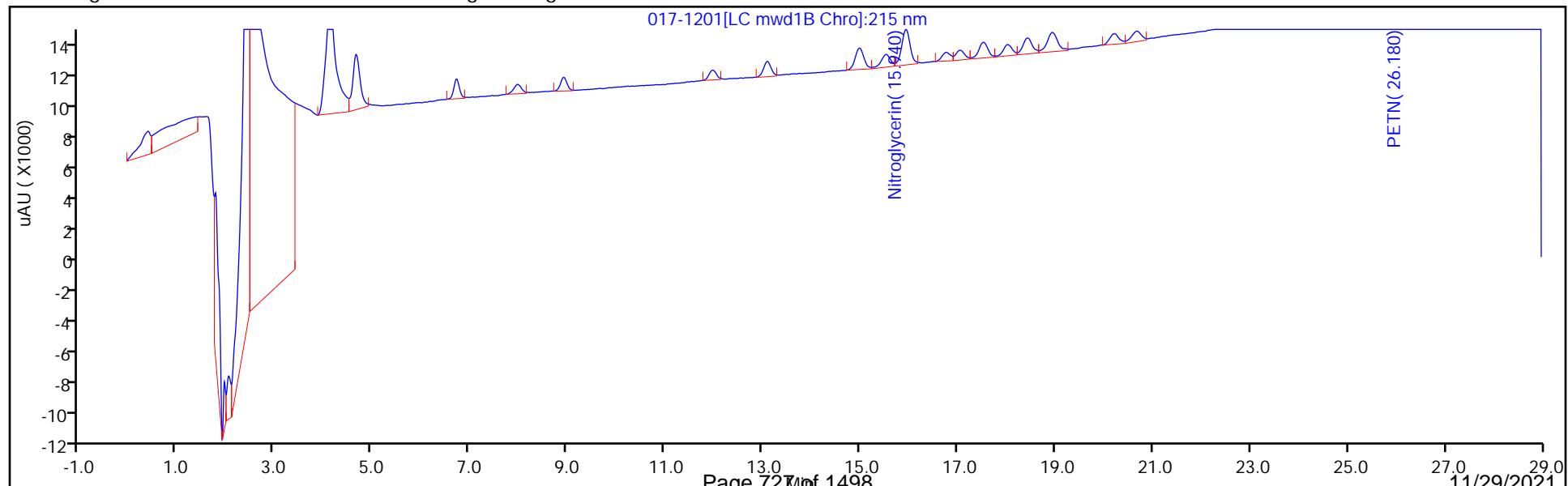
Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Denver

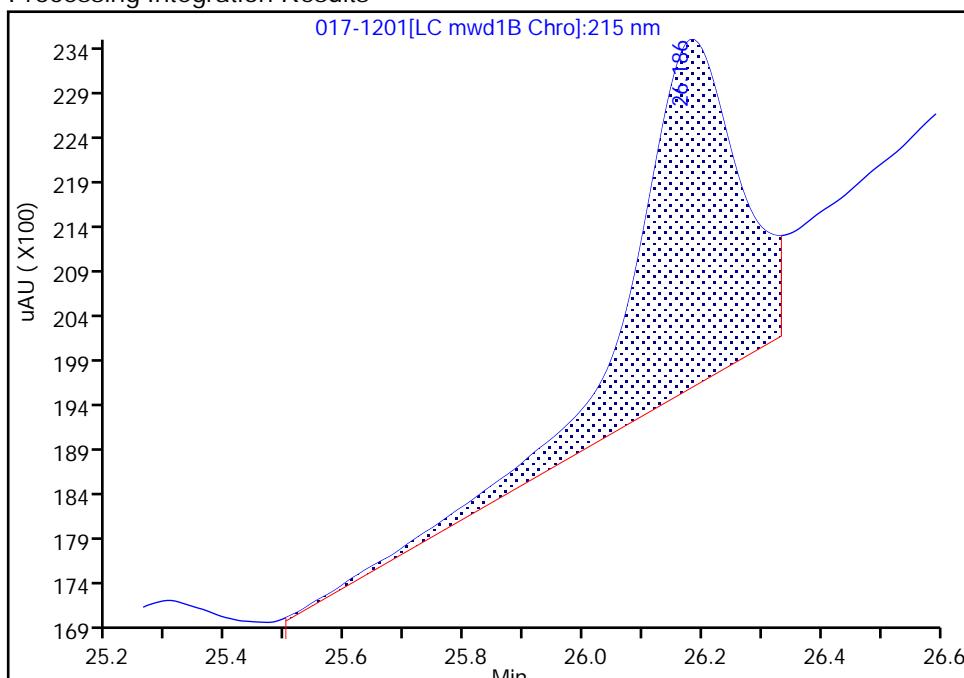
Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\017-1201.D  
 Injection Date: 01-May-2021 23:00:06 Instrument ID: CHHPLC\_X5  
 Lims ID: IC INT/ADD 2  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 17 Worklist Smp#: 17  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X5\_Luna Limit Group: GCSV - 8330  
 Column: Detector LC mwd1B, 215 nm

**24 PETN, CAS: 78-11-5**

Signal: 1

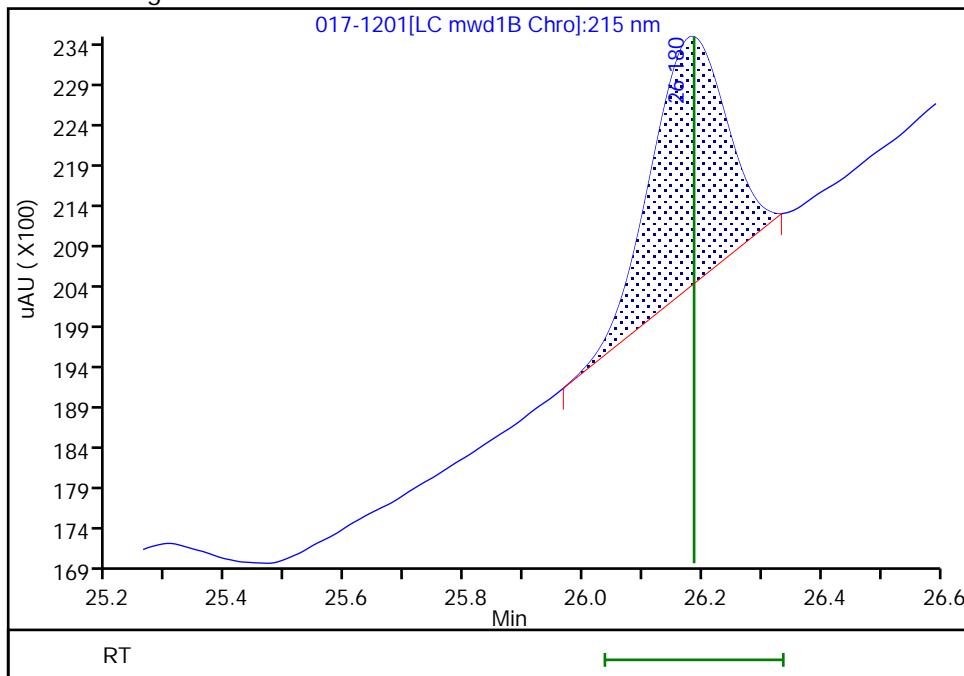
RT: 26.19  
 Area: 47400  
 Amount: 0.217570  
 Amount Units: ug/ml

## Processing Integration Results



RT: 26.18  
 Area: 27436  
 Amount: 0.199186  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: zhangji, 04-May-2021 13:41:08

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\018-1301.D  
 Lims ID: IC INT/ADD 1  
 Client ID:  
 Sample Type: IC Calib Level: 1  
 Inject. Date: 01-May-2021 23:35:08 ALS Bottle#: 18 Worklist Smp#: 18  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: IC INT/ADD 1  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Sublist: chrom-8330\_X5\_Luna\*sub1  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 04-May-2021 13:43:15 Calib Date: 02-May-2021 04:51:05  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\027-2201.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm) Det: LC mwd1A, 254 nm  
 Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:42:55

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.144	4.126	0.018	8029	0.0100	0.0101	
2 2,4-diamino-6-nitrotoluene	1	4.684	4.653	0.031	3655	0.0100	0.0099	
6 HMX	1	6.724	6.713	0.011	2543	0.0100	0.009840	
5 2,4,6-Trinitrophenol	1	8.004	7.933	0.071	1789	0.0100	0.0112	
8 RDX	1	8.918	8.906	0.012	2988	0.0100	0.0146	
9 Nitrobenzene	1	11.978	11.973	0.005	4507	0.0100	0.0120	
\$ 10 1,2-Dinitrobenzene	1	13.104	13.093	0.011	4082	0.0100	0.0154	
11 3,5-Dinitroaniline	1	14.978	14.979	-0.001	5594	0.0100	0.0103	
12 1,3-Dinitrobenzene	1	15.524	15.519	0.005	7085	0.0100	0.0101	
13 Nitroglycerin	2	15.924	15.939	-0.015	16401	0.1000	0.1275	
14 o-Nitrotoluene	1	16.751	16.759	-0.008	3022	0.0100	0.0121	
15 p-Nitrotoluene	1	17.031	17.046	-0.015	2608	0.0100	0.0120	
16 4-Amino-2,6-dinitrotoluene	1	17.511	17.526	-0.015	3954	0.0100	0.0133	
17 m-Nitrotoluene	1	17.978	18.026	-0.048	3517	0.0100	0.0126	
18 2-Amino-4,6-dinitrotoluene	1	18.418	18.426	-0.008	5148	0.0100	0.0100	
19 1,3,5-Trinitrobenzene	1	18.904	18.939	-0.035	7116	0.0100	0.0103	
20 2,6-Dinitrotoluene	1	20.191	20.199	-0.008	3555	0.0100	0.0102	
21 2,4-Dinitrotoluene	1	20.644	20.666	-0.022	6619	0.0100	0.0117	
22 Tetryl	1	24.271	24.313	-0.042	5245	0.0100	0.0106	
23 2,4,6-Trinitrotoluene	1	25.258	25.280	-0.022	5469	0.0100	0.0105	
24 PETN	2	26.151	26.186	-0.035	15659	0.1000	0.1137	M

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

**Reagents:**

8330IntermStk\_00067

Amount Added: 1.00 Units: uL

8330\_ADDs\_00027

Amount Added: 0.50 Units: uL

Report Date: 04-May-2021 13:43:16

Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\018-1301.D

Injection Date: 01-May-2021 23:35:08

Instrument ID: CHHPLC\_X5

Operator ID: JZ

Lims ID: IC INT/ADD 1

Worklist Smp#: 18

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

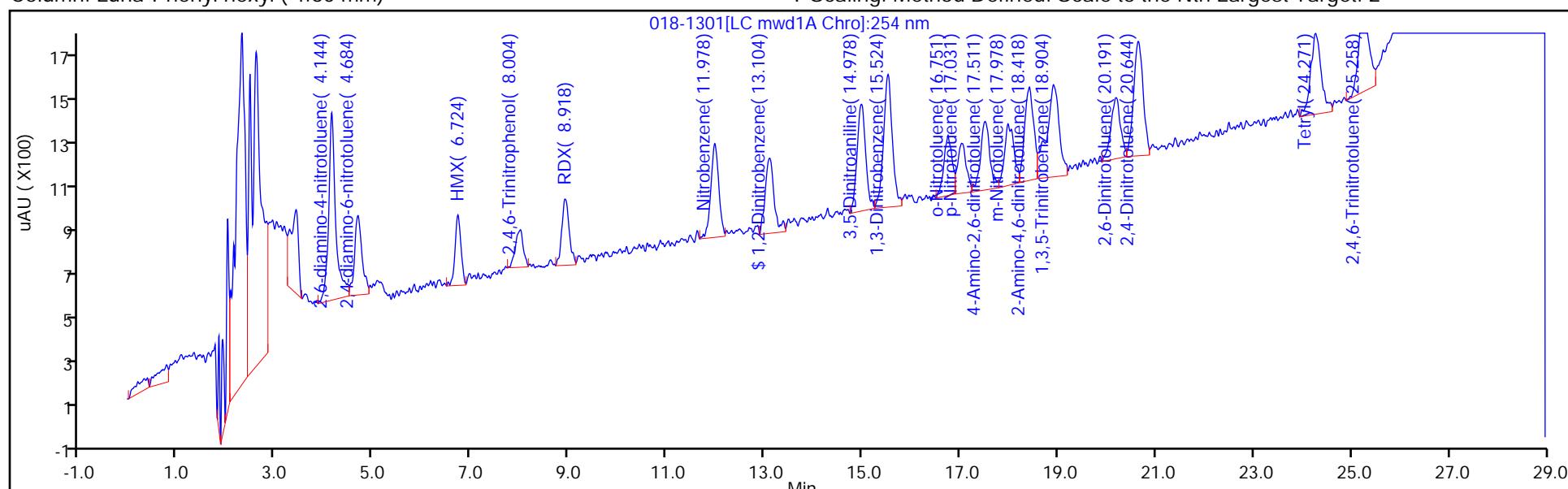
ALS Bottle#: 18

Method: 8330\_X5\_Luna

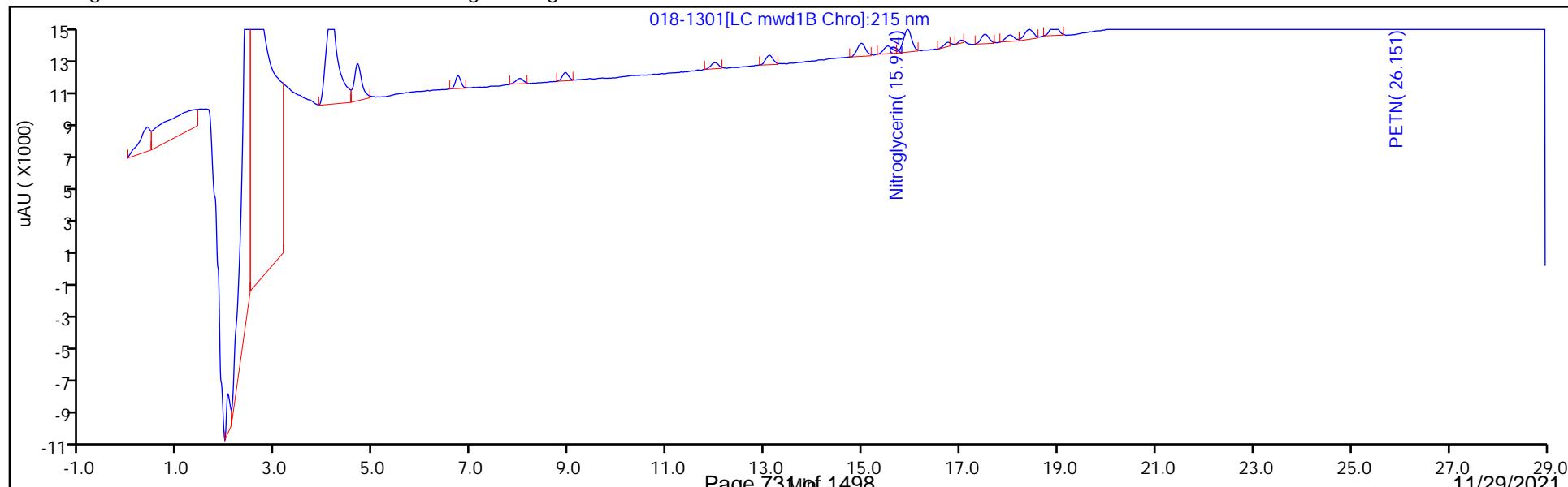
Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



## Eurofins TestAmerica, Denver

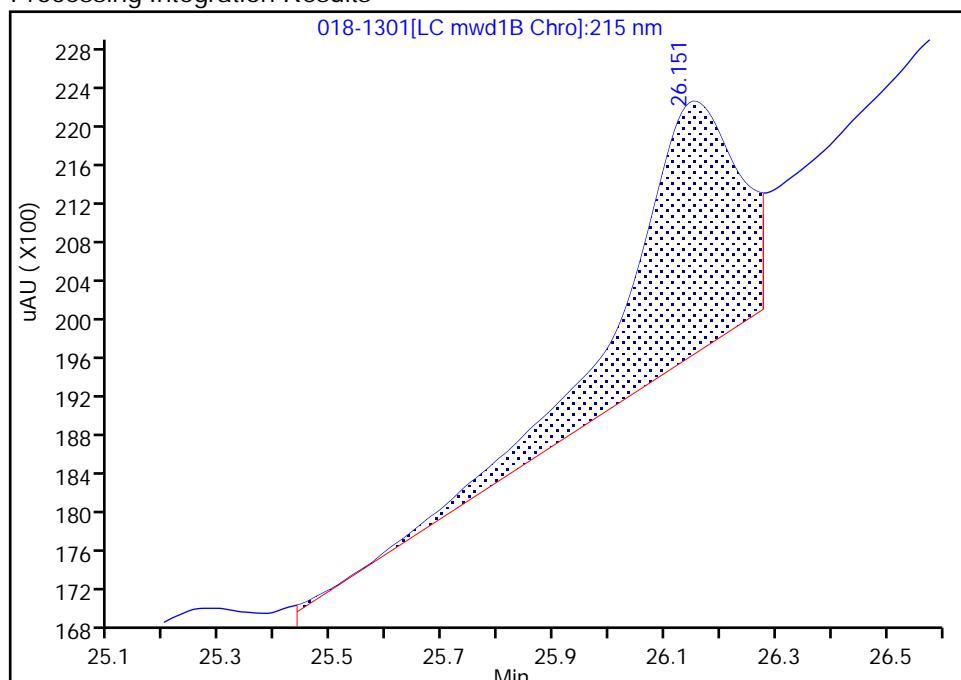
Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\018-1301.D  
 Injection Date: 01-May-2021 23:35:08 Instrument ID: CHHPLC\_X5  
 Lims ID: IC INT/ADD 1  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 18 Worklist Smp#: 18  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X5\_Luna Limit Group: GCSV - 8330  
 Column: Detector LC mwd1B, 215 nm

## 24 PETN, CAS: 78-11-5

Signal: 1

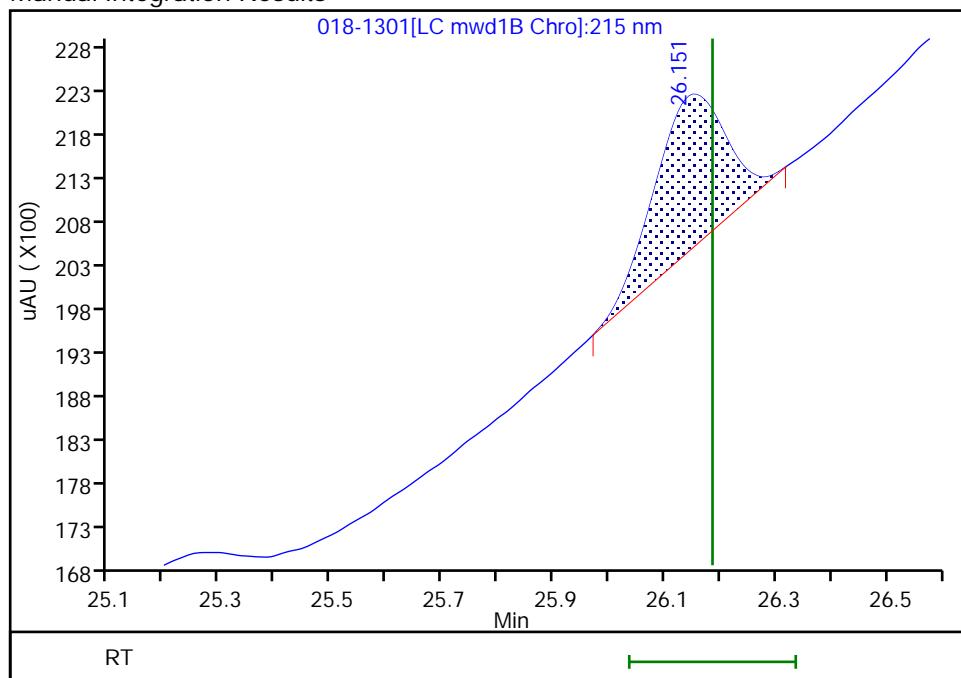
RT: 26.15  
 Area: 35908  
 Amount: 0.224090  
 Amount Units: ug/ml

## Processing Integration Results



RT: 26.15  
 Area: 15659  
 Amount: 0.113685  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: zhangji, 04-May-2021 13:41:16

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

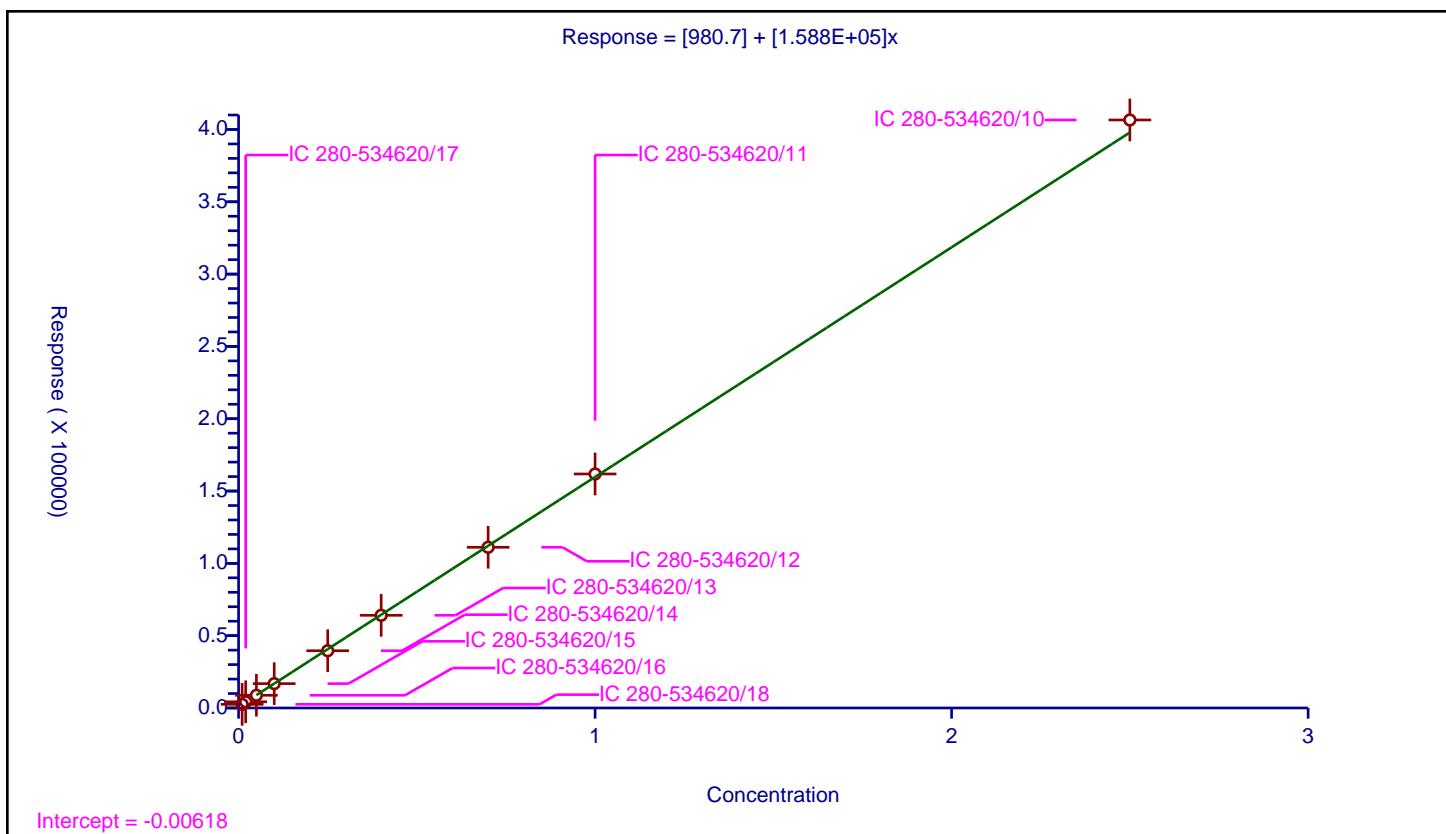
## Calibration

/ HMX

**Curve Type:** Linear  
**Weighting:** Conc\_Sq  
**Origin:** None  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	980.7
Slope:	1.588E+05
Error Coefficients	
Standard Error:	3410
Relative Standard Error:	2.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01	2543.0			254300.0	Y
2	IC 280-534620/17	0.02	4286.0			214300.0	Y
3	IC 280-534620/16	0.05	8791.0			175820.0	Y
4	IC 280-534620/15	0.1	16850.0			168500.0	Y
5	IC 280-534620/14	0.25	39580.0			158320.0	Y
6	IC 280-534620/13	0.4	64089.0			160222.5	Y
7	IC 280-534620/12	0.7	111120.0			158742.857143	Y
8	IC 280-534620/11	1.0	161798.0			161798.0	Y
9	IC 280-534620/10	2.5	406565.0			162626.0	Y



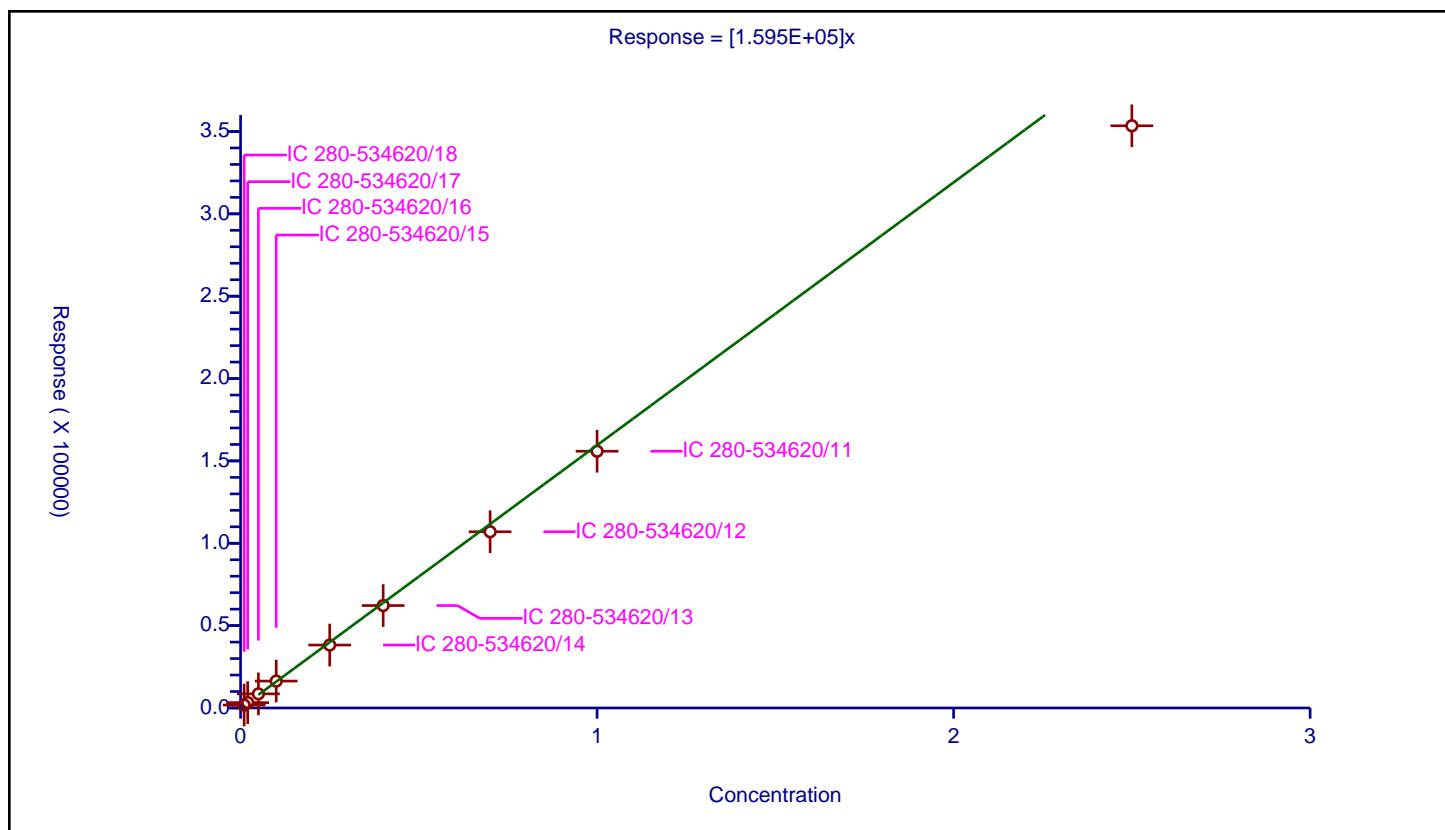
## Calibration

/ 2,4,6-Trinitrophenol

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	1.595E+05
Error Coefficients	
Standard Error:	16200
Relative Standard Error:	7.0
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01	1789.0			178900.0	Y
2	IC 280-534620/17	0.02	3270.0			163500.0	Y
3	IC 280-534620/16	0.05	8578.0			171560.0	Y
4	IC 280-534620/15	0.1	16340.0			163400.0	Y
5	IC 280-534620/14	0.25	38222.0			152888.0	Y
6	IC 280-534620/13	0.4	62190.0			155475.0	Y
7	IC 280-534620/12	0.7	106987.0			152838.571429	Y
8	IC 280-534620/11	1.0	155884.0			155884.0	Y
9	IC 280-534620/10	2.5	353462.0			141384.8	Y



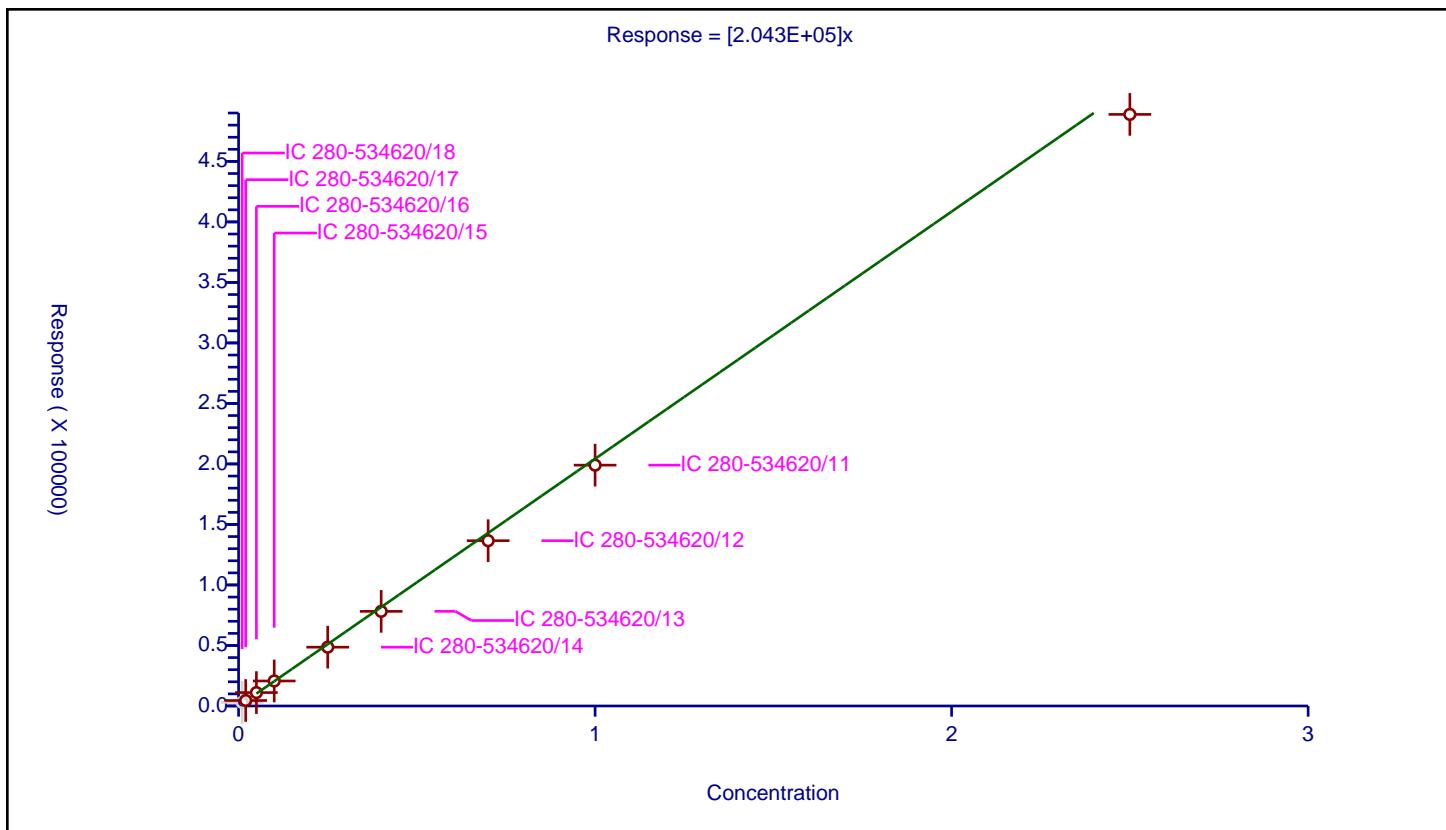
## Calibration

/ RDX

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	2.043E+05
Error Coefficients	
Standard Error:	8980
Relative Standard Error:	6.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01	2988.0			298800.0	N
2	IC 280-534620/17	0.02	4533.0			226650.0	Y
3	IC 280-534620/16	0.05	11066.0			221320.0	Y
4	IC 280-534620/15	0.1	20661.0			206610.0	Y
5	IC 280-534620/14	0.25	48606.0			194424.0	Y
6	IC 280-534620/13	0.4	78185.0			195462.5	Y
7	IC 280-534620/12	0.7	136592.0			195131.428571	Y
8	IC 280-534620/11	1.0	199019.0			199019.0	Y
9	IC 280-534620/10	2.5	488855.0			195542.0	Y



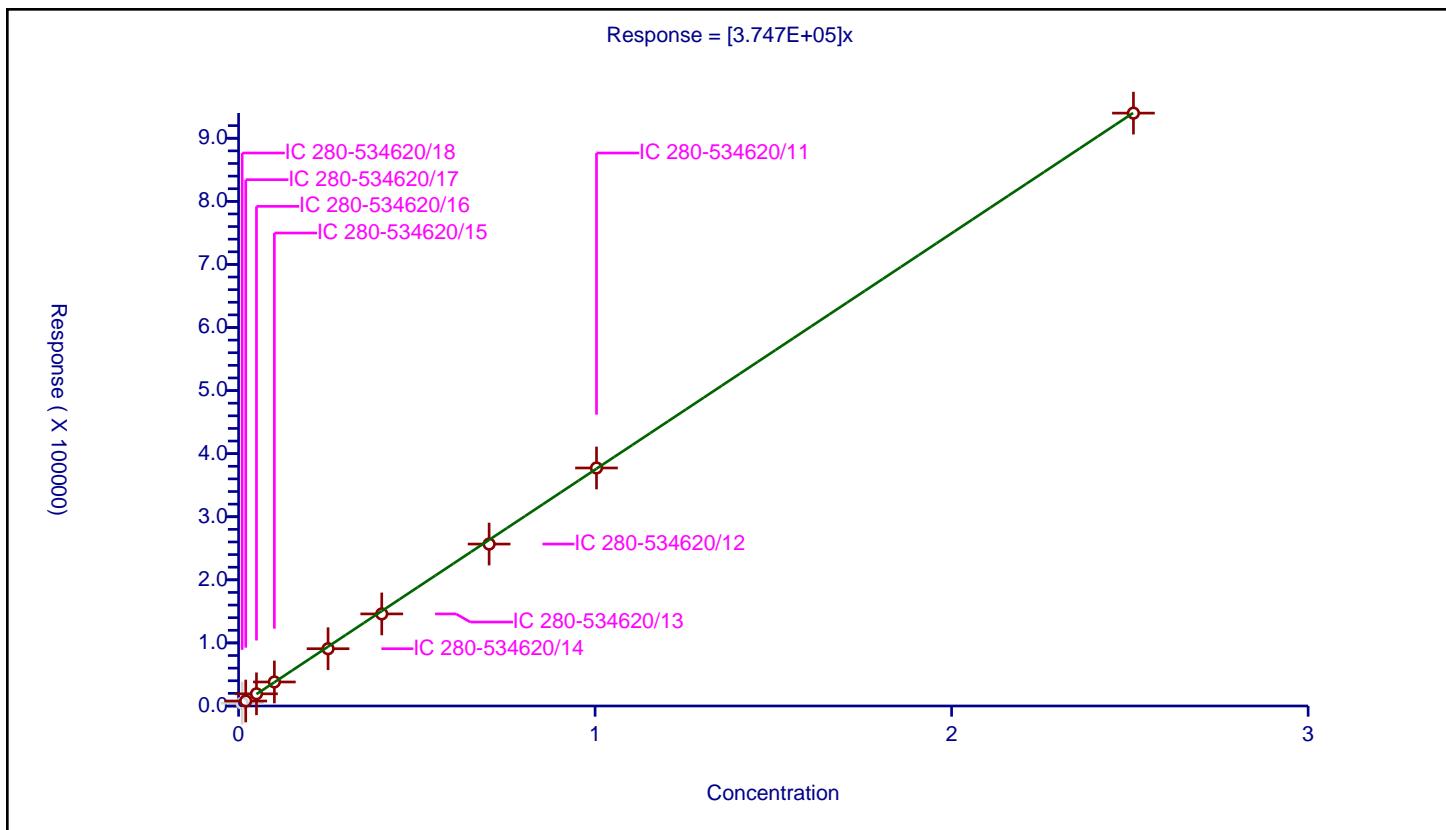
## Calibration

/ Nitrobenzene

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	3.747E+05
Error Coefficients	
Standard Error:	3320
Relative Standard Error:	2.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01004	4507.0			448904.38247	N
2	IC 280-534620/17	0.02008	7888.0			392828.685259	Y
3	IC 280-534620/16	0.0502	19306.0			384581.673307	Y
4	IC 280-534620/15	0.1004	38085.0			379332.669323	Y
5	IC 280-534620/14	0.251	90760.0			361593.625498	Y
6	IC 280-534620/13	0.4016	145926.0			363361.553785	Y
7	IC 280-534620/12	0.7028	256719.0			365280.307342	Y
8	IC 280-534620/11	1.004	377310.0			375806.772908	Y
9	IC 280-534620/10	2.51	939811.0			374426.693227	Y



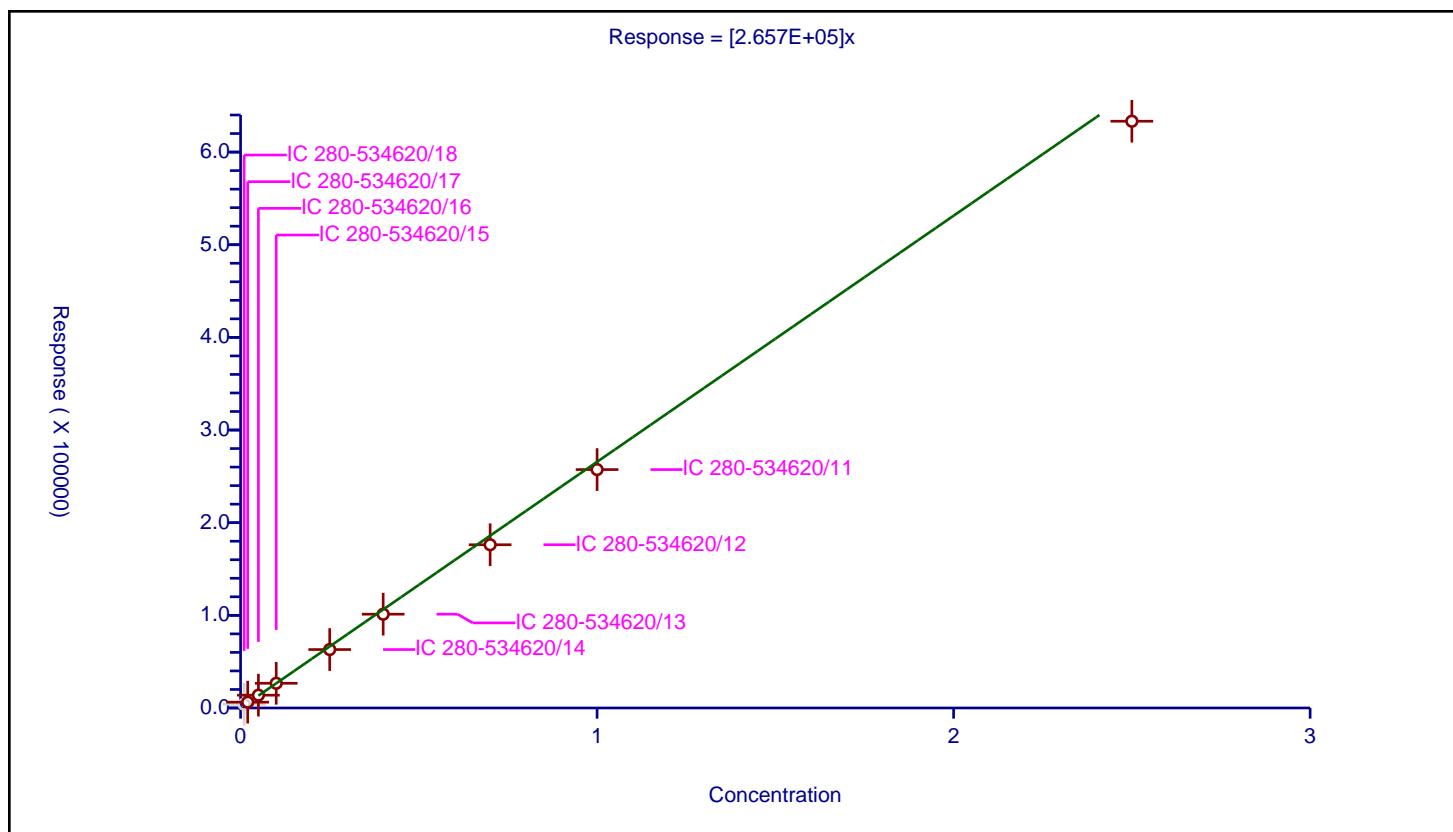
## Calibration

/ 1,2-Dinitrobenzene

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	2.657E+05
Error Coefficients	
Standard Error:	12800
Relative Standard Error:	8.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

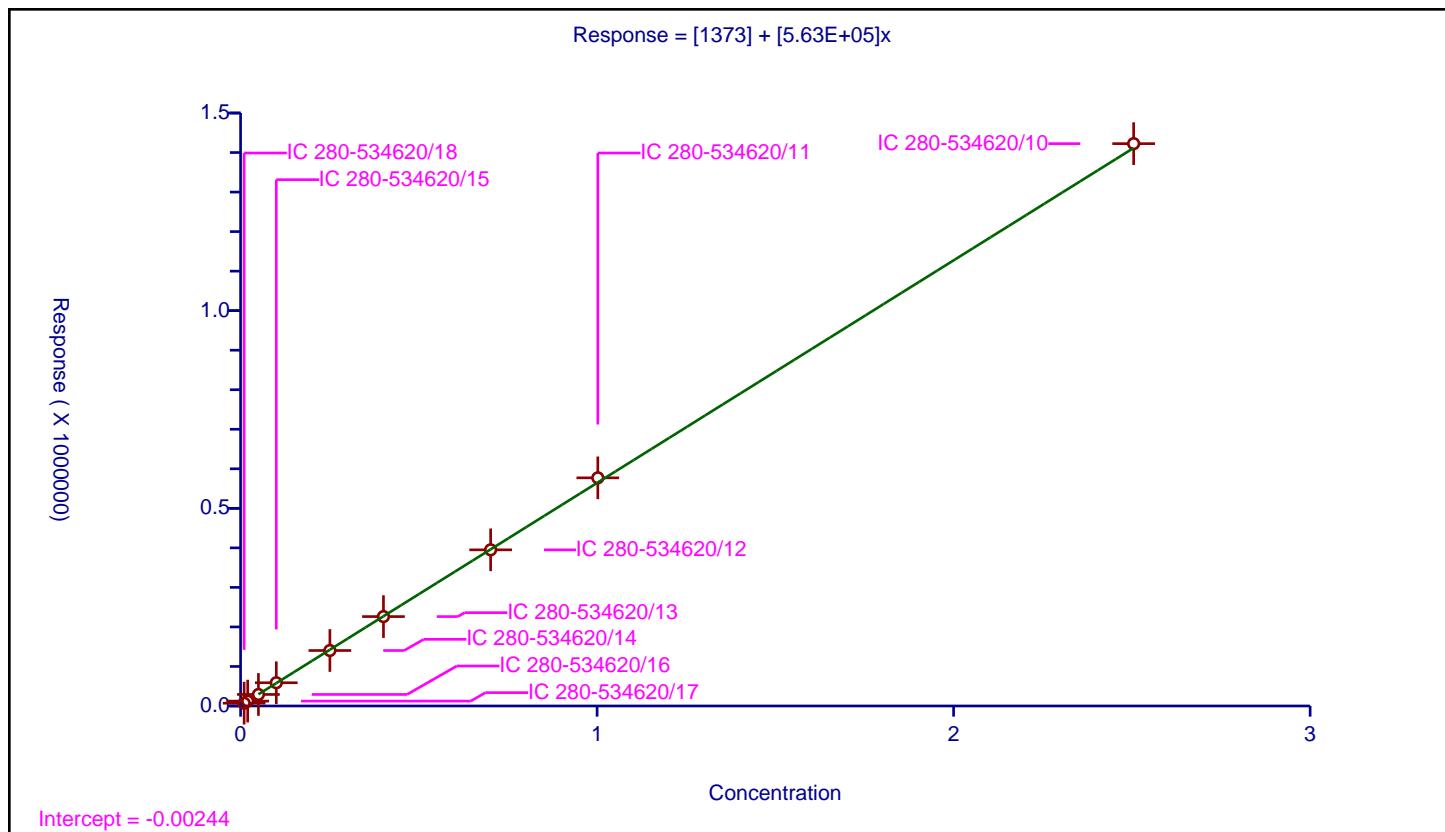
ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01	4082.0			408200.0	N
2	IC 280-534620/17	0.02	6280.0			314000.0	Y
3	IC 280-534620/16	0.05	13836.0			276720.0	Y
4	IC 280-534620/15	0.1	26678.0			266780.0	Y
5	IC 280-534620/14	0.25	63081.0			252324.0	Y
6	IC 280-534620/13	0.4	101248.0			253120.0	Y
7	IC 280-534620/12	0.7	176180.0			251685.714286	Y
8	IC 280-534620/11	1.0	257324.0			257324.0	Y
9	IC 280-534620/10	2.5	633300.0			253320.0	Y



**Curve Type:** Linear  
**Weighting:** Conc\_Sq  
**Origin:** None  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	1373
Slope:	5.63E+05
Error Coefficients	
Standard Error:	6130
Relative Standard Error:	1.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01002	7085.0			707085.828343	Y
2	IC 280-534620/17	0.02004	12411.0			619311.377246	Y
3	IC 280-534620/16	0.0501	29142.0			581676.646707	Y
4	IC 280-534620/15	0.1002	58764.0			586467.065868	Y
5	IC 280-534620/14	0.2505	140347.0			560267.46507	Y
6	IC 280-534620/13	0.4008	226148.0			564241.516966	Y
7	IC 280-534620/12	0.7014	394975.0			563123.752495	Y
8	IC 280-534620/11	1.002	577120.0			575968.063872	Y
9	IC 280-534620/10	2.505	1422490.0			567860.279441	Y



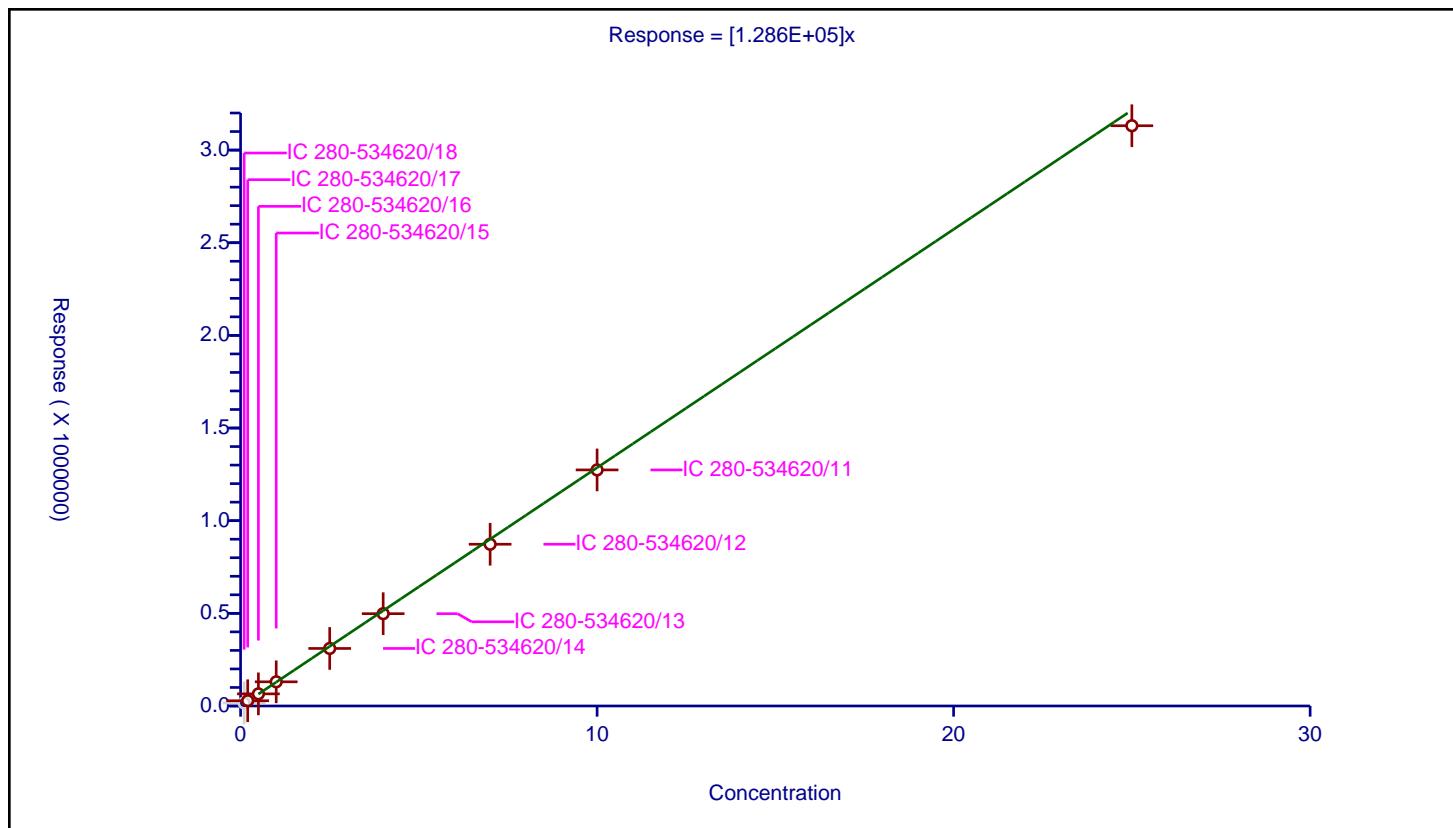
## Calibration

/ Nitroglycerin

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	1.286E+05
Error Coefficients	
Standard Error:	34400
Relative Standard Error:	4.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.1	16401.0			164010.0	N
2	IC 280-534620/17	0.2	28299.0			141495.0	Y
3	IC 280-534620/16	0.5	65416.0			130832.0	Y
4	IC 280-534620/15	1.0	130447.0			130447.0	Y
5	IC 280-534620/14	2.5	310480.0			124192.0	Y
6	IC 280-534620/13	4.0	498088.0			124522.0	Y
7	IC 280-534620/12	7.0	872941.0			124705.857143	Y
8	IC 280-534620/11	10.0	1273886.0			127388.6	Y
9	IC 280-534620/10	25.0	3131400.0			125256.0	Y



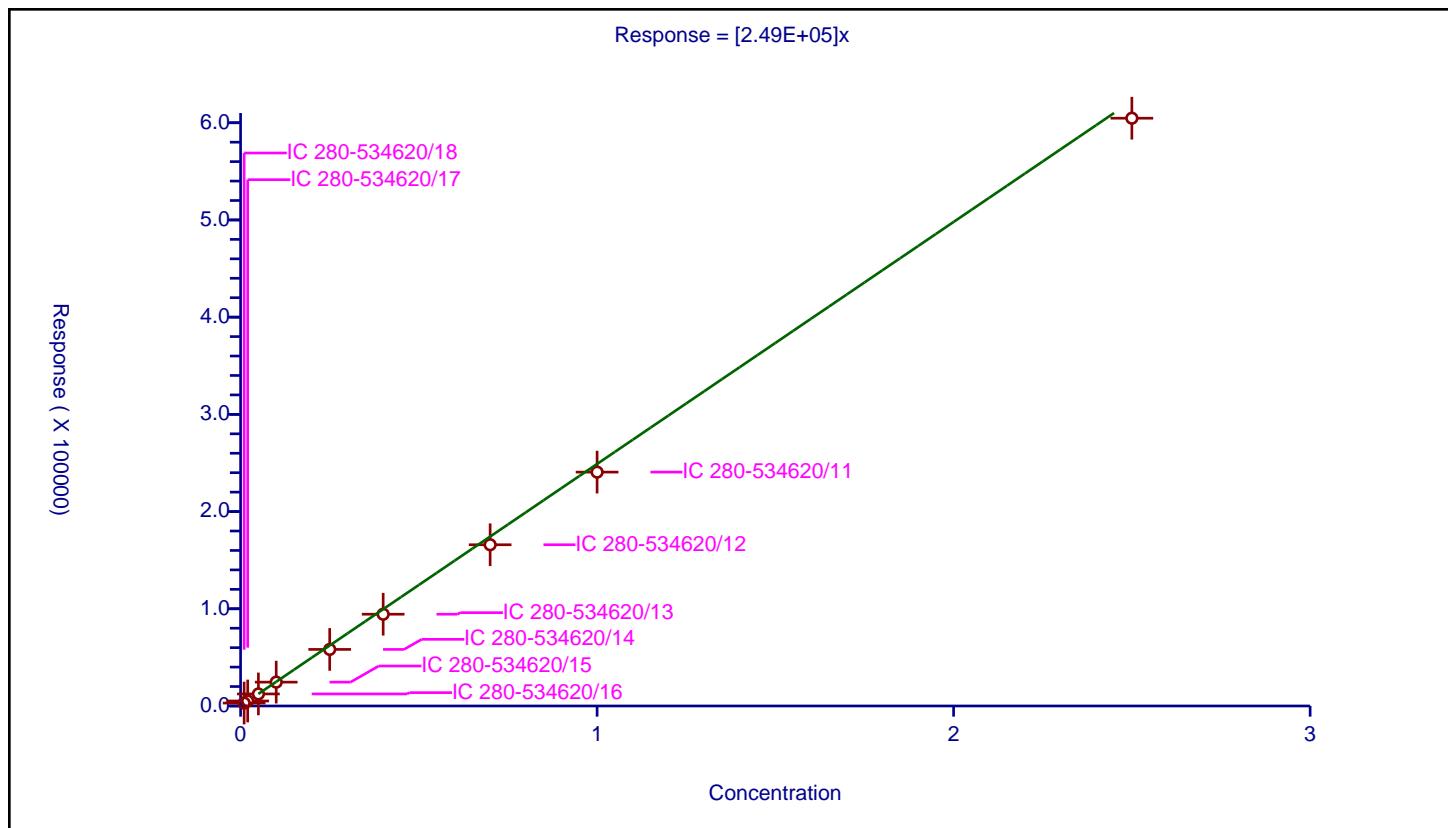
## Calibration

/ o-Nitrotoluene

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	2.49E+05
Error Coefficients	
Standard Error:	7910
Relative Standard Error:	8.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01	3022.0			302200.0	Y
2	IC 280-534620/17	0.02	5151.0			257550.0	Y
3	IC 280-534620/16	0.05	12373.0			247460.0	Y
4	IC 280-534620/15	0.1	24528.0			245280.0	Y
5	IC 280-534620/14	0.25	58191.0			232764.0	Y
6	IC 280-534620/13	0.4	94418.0			236045.0	Y
7	IC 280-534620/12	0.7	165863.0			236947.142857	Y
8	IC 280-534620/11	1.0	240595.0			240595.0	Y
9	IC 280-534620/10	2.5	604653.0			241861.2	Y



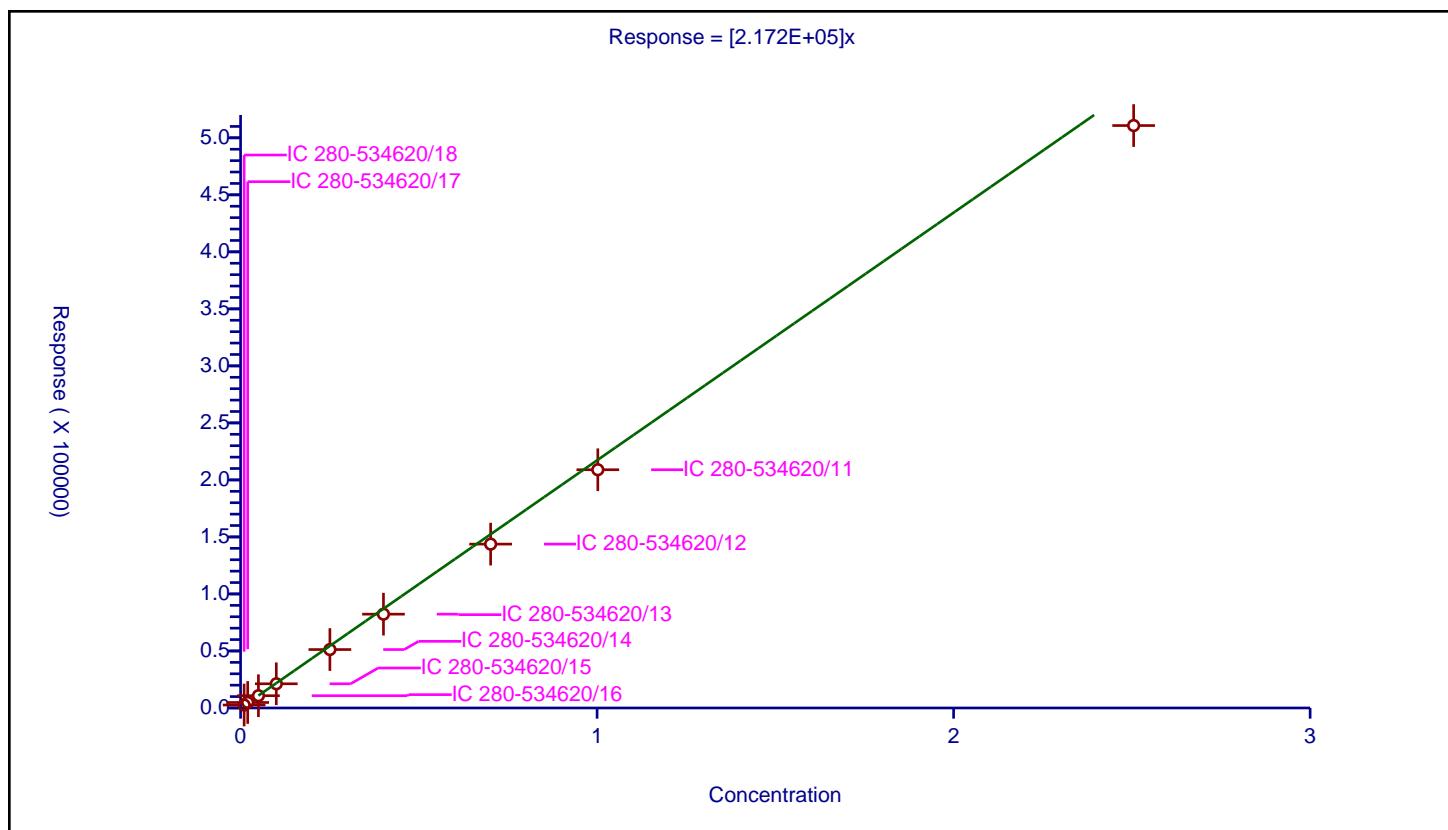
## Calibration

/ p-Nitrotoluene

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	2.172E+05
Error Coefficients	
Standard Error:	12700
Relative Standard Error:	9.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01002	2608.0			260279.441118	Y
2	IC 280-534620/17	0.02004	4823.0			240668.662675	Y
3	IC 280-534620/16	0.0501	10760.0			214770.459082	Y
4	IC 280-534620/15	0.1002	21221.0			211786.427146	Y
5	IC 280-534620/14	0.2505	51245.0			204570.858283	Y
6	IC 280-534620/13	0.4008	82281.0			205291.916168	Y
7	IC 280-534620/12	0.7014	143722.0			204907.328201	Y
8	IC 280-534620/11	1.002	208929.0			208511.976048	Y
9	IC 280-534620/10	2.505	510755.0			203894.211577	Y



## Calibration

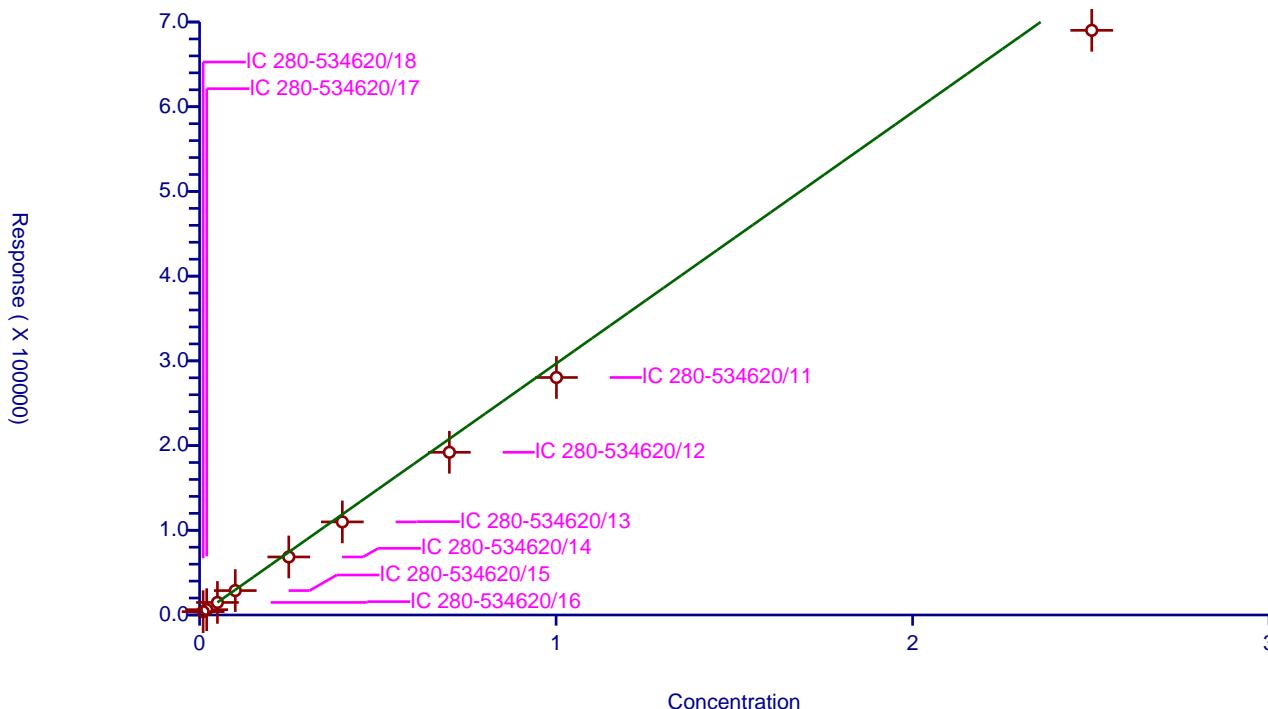
## / 4-Amino-2,6-dinitrotoluene

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	2.967E+05
Error Coefficients	
Standard Error:	20600
Relative Standard Error:	13.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.974

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01001	3954.0			395004.995005	Y
2	IC 280-534620/17	0.02002	6276.0			313486.513487	Y
3	IC 280-534620/16	0.05005	14802.0			295744.255744	Y
4	IC 280-534620/15	0.1001	28819.0			287902.097902	Y
5	IC 280-534620/14	0.25025	68509.0			273762.237762	Y
6	IC 280-534620/13	0.4004	109890.0			274450.549451	Y
7	IC 280-534620/12	0.7007	192075.0			274118.738404	Y
8	IC 280-534620/11	1.001	280366.0			280085.914086	Y
9	IC 280-534620/10	2.5025	690165.0			275790.20979	Y

$$\text{Response} = [2.967\text{E+05}]x$$



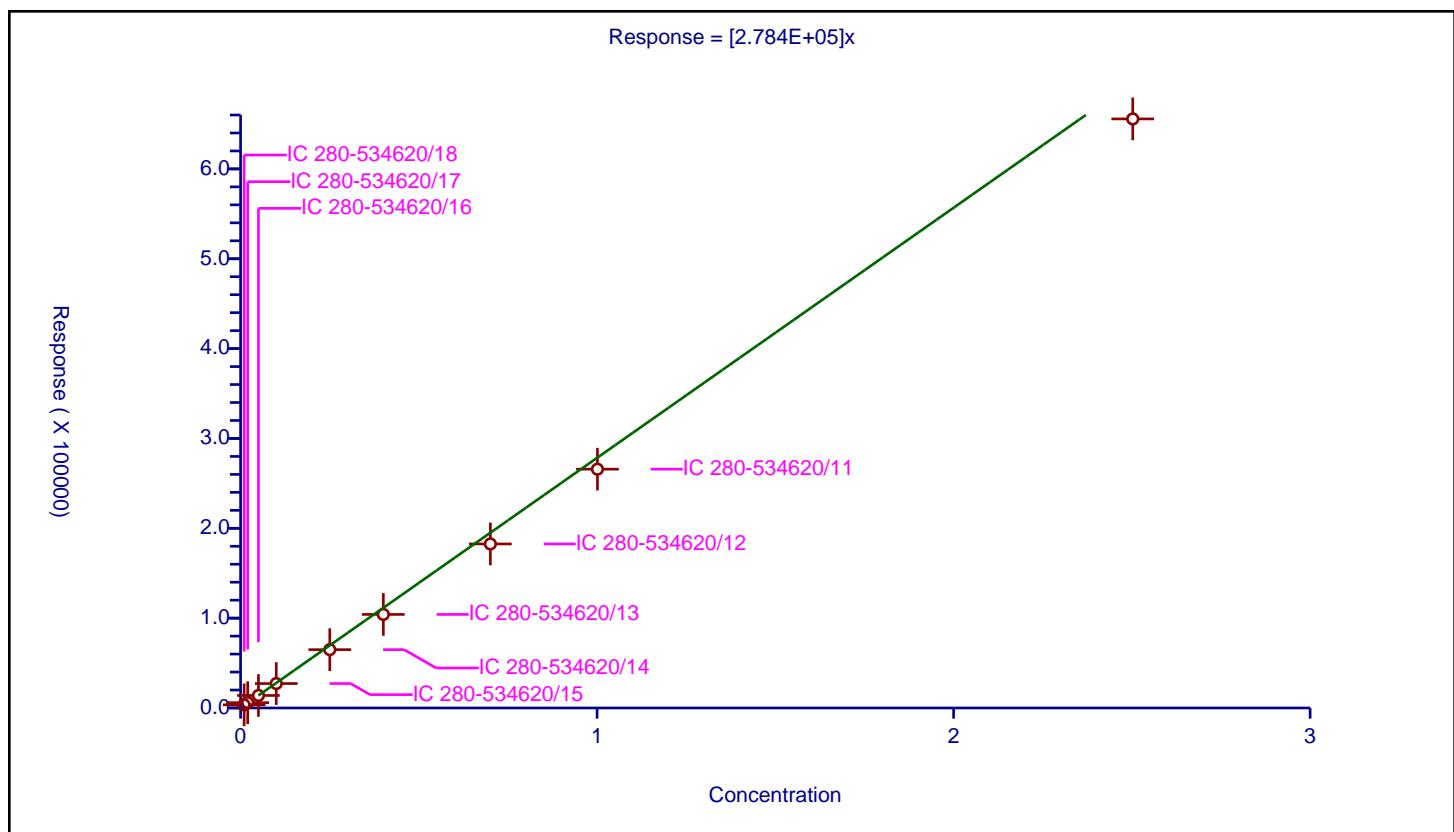
## Calibration

/ m-Nitrotoluene

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	2.784E+05
Error Coefficients	
Standard Error:	16100
Relative Standard Error:	10.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01001	3517.0			351348.651349	Y
2	IC 280-534620/17	0.02002	5928.0			296103.896104	Y
3	IC 280-534620/16	0.05005	13943.0			278581.418581	Y
4	IC 280-534620/15	0.1001	27212.0			271848.151848	Y
5	IC 280-534620/14	0.25025	64933.0			259472.527473	Y
6	IC 280-534620/13	0.4004	104128.0			260059.94006	Y
7	IC 280-534620/12	0.7007	182587.0			260577.993435	Y
8	IC 280-534620/11	1.001	265803.0			265537.462537	Y
9	IC 280-534620/10	2.5025	655662.0			262002.797203	Y



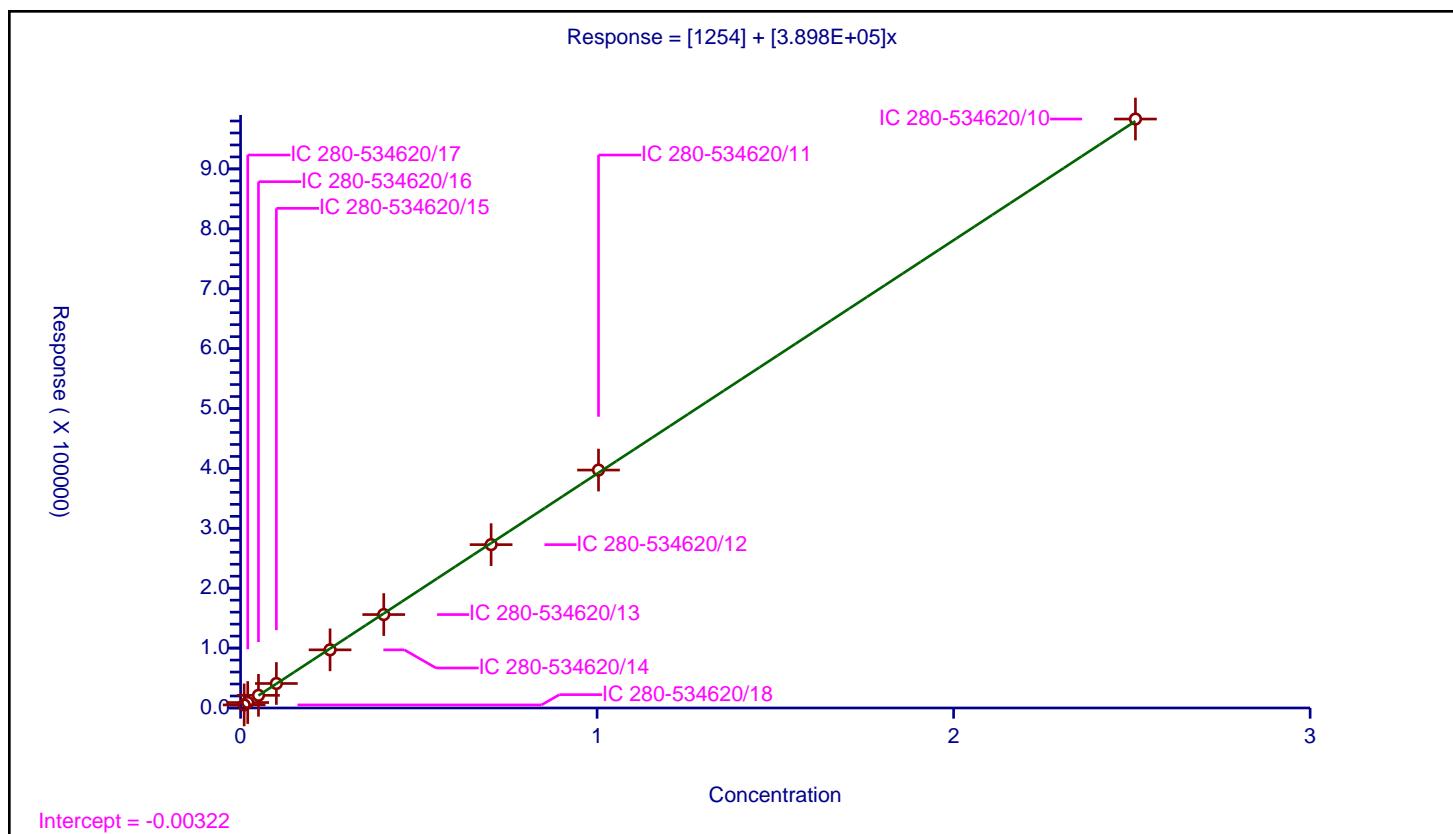
## Calibration

/ 2-Amino-4,6-dinitrotoluene

**Curve Type:** Linear  
**Weighting:** Conc\_Sq  
**Origin:** None  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	1254
Slope:	3.898E+05
Error Coefficients	
Standard Error:	2610
Relative Standard Error:	1.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01004	5148.0			512749.003984	Y
2	IC 280-534620/17	0.02008	9114.0			453884.462151	Y
3	IC 280-534620/16	0.0502	21111.0			420537.848606	Y
4	IC 280-534620/15	0.1004	40904.0			407410.358566	Y
5	IC 280-534620/14	0.251	97071.0			386737.051793	Y
6	IC 280-534620/13	0.4016	155961.0			388349.103586	Y
7	IC 280-534620/12	0.7028	272718.0			388044.963005	Y
8	IC 280-534620/11	1.004	397243.0			395660.358566	Y
9	IC 280-534620/10	2.51	983275.0			391743.027888	Y



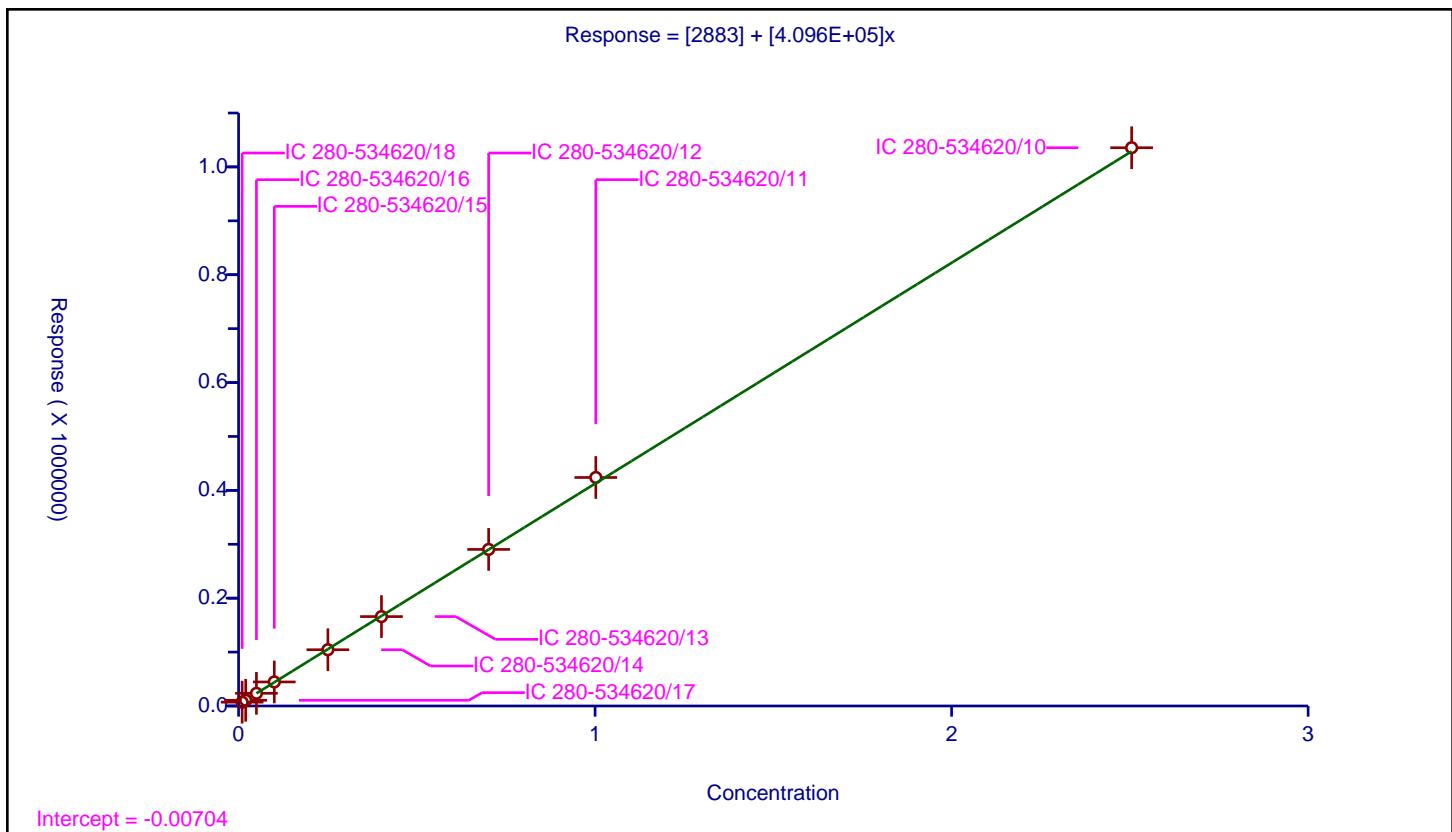
## Calibration

/ 1,3,5-Trinitrobenzene

**Curve Type:** Linear  
**Weighting:** Conc\_Sq  
**Origin:** None  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	2883
Slope:	4.096E+05
Error Coefficients	
Standard Error:	4780
Relative Standard Error:	3.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01002	7116.0			710179.640719	Y
2	IC 280-534620/17	0.02004	10540.0			525948.103792	Y
3	IC 280-534620/16	0.0501	23506.0			469181.636727	Y
4	IC 280-534620/15	0.1002	44594.0			445049.9002	Y
5	IC 280-534620/14	0.2505	104344.0			416542.914172	Y
6	IC 280-534620/13	0.4008	165828.0			413742.51497	Y
7	IC 280-534620/12	0.7014	290458.0			414111.776447	Y
8	IC 280-534620/11	1.002	423869.0			423022.954092	Y
9	IC 280-534620/10	2.505	1035616.0			413419.560878	Y



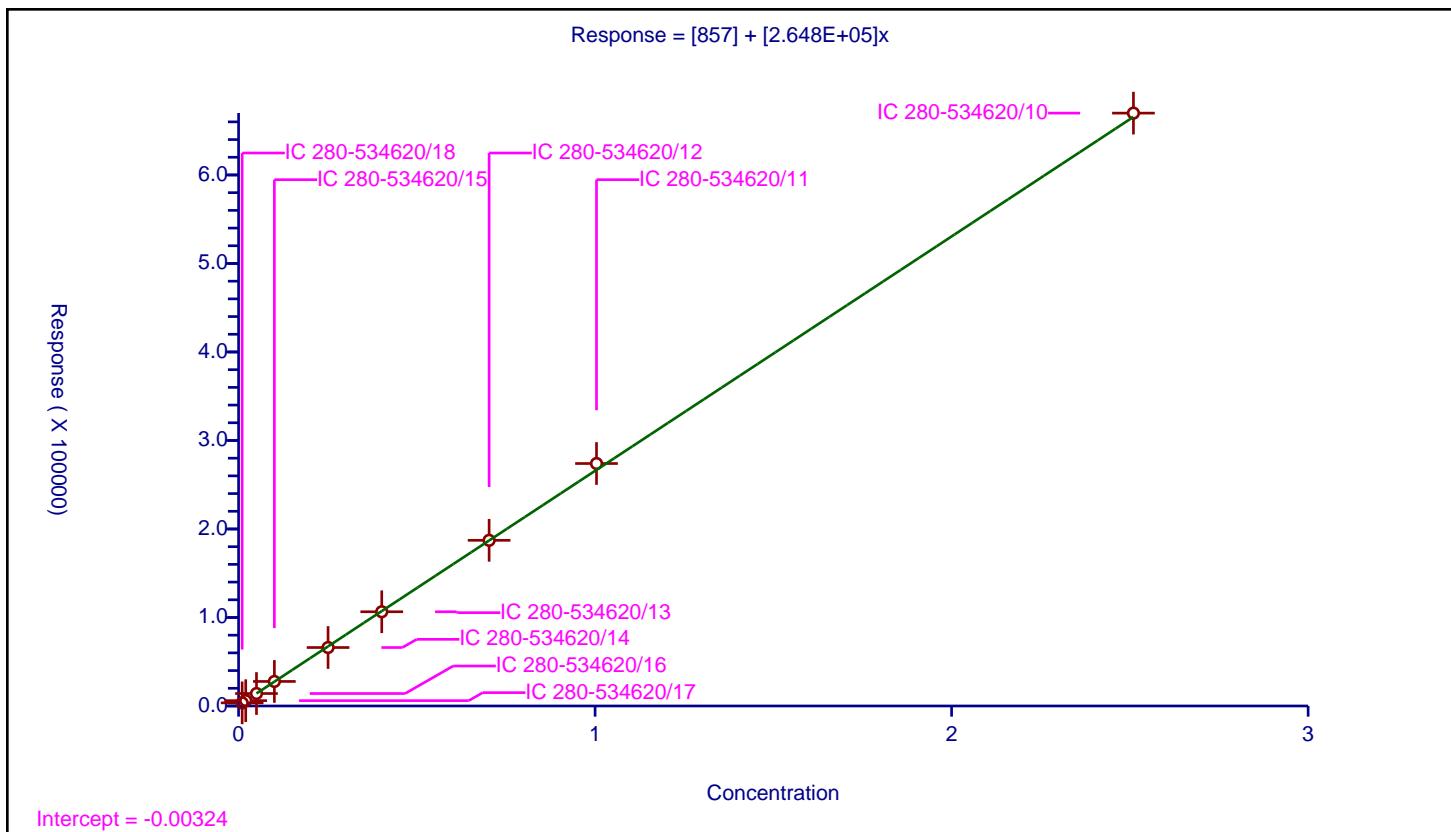
## Calibration

## / 2,6-Dinitrotoluene

**Curve Type:** Linear  
**Weighting:** Conc\_Sq  
**Origin:** None  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	857
Slope:	2.648E+05
Error Coefficients	
Standard Error:	3220
Relative Standard Error:	1.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01004	3555.0			354083.665339	Y
2	IC 280-534620/17	0.02008	6026.0			300099.601594	Y
3	IC 280-534620/16	0.0502	14081.0			280498.007968	Y
4	IC 280-534620/15	0.1004	27721.0			276105.577689	Y
5	IC 280-534620/14	0.251	66062.0			263195.219124	Y
6	IC 280-534620/13	0.4016	106452.0			265069.721116	Y
7	IC 280-534620/12	0.7028	187184.0			266340.352874	Y
8	IC 280-534620/11	1.004	273958.0			272866.533865	Y
9	IC 280-534620/10	2.51	669889.0			266888.047809	Y



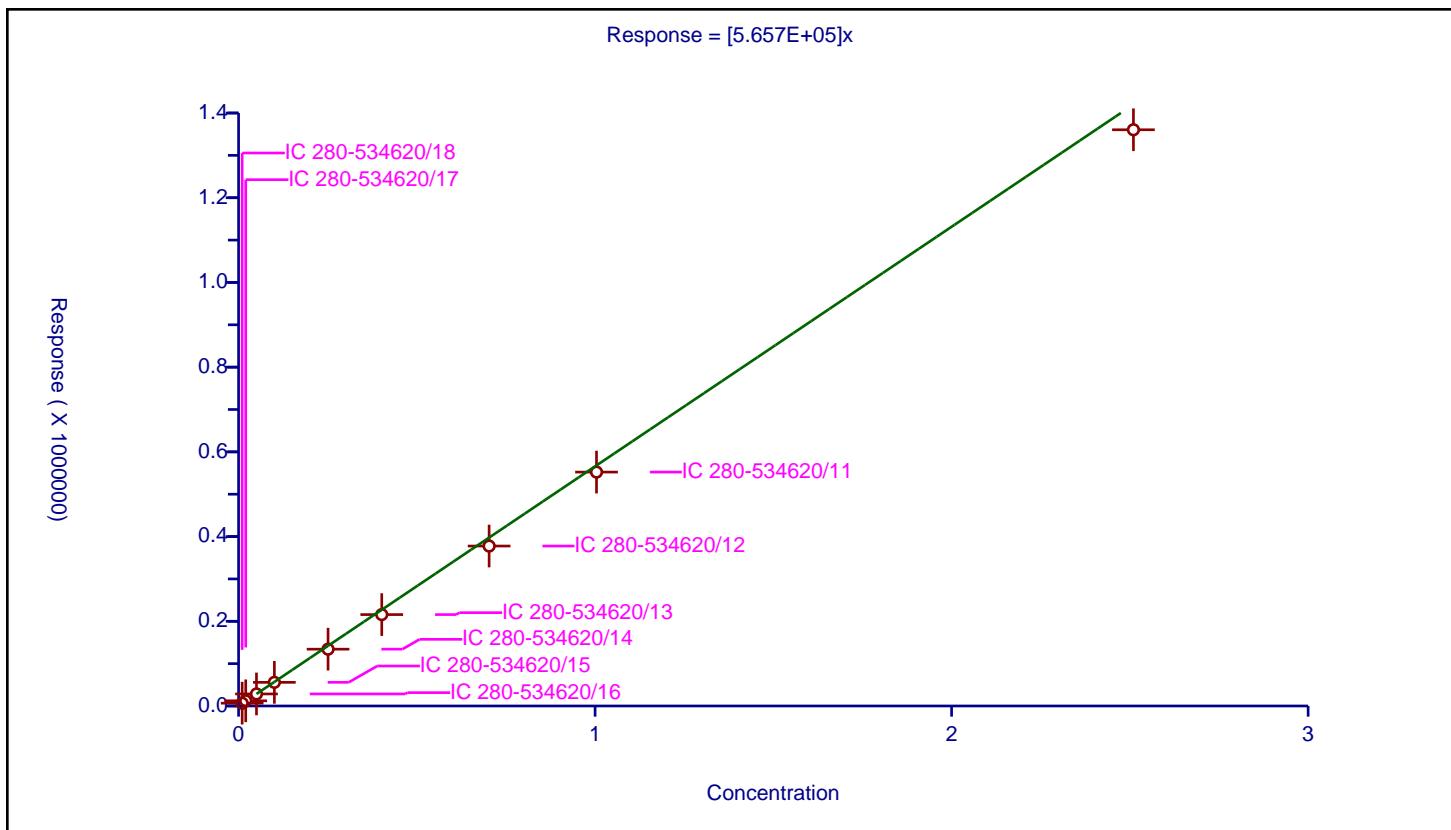
## Calibration

## / 2,4-Dinitrotoluene

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	5.657E+05
Error Coefficients	
Standard Error:	23400
Relative Standard Error:	7.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

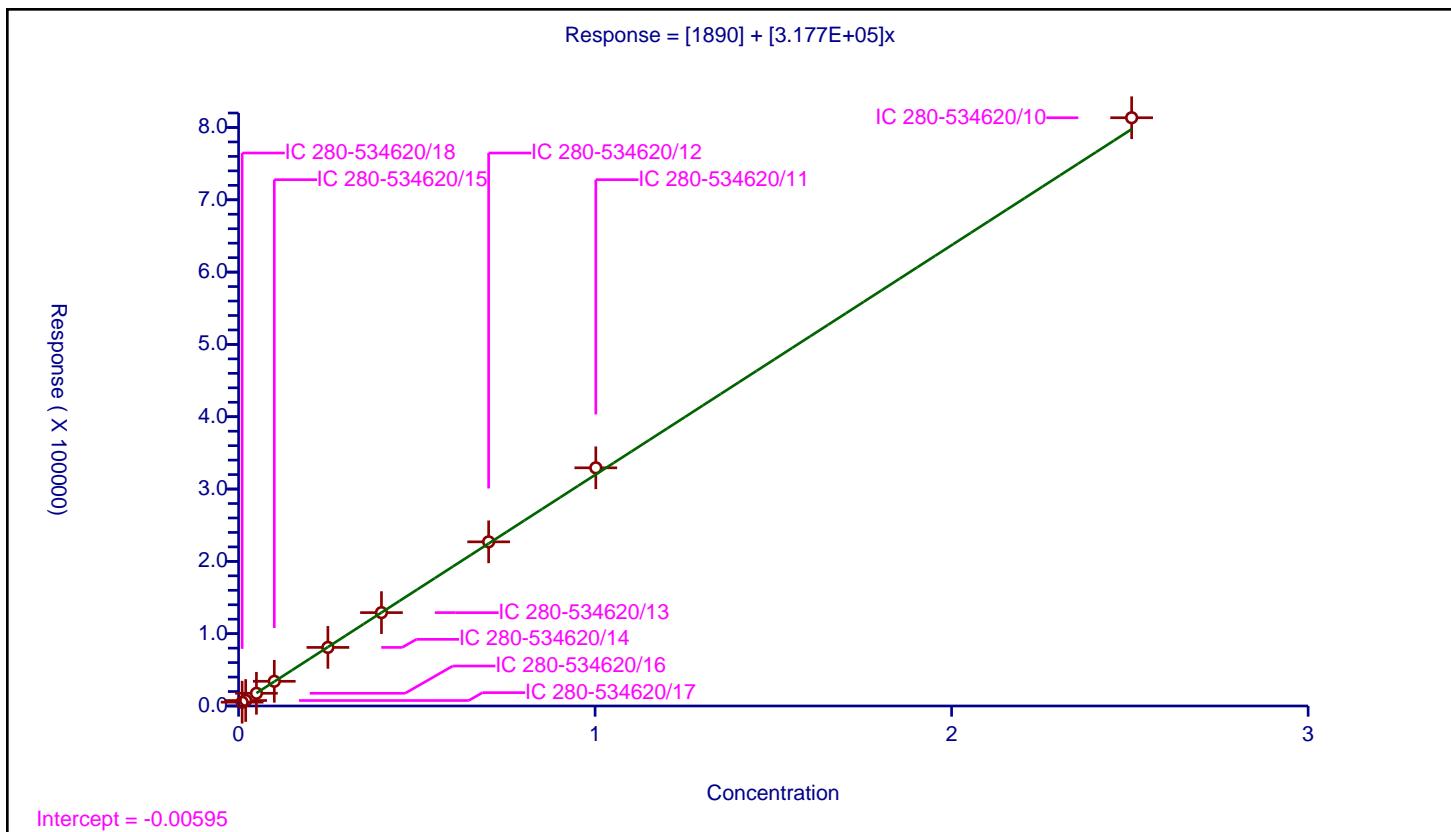
ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01004	6619.0			659262.948207	Y
2	IC 280-534620/17	0.02008	12229.0			609013.944223	Y
3	IC 280-534620/16	0.0502	28396.0			565657.370518	Y
4	IC 280-534620/15	0.1004	55838.0			556155.378486	Y
5	IC 280-534620/14	0.251	134163.0			534513.944223	Y
6	IC 280-534620/13	0.4016	215819.0			537397.908367	Y
7	IC 280-534620/12	0.7028	377631.0			537323.562891	Y
8	IC 280-534620/11	1.004	552269.0			550068.7251	Y
9	IC 280-534620/10	2.51	1360486.0			542026.294821	Y



**Curve Type:** Linear  
**Weighting:** Conc\_Sq  
**Origin:** None  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	1890
Slope:	3.177E+05
Error Coefficients	
Standard Error:	6990
Relative Standard Error:	4.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01002	5245.0			523453.093812	Y
2	IC 280-534620/17	0.02004	7583.0			378393.213573	Y
3	IC 280-534620/16	0.0501	17573.0			350758.483034	Y
4	IC 280-534620/15	0.1002	34148.0			340798.403194	Y
5	IC 280-534620/14	0.2505	80996.0			323337.325349	Y
6	IC 280-534620/13	0.4008	129140.0			322205.588822	Y
7	IC 280-534620/12	0.7014	227001.0			323639.863131	Y
8	IC 280-534620/11	1.002	329366.0			328708.582834	Y
9	IC 280-534620/10	2.505	813489.0			324746.107784	Y



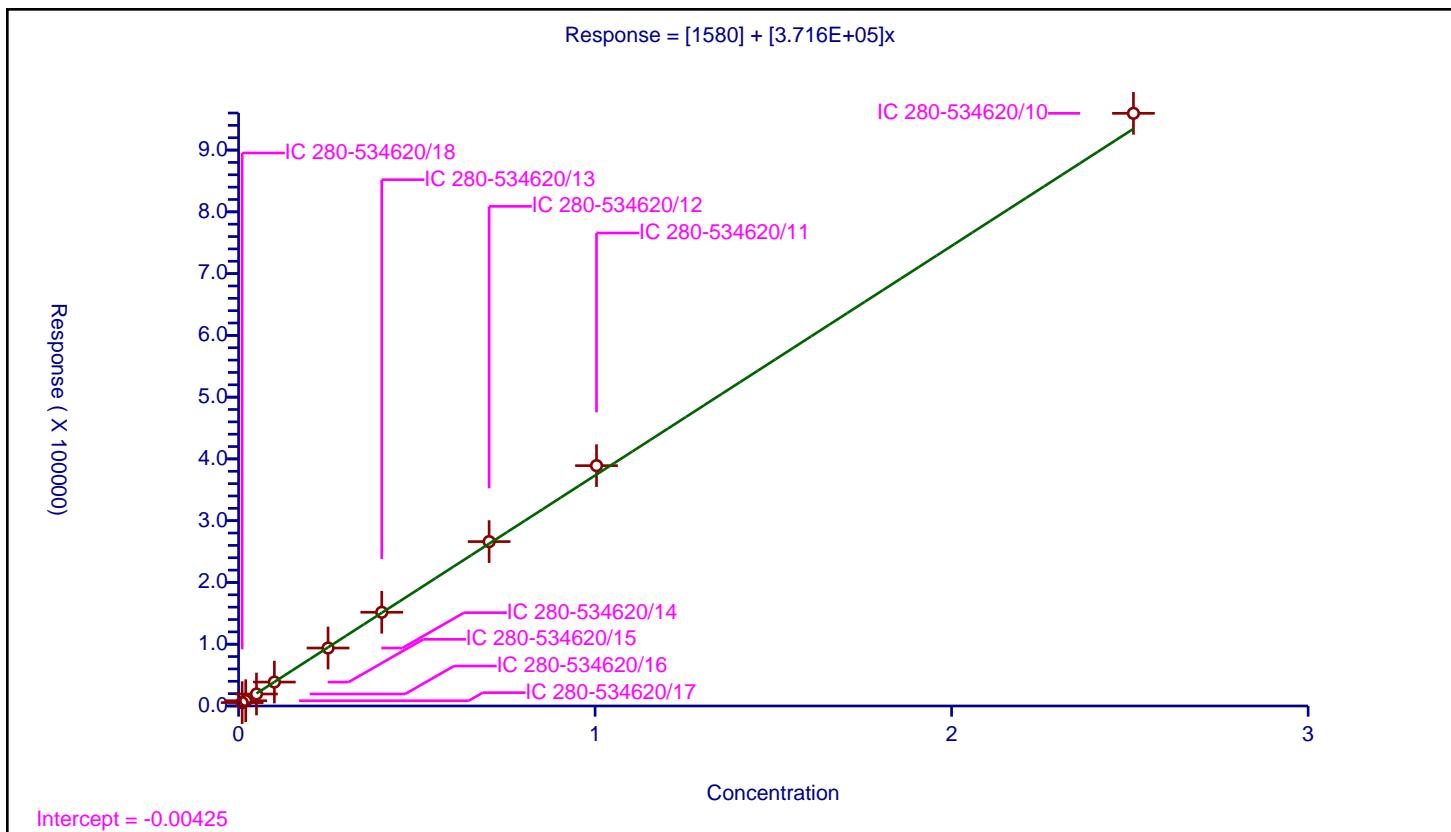
## Calibration

## / 2,4,6-Trinitrotoluene

**Curve Type:** Linear  
**Weighting:** Conc\_Sq  
**Origin:** None  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	1580
Slope:	3.716E+05
Error Coefficients	
Standard Error:	11000
Relative Standard Error:	3.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

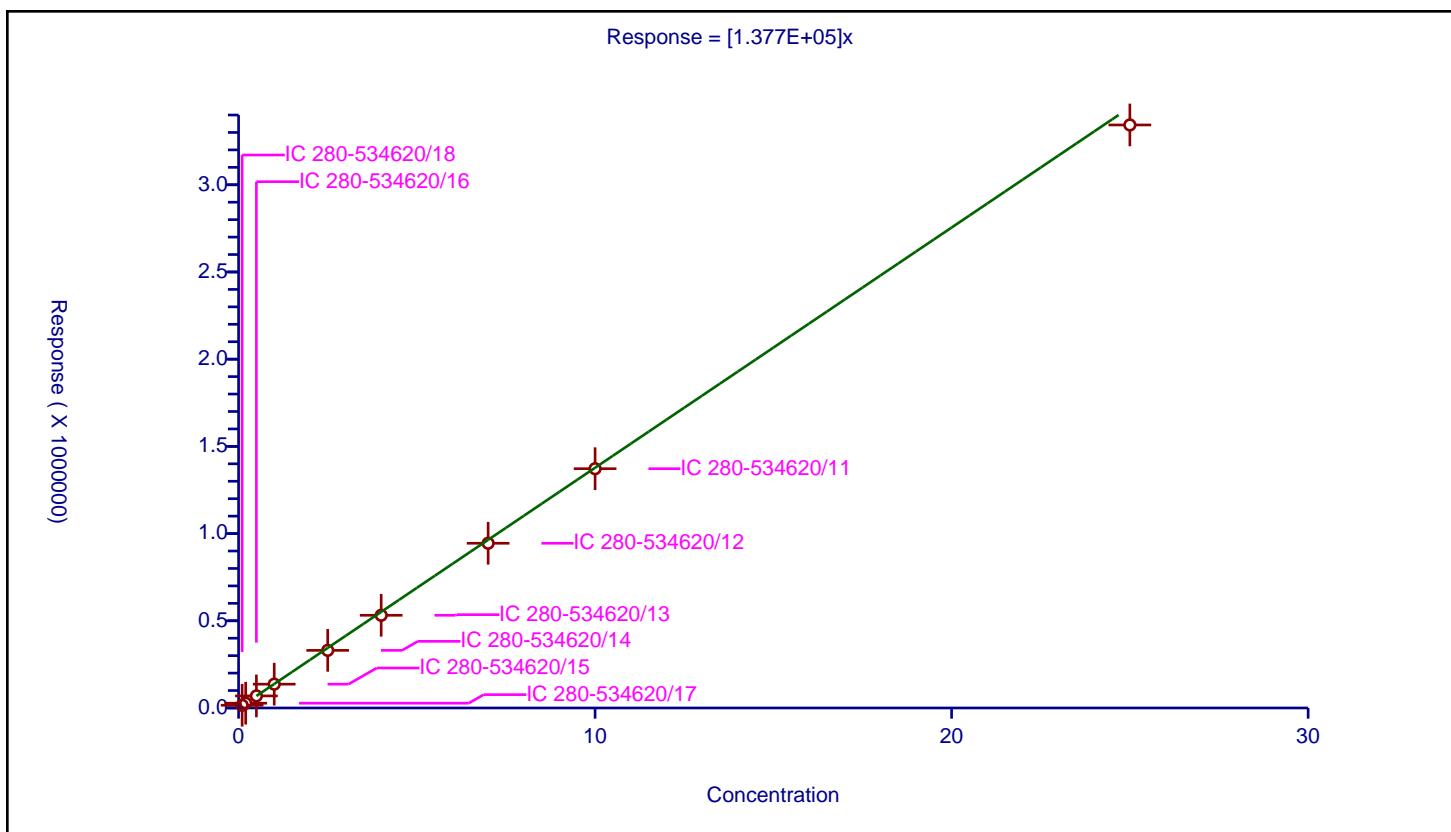
ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01004	5469.0			544721.115538	Y
2	IC 280-534620/17	0.02008	8548.0			425697.211155	Y
3	IC 280-534620/16	0.0502	19400.0			386454.183267	Y
4	IC 280-534620/15	0.1004	38740.0			385856.573705	Y
5	IC 280-534620/14	0.251	93822.0			373792.828685	Y
6	IC 280-534620/13	0.4016	151709.0			377761.454183	Y
7	IC 280-534620/12	0.7028	266122.0			378659.647126	Y
8	IC 280-534620/11	1.004	389102.0			387551.792829	Y
9	IC 280-534620/10	2.51	959496.0			382269.322709	Y



**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	1.377E+05
Error Coefficients	
Standard Error:	37200
Relative Standard Error:	5.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.1	15659.0			156590.0	Y
2	IC 280-534620/17	0.2	27436.0			137180.0	Y
3	IC 280-534620/16	0.5	69170.0			138340.0	Y
4	IC 280-534620/15	1.0	136676.0			136676.0	Y
5	IC 280-534620/14	2.5	330309.0			132123.6	Y
6	IC 280-534620/13	4.0	531566.0			132891.5	Y
7	IC 280-534620/12	7.0	944599.0			134942.714286	Y
8	IC 280-534620/11	10.0	1371986.0			137198.6	Y
9	IC 280-534620/10	25.0	3343027.0			133721.08	Y



FORM VI  
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA  
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1 Analy Batch No.: 534620

SDG No.: \_\_\_\_\_

Instrument ID: CHHPLC\_X5 GC Column: Luna-phenyl ID: 4.6 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/02/2021 00:45 Calibration End Date: 05/02/2021 04:51 Calibration ID: 53147

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-534620/27	027-2201.D
Level 2	IC 280-534620/26	026-2101.D
Level 3	IC 280-534620/25	025-2001.D
Level 4	IC 280-534620/24	024-1901.D
Level 5	IC 280-534620/23	023-1801.D
Level 6	IC 280-534620/22	022-1701.D
Level 7	IC 280-534620/21	021-1601.D
Level 8	IC 280-534620/20	020-1501.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
TNX	5.064	5.071	5.067	5.077	5.075	5.069	5.070	5.050			4.925 - 5.225	5.068
DNX	5.897	5.898	5.894	5.904	5.902	5.896	5.904	5.876			5.752 - 6.052	5.896
MNX	7.444	7.444	7.447	7.451	7.455	7.449	7.450	7.430			7.305 - 7.605	7.446

FORM VI  
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA  
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1 Analy Batch No.: 534620

SDG No.: \_\_\_\_\_

Instrument ID: CHHPLC\_X5 GC Column: Luna-phenyl ID: 4.6 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/02/2021 00:45 Calibration End Date: 05/02/2021 04:51 Calibration ID: 53147

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-534620/27	027-2201.D
Level 2	IC 280-534620/26	026-2101.D
Level 3	IC 280-534620/25	025-2001.D
Level 4	IC 280-534620/24	024-1901.D
Level 5	IC 280-534620/23	023-1801.D
Level 6	IC 280-534620/22	022-1701.D
Level 7	IC 280-534620/21	021-1601.D
Level 8	IC 280-534620/20	020-1501.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
TNX	410889 372502	384156 369461	382597 368210	348975 372358	Ave		376143.53 1				4.7		20.0			
DNX	297353 284253	292168 282676	288032 280817	268675 284356	Ave		284791.26 8				3.0		20.0			
MNX	288260 261292	277069 259317	266692 258167	246968 260974	Ave		264842.56 ?				4.8		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI  
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA  
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1 Analy Batch No.: 534620

SDG No.: \_\_\_\_\_

Instrument ID: CHHPLC\_X5 GC Column: Luna-phenyl ID: 4.6 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/02/2021 00:45 Calibration End Date: 05/02/2021 04:51 Calibration ID: 53147

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-534620/27	027-2201.D
Level 2	IC 280-534620/26	026-2101.D
Level 3	IC 280-534620/25	025-2001.D
Level 4	IC 280-534620/24	024-1901.D
Level 5	IC 280-534620/23	023-1801.D
Level 6	IC 280-534620/22	022-1701.D
Level 7	IC 280-534620/21	021-1601.D
Level 8	IC 280-534620/20	020-1501.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
TNX	Ave	8226 258881	19227 368578	38298 931826	87331	149150	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
DNX	Ave	5953 198071	14623 281098	28832 711601	67236	113815	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
MNX	Ave	6728 211836	16167 301281	31123 761392	72053	121971	0.0233 0.817	0.0584 1.17	0.117 2.92	0.292	0.467

Curve Type Legend

Ave = Average

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\020-1501.D  
 Lims ID: IC DMT 8  
 Client ID:  
 Sample Type: IC Calib Level: 8  
 Inject. Date: 02-May-2021 00:45:25 ALS Bottle#: 20 Worklist Smp#: 20  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: IC DMT 8  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Sublist: chrom-8330\_X5\_Luna\*sub2  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 04-May-2021 13:43:16 Calib Date: 02-May-2021 04:51:05  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\027-2201.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm) Det: LC mwd1A, 254 nm  
 Process Host: CTX1618

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.050	5.075	-0.025	931826	2.50	2.48	
4 DNX	1	5.876	5.902	-0.026	711601	2.50	2.50	
7 MNX	1	7.430	7.455	-0.025	761392	2.92	2.87	

**Reagents:**

8330 DMT\_00008 Amount Added: 125.00 Units: uL

Report Date: 04-May-2021 13:43:16

Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\020-1501.D

Injection Date: 02-May-2021 00:45:25

Instrument ID: CHHPLC\_X5

Operator ID: JZ

Lims ID: IC DMT 8

Worklist Smp#: 20

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

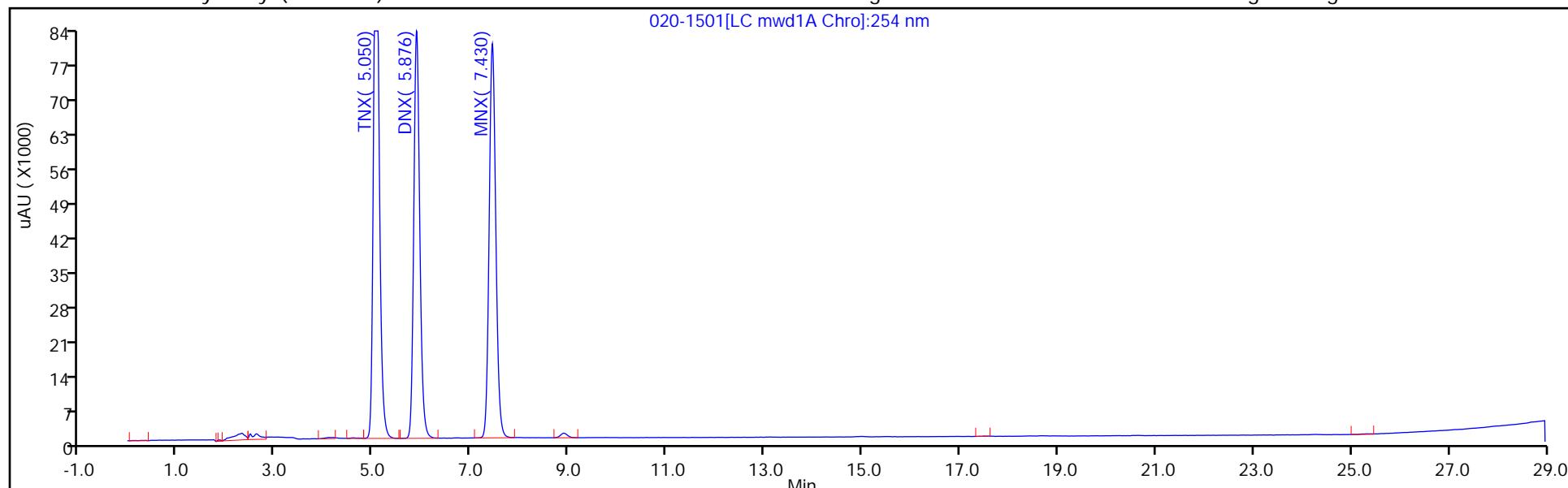
ALS Bottle#: 20

Method: 8330\_X5\_Luna

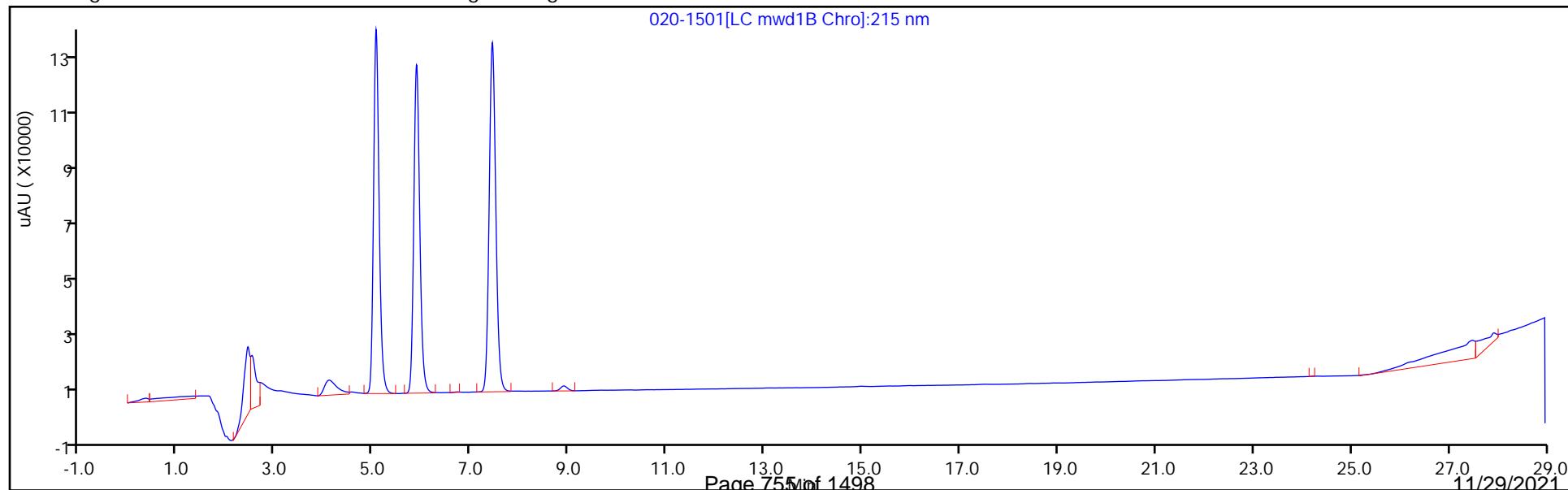
Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\021-1601.D  
 Lims ID: IC DMT 7  
 Client ID:  
 Sample Type: IC Calib Level: 7  
 Inject. Date: 02-May-2021 01:20:33 ALS Bottle#: 21 Worklist Smp#: 21  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: IC DMT 7  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Sublist: chrom-8330\_X5\_Luna\*sub2  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 04-May-2021 13:43:17 Calib Date: 02-May-2021 04:51:05  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\027-2201.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm) Det: LC mwd1A, 254 nm  
 Process Host: CTX1618

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.070	5.075	-0.005	368578	1.00	0.9799	
4 DNX	1	5.904	5.902	0.002	281098	1.00	0.9870	
7 MNX	1	7.450	7.455	-0.005	301281	1.17	1.14	

**Reagents:**

8330 DMT\_00008 Amount Added: 50.00 Units: uL

Report Date: 04-May-2021 13:43:17

Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\021-1601.D

Injection Date: 02-May-2021 01:20:33

Instrument ID: CHHPLC\_X5

Operator ID: JZ

Lims ID: IC DMT 7

Worklist Smp#: 21

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

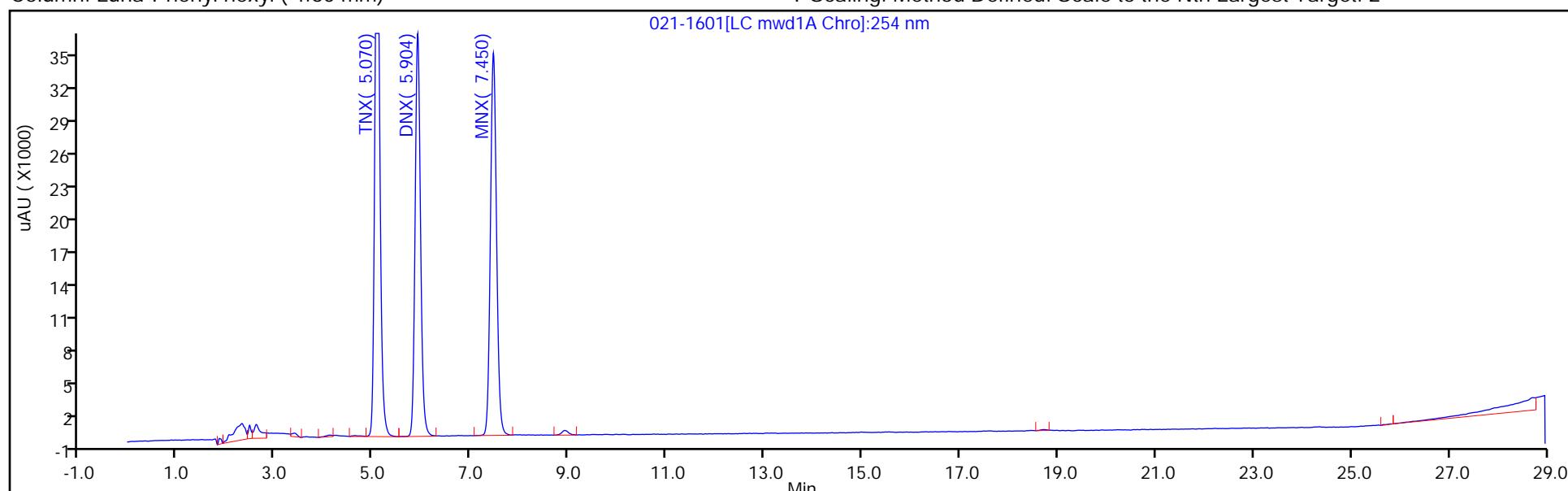
ALS Bottle#: 21

Method: 8330\_X5\_Luna

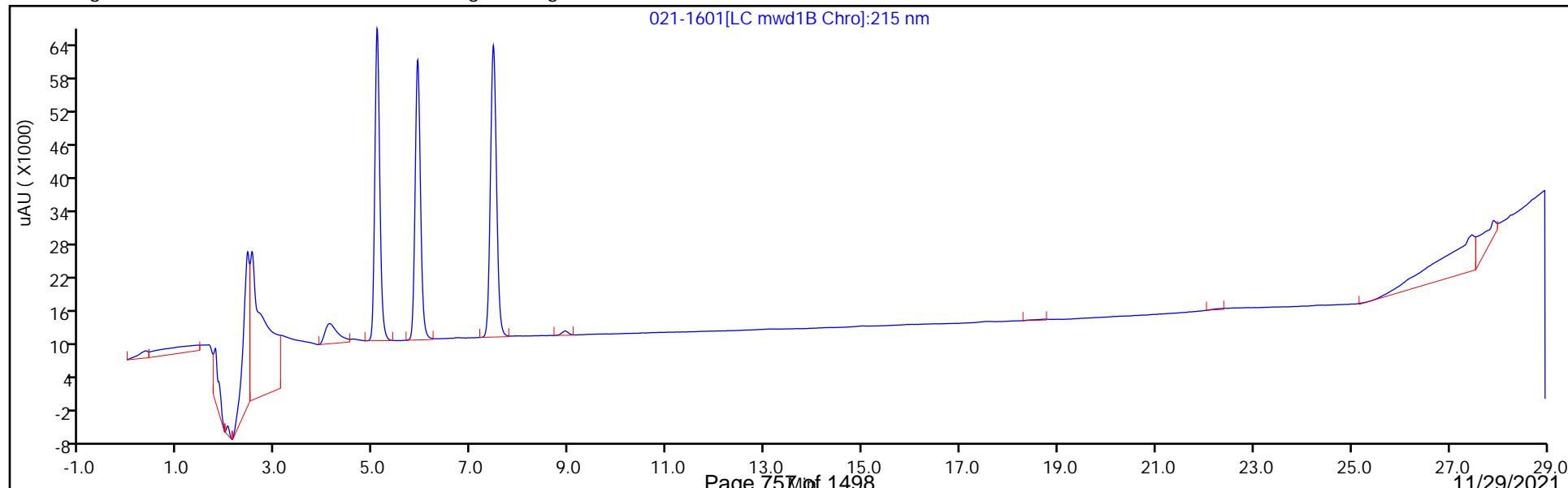
Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\022-1701.D  
 Lims ID: IC DMT 6  
 Client ID:  
 Sample Type: IC Calib Level: 6  
 Inject. Date: 02-May-2021 01:55:44 ALS Bottle#: 22 Worklist Smp#: 22  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: IC DMT 6  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Sublist: chrom-8330\_X5\_Luna\*sub2  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 04-May-2021 13:43:17 Calib Date: 02-May-2021 04:51:05  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\027-2201.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm) Det: LC mwd1A, 254 nm  
 Process Host: CTX1618

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.069	5.075	-0.006	258881	0.7007	0.6883	
4 DNX	1	5.896	5.902	-0.006	198071	0.7007	0.6955	
7 MNX	1	7.449	7.455	-0.006	211836	0.8169	0.7999	

**Reagents:**

8330 DMT\_00008 Amount Added: 35.00 Units: uL

Report Date: 04-May-2021 13:43:17

Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\022-1701.D

Injection Date: 02-May-2021 01:55:44

Instrument ID: CHHPLC\_X5

Operator ID: JZ

Lims ID: IC DMT 6

Worklist Smp#: 22

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

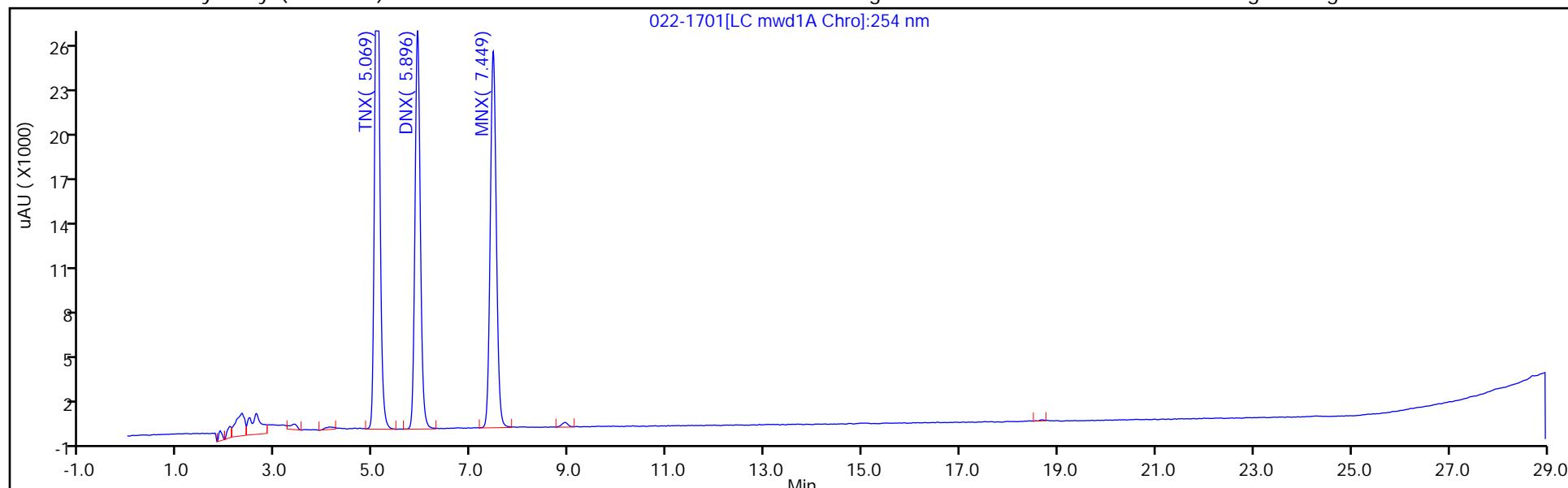
ALS Bottle#: 22

Method: 8330\_X5\_Luna

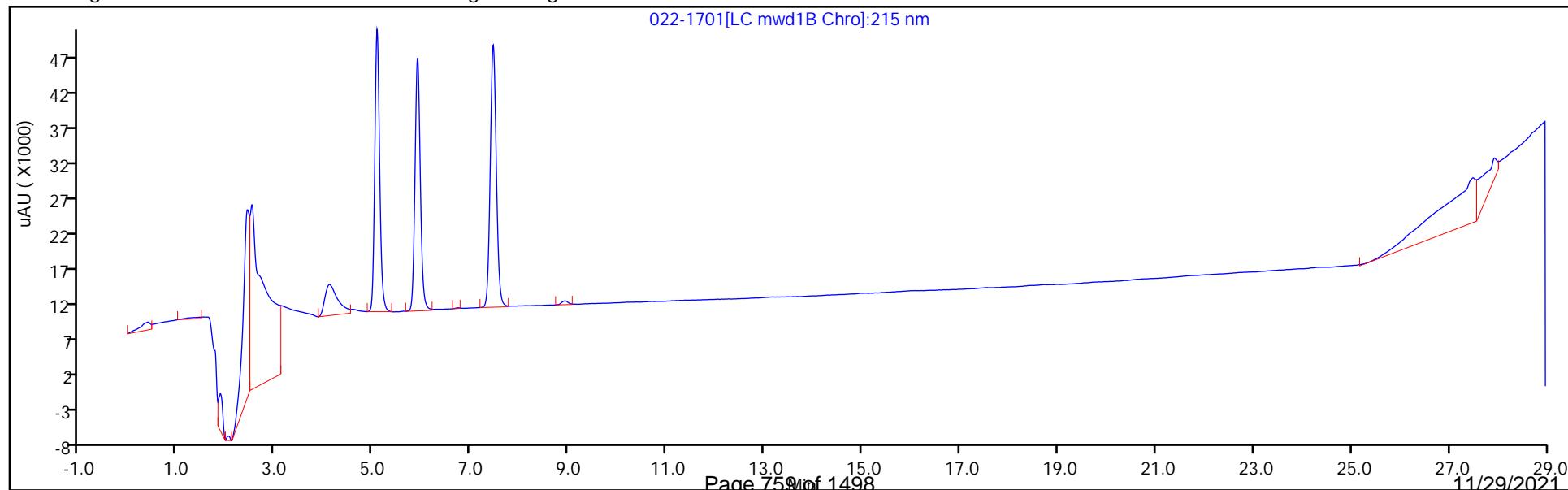
Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\023-1801.D  
 Lims ID: IC DMT 5  
 Client ID:  
 Sample Type: IC Calib Level: 5  
 Inject. Date: 02-May-2021 02:30:46 ALS Bottle#: 23 Worklist Smp#: 23  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: IC DMT 5  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Sublist: chrom-8330\_X5\_Luna\*sub2  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 04-May-2021 13:43:18 Calib Date: 02-May-2021 04:51:05  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\027-2201.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm) Det: LC mwd1A, 254 nm  
 Process Host: CTX1618

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.075	5.075	0.000	149150	0.4004	0.3965	
4 DNX	1	5.902	5.902	0.000	113815	0.4004	0.3996	
7 MNX	1	7.455	7.455	0.000	121971	0.4668	0.4605	

**Reagents:**

8330 DMT\_00008 Amount Added: 20.00 Units: uL

Report Date: 04-May-2021 13:43:18

Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\023-1801.D

Injection Date: 02-May-2021 02:30:46

Instrument ID: CHHPLC\_X5

Operator ID: JZ

Lims ID: IC DMT 5

Worklist Smp#: 23

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

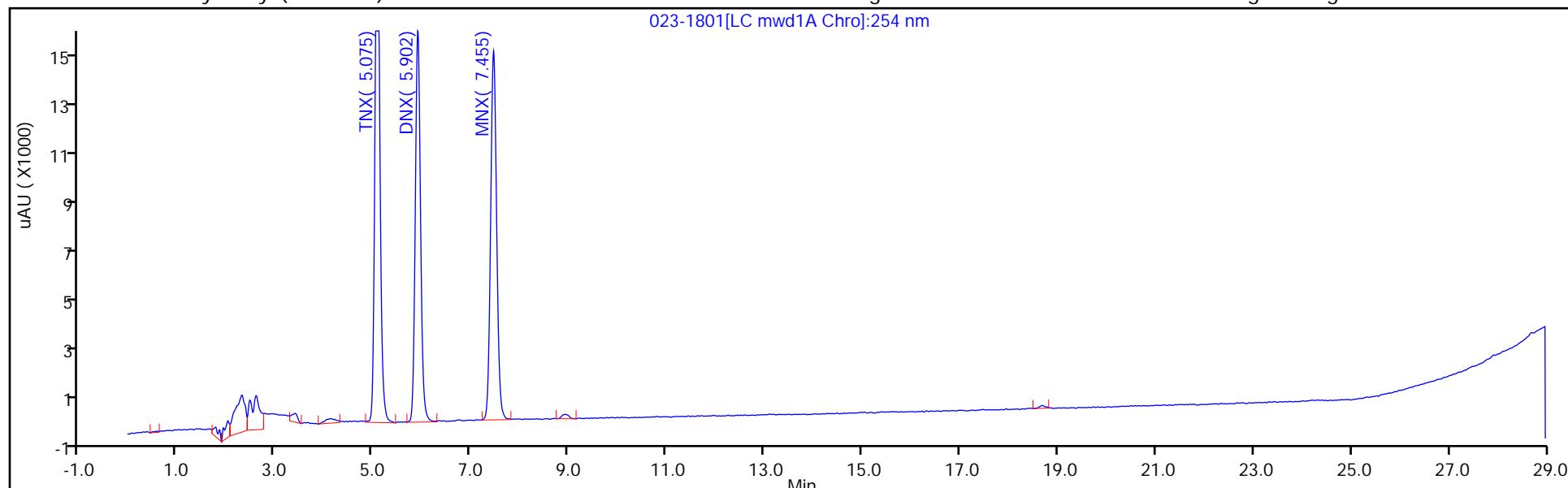
ALS Bottle#: 23

Method: 8330\_X5\_Luna

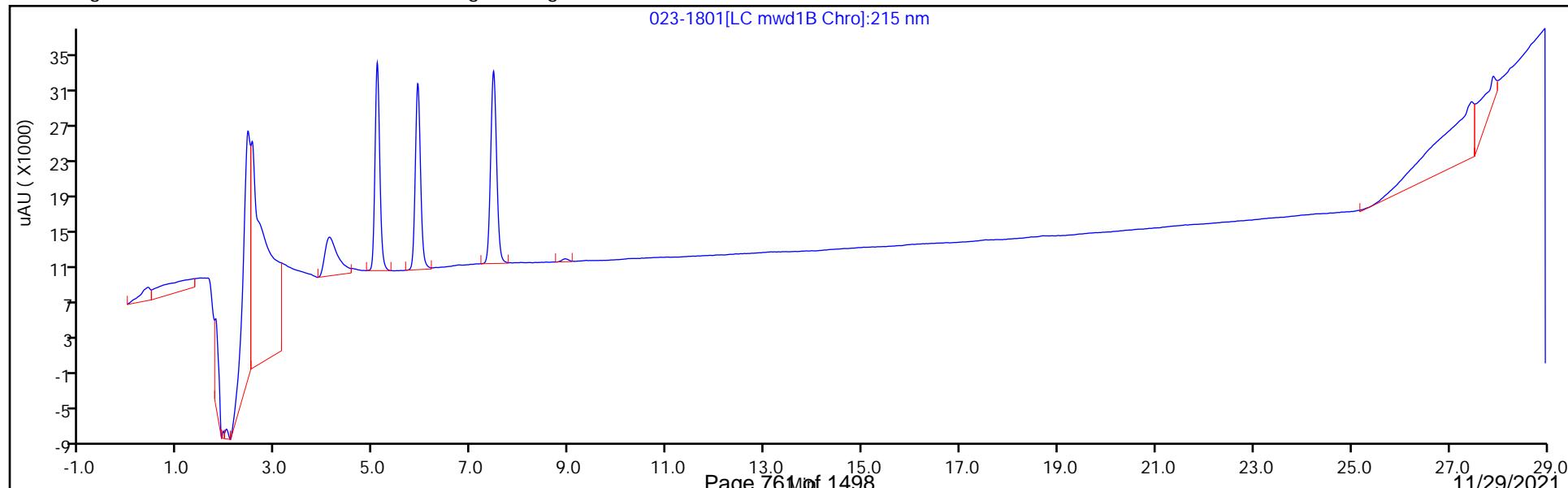
Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\024-1901.D  
 Lims ID: IC DMT 4  
 Client ID:  
 Sample Type: IC Calib Level: 4  
 Inject. Date: 02-May-2021 03:05:50 ALS Bottle#: 24 Worklist Smp#: 24  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: IC DMT 4  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Sublist: chrom-8330\_X5\_Luna\*sub2  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 04-May-2021 13:43:18 Calib Date: 02-May-2021 04:51:05  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\027-2201.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm) Det: LC mwd1A, 254 nm  
 Process Host: CTX1618

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.077	5.075	0.002	87331	0.2503	0.2322	
4 DNX	1	5.904	5.902	0.002	67236	0.2503	0.2361	
7 MNX	1	7.451	7.455	-0.004	72053	0.2918	0.2721	

**Reagents:**

8330 DMT\_00008 Amount Added: 12.50 Units: uL

Report Date: 04-May-2021 13:43:18

Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\024-1901.D

Injection Date: 02-May-2021 03:05:50

Instrument ID: CHHPLC\_X5

Operator ID: JZ

Lims ID: IC DMT 4

Worklist Smp#: 24

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

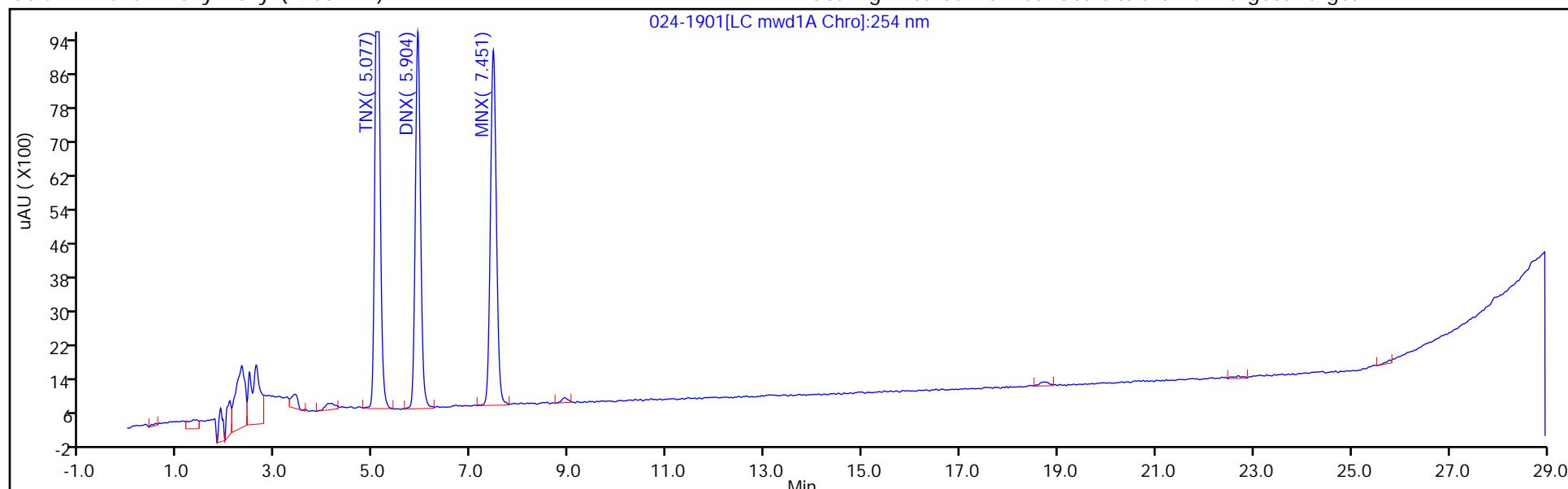
ALS Bottle#: 24

Method: 8330\_X5\_Luna

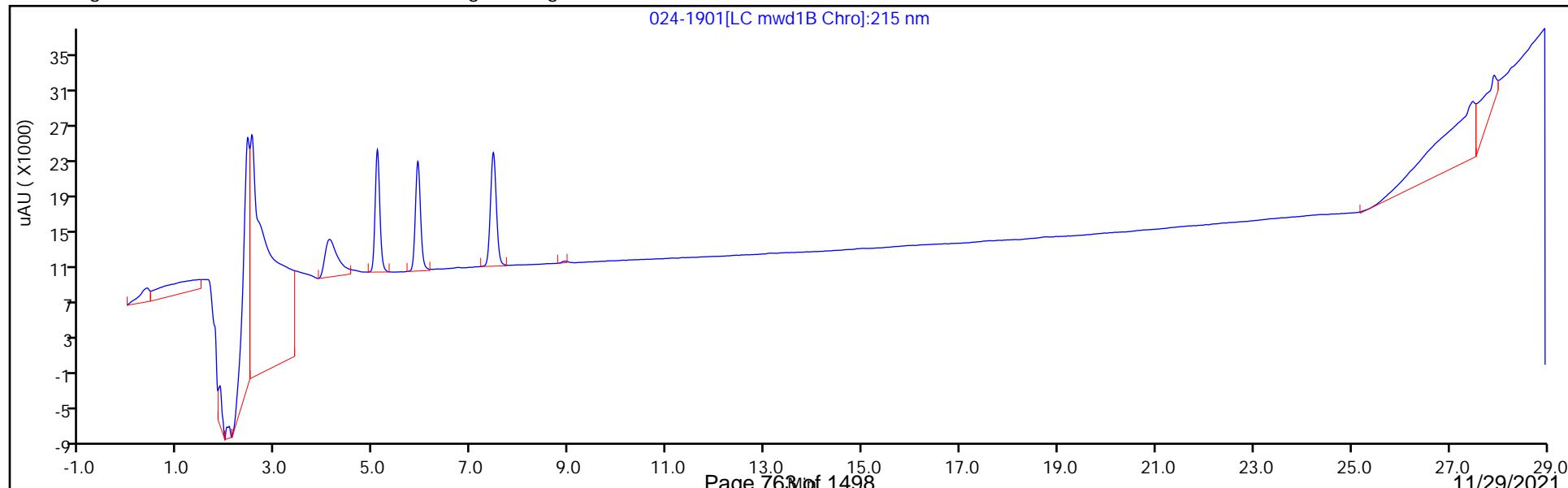
Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\025-2001.D  
 Lims ID: IC DMT 3  
 Client ID:  
 Sample Type: IC Calib Level: 3  
 Inject. Date: 02-May-2021 03:41:00 ALS Bottle#: 25 Worklist Smp#: 25  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: IC DMT 3  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Sublist: chrom-8330\_X5\_Luna\*sub2  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 04-May-2021 13:43:19 Calib Date: 02-May-2021 04:51:05  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\027-2201.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm) Det: LC mwd1A, 254 nm  
 Process Host: CTX1618

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.067	5.075	-0.008	38298	0.1001	0.1018	
4 DNX	1	5.894	5.902	-0.008	28832	0.1001	0.1012	
7 MNX	1	7.447	7.455	-0.008	31123	0.1167	0.1175	

**Reagents:**

8330 DMT\_00008 Amount Added: 5.00 Units: uL

Report Date: 04-May-2021 13:43:19

Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\025-2001.D

Injection Date: 02-May-2021 03:41:00

Instrument ID: CHHPLC\_X5

Operator ID: JZ

Lims ID: IC DMT 3

Worklist Smp#: 25

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

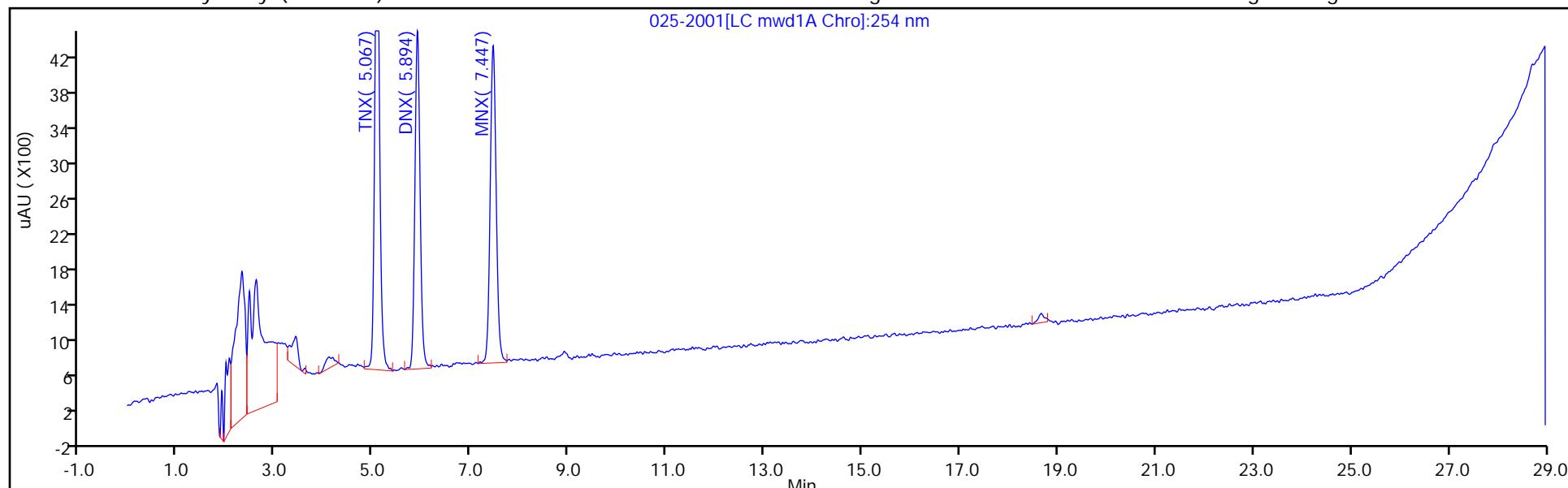
ALS Bottle#: 25

Method: 8330\_X5\_Luna

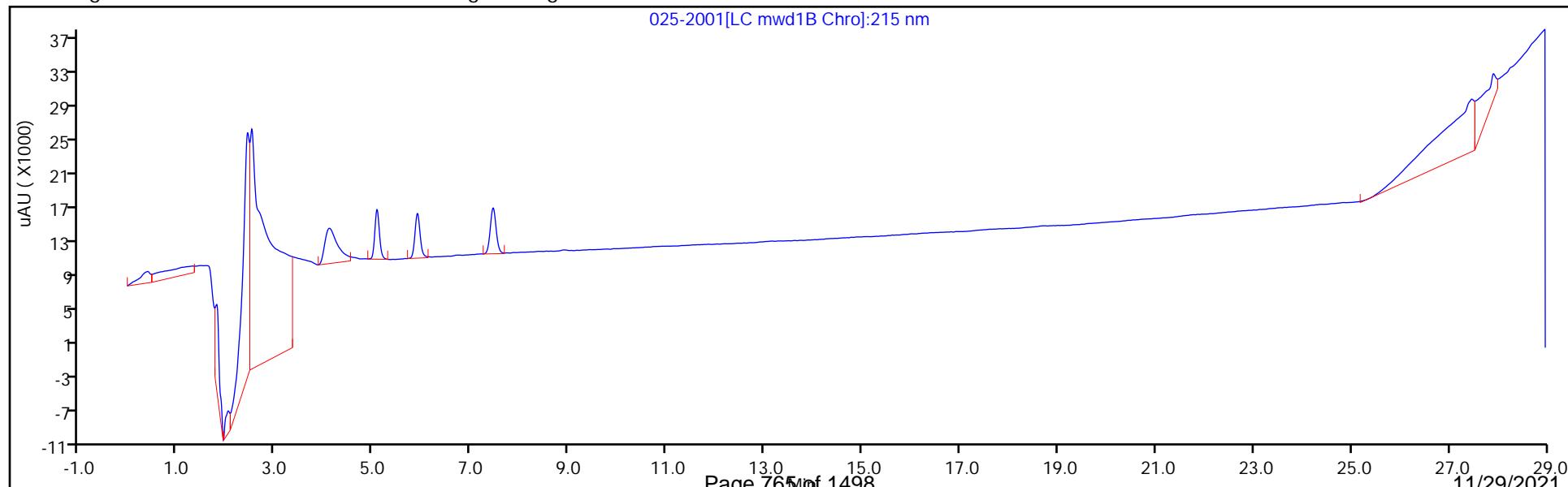
Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\026-2101.D  
 Lims ID: IC DMT 2  
 Client ID:  
 Sample Type: IC Calib Level: 2  
 Inject. Date: 02-May-2021 04:16:02 ALS Bottle#: 26 Worklist Smp#: 26  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: IC DMT 2  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Sublist: chrom-8330\_X5\_Luna\*sub2  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 04-May-2021 13:43:19 Calib Date: 02-May-2021 04:51:05  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\027-2201.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm) Det: LC mwd1A, 254 nm  
 Process Host: CTX1618

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.071	5.075	-0.004	19227	0.0501	0.0511	
4 DNX	1	5.898	5.902	-0.004	14623	0.0501	0.0513	
7 MNX	1	7.444	7.455	-0.011	16167	0.0584	0.0610	

**Reagents:**

8330 DMT\_00008 Amount Added: 2.50 Units: uL

Report Date: 04-May-2021 13:43:19

Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\026-2101.D

Injection Date: 02-May-2021 04:16:02

Instrument ID: CHHPLC\_X5

Operator ID: JZ

Lims ID: IC DMT 2

Worklist Smp#: 26

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

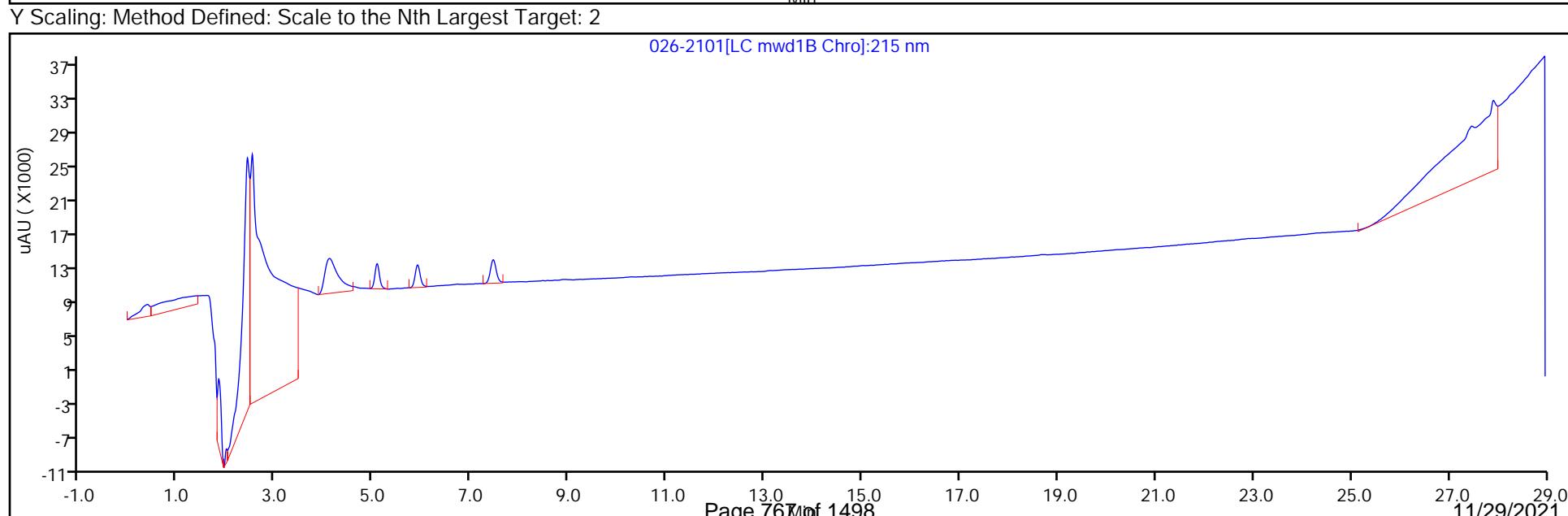
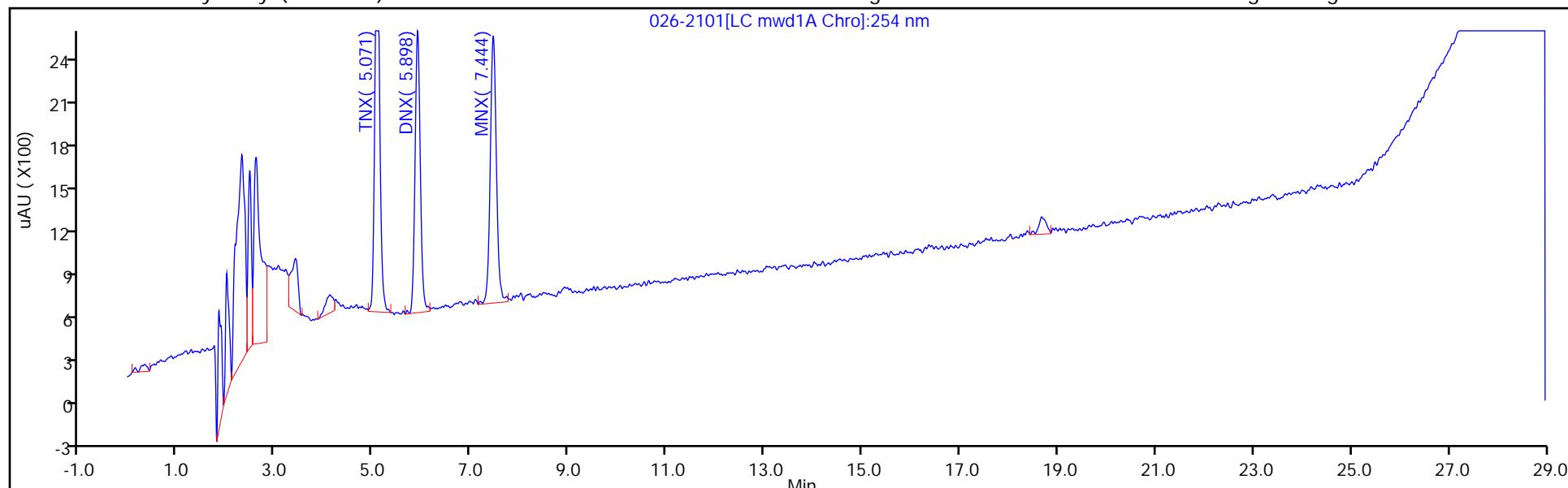
ALS Bottle#: 26

Method: 8330\_X5\_Luna

Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\027-2201.D  
 Lims ID: IC DMT 1  
 Client ID:  
 Sample Type: IC Calib Level: 1  
 Inject. Date: 02-May-2021 04:51:05 ALS Bottle#: 27 Worklist Smp#: 27  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: IC DMT 1  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Sublist: chrom-8330\_X5\_Luna\*sub2  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 04-May-2021 13:43:20 Calib Date: 02-May-2021 04:51:05  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\027-2201.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm) Det: LC mwd1A, 254 nm  
 Process Host: CTX1618

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.064	5.075	-0.011	8226	0.0200	0.0219	
4 DNX	1	5.897	5.902	-0.005	5953	0.0200	0.0209	
7 MNX	1	7.444	7.455	-0.011	6728	0.0233	0.0254	

**Reagents:**

8330 DMT\_00008 Amount Added: 1.00 Units: uL

Report Date: 04-May-2021 13:43:20

Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\027-2201.D

Injection Date: 02-May-2021 04:51:05

Instrument ID: CHHPLC\_X5

Operator ID: JZ

Lims ID: IC DMT 1

Worklist Smp#: 27

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

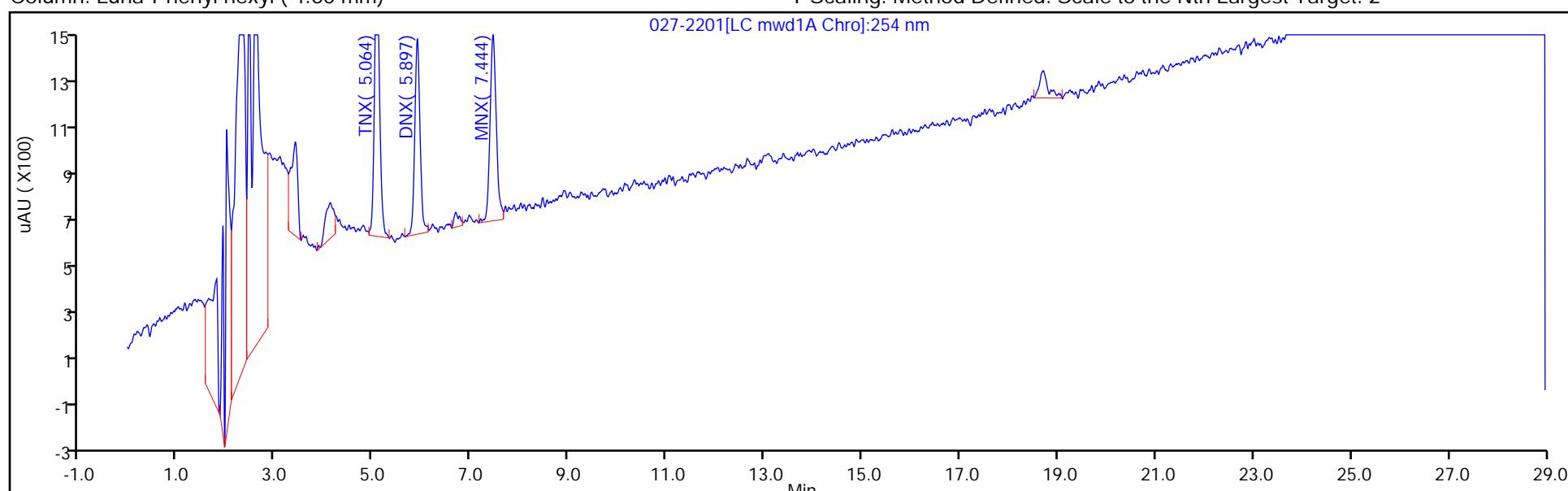
ALS Bottle#: 27

Method: 8330\_X5\_Luna

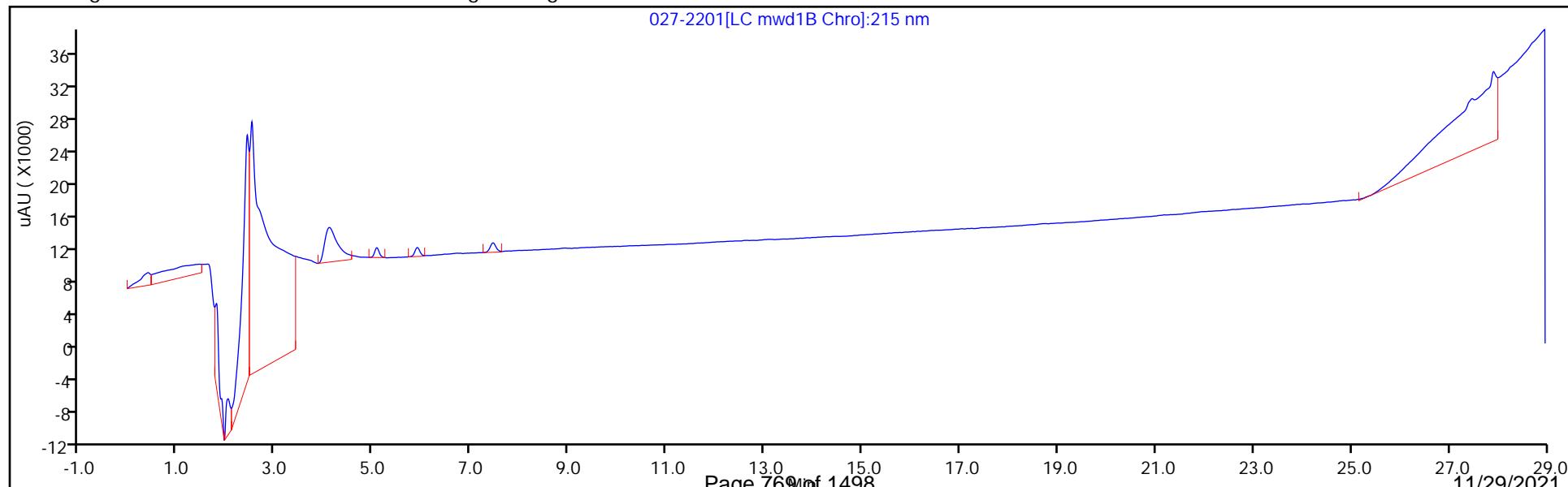
Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



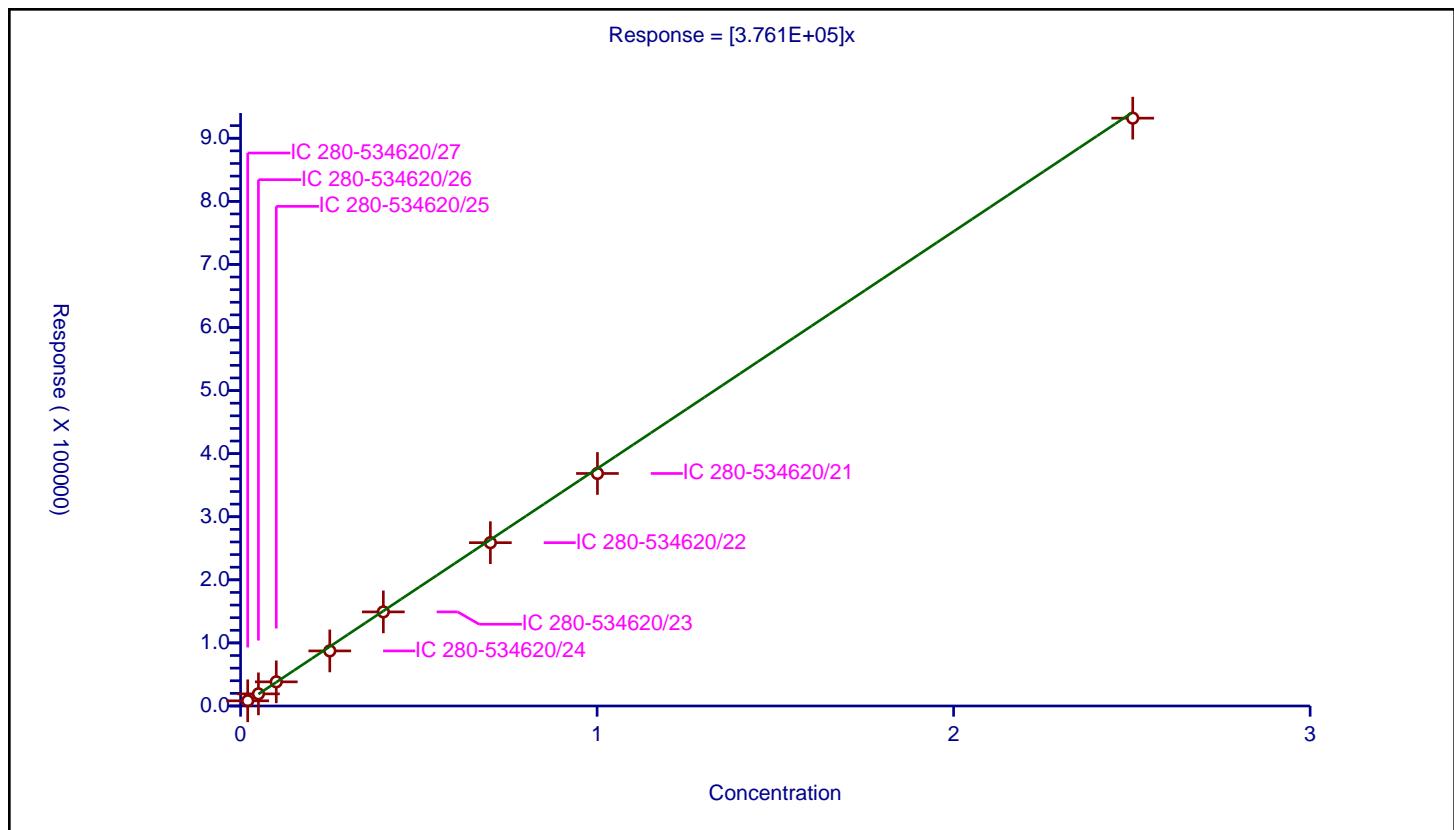
Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	3.761E+05
Error Coefficients	
Standard Error:	5660
Relative Standard Error:	4.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

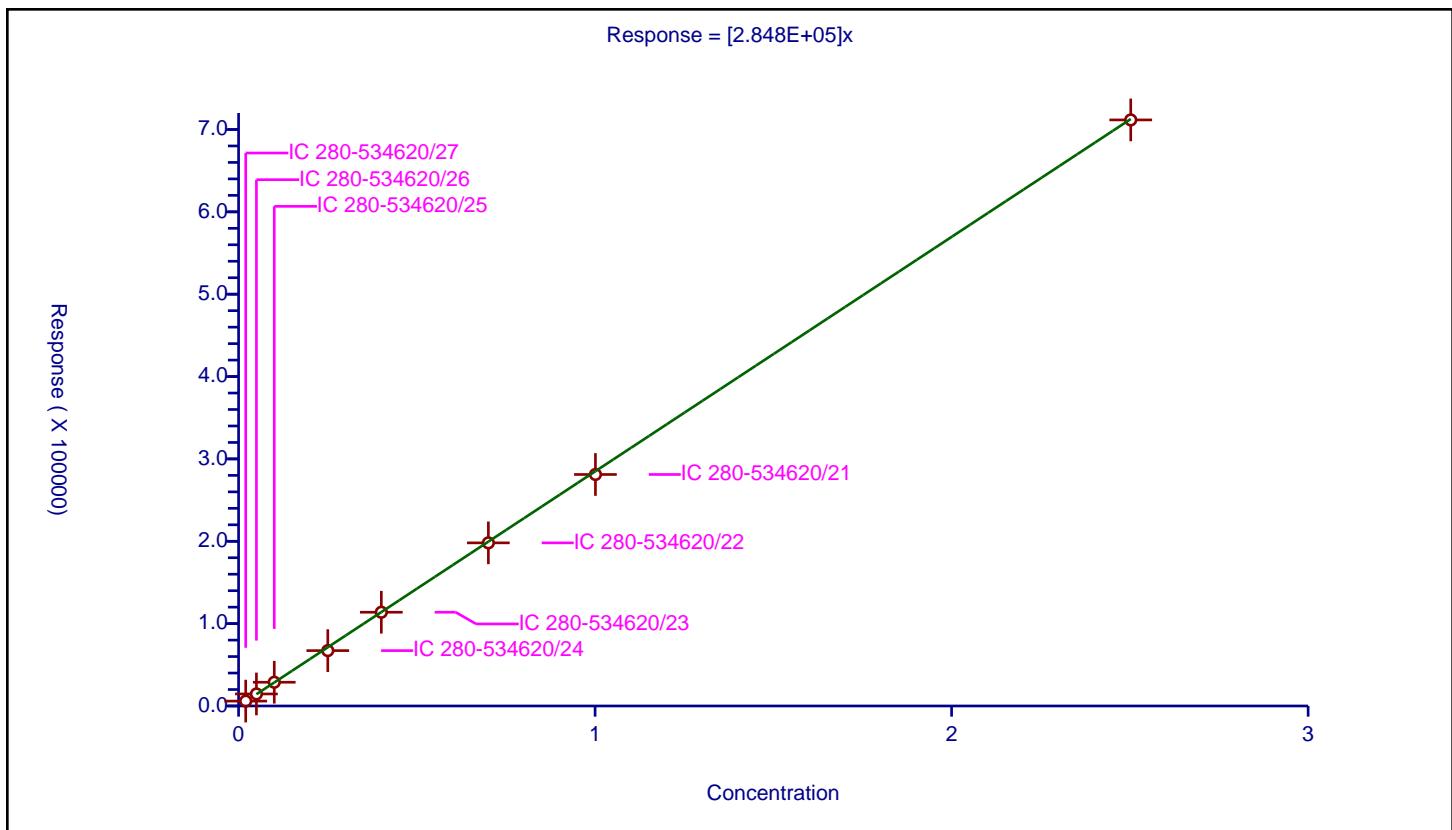
ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/27	0.02002	8226.0			410889.110889	Y
2	IC 280-534620/26	0.05005	19227.0			384155.844156	Y
3	IC 280-534620/25	0.1001	38298.0			382597.402597	Y
4	IC 280-534620/24	0.25025	87331.0			348975.024975	Y
5	IC 280-534620/23	0.4004	149150.0			372502.497502	Y
6	IC 280-534620/22	0.7007	258881.0			369460.539461	Y
7	IC 280-534620/21	1.001	368578.0			368209.79021	Y
8	IC 280-534620/20	2.5025	931826.0			372358.041958	Y



**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	2.848E+05
Error Coefficients	
Standard Error:	2260
Relative Standard Error:	3.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

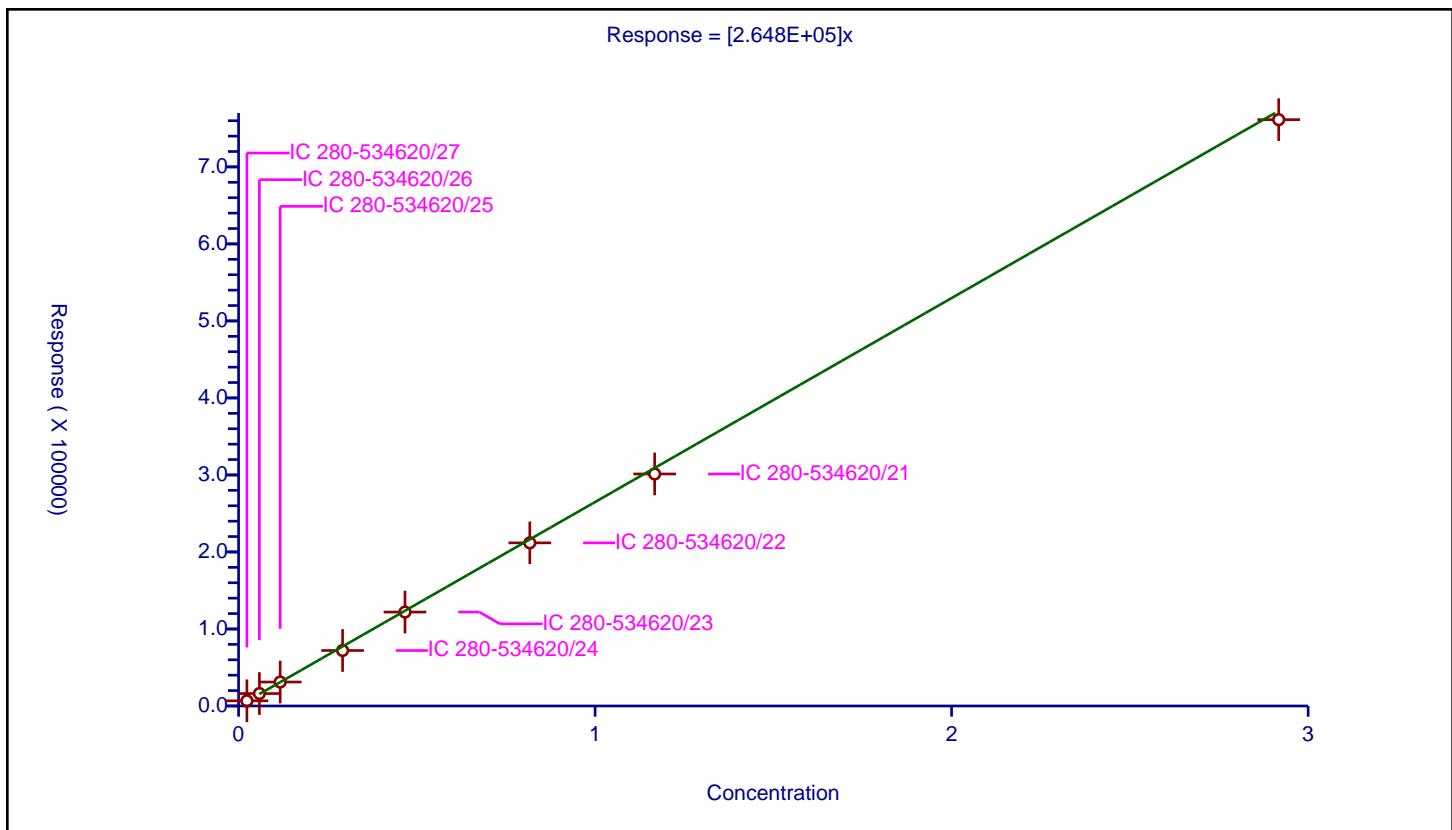
ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/27	0.02002	5953.0			297352.647353	Y
2	IC 280-534620/26	0.05005	14623.0			292167.832168	Y
3	IC 280-534620/25	0.1001	28832.0			288031.968032	Y
4	IC 280-534620/24	0.25025	67236.0			268675.324675	Y
5	IC 280-534620/23	0.4004	113815.0			284253.246753	Y
6	IC 280-534620/22	0.7007	198071.0			282675.895533	Y
7	IC 280-534620/21	1.001	281098.0			280817.182817	Y
8	IC 280-534620/20	2.5025	711601.0			284356.043956	Y



**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	2.648E+05
Error Coefficients	
Standard Error:	5850
Relative Standard Error:	4.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/27	0.02334	6728.0			288260.497001	Y
2	IC 280-534620/26	0.05835	16167.0			277069.40874	Y
3	IC 280-534620/25	0.1167	31123.0			266692.373608	Y
4	IC 280-534620/24	0.29175	72053.0			246968.294773	Y
5	IC 280-534620/23	0.4668	121971.0			261291.773779	Y
6	IC 280-534620/22	0.8169	211836.0			259316.929857	Y
7	IC 280-534620/21	1.167	301281.0			258167.095116	Y
8	IC 280-534620/20	2.9175	761392.0			260974.12168	Y



FORM VII  
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Lab Sample ID: ICV 280-527768/37 Calibration Date: 03/03/2021 02:53

Instrument ID: CHHPLC\_X3 Calib Start Date: 03/02/2021 23:49

GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 03/03/2021 02:30

Lab File ID: 03020037.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	185806	197668		532	501	6.4	15.0
DNX	Ave	142119	151812		535	501	6.8	15.0
MNX	Ave	130340	138202		619	584	6.0	15.0

FORM VII  
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: ICV 280-527768/37 Calibration Date: 03/03/2021 02:53  
Instrument ID: CHHPLC\_X3 Calib Start Date: 03/02/2021 23:49  
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 03/03/2021 02:30  
Lab File ID: 03020037.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.52	6.42	6.62
DNX	6.83	6.73	6.93
MNX	7.24	7.08	7.38

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20210302-99486.b\03020037.D  
 Lims ID: ICV DMT  
 Client ID:  
 Sample Type: ICV  
 Inject. Date: 03-Mar-2021 02:53:28 ALS Bottle#: 37 Worklist Smp#: 37  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Sample Info: ICV DMT  
 Misc. Info.: 280-0099486-037  
 Operator ID: Instrument ID: CHHPLC\_X3  
 Sublist:  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20210302-99486.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 03-Mar-2021 13:36:22 Calib Date: 03-Mar-2021 02:30:22  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20210302-99486.b\03020036.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1629

First Level Reviewer: zhangji Date: 03-Mar-2021 13:21:26

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.523	6.518	0.005	98933	0.5005	0.5325	M
5 DNX	1	6.830	6.832	-0.002	75982	0.5005	0.5346	M
6 MNX	1	7.237	7.232	0.005	80641	0.5835	0.6187	M

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

### Reagents:

8330\_OP\_DMT\_00009 Amount Added: 50.00 Units: uL

Report Date: 03-Mar-2021 13:36:35

Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Denver

Data File: \\chromfs\\denver\\chromdata\\chhplc\_x\\20210302-99486.b\\03020037.d

Injection Date: 03-Mar-2021 02:53:28

Instrument ID: CHHPLC\_X3

Operator ID:

Lims ID: ICV DMT

Worklist Smp#: 37

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

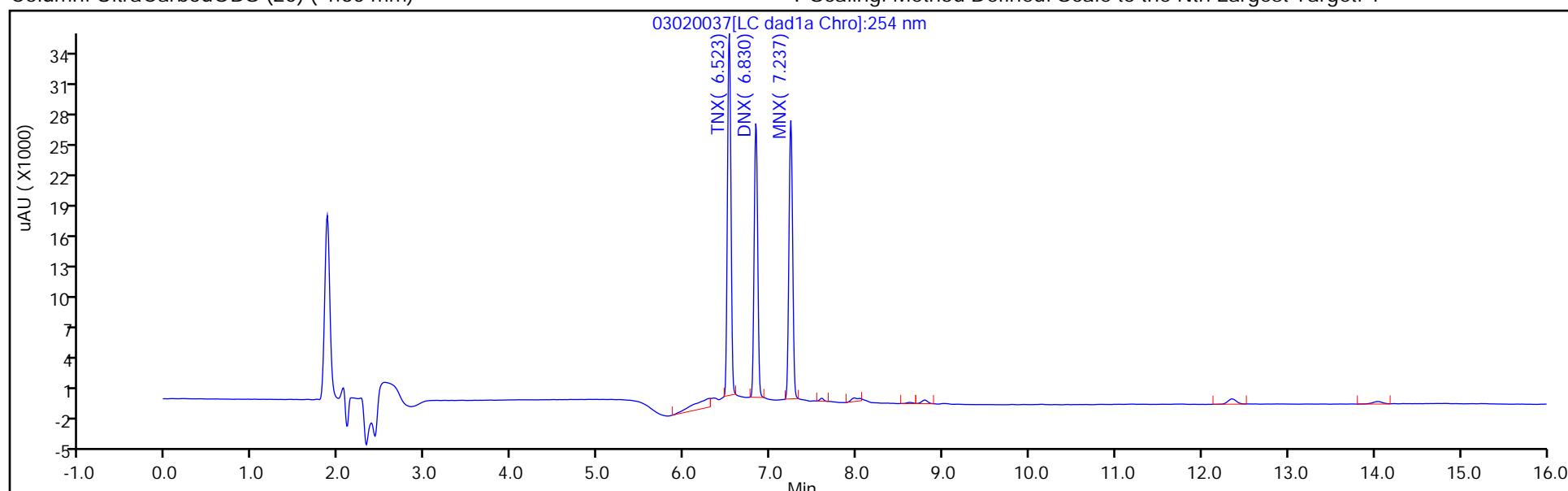
ALS Bottle#: 37

Method: 8330\_X3

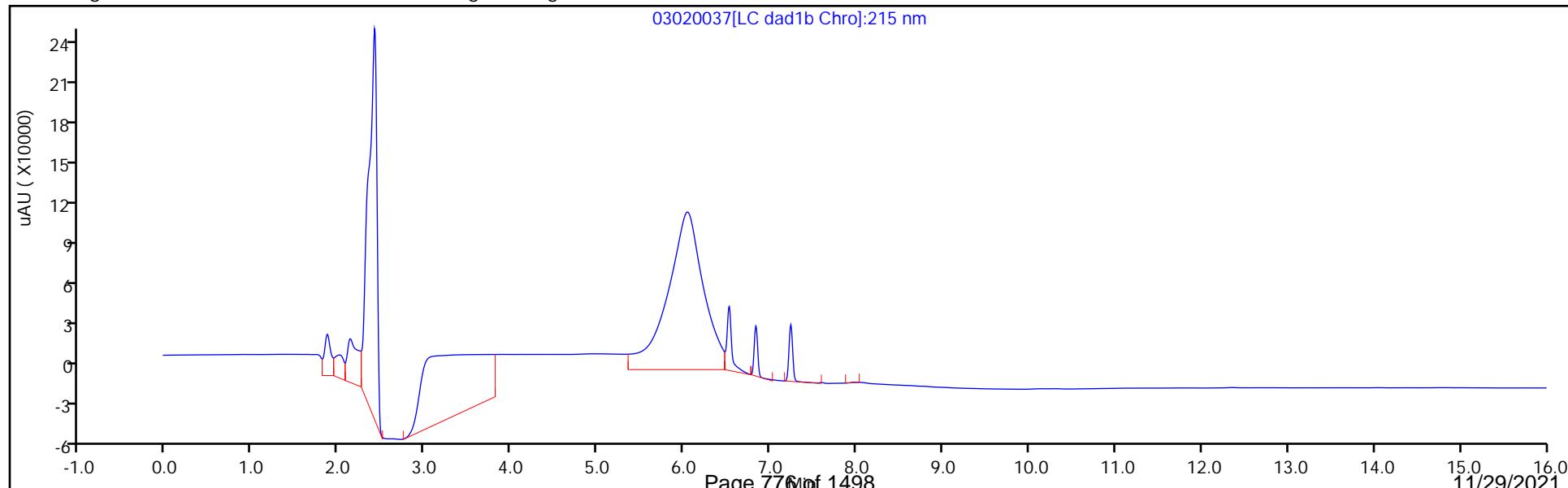
Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

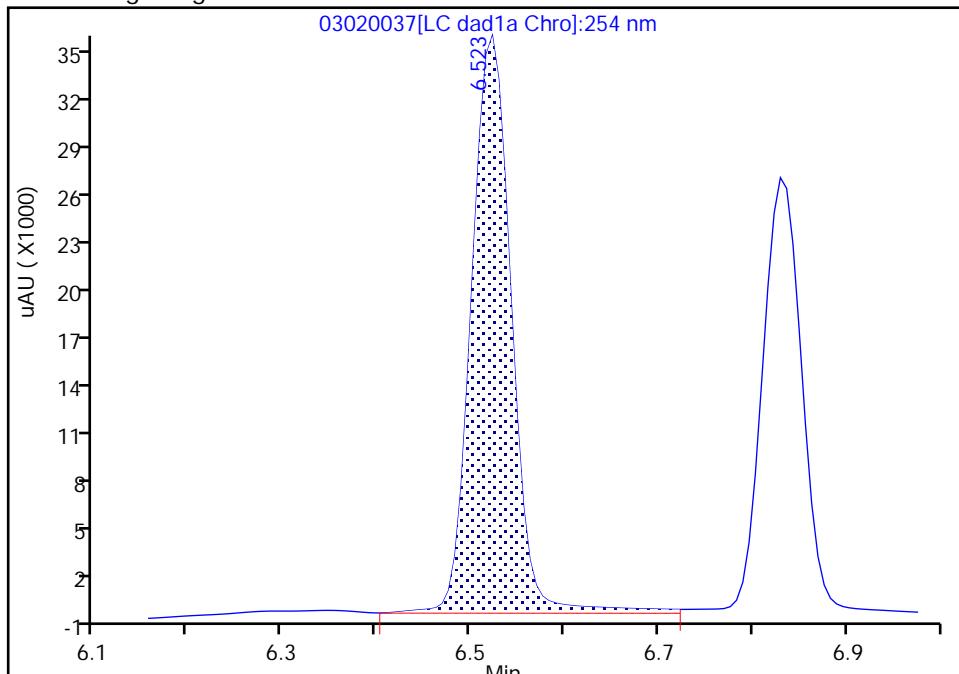
Data File: \\chromfs\denver\chromdata\chhplc\_x\20210302-99486.b\03020037.d  
 Injection Date: 03-Mar-2021 02:53:28 Instrument ID: CHHPLC\_X3  
 Lims ID: ICV DMT  
 Client ID:  
 Operator ID: ALS Bottle#: 37 Worklist Smp#: 37  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

**2 TNX, CAS: 13980-04-6**

Signal: 1

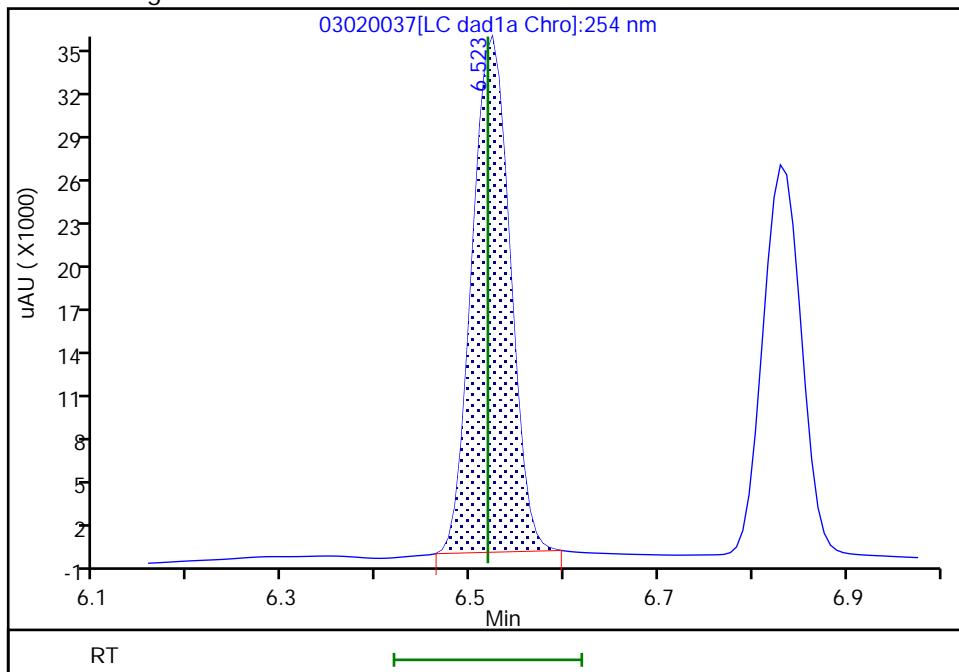
## Processing Integration Results

RT: 6.52  
 Area: 105520  
 Amount: 0.567904  
 Amount Units: ug/mL



## Manual Integration Results

RT: 6.52  
 Area: 98933  
 Amount: 0.532453  
 Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:21:12

Audit Action: Manually Integrated

Audit Reason: Baseline

## Eurofins TestAmerica, Denver

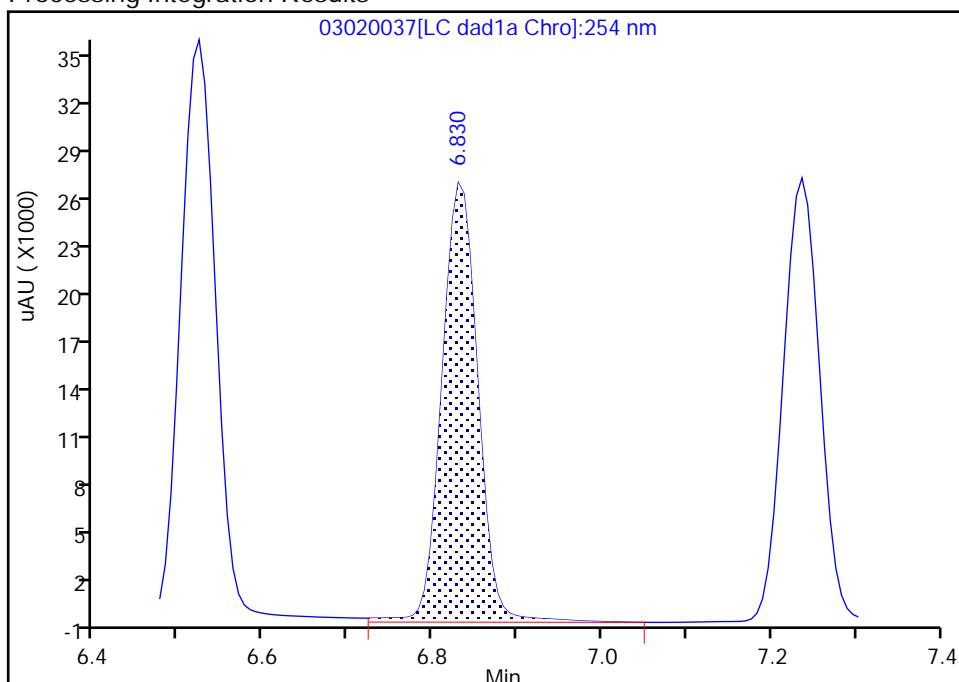
Data File: \\chromfs\denver\chromdata\chhplc\_x\20210302-99486.b\03020037.d  
 Injection Date: 03-Mar-2021 02:53:28 Instrument ID: CHHPLC\_X3  
 Lims ID: ICV DMT  
 Client ID:  
 Operator ID: ALS Bottle#: 37 Worklist Smp#: 37  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

**5 DNX, CAS: 80251-29-2**

Signal: 1

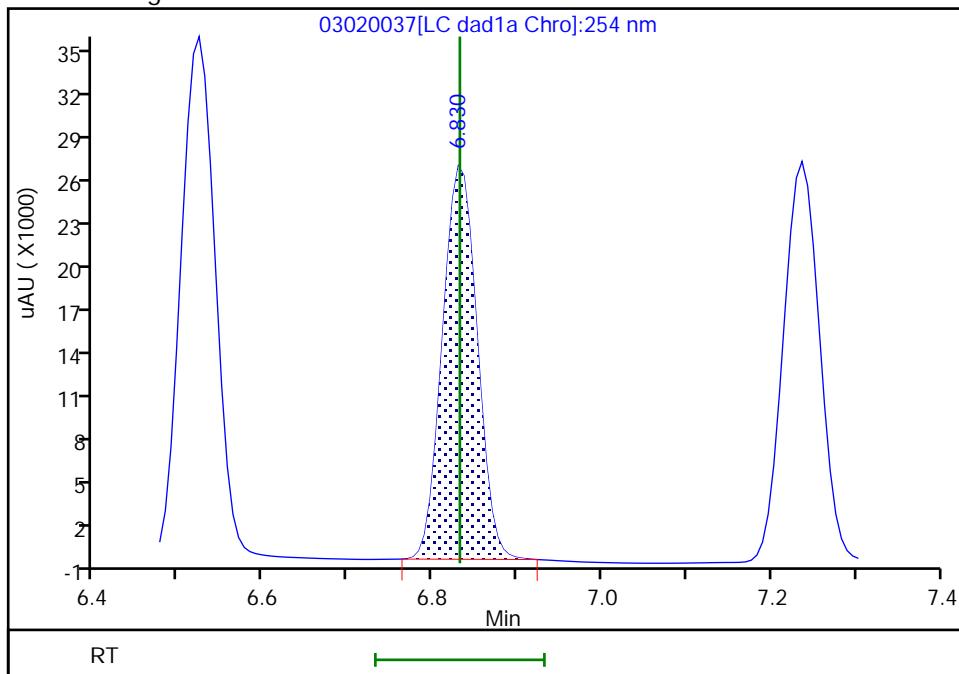
RT: 6.83  
 Area: 79674  
 Amount: 0.560613  
 Amount Units: ug/mL

## Processing Integration Results



RT: 6.83  
 Area: 75982  
 Amount: 0.534635  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 03-Mar-2021 13:21:15

Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Denver

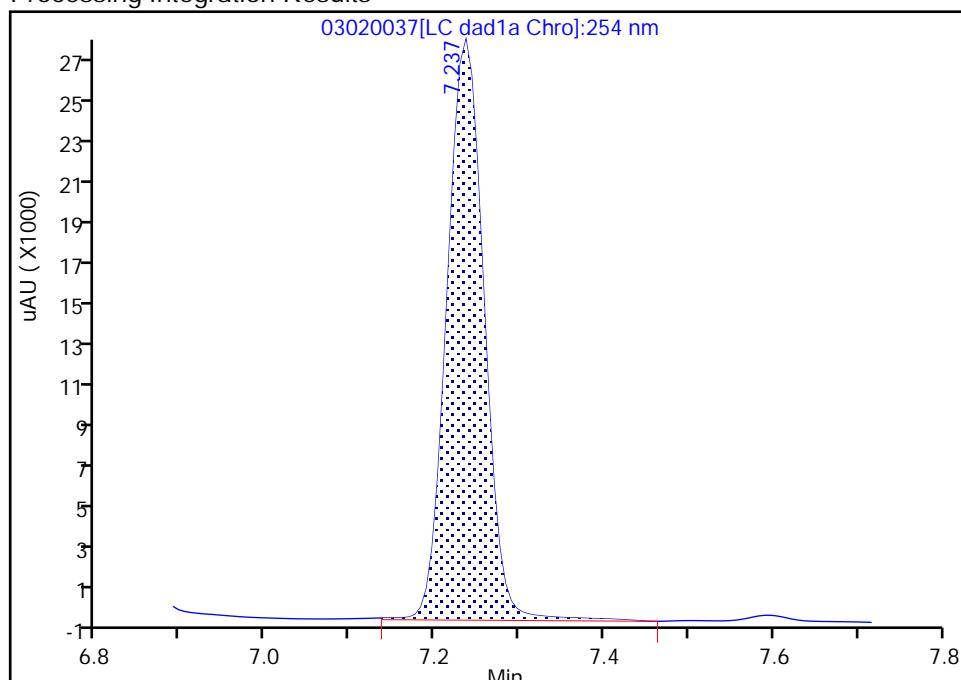
Data File: \\chromfs\denver\chromdata\chhplc\_x\20210302-99486.b\03020037.d  
 Injection Date: 03-Mar-2021 02:53:28 Instrument ID: CHHPLC\_X3  
 Lims ID: ICV DMT  
 Client ID:  
 Operator ID: ALS Bottle#: 37 Worklist Smp#: 37  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

**6 MNX, CAS: 5755-27-1**

Signal: 1

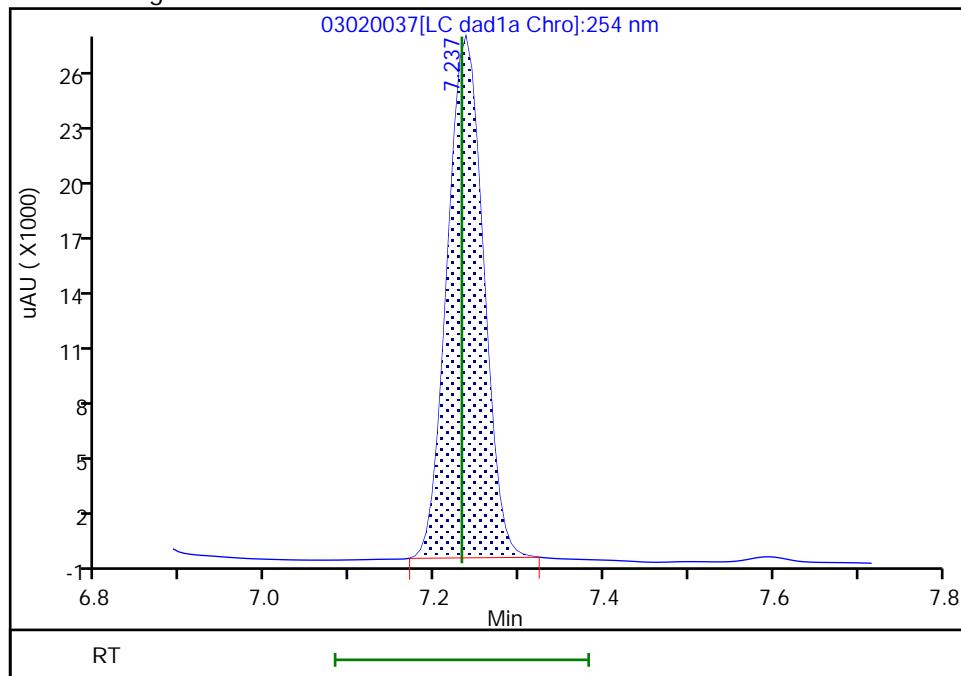
RT: 7.24  
 Area: 83346  
 Amount: 0.639449  
 Amount Units: ug/mL

## Processing Integration Results



RT: 7.24  
 Area: 80641  
 Amount: 0.618696  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 03-Mar-2021 13:21:25

Audit Action: Manually Integrated

Audit Reason: Baseline

FORM VII  
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: ICV 280-534622/20 Calibration Date: 05/01/2021 21:27  
Instrument ID: CHHPLC\_X3 Calib Start Date: 05/01/2021 18:01  
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 05/01/2021 21:04  
Lab File ID: 020-1401.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	84421	82460		488	500	-2.3	15.0
RDX	Ave	106261	102780		484	500	-3.3	15.0
Picric acid	Ave	82721	86056		520	500	4.0	15.0
1,3,5-Trinitrobenzene	Ave	220317	224390		509	500	1.8	15.0
1,3-Dinitrobenzene	Ave	296329	300634		507	500	1.5	15.0
Nitrobenzene	Ave	195286	196150		502	500	0.4	15.0
Tetryl	Ave	172420	171402		497	500	-0.6	15.0
Nitroglycerin	Lin2		67022		5160	5000	3.2	15.0
2,4,6-Trinitrotoluene	Ave	206038	210436		511	500	2.1	15.0
4-Amino-2,6-dinitrotoluene	Ave	152768	147828		484	500	-3.2	15.0
2-Amino-4,6-dinitrotoluene	Ave	206926	203056		491	500	-1.9	15.0
2,6-Dinitrotoluene	Ave	143079	144928		506	500	1.3	15.0
2,4-Dinitrotoluene	Ave	287012	279908		488	500	-2.5	15.0
2-Nitrotoluene	Ave	128392	125290		488	500	-2.4	15.0
4-Nitrotoluene	Ave	111913	108216		483	500	-3.3	15.0
3-Nitrotoluene	Ave	142246	137810		484	500	-3.1	15.0
PETN	Ave	74779	76182		5090	5000	1.9	15.0
1,2-Dinitrobenzene	Ave	128217	134842		526	500	5.2	15.0

FORM VII  
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: ICV 280-534622/20 Calibration Date: 05/01/2021 21:27  
Instrument ID: CHHPLC\_X3 Calib Start Date: 05/01/2021 18:01  
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 05/01/2021 21:04  
Lab File ID: 020-1401.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.63	6.48	6.78
RDX	7.59	7.45	7.75
Picric acid	7.93	7.81	8.11
1,3,5-Trinitrobenzene	8.65	8.50	8.80
1,3-Dinitrobenzene	9.27	9.13	9.43
Nitrobenzene	9.66	9.51	9.81
Tetryl	9.97	9.83	10.13
Nitroglycerin	10.43	10.29	10.59
2,4,6-Trinitrotoluene	10.90	10.80	11.00
4-Amino-2,6-dinitrotoluene	11.10	11.01	11.21
2-Amino-4,6-dinitrotoluene	11.36	11.27	11.47
2,6-Dinitrotoluene	11.53	11.43	11.63
2,4-Dinitrotoluene	11.70	11.60	11.80
2-Nitrotoluene	12.57	12.43	12.73
4-Nitrotoluene	13.01	12.86	13.16
3-Nitrotoluene	13.59	13.45	13.75
PETN	14.68	14.53	14.83
1,2-Dinitrobenzene	8.52	8.38	8.68

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20210501-101094.b\020-1401.D  
 Lims ID: ICV INT  
 Client ID:  
 Sample Type: ICV  
 Inject. Date: 01-May-2021 21:27:37 ALS Bottle#: 20 Worklist Smp#: 20  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Sample Info: ICV INT  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Sublist:  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20210501-101094.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 04-May-2021 13:29:14 Calib Date: 01-May-2021 21:04:39  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20210501-101094.b\019-1301.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:29:14

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.627	6.631	-0.004	41230	0.5000	0.4884	M
7 RDX	1	7.593	7.598	-0.005	51390	0.5000	0.4836	
8 2,4,6-Trinitrophenol	1	7.933	7.958	-0.025	43028	0.5000	0.5202	
\$ 9 1,2-Dinitrobenzene	1	8.520	8.525	-0.005	67421	0.5000	0.5258	
10 1,3,5-Trinitrobenzene	1	8.647	8.651	-0.004	112195	0.5000	0.5092	
11 1,3-Dinitrobenzene	1	9.273	9.278	-0.005	150317	0.5000	0.5073	
12 Nitrobenzene	1	9.660	9.664	-0.004	98075	0.5000	0.5022	
14 Tetryl	1	9.973	9.978	-0.005	85701	0.5000	0.4970	
15 Nitroglycerin	2	10.433	10.438	-0.005	335112	5.00	5.16	
16 2,4,6-Trinitrotoluene	1	10.900	10.904	-0.004	105218	0.5000	0.5107	
17 4-Amino-2,6-dinitrotoluene	1	11.100	11.111	-0.011	73914	0.5000	0.4838	
18 2-Amino-4,6-dinitrotoluene	1	11.360	11.371	-0.011	101528	0.5000	0.4906	
19 2,6-Dinitrotoluene	1	11.526	11.531	-0.005	72464	0.5000	0.5065	
20 2,4-Dinitrotoluene	1	11.700	11.704	-0.004	139954	0.5000	0.4876	
21 o-Nitrotoluene	1	12.566	12.578	-0.012	62645	0.5000	0.4879	
22 p-Nitrotoluene	1	13.006	13.011	-0.005	54108	0.5000	0.4835	
23 m-Nitrotoluene	1	13.593	13.604	-0.011	68905	0.5000	0.4844	
24 PETN	2	14.680	14.684	-0.004	380912	5.00	5.09	

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

### Reagents:

8330 LCS_00108	Amount Added: 50.00	Units: uL
8330Surrogate_00124	Amount Added: 50.00	Units: uL

Report Date: 04-May-2021 13:29:19

Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20210501-101094.b\020-1401.d

Injection Date: 01-May-2021 21:27:37

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: ICV INT

Worklist Smp#: 20

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

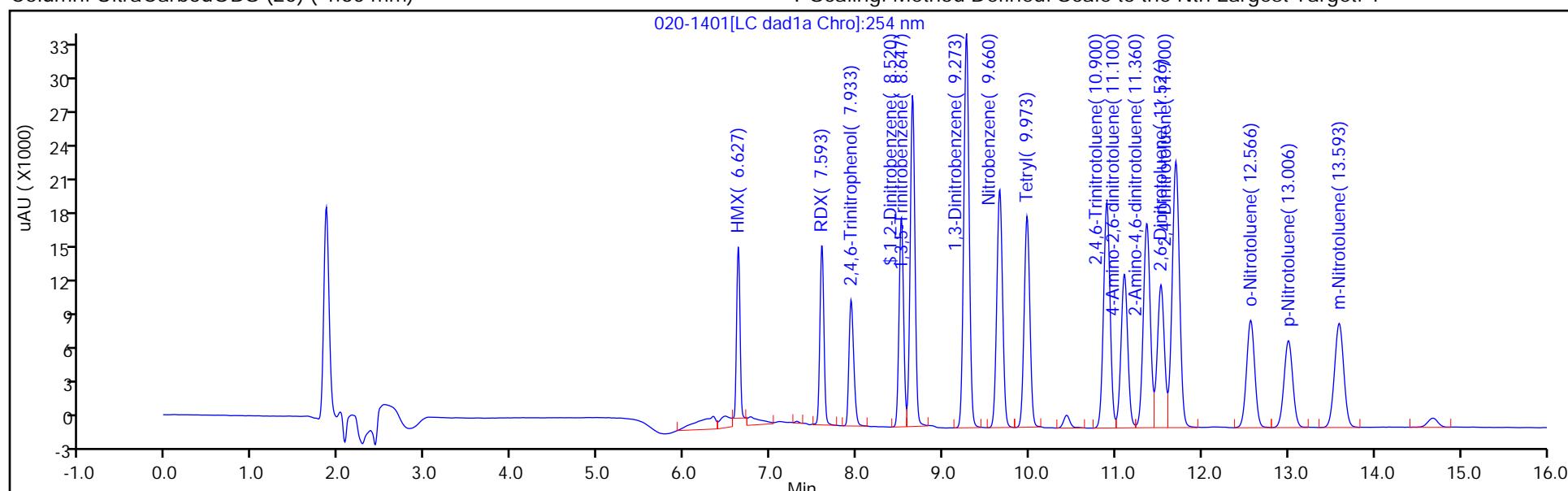
ALS Bottle#: 20

Method: 8330\_X3

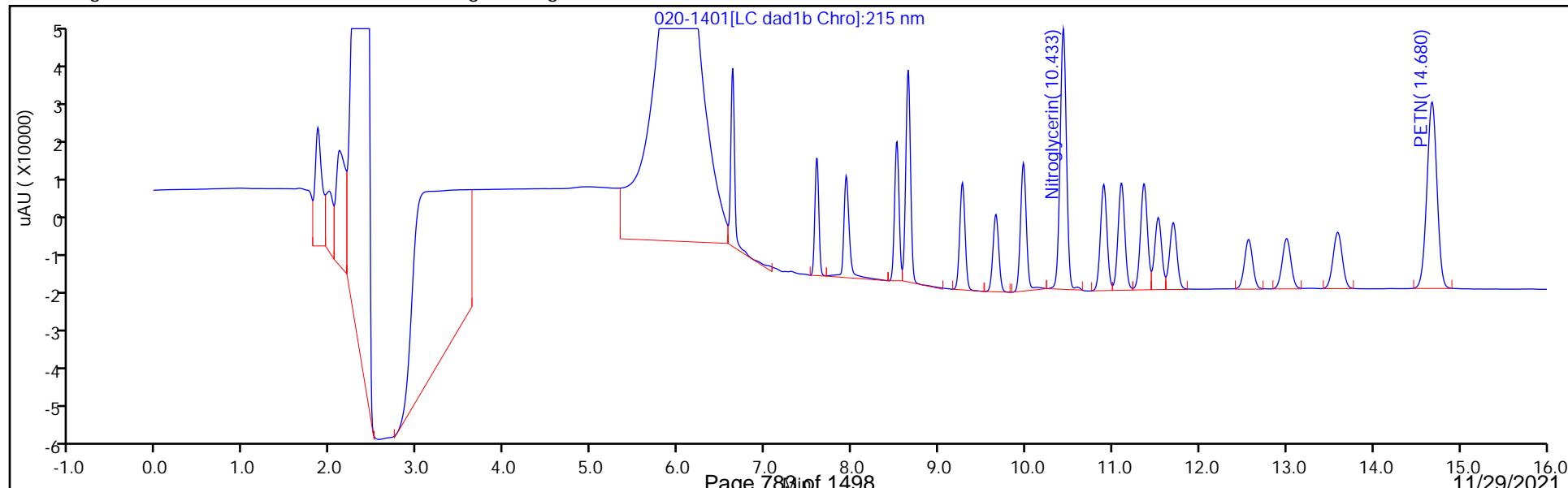
Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



## Eurofins TestAmerica, Denver

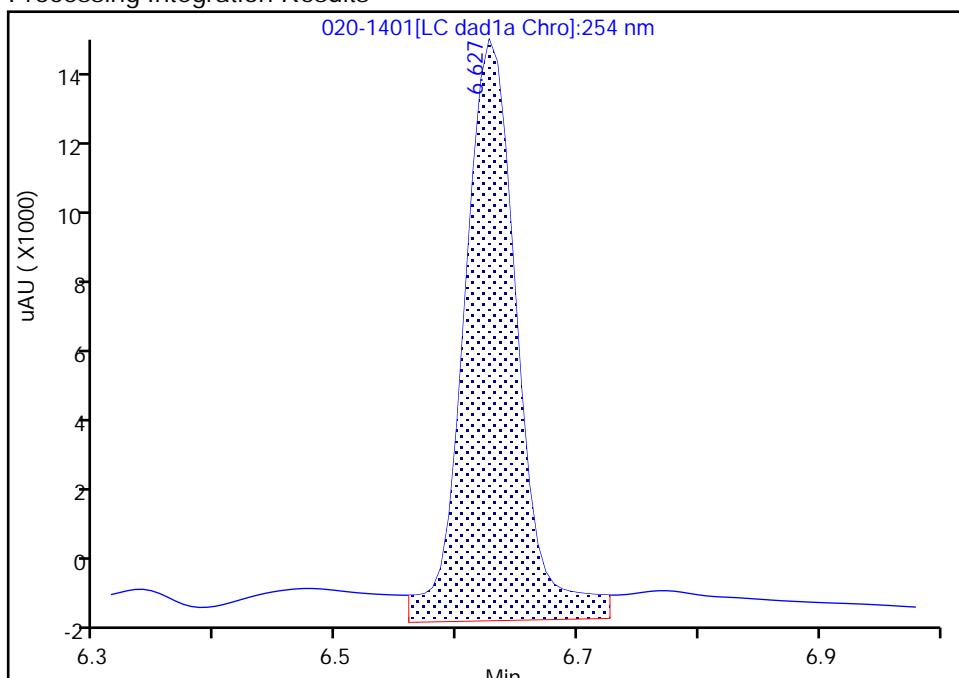
Data File: \\chromfs\denver\chromdata\chhplc\_x\20210501-101094.b\020-1401.d  
 Injection Date: 01-May-2021 21:27:37 Instrument ID: CHHPLC\_X3  
 Lims ID: ICV INT  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 20 Worklist Smp#: 20  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

**3 HMX, CAS: 2691-41-0**

Signal: 1

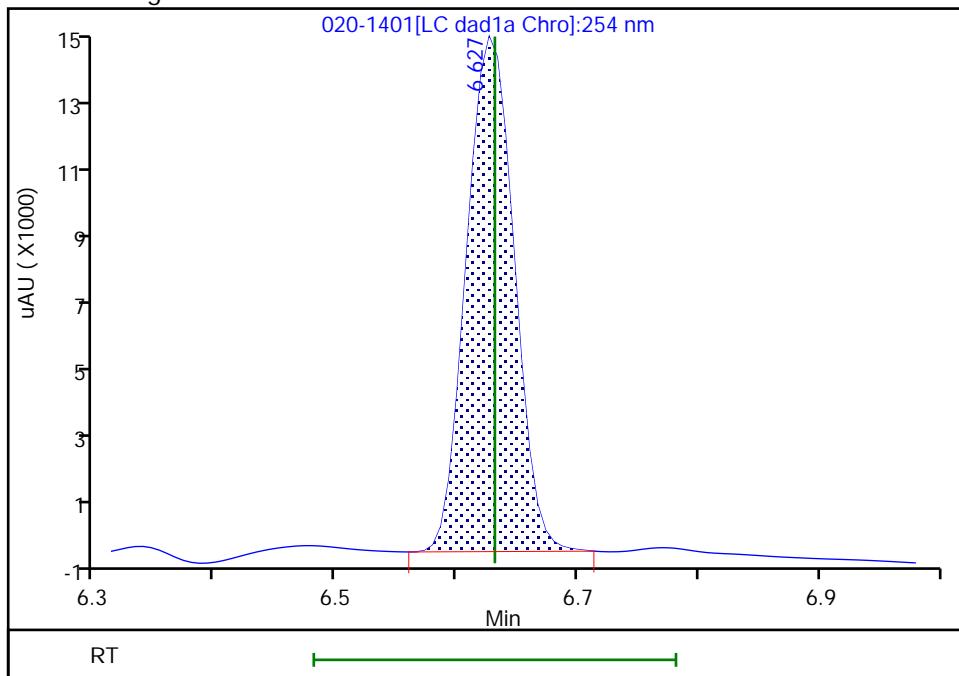
RT: 6.63  
 Area: 48145  
 Amount: 0.570294  
 Amount Units: ug/mL

## Processing Integration Results



RT: 6.63  
 Area: 41230  
 Amount: 0.488383  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 04-May-2021 13:24:55

Audit Action: Manually Integrated

Audit Reason: Baseline

FORM VII  
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCV 280-556359/7 Calibration Date: 11/05/2021 14:27  
Instrument ID: CHHPLC\_X3 Calib Start Date: 05/01/2021 18:01  
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 05/01/2021 21:04  
Lab File ID: 11050007.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	84421	86664		257	250	2.7	15.0
RDX	Ave	106261	104060		245	250	-2.1	15.0
Picric acid	Ave	82721	81392		246	250	-1.6	15.0
1,3,5-Trinitrobenzene	Ave	220317	230587		262	251	4.7	15.0
1,3-Dinitrobenzene	Ave	296329	306463		259	251	3.4	15.0
Nitrobenzene	Ave	195286	199633		257	251	2.2	15.0
Tetryl	Ave	172420	154363		224	251	-10.5	15.0
Nitroglycerin	Lin2		64942		2470	2500	-1.3	15.0
2,4,6-Trinitrotoluene	Ave	206038	207769		253	251	0.8	15.0
4-Amino-2,6-dinitrotoluene	Ave	152768	153822		252	250	0.7	15.0
2-Amino-4,6-dinitrotoluene	Ave	206926	207705		252	251	0.4	15.0
2,6-Dinitrotoluene	Ave	143079	147781		259	251	3.3	15.0
2,4-Dinitrotoluene	Ave	287012	304490		266	251	6.1	15.0
2-Nitrotoluene	Ave	128392	129944		253	250	1.2	15.0
4-Nitrotoluene	Ave	111913	112168		251	251	0.2	15.0
3-Nitrotoluene	Ave	142246	144767		255	250	1.8	15.0
PETN	Ave	74779	69689		2330	2500	-6.8	15.0
1,2-Dinitrobenzene	Ave	128217	134956		263	250	5.3	15.0

FORM VII  
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCV 280-556359/7 Calibration Date: 11/05/2021 14:27  
 Instrument ID: CHHPLC\_X3 Calib Start Date: 05/01/2021 18:01  
 GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 05/01/2021 21:04  
 Lab File ID: 11050007.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.61	6.46	6.76
RDX	7.63	7.48	7.78
Picric acid	8.02	7.87	8.17
1,3,5-Trinitrobenzene	8.73	8.58	8.88
1,3-Dinitrobenzene	9.37	9.22	9.52
Nitrobenzene	9.77	9.62	9.92
Tetryl	10.11	9.96	10.26
Nitroglycerin	10.57	10.42	10.72
2,4,6-Trinitrotoluene	11.03	10.93	11.13
4-Amino-2,6-dinitrotoluene	11.24	11.14	11.34
2-Amino-4,6-dinitrotoluene	11.50	11.40	11.60
2,6-Dinitrotoluene	11.67	11.57	11.77
2,4-Dinitrotoluene	11.83	11.73	11.93
2-Nitrotoluene	12.71	12.56	12.86
4-Nitrotoluene	13.15	13.00	13.30
3-Nitrotoluene	13.75	13.60	13.90
PETN	14.86	14.71	15.01
1,2-Dinitrobenzene	8.61	8.46	8.76

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\11050007.D  
 Lims ID: CCV INT  
 Client ID:  
 Sample Type: CCV  
 Inject. Date: 05-Nov-2021 14:27:48 ALS Bottle#: 7 Worklist Smp#: 7  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Sample Info: CCV INT  
 Misc. Info.: 280-0106237-007  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Sublist: chrom-8330\_X3\*sub9  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Nov-2021 10:24:48 Calib Date: 27-Oct-2021 04:27:09  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211027-105955.b\1026T007.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1650

First Level Reviewer: zhangji

Date:

05-Nov-2021 14:53:52

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.612	6.612	0.000	21666	0.2500	0.2566	M
8 RDX	1	7.632	7.632	0.000	26015	0.2500	0.2448	
9 2,4,6-Trinitrophenol	1	8.019	8.019	0.000	20348	0.2500	0.2460	
\$ 10 1,2-Dinitrobenzene	1	8.606	8.606	0.000	33739	0.2500	0.2631	
11 1,3,5-Trinitrobenzene	1	8.726	8.726	0.000	57762	0.2505	0.2622	
12 1,3-Dinitrobenzene	1	9.365	9.365	0.000	76769	0.2505	0.2591	
13 Nitrobenzene	1	9.765	9.765	0.000	50108	0.2510	0.2566	
15 Tetryl	1	10.112	10.112	0.000	38668	0.2505	0.2243	
16 Nitroglycerin	2	10.572	10.572	0.000	162354	2.50	2.47	
17 2,4,6-Trinitrotoluene	1	11.025	11.025	0.000	52150	0.2510	0.2531	
18 4-Amino-2,6-dinitrotoluene	1	11.239	11.239	0.000	38494	0.2503	0.2520	
19 2-Amino-4,6-dinitrotoluene	1	11.499	11.499	0.000	52134	0.2510	0.2519	
20 2,6-Dinitrotoluene	1	11.665	11.665	0.000	37093	0.2510	0.2592	
21 2,4-Dinitrotoluene	1	11.832	11.832	0.000	76427	0.2510	0.2663	
22 o-Nitrotoluene	1	12.712	12.712	0.000	32486	0.2500	0.2530	
23 p-Nitrotoluene	1	13.152	13.152	0.000	28098	0.2505	0.2511	
24 m-Nitrotoluene	1	13.745	13.745	0.000	36228	0.2503	0.2547	
25 PETN	2	14.859	14.859	0.000	174222	2.50	2.33	

**QC Flag Legend**

Processing Flags

Review Flags

M - Manually Integrated

**Reagents:**

8330IntermStk\_00069

Amount Added: 25.00

Units: uL

Report Date: 06-Nov-2021 10:24:48

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20211105-106237.b\11050007.d

Injection Date: 05-Nov-2021 14:27:48

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

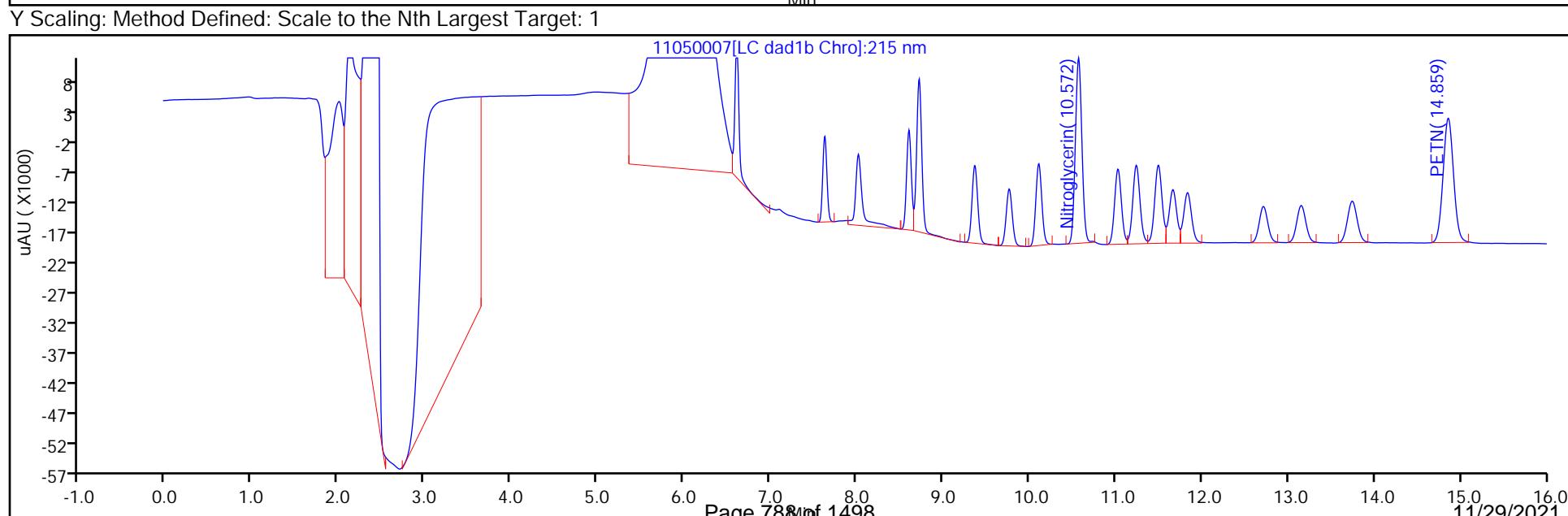
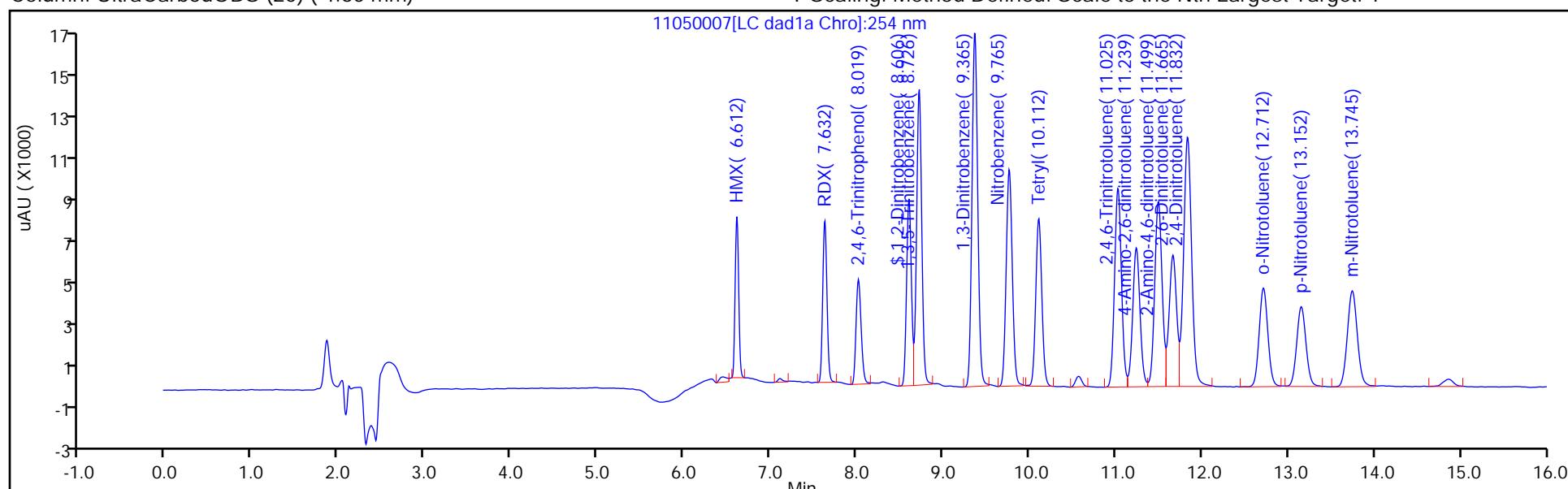
ALS Bottle#: 7

Method: 8330\_X3

Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



## Eurofins TestAmerica, Denver

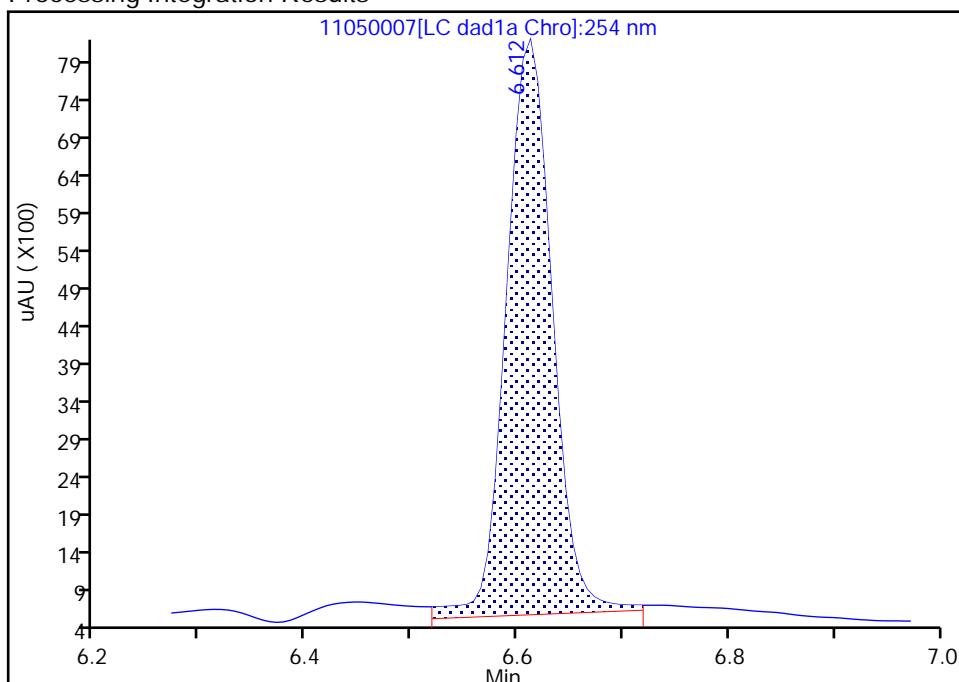
Data File: \\chromfs\denver\chromdata\chhplc\_x\20211105-106237.b\11050007.d  
 Injection Date: 05-Nov-2021 14:27:48 Instrument ID: CHHPLC\_X3  
 Lims ID: CCV INT  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 7  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

## 4 HMX, CAS: 2691-41-0

Signal: 1

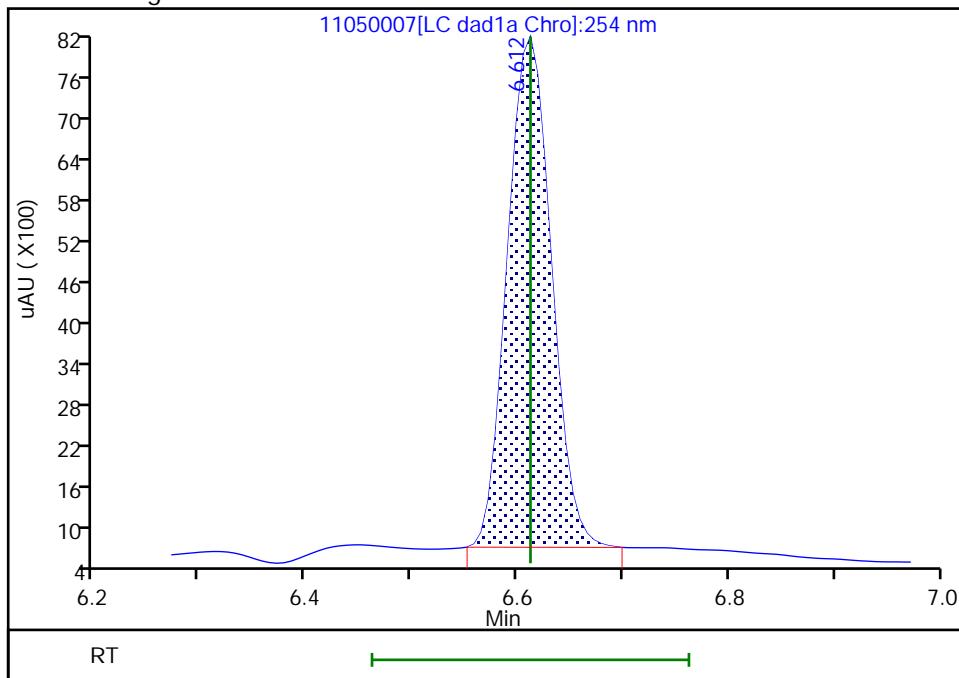
RT: 6.61  
 Area: 23183  
 Amount: 0.274610  
 Amount Units: ug/mL

## Processing Integration Results



RT: 6.61  
 Area: 21666  
 Amount: 0.256641  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 05-Nov-2021 14:53:34

Audit Action: Manually Integrated

Audit Reason: Baseline

FORM VII  
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Lab Sample ID: CCV 280-556359/9 Calibration Date: 11/05/2021 14:50

Instrument ID: CHHPLC\_X3 Calib Start Date: 03/02/2021 23:49

GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 03/03/2021 02:30

Lab File ID: 11050009.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	185806	192176		259	250	3.4	15.0
DNX	Ave	142119	145998		257	250	2.7	15.0
MNX	Ave	130340	133436		299	292	2.4	15.0

FORM VII  
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Lab Sample ID: CCV 280-556359/9 Calibration Date: 11/05/2021 14:50

Instrument ID: CHHPLC\_X3 Calib Start Date: 03/02/2021 23:49

GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 03/03/2021 02:30

Lab File ID: 11050009.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.49	6.39	6.59
DNX	6.81	6.71	6.91
MNX	7.24	7.09	7.39

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\11050009.D  
 Lims ID: CCV DMT  
 Client ID:  
 Sample Type: CCV  
 Inject. Date: 05-Nov-2021 14:50:48 ALS Bottle#: 9 Worklist Smp#: 9  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Sample Info: CCV DMT  
 Misc. Info.: 280-0106237-009  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Sublist: chrom-8330\_X3\*sub17  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Nov-2021 10:24:48 Calib Date: 27-Oct-2021 04:27:09  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211027-105955.b\1026T007.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1650

First Level Reviewer: zhangji Date: 05-Nov-2021 15:50:27

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.493	6.493	0.000	48092	0.2503	0.2588	M
6 DNX	1	6.813	6.813	0.000	36536	0.2503	0.2571	M
7 MNX	1	7.239	7.239	0.000	38930	0.2918	0.2987	

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

### Reagents:

8330 DMT\_00009 Amount Added: 12.50 Units: uL

Report Date: 06-Nov-2021 10:24:48

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\\denver\\chromdata\\chhplc\_x\\20211105-106237.b\\11050009.d

Injection Date: 05-Nov-2021 14:50:48

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

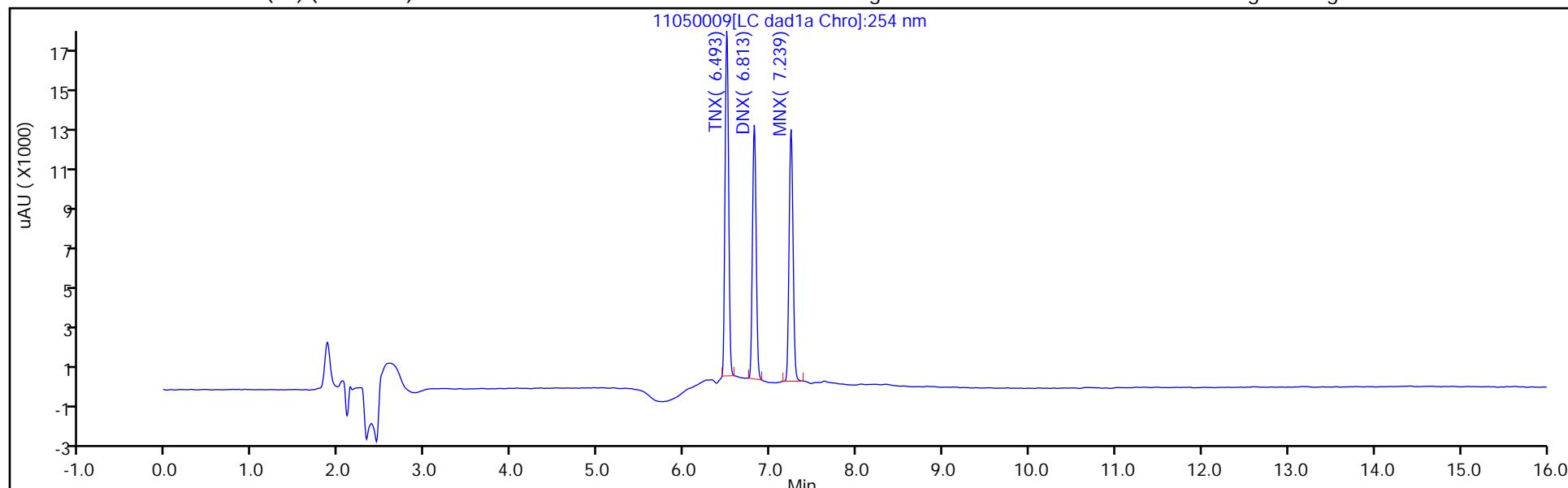
ALS Bottle#: 9

Method: 8330\_X3

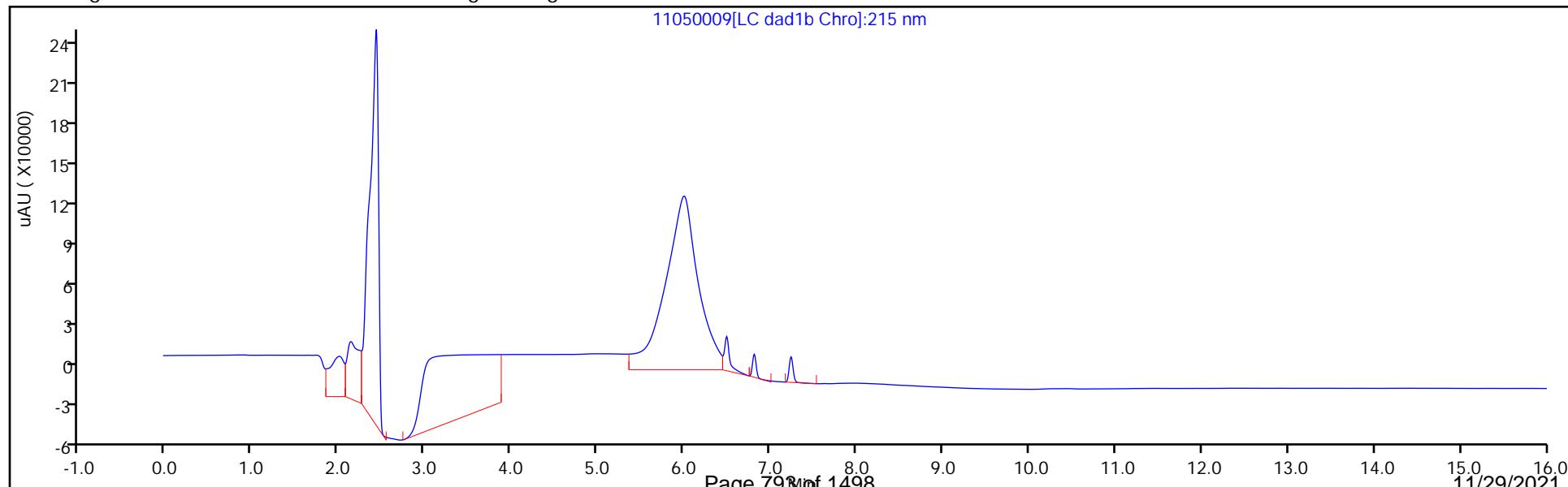
Limit Group: GCSV - 8330

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



Eurofins TestAmerica, Denver

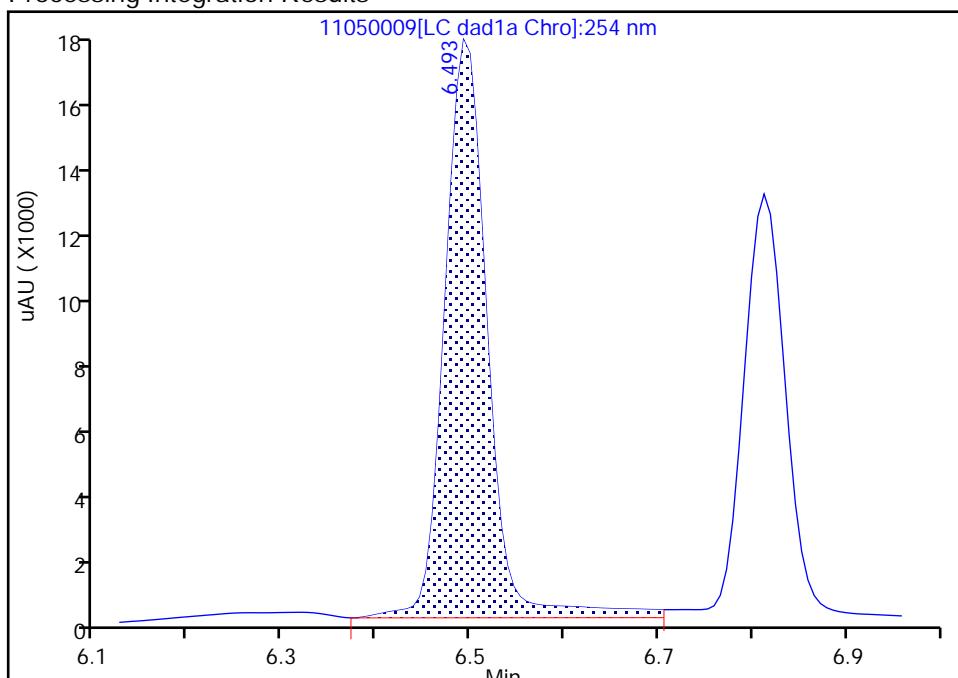
Data File: \\chromfs\denver\chromdata\chhplc\_x\20211105-106237.b\11050009.d  
 Injection Date: 05-Nov-2021 14:50:48 Instrument ID: CHHPLC\_X3  
 Lims ID: CCV DMT  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 9 Worklist Smp#: 9  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

**3 TNX, CAS: 13980-04-6**

Signal: 1

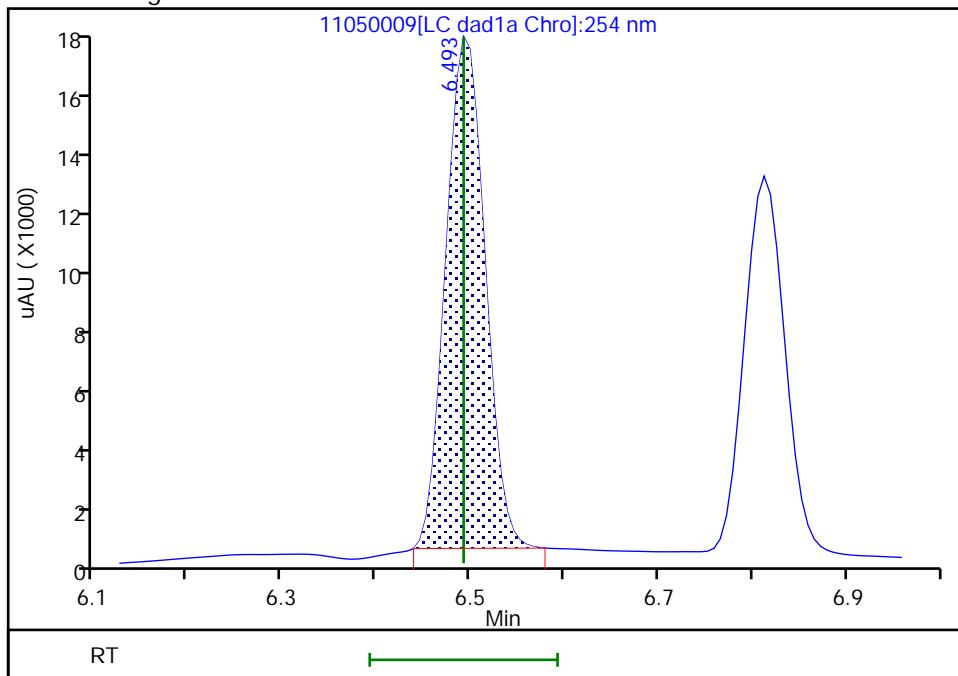
RT: 6.49  
 Area: 53748  
 Amount: 0.289269  
 Amount Units: ug/mL

## Processing Integration Results



RT: 6.49  
 Area: 48092  
 Amount: 0.258829  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 05-Nov-2021 15:50:19

Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Denver

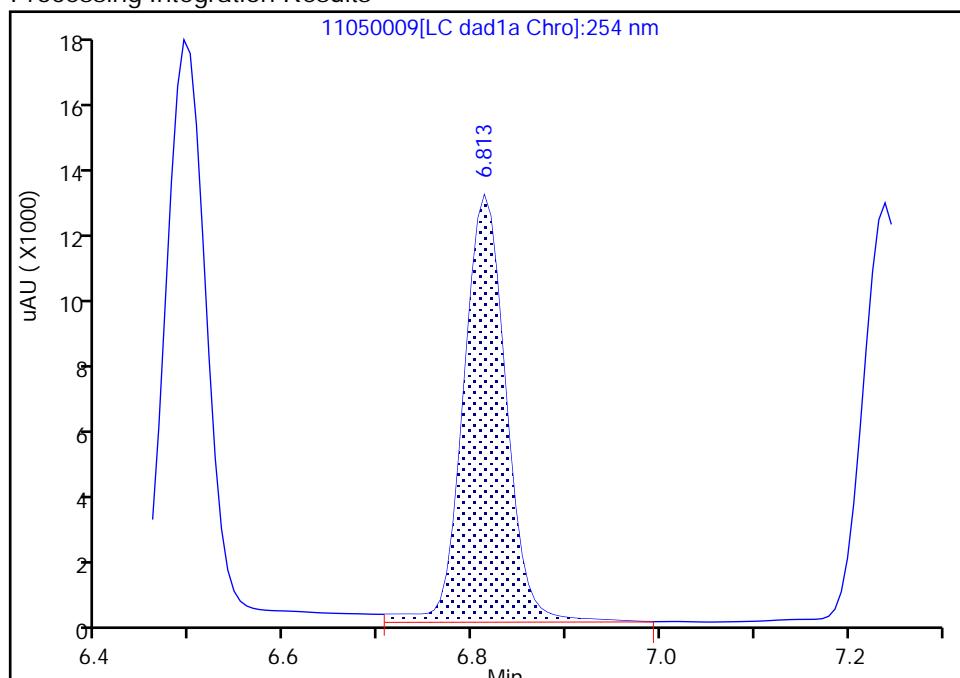
Data File: \\chromfs\denver\chromdata\chhplc\_x\20211105-106237.b\11050009.d  
 Injection Date: 05-Nov-2021 14:50:48 Instrument ID: CHHPLC\_X3  
 Lims ID: CCV DMT  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 9 Worklist Smp#: 9  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

**6 DNX, CAS: 80251-29-2**

Signal: 1

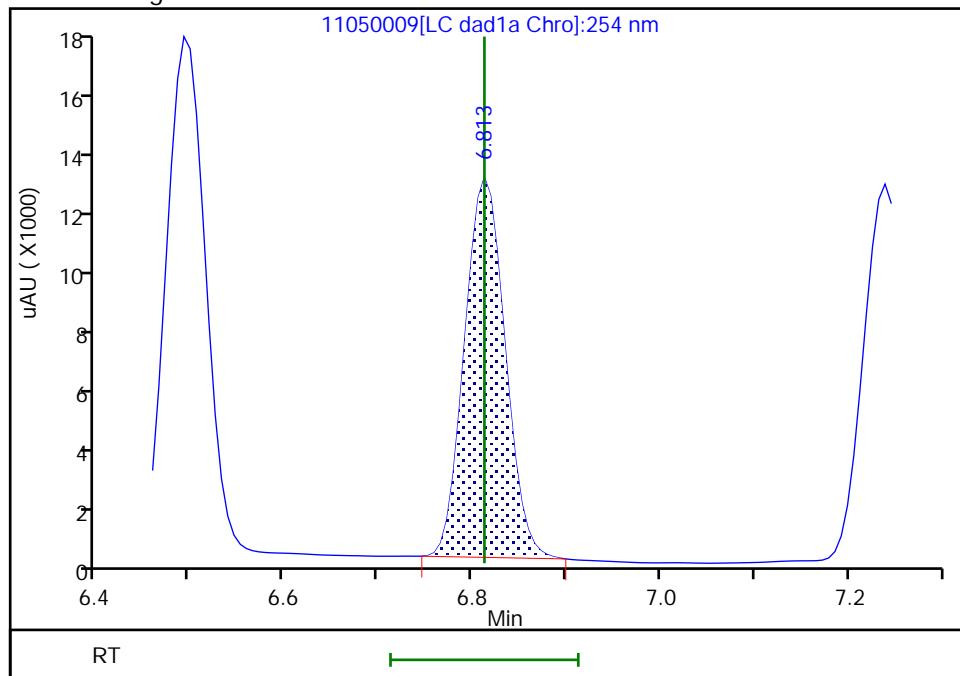
RT: 6.81  
 Area: 39143  
 Amount: 0.275423  
 Amount Units: ug/mL

## Processing Integration Results



RT: 6.81  
 Area: 36536  
 Amount: 0.257080  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 05-Nov-2021 15:50:23

Audit Action: Manually Integrated

Audit Reason: Baseline

FORM VII  
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCV 280-556359/21 Calibration Date: 11/05/2021 19:04  
Instrument ID: CHHPLC\_X3 Calib Start Date: 05/01/2021 18:01  
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 05/01/2021 21:04  
Lab File ID: 11050021.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	84421	86576		256	250	2.6	15.0
RDX	Ave	106261	104264		245	250	-1.9	15.0
Picric acid	Ave	82721	80056		242	250	-3.2	15.0
1,3,5-Trinitrobenzene	Ave	220317	227134		258	251	3.1	15.0
1,3-Dinitrobenzene	Ave	296329	304659		258	251	2.8	15.0
Nitrobenzene	Ave	195286	196833		253	251	0.8	15.0
Tetryl	Ave	172420	156096		227	251	-9.5	15.0
Nitroglycerin	Lin2		66157		2510	2500	0.6	15.0
2,4,6-Trinitrotoluene	Ave	206038	206968		252	251	0.5	15.0
4-Amino-2,6-dinitrotoluene	Ave	152768	152392		250	250	-0.2	15.0
2-Amino-4,6-dinitrotoluene	Ave	206926	206088		250	251	-0.4	15.0
2,6-Dinitrotoluene	Ave	143079	149012		261	251	4.1	15.0
2,4-Dinitrotoluene	Ave	287012	301765		264	251	5.1	15.0
2-Nitrotoluene	Ave	128392	128580		250	250	0.1	15.0
4-Nitrotoluene	Ave	111913	111257		249	251	-0.6	15.0
3-Nitrotoluene	Ave	142246	141738		249	250	-0.4	15.0
PETN	Ave	74779	69378		2320	2500	-7.2	15.0
1,2-Dinitrobenzene	Ave	128217	135448		264	250	5.6	15.0

FORM VII  
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCV 280-556359/21 Calibration Date: 11/05/2021 19:04  
Instrument ID: CHHPLC\_X3 Calib Start Date: 05/01/2021 18:01  
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 05/01/2021 21:04  
Lab File ID: 11050021.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.60	6.46	6.76
RDX	7.61	7.48	7.78
Picric acid	8.00	7.87	8.17
1,3,5-Trinitrobenzene	8.70	8.58	8.88
1,3-Dinitrobenzene	9.34	9.22	9.52
Nitrobenzene	9.73	9.62	9.92
Tetryl	10.08	9.96	10.26
Nitroglycerin	10.53	10.42	10.72
2,4,6-Trinitrotoluene	10.98	10.93	11.13
4-Amino-2,6-dinitrotoluene	11.20	11.14	11.34
2-Amino-4,6-dinitrotoluene	11.45	11.40	11.60
2,6-Dinitrotoluene	11.62	11.57	11.77
2,4-Dinitrotoluene	11.78	11.73	11.93
2-Nitrotoluene	12.66	12.56	12.86
4-Nitrotoluene	13.09	13.00	13.30
3-Nitrotoluene	13.68	13.60	13.90
PETN	14.78	14.71	15.01
1,2-Dinitrobenzene	8.58	8.46	8.76

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\11050021.D  
 Lims ID: CCV INT  
 Client ID:  
 Sample Type: CCV  
 Inject. Date: 05-Nov-2021 19:04:24 ALS Bottle#: 7 Worklist Smp#: 21  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Sample Info: CCV INT  
 Misc. Info.: 280-0106237-021  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Sublist: chrom-8330\_X3\*sub9  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Nov-2021 10:24:53 Calib Date: 27-Oct-2021 04:27:09  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211027-105955.b\1026T007.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1650

First Level Reviewer: zhangji

Date:

05-Nov-2021 19:59:55

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.603	6.612	-0.009	21644	0.2500	0.2564	M
8 RDX	1	7.610	7.632	-0.022	26066	0.2500	0.2453	
9 2,4,6-Trinitrophenol	1	8.003	8.019	-0.016	20014	0.2500	0.2419	
\$ 10 1,2-Dinitrobenzene	1	8.577	8.606	-0.029	33862	0.2500	0.2641	
11 1,3,5-Trinitrobenzene	1	8.697	8.726	-0.029	56897	0.2505	0.2583	
12 1,3-Dinitrobenzene	1	9.337	9.365	-0.028	76317	0.2505	0.2575	
13 Nitrobenzene	1	9.730	9.765	-0.035	49405	0.2510	0.2530	
15 Tetryl	1	10.077	10.112	-0.035	39102	0.2505	0.2268	
16 Nitroglycerin	2	10.530	10.572	-0.042	165393	2.50	2.51	
17 2,4,6-Trinitrotoluene	1	10.983	11.025	-0.042	51949	0.2510	0.2521	
18 4-Amino-2,6-dinitrotoluene	1	11.197	11.239	-0.042	38136	0.2503	0.2496	
19 2-Amino-4,6-dinitrotoluene	1	11.450	11.499	-0.049	51728	0.2510	0.2500	
20 2,6-Dinitrotoluene	1	11.617	11.665	-0.048	37402	0.2510	0.2614	
21 2,4-Dinitrotoluene	1	11.783	11.832	-0.049	75743	0.2510	0.2639	
22 o-Nitrotoluene	1	12.657	12.712	-0.055	32145	0.2500	0.2504	
23 p-Nitrotoluene	1	13.090	13.152	-0.062	27870	0.2505	0.2490	
24 m-Nitrotoluene	1	13.677	13.745	-0.068	35470	0.2503	0.2494	
25 PETN	2	14.777	14.859	-0.082	173446	2.50	2.32	

**QC Flag Legend**

Processing Flags

Review Flags

M - Manually Integrated

**Reagents:**

8330IntermStk\_00069

Amount Added: 25.00

Units: uL

Report Date: 06-Nov-2021 10:24:53

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20211105-106237.b\11050021.d

Injection Date: 05-Nov-2021 19:04:24

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

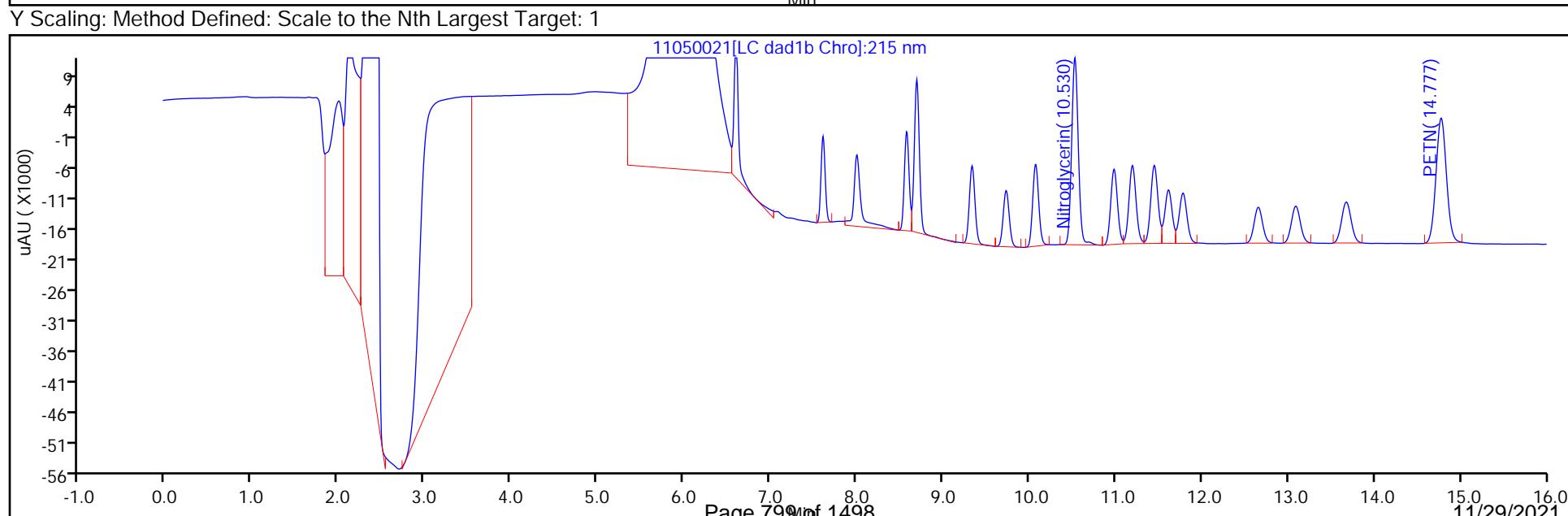
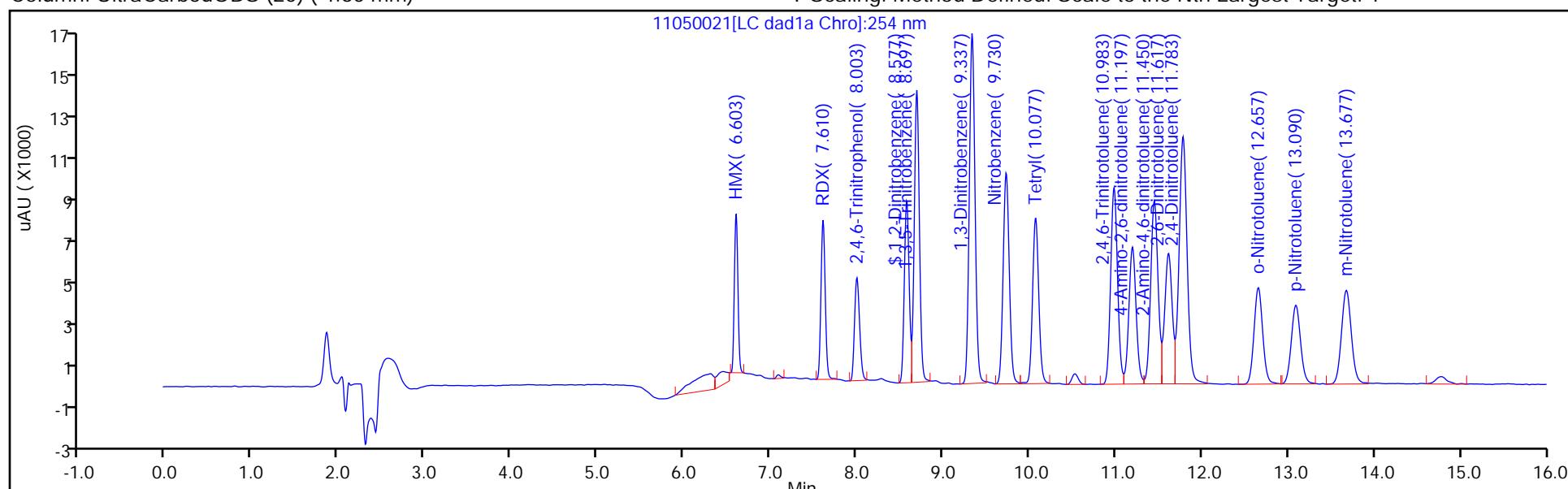
ALS Bottle#: 7

Method: 8330\_X3

Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



## Eurofins TestAmerica, Denver

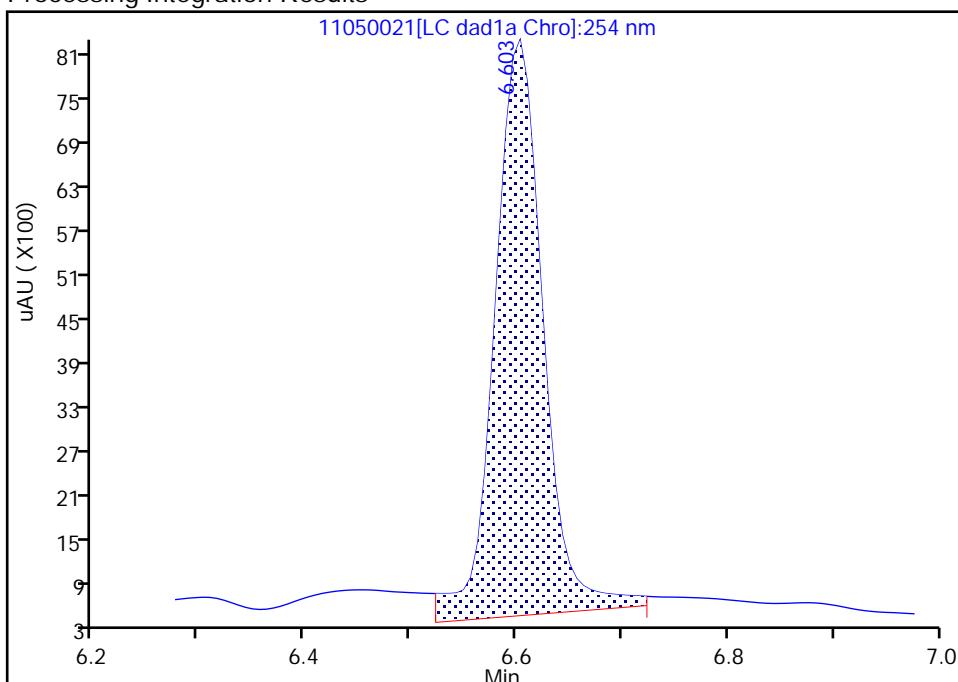
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 Injection Date: 05-Nov-2021 19:04:24 Instrument ID: CHHPLC\_X3  
 Lims ID: CCV INT  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 21  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

## 4 HMX, CAS: 2691-41-0

Signal: 1

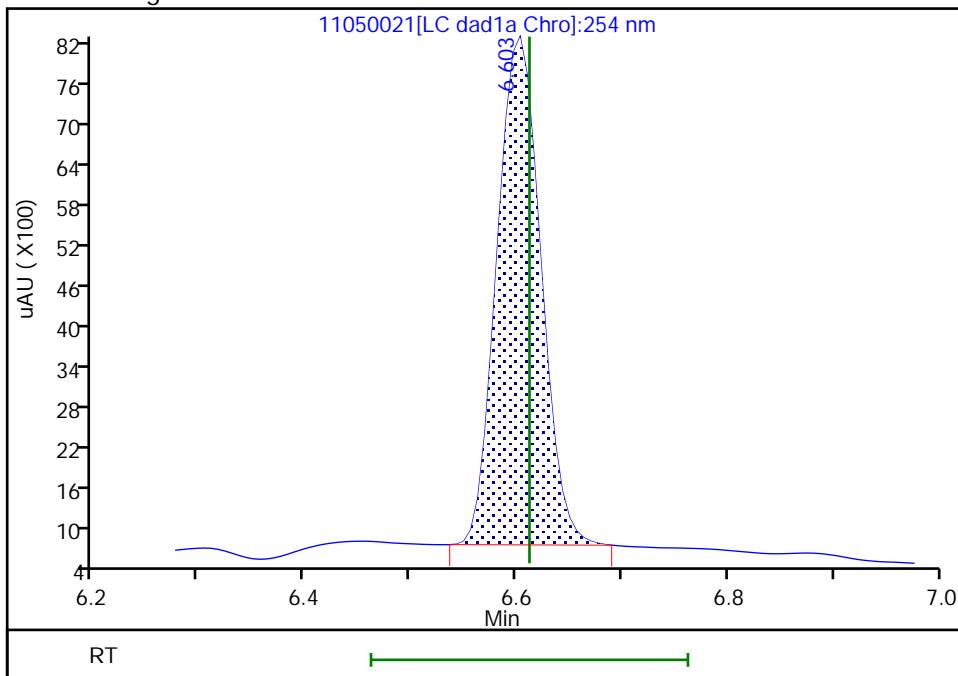
RT: 6.60  
 Area: 24880  
 Amount: 0.294712  
 Amount Units: ug/mL

## Processing Integration Results



RT: 6.60  
 Area: 21644  
 Amount: 0.256380  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 05-Nov-2021 19:59:54

Audit Action: Manually Integrated

Audit Reason: Baseline

FORM VII  
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Lab Sample ID: CCV 280-556359/22 Calibration Date: 11/05/2021 19:27

Instrument ID: CHHPLC\_X3 Calib Start Date: 03/02/2021 23:49

GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 03/03/2021 02:30

Lab File ID: 11050022.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	185806	189718		256	250	2.1	15.0
DNX	Ave	142119	144272		254	250	1.5	15.0
MNX	Ave	130340	134255		301	292	3.0	15.0

FORM VII  
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCV 280-556359/22 Calibration Date: 11/05/2021 19:27  
Instrument ID: CHHPLC\_X3 Calib Start Date: 03/02/2021 23:49  
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 03/03/2021 02:30  
Lab File ID: 11050022.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.48	6.39	6.59
DNX	6.80	6.71	6.91
MNX	7.23	7.09	7.39

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\11050022.D  
 Lims ID: CCV DMT  
 Client ID:  
 Sample Type: CCV  
 Inject. Date: 05-Nov-2021 19:27:22 ALS Bottle#: 9 Worklist Smp#: 22  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: CCV DMT  
 Misc. Info.: 280-0106237-022  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Sublist: chrom-8330\_X3\*sub17  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Nov-2021 10:24:53 Calib Date: 27-Oct-2021 04:27:09  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211027-105955.b\1026T007.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1650

First Level Reviewer: zhangji Date: 05-Nov-2021 20:00:25

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	6.493	-0.011	47477	0.2503	0.2555	M
6 DNX	1	6.802	6.813	-0.011	36104	0.2503	0.2540	M
7 MNX	1	7.229	7.239	-0.010	39169	0.2918	0.3005	

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

### Reagents:

8330 DMT\_00009 Amount Added: 12.50 Units: uL

Report Date: 06-Nov-2021 10:24:54

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\\denver\\chromdata\\chhplc\_x\\20211105-106237.b\\11050022.d

Injection Date: 05-Nov-2021 19:27:22

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

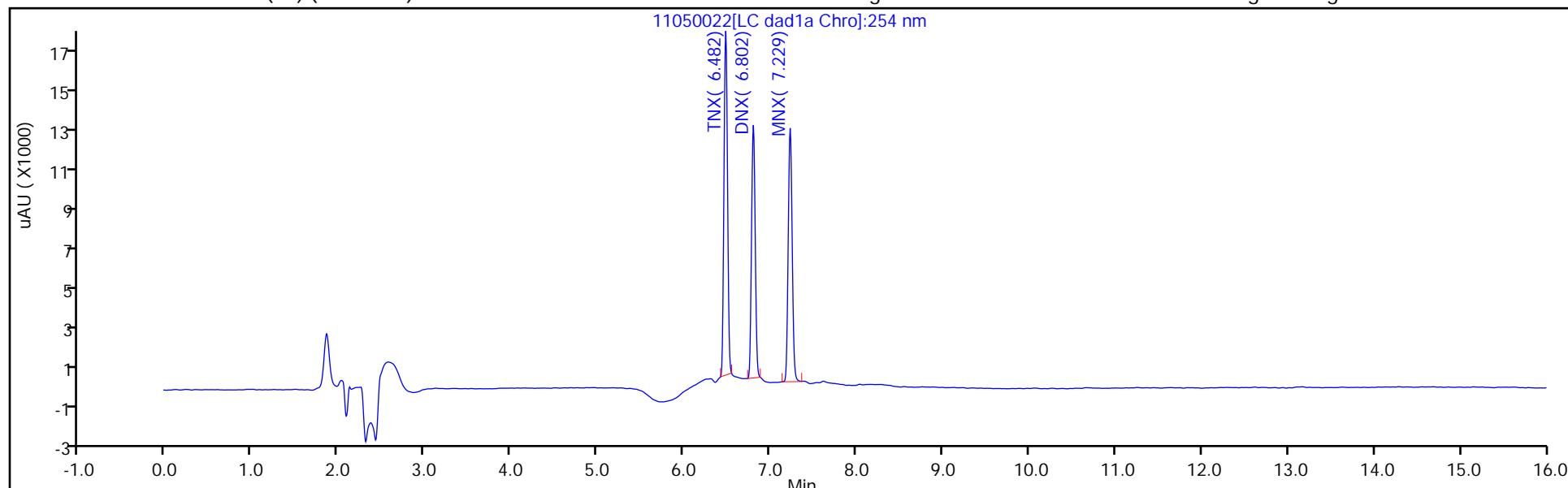
ALS Bottle#: 9

Method: 8330\_X3

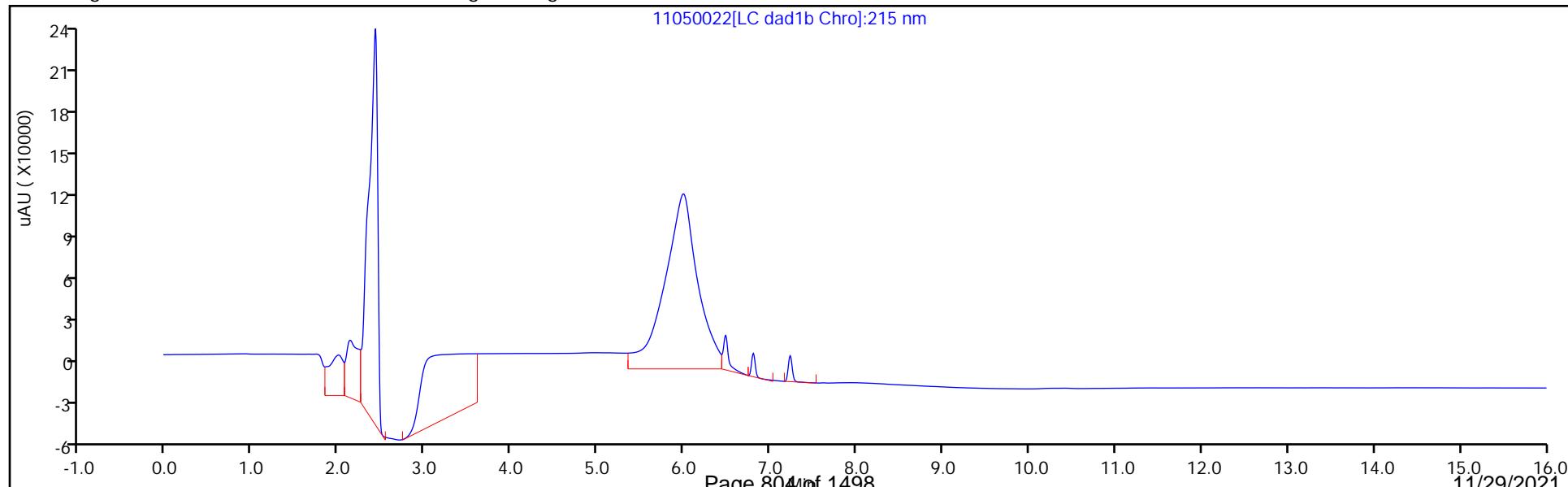
Limit Group: GCSV - 8330

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



## Eurofins TestAmerica, Denver

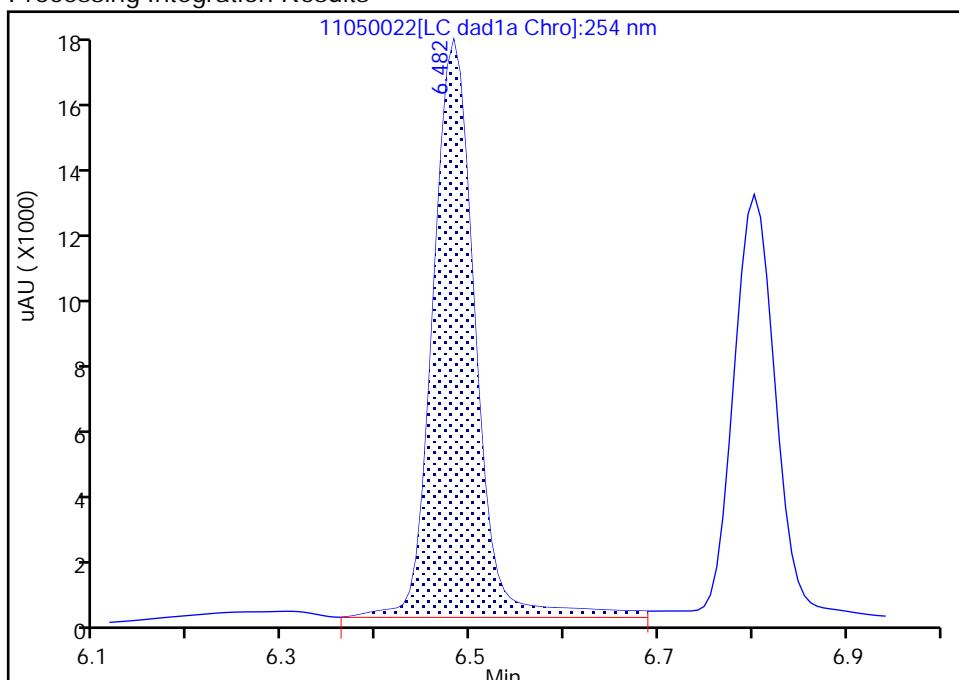
Data File: \\chromfs\denver\chromdata\chhplc\_x\20211105-106237.b\11050022.d  
 Injection Date: 05-Nov-2021 19:27:22 Instrument ID: CHHPLC\_X3  
 Lims ID: CCV DMT  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 9 Worklist Smp#: 22  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

**3 TNX, CAS: 13980-04-6**

Signal: 1

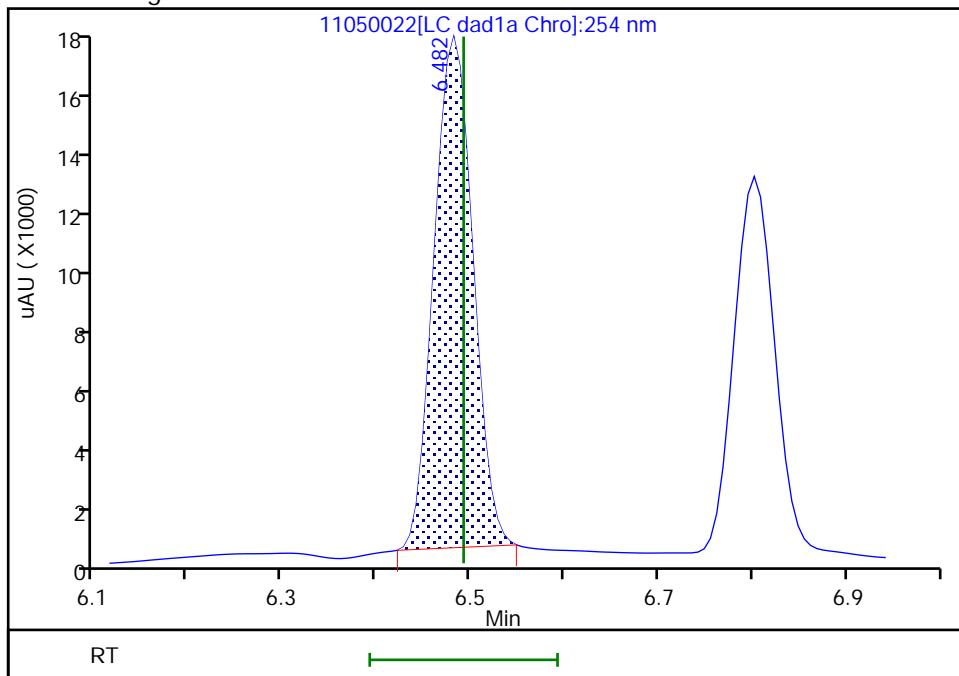
RT: 6.48  
 Area: 52862  
 Amount: 0.284501  
 Amount Units: ug/mL

## Processing Integration Results



RT: 6.48  
 Area: 47477  
 Amount: 0.255519  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 05-Nov-2021 20:00:19

Audit Action: Manually Integrated

Audit Reason: Baseline

## Eurofins TestAmerica, Denver

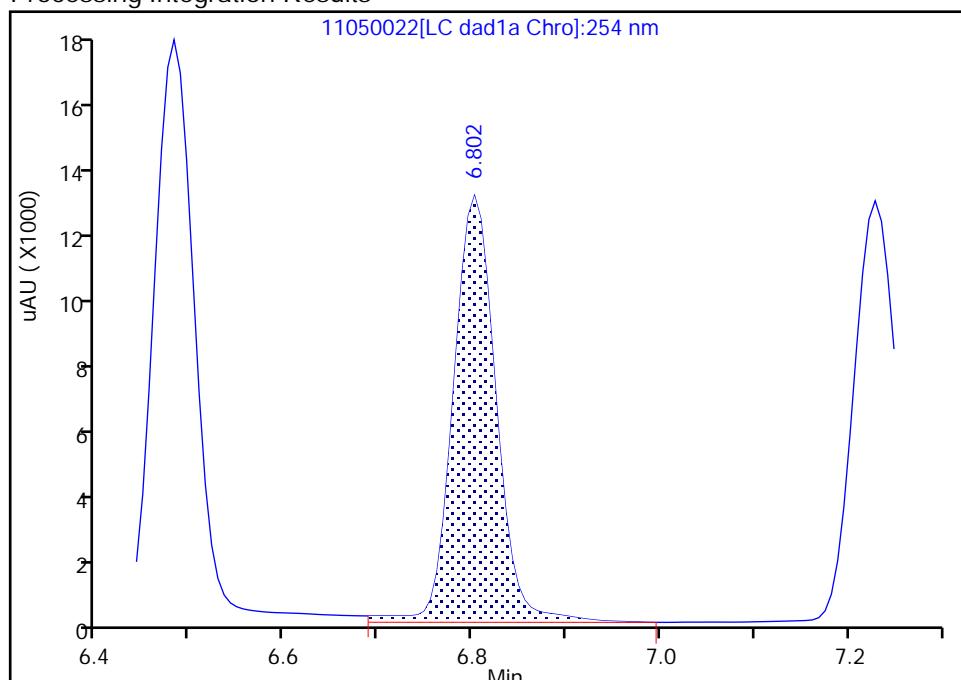
Data File: \\chromfs\denver\chromdata\chhplc\_x\20211105-106237.b\11050022.d  
 Injection Date: 05-Nov-2021 19:27:22 Instrument ID: CHHPLC\_X3  
 Lims ID: CCV DMT  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 9 Worklist Smp#: 22  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

## 6 DNX, CAS: 80251-29-2

Signal: 1

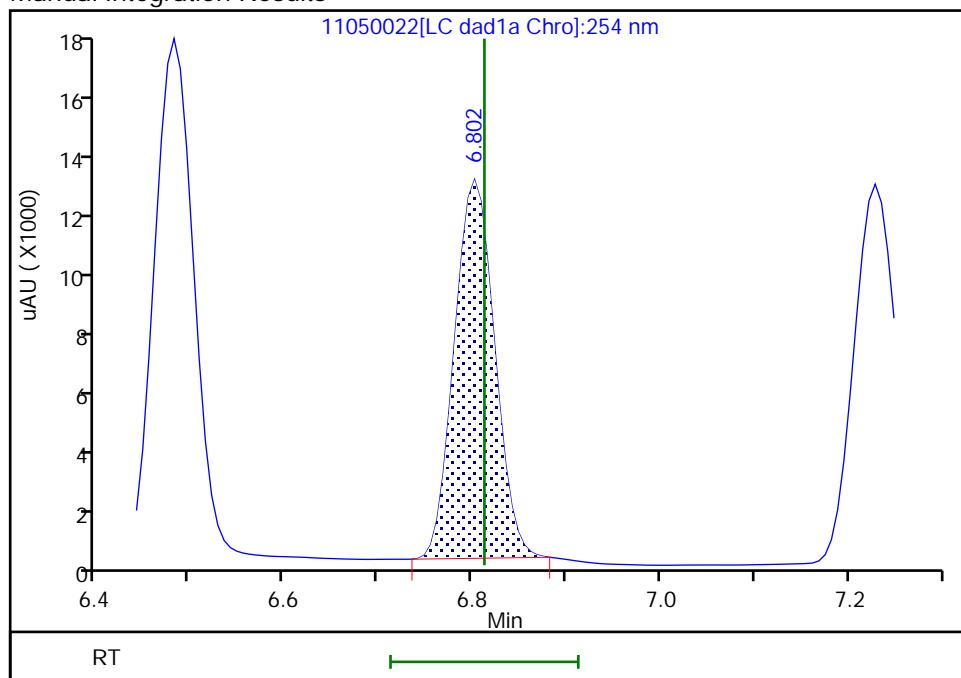
RT: 6.80  
 Area: 39138  
 Amount: 0.275388  
 Amount Units: ug/mL

## Processing Integration Results



RT: 6.80  
 Area: 36104  
 Amount: 0.254040  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 05-Nov-2021 20:00:23

Audit Action: Manually Integrated

Audit Reason: Baseline

FORM VII  
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCV 280-556359/33 Calibration Date: 11/05/2021 23:39  
Instrument ID: CHHPLC\_X3 Calib Start Date: 05/01/2021 18:01  
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 05/01/2021 21:04  
Lab File ID: 11050033.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	84421	86840		257	250	2.9	15.0
RDX	Ave	106261	103700		244	250	-2.4	15.0
Picric acid	Ave	82721	80680		244	250	-2.5	15.0
1,3,5-Trinitrobenzene	Ave	220317	229030		260	251	4.0	15.0
1,3-Dinitrobenzene	Ave	296329	305034		258	251	2.9	15.0
Nitrobenzene	Ave	195286	193570		249	251	-0.9	15.0
Tetryl	Ave	172420	155737		226	251	-9.7	15.0
Nitroglycerin	Lin2		66479		2530	2500	1.1	15.0
2,4,6-Trinitrotoluene	Ave	206038	207745		253	251	0.8	15.0
4-Amino-2,6-dinitrotoluene	Ave	152768	154190		253	250	0.9	15.0
2-Amino-4,6-dinitrotoluene	Ave	206926	208518		253	251	0.8	15.0
2,6-Dinitrotoluene	Ave	143079	148522		261	251	3.8	15.0
2,4-Dinitrotoluene	Ave	287012	301940		264	251	5.2	15.0
2-Nitrotoluene	Ave	128392	125680		245	250	-2.1	15.0
4-Nitrotoluene	Ave	111913	110599		248	251	-1.2	15.0
3-Nitrotoluene	Ave	142246	140236		247	250	-1.4	15.0
PETN	Ave	74779	69412		2320	2500	-7.2	15.0
1,2-Dinitrobenzene	Ave	128217	134136		262	250	4.6	15.0

FORM VII  
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCV 280-556359/33 Calibration Date: 11/05/2021 23:39  
 Instrument ID: CHHPLC\_X3 Calib Start Date: 05/01/2021 18:01  
 GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 05/01/2021 21:04  
 Lab File ID: 11050033.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.60	6.46	6.76
RDX	7.60	7.48	7.78
Picric acid	8.00	7.87	8.17
1,3,5-Trinitrobenzene	8.69	8.58	8.88
1,3-Dinitrobenzene	9.34	9.22	9.52
Nitrobenzene	9.73	9.62	9.92
Tetryl	10.07	9.96	10.26
Nitroglycerin	10.52	10.42	10.72
2,4,6-Trinitrotoluene	10.98	10.93	11.13
4-Amino-2,6-dinitrotoluene	11.19	11.14	11.34
2-Amino-4,6-dinitrotoluene	11.44	11.40	11.60
2,6-Dinitrotoluene	11.61	11.57	11.77
2,4-Dinitrotoluene	11.78	11.73	11.93
2-Nitrotoluene	12.66	12.56	12.86
4-Nitrotoluene	13.09	13.00	13.30
3-Nitrotoluene	13.68	13.60	13.90
PETN	14.78	14.71	15.01
1,2-Dinitrobenzene	8.58	8.46	8.76

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\11050033.D  
 Lims ID: CCV INT  
 Client ID:  
 Sample Type: CCV  
 Inject. Date: 05-Nov-2021 23:39:25 ALS Bottle#: 7 Worklist Smp#: 33  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Sample Info: CCV INT  
 Misc. Info.: 280-0106237-033  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Sublist: chrom-8330\_X3\*sub9  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Nov-2021 10:24:57 Calib Date: 27-Oct-2021 04:27:09  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211027-105955.b\1026T007.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1650

First Level Reviewer: zhangji

Date:

06-Nov-2021 10:13:00

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.597	6.612	-0.015	21710	0.2500	0.2572	M
8 RDX	1	7.604	7.632	-0.028	25925	0.2500	0.2440	
9 2,4,6-Trinitrophenol	1	7.997	8.019	-0.022	20170	0.2500	0.2438	
\$ 10 1,2-Dinitrobenzene	1	8.577	8.606	-0.029	33534	0.2500	0.2615	
11 1,3,5-Trinitrobenzene	1	8.691	8.726	-0.035	57372	0.2505	0.2604	
12 1,3-Dinitrobenzene	1	9.337	9.365	-0.028	76411	0.2505	0.2579	
13 Nitrobenzene	1	9.730	9.765	-0.035	48586	0.2510	0.2488	
15 Tetryl	1	10.070	10.112	-0.042	39012	0.2505	0.2263	
16 Nitroglycerin	2	10.524	10.572	-0.048	166197	2.50	2.53	
17 2,4,6-Trinitrotoluene	1	10.977	11.025	-0.048	52144	0.2510	0.2531	
18 4-Amino-2,6-dinitrotoluene	1	11.190	11.239	-0.049	38586	0.2503	0.2526	
19 2-Amino-4,6-dinitrotoluene	1	11.444	11.499	-0.055	52338	0.2510	0.2529	
20 2,6-Dinitrotoluene	1	11.610	11.665	-0.055	37279	0.2510	0.2605	
21 2,4-Dinitrotoluene	1	11.784	11.832	-0.048	75787	0.2510	0.2641	
22 o-Nitrotoluene	1	12.657	12.712	-0.055	31420	0.2500	0.2447	
23 p-Nitrotoluene	1	13.090	13.152	-0.062	27705	0.2505	0.2476	
24 m-Nitrotoluene	1	13.677	13.745	-0.068	35094	0.2503	0.2467	
25 PETN	2	14.777	14.859	-0.082	173531	2.50	2.32	

**QC Flag Legend**

Processing Flags

Review Flags

M - Manually Integrated

**Reagents:**

8330IntermStk\_00069

Amount Added: 25.00

Units: uL

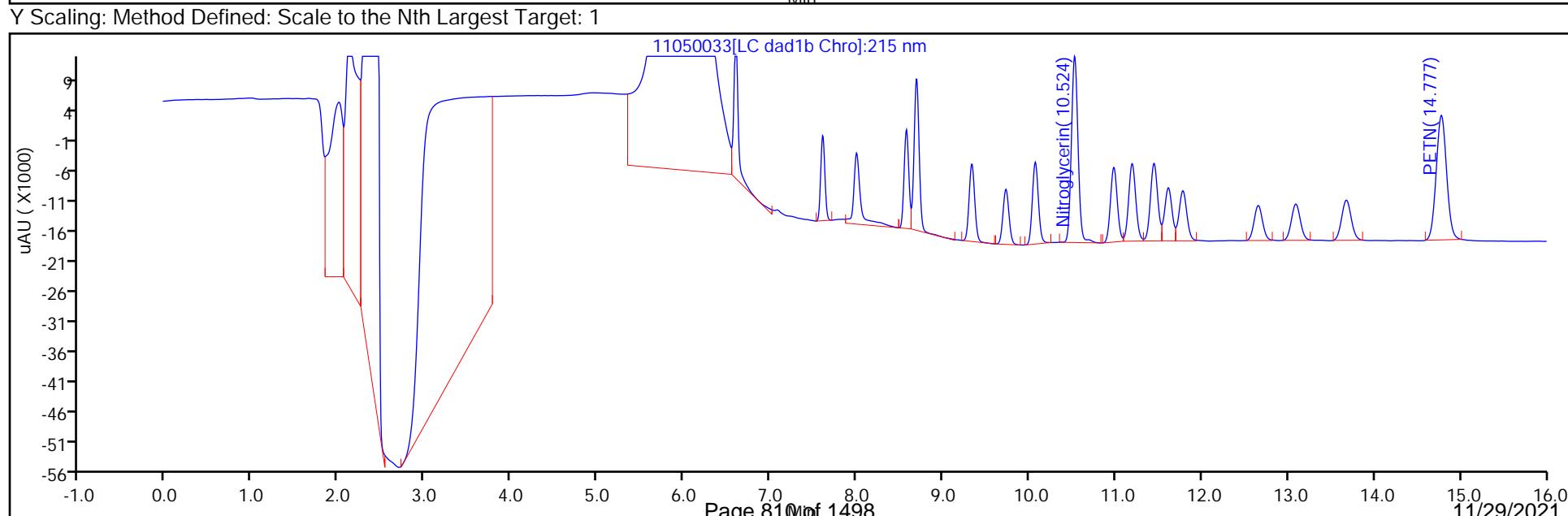
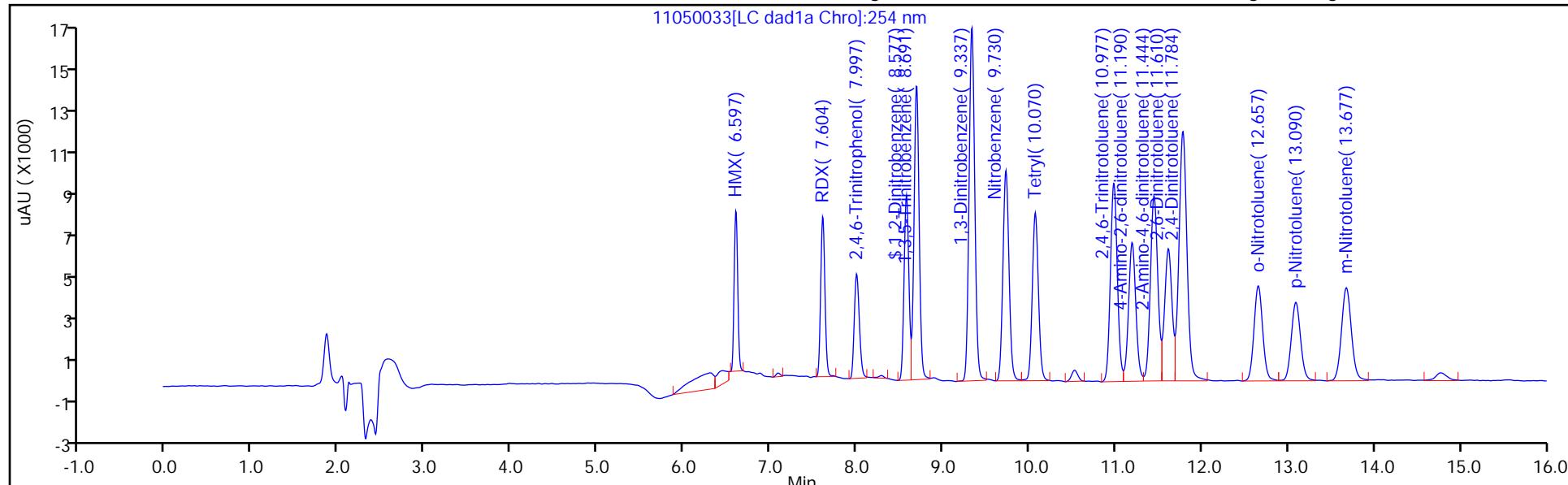
Report Date: 06-Nov-2021 10:24:57

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20211105-106237.b\11050033.d  
 Injection Date: 05-Nov-2021 23:39:25 Instrument ID: CHHPLC\_X3  
 Lims ID: CCV INT Operator ID: JZ  
 Client ID:  
 Injection Vol: 100.0 ul Worklist Smp#: 33  
 Method: 8330\_X3  
 Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



## Eurofins TestAmerica, Denver

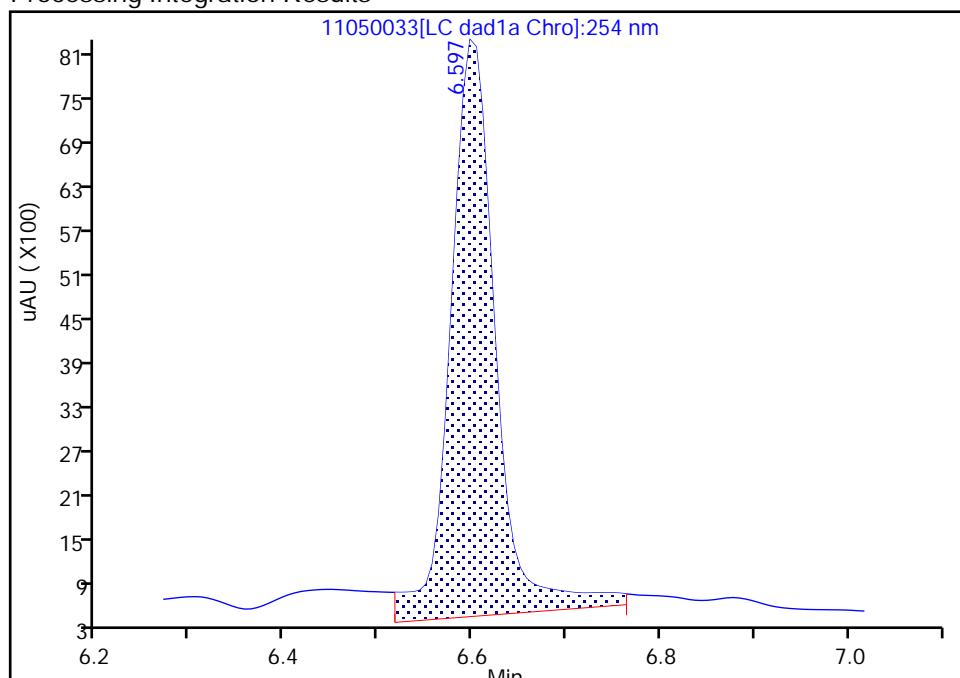
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 Injection Date: 05-Nov-2021 23:39:25 Instrument ID: CHHPLC\_X3  
 Lims ID: CCV INT  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 33  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

## 4 HMX, CAS: 2691-41-0

Signal: 1

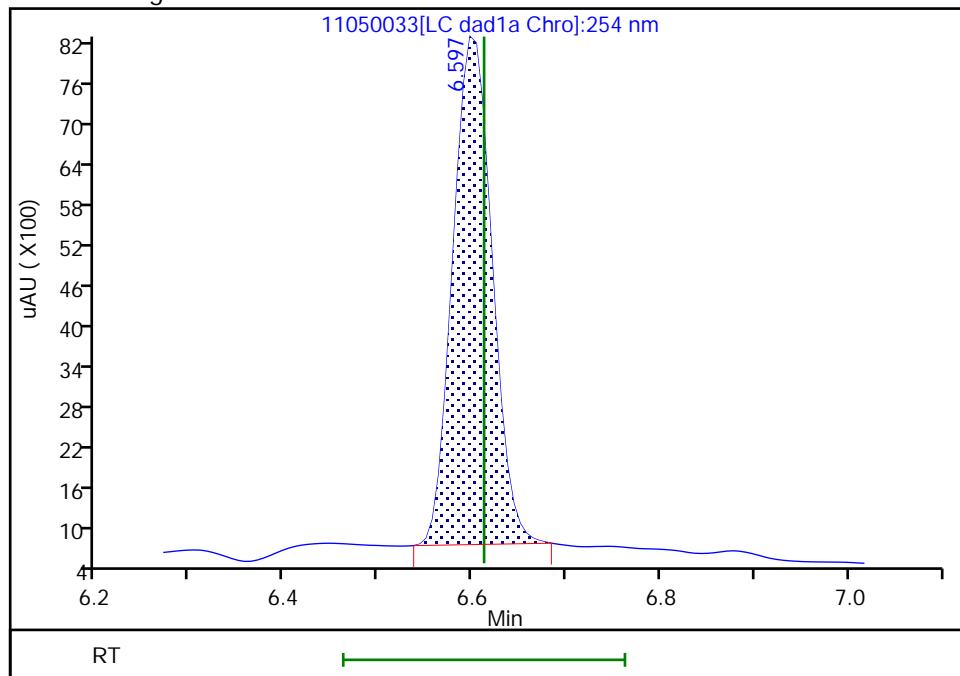
RT: 6.60  
 Area: 26176  
 Amount: 0.310063  
 Amount Units: ug/mL

## Processing Integration Results



RT: 6.60  
 Area: 21710  
 Amount: 0.257162  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 06-Nov-2021 10:12:59

Audit Action: Manually Integrated

Audit Reason: Baseline

FORM VII  
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Lab Sample ID: CCV 280-556359/34 Calibration Date: 11/06/2021 00:02

Instrument ID: CHHPLC\_X3 Calib Start Date: 03/02/2021 23:49

GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 03/03/2021 02:30

Lab File ID: 11050034.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	185806	188128		253	250	1.2	15.0
DNX	Ave	142119	140955		248	250	-0.8	15.0
MNX	Ave	130340	133556		299	292	2.5	15.0

FORM VII  
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCV 280-556359/34 Calibration Date: 11/06/2021 00:02  
Instrument ID: CHHPLC\_X3 Calib Start Date: 03/02/2021 23:49  
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 03/03/2021 02:30  
Lab File ID: 11050034.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.48	6.39	6.59
DNX	6.80	6.71	6.91
MNX	7.23	7.09	7.39

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\11050034.D  
 Lims ID: CCV DMT  
 Client ID:  
 Sample Type: CCV  
 Inject. Date: 06-Nov-2021 00:02:27 ALS Bottle#: 9 Worklist Smp#: 34  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: CCV DMT  
 Misc. Info.: 280-0106237-034  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Sublist: chrom-8330\_X3\*sub17  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Nov-2021 10:24:58 Calib Date: 27-Oct-2021 04:27:09  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211027-105955.b\1026T007.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 10:13:15

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	6.493	-0.014	47079	0.2503	0.2534	M
6 DNX	1	6.799	6.813	-0.014	35274	0.2503	0.2482	M
7 MNX	1	7.226	7.239	-0.013	38965	0.2918	0.2989	

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

### Reagents:

8330 DMT\_00009 Amount Added: 12.50 Units: uL

Report Date: 06-Nov-2021 10:24:58

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\\denver\\chromdata\\chhplc\_x\\20211105-106237.b\\11050034.d

Injection Date: 06-Nov-2021 00:02:27

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

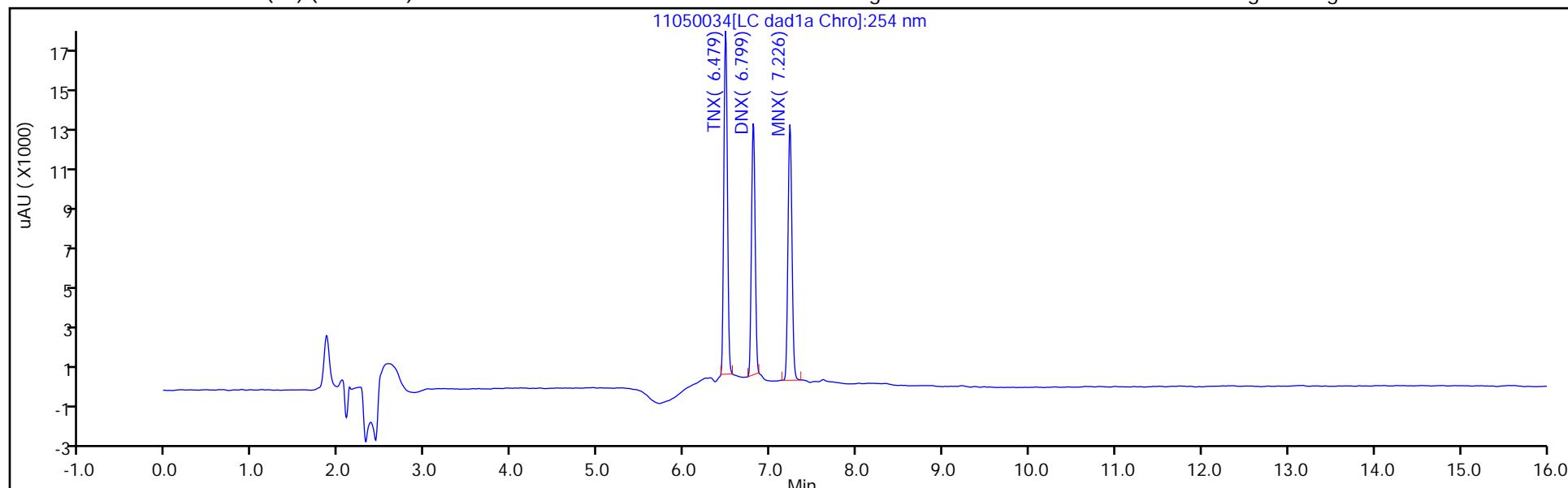
ALS Bottle#: 9

Method: 8330\_X3

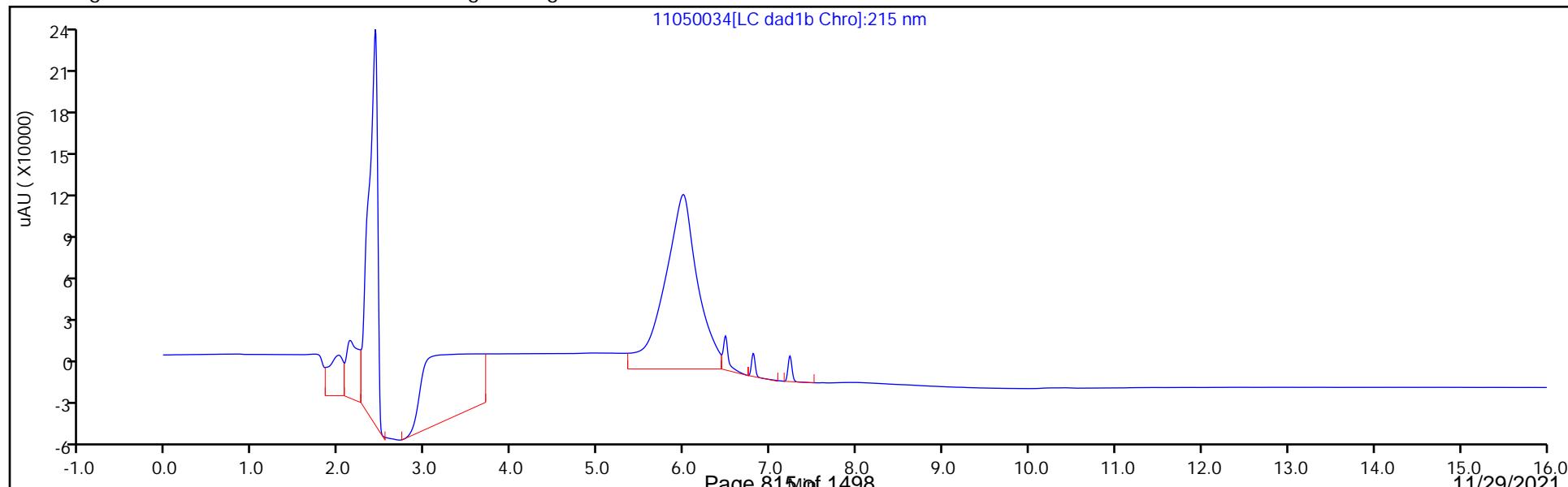
Limit Group: GCSV - 8330

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



## Eurofins TestAmerica, Denver

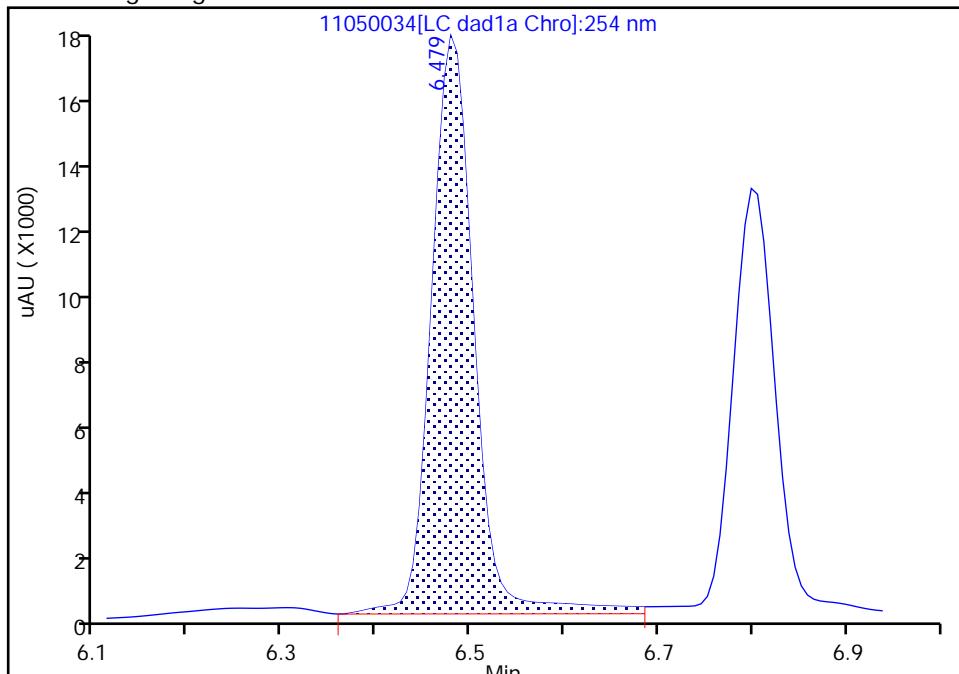
Data File: \\chromfs\denver\chromdata\chhplc\_x\20211105-106237.b\11050034.d  
 Injection Date: 06-Nov-2021 00:02:27 Instrument ID: CHHPLC\_X3  
 Lims ID: CCV DMT  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 9 Worklist Smp#: 34  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

**3 TNX, CAS: 13980-04-6**

Signal: 1

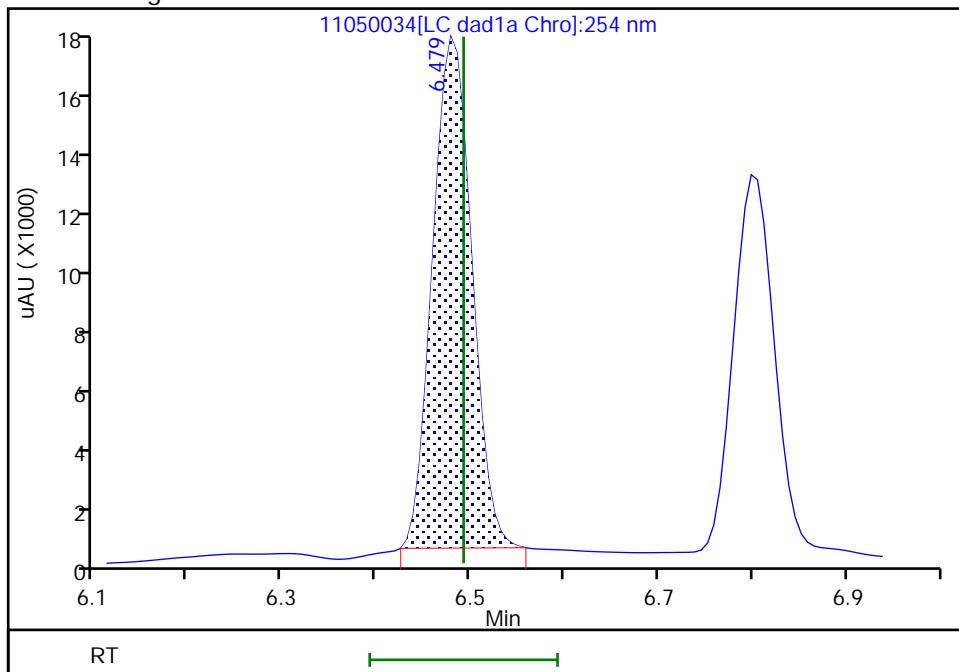
## Processing Integration Results

RT: 6.48  
 Area: 52465  
 Amount: 0.282364  
 Amount Units: ug/mL



## Manual Integration Results

RT: 6.48  
 Area: 47079  
 Amount: 0.253377  
 Amount Units: ug/mL



Reviewer: zhangji, 06-Nov-2021 10:13:09

Audit Action: Manually Integrated

Audit Reason: Baseline

## Eurofins TestAmerica, Denver

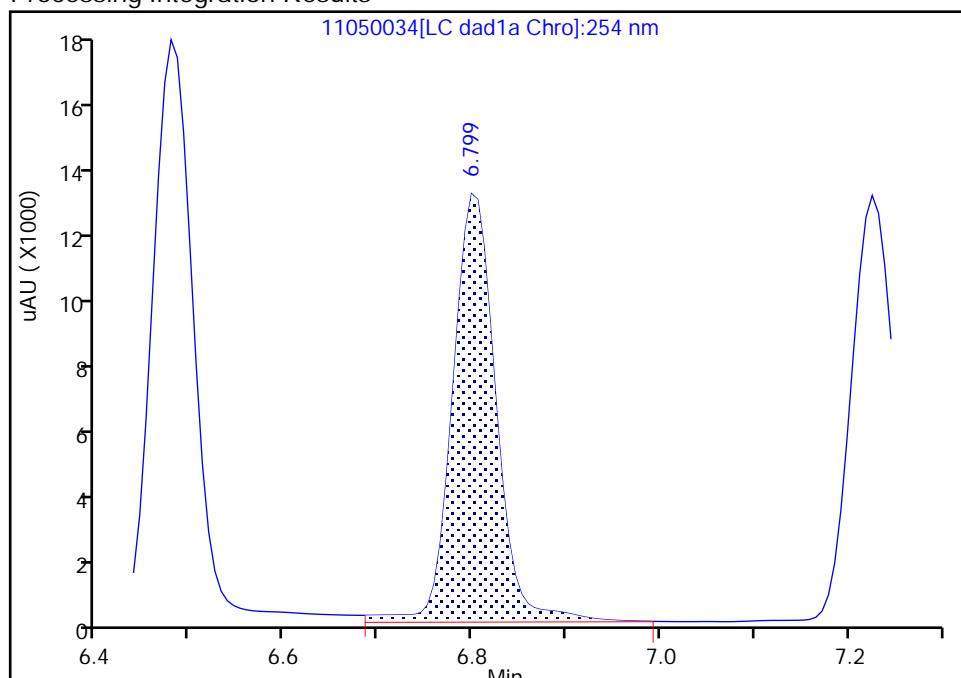
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 Injection Date: 06-Nov-2021 00:02:27 Instrument ID: CHHPLC\_X3  
 Lims ID: CCV DMT  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 9 Worklist Smp#: 34  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

## 6 DNX, CAS: 80251-29-2

Signal: 1

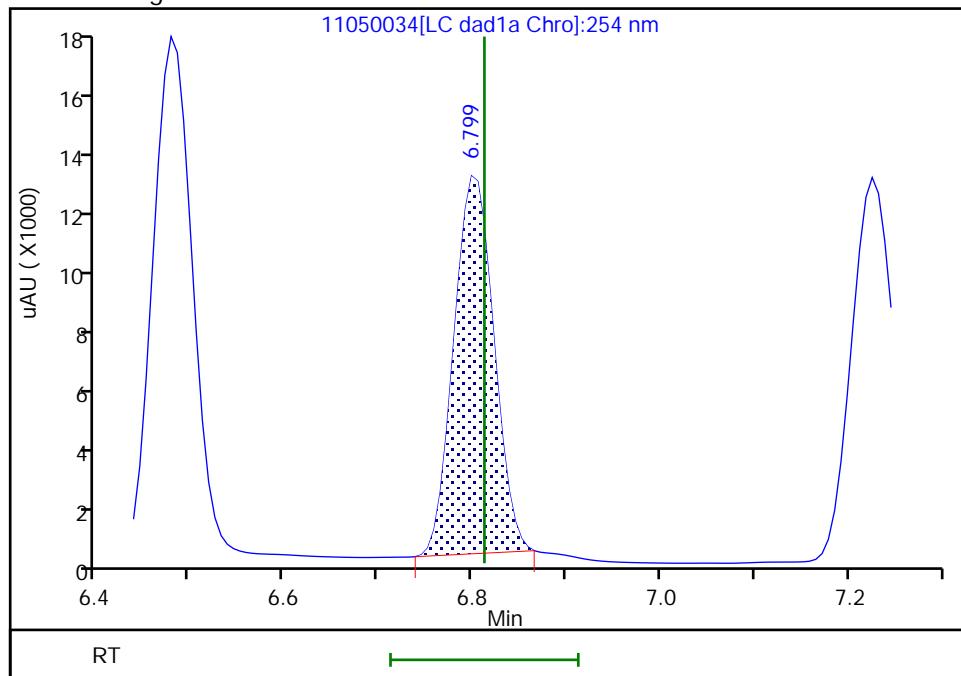
RT: 6.80  
 Area: 39445  
 Amount: 0.277548  
 Amount Units: ug/mL

## Processing Integration Results



RT: 6.80  
 Area: 35274  
 Amount: 0.248200  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 06-Nov-2021 10:13:13

Audit Action: Manually Integrated

Audit Reason: Baseline

FORM VII  
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCV 280-556359/41 Calibration Date: 11/06/2021 02:42  
Instrument ID: CHHPLC\_X3 Calib Start Date: 05/01/2021 18:01  
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 05/01/2021 21:04  
Lab File ID: 11050041.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	84421	87736		260	250	3.9	15.0
RDX	Ave	106261	104100		245	250	-2.0	15.0
Picric acid	Ave	82721	80948		245	250	-2.1	15.0
1,3,5-Trinitrobenzene	Ave	220317	229106		260	251	4.0	15.0
1,3-Dinitrobenzene	Ave	296329	304627		258	251	2.8	15.0
Nitrobenzene	Ave	195286	191884		247	251	-1.7	15.0
Tetryl	Ave	172420	156076		227	251	-9.5	15.0
Nitroglycerin	Lin2		65314		2480	2500	-0.7	15.0
2,4,6-Trinitrotoluene	Ave	206038	206470		252	251	0.2	15.0
4-Amino-2,6-dinitrotoluene	Ave	152768	154314		253	250	1.0	15.0
2-Amino-4,6-dinitrotoluene	Ave	206926	207394		252	251	0.2	15.0
2,6-Dinitrotoluene	Ave	143079	146765		257	251	2.6	15.0
2,4-Dinitrotoluene	Ave	287012	302793		265	251	5.5	15.0
2-Nitrotoluene	Ave	128392	124540		242	250	-3.0	15.0
4-Nitrotoluene	Ave	111913	108874		244	251	-2.7	15.0
3-Nitrotoluene	Ave	142246	137359		242	250	-3.4	15.0
PETN	Ave	74779	70069		2340	2500	-6.3	15.0
1,2-Dinitrobenzene	Ave	128217	133448		260	250	4.1	15.0

FORM VII  
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCV 280-556359/41 Calibration Date: 11/06/2021 02:42  
Instrument ID: CHHPLC\_X3 Calib Start Date: 05/01/2021 18:01  
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 05/01/2021 21:04  
Lab File ID: 11050041.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.61	6.46	6.76
RDX	7.62	7.48	7.78
Picric acid	8.01	7.87	8.17
1,3,5-Trinitrobenzene	8.71	8.58	8.88
1,3-Dinitrobenzene	9.35	9.22	9.52
Nitrobenzene	9.74	9.62	9.92
Tetryl	10.08	9.96	10.26
Nitroglycerin	10.54	10.42	10.72
2,4,6-Trinitrotoluene	11.00	10.93	11.13
4-Amino-2,6-dinitrotoluene	11.20	11.14	11.34
2-Amino-4,6-dinitrotoluene	11.46	11.40	11.60
2,6-Dinitrotoluene	11.63	11.57	11.77
2,4-Dinitrotoluene	11.80	11.73	11.93
2-Nitrotoluene	12.67	12.56	12.86
4-Nitrotoluene	13.10	13.00	13.30
3-Nitrotoluene	13.69	13.60	13.90
PETN	14.79	14.71	15.01
1,2-Dinitrobenzene	8.59	8.46	8.76

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\11050041.D  
 Lims ID: CCV INT  
 Client ID:  
 Sample Type: CCV  
 Inject. Date: 06-Nov-2021 02:42:55 ALS Bottle#: 7 Worklist Smp#: 41  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Sample Info: CCV INT  
 Misc. Info.: 280-0106237-041  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Sublist: chrom-8330\_X3\*sub9  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Nov-2021 10:25:01 Calib Date: 27-Oct-2021 04:27:09  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211027-105955.b\1026T007.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1650

First Level Reviewer: zhangji

Date:

06-Nov-2021 10:17:30

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.609	6.612	-0.003	21934	0.2500	0.2598	
8 RDX	1	7.622	7.632	-0.010	26025	0.2500	0.2449	
9 2,4,6-Trinitrophenol	1	8.009	8.019	-0.010	20237	0.2500	0.2446	
\$ 10 1,2-Dinitrobenzene	1	8.589	8.606	-0.017	33362	0.2500	0.2602	
11 1,3,5-Trinitrobenzene	1	8.709	8.726	-0.017	57391	0.2505	0.2605	
12 1,3-Dinitrobenzene	1	9.349	9.365	-0.016	76309	0.2505	0.2575	
13 Nitrobenzene	1	9.742	9.765	-0.023	48163	0.2510	0.2466	
15 Tetryl	1	10.082	10.112	-0.030	39097	0.2505	0.2268	
16 Nitroglycerin	2	10.542	10.572	-0.030	163285	2.50	2.48	
17 2,4,6-Trinitrotoluene	1	10.995	11.025	-0.030	51824	0.2510	0.2515	
18 4-Amino-2,6-dinitrotoluene	1	11.202	11.239	-0.037	38617	0.2503	0.2528	
19 2-Amino-4,6-dinitrotoluene	1	11.455	11.499	-0.044	52056	0.2510	0.2516	
20 2,6-Dinitrotoluene	1	11.629	11.665	-0.036	36838	0.2510	0.2575	
21 2,4-Dinitrotoluene	1	11.795	11.832	-0.037	76001	0.2510	0.2648	
22 o-Nitrotoluene	1	12.669	12.712	-0.043	31135	0.2500	0.2425	
23 p-Nitrotoluene	1	13.102	13.152	-0.050	27273	0.2505	0.2437	
24 m-Nitrotoluene	1	13.689	13.745	-0.056	34374	0.2503	0.2417	
25 PETN	2	14.789	14.859	-0.070	175173	2.50	2.34	

**QC Flag Legend**

Processing Flags

**Reagents:**

8330\TermStk\_00069

Amount Added: 25.00

Units: uL

Report Date: 06-Nov-2021 10:25:01

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20211105-106237.b\11050041.d

Injection Date: 06-Nov-2021 02:42:55

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: CCV INT

Worklist Smp#: 41

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

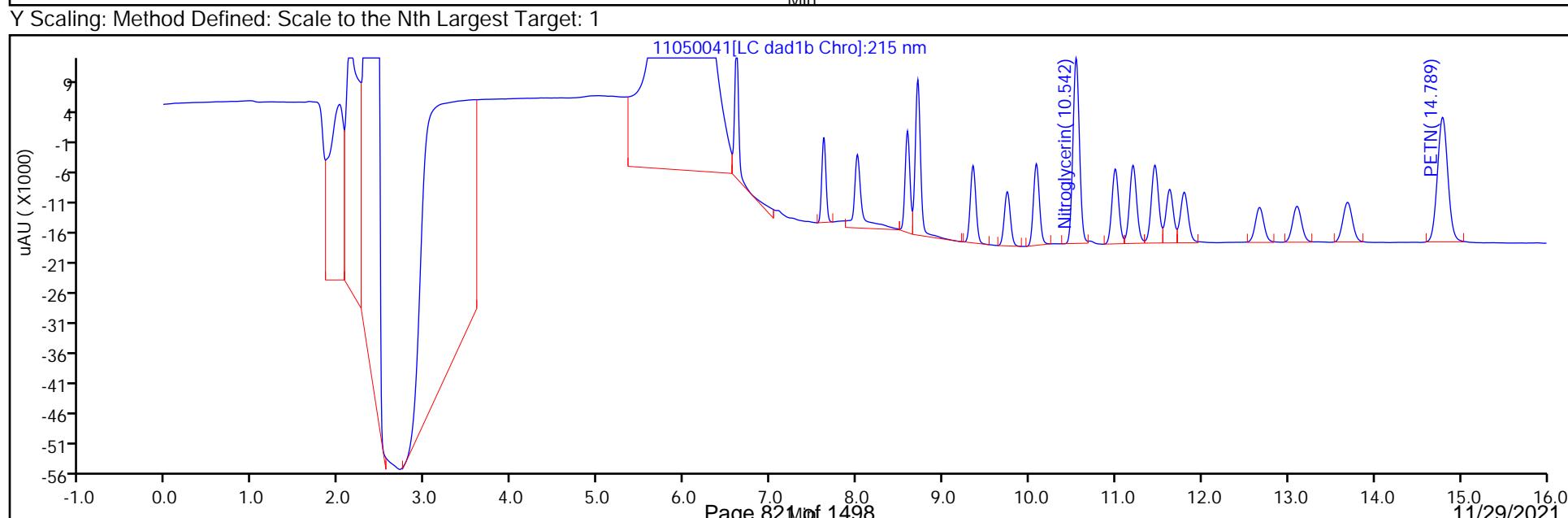
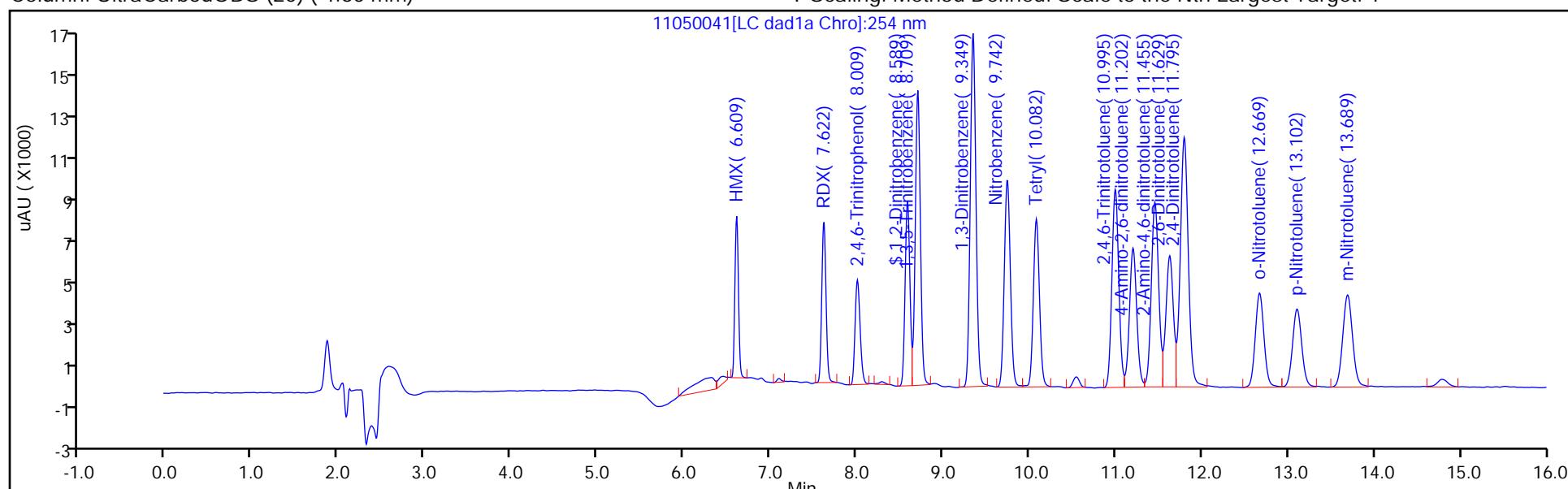
ALS Bottle#: 7

Method: 8330\_X3

Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII  
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Lab Sample ID: CCV 280-556359/42 Calibration Date: 11/06/2021 03:05

Instrument ID: CHHPLC\_X3 Calib Start Date: 03/02/2021 23:49

GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 03/03/2021 02:30

Lab File ID: 11050042.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	185806	186849		252	250	0.6	15.0
DNX	Ave	142119	140400		247	250	-1.2	15.0
MNX	Ave	130340	134526		301	292	3.2	15.0

FORM VII  
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCV 280-556359/42 Calibration Date: 11/06/2021 03:05  
Instrument ID: CHHPLC\_X3 Calib Start Date: 03/02/2021 23:49  
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 03/03/2021 02:30  
Lab File ID: 11050042.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.49	6.39	6.59
DNX	6.81	6.71	6.91
MNX	7.24	7.09	7.39

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\11050042.D  
 Lims ID: CCV DMT  
 Client ID:  
 Sample Type: CCV  
 Inject. Date: 06-Nov-2021 03:05:51 ALS Bottle#: 9 Worklist Smp#: 42  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: CCV DMT  
 Misc. Info.: 280-0106237-042  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Sublist: chrom-8330\_X3\*sub17  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Nov-2021 10:25:01 Calib Date: 27-Oct-2021 04:27:09  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211027-105955.b\1026T007.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 10:17:42

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.488	6.493	-0.005	46759	0.2503	0.2517	M
6 DNX	1	6.808	6.813	-0.005	35135	0.2503	0.2472	M
7 MNX	1	7.235	7.239	-0.004	39248	0.2918	0.3011	

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

### Reagents:

8330 DMT\_00009 Amount Added: 12.50 Units: uL

Report Date: 06-Nov-2021 10:25:01

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\\denver\\chromdata\\chhplc\_x\\20211105-106237.b\\11050042.d

Injection Date: 06-Nov-2021 03:05:51

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: CCV DMT

Worklist Smp#: 42

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

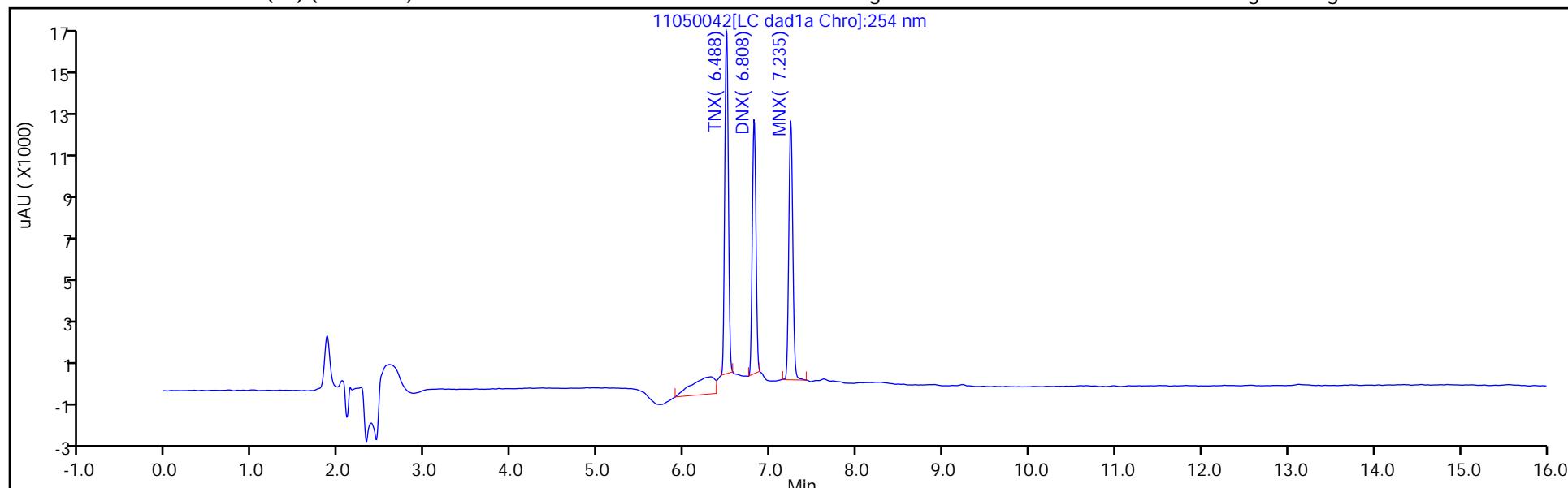
ALS Bottle#: 9

Method: 8330\_X3

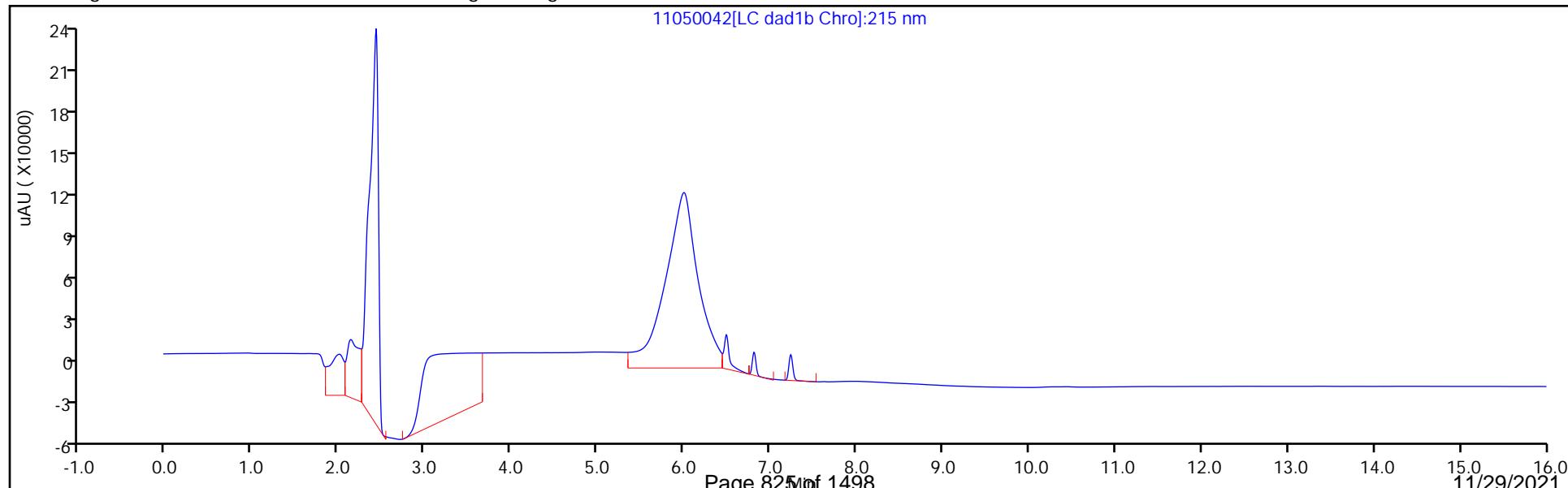
Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



## Eurofins TestAmerica, Denver

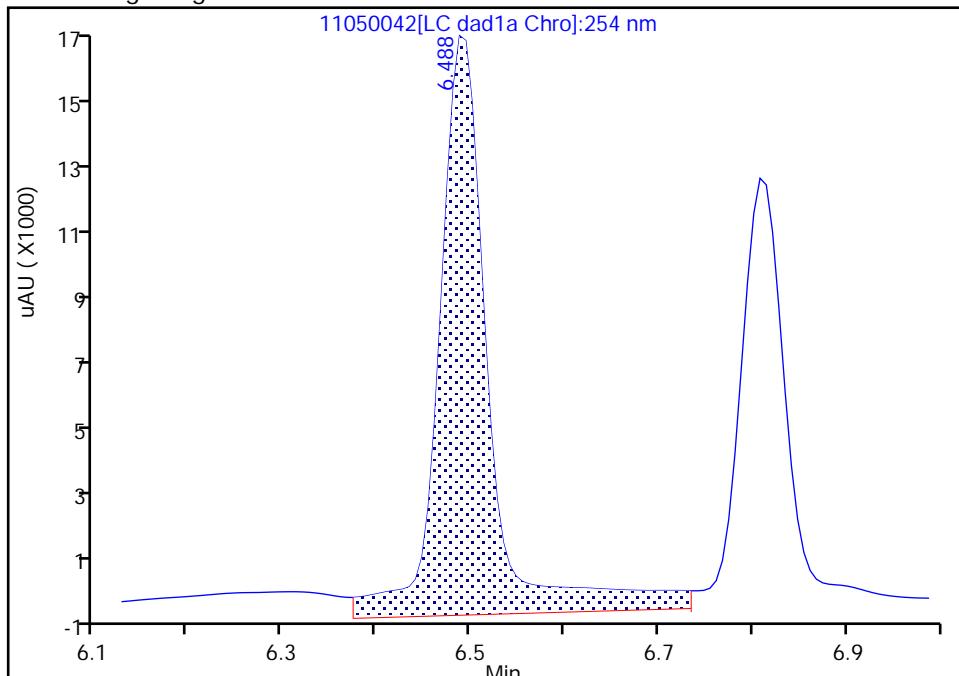
Data File: \\chromfs\denver\chromdata\chhplc\_x\20211105-106237.b\11050042.d  
 Injection Date: 06-Nov-2021 03:05:51 Instrument ID: CHHPLC\_X3  
 Lims ID: CCV DMT  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 9 Worklist Smp#: 42  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

**3 TNX, CAS: 13980-04-6**

Signal: 1

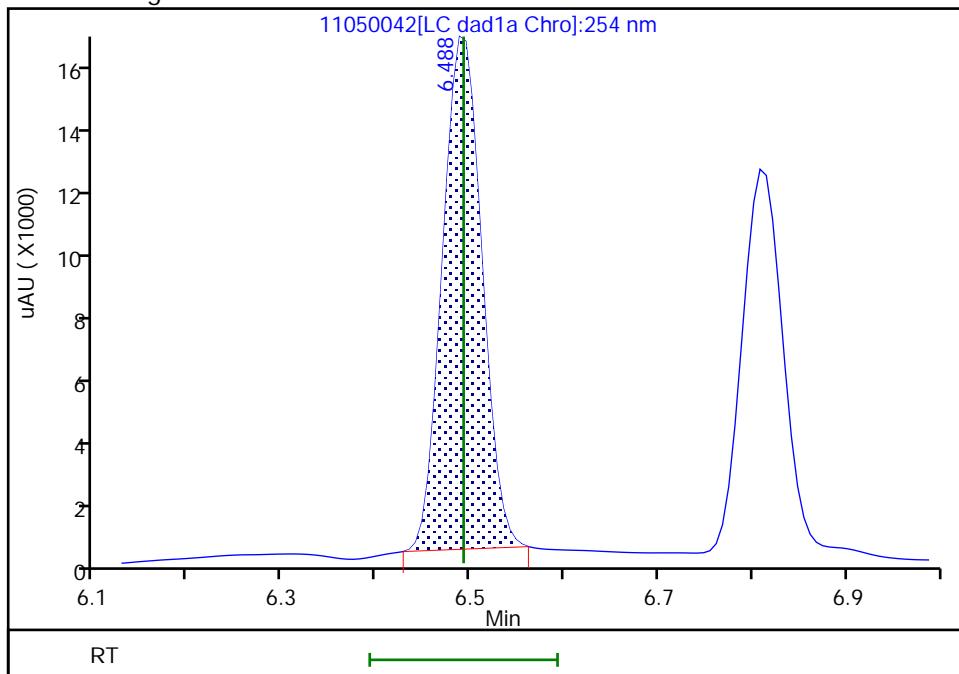
## Processing Integration Results

RT: 6.49  
 Area: 62330  
 Amount: 0.335457  
 Amount Units: ug/mL



## Manual Integration Results

RT: 6.49  
 Area: 46759  
 Amount: 0.251655  
 Amount Units: ug/mL



Reviewer: zhangji, 06-Nov-2021 10:17:36

Audit Action: Manually Integrated

Audit Reason: Baseline

## Eurofins TestAmerica, Denver

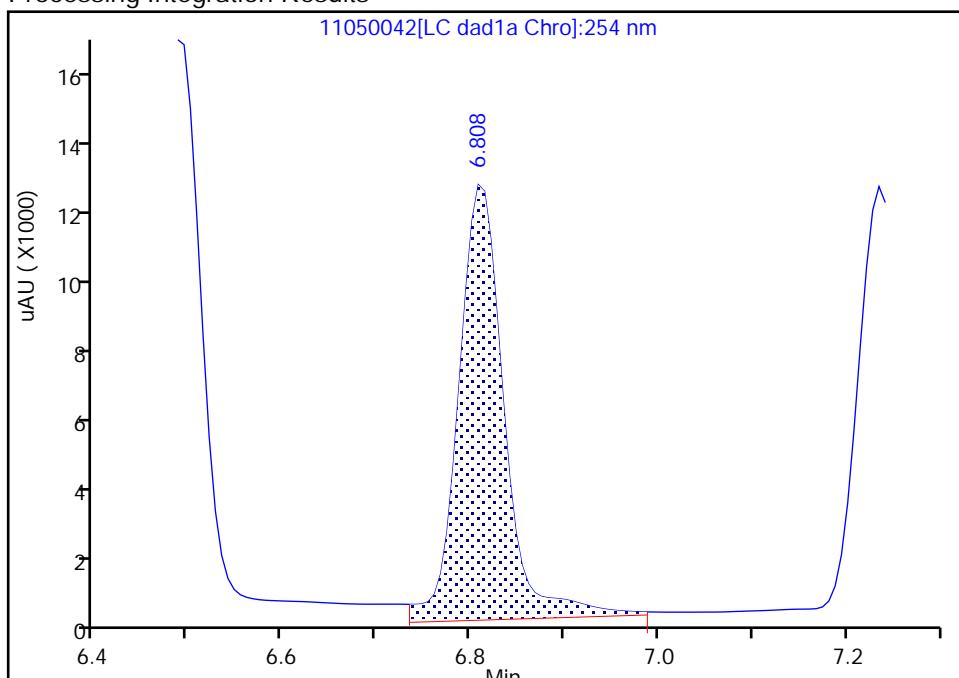
Data File: \\chromfs\denver\chromdata\chhplc\_x\20211105-106237.b\11050042.d  
 Injection Date: 06-Nov-2021 03:05:51 Instrument ID: CHHPLC\_X3  
 Lims ID: CCV DMT  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 9 Worklist Smp#: 42  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

**6 DNX, CAS: 80251-29-2**

Signal: 1

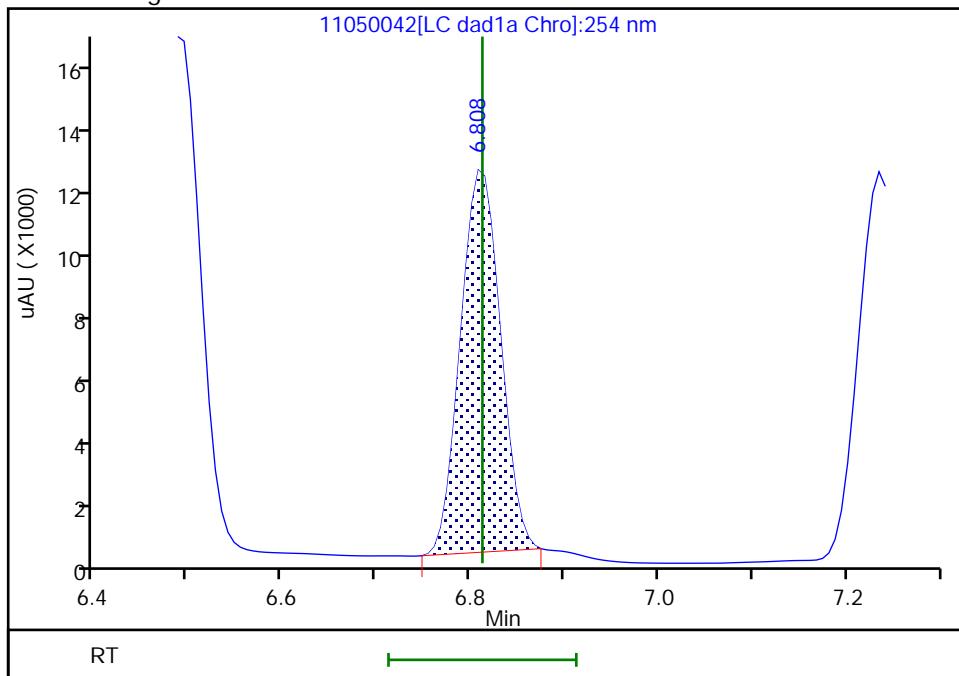
RT: 6.81  
 Area: 42040  
 Amount: 0.295808  
 Amount Units: ug/mL

## Processing Integration Results



RT: 6.81  
 Area: 35135  
 Amount: 0.247222  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 06-Nov-2021 10:17:39

Audit Action: Manually Integrated

Audit Reason: Baseline

FORM VII  
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCV 280-556359/48 Calibration Date: 11/06/2021 05:23  
Instrument ID: CHHPLC\_X3 Calib Start Date: 05/01/2021 18:01  
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 05/01/2021 21:04  
Lab File ID: 11050048.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	84421	87756		260	250	3.9	15.0
RDX	Ave	106261	104516		246	250	-1.6	15.0
Picric acid	Ave	82721	80448		243	250	-2.7	15.0
1,3,5-Trinitrobenzene	Ave	220317	227561		259	251	3.3	15.0
1,3-Dinitrobenzene	Ave	296329	304387		257	251	2.7	15.0
Nitrobenzene	Ave	195286	189048		243	251	-3.2	15.0
Tetryl	Ave	172420	155130		225	251	-10.0	15.0
Nitroglycerin	Lin2		64723		2460	2500	-1.7	15.0
2,4,6-Trinitrotoluene	Ave	206038	206984		252	251	0.5	15.0
4-Amino-2,6-dinitrotoluene	Ave	152768	153994		252	250	0.8	15.0
2-Amino-4,6-dinitrotoluene	Ave	206926	205773		250	251	-0.6	15.0
2,6-Dinitrotoluene	Ave	143079	150518		264	251	5.2	15.0
2,4-Dinitrotoluene	Ave	287012	301900		264	251	5.2	15.0
2-Nitrotoluene	Ave	128392	122280		238	250	-4.8	15.0
4-Nitrotoluene	Ave	111913	108691		243	251	-2.9	15.0
3-Nitrotoluene	Ave	142246	136619		240	250	-4.0	15.0
PETN	Ave	74779	70164		2350	2500	-6.2	15.0
1,2-Dinitrobenzene	Ave	128217	134752		263	250	5.1	15.0

FORM VII  
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCV 280-556359/48 Calibration Date: 11/06/2021 05:23  
 Instrument ID: CHHPLC\_X3 Calib Start Date: 05/01/2021 18:01  
 GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 05/01/2021 21:04  
 Lab File ID: 11050048.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.60	6.46	6.76
RDX	7.60	7.48	7.78
Picric acid	8.00	7.87	8.17
1,3,5-Trinitrobenzene	8.69	8.58	8.88
1,3-Dinitrobenzene	9.33	9.22	9.52
Nitrobenzene	9.72	9.62	9.92
Tetryl	10.06	9.96	10.26
Nitroglycerin	10.52	10.42	10.72
2,4,6-Trinitrotoluene	10.98	10.93	11.13
4-Amino-2,6-dinitrotoluene	11.18	11.14	11.34
2-Amino-4,6-dinitrotoluene	11.44	11.40	11.60
2,6-Dinitrotoluene	11.60	11.57	11.77
2,4-Dinitrotoluene	11.78	11.73	11.93
2-Nitrotoluene	12.65	12.56	12.86
4-Nitrotoluene	13.08	13.00	13.30
3-Nitrotoluene	13.66	13.60	13.90
PETN	14.77	14.71	15.01
1,2-Dinitrobenzene	8.58	8.46	8.76

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\11050048.D  
 Lims ID: CCV INT  
 Client ID:  
 Sample Type: CCV  
 Inject. Date: 06-Nov-2021 05:23:19 ALS Bottle#: 7 Worklist Smp#: 48  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Sample Info: CCV INT  
 Misc. Info.: 280-0106237-048  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Sublist: chrom-8330\_X3\*sub9  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Nov-2021 10:25:04 Calib Date: 27-Oct-2021 04:27:09  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211027-105955.b\1026T007.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1650

First Level Reviewer: zhangji

Date:

06-Nov-2021 10:24:27

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	6.612	-0.014	21939	0.2500	0.2599	M
8 RDX	1	7.604	7.632	-0.028	26129	0.2500	0.2459	
9 2,4,6-Trinitrophenol	1	7.998	8.019	-0.021	20112	0.2500	0.2431	
\$ 10 1,2-Dinitrobenzene	1	8.578	8.606	-0.028	33688	0.2500	0.2627	
11 1,3,5-Trinitrobenzene	1	8.691	8.726	-0.035	57004	0.2505	0.2587	
12 1,3-Dinitrobenzene	1	9.331	9.365	-0.034	76249	0.2505	0.2573	
13 Nitrobenzene	1	9.724	9.765	-0.041	47451	0.2510	0.2430	
15 Tetryl	1	10.064	10.112	-0.048	38860	0.2505	0.2254	
16 Nitroglycerin	2	10.524	10.572	-0.048	161808	2.50	2.46	
17 2,4,6-Trinitrotoluene	1	10.978	11.025	-0.047	51953	0.2510	0.2522	
18 4-Amino-2,6-dinitrotoluene	1	11.184	11.239	-0.055	38537	0.2503	0.2523	
19 2-Amino-4,6-dinitrotoluene	1	11.438	11.499	-0.061	51649	0.2510	0.2496	
20 2,6-Dinitrotoluene	1	11.604	11.665	-0.061	37780	0.2510	0.2641	
21 2,4-Dinitrotoluene	1	11.778	11.832	-0.054	75777	0.2510	0.2640	
22 o-Nitrotoluene	1	12.651	12.712	-0.061	30570	0.2500	0.2381	
23 p-Nitrotoluene	1	13.084	13.152	-0.068	27227	0.2505	0.2433	
24 m-Nitrotoluene	1	13.664	13.745	-0.081	34189	0.2503	0.2404	
25 PETN	2	14.771	14.859	-0.088	175411	2.50	2.35	

**QC Flag Legend**

Processing Flags

Review Flags

M - Manually Integrated

**Reagents:**

8330IntermStk\_00069

Amount Added: 25.00

Units: uL

Report Date: 06-Nov-2021 10:25:04

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20211105-106237.b\11050048.d

Injection Date: 06-Nov-2021 05:23:19

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: CCV INT

Worklist Smp#: 48

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

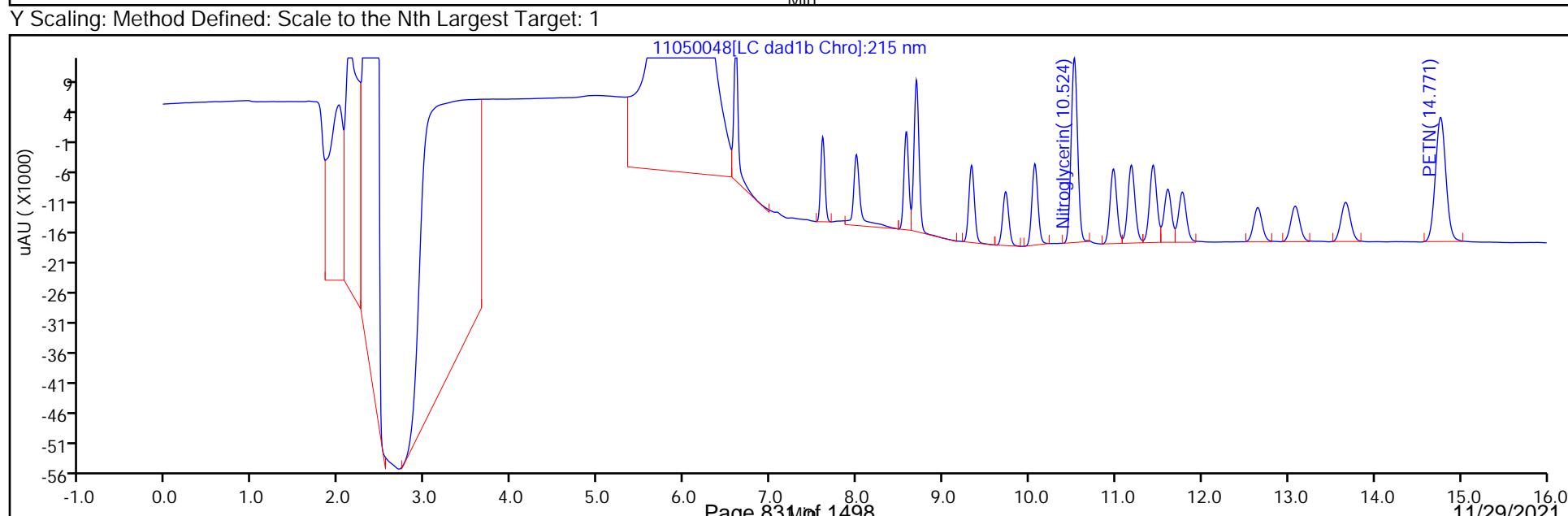
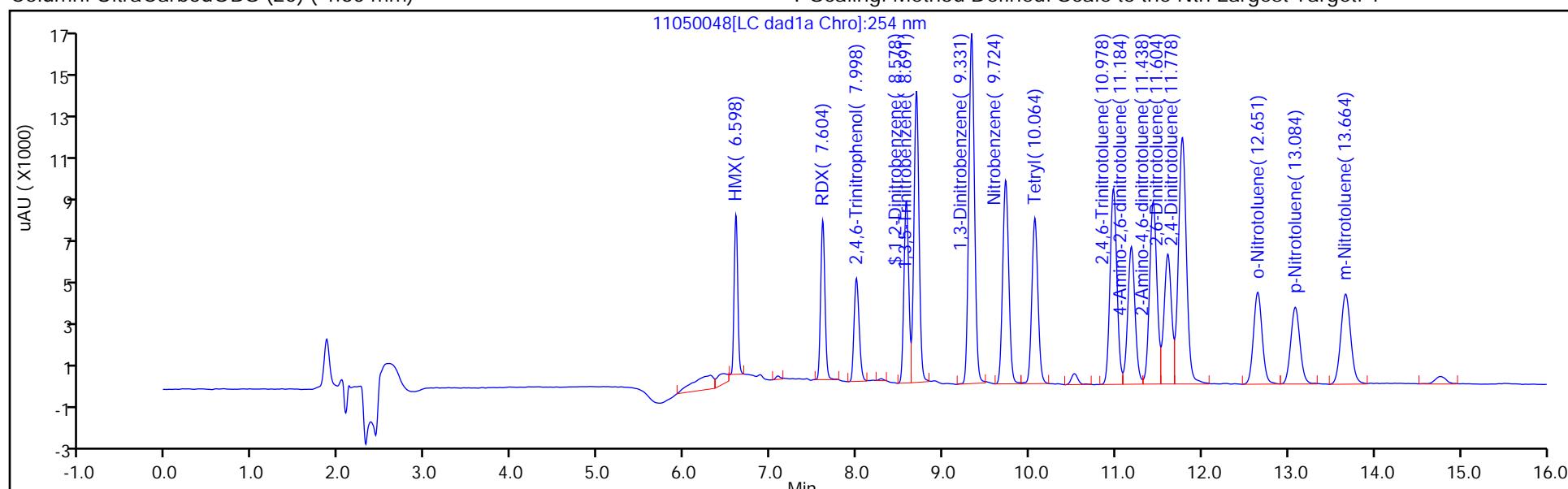
ALS Bottle#: 7

Method: 8330\_X3

Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



## Eurofins TestAmerica, Denver

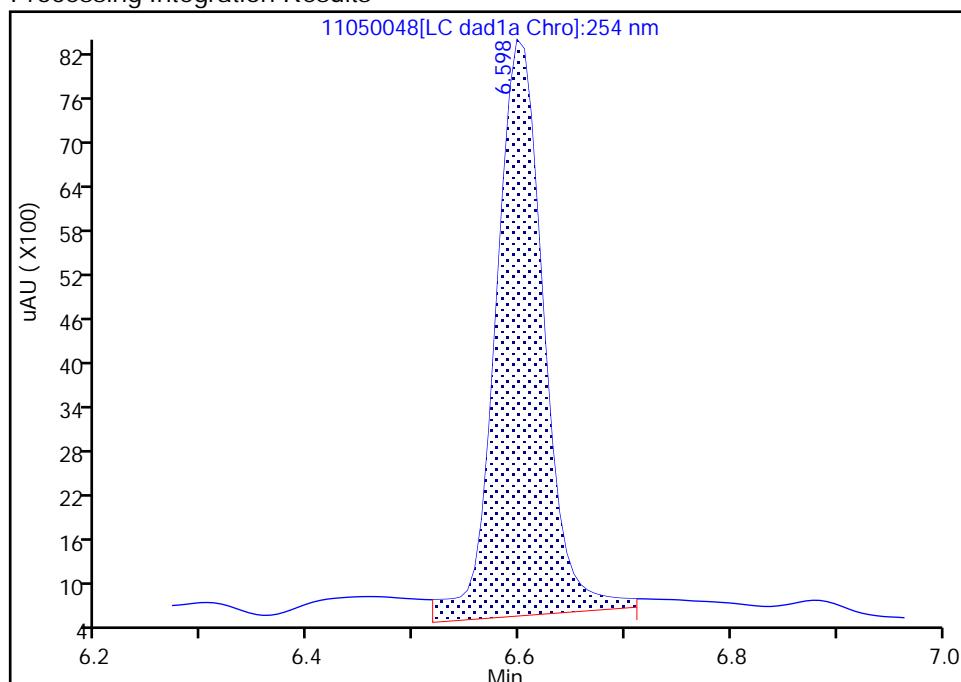
Data File: \\chromfs\denver\chromdata\chhplc\_x\20211105-106237.b\11050048.d  
 Injection Date: 06-Nov-2021 05:23:19 Instrument ID: CHHPLC\_X3  
 Lims ID: CCV INT  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 48  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

**4 HMX, CAS: 2691-41-0**

Signal: 1

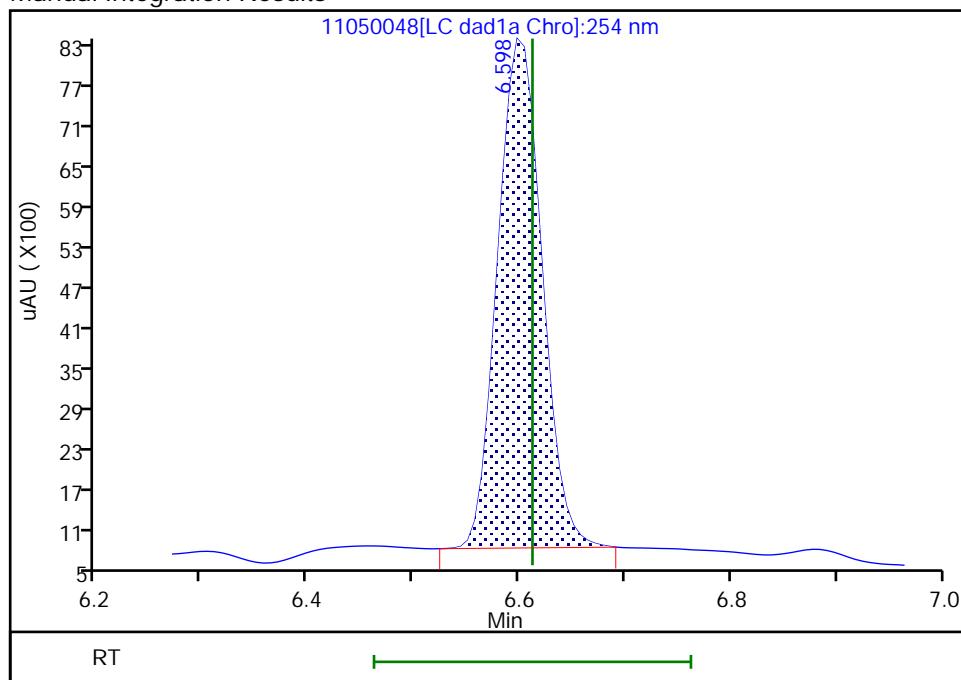
RT: 6.60  
 Area: 24444  
 Amount: 0.289547  
 Amount Units: ug/mL

## Processing Integration Results



RT: 6.60  
 Area: 21939  
 Amount: 0.259875  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 06-Nov-2021 10:24:26

Audit Action: Manually Integrated

Audit Reason: Baseline

FORM VII  
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCV 280-556359/49 Calibration Date: 11/06/2021 05:46  
Instrument ID: CHHPLC\_X3 Calib Start Date: 03/02/2021 23:49  
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 03/03/2021 02:30  
Lab File ID: 11050049.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	185806	185878		250	250	0.0	15.0
DNX	Ave	142119	140851		248	250	-0.9	15.0
MNX	Ave	130340	133426		299	292	2.4	15.0

FORM VII  
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCV 280-556359/49 Calibration Date: 11/06/2021 05:46  
Instrument ID: CHHPLC\_X3 Calib Start Date: 03/02/2021 23:49  
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 03/03/2021 02:30  
Lab File ID: 11050049.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.48	6.39	6.59
DNX	6.80	6.71	6.91
MNX	7.22	7.09	7.39

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\11050049.D  
 Lims ID: CCV DMT  
 Client ID:  
 Sample Type: CCV  
 Inject. Date: 06-Nov-2021 05:46:15 ALS Bottle#: 9 Worklist Smp#: 49  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: CCV DMT  
 Misc. Info.: 280-0106237-049  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Sublist: chrom-8330\_X3\*sub17  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Nov-2021 10:25:04 Calib Date: 27-Oct-2021 04:27:09  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211027-105955.b\1026T007.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 10:24:43

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.481	6.493	-0.012	46516	0.2503	0.2503	M
6 DNX	1	6.801	6.813	-0.012	35248	0.2503	0.2480	M
7 MNX	1	7.221	7.239	-0.018	38927	0.2918	0.2987	

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

### Reagents:

8330 DMT\_00009 Amount Added: 12.50 Units: uL

Report Date: 06-Nov-2021 10:25:04

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\\denver\\chromdata\\chhplc\_x\\20211105-106237.b\\11050049.d

Injection Date: 06-Nov-2021 05:46:15

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: CCV DMT

Worklist Smp#: 49

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

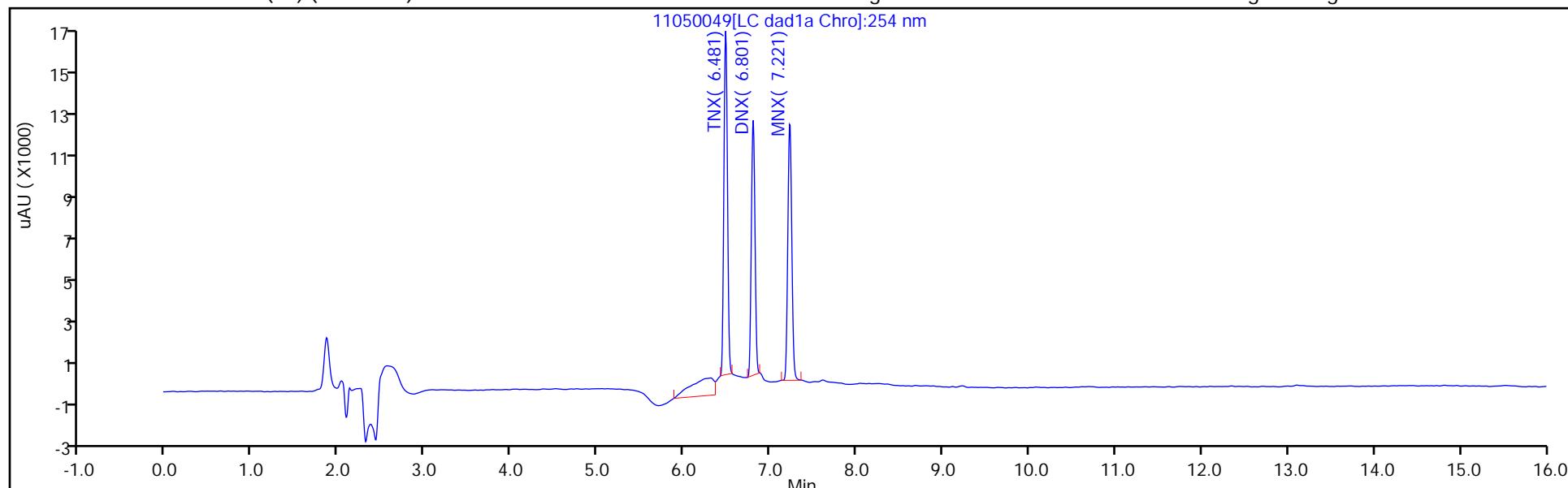
ALS Bottle#: 9

Method: 8330\_X3

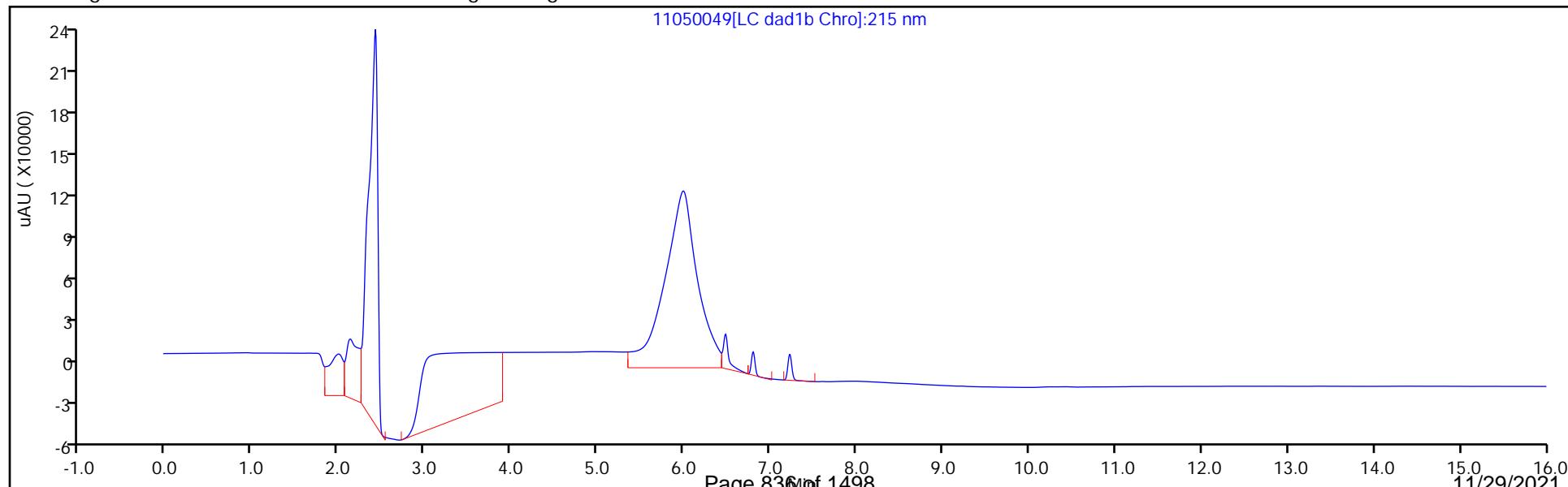
Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



## Eurofins TestAmerica, Denver

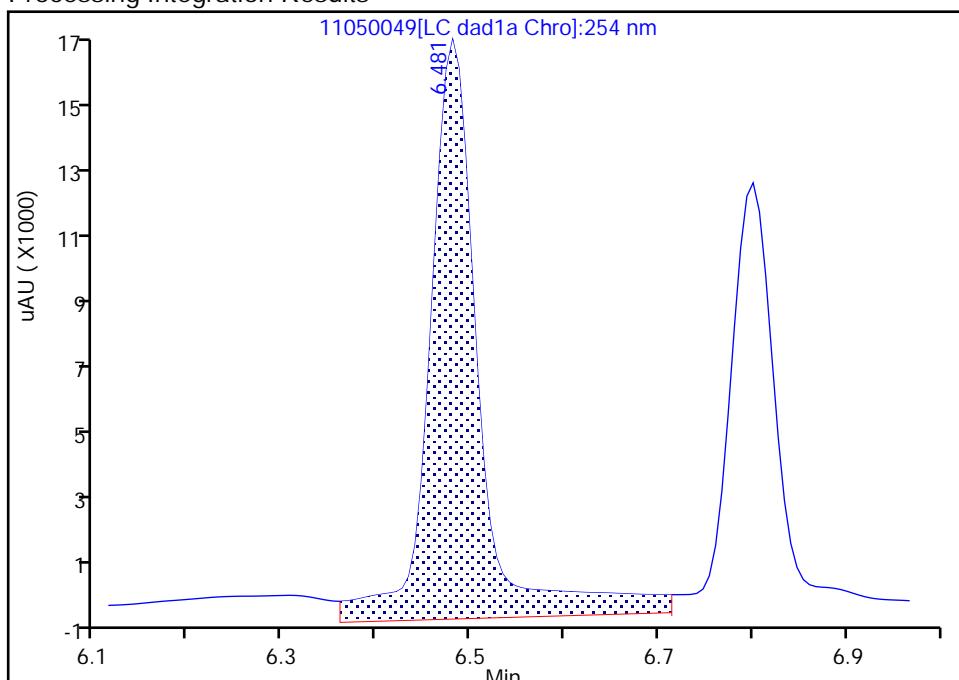
Data File: \\chromfs\denver\chromdata\chhplc\_x\20211105-106237.b\11050049.d  
 Injection Date: 06-Nov-2021 05:46:15 Instrument ID: CHHPLC\_X3  
 Lims ID: CCV DMT  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 9 Worklist Smp#: 49  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

**3 TNX, CAS: 13980-04-6**

Signal: 1

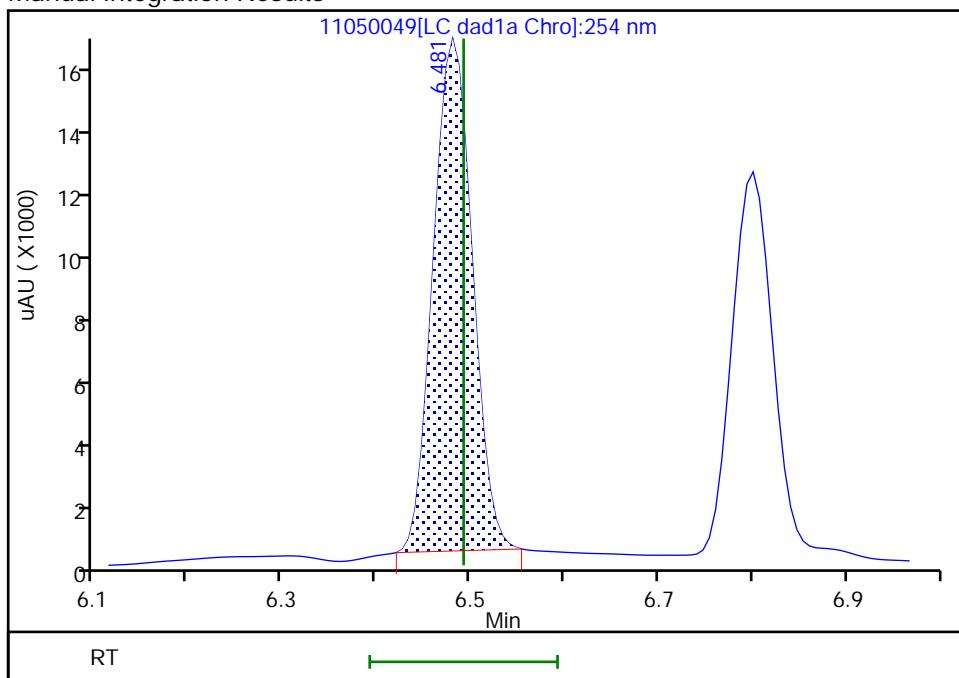
RT: 6.48  
 Area: 62187  
 Amount: 0.334688  
 Amount Units: ug/mL

## Processing Integration Results



## Manual Integration Results

RT: 6.48  
 Area: 46516  
 Amount: 0.250347  
 Amount Units: ug/mL



Reviewer: zhangji, 06-Nov-2021 10:24:34

Audit Action: Manually Integrated

Audit Reason: Baseline

## Eurofins TestAmerica, Denver

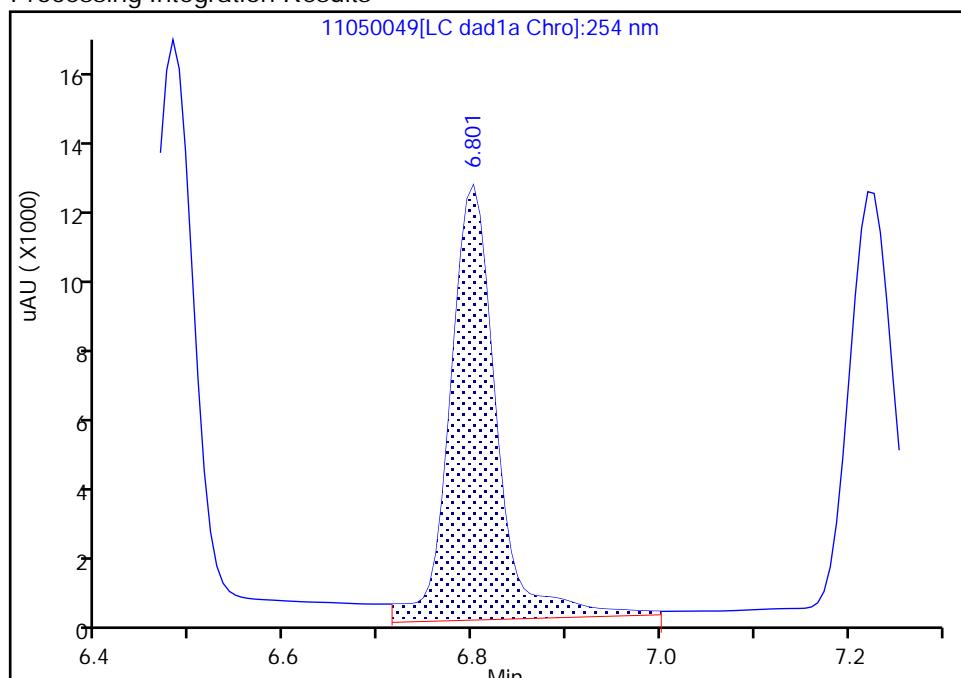
Data File: \\chromfs\denver\chromdata\chhplc\_x\20211105-106237.b\11050049.d  
 Injection Date: 06-Nov-2021 05:46:15 Instrument ID: CHHPLC\_X3  
 Lims ID: CCV DMT  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 9 Worklist Smp#: 49  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

## 6 DNX, CAS: 80251-29-2

Signal: 1

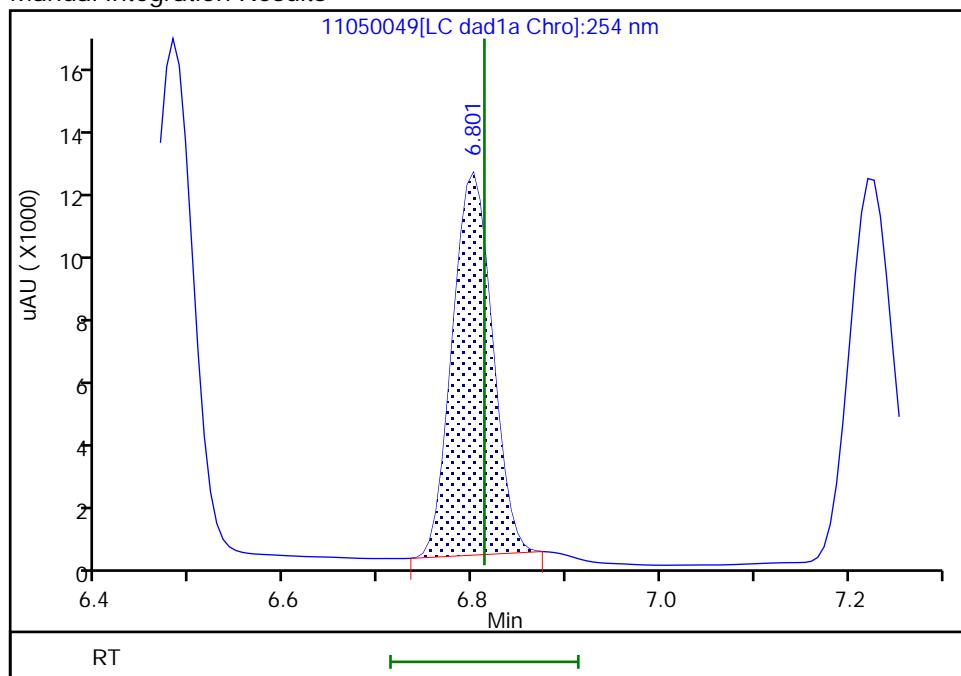
RT: 6.80  
 Area: 42880  
 Amount: 0.301718  
 Amount Units: ug/mL

## Processing Integration Results



RT: 6.80  
 Area: 35248  
 Amount: 0.248017  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 06-Nov-2021 10:24:38

Audit Action: Manually Integrated

Audit Reason: Baseline

FORM VII  
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: ICV 280-534620/19 Calibration Date: 05/02/2021 00:10  
Instrument ID: CHHPLC\_X5 Calib Start Date: 05/01/2021 18:54  
GC Column: Luna-phenylhex ID: 4.60 (mm) Calib End Date: 05/01/2021 23:35  
Lab File ID: 019-1401.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin2		153834		478	500	-4.3	15.0
Picric acid	Ave	159537	164682		516	500	3.2	15.0
RDX	Ave	204270	192088		470	500	-6.0	15.0
Nitrobenzene	Ave	374651	372074		497	500	-0.7	15.0
1,3-Dinitrobenzene	Lin2		568356		502	500	0.5	15.0
Nitroglycerin	Ave	128605	126748		4930	5000	-1.4	15.0
2-Nitrotoluene	Ave	248967	234824		472	500	-5.7	15.0
4-Nitrotoluene	Ave	217187	205250		473	500	-5.5	15.0
4-Amino-2,6-dinitrotoluene	Ave	296705	274856		463	500	-7.4	15.0
3-Nitrotoluene	Ave	278393	258506		464	500	-7.1	15.0
2-Amino-4,6-dinitrotoluene	Lin2		385846		492	500	-1.7	15.0
1,3,5-Trinitrobenzene	Lin2		419618		505	500	1.0	15.0
2,6-Dinitrotoluene	Lin2		264314		496	500	-0.8	15.0
2,4-Dinitrotoluene	Ave	565713	524186		463	500	-7.3	15.0
Tetryl	Lin2		317712		494	500	-1.2	15.0
2,4,6-Trinitrotoluene	Lin2		384566		513	500	2.6	15.0
PETN	Ave	137740	135365		4910	5000	-1.7	15.0
1,2-Dinitrobenzene	Ave	265659	258782		487	500	-2.6	15.0

FORM VII  
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: ICV 280-534620/19 Calibration Date: 05/02/2021 00:10  
Instrument ID: CHHPLC\_X5 Calib Start Date: 05/01/2021 18:54  
GC Column: Luna-phenylhex ID: 4.60 (mm) Calib End Date: 05/01/2021 23:35  
Lab File ID: 019-1401.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.69	6.56	6.86
Picric acid	7.83	7.78	8.08
RDX	8.87	8.76	9.06
Nitrobenzene	11.93	11.82	12.12
1,3-Dinitrobenzene	15.49	15.37	15.67
Nitroglycerin	15.92	15.79	16.09
2-Nitrotoluene	16.73	16.61	16.91
4-Nitrotoluene	17.01	16.90	17.20
4-Amino-2,6-dinitrotoluene	17.49	17.38	17.68
3-Nitrotoluene	17.99	17.88	18.18
2-Amino-4,6-dinitrotoluene	18.40	18.28	18.58
1,3,5-Trinitrobenzene	18.92	18.79	19.09
2,6-Dinitrotoluene	20.18	20.05	20.35
2,4-Dinitrotoluene	20.65	20.52	20.82
Tetryl	24.31	24.16	24.46
2,4,6-Trinitrotoluene	25.28	25.13	25.43
PETN	26.19	26.04	26.34
1,2-Dinitrobenzene	13.06	12.94	13.24

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\019-1401.D  
 Lims ID: ICV INT/ADD  
 Client ID:  
 Sample Type: ICV  
 Inject. Date: 02-May-2021 00:10:18 ALS Bottle#: 19 Worklist Smp#: 19  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: ICV INT/ADD  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Sublist:  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 04-May-2021 13:45:38 Calib Date: 01-May-2021 23:35:08  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\018-1301.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm) Det: LC mwd1A, 254 nm  
 Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:33:02

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.060	4.126	-0.066	216822	0.5000	0.5224	
2 2,4-diamino-6-nitrotoluene	1	4.647	4.653	-0.006	135044	0.5000	0.5598	
6 HMX	1	6.694	6.713	-0.019	76917	0.5000	0.4783	
5 2,4,6-Trinitrophenol	1	7.827	7.933	-0.106	82341	0.5000	0.5161	
8 RDX	1	8.874	8.906	-0.032	96044	0.5000	0.4702	
9 Nitrobenzene	1	11.934	11.973	-0.039	186037	0.5000	0.4966	
\$ 10 1,2-Dinitrobenzene	1	13.060	13.093	-0.033	129391	0.5000	0.4871	
11 3,5-Dinitroaniline	1	14.947	14.979	-0.032	215841	0.5000	0.4774	
12 1,3-Dinitrobenzene	1	15.494	15.519	-0.025	284178	0.5000	0.5024	
13 Nitroglycerin	2	15.920	15.939	-0.019	633738	5.00	4.93	
14 o-Nitrotoluene	1	16.727	16.759	-0.032	117412	0.5000	0.4716	
15 p-Nitrotoluene	1	17.014	17.046	-0.032	102625	0.5000	0.4725	
16 4-Amino-2,6-dinitrotoluene	1	17.494	17.526	-0.032	137428	0.5000	0.4632	
17 m-Nitrotoluene	1	17.994	18.026	-0.032	129253	0.5000	0.4643	
18 2-Amino-4,6-dinitrotoluene	1	18.400	18.426	-0.026	192923	0.5000	0.4916	
19 1,3,5-Trinitrobenzene	1	18.920	18.939	-0.019	209809	0.5000	0.5052	
20 2,6-Dinitrotoluene	1	20.180	20.199	-0.019	132157	0.5000	0.4958	
21 2,4-Dinitrotoluene	1	20.647	20.666	-0.019	262093	0.5000	0.4633	
22 Tetryl	1	24.314	24.313	0.001	158856	0.5000	0.4941	
23 2,4,6-Trinitrotoluene	1	25.280	25.280	0.000	192283	0.5000	0.5131	
24 PETN	2	26.187	26.186	0.001	676826	5.00	4.91	M

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

**Reagents:**

3,5-DNA LCS_00038	Amount Added: 50.00	Units: uL
8330 LCS_00108	Amount Added: 50.00	Units: uL
8330Surrogate_00124	Amount Added: 50.00	Units: uL
8330DiaminLCS_00039	Amount Added: 50.00	Units: uL

Report Date: 04-May-2021 13:45:44

Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\019-1401.D

Injection Date: 02-May-2021 00:10:18

Instrument ID: CHHPLC\_X5

Operator ID: JZ

Lims ID: ICV INT/ADD

Worklist Smp#: 19

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

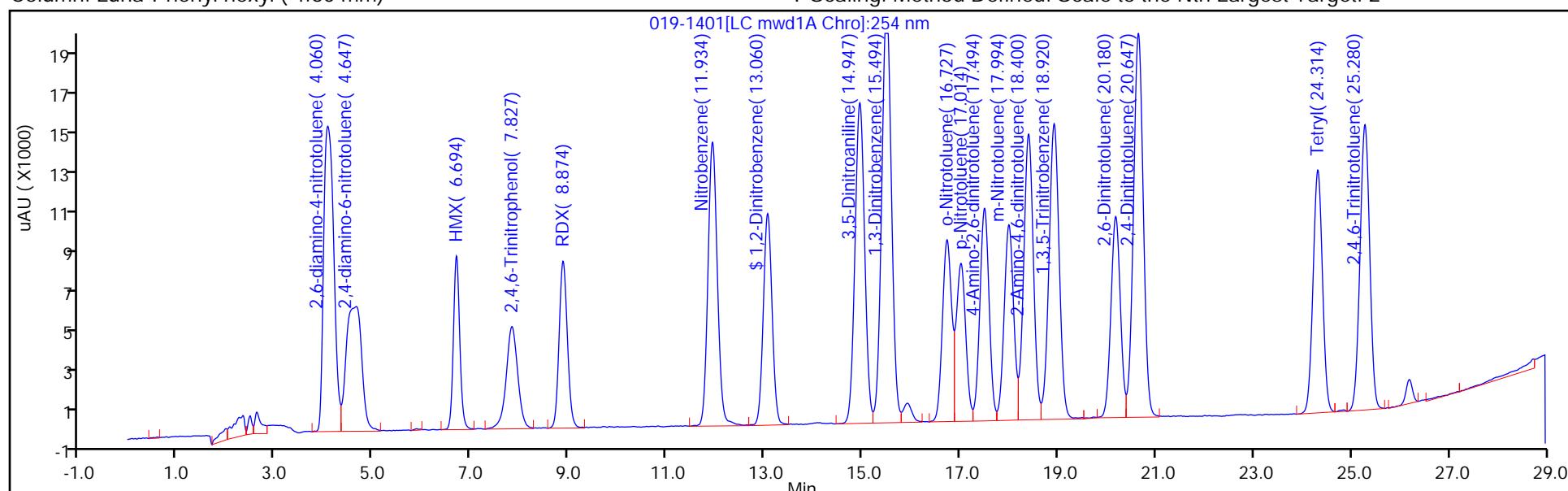
ALS Bottle#: 19

Method: 8330\_X5\_Luna

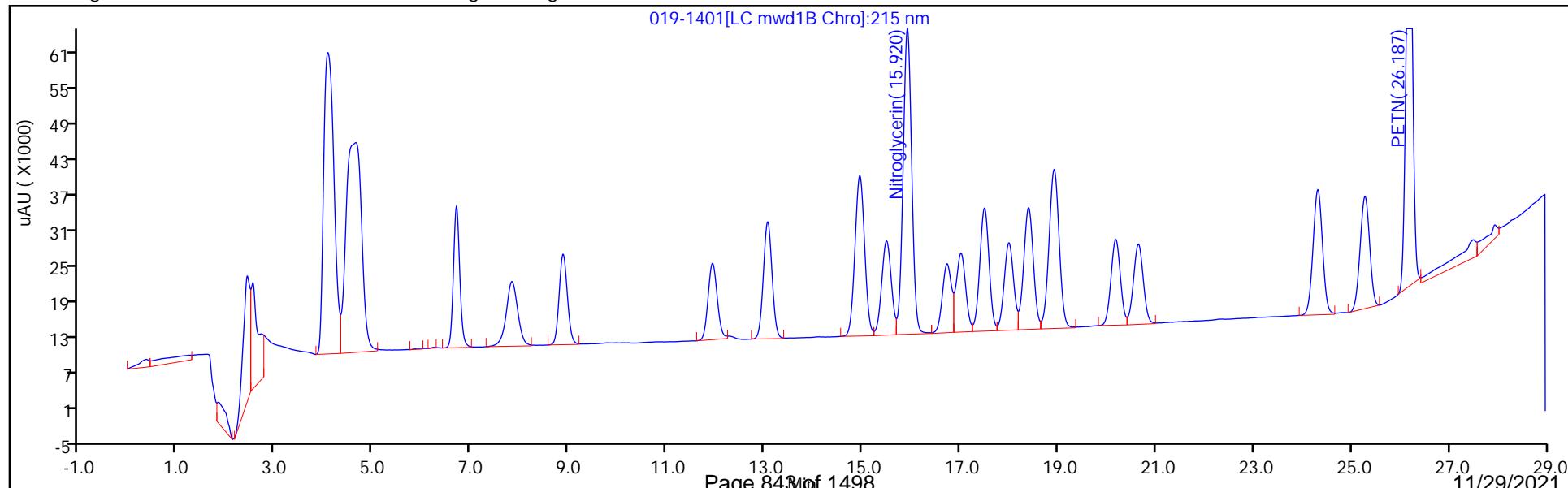
Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



## Eurofins TestAmerica, Denver

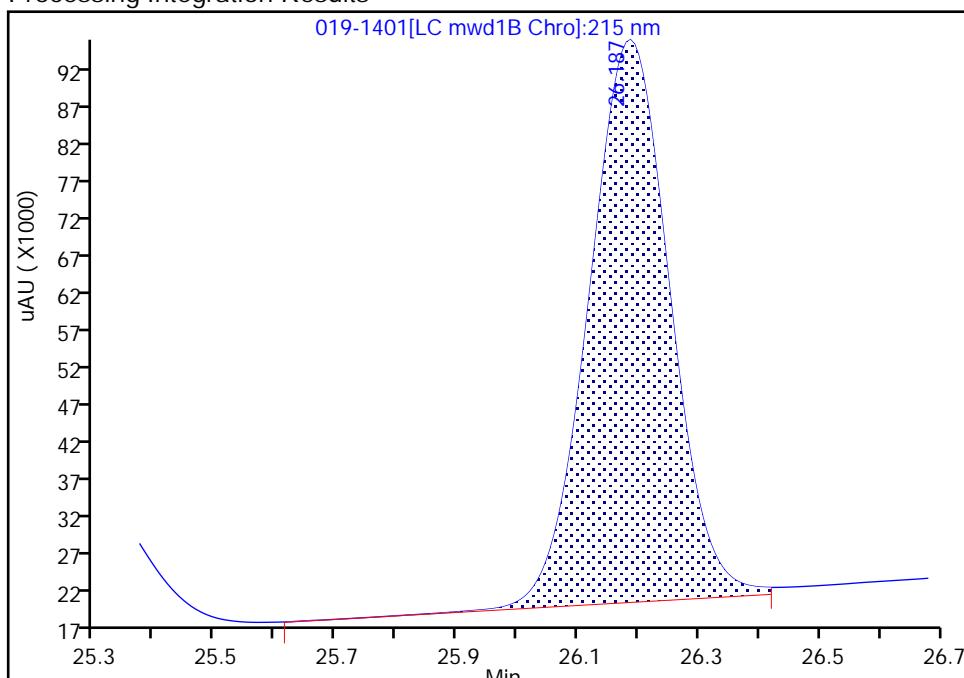
Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\019-1401.D  
 Injection Date: 02-May-2021 00:10:18 Instrument ID: CHHPLC\_X5  
 Lims ID: ICV INT/ADD  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 19 Worklist Smp#: 19  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X5\_Luna Limit Group: GCSV - 8330  
 Column: Detector LC mwd1B, 215 nm

## 24 PETN, CAS: 78-11-5

Signal: 1

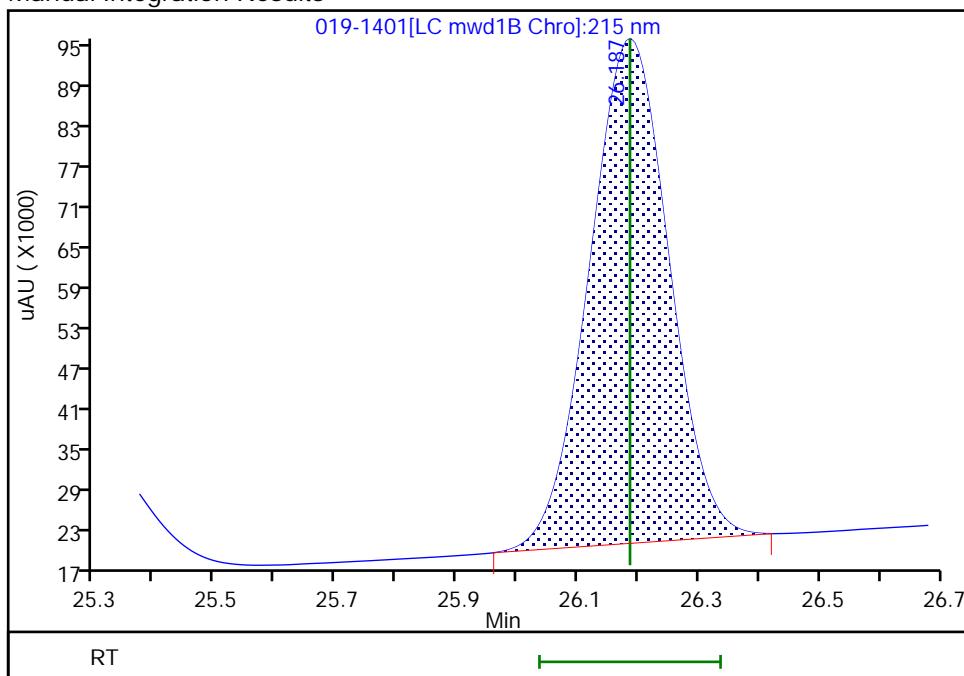
RT: 26.19  
 Area: 693830  
 Amount: 5.037230  
 Amount Units: ug/ml

## Processing Integration Results



RT: 26.19  
 Area: 676826  
 Amount: 4.913780  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: zhangji, 04-May-2021 13:43:01

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM VII  
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Lab Sample ID: ICV 280-534620/28 Calibration Date: 05/02/2021 05:26

Instrument ID: CHHPLC\_X5 Calib Start Date: 05/02/2021 00:45

GC Column: Luna-phenylhex ID: 4.60 (mm) Calib End Date: 05/02/2021 04:51

Lab File ID: 028-2301.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	376144	376410		501	501	0.0	15.0
DNX	Ave	284791	287804		506	501	1.1	15.0
MNX	Ave	264843	265575		585	584	0.3	15.0

FORM VII  
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: ICV 280-534620/28 Calibration Date: 05/02/2021 05:26  
Instrument ID: CHHPLC\_X5 Calib Start Date: 05/02/2021 00:45  
GC Column: Luna-phenylhex ID: 4.60 (mm) Calib End Date: 05/02/2021 04:51  
Lab File ID: 028-2301.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.07	4.93	5.23
DNX	5.89	5.75	6.05
MNX	7.44	7.31	7.61

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\028-2301.D  
 Lims ID: ICV DMT  
 Client ID:  
 Sample Type: ICV  
 Inject. Date: 02-May-2021 05:26:08 ALS Bottle#: 28 Worklist Smp#: 28  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: ICV DMT  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Sublist:  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 04-May-2021 13:45:38 Calib Date: 02-May-2021 04:51:05  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\027-2201.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm) Det: LC mwd1A, 254 nm  
 Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:36:47

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.067	5.075	-0.008	188393	0.5005	0.5009	
4 DNX	1	5.894	5.902	-0.008	144046	0.5005	0.5058	
7 MNX	1	7.441	7.455	-0.014	154963	0.5835	0.5851	

**Reagents:**

8330\_OP\_DMT\_00010 Amount Added: 50.00 Units: uL

Report Date: 04-May-2021 13:45:44

Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\028-2301.D

Injection Date: 02-May-2021 05:26:08

Instrument ID: CHHPLC\_X5

Operator ID: JZ

Lims ID: ICV DMT

Worklist Smp#: 28

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

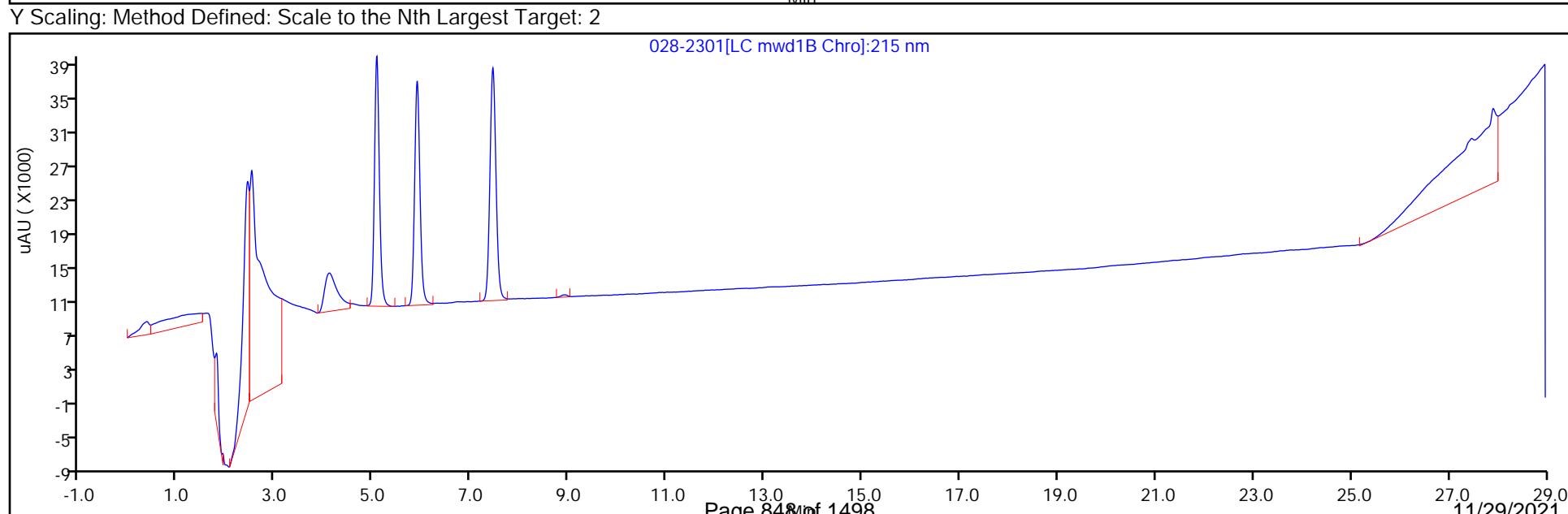
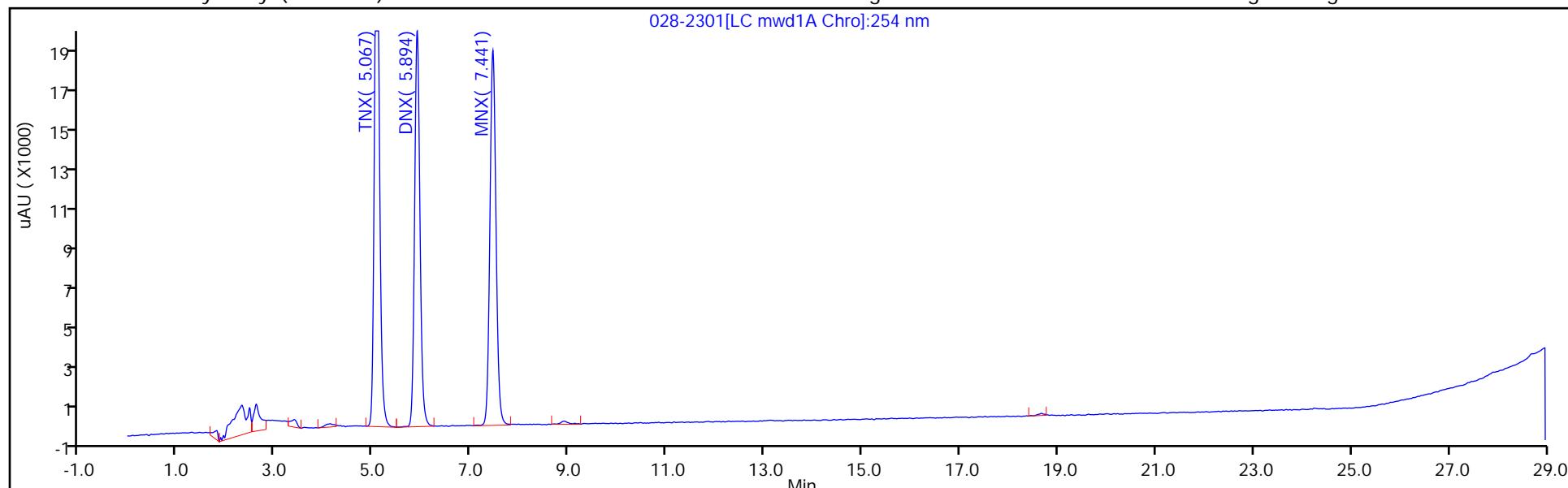
ALS Bottle#: 28

Method: 8330\_X5\_Luna

Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII  
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCV 280-556366/35 Calibration Date: 11/06/2021 06:15  
Instrument ID: CHHPLC\_X5 Calib Start Date: 05/01/2021 18:54  
GC Column: Luna-phenylhex ID: 4.60 (mm) Calib End Date: 05/01/2021 23:35  
Lab File ID: 11050035.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin2		168796		260	250	3.8	15.0
Picric acid	Ave	159537	161176		253	250	1.0	15.0
RDX	Ave	204270	203928		250	250	-0.2	15.0
Nitrobenzene	Ave	374651	368291		247	251	-1.7	15.0
1,3-Dinitrobenzene	Lin2		608579		268	251	7.1	15.0
Nitroglycerin	Ave	128605	135421		2630	2500	5.3	15.0
2-Nitrotoluene	Ave	248967	234852		236	250	-5.7	15.0
4-Nitrotoluene	Ave	217187	212814		245	251	-2.0	15.0
4-Amino-2,6-dinitrotoluene	Ave	296705	291552		246	250	-1.7	15.0
3-Nitrotoluene	Ave	278393	268328		241	250	-3.6	15.0
2-Amino-4,6-dinitrotoluene	Lin2		434040		276	251	10.1	15.0
1,3,5-Trinitrobenzene	Lin2		441046		263	251	4.9	15.0
2,6-Dinitrotoluene	Lin2		280773		263	251	4.7	15.0
2,4-Dinitrotoluene	Ave	565713	568797		252	251	0.5	15.0
Tetryl	Lin2		302547		233	251	-7.1	15.0
2,4,6-Trinitrotoluene	Lin2		404191		269	251	7.1	15.0
PETN	Ave	137740	132076		2400	2500	-4.1	15.0
1,2-Dinitrobenzene	Ave	265659	266400		251	250	0.3	15.0

FORM VII  
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCV 280-556366/35 Calibration Date: 11/06/2021 06:15  
Instrument ID: CHHPLC\_X5 Calib Start Date: 05/01/2021 18:54  
GC Column: Luna-phenylhex ID: 4.60 (mm) Calib End Date: 05/01/2021 23:35  
Lab File ID: 11050035.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.63	6.52	6.82
Picric acid	7.73	7.76	8.06
RDX	8.78	8.68	8.98
Nitrobenzene	11.84	11.74	12.04
1,3-Dinitrobenzene	15.35	15.25	15.55
Nitroglycerin	15.69	15.61	15.91
2-Nitrotoluene	16.57	16.48	16.78
4-Nitrotoluene	16.85	16.77	17.07
4-Amino-2,6-dinitrotoluene	17.31	17.23	17.53
3-Nitrotoluene	17.82	17.74	18.04
2-Amino-4,6-dinitrotoluene	18.20	18.12	18.42
1,3,5-Trinitrobenzene	18.73	18.64	18.94
2,6-Dinitrotoluene	19.97	19.90	20.20
2,4-Dinitrotoluene	20.43	20.36	20.66
Tetryl	24.03	23.96	24.26
2,4,6-Trinitrotoluene	25.02	24.95	25.25
PETN	25.93	25.85	26.15
1,2-Dinitrobenzene	12.93	12.83	13.13

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20211105-106238.b\11050035.D  
 Lims ID: CCV  
 Client ID:  
 Sample Type: CCV  
 Inject. Date: 06-Nov-2021 06:15:02 ALS Bottle#: 7 Worklist Smp#: 35  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: CCV  
 Misc. Info.: 280-0106238-035  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Sublist: chrom-8330\_X5\_Luna\*sub1  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20211105-106238.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Nov-2021 12:42:08 Calib Date: 02-May-2021 04:51:05  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\027-2201.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm) Det: LC mwd1A, 254 nm  
 Process Host: CTX1650

First Level Reviewer: zhangji

Date:

06-Nov-2021 12:38:35

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.099	4.118	-0.019	106710	0.2500	0.2523	
2 2,4-diamino-6-nitrotoluene	1	4.619	4.638	-0.019	64759	0.2500	0.2657	
5 HMX	1	6.632	6.665	-0.033	42199	0.2500	0.2596	
7 2,4,6-Trinitrophenol	1	7.732	7.905	-0.173	40294	0.2500	0.2526	
8 RDX	1	8.779	8.825	-0.046	50982	0.2500	0.2496	
9 Nitrobenzene	1	11.838	11.885	-0.047	92441	0.2510	0.2467	
\$ 10 1,2-Dinitrobenzene	1	12.925	12.978	-0.053	66600	0.2500	0.2507	
11 3,5-Dinitroaniline	1	14.792	14.851	-0.059	114892	0.2500	0.2531	
12 1,3-Dinitrobenzene	1	15.352	15.398	-0.046	152449	0.2505	0.2684	
13 Nitroglycerin	2	15.692	15.758	-0.066	338553	2.50	2.63	
14 o-Nitrotoluene	1	16.565	16.631	-0.066	58713	0.2500	0.2358	
16 p-Nitrotoluene	1	16.852	16.918	-0.066	53310	0.2505	0.2455	
17 4-Amino-2,6-dinitrotoluene	1	17.305	17.378	-0.073	72961	0.2503	0.2459	
18 m-Nitrotoluene	1	17.818	17.885	-0.067	67149	0.2503	0.2412	
19 2-Amino-4,6-dinitrotoluene	1	18.198	18.265	-0.067	108944	0.2510	0.2762	
20 1,3,5-Trinitrobenzene	1	18.732	18.785	-0.053	110482	0.2505	0.2627	
21 2,6-Dinitrotoluene	1	19.972	20.045	-0.073	70474	0.2510	0.2629	
22 2,4-Dinitrotoluene	1	20.432	20.505	-0.073	142768	0.2510	0.2524	
23 Tetryl	1	24.025	24.112	-0.087	75788	0.2505	0.2326	
24 2,4,6-Trinitrotoluene	1	25.019	25.098	-0.079	101452	0.2510	0.2687	
25 PETN	2	25.925	25.998	-0.073	330189	2.50	2.40	

**QC Flag Legend**

Processing Flags

**Reagents:**

8330IntermStk\_00069

Amount Added: 25.00 Units: uL

8330\_ADDs\_00029

Amount Added: 12.50 Units: uL

Report Date: 06-Nov-2021 12:42:08

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20211105-106238.b\11050035.D

Injection Date: 06-Nov-2021 06:15:02

Instrument ID: CHHPLC\_X5

Operator ID: JZ

Lims ID: CCV

Worklist Smp#: 35

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

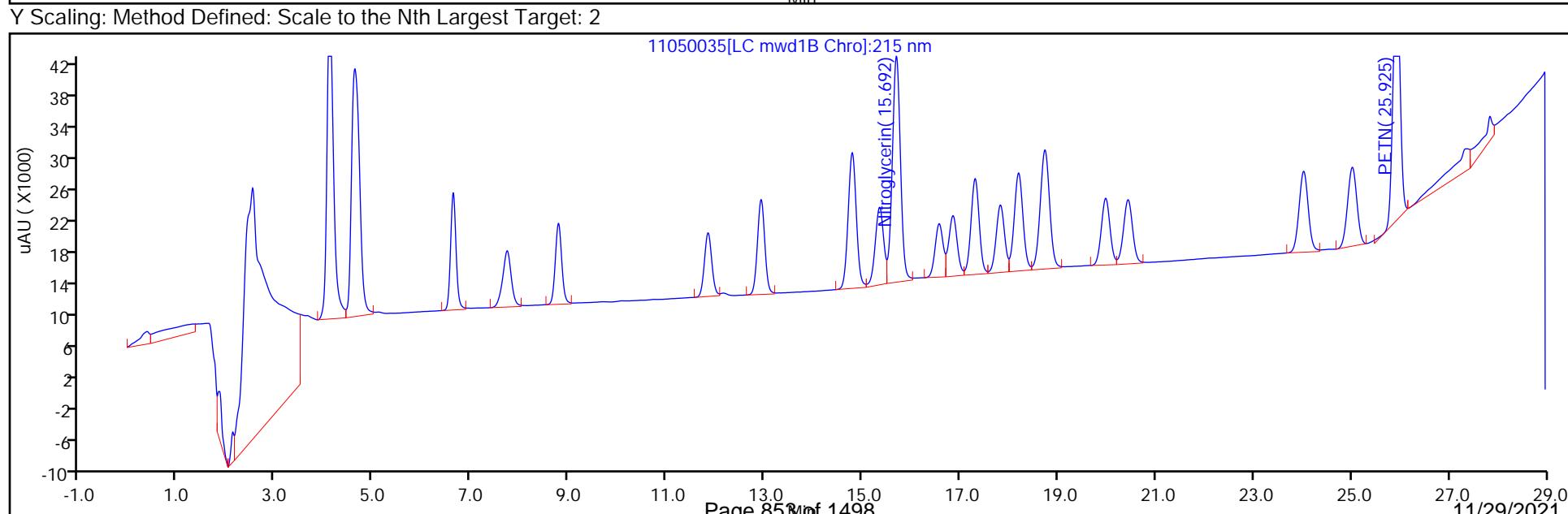
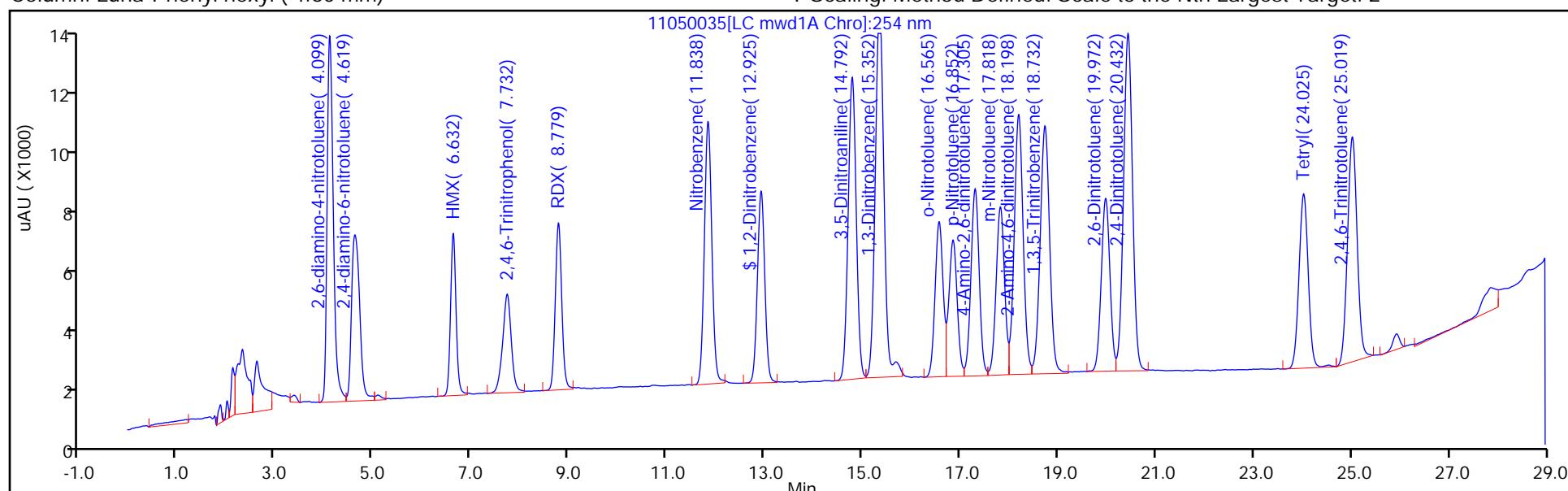
ALS Bottle#: 7

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



FORM VII  
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Lab Sample ID: CCV 280-556366/36 Calibration Date: 11/06/2021 06:50

Instrument ID: CHHPLC\_X5 Calib Start Date: 05/02/2021 00:45

GC Column: Luna-phenylhex ID: 4.60 (mm) Calib End Date: 05/02/2021 04:51

Lab File ID: 11050036.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	376144	362102		241	250	-3.7	15.0
DNX	Ave	284791	284412		250	250	-0.1	15.0
MNX	Ave	264843	263410		290	292	-0.5	15.0

FORM VII  
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCV 280-556366/36 Calibration Date: 11/06/2021 06:50  
Instrument ID: CHHPLC\_X5 Calib Start Date: 05/02/2021 00:45  
GC Column: Luna-phenylhex ID: 4.60 (mm) Calib End Date: 05/02/2021 04:51  
Lab File ID: 11050036.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.03	4.89	5.19
DNX	5.84	5.71	6.01
MNX	7.36	7.23	7.53

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20211105-106238.b\11050036.D  
 Lims ID: CCV DMT  
 Client ID:  
 Sample Type: CCV  
 Inject. Date: 06-Nov-2021 06:50:06 ALS Bottle#: 8 Worklist Smp#: 36  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: CCV DMT  
 Misc. Info.: 280-0106238-036  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Sublist: chrom-8330\_X5\_Luna\*sub2  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20211105-106238.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Nov-2021 12:42:08 Calib Date: 02-May-2021 04:51:05  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\027-2201.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm) Det: LC mwd1A, 254 nm  
 Process Host: CTX1650

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.033	5.044	-0.011	90616	0.2503	0.2409	
4 DNX	1	5.840	5.857	-0.017	71174	0.2503	0.2499	
6 MNX	1	7.360	7.384	-0.024	76850	0.2918	0.2902	

**Reagents:**

8330 DMT\_00009 Amount Added: 12.50 Units: uL

Report Date: 06-Nov-2021 12:42:08

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20211105-106238.b\11050036.D

Injection Date: 06-Nov-2021 06:50:06

Instrument ID: CHHPLC\_X5

Operator ID: JZ

Lims ID: CCV DMT

Worklist Smp#: 36

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

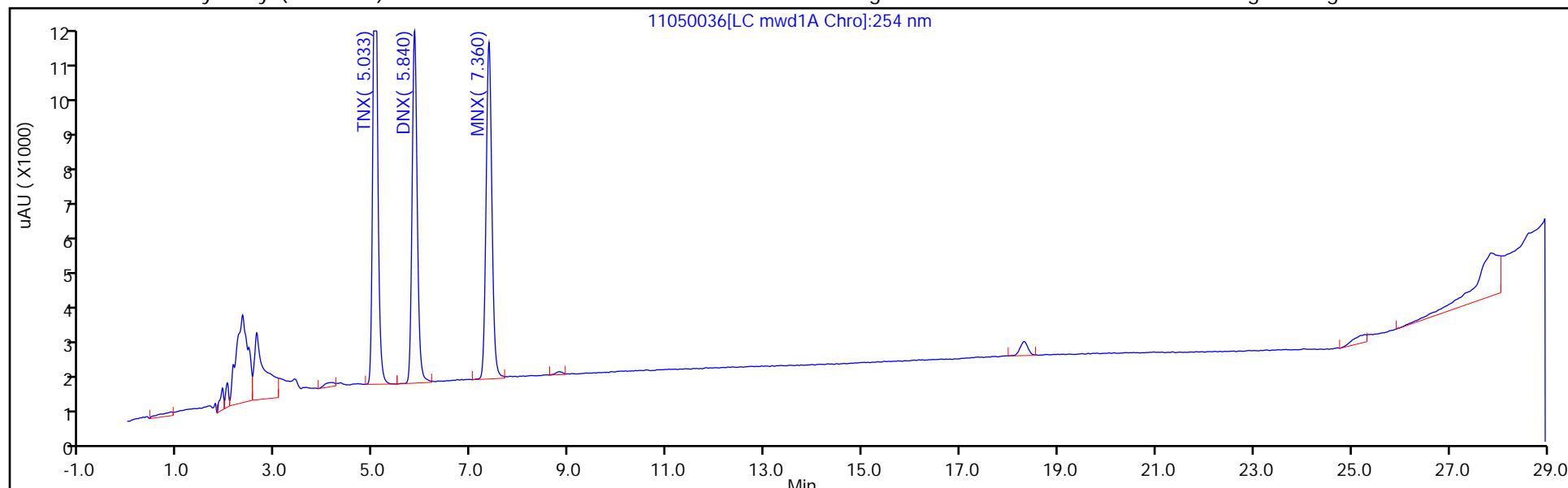
ALS Bottle#: 8

Method: 8330\_X5\_Luna

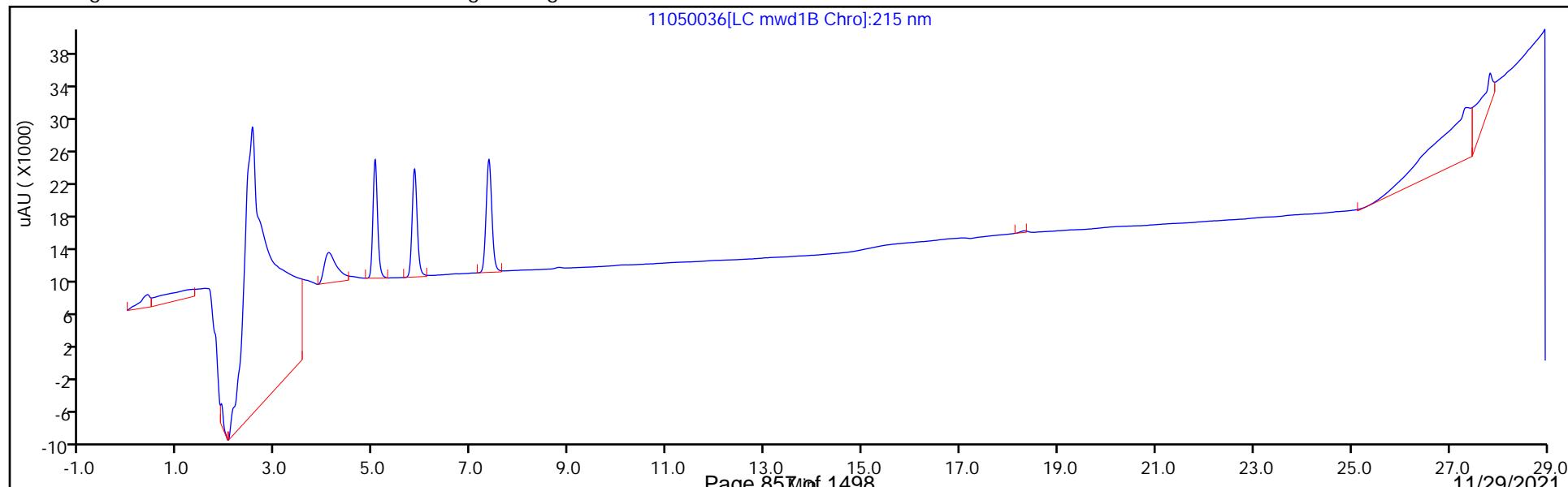
Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII  
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCV 280-556366/55 Calibration Date: 11/06/2021 11:30  
Instrument ID: CHHPLC\_X5 Calib Start Date: 05/01/2021 18:54  
GC Column: Luna-phenylhex ID: 4.60 (mm) Calib End Date: 05/01/2021 23:35  
Lab File ID: 11050055.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin2		169324		260	250	4.2	15.0
Picric acid	Ave	159537	161644		253	250	1.3	15.0
RDX	Ave	204270	205400		251	250	0.6	15.0
Nitrobenzene	Ave	374651	363080		243	251	-3.1	15.0
1,3-Dinitrobenzene	Lin2		607689		268	251	7.0	15.0
Nitroglycerin	Ave	128605	135251		2630	2500	5.2	15.0
2-Nitrotoluene	Ave	248967	227728		229	250	-8.5	15.0
4-Nitrotoluene	Ave	217187	208415		240	251	-4.0	15.0
4-Amino-2,6-dinitrotoluene	Ave	296705	292388		247	250	-1.5	15.0
3-Nitrotoluene	Ave	278393	260543		234	250	-6.4	15.0
2-Amino-4,6-dinitrotoluene	Lin2		435394		277	251	10.4	15.0
1,3,5-Trinitrobenzene	Lin2		440028		262	251	4.6	15.0
2,6-Dinitrotoluene	Lin2		280833		263	251	4.8	15.0
2,4-Dinitrotoluene	Ave	565713	568797		252	251	0.5	15.0
Tetryl	Lin2		302036		232	251	-7.3	15.0
2,4,6-Trinitrotoluene	Lin2		407936		271	251	8.1	15.0
PETN	Ave	137740	131992		2400	2500	-4.2	15.0
1,2-Dinitrobenzene	Ave	265659	268160		252	250	0.9	15.0

FORM VII  
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCV 280-556366/55 Calibration Date: 11/06/2021 11:30  
Instrument ID: CHHPLC\_X5 Calib Start Date: 05/01/2021 18:54  
GC Column: Luna-phenylhex ID: 4.60 (mm) Calib End Date: 05/01/2021 23:35  
Lab File ID: 11050055.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.61	6.52	6.82
Picric acid	7.68	7.76	8.06
RDX	8.76	8.68	8.98
Nitrobenzene	11.82	11.74	12.04
1,3-Dinitrobenzene	15.31	15.25	15.55
Nitroglycerin	15.66	15.61	15.91
2-Nitrotoluene	16.53	16.48	16.78
4-Nitrotoluene	16.81	16.77	17.07
4-Amino-2,6-dinitrotoluene	17.25	17.23	17.53
3-Nitrotoluene	17.78	17.74	18.04
2-Amino-4,6-dinitrotoluene	18.14	18.12	18.42
1,3,5-Trinitrobenzene	18.68	18.64	18.94
2,6-Dinitrotoluene	19.92	19.90	20.20
2,4-Dinitrotoluene	20.38	20.36	20.66
Tetryl	23.95	23.96	24.26
2,4,6-Trinitrotoluene	24.95	24.95	25.25
PETN	25.88	25.85	26.15
1,2-Dinitrobenzene	12.89	12.83	13.13

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20211105-106238.b\11050055.D  
 Lims ID: CCV  
 Client ID:  
 Sample Type: CCV  
 Inject. Date: 06-Nov-2021 11:30:24 ALS Bottle#: 7 Worklist Smp#: 55  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: CCV  
 Misc. Info.: 280-0106238-055  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Sublist: chrom-8330\_X5\_Luna\*sub1  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20211105-106238.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Nov-2021 12:42:11 Calib Date: 02-May-2021 04:51:05  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\027-2201.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm) Det: LC mwd1A, 254 nm  
 Process Host: CTX1650

First Level Reviewer: zhangji

Date:

06-Nov-2021 12:41:50

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	4.103	4.118	-0.015	105780	0.2500	0.2500	
2 2,4-diamino-6-nitrotoluene	1	4.610	4.638	-0.028	62503	0.2500	0.2562	
5 HMX	1	6.610	6.665	-0.055	42331	0.2500	0.2604	
7 2,4,6-Trinitrophenol	1	7.683	7.905	-0.222	40411	0.2500	0.2533	
8 RDX	1	8.757	8.825	-0.068	51350	0.2500	0.2514	
9 Nitrobenzene	1	11.816	11.885	-0.069	91133	0.2510	0.2432	
\$ 10 1,2-Dinitrobenzene	1	12.890	12.978	-0.088	67040	0.2500	0.2524	
11 3,5-Dinitroaniline	1	14.743	14.851	-0.108	114873	0.2500	0.2531	
12 1,3-Dinitrobenzene	1	15.310	15.398	-0.088	152226	0.2505	0.2680	
13 Nitroglycerin	2	15.656	15.758	-0.102	338127	2.50	2.63	
14 o-Nitrotoluene	1	16.530	16.631	-0.101	56932	0.2500	0.2287	
16 p-Nitrotoluene	1	16.810	16.918	-0.108	52208	0.2505	0.2404	
17 4-Amino-2,6-dinitrotoluene	1	17.250	17.378	-0.128	73170	0.2503	0.2466	
18 m-Nitrotoluene	1	17.776	17.885	-0.109	65201	0.2503	0.2342	
19 2-Amino-4,6-dinitrotoluene	1	18.136	18.265	-0.129	109284	0.2510	0.2771	
20 1,3,5-Trinitrobenzene	1	18.683	18.785	-0.102	110227	0.2505	0.2621	
21 2,6-Dinitrotoluene	1	19.923	20.045	-0.122	70489	0.2510	0.2629	
22 2,4-Dinitrotoluene	1	20.383	20.505	-0.122	142768	0.2510	0.2524	
23 Tetryl	1	23.950	24.112	-0.162	75660	0.2505	0.2322	
24 2,4,6-Trinitrotoluene	1	24.950	25.098	-0.148	102392	0.2510	0.2713	
25 PETN	2	25.883	25.998	-0.115	329981	2.50	2.40	

**QC Flag Legend**

Processing Flags

**Reagents:**

8330IntermStk\_00069

Amount Added: 25.00 Units: uL

8330\_ADDs\_00029

Amount Added: 12.50 Units: uL

Report Date: 06-Nov-2021 12:42:11

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20211105-106238.b\11050055.D

Injection Date: 06-Nov-2021 11:30:24

Instrument ID: CHHPLC\_X5

Operator ID: JZ

Lims ID: CCV

Worklist Smp#: 55

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

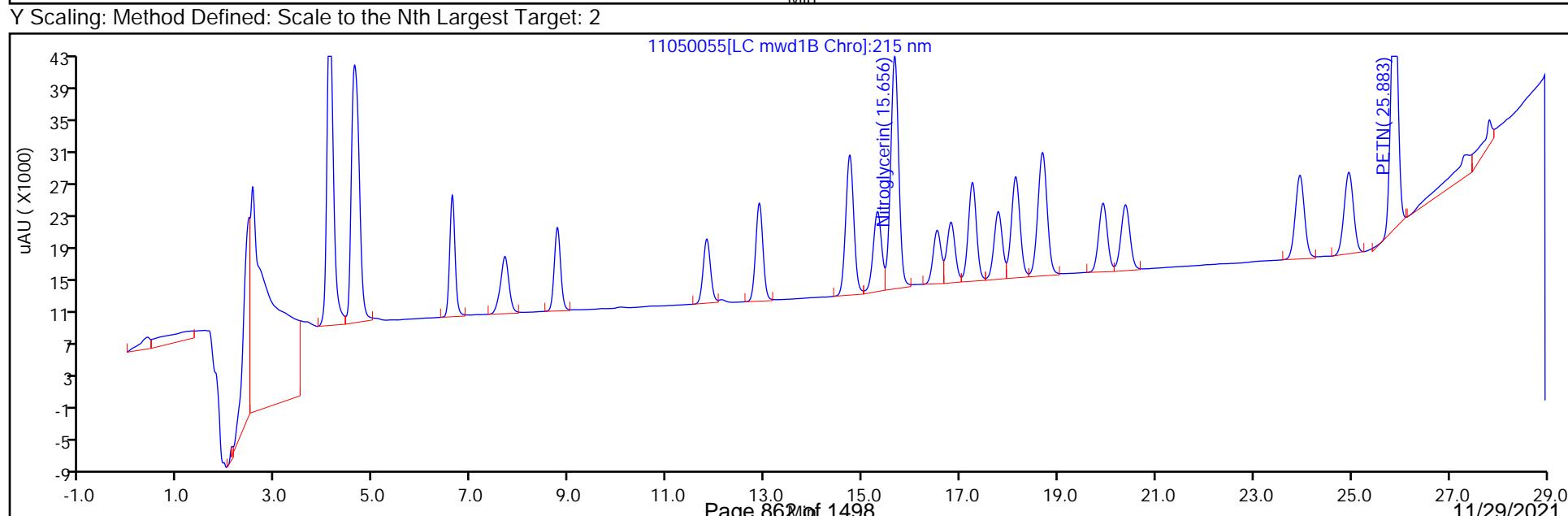
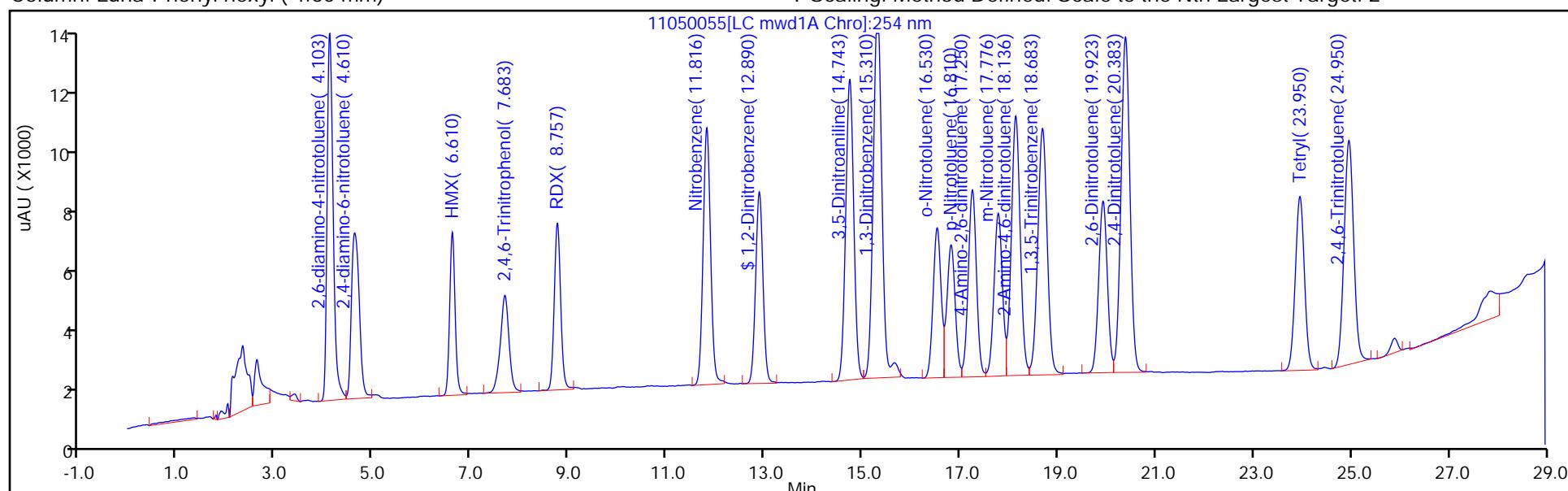
ALS Bottle#: 7

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



FORM VII  
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Lab Sample ID: CCV 280-556366/56 Calibration Date: 11/06/2021 12:05

Instrument ID: CHHPLC\_X5 Calib Start Date: 05/02/2021 00:45

GC Column: Luna-phenylhex ID: 4.60 (mm) Calib End Date: 05/02/2021 04:51

Lab File ID: 11050056.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	376144	359417		239	250	-4.4	15.0
DNX	Ave	284791	286226		252	250	0.5	15.0
MNX	Ave	264843	262194		289	292	-1.0	15.0

FORM VII  
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCV 280-556366/56 Calibration Date: 11/06/2021 12:05  
Instrument ID: CHHPLC\_X5 Calib Start Date: 05/02/2021 00:45  
GC Column: Luna-phenylhex ID: 4.60 (mm) Calib End Date: 05/02/2021 04:51  
Lab File ID: 11050056.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.02	4.89	5.19
DNX	5.83	5.71	6.01
MNX	7.34	7.23	7.53

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20211105-106238.b\11050056.D  
 Lims ID: CCV DMT  
 Client ID:  
 Sample Type: CCV  
 Inject. Date: 06-Nov-2021 12:05:21 ALS Bottle#: 8 Worklist Smp#: 56  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: CCV DMT  
 Misc. Info.: 280-0106238-056  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Sublist: chrom-8330\_X5\_Luna\*sub2  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20211105-106238.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Nov-2021 12:42:12 Calib Date: 02-May-2021 04:51:05  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20210501-101093.b\027-2201.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm) Det: LC mwd1A, 254 nm  
 Process Host: CTX1650

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.022	5.044	-0.022	89944	0.2503	0.2391	
4 DNX	1	5.828	5.857	-0.029	71628	0.2503	0.2515	
6 MNX	1	7.342	7.384	-0.042	76495	0.2918	0.2888	

**Reagents:**

8330 DMT\_00009 Amount Added: 12.50 Units: uL

Report Date: 06-Nov-2021 12:42:12

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20211105-106238.b\11050056.D

Injection Date: 06-Nov-2021 12:05:21

Instrument ID: CHHPLC\_X5

Operator ID: JZ

Lims ID: CCV DMT

Worklist Smp#: 56

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

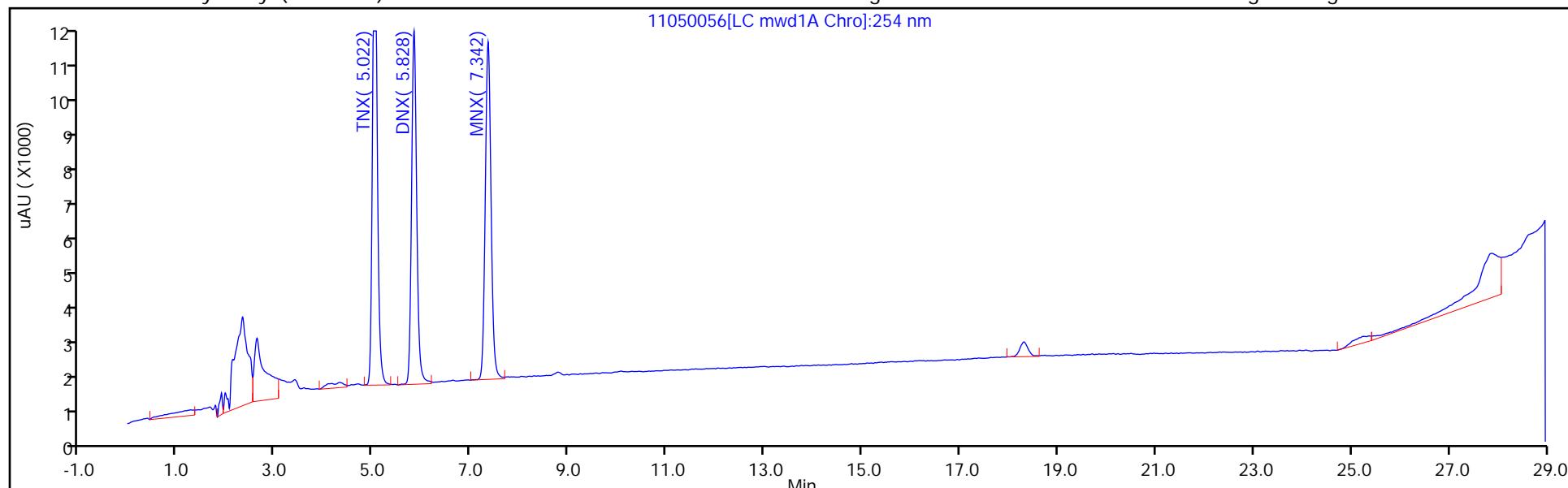
ALS Bottle#: 8

Method: 8330\_X5\_Luna

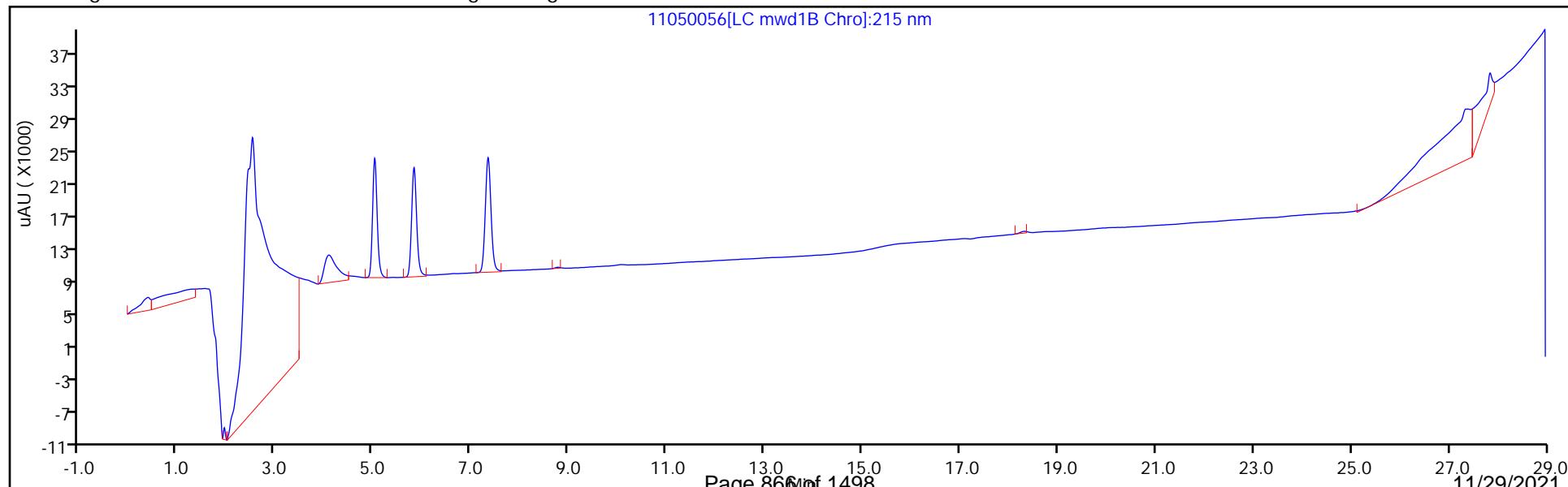
Limit Group: GCSV - 8330

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 TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 280-556180/1-A  
Matrix: Water Lab File ID: 11050011.D  
Analysis Method: 8330A Date Collected: \_\_\_\_\_  
Extraction Method: 3535 Date Extracted: 11/04/2021 14:13  
Sample wt/vol: 500 (mL) Date Analyzed: 11/05/2021 15:15  
Con. Extract Vol.: 5 (mL) Dilution Factor: 1  
Injection Volume: 100 (uL) GC Column: UltraCarb5uODS ID: 4.6 (mm)  
% Moisture: \_\_\_\_\_ GPC Cleanup: (Y/N) N  
Analysis Batch No.: 556359 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	92		83-119

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\11050011.D  
 Lims ID: MB 280-556180/1-A  
 Client ID:  
 Sample Type: MB  
 Inject. Date: 05-Nov-2021 15:15:07 ALS Bottle#: 11 Worklist Smp#: 11  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: MB 280-556180/1-  
 Misc. Info.: 280-0106237-011  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Nov-2021 10:24:48 Calib Date: 27-Oct-2021 04:27:09  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211027-105955.b\1026T007.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1650

First Level Reviewer: zhangji Date: 05-Nov-2021 15:50:33

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
1 Triamine Trinitrobenzene	1	2.449				ND		
2 2,6-diamino-4-nitrotoluene	1	6.470				ND		
3 TNX	1	6.493				ND		U
4 HMX	1	6.612				ND		
5 2,4-diamino-6-nitrotoluene	1	6.650				ND		
6 DNX	1	6.813				ND		
7 MNX	1	7.239				ND		
8 RDX	1	7.632				ND		
9 2,4,6-Trinitrophenol	1	8.019				ND		
\$ 10 1,2-Dinitrobenzene	1	8.602	8.606	-0.004	23698	0.2000	0.1848	
11 1,3,5-Trinitrobenzene	1	8.726				ND		
12 1,3-Dinitrobenzene	1	9.365				ND		
13 Nitrobenzene	1	9.765				ND		
14 3,5-Dinitroaniline	1	9.930				ND		
15 Tetryl	1	10.112				ND		
16 Nitroglycerin	2	10.572				ND		
17 2,4,6-Trinitrotoluene	1	11.025				ND		
18 4-Amino-2,6-dinitrotoluene	1	11.239				ND		
19 2-Amino-4,6-dinitrotoluene	1	11.499				ND		
20 2,6-Dinitrotoluene	1	11.665				ND		
21 2,4-Dinitrotoluene	1	11.832				ND		
22 o-Nitrotoluene	1	12.712				ND		
23 p-Nitrotoluene	1	13.152				ND		
24 m-Nitrotoluene	1	13.745				ND		
25 PETN	2	14.859				ND		
26 Ammonium Picrate	1	0.000				ND		

### QC Flag Legend

Processing Flags

Review Flags

U - Marked Undetected

Report Date: 06-Nov-2021 10:24:49

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\\denver\\chromdata\\chhplc\_x\\20211105-106237.b\\11050011.d

Injection Date: 05-Nov-2021 15:15:07

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: MB 280-556180/1-A

Worklist Smp#: 11

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

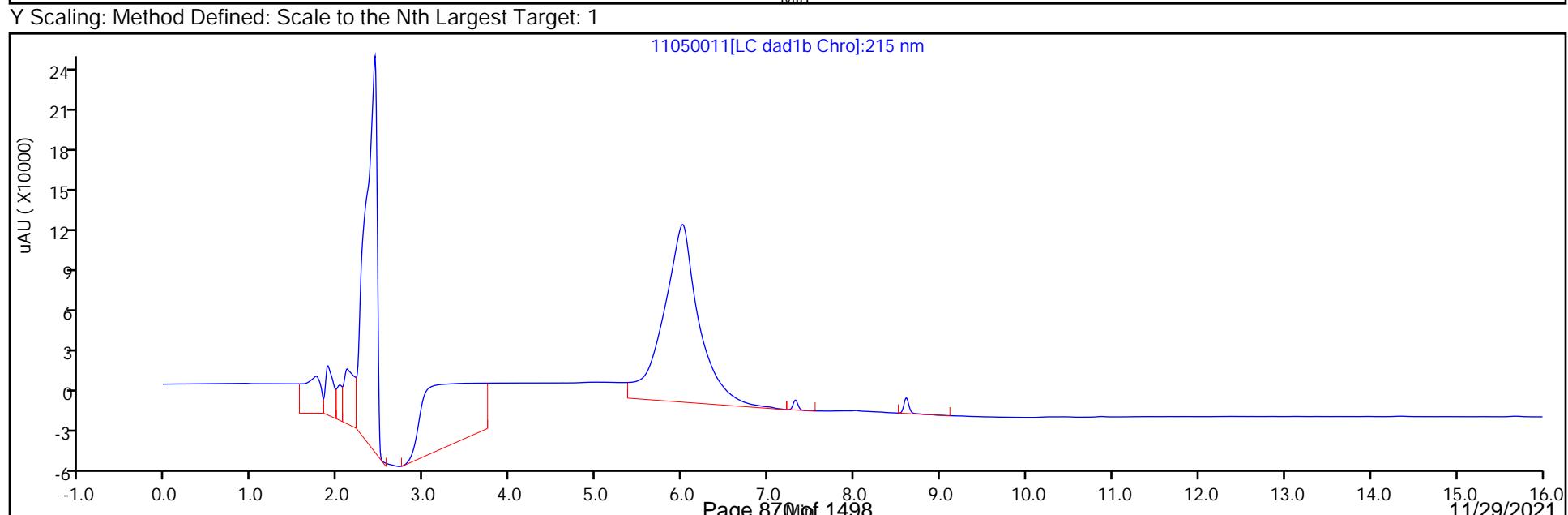
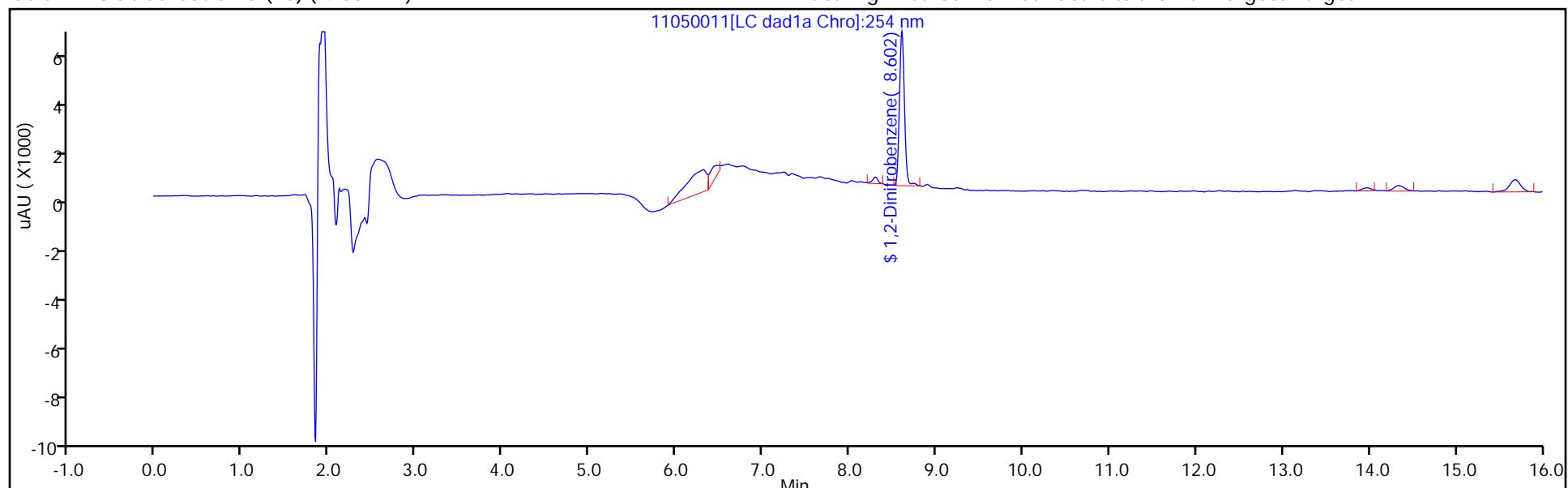
ALS Bottle#: 11

Method: 8330\_X3

Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver  
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\11050011.D  
 Lims ID: MB 280-556180/1-A  
 Client ID:  
 Sample Type: MB  
 Inject. Date: 05-Nov-2021 15:15:07 ALS Bottle#: 11 Worklist Smp#: 11  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: MB 280-556180/1-  
 Misc. Info.: 280-0106237-011  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Nov-2021 10:24:48 Calib Date: 27-Oct-2021 04:27:09  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211027-105955.b\1026T007.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1650

First Level Reviewer: zhangji Date: 05-Nov-2021 15:50:33

Compound	Amount Added	Amount Recovered	% Rec.
\$ 10 1,2-Dinitrobenzene	0.2000	0.1848	92.41

FORM I  
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: \_\_\_\_\_ Lab Sample ID: LCS 280-556180/2-A  
Matrix: Water Lab File ID: 11050012.D  
Analysis Method: 8330A Date Collected: \_\_\_\_\_  
Extraction Method: 3535 Date Extracted: 11/04/2021 14:13  
Sample wt/vol: 500 (mL) Date Analyzed: 11/05/2021 15:38  
Con. Extract Vol.: 5 (mL) Dilution Factor: 1  
Injection Volume: 100 (uL) GC Column: UltraCarb5uODS ID: 4.6 (mm)  
% Moisture: \_\_\_\_\_ GPC Cleanup: (Y/N) N  
Analysis Batch No.: 556359 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	2.00		0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	1.94		0.10	0.080	0.027
606-20-2	2,6-Dinitrotoluene	1.93		0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	1.84		0.11	0.10	0.051
88-72-2	2-Nitrotoluene	1.57		0.21	0.20	0.086
99-08-1	3-Nitrotoluene	1.55	M	0.40	0.40	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.82		0.15	0.12	0.058
99-99-0	4-Nitrotoluene	1.61		0.41	0.40	0.10
2691-41-0	HMX	1.95	M	0.21	0.20	0.088
98-95-3	Nitrobenzene	1.77		0.21	0.20	0.091
121-82-4	RDX	1.88		0.21	0.20	0.052
479-45-8	Tetryl	1.91		0.11	0.10	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	90		83-119

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\11050012.D  
 Lims ID: LCS 280-556180/2-A  
 Client ID:  
 Sample Type: LCS  
 Inject. Date: 05-Nov-2021 15:38:03 ALS Bottle#: 12 Worklist Smp#: 12  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: LCS 280-556180/2  
 Misc. Info.: 280-0106237-012  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Nov-2021 10:24:48 Calib Date: 27-Oct-2021 04:27:09  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211027-105955.b\1026T007.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1650

First Level Reviewer: zhangji Date: 05-Nov-2021 16:07:49

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.608	6.612	-0.004	16450	0.2000	0.1949	M
8 RDX	1	7.615	7.632	-0.017	19998	0.2000	0.1882	
9 2,4,6-Trinitrophenol	1	7.988	8.019	-0.031	17206	0.2000	0.2080	
\$ 10 1,2-Dinitrobenzene	1	8.582	8.606	-0.024	23205	0.2000	0.1810	
11 1,3,5-Trinitrobenzene	1	8.702	8.726	-0.024	45637	0.2000	0.2071	
12 1,3-Dinitrobenzene	1	9.335	9.365	-0.030	58737	0.2000	0.1982	
13 Nitrobenzene	1	9.735	9.765	-0.030	34549	0.2000	0.1769	
15 Tetryl	1	10.075	10.112	-0.037	32847	0.2000	0.1905	
16 Nitroglycerin	2	10.528	10.572	-0.044	128207	2.00	1.93	
17 2,4,6-Trinitrotoluene	1	10.982	11.025	-0.043	41225	0.2000	0.2001	
18 4-Amino-2,6-dinitrotoluene	1	11.195	11.239	-0.044	27763	0.2000	0.1817	
19 2-Amino-4,6-dinitrotoluene	1	11.448	11.499	-0.051	38158	0.2000	0.1844	
20 2,6-Dinitrotoluene	1	11.615	11.665	-0.050	27587	0.2000	0.1928	
21 2,4-Dinitrotoluene	1	11.782	11.832	-0.050	55575	0.2000	0.1936	
22 o-Nitrotoluene	1	12.655	12.712	-0.057	20121	0.2000	0.1567	
23 p-Nitrotoluene	1	13.095	13.152	-0.057	18048	0.2000	0.1613	
24 m-Nitrotoluene	1	13.675	13.745	-0.070	22048	0.2000	0.1550	M
25 PETN	2	14.782	14.859	-0.077	146480	2.00	1.96	

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Report Date: 06-Nov-2021 10:24:49

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20211105-106237.b\11050012.d

Injection Date: 05-Nov-2021 15:38:03

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: LCS 280-556180/2-A

Worklist Smp#: 12

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

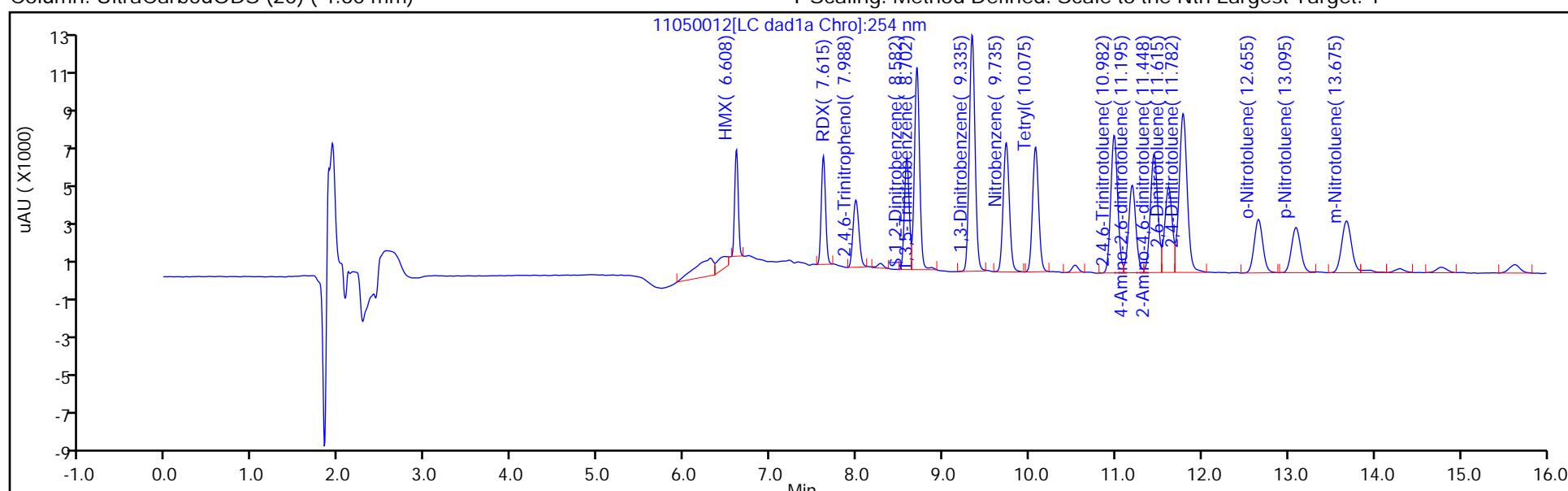
ALS Bottle#: 12

Method: 8330\_X3

Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver  
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\11050012.D  
 Lims ID: LCS 280-556180/2-A  
 Client ID:  
 Sample Type: LCS  
 Inject. Date: 05-Nov-2021 15:38:03      ALS Bottle#: 12      Worklist Smp#: 12  
 Injection Vol: 100.0 ul      Dil. Factor: 1.0000  
 Sample Info: LCS 280-556180/2  
 Misc. Info.: 280-0106237-012  
 Operator ID: JZ      Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Nov-2021 10:24:48      Calib Date: 27-Oct-2021 04:27:09  
 Integrator: Falcon  
 Quant Method: External Standard      Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211027-105955.b\1026T007.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm)      Det: LC DAD1B, 254 nm  
 Process Host: CTX1650

First Level Reviewer: zhangji      Date: 05-Nov-2021 16:07:49

Compound	Amount Added	Amount Recovered	% Rec.
\$ 10 1,2-Dinitrobenzene	0.2000	0.1810	90.49

## Eurofins TestAmerica, Denver

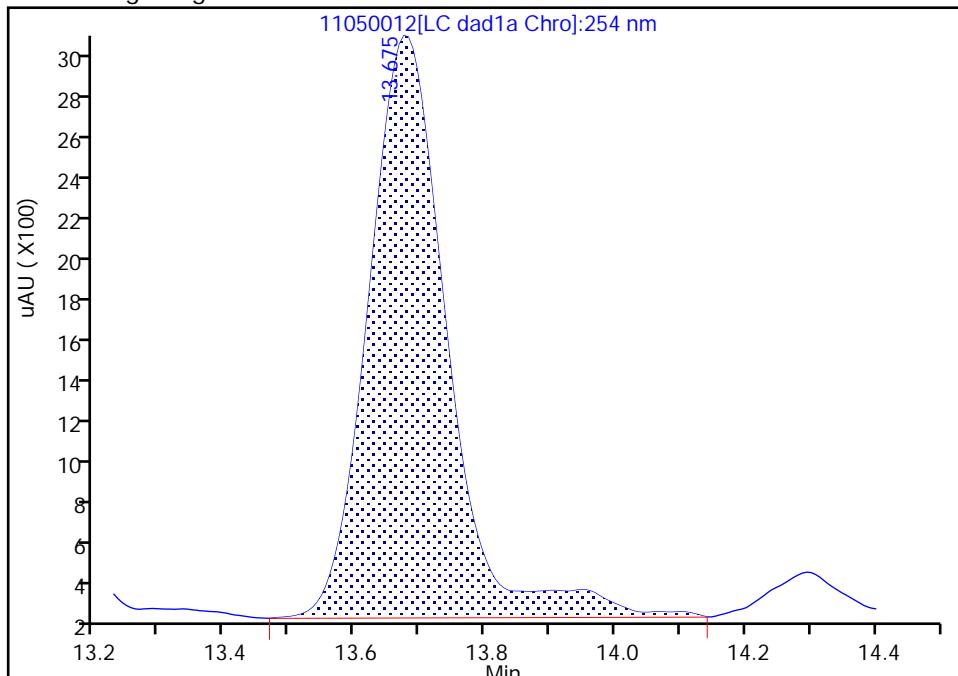
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 Injection Date: 05-Nov-2021 15:38:03 Instrument ID: CHHPLC\_X3  
 Lims ID: LCS 280-556180/2-A  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 12 Worklist Smp#: 12  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

**24 m-Nitrotoluene, CAS: 99-08-1**

Signal: 1

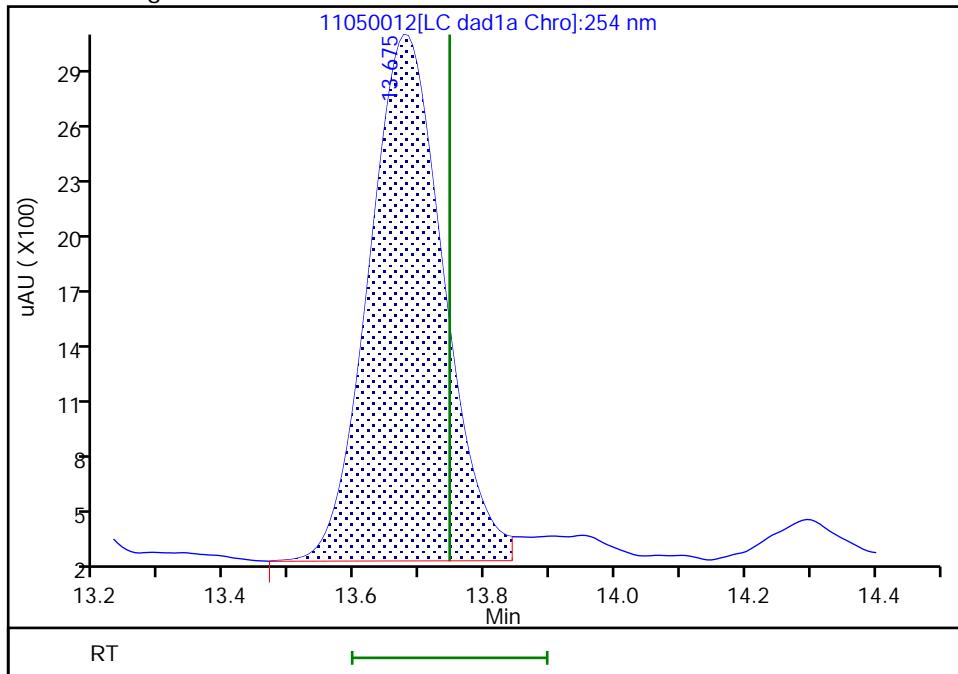
## Processing Integration Results

RT: 13.67  
 Area: 23395  
 Amount: 0.164468  
 Amount Units: ug/mL



## Manual Integration Results

RT: 13.67  
 Area: 22048  
 Amount: 0.154999  
 Amount Units: ug/mL



Reviewer: zhangji, 05-Nov-2021 16:07:36

Audit Action: Split an Integrated Peak

Audit Reason: Baseline

## Eurofins TestAmerica, Denver

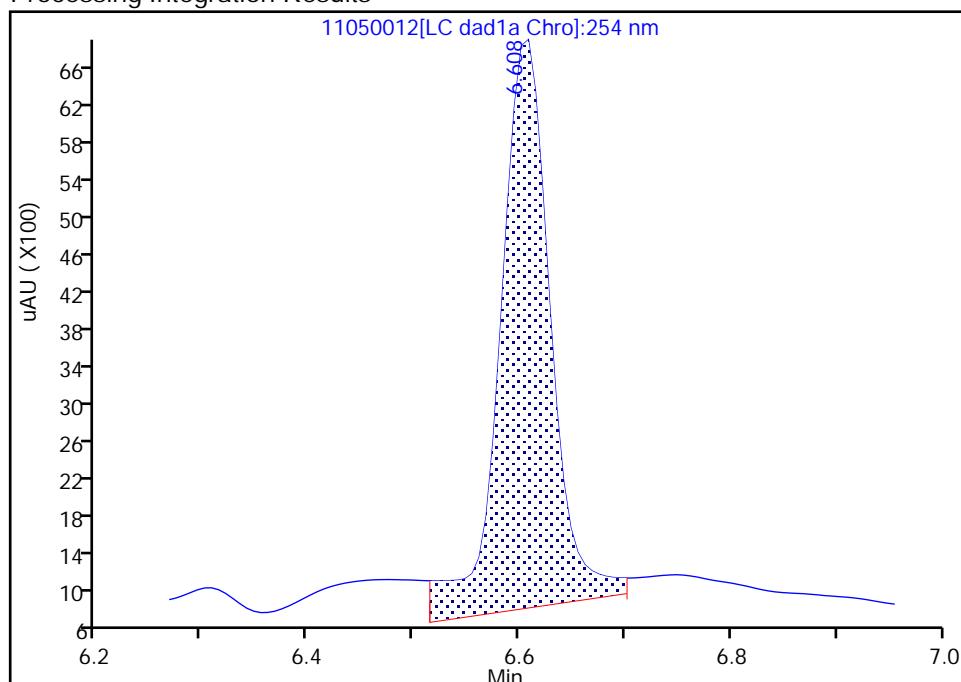
Data File: \\chromfs\denver\chromdata\chhplc\_x\20211105-106237.b\11050012.d  
 Injection Date: 05-Nov-2021 15:38:03 Instrument ID: CHHPLC\_X3  
 Lims ID: LCS 280-556180/2-A  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 12 Worklist Smp#: 12  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

**4 HMX, CAS: 2691-41-0**

Signal: 1

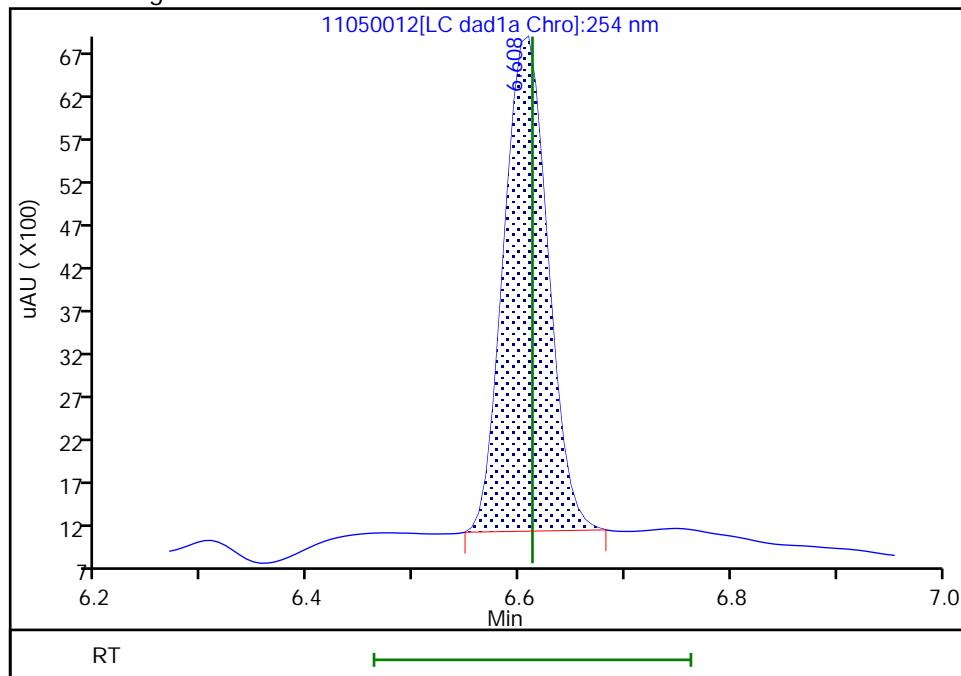
RT: 6.61  
 Area: 19981  
 Amount: 0.236682  
 Amount Units: ug/mL

## Processing Integration Results



RT: 6.61  
 Area: 16450  
 Amount: 0.194856  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 05-Nov-2021 16:07:30

Audit Action: Manually Integrated

Audit Reason: Baseline

FORM I  
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: \_\_\_\_\_ Lab Sample ID: LCS 280-556180/3-A  
Matrix: Water Lab File ID: 11050013.D  
Analysis Method: 8330A Date Collected: \_\_\_\_\_  
Extraction Method: 3535 Date Extracted: 11/04/2021 14:13  
Sample wt/vol: 500 (mL) Date Analyzed: 11/05/2021 16:00  
Con. Extract Vol.: 5 (mL) Dilution Factor: 1  
Injection Volume: 100 (uL) GC Column: UltraCarb5uODS ID: 4.6 (mm)  
% Moisture: \_\_\_\_\_ GPC Cleanup: (Y/N) N  
Analysis Batch No.: 556359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
5755-27-1	MNX	2.16	M	2.0	0.40	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	89	M	83-119

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\11050013.D  
 Lims ID: LCS 280-556180/3-A  
 Client ID:  
 Sample Type: LCS  
 Inject. Date: 05-Nov-2021 16:00:54 ALS Bottle#: 13 Worklist Smp#: 13  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: LCS 280-556180/3  
 Misc. Info.: 280-0106237-013  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Nov-2021 10:24:48 Calib Date: 27-Oct-2021 04:27:09  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211027-105955.b\1026T007.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1650

First Level Reviewer: zhangji Date: 05-Nov-2021 17:38:59

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.480	6.493	-0.013	35583	0.2002	0.1915	M
6 DNX	1	6.800	6.813	-0.013	26577	0.2002	0.1870	M
7 MNX	1	7.227	7.239	-0.012	28201	0.2334	0.2164	M
\$ 10 1,2-Dinitrobenzene	1	8.580	8.606	-0.026	22887	0.2000	0.1785	M

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Report Date: 06-Nov-2021 10:24:49

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\\denver\\chromdata\\chhplc\_x\\20211105-106237.b\\11050013.d

Injection Date: 05-Nov-2021 16:00:54

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: LCS 280-556180/3-A

Worklist Smp#: 13

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

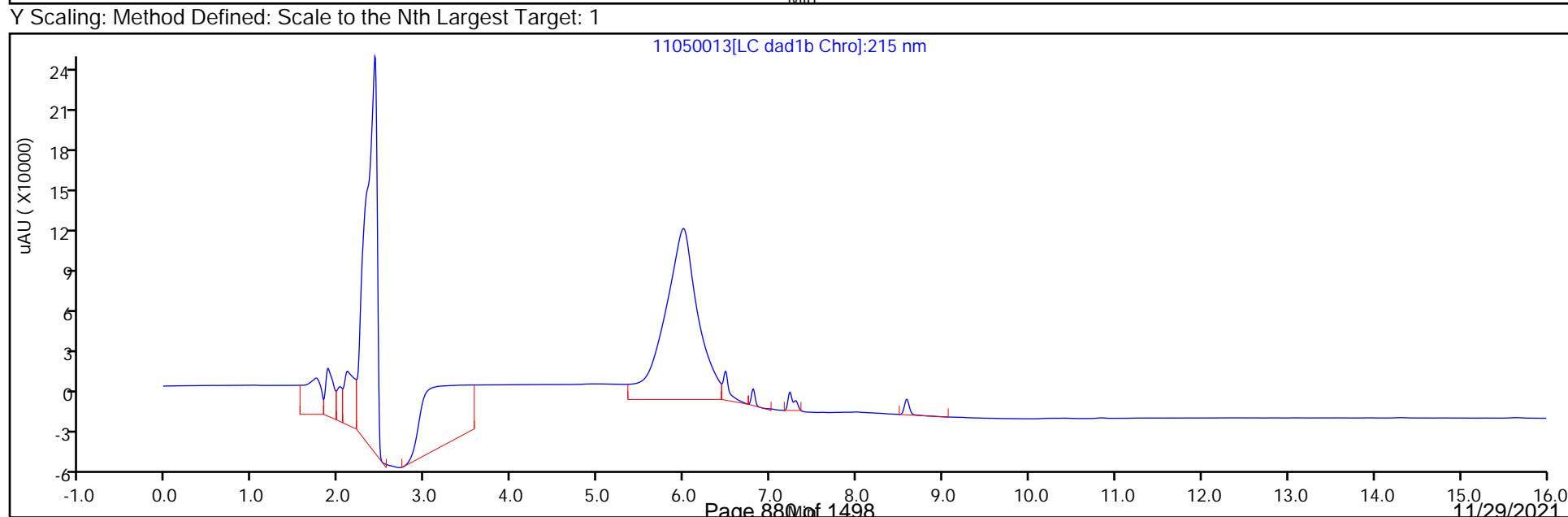
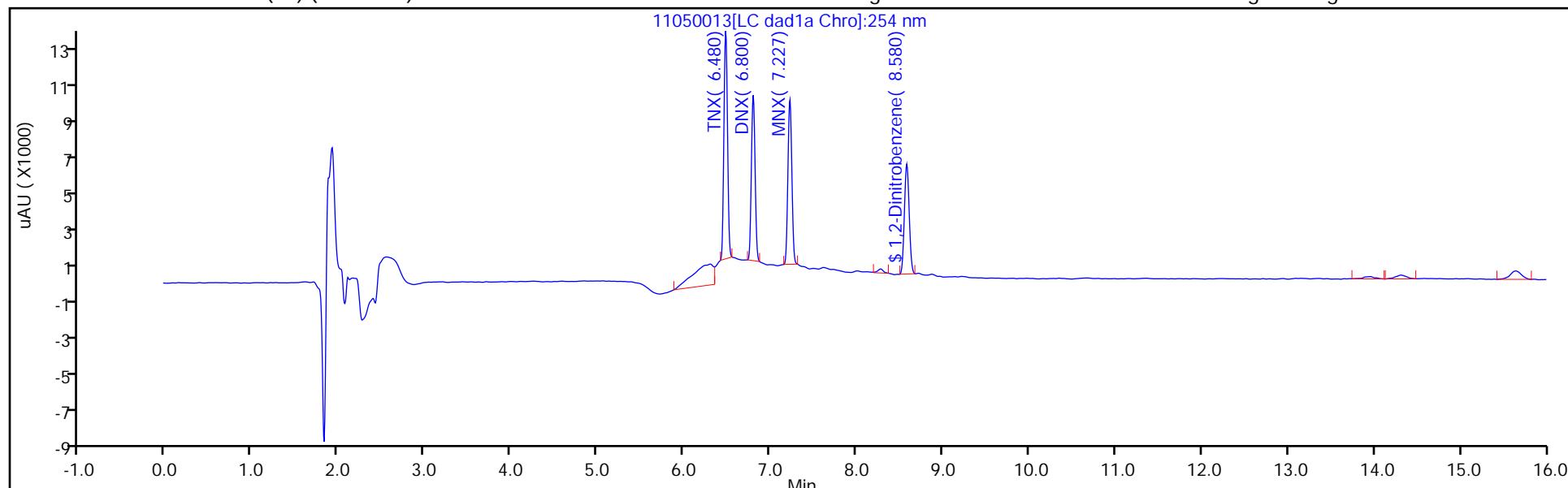
ALS Bottle#: 13

Method: 8330\_X3

Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver  
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\11050013.D  
 Lims ID: LCS 280-556180/3-A  
 Client ID:  
 Sample Type: LCS  
 Inject. Date: 05-Nov-2021 16:00:54 ALS Bottle#: 13 Worklist Smp#: 13  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: LCS 280-556180/3  
 Misc. Info.: 280-0106237-013  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Nov-2021 10:24:48 Calib Date: 27-Oct-2021 04:27:09  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211027-105955.b\1026T007.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1650

First Level Reviewer: zhangji Date: 05-Nov-2021 17:38:59

Compound	Amount Added	Amount Recovered	% Rec.
\$ 10 1,2-Dinitrobenzene	0.2000	0.1785	89.25

## Eurofins TestAmerica, Denver

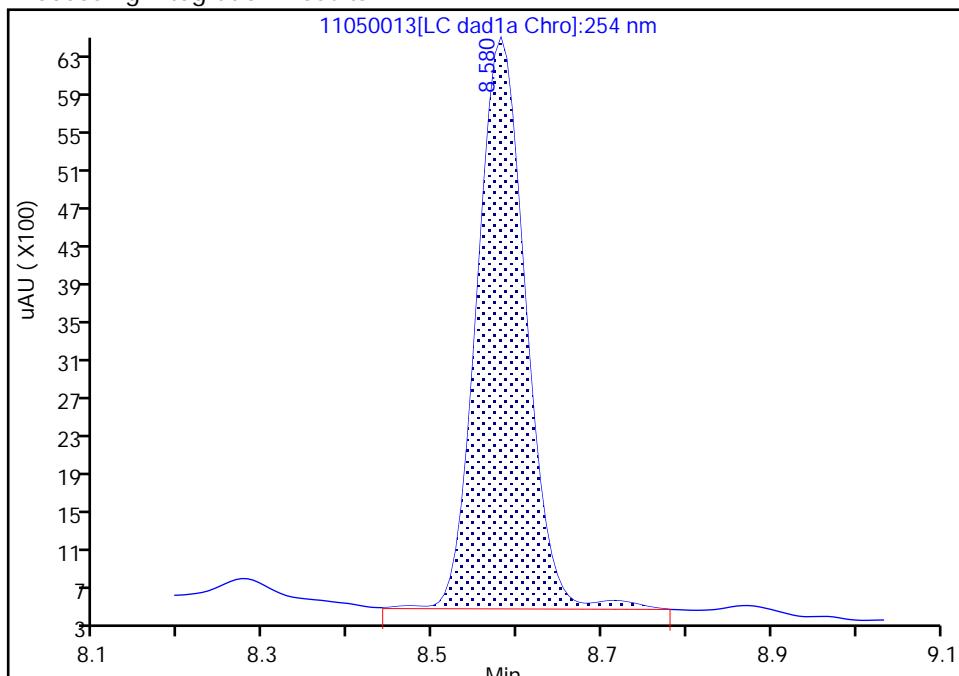
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 Injection Date: 05-Nov-2021 16:00:54 Instrument ID: CHHPLC\_X3  
 Lims ID: LCS 280-556180/3-A  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 13 Worklist Smp#: 13  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

## \$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

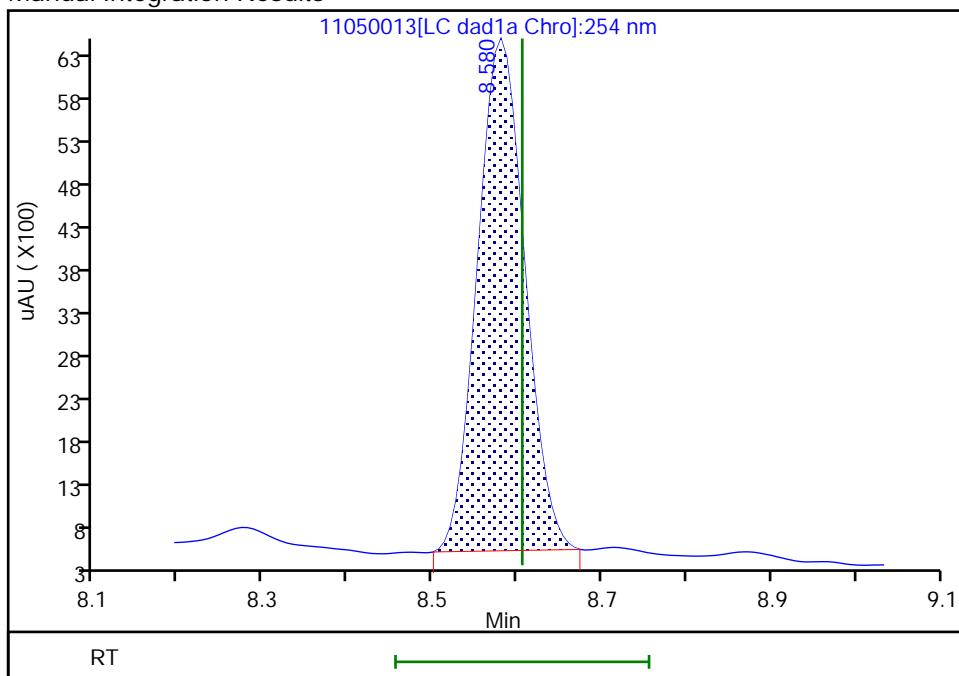
## Processing Integration Results

RT: 8.58  
 Area: 23823  
 Amount: 0.185802  
 Amount Units: ug/mL



## Manual Integration Results

RT: 8.58  
 Area: 22887  
 Amount: 0.178502  
 Amount Units: ug/mL



Reviewer: zhangji, 05-Nov-2021 17:38:57

Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Denver

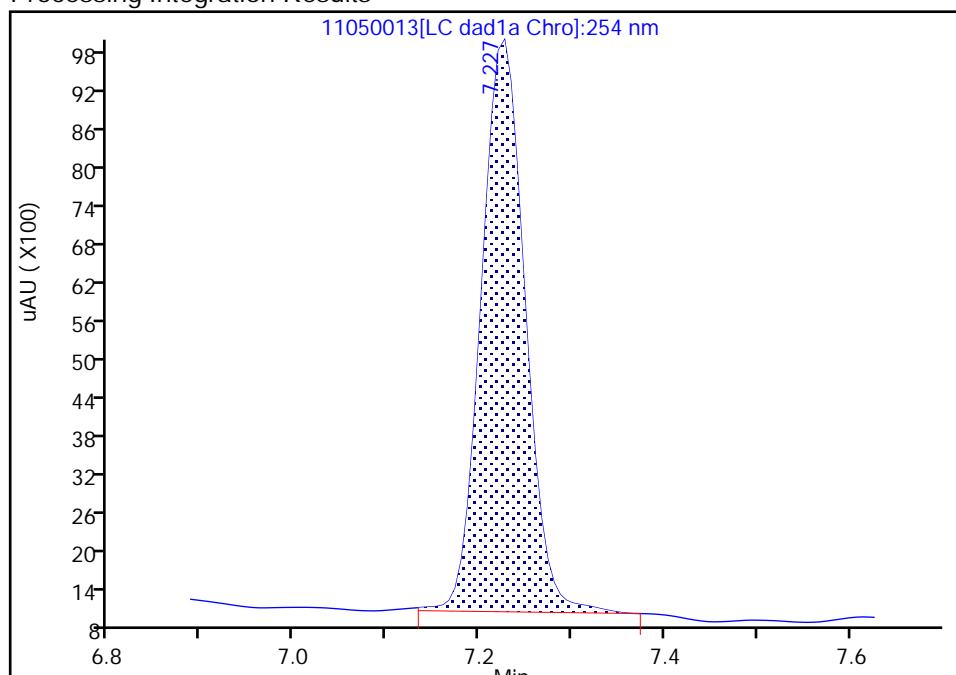
Data File: \\chromfs\denver\chromdata\chhplc\_x\20211105-106237.b\11050013.d  
 Injection Date: 05-Nov-2021 16:00:54 Instrument ID: CHHPLC\_X3  
 Lims ID: LCS 280-556180/3-A  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 13 Worklist Smp#: 13  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

**7 MNX, CAS: 5755-27-1**

Signal: 1

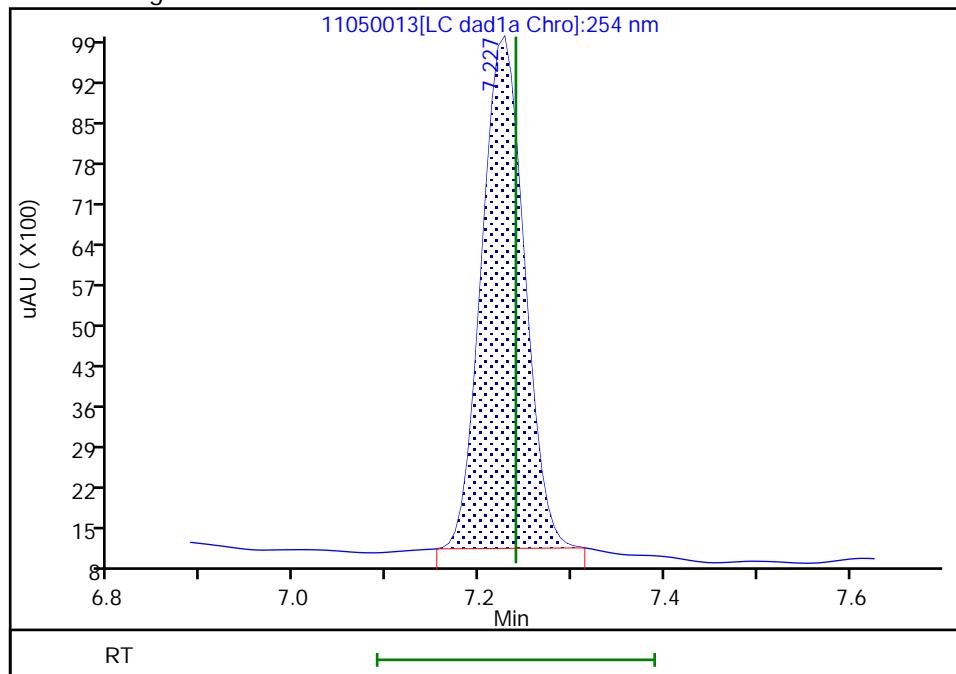
RT: 7.23  
 Area: 29311  
 Amount: 0.224880  
 Amount Units: ug/mL

## Processing Integration Results



RT: 7.23  
 Area: 28201  
 Amount: 0.216364  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 05-Nov-2021 17:38:53

Audit Action: Manually Integrated

Audit Reason: Baseline

FORM I  
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: NW062-7 MS Lab Sample ID: 280-155048-7 MS  
Matrix: Water Lab File ID: 11050037.D  
Analysis Method: 8330A Date Collected: 11/02/2021 12:50  
Extraction Method: 3535 Date Extracted: 11/04/2021 14:13  
Sample wt/vol: 489.4 (mL) Date Analyzed: 11/06/2021 01:11  
Con. Extract Vol.: 5 (mL) Dilution Factor: 1  
Injection Volume: 100 (uL) GC Column: UltraCarb5uODS ID: 4.6 (mm)  
% Moisture:  GPC Cleanup: (Y/N) N  
Analysis Batch No.: 556359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.10	M	0.21	0.20	0.086
99-65-0	1,3-Dinitrobenzene	1.99	M	0.11	0.10	0.038
118-96-7	2,4,6-Trinitrotoluene	2.03		0.11	0.10	0.046
121-14-2	2,4-Dinitrotoluene	1.96		0.10	0.082	0.028
606-20-2	2,6-Dinitrotoluene	1.99		0.10	0.082	0.041
35572-78-2	2-Amino-4,6-dinitrotoluene	1.90		0.11	0.10	0.052
88-72-2	2-Nitrotoluene	1.60		0.21	0.20	0.087
99-08-1	3-Nitrotoluene	1.51		0.41	0.41	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.85		0.15	0.12	0.059
99-99-0	4-Nitrotoluene	1.65		0.42	0.41	0.10
2691-41-0	HMX	2.09	M	0.21	0.20	0.089
98-95-3	Nitrobenzene	1.98	M	0.21	0.20	0.093
121-82-4	RDX	1.87	M	0.21	0.20	0.053
479-45-8	Tetryl	2.03		0.11	0.10	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	90	M	83-119

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\11050037.D  
 Lims ID: 280-155048-A-7-B MS  
 Client ID: NW062-7  
 Sample Type: MS  
 Inject. Date: 06-Nov-2021 01:11:16 ALS Bottle#: 37 Worklist Smp#: 37  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-155048-A-7-B  
 Misc. Info.: 280-0106237-037  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Nov-2021 10:24:58 Calib Date: 27-Oct-2021 04:27:09  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211027-105955.b\1026T007.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1650

First Level Reviewer: zhangji

Date: 06-Nov-2021 10:15:59

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.596	6.612	-0.016	17242	0.2000	0.2042	M
8 RDX	1	7.610	7.632	-0.022	19501	0.2000	0.1835	M
9 2,4,6-Trinitrophenol	1	7.976	8.019	-0.043	22412	0.2000	0.2709	M
\$ 10 1,2-Dinitrobenzene	1	8.576	8.606	-0.030	23015	0.2000	0.1795	M
11 1,3,5-Trinitrobenzene	1	8.696	8.726	-0.030	45385	0.2000	0.2060	M
12 1,3-Dinitrobenzene	1	9.330	9.365	-0.035	57653	0.2000	0.1946	M
13 Nitrobenzene	1	9.730	9.765	-0.035	37753	0.2000	0.1933	M
15 Tetryl	1	10.063	10.112	-0.049	34244	0.2000	0.1986	
16 Nitroglycerin	2	10.523	10.572	-0.049	131596	2.00	1.99	
17 2,4,6-Trinitrotoluene	1	10.976	11.025	-0.049	40986	0.2000	0.1989	
18 4-Amino-2,6-dinitrotoluene	1	11.183	11.239	-0.056	27720	0.2000	0.1815	
19 2-Amino-4,6-dinitrotoluene	1	11.436	11.499	-0.063	38507	0.2000	0.1861	
20 2,6-Dinitrotoluene	1	11.603	11.665	-0.062	27924	0.2000	0.1952	
21 2,4-Dinitrotoluene	1	11.776	11.832	-0.056	55195	0.2000	0.1923	
22 o-Nitrotoluene	1	12.650	12.712	-0.062	20156	0.2000	0.1570	
23 p-Nitrotoluene	1	13.083	13.152	-0.069	18035	0.2000	0.1612	
24 m-Nitrotoluene	1	13.663	13.745	-0.082	20981	0.2000	0.1475	
25 PETN	2	14.763	14.859	-0.096	149699	2.00	2.00	

**QC Flag Legend**

Processing Flags

Review Flags

M - Manually Integrated

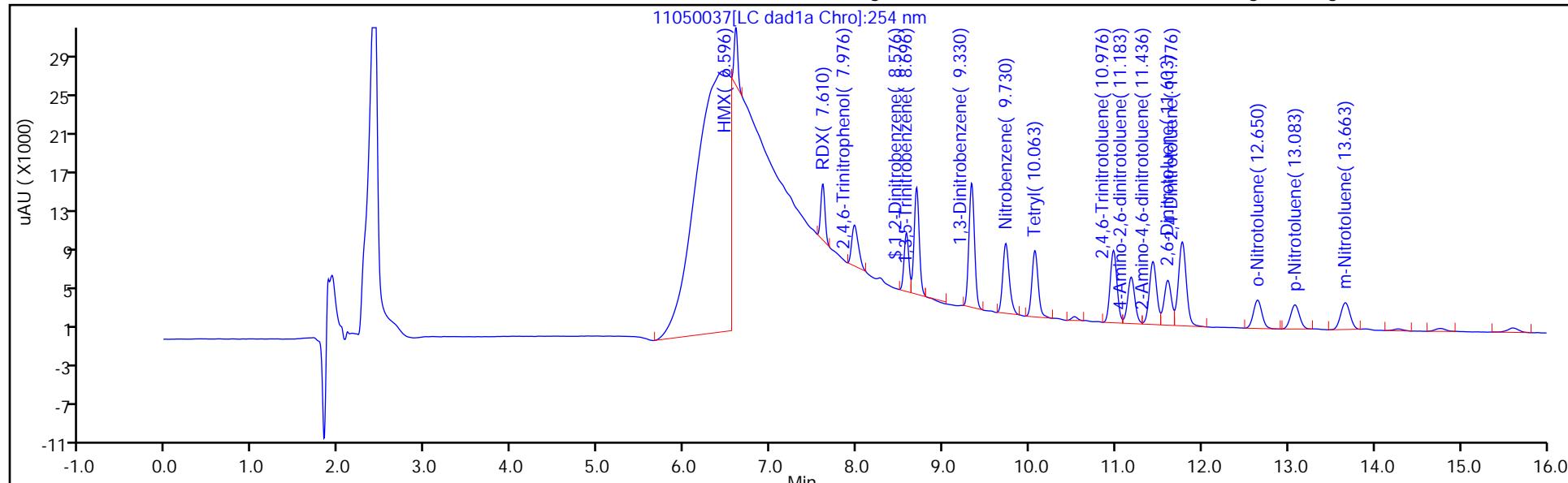
Report Date: 06-Nov-2021 10:24:59

Chrom Revision: 2.3 22-Sep-2021 15:38:46

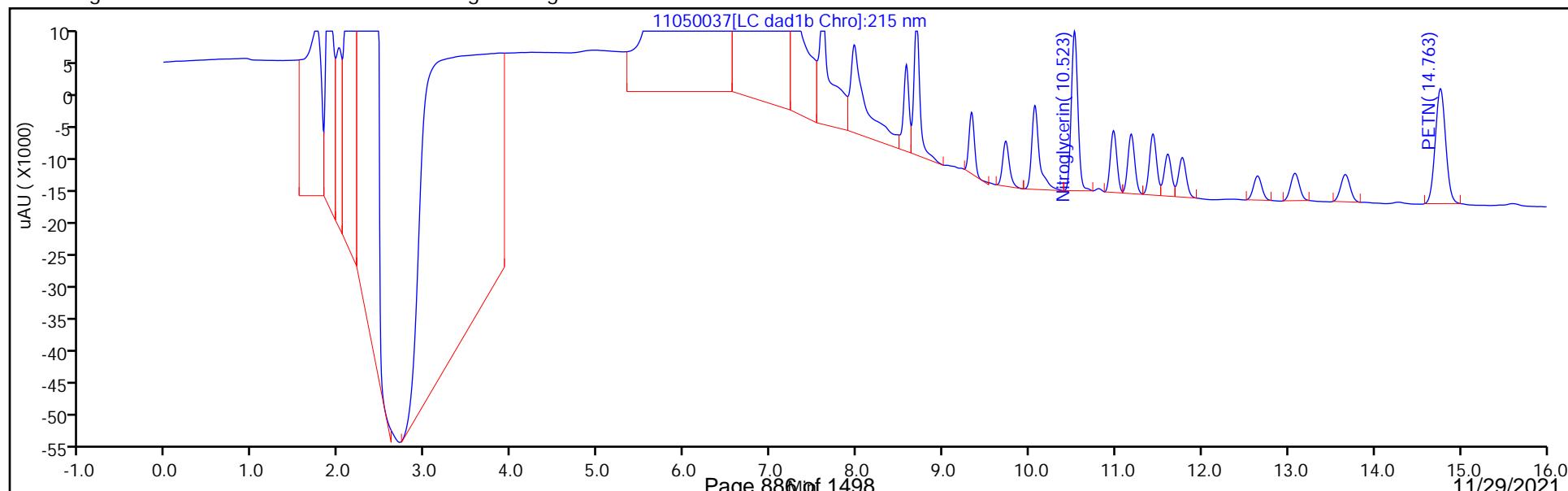
Eurofins TestAmerica, Denver

Data File: \\chromfs\\denver\\chromdata\\chhplc\_x\\20211105-106237.b\\11050037.d  
 Injection Date: 06-Nov-2021 01:11:16 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-155048-A-7-B MS Operator ID: JZ  
 Client ID: NW062-7 Worklist Smp#: 37  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000 ALS Bottle#: 37  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver  
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\11050037.D  
 Lims ID: 280-155048-A-7-B MS  
 Client ID: NW062-7  
 Sample Type: MS  
 Inject. Date: 06-Nov-2021 01:11:16 ALS Bottle#: 37 Worklist Smp#: 37  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-155048-A-7-B  
 Misc. Info.: 280-0106237-037  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Nov-2021 10:24:58 Calib Date: 27-Oct-2021 04:27:09  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211027-105955.b\1026T007.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 10:15:59

Compound	Amount Added	Amount Recovered	% Rec.
\$ 10 1,2-Dinitrobenzene	0.2000	0.1795	89.75

Eurofins TestAmerica, Denver

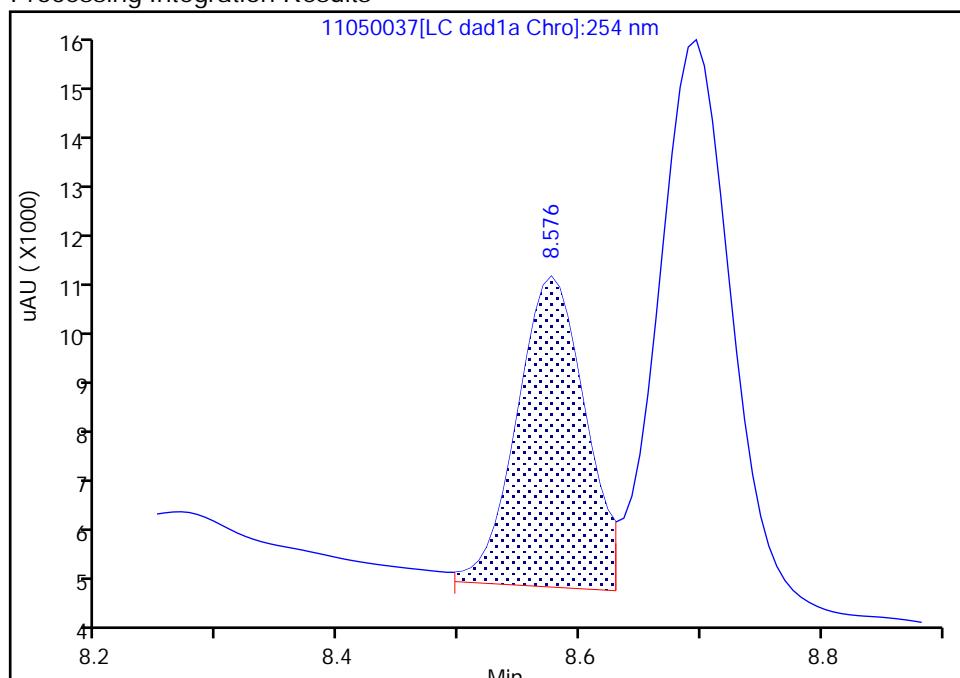
Data File: \\chromfs\denver\chromdata\chhplc\_x\20211105-106237.b\11050037.d  
 Injection Date: 06-Nov-2021 01:11:16 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-155048-A-7-B MS  
 Client ID: NW062-7  
 Operator ID: JZ ALS Bottle#: 37 Worklist Smp#: 37  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

## \$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

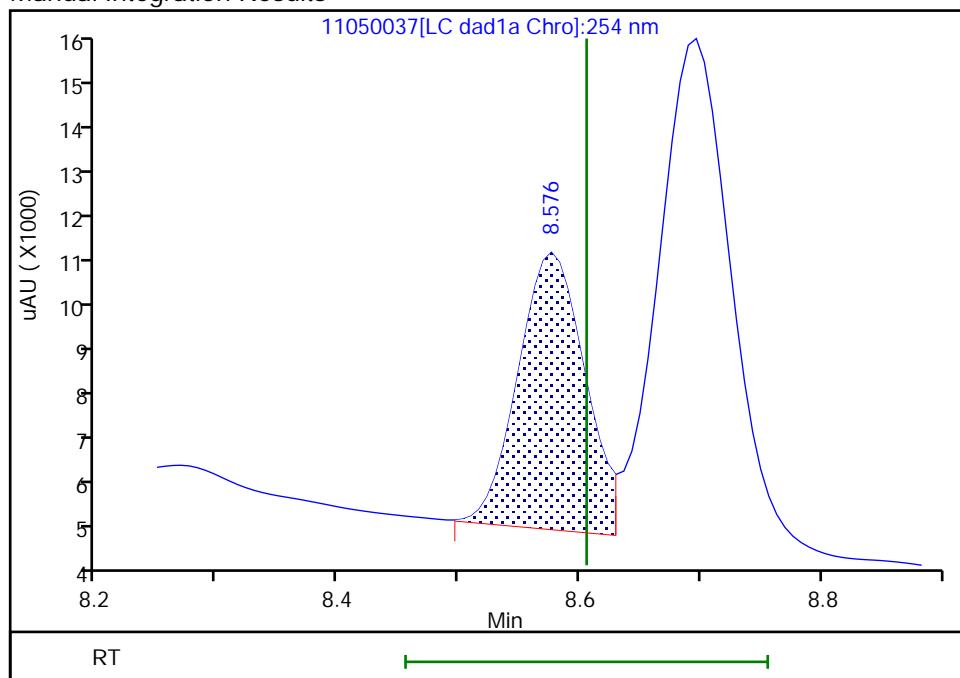
RT: 8.58  
 Area: 23751  
 Amount: 0.185240  
 Amount Units: ug/mL

## Processing Integration Results



RT: 8.58  
 Area: 23015  
 Amount: 0.179500  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 06-Nov-2021 10:15:32

Audit Action: Assigned New Baseline

Audit Reason: Baseline

## Eurofins TestAmerica, Denver

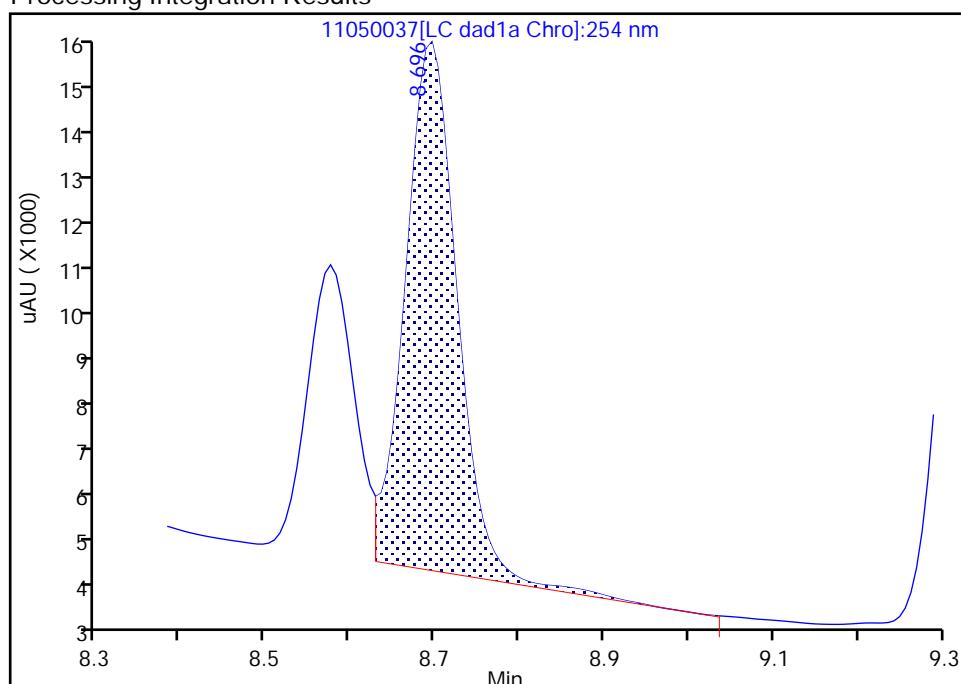
Data File: \\chromfs\denver\chromdata\chhplc\_x\20211105-106237.b\11050037.d  
 Injection Date: 06-Nov-2021 01:11:16 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-155048-A-7-B MS  
 Client ID: NW062-7  
 Operator ID: JZ ALS Bottle#: 37 Worklist Smp#: 37  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

## 11 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

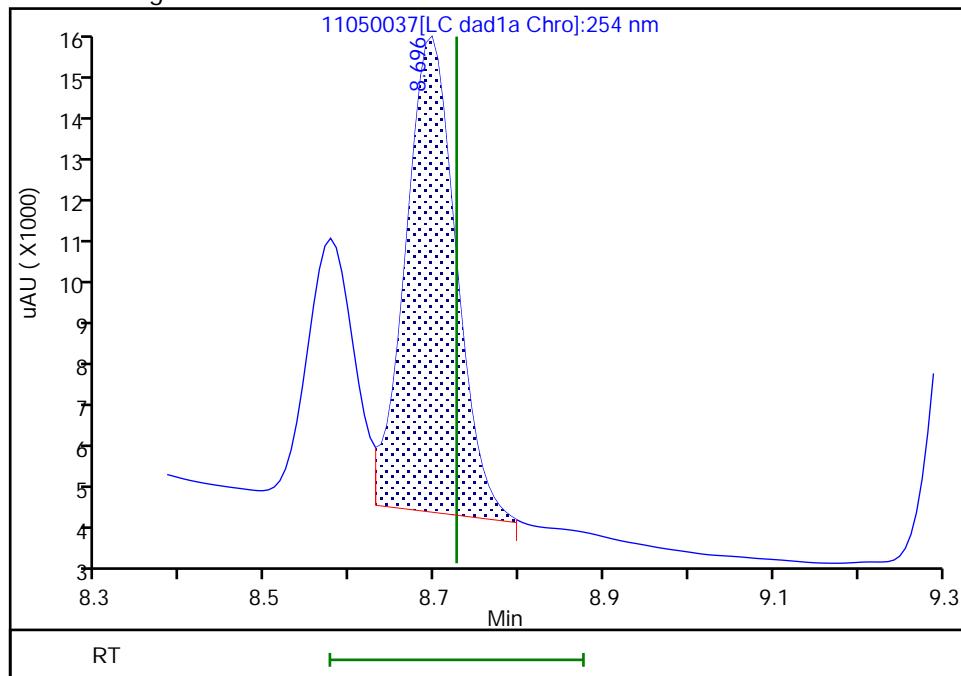
RT: 8.70  
 Area: 46763  
 Amount: 0.212253  
 Amount Units: ug/mL

## Processing Integration Results



RT: 8.70  
 Area: 45385  
 Amount: 0.205998  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 06-Nov-2021 10:15:35

Audit Action: Split an Integrated Peak

Audit Reason: Baseline

## Eurofins TestAmerica, Denver

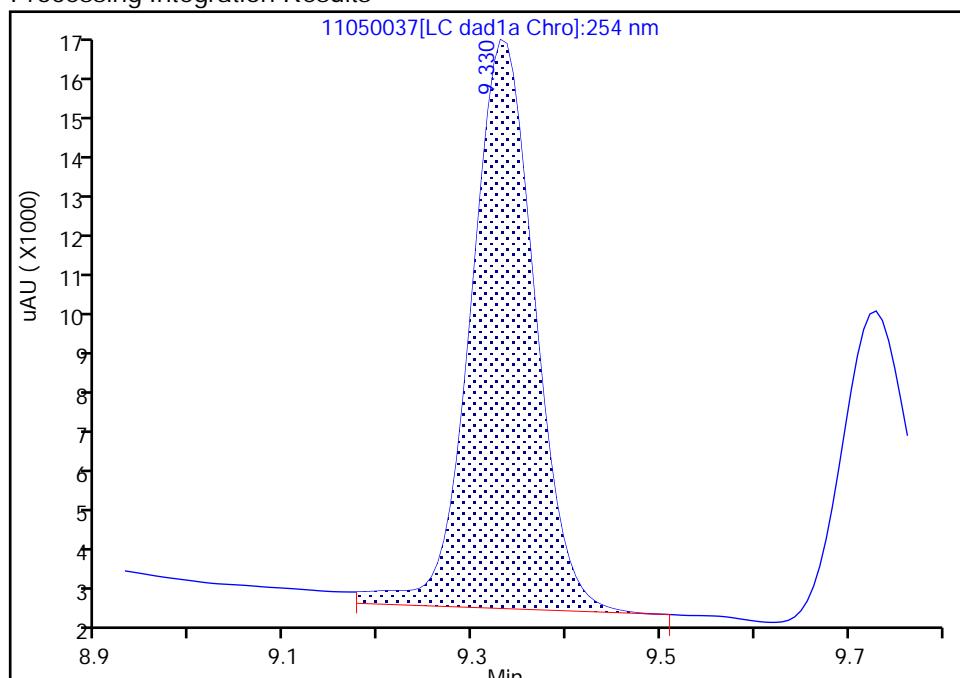
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 Injection Date: 06-Nov-2021 01:11:16 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-155048-A-7-B MS  
 Client ID: NW062-7  
 Operator ID: JZ ALS Bottle#: 37 Worklist Smp#: 37  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

**12 1,3-Dinitrobenzene, CAS: 99-65-0**

Signal: 1

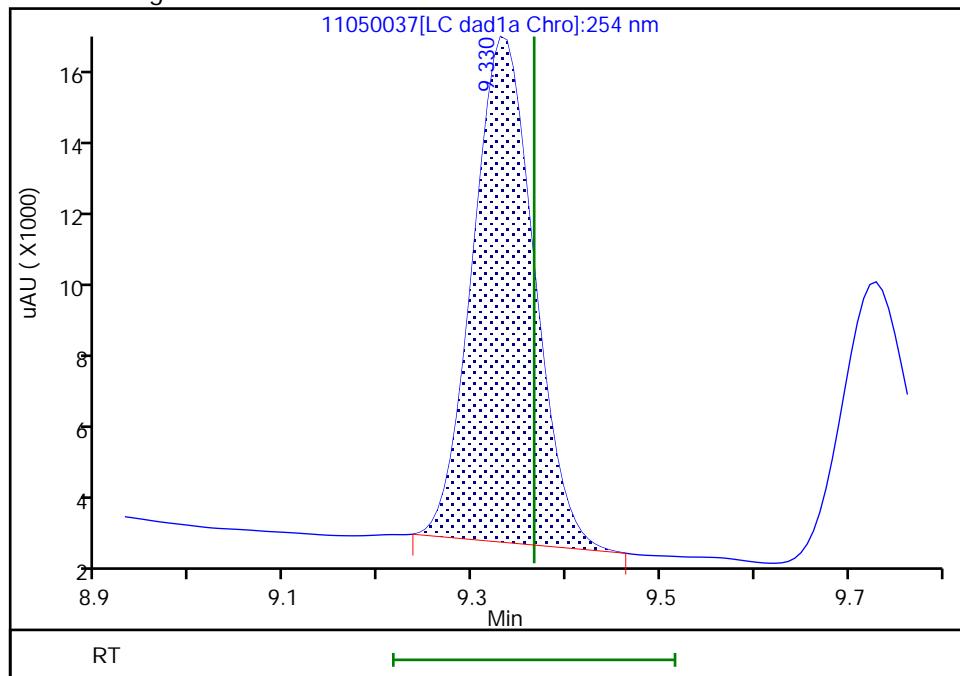
RT: 9.33  
 Area: 61325  
 Amount: 0.206949  
 Amount Units: ug/mL

## Processing Integration Results



RT: 9.33  
 Area: 57653  
 Amount: 0.194557  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 06-Nov-2021 10:15:46

Audit Action: Manually Integrated

Audit Reason: Baseline

## Eurofins TestAmerica, Denver

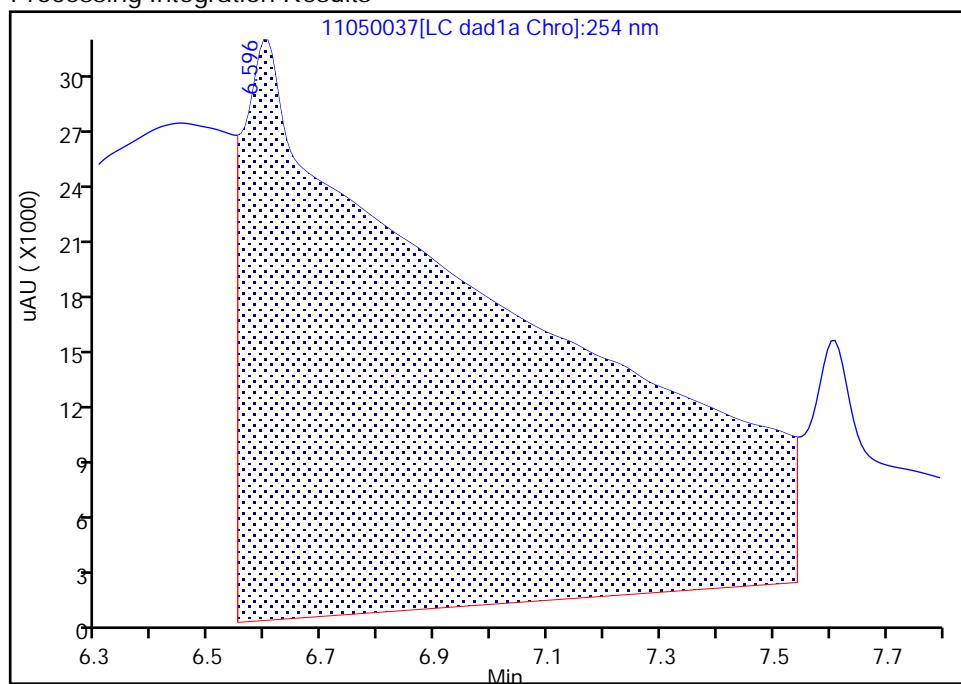
Data File: \\chromfs\denver\chromdata\chhplc\_x\20211105-106237.b\11050037.d  
 Injection Date: 06-Nov-2021 01:11:16 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-155048-A-7-B MS  
 Client ID: NW062-7  
 Operator ID: JZ ALS Bottle#: 37 Worklist Smp#: 37  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

**4 HMX, CAS: 2691-41-0**

Signal: 1

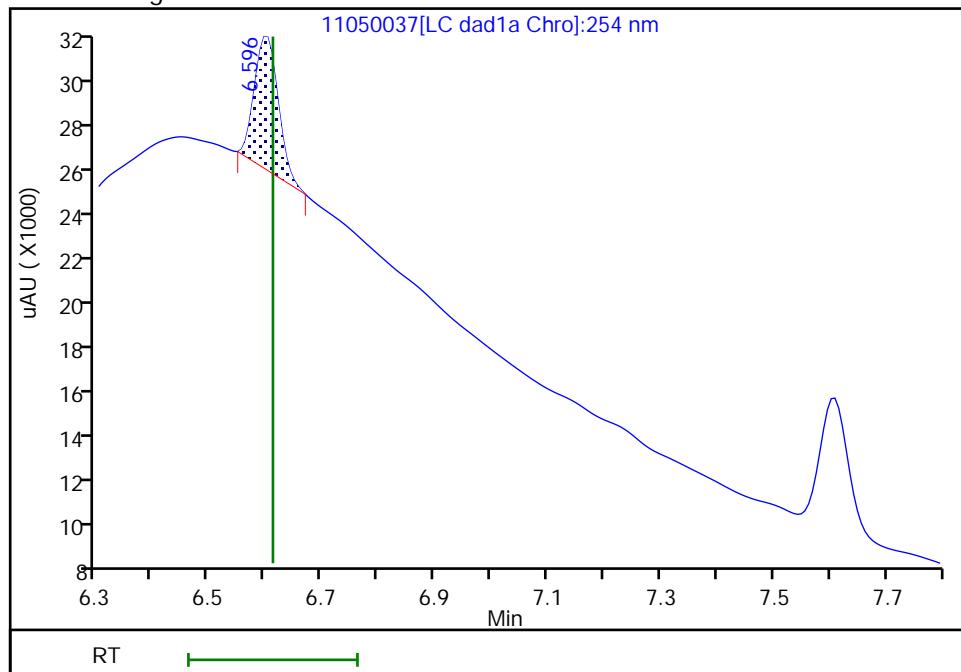
RT: 6.60  
 Area: 970910  
 Amount: 11.500752  
 Amount Units: ug/mL

## Processing Integration Results



RT: 6.60  
 Area: 17242  
 Amount: 0.204237  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 06-Nov-2021 10:15:16

Audit Action: Manually Integrated

Audit Reason: Baseline

## Eurofins TestAmerica, Denver

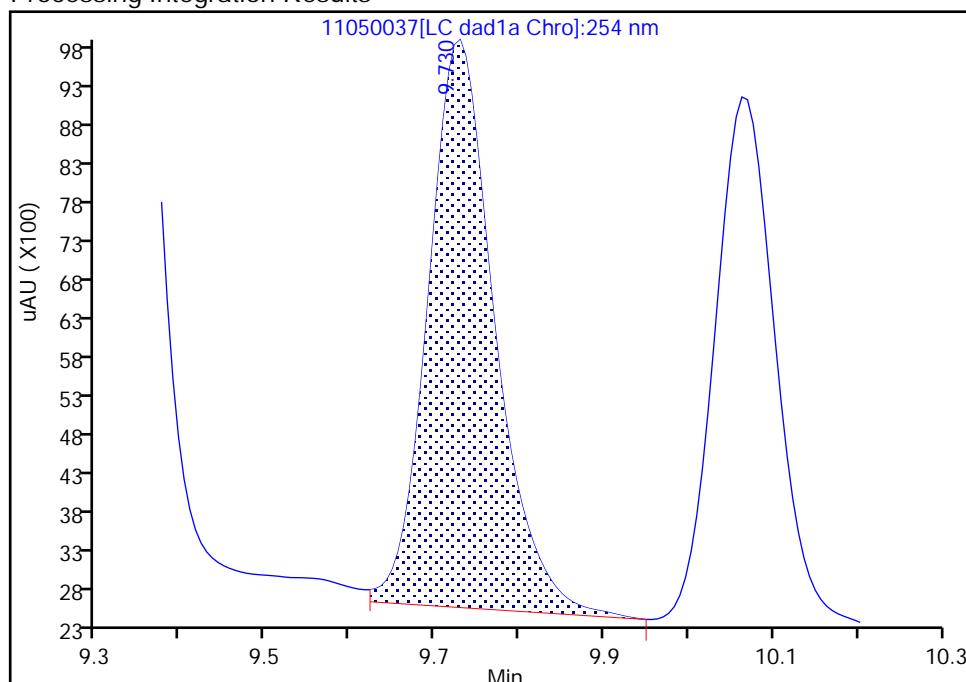
Data File: \\chromfs\denver\chromdata\chhplc\_x\20211105-106237.b\11050037.d  
 Injection Date: 06-Nov-2021 01:11:16 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-155048-A-7-B MS  
 Client ID: NW062-7  
 Operator ID: JZ ALS Bottle#: 37 Worklist Smp#: 37  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

**13 Nitrobenzene, CAS: 98-95-3**

Signal: 1

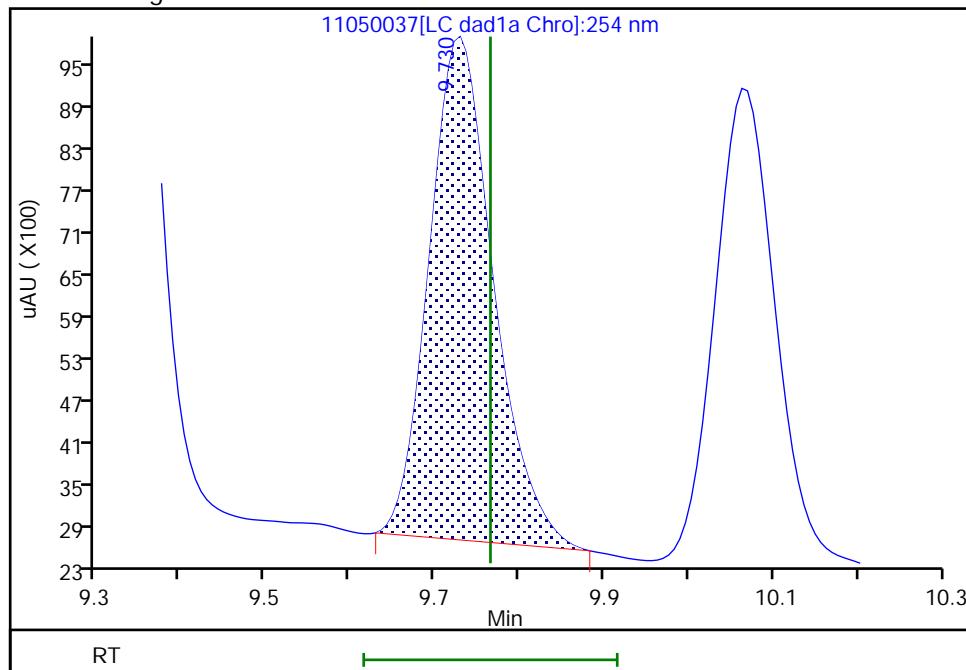
RT: 9.73  
 Area: 39997  
 Amount: 0.204812  
 Amount Units: ug/mL

## Processing Integration Results



RT: 9.73  
 Area: 37753  
 Amount: 0.193322  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 06-Nov-2021 10:15:51

Audit Action: Manually Integrated

Audit Reason: Baseline

## Eurofins TestAmerica, Denver

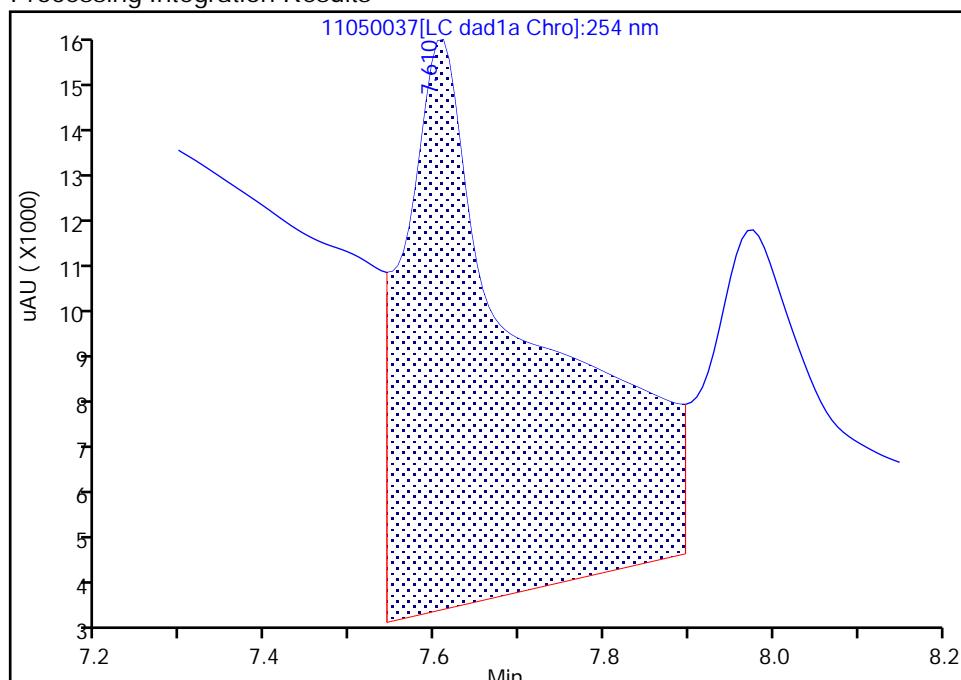
Data File: \\chromfs\denver\chromdata\chhplc\_x\20211105-106237.b\11050037.d  
 Injection Date: 06-Nov-2021 01:11:16 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-155048-A-7-B MS  
 Client ID: NW062-7  
 Operator ID: JZ ALS Bottle#: 37 Worklist Smp#: 37  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

## 8 RDX, CAS: 121-82-4

Signal: 1

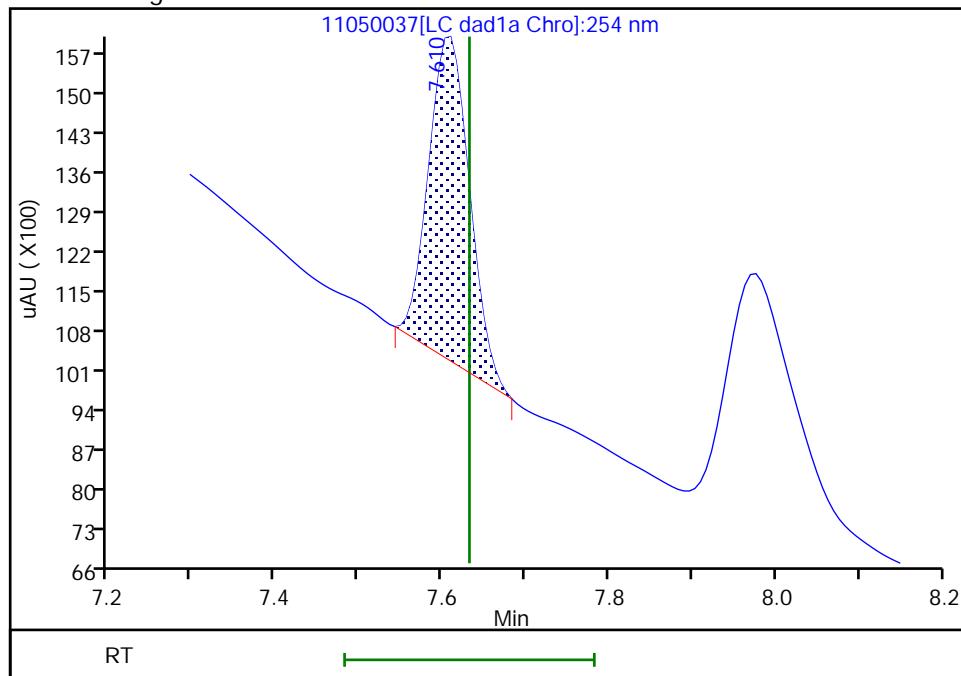
RT: 7.61  
 Area: 134819  
 Amount: 1.268748  
 Amount Units: ug/mL

## Processing Integration Results



RT: 7.61  
 Area: 19501  
 Amount: 0.183519  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 06-Nov-2021 10:15:21

Audit Action: Manually Integrated

Audit Reason: Baseline

FORM I  
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: NW062-7 MS Lab Sample ID: 280-155048-7 MS  
Matrix: Water Lab File ID: 11050039.D  
Analysis Method: 8330A Date Collected: 11/02/2021 12:50  
Extraction Method: 3535 Date Extracted: 11/04/2021 14:13  
Sample wt/vol: 493.6 (mL) Date Analyzed: 11/06/2021 01:57  
Con. Extract Vol.: 5 (mL) Dilution Factor: 1  
Injection Volume: 100 (uL) GC Column: UltraCarb5uODS ID: 4.6 (mm)  
% Moisture: \_\_\_\_\_ GPC Cleanup: (Y/N) N  
Analysis Batch No.: 556359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
5755-27-1	MNX	2.29	M	2.0	0.41	0.16

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	93	M	83-119

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\11050039.D  
 Lims ID: 280-155048-B-7-A MS  
 Client ID: NW062-7  
 Sample Type: MS  
 Inject. Date: 06-Nov-2021 01:57:03 ALS Bottle#: 39 Worklist Smp#: 39  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-155048-B-7-A  
 Misc. Info.: 280-0106237-039  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Nov-2021 10:24:58 Calib Date: 27-Oct-2021 04:27:09  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211027-105955.b\1026T007.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 10:17:03

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.480	6.493	-0.013	37065	0.2002	0.1995	M
6 DNX	1	6.800	6.813	-0.013	26545	0.2002	0.1868	M
7 MNX	1	7.220	7.239	-0.019	29402	0.2334	0.2256	M
\$ 10 1,2-Dinitrobenzene	1	8.573	8.606	-0.033	23841	0.2000	0.1859	M

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Report Date: 06-Nov-2021 10:25:00

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\\denver\\chromdata\\chhplc\_x\\20211105-106237.b\\11050039.d

Injection Date: 06-Nov-2021 01:57:03

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: 280-155048-B-7-A MS

Worklist Smp#: 39

Client ID: NW062-7

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

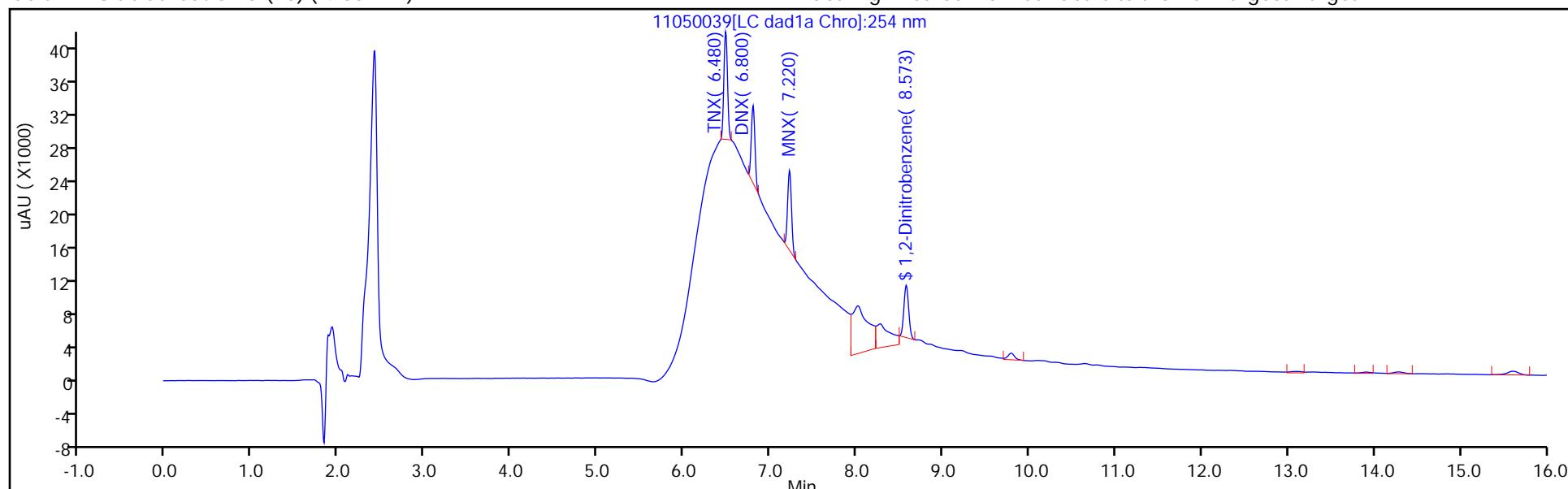
ALS Bottle#: 39

Method: 8330\_X3

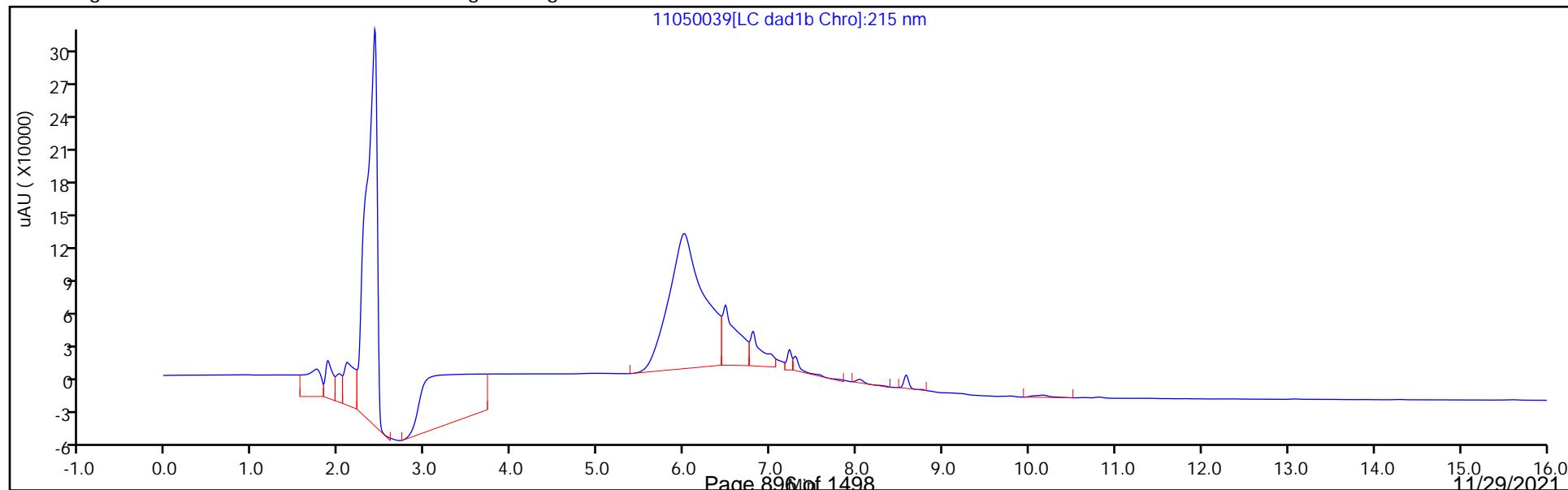
Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver  
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\11050039.D  
 Lims ID: 280-155048-B-7-A MS  
 Client ID: NW062-7  
 Sample Type: MS  
 Inject. Date: 06-Nov-2021 01:57:03 ALS Bottle#: 39 Worklist Smp#: 39  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-155048-B-7-A  
 Misc. Info.: 280-0106237-039  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Nov-2021 10:24:58 Calib Date: 27-Oct-2021 04:27:09  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211027-105955.b\1026T007.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 10:17:03

Compound	Amount Added	Amount Recovered	% Rec.
\$ 10 1,2-Dinitrobenzene	0.2000	0.1859	92.97

## Eurofins TestAmerica, Denver

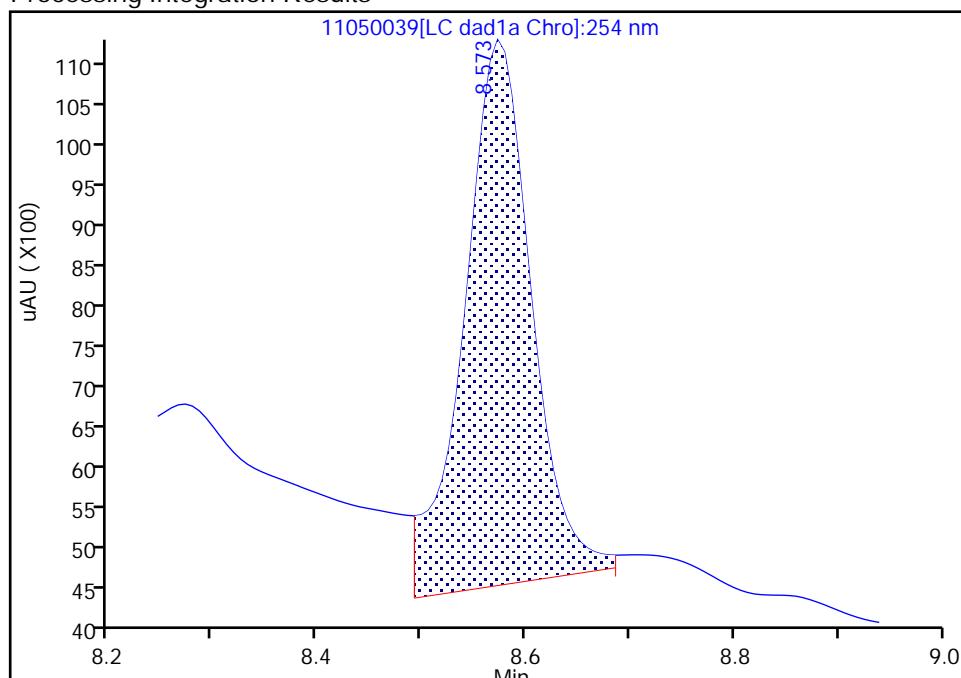
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 Injection Date: 06-Nov-2021 01:57:03 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-155048-B-7-A MS  
 Client ID: NW062-7  
 Operator ID: JZ ALS Bottle#: 39 Worklist Smp#: 39  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

## \$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

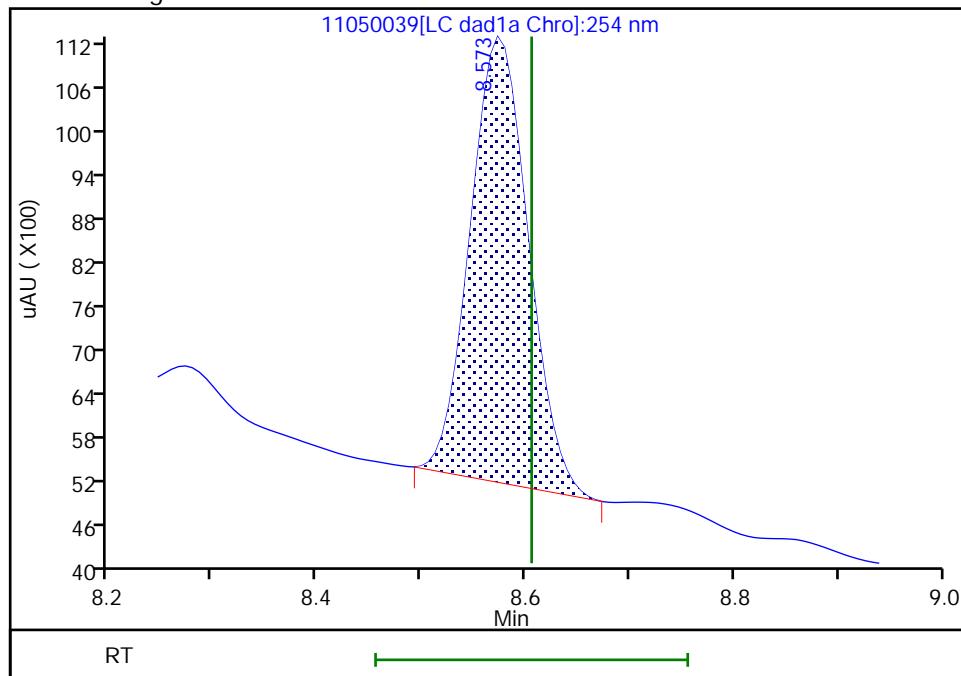
RT: 8.57  
 Area: 30597  
 Amount: 0.238634  
 Amount Units: ug/mL

## Processing Integration Results



RT: 8.57  
 Area: 23841  
 Amount: 0.185942  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 06-Nov-2021 10:17:02

Audit Action: Manually Integrated

Audit Reason: Baseline

## Eurofins TestAmerica, Denver

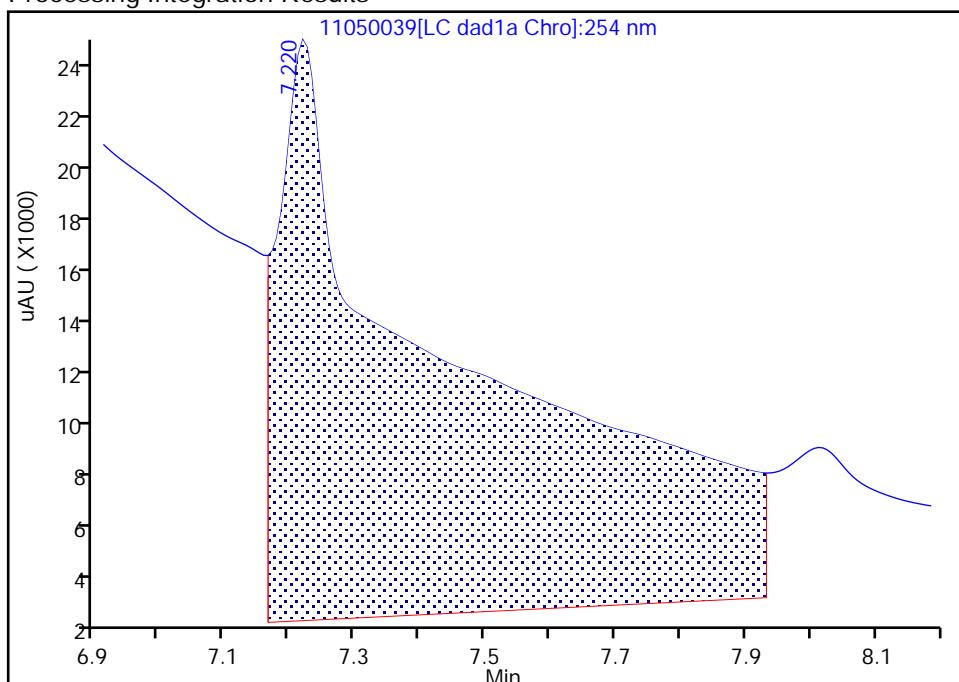
Data File: \\chromfs\denver\chromdata\chhplc\_x\20211105-106237.b\11050039.d  
 Injection Date: 06-Nov-2021 01:57:03 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-155048-B-7-A MS  
 Client ID: NW062-7  
 Operator ID: JZ ALS Bottle#: 39 Worklist Smp#: 39  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

7 MNX, CAS: 5755-27-1

Signal: 1

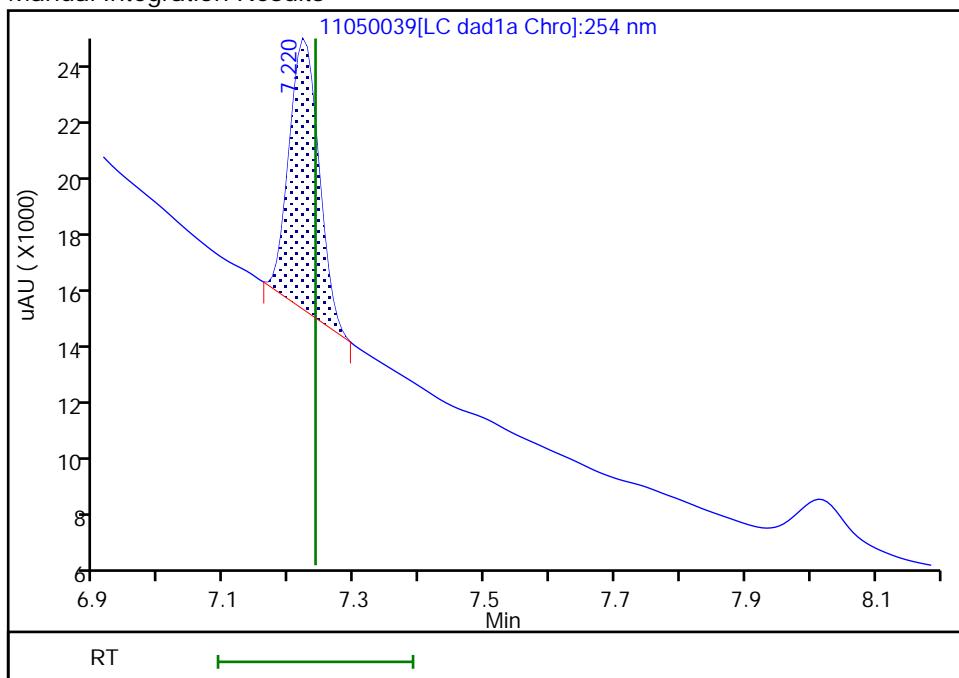
RT: 7.22  
 Area: 437167  
 Amount: 3.354042  
 Amount Units: ug/mL

## Processing Integration Results



## Manual Integration Results

RT: 7.22  
 Area: 29402  
 Amount: 0.225579  
 Amount Units: ug/mL



Reviewer: zhangji, 06-Nov-2021 10:16:57

Audit Action: Manually Integrated

Audit Reason: Baseline

FORM I  
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: G0070-7 MS Lab Sample ID: 280-155048-8 MS  
Matrix: Water Lab File ID: 11050044.D  
Analysis Method: 8330A Date Collected: 11/01/2021 14:25  
Extraction Method: 3535 Date Extracted: 11/04/2021 14:13  
Sample wt/vol: 492.5 (mL) Date Analyzed: 11/06/2021 03:51  
Con. Extract Vol.: 5 (mL) Dilution Factor: 1  
Injection Volume: 100 (uL) GC Column: UltraCarb5uODS ID: 4.6 (mm)  
% Moisture:                    GPC Cleanup: (Y/N) N  
Analysis Batch No.: 556359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.03		0.21	0.20	0.085
99-65-0	1,3-Dinitrobenzene	1.99		0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	1.99		0.11	0.10	0.046
121-14-2	2,4-Dinitrotoluene	1.87		0.10	0.081	0.028
606-20-2	2,6-Dinitrotoluene	1.92		0.10	0.081	0.041
35572-78-2	2-Amino-4,6-dinitrotoluene	1.81		0.11	0.10	0.051
88-72-2	2-Nitrotoluene	1.50		0.21	0.20	0.087
99-08-1	3-Nitrotoluene	1.58		0.41	0.41	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.76		0.15	0.12	0.059
99-99-0	4-Nitrotoluene	1.63		0.42	0.41	0.10
2691-41-0	HMX	2.02	M	0.21	0.20	0.089
98-95-3	Nitrobenzene	1.86		0.21	0.20	0.092
121-82-4	RDX	1.92	M	0.21	0.20	0.052
479-45-8	Tetryl	1.96		0.11	0.10	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	89		83-119

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\11050044.D  
 Lims ID: 280-155048-A-8-B MS  
 Client ID: G0070-7  
 Sample Type: MS  
 Inject. Date: 06-Nov-2021 03:51:41 ALS Bottle#: 44 Worklist Smp#: 44  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-155048-A-8-B  
 Misc. Info.: 280-0106237-044  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Nov-2021 10:25:01 Calib Date: 27-Oct-2021 04:27:09  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211027-105955.b\1026T007.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 10:18:23

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	6.612	-0.011	16770	0.2000	0.1986	M
8 RDX	1	7.608	7.632	-0.024	20072	0.2000	0.1889	M
9 2,4,6-Trinitrophenol	1	7.988	8.019	-0.031	29095	0.2000	0.3517	M
\$ 10 1,2-Dinitrobenzene	1	8.574	8.606	-0.032	22729	0.2000	0.1773	
11 1,3,5-Trinitrobenzene	1	8.694	8.726	-0.032	43998	0.2000	0.1997	
12 1,3-Dinitrobenzene	1	9.328	9.365	-0.037	58100	0.2000	0.1961	
13 Nitrobenzene	1	9.728	9.765	-0.037	35865	0.2000	0.1837	
15 Tetryl	1	10.068	10.112	-0.044	33263	0.2000	0.1929	
16 Nitroglycerin	2	10.521	10.572	-0.051	137937	2.00	2.09	
17 2,4,6-Trinitrotoluene	1	10.974	11.025	-0.051	40453	0.2000	0.1963	
18 4-Amino-2,6-dinitrotoluene	1	11.181	11.239	-0.058	26450	0.2000	0.1731	
19 2-Amino-4,6-dinitrotoluene	1	11.434	11.499	-0.065	36981	0.2000	0.1787	
20 2,6-Dinitrotoluene	1	11.601	11.665	-0.064	27014	0.2000	0.1888	
21 2,4-Dinitrotoluene	1	11.768	11.832	-0.064	52832	0.2000	0.1841	
22 o-Nitrotoluene	1	12.641	12.712	-0.071	18933	0.2000	0.1475	
23 p-Nitrotoluene	1	13.074	13.152	-0.078	17944	0.2000	0.1603	
24 m-Nitrotoluene	1	13.661	13.745	-0.084	22182	0.2000	0.1559	
25 PETN	2	14.761	14.859	-0.098	147854	2.00	1.98	

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

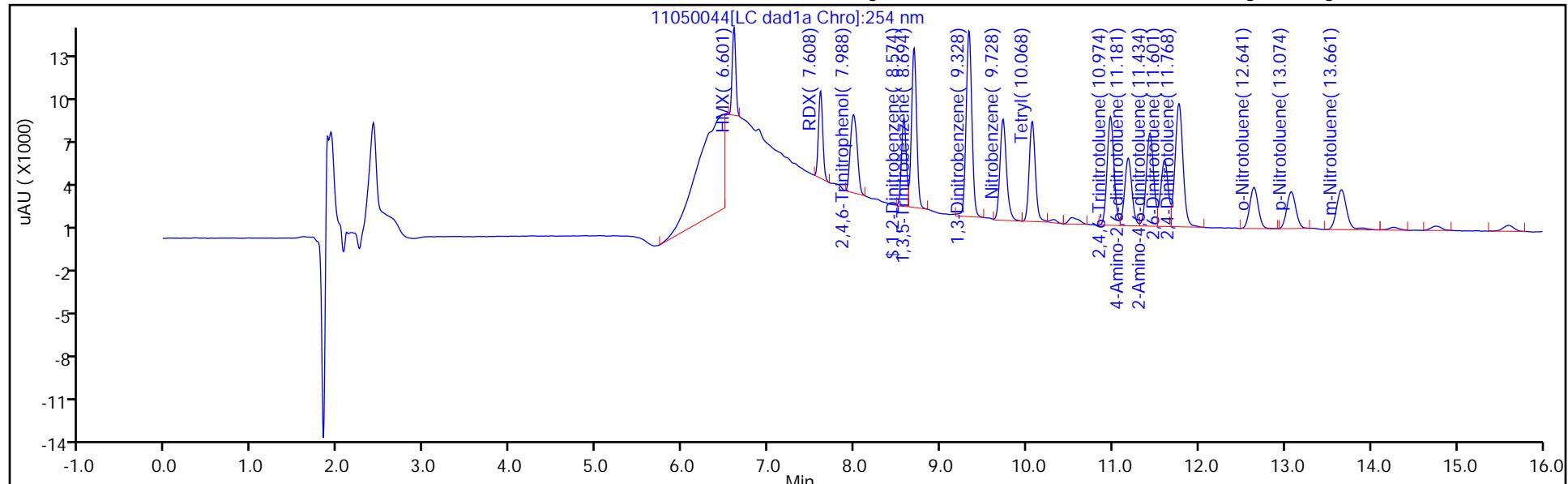
Report Date: 06-Nov-2021 10:25:02

Chrom Revision: 2.3 22-Sep-2021 15:38:46

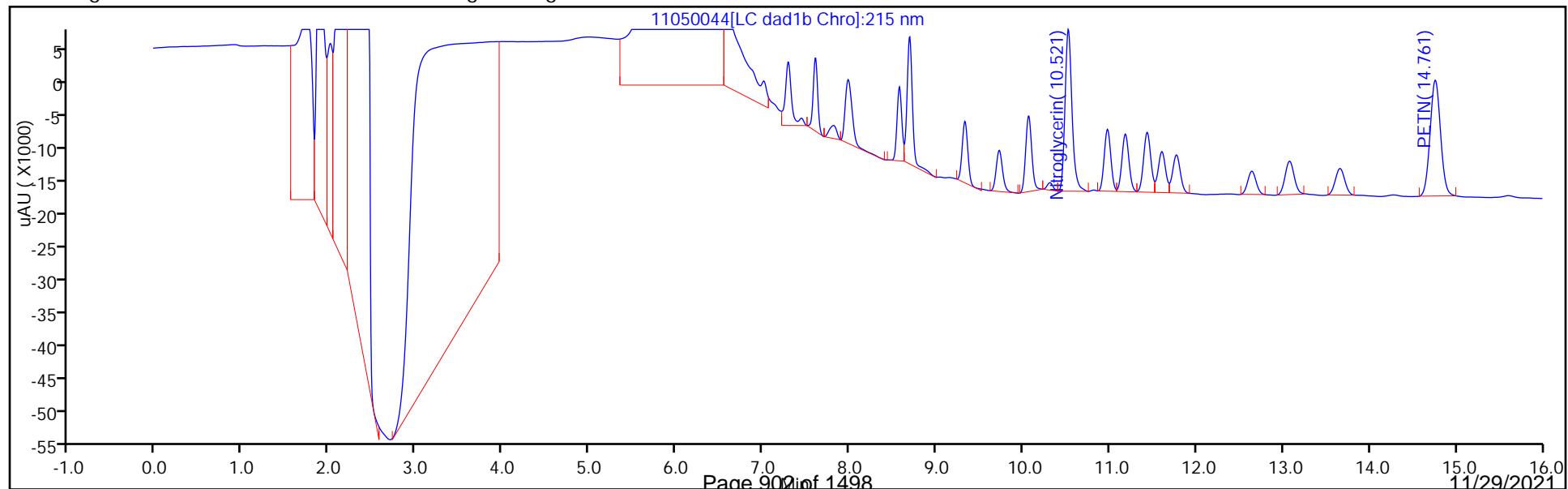
Eurofins TestAmerica, Denver

Data File: \\chromfs\\denver\\chromdata\\chhplc\_x\\20211105-106237.b\\11050044.d  
 Injection Date: 06-Nov-2021 03:51:41 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-155048-A-8-B MS Operator ID: JZ  
 Client ID: G0070-7 Worklist Smp#: 44  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000 ALS Bottle#: 44  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver  
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\11050044.D  
 Lims ID: 280-155048-A-8-B MS  
 Client ID: G0070-7  
 Sample Type: MS  
 Inject. Date: 06-Nov-2021 03:51:41 ALS Bottle#: 44 Worklist Smp#: 44  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-155048-A-8-B  
 Misc. Info.: 280-0106237-044  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Nov-2021 10:25:01 Calib Date: 27-Oct-2021 04:27:09  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211027-105955.b\1026T007.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 10:18:23

Compound	Amount Added	Amount Recovered	% Rec.
\$ 10 1,2-Dinitrobenzene	0.2000	0.1773	88.63

## Eurofins TestAmerica, Denver

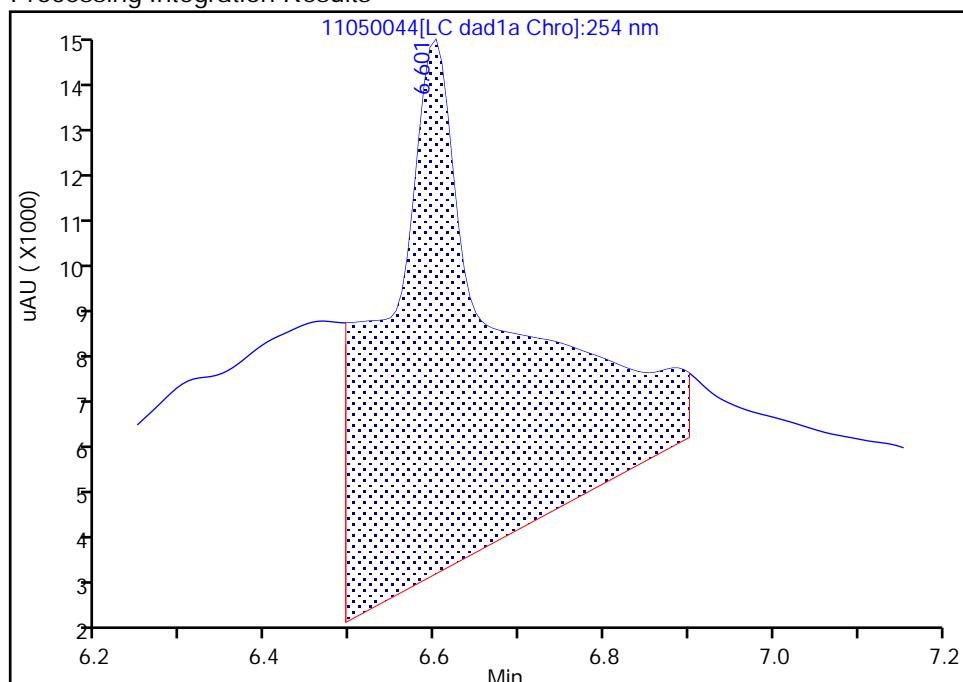
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 Injection Date: 06-Nov-2021 03:51:41 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-155048-A-8-B MS  
 Client ID: G0070-7  
 Operator ID: JZ ALS Bottle#: 44 Worklist Smp#: 44  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

## 4 HMX, CAS: 2691-41-0

Signal: 1

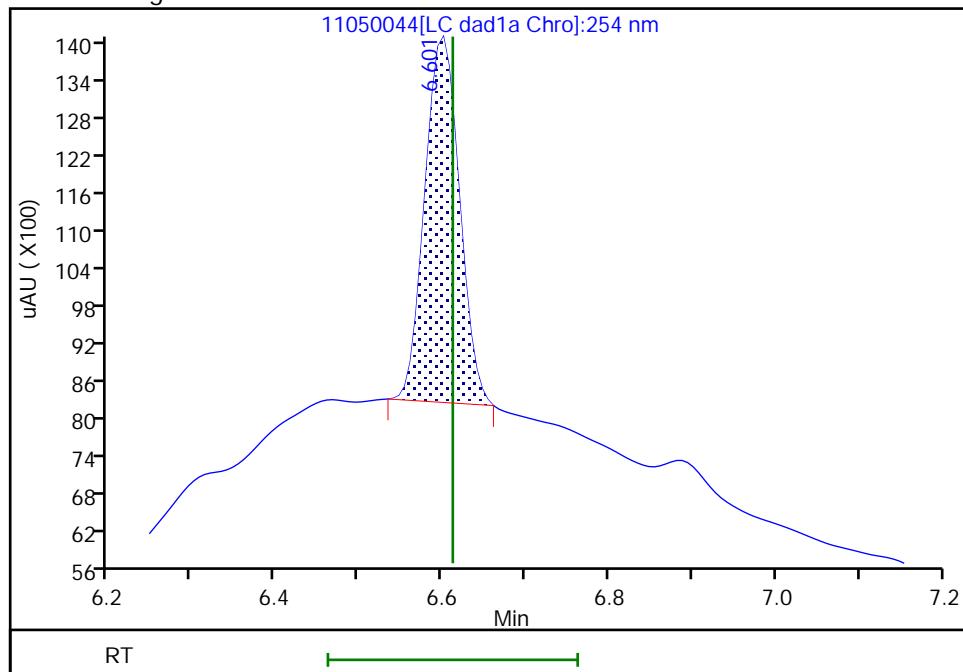
RT: 6.60  
 Area: 111833  
 Amount: 1.324699  
 Amount Units: ug/mL

## Processing Integration Results



RT: 6.60  
 Area: 16770  
 Amount: 0.198646  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 06-Nov-2021 10:18:07

Audit Action: Manually Integrated

Audit Reason: Baseline

## Eurofins TestAmerica, Denver

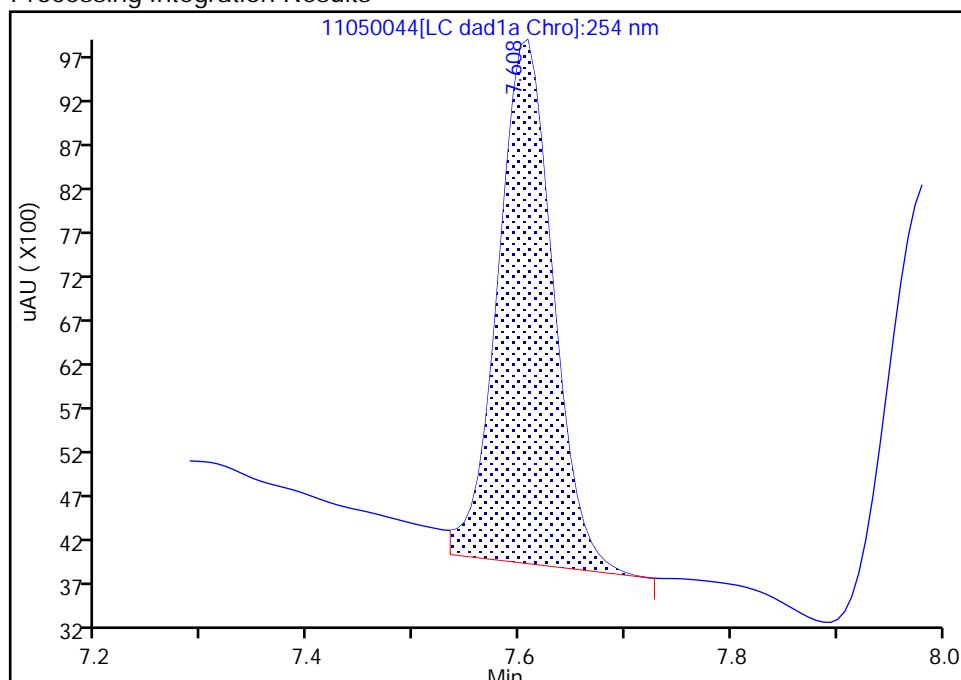
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 Injection Date: 06-Nov-2021 03:51:41 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-155048-A-8-B MS  
 Client ID: G0070-7  
 Operator ID: JZ ALS Bottle#: 44 Worklist Smp#: 44  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

**8 RDX, CAS: 121-82-4**

Signal: 1

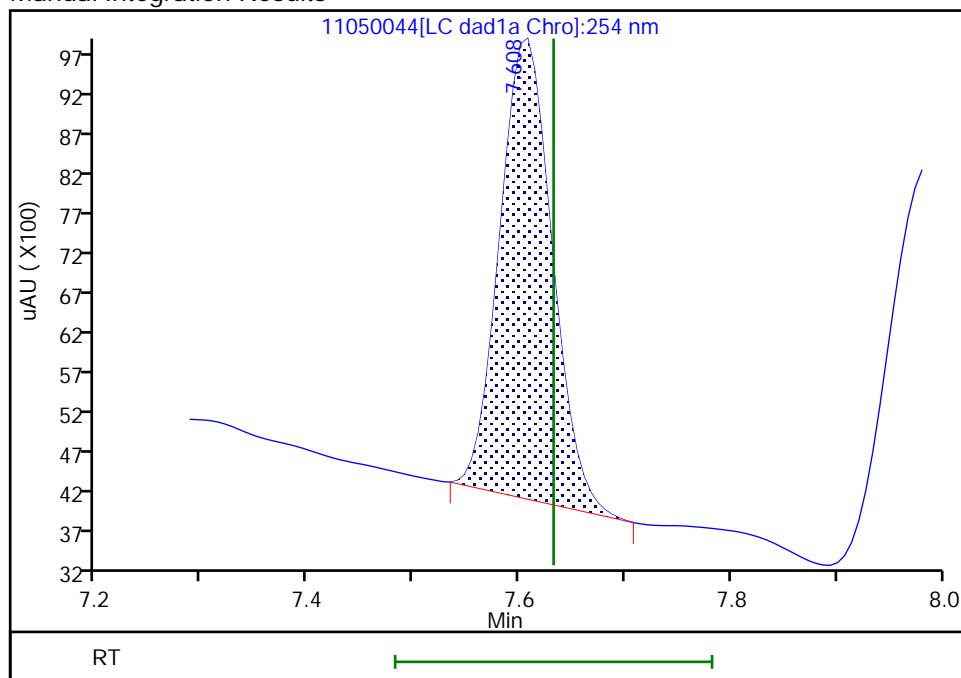
RT: 7.61  
 Area: 21563  
 Amount: 0.202924  
 Amount Units: ug/mL

## Processing Integration Results



RT: 7.61  
 Area: 20072  
 Amount: 0.188893  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 06-Nov-2021 10:18:14

Audit Action: Manually Integrated

Audit Reason: Baseline

FORM I  
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: G0070-7 MS Lab Sample ID: 280-155048-8 MS  
Matrix: Water Lab File ID: 11050046.D  
Analysis Method: 8330A Date Collected: 11/01/2021 14:25  
Extraction Method: 3535 Date Extracted: 11/04/2021 14:13  
Sample wt/vol: 510.4 (mL) Date Analyzed: 11/06/2021 04:37  
Con. Extract Vol.: 5 (mL) Dilution Factor: 1  
Injection Volume: 100 (uL) GC Column: UltraCarb5uODS ID: 4.6 (mm)  
% Moisture:  GPC Cleanup: (Y/N) N  
Analysis Batch No.: 556359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
5755-27-1	MNX	2.19	M	2.0	0.39	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	91	M	83-119

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\11050046.D  
 Lims ID: 280-155048-B-8-A MS  
 Client ID: G0070-7  
 Sample Type: MS  
 Inject. Date: 06-Nov-2021 04:37:31 ALS Bottle#: 46 Worklist Smp#: 46  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-155048-B-8-A  
 Misc. Info.: 280-0106237-046  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Nov-2021 10:25:01 Calib Date: 27-Oct-2021 04:27:09  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211027-105955.b\1026T007.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 10:23:57

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.480	6.493	-0.013	35325	0.2002	0.1901	M
6 DNX	1	6.800	6.813	-0.013	26479	0.2002	0.1863	M
7 MNX	1	7.220	7.239	-0.019	29116	0.2334	0.2234	M
\$ 10 1,2-Dinitrobenzene	1	8.574	8.606	-0.032	23247	0.2000	0.1813	M

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

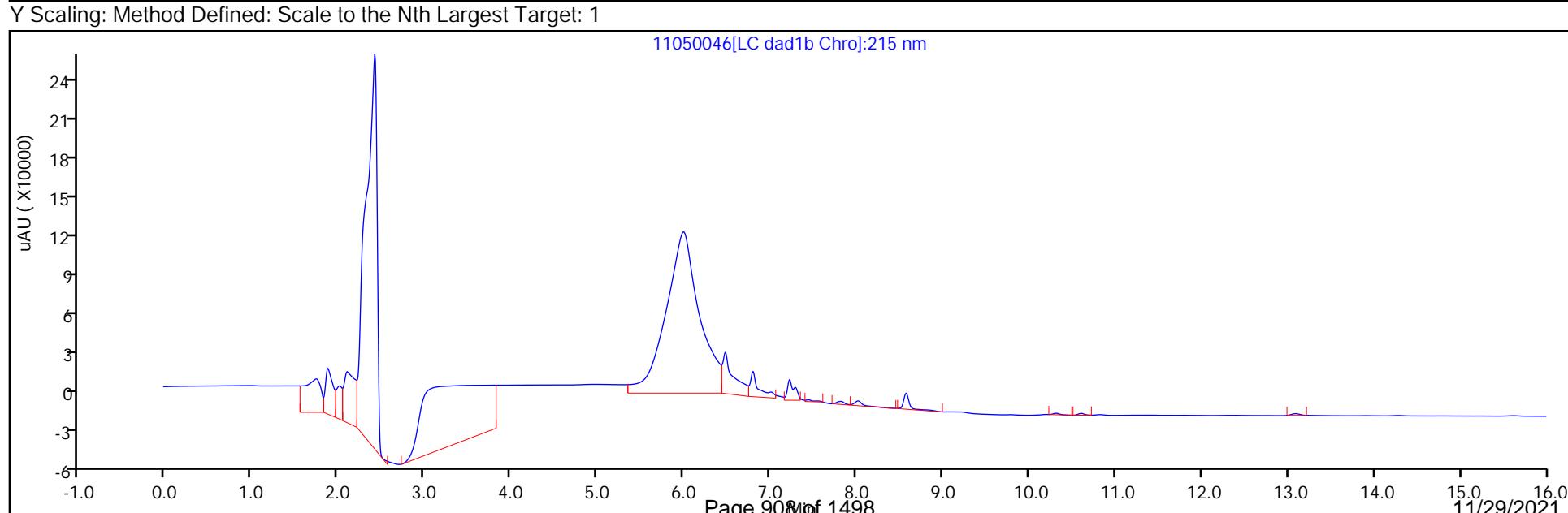
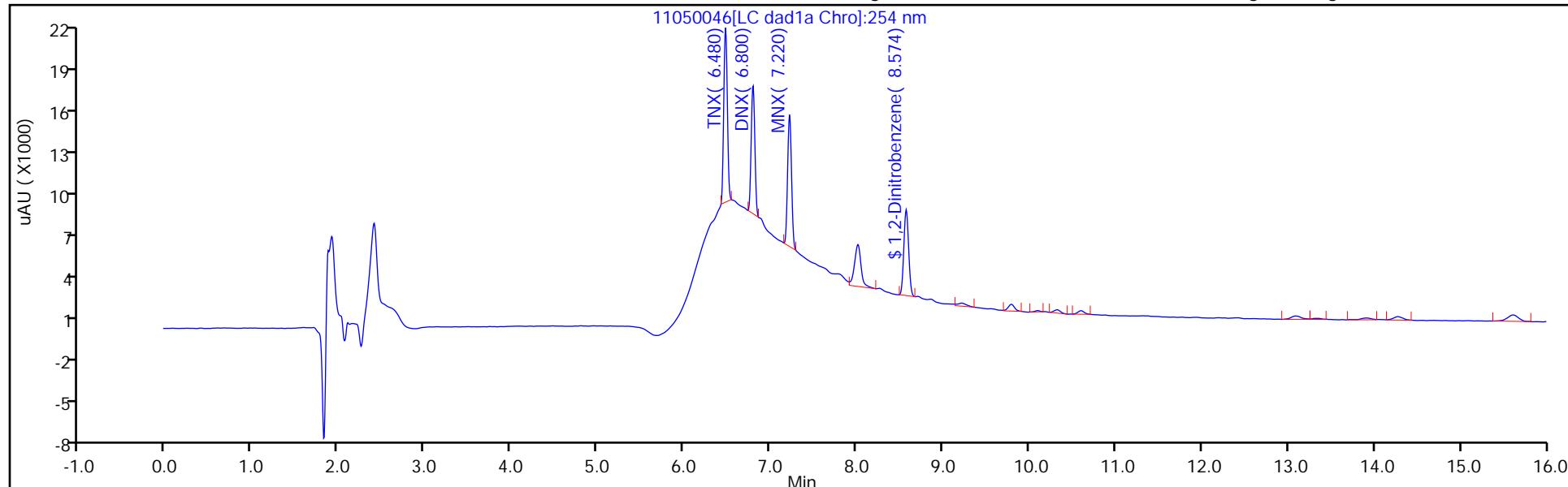
Report Date: 06-Nov-2021 10:25:03

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\\denver\\chromdata\\chhplc\_x\\20211105-106237.b\\11050046.d  
Injection Date: 06-Nov-2021 04:37:31 Instrument ID: CHHPLC\_X3  
Lims ID: 280-155048-B-8-A MS Operator ID: JZ  
Client ID: G0070-7 Worklist Smp#: 46  
Injection Vol: 100.0 ul Dil. Factor: 1.0000 ALS Bottle#: 46  
Method: 8330\_X3 Limit Group: GCSV - 8330  
Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver  
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\11050046.D  
 Lims ID: 280-155048-B-8-A MS  
 Client ID: G0070-7  
 Sample Type: MS  
 Inject. Date: 06-Nov-2021 04:37:31 ALS Bottle#: 46 Worklist Smp#: 46  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-155048-B-8-A  
 Misc. Info.: 280-0106237-046  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Nov-2021 10:25:01 Calib Date: 27-Oct-2021 04:27:09  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211027-105955.b\1026T007.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 10:23:57

Compound	Amount Added	Amount Recovered	% Rec.
\$ 10 1,2-Dinitrobenzene	0.2000	0.1813	90.65

## Eurofins TestAmerica, Denver

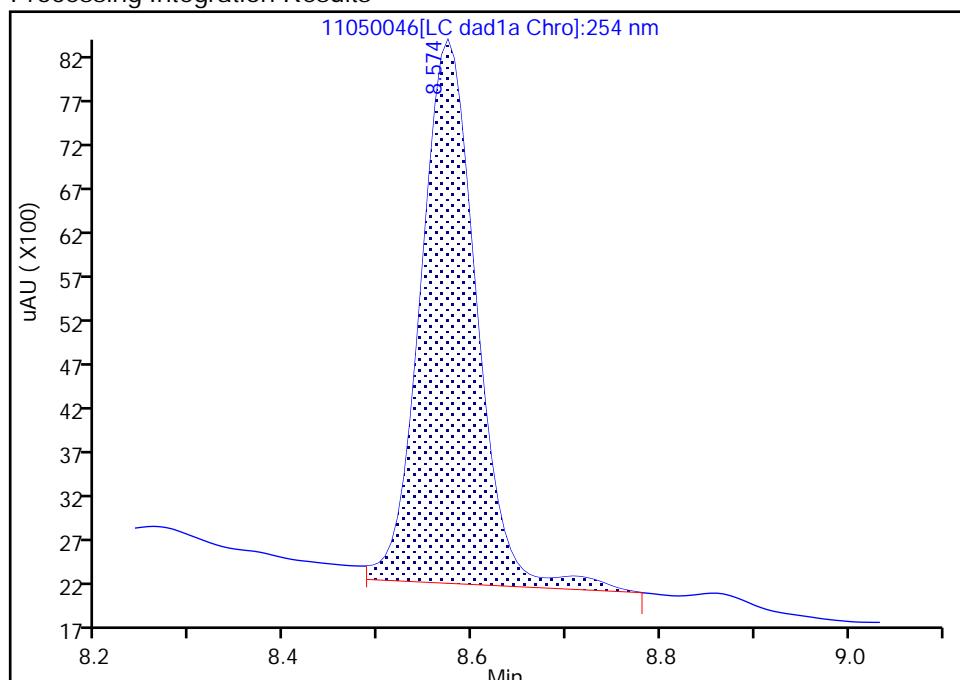
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 Lims ID: 280-155048-B-8-A MS  
 Client ID: G0070-7  
 Operator ID: JZ ALS Bottle#: 46 Worklist Smp#: 46  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

## \$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

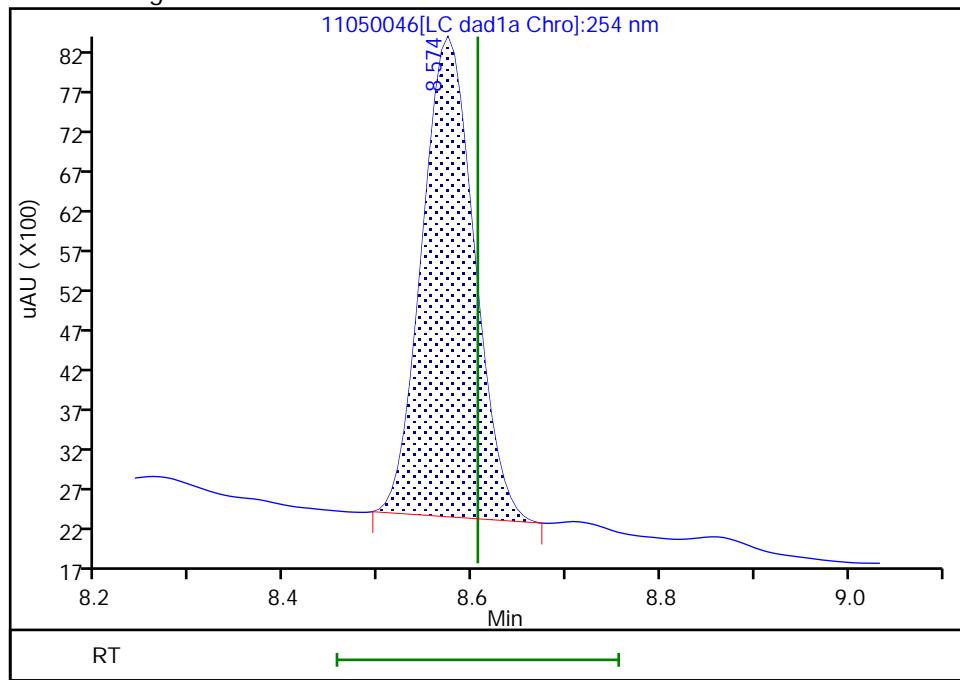
RT: 8.57  
 Area: 25376  
 Amount: 0.197914  
 Amount Units: ug/mL

## Processing Integration Results



RT: 8.57  
 Area: 23247  
 Amount: 0.181310  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 06-Nov-2021 10:23:56

Audit Action: Manually Integrated

Audit Reason: Baseline

## Eurofins TestAmerica, Denver

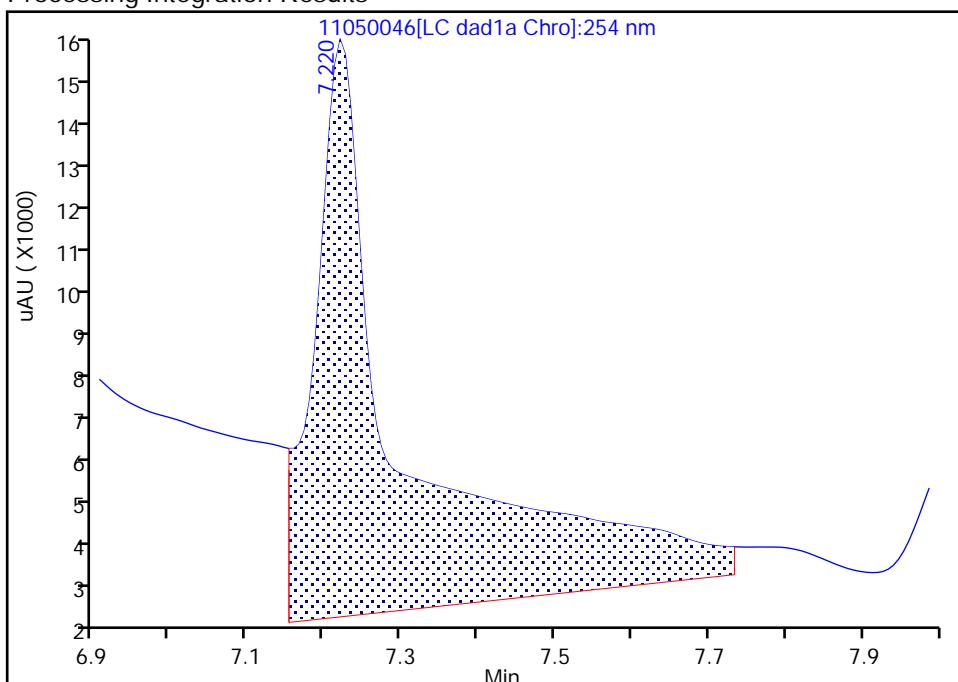
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 Injection Date: 06-Nov-2021 04:37:31 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-155048-B-8-A MS  
 Client ID: G0070-7  
 Operator ID: JZ ALS Bottle#: 46 Worklist Smp#: 46  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

7 MNX, CAS: 5755-27-1

Signal: 1

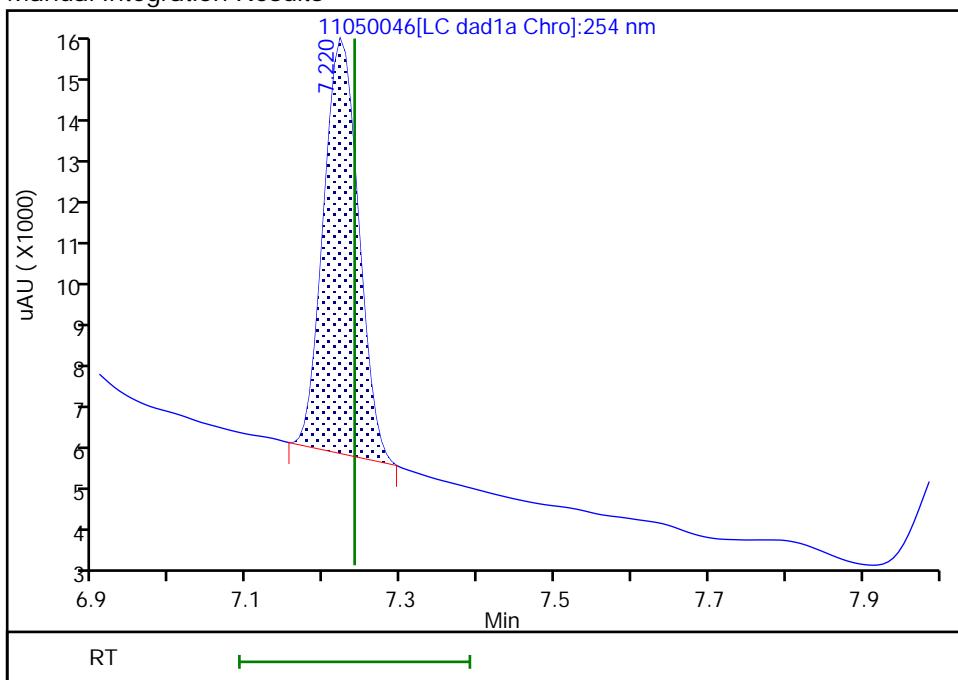
RT: 7.22  
 Area: 103967  
 Amount: 0.797658  
 Amount Units: ug/mL

## Processing Integration Results



## Manual Integration Results

RT: 7.22  
 Area: 29116  
 Amount: 0.223384  
 Amount Units: ug/mL



Reviewer: zhangji, 06-Nov-2021 10:23:52

Audit Action: Manually Integrated

Audit Reason: Baseline

FORM I  
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: NW062-7 MSD Lab Sample ID: 280-155048-7 MSD  
Matrix: Water Lab File ID: 11050038.D  
Analysis Method: 8330A Date Collected: 11/02/2021 12:50  
Extraction Method: 3535 Date Extracted: 11/04/2021 14:13  
Sample wt/vol: 499.7 (mL) Date Analyzed: 11/06/2021 01:34  
Con. Extract Vol.: 5 (mL) Dilution Factor: 1  
Injection Volume: 100 (uL) GC Column: UltraCarb5uODS ID: 4.6 (mm)  
% Moisture:  GPC Cleanup: (Y/N) N  
Analysis Batch No.: 556359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.11	M	0.21	0.20	0.084
99-65-0	1,3-Dinitrobenzene	2.00	M	0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	2.04		0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	1.98		0.10	0.080	0.027
606-20-2	2,6-Dinitrotoluene	2.00		0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	1.90		0.11	0.10	0.051
88-72-2	2-Nitrotoluene	1.60		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	1.86		0.15	0.12	0.058
99-99-0	4-Nitrotoluene	1.64		0.41	0.40	0.10
2691-41-0	HMX	2.10	M	0.21	0.20	0.088
98-95-3	Nitrobenzene	1.99	M	0.21	0.20	0.091
121-82-4	RDX	1.84	M	0.21	0.20	0.052
479-45-8	Tetryl	2.06		0.11	0.10	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	91	M	83-119

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\11050038.D  
 Lims ID: 280-155048-A-7-C MSD  
 Client ID: NW062-7  
 Sample Type: MSD  
 Inject. Date: 06-Nov-2021 01:34:09 ALS Bottle#: 38 Worklist Smp#: 38  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-155048-A-7-C  
 Misc. Info.: 280-0106237-038  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Nov-2021 10:24:58 Calib Date: 27-Oct-2021 04:27:09  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211027-105955.b\1026T007.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 10:16:39

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.597	6.612	-0.015	17714	0.2000	0.2098	M
8 RDX	1	7.604	7.632	-0.028	19503	0.2000	0.1835	M
9 2,4,6-Trinitrophenol	1	7.970	8.019	-0.049	24511	0.2000	0.2963	M
\$ 10 1,2-Dinitrobenzene	1	8.577	8.606	-0.029	23348	0.2000	0.1821	M
11 1,3,5-Trinitrobenzene	1	8.690	8.726	-0.036	46351	0.2000	0.2104	M
12 1,3-Dinitrobenzene	1	9.330	9.365	-0.035	59185	0.2000	0.1997	M
13 Nitrobenzene	1	9.724	9.765	-0.041	38754	0.2000	0.1984	M
15 Tetryl	1	10.064	10.112	-0.048	35419	0.2000	0.2054	
16 Nitroglycerin	2	10.524	10.572	-0.048	135731	2.00	2.05	
17 2,4,6-Trinitrotoluene	1	10.977	11.025	-0.048	42080	0.2000	0.2042	
18 4-Amino-2,6-dinitrotoluene	1	11.184	11.239	-0.055	28452	0.2000	0.1862	
19 2-Amino-4,6-dinitrotoluene	1	11.437	11.499	-0.062	39388	0.2000	0.1903	
20 2,6-Dinitrotoluene	1	11.604	11.665	-0.061	28566	0.2000	0.1997	
21 2,4-Dinitrotoluene	1	11.777	11.832	-0.055	56861	0.2000	0.1981	
22 o-Nitrotoluene	1	12.644	12.712	-0.068	20554	0.2000	0.1601	
23 p-Nitrotoluene	1	13.084	13.152	-0.068	18362	0.2000	0.1641	
24 m-Nitrotoluene	1	13.664	13.745	-0.081	21233	0.2000	0.1493	
25 PETN	2	14.770	14.859	-0.089	155286	2.00	2.08	

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

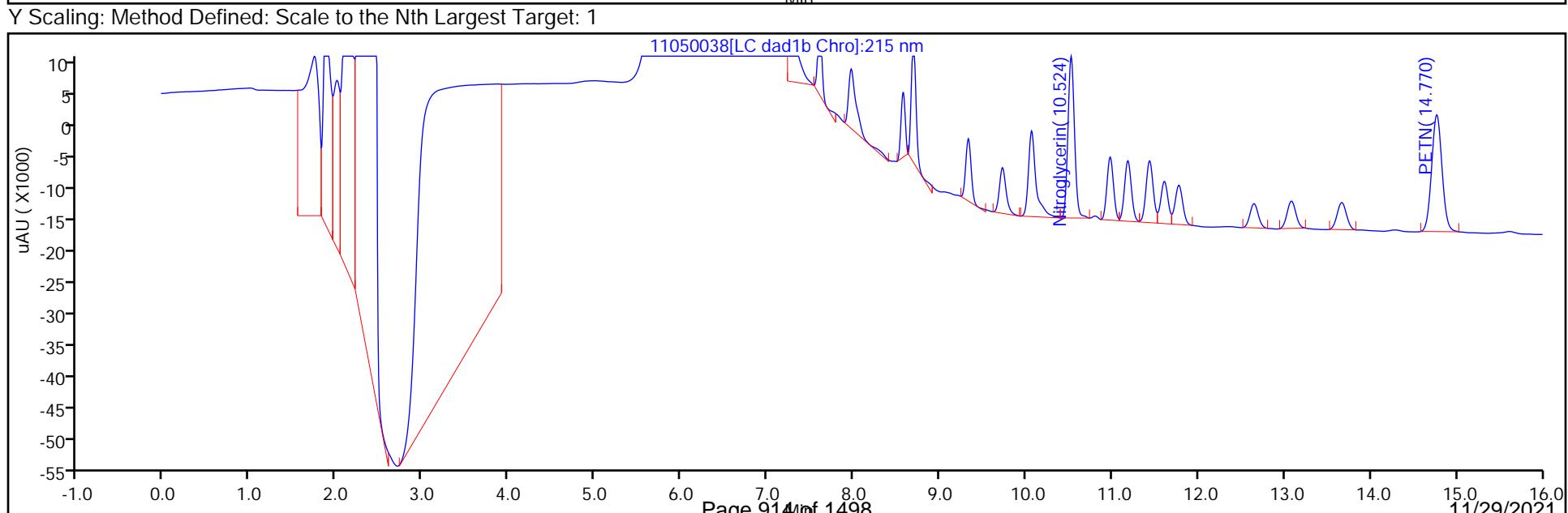
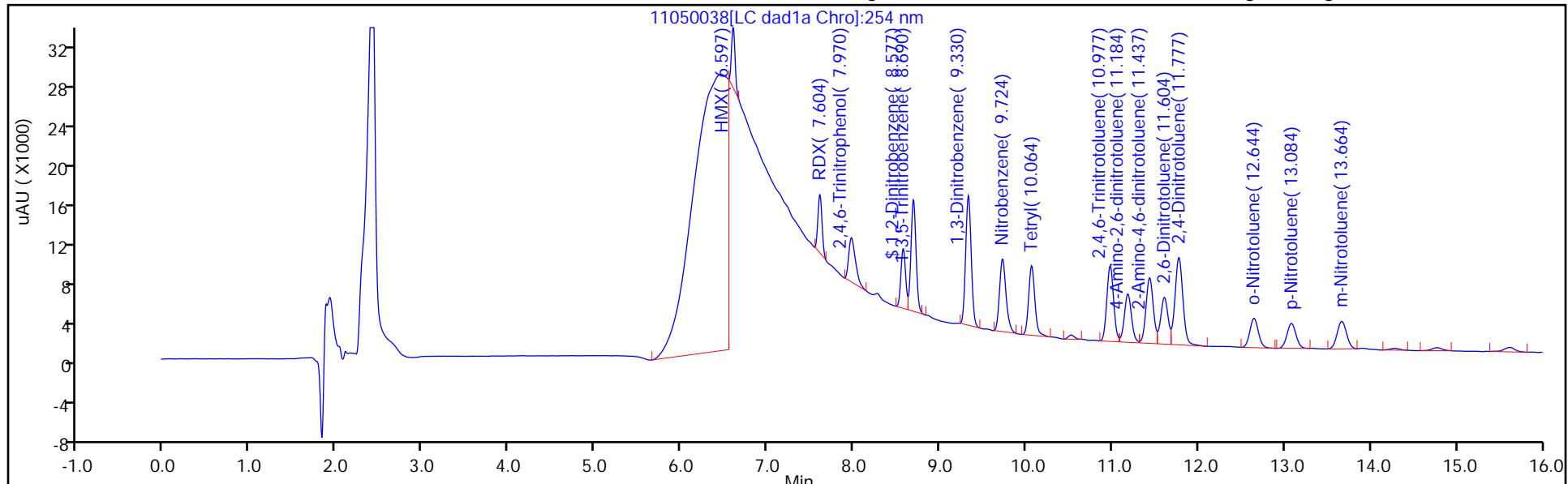
Report Date: 06-Nov-2021 10:24:59

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\\denver\\chromdata\\chhplc\_x\\20211105-106237.b\\11050038.d  
 Injection Date: 06-Nov-2021 01:34:09 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-155048-A-7-C MSD Operator ID: JZ  
 Client ID: NW062-7 Worklist Smp#: 38  
 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



Eurofins TestAmerica, Denver  
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\11050038.D  
 Lims ID: 280-155048-A-7-C MSD  
 Client ID: NW062-7  
 Sample Type: MSD  
 Inject. Date: 06-Nov-2021 01:34:09 ALS Bottle#: 38 Worklist Smp#: 38  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-155048-A-7-C  
 Misc. Info.: 280-0106237-038  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Nov-2021 10:24:58 Calib Date: 27-Oct-2021 04:27:09  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211027-105955.b\1026T007.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 10:16:39

Compound	Amount Added	Amount Recovered	% Rec.
\$ 10 1,2-Dinitrobenzene	0.2000	0.1821	91.05

## Eurofins TestAmerica, Denver

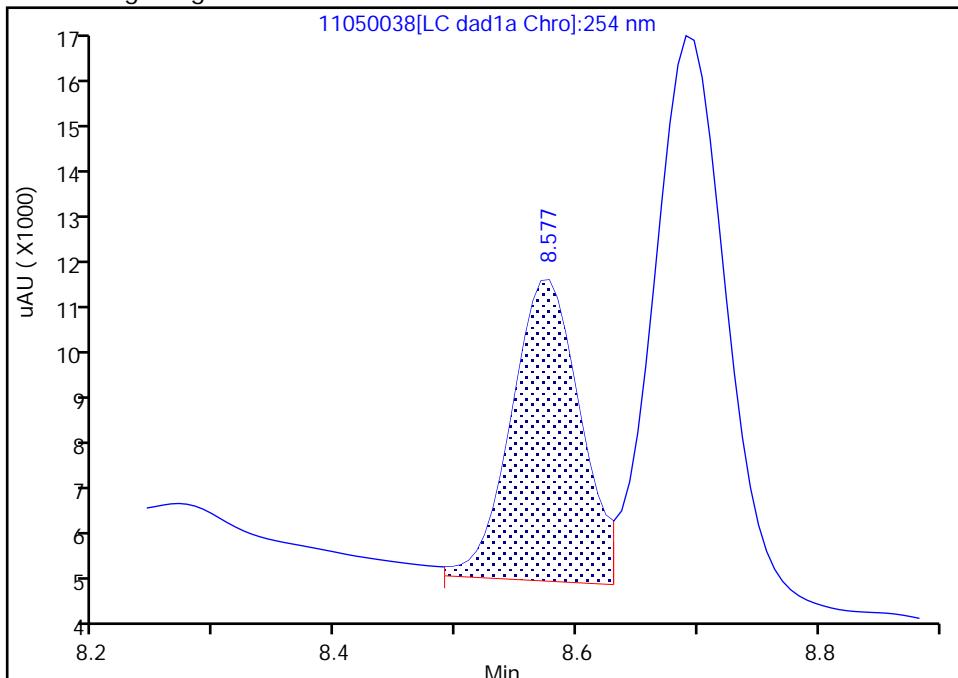
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 Injection Date: 06-Nov-2021 01:34:09 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-155048-A-7-C MSD  
 Client ID: NW062-7  
 Operator ID: JZ ALS Bottle#: 38 Worklist Smp#: 38  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

## \$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

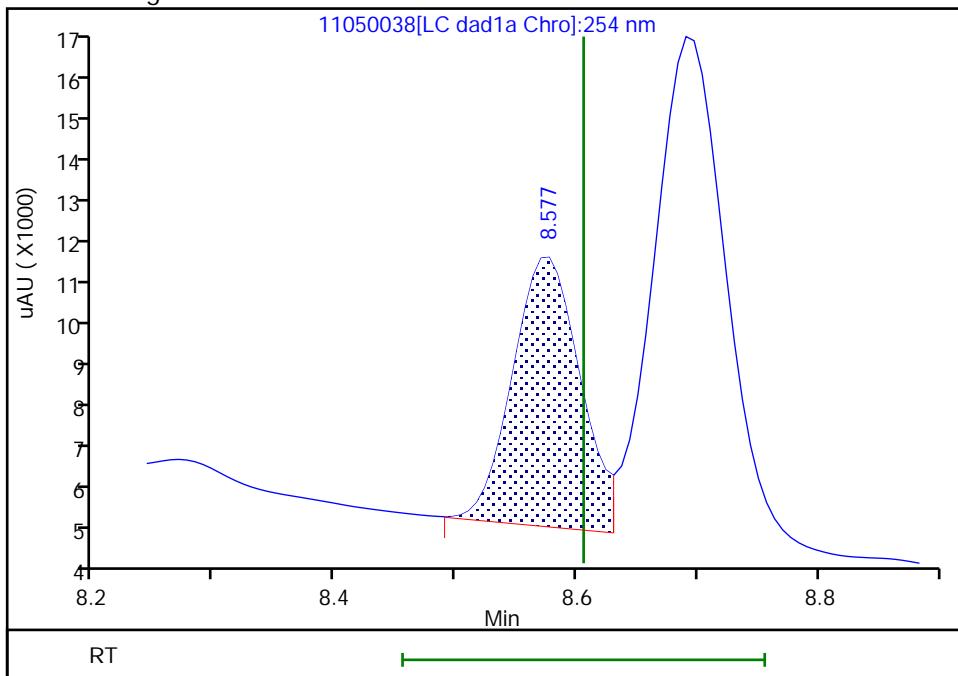
## Processing Integration Results

RT: 8.58  
 Area: 24028  
 Amount: 0.187401  
 Amount Units: ug/mL



## Manual Integration Results

RT: 8.58  
 Area: 23348  
 Amount: 0.182097  
 Amount Units: ug/mL



Reviewer: zhangji, 06-Nov-2021 10:16:20

Audit Action: Assigned New Baseline

Audit Reason: Baseline

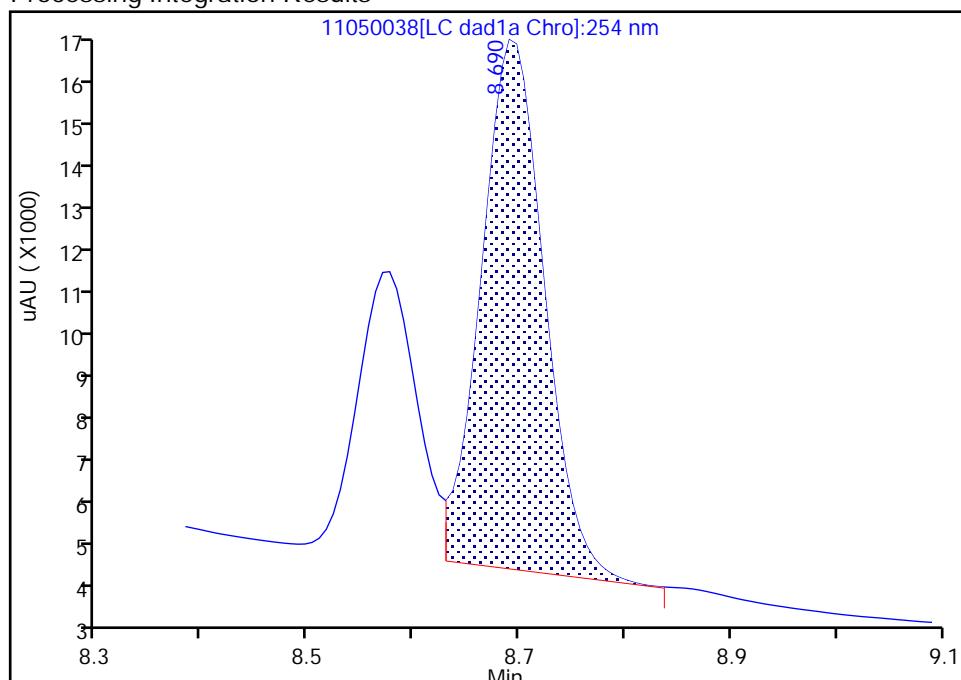
## Eurofins TestAmerica, Denver

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 Injection Date: 06-Nov-2021 01:34:09 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-155048-A-7-C MSD  
 Client ID: NW062-7  
 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

**11 1,3,5-Trinitrobenzene, CAS: 99-35-4**  
 Signal: 1

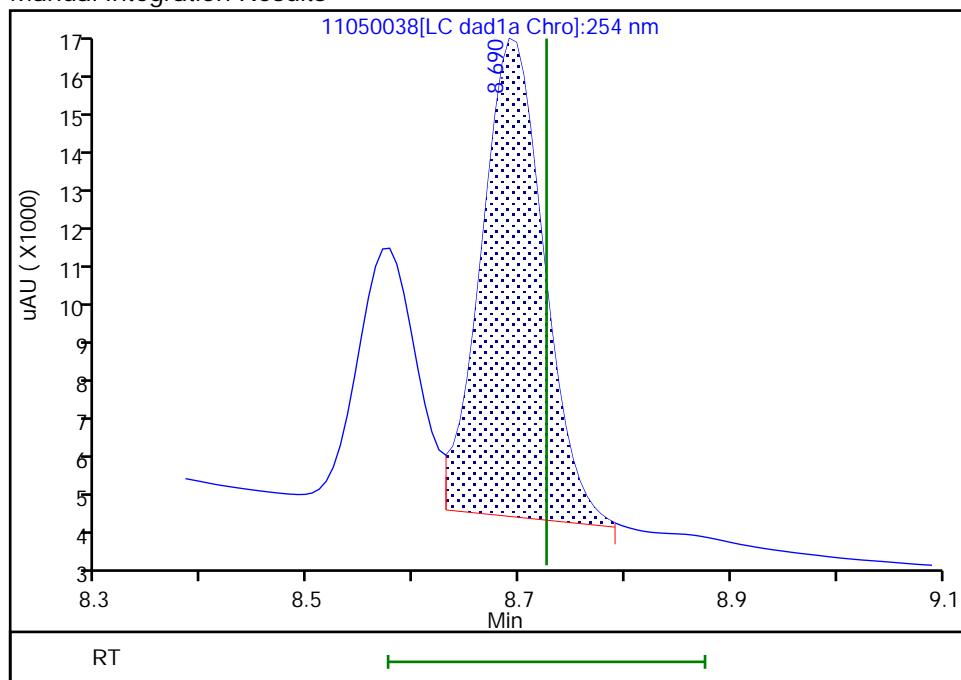
RT: 8.69  
 Area: 46641  
 Amount: 0.211699  
 Amount Units: ug/mL

## Processing Integration Results



RT: 8.69  
 Area: 46351  
 Amount: 0.210383  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 06-Nov-2021 10:16:24

Audit Action: Split an Integrated Peak

Audit Reason: Baseline

Eurofins TestAmerica, Denver

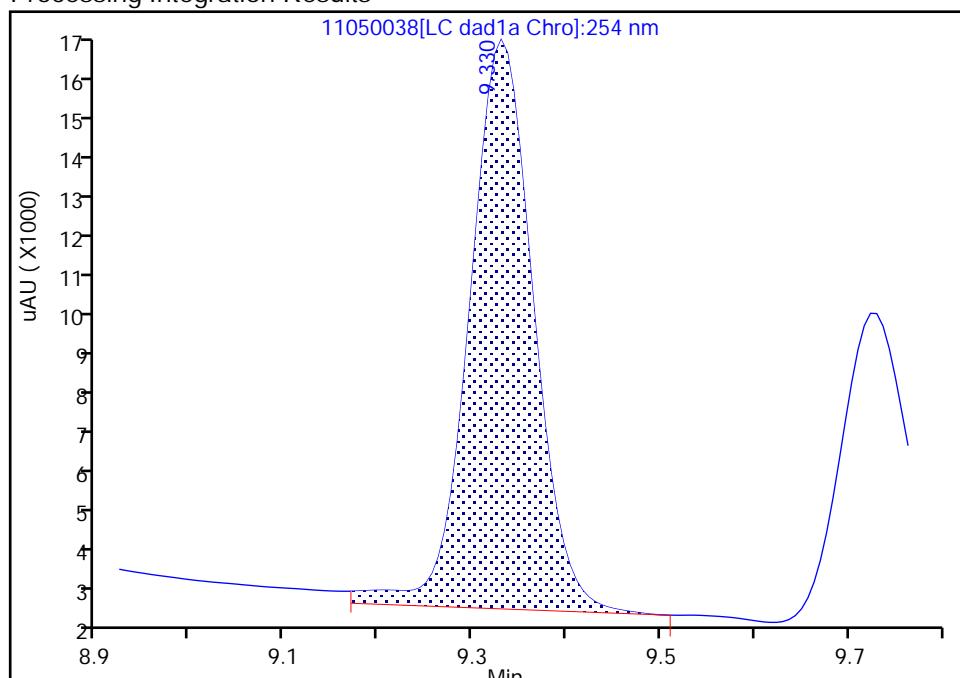
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 Injection Date: 06-Nov-2021 01:34:09 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-155048-A-7-C MSD  
 Client ID: NW062-7  
 Operator ID: JZ ALS Bottle#: 38 Worklist Smp#: 38  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

**12 1,3-Dinitrobenzene, CAS: 99-65-0**

Signal: 1

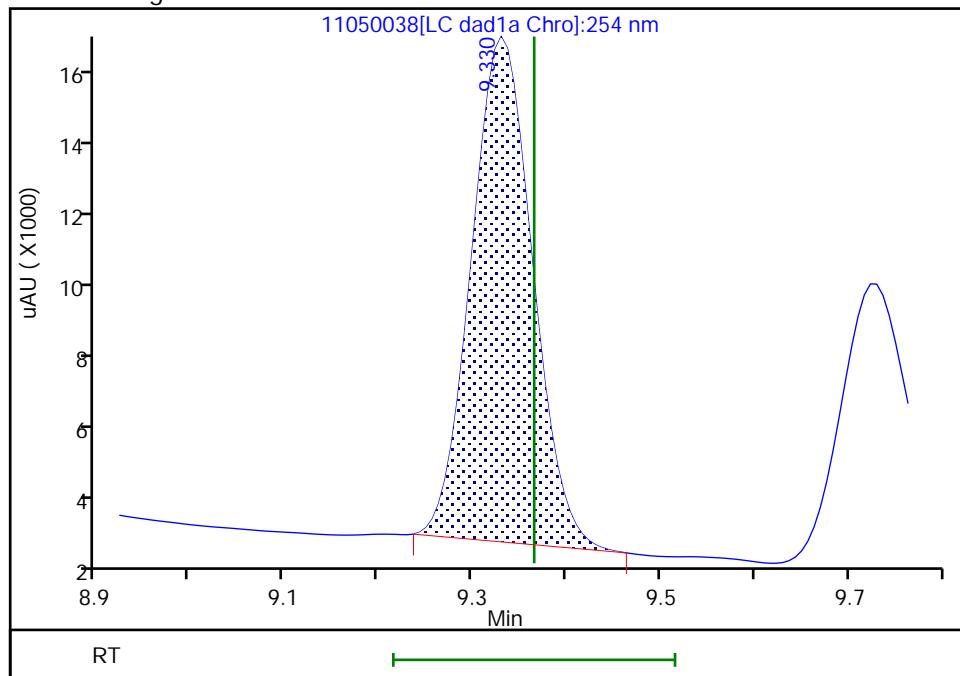
RT: 9.33  
 Area: 63407  
 Amount: 0.213975  
 Amount Units: ug/mL

## Processing Integration Results



RT: 9.33  
 Area: 59185  
 Amount: 0.199727  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 06-Nov-2021 10:16:30

Audit Action: Manually Integrated

Audit Reason: Baseline

## Eurofins TestAmerica, Denver

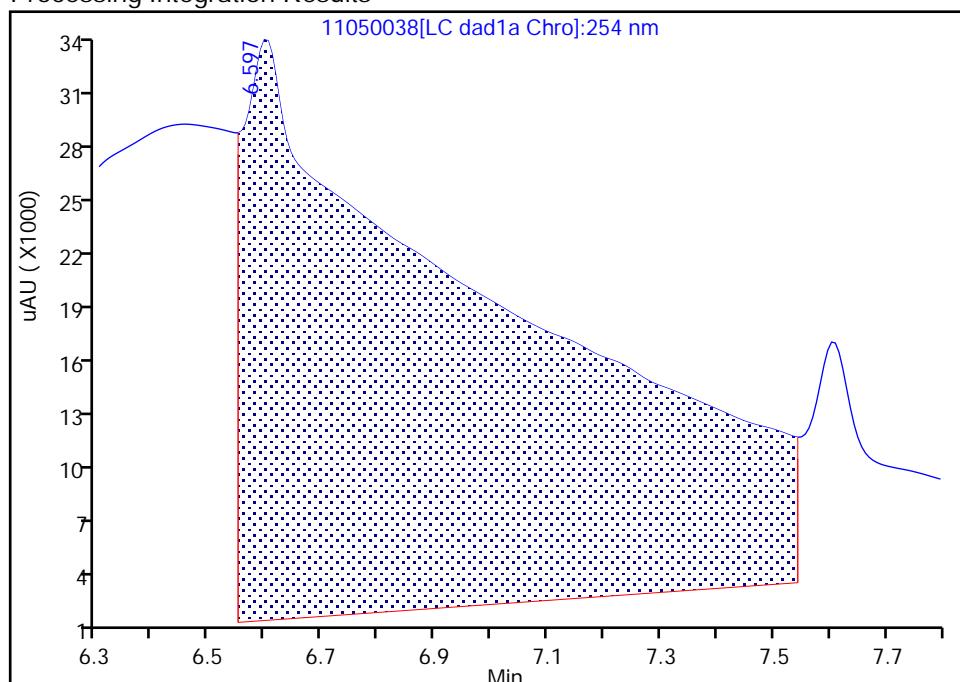
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 Injection Date: 06-Nov-2021 01:34:09 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-155048-A-7-C MSD  
 Client ID: NW062-7  
 Operator ID: JZ ALS Bottle#: 38 Worklist Smp#: 38  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

## 4 HMX, CAS: 2691-41-0

Signal: 1

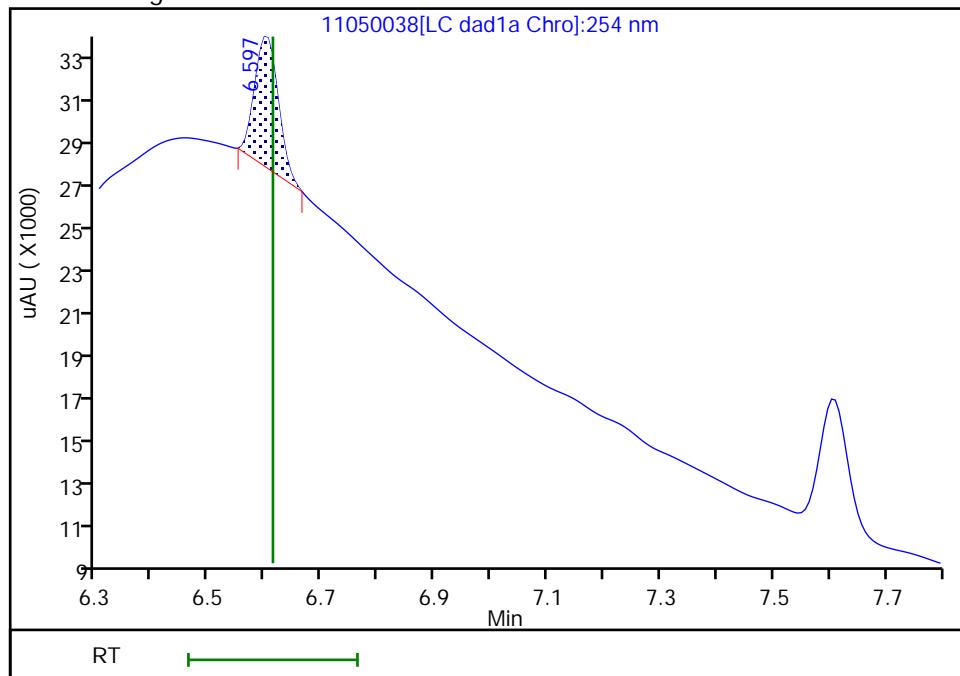
RT: 6.60  
 Area: 1014449  
 Amount: 12.016486  
 Amount Units: ug/mL

## Processing Integration Results



RT: 6.60  
 Area: 17714  
 Amount: 0.209828  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 06-Nov-2021 10:16:06

Audit Action: Manually Integrated

Audit Reason: Baseline

## Eurofins TestAmerica, Denver

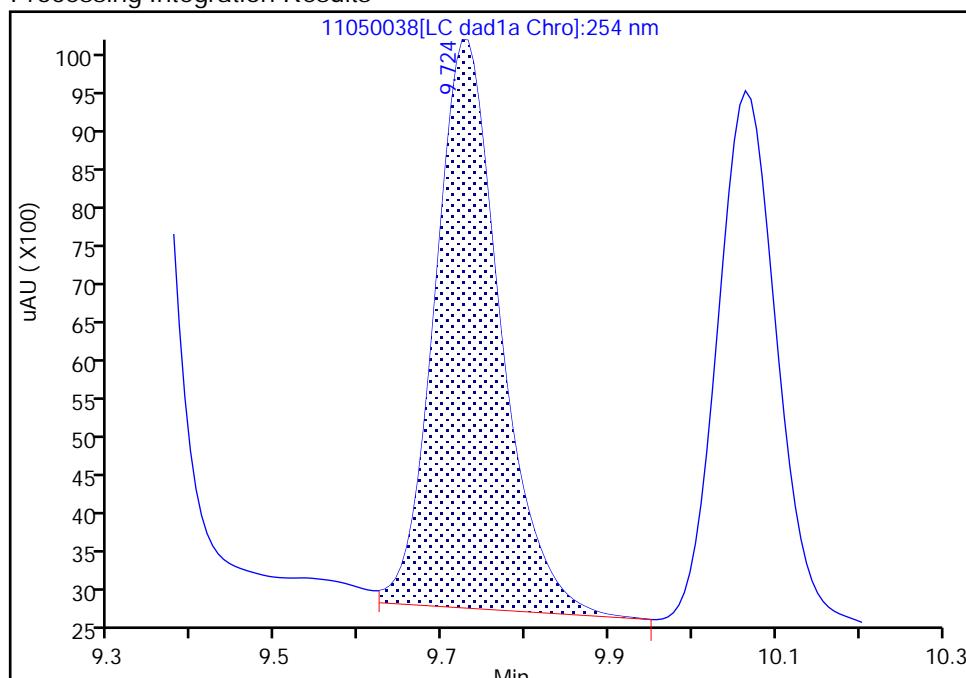
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 Injection Date: 06-Nov-2021 01:34:09 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-155048-A-7-C MSD  
 Client ID: NW062-7  
 Operator ID: JZ ALS Bottle#: 38 Worklist Smp#: 38  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

**13 Nitrobenzene, CAS: 98-95-3**

Signal: 1

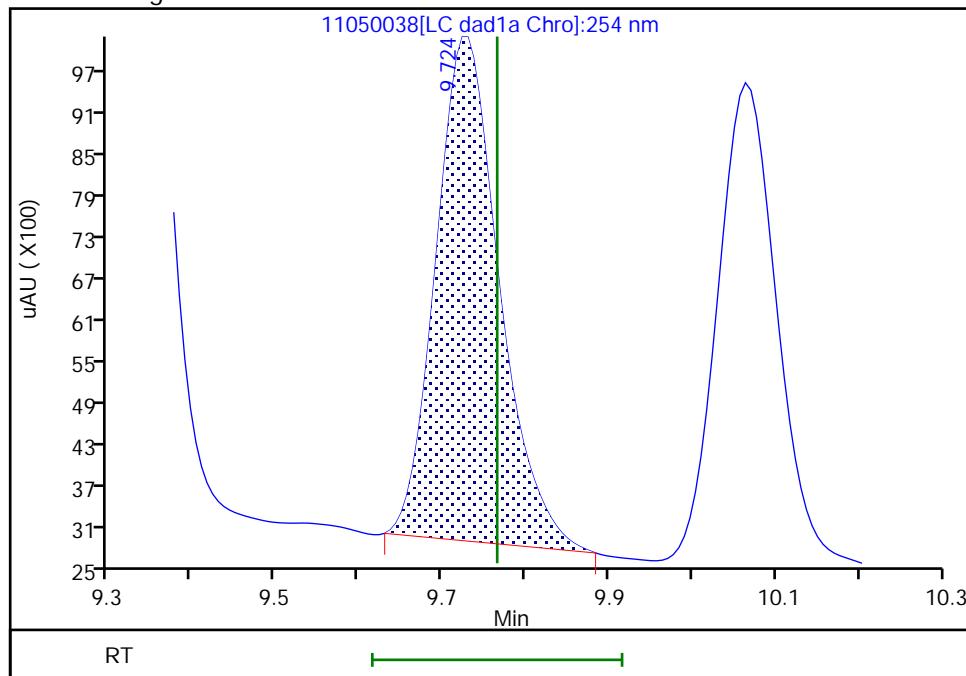
RT: 9.72  
 Area: 40787  
 Amount: 0.208858  
 Amount Units: ug/mL

## Processing Integration Results



RT: 9.72  
 Area: 38754  
 Amount: 0.198447  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 06-Nov-2021 10:16:34

Audit Action: Manually Integrated

Audit Reason: Baseline

## Eurofins TestAmerica, Denver

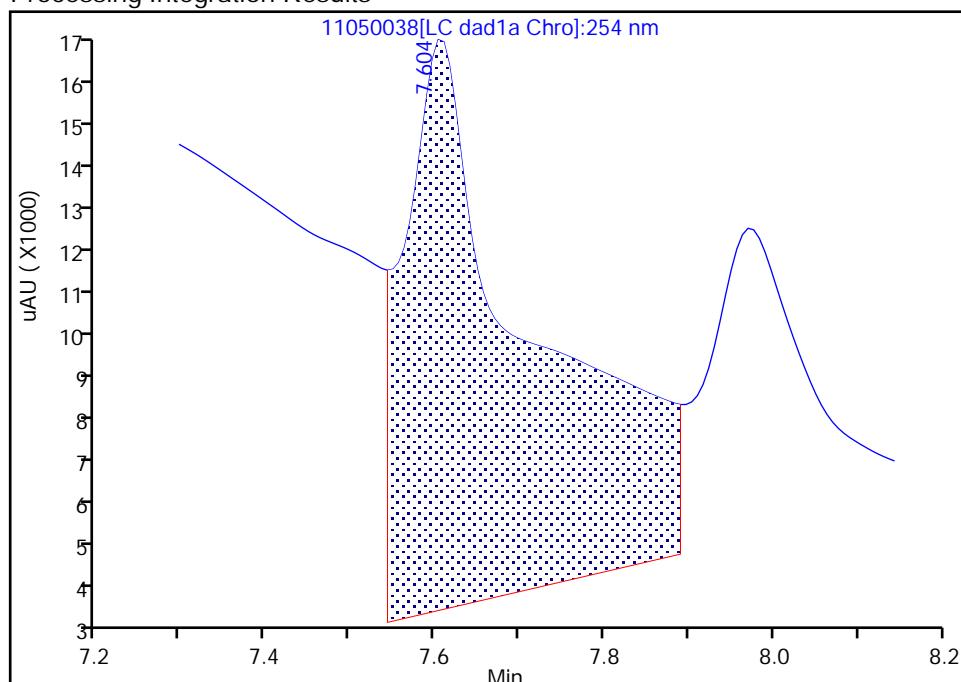
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 Injection Date: 06-Nov-2021 01:34:09 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-155048-A-7-C MSD  
 Client ID: NW062-7  
 Operator ID: JZ ALS Bottle#: 38 Worklist Smp#: 38  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

## 8 RDX, CAS: 121-82-4

Signal: 1

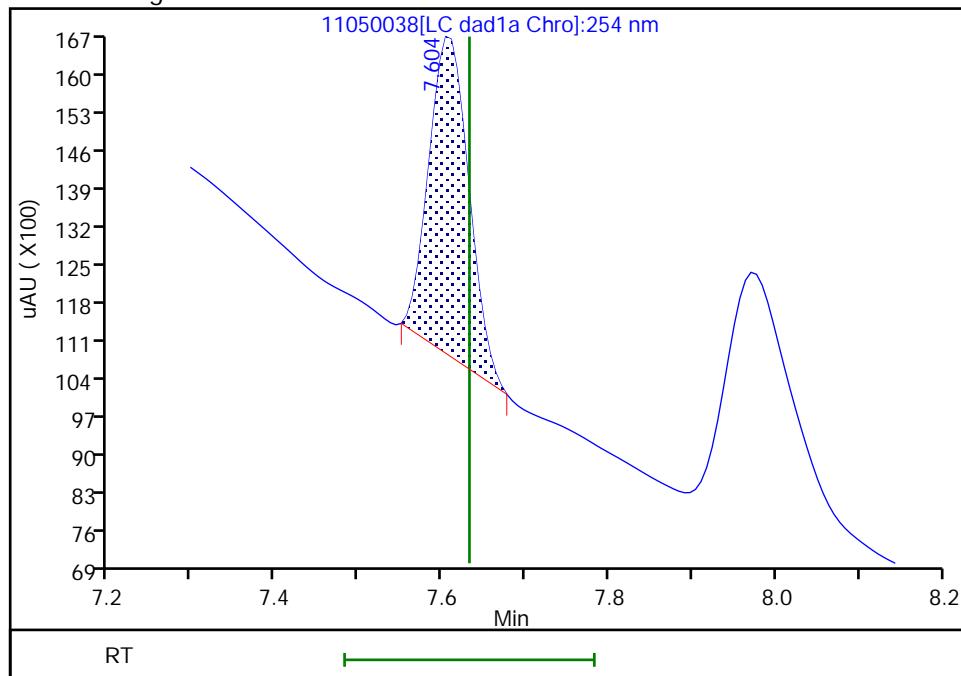
RT: 7.60  
 Area: 138685  
 Amount: 1.305130  
 Amount Units: ug/mL

## Processing Integration Results



RT: 7.60  
 Area: 19503  
 Amount: 0.183538  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 06-Nov-2021 10:16:11

Audit Action: Manually Integrated

Audit Reason: Baseline

FORM I  
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: NW062-7 MSD Lab Sample ID: 280-155048-7 MSD  
Matrix: Water Lab File ID: 11050040.D  
Analysis Method: 8330A Date Collected: 11/02/2021 12:50  
Extraction Method: 3535 Date Extracted: 11/04/2021 14:13  
Sample wt/vol: 494.6 (mL) Date Analyzed: 11/06/2021 02:20  
Con. Extract Vol.: 5 (mL) Dilution Factor: 1  
Injection Volume: 100 (uL) GC Column: UltraCarb5uODS ID: 4.6 (mm)  
% Moisture:  GPC Cleanup: (Y/N) N  
Analysis Batch No.: 556359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
5755-27-1	MNX	2.24	M	2.0	0.40	0.16

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	92	M	83-119

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\11050040.D  
 Lims ID: 280-155048-B-7-B MSD  
 Client ID: NW062-7  
 Sample Type: MSD  
 Inject. Date: 06-Nov-2021 02:20:03 ALS Bottle#: 40 Worklist Smp#: 40  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-155048-B-7-B  
 Misc. Info.: 280-0106237-040  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Nov-2021 10:24:58 Calib Date: 27-Oct-2021 04:27:09  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211027-105955.b\1026T007.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 10:17:26

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.480	6.493	-0.013	37073	0.2002	0.1995	M
6 DNX	1	6.800	6.813	-0.013	26426	0.2002	0.1859	M
7 MNX	1	7.220	7.239	-0.019	28869	0.2334	0.2215	M
\$ 10 1,2-Dinitrobenzene	1	8.580	8.606	-0.026	23626	0.2000	0.1843	M

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Report Date: 06-Nov-2021 10:25:00

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\\denver\\chromdata\\chhplc\_x\\20211105-106237.b\\11050040.d

Injection Date: 06-Nov-2021 02:20:03

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: 280-155048-B-7-B MSD

Worklist Smp#: 40

Client ID: NW062-7

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

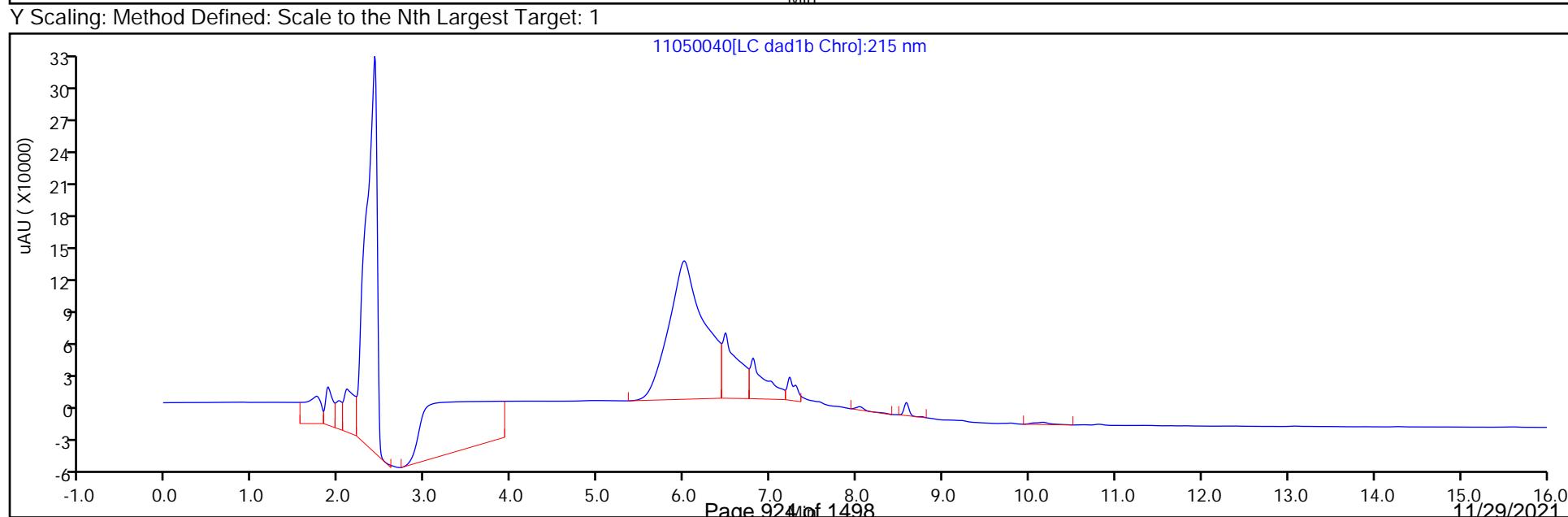
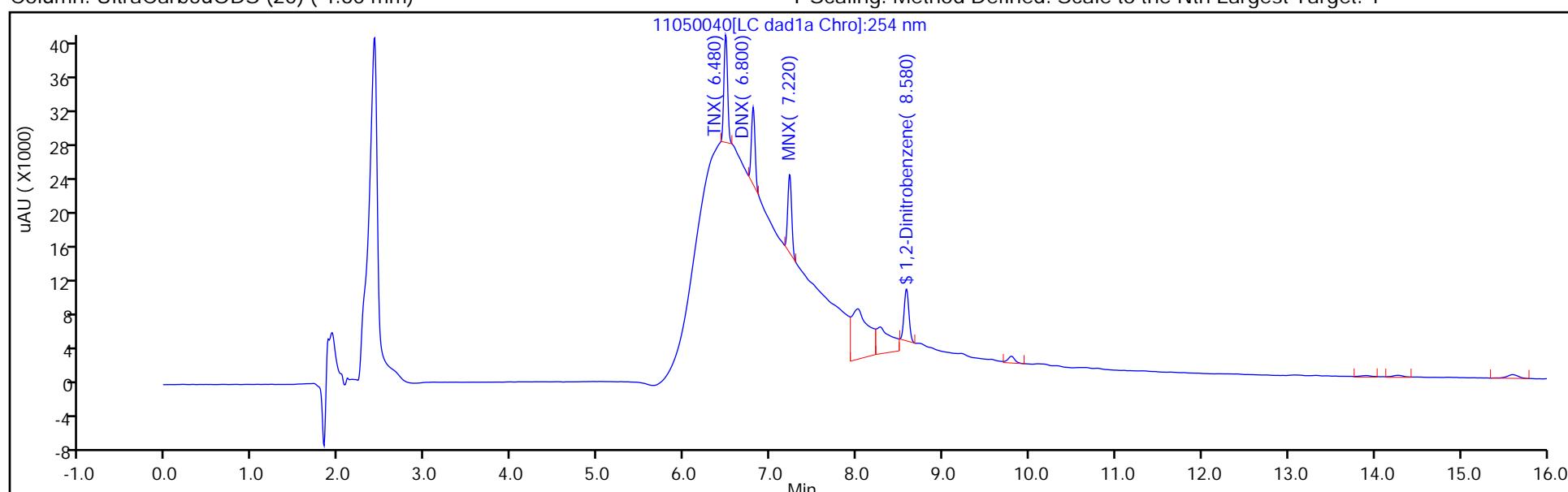
ALS Bottle#: 40

Method: 8330\_X3

Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver  
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\11050040.D  
 Lims ID: 280-155048-B-7-B MSD  
 Client ID: NW062-7  
 Sample Type: MSD  
 Inject. Date: 06-Nov-2021 02:20:03 ALS Bottle#: 40 Worklist Smp#: 40  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-155048-B-7-B  
 Misc. Info.: 280-0106237-040  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Nov-2021 10:24:58 Calib Date: 27-Oct-2021 04:27:09  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211027-105955.b\1026T007.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 10:17:26

Compound	Amount Added	Amount Recovered	% Rec.
\$ 10 1,2-Dinitrobenzene	0.2000	0.1843	92.13

## Eurofins TestAmerica, Denver

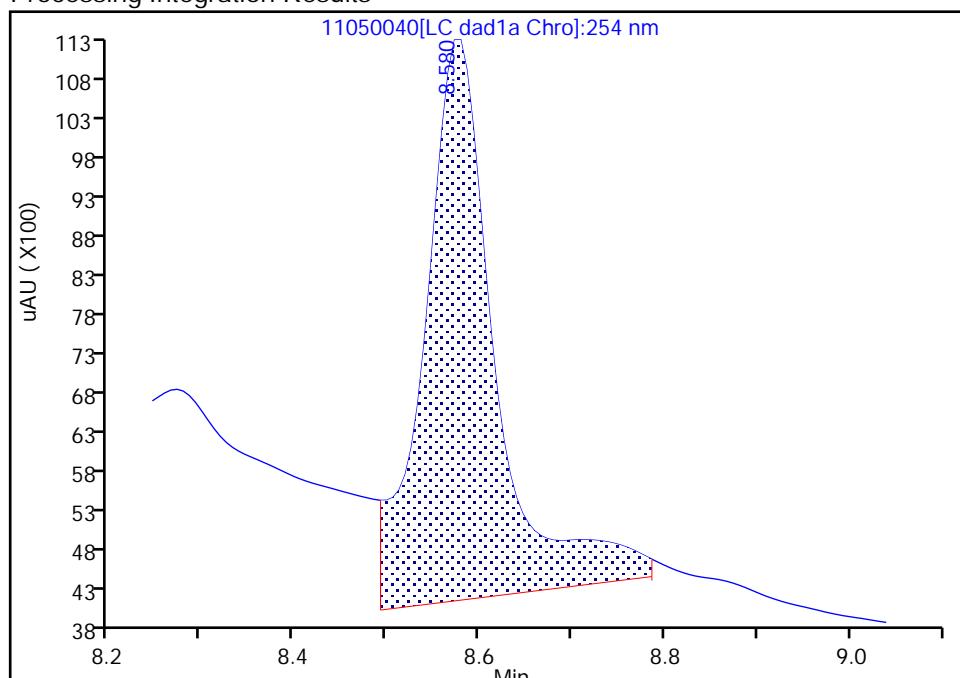
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 Injection Date: 06-Nov-2021 02:20:03 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-155048-B-7-B MSD  
 Client ID: NW062-7  
 Operator ID: JZ ALS Bottle#: 40 Worklist Smp#: 40  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

## \$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

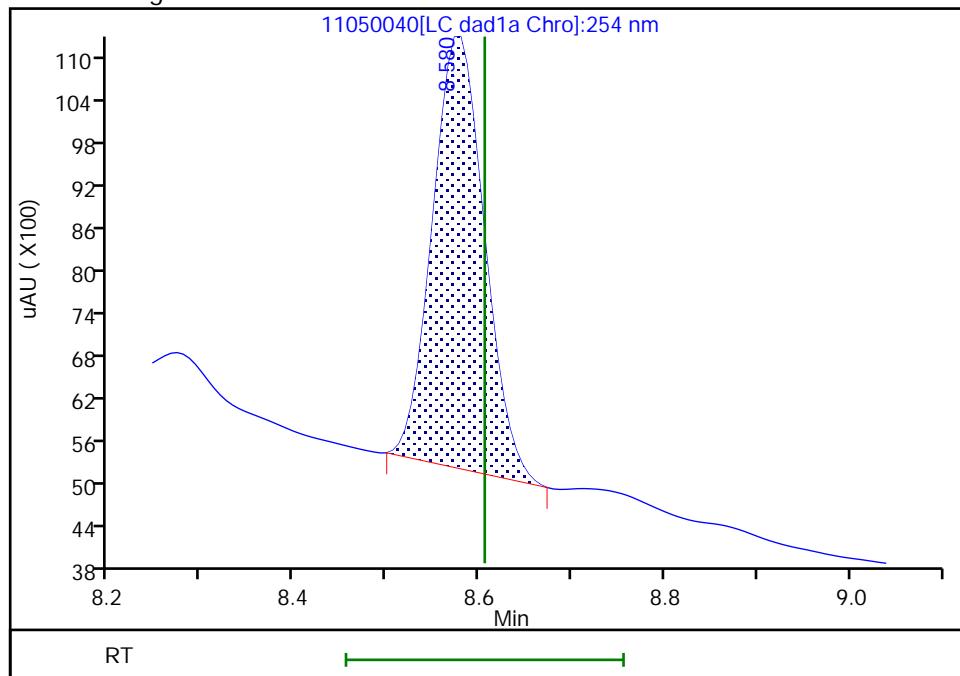
RT: 8.58  
 Area: 38067  
 Amount: 0.296895  
 Amount Units: ug/mL

## Processing Integration Results



RT: 8.58  
 Area: 23626  
 Amount: 0.184265  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 06-Nov-2021 10:17:24

Audit Action: Manually Integrated

Audit Reason: Baseline

## Eurofins TestAmerica, Denver

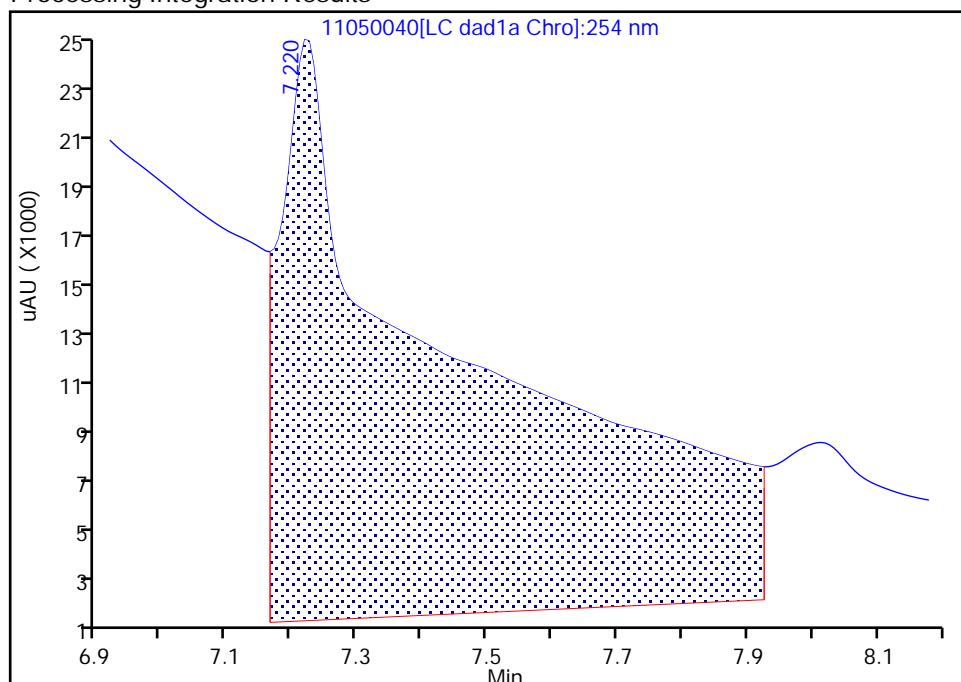
Data File: \\chromfs\denver\chromdata\chhplc\_x\20211105-106237.b\11050040.d  
 Injection Date: 06-Nov-2021 02:20:03 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-155048-B-7-B MSD  
 Client ID: NW062-7  
 Operator ID: JZ ALS Bottle#: 40 Worklist Smp#: 40  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

7 MNX, CAS: 5755-27-1

Signal: 1

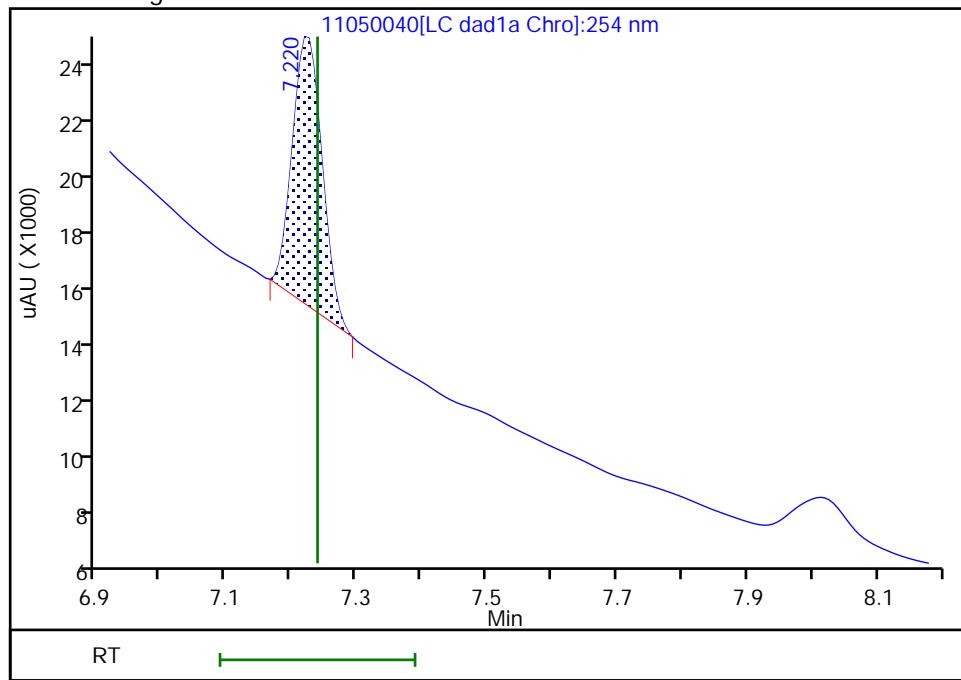
RT: 7.22  
 Area: 446382  
 Amount: 3.424742  
 Amount Units: ug/mL

## Processing Integration Results



RT: 7.22  
 Area: 28869  
 Amount: 0.221489  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 06-Nov-2021 10:17:20

Audit Action: Manually Integrated

Audit Reason: Baseline

FORM I  
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: G0070-7 MSD Lab Sample ID: 280-155048-8 MSD  
Matrix: Water Lab File ID: 11050045.D  
Analysis Method: 8330A Date Collected: 11/01/2021 14:25  
Extraction Method: 3535 Date Extracted: 11/04/2021 14:13  
Sample wt/vol: 496.7 (mL) Date Analyzed: 11/06/2021 04:14  
Con. Extract Vol.: 5 (mL) Dilution Factor: 1  
Injection Volume: 100 (uL) GC Column: UltraCarb5uODS ID: 4.6 (mm)  
% Moisture:                    GPC Cleanup: (Y/N) N  
Analysis Batch No.: 556359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.21		0.21	0.20	0.085
99-65-0	1,3-Dinitrobenzene	2.11		0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	2.11		0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	2.01		0.10	0.081	0.028
606-20-2	2,6-Dinitrotoluene	2.00		0.10	0.081	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	1.97		0.11	0.10	0.051
88-72-2	2-Nitrotoluene	1.58		0.21	0.20	0.086
99-08-1	3-Nitrotoluene	1.52		0.40	0.40	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.90		0.15	0.12	0.058
99-99-0	4-Nitrotoluene	1.72		0.41	0.40	0.10
2691-41-0	HMX	2.08	M	0.21	0.20	0.088
98-95-3	Nitrobenzene	1.94		0.21	0.20	0.092
121-82-4	RDX	1.98	M	0.21	0.20	0.052
479-45-8	Tetryl	2.05	M	0.11	0.10	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	93		83-119

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\11050045.D  
 Lims ID: 280-155048-A-8-C MSD  
 Client ID: G0070-7  
 Sample Type: MSD  
 Inject. Date: 06-Nov-2021 04:14:38 ALS Bottle#: 45 Worklist Smp#: 45  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-155048-A-8-C  
 Misc. Info.: 280-0106237-045  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Nov-2021 10:25:01 Calib Date: 27-Oct-2021 04:27:09  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211027-105955.b\1026T007.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 10:18:50

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	6.612	-0.013	17470	0.2000	0.2069	M
8 RDX	1	7.606	7.632	-0.026	20909	0.2000	0.1968	M
9 2,4,6-Trinitrophenol	1	7.986	8.019	-0.033	30484	0.2000	0.3685	M
\$ 10 1,2-Dinitrobenzene	1	8.573	8.606	-0.033	23737	0.2000	0.1851	
11 1,3,5-Trinitrobenzene	1	8.693	8.726	-0.033	48357	0.2000	0.2195	
12 1,3-Dinitrobenzene	1	9.326	9.365	-0.039	62080	0.2000	0.2095	
13 Nitrobenzene	1	9.726	9.765	-0.039	37702	0.2000	0.1931	
15 Tetryl	1	10.066	10.112	-0.046	35050	0.2000	0.2033	M
16 Nitroglycerin	2	10.519	10.572	-0.053	143566	2.00	2.17	
17 2,4,6-Trinitrotoluene	1	10.972	11.025	-0.053	43191	0.2000	0.2096	
18 4-Amino-2,6-dinitrotoluene	1	11.179	11.239	-0.060	28905	0.2000	0.1892	
19 2-Amino-4,6-dinitrotoluene	1	11.432	11.499	-0.067	40451	0.2000	0.1955	
20 2,6-Dinitrotoluene	1	11.606	11.665	-0.059	28457	0.2000	0.1989	
21 2,4-Dinitrotoluene	1	11.772	11.832	-0.060	57394	0.2000	0.2000	
22 o-Nitrotoluene	1	12.646	12.712	-0.066	20178	0.2000	0.1572	
23 p-Nitrotoluene	1	13.079	13.152	-0.073	19167	0.2000	0.1713	
24 m-Nitrotoluene	1	13.666	13.745	-0.079	21521	0.2000	0.1513	
25 PETN	2	14.766	14.859	-0.093	154653	2.00	2.07	

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

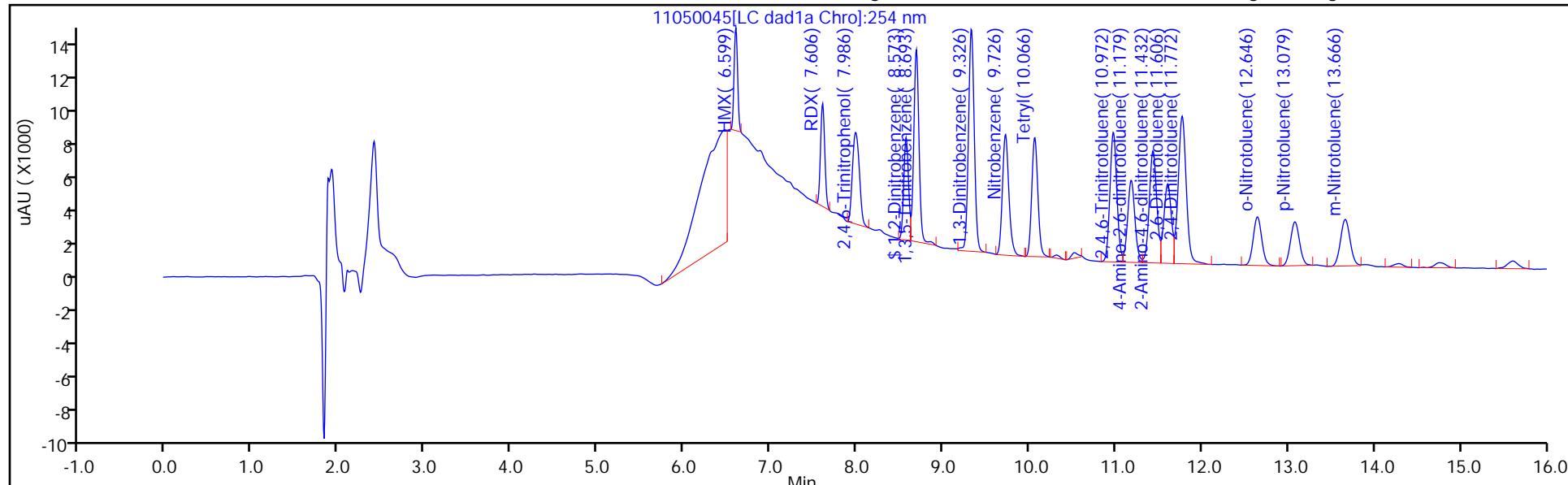
Report Date: 06-Nov-2021 10:25:02

Chrom Revision: 2.3 22-Sep-2021 15:38:46

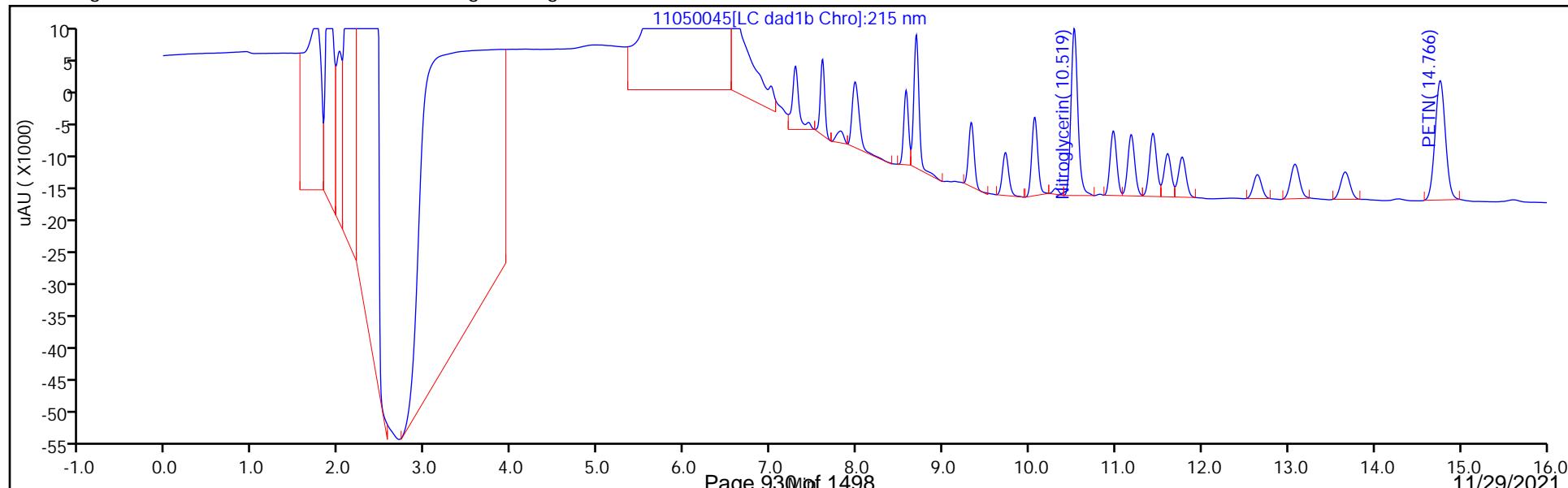
Eurofins TestAmerica, Denver

Data File: \\chromfs\\denver\\chromdata\\chhplc\_x\\20211105-106237.b\\11050045.d  
 Injection Date: 06-Nov-2021 04:14:38 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-155048-A-8-C MSD Operator ID: JZ  
 Client ID: G0070-7 Worklist Smp#: 45  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000 ALS Bottle#: 45  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver  
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\11050045.D  
 Lims ID: 280-155048-A-8-C MSD  
 Client ID: G0070-7  
 Sample Type: MSD  
 Inject. Date: 06-Nov-2021 04:14:38 ALS Bottle#: 45 Worklist Smp#: 45  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-155048-A-8-C  
 Misc. Info.: 280-0106237-045  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Nov-2021 10:25:01 Calib Date: 27-Oct-2021 04:27:09  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211027-105955.b\1026T007.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 10:18:50

Compound	Amount Added	Amount Recovered	% Rec.
\$ 10 1,2-Dinitrobenzene	0.2000	0.1851	92.57

## Eurofins TestAmerica, Denver

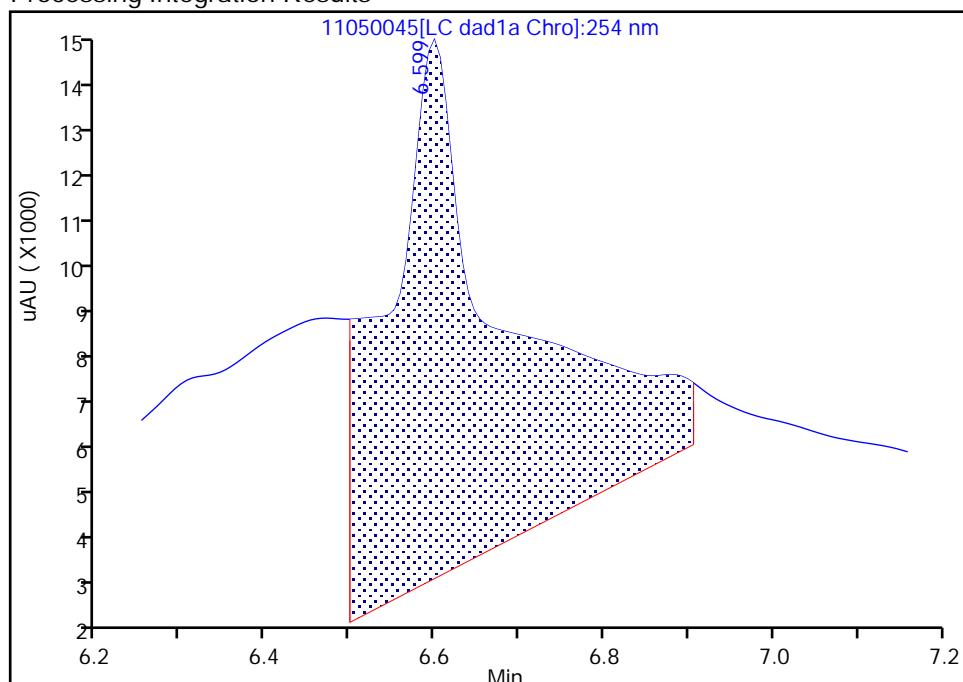
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 Injection Date: 06-Nov-2021 04:14:38 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-155048-A-8-C MSD  
 Client ID: G0070-7  
 Operator ID: JZ ALS Bottle#: 45 Worklist Smp#: 45  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

**4 HMX, CAS: 2691-41-0**

Signal: 1

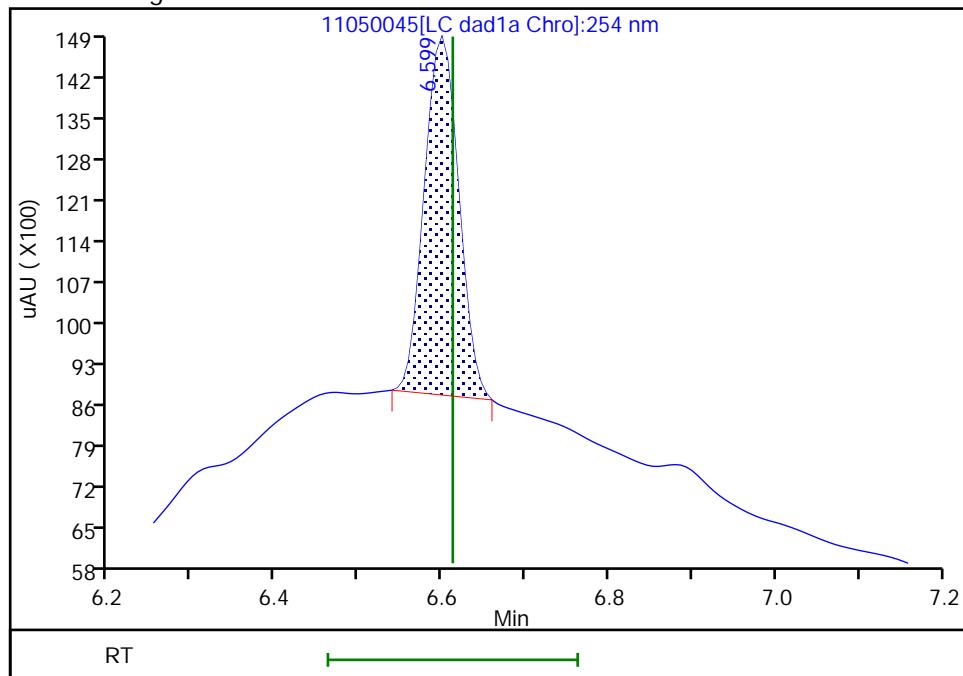
RT: 6.60  
 Area: 119581  
 Amount: 1.416477  
 Amount Units: ug/mL

## Processing Integration Results



RT: 6.60  
 Area: 17470  
 Amount: 0.206938  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 06-Nov-2021 10:18:30

Audit Action: Manually Integrated

Audit Reason: Baseline

## Eurofins TestAmerica, Denver

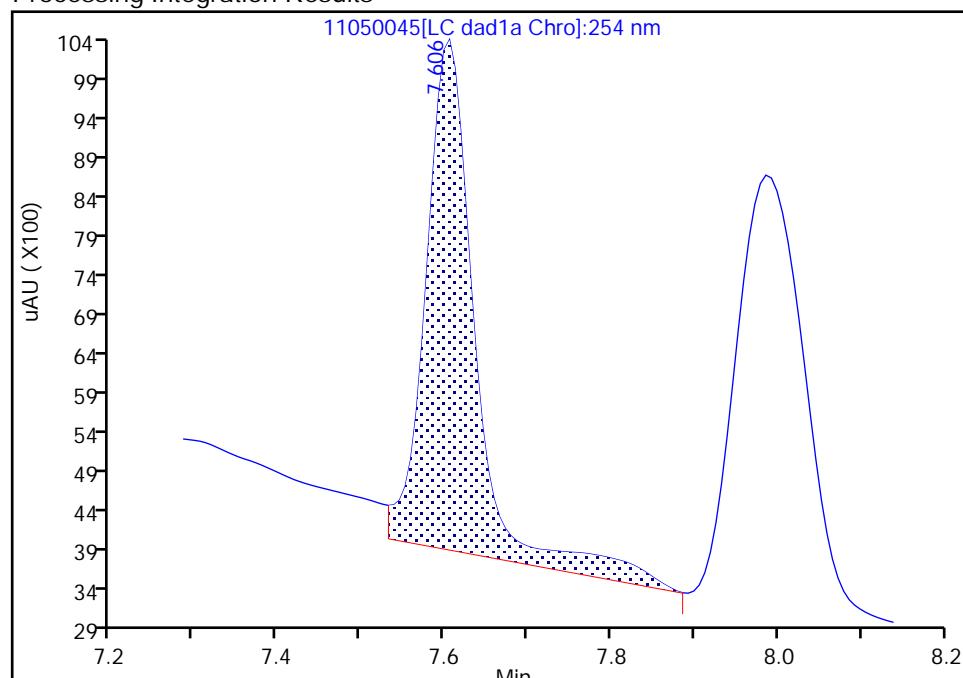
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 Injection Date: 06-Nov-2021 04:14:38 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-155048-A-8-C MSD  
 Client ID: G0070-7  
 Operator ID: JZ ALS Bottle#: 45 Worklist Smp#: 45  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

## 8 RDX, CAS: 121-82-4

Signal: 1

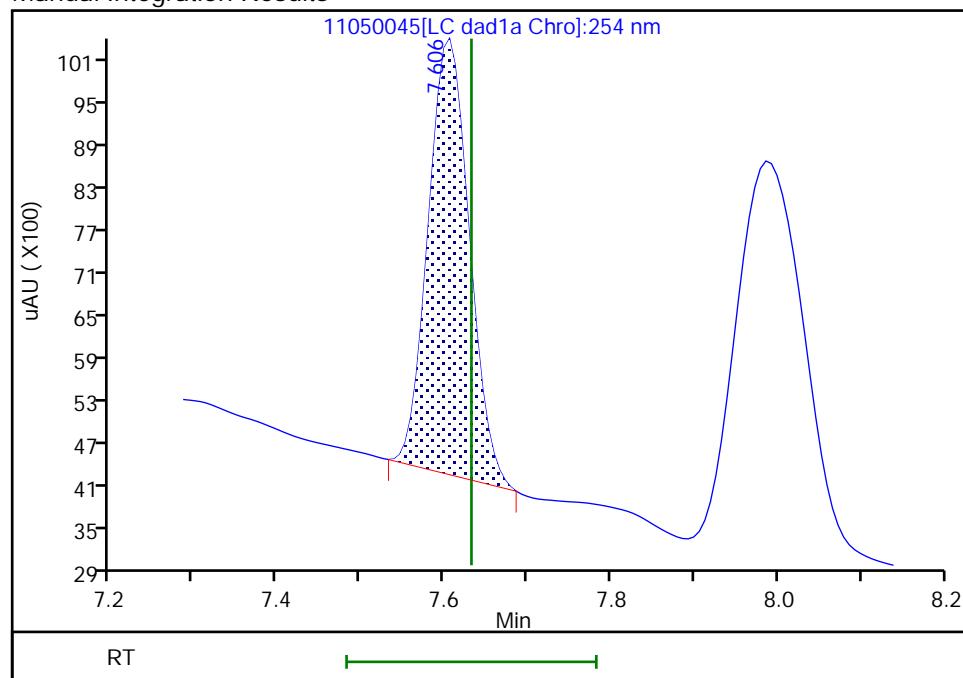
RT: 7.61  
 Area: 26683  
 Amount: 0.251107  
 Amount Units: ug/mL

## Processing Integration Results



RT: 7.61  
 Area: 20909  
 Amount: 0.196769  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 06-Nov-2021 10:18:35

Audit Action: Manually Integrated

Audit Reason: Baseline

## Eurofins TestAmerica, Denver

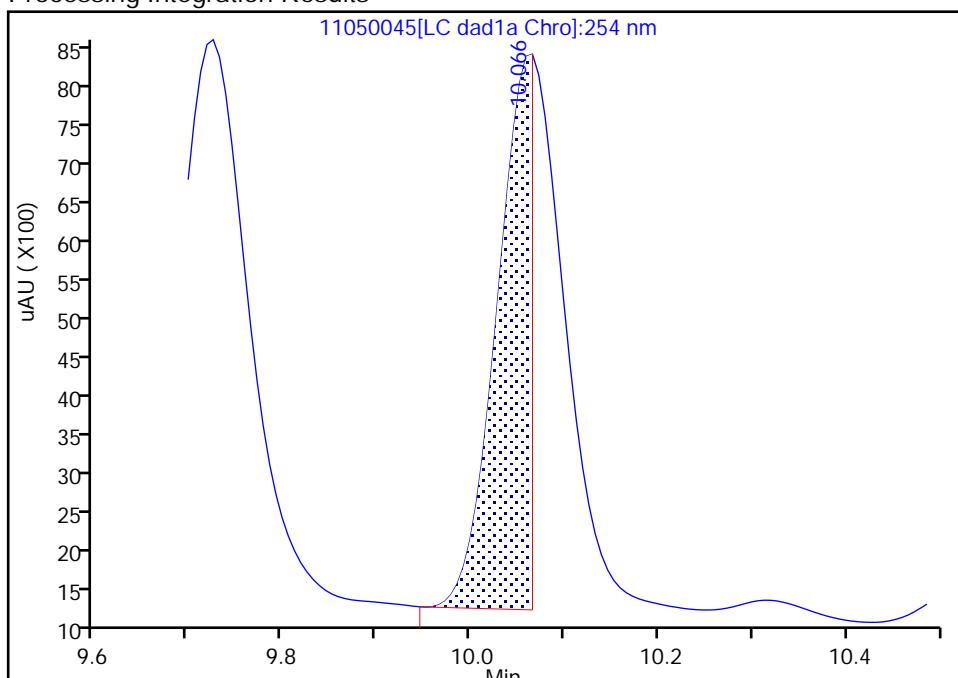
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 Injection Date: 06-Nov-2021 04:14:38 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-155048-A-8-C MSD  
 Client ID: G0070-7  
 Operator ID: JZ ALS Bottle#: 45 Worklist Smp#: 45  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

## 15 Tetryl, CAS: 479-45-8

Signal: 1

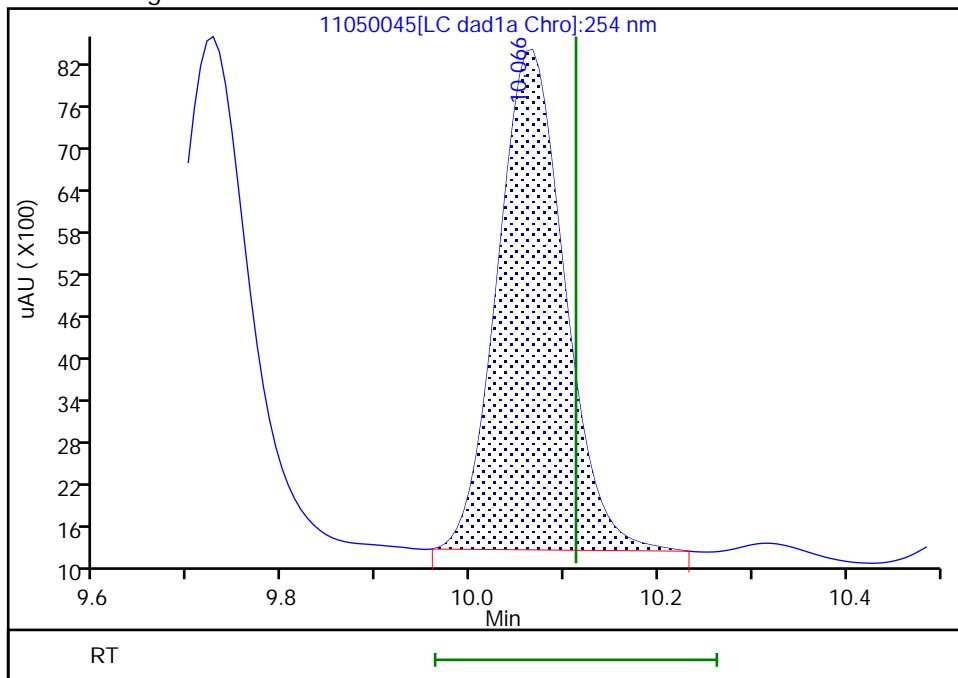
RT: 10.07  
 Area: 17945  
 Amount: 0.104077  
 Amount Units: ug/mL

## Processing Integration Results



RT: 10.07  
 Area: 35050  
 Amount: 0.203283  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 06-Nov-2021 10:18:47

Audit Action: Manually Integrated

Audit Reason: Baseline

FORM I  
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: G0070-7 MSD Lab Sample ID: 280-155048-8 MSD  
Matrix: Water Lab File ID: 11050047.D  
Analysis Method: 8330A Date Collected: 11/01/2021 14:25  
Extraction Method: 3535 Date Extracted: 11/04/2021 14:13  
Sample wt/vol: 511.1 (mL) Date Analyzed: 11/06/2021 05:00  
Con. Extract Vol.: 5 (mL) Dilution Factor: 1  
Injection Volume: 100 (uL) GC Column: UltraCarb5uODS ID: 4.6 (mm)  
% Moisture:  GPC Cleanup: (Y/N) N  
Analysis Batch No.: 556359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
5755-27-1	MNX	2.23	M	2.0	0.39	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	95	M	83-119

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\11050047.D  
 Lims ID: 280-155048-B-8-B MSD  
 Client ID: G0070-7  
 Sample Type: MSD  
 Inject. Date: 06-Nov-2021 05:00:24 ALS Bottle#: 47 Worklist Smp#: 47  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-155048-B-8-B  
 Misc. Info.: 280-0106237-047  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Nov-2021 10:25:01 Calib Date: 27-Oct-2021 04:27:09  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211027-105955.b\1026T007.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 10:24:18

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.475	6.493	-0.018	36572	0.2002	0.1968	M
6 DNX	1	6.795	6.813	-0.018	27126	0.2002	0.1909	M
7 MNX	1	7.221	7.239	-0.018	29773	0.2334	0.2284	M
\$ 10 1,2-Dinitrobenzene	1	8.575	8.606	-0.031	24280	0.2000	0.1894	M

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

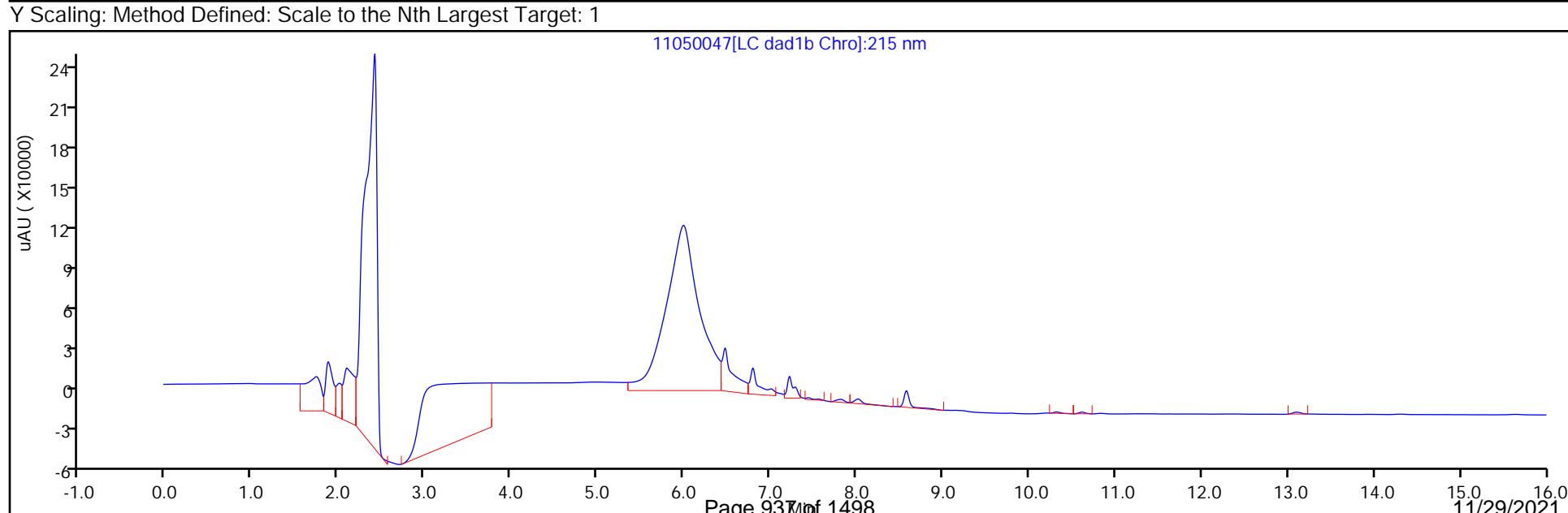
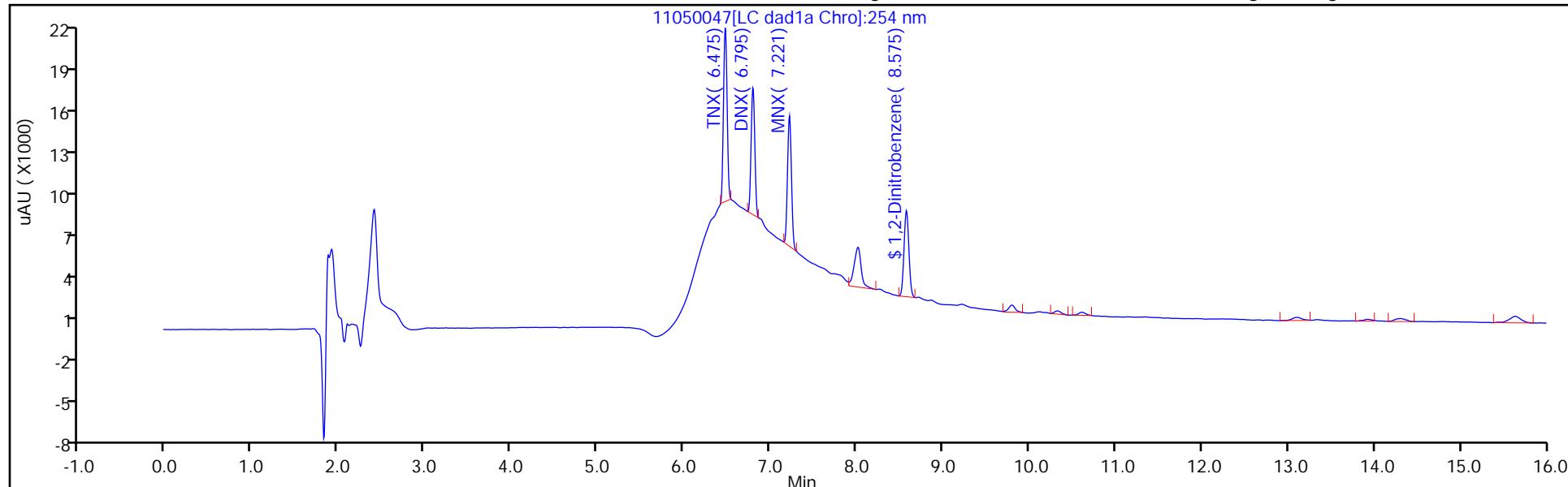
Report Date: 06-Nov-2021 10:25:03

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\\denver\\chromdata\\chhplc\_x\\20211105-106237.b\\11050047.d  
Injection Date: 06-Nov-2021 05:00:24 Instrument ID: CHHPLC\_X3  
Lims ID: 280-155048-B-8-B MSD Operator ID: JZ  
Client ID: G0070-7 Worklist Smp#: 47  
Injection Vol: 100.0 ul Dil. Factor: 1.0000 ALS Bottle#: 47  
Method: 8330\_X3 Limit Group: GCSV - 8330  
Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver  
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\11050047.D  
 Lims ID: 280-155048-B-8-B MSD  
 Client ID: G0070-7  
 Sample Type: MSD  
 Inject. Date: 06-Nov-2021 05:00:24 ALS Bottle#: 47 Worklist Smp#: 47  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-155048-B-8-B  
 Misc. Info.: 280-0106237-047  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20211105-106237.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Nov-2021 10:25:01 Calib Date: 27-Oct-2021 04:27:09  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20211027-105955.b\1026T007.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1650

First Level Reviewer: zhangji Date: 06-Nov-2021 10:24:18

Compound	Amount Added	Amount Recovered	% Rec.
\$ 10 1,2-Dinitrobenzene	0.2000	0.1894	94.68

## Eurofins TestAmerica, Denver

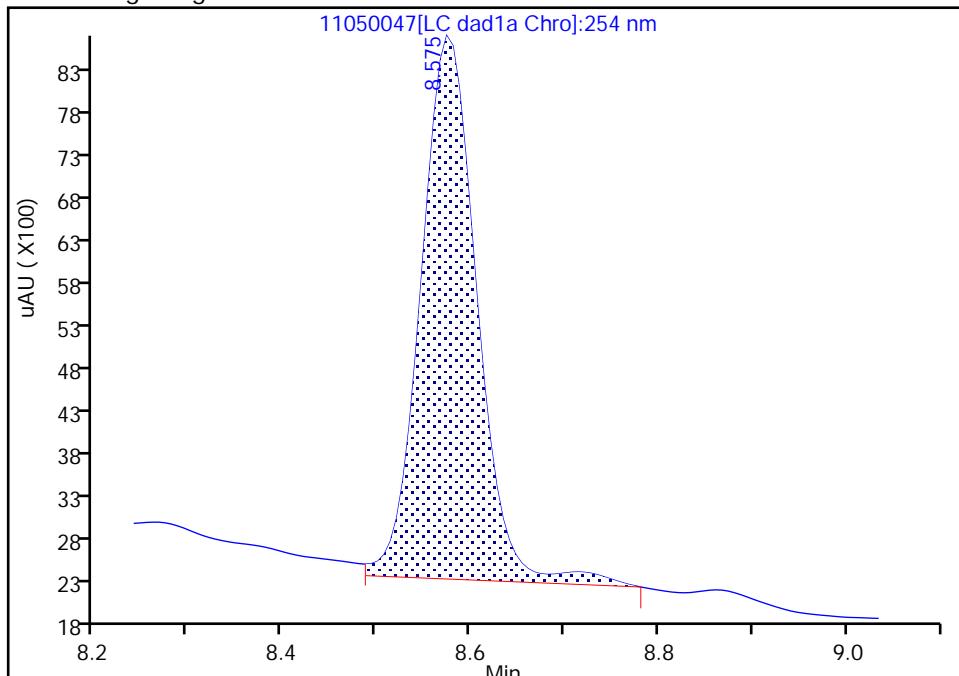
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 Injection Date: 06-Nov-2021 05:00:24 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-155048-B-8-B MSD  
 Client ID: G0070-7  
 Operator ID: JZ ALS Bottle#: 47 Worklist Smp#: 47  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

## \$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

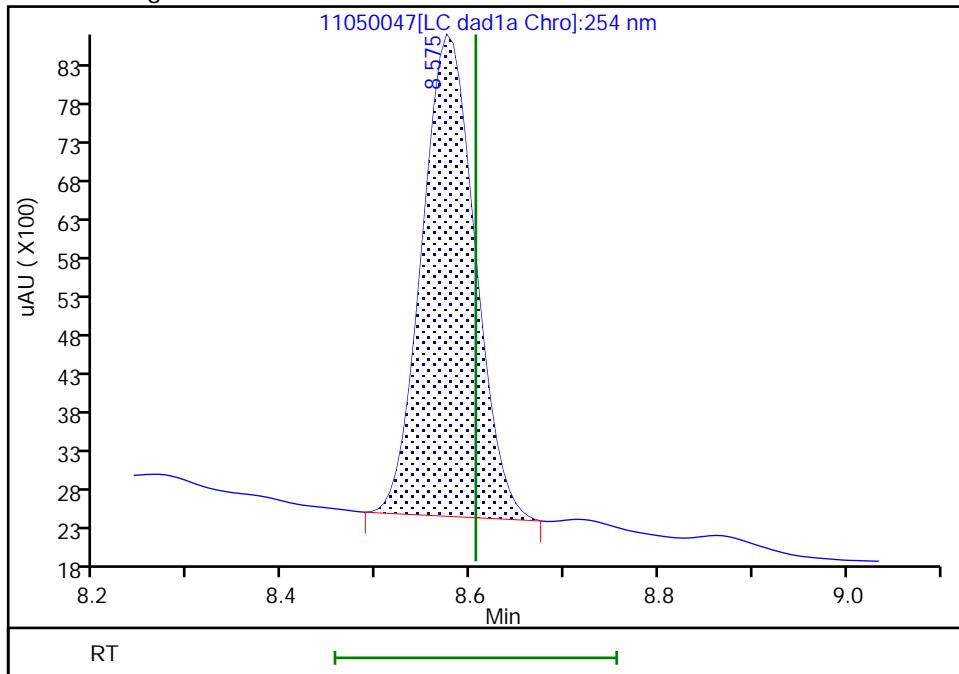
## Processing Integration Results

RT: 8.57  
 Area: 26217  
 Amount: 0.204473  
 Amount Units: ug/mL



## Manual Integration Results

RT: 8.57  
 Area: 24280  
 Amount: 0.189366  
 Amount Units: ug/mL



Reviewer: zhangji, 06-Nov-2021 10:24:16

Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Denver

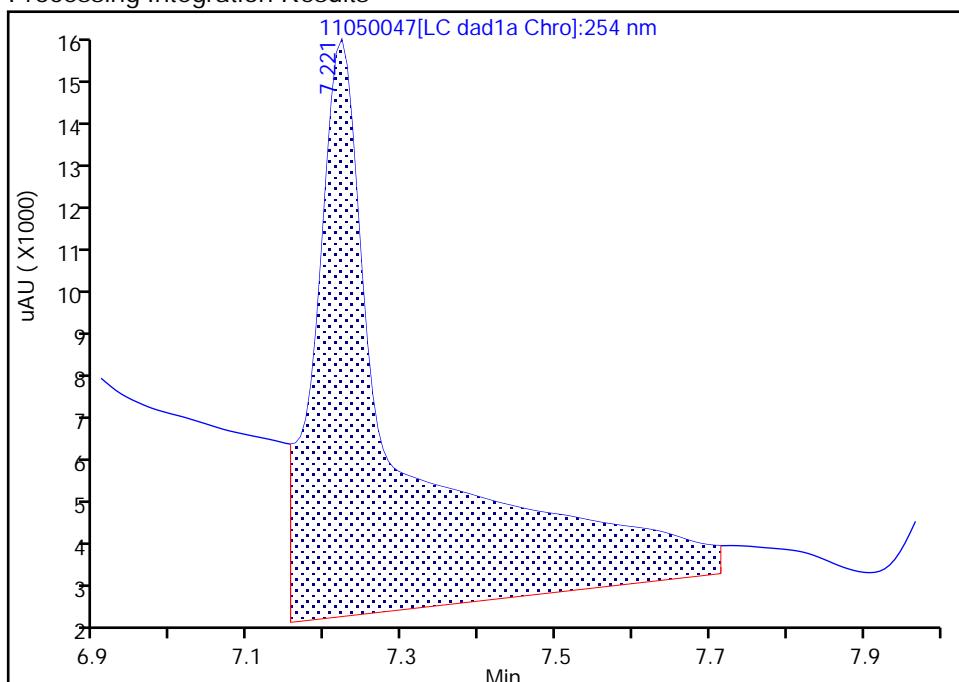
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 Injection Date: 06-Nov-2021 05:00:24 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-155048-B-8-B MSD  
 Client ID: G0070-7  
 Operator ID: JZ ALS Bottle#: 47 Worklist Smp#: 47  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

**7 MNX, CAS: 5755-27-1**

Signal: 1

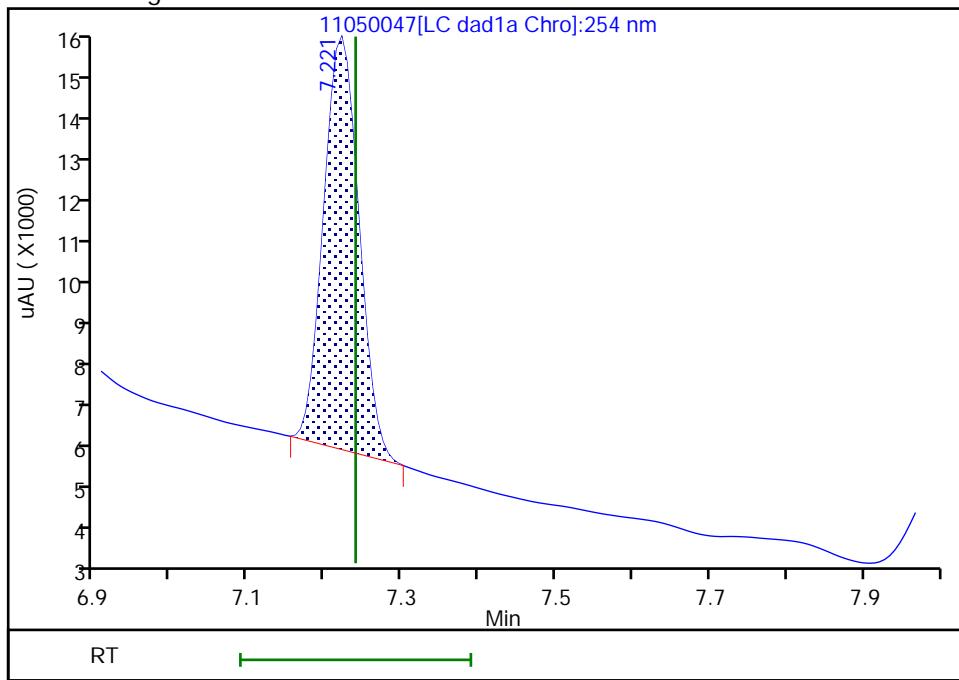
RT: 7.22  
 Area: 104121  
 Amount: 0.798839  
 Amount Units: ug/mL

## Processing Integration Results



RT: 7.22  
 Area: 29773  
 Amount: 0.228425  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 06-Nov-2021 10:24:12

Audit Action: Manually Integrated

Audit Reason: Baseline

## HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, DenverJob No.: 280-155048-1

SDG No.:

Instrument ID: CHHPLC\_X3Start Date: 03/02/2021 16:33Analysis Batch Number: 527768End Date: 03/03/2021 02:53

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-527768/11		03/02/2021 16:33	1		UltraCarb5uODS 4.6 (mm)
IC 280-527768/12		03/02/2021 16:56	1		UltraCarb5uODS 4.6 (mm)
IC 280-527768/13		03/02/2021 17:19	1		UltraCarb5uODS 4.6 (mm)
IC 280-527768/14		03/02/2021 17:42	1		UltraCarb5uODS 4.6 (mm)
IC 280-527768/15		03/02/2021 18:05	1		UltraCarb5uODS 4.6 (mm)
IC 280-527768/16		03/02/2021 18:28	1		UltraCarb5uODS 4.6 (mm)
IC 280-527768/17		03/02/2021 18:51	1		UltraCarb5uODS 4.6 (mm)
IC 280-527768/18		03/02/2021 19:13	1		UltraCarb5uODS 4.6 (mm)
IC 280-527768/58		03/02/2021 19:36	1		UltraCarb5uODS 4.6 (mm)
ICV 280-527768/19		03/02/2021 19:59	1		UltraCarb5uODS 4.6 (mm)
IC 280-527768/20		03/02/2021 20:22	1		UltraCarb5uODS 4.6 (mm)
IC 280-527768/21		03/02/2021 20:45	1		UltraCarb5uODS 4.6 (mm)
IC 280-527768/22		03/02/2021 21:08	1		UltraCarb5uODS 4.6 (mm)
IC 280-527768/23		03/02/2021 21:31	1		UltraCarb5uODS 4.6 (mm)
IC 280-527768/24		03/02/2021 21:54	1		UltraCarb5uODS 4.6 (mm)
IC 280-527768/25		03/02/2021 22:17	1		UltraCarb5uODS 4.6 (mm)
IC 280-527768/26		03/02/2021 22:40	1		UltraCarb5uODS 4.6 (mm)
IC 280-527768/27		03/02/2021 23:03	1		UltraCarb5uODS 4.6 (mm)
ICV 280-527768/28		03/02/2021 23:26	1		UltraCarb5uODS 4.6 (mm)
IC 280-527768/29		03/02/2021 23:49	1	03020029.D	UltraCarb5uODS 4.6 (mm)
IC 280-527768/30		03/03/2021 00:12	1	03020030.D	UltraCarb5uODS 4.6 (mm)
IC 280-527768/31		03/03/2021 00:35	1	03020031.D	UltraCarb5uODS 4.6 (mm)
IC 280-527768/32		03/03/2021 00:58	1	03020032.D	UltraCarb5uODS 4.6 (mm)
IC 280-527768/33		03/03/2021 01:21	1	03020033.D	UltraCarb5uODS 4.6 (mm)
IC 280-527768/34		03/03/2021 01:44	1	03020034.D	UltraCarb5uODS 4.6 (mm)
IC 280-527768/35		03/03/2021 02:07	1	03020035.D	UltraCarb5uODS 4.6 (mm)
IC 280-527768/36		03/03/2021 02:30	1	03020036.D	UltraCarb5uODS 4.6 (mm)
ICV 280-527768/37		03/03/2021 02:53	1	03020037.D	UltraCarb5uODS 4.6 (mm)

## HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Instrument ID: CHHPLC\_X5 Start Date: 05/01/2021 18:54Analysis Batch Number: 534620 End Date: 05/02/2021 05:26

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-534620/10		05/01/2021 18:54	1	010-0501.D	Luna-phenylhex 4.6 (mm)
IC 280-534620/11		05/01/2021 19:29	1	011-0601.D	Luna-phenylhex 4.6 (mm)
IC 280-534620/12		05/01/2021 20:04	1	012-0701.D	Luna-phenylhex 4.6 (mm)
IC 280-534620/13		05/01/2021 20:39	1	013-0801.D	Luna-phenylhex 4.6 (mm)
IC 280-534620/14		05/01/2021 21:15	1	014-0901.D	Luna-phenylhex 4.6 (mm)
IC 280-534620/15		05/01/2021 21:50	1	015-1001.D	Luna-phenylhex 4.6 (mm)
IC 280-534620/16		05/01/2021 22:25	1	016-1101.D	Luna-phenylhex 4.6 (mm)
IC 280-534620/17		05/01/2021 23:00	1	017-1201.D	Luna-phenylhex 4.6 (mm)
IC 280-534620/18		05/01/2021 23:35	1	018-1301.D	Luna-phenylhex 4.6 (mm)
ICV 280-534620/19		05/02/2021 00:10	1	019-1401.D	Luna-phenylhex 4.6 (mm)
IC 280-534620/20		05/02/2021 00:45	1	020-1501.D	Luna-phenylhex 4.6 (mm)
IC 280-534620/21		05/02/2021 01:20	1	021-1601.D	Luna-phenylhex 4.6 (mm)
IC 280-534620/22		05/02/2021 01:55	1	022-1701.D	Luna-phenylhex 4.6 (mm)
IC 280-534620/23		05/02/2021 02:30	1	023-1801.D	Luna-phenylhex 4.6 (mm)
IC 280-534620/24		05/02/2021 03:05	1	024-1901.D	Luna-phenylhex 4.6 (mm)
IC 280-534620/25		05/02/2021 03:41	1	025-2001.D	Luna-phenylhex 4.6 (mm)
IC 280-534620/26		05/02/2021 04:16	1	026-2101.D	Luna-phenylhex 4.6 (mm)
IC 280-534620/27		05/02/2021 04:51	1	027-2201.D	Luna-phenylhex 4.6 (mm)
ICV 280-534620/28		05/02/2021 05:26	1	028-2301.D	Luna-phenylhex 4.6 (mm)

## HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Instrument ID: CHHPLC\_X3 Start Date: 05/01/2021 18:01Analysis Batch Number: 534622 End Date: 05/01/2021 21:27

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-534622/11		05/01/2021 18:01	1	011-0501.D	UltraCarb5uODS 4.6 (mm)
IC 280-534622/12		05/01/2021 18:23	1	012-0601.D	UltraCarb5uODS 4.6 (mm)
IC 280-534622/13		05/01/2021 18:46	1	013-0701.D	UltraCarb5uODS 4.6 (mm)
IC 280-534622/14		05/01/2021 19:09	1	014-0801.D	UltraCarb5uODS 4.6 (mm)
IC 280-534622/15		05/01/2021 19:32	1	015-0901.D	UltraCarb5uODS 4.6 (mm)
IC 280-534622/16		05/01/2021 19:55	1	016-1001.D	UltraCarb5uODS 4.6 (mm)
IC 280-534622/17		05/01/2021 20:18	1	017-1101.D	UltraCarb5uODS 4.6 (mm)
IC 280-534622/18		05/01/2021 20:41	1	018-1201.D	UltraCarb5uODS 4.6 (mm)
IC 280-534622/19		05/01/2021 21:04	1	019-1301.D	UltraCarb5uODS 4.6 (mm)
ICV 280-534622/20		05/01/2021 21:27	1	020-1401.D	UltraCarb5uODS 4.6 (mm)

## HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Instrument ID: CHHPLC\_X3

Start Date: 11/05/2021 14:27

Analysis Batch Number: 556359

End Date: 11/06/2021 05:46

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-556359/7		11/05/2021 14:27	1	11050007.D	UltraCarb5uODS 4.6 (mm)
CCV 280-556359/9		11/05/2021 14:50	1	11050009.D	UltraCarb5uODS 4.6 (mm)
MB 280-556180/1-A		11/05/2021 15:15	1	11050011.D	UltraCarb5uODS 4.6 (mm)
LCS 280-556180/2-A		11/05/2021 15:38	1	11050012.D	UltraCarb5uODS 4.6 (mm)
LCS 280-556180/3-A		11/05/2021 16:00	1	11050013.D	UltraCarb5uODS 4.6 (mm)
ZZZZZ		11/05/2021 16:23	1		UltraCarb5uODS 4.6 (mm)
ZZZZZ		11/05/2021 16:46	1		UltraCarb5uODS 4.6 (mm)
ZZZZZ		11/05/2021 17:09	1		UltraCarb5uODS 4.6 (mm)
ZZZZZ		11/05/2021 17:32	1		UltraCarb5uODS 4.6 (mm)
ZZZZZ		11/05/2021 17:55	1		UltraCarb5uODS 4.6 (mm)
ZZZZZ		11/05/2021 18:18	1		UltraCarb5uODS 4.6 (mm)
ZZZZZ		11/05/2021 18:41	1		UltraCarb5uODS 4.6 (mm)
CCV 280-556359/21		11/05/2021 19:04	1	11050021.D	UltraCarb5uODS 4.6 (mm)
CCV 280-556359/22		11/05/2021 19:27	1	11050022.D	UltraCarb5uODS 4.6 (mm)
ZZZZZ		11/05/2021 19:50	1		UltraCarb5uODS 4.6 (mm)
ZZZZZ		11/05/2021 20:13	1		UltraCarb5uODS 4.6 (mm)
ZZZZZ		11/05/2021 20:36	1		UltraCarb5uODS 4.6 (mm)
ZZZZZ		11/05/2021 20:58	1		UltraCarb5uODS 4.6 (mm)
ZZZZZ		11/05/2021 21:21	1		UltraCarb5uODS 4.6 (mm)
280-155048-1	CA211-7	11/05/2021 21:44	1	11050028.D	UltraCarb5uODS 4.6 (mm)
280-155048-2	CA212-7	11/05/2021 22:07	1	11050029.D	UltraCarb5uODS 4.6 (mm)
280-155048-3	NW061-7	11/05/2021 22:30	1	11050030.D	UltraCarb5uODS 4.6 (mm)
280-155048-4	G0076-7	11/05/2021 22:53	1	11050031.D	UltraCarb5uODS 4.6 (mm)
280-155048-5	NW060-7	11/05/2021 23:16	1	11050032.D	UltraCarb5uODS 4.6 (mm)
CCV 280-556359/33		11/05/2021 23:39	1	11050033.D	UltraCarb5uODS 4.6 (mm)
CCV 280-556359/34		11/06/2021 00:02	1	11050034.D	UltraCarb5uODS 4.6 (mm)
280-155048-6	CA210-7	11/06/2021 00:25	1	11050035.D	UltraCarb5uODS 4.6 (mm)
280-155048-7	NW062-7	11/06/2021 00:48	1	11050036.D	UltraCarb5uODS 4.6 (mm)
280-155048-7 MS	NW062-7 MS	11/06/2021 01:11	1	11050037.D	UltraCarb5uODS 4.6 (mm)
280-155048-7 MSD	NW062-7 MSD	11/06/2021 01:34	1	11050038.D	UltraCarb5uODS 4.6 (mm)
280-155048-7 MS	NW062-7 MS	11/06/2021 01:57	1	11050039.D	UltraCarb5uODS 4.6 (mm)
280-155048-7 MSD	NW062-7 MSD	11/06/2021 02:20	1	11050040.D	UltraCarb5uODS 4.6 (mm)
CCV 280-556359/41		11/06/2021 02:42	1	11050041.D	UltraCarb5uODS 4.6 (mm)
CCV 280-556359/42		11/06/2021 03:05	1	11050042.D	UltraCarb5uODS 4.6 (mm)
280-155048-8	G0070-7	11/06/2021 03:28	1	11050043.D	UltraCarb5uODS 4.6 (mm)
280-155048-8 MS	G0070-7 MS	11/06/2021 03:51	1	11050044.D	UltraCarb5uODS 4.6 (mm)
280-155048-8 MSD	G0070-7 MSD	11/06/2021 04:14	1	11050045.D	UltraCarb5uODS 4.6 (mm)
280-155048-8 MS	G0070-7 MS	11/06/2021 04:37	1	11050046.D	UltraCarb5uODS 4.6 (mm)
280-155048-8 MSD	G0070-7 MSD	11/06/2021 05:00	1	11050047.D	UltraCarb5uODS 4.6 (mm)
CCV 280-556359/48		11/06/2021 05:23	1	11050048.D	UltraCarb5uODS 4.6 (mm)
CCV 280-556359/49		11/06/2021 05:46	1	11050049.D	UltraCarb5uODS 4.6 (mm)

## HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Instrument ID: CHHPLC\_X5 Start Date: 11/05/2021 23:15Analysis Batch Number: 556366 End Date: 11/06/2021 12:05

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-556366/23		11/05/2021 23:15	1		Luna-phenylhex 4.6 (mm)
CCV 280-556366/24		11/05/2021 23:49	1		Luna-phenylhex 4.6 (mm)
ZZZZZ		11/06/2021 00:24	1		Luna-phenylhex 4.6 (mm)
ZZZZZ		11/06/2021 01:00	1		Luna-phenylhex 4.6 (mm)
ZZZZZ		11/06/2021 01:34	1		Luna-phenylhex 4.6 (mm)
ZZZZZ		11/06/2021 02:09	1		Luna-phenylhex 4.6 (mm)
ZZZZZ		11/06/2021 02:44	1		Luna-phenylhex 4.6 (mm)
ZZZZZ		11/06/2021 03:19	1		Luna-phenylhex 4.6 (mm)
ZZZZZ		11/06/2021 03:54	1		Luna-phenylhex 4.6 (mm)
ZZZZZ		11/06/2021 04:29	1		Luna-phenylhex 4.6 (mm)
ZZZZZ		11/06/2021 05:05	1		Luna-phenylhex 4.6 (mm)
ZZZZZ		11/06/2021 05:40	1		Luna-phenylhex 4.6 (mm)
CCV 280-556366/35		11/06/2021 06:15	1	11050035.D	Luna-phenylhex 4.6 (mm)
CCV 280-556366/36		11/06/2021 06:50	1	11050036.D	Luna-phenylhex 4.6 (mm)
ZZZZZ		11/06/2021 07:25	1		Luna-phenylhex 4.6 (mm)
ZZZZZ		11/06/2021 08:00	1		Luna-phenylhex 4.6 (mm)
ZZZZZ		11/06/2021 08:35	1		Luna-phenylhex 4.6 (mm)
ZZZZZ		11/06/2021 09:10	1		Luna-phenylhex 4.6 (mm)
ZZZZZ		11/06/2021 09:45	1		Luna-phenylhex 4.6 (mm)
ZZZZZ		11/06/2021 10:20	1		Luna-phenylhex 4.6 (mm)
280-155048-6	CA210-7	11/06/2021 10:55	1	11050049.D	Luna-phenylhex 4.6 (mm)
CCV 280-556366/55		11/06/2021 11:30	1	11050055.D	Luna-phenylhex 4.6 (mm)
CCV 280-556366/56		11/06/2021 12:05	1	11050056.D	Luna-phenylhex 4.6 (mm)

## HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Batch Number: 556180

Batch Start Date: 11/04/21 14:13

Batch Analyst: Hayburn, Christopher D

Batch Method: 3535

Batch End Date: 11/04/21 17:31

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	8330 LCS 00110	8330 OP DMT 00011
MB 280-556180/1		3535, 8330A				500 mL	5 mL		
LCS 280-556180/2		3535, 8330A				500 mL	5 mL	0.1 mL	
LCS 280-556180/3		3535, 8330A				500 mL	5 mL		0.1 mL
280-155048-A-1	CA211-7	3535, 8330A	T	794.5 g	287.8 g	506.7 mL	5 mL		
280-155048-A-2	CA212-7	3535, 8330A	T	793.9 g	288.5 g	505.4 mL	5 mL		
280-155048-A-3	NW061-7	3535, 8330A	T	785.5 g	288.8 g	496.7 mL	5 mL		
280-155048-A-4	G0076-7	3535, 8330A	T	784.9 g	283.9 g	501 mL	5 mL		
280-155048-A-5	NW060-7	3535, 8330A	T	786.7 g	287.9 g	498.8 mL	5 mL		
280-155048-A-6	CA210-7	3535, 8330A	T	790.5 g	288.8 g	501.7 mL	5 mL		
280-155048-A-7	NW062-7	3535, 8330A	T	781.4 g	287.8 g	493.6 mL	5 mL		
280-155048-A-7 MS	NW062-7	3535, 8330A	T	779.0 g	289.6 g	489.4 mL	5 mL	0.1 mL	
280-155048-A-7 MSD	NW062-7	3535, 8330A	T	788.0 g	288.3 g	499.7 mL	5 mL	0.1 mL	
280-155048-B-7 MS	NW062-7	3535, 8330A	T	783.2 g	289.6 g	493.6 mL	5 mL		0.1 mL
280-155048-B-7 MSD	NW062-7	3535, 8330A	T	782.8 g	288.2 g	494.6 mL	5 mL		0.1 mL
280-155048-A-8	G0070-7	3535, 8330A	T	786.7 g	287.6 g	499.1 mL	5 mL		
280-155048-A-8 MS	G0070-7	3535, 8330A	T	779.9 g	287.4 g	492.5 mL	5 mL	0.1 mL	
280-155048-A-8 MSD	G0070-7	3535, 8330A	T	784.6 g	287.9 g	496.7 mL	5 mL	0.1 mL	
280-155048-B-8 MS	G0070-7	3535, 8330A	T	797.3 g	286.9 g	510.4 mL	5 mL		0.1 mL
280-155048-B-8 MSD	G0070-7	3535, 8330A	T	797.9 g	286.8 g	511.1 mL	5 mL		0.1 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330Surrogate 00126	AnalysisComment				
MB 280-556180/1		3535, 8330A		0.1 mL					
LCS 280-556180/2		3535, 8330A		0.1 mL	8830				
LCS 280-556180/3		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 TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Batch Number: 556180

Batch Start Date: 11/04/21 14:13

Batch Analyst: Hayburn, Christopher D

Batch Method: 3535

Batch End Date: 11/04/21 17:31

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330Surrogate 00126	AnalysisComment				
280-155048-A-1	CA211-7	3535, 8330A	T	0.1 mL					
280-155048-A-2	CA212-7	3535, 8330A	T	0.1 mL					
280-155048-A-3	NW061-7	3535, 8330A	T	0.1 mL					
280-155048-A-4	G0076-7	3535, 8330A	T	0.1 mL					
280-155048-A-5	NW060-7	3535, 8330A	T	0.1 mL					
280-155048-A-6	CA210-7	3535, 8330A	T	0.1 mL					
280-155048-A-7	NW062-7	3535, 8330A	T	0.1 mL					
280-155048-A-7 MS	NW062-7	3535, 8330A	T	0.1 mL	8330				
280-155048-A-7 MSD	NW062-7	3535, 8330A	T	0.1 mL	8330				
280-155048-B-7 MS	NW062-7	3535, 8330A	T	0.1 mL	DMT				
280-155048-B-7 MSD	NW062-7	3535, 8330A	T	0.1 mL	DMT				
280-155048-A-8	G0070-7	3535, 8330A	T	0.1 mL					
280-155048-A-8 MS	G0070-7	3535, 8330A	T	0.1 mL	8330				
280-155048-A-8 MSD	G0070-7	3535, 8330A	T	0.1 mL	8330				
280-155048-B-8 MS	G0070-7	3535, 8330A	T	0.1 mL	DMT				
280-155048-B-8 MSD	G0070-7	3535, 8330A	T	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 TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Batch Number: 556180

Batch Start Date: 11/04/21 14:13

Batch Analyst: Hayburn, Christopher D

Batch Method: 3535

Batch End Date: 11/04/21 17:31

Batch Notes	
First Start time	11/04/2021 14:50
First End time	11/04/2021 17:10
SPE Cartridge Type	Porapak RDX
SPE Cartridge Lot ID	0052312024
Balance ID	24350888
Pipette/Syringe/Dispenser ID	JiJi, Soot, DOD
Solvent Name	Acetonitrile
Solvent Lot #	Acetonitrile_00055
Rinse Solvent Name	0.1%AAinACN
Rinse Solvent Lot	0.1%AAinACN_00168
Acid Name	Ca2Cl
Acid ID	Ca2Cl_Sol_00078
Analyst ID - Spike Analyst	DL
Analyst ID - Spike Witness Analyst	Reviewer: EB
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 TestAmerica, Denver Job Number: 280-155048-1

SDG No.: \_\_\_\_\_

Project: Cornhusker (CHAAP)

Client Sample ID	Lab Sample ID
CA211-7	280-155048-1
CA212-7	280-155048-2
NW061-7	280-155048-3
G0076-7	280-155048-4
NW060-7	280-155048-5
CA210-7	280-155048-6
NW062-7	280-155048-7
G0070-7	280-155048-8

Comments:

1B-IN  
INORGANIC ANALYSIS DATA SHEET  
GENERAL CHEMISTRY

Client Sample ID: CA211-7

Lab Sample ID: 280-155048-1

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG ID.:

Matrix: Water

Date Sampled: 11/02/2021 10:55

Reporting Basis: WET

Date Received: 11/03/2021 10:55

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.050	0.10	0.050	0.022	mg/L	U		1	350.1
Nitrogen, Total Kjeldahl	1.0	1.0	1.0	0.69	mg/L	U		1	351.2
Nitrate Nitrite as N	36	1.0	0.50	0.19	mg/L			10	353.2
Sulfide	1.6	4.0	1.9	0.79	mg/L	J		1	9034
Sulfate	110	5.0	2.5	1.0	mg/L			1	9056A
Total Alkalinity as CaCO <sub>3</sub>	220	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN  
INORGANIC ANALYSIS DATA SHEET  
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: CA211-7

Lab Sample ID: 280-155048-1

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG ID.:

Matrix: Water

Date Sampled: 11/02/2021 10:55

Reporting Basis: WET

Date Received: 11/03/2021 10:55

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	4.9	1.0	0.80	0.35	mg/L			1	9060A

1B-IN  
INORGANIC ANALYSIS DATA SHEET  
GENERAL CHEMISTRY

Client Sample ID: CA212-7

Lab Sample ID: 280-155048-2

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG ID.:

Matrix: Water

Date Sampled: 11/02/2021 12:05

Reporting Basis: WET

Date Received: 11/03/2021 10:55

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.050	0.10	0.050	0.022	mg/L	U		1	350.1
Nitrogen, Total Kjeldahl	1.0	1.0	1.0	0.69	mg/L	U		1	351.2
Nitrate Nitrite as N	17	1.0	0.50	0.19	mg/L			10	353.2
Sulfide	0.80	4.0	1.9	0.79	mg/L	J		1	9034
Sulfate	84	5.0	2.5	1.0	mg/L			1	9056A
Total Alkalinity as CaCO <sub>3</sub>	200	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN  
INORGANIC ANALYSIS DATA SHEET  
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: CA212-7

Lab Sample ID: 280-155048-2

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG ID.:

Matrix: Water

Date Sampled: 11/02/2021 12:05

Reporting Basis: WET

Date Received: 11/03/2021 10:55

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	2.7	1.0	0.80	0.35	mg/L			1	9060A

1B-IN  
INORGANIC ANALYSIS DATA SHEET  
GENERAL CHEMISTRY

Client Sample ID: NW061-7

Lab Sample ID: 280-155048-3

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG ID.:

Matrix: Water

Date Sampled: 11/02/2021 11:30

Reporting Basis: WET

Date Received: 11/03/2021 10:55

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	3.9	0.10	0.050	0.022	mg/L			1	350.1
Nitrogen, Total Kjeldahl	2.8	1.0	1.0	0.69	mg/L			1	351.2
Nitrate Nitrite as N	12	0.50	0.25	0.095	mg/L			5	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	140	5.0	2.5	1.0	mg/L			1	9056A
Total Alkalinity as CaCO <sub>3</sub>	300	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN  
INORGANIC ANALYSIS DATA SHEET  
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: NW061-7

Lab Sample ID: 280-155048-3

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG ID.:

Matrix: Water

Date Sampled: 11/02/2021 11:30

Reporting Basis: WET

Date Received: 11/03/2021 10:55

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	5.1	1.0	0.80	0.35	mg/L			1	9060A

1B-IN  
INORGANIC ANALYSIS DATA SHEET  
GENERAL CHEMISTRY

Client Sample ID: G0076-7

Lab Sample ID: 280-155048-4

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG ID.:

Matrix: Water

Date Sampled: 11/01/2021 13:10

Reporting Basis: WET

Date Received: 11/03/2021 10:55

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	1.8	0.10	0.050	0.022	mg/L			1	350.1
Nitrogen, Total Kjeldahl	2.0	1.0	1.0	0.69	mg/L			1	351.2
Nitrate Nitrite as N	0.050	0.10	0.050	0.019	mg/L	U		1	353.2
Sulfide	0.80	4.0	1.9	0.79	mg/L	J		1	9034
Sulfate	280	25	13	5.2	mg/L		D	5	9056A
Total Alkalinity as CaCO <sub>3</sub>	380	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN  
INORGANIC ANALYSIS DATA SHEET  
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0076-7

Lab Sample ID: 280-155048-4

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG ID.:

Matrix: Water

Date Sampled: 11/01/2021 13:10

Reporting Basis: WET

Date Received: 11/03/2021 10:55

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	5.2	1.0	0.80	0.35	mg/L			1	9060A

1B-IN  
INORGANIC ANALYSIS DATA SHEET  
GENERAL CHEMISTRY

Client Sample ID: NW060-7

Lab Sample ID: 280-155048-5

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG ID.:

Matrix: Water

Date Sampled: 11/02/2021 10:10

Reporting Basis: WET

Date Received: 11/03/2021 10:55

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.050	0.10	0.050	0.022	mg/L	U		1	350.1
Nitrogen, Total Kjeldahl	1.0	1.0	1.0	0.69	mg/L	U		1	351.2
Nitrate Nitrite as N	3.6	0.10	0.050	0.019	mg/L			1	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	30	5.0	2.5	1.0	mg/L			1	9056A
Total Alkalinity as CaCO <sub>3</sub>	58	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN  
INORGANIC ANALYSIS DATA SHEET  
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: NW060-7

Lab Sample ID: 280-155048-5

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG ID.:

Matrix: Water

Date Sampled: 11/02/2021 10:10

Reporting Basis: WET

Date Received: 11/03/2021 10:55

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	2.7	1.0	0.80	0.35	mg/L			1	9060A

1B-IN  
INORGANIC ANALYSIS DATA SHEET  
GENERAL CHEMISTRY

Client Sample ID: CA210-7

Lab Sample ID: 280-155048-6

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG ID.:

Matrix: Water

Date Sampled: 11/02/2021 09:50

Reporting Basis: WET

Date Received: 11/03/2021 10:55

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.050	0.10	0.050	0.022	mg/L	U		1	350.1
Nitrogen, Total Kjeldahl	1.0	1.0	1.0	0.69	mg/L	U		1	351.2
Nitrate Nitrite as N	29	1.0	0.50	0.19	mg/L			10	353.2
Sulfide	0.80	4.0	1.9	0.79	mg/L	J		1	9034
Sulfate	210	25	13	5.2	mg/L		D	5	9056A
Total Alkalinity as CaCO <sub>3</sub>	410	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN  
INORGANIC ANALYSIS DATA SHEET  
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: CA210-7

Lab Sample ID: 280-155048-6

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG ID.:

Matrix: Water

Date Sampled: 11/02/2021 09:50

Reporting Basis: WET

Date Received: 11/03/2021 10:55

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	10	1.0	0.80	0.35	mg/L			1	9060A

1B-IN  
INORGANIC ANALYSIS DATA SHEET  
GENERAL CHEMISTRY

Client Sample ID: NW062-7

Lab Sample ID: 280-155048-7

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG ID.:

Matrix: Water

Date Sampled: 11/02/2021 12:50

Reporting Basis: WET

Date Received: 11/03/2021 10:55

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	1.2	0.10	0.050	0.022	mg/L			1	350.1
Nitrogen, Total Kjeldahl	1.6	1.0	1.0	0.69	mg/L			1	351.2
Nitrate Nitrite as N	0.050	0.10	0.050	0.019	mg/L	U		1	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	200	5.0	2.5	1.0	mg/L		J1	1	9056A
Total Alkalinity as CaCO <sub>3</sub>	290	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN  
INORGANIC ANALYSIS DATA SHEET  
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: NW062-7

Lab Sample ID: 280-155048-7

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG ID.:

Matrix: Water

Date Sampled: 11/02/2021 12:50

Reporting Basis: WET

Date Received: 11/03/2021 10:55

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	3.0	1.0	0.80	0.35	mg/L			1	9060A

1B-IN  
INORGANIC ANALYSIS DATA SHEET  
GENERAL CHEMISTRY

Client Sample ID: G0070-7

Lab Sample ID: 280-155048-8

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG ID.:

Matrix: Water

Date Sampled: 11/01/2021 14:25

Reporting Basis: WET

Date Received: 11/03/2021 10:55

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.050	0.10	0.050	0.022	mg/L	U		1	350.1
Nitrogen, Total Kjeldahl	1.0	1.0	1.0	0.69	mg/L	U	J1	1	351.2
Nitrate Nitrite as N	0.050	0.10	0.050	0.019	mg/L	U		1	353.2
Sulfide	0.80	4.0	1.9	0.79	mg/L	J		1	9034
Sulfate	47	5.0	2.5	1.0	mg/L		J1	1	9056A
Total Alkalinity as CaCO <sub>3</sub>	230	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN  
INORGANIC ANALYSIS DATA SHEET  
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0070-7

Lab Sample ID: 280-155048-8

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG ID.:

Matrix: Water

Date Sampled: 11/01/2021 14:25

Reporting Basis: WET

Date Received: 11/03/2021 10:55

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	1.1	1.0	0.80	0.35	mg/L			1	9060A

2-IN  
CALIBRATION QUALITY CONTROL  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Analyst: JJM Batch Start Date: 11/21/2021

Reporting Units: mg/L Analytical Batch No.: 558260

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
14	ICVL	10:50	Ammonia	0.511	0.501	102	90-110	350.1	ICV_00494
15	ICV	10:52	Ammonia	2.47	2.51	99	90-110	350.1	ICV_00494
16	ICB	10:54	Ammonia	0.050				U	
33	CCVL	11:28	Ammonia	0.487	0.500	97	90-110	350.1	cal_00509
34	CCV	11:30	Ammonia	2.47	2.50	99	90-110	350.1	cal_00509
35	CCB	11:32	Ammonia	0.050				U	
49	CCVL	12:00	Ammonia	0.517	0.500	103	90-110	350.1	cal_00509
50	CCV	12:02	Ammonia	2.63	2.50	105	90-110	350.1	cal_00509
51	CCB	12:04	Ammonia	0.0233				J	

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

FORM II-IN

2-IN  
CALIBRATION QUALITY CONTROL  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Analyst: JJM Batch Start Date: 11/21/2021

Reporting Units: mg/L Analytical Batch No.: 558270

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
14	ICVL	13:35	Ammonia	0.530	0.501	106	90-110	350.1	ICV_00494
15	ICV	13:37	Ammonia	2.53	2.51	101	90-110	350.1	ICV_00494
16	ICB	13:39	Ammonia	0.050				U	
33	CCVL	14:13	Ammonia	0.480	0.500	96	90-110	350.1	cal_00509
34	CCV	14:15	Ammonia	2.42	2.50	97	90-110	350.1	cal_00509
35	CCB	14:17	Ammonia	0.050				U	
49	CCVL	14:45	Ammonia	0.454	0.500	91	90-110	350.1	cal_00509
50	CCV	14:47	Ammonia	2.29	2.50	92	90-110	350.1	cal_00509
51	CCB	14:49	Ammonia	0.050				U	

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

FORM II-IN

2-IN  
CALIBRATION QUALITY CONTROL  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Analyst: RKD Batch Start Date: 11/22/2021

Reporting Units: mg/L Analytical Batch No.: 558390

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
14	ICVL	10:34	Ammonia	0.507	0.501	101	90-110		350.1 ICV_00494
15	ICV	10:36	Ammonia	2.46	2.51	98	90-110		350.1 ICV_00494
16	ICB	10:38	Ammonia	0.0284				J	
33	CCVL	11:12	Ammonia	0.500	0.500	100	90-110		350.1 cal_00509
34	CCV	11:14	Ammonia	2.50	2.50	100	90-110		350.1 cal_00509
35	CCB	11:16	Ammonia	0.0268				J	

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

FORM II-IN

2-IN  
CALIBRATION QUALITY CONTROL  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Analyst: SVC Batch Start Date: 11/17/2021

Reporting Units: mg/L Analytical Batch No.: 557899

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
7	ICV	19:34	Nitrogen, Total Kjeldahl	5.09	5.00	102	90-110	U	TKN ICV 25_00112
8	ICB	19:34	Nitrogen, Total Kjeldahl	1.0				U	
21	CCV	19:39	Nitrogen, Total Kjeldahl	5.04	5.00	101	90-110	U	TKN 25ppm_00826
22	CCB	19:39	Nitrogen, Total Kjeldahl	1.0				U	
32	CCV	19:45	Nitrogen, Total Kjeldahl	5.08	5.00	102	90-110	U	TKN 25ppm_00826
33	CCB	19:45	Nitrogen, Total Kjeldahl	1.0				U	
44	CCV	19:51	Nitrogen, Total Kjeldahl	5.01	5.00	100	90-110	U	TKN 25ppm_00826
45	CCB	19:51	Nitrogen, Total Kjeldahl	1.0				U	

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

FORM II-IN

2-IN  
CALIBRATION QUALITY CONTROL  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1  
SDG No.: \_\_\_\_\_  
Analyst: SVC Batch Start Date: 11/17/2021  
Reporting Units: mg/L Analytical Batch No.: 557898

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
17	ICV	16:59	Nitrate Nitrite as N	4.82	5.00	96	90-110	NXN	ICV INT_00577
18	ICVL	17:01	Nitrate Nitrite as N	1.92	2.00	96	90-110	NXN	ICV INT_00577
19	ICB	17:03	Nitrate Nitrite as N	0.050				U	
35	CCV	17:35	Nitrate Nitrite as N	5.13	5.00	103	90-110	NXN	CAL INT_00601
36	CCVL	17:37	Nitrate Nitrite as N	0.994	1.00	99	90-110	NXN	CAL INT_00601
37	CCB	17:39	Nitrate Nitrite as N	0.050				U	
51	CCV	18:08	Nitrate Nitrite as N	5.31	5.00	106	90-110	NXN	CAL INT_00601
52	CCVL	18:10	Nitrate Nitrite as N	1.08	1.00	108	90-110	NXN	CAL INT_00601
53	CCB	18:12	Nitrate Nitrite as N	0.050				U	
68	CCV	18:42	Nitrate Nitrite as N	5.29	5.00	106	90-110	NXN	CAL INT_00601
69	CCVL	18:44	Nitrate Nitrite as N	1.09	1.00	109	90-110	NXN	CAL INT_00601
70	CCB	18:46	Nitrate Nitrite as N	0.050				U	

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

FORM II-IN

2-IN  
CALIBRATION QUALITY CONTROL  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Analyst: SPG Batch Start Date: 11/11/2021

Reporting Units: mg/L Analytical Batch No.: 557096

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
10	ICV	17:36	Sulfate	75.7	80.0	95	90-110		IC SO4 ICV_00022
11	ICB	17:51	Sulfate	2.5				U	

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

FORM II-IN

2-IN  
CALIBRATION QUALITY CONTROL  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Analyst: SPG Batch Start Date: 11/14/2021

Reporting Units: mg/L Analytical Batch No.: 557415

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
8	ICB	18:07	Sulfate	2.5				U	
9	ICV	18:21	Sulfate	84.0	80.0	105	90-110		IC SO4 ICV_00022

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

FORM II-IN

2-IN  
CALIBRATION QUALITY CONTROL  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Analyst: CJ Batch Start Date: 11/14/2021

Reporting Units: mg/L Analytical Batch No.: 557417

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
8	ICV	19:07	Sulfate	80.7	80.0	101	90-110		IC SO4 ICV_00022
9	ICB	19:24	Sulfate	2.5				U	

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

FORM II-IN

2-IN  
CALIBRATION QUALITY CONTROL  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Analyst: CJ Batch Start Date: 11/19/2021

Reporting Units: mg/L Analytical Batch No.: 558091

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	CCV	14:40	Sulfate	101	100	101	90-110		IC LCS_01845
2	CCB	14:54	Sulfate	2.5				U	
17	CCV	18:36	Sulfate	101	100	101	90-110		IC LCS_01845
18	CCB	18:50	Sulfate	2.5				U	
29	CCV	21:24	Sulfate	101	100	101	90-110		IC LCS_01845
30	CCB	21:38	Sulfate	2.5				U	
41	CCV	00:13	Sulfate	101	100	101	90-110		IC LCS_01845
42	CCB	00:27	Sulfate	2.5				U	
56	CCV	03:43	Sulfate	102	100	102	90-110		IC LCS_01845
57	CCB	03:57	Sulfate	2.5				U	
68	CCV	06:31	Sulfate	103	100	103	90-110		IC LCS_01845
69	CCB	06:45	Sulfate	2.5				U	

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

FORM II-IN

2-IN  
CALIBRATION QUALITY CONTROL  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Analyst: CJ Batch Start Date: 11/19/2021

Reporting Units: mg/L Analytical Batch No.: 558093

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
2	CCB	10:06	Sulfate	2.5				U	
71	CCV	13:50	Sulfate	103	100	103	90-110		IC LCS_01845
85	CCB	14:05	Sulfate	2.5				U	
82	CCV	16:50	Sulfate	107	100	107	90-110		IC LCS_01845
83	CCB	17:05	Sulfate	2.5				U	
96	CCV	19:49	Sulfate	110	100	110	90-110		IC LCS_01845
97	CCB	20:04	Sulfate	2.5				U	
111	CCV	23:33	Sulfate	104	100	104	90-110		IC LCS_01845
112	CCB	23:48	Sulfate	2.5				U	

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

FORM II-IN

2-IN  
CALIBRATION QUALITY CONTROL  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Analyst: CJ Batch Start Date: 11/24/2021

Reporting Units: mg/L Analytical Batch No.: 558640

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	CCV	10:16	Sulfate	96.6	100	97	90-110		IC LCS_01846
2	CCB	10:32	Sulfate	2.5				U	
17	CCV	14:38	Sulfate	96.9	100	97	90-110		IC LCS_01846
18	CCB	14:55	Sulfate	2.5				U	

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

FORM II-IN

2-IN  
CALIBRATION QUALITY CONTROL  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Analyst: RAF Batch Start Date: 11/04/2021

Reporting Units: mg/L Analytical Batch No.: 556344

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
2	ICV	17:36	Dissolved Organic Carbon - Quad	20.2	20.0	101	90-110		TOC ICV Std_00047
3	ICB	17:53	Dissolved Organic Carbon - Quad	0.80				U	
28	CCV	00:12	Dissolved Organic Carbon - Quad	23.7	25.0	95	90-110		TOC LCS Std_00052
29	CCB	00:27	Dissolved Organic Carbon - Quad	0.80				U	
40	CCV	03:19	Dissolved Organic Carbon - Quad	23.2	25.0	93	90-110		TOC LCS Std_00052
41	CCB	03:34	Dissolved Organic Carbon - Quad	0.80				U	
52	CCV	06:25	Dissolved Organic Carbon - Quad	23.5	25.0	94	90-110		TOC LCS Std_00052
53	CCB	06:40	Dissolved Organic Carbon - Quad	0.80				U	

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

FORM II-IN

2-IN  
CALIBRATION QUALITY CONTROL  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Analyst: ECC Batch Start Date: 11/12/2021

Reporting Units: mg/L Analytical Batch No.: 557616

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
43	CCV	23:22	Total Alkalinity as CaCO <sub>3</sub>	207	200	103	90-110	J	Alk daily lcs 01005
44	CCB	23:27	Total Alkalinity as CaCO <sub>3</sub>	3.21				U	
55	CCV	01:02	Total Alkalinity as CaCO <sub>3</sub>	199	200	99	90-110	J	Alk daily lcs 01005
56	CCB	01:07	Total Alkalinity as CaCO <sub>3</sub>	6.4				U	
69	CCV	02:23	Total Alkalinity as CaCO <sub>3</sub>	207	200	103	90-110	J	Alk daily lcs 01005
70	CCB	02:28	Total Alkalinity as CaCO <sub>3</sub>	6.4				U	

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

FORM II-IN

3-IN  
METHOD BLANK  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Method	Lab Sample ID	Analyte	Result	Qual	Units	LOQ	Dil
Batch ID: 558260	Date: 11/21/2021 11:02						
350.1	MB 280-558260/20	Ammonia	0.050	U	mg/L	0.10	1
Batch ID: 558270	Date: 11/21/2021 13:47						
350.1	MB 280-558270/20	Ammonia	0.050	U	mg/L	0.10	1
Batch ID: 558390	Date: 11/22/2021 10:46						
350.1	MB 280-558390/20	Ammonia	0.050	U	mg/L	0.10	1
Batch ID: 557899	Date: 11/17/2021 19:34	Prep Batch:	557729	Date:	11/16/2021 18:04		
351.2	MB 280-557729/2-A	Nitrogen, Total Kjeldahl	1.0	U	mg/L	1.0	1
Batch ID: 557899	Date: 11/17/2021 19:47	Prep Batch:	557730	Date:	11/16/2021 18:07		
351.2	MB 280-557730/2-A	Nitrogen, Total Kjeldahl	1.0	U	mg/L	1.0	1
Batch ID: 557898	Date: 11/17/2021 17:09						
353.2	MB 280-557898/22	Nitrate Nitrite as N	0.050	U	mg/L	0.10	1
Batch ID: 557898	Date: 11/17/2021 18:28						
353.2	MB 280-557898/61	Nitrate Nitrite as N	0.050	U	mg/L	0.10	1
Batch ID: 556496	Date: 11/07/2021 12:16	Prep Batch:	556494	Date:	11/07/2021 11:29		
9034	MB 280-556494/2-A	Sulfide	1.9	U	mg/L	4.0	1
Batch ID: 556715	Date: 11/09/2021 10:11	Prep Batch:	556700	Date:	11/09/2021 09:08		
9034	MB 280-556700/3-A	Sulfide	1.9	U	mg/L	4.0	1
Batch ID: 556751	Date: 11/09/2021 12:10	Prep Batch:	556749	Date:	11/09/2021 12:07		
9034	MB 280-556749/2-A	Sulfide	1.9	U	mg/L	4.0	1
Batch ID: 556789	Date: 11/09/2021 14:38	Prep Batch:	556787	Date:	11/09/2021 14:32		
9034	MB 280-556787/2-A	Sulfide	1.9	U	mg/L	4.0	1
Batch ID: 558093	Date: 11/19/2021 11:06						
9056A	MB 280-558093/6	Sulfate	2.5	U	mg/L	5.0	1
Batch ID: 558091	Date: 11/19/2021 15:50						
9056A	MB 280-558091/6	Sulfate	2.5	U	mg/L	5.0	1
Batch ID: 558093	Date: 11/19/2021 20:49						
9056A	MB 280-558093/100	Sulfate	2.5	U	mg/L	5.0	1
Batch ID: 558091	Date: 11/20/2021 01:09						
9056A	MB 280-558091/45	Sulfate	2.5	U	mg/L	5.0	1
Batch ID: 558640	Date: 11/24/2021 11:38						
9056A	MB 280-558640/6	Sulfate	2.5	U	mg/L	5.0	1
Batch ID: 556344	Date: 11/05/2021 02:18						
9060A	MB 280-556213/2-A	Dissolved Organic Carbon - Quad	0.80	U	mg/L	1.0	1
Batch ID: 557616	Date: 11/12/2021 22:01						
SM 2320B	MB 280-557616/32	Total Alkalinity as CaCO <sub>3</sub>	3.47	J	mg/L	10	1
Batch ID: 557616	Date: 11/13/2021 01:18						
SM 2320B	MB 280-557616/58	Total Alkalinity as CaCO <sub>3</sub>	3.11	J	mg/L	10	1

5-IN  
MATRIX SPIKE SAMPLE RECOVERY  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 558260 Date: 11/21/2021 11:42											
350.1	280-155048-8	Ammonia	0.050	U	mg/L						
350.1	280-155048-8	Ammonia MS	1.02		mg/L	1.00	102	90-110			
Batch ID: 558270 Date: 11/21/2021 14:27											
350.1	280-155048-7	Ammonia	1.2		mg/L						
350.1	280-155048-7	Ammonia MS	2.14		mg/L	1.00	97	90-110			
Batch ID: 557899 Date: 11/17/2021 19:42 Prep Batch: 557729 Date: 11/16/2021 18:04											
351.2	280-155048-7	Nitrogen, Total Kjeldahl	1.6		mg/L						
351.2	280-155048-7	Nitrogen, Total MS Kjeldahl	4.44		mg/L	3.00	95	90-110			
Batch ID: 557899 Date: 11/17/2021 19:48 Prep Batch: 557730 Date: 11/16/2021 18:07											
351.2	280-155048-8	Nitrogen, Total Kjeldahl	1.0	U	mg/L						J1
351.2	280-155048-8	Nitrogen, Total MS Kjeldahl	3.40		mg/L	3.00	113	90-110			J1
Batch ID: 557898 Date: 11/17/2021 17:50											
353.2	280-155048-7	Nitrate Nitrite as N	0.050	U	mg/L						
353.2	280-155048-7	Nitrate Nitrite as N MS	3.90		mg/L	4.00	97	90-110			
Batch ID: 557898 Date: 11/17/2021 18:32											
353.2	280-155048-8	Nitrate Nitrite as N	0.050	U	mg/L						
353.2	280-155048-8	Nitrate Nitrite as N MS	4.19		mg/L	4.00	105	90-110			
Batch ID: 556496 Date: 11/07/2021 12:16 Prep Batch: 556494 Date: 11/07/2021 11:29											
9034	280-155048-8	Sulfide	0.80	J	mg/L						
9034	280-155048-8	Sulfide MS	16.8		mg/L	21.3	75	44-110			
Batch ID: 556715 Date: 11/09/2021 10:11 Prep Batch: 556700 Date: 11/09/2021 09:08											
9034	280-155048-7	Sulfide	1.9	U	mg/L						
9034	280-155048-7	Sulfide MS	16.8		mg/L	20.2	83	44-110			
Batch ID: 558091 Date: 11/20/2021 03:15											
9056A	280-155048-7	Sulfate	200		mg/L						J1
9056A	280-155048-7	Sulfate MS	255		mg/L	50.0	116	87-112			J1
Batch ID: 558091 Date: 11/20/2021 04:39											
9056A	280-155048-8	Sulfate	47		mg/L						J1
9056A	280-155048-8	Sulfate MS	106		mg/L	50.0	118	87-112			J1
Batch ID: 556344 Date: 11/05/2021 04:53											
9060A	280-155048-7	Dissolved Organic Carbon - Quad	3.0		mg/L						
9060A	280-155048-7	Dissolved Organic Carbon - Quad MS	26.2		mg/L	25.0	93	88-112			
Batch ID: 556344 Date: 11/05/2021 05:40											
9060A	280-155048-8	Dissolved Organic Carbon - Quad	1.1		mg/L						

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

5-IN  
MATRIX SPIKE SAMPLE RECOVERY  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
9060A	280-155048-8 MS	Dissolved Organic Carbon - Quad	23.9		mg/L	25.0	91	88-112			

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

5-IN  
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 558260 Date: 11/21/2021 11:44											
350.1	280-155048-8	Ammonia MSD	1.03		mg/L	1.00	103	90-110	1	10	
Batch ID: 558270 Date: 11/21/2021 14:29											
350.1	280-155048-7	Ammonia MSD	2.09		mg/L	1.00	92	90-110	2	10	
Batch ID: 557899 Date: 11/17/2021 19:42 Prep Batch: 557729 Date: 11/16/2021 18:04											
351.2	280-155048-7	Nitrogen, Total Kjeldahl	4.42		mg/L	3.00	94	90-110	0	25	
Batch ID: 557899 Date: 11/17/2021 19:49 Prep Batch: 557730 Date: 11/16/2021 18:07											
351.2	280-155048-8	Nitrogen, Total Kjeldahl	3.41		mg/L	3.00	114	90-110	0	25	J1
Batch ID: 557898 Date: 11/17/2021 17:52											
353.2	280-155048-7	Nitrate Nitrite as N MSD	3.97		mg/L	4.00	99	90-110	2	10	
Batch ID: 557898 Date: 11/17/2021 18:34											
353.2	280-155048-8	Nitrate Nitrite as N MSD	4.07		mg/L	4.00	102	90-110	3	10	
Batch ID: 556496 Date: 11/07/2021 12:16 Prep Batch: 556494 Date: 11/07/2021 11:29											
9034	280-155048-8	Sulfide MSD	16.8		mg/L	21.3	75	44-110	0	20	
Batch ID: 556715 Date: 11/09/2021 10:11 Prep Batch: 556700 Date: 11/09/2021 09:08											
9034	280-155048-7	Sulfide MSD	15.2		mg/L	20.2	75	44-110	10	20	
Batch ID: 558091 Date: 11/20/2021 03:29											
9056A	280-155048-7	Sulfate MSD	255		mg/L	50.0	115	87-112	0	10	J1
Batch ID: 558091 Date: 11/20/2021 04:53											
9056A	280-155048-8	Sulfate MSD	112		mg/L	50.0	130	87-112	6	10	J1
Batch ID: 556344 Date: 11/05/2021 05:08											
9060A	280-155048-7	Dissolved Organic Carbon - Quad	26.2		mg/L	25.0	93	88-112	0	15	
Batch ID: 556344 Date: 11/05/2021 05:55											
9060A	280-155048-8	Dissolved Organic Carbon - Quad	23.9		mg/L	25.0	91	88-112	0	15	

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

6-IN  
DUPLICATE  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Matrix: Water \_\_\_\_\_

Method	Client Sample ID	Lab Sample ID	Analyte	Result	Unit	RPD	RPD Limit	Qual
Batch ID: 558091	Date: 11/20/2021 03:01							
9056A	NW062-7	280-155048-7	Sulfate	200	mg/L			
9056A	NW062-7	280-155048-7 DU	Sulfate	197	mg/L	0.1	10	
Batch ID: 558091	Date: 11/20/2021 04:25							
9056A	G0070-7	280-155048-8	Sulfate	47	mg/L			
9056A	G0070-7	280-155048-8 DU	Sulfate	46.9	mg/L	0.07	10	
Batch ID: 557616	Date: 11/13/2021 01:32							
SM 2320B	CA210-7	280-155048-6	Total Alkalinity as CaCO <sub>3</sub>	410	mg/L			
SM 2320B	CA210-7	280-155048-6 DU	Total Alkalinity as CaCO <sub>3</sub>	416	mg/L	1	10	

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

FORM VI-IN

7A-IN  
LAB CONTROL SAMPLE  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 558260 Date: 11/21/2021 10:58											
350.1	LCS 280-558260/18	Ammonia	2.45		mg/L	2.50	98	90-110	0	10	
Batch ID: 558270 Date: 11/21/2021 13:43											
350.1	LCS 280-558270/18	Ammonia	2.55		mg/L	2.50	102	90-110	1	10	
Batch ID: 558390 Date: 11/22/2021 10:42											
350.1	LCS 280-558390/18	Ammonia	2.51		mg/L	2.50	100	90-110	0	10	
Batch ID: 557899 Date: 11/17/2021 19:34 Prep Batch: 557729 Date: 11/16/2021 18:04											
351.2	LCS 280-557729/1-	Nitrogen, Total Kjeldahl A	5.92		mg/L	6.00	99	90-110			
Batch ID: 557899 Date: 11/17/2021 19:47 Prep Batch: 557730 Date: 11/16/2021 18:07											
351.2	LCS 280-557730/1-	Nitrogen, Total Kjeldahl A	5.71		mg/L	6.00	95	90-110			
Batch ID: 557898 Date: 11/17/2021 17:07											
353.2	LCS 280-557898/21	Nitrate Nitrite as N	5.00		mg/L	5.00	100	90-110			
Batch ID: 557898 Date: 11/17/2021 18:24											
353.2	LCS 280-557898/59	Nitrate Nitrite as N	5.35		mg/L	5.00	107	90-110	5	10	
Batch ID: 556496 Date: 11/07/2021 12:16 Prep Batch: 556494 Date: 11/07/2021 11:29											
9034	LCS 280-556494/1-	Sulfide A	16.0		mg/L	21.3	75	44-110			
Batch ID: 556715 Date: 11/09/2021 10:11 Prep Batch: 556700 Date: 11/09/2021 09:08											
9034	LCS 280-556700/1-	Sulfide A	16.0		mg/L	20.2	79	44-110	5	20	
Batch ID: 556751 Date: 11/09/2021 12:10 Prep Batch: 556749 Date: 11/09/2021 12:07											
9034	LCS 280-556749/1-	Sulfide A	16.4		mg/L	20.2	81	44-110			
Batch ID: 556789 Date: 11/09/2021 14:38 Prep Batch: 556787 Date: 11/09/2021 14:32											
9034	LCS 280-556787/1-	Sulfide A	16.0		mg/L	20.2	79	44-110			

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

FORM VIIA-IN

7A-IN  
LAB CONTROL SAMPLE  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 558091 Date: 11/19/2021 15:22											
9056A	LCS 280-558091/4	Sulfate	102		mg/L	100	102	87-112	0	10	M
Batch ID: 558093 Date: 11/19/2021 20:19											
9056A	LCS 280-558093/98	Sulfate	104		mg/L	100	104	87-112	0	10	
Batch ID: 558091 Date: 11/20/2021 00:41											
9056A	LCS 280-558091/43	Sulfate	103		mg/L	100	103	87-112	2	10	M
Batch ID: 558640 Date: 11/24/2021 11:05											
9056A	LCS 280-558640/4	Sulfate	96.3		mg/L	100	96	87-112	0	10	M
Batch ID: 556344 Date: 11/05/2021 02:03											
9060A	LCS 280-556213/1- A	Dissolved Organic Carbon - Quad	23.2		mg/L	25.0	93	88-112			
Batch ID: 557616 Date: 11/12/2021 21:56											
SM 2320B	LCS 280-557616/31	Total Alkalinity as CaCO <sub>3</sub>	209		mg/L	200	105	89-109			
Batch ID: 557616 Date: 11/13/2021 01:13											
SM 2320B	LCS 280-557616/57	Total Alkalinity as CaCO <sub>3</sub>	207		mg/L	200	103	89-109			

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

FORM VIIA-IN

7A-IN  
LAB CONTROL SAMPLE DUPLICATE  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 558260 Date: 11/21/2021 11:00											
350.1	LCSD 280-558260/19	Ammonia	2.45		mg/L	2.50	98	90-110	0	10	
Batch ID: 558270 Date: 11/21/2021 13:45											
350.1	LCSD 280-558270/19	Ammonia	2.53		mg/L	2.50	101	90-110	1	10	
Batch ID: 558390 Date: 11/22/2021 10:44											
350.1	LCSD 280-558390/19	Ammonia	2.51		mg/L	2.50	100	90-110	0	10	
Batch ID: 557898 Date: 11/17/2021 18:26											
353.2	LCSD 280-557898/60	Nitrate Nitrite as N	5.07		mg/L	5.00	101	90-110	5	10	
Batch ID: 556715 Date: 11/09/2021 10:11 Prep Batch: 556700 Date: 11/09/2021 09:08											
9034	LCSD 280-556700/2-	Sulfide	15.2		mg/L	20.2	75	44-110	5	20	
Batch ID: 558091 Date: 11/19/2021 15:36											
9056A	LCSD 280-558091/5	Sulfate	102		mg/L	100	102	87-112	0	10	M
Batch ID: 558093 Date: 11/19/2021 20:34											
9056A	LCSD 280-558093/99	Sulfate	104		mg/L	100	104	87-112	0	10	
Batch ID: 558091 Date: 11/20/2021 00:55											
9056A	LCSD 280-558091/44	Sulfate	102		mg/L	100	102	87-112	2	10	M
Batch ID: 558640 Date: 11/24/2021 11:22											
9056A	LCSD 280-558640/5	Sulfate	96.5		mg/L	100	97	87-112	0	10	M

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

FORM VIIA-IN

7A-IN  
METHOD REPORTING LIMIT CHECK  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 558093 Date: 11/19/2021 10:21											
9056A	MRL 280-558093/3	Sulfate	4.48	J	mg/L	5.00	90	50-150	LCS Source: IC CAL cl/so4_00394		
Batch ID: 558091 Date: 11/19/2021 15:08											
9056A	MRL 280-558091/3	Sulfate	2.61	J	mg/L	5.00	52	50-150	LCS Source: IC CAL cl/so4_00394		
Batch ID: 558640 Date: 11/24/2021 10:49											
9056A	MRL 280-558640/3	Sulfate	4.09	J	mg/L	5.00	82	50-150	LCS Source: IC CAL cl/so4_00395		

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

FORM VIIA-IN

9-IN  
DETECTION LIMITS  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver

Job Number: 280-155048-1

SDG Number: \_\_\_\_\_

Matrix: Water

Instrument ID: WC\_Alp 4

Method: 350.1

DL Date: 03/28/2011 13:26

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Ammonia		0.1	0.022

9-IN  
CALIBRATION BLANK DETECTION LIMITS  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver

Job Number: 280-155048-1

SDG Number: \_\_\_\_\_

Matrix: Water

Instrument ID: WC\_Alp 4

Method: 350.1

XMDL Date: 03/28/2011 13:26

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Ammonia		0.1	0.0225

9-IN  
DETECTION LIMITS  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver

Job Number: 280-155048-1

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 TestAmerica, Denver

Job Number: 280-155048-1

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 TestAmerica, Denver

Job Number: 280-155048-1

SDG Number: \_\_\_\_\_

Matrix: Water

Instrument ID: WC\_Alp 2

Method: 353.2

DL Date: 12/16/2011 09:50

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Nitrate Nitrite as N		0.1	0.019

9-IN  
CALIBRATION BLANK DETECTION LIMITS  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver

Job Number: 280-155048-1

SDG Number: \_\_\_\_\_

Matrix: Water

Instrument ID: WC\_Alp 2

Method: 353.2

XMDL Date: 05/16/2011 11:21

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Nitrate Nitrite as N		0.1	0.0191

9-IN  
DETECTION LIMITS  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver

Job Number: 280-155048-1

SDG Number: \_\_\_\_\_

Matrix: Water

Instrument ID: NOEQUIP

Method: 9034

DL Date: 03/28/2011 13:37

Prep Method: 9030B

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Sulfide		4	0.793

9-IN  
CALIBRATION BLANK DETECTION LIMITS  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver

Job Number: 280-155048-1

SDG Number: \_\_\_\_\_

Matrix: Water

Instrument ID: NOEQUIP

Method: 9034

XMDL Date: 03/28/2011 13:37

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Sulfide		4	0.793

9-IN  
DETECTION LIMITS  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver

Job Number: 280-155048-1

SDG Number: \_\_\_\_\_

Matrix: Water

Instrument ID: WC\_IonChrom10

Method: 9056A

DL Date: 06/21/2019 00:00

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Sulfate		5	1.03

9-IN  
CALIBRATION BLANK DETECTION LIMITS  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver

Job Number: 280-155048-1

SDG Number: \_\_\_\_\_

Matrix: Water

Instrument ID: WC\_IonChrom10

Method: 9056A

XMDL Date: 06/21/2019 00:00

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Sulfate		5	1.03

9-IN  
DETECTION LIMITS  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver

Job Number: 280-155048-1

SDG Number: \_\_\_\_\_

Matrix: Water

Instrument ID: WC\_IonChrom11

Method: 9056A

DL Date: 06/21/2019 00:00

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Sulfate		5	1.03

9-IN  
CALIBRATION BLANK DETECTION LIMITS  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver

Job Number: 280-155048-1

SDG Number: \_\_\_\_\_

Matrix: Water

Instrument ID: WC\_IonChrom11

Method: 9056A

XMDL Date: 06/21/2019 00:00

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Sulfate		5	1.03

9-IN  
DETECTION LIMITS  
GENERAL CHEMISTRY - DISSOLVED

Lab Name: Eurofins TestAmerica, Denver

Job Number: 280-155048-1

SDG Number: \_\_\_\_\_

Matrix: Water

Instrument ID: WC\_SHI4

Method: 9060A

DL Date: 06/21/2019 00:00

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Dissolved Organic Carbon - Quad		1	0.345

9-IN  
CALIBRATION BLANK DETECTION LIMITS  
GENERAL CHEMISTRY - DISSOLVED

Lab Name: Eurofins TestAmerica, Denver

Job Number: 280-155048-1

SDG Number: \_\_\_\_\_

Matrix: Water

Instrument ID: WC\_SHI4

Method: 9060A

XMDL Date: 06/21/2019 00:00

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Dissolved Organic Carbon - Quad		1	0.345

9-IN  
DETECTION LIMITS  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver

Job Number: 280-155048-1

SDG Number: \_\_\_\_\_

Matrix: Water

Instrument ID: WC-AT3

Method: SM 2320B

DL Date: 02/03/2019 00:00

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Total Alkalinity as CaCO <sub>3</sub>		10	3.08

9-IN  
CALIBRATION BLANK DETECTION LIMITS  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver

Job Number: 280-155048-1

SDG Number: \_\_\_\_\_

Matrix: Water

Instrument ID: WC-AT3

Method: SM 2320B

XMDL Date: 02/03/2019 00:00

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Total Alkalinity as CaCO <sub>3</sub>		10	3.08

12-IN  
PREPARATION LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Prep Method: 351.2

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-557729/1-A	11/16/2021 18:04	557729		25	25
MB 280-557729/2-A	11/16/2021 18:04	557729		25	25
280-155048-7	11/16/2021 18:04	557729		25	25
280-155048-7 MS	11/16/2021 18:04	557729		25	25
280-155048-7 MSD	11/16/2021 18:04	557729		25	25
280-155048-1	11/16/2021 18:04	557729		25	25
280-155048-2	11/16/2021 18:04	557729		25	25
280-155048-3	11/16/2021 18:04	557729		25	25
280-155048-4	11/16/2021 18:04	557729		25	25
280-155048-5	11/16/2021 18:04	557729		25	25
280-155048-6	11/16/2021 18:04	557729		25	25

12-IN  
PREPARATION LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Prep Method: 351.2

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-557730/1-A	11/16/2021 18:07	557730		25	25
MB 280-557730/2-A	11/16/2021 18:07	557730		25	25
280-155048-8	11/16/2021 18:07	557730		25	25
280-155048-8 MS	11/16/2021 18:07	557730		25	25
280-155048-8 MSD	11/16/2021 18:07	557730		25	25

12-IN  
PREPARATION LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Prep Method: 9030B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-556494/1-A	11/07/2021 11:29	556494		50	50
MB 280-556494/2-A	11/07/2021 11:29	556494		50	50
280-155048-8	11/07/2021 11:29	556494		50	50
280-155048-8 MS	11/07/2021 11:29	556494		50	50
280-155048-8 MSD	11/07/2021 11:29	556494		50	50
280-155048-4	11/07/2021 11:29	556494		50	50

12-IN  
PREPARATION LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Prep Method: 9030B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-556700/1-A	11/09/2021 09:08	556700		50	50
LCSD 280-556700/2-A	11/09/2021 09:08	556700		50	50
MB 280-556700/3-A	11/09/2021 09:08	556700		50	50
280-155048-7	11/09/2021 09:08	556700		50	50
280-155048-7 MS	11/09/2021 09:08	556700		50	50
280-155048-7 MSD	11/09/2021 09:08	556700		50	50

12-IN  
PREPARATION LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Prep Method: 9030B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-556749/1-A	11/09/2021 12:07	556749		50	50
MB 280-556749/2-A	11/09/2021 12:07	556749		50	50
280-155048-2	11/09/2021 12:07	556749		50	50
280-155048-3	11/09/2021 12:07	556749		50	50
280-155048-5	11/09/2021 12:07	556749		50	50
280-155048-6	11/09/2021 12:07	556749		50	50

12-IN  
PREPARATION LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Prep Method: 9030B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-556787/1-A	11/09/2021 14:32	556787		50	50
MB 280-556787/2-A	11/09/2021 14:32	556787		50	50
280-155048-1	11/09/2021 14:32	556787		50	50

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Instrument ID: WC\_Alp 4 Analysis Method: 350.1

Start Date: 11/21/2021 10:23 End Date: 11/21/2021 12:14

Lab Sample Id	D/F	T Y P E	Time	Analytes															
				N	H	3													
ZZZZZZ			10:23																
ZZZZZZ			10:25																
ZZZZZZ			10:27																
IC 280-558260/4			10:29	X															
IC 280-558260/5			10:31	X															
IC 280-558260/6			10:34	X															
IC 280-558260/7			10:36	X															
IC 280-558260/8			10:38	X															
IC 280-558260/9			10:40	X															
IC 280-558260/10			10:42	X															
IC 280-558260/11			10:44	X															
ZZZZZZ			10:46																
ZZZZZZ			10:48																
ICVL 280-558260/14	1		10:50	X															
ICV 280-558260/15	1		10:52	X															
ICB 280-558260/16	1		10:54	X															
ZZZZZZ			10:56																
LCS 280-558260/18	1	T	10:58	X															
LCSD 280-558260/19	1	T	11:00	X															
MB 280-558260/20	1	T	11:02	X															
ZZZZZZ			11:04																
ZZZZZZ			11:06																
ZZZZZZ			11:08																
ZZZZZZ			11:10																
ZZZZZZ			11:12																
ZZZZZZ			11:14																
ZZZZZZ			11:16																
ZZZZZZ			11:18																
280-155048-2	1	T	11:20	X															
280-155048-5	1	T	11:22	X															
ZZZZZZ			11:24																
ZZZZZZ			11:26																
CCVL 280-558260/33	1		11:28	X															
CCV 280-558260/34	1		11:30	X															
CCB 280-558260/35	1		11:32	X															
ZZZZZZ			11:34																
ZZZZZZ			11:36																
ZZZZZZ			11:38																
280-155048-8	1	T	11:40	X															
280-155048-8 MS	1	T	11:42	X															
280-155048-8 MSD	1	T	11:44	X															

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Instrument ID: WC\_AlP 4

Analysis Method: 350.1

Start Date: 11/21/2021 10:23

End Date: 11/21/2021 12:14

Prep Types:  
T = Total/NA

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Instrument ID: WC\_Alp 4 Analysis Method: 350.1

Start Date: 11/21/2021 13:09 End Date: 11/21/2021 15:58

Lab Sample Id	D/F	T Y P E	Time	Analytes															
				N	H	3													
ZZZZZZ			13:09																
ZZZZZZ			13:11																
ZZZZZZ			13:13																
IC 280-558270/4			13:15	X															
IC 280-558270/5			13:17	X															
IC 280-558270/6			13:19	X															
IC 280-558270/7			13:21	X															
IC 280-558270/8			13:23	X															
IC 280-558270/9			13:25	X															
IC 280-558270/10			13:27	X															
IC 280-558270/11			13:29	X															
ZZZZZZ			13:31																
ZZZZZZ			13:33																
ICVL 280-558270/14	1		13:35	X															
ICV 280-558270/15	1		13:37	X															
ICB 280-558270/16	1		13:39	X															
ZZZZZZ			13:41																
LCS 280-558270/18	1	T	13:43	X															
LCSD 280-558270/19	1	T	13:45	X															
MB 280-558270/20	1	T	13:47	X															
ZZZZZZ			13:49																
ZZZZZZ			13:51																
ZZZZZZ			13:53																
ZZZZZZ			13:55																
ZZZZZZ			13:57																
ZZZZZZ			13:59																
ZZZZZZ			14:01																
ZZZZZZ			14:03																
ZZZZZZ			14:05																
ZZZZZZ			14:07																
ZZZZZZ			14:09																
ZZZZZZ			14:11																
CCVL 280-558270/33	1		14:13	X															
CCV 280-558270/34	1		14:15	X															
CCB 280-558270/35	1		14:17	X															
ZZZZZZ			14:19																
ZZZZZZ			14:21																
ZZZZZZ			14:23																
280-155048-7	1	T	14:25	X															
280-155048-7 MS	1	T	14:27	X															
280-155048-7 MSD	1	T	14:29	X															

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Instrument ID: WC\_Alp 4 Analysis Method: 350.1

Start Date: 11/21/2021 13:09 End Date: 11/21/2021 15:58

Lab Sample Id	D/F	T Y p e	Time	Analytes											
				N	H	3									
ZZZZZZ			14:31												
ZZZZZZ			14:33												
ZZZZZZ			14:35												
ZZZZZZ			14:37												
ZZZZZZ			14:39												
ZZZZZZ			14:41												
ZZZZZZ			14:43												
CCVL 280-558270/49	1		14:45	X											
CCV 280-558270/50	1		14:47	X											
CCB 280-558270/51	1		14:49	X											
ZZZZZZ			14:51												
ZZZZZZ			14:53												
ZZZZZZ			14:55												
ZZZZZZ			14:57												
ZZZZZZ			14:59												
ZZZZZZ			15:01												
ZZZZZZ			15:03												
ZZZZZZ			15:05												
ZZZZZZ			15:07												
ZZZZZZ			15:09												
ZZZZZZ			15:11												
ZZZZZZ			15:13												
ZZZZZZ			15:15												
ZZZZZZ			15:17												
ZZZZZZ			15:19												
ZZZZZZ			15:21												
ZZZZZZ			15:23												
ZZZZZZ			15:25												
ZZZZZZ			15:27												
ZZZZZZ			15:29												
ZZZZZZ			15:38												
ZZZZZZ			15:40												
ZZZZZZ			15:42												
ZZZZZZ			15:44												
ZZZZZZ			15:51												
ZZZZZZ			15:54												
ZZZZZZ			15:56												
ZZZZZZ			15:58												

Prep Types:

T = Total/NA

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Instrument ID: WC\_Alp 4 Analysis Method: 350.1

Start Date: 11/22/2021 10:08 End Date: 11/22/2021 14:45

Lab Sample Id	D/F	T Y P E	Time	Analytes															
				N	H	3													
ZZZZZZ			10:08																
ZZZZZZ			10:10																
ZZZZZZ			10:12																
IC 280-558390/4			10:14	X															
IC 280-558390/5			10:16	X															
IC 280-558390/6			10:18	X															
IC 280-558390/7			10:20	X															
IC 280-558390/8			10:22	X															
IC 280-558390/9			10:24	X															
IC 280-558390/10			10:26	X															
IC 280-558390/11			10:28	X															
ZZZZZZ			10:30																
ZZZZZZ			10:32																
ICVL 280-558390/14	1		10:34	X															
ICV 280-558390/15	1		10:36	X															
ICB 280-558390/16	1		10:38	X															
ZZZZZZ			10:40																
LCS 280-558390/18	1	T	10:42	X															
LCSD 280-558390/19	1	T	10:44	X															
MB 280-558390/20	1	T	10:46	X															
ZZZZZZ			10:48																
ZZZZZZ			10:50																
ZZZZZZ			10:52																
280-155048-3	1	T	10:54	X															
ZZZZZZ			10:56																
ZZZZZZ			10:58																
ZZZZZZ			11:00																
ZZZZZZ			11:02																
ZZZZZZ			11:04																
ZZZZZZ			11:06																
ZZZZZZ			11:08																
ZZZZZZ			11:10																
CCVL 280-558390/33	1		11:12	X															
CCV 280-558390/34	1		11:14	X															
CCB 280-558390/35	1		11:16	X															
ZZZZZZ			11:18																
ZZZZZZ			11:20																
ZZZZZZ			11:22																
ZZZZZZ			11:24																
ZZZZZZ			11:26																
ZZZZZZ			11:28																

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Instrument ID: WC\_AlP 4

Analysis Method: 350.1

Start Date: 11/22/2021 10:08

End Date: 11/22/2021 14:45

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Instrument ID: WC\_Alph 4

Analysis Method: 350.1

Start Date: 11/22/2021 10:08

End Date: 11/22/2021 14:45

## Prep Types:

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Instrument ID: WC\_GAL1 Analysis Method: 351.2

Start Date: 11/15/2021 17:04 End Date: 11/17/2021 20:51

Lab Sample Id	D/F	T Y P E	Time	Analytes												
				T K N												
IC 280-557418/1-A			17:04	X												
IC 280-557418/2-A			17:04	X												
IC 280-557418/3-A			17:05	X												
IC 280-557418/4-A			17:05	X												
IC 280-557418/5-A			17:05	X												
IC 280-557418/6-A			17:05	X												
ICV 280-557418/7-A	1		19:34	X												
ICB 280-557418/8-A	1		19:34	X												
LCS 280-557729/1-A	1	T	19:34	X												
MB 280-557729/2-A	1	T	19:34	X												
ZZZZZZ			19:35													
ZZZZZZ			19:35													
ZZZZZZ			19:35													
ZZZZZZ			19:35													
ZZZZZZ			19:36													
ZZZZZZ			19:37													
ZZZZZZ			19:38													
ZZZZZZ			19:38													
ZZZZZZ			19:39													
ZZZZZZ			19:39													
CCV 280-557418/9-A	1		19:39	X												
CCB 280-557418/10-A	1		19:39	X												
ZZZZZZ			19:40													
ZZZZZZ			19:40													
280-155048-7	1	T	19:42	X												
280-155048-7 MS	1	T	19:42	X												
280-155048-7 MSD	1	T	19:42	X												
280-155048-1	1	T	19:42	X												
280-155048-2	1	T	19:43	X												
280-155048-3	1	T	19:43	X												
280-155048-4	1	T	19:43	X												
CCV 280-557418/9-A	1		19:45	X												
CCB 280-557418/10-A	1		19:45	X												
280-155048-5	1	T	19:46	X												
280-155048-6	1	T	19:46	X												
ZZZZZZ			19:47													
ZZZZZZ			19:47													
LCS 280-557730/1-A	1	T	19:47	X												
MB 280-557730/2-A	1	T	19:47	X												
280-155048-8	1	T	19:48	X												
280-155048-8 MS	1	T	19:48	X												

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Instrument ID: WC\_GAL1 Analysis Method: 351.2

Start Date: 11/15/2021 17:04 End Date: 11/17/2021 20:51

Lab Sample Id	D/F	T Y p e	Time	Analytes														
				T K N														
280-155048-8 MSD		1	T 19:49	X														
ZZZZZZ			19:49															
CCV 280-557418/9-A		1	19:51	X														
CCB 280-557418/10-A		1	19:51	X														
ZZZZZZ			19:51															
ZZZZZZ			19:51															
ZZZZZZ			19:52															
ZZZZZZ			19:52															
ZZZZZZ			19:52															
ZZZZZZ			19:52															
ZZZZZZ			19:52															
ZZZZZZ			19:54															
ZZZZZZ			19:54															
ZZZZZZ			19:55															
ZZZZZZ			19:55															
ZZZZZZ			20:46															
CCV 280-557418/9-A			20:46															
CCB 280-557418/10-A			20:46															
ZZZZZZ			20:46															
ZZZZZZ			20:47															
ZZZZZZ			20:47															
ZZZZZZ			20:47															
ZZZZZZ			20:48															
ZZZZZZ			20:49															
ZZZZZZ			20:49															
CCV 280-557418/9-A			20:50															
CCV 280-557418/9-A			20:50															
CCB 280-557418/10-A			20:51															
CCB 280-557418/10-A			20:51															

Prep Types:  
T = Total/NA

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Instrument ID: WC\_AlP 2

Analysis Method: 353.2

Start Date: 11/17/2021 16:27

End Date: 11/17/2021 19:52

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Instrument ID: WC\_AlP 2

Analysis Method: 353.2

Start Date: 11/17/2021 16:27

End Date: 11/17/2021 19:52

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Instrument ID: WC\_AlP 2

Analysis Method: 353.2

Start Date: 11/17/2021 16:27

End Date: 11/17/2021 19:52

Prep Types:

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Instrument ID: NOEQUIP

Analysis Method: 9034

Start Date: 11/07/2021 12:16

End Date: 11/07/2021 12:16

Prep Types:

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Instrument ID: NOEQUIP

Analysis Method: 9034

Start Date: 11/09/2021 10:11

End Date: 11/09/2021 10:11

Prep Types:  
T = Total/NA

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Instrument ID: NOEQUIP Analysis Method: 9034

Start Date: 11/09/2021 12:10 End Date: 11/09/2021 12:10

Lab Sample Id	D/F	T Y p e	Time	Analytes																
				S 2																
LCS 280-556749/1-A		1	T 12:10	X																
MB 280-556749/2-A		1	T 12:10	X																
ZZZZZZ			12:10																	
ZZZZZZ			12:10																	
ZZZZZZ			12:10																	
280-155048-2		1	T 12:10	X																
280-155048-3		1	T 12:10	X																
280-155048-5		1	T 12:10	X																
280-155048-6		1	T 12:10	X																
ZZZZZZ			12:10																	
ZZZZZZ			12:10																	
ZZZZZZ			12:10																	
ZZZZZZ			12:10																	
ZZZZZZ			12:10																	
ZZZZZZ			12:10																	
ZZZZZZ			12:10																	
ZZZZZZ			12:10																	
ZZZZZZ			12:10																	
ZZZZZZ			12:10																	
ZZZZZZ			12:10																	

Prep Types:

T = Total/NA

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: 9034

Start Date: 11/09/2021 14:38 End Date: 11/09/2021 14:38

Prep Types:  
T = Total/NA

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Instrument ID: WC\_IonChrom10 Analysis Method: 9056A

Start Date: 11/14/2021 16:43 End Date: 11/16/2021 02:32

Lab Sample Id	D/F	T Y P E	Time	Analytes											
				S	O	O	O	O	O	O	O	O	O	O	O
STD1 280-557415/2 IC	1		16:43	X											
STD2 280-557415/3 IC	1		16:57	X											
STD3 280-557415/4 IC	1		17:11	X											
STD4 280-557415/5 IC	1		17:25	X											
STD5 280-557415/6 IC	1		17:39	X											
STD6 280-557415/7 IC	1		17:53	X											
ICB 280-557415/8	1		18:07	X											
ICV 280-557415/9	1		18:21	X											
ZZZZZZ			18:35												
ZZZZZZ			18:49												
ZZZZZZ			19:03												
ZZZZZZ			19:17												
ZZZZZZ			10:10												
ZZZZZZ			10:24												
ZZZZZZ			10:38												
ZZZZZZ			10:52												
ZZZZZZ			11:06												
ZZZZZZ			11:20												
ZZZZZZ			11:34												
ZZZZZZ			11:48												
ZZZZZZ			12:02												
ZZZZZZ			12:16												
CCV 280-557415/24			12:30												
CCB 280-557415/25			12:44												
ZZZZZZ			12:58												
CCV 280-557415/28			13:12												
CCB 280-557415/29			13:26												
ZZZZZZ			13:40												
ZZZZZZ			13:54												
ZZZZZZ			14:08												
ZZZZZZ			14:22												
ZZZZZZ			14:36												
ZZZZZZ			14:50												
ZZZZZZ			15:04												
ZZZZZZ			15:18												
ZZZZZZ			15:33												
ZZZZZZ			15:47												
CCV 280-557415/41			16:01												
CCB 280-557415/42			16:15												
ZZZZZZ			16:29												
ZZZZZZ			16:43												

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Instrument ID: WC\_IonChrom10 Analysis Method: 9056A

Start Date: 11/14/2021 16:43 End Date: 11/16/2021 02:32

Lab Sample Id	D/F	T Y P E	Time	Analytes															
				S	O	4													
ZZZZZZ			16:57																
ZZZZZZ			17:11																
ZZZZZZ			17:25																
ZZZZZZ			17:39																
ZZZZZZ			17:53																
ZZZZZZ			18:07																
ZZZZZZ			18:21																
ZZZZZZ			18:35																
CCV 280-557415/87			18:49																
CCB 280-557415/88			19:03																
ZZZZZZ			19:17																
ZZZZZZ			19:31																
ZZZZZZ			19:45																
ZZZZZZ			19:59																
CCV 280-557415/59			20:13																
CCB 280-557415/60			20:27																
ZZZZZZ			20:41																
ZZZZZZ			20:55																
ZZZZZZ			21:09																
ZZZZZZ			21:23																
ZZZZZZ			21:37																
ZZZZZZ			21:51																
ZZZZZZ			22:05																
ZZZZZZ			22:19																
ZZZZZZ			22:33																
ZZZZZZ			22:47																
ZZZZZZ			23:01																
ZZZZZZ			23:15																
ZZZZZZ			23:29																
CCV 280-557415/74			23:43																
CCB 280-557415/75			23:57																
ZZZZZZ			00:12																
ZZZZZZ			00:26																
ZZZZZZ			00:40																
ZZZZZZ			00:54																
ZZZZZZ			01:08																
ZZZZZZ			01:22																
ZZZZZZ			01:36																
ZZZZZZ			01:50																
ZZZZZZ			02:04																
CCV 280-557415/85			02:18																

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.:  
\_\_\_\_\_

Instrument ID: WC\_IonChrom10 Analysis Method: 9056A

Start Date: 11/14/2021 16:43 End Date: 11/16/2021 02:32

## Prep Types:

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Instrument ID: WC\_IonChrom10 Analysis Method: 9056A

Start Date: 11/19/2021 14:40 End Date: 11/20/2021 07:55

Lab Sample Id	D/F	T Y P E	Time	Analytes											
				S	O	O	O	O	O	O	O	O	O	O	O
CCV 280-558091/1	1		14:40	X											
CCB 280-558091/2	1		14:54	X											
MRL 280-558091/3	1	T	15:08	X											
LCS 280-558091/4	1	T	15:22	X											
LCSD 280-558091/5	1	T	15:36	X											
MB 280-558091/6	1	T	15:50	X											
ZZZZZZ			16:04												
ZZZZZZ			16:18												
ZZZZZZ			16:32												
ZZZZZZ			16:46												
ZZZZZZ			17:00												
ZZZZZZ			17:14												
ZZZZZZ			17:28												
ZZZZZZ			17:54												
ZZZZZZ			18:08												
ZZZZZZ			18:22												
CCV 280-558091/17	1		18:36	X											
CCB 280-558091/18	1		18:50	X											
ZZZZZZ			19:04												
ZZZZZZ			19:18												
ZZZZZZ			19:32												
ZZZZZZ			19:46												
ZZZZZZ			20:00												
ZZZZZZ			20:14												
ZZZZZZ			20:28												
ZZZZZZ			20:42												
ZZZZZZ			20:56												
ZZZZZZ			21:10												
CCV 280-558091/29	1		21:24	X											
CCB 280-558091/30	1		21:38	X											
ZZZZZZ			21:52												
ZZZZZZ			22:06												
ZZZZZZ			22:20												
ZZZZZZ			22:34												
ZZZZZZ			22:48												
ZZZZZZ			23:02												
ZZZZZZ			23:17												
ZZZZZZ			23:31												
280-155048-1	1	T	23:45	X											
280-155048-2	1	T	23:59	X											
CCV 280-558091/41	1		00:13	X											

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Instrument ID: WC\_IonChrom10

Analysis Method: 9056A

Start Date: 11/19/2021 14:40

End Date: 11/20/2021 07:55

Lab Sample Id	D/F	T Y P E	Time	Analytes															
				S	O	4													
CCB 280-558091/42	1		00:27	X															
LCS 280-558091/43	1	T	00:41	X															
LCSD 280-558091/44	1	T	00:55	X															
MB 280-558091/45	1	T	01:09	X															
280-155048-3	1	T	01:23	X															
ZZZZZZ			01:37																
280-155048-5	1	T	01:51	X															
ZZZZZZ			02:05																
ZZZZZZ			02:19																
ZZZZZZ			02:33																
280-155048-7	1	T	02:47	X															
280-155048-7 DU	1	T	03:01	X															
280-155048-7 MS	1	T	03:15	X															
280-155048-7 MSD	1	T	03:29	X															
CCV 280-558091/56	1		03:43	X															
CCB 280-558091/57	1		03:57	X															
280-155048-8	1	T	04:11	X															
280-155048-8 DU	1	T	04:25	X															
280-155048-8 MS	1	T	04:39	X															
280-155048-8 MSD	1	T	04:53	X															
ZZZZZZ			05:07																
ZZZZZZ			05:21																
ZZZZZZ			05:35																
ZZZZZZ			05:49																
ZZZZZZ			06:03																
ZZZZZZ			06:17																
CCV 280-558091/68	1		06:31	X															
CCB 280-558091/69	1		06:45	X															
ZZZZZZ			06:59																
ZZZZZZ			07:13																
ZZZZZZ			07:27																
CCV 280-558091/73			07:41																
CCB 280-558091/74			07:55																

Prep Types:

T = Total/NA

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Instrument ID: WC\_IonChrom11 Analysis Method: 9056A

Start Date: 11/14/2021 17:29 End Date: 11/16/2021 04:21

Lab Sample Id	D/F	T Y P E	Time	Analytes											
				S	O	O	O	O	O	O	O	O	O	O	O
STD 280-557417/2 IC	1		17:29	X											
STD 280-557417/3 IC	1		17:45	X											
STD 280-557417/4 IC	1		18:02	X											
STD 280-557417/5 IC	1		18:18	X											
STD 280-557417/6 IC	1		18:35	X											
STD 280-557417/7 IC	1		18:51	X											
ICV 280-557417/8	1		19:07	X											
ICB 280-557417/9	1		19:24	X											
ZZZZZZ			19:40												
ZZZZZZ			19:57												
ZZZZZZ			20:13												
ZZZZZZ			20:29												
ZZZZZZ			09:40												
ZZZZZZ			09:56												
ZZZZZZ			10:12												
ZZZZZZ			10:29												
ZZZZZZ			10:45												
ZZZZZZ			11:02												
ZZZZZZ			11:18												
ZZZZZZ			11:34												
ZZZZZZ			11:51												
ZZZZZZ			12:07												
CCV 280-557417/24			12:24												
CCB 280-557417/25			12:40												
ZZZZZZ			12:56												
ZZZZZZ			13:13												
ZZZZZZ			13:29												
ZZZZZZ			13:46												
ZZZZZZ			14:02												
ZZZZZZ			14:19												
ZZZZZZ			14:35												
ZZZZZZ			14:51												
ZZZZZZ			15:08												
ZZZZZZ			15:24												
ZZZZZZ			15:41												
CCV 280-557417/37			15:57												
CCB 280-557417/38			16:13												
ZZZZZZ			16:30												
ZZZZZZ			16:46												
ZZZZZZ			17:03												
ZZZZZZ			17:19												

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Instrument ID: WC\_IonChrom11

Analysis Method: 9056A

Start Date: 11/14/2021 17:29

End Date: 11/16/2021 04:21

## Prep Types:

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Instrument ID: WC\_IonChrom11

Analysis Method: 9056A

Start Date: 11/24/2021 10:16

End Date: 11/25/2021 06:35

Lab Sample Id	D/F	T Y p e	Time	Analytes												
				S	O	O	O	O	O	O	O	O	O	O	O	O
CCV 280-558640/1	1		10:16	X												
CCB 280-558640/2	1		10:32	X												
MRL 280-558640/3	1	T	10:49	X												
LCS 280-558640/4	1	T	11:05	X												
LCSD 280-558640/5	1	T	11:22	X												
MB 280-558640/6	1	T	11:38	X												
ZZZZZZ			11:54													
ZZZZZZ			12:11													
ZZZZZZ			12:27													
ZZZZZZ			12:44													
280-155048-4	5	T	13:00	X												
280-155048-6	5	T	13:16	X												
ZZZZZZ			13:33													
ZZZZZZ			13:49													
ZZZZZZ			14:06													
ZZZZZZ			14:22													
CCV 280-558640/17	1		14:38	X												
CCB 280-558640/18	1		14:55	X												
ZZZZZZ			15:11													
ZZZZZZ			15:28													
ZZZZZZ			15:44													
ZZZZZZ			16:01													
ZZZZZZ			16:17													
ZZZZZZ			16:33													
ZZZZZZ			16:50													
ZZZZZZ			17:06													
ZZZZZZ			17:23													
ZZZZZZ			17:39													
CCV 280-558640/29			17:55													
CCB 280-558640/30			18:12													
ZZZZZZ			18:28													
ZZZZZZ			20:28													
ZZZZZZ			20:44													
ZZZZZZ			21:01													
ZZZZZZ			21:17													
ZZZZZZ			21:33													
ZZZZZZ			21:50													
ZZZZZZ			22:06													
ZZZZZZ			22:23													
ZZZZZZ			22:39													
CCV 280-558640/41			22:55													

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Instrument ID: WC\_IonChrom11

Analysis Method: 9056A

Start Date: 11/24/2021 10:16

End Date: 11/25/2021 06:35

Prep Types:

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13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Instrument ID: WC\_IonChrom7 Analysis Method: 9056A

Start Date: 11/11/2021 16:07 End Date: 11/12/2021 05:54

Lab Sample Id	D/F	T Y P E	Time	Analytes											
				S	O	O	O	O	O	O	O	O	O	O	O
STD 280-557096/4 IC	1		16:07	X											
STD 280-557096/5 IC	1		16:22	X											
STD 280-557096/6 IC	1		16:36	X											
STD 280-557096/7 IC	1		16:51	X											
STD 280-557096/8 IC	1		17:06	X											
STD 280-557096/9 IC	1		17:21	X											
ICV 280-557096/10	1		17:36	X											
ICB 280-557096/11	1		17:51	X											
ZZZZZZ			18:06												
ZZZZZZ			18:21												
ZZZZZZ			18:36												
ZZZZZZ			18:51												
ZZZZZZ			19:13												
ZZZZZZ			19:27												
ZZZZZZ			19:42												
ZZZZZZ			19:57												
ZZZZZZ			20:12												
ZZZZZZ			20:27												
ZZZZZZ			20:42												
ZZZZZZ			20:57												
ZZZZZZ			21:12												
ZZZZZZ			21:27												
CCV 280-557096/26			21:42												
CCB 280-557096/27			21:57												
ZZZZZZ			22:12												
ZZZZZZ			22:26												
ZZZZZZ			22:41												
ZZZZZZ			22:56												
ZZZZZZ			23:11												
ZZZZZZ			23:26												
ZZZZZZ			23:41												
ZZZZZZ			23:56												
ZZZZZZ			00:11												
ZZZZZZ			00:26												
CCV 280-557096/38			00:41												
CCB 280-557096/39			00:56												
ZZZZZZ			01:11												
ZZZZZZ			01:26												
ZZZZZZ			01:41												
ZZZZZZ			01:55												
ZZZZZZ			02:10												

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Instrument ID: WC\_IonChrom7

Analysis Method: 9056A

Start Date: 11/11/2021 16:07

End Date: 11/12/2021 05:54

Prep Types:

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Instrument ID: WC IonChrom7 Analysis Method: 9056A

Start Date: 11/19/2021 09:52 End Date: 11/20/2021 01:17

Lab Sample Id	D/F	T Y P E	Time	Analytes											
				S	O	O	O	O	O	O	O	O	O	O	O
CCV 280-558093/1			09:52												
CCB 280-558093/2		1	10:06	X											
MRL 280-558093/3		1	T	10:21	X										
ZZZZZZ				10:36											
ZZZZZZ				10:51											
MB 280-558093/6		1	T	11:06	X										
ZZZZZZ				11:21											
ZZZZZZ				11:36											
ZZZZZZ				11:51											
ZZZZZZ				12:05											
ZZZZZZ				12:20											
ZZZZZZ				12:35											
ZZZZZZ				12:50											
ZZZZZZ				13:05											
ZZZZZZ				13:20											
ZZZZZZ				13:35											
CCV 280-558093/71		1	13:50	X											
CCB 280-558093/85		1	14:05	X											
ZZZZZZ				14:20											
ZZZZZZ				14:35											
ZZZZZZ				14:50											
ZZZZZZ				15:05											
ZZZZZZ				15:20											
ZZZZZZ				15:34											
ZZZZZZ				15:49											
ZZZZZZ				16:06											
ZZZZZZ				16:20											
ZZZZZZ				16:35											
CCV 280-558093/82		1	16:50	X											
CCB 280-558093/83		1	17:05	X											
ZZZZZZ				17:20											
ZZZZZZ				17:35											
ZZZZZZ				17:50											
ZZZZZZ				18:05											
ZZZZZZ				18:20											
ZZZZZZ				18:34											
ZZZZZZ				18:49											
ZZZZZZ				19:04											
ZZZZZZ				19:19											
ZZZZZZ				19:34											
CCV 280-558093/96		1	19:49	X											

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Instrument ID: WC\_IonChrom7

Analysis Method: 9056A

Start Date: 11/19/2021 09:52

End Date: 11/20/2021 01:17

## Prep Types:

$$\overline{T} = \text{Total/NA}$$

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Instrument ID: WC\_SHI4 Analysis Method: 9060A

Start Date: 11/04/2021 16:29 End Date: 11/05/2021 11:26

Lab Sample Id	D/F	T Y P E	Time	Analytes								
				D	O	C	Q					
ZZZZZZ			16:29									
ICV 280-556344/2	1		17:36	X								
ICB 280-556344/3	1		17:53	X								
ZZZZZZ			18:08									
ZZZZZZ			18:25									
ZZZZZZ			18:40									
ZZZZZZ			18:54									
ZZZZZZ			19:09									
ZZZZZZ			19:24									
ZZZZZZ			19:39									
ZZZZZZ			19:54									
ZZZZZZ			20:09									
ZZZZZZ			20:24									
ZZZZZZ			20:38									
ZZZZZZ			20:53									
CCV 280-556344/16			21:08									
CCB 280-556344/17			21:25									
ZZZZZZ			21:40									
ZZZZZZ			21:57									
ZZZZZZ			22:12									
ZZZZZZ			22:26									
ZZZZZZ			22:41									
ZZZZZZ			22:56									
ZZZZZZ			23:11									
ZZZZZZ			23:28									
ZZZZZZ			23:43									
ZZZZZZ			23:58									
CCV 280-556344/28	1		00:12	X								
CCB 280-556344/29	1		00:27	X								
ZZZZZZ			00:44									
ZZZZZZ			00:59									
ZZZZZZ			01:16									
ZZZZZZ			01:33									
ZZZZZZ			01:48									
LCS 280-556213/1-A	1	D	02:03	X								
MB 280-556213/2-A	1	D	02:18	X								
280-155048-1	1	D	02:33	X								
280-155048-2	1	D	02:50	X								
280-155048-3	1	D	03:05	X								
CCV 280-556344/40	1		03:19	X								

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Instrument ID: WC\_SHI4 Analysis Method: 9060A

Start Date: 11/04/2021 16:29 End Date: 11/05/2021 11:26

Lab Sample Id	D/F	T Y P E	Time	Analytes														
				D	O	C	Q											
CCB 280-556344/41	1		03:34	X														
280-155048-4	1	D	03:49	X														
280-155048-5	1	D	04:04	X														
280-155048-6	1	D	04:21	X														
280-155048-7	1	D	04:38	X														
280-155048-7 MS	1	D	04:53	X														
280-155048-7 MSD	1	D	05:08	X														
280-155048-8	1	D	05:23	X														
280-155048-8 MS	1	D	05:40	X														
280-155048-8 MSD	1	D	05:55	X														
ZZZZZZ			06:10															
CCV 280-556344/52	1		06:25	X														
CCB 280-556344/53	1		06:40	X														
ZZZZZZ			06:54															
ZZZZZZ			07:09															
ZZZZZZ			07:26															
ZZZZZZ			07:41															
ZZZZZZ			07:58															
ZZZZZZ			08:13															
ZZZZZZ			08:28															
ZZZZZZ			08:43															
ZZZZZZ			08:58															
ZZZZZZ			09:13															
CCV 280-556344/64			09:28															
CCB 280-556344/65			09:43															
ZZZZZZ			09:57															
ZZZZZZ			10:15															
ZZZZZZ			10:29															
ZZZZZZ			10:47															
CCV 280-556344/70			11:11															
CCB 280-556344/71			11:26															

Prep Types:  
D = Dissolved

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Instrument ID: WC-AT3

Analysis Method: SM 2320B

Start Date: 11/12/2021 19:00

End Date: 11/13/2021 03:47

Lab Sample Id	D/F	T Y p e	Time	Analytes															
				A l k															
RINSE 280-557616/1			19:00																
ZZZZZZ			19:03																
ZZZZZZ			19:15																
ZZZZZZ			19:21																
ZZZZZZ			19:28																
ZZZZZZ			19:32																
ZZZZZZ			19:38																
ZZZZZZ			19:43																
ZZZZZZ			19:47																
ZZZZZZ			19:52																
ZZZZZZ			19:56																
ZZZZZZ			20:00																
ZZZZZZ			20:05																
ZZZZZZ			20:09																
ZZZZZZ			20:21																
ZZZZZZ			20:33																
CCV 280-557616/17			20:39																
CCB 280-557616/18			20:44																
ZZZZZZ			20:50																
ZZZZZZ			20:55																
ZZZZZZ			21:00																
ZZZZZZ			21:05																
ZZZZZZ			21:11																
ZZZZZZ			21:15																
ZZZZZZ			21:20																
ZZZZZZ			21:26																
ZZZZZZ			21:32																
ZZZZZZ			21:40																
CCV 280-557616/29			21:46																
CCB 280-557616/30			21:51																
LCS 280-557616/31	1	T	21:56	X															
MB 280-557616/32	1	T	22:01	X															
ZZZZZZ			22:13																
ZZZZZZ			22:25																
ZZZZZZ			22:31																
ZZZZZZ			22:41																
ZZZZZZ			22:48																
ZZZZZZ			22:54																
ZZZZZZ			23:00																
ZZZZZZ			23:06																
ZZZZZZ			23:10																

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Instrument ID: WC-AT3

Analysis Method: SM 2320B

Start Date: 11/12/2021 19:00

End Date: 11/13/2021 03:47

Lab Sample Id	D/F	T Y P E	Time	Analytes															
				A l k															
ZZZZZZ			23:16																
CCV 280-557616/43	1		23:22	X															
CCB 280-557616/44	1		23:27	X															
ZZZZZZ			23:32																
ZZZZZZ			23:42																
ZZZZZZ			23:47																
ZZZZZZ			23:57																
ZZZZZZ			00:06																
ZZZZZZ			00:26																
ZZZZZZ			00:38																
280-155048-4	1	T	00:45	X															
280-155048-3	1	T	00:51	X															
280-155048-1	1	T	00:56	X															
CCV 280-557616/55	1		01:02	X															
CCB 280-557616/56	1		01:07	X															
LCS 280-557616/57	1	T	01:13	X															
MB 280-557616/58	1	T	01:18	X															
280-155048-6	1	T	01:25	X															
280-155048-6 DU	1	T	01:32	X															
280-155048-7	1	T	01:38	X															
280-155048-8	1	T	01:43	X															
280-155048-2	1	T	01:50	X															
280-155048-5	1	T	01:54	X															
ZZZZZZ			02:01																
ZZZZZZ			02:05																
ZZZZZZ			02:12																
ZZZZZZ			02:17																
CCV 280-557616/69	1		02:23	X															
CCB 280-557616/70	1		02:28	X															
ZZZZZZ			02:34																
ZZZZZZ			02:40																
ZZZZZZ			02:45																
ZZZZZZ			02:52																
ZZZZZZ			02:58																
ZZZZZZ			03:06																
ZZZZZZ			03:15																
ZZZZZZ			03:22																
ZZZZZZ			03:29																
ZZZZZZ			03:36																
CCV 280-557616/81			03:42																
CCB 280-557616/82			03:47																

13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155048-1

SDG No.: \_\_\_\_\_

Instrument ID: WC-AT3 Analysis Method: SM 2320B

Start Date: 11/12/2021 19:00 End Date: 11/13/2021 03:47

Lab Sample Id	D/F	T Y p e	Time	Analytes															
				A l k															

Prep Types:  
T = Total/NA

## GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Batch Number: 558260

Batch Start Date: 11/21/21 10:23

Batch Analyst: Mitchell, Jacob J

Batch Method: 350.1

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	ClResPres	InitialAmount	FinalAmount	Initial pH	350.1 cal 00509	350.1 ICV 00494
ICVL 280-558260/14		350.1			100 mL	100 mL			0.5 mL
ICV 280-558260/15		350.1			100 mL	100 mL			2.5 mL
ICB 280-558260/16		350.1			10 mL	10 mL			
LCS 280-558260/18		350.1			100 mL	100 mL		2.5 mL	
LCSD 280-558260/19		350.1			100 mL	100 mL		2.5 mL	
MB 280-558260/20		350.1			10 mL	10 mL			
280-155048-C-2	CA212-7	350.1	T	no	10 mL	10 mL	<2 SU		
280-155048-C-5	NW060-7	350.1	T	no	10 mL	10 mL	<2 SU		
CCVL 280-558260/33		350.1			100 mL	100 mL		0.5 mL	
CCV 280-558260/34		350.1			100 mL	100 mL		2.5 mL	
CCB 280-558260/35		350.1			10 mL	10 mL			
280-155048-C-8	G0070-7	350.1	T	no	10 mL	10 mL	<2 SU		
280-155048-C-8 MS	G0070-7	350.1	T	no	10 mL	10 mL	<2 SU	0.1 mL	
280-155048-C-8 MSD	G0070-7	350.1	T	no	10 mL	10 mL	<2 SU	0.1 mL	
280-155048-C-1	CA211-7	350.1	T	no	10 mL	10 mL	<2 SU		
280-155048-C-4	G0076-7	350.1	T	no	10 mL	10 mL	<2 SU		
280-155048-C-6	CA210-7	350.1	T	no	10 mL	10 mL	<2 SU		
CCVL 280-558260/49		350.1			100 mL	100 mL		0.5 mL	
CCV 280-558260/50		350.1			100 mL	100 mL		2.5 mL	
CCB 280-558260/51		350.1			10 mL	10 mL			

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

## GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Batch Number: 558260

Batch Start Date: 11/21/21 10:23

Batch Analyst: Mitchell, Jacob J

Batch Method: 350.1

Batch End Date:

Batch Notes	
Sodium Nitroprusside ID	350.1 color_00268
Hypochlorite ID	350.1 bleach_01524
Carrier Identification	350.1 complex_00584
Sodium Salicylate ID	Sodium Sal_00021
Pipette/Syringe/Dispenser ID	SAH5000, 1000 INTERCESSOR, BWH 200
Batch Comment	JM

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.

350.1

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## GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Batch Number: 558270

Batch Start Date: 11/21/21 13:09

Batch Analyst: Mitchell, Jacob J

Batch Method: 350.1

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	ClResPres	InitialAmount	FinalAmount	Initial pH	350.1 cal 00509	350.1 ICV 00494
ICVL 280-558270/14		350.1			100 mL	100 mL			0.5 mL
ICV 280-558270/15		350.1			100 mL	100 mL			2.5 mL
ICB 280-558270/16		350.1			10 mL	10 mL			
LCS 280-558270/18		350.1			100 mL	100 mL		2.5 mL	
LCSD 280-558270/19		350.1			100 mL	100 mL		2.5 mL	
MB 280-558270/20		350.1			10 mL	10 mL			
CCVL 280-558270/33		350.1			100 mL	100 mL		0.5 mL	
CCV 280-558270/34		350.1			100 mL	100 mL		2.5 mL	
CCB 280-558270/35		350.1			10 mL	10 mL			
280-155048-C-7	NW062-7	350.1	T	no	10 mL	10 mL	<2 SU		
280-155048-C-7 MS	NW062-7	350.1	T	no	10 mL	10 mL	<2 SU	0.1 mL	
280-155048-C-7 MSD	NW062-7	350.1	T	no	10 mL	10 mL	<2 SU	0.1 mL	
CCVL 280-558270/49		350.1			100 mL	100 mL		0.5 mL	
CCV 280-558270/50		350.1			100 mL	100 mL		2.5 mL	
CCB 280-558270/51		350.1			10 mL	10 mL			

## Batch Notes

Sodium Nitroprusside ID	350.1 color_00268
Hypochlorite ID	350.1 bleach_01524
Carrier Identification	350.1 complex_00584
Sodium Salicylate ID	Sodium Sal_00021
Pipette/Syringe/Dispenser ID	SAH5000, 1000 INTERCESSOR, BWH 200
Batch Comment	JM

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

## GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, DenverJob No.: 280-155048-1

SDG No.: \_\_\_\_\_

Batch Number: 558270Batch Start Date: 11/21/21 13:09Batch Analyst: Mitchell, Jacob JBatch Method: 350.1

Batch End Date: \_\_\_\_\_

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

350.1

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## GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Batch Number: 558390

Batch Start Date: 11/22/21 10:08

Batch Analyst: Dhungel, Rohit K

Batch Method: 350.1

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	ClResPres	InitialAmount	FinalAmount	Initial pH	350.1 cal 00509	350.1 ICV 00494
ICVL 280-558390/14		350.1			100 mL	100 mL			0.5 mL
ICV 280-558390/15		350.1			100 mL	100 mL			2.5 mL
ICB 280-558390/16		350.1			10 mL	10 mL			
LCS 280-558390/18		350.1			100 mL	100 mL		2.5 mL	
LCSD 280-558390/19		350.1			100 mL	100 mL		2.5 mL	
MB 280-558390/20		350.1			10 mL	10 mL			
280-155048-C-3	NW061-7	350.1	T	No	10 mL	10 mL	<2 SU		
CCVL 280-558390/33		350.1			100 mL	100 mL		0.5 mL	
CCV 280-558390/34		350.1			100 mL	100 mL		2.5 mL	
CCB 280-558390/35		350.1			10 mL	10 mL			

## Batch Notes

Sodium Nitroprusside ID	350.1 color_00268
Hypochlorite ID	350.1 bleach_01525
Carrier Identification	350.1 complex_00584
Sodium Salicylate ID	sodium sal_00033
Pipette/Syringe/Dispenser ID	SAH 5000, 1000 INTERCESSOR, BWH 200
Batch Comment	RKD

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

## GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Batch Number: 557418

Batch Start Date: 11/14/21 16:04

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 00826	TKN ICV 25 00112		
ICV 280-557418/7		351.2, 351.2		25 mL	25 mL		5 mL		
ICB 280-557418/8		351.2, 351.2		25 mL	25 mL				
CCV 280-557418/9		351.2, 351.2		25 mL	25 mL	5 mL			
CCB 280-557418/10		351.2, 351.2		25 mL	25 mL				

## Batch Notes

Block Digestor ID	TKN Hotblock
Digestion Solution ID	TKN digestion_00143
Oven, Bath or Block Temperature 1	160 Degrees C
Block Digestion Temperature Start Date	11/14/2021 16:45
Oven, Bath or Block Temperature 2	380 Degrees C
Block Digestion Temperature End Date	11/14/2021 23:00
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.

351.2

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## GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Batch Number: 557729

Batch Start Date: 11/16/21 18:04

Batch Analyst: Cherry, Scott V

Batch Method: 351.2

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	TKN 25ppm 00826		
LCS 280-557729/1		351.2, 351.2			25 mL	25 mL	6 mL		
MB 280-557729/2		351.2, 351.2			25 mL	25 mL			
280-155048-C-7	NW062-7	351.2, 351.2	T	<2	25 mL	25 mL			
280-155048-C-7 MS	NW062-7	351.2, 351.2	T	<2	25 mL	25 mL	3 mL		
280-155048-C-7 MSD	NW062-7	351.2, 351.2	T	<2	25 mL	25 mL	3 mL		
280-155048-C-1	CA211-7	351.2, 351.2	T	<2	25 mL	25 mL			
280-155048-C-2	CA212-7	351.2, 351.2	T	<2	25 mL	25 mL			
280-155048-C-3	NW061-7	351.2, 351.2	T	<2	25 mL	25 mL			
280-155048-C-4	G0076-7	351.2, 351.2	T	<2	25 mL	25 mL			
280-155048-C-5	NW060-7	351.2, 351.2	T	<2	25 mL	25 mL			
280-155048-C-6	CA210-7	351.2, 351.2	T	<2	25 mL	25 mL			

## Batch Notes

Block Digestor ID	TKN Hotblock
Digestion Solution ID	TKN digestion_00143
Oven, Bath or Block Temperature 1	160 Degrees C
Block Digestion Temperature Start Date	11/16/2021 18:25
Oven, Bath or Block Temperature 2	380 Degrees C
Block Digestion Temperature End Date	11/16/2021 23:45
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 TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Batch Number: 557730

Batch Start Date: 11/16/21 18:07

Batch Analyst: Cherry, Scott V

Batch Method: 351.2

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	TKN 25ppm 00826		
LCS 280-557730/1		351.2, 351.2			25 mL	25 mL	6 mL		
MB 280-557730/2		351.2, 351.2			25 mL	25 mL			
280-155048-C-8	G0070-7	351.2, 351.2	T	<2	25 mL	25 mL			
280-155048-C-8 MS	G0070-7	351.2, 351.2	T	<2	25 mL	25 mL	3 mL		
280-155048-C-8 MSD	G0070-7	351.2, 351.2	T	<2	25 mL	25 mL	3 mL		

## Batch Notes

Block Digestor ID	TKN Hotblock
Digestion Solution ID	TKN digestion_00143
Oven, Bath or Block Temperature 1	160 Degrees C
Block Digestion Temperature Start Date	11/16/2021 18:25
Oven, Bath or Block Temperature 2	380 Degrees C
Block Digestion Temperature End Date	11/16/2021 23:45
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 TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Batch Number: 557899

Batch Start Date: 11/15/21 17:04

Batch Analyst: Cherry, Scott V

Batch Method: 351.2

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	Final Amount					
ICV 280-557418/7-A		351.2		2 mL					
ICB 280-557418/8-A		351.2		2 mL					
LCS 280-557729/1-A		351.2		2 mL					
MB 280-557729/2-A		351.2		2 mL					
CCV 280-557418/9-A		351.2		2 mL					
CCB 280-557418/10-A		351.2		2 mL					
280-155048-C-7-A	NW062-7	351.2	T	2 mL					
280-155048-C-7-B MS	NW062-7	351.2	T	2 mL					
280-155048-C-7-C MSD	NW062-7	351.2	T	2 mL					
280-155048-C-1-A	CA211-7	351.2	T	2 mL					
280-155048-C-2-A	CA212-7	351.2	T	2 mL					
280-155048-C-3-A	NW061-7	351.2	T	2 mL					
280-155048-C-4-A	G0076-7	351.2	T	2 mL					
CCV 280-557418/9-A		351.2		2 mL					
CCB 280-557418/10-A		351.2		2 mL					
280-155048-C-5-A	NW060-7	351.2	T	2 mL					
280-155048-C-6-A	CA210-7	351.2	T	2 mL					
LCS 280-557730/1-A		351.2		2 mL					
MB 280-557730/2-A		351.2		2 mL					
280-155048-C-8-A	G0070-7	351.2	T	2 mL					
280-155048-C-8-B MS	G0070-7	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 TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Batch Number: 557899

Batch Start Date: 11/15/21 17:04

Batch Analyst: Cherry, Scott V

Batch Method: 351.2

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	Final Amount					
280-155048-C-8-	G0070-7	351.2	T	2 mL					
C MSD									
CCV		351.2		2 mL					
280-557418/9-A									
CCB		351.2		2 mL					
280-557418/10-A									

## Batch Notes

Hypochlorite ID	TKN hypo_00675
Buffer Reagent ID	TKN buffer_00132
Pipette/Syringe/Dispenser ID	5000ad, 1000ad
Sodium Nitroprusside ID	sodium nitro_00107

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

## GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Batch Number: 557898

Batch Start Date: 11/17/21 16:27

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 00601	NXN ICV INT 00577		
ICV 280-557898/17		353.2		100 mL	100 mL		5 mL		
ICVL 280-557898/18		353.2		100 mL	100 mL		2 mL		
ICB 280-557898/19		353.2		100 mL	100 mL				
LCS 280-557898/21		353.2		100 mL	100 mL	5 mL			
MB 280-557898/22		353.2		100 mL	100 mL				
280-155048-C-1	CA211-7	353.2	T	100 mL	100 mL				
280-155048-C-2	CA212-7	353.2	T	100 mL	100 mL				
280-155048-C-3	NW061-7	353.2	T	100 mL	100 mL				
280-155048-C-4	G0076-7	353.2	T	100 mL	100 mL				
CCV 280-557898/35		353.2		100 mL	100 mL	5 mL			
CCVL 280-557898/36		353.2		100 mL	100 mL	1 mL			
CCB 280-557898/37		353.2		100 mL	100 mL				
280-155048-C-5	NW060-7	353.2	T	100 mL	100 mL				
280-155048-C-6	CA210-7	353.2	T	100 mL	100 mL				
280-155048-C-7	NW062-7	353.2	T	100 mL	100 mL				
280-155048-C-7 MS	NW062-7	353.2	T	5 mL	5 mL	0.2 mL			
280-155048-C-7 MSD	NW062-7	353.2	T	5 mL	5 mL	0.2 mL			
CCV 280-557898/51		353.2		100 mL	100 mL	5 mL			
CCVL 280-557898/52		353.2		100 mL	100 mL	1 mL			
CCB 280-557898/53		353.2		100 mL	100 mL				
LCS 280-557898/59		353.2		100 mL	100 mL	5 mL			
LCSD 280-557898/60		353.2		100 mL	100 mL	5 mL			
MB 280-557898/61		353.2		100 mL	100 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

## GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Batch Number: 557898

Batch Start Date: 11/17/21 16:27

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 00601	NXN ICV INT 00577		
280-155048-C-8	G0070-7	353.2	T	100 mL	100 mL				
280-155048-C-8 MS	G0070-7	353.2	T	5 mL	5 mL	0.2 mL			
280-155048-C-8 MSD	G0070-7	353.2	T	5 mL	5 mL	0.2 mL			
CCV 280-557898/68		353.2		100 mL	100 mL	5 mL			
CCVL 280-557898/69		353.2		100 mL	100 mL	1 mL			
CCB 280-557898/70		353.2		100 mL	100 mL				

## Batch Notes

pH Indicator ID	hc902937
Buffer Reagent ID	NOXT Buffer_00222
Color Reagent ID	NOXT CR_00121
Pipette/Syringe/Dispenser ID	5000ad, 1000ad
Cadmium Column Lot ID	q19133-0419
Copper Sulfate ID	CuSO4 NOXT_0014
Hydrochloric Acid ID	0.5N HC1_0084

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

## GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Batch Number: 556494

Batch Start Date: 11/07/21 11:35

Batch Analyst: Mitchell, Jacob J

Batch Method: 9030B

Batch End Date: 11/07/21 13:05

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	DistillUnitPort	Initial pH	Final pH	AcidVolAdded
LCS 280-556494/1		9030B, 9034		50 mL	50 mL	1	>9 SU	<2 SU	5 mL
MB 280-556494/2		9030B, 9034		50 mL	50 mL	2	>9 SU	<2 SU	5 mL
280-155048-E-8	G0070-7	9030B, 9034	T	50 mL	50 mL	3	>9 SU	<2 SU	5 mL
280-155048-E-8 MS	G0070-7	9030B, 9034	T	50 mL	50 mL	4	>9 SU	<2 SU	5 mL
280-155048-E-8 MSD	G0070-7	9030B, 9034	T	50 mL	50 mL	5	>9 SU	<2 SU	5 mL
280-155048-E-4	G0076-7	9030B, 9034	T	50 mL	50 mL	16	>9 SU	<2 SU	5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	SFD ICV INT 02020					
LCS 280-556494/1		9030B, 9034		1 mL					
MB 280-556494/2		9030B, 9034							
280-155048-E-8	G0070-7	9030B, 9034	T						
280-155048-E-8 MS	G0070-7	9030B, 9034	T	1 mL					
280-155048-E-8 MSD	G0070-7	9030B, 9034	T	1 mL					
280-155048-E-4	G0076-7	9030B, 9034	T						

Batch Notes	
Formaldehyde ID	form_00120
Zinc Acetate Buffer ID	znac_00120
Pipette/Syringe/Dispenser ID	5Hz4, ARM 1000
Sulfuric Acid Reagent ID Number	SulfuricAcid_00260
pH Indicator ID	HC157843
Distillation Start Time	11/07/2021 11:35
Uncorrected Temperature 2	80 Degrees C
Oven, Bath or Block Temperature 2	80 Degrees C
Distillation End Time	11/07/2021 13:05
Batch Comment	JM

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

## GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, DenverJob No.: 280-155048-1

SDG No.: \_\_\_\_\_

Batch Number: 556494Batch Start Date: 11/07/21 11:35Batch Analyst: Mitchell, Jacob JBatch Method: 9030BBatch End Date: 11/07/21 13:05

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

## GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Batch Number: 556496

Batch Start Date: 11/07/21 13:05

Batch Analyst: Mitchell, Jacob J

Batch Method: 9034

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	BuretStart1	BuretStop1	IodineAmount	TitrantVolume1	FinalAmount	
LCS 280-556494/1-A		9034		0 mL	3.0 mL	5 mL	3 mL	50 mL	
MB 280-556494/2-A		9034		3.0 mL	4.0 mL	1 mL	1 mL	50 mL	
280-155048-E-8- A	G0070-7	9034	T	4.0 mL	4.9 mL	1 mL	0.9 mL	50 mL	
280-155048-E-8- B MS	G0070-7	9034	T	4.9 mL	7.8 mL	5 mL	2.9 mL	50 mL	
280-155048-E-8- C MSD	G0070-7	9034	T	7.8 mL	10.7 mL	5 mL	2.9 mL	50 mL	
280-155048-E-4- A	G0076-7	9034	T	20.4 mL	21.3 mL	1 mL	0.9000000000000002 mL	50 mL	

## Batch Notes

Normality of First Titrant	0.025 N
Normality of Iodine Solution	0.025 N
Iodine ID	Iod_00271
Hydrochloric Acid ID	HCl Sol_00195
Sodium Thiosulfate ID	Na Thio_00174
Starch Reagent ID	Starch Ind_00066
Pipette/Syringe/Dispenser ID	5Hz4, ARM 1000
Batch Comment	JM

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

## GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Batch Number: 556700

Batch Start Date: 11/09/21 09:15

Batch Analyst: Mitchell, Jacob J

Batch Method: 9030B

Batch End Date: 11/09/21 10:45

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	DistillUnitPort	Initial pH	Final pH	AcidVolAdded
LCS 280-556700/1		9030B, 9034		50 mL	50 mL	1	>9 SU	<2 SU	5 mL
LCSD 280-556700/2		9030B, 9034		50 mL	50 mL	2	>9 SU	<2 SU	5 mL
MB 280-556700/3		9030B, 9034		50 mL	50 mL	3	>9 SU	<2 SU	5 mL
280-155048-E-7	NW062-7	9030B, 9034	T	50 mL	50 mL	4	>9 SU	<2 SU	5 mL
280-155048-E-7 MS	NW062-7	9030B, 9034	T	50 mL	50 mL	5	>9 SU	<2 SU	5 mL
280-155048-E-7 MSD	NW062-7	9030B, 9034	T	50 mL	50 mL	6	>9 SU	<2 SU	5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	SFD ICV INT 02023					
LCS 280-556700/1		9030B, 9034		1 mL					
LCSD 280-556700/2		9030B, 9034		1 mL					
MB 280-556700/3		9030B, 9034							
280-155048-E-7	NW062-7	9030B, 9034	T						
280-155048-E-7 MS	NW062-7	9030B, 9034	T	1 mL					
280-155048-E-7 MSD	NW062-7	9030B, 9034	T	1 mL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

## GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Batch Number: 556700

Batch Start Date: 11/09/21 09:15

Batch Analyst: Mitchell, Jacob J

Batch Method: 9030B

Batch End Date: 11/09/21 10:45

Batch Notes	
Formaldehyde ID	form_00120
Zinc Acetate Buffer ID	znac_00120
Pipette/Syringe/Dispenser ID	5Hz4, ARM 1000
Sulfuric Acid Reagent ID Number	SulfuricAcid_00260
pH Indicator ID	HC157843
Distillation Start Time	11/09/2021 09:15
Uncorrected Temperature 2	80 Degrees C
Oven, Bath or Block Temperature 2	80 Degrees C
Distillation End Time	11/09/2021 10:45
Lead Acetate Paper Lot #	3
Batch Comment	JM

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

## GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Batch Number: 556715

Batch Start Date: 11/09/21 10:45

Batch Analyst: Mitchell, Jacob J

Batch Method: 9034

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	BuretStart1	BuretStop1	IodineAmount	TitrantVolume1	FinalAmount	
LCS 280-556700/1-A		9034		0 mL	3.0 mL	5 mL	3 mL	50 mL	
LCSD 280-556700/2-A		9034		3.0 mL	6.1 mL	5 mL	3.1 mL	50 mL	
MB 280-556700/3-A		9034		6.1 mL	7.1 mL	1 mL	1 mL	50 mL	
280-155048-E-7- A	NW062-7	9034	T	7.1 mL	8.1 mL	1 mL	1 mL	50 mL	
280-155048-E-7- B MS	NW062-7	9034	T	8.1 mL	11.0 mL	5 mL	2.9 mL	50 mL	
280-155048-E-7- C MSD	NW062-7	9034	T	11.0 mL	14.1 mL	5 mL	3.1 mL	50 mL	

## Batch Notes

Normality of First Titrant	0.025 N
Normality of Iodine Solution	0.025 N
Iodine ID	Iod_00271
Hydrochloric Acid ID	HCl Sol_00195
Sodium Thiosulfate ID	Na Thio_00174
Starch Reagent ID	Starch Ind_00066
Pipette/Syringe/Dispenser ID	5Hz4, ARM 1000
Batch Comment	JM

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

## GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Batch Number: 556749

Batch Start Date: 11/09/21 12:15

Batch Analyst: Mitchell, Jacob J

Batch Method: 9030B

Batch End Date: 11/09/21 13:45

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	DistillUnitPort	Initial pH	Final pH	AcidVolAdded
LCS 280-556749/1		9030B, 9034		50 mL	50 mL	1	>9 SU	<2 SU	5 mL
MB 280-556749/2		9030B, 9034		50 mL	50 mL	2	>9 SU	<2 SU	5 mL
280-155048-E-2	CA212-7	9030B, 9034	T	50 mL	50 mL	6	>9 SU	<2 SU	5 mL
280-155048-E-3	NW061-7	9030B, 9034	T	50 mL	50 mL	7	>9 SU	<2 SU	5 mL
280-155048-E-5	NW060-7	9030B, 9034	T	50 mL	50 mL	8	>9 SU	<2 SU	5 mL
280-155048-E-6	CA210-7	9030B, 9034	T	50 mL	50 mL	9	>9 SU	<2 SU	5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	SFD ICV INT 02023					
LCS 280-556749/1		9030B, 9034		1 mL					
MB 280-556749/2		9030B, 9034							
280-155048-E-2	CA212-7	9030B, 9034	T						
280-155048-E-3	NW061-7	9030B, 9034	T						
280-155048-E-5	NW060-7	9030B, 9034	T						
280-155048-E-6	CA210-7	9030B, 9034	T						

## Batch Notes

Formaldehyde ID	form_00120
Zinc Acetate Buffer ID	znac_00120
Pipette/Syringe/Dispenser ID	5Hz4, ARM 1000
Sulfuric Acid Reagent ID Number	SulfuricAcid_00260
pH Indicator ID	HC157843
Distillation Start Time	11/09/2021 12:15
Uncorrected Temperature 2	80 Degrees C
Oven, Bath or Block Temperature 2	80 Degrees C
Distillation End Time	11/09/2021 13:45
Lead Acetate Paper Lot #	3
Batch Comment	JM

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

## GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, DenverJob No.: 280-155048-1

SDG No.: \_\_\_\_\_

Batch Number: 556749Batch Start Date: 11/09/21 12:15Batch Analyst: Mitchell, Jacob JBatch Method: 9030BBatch End Date: 11/09/21 13:45

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

## GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Batch Number: 556751

Batch Start Date: 11/09/21 12:10

Batch Analyst: Mitchell, Jacob J

Batch Method: 9034

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	BuretStart1	BuretStop1	IodineAmount	TitrantVolume1	FinalAmount	
LCS 280-556749/1-A		9034		0 mL	2.95 mL	5 mL	2.95 mL	50 mL	
MB 280-556749/2-A		9034		2.95 mL	3.9 mL	1 mL	0.95 mL	50 mL	
280-155048-E-2- A	CA212-7	9034	T	10.9 mL	11.8 mL	1 mL	0.9 mL	50 mL	
280-155048-E-3- A	NW061-7	9034	T	11.8 mL	12.8 mL	1 mL	1 mL	50 mL	
280-155048-E-5- A	NW060-7	9034	T	12.8 mL	13.8 mL	1 mL	1 mL	50 mL	
280-155048-E-6- A	CA210-7	9034	T	13.8 mL	14.7 mL	1 mL	0.8999999999999999 99 mL	50 mL	

## Batch Notes

Normality of First Titrant	0.025 N
Normality of Iodine Solution	0.025 N
Iodine ID	Iod_00271
Hydrochloric Acid ID	HCl Sol_00195
Sodium Thiosulfate ID	Na Thio_00174
Starch Reagent ID	Starch Ind_00066
Pipette/Syringe/Dispenser ID	5Hz4, ARM 1000
Batch Comment	JM

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

## GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Batch Number: 556787

Batch Start Date: 11/09/21 14:35

Batch Analyst: Mitchell, Jacob J

Batch Method: 9030B

Batch End Date: 11/09/21 16:05

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	DistillUnitPort	Initial pH	Final pH	AcidVolAdded
LCS 280-556787/1		9030B, 9034		50 mL	50 mL	1	>9 SU	<2 SU	5 mL
MB 280-556787/2		9030B, 9034		50 mL	50 mL	2	>9 SU	<2 SU	5 mL
280-155048-E-1	CA211-7	9030B, 9034	T	50 mL	50 mL	8	>9 SU	<2 SU	5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	SFD ICV INT 02023					
LCS 280-556787/1		9030B, 9034		1 mL					
MB 280-556787/2		9030B, 9034							
280-155048-E-1	CA211-7	9030B, 9034	T						

## Batch Notes

Formaldehyde ID	form_00120
Zinc Acetate Buffer ID	znac_00120
Pipette/Syringe/Dispenser ID	5Hz4, ARM 1000
Sulfuric Acid Reagent ID Number	SulfuricAcid_00260
pH Indicator ID	HC157843
Distillation Start Time	11/09/2021 14:35
Uncorrected Temperature 2	80 Degrees C
Oven, Bath or Block Temperature 2	80 Degrees C
Distillation End Time	11/09/2021 16:05
Lead Acetate Paper Lot #	3
Batch Comment	JM

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

## GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Batch Number: 556789

Batch Start Date: 11/09/21 16:05

Batch Analyst: Mitchell, Jacob J

Batch Method: 9034

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	BuretStart1	BuretStop1	IodineAmount	TitrantVolume1	FinalAmount	
LCS 280-556787/1-A		9034		0 mL	3.0 mL	5 mL	3 mL	50 mL	
MB 280-556787/2-A		9034		3.0 mL	4.0 mL	1 mL	1 mL	50 mL	
280-155048-E-1- A	CA211-7	9034	T	13.6 mL	14.4 mL	1 mL	0.8000000000000001 mL	50 mL	

## Batch Notes

Normality of First Titrant	0.025 N
Normality of Iodine Solution	0.025 N
Iodine ID	Iod_00271
Hydrochloric Acid ID	HCl Sol_00195
Sodium Thiosulfate ID	Na Thio_00174
Starch Reagent ID	Starch Ind_00066
Pipette/Syringe/Dispenser ID	5Hz4, ARM 1000
Batch Comment	JM

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

## GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Batch Number: 557096

Batch Start Date: 11/11/21 16:07

Batch Analyst: Gonzalez, Sofie P

Batch Method: 9056A

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	C1 ICV Std 00002	IC CAL cl/so4 00393	IC Cal low 00607	IC ICV 5 00341
STD 280-557096/4 IC		9056A		5 mL	5 mL		0.02 mL	0.02 mL	
STD 280-557096/5 IC		9056A		5 mL	5 mL		0.05 mL	0.05 mL	
STD 280-557096/6 IC		9056A		5 mL	5 mL		0.1 mL	0.1 mL	
STD 280-557096/7 IC		9056A		5 mL	5 mL		1.2 mL	0.4 mL	
STD 280-557096/8 IC		9056A		5 mL	5 mL		2.4 mL	0.8 mL	
STD 280-557096/9 IC		9056A		5 mL	5 mL		4 mL	1 mL	
ICV 280-557096/10		9056A		5 mL	5 mL	0.4 mL			0.4 mL
ICB 280-557096/11		9056A		5 mL	5 mL				

Lab Sample ID	Client Sample ID	Method Chain	Basis	IC SO4 ICV 00022					
STD 280-557096/4 IC		9056A							
STD 280-557096/5 IC		9056A							
STD 280-557096/6 IC		9056A							
STD 280-557096/7 IC		9056A							
STD 280-557096/8 IC		9056A							
STD 280-557096/9 IC		9056A							
ICV 280-557096/10		9056A		0.4 mL					
ICB 280-557096/11		9056A							

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

## GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Batch Number: 557096

Batch Start Date: 11/11/21 16:07

Batch Analyst: Gonzalez, Sofie P

Batch Method: 9056A

Batch End Date:

Batch Notes	
Filter ID	SLGB033NB
Pipette/Syringe/Dispenser ID	5000CK 1000BMF CJ200 IC100
Sufficient Volume for Batch QC	yes
Eluent 1 ID	AS14 eluent_00021
Batch Comment	SG

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.

9056A

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## GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Batch Number: 557415

Batch Start Date: 11/14/21 16:43

Batch Analyst: Gonzalez, Sofie P

Batch Method: 9056A

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	C1 ICV Std 00002	IC CAL cl/so4 00393	IC Cal low 00607	IC ICV 5 00341
STD1 280-557415/2 IC		9056A		10 mL	10 mL		0.04 mL	0.04 mL	
STD2 280-557415/3 IC		9056A		10 mL	10 mL		0.1 mL	0.1 mL	
STD3 280-557415/4 IC		9056A		10 mL	10 mL		0.2 mL	0.2 mL	
STD4 280-557415/5 IC		9056A		10 mL	10 mL		2.4 mL	0.8 mL	
STD5 280-557415/6 IC		9056A		10 mL	10 mL		4.8 mL	1.6 mL	
STD6 280-557415/7 IC		9056A		10 mL	10 mL		8 mL	2 mL	
ICB 280-557415/8		9056A		10 mL	10 mL				
ICV 280-557415/9		9056A		10 mL	10 mL	0.8 mL			0.8 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	IC SO4 ICV 00022					
STD1 280-557415/2 IC		9056A							
STD2 280-557415/3 IC		9056A							
STD3 280-557415/4 IC		9056A							
STD4 280-557415/5 IC		9056A							
STD5 280-557415/6 IC		9056A							
STD6 280-557415/7 IC		9056A							
ICB 280-557415/8		9056A							
ICV 280-557415/9		9056A		0.8 mL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

## GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Batch Number: 557415

Batch Start Date: 11/14/21 16:43

Batch Analyst: Gonzalez, Sofie P

Batch Method: 9056A

Batch End Date:

Batch Notes	
Filter ID	SLGB033NB
Pipette/Syringe/Dispenser ID	5000CK IC100 CJ200 BMF1000
Sufficient Volume for Batch QC	yes
Eluent 1 ID	IC10 eluent_00002
Batch Comment	CJ and SG

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.

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## GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Batch Number: 557417

Batch Start Date: 11/14/21 17:29

Batch Analyst: Jindarat, Chanida

Batch Method: 9056A

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	C1 ICV Std 00002	IC CAL cl/so4 00393	IC Cal low 00607	IC ICV 5 00341
STD 280-557417/2 IC		9056A		5 mL	5 mL		0.02 mL	0.02 mL	
STD 280-557417/3 IC		9056A		5 mL	5 mL		0.05 mL	0.05 mL	
STD 280-557417/4 IC		9056A		5 mL	5 mL		0.1 mL	0.1 mL	
STD 280-557417/5 IC		9056A		5 mL	5 mL		1.2 mL	0.4 mL	
STD 280-557417/6 IC		9056A		5 mL	5 mL		2.4 mL	0.8 mL	
STD 280-557417/7 IC		9056A		5 mL	5 mL		4 mL	1 mL	
ICV 280-557417/8		9056A		5 mL	5 mL	0.4 mL			0.4 mL
ICB 280-557417/9		9056A		5 mL	5 mL				

Lab Sample ID	Client Sample ID	Method Chain	Basis	IC SO4 ICV 00022					
STD 280-557417/2 IC		9056A							
STD 280-557417/3 IC		9056A							
STD 280-557417/4 IC		9056A							
STD 280-557417/5 IC		9056A							
STD 280-557417/6 IC		9056A							
STD 280-557417/7 IC		9056A							
ICV 280-557417/8		9056A		0.4 mL					
ICB 280-557417/9		9056A							

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

## GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Batch Number: 557417

Batch Start Date: 11/14/21 17:29

Batch Analyst: Jindarat, Chanida

Batch Method: 9056A

Batch End Date:

Batch Notes	
Filter ID	SLGP033NB
Pipette/Syringe/Dispenser ID	5000CK, BMF1000, 200CJ, ic100
Sufficient Volume for Batch QC	Yes
Eluent 1 ID	AS14 Eluent_00022

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.

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## GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Batch Number: 558091

Batch Start Date: 11/19/21 14:40

Batch Analyst: Jindarat, Chanida

Batch Method: 9056A

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	IC CAL cl/so4 00394	IC Cal low 00608	IC LCS 01845	ICMS/MSD WEEK 00731
CCV 280-558091/1		9056A		10 mL	10 mL			10 mL	
CCB 280-558091/2		9056A		10 mL	10 mL				
MRL 280-558091/3		9056A		10 mL	10 mL	0.2 mL	0.1 mL		
LCS 280-558091/4		9056A		10 mL	10 mL			10 mL	
LCSD 280-558091/5		9056A		5 mL	5 mL			10 mL	
MB 280-558091/6		9056A		10 mL	10 mL				
CCV 280-558091/17		9056A		10 mL	10 mL			10 mL	
CCB 280-558091/18		9056A		10 mL	10 mL				
CCV 280-558091/29		9056A		10 mL	10 mL			10 mL	
CCB 280-558091/30		9056A		10 mL	10 mL				
280-155048-F-1	CA211-7	9056A	T	10 mL	10 mL				
280-155048-F-2	CA212-7	9056A	T	10 mL	10 mL				
CCV 280-558091/41		9056A		10 mL	10 mL			10 mL	
CCB 280-558091/42		9056A		10 mL	10 mL				
LCS 280-558091/43		9056A		10 mL	10 mL			10 mL	
LCSD 280-558091/44		9056A		10 mL	10 mL			10 mL	
MB 280-558091/45		9056A		10 mL	10 mL				
280-155048-F-3	NW061-7	9056A	T	10 mL	10 mL				
280-155048-F-4	G0076-7	9056A	T	10 mL	10 mL				
280-155048-F-5	NW060-7	9056A	T	10 mL	10 mL				
280-155048-F-6	CA210-7	9056A	T	10 mL	10 mL				
280-155048-F-7	NW062-7	9056A	T	10 mL	10 mL				
280-155048-F-7 DU	NW062-7	9056A	T	10 mL	10 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

## GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Batch Number: 558091

Batch Start Date: 11/19/21 14:40

Batch Analyst: Jindarat, Chanida

Batch Method: 9056A

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	IC CAL cl/so4 00394	IC Cal low 00608	IC LCS 01845	ICMS/MSD WEEK 00731
280-155048-F-7 MS	NW062-7	9056A	T	10 mL	10 mL				0.1 mL
280-155048-F-7 MSD	NW062-7	9056A	T	10 mL	10 mL				0.1 mL
CCV 280-558091/56		9056A		10 mL	10 mL			10 mL	
CCB 280-558091/57		9056A		10 mL	10 mL				
280-155048-F-8 DU	G0070-7	9056A	T	10 mL	10 mL				
280-155048-F-8 DU	G0070-7	9056A	T	10 mL	10 mL				
280-155048-F-8 MS	G0070-7	9056A	T	10 mL	10 mL				0.1 mL
280-155048-F-8 MSD	G0070-7	9056A	T	10 mL	10 mL				0.1 mL
CCV 280-558091/68		9056A		10 mL	10 mL			10 mL	
CCB 280-558091/69		9056A		10 mL	10 mL				

## Batch Notes

Filter ID	SLGP033NB
Pipette/Syringe/Dispenser ID	5000CK, BMF1000, 200CJ, ic100
Sufficient Volume for Batch QC	Yes
Eluent 1 ID	IC10 Eluent_00002

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

9056A

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## GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Batch Number: 558093

Batch Start Date: 11/19/21 09:52

Batch Analyst: Jindarat, Chanida

Batch Method: 9056A

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	IC CAL cl/so4 00394	IC Cal low 00608	IC LCS 01845	ICMS/MSD WEEK 00731
CCB 280-558093/2		9056A		5 mL	5 mL				
MRL 280-558093/3		9056A		5 mL	5 mL	0.1 mL	0.05 mL		
LCS 280-558093/4		9056A		5 mL	5 mL			5 mL	
LCSD 280-558093/5		9056A		5 mL	5 mL			5 mL	
MB 280-558093/6		9056A		5 mL	5 mL				
CCV 280-558093/71		9056A		5 mL	5 mL			5 mL	
CCV 280-558093/82		9056A		5 mL	5 mL			5 mL	
CCB 280-558093/83		9056A		5 mL	5 mL				
CCB 280-558093/85		9056A		5 mL	5 mL				
280-155048-F-7	NW062-7	9056A	T	5 mL	5 mL				
280-155048-F-7 DU	NW062-7	9056A	T	5 mL	5 mL				
280-155048-F-7 MS	NW062-7	9056A	T	5 mL	5 mL				0.05 mL
280-155048-F-7 MSD	NW062-7	9056A	T	5 mL	5 mL				0.05 mL
CCV 280-558093/96		9056A		5 mL	5 mL			5 mL	
CCB 280-558093/97		9056A		5 mL	5 mL				
LCS 280-558093/98		9056A		5 mL	5 mL			5 mL	
LCSD 280-558093/99		9056A		5 mL	5 mL			5 mL	
MB 280-558093/100		9056A		5 mL	5 mL				
280-155048-F-1	CA211-7	9056A	T	5 mL	5 mL				
280-155048-F-2	CA212-7	9056A	T	5 mL	5 mL				
280-155048-F-3	NW061-7	9056A	T	5 mL	5 mL				
280-155048-F-4	G0076-7	9056A	T	5 mL	5 mL				
280-155048-F-5	NW060-7	9056A	T	5 mL	5 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

## GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Batch Number: 558093

Batch Start Date: 11/19/21 09:52

Batch Analyst: Jindarat, Chanida

Batch Method: 9056A

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	IC CAL cl/so4 00394	IC Cal low 00608	IC LCS 01845	ICMS/MSD WEEK 00731
280-155048-F-6	CA210-7	9056A	T	5 mL	5 mL				
280-155048-F-8	G0070-7	9056A	T	5 mL	5 mL				
280-155048-F-8 DU	G0070-7	9056A	T	5 mL	5 mL				
280-155048-F-8 MS	G0070-7	9056A	T	5 mL	5 mL				0.05 mL
280-155048-F-8 MSD	G0070-7	9056A	T	5 mL	5 mL				0.05 mL
CCV		9056A		5 mL	5 mL			5 mL	
280-558093/111		9056A		5 mL	5 mL				
CCB		9056A							
280-558093/112									

## Batch Notes

Filter ID	SLGP033NB
Pipette/Syringe/Dispenser ID	5000CK, BMF1000, 200CJ, ic100
Sufficient Volume for Batch QC	Yes
Eluent 1 ID	IC10 Eluent_00002

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

## GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Batch Number: 558640

Batch Start Date: 11/24/21 10:16

Batch Analyst: Jindarat, Chanida

Batch Method: 9056A

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	IC CAL cl/so4 00395	IC Cal low 00609	IC LCS 01846	
CCV 280-558640/1		9056A		5 mL	5 mL			5 mL	
CCB 280-558640/2		9056A		5 mL	5 mL				
MRL 280-558640/3		9056A		5 mL	5 mL	0.1 mL	0.05 mL		
LCS 280-558640/4		9056A		5 mL	5 mL			5 mL	
LCSD 280-558640/5		9056A		5 mL	5 mL			5 mL	
MB 280-558640/6		9056A		5 mL	5 mL				
280-155048-F-4	G0076-7	9056A	T	5 mL	5 mL				
280-155048-F-6	CA210-7	9056A	T	5 mL	5 mL				
CCV 280-558640/17		9056A		5 mL	5 mL			5 mL	
CCB 280-558640/18		9056A		5 mL	5 mL				

## Batch Notes

Filter ID	SLGP033NB
Pipette/Syringe/Dispenser ID	5000CK, BMF1000, 200CJ, ic100
Sufficient Volume for Batch QC	Yes
Eluent 1 ID	AS14 Eluent_00022
Batch Comment	Run by JF, review by CJ

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

## GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Batch Number: 556343

Batch Start Date: 11/04/21 16:29

Batch Analyst: Fox, Regan A

Batch Method: 9060A

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	Final pH	TOC LCS Std 00052	AnalysisComment
LCS 280-556213/1-A		9060A		200 mL	200 mL	<2 SU	<2 SU	5 mL	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
MB 280-556213/2-A		9060A		20 mL	20 mL	<2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-155048-D-1-A	CA211-7	9060A	D	20 mL	20 mL	>2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-155048-D-2-A	CA212-7	9060A	D	20 mL	20 mL	>2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-155048-D-3-A	NW061-7	9060A	D	20 mL	20 mL	>2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-155048-D-4-A	G0076-7	9060A	D	20 mL	20 mL	>2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-155048-D-5-A	NW060-7	9060A	D	20 mL	20 mL	>2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

## GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Batch Number: 556343

Batch Start Date: 11/04/21 16:29

Batch Analyst: Fox, Regan A

Batch Method: 9060A

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	Final pH	TOC LCS Std 00052	AnalysisComment
280-155048-D-6-A	CA210-7	9060A	D	20 mL	20 mL	>2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-155048-D-7-A	NW062-7	9060A	D	20 mL	20 mL	>2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-155048-D-7-B MS	NW062-7	9060A	D	50 mL	50 mL	>2 SU	<2 SU	1.25 mL	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-155048-D-7-C MSD	NW062-7	9060A	D	50 mL	50 mL	>2 SU	<2 SU	1.25 mL	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-155048-D-8-A	G0070-7	9060A	D	20 mL	20 mL	>2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-155048-D-8-B MS	G0070-7	9060A	D	50 mL	50 mL	>2 SU	<2 SU	1.25 mL	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-155048-D-8-C MSD	G0070-7	9060A	D	50 mL	50 mL	>2 SU	<2 SU	1.25 mL	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

## GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Batch Number: 556343

Batch Start Date: 11/04/21 16:29

Batch Analyst: Fox, Regan A

Batch Method: 9060A

Batch End Date:

Batch Notes	
Acid ID	H2SO4_00210, 0.2% H2SO4_00407
Combustion Catylst ID	19003D-03
Pipette/Syringe/Dispenser ID	BWH 5000
pH Paper ID	HC157843

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.

9060A

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## GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Batch Number: 556344

Batch Start Date: 11/04/21 16:29

Batch Analyst: Fox, Regan A

Batch Method: 9060A

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial Amount	Final Amount	Initial pH	Final pH	TOC ICV Std 00047	TOC LCS Std 00052
ICV 280-556344/2		9060A		50 mL	50 mL	<2 SU	<2 SU	1 mL	
ICB 280-556344/3		9060A		20 mL	20 mL	<2 SU	<2 SU		
CCV 280-556344/28		9060A		200 mL	200 mL	<2 SU	<2 SU		5 mL
CCB 280-556344/29		9060A		20 mL	20 mL	<2 SU	<2 SU		
LCS 280-556213/1-A		9060A		200 mL	200 mL	<2 SU	<2 SU		5 mL
MB 280-556213/2-A		9060A		20 mL	20 mL	<2 SU	<2 SU		
280-155048-D-1-A	CA211-7	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-155048-D-2-A	CA212-7	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-155048-D-3-A	NW061-7	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
CCV 280-556344/40		9060A		200 mL	200 mL	<2 SU	<2 SU		5 mL
CCB 280-556344/41		9060A		20 mL	20 mL	<2 SU	<2 SU		
280-155048-D-4-A	G0076-7	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-155048-D-5-A	NW060-7	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-155048-D-6-A	CA210-7	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-155048-D-7-A	NW062-7	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-155048-D-7-B_MS	NW062-7	9060A	D	50 mL	50 mL	>2 SU	<2 SU		1.25 mL
280-155048-D-7-C_MSD	NW062-7	9060A	D	50 mL	50 mL	>2 SU	<2 SU		1.25 mL
280-155048-D-8-A	G0070-7	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-155048-D-8-B_MS	G0070-7	9060A	D	50 mL	50 mL	>2 SU	<2 SU		1.25 mL
280-155048-D-8-C_MSD	G0070-7	9060A	D	50 mL	50 mL	>2 SU	<2 SU		1.25 mL
CCV 280-556344/52		9060A		200 mL	200 mL	<2 SU	<2 SU		5 mL

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

## GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Batch Number: 556344

Batch Start Date: 11/04/21 16:29

Batch Analyst: Fox, Regan 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 00047	TOC LCS Std 00052
CCB 280-556344/53		9060A		20 mL	20 mL	<2 SU	<2 SU		

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
ICV 280-556344/2		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
ICB 280-556344/3		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
CCV 280-556344/28		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
CCB 280-556344/29		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
LCS 280-556213/1-A		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
MB 280-556213/2-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 TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Batch Number: 556344

Batch Start Date: 11/04/21 16:29

Batch Analyst: Fox, Regan A

Batch Method: 9060A

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
280-155048-D-1-A	CA211-7	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-155048-D-2-A	CA212-7	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-155048-D-3-A	NW061-7	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
CCV 280-556344/40		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
CCB 280-556344/41		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-155048-D-4-A	G0076-7	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-155048-D-5-A	NW060-7	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 TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Batch Number: 556344

Batch Start Date: 11/04/21 16:29

Batch Analyst: Fox, Regan A

Batch Method: 9060A

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
280-155048-D-6-A	CA210-7	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-155048-D-7-A	NW062-7	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-155048-D-7-B MS	NW062-7	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-155048-D-7-C MSD	NW062-7	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-155048-D-8-A	G0070-7	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-155048-D-8-B MS	G0070-7	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-155048-D-8-C MSD	G0070-7	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 TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Batch Number: 556344

Batch Start Date: 11/04/21 16:29

Batch Analyst: Fox, Regan A

Batch Method: 9060A

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
CCV 280-556344/52		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
CCB 280-556344/53		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					

## Batch Notes

Acid ID	H2SO4_00210, 0.2% H2SO4_00407
Combustion Catalyst ID	19003D-03
Pipette/Syringe/Dispenser ID	BWH 5000, 1082991
Filter ID	16876568
pH Paper ID	HC157843
Batch Comment	DOC filtration

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.

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## GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Batch Number: 557616

Batch Start Date: 11/12/21 19:00

Batch Analyst: Clifford, Emilie CS

Batch Method: SM 2320B

Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	CalcMsg	Alk daily lcs 01005				
LCS 280-557616/31		SM 2320B		InitialAmount is blank	10 mL				
MB 280-557616/32		SM 2320B		InitialAmount is blank					
CCV 280-557616/43		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-557616/44		SM 2320B		InitialAmount is blank					
280-155048-F-4	G0076-7	SM 2320B	T	InitialAmount is blank					
280-155048-F-3	NW061-7	SM 2320B	T	InitialAmount is blank					
280-155048-F-1	CA211-7	SM 2320B	T	InitialAmount is blank					
CCV 280-557616/55		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-557616/56		SM 2320B		InitialAmount is blank					
LCS 280-557616/57		SM 2320B		InitialAmount is blank	10 mL				
MB 280-557616/58		SM 2320B		InitialAmount is blank					
280-155048-F-6	CA210-7	SM 2320B	T	InitialAmount is blank					
280-155048-F-6 DU	CA210-7	SM 2320B	T	InitialAmount is blank					
280-155048-F-7	NW062-7	SM 2320B	T	InitialAmount is blank					
280-155048-F-8	G0070-7	SM 2320B	T	InitialAmount is blank					
280-155048-F-2	CA212-7	SM 2320B	T	InitialAmount is blank					
280-155048-F-5	NW060-7	SM 2320B	T	InitialAmount is blank					
CCV 280-557616/69		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-557616/70		SM 2320B		InitialAmount is blank					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

## GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver

Job No.: 280-155048-1

SDG No.:

Batch Number: 557616

Batch Start Date: 11/12/21 19:00

Batch Analyst: Clifford, Emilie CS

Batch Method: SM 2320B

Batch End Date:

Batch Notes	
Nominal Amount Used	10 mL
Acid ID	0.02 H <sub>2</sub> SO <sub>4</sub> _00283
Normality of First Titrant	0.02 N
Sodium Carbonate ID	Alk Stk Std_00022
pH Buffer 1 ID	pH 2.0 buffer_00093
pH Buffer 2 ID	pH 4.0 buffer_00202
pH Buffer 3 ID	pH 7.0 buffer_00305
pH Buffer 4 ID	pH 10 buffer_00157
pH Buffer 5 ID	pH 12 buffer_00175
pH Buffer 6 ID	pH 7.0 buffer_00302
Probe ID	PCE 80 pH 1200D_7803
Batch Comment	Man-tech froze mid run - EC

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.

SM 2320B

Page 2 of 2

## \*\*\* Sample Table from Analysis \*\*\*

File name: \*\*\* Sample Table from Analysis \*\*\*

Date: 21-Nov-21

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 2500.00	U	1		1	1	
107	LCSD 2500.00	U	1		1	1	
111	MB	U	1		1	1	
201	280-155369-a-9	U	1		1	1	
202	MS 280-155369-a-9	U	1		1	1	
203	MSD 280-155369-a-9	U	1		1	1	
204	280-155070-f-2	U	1		5	1	
205	Void 280-155015-c-10	U	1		10	1	
206	280-155015-c-9	U	1		1	1	
207	280-155015-c-11	U	1		1	1	
208	280-155015-c-12	U	1		1	1	
209	280-155048-c-2	U	1		1	1	
210	280-155048-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	
211	280-155138-c-9	U	1		1	1	
212	280-155138-c-4	U	1		1	1	
213	280-155048-c-8	U	1		1	1	
214	280-155048-c-8	ms U	1		1	1	
215	280-155048-c-8	msd U	1		1	1	
216	280-155048-c-1	U	1		1	1	
217	280-155048-c-4	U	1		1	1	
218	280-155048-c-3	U	1		1	1	
219	280-155048-c-6	U	1		1	1	
220	280-155138-c-7	U	1		1	1	
0	Blank	BLNK	1		1	1	
0	Read Baseline	RB	1		1	1	
105	CCVL 500.0 ppb	U	1		1	1	
107	CCV 2500.0 ppb	U	1		1	1	
111	CCB	U	1		1	1	
0	read baseline	RB	1		1	1	
107	LCS 2500.00	U	1		1	1	
107	LCSD 2500.00	U	1		1	1	
111	MB	U	1		1	1	
0	read baseline	RB	1		1	1	

File name: C:\FLOW\_4\112121.RST

Date: 21-Nov-21

Operator: JM

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags	
1	106	Sync	1	SYNC	1	1	7735	1085.109009		
2	0	Carry Over	1	CO	1	1	-8	-9.504777	LO	
3	0	Blank	1	BLNK	1	1	-19	-11.167446	LO	
4	101	Cal 0 ppb	1	C	1	1	97	5.097373		
5	102	Cal 25 ppb	1	C	1	1	251	26.544283		
6	103	Cal 50 ppb	1	C	1	1	388	45.798668		
7	104	Cal 100 ppb	1	C	1	1	738	94.724915		
8	105	Cal 500 ppb	1	C	1	1	3563	491.874084		
9	106	Cal 1000 ppb	1	C	1	1	7265	1017.944397		
10	107	Cal 2500 ppb	1	C	1	1	17413	2491.521240		
11	108	Cal 5000 ppb	1	C	1	1	34006	5001.498535	HI	
12	0	Blank	1	BLNK	1	1	2	-8.177981	LO	
B	0	Read Baseline	1	RB	1	1	0	-8.455329	BL	
14	109	ICVL 500.0 ppb	1	U	1	1	3701	511.396759		
15	110	ICV 2500.0 ppb	1	U	1	1	17295	2474.119141		
16	111	ICB	1	U	1	1	173	15.661288		
B	0	read baseline	1	RB	1	1	0	-8.455329	BL	
18	107	LCS 2500.00	1	U	1	1	17101	2445.604980		
19	107	LCSD 2500.00	1	U	1	1	17143	2451.770264		
20	111	MB	1	U	1	1	140	11.058041		
21	201	280-155369-a-9	1	U	1	1	100	5.562490		
22	202	MS 280-155369-a-9	1	U	1	1	7060	988.628052		
23	203	MSD 280-155369-a-9	1	U	1	1	7097	993.865967		
24	204	280-155070-f-2	1	U	5	1	27236	19811.871094		
25	205	Void 280-155015-c-10	1	U	10	1	510	627.920654		
26	206	280-155015-c-9	1	U	1	1	10911	1541.943604		
27	207	280-155015-c-11	1	U	1	1	125	9.052941		
28	208	280-155015-c-12	1	U	1	1	497	61.034966		
29	209	280-155048-c-2	1	U	1	1	47	-1.954761	LO	
30	210	280-155048-c-5	1	U	1	1	69	1.216039		
31	0	Blank	1	BLNK	1	1	-6	-9.267093	LO	
B	0	Read Baseline	1	RB	1	1	0	-8.455329	BL	
33	105	CCVL 500.0 ppb	1	U	1	1	3528	486.922546		
34	107	CCV 2500.0 ppb	1	U	1	1	17258	2468.637939		
35	111	CCB	1	U	1	1	38	-3.085647	LO UM	
B	0	read baseline	1	RB	1	1	0	-8.455329	BL	
37	211	280-155138-c-9	1	U	1	1	20	-5.728232	LO	
38	212	280-155138-c-4	1	U	1	1	8	-7.336373	LO	
39	213	280-155048-c-8	1	U	1	1	23	-5.224354	LO	
40	214	280-155048-c-8	ms	1	U	1	1	7314	1024.856812	
41	215	280-155048-c-8	msd	1	U	1	1	7364	1032.005371	
42	216	280-155048-c-1	1	U	1	1	42	-2.560865	LO	
43	217	280-155048-c-4	1	U	1	1	12834	1820.853394		
44	218	280-155048-c-3	1	U	1	1	27633	4022.796387		
45	219	280-155048-c-6	1	U	1	1	201	19.604500		
46	220	280-155138-c-7	1	U	1	1	40	-2.878658	LO	
47	0	Blank	1	BLNK	1	1	-8	-9.543214	LO	
B	0	Read Baseline	1	RB	1	1	0	-8.455329	BL	
49	105	CCVL 500.0 ppb	1	U	1	1	3742	517.222717		
50	107	CCV 2500.0 ppb	1	U	1	1	18373	2633.388428		
51	111	CCB	1	U	1	1	227	23.320381		
B	0	read baseline	1	RB	1	1	0	-8.455329	BL	
53	107	LCS 2500.00	1	U	1	1	18693	2680.700928		
54	107	LCSD 2500.00	1	U	1	1	18850	2704.001709		
55	111	MB	1	U	1	1	206	20.253628		
B	0	read baseline	1	RB	1	1	0	-8.455329	BL	
57	0	Void	1		0	0	-1	-8.599980	LO	

NH3:Calibration 1: Peak 4-59

File name: C:\FLOW\_4\112121.RST

Date: 21-Nov-21

Operator: JM

* Name	Conc	Height
* Cal 0 ppb	0.000000	97.045105
* Cal 25 ppb	25.000000	250.554932
* Cal 50 ppb	50.000000	388.306458
* Cal 100 ppb	100.000000	738.063171
* Cal 500 ppb	500.000000	3562.644287
* Cal 1000 ppb	1000.000000	7265.245605
* Cal 2500 ppb	2500.000000	17412.826172
* Cal 5000 ppb	5000.000000	34006.160156

Calib Coef:

x=cyy+by+a

a: (intercept) -8.4553e+00

b: 1.3963e-01

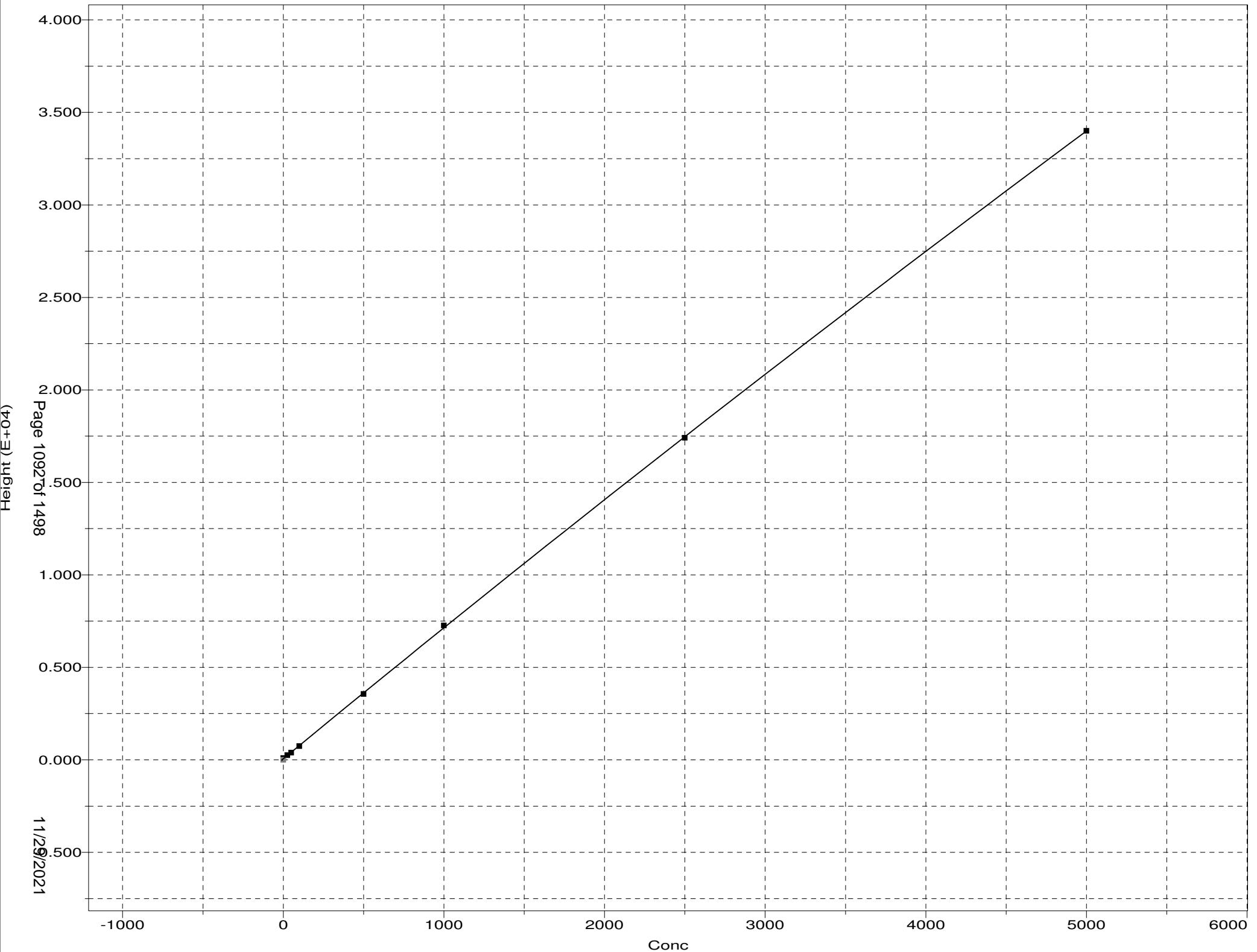
c: 2.2623e-07

Corr Coef: 0.999988

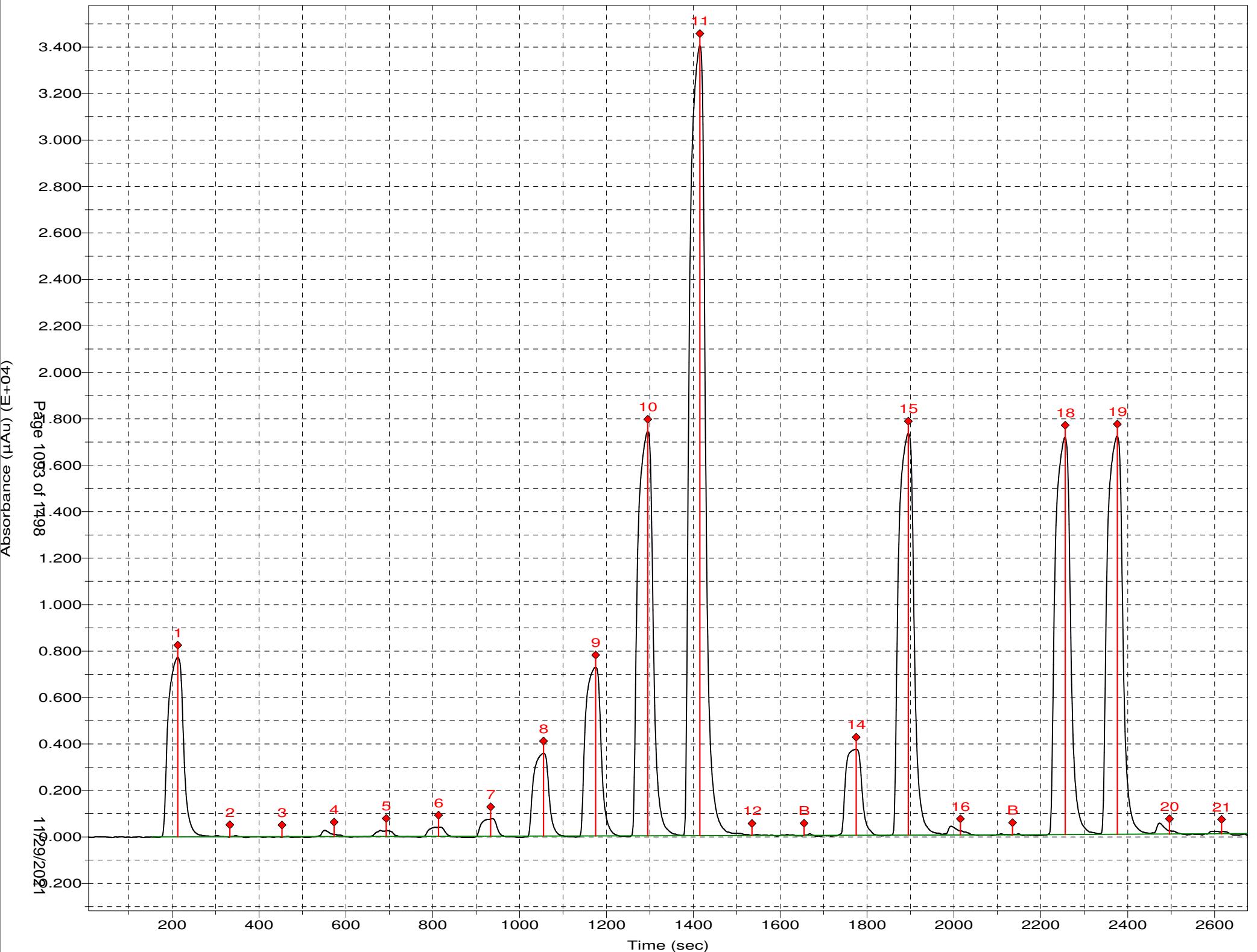
Carryover: 0%

No Drift Peaks

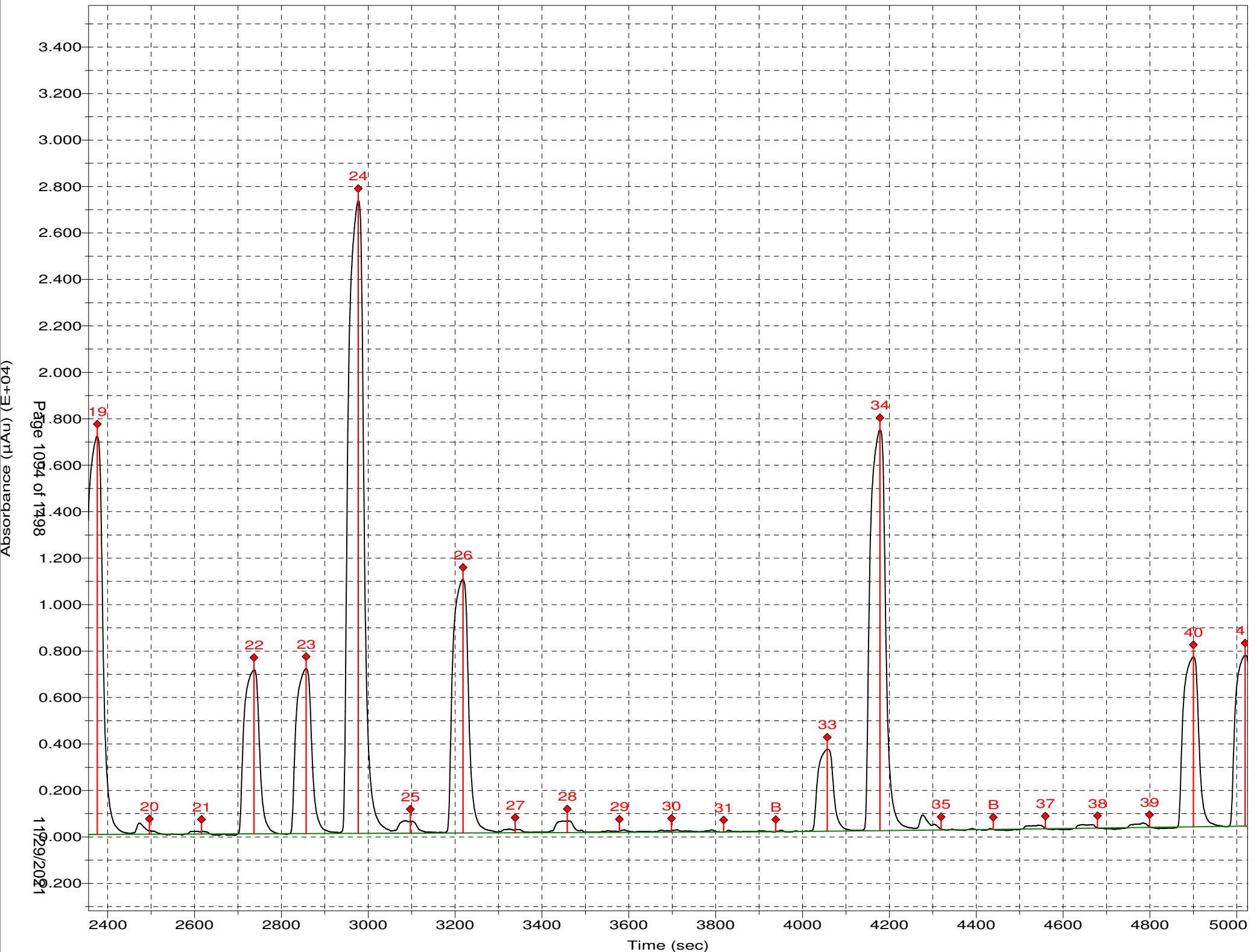
# NH3:Calibration 1: Peak 4-59



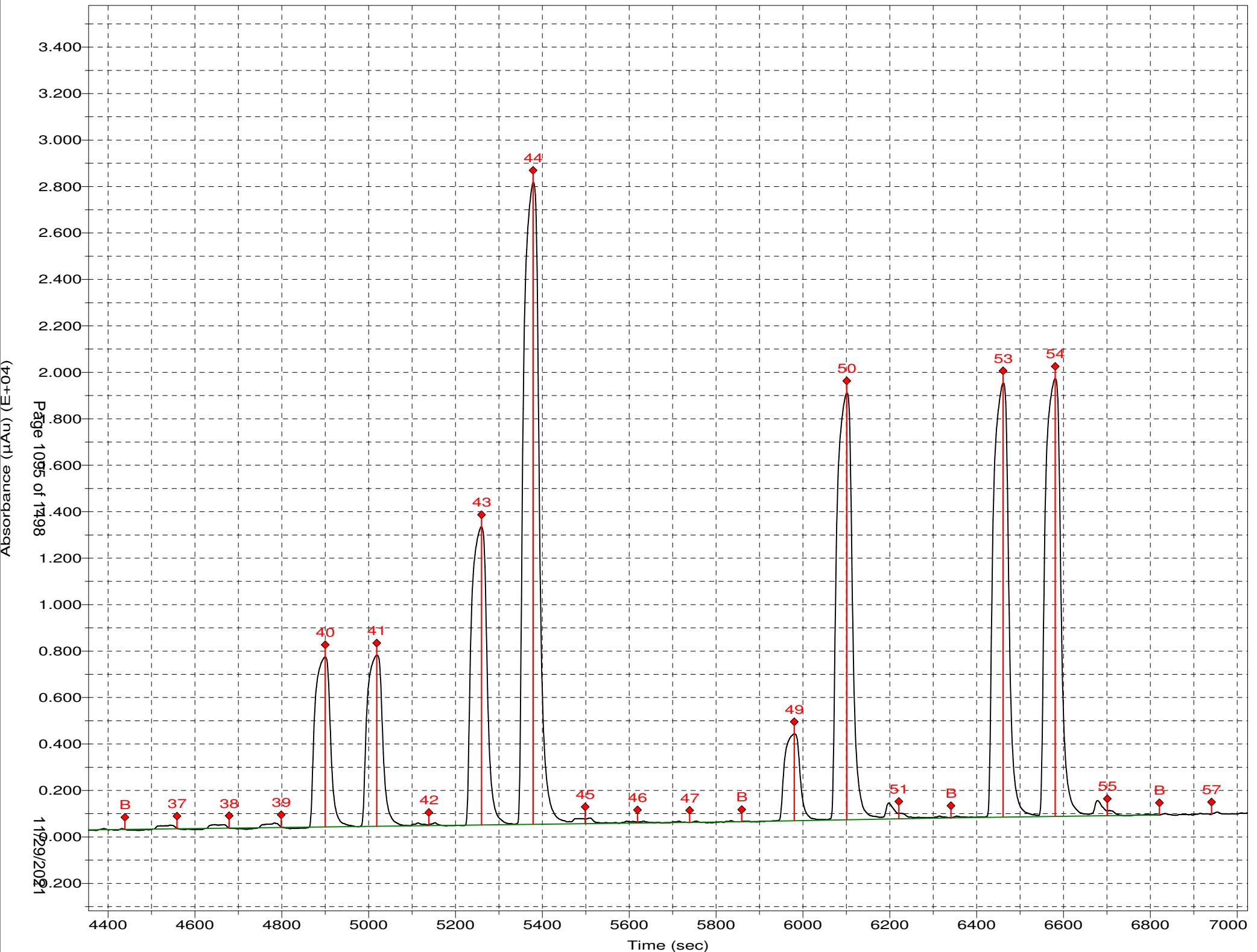
## Channel 3: NH3



## Channel 3: NH3



## Channel 3: NH3



# TestAmerica Calibration Spreadsheet, Work Instruction No. CA-Q-WI-13; dated 8/10/2011

Method	350.1
Analyte/Da	NH3

## -----Input Calibration Data-----

Amount	Response	ISTD Amt	ISTD Resp	Response
0.000	97.045			97.04500
25.000	250.554			250.55400
50.000	388.306			388.30600
100.000	738.063			738.06300
500.000	3562.644			3562.64400
1000.000	7265.246			7265.24600
2500.000	17412.826			17412.82600
5000.000	34006.160			34006.16000
				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!	42.94%	-10.24%	14.54%
#DIV/0!	#DIV/0!	#DIV/0!	10.76%	-15.53%	-4.91%
#DIV/0!	#DIV/0!	#DIV/0!	5.26%	-7.51%	-4.37%
#DIV/0!	#DIV/0!	#DIV/0!	1.62%	-0.32%	-2.57%
#DIV/0!	#DIV/0!	#DIV/0!	3.62%	3.04%	0.95%
#DIV/0!	#DIV/0!	#DIV/0!	-0.66%	-0.45%	-0.04%
#DIV/0!	#DIV/0!	#DIV/0!	-3.00%	-2.54%	3.12%

RSE in X:

#DIV/0! #DIV/0! #DIV/0! 18.3% 9.1% 8.2%

## -----Curve Fit Statistics-----

	1 <sup>ST</sup> Degree	2 <sup>ND</sup> Degree		
Constant	Coefficient	Coefficient	X-Intercept	
Weighted (1/Amt^2)				
Average	#DIV/0!		0	#DIV/0! #DIV/0!
Linear	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0! #DIV/0!

$r^2$  r

Instrum.Responses:	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5
250.554	3,562.644				
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!
Sample Results:					
Linear(1/x) Result:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Linear Forced:	35.735	508.116	0.000	0.000	0.000
Linear Result:	22.440	498.382	-13.564	-13.564	-13.564
Quad Result (no IS):	28.634	487.173	-5.732	-5.732	-5.732
Quad Result (with IS):					

## -----Weighted (1/Amt)-----

Linear	#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
--------	---------	---------	--	---------	---------	---------	---------	---------

## -----Unweighted-----

Forced Zero	7.0115E+00	0	0.99921	0.99961		
Linear	9.4393E+01	6.9590E+00	-13.56	0.99918	0.99959	
Quadratic	4.1812E+01	7.2938E+00	-1.3706E-04	-5.73	0.99915	0.99957

c b a

\*\*\* Sample Table from Analysis \*\*\*

File name: \*\*\* Sample Table from Analysis \*\*\*

Date: 21-Nov-21

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	350.1 color_00268
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 2500.00	U	1		1	1	
107	LCSD 2500.00	U	1		1	1	
111	MB	U	1		1	1	
201	280-155369-a-9	U	1		1	1	All CZ
202	MS 280-155369-a-9	U	1		1	1	
203	MSD 280-155369-a-9	U	1		1	1	
204	280-155070-f-2	U	1		5	1	
205	Void 280-155015-c-10	U	1		10	1	
206	280-155015-c-9	U	1		1	1	
207	280-155015-c-11	U	1		1	1	
208	280-155015-c-12	U	1		1	1	
209	280-155048-c-2	U	1		1	1	
210	280-155048-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	
211	280-155138-c-9	U	1		1	1	
212	280-155138-c-4	U	1		1	1	
213	280-155048-c-8	U	1		1	1	
214	280-155048-c-8	ms U	1		1	1	
215	280-155048-c-8	msd U	1		1	1	
216	280-155048-c-1	U	1		1	1	
217	280-155048-c-4	U	1		1	1	
218	280-155048-c-3	U	1		1	1	
219	280-155048-c-6	U	1		1	1	
220	280-155138-c-7	U	1		1	1	
0	Blank	BLNK	1		1	1	
0	Read Baseline	RB	1		1	1	
105	CCVL 500.0 ppb	U	1		1	1	
107	CCV 2500.0 ppb	U	1		1	1	
111	CCB	U	1		1	1	
0	read baseline	RB	1		1	1	
107	LCS 2500.00	U	1		1	1	
107	LCSD 2500.00	U	1		1	1	
111	MB	U	1		1	1	
0	read baseline	RB	1		1	1	

350.1 color\_00268

350.1 bleach\_01524

350.1 complex\_00584

pH  
All CZ

Cl<sup>-</sup>  
All non-detect

## \*\*\* Sample Table from Analysis \*\*\*

File name: \*\*\* Sample Table from Analysis \*\*\*

Date: 21-Nov-21

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 2500.00	U	1		1	1	
107	LCSD 2500.00	U	1		1	1	
111	MB	U	1		1	1	
223	280-155078-a-7	U	1		1	1	
224	MS 280-155078-a-7	U	1		1	1	
225	MSD 280-155078-a-7	U	1		1	1	
226	280-155138-c-1	U	1		1	1	
227	280-155138-c-2	U	1		1	1	
228	280-155138-c-6	U	1		1	1	
229	280-155138-c-5	U	1		1	1	
230	Void 280-155130-f-1	U	1		10	1	
231	280-155130-f-2	U	1		1	1	
232	280-155117-b-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	
233	280-155117-b-4	U	1		1	1	
234	280-155117-b-6	U	1		1	1	
235	280-155048-c-7	U	1		1	1	
236	280-155048-c-7	ms U	1		1	1	
237	280-155048-c-7	msd U	1		1	1	
238	280-155117-b-9	U	1		1	1	
239	280-155150-b-1	U	1		1	1	
240	280-155150-a-3	U	1		1	1	
241	280-155117-b-3	U	1		1	1	
242	280-155117-b-2	U	1		1	1	
0	Blank	BLNK	1		1	1	
0	Read Baseline	RB	1		1	1	
105	CCVL 500.0 ppb	U	1		1	1	
107	CCV 2500.0 ppb	U	1		1	1	
111	CCB	U	1		1	1	
0	read baseline	RB	1		1	1	
107	LCS 2500.00	U	1		1	1	
107	LCSD 2500.00	U	1		1	1	
111	MB	U	1		1	1	
0	read baseline	RB	1		1	1	
243	Void 280-155117-b-1	U	1		1	1	
244	Void 280-155117-b-8	U	1		1	1	
113	Void 280-155138-c-10	U	1		1	1	
114	Void 280-155138-c-10	U	1		1	1	
115	Void 280-155138-c-10	U	1		1	1	

Cup	Name	Type	R	Dil	Wt	Vial	Comment
116	Void 280-155150-a-2	U		1	1	1	
117	Void 280-155117-b-7	U		1	1	1	
118	Void 320-81484-a-3	U		1	1	1	
221	Void 280-155138-c-8	U		1	1	1	
222	Void 280-155138-c-3	U		1	1	1	
0	Blank	BLNK		1	1	1	
0	Read Baseline	RB		1	1	1	
105	Void CCVL 500.0	ppb	U	1	1	1	
107	Void CCV 2500.0	ppb	U	1	1	1	
111	Void CCB	U		1	1	1	
0	read baseline	RB		1	1	1	
105	Void CCVL 500.0	ppb	U	1	1	1	
107	Void CCV 2500.0	ppb	U	1	1	1	
0	Blank	BLNK		1	1	1	
105	Void CCVL 500.0	ppb	U	1	1	1	
107	Void CCV 2500.0	ppb	U	1	1	1	
0	Blank	BLNK		1	1	1	
0	Read Baseline	RB		1	1	1	

File name: C:\FLOW\_4\112121A.RST

Date: 21-Nov-21

Operator: JM

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags	
1	106	Sync	1	SYNC	1	1	8615	1004.915222		
2	0	Carry Over	1	CO	1	1	11	-8.235144	LO	
3	0	Blank	1	BLNK	1	1	3	-9.196054	LO	
4	101	Cal 0 ppb	1	C	1	1	126	5.202130		
5	102	Cal 25 ppb	1	C	1	1	261	20.925222		
6	103	Cal 50 ppb	1	C	1	1	487	47.384411		
7	104	Cal 100 ppb	1	C	1	1	951	101.774696		
8	105	Cal 500 ppb	1	C	1	1	4282	493.071808		
9	106	Cal 1000 ppb	1	C	1	1	8658	1010.009827		
10	107	Cal 2500 ppb	1	C	1	1	21077	2495.955811		
11	108	Cal 5000 ppb	1	C	1	1	41510	5000.683105	HI	
12	0	Blank	1	BLNK	1	1	-43	-14.594490	LO	
B	0	Read Baseline	1	RB	1	1	0	-9.577360	BL	
14	109	ICVL 500.0 ppb	1	U	1	1	4592	529.591797		
15	110	ICV 2500.0 ppb	1	U	1	1	21376	2532.060303		
16	111	ICB	1	U	1	1	133	5.998303		
B	0	read baseline	1	RB	1	1	0	-9.577360	BL	
18	107	LCS 2500.00	1	U	1	1	21559	2554.146729		
19	107	LCSD 2500.00	1	U	1	1	21342	2527.918213		
20	111	MB	1	U	1	1	186	12.176451		
21	223	280-155078-a-7	1	U	1	1	108	3.020077		
22	224	MS 280-155078-a-7	1	U	1	1	8725	1018.001099		
23	225	MSD 280-155078-a-7	1	U	1	1	8921	1041.246704		
24	226	280-155138-c-1	1	U	1	1	11611	1360.924683		
25	227	280-155138-c-2	1	U	1	1	83	0.165446		
26	228	280-155138-c-6	1	U	1	1	89	0.811603		
27	229	280-155138-c-5	1	U	1	1	84	0.202149		
28	230	Void 280-155130-f-1	1	U	10	1	72210	89040.593750	HI	
29	231	280-155130-f-2	1	U	1	1	959	102.753754	FL	
30	232	280-155117-b-5	1	U	1	1	78	-0.404926	LO FL	
31	0	Blank	1	BLNK	1	1	0	-9.535042	LO	
B	0	Read Baseline	1	RB	1	1	0	-9.577360	BL	
33	105	CCVL 500.0 ppb	1	U	1	1	4172	480.030121		
34	107	CCV 2500.0 ppb	1	U	1	1	20467	2422.293213		
35	111	CCB	1	U	1	1	152	8.252777		
B	0	read baseline	1	RB	1	1	0	-9.577360	BL	
37	233	280-155117-b-4	1	U	1	1	59	-2.675020	LO	
38	234	280-155117-b-6	1	U	1	1	733	76.256264		
39	235	280-155048-c-7	1	U	1	1	10007	1170.090942		
40	236	280-155048-c-7	ms	1	U	1	1	18123	2140.001221	
41	237	280-155048-c-7	msd	1	U	1	1	17736	2093.525146	
42	238	280-155117-b-9	1	U	1	1	96	1.709458		
43	239	280-155150-b-1	1	U	1	1	501	49.072514		
44	240	280-155150-a-3	1	U	1	1	4541	523.581421		
45	241	280-155117-b-3	1	U	1	1	2882	328.307312		
46	242	280-155117-b-2	1	U	1	1	48	-3.927627	LO	
47	0	Blank	1	BLNK	1	1	10	-8.379513	LO	
B	0	Read Baseline	1	RB	1	1	0	-9.577360	BL	
49	105	CCVL 500.0 ppb	1	U	1	1	3947	453.597260		
50	107	CCV 2500.0 ppb	1	U	1	1	19398	2293.474365		
51	111	CCB	1	U	1	1	144	7.229188		
B	0	read baseline	1	RB	1	1	0	-9.577360	BL	
53	107	LCS 2500.00	1	U	1	1	19160	2264.803955		
54	107	LCSD 2500.00	1	U	1	1	19137	2261.977539		
55	111	MB	1	U	1	1	157	8.801363		
B	0	read baseline	1	RB	1	1	0	-9.577360	BL	
57	243	Void 280-155117-b-1	1	U	1	1	673	69.231682		
58	244	Void 280-155117-b-8	1	U	1	1	52	-3.471555	LO	
59	113	Void 280-155138-c-10	1	U	1	1	13	-8.102268	LO	
60	114	Void 280-155138-c-10	ms	1	U	1	1	7772	905.140076	
61	115	Void 280-155138-c-10	msd	1	U	1	1	7744	901.734192	
62	116	Void 280-155150-a-2	1	U	1	1	694	71.634300		
63	117	Void 280-155117-b-7	1	U	1	1	685	70.584190		
64	118	Void 320-81484-a-3	1	U	1	1	823	86.777763		
65	221	Void 280-155138-c-8	1	U	1	1	3406	389.908112		
66	222	Void 280-155138-c-3	1	U	1	1	8365	975.275024		
67	0	Blank	1	BLNK	1	1	-4	-9.987164	LO	
B	0	Read Baseline	1	RB	1	1	0	-9.577360	BL	
69	105	Void CCVL 500.0 ppb	1	U	1	1	3696	424.086182		
70	107	Void CCV 2500.0 ppb	1	U	1	1	18102	2137.487305		

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
71	111	Void CCB	1	U		1	166	9.814084	
B	0	read baseline	1	RB		1	0	-9.577360	BL
73	105	Void CCVL	500.0	ppb	1	U	3777	433.632904	UM
74	107	Void CCV	2500.0	ppb	1	U	18178	2146.651855	
75	0	Blank		1	BLNK		0	-9.617776	LO
76	105	Void CCVL	500.0	ppb	1	U	3776	433.423187	
77	107	Void CCV	2500.0	ppb	1	U	18552	2191.601318	

NH3:Calibration 1: Peak 4-79

File name: C:\FLOW\_4\112121A.RST

Date: 21-Nov-21

Operator: JM

* Name	Conc	Height
* Cal 0 ppb	0.000000	126.314377
* Cal 25 ppb	25.000000	260.666626
* Cal 50 ppb	50.000000	486.695618
* Cal 100 ppb	100.000000	951.082886
* Cal 500 ppb	500.000000	4282.362305
* Cal 1000 ppb	1000.000000	8657.651367
* Cal 2500 ppb	2500.000000	21076.890625
* Cal 5000 ppb	5000.000000	41510.058594

Calib Coef:

x=cyy+by+a

a: (intercept) -9.5774e+00

b: 1.1699e-01

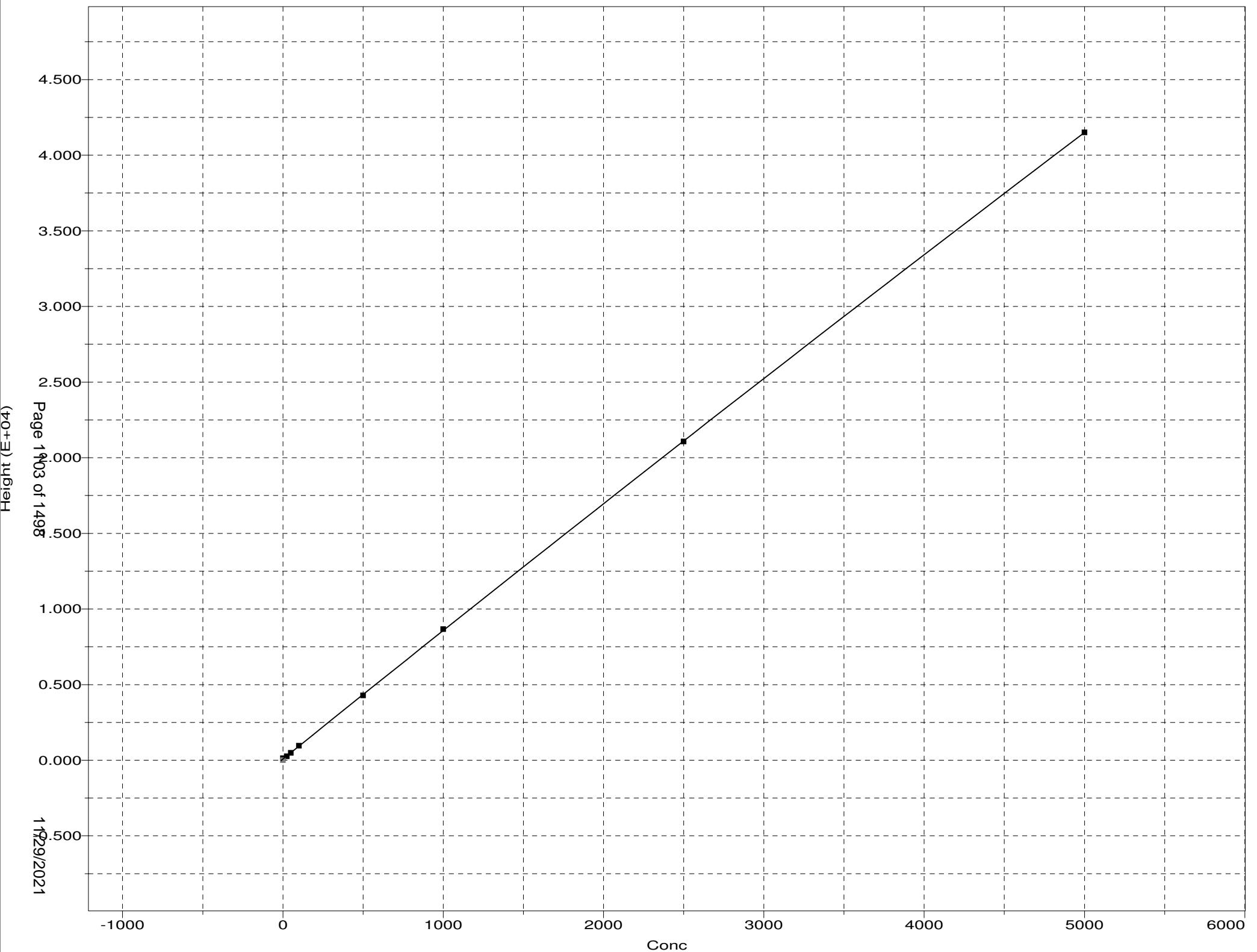
c: 8.9269e-08

Corr Coef: 0.999995

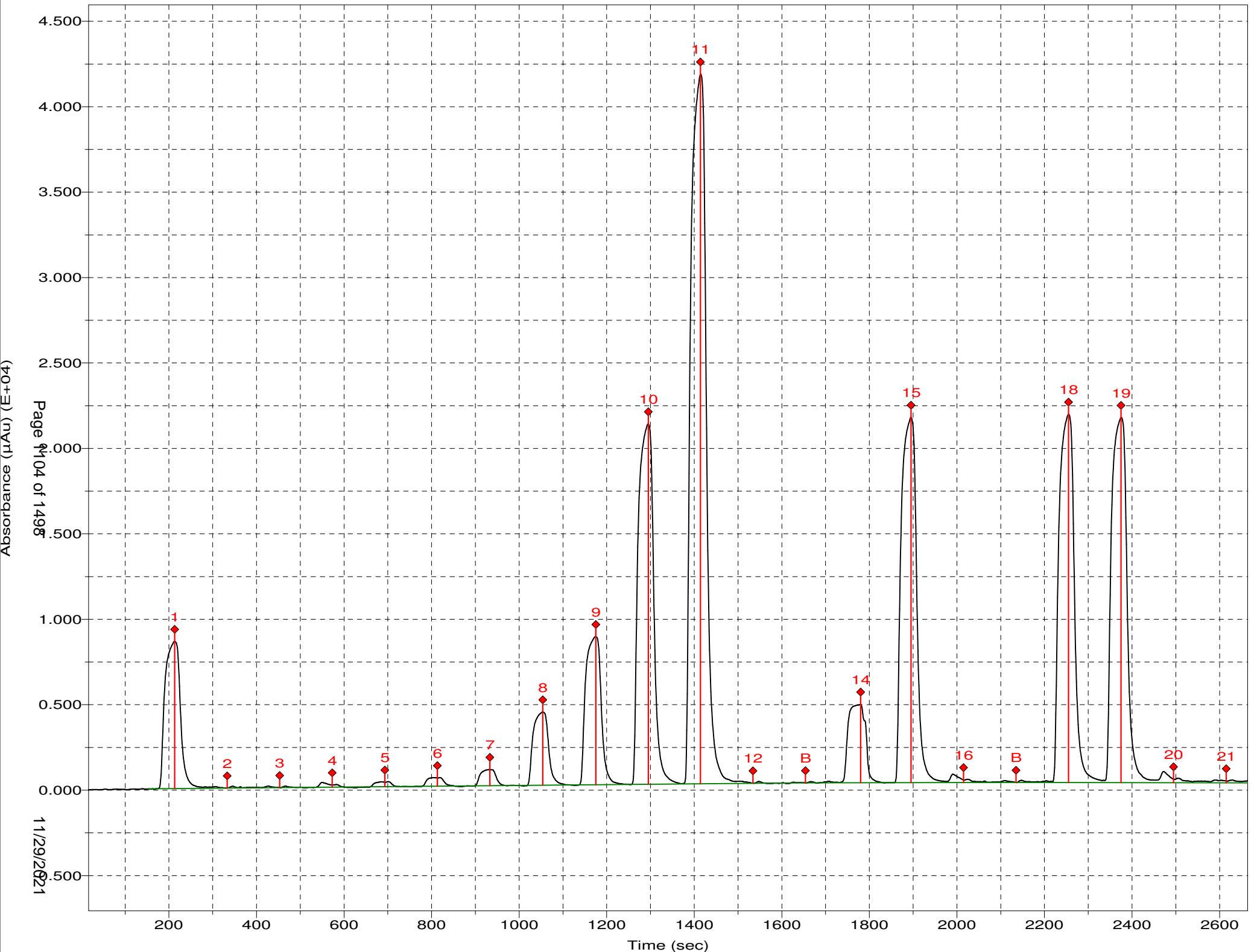
Carryover: 0.133%

No Drift Peaks

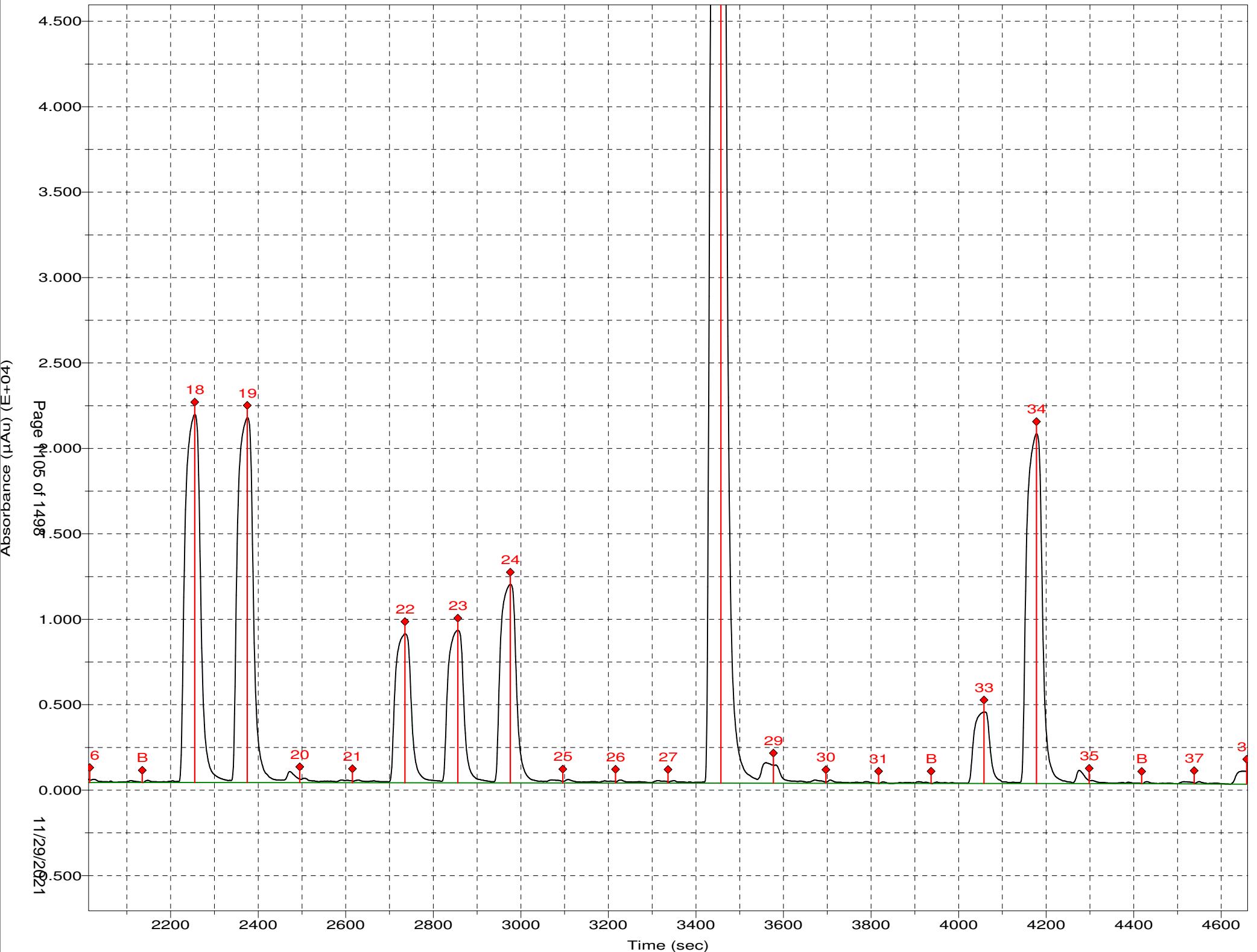
# NH3:Calibration 1: Peak 4-79



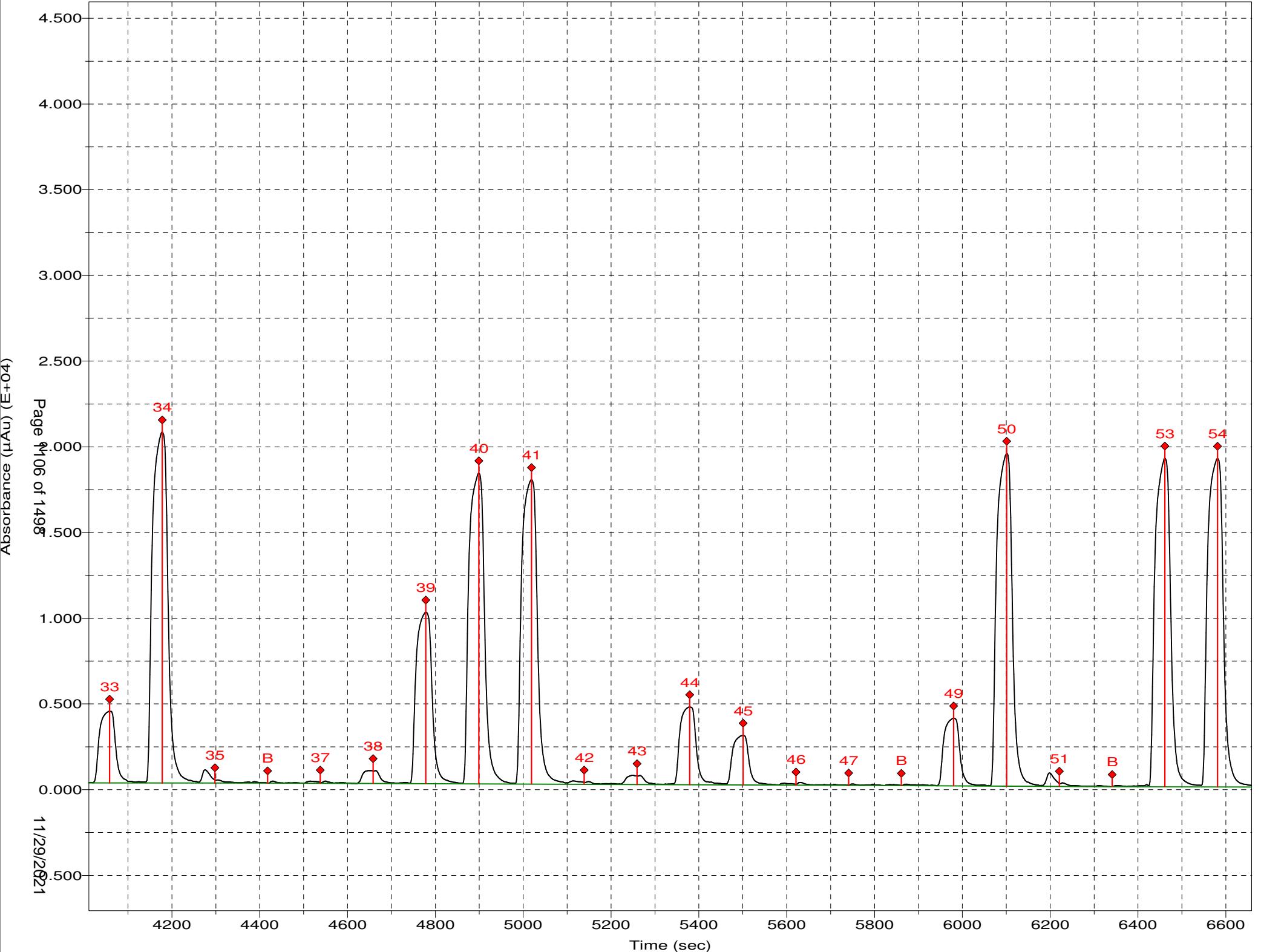
## Channel 3: NH3



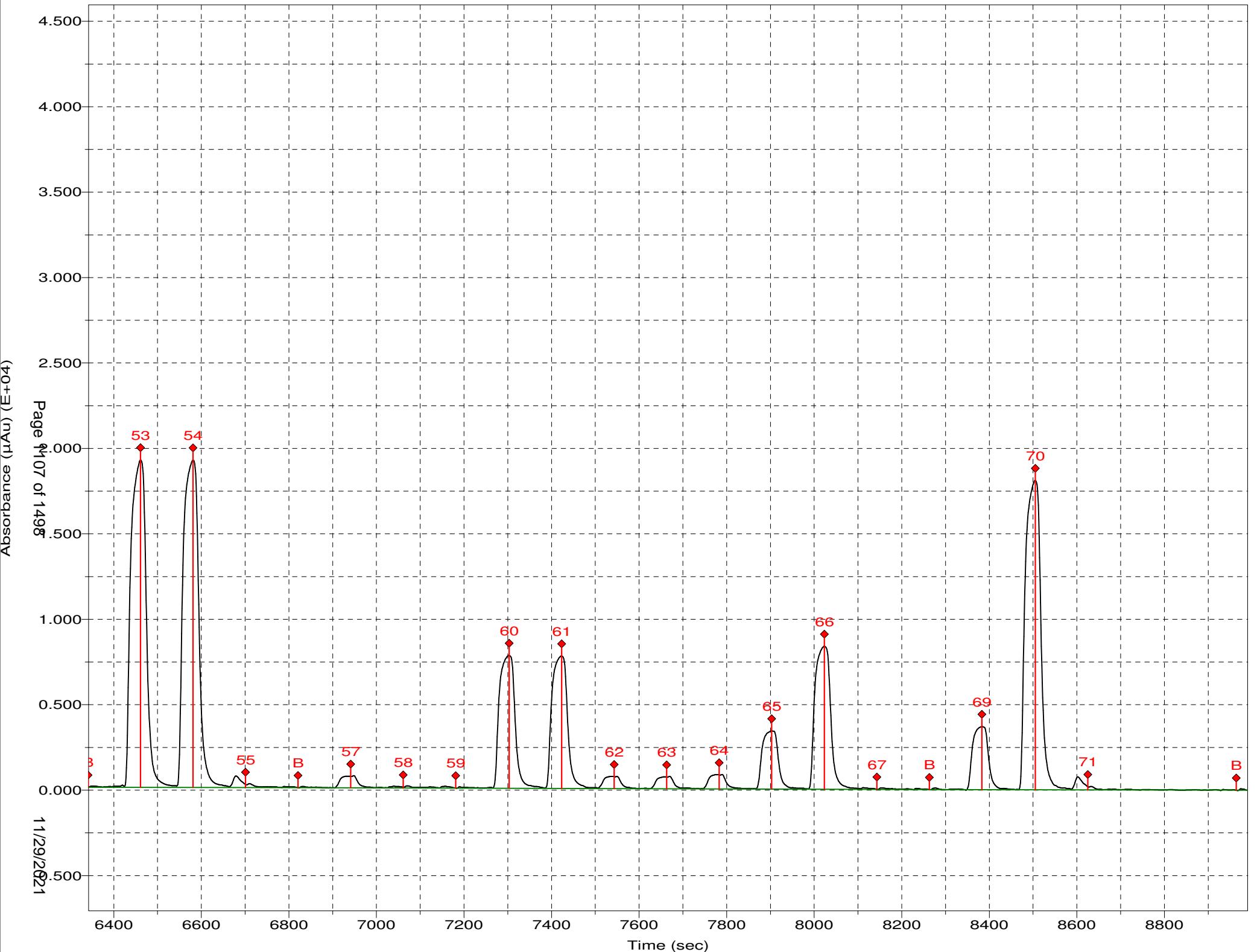
## Channel 3: NH3



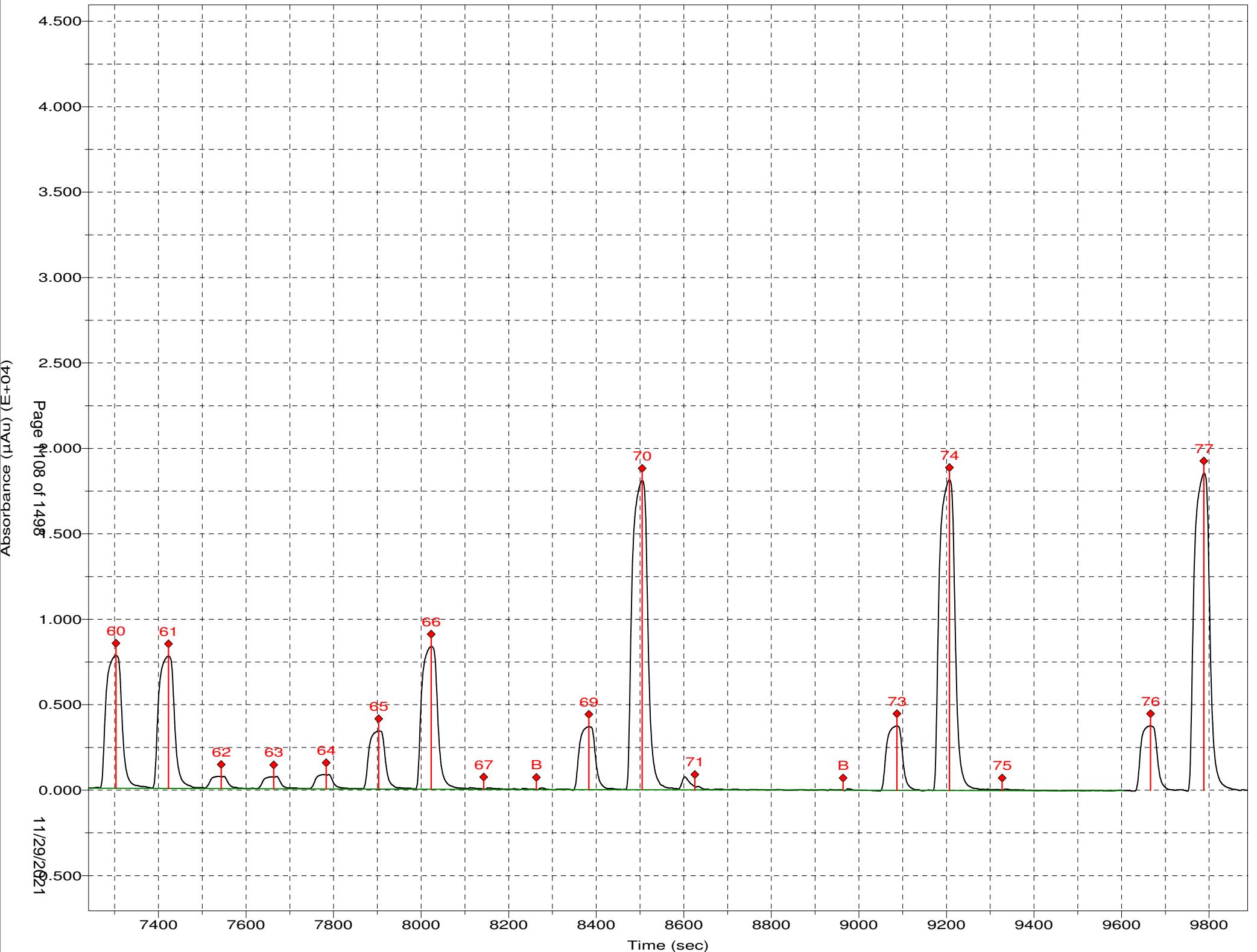
## Channel 3: NH3



## Channel 3: NH3



## Channel 3: NH3



# TestAmerica Calibration Spreadsheet, Work Instruction No. CA-Q-WI-13; dated 8/10/2011

Method	350.1
Analyte/Da	NH3

## -----Input Calibration Data-----

Amount	Response	ISTD Amt	ISTD Resp	Response
0.000	126.314			126.31400
25.000	260.666			260.66600
50.000	486.696			486.69600
100.000	951.083			951.08300
500.000	4282.362			4282.36200
1000.000	8657.651			8657.65100
2500.000	21076.890			21076.89000
5000.000	41510.059			41510.05900
				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!	23.14%	-25.82%	-12.14%
#DIV/0!	#DIV/0!	#DIV/0!	14.96%	-9.15%	-3.60%
#DIV/0!	#DIV/0!	#DIV/0!	12.32%	0.65%	2.14%
#DIV/0!	#DIV/0!	#DIV/0!	1.15%	-0.64%	-1.83%
#DIV/0!	#DIV/0!	#DIV/0!	2.25%	1.71%	0.61%
#DIV/0!	#DIV/0!	#DIV/0!	-0.43%	-0.24%	-0.03%
#DIV/0!	#DIV/0!	#DIV/0!	-1.95%	-1.52%	1.30%

RSE in X: #DIV/0! #DIV/0! #DIV/0! 12.4% 12.3% 6.5%

## -----Curve Fit Statistics-----

	1 <sup>ST</sup> Degree	2 <sup>ND</sup> Degree		
Constant	Coefficient	Coefficient	X-Intercept	
Weighted (1/Amt^2)				
Average	#DIV/0!		0	#DIV/0! #DIV/0!
Linear	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0! #DIV/0!

$r^2$       r

Instrument.Responses:	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5
260.666	4,282.362				
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!
Sample Results:	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5
Linear(1/x) Result:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Linear Forced:	30.784	505.744	0.000	0.000	0.000
Linear Result:	18.545	496.791	-12.452	-12.452	-12.452
Quad Result (no IS):	21.966	490.845	-8.271	-8.271	-8.271
Quad Result (with IS):					

## -----Weighted (1/Amt)-----

Linear	#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

## -----Unweighted-----

Forced Zero	8.4675E+00		0	0.99966	0.99983			
Linear	1.0471E+02	8.4093E+00		-12.45	0.99971	0.99985	Linear Forced:	30.784
Quadratic	7.1321E+01	8.6219E+00	-8.7041E-05	-8.27	0.99982	0.99991	Linear Result:	18.545

c            b            a

\*\*\* Sample Table from Analysis \*\*\*

File name: \*\*\* Sample Table from Analysis \*\*\*

Date: 21-Nov-21

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 2500.00	U	1		1	1	
107	LCSD 2500.00	U	1		1	1	
111	MB	U	1		1	1	
223	280-155078-a-7	U	1		1	1	All <2
224	MS 280-155078-a-7	U	1		1	1	
225	MSD 280-155078-a-7	U	1		1	1	
226	280-155138-c-1	U	1		1	1	
227	280-155138-c-2	U	1		1	1	
228	280-155138-c-6	U	1		1	1	
229	280-155138-c-5	U	1		1	1	
230	Void 280-155130-f-1	U	1		10	1	
231	280-155130-f-2	U	1		1	1	
232	280-155117-b-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	
233	280-155117-b-4	U	1		1	1	
234	280-155117-b-6	U	1		1	1	
235	280-155048-c-7	U	1		1	1	
236	280-155048-c-7 ms	U	1		1	1	
237	280-155048-c-7 msd	U	1		1	1	
238	280-155117-b-9	U	1		1	1	
239	280-155150-b-1	U	1		1	1	
240	280-155150-a-3	U	1		1	1	
241	280-155117-b-3	U	1		1	1	
242	280-155117-b-2	U	1		1	1	
0	Blank	BLNK	1		1	1	
0	Read Baseline	RB	1		1	1	
105	CCVL 500.0 ppb	U	1		1	1	
107	CCV 2500.0 ppb	U	1		1	1	
111	CCB	U	1		1	1	
0	read baseline	RB	1		1	1	
107	LCS 2500.00	U	1		1	1	
107	LCSD 2500.00	U	1		1	1	
111	MB	U	1		1	1	
0	read baseline	RB	1		1	1	

Cup	Name	Type	R	Dil	Wt	Vial	Comment
243	Void	280-155117-b-1	U	1	1	1	
244	Void	280-155117-b-8	U	1	1	1	
113	Void	280-155138-c-10	U	1	1	1	
114	Void	280-155138-c-10	U	1	1	1	
115	Void	280-155138-c-10	U	1	1	1	
116	Void	280-155150-a-2	U	1	1	1	
117	Void	280-155117-b-7	U	1	1	1	
118	Void	320-81484-a-3	U	1	1	1	
221	Void	280-155138-c-8	U	1	1	1	
222	Void	280-155138-c-3	U	1	1	1	
0	Blank	BLNK	1		1	1	
0	Read Baseline	RB	1		1	1	
105	Void	CCVL 500.0	ppb	U	1	1	1
107	Void	CCV 2500.0	ppb	U	1	1	1
111	Void	CCB	U	1	1	1	
0	read baseline	RB	1		1	1	
105	Void	CCVL 500.0	ppb	U	1	1	1
107	Void	CCV 2500.0	ppb	U	1	1	1
0	Blank	BLNK	1		1	1	
105	Void	CCVL 500.0	ppb	U	1	1	1
107	Void	CCV 2500.0	ppb	U	1	1	1
0	Blank	BLNK	1		1	1	
0	Read Baseline	RB	1		1	1	

## \*\*\* Sample Table from Analysis \*\*\*

File name: \*\*\* Sample Table from Analysis \*\*\*

Date: 22-Nov-21

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 2500.00	U	1		1	1	
107	LCSD 2500.00	U	1		1	1	
111	MB	U	1		1	1	
201	280-155015-C-12	U	1		1	1	
202	MS 280-155015-c-12	U	1		1	1	
203	MSD 280-155015-c-12	U	1		1	1	
204	280-155048-c-3	U	1		1	1	
205	Void 280-155070-f-3	U	1		100	1	
206	Void 280-155015-c-10	U	1		10	1	
207	280-155117-b-1	U	1		1	1	
208	280-155117-b-7	U	1		1	1	
209	280-155117-b-8	U	1		1	1	
210	Void 280-155130-f-1	U	1		100	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	280-155130-f-2	U	1		1	1	
212	280-155138-c-3	U	1		2	1	
213	280-155138-c-10	U	1		1	1	
214	MS 280-155138-c-10	U	1		1	1	
215	MSD 280-155138-c-10	U	1		1	1	
216	280-155138-c-8	U	1		2	1	
217	320-81484-a-3	U	1		1	1	
218	320-81484-a-8	U	1		2	1	
219	Void 280-154777-r-1	U	1		100	1	
220	280-154779-p-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	
107	LCS 2500.00	U	1		1	1	
107	LCSD 2500.00	U	1		1	1	
111	MB	U	1		1	1	
0	read baseline	RB	1		1	1	
221	280-155081-a-3	U	1		1	1	
222	280-155081-a-7	U	1		1	1	
223	280-155081-a-11	U	1		1	1	
224	280-155081-a-15	U	1		1	1	
225	280-155150-a-2	U	1		1	1	

Cup	Name	Type	R	Dil	Wt	Vial	Comment
226	MS 280-155150-a-2	U		1	1	1	
227	MSD 280-155150-a-2	U		1	1	1	
228	280-155081-a-19	U	1		1	1	
229	Void 280-155225-c-1	U		1	2	1	
230	Void 280-155225-c-2	U		1	2	1	
0	Blank	BLNK		1	1	1	
0	Read Baseline	RB		1	1	1	
105	CCVL 500.0	ppb	U	1	1	1	
107	CCV 2500.0	ppb	U	1	1	1	
111	CCB		U	1	1	1	
0	read baseline	RB		1	1	1	
231	280-155225-c-3	U	1		2	1	
232	Void 280-155225-c-4	U		1	2	1	
233	280-155225-c-5	U	1		1	1	
234	280-155225-c-6	U	1		1	1	
235	280-155225-c-7	U	1		1	1	
236	280-155225-c-8	U	1		1	1	
237	280-155275-b-1	U	1		1	1	
238	MS 280-155275-b-1	U	1		1	1	
239	MSD 280-155275-b-1	U		1	1	1	
240	280-155015-c-10	U	1		2	1	
0	Blank	BLNK		1	1	1	
0	Read Baseline	RB		1	1	1	
105	CCVL 500.0	ppb	U	1	1	1	
107	CCV 2500.0	ppb	U	1	1	1	
111	CCB		U	1	1	1	
0	read baseline	RB		1	1	1	
107	LCS 2500.00		U	1	1	1	
107	LCSD 2500.00		U	1	1	1	
111	MB		U	1	1	1	
0	read baseline	RB		1	1	1	
241	Void 280-155070-f-3	U	1		20	1	
242	Void 280-155130-f-1	U	1		20	1	
243	Void 280-154777-r-1	U	1		20	1	
244	Void 280-155225-c-1	U	1		1	1	
245	Void 280-155225-c-2	U	1		1	1	
246	Void 280-155225-c-4	U	1		1	1	
247	Void 280-155225-c-9	U	1		2	1	
248	Void 280-155275-b-2	U	1		1	1	
0	Void Blank	BLNK	1		1	1	
0	Void Read Baseline	RB	1		1	1	
105	Void CCVL 500.0	ppb	U	1	1	1	
107	VOid CCV 2500.0	ppb	U	1	1	1	
111	VOid CCB		U	1	1	1	
0	Void read baseline	RB	1		1	1	
105	Void CCVL 500.0	ppb	U	1	1	1	
107	VOid CCV 2500.0	ppb	U	1	1	1	
111	VOid CCB		U	1	1	1	
0	VOid read baseline	RB	1		1	1	
105	Void CCVL 500.0	ppb	U	1	1	1	
107	Void CCV 2500.0	ppb	U	1	1	1	
111	Void CCB		U	1	1	1	
0	VOid read baseline	RB	1		1	1	

File name: C:\FLOW\_4\112221.RST

Date: 22-Nov-21

Operator: RKD

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
1	106	Sync	1	SYNC	1	1	13096	983.204590	
2	0	Carry Over	1	CO	1	1	-39	0.081900	
3	0	Blank	1	BLNK	1	1	-1	2.919065	
4	101	Cal 0 ppb	1	C	1	1	125	12.346548	
5	102	Cal 25 ppb	1	C	1	1	330	27.573448	
6	103	Cal 50 ppb	1	C	1	1	620	49.180344	
7	104	Cal 100 ppb	1	C	1	1	1288	99.022430	
8	105	Cal 500 ppb	1	C	1	1	6550	492.047974	
9	106	Cal 1000 ppb	1	C	1	1	13118	984.834778	
10	107	Cal 2500 ppb	1	C	1	1	33282	2512.545654	
11	108	Cal 5000 ppb	1	C	1	1	65468	4997.446289	
12	0	Blank	1	BLNK	1	1	39	5.927881	
B	0	Read Baseline	1	RB	1	1	0	3.014382	BL
14	109	ICVL 500.0 ppb	1	U	1	1	6755	507.433655	
15	110	ICV 2500.0 ppb	1	U	1	1	32644	2463.885742	
16	111	ICB	1	U	1	1	340	28.375267	
B	0	read baseline	1	RB	1	1	0	3.014382	BL
18	107	LCS 2500.00	1	U	1	1	33250	2510.051270	
19	107	LCSD 2500.00	1	U	1	1	33280	2512.344971	
20	111	MB	1	U	1	1	209	18.547848	
21	201	280-155015-C-12	1	U	1	1	979	75.961288	
22	202	MS 280-155015-c-12	1	U	1	1	13953	1047.651611	
23	203	MSD 280-155015-c-12	1	U	1	1	14455	1085.447876	
24	204	280-155048-c-3	1	U	1	1	51496	3911.741211	
25	205	Void 280-155070-f-3	1	U	100	1	5751	43228.550781	
26	206	Void 280-155015-c-10	1	U	10	1	750	588.661133	
27	207	280-155117-b-1	1	U	1	1	1069	82.697678	
28	208	280-155117-b-7	1	U	1	1	1232	94.786804	
29	209	280-155117-b-8	1	U	1	1	-33	0.566142	
30	210	Void 280-155130-f-1	1	U	100	1	9710	72883.554688	
31	0	Blank	1	BLNK	1	1	-1	2.945170	
B	0	Read Baseline	1	RB	1	1	0	3.014382	BL
33	105	CCVL 500.0 ppb	1	U	1	1	6651	499.646698	
34	107	CCV 2500.0 ppb	1	U	1	1	33099	2498.571777	
35	111	CCB	1	U	1	1	319	26.772406	
B	0	read baseline	1	RB	1	1	0	3.014382	BL
37	211	280-155130-f-2	1	U	1	1	1457	111.632919	
38	212	280-155138-c-3	1	U	2	1	7328	1100.680420	
39	213	280-155138-c-10	1	U	1	1	21	4.587388	
40	214	MS 280-155138-c-10	1	U	1	1	13119	984.894714	
41	215	MSD 280-155138-c-10	1	U	1	1	13460	1010.609924	
42	216	280-155138-c-8	1	U	2	1	2911	440.139740	
43	217	320-81484-a-3	1	U	1	1	1290	99.180946	
44	218	320-81484-a-8	1	U	2	1	1474	225.803711	
45	219	Void 280-154777-r-1	1	U	100	1	4007	30195.281250	
46	220	280-154779-p-1	1	U	1	1	42575	3224.127930	
47	0	Blank	1	BLNK	1	1	14	4.031395	
B	0	Read Baseline	1	RB	1	1	0	3.014382	BL
49	105	CCVL 500.0 ppb	1	U	1	1	6662	500.443817	
50	107	CCV 2500.0 ppb	1	U	1	1	33294	2513.453857	
51	111	CCB	1	U	1	1	414	33.875896	
B	0	read baseline	1	RB	1	1	0	3.014382	BL
53	107	LCS 2500.00	1	U	1	1	33336	2516.681885	
54	107	LCSD 2500.00	1	U	1	1	33533	2531.685059	
55	111	MB	1	U	1	1	319	26.812859	
B	0	read baseline	1	RB	1	1	0	3.014382	BL
57	221	280-155081-a-3	1	U	1	1	10	3.762875	
58	222	280-155081-a-7	1	U	1	1	-71	-2.250809	LO
59	223	280-155081-a-11	1	U	1	1	-98	-4.271098	LO
60	224	280-155081-a-15	1	U	1	1	-3	2.797109	
61	225	280-155150-a-2	1	U	1	1	1242	95.554543	
62	226	MS 280-155150-a-2	1	U	1	1	14632	1098.800049	
63	227	MSD 280-155150-a-2	1	U	1	1	14783	1110.151001	
64	228	280-155081-a-19	1	U	1	1	62	7.649746	
65	229	Void 280-155225-c-1	1	U	2	1	117	23.468254	
66	230	Void 280-155225-c-2	1	U	2	1	56	14.418431	
67	0	Blank	1	BLNK	1	1	58	7.366704	
B	0	Read Baseline	1	RB	1	1	0	3.014382	BL
69	105	CCVL 500.0 ppb	1	U	1	1	6830	513.055908	
70	107	CCV 2500.0 ppb	1	U	1	1	33432	2523.948242	

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
71	111	CCB	1	U		1	380	31.332104	
B	0	read baseline	1	RB		1	0	3.014382	BL
73	231	280-155225-c-3	1	U		2	1345	206.566467	
74	232	Void 280-155225-c-4	1	U		2	106	21.746801	
75	233	280-155225-c-5	1	U		1	-26	1.051014	
76	234	280-155225-c-6	1	U		1	329	27.514601	
77	235	280-155225-c-7	1	U		1	6222	467.523926	
78	236	280-155225-c-8	1	U		1	8652	649.490479	
79	237	280-155275-b-1	1	U		1	591	47.075035	
80	238	MS 280-155275-b-1	1	U		1	12826	962.861389	
81	239	MSD 280-155275-b-1	1	U		1	13204	991.321228	
82	240	280-155015-c-10	1	U		2	3259	492.118805	
83	0	Blank	1	BLNK		1	26	4.981570	
B	0	Read Baseline	1	RB		1	0	3.014382	BL
85	105	CCVL 500.0 ppb	1	U		1	6345	476.718231	
86	107	CCV 2500.0 ppb	1	U		1	31169	2351.375977	
87	111	CCB	1	U		1	393	32.258194	
B	0	read baseline	1	RB		1	0	3.014382	BL
89	107	LCS 2500.00	1	U		1	31057	2342.858887	
90	107	LCSD 2500.00	1	U		1	30662	2312.760254	
91	111	MB	1	U		1	266	22.851402	
B	0	read baseline	1	RB		1	0	3.014382	BL
93	241	Void 280-155070-f-3	1	U		20	25805	38868.273438	
94	242	Void 280-155130-f-1	1	U		20	44579	67564.171875	
95	243	Void 280-154777-r-1	1	U		20	18338	27564.394531	
96	244	Void 280-155225-c-1	1	U		1	74	8.492549	
97	245	Void 280-155225-c-2	1	U		1	44	6.267785	
98	246	Void 280-155225-c-4	1	U		1	56	7.215763	
99	247	Void 280-155225-c-9	1	U		2	2977	450.006287	
100	248	Void 280-155275-b-2	1	U		1	1394	106.885307	
101	0	Void Blank	1	BLNK		1	49	6.657682	
B	0	Void Read Baseline	1	RB		1	0	3.014382	BL
103	105	Void CCVL 500.0 ppb	1	U		1	5934	445.998108	
104	107	Void CCV 2500.0 ppb	1	U		1	29365	2214.025391	
105	111	Void CCB	1	U		1	217	19.169249	
B	0	Void read baseline	1	RB		1	0	3.014382	BL
107	105	Void CCVL 500.0 ppb	1	U		1	5712	429.374664	
108	107	Void CCV 2500.0 ppb	1	U		1	28770	2168.775635	
109	111	Void CCB	1	U		1	209	18.588259	
B	0	Void read baseline	1	RB		1	0	3.014382	BL
111	105	Void CCVL 500.0 ppb	1	U		1	-39	0.138372	
112	107	Void CCV 2500.0 ppb	1	U		1	54	7.071733	
113	111	Void CCB	1	U		1	78	8.812767	
B	0	Void read baseline	1	RB		1	0	3.014382	BL

NH3:Calibration 1: Peak 4-114

File name: C:\FLOW\_4\112221.RST

Date: 22-Nov-21

Operator: RKD

* Name	Conc	Height
* Cal 0 ppb	0.000000	125.282837
* Cal 25 ppb	25.000000	329.676575
* Cal 50 ppb	50.000000	619.657349
* Cal 100 ppb	100.000000	1288.338623
* Cal 500 ppb	500.000000	6549.645508
* Cal 1000 ppb	1000.000000	13117.789062
* Cal 2500 ppb	2500.000000	33282.195312
* Cal 5000 ppb	5000.000000	65468.359375

Calib Coef:

x=cyy+by+a

a: (intercept) 3.0144e+00

b: 7.4485e-02

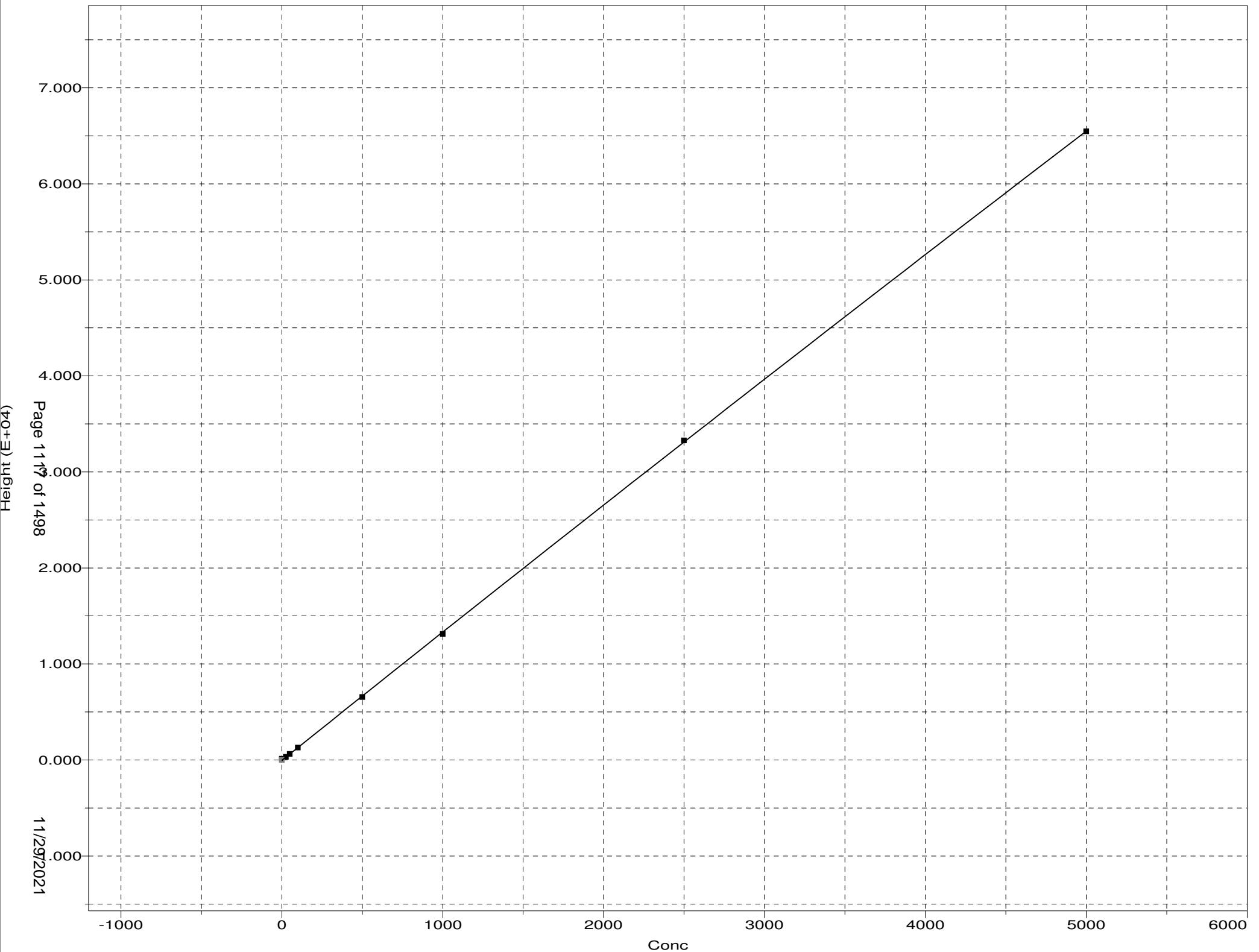
c: 2.7531e-08

Corr Coef: 0.999986

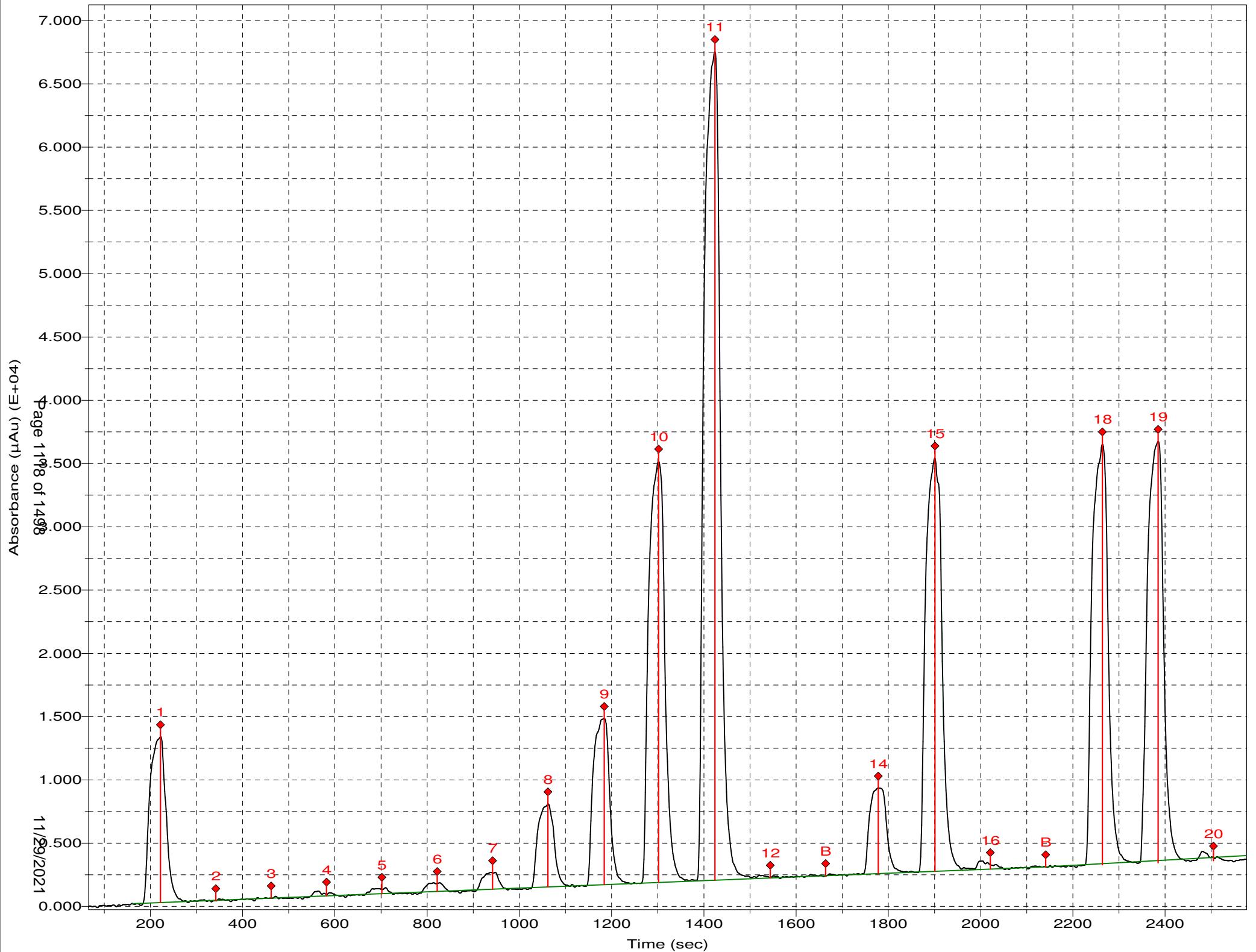
Carryover: 0%

No Drift Peaks

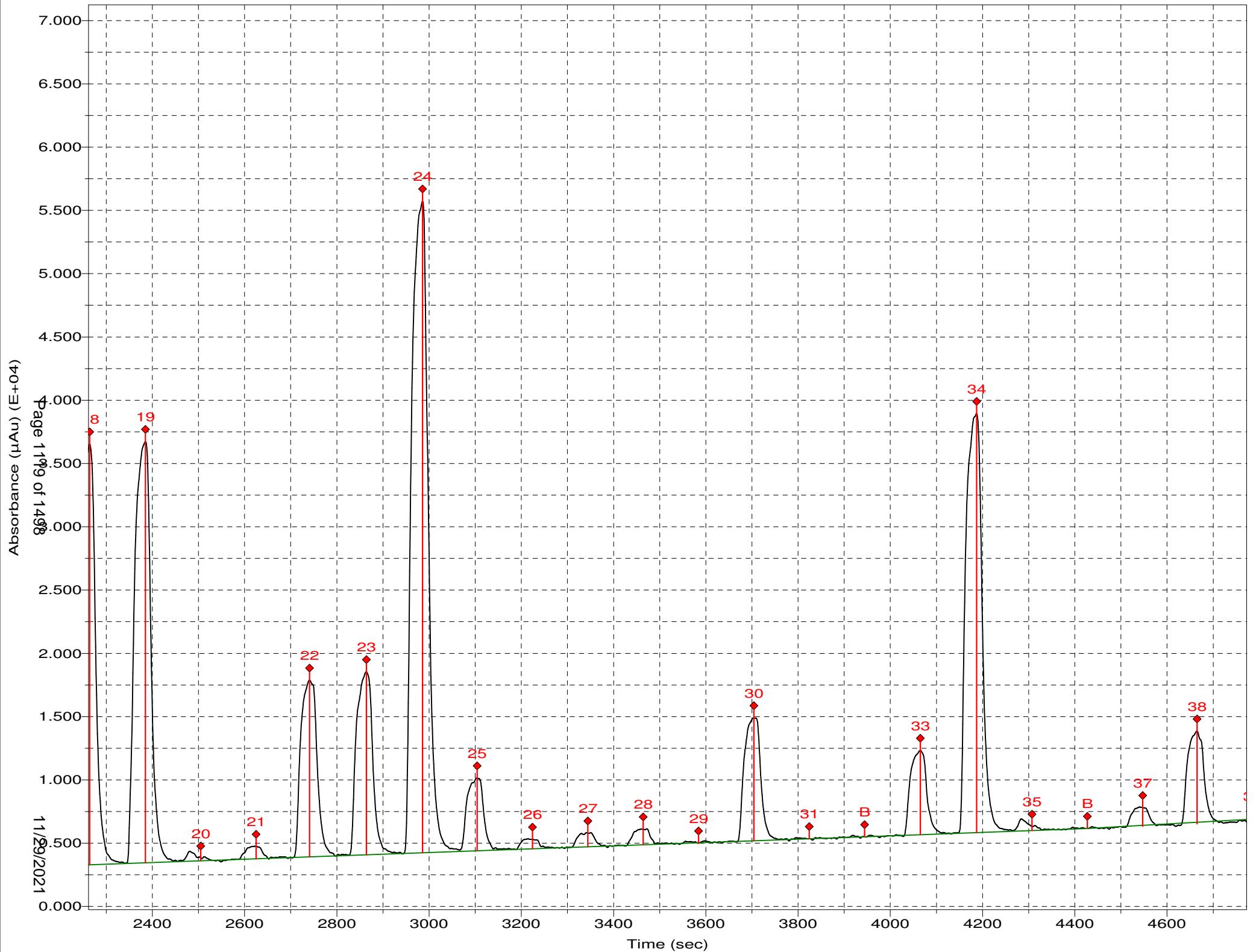
# NH3:Calibration 1: Peak 4-114



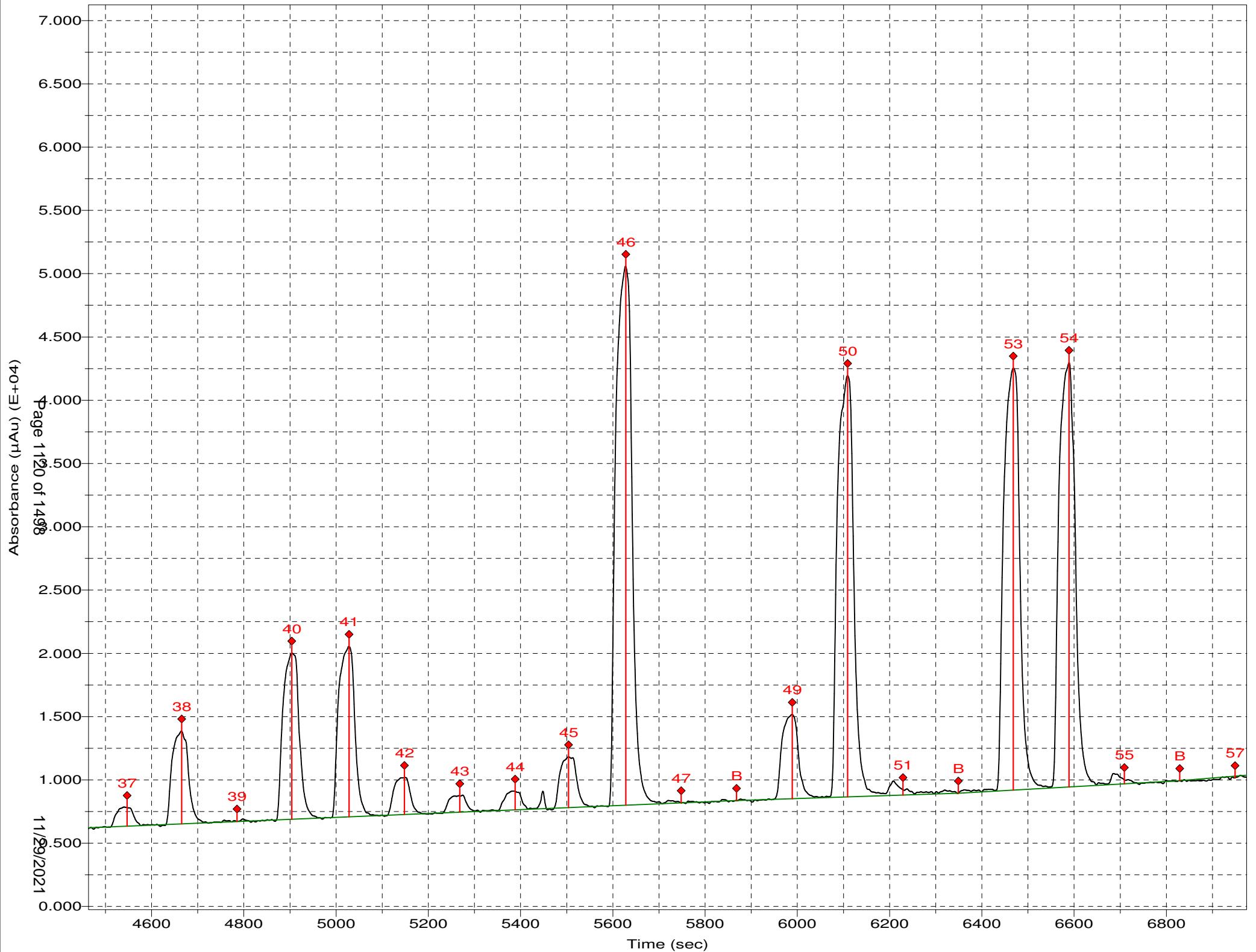
## Channel 3: NH3



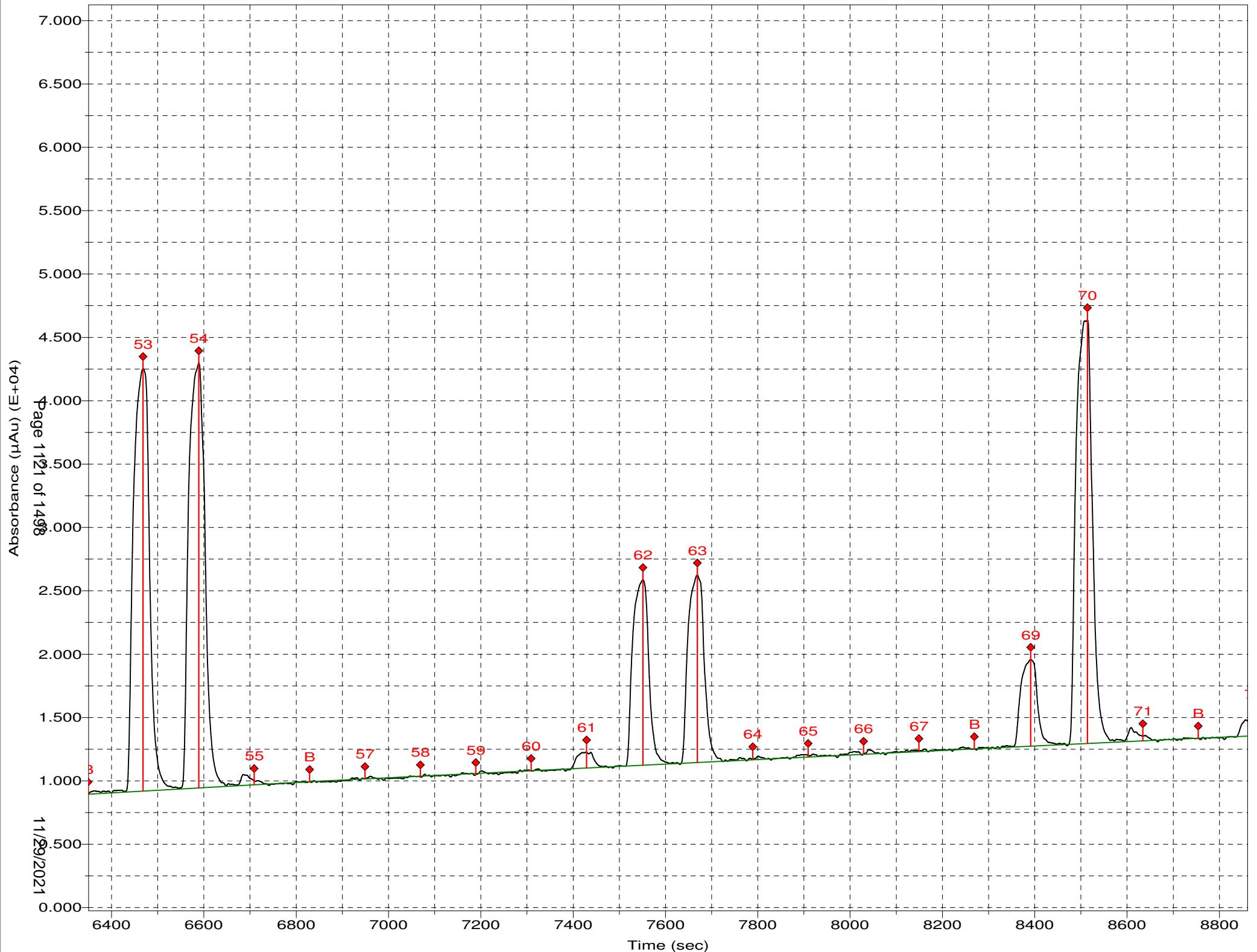
## Channel 3: NH3



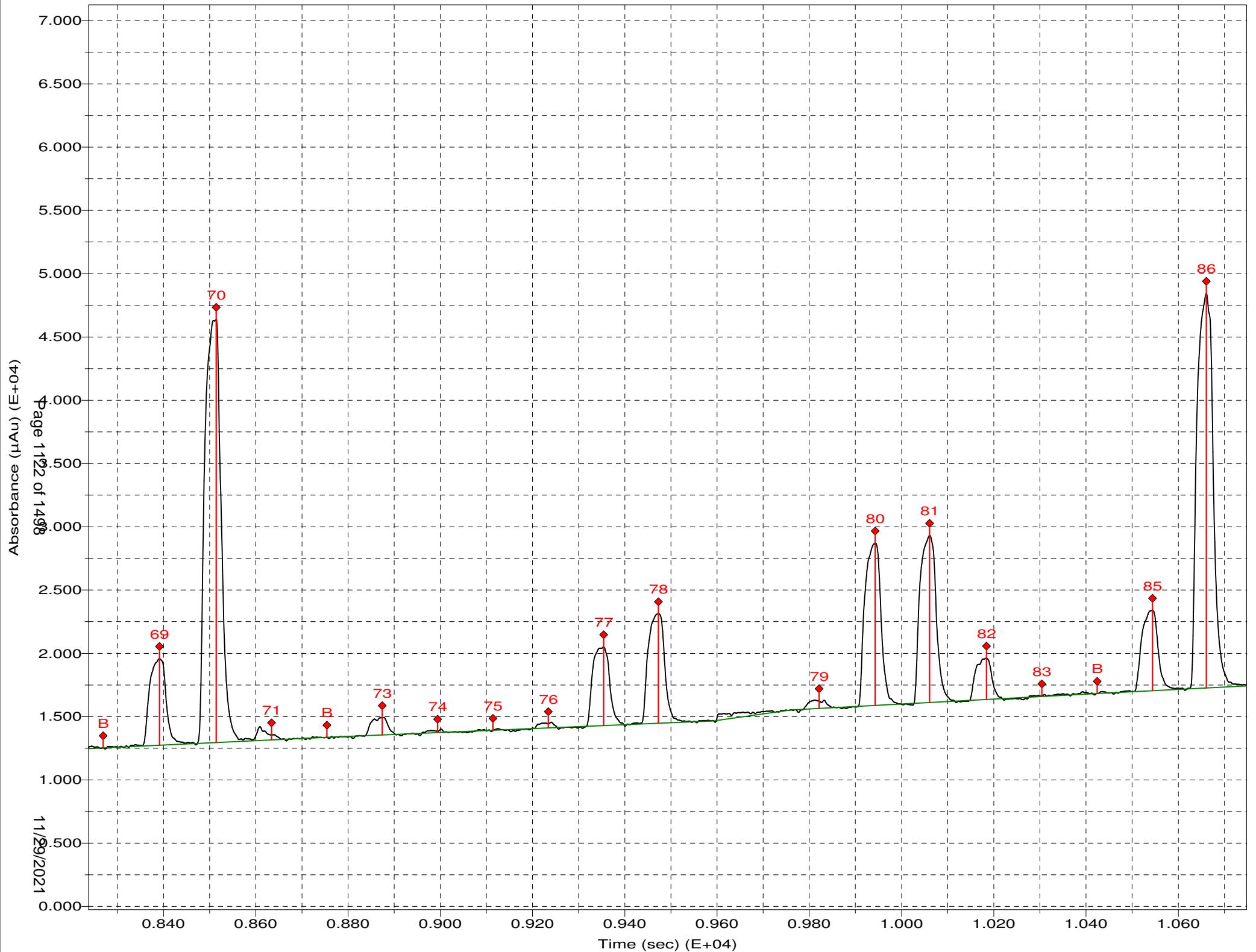
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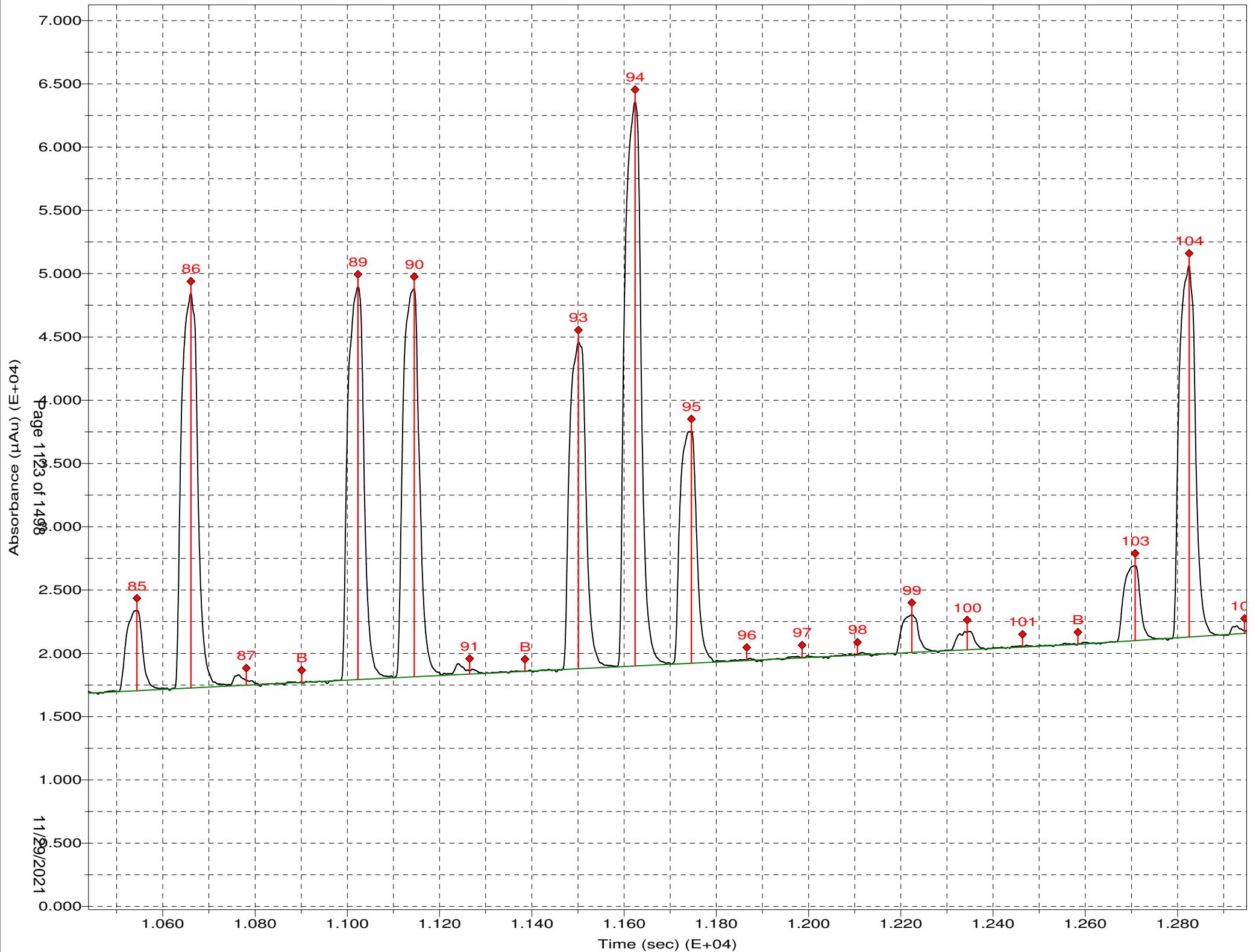
## Channel 3: NH3



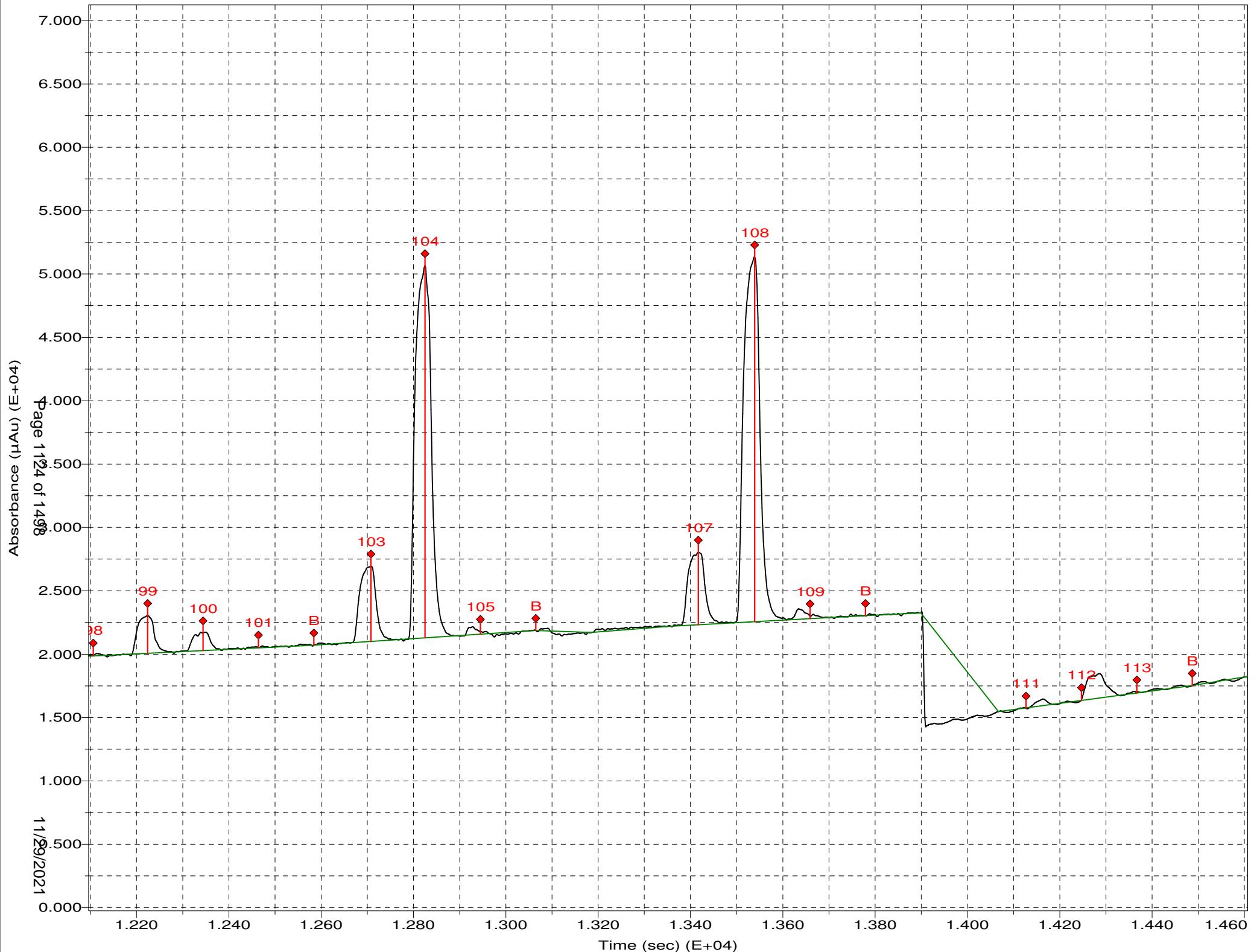
## Channel 3: NH3



## Channel 3: NH3



## Channel 3: NH3



\*\*\* Sample Table from Analysis \*\*\*

File name: \*\*\* Sample Table from Analysis \*\*\*

Date: 22-Nov-21

Cup	Name	Type	R	Dil	Wt	Vial	Comment
106	Sync	SYNC	1		1		350.1 COLOR- 00268
0	Carry Over	CO	1		1		
0	Blank	BLNK	1		1		
101	Cal 0 ppb	C	1		1		350.1 Bleach- 01525
102	Cal 25 ppb	C	1		1		
103	Cal 50 ppb	C	1		1		350.1 Complex- 00584
104	Cal 100 ppb	C	1		1		
105	Cal 500 ppb	C	1		1		
106	Cal 1000 ppb	C	1		1		
107	Cal 2500 ppb	C	1		1		
108	Cal 5000 ppb	C	1		1		
0	Blank	BLNK	1		1		
0	Read Baseline	RB	1		1		
109	ICVL 500.0 ppb	U	1		1		
110	ICV 2500.0 ppb	U	1		1		
111	ICB	U	1		1		
	0 read baseline	RB	1		1		
107	LCS 2500.00	U	1		1		PN
107	LCSD 2500.00	U	1		1		A
111	MB	U	1		1		
201	280-155015-C-12	U	1		1		<2
202	MS 280-155015-c-12	U	1		1		NO
203	MSD 280-155015-c-12	U	1		1		
204	280-155048-c-3	U	1		1		
205	Void 280-155070-f-3	U	1		100		
206	Void 280-155015-c-10	U	1		10		
207	280-155117-b-1	U	1		1		
208	280-155117-b-7	U	1		1		
209	280-155117-b-8	U	1		1		
210	Void 280-155130-f-1	U	1		100		
0	Blank	BLNK	1		1		
0	Read Baseline	RB	1		1		
105	CCVL 500.0 ppb	U	1		1		
107	CCV 2500.0 ppb	U	1		1		
111	CCB	U	1		1		
	0 read baseline	RB	1		1		
211	280-155130-f-2	U	1		1		
212	280-155138-c-3	U	1		2		
213	280-155138-c-10	U	1		1		
214	MS 280-155138-c-10	U	1		1		
215	MSD 280-155138-c-10	U	1		1		
216	280-155138-c-8	U	1		2		
217	320-81484-a-3	U	1		1		
218	320-81484-a-8	U	1		2		
219	Void 280-154777-r-1	U	1		100		
220	280-154779-p-1	U	1		1		
0	Blank	BLNK	1		1		
0	Read Baseline	RB	1		1		
105	CCVL 500.0 ppb	U	1		1		
107	CCV 2500.0 ppb	U	1		1		
111	CCB	U	1		1		
	0 read baseline	RB	1		1		
107	LCS 2500.00	U	1		1		
107	LCSD 2500.00	U	1		1		
111	MB	U	1		1		
	0 read baseline	RB	1		1		

# Calibration results

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TKN

Version number 1.5 WC\_GAL1

Date 11/17/2021 User Dealer  
 Time 8:58:09PM Software version: 7.0  
 Analyzer name WC\_GAL1

Test TKN Coeff. of deter. 0.998983

Status Accepted Total factor 3.644

Accepted 11/15/2021 5:07 PM

Checked 11/15/2021 5:07 PM

User name Dealer

Comment

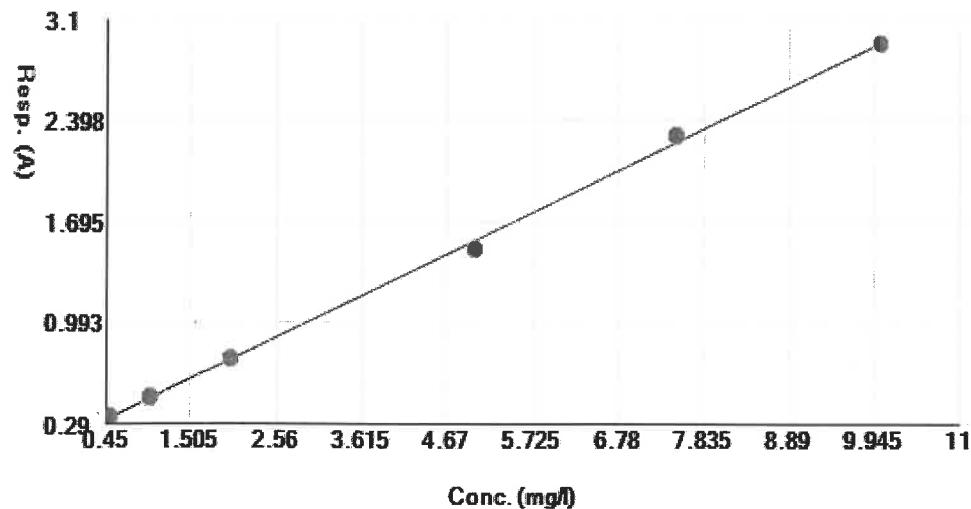
Errors

Factor 3.644

Bias 0.187

Cal/Ctrl	Response	Calc. conc.	Given conc.	Lot	Errors
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TKN 10.0	0.333	0.52934520	0.50000000	Default
TKN 10.0	0.468	1.02455200	1.00000000	Default
TKN 10.0	0.745	2.03061500	2.00000000	Default
TKN 10.0	1.498	4.77604200	5.00000000	Default
TKN 7.5	2.287	7.65004500	7.50000000	Default
TKN 10.0	2.929	9.98939900	10.00000000	Default



# Test results report

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WC\_GAL1

## Test name      TKN

<b>Date</b>	11/17/2021	<b>User</b>	<b>Dealer</b>	
<b>Time</b>	8:58:47PM	<b>Software version: 7.0</b>		
<b>Test</b>	TKN	<b>Group ID</b>	[All]	
<b>Sample ID</b>	[All]	<b>Group name</b>	[All]	

Test	Sample/ctrl ID	Test version	Result	Unit	Note	Dil. 1 +	Status	Errors
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TKN	icv	1.5	5.0892210	mg/l		0.0	calc	
TKN	icb	1.5	0.1081988	mg/l		0.0	calc	
TKN	LCS 280-557729/1-A	1.5	5.9242120	mg/l		0.0	calc	
TKN	MB 280-557729/2-A	1.5	0.1000341	mg/l		0.0	calc	
TKN	280-155138-C-1 0-A	1.5	-0.4722454	mg/l		0.0	calc	
TKN	280-155138-C-1 0-B MS	1.5	-0.3525051	mg/l		0.0	calc	
TKN	280-155138-C-1 0-C MS	1.5	-0.3567832	mg/l		0.0	calc	
TKN	280-155138-C-9 -A	1.5	-0.4782377	mg/l		0.0	calc	
TKN	280-155138-C-8 -A	1.5	1.1154250	mg/l		0.0	calc	
TKN	280-155138-C-7 -A	1.5	0.2176941	mg/l		0.0	calc	
TKN	280-155138-C-6 -A	1.5	-0.4762098	mg/l		0.0	calc	
TKN	280-155138-C-5 -A	1.5	-0.1736874	mg/l		0.0	calc	
TKN	280-155138-C-4 -A	1.5	-0.1434925	mg/l		0.0	calc	
TKN	280-155138-C-3 -A	1.5	1.3538810	mg/l		0.0	calc	
TKN	ccv1	1.5	5.0415520	mg/l		0.0	calc	
TKN	ccb1	1.5	0.1140050	mg/l		0.0	calc	
TKN	280-155138-C-2 -A	1.5	-0.4676255	mg/l		0.0	calc	
TKN	280-155138-C-1 -A	1.5	1.6367360	mg/l		0.0	calc	
TKN	280-155048-C-7 -A	1.5	1.5839390	mg/l		0.0	calc	
TKN	280-155048-C-7 -B MS	1.5	4.4388700	mg/l		0.0	calc	
TKN	280-155048-C-7 -C MSD	1.5	4.4183430	mg/l		0.0	calc	

Test	Sample/ctrl ID	Test version	Result	Unit	Note	Dil. 1 +	Status	Errors
TKN	280-155048-C-1-A	1.5	-0.4686755	mg/l		0.0	calc	
TKN	280-155048-C-2-A	1.5	-0.4756789	mg/l		0.0	calc	
TKN	280-155048-C-3-A	1.5	2.8191080	mg/l		0.0	calc	
TKN	280-155048-C-4-A	1.5	1.9791010	mg/l		0.0	calc	
TKN	ccv2	1.5	5.0843170	mg/l		0.0	calc	
TKN	ccb2	1.5	0.0715438	mg/l		0.0	calc	
TKN	280-155048-C-5-A	1.5	0.1313861	mg/l		0.0	calc	
TKN	280-155048-C-6-A	1.5	-0.4361079	mg/l		0.0	calc	
TKN	280-155221-I-1-A	1.5	1.0254540	mg/l		0.0	calc	
TKN	280-155221-I-2-A	1.5	0.5735527	mg/l		0.0	calc	
TKN	LCS 280-557730/1-A	1.5	5.7142470	mg/l		0.0	calc	
TKN	MB 280-557730/2-A	1.5	0.0624511	mg/l		0.0	calc	
TKN	280-155048-C-8-A	1.5	0.2259924	mg/l		0.0	calc	
TKN	280-155048-C-8-B MS	1.5	3.4011620	mg/l		0.0	calc	
TKN	280-155048-C-8-C MSD	1.5	3.4080560	mg/l		0.0	calc	
TKN	280-155225-C-1-A	1.5	-0.0461806	mg/l		0.0	calc	
TKN	ccv3	1.5	5.0143890	mg/l		0.0	calc	
TKN	ccb3	1.5	0.0029035	mg/l		0.0	calc	
TKN	280-155225-C-2-A	1.5	-0.4762115	mg/l		0.0	calc	
TKN	280-155225-C-3-A	1.5	0.5290443	mg/l		0.0	calc	
TKN	280-155225-C-4-A	1.5	0.5121606	mg/l		0.0	calc	
TKN	280-155225-C-5-A	1.5	-0.4860420	mg/l		0.0	calc	
TKN	280-155225-C-7-A	1.5	1.9948230	mg/l		0.0	calc	
TKN	280-155225-C-8-A	1.5	2.8235230	mg/l		0.0	calc	
TKN	280-155225-C-9-A	1.5	1.9230160	mg/l		0.0	calc	
TKN	280-155225-C-6-A	1.5	-0.1736972	mg/l		0.0	calc	

Test	Sample/ctrl ID	Test version	Result	Unit	Note	Dil. 1 +	Status	Errors
TKN	280-155225-C-6 -B MS	1.5	2.6271640	mg/l		0.0	calc	
TKN	280-155225-C-6 -C MSD	1.5	2.6228180	mg/l		0.0	calc	
TKN	280-155436-K-1 -B	1.5	12.6162800	mg/l		4.0	calc	
TKN	ccv4	1.5	5.0926820	mg/l		0.0	calc	
TKN	ccb4	1.5	0.0366655	mg/l		0.0	calc	
TKN	280-155015-C-1 -B	1.5	1.6314870	mg/l		0.0	calc	
TKN	280-155015-C-2 -B	1.5	2.8356290	mg/l		0.0	calc	
TKN	280-155015-C-3 -B	1.5	3.6169980	mg/l		0.0	calc	
TKN	280-155015-C-5 -B	1.5	1.3155450	mg/l		0.0	calc	
TKN	280-155015-C-5 -B	1.5	1.3188080	mg/l		0.0	calc	
TKN	280-155015-C-8 -B	1.5	3.0520540	mg/l		0.0	calc	
TKN	280-155015-C-8 -B	1.5	3.0642320	mg/l		0.0	calc	
TKN	ccv5	1.5	5.1496120	mg/l		0.0	calc	
TKN	ccv5	1.5	5.0559920	mg/l		0.0	calc	
TKN	ccb5	1.5	0.0994432	mg/l		0.0	calc	
TKN	ccb5	1.5	0.0968346	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\111721.RST  
Sample table path C:\FLOW\_4\111721.tbl  
Method path C:\FLOW\_4\nox.mth  
Date acquired 17-Nov-21  
Time acquired 20:00

Date	Time	Cup	Name
17-Nov-21	16:27	109	SYNC
17-Nov-21	16:29	0	Carryover
17-Nov-21	16:31	0	Carryover
			(Statistics)
17-Nov-21	16:33	0	read baseline
17-Nov-21	16:35	101	Cal 0.00 ppb
17-Nov-21	16:37	102	Cal 50.0 ppb
17-Nov-21	16:39	103	Cal 100 ppb
17-Nov-21	16:41	104	Cal 500 ppb
17-Nov-21	16:43	105	Cal 1000 ppb
17-Nov-21	16:45	106	Cal 2500 ppb
17-Nov-21	16:47	107	Cal 5000 ppb
17-Nov-21	16:49	108	Cal 7500 ppb
17-Nov-21	16:51	109	Cal 10000 ppb
17-Nov-21	16:53	0	Blank
17-Nov-21	16:55	0	Read Baseline
17-Nov-21	16:57	110	5000 PPB NO2
17-Nov-21	16:59	111	ICV 5000 PPB
17-Nov-21	17:01	112	ICV 2000 PPB
17-Nov-21	17:03	0	ICB
17-Nov-21	17:05	0	Read Baseline
17-Nov-21	17:07	107	LCS
17-Nov-21	17:09	0	MB
17-Nov-21	17:11	113	280-154911-A-1
17-Nov-21	17:13	114	ms 280-154911-A-1
17-Nov-21	17:15	115	msd 280-154911-A-1
17-Nov-21	17:17	116	280-154911-A-2
17-Nov-21	17:19	117	280-154931-H-5
17-Nov-21	17:21	118	280-155237-H-2
17-Nov-21	17:23	119	280-155048-C-1
17-Nov-21	17:25	120	280-155048-C-2
17-Nov-21	17:27	121	280-155048-C-3
17-Nov-21	17:29	122	280-155048-C-4
17-Nov-21	17:31	0	Rinse
17-Nov-21	17:33	0	Read Baseline
17-Nov-21	17:35	107	CCV 5000 ppb
17-Nov-21	17:37	105	CCVL 1000 ppb
17-Nov-21	17:39	0	CCB
17-Nov-21	17:41	0	Read Baseline
17-Nov-21	17:44	123	280-155048-C-5
17-Nov-21	17:46	124	280-155048-C-6
17-Nov-21	17:48	125	280-155048-C-7
17-Nov-21	17:50	126	ms 280-155048-C-7
17-Nov-21	17:52	127	msd 280-155048-C-7
17-Nov-21	17:54	128	280-155011-R Page 1130 of 1490

Result path C:\FLOW\_4\111721.RST  
 Sample table path C:\FLOW\_4\111721.tbl  
 Method path C:\FLOW\_4\nox.mth  
 Date acquired 17-Nov-21  
 Time acquired 20:00

Date	Time	Cup	Name
17-Nov-21	17:56	129	280-155015-C-2
17-Nov-21	17:58	130	280-155015-C-3
17-Nov-21	18:00	131	280-155015-C-4
17-Nov-21	18:02	132	280-155015-C-5
17-Nov-21	18:04	0	Rinse
17-Nov-21	18:06	0	Read Baseline
17-Nov-21	18:08	107	CCV 5000 ppb
17-Nov-21	18:10	105	CCVL 1000 ppb
17-Nov-21	18:12	0	CCB
17-Nov-21	18:14	0	Read Baseline
17-Nov-21	18:16	133	280-155015-C-6
17-Nov-21	18:18	134	280-155015-C-7
17-Nov-21	18:20	135	280-155015-C-8
17-Nov-21	18:22	136	280-155015-C-9
17-Nov-21	18:24	107	LCS
17-Nov-21	18:26	107	LCSD
17-Nov-21	18:28	0	MB
17-Nov-21	18:30	137	280-155048-C-8
17-Nov-21	18:32	138	ms 280-155048-C-8
17-Nov-21	18:34	139	msd 280-155048-C-8
17-Nov-21	18:36	140	280-155015-C-10
17-Nov-21	18:38	0	Rinse
17-Nov-21	18:40	0	Read Baseline
17-Nov-21	18:42	107	CCV 5000 ppb
17-Nov-21	18:44	105	CCVL 1000 ppb
17-Nov-21	18:46	0	CCB
17-Nov-21	18:48	0	Read Baseline
17-Nov-21	18:50	141	280-155015-C-11
17-Nov-21	18:52	142	280-155015-C-12
17-Nov-21	18:54	143	280-155130-F-1
17-Nov-21	18:56	144	280-155130-F-2
17-Nov-21	18:58	145	280-155268-A-1
17-Nov-21	19:00	146	280-155268-A-2
17-Nov-21	19:02	147	280-155268-A-3
17-Nov-21	19:04	148	280-155081-A-4
17-Nov-21	19:06	149	280-155081-A-20
17-Nov-21	19:08	150	ms 280-155081-A-20
17-Nov-21	19:10	0	Rinse
17-Nov-21	19:12	0	Read Baseline
17-Nov-21	19:14	107	CCV 5000 ppb
17-Nov-21	19:16	105	CCVL 1000 ppb
17-Nov-21	19:18	0	CCB
17-Nov-21	19:20	0	Read Baseline
17-Nov-21	19:22	151	msd 280-155081-A-20
17-Nov-21	19:24	152	280-155081-A-12
17-Nov-21	19:26	153	280-155081-A-16
17-Nov-21	19:28	154	280-155081-A-8
17-Nov-21	19:30	155	550-173255-F-1
17-Nov-21	19:32	156	550-173255-F-2
17-Nov-21	19:34	157	550-173255-F-3
17-Nov-21	19:36	158	550-173255-F-4
17-Nov-21	19:38	159	550-173255-F-5
17-Nov-21	19:40	160	550-173255-F-6
17-Nov-21	19:42	0	Rinse
17-Nov-21	19:44	0	Read Baseline
17-Nov-21	19:46	107	CCV 5000 ppb
17-Nov-21	19:48	105	CCVL 1000 ppb

Result path C:\FLOW\_4\111721.RST  
Sample table path C:\FLOW\_4\111721.tbl  
Method path C:\FLOW\_4\nox.mth  
Date acquired 17-Nov-21  
Time acquired 20:00

Date	Time	Cup	Name
17-Nov-21	19:50	0	CCB
17-Nov-21	19:52	0	Read Baseline

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\111721.RST  
 Sample table path C:\FLOW\_4\111721.tbl  
 Method path C:\FLOW\_4\nox.mth  
 Date acquired 17-Nov-21  
 Time acquired 20:00

Name	Response	Nitrate as N			Mean Response	Mean Calc [ppb]
		Calc [ppb]	Flags			
SYNC	2273561	10018.147	HI UM			
Carryover	2254	-5.669	LO			
Carryover (Statistics)	-587	-18.208	LO		833	-11.938
read baseline	0	-15.617	BL			
Cal 0.00 ppb	767	-12.231	LO			
Cal 50.0 ppb	12789	40.824				
Cal 100 ppb	21925	81.143				
Cal 500 ppb	117897	504.691				
Cal 1000 ppb	217213	942.996				
Cal 2500 ppb	576566	2528.904				
Cal 5000 ppb	1156604	5088.751				
Cal 7500 ppb	1721845	7583.292				
Cal 10000 ppb	2244893	9891.628				
Blank	203	-14.720	LO			
Read Baseline	0	-15.617	BL			
5000 PPB NO2	1126588	4956.282				
ICV 5000 PPB	1094811	4816.044				
ICV 2000 PPB	438820	1921.000				
ICB	1348	-9.669	LO			
Read Baseline	0	-15.617	BL			
LCS	1136259	4998.963				
MB	1117	-10.689	LO UM			
280-154911-A-1	499153	21872.633				
ms 280-154911-A-1	1253144	55148.043				
msd 280-154911-A-1	1278188	56253.297				
280-154911-A-2	627780	27549.260				
280-154931-H-5	26142	99.755				
280-155237-H-2	556864	2441.957				
280-155048-C-1	828232	36395.688				
280-155048-C-2	395052	17278.395				
280-155048-C-3	546737	11986.313				
280-155048-C-4	2322	-5.369	LO			
Rinse	508	-13.375	LO			
Read Baseline	0	-15.617	BL			
CCV 5000 ppb	1165712	5128.946				
CCVL 1000 ppb	228797	994.121				
CCB	6072	11.181				
Read Baseline	0	-15.617	BL			
280-155048-C-5	816244	3586.663				
280-155048-C-6	661669	29044.848				
280-155048-C-7	3177	-1.598	LO			
ms 280-155048-C-7	886558	3896.973				
msd 280-155048-C-7	902342	3966.633				
280-155015-C-1	21912	Page 1080 of 1498				

Result path C:\FLOW\_4\111721.RST  
 Sample table path C:\FLOW\_4\111721.tbl  
 Method path C:\FLOW\_4\nox.mth  
 Date acquired 17-Nov-21  
 Time acquired 20:00

Name	Nitrate as N			Mean Response	Mean Calc [ppb]
	Response	Calc [ppb]	Flags		
280-155015-C-2	13949	45.946			
280-155015-C-3	13529	44.091			
280-155015-C-4	1170216	5148.823			
280-155015-C-5	11135	33.525			
Rinse	-1151	-20.697	LO		
Read Baseline	0	-15.617	BL		
CCV 5000 ppb	1207516	5313.438			
CCVL 1000 ppb	247663	1077.379			
CCB	1403	-9.426	LO		
Read Baseline	0	-15.617	BL		
280-155015-C-6	14013	46.228			
280-155015-C-7	13705	44.866			
280-155015-C-8	14592	48.783			
280-155015-C-9	900157	3956.991			
LCS	1216674	5353.855			
LCSD	1151946	5068.195			
MB	1810	-7.629	LO		
280-155048-C-8	5564	8.939			
ms 280-155048-C-8	952056	4186.034			
msd 280-155048-C-8	925318	4068.031			
280-155015-C-10	242786	1055.857			
Rinse	943	-11.454	LO		
Read Baseline	0	-15.617	BL		
CCV 5000 ppb	1201737	5287.934			
CCVL 1000 ppb	250093	1088.103			
CCB	6732	14.094			
Read Baseline	0	-15.617	BL		
280-155015-C-11	-2800	-27.974	LO		
280-155015-C-12	397361	1738.030			
280-155130-F-1	476693	2088.141			
280-155130-F-2	632045	69343.734			
280-155268-A-1	1117028	9828.189			
280-155268-A-2	597554	13107.654			
280-155268-A-3	934721	8219.057			
280-155081-A-4	87760	371.690			
280-155081-A-20	71897	301.683			
ms 280-155081-A-20	1026715	4515.521			
Rinse	2985	-2.441	LO		
Read Baseline	0	-15.617	BL		
CCV 5000 ppb	1181647	5199.271			
CCVL 1000 ppb	244454	1063.217			
CCB	8124	20.237			
Read Baseline	0	-15.617	BL		
msd 280-155081-A-20	888538	3905.710			
280-155081-A-12	12641	40.170			
280-155081-A-16	793	-12.116	LO		
280-155081-A-8	14478	48.278			
550-173255-F-1	521529	2286.016			
550-173255-F-2	481046	2107.355			
550-173255-F-3	464341	2033.631			
550-173255-F-4	661514	2903.800			
550-173255-F-5	661574	2904.068			
550-173255-F-6	658181	2889.093			
Rinse	-159	-16.320	LO		
Read Baseline	0	-15.617	BL		
CCV 5000 ppb	1041076	4578.896			
CCVL 1000 ppb	241789	1039.1434 of 1498			

Result path C:\FLOW\_4\111721.RST  
Sample table path C:\FLOW\_4\111721.tbl  
Method path C:\FLOW\_4\nox.mth  
Date acquired 17-Nov-21  
Time acquired 20:00

Name	Nitrate as N			Mean Response	Mean Calc [ppb]
	Response	Calc [ppb]	Flags		
CCB	-646	-18.466	LO		
Read Baseline	0	-15.617	BL		

## Peak Table:Nitrate as N

File name: C:\FLOW\_4\111721.RST

Date: 17-Nov-21

Operator: svc

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
1	109	SYNC	1	SYNC	1	1	2273561	10018.147461	HI UM
2	0	Carryover	1	CO	1	1	2254	-5.668645	LO
3	0	Carryover	2	CO	1	1	-587	-18.208199	LO
B	0	read baseline	1	RB	1	1	0	-15.616562	BL
5	101	Cal 0.00 ppb	1	C	1	1	767	-12.230652	LO
6	102	Cal 50.0 ppb	1	C	1	1	12789	40.823990	
7	103	Cal 100 ppb	1	C	1	1	21925	81.142853	
8	104	Cal 500 ppb	1	C	1	1	117897	504.691040	
9	105	Cal 1000 ppb	1	C	1	1	217213	942.996460	
10	106	Cal 2500 ppb	1	C	1	1	576566	2528.903809	
11	107	Cal 5000 ppb	1	C	1	1	1156604	5088.751465	
12	108	Cal 7500 ppb	1	C	1	1	1721845	7583.291504	
13	109	Cal 10000 ppb	1	C	1	1	2244893	9891.627930	
14	0	Blank	1	BLNK	1	1	203	-14.719746	LO
B	0	Read Baseline	1	RB	1	1	0	-15.616562	BL
16	110	5000 PPB NO2	1	U	1	1	1126588	4956.281738	
17	111	ICV 5000 PPB	1	CCV	1	1	1094811	4816.043945	
18	112	ICV 2000 PPB	1	CCV	1	1	438820	1921.000244	
19	0	ICB	1	U	1	1	1348	-9.669497	LO
B	0	Read Baseline	1	RB	1	1	0	-15.616562	BL
21	107	LCS	1	U	1	1	1136259	4998.963379	
22	0	MB	1	U	1	1	1117	-10.688707	LO UM
23	113	280-154911-A-1	1	U	10	1	499153	21872.632812	
24	114	ms 280-154911-A-1	1	U	10	1	1253144	55148.042969	
25	115	msd 280-154911-A-1	1	U	10	1	1278188	56253.296875	
26	116	280-154911-A-2	1	U	10	1	627780	27549.259766	
27	117	280-154931-H-5	1	U	1	1	26142	99.755203	
28	118	280-155237-H-2	1	U	1	1	556864	2441.957031	
29	119	280-155048-C-1	1	U	10	1	828232	36395.687500	
30	120	280-155048-C-2	1	U	10	1	395052	17278.394531	
31	121	280-155048-C-3	1	U	5	1	546737	11986.313477	
32	122	280-155048-C-4	1	U	1	1	2322	-5.368534	LO
33	0	Rinse	1	U	1	1	508	-13.375494	LO
B	0	Read Baseline	1	RB	1	1	0	-15.616562	BL
35	107	CCV 5000 ppb	1	CCV	1	1	1165712	5128.945801	
36	105	CCVL 1000 ppb	1	CCV	1	1	228797	994.120911	
37	0	CCB	1	U	1	1	6072	11.180510	
B	0	Read Baseline	1	RB	1	1	0	-15.616562	BL
39	123	280-155048-C-5	1	U	1	1	816244	3586.663086	
40	124	280-155048-C-6	1	U	10	1	661669	29044.847656	
41	125	280-155048-C-7	1	U	1	1	3177	-1.597700	LO
42	126	ms 280-155048-C-7	1	U	1	1	886558	3896.972656	
43	127	msd 280-155048-C-7	1	U	1	1	902342	3966.632812	
44	128	280-155015-C-1	1	U	1	1	21912	81.085854	
45	129	280-155015-C-2	1	U	1	1	13949	45.945709	
46	130	280-155015-C-3	1	U	1	1	13529	44.090725	
47	131	280-155015-C-4	1	U	1	1	1170216	5148.823242	
48	132	280-155015-C-5	1	U	1	1	11135	33.524521	
49	0	Rinse	1	U	1	1	-1151	-20.697308	LO
B	0	Read Baseline	1	RB	1	1	0	-15.616562	BL
51	107	CCV 5000 ppb	1	CCV	1	1	1207516	5313.437988	
52	105	CCVL 1000 ppb	1	CCV	1	1	247663	1077.378662	
53	0	CCB	1	U	1	1	1403	-9.425538	LO
B	0	Read Baseline	1	RB	1	1	0	-15.616562	BL
55	133	280-155015-C-6	1	U	1	1	14013	46.227932	
56	134	280-155015-C-7	1	U	1	1	13705	44.865803	
57	135	280-155015-C-8	1	U	1	1	14592	48.782742	
58	136	280-155015-C-9	1	U	1	1	900157	3956.990723	
59	107	LCS	1	U	1	1	1216674	5353.855469	
60	107	LCSD	1	U	1	1	1151946	5068.195312	
61	0	MB	1	U	1	1	1810	-7.628735	LO
62	137	280-155048-C-8	1	U	1	1	5564	8.938836	
63	138	ms 280-155048-C-8	1	U	1	1	952056	4186.034180	
64	139	msd 280-155048-C-8	1	U	1	1	925318	4068.030762	
65	140	280-155015-C-10	1	U	1	1	242786	1055.856689	
66	0	Rinse	1	U	1	1	943	-11.454144	LO
B	0	Read Baseline	1	RB	1	1	0	-15.616562	BL
68	107	CCV 5000 ppb	1	CCV	1	1	1201737	5287.933594	
69	105	CCVL 1000 ppb	1	CCV	1	1	250093	1088.103149	
70	0	CCB	1	U	1	1	6732	14.093790	

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
B	0	Read Baseline	1	RB		1	0	-15.616562	BL
72	141	280-155015-C-11	1	U		1	-2800	-27.973682	LO
73	142	280-155015-C-12	1	U		1	397361	1738.030273	
74	143	280-155130-F-1	1	U		1	476693	2088.141357	
75	144	280-155130-F-2	1	U	25	1	632045	69343.734375	
76	145	280-155268-A-1	1	U	2	1	1117028	9828.189453	
77	146	280-155268-A-2	1	U	5	1	597554	13107.654297	
78	147	280-155268-A-3	1	U	2	1	934721	8219.056641	
79	148	280-155081-A-4	1	U	1	1	87760	371.690125	
80	149	280-155081-A-20	1	U	1	1	71897	301.683105	
81	150	msd 280-155081-A-20	1	U		1	1026715	4515.520996	
82	0	Rinse	1	U		1	2985	-2.441338	LO
B	0	Read Baseline	1	RB		1	0	-15.616561	BL
84	107	CCV 5000 ppb	1	CCV		1	1181647	5199.270996	
85	105	CCVL 1000 ppb	1	CCV		1	244454	1063.216797	
86	0	CCB	1	U		1	8124	20.236729	
B	0	Read Baseline	1	RB		1	0	-15.616561	BL
88	151	msd 280-155081-A-20	1	U		1	888538	3905.709961	
89	152	280-155081-A-12	1	U		1	12641	40.169857	
90	153	280-155081-A-16	1	U		1	793	-12.115646	LO
91	154	280-155081-A-8	1	U		1	14478	48.277596	
92	155	550-173255-F-1	1	U		1	521529	2286.015625	
93	156	550-173255-F-2	1	U		1	481046	2107.355469	
94	157	550-173255-F-3	1	U		1	464341	2033.631470	
95	158	550-173255-F-4	1	U		1	661514	2903.800049	
96	159	550-173255-F-5	1	U		1	661574	2904.067627	
97	160	550-173255-F-6	1	U		1	658181	2889.092529	
98	0	Rinse	1	U		1	-159	-16.319666	LO
B	0	Read Baseline	1	RB		1	0	-15.616562	BL
100	107	CCV 5000 ppb	1	CCV		1	1041076	4578.895996	
101	105	CCVL 1000 ppb	1	CCV		1	241789	1051.457275	
102	0	CCB	1	U		1	-646	-18.465855	LO
B	0	Read Baseline	1	RB		1	0	-15.616562	BL

Nitrate as N:Calibration 1: Peak 5-103

File name: C:\FLOW\_4\111721.RST

Date: 17-Nov-21

Operator: svc

* Name	Conc	Height
* Cal 0.00 ppb	0.000000	767.217041
* Cal 50.0 ppb	50.000000	12788.924805
* Cal 100 ppb	100.000000	21924.818359
* Cal 500 ppb	500.000000	117897.046875
* Cal 1000 ppb	1000.000000	217213.140625
* Cal 2500 ppb	2500.000000	576565.562500
* Cal 5000 ppb	5000.000000	1156604.125000
* Cal 7500 ppb	7500.000000	1721844.625000
* Cal 10000 ppb	10000.000000	2244893.000000

Calib Coef:

y=bx+a

a: (intercept) 3.5386e+03

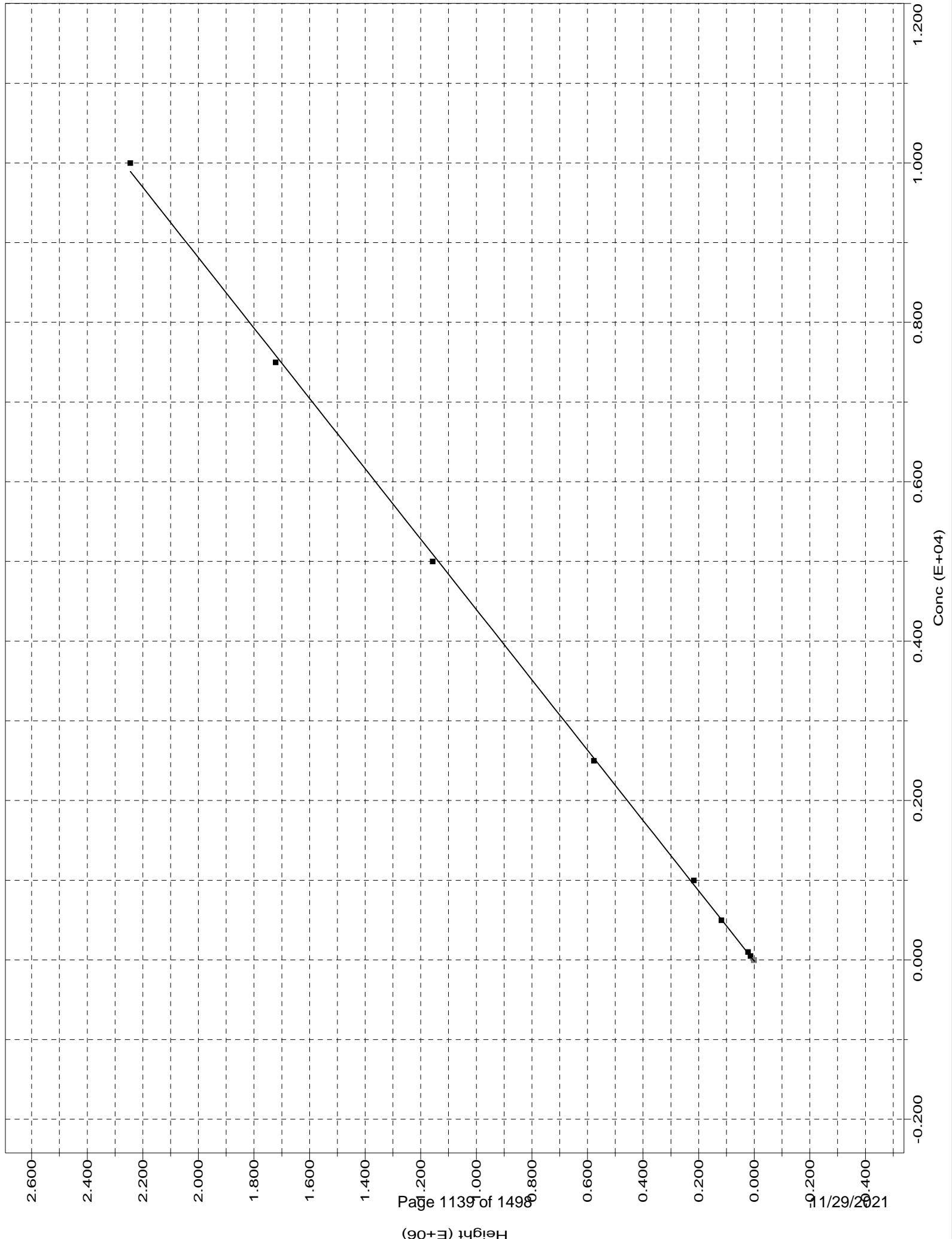
b: 2.2659e+02

Corr Coef: 0.999858

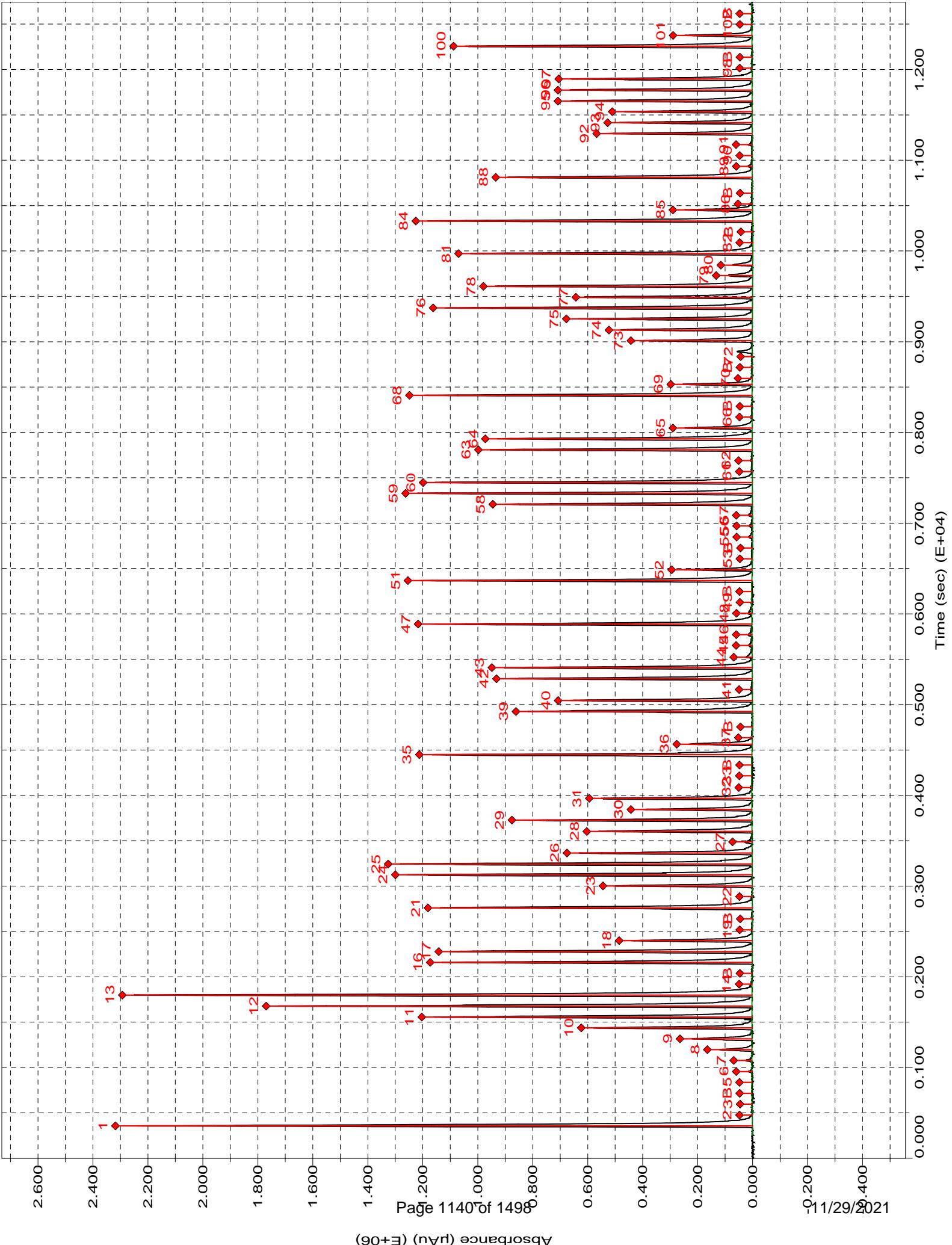
Carryover: 0.0991%

No Drift Peaks

Nitrate as N:Calibration 1: Peak 5-103



### Channel 3: Nitrate as N



## Sample Table - 111721.tbl

File name: C:\FLOW\_4\111721.TBL

Date: 17-Nov-21

Cup	Name	Type	R	Dil	Wt	Vial	Comment
109	SYNC	SYNC	1		1		
0	Carryover	CO	1		1		
0	Carryover	CO	1		1		
0	read baseline	RB	1		1		
101	Cal 0.00 ppb	C	1		1		
102	Cal 50.0 ppb	C	1		1		
103	Cal 100 ppb	C	1		1		
104	Cal 500 ppb	C	1		1		
105	Cal 1000 ppb	C	1		1		
106	Cal 2500 ppb	C	1		1		
107	Cal 5000 ppb	C	1		1		
108	Cal 7500 ppb	C	1		1		
109	Cal 10000 ppb	C	1		1		
0	Blank	BLNK	1		1		
0	Read Baseline	RB	1		1		
110	5000 PPB NO2	U	1		1		
111	ICV 5000 PPB	CCV	1		1		
112	ICV 2000 PPB	CCV	1		1		
0	ICB	U	1		1		
0	Read Baseline	RB	1		1		
107	LCS	U	1		1		
0	MB	U	1		1		
113	280-154911-A-1	U	1	10	1		
114	ms 280-154911-A-1	U	1	10	1		LL
115	msd 280-154911-A-1	U	1	10	1		LL
116	280-154911-A-2	U	1	10	1		LL
117	280-154931-H-5	U	1	1	1	Total	LL
118	280-155237-H-2	U	1	1	1		LL
119	280-155048-C-1	U	1	10+	1		LL
120	280-155048-C-2	U	1	10+	1		LL
121	280-155048-C-3	U	1	5+	1		LL
122	280-155048-C-4	U	1	1	1		LL
0	Rinse	U	1	1	1		
0	Read Baseline	RB	1	1	1		
107	CCV 5000 ppb	CCV	1		1		
105	CCVL 1000 ppb	CCV	1		1		
0	CCB	U	1	1	1		
0	Read Baseline	RB	1	1	1		
123	280-155048-C-5	U	1	1	1		LL
124	280-155048-C-6	U	1	10+	1		LL
125	280-155048-C-7	U	1	1	1		LL
126	ms 280-155048-C-7	U	1	1	1		LL
127	msd 280-155048-C-7	U	1	1	1		LL
128	280-155015-C-1	U	1	1	1		LL
129	280-155015-C-2	U	1	1	1		LL
130	280-155015-C-3	U	1	1	1		LL
131	280-155015-C-4	U	1	1	1		LL
132	280-155015-C-5	U	1	1	1		LL
0	Rinse	U	1	1	1		
0	Read Baseline	RB	1	1	1		
107	CCV 5000 ppb	CCV	1		1		
105	CCVL 1000 ppb	CCV	1		1		
0	CCB	U	1	1	1		
0	Read Baseline	RB	1	1	1		
133	280-155015-C-6	U	1	1	1		LL
134	280-155015-C-7	U	1	1	1		LL

Cup	Name	Type	R	Dil	Wt	Vial	Comment
135	280-155015-C-8	U	1		1		LL
136	280-155015-C-9	U	1		1		LL
107	LCS	U	1		1		
107	LCSD	U	1		1		
0	MB	U	1		1		
137	280-155048-C-8	U	1		1		LL
138	ms 280-155048-C-8	U	1		1	1	LL
139	msd 280-155048-C-8	U	1		1	1	LL
140	280-155015-C-10	U	1		1	1	LL
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	280-155015-C-11	U	1		1	1	LL
142	280-155015-C-12	U	1		1	1	LL
143	280-155130-F-1	U	1		1	1	LL
144	280-155130-F-2	U	1	25	+	1	LL
145	280-155268-A-1	U	1	2	+	1	LL
146	280-155268-A-2	U	1	3	+	1	LL
147	280-155268-A-3	U	1	2	+	1	LL
148	280-155081-A-4	U	1		1	1	LL
149	280-155081-A-20	U	1		1	1	LL
150	ms 280-155081-A-20	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 280-155081-A-20	U	1		1	1	LL
152	280-155081-A-12	U	1		1	1	LL
153	280-155081-A-16	U	1		1	1	LL
154	280-155081-A-8	U	1		1	1	LL
155	550-173255-F-1	U	1		1	1	LL
156	550-173255-F-2	U	1		1	1	LL
157	550-173255-F-3	U	1		1	1	LL
158	550-173255-F-4	U	1		1	1	LL
159	550-173255-F-5	U	1		1	1	LL
160	550-173255-F-6	U	1		1	1	LL
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: 280-155048-1

Batch: 556496

Analyst Initials: JJM

Method: 9034

Instrument: No Equipment Used for this Test

Lab Sample ID: LCS 280-556494/1-A

Analysis Date: Nov 07, 2021 12:16

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	16	mg/L	50 mL	50 mL

Lab Sample ID: MB 280-556494/2-A

Analysis Date: Nov 07, 2021 12:16

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-155048-E-8-A

Analysis Date: Nov 07, 2021 12:16

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0.8	mg/L	50 mL	50 mL

Lab Sample ID: 280-155048-E-8-B MS

Analysis Date: Nov 07, 2021 12:16

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	16.8	mg/L	50 mL	50 mL

Lab Sample ID: 280-155048-E-8-C MSD

Analysis Date: Nov 07, 2021 12:16

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	16.8	mg/L	50 mL	50 mL

Lab Sample ID: 280-155048-E-4-A

Analysis Date: Nov 07, 2021 12:16

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0.799999999999968	mg/L	50 mL	50 mL

## Sulfide by Titration

Analyst:	JM	SOP Information:	
Date:	11/7/2021	Number:	91
Titration Solutions		Calibration Information	
Solution 1:	Iodine	Source/Ver-Lot#:	INT_0195
TALS ID	Iod_00271	Prep Date:	7/23/2021
Normality:	0.025	Made By:	JM
Solution 2:	sodium thiosulfate	Concentration:	960
TALS ID	Na Thio_00174	Expiration Date:	11/8/2021
Normality:	0.025		
	Starch Indicator		
TALS ID	Starch IND_00066		

	CAL Volume	Buret	Buret	mL	Final	Conc
		Start	End	Iodine	mL	mg/L
CAL	5	0.00	8.10	20	8.10	952.000
CAL	5	8.10	16.00	20	7.90	968.000

ICV Information						
Source/Ver-Lot#:	INT_0190					
Prep Date:	7/23/2021					
Made By:	JM					
Concentration:	1064					
Expiration Date:	11/8/2021					

	CAL Volume	Buret	Buret	mL	Final	Conc
		Start	End	Iodine	mL	mg/L
ICV	5	0.00	6.60	20	6.60	1072.000
ICV	5	6.60	13.40	20	6.80	1056.000

# TALS Raw Data Report

Job Number: 280-154988-1  
 LIMS Batch: 556496  
 Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-556494/1-A** Inj Date: 11/7/2021 12:16:00PM 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	75	44	110	
Sulfide as H2S		17 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-556494/2-A** Inj Date: 11/7/2021 12:16:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	mg/L				
Sulfide as H2S		0 mg/L	mg/L				

RS# 3 Lab ID: **280-155048-E-8-A** Inj Date: 11/7/2021 12:16:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.8 mg/L	0.80 J mg/L				
Sulfide as H2S		0.85 mg/L	0.85 J mg/L				

RS# 4 Lab ID: **280-155048-E-8-B MS** Inj Date: 11/7/2021 12:16:00PM 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	75	44	110	
Sulfide as H2S		17.85 mg/L	mg/L				

RS# 5 Lab ID: **280-155048-E-8-C MSD** Inj Date: 11/7/2021 12:16:00PM 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	75	44	110	0
Sulfide as H2S		17.85 mg/L	mg/L				20

RS# 6 Lab ID: **280-154988-F-1-A** Inj Date: 11/7/2021 12:16:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.8 mg/L	0.80 J mg/L				
Sulfide as H2S		0.85 mg/L	0.85 J mg/L				

RS# 7 Lab ID: **280-154988-F-2-A** Inj Date: 11/7/2021 12:16:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	mg/L				
Sulfide as H2S		0 mg/L	mg/L				

RS# 8 Lab ID: **280-154988-E-3-A** Inj Date: 11/7/2021 12:16:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	mg/L				
Sulfide as H2S		0 mg/L	mg/L				

# TALS Raw Data Report

Job Number: 280-155015-1  
 LIMS Batch: 556496  
 Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-556494/1-A** Inj Date: 11/7/2021 12:16:00PM 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	75	44	110	
Sulfide as H2S		17 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-556494/2-A** Inj Date: 11/7/2021 12:16:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 3 Lab ID: **280-155048-E-8-A** Inj Date: 11/7/2021 12:16:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.8 mg/L	0.80 J mg/L				
Sulfide as H2S		0.85 mg/L	0.85 J mg/L				

RS# 4 Lab ID: **280-155048-E-8-B MS** Inj Date: 11/7/2021 12:16:00PM 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	75	44	110	
Sulfide as H2S		17.85 mg/L	mg/L				

RS# 5 Lab ID: **280-155048-E-8-C MSD** Inj Date: 11/7/2021 12:16:00PM 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	75	44	110	0
Sulfide as H2S		17.85 mg/L	mg/L				20

RS# 9 Lab ID: **280-155015-E-1-A** Inj Date: 11/7/2021 12:16:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 10 Lab ID: **280-155015-E-2-A** Inj Date: 11/7/2021 12:16:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.8 mg/L	0.80 J mg/L				
Sulfide as H2S		0.85 mg/L	0.85 J mg/L				

RS# 11 Lab ID: **280-155015-E-3-A** Inj Date: 11/7/2021 12:16:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 12 Lab ID: **280-155015-E-9-A** Inj Date: 11/7/2021 12:16:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 13 Lab ID: **280-155015-E-10-A** Inj Date: 11/7/2021 12:16:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-23.2 mg/L	1.9 U mg/L				
Sulfide as H2S		-24.65 mg/L	2.0 U mg/L				

# TALS Raw Data Report

RS# 14 Lab ID: **280-155015-E-11-A** Inj Date: 11/7/2021 12:16:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.8 mg/L	0.80 J mg/L				
Sulfide as H <sub>2</sub> S		0.85 mg/L	0.85 J mg/L				

RS# 15 Lab ID: **280-155015-E-12-A** Inj Date: 11/7/2021 12:16:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H <sub>2</sub> S		0 mg/L	2.0 U mg/L				

# TALS Raw Data Report

Job Number: 280-155048-1  
 LIMS Batch: 556496  
 Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-556494/1-A** Inj Date: 11/7/2021 12:16:00PM 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	75	44	110	
Sulfide as H2S		17 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-556494/2-A** Inj Date: 11/7/2021 12:16:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 3 Lab ID: **280-155048-E-8-A** Inj Date: 11/7/2021 12:16:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.8 mg/L	0.80 J mg/L				
Sulfide as H2S		0.85 mg/L	0.85 J mg/L				

RS# 4 Lab ID: **280-155048-E-8-B MS** Inj Date: 11/7/2021 12:16:00PM 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	75	44	110	
Sulfide as H2S		17.85 mg/L	mg/L				

RS# 5 Lab ID: **280-155048-E-8-C MSD** Inj Date: 11/7/2021 12:16:00PM 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	75	44	110	0
Sulfide as H2S		17.85 mg/L	mg/L				20

RS# 16 Lab ID: **280-155048-E-4-A** Inj Date: 11/7/2021 12:16:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		999999968 mg/L	0.80 J mg/L				
Sulfide as H2S		999999966 mg/L	0.85 J mg/L				

# TALS Raw Data Report

**Titration Data Review Checklist**

LIMS Batch Number: <u>556496</u>	Method (circle one):			QC Type (circle):		
Analyst/1 <sup>st</sup> Reviewer: <u>WRB</u>	2310B	2320B	2340C	<u>Standard</u>	DoD	QAPP
Date: <u>11/08/21</u>	4500 S2 F 4500 SO3 B <u>9030B/9034</u>					
Matrix (circle): <u>Water</u> Solid	Automated or Manual (circle one)			Instrument ID (circle one if applicable): <u>AT2 AT3</u>		

Review Items	Yes	No	2 <sup>nd</sup> Rev	If No, why is data reportable?
<b>A. Sample Storage and Pretreatment</b>				
1. Is sample pH verified and documented prior to analysis? (if required)	<u>Y</u>		/	
2. For samples requiring pH adjustment is the amount of acid/base used documented?	<u>NA</u>		/	If no, list details:
3. Are samples analyzed within the required hold time?	<u>Y</u>		/	NCM:
4. Pre-treatment reagents used to remove interferences are documented.	<u>NA</u>		/	
<b>B. Calibration / Instrument</b>				
5. Was the normality of the titrant verified and found acceptable?	<u>Y</u>		/	Comments:
6. For potentiometric titration, the pH meter is calibrated with 5 buffers bracketing range of samples and QC.	<u>NA</u>		/	Comments:
7. Calibration standards are analyzed at the beginning and end of the analytical sequence and after every 10 sample analyses. (samples/dilutions/reanalyses).	<u>NA</u>		/	Comments:
8. Calibrations standards (ICV/CCV) are within 90-110% recovery.	<u>NA</u>		/	
<b>C. Sample and Batch QC</b>				
9. Blanks are analyzed at the beginning, end and after every 10 sample analyses in the sequence.	<u>NA</u>		/	<u>NO CCB's</u>
10. Results of blank analyses (MB, ICB, CCB) are <½ RL (<RL for alkalinity unless DoD)	<u>Y</u>		/	<input type="checkbox"/> No analyte > ½ RL in associated samples <input type="checkbox"/> Sample results >10x blank
11. A standard from a second source (SRM, CRM, LCS) is included in the analytical sequence.	<u>Y</u>		/	
12. The recovery of the 2 <sup>nd</sup> source material falls within 90-110% or manufacturer's limits.	<u>Y</u>		/	
13. Samples analyses are bracketing by acceptable CCV/CCBs.	<u>NA</u>		/	<input type="checkbox"/> No analyte > RL in associated samples <input type="checkbox"/> Sample results >10x blank <input type="checkbox"/> 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)	<u>Y</u>		/	<input type="checkbox"/> Non-conformance (NCM) added <input type="checkbox"/> Sample results >4X spike conc.
15. Duplicate analyzed at required frequency and RPD within limits. (Required for 2310B, 2320B, 4500 SO3 B)	<u>NA</u>		/	<input type="checkbox"/> Non-conformance (NCM) added <input type="checkbox"/> Sample results ND or <2X RL

## TestAmerica Denver

Review Items	Yes	No	2 <sup>nd</sup> Rev	If No, why is data reportable?
16. Are all MS/MSD RPDs <50%? Note: Excessive RPDs (>50%) require evaluation, correction or explanation.	✓		/	<input type="checkbox"/> Non-conformance (NCM) added
<b>D. Raw Data &amp; TALS Data Entry</b>				
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	✓		/	
<b>E. Final Report and NCMs (2<sup>nd</sup> level review only)</b>				
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: Performed by JM on 11/8/21 11/7/21  
wB 11/8/21

2<sup>nd</sup> Reviewer:



Review Date:

11.8.21

# General Chemistry Raw Data Report

Job ID: 280-155048-1

Batch: 556715

Analyst Initials: JJM

Method: 9034

Instrument: No Equipment Used for this Test

Lab Sample ID: LCS 280-556700/1-A

Analysis Date: Nov 09, 2021 10:11

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	16	mg/L	50 mL	50 mL

Lab Sample ID: LCSD 280-556700/2-A

Analysis Date: Nov 09, 2021 10:11

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	15.2	mg/L	50 mL	50 mL

Lab Sample ID: MB 280-556700/3-A

Analysis Date: Nov 09, 2021 10:11

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-155048-E-7-A

Analysis Date: Nov 09, 2021 10:11

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-155048-E-7-B MS

Analysis Date: Nov 09, 2021 10:11

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	16.8	mg/L	50 mL	50 mL

Lab Sample ID: 280-155048-E-7-C MSD

Analysis Date: Nov 09, 2021 10:11

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	15.2	mg/L	50 mL	50 mL

## Sulfide by Titration

Analyst:	JM	SOP Information:	
Date:	11/9/2021	Number:	91
Titration Solutions		Calibration Information	
Solution 1:	Iodine	Source/Ver-Lot#:	INT_0195
TALS ID	Iod_00271	Prep Date:	7/23/2021
Normality:	0.025	Made By:	JM
Solution 2:	sodium thiosulfate	Concentration:	936
TALS ID	Na Thio_00174	Expiration Date:	11/8/2021
Normality:	0.025		
	Starch Indicator		
TALS ID	Starch IND_00066		

	CAL Volume	Buret	Buret	mL	Final	Conc
		Start	End	Iodine	mL	mg/L
CAL	5	0.00	8.30	20	8.30	936.000
CAL	5	8.30	16.60	20	8.30	936.000

ICV Information						
Source/Ver-Lot#:	INT_0190					
Prep Date:	7/23/2021					
Made By:	JM					
Concentration:	1008					
Expiration Date:	11/8/2021					

	CAL Volume	Buret	Buret	mL	Final	Conc
		Start	End	Iodine	mL	mg/L
ICV	5	0.00	7.30	20	7.30	1016.000
ICV	5	7.30	14.80	20	7.50	1000.000

# TALS Raw Data Report

Job Number: 280-155048-1  
 LIMS Batch: 556715  
 Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-556700/1-A** Inj Date: 11/9/2021 10:11:00AM 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	79	44	110	
Sulfide as H2S		17 mg/L	mg/L				

RS# 2 Lab ID: **LCSD 280-556700/2-A** Inj Date: 11/9/2021 10:11:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		15.2 mg/L	mg/L	75	44	110	5
Sulfide as H2S		16.15 mg/L	mg/L				20

RS# 3 Lab ID: **MB 280-556700/3-A** Inj Date: 11/9/2021 10:11:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 4 Lab ID: **280-155048-E-7-A** Inj Date: 11/9/2021 10:11:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 5 Lab ID: **280-155048-E-7-B MS** Inj Date: 11/9/2021 10:11:00AM 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	83	44	110	
Sulfide as H2S		17.85 mg/L	mg/L				

RS# 6 Lab ID: **280-155048-E-7-C MSD** Inj Date: 11/9/2021 10:11:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		15.2 mg/L	mg/L	75	44	110	10
Sulfide as H2S		16.15 mg/L	mg/L				20

# TALS Raw Data Report

Job Number: 280-155070-1  
 LIMS Batch: 556715  
 Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-556700/1-A** Inj Date: 11/9/2021 10:11:00AM 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	79	44	110	
Sulfide as H2S		17 mg/L	mg/L				

RS# 2 Lab ID: **LCSD 280-556700/2-A** Inj Date: 11/9/2021 10:11:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		15.2 mg/L	mg/L	75	44	110	5
Sulfide as H2S		16.15 mg/L	mg/L				20

RS# 3 Lab ID: **MB 280-556700/3-A** Inj Date: 11/9/2021 10:11:00AM 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: **280-155048-E-7-A** Inj Date: 11/9/2021 10:11:00AM 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# 5 Lab ID: **280-155048-E-7-B MS** Inj Date: 11/9/2021 10:11:00AM 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	83	44	110	
Sulfide as H2S		17.85 mg/L	mg/L				

RS# 6 Lab ID: **280-155048-E-7-C MSD** Inj Date: 11/9/2021 10:11:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		15.2 mg/L	mg/L	75	44	110	10
Sulfide as H2S		16.15 mg/L	mg/L				20

RS# 11 Lab ID: **280-155070-J-2-A** Inj Date: 11/9/2021 10:11:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		999999968 mg/L	mg/L				
Sulfide as H2S		999999966 mg/L	mg/L				

RS# 12 Lab ID: **280-155070-J-3-A** Inj Date: 11/9/2021 10:11:00AM 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: 280-155084-1  
 LIMS Batch: 556715  
 Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-556700/1-A** Inj Date: 11/9/2021 10:11:00AM 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	79	44	110	
Sulfide as H2S		17 mg/L	mg/L				

RS# 2 Lab ID: **LCSD 280-556700/2-A** Inj Date: 11/9/2021 10:11:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		15.2 mg/L	mg/L	75	44	110	5
Sulfide as H2S		16.15 mg/L	mg/L				20

RS# 3 Lab ID: **MB 280-556700/3-A** Inj Date: 11/9/2021 10:11:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 4 Lab ID: **280-155048-E-7-A** Inj Date: 11/9/2021 10:11:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 5 Lab ID: **280-155048-E-7-B MS** Inj Date: 11/9/2021 10:11:00AM 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	83	44	110	
Sulfide as H2S		17.85 mg/L	mg/L				

RS# 6 Lab ID: **280-155048-E-7-C MSD** Inj Date: 11/9/2021 10:11:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		15.2 mg/L	mg/L	75	44	110	10
Sulfide as H2S		16.15 mg/L	mg/L				20

RS# 13 Lab ID: **280-155084-C-5-A** Inj Date: 11/9/2021 10:11:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.8 mg/L	0.80 J mg/L				
Sulfide as H2S		0.85 mg/L	0.85 J mg/L				

RS# 14 Lab ID: **280-155084-C-6-A** Inj Date: 11/9/2021 10:11:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 15 Lab ID: **280-155084-C-7-A** Inj Date: 11/9/2021 10:11:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		999999968 mg/L	0.80 J mg/L				
Sulfide as H2S		999999966 mg/L	0.85 J mg/L				

RS# 16 Lab ID: **280-155084-C-8-A** Inj Date: 11/9/2021 10:11:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		4.8 mg/L	mg/L				
Sulfide as H2S		5.1 mg/L	mg/L				

# TALS Raw Data Report

Job Number: 280-155127-1  
 LIMS Batch: 556715  
 Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-556700/1-A** Inj Date: 11/9/2021 10:11:00AM 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	79	44	110	
Sulfide as H2S		17 mg/L	mg/L				

RS# 2 Lab ID: **LCSD 280-556700/2-A** Inj Date: 11/9/2021 10:11:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		15.2 mg/L	mg/L	75	44	110	5
Sulfide as H2S		16.15 mg/L	mg/L				20

RS# 3 Lab ID: **MB 280-556700/3-A** Inj Date: 11/9/2021 10:11:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	0.79 U mg/L				
Sulfide as H2S		0 mg/L	0.84 U mg/L				

RS# 4 Lab ID: **280-155048-E-7-A** Inj Date: 11/9/2021 10:11:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	0.79 U mg/L				
Sulfide as H2S		0 mg/L	0.84 U mg/L				

RS# 5 Lab ID: **280-155048-E-7-B MS** Inj Date: 11/9/2021 10:11:00AM 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	83	44	110	
Sulfide as H2S		17.85 mg/L	mg/L				

RS# 6 Lab ID: **280-155048-E-7-C MSD** Inj Date: 11/9/2021 10:11:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		15.2 mg/L	mg/L	75	44	110	10
Sulfide as H2S		16.15 mg/L	mg/L				20

RS# 7 Lab ID: **280-155127-O-1-A** Inj Date: 11/9/2021 10:11:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	0.79 U mg/L				
Sulfide as H2S		0 mg/L	0.84 U mg/L				

# TALS Raw Data Report

Job Number: 280-155194-1  
 LIMS Batch: 556715  
 Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-556700/1-A** Inj Date: 11/9/2021 10:11:00AM 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	79	44	110	
Sulfide as H2S		17 mg/L	mg/L				

RS# 2 Lab ID: **LCSD 280-556700/2-A** Inj Date: 11/9/2021 10:11:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		15.2 mg/L	mg/L	75	44	110	5
Sulfide as H2S		16.15 mg/L	mg/L				20

RS# 3 Lab ID: **MB 280-556700/3-A** Inj Date: 11/9/2021 10:11:00AM 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: **280-155048-E-7-A** Inj Date: 11/9/2021 10:11:00AM 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# 5 Lab ID: **280-155048-E-7-B MS** Inj Date: 11/9/2021 10:11:00AM 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	83	44	110	
Sulfide as H2S		17.85 mg/L	mg/L				

RS# 6 Lab ID: **280-155048-E-7-C MSD** Inj Date: 11/9/2021 10:11:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		15.2 mg/L	mg/L	75	44	110	10
Sulfide as H2S		16.15 mg/L	mg/L				20

RS# 8 Lab ID: **280-155194-E-1-A** Inj Date: 11/9/2021 10:11:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.8 mg/L	0.80 J mg/L				
Sulfide as H2S		0.85 mg/L	0.85 J mg/L				

RS# 9 Lab ID: **280-155194-E-2-A** Inj Date: 11/9/2021 10:11:00AM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.8 mg/L	0.80 J mg/L				
Sulfide as H2S		0.85 mg/L	0.85 J mg/L				

RS# 10 Lab ID: **280-155194-E-3-A** Inj Date: 11/9/2021 10:11:00AM 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

**Titration Data Review Checklist**

LIMS Batch Number: <b>556715</b>	Method (circle one):			QC Type (circle):			
Analyst/1 <sup>st</sup> Reviewer: <b>VZB</b>	2310B	2320B	2340C	<b>Standard</b>	DoD	QAPP	Other
Date: <b>11/11/21</b>	4500 S2 F	4500 SO3 B	<b>9030B/9034</b>				
Matrix (circle): <b>Water</b> Solid	Automated or Manual (circle one)			Instrument ID (circle one if applicable):			
				<b>AT2 AT3</b>			

Review Items	Yes	No	2 <sup>nd</sup> Rev	If No, why is data reportable?
<b>A. Sample Storage and Pretreatment</b>				
1. Is sample pH verified and documented prior to analysis? (if required)	Y		✓	
2. For samples requiring pH adjustment is the amount of acid/base used documented?	NA		—	If no, list details:
3. Are samples analyzed within the required hold time?	Y		✓	NCM:
4. Pre-treatment reagents used to remove interferences are documented.	NA		—	
<b>B. Calibration / Instrument</b>				
5. Was the normality of the titrant verified and found acceptable?	Y		✓	Comments:
6. For potentiometric titration, the pH meter is calibrated with 5 buffers bracketing range of samples and QC.	NA		—	Comments:
7. Calibration standards are analyzed at the beginning and end of the analytical sequence and after every 10 sample analyses. (samples/dilutions/reanalyses).	NA		—	Comments:
8. Calibrations standards (ICV/CCV) are within 90-110% recovery.	NA		—	
<b>C. Sample and Batch QC</b>				
9. Blanks are analyzed at the beginning, end and after every 10 sample analyses in the sequence.	Y		✓	
10. Results of blank analyses (MB, ICB, CCB) are <½ RL (<RL for alkalinity unless DoD)	Y		✓	<input type="checkbox"/> No analyte > ½ RL in associated samples <input type="checkbox"/> Sample results >10x blank
11. A standard from a second source (SRM, CRM, LCS) is included in the analytical sequence.	Y		✓	
12. The recovery of the 2 <sup>nd</sup> source material falls within 90-110% or manufacturer's limits.	Y		—	
13. Samples analyses are bracketing by acceptable CCV/CCBs.	NA		—	<input type="checkbox"/> No analyte > RL in associated samples <input type="checkbox"/> Sample results >10x blank <input type="checkbox"/> 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)	Y		✓	<input type="checkbox"/> Non-conformance (NCM) added <input type="checkbox"/> Sample results >4X spike conc.
15. Duplicate analyzed at required frequency and RPD within limits. (Required for 2310B, 2320B, 4500 SO3 B)	NA		✓	<input type="checkbox"/> Non-conformance (NCM) added <input type="checkbox"/> Sample results ND or <2X RL

Review Items	Yes	No	2 <sup>nd</sup> Rev	If No, why is data reportable?
16. Are all MS/MSD RPDs <50%? Note: Excessive RPDs (>50%) require evaluation, correction or explanation.	✓		✓	<input type="checkbox"/> Non-conformance (NCM) added
<b>D. Raw Data &amp; TALS Data Entry</b>				
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	✓		✓	
<b>E. Final Report and NCMs (2<sup>nd</sup> level review only)</b>				
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: JM performed 11/09/21

2<sup>nd</sup> Reviewer:



Review Date:

11-11-21

# General Chemistry Raw Data Report

Job ID: 280-155048-1

Batch: 556751

Analyst Initials: JJM

Method: 9034

Instrument: No Equipment Used for this Test

Lab Sample ID: LCS 280-556749/1-A

Analysis Date: Nov 09, 2021 12:10

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	16.4	mg/L	50 mL	50 mL

Lab Sample ID: MB 280-556749/2-A

Analysis Date: Nov 09, 2021 12:10

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0.4	mg/L	50 mL	50 mL

Lab Sample ID: 280-155048-E-2-A

Analysis Date: Nov 09, 2021 12:10

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0.8	mg/L	50 mL	50 mL

Lab Sample ID: 280-155048-E-3-A

Analysis Date: Nov 09, 2021 12:10

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-155048-E-5-A

Analysis Date: Nov 09, 2021 12:10

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-155048-E-6-A

Analysis Date: Nov 09, 2021 12:10

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0.8	mg/L	50 mL	50 mL

## Sulfide by Titration

Analyst:	JM	SOP Information:	
Date:	11/9/2021	Number:	91
Titration Solutions		Calibration Information	
Solution 1:	Iodine	Source/Ver-Lot#:	INT_0195
TALS ID	Iod_00271	Prep Date:	7/23/2021
Normality:	0.025	Made By:	JM
Solution 2:	sodium thiosulfate	Concentration:	936
TALS ID	Na Thio_00174	Expiration Date:	11/8/2021
Normality:	0.025		
	Starch Indicator		
TALS ID	Starch IND_00066		

	CAL Volume	Buret	Buret	mL	Final	Conc
		Start	End	Iodine	mL	mg/L
CAL	5	0.00	8.30	20	8.30	936.000
CAL	5	8.30	16.60	20	8.30	936.000

ICV Information						
Source/Ver-Lot#:	INT_0190					
Prep Date:	7/23/2021					
Made By:	JM					
Concentration:	1008					
Expiration Date:	11/8/2021					

	CAL Volume	Buret	Buret	mL	Final	Conc
		Start	End	Iodine	mL	mg/L
ICV	5	0.00	7.30	20	7.30	1016.000
ICV	5	7.30	14.80	20	7.50	1000.000

# TALS Raw Data Report

Job Number: 280-155048-1  
 LIMS Batch: 556751  
 Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-556749/1-A** Inj Date: 11/9/2021 12:10:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16.4 mg/L	mg/L	81	44	110	
Sulfide as H <sub>2</sub> S		17.425 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-556749/2-A** Inj Date: 11/9/2021 12:10:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.4 mg/L	1.9 U mg/L				
Sulfide as H <sub>2</sub> S		0.425 mg/L	2.0 U mg/L				

RS# 3 Lab ID: **280-155138-E-10-A** Inj Date: 11/9/2021 12:10:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.8 mg/L	0.80 J mg/L				
Sulfide as H <sub>2</sub> S		0.85 mg/L	0.85 J mg/L				

RS# 4 Lab ID: **280-155138-E-10-B MS** Inj Date: 11/9/2021 12:10:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		15.6 mg/L	mg/L	73	44	110	
Sulfide as H <sub>2</sub> S		16.575 mg/L	mg/L				

RS# 5 Lab ID: **280-155138-E-10-C MSD** Inj Date: 11/9/2021 12:10:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		15.6 mg/L	mg/L	73	44	110	0
Sulfide as H <sub>2</sub> S		16.575 mg/L	mg/L				20

RS# 6 Lab ID: **280-155048-E-2-A** Inj Date: 11/9/2021 12:10:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.8 mg/L	0.80 J mg/L				
Sulfide as H <sub>2</sub> S		0.85 mg/L	0.85 J mg/L				

RS# 7 Lab ID: **280-155048-E-3-A** Inj Date: 11/9/2021 12:10:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H <sub>2</sub> S		0 mg/L	2.0 U mg/L				

RS# 8 Lab ID: **280-155048-E-5-A** Inj Date: 11/9/2021 12:10:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H <sub>2</sub> S		0 mg/L	2.0 U mg/L				

RS# 9 Lab ID: **280-155048-E-6-A** Inj Date: 11/9/2021 12:10:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.8 mg/L	0.80 J mg/L				
Sulfide as H <sub>2</sub> S		0.85 mg/L	0.85 J mg/L				

# TALS Raw Data Report

Job Number: 280-155084-1  
 LIMS Batch: 556751  
 Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-556749/1-A** Inj Date: 11/9/2021 12:10:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16.4 mg/L	mg/L	81	44	110	
Sulfide as H2S		17.425 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-556749/2-A** Inj Date: 11/9/2021 12:10:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.4 mg/L	1.9 U mg/L				
Sulfide as H2S		0.425 mg/L	2.0 U mg/L				

RS# 3 Lab ID: **280-155138-E-10-A** Inj Date: 11/9/2021 12:10:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.8 mg/L	0.80 J mg/L				
Sulfide as H2S		0.85 mg/L	0.85 J mg/L				

RS# 4 Lab ID: **280-155138-E-10-B MS** Inj Date: 11/9/2021 12:10:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		15.6 mg/L	mg/L	73	44	110	
Sulfide as H2S		16.575 mg/L	mg/L				

RS# 5 Lab ID: **280-155138-E-10-C MSD** Inj Date: 11/9/2021 12:10:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		15.6 mg/L	mg/L	73	44	110	0
Sulfide as H2S		16.575 mg/L	mg/L				20

RS# 16 Lab ID: **280-155084-C-9-A** Inj Date: 11/9/2021 12:10:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

# TALS Raw Data Report

Job Number: 280-155138-1  
 LIMS Batch: 556751  
 Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-556749/1-A** Inj Date: 11/9/2021 12:10:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16.4 mg/L	mg/L	81	44	110	
Sulfide as H2S		17.425 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-556749/2-A** Inj Date: 11/9/2021 12:10:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.4 mg/L	1.9 U mg/L				
Sulfide as H2S		0.425 mg/L	2.0 U mg/L				

RS# 3 Lab ID: **280-155138-E-10-A** Inj Date: 11/9/2021 12:10:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.8 mg/L	0.80 J mg/L				
Sulfide as H2S		0.85 mg/L	0.85 J mg/L				

RS# 4 Lab ID: **280-155138-E-10-B MS** Inj Date: 11/9/2021 12:10:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		15.6 mg/L	mg/L	73	44	110	
Sulfide as H2S		16.575 mg/L	mg/L				

RS# 5 Lab ID: **280-155138-E-10-C MSD** Inj Date: 11/9/2021 12:10:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		15.6 mg/L	mg/L	73	44	110	0
Sulfide as H2S		16.575 mg/L	mg/L				20

RS# 10 Lab ID: **280-155138-E-1-A** Inj Date: 11/9/2021 12:10:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 11 Lab ID: **280-155138-E-2-A** Inj Date: 11/9/2021 12:10:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 12 Lab ID: **280-155138-E-3-A** Inj Date: 11/9/2021 12:10:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		999999968 mg/L	0.80 J mg/L				
Sulfide as H2S		999999966 mg/L	0.85 J mg/L				

RS# 13 Lab ID: **280-155138-E-4-A** Inj Date: 11/9/2021 12:10:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 14 Lab ID: **280-155138-E-5-A** Inj Date: 11/9/2021 12:10:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

# TALS Raw Data Report

RS# 15 Lab ID: **280-155138-E-8-A**

Inj Date: 11/9/2021 12:10:00PM

Dil: 1.0

Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.8 mg/L	0.80 J mg/L				
Sulfide as H <sub>2</sub> S		0.85 mg/L	0.85 J mg/L				

# TALS Raw Data Report

Job Number: 280-155225-1  
 LIMS Batch: 556751  
 Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-556749/1-A** Inj Date: 11/9/2021 12:10:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16.4 mg/L	mg/L	81	44	110	
Sulfide as H <sub>2</sub> S		17.425 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-556749/2-A** Inj Date: 11/9/2021 12:10:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.4 mg/L	1.9 U mg/L				
Sulfide as H <sub>2</sub> S		0.425 mg/L	2.0 U mg/L				

RS# 3 Lab ID: **280-155138-E-10-A** Inj Date: 11/9/2021 12:10:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.8 mg/L	0.80 J mg/L				
Sulfide as H <sub>2</sub> S		0.85 mg/L	0.85 J mg/L				

RS# 4 Lab ID: **280-155138-E-10-B MS** Inj Date: 11/9/2021 12:10:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		15.6 mg/L	mg/L	73	44	110	
Sulfide as H <sub>2</sub> S		16.575 mg/L	mg/L				

RS# 5 Lab ID: **280-155138-E-10-C MSD** Inj Date: 11/9/2021 12:10:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		15.6 mg/L	mg/L	73	44	110	0
Sulfide as H <sub>2</sub> S		16.575 mg/L	mg/L				20

RS# 17 Lab ID: **280-155225-E-4-A** Inj Date: 11/9/2021 12:10:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.8 mg/L	0.80 J mg/L				
Sulfide as H <sub>2</sub> S		0.85 mg/L	0.85 J mg/L				

# TALS Raw Data Report

**Titration Data Review Checklist**

LIMS Batch Number: 55675	Method (circle one):			QC Type (circle):		
Analyst/1 <sup>st</sup> Reviewer: V2B	2310B	2320B	2340C	Standard	DoD	QAPP
Date: 11/11/21	4500 S2 F 4500 SO3 B 9030B/9034			Other		
Matrix (circle): Water Solid	Automated or Manual (circle one)			Instrument ID (circle one if applicable):		
				AT2	AT3	

Review Items	Yes	No	2 <sup>nd</sup> Rev	If No, why is data reportable?
<b>A. Sample Storage and Pretreatment</b>				
1. Is sample pH verified and documented prior to analysis? (if required)	Y		/	
2. For samples requiring pH adjustment is the amount of acid/base used documented?	NA		-	If no, list details:
3. Are samples analyzed within the required hold time?	Y		/	NCM:
4. Pre-treatment reagents used to remove interferences are documented.	NA		-	
<b>B. Calibration / Instrument</b>				
5. Was the normality of the titrant verified and found acceptable?	Y		/	Comments:
6. For potentiometric titration, the pH meter is calibrated with 5 buffers bracketing range of samples and QC.	NA		-	Comments:
7. Calibration standards are analyzed at the beginning and end of the analytical sequence and after every 10 sample analyses. (samples/dilutions/reanalyses).	NA		-	Comments:
8. Calibrations standards (ICV/CCV) are within 90-110% recovery.	NA		-	
<b>C. Sample and Batch QC</b>				
9. Blanks are analyzed at the beginning, end and after every 10 sample analyses in the sequence.	Y		/	
10. Results of blank analyses (MB, ICB, CCB) are <½ RL (<RL for alkalinity unless DoD)	Y		/	<input type="checkbox"/> No analyte > ½ RL in associated samples <input type="checkbox"/> Sample results >10x blank
11. A standard from a second source (SRM, CRM, LCS) is included in the analytical sequence.	Y		/	
12. The recovery of the 2 <sup>nd</sup> source material falls within 90-110% or manufacturer's limits.	Y		/	
13. Samples analyses are bracketing by acceptable CCV/CCBs.	NA		-	<input type="checkbox"/> No analyte > RL in associated samples <input type="checkbox"/> Sample results >10x blank <input type="checkbox"/> 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)	Y		/	<input type="checkbox"/> Non-conformance (NCM) added <input type="checkbox"/> Sample results >4X spike conc.
15. Duplicate analyzed at required frequency and RPD within limits. (Required for 2310B, 2320B, 4500 SO3 B)	NA		-	<input type="checkbox"/> Non-conformance (NCM) added <input type="checkbox"/> Sample results ND or <2X RL

Review Items	Yes	No	2 <sup>nd</sup> Rev	If No, why is data reportable?
16. Are all MS/MSD RPDs <50%? Note: Excessive RPDs (>50%) require evaluation, correction or explanation.	✓		✓	<input type="checkbox"/> Non-conformance (NCM) added
<b>D. Raw Data &amp; TALS Data Entry</b>				
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	✓		✓	
<b>E. Final Report and NCMs (2<sup>nd</sup> level review only)</b>				
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: JM performed 1/09/21

2<sup>nd</sup> Reviewer:

Review Date: 1/11/21

# General Chemistry Raw Data Report

Job ID: 280-155048-1

Batch: 556789

Analyst Initials: JJM

Method: 9034

Instrument: No Equipment Used for this Test

Lab Sample ID: LCS 280-556787/1-A

Analysis Date: Nov 09, 2021 14:38

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	16	mg/L	50 mL	50 mL

Lab Sample ID: MB 280-556787/2-A

Analysis Date: Nov 09, 2021 14:38

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-155048-E-1-A

Analysis Date: Nov 09, 2021 14:38

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	1.6	mg/L	50 mL	50 mL

## Sulfide by Titration

Analyst:	JM	SOP Information:
Date:	11/9/2021	Number: 91
<b>Titration Solutions</b>		<b>Calibration Information</b>
Solution 1:	Iodine	Source/Ver-Lot#: INT_0195
TALS ID	Iod_00271	Prep Date: 7/23/2021
Normality:	0.025	Made By: JM
Solution 2:	sodium thiosulfate	Concentration: 936
TALS ID	Na Thio_00174	Expiration Date: 11/8/2021
Normality:	0.025	
	Starch Indicator	
TALS ID	Starch IND_00066	

	CAL Volume	Buret	Buret	mL	Final	Conc
		Start	End	Iodine	mL	mg/L
CAL	5	0.00	8.30	20	8.30	936.000
CAL	5	8.30	16.60	20	8.30	936.000

ICV Information						
Source/Ver-Lot#:	INT_0190					
Prep Date:	7/23/2021					
Made By:	JM					
Concentration:	1008					
Expiration Date:	11/8/2021					

	CAL Volume	Buret	Buret	mL	Final	Conc
		Start	End	Iodine	mL	mg/L
ICV	5	0.00	7.30	20	7.30	1016.000
ICV	5	7.30	14.80	20	7.50	1000.000

# TALS Raw Data Report

Job Number: 280-155048-1  
 LIMS Batch: 556789  
 Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-556787/1-A** Inj Date: 11/9/2021 2:38:00PM 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	79	44	110	
Sulfide as H <sub>2</sub> S		17 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-556787/2-A** Inj Date: 11/9/2021 2:38:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H <sub>2</sub> S		0 mg/L	2.0 U mg/L				

RS# 3 Lab ID: **280-155138-E-9-A** Inj Date: 11/9/2021 2:38:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H <sub>2</sub> S		0 mg/L	2.0 U mg/L				

RS# 4 Lab ID: **280-155138-E-9-B MS** Inj Date: 11/9/2021 2:38:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		13.6 mg/L	mg/L	67	44	110	
Sulfide as H <sub>2</sub> S		14.45 mg/L	mg/L				

RS# 5 Lab ID: **280-155138-E-9-C MSD** Inj Date: 11/9/2021 2:38:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		13.6 mg/L	mg/L	67	44	110	0
Sulfide as H <sub>2</sub> S		14.45 mg/L	mg/L				20

RS# 8 Lab ID: **280-155048-E-1-A** Inj Date: 11/9/2021 2:38:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		1.6 mg/L	1.6 J mg/L				
Sulfide as H <sub>2</sub> S		1.7 mg/L	1.7 J mg/L				

# TALS Raw Data Report

Job Number: 280-155138-1  
 LIMS Batch: 556789  
 Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-556787/1-A** Inj Date: 11/9/2021 2:38:00PM 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	79	44	110	
Sulfide as H2S		17 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-556787/2-A** Inj Date: 11/9/2021 2:38:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 3 Lab ID: **280-155138-E-9-A** Inj Date: 11/9/2021 2:38:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 4 Lab ID: **280-155138-E-9-B MS** Inj Date: 11/9/2021 2:38:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		13.6 mg/L	mg/L	67	44	110	
Sulfide as H2S		14.45 mg/L	mg/L				

RS# 5 Lab ID: **280-155138-E-9-C MSD** Inj Date: 11/9/2021 2:38:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		13.6 mg/L	mg/L	67	44	110	0
Sulfide as H2S		14.45 mg/L	mg/L				20

RS# 6 Lab ID: **280-155138-E-6-A** Inj Date: 11/9/2021 2:38:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		1.6 mg/L	1.6 J mg/L				
Sulfide as H2S		1.7 mg/L	1.7 J mg/L				

RS# 7 Lab ID: **280-155138-E-7-A** Inj Date: 11/9/2021 2:38:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.8 mg/L	0.80 J mg/L				
Sulfide as H2S		0.85 mg/L	0.85 J mg/L				

# TALS Raw Data Report

Job Number: 280-155224-1  
 LIMS Batch: 556789  
 Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-556787/1-A** Inj Date: 11/9/2021 2:38:00PM 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	79	44	110	
Sulfide as H2S		17 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-556787/2-A** Inj Date: 11/9/2021 2:38:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	mg/L				
Sulfide as H2S		0 mg/L	mg/L				

RS# 3 Lab ID: **280-155138-E-9-A** Inj Date: 11/9/2021 2:38:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	mg/L				
Sulfide as H2S		0 mg/L	mg/L				

RS# 4 Lab ID: **280-155138-E-9-B MS** Inj Date: 11/9/2021 2:38:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		13.6 mg/L	mg/L	67	44	110	
Sulfide as H2S		14.45 mg/L	mg/L				

RS# 5 Lab ID: **280-155138-E-9-C MSD** Inj Date: 11/9/2021 2:38:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		13.6 mg/L	mg/L	67	44	110	0
Sulfide as H2S		14.45 mg/L	mg/L				20

RS# 9 Lab ID: **280-155224-K-1-A** Inj Date: 11/9/2021 2:38:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	mg/L				
Sulfide as H2S		0 mg/L	mg/L				

# TALS Raw Data Report

**Titration Data Review Checklist**

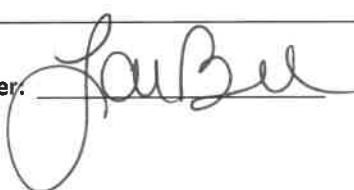
LIMS Batch Number: <u>556789</u>	Method (circle one):			QC Type (circle):			
Analyst/1 <sup>st</sup> Reviewer: <u>WEB</u>	2310B	2320B	2340C	<u>Standard</u>	DoD	QAPP	Other
Date: <u>11/11/21</u>	4500 S2 F 4500 SO3 B <u>9030B/9034</u>						
Matrix (circle): <u>Water</u> Solid	Automated or Manual (circle one)			Instrument ID (circle one if applicable): <u>AT2 AT3</u>			

Review Items	Yes	No	2 <sup>nd</sup> Rev	If No, why is data reportable?
<b>A. Sample Storage and Pretreatment</b>				
1. Is sample pH verified and documented prior to analysis? (if required)	<u>Y</u>		<u>/</u>	
2. For samples requiring pH adjustment is the amount of acid/base used documented?	<u>NA</u>		<u>-</u>	If no, list details:
3. Are samples analyzed within the required hold time?	<u>Y</u>		<u>/</u>	NCM:
4. Pre-treatment reagents used to remove interferences are documented.	<u>NA</u>		<u>-</u>	
<b>B. Calibration / Instrument</b>				
5. Was the normality of the titrant verified and found acceptable?	<u>Y</u>		<u>/</u>	Comments:
6. For potentiometric titration, the pH meter is calibrated with 5 buffers bracketing range of samples and QC.	<u>NA</u>		<u>-</u>	Comments:
7. Calibration standards are analyzed at the beginning and end of the analytical sequence and after every 10 sample analyses. (samples/dilutions/reanalyses).	<u>NA</u>		<u>-</u>	Comments:
8. Calibrations standards (ICV/CCV) are within 90-110% recovery.	<u>NA</u>		<u>-</u>	
<b>C. Sample and Batch QC</b>				
9. Blanks are analyzed at the beginning, end and after every 10 sample analyses in the sequence.	<u>Y</u>		<u>/</u>	
10. Results of blank analyses (MB, ICB, CCB) are <½ RL (<RL for alkalinity unless DoD)	<u>Y</u>		<u>/</u>	<input type="checkbox"/> No analyte > ½ RL in associated samples <input type="checkbox"/> Sample results >10x blank
11. A standard from a second source (SRM, CRM, LCS) is included in the analytical sequence.	<u>Y</u>		<u>/</u>	
12. The recovery of the 2 <sup>nd</sup> source material falls within 90-110% or manufacturer's limits.	<u>Y</u>		<u>/</u>	
13. Samples analyses are bracketing by acceptable CCV/CCBs.	<u>NA</u>		<u>-</u>	<input type="checkbox"/> No analyte > RL in associated samples <input type="checkbox"/> Sample results >10x blank <input type="checkbox"/> 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)	<u>Y</u>		<u>/</u>	<input type="checkbox"/> Non-conformance (NCM) added <input type="checkbox"/> Sample results >4X spike conc.
15. Duplicate analyzed at required frequency and RPD within limits. (Required for 2310B, 2320B, 4500 SO3 B)	<u>NA</u>		<u>-</u>	<input type="checkbox"/> Non-conformance (NCM) added <input type="checkbox"/> Sample results ND or <2X RL

Review Items	Yes	No	2 <sup>nd</sup> Rev	If No, why is data reportable?
16. Are all MS/MSD RPDs <50%? Note: Excessive RPDs (>50%) require evaluation, correction or explanation.	/		/	<input type="checkbox"/> Non-conformance (NCM) added
<b>D. Raw Data &amp; TALS Data Entry</b>				
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	/		/	
<b>E. Final Report and NCMs (2<sup>nd</sup> level review only)</b>				
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: JM performed 11/09/21

2<sup>nd</sup> Reviewer:



Review Date:

11/11/21

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-16  
 Lims ID: STD1  
 Client ID:  
 Sample Type: IC Calib Level: 1  
 Inject. Date: 14-Nov-2021 16:43:00 ALS Bottle#: 0 Worklist Smp#: 2  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-0106492-002  
 Misc. Info.: 280-0106492-002  
 Operator ID: wetchemd Instrument ID: WC\_IonChrom10  
 Sublist: chrom-Anions\_IC10\*sub2  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Anions\_IC10.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 15-Nov-2021 15:00:09 Calib Date: 14-Nov-2021 17:53:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-180

Column 1 : Det: Info 2\_091554\_1  
 Process Host: CTX1639

First Level Reviewer: jindarac Date: 14-Nov-2021 17:20:28

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.767	2.767	0.000	6429023	0.2000	0.1493	Ma
2 Chloride	3.813	3.837	-0.024	12878743	1.00	1.01	Ma
3 Nitrite as N	4.462	4.433	0.029	6082884	NC	NC	
4 Bromide	5.523	5.465	0.058	998417	0.2000	0.2256	M
5 Nitrate as N	6.292	6.160	0.132	6150773	NC	NC	
6 Orthophosphate as P	7.737	7.698	0.039	5134364	NC	NC	M
7 Sulfate	8.800	8.743	0.057	9141707	1.00	1.05	M

### QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

a - User Assigned ID

### Reagents:

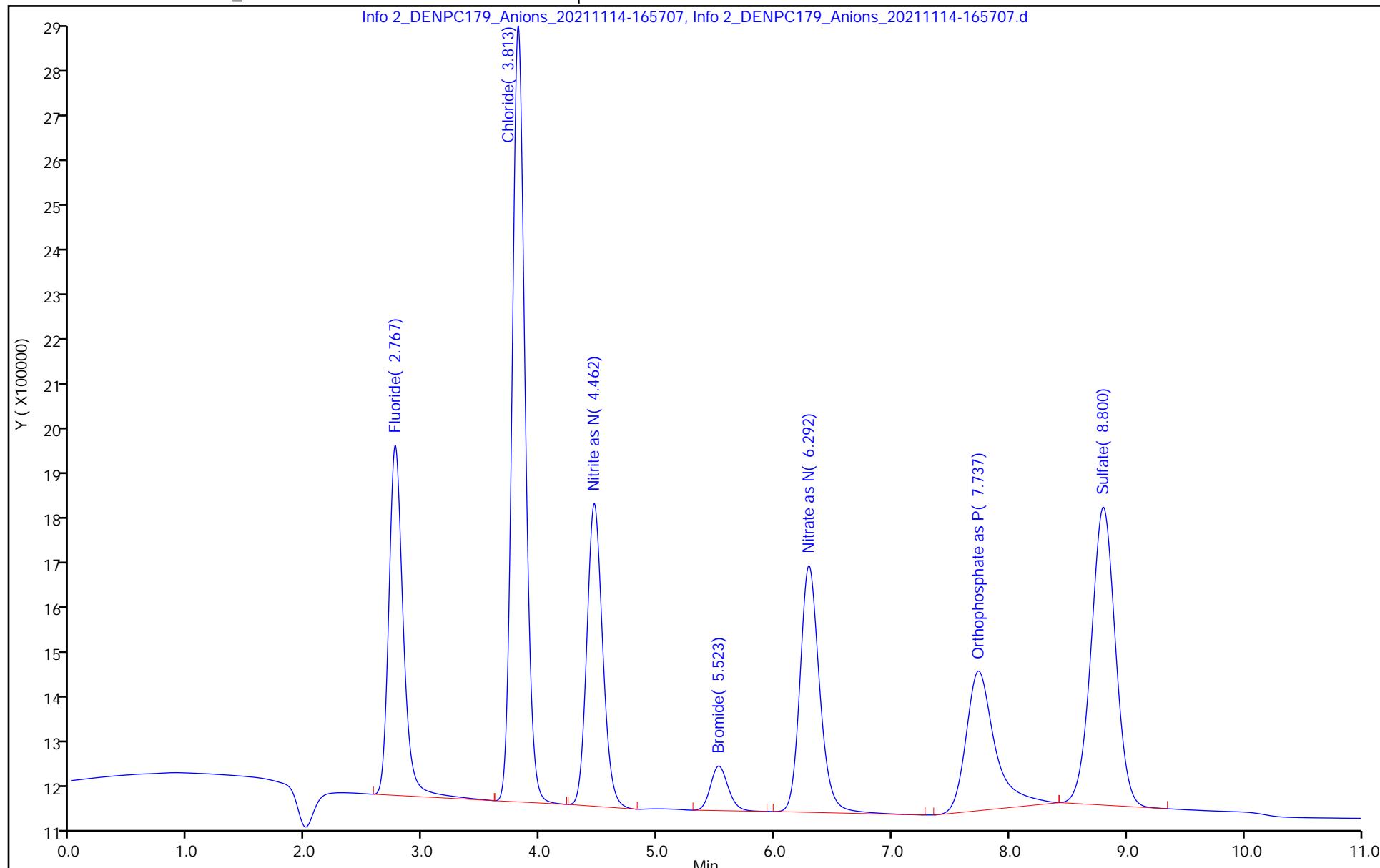
IC Cal low_00607	Amount Added: 0.04	Units: mL
IC CAL cl/so4_00393	Amount Added: 0.04	Units: mL

Report Date: 15-Nov-2021 15:00:10

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-165707.d  
Injection Date: 14-Nov-2021 16:43:00 Instrument ID: WC\_IonChrom10 Operator ID: wetchemd  
Lims ID: STD1 Worklist Smp#: 2  
Client ID:  
Injection Vol: 5.0 ul ALS Bottle#: 0  
Method: Anions\_IC10 Dil. Factor: 1.0000  
Limit Group: Wet - Anions 28D



## Eurofins TestAmerica, Denver

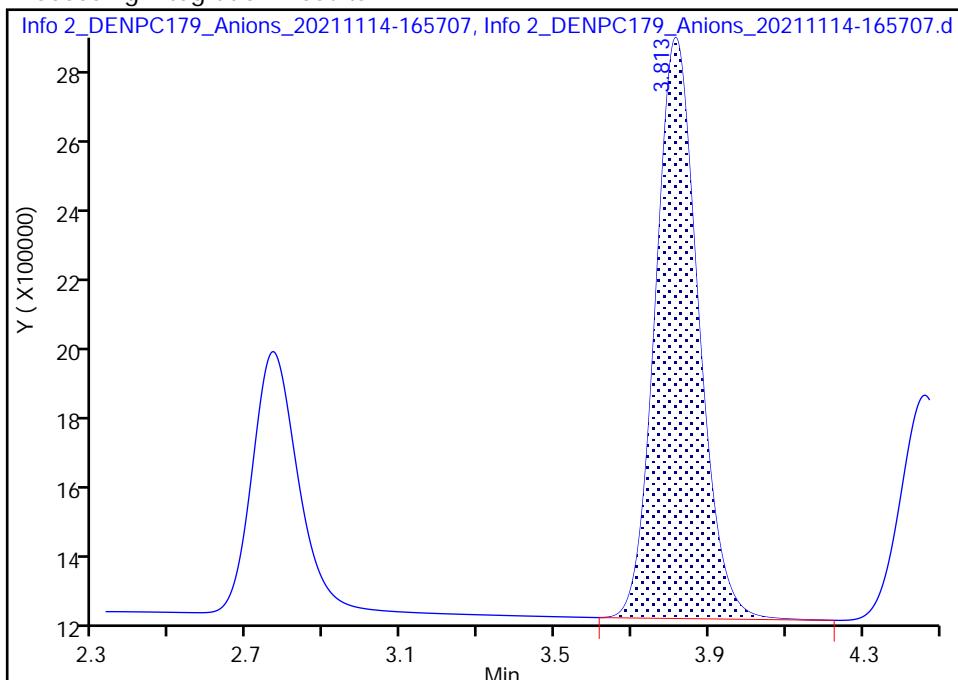
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-165707.d  
 Injection Date: 14-Nov-2021 16:43:00 Instrument ID: WC\_IonChrom10  
 Lims ID: STD1  
 Client ID:  
 Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 2  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC10 Limit Group: Wet - Anions 28D  
 Column: Detector Info 2\_091554\_1

## 1 Fluoride, CAS: 16984-48-8

Signal: 1

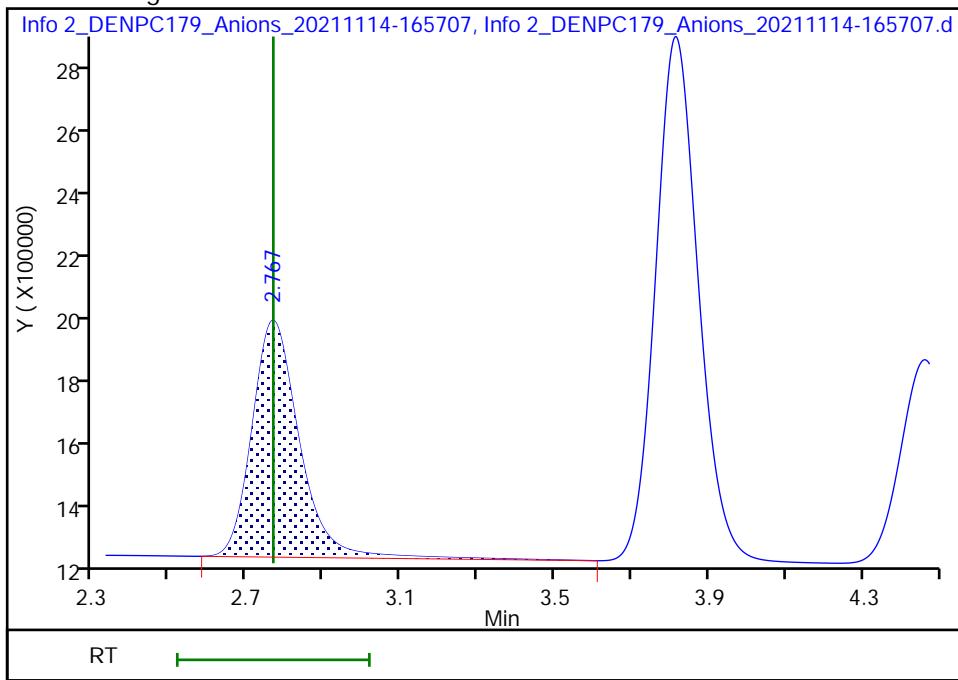
RT: 3.81  
 Area: 12878743  
 Amount: 0.200000  
 Amount Units: ug/ml

## Processing Integration Results



RT: 2.77  
 Area: 6429023  
 Amount: 0.149279  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: jindarac, 14-Nov-2021 17:21:23

Audit Action: Manually Integrated/Assigned Compound ID

Audit Reason:

## Eurofins TestAmerica, Denver

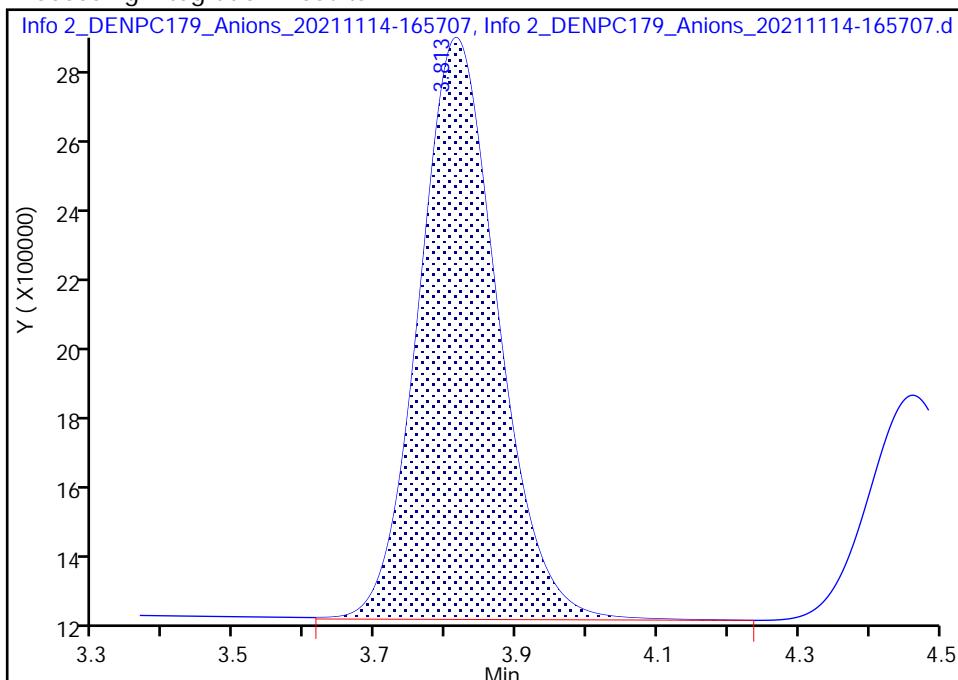
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-165707.d  
 Injection Date: 14-Nov-2021 16:43:00 Instrument ID: WC\_IonChrom10  
 Lims ID: STD1  
 Client ID:  
 Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 2  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC10 Limit Group: Wet - Anions 28D  
 Column: Detector Info 2\_091554\_1

## 2 Chloride, CAS: 16887-00-6

Signal: 1

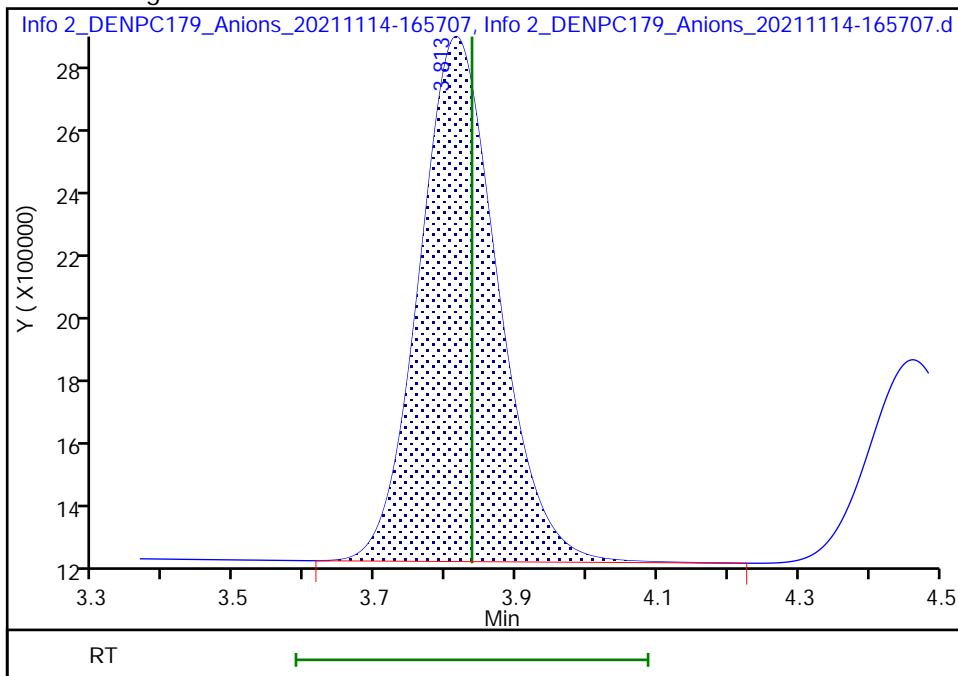
RT: 3.81  
 Area: 12950930  
 Amount: 0  
 Amount Units: ug/ml

## Processing Integration Results



RT: 3.81  
 Area: 12878743  
 Amount: 1.013598  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: jindarac, 14-Nov-2021 17:21:25

Audit Action: Manually Integrated/Assigned Compound ID

Audit Reason:

## Eurofins TestAmerica, Denver

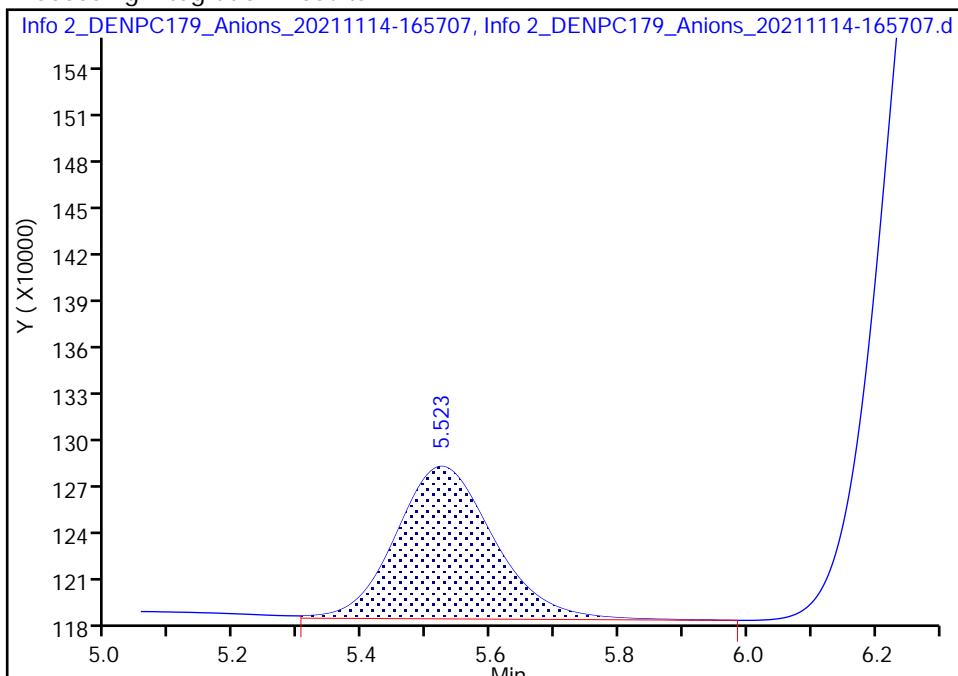
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-165707.d  
 Injection Date: 14-Nov-2021 16:43:00 Instrument ID: WC\_IonChrom10  
 Lims ID: STD1  
 Client ID:  
 Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 2  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC10 Limit Group: Wet - Anions 28D  
 Column: Detector Info 2\_091554\_1

**4 Bromide, CAS: 24959-67-9**

Signal: 1

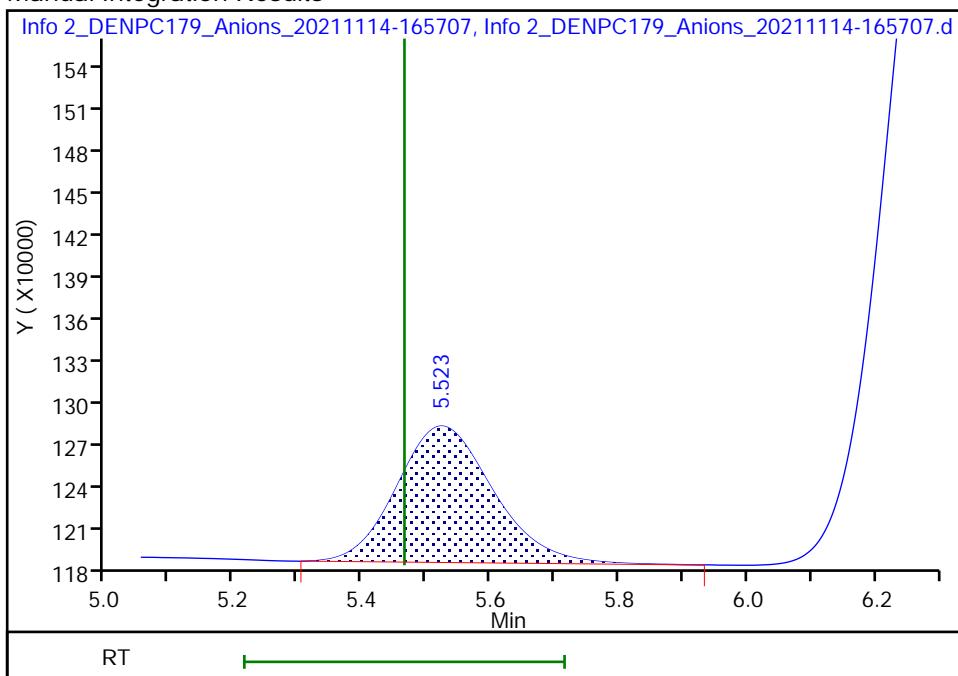
RT: 5.52  
 Area: 1027737  
 Amount: 0.200000  
 Amount Units: ug/ml

## Processing Integration Results



RT: 5.52  
 Area: 998417  
 Amount: 0.225619  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: jindarac, 14-Nov-2021 17:21:32

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

## Eurofins TestAmerica, Denver

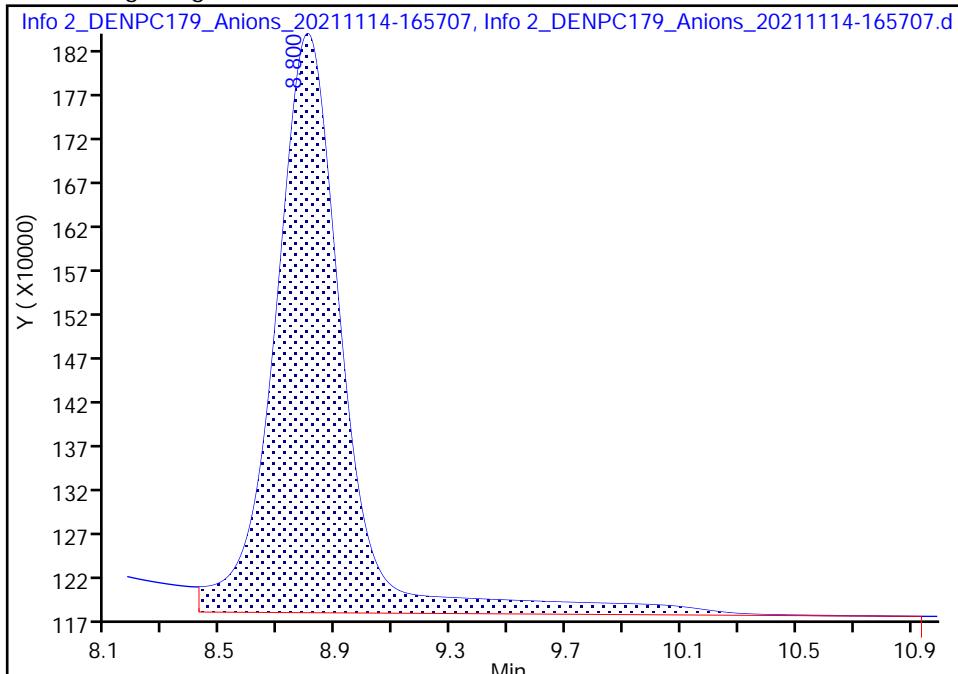
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-165707.d  
 Injection Date: 14-Nov-2021 16:43:00 Instrument ID: WC\_IonChrom10  
 Lims ID: STD1  
 Client ID:  
 Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 2  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC10 Limit Group: Wet - Anions 28D  
 Column: Detector Info 2\_091554\_1

## 7 Sulfate, CAS: 14808-79-8

Signal: 1

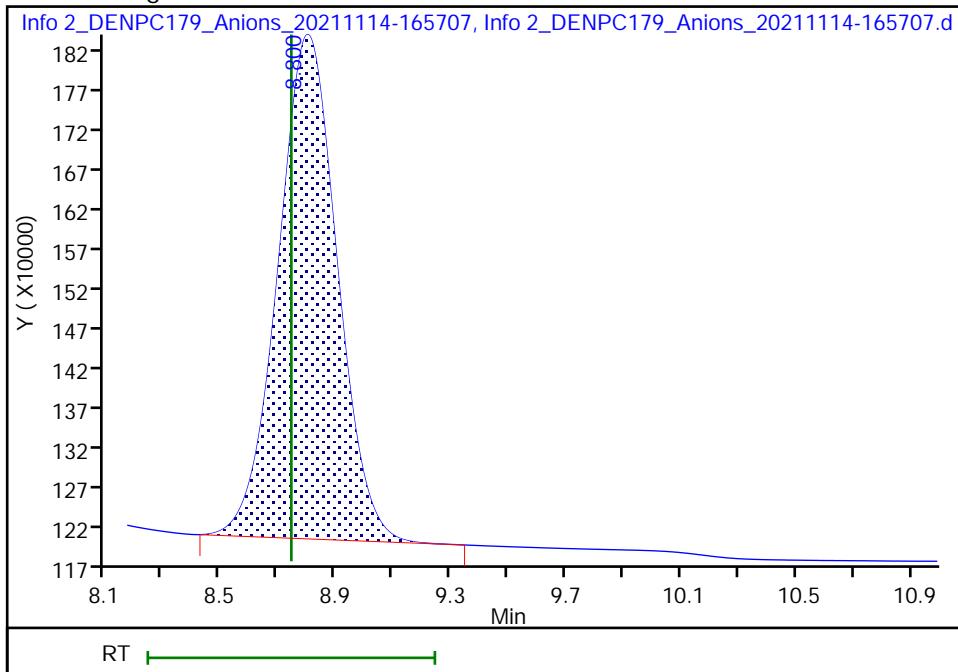
## Processing Integration Results

RT: 8.80  
 Area: 11117203  
 Amount: 1.000000  
 Amount Units: ug/ml



## Manual Integration Results

RT: 8.80  
 Area: 9141707  
 Amount: 1.049773  
 Amount Units: ug/ml



Reviewer: gonzalezsp, 15-Nov-2021 14:59:28

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-17  
Lims ID: STD2  
Client ID:  
Sample Type: IC Calib Level: 2  
Inject. Date: 14-Nov-2021 16:57:00 ALS Bottle#: 0 Worklist Smp#: 3  
Injection Vol: 5.0 ul Dil. Factor: 1.0000  
Sample Info: 280-0106492-003  
Misc. Info.: 280-0106492-003  
Operator ID: wetchemd Instrument ID: WC\_IonChrom10  
Sublist: chrom-Anions\_IC10\*sub2  
Method: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Anions\_IC10.m  
Limit Group: Wet - Anions 28D  
Last Update: 15-Nov-2021 15:00:10 Calib Date: 14-Nov-2021 17:53:00  
Integrator: Falcon  
Quant Method: External Standard Quant By: Initial Calibration  
Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-180  
Column 1 : Det: Info 2\_091554\_1  
Process Host: CTX1639

First Level Reviewer: jindarac Date: 14-Nov-2021 17:21:16

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.765	2.767	-0.002	18357697	0.5000	0.5423	Ma
2 Chloride	3.813	3.837	-0.024	35397665	2.50	2.50	M
3 Nitrite as N	4.462	4.433	0.029	16872480	NC	NC	M
4 Bromide	5.522	5.465	0.057	2718107	0.5000	0.4869	
5 Nitrate as N	6.278	6.160	0.118	16933607	NC	NC	
6 Orthophosphate as P	7.723	7.698	0.025	10164537	NC	NC	M
7 Sulfate	8.792	8.743	0.049	24918556	2.50	2.46	M

### QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

a - User Assigned ID

### Reagents:

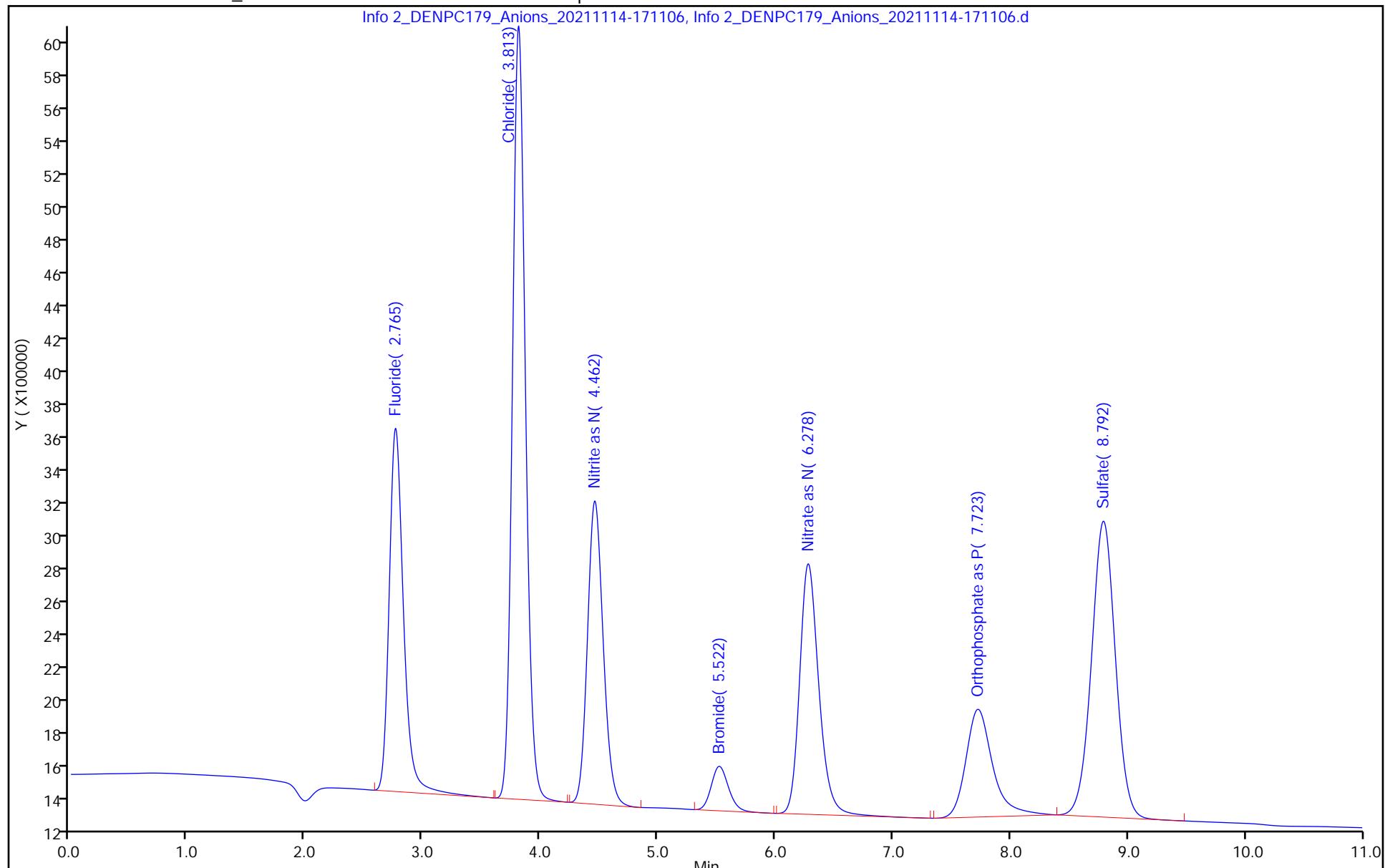
IC Cal low_00607	Amount Added: 0.10	Units: mL
IC CAL cl/so4_00393	Amount Added: 0.10	Units: mL

Report Date: 15-Nov-2021 15:00:11

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-171106.d  
Injection Date: 14-Nov-2021 16:57:00 Instrument ID: WC\_IonChrom10 Operator ID: wetchemd  
Lims ID: STD2 Worklist Smp#: 3  
Client ID:  
Injection Vol: 5.0 ul ALS Bottle#: 0  
Method: Anions\_IC10 Dil. Factor: 1.0000  
Limit Group: Wet - Anions 28D



## Eurofins TestAmerica, Denver

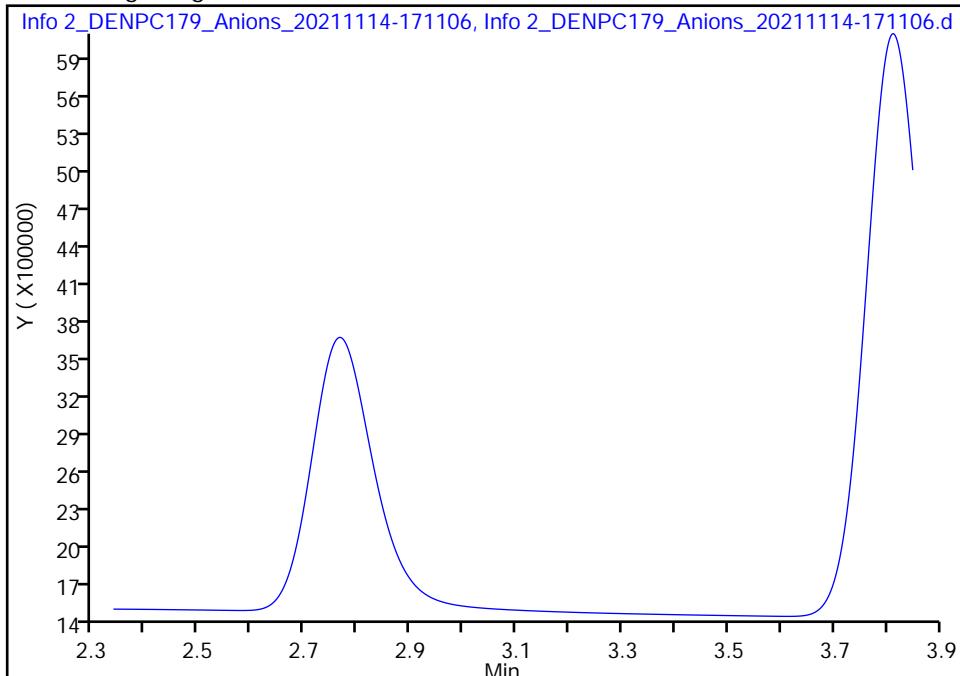
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-171106.d  
 Injection Date: 14-Nov-2021 16:57:00 Instrument ID: WC\_IonChrom10  
 Lims ID: STD2  
 Client ID:  
 Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 3  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC10 Limit Group: Wet - Anions 28D  
 Column: Detector Info 2\_091554\_1

## 1 Fluoride, CAS: 16984-48-8

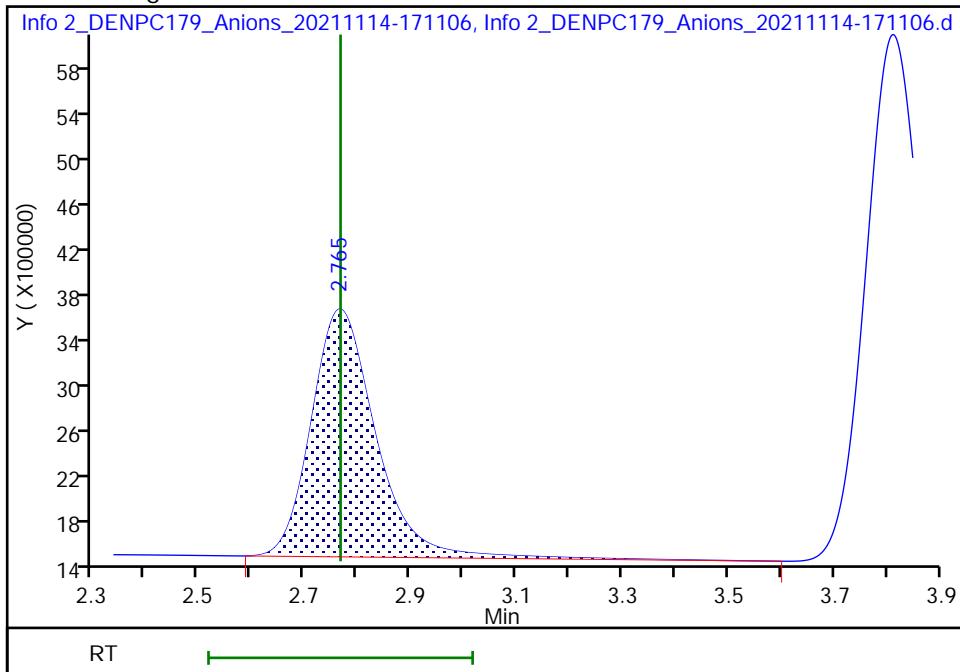
Signal: 1

## Processing Integration Results

Not Detected  
 Expected RT: 2.77



## Manual Integration Results



Reviewer: jindarac, 14-Nov-2021 17:20:44

Audit Action: Manually Integrated/Assigned Compound ID

Audit Reason: Peak not integrated

## Eurofins TestAmerica, Denver

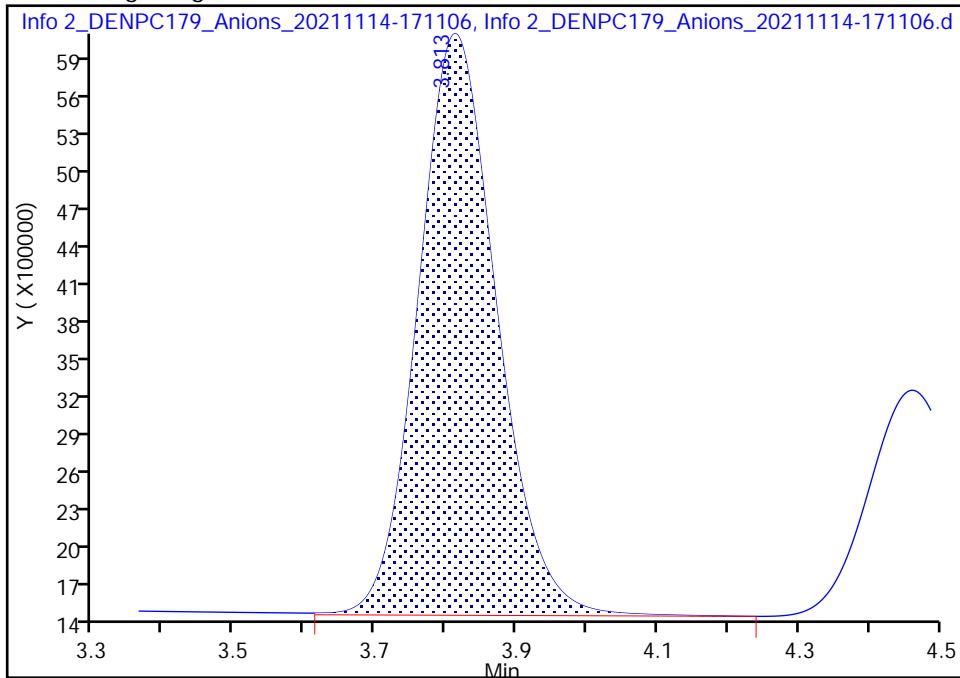
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-171106.d  
 Injection Date: 14-Nov-2021 16:57:00 Instrument ID: WC\_IonChrom10  
 Lims ID: STD2  
 Client ID:  
 Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 3  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC10 Limit Group: Wet - Anions 28D  
 Column: Detector Info 2\_091554\_1

## 2 Chloride, CAS: 16887-00-6

Signal: 1

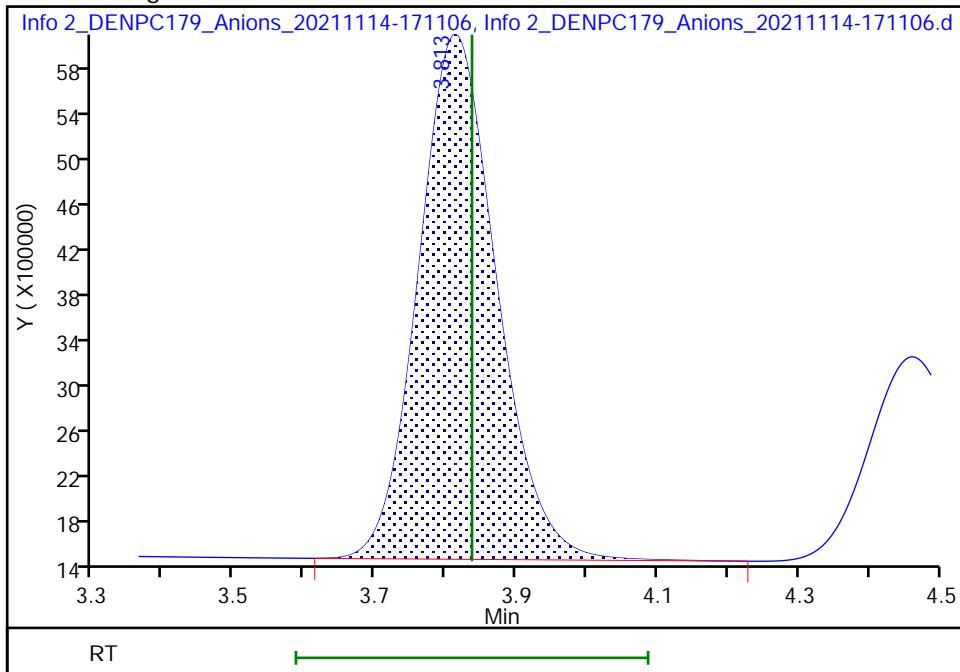
## Processing Integration Results

RT: 3.81  
 Area: 35636388  
 Amount: 0  
 Amount Units: ug/ml



## Manual Integration Results

RT: 3.81  
 Area: 35397665  
 Amount: 2.497876  
 Amount Units: ug/ml



Reviewer: jindarac, 14-Nov-2021 17:20:51

Audit Action: Manually Integrated

Audit Reason: Peak not integrated

## Eurofins TestAmerica, Denver

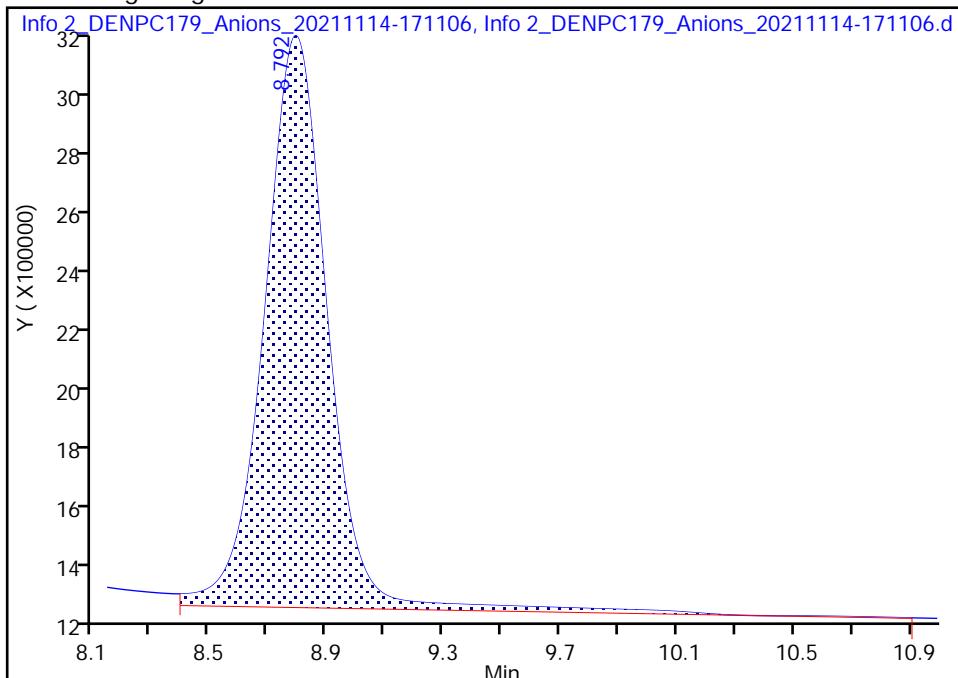
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-171106.d  
 Injection Date: 14-Nov-2021 16:57:00 Instrument ID: WC\_IonChrom10  
 Lims ID: STD2  
 Client ID:  
 Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 3  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC10 Limit Group: Wet - Anions 28D  
 Column: Detector Info 2\_091554\_1

## 7 Sulfate, CAS: 14808-79-8

Signal: 1

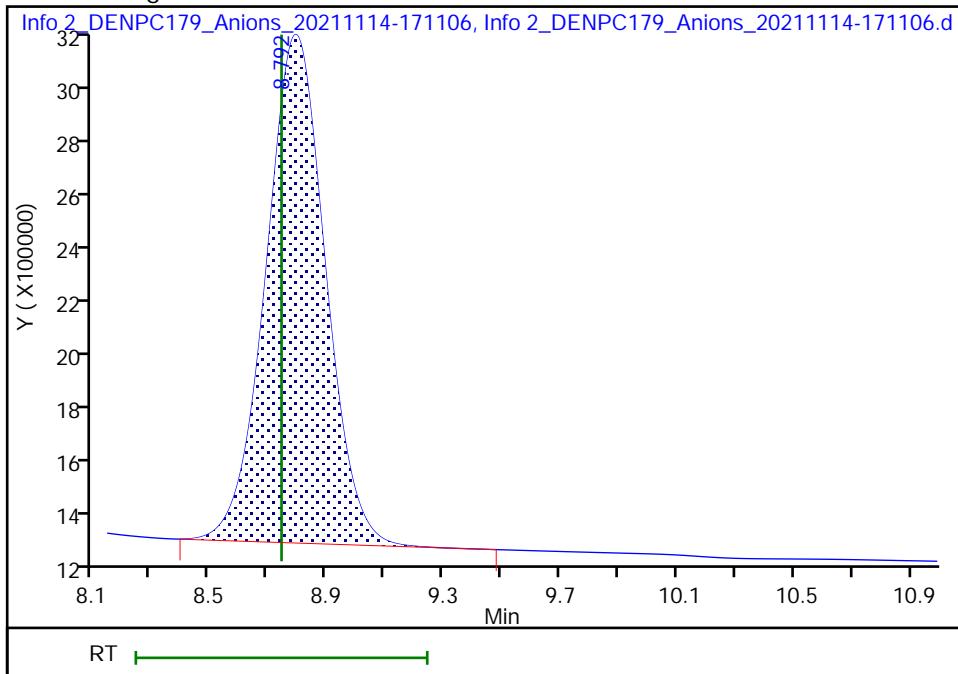
RT: 8.79  
 Area: 27249100  
 Amount: 2.500000  
 Amount Units: ug/ml

## Processing Integration Results



RT: 8.79  
 Area: 24918556  
 Amount: 2.455798  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: jindarac, 14-Nov-2021 17:21:13

Audit Action: Manually Integrated

Audit Reason: Peak not integrated

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-172  
 Lims ID: STD3  
 Client ID:  
 Sample Type: IC Calib Level: 3  
 Inject. Date: 14-Nov-2021 17:11:00 ALS Bottle#: 0 Worklist Smp#: 4  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-0106492-004  
 Misc. Info.: 280-0106492-004  
 Operator ID: wetchemd Instrument ID: WC\_IonChrom10  
 Sublist: chrom-Anions\_IC10\*sub2  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Anions\_IC10.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 15-Nov-2021 15:00:11 Calib Date: 14-Nov-2021 17:53:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-180  
 Column 1 : Det: Info 2\_091554\_1  
 Process Host: CTX1639

First Level Reviewer: jindarac Date: 14-Nov-2021 17:33:02

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.765	2.767	-0.002	36569889	1.00	1.14	Ma
2 Chloride	3.812	3.837	-0.025	72906043	5.00	4.97	M
3 Nitrite as N	4.458	4.433	0.025	35140921	NC	NC	M
4 Bromide	5.515	5.465	0.050	5592493	1.00	0.9237	
5 Nitrate as N	6.260	6.160	0.100	35371015	NC	NC	
6 Orthophosphate as P	7.713	7.698	0.015	17946003	NC	NC	M
7 Sulfate	8.785	8.743	0.042	51712422	5.00	4.84	M

### QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

a - User Assigned ID

### Reagents:

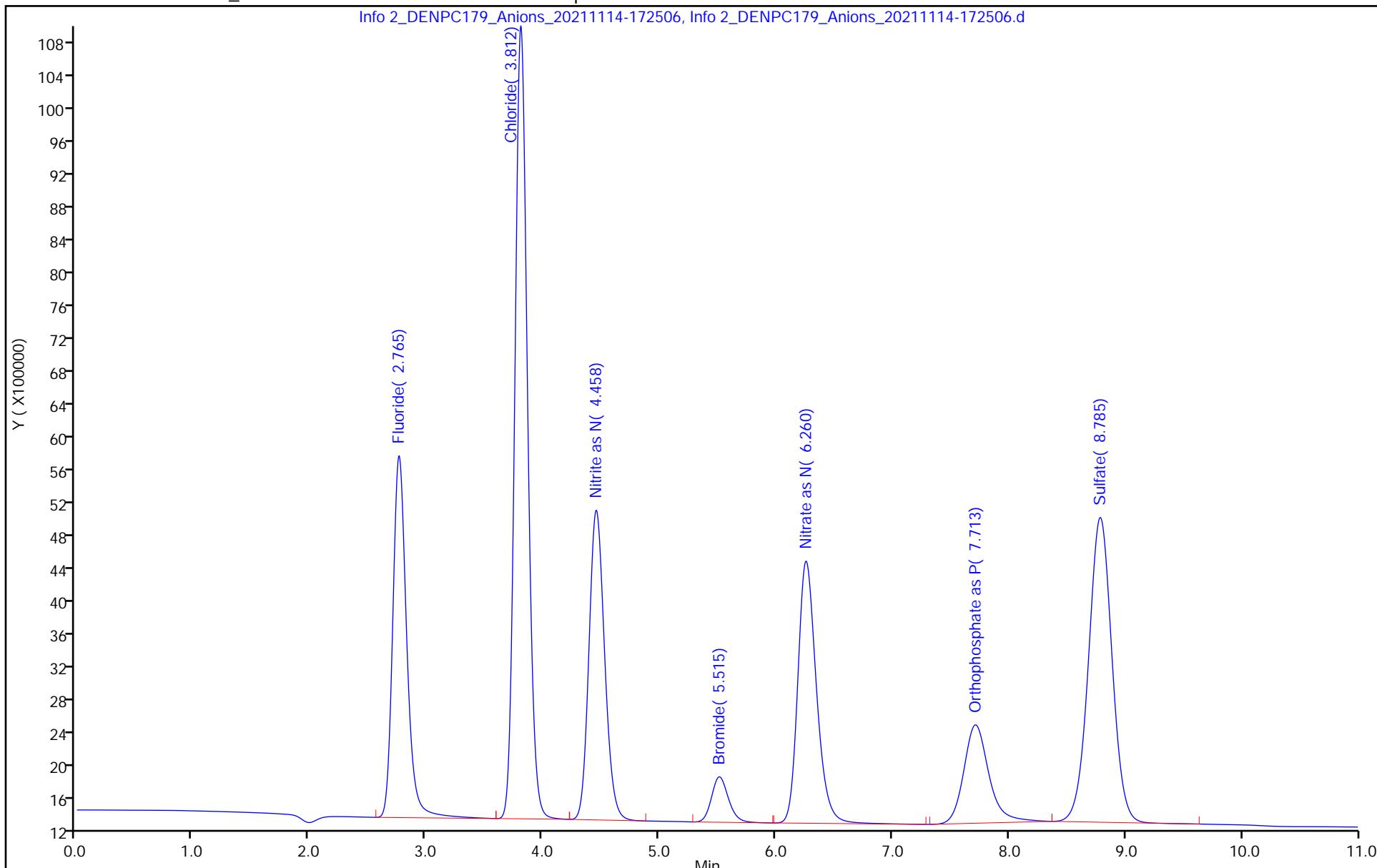
IC Cal low_00607	Amount Added: 0.20	Units: mL
IC CAL cl/so4_00393	Amount Added: 0.20	Units: mL

Report Date: 15-Nov-2021 15:00:11

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-172506.d  
Injection Date: 14-Nov-2021 17:11:00 Instrument ID: WC\_IonChrom10 Operator ID: wetchemd  
Lims ID: STD3 Worklist Smp#: 4  
Client ID:  
Injection Vol: 5.0 ul ALS Bottle#: 0  
Method: Anions\_IC10 Dil. Factor: 1.0000  
Limit Group: Wet - Anions 28D



## Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-172506.d  
 Injection Date: 14-Nov-2021 17:11:00 Instrument ID: WC\_IonChrom10  
 Lims ID: STD3  
 Client ID:  
 Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 4  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC10 Limit Group: Wet - Anions 28D  
 Column: Detector Info 2\_091554\_1

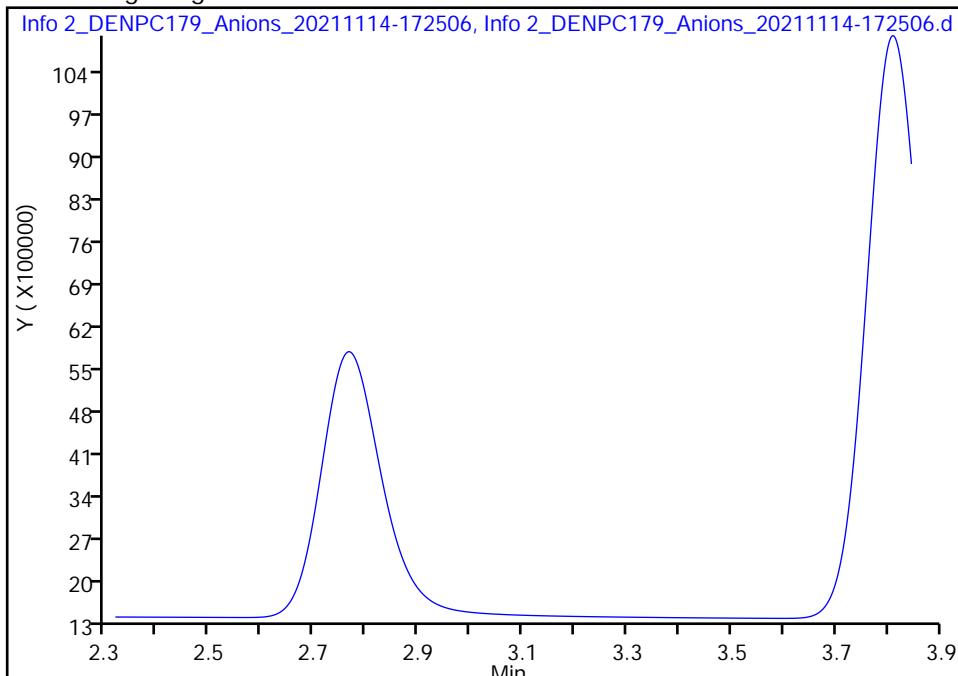
**1 Fluoride, CAS: 16984-48-8**

Signal: 1

Not Detected

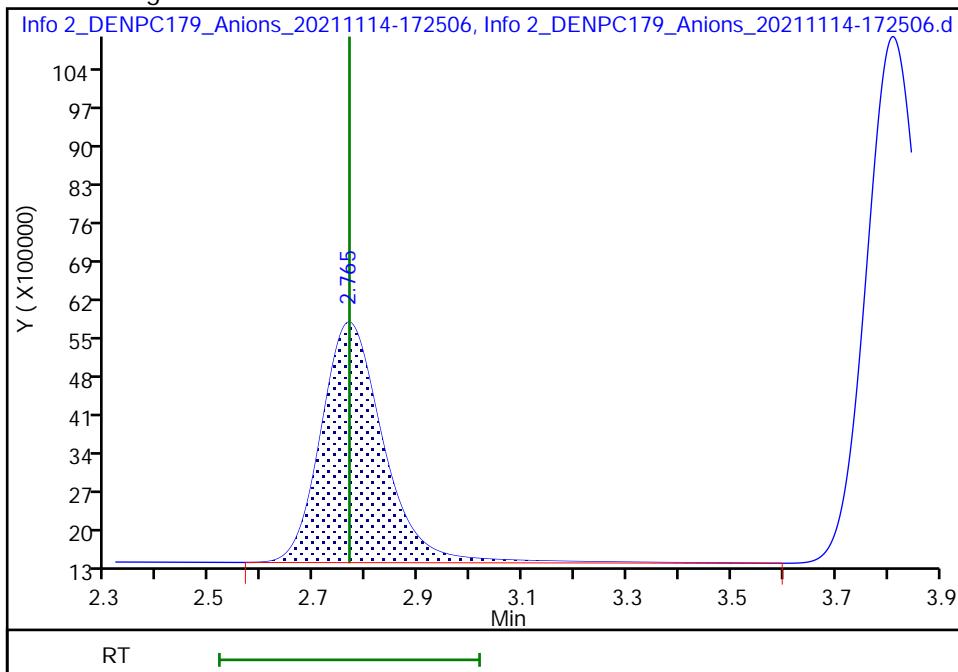
Expected RT: 2.77

## Processing Integration Results



## Manual Integration Results

RT: 2.77  
 Area: 36569889  
 Amount: 1.142469  
 Amount Units: ug/ml



Reviewer: jindarac, 14-Nov-2021 17:32:58

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

## Eurofins TestAmerica, Denver

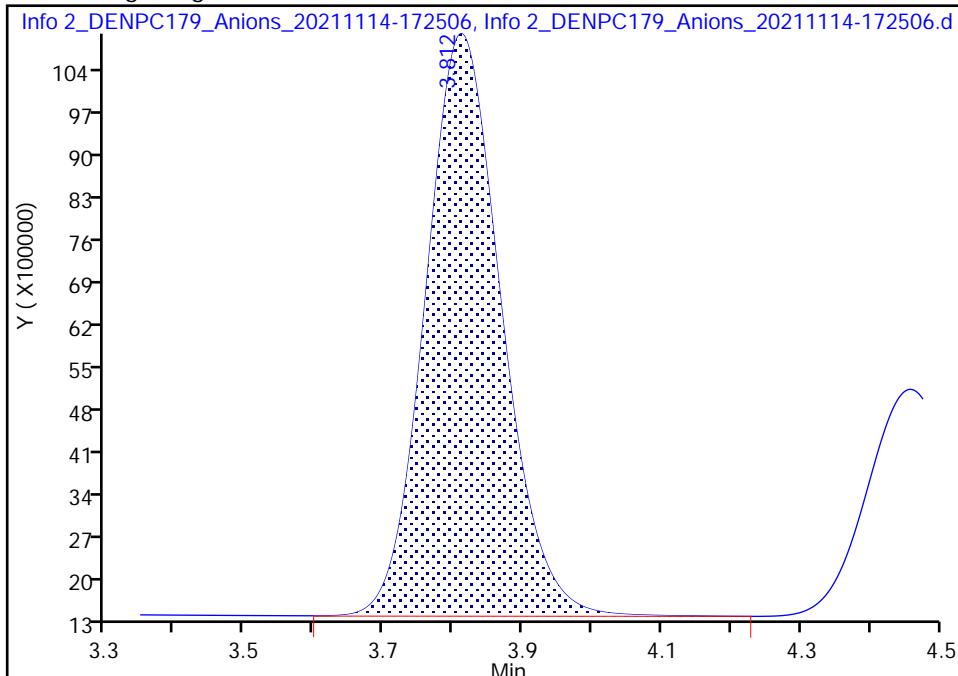
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-172506.d  
 Injection Date: 14-Nov-2021 17:11:00 Instrument ID: WC\_IonChrom10  
 Lims ID: STD3  
 Client ID:  
 Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 4  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC10 Limit Group: Wet - Anions 28D  
 Column: Detector Info 2\_091554\_1

## 2 Chloride, CAS: 16887-00-6

Signal: 1

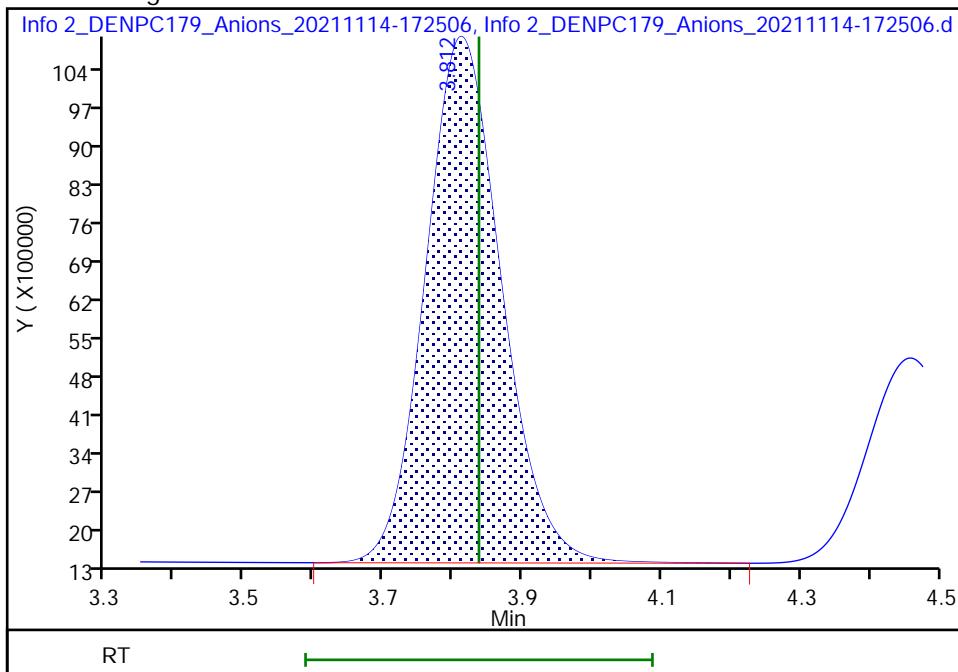
## Processing Integration Results

RT: 3.81  
 Area: 72995169  
 Amount: 5.000859  
 Amount Units: ug/ml



## Manual Integration Results

RT: 3.81  
 Area: 72906043  
 Amount: 4.970147  
 Amount Units: ug/ml



Reviewer: jindarac, 14-Nov-2021 17:32:55

Audit Action: Manually Integrated

Audit Reason: Peak not integrated

## Eurofins TestAmerica, Denver

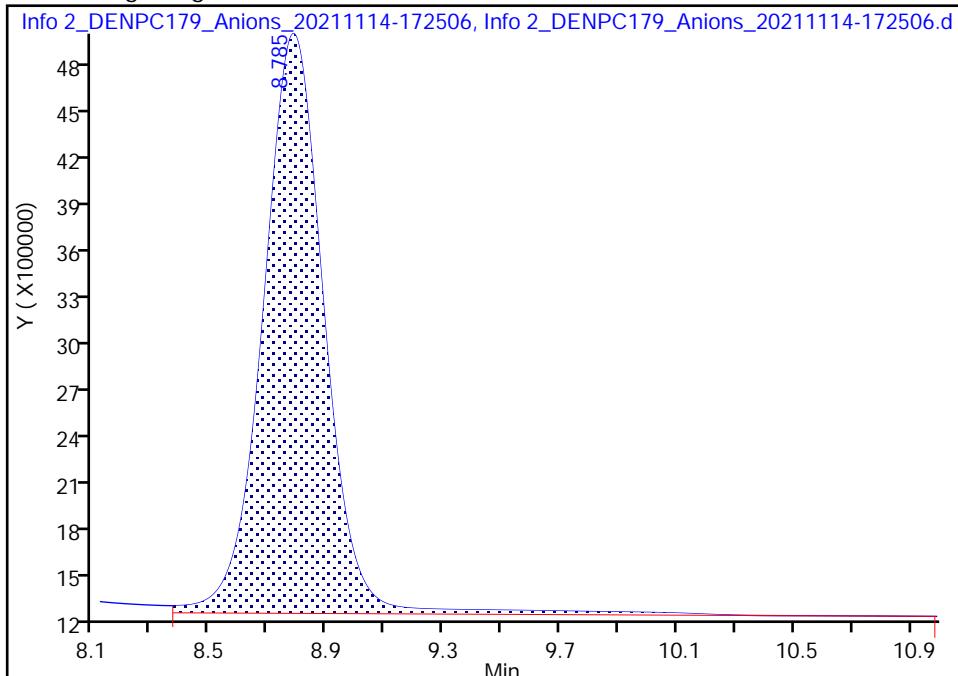
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-172506.d  
 Injection Date: 14-Nov-2021 17:11:00 Instrument ID: WC\_IonChrom10  
 Lims ID: STD3  
 Client ID:  
 Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 4  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC10 Limit Group: Wet - Anions 28D  
 Column: Detector Info 2\_091554\_1

## 7 Sulfate, CAS: 14808-79-8

Signal: 1

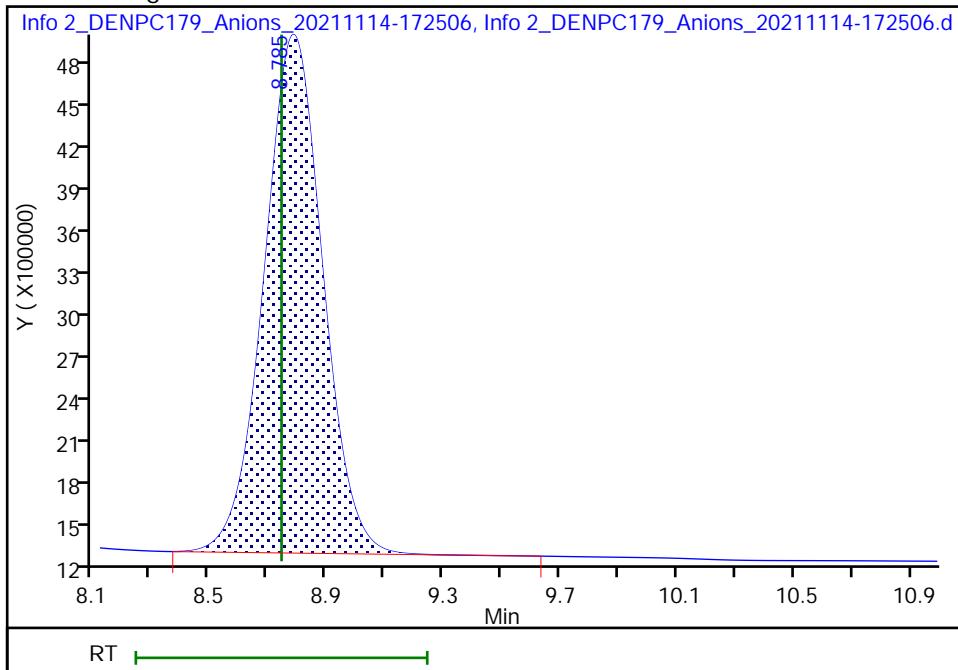
## Processing Integration Results

RT: 8.79  
 Area: 55018657  
 Amount: 0  
 Amount Units: ug/ml



## Manual Integration Results

RT: 8.79  
 Area: 51712422  
 Amount: 4.843653  
 Amount Units: ug/ml



Reviewer: jindarac, 14-Nov-2021 17:57:39

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-173  
 Lims ID: STD4  
 Client ID:  
 Sample Type: IC Calib Level: 4  
 Inject. Date: 14-Nov-2021 17:25:00 ALS Bottle#: 0 Worklist Smp#: 5  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-0106492-005  
 Misc. Info.: 280-0106492-005  
 Operator ID: wetchemd Instrument ID: WC\_IonChrom10  
 Sublist: chrom-Anions\_IC10\*sub2  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Anions\_IC10.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 15-Nov-2021 15:00:12 Calib Date: 14-Nov-2021 17:53:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-180

Column 1 : Det: Info 2\_091554\_1  
 Process Host: CTX1639

First Level Reviewer: jindarac Date: 14-Nov-2021 17:43:42

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.770	2.770	0.000	131821553	4.00	4.28	Ma
2 Chloride	3.828	3.828	0.000	897570285	60.0	59.3	M
3 Nitrite as N	4.450	4.450	0.000	145985760	NC	NC	M
4 Bromide	5.498	5.498	0.000	24352756	4.00	3.77	
5 Nitrate as N	6.207	6.207	0.000	153138478	NC	NC	
6 Orthophosphate as P	7.698	7.698	0.000	66323295	NC	NC	M
7 Sulfate	8.757	8.757	0.000	666739209	60.0	59.7	M

### QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

a - User Assigned ID

### Reagents:

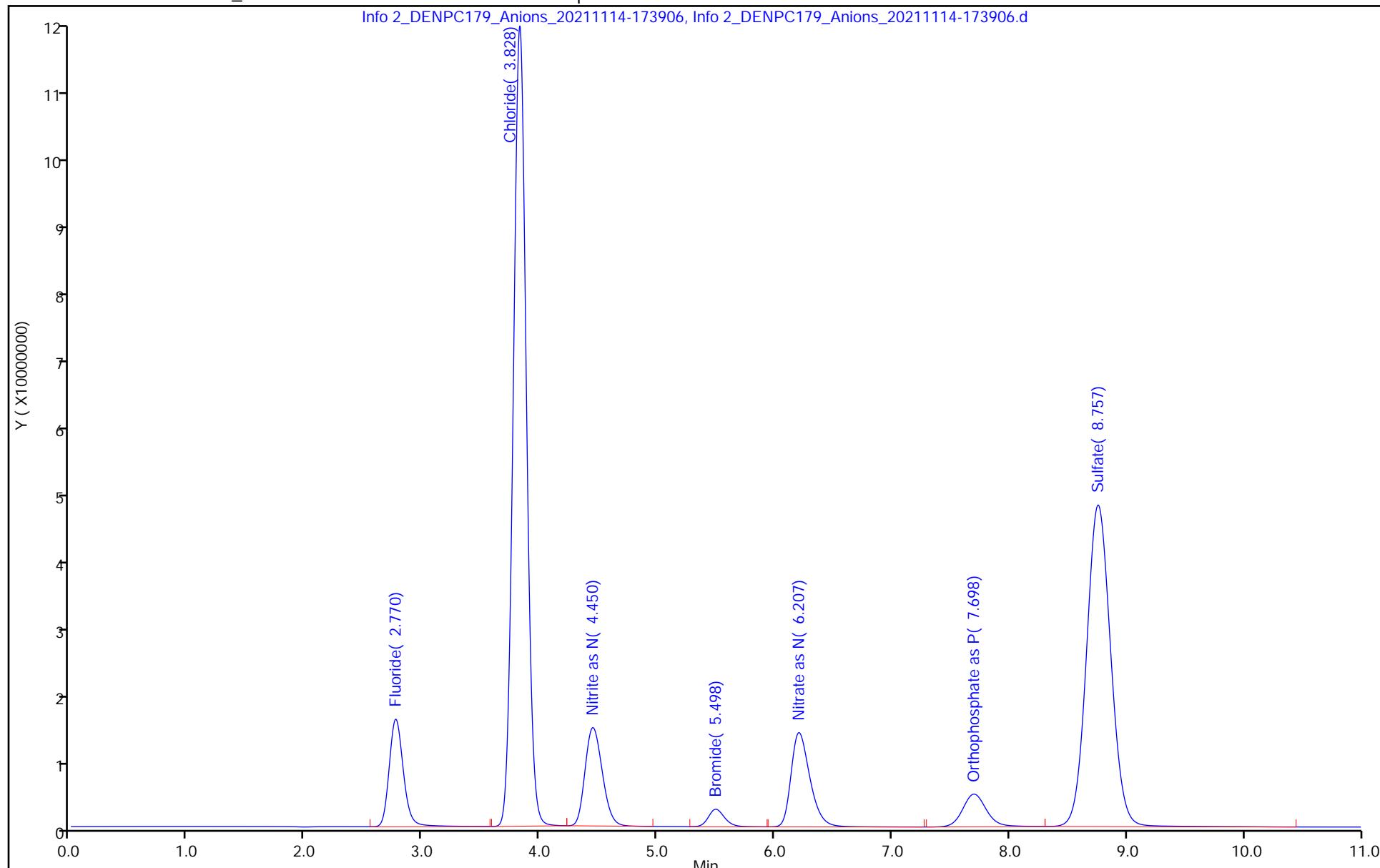
IC Cal low_00607	Amount Added: 0.80	Units: mL
IC CAL cl/so4_00393	Amount Added: 2.40	Units: mL

Report Date: 15-Nov-2021 15:00:12

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-173906.d  
Injection Date: 14-Nov-2021 17:25:00 Instrument ID: WC\_IonChrom10 Operator ID: wetchemd  
Lims ID: STD4 Worklist Smp#: 5  
Client ID:  
Injection Vol: 5.0 ul ALS Bottle#: 0  
Method: Anions\_IC10 Dil. Factor: 1.0000  
Limit Group: Wet - Anions 28D



Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-173906.d  
 Injection Date: 14-Nov-2021 17:25:00 Instrument ID: WC\_IonChrom10  
 Lims ID: STD4  
 Client ID:  
 Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 5  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC10 Limit Group: Wet - Anions 28D  
 Column: Detector Info 2\_091554\_1

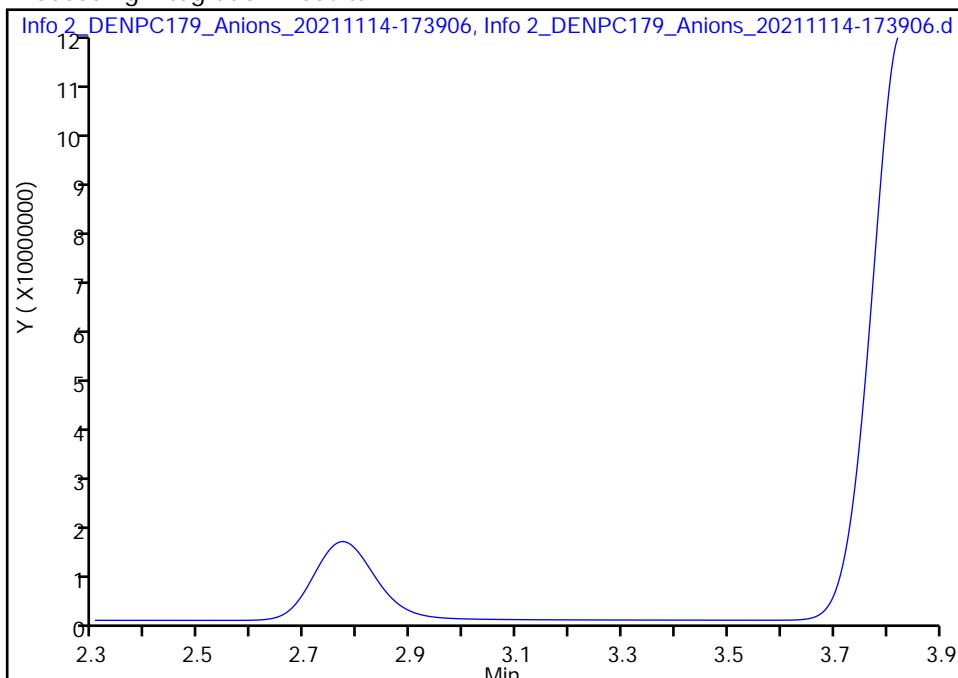
**1 Fluoride, CAS: 16984-48-8**

Signal: 1

Not Detected

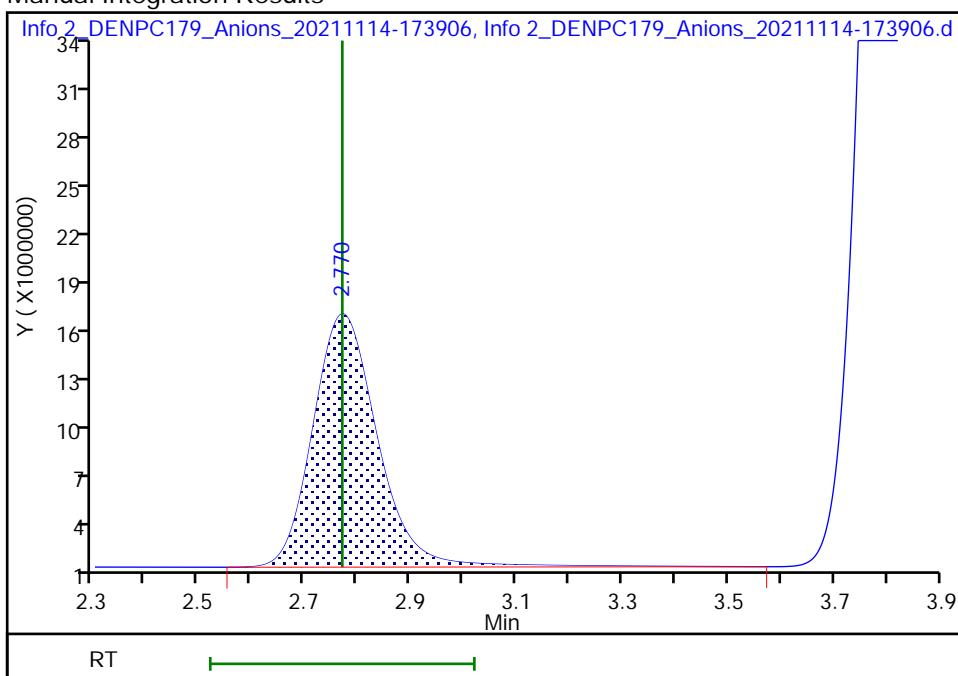
Expected RT: 2.77

## Processing Integration Results



## Manual Integration Results

RT: 2.77  
 Area: 131821553  
 Amount: 4.281163  
 Amount Units: ug/ml



Reviewer: jindarac, 14-Nov-2021 17:43:06

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

Eurofins TestAmerica, Denver

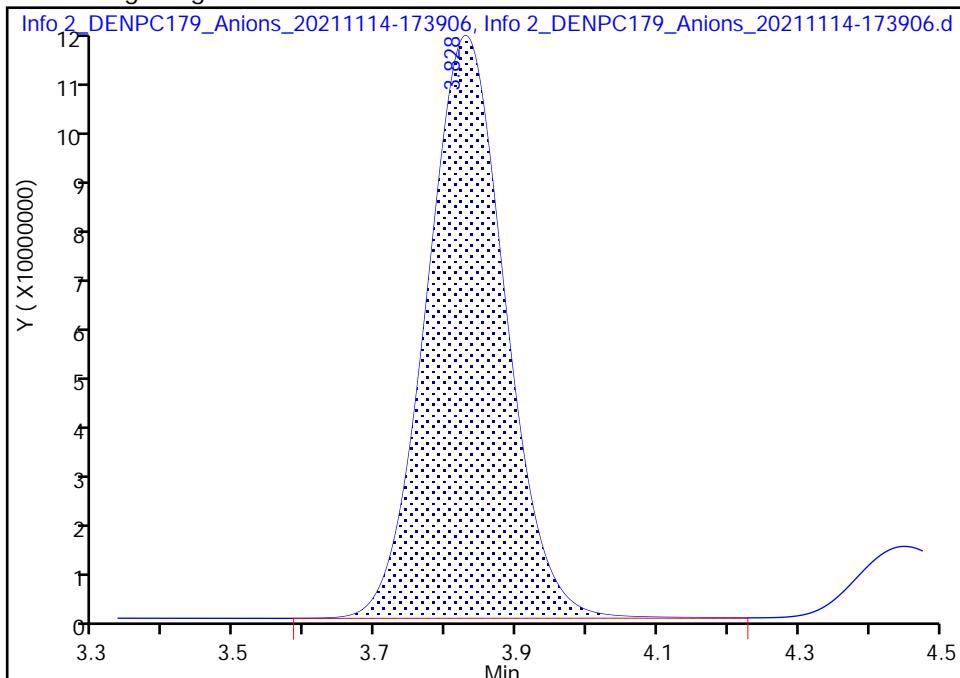
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-173906.d  
 Injection Date: 14-Nov-2021 17:25:00 Instrument ID: WC\_IonChrom10  
 Lims ID: STD4  
 Client ID:  
 Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 5  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC10 Limit Group: Wet - Anions 28D  
 Column: Detector Info 2\_091554\_1

**2 Chloride, CAS: 16887-00-6**

Signal: 1

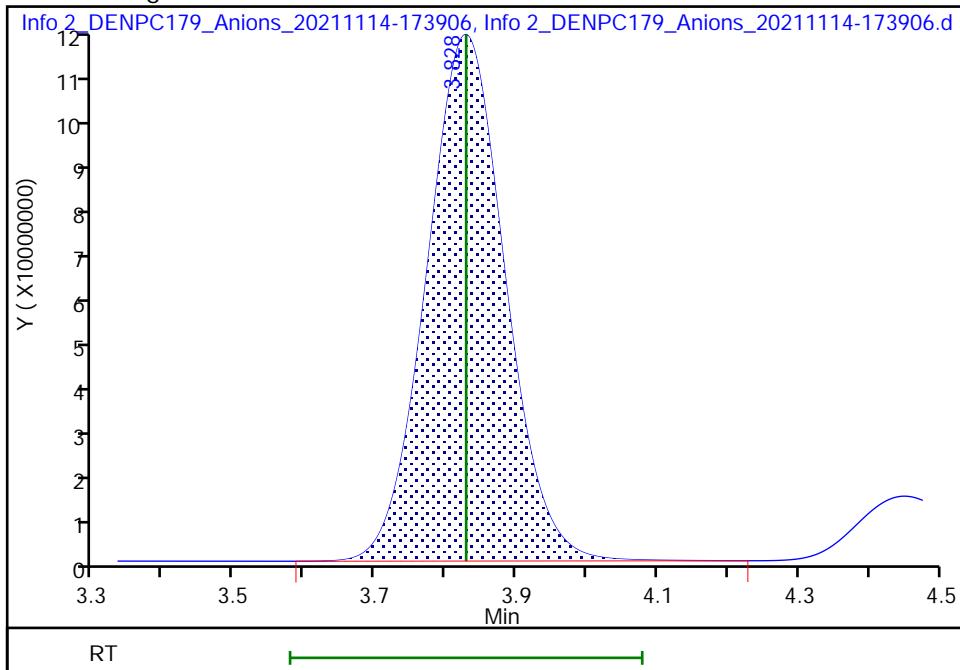
## Processing Integration Results

RT: 3.83  
 Area: 898611985  
 Amount: 60.000920  
 Amount Units: ug/ml



## Manual Integration Results

RT: 3.83  
 Area: 897570285  
 Amount: 59.325823  
 Amount Units: ug/ml



Reviewer: jindarac, 14-Nov-2021 17:43:16

Audit Action: Manually Integrated

Audit Reason: Peak not integrated

## Eurofins TestAmerica, Denver

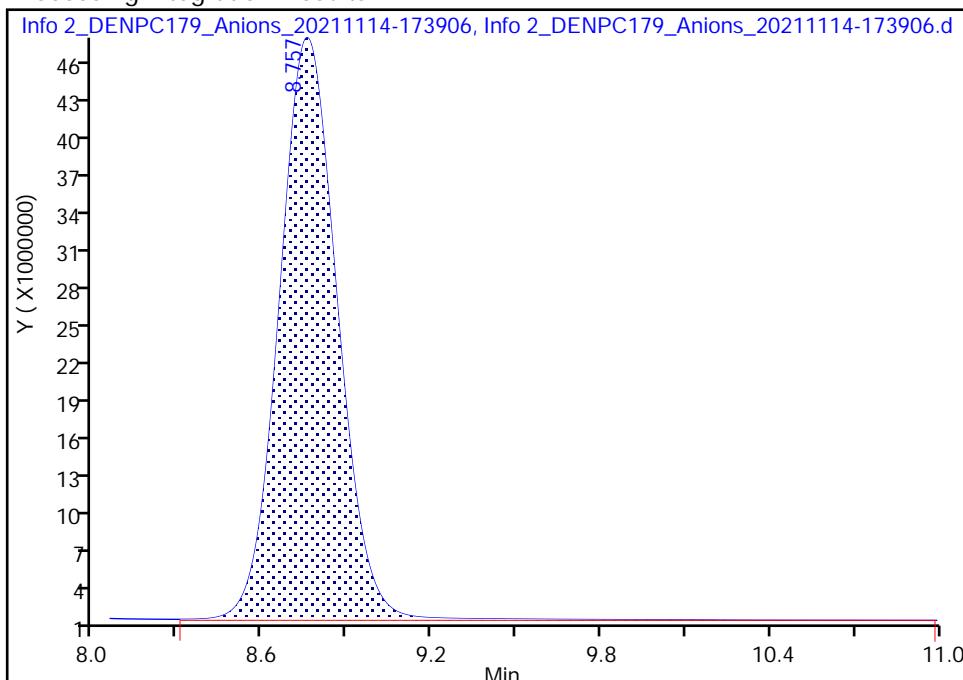
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-173906.d  
 Injection Date: 14-Nov-2021 17:25:00 Instrument ID: WC\_IonChrom10  
 Lims ID: STD4  
 Client ID:  
 Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 5  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC10 Limit Group: Wet - Anions 28D  
 Column: Detector Info 2\_091554\_1

## 7 Sulfate, CAS: 14808-79-8

Signal: 1

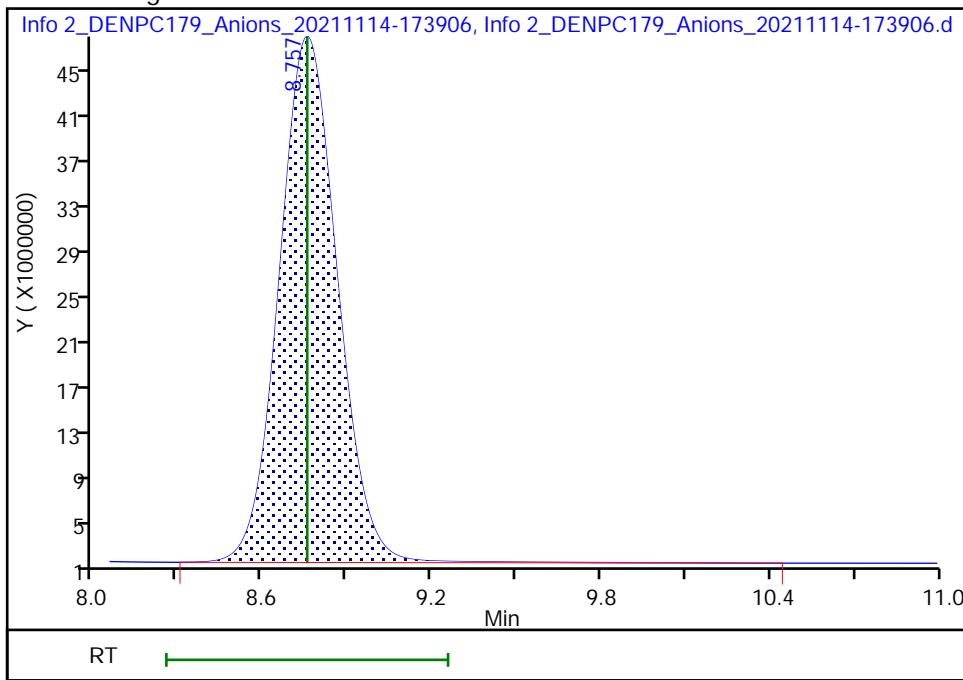
RT: 8.76  
 Area: 672202819  
 Amount: 59.975363  
 Amount Units: ug/ml

## Processing Integration Results



RT: 8.76  
 Area: 666739209  
 Amount: 59.654523  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: jindarac, 14-Nov-2021 17:43:37

Audit Action: Manually Integrated

Audit Reason: Peak not integrated

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-175  
 Lims ID: STD5  
 Client ID:  
 Sample Type: IC Calib Level: 5  
 Inject. Date: 14-Nov-2021 17:39:00 ALS Bottle#: 0 Worklist Smp#: 6  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-0106492-006  
 Misc. Info.: 280-0106492-006  
 Operator ID: wetchemd Instrument ID: WC\_IonChrom10  
 Sublist: chrom-Anions\_IC10\*sub2  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Anions\_IC10.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 15-Nov-2021 15:00:12 Calib Date: 14-Nov-2021 17:53:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-180  
 Column 1 : Det: Info 2\_091554\_1  
 Process Host: CTX1639

First Level Reviewer: jindarac Date: 14-Nov-2021 17:57:01

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.773	2.773	0.000	241856951	8.00	7.91	Ma
2 Chloride	3.850	3.850	0.000	1822628329	120.0	120.3	Ma
3 Nitrite as N	4.440	4.440	0.000	289035241	NC	NC	M
4 Bromide	5.487	5.487	0.000	52627722	8.00	8.07	
5 Nitrate as N	6.175	6.175	0.000	316207513	NC	NC	
6 Orthophosphate as P	7.683	7.683	0.000	133628582	NC	NC	M
7 Sulfate	8.727	8.727	0.000	1352130342	120.0	120.7	M

### QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

a - User Assigned ID

### Reagents:

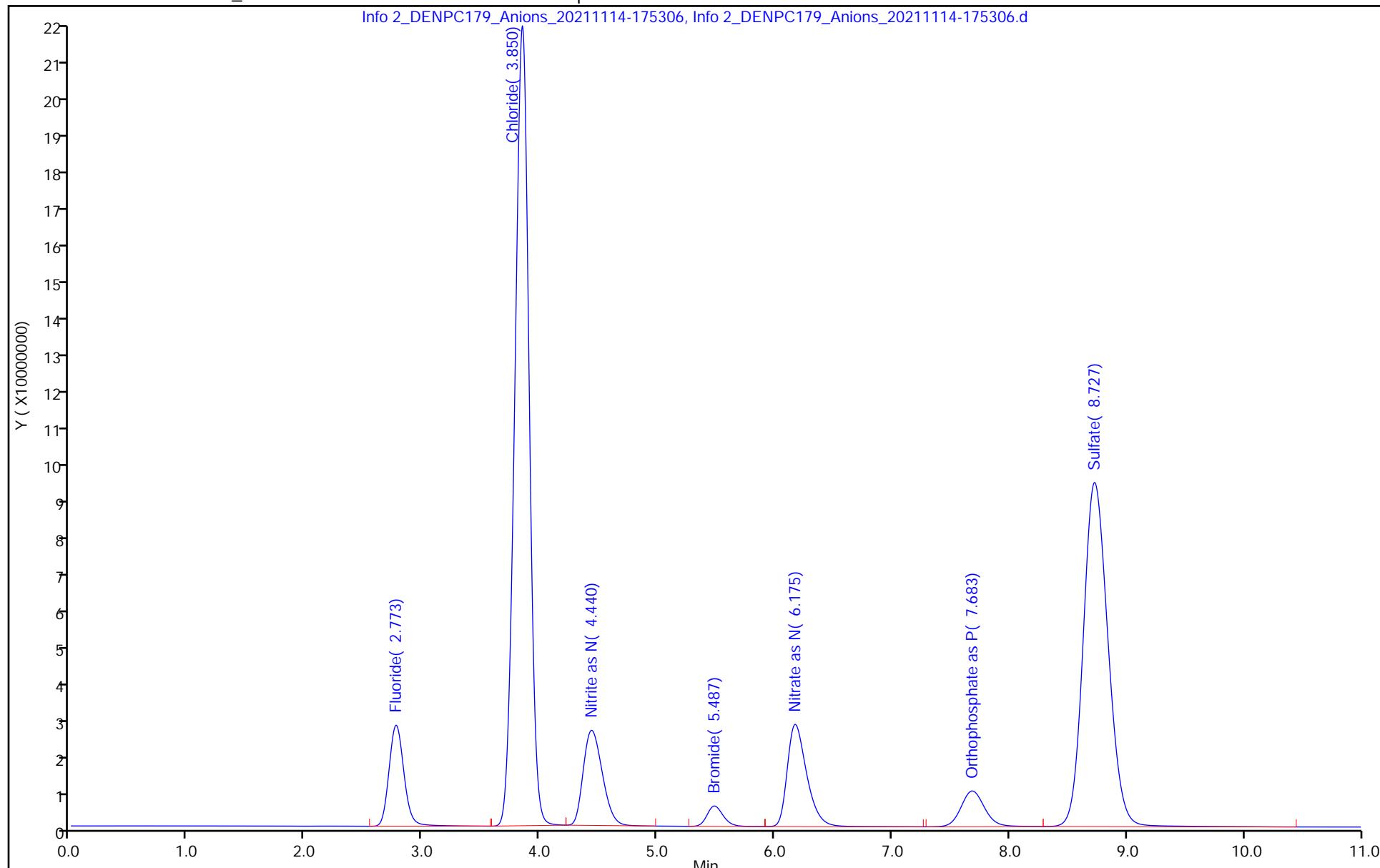
IC Cal low_00607	Amount Added: 1.60	Units: mL
IC CAL cl/so4_00393	Amount Added: 4.80	Units: mL

Report Date: 15-Nov-2021 15:00:13

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-175306.d  
Injection Date: 14-Nov-2021 17:39:00 Instrument ID: WC\_IonChrom10 Operator ID: wetchemd  
Lims ID: STD5 Worklist Smp#: 6  
Client ID:  
Injection Vol: 5.0 ul ALS Bottle#: 0  
Method: Anions\_IC10 Dil. Factor: 1.0000  
Limit Group: Wet - Anions 28D



Eurofins TestAmerica, Denver

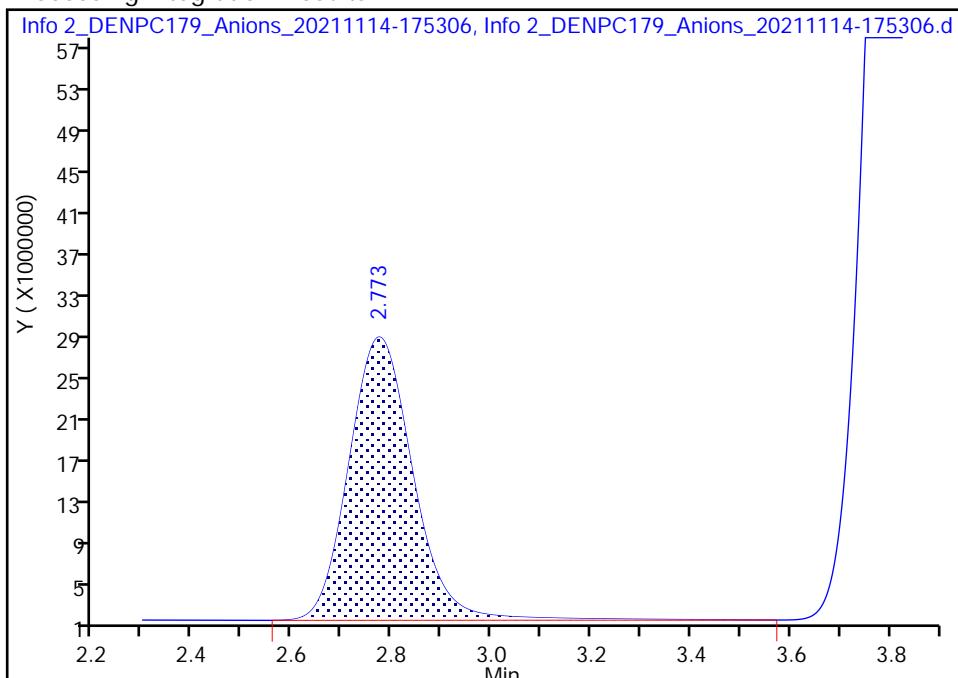
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-175306.d  
 Injection Date: 14-Nov-2021 17:39:00 Instrument ID: WC\_IonChrom10  
 Lims ID: STD5  
 Client ID:  
 Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 6  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC10 Limit Group: Wet - Anions 28D  
 Column: Detector Info 2\_091554\_1

**1 Fluoride, CAS: 16984-48-8**

Signal: 1

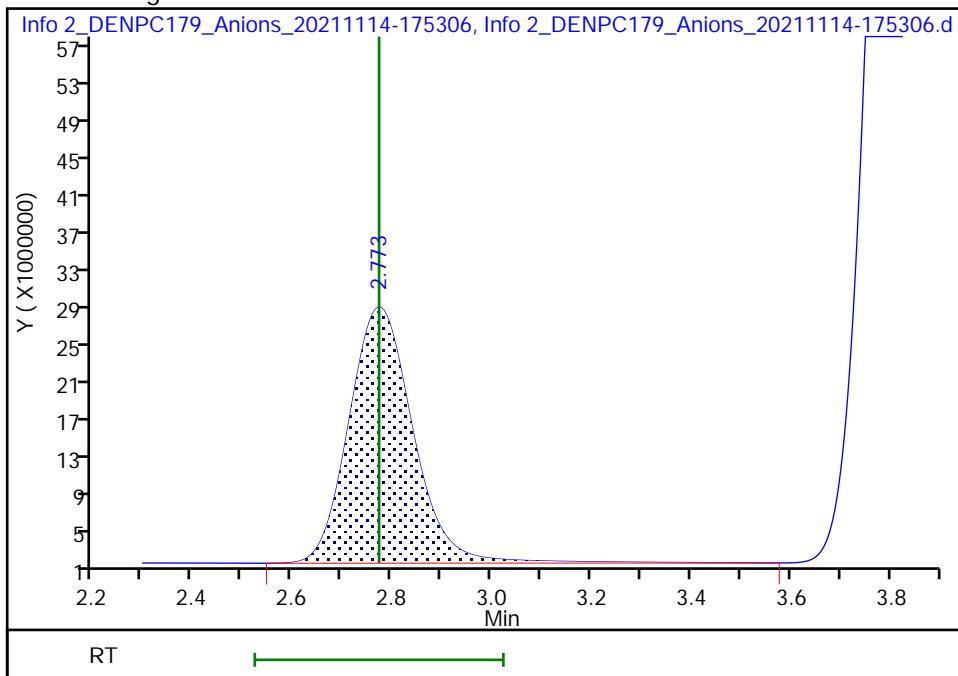
RT: 2.77  
 Area: 241914194  
 Amount: 7.702899  
 Amount Units: ug/ml

## Processing Integration Results



RT: 2.77  
 Area: 241856951  
 Amount: 7.907004  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: jindarac, 14-Nov-2021 17:56:42

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

Eurofins TestAmerica, Denver

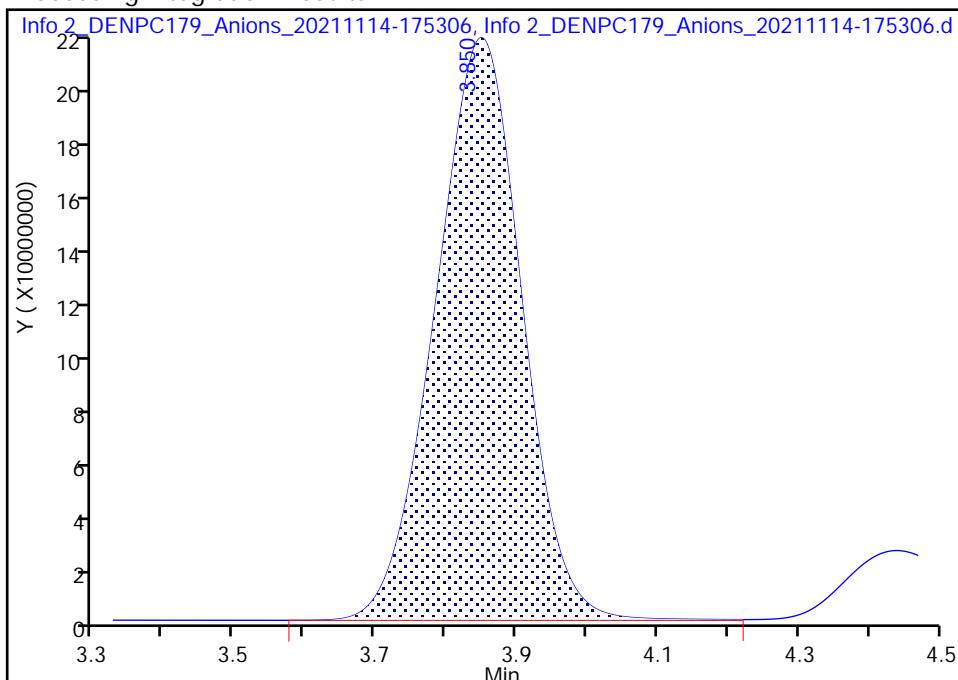
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-175306.d  
 Injection Date: 14-Nov-2021 17:39:00 Instrument ID: WC\_IonChrom10  
 Lims ID: STD5  
 Client ID:  
 Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 6  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC10 Limit Group: Wet - Anions 28D  
 Column: Detector Info 2\_091554\_1

**2 Chloride, CAS: 16887-00-6**

Signal: 1

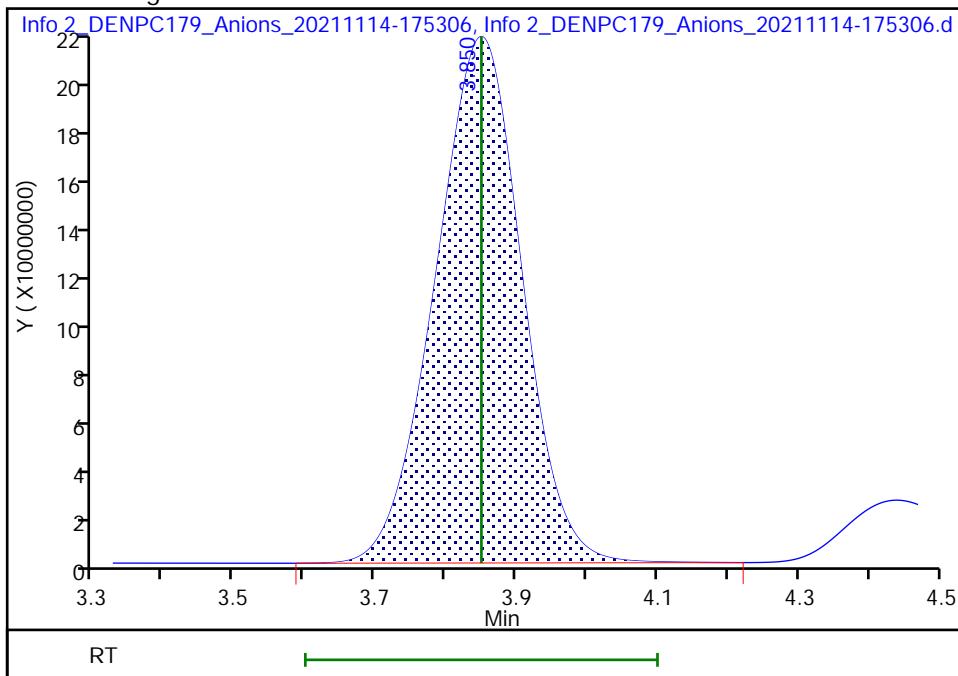
RT: 3.85  
 Area: 1828199074  
 Amount: 120.6856  
 Amount Units: ug/ml

## Processing Integration Results



RT: 3.85  
 Area: 1822628329  
 Amount: 120.2987  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: gonzalezsp, 15-Nov-2021 07:53:58

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

## Eurofins TestAmerica, Denver

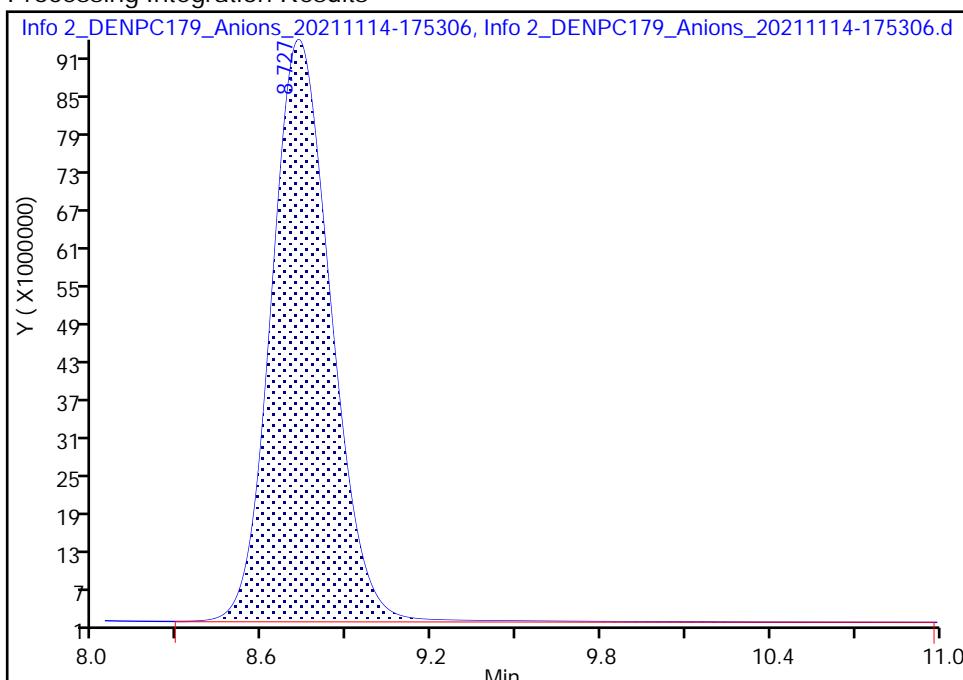
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-175306.d  
 Injection Date: 14-Nov-2021 17:39:00 Instrument ID: WC\_IonChrom10  
 Lims ID: STD5  
 Client ID:  
 Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 6  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC10 Limit Group: Wet - Anions 28D  
 Column: Detector Info 2\_091554\_1

## 7 Sulfate, CAS: 14808-79-8

Signal: 1

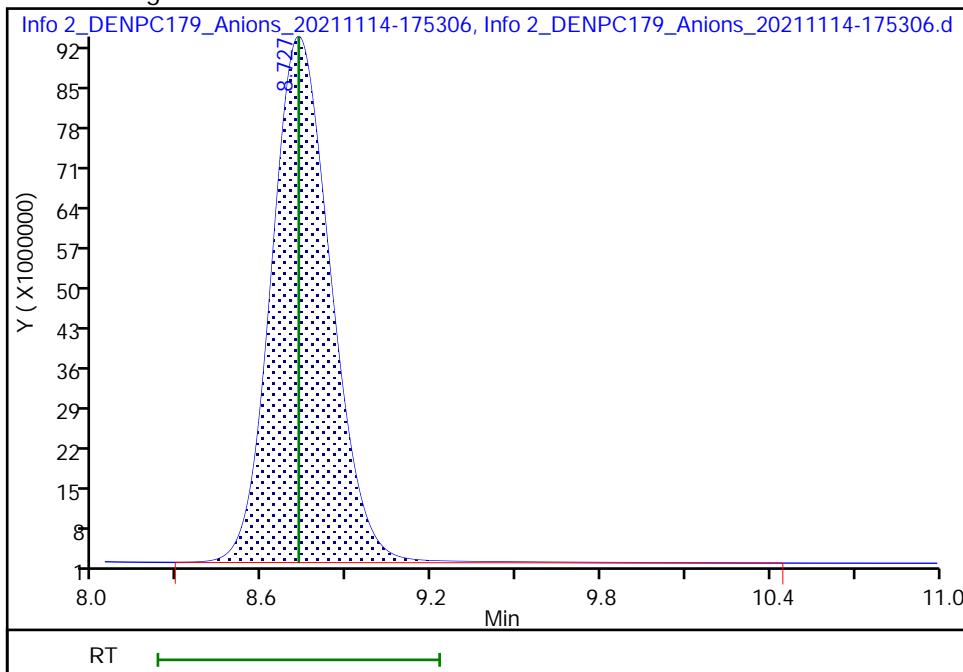
RT: 8.73  
 Area: 1355132256  
 Amount: 120.7938  
 Amount Units: ug/ml

## Processing Integration Results



RT: 8.73  
 Area: 1352130342  
 Amount: 120.7362  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: gonzalezsp, 15-Nov-2021 07:53:45

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-180  
Lims ID: STD6  
Client ID:  
Sample Type: IC Calib Level: 6  
Inject. Date: 14-Nov-2021 17:53:00 ALS Bottle#: 0 Worklist Smp#: 7  
Injection Vol: 5.0 ul Dil. Factor: 1.0000  
Sample Info: 280-0106492-007  
Misc. Info.: 280-0106492-007  
Operator ID: wetchemd Instrument ID: WC\_IonChrom10  
Sublist: chrom-Anions\_IC10\*sub2  
Method: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Anions\_IC10.m  
Limit Group: Wet - Anions 28D  
Last Update: 15-Nov-2021 15:00:13 Calib Date: 14-Nov-2021 17:53:00  
Integrator: Falcon  
Quant Method: External Standard Quant By: Initial Calibration  
Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-180  
Column 1 : Det: Info 2\_091554\_1  
Process Host: CTX1639

First Level Reviewer: gonzalezsp Date: 15-Nov-2021 07:55:05

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.772	2.773	-0.001	295594338	10.0	9.68	Ma
2 Chloride	3.878	3.850	0.028	3037802265	200.0	200.4	M
3 Nitrite as N	4.435	4.440	-0.005	358262688	NC	NC	M
4 Bromide	5.482	5.487	-0.005	66758391	10.0	10.2	
5 Nitrate as N	6.163	6.175	-0.012	398758825	NC	NC	
6 Orthophosphate as P	7.672	7.683	-0.011	167342390	NC	NC	M
7 Sulfate	8.693	8.727	-0.034	2238847753	200.0	199.8	M

### QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

a - User Assigned ID

### Reagents:

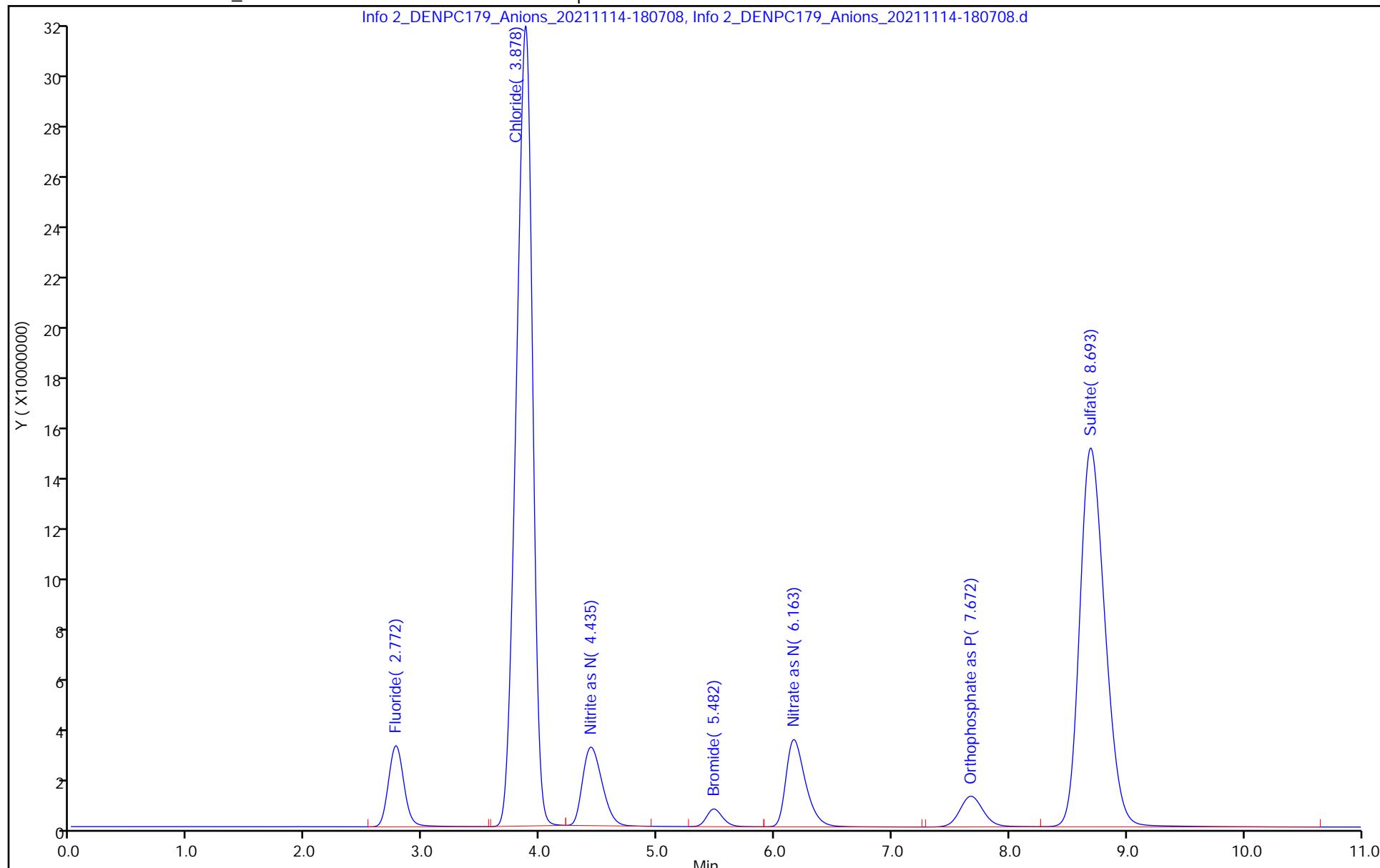
IC Cal low_00607	Amount Added: 2.00	Units: mL
IC CAL cl/so4_00393	Amount Added: 8.00	Units: mL

Report Date: 15-Nov-2021 15:00:13

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-180708.d  
Injection Date: 14-Nov-2021 17:53:00 Instrument ID: WC\_IonChrom10 Operator ID: wetchemd  
Lims ID: STD6 Worklist Smp#: 7  
Client ID:  
Injection Vol: 5.0 ul ALS Bottle#: 0  
Method: Anions\_IC10 Dil. Factor: 1.0000  
Limit Group: Wet - Anions 28D



Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-180708.d  
 Injection Date: 14-Nov-2021 17:53:00 Instrument ID: WC\_IonChrom10  
 Lims ID: STD6  
 Client ID:  
 Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 7  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC10 Limit Group: Wet - Anions 28D  
 Column: Detector Info 2\_091554\_1

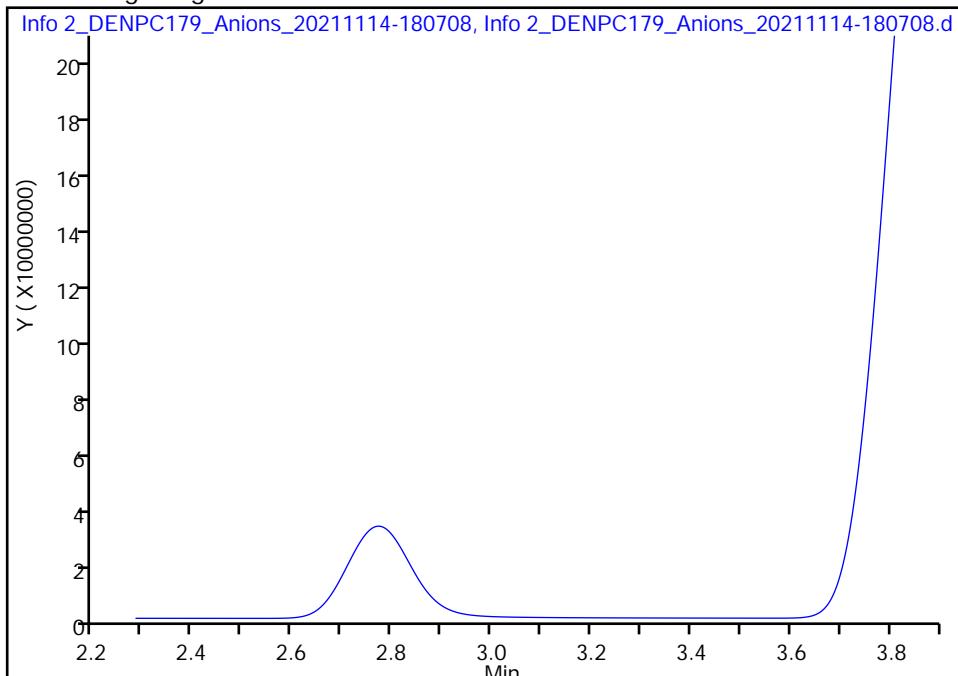
### 1 Fluoride, CAS: 16984-48-8

Signal: 1

Not Detected

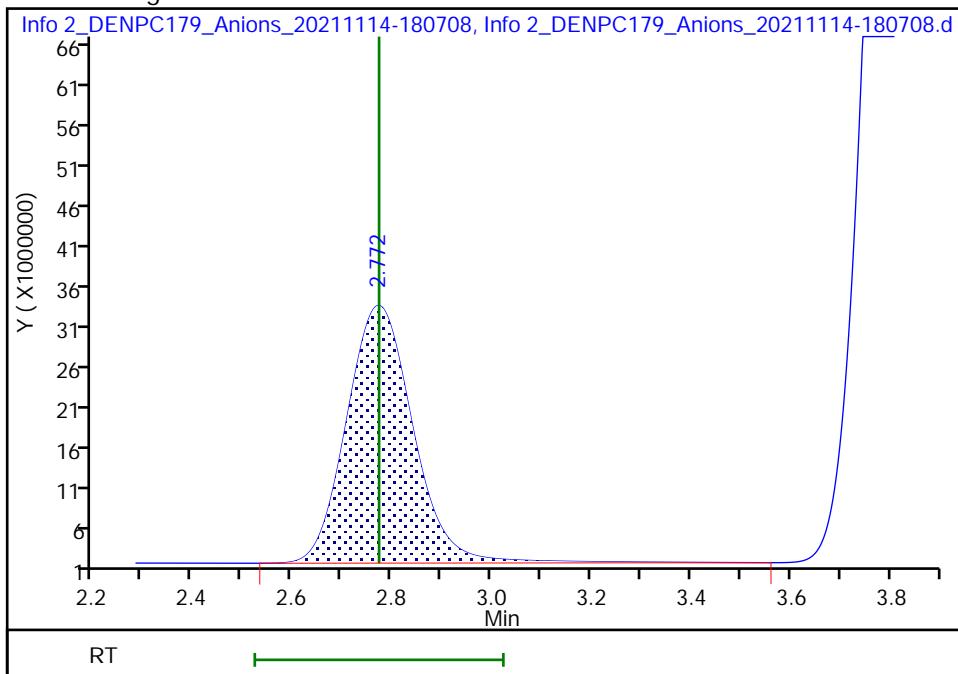
Expected RT: 2.77

## Processing Integration Results



## Manual Integration Results

RT: 2.77  
 Area: 295594338  
 Amount: 9.677737  
 Amount Units: ug/ml



Reviewer: gonzalezsp, 15-Nov-2021 07:54:27

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

## Eurofins TestAmerica, Denver

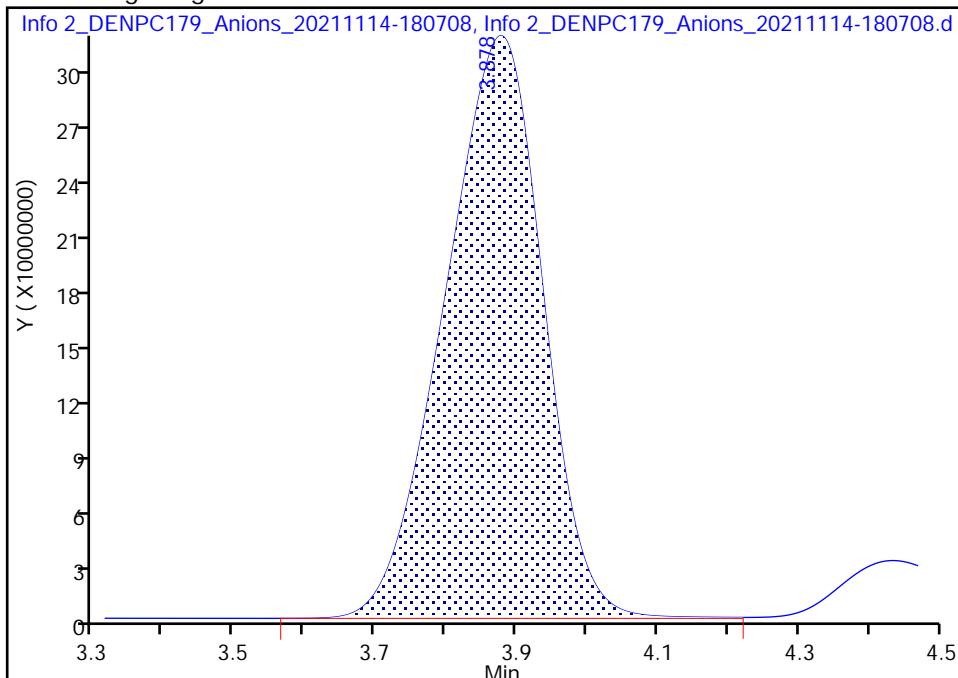
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-180708.d  
 Injection Date: 14-Nov-2021 17:53:00 Instrument ID: WC\_IonChrom10  
 Lims ID: STD6  
 Client ID:  
 Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 7  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC10 Limit Group: Wet - Anions 28D  
 Column: Detector Info 2\_091554\_1

## 2 Chloride, CAS: 16887-00-6

Signal: 1

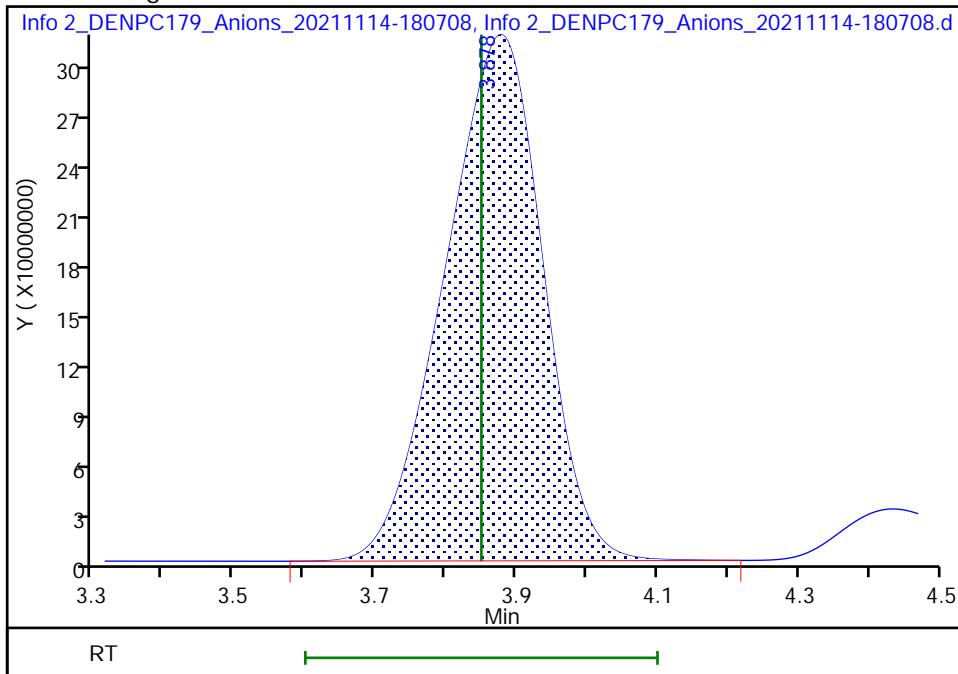
RT: 3.88  
 Area: 3047604774  
 Amount: 200.6970  
 Amount Units: ug/ml

## Processing Integration Results



## Manual Integration Results

RT: 3.88  
 Area: 3037802265  
 Amount: 200.3938  
 Amount Units: ug/ml



Reviewer: gonzalezsp, 15-Nov-2021 07:54:39

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

## Eurofins TestAmerica, Denver

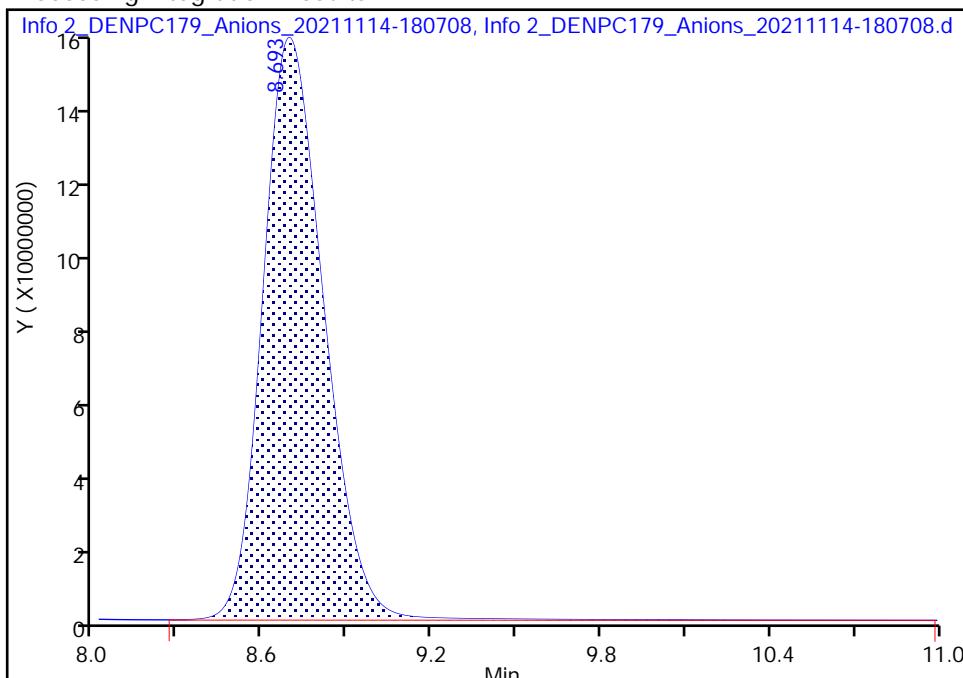
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-180708.d  
 Injection Date: 14-Nov-2021 17:53:00      Instrument ID: WC\_IonChrom10  
 Lims ID: STD6  
 Client ID:  
 Operator ID: wetchemd      ALS Bottle#: 0      Worklist Smp#: 7  
 Injection Vol: 5.0 ul      Dil. Factor: 1.0000  
 Method: Anions\_IC10      Limit Group: Wet - Anions 28D  
 Column:      Detector: Info 2\_091554\_1

## 7 Sulfate, CAS: 14808-79-8

Signal: 1

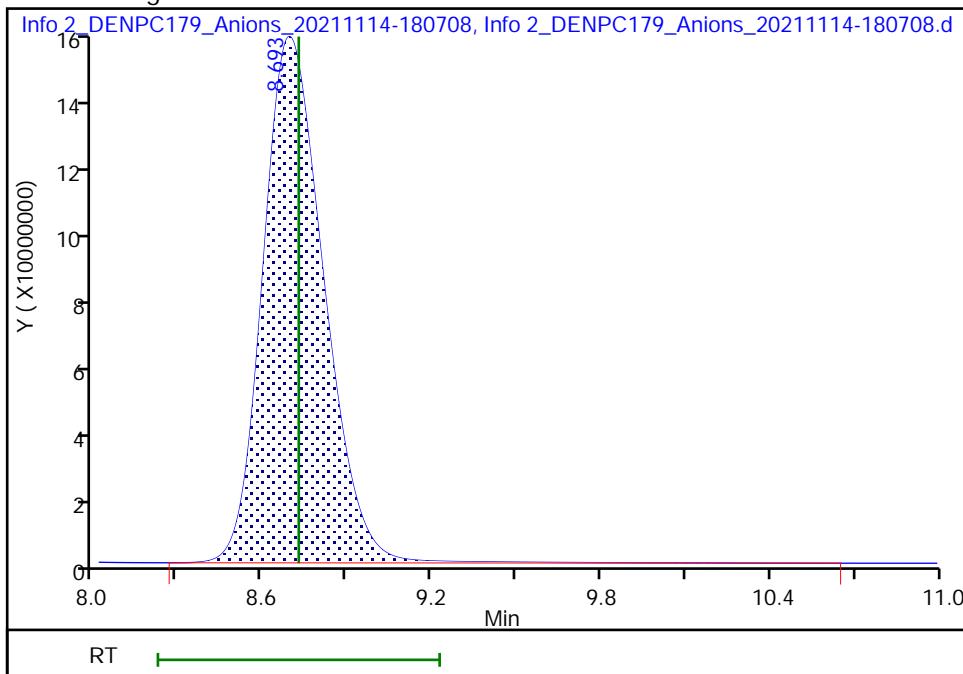
RT: 8.69  
 Area: 2243317526  
 Amount: 199.9492  
 Amount Units: ug/ml

## Processing Integration Results



RT: 8.69  
 Area: 2238847753  
 Amount: 199.7600  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: gonzalezsp, 15-Nov-2021 07:54:58

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

**IC Instrument Information**WL: 104192 Inst ID: 1C10 Analysis Date: 11/15/14 Analyst: ST

Rush Job No.	Samples	Anions	QC Req	HT Exp
<input type="checkbox"/> <u>154500</u>	<u>1</u>	F Cl NO <sub>2</sub> Br NO <sub>3</sub> PO <sub>4</sub> SO <sub>4</sub>	MS/D	✓
<input type="checkbox"/> <u>154517</u>	<u>2</u>	F Cl NO <sub>2</sub> Br NO <sub>3</sub> PO <sub>4</sub> SO <sub>4</sub>	MS/D	
<input type="checkbox"/> <u>154587</u>	<u>2</u>	F Cl NO <sub>2</sub> Br NO <sub>3</sub> PO <sub>4</sub> SO <sub>4</sub>	MS/D	
<input type="checkbox"/> <u>154944</u>	<u>2</u>	F Cl NO <sub>2</sub> Br NO <sub>3</sub> PO <sub>4</sub> SO <sub>4</sub>	MS/D	
<input type="checkbox"/> <u>154952</u>	<u>1</u>	F Cl NO <sub>2</sub> Br NO <sub>3</sub> PO <sub>4</sub> SO <sub>4</sub>	MS/D	
<input checked="" type="checkbox"/> <u>155037</u>	<u>2</u>	F Cl NO <sub>2</sub> Br NO <sub>3</sub> PO <sub>4</sub> SO <sub>4</sub>	MS/D	
<input type="checkbox"/> <u>154405</u>	<u>4</u>	F Cl NO <sub>2</sub> Br NO <sub>3</sub> PO <sub>4</sub> SO <sub>4</sub>	MS/D	
<input type="checkbox"/> <u>154487</u>	<u>3</u>	F Cl NO <sub>2</sub> Br NO <sub>3</sub> PO <sub>4</sub> SO <sub>4</sub>	MS/D	
<input type="checkbox"/>		F Cl NO <sub>2</sub> Br NO <sub>3</sub> PO <sub>4</sub> SO <sub>4</sub>	MS/D	
<input type="checkbox"/>		F Cl NO <sub>2</sub> Br NO <sub>3</sub> PO <sub>4</sub> SO <sub>4</sub>	MS/D	
<input type="checkbox"/>		F Cl NO <sub>2</sub> Br NO <sub>3</sub> PO <sub>4</sub> SO <sub>4</sub>	MS/D	
<input type="checkbox"/>		F Cl NO <sub>2</sub> Br NO <sub>3</sub> PO <sub>4</sub> SO <sub>4</sub>	MS/D	
<input type="checkbox"/>		F Cl NO <sub>2</sub> Br NO <sub>3</sub> PO <sub>4</sub> SO <sub>4</sub>	MS/D	
<input type="checkbox"/>		F Cl NO <sub>2</sub> Br NO <sub>3</sub> PO <sub>4</sub> SO <sub>4</sub>	MS/D	

**Dilutions**

Job No.	Samples	Anions	Dilution	Reason
<u>1052</u>	<u>#2</u>	F Cl NO <sub>2</sub> Br NO <sub>3</sub> PO <sub>4</sub> SO <sub>4</sub>	5X	over range
<u>137</u>	<u>2</u>	F Cl NO <sub>2</sub> Br NO <sub>3</sub> PO <sub>4</sub> SO <sub>4</sub>	5X	coverage
		F Cl NO <sub>2</sub> Br NO <sub>3</sub> PO <sub>4</sub> SO <sub>4</sub>		
		F Cl NO <sub>2</sub> Br NO <sub>3</sub> PO <sub>4</sub> SO <sub>4</sub>		
		F Cl NO <sub>2</sub> Br NO <sub>3</sub> PO <sub>4</sub> SO <sub>4</sub>		
		F Cl NO <sub>2</sub> Br NO <sub>3</sub> PO <sub>4</sub> SO <sub>4</sub>		
		F Cl NO <sub>2</sub> Br NO <sub>3</sub> PO <sub>4</sub> SO <sub>4</sub>		
		F Cl NO <sub>2</sub> Br NO <sub>3</sub> PO <sub>4</sub> SO <sub>4</sub>		
		F Cl NO <sub>2</sub> Br NO <sub>3</sub> PO <sub>4</sub> SO <sub>4</sub>		
		F Cl NO <sub>2</sub> Br NO <sub>3</sub> PO <sub>4</sub> SO <sub>4</sub>		

## IC Instrument Information

WL: 100492 Inst ID: 1C10 Analysis Date: 11/15/14 Analyst: SJL

*Reviewed  
11/15/14*

Rush Job No.	Samples	Anions	QC Req	HT Exp
<input type="checkbox"/> <u>154500</u>	<u>1</u>	F Cl NO2 Br NO3 PO4 SO4	MS/D #3	
<input type="checkbox"/> <u>154517</u>	<u>2</u>	F Cl NO2 Br NO3 PO4 SO4	MS/D	
<input type="checkbox"/> <u>154587</u>	<u>2</u>	F Cl NO2 Br NO3 PO4 SO4	MS/D	
<input type="checkbox"/> <u>154944</u>	<u>2</u>	F Cl NO2 Br NO3 PO4 SO4	MS/D	
<input type="checkbox"/> <u>1541052</u>	<u>1</u>	F Cl NO2 Br NO3 PO4 SO4	MS/D	
<input checked="" type="checkbox"/> <u>155037</u>	<u>2</u>	F Cl NO2 Br NO3 PO4 SO4	MS/D	
<input type="checkbox"/> <u>154405</u>	<u>4</u>	F Cl NO2 Br NO3 PO4 SO4	MS/D	
<input type="checkbox"/> <u>154487</u>	<u>3</u>	F Cl NO2 Br NO3 PO4 SO4	MS/D	
<input type="checkbox"/> <u>154580</u>	<u>3</u>	F Cl NO2 Br NO3 PO4 SO4	MS/D	
<input type="checkbox"/> <u>154442</u>	<u>4</u>	F Cl NO2 Br NO3 PO4 SO4	MS/D	
<input type="checkbox"/> <u>64690</u>	<u>1</u>	F Cl NO2 Br NO3 PO4 SO4	MS/D	
<input type="checkbox"/>		F Cl NO2 Br NO3 PO4 SO4	MS/D	
<input type="checkbox"/>		F Cl NO2 Br NO3 PO4 SO4	MS/D	
<input type="checkbox"/>		F Cl NO2 Br NO3 PO4 SO4	MS/D	

### Dilutions

Job No.	Samples	Anions	Dilution	Reason
<u>1052</u>	<u>#2</u>	F Cl NO2 Br NO3 PO4 SO4	<u>5X</u>	<u>Over range</u>
<u>1537</u>	<u>2</u>	F Cl NO2 Br NO3 PO4 SO4	<u>5X</u>	<u>Coverage</u>
<u>580</u>		F Cl NO2 Br NO3 PO4 SO4	<u>10, 100X</u>	<u>Test/Coverage</u>
<u>472</u>		F Cl NO2 Br NO3 PO4 SO4	<u>20X</u>	<u>Hist/Coverage</u>
<u>690</u>		F Cl NO2 Br NO3 PO4 SO4	<u>20X</u>	<u>test/Coverage</u>
		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\_IonChrom10\20211114-106492.b\Anions\_IC10.m  
Instrument: WC\_IonChrom10 Lims Location: 280  
Lock State: Unlocked Cpdn Order: Retention Time  
Integrator: Falcon Last Modified: 15-Nov-2021 14:59:33  
No.Compounds:7

**Initial Calibration Batches**

Ical Batch: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b  
Inj Date : 14-Nov-2021 16:43:00, Sublist: chrom-Anions\_IC10\*sub2

**Detector 1: Info 2\_091554\_1**

Compound	Wet - Anions 28D				Wet - Anions			
	b	M1	M2	Err	b	M1	M2	Err
1 Fluoride	1898768	3034754		0.997				
2 Chloride	-249919	1517163		1.000				
3 Nitrite as N					-111943	362066C		1.000
4 Bromide	-486344	6580842		0.999				
5 Nitrate as N					-242864	3971021		1.000
6 Orthophosphate as P					1806094	1644314		1.000
7 Sulfate	-263768	1122089		1.000				

Eurofins Environment Testing America  
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Anions\_IC10.m  
 Instrument: WC\_IonChrom10 Lims Location: 280  
 Lock State: Unlocked Cpnd Order: Retention Time  
 Integrator: Falcon Last Modified: 15-Nov-2021 14:59:33  
 No.Compounds:7  
 Sublist: chrom-Anions\_IC10\*sub2  
 Limit Group: Wet - Anions 28D

### Detectors

Detector: 1, Info 2\_091554\_1  
 Data Type: ic Spec Type: none  
 Supports Extracted Chromatograms: False  
 Run Time: 0.000-13.933 No. Points: 7196

### Calibration File Names

Level: 1	\\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-16570
	Inj Date: 14-Nov-2021 16:43:00 Worklist: 106492 Sample#: 2
Level: 2	\\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-17110
	Inj Date: 14-Nov-2021 16:57:00 Worklist: 106492 Sample#: 3
Level: 3	\\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-17250
	Inj Date: 14-Nov-2021 17:11:00 Worklist: 106492 Sample#: 4
Level: 4	\\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-17390
	Inj Date: 14-Nov-2021 17:25:00 Worklist: 106492 Sample#: 5
Level: 5	\\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-17530
	Inj Date: 14-Nov-2021 17:39:00 Worklist: 106492 Sample#: 6
Level: 6	\\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-18070
	Inj Date: 14-Nov-2021 17:53:00 Worklist: 106492 Sample#: 7

Start Cal Date: 14-Nov-2021 16:43:00 End Cal Date: 14-Nov-2021 17:53:00

### Individual Compound Calibration Parameters

Quant Method: ESTD	RF Calibration: Replace	
Rule Name: Linear1	Curve: Linear	Weighting: Conc
Origin: None	Error: raw_COD	Error Limit: 1.00
RF %Dif: 0.0	SPCC Limit: 0.0	CCC Limit: 0.0
Dependent Variable: Resp		

Number of Compounds: 4

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error
------------------------------------	------------------------------------	------------------------------------	------------------------------------	------------------------------------	------------------------------------	---	----	----	-------

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error
1 Fluoride									
32145115	36715394	36569889	32955388	30232119	29559434	1898768			0.997
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		30347546		
M6429023	M18357697	M36569889	M131821553	M241856951	M295594338				
106492(2)	106492(3)	106492(4)	106492(5)	106492(6)	106492(7)				
2 Chloride									
12878743	14159066	14581209	14959505	15188569	15189011	-2499190			1.000
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		15171631		
M12878743	M35397665	M72906043	M897570285	M1822628329	M3037802265				
106492(2)	106492(3)	106492(4)	106492(5)	106492(6)	106492(7)				
4 Bromide									
4992085	5436214	5592493	6088189	6578465	6675839	-486344			0.999
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		6580842		
M998417	2718107	5592493	24352756	52627722	66758391				
106492(2)	106492(3)	106492(4)	106492(5)	106492(6)	106492(7)				
7 Sulfate									
9141707	9967422	10342484	11112320	11267753	11194239	-2637680			1.000
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		11220891		
M9141707	M24918556	M51712422	M666739209	M1352130342	M2238847753				
106492(2)	106492(3)	106492(4)	106492(5)	106492(6)	106492(7)				

Eurofins Environment Testing America  
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Anions\_IC10.m

Instrument: WC\_IonChrom10

Lims Location: 280

Lock State: Unlocked

Cpnd Order: Retention Time

Integrator: Falcon

Last Modified: 15-Nov-2021 14:59:33

No.Compounds:7

Sublist: chrom-Anions\_IC10\*sub2

Limit Group: Wet - Anions

#### Detectors

Detector: 1, Info 2\_091554\_1

Data Type: ic Spec Type: none

Supports Extracted Chromatograms: False

Run Time: 0.000-13.933

No. Points: 7196

#### Calibration File Names

Level: 1	\\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-16570
	Inj Date: 14-Nov-2021 16:43:00 Worklist: 106492 Sample#: 2
Level: 2	\\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-17110
	Inj Date: 14-Nov-2021 16:57:00 Worklist: 106492 Sample#: 3
Level: 3	\\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-17250
	Inj Date: 14-Nov-2021 17:11:00 Worklist: 106492 Sample#: 4
Level: 4	\\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-17390
	Inj Date: 14-Nov-2021 17:25:00 Worklist: 106492 Sample#: 5
Level: 5	\\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-17530
	Inj Date: 14-Nov-2021 17:39:00 Worklist: 106492 Sample#: 6
Level: 6	\\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-18070
	Inj Date: 14-Nov-2021 17:53:00 Worklist: 106492 Sample#: 7

Start Cal Date: 14-Nov-2021 16:43:00

End Cal Date: 14-Nov-2021 17:53:00

#### 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
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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					
30414420	33744960	35140921	36496440	36129405	35826269	-1119437			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		36206607		
6082884	M16872480	M35140921	M145985760	M289035241	M358262688				
106492(2)	106492(3)	106492(4)	106492(5)	106492(6)	106492(7)				
5 Nitrate as N									
				Signal: 1					
30753865	33867214	35371015	38284620	39525939	39875883	-2428643			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		39710214		
6150773	16933607	35371015	153138478	316207513	398758825				
106492(2)	106492(3)	106492(4)	106492(5)	106492(6)	106492(7)				
6 Orthophosphate as P									
				Signal: 1					
25671820	20329074	17946003	16580824	16703573	16734239	1806094			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		16443148		
M5134364	M10164537	M17946003	M66323295	M133628582	M167342390				
106492(2)	106492(3)	106492(4)	106492(5)	106492(6)	106492(7)				

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-182  
 Lims ID: icb  
 Client ID:  
 Sample Type: ICB  
 Inject. Date: 14-Nov-2021 18:07:00 ALS Bottle#: 0 Worklist Smp#: 8  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-0106492-008  
 Misc. Info.: 280-0106492-008  
 Operator ID: wetchemd Instrument ID: WC\_IonChrom10  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Anions\_IC10.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 15-Nov-2021 15:21:58 Calib Date: 14-Nov-2021 17:53:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICAL File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-182

Column 1 : Det: Info 2\_091554\_1  
 Process Host: CTX1639

First Level Reviewer: gonzalezsp Date: 15-Nov-2021 15:09:10

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.773	2.768	0.005	521063	-0.0454	Ma	
2 Chloride		3.837			ND		
3 Nitrite as N		4.447			ND		
4 Bromide		5.498			ND		
5 Nitrate as N		6.208			ND		
6 Orthophosphate as P	7.748	7.693	0.055	2482874	NC	M	
7 Sulfate	8.797	8.742	0.055	158280	0.2492	M	

### QC Flag Legend

#### Processing Flags

NC - Not Calibrated

#### Review Flags

M - Manually Integrated

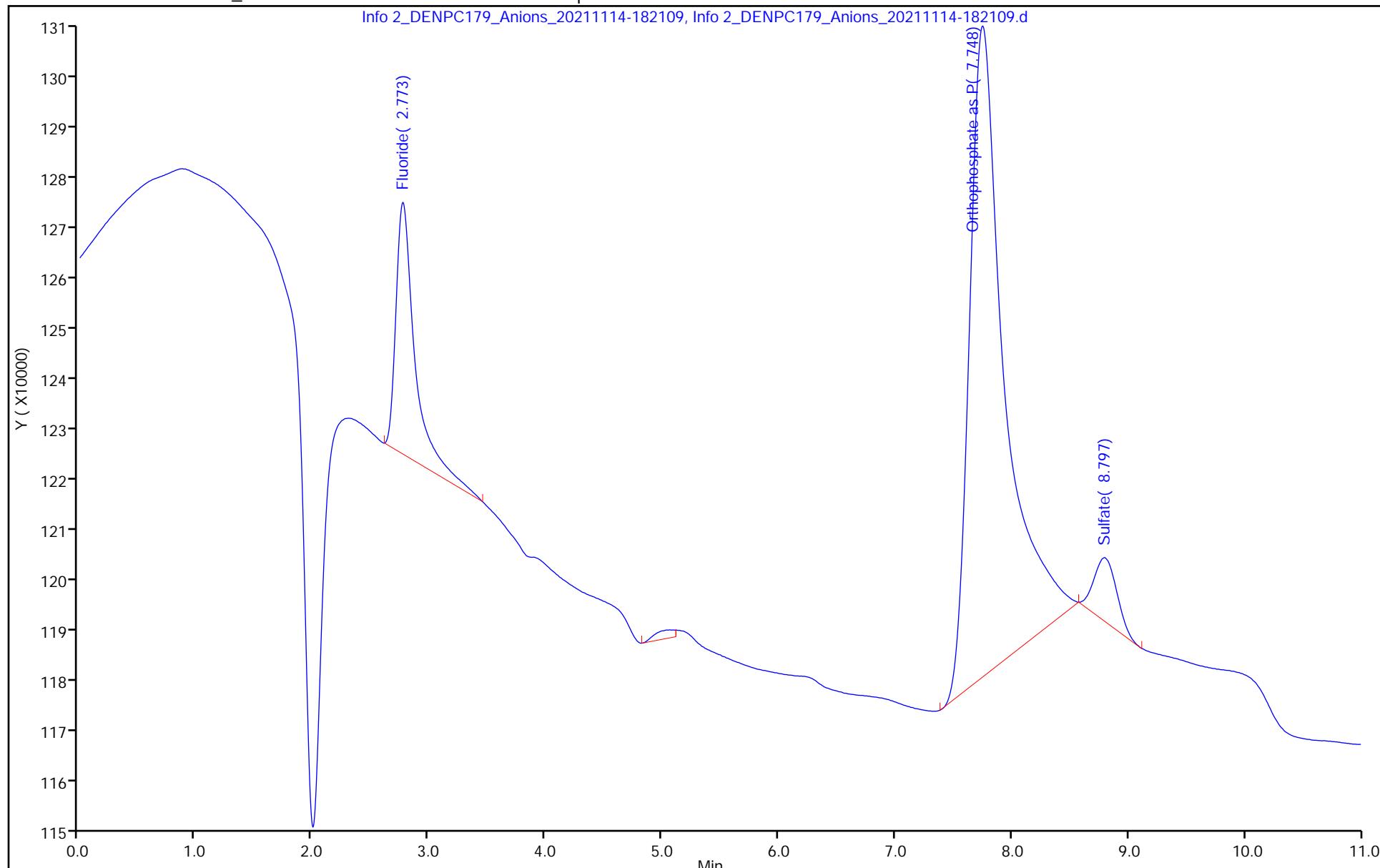
a - User Assigned ID

Report Date: 15-Nov-2021 15:22:09

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-182109.d  
Injection Date: 14-Nov-2021 18:07:00 Instrument ID: WC\_IonChrom10 Operator ID: wetchemd  
Lims ID: icb Worklist Smp#: 8  
Client ID:  
Injection Vol: 5.0 ul ALS Bottle#: 0  
Method: Anions\_IC10 Dil. Factor: 1.0000  
Limit Group: Wet - Anions 28D



## Eurofins TestAmerica, Denver

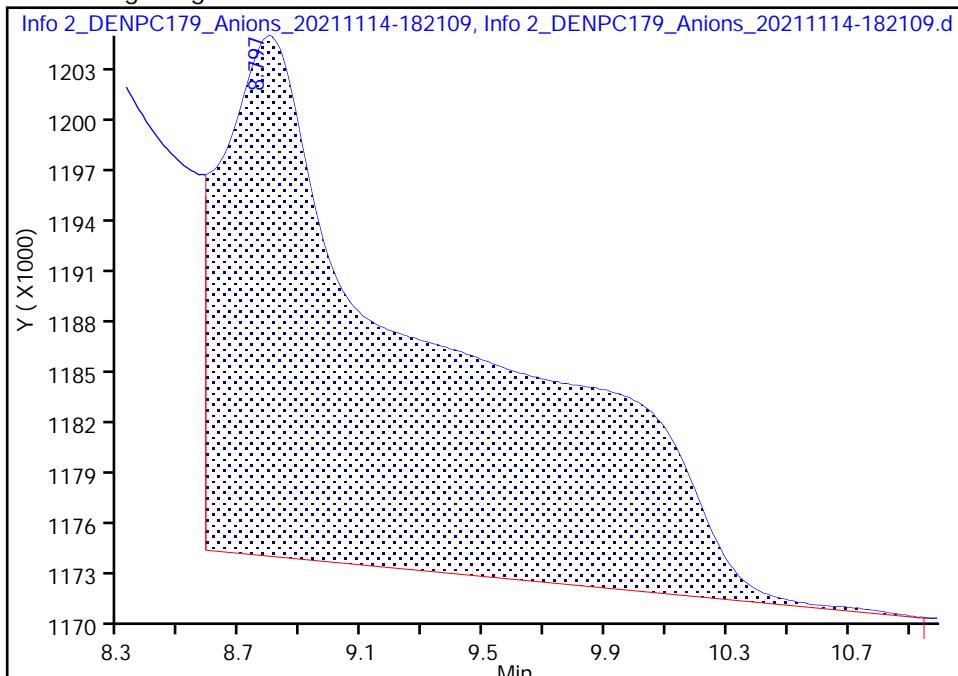
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-182109.d  
 Injection Date: 14-Nov-2021 18:07:00 Instrument ID: WC\_IonChrom10  
 Lims ID: icb  
 Client ID:  
 Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 8  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC10 Limit Group: Wet - Anions 28D  
 Column: Detector Info 2\_091554\_1

## 7 Sulfate, CAS: 14808-79-8

Signal: 1

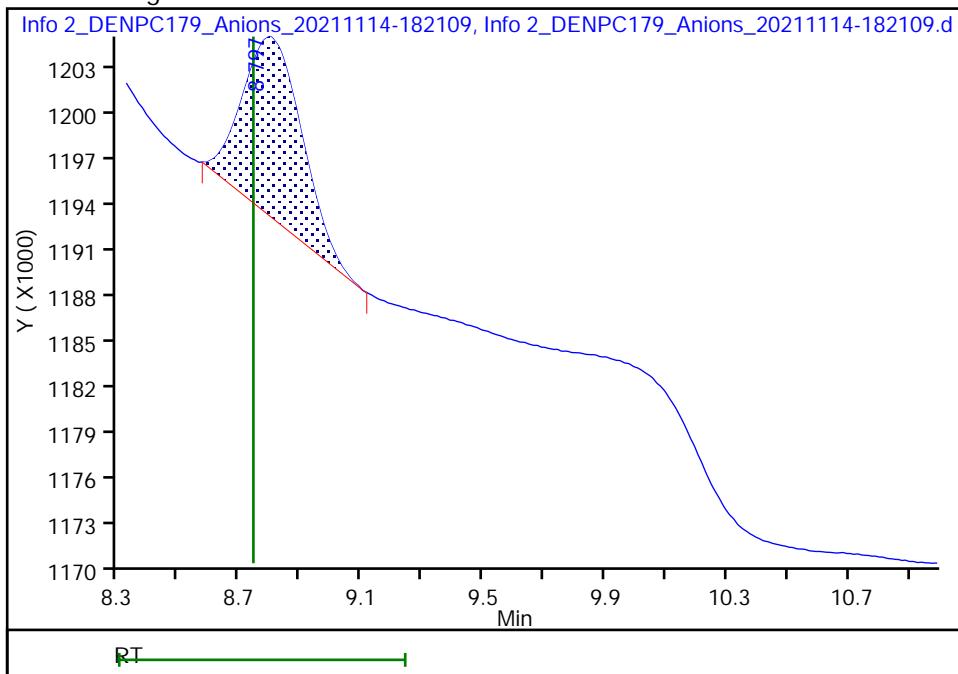
RT: 8.80  
 Area: 1546406  
 Amount: 0.372884  
 Amount Units: ug/ml

## Processing Integration Results



RT: 8.80  
 Area: 158280  
 Amount: 0.249175  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: gonzalezsp, 15-Nov-2021 15:09:05

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-183  
 Lims ID: icv  
 Client ID:  
 Sample Type: ICV  
 Inject. Date: 14-Nov-2021 18:21:00 ALS Bottle#: 0 Worklist Smp#: 9  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-0106492-009  
 Misc. Info.: 280-0106492-009  
 Operator ID: wetchemd Instrument ID: WC\_IonChrom10  
 Sublist:  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Anions\_IC10.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 15-Nov-2021 15:22:10 Calib Date: 14-Nov-2021 17:53:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-183  
 Column 1 : Det: Info 2\_091554\_1  
 Process Host: CTX1639

First Level Reviewer: gonzalezsp Date: 15-Nov-2021 07:56:17

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.768	2.768	0.000	130028484	4.00	4.22	Ma
2 Chloride	3.837	3.837	0.000	1251876792	80.0	82.7	M
3 Nitrite as N	4.447	4.447	0.000	144158207	NC	NC	M
4 Bromide	5.498	5.498	0.000	24890719	4.00	3.86	
5 Nitrate as N	6.208	6.208	0.000	155524483	NC	NC	
6 Orthophosphate as P	7.693	7.693	0.000	65200836	NC	NC	M
7 Sulfate	8.742	8.742	0.000	939382506	80.0	84.0	M

### QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

a - User Assigned ID

### Reagents:

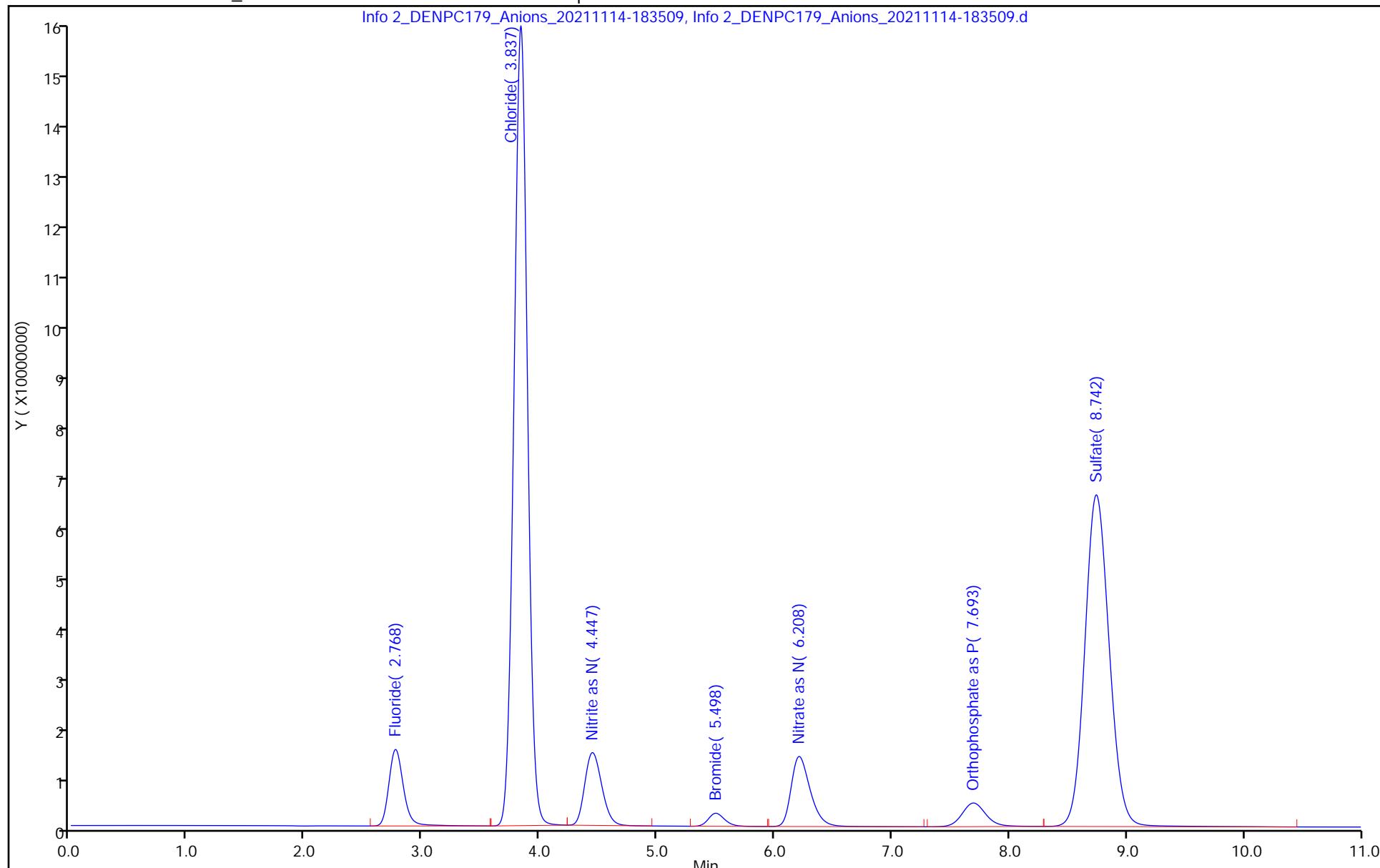
IC SO4 ICV_00022	Amount Added: 0.80	Units: mL
CI ICV Std_00002	Amount Added: 0.80	Units: mL
IC ICV 5_00341	Amount Added: 0.80	Units: mL

Report Date: 15-Nov-2021 15:22:10

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-183509.d  
Injection Date: 14-Nov-2021 18:21:00 Instrument ID: WC\_IonChrom10 Operator ID: wetchemd  
Lims ID: icv Worklist Smp#: 9  
Client ID:  
Injection Vol: 5.0 ul ALS Bottle#: 0  
Method: Anions\_IC10 Dil. Factor: 1.0000  
Limit Group: Wet - Anions 28D



## Eurofins TestAmerica, Denver

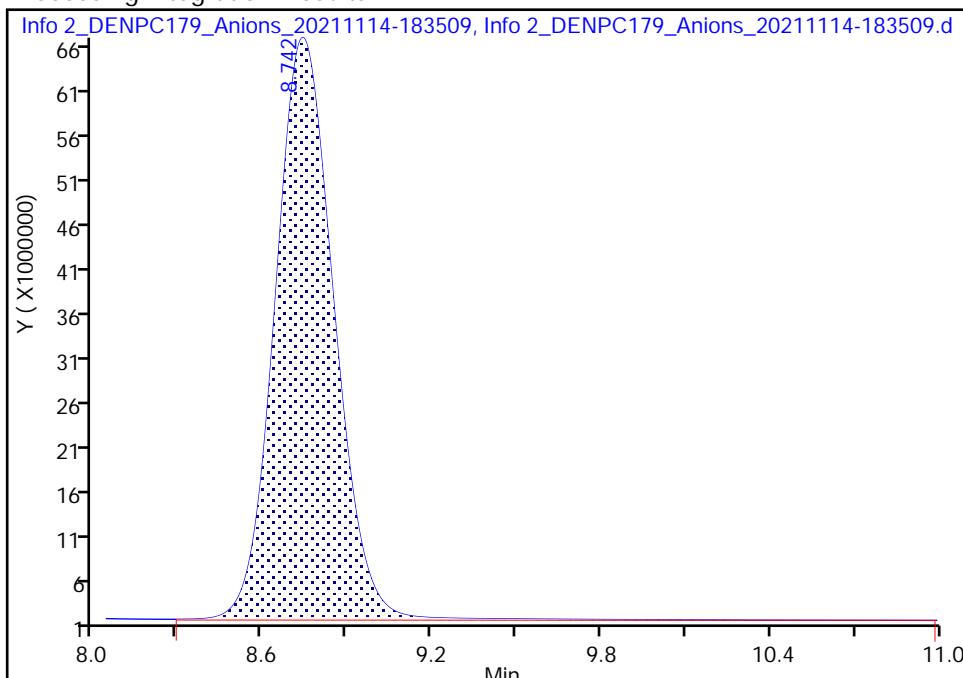
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-183509.d  
 Injection Date: 14-Nov-2021 18:21:00 Instrument ID: WC\_IonChrom10  
 Lims ID: icv  
 Client ID:  
 Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 9  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC10 Limit Group: Wet - Anions 28D  
 Column: Detector Info 2\_091554\_1

## 7 Sulfate, CAS: 14808-79-8

Signal: 1

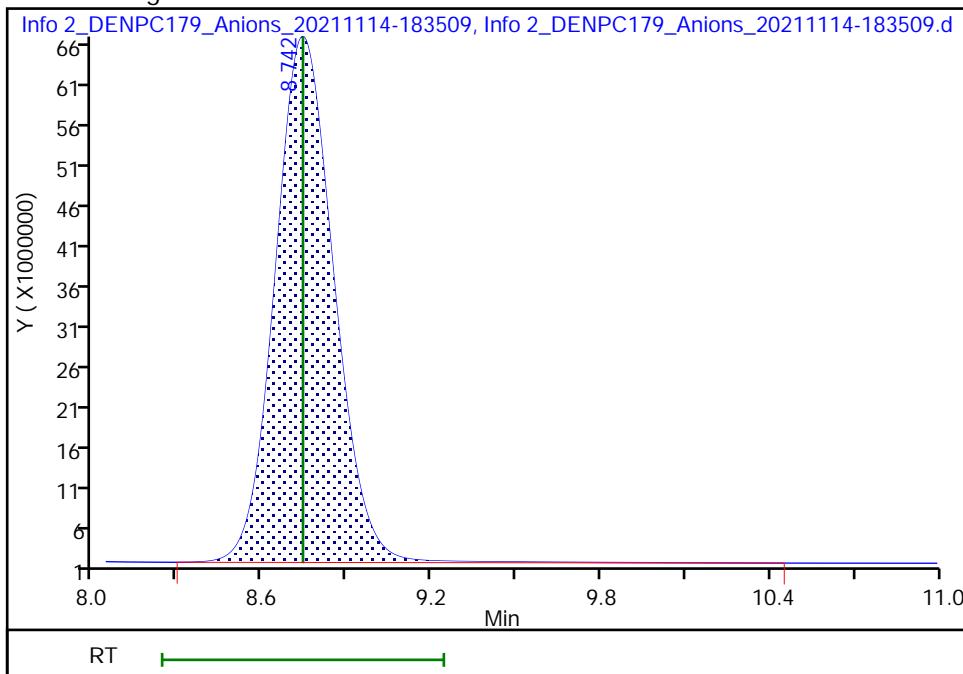
RT: 8.74  
 Area: 945411149  
 Amount: 84.489582  
 Amount Units: ug/ml

## Processing Integration Results



RT: 8.74  
 Area: 939382506  
 Amount: 83.952353  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: gonzalezsp, 15-Nov-2021 07:56:02

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

**IC Instrument Information**
 WL: 106655 Inst ID: 100 Analysis Date: 11/19/21 Analyst: JF

Rush Job No.	Samples	Anions	QC Req	HT Exp
<input type="checkbox"/> <u>155873</u>	<u>4</u>	F Cl NO <sub>2</sub> Br NO <sub>3</sub> PO <sub>4</sub> SO <sub>4</sub>	MS/D	
<input type="checkbox"/> <u>155884</u>	<u>1</u>	F Cl NO <sub>2</sub> Br NO <sub>3</sub> PO <sub>4</sub> SO <sub>4</sub>	MS/D	
<input type="checkbox"/> <u>155885</u>	<u>1</u>	F Cl NO <sub>2</sub> Br NO <sub>3</sub> PO <sub>4</sub> SO <sub>4</sub>	MS/D	
<input type="checkbox"/> <u>155886</u>	<u>3</u>	F Cl NO <sub>2</sub> Br NO <sub>3</sub> PO <sub>4</sub> SO <sub>4</sub>	MS/D	
<input type="checkbox"/> <u>155871</u>	<u>6</u>	F Cl NO <sub>2</sub> Br NO <sub>3</sub> PO <sub>4</sub> SO <sub>4</sub>	MS/D	
<input checked="" type="checkbox"/> <u>155889</u>	<u>8</u>	F Cl NO <sub>2</sub> Br NO <sub>3</sub> PO <sub>4</sub> SO <sub>4</sub>	MS/D	
<input type="checkbox"/> <u>155048</u>	<u>8</u>	F Cl NO <sub>2</sub> Br NO <sub>3</sub> PO <sub>4</sub> SO <sub>4</sub>	MS/D	<u>4, 8</u>
<input type="checkbox"/> <u>155234</u>	<u>4</u>	F Cl NO <sub>2</sub> Br NO <sub>3</sub> PO <sub>4</sub> SO <sub>4</sub>	MS/D	
<input type="checkbox"/> <u>155324</u>	<u>4</u>	F Cl NO <sub>2</sub> Br NO <sub>3</sub> PO <sub>4</sub> SO <sub>4</sub>	MS/D	
<input type="checkbox"/>		F Cl NO <sub>2</sub> Br NO <sub>3</sub> PO <sub>4</sub> SO <sub>4</sub>	MS/D	
<input type="checkbox"/>		F Cl NO <sub>2</sub> Br NO <sub>3</sub> PO <sub>4</sub> SO <sub>4</sub>	MS/D	
<input type="checkbox"/>		F Cl NO <sub>2</sub> Br NO <sub>3</sub> PO <sub>4</sub> SO <sub>4</sub>	MS/D	
<input type="checkbox"/>		F Cl NO <sub>2</sub> Br NO <sub>3</sub> PO <sub>4</sub> SO <sub>4</sub>	MS/D	
<input type="checkbox"/>		F Cl NO <sub>2</sub> Br NO <sub>3</sub> PO <sub>4</sub> SO <sub>4</sub>	MS/D	
<input type="checkbox"/>		F Cl NO <sub>2</sub> Br NO <sub>3</sub> PO <sub>4</sub> SO <sub>4</sub>	MS/D	

**Dilutions**

Job No.	Samples	Anions	Dilution	Reason
<u>884</u>		F Cl NO <sub>2</sub> Br NO <sub>3</sub> PO <sub>4</sub> SO <sub>4</sub>	<u>5, 10X</u>	<u>Coverage</u>
<u>888</u>		F Cl NO <sub>2</sub> Br NO <sub>3</sub> PO <sub>4</sub> SO <sub>4</sub>	<u>5X</u>	<u>Hist</u>
<u>237</u>		F Cl NO <sub>2</sub> Br NO <sub>3</sub> PO <sub>4</sub> SO <sub>4</sub>	<u>5, 10X</u>	<u>dilution</u>
<u>324</u>		F Cl NO <sub>2</sub> Br NO <sub>3</sub> PO <sub>4</sub> SO <sub>4</sub>	<u>10X</u>	<u>dilution</u>
		F Cl NO <sub>2</sub> Br NO <sub>3</sub> PO <sub>4</sub> SO <sub>4</sub>		
		F Cl NO <sub>2</sub> Br NO <sub>3</sub> PO <sub>4</sub> SO <sub>4</sub>		
		F Cl NO <sub>2</sub> Br NO <sub>3</sub> PO <sub>4</sub> SO <sub>4</sub>		
		F Cl NO <sub>2</sub> Br NO <sub>3</sub> PO <sub>4</sub> SO <sub>4</sub>		
		F Cl NO <sub>2</sub> Br NO <sub>3</sub> PO <sub>4</sub> SO <sub>4</sub>		

Eurofins Environment Testing America  
Initial Calibration Summary Report

Method: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Anions\_IC10.m  
Instrument: WC\_IonChrom10 Lims Location: 280  
Lock State: Unlocked Cpdn Order: Retention Time  
Integrator: Falcon Last Modified: 15-Nov-2021 14:59:33  
No.Compounds:7

**Initial Calibration Batches**

Ical Batch: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b  
Inj Date : 14-Nov-2021 16:43:00, Sublist: chrom-Anions\_IC10\*sub2

**Detector 1: Info 2\_091554\_1**

Compound	Wet - Anions 28D				Wet - Anions			
	b	M1	M2	Err	b	M1	M2	Err
1 Fluoride	1898768	3034754		0.997				
2 Chloride	-249919	1517163		1.000				
3 Nitrite as N					-111943	362066C		1.000
4 Bromide	-486344	6580842		0.999				
5 Nitrate as N					-242864	3971021		1.000
6 Orthophosphate as P					1806094	1644314		1.000
7 Sulfate	-263768	1122089		1.000				

Eurofins Environment Testing America  
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Anions\_IC10.m  
 Instrument: WC\_IonChrom10 Lims Location: 280  
 Lock State: Unlocked Cpnd Order: Retention Time  
 Integrator: Falcon Last Modified: 15-Nov-2021 14:59:33  
 No.Compounds:7  
 Sublist: chrom-Anions\_IC10\*sub2  
 Limit Group: Wet - Anions 28D

### Detectors

Detector: 1, Info 2\_091554\_1  
 Data Type: ic Spec Type: none  
 Supports Extracted Chromatograms: False  
 Run Time: 0.000-13.933 No. Points: 7196

### Calibration File Names

Level: 1	\\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-16570
	Inj Date: 14-Nov-2021 16:43:00 Worklist: 106492 Sample#: 2
Level: 2	\\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-17110
	Inj Date: 14-Nov-2021 16:57:00 Worklist: 106492 Sample#: 3
Level: 3	\\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-17250
	Inj Date: 14-Nov-2021 17:11:00 Worklist: 106492 Sample#: 4
Level: 4	\\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-17390
	Inj Date: 14-Nov-2021 17:25:00 Worklist: 106492 Sample#: 5
Level: 5	\\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-17530
	Inj Date: 14-Nov-2021 17:39:00 Worklist: 106492 Sample#: 6
Level: 6	\\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-18070
	Inj Date: 14-Nov-2021 17:53:00 Worklist: 106492 Sample#: 7

Start Cal Date: 14-Nov-2021 16:43:00 End Cal Date: 14-Nov-2021 17:53:00

### Individual Compound Calibration Parameters

Quant Method: ESTD	RF Calibration: Replace	
Rule Name: Linear1	Curve: Linear	Weighting: Conc
Origin: None	Error: raw_COD	Error Limit: 1.00
RF %Dif: 0.0	SPCC Limit: 0.0	CCC Limit: 0.0
Dependent Variable: Resp		

Number of Compounds: 4

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error
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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									
32145115	36715394	36569889	32955388	30232119	29559434	1898768			0.997
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		30347546		
M6429023	M18357697	M36569889	M131821553	M241856951	M295594338				
106492(2)	106492(3)	106492(4)	106492(5)	106492(6)	106492(7)				
2 Chloride									
12878743	14159066	14581209	14959505	15188569	15189011	-2499190			1.000
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		15171631		
M12878743	M35397665	M72906043	M897570285	M1822628329	M3037802265				
106492(2)	106492(3)	106492(4)	106492(5)	106492(6)	106492(7)				
4 Bromide									
4992085	5436214	5592493	6088189	6578465	6675839	-486344			0.999
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		6580842		
M998417	2718107	5592493	24352756	52627722	66758391				
106492(2)	106492(3)	106492(4)	106492(5)	106492(6)	106492(7)				
7 Sulfate									
9141707	9967422	10342484	11112320	11267753	11194239	-2637680			1.000
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		11220891		
M9141707	M24918556	M51712422	M666739209	M1352130342	M2238847753				
106492(2)	106492(3)	106492(4)	106492(5)	106492(6)	106492(7)				

Eurofins Environment Testing America  
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Anions\_IC10.m

Instrument: WC\_IonChrom10

Lims Location: 280

Lock State: Unlocked

Cpnd Order: Retention Time

Integrator: Falcon

Last Modified: 15-Nov-2021 14:59:33

No.Compounds:7

Sublist: chrom-Anions\_IC10\*sub2

Limit Group: Wet - Anions

#### Detectors

Detector: 1, Info 2\_091554\_1

Data Type: ic Spec Type: none

Supports Extracted Chromatograms: False

Run Time: 0.000-13.933

No. Points: 7196

#### Calibration File Names

Level: 1	\\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-16570
	Inj Date: 14-Nov-2021 16:43:00 Worklist: 106492 Sample#: 2
Level: 2	\\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-17110
	Inj Date: 14-Nov-2021 16:57:00 Worklist: 106492 Sample#: 3
Level: 3	\\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-17250
	Inj Date: 14-Nov-2021 17:11:00 Worklist: 106492 Sample#: 4
Level: 4	\\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-17390
	Inj Date: 14-Nov-2021 17:25:00 Worklist: 106492 Sample#: 5
Level: 5	\\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-17530
	Inj Date: 14-Nov-2021 17:39:00 Worklist: 106492 Sample#: 6
Level: 6	\\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-18070
	Inj Date: 14-Nov-2021 17:53:00 Worklist: 106492 Sample#: 7

Start Cal Date: 14-Nov-2021 16:43:00

End Cal Date: 14-Nov-2021 17:53:00

#### 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					
30414420	33744960	35140921	36496440	36129405	35826269	-1119437			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		36206607		
6082884	M16872480	M35140921	M145985760	M289035241	M358262688				
106492(2)	106492(3)	106492(4)	106492(5)	106492(6)	106492(7)				
5 Nitrate as N									
				Signal: 1					
30753865	33867214	35371015	38284620	39525939	39875883	-2428643			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		39710214		
6150773	16933607	35371015	153138478	316207513	398758825				
106492(2)	106492(3)	106492(4)	106492(5)	106492(6)	106492(7)				
6 Orthophosphate as P									
				Signal: 1					
25671820	20329074	17946003	16580824	16703573	16734239	1806094			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		16443148		
M5134364	M10164537	M17946003	M66323295	M133628582	M167342390				
106492(2)	106492(3)	106492(4)	106492(5)	106492(6)	106492(7)				

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211119-145  
 Lims ID: CCV  
 Client ID:  
 Sample Type: CCV  
 Inject. Date: 19-Nov-2021 14:40:00 ALS Bottle#: 0 Worklist Smp#: 1  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-0106655-001  
 Misc. Info.: 280-0106655-001  
 Operator ID: wetchemd Instrument ID: WC\_IonChrom10  
 Sublist: chrom-Anions\_IC10\*sub2  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Anions\_IC10.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 20-Nov-2021 19:01:46 Calib Date: 14-Nov-2021 17:53:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-180  
 Column 1 : Det: Info 2\_091554\_1  
 Process Host: CTX1611

First Level Reviewer: jindarac Date: 19-Nov-2021 15:14:17

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.753	2.753	0.000	143465504	5.00	4.66	Ma
2 Chloride	3.800	3.800	0.000	1514373549	100.0	100.0	M
3 Nitrite as N	4.372	4.372	0.000	180855310	NC	NC	M
4 Bromide	5.382	5.382	0.000	31808776	5.00	4.91	
5 Nitrate as N	6.055	6.055	0.000	190761280	NC	NC	
6 Orthophosphate as P	7.507	7.507	0.000	82531360	NC	NC	M
7 Sulfate	8.515	8.515	0.000	1135313044	100.0	101.4	Ma

### QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

a - User Assigned ID

### Reagents:

IC LCS\_01845

Amount Added: 10.00

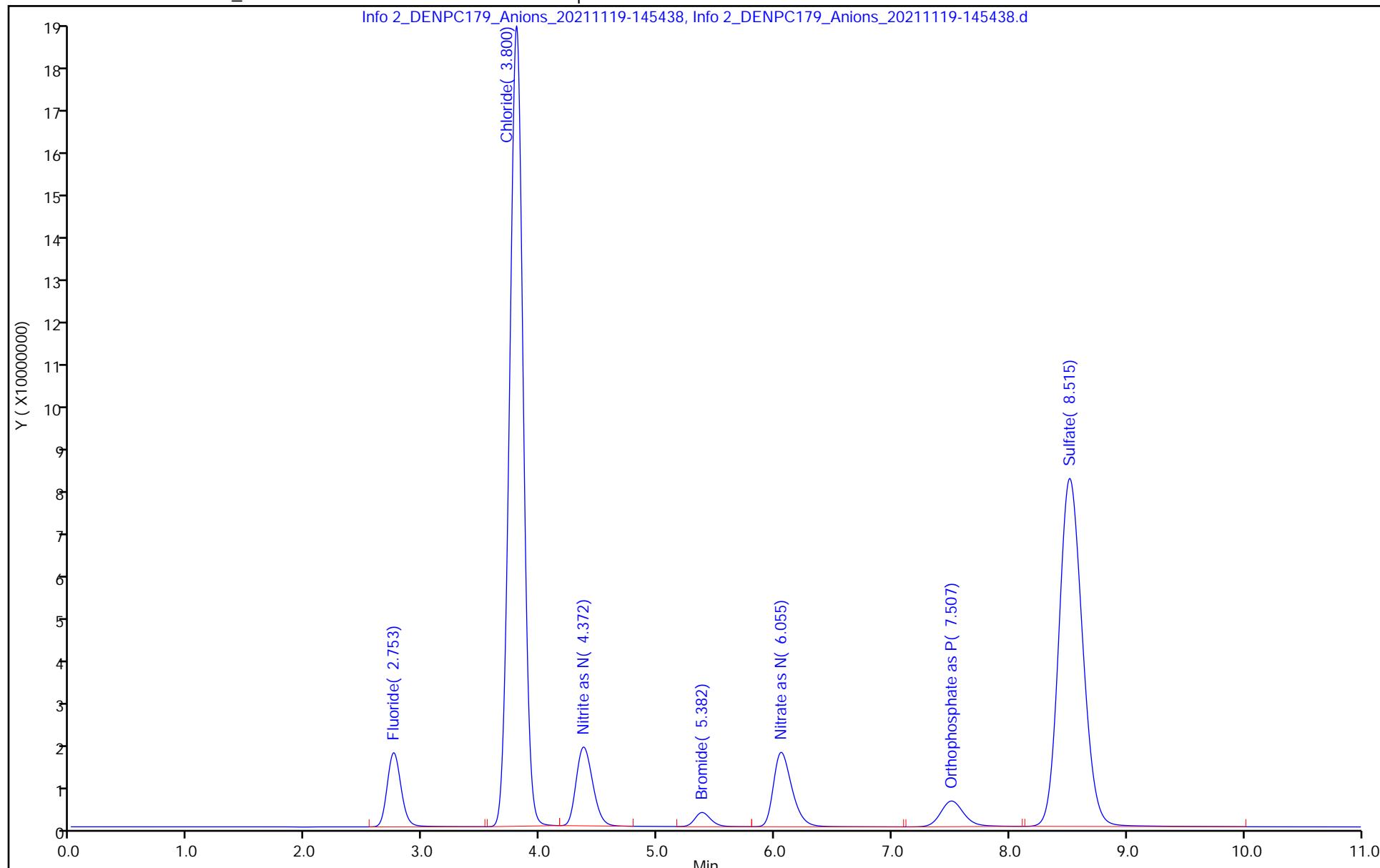
Units: mL

Report Date: 20-Nov-2021 19:01:46

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211119-145438.d  
Injection Date: 19-Nov-2021 14:40:00 Instrument ID: WC\_IonChrom10 Operator ID: wetchemd  
Lims ID: CCV Worklist Smp#: 1  
Client ID:  
Injection Vol: 5.0 ul ALS Bottle#: 0  
Method: Anions\_IC10 Dil. Factor: 1.0000  
Limit Group: Wet - Anions 28D



## Eurofins TestAmerica, Denver

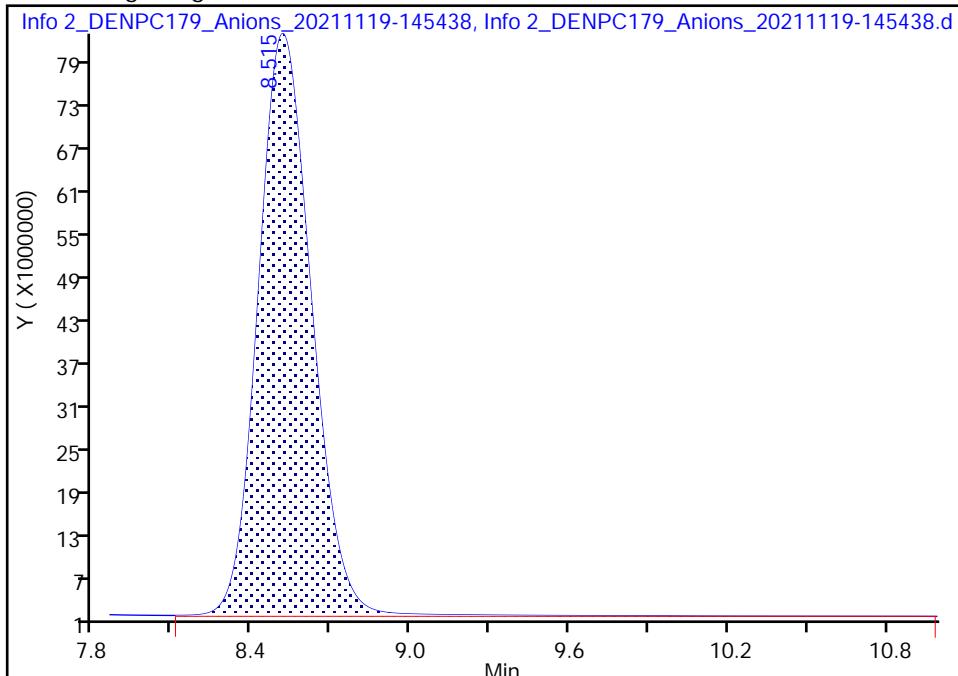
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211119-145438.d  
 Injection Date: 19-Nov-2021 14:40:00 Instrument ID: WC\_IonChrom10  
 Lims ID: CCV  
 Client ID:  
 Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 1  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC10 Limit Group: Wet - Anions 28D  
 Column: Detector Info 2\_091554\_1

## 7 Sulfate, CAS: 14808-79-8

Signal: 1

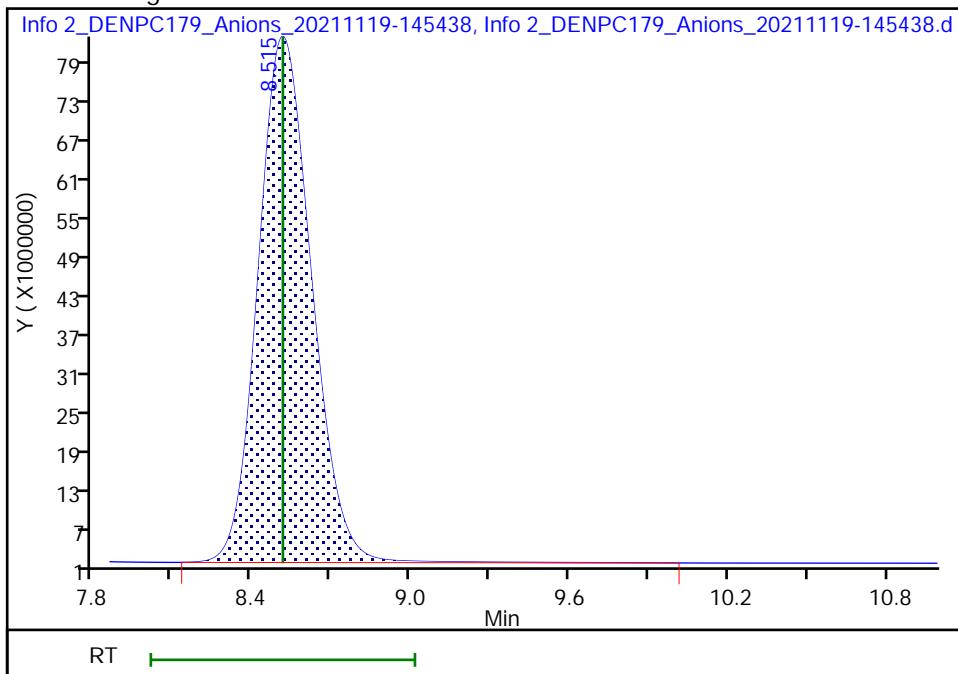
## Processing Integration Results

RT: 8.52  
 Area: 1145617182  
 Amount: 102.3319  
 Amount Units: ug/ml



## Manual Integration Results

RT: 8.52  
 Area: 1135313044  
 Amount: 101.4136  
 Amount Units: ug/ml



Reviewer: jindarac, 20-Nov-2021 18:31:34

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211119-150  
 Lims ID: CCB  
 Client ID:  
 Sample Type: CCB  
 Inject. Date: 19-Nov-2021 14:54:00      ALS Bottle#: 0      Worklist Smp#: 2  
 Injection Vol: 5.0 ul      Dil. Factor: 1.0000  
 Sample Info: 280-0106655-002  
 Misc. Info.: 280-0106655-002  
 Operator ID: wetchemd      Instrument ID: WC\_IonChrom10  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Anions\_IC10.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 20-Nov-2021 19:01:46      Calib Date: 14-Nov-2021 17:53:00  
 Integrator: Falcon  
 Quant Method: External Standard      Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-180  
 Column 1 : Det: Info 2\_091554\_1  
 Process Host: CTX1611

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		2.753			ND		
2 Chloride		3.800			ND		
3 Nitrite as N		4.372			ND		
4 Bromide		5.382			ND		
5 Nitrate as N		6.055			ND		
6 Orthophosphate as P	7.560	7.507	0.053	2527537		NC	
7 Sulfate	8.575	8.515	0.060	1866853		0.4014	

### QC Flag Legend

Processing Flags

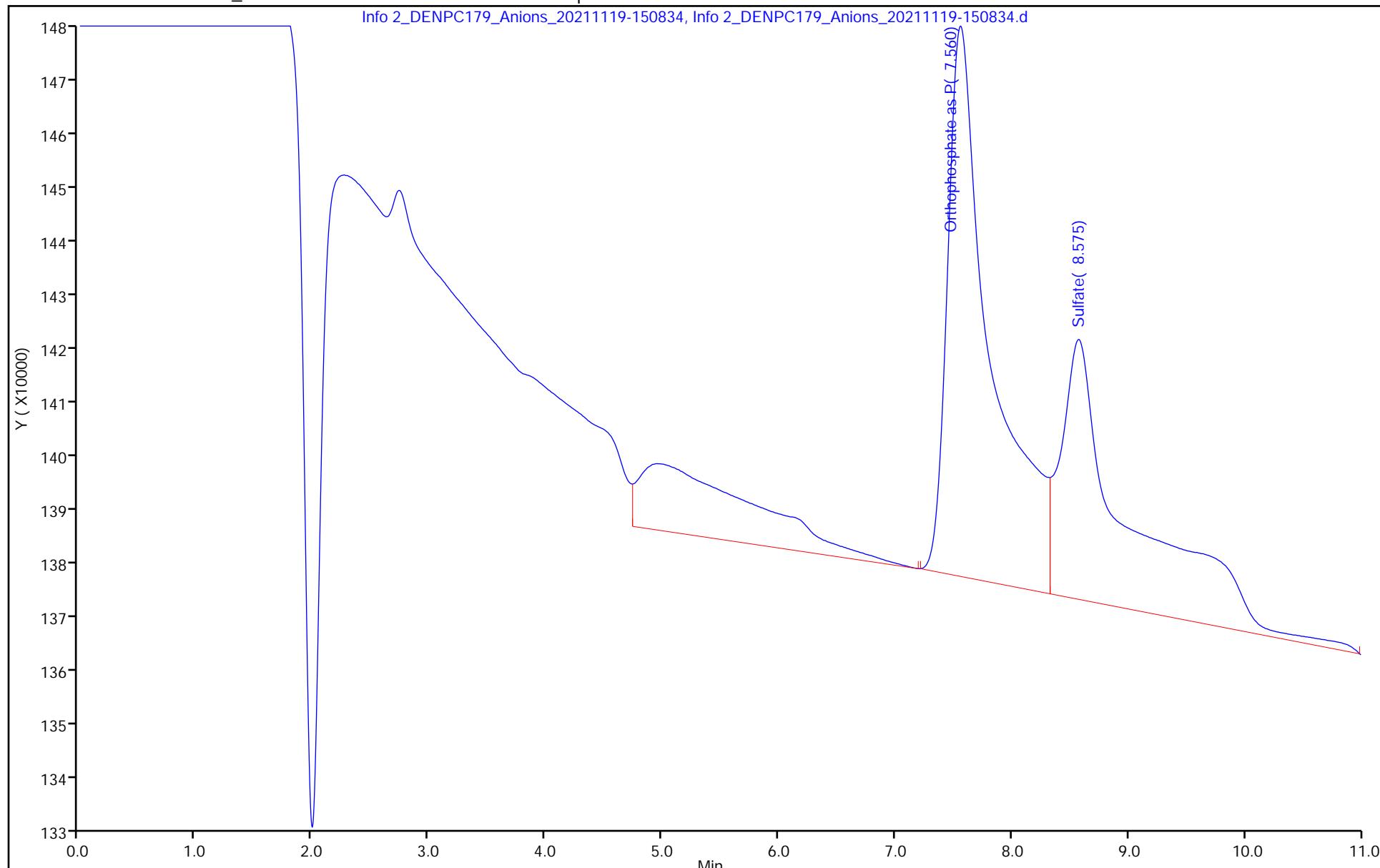
NC - Not Calibrated

Report Date: 20-Nov-2021 19:01:46

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211119-150834.d  
Injection Date: 19-Nov-2021 14:54:00 Instrument ID: WC\_IonChrom10 Operator ID: wetchemd  
Lims ID: CCB Worklist Smp#: 2  
Client ID:  
Injection Vol: 5.0 ul ALS Bottle#: 0  
Method: Anions\_IC10 Dil. Factor: 1.0000  
Limit Group: Wet - Anions 28D



Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211119-152844.m  
 Lims ID: MRL  
 Client ID:  
 Sample Type: MRL  
 Inject. Date: 19-Nov-2021 15:08:00 ALS Bottle#: 0 Worklist Smp#: 3  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-0106655-003  
 Misc. Info.: 280-0106655-003  
 Operator ID: wetchemd Instrument ID: WC\_IonChrom10  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Anions\_IC10.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 20-Nov-2021 19:01:46 Calib Date: 14-Nov-2021 17:53:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICAL File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-180000.m  
 Column 1 : Det: Info 2\_091554\_1  
 Process Host: CTX1611

First Level Reviewer: jindaratac Date: 20-Nov-2021 18:32:06

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.755	2.753	0.002	15257539	0.5000	0.4402	Ma
2 Chloride	3.780	3.800	-0.020	34501494	5.00	2.44	
3 Nitrite as N	4.405	4.372	0.033	17231731	NC	NC	
4 Bromide	5.428	5.382	0.046	2993367	0.5000	0.5288	
5 Nitrate as N	6.155	6.055	0.100	17046289	NC	NC	
6 Orthophosphate as P	7.637	7.507	0.130	11200762	NC	NC	
7 Sulfate	8.672	8.515	0.157	26605355	5.00	2.61	

### QC Flag Legend

#### Processing Flags

NC - Not Calibrated

#### Review Flags

M - Manually Integrated

a - User Assigned ID

### Reagents:

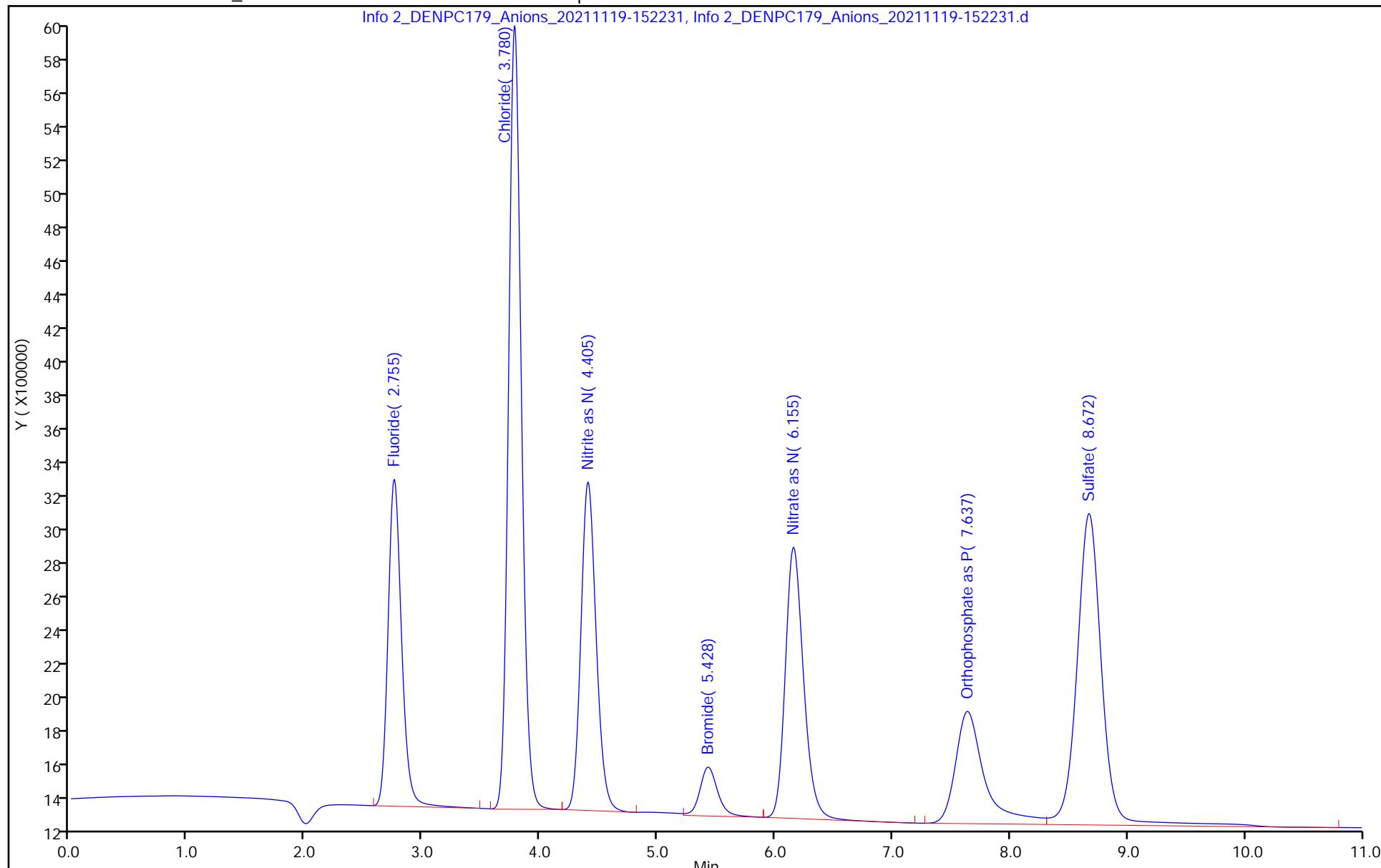
IC Cal low_00608	Amount Added: 0.10	Units: mL
IC CAL cl/so4_00394	Amount Added: 0.20	Units: mL

Report Date: 20-Nov-2021 19:01:47

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211119-152231.d  
Injection Date: 19-Nov-2021 15:08:00 Instrument ID: WC\_IonChrom10 Operator ID: wetchemd  
Lims ID: MRL Worklist Smp#: 3  
Client ID:  
Injection Vol: 5.0 ul ALS Bottle#: 0  
Method: Anions\_IC10 Dil. Factor: 1.0000  
Limit Group: Wet - Anions 28D



Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211119-153  
 Lims ID: LCS  
 Client ID:  
 Sample Type: LCS  
 Inject. Date: 19-Nov-2021 15:22:00 ALS Bottle#: 0 Worklist Smp#: 4  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-0106655-004  
 Misc. Info.: 280-0106655-004  
 Operator ID: wetchemd Instrument ID: WC\_IonChrom10  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Anions\_IC10.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 20-Nov-2021 19:01:46 Calib Date: 14-Nov-2021 17:53:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICAL File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-180

Column 1 : Det: Info 2\_091554\_1  
 Process Host: CTX1611

First Level Reviewer: jindarac Date: 19-Nov-2021 17:16:24

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.762	2.753	0.009	150783737	5.00	4.91	Ma
2 Chloride	3.815	3.800	0.015	1516743437	100.0	100.1	M
3 Nitrite as N	4.393	4.372	0.021	181329777	NC	NC	M
4 Bromide	5.403	5.382	0.021	31378245	5.00	4.84	
5 Nitrate as N	6.082	6.055	0.027	191628570	NC	NC	
6 Orthophosphate as P	7.620	7.507	0.113	83833329	NC	NC	Ma
7 Sulfate	8.630	8.515	0.115	1136380965	100.0	101.5	Ma

### QC Flag Legend

#### Processing Flags

NC - Not Calibrated

#### Review Flags

M - Manually Integrated

a - User Assigned ID

### Reagents:

IC LCS\_01845

Amount Added: 10.00

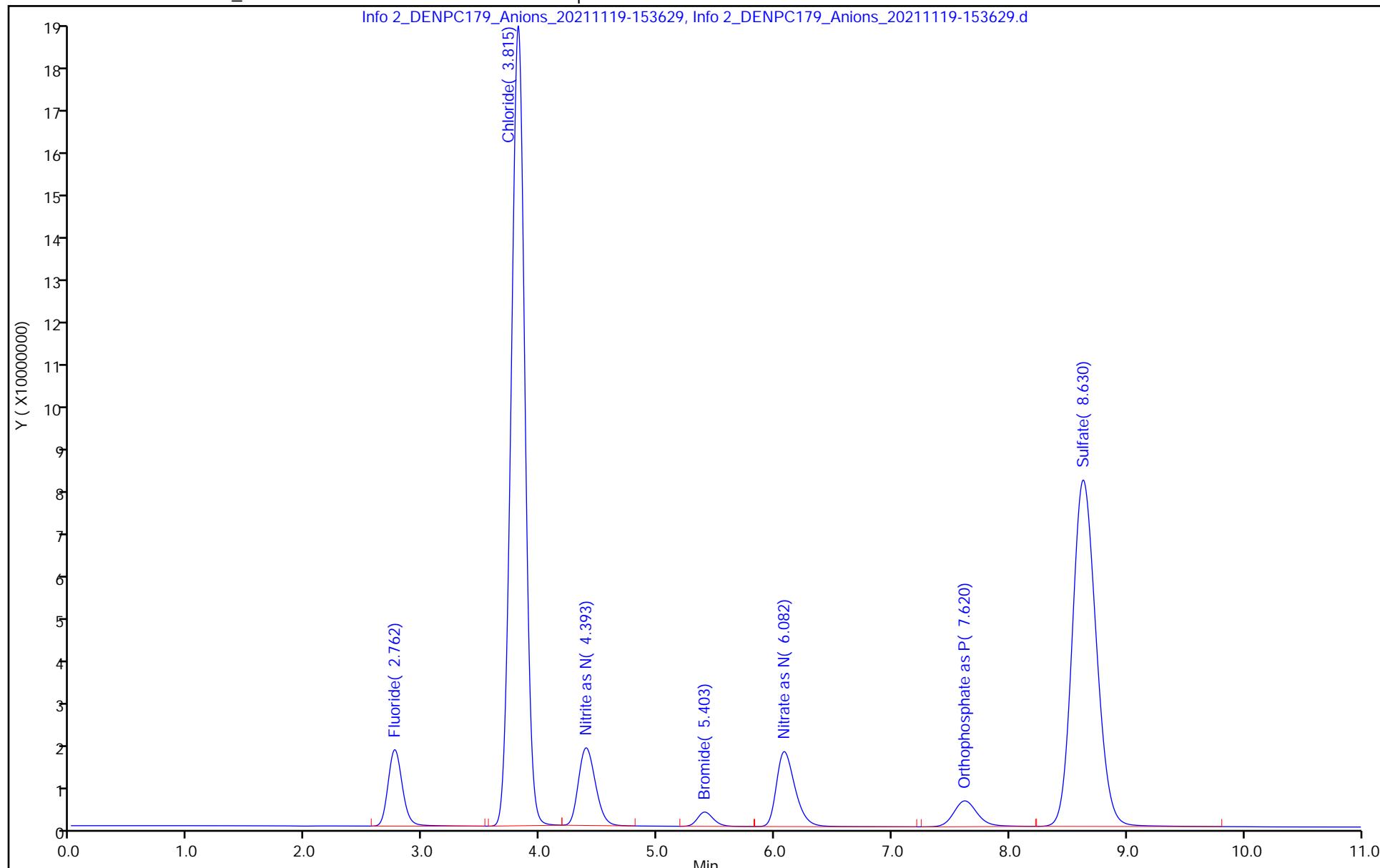
Units: mL

Report Date: 20-Nov-2021 19:01:47

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211119-153629.d  
Injection Date: 19-Nov-2021 15:22:00 Instrument ID: WC\_IonChrom10 Operator ID: wetchemd  
Lims ID: LCS Worklist Smp#: 4  
Client ID:  
Injection Vol: 5.0 ul ALS Bottle#: 0  
Method: Anions\_IC10 Dil. Factor: 1.0000  
Limit Group: Wet - Anions 28D



## Eurofins TestAmerica, Denver

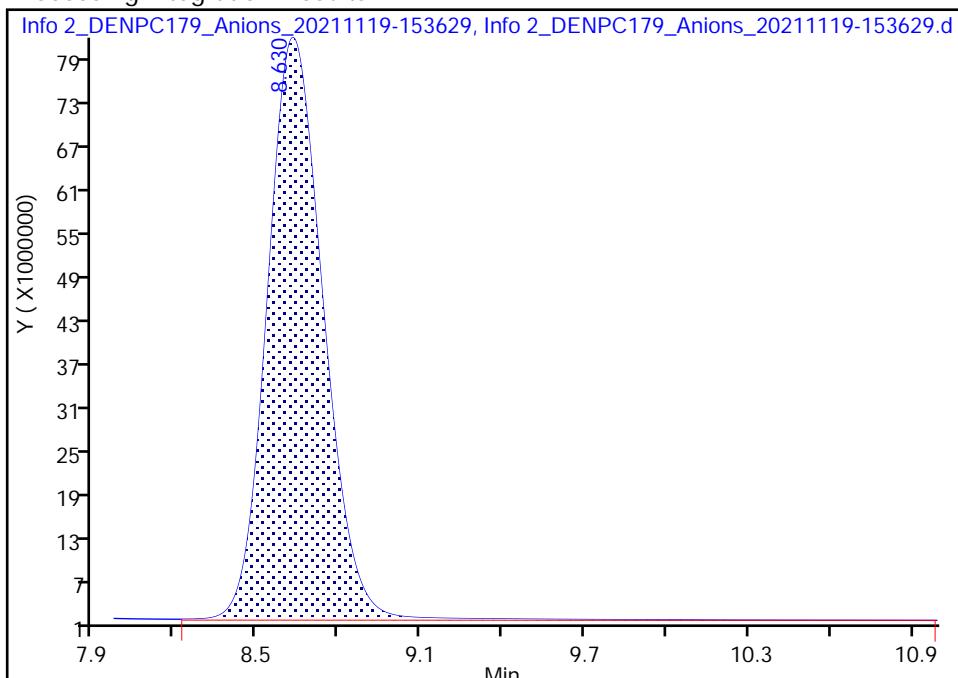
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211119-153629.d  
 Injection Date: 19-Nov-2021 15:22:00 Instrument ID: WC\_IonChrom10  
 Lims ID: LCS  
 Client ID:  
 Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 4  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC10 Limit Group: Wet - Anions 28D  
 Column: Detector Info 2\_091554\_1

## 7 Sulfate, CAS: 14808-79-8

Signal: 1

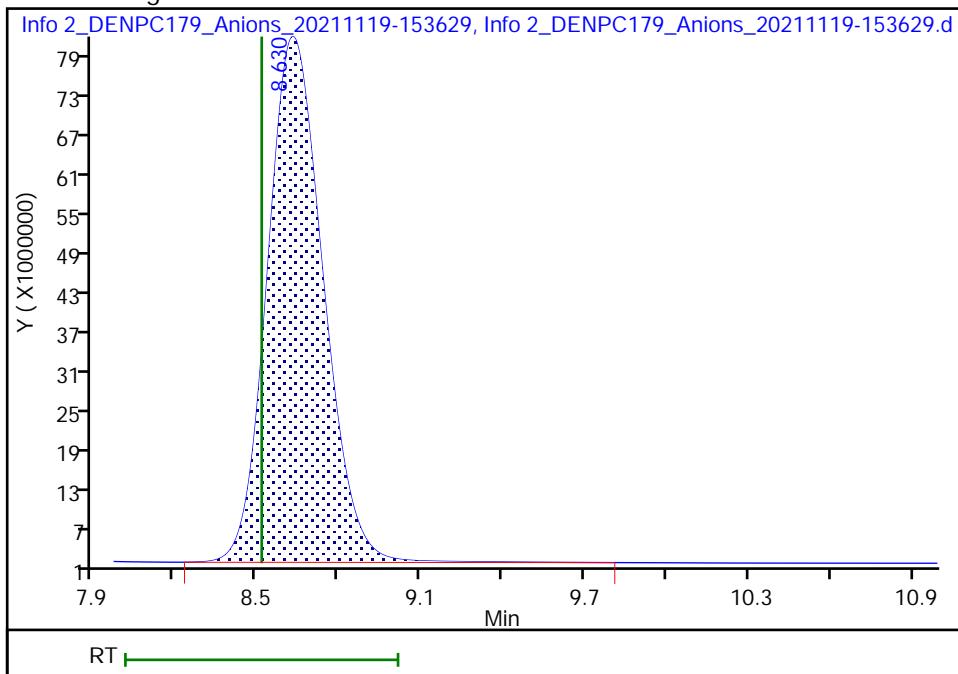
RT: 8.63  
 Area: 1147372344  
 Amount: 102.4883  
 Amount Units: ug/ml

## Processing Integration Results



RT: 8.63  
 Area: 1136380965  
 Amount: 101.5088  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: jindarac, 20-Nov-2021 18:33:53

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211119-155  
 Lims ID: LCSD  
 Client ID:  
 Sample Type: LCSD  
 Inject. Date: 19-Nov-2021 15:36:00 ALS Bottle#: 0 Worklist Smp#: 5  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-0106655-005  
 Misc. Info.: 280-0106655-005  
 Operator ID: wetchemd Instrument ID: WC\_IonChrom10  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Anions\_IC10.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 20-Nov-2021 19:01:46 Calib Date: 14-Nov-2021 17:53:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICAL File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-180

Column 1 : Det: Info 2\_091554\_1  
 Process Host: CTX1611

First Level Reviewer: jindarac

Date: 19-Nov-2021 16:39:53

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.763	2.753	0.010	152548898	5.00	4.96	Ma
2 Chloride	3.815	3.800	0.015	1517023313	100.0	100.2	M
3 Nitrite as N	4.393	4.372	0.021	180192127	NC	NC	M
4 Bromide	5.407	5.382	0.025	31120677	5.00	4.80	
5 Nitrate as N	6.083	6.055	0.028	191186572	NC	NC	
6 Orthophosphate as P	7.622	7.507	0.115	83847156	NC	NC	M
7 Sulfate	8.632	8.515	0.117	1136997255	100.0	101.6	M

**QC Flag Legend**

## Processing Flags

NC - Not Calibrated

## Review Flags

M - Manually Integrated

a - User Assigned ID

**Reagents:**

IC LCS\_01845

Amount Added: 10.00

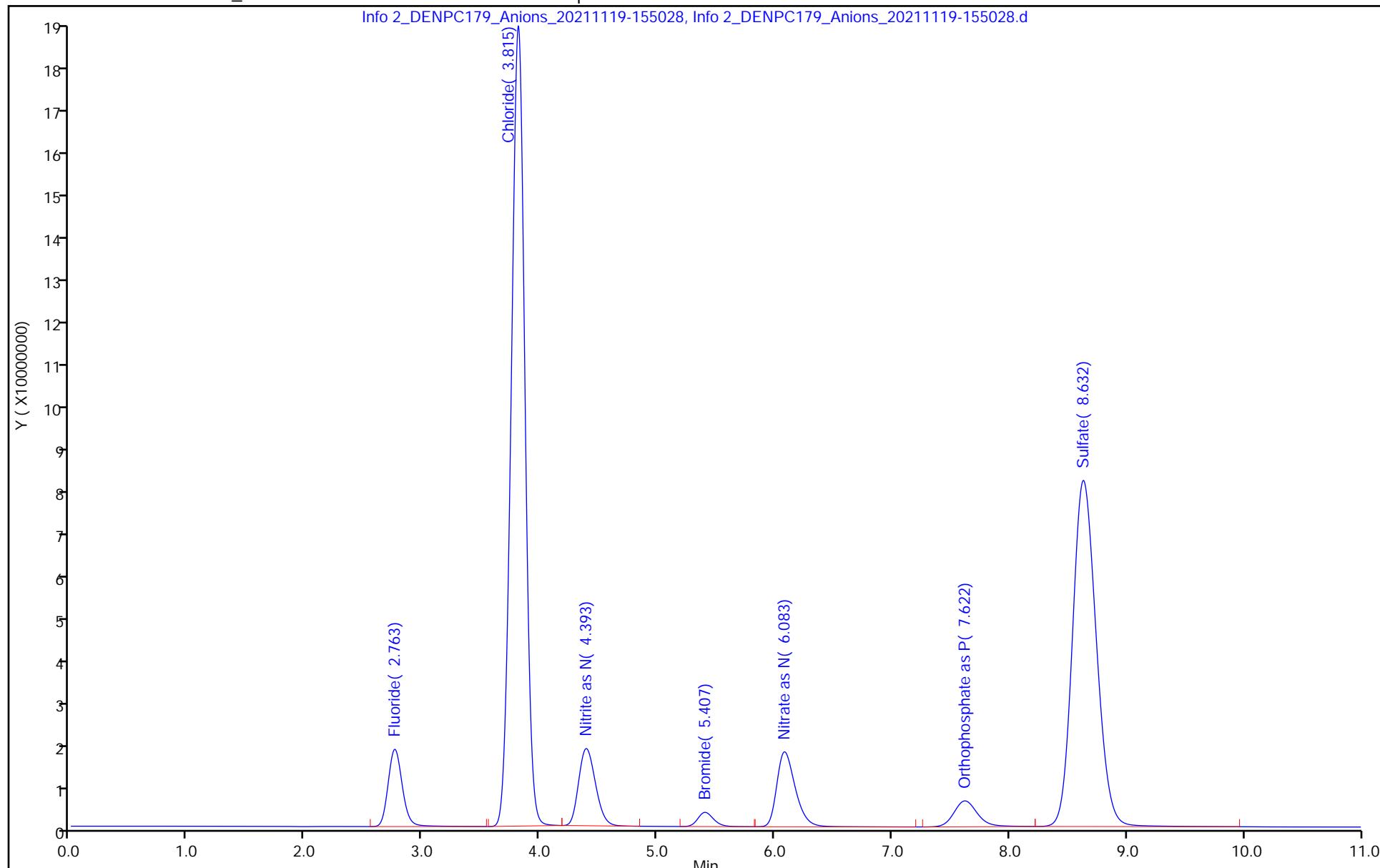
Units: mL

Report Date: 20-Nov-2021 19:01:48

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211119-155028.d  
Injection Date: 19-Nov-2021 15:36:00 Instrument ID: WC\_IonChrom10 Operator ID: wetchemd  
Lims ID: LCSD Worklist Smp#: 5  
Client ID:  
Injection Vol: 5.0 ul ALS Bottle#: 0  
Method: Anions\_IC10 Dil. Factor: 1.0000  
Limit Group: Wet - Anions 28D



## Eurofins TestAmerica, Denver

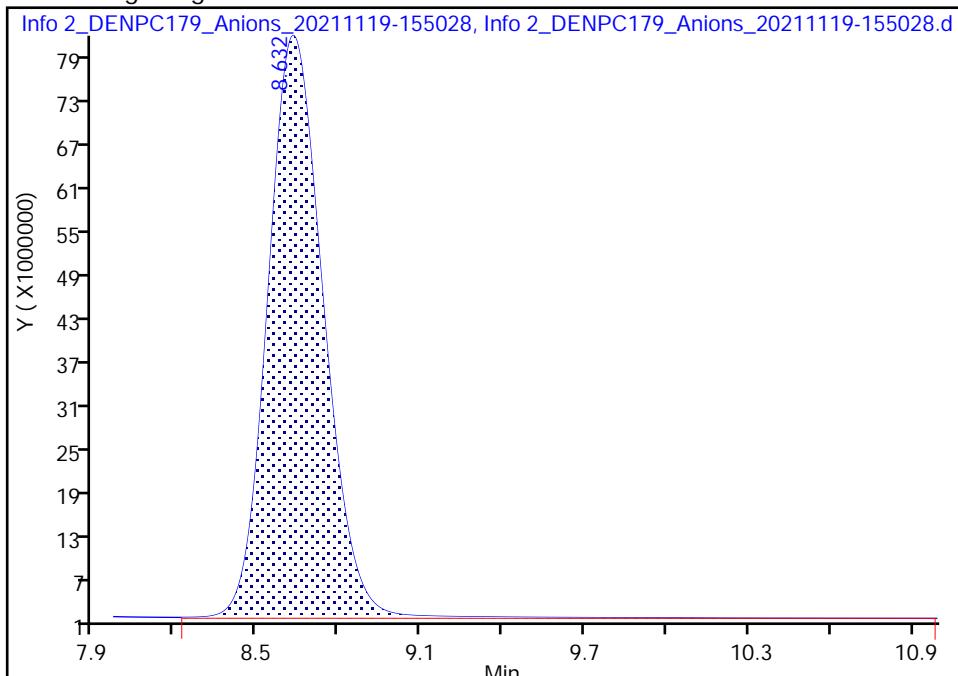
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211119-155028.d  
 Injection Date: 19-Nov-2021 15:36:00 Instrument ID: WC\_IonChrom10  
 Lims ID: LCSD  
 Client ID:  
 Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 5  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC10 Limit Group: Wet - Anions 28D  
 Column: Detector Info 2\_091554\_1

## 7 Sulfate, CAS: 14808-79-8

Signal: 1

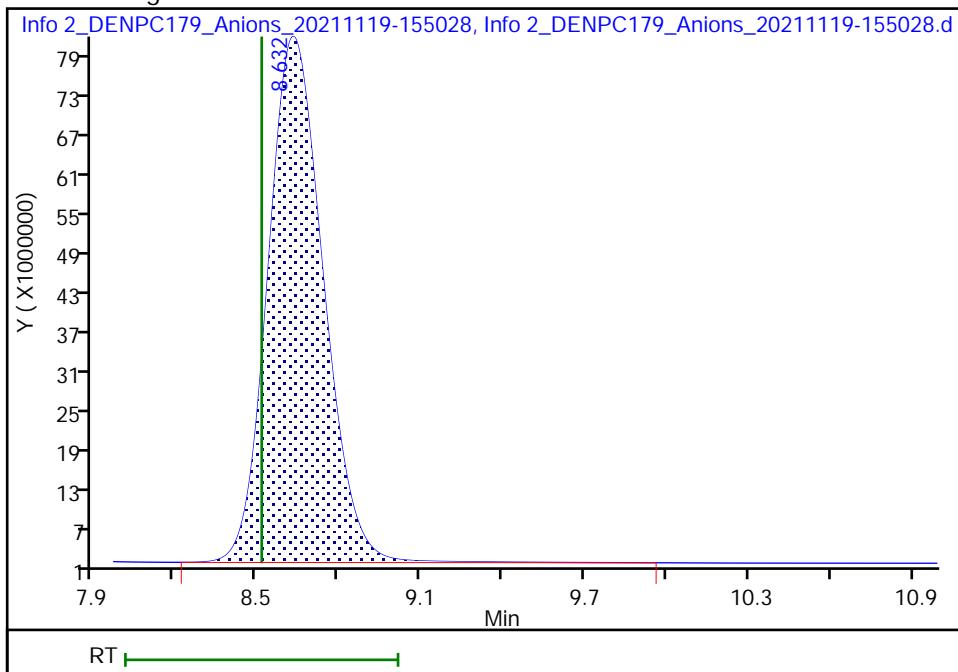
## Processing Integration Results

RT: 8.63  
 Area: 1147300855  
 Amount: 102.4819  
 Amount Units: ug/ml



## Manual Integration Results

RT: 8.63  
 Area: 1136997255  
 Amount: 101.5637  
 Amount Units: ug/ml



Reviewer: jindarac, 20-Nov-2021 18:35:10

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211119-160  
 Lims ID: MB  
 Client ID:  
 Sample Type: MB  
 Inject. Date: 19-Nov-2021 15:50:00 ALS Bottle#: 0 Worklist Smp#: 6  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-0106655-006  
 Misc. Info.: 280-0106655-006  
 Operator ID: wetchemd Instrument ID: WC\_IonChrom10  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Anions\_IC10.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 20-Nov-2021 19:01:48 Calib Date: 14-Nov-2021 17:53:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-180  
 Column 1 : Det: Info 2\_091554\_1  
 Process Host: CTX1611

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.753				ND		
2 Chloride	3.800				ND		
3 Nitrite as N	4.372				ND		
4 Bromide	5.382				ND		
5 Nitrate as N	6.055				ND		
6 Orthophosphate as P	7.683	7.683	0.000	3040140		NC	
7 Sulfate	8.702	8.702	0.000	1793344		0.3949	

### QC Flag Legend

Processing Flags

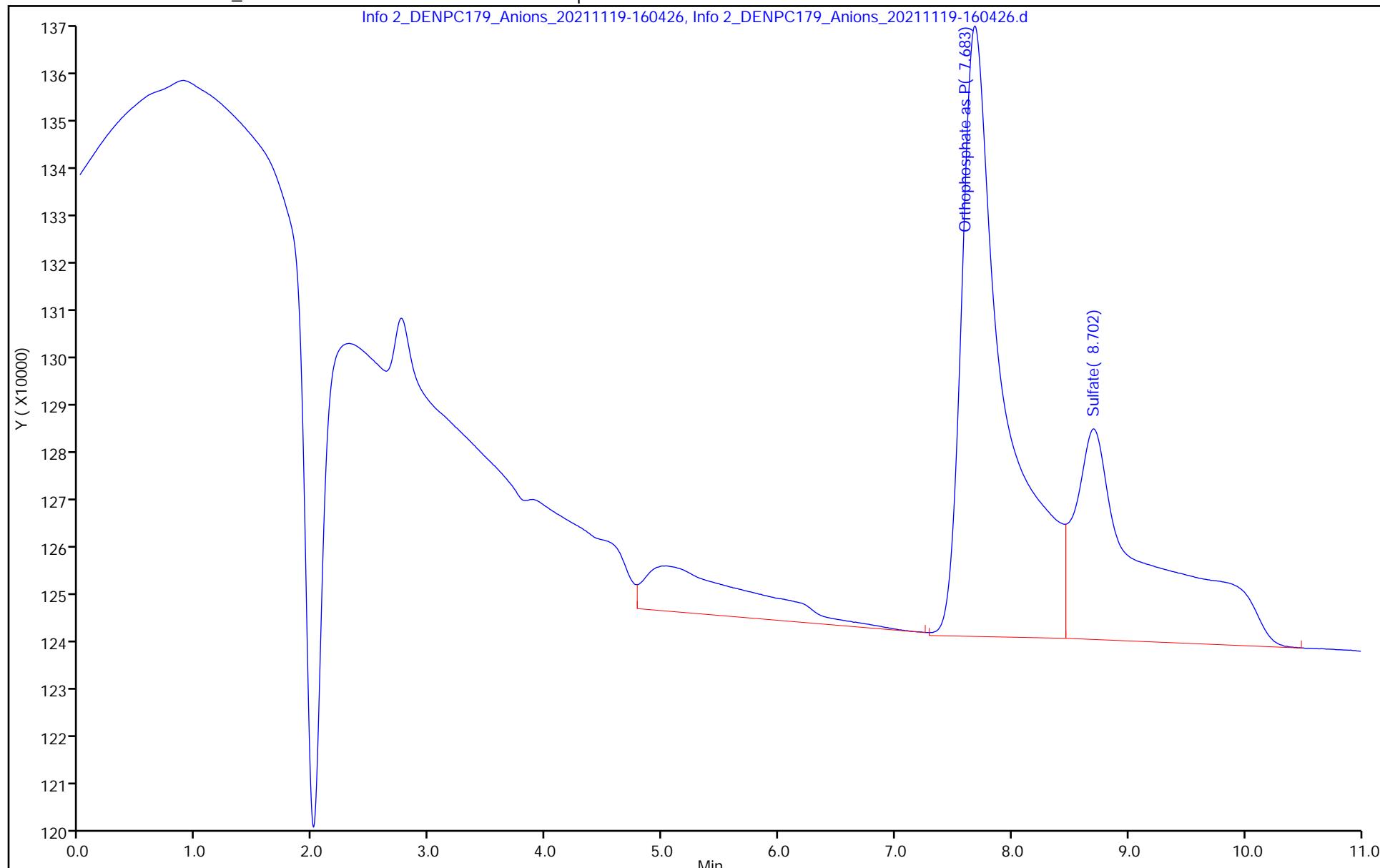
NC - Not Calibrated

Report Date: 20-Nov-2021 19:01:48

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211119-160426.d  
Injection Date: 19-Nov-2021 15:50:00 Instrument ID: WC\_IonChrom10 Operator ID: wetchemd  
Lims ID: MB Worklist Smp#: 6  
Client ID:  
Injection Vol: 5.0 ul ALS Bottle#: 0  
Method: Anions\_IC10 Dil. Factor: 1.0000  
Limit Group: Wet - Anions 28D



Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211119-185  
 Lims ID: ccv  
 Client ID:  
 Sample Type: CCV  
 Inject. Date: 19-Nov-2021 18:36:00      ALS Bottle#: 0      Worklist Smp#: 17  
 Injection Vol: 5.0 ul      Dil. Factor: 1.0000  
 Sample Info: 280-0106655-017  
 Misc. Info.: 280-0106655-017  
 Operator ID: wetchemd      Instrument ID: WC\_IonChrom10  
 Sublist: chrom-Anions\_IC10\*sub2  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Anions\_IC10.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 20-Nov-2021 19:01:52      Calib Date: 14-Nov-2021 17:53:00  
 Integrator: Falcon  
 Quant Method: External Standard      Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-180

Column 1 : Det: Info 2\_091554\_1  
 Process Host: CTX1611

First Level Reviewer: jindarac Date: 19-Nov-2021 19:20:27

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.763	2.753	0.010	141232127	5.00	4.59	Ma
2 Chloride	3.818	3.800	0.018	1507796776	100.0	99.5	M
3 Nitrite as N	4.397	4.372	0.025	179074162	NC	NC	Ma
4 Bromide	5.407	5.382	0.025	30921812	5.00	4.77	
5 Nitrate as N	6.085	6.055	0.030	189669623	NC	NC	
6 Orthophosphate as P	7.627	7.683	-0.056	82976418	NC	NC	M
7 Sulfate	8.637	8.702	-0.065	1129883863	100.0	100.9	M

### QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

a - User Assigned ID

### Reagents:

IC LCS\_01845

Amount Added: 10.00

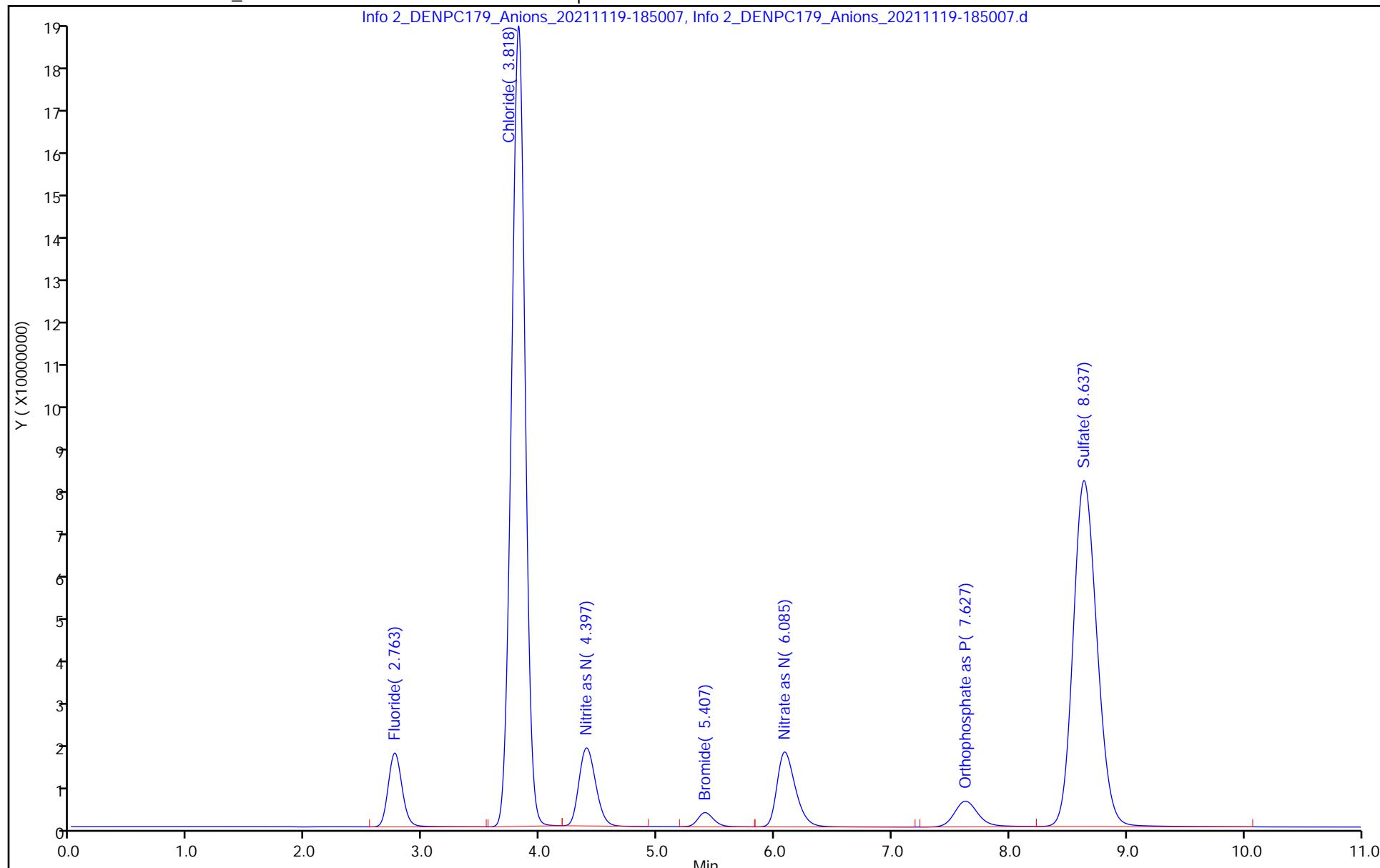
Units: mL

Report Date: 20-Nov-2021 19:01:52

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211119-185007.d  
Injection Date: 19-Nov-2021 18:36:00 Instrument ID: WC\_IonChrom10 Operator ID: wetchemd  
Lims ID: ccv Worklist Smp#: 17  
Client ID:  
Injection Vol: 5.0 ul ALS Bottle#: 0  
Method: Anions\_IC10 Dil. Factor: 1.0000  
Limit Group: Wet - Anions 28D



## Eurofins TestAmerica, Denver

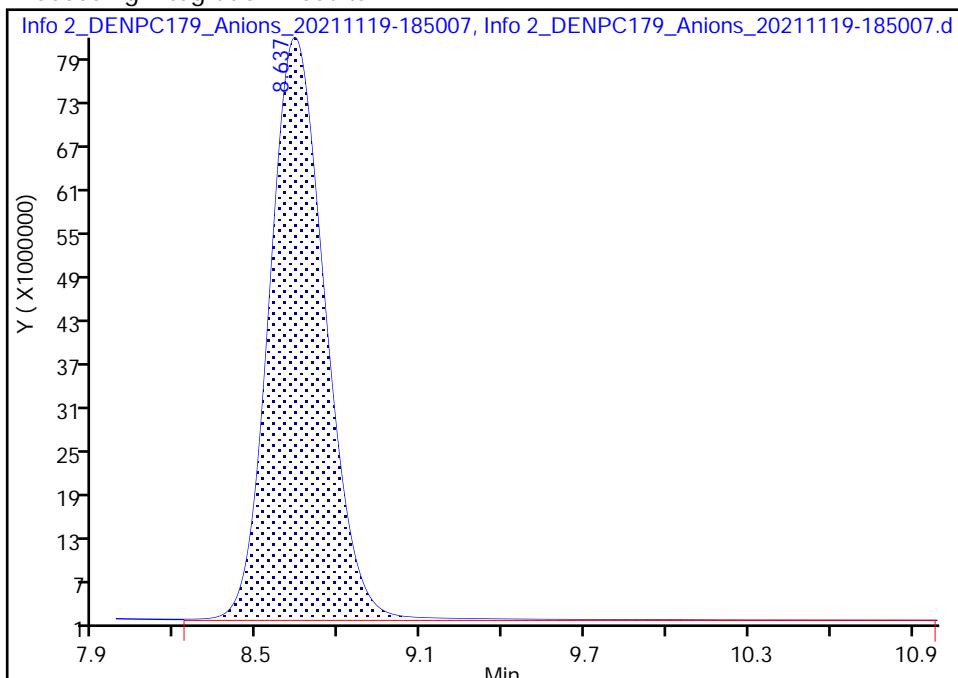
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211119-185007.d  
 Injection Date: 19-Nov-2021 18:36:00      Instrument ID: WC\_IonChrom10  
 Lims ID: ccv  
 Client ID:  
 Operator ID: wetchemd      ALS Bottle#: 0      Worklist Smp#: 17  
 Injection Vol: 5.0 ul      Dil. Factor: 1.0000  
 Method: Anions\_IC10      Limit Group: Wet - Anions 28D  
 Column:      Detector: Info 2\_091554\_1

## 7 Sulfate, CAS: 14808-79-8

Signal: 1

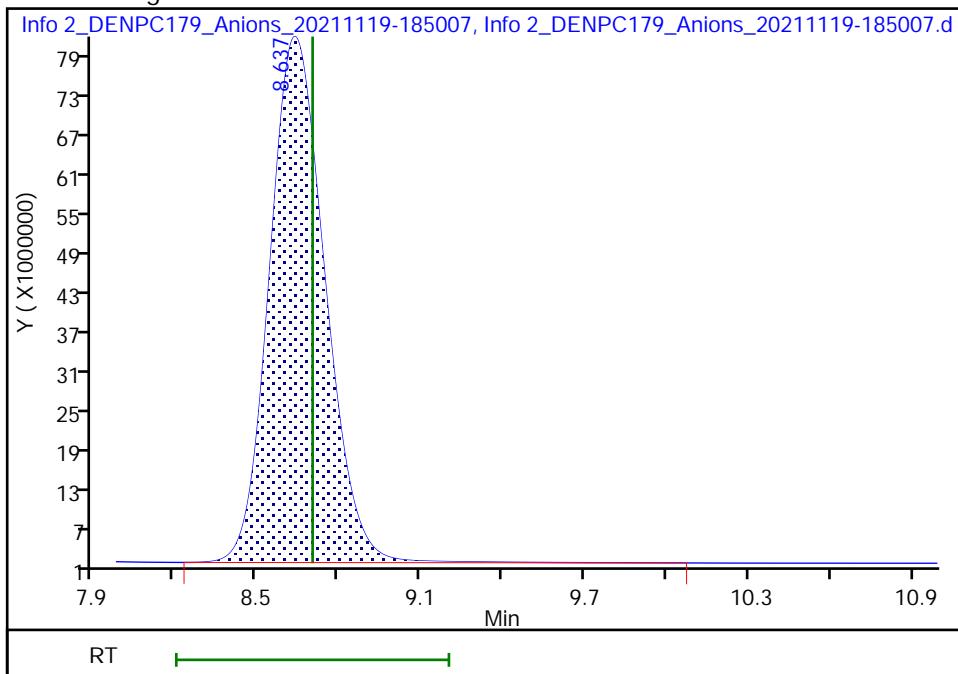
RT: 8.64  
 Area: 1140116854  
 Amount: 101.8417  
 Amount Units: ug/ml

## Processing Integration Results



RT: 8.64  
 Area: 1129883863  
 Amount: 100.9297  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: jindarac, 20-Nov-2021 18:40:54

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211119-190  
 Lims ID: ccb  
 Client ID:  
 Sample Type: CCB  
 Inject. Date: 19-Nov-2021 18:50:00      ALS Bottle#: 0      Worklist Smp#: 18  
 Injection Vol: 5.0 ul      Dil. Factor: 1.0000  
 Sample Info: 280-0106655-018  
 Misc. Info.: 280-0106655-018  
 Operator ID: wetchemd      Instrument ID: WC\_IonChrom10  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Anions\_IC10.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 20-Nov-2021 19:01:52      Calib Date: 14-Nov-2021 17:53:00  
 Integrator: Falcon  
 Quant Method: External Standard      Quant By: Initial Calibration  
 Last ICAL File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-180  
 Column 1 : Det: Info 2\_091554\_1  
 Process Host: CTX1611

First Level Reviewer: jindaratac

Date:

20-Nov-2021 18:41:20

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		2.753			ND		
2 Chloride	3.773	3.800	-0.027	12478	0.1656	M	
3 Nitrite as N		4.372			ND		
4 Bromide		5.382			ND		
5 Nitrate as N	6.203	6.055	0.148	222178	NC	M	
6 Orthophosphate as P	7.688	7.683	0.005	2383575	NC		
7 Sulfate	8.693	8.702	-0.009	4129335	0.6031		

**QC Flag Legend**

## Processing Flags

NC - Not Calibrated

## Review Flags

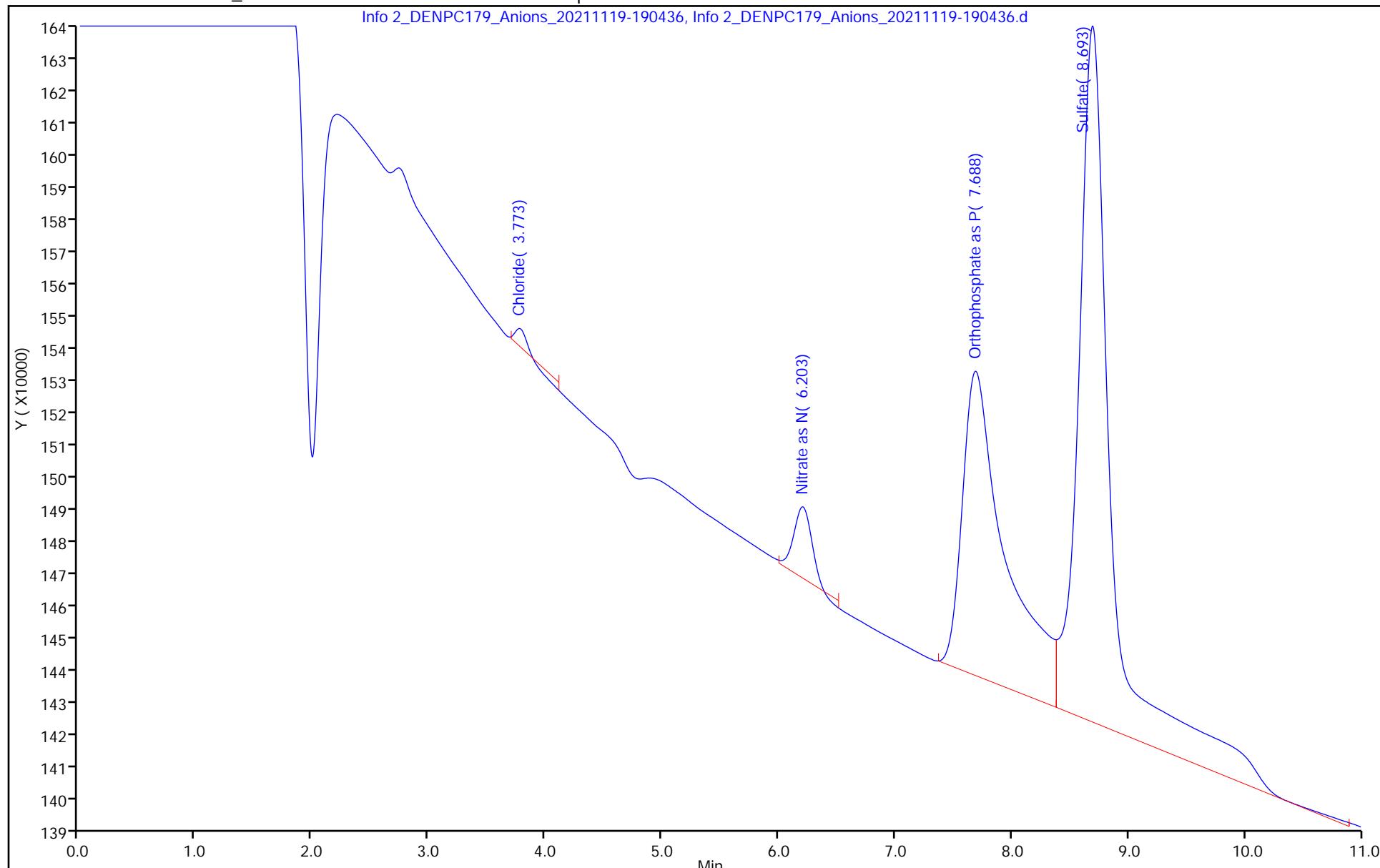
M - Manually Integrated

Report Date: 20-Nov-2021 19:01:53

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211119-190436.d  
Injection Date: 19-Nov-2021 18:50:00 Instrument ID: WC\_IonChrom10 Operator ID: wetchemd  
Lims ID: ccb Worklist Smp#: 18  
Client ID:  
Injection Vol: 5.0 ul ALS Bottle#: 0  
Method: Anions\_IC10 Dil. Factor: 1.0000  
Limit Group: Wet - Anions 28D



Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211119-213  
 Lims ID: ccv  
 Client ID:  
 Sample Type: CCV  
 Inject. Date: 19-Nov-2021 21:24:00 ALS Bottle#: 0 Worklist Smp#: 29  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-0106655-029  
 Misc. Info.: 280-0106655-029  
 Operator ID: wetchemd Instrument ID: WC\_IonChrom10  
 Sublist: chrom-Anions\_IC10\*sub2  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Anions\_IC10.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 20-Nov-2021 19:01:57 Calib Date: 14-Nov-2021 17:53:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-180  
 Column 1 : Det: Info 2\_091554\_1  
 Process Host: CTX1611

First Level Reviewer: jindarac Date: 20-Nov-2021 18:44:41

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.762	2.753	0.009	141294080	5.00	4.59	Ma
2 Chloride	3.817	3.800	0.017	1509911995	100.0	99.7	M
3 Nitrite as N	4.397	4.372	0.025	179661484	NC	NC	M
4 Bromide	5.408	5.382	0.026	31486305	5.00	4.86	
5 Nitrate as N	6.087	6.055	0.032	190042390	NC	NC	
6 Orthophosphate as P	7.625	7.683	-0.058	83405773	NC	NC	M
7 Sulfate	8.635	8.702	-0.067	1130400229	100.0	101.0	M

### QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

a - User Assigned ID

### Reagents:

IC LCS\_01845

Amount Added: 10.00

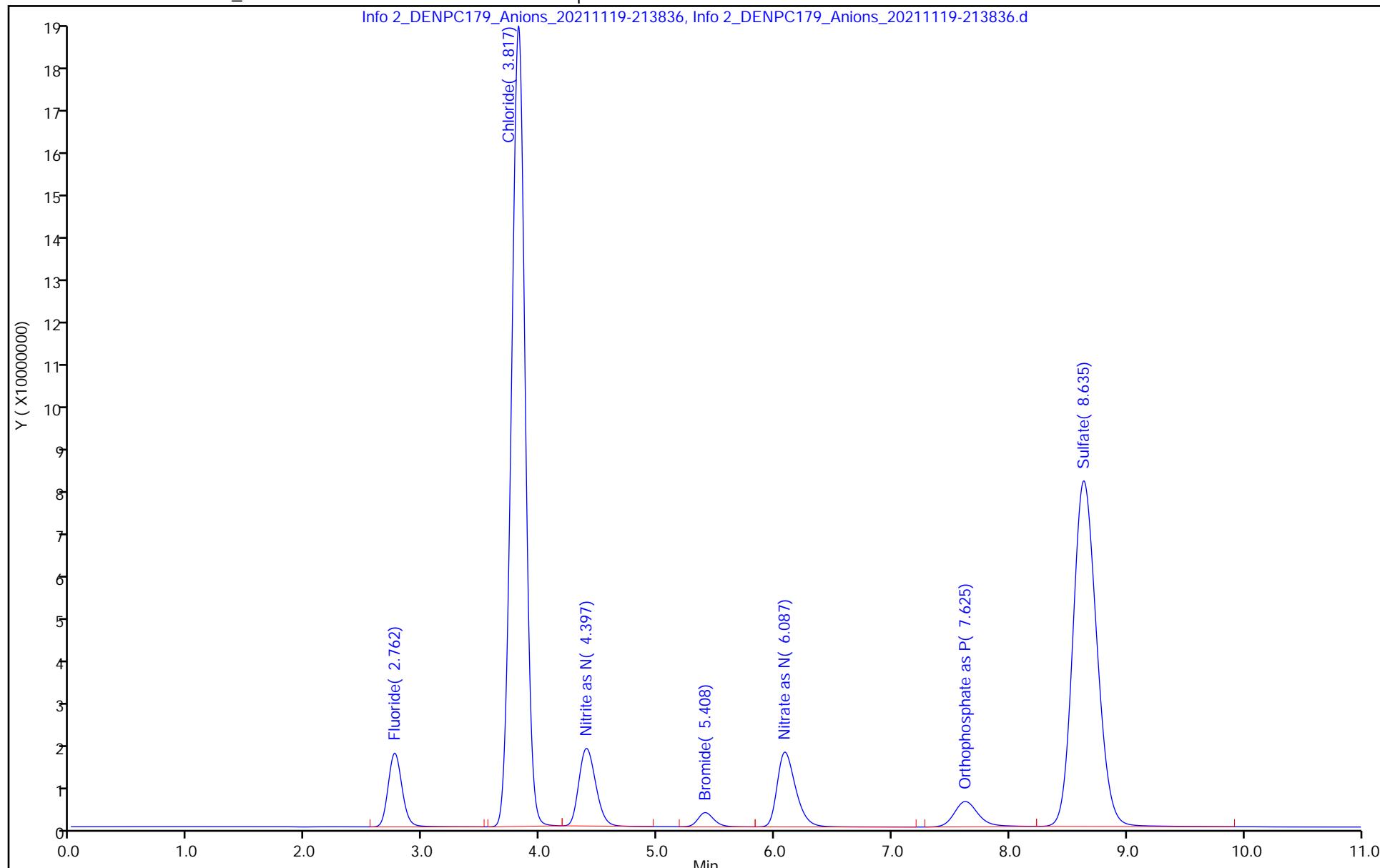
Units: mL

Report Date: 20-Nov-2021 19:01:57

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211119-213836.d  
Injection Date: 19-Nov-2021 21:24:00 Instrument ID: WC\_IonChrom10 Operator ID: wetchemd  
Lims ID: ccv Worklist Smp#: 29  
Client ID:  
Injection Vol: 5.0 ul ALS Bottle#: 0  
Method: Anions\_IC10 Dil. Factor: 1.0000  
Limit Group: Wet - Anions 28D



## Eurofins TestAmerica, Denver

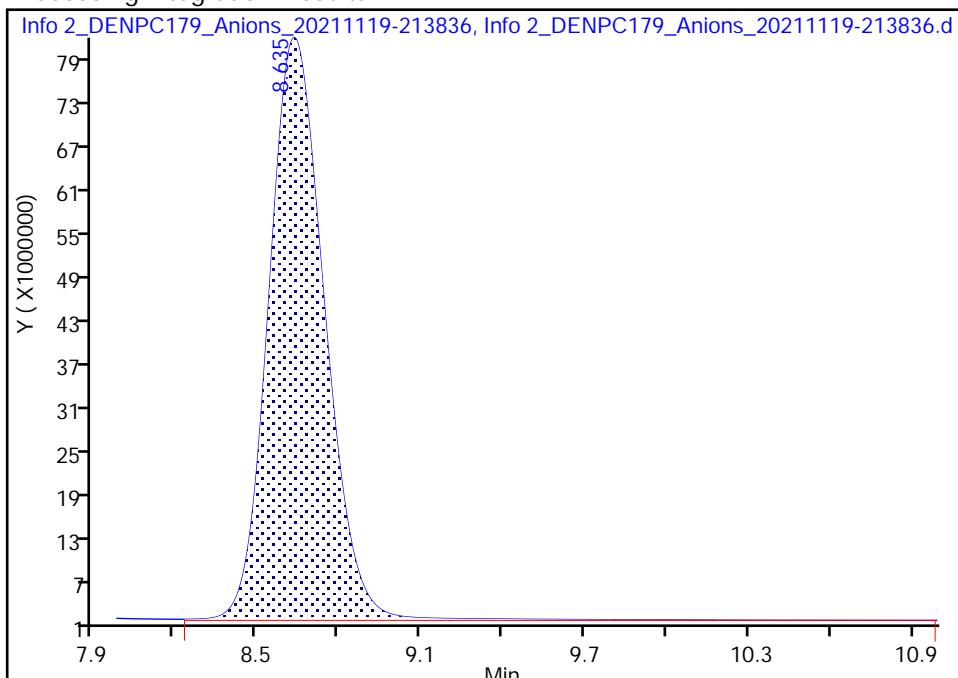
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211119-213836.d  
 Injection Date: 19-Nov-2021 21:24:00 Instrument ID: WC\_IonChrom10  
 Lims ID: ccv  
 Client ID:  
 Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 29  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC10 Limit Group: Wet - Anions 28D  
 Column: Detector Info 2\_091554\_1

## 7 Sulfate, CAS: 14808-79-8

Signal: 1

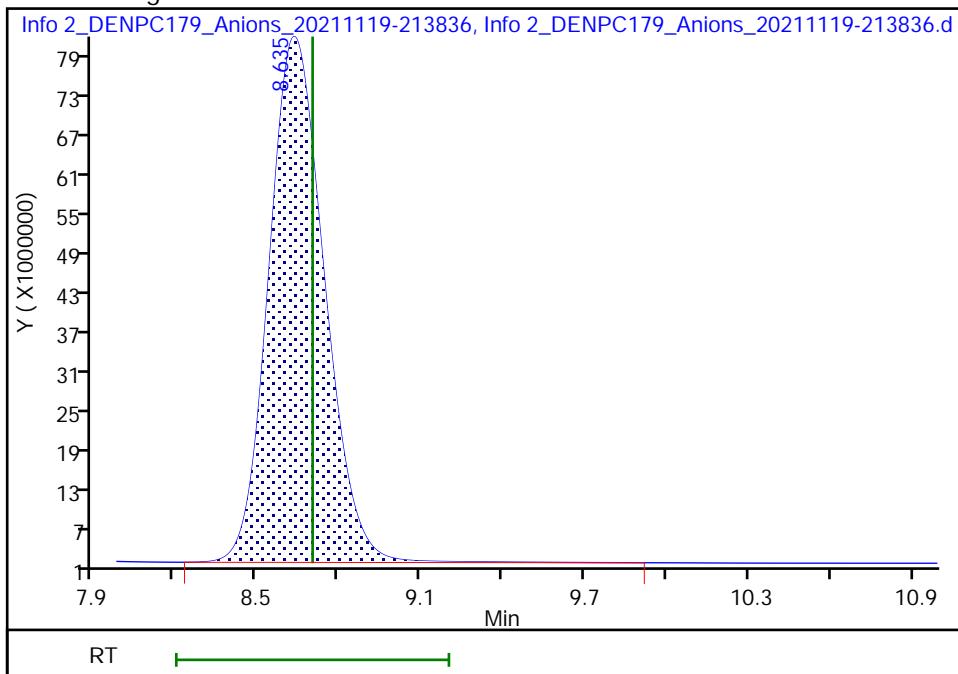
RT: 8.64  
 Area: 1142846284  
 Amount: 102.0849  
 Amount Units: ug/ml

## Processing Integration Results



RT: 8.64  
 Area: 1130400229  
 Amount: 100.9758  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: jindarac, 20-Nov-2021 18:44:37

Audit Action: Manually Integrated

Audit Reason: Peak not integrated

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211119-215  
 Lims ID: ccb  
 Client ID:  
 Sample Type: CCB  
 Inject. Date: 19-Nov-2021 21:38:00      ALS Bottle#: 0      Worklist Smp#: 30  
 Injection Vol: 5.0 ul      Dil. Factor: 1.0000  
 Sample Info: 280-0106655-030  
 Misc. Info.: 280-0106655-030  
 Operator ID: wetchemd      Instrument ID: WC\_IonChrom10  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Anions\_IC10.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 20-Nov-2021 19:01:57      Calib Date: 14-Nov-2021 17:53:00  
 Integrator: Falcon  
 Quant Method: External Standard      Quant By: Initial Calibration  
 Last ICAL File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-180

Column 1 : Det: Info 2\_091554\_1  
 Process Host: CTX1611

First Level Reviewer: jindaratac Date: 20-Nov-2021 18:44:51

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		2.753			ND		
2 Chloride	3.770	3.800	-0.030	42200	0.1675	M	
3 Nitrite as N		4.372			ND		
4 Bromide		5.382			ND		
5 Nitrate as N		6.055			ND		
6 Orthophosphate as P	7.693	7.683	0.010	3527510	NC		
7 Sulfate	8.692	8.702	-0.010	1303318	0.3512		

### QC Flag Legend

#### Processing Flags

NC - Not Calibrated

#### Review Flags

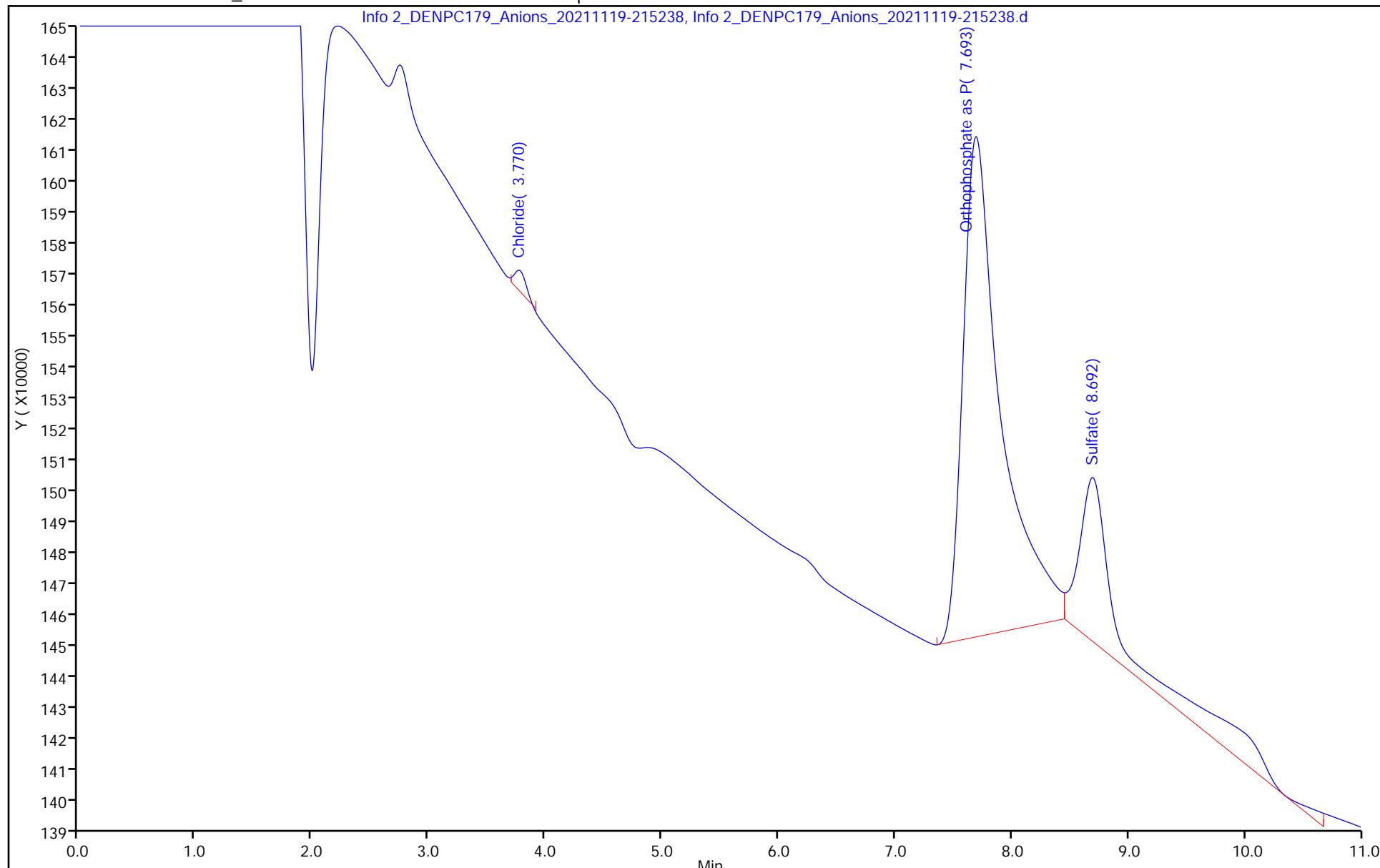
M - Manually Integrated

Report Date: 20-Nov-2021 19:01:57

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211119-215238.d  
Injection Date: 19-Nov-2021 21:38:00 Instrument ID: WC\_IonChrom10 Operator ID: wetchemd  
Lims ID: ccb Worklist Smp#: 30  
Client ID:  
Injection Vol: 5.0 ul ALS Bottle#: 0  
Method: Anions\_IC10 Dil. Factor: 1.0000  
Limit Group: Wet - Anions 28D



Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211119-235  
 Lims ID: 280-155048-F-1  
 Client ID: CA211-7  
 Sample Type: Client  
 Inject. Date: 19-Nov-2021 23:45:00 ALS Bottle#: 0 Worklist Smp#: 39  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-0106655-039  
 Misc. Info.: 280-0106655-039  
 Operator ID: wetchemd Instrument ID: WC\_IonChrom10  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Anions\_IC10.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 20-Nov-2021 19:01:57 Calib Date: 14-Nov-2021 17:53:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-180  
 Column 1 : Det: Info 2\_091554\_1  
 Process Host: CTX1611

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride		2.753			ND	
2 Chloride	3.827	3.800	0.027	845963177	55.9	
3 Nitrite as N		4.372			ND	
4 Bromide	5.437	5.382	0.055	659712	0.1742	
5 Nitrate as N	6.027	6.055	-0.028	1362141871	NC	
6 Orthophosphate as P	7.720	7.683	0.037	4841059	NC	
7 Sulfate	8.643	8.702	-0.059	1266444435	113.1	

### QC Flag Legend

Processing Flags

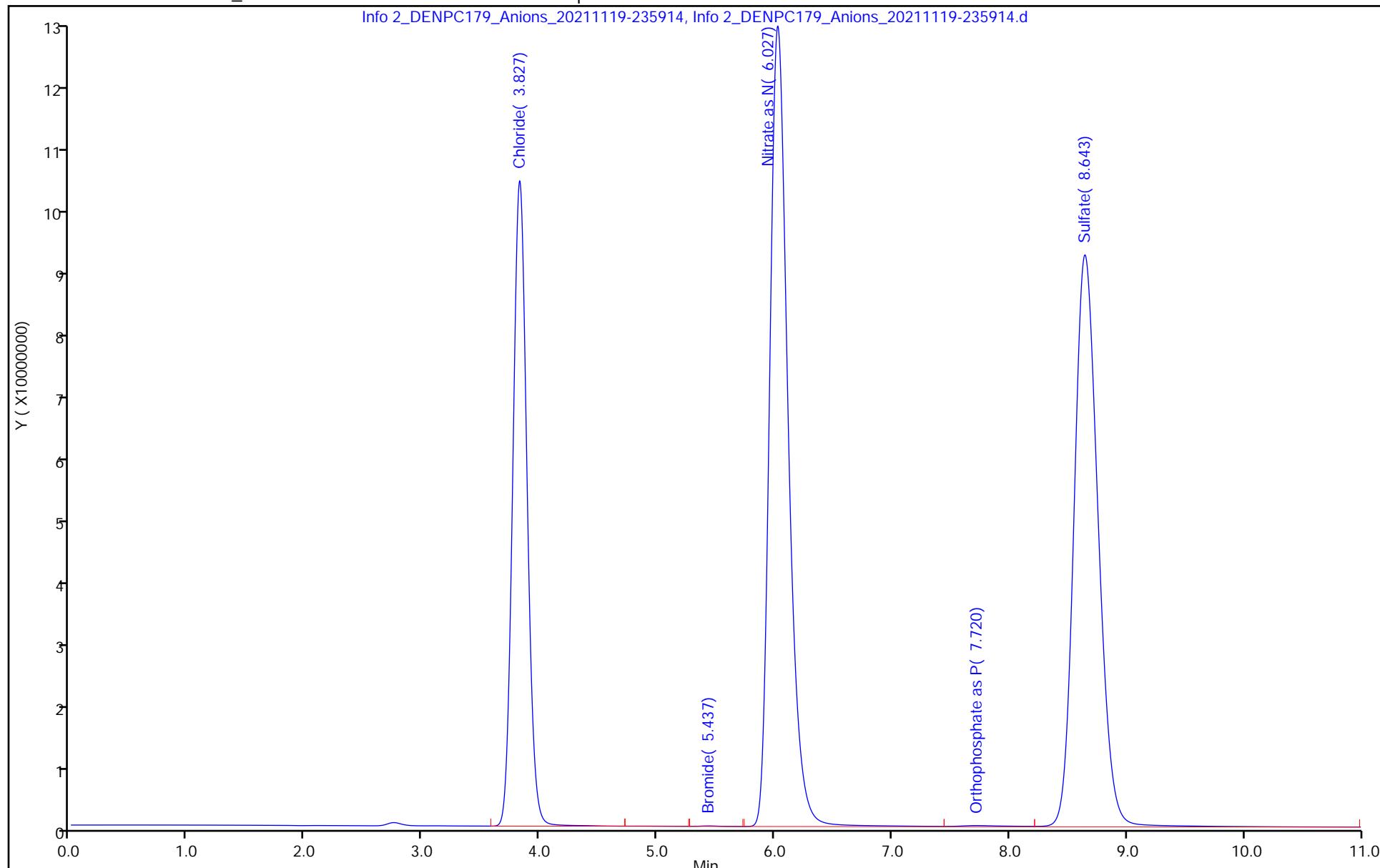
NC - Not Calibrated

Report Date: 20-Nov-2021 19:02:01

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211119-235914.d  
Injection Date: 19-Nov-2021 23:45:00 Instrument ID: WC\_IonChrom10 Operator ID: wetchemd  
Lims ID: 280-155048-F-1 Lab Sample ID: 280-155048-1 Worklist Smp#: 39  
Client ID: CA211-7  
Injection Vol: 5.0 ul Dil. Factor: 1.0000 ALS Bottle#: 0  
Method: Anions\_IC10 Limit Group: Wet - Anions 28D



Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211120-00  
 Lims ID: 280-155048-F-2  
 Client ID: CA212-7  
 Sample Type: Client  
 Inject. Date: 19-Nov-2021 23:59:00 ALS Bottle#: 0 Worklist Smp#: 40  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-0106655-040  
 Misc. Info.: 280-0106655-040  
 Operator ID: wetchemd Instrument ID: WC\_IonChrom10  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Anions\_IC10.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 20-Nov-2021 19:01:57 Calib Date: 14-Nov-2021 17:53:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-180  
 Column 1 : Det: Info 2\_091554\_1  
 Process Host: CTX1611

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride		2.753			ND	
2 Chloride	3.813	3.800	0.013	293927407	19.5	
3 Nitrite as N	4.605	4.372	0.233	772729	NC	
4 Bromide	5.442	5.382	0.060	380349	0.1317	
5 Nitrate as N	6.030	6.055	-0.025	624890863	NC	
6 Orthophosphate as P	7.742	7.683	0.059	2285803	NC	
7 Sulfate	8.660	8.702	-0.042	936422182	83.7	

### QC Flag Legend

Processing Flags

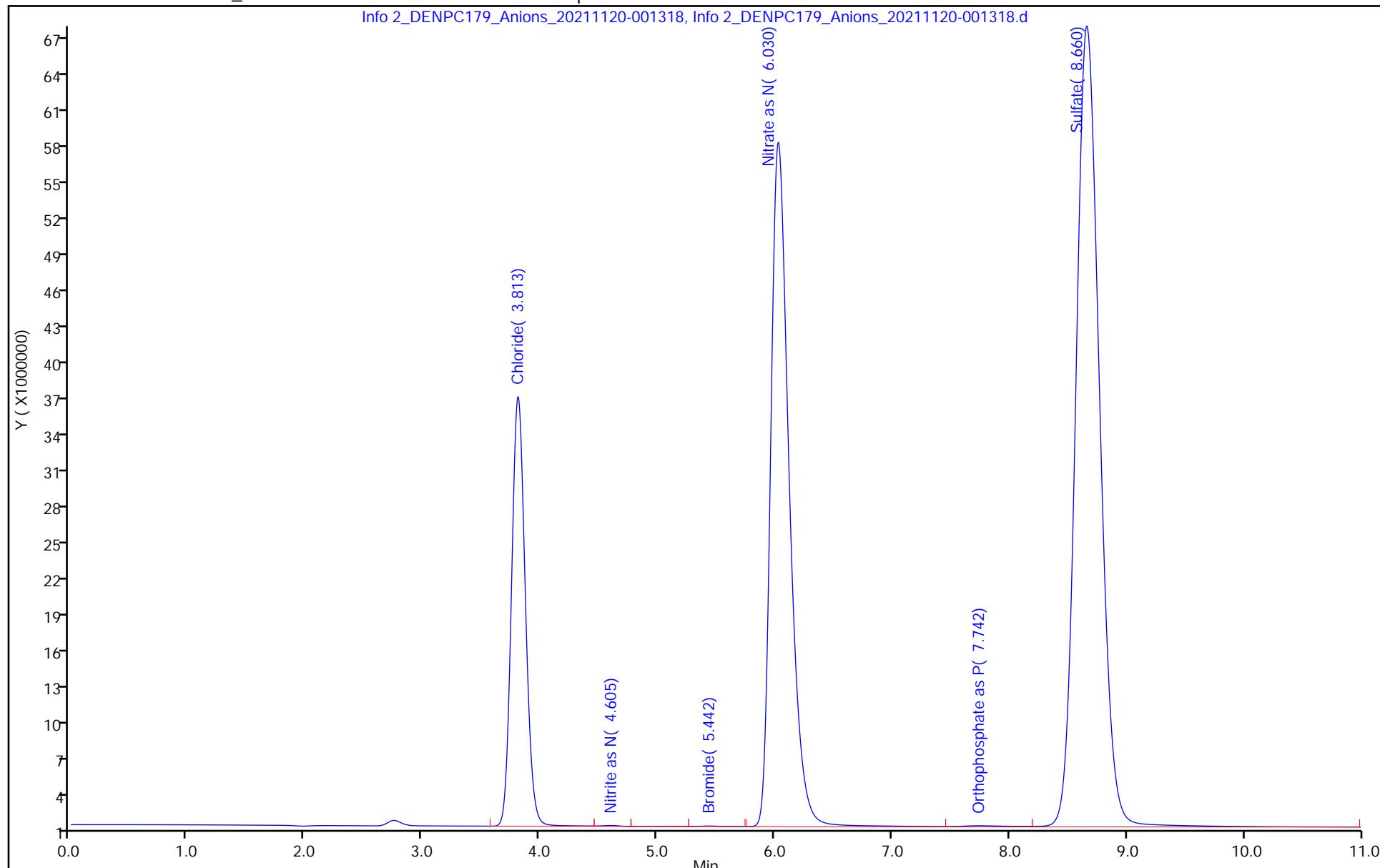
NC - Not Calibrated

Report Date: 20-Nov-2021 19:02:01

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211120-001318.d  
Injection Date: 19-Nov-2021 23:59:00 Instrument ID: WC\_IonChrom10 Operator ID: wetchemd  
Lims ID: 280-155048-F-2 Lab Sample ID: 280-155048-2 Worklist Smp#: 40  
Client ID: CA212-7  
Injection Vol: 5.0 ul Dil. Factor: 1.0000 ALS Bottle#: 0  
Method: Anions\_IC10 Limit Group: Wet - Anions 28D



Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211120-002  
 Lims ID: ccv  
 Client ID:  
 Sample Type: CCV  
 Inject. Date: 20-Nov-2021 00:13:00      ALS Bottle#: 0      Worklist Smp#: 41  
 Injection Vol: 5.0 ul      Dil. Factor: 1.0000  
 Sample Info: 280-0106655-041  
 Misc. Info.: 280-0106655-041  
 Operator ID: wetchemd      Instrument ID: WC\_IonChrom10  
 Sublist: chrom-Anions\_IC10\*sub2  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Anions\_IC10.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 20-Nov-2021 19:02:01      Calib Date: 14-Nov-2021 17:53:00  
 Integrator: Falcon  
 Quant Method: External Standard      Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-180

Column 1 : Det: Info 2\_091554\_1  
 Process Host: CTX1611

First Level Reviewer: jindarac Date: 20-Nov-2021 18:48:41

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.762	2.753	0.009	140814740	5.00	4.58	Ma
2 Chloride	3.813	3.800	0.013	1517362506	100.0	100.2	M
3 Nitrite as N	4.388	4.372	0.016	180418266	NC	NC	M
4 Bromide	5.390	5.382	0.008	31762635	5.00	4.90	
5 Nitrate as N	6.063	6.055	0.008	191014120	NC	NC	Ma
6 Orthophosphate as P	7.632	7.683	-0.051	85258876	NC	NC	Ma
7 Sulfate	8.643	8.702	-0.059	1134983060	100.0	101.4	Ma

### QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

a - User Assigned ID

### Reagents:

IC LCS\_01845

Amount Added: 10.00

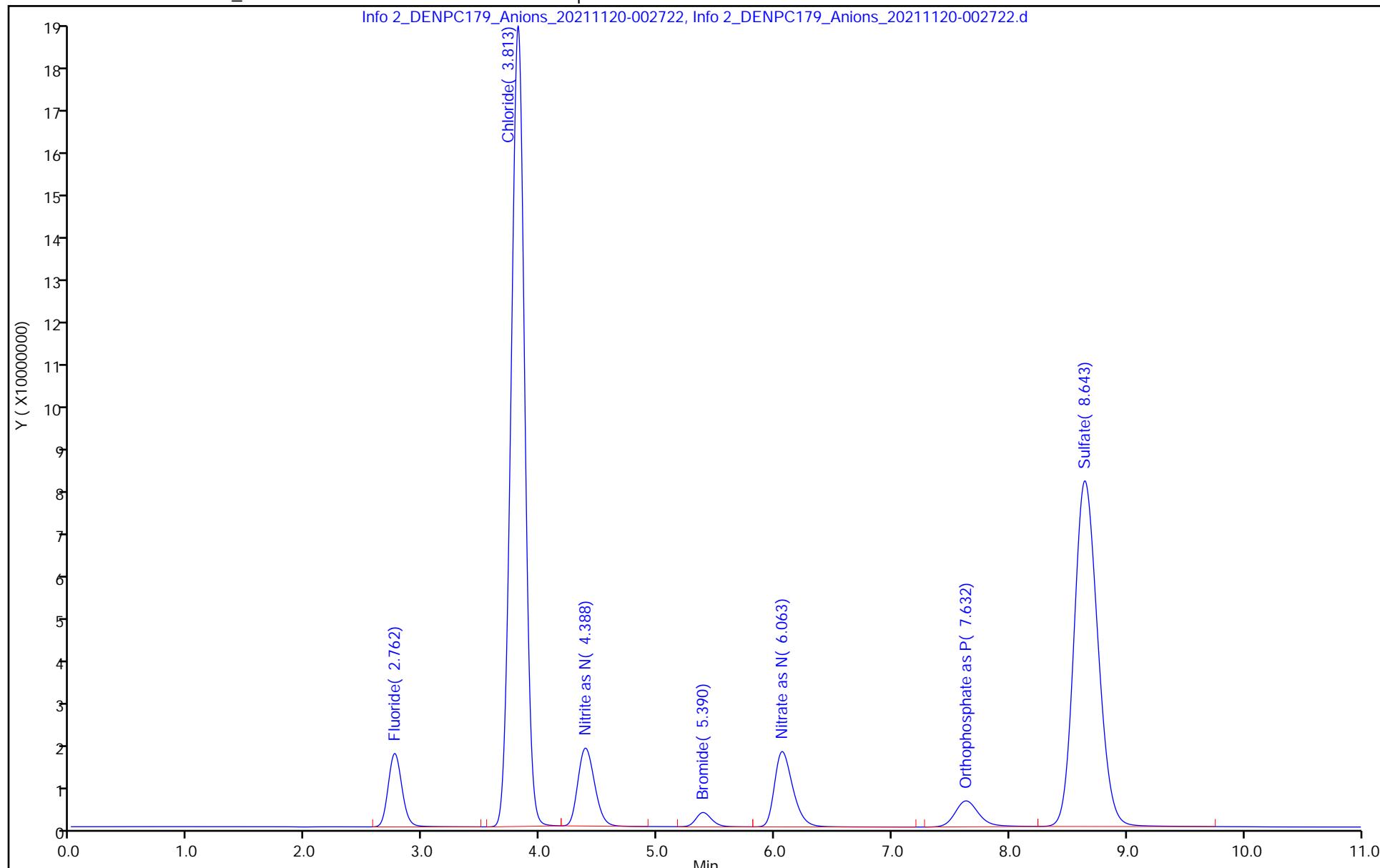
Units: mL

Report Date: 20-Nov-2021 19:02:02

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211120-002722.d  
Injection Date: 20-Nov-2021 00:13:00 Instrument ID: WC\_IonChrom10 Operator ID: wetchemd  
Lims ID: ccv Worklist Smp#: 41  
Client ID:  
Injection Vol: 5.0 ul ALS Bottle#: 0  
Method: Anions\_IC10 Dil. Factor: 1.0000  
Limit Group: Wet - Anions 28D



## Eurofins TestAmerica, Denver

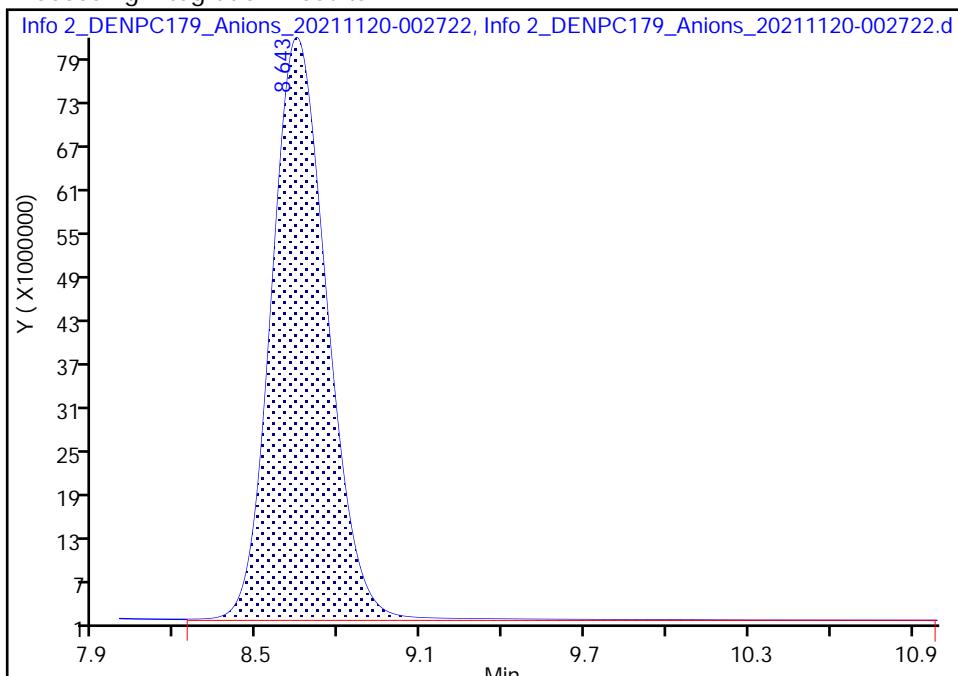
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211120-002722.d  
 Injection Date: 20-Nov-2021 00:13:00 Instrument ID: WC\_IonChrom10  
 Lims ID: ccv  
 Client ID:  
 Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 41  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC10 Limit Group: Wet - Anions 28D  
 Column: Detector Info 2\_091554\_1

## 7 Sulfate, CAS: 14808-79-8

Signal: 1

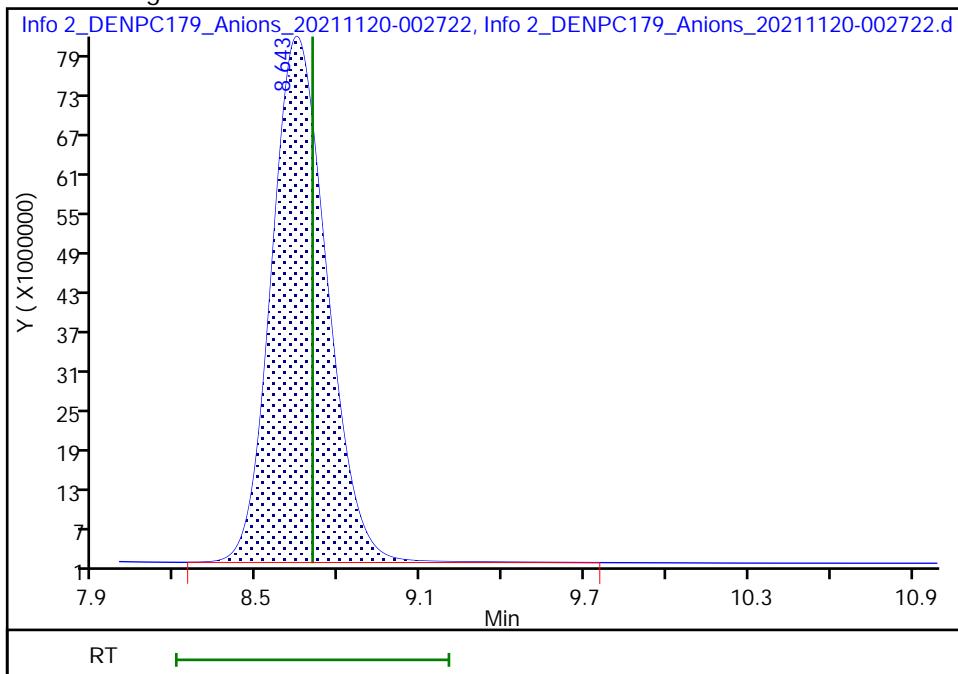
RT: 8.64  
 Area: 1147401146  
 Amount: 102.4909  
 Amount Units: ug/ml

## Processing Integration Results



RT: 8.64  
 Area: 1134983060  
 Amount: 101.3842  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: jindarac, 20-Nov-2021 18:48:11

Audit Action: Manually Integrated/Assigned Compound ID

Audit Reason: Peak not integrated

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211120-004  
 Lims ID: ccb  
 Client ID:  
 Sample Type: CCB  
 Inject. Date: 20-Nov-2021 00:27:00      ALS Bottle#: 0      Worklist Smp#: 42  
 Injection Vol: 5.0 ul      Dil. Factor: 1.0000  
 Sample Info: 280-0106655-042  
 Misc. Info.: 280-0106655-042  
 Operator ID: wetchemd      Instrument ID: WC\_IonChrom10  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Anions\_IC10.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 20-Nov-2021 19:02:01      Calib Date: 14-Nov-2021 17:53:00  
 Integrator: Falcon  
 Quant Method: External Standard      Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-180  
 Column 1 : Det: Info 2\_091554\_1  
 Process Host: CTX1611

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		2.753			ND		
2 Chloride		3.800			ND		
3 Nitrite as N		4.372			ND		
4 Bromide		5.382			ND		
5 Nitrate as N		6.055			ND		
6 Orthophosphate as P	7.695	7.683	0.012	4060525		NC	
7 Sulfate	8.707	8.702	0.005	2233533		0.4341	

### QC Flag Legend

Processing Flags

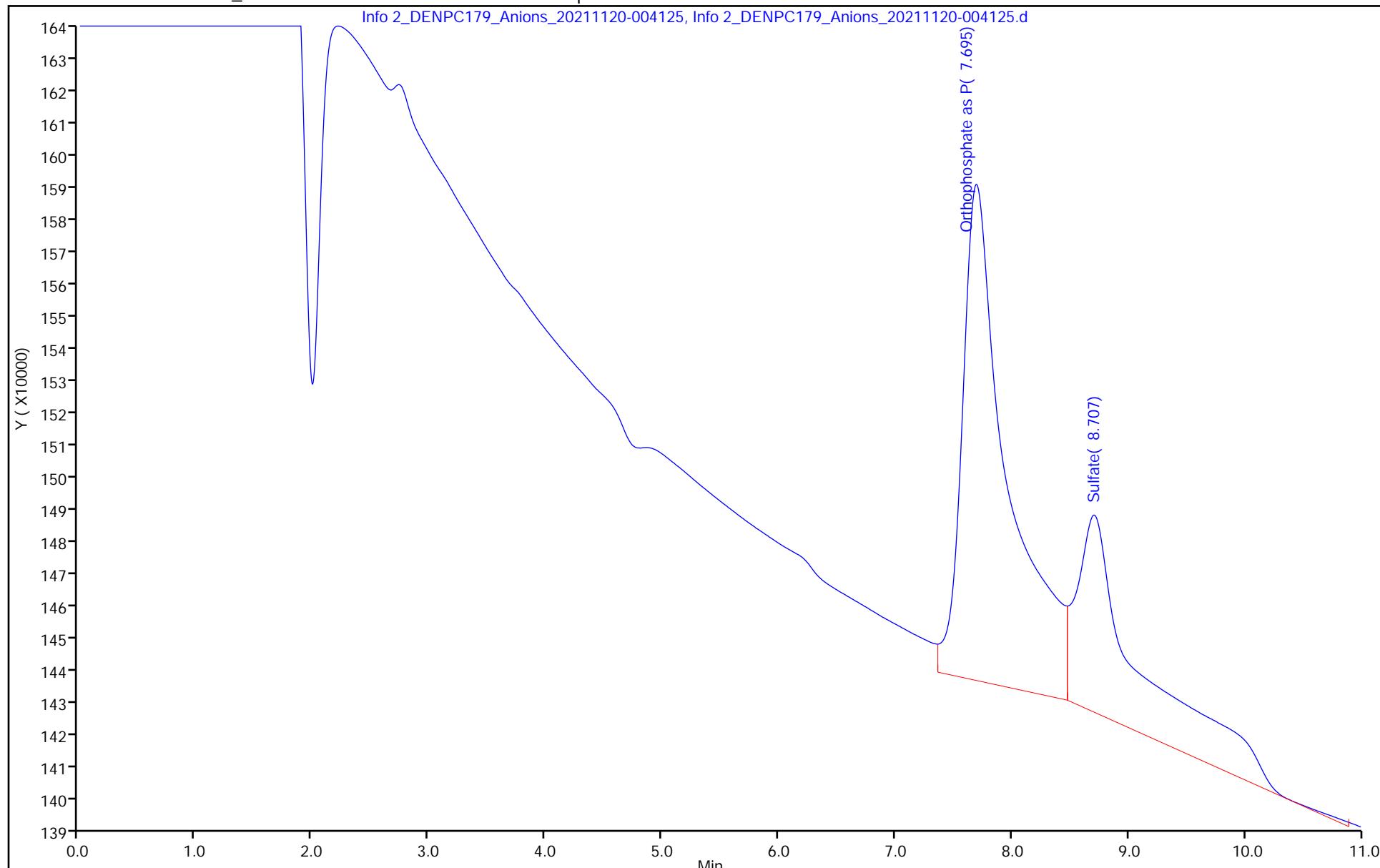
NC - Not Calibrated

Report Date: 20-Nov-2021 19:02:02

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211120-004125.d  
Injection Date: 20-Nov-2021 00:27:00 Instrument ID: WC\_IonChrom10 Operator ID: wetchemd  
Lims ID: ccb Worklist Smp#: 42  
Client ID:  
Injection Vol: 5.0 ul ALS Bottle#: 0  
Method: Anions\_IC10 Dil. Factor: 1.0000  
Limit Group: Wet - Anions 28D



Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211120-005  
 Lims ID: lcs  
 Client ID:  
 Sample Type: LCS  
 Inject. Date: 20-Nov-2021 00:41:00      ALS Bottle#: 0      Worklist Smp#: 43  
 Injection Vol: 5.0 ul      Dil. Factor: 1.0000  
 Sample Info: 280-0106655-043  
 Misc. Info.: 280-0106655-043  
 Operator ID: wetchemd      Instrument ID: WC\_IonChrom10  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Anions\_IC10.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 20-Nov-2021 19:02:01      Calib Date: 14-Nov-2021 17:53:00  
 Integrator: Falcon  
 Quant Method: External Standard      Quant By: Initial Calibration  
 Last ICAL File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-180  
 Column 1 : Det: Info 2\_091554\_1  
 Process Host: CTX1611

First Level Reviewer: jindarac

Date:

20-Nov-2021 18:51:36

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.763	2.753	0.010	148098634	5.00	4.82	Ma
2 Chloride	3.815	3.800	0.015	1548300510	100.0	102.2	M
3 Nitrite as N	4.388	4.372	0.016	180048520	NC	NC	M
4 Bromide	5.390	5.382	0.008	31563495	5.00	4.87	
5 Nitrate as N	6.062	6.055	0.007	193987008	NC	NC	
6 Orthophosphate as P	7.632	7.683	-0.051	84863859	NC	NC	M
7 Sulfate	8.643	8.702	-0.059	1157546674	100.0	103.4	M

**QC Flag Legend**

## Processing Flags

NC - Not Calibrated

## Review Flags

M - Manually Integrated

a - User Assigned ID

**Reagents:**

IC LCS\_01845

Amount Added: 10.00

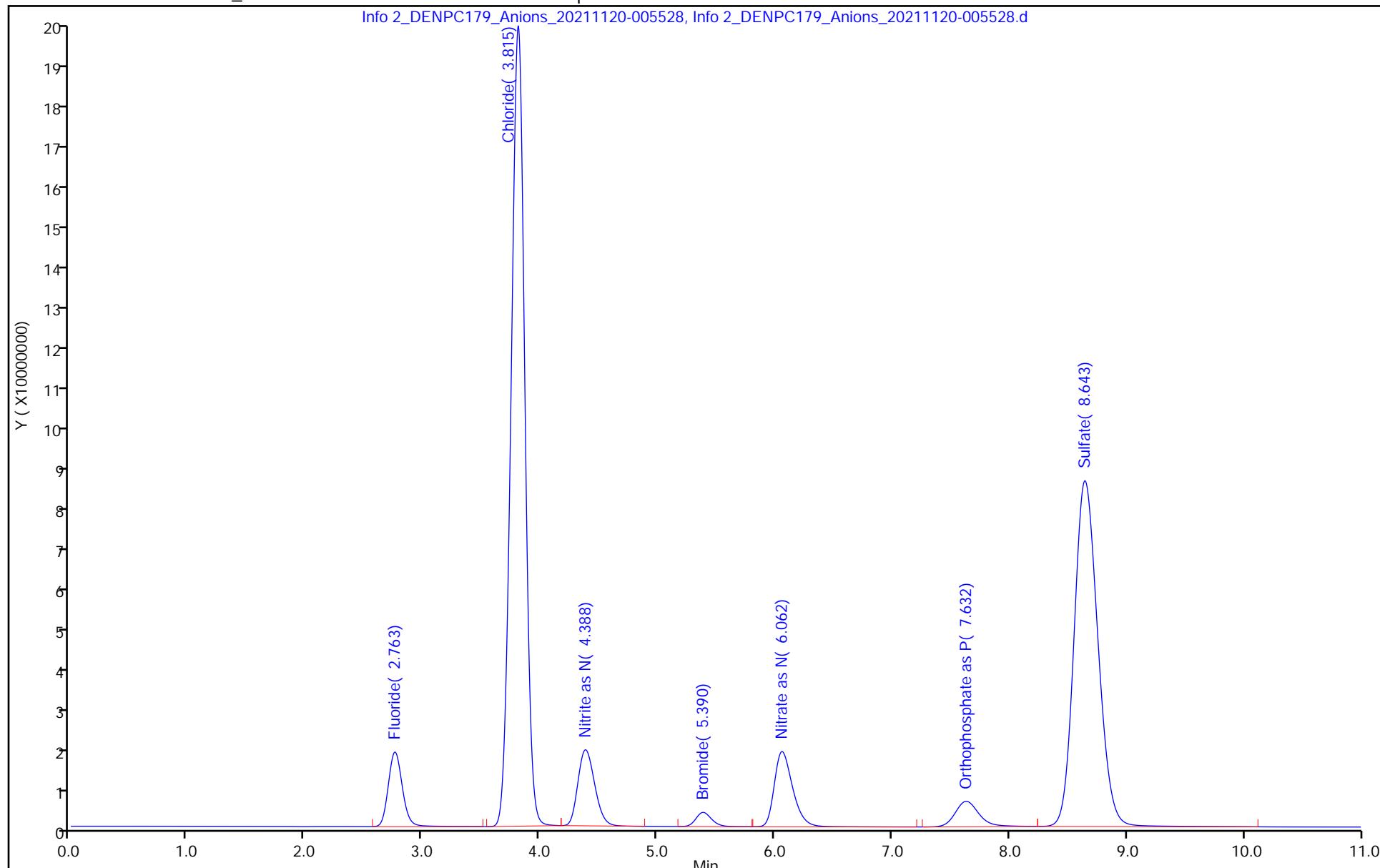
Units: mL

Report Date: 20-Nov-2021 19:02:03

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211120-005528.d  
Injection Date: 20-Nov-2021 00:41:00 Instrument ID: WC\_IonChrom10 Operator ID: wetchemd  
Lims ID: lcs Worklist Smp#: 43  
Client ID:  
Injection Vol: 5.0 ul ALS Bottle#: 0  
Method: Anions\_IC10 Dil. Factor: 1.0000  
Limit Group: Wet - Anions 28D



## Eurofins TestAmerica, Denver

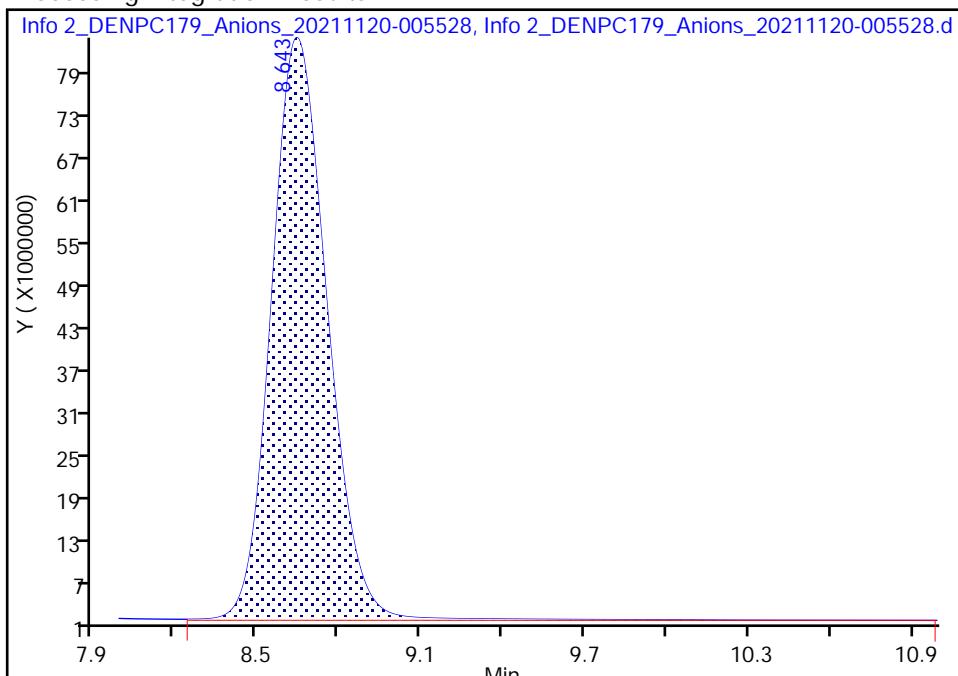
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211120-005528.d  
 Injection Date: 20-Nov-2021 00:41:00 Instrument ID: WC\_IonChrom10  
 Lims ID: lcs  
 Client ID:  
 Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 43  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC10 Limit Group: Wet - Anions 28D  
 Column: Detector Info 2\_091554\_1

## 7 Sulfate, CAS: 14808-79-8

Signal: 1

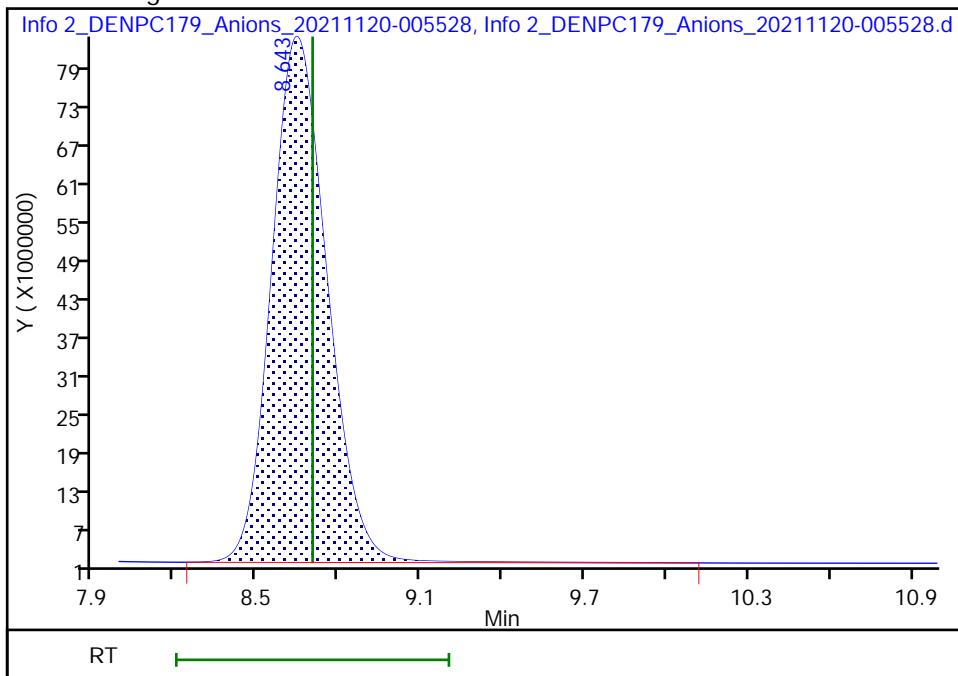
RT: 8.64  
 Area: 1168032119  
 Amount: 104.3295  
 Amount Units: ug/ml

## Processing Integration Results



RT: 8.64  
 Area: 1157546674  
 Amount: 103.3950  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: jindarac, 20-Nov-2021 18:49:25

Audit Action: Manually Integrated

Audit Reason: Peak not integrated

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211120-010  
 Lims ID: lcsd  
 Client ID:  
 Sample Type: LCSD  
 Inject. Date: 20-Nov-2021 00:55:00      ALS Bottle#: 0      Worklist Smp#: 44  
 Injection Vol: 5.0 ul      Dil. Factor: 1.0000  
 Sample Info: 280-0106655-044  
 Misc. Info.: 280-0106655-044  
 Operator ID: wetchemd      Instrument ID: WC\_IonChrom10  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Anions\_IC10.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 20-Nov-2021 19:02:01      Calib Date: 14-Nov-2021 17:53:00  
 Integrator: Falcon  
 Quant Method: External Standard      Quant By: Initial Calibration  
 Last ICAL File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-180  
 Column 1 : Det: Info 2\_091554\_1  
 Process Host: CTX1611

First Level Reviewer: jindarac

Date:

20-Nov-2021 18:52:45

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.763	2.753	0.010	150687130	5.00	4.90	Ma
2 Chloride	3.813	3.800	0.013	1518889357	100.0	100.3	Ma
3 Nitrite as N	4.387	4.372	0.015	180602060	NC	NC	Ma
4 Bromide	5.390	5.382	0.008	31131207	5.00	4.80	
5 Nitrate as N	6.062	6.055	0.007	191187972	NC	NC	
6 Orthophosphate as P	7.630	7.683	-0.053	84704662	NC	NC	M
7 Sulfate	8.642	8.702	-0.060	1138260404	100.0	101.7	M

**QC Flag Legend**

## Processing Flags

NC - Not Calibrated

## Review Flags

M - Manually Integrated

a - User Assigned ID

**Reagents:**

IC LCS\_01845

Amount Added: 10.00

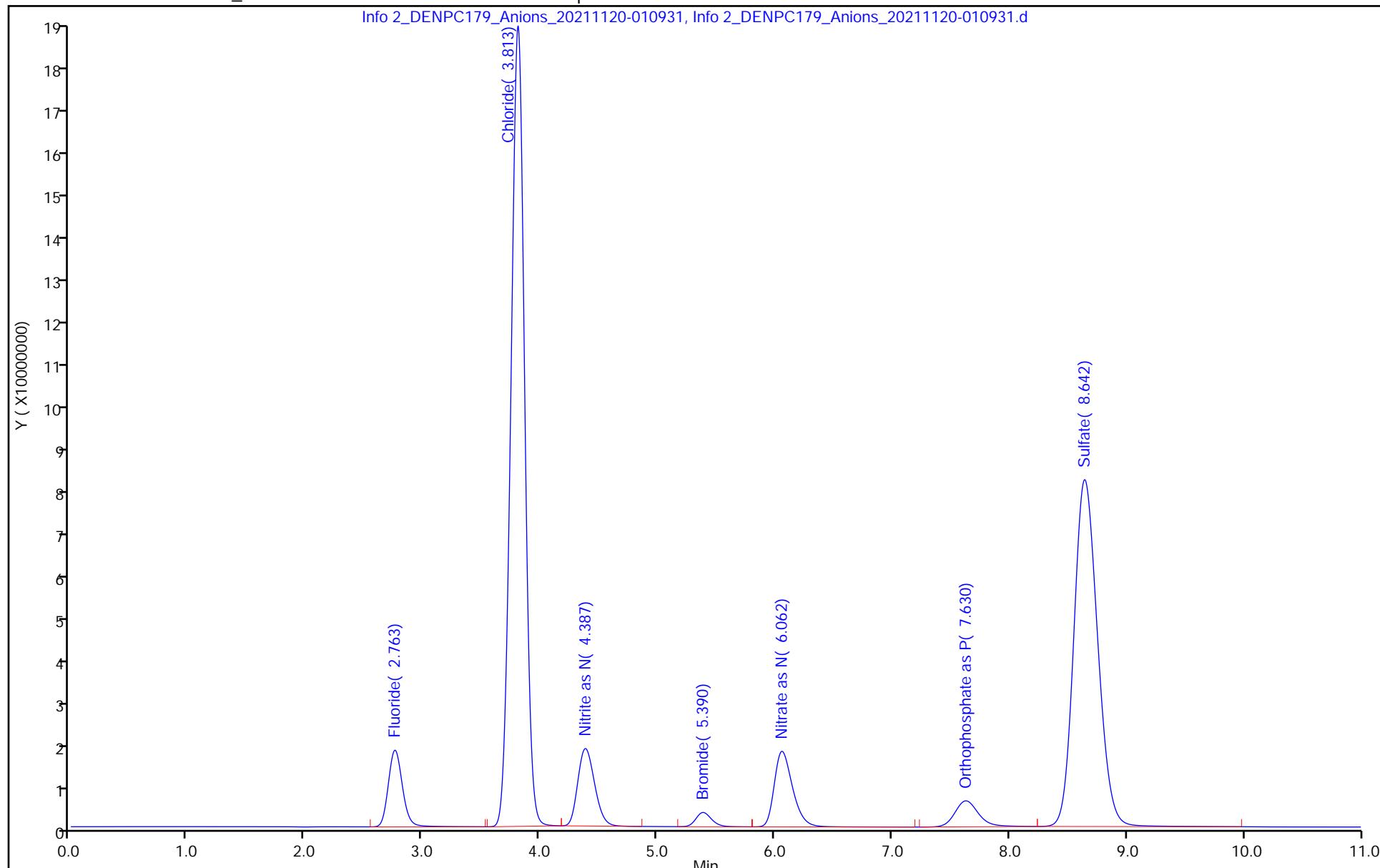
Units: mL

Report Date: 20-Nov-2021 19:02:03

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211120-010931.d  
Injection Date: 20-Nov-2021 00:55:00 Instrument ID: WC\_IonChrom10 Operator ID: wetchemd  
Lims ID: lc3d Worklist Smp#: 44  
Client ID:  
Injection Vol: 5.0 ul ALS Bottle#: 0  
Method: Anions\_IC10 Dil. Factor: 1.0000  
Limit Group: Wet - Anions 28D



## Eurofins TestAmerica, Denver

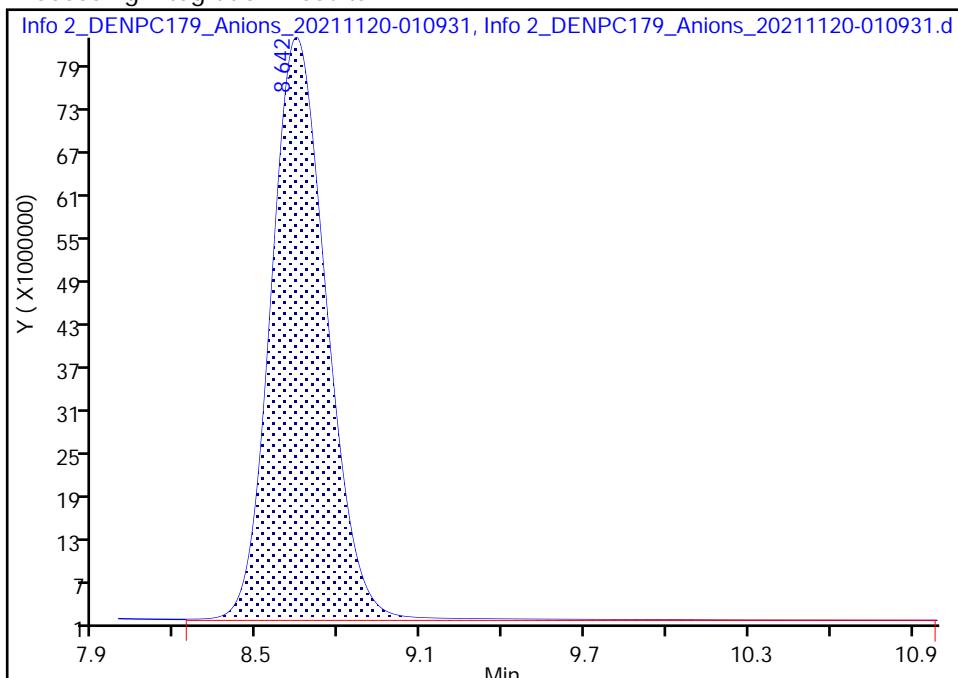
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211120-010931.d  
 Injection Date: 20-Nov-2021 00:55:00 Instrument ID: WC\_IonChrom10  
 Lims ID: lcsd  
 Client ID:  
 Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 44  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC10 Limit Group: Wet - Anions 28D  
 Column: Detector Info 2\_091554\_1

## 7 Sulfate, CAS: 14808-79-8

Signal: 1

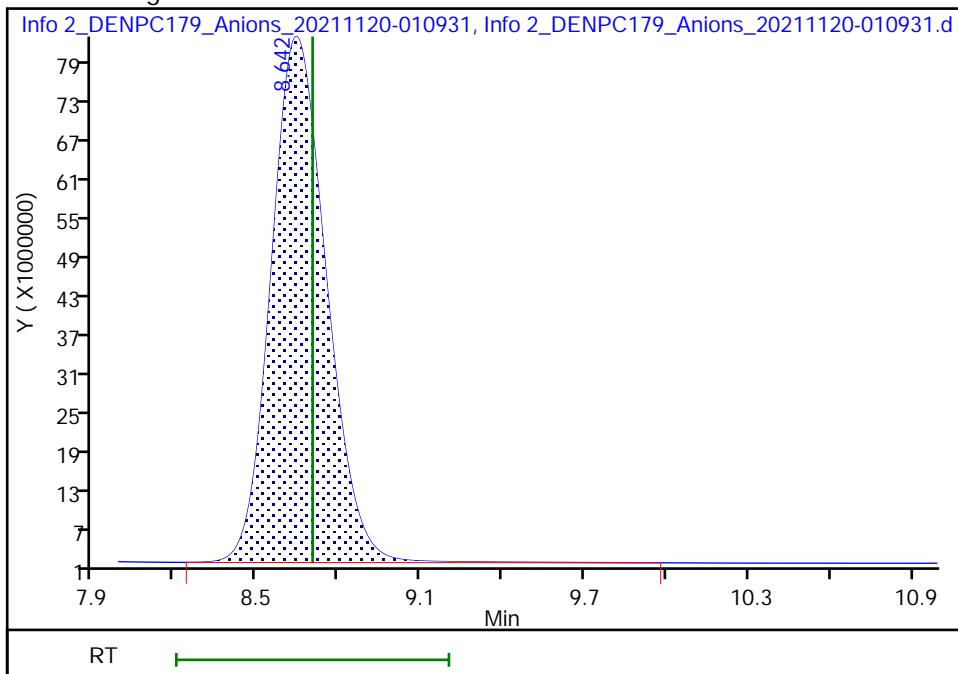
RT: 8.64  
 Area: 1149476641  
 Amount: 102.6758  
 Amount Units: ug/ml

## Processing Integration Results



RT: 8.64  
 Area: 1138260404  
 Amount: 101.6762  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: jindarac, 20-Nov-2021 18:52:41

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211120-012  
 Lims ID: mb  
 Client ID:  
 Sample Type: MB  
 Inject. Date: 20-Nov-2021 01:09:00 ALS Bottle#: 0 Worklist Smp#: 45  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-0106655-045  
 Misc. Info.: 280-0106655-045  
 Operator ID: wetchemd Instrument ID: WC\_IonChrom10  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Anions\_IC10.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 20-Nov-2021 19:02:01 Calib Date: 14-Nov-2021 17:53:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-180  
 Column 1 : Det: Info 2\_091554\_1  
 Process Host: CTX1611

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.753				ND		
2 Chloride	3.800				ND		
3 Nitrite as N	4.372				ND		
4 Bromide	5.382				ND		
5 Nitrate as N	6.055				ND		
6 Orthophosphate as P	7.688	7.683	0.005	4522827		NC	
7 Sulfate	8.702	8.702	0.000	2276068		0.4379	

### QC Flag Legend

Processing Flags

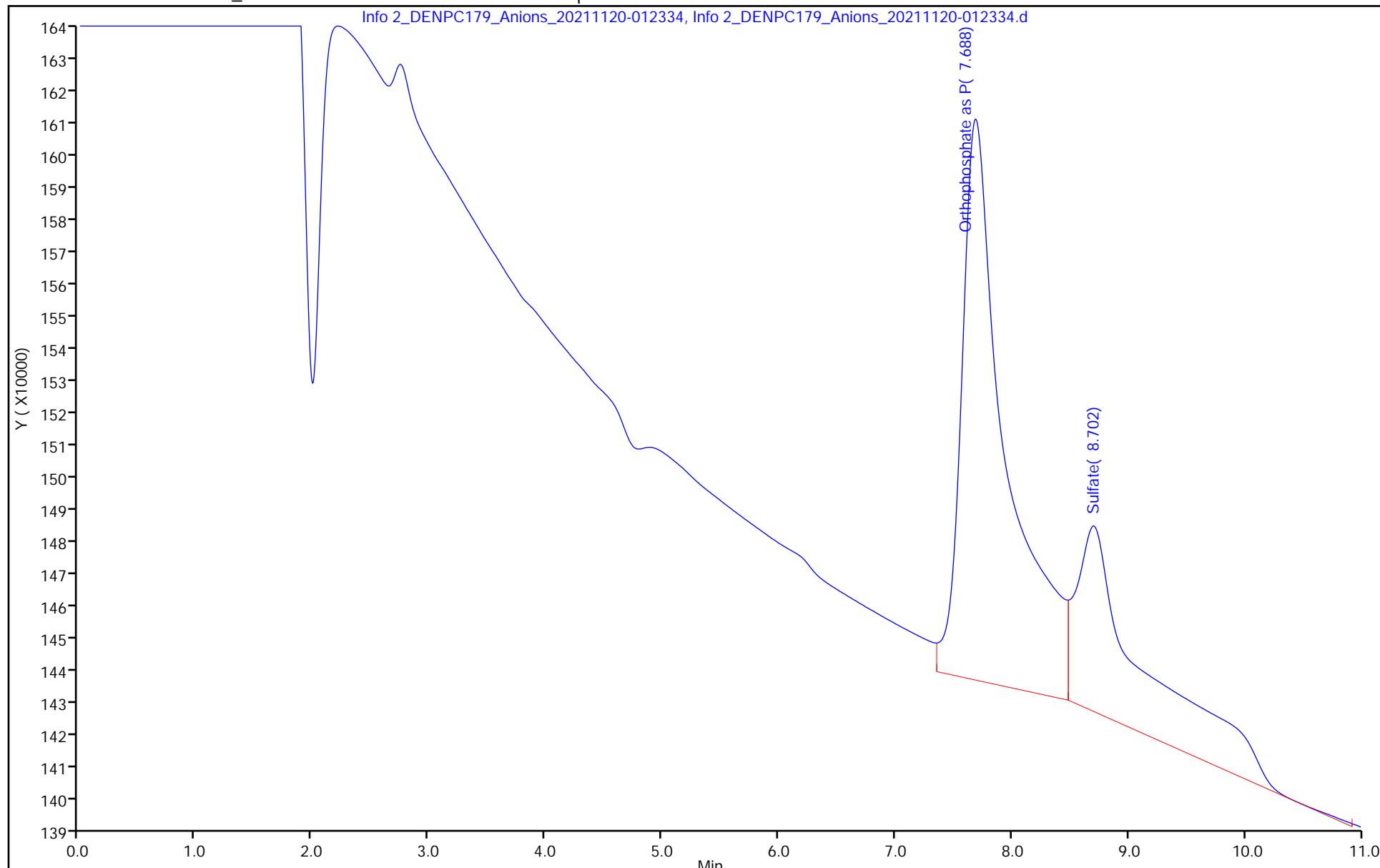
NC - Not Calibrated

Report Date: 20-Nov-2021 19:02:04

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211120-012334.d  
Injection Date: 20-Nov-2021 01:09:00 Instrument ID: WC\_IonChrom10 Operator ID: wetchemd  
Lims ID: mb Worklist Smp#: 45  
Client ID:  
Injection Vol: 5.0 ul ALS Bottle#: 0  
Method: Anions\_IC10 Dil. Factor: 1.0000  
Limit Group: Wet - Anions 28D



Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211120-013  
 Lims ID: 280-155048-F-3  
 Client ID: NW061-7  
 Sample Type: Client  
 Inject. Date: 20-Nov-2021 01:23:00 ALS Bottle#: 0 Worklist Smp#: 46  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-0106655-046  
 Misc. Info.: 280-0106655-046  
 Operator ID: wetchemd Instrument ID: WC\_IonChrom10  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Anions\_IC10.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 20-Nov-2021 19:02:01 Calib Date: 14-Nov-2021 17:53:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-180  
 Column 1 : Det: Info 2\_091554\_1  
 Process Host: CTX1611

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride		2.753			ND	
2 Chloride	3.835	3.800	0.035	785796315	52.0	
3 Nitrite as N		4.372			ND	
4 Bromide	5.447	5.382	0.065	1207409	0.2574	
5 Nitrate as N	6.045	6.055	-0.010	486636300	NC	
6 Orthophosphate as P	7.698	7.683	0.015	13216210	NC	
7 Sulfate	8.632	8.702	-0.070	1533482779	136.9	

### QC Flag Legend

Processing Flags

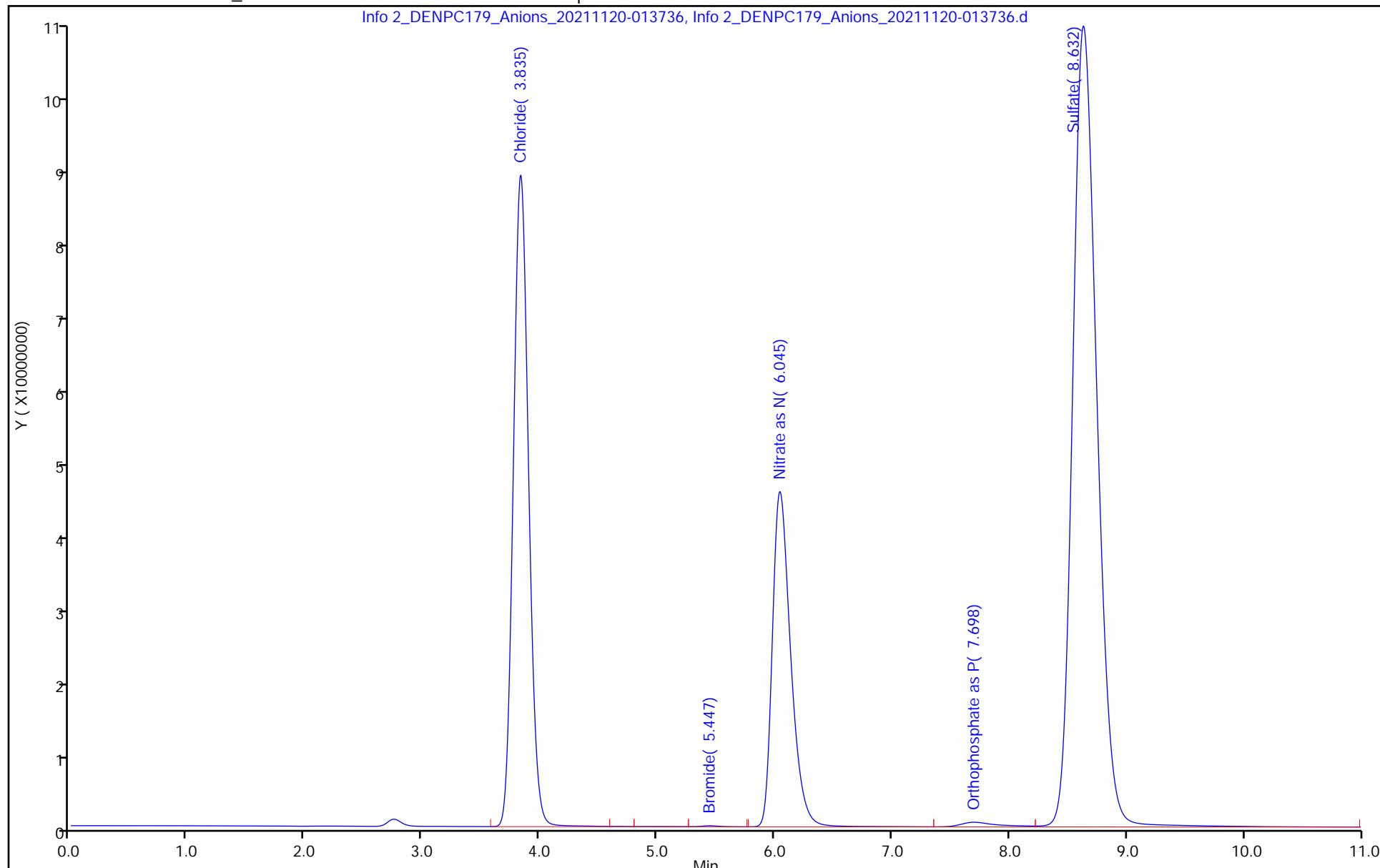
NC - Not Calibrated

Report Date: 20-Nov-2021 19:02:04

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211120-013736.d  
Injection Date: 20-Nov-2021 01:23:00 Instrument ID: WC\_IonChrom10 Operator ID: wetchemd  
Lims ID: 280-155048-F-3 Lab Sample ID: 280-155048-3 Worklist Smp#: 46  
Client ID: NW061-7  
Injection Vol: 5.0 ul Dil. Factor: 1.0000 ALS Bottle#: 0  
Method: Anions\_IC10 Limit Group: Wet - Anions 28D



Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211120-020  
 Lims ID: 280-155048-F-5  
 Client ID: NW060-7  
 Sample Type: Client  
 Inject. Date: 20-Nov-2021 01:51:00 ALS Bottle#: 0 Worklist Smp#: 48  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-0106655-048  
 Misc. Info.: 280-0106655-048  
 Operator ID: wetchemd Instrument ID: WC\_IonChrom10  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Anions\_IC10.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 20-Nov-2021 19:02:01 Calib Date: 14-Nov-2021 17:53:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-180  
 Column 1 : Det: Info 2\_091554\_1  
 Process Host: CTX1611

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride		2.753			ND	
2 Chloride	3.788	3.800	-0.012	143813795	9.64	
3 Nitrite as N		4.372			ND	
4 Bromide	5.440	5.382	0.058	232004	0.1092	
5 Nitrate as N	6.093	6.055	0.038	134926619	NC	
6 Orthophosphate as P	7.693	7.683	0.010	6118231	NC	
7 Sulfate	8.690	8.702	-0.012	329625870	29.6	

### QC Flag Legend

Processing Flags

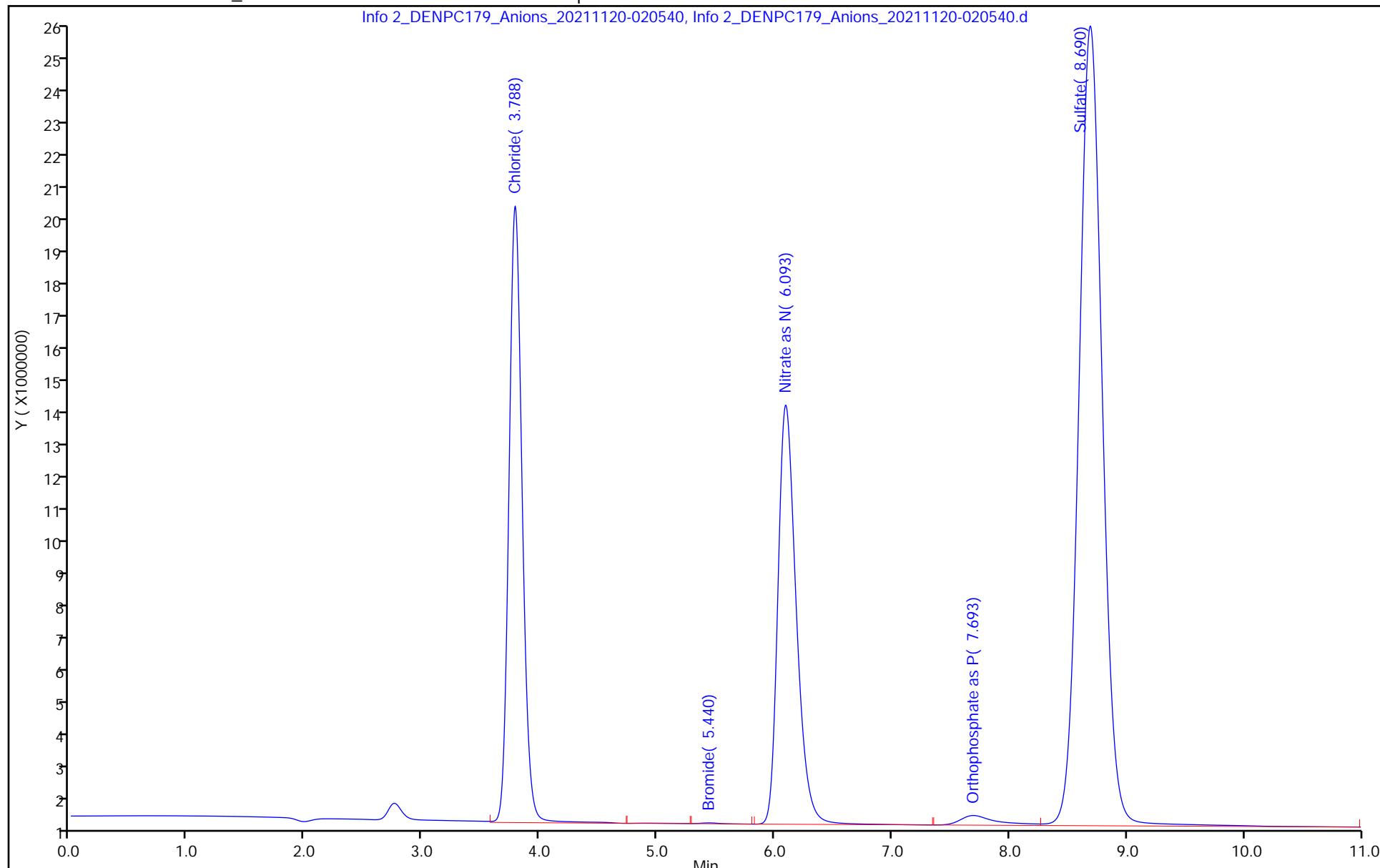
NC - Not Calibrated

Report Date: 20-Nov-2021 19:02:04

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211120-020540.d  
Injection Date: 20-Nov-2021 01:51:00 Instrument ID: WC\_IonChrom10 Operator ID: wetchemd  
Lims ID: 280-155048-F-5 Lab Sample ID: 280-155048-5 Worklist Smp#: 48  
Client ID: NW060-7  
Injection Vol: 5.0 ul Dil. Factor: 1.0000 ALS Bottle#: 0  
Method: Anions\_IC10 Limit Group: Wet - Anions 28D



Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211120-030  
 Lims ID: 280-155048-F-7  
 Client ID: NW062-7  
 Sample Type: Client  
 Inject. Date: 20-Nov-2021 02:47:00 ALS Bottle#: 0 Worklist Smp#: 52  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-0106655-052  
 Misc. Info.: 280-0106655-052  
 Operator ID: wetchemd Instrument ID: WC\_IonChrom10  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Anions\_IC10.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 20-Nov-2021 19:02:01 Calib Date: 14-Nov-2021 17:53:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-180  
 Column 1 : Det: Info 2\_091554\_1  
 Process Host: CTX1611

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride		2.753			ND	
2 Chloride	3.832	3.800	0.032	576744976	38.2	
3 Nitrite as N		4.372			ND	
4 Bromide	5.448	5.382	0.066	1594557	0.3162	
5 Nitrate as N	6.175	6.055	0.120	324541	NC	
6 Orthophosphate as P	7.688	7.683	0.005	5656330	NC	
7 Sulfate	8.597	8.702	-0.105	2206212341	196.9	

### QC Flag Legend

Processing Flags

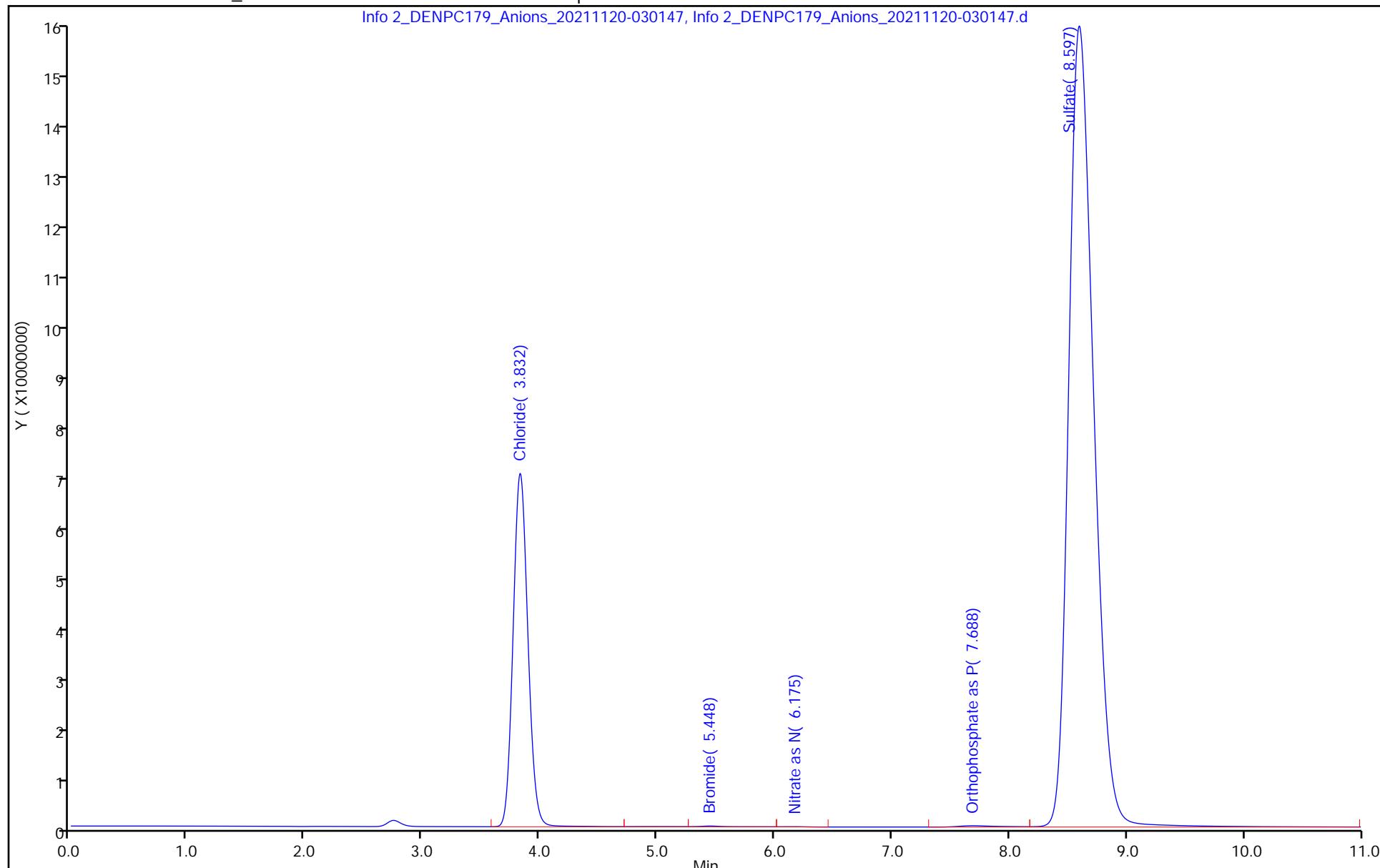
NC - Not Calibrated

Report Date: 20-Nov-2021 19:02:06

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211120-030147.d  
Injection Date: 20-Nov-2021 02:47:00 Instrument ID: WC\_IonChrom10 Operator ID: wetchemd  
Lims ID: 280-155048-F-7 Lab Sample ID: 280-155048-7 Worklist Smp#: 52  
Client ID: NW062-7  
Injection Vol: 5.0 ul Dil. Factor: 1.0000 ALS Bottle#: 0  
Method: Anions\_IC10 Limit Group: Wet - Anions 28D



Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211120-03  
 Lims ID: 280-155048-F-7 DU  
 Client ID:  
 Sample Type: DU  
 Inject. Date: 20-Nov-2021 03:01:00 ALS Bottle#: 0 Worklist Smp#: 53  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-0106655-053  
 Misc. Info.: 280-0106655-053  
 Operator ID: wetchemd Instrument ID: WC\_IonChrom10  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Anions\_IC10.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 20-Nov-2021 19:02:01 Calib Date: 14-Nov-2021 17:53:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-180  
 Column 1 : Det: Info 2\_091554\_1  
 Process Host: CTX1611

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		2.753			ND		
2 Chloride	3.833	3.800	0.033	571885919		37.9	
3 Nitrite as N		4.372			ND		
4 Bromide	5.452	5.382	0.070	2341525		0.4297	
5 Nitrate as N	6.182	6.055	0.127	572822		NC	
6 Orthophosphate as P	7.693	7.683	0.010	5089431		NC	
7 Sulfate	8.600	8.702	-0.102	2203225631		196.6	

### QC Flag Legend

Processing Flags

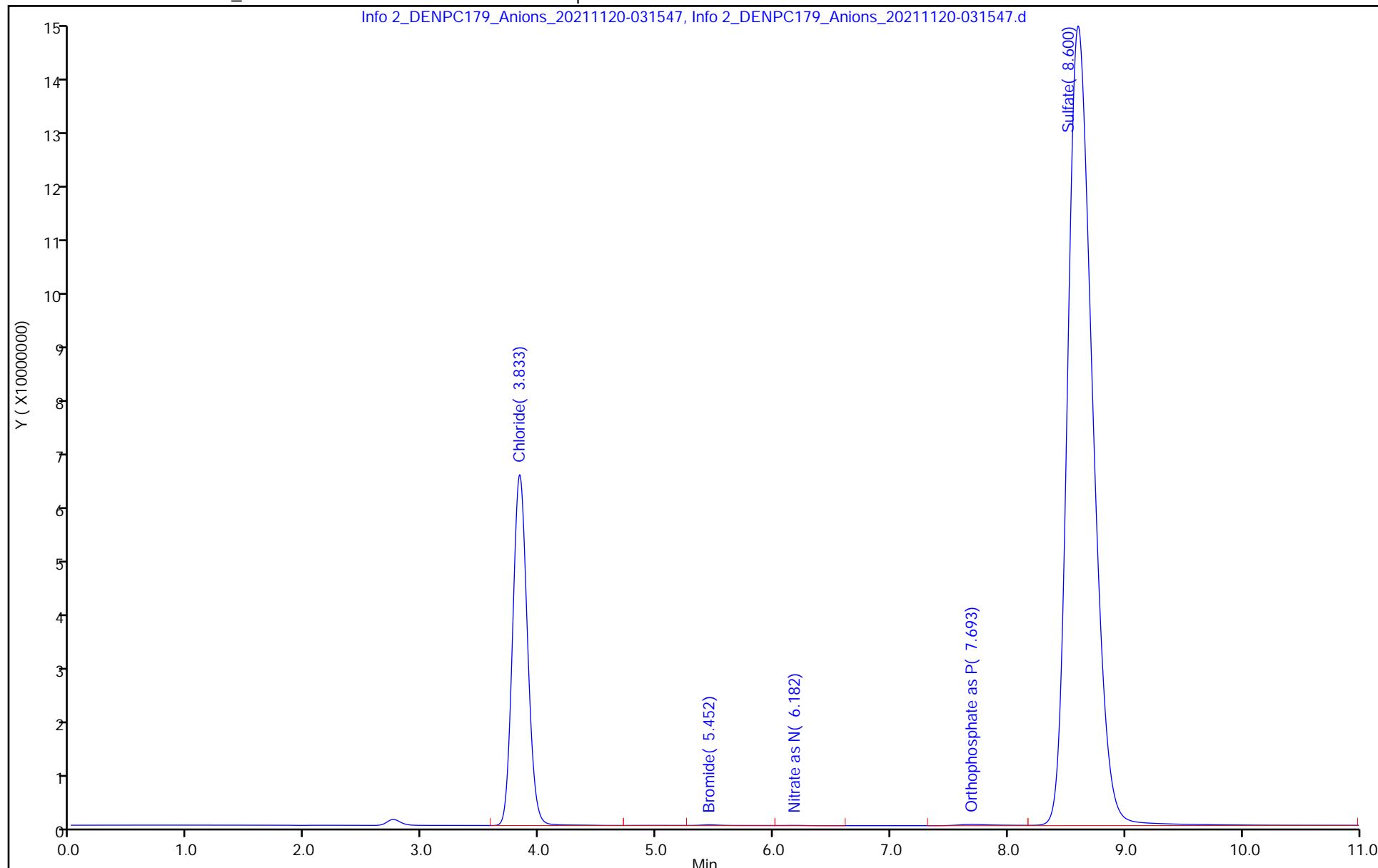
NC - Not Calibrated

Report Date: 20-Nov-2021 19:02:06

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211120-031547.d  
Injection Date: 20-Nov-2021 03:01:00 Instrument ID: WC\_IonChrom10 Operator ID: wetchemd  
Lims ID: 280-155048-F-7 DU Worklist Smp#: 53  
Client ID:  
Injection Vol: 5.0 ul ALS Bottle#: 0  
Method: Anions\_IC10 Dil. Factor: 1.0000  
Limit Group: Wet - Anions 28D



Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211120-032  
 Lims ID: 280-155048-F-7 MS  
 Client ID: NW062-7  
 Sample Type: MS  
 Inject. Date: 20-Nov-2021 03:15:00 ALS Bottle#: 0 Worklist Smp#: 54  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-0106655-054  
 Misc. Info.: 280-0106655-054  
 Operator ID: wetchemd Instrument ID: WC\_IonChrom10  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Anions\_IC10.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 20-Nov-2021 19:02:01 Calib Date: 14-Nov-2021 17:53:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICAL File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-180  
 Column 1 : Det: Info 2\_091554\_1  
 Process Host: CTX1611

First Level Reviewer: jindarac Date: 20-Nov-2021 18:55:01

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.760	2.753	0.007	153852591	5.00	5.01	Ma
2 Chloride	3.837	3.800	0.037	1492831825	50.0	98.6	
3 Nitrite as N	4.598	4.372	0.226	207473439	NC	NC	
4 Bromide	5.415	5.382	0.033	36996433	5.00	5.70	
5 Nitrate as N	6.078	6.055	0.023	224643135	NC	NC	
6 Orthophosphate as P	7.637	7.683	-0.046	99123998	NC	NC	
7 Sulfate	8.582	8.702	-0.120	2856695825	50.0	254.8	E

### QC Flag Legend

#### Processing Flags

NC - Not Calibrated

E - Exceeded Maximum Amount

#### Review Flags

M - Manually Integrated

a - User Assigned ID

### Reagents:

ICMS/MSD WEEK\_00731

Amount Added: 0.10

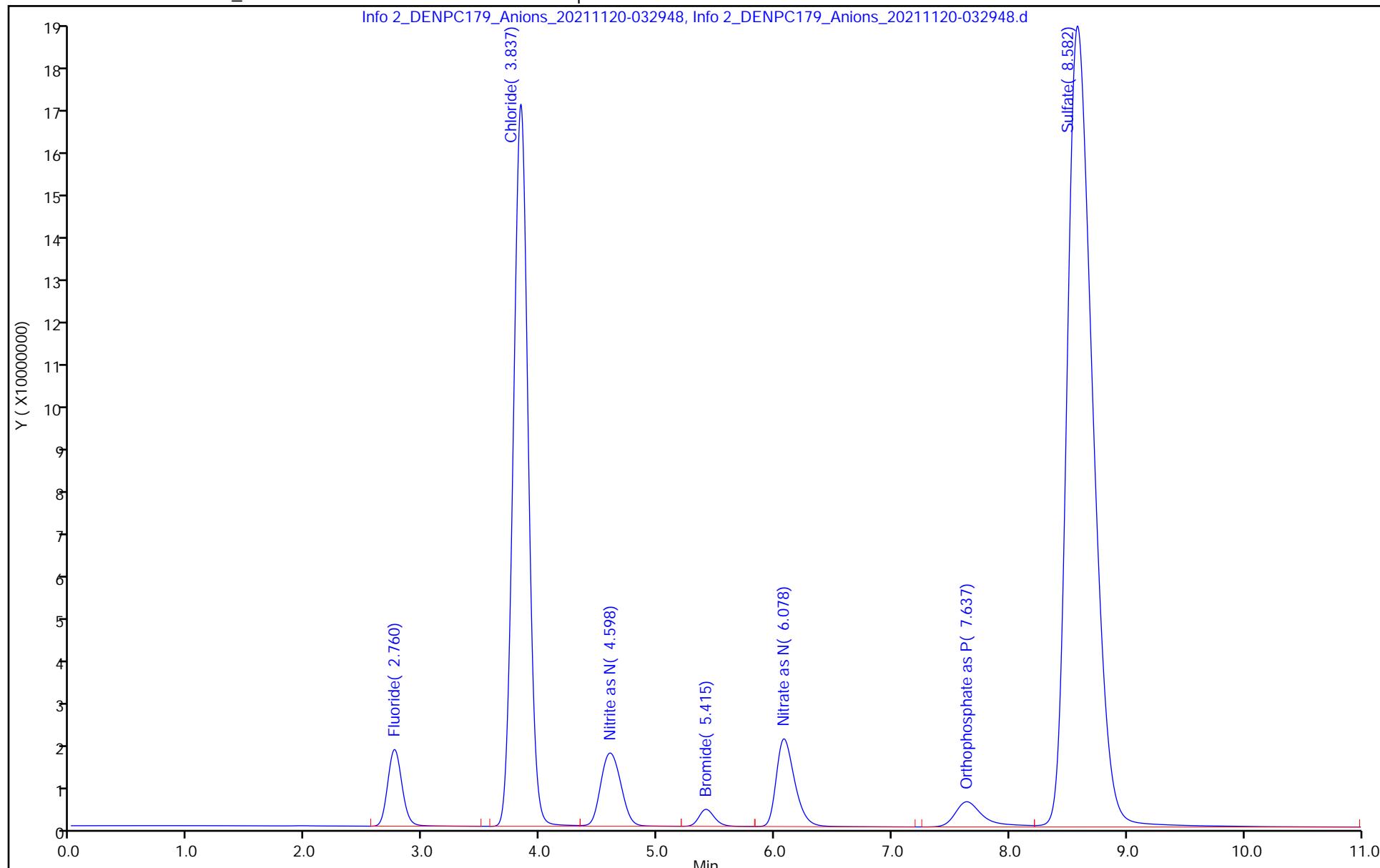
Units: mL

Report Date: 20-Nov-2021 19:02:06

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211120-032948.d  
Injection Date: 20-Nov-2021 03:15:00 Instrument ID: WC\_IonChrom10 Operator ID: wetchemd  
Lims ID: 280-155048-F-7 MS Worklist Smp#: 54  
Client ID: NW062-7  
Injection Vol: 5.0 ul Dil. Factor: 1.0000 ALS Bottle#: 0  
Method: Anions\_IC10 Limit Group: Wet - Anions 28D



Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211120-034.m  
 Lims ID: 280-155048-F-7 MSD  
 Client ID: NW062-7  
 Sample Type: MSD  
 Inject. Date: 20-Nov-2021 03:29:00 ALS Bottle#: 0 Worklist Smp#: 55  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-0106655-055  
 Misc. Info.: 280-0106655-055  
 Operator ID: wetchemd Instrument ID: WC\_IonChrom10  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Anions\_IC10.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 20-Nov-2021 19:02:01 Calib Date: 14-Nov-2021 17:53:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICAL File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-180.m  
 Column 1 : Det: Info 2\_091554\_1  
 Process Host: CTX1611

First Level Reviewer: jindaratac Date: 20-Nov-2021 18:55:16

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.760	2.753	0.007	152534902	5.00	4.96	Ma
2 Chloride	3.837	3.800	0.037	1485146629	50.0	98.1	
3 Nitrite as N	4.597	4.372	0.225	205789535	NC	NC	
4 Bromide	5.415	5.382	0.033	36487084	5.00	5.62	
5 Nitrate as N	6.080	6.055	0.025	222356370	NC	NC	
6 Orthophosphate as P	7.638	7.683	-0.045	99235198	NC	NC	
7 Sulfate	8.583	8.702	-0.119	2853113863	50.0	254.5	E

### QC Flag Legend

#### Processing Flags

NC - Not Calibrated

E - Exceeded Maximum Amount

#### Review Flags

M - Manually Integrated

a - User Assigned ID

### Reagents:

ICMS/MSD WEEK\_00731

Amount Added: 0.10

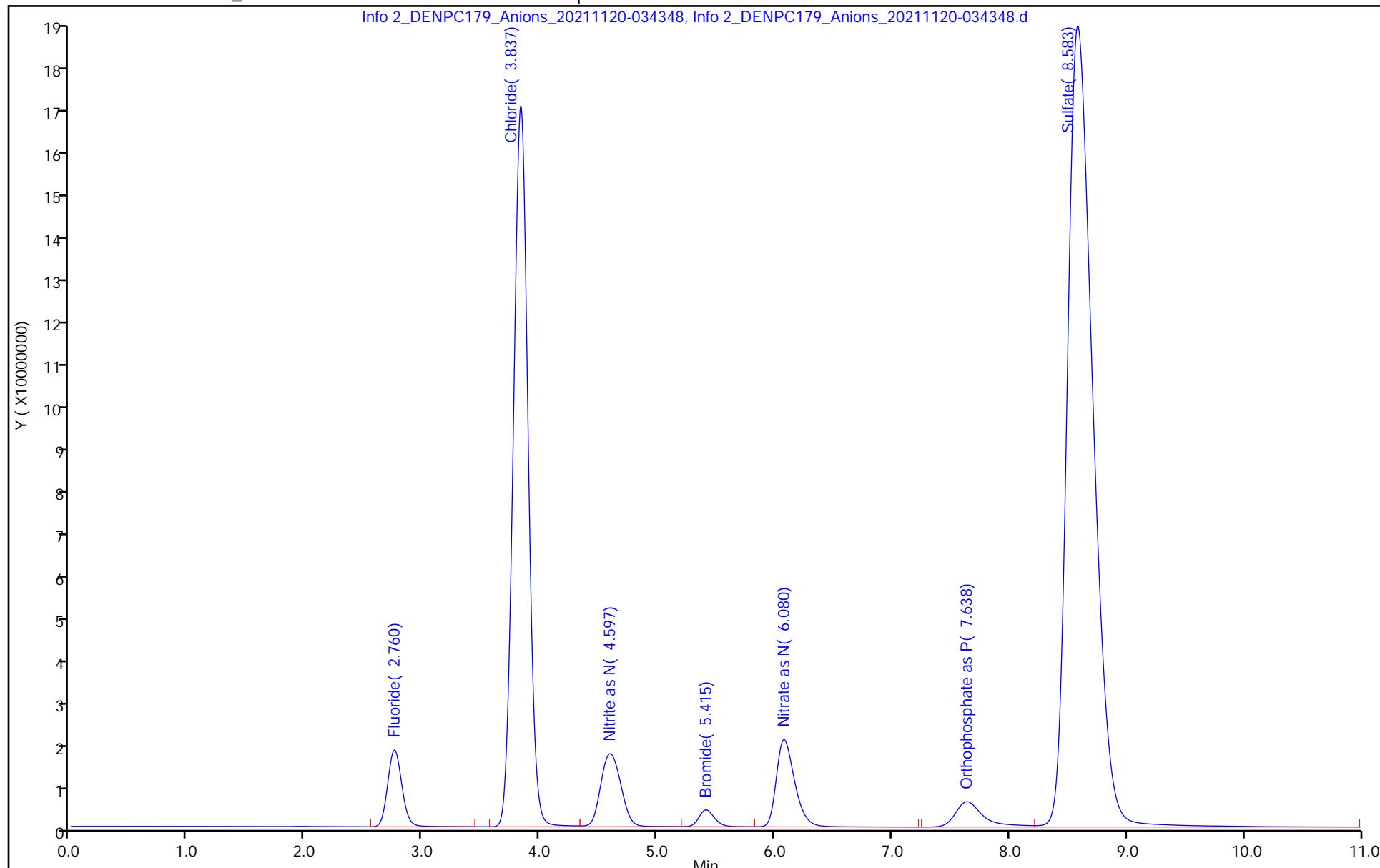
Units: mL

Report Date: 20-Nov-2021 19:02:07

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211120-034348.d  
Injection Date: 20-Nov-2021 03:29:00 Instrument ID: WC\_IonChrom10 Operator ID: wetchemd  
Lims ID: 280-155048-F-7 MSD Worklist Smp#: 55  
Client ID: NW062-7  
Injection Vol: 5.0 ul Dil. Factor: 1.0000 ALS Bottle#: 0  
Method: Anions\_IC10 Limit Group: Wet - Anions 28D



Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211120-035  
 Lims ID: ccv  
 Client ID:  
 Sample Type: CCV  
 Inject. Date: 20-Nov-2021 03:43:00 ALS Bottle#: 0 Worklist Smp#: 56  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-0106655-056  
 Misc. Info.: 280-0106655-056  
 Operator ID: wetchemd Instrument ID: WC\_IonChrom10  
 Sublist: chrom-Anions\_IC10\*sub2  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Anions\_IC10.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 20-Nov-2021 19:02:07 Calib Date: 14-Nov-2021 17:53:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-180  
 Column 1 : Det: Info 2\_091554\_1  
 Process Host: CTX1611

First Level Reviewer: jindarac Date: 20-Nov-2021 18:56:10

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.762	2.753	0.009	139834707	5.00	4.55	Ma
2 Chloride	3.815	3.800	0.015	1525934887	100.0	100.7	M
3 Nitrite as N	4.390	4.372	0.018	180565397	NC	NC	M
4 Bromide	5.393	5.382	0.011	31162931	5.00	4.81	M
5 Nitrate as N	6.068	6.055	0.013	191943707	NC	NC	
6 Orthophosphate as P	7.627	7.683	-0.056	86699931	NC	NC	M
7 Sulfate	8.643	8.702	-0.059	1145738794	100.0	102.3	M

### QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

a - User Assigned ID

### Reagents:

IC LCS\_01845

Amount Added: 10.00

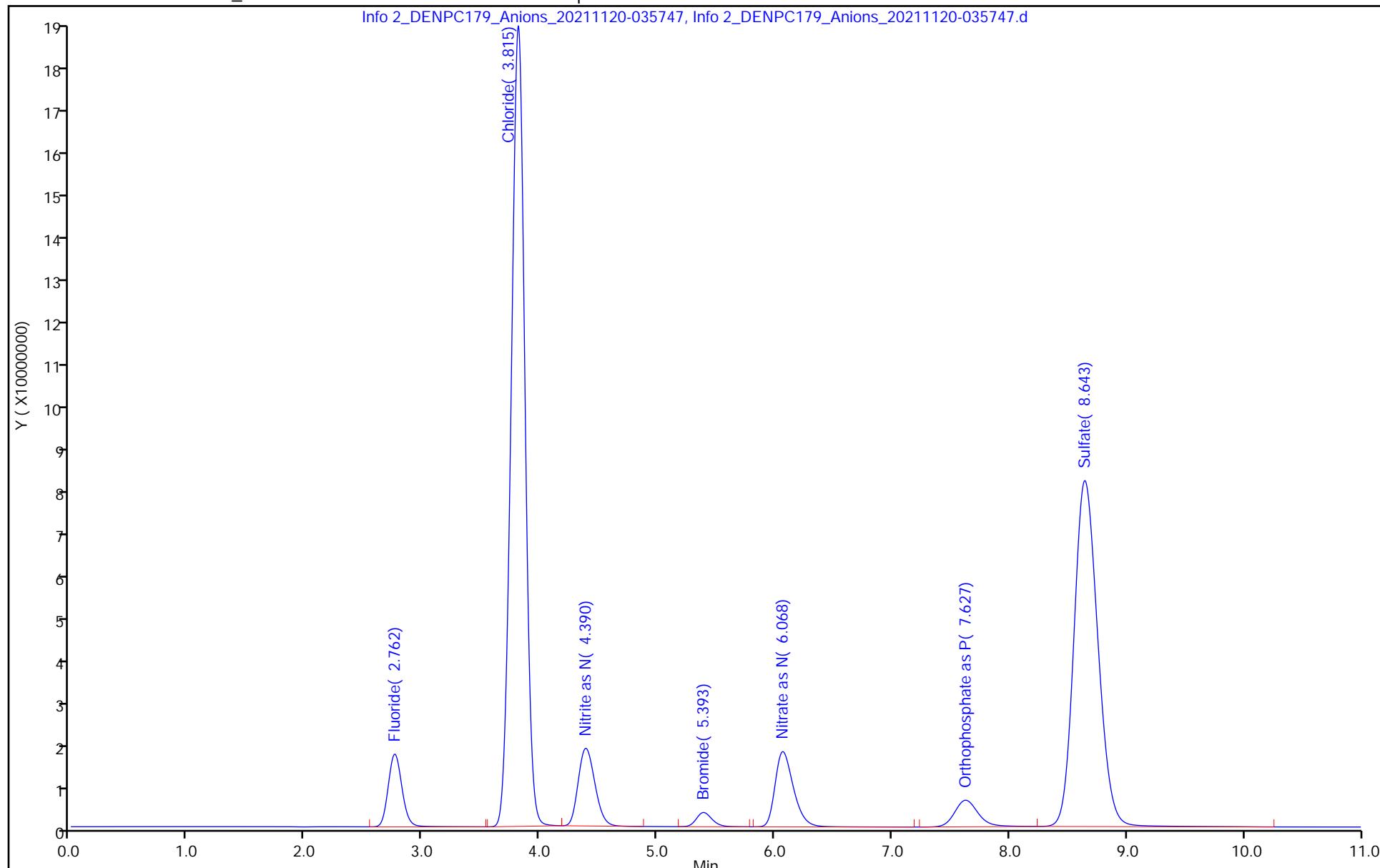
Units: mL

Report Date: 20-Nov-2021 19:02:07

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211120-035747.d  
Injection Date: 20-Nov-2021 03:43:00 Instrument ID: WC\_IonChrom10 Operator ID: wetchemd  
Lims ID: ccv Worklist Smp#: 56  
Client ID:  
Injection Vol: 5.0 ul ALS Bottle#: 0  
Method: Anions\_IC10 Dil. Factor: 1.0000  
Limit Group: Wet - Anions 28D



## Eurofins TestAmerica, Denver

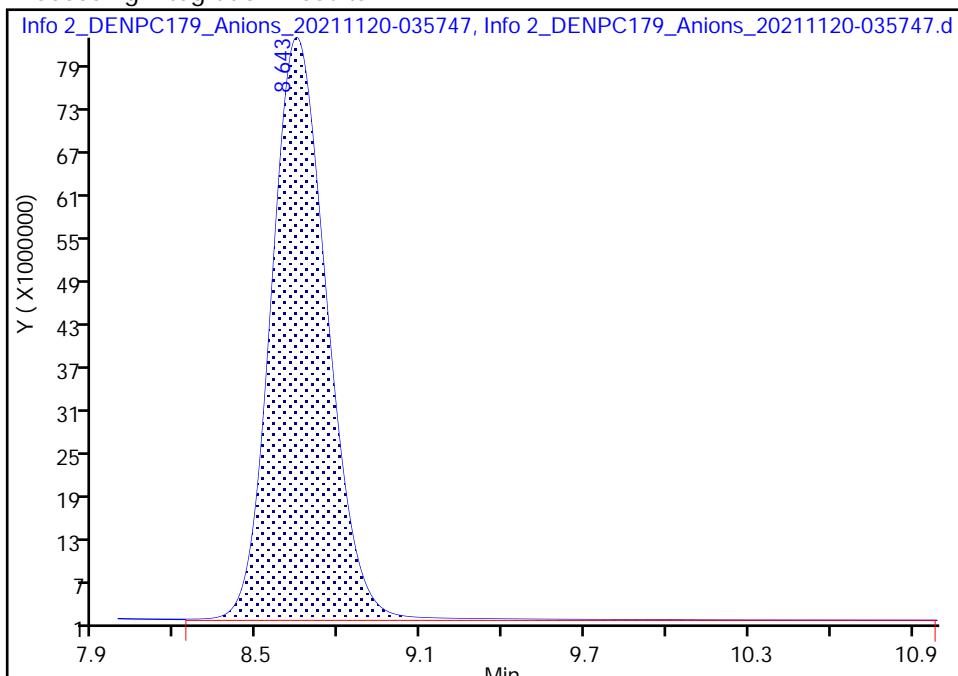
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211120-035747.d  
 Injection Date: 20-Nov-2021 03:43:00 Instrument ID: WC\_IonChrom10  
 Lims ID: ccv  
 Client ID:  
 Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 56  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC10 Limit Group: Wet - Anions 28D  
 Column: Detector Info 2\_091554\_1

## 7 Sulfate, CAS: 14808-79-8

Signal: 1

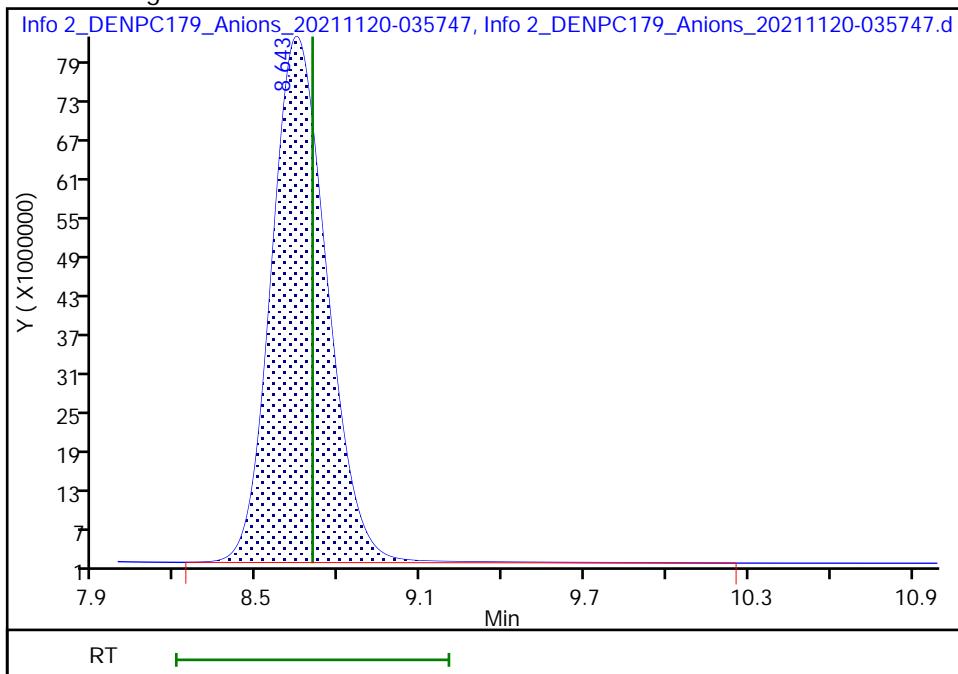
RT: 8.64  
 Area: 1155524709  
 Amount: 103.2148  
 Amount Units: ug/ml

## Processing Integration Results



RT: 8.64  
 Area: 1145738794  
 Amount: 102.3427  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: jindarac, 20-Nov-2021 18:56:07

Audit Action: Manually Integrated

Audit Reason: Peak not integrated

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211120-04  
 Lims ID: ccb  
 Client ID:  
 Sample Type: CCB  
 Inject. Date: 20-Nov-2021 03:57:00      ALS Bottle#: 0      Worklist Smp#: 57  
 Injection Vol: 5.0 ul      Dil. Factor: 1.0000  
 Sample Info: 280-0106655-057  
 Misc. Info.: 280-0106655-057  
 Operator ID: wetchemd      Instrument ID: WC\_IonChrom10  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Anions\_IC10.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 20-Nov-2021 19:02:07      Calib Date: 14-Nov-2021 17:53:00  
 Integrator: Falcon  
 Quant Method: External Standard      Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-180  
 Column 1 : Det: Info 2\_091554\_1  
 Process Host: CTX1611

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		2.753			ND		
2 Chloride	3.762	3.800	-0.038	829342		0.2194	
3 Nitrite as N		4.372			ND		
4 Bromide		5.382			ND		
5 Nitrate as N		6.055			ND		
6 Orthophosphate as P	7.678	7.683	-0.005	2847197		NC	
7 Sulfate	8.700	8.702	-0.002	930037		0.3180	

### QC Flag Legend

Processing Flags

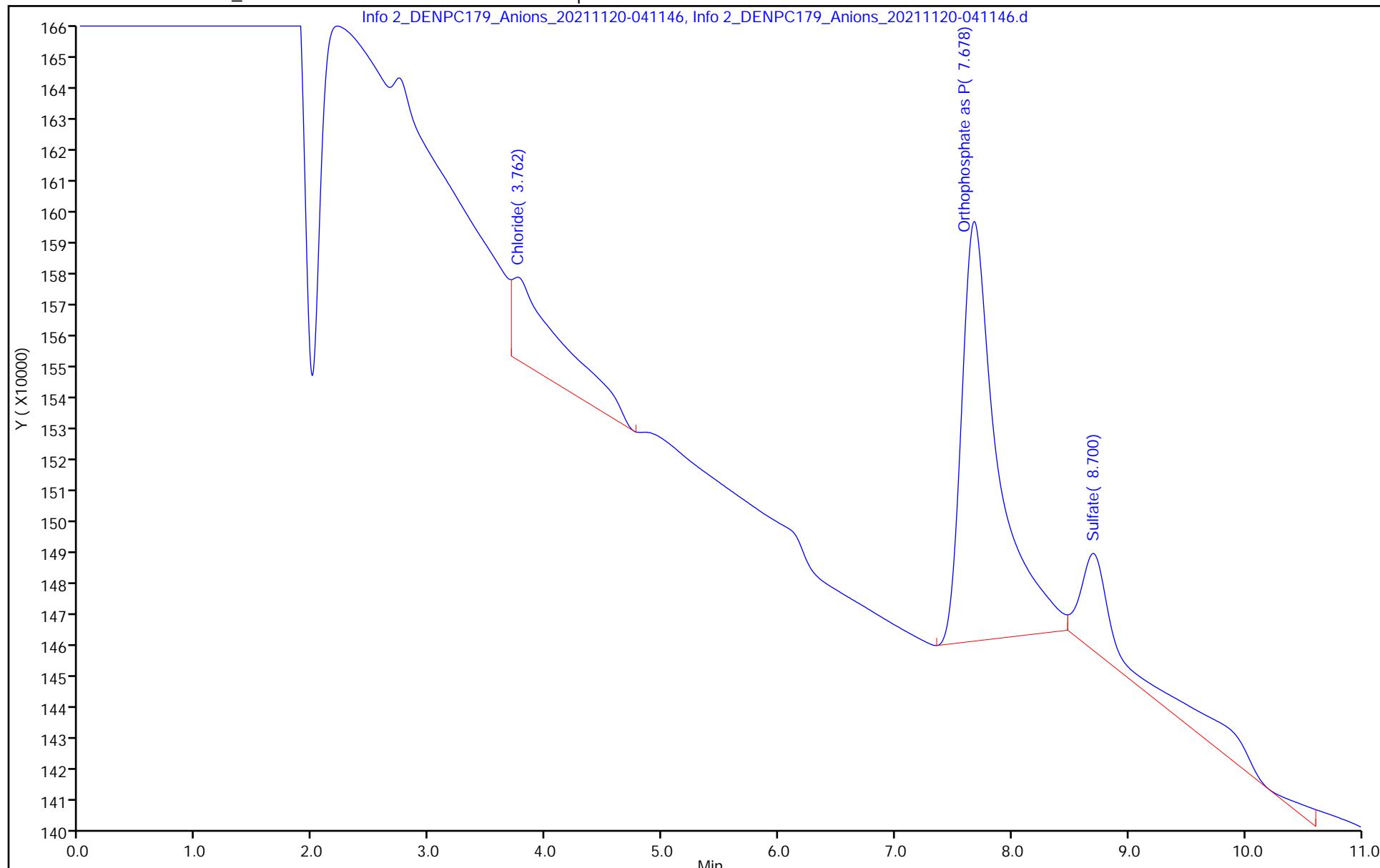
NC - Not Calibrated

Report Date: 20-Nov-2021 19:02:08

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211120-041146.d  
Injection Date: 20-Nov-2021 03:57:00 Instrument ID: WC\_IonChrom10 Operator ID: wetchemd  
Lims ID: ccb Worklist Smp#: 57  
Client ID:  
Injection Vol: 5.0 ul ALS Bottle#: 0  
Method: Anions\_IC10 Dil. Factor: 1.0000  
Limit Group: Wet - Anions 28D



Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211120-042  
 Lims ID: 280-155048-F-8  
 Client ID: G0070-7  
 Sample Type: Client  
 Inject. Date: 20-Nov-2021 04:11:00 ALS Bottle#: 0 Worklist Smp#: 58  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-0106655-058  
 Misc. Info.: 280-0106655-058  
 Operator ID: wetchemd Instrument ID: WC\_IonChrom10  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Anions\_IC10.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 20-Nov-2021 19:02:07 Calib Date: 14-Nov-2021 17:53:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-180  
 Column 1 : Det: Info 2\_091554\_1  
 Process Host: CTX1611

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride		2.753			ND	
2 Chloride	3.820	3.800	0.020	177858072	11.9	
3 Nitrite as N		4.372			ND	
4 Bromide	5.447	5.382	0.065	1632697	0.3220	
5 Nitrate as N	6.192	6.055	0.137	931672	NC	
6 Orthophosphate as P	7.708	7.683	0.025	3095391	NC	
7 Sulfate	8.672	8.702	-0.030	523883371	46.9	

### QC Flag Legend

Processing Flags

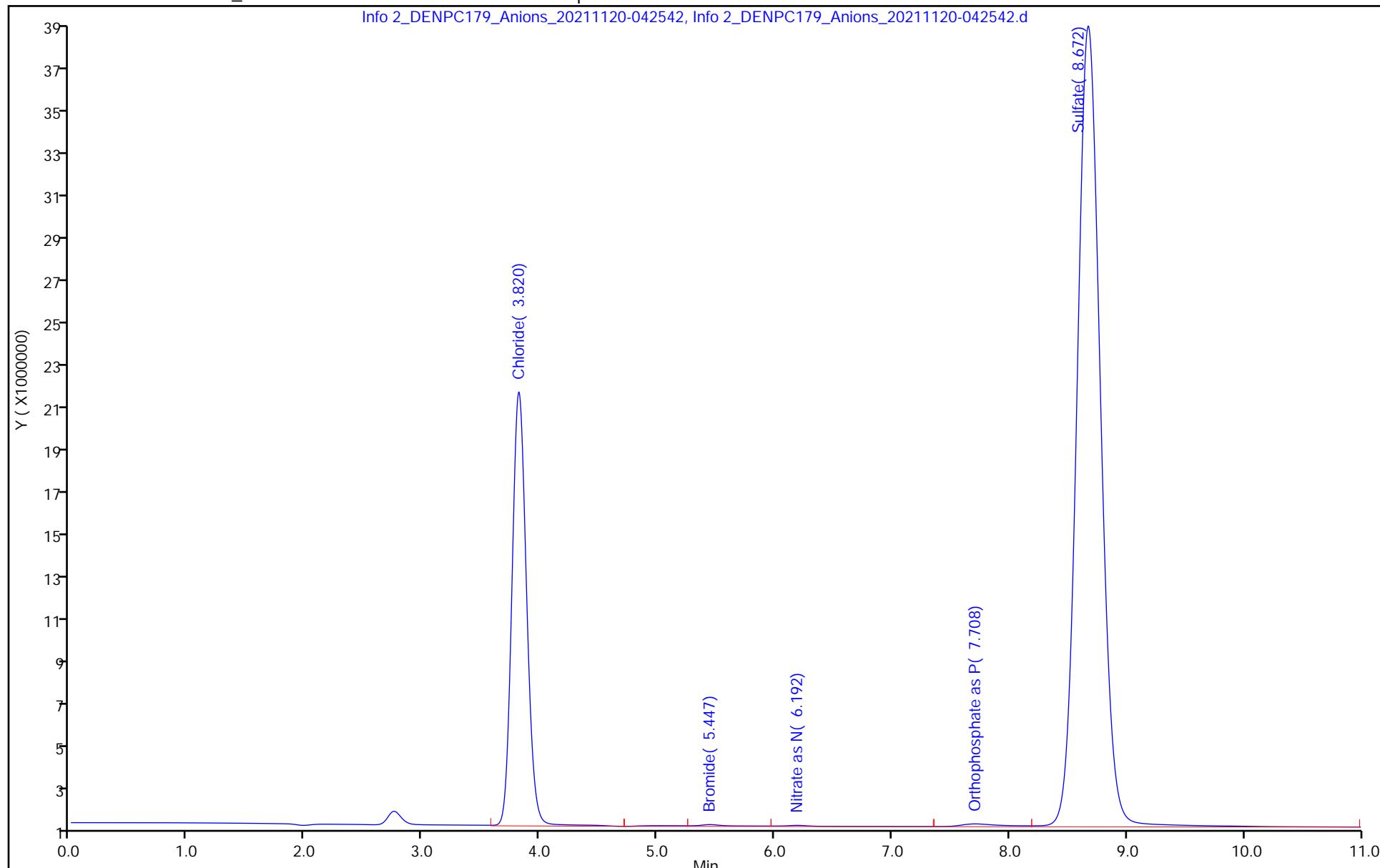
NC - Not Calibrated

Report Date: 20-Nov-2021 19:02:08

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211120-042542.d  
Injection Date: 20-Nov-2021 04:11:00 Instrument ID: WC\_IonChrom10 Operator ID: wetchemd  
Lims ID: 280-155048-F-8 Lab Sample ID: 280-155048-8 Worklist Smp#: 58  
Client ID: G0070-7  
Injection Vol: 5.0 ul Dil. Factor: 1.0000 ALS Bottle#: 0  
Method: Anions\_IC10 Limit Group: Wet - Anions 28D



Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211120-043  
 Lims ID: 280-155048-F-8 DU  
 Client ID:  
 Sample Type: DU  
 Inject. Date: 20-Nov-2021 04:25:00 ALS Bottle#: 0 Worklist Smp#: 59  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-0106655-059  
 Misc. Info.: 280-0106655-059  
 Operator ID: wetchemd Instrument ID: WC\_IonChrom10  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Anions\_IC10.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 20-Nov-2021 19:02:07 Calib Date: 14-Nov-2021 17:53:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-180  
 Column 1 : Det: Info 2\_091554\_1  
 Process Host: CTX1611

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		2.753			ND		
2 Chloride	3.822	3.800	0.022	177279999		11.8	
3 Nitrite as N		4.372			ND		
4 Bromide	5.450	5.382	0.068	1555074		0.3102	
5 Nitrate as N	6.198	6.055	0.143	921793		NC	
6 Orthophosphate as P	7.707	7.683	0.024	2678242		NC	
7 Sulfate	8.673	8.702	-0.029	523512305		46.9	

### QC Flag Legend

Processing Flags

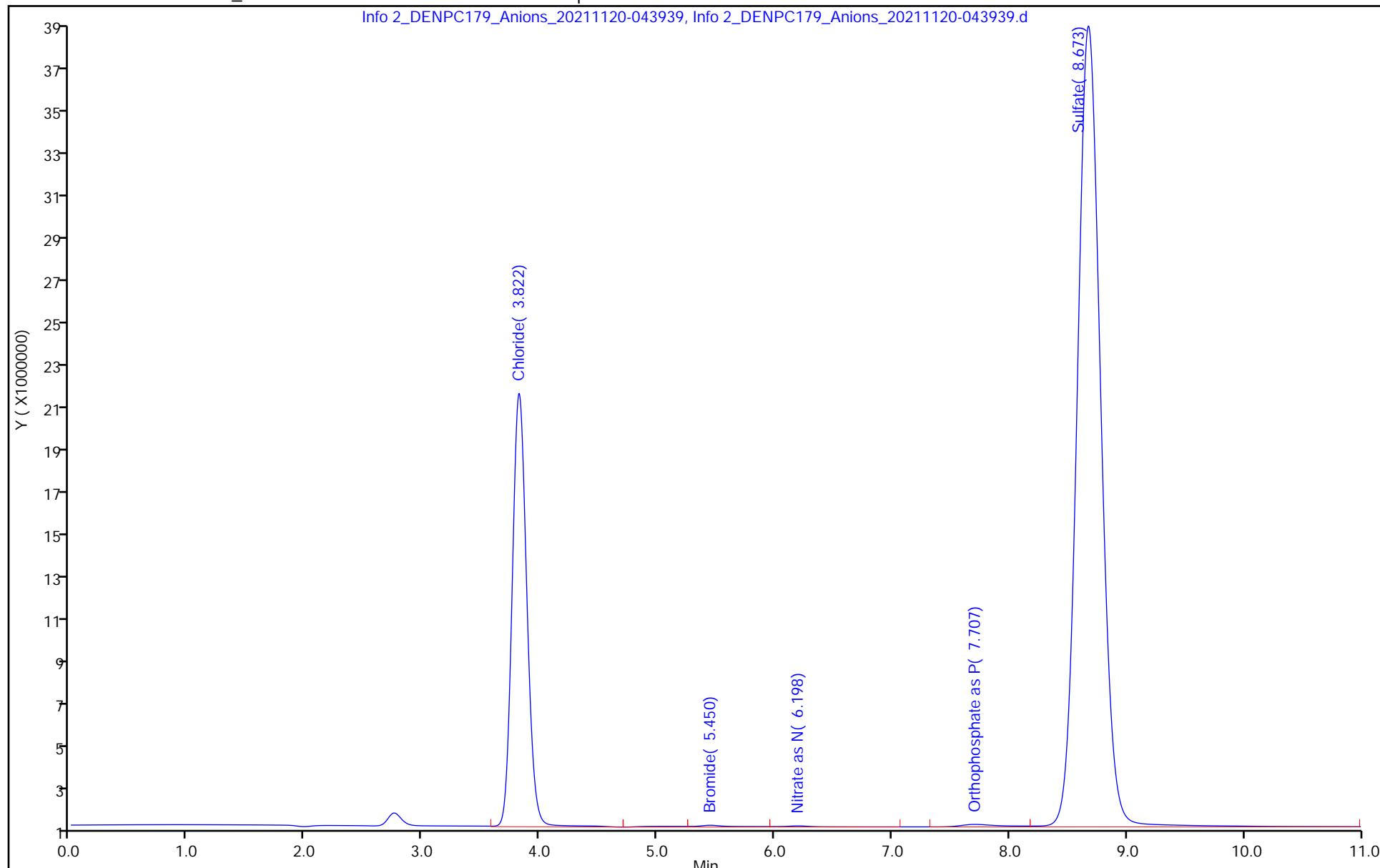
NC - Not Calibrated

Report Date: 20-Nov-2021 19:02:08

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211120-043939.d  
Injection Date: 20-Nov-2021 04:25:00 Instrument ID: WC\_IonChrom10 Operator ID: wetchemd  
Lims ID: 280-155048-F-8 DU Worklist Smp#: 59  
Client ID:  
Injection Vol: 5.0 ul ALS Bottle#: 0  
Method: Anions\_IC10 Dil. Factor: 1.0000  
Limit Group: Wet - Anions 28D



Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211120-045  
 Lims ID: 280-155048-F-8 MS  
 Client ID: G0070-7  
 Sample Type: MS  
 Inject. Date: 20-Nov-2021 04:39:00 ALS Bottle#: 0 Worklist Smp#: 60  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-0106655-060  
 Misc. Info.: 280-0106655-060  
 Operator ID: wetchemd Instrument ID: WC\_IonChrom10  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Anions\_IC10.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 20-Nov-2021 19:02:07 Calib Date: 14-Nov-2021 17:53:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICAL File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-180  
 Column 1 : Det: Info 2\_091554\_1  
 Process Host: CTX1611

First Level Reviewer: jindarac Date: 20-Nov-2021 18:56:31

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.762	2.753	0.009	144440116	5.00	4.70	Ma
2 Chloride	3.817	3.800	0.017	1063202845	50.0	70.2	
3 Nitrite as N	4.588	4.372	0.216	199748839	NC	NC	
4 Bromide	5.410	5.382	0.028	34495829	5.00	5.32	
5 Nitrate as N	6.073	6.055	0.018	215765671	NC	NC	
6 Orthophosphate as P	7.642	7.683	-0.041	96157567	NC	NC	
7 Sulfate	8.642	8.702	-0.060	1183358787	50.0	105.7	

### QC Flag Legend

#### Processing Flags

NC - Not Calibrated

#### Review Flags

M - Manually Integrated

a - User Assigned ID

### Reagents:

ICMS/MSD WEEK\_00731

Amount Added: 0.10

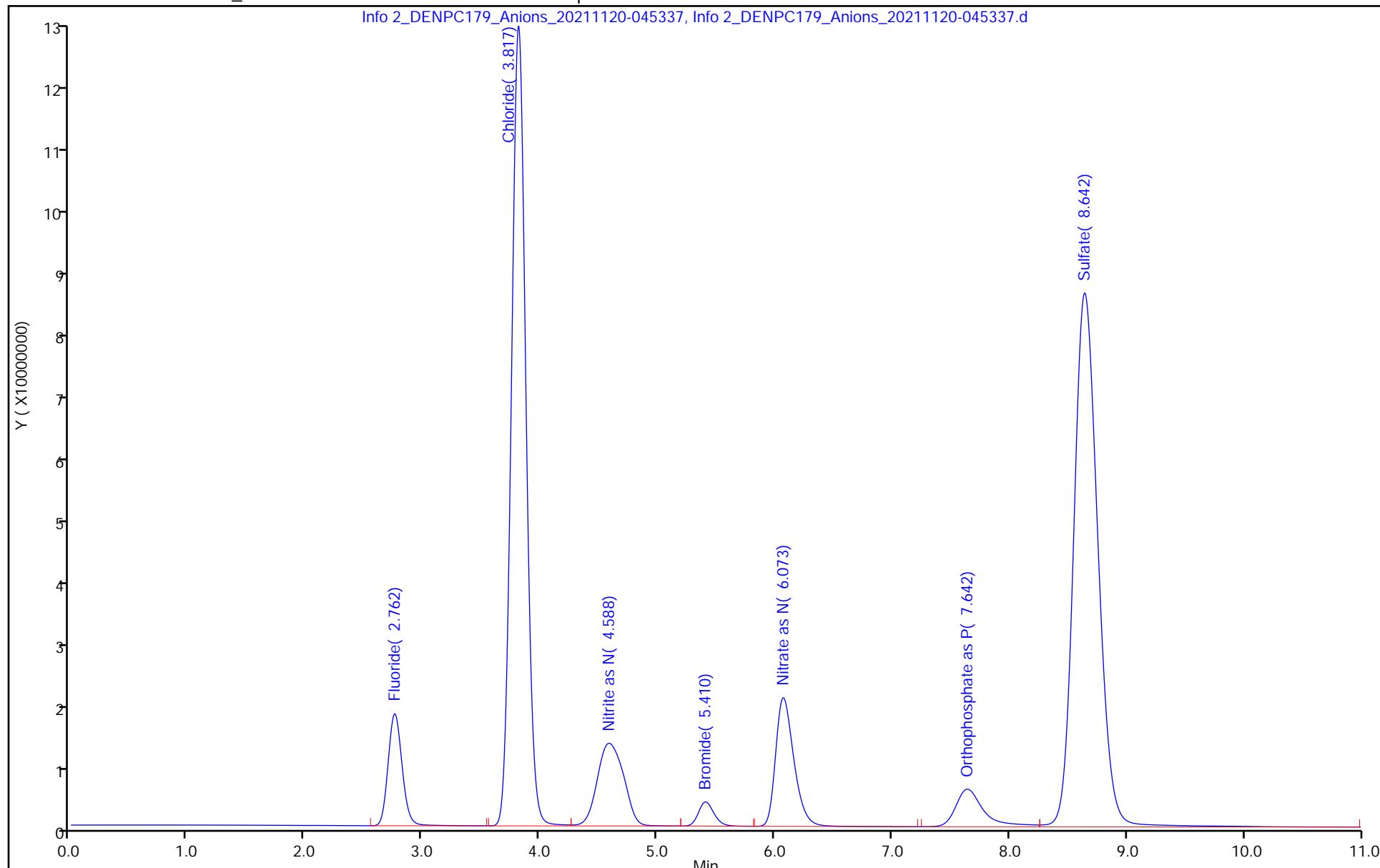
Units: mL

Report Date: 20-Nov-2021 19:02:09

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211120-045337.d  
Injection Date: 20-Nov-2021 04:39:00 Instrument ID: WC\_IonChrom10 Operator ID: wetchemd  
Lims ID: 280-155048-F-8 MS Worklist Smp#: 60  
Client ID: G0070-7  
Injection Vol: 5.0 ul Dil. Factor: 1.0000 ALS Bottle#: 0  
Method: Anions\_IC10 Limit Group: Wet - Anions 28D



Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211120-050  
 Lims ID: 280-155048-F-8 MSD  
 Client ID: G0070-7  
 Sample Type: MSD  
 Inject. Date: 20-Nov-2021 04:53:00 ALS Bottle#: 0 Worklist Smp#: 61  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-0106655-061  
 Misc. Info.: 280-0106655-061  
 Operator ID: wetchemd Instrument ID: WC\_IonChrom10  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Anions\_IC10.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 20-Nov-2021 19:02:07 Calib Date: 14-Nov-2021 17:53:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICAL File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-180  
 Column 1 : Det: Info 2\_091554\_1  
 Process Host: CTX1611

First Level Reviewer: jindarac

Date:

20-Nov-2021 18:56:50

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.763	2.753	0.010	157458514	5.00	5.13	Ma
2 Chloride	3.818	3.800	0.018	1155986463	50.0	76.4	
3 Nitrite as N	4.578	4.372	0.206	220583527	NC	NC	
4 Bromide	5.410	5.382	0.028	38050334	5.00	5.86	
5 Nitrate as N	6.072	6.055	0.017	238223756	NC	NC	
6 Orthophosphate as P	7.640	7.683	-0.043	105509593	NC	NC	
7 Sulfate	8.638	8.702	-0.064	1253664969	50.0	112.0	

**QC Flag Legend**

## Processing Flags

NC - Not Calibrated

## Review Flags

M - Manually Integrated

a - User Assigned ID

**Reagents:**

ICMS/MSD WEEK\_00731

Amount Added: 0.10

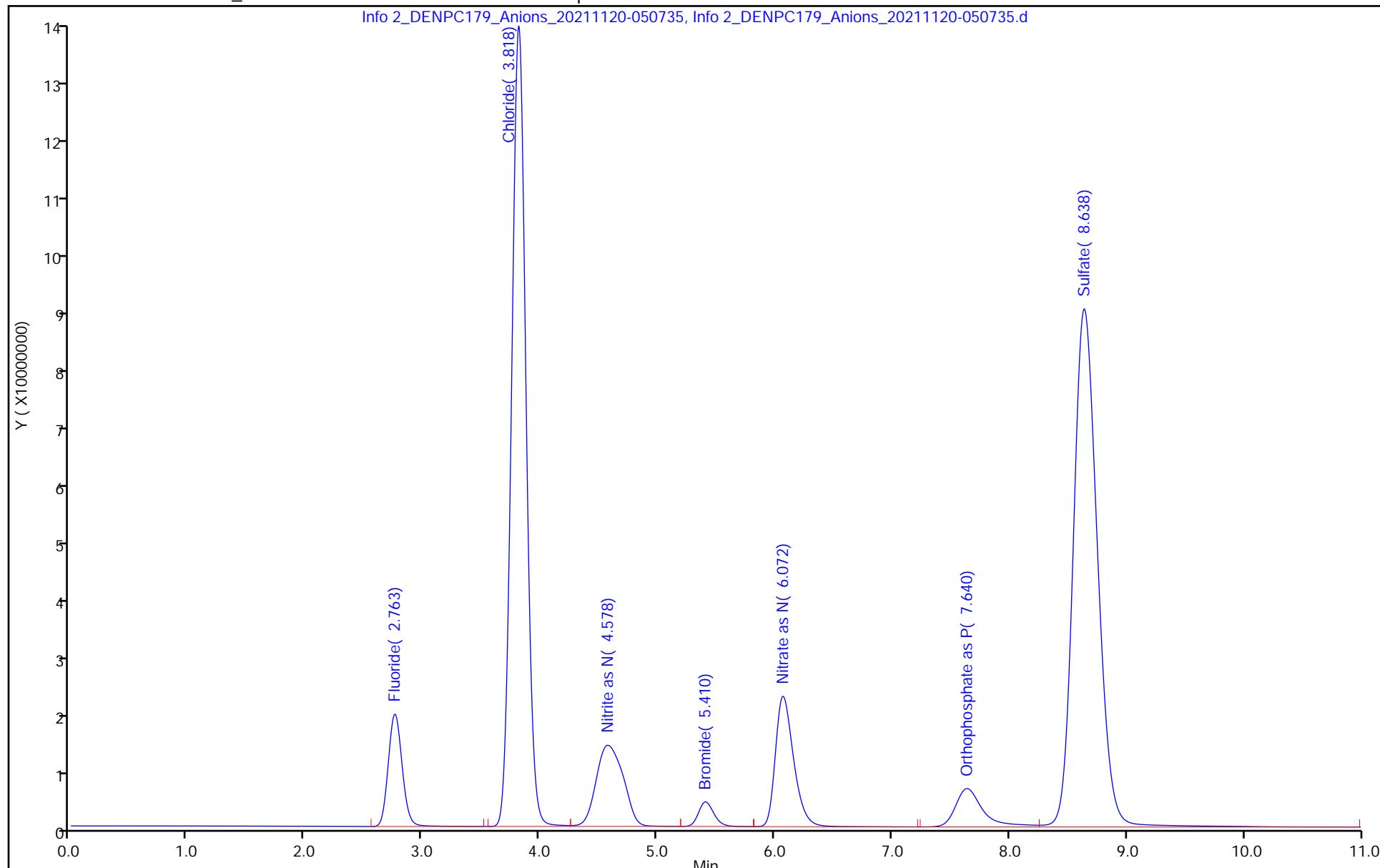
Units: mL

Report Date: 20-Nov-2021 19:02:09

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211120-050735.d  
Injection Date: 20-Nov-2021 04:53:00 Instrument ID: WC\_IonChrom10 Operator ID: wetchemd  
Lims ID: 280-155048-F-8 MSD Worklist Smp#: 61  
Client ID: G0070-7  
Injection Vol: 5.0 ul Dil. Factor: 1.0000 ALS Bottle#: 0  
Method: Anions\_IC10 Limit Group: Wet - Anions 28D



Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211120-064  
 Lims ID: ccv  
 Client ID:  
 Sample Type: CCV  
 Inject. Date: 20-Nov-2021 06:31:00 ALS Bottle#: 0 Worklist Smp#: 68  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-0106655-068  
 Misc. Info.: 280-0106655-068  
 Operator ID: wetchemd Instrument ID: WC\_IonChrom10  
 Sublist: chrom-Anions\_IC10\*sub2  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Anions\_IC10.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 20-Nov-2021 19:02:12 Calib Date: 14-Nov-2021 17:53:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-180  
 Column 1 : Det: Info 2\_091554\_1  
 Process Host: CTX1611

First Level Reviewer: jindarac Date: 20-Nov-2021 18:59:48

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.763	2.753	0.010	140616025	5.00	4.57	Ma
2 Chloride	3.815	3.800	0.015	1532749247	100.0	101.2	Ma
3 Nitrite as N	4.388	4.372	0.016	180804342	NC	NC	Ma
4 Bromide	5.390	5.382	0.008	32011501	5.00	4.94	
5 Nitrate as N	6.065	6.055	0.010	192960682	NC	NC	
6 Orthophosphate as P	7.625	7.683	-0.058	84055440	NC	NC	M
7 Sulfate	8.643	8.702	-0.059	1149969771	100.0	102.7	M

### QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

a - User Assigned ID

### Reagents:

IC LCS\_01845

Amount Added: 10.00

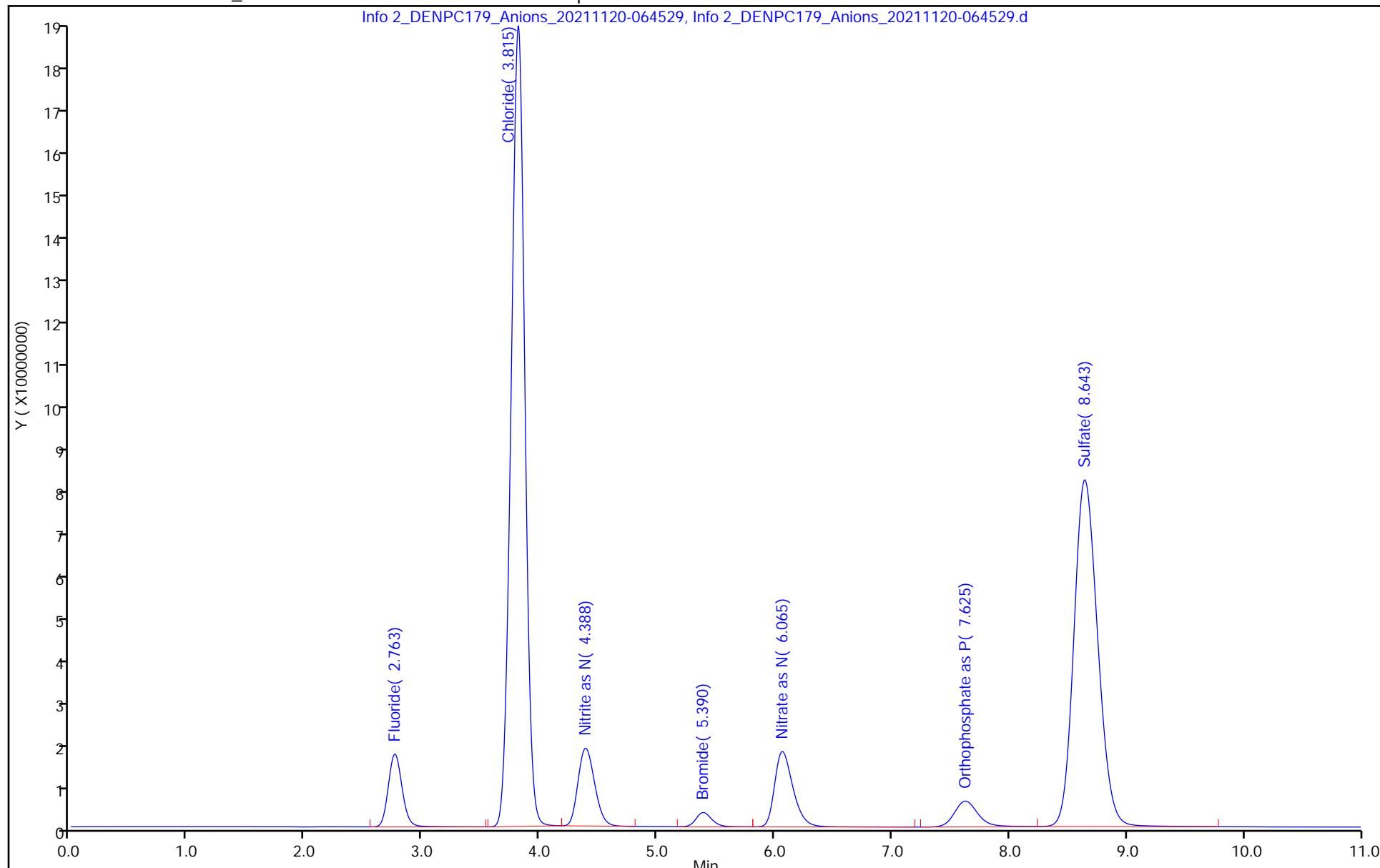
Units: mL

Report Date: 20-Nov-2021 19:02:12

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211120-064529.d  
Injection Date: 20-Nov-2021 06:31:00 Instrument ID: WC\_IonChrom10 Operator ID: wetchemd  
Lims ID: ccv Worklist Smp#: 68  
Client ID:  
Injection Vol: 5.0 ul ALS Bottle#: 0  
Method: Anions\_IC10 Dil. Factor: 1.0000  
Limit Group: Wet - Anions 28D



## Eurofins TestAmerica, Denver

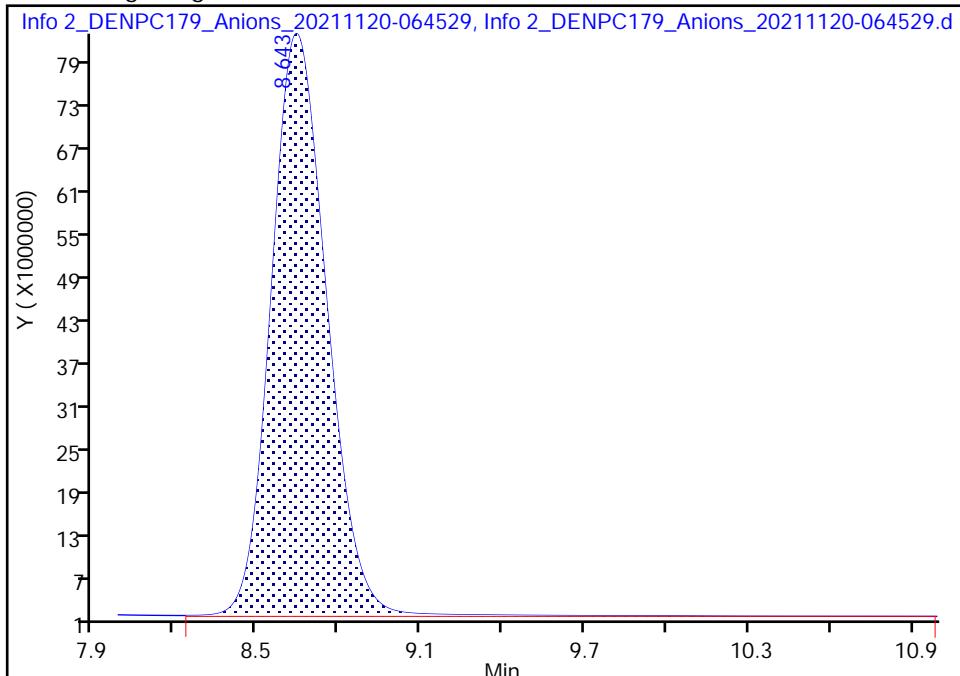
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211120-064529.d  
 Injection Date: 20-Nov-2021 06:31:00 Instrument ID: WC\_IonChrom10  
 Lims ID: ccv  
 Client ID:  
 Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 68  
 Injection Vol: 5.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC10 Limit Group: Wet - Anions 28D  
 Column: Detector Info 2\_091554\_1

## 7 Sulfate, CAS: 14808-79-8

Signal: 1

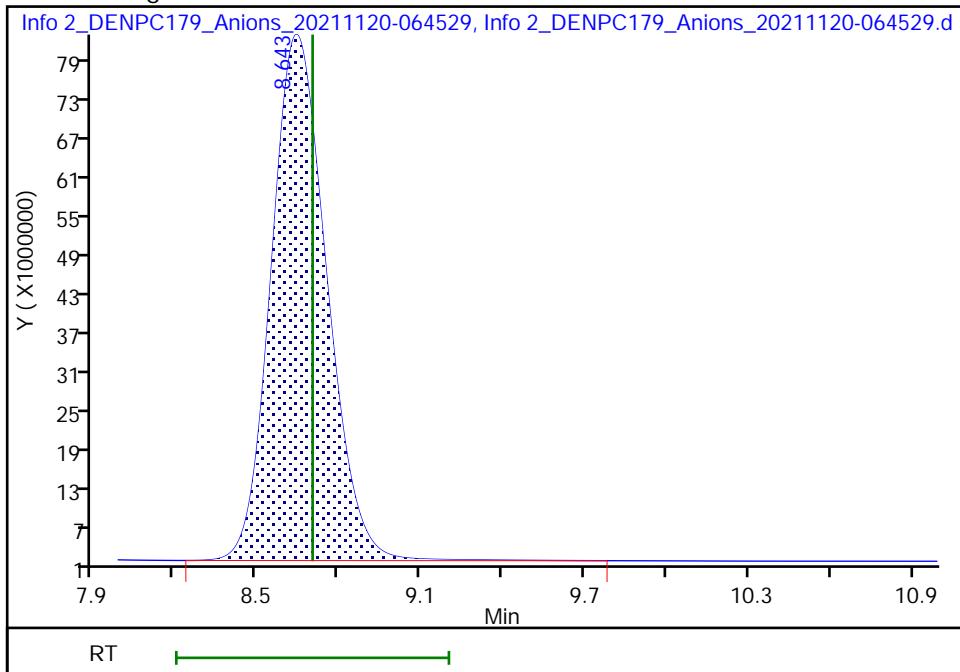
## Processing Integration Results

RT: 8.64  
 Area: 1160930858  
 Amount: 103.6966  
 Amount Units: ug/ml



## Manual Integration Results

RT: 8.64  
 Area: 1149969771  
 Amount: 102.7198  
 Amount Units: ug/ml



Reviewer: jindarac, 20-Nov-2021 18:59:41

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211120-065  
 Lims ID: ccb  
 Client ID:  
 Sample Type: CCB  
 Inject. Date: 20-Nov-2021 06:45:00      ALS Bottle#: 0      Worklist Smp#: 69  
 Injection Vol: 5.0 ul      Dil. Factor: 1.0000  
 Sample Info: 280-0106655-069  
 Misc. Info.: 280-0106655-069  
 Operator ID: wetchemd      Instrument ID: WC\_IonChrom10  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Anions\_IC10.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 20-Nov-2021 19:02:12      Calib Date: 14-Nov-2021 17:53:00  
 Integrator: Falcon  
 Quant Method: External Standard      Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211114-106492.b\Info 2\_DENPC179\_Anions\_20211114-180

Column 1 : Det: Info 2\_091554\_1  
 Process Host: CTX1611

First Level Reviewer: jindaratac Date: 20-Nov-2021 18:59:57

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		2.753			ND		
2 Chloride	3.762	3.800	-0.038	30275	0.1667	M	
3 Nitrite as N		4.372			ND		
4 Bromide		5.382			ND		
5 Nitrate as N		6.055			ND		
6 Orthophosphate as P	7.680	7.683	-0.003	2604912	NC		
7 Sulfate	8.703	8.702	0.001	1550973	0.3733		

### QC Flag Legend

#### Processing Flags

NC - Not Calibrated

#### Review Flags

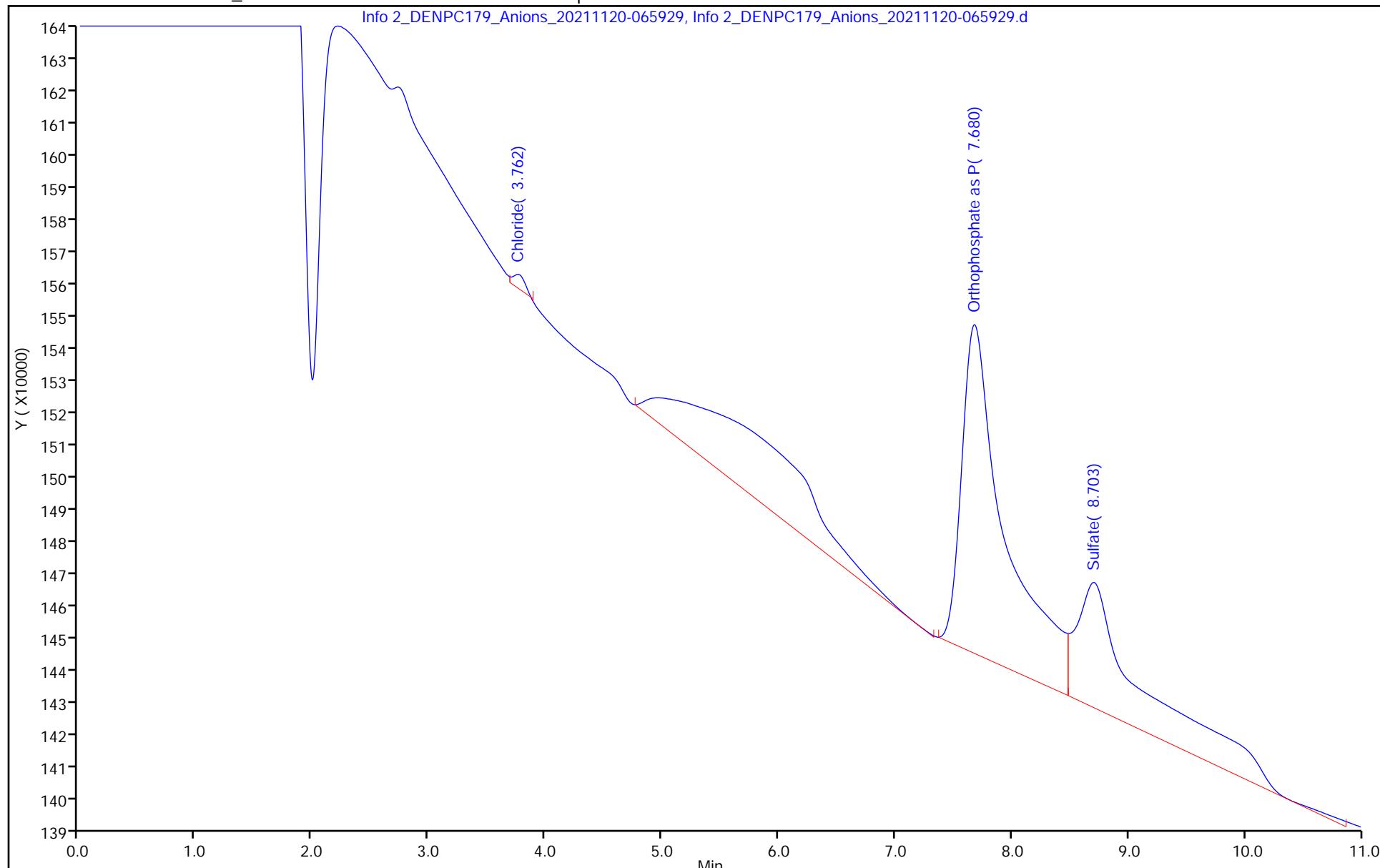
M - Manually Integrated

Report Date: 20-Nov-2021 19:02:13

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom10\20211119-106655.b\Info 2\_DENPC179\_Anions\_20211120-065929.d  
Injection Date: 20-Nov-2021 06:45:00 Instrument ID: WC\_IonChrom10 Operator ID: wetchemd  
Lims ID: ccb Worklist Smp#: 69  
Client ID:  
Injection Vol: 5.0 ul ALS Bottle#: 0  
Method: Anions\_IC10 Dil. Factor: 1.0000  
Limit Group: Wet - Anions 28D



Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\0004.d  
 Lims ID: std L1  
 Client ID:  
 Sample Type: IC Calib Level: 1  
 Inject. Date: 14-Nov-2021 17:29:00 ALS Bottle#: 0 Worklist Smp#: 2  
 Injection Vol: 10.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-0106493-002  
 Operator ID: Instrument ID: WC\_IonChrom11  
 Sublist: chrom-Anions\_IC11\*sub1  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\Anions\_IC11.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 16-Nov-2021 13:02:37 Calib Date: 14-Nov-2021 18:51:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\0009.d  
 Column 1 : Det: 0005  
 Process Host: CTX1677

First Level Reviewer: jindarac Date: 14-Nov-2021 17:52:49

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.517	2.517	0.000	3138766	0.2000	0.2172	M
2 Chloride	3.700	3.700	0.000	11646073	1.00	1.31	
3 Nitrite as N	4.525	4.525	0.000	5323545	NC	NC	
4 Bromide	5.484	5.484	0.000	1014966	0.2000	0.2102	
5 Nitrate as N	6.200	6.200	0.000	5998610	NC	NC	
7 Orthophosphate as P	9.209	9.209	0.000	1171008	NC	NC	
6 Sulfate	10.059	10.059	0.000	8264861	1.00	1.30	M

### QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

### Reagents:

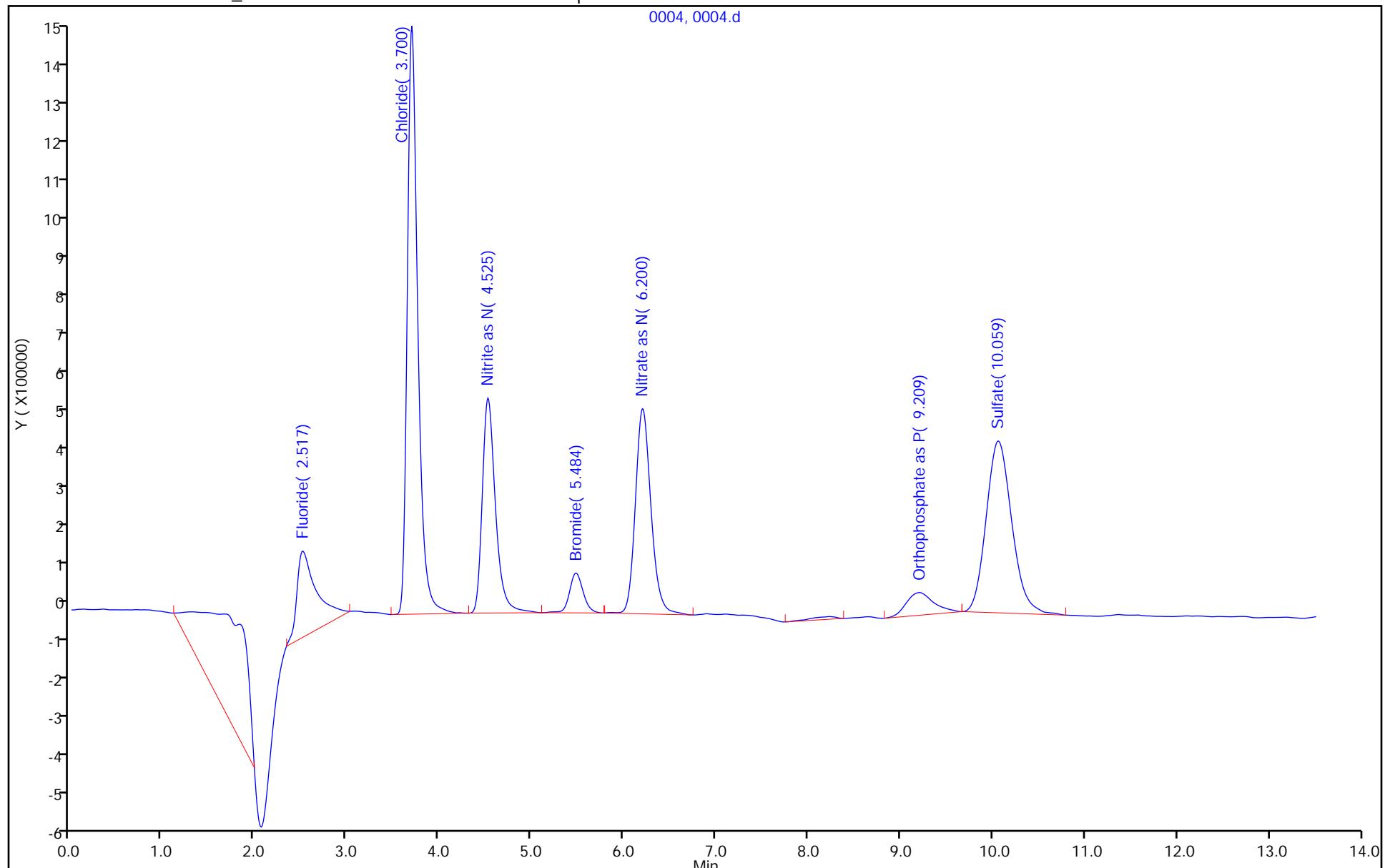
IC Cal low_00607	Amount Added: 0.02	Units: mL
IC CAL cl/so4_00393	Amount Added: 0.02	Units: mL

Report Date: 16-Nov-2021 13:02:37

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

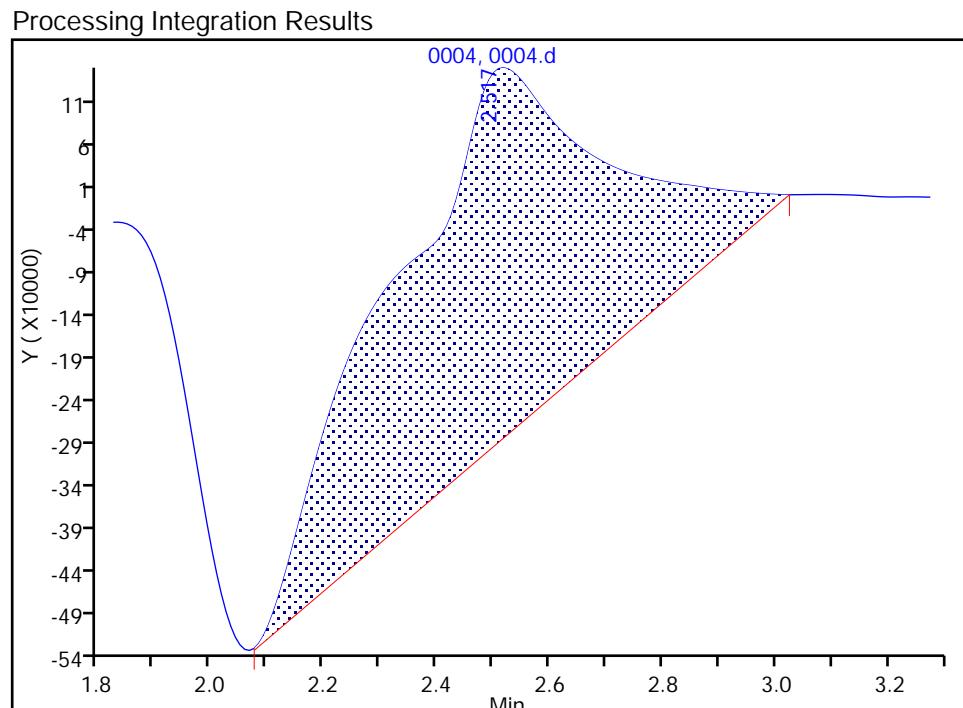
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\0004.d  
Injection Date: 14-Nov-2021 17:29:00 Instrument ID: WC\_IonChrom11  
Lims ID: std L1 Operator ID:  
Client ID:  
Injection Vol: 10.0 ul Worklist Smp#: 2  
Method: Anions\_IC11 Dil. Factor: 1.0000  
Limit Group: Wet - Anions 28D ALS Bottle#: 0



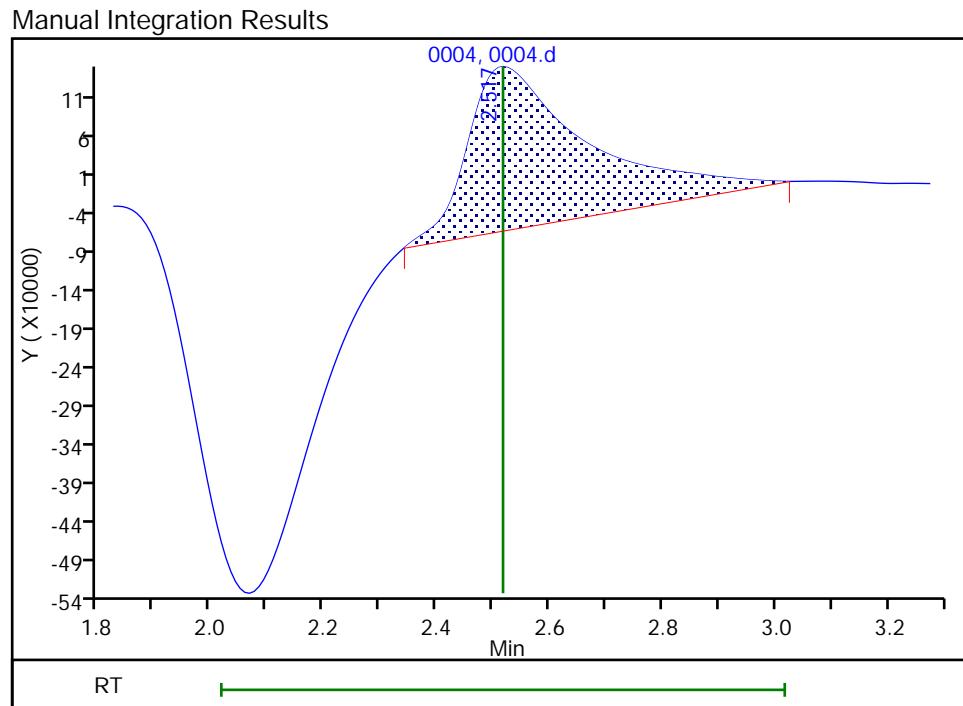
Eurofins TestAmerica, Denver  
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\0004.d  
Injection Date: 14-Nov-2021 17:29:00 Instrument ID: WC\_IonChrom11  
Lims ID: std L1  
Client ID:  
Operator ID: ALS Bottle#: 0 Worklist Smp#: 2  
Injection Vol: 10.0 ul Dil. Factor: 1.0000  
Method: Anions\_IC11 Limit Group: Wet - Anions 28D  
Column: Detector 0005

## 1 Fluoride, CAS: 16984-48-8

Signal: 1



RT: 2.52  
Area: 3138766  
Amount: 0.217247  
Amount Units: ug/ml



Reviewer: jindarac, 14-Nov-2021 17:52:45

#### Audit Action: Manually Integrated

### Audit Reason: Baseline Smoothing

## Eurofins TestAmerica, Denver

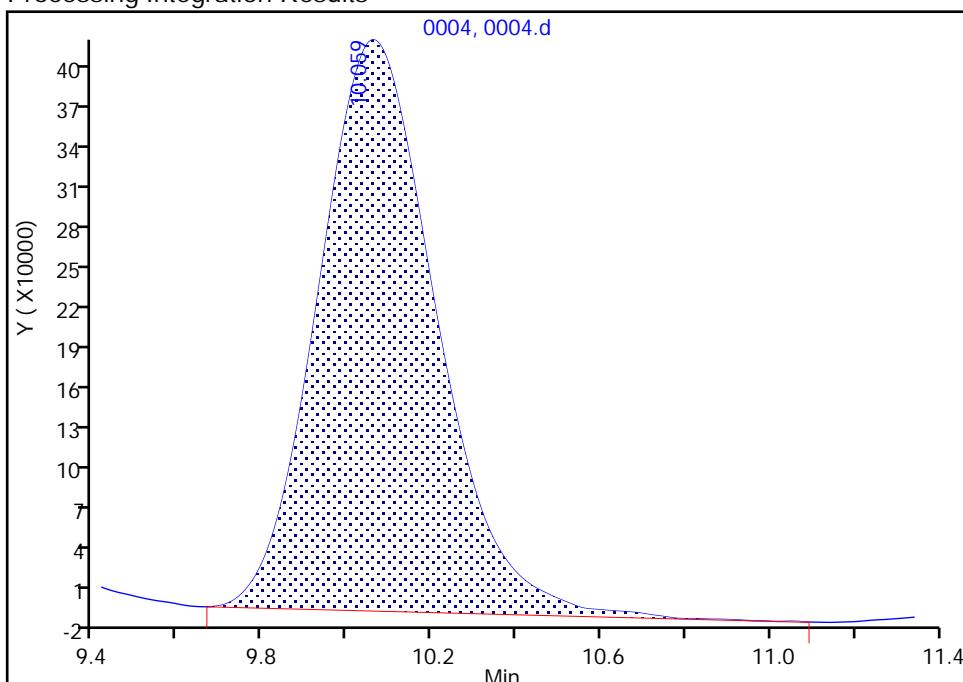
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\0004.d  
 Injection Date: 14-Nov-2021 17:29:00 Instrument ID: WC\_IonChrom11  
 Lims ID: std L1  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 2  
 Injection Vol: 10.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC11 Limit Group: Wet - Anions 28D  
 Column: Detector 0005

**6 Sulfate, CAS: 14808-79-8**

Signal: 1

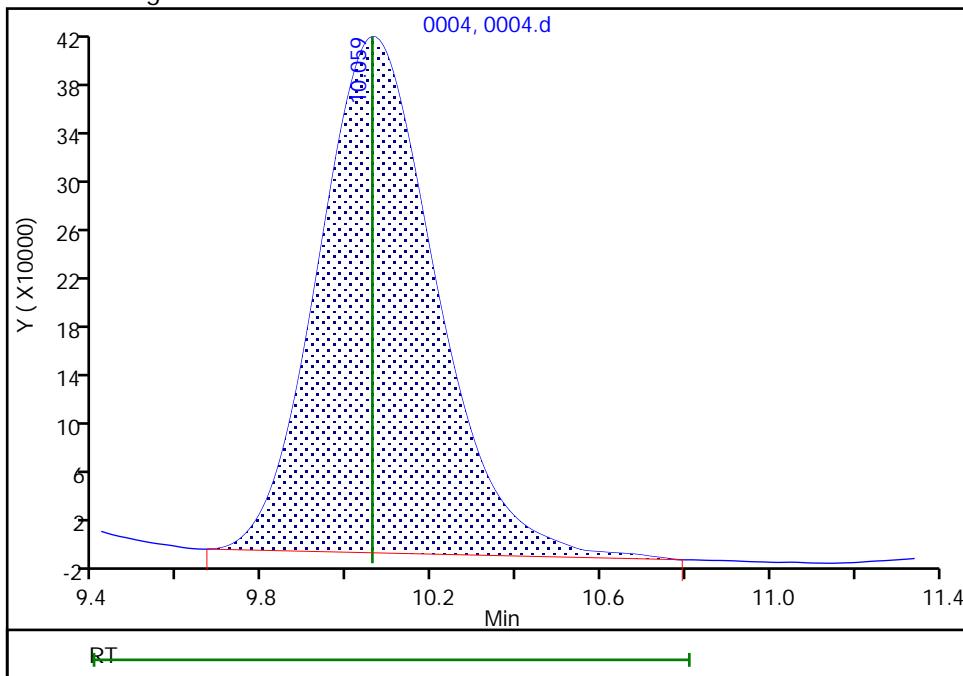
RT: 10.06  
 Area: 8288886  
 Amount: 0  
 Amount Units: ug/ml

## Processing Integration Results



RT: 10.06  
 Area: 8264861  
 Amount: 1.303181  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: gonzalezsp, 15-Nov-2021 07:43:43

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\0005.d  
 Lims ID: std L2  
 Client ID:  
 Sample Type: IC Calib Level: 2  
 Inject. Date: 14-Nov-2021 17:45:00 ALS Bottle#: 0 Worklist Smp#: 3  
 Injection Vol: 10.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-0106493-003  
 Operator ID: Instrument ID: WC\_IonChrom11  
 Sublist: chrom-Anions\_IC11\*sub1  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\Anions\_IC11.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 16-Nov-2021 13:02:38 Calib Date: 14-Nov-2021 18:51:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\0009.d  
 Column 1 : Det: 0005  
 Process Host: CTX1677

First Level Reviewer: gonzalezsp Date: 14-Nov-2021 20:06:13

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.509	2.509	0.000	7643242	0.5000	0.4915	M
2 Chloride	3.700	3.700	0.000	29173549	2.50	2.29	
3 Nitrite as N	4.525	4.525	0.000	13071055	NC	NC	
4 Bromide	5.475	5.475	0.000	2588032	0.5000	0.4994	
5 Nitrate as N	6.200	6.200	0.000	14609941	NC	NC	
7 Orthophosphate as P	9.192	9.192	0.000	2786926	NC	NC	
6 Sulfate	10.059	10.059	0.000	20543270	2.50	2.35	

### QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

### Reagents:

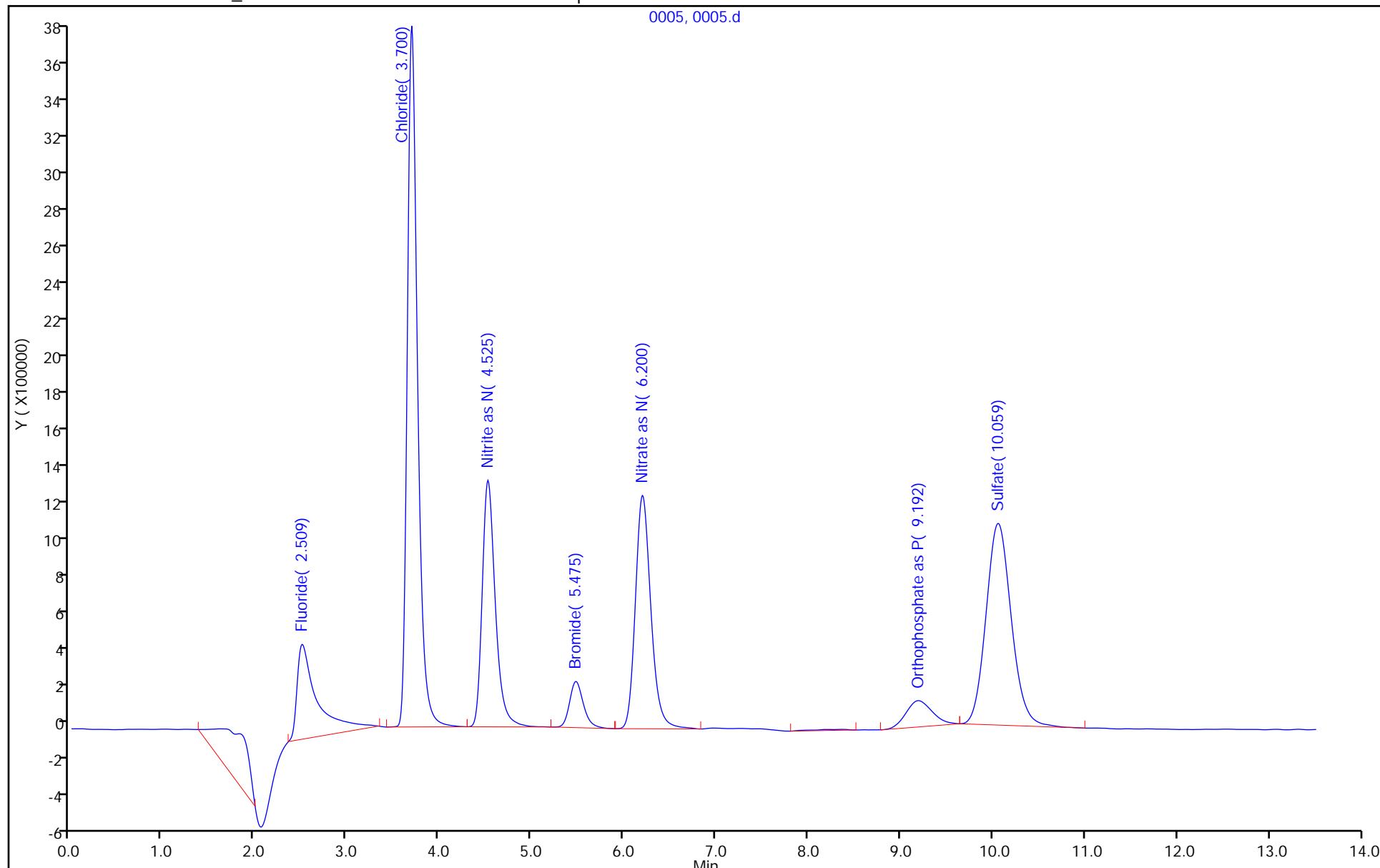
IC Cal low_00607	Amount Added: 0.05	Units: mL
IC CAL cl/so4_00393	Amount Added: 0.05	Units: mL

Report Date: 16-Nov-2021 13:02:38

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\0005.d  
Injection Date: 14-Nov-2021 17:45:00 Instrument ID: WC\_IonChrom11  
Lims ID: std L2 Operator ID:  
Client ID:  
Injection Vol: 10.0 ul Worklist Smp#: 3  
Method: Anions\_IC11 Dil. Factor: 1.0000  
Limit Group: Wet - Anions 28D ALS Bottle#: 0



Eurofins TestAmerica, Denver

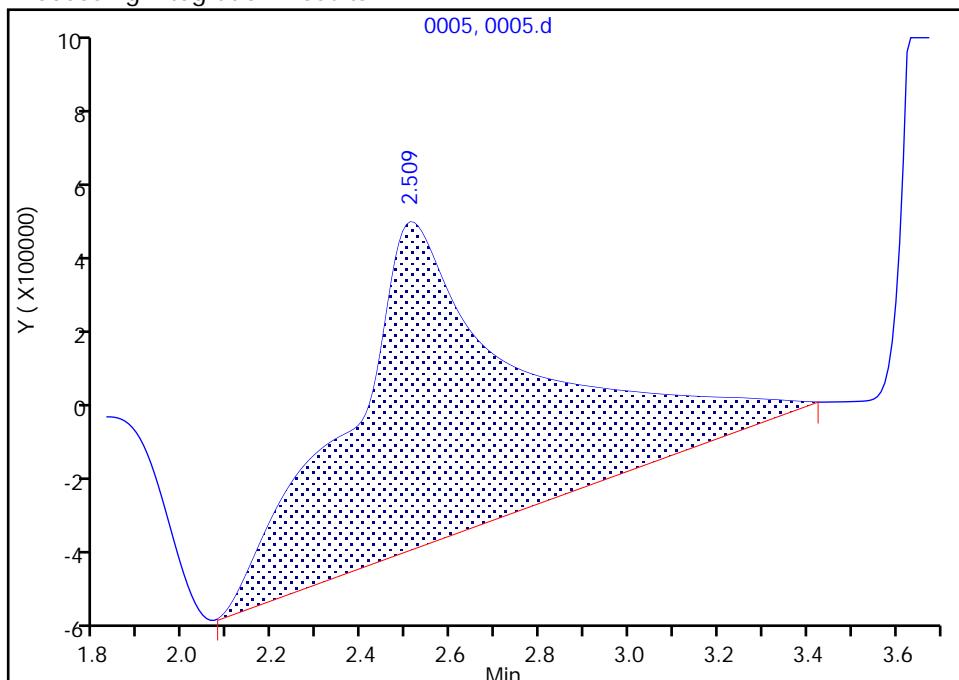
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\0005.d  
 Injection Date: 14-Nov-2021 17:45:00 Instrument ID: WC\_IonChrom11  
 Lims ID: std L2  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 3  
 Injection Vol: 10.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC11 Limit Group: Wet - Anions 28D  
 Column: Detector 0005

### 1 Fluoride, CAS: 16984-48-8

Signal: 1

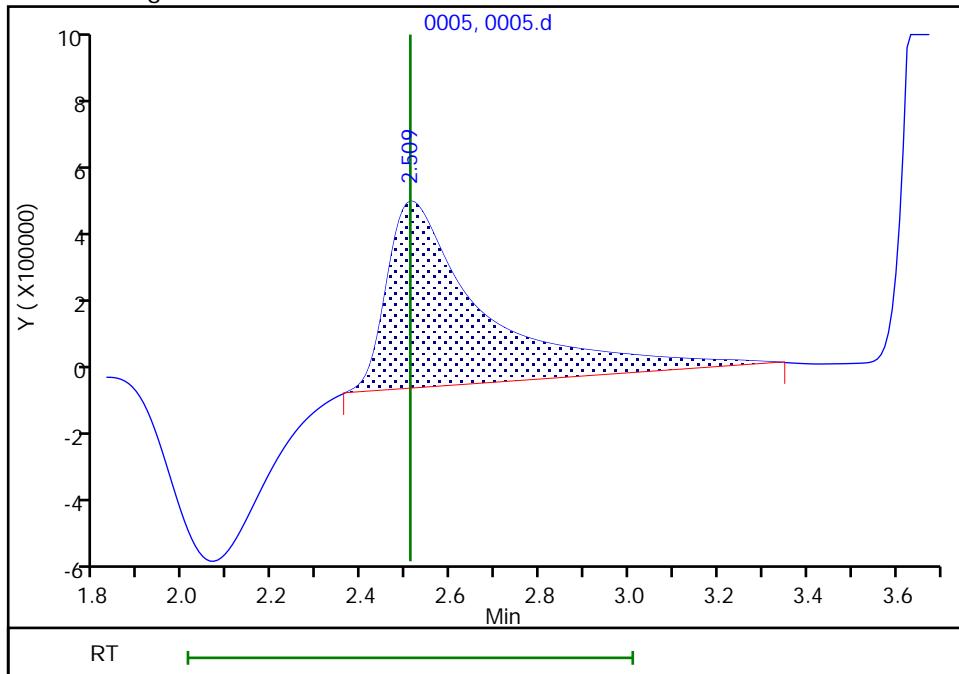
RT: 2.51  
 Area: 22519207  
 Amount: 1.070054  
 Amount Units: ug/ml

Processing Integration Results



RT: 2.51  
 Area: 7643242  
 Amount: 0.491494  
 Amount Units: ug/ml

Manual Integration Results



Reviewer: gonzalezsp, 14-Nov-2021 20:06:07

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\0006.d  
 Lims ID: std L3  
 Client ID:  
 Sample Type: IC Calib Level: 3  
 Inject. Date: 14-Nov-2021 18:02:00 ALS Bottle#: 0 Worklist Smp#: 4  
 Injection Vol: 10.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-0106493-004  
 Operator ID: Instrument ID: WC\_IonChrom11  
 Sublist: chrom-Anions\_IC11\*sub1  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\Anions\_IC11.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 16-Nov-2021 13:02:38 Calib Date: 14-Nov-2021 18:51:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\0009.d  
 Column 1 : Det: 0005  
 Process Host: CTX1677

First Level Reviewer: gonzalezsp Date: 14-Nov-2021 20:06:34

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.509	2.509	0.000	15207785	1.00	0.9520	M
2 Chloride	3.700	3.700	0.000	60418917	5.00	4.03	
3 Nitrite as N	4.534	4.534	0.000	26760914	NC	NC	
4 Bromide	5.484	5.484	0.000	5089010	1.00	0.9591	
5 Nitrate as N	6.209	6.209	0.000	29649558	NC	NC	
7 Orthophosphate as P	9.184	9.184	0.000	6407539	NC	NC	
6 Sulfate	10.059	10.059	0.000	41674139	5.00	4.14	

### QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

### Reagents:

IC Cal low_00607	Amount Added: 0.10	Units: mL
IC CAL cl/so4_00393	Amount Added: 0.10	Units: mL

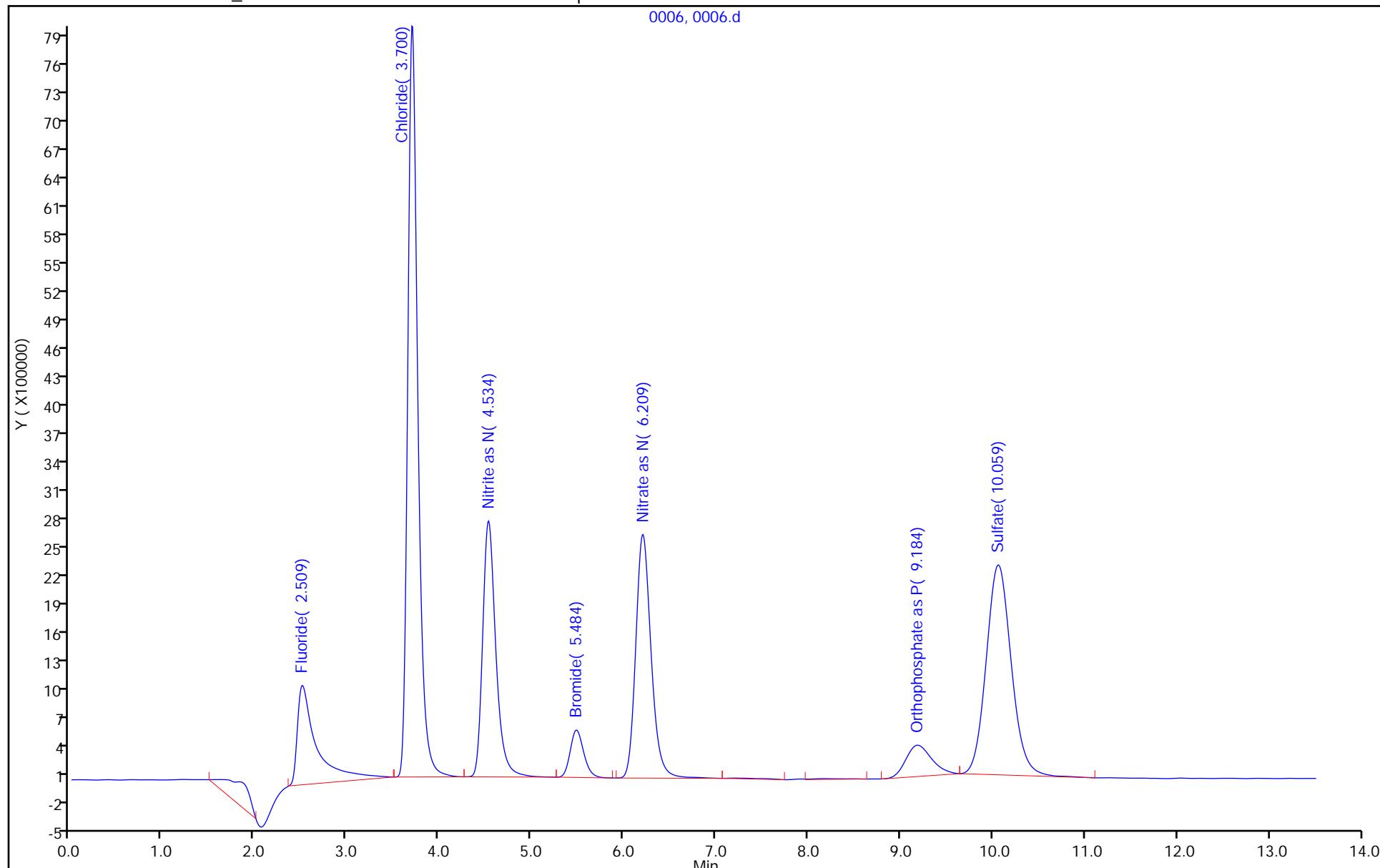
Report Date: 16-Nov-2021 13:02:39

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\0006.d  
Injection Date: 14-Nov-2021 18:02:00 Instrument ID: WC\_IonChrom11  
Lims ID: std L3 Operator ID:  
Client ID:  
Injection Vol: 10.0 ul Worklist Smp#: 4  
Method: Anions\_IC11 Dil. Factor: 1.0000  
Limit Group: Wet - Anions 28D  
ALS Bottle#: 0

0006, 0006.d



## Eurofins TestAmerica, Denver

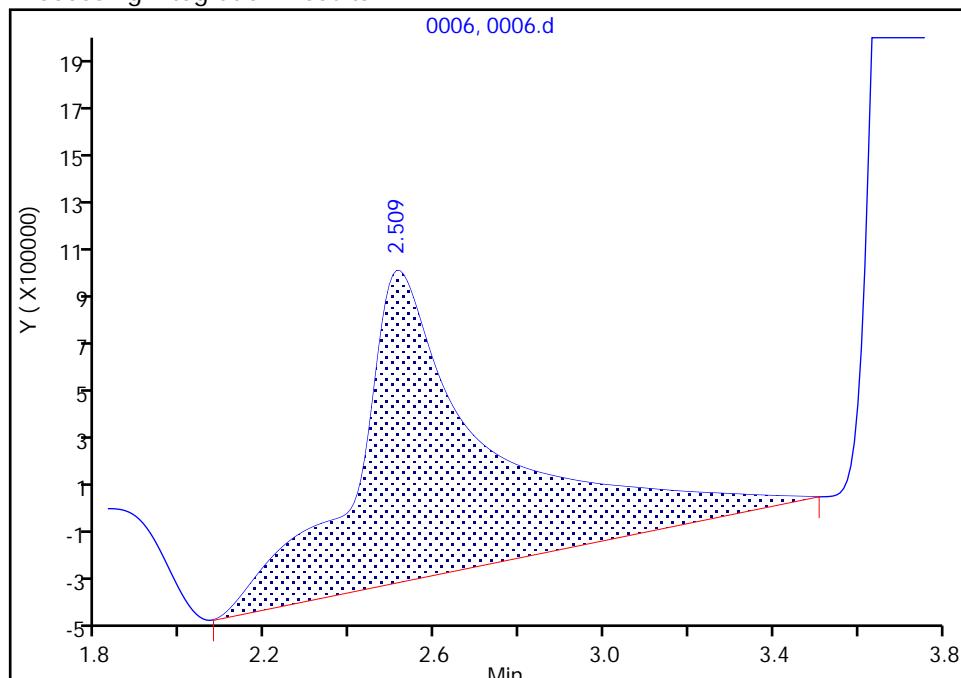
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\0006.d  
 Injection Date: 14-Nov-2021 18:02:00 Instrument ID: WC\_IonChrom11  
 Lims ID: std L3  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 4  
 Injection Vol: 10.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC11 Limit Group: Wet - Anions 28D  
 Column: Detector 0005

## 1 Fluoride, CAS: 16984-48-8

Signal: 1

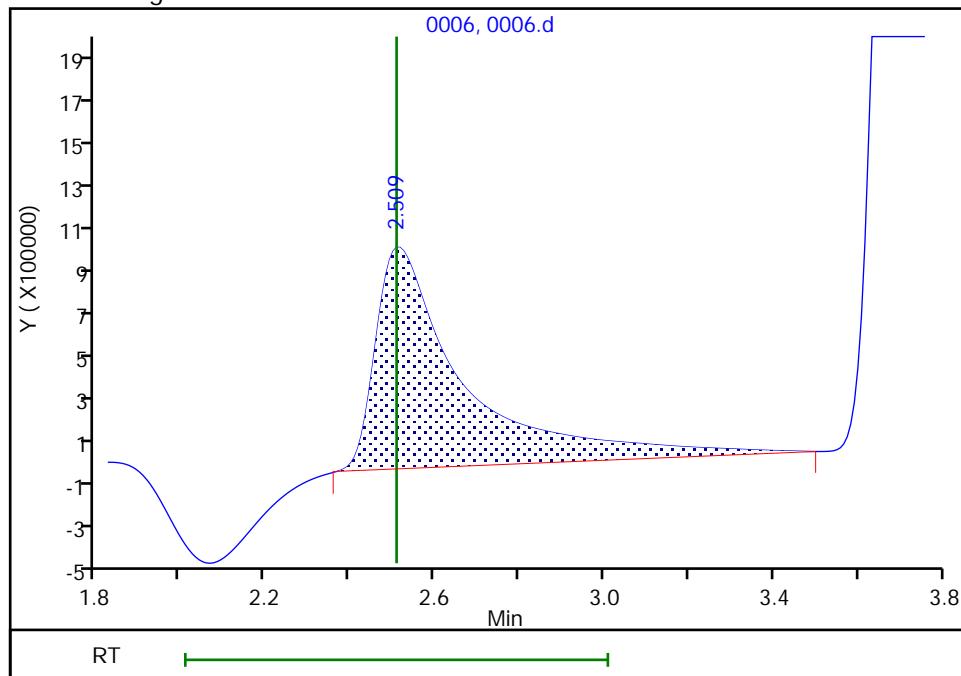
RT: 2.51  
 Area: 29807017  
 Amount: 1.705578  
 Amount Units: ug/ml

## Processing Integration Results



RT: 2.51  
 Area: 15207785  
 Amount: 0.952047  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: gonzalezsp, 14-Nov-2021 20:06:27

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\0007.d  
 Lims ID: std L4  
 Client ID:  
 Sample Type: IC Calib Level: 4  
 Inject. Date: 14-Nov-2021 18:18:00 ALS Bottle#: 0 Worklist Smp#: 5  
 Injection Vol: 10.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-0106493-005  
 Operator ID: Instrument ID: WC\_IonChrom11  
 Sublist: chrom-Anions\_IC11\*sub1  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\Anions\_IC11.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 16-Nov-2021 13:02:39 Calib Date: 14-Nov-2021 18:51:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\0009.d  
 Column 1 : Det: 0005  
 Process Host: CTX1677

First Level Reviewer: gonzalezsp Date: 14-Nov-2021 20:06:59

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.509	2.509	0.000	62544168	4.00	3.83	M
2 Chloride	3.750	3.750	0.000	1007983829	60.0	56.8	
3 Nitrite as N	4.550	4.550	0.000	118723288	NC	NC	
4 Bromide	5.484	5.484	0.000	21222174	4.00	3.92	
5 Nitrate as N	6.200	6.200	0.000	131879303	NC	NC	M
7 Orthophosphate as P	9.150	9.150	0.000	32904898	NC	NC	
6 Sulfate	10.117	10.117	0.000	628840790	60.0	54.0	M

### QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

### Reagents:

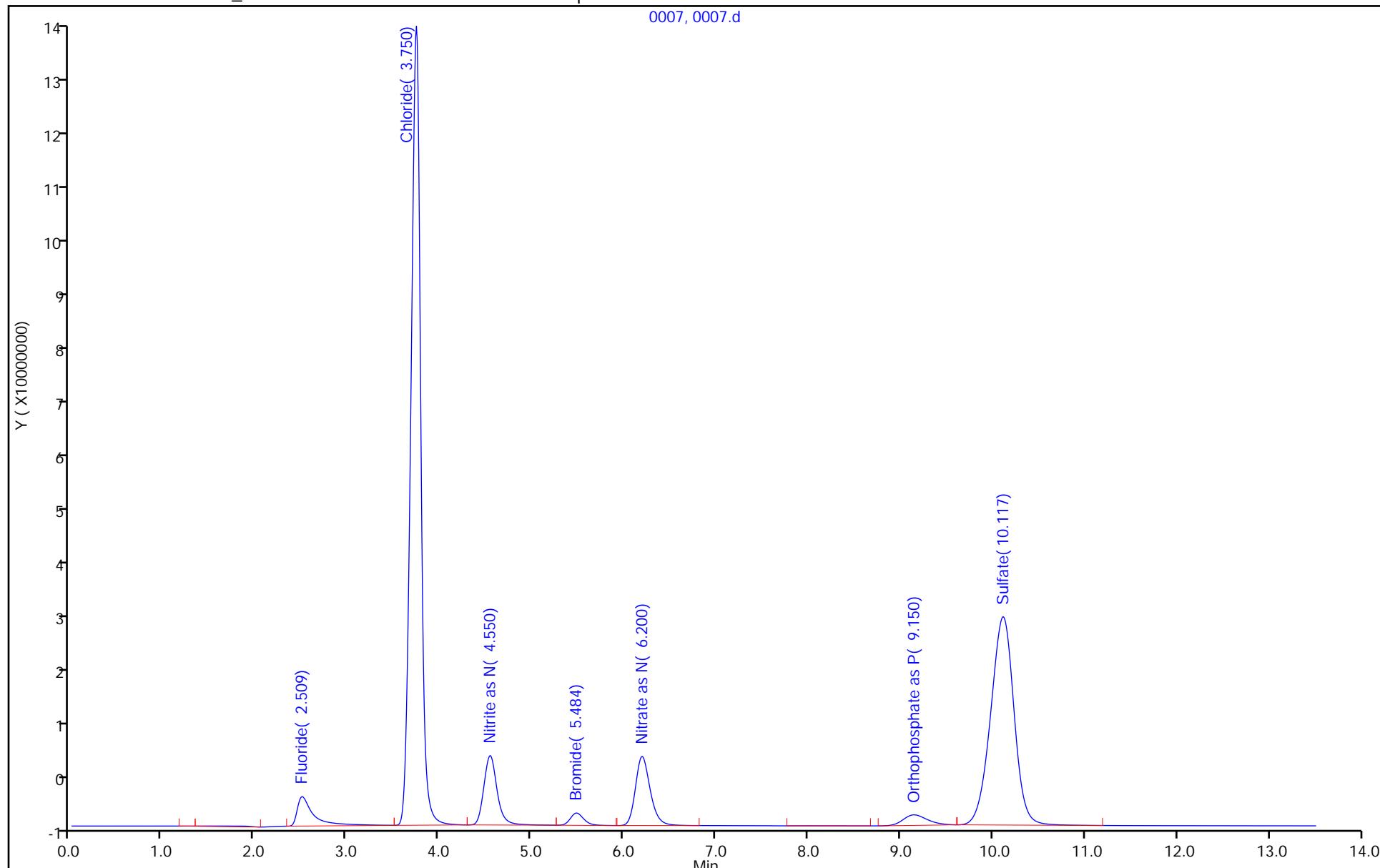
IC Cal low_00607	Amount Added: 0.40	Units: mL
IC CAL cl/so4_00393	Amount Added: 1.20	Units: mL

Report Date: 16-Nov-2021 13:02:39

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\0007.d  
Injection Date: 14-Nov-2021 18:18:00 Instrument ID: WC\_IonChrom11  
Lims ID: std L4 Operator ID:  
Client ID:  
Injection Vol: 10.0 ul Worklist Smp#: 5  
Method: Anions\_IC11 Dil. Factor: 1.0000  
Limit Group: Wet - Anions 28D



Eurofins TestAmerica, Denver

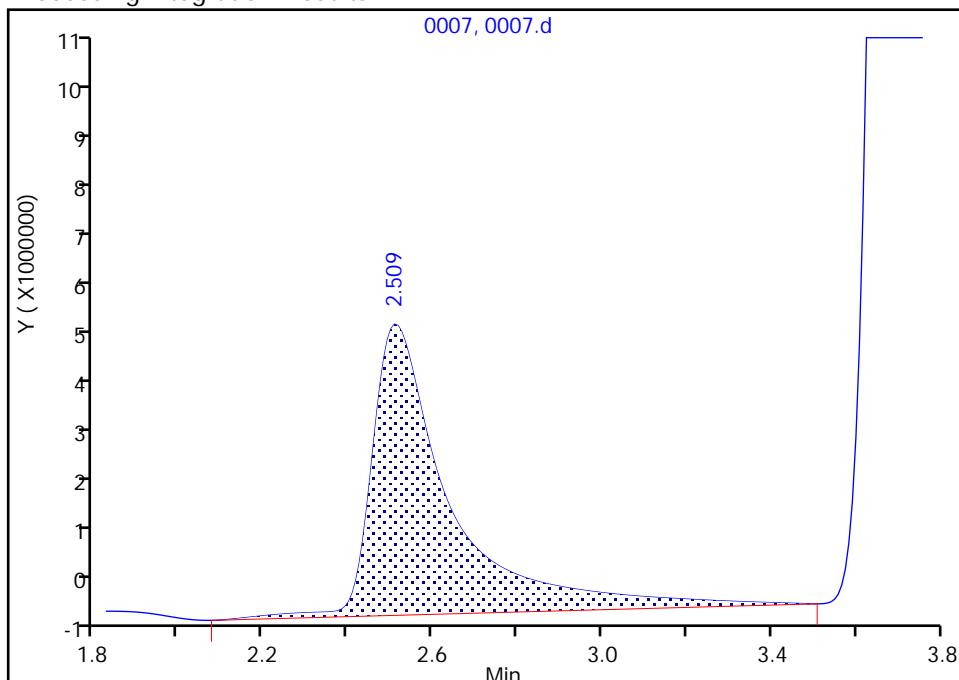
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\0007.d  
 Injection Date: 14-Nov-2021 18:18:00 Instrument ID: WC\_IonChrom11  
 Lims ID: std L4  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 5  
 Injection Vol: 10.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC11 Limit Group: Wet - Anions 28D  
 Column: Detector 0005

**1 Fluoride, CAS: 16984-48-8**

Signal: 1

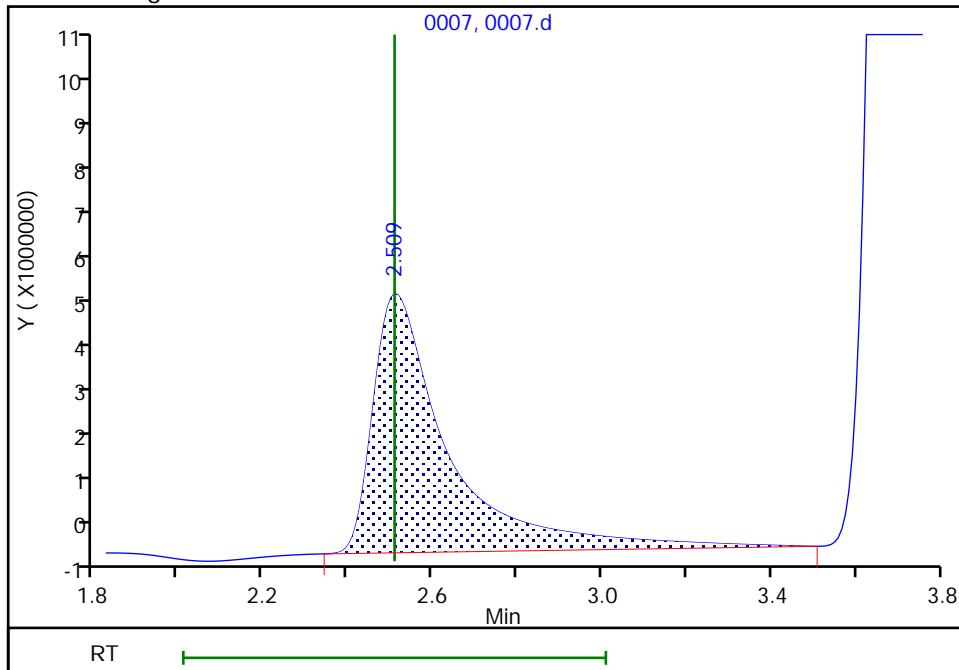
RT: 2.51  
 Area: 66466563  
 Amount: 4.032208  
 Amount Units: ug/ml

## Processing Integration Results



RT: 2.51  
 Area: 62544168  
 Amount: 3.834033  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: gonzalezsp, 14-Nov-2021 20:06:52

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

## Eurofins TestAmerica, Denver

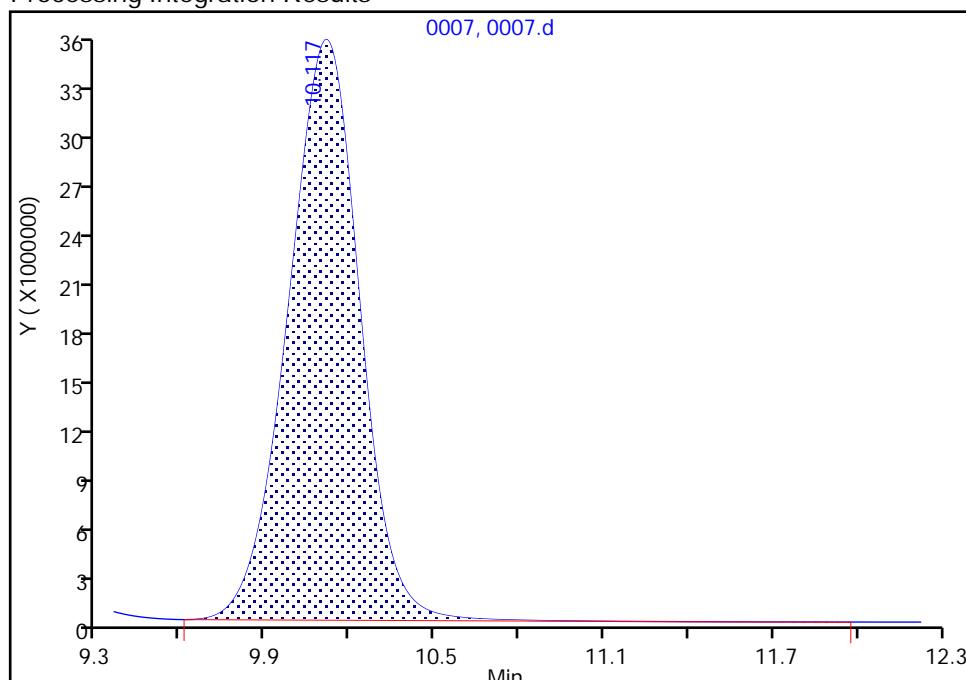
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\0007.d  
 Injection Date: 14-Nov-2021 18:18:00 Instrument ID: WC\_IonChrom11  
 Lims ID: std L4  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 5  
 Injection Vol: 10.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC11 Limit Group: Wet - Anions 28D  
 Column: Detector 0005

**6 Sulfate, CAS: 14808-79-8**

Signal: 1

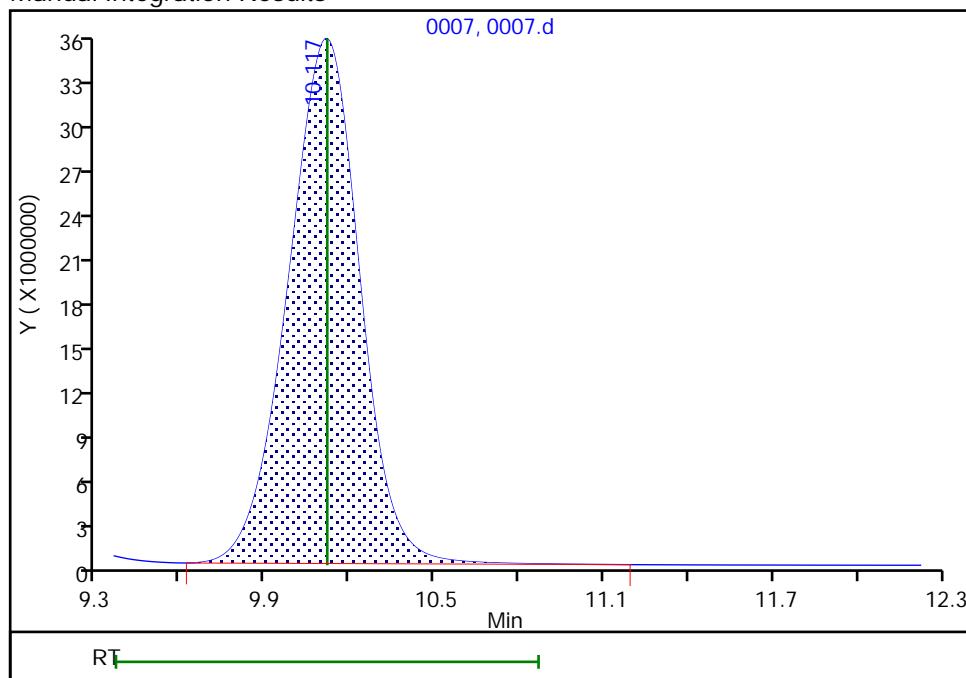
RT: 10.12  
 Area: 629244124  
 Amount: 0  
 Amount Units: ug/ml

## Processing Integration Results



RT: 10.12  
 Area: 628840790  
 Amount: 54.023175  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: gonzalezsp, 15-Nov-2021 07:44:22

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\0008.d  
 Lims ID: std L5  
 Client ID:  
 Sample Type: IC Calib Level: 5  
 Inject. Date: 14-Nov-2021 18:35:00 ALS Bottle#: 0 Worklist Smp#: 6  
 Injection Vol: 10.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-0106493-006  
 Operator ID: Instrument ID: WC\_IonChrom11  
 Sublist: chrom-Anions\_IC11\*sub1  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\Anions\_IC11.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 16-Nov-2021 13:02:40 Calib Date: 14-Nov-2021 18:51:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\0009.d  
 Column 1 : Det: 0005  
 Process Host: CTX1677

First Level Reviewer: gonzalezsp Date: 15-Nov-2021 07:45:24

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.509	2.509	0.000	130775611	8.00	7.99	
2 Chloride	3.792	3.792	0.000	2142832479	120.0	120.1	
3 Nitrite as N	4.567	4.567	0.000	247152972	NC	NC	
4 Bromide	5.484	5.484	0.000	43224295	8.00	7.97	
5 Nitrate as N	6.184	6.184	0.000	285371230	NC	NC	M
7 Orthophosphate as P	9.117	9.117	0.000	74986164	NC	NC	
6 Sulfate	10.167	10.167	0.000	1392088630	120.0	118.9	M

### QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

### Reagents:

IC Cal low_00607	Amount Added: 0.80	Units: mL
IC CAL cl/so4_00393	Amount Added: 2.40	Units: mL

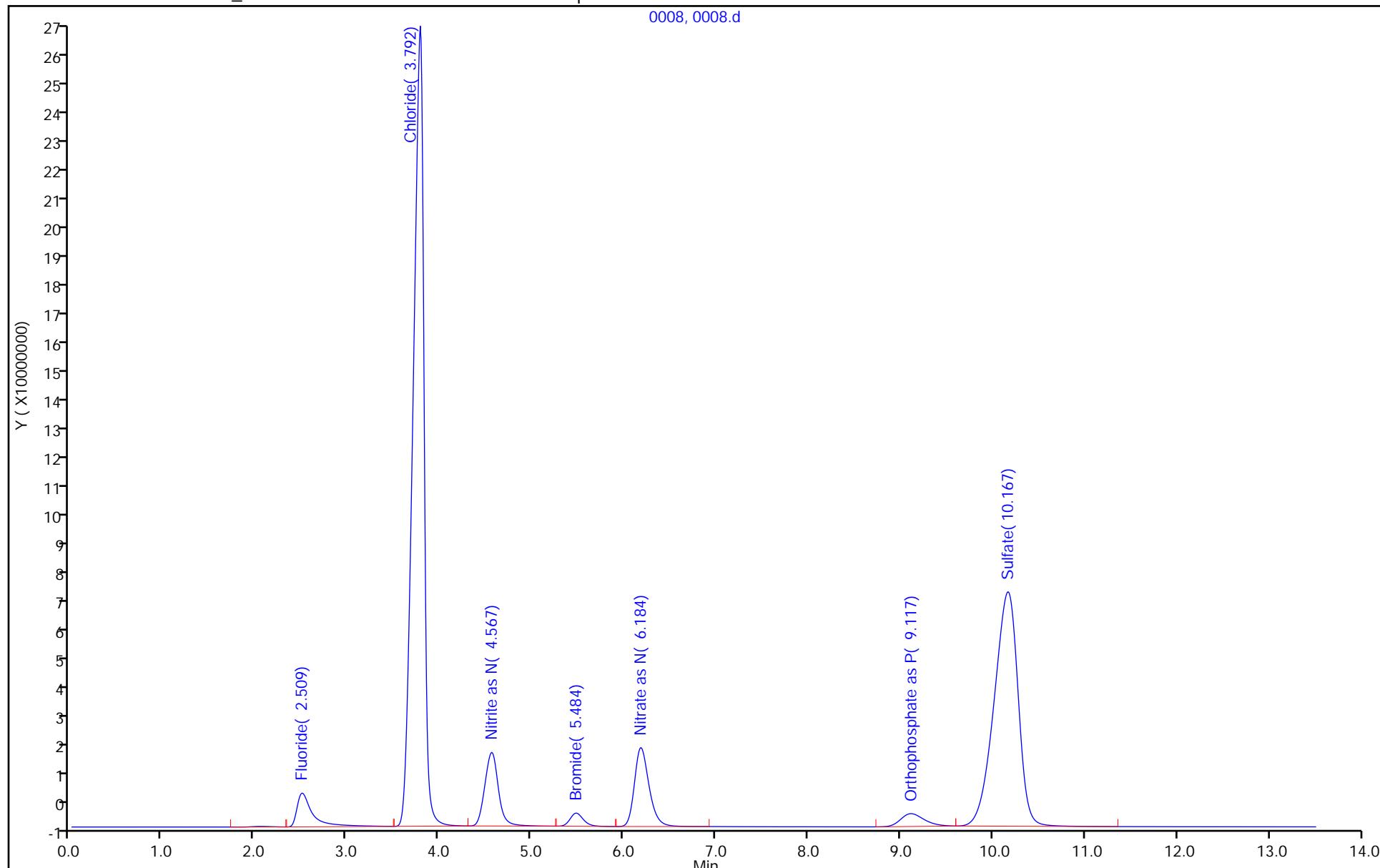
Report Date: 16-Nov-2021 13:02:40

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\0008.d  
Injection Date: 14-Nov-2021 18:35:00 Instrument ID: WC\_IonChrom11  
Lims ID: std L5 Operator ID:  
Client ID:  
Injection Vol: 10.0 ul Worklist Smp#: 6  
Method: Anions\_IC11 Dil. Factor: 1.0000  
Limit Group: Wet - Anions 28D

0008, 0008.d



## Eurofins TestAmerica, Denver

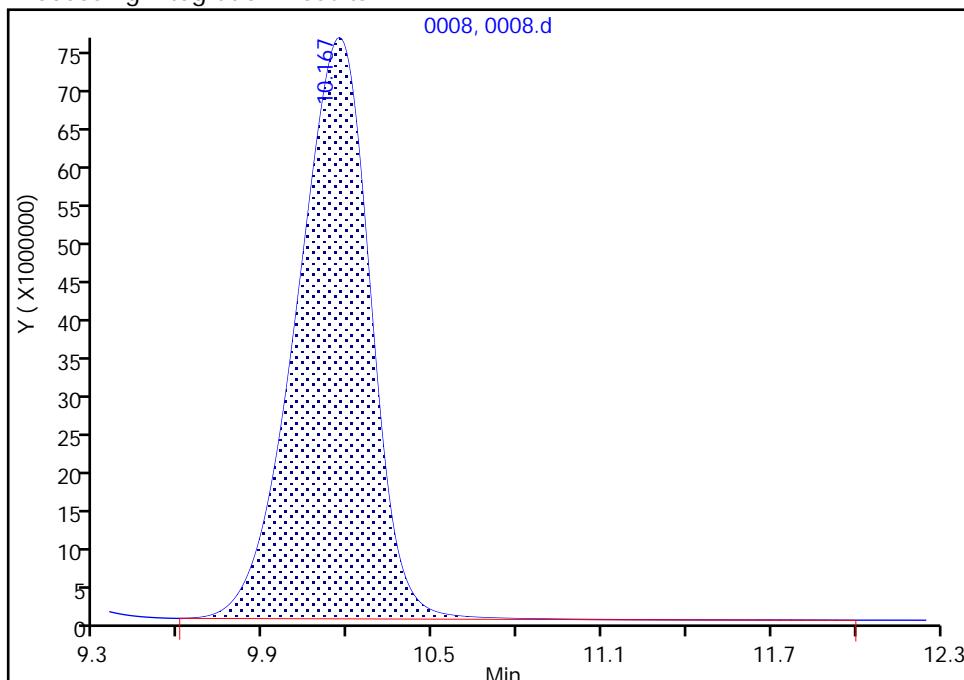
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\0008.d  
 Injection Date: 14-Nov-2021 18:35:00 Instrument ID: WC\_IonChrom11  
 Lims ID: std L5  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 6  
 Injection Vol: 10.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC11 Limit Group: Wet - Anions 28D  
 Column: Detector 0005

**6 Sulfate, CAS: 14808-79-8**

Signal: 1

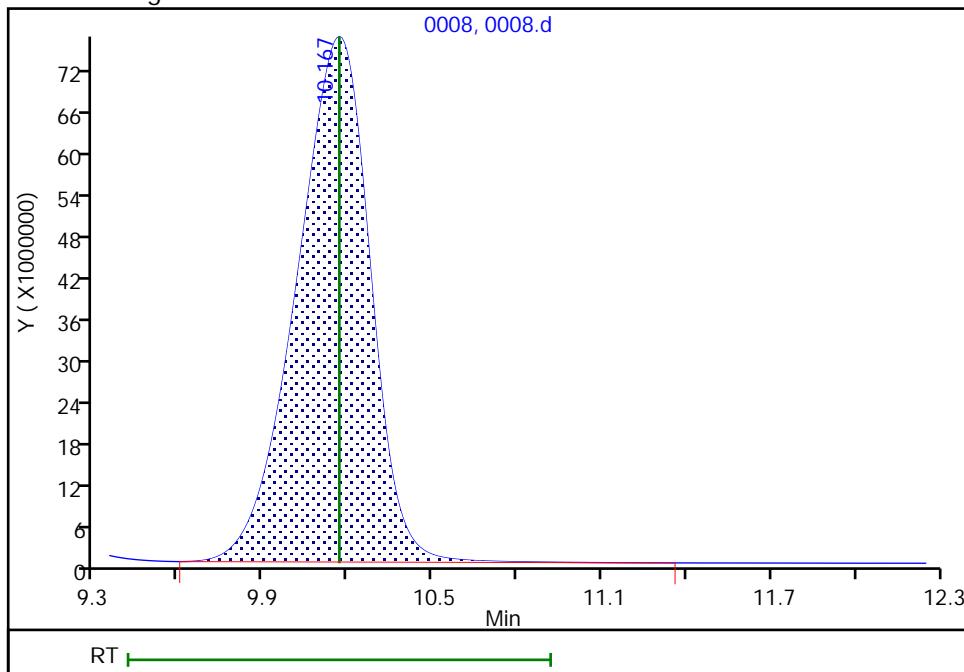
RT: 10.17  
 Area: 1392640893  
 Amount: 0  
 Amount Units: ug/ml

## Processing Integration Results



RT: 10.17  
 Area: 1392088630  
 Amount: 118.8636  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: gonzalezsp, 15-Nov-2021 07:45:06

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\0009.d  
 Lims ID: std L6  
 Client ID:  
 Sample Type: IC Calib Level: 6  
 Inject. Date: 14-Nov-2021 18:51:00 ALS Bottle#: 0 Worklist Smp#: 7  
 Injection Vol: 10.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-0106493-007  
 Operator ID: Instrument ID: WC\_IonChrom11  
 Sublist: chrom-Anions\_IC11\*sub1  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\Anions\_IC11.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 16-Nov-2021 13:02:40 Calib Date: 14-Nov-2021 18:51:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\0009.d  
 Column 1 : Det: 0005  
 Process Host: CTX1677

First Level Reviewer: gonzalezsp Date: 15-Nov-2021 07:45:51

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.509	2.509	0.000	167383964	10.0	10.2	
2 Chloride	3.842	3.842	0.000	3647971873	200.0	204.0	
3 Nitrite as N	4.575	4.575	0.000	314678249	NC	NC	
4 Bromide	5.484	5.484	0.000	55029657	10.0	10.1	
5 Nitrate as N	6.184	6.184	0.000	370295669	NC	NC	M
7 Orthophosphate as P	9.100	9.100	0.000	98180029	NC	NC	
6 Sulfate	10.225	10.225	0.000	2439236596	200.0	207.8	M

### QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

### Reagents:

IC Cal low_00607	Amount Added: 1.00	Units: mL
IC CAL cl/so4_00393	Amount Added: 4.00	Units: mL

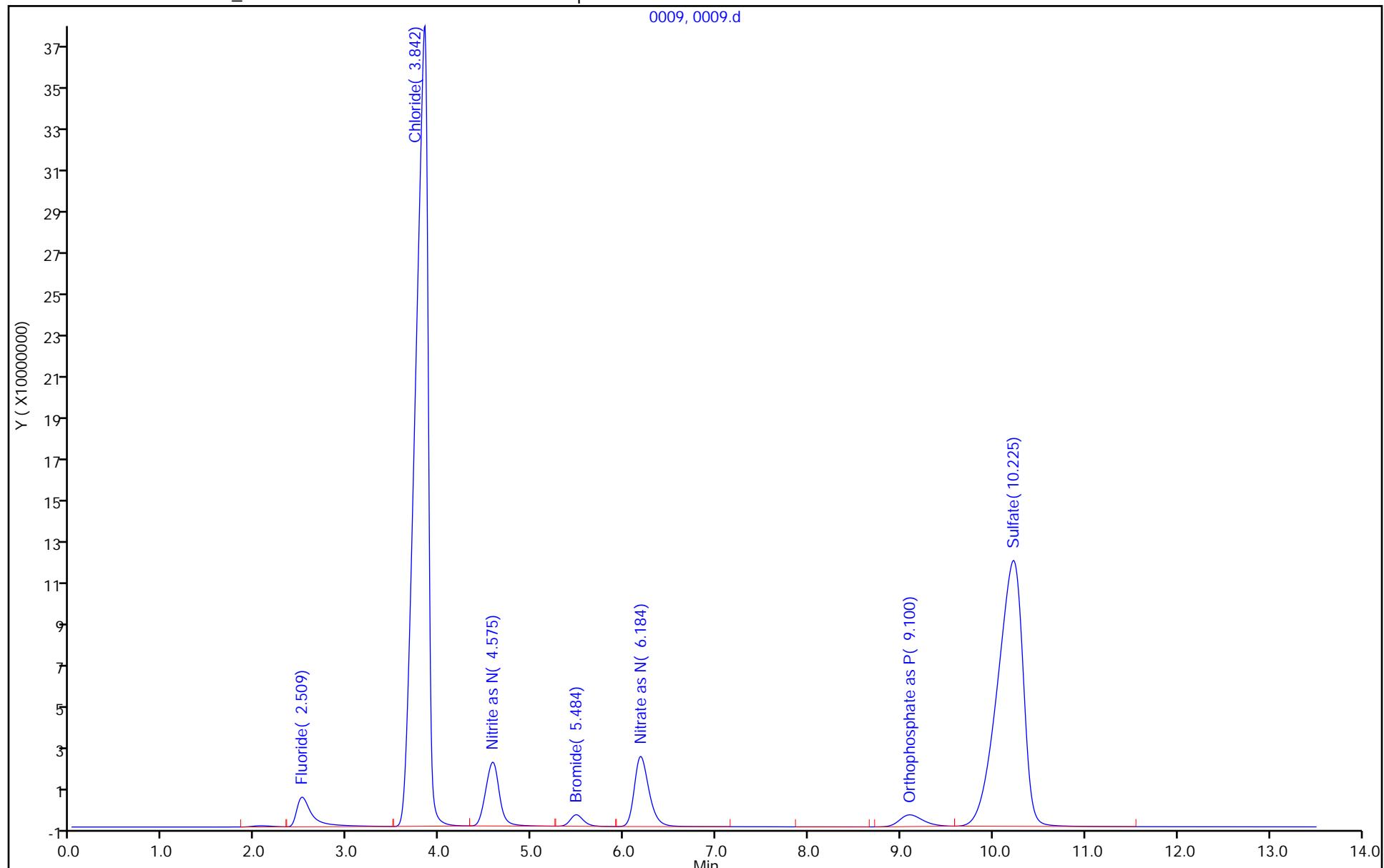
Report Date: 16-Nov-2021 13:02:40

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\0009.d  
Injection Date: 14-Nov-2021 18:51:00 Instrument ID: WC\_IonChrom11  
Lims ID: std L6 Operator ID:  
Client ID:  
Injection Vol: 10.0 ul Worklist Smp#: 7  
Method: Anions\_IC11 Dil. Factor: 1.0000  
Limit Group: Wet - Anions 28D  
ALS Bottle#: 0

0009, 0009.d



Eurofins TestAmerica, Denver

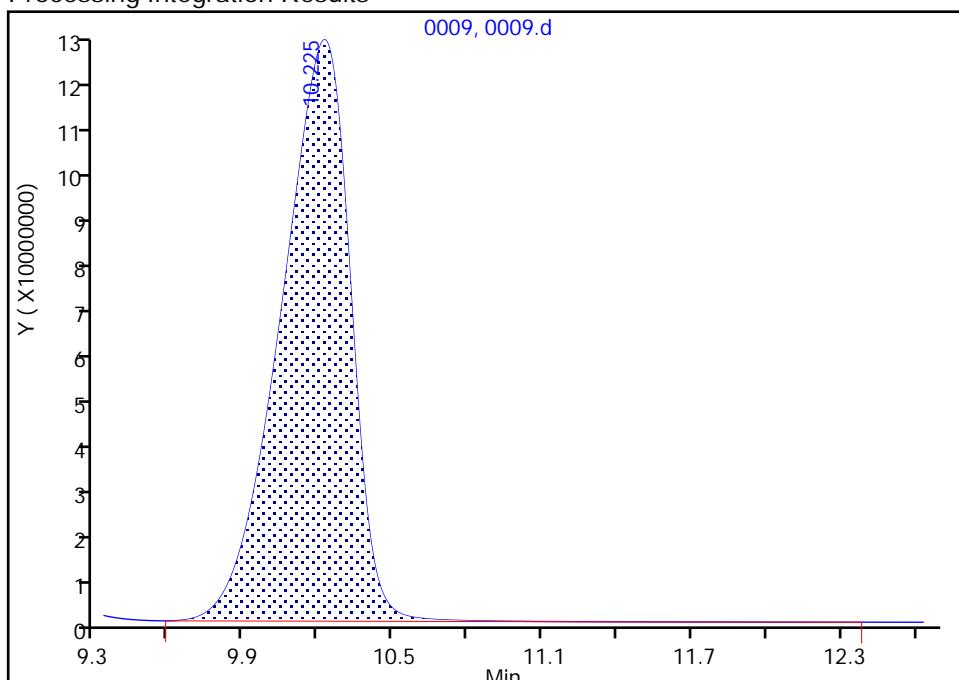
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\0009.d  
 Injection Date: 14-Nov-2021 18:51:00 Instrument ID: WC\_IonChrom11  
 Lims ID: std L6  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 7  
 Injection Vol: 10.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC11 Limit Group: Wet - Anions 28D  
 Column: Detector 0005

**6 Sulfate, CAS: 14808-79-8**

Signal: 1

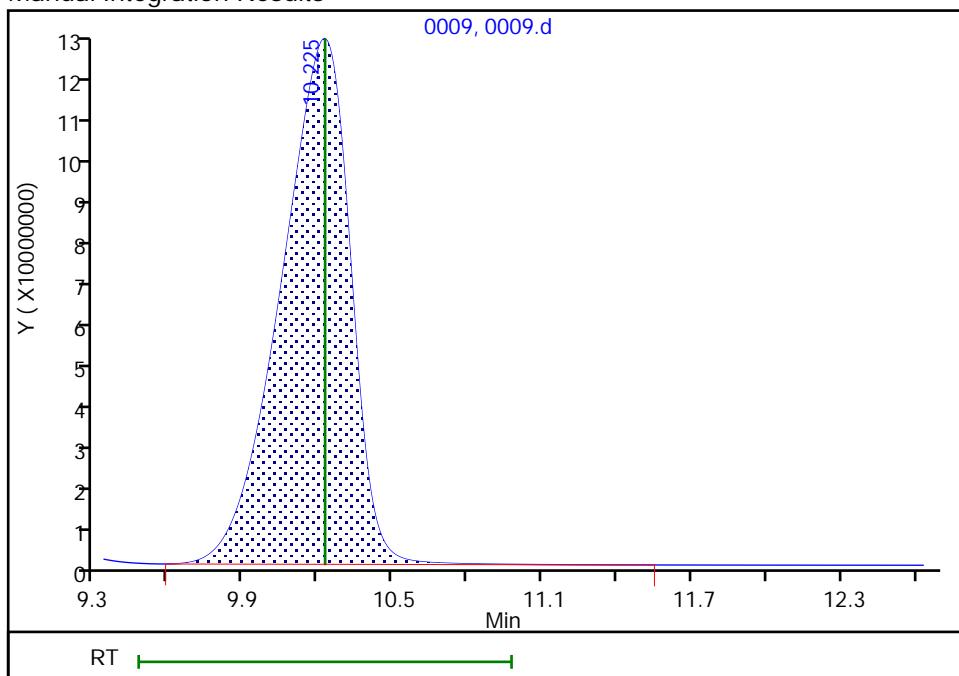
RT: 10.23  
 Area: 2440190368  
 Amount: 0  
 Amount Units: ug/ml

## Processing Integration Results



RT: 10.23  
 Area: 2439236596  
 Amount: 207.8223  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: gonzalezsp, 15-Nov-2021 07:45:35

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

**IC Instrument Information**
 WL: 100493 Inst ID: IC1 Analysis Date: 11/15/14 Analyst: SG

Rush Job No.	Samples	Anions	QC Req	HT Exp
<input type="checkbox"/> <u>154833</u>	<u>5</u>	(F) Cl NO2 Br NO3 PO4 SO4	MS/D	_____
<input type="checkbox"/> <u>154837</u>	<u>5</u>	(F) Cl NO2 Br NO3 PO4 SO4	MS/D	_____
<input type="checkbox"/> <u>154839</u>	<u>3</u>	(F) Cl NO2 Br NO3 PO4 SO4	MS/D	_____
<input type="checkbox"/> <u>155056</u>	<u>2</u>	(F) Cl NO2 Br NO3 PO4 SO4	MS/D	_____
<input type="checkbox"/> <u>154941</u>	<u>7</u>	(F) Cl NO2 Br NO3 PO4 SO4	MS/D	_____
<input type="checkbox"/> _____	_____	F Cl NO2 Br NO3 PO4 SO4	MS/D	_____
<input type="checkbox"/> _____	_____	F Cl NO2 Br NO3 PO4 SO4	MS/D	_____
<input type="checkbox"/> _____	_____	F Cl NO2 Br NO3 PO4 SO4	MS/D	_____
<input type="checkbox"/> _____	_____	F Cl NO2 Br NO3 PO4 SO4	MS/D	_____
<input type="checkbox"/> _____	_____	F Cl NO2 Br NO3 PO4 SO4	MS/D	_____
<input type="checkbox"/> _____	_____	F Cl NO2 Br NO3 PO4 SO4	MS/D	_____
<input type="checkbox"/> _____	_____	F Cl NO2 Br NO3 PO4 SO4	MS/D	_____
<input type="checkbox"/> _____	_____	F Cl NO2 Br NO3 PO4 SO4	MS/D	_____
<input type="checkbox"/> _____	_____	F Cl NO2 Br NO3 PO4 SO4	MS/D	_____
<input type="checkbox"/> _____	_____	F Cl NO2 Br NO3 PO4 SO4	MS/D	_____
<input type="checkbox"/> _____	_____	F Cl NO2 Br NO3 PO4 SO4	MS/D	_____
<input type="checkbox"/> _____	_____	F Cl NO2 Br NO3 PO4 SO4	MS/D	_____

**Dilutions**

Job No.	Samples	Anions	Dilution	Reason
<u>833</u>	<u>4</u>	(F) Cl NO2 Br NO3 PO4 SO4	<u>5X</u>	<u>Coverage</u>
<u>837</u>	<u>5</u>	(F) Cl NO2 Br NO3 PO4 SO4	<u>5X, 10X</u>	<u>dilution</u>
<u>839</u>	<u>5</u>	(F) Cl NO2 Br NO3 PO4 SO4	<u>5X</u>	<u>dilution</u>
<u>656</u>	_____	F Cl NO2 Br NO3 PO4 SO4	<u>5X</u>	<u>coverage.</u>
<u>941</u>	_____	F Cl NO2 Br NO3 PO4 SO4	<u>10, 20, 100X</u>	<u>Test/coverage.</u>
_____	_____	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\_IonChrom11\20211114-106493.b\Anions\_IC11.m

Instrument: WC\_IonChrom11

Lims Location: 280

Lock State: Initial Calib Locked

Cpnd Order: Retention Time

Integrator: Falcon

Last Modified: 16-Nov-2021 13:20:39

No.Compounds:7

Initial Calibration Batches
-----------------------------

Ical Batch: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b

Inj Date : 14-Nov-2021 17:29:00, Sublist: chrom-Anions\_IC11\*sub1

## Detector 1: 0005

Compound	Wet - Anions				Wet - Anions 28D			
	b	M1	M2	Err	b	M1	M2	Err
1 Fluoride					-429500	1642491		0.999
2 Chloride					-118831	1794420		1.000
3 Nitrite as N	-174820	3106326		0.999				
4 Bromide					-128835	5440555		1.000
5 Nitrate as N	-252573	3598982		0.998				
7 Orthophosphate as P	-137149	9479558	R1	0.994*				
6 Sulfate					-707509	1177116		0.997

ICalib Error Legend

R1, Curve Fit Fail Error Limit Test

Eurofins Environment Testing America  
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\Anions\_IC11.m  
 Instrument: WC\_IonChrom11 Lims Location: 280  
 Lock State: Initial Calib Locked Cpnd Order: Retention Time  
 Integrator: Falcon Last Modified: 16-Nov-2021 13:20:39  
 No.Compounds:7  
 Sublist: chrom-Anions\_IC11\*sub1  
 Limit Group: Wet - Anions

### Detectors

Detector: 1, 0005  
 Data Type: ic Spec Type: none  
 Supports Extracted Chromatograms: False  
 Run Time: 0.000-13.500 No. Points: 1561

### Calibration File Names

Level: 1	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0004.d
	Inj Date: 14-Nov-2021 17:29:00 Worklist: 106493 Sample#: 2
Level: 2	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0005.d
	Inj Date: 14-Nov-2021 17:45:00 Worklist: 106493 Sample#: 3
Level: 3	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0006.d
	Inj Date: 14-Nov-2021 18:02:00 Worklist: 106493 Sample#: 4
Level: 4	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0007.d
	Inj Date: 14-Nov-2021 18:18:00 Worklist: 106493 Sample#: 5
Level: 5	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0008.d
	Inj Date: 14-Nov-2021 18:35:00 Worklist: 106493 Sample#: 6
Level: 6	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0009.d
	Inj Date: 14-Nov-2021 18:51:00 Worklist: 106493 Sample#: 7

Start Cal Date: 14-Nov-2021 17:13:00 End Cal Date: 14-Nov-2021 18:51:00

### Individual Compound Calibration Parameters

Quant Method: ESTD	RF Calibration: Replace
Rule Name: Linear1	Curve: Linear
Origin: None	Error: raw_COD
RF %Dif: 0.0	SPCC Limit: 0.0
Dependent Variable: Resp	Weighting: Conc
	Error Limit: 1.00
	CCC Limit: 0.0

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
------------------------------------	------------------------------------	------------------------------------	------------------------------------	------------------------------------	------------------------------------	---	----	----	-------

Eurofins Environment Testing America  
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\Anions\_IC11.m  
 Instrument: WC\_IonChrom11 Lims Location: 280  
 Lock State: Initial Calib Locked Cpnd Order: Retention Time  
 Integrator: Falcon Last Modified: 16-Nov-2021 13:20:39  
 No.Compounds:7  
 Sublist: chrom-Anions\_IC11\*sub1  
 Limit Group: Wet - Anions 28D

#### Detectors

Detector: 1, 0005  
 Data Type: ic Spec Type: none  
 Supports Extracted Chromatograms: False  
 Run Time: 0.000-13.500 No. Points: 1561

#### Calibration File Names

Level: 1	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0004.d
	Inj Date: 14-Nov-2021 17:29:00 Worklist: 106493 Sample#: 2
Level: 2	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0005.d
	Inj Date: 14-Nov-2021 17:45:00 Worklist: 106493 Sample#: 3
Level: 3	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0006.d
	Inj Date: 14-Nov-2021 18:02:00 Worklist: 106493 Sample#: 4
Level: 4	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0007.d
	Inj Date: 14-Nov-2021 18:18:00 Worklist: 106493 Sample#: 5
Level: 5	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0008.d
	Inj Date: 14-Nov-2021 18:35:00 Worklist: 106493 Sample#: 6
Level: 6	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0009.d
	Inj Date: 14-Nov-2021 18:51:00 Worklist: 106493 Sample#: 7

Start Cal Date: 14-Nov-2021 17:13:00 End Cal Date: 14-Nov-2021 18:51:00

#### Individual Compound Calibration Parameters

Quant Method: ESTD	RF Calibration: Replace
Rule Name: Linear1	Curve: Linear
Origin: None	Error: CorrCoef
RF %Dif: 0.0	SPCC Limit: 0.0
Dependent Variable: Resp	Weighting: Conc
	Error Limit: 1.00
	CCC Limit: 0.0

#### 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
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Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\0010.d  
 Lims ID: ICV  
 Client ID:  
 Sample Type: ICV  
 Inject. Date: 14-Nov-2021 19:07:00 ALS Bottle#: 0 Worklist Smp#: 8  
 Injection Vol: 10.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-0106493-008  
 Misc. Info.: 10  
 Operator ID: Instrument ID: WC\_IonChrom11  
 Sublist:  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\Anions\_IC11.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 16-Nov-2021 13:20:09 Calib Date: 14-Nov-2021 18:51:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\0009.d  
 Column 1 : Det: 0005  
 Process Host: CTX1677

First Level Reviewer: gonzalezsp Date: 14-Nov-2021 20:08:46

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.509	2.509	0.000	60073164	4.00	3.68	M
2 Chloride	3.767	3.767	0.000	1470602591	80.0	82.6	
3 Nitrite as N	4.551	4.551	0.000	115835637	NC	NC	
4 Bromide	5.484	5.484	0.000	20914443	4.00	3.87	
5 Nitrate as N	6.201	6.201	0.000	132289111	NC	NC	M
7 Orthophosphate as P	9.142	9.142	0.000	32093698	NC	NC	
6 Sulfate	10.134	10.134	0.000	942891781	80.0	80.7	M

### QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

### Reagents:

IC SO4 ICV_00022	Amount Added: 0.40	Units: mL
CI ICV Std_00002	Amount Added: 0.40	Units: mL
IC ICV 5_00341	Amount Added: 0.40	Units: mL

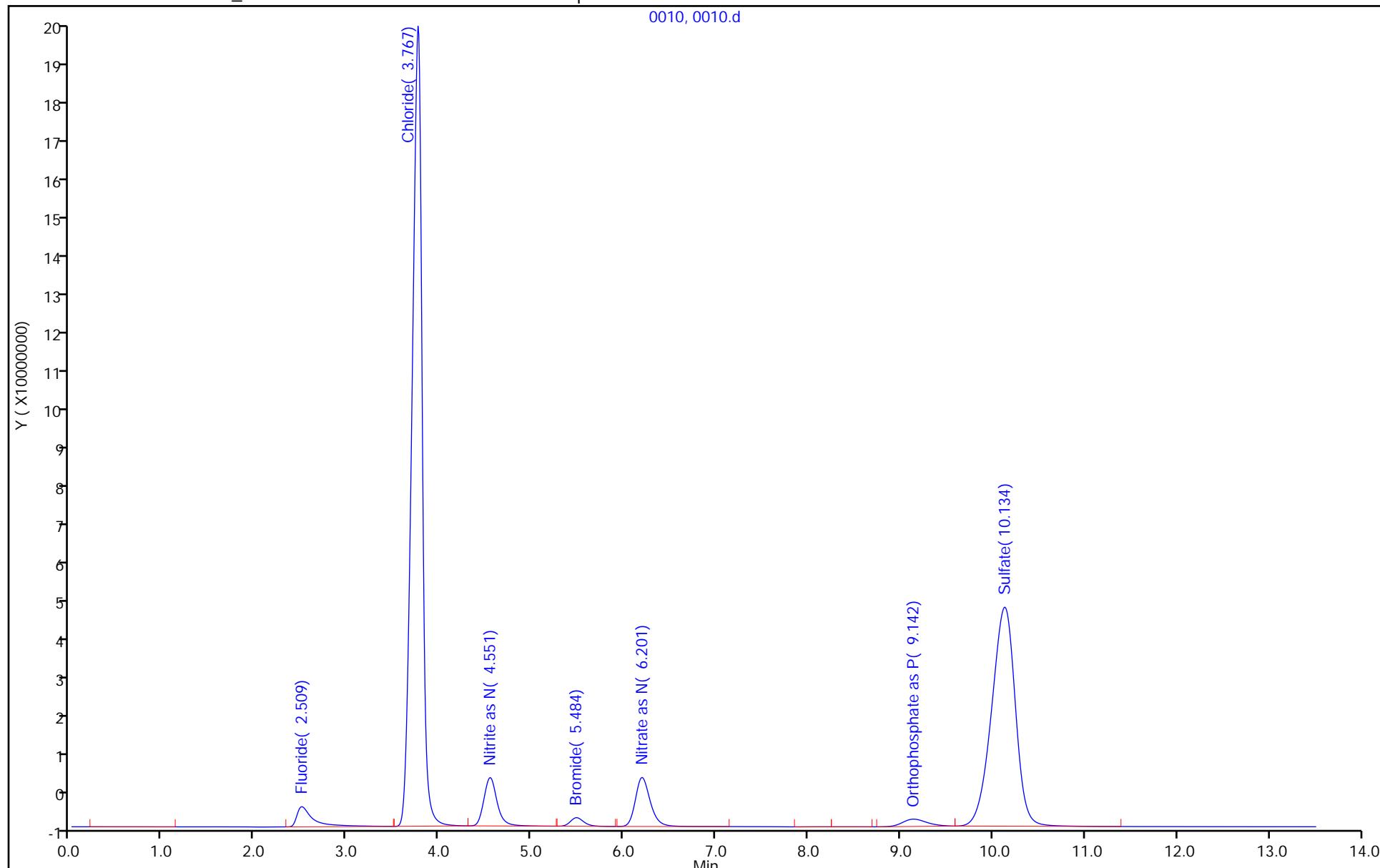
Report Date: 16-Nov-2021 13:20:10

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\0010.d  
Injection Date: 14-Nov-2021 19:07:00 Instrument ID: WC\_IonChrom11  
Lims ID: ICV Operator ID:  
Client ID:  
Injection Vol: 10.0 ul Worklist Smp#: 8  
Method: Anions\_IC11 Dil. Factor: 1.0000  
Limit Group: Wet - Anions 28D

0010, 0010.d



Eurofins TestAmerica, Denver

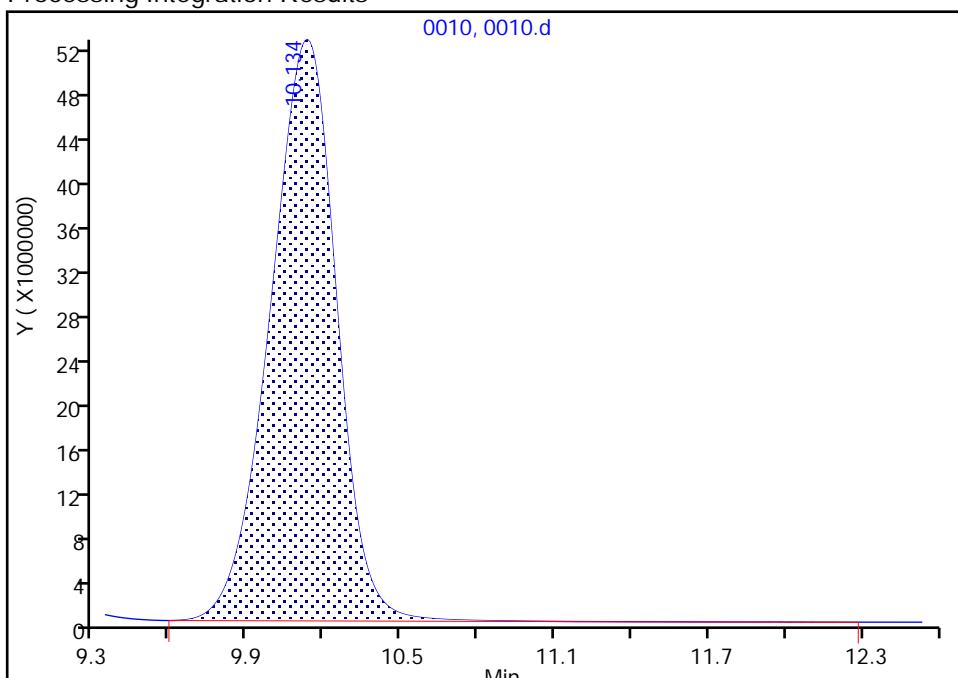
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\0010.d  
 Injection Date: 14-Nov-2021 19:07:00 Instrument ID: WC\_IonChrom11  
 Lims ID: ICV  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 8  
 Injection Vol: 10.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC11 Limit Group: Wet - Anions 28D  
 Column: Detector 0005

**6 Sulfate, CAS: 14808-79-8**

Signal: 1

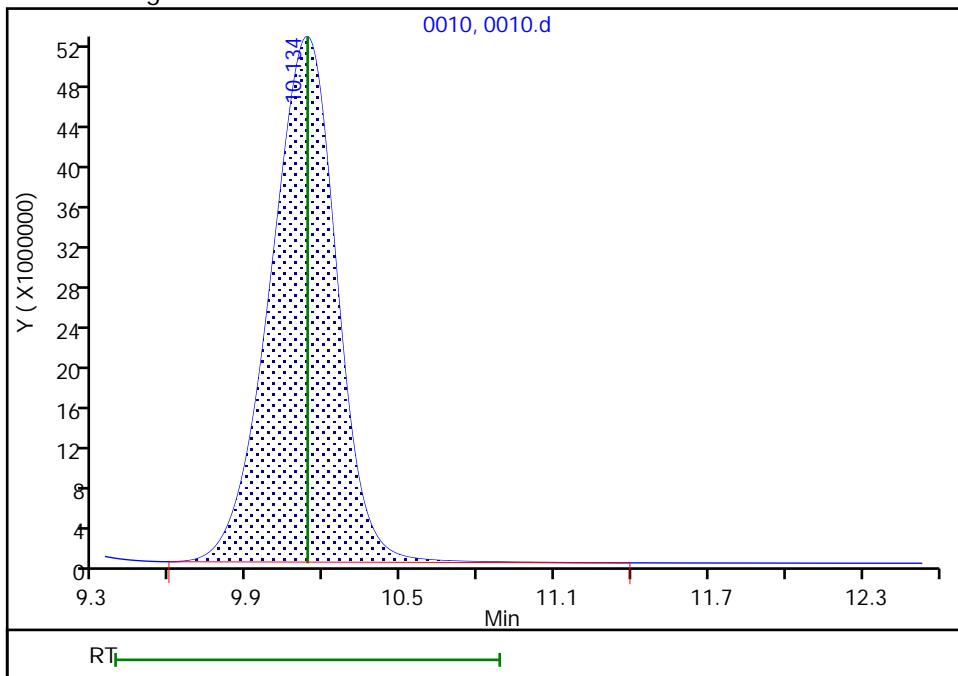
RT: 10.13  
 Area: 943389256  
 Amount: 80.745117  
 Amount Units: ug/ml

## Processing Integration Results



RT: 10.13  
 Area: 942891781  
 Amount: 80.702854  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: gonzalezsp, 15-Nov-2021 07:46:09

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\0011.d  
 Lims ID: ICB  
 Client ID:  
 Sample Type: ICB  
 Inject. Date: 14-Nov-2021 19:24:00 ALS Bottle#: 0 Worklist Smp#: 9  
 Injection Vol: 10.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-0106493-009  
 Misc. Info.: 11  
 Operator ID: Instrument ID: WC\_IonChrom11  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\Anions\_IC11.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 16-Nov-2021 13:20:09 Calib Date: 14-Nov-2021 18:51:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICAL File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\0009.d  
 Column 1 : Det: 0005  
 Process Host: CTX1677

First Level Reviewer: jindarac Date: 16-Nov-2021 13:03:37

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		2.509			ND		U
2 Chloride		3.767			ND		U
3 Nitrite as N		4.551			ND		U
4 Bromide		5.484			ND		U
5 Nitrate as N		6.201			ND		U
7 Orthophosphate as P	8.809	9.142	-0.333	127828		NC	
6 Sulfate	10.375	10.134	0.241	115396		0.6109	

### QC Flag Legend

#### Processing Flags

NC - Not Calibrated

#### Review Flags

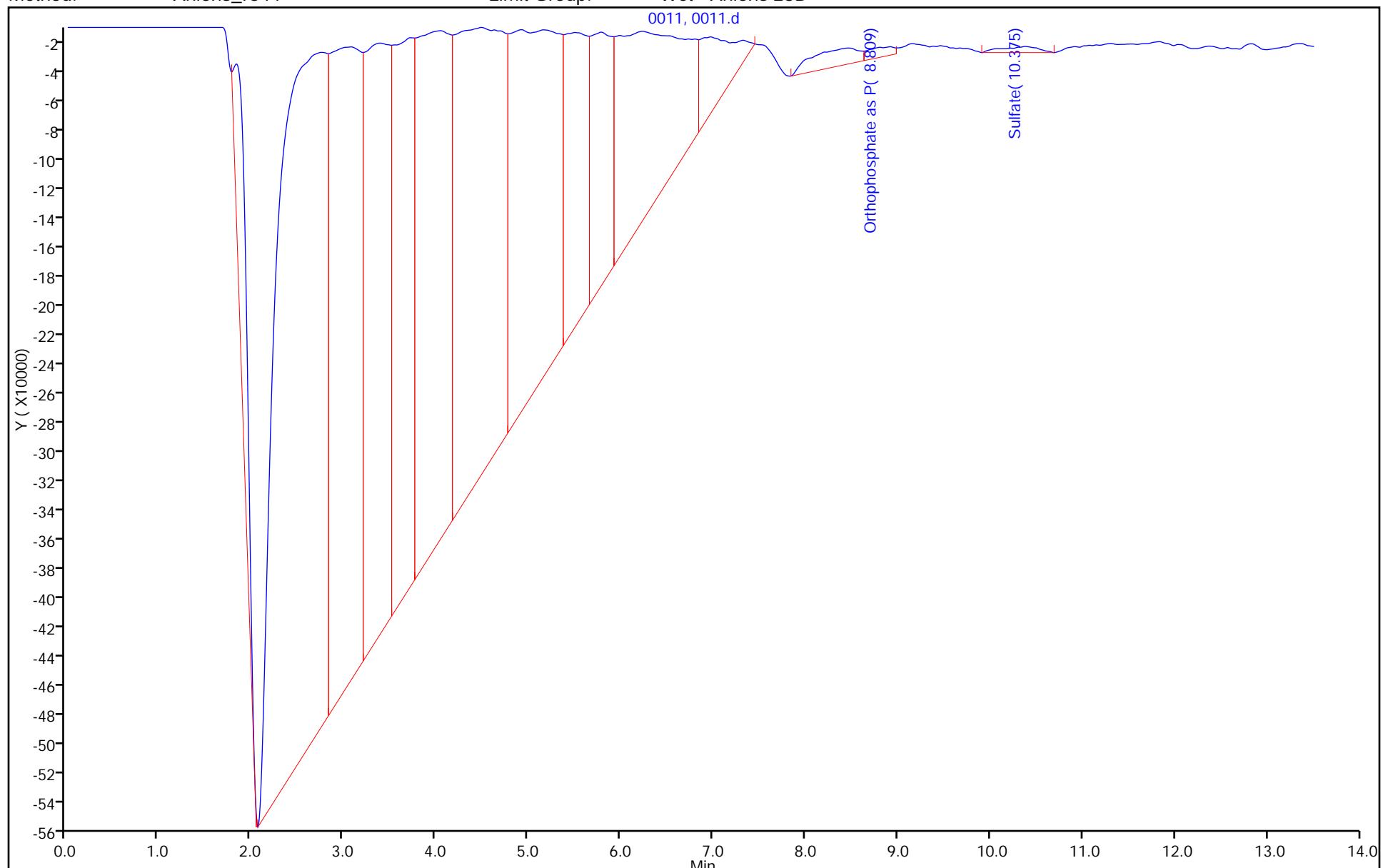
U - Marked Undetected

Report Date: 16-Nov-2021 13:20:10

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\0011.d  
Injection Date: 14-Nov-2021 19:24:00 Instrument ID: WC\_IonChrom11  
Lims ID: ICB Operator ID:  
Client ID:  
Injection Vol: 10.0 ul Worklist Smp#: 9  
Method: Anions\_IC11 Dil. Factor: 1.0000  
Limit Group: Wet - Anions 28D ALS Bottle#: 0



## IC Instrument Information

WL: 106781 Inst ID: ICII Analysis Date: 11/24/21 Analyst: JF

Rush Job No.	Samples	Anions	QC Req	HT Exp
5F 11/24/21				
<input type="checkbox"/> <u>43490</u>	<u>4</u>	F Cl NO2 Br NO3 PO4 SO4	MS/D	
<input type="checkbox"/> <u>155048</u>	<u>2</u>	F Cl NO2 Br NO3 PO4 SO4	MS/D	
<input type="checkbox"/> <u>155607</u>	<u>3</u>	F Cl NO2 Br NO3 PO4 SO4	MS/D	
<input type="checkbox"/> <u>155481</u>	<u>2</u>	F Cl NO2 Br NO3 PO4 SO4	MS/D	
<input type="checkbox"/> <u>155470</u>	<u>4</u>	F Cl NO2 Br NO3 PO4 SO4	MS/D	
<input checked="" type="checkbox"/> <u>155336</u>	<u>5</u>	F Cl NO2 Br NO3 PO4 SO4	MS/D	
<input type="checkbox"/> <u>155465</u>	<u>1</u>	F Cl NO2 Br NO3 PO4 SO4	MS/D	
<input type="checkbox"/> <u>155654</u>	<u>1</u>	F Cl NO2 Br NO3 PO4 SO4	MS/D	
<input type="checkbox"/> <u>43490</u>	<u>3</u>	F Cl NO2 Br NO3 PO4 SO4	MS/D	
<input type="checkbox"/>		F Cl NO2 Br NO3 PO4 SO4	MS/D	
<input type="checkbox"/>		F Cl NO2 Br NO3 PO4 SO4	MS/D	
<input type="checkbox"/>		F Cl NO2 Br NO3 PO4 SO4	MS/D	
<input type="checkbox"/>		F Cl NO2 Br NO3 PO4 SO4	MS/D	
<input type="checkbox"/>		F Cl NO2 Br NO3 PO4 SO4	MS/D	
<input type="checkbox"/>		F Cl NO2 Br NO3 PO4 SO4	MS/D	

Soil.

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### Dilutions

Job No.	Samples	Anions	Dilution	Reason
<u>048</u>	<u>2</u>	F Cl NO2 Br NO3 PO4 SO4	<u>5x</u>	<u>Rerun</u>
<u>607</u>	<u>3</u>	F Cl NO2 Br NO3 PO4 SO4	<u>1/20x</u>	
<u>481</u>	<u>2</u>	F Cl NO2 Br NO3 PO4 SO4	<u>1/5,10x</u>	
<u>470</u>	<u>4</u>	F Cl NO2 Br NO3 PO4 SO4	<u>1x</u>	
<u>336</u>		F Cl NO2 Br NO3 PO4 SO4	<u>1/10,100x</u>	<u>Test</u>
<u>465</u>		F Cl NO2 Br NO3 PO4 SO4	<u>5x</u>	<u>Coverage</u>
<u>654</u>		F Cl NO2 Br NO3 PO4 SO4	<u>20,50x</u>	<u>Coverage</u>
<u>490</u>		F Cl NO2 Br NO3 PO4 SO4	<u>5x</u>	<u>Coverage</u>
		F Cl NO2 Br NO3 PO4 SO4		

Eurofins Environment Testing America  
Initial Calibration Summary Report

Method: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\Anions\_IC11.m

Instrument: WC\_IonChrom11

Lims Location: 280

Lock State: Initial Calib Locked

Cpnd Order: Retention Time

Integrator: Falcon

Last Modified: 16-Nov-2021 13:20:39

No.Compounds:7

Initial Calibration Batches
-----------------------------

Ical Batch: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b

Inj Date : 14-Nov-2021 17:29:00, Sublist: chrom-Anions\_IC11\*sub1

## Detector 1: 0005

Compound	Wet - Anions				Wet - Anions 28D			
	b	M1	M2	Err	b	M1	M2	Err
1 Fluoride					-429500	1642491		0.999
2 Chloride					-118831	1794420		1.000
3 Nitrite as N	-174820	3106326		0.999				
4 Bromide					-128835	5440555		1.000
5 Nitrate as N	-252573	3598982		0.998				
7 Orthophosphate as P	-137149	9479558	R1	0.994*				
6 Sulfate					-707509	1177116		0.997

ICalib Error Legend

R1, Curve Fit Fail Error Limit Test

Eurofins Environment Testing America  
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\Anions\_IC11.m  
 Instrument: WC\_IonChrom11 Lims Location: 280  
 Lock State: Initial Calib Locked Cpnd Order: Retention Time  
 Integrator: Falcon Last Modified: 16-Nov-2021 13:20:39  
 No.Compounds:7  
 Sublist: chrom-Anions\_IC11\*sub1  
 Limit Group: Wet - Anions

### Detectors

Detector: 1, 0005  
 Data Type: ic Spec Type: none  
 Supports Extracted Chromatograms: False  
 Run Time: 0.000-13.500 No. Points: 1561

### Calibration File Names

Level: 1	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0004.d
	Inj Date: 14-Nov-2021 17:29:00 Worklist: 106493 Sample#: 2
Level: 2	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0005.d
	Inj Date: 14-Nov-2021 17:45:00 Worklist: 106493 Sample#: 3
Level: 3	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0006.d
	Inj Date: 14-Nov-2021 18:02:00 Worklist: 106493 Sample#: 4
Level: 4	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0007.d
	Inj Date: 14-Nov-2021 18:18:00 Worklist: 106493 Sample#: 5
Level: 5	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0008.d
	Inj Date: 14-Nov-2021 18:35:00 Worklist: 106493 Sample#: 6
Level: 6	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0009.d
	Inj Date: 14-Nov-2021 18:51:00 Worklist: 106493 Sample#: 7

Start Cal Date: 14-Nov-2021 17:13:00 End Cal Date: 14-Nov-2021 18:51:00

### Individual Compound Calibration Parameters

Quant Method: ESTD	RF Calibration: Replace
Rule Name: Linear1	Curve: Linear
Origin: None	Error: raw_COD
RF %Dif: 0.0	SPCC Limit: 0.0
Dependent Variable: Resp	Weighting: Conc
	Error Limit: 1.00
	CCC Limit: 0.0

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
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Eurofins Environment Testing America  
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\Anions\_IC11.m  
 Instrument: WC\_IonChrom11 Lims Location: 280  
 Lock State: Initial Calib Locked Cpnd Order: Retention Time  
 Integrator: Falcon Last Modified: 16-Nov-2021 13:20:39  
 No.Compounds:7  
 Sublist: chrom-Anions\_IC11\*sub1  
 Limit Group: Wet - Anions 28D

#### Detectors

Detector: 1, 0005  
 Data Type: ic Spec Type: none  
 Supports Extracted Chromatograms: False  
 Run Time: 0.000-13.500 No. Points: 1561

#### Calibration File Names

Level: 1	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0004.d
	Inj Date: 14-Nov-2021 17:29:00 Worklist: 106493 Sample#: 2
Level: 2	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0005.d
	Inj Date: 14-Nov-2021 17:45:00 Worklist: 106493 Sample#: 3
Level: 3	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0006.d
	Inj Date: 14-Nov-2021 18:02:00 Worklist: 106493 Sample#: 4
Level: 4	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0007.d
	Inj Date: 14-Nov-2021 18:18:00 Worklist: 106493 Sample#: 5
Level: 5	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0008.d
	Inj Date: 14-Nov-2021 18:35:00 Worklist: 106493 Sample#: 6
Level: 6	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0009.d
	Inj Date: 14-Nov-2021 18:51:00 Worklist: 106493 Sample#: 7

Start Cal Date: 14-Nov-2021 17:13:00 End Cal Date: 14-Nov-2021 18:51:00

#### Individual Compound Calibration Parameters

Quant Method: ESTD	RF Calibration: Replace
Rule Name: Linear1	Curve: Linear
Origin: None	Error: CorrCoef
RF %Dif: 0.0	SPCC Limit: 0.0
Dependent Variable: Resp	Weighting: Conc
	Error Limit: 1.00
	CCC Limit: 0.0

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
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Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211124-106781.b\0001.d  
 Lims ID: CCV  
 Client ID:  
 Sample Type: CCV  
 Inject. Date: 24-Nov-2021 10:16:00 ALS Bottle#: 0 Worklist Smp#: 1  
 Injection Vol: 10.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-0106781-001  
 Operator ID: Instrument ID: WC\_IonChrom11  
 Sublist: chrom-Anions\_IC11\*sub1  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211124-106781.b\Anions\_IC11.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 24-Nov-2021 16:12:47 Calib Date: 14-Nov-2021 18:51:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICAL File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\0009.d  
 Column 1 : Det: 0005  
 Process Host: CTX1652

First Level Reviewer: jindarac Date: 24-Nov-2021 16:08:18

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.484	2.484	0.000	78217596	5.00	4.79	
2 Chloride	3.709	3.709	0.000	1738171850	100.0	97.5	
3 Nitrite as N	4.459	4.459	0.000	144684065	NC	NC	
4 Bromide	5.342	5.342	0.000	24452156	5.00	4.52	
5 Nitrate as N	6.025	6.025	0.000	161310692	NC	NC	M
7 Orthophosphate as P	8.775	8.775	0.000	26928223	NC	NC	
6 Sulfate	9.767	9.767	0.000	1129588265	100.0	96.6	M

### QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

### Reagents:

IC LCS\_01846

Amount Added: 5.00

Units: mL

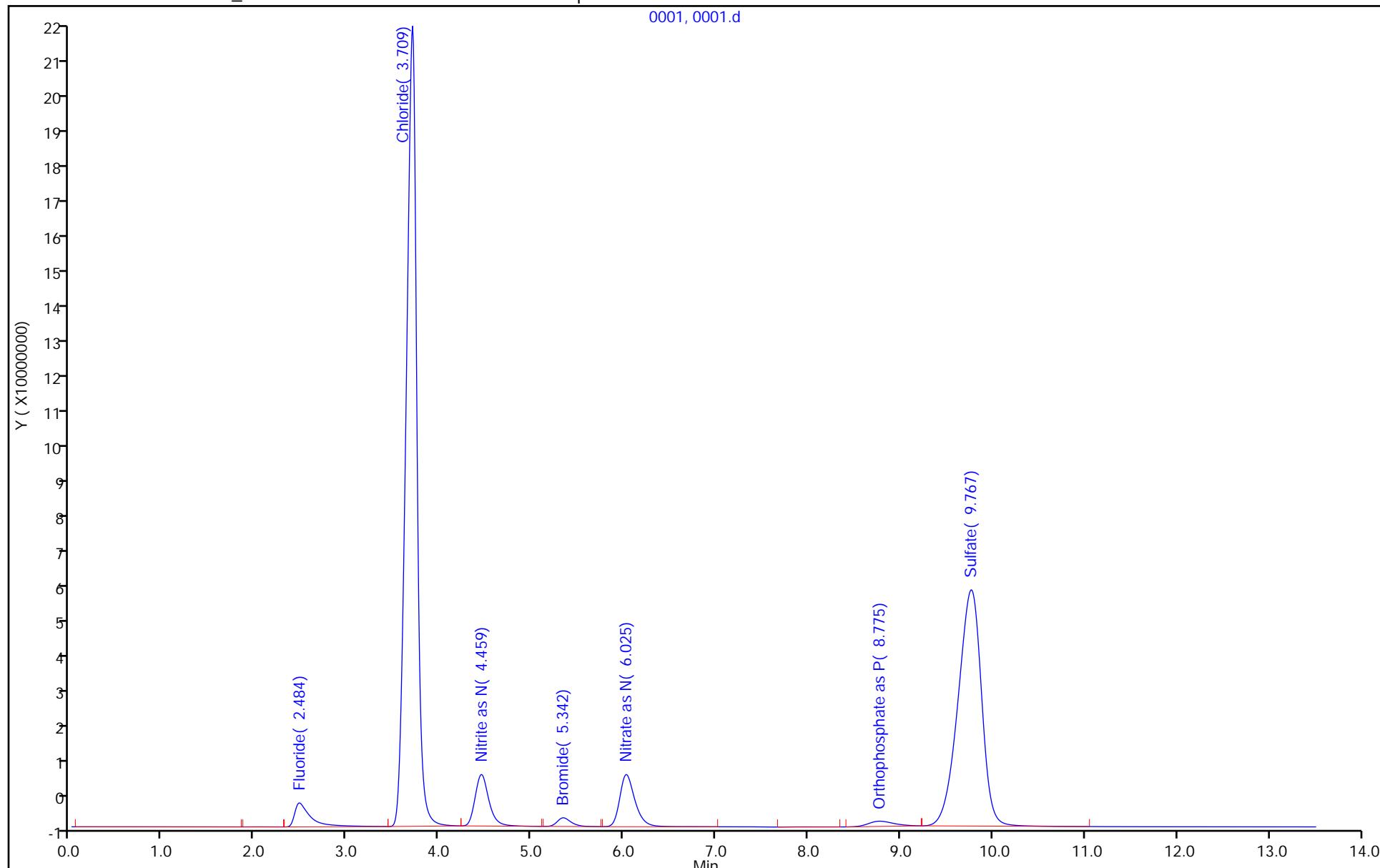
Report Date: 24-Nov-2021 16:12:47

Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211124-106781.b\0001.d  
Injection Date: 24-Nov-2021 10:16:00 Instrument ID: WC\_IonChrom11  
Lims ID: CCV Operator ID:  
Client ID:  
Injection Vol: 10.0 ul Worklist Smp#: 1  
Method: Anions\_IC11 Dil. Factor: 1.0000  
Limit Group: Wet - Anions 28D

0001, 0001.d



Eurofins TestAmerica, Denver

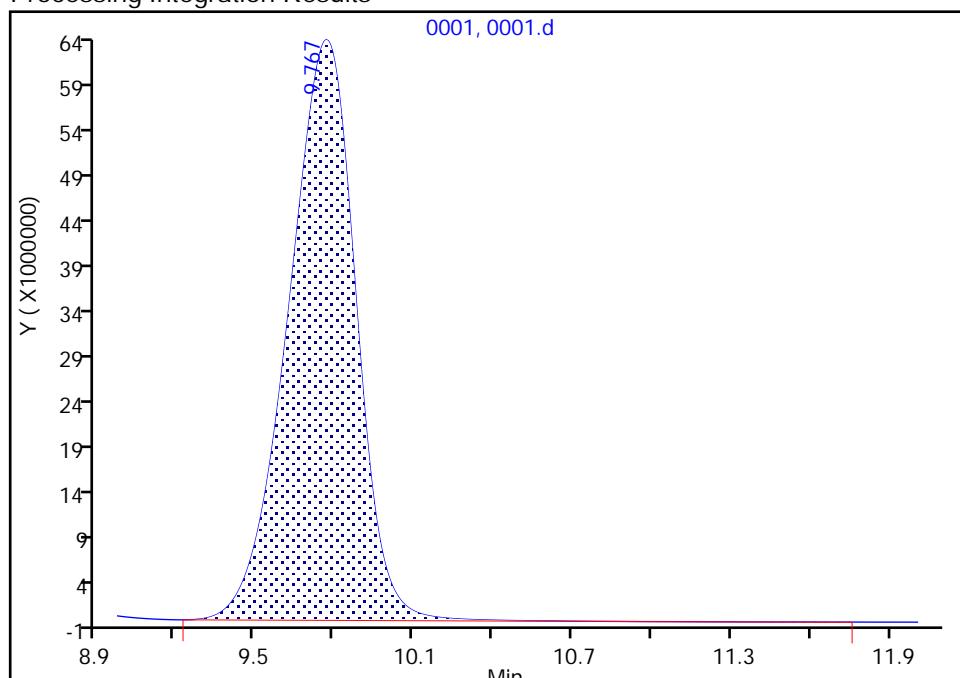
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211124-106781.b\0001.d  
 Injection Date: 24-Nov-2021 10:16:00 Instrument ID: WC\_IonChrom11  
 Lims ID: CCV  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 1  
 Injection Vol: 10.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC11 Limit Group: Wet - Anions 28D  
 Column: Detector 0005

**6 Sulfate, CAS: 14808-79-8**

Signal: 1

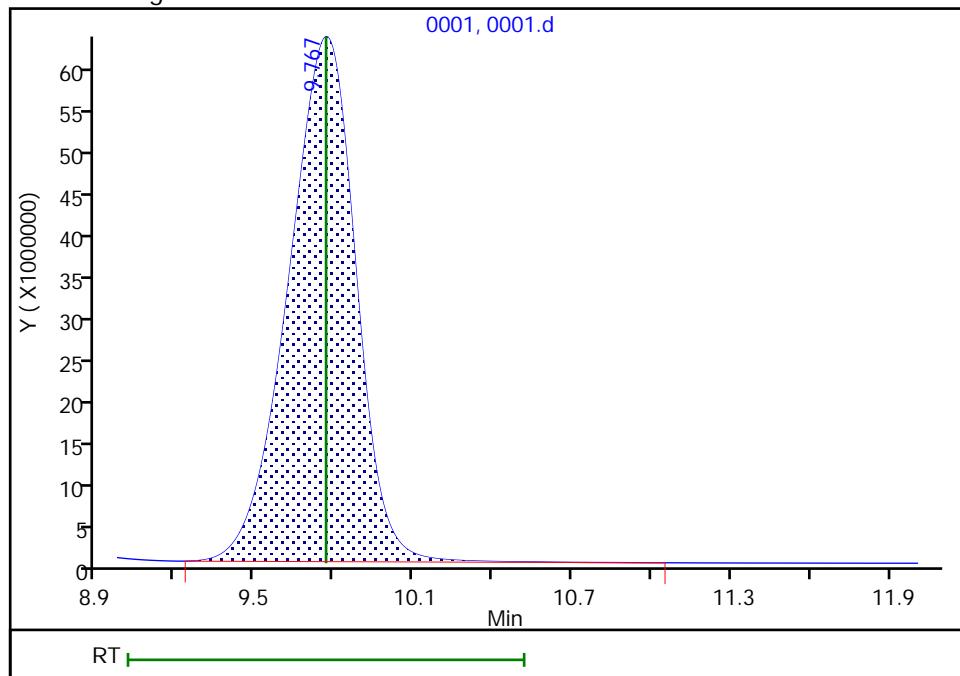
RT: 9.77  
 Area: 1130113415  
 Amount: 0  
 Amount Units: ug/ml

## Processing Integration Results



RT: 9.77  
 Area: 1129588265  
 Amount: 96.563343  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: jindarac, 24-Nov-2021 16:08:15

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211124-106781.b\0002.d  
 Lims ID: CCB  
 Client ID:  
 Sample Type: CCB  
 Inject. Date: 24-Nov-2021 10:32:00 ALS Bottle#: 0 Worklist Smp#: 2  
 Injection Vol: 10.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-0106781-002  
 Operator ID: Instrument ID: WC\_IonChrom11  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211124-106781.b\Anions\_IC11.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 24-Nov-2021 16:12:48 Calib Date: 14-Nov-2021 18:51:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\0009.d  
 Column 1 : Det: 0005  
 Process Host: CTX1652

First Level Reviewer: jindaratac Date: 24-Nov-2021 16:08:34

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.484				ND		
2 Chloride	3.709				ND	U	
3 Nitrite as N	4.459				ND	U	
4 Bromide	5.342				ND	U	
5 Nitrate as N	6.025				ND	U	
7 Orthophosphate as P	8.842	8.842	0.000	107637		NC	
6 Sulfate	9.767				ND		

### QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

U - Marked Undetected

Report Date: 24-Nov-2021 16:12:48

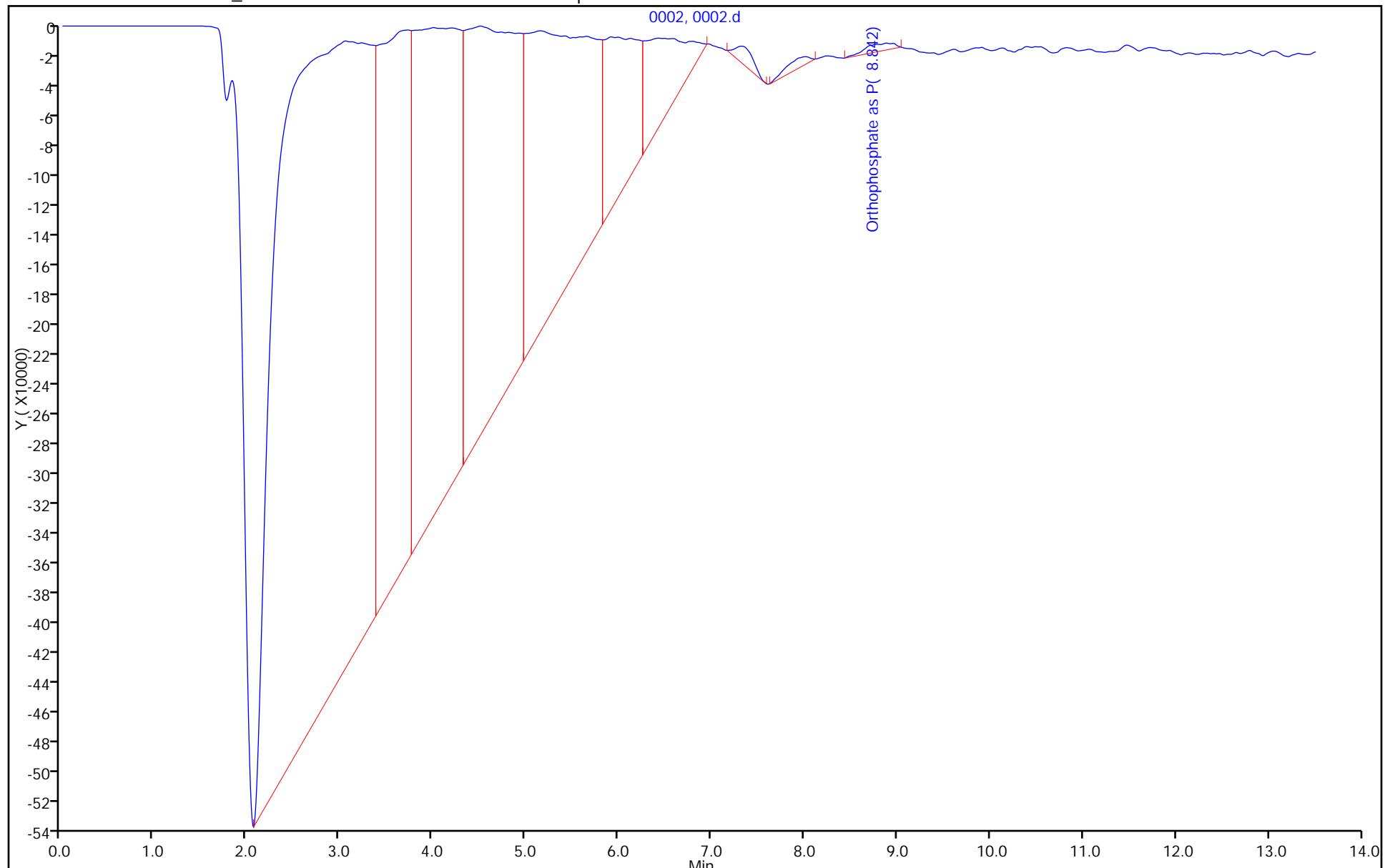
Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211124-106781.b\0002.d  
Injection Date: 24-Nov-2021 10:32:00 Instrument ID: WC\_IonChrom11  
Lims ID: CCB Client ID:  
Injection Vol: 10.0 ul Dil. Factor: 1.0000  
Method: Anions\_IC11 Limit Group: Wet - Anions 28D

Operator ID:  
Worklist Smp#: 2

ALS Bottle#: 0



Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211124-106781.b\0003.d  
 Lims ID: MRL  
 Client ID:  
 Sample Type: MRL  
 Inject. Date: 24-Nov-2021 10:49:00 ALS Bottle#: 0 Worklist Smp#: 3  
 Injection Vol: 10.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-0106781-003  
 Operator ID: Instrument ID: WC\_IonChrom11  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211124-106781.b\Anions\_IC11.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 24-Nov-2021 16:12:48 Calib Date: 14-Nov-2021 18:51:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\0009.d  
 Column 1 : Det: 0005  
 Process Host: CTX1652

First Level Reviewer: jindaracr Date: 24-Nov-2021 16:08:45

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.484	2.484	0.000	8671910	0.5000	0.5541	M
2 Chloride	3.634	3.634	0.000	58558379	5.00	3.93	
3 Nitrite as N	4.425	4.425	0.000	13020521	NC	NC	
4 Bromide	5.342	5.342	0.000	2348018	0.5000	0.4553	
5 Nitrate as N	6.034	6.034	0.000	14314032	NC	NC	
7 Orthophosphate as P	8.817	8.817	0.000	1975290	NC	NC	
6 Sulfate	9.675	9.675	0.000	41109157	5.00	4.09	

### QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

### Reagents:

IC Cal low_00609	Amount Added: 0.05	Units: mL
IC CAL cl/so4_00395	Amount Added: 0.10	Units: mL

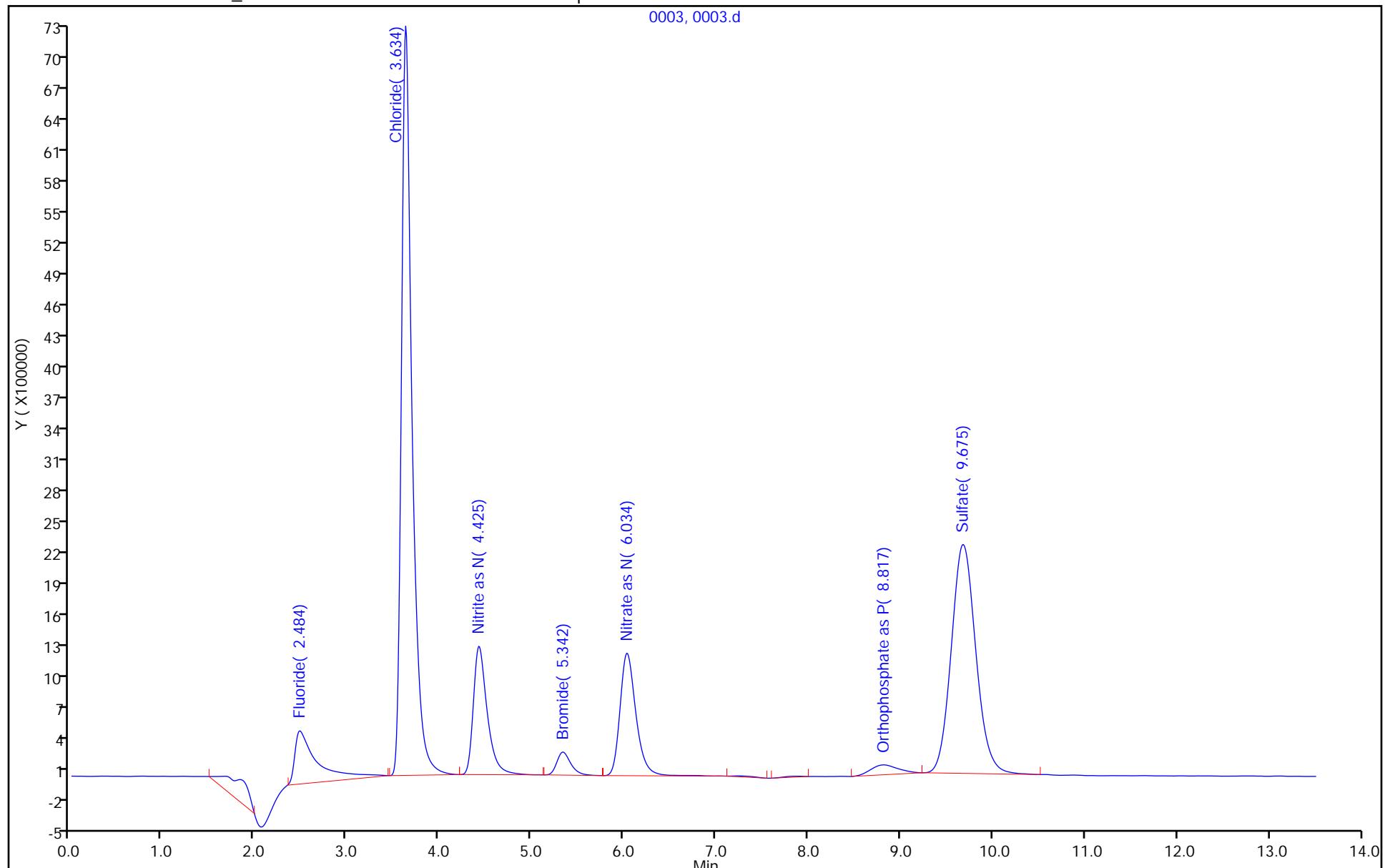
Report Date: 24-Nov-2021 16:12:48

Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211124-106781.b\0003.d  
Injection Date: 24-Nov-2021 10:49:00 Instrument ID: WC\_IonChrom11  
Lims ID: MRL Operator ID:  
Client ID:  
Injection Vol: 10.0 ul ALS Bottle#: 0  
Method: Anions\_IC11 Dil. Factor: 1.0000  
Limit Group: Wet - Anions 28D

Worklist Smp#: 3



Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211124-106781.b\0004.d  
 Lims ID: LCS  
 Client ID:  
 Sample Type: LCS  
 Inject. Date: 24-Nov-2021 11:05:00 ALS Bottle#: 0 Worklist Smp#: 4  
 Injection Vol: 10.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-0106781-004  
 Operator ID: Instrument ID: WC\_IonChrom11  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211124-106781.b\Anions\_IC11.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 24-Nov-2021 16:12:49 Calib Date: 14-Nov-2021 18:51:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\0009.d  
 Column 1 : Det: 0005  
 Process Host: CTX1652

First Level Reviewer: jindaratac Date: 24-Nov-2021 16:09:01

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.475	2.475	0.000	77820795	5.00	4.76	
2 Chloride	3.700	3.700	0.000	1731980477	100.0	97.2	
3 Nitrite as N	4.442	4.442	0.000	144976212	NC	NC	
4 Bromide	5.325	5.325	0.000	24300003	5.00	4.49	
5 Nitrate as N	6.009	6.009	0.000	160543721	NC	NC	M
7 Orthophosphate as P	8.767	8.767	0.000	28330608	NC	NC	
6 Sulfate	9.767	9.767	0.000	1126823590	100.0	96.3	M

### QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

### Reagents:

IC LCS\_01846

Amount Added: 5.00

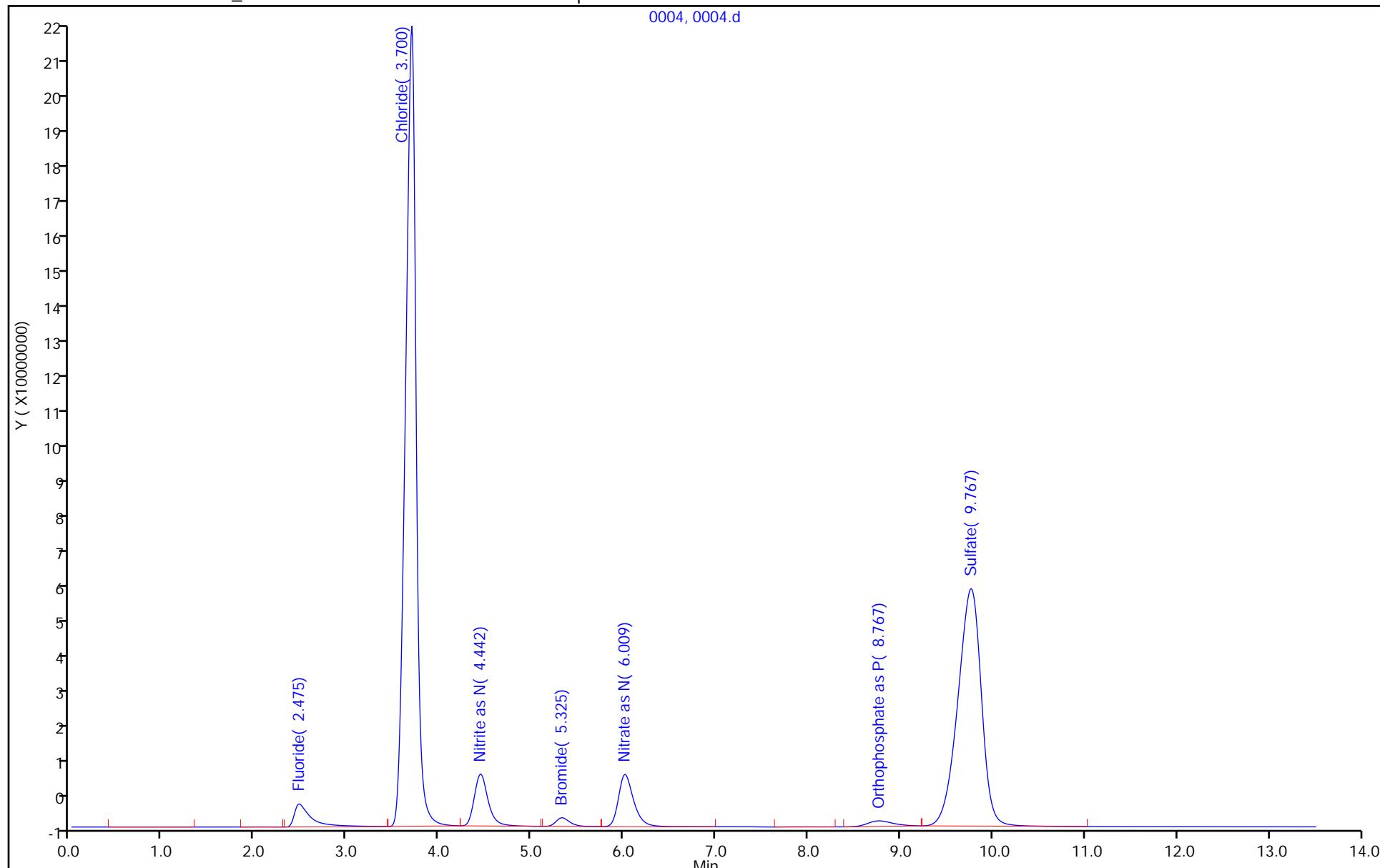
Units: mL

Report Date: 24-Nov-2021 16:12:49

Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211124-106781.b\0004.d  
Injection Date: 24-Nov-2021 11:05:00 Instrument ID: WC\_IonChrom11  
Lims ID: LCS Operator ID:  
Client ID:  
Injection Vol: 10.0 ul Worklist Smp#: 4  
Method: Anions\_IC11 Dil. Factor: 1.0000  
Limit Group: Wet - Anions 28D



Eurofins TestAmerica, Denver

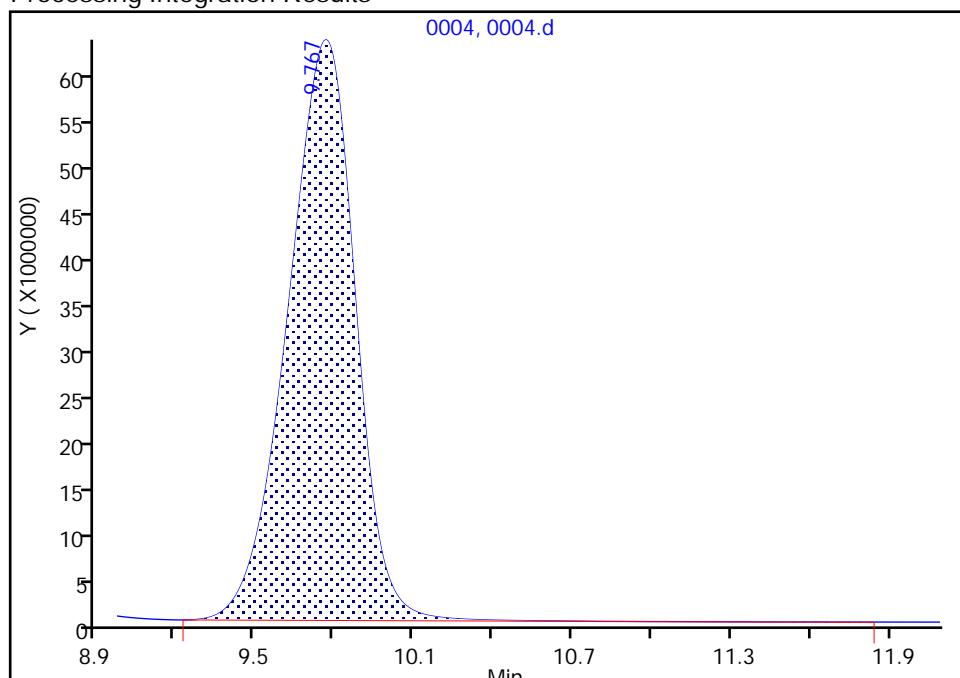
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211124-106781.b\0004.d  
 Injection Date: 24-Nov-2021 11:05:00 Instrument ID: WC\_IonChrom11  
 Lims ID: LCS  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 4  
 Injection Vol: 10.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC11 Limit Group: Wet - Anions 28D  
 Column: Detector 0005

**6 Sulfate, CAS: 14808-79-8**

Signal: 1

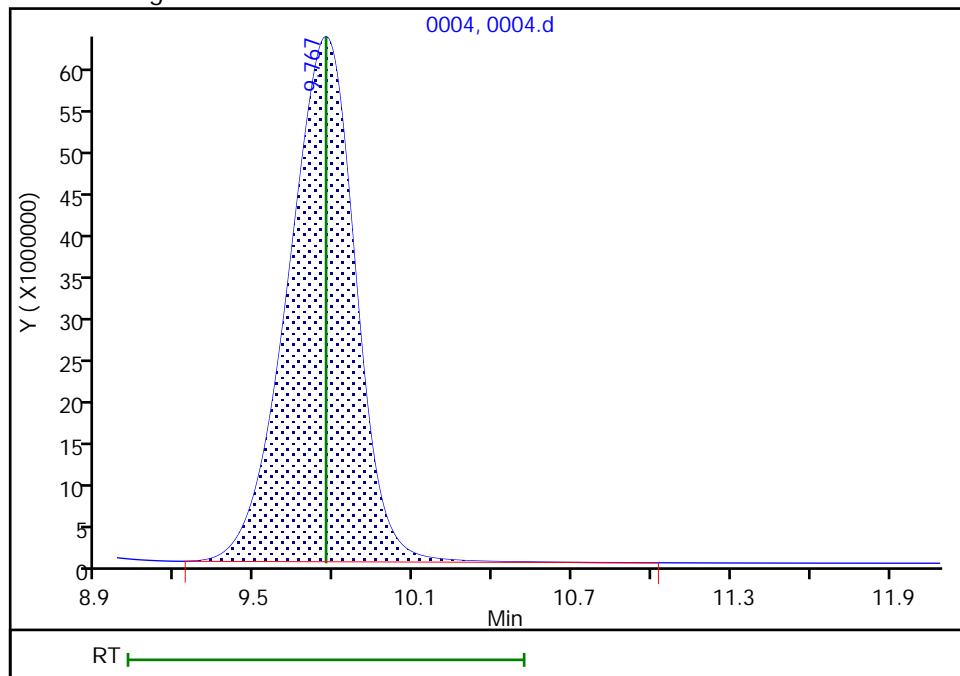
RT: 9.77  
 Area: 1127445244  
 Amount: 0  
 Amount Units: ug/ml

## Processing Integration Results



RT: 9.77  
 Area: 1126823590  
 Amount: 96.328475  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: jindarac, 24-Nov-2021 16:08:59

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211124-106781.b\0005.d  
 Lims ID: LCSD  
 Client ID:  
 Sample Type: LCSD  
 Inject. Date: 24-Nov-2021 11:22:00 ALS Bottle#: 0 Worklist Smp#: 5  
 Injection Vol: 10.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-0106781-005  
 Operator ID: Instrument ID: WC\_IonChrom11  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211124-106781.b\Anions\_IC11.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 24-Nov-2021 16:12:49 Calib Date: 14-Nov-2021 18:51:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\0009.d  
 Column 1 : Det: 0005  
 Process Host: CTX1652

First Level Reviewer: jindaratac Date: 24-Nov-2021 16:09:22

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.475	2.475	0.000	78336930	5.00	4.80	
2 Chloride	3.700	3.700	0.000	1732138279	100.0	97.2	
3 Nitrite as N	4.442	4.442	0.000	144663803	NC	NC	
4 Bromide	5.325	5.325	0.000	24188705	5.00	4.47	
5 Nitrate as N	6.009	6.009	0.000	160997502	NC	NC	M
7 Orthophosphate as P	8.767	8.767	0.000	28944120	NC	NC	
6 Sulfate	9.775	9.775	0.000	1129226271	100.0	96.5	M

### QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

### Reagents:

IC LCS\_01846

Amount Added: 5.00

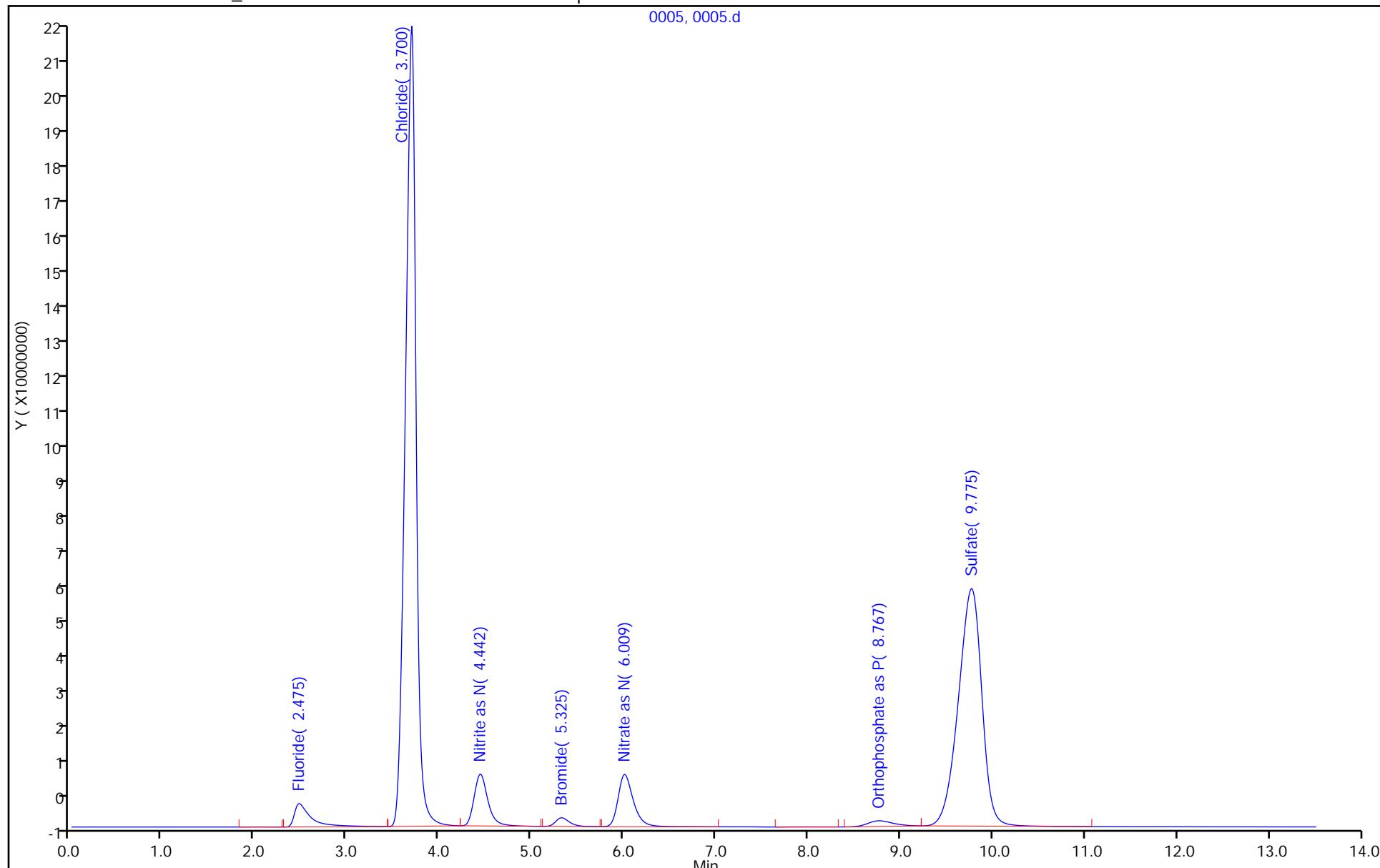
Units: mL

Report Date: 24-Nov-2021 16:12:49

Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211124-106781.b\0005.d  
Injection Date: 24-Nov-2021 11:22:00 Instrument ID: WC\_IonChrom11  
Lims ID: LCSD Operator ID:  
Client ID:  
Injection Vol: 10.0 ul Worklist Smp#: 5  
Method: Anions\_IC11 Dil. Factor: 1.0000  
Limit Group: Wet - Anions 28D



Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211124-106781.b\0005.d  
 Injection Date: 24-Nov-2021 11:22:00      Instrument ID: WC\_IonChrom11  
 Lims ID: LCSD

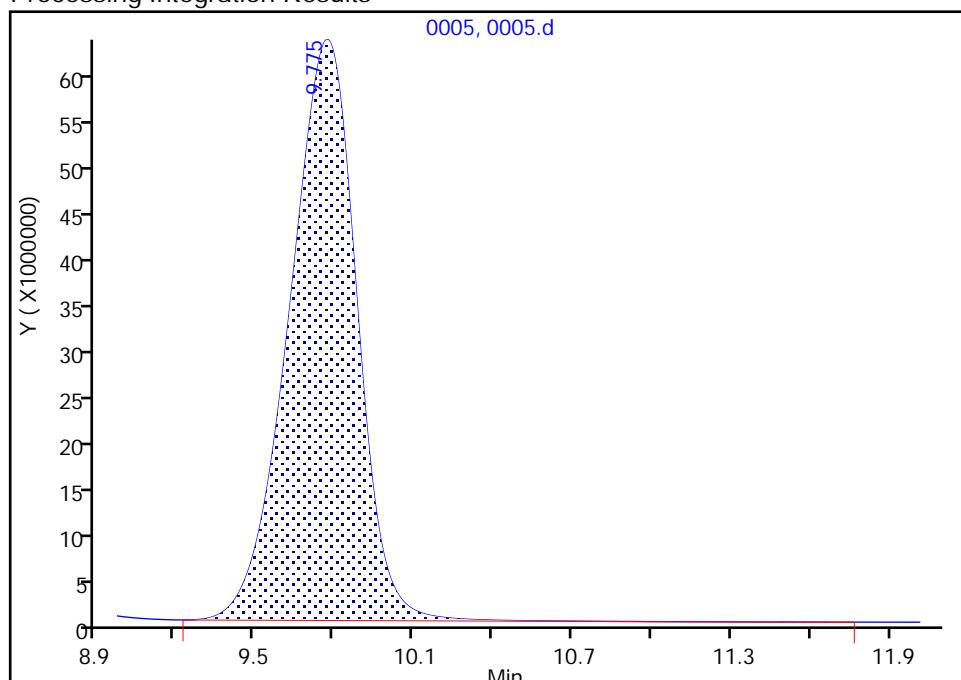
Client ID:  
 Operator ID:                                    ALS Bottle#: 0      Worklist Smp#: 5  
 Injection Vol: 10.0 ul                        Dil. Factor: 1.0000  
 Method: Anions\_IC11                         Limit Group: Wet - Anions 28D  
 Column:                                         Detector: 0005

**6 Sulfate, CAS: 14808-79-8**

Signal: 1

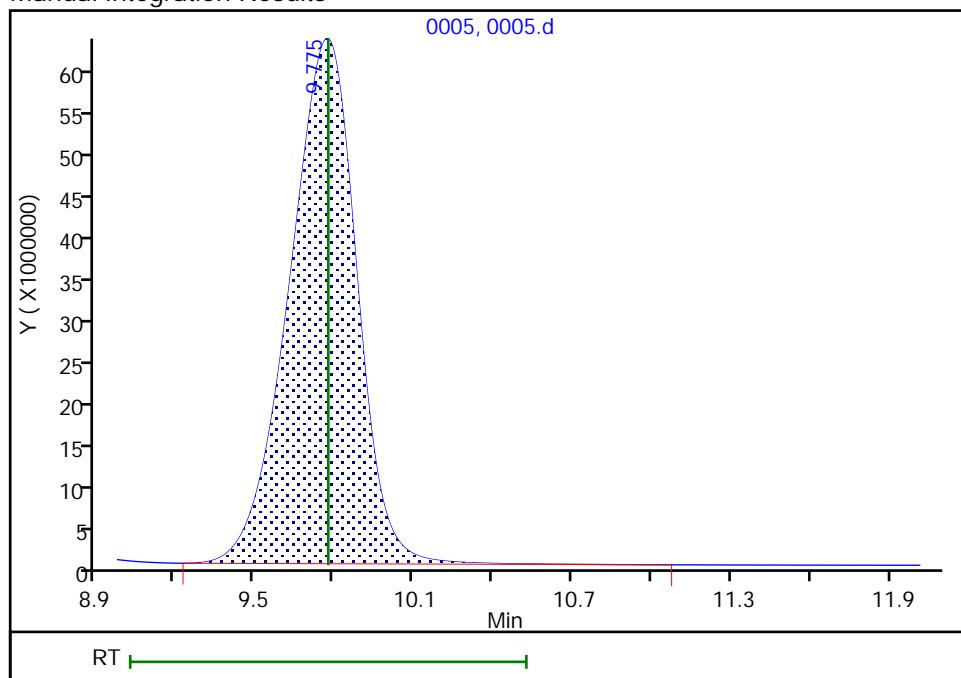
RT: 9.78  
 Area: 1129546557  
 Amount: 0  
 Amount Units: ug/ml

## Processing Integration Results



RT: 9.78  
 Area: 1129226271  
 Amount: 96.532591  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: jindarac, 24-Nov-2021 16:09:19

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211124-106781.b\0006.d  
 Lims ID: MB  
 Client ID:  
 Sample Type: MB  
 Inject. Date: 24-Nov-2021 11:38:00 ALS Bottle#: 0 Worklist Smp#: 6  
 Injection Vol: 10.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-0106781-006  
 Operator ID: Instrument ID: WC\_IonChrom11  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211124-106781.b\Anions\_IC11.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 24-Nov-2021 16:12:49 Calib Date: 14-Nov-2021 18:51:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\0009.d  
 Column 1 : Det: 0005  
 Process Host: CTX1652

First Level Reviewer: jindaracr Date: 24-Nov-2021 16:09:33

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.475				ND		
2 Chloride	3.700				ND	U	
3 Nitrite as N	4.442				ND	U	
4 Bromide	5.325				ND		
5 Nitrate as N	6.009				ND		
7 Orthophosphate as P	8.767				ND		
6 Sulfate	9.775				ND		

### QC Flag Legend

Processing Flags

Review Flags

U - Marked Undetected

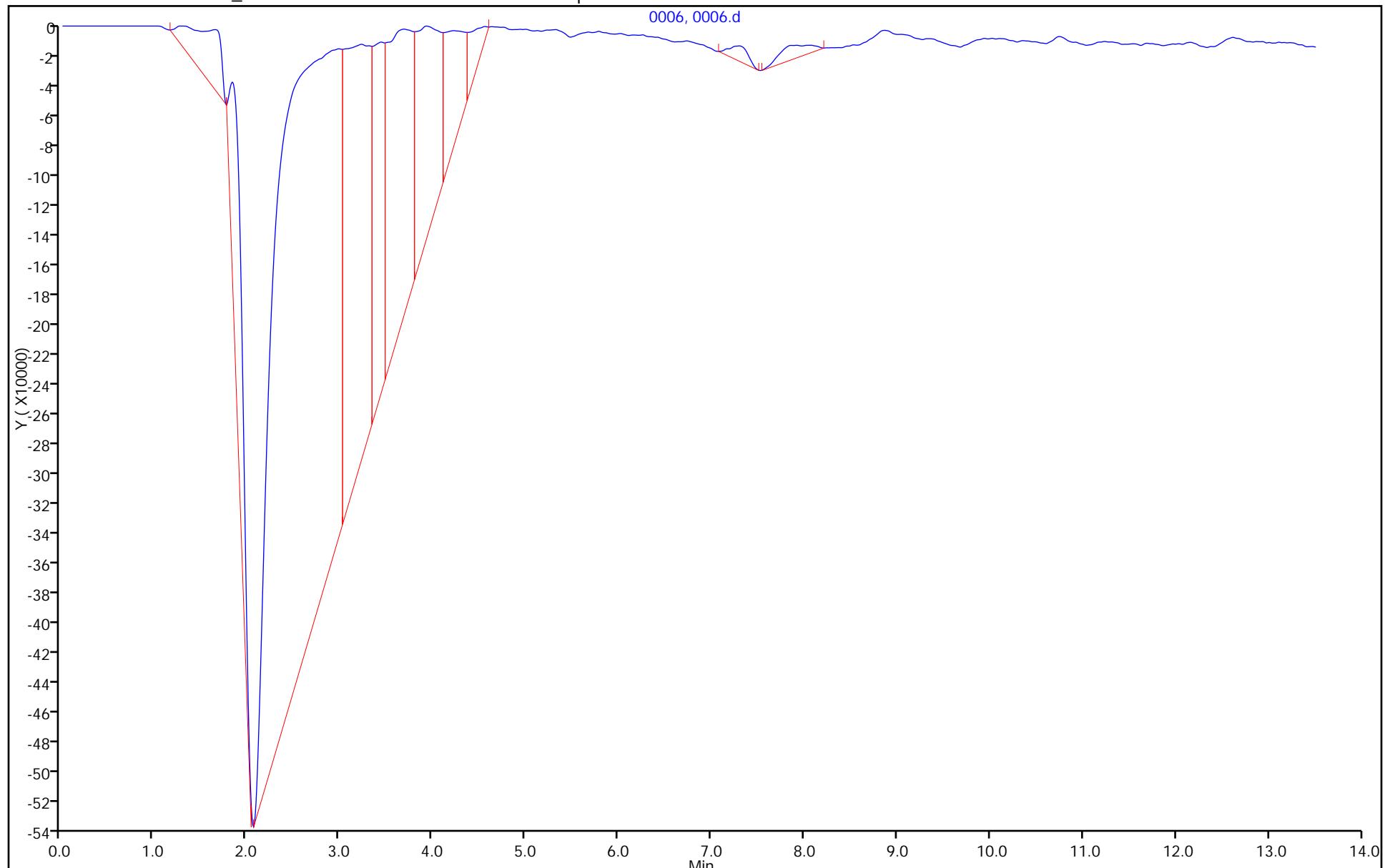
Report Date: 24-Nov-2021 16:12:49

Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211124-106781.b\0006.d  
Injection Date: 24-Nov-2021 11:38:00 Instrument ID: WC\_IonChrom11  
Lims ID: MB Operator ID:  
Client ID:  
Injection Vol: 10.0 ul ALS Bottle#: 0  
Method: Anions\_IC11 Dil. Factor: 1.0000  
Limit Group: Wet - Anions 28D

Worklist Smp#: 6



Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211124-106781.b\0011.d  
 Lims ID: 280-155048-F-4  
 Client ID: G0076-7  
 Sample Type: Client  
 Inject. Date: 24-Nov-2021 13:00:00 ALS Bottle#: 0 Worklist Smp#: 11  
 Injection Vol: 10.0 ul Dil. Factor: 5.0000  
 Sample Info: 280-0106781-011  
 Misc. Info.: 16194  
 Operator ID: Instrument ID: WC\_IonChrom11  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211124-106781.b\Anions\_IC11.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 24-Nov-2021 16:12:49 Calib Date: 14-Nov-2021 18:51:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICAL File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\0009.d

Column 1 : Det: 0005

Process Host: CTX1652

First Level Reviewer: jindarac Date: 24-Nov-2021 16:10:03

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride		2.475			ND	U
2 Chloride	3.626	3.700	-0.074	139284251	8.42	
3 Nitrite as N	4.392	4.442	-0.050	2812058	NC	
4 Bromide	5.317	5.325	-0.008	1165319	0.2379	
5 Nitrate as N	5.992	6.009	-0.017	317826	NC	
7 Orthophosphate as P	8.934	8.767	0.167	331301	NC	
6 Sulfate	9.767	9.775	-0.008	650728202	55.9	

### QC Flag Legend

#### Processing Flags

NC - Not Calibrated

#### Review Flags

U - Marked Undetected

Report Date: 24-Nov-2021 16:12:51

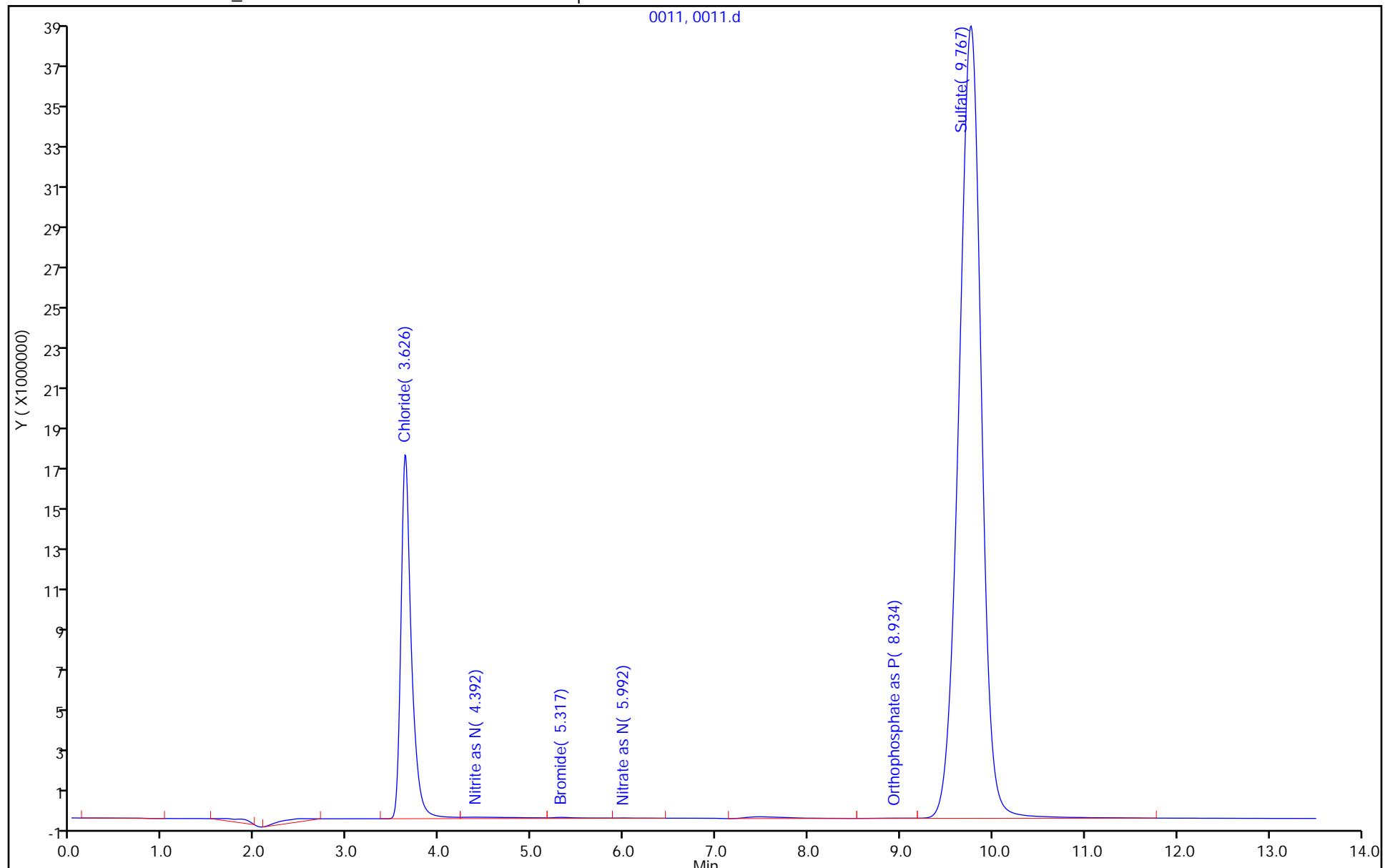
Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211124-106781.b\0011.d  
Injection Date: 24-Nov-2021 13:00:00 Instrument ID: WC\_IonChrom11  
Lims ID: 280-155048-F-4 Lab Sample ID: 280-155048-4  
Client ID: G0076-7  
Injection Vol: 10.0 ul Dil. Factor: 5.0000  
Method: Anions\_IC11 Limit Group: Wet - Anions 28D

Operator ID:  
Worklist Smp#: 11

ALS Bottle#: 0



Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211124-106781.b\0012.d  
 Lims ID: 280-155048-F-6  
 Client ID: CA210-7  
 Sample Type: Client  
 Inject. Date: 24-Nov-2021 13:16:00 ALS Bottle#: 0 Worklist Smp#: 12  
 Injection Vol: 10.0 ul Dil. Factor: 5.0000  
 Sample Info: 280-0106781-012  
 Misc. Info.: 8641  
 Operator ID: Instrument ID: WC\_IonChrom11  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211124-106781.b\Anions\_IC11.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 24-Nov-2021 16:12:49 Calib Date: 14-Nov-2021 18:51:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICAL File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\0009.d  
 Column 1 : Det: 0005  
 Process Host: CTX1652

First Level Reviewer: jindarac Date: 24-Nov-2021 16:10:40

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride		2.475			ND	U
2 Chloride	3.642	3.700	-0.058	550502806	31.3	M
3 Nitrite as N	4.392	4.442	-0.050	928424	NC	M
4 Bromide	5.309	5.325	-0.016	282981	0.0757	M
5 Nitrate as N	6.009	6.009	0.000	181973617	NC	M
7 Orthophosphate as P	8.934	8.767	0.167	963621	NC	
6 Sulfate	9.750	9.775	-0.025	478370390	41.2	

### QC Flag Legend

#### Processing Flags

NC - Not Calibrated

#### Review Flags

M - Manually Integrated

U - Marked Undetected

Report Date: 24-Nov-2021 16:12:52

Chrom Revision: 2.3 15-Nov-2021 20:34:30

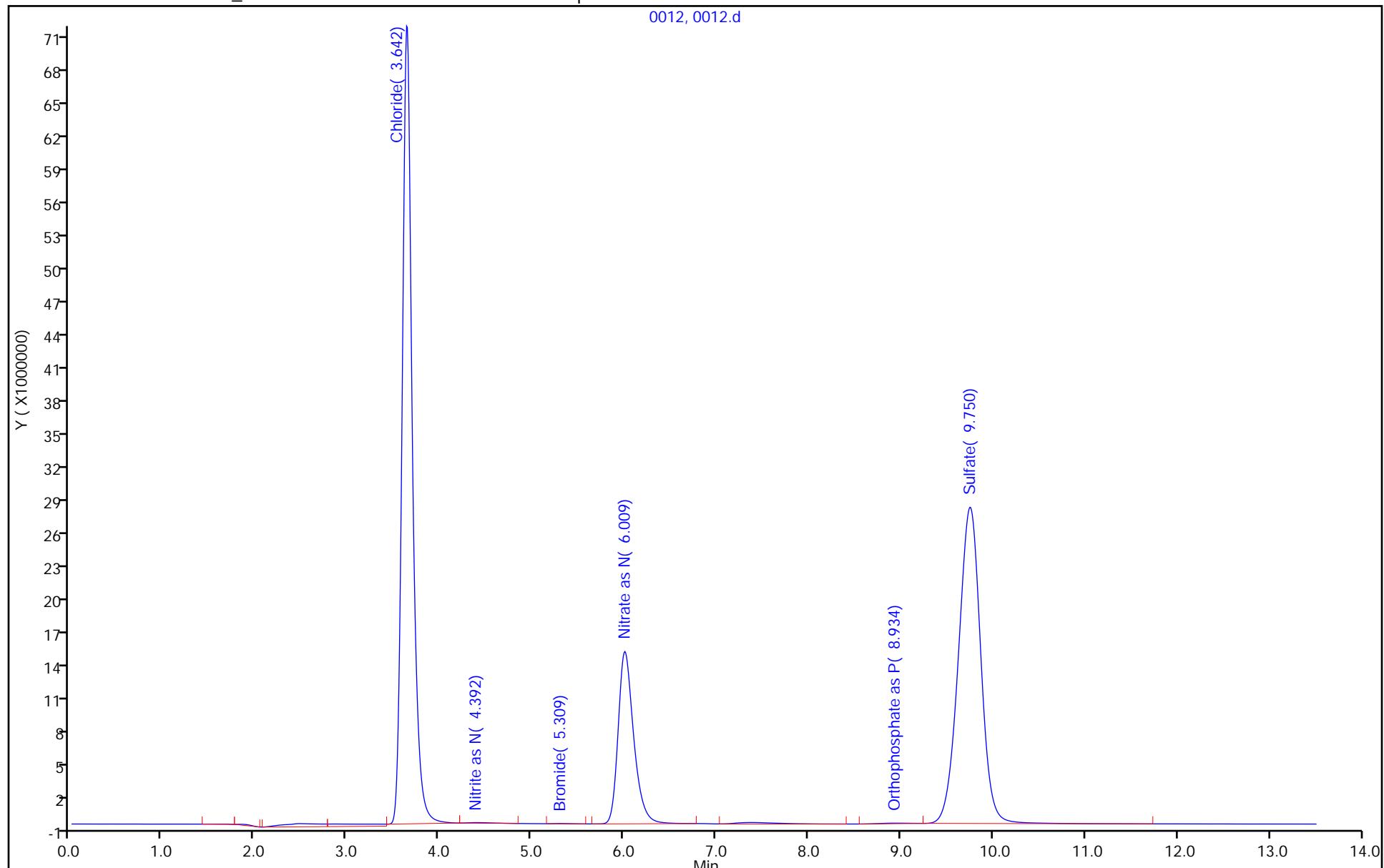
Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211124-106781.b\0012.d  
Injection Date: 24-Nov-2021 13:16:00 Instrument ID: WC\_IonChrom11  
Lims ID: 280-155048-F-6 Lab Sample ID: 280-155048-6  
Client ID: CA210-7  
Injection Vol: 10.0 ul Dil. Factor: 5.0000  
Method: Anions\_IC11 Limit Group: Wet - Anions 28D

Operator ID:  
Worklist Smp#: 12

ALS Bottle#: 0

0012, 0012.d



Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211124-106781.b\0017.d  
 Lims ID: ccv  
 Client ID:  
 Sample Type: CCV  
 Inject. Date: 24-Nov-2021 14:38:00 ALS Bottle#: 0 Worklist Smp#: 17  
 Injection Vol: 10.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-0106781-017  
 Misc. Info.: 12218  
 Operator ID: Instrument ID: WC\_IonChrom11  
 Sublist: chrom-Anions\_IC11\*sub1  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211124-106781.b\Anions\_IC11.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 24-Nov-2021 16:12:53 Calib Date: 14-Nov-2021 18:51:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\0009.d  
 Column 1 : Det: 0005  
 Process Host: CTX1652

First Level Reviewer: jindarac Date: 24-Nov-2021 16:11:31

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.475	2.475	0.000	80447400	5.00	4.92	
2 Chloride	3.692	3.700	-0.008	1740508149	100.0	97.7	
3 Nitrite as N	4.434	4.442	-0.008	145240404	NC	NC	
4 Bromide	5.309	5.325	-0.016	24438420	5.00	4.52	
5 Nitrate as N	5.992	6.009	-0.017	161682681	NC	NC	M
7 Orthophosphate as P	8.759	8.767	-0.008	31237849	NC	NC	
6 Sulfate	9.775	9.775	0.000	1133550446	100.0	96.9	M

### QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

### Reagents:

IC LCS\_01846

Amount Added: 5.00

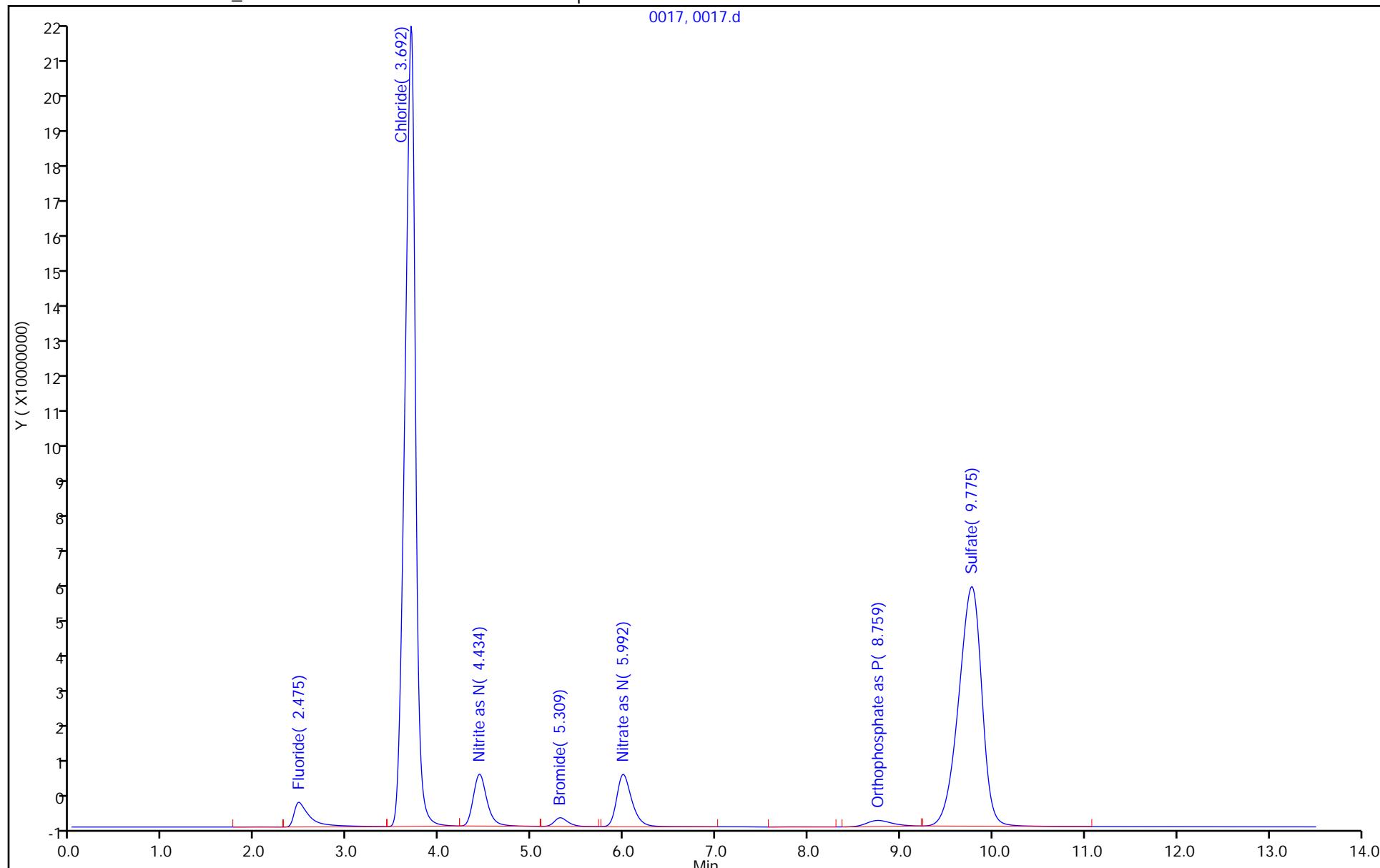
Units: mL

Report Date: 24-Nov-2021 16:12:53

Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211124-106781.b\0017.d  
Injection Date: 24-Nov-2021 14:38:00 Instrument ID: WC\_IonChrom11  
Lims ID: ccv Operator ID:  
Client ID:  
Injection Vol: 10.0 ul Worklist Smp#: 17  
Method: Anions\_IC11 Dil. Factor: 1.0000  
Limit Group: Wet - Anions 28D



Eurofins TestAmerica, Denver

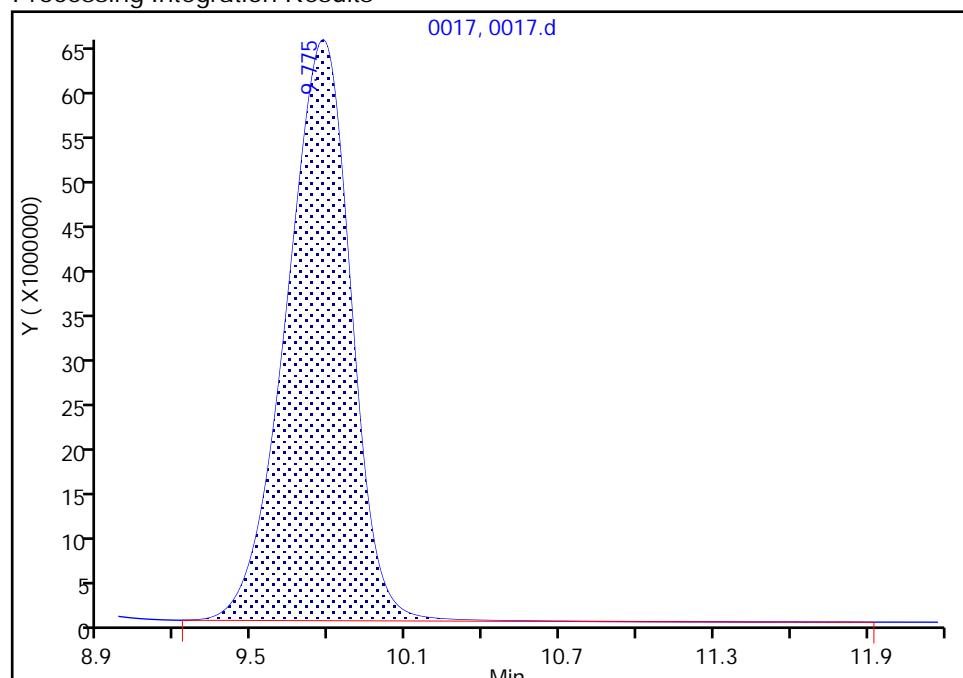
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211124-106781.b\0017.d  
 Injection Date: 24-Nov-2021 14:38:00 Instrument ID: WC\_IonChrom11  
 Lims ID: ccv  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 17  
 Injection Vol: 10.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC11 Limit Group: Wet - Anions 28D  
 Column: Detector 0005

**6 Sulfate, CAS: 14808-79-8**

Signal: 1

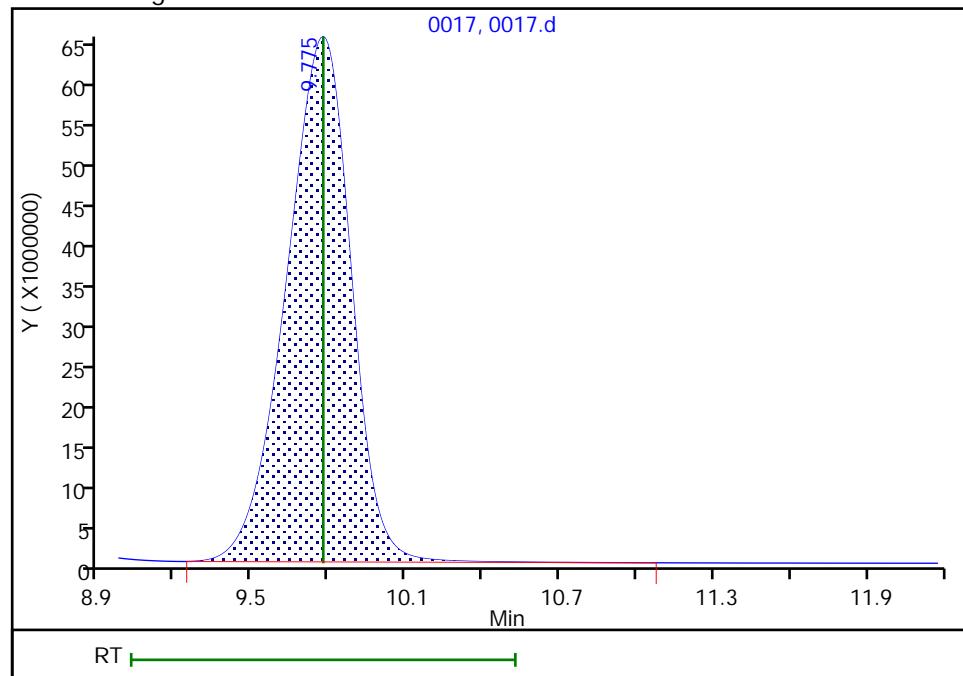
RT: 9.78  
 Area: 1134067304  
 Amount: 0  
 Amount Units: ug/ml

Processing Integration Results



RT: 9.78  
 Area: 1133550446  
 Amount: 96.899944  
 Amount Units: ug/ml

Manual Integration Results



Reviewer: jindarac, 24-Nov-2021 16:11:28

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211124-106781.b\0018.d  
 Lims ID: ccb  
 Client ID:  
 Sample Type: CCB  
 Inject. Date: 24-Nov-2021 14:55:00      ALS Bottle#: 0      Worklist Smp#: 18  
 Injection Vol: 10.0 ul      Dil. Factor: 1.0000  
 Sample Info: 280-0106781-018  
 Misc. Info.: 568  
 Operator ID:      Instrument ID: WC\_IonChrom11  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211124-106781.b\Anions\_IC11.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 24-Nov-2021 16:12:53      Calib Date: 14-Nov-2021 18:51:00  
 Integrator: Falcon  
 Quant Method: External Standard      Quant By: Initial Calibration  
 Last ICAL File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211114-106493.b\0009.d  
 Column 1 :      Det: 0005  
 Process Host: CTX1652

First Level Reviewer: jindarac Date: 24-Nov-2021 16:11:44

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		2.475			ND		U
2 Chloride		3.700			ND		U
3 Nitrite as N		4.442			ND		U
4 Bromide		5.325			ND		
5 Nitrate as N		6.009			ND		
7 Orthophosphate as P	8.800	8.767	0.033	156124		NC	
6 Sulfate		9.775			ND		

### QC Flag Legend

#### Processing Flags

NC - Not Calibrated

#### Review Flags

U - Marked Undetected

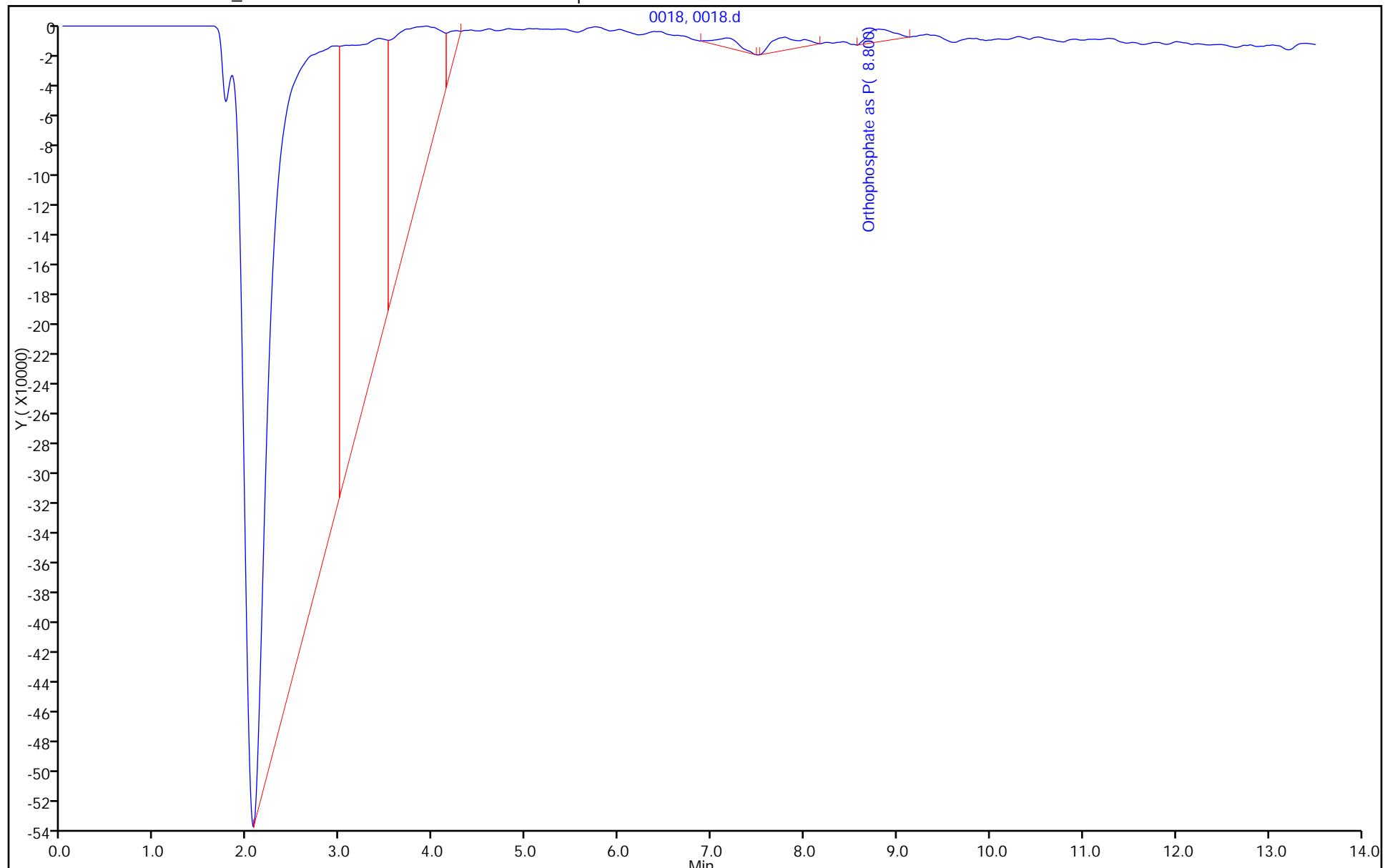
Report Date: 24-Nov-2021 16:12:53

Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom11\20211124-106781.b\0018.d  
Injection Date: 24-Nov-2021 14:55:00 Instrument ID: WC\_IonChrom11  
Lims ID: ccb Operator ID:  
Client ID:  
Injection Vol: 10.0 ul ALS Bottle#: 0  
Method: Anions\_IC11 Dil. Factor: 1.0000  
Limit Group: Wet - Anions 28D

Worklist Smp#: 18



Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0004.d  
 Lims ID: std L1  
 Client ID:  
 Sample Type: IC Calib Level: 1  
 Inject. Date: 11-Nov-2021 16:07:00 ALS Bottle#: 0 Worklist Smp#: 4  
 Injection Vol: 25.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-0106412-004  
 Operator ID: Instrument ID: WC\_IonChrom7  
 Sublist: chrom-Anions\_IC7\*sub1  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\Anions\_IC7.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 12-Nov-2021 12:39:24 Calib Date: 11-Nov-2021 17:21:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0009.d  
 Column 1 : Det: 0005  
 Process Host: CTX1631

First Level Reviewer: jindarac Date: 11-Nov-2021 16:35:17

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.667	2.550	0.117	4793414	0.2000	0.2301	M
2 Chloride	3.959	3.875	0.084	9542066	1.00	1.40	Ma
3 Nitrite as N	4.834	4.642	0.192	4295391	NC	NC	Ma
4 Bromide	5.842	5.575	0.267	981237	0.2000	0.2724	Ma
5 Nitrate as N	6.659	6.334	0.325	5057387	NC	NC	Ma
7 Orthophosphate as P	9.909	9.500	0.409	2289343	NC	NC	a
6 Sulfate	10.950	10.609	0.341	6703021	1.00	1.33	a

### QC Flag Legend

#### Processing Flags

NC - Not Calibrated

#### Review Flags

M - Manually Integrated

a - User Assigned ID

### Reagents:

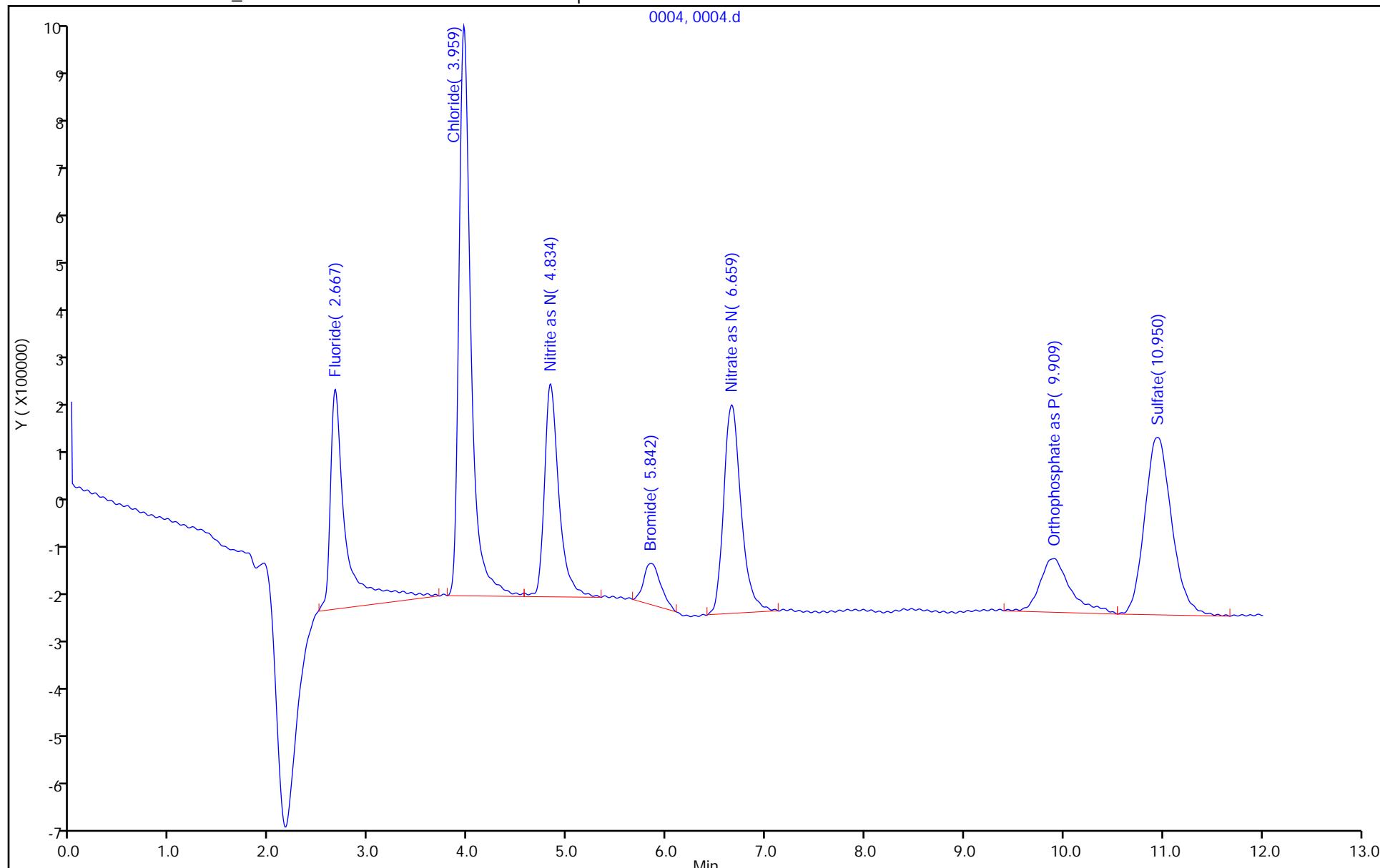
IC Cal low_00607	Amount Added: 0.02	Units: mL
IC CAL cl/so4_00393	Amount Added: 0.02	Units: mL

Report Date: 12-Nov-2021 12:39:24

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0004.d  
Injection Date: 11-Nov-2021 16:07:00 Instrument ID: WC\_IonChrom7  
Lims ID: std L1 Operator ID:  
Client ID:  
Injection Vol: 25.0 ul Worklist Smp#: 4  
Method: Anions\_IC7 Dil. Factor: 1.0000  
Limit Group: Wet - Anions 28D



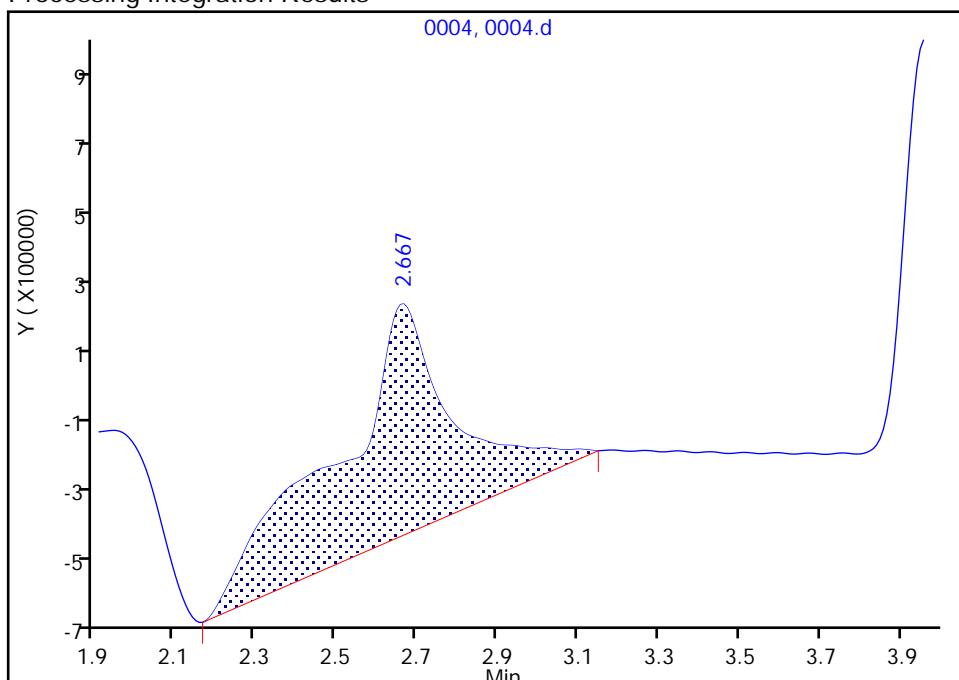
## Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0004.d  
 Injection Date: 11-Nov-2021 16:07:00 Instrument ID: WC\_IonChrom7  
 Lims ID: std L1  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 4  
 Injection Vol: 25.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC7 Limit Group: Wet - Anions 28D  
 Column: Detector 0005

**1 Fluoride, CAS: 16984-48-8**  
Signal: 1

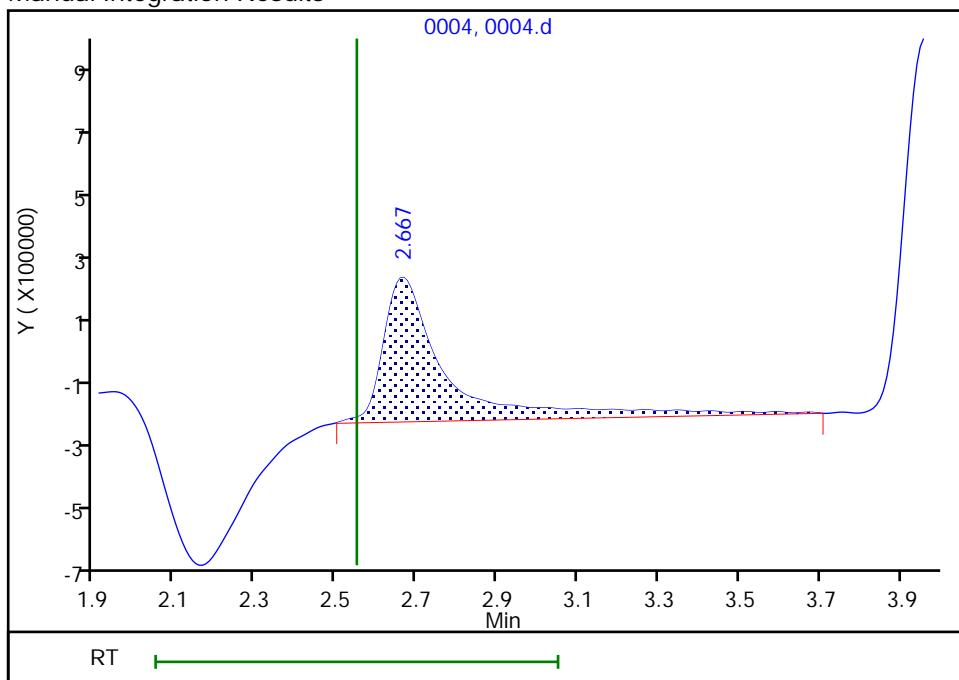
RT: 2.67  
 Area: 12914824  
 Amount: 0.428088  
 Amount Units: ug/ml

## Processing Integration Results



RT: 2.67  
 Area: 4793414  
 Amount: 0.230072  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: jindarac, 11-Nov-2021 18:07:36

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

## Eurofins TestAmerica, Denver

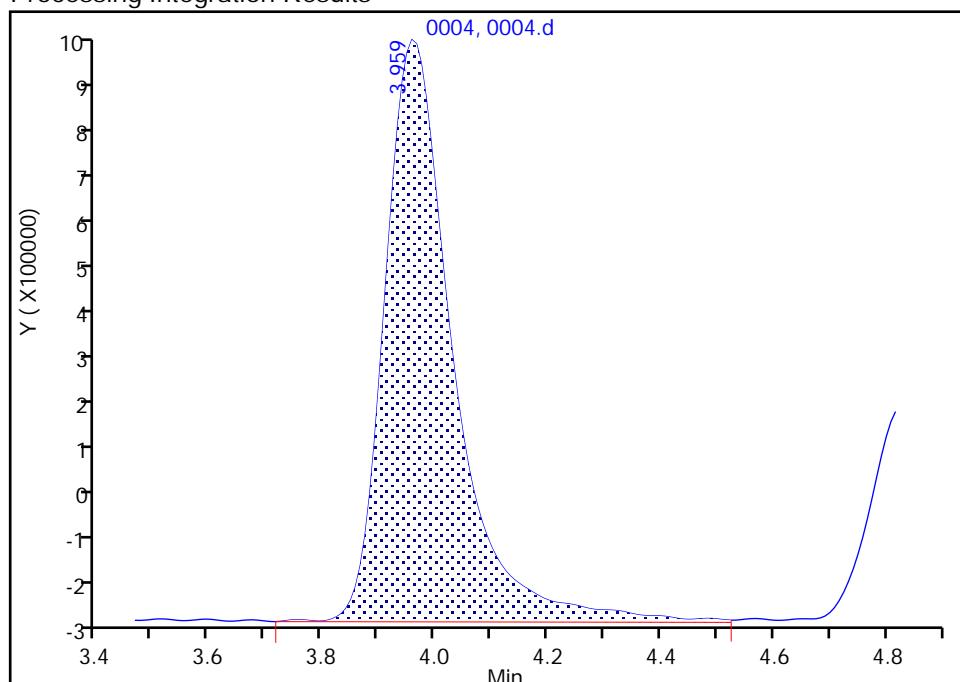
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0004.d  
 Injection Date: 11-Nov-2021 16:07:00 Instrument ID: WC\_IonChrom7  
 Lims ID: std L1  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 4  
 Injection Vol: 25.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC7 Limit Group: Wet - Anions 28D  
 Column: Detector 0005

## 2 Chloride, CAS: 16887-00-6

Signal: 1

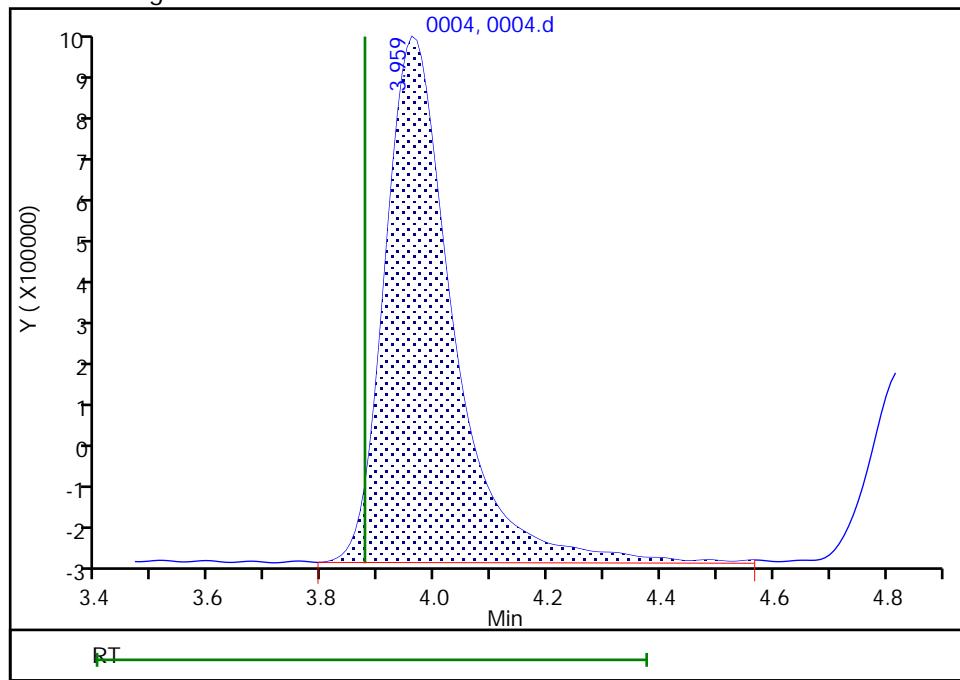
RT: 3.96  
 Area: 9576235  
 Amount: 1.401067  
 Amount Units: ug/ml

## Processing Integration Results



RT: 3.96  
 Area: 9542066  
 Amount: 1.401170  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: gonzalezsp, 12-Nov-2021 07:10:01

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline Smoothing

## Eurofins TestAmerica, Denver

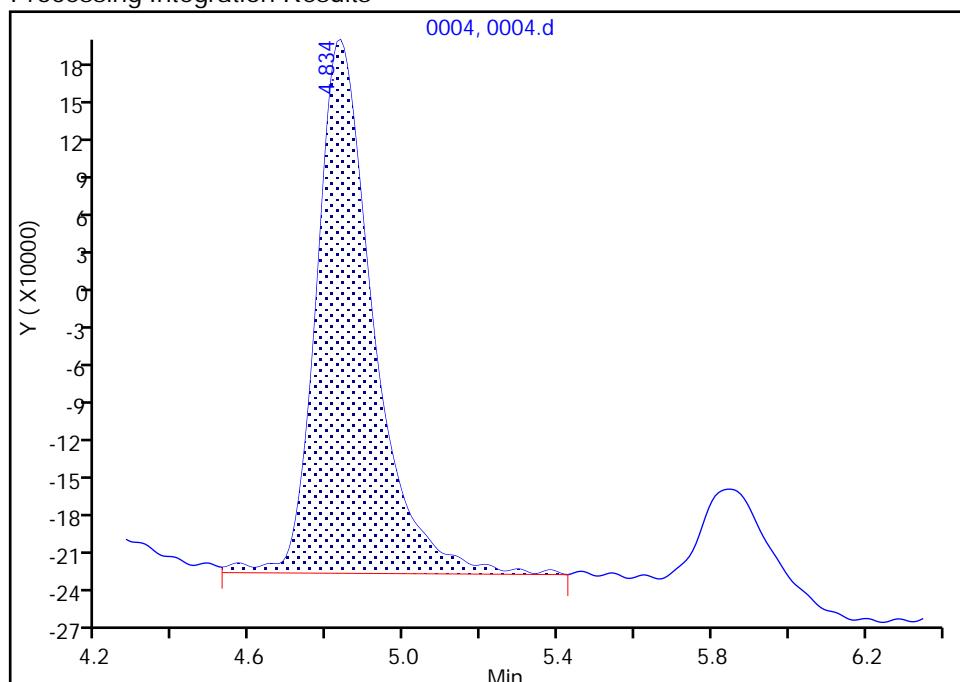
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0004.d  
 Injection Date: 11-Nov-2021 16:07:00 Instrument ID: WC\_IonChrom7  
 Lims ID: std L1  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 4  
 Injection Vol: 25.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC7 Limit Group: Wet - Anions 28D  
 Column: Detector 0005

**4 Bromide, CAS: 24959-67-9**

Signal: 1

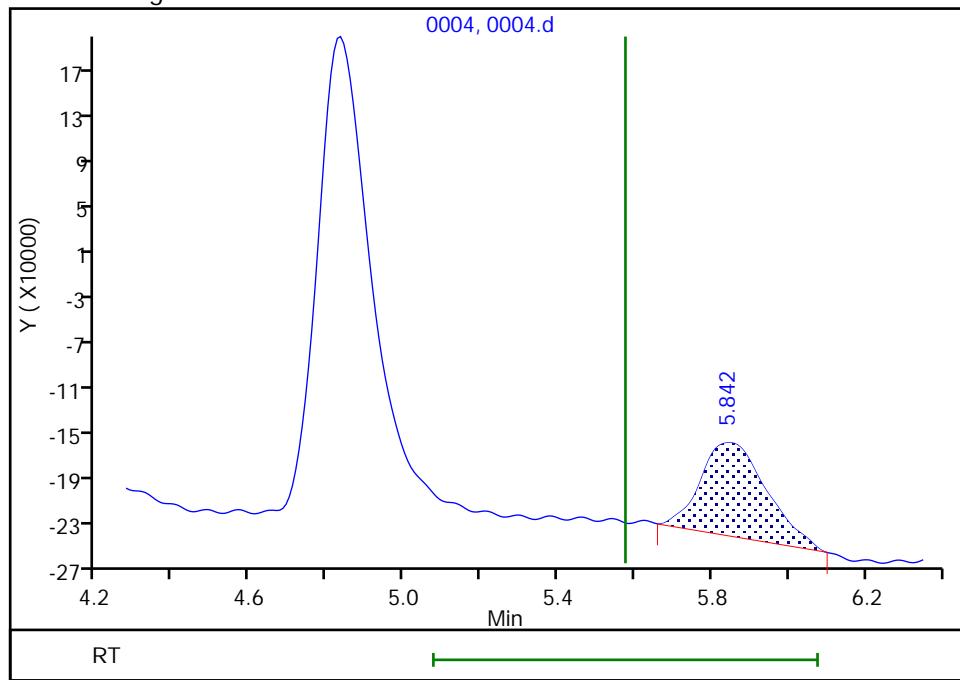
RT: 4.83  
 Area: 4343648  
 Amount: 0.467406  
 Amount Units: ug/ml

## Processing Integration Results



RT: 5.84  
 Area: 981237  
 Amount: 0.272431  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: gonzalezsp, 12-Nov-2021 07:09:16

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

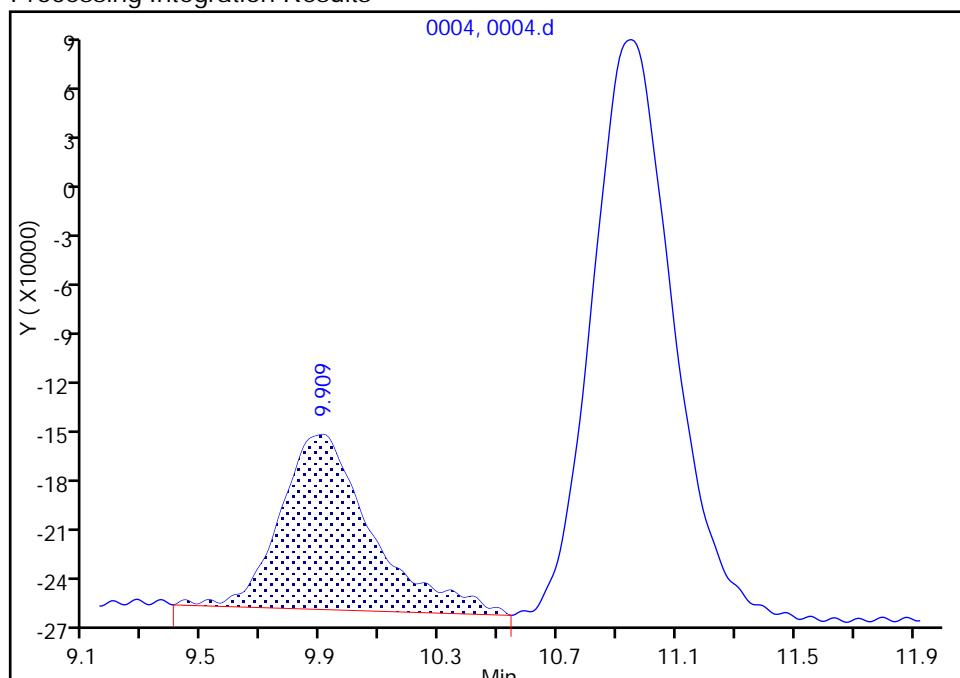
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0004.d  
 Injection Date: 11-Nov-2021 16:07:00 Instrument ID: WC\_IonChrom7  
 Lims ID: std L1  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 4  
 Injection Vol: 25.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC7 Limit Group: Wet - Anions 28D  
 Column: Detector 0005

**6 Sulfate, CAS: 14808-79-8**

Signal: 1

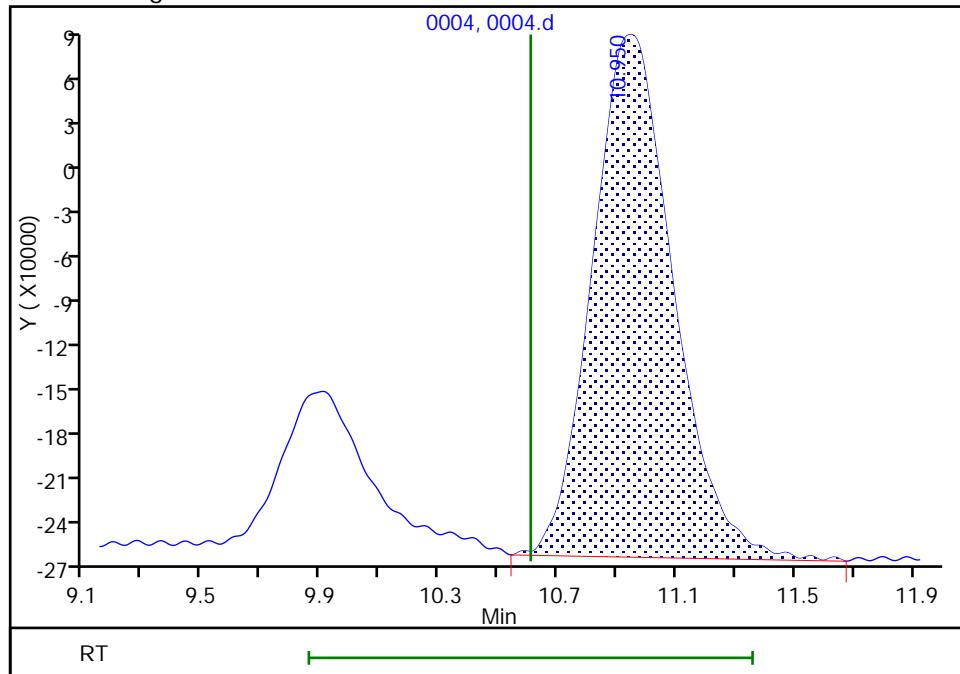
RT: 9.91  
 Area: 2289343  
 Amount: 1.184767  
 Amount Units: ug/ml

## Processing Integration Results



RT: 10.95  
 Area: 6703021  
 Amount: 1.328002  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: jindarac, 11-Nov-2021 16:35:10

Audit Action: Assigned Compound ID

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0005.d  
 Lims ID: std L2  
 Client ID:  
 Sample Type: IC Calib Level: 2  
 Inject. Date: 11-Nov-2021 16:22:00 ALS Bottle#: 0 Worklist Smp#: 5  
 Injection Vol: 25.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-0106412-005  
 Operator ID: Instrument ID: WC\_IonChrom7  
 Sublist: chrom-Anions\_IC7\*sub1  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\Anions\_IC7.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 12-Nov-2021 12:39:25 Calib Date: 11-Nov-2021 17:21:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0009.d  
 Column 1 : Det: 0005  
 Process Host: CTX1631

First Level Reviewer: jindarac Date: 11-Nov-2021 17:23:20

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.626	2.550	0.076	10060494	0.5000	0.4992	M
2 Chloride	3.901	3.875	0.026	23647287	2.50	2.29	M
3 Nitrite as N	4.776	4.642	0.134	11675992	NC	NC	Ma
4 Bromide	5.792	5.575	0.217	2019782	0.5000	0.4091	a
5 Nitrate as N	6.584	6.334	0.250	13130713	NC	NC	a
7 Orthophosphate as P	9.884	9.500	0.384	4849096	NC	NC	Ma
6 Sulfate	10.976	10.609	0.367	16935139	2.50	2.35	a

### QC Flag Legend

#### Processing Flags

NC - Not Calibrated

#### Review Flags

M - Manually Integrated

a - User Assigned ID

### Reagents:

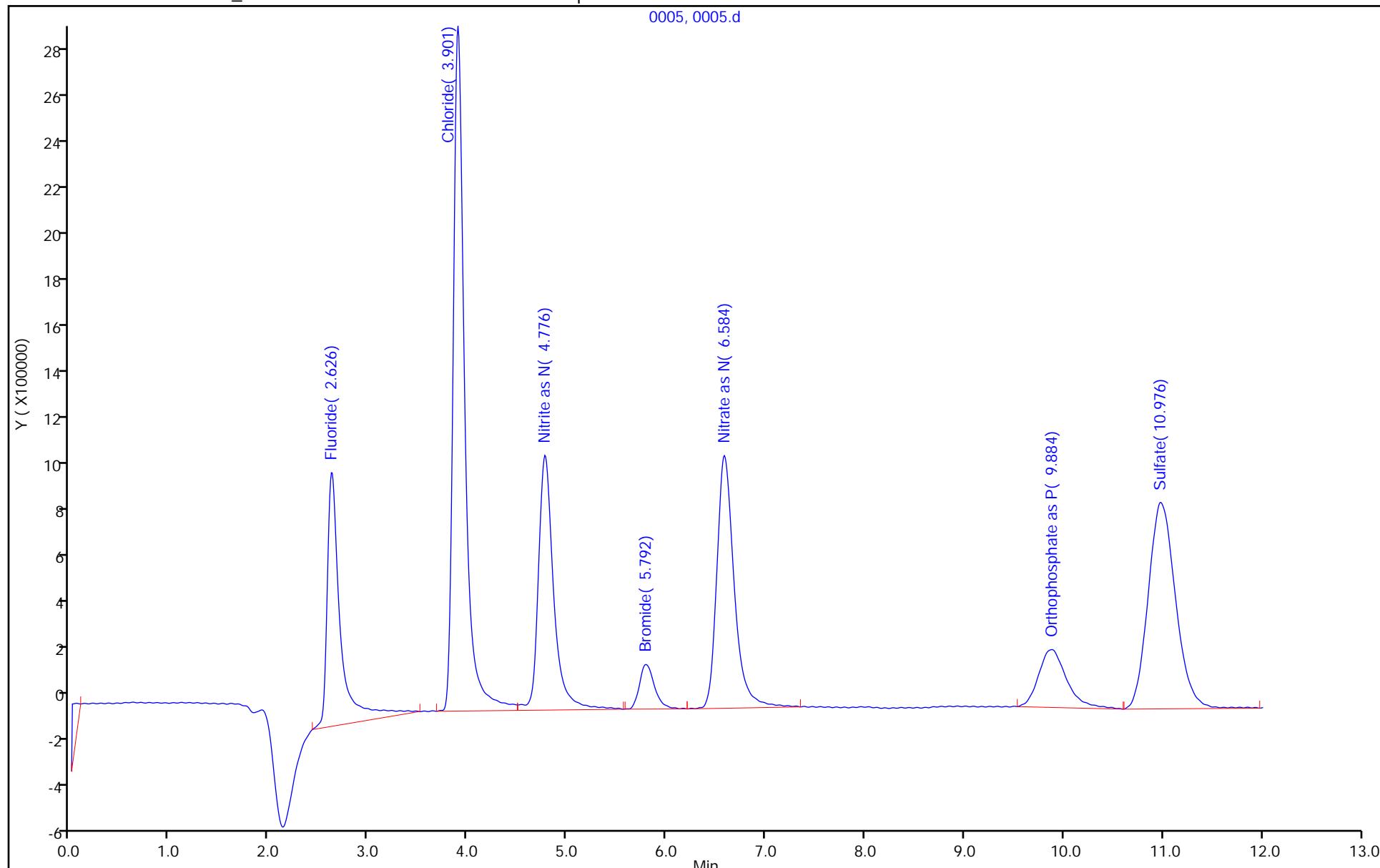
IC CAL cl/so4_00393	Amount Added: 0.05	Units: mL
IC Cal low_00607	Amount Added: 0.05	Units: mL

Report Date: 12-Nov-2021 12:39:25

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0005.d  
Injection Date: 11-Nov-2021 16:22:00 Instrument ID: WC\_IonChrom7  
Lims ID: std L2 Operator ID:  
Client ID:  
Injection Vol: 25.0 ul Worklist Smp#: 5  
Method: Anions\_IC7 Dil. Factor: 1.0000  
Limit Group: Wet - Anions 28D ALS Bottle#: 0



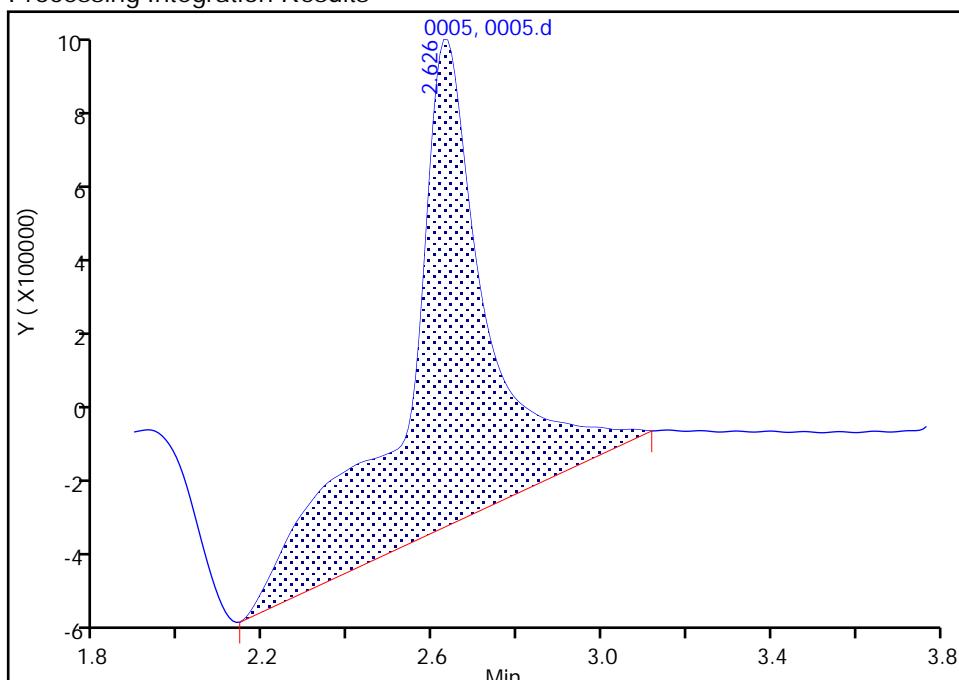
## Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0005.d  
 Injection Date: 11-Nov-2021 16:22:00 Instrument ID: WC\_IonChrom7  
 Lims ID: std L2  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 5  
 Injection Vol: 25.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC7 Limit Group: Wet - Anions 28D  
 Column: Detector 0005

**1 Fluoride, CAS: 16984-48-8**  
Signal: 1

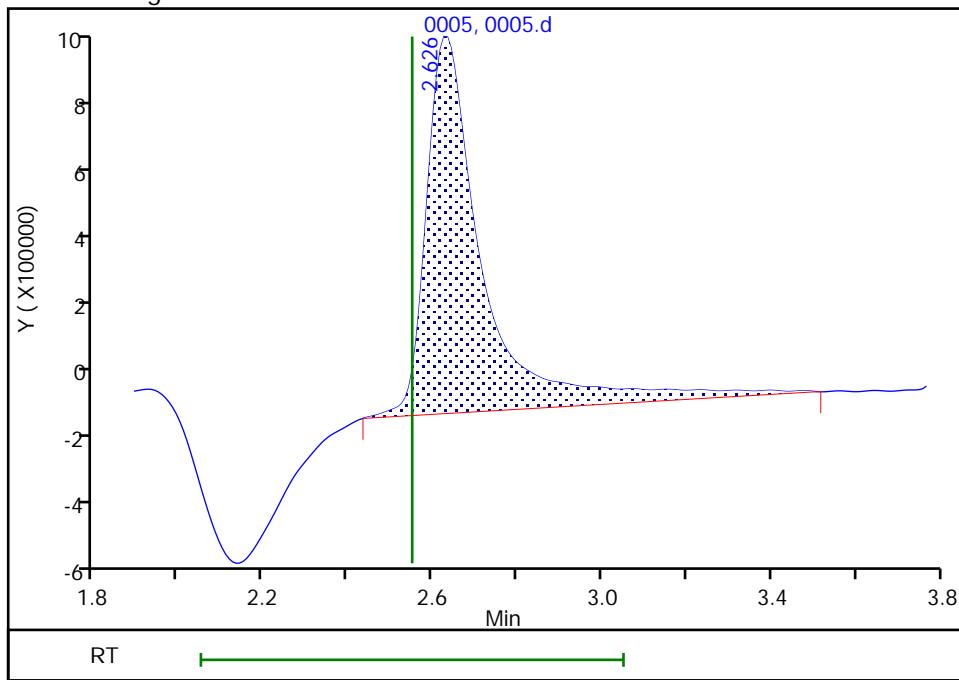
RT: 2.63  
 Area: 17443727  
 Amount: 0.855992  
 Amount Units: ug/ml

## Processing Integration Results



RT: 2.63  
 Area: 10060494  
 Amount: 0.499156  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: jindarac, 11-Nov-2021 18:07:49

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

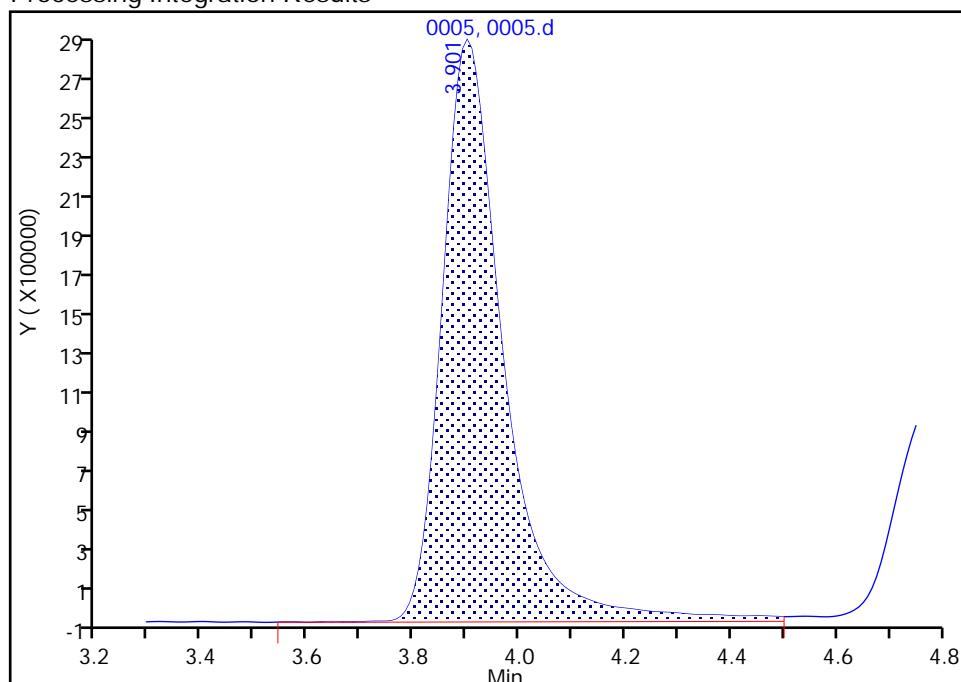
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0005.d  
 Injection Date: 11-Nov-2021 16:22:00 Instrument ID: WC\_IonChrom7  
 Lims ID: std L2  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 5  
 Injection Vol: 25.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC7 Limit Group: Wet - Anions 28D  
 Column: Detector 0005

**2 Chloride, CAS: 16887-00-6**

Signal: 1

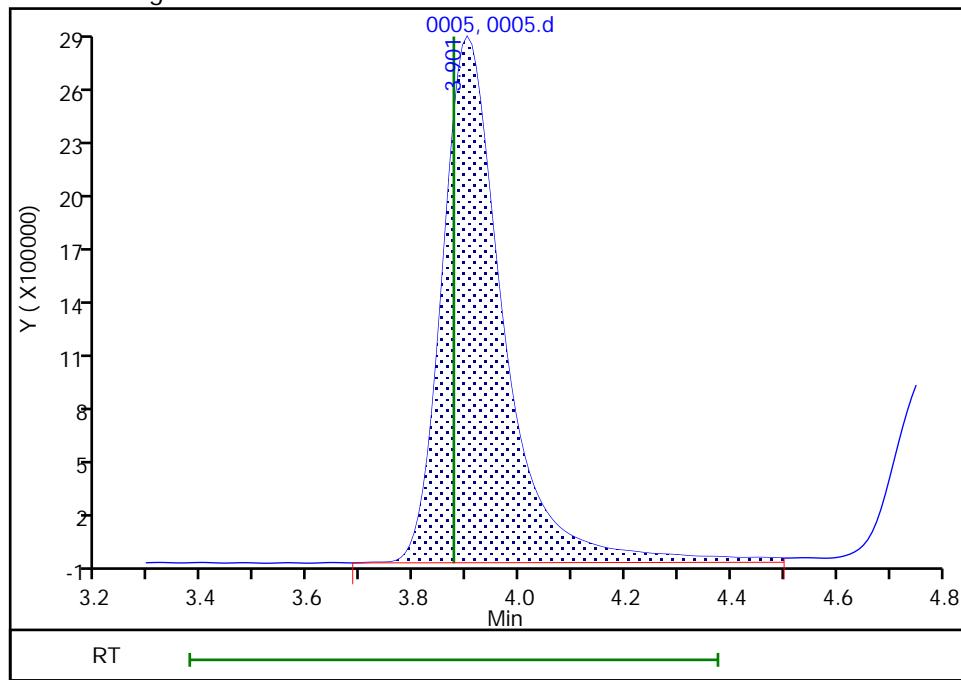
RT: 3.90  
 Area: 23693766  
 Amount: 2.295610  
 Amount Units: ug/ml

## Processing Integration Results



RT: 3.90  
 Area: 23647287  
 Amount: 2.293692  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: gonzalezsp, 12-Nov-2021 07:10:52

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

## Eurofins TestAmerica, Denver

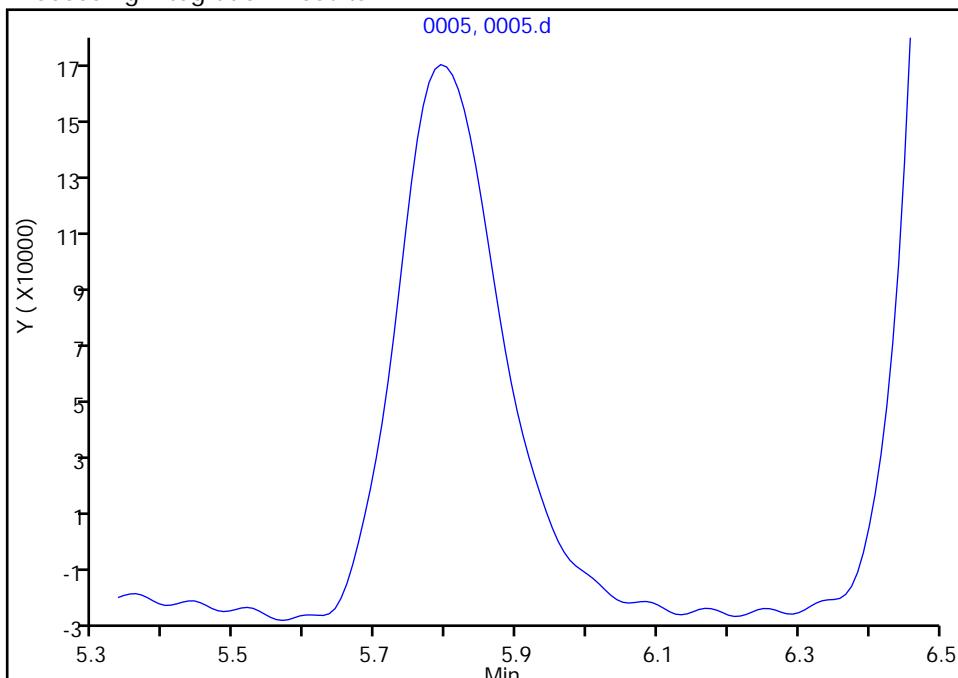
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0005.d  
 Injection Date: 11-Nov-2021 16:22:00 Instrument ID: WC\_IonChrom7  
 Lims ID: std L2  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 5  
 Injection Vol: 25.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC7 Limit Group: Wet - Anions 28D  
 Column: Detector 0005

**4 Bromide, CAS: 24959-67-9**

Signal: 1

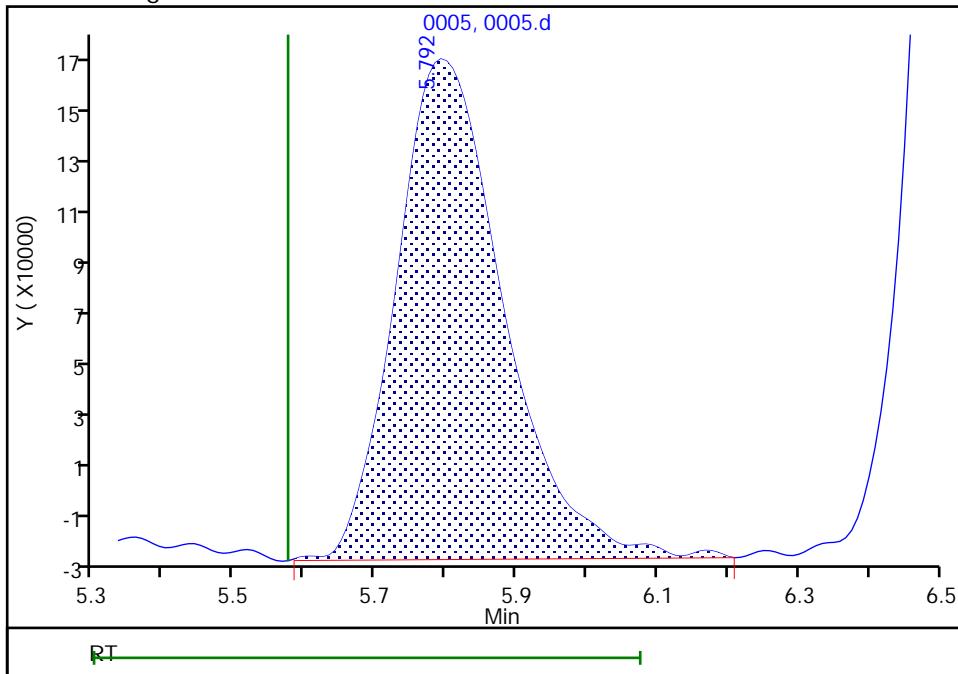
Not Detected  
 Expected RT: 5.58

## Processing Integration Results



RT: 5.79  
 Area: 2019782  
 Amount: 0.409091  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: jindarac, 11-Nov-2021 17:22:49

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Denver

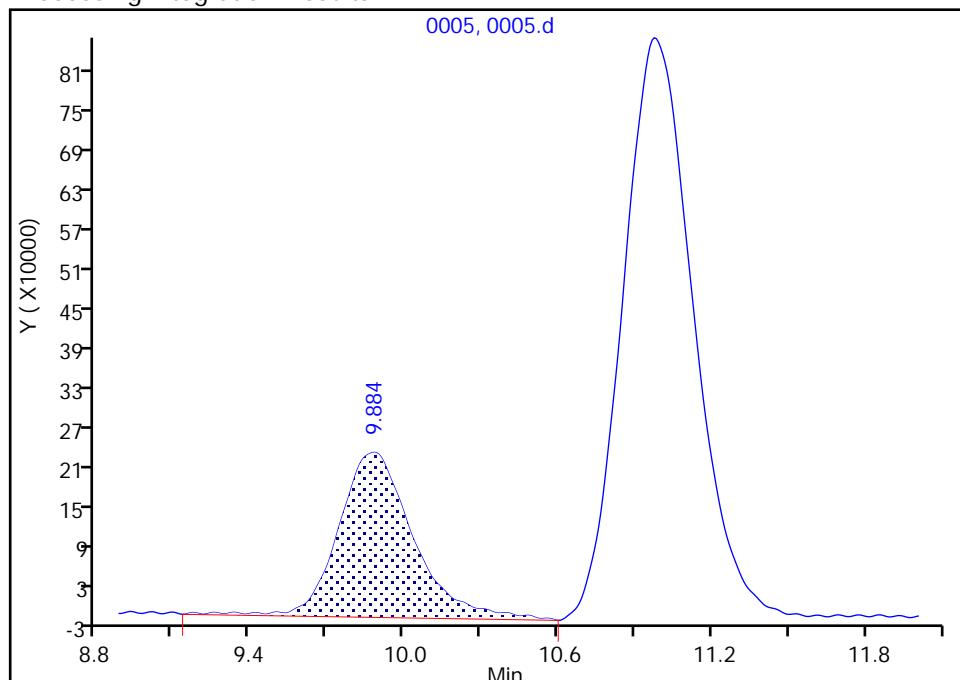
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0005.d  
 Injection Date: 11-Nov-2021 16:22:00 Instrument ID: WC\_IonChrom7  
 Lims ID: std L2  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 5  
 Injection Vol: 25.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC7 Limit Group: Wet - Anions 28D  
 Column: Detector 0005

**6 Sulfate, CAS: 14808-79-8**

Signal: 1

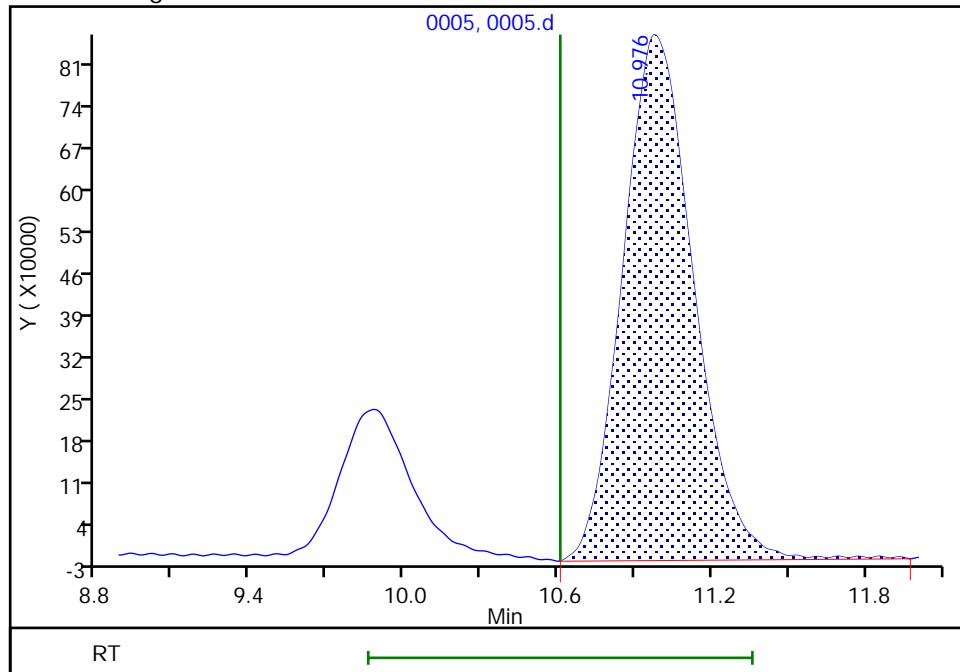
RT: 9.88  
 Area: 5054348  
 Amount: 1.485265  
 Amount Units: ug/ml

## Processing Integration Results



RT: 10.98  
 Area: 16935139  
 Amount: 2.350698  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: jindarac, 11-Nov-2021 17:22:44

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0006.d  
 Lims ID: std L3  
 Client ID:  
 Sample Type: IC Calib Level: 3  
 Inject. Date: 11-Nov-2021 16:36:00 ALS Bottle#: 0 Worklist Smp#: 6  
 Injection Vol: 25.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-0106412-006  
 Operator ID: Instrument ID: WC\_IonChrom7  
 Sublist: chrom-Anions\_IC7\*sub1  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\Anions\_IC7.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 12-Nov-2021 12:39:26 Calib Date: 11-Nov-2021 17:21:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0009.d  
 Column 1 : Det: 0005  
 Process Host: CTX1631

First Level Reviewer: jindarac Date: 11-Nov-2021 17:23:33

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.450	2.550	-0.100	17235087	1.00	0.8657	M
2 Chloride	3.650	3.875	-0.225	46454035	5.00	3.74	M
3 Nitrite as N	4.450	4.642	-0.192	22511791	NC	NC	
4 Bromide	5.384	5.575	-0.191	4502884	1.00	0.7358	
5 Nitrate as N	6.134	6.334	-0.200	25176971	NC	NC	
7 Orthophosphate as P	9.284	9.500	-0.216	9264397	NC	NC	
6 Sulfate	10.317	10.609	-0.292	33674025	5.00	4.02	

### QC Flag Legend

#### Processing Flags

NC - Not Calibrated

#### Review Flags

M - Manually Integrated

### Reagents:

IC CAL cl/so4_00393	Amount Added: 0.10	Units: mL
IC Cal low_00607	Amount Added: 0.10	Units: mL

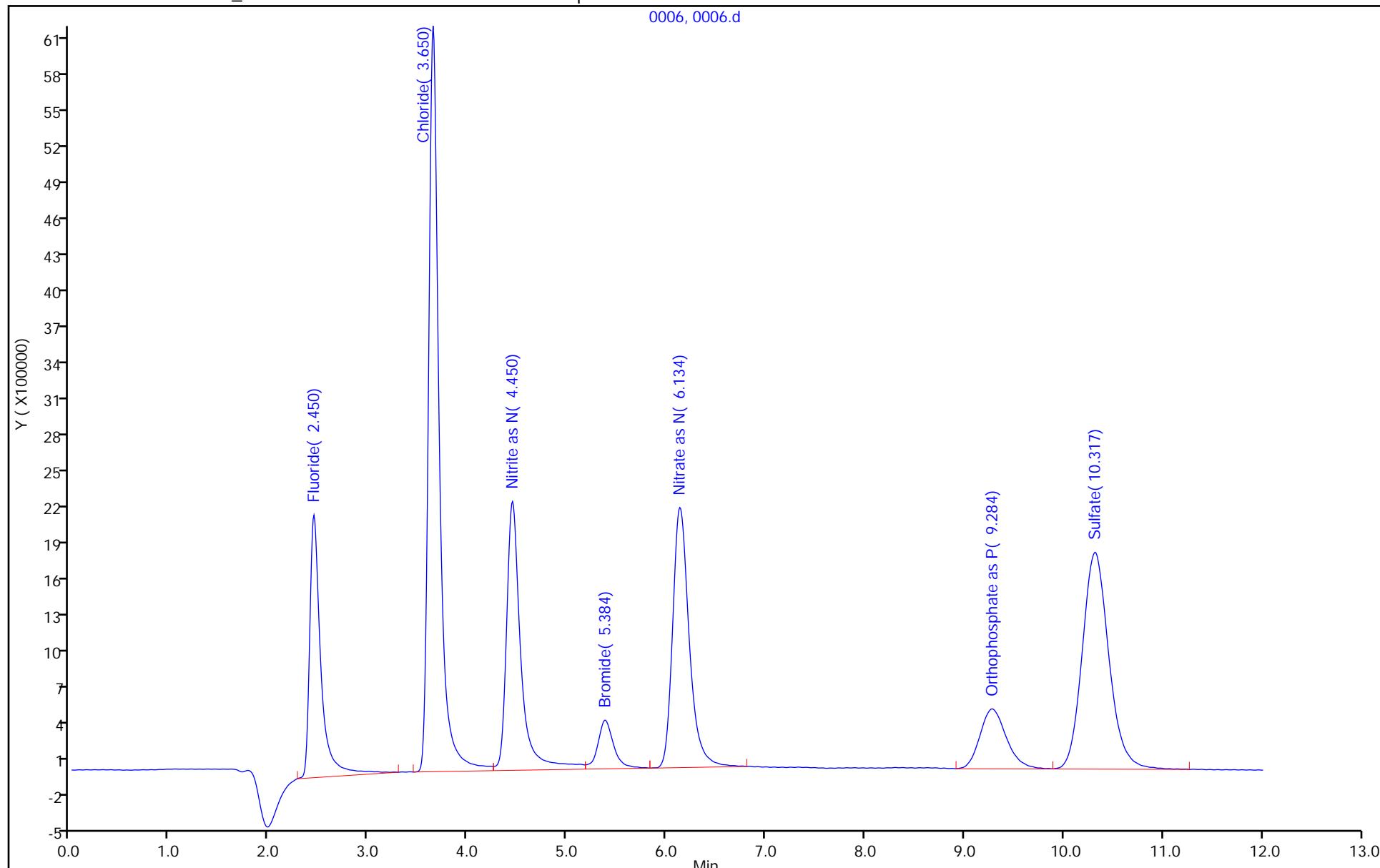
Report Date: 12-Nov-2021 12:39:26

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0006.d  
Injection Date: 11-Nov-2021 16:36:00 Instrument ID: WC\_IonChrom7  
Lims ID: std L3 Operator ID:  
Client ID:  
Injection Vol: 25.0 ul Worklist Smp#: 6  
Method: Anions\_IC7 Dil. Factor: 1.0000  
Limit Group: Wet - Anions 28D ALS Bottle#: 0

0006, 0006.d



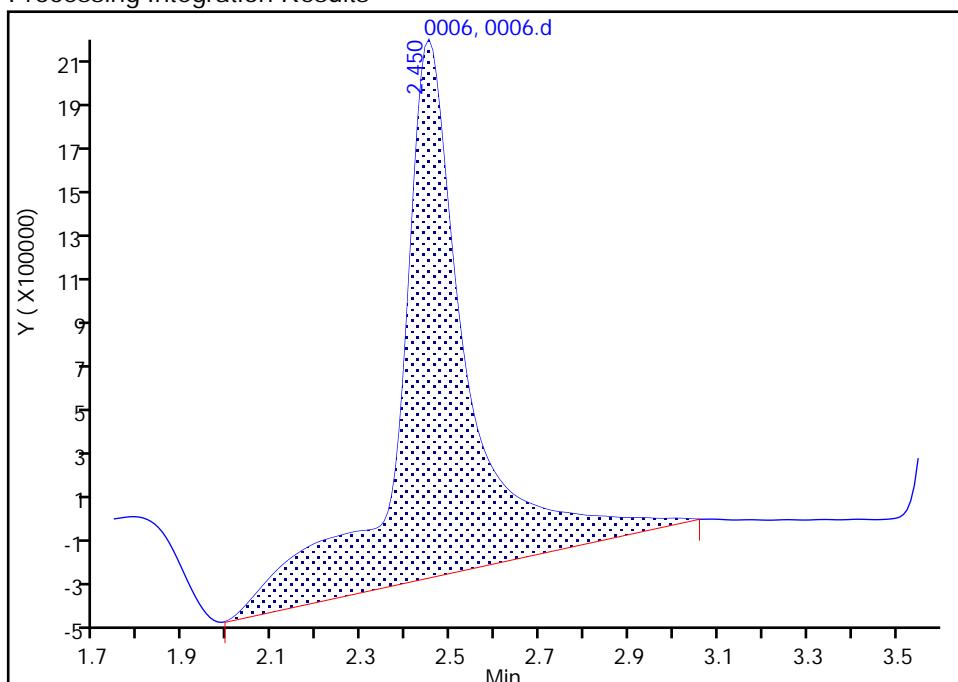
## Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0006.d  
 Injection Date: 11-Nov-2021 16:36:00 Instrument ID: WC\_IonChrom7  
 Lims ID: std L3  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 6  
 Injection Vol: 25.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC7 Limit Group: Wet - Anions 28D  
 Column: Detector 0005

**1 Fluoride, CAS: 16984-48-8**  
Signal: 1

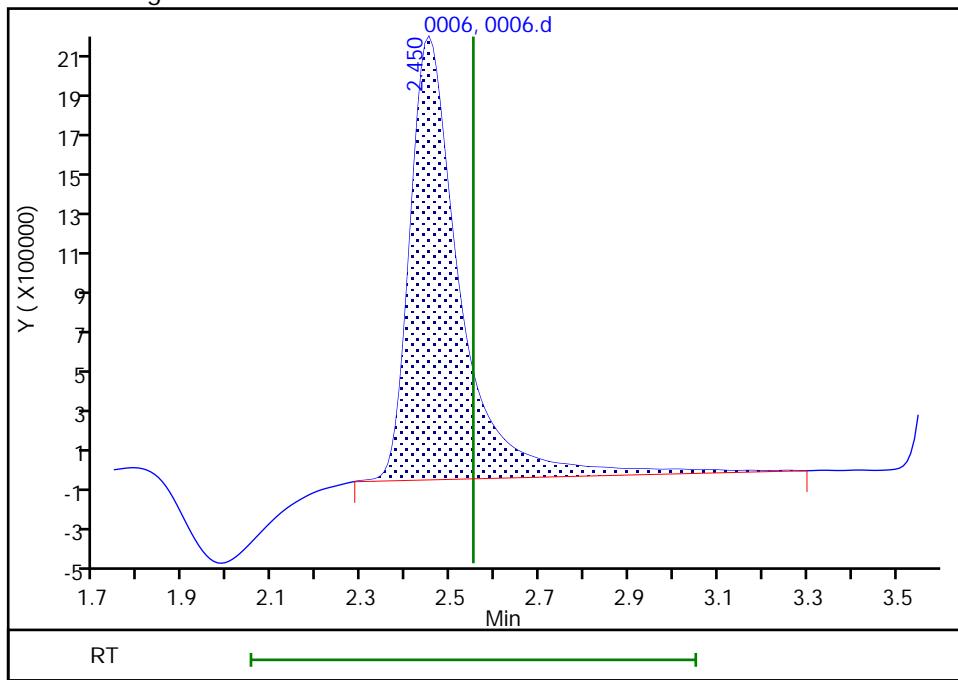
RT: 2.45  
 Area: 26390330  
 Amount: 1.378032  
 Amount Units: ug/ml

## Processing Integration Results



RT: 2.45  
 Area: 17235087  
 Amount: 0.865691  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: jindarac, 11-Nov-2021 18:08:02

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

## Eurofins TestAmerica, Denver

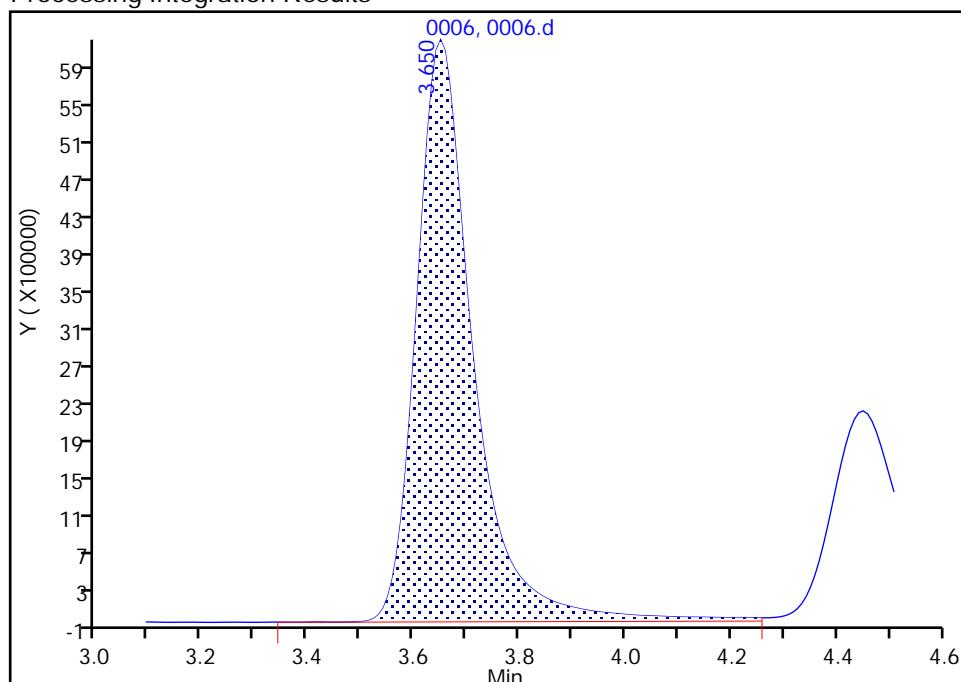
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0006.d  
 Injection Date: 11-Nov-2021 16:36:00 Instrument ID: WC\_IonChrom7  
 Lims ID: std L3  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 6  
 Injection Vol: 25.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC7 Limit Group: Wet - Anions 28D  
 Column: Detector 0005

## 2 Chloride, CAS: 16887-00-6

Signal: 1

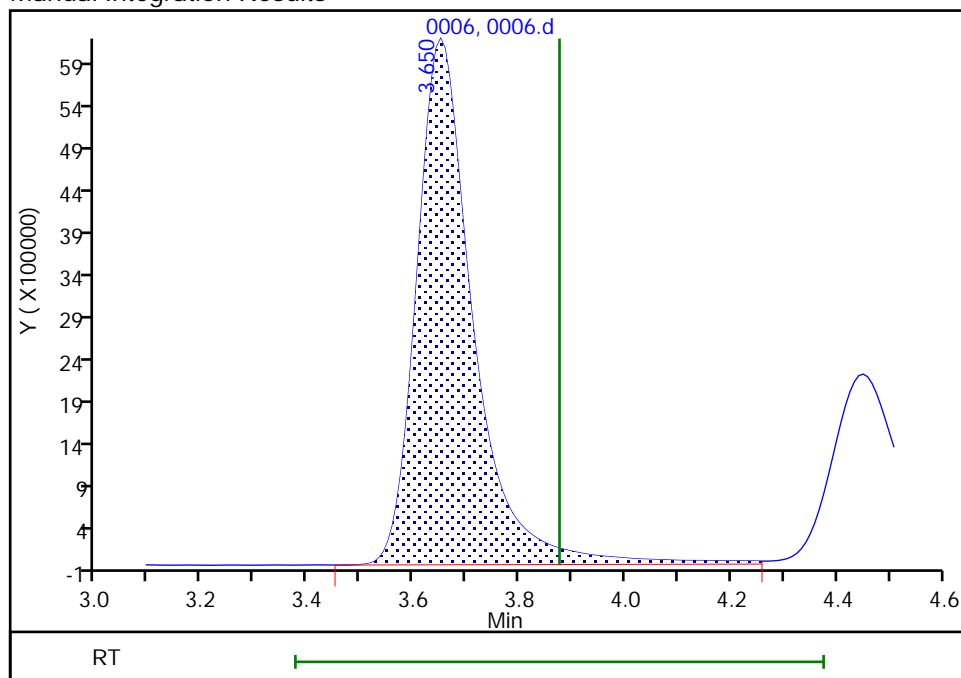
RT: 3.65  
 Area: 46465552  
 Amount: 3.737045  
 Amount Units: ug/ml

## Processing Integration Results



RT: 3.65  
 Area: 46454035  
 Amount: 3.736813  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: gonzalezsp, 12-Nov-2021 07:12:13

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0007.d  
 Lims ID: std L4  
 Client ID:  
 Sample Type: IC Calib Level: 4  
 Inject. Date: 11-Nov-2021 16:51:00 ALS Bottle#: 0 Worklist Smp#: 7  
 Injection Vol: 25.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-0106412-007  
 Operator ID: Instrument ID: WC\_IonChrom7  
 Sublist: chrom-Anions\_IC7\*sub1  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\Anions\_IC7.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 12-Nov-2021 12:39:26 Calib Date: 11-Nov-2021 17:21:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0009.d  
 Column 1 : Det: 0005  
 Process Host: CTX1631

First Level Reviewer: jindarac Date: 11-Nov-2021 17:25:03

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.642	2.642	0.000	74269894	4.00	3.78	M
2 Chloride	3.926	3.926	0.000	822053816	60.0	52.8	M
3 Nitrite as N	4.717	4.717	0.000	126524127	NC	NC	Ma
4 Bromide	5.634	5.634	0.000	32135526	4.00	4.37	Ma
5 Nitrate as N	6.351	6.351	0.000	130878982	NC	NC	Ma
7 Orthophosphate as P	9.592	9.592	0.000	40055033	NC	NC	a
6 Sulfate	10.726	10.726	0.000	527396077	60.0	53.4	

### QC Flag Legend

#### Processing Flags

NC - Not Calibrated

#### Review Flags

M - Manually Integrated

a - User Assigned ID

### Reagents:

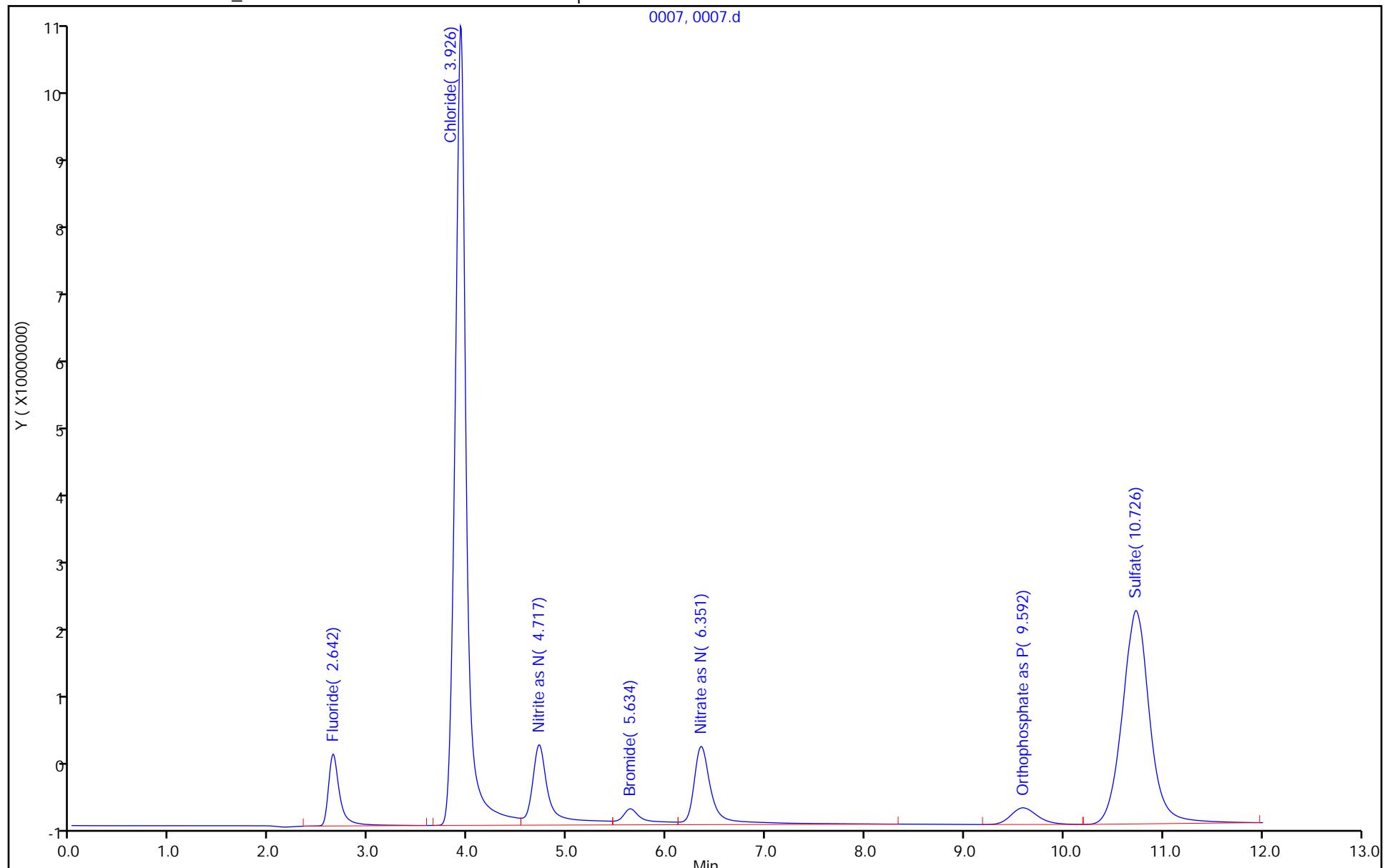
IC CAL cl/so4_00393	Amount Added: 1.20	Units: mL
IC Cal low_00607	Amount Added: 0.40	Units: mL

Report Date: 12-Nov-2021 12:39:27

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0007.d  
Injection Date: 11-Nov-2021 16:51:00 Instrument ID: WC\_IonChrom7  
Lims ID: std L4 Operator ID:  
Client ID:  
Injection Vol: 25.0 ul Worklist Smp#: 7  
Method: Anions\_IC7 Dil. Factor: 1.0000  
Limit Group: Wet - Anions 28D ALS Bottle#: 0



Eurofins TestAmerica, Denver

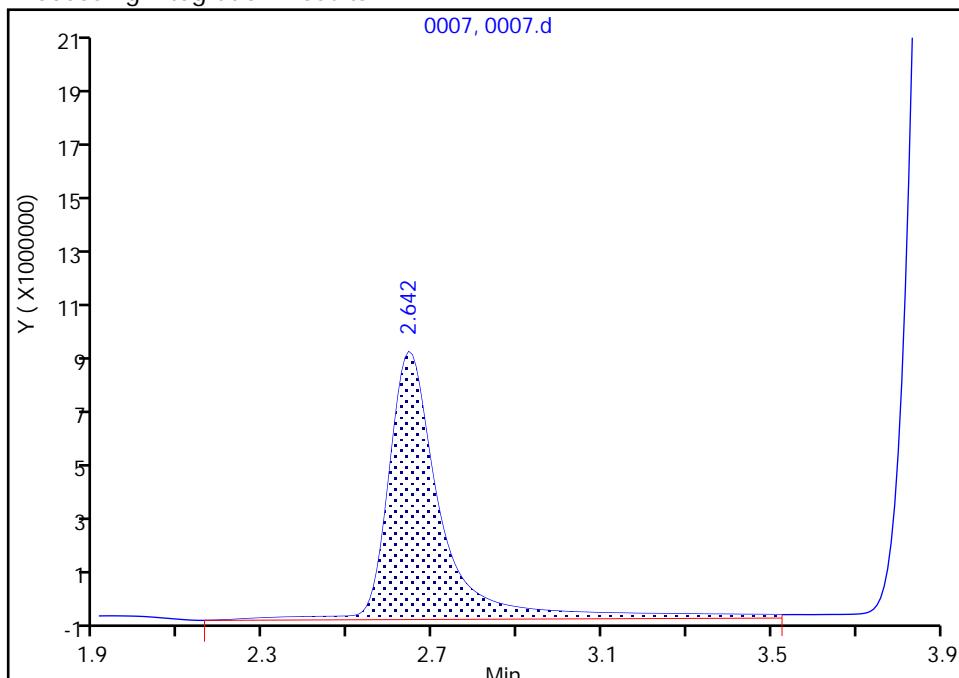
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0007.d  
 Injection Date: 11-Nov-2021 16:51:00 Instrument ID: WC\_IonChrom7  
 Lims ID: std L4  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 7  
 Injection Vol: 25.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC7 Limit Group: Wet - Anions 28D  
 Column: Detector 0005

### 1 Fluoride, CAS: 16984-48-8

Signal: 1

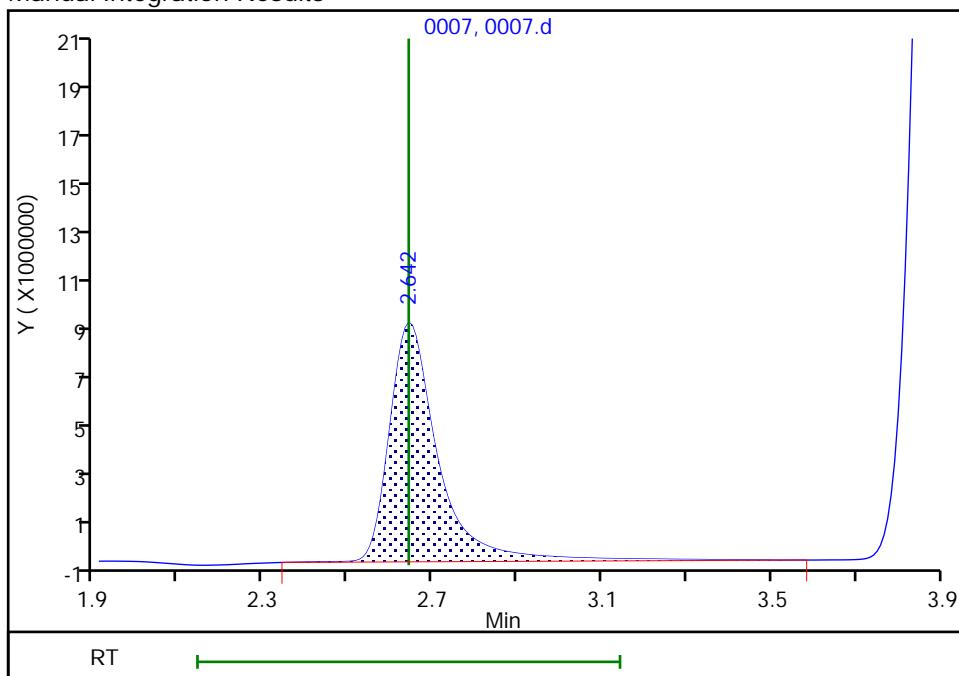
RT: 2.64  
 Area: 82369091  
 Amount: 4.355916  
 Amount Units: ug/ml

Processing Integration Results



RT: 2.64  
 Area: 74269894  
 Amount: 3.779479  
 Amount Units: ug/ml

Manual Integration Results



Reviewer: jindarac, 11-Nov-2021 18:08:16

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

## Eurofins TestAmerica, Denver

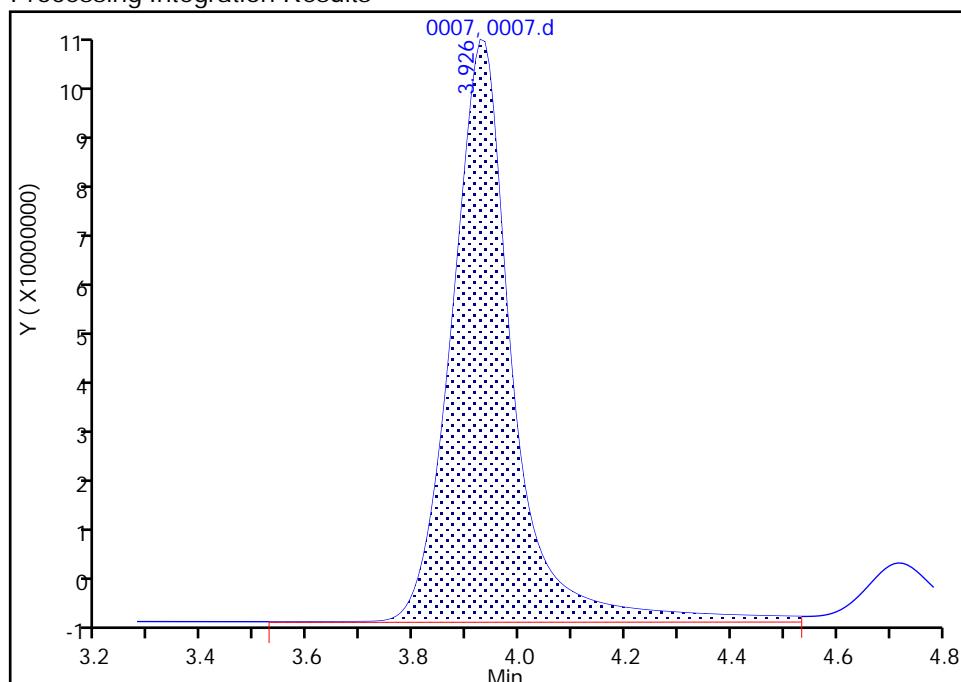
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0007.d  
 Injection Date: 11-Nov-2021 16:51:00 Instrument ID: WC\_IonChrom7  
 Lims ID: std L4  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 7  
 Injection Vol: 25.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC7 Limit Group: Wet - Anions 28D  
 Column: Detector 0005

## 2 Chloride, CAS: 16887-00-6

Signal: 1

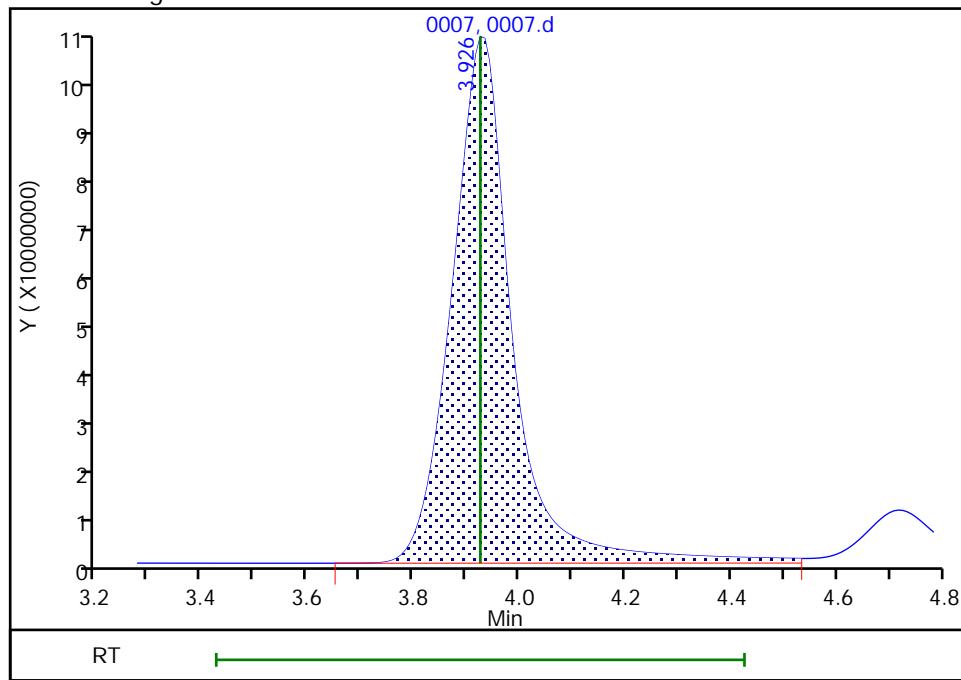
RT: 3.93  
 Area: 828704985  
 Amount: 55.365614  
 Amount Units: ug/ml

## Processing Integration Results



RT: 3.93  
 Area: 822053816  
 Amount: 52.813696  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: gonzalezsp, 12-Nov-2021 07:13:43

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

## Eurofins TestAmerica, Denver

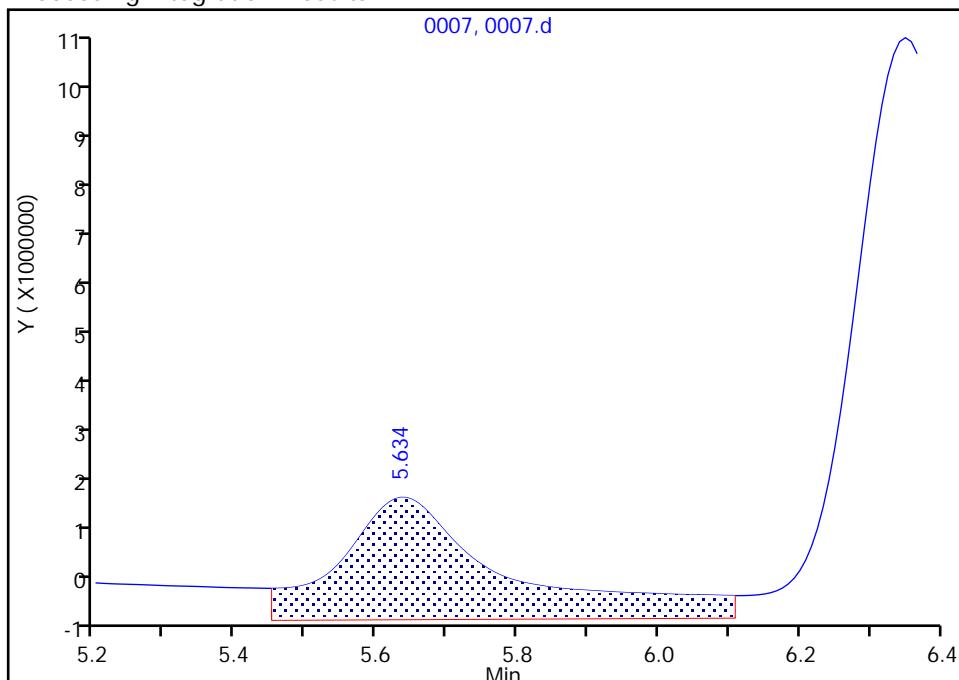
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0007.d  
 Injection Date: 11-Nov-2021 16:51:00 Instrument ID: WC\_IonChrom7  
 Lims ID: std L4  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 7  
 Injection Vol: 25.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC7 Limit Group: Wet - Anions 28D  
 Column: Detector 0005

## 4 Bromide, CAS: 24959-67-9

Signal: 1

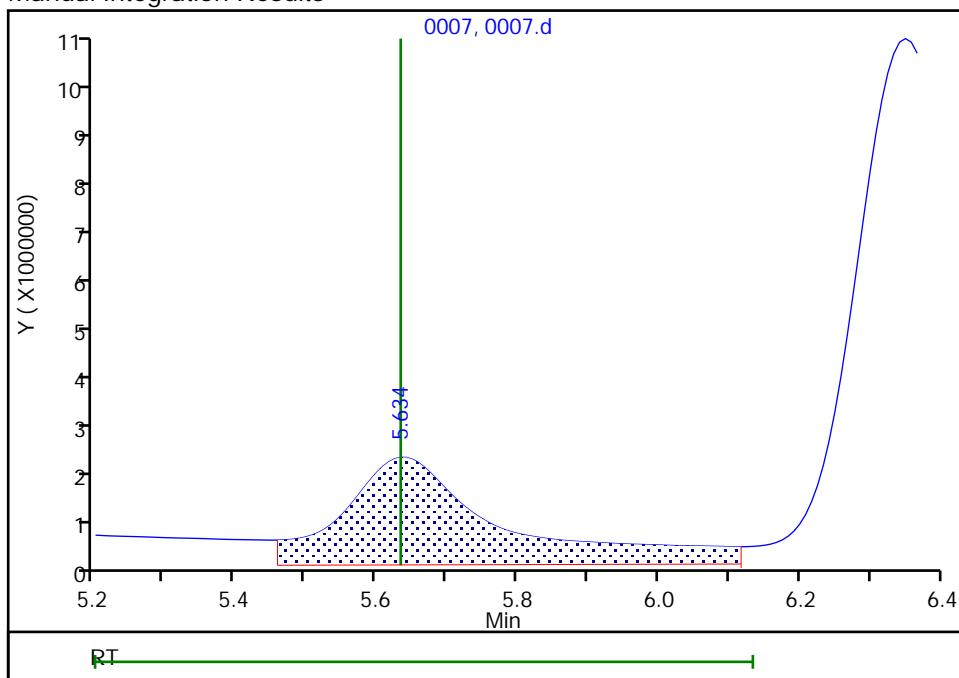
RT: 5.63  
 Area: 34963483  
 Amount: 5.928652  
 Amount Units: ug/ml

## Processing Integration Results



RT: 5.63  
 Area: 32135526  
 Amount: 4.371956  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: gonzalezsp, 12-Nov-2021 07:13:52

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0008.d  
 Lims ID: std L5  
 Client ID:  
 Sample Type: IC Calib Level: 5  
 Inject. Date: 11-Nov-2021 17:06:00 ALS Bottle#: 0 Worklist Smp#: 8  
 Injection Vol: 25.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-0106412-008  
 Operator ID: Instrument ID: WC\_IonChrom7  
 Sublist: chrom-Anions\_IC7\*sub1  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\Anions\_IC7.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 12-Nov-2021 12:39:27 Calib Date: 11-Nov-2021 17:21:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0009.d  
 Column 1 : Det: 0005  
 Process Host: CTX1631

First Level Reviewer: jindarac Date: 11-Nov-2021 18:03:34

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.650	2.642	0.008	163306752	8.00	8.33	M
2 Chloride	4.075	3.926	0.149	1943063322	120.0	123.7	Ma
3 Nitrite as N	4.892	4.717	0.175	274388480	NC	NC	Ma
4 Bromide	5.875	5.634	0.241	59635506	8.00	7.99	Ma
5 Nitrate as N	6.642	6.351	0.291	283423216	NC	NC	Ma
7 Orthophosphate as P	9.892	9.592	0.300	84292708	NC	NC	a
6 Sulfate	11.134	10.726	0.408	1194979324	120.0	120.1	a

### QC Flag Legend

#### Processing Flags

NC - Not Calibrated

#### Review Flags

M - Manually Integrated

a - User Assigned ID

### Reagents:

IC CAL cl/so4_00393	Amount Added: 2.40	Units: mL
IC Cal low_00607	Amount Added: 0.80	Units: mL

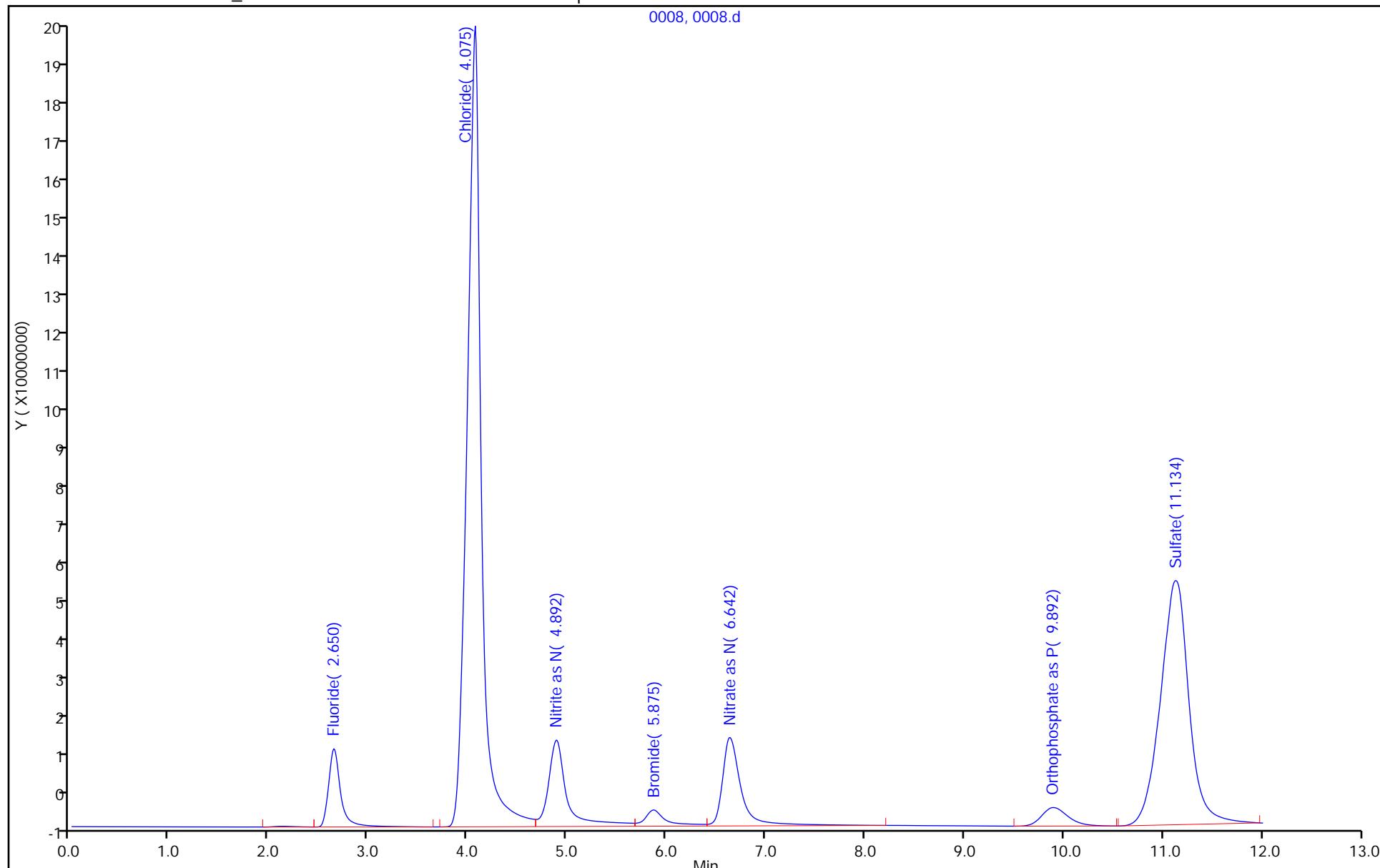
Report Date: 12-Nov-2021 12:39:27

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0008.d  
Injection Date: 11-Nov-2021 17:06:00 Instrument ID: WC\_IonChrom7  
Lims ID: std L5 Operator ID:  
Client ID:  
Injection Vol: 25.0 ul Worklist Smp#: 8  
Method: Anions\_IC7 Dil. Factor: 1.0000  
Limit Group: Wet - Anions 28D

0008, 0008.d



## Eurofins TestAmerica, Denver

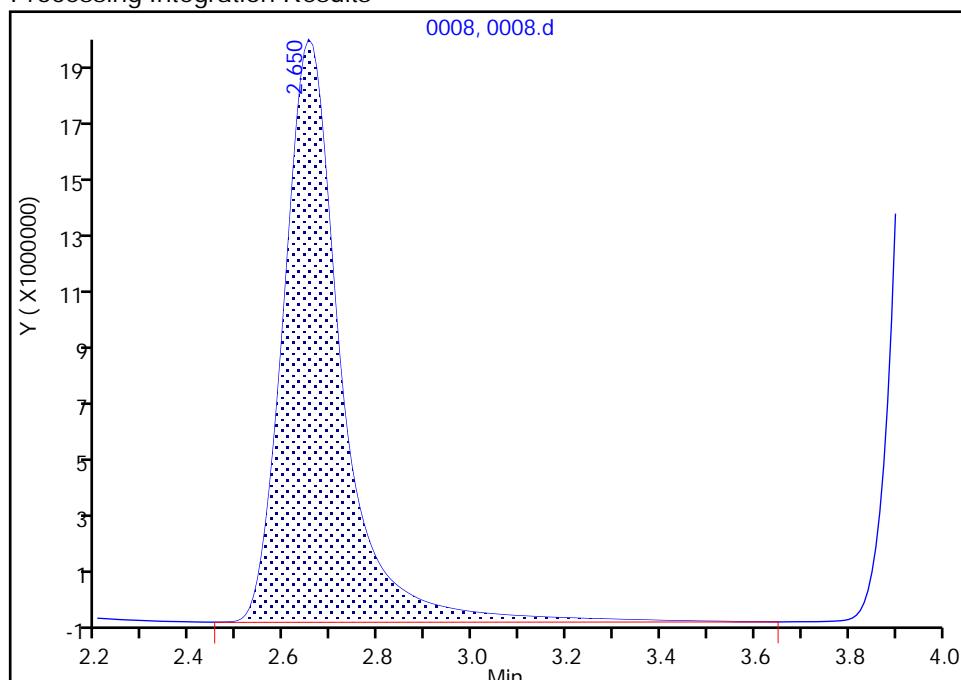
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0008.d  
 Injection Date: 11-Nov-2021 17:06:00 Instrument ID: WC\_IonChrom7  
 Lims ID: std L5  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 8  
 Injection Vol: 25.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC7 Limit Group: Wet - Anions 28D  
 Column: Detector 0005

**1 Fluoride, CAS: 16984-48-8**

Signal: 1

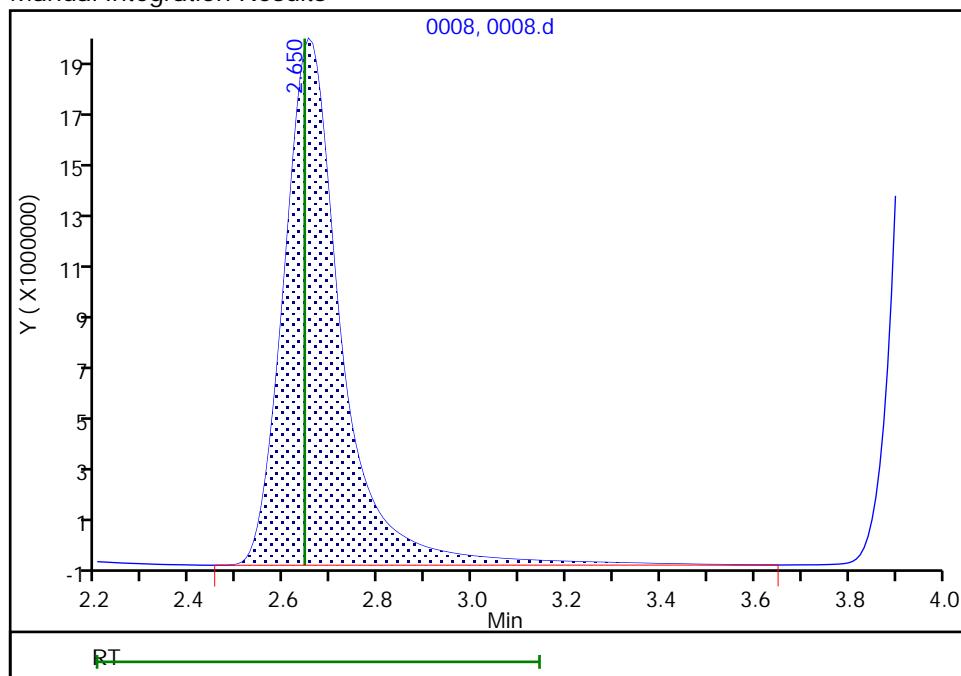
RT: 2.65  
 Area: 163554756  
 Amount: 8.336139  
 Amount Units: ug/ml

## Processing Integration Results



RT: 2.65  
 Area: 163306752  
 Amount: 8.328185  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: jindarac, 11-Nov-2021 18:08:34

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

## Eurofins TestAmerica, Denver

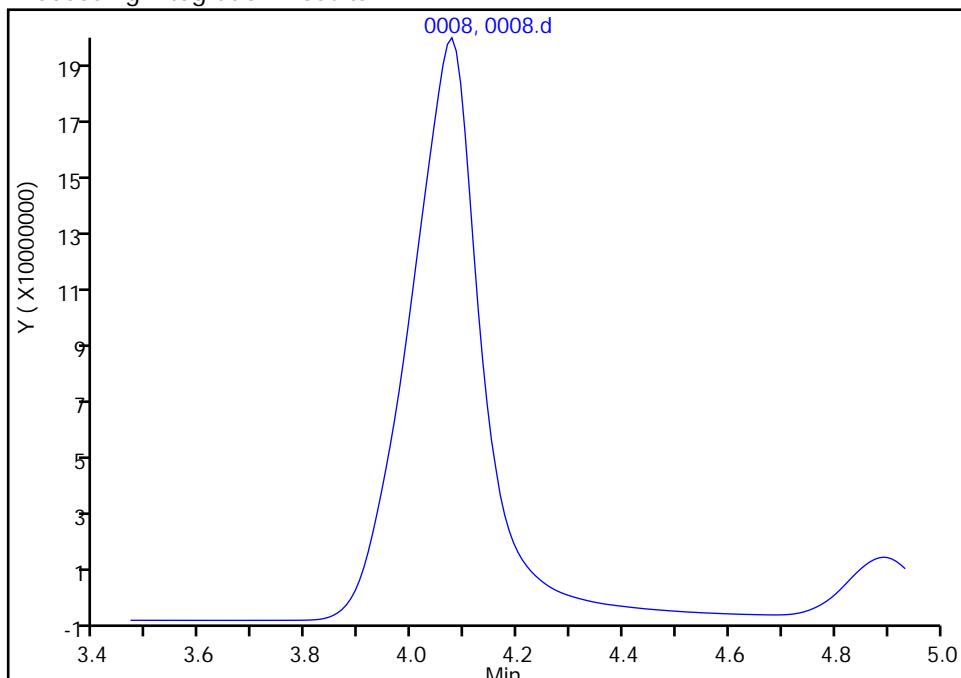
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0008.d  
 Injection Date: 11-Nov-2021 17:06:00 Instrument ID: WC\_IonChrom7  
 Lims ID: std L5  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 8  
 Injection Vol: 25.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC7 Limit Group: Wet - Anions 28D  
 Column: Detector 0005

## 2 Chloride, CAS: 16887-00-6

Signal: 1

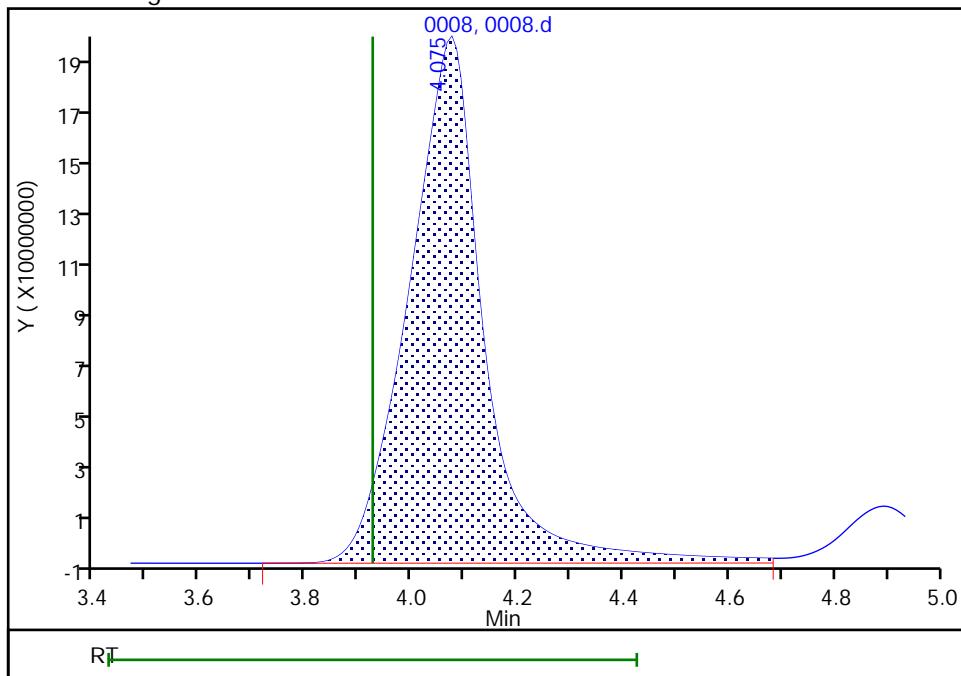
Not Detected  
 Expected RT: 3.93

## Processing Integration Results



RT: 4.08  
 Area: 1943063322  
 Amount: 123.7467  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: gonzalezsp, 12-Nov-2021 07:15:06

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

## Eurofins TestAmerica, Denver

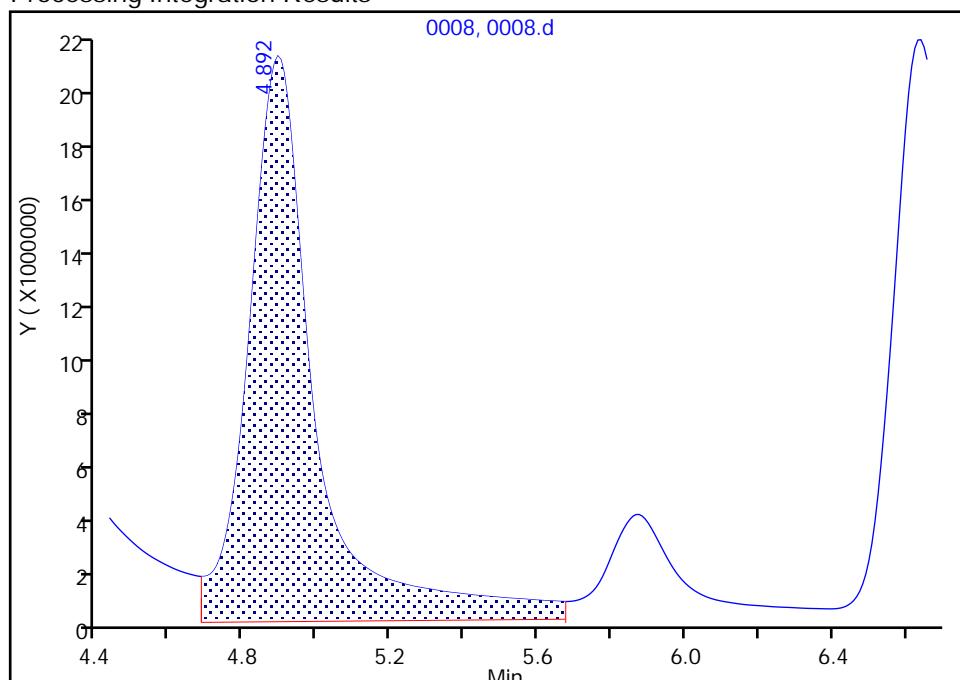
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0008.d  
 Injection Date: 11-Nov-2021 17:06:00 Instrument ID: WC\_IonChrom7  
 Lims ID: std L5  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 8  
 Injection Vol: 25.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC7 Limit Group: Wet - Anions 28D  
 Column: Detector 0005

## 4 Bromide, CAS: 24959-67-9

Signal: 1

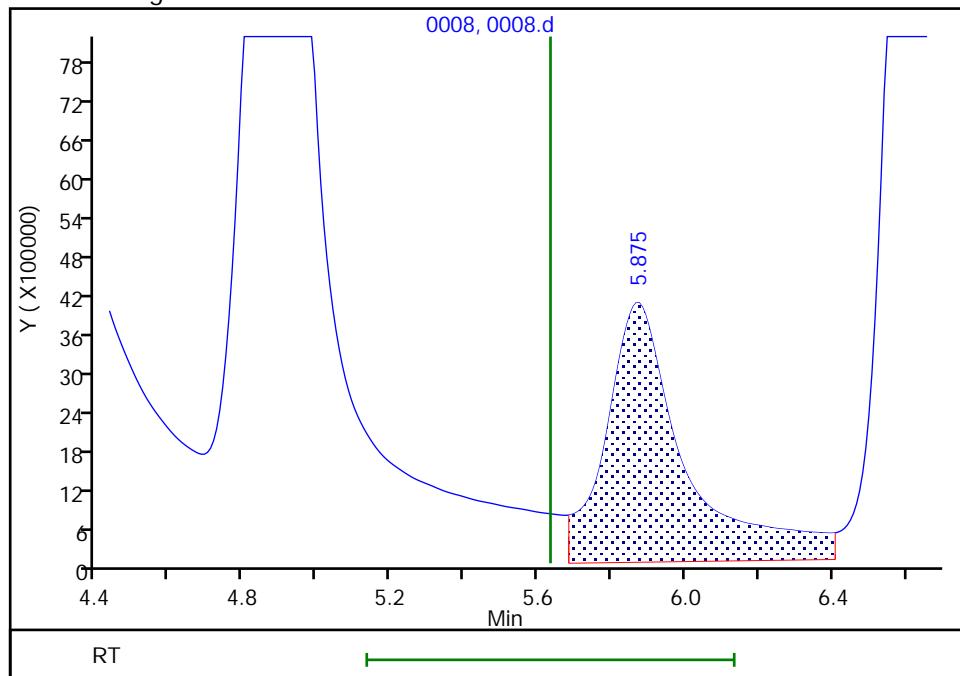
RT: 4.89  
 Area: 270683718  
 Amount: 15.855074  
 Amount Units: ug/ml

## Processing Integration Results



RT: 5.88  
 Area: 59635506  
 Amount: 7.990618  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: gonzalezsp, 12-Nov-2021 07:15:15

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver

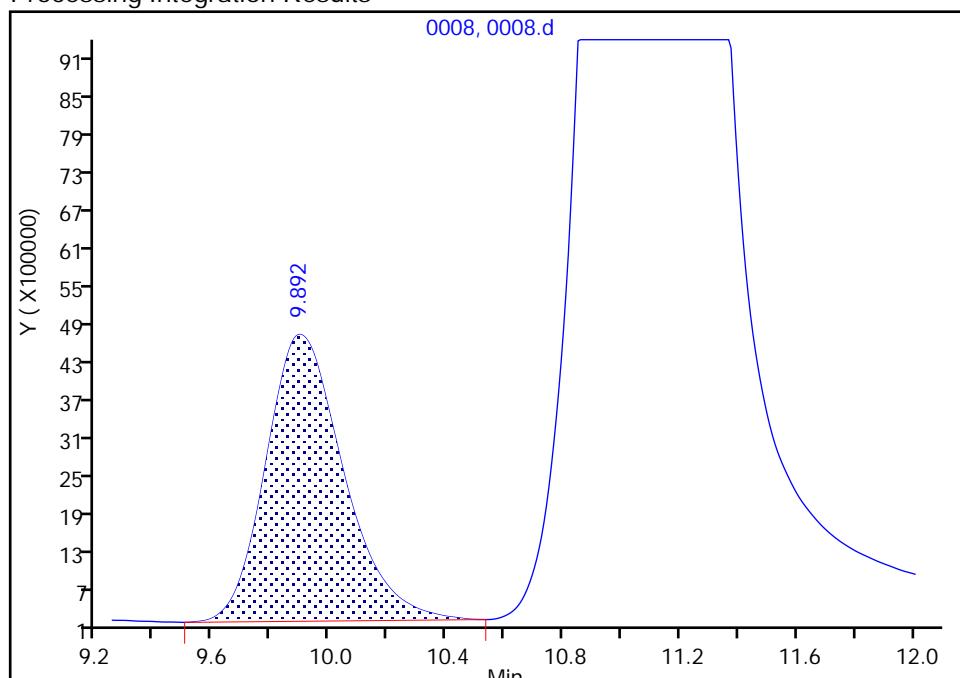
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0008.d  
 Injection Date: 11-Nov-2021 17:06:00 Instrument ID: WC\_IonChrom7  
 Lims ID: std L5  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 8  
 Injection Vol: 25.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC7 Limit Group: Wet - Anions 28D  
 Column: Detector 0005

**6 Sulfate, CAS: 14808-79-8**

Signal: 1

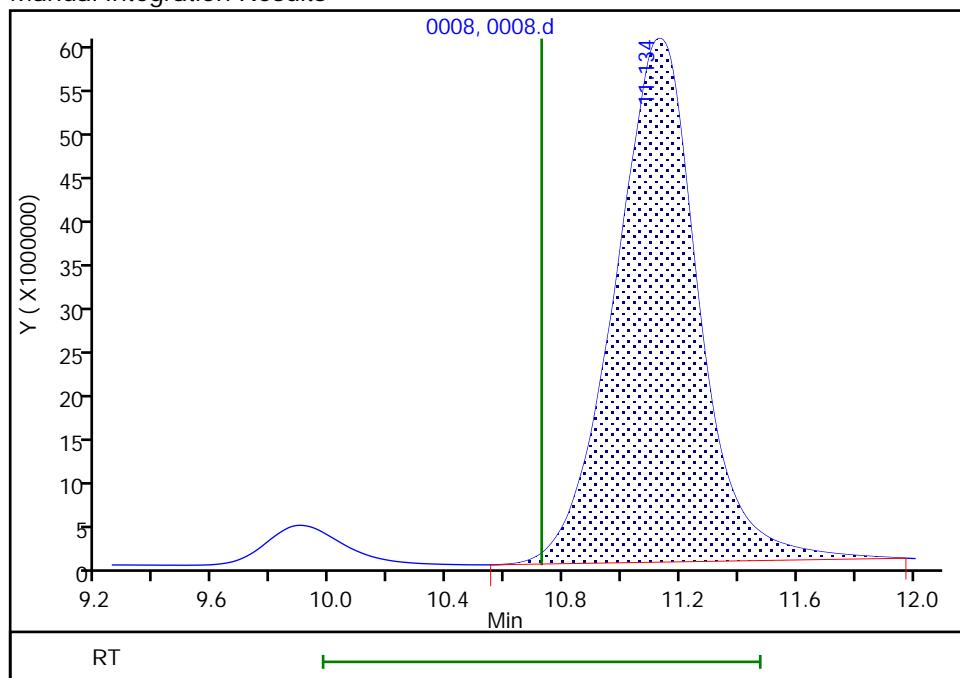
RT: 9.89  
 Area: 84292708  
 Amount: 12.132690  
 Amount Units: ug/ml

Processing Integration Results



RT: 11.13  
 Area: 1194979324  
 Amount: 120.0958  
 Amount Units: ug/ml

Manual Integration Results



Reviewer: jindarac, 11-Nov-2021 18:03:27

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0009.d  
 Lims ID: std L6  
 Client ID:  
 Sample Type: IC Calib Level: 6  
 Inject. Date: 11-Nov-2021 17:21:00 ALS Bottle#: 0 Worklist Smp#: 9  
 Injection Vol: 25.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-0106412-009  
 Operator ID: Instrument ID: WC\_IonChrom7  
 Sublist: chrom-Anions\_IC7\*sub1  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\Anions\_IC7.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 12-Nov-2021 12:39:28 Calib Date: 11-Nov-2021 17:21:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0009.d  
 Column 1 : Det: 0005  
 Process Host: CTX1631

First Level Reviewer: jindarac Date: 11-Nov-2021 18:03:43

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.567	2.642	-0.075	195980470	10.0	10.0	
2 Chloride	3.942	3.926	0.016	3219394062	200.0	204.5	Ma
3 Nitrite as N	4.667	4.717	-0.050	340788069	NC	NC	Ma
4 Bromide	5.559	5.634	-0.075	74298330	10.0	9.92	Ma
5 Nitrate as N	6.259	6.351	-0.092	365874197	NC	NC	Ma
7 Orthophosphate as P	9.400	9.592	-0.192	104234648	NC	NC	
6 Sulfate	10.642	10.726	-0.084	2067766230	200.0	207.3	

### QC Flag Legend

#### Processing Flags

NC - Not Calibrated

#### Review Flags

M - Manually Integrated

a - User Assigned ID

### Reagents:

IC CAL cl/so4_00393	Amount Added: 4.00	Units: mL
IC Cal low_00607	Amount Added: 1.00	Units: mL

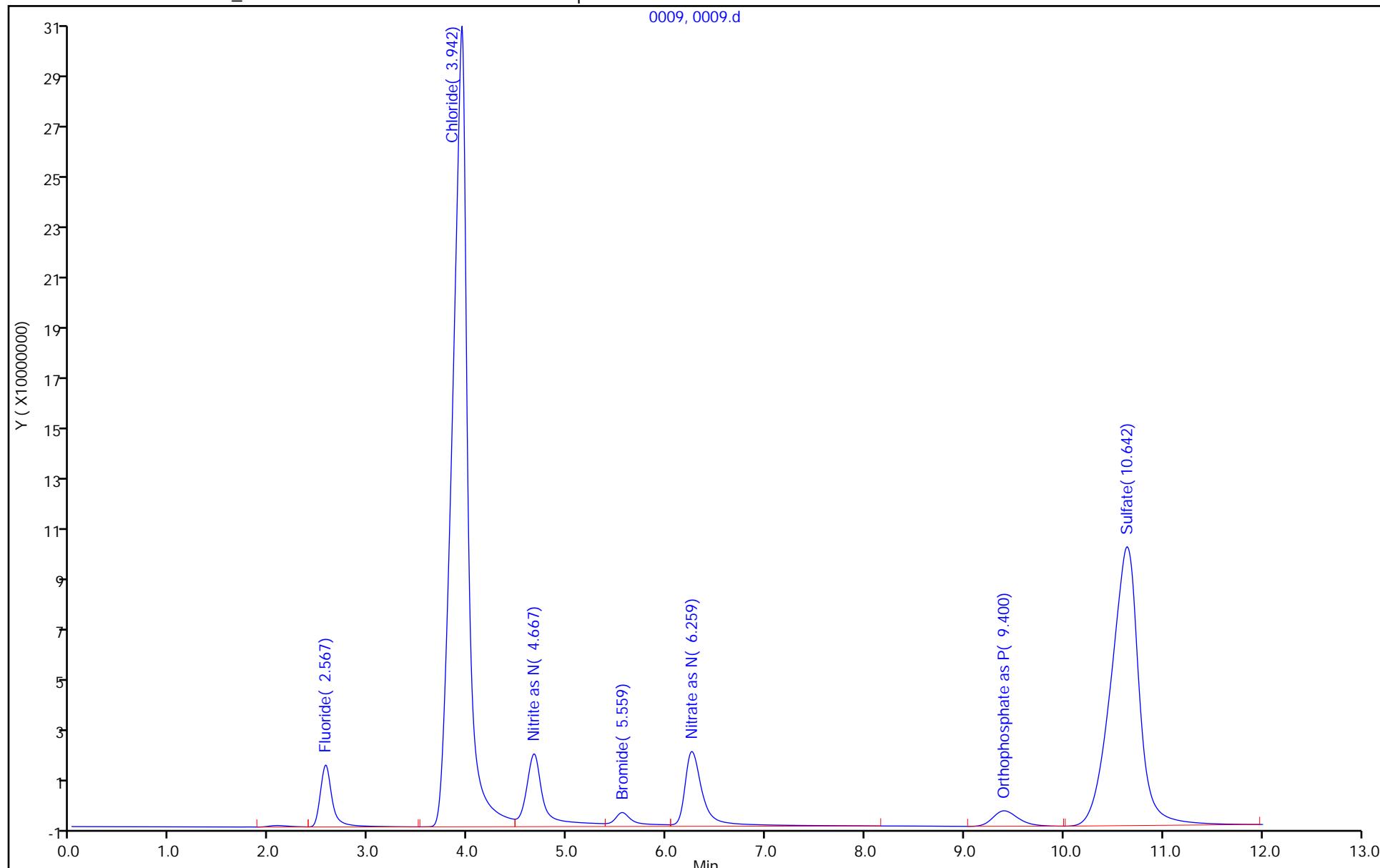
Report Date: 12-Nov-2021 12:39:28

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0009.d  
Injection Date: 11-Nov-2021 17:21:00 Instrument ID: WC\_IonChrom7  
Lims ID: std L6 Operator ID:  
Client ID:  
Injection Vol: 25.0 ul Worklist Smp#: 9  
Method: Anions\_IC7 Dil. Factor: 1.0000  
Limit Group: Wet - Anions 28D

0009, 0009.d



## Eurofins TestAmerica, Denver

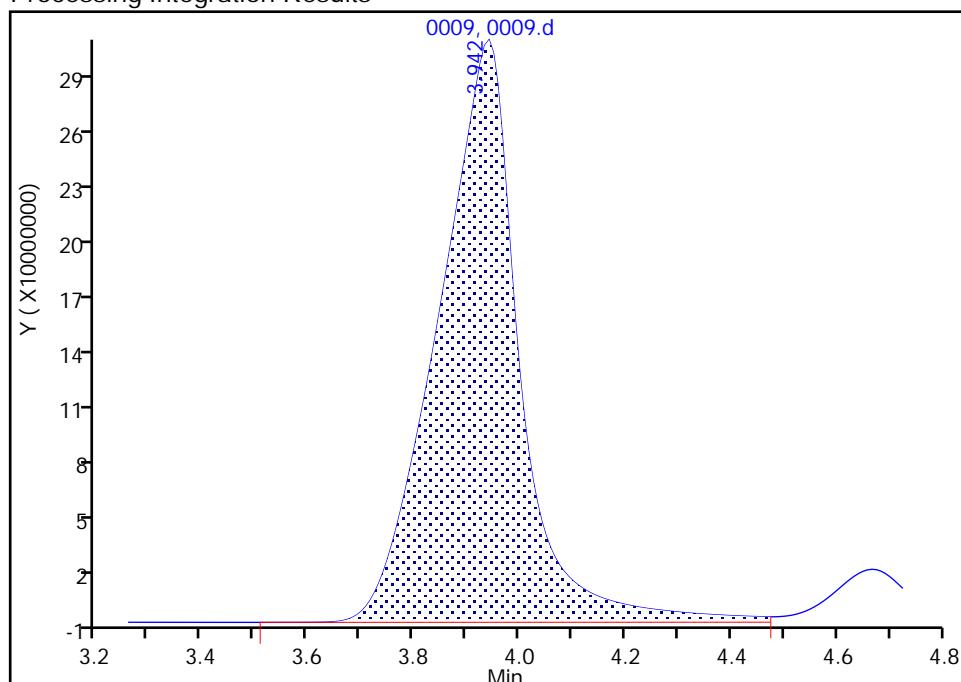
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0009.d  
 Injection Date: 11-Nov-2021 17:21:00 Instrument ID: WC\_IonChrom7  
 Lims ID: std L6  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 9  
 Injection Vol: 25.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC7 Limit Group: Wet - Anions 28D  
 Column: Detector 0005

## 2 Chloride, CAS: 16887-00-6

Signal: 1

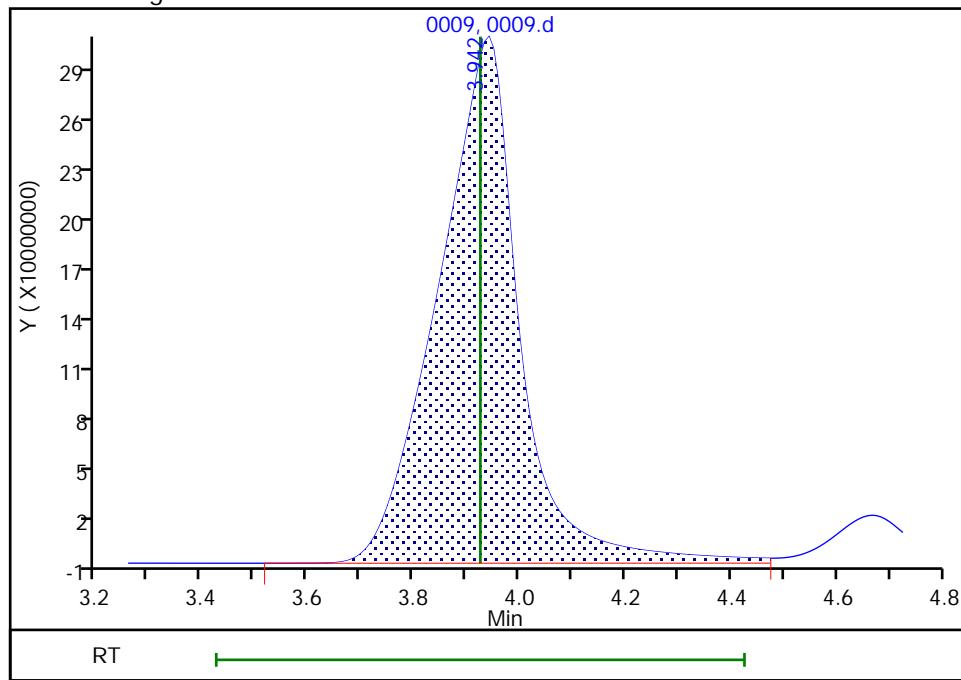
RT: 3.94  
 Area: 3218366675  
 Amount: 204.4685  
 Amount Units: ug/ml

## Processing Integration Results



RT: 3.94  
 Area: 3219394062  
 Amount: 204.5079  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: gonzalezsp, 12-Nov-2021 07:16:54

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

## Eurofins TestAmerica, Denver

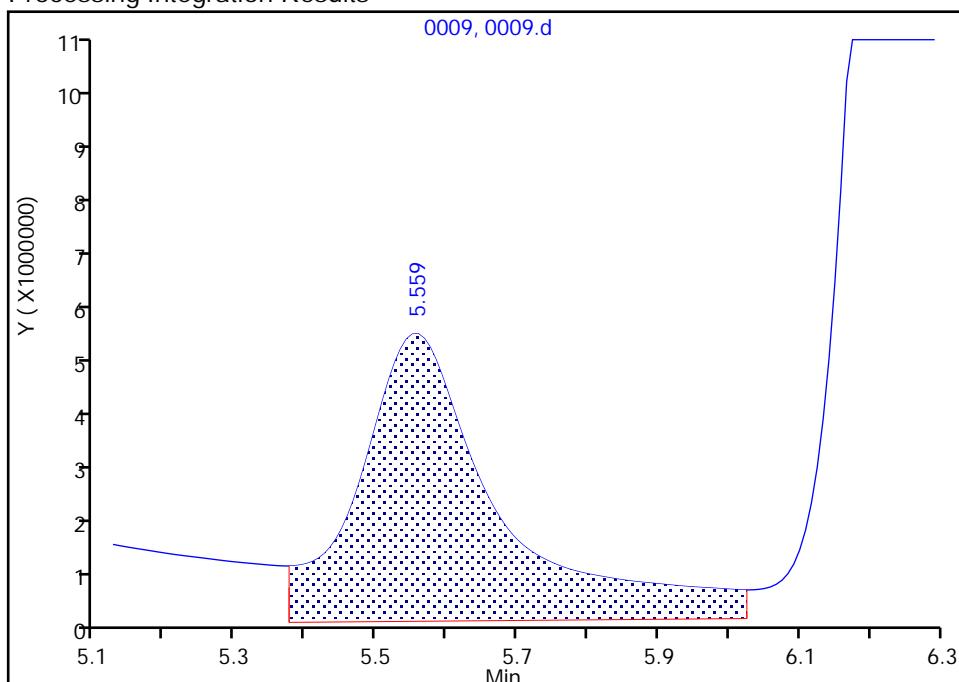
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0009.d  
 Injection Date: 11-Nov-2021 17:21:00 Instrument ID: WC\_IonChrom7  
 Lims ID: std L6  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 9  
 Injection Vol: 25.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC7 Limit Group: Wet - Anions 28D  
 Column: Detector 0005

**4 Bromide, CAS: 24959-67-9**

Signal: 1

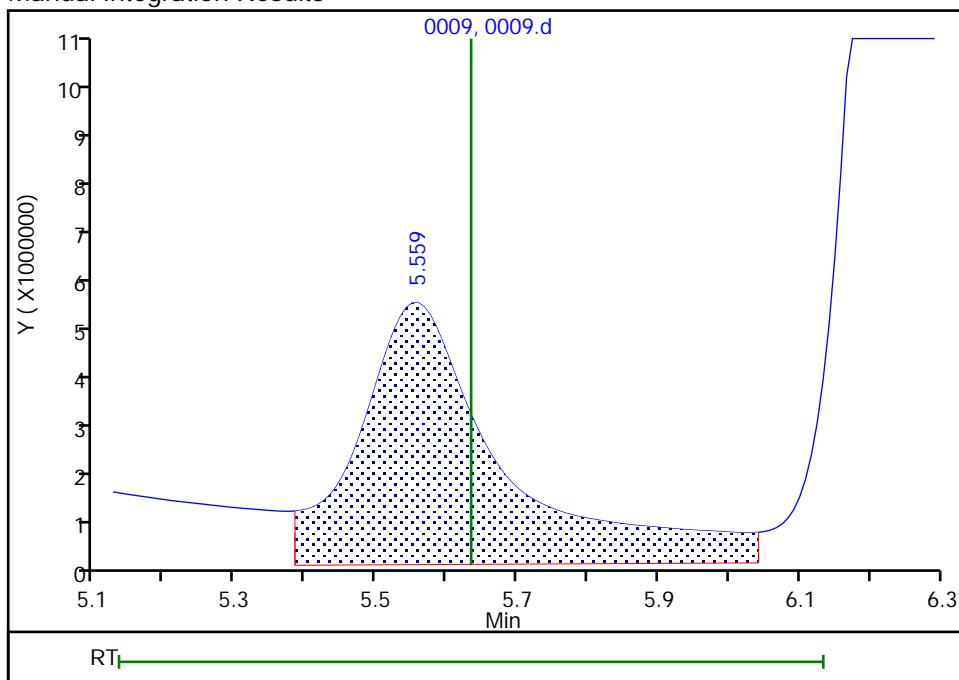
RT: 5.56  
 Area: 71192383  
 Amount: 9.653612  
 Amount Units: ug/ml

## Processing Integration Results



RT: 5.56  
 Area: 74298330  
 Amount: 9.920066  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: gonzalezsp, 12-Nov-2021 07:17:27

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

## IC Instrument Information

WL: 106412 Inst ID: IC4 Analysis Date: 11/11/2021 Analyst: CJ

Rush	Job No.	Samples	Anions	QC Req	HT Exp
<input type="checkbox"/>	<u>154442</u>	<u>26</u>	F Cl NO2 Br NO3 PO4 SO4	MS/D	_____
<input type="checkbox"/>	_____	_____	F Cl NO2 Br NO3 PO4 SO4	MS/D	_____
<input type="checkbox"/>	_____	_____	F Cl NO2 Br NO3 PO4 SO4	MS/D	_____
<input type="checkbox"/>	_____	_____	F Cl NO2 Br NO3 PO4 SO4	MS/D	_____
<input type="checkbox"/>	_____	_____	F Cl NO2 Br NO3 PO4 SO4	MS/D	_____
<input checked="" type="checkbox"/>	_____	_____	F Cl NO2 Br NO3 PO4 SO4	MS/D	_____
<input type="checkbox"/>	_____	_____	F Cl NO2 Br NO3 PO4 SO4	MS/D	_____
<input type="checkbox"/>	_____	_____	F Cl NO2 Br NO3 PO4 SO4	MS/D	_____
<input type="checkbox"/>	_____	_____	F Cl NO2 Br NO3 PO4 SO4	MS/D	_____
<input type="checkbox"/>	_____	_____	F Cl NO2 Br NO3 PO4 SO4	MS/D	_____
<input type="checkbox"/>	_____	_____	F Cl NO2 Br NO3 PO4 SO4	MS/D	_____
<input type="checkbox"/>	_____	_____	F Cl NO2 Br NO3 PO4 SO4	MS/D	_____
<input type="checkbox"/>	_____	_____	F Cl NO2 Br NO3 PO4 SO4	MS/D	_____
<input type="checkbox"/>	_____	_____	F Cl NO2 Br NO3 PO4 SO4	MS/D	_____
<input type="checkbox"/>	_____	_____	F Cl NO2 Br NO3 PO4 SO4	MS/D	_____
<input type="checkbox"/>	_____	_____	F Cl NO2 Br NO3 PO4 SO4	MS/D	_____
<input type="checkbox"/>	_____	_____	F Cl NO2 Br NO3 PO4 SO4	MS/D	_____
<input type="checkbox"/>	_____	_____	F Cl NO2 Br NO3 PO4 SO4	MS/D	_____

### Dilutions

Job No.	Samples	Anions	Dilution	Reason
<u>442</u>	_____	F Cl NO2 Br NO3 PO4 SO4	<u>100,500,1000X</u>	<u>H1st.</u>
	_____	F Cl NO2 Br NO3 PO4 SO4	_____	_____
	_____	F Cl NO2 Br NO3 PO4 SO4	_____	_____
	_____	F Cl NO2 Br NO3 PO4 SO4	_____	_____
	_____	F Cl NO2 Br NO3 PO4 SO4	_____	_____
	_____	F Cl NO2 Br NO3 PO4 SO4	_____	_____
	_____	F Cl NO2 Br NO3 PO4 SO4	_____	_____
	_____	F Cl NO2 Br NO3 PO4 SO4	_____	_____
	_____	F Cl NO2 Br NO3 PO4 SO4	_____	_____
	_____	F Cl NO2 Br NO3 PO4 SO4	_____	_____
	_____	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\_IonChrom7\20211112-106445.b\Anions\_IC7.m  
 Instrument: WC\_IonChrom7 Lims Location: 280  
 Lock State: Initial Calib Locked Cpnd Order: Retention Time  
 Integrator: Falcon Last Modified: 12-Nov-2021 14:01:55  
 No.Compounds:7

**Initial Calibration Batches**

Ical Batch: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b  
 Inj Date : 11-Nov-2021 16:07:00, Sublist: chrom-Anions\_IC7\*sub1

Detector 1: 0005

Compound	Wet - Anions				Wet - Anions 28D			
	b	M1	M2	Err	b	M1	M2	Err
1 Fluoride					289953	195741C		0.998
2 Chloride					-126017	1580377		0.998
3 Nitrite as N	-433664	3401703		0.996				
4 Bromide					-108910	759948S		0.997
5 Nitrate as N	-388600	3573238		0.996				
7 Orthophosphate as P	-91785	1036016		0.999				
6 Sulfate					-658368	1000503		0.996

Eurofins Environment Testing America  
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211112-106445.b\Anions\_IC7.m  
 Instrument: WC\_IonChrom7 Lims Location: 280  
 Lock State: Initial Calib Locked Cpdn Order: Retention Time  
 Integrator: Falcon Last Modified: 12-Nov-2021 14:01:55  
 No.Compounds:7  
 Sublist: chrom-Anions\_IC7\*sub1  
 Limit Group: Wet - Anions 28D

### Detectors

Detector: 1,0005  
 Data Type: ic Spec Type: none  
 Supports Extracted Chromatograms: False  
 Run Time: 0.000-12.000 No. Points: 1561

### Calibration File Names

Level: 1	\\chromfs\Denver\ChromData\WC_IonChrom7\20211111-106412.b\0004.d
	Inj Date: 11-Nov-2021 16:07:00 Worklist: 106412 Sample#: 4
Level: 2	\\chromfs\Denver\ChromData\WC_IonChrom7\20211111-106412.b\0005.d
	Inj Date: 11-Nov-2021 16:22:00 Worklist: 106412 Sample#: 5
Level: 3	\\chromfs\Denver\ChromData\WC_IonChrom7\20211111-106412.b\0006.d
	Inj Date: 11-Nov-2021 16:36:00 Worklist: 106412 Sample#: 6
Level: 4	\\chromfs\Denver\ChromData\WC_IonChrom7\20211111-106412.b\0007.d
	Inj Date: 11-Nov-2021 16:51:00 Worklist: 106412 Sample#: 7
Level: 5	\\chromfs\Denver\ChromData\WC_IonChrom7\20211111-106412.b\0008.d
	Inj Date: 11-Nov-2021 17:06:00 Worklist: 106412 Sample#: 8
Level: 6	\\chromfs\Denver\ChromData\WC_IonChrom7\20211111-106412.b\0009.d
	Inj Date: 11-Nov-2021 17:21:00 Worklist: 106412 Sample#: 9

Start Cal Date: 11-Nov-2021 16:07:00 End Cal Date: 12-Nov-2021 05:39:00

### Individual Compound Calibration Parameters

Quant Method: ESTD	RF Calibration: Replace
Rule Name: Linear1	Curve: Linear
Origin: None	Error: CorrCoef
RF %Dif: 0.0	SPCC Limit: 0.0
Dependent Variable: Resp	Weighting: Conc
	Error Limit: 1.00
	CCC Limit: 0.0

### 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

23967070	20120988	17235087	18567474	20413344	19598047	289953			0.998
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		19574109		
M4793414	M10060494	M17235087	M74269894	M163306752	195980470				
106412(4)	106412(5)	106412(6)	106412(7)	106412(8)	106412(9)				

## 2 Chloride

Signal: 1

9542066	9458915	9290807	13700897	16192194	16096970	-12601701			0.998
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		15803770		
M9542066	M23647287	M46454035	M822053816	M1943063322	M3219394062				
106412(4)	106412(5)	106412(6)	106412(7)	106412(8)	106412(9)				

## 4 Bromide

Signal: 1

4906185	4039564	4502884	8033882	7454438	7429833	-1089103			0.997
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		7599489		
M981237	M2019782	4502884	M32135526	M59635506	M74298330				
106412(4)	106412(5)	106412(6)	106412(7)	106412(8)	106412(9)				

## 6 Sulfate

Signal: 1

Error: raw\_COD

6703021	6774056	6734805	8789935	9958161	10338831	-6583680			0.996
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		10005034		
M6703021	M16935139	33674025	527396077	M1194979324	2067766230				
106412(4)	106412(5)	106412(6)	106412(7)	106412(8)	106412(9)				

Eurofins Environment Testing America  
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\Anions\_IC7.m  
 Instrument: WC\_IonChrom7 Lims Location: 280  
 Lock State: Initial Calib Locked Cpnd Order: Retention Time  
 Integrator: Falcon Last Modified: 12-Nov-2021 14:02:45  
 No.Compounds:7  
 Sublist: chrom-Anions\_IC7\*sub1  
 Limit Group: Wet - Anions

### Detectors

Detector: 1, 0005  
 Data Type: ic Spec Type: none  
 Supports Extracted Chromatograms: False  
 Run Time: 0.000-12.000 No. Points: 1561

### Calibration File Names

Level: 1	\\chromfs\Denver\ChromData\WC_IonChrom7\20211111-106412.b\0004.d
	Inj Date: 11-Nov-2021 16:07:00 Worklist: 106412 Sample#: 4
Level: 2	\\chromfs\Denver\ChromData\WC_IonChrom7\20211111-106412.b\0005.d
	Inj Date: 11-Nov-2021 16:22:00 Worklist: 106412 Sample#: 5
Level: 3	\\chromfs\Denver\ChromData\WC_IonChrom7\20211111-106412.b\0006.d
	Inj Date: 11-Nov-2021 16:36:00 Worklist: 106412 Sample#: 6
Level: 4	\\chromfs\Denver\ChromData\WC_IonChrom7\20211111-106412.b\0007.d
	Inj Date: 11-Nov-2021 16:51:00 Worklist: 106412 Sample#: 7
Level: 5	\\chromfs\Denver\ChromData\WC_IonChrom7\20211111-106412.b\0008.d
	Inj Date: 11-Nov-2021 17:06:00 Worklist: 106412 Sample#: 8
Level: 6	\\chromfs\Denver\ChromData\WC_IonChrom7\20211111-106412.b\0009.d
	Inj Date: 11-Nov-2021 17:21:00 Worklist: 106412 Sample#: 9

Start Cal Date: 11-Nov-2021 16:07:00 End Cal Date: 11-Nov-2021 17:21:00

### Individual Compound Calibration Parameters

Quant Method: ESTD	RF Calibration: Replace
Rule Name: Linear1	Curve: Linear
Origin: None	Error: raw_COD
RF %Dif: 0.0	SPCC Limit: 0.0
Dependent Variable: Resp	Weighting: Conc
	Error Limit: 1.00
	CCC Limit: 0.0

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					
21476955 0.200000(1)	23351984 0.500000(2)	22511791 1.0000 (3)	31631032 4.0000 (4)	34298560 8.0000 (5)	34078807 10.0 (6)	-4336647			0.996
M4295391 106412(4)	M11675992 106412(5)	22511791 106412(6)	M126524127 106412(7)	M274388480 106412(8)	M340788069 106412(9)			34017035	
5 Nitrate as N									
				Signal: 1					
25286935 0.200000(1)	26261426 0.500000(2)	25176971 1.0000 (3)	32719746 4.0000 (4)	35427902 8.0000 (5)	36587420 10.0 (6)	-3886007			0.996
M5057387 106412(4)	M13130713 106412(5)	25176971 106412(6)	M130878982 106412(7)	M283423216 106412(8)	M365874197 106412(9)			35732384	
7 Orthophosphate as P									
				Signal: 1					
11446715 0.200000(1)	9698192 0.500000(2)	9264397 1.0000 (3)	10013758 4.0000 (4)	10536589 8.0000 (5)	10423465 10.0 (6)	-91785			0.999
M2289343 106412(4)	M4849096 106412(5)	9264397 106412(6)	M40055033 106412(7)	M84292708 106412(8)	104234648 106412(9)			10360166	

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0010.d  
 Lims ID: icv  
 Client ID:  
 Sample Type: ICV  
 Inject. Date: 11-Nov-2021 17:36:00      ALS Bottle#: 0      Worklist Smp#: 10  
 Injection Vol: 25.0 ul      Dil. Factor: 1.0000  
 Sample Info: 280-0106412-010  
 Misc. Info.: 10  
 Operator ID:      Instrument ID: WC\_IonChrom7  
 Sublist:  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\Anions\_IC7.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 12-Nov-2021 14:02:21      Calib Date: 11-Nov-2021 17:21:00  
 Integrator: Falcon  
 Quant Method: External Standard      Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0009.d

Column 1 : Det: 0005

Process Host: CTX1631

First Level Reviewer: jindarac Date: 11-Nov-2021 18:13:13

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.550	2.550	0.000	65847323	4.00	3.35	
2 Chloride	3.875	3.875	0.000	1218472636	80.0	77.9	M
3 Nitrite as N	4.642	4.642	0.000	135906317	NC	NC	Ma
4 Bromide	5.575	5.575	0.000	37955421	4.00	5.14	Ma
5 Nitrate as N	6.334	6.334	0.000	131581963	NC	NC	Ma
7 Orthophosphate as P	9.500	9.500	0.000	37139806	NC	NC	
6 Sulfate	10.609	10.609	0.000	751231266	80.0	75.7	

### QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

a - User Assigned ID

### Reagents:

IC SO4 ICV_00022	Amount Added: 0.40	Units: mL
CI ICV Std_00002	Amount Added: 0.40	Units: mL
IC ICV 5_00341	Amount Added: 0.40	Units: mL

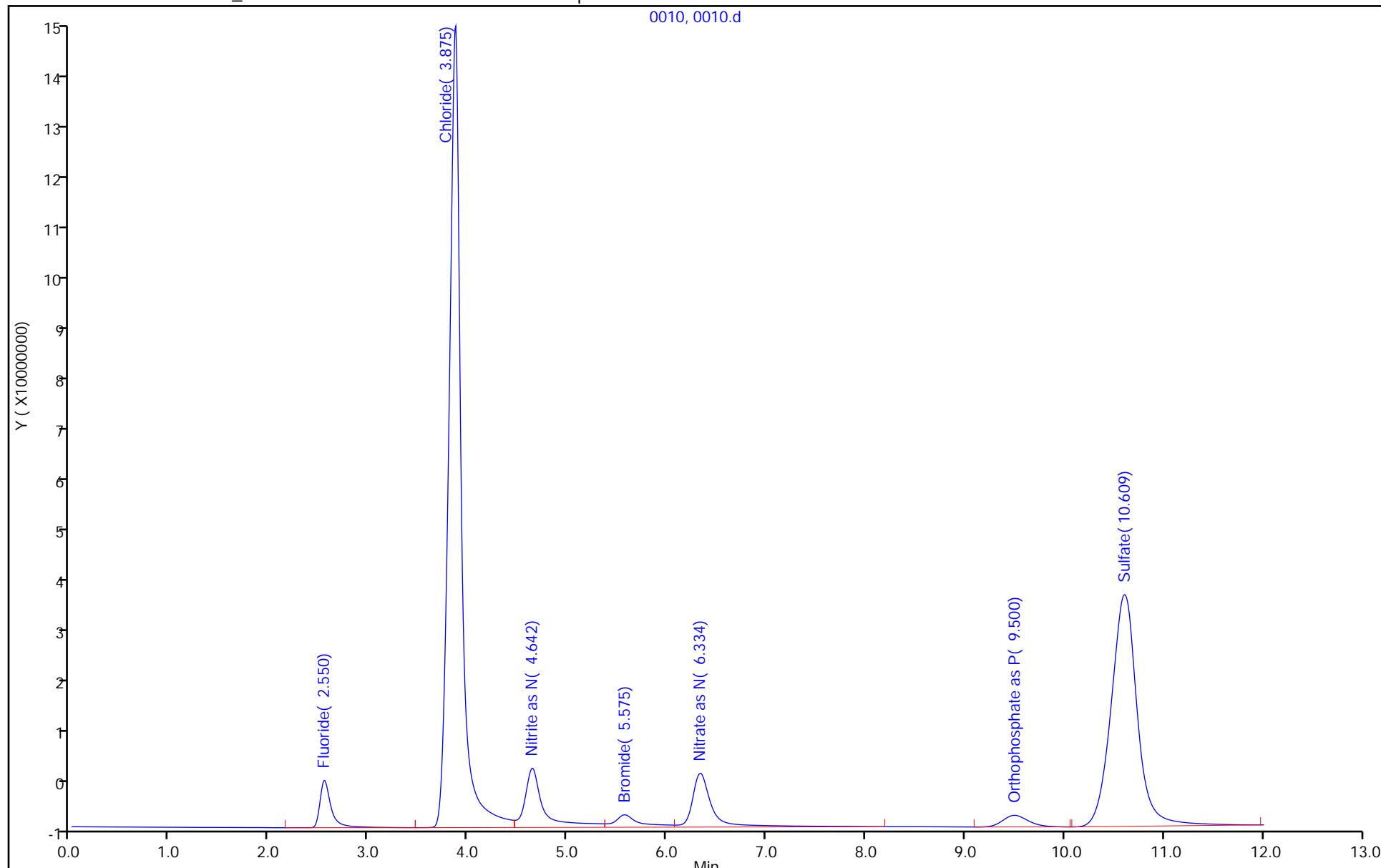
Report Date: 12-Nov-2021 14:02:22

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0010.d  
Injection Date: 11-Nov-2021 17:36:00 Instrument ID: WC\_IonChrom7  
Lims ID: icv Operator ID:  
Client ID:  
Injection Vol: 25.0 ul Worklist Smp#: 10  
Method: Anions\_IC7 Dil. Factor: 1.0000  
Limit Group: Wet - Anions 28D

0010, 0010.d



Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0011.d  
 Lims ID: icb  
 Client ID:  
 Sample Type: ICB  
 Inject. Date: 11-Nov-2021 17:51:00      ALS Bottle#: 0      Worklist Smp#: 11  
 Injection Vol: 25.0 ul      Dil. Factor: 1.0000  
 Sample Info: 280-0106412-011  
 Misc. Info.: 11  
 Operator ID:      Instrument ID: WC\_IonChrom7  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\Anions\_IC7.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 12-Nov-2021 14:02:21      Calib Date: 11-Nov-2021 17:21:00  
 Integrator: Falcon  
 Quant Method: External Standard      Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0009.d  
 Column 1 : Det: 0005  
 Process Host: CTX1631

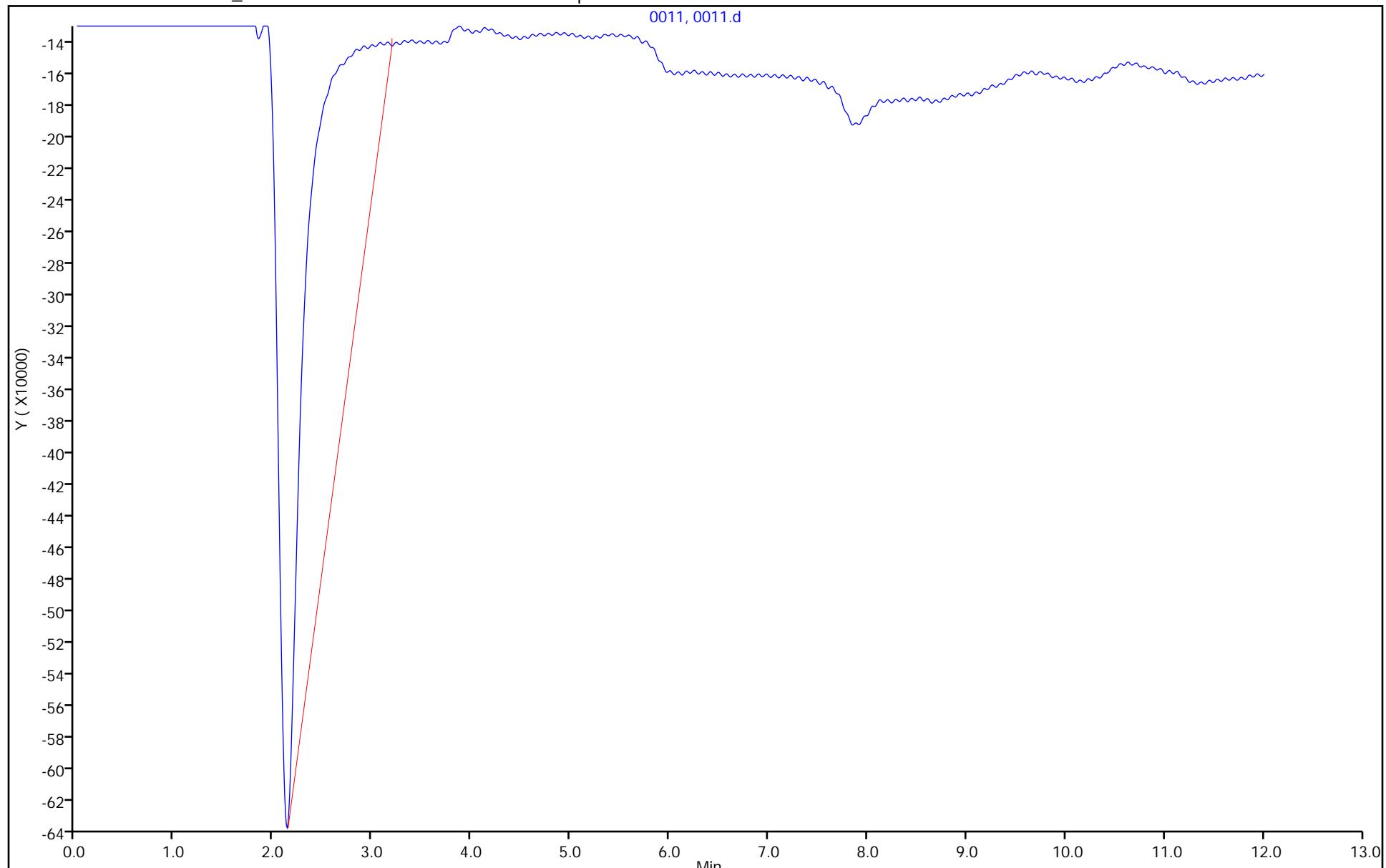
Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.550				ND		
2 Chloride	3.875				ND		
3 Nitrite as N	4.642				ND		
4 Bromide	5.575				ND		
5 Nitrate as N	6.334				ND		
7 Orthophosphate as P	9.500				ND		
6 Sulfate	10.609				ND		

Report Date: 12-Nov-2021 14:02:23

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0011.d  
Injection Date: 11-Nov-2021 17:51:00 Instrument ID: WC\_IonChrom7  
Lims ID: icb Operator ID:  
Client ID:  
Injection Vol: 25.0 ul Worklist Smp#: 11  
Method: Anions\_IC7 Dil. Factor: 1.0000  
Limit Group: Wet - Anions 28D



**IC Instrument Information**
 WL: 106656 Inst ID: IC7 Analysis Date: 11/14/21 Analyst: JF

Rush Job No.	Samples	Anions	QC Req	HT Exp
<u>154834</u>	<u>7</u>	F Cl NO2 Br NO3 PO4 SO4	MS/D	
<u>62268</u>	<u>7</u>	F Cl NO2 Br NO3 PO4 SO4	MS/D	
<u>154591</u>	<u>1</u>	F Cl NO2 Br NO3 PO4 SO4	MS/D	
<u>154944</u>	<u>1</u>	F Cl NO2 Br NO3 PO4 SO4	MS/D	
<u>155054</u>	<u>4</u>	F Cl NO2 Br NO3 PO4 SO4	MS/D	
<u>155048</u>	<u>8</u>	F Cl NO2 Br NO3 PO4 SO4	(MS/D)	4,8
<u>155040</u>	<u>2</u>	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
<u>834</u>	<u>7</u>	F Cl NO2 Br NO3 PO4 SO4	5,10,20	Test
<u>944</u>	<u>1</u>	F Cl NO2 Br NO3 PO4 SO4	50x	Rerun
<u>054</u>		F Cl NO2 Br NO3 PO4 SO4	10,20,50x	dilution.
<u>040</u>		F Cl NO2 Br NO3 PO4 SO4	20X	Hist
		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\_IonChrom7\20211112-106445.b\Anions\_IC7.m  
 Instrument: WC\_IonChrom7 Lims Location: 280  
 Lock State: Initial Calib Locked Cpnd Order: Retention Time  
 Integrator: Falcon Last Modified: 12-Nov-2021 14:01:55  
 No.Compounds:7

**Initial Calibration Batches**

Ical Batch: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b  
 Inj Date : 11-Nov-2021 16:07:00, Sublist: chrom-Anions\_IC7\*sub1

Detector 1: 0005

Compound	Wet - Anions				Wet - Anions 28D			
	b	M1	M2	Err	b	M1	M2	Err
1 Fluoride					289953	195741C		0.998
2 Chloride					-126017	1580377		0.998
3 Nitrite as N	-433664	3401703		0.996				
4 Bromide					-108910	759948S		0.997
5 Nitrate as N	-388600	3573238		0.996				
7 Orthophosphate as P	-91785	1036016		0.999				
6 Sulfate					-658368	1000503		0.996

Eurofins Environment Testing America  
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211112-106445.b\Anions\_IC7.m  
 Instrument: WC\_IonChrom7 Lims Location: 280  
 Lock State: Initial Calib Locked Cpdn Order: Retention Time  
 Integrator: Falcon Last Modified: 12-Nov-2021 14:01:55  
 No.Compounds:7  
 Sublist: chrom-Anions\_IC7\*sub1  
 Limit Group: Wet - Anions 28D

### Detectors

Detector: 1,0005  
 Data Type: ic Spec Type: none  
 Supports Extracted Chromatograms: False  
 Run Time: 0.000-12.000 No. Points: 1561

### Calibration File Names

Level: 1	\\chromfs\Denver\ChromData\WC_IonChrom7\20211111-106412.b\0004.d
	Inj Date: 11-Nov-2021 16:07:00 Worklist: 106412 Sample#: 4
Level: 2	\\chromfs\Denver\ChromData\WC_IonChrom7\20211111-106412.b\0005.d
	Inj Date: 11-Nov-2021 16:22:00 Worklist: 106412 Sample#: 5
Level: 3	\\chromfs\Denver\ChromData\WC_IonChrom7\20211111-106412.b\0006.d
	Inj Date: 11-Nov-2021 16:36:00 Worklist: 106412 Sample#: 6
Level: 4	\\chromfs\Denver\ChromData\WC_IonChrom7\20211111-106412.b\0007.d
	Inj Date: 11-Nov-2021 16:51:00 Worklist: 106412 Sample#: 7
Level: 5	\\chromfs\Denver\ChromData\WC_IonChrom7\20211111-106412.b\0008.d
	Inj Date: 11-Nov-2021 17:06:00 Worklist: 106412 Sample#: 8
Level: 6	\\chromfs\Denver\ChromData\WC_IonChrom7\20211111-106412.b\0009.d
	Inj Date: 11-Nov-2021 17:21:00 Worklist: 106412 Sample#: 9

Start Cal Date: 11-Nov-2021 16:07:00 End Cal Date: 12-Nov-2021 05:39:00

### Individual Compound Calibration Parameters

Quant Method: ESTD	RF Calibration: Replace
Rule Name: Linear1	Curve: Linear
Origin: None	Error: CorrCoef
RF %Dif: 0.0	SPCC Limit: 0.0
Dependent Variable: Resp	Weighting: Conc
	Error Limit: 1.00
	CCC Limit: 0.0

### 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

23967070	20120988	17235087	18567474	20413344	19598047	289953			0.998
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		19574109		
M4793414	M10060494	M17235087	M74269894	M163306752	195980470				
106412(4)	106412(5)	106412(6)	106412(7)	106412(8)	106412(9)				

## 2 Chloride

Signal: 1

9542066	9458915	9290807	13700897	16192194	16096970	-12601701			0.998
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		15803770		
M9542066	M23647287	M46454035	M822053816	M1943063322	M3219394062				
106412(4)	106412(5)	106412(6)	106412(7)	106412(8)	106412(9)				

## 4 Bromide

Signal: 1

4906185	4039564	4502884	8033882	7454438	7429833	-1089103			0.997
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		7599489		
M981237	M2019782	4502884	M32135526	M59635506	M74298330				
106412(4)	106412(5)	106412(6)	106412(7)	106412(8)	106412(9)				

## 6 Sulfate

Signal: 1

Error: raw\_COD

6703021	6774056	6734805	8789935	9958161	10338831	-6583680			0.996
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		10005034		
M6703021	M16935139	33674025	527396077	M1194979324	2067766230				
106412(4)	106412(5)	106412(6)	106412(7)	106412(8)	106412(9)				

Eurofins Environment Testing America  
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\Anions\_IC7.m  
 Instrument: WC\_IonChrom7 Lims Location: 280  
 Lock State: Initial Calib Locked Cpnd Order: Retention Time  
 Integrator: Falcon Last Modified: 12-Nov-2021 14:02:45  
 No.Compounds:7  
 Sublist: chrom-Anions\_IC7\*sub1  
 Limit Group: Wet - Anions

### Detectors

Detector: 1, 0005  
 Data Type: ic Spec Type: none  
 Supports Extracted Chromatograms: False  
 Run Time: 0.000-12.000 No. Points: 1561

### Calibration File Names

Level: 1	\\chromfs\Denver\ChromData\WC_IonChrom7\20211111-106412.b\0004.d
	Inj Date: 11-Nov-2021 16:07:00 Worklist: 106412 Sample#: 4
Level: 2	\\chromfs\Denver\ChromData\WC_IonChrom7\20211111-106412.b\0005.d
	Inj Date: 11-Nov-2021 16:22:00 Worklist: 106412 Sample#: 5
Level: 3	\\chromfs\Denver\ChromData\WC_IonChrom7\20211111-106412.b\0006.d
	Inj Date: 11-Nov-2021 16:36:00 Worklist: 106412 Sample#: 6
Level: 4	\\chromfs\Denver\ChromData\WC_IonChrom7\20211111-106412.b\0007.d
	Inj Date: 11-Nov-2021 16:51:00 Worklist: 106412 Sample#: 7
Level: 5	\\chromfs\Denver\ChromData\WC_IonChrom7\20211111-106412.b\0008.d
	Inj Date: 11-Nov-2021 17:06:00 Worklist: 106412 Sample#: 8
Level: 6	\\chromfs\Denver\ChromData\WC_IonChrom7\20211111-106412.b\0009.d
	Inj Date: 11-Nov-2021 17:21:00 Worklist: 106412 Sample#: 9

Start Cal Date: 11-Nov-2021 16:07:00 End Cal Date: 11-Nov-2021 17:21:00

### Individual Compound Calibration Parameters

Quant Method: ESTD	RF Calibration: Replace
Rule Name: Linear1	Curve: Linear
Origin: None	Error: raw_COD
RF %Dif: 0.0	SPCC Limit: 0.0
Dependent Variable: Resp	Weighting: Conc
	Error Limit: 1.00
	CCC Limit: 0.0

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					
21476955 0.200000(1)	23351984 0.500000(2)	22511791 1.0000 (3)	31631032 4.0000 (4)	34298560 8.0000 (5)	34078807 10.0 (6)	-4336647			0.996
M4295391 106412(4)	M11675992 106412(5)	22511791 106412(6)	M126524127 106412(7)	M274388480 106412(8)	M340788069 106412(9)			34017035	
5 Nitrate as N									
				Signal: 1					
25286935 0.200000(1)	26261426 0.500000(2)	25176971 1.0000 (3)	32719746 4.0000 (4)	35427902 8.0000 (5)	36587420 10.0 (6)	-3886007			0.996
M5057387 106412(4)	M13130713 106412(5)	25176971 106412(6)	M130878982 106412(7)	M283423216 106412(8)	M365874197 106412(9)			35732384	
7 Orthophosphate as P									
				Signal: 1					
11446715 0.200000(1)	9698192 0.500000(2)	9264397 1.0000 (3)	10013758 4.0000 (4)	10536589 8.0000 (5)	10423465 10.0 (6)	-91785			0.999
M2289343 106412(4)	M4849096 106412(5)	9264397 106412(6)	M40055033 106412(7)	M84292708 106412(8)	104234648 106412(9)			10360166	

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211119-106656.b\0002.d  
 Lims ID: ccb  
 Client ID:  
 Sample Type: CCB  
 Inject. Date: 19-Nov-2021 10:06:00 ALS Bottle#: 0 Worklist Smp#: 2  
 Injection Vol: 25.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-0106610-002  
 Operator ID: Instrument ID: WC\_IonChrom7  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211119-106656.b\Anions\_IC7.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 20-Nov-2021 19:36:20 Calib Date: 11-Nov-2021 17:21:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0009.d  
 Column 1 : Det: 0005  
 Process Host: CTX1611

First Level Reviewer: jindaracr Date: 20-Nov-2021 19:29:19

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.492				ND		
2 Chloride	3.742				ND		U
3 Nitrite as N	4.492				ND		
4 Bromide	5.417				ND		
5 Nitrate as N	6.126				ND		
7 Orthophosphate as P	9.126				ND		
6 Sulfate	10.284				ND		

### QC Flag Legend

Processing Flags

Review Flags

U - Marked Undetected

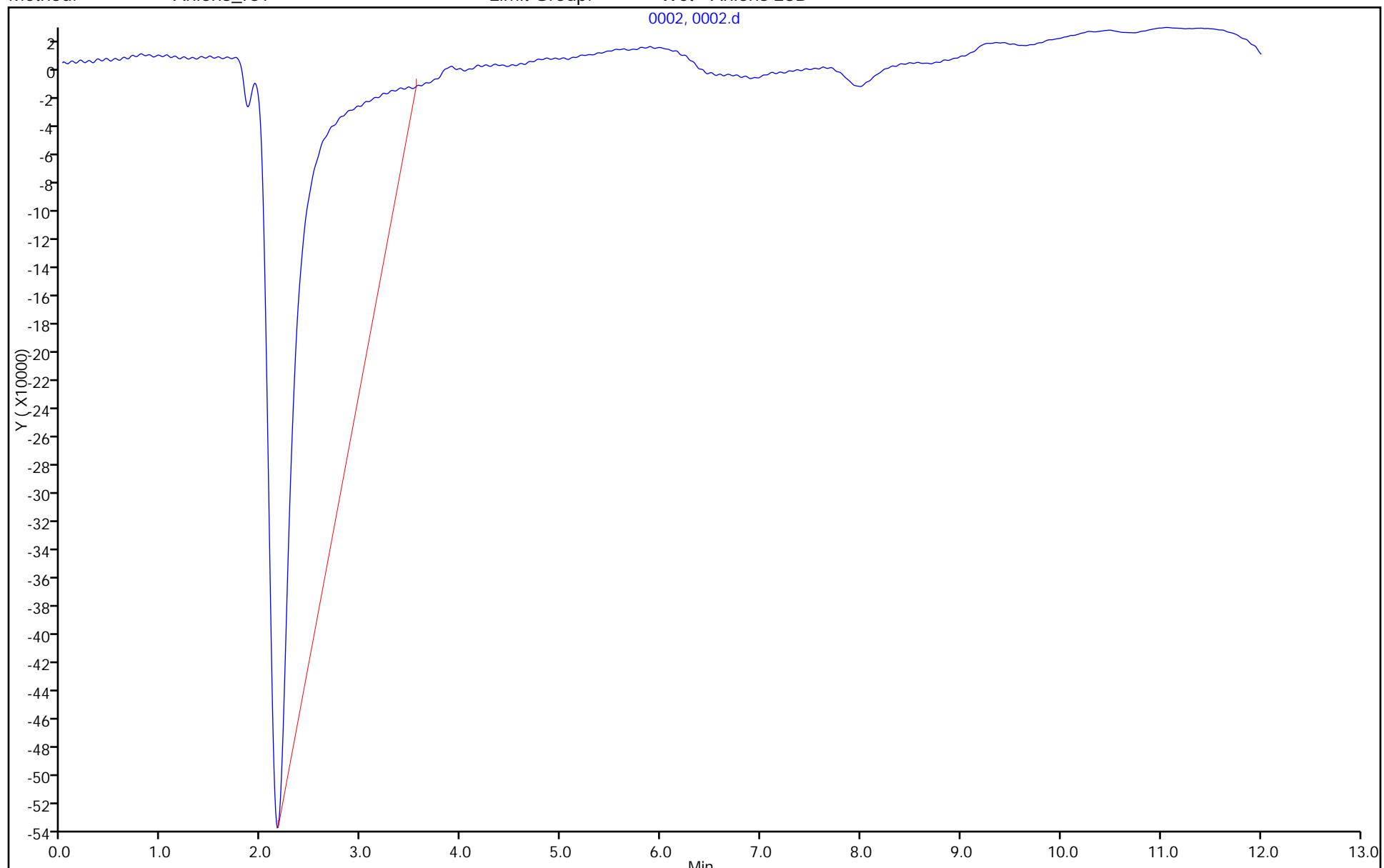
Report Date: 20-Nov-2021 19:36:20

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211119-106656.b\0002.d  
Injection Date: 19-Nov-2021 10:06:00 Instrument ID: WC\_IonChrom7  
Lims ID: ccb Operator ID:  
Client ID:  
Injection Vol: 25.0 ul ALS Bottle#: 0  
Method: Anions\_IC7 Dil. Factor: 1.0000  
Limit Group: Wet - Anions 28D

Worklist Smp#: 2



Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211119-106656.b\0003.d  
 Lims ID: mrl  
 Client ID:  
 Sample Type: MRL  
 Inject. Date: 19-Nov-2021 10:21:00 ALS Bottle#: 0 Worklist Smp#: 3  
 Injection Vol: 25.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-0106610-003  
 Operator ID: Instrument ID: WC\_IonChrom7  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211119-106656.b\Anions\_IC7.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 20-Nov-2021 19:36:20 Calib Date: 11-Nov-2021 17:21:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0009.d  
 Column 1 : Det: 0005  
 Process Host: CTX1611

First Level Reviewer: jindaratac Date: 20-Nov-2021 19:29:39

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.492	2.492	0.000	8776422	0.5000	0.4336	M
2 Chloride	3.717	3.742	-0.025	54130404	5.00	4.22	
3 Nitrite as N	4.534	4.492	0.042	13056840	NC	NC	
4 Bromide	5.450	5.417	0.033	2416198	0.5000	0.4613	
5 Nitrate as N	6.159	6.126	0.033	12666566	NC	NC	
7 Orthophosphate as P	9.050	9.126	-0.076	4806127	NC	NC	
6 Sulfate	10.059	10.284	-0.225	38249760	5.00	4.48	

### QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

### Reagents:

IC Cal low_00608	Amount Added: 0.05	Units: mL
IC CAL cl/so4_00394	Amount Added: 0.10	Units: mL

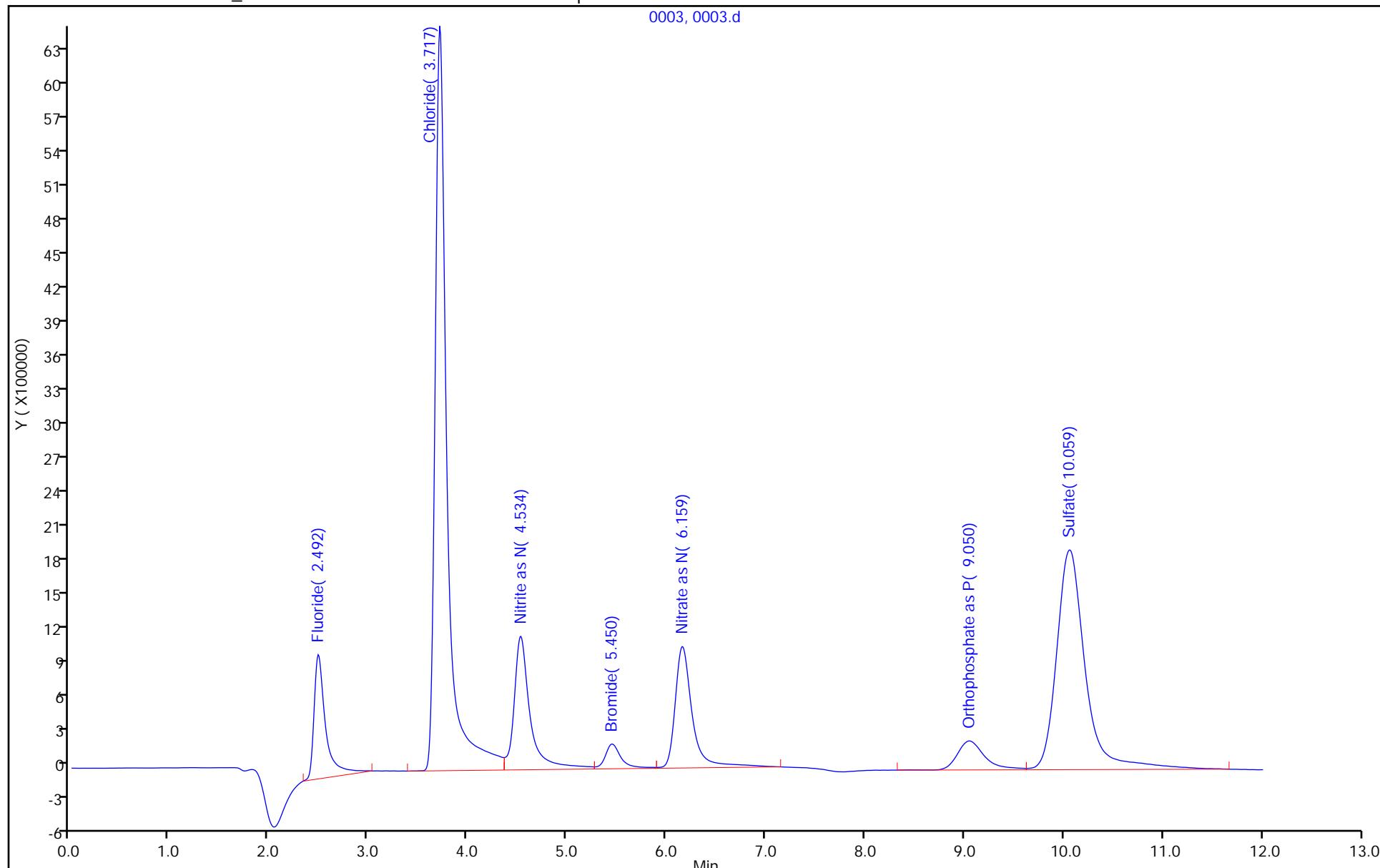
Report Date: 20-Nov-2021 19:36:21

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211119-106656.b\0003.d  
Injection Date: 19-Nov-2021 10:21:00 Instrument ID: WC\_IonChrom7  
Lims ID: mrl Operator ID:  
Client ID:  
Injection Vol: 25.0 ul Worklist Smp#: 3  
Method: Anions\_IC7 Dil. Factor: 1.0000  
Limit Group: Wet - Anions 28D

0003, 0003.d



Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211119-106656.b\0006.d  
 Lims ID: mb  
 Client ID:  
 Sample Type: MB  
 Inject. Date: 19-Nov-2021 11:06:00 ALS Bottle#: 0 Worklist Smp#: 6  
 Injection Vol: 25.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-0106610-006  
 Operator ID: Instrument ID: WC\_IonChrom7  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211119-106656.b\Anions\_IC7.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 20-Nov-2021 19:36:20 Calib Date: 11-Nov-2021 17:21:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0009.d  
 Column 1 : Det: 0005  
 Process Host: CTX1611

First Level Reviewer: jindaracr Date: 20-Nov-2021 19:29:49

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.492				ND		U
2 Chloride	3.742				ND		
3 Nitrite as N	4.492				ND		
4 Bromide	5.417				ND		
5 Nitrate as N	6.126				ND		
7 Orthophosphate as P	9.126				ND		
6 Sulfate	10.284				ND		

### QC Flag Legend

Processing Flags

Review Flags

U - Marked Undetected

Report Date: 20-Nov-2021 19:36:22

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211119-106656.b\0006.d

Injection Date: 19-Nov-2021 11:06:00

Instrument ID: WC\_IonChrom7

Operator ID:

Lims ID: mb

Worklist Smp#: 6

Client ID:

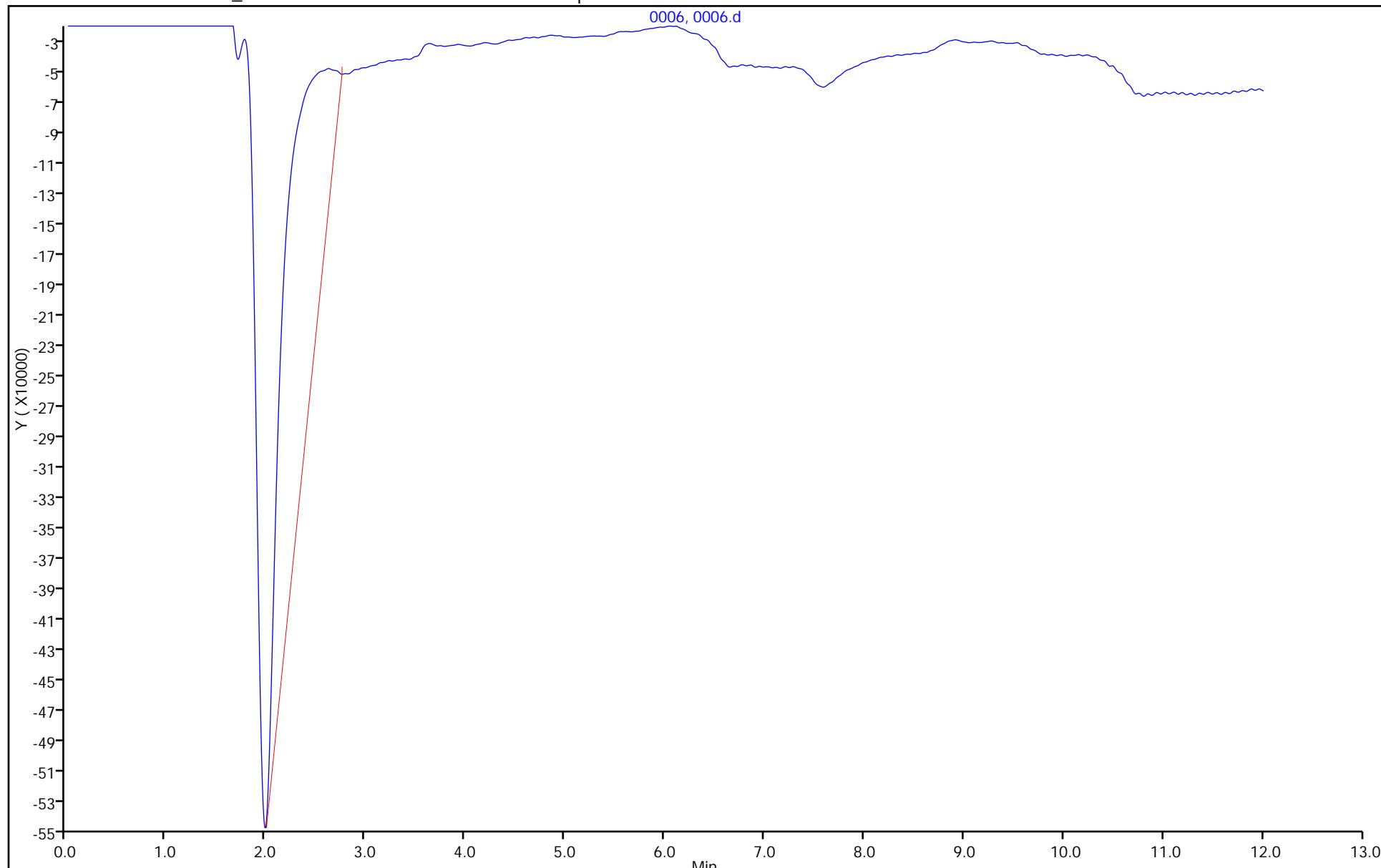
Injection Vol: 25.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: Anions\_IC7

Limit Group: Wet - Anions 28D



Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211119-106656.b\0017.d  
 Lims ID: ccv  
 Client ID:  
 Sample Type: CCV  
 Inject. Date: 19-Nov-2021 13:50:00 ALS Bottle#: 0 Worklist Smp#: 71  
 Injection Vol: 25.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-0106656-071  
 Misc. Info.: 27592  
 Operator ID: Instrument ID: WC\_IonChrom7  
 Sublist: chrom-Anions\_IC7\*sub1  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211119-106656.b\Anions\_IC7.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 20-Nov-2021 19:36:25 Calib Date: 11-Nov-2021 17:21:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0009.d  
 Column 1 : Det: 0005  
 Process Host: CTX1611

First Level Reviewer: gonzalezsp Date: 19-Nov-2021 15:20:46

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.409	2.492	-0.083	85733918	5.00	4.37	
2 Chloride	3.609	3.742	-0.133	1503743568	100.0	95.9	
3 Nitrite as N	4.309	4.492	-0.183	134216536	NC	NC	
4 Bromide	5.159	5.417	-0.258	27913245	5.00	3.82	
5 Nitrate as N	5.850	6.126	-0.276	152140918	NC	NC	
7 Orthophosphate as P	8.625	9.126	-0.501	53230370	NC	NC	a
6 Sulfate	9.709	10.284	-0.575	1025573688	100.0	103.2	a

### QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

a - User Assigned ID

### Reagents:

IC LCS\_01845

Amount Added: 5.00

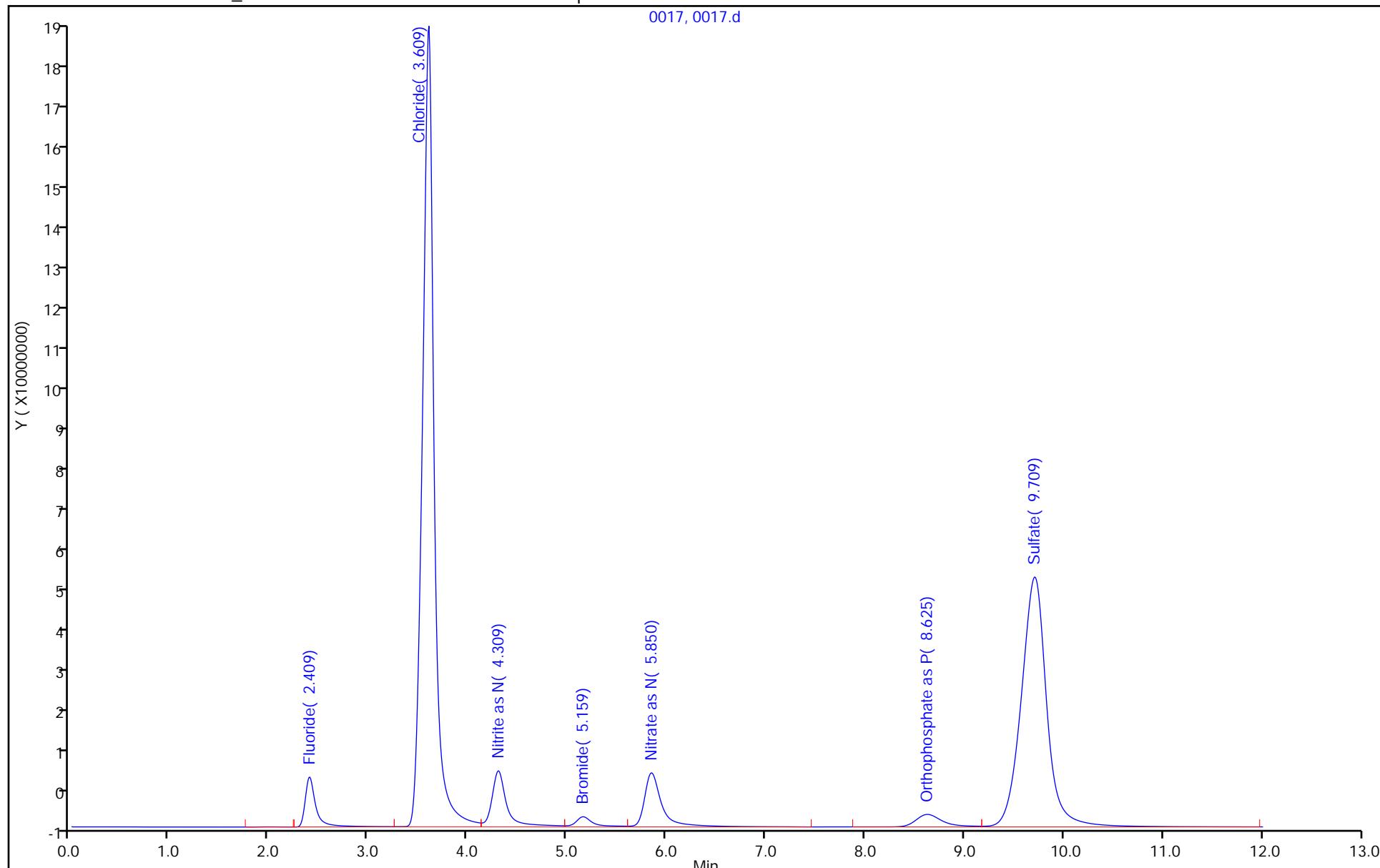
Units: mL

Report Date: 20-Nov-2021 19:36:25

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211119-106656.b\0017.d  
Injection Date: 19-Nov-2021 13:50:00 Instrument ID: WC\_IonChrom7  
Lims ID: ccv Operator ID:  
Client ID:  
Injection Vol: 25.0 ul Worklist Smp#: 71  
Method: Anions\_IC7 Dil. Factor: 1.0000  
Limit Group: Wet - Anions 28D ALS Bottle#: 0



## Eurofins TestAmerica, Denver

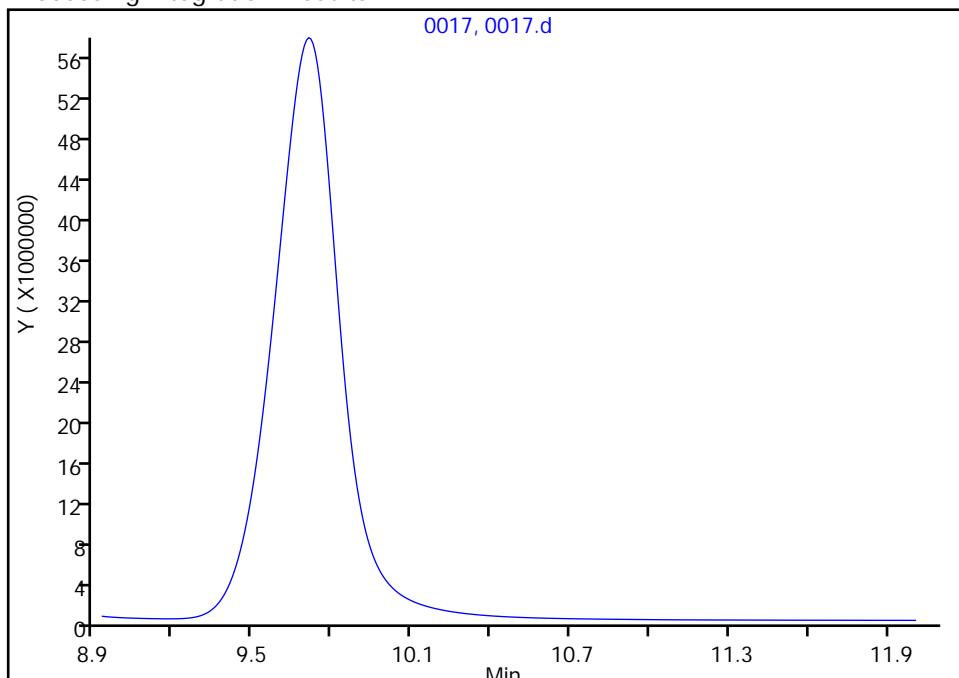
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211119-106656.b\0017.d  
 Injection Date: 19-Nov-2021 13:50:00 Instrument ID: WC\_IonChrom7  
 Lims ID: ccv  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 71  
 Injection Vol: 25.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC7 Limit Group: Wet - Anions 28D  
 Column: Detector 0005

**6 Sulfate, CAS: 14808-79-8**

Signal: 1

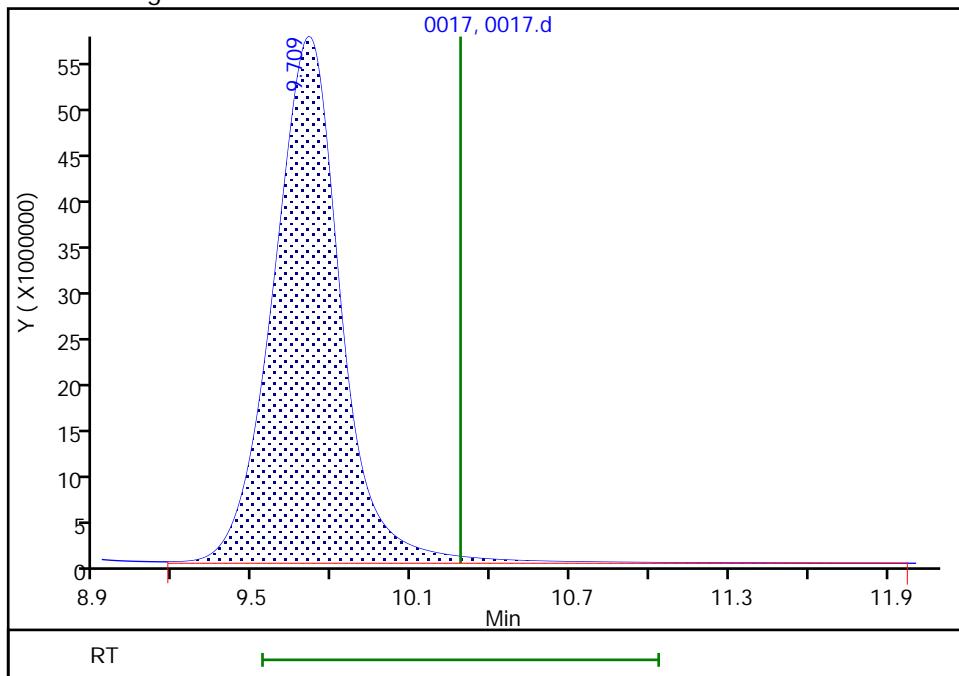
Not Detected  
 Expected RT: 10.28

## Processing Integration Results



RT: 9.71  
 Area: 1025573688  
 Amount: 103.1638  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: gonzalezsp, 19-Nov-2021 15:20:42

Audit Action: Assigned Compound ID

Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211119-106656.b\0018.d  
 Lims ID: ccb  
 Client ID:  
 Sample Type: CCB  
 Inject. Date: 19-Nov-2021 14:05:00      ALS Bottle#: 0      Worklist Smp#: 85  
 Injection Vol: 25.0 ul      Dil. Factor: 1.0000  
 Sample Info: 280-0106656-085  
 Misc. Info.: 8905  
 Operator ID:      Instrument ID: WC\_IonChrom7  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211119-106656.b\Anions\_IC7.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 20-Nov-2021 19:36:25      Calib Date: 11-Nov-2021 17:21:00  
 Integrator: Falcon  
 Quant Method: External Standard      Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0009.d  
 Column 1 : Det: 0005  
 Process Host: CTX1611

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.492				ND		
2 Chloride	3.742				ND		
3 Nitrite as N	4.492				ND		
4 Bromide	5.417				ND		
5 Nitrate as N	6.126				ND		
7 Orthophosphate as P	9.126				ND		
6 Sulfate	10.284				ND		

Report Date: 20-Nov-2021 19:36:25

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211119-106656.b\0018.d

Injection Date: 19-Nov-2021 14:05:00

Instrument ID: WC\_IonChrom7

Operator ID:

Lims ID: ccb

Worklist Smp#: 85

Client ID:

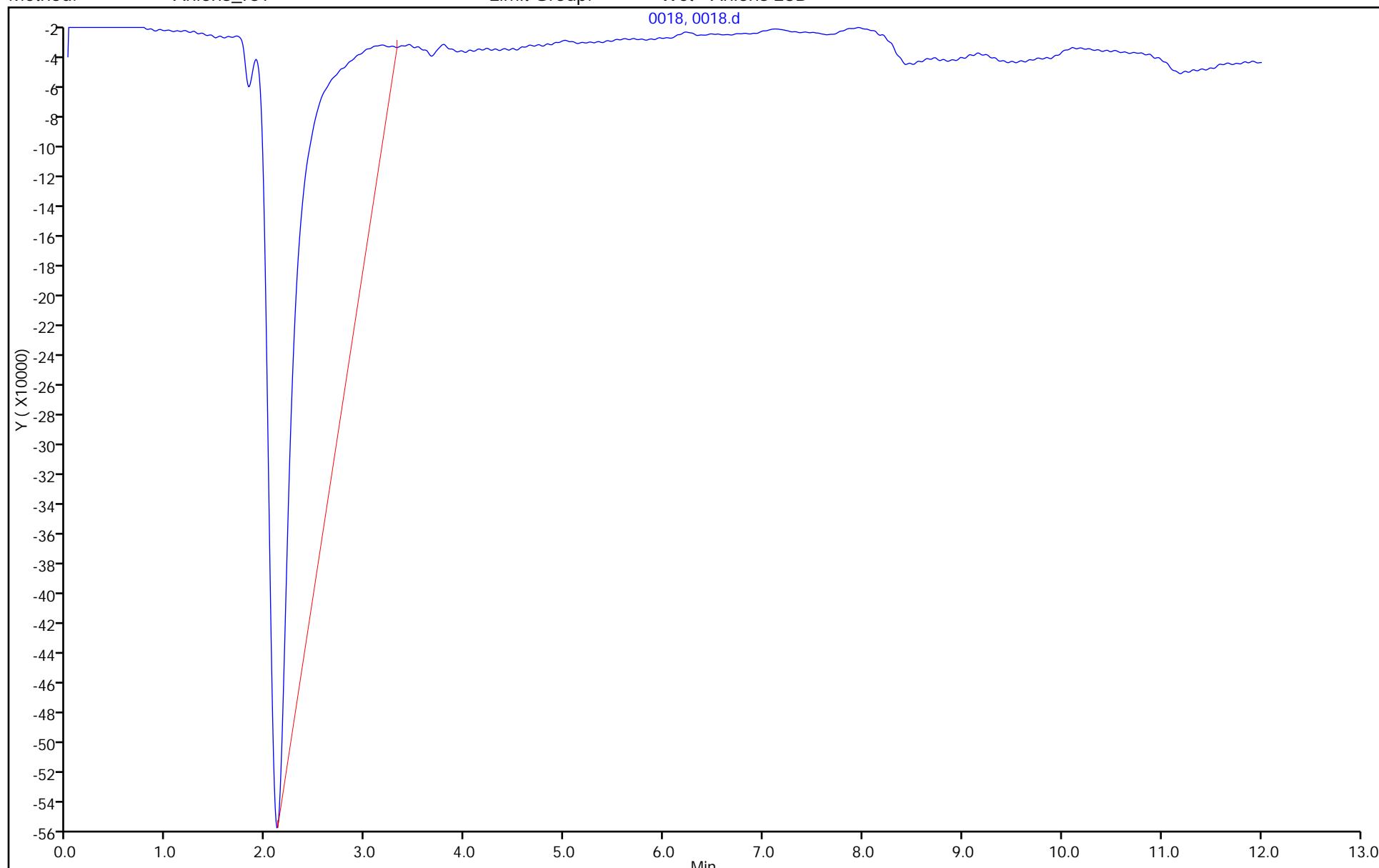
Injection Vol: 25.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: Anions\_IC7

Limit Group: Wet - Anions 28D



Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211119-106656.b\29.0000.d  
 Lims ID: ccv  
 Client ID:  
 Sample Type: CCV  
 Inject. Date: 19-Nov-2021 16:50:00 ALS Bottle#: 0 Worklist Smp#: 82  
 Injection Vol: 25.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-0106656-082  
 Misc. Info.: 5488  
 Operator ID: Instrument ID: WC\_IonChrom7  
 Sublist: chrom-Anions\_IC7\*sub1  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211119-106656.b\Anions\_IC7.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 20-Nov-2021 19:36:28 Calib Date: 11-Nov-2021 17:21:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0009.d  
 Column 1 : Det: 0005  
 Process Host: CTX1611

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.442	2.492	-0.050	91474597	5.00	4.66	
2 Chloride	3.734	3.742	-0.008	1666680418	100.0	106.3	
3 Nitrite as N	4.500	4.492	0.008	144386460	NC	NC	
4 Bromide	5.409	5.417	-0.008	28542332	5.00	3.90	
5 Nitrate as N	6.125	6.126	-0.001	158591313	NC	NC	
7 Orthophosphate as P	9.000	9.126	-0.126	56355236	NC	NC	
6 Sulfate	10.092	10.284	-0.192	1060161219	100.0	106.6	

**QC Flag Legend**

Processing Flags

NC - Not Calibrated

**Reagents:**

IC LCS\_01845

Amount Added: 5.00

Units: mL

Report Date: 20-Nov-2021 19:36:28

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211119-106656.b\29.0000.d

Injection Date: 19-Nov-2021 16:50:00

Instrument ID: WC\_IonChrom7

Operator ID:

Lims ID: ccv

Worklist Smp#: 82

Client ID:

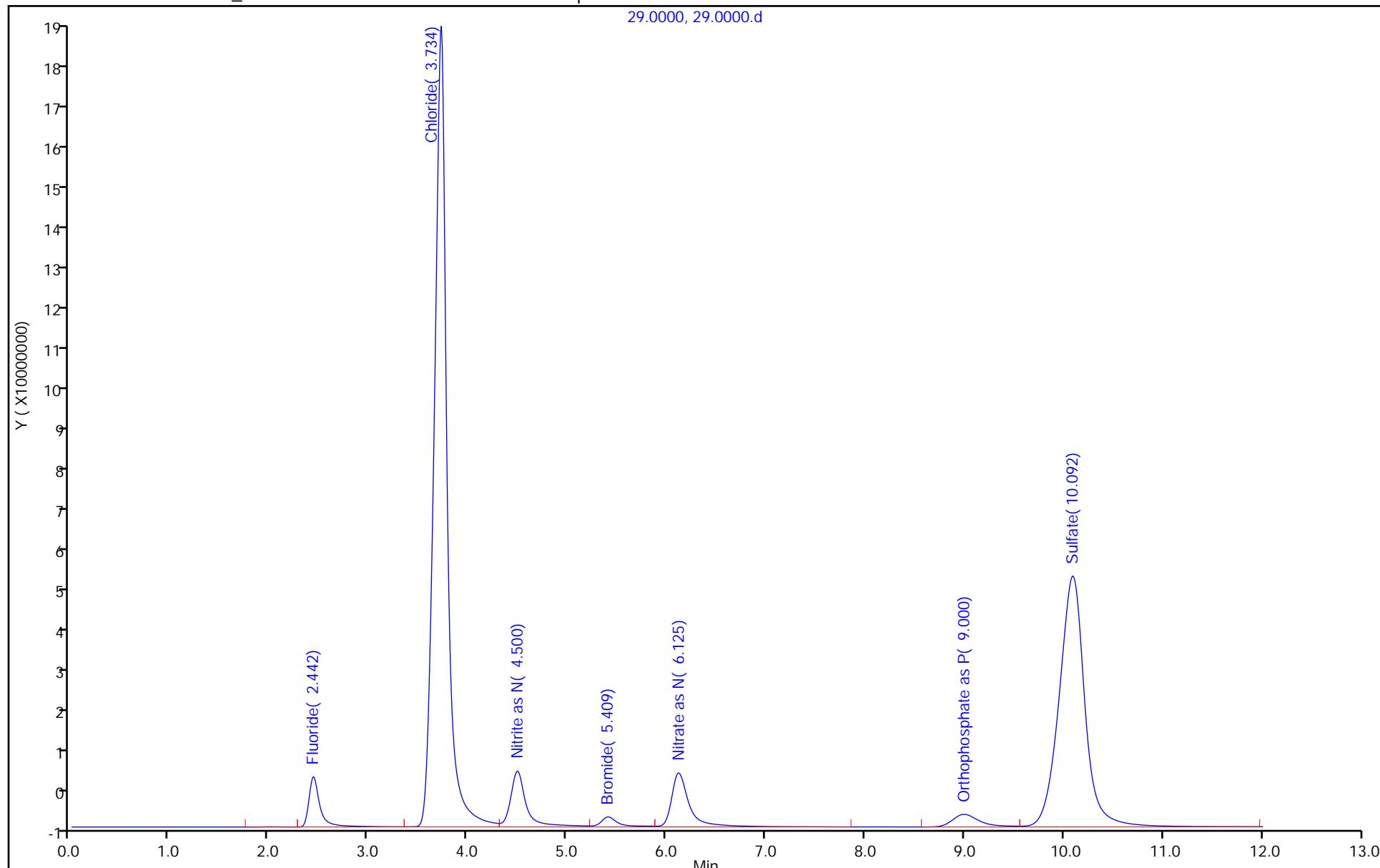
Injection Vol: 25.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: Anions\_IC7

Limit Group: Wet - Anions 28D



Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211119-106656.b\30.0000.d  
 Lims ID: ccb  
 Client ID:  
 Sample Type: CCB  
 Inject. Date: 19-Nov-2021 17:05:00      ALS Bottle#: 0      Worklist Smp#: 83  
 Injection Vol: 25.0 ul      Dil. Factor: 1.0000  
 Sample Info: 280-0106656-083  
 Misc. Info.: 1516  
 Operator ID:      Instrument ID: WC\_IonChrom7  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211119-106656.b\Anions\_IC7.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 20-Nov-2021 19:36:28      Calib Date: 11-Nov-2021 17:21:00  
 Integrator: Falcon  
 Quant Method: External Standard      Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0009.d  
 Column 1 :      Det: 0005  
 Process Host: CTX1611

First Level Reviewer: jindarac Date: 20-Nov-2021 19:32:49

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.492				ND		
2 Chloride	3.742				ND		U
3 Nitrite as N	4.492				ND		
4 Bromide	5.417				ND		
5 Nitrate as N	6.126				ND		
7 Orthophosphate as P	9.126				ND		
6 Sulfate	10.284				ND		

### QC Flag Legend

Processing Flags

Review Flags

U - Marked Undetected

Report Date: 20-Nov-2021 19:36:29

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211119-106656.b\30.0000.d

Injection Date: 19-Nov-2021 17:05:00

Instrument ID: WC\_IonChrom7

Operator ID:

Lims ID: ccb

Worklist Smp#: 83

Client ID:

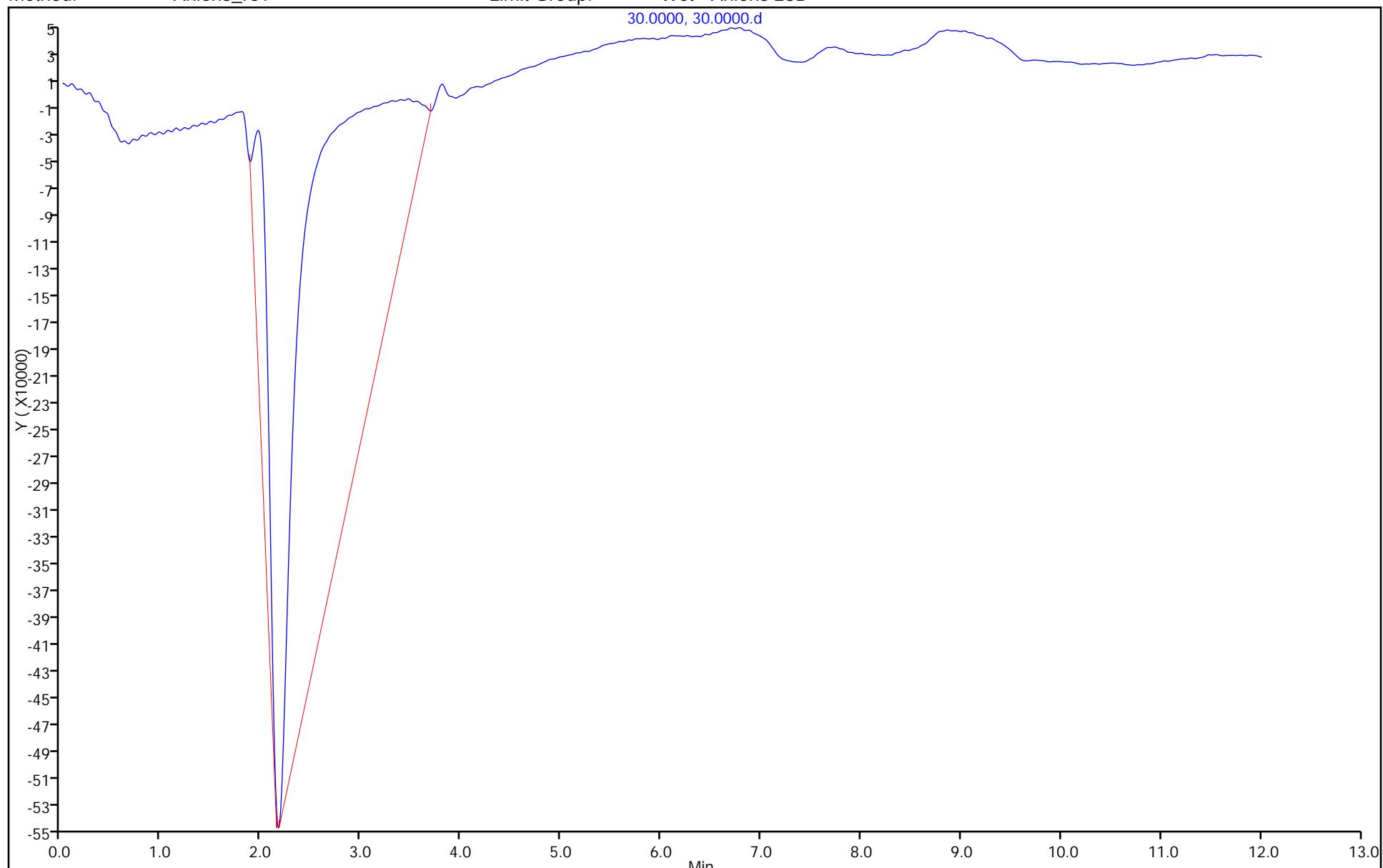
Injection Vol: 25.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: Anions\_IC7

Limit Group: Wet - Anions 28D



Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211119-106656.b\41.0000.d  
 Lims ID: ccv  
 Client ID:  
 Sample Type: CCV  
 Inject. Date: 19-Nov-2021 19:49:00      ALS Bottle#: 0      Worklist Smp#: 96  
 Injection Vol: 25.0 ul      Dil. Factor: 1.0000  
 Sample Info: 280-0106656-096  
 Misc. Info.: 10663  
 Operator ID:      Instrument ID: WC\_IonChrom7  
 Sublist: chrom-Anions\_IC7\*sub1  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211119-106656.b\Anions\_IC7.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 20-Nov-2021 19:36:31      Calib Date: 11-Nov-2021 17:21:00  
 Integrator: Falcon  
 Quant Method: External Standard      Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0009.d  
 Column 1 : Det: 0005  
 Process Host: CTX1611

First Level Reviewer: jindarac Date: 20-Nov-2021 19:34:39

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.559	2.492	0.067	94610497	5.00	4.82	
2 Chloride	3.875	3.742	0.133	1657459250	100.0	105.7	
3 Nitrite as N	4.634	4.492	0.142	145359073	NC	NC	
4 Bromide	5.542	5.417	0.125	29233660	5.00	3.99	
5 Nitrate as N	6.242	6.126	0.116	159823652	NC	NC	
7 Orthophosphate as P	9.142	9.126	0.016	54333240	NC	NC	M
6 Sulfate	10.267	10.284	-0.017	1092172930	100.0	109.8	M

### QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

### Reagents:

IC LCS\_01845

Amount Added: 5.00

Units: mL

Report Date: 20-Nov-2021 19:36:31

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211119-106656.b\41.0000.d

Injection Date: 19-Nov-2021 19:49:00

Instrument ID: WC\_IonChrom7

Operator ID:

Lims ID: ccv

Worklist Smp#: 96

Client ID:

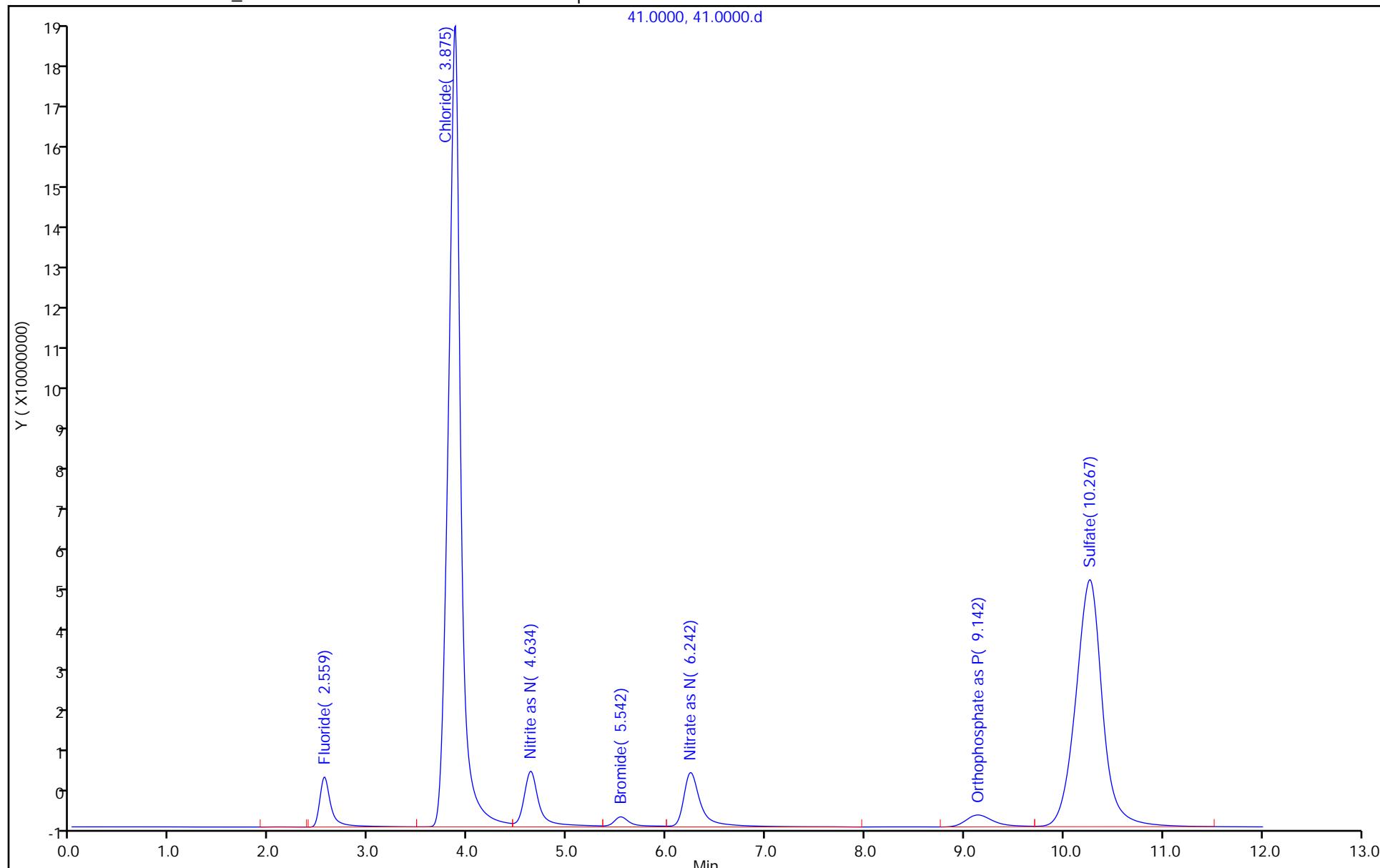
Injection Vol: 25.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: Anions\_IC7

Limit Group: Wet - Anions 28D



## Eurofins TestAmerica, Denver

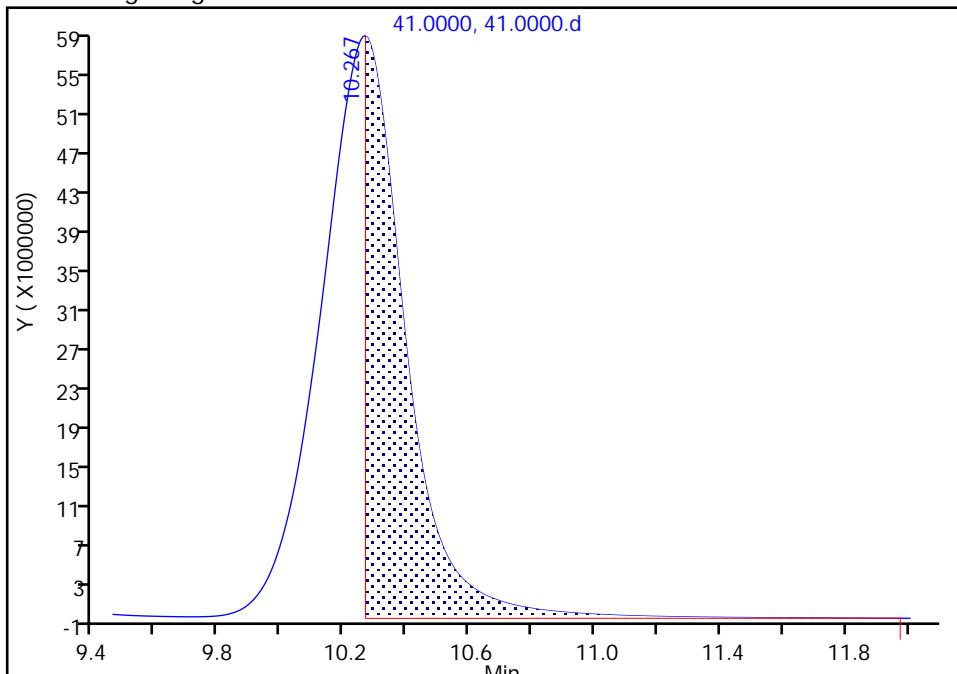
Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211119-106656.b\41.0000.d  
 Injection Date: 19-Nov-2021 19:49:00 Instrument ID: WC\_IonChrom7  
 Lims ID: ccv  
 Client ID:  
 Operator ID: ALS Bottle#: 0 Worklist Smp#: 96  
 Injection Vol: 25.0 ul Dil. Factor: 1.0000  
 Method: Anions\_IC7 Limit Group: Wet - Anions 28D  
 Column: Detector 0005

**6 Sulfate, CAS: 14808-79-8**

Signal: 1

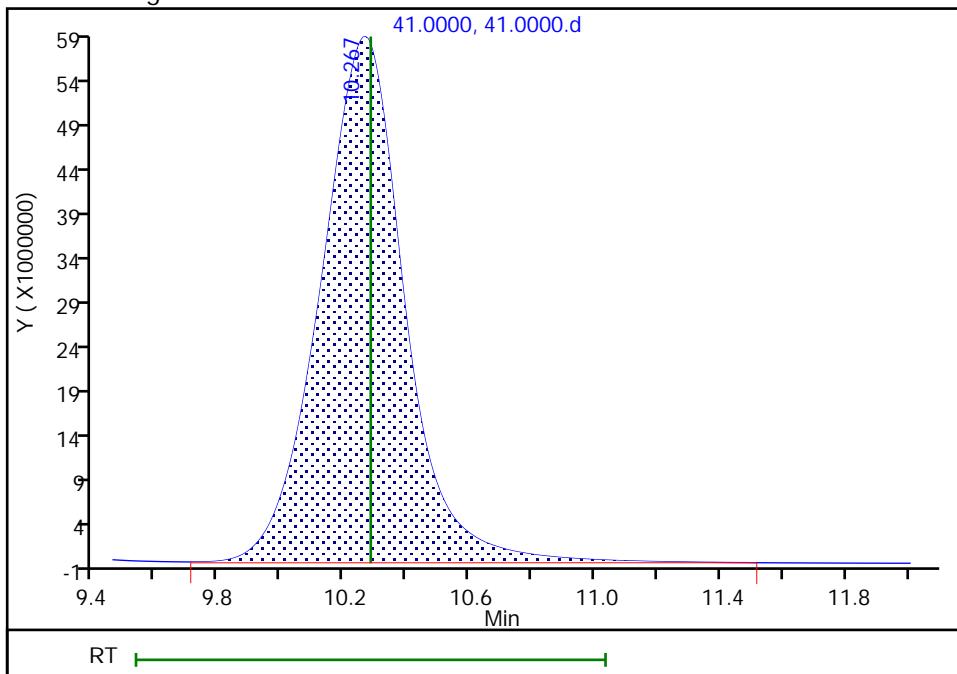
## Processing Integration Results

RT: 10.27  
 Area: 528738485  
 Amount: 53.505279  
 Amount Units: ug/ml



## Manual Integration Results

RT: 10.27  
 Area: 1092172930  
 Amount: 109.8204  
 Amount Units: ug/ml



Reviewer: jindarac, 20-Nov-2021 19:34:36

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211119-106656.b\42.0000.d  
 Lims ID: ccb  
 Client ID:  
 Sample Type: CCB  
 Inject. Date: 19-Nov-2021 20:04:00      ALS Bottle#: 0      Worklist Smp#: 97  
 Injection Vol: 25.0 ul      Dil. Factor: 1.0000  
 Sample Info: 280-0106656-097  
 Misc. Info.: 25925  
 Operator ID:      Instrument ID: WC\_IonChrom7  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211119-106656.b\Anions\_IC7.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 20-Nov-2021 19:36:31      Calib Date: 11-Nov-2021 17:21:00  
 Integrator: Falcon  
 Quant Method: External Standard      Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0009.d  
 Column 1 :      Det: 0005  
 Process Host: CTX1611

First Level Reviewer: jindarac Date: 20-Nov-2021 19:34:47

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.492				ND		
2 Chloride	3.742				ND		U
3 Nitrite as N	4.492				ND		
4 Bromide	5.417				ND		
5 Nitrate as N	6.126				ND		
7 Orthophosphate as P	9.126				ND		
6 Sulfate	10.284				ND		

### QC Flag Legend

Processing Flags

Review Flags

U - Marked Undetected

Report Date: 20-Nov-2021 19:36:32

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211119-106656.b\42.0000.d

Injection Date: 19-Nov-2021 20:04:00

Instrument ID: WC\_IonChrom7

Operator ID:

Lims ID: ccb

Worklist Smp#: 97

Client ID:

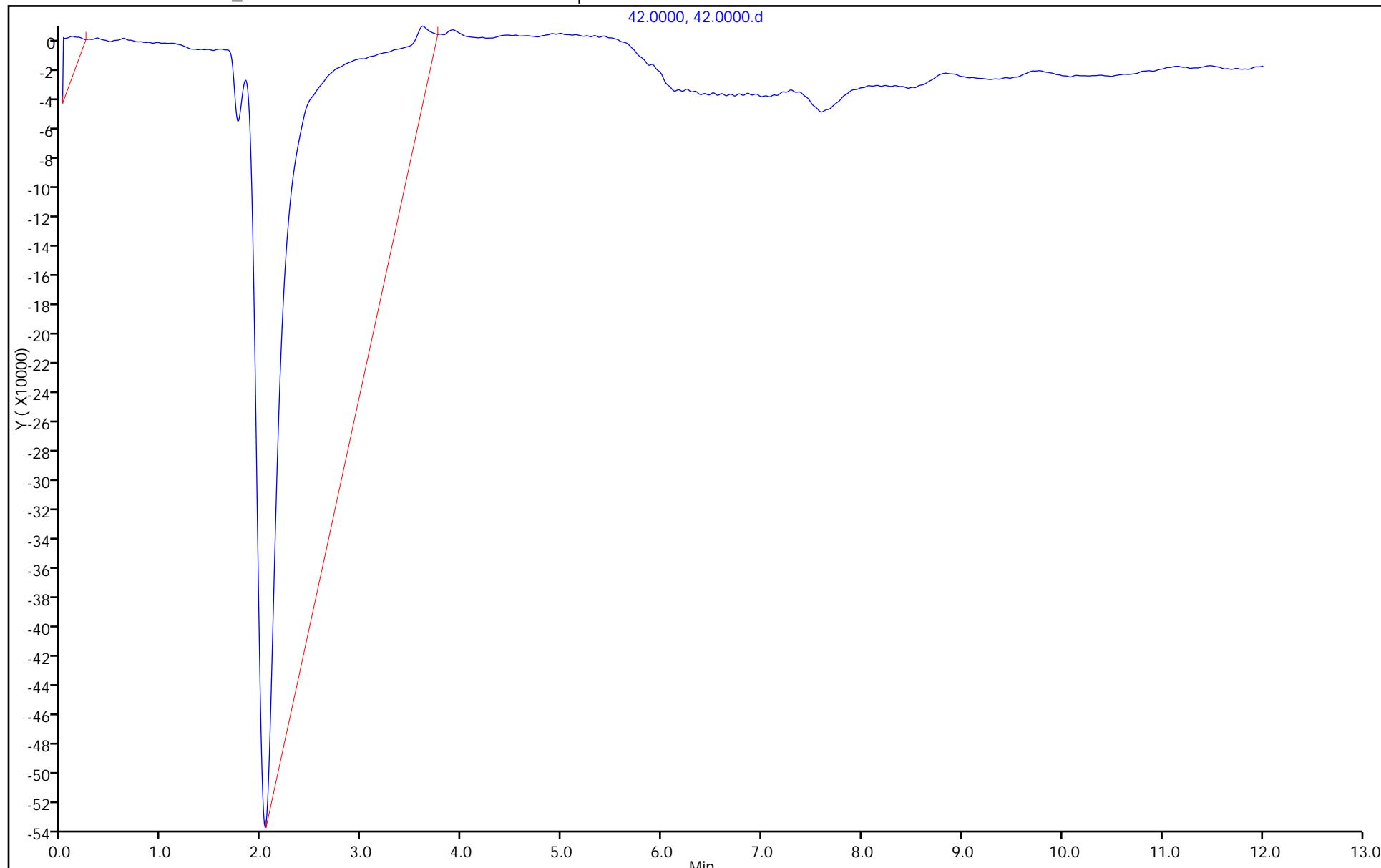
Injection Vol: 25.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: Anions\_IC7

Limit Group: Wet - Anions 28D



Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211119-106656.b\43.0000.d  
 Lims ID: lcs  
 Client ID:  
 Sample Type: LCS  
 Inject. Date: 19-Nov-2021 20:19:00 ALS Bottle#: 0 Worklist Smp#: 98  
 Injection Vol: 25.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-0106656-098  
 Misc. Info.: 28391  
 Operator ID: Instrument ID: WC\_IonChrom7  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211119-106656.b\Anions\_IC7.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 20-Nov-2021 19:36:31 Calib Date: 11-Nov-2021 17:21:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0009.d  
 Column 1 : Det: 0005  
 Process Host: CTX1611

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.425	2.492	-0.067	86253588	5.00	4.39	
2 Chloride	3.634	3.742	-0.108	1578423784	100.0	100.7	
3 Nitrite as N	4.359	4.492	-0.133	138644767	NC	NC	
4 Bromide	5.234	5.417	-0.183	28519865	5.00	3.90	
5 Nitrate as N	5.917	6.126	-0.209	156996263	NC	NC	
7 Orthophosphate as P	8.750	9.126	-0.376	52821528	NC	NC	
6 Sulfate	9.825	10.284	-0.459	1029772606	100.0	103.6	

### QC Flag Legend

Processing Flags

NC - Not Calibrated

### Reagents:

IC LCS\_01845

Amount Added: 5.00

Units: mL

Report Date: 20-Nov-2021 19:36:32

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211119-106656.b\43.0000.d

Injection Date: 19-Nov-2021 20:19:00

Instrument ID: WC\_IonChrom7

Operator ID:

Lims ID: lcs

Worklist Smp#: 98

Client ID:

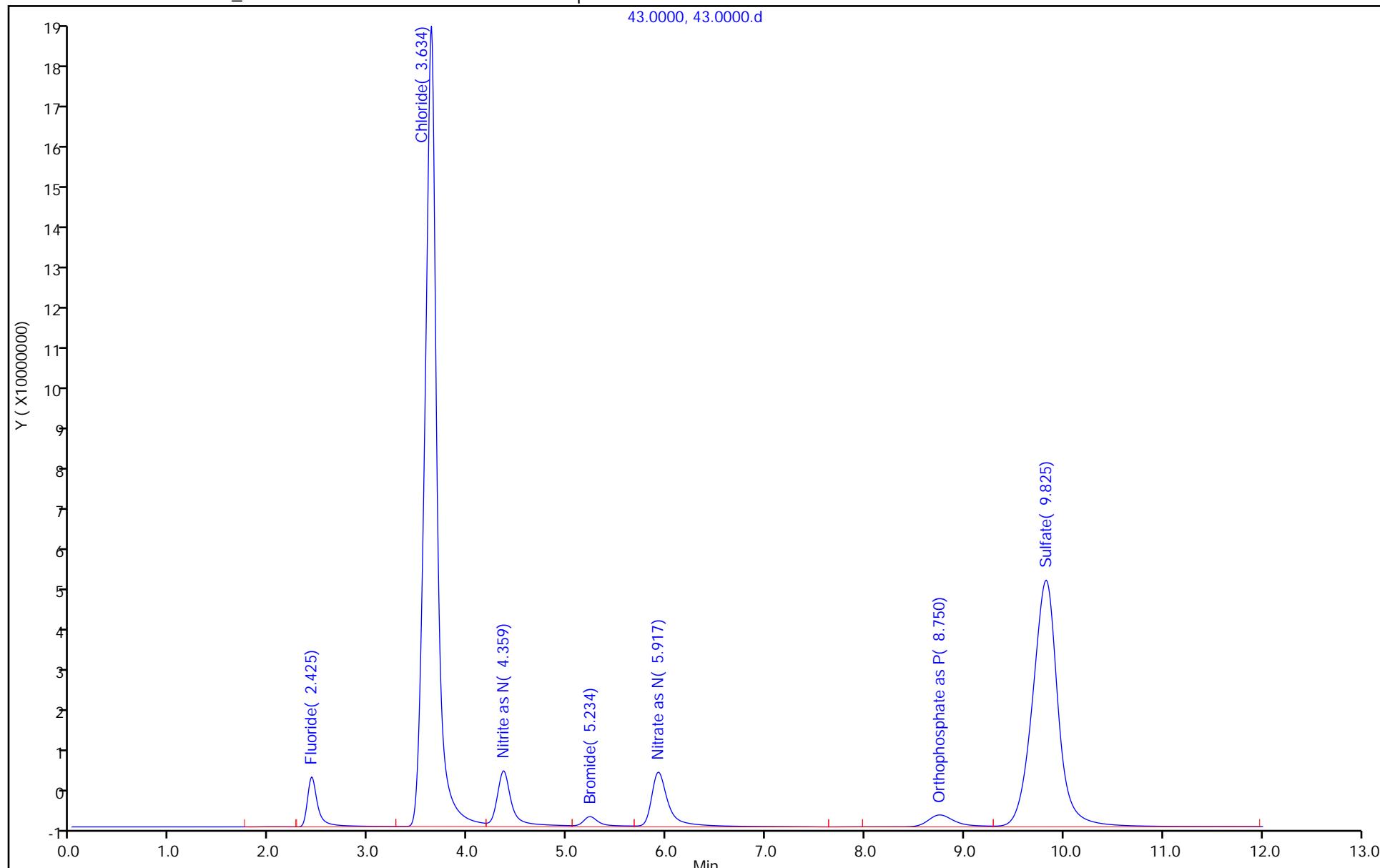
Injection Vol: 25.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: Anions\_IC7

Limit Group: Wet - Anions 28D



Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211119-106656.b\44.0000.d  
 Lims ID: lcsd  
 Client ID:  
 Sample Type: LCSD  
 Inject. Date: 19-Nov-2021 20:34:00      ALS Bottle#: 0      Worklist Smp#: 99  
 Injection Vol: 25.0 ul      Dil. Factor: 1.0000  
 Sample Info: 280-0106656-099  
 Misc. Info.: 27965  
 Operator ID:      Instrument ID: WC\_IonChrom7  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211119-106656.b\Anions\_IC7.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 20-Nov-2021 19:36:31      Calib Date: 11-Nov-2021 17:21:00  
 Integrator: Falcon  
 Quant Method: External Standard      Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0009.d  
 Column 1 : Det: 0005  
 Process Host: CTX1611

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.509	2.492	0.017	88378772	5.00	4.50	
2 Chloride	3.742	3.742	0.000	1563129346	100.0	99.7	
3 Nitrite as N	4.467	4.492	-0.025	138646769	NC	NC	
4 Bromide	5.325	5.417	-0.092	28371147	5.00	3.88	
5 Nitrate as N	6.034	6.126	-0.092	162300715	NC	NC	
7 Orthophosphate as P	8.925	9.126	-0.201	51540881	NC	NC	
6 Sulfate	10.009	10.284	-0.275	1034405345	100.0	104.0	

### QC Flag Legend

Processing Flags

NC - Not Calibrated

### Reagents:

IC LCS\_01845

Amount Added: 5.00

Units: mL

Report Date: 20-Nov-2021 19:36:32

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211119-106656.b\44.0000.d

Injection Date: 19-Nov-2021 20:34:00

Instrument ID: WC\_IonChrom7

Operator ID:

Lims ID: lcSD

Worklist Smp#: 99

Client ID:

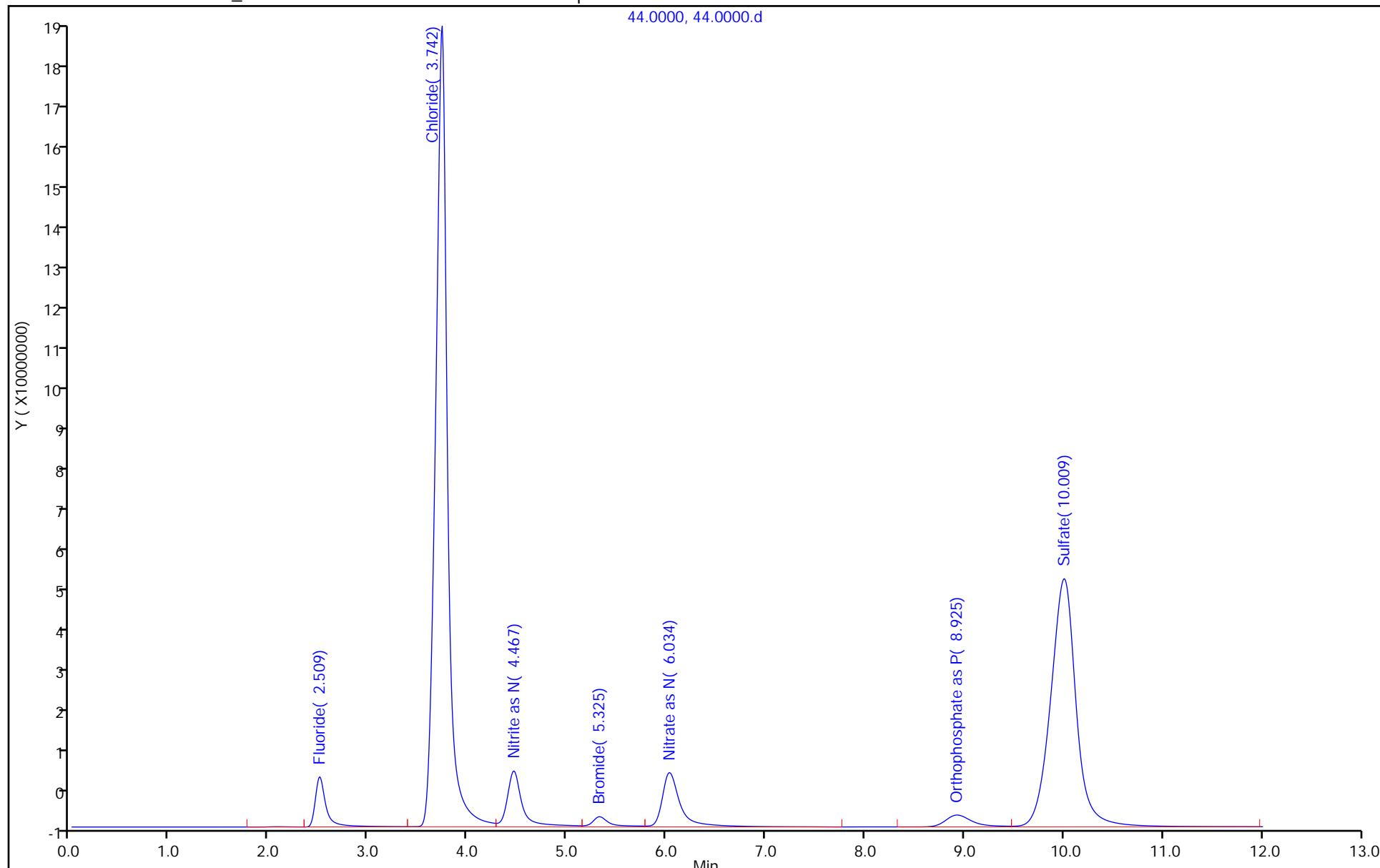
Injection Vol: 25.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: Anions\_IC7

Limit Group: Wet - Anions 28D



Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211119-106656.b\45.0000.d  
 Lims ID: mb  
 Client ID:  
 Sample Type: MB  
 Inject. Date: 19-Nov-2021 20:49:00      ALS Bottle#: 0      Worklist Smp#: 100  
 Injection Vol: 25.0 ul      Dil. Factor: 1.0000  
 Sample Info: 280-0106656-100  
 Misc. Info.: 28284  
 Operator ID:      Instrument ID: WC\_IonChrom7  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211119-106656.b\Anions\_IC7.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 20-Nov-2021 19:36:31      Calib Date: 11-Nov-2021 17:21:00  
 Integrator: Falcon  
 Quant Method: External Standard      Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0009.d  
 Column 1 :      Det: 0005  
 Process Host: CTX1611

First Level Reviewer: jindarac Date: 20-Nov-2021 19:34:59

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.492				ND		
2 Chloride	3.742				ND		U
3 Nitrite as N	4.492				ND		
4 Bromide	5.417				ND		
5 Nitrate as N	6.126				ND		
7 Orthophosphate as P	9.126				ND		
6 Sulfate	10.284				ND		

### QC Flag Legend

Processing Flags

Review Flags

U - Marked Undetected

Report Date: 20-Nov-2021 19:36:32

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211119-106656.b\45.0000.d

Injection Date: 19-Nov-2021 20:49:00

Instrument ID: WC\_IonChrom7

Operator ID:

Lims ID: mb

Worklist Smp#: 100

Client ID:

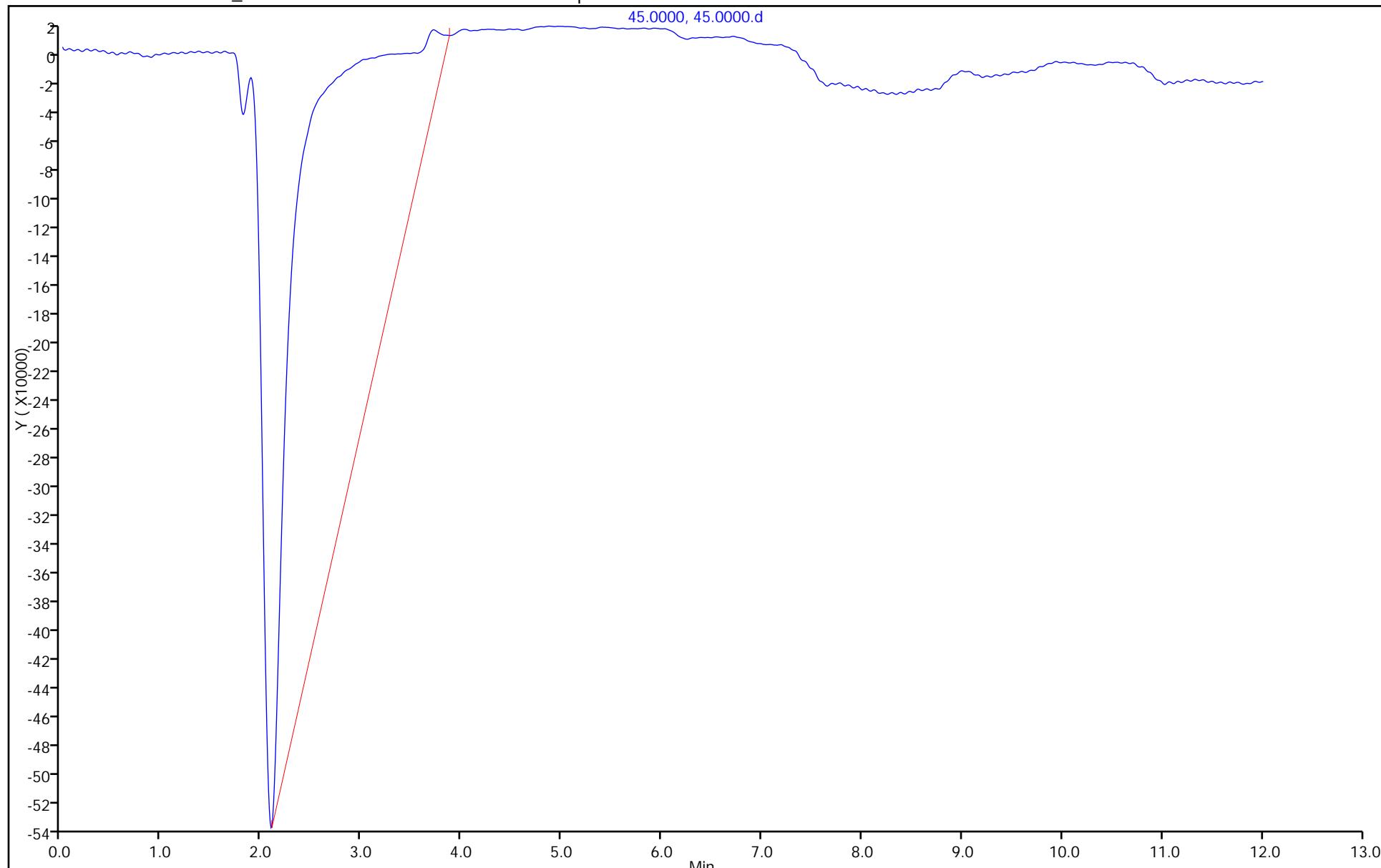
Injection Vol: 25.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: Anions\_IC7

Limit Group: Wet - Anions 28D



Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211119-106656.b\56.0000.d  
 Lims ID: ccv  
 Client ID:  
 Sample Type: CCV  
 Inject. Date: 19-Nov-2021 23:33:00 ALS Bottle#: 0 Worklist Smp#: 111  
 Injection Vol: 25.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-0106656-111  
 Misc. Info.: 15697  
 Operator ID: Instrument ID: WC\_IonChrom7  
 Sublist: chrom-Anions\_IC7\*sub1  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211119-106656.b\Anions\_IC7.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 20-Nov-2021 19:36:35 Calib Date: 11-Nov-2021 17:21:00  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0009.d  
 Column 1 : Det: 0005  
 Process Host: CTX1611

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.459	2.492	-0.033	87636193	5.00	4.46	
2 Chloride	3.667	3.742	-0.075	1537975193	100.0	98.1	
3 Nitrite as N	4.409	4.492	-0.083	142979880	NC	NC	
4 Bromide	5.301	5.417	-0.116	28014533	5.00	3.83	
5 Nitrate as N	6.009	6.126	-0.117	158118361	NC	NC	
7 Orthophosphate as P	8.876	9.126	-0.250	52778591	NC	NC	
6 Sulfate	9.959	10.284	-0.325	1033874389	100.0	104.0	

**QC Flag Legend**

Processing Flags

NC - Not Calibrated

**Reagents:**

IC LCS\_01845

Amount Added: 5.00

Units: mL

Report Date: 20-Nov-2021 19:36:35

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211119-106656.b\56.0000.d

Injection Date: 19-Nov-2021 23:33:00

Instrument ID: WC\_IonChrom7

Operator ID:

Lims ID: ccv

Worklist Smp#: 111

Client ID:

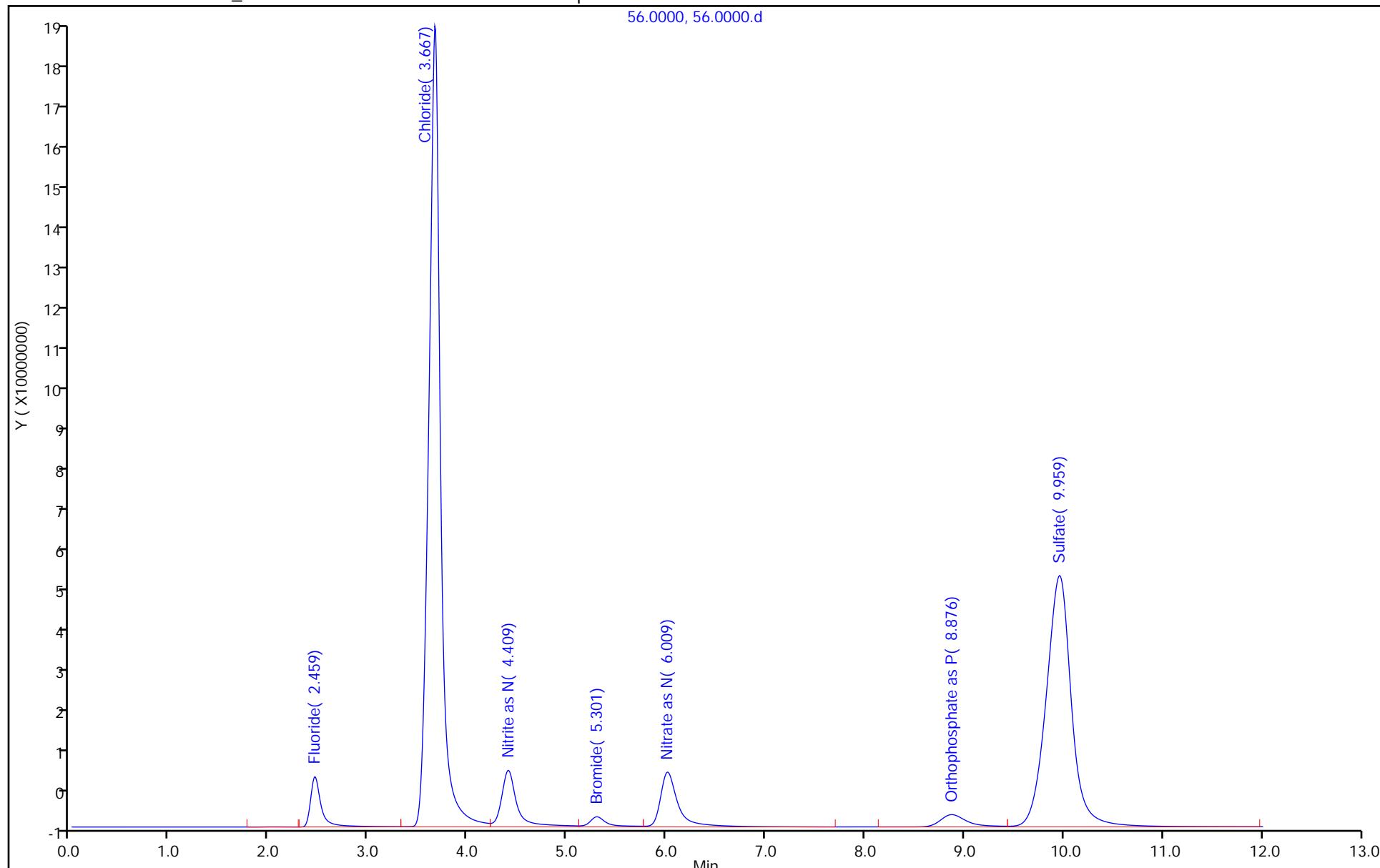
Injection Vol: 25.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: Anions\_IC7

Limit Group: Wet - Anions 28D



Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211119-106656.b\57.0000.d  
 Lims ID: ccb  
 Client ID:  
 Sample Type: CCB  
 Inject. Date: 19-Nov-2021 23:48:00      ALS Bottle#: 0      Worklist Smp#: 112  
 Injection Vol: 25.0 ul      Dil. Factor: 1.0000  
 Sample Info: 280-0106656-112  
 Misc. Info.: 6045  
 Operator ID:      Instrument ID: WC\_IonChrom7  
 Method: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211119-106656.b\Anions\_IC7.m  
 Limit Group: Wet - Anions 28D  
 Last Update: 20-Nov-2021 19:36:35      Calib Date: 11-Nov-2021 17:21:00  
 Integrator: Falcon  
 Quant Method: External Standard      Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211111-106412.b\0009.d  
 Column 1 : Det: 0005  
 Process Host: CTX1611

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.492				ND		
2 Chloride	3.742				ND		
3 Nitrite as N	4.492				ND		
4 Bromide	5.417				ND		
5 Nitrate as N	6.126				ND		
7 Orthophosphate as P	9.126				ND		
6 Sulfate	10.284				ND		

Report Date: 20-Nov-2021 19:36:35

Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC\_IonChrom7\20211119-106656.b\57.0000.d

Injection Date: 19-Nov-2021 23:48:00

Instrument ID: WC\_IonChrom7

Operator ID:

Lims ID: ccb

Worklist Smp#: 112

Client ID:

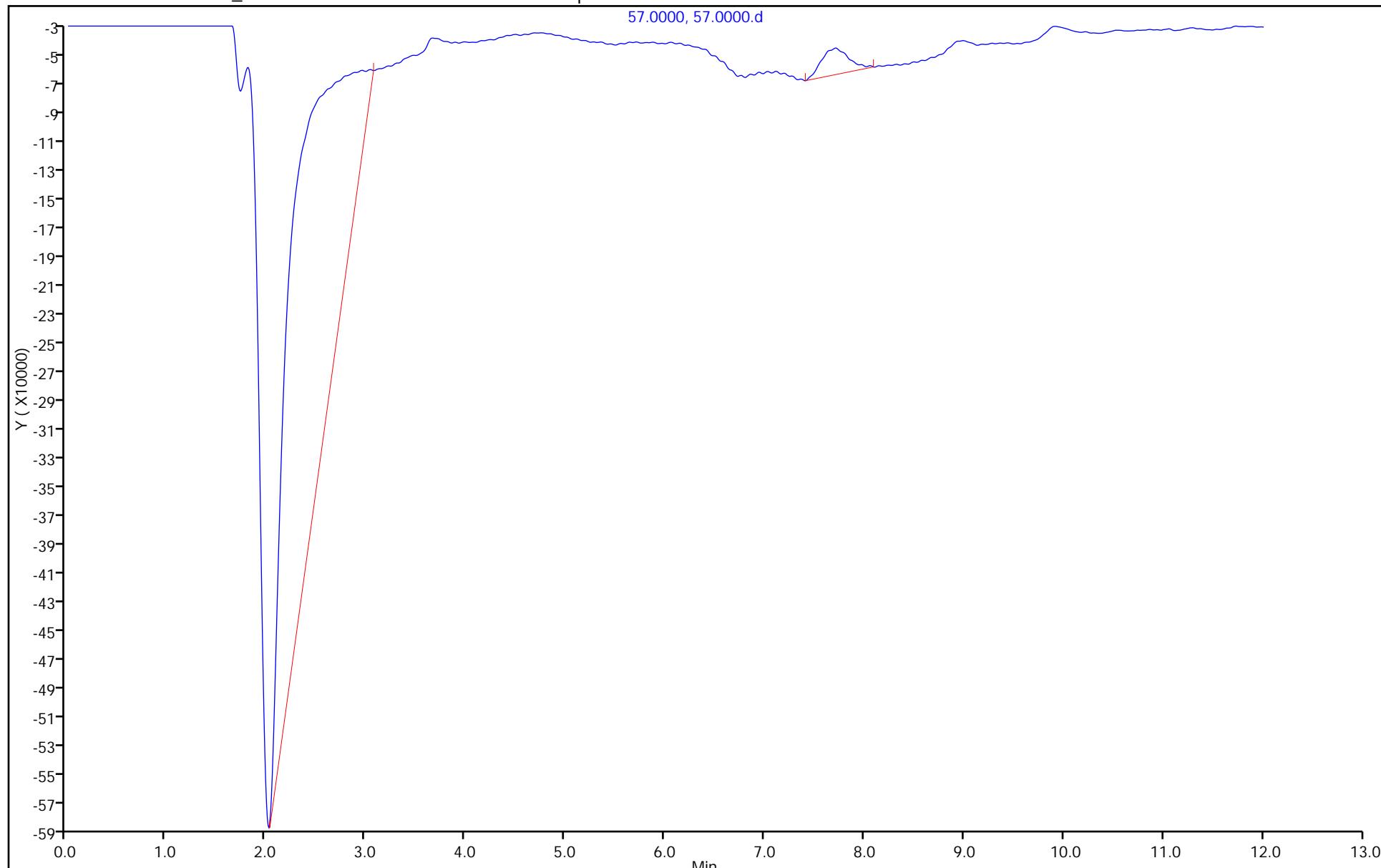
Injection Vol: 25.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: Anions\_IC7

Limit Group: Wet - Anions 28D



	Type	Analysis	Sample Name	Sa	Origin	Manual Dilution	Result	Notes	C
1	Standar	NPOC	CAL		NPOC.2021_	1.000		Cal Curve OK	
2	Unknow	NPOC	ICV		NPOC.met	1.000	NPOC:20.15mg/L		
3	Unknow	NPOC	ICB		NPOC.met	1.000	NPOC:0.09753mg/L		
4	Unknow	NPOC	LCS		NPOC.met	1.000	NPOC:25.11mg/L		
5	Unknow	NPOC	MB		NPOC.met	1.000	NPOC:0.1092mg/L		
6	Unknow	NPOC	TIC		NPOC.met	1.000	NPOC:0.1420mg/L		
7	Unknow	NPOC	580-107062-a-19		NPOC.met	1.000	NPOC:0.2749mg/L		
8	Unknow	NPOC	MS 580-107062-a-19		NPOC.met	1.000	NPOC:24.91mg/L		
9	Unknow	NPOC	MSD 580-107062-a-19		NPOC.met	1.000	NPOC:25.01mg/L		
10	Unknow	NPOC	280-155084-a-5		NPOC.met	1.000	NPOC:3.219mg/L		
11	Unknow	NPOC	280-155084-a-6		NPOC.met	1.000	NPOC:3.212mg/L		
12	Unknow	NPOC	280-155084-a-7		NPOC.met	1.000	NPOC:4.065mg/L		
13	Unknow	NPOC	280-155084-a-8		NPOC.met	2.000	NPOC:5.992mg/L		
14	Unknow	NPOC	280-155084-a-9		NPOC.met	1.000	NPOC:3.511mg/L		
15	Unknow	NPOC	280-155002-c-2		NPOC.met	2.000	NPOC:51.20mg/L		
16	Unknow	NPOC	CCV		NPOC.met	1.000	NPOC:23.93mg/L		
17	Unknow	NPOC	CCB		NPOC.met	1.000	NPOC:0.1246mg/L		
18	Unknow	NPOC	280-155002-c-5		NPOC.met	10.00	NPOC:27.28mg/L		
19	Unknow	NPOC	280-155002-c-6		NPOC.met	50.00	NPOC:722.5mg/L		
20	Unknow	NPOC	280-155002-c-7		NPOC.met	5.000	NPOC:60.60mg/L		
21	Unknow	NPOC	280-155057-a-2		NPOC.met	1.000	NPOC:0.7044mg/L		
22	Unknow	NPOC	280-155057-a-3		NPOC.met	1.000	NPOC:6.145mg/L		
23	Unknow	NPOC	280-155057-a-4		NPOC.met	1.000	NPOC:0.7863mg/L		
24	Unknow	NPOC	MS 280-155057-a-4		NPOC.met	1.000	NPOC:23.76mg/L		
25	Unknow	NPOC	MSD 280-155057-a-4		NPOC.met	1.000	NPOC:23.83mg/L		
26	Unknow	NPOC	280-155057-a-5		NPOC.met	1.000	NPOC:4.336mg/L		
27	Unknow	NPOC	280-155057-a-6		NPOC.met	1.000	NPOC:4.650mg/L		
28	Unknow	NPOC	CCV		NPOC.met	1.000	NPOC:23.72mg/L		
29	Unknow	NPOC	CCB		NPOC.met	1.000	NPOC:0.1448mg/L		
30	Unknow	NPOC	280-155057-a-7		NPOC.met	1.000	NPOC:4.645mg/L		
31	Unknow	NPOC	280-155057-a-8		NPOC.met	1.000	NPOC:17.48mg/L		
32	Unknow	NPOC	280-155057-a-9		NPOC.met	1.000	NPOC:1.728mg/L		
33	Unknow	NPOC	280-155057-a-10		NPOC.met	1.000	NPOC:2.031mg/L		
34	Unknow	NPOC	280-155057-a-11		NPOC.met	1.000	NPOC:1.049mg/L		
35	Unknow	NPOC	lcs 280-556213/1-a		NPOC.met	1.000	NPOC:23.22mg/L		
36	Unknow	NPOC	mb 280-556213/2-a		NPOC.met	1.000	NPOC:0.2383mg/L		
37	Unknow	NPOC	280-155048-d-1-a		NPOC.met	1.000	NPOC:4.906mg/L		
38	Unknow	NPOC	280-155048-d-2-a		NPOC.met	1.000	NPOC:2.667mg/L		
39	Unknow	NPOC	280-155048-d-3-a		NPOC.met	1.000	NPOC:5.102mg/L		
40	Unknow	NPOC	CCV		NPOC.met	1.000	NPOC:23.22mg/L		
41	Unknow	NPOC	CCB		NPOC.met	1.000	NPOC:0.1443mg/L		
42	Unknow	NPOC	280-155048-d-4-a		NPOC.met	1.000	NPOC:5.198mg/L		
43	Unknow	NPOC	280-155048-d-5-a		NPOC.met	1.000	NPOC:2.708mg/L		
44	Unknow	NPOC	280-155048-d-6-a		NPOC.met	1.000	NPOC:10.34mg/L		
45	Unknow	NPOC	280-155048-d-7-a		NPOC.met	1.000	NPOC:2.992mg/L		
46	Unknow	NPOC	280-155048-d-7-b ms		NPOC.met	1.000	NPOC:26.20mg/L		
47	Unknow	NPOC	280-155048-d-7-c msd		NPOC.met	1.000	NPOC:26.20mg/L		
48	Unknow	NPOC	280-155048-d-8-a		NPOC.met	1.000	NPOC:1.146mg/L		
49	Unknow	NPOC	280-155048-d-8-b ms		NPOC.met	1.000	NPOC:23.87mg/L		
50	Unknow	NPOC	280-155048-d-8-c msd		NPOC.met	1.000	NPOC:23.89mg/L		
51	Unknow	NPOC	LCS		NPOC.met	1.000	NPOC:23.40mg/L		
52	Unknow	NPOC	CCV		NPOC.met	1.000	NPOC:23.53mg/L		
53	Unknow	NPOC	CCB		NPOC.met	1.000	NPOC:0.1361mg/L		

	Status	A	Date / Time	Vial
1	Completed	C	11/4/2021 5:27:53 PM	88,
2	Completed		11/4/2021 5:42:47 PM	1
3	Completed		11/4/2021 5:59:44 PM	2
4	Completed		11/4/2021 6:14:33 PM	3
5	Completed		11/4/2021 6:31:30 PM	4
6	Completed		11/4/2021 6:46:19 PM	5
7	Completed		11/4/2021 7:01:10 PM	6
8	Completed		11/4/2021 7:16:01 PM	7
9	Completed		11/4/2021 7:30:52 PM	8
10	Completed		11/4/2021 7:45:43 PM	9
11	Completed		11/4/2021 8:00:34 PM	10
12	Completed		11/4/2021 8:15:25 PM	11
13	Completed		11/4/2021 8:30:16 PM	12
14	Completed		11/4/2021 8:45:07 PM	13
15	Completed		11/4/2021 8:59:58 PM	14
16	Completed		11/4/2021 9:16:55 PM	15
17	Completed		11/4/2021 9:31:44 PM	16
18	Completed		11/4/2021 9:48:41 PM	17
19	Completed		11/4/2021 10:03:30 PM	18
20	Completed		11/4/2021 10:18:21 PM	19
21	Completed		11/4/2021 10:33:12 PM	20
22	Completed		11/4/2021 10:48:03 PM	21
23	Completed		11/4/2021 11:02:54 PM	22
24	Completed		11/4/2021 11:19:51 PM	23
25	Completed		11/4/2021 11:34:40 PM	24
26	Completed		11/4/2021 11:49:31 PM	25
27	Completed		11/5/2021 12:04:22 AM	26
28	Completed		11/5/2021 12:19:17 AM	27
29	Completed		11/5/2021 12:34:08 AM	28
30	Completed		11/5/2021 12:51:05 AM	29
31	Completed		11/5/2021 1:05:54 AM	30
32	Completed		11/5/2021 1:22:51 AM	31
33	Completed		11/5/2021 1:40:07 AM	32
34	Completed		11/5/2021 1:54:57 AM	33
35	Completed		11/5/2021 2:09:50 AM	34
36	Completed		11/5/2021 2:24:42 AM	35
37	Completed		11/5/2021 2:39:34 AM	36
38	Completed		11/5/2021 2:56:32 AM	37
39	Completed		11/5/2021 3:11:22 AM	38
40	Completed		11/5/2021 3:26:14 AM	39
41	Completed		11/5/2021 3:41:06 AM	40
42	Completed		11/5/2021 3:55:58 AM	41
43	Completed		11/5/2021 4:13:23 AM	42
44	Completed		11/5/2021 4:28:13 AM	43
45	Completed		11/5/2021 4:45:11 AM	44
46	Completed		11/5/2021 5:00:04 AM	45
47	Completed		11/5/2021 5:15:05 AM	46
48	Completed		11/5/2021 5:32:03 AM	47
49	Completed		11/5/2021 5:46:53 AM	48
50	Completed		11/5/2021 6:01:45 AM	49
51	Completed		11/5/2021 6:16:37 AM	50
52	Completed		11/5/2021 6:31:29 AM	51
53	Completed		11/5/2021 6:46:21 AM	52

	Type	Analysis	Sample Name	Sa	Origin	Manual Dilution	Result	Notes	C
54	Unknow	NPOC	MB		NPOC.met	1.000	NPOC:0.1282mg/L		
55	Unknow	NPOC	TIC		NPOC.met	1.000	NPOC:0.1647mg/L		
56	Unknow	NPOC	280-154892-f-1		NPOC.met	1.000	NPOC:2.774mg/L		
57	Unknow	NPOC	280-154892-f-3		NPOC.met	1.000	NPOC:2.747mg/L		
58	Unknow	NPOC	MS 280-154892-f-3		NPOC.met	1.000	NPOC:25.62mg/L		
59	Unknow	NPOC	MSD 280-154892-f-3		NPOC.met	1.000	NPOC:25.55mg/L		
60	Unknow	NPOC	280-154945-c-1		NPOC.met	1.000	NPOC:0.8032mg/L		
61	Unknow	NPOC	280-154945-c-2		NPOC.met	1.000	NPOC:0.7433mg/L		
62	Unknow	NPOC	280-154945-c-3		NPOC.met	1.000	NPOC:0.5763mg/L		
63	Unknow	NPOC	280-154988-b-1		NPOC.met	1.000	NPOC:1.780mg/L		
64	Unknow	NPOC	CCV		NPOC.met	1.000	NPOC:23.47mg/L		
65	Unknow	NPOC	CCB		NPOC.met	1.000	NPOC:0.2409mg/L		
66	Unknow	NPOC	280-154988-b-2		NPOC.met	1.000	NPOC:1.818mg/L		
67	Unknow	NPOC	280-154988-b-3		NPOC.met	1.000	NPOC:2.638mg/L		
68	Unknow	NPOC	280-155070-f-2		NPOC.met	5.000	NPOC:161.7mg/L		
69	Unknow	NPOC	280-155070-f-3		NPOC.met	5.000	NPOC:678.4mg/L		
70	Unknow	NPOC	CCV		NPOC.met	1.000	NPOC:24.11mg/L		
71	Unknow	NPOC	CCB		NPOC.met	1.000	NPOC:0.2477mg/L		

	Status	A	Date / Time	Vial
54	Completed		11/5/2021 7:01:13 AM	53
55	Completed		11/5/2021 7:16:06 AM	54
56	Completed		11/5/2021 7:33:03 AM	55
57	Completed		11/5/2021 7:50:16 AM	56
58	Completed		11/5/2021 8:05:08 AM	57
59	Completed		11/5/2021 8:20:00 AM	58
60	Completed		11/5/2021 8:34:52 AM	59
61	Completed		11/5/2021 8:49:44 AM	60
62	Completed		11/5/2021 9:04:37 AM	61
63	Completed		11/5/2021 9:19:28 AM	62
64	Completed		11/5/2021 9:34:29 AM	63
65	Completed		11/5/2021 9:49:21 AM	64
66	Completed		11/5/2021 10:06:25 AM	65
67	Completed		11/5/2021 10:21:16 AM	66
68	Completed		11/5/2021 10:36:09 AM	67
69	Completed		11/5/2021 11:02:38 AM	68
70	Completed		11/5/2021 11:17:36 AM	69
71	Completed		11/5/2021 11:32:28 AM	70

Date of Creation 5:27:53 PM 11/4/2021  
User  
System TOC-V CPN

Cal. Curve

Sample Name: CAL  
Sample ID:  
Object ID: OA-100612-04635090-13465A02794E-0000  
Cal. Curve: NPOC.2021\_11\_04\_16\_22\_17.cal  
Status: Completed  
Comment:

Type	Anal.
Standard	NPOC

Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	0.2606	50uL	1	*****		11/4/2021 4:29:58 PM
2	0.3120	50uL	1	*****		11/4/2021 4:32:04 PM

Acid Add. 1.500%  
Sp. Time 90.00sec  
Mean Area 0.2863  
SD Area 0.03635  
CV Area 12.69%  
Vial 88

Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	3.355	50uL	1	*****	E	11/4/2021 4:40:43 PM
2	3.569	50uL	1	*****		11/4/2021 4:42:49 PM
3	3.535	50uL	1	*****		11/4/2021 4:44:54 PM

Acid Add. 1.500%  
Sp. Time 90.00sec  
Mean Area 3.552  
SD Area 0.02404  
CV Area 0.68%  
Vial 89

Conc: 5.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	15.54	50uL	1	*****		11/4/2021 4:53:33 PM
2	15.91	50uL	1	*****		11/4/2021 4:55:38 PM

Acid Add. 1.500%  
Sp. Time 90.00sec  
Mean Area 15.73  
SD Area 0.2616  
CV Area 1.66%  
Vial 90

Conc: 10.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	31.32	50uL	1	*****		11/4/2021 5:04:17 PM
2	31.66	50uL	1	*****		11/4/2021 5:06:23 PM

Acid Add. 1.500%  
 Sp. Time 90.00sec  
 Mean Area 31.49  
 SD Area 0.2404  
 CV Area 0.76%  
 Vial 91

Conc: 25.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	78.86	50uL	1	*****		11/4/2021 5:15:02 PM
2	80.32	50uL	1	*****		11/4/2021 5:17:08 PM

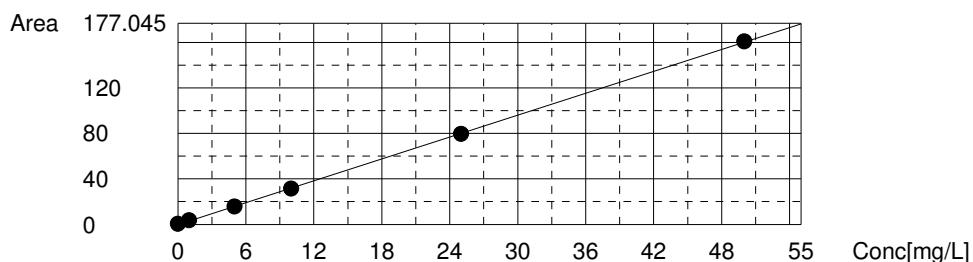
Acid Add. 1.500%  
 Sp. Time 90.00sec  
 Mean Area 79.59  
 SD Area 1.032  
 CV Area 1.30%  
 Vial 92

Conc: 50.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	160.9	50uL	1	*****		11/4/2021 5:25:47 PM
2	161.0	50uL	1	*****		11/4/2021 5:27:53 PM

Acid Add. 1.500%  
 Sp. Time 90.00sec  
 Mean Area 160.9  
 SD Area 0.07071  
 CV Area 0.04%  
 Vial 93

Slope: 3.213  
 Intercept -0.1384  
 $r^2$  0.9999  
 r 1.0000  
 Zero Shift No



## Instr.Information

System  
Instrument Options  
Catalyst

TOC-V CPN  
TOCASI/  
Regular Sensitivity

## Cal. Curve

Sample Name: CAL  
Sample ID:  
Cal. Curve: NPOC.2021\_11\_04\_16\_22\_17.cal  
Status Completed

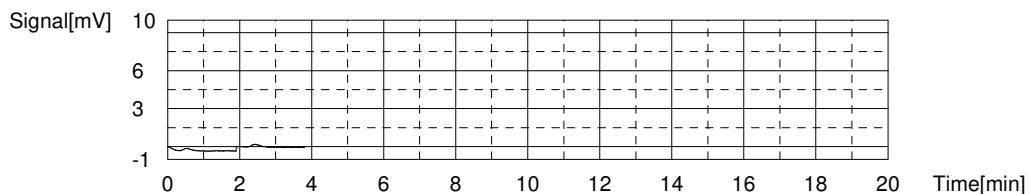
Type	Anal.
Standard	NPOC

Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	0.2606	50uL	1	*****		11/4/2021 4:29:58 PM
2	0.3120	50uL	1	*****		11/4/2021 4:32:04 PM

Acid Add.  
Sp. Time  
Mean Area

1.500%  
90.00sec  
0.2863

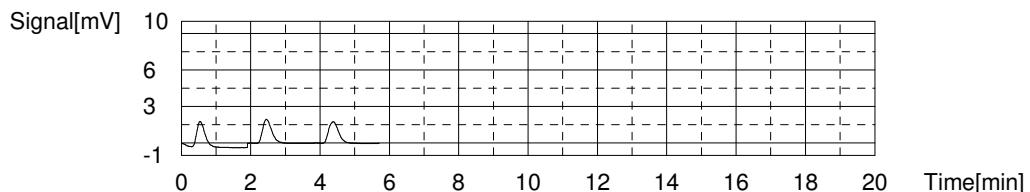


Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	3.355	50uL	1	*****	E	11/4/2021 4:40:43 PM
2	3.569	50uL	1	*****		11/4/2021 4:42:49 PM
3	3.535	50uL	1	*****		11/4/2021 4:44:54 PM

Acid Add.  
Sp. Time  
Mean Area

1.500%  
90.00sec  
3.552

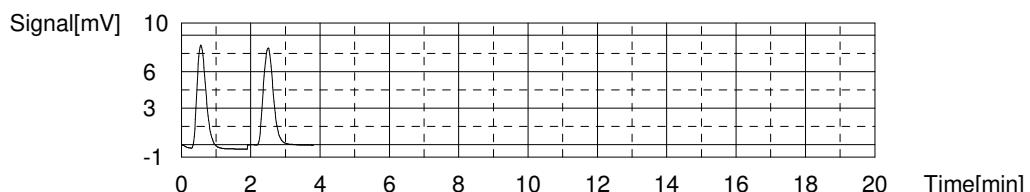


Conc: 5.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	15.54	50uL	1	*****		11/4/2021 4:53:33 PM
2	15.91	50uL	1	*****		11/4/2021 4:55:38 PM

Acid Add.  
Sp. Time  
Mean Area

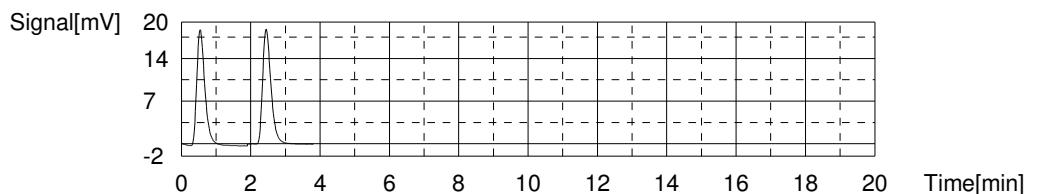
1.500%  
90.00sec  
15.73



Conc: 10.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	31.32	50uL	1	*****		11/4/2021 5:04:17 PM
2	31.66	50uL	1	*****		11/4/2021 5:06:23 PM

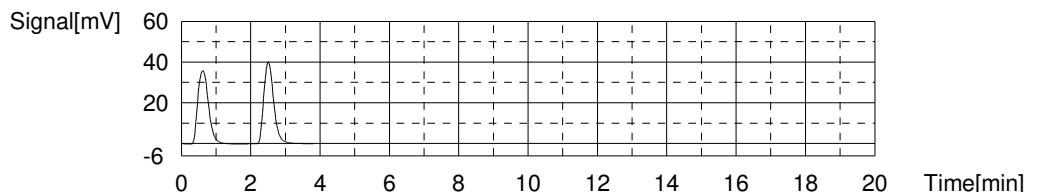
Acid Add. 1.500%  
Sp. Time 90.00sec  
Mean Area 31.49



Conc: 25.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	78.86	50uL	1	*****		11/4/2021 5:15:02 PM
2	80.32	50uL	1	*****		11/4/2021 5:17:08 PM

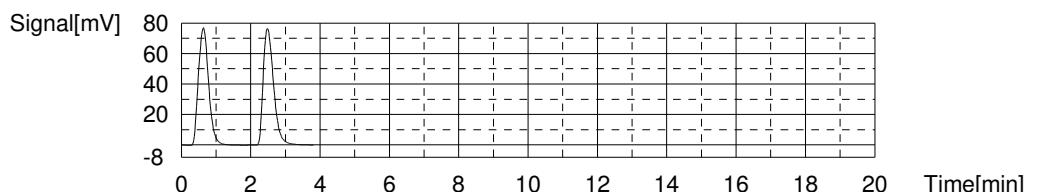
Acid Add. 1.500%  
Sp. Time 90.00sec  
Mean Area 79.59



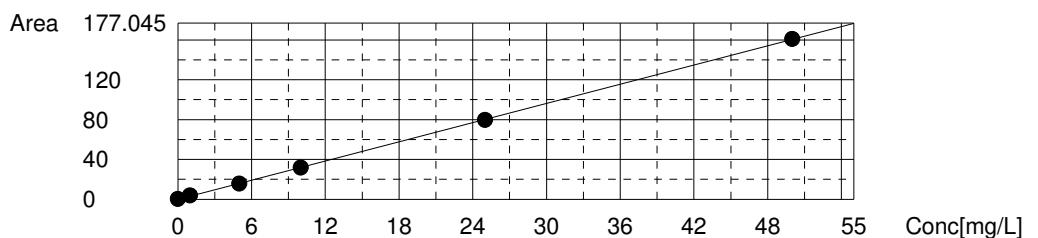
Conc: 50.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	160.9	50uL	1	*****		11/4/2021 5:25:47 PM
2	161.0	50uL	1	*****		11/4/2021 5:27:53 PM

Acid Add. 1.500%  
Sp. Time 90.00sec  
Mean Area 160.9



Slope: 3.213  
Intercept -0.1384  
 $r^2$  0.9999  
r 1.0000  
Zero Shift No

**Sample**

Sample Name: ICV  
Sample ID:  
Origin:  
Status:  
Chk. Result

NPOC.met  
Completed

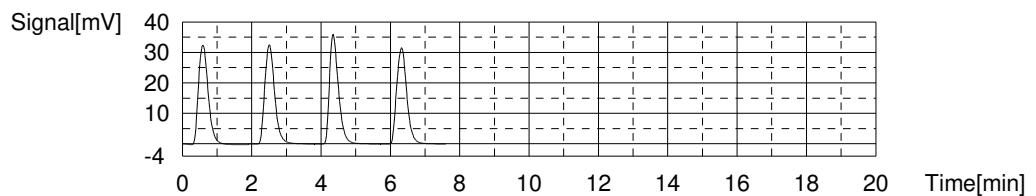
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:20.15mg/L

**1. Det**

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	64.71	20.18mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 5:36:31 PM
2	64.48	20.11mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 5:38:36 PM
3	64.89	20.24mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 5:40:42 PM
4	64.41	20.09mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 5:42:47 PM

Mean Area 64.62  
Mean Conc. 20.15mg/L



## Sample

Sample Name: ICB  
Sample ID:  
Origin:  
Status NPOC.met  
Chk. Result Completed

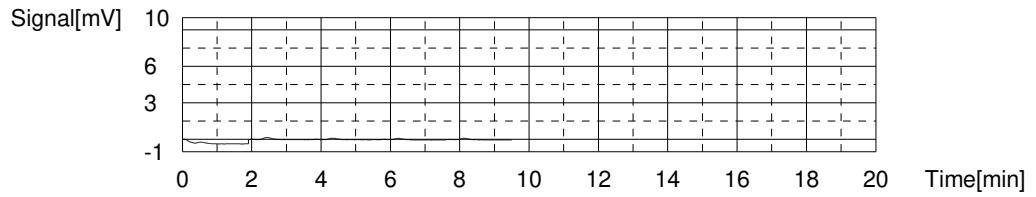
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.09753mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.000	0.04308mg/L	50uL	1	E	NPOC.2021_11_04_16_22_17.cal	11/4/2021 5:51:22 PM
2	0.2541	0.1222mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 5:53:27 PM
3	0.1886	0.1018mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 5:55:33 PM
4	0.1271	0.08263mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 5:57:38 PM
5	0.1301	0.08357mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 5:59:44 PM

Mean Area 0.1750  
Mean Conc. 0.09753mg/L



## Sample

Sample Name: LCS  
Sample ID:  
Origin:  
Status NPOC.met  
Chk. Result Completed

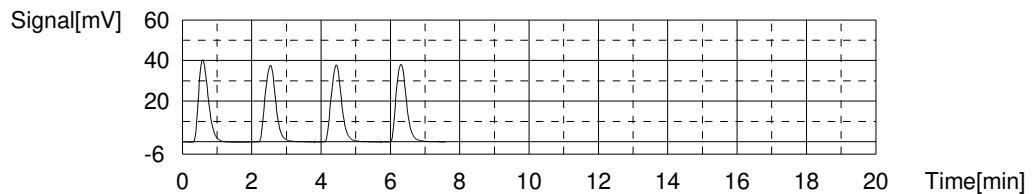
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.11mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	81.01	25.25mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 6:08:17 PM
2	80.61	25.13mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 6:10:22 PM
3	79.98	24.93mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 6:12:28 PM
4	80.56	25.11mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 6:14:33 PM

Mean Area 80.54  
Mean Conc. 25.11mg/L



## Sample

Sample Name: MB  
Sample ID:  
Origin:  
Status NPOC.met  
Chk. Result Completed

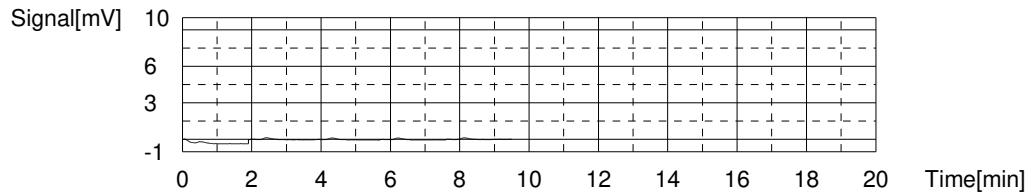
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1092mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.000	0.04308mg/L	50uL	1	E	NPOC.2021_11_04_16_22_17.cal	11/4/2021 6:23:08 PM
2	0.2319	0.1152mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 6:25:13 PM
3	0.2141	0.1097mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 6:27:19 PM
4	0.2104	0.1086mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 6:29:24 PM
5	0.1929	0.1031mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 6:31:30 PM

Mean Area 0.2123  
Mean Conc. 0.1092mg/L



## Sample

Sample Name: TIC  
Sample ID:  
Origin:  
Status NPOC.met  
Chk. Result Completed

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1420mg/L

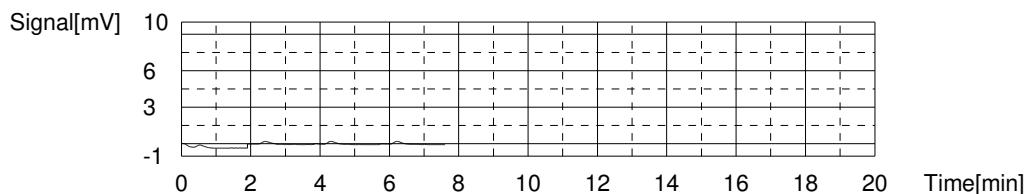
## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2201	0.1116mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 6:40:02 PM
2	0.3540	0.1532mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 6:42:08 PM
3	0.3624	0.1559mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 6:44:14 PM
4	0.3352	0.1474mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 6:46:19 PM

Mean Area  
Mean Conc.

0.3179  
0.1420mg/L



#### Sample

Sample Name: 580-107062-a-19  
 Sample ID:  
 Origin:  
 Status Completed  
 Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2749mg/L

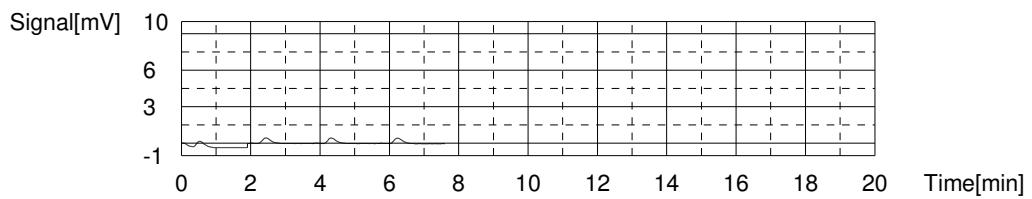
#### 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.6718	0.2521mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 6:54:54 PM
2	0.7976	0.2913mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 6:56:59 PM
3	0.7615	0.2801mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 6:59:05 PM
4	0.7490	0.2762mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 7:01:10 PM

Mean Area  
Mean Conc.

0.7450  
0.2749mg/L



#### Sample

Sample Name: MS 580-107062-a-19  
 Sample ID:  
 Origin:  
 Status Completed  
 Chk. Result

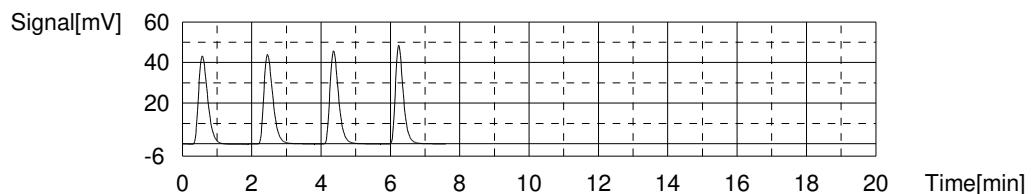
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.91mg/L

#### 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	81.17	25.30mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 7:09:45 PM
2	80.54	25.11mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 7:11:50 PM
3	80.19	25.00mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 7:13:56 PM
4	77.73	24.23mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 7:16:01 PM

Mean Area 79.91  
Mean Conc. 24.91mg/L



## Sample

Sample Name: MSD 580-107062-a-19  
Sample ID:  
Origin: NPOC.met  
Status Completed  
Chk. Result

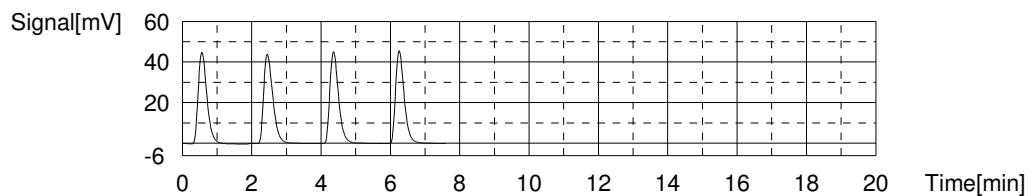
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.01mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	79.75	24.86mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 7:24:35 PM
2	81.61	25.44mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 7:26:41 PM
3	79.76	24.86mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 7:28:47 PM
4	79.86	24.89mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 7:30:52 PM

Mean Area 80.25  
Mean Conc. 25.01mg/L



## Sample

Sample Name: 280-155084-a-5  
Sample ID:  
Origin: NPOC.met  
Status Completed  
Chk. Result

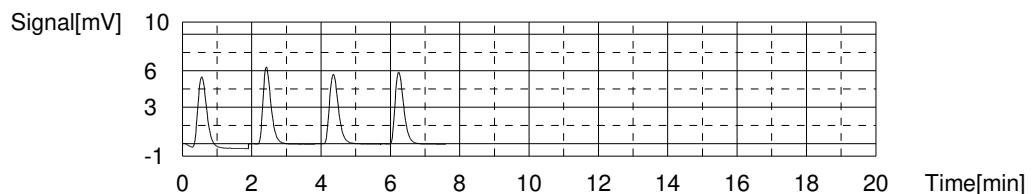
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.219mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.06	3.174mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 7:39:26 PM
2	10.18	3.211mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 7:41:32 PM
3	10.28	3.242mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 7:43:38 PM
4	10.30	3.248mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 7:45:43 PM

Mean Area 10.21  
Mean Conc. 3.219mg/L



## Sample

Sample Name: 280-155084-a-6  
Sample ID:  
Origin: NPOC.met  
Status Completed  
Chk. Result

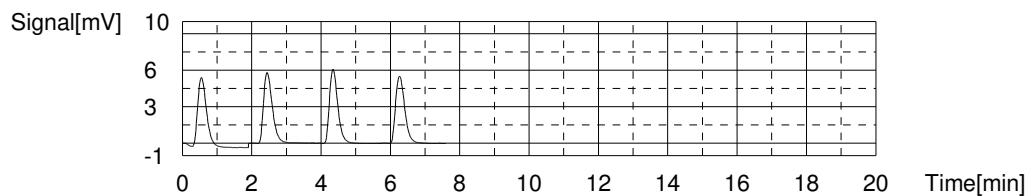
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.212mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.03	3.164mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 7:54:18 PM
2	10.29	3.245mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 7:56:23 PM
3	10.23	3.227mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 7:58:29 PM
4	10.18	3.211mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 8:00:34 PM

Mean Area 10.18  
Mean Conc. 3.212mg/L



## Sample

Sample Name: 280-155084-a-7  
Sample ID:  
Origin: NPOC.met  
Status Completed  
Chk. Result

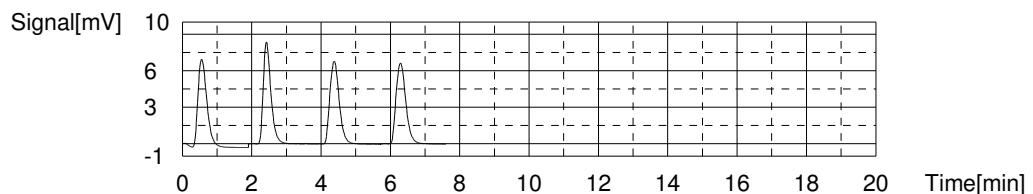
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.065mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	12.78	4.020mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 8:09:08 PM
2	12.96	4.076mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 8:11:14 PM
3	12.90	4.057mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 8:13:20 PM
4	13.06	4.107mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 8:15:25 PM

Mean Area 12.93  
Mean Conc. 4.065mg/L



## Sample

Sample Name: 280-155084-a-8  
Sample ID:  
Origin: NPOC.met  
Status Completed  
Chk. Result

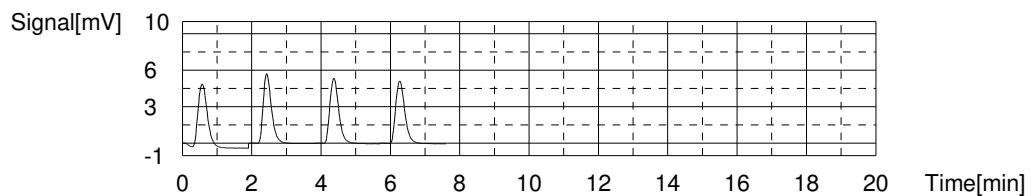
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	2.000	NPOC:5.992mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.563	6.038mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 8:24:00 PM
2	9.534	6.020mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 8:26:05 PM
3	9.418	5.948mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 8:28:11 PM
4	9.440	5.961mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 8:30:16 PM

Mean Area 9.489  
Mean Conc. 5.992mg/L



## Sample

Sample Name: 280-155084-a-9  
Sample ID:  
Origin: NPOC.met  
Status Completed  
Chk. Result

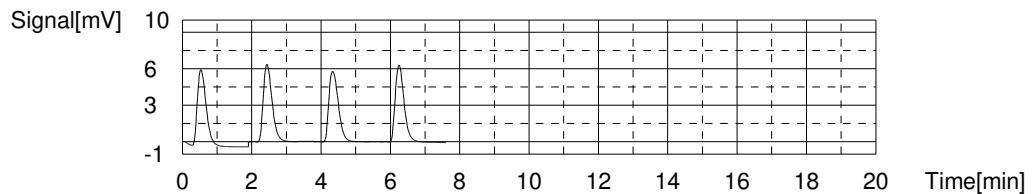
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.511mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.89	3.432mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 8:38:50 PM
2	11.34	3.572mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 8:40:56 PM
3	11.07	3.488mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 8:43:02 PM
4	11.27	3.550mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 8:45:07 PM

Mean Area 11.14  
Mean Conc. 3.511mg/L



## Sample

Sample Name: 280-155002-c-2  
Sample ID:  
Origin:  
Status Completed  
Chk. Result

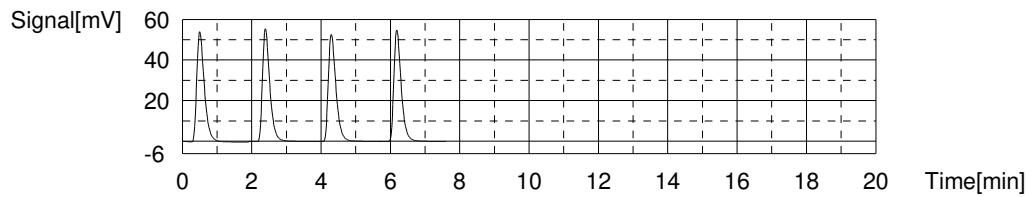
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	2.000	NPOC:51.20mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	83.83	52.26mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 8:53:41 PM
2	82.19	51.24mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 8:55:47 PM
3	81.03	50.52mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 8:57:53 PM
4	81.45	50.78mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 8:59:58 PM

Mean Area 82.13  
Mean Conc. 51.20mg/L



## Sample

Sample Name: CCV  
Sample ID:  
Origin:  
Status Completed  
Chk. Result

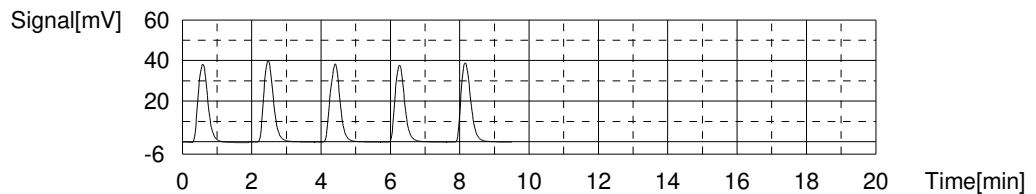
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:23.93mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	76.12	23.73mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 9:08:32 PM
2	77.80	24.25mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 9:10:38 PM
3	76.47	23.84mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 9:12:44 PM
4	73.36	22.87mg/L	50uL	1	E	NPOC.2021_11_04_16_22_17.cal	11/4/2021 9:14:49 PM
5	76.61	23.88mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 9:16:55 PM

Mean Area 76.75  
Mean Conc. 23.93mg/L



## Sample

Sample Name: CCB  
Sample ID:  
Origin:  
Status NPOC.met  
Chk. Result Completed

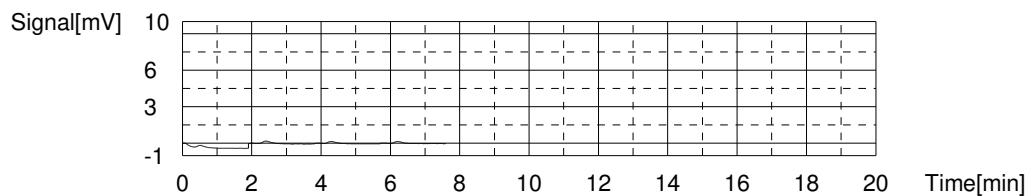
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1246mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.1899	0.1022mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 9:25:28 PM
2	0.3519	0.1526mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 9:27:33 PM
3	0.2687	0.1267mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 9:29:39 PM
4	0.2377	0.1171mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 9:31:44 PM

Mean Area 0.2621  
Mean Conc. 0.1246mg/L



## Sample

Sample Name: 280-155002-c-5  
Sample ID:  
Origin:  
Status NPOC.met  
Chk. Result Completed

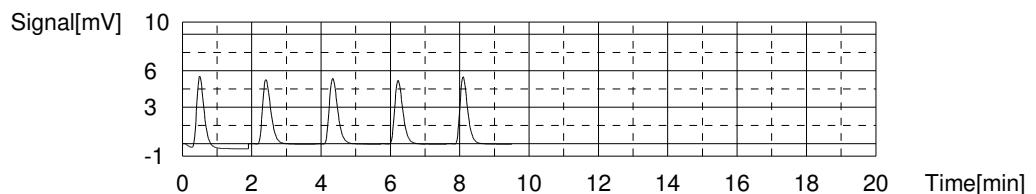
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	10.00	NPOC:27.28mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.480	26.82mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 9:40:18 PM
2	8.699	27.50mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 9:42:24 PM
3	9.196	29.05mg/L	50uL	1	E	NPOC.2021_11_04_16_22_17.cal	11/4/2021 9:44:30 PM
4	8.746	27.65mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 9:46:35 PM
5	8.590	27.16mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 9:48:41 PM

Mean Area 8.629  
Mean Conc. 27.28mg/L



## Sample

Sample Name: 280-155002-c-6  
Sample ID:  
Origin:  
Status Completed  
Chk. Result

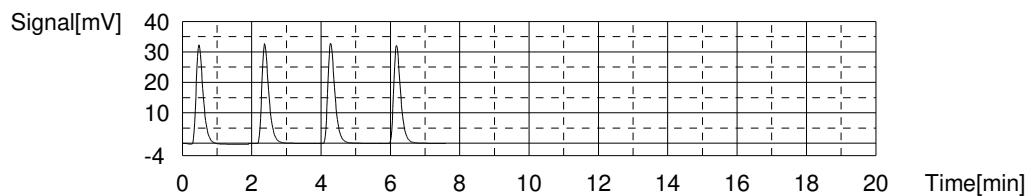
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	50.00	NPOC:722.5mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	46.32	722.9mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 9:57:13 PM
2	46.52	726.0mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 9:59:19 PM
3	47.13	735.5mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 10:01:25 PM
4	45.22	705.8mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 10:03:30 PM

Mean Area 46.30  
Mean Conc. 722.5mg/L



## Sample

Sample Name: 280-155002-c-7  
Sample ID:  
Origin:  
Status Completed  
Chk. Result

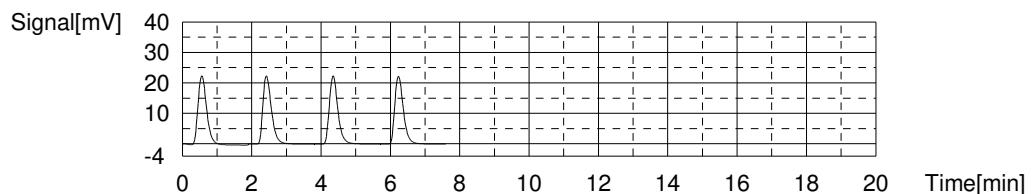
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	5.000	NPOC:60.60mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	39.73	62.03mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 10:12:05 PM
2	38.53	60.17mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 10:14:10 PM
3	38.34	59.87mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 10:16:16 PM
4	38.64	60.34mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 10:18:21 PM

Mean Area 38.81  
Mean Conc. 60.60mg/L



## Sample

Sample Name: 280-155057-a-2  
Sample ID:  
Origin:  
Status Completed  
Chk. Result

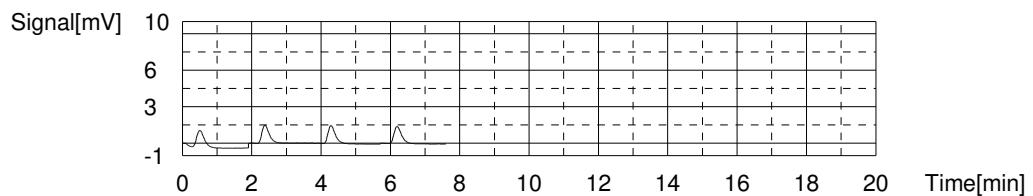
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.7044mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.997	0.6645mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 10:26:55 PM
2	2.192	0.7252mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 10:29:01 PM
3	2.187	0.7237mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 10:31:07 PM
4	2.124	0.7041mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 10:33:12 PM

Mean Area 2.125  
Mean Conc. 0.7044mg/L



## Sample

Sample Name: 280-155057-a-3  
Sample ID:  
Origin:  
Status Completed  
Chk. Result

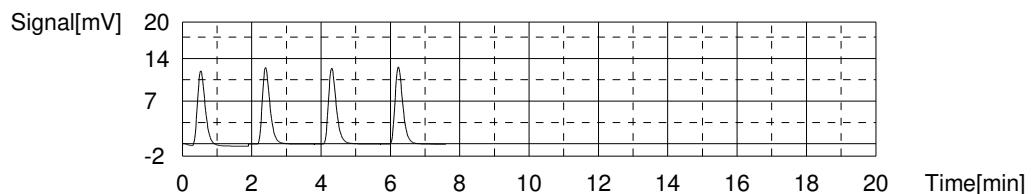
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:6.145mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	19.19	6.015mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 10:41:47 PM
2	19.53	6.121mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 10:43:52 PM
3	19.65	6.158mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 10:45:58 PM
4	20.06	6.286mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 10:48:03 PM

Mean Area 19.61  
Mean Conc. 6.145mg/L



## Sample

Sample Name: 280-155057-a-4  
Sample ID:  
Origin:  
Status Completed  
Chk. Result

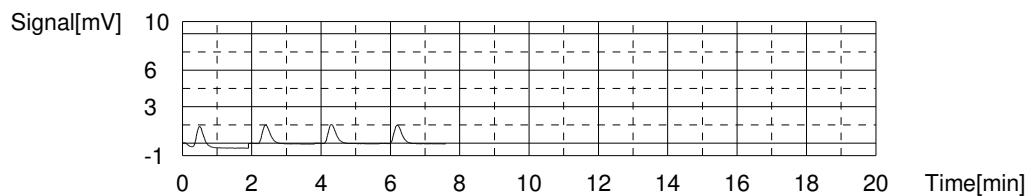
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.7863mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.252	0.7439mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 10:56:37 PM
2	2.439	0.8021mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 10:58:43 PM
3	2.463	0.8095mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 11:00:49 PM
4	2.399	0.7896mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 11:02:54 PM

Mean Area 2.388  
Mean Conc. 0.7863mg/L



## Sample

Sample Name: MS 280-155057-a-4  
Sample ID:  
Origin:  
Status Completed  
Chk. Result

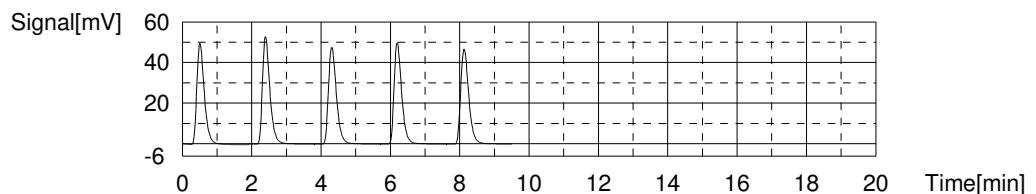
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:23.76mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	75.95	23.68mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 11:11:28 PM
2	79.45	24.77mg/L	50uL	1	E	NPOC.2021_11_04_16_22_17.cal	11/4/2021 11:13:34 PM
3	76.35	23.80mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 11:15:40 PM
4	76.50	23.85mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 11:17:45 PM
5	76.00	23.69mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 11:19:51 PM

Mean Area 76.20  
Mean Conc. 23.76mg/L



## Sample

Sample Name: MSD 280-155057-a-4  
Sample ID:  
Origin: NPOC.met  
Status Completed  
Chk. Result

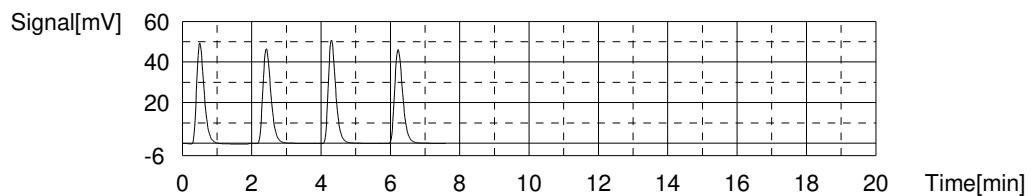
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:23.83mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	76.15	23.74mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 11:28:23 PM
2	76.17	23.75mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 11:30:29 PM
3	77.12	24.04mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 11:32:35 PM
4	76.33	23.80mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 11:34:40 PM

Mean Area 76.44  
Mean Conc. 23.83mg/L



## Sample

Sample Name: 280-155057-a-5  
Sample ID:  
Origin: NPOC.met  
Status Completed  
Chk. Result

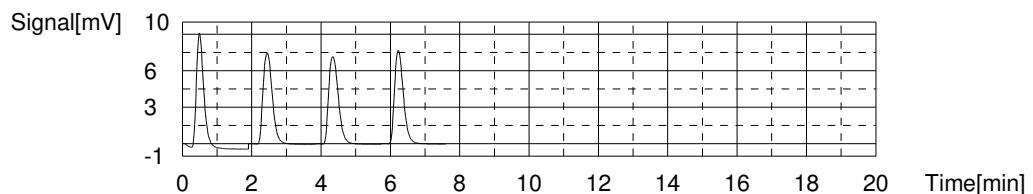
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.336mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	13.59	4.272mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 11:43:14 PM
2	13.96	4.387mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 11:45:20 PM
3	13.91	4.372mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 11:47:26 PM
4	13.72	4.313mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 11:49:31 PM

Mean Area 13.80  
Mean Conc. 4.336mg/L



## Sample

Sample Name: 280-155057-a-6  
Sample ID:  
Origin: NPOC.met  
Status Completed  
Chk. Result

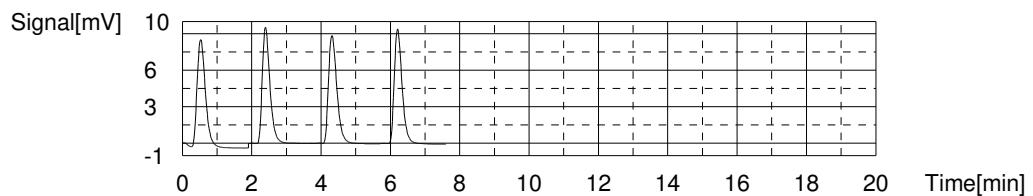
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.650mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	14.69	4.614mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/4/2021 11:58:05 PM
2	14.74	4.630mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 12:00:11 AM
3	14.85	4.664mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 12:02:17 AM
4	14.94	4.692mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 12:04:22 AM

Mean Area 14.81  
Mean Conc. 4.650mg/L



## Sample

Sample Name: CCV  
Sample ID:  
Origin: NPOC.met  
Status Completed  
Chk. Result

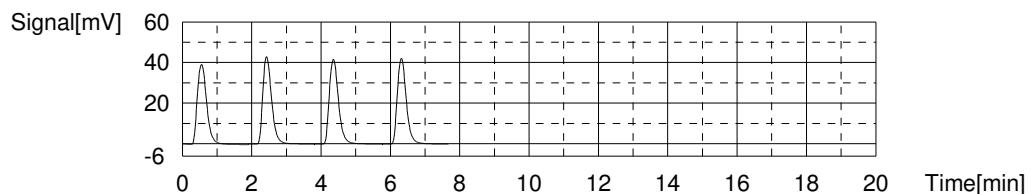
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:23.72mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	74.57	23.25mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 12:12:56 AM
2	76.10	23.72mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 12:15:02 AM
3	77.17	24.06mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 12:17:12 AM
4	76.50	23.85mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 12:19:17 AM

Mean Area 76.09  
Mean Conc. 23.72mg/L



## Sample

Sample Name: CCB  
Sample ID:  
Origin:  
Status Completed  
Chk. Result

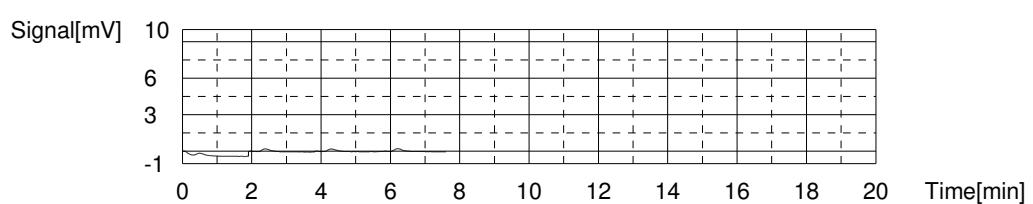
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1448mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2129	0.1093mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 12:27:51 AM
2	0.3770	0.1604mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 12:29:57 AM
3	0.3567	0.1541mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 12:32:03 AM
4	0.3604	0.1552mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 12:34:08 AM

Mean Area 0.3267  
Mean Conc. 0.1448mg/L



## Sample

Sample Name: 280-155057-a-7  
Sample ID:  
Origin:  
Status Completed  
Chk. Result

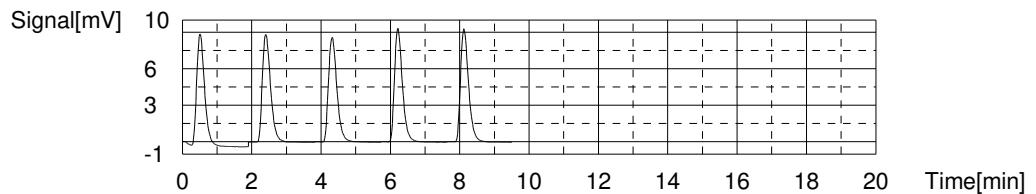
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.645mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	14.21	4.465mg/L	50uL	1	E	NPOC.2021_11_04_16_22_17.cal	11/5/2021 12:42:42 AM
2	14.68	4.611mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 12:44:48 AM
3	14.53	4.565mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 12:46:54 AM
4	14.91	4.683mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 12:48:59 AM
5	15.03	4.720mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 12:51:05 AM

Mean Area 14.79  
Mean Conc. 4.645mg/L



## Sample

Sample Name: 280-155057-a-8  
Sample ID:  
Origin:  
Status Completed  
Chk. Result

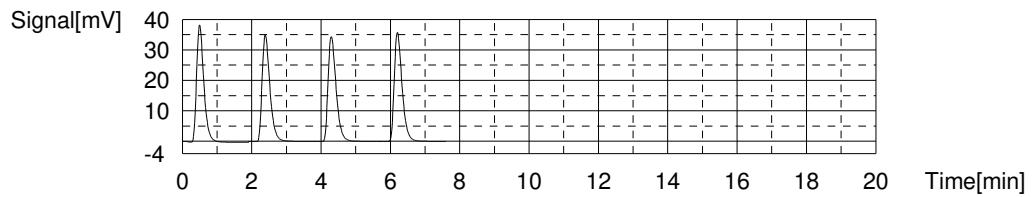
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:17.48mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	56.42	17.60mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 12:59:37 AM
2	55.20	17.22mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 1:01:43 AM
3	55.64	17.36mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 1:03:49 AM
4	56.92	17.76mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 1:05:54 AM

Mean Area 56.05  
Mean Conc. 17.48mg/L



## Sample

Sample Name: 280-155057-a-9  
Sample ID:  
Origin:  
Status Completed  
Chk. Result

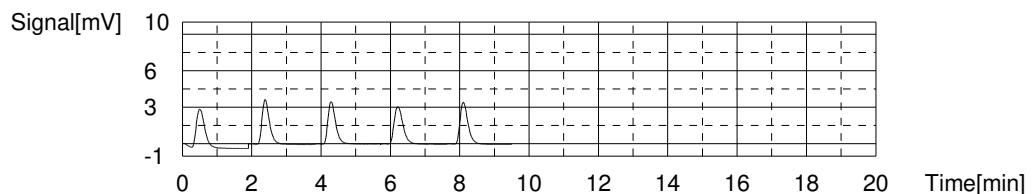
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.728mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.159	1.649mg/L	50uL	1	E	NPOC.2021_11_04_16_22_17.cal	11/5/2021 1:14:28 AM
2	5.403	1.724mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 1:16:34 AM
3	5.310	1.696mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 1:18:40 AM
4	5.440	1.736mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 1:20:45 AM
5	5.505	1.756mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 1:22:51 AM

Mean Area 5.415  
Mean Conc. 1.728mg/L



## Sample

Sample Name: 280-155057-a-10  
Sample ID:  
Origin: NPOC.met  
Status Completed  
Chk. Result

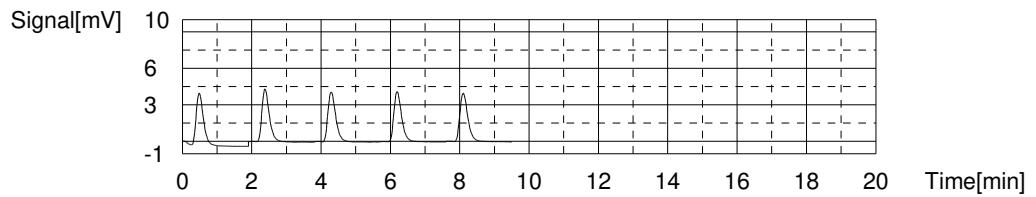
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.031mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.046	1.925mg/L	50uL	1	E	NPOC.2021_11_04_16_22_17.cal	11/5/2021 1:31:44 AM
2	6.414	2.039mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 1:33:50 AM
3	6.345	2.018mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 1:35:56 AM
4	6.410	2.038mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 1:38:01 AM
5	6.382	2.029mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 1:40:07 AM

Mean Area 6.388  
Mean Conc. 2.031mg/L



## Sample

Sample Name: 280-155057-a-11  
Sample ID:  
Origin: NPOC.met  
Status Completed  
Chk. Result

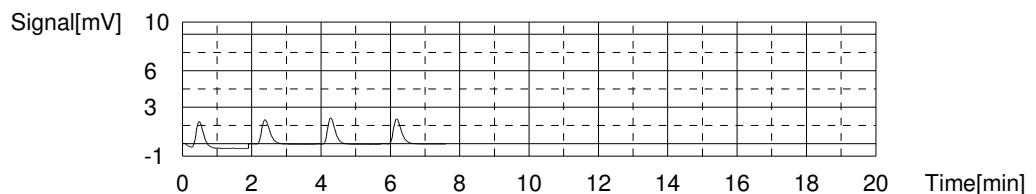
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.049mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.095	1.006mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 1:48:40 AM
2	3.246	1.053mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 1:50:46 AM
3	3.305	1.072mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 1:52:52 AM
4	3.281	1.064mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 1:54:57 AM

Mean Area 3.232  
Mean Conc. 1.049mg/L



## Sample

Sample Name: lcs 280-556213/1-a  
Sample ID:  
Origin:  
Status Completed  
Chk. Result

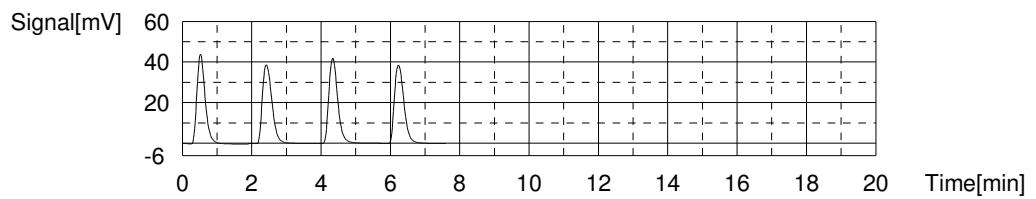
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:23.22mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	73.87	23.03mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 2:03:33 AM
2	74.58	23.25mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 2:05:39 AM
3	75.44	23.52mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 2:07:45 AM
4	74.04	23.08mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 2:09:50 AM

Mean Area 74.48  
Mean Conc. 23.22mg/L



## Sample

Sample Name: mb 280-556213/2-a  
Sample ID:  
Origin:  
Status Completed  
Chk. Result

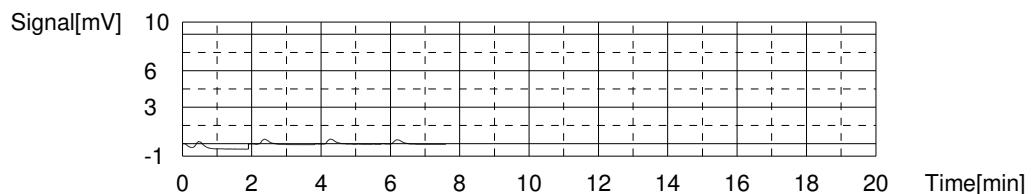
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2383mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.6615	0.2489mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 2:18:26 AM
2	0.6144	0.2343mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 2:20:31 AM
3	0.6602	0.2485mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 2:22:37 AM
4	0.5733	0.2215mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 2:24:42 AM

Mean Area 0.6274  
Mean Conc. 0.2383mg/L



## Sample

Sample Name: 280-155048-d-1-a  
Sample ID:  
Origin: NPOC.met  
Status Completed  
Chk. Result

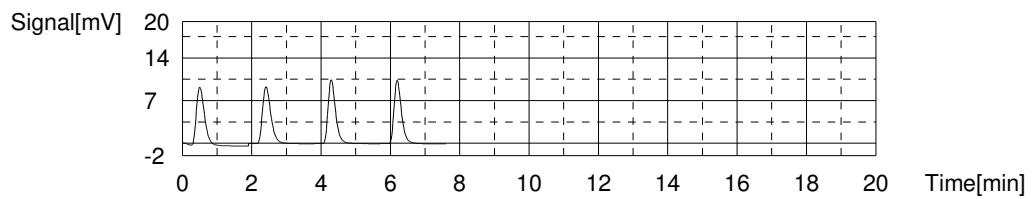
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.906mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	15.51	4.870mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 2:33:18 AM
2	15.72	4.935mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 2:35:23 AM
3	15.74	4.941mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 2:37:29 AM
4	15.54	4.879mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 2:39:34 AM

Mean Area 15.63  
Mean Conc. 4.906mg/L



## Sample

Sample Name: 280-155048-d-2-a  
Sample ID:  
Origin: NPOC.met  
Status Completed  
Chk. Result

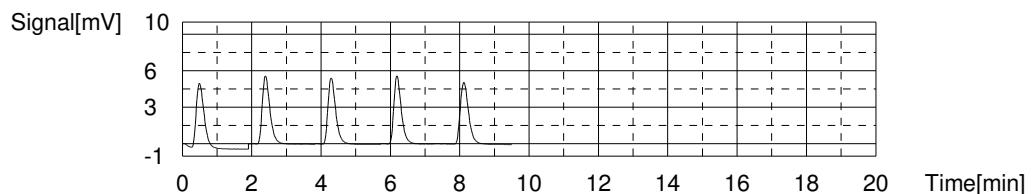
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.667mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.092	2.561mg/L	50uL	1	E	NPOC.2021_11_04_16_22_17.cal	11/5/2021 2:48:10 AM
2	8.600	2.719mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 2:50:15 AM
3	8.336	2.637mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 2:52:21 AM
4	8.360	2.645mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 2:54:26 AM
5	8.435	2.668mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 2:56:32 AM

Mean Area 8.433  
Mean Conc. 2.667mg/L



## Sample

Sample Name: 280-155048-d-3-a  
Sample ID:  
Origin:  
Status Completed  
Chk. Result

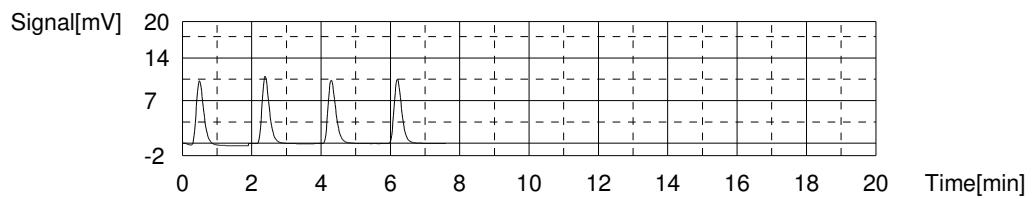
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.102mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	15.87	4.982mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 3:05:06 AM
2	16.40	5.147mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 3:07:11 AM
3	16.47	5.168mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 3:09:17 AM
4	16.28	5.109mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 3:11:22 AM

Mean Area 16.26  
Mean Conc. 5.102mg/L



## Sample

Sample Name: CCV  
Sample ID:  
Origin:  
Status Completed  
Chk. Result

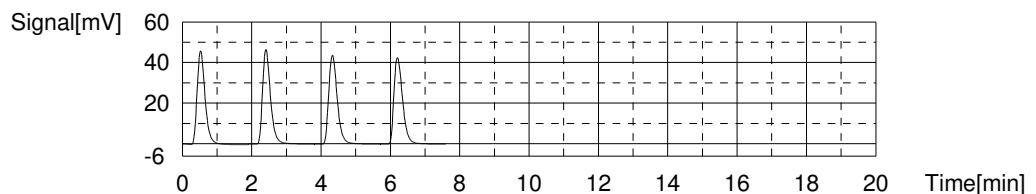
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:23.22mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	73.99	23.07mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 3:19:58 AM
2	74.61	23.26mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 3:22:03 AM
3	74.88	23.35mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 3:24:09 AM
4	74.38	23.19mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 3:26:14 AM

Mean Area 74.47  
Mean Conc. 23.22mg/L



## Sample

Sample Name: CCB  
Sample ID:  
Origin:  
Status Completed  
Chk. Result

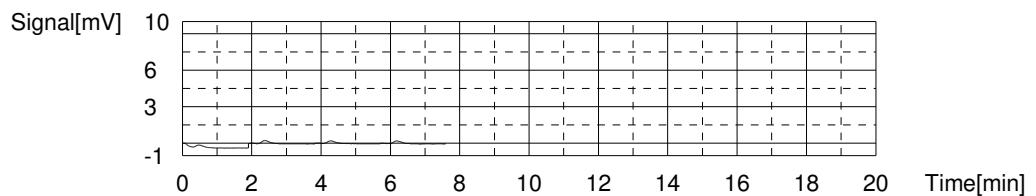
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1443mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2201	0.1116mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 3:34:50 AM
2	0.3997	0.1675mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 3:36:55 AM
3	0.3381	0.1483mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 3:39:01 AM
4	0.3434	0.1499mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 3:41:06 AM

Mean Area 0.3253  
Mean Conc. 0.1443mg/L



## Sample

Sample Name: 280-155048-d-4-a  
Sample ID:  
Origin:  
Status Completed  
Chk. Result

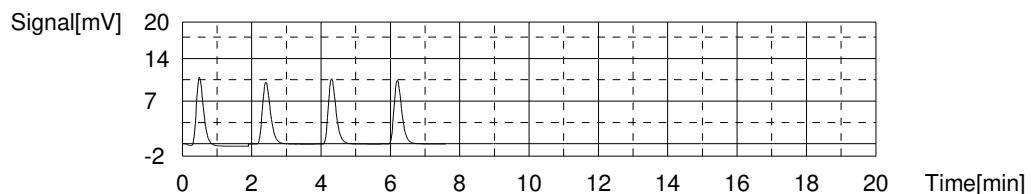
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.198mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	16.39	5.144mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 3:49:42 AM
2	16.67	5.231mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 3:51:47 AM
3	16.72	5.246mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 3:53:53 AM
4	16.48	5.172mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 3:55:58 AM

Mean Area 16.57  
Mean Conc. 5.198mg/L



## Sample

Sample Name: 280-155048-d-5-a  
Sample ID:  
Origin: NPOC.met  
Status Completed  
Chk. Result

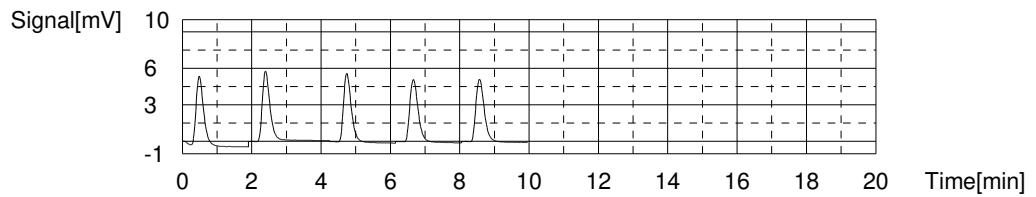
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.708mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.407	2.659mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 4:04:34 AM
2	9.375	2.961mg/L	50uL	1	E	NPOC.2021_11_04_16_22_17.cal	11/5/2021 4:07:06 AM
3	8.641	2.732mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 4:09:12 AM
4	8.483	2.683mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 4:11:17 AM
5	8.721	2.757mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 4:13:23 AM

Mean Area 8.563  
Mean Conc. 2.708mg/L



## Sample

Sample Name: 280-155048-d-6-a  
Sample ID:  
Origin: NPOC.met  
Status Completed  
Chk. Result

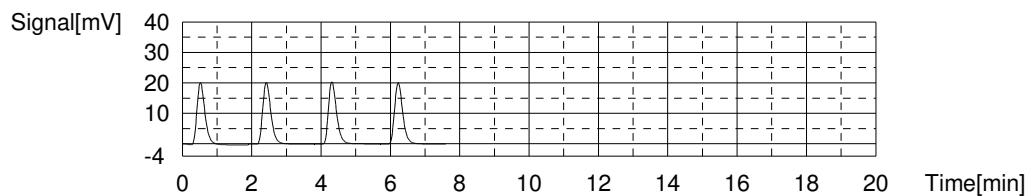
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:10.34mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	32.84	10.26mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 4:21:57 AM
2	33.23	10.38mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 4:24:02 AM
3	33.15	10.36mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 4:26:08 AM
4	33.18	10.37mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 4:28:13 AM

Mean Area  
Mean Conc.  
33.10  
10.34mg/L



## Sample

Sample Name: 280-155048-d-7-a  
 Sample ID:  
 Origin: NPOC.met  
 Status Completed  
 Chk. Result

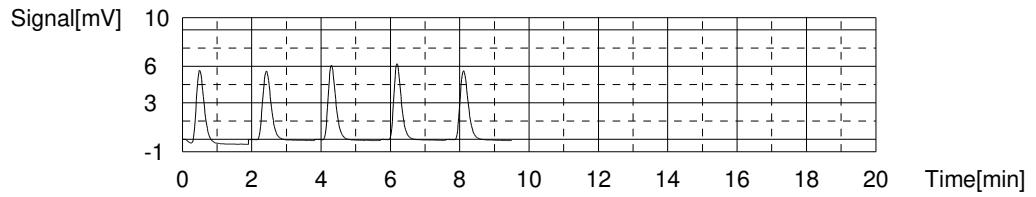
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.992mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.177	2.899mg/L	50uL	1	E	NPOC.2021_11_04_16_22_17.cal	11/5/2021 4:36:49 AM
2	9.592	3.028mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 4:38:54 AM
3	9.543	3.013mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 4:41:00 AM
4	9.347	2.952mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 4:43:05 AM
5	9.419	2.974mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 4:45:11 AM

Mean Area  
Mean Conc.  
9.475  
2.992mg/L



## Sample

Sample Name: 280-155048-d-7-b ms  
 Sample ID:  
 Origin: NPOC.met  
 Status Completed  
 Chk. Result

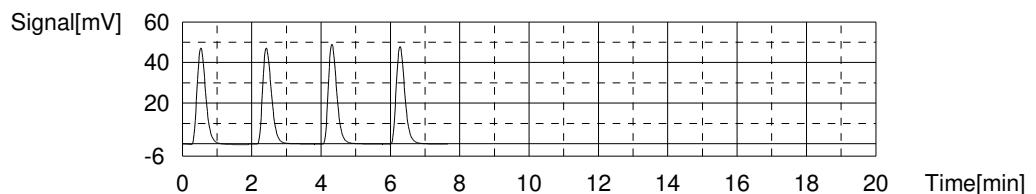
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.20mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	83.39	25.99mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 4:53:45 AM
2	84.43	26.32mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 4:55:50 AM
3	84.35	26.29mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 4:57:59 AM
4	84.01	26.19mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 5:00:04 AM

Mean Area 84.05  
Mean Conc. 26.20mg/L



## Sample

Sample Name: 280-155048-d-7-c msd  
Sample ID:  
Origin: NPOC.met  
Status Completed  
Chk. Result

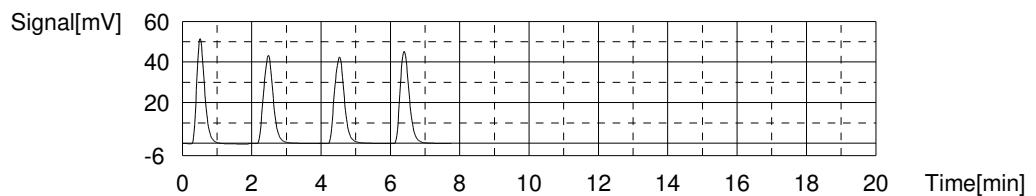
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.20mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	83.17	25.92mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 5:08:40 AM
2	84.25	26.26mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 5:10:54 AM
3	84.82	26.44mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 5:13:00 AM
4	84.00	26.18mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 5:15:05 AM

Mean Area 84.06  
Mean Conc. 26.20mg/L



## Sample

Sample Name: 280-155048-d-8-a  
Sample ID:  
Origin: NPOC.met  
Status Completed  
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.146mg/L

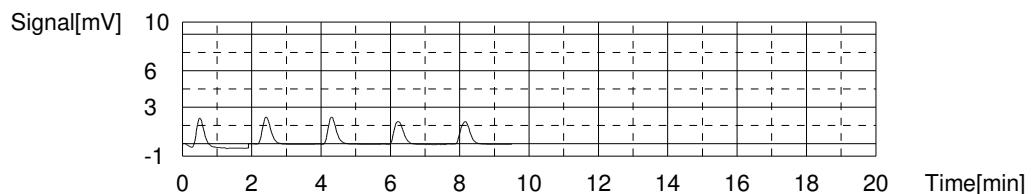
## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.538	1.144mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 5:23:41 AM
2	3.752	1.211mg/L	50uL	1	E	NPOC.2021_11_04_16_22_17.cal	11/5/2021 5:25:46 AM
3	3.604	1.165mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 5:27:52 AM
4	3.534	1.143mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 5:29:57 AM
5	3.502	1.133mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 5:32:03 AM

Mean Area  
Mean Conc.

3.545  
1.146mg/L



#### Sample

Sample Name: 280-155048-d-8-b ms  
 Sample ID:  
 Origin:  
 Status Completed  
 Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:23.87mg/L

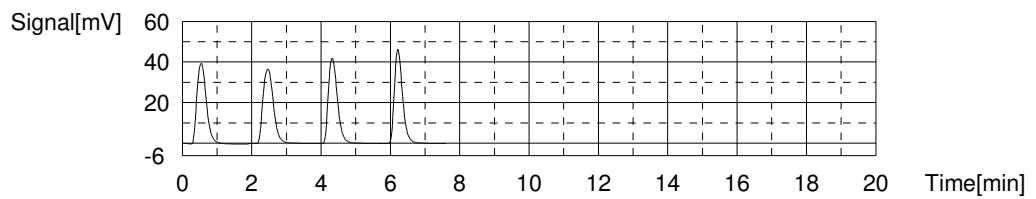
#### 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	75.46	23.53mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 5:40:37 AM
2	77.29	24.10mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 5:42:42 AM
3	76.74	23.92mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 5:44:48 AM
4	76.77	23.93mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 5:46:53 AM

Mean Area  
Mean Conc.

76.56  
23.87mg/L



#### Sample

Sample Name: 280-155048-d-8-c msd  
 Sample ID:  
 Origin:  
 Status Completed  
 Chk. Result

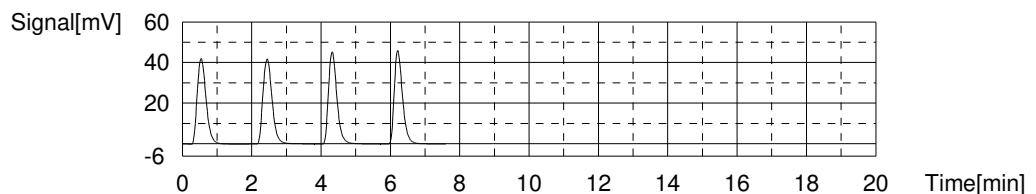
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:23.89mg/L

#### 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	76.03	23.70mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 5:55:29 AM
2	77.16	24.05mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 5:57:34 AM
3	76.74	23.92mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 5:59:40 AM
4	76.56	23.87mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 6:01:45 AM

Mean Area 76.62  
Mean Conc. 23.89mg/L



## Sample

Sample Name: LCS  
Sample ID:  
Origin:  
Status NPOC.met  
Chk. Result Completed

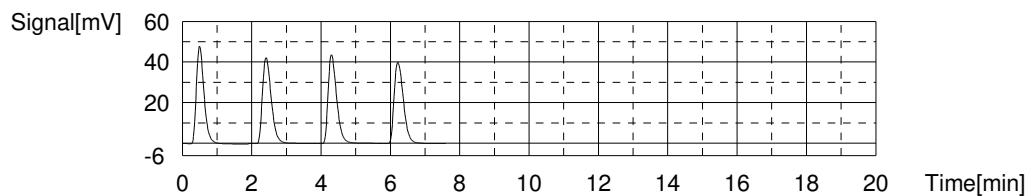
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:23.40mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	75.30	23.48mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 6:10:21 AM
2	75.21	23.45mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 6:12:26 AM
3	74.73	23.30mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 6:14:32 AM
4	74.95	23.37mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 6:16:37 AM

Mean Area 75.05  
Mean Conc. 23.40mg/L



## Sample

Sample Name: CCV  
Sample ID:  
Origin:  
Status NPOC.met  
Chk. Result Completed

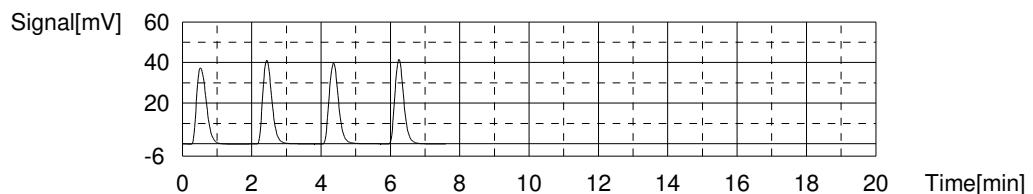
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:23.53mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	74.91	23.35mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 6:25:13 AM
2	75.98	23.69mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 6:27:18 AM
3	75.59	23.57mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 6:29:24 AM
4	75.39	23.50mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 6:31:29 AM

Mean Area 75.47  
Mean Conc. 23.53mg/L



## Sample

Sample Name: CCB  
Sample ID:  
Origin:  
Status Completed  
Chk. Result

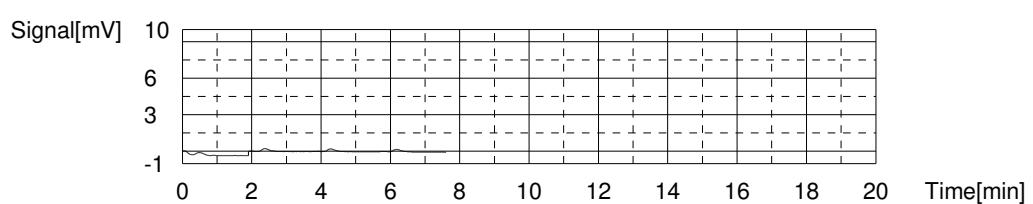
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1361mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2150	0.1100mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 6:40:05 AM
2	0.3637	0.1563mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 6:42:10 AM
3	0.3212	0.1430mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 6:44:16 AM
4	0.2961	0.1352mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 6:46:21 AM

Mean Area 0.2990  
Mean Conc. 0.1361mg/L



## Sample

Sample Name: MB  
Sample ID:  
Origin:  
Status Completed  
Chk. Result

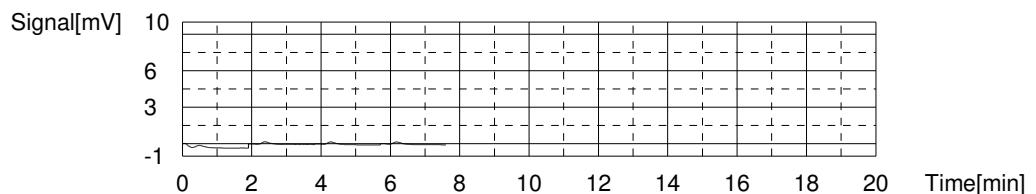
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1282mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2378	0.1171mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 6:54:57 AM
2	0.3123	0.1403mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 6:57:02 AM
3	0.2677	0.1264mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 6:59:08 AM
4	0.2767	0.1292mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 7:01:13 AM

Mean Area 0.2736  
Mean Conc. 0.1282mg/L



## Sample

Sample Name: TIC  
Sample ID:  
Origin: NPOC.met  
Status Completed  
Chk. Result

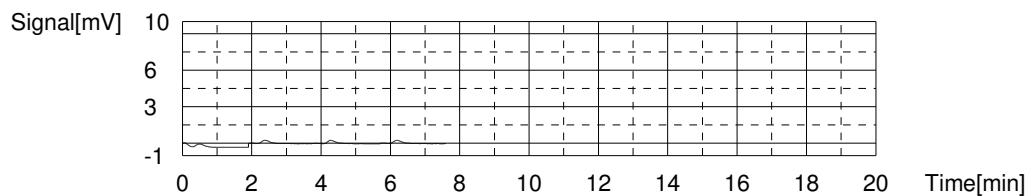
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1647mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3517	0.1525mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 7:09:49 AM
2	0.3896	0.1643mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 7:11:54 AM
3	0.4220	0.1744mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 7:14:00 AM
4	0.4005	0.1677mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 7:16:06 AM

Mean Area 0.3910  
Mean Conc. 0.1647mg/L



## Sample

Sample Name: 280-154892-f-1  
Sample ID:  
Origin: NPOC.met  
Status Completed  
Chk. Result

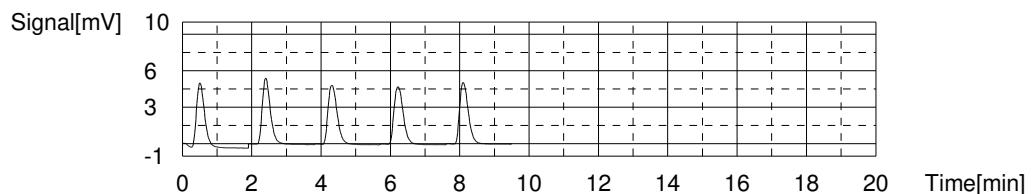
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.774mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.405	2.659mg/L	50uL	1	E	NPOC.2021_11_04_16_22_17.cal	11/5/2021 7:24:41 AM
2	8.779	2.775mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 7:26:46 AM
3	8.738	2.762mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 7:28:52 AM
4	8.802	2.782mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 7:30:57 AM
5	8.784	2.777mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 7:33:03 AM

Mean Area 8.776  
Mean Conc. 2.774mg/L



## Sample

Sample Name: 280-154892-f-3  
Sample ID:  
Origin: NPOC.met  
Status Completed  
Chk. Result

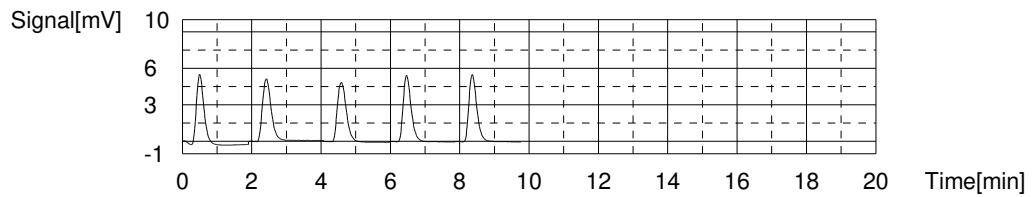
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.747mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.493	2.686mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 7:41:38 AM
2	9.252	2.922mg/L	50uL	1	E	NPOC.2021_11_04_16_22_17.cal	11/5/2021 7:43:59 AM
3	8.815	2.786mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 7:46:05 AM
4	8.684	2.745mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 7:48:10 AM
5	8.765	2.771mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 7:50:16 AM

Mean Area 8.689  
Mean Conc. 2.747mg/L



## Sample

Sample Name: MS 280-154892-f-3  
Sample ID:  
Origin: NPOC.met  
Status Completed  
Chk. Result

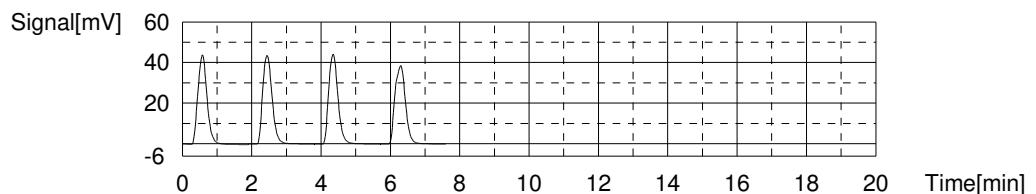
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.62mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	81.27	25.33mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 7:58:51 AM
2	82.75	25.79mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 8:00:56 AM
3	82.82	25.82mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 8:03:02 AM
4	81.87	25.52mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 8:05:08 AM

Mean Area 82.18  
Mean Conc. 25.62mg/L



## Sample

Sample Name: MSD 280-154892-f-3  
Sample ID:  
Origin: NPOC.met  
Status Completed  
Chk. Result

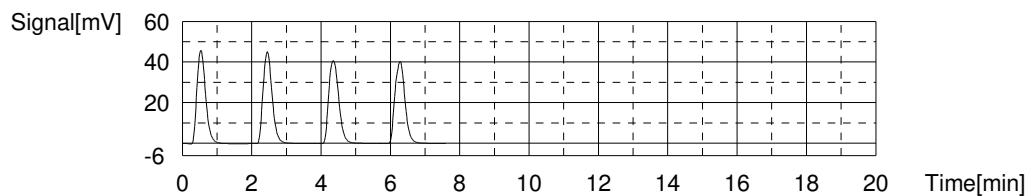
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.55mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	80.79	25.18mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 8:13:44 AM
2	82.50	25.72mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 8:15:49 AM
3	82.54	25.73mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 8:17:55 AM
4	82.02	25.57mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 8:20:00 AM

Mean Area 81.96  
Mean Conc. 25.55mg/L



## Sample

Sample Name: 280-154945-c-1  
Sample ID:  
Origin: NPOC.met  
Status Completed  
Chk. Result

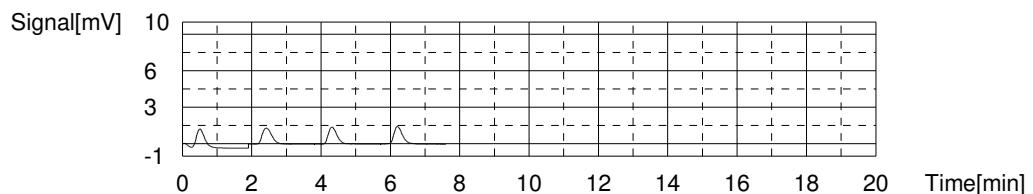
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.8032mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.394	0.7881mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 8:28:36 AM
2	2.522	0.8279mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 8:30:41 AM
3	2.400	0.7899mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 8:32:47 AM
4	2.454	0.8067mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 8:34:52 AM

Mean Area 2.443  
Mean Conc. 0.8032mg/L



## Sample

Sample Name: 280-154945-c-2  
Sample ID:  
Origin:  
Status Completed  
Chk. Result

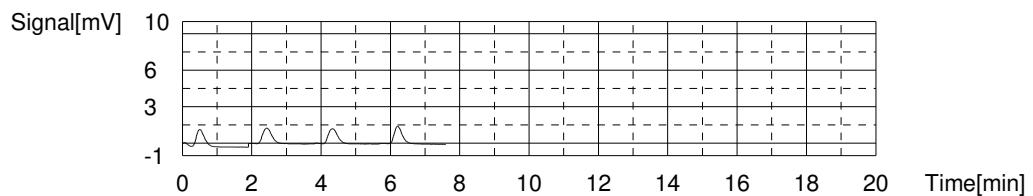
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.7433mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.132	0.7065mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 8:43:28 AM
2	2.307	0.7610mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 8:45:33 AM
3	2.238	0.7395mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 8:47:39 AM
4	2.323	0.7660mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 8:49:44 AM

Mean Area 2.250  
Mean Conc. 0.7433mg/L



## Sample

Sample Name: 280-154945-c-3  
Sample ID:  
Origin:  
Status Completed  
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.5763mg/L

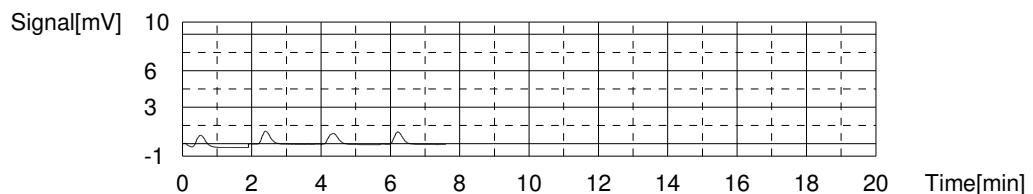
## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.625	0.5488mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 8:58:20 AM
2	1.769	0.5936mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 9:00:25 AM
3	1.726	0.5802mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 9:02:31 AM
4	1.734	0.5827mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 9:04:37 AM

Mean Area  
Mean Conc.

1.714  
0.5763mg/L



#### Sample

Sample Name: 280-154988-b-1  
 Sample ID:  
 Origin: NPOC.met  
 Status Completed  
 Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.780mg/L

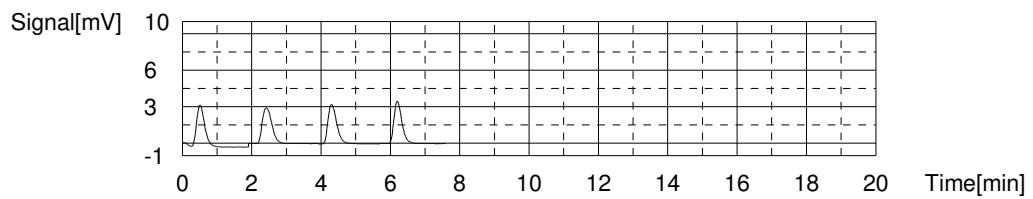
#### 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.438	1.735mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 9:13:12 AM
2	5.628	1.794mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 9:15:17 AM
3	5.675	1.809mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 9:17:23 AM
4	5.587	1.782mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 9:19:28 AM

Mean Area  
Mean Conc.

5.582  
1.780mg/L



#### Sample

Sample Name: CCV  
 Sample ID:  
 Origin: NPOC.met  
 Status Completed  
 Chk. Result

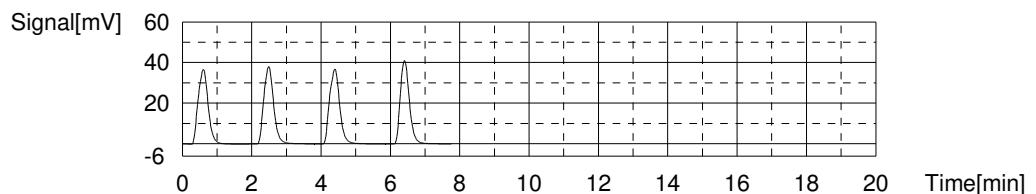
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:23.47mg/L

#### 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	74.76	23.31mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 9:28:04 AM
2	75.36	23.49mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 9:30:09 AM
3	75.57	23.56mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 9:32:24 AM
4	75.39	23.50mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 9:34:29 AM

Mean Area 75.27  
Mean Conc. 23.47mg/L



## Sample

Sample Name: CCB  
Sample ID:  
Origin:  
Status NPOC.met  
Chk. Result Completed

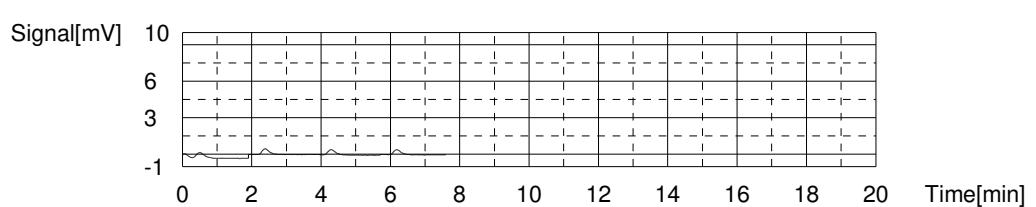
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2409mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.6160	0.2348mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 9:43:05 AM
2	0.6869	0.2568mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 9:45:10 AM
3	0.6427	0.2431mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 9:47:16 AM
4	0.5974	0.2290mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 9:49:21 AM

Mean Area 0.6358  
Mean Conc. 0.2409mg/L



## Sample

Sample Name: 280-154988-b-2  
Sample ID:  
Origin:  
Status NPOC.met  
Chk. Result Completed

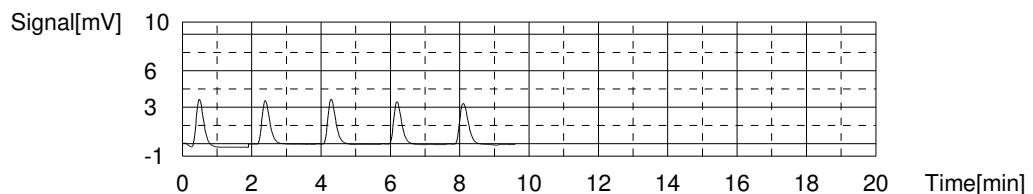
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.818mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.832	1.858mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 9:57:57 AM
2	5.645	1.800mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 10:00:02 AM
3	5.888	1.875mg/L	50uL	1	E	NPOC.2021_11_04_16_22_17.cal	11/5/2021 10:02:08 AM
4	5.603	1.787mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 10:04:13 AM
5	5.732	1.827mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 10:06:25 AM

Mean Area 5.703  
Mean Conc. 1.818mg/L



## Sample

Sample Name: 280-154988-b-3  
Sample ID:  
Origin: NPOC.met  
Status Completed  
Chk. Result

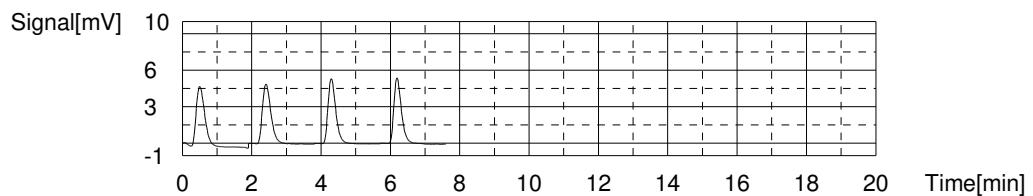
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.638mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.376	2.650mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 10:15:00 AM
2	8.447	2.672mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 10:17:05 AM
3	8.327	2.634mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 10:19:11 AM
4	8.206	2.597mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 10:21:16 AM

Mean Area 8.339  
Mean Conc. 2.638mg/L



## Sample

Sample Name: 280-155070-f-2  
Sample ID:  
Origin: NPOC.met  
Status Completed  
Chk. Result

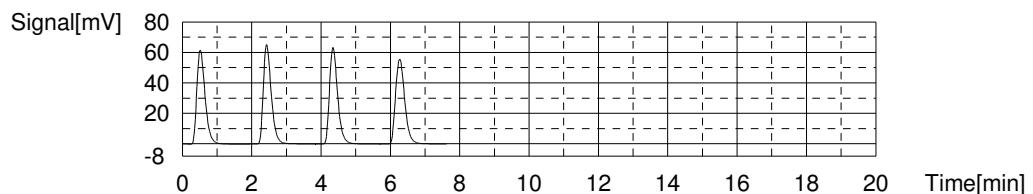
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	5.000	NPOC:161.7mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	102.8	160.2mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 10:29:53 AM
2	104.5	162.8mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 10:31:58 AM
3	104.1	162.2mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 10:34:04 AM
4	103.8	161.7mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 10:36:09 AM

Mean Area 103.8  
Mean Conc. 161.7mg/L



## Sample

Sample Name: 280-155070-f-3  
Sample ID:  
Origin: NPOC.met  
Status Completed  
Chk. Result

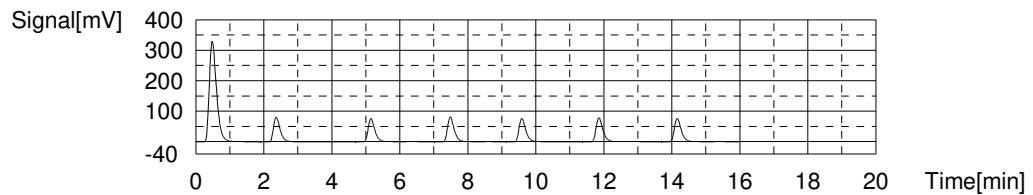
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	5.000	NPOC:678.4mg/L

## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	492.1	765.9mg/L	50uL	1	R	NPOC.2021_11_04_16_22_17.cal	11/5/2021 10:44:45 AM
2	112.2	671.7mg/L	13uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 10:47:43 AM
3	109.2	653.7mg/L	13uL	1	E	NPOC.2021_11_04_16_22_17.cal	11/5/2021 10:50:15 AM
4	114.1	683.0mg/L	13uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 10:52:32 AM
5	109.3	654.3mg/L	13uL	1	E	NPOC.2021_11_04_16_22_17.cal	11/5/2021 10:55:00 AM
6	114.7	686.6mg/L	13uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 10:57:29 AM
7	112.3	672.3mg/L	13uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 11:02:38 AM

Mean Area 113.3  
Mean Conc. 678.4mg/L



## Sample

Sample Name: CCV  
Sample ID:  
Origin: NPOC.met  
Status Completed  
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.11mg/L

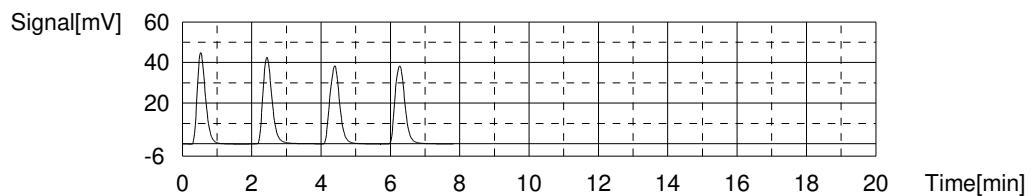
## 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	76.34	23.80mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 11:11:06 AM
2	78.92	24.60mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 11:13:12 AM
3	76.71	23.91mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 11:15:17 AM
4	77.34	24.11mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 11:17:36 AM

Mean Area  
Mean Conc.

77.33  
24.11mg/L



#### Sample

Sample Name: CCB  
 Sample ID:  
 Origin:  
 Status Completed  
 Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2477mg/L

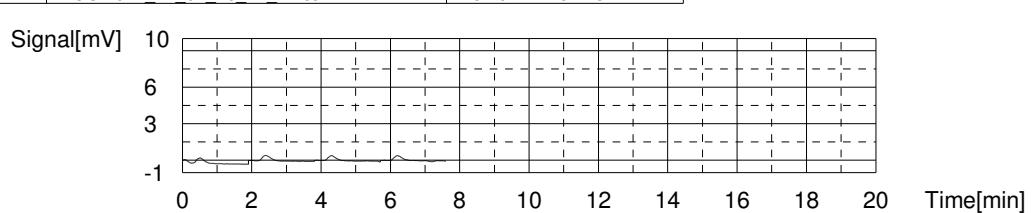
#### 1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.6207	0.2362mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 11:26:11 AM
2	0.7568	0.2786mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 11:28:17 AM
3	0.6432	0.2432mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 11:30:23 AM
4	0.6100	0.2329mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 11:32:28 AM

Mean Area  
Mean Conc.

0.6577  
0.2477mg/L



Shi:4

9660A

	Type	Analysis	Sample Name	Sa	OM	PH Result 22	Notes	C	St	A	D	Vial
1*	Unknown	NPOC	ICV		N 1	✓			De:			1
2*	Unknown	NPOC	ICB		N 1	✓			De:			2
3*	Unknown	NPOC	LCS		N 1	✓			De:			3
4*	Unknown	NPOC	MB		N 1	✓			De:			4
5*	Unknown	NPOC	TIC		N 1	✓			De:			5
6*	Unknown	NPOC	580-107062-a-19		N 1	✓			De:			6
7*	Unknown	NPOC	MS 580-107062-a-19		N 1	✓			De:			7
8*	Unknown	NPOC	MSD 580-107062-a-19		N 1	✓			De:			8
9*	Unknown	NPOC	280-155084-a-5		N 1	✓			De:			9
10*	Unknown	NPOC	280-155084-a-6		N 1	✓			De:			10
11*	Unknown	NPOC	280-155084-a-7		N 1	✓			De:			11
12*	Unknown	NPOC	280-155084-a-8		N 1	✓	2X Dil-odor		De:			12
13*	Unknown	NPOC	280-155084-a-9		N 1	✓			De:			13
14*	Unknown	NPOC	280-155002-c-2		N 1	✓	SX Dil-ferNN		De:			14
15*	Unknown	NPOC	CCV		N 1	✓			De:			15
16*	Unknown	NPOC	CCB		N 1	✓			De:			16
17*	Unknown	NPOC	280-155002-c-5		N 1	✓	10X Dil-odor		De:			17
18*	Unknown	NPOC	280-155002-c-6		N 1	✓	50X Dil-odor		De:			18
19*	Unknown	NPOC	280-155002-c-7		N 1	✓	5X Dil-odor		De:			19
20*	Unknown	NPOC	280-155057-a-2		N 1	✓			De:			20
21*	Unknown	NPOC	280-155057-a-3		N 1	✓			De:			21
22*	Unknown	NPOC	280-155057-a-4		N 1	✓			De:			22
23*	Unknown	NPOC	MS 280-155057-a-4		N 1	✓			De:			23
24*	Unknown	NPOC	MSD 280-155057-a-4		N 1	✓			De:			24
25*	Unknown	NPOC	280-155057-a-5		N 1	✓			De:			25
26*	Unknown	NPOC	280-155057-a-6		N 1	✓			De:			26
27*	Unknown	NPOC	CCV		N 1	✓			De:			27
28*	Unknown	NPOC	CCB		N 1	✓			De:			28
29*	Unknown	NPOC	280-155057-a-7		N 1	✓			De:			29
30*	Unknown	NPOC	280-155057-a-8		N 1	✓			De:			30
31*	Unknown	NPOC	280-155057-a-9		N 1	✓			De:			31
32*	Unknown	NPOC	280-155057-a-10		N 1	✓			De:			32
33*	Unknown	NPOC	280-155057-a-11		N 1	✓			De:			33
34*	Unknown	NPOC	Ics 280-556213/1-a		N 1	✓	Filtration		De:			34
35*	Unknown	NPOC	mb 280-556213/2-a		N 1	✓			De:			35
36*	Unknown	NPOC	280-155048-d-1-a		N 1	>2	DOC		De:			36
37*	Unknown	NPOC	280-155048-d-2-a		N 1	>2	DOC		De:			37
38*	Unknown	NPOC	280-155048-d-3-a		N 1	>2	DOC		De:			38
39*	Unknown	NPOC	CCV		N 1	✓			De:			39
40*	Unknown	NPOC	CCB		N 1	✓			De:			40
41*	Unknown	NPOC	280-155048-d-4-a		N 1	>2	DOC		De:			41
42*	Unknown	NPOC	280-155048-d-5-a		N 1	>2	DOC		De:			42
43*	Unknown	NPOC	280-155048-d-6-a		N 1	>2	DOC		De:			43
44*	Unknown	NPOC	280-155048-d-7-a		N 1	>2	DOC		De:			44
45*	Unknown	NPOC	280-155048-d-7-b ms		N 1	>2	DOC		De:			45
46*	Unknown	NPOC	280-155048-d-7-c msd		N 1	>2	DOC		De:			46
47*	Unknown	NPOC	280-155048-d-8-a		N 1	>2	DOC		De:			47
48*	Unknown	NPOC	280-155048-d-8-b ms		N 1	>2	DOC		De:			48
49*	Unknown	NPOC	280-155048-d-8-c msd		N 1	>2	DOC		De:			49
50*	Unknown	NPOC	LCS		N 1	✓			De:			50
51*	Unknown	NPOC	CCV		N 1	✓			De:			51

S310B

Shi 4

S310B

	Type	Analysis	Sample Name	Sa	OM	pH Result <u>22</u>	Notes	C	St	A	D	Vial
52*	Unknown	NPOC	CCB	N	1	✓			De:			52
53*	Unknown	NPOC	MB	N	1	✓			De:			53
54*	Unknown	NPOC	TIC	N	1	✓			De:			54
55*	Unknown	NPOC	280-154892-f-1	N	1	✓			De:			55
56*	Unknown	NPOC	280-154892-f-3	N	1	✓			De:			56
57*	Unknown	NPOC	MS 280-154892-f-3	N	1	✓			De:			57
58*	Unknown	NPOC	MSD 280-154892-f-3	N	1	✓			De:			58
59*	Unknown	NPOC	280-154945-c-1	N	1	✓			De:			59
60*	Unknown	NPOC	280-154945-c-2	N	1	✓			De:			60
61*	Unknown	NPOC	280-154945-c-3	N	1	✓			De:			61
62*	Unknown	NPOC	280-154988-b-1	N	1	✓			De:			62
63*	Unknown	NPOC	CCV	N	1	✓			De:			63
64*	Unknown	NPOC	CCB	N	1	✓			De:			64
65*	Unknown	NPOC	280-154988-b-2	N	1	✓			De:			65
66*	Unknown	NPOC	280-154988-b-3	N	1	✓			De:			66
67*	Unknown	NPOC	280-155070-f-2	N	1	✓	SX Dil-odor		De:			67
68*	Unknown	NPOC	280-155070-f-3	N	1	✓	SX Dil-odor		De:			68
69*	Unknown	NPOC	CCV	N	1	✓			De:			69
70*	Unknown	NPOC	CCB	N	1	✓			De:			70

BWH 5000

# FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 280-556213

Analyst: Fox, Regan A

Batch Open: 11/4/2021 12:57:00PM

Batch End:

## Sample Filtration

Input Sample Lab ID (Analytical Method)	SDG (Job #)	Matrix	Initial Amount	Final Amount	Due Date	Analytical TAT	Div Rank	Comments	Output Sample Lab ID
1 LCS~280-556213/1 N/A	N/A			N/A	N/A	N/A			
2 MB~280-556213/2 N/A	N/A			N/A	N/A	N/A			
3 280-155048-D-1 (9060A_Diss)	N/A			Water	11/2/1/21	18_Days	4		
4 280-155048-D-2 (9060A_Diss)	(280-155048-1)	N/A		Water	11/2/1/21	18_Days	4		
5 (9060A_Diss)	N/A			Water	11/2/1/21	18_Days	4		
6 280-155048-D-4 (9060A_Diss)	N/A			Water	11/2/1/21	18_Days	4		
7 280-155048-D-5 (9060A_Diss)	N/A			Water	11/2/1/21	18_Days	4		
8 280-155048-D-6 (9060A_Diss)	N/A			Water	11/2/1/21	18_Days	4		
9 280-155048-D-7 (9060A_Diss)	N/A			Water	11/2/1/21	18_Days	4		
10 280-155048-D-7~MS (9060A_Diss)	N/A			Water	11/2/1/21	18_Days	4		
11 (9060A_Diss)	N/A			Water	11/2/1/21	18_Days	4		
12 280-155048-D-8 (9060A_Diss)	N/A			Water	11/2/1/21	18_Days	4		
13 280-155048-D-8~MS (9060A_Diss)	N/A			Water	11/2/1/21	18_Days	4		
14 (9060A_Diss)	N/A			Water	11/2/1/21	18_Days	4		

# FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 280-556213

Analyst: Fox, Regan A

Batch Open: 11/4/2021 12:57:00PM

Batch End:

## Batch Notes

Pipette/Syringe/Dispenser ID	1082991
Filter ID	16876568
Nitric Acid ID	N/A
Batch Comment	DOC filtration

# FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 280-556213

Analyst: Fox, Regan A

Batch Open: 11/4/2021 12:57:00PM

Batch End:

	Comments
280-155048-D-1	
280-155048-D-2	Method Comments: Q5Rev3.1-12212015_Std Var App_60day disposal
280-155048-D-3	Method Comments: Q5Rev3.1-12212015_Std Var App_60day disposal
280-155048-D-4	Method Comments: Q5Rev3.1-12212015_Std Var App_60day disposal
280-155048-D-5	Method Comments: Q5Rev3.1-12212015_Std Var App_60day disposal
280-155048-D-6	Method Comments: Q5Rev3.1-12212015_Std Var App_60day disposal
280-155048-D-7	Method Comments: Q5Rev3.1-12212015_Std Var App_60day disposal
280-155048-D-7~MS	Method Comments: Q5Rev3.1-12212015_Std Var App_60day disposal
280-155048-D-7~ME	Method Comments: Q5Rev3.1-12212015_Std Var App_60day disposal
280-155048-D-8	Method Comments: Q5Rev3.1-12212015_Std Var App_60day disposal
280-155048-D-8~MS	Method Comments: Q5Rev3.1-12212015_Std Var App_60day disposal
280-155048-D-8~ME	Method Comments: Q5Rev3.1-12212015_Std Var App_60day disposal

## FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 280-556213

Analyst: Fox, Regan A

Batch Open: 11/4/2021 12:57:00PM

Batch End.

## Reagent Additions Worksheet

Lab ID	Reagent Code	Amount Added	Final Amount	By	Witness

### Other Reagents:

## Reagent

### Amount/Units

Lot#:

**MANTECH INC.**

Report Date: 11/12/2021 : 10:25

**Calibration Report****Calibration Record # 1034****Calibration Settings**

Calibration ID	PH	Date	11/12/2021
Channel	1	Time	10:25 AM
Probe Type	pH	Temperature	296.88 K 23.73 C
Probe ID	PH ELECTRODE	Analysis Type	Single Line Fit

**Calibration Results**

Slope	-59.171	CorrCoeff	1.0000
Intercept	-14.842	Equation:	Y = (-59.171) X + (-14.842 )

**Calibration Validity** True

Operator

	Result	Minimum	Maximum
Slope	-59.171	-65.00	-54.00
Intercept	-14.842	-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	281.25
4.00	162.10
7.00	-15.13
10.00	-190.55
12.00	-311.88

**Water Analysis Historical Data Report**

<b>Run Number</b>				<b>Order Number</b>				20211112-10											
<b>SampleID</b>	<b>RunDate</b>	<b>RunTime</b>	<b>Temp</b>	<b>cond (uS)</b>	<b>pH</b>	<b>pH2</b>	<b>pH3</b>	<b>Acid</b>	<b>palk ppm</b>	<b>talk ppm</b>	<b>bcarb ppm</b>	<b>carb ppm</b>	<b>hydr ppm</b>	<b>mL @8.3</b>	<b>mL @4.5</b>	<b>mL @4.2</b>	<b>tcon</b>		
RINSE	11/12/2021	7:00 PM	22.75	-1.00	5.78	-1.00	-1.00	-1.00	.00	1.59	1.59	.00	.00	.00	.03	.05	.02		
INITIAL CHECK	11/12/2021	7:03 PM	22.52	-1.00	10.59	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00		
BUFFER 7	11/12/2021	7:15 PM	22.14	-1.00	7.02	-1.00	-1.00	-1.00	.00	1,321.92	1,321.92	.00	.00	.00	13.22	-1.00	.02		
LCS	11/12/2021	7:21 PM	22.52	-1.00	10.62	-1.00	-1.00	-1.00	147.07	202.78	.00	111.41	91.37	1.47	2.03	-1.00	.02		
LCSD	11/12/2021	7:28 PM	22.37	-1.00	10.62	-1.00	-1.00	-1.00	149.64	226.06	.00	152.84	73.22	1.50	2.26	-1.00	.02		
MB	11/12/2021	7:32 PM	22.32	-1.00	7.91	-1.00	-1.00	-1.00	.00	4.83	4.83	.00	.00	.00	.05	.06	.02		
280-155495-a-1	11/12/2021	7:38 PM	22.22	-1.00	6.79	-1.00	-1.00	-1.00	.00	178.88	178.88	.00	.00	.00	1.79	-1.00	.02		
DU	11/12/2021	7:43 PM	22.17	-1.00	6.88	-1.00	-1.00	-1.00	.00	181.74	181.74	.00	.00	.00	1.82	-1.00	.02		
280-155081-a-1	11/12/2021	7:47 PM	22.26	-1.00	6.11	-1.00	-1.00	-1.00	.00	37.60	37.60	.00	.00	.00	.38	-1.00	.02		
280-155081-a-13	11/12/2021	7:52 PM	22.37	-1.00	6.33	-1.00	-1.00	-1.00	.00	83.84	83.84	.00	.00	.00	.84	-1.00	.02		
280-155081-a-9	11/12/2021	7:56 PM	22.34	-1.00	5.99	-1.00	-1.00	-1.00	.00	43.93	43.93	.00	.00	.00	.44	-1.00	.02		
280-155081-a-17	11/12/2021	8:00 PM	22.20	-1.00	6.13	-1.00	-1.00	-1.00	.00	50.81	50.81	.00	.00	.00	.51	-1.00	.02		
280-155081-a-5	11/12/2021	8:05 PM	21.98	-1.00	5.96	-1.00	-1.00	-1.00	.00	44.16	44.16	.00	.00	.00	.44	-1.00	.02		
280-155078-a-5	11/12/2021	8:09 PM	21.86	-1.00	5.43	-1.00	-1.00	-1.00	.00	12.59	12.59	.00	.00	.00	.13	.14	.02		
280-155070-e-2	11/12/2021	8:21 PM	21.79	-1.00	7.53	-1.00	-1.00	-1.00	.00	1,268.13	1,268.13	.00	.00	.00	12.68	-1.00	.02		
280-155070-e-3	11/12/2021	8:33 PM	22.17	-1.00	9.26	-1.00	-1.00	-1.00	73.02	785.20	639.17	146.04	.00	.73	7.85	-1.00	.02		
CCV	11/12/2021	8:39 PM	22.29	-1.00	10.58	-1.00	-1.00	-1.00	141.54	205.82	.00	128.57	77.25	1.42	2.06	-1.00	.02		
CCB	11/12/2021	8:44 PM	22.19	-1.00	7.64	-1.00	-1.00	-1.00	.00	3.58	3.58	.00	.00	.00	.05	.06	.02		
280-154997-a-1	11/12/2021	8:50 PM	22.23	-1.00	6.89	-1.00	-1.00	-1.00	.00	178.19	178.19	.00	.00	.00	1.78	-1.00	.02		
280-154997-a-5	11/12/2021	8:55 PM	22.39	-1.00	6.92	-1.00	-1.00	-1.00	.00	158.61	158.61	.00	.00	.00	1.59	-1.00	.02		
280-154997-a-4	11/12/2021	9:00 PM	22.35	-1.00	6.88	-1.00	-1.00	-1.00	.00	153.47	153.47	.00	.00	.00	1.53	-1.00	.02		
280-154997-a-3	11/12/2021	9:05 PM	22.08	-1.00	6.96	-1.00	-1.00	-1.00	.00	155.33	155.33	.00	.00	.00	1.55	-1.00	.02		
280-154997-a-2	11/12/2021	9:11 PM	22.02	-1.00	6.85	-1.00	-1.00	-1.00	.00	151.41	151.41	.00	.00	.00	1.51	-1.00	.02		
280-155138-f-6	11/12/2021	9:15 PM	21.98	-1.00	6.58	-1.00	-1.00	-1.00	.00	103.95	103.95	.00	.00	.00	1.04	-1.00	.02		
280-155138-f-7	11/12/2021	9:20 PM	21.89	-1.00	6.95	-1.00	-1.00	-1.00	.00	138.92	138.92	.00	.00	.00	1.39	-1.00	.02		
280-155138-f-9	11/12/2021	9:26 PM	21.90	-1.00	7.11	-1.00	-1.00	-1.00	.00	188.34	188.34	.00	.00	.00	1.88	-1.00	.02		
280-155138-f-8	11/12/2021	9:32 PM	22.00	-1.00	6.80	-1.00	-1.00	-1.00	.00	349.91	349.91	.00	.00	.00	3.50	-1.00	.02		
280-154848-d-5	11/12/2021	9:40 PM	22.13	-1.00	7.49	-1.00	-1.00	-1.00	.00	433.37	433.37	.00	.00	.00	4.33	-1.00	.02		
CCV	11/12/2021	9:46 PM	22.39	-1.00	10.57	-1.00	-1.00	-1.00	143.61	198.24	.00	109.26	88.99	1.44	1.98	-1.00	.02		

<u>Run Number</u>	3731		<u>Order Number</u>	20211112-10														
<u>SampleID</u>	<u>RunDate</u>	<u>RunTime</u>	<u>Temp</u>	<u>cond (<u>uS</u>)</u>	<u>pH</u>	<u>pH2</u>	<u>pH3</u>	<u>Acid</u>	<u>palk ppm</u>	<u>talk ppm</u>	<u>bcarb ppm</u>	<u>carb ppm</u>	<u>hydr ppm</u>	<u>mL @8.3</u>	<u>mL @4.5</u>	<u>mL @4.2</u>	<u>tcon</u>	
CCB	11/12/2021	9:51 PM	22.60	-1.00	7.95	-1.00	-1.00	-1.00	.00	3.07	3.07	.00	.00	.00	.04	.05	.02	
LCS	11/12/2021	9:56 PM	22.51	-1.00	10.55	-1.00	-1.00	-1.00	149.40	209.39	.00	120.00	89.40	1.49	2.09	-1.00	.02	
MB	11/12/2021	10:01 PM	22.34	-1.00	8.19	-1.00	-1.00	-1.00	.00	3.47	3.47	.00	.00	.00	.04	.05	.02	
280-154996-b-1	11/12/2021	10:13 PM	22.07	-1.00	7.70	-1.00	-1.00	-1.00	.00	1,079.54	1,079.54	.00	.00	.00	10.80	-1.00	.02	
DU	11/12/2021	10:25 PM	22.20	-1.00	7.68	-1.00	-1.00	-1.00	.00	1,089.30	1,089.30	.00	.00	.00	10.89	-1.00	.02	
280-154988-a-3	11/12/2021	10:31 PM	22.25	-1.00	7.55	-1.00	-1.00	-1.00	.00	421.17	421.17	.00	.00	.00	4.21	-1.00	.02	
280-154988-a-1	11/12/2021	10:41 PM	22.07	-1.00	7.64	-1.00	-1.00	-1.00	.00	821.06	821.06	.00	.00	.00	8.21	-1.00	.02	
280-154988-a-2	11/12/2021	10:48 PM	22.13	-1.00	7.69	-1.00	-1.00	-1.00	.00	578.33	578.33	.00	.00	.00	5.78	-1.00	.02	
280-155327-a-5	11/12/2021	10:54 PM	22.13	-1.00	7.00	-1.00	-1.00	-1.00	.00	156.26	156.26	.00	.00	.00	1.56	-1.00	.02	
280-155327-a-6	11/12/2021	11:00 PM	22.14	-1.00	6.52	-1.00	-1.00	-1.00	.00	246.16	246.16	.00	.00	.00	2.46	-1.00	.02	
280-155327-a-7	11/12/2021	11:06 PM	22.29	-1.00	7.19	-1.00	-1.00	-1.00	.00	171.65	171.65	.00	.00	.00	1.72	-1.00	.02	
280-155327-a-2	11/12/2021	11:10 PM	22.46	-1.00	6.30	-1.00	-1.00	-1.00	.00	75.05	75.05	.00	.00	.00	.75	-1.00	.02	
280-155327-a-3	11/12/2021	11:16 PM	22.19	-1.00	7.02	-1.00	-1.00	-1.00	.00	239.56	239.56	.00	.00	.00	2.40	-1.00	.02	
CCV	11/12/2021	11:22 PM	22.13	-1.00	10.53	-1.00	-1.00	-1.00	147.73	206.69	.00	117.93	88.77	1.48	2.07	-1.00	.02	
CCB	11/12/2021	11:27 PM	22.08	-1.00	7.86	-1.00	-1.00	-1.00	.00	3.21	3.21	.00	.00	.00	.04	.05	.02	
280-155327-a-4	11/12/2021	11:32 PM	21.87	-1.00	6.95	-1.00	-1.00	-1.00	.00	172.82	172.82	.00	.00	.00	1.73	-1.00	.02	
280-155002-a-5	11/12/2021	11:42 PM	21.83	-1.00	7.34	-1.00	-1.00	-1.00	.00	905.02	905.02	.00	.00	.00	9.05	-1.00	.02	
280-155002-a-6	11/12/2021	11:47 PM	21.83	-1.00	4.68	-1.00	-1.00	-1.00	.00	85.23	85.23	.00	.00	.00	.85	-1.00	.02	
280-155002-a-7	11/12/2021	11:57 PM	21.90	-1.00	7.25	-1.00	-1.00	-1.00	.00	791.95	791.95	.00	.00	.00	7.92	-1.00	.02	
280-155002-a-2	11/13/2021	12:06 AM	22.17	-1.00	6.94	-1.00	-1.00	-1.00	.00	734.13	734.13	.00	.00	.00	7.34	-1.00	.02	
280-155002-a-3	11/13/2021	12:26 AM	22.25	-1.00	7.83	-1.00	-1.00	-1.00	.00	2,228.28	2,228.28	.00	.00	.00	22.28	-1.00	.02	
280-155002-a-4	11/13/2021	12:38 AM	22.48	-1.00	6.95	-1.00	-1.00	-1.00	.00	1,156.30	1,156.30	.00	.00	.00	11.56	-1.00	.02	
280-155048-f-4	11/13/2021	12:45 AM	22.57	-1.00	7.31	-1.00	-1.00	-1.00	.00	377.83	377.83	.00	.00	.00	3.78	-1.00	.02	
280-155048-f-3	11/13/2021	12:51 AM	22.29	-1.00	7.30	-1.00	-1.00	-1.00	.00	297.11	297.11	.00	.00	.00	2.97	-1.00	.02	
280-155048-f-1	11/13/2021	12:56 AM	22.11	-1.00	6.83	-1.00	-1.00	-1.00	.00	223.37	223.37	.00	.00	.00	2.23	-1.00	.02	
CCV	11/13/2021	1:02 AM	21.92	-1.00	10.51	-1.00	-1.00	-1.00	144.55	198.82	.00	108.53	90.28	1.45	1.99	-1.00	.02	
CCB	11/13/2021	1:07 AM	21.89	-1.00	7.78	-1.00	-1.00	-1.00	.00	2.40	2.40	.00	.00	.00	.04	.05	.02	
LCS	11/13/2021	1:13 AM	21.77	-1.00	10.49	-1.00	-1.00	-1.00	143.02	206.86	.00	127.66	79.19	1.43	2.07	-1.00	.02	
MB	11/13/2021	1:18 AM	21.87	-1.00	7.85	-1.00	-1.00	-1.00	.00	3.11	3.11	.00	.00	.00	.04	.05	.02	
280-155048-f-6	11/13/2021	1:25 AM	21.86	-1.00	7.01	-1.00	-1.00	-1.00	.00	410.66	410.66	.00	.00	.00	4.11	-1.00	.02	
DU 280-155048-f-6	11/13/2021	1:32 AM	21.90	-1.00	7.09	-1.00	-1.00	-1.00	.00	415.98	415.98	.00	.00	.00	4.16	-1.00	.02	

<u>Run Number</u>	3731			<u>Order Number</u>	20211112-10												
<u>SampleID</u>	<u>RunDate</u>	<u>RunTime</u>	<u>Temp</u>	<u>cond (<u>uS</u>)</u>	<u>pH</u>	<u>pH2</u>	<u>pH3</u>	<u>Acid</u>	<u>palk ppm</u>	<u>talk ppm</u>	<u>bcarb ppm</u>	<u>carb ppm</u>	<u>hydr ppm</u>	<u>mL @8.3</u>	<u>mL @4.5</u>	<u>mL @4.2</u>	<u>tcon</u>
280-155048-f-7	11/13/2021	1:38 AM	21.99	-1.00	7.37	-1.00	-1.00	-1.00	.00	288.33	288.33	.00	.00	.00	2.88	-1.00	.02
280-155048-f-8	11/13/2021	1:43 AM	22.17	-1.00	7.21	-1.00	-1.00	-1.00	.00	227.06	227.06	.00	.00	.00	2.27	-1.00	.02
280-155048-f-2	11/13/2021	1:50 AM	22.51	-1.00	6.91	-1.00	-1.00	-1.00	.00	201.90	201.90	.00	.00	.00	2.02	-1.00	.02
280-155048-f-5	11/13/2021	1:54 AM	22.35	-1.00	6.47	-1.00	-1.00	-1.00	.00	58.37	58.37	.00	.00	.00	.58	-1.00	.02
280-155057-e-10	11/13/2021	2:01 AM	22.16	-1.00	7.26	-1.00	-1.00	-1.00	.00	406.41	406.41	.00	.00	.00	4.06	-1.00	.02
280-155057-e-4	11/13/2021	2:05 AM	22.07	-1.00	6.80	-1.00	-1.00	-1.00	.00	99.50	99.50	.00	.00	.00	1.00	-1.00	.02
280-155057-e-11	11/13/2021	2:12 AM	21.92	-1.00	7.70	-1.00	-1.00	-1.00	.00	269.60	269.60	.00	.00	.00	2.70	-1.00	.02
280-155057-e-6	11/13/2021	2:17 AM	21.90	-1.00	7.39	-1.00	-1.00	-1.00	.00	218.96	218.96	.00	.00	.00	2.19	-1.00	.02
CCV	11/13/2021	2:23 AM	21.92	-1.00	10.47	-1.00	-1.00	-1.00	141.93	206.81	.00	129.75	77.06	1.42	2.07	-1.00	.02
CCB	11/13/2021	2:28 AM	21.99	-1.00	8.07	-1.00	-1.00	-1.00	.00	3.08	3.08	.00	.00	.00	.04	.05	.02
280-155057-e-7	11/13/2021	2:34 AM	21.96	-1.00	7.10	-1.00	-1.00	-1.00	.00	213.25	213.25	.00	.00	.00	2.13	-1.00	.02
280-155057-e-2	11/13/2021	2:40 AM	22.08	-1.00	7.41	-1.00	-1.00	-1.00	.00	257.97	257.97	.00	.00	.00	2.58	-1.00	.02
280-155057-e-8	11/13/2021	2:45 AM	22.22	-1.00	7.19	-1.00	-1.00	-1.00	.00	250.11	250.11	.00	.00	.00	2.50	-1.00	.02
280-155057-e-3	11/13/2021	2:52 AM	22.39	-1.00	6.83	-1.00	-1.00	-1.00	.00	218.32	218.32	.00	.00	.00	2.18	-1.00	.02
280-155057-e-9	11/13/2021	2:58 AM	22.55	-1.00	7.24	-1.00	-1.00	-1.00	.00	299.73	299.73	.00	.00	.00	3.00	-1.00	.02
280-155057-e-5	11/13/2021	3:06 AM	22.37	-1.00	7.31	-1.00	-1.00	-1.00	.00	529.46	529.46	.00	.00	.00	5.29	-1.00	.02
280-155015-f-1	11/13/2021	3:15 AM	22.22	-1.00	6.99	-1.00	-1.00	-1.00	.00	687.35	687.35	.00	.00	.00	6.87	-1.00	.02
280-155015-f-2	11/13/2021	3:22 AM	22.16	-1.00	7.04	-1.00	-1.00	-1.00	.00	435.52	435.52	.00	.00	.00	4.36	-1.00	.02
280-155015-f-3	11/13/2021	3:29 AM	22.07	-1.00	7.00	-1.00	-1.00	-1.00	.00	478.38	478.38	.00	.00	.00	4.78	-1.00	.02
280-155015-f-7	11/13/2021	3:36 AM	22.13	-1.00	7.11	-1.00	-1.00	-1.00	.00	387.60	387.60	.00	.00	.00	3.88	-1.00	.02
CCV	11/13/2021	3:42 AM	22.10	-1.00	10.44	-1.00	-1.00	-1.00	138.85	207.52	.00	137.35	70.17	1.39	2.08	-1.00	.02
CCB	11/13/2021	3:47 AM	22.10	-1.00	7.69	-1.00	-1.00	-1.00	.00	2.91	2.91	.00	.00	.00	.04	.05	.02



# **Shipping and Receiving Documents**

**CHAIN OF CUSTODY RECORD**

12120 Shamrock Plaza Suite 3000 Omaha NE 68154 402/331-8101 F 402/331-1001

AECOM

AECOM

**CHAIN OF CUSTODY RECORD**

**AECOM**  
12120 Shamrock Plaza Suite 300, Omaha, NE 68154 (402) 334-8181 Fax (402) 334-1984

Project Name: CHAAP 2019	AECOM Project Number: 60565355	Analytical Parameters										Bill to: Brice Engineering	
Project Location: Grand Island, Nebraska	AECOM Project Manager: Dean Converse											Remarks	
Sampler(s): <i>BE AP</i>													
Sample	Date	Time	Type	Sample Identification		Matrix	Containers		Standard TAT				
				Comp.	Grab		No.	Type					
11-2-21	1250	X	<i>Nw062-7</i>	<i>Nw062-7</i>	AQ	9	<i>ABCDEF</i>	X	X	X	X	6°C	
11-2-21	1250	X	<i>Nw062-7 ms/msD</i>	<i>Nw062-7 ms/msD</i>	AQ	18	<i>ABCDEF</i>	X	X	X	X	<i>ms/msD</i>	
<i>[Large handwritten signature over the grid]</i>													
Shipping Details													
Signatures	Date	Time	Method of Shipment:		Federal Express		Special Instructions						
Relinquished by: <i>B. H.</i>	11-2-21	1700	Airbill Number:		535539785526		* Filter groundwater sample before analyzing for DOC						
Received by: <i>J. A. S.</i>	11-12-21	1055					(A) (2) 500mL Ambers (Explosives)						
Relinquished by: <i>J. A. S.</i>	11-12-21	1055					(B) (1) 500mL HDPE w/ H <sub>2</sub> SO <sub>4</sub> (TKN, NH <sub>3</sub> , NO <sub>2</sub> /NO <sub>3</sub> )						
									(C) (1) 250mL HDPE (SO <sub>4</sub> , Alkalinity)				
									(D) (1) 250mL HDPE w/ ZnOAc/NaOH (Sulfide)				
									(E) (1) 250mL Amber (DOC)*				
									(F) (3) 40 mL VOA w/ HCl (Methane)				
									TAL/Brice Project #: 28017805				
									Received for Laboratory by: 11-29/2019				

12120 Shamrock Plaza Suite 300, Omaha, NE 68154 (402) 334-8181 Fax (402) 334-1984

20

Page Number

3.9 Tell C#

White copy - Laboratory      Yellow copy - Laboratory      Pink copy - Sampler

2020579



# CHAAP



Environment Testing  
TestAmerica

ORIGIN ID:PHDA (308) 379-7542  
GARY CARSON  
BRICE ENGINEERING (WATER TREATMENT  
7502 WEST 19TH STREET  
  
GRAND ISLAND, NE 68803  
UNITED STATES US

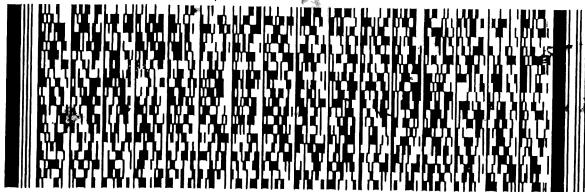
SHIP DATE: 19OCT21  
ACTWGT: 10.00 LB MAN  
CAD: 0562071/CAFE350?

TO

**EUROFINS TESTAMERICA DENVER**  
**4955 YARROW STREET**

**ARVADA CO 800024517**  
(303) 736-0100  
REF: S280 - 113339

RMA: ####



44-121212020122

Part # 1550470-034 EXP 07/22

44-121212020122

Part # 1550470-034 EXP 07/22

44-121212020122

650  
4 11:30 E  
5490 11.03  
FZ



280-155048 Waybill

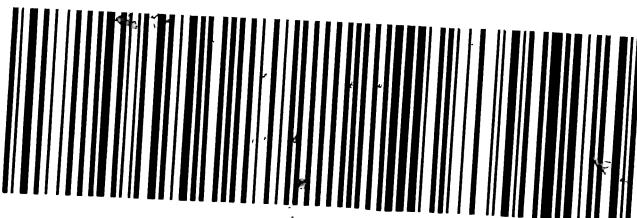
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TRK# **5355 3978 5490**

**XA LAAA**

**WED - 03 NOV 11:30A**  
**PRIORITY OVERNIGHT**

**80002**  
CO-US DEN

EXP 04/22



#5046225 11/02 56DJ1/A822/FE4A


**eurofins**

Environment Testing

650

4  
11:30E  
5504  
11.03

ORIGIN ID:PHDA (308) 379-7542  
 GARY CARSON  
 BRICE ENGINEERING WATER TREATMENT  
 7602 WEST 13TH STREET

GRAND ISLAND, NE 68803  
 UNITED STATES US

SHIP DATE: 19OCT21  
 ACTWGT: 10.00 LB MAN  
 CAD: 0562071/CAFE3507


**eurofins**
**Environment Testing  
TestAmerica**

ORIGIN ID:PHDA (308) 379-7542  
 GARY CARSON  
 BRICE ENGINEERING (WATER TREATMENT  
 7602 WEST 13TH STREET  
 GRAND ISLAND, NE 68803  
 UNITED STATES US

SHIP DATE: 19OCT21  
 ACTWGT: 10.00 LB MAN  
 CAD: 0562071/CAFE3507

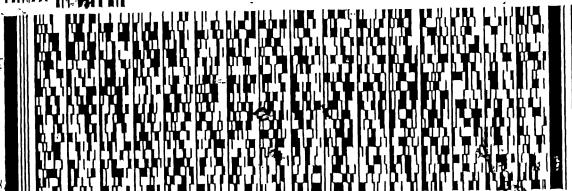
TO

**EUROFINS TESTAMERICA DENVER  
4955 YARROW STREET**

**ARVADA CO 800024517**

(303) 736-0100  
 REF: S280 - 113339

RMA: |||

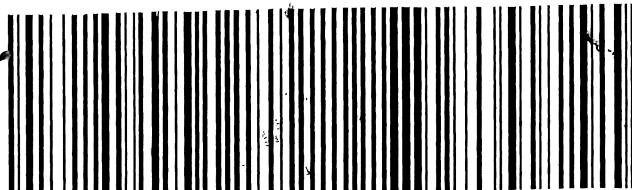


**FedEx**  
 TRK# 5355 3978 5504

WED - 03 NOV 11:30A  
 PRIORITY OVERNIGHT

80002  
 CO-US DEN

**XA LAAA**



#5046225 11/02 56DJ1/AB22/FE4A

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**eurofins**
**Environment Testing  
TestAmerica**

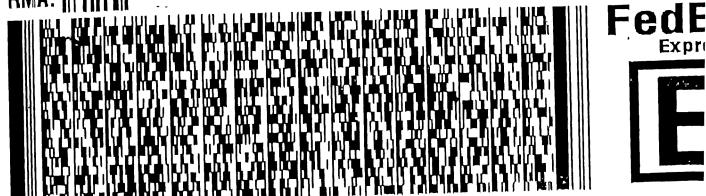
TO

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4955 YARROW STREET**

**ARVADA CO 800024517**

(303) 736-0100  
 REF: S280 - 113339

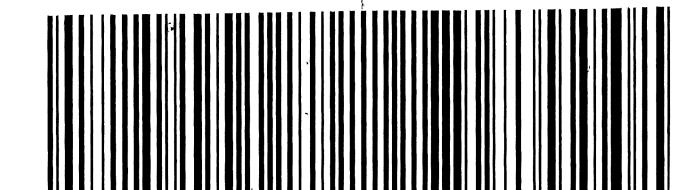
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**FedEx**  
 TRK# 5355 3978 5526

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 PRIORITY OVERNI

**XA LAAA**



#5046225 11/02 56DJ1/AB22/FE4A

11/29/2021

# CHAAP



Environment Testing  
TestAmerica

ORIGIN ID:PHDA (308) 379-7542  
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UNITED STATES US

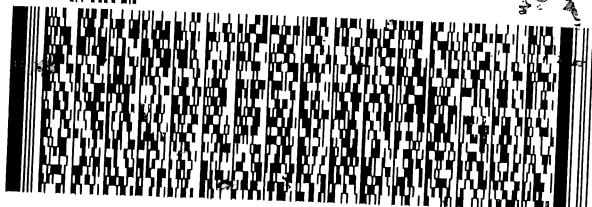
SHIP DATE: 19 OCT 21  
ACT WGT: 10.00 LB MAN  
CAD: 0562071/CAFE3507

TO

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**4955 YARROW STREET**

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(303) 736-0100  
REF: S280 - 113339

RMA:

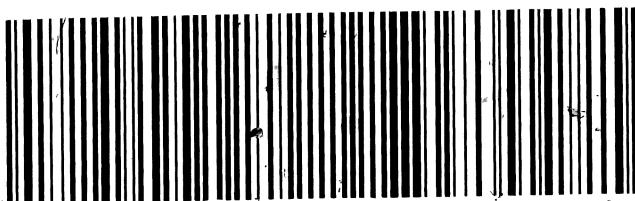


**WED - 03 NOV 11:30A**  
**PRIORITY OVERNIGHT**

**80002**  
CO-US DEN

EXP 04/22

**XA LAAA**



#5046225 11/02 56DJ1/AB22/FE4A

## Login Sample Receipt Checklist

Client: Brice Environmental Services, Corp

Job Number: 280-155048-1

**Login Number: 155048**

**List Source: Eurofins TestAmerica, Denver**

**List Number: 1**

**Creator: Roehsner, Karen P**

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?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	