

## ANALYTICAL REPORT

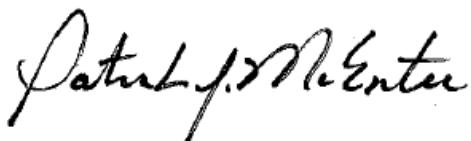
Job Number: 280-159130-1

Job Description: Cornhusker (CHAAP)

For:

Brice Environmental Services, Corp  
3800 Centerpoint Drive, Suite 520  
Anchorage, AK 99503

Attention: Corey Schwabenlander



Approved for release.  
Patrick J McEntee  
Client Service Manager  
3/7/2022 5:33 AM

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

The Lab Certification ID# is 4025.

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

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# Definitions/Glossary

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

Job ID: 280-159130-1

## Qualifiers

### HPLC/IC

Qualifier	Qualifier Description
J	Estimated: The analyte was positively identified; the quantitation is an estimation
J1	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
M	Manual integrated compound.
Q	One or more quality control criteria failed.
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: 280-159130-1**

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 2/25/2022 10:45 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.7° C and 3.4° C.

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

Samples OS003-DP08-35 (280-159130-1), OS003-DP08-45 (280-159130-2), OS001-DP08-25 (280-159130-3), OS501-DP08-25 (280-159130-4), OS001-DP08-35 (280-159130-5) and OS001-DP08-45 (280-159130-6) were analyzed for Nitroaromatics and Nitramines (HPLC) in accordance with 8330A. The samples were prepared on 03/01/2022 and analyzed on 03/02/2022, 03/03/2022 and 03/04/2022.

Surrogate recovery for the following sample in preparation batch 280-567330 and analytical batch 280-567371 was outside the upper control limits: OS001-DP08-45 (280-159130-6). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed. Surrogate recovered within control limit in the confirmation instrument.

3-Nitrotoluene and 4-Amino-2,6-dinitrotoluene failed the recovery criteria low for LCS 280-567330/2-A. Refer to the QC report for details.

The laboratory control sample (LCS) for preparation batch 280-567330 and analytical batch 280-567371 recovered outside control limits for the following analytes:m-Nitrotoluene(73-125%R) at 67%R and 4-Amino-2,6-dinitrotoluene(73-125%R) at 74%R. The associated samples are impacted: OS003-DP08-35 (280-159130-1), OS003-DP08-45 (280-159130-2), OS003-DP08-45 (280-159130-2[MS]), OS003-DP08-45 (280-159130-2[MSD]), OS001-DP08-25 (280-159130-3), OS501-DP08-25 (280-159130-4), OS001-DP08-35 (280-159130-5) and OS001-DP08-45 (280-159130-6). 4-Amino-2,6-dinitrotoluene recovered within control limit in the MS/MSD and the confirmation instrument. m-Nitrotoluene recovered within control limit in the confirmation instrument. Confirmation instrument confirmed the ND result in primary instrument.

The %RPD between the primary and confirmation column exceeded 40% for HMX for the following sample: OS001-DP08-25 (280-159130-3) in preparation batch 280-567330 and analytical batch 280-567371. The results from both columns has been qualified and reported in accordance with the laboratory's QAS.

2-Nitrotoluene and 3-Nitrotoluene failed the recovery criteria low for the MSD of sample OS003-DP08-45MSD (280-159130-2) in batch 280-567371. 3-Nitrotoluene exceeded the RPD limit.

The following samples from preparation batch 280-567330 required filtration to reduce matrix interferences: OS003-DP08-35 (280-159130-1), OS003-DP08-45 (280-159130-2), OS003-DP08-45 (280-159130-2[MS]), OS003-DP08-45 (280-159130-2[MSD]), OS001-DP08-25 (280-159130-3), OS501-DP08-25 (280-159130-4), OS001-DP08-35 (280-159130-5) and OS001-DP08-45 (280-159130-6).

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: 280-159130-1

## **Client Sample ID: OS003-DP08-35**

## **Lab Sample ID: 280-159130-1**

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
2,4,6-Trinitrotoluene	0.14		0.11	0.10	0.047	ug/L	1	8330A		Total/NA

## **Client Sample ID: OS003-DP08-45**

## **Lab Sample ID: 280-159130-2**

No Detections.

## **Client Sample ID: OS001-DP08-25**

## **Lab Sample ID: 280-159130-3**

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
2,4,6-Trinitrotoluene	21		0.11	0.10	0.045	ug/L	1	8330A		Total/NA
2-Amino-4,6-dinitrotoluene	3.0		0.11	0.10	0.051	ug/L	1	8330A		Total/NA
4-Amino-2,6-dinitrotoluene	3.7 Q		0.15	0.12	0.058	ug/L	1	8330A		Total/NA
HMX	0.20 J M J1		0.21	0.20	0.087	ug/L	1	8330A		Total/NA
HMX	0.45 M J1		0.21	0.20	0.087	ug/L	1	8330A		Total/NA
RDX	0.70 M		0.21	0.20	0.051	ug/L	1	8330A		Total/NA

## **Client Sample ID: OS501-DP08-25**

## **Lab Sample ID: 280-159130-4**

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
2,4,6-Trinitrotoluene	21		0.11	0.099	0.045	ug/L	1	8330A		Total/NA
2-Amino-4,6-dinitrotoluene	3.0		0.11	0.099	0.050	ug/L	1	8330A		Total/NA
4-Amino-2,6-dinitrotoluene	3.8 Q		0.15	0.12	0.057	ug/L	1	8330A		Total/NA
RDX	0.69		0.21	0.20	0.051	ug/L	1	8330A		Total/NA

## **Client Sample ID: OS001-DP08-35**

## **Lab Sample ID: 280-159130-5**

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
1,3,5-Trinitrobenzene	3.9 M		0.22	0.21	0.088	ug/L	1	8330A		Total/NA
2,4,6-Trinitrotoluene	1.1		0.12	0.10	0.047	ug/L	1	8330A		Total/NA
4-Amino-2,6-dinitrotoluene	1.0 Q		0.16	0.13	0.061	ug/L	1	8330A		Total/NA

## **Client Sample ID: OS001-DP08-45**

## **Lab Sample ID: 280-159130-6**

No Detections.

This Detection Summary does not include radiochemical test results.

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# Client Sample Results

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

Job ID: 280-159130-1

**Client Sample ID: OS003-DP08-35**

Date Collected: 02/23/22 09:20

Date Received: 02/25/22 10:45

**Lab Sample ID: 280-159130-1**

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.21	U	0.22	0.21	0.087	ug/L		03/03/22 18:09	1
1,3-Dinitrobenzene	0.10	U M	0.11	0.10	0.038	ug/L		03/02/22 05:52	1
<b>2,4,6-Trinitrotoluene</b>	<b>0.14</b>		0.11	0.10	0.047	ug/L		03/02/22 05:52	1
2,4-Dinitrotoluene	0.083	U	0.10	0.083	0.028	ug/L		03/02/22 05:52	1
2,6-Dinitrotoluene	0.083	U	0.10	0.083	0.042	ug/L		03/02/22 05:52	1
2-Amino-4,6-dinitrotoluene	0.10	U M	0.11	0.10	0.053	ug/L		03/03/22 18:09	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.089	ug/L		03/02/22 05:52	1
3-Nitrotoluene	0.42	U Q	0.42	0.42	0.20	ug/L		03/02/22 05:52	1
4-Amino-2,6-dinitrotoluene	0.12	U Q	0.16	0.12	0.060	ug/L		03/02/22 05:52	1
4-Nitrotoluene	0.42	U	0.43	0.42	0.10	ug/L		03/02/22 05:52	1
HMX	0.21	U	0.22	0.21	0.091	ug/L		03/02/22 05:52	1
MNX	0.42	U	2.1	0.42	0.16	ug/L		03/02/22 05:52	1
Nitrobenzene	0.21	U M	0.22	0.21	0.094	ug/L		03/02/22 05:52	1
RDX	0.21	U	0.22	0.21	0.053	ug/L		03/02/22 05:52	1
Tetryl	0.10	U M	0.11	0.10	0.033	ug/L		03/02/22 05:52	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				03/01/22 11:26	03/02/22 05:52	1
1,2-Dinitrobenzene	93		83 - 119				03/01/22 11:26	03/03/22 18:09	1

**Client Sample ID: OS003-DP08-45**

Date Collected: 02/23/22 10:05

Date Received: 02/25/22 10:45

**Lab Sample ID: 280-159130-2**

Matrix: Water

**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	0.086	ug/L		03/02/22 06:15	1
1,3-Dinitrobenzene	0.10	U M	0.11	0.10	0.038	ug/L		03/02/22 06:15	1
<b>2,4,6-Trinitrotoluene</b>	<b>0.10</b>	<b>U</b>	<b>0.11</b>	<b>0.10</b>	<b>0.046</b>	<b>ug/L</b>		03/02/22 06:15	1
2,4-Dinitrotoluene	0.081	U	0.10	0.081	0.028	ug/L		03/02/22 06:15	1
2,6-Dinitrotoluene	0.081	U	0.10	0.081	0.041	ug/L		03/02/22 06:15	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.052	ug/L		03/02/22 06:15	1
2-Nitrotoluene	0.20	U J1	0.21	0.20	0.087	ug/L		03/02/22 06:15	1
3-Nitrotoluene	0.41	U Q J1	0.41	0.41	0.20	ug/L		03/02/22 06:15	1
4-Amino-2,6-dinitrotoluene	0.12	U Q	0.15	0.12	0.059	ug/L		03/02/22 06:15	1
4-Nitrotoluene	0.41	U	0.42	0.41	0.10	ug/L		03/02/22 06:15	1
HMX	0.20	U	0.21	0.20	0.089	ug/L		03/02/22 06:15	1
MNX	0.41	U	2.0	0.41	0.16	ug/L		03/02/22 06:15	1
Nitrobenzene	0.20	U	0.21	0.20	0.093	ug/L		03/02/22 06:15	1
RDX	0.20	U	0.21	0.20	0.052	ug/L		03/02/22 06:15	1
Tetryl	0.10	U M	0.11	0.10	0.032	ug/L		03/02/22 06:15	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	97	M	83 - 119				03/01/22 11:26	03/02/22 06:15	1

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# Client Sample Results

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

Job ID: 280-159130-1

**Client Sample ID: OS001-DP08-25**

Date Collected: 02/23/22 11:20

Date Received: 02/25/22 10:45

**Lab Sample ID: 280-159130-3**

Matrix: Water

**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		03/03/22 21:39	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037	ug/L		03/03/22 21:39	1
<b>2,4,6-Trinitrotoluene</b>	<b>21</b>		0.11	0.10	0.045	ug/L		03/02/22 08:09	1
2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.027	ug/L		03/03/22 21:39	1
2,6-Dinitrotoluene	0.080	U	0.10	0.080	0.040	ug/L		03/02/22 08:09	1
<b>2-Amino-4,6-dinitrotoluene</b>	<b>3.0</b>		0.11	0.10	0.051	ug/L		03/02/22 08:09	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.085	ug/L		03/02/22 08:09	1
3-Nitrotoluene	0.40	U Q	0.40	0.40	0.19	ug/L		03/02/22 08:09	1
<b>4-Amino-2,6-dinitrotoluene</b>	<b>3.7 Q</b>		0.15	0.12	0.058	ug/L		03/02/22 08:09	1
4-Nitrotoluene	0.40	U	0.41	0.40	0.10	ug/L		03/03/22 21:39	1
<b>HMX</b>	<b>0.20 J M J1</b>		0.21	0.20	0.087	ug/L		03/02/22 08:09	1
<b>HMX</b>	<b>0.45 M J1</b>		0.21	0.20	0.087	ug/L		03/03/22 21:39	1
MNX	0.40	U M	2.0	0.40	0.15	ug/L		03/02/22 08:09	1
Nitrobenzene	0.20	U	0.21	0.20	0.091	ug/L		03/02/22 08:09	1
<b>RDX</b>	<b>0.70 M</b>		0.21	0.20	0.051	ug/L		03/02/22 08:09	1
Tetryl	0.10	U M	0.11	0.10	0.032	ug/L		03/02/22 08:09	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	98	M	83 - 119				03/01/22 11:26	03/02/22 08:09	1
1,2-Dinitrobenzene	101		83 - 119				03/01/22 11:26	03/03/22 21:39	1

**Client Sample ID: OS501-DP08-25**

Date Collected: 02/23/22 08:00

Date Received: 02/25/22 10:45

**Lab Sample ID: 280-159130-4**

Matrix: Water

**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	0.083	ug/L		03/03/22 23:24	1
1,3-Dinitrobenzene	0.099	U	0.11	0.099	0.037	ug/L		03/03/22 23:24	1
<b>2,4,6-Trinitrotoluene</b>	<b>21</b>		0.11	0.099	0.045	ug/L		03/02/22 09:18	1
2,4-Dinitrotoluene	0.079	U M	0.099	0.079	0.027	ug/L		03/02/22 09:18	1
2,6-Dinitrotoluene	0.079	U	0.099	0.079	0.040	ug/L		03/02/22 09:18	1
<b>2-Amino-4,6-dinitrotoluene</b>	<b>3.0</b>		0.11	0.099	0.050	ug/L		03/02/22 09:18	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.085	ug/L		03/02/22 09:18	1
3-Nitrotoluene	0.40	U Q	0.40	0.40	0.19	ug/L		03/02/22 09:18	1
<b>4-Amino-2,6-dinitrotoluene</b>	<b>3.8 Q</b>		0.15	0.12	0.057	ug/L		03/02/22 09:18	1
4-Nitrotoluene	0.40	U	0.41	0.40	0.099	ug/L		03/02/22 09:18	1
HMX	0.20	U	0.21	0.20	0.087	ug/L		03/02/22 09:18	1
MNX	0.40	U M	2.0	0.40	0.15	ug/L		03/02/22 09:18	1
Nitrobenzene	0.20	U	0.21	0.20	0.090	ug/L		03/02/22 09:18	1
<b>RDX</b>	<b>0.69</b>		0.21	0.20	0.051	ug/L		03/02/22 09:18	1
Tetryl	0.099	U M	0.11	0.099	0.032	ug/L		03/02/22 09:18	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				03/01/22 11:26	03/02/22 09:18	1
1,2-Dinitrobenzene	104		83 - 119				03/01/22 11:26	03/03/22 23:24	1

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# Client Sample Results

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

Job ID: 280-159130-1

**Client Sample ID: OS001-DP08-35**

Date Collected: 02/23/22 12:05

Date Received: 02/25/22 10:45

**Lab Sample ID: 280-159130-5**

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	3.9	M	0.22	0.21	0.088	ug/L		03/02/22 09:41	1
1,3-Dinitrobenzene	0.10	U	0.12	0.10	0.039	ug/L		03/02/22 09:41	1
2,4,6-Trinitrotoluene	1.1		0.12	0.10	0.047	ug/L		03/02/22 09:41	1
2,4-Dinitrotoluene	0.084	U	0.10	0.084	0.029	ug/L		03/03/22 23:59	1
2,6-Dinitrotoluene	0.084	U	0.10	0.084	0.042	ug/L		03/02/22 09:41	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.12	0.10	0.053	ug/L		03/03/22 23:59	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.090	ug/L		03/02/22 09:41	1
3-Nitrotoluene	0.42	U Q	0.42	0.42	0.20	ug/L		03/02/22 09:41	1
4-Amino-2,6-dinitrotoluene	1.0	Q	0.16	0.13	0.061	ug/L		03/02/22 09:41	1
4-Nitrotoluene	0.42	U	0.43	0.42	0.10	ug/L		03/03/22 23:59	1
HMX	0.21	U	0.22	0.21	0.092	ug/L		03/02/22 09:41	1
MNX	0.42	U	2.1	0.42	0.16	ug/L		03/02/22 09:41	1
Nitrobenzene	0.21	U	0.22	0.21	0.096	ug/L		03/02/22 09:41	1
RDX	0.21	U M	0.22	0.21	0.054	ug/L		03/02/22 09:41	1
Tetryl	0.10	U M	0.12	0.10	0.033	ug/L		03/02/22 09:41	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	107	M	83 - 119		03/01/22 11:26	03/02/22 09:41			1
1,2-Dinitrobenzene	104		83 - 119		03/01/22 11:26	03/03/22 23:59			1

**Client Sample ID: OS001-DP08-45**

Date Collected: 02/23/22 12:50

Date Received: 02/25/22 10:45

**Lab Sample ID: 280-159130-6**

Matrix: Water

**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 Q	0.21	0.20	0.084	ug/L		03/02/22 10:04	1
1,3-Dinitrobenzene	0.10	U M Q	0.11	0.10	0.037	ug/L		03/02/22 10:04	1
2,4,6-Trinitrotoluene	0.10	U Q	0.11	0.10	0.045	ug/L		03/02/22 10:04	1
2,4-Dinitrotoluene	0.080	U Q	0.10	0.080	0.028	ug/L		03/02/22 10:04	1
2,6-Dinitrotoluene	0.080	U Q	0.10	0.080	0.040	ug/L		03/02/22 10:04	1
2-Amino-4,6-dinitrotoluene	0.10	U Q	0.11	0.10	0.051	ug/L		03/02/22 10:04	1
2-Nitrotoluene	0.20	U Q	0.21	0.20	0.086	ug/L		03/02/22 10:04	1
3-Nitrotoluene	0.40	U Q	0.40	0.40	0.20	ug/L		03/02/22 10:04	1
4-Amino-2,6-dinitrotoluene	0.12	U Q	0.15	0.12	0.058	ug/L		03/02/22 10:04	1
4-Nitrotoluene	0.40	U M Q	0.41	0.40	0.10	ug/L		03/02/22 10:04	1
HMX	0.20	U Q	0.21	0.20	0.088	ug/L		03/02/22 10:04	1
MNX	0.40	U M	2.0	0.40	0.15	ug/L		03/02/22 10:04	1
Nitrobenzene	0.20	U	0.21	0.20	0.091	ug/L		03/04/22 00:35	1
RDX	0.20	U M Q	0.21	0.20	0.052	ug/L		03/02/22 10:04	1
Tetryl	0.10	U M Q	0.11	0.10	0.032	ug/L		03/02/22 10:04	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	126	M Q	83 - 119		03/01/22 11:26	03/02/22 10:04			1
1,2-Dinitrobenzene	106		83 - 119		03/01/22 11:26	03/04/22 00:35			1

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# Default Detection Limits

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

Job ID: 280-159130-1

## 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

# Surrogate Summary

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

Job ID: 280-159130-1

## 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	
280-159130-1	OS003-DP08-35	94
280-159130-2	OS003-DP08-45	97 M
280-159130-2 MS	OS003-DP08-45	101 M
280-159130-2 MSD	OS003-DP08-45	93
280-159130-3	OS001-DP08-25	98 M
280-159130-4	OS501-DP08-25	93 M
280-159130-5	OS001-DP08-35	107 M
280-159130-6	OS001-DP08-45	126 M Q
LCS 280-567330/2-A	Lab Control Sample	86
LCS 280-567330/3-A	Lab Control Sample	111
MB 280-567330/1-A	Method Blank	95

#### 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	
280-159130-1	OS003-DP08-35	93
280-159130-3	OS001-DP08-25	101
280-159130-4	OS501-DP08-25	104
280-159130-5	OS001-DP08-35	104
280-159130-6	OS001-DP08-45	106

#### Surrogate Legend

12DNB = 1,2-Dinitrobenzene



# QC Sample Results

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

Job ID: 280-159130-1

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

Surrogate	LCS	LCS
	%Recovery	Qualifier
1,2-Dinitrobenzene	111	83 - 119

Lab Sample ID: 280-159130-2 MS

Matrix: Water

Analysis Batch: 567371

Client Sample ID: OS003-DP08-45

Prep Type: Total/NA

Prep Batch: 567330

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec.
1,3,5-Trinitrobenzene	0.20	U	2.10	2.28	M	ug/L		109	73 - 125
1,3-Dinitrobenzene	0.10	U M	2.10	2.34		ug/L		112	78 - 120
2,4,6-Trinitrotoluene	0.10	U	2.10	2.22		ug/L		106	71 - 123
2,4-Dinitrotoluene	0.081	U	2.10	2.10		ug/L		100	78 - 120
2,6-Dinitrotoluene	0.081	U	2.10	2.17		ug/L		104	77 - 127
2-Amino-4,6-dinitrotoluene	0.10	U	2.10	2.04		ug/L		98	79 - 120
2-Nitrotoluene	0.20	U J1	2.10	1.75		ug/L		84	70 - 127
3-Nitrotoluene	0.41	U Q J1	2.10	1.61		ug/L		77	73 - 125
4-Amino-2,6-dinitrotoluene	0.12	U Q	2.10	1.99		ug/L		95	76 - 125
4-Nitrotoluene	0.41	U	2.10	1.96		ug/L		94	71 - 127
HMX	0.20	U	2.10	2.03	M	ug/L		97	65 - 135
Nitrobenzene	0.20	U	2.10	2.01		ug/L		96	65 - 134
RDX	0.20	U	2.10	2.01	M	ug/L		96	68 - 130
Tetryl	0.10	U M	2.10	2.21		ug/L		106	64 - 128
Surrogate	MS Result		MS Qualifier	MS Result		MS Qualifier	Unit	D	%Rec.
1,2-Dinitrobenzene	101	M		83 - 119					

Lab Sample ID: 280-159130-2 MS

Matrix: Water

Analysis Batch: 567371

Client Sample ID: OS003-DP08-45

Prep Type: Total/NA

Prep Batch: 567330

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec.
MNX	0.41	U	2.45	2.63	M	ug/L		107	57 - 132

Lab Sample ID: 280-159130-2 MSD

Matrix: Water

Analysis Batch: 567371

Client Sample ID: OS003-DP08-45

Prep Type: Total/NA

Prep Batch: 567330

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec.	RPD	RPD Limit
1,3,5-Trinitrobenzene	0.20	U	2.08	2.23		ug/L		107	73 - 125	2	30
1,3-Dinitrobenzene	0.10	U M	2.08	2.07		ug/L		100	78 - 120	12	30
2,4,6-Trinitrotoluene	0.10	U	2.08	2.07		ug/L		100	71 - 123	7	30
2,4-Dinitrotoluene	0.081	U	2.08	1.81		ug/L		87	78 - 120	15	30
2,6-Dinitrotoluene	0.081	U	2.08	1.82		ug/L		88	77 - 127	17	30
2-Amino-4,6-dinitrotoluene	0.10	U	2.08	1.76		ug/L		85	79 - 120	15	30
2-Nitrotoluene	0.20	U J1	2.08	1.34	J1	ug/L		65	70 - 127	26	30
3-Nitrotoluene	0.41	U Q J1	2.08	1.16	J1	ug/L		56	73 - 125	32	30
4-Amino-2,6-dinitrotoluene	0.12	U Q	2.08	1.72		ug/L		83	76 - 125	15	30
4-Nitrotoluene	0.41	U	2.08	1.47		ug/L		71	71 - 127	29	30
HMX	0.20	U	2.08	2.12	M	ug/L		102	65 - 135	4	30
Nitrobenzene	0.20	U	2.08	1.75		ug/L		84	65 - 134	14	30
RDX	0.20	U	2.08	2.03	M	ug/L		98	68 - 130	1	30
Tetryl	0.10	U M	2.08	2.13		ug/L		103	64 - 128	4	30

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# QC Sample Results

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

Job ID: 280-159130-1

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

Lab Sample ID: 280-159130-2 MSD

Matrix: Water

Analysis Batch: 567371

Client Sample ID: OS003-DP08-45

Prep Type: Total/NA

Prep Batch: 567330

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

Lab Sample ID: 280-159130-2 MSD

Matrix: Water

Analysis Batch: 567371

Client Sample ID: OS003-DP08-45

Prep Type: Total/NA

Prep Batch: 567330

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier					
MNX	0.41	U	2.43	2.48	M	ug/L	102	57 - 132	6	30

# QC Association Summary

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

Job ID: 280-159130-1

## HPLC/IC

### Prep Batch: 567330

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159130-1	OS003-DP08-35	Total/NA	Water	3535	
280-159130-2	OS003-DP08-45	Total/NA	Water	3535	
280-159130-3	OS001-DP08-25	Total/NA	Water	3535	
280-159130-4	OS501-DP08-25	Total/NA	Water	3535	
280-159130-5	OS001-DP08-35	Total/NA	Water	3535	
280-159130-6	OS001-DP08-45	Total/NA	Water	3535	
MB 280-567330/1-A	Method Blank	Total/NA	Water	3535	
LCS 280-567330/2-A	Lab Control Sample	Total/NA	Water	3535	
LCS 280-567330/3-A	Lab Control Sample	Total/NA	Water	3535	
280-159130-2 MS	OS003-DP08-45	Total/NA	Water	3535	
280-159130-2 MS	OS003-DP08-45	Total/NA	Water	3535	
280-159130-2 MSD	OS003-DP08-45	Total/NA	Water	3535	
280-159130-2 MSD	OS003-DP08-45	Total/NA	Water	3535	

### Analysis Batch: 567371

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159130-1	OS003-DP08-35	Total/NA	Water	8330A	567330
280-159130-2	OS003-DP08-45	Total/NA	Water	8330A	567330
280-159130-3	OS001-DP08-25	Total/NA	Water	8330A	567330
280-159130-4	OS501-DP08-25	Total/NA	Water	8330A	567330
280-159130-5	OS001-DP08-35	Total/NA	Water	8330A	567330
280-159130-6	OS001-DP08-45	Total/NA	Water	8330A	567330
MB 280-567330/1-A	Method Blank	Total/NA	Water	8330A	567330
LCS 280-567330/2-A	Lab Control Sample	Total/NA	Water	8330A	567330
LCS 280-567330/3-A	Lab Control Sample	Total/NA	Water	8330A	567330
280-159130-2 MS	OS003-DP08-45	Total/NA	Water	8330A	567330
280-159130-2 MS	OS003-DP08-45	Total/NA	Water	8330A	567330
280-159130-2 MSD	OS003-DP08-45	Total/NA	Water	8330A	567330
280-159130-2 MSD	OS003-DP08-45	Total/NA	Water	8330A	567330

### Analysis Batch: 567645

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159130-1	OS003-DP08-35	Total/NA	Water	8330A	567330
280-159130-3	OS001-DP08-25	Total/NA	Water	8330A	567330
280-159130-4	OS501-DP08-25	Total/NA	Water	8330A	567330
280-159130-5	OS001-DP08-35	Total/NA	Water	8330A	567330
280-159130-6	OS001-DP08-45	Total/NA	Water	8330A	567330

# Lab Chronicle

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

Job ID: 280-159130-1

## **Client Sample ID: OS003-DP08-35**

Date Collected: 02/23/22 09:20

Date Received: 02/25/22 10:45

## **Lab Sample ID: 280-159130-1**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			481.7 mL	5 mL	567330	03/01/22 11:26	ARC	TAL DEN
Total/NA	Analysis	8330A		1			567371	03/02/22 05:52	JZ	TAL DEN
Total/NA	Prep	3535			481.7 mL	5 mL	567330	03/01/22 11:26	ARC	TAL DEN
Total/NA	Analysis	8330A		1			567645	03/03/22 18:09	JZ	TAL DEN

## **Client Sample ID: OS003-DP08-45**

Date Collected: 02/23/22 10:05

Date Received: 02/25/22 10:45

## **Lab Sample ID: 280-159130-2**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			491.3 mL	5 mL	567330	03/01/22 11:26	ARC	TAL DEN
Total/NA	Analysis	8330A		1			567371	03/02/22 06:15	JZ	TAL DEN

## **Client Sample ID: OS001-DP08-25**

Date Collected: 02/23/22 11:20

Date Received: 02/25/22 10:45

## **Lab Sample ID: 280-159130-3**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			501.5 mL	5 mL	567330	03/01/22 11:26	ARC	TAL DEN
Total/NA	Analysis	8330A		1			567371	03/02/22 08:09	JZ	TAL DEN
Total/NA	Prep	3535			501.5 mL	5 mL	567330	03/01/22 11:26	ARC	TAL DEN
Total/NA	Analysis	8330A		1			567645	03/03/22 21:39	JZ	TAL DEN

## **Client Sample ID: OS501-DP08-25**

Date Collected: 02/23/22 08:00

Date Received: 02/25/22 10:45

## **Lab Sample ID: 280-159130-4**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			504.7 mL	5 mL	567330	03/01/22 11:26	ARC	TAL DEN
Total/NA	Analysis	8330A		1			567371	03/02/22 09:18	JZ	TAL DEN
Total/NA	Prep	3535			504.7 mL	5 mL	567330	03/01/22 11:26	ARC	TAL DEN
Total/NA	Analysis	8330A		1			567645	03/03/22 23:24	JZ	TAL DEN

## **Client Sample ID: OS001-DP08-35**

Date Collected: 02/23/22 12:05

Date Received: 02/25/22 10:45

## **Lab Sample ID: 280-159130-5**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			476.4 mL	5 mL	567330	03/01/22 11:26	ARC	TAL DEN
Total/NA	Analysis	8330A		1			567371	03/02/22 09:41	JZ	TAL DEN
Total/NA	Prep	3535			476.4 mL	5 mL	567330	03/01/22 11:26	ARC	TAL DEN
Total/NA	Analysis	8330A		1			567645	03/03/22 23:59	JZ	TAL DEN

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# Lab Chronicle

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

Job ID: 280-159130-1

**Client Sample ID: OS001-DP08-45**

**Lab Sample ID: 280-159130-6**

**Matrix: Water**

**Date Collected: 02/23/22 12:50**

**Date Received: 02/25/22 10:45**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			497.7 mL	5 mL	567330	03/01/22 11:26	ARC	TAL DEN
Total/NA	Analysis	8330A		1			567371	03/02/22 10:04	JZ	TAL DEN
Total/NA	Prep	3535			497.7 mL	5 mL	567330	03/01/22 11:26	ARC	TAL DEN
Total/NA	Analysis	8330A		1			567645	03/04/22 00:35	JZ	TAL DEN

**Laboratory References:**

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

# Accreditation/Certification Summary

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

Job ID: 280-159130-1

## Laboratory: Eurofins Denver

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

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

# Method Summary

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

Job ID: 280-159130-1

Method	Method Description	Protocol	Laboratory
8330A	Nitroaromatics and Nitramines (HPLC)	EPA	TAL DEN
3535	Solid-Phase Extraction (SPE)	SW846	TAL DEN

**Protocol References:**

EPA = US Environmental Protection Agency

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

**Laboratory References:**

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

## Sample Summary

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

Job ID: 280-159130-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-159130-1	OS003-DP08-35	Water	02/23/22 09:20	02/25/22 10:45
280-159130-2	OS003-DP08-45	Water	02/23/22 10:05	02/25/22 10:45
280-159130-3	OS001-DP08-25	Water	02/23/22 11:20	02/25/22 10:45
280-159130-4	OS501-DP08-25	Water	02/23/22 08:00	02/25/22 10:45
280-159130-5	OS001-DP08-35	Water	02/23/22 12:05	02/25/22 10:45
280-159130-6	OS001-DP08-45	Water	02/23/22 12:50	02/25/22 10:45

## HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver

Job No.: 280-159130-1

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

Instrument ID: CHHPLC\_X3

Analysis Batch Number: 562503

Lab Sample ID: IC 280-562503/11

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

Date Analyzed: 01/04/22 18:28

Lab File ID: 01040011.D

GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.59	Baseline	zhangji	01/04/22 19:18

Lab Sample ID: IC 280-562503/12

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

Date Analyzed: 01/04/22 18:51

Lab File ID: 01040012.D

GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.60	Baseline	zhangji	01/04/22 19:18

Lab Sample ID: IC 280-562503/18

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

Date Analyzed: 01/04/22 21:08

Lab File ID: 01040018.D

GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	7.61	Baseline	zhangji	01/05/22 12:01
Picric acid	7.95	Baseline	zhangji	01/05/22 12:02
PETN	14.74	Baseline	zhangji	01/05/22 12:01

## HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver

Job No.: 280-159130-1

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

Instrument ID: CHHPLC\_X3

Analysis Batch Number: 562503

Lab Sample ID: IC 280-562503/19

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

Date Analyzed: 01/04/22 21:31

Lab File ID: 01040019.D

GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.60	Baseline	zhangji	01/05/22 11:59
RDX	7.60	Baseline	zhangji	01/05/22 12:00
Picric acid	7.94	Baseline	zhangji	01/05/22 12:00
2,4,6-Trinitrotoluene	10.95	Baseline	zhangji	01/05/22 12:00
4-Amino-2,6-dinitrotoluene	11.15	Baseline	zhangji	01/05/22 12:00
2-Amino-4,6-dinitrotoluene	11.41	Baseline	zhangji	01/05/22 12:00
2,6-Dinitrotoluene	11.58	Baseline	zhangji	01/05/22 12:00
2,4-Dinitrotoluene	11.75	Baseline	zhangji	01/05/22 12:00
PETN	14.71	Baseline	zhangji	01/05/22 12:00

Lab Sample ID: ICV 280-562503/20

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

Date Analyzed: 01/04/22 21:54

Lab File ID: 01040020.D

GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	7.60	Baseline	zhangji	01/05/22 11:59
Picric acid	7.92	Baseline	zhangji	01/05/22 11:59

Lab Sample ID: IC 280-562503/30

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

Date Analyzed: 01/05/22 01:43

Lab File ID: 01040030.D

GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.47	Baseline	zhangji	01/05/22 12:05
DNX	6.79	Baseline	zhangji	01/05/22 12:07
MNX	7.22	Baseline	zhangji	01/05/22 12:07

## HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver

Job No.: 280-159130-1

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

Instrument ID: CHHPLC\_X3

Analysis Batch Number: 562503

Lab Sample ID: IC 280-562503/31

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

Date Analyzed: 01/05/22 02:06

Lab File ID: 01040031.D

GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.48	Baseline	zhangji	01/05/22 12:07
DNX	6.80	Baseline	zhangji	01/05/22 12:07
MNX	7.22	Baseline	zhangji	01/05/22 12:07

Lab Sample ID: IC 280-562503/32

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

Date Analyzed: 01/05/22 02:29

Lab File ID: 01040032.D

GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.48	Baseline	zhangji	01/05/22 12:07
DNX	6.80	Baseline	zhangji	01/05/22 12:07
MNX	7.22	Baseline	zhangji	01/05/22 12:08

Lab Sample ID: IC 280-562503/33

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

Date Analyzed: 01/05/22 02:52

Lab File ID: 01040033.D

GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.48	Baseline	zhangji	01/05/22 12:07
DNX	6.80	Baseline	zhangji	01/05/22 12:07
MNX	7.22	Baseline	zhangji	01/05/22 12:08

Lab Sample ID: IC 280-562503/34

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

Date Analyzed: 01/05/22 03:15

Lab File ID: 01040034.D

GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.48	Baseline	zhangji	01/05/22 12:08
DNX	6.80	Baseline	zhangji	01/05/22 12:08
MNX	7.22	Baseline	zhangji	01/05/22 12:08

## HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver

Job No.: 280-159130-1

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

Instrument ID: CHHPLC\_X3

Analysis Batch Number: 562503

Lab Sample ID: IC 280-562503/35

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

Date Analyzed: 01/05/22 03:38

Lab File ID: 01040035.D

GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.48	Baseline	zhangji	01/05/22 12:08
DNX	6.80	Baseline	zhangji	01/05/22 12:08
MNX	7.22	Baseline	zhangji	01/05/22 12:08

Lab Sample ID: IC 280-562503/36

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

Date Analyzed: 01/05/22 04:01

Lab File ID: 01040036.D

GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.48	Baseline	zhangji	01/05/22 12:09
DNX	6.80	Baseline	zhangji	01/05/22 12:09
MNX	7.22	Baseline	zhangji	01/05/22 12:09

Lab Sample ID: IC 280-562503/37

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

Date Analyzed: 01/05/22 04:24

Lab File ID: 01040037.D

GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.48	Baseline	zhangji	01/05/22 12:09
DNX	6.80	Baseline	zhangji	01/05/22 12:09
MNX	7.22	Baseline	zhangji	01/05/22 12:09

Lab Sample ID: ICV 280-562503/38

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

Date Analyzed: 01/05/22 04:47

Lab File ID: 01040038.D

GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.48	Baseline	zhangji	01/05/22 12:09
DNX	6.80	Baseline	zhangji	01/05/22 12:09
MNX	7.22	Baseline	zhangji	01/05/22 12:09

## HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver

Job No.: 280-159130-1

SDG No.:

Instrument ID: CHHPLC\_X3

Analysis Batch Number: 567371

Lab Sample ID: CCV 280-567371/41

Client Sample ID:

Date Analyzed: 03/02/22 03:57

Lab File ID: 03010041.D

GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.60	Baseline	zhangji	03/02/22 12:41

Lab Sample ID: CCV 280-567371/42

Client Sample ID:

Date Analyzed: 03/02/22 04:20

Lab File ID: 03010042.D

GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.48	Baseline	zhangji	03/02/22 12:41
DNX	6.79	Baseline	zhangji	03/02/22 12:41
MNX	7.21	Baseline	zhangji	03/02/22 12:41

Lab Sample ID: MB 280-567330/1-A

Client Sample ID:

Date Analyzed: 03/02/22 04:43

Lab File ID: 03010043.D

GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX		Invalid Compound ID	zhangji	03/02/22 12:41
RDX		Invalid Compound ID	zhangji	03/02/22 12:41

Lab Sample ID: LCS 280-567330/3-A

Client Sample ID:

Date Analyzed: 03/02/22 05:29

Lab File ID: 03010045.D

GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.20	Baseline	zhangji	03/02/22 12:42

## HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver

Job No.: 280-159130-1

SDG No.:

Instrument ID: CHHPLC\_X3

Analysis Batch Number: 567371

Lab Sample ID: 280-159130-1

Client Sample ID: OS003-DP08-35

Date Analyzed: 03/02/22 05:52

Lab File ID: 03010046.D

GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3-Dinitrobenzene		Invalid Compound ID	zhangji	03/02/22 12:43
Nitrobenzene		Invalid Compound ID	zhangji	03/02/22 12:43
Tetryl		Invalid Compound ID	zhangji	03/02/22 12:43

Lab Sample ID: 280-159130-2

Client Sample ID: OS003-DP08-45

Date Analyzed: 03/02/22 06:15

Lab File ID: 03010047.D

GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.52	Baseline	zhangji	03/02/22 12:43
1,3-Dinitrobenzene		Invalid Compound ID	zhangji	03/02/22 12:43
Tetryl		Invalid Compound ID	zhangji	03/02/22 12:43

Lab Sample ID: 280-159130-2 MS

Client Sample ID: OS003-DP08-45 MS

Date Analyzed: 03/02/22 06:38

Lab File ID: 03010048.D

GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.59	Baseline	zhangji	03/02/22 12:43
RDX	7.58	Baseline	zhangji	03/02/22 12:43
1,2-Dinitrobenzene	8.52	Baseline	zhangji	03/02/22 12:43
1,3,5-Trinitrobenzene	8.64	Baseline	zhangji	03/02/22 12:43

Lab Sample ID: 280-159130-2 MSD

Client Sample ID: OS003-DP08-45 MSD

Date Analyzed: 03/02/22 07:01

Lab File ID: 03010049.D

GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.59	Baseline	zhangji	03/02/22 12:44
RDX	7.58	Baseline	zhangji	03/02/22 12:44

## HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver

Job No.: 280-159130-1

SDG No.:

Instrument ID: CHHPLC\_X3

Analysis Batch Number: 567371

Lab Sample ID: 280-159130-2 MS

Client Sample ID: OS003-DP08-45 MS

Date Analyzed: 03/02/22 07:23

Lab File ID: 03010050.D

GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.20	Baseline	zhangji	03/02/22 12:44
1,2-Dinitrobenzene	8.52	Baseline	zhangji	03/02/22 12:44

Lab Sample ID: 280-159130-2 MSD

Client Sample ID: OS003-DP08-45 MSD

Date Analyzed: 03/02/22 07:46

Lab File ID: 03010051.D

GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.20	Baseline	zhangji	03/02/22 12:45

Lab Sample ID: 280-159130-3

Client Sample ID: OS001-DP08-25

Date Analyzed: 03/02/22 08:09

Lab File ID: 03010052.D

GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.58	Baseline	zhangji	03/02/22 12:45
RDX	7.57	Baseline	zhangji	03/02/22 12:45
1,2-Dinitrobenzene	8.52	Baseline	zhangji	03/02/22 12:45
1,3,5-Trinitrobenzene	8.65	Baseline	zhangji	03/02/22 12:45
MNX		Invalid Compound ID	zhangji	03/02/22 12:45
Tetryl		Invalid Compound ID	zhangji	03/02/22 12:45

Lab Sample ID: CCV 280-567371/53

Client Sample ID:

Date Analyzed: 03/02/22 08:32

Lab File ID: 03010053.D

GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.59	Baseline	zhangji	03/02/22 12:46

## HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver

Job No.: 280-159130-1

SDG No.:

Instrument ID: CHHPLC\_X3

Analysis Batch Number: 567371

Lab Sample ID: CCV 280-567371/54

Client Sample ID:

Date Analyzed: 03/02/22 08:55

Lab File ID: 03010054.D

GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.47	Baseline	zhangji	03/02/22 12:46
DNX	6.79	Baseline	zhangji	03/02/22 12:46
MNX	7.21	Baseline	zhangji	03/02/22 12:46

Lab Sample ID: 280-159130-4

Client Sample ID: OS501-DP08-25

Date Analyzed: 03/02/22 09:18

Lab File ID: 03010055.D

GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.52	Baseline	zhangji	03/02/22 12:46
1,3,5-Trinitrobenzene	8.65	Baseline	zhangji	03/02/22 12:47
2,4-Dinitrotoluene		Invalid Compound ID	zhangji	03/02/22 12:46
MNX		Invalid Compound ID	zhangji	03/02/22 12:46
Tetryl		Invalid Compound ID	zhangji	03/02/22 12:46

Lab Sample ID: 280-159130-5

Client Sample ID: OS001-DP08-35

Date Analyzed: 03/02/22 09:41

Lab File ID: 03010056.D

GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.52	Baseline	zhangji	03/02/22 12:47
1,3,5-Trinitrobenzene	8.64	Baseline	zhangji	03/02/22 12:47
RDX		Invalid Compound ID	zhangji	03/02/22 12:47
Tetryl		Invalid Compound ID	zhangji	03/02/22 12:47

## HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver

Job No.: 280-159130-1

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

Instrument ID: CHHPLC\_X3

Analysis Batch Number: 567371

Lab Sample ID: 280-159130-6

Client Sample ID: OS001-DP08-45

Date Analyzed: 03/02/22 10:04

Lab File ID: 03010057.D

GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.52	Baseline	zhangji	03/02/22 12:52
1,3,5-Trinitrobenzene		Invalid Compound ID	zhangji	03/02/22 12:52
1,3-Dinitrobenzene		Invalid Compound ID	zhangji	03/02/22 12:52
MNX		Invalid Compound ID	zhangji	03/02/22 12:52
RDX		Invalid Compound ID	zhangji	03/02/22 12:52
Tetryl		Invalid Compound ID	zhangji	03/02/22 12:52
4-Nitrotoluene	12.92	Baseline	zhangji	03/02/22 12:52

Lab Sample ID: CCV 280-567371/65

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

Date Analyzed: 03/02/22 13:08

Lab File ID: 03010065.D

GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.59	Baseline	zhangji	03/02/22 13:36

Lab Sample ID: CCV 280-567371/66

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

Date Analyzed: 03/02/22 13:31

Lab File ID: 03010066.D

GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.47	Baseline	zhangji	03/02/22 13:58
DNX	6.79	Baseline	zhangji	03/02/22 13:58
MNX	7.21	Baseline	zhangji	03/02/22 13:58

## HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver

Job No.: 280-159130-1

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

Instrument ID: CHHPLC\_X5 Analysis Batch Number: 567560

Lab Sample ID: IC 280-567560/10 Client Sample ID: \_\_\_\_\_

Date Analyzed: 03/02/22 21:22 Lab File ID: 03020010.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Amino-4,6-dinitrotoluene	18.73	Unspecified		
1,3,5-Trinitrobenzene	18.85	Split Peak	zhangji	03/03/22 12:08

Lab Sample ID: IC 280-567560/15 Client Sample ID: \_\_\_\_\_

Date Analyzed: 03/03/22 00:17 Lab File ID: 03020015.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PETN	26.21	Baseline Smoothing	zhangji	03/03/22 12:12

Lab Sample ID: IC 280-567560/16 Client Sample ID: \_\_\_\_\_

Date Analyzed: 03/03/22 00:53 Lab File ID: 03020016.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitroglycerin	16.07	Baseline Smoothing	zhangji	03/03/22 12:12
PETN	26.22	Baseline Smoothing	zhangji	03/03/22 12:12

Lab Sample ID: IC 280-567560/17 Client Sample ID: \_\_\_\_\_

Date Analyzed: 03/03/22 01:28 Lab File ID: 03020017.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitroglycerin	16.06	Baseline Smoothing	zhangji	03/03/22 12:12
2-Amino-4,6-dinitrotoluene	18.76	Baseline Smoothing	zhangji	03/03/22 12:10
1,3,5-Trinitrobenzene	18.96	Baseline Smoothing	zhangji	03/03/22 12:10
PETN	26.22	Baseline Smoothing	zhangji	03/03/22 12:12

## HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver

Job No.: 280-159130-1

SDG No.:

Instrument ID: CHHPLC\_X5

Analysis Batch Number: 567560

Lab Sample ID: IC 280-567560/18

Client Sample ID:

Date Analyzed: 03/03/22 02:03

Lab File ID: 03020018.D

GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitroglycerin	16.05	Baseline Smoothing	zhangji	03/03/22 12:12
2-Amino-4,6-dinitrotoluene	18.75	Baseline Smoothing	zhangji	03/03/22 12:11
1,3,5-Trinitrobenzene	18.95	Baseline Smoothing	zhangji	03/03/22 12:11
PETN	26.22	Baseline Smoothing	zhangji	03/03/22 12:11

## HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver

Job No.: 280-159130-1

SDG No.:

Instrument ID: CHHPLC\_X5

Analysis Batch Number: 567645

Lab Sample ID: 280-159130-1

Client Sample ID: OS003-DP08-35

Date Analyzed: 03/03/22 18:09

Lab File ID: 03030013.D

GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	9.13	Baseline Smoothing	zhangji	03/03/22 18:45
2-Amino-4,6-dinitrotoluene	18.84	Baseline Smoothing	zhangji	03/03/22 18:45

Lab Sample ID: 280-159130-3

Client Sample ID: OS001-DP08-25

Date Analyzed: 03/03/22 21:39

Lab File ID: 03030019.D

GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.88	Baseline Smoothing	zhangji	03/04/22 12:08
RDX	9.12	Baseline Smoothing	zhangji	03/04/22 12:08
MNX		Invalid Compound ID	zhangji	03/04/22 12:07

Lab Sample ID: 280-159130-4

Client Sample ID: OS501-DP08-25

Date Analyzed: 03/03/22 23:24

Lab File ID: 03030022.D

GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.88	Baseline Smoothing	zhangji	03/04/22 12:08
MNX		Invalid Compound ID	zhangji	03/04/22 12:08

Lab Sample ID: 280-159130-5

Client Sample ID: OS001-DP08-35

Date Analyzed: 03/03/22 23:59

Lab File ID: 03030023.D

GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	9.07	Split Peak	zhangji	03/04/22 12:08

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver

Job No.: 280-159130-1

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

Instrument ID: CHHPLC\_X5

Analysis Batch Number: 567645

Lab Sample ID: 280-159130-6

Client Sample ID: OS001-DP08-45

Date Analyzed: 03/04/22 00:35

Lab File ID: 03030024.D

GC Column: Luna-phenylhe ID: 4.6 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Nitrotoluene		Invalid Compound ID	zhangji	03/04/22 12:09

## REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver

Job No.: 280-159130-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration		
					Reagent ID	Volume Added				
8330_DMT_00010	04/30/22	12/02/21	Acetonitrile, Lot 211161	5 mL	MNX, TNX, DNX_00057	1 mL	DNX	20.02 ug/mL		
							MNX	23.34 ug/mL		
							TNX	20.02 ug/mL		
.MNX, TNX, DNX_00057	04/30/22	Agilent, Lot 0006594482			(Purchased Reagent)		DNX	100.1 ug/mL		
							MNX	116.7 ug/mL		
							TNX	100.1 ug/mL		
8330_LCS_00111	05/12/22	11/12/21	Acetonitrile, Lot Acetonitrile_00059	100 mL	8330LCSMix1_00129	1 mL	1,3,5-Trinitrobenzene	10 ug/mL		
							1,3-Dinitrobenzene	10 ug/mL		
							2,4,6-Trinitrotoluene	10 ug/mL		
							2,4-Dinitrotoluene	10 ug/mL		
							HMX	10 ug/mL		
							Nitrobenzene	10 ug/mL		
							RDX	10 ug/mL		
					8330LCSmix2_00028	1 mL	2,6-Dinitrotoluene	10 ug/mL		
							2-Amino-4,6-dinitrotoluene	10 ug/mL		
							2-Nitrotoluene	10 ug/mL		
.8330LCSMix1_00129	04/30/26	Restek, Lot A0163590			(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		
							1,3-Dinitrobenzene	1000 ug/mL		
							2,4,6-Trinitrotoluene	1000 ug/mL		
.8330LCSmix2_00028	04/30/26	Restek, Lot A0171368			(Purchased Reagent)		2,4-Dinitrotoluene	1000 ug/mL		
							2-Amino-4,6-dinitrotoluene	1000 ug/mL		
							2-Nitrotoluene	1000 ug/mL		
							3-Nitrotoluene	1000 ug/mL		
							4-Amino-2,6-dinitrotoluene	1000 ug/mL		
							4-Nitrotoluene	1000 ug/mL		
							Tetryl	1000 ug/mL		
8330_LCS_00112	05/12/22	01/27/22	Acetonitrile, Lot Acetonitrile_00059	100 mL	8330_NG_Stk_00095	1 mL	Nitroglycerin	100 ug/mL		
					8330_NG_Stk_00099	1 mL	Nitroglycerin	100 ug/mL		
					8330_PETN_Stk_00109	1 mL	PETN	100 ug/mL		
					8330_PETN_Stk_00118	1 mL	PETN	100 ug/mL		
					8330LCSMix1_00130	1 mL	1,3,5-Trinitrobenzene	10 ug/mL		
							1,3-Dinitrobenzene	10 ug/mL		
							2,4,6-Trinitrotoluene	10 ug/mL		
							2,4-Dinitrotoluene	10 ug/mL		
							HMX	10 ug/mL		
							Nitrobenzene	10 ug/mL		

## REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver

Job No.: 280-159130-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					8330LCSmix2_00027	1 mL	RDX	10 ug/mL
					PicricARestek_00099	1 mL	2,6-Dinitrotoluene	10 ug/mL
.8330 NG Stk 00095	06/30/23	Restek, Lot A0161480			(Purchased Reagent)		2-Amino-4,6-dinitrotoluene	10 ug/mL
.8330 NG_Stk_00099	06/30/23	Restek, Lot A0161480			(Purchased Reagent)		2-Nitrotoluene	10 ug/mL
.8330 PETN Stk 00109	05/31/24	Restek, Lot A0172687			(Purchased Reagent)		3-Nitrotoluene	10 ug/mL
.8330_PETN_Stk_00118	05/31/24	Restek, Lot A0172687			(Purchased Reagent)		4-Amino-2,6-dinitrotoluene	10 ug/mL
.8330LCSMix1_00130	04/30/26	Restek, Lot A0163590			(Purchased Reagent)		4-Nitrotoluene	10 ug/mL
							Tetryl	10 ug/mL
							2,4,6-Trinitrophenol	10 ug/mL
							Nitroglycerin	5000 ug/mL
							Nitroglycerin	5000 ug/mL
							PETN	5000 ug/mL
							PETN	5000 ug/mL
.8330LCSmix2_00027	04/30/26	Restek, Lot A0171368			(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							2,4,6-Trinitrotoluene	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							RDX	1000 ug/mL
.PicricARestek_00099	11/30/25	Restek, Lot A0166597			(Purchased Reagent)		2,6-Dinitrotoluene	1000 ug/mL
8330_OP_DMT_00012	04/30/22	09/23/21	Acetonitrile, Lot Acetonitrile 00056	10 mL	MNX, TNX, DNX_00063	1 mL	MNX	11.67 ug/mL
.MNX, TNX, DNX_00063	04/30/22		Agilent, Lot 0006599273		(Purchased Reagent)		MNX	116.7 ug/mL
8330_OP_DMT_00013	04/30/22	02/15/22	Acetonitrile, Lot Acetonitrile_00055	10 mL	MNX, TNX, DNX_00062	1 mL	DNX	10.01 ug/mL
							MNX	11.67 ug/mL
							TNX	10.01 ug/mL
.MNX, TNX, DNX_00062	04/30/22		Agilent, Lot 0006599273		(Purchased Reagent)		DNX	100.1 ug/mL
							MNX	116.7 ug/mL
							TNX	100.1 ug/mL
8330IntermStk_00070	03/31/22	01/04/22	Acetonitrile, Lot ACN_238	10 mL	8330_NG1000_00006	1 mL	Nitroglycerin	100 ug/mL
					8330_PETN1000_00006	1 mL	PETN	100 ug/mL
					8330ICALStock_00032	1 mL	1,3,5-Trinitrobenzene	10.02 ug/mL
							1,3-Dinitrobenzene	10.02 ug/mL
							2,4,6-Trinitrotoluene	10.04 ug/mL
							2,4-Dinitrotoluene	10.04 ug/mL
							2,6-Dinitrotoluene	10.04 ug/mL
							2-Amino-4,6-dinitrotoluene	10.04 ug/mL

## REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver

Job No.: 280-159130-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							2,4,6-Trinitrophenol	10 ug/mL
.8330 NG1000 00006	01/04/23	Restek, Lot A0175997			(Purchased Reagent)		Nitroglycerin	1000 ug/mL
.8330 PETN1000 00006	01/04/23	Restek, Lot A0175907			(Purchased Reagent)		PETN	1000 ug/mL
.8330ICALStock_00032	03/31/22	01/04/22	Acetonitrile, Lot ACN_238	10 mL	8330 Stock_TS_00019	1 mL	1,3,5-Trinitrobenzene	100.2 ug/mL
							1,3-Dinitrobenzene	100.2 ug/mL
							2,4,6-Trinitrotoluene	100.4 ug/mL
							2,4-Dinitrotoluene	100.4 ug/mL
							2,6-Dinitrotoluene	100.4 ug/mL
							2-Amino-4,6-dinitrotoluene	100.4 ug/mL
							2-Nitrotoluene	100 ug/mL
							3-Nitrotoluene	100.1 ug/mL
							4-Amino-2,6-dinitrotoluene	100.1 ug/mL
							4-Nitrotoluene	100.2 ug/mL
							HMX	100 ug/mL
							Nitrobenzene	100.4 ug/mL
							RDX	100 ug/mL
							Tetryl	100.2 ug/mL
					8330SurrStock 00169	1 mL	1,2-Dinitrobenzene	100 ug/mL
..8330 Stock_TS_00019	03/31/22	Ultra Scientific, Lot CT-0801			(Purchased Reagent)		1,3,5-Trinitrobenzene	1002 ug/mL
							1,3-Dinitrobenzene	1002 ug/mL
							2,4,6-Trinitrotoluene	1004 ug/mL
							2,4-Dinitrotoluene	1004 ug/mL
							2,6-Dinitrotoluene	1004 ug/mL
							2-Amino-4,6-dinitrotoluene	1004 ug/mL
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1001 ug/mL
							4-Amino-2,6-dinitrotoluene	1001 ug/mL
							4-Nitrotoluene	1002 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1004 ug/mL
							RDX	1000 ug/mL
							Tetryl	1002 ug/mL
..8330SurrStock 00169	01/04/23	AccuStandard, Lot 219051500			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330PASTkPS_00067	07/08/22	AccuStandard, Lot 218031154-02			(Purchased Reagent)		2,4,6-Trinitrophenol	100 ug/mL
8330Surrogate_00127	05/16/22	11/16/21	Acetonitrile, Lot Acetonitrile_00059	500 mL	8330SurrStkSS_00203	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00204	1 mL	1,2-Dinitrobenzene	10 ug/mL

## REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver

Job No.: 280-159130-1

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

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					8330SurrStkSS_00207	1 mL	1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00211	1 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00212	1 mL	1,2-Dinitrobenzene (Surr)	10 ug/mL
							1,2-Dinitrobenzene	10 ug/mL
.8330SurrStkSS_00203	05/30/26		Restek, Lot A0172684		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00204	05/30/26		Restek, Lot A0172684		(Purchased Reagent)		1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00207	05/30/26		Restek, Lot A0172684		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00211	05/30/26		Restek, Lot A0172684		(Purchased Reagent)		1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00212	05/30/26		Restek, Lot A0172684		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL

Reagent

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**8330 LCS\_00111**

## Preliminary Report

Eurofins TestAmerica, Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC\_X\20211112-106450.b\LCS111.D  
 Lims ID: LCS111 Inj. Date: 12-Nov-2021 17:18:59  
 Worklist ID: 280-0106450-021 Instrument: CHHPLC\_X3  
 Method: 8330\_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 3535
4 HMX	0.5000	0.4991	99.8	65-135
8 RDX	0.5000	0.4595	91.9	68-130
9 2,4,6-Trinitrophenol	0.5000	0.4794	95.9	73-124
11 1,3,5-Trinitrobenzene	0.5000	0.4892	97.8	73-125
12 1,3-Dinitrobenzene	0.5000	0.4864	97.3	78-120
13 Nitrobenzene	0.5000	0.4870	97.4	65-134
15 Tetryl	0.5000	0.4805	96.1	64-128
16 Nitroglycerin	5.00	4.94	98.9	74-127
17 2,4,6-Trinitrotoluene	0.5000	0.4933	98.7	71-123
18 4AMD	0.5000	0.4752	95.0	76-125
19 2-Amino-4,6-dinitrotolu	0.5000	0.4783	95.7	79-120
20 2,6-Dinitrotoluene	0.5000	0.4939	98.8	77-127
21 2,4-Dinitrotoluene	0.5000	0.4820	96.4	78-120
22 o-Nitrotoluene	0.5000	0.4819	96.4	70-127
23 p-Nitrotoluene	0.5000	0.4905	98.1	71-127
24 m-Nitrotoluene	0.5000	0.4585	91.7	73-125
25 PETN	5.00	4.87	97.5	73-127

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

280-155295-A-3-A

280-155295-B-7-A

Reagent

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**8330 LCS\_00112**

## Preliminary Report

Eurofins Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC\_X\20220127-108200.b\01270006.D  
 Lims ID: C18column:B16162 Inj. Date: 27-Jan-2022 16:00:33  
 Worklist ID: 280-0108200-006 Instrument: CHHPLC\_X3  
 Method: 8330\_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 0B_Sonc_	Limits 2 0B_Sonc_
4 HMX	0.5000	0.4889	97.8	65-135	
8 RDX	0.5000	0.4749	95.0	68-130	
9 2,4,6-Trinitrophenol	0.5000	0.5053	101.1	80-120	73-124
11 1,3,5-Trinitrobenzene	0.5000	0.4962	99.2	73-125	
12 1,3-Dinitrobenzene	0.5000	0.5119	102.4	78-120	
13 Nitrobenzene	0.5000	0.4982	99.6	65-134	
15 Tetryl	0.5000	0.4978	99.6	64-128	
16 Nitroglycerin	5.00	5.13	102.5	74-127	
17 2,4,6-Trinitrotoluene	0.5000	0.4982	99.6	71-123	
18 4AMD	0.5000	0.4863	97.3	76-125	
19 2-Amino-4,6-dinitrotolu	0.5000	0.4895	97.9	79-120	
20 2,6-Dinitrotoluene	0.5000	0.4962	99.2	77-127	
21 2,4-Dinitrotoluene	0.5000	0.4865	97.3	78-120	
22 o-Nitrotoluene	0.5000	0.4832	96.6	70-127	
23 p-Nitrotoluene	0.5000	0.5183	103.7	71-127	
24 m-Nitrotoluene	0.5000	0.4566	91.3	73-125	
25 PETN	5.00	5.08	101.6	73-127	

Samples for Limit Group: 1, Lims Prep Method: 8330B\_Sonc\_10g

410-70411-D-1-A	410-70411-E-2-A	410-70411-E-3-A
410-70411-D-4-A	410-70411-D-5-A	410-70411-E-6-A
410-70411-D-7-A	410-70411-D-8-A	410-70411-E-9-A
410-70411-D-10-A	410-70411-D-11-A	

Samples for Limit Group: 2, Lims Prep Method: 8330B\_Sonc\_10g

680-210367-E-1-C	680-210367-E-2-A	680-210367-E-3-A
680-210367-D-4-A	680-210367-E-5-A	680-210367-E-6-A
680-210367-E-7-A		

Reagent

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**8330 Stock\_TS\_00019**



# 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\_NG\_Stack\_00095**

# 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.:	A0161840
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 CAS # 55-63-0 Purity 99%	5,032.0 $\mu$ g/mL	+/- 46.7949 $\mu$ g/mL	+/- 278.0096 $\mu$ g/mL	+/- 323.4663 $\mu$ g/mL

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ $\mu$ 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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**8330\_NG\_Stack\_00099**

# RESTEK® CERTIFIED REFERENCE MATERIAL

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 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.:** A0161840

**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 CAS # 55-63-0 Purity 99%	5,032.0 $\mu$ g/mL	+/- 46.7949 $\mu$ g/mL	+/- 278.0096 $\mu$ g/mL	+/- 323.4663 $\mu$ g/mL

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

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

### Certified Uncertainty Value Notes:

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

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

*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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**8330\_NG1000\_00006**

# RESTEK® CERTIFIED REFERENCE MATERIAL

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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.:** 31498

**Lot No.:** A0175997

**Description :** Nitroglycerin Standard

Nitroglycerin Standard 1,000 $\mu$ g/mL, Methanol, 1mL/ampul

**Container Size :** 2 mL

**Pkg Amt:** > 1 mL

**Expiration Date :** September 30, 2026

**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 CAS # 55-63-0 Purity 99%	1,000.0 $\mu$ g/mL	+/- 5.9397 $\mu$ g/mL	+/- 54.7830 $\mu$ g/mL	+/- 63.8824 $\mu$ g/mL

**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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**8330\_OP\_DMT\_00012**

## Preliminary Report

Eurofins TestAmerica, Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC\_X\20210923-104924.b\09230005.D

Lims ID: DMT LCS 12

Inj. Date: 23-Sep-2021 17:32:02

Worklist ID: 280-0104924-005

Instrument: CHHPLC\_X3

Method: 8330\_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 0B_Sonc_
2 TNX	0.5005	0.5409	108.1	50-150
5 DNX	0.5005	0.5315	106.2	50-150
6 MNX	0.5835	0.6076	104.1	50-150

Samples for Limit Group: 1, Lims Prep Method: 8330B\_Sonc\_10g

410-54924-B-2-B

410-54924-B-4-B

410-54924-B-6-D

410-54924-B-8-D

410-54873-B-2-F

410-54873-B-4-B

410-54873-B-6-B

Reagent

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**8330\_OP\_DMT\_00013**

## Preliminary Report

Eurofins Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC\_X\20220216-108600.b\02160011.D

Lims ID: 8330\_OP\_DMT13 Inj. Date: 16-Feb-2022 15:39:01

Worklist ID: 280-0108600-011 Instrument: CHHPLC\_X3

Method: 8330\_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 3535	Limits 2 3535	Limits 3 3535
3 TNX	0.5005	0.5150	102.9	50-150		
6 DNX	0.5005	0.5095	101.8	50-150	66-119	
7 MNX	0.5835	0.6021	103.2	68-123	57-132	

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

280-158694-A-1-A 280-158695-B-1-A

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

280-158618-A-1-A	280-158618-A-2-A	280-158653-A-1-A
280-158653-B-2-A	280-158653-A-3-A	280-158653-A-4-A
280-158653-B-5-A	280-158653-A-6-A	280-158593-B-1-A
280-158593-B-2-A	280-158593-A-3-A	280-158593-B-4-A
280-158593-B-5-A	280-158593-B-6-A	280-158593-A-7-A

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

860-20476-C-1-A

Reagent

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**8330\_PETN\_Stk\_00109**



# CERTIFIED REFERENCE MATERIAL

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## 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.:** A0172687

**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 :** 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	PETN CAS # 78-11-5 Purity 99%	5,032.0 $\mu$ g/mL	+/- 46.7949	$\mu$ g/mL	Gravimetric
			+/- 278.0096	$\mu$ g/mL	Unstressed
			+/- 323.4663	$\mu$ g/mL	Stressed

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

**Column:**  
250mm x 4.6mm  
Ultra C18 (cat.# 91/4575)

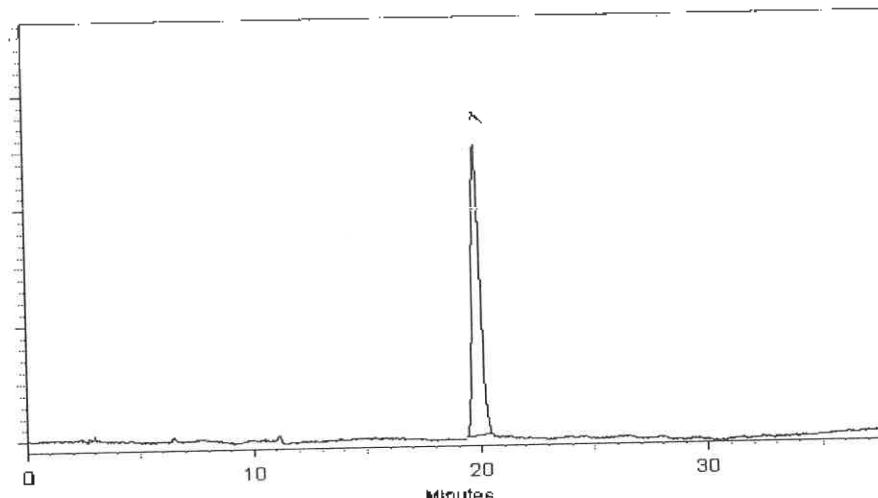
**Flow Rate:**  
1.0 mL/min.

**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.

Karenlyn McGinn - Operations Tech I

Date Mixed: 24-May-2021 Balance: 1128353505

Marilyn Cowan - Operations Tech I

Date Passed: 27-May-2021

REVIEWED  
By: [Signature]

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

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

### Certified Uncertainty Value Notes:

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

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

$k$  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=)

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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:

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Reagent

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**8330\_PETN\_Stk\_00118**



# CERTIFIED REFERENCE MATERIAL

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## 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.:** A0172687

**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 :** 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	PETN CAS # 78-11-5 Purity 99%	5,032.0 $\mu$ g/mL	+/- 46.7949	$\mu$ g/mL	Gravimetric
			+/- 278.0096	$\mu$ g/mL	Unstressed
			+/- 323.4663	$\mu$ g/mL	Stressed

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

**Column:**  
250mm x 4.6mm  
Ultra C18 (cat.# 91/4575)

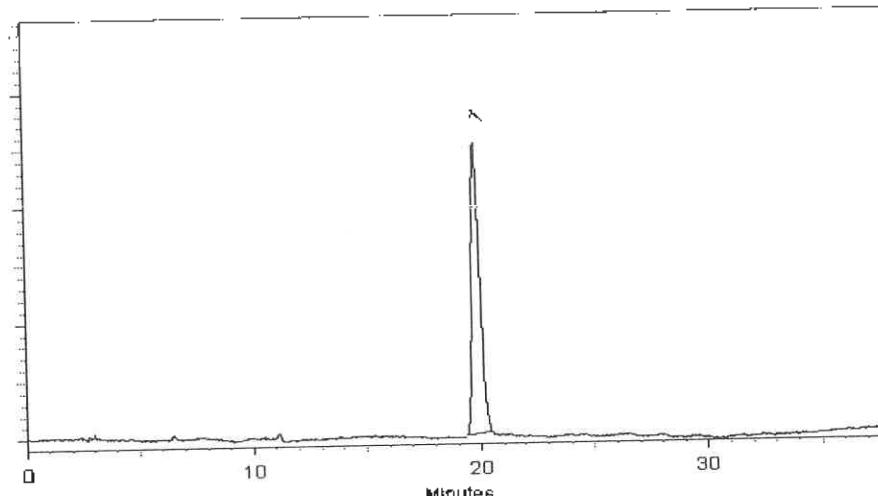
**Flow Rate:**  
1.0 mL/min.

**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.

Karenlyn McGinn - Operations Tech I

Date Mixed: 24-May-2021 Balance: 1128353505

Marilyn Cowan - Operations Tech I

Date Passed: 27-May-2021

REVIEWED  
By: [Signature]

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

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- Purity values are rounded to the nearest whole number.

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- 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=)

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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\_PETN1000\_00006**

# RESTEK® CERTIFIED REFERENCE MATERIAL

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## Certificate of Analysis



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

**Catalog No.:** 31600

**Lot No.:** A0175907

**Description :** PETN Standard

PETN Standard 1000 $\mu$ g/mL, Methanol, 1mL/ampul

**Container Size :** 2 mL

**Pkg Amt:** > 1 mL

**Expiration Date :** August 31, 2026

**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 CAS # 78-11-5 Purity 99%	1,006.8 $\mu$ g/mL	+/- 10.1422 $\mu$ g/mL	+/- 55.7605 $\mu$ g/mL	Gravimetric Unstressed

**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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- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

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

### Manufacturing Notes:

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

### Handling Notes:

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Reagent

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**8330LCSM**ix1\_00129****



# CERTIFIED REFERENCE MATERIAL

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## Certificate of Analysis

### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No.:	<u>31450</u>	Lot No.:	<u>A0171502</u>
Description :	8330 Calibration Mix #1		
	8330 Calibration Std #1 1000 $\mu$ g/mL, Acetonitrile, 1mL/ampul		
Container Size :	<u>2 mL</u>	Pkg Amt:	<u>&gt; 1 mL</u>
Expiration Date :	<u>April 30, 2026</u>	Storage:	<u>10°C or colder</u>
	Ship: <u>Ambient</u>		

### 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	IIMX CAS # 2691-41-0 Purity 99%	1,002.0 $\mu$ g/mL	+/- 5.9516 $\mu$ g/mL	+/- 54.8926 $\mu$ g/mL	+/- 64.0101 $\mu$ g/mL
	(Lot 210324JLM)				
2	RDX CAS # 121-82-4 Purity 99%	1,003.0 $\mu$ g/mL	+/- 5.9575 $\mu$ g/mL	+/- 54.9474 $\mu$ g/mL	+/- 64.0740 $\mu$ g/mL
	(Lot 080220JLM)				
3	1,3,5-Trinitrobenzene CAS # 99-35-4 Purity 99%	1,004.0 $\mu$ g/mL	+/- 5.9635 $\mu$ g/mL	+/- 55.0021 $\mu$ g/mL	+/- 64.1379 $\mu$ g/mL
	(Lot A6TDK)				
4	1,3-Dinitrobenzene CAS # 99-65-0 Purity 99%	1,000.0 $\mu$ g/mL	+/- 5.9397 $\mu$ g/mL	+/- 54.7830 $\mu$ g/mL	+/- 63.8824 $\mu$ g/mL
	(Lot 1-DXX-24-1)				
5	Nitrobenzene CAS # 98-95-3 Purity 99%	1,010.0 $\mu$ g/mL	+/- 5.9991 $\mu$ g/mL	+/- 55.3308 $\mu$ g/mL	+/- 64.5212 $\mu$ g/mL
	(Lot MKCK4267)				
6	2,4,6-Trinitrotoluene CAS # 118-96-7 Purity 99%	1,000.0 $\mu$ g/mL	+/- 5.9397 $\mu$ g/mL	+/- 54.7830 $\mu$ g/mL	+/- 63.8824 $\mu$ g/mL
	(Lot D10587700)				
7	2,4-Dinitrotoluene CAS # 121-14-2 Purity 99%	1,004.0 $\mu$ g/mL	+/- 5.9635 $\mu$ g/mL	+/- 55.0021 $\mu$ g/mL	+/- 64.1379 $\mu$ g/mL
	(Lot MKAA0690)				

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

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

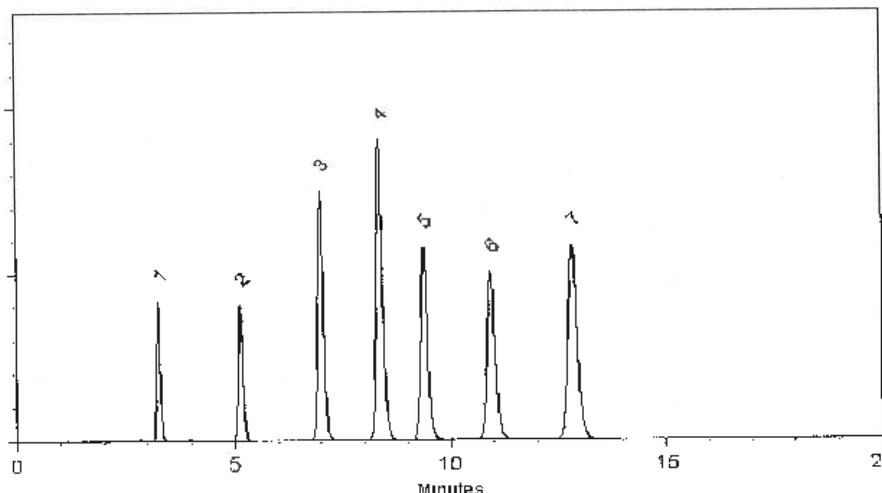
**Flow Rate:**  
1.0 ml/min.

**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.

*[Signature]*  
Lane Kibe - Mix Technician

Date Mixed: 20-Apr-2021 Balance: 1127510105

*[Signature]*  
Alpine Shadow - Operations Tech I

Date Passed: 23-Apr-2021

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ $\mu$ 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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**8330LCSmix2\_00027**



# CERTIFIED REFERENCE MATERIAL

110 Behler 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.:** A0171368

**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:** April 30, 2026

**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%	1,008.0 $\mu$ g/mL	+/- 5.9872 $\mu$ g/mL	+/- 55.2213 $\mu$ g/mL	Gravimetric Unstressed
	(Lot 091120JLM)		+/- 64.3934 $\mu$ g/mL		Stressed
2	4-Amino-2,6-dinitrotoluene <b>CAS #</b> 19406-51-0 <b>Purity</b> 99%	1,002.0 $\mu$ g/mL	+/- 5.9516 $\mu$ g/mL	+/- 54.8926 $\mu$ g/mL	Gravimetric Unstressed
	(Lot ER070908-01)		+/- 64.0101 $\mu$ g/mL		Stressed
3	2-Amino-4,6-dinitrotoluene <b>CAS #</b> 35572-78-2 <b>Purity</b> 99%	1,006.0 $\mu$ g/mL	+/- 5.9753 $\mu$ g/mL	+/- 55.1117 $\mu$ g/mL	Gravimetric Unstressed
	(Lot 29550-55)		+/- 64.2657 $\mu$ g/mL		Stressed
4	2,6-Dinitrotoluene <b>CAS #</b> 606-20-2 <b>Purity</b> 99%	1,008.0 $\mu$ g/mL	+/- 5.9872 $\mu$ g/mL	+/- 55.2213 $\mu$ g/mL	Gravimetric Unstressed
	(Lot 1437483V)		+/- 64.3934 $\mu$ g/mL		Stressed
5	2-Nitrotoluene <b>CAS #</b> 88-72-2 <b>Purity</b> 99%	1,010.0 $\mu$ g/mL	+/- 5.9991 $\mu$ g/mL	+/- 55.3308 $\mu$ g/mL	Gravimetric Unstressed
	(Lot BCBZ7826)		+/- 64.5212 $\mu$ g/mL		Stressed
6	4-Nitrotoluene <b>CAS #</b> 99-99-0 <b>Purity</b> 99%	1,010.0 $\mu$ g/mL	+/- 5.9991 $\mu$ g/mL	+/- 55.3308 $\mu$ g/mL	Gravimetric Unstressed
	(Lot FAU01)		+/- 64.5212 $\mu$ g/mL		Stressed
7	3-Nitrotoluene <b>CAS #</b> 99-08-1 <b>Purity</b> 99%	1,000.0 $\mu$ g/mL	+/- 5.9397 $\mu$ g/mL	+/- 54.7830 $\mu$ g/mL	Gravimetric Unstressed
	(Lot 07329LG)		+/- 63.8824 $\mu$ g/mL		Stressed

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

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

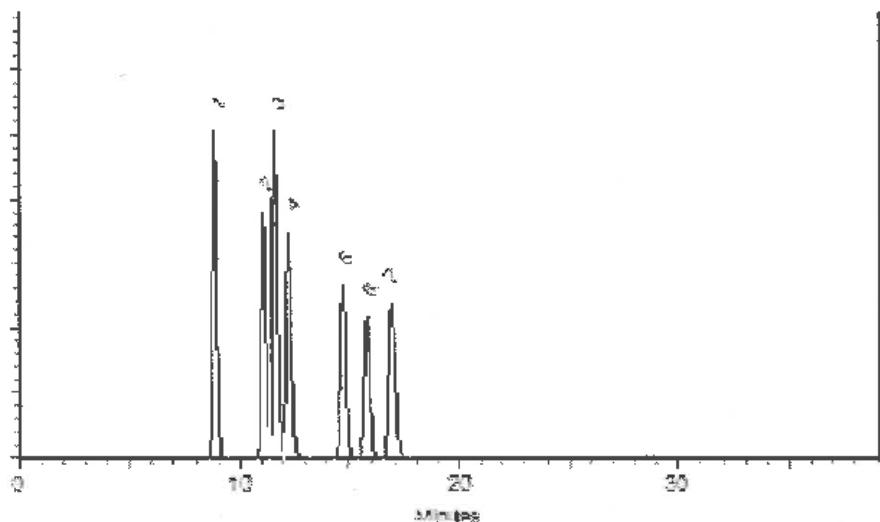
**Flow Rate:**  
1.0 mL/min.

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

**Mobile Phase B:**

**Mobile Phase Composition:**  
100% A

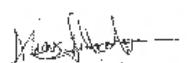
**Det. Type:**  
Wavelength: 210nm & 254nm



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.

Copy Meier - Operations Tech

Date Mixed: 15-Apr-2021 Balance: J128342314

  
Meeks Shallow - Operations Tech

Date Passed: 20-Apr-2021

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

## General Certified Reference Material Notes

### Expiration Notes:

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Reagent

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**8330LCSmix2\_00028**



# CERTIFIED REFERENCE MATERIAL

110 Behler 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.:** A0171368

**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:** April 30, 2026

**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%	1,008.0 $\mu$ g/mL	+/- 5.9872 $\mu$ g/mL	+/- 55.2213 $\mu$ g/mL	Gravimetric Unstressed
	(Lot 091120JLM)		+/- 64.3934 $\mu$ g/mL		Stressed
2	4-Amino-2,6-dinitrotoluene <b>CAS #</b> 19406-51-0 <b>Purity</b> 99%	1,002.0 $\mu$ g/mL	+/- 5.9516 $\mu$ g/mL	+/- 54.8926 $\mu$ g/mL	Gravimetric Unstressed
	(Lot ER070908-01)		+/- 64.0101 $\mu$ g/mL		Stressed
3	2-Amino-4,6-dinitrotoluene <b>CAS #</b> 35572-78-2 <b>Purity</b> 99%	1,006.0 $\mu$ g/mL	+/- 5.9753 $\mu$ g/mL	+/- 55.1117 $\mu$ g/mL	Gravimetric Unstressed
	(Lot 29550-55)		+/- 64.2657 $\mu$ g/mL		Stressed
4	2,6-Dinitrotoluene <b>CAS #</b> 606-20-2 <b>Purity</b> 99%	1,008.0 $\mu$ g/mL	+/- 5.9872 $\mu$ g/mL	+/- 55.2213 $\mu$ g/mL	Gravimetric Unstressed
	(Lot 1437483V)		+/- 64.3934 $\mu$ g/mL		Stressed
5	2-Nitrotoluene <b>CAS #</b> 88-72-2 <b>Purity</b> 99%	1,010.0 $\mu$ g/mL	+/- 5.9991 $\mu$ g/mL	+/- 55.3308 $\mu$ g/mL	Gravimetric Unstressed
	(Lot BCBZ7826)		+/- 64.5212 $\mu$ g/mL		Stressed
6	4-Nitrotoluene <b>CAS #</b> 99-99-0 <b>Purity</b> 99%	1,010.0 $\mu$ g/mL	+/- 5.9991 $\mu$ g/mL	+/- 55.3308 $\mu$ g/mL	Gravimetric Unstressed
	(Lot FAU01)		+/- 64.5212 $\mu$ g/mL		Stressed
7	3-Nitrotoluene <b>CAS #</b> 99-08-1 <b>Purity</b> 99%	1,000.0 $\mu$ g/mL	+/- 5.9397 $\mu$ g/mL	+/- 54.7830 $\mu$ g/mL	Gravimetric Unstressed
	(Lot 07329LG)		+/- 63.8824 $\mu$ g/mL		Stressed

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

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

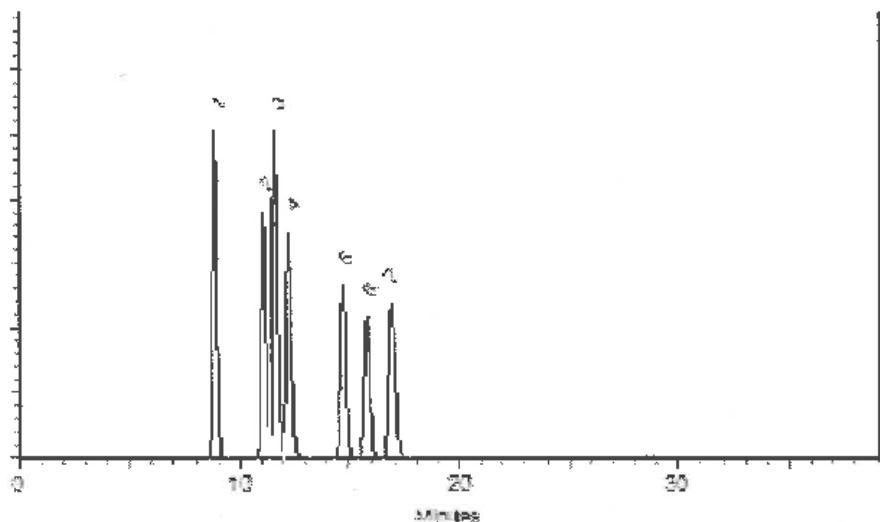
**Flow Rate:**  
1.0 mL/min.

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

**Mobile Phase B:**

**Mobile Phase Composition:**  
100% A

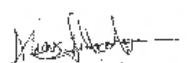
**Det. Type:**  
Wavelength: 210nm & 254nm



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.

Copy Meier - Operations Tech

Date Mixed: 15-Apr-2021 Balance: J128342314

  
Meeks Shallow - Operations Tech

Date Passed: 20-Apr-2021

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

## General Certified Reference Material 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.

### Handling Notes:

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Reagent

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**8330PASTkPS\_00067**



# CERTIFICATE OF ANALYSIS

**Catalog No:** M-8330-ADD-3

**Description:** Picric acid

**Lot:** 218031154-02

**Solvent:** Acetonitrile (50%)

Methanol (50%)

**Hazards:** Refer to SDS for complete safety information



Signal Word: Danger

**Date Certified:** Jun 8, 2020

**Expiration:** Jul 8, 2022

**Sample Size:** 1 mL

**Components:** 1

**Storage Condition:** Ambient (>5 °C)

**Certified Reference Material**



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.

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By:

Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

Reagent

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**8330Surrogate\_00127**

## Preliminary Report

Eurofins TestAmerica, Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC\_X\20211116-106552.b\071-0801.D

Lims ID: Surr127

Inj. Date: 16-Nov-2021 17:37:51

Worklist ID: 280-0106552-072

Instrument: CHHPLC\_X3

Method: 8330\_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 3535
\$ 10 1,2-Dinitrobenzene	0.5000	0.5055	101.1	83-119

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

280-155547-B-1-A

Reagent

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**8330SurrStkSS\_00203**



# 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.:** A0172684  
**Description :** 8330 Surrogate Mix  
                 8330 Surrogate Mix 1000 µg/mL, Methanol, 1mL/ampul  
**Container Size :** 2 mL      **Pkg Amt:** > 1 mL  
**Expiration Date :** May 31, 2026      **Storage:** 10°C or colder  
                 **Ship:** Ambient

### 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 CAS # 528-29-0 Purity 99%	1,002.0 µg/mL	+/- 5.9516 µg/mL	+/- 56.1943 µg/mL	Gravimetric Unstressed Stressed
	(Lot MKCH6067)		+/- 57.5086 µg/mL		

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

## General Certified Reference Material Notes

### Expiration Notes:

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Reagent

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**8330SurrStkSS\_00204**



# 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)



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**Catalog No. :** 31453

**Lot No.:** A0172684

**Description :** 8330 Surrogate Mix

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

**Container Size :** 2 mL

**Pkg Amt:** > 1 mL

**Expiration Date :** May 31, 2026

**Storage:** 10°C or colder

**Ship:** Ambient

### 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	1,002.0 µg/mL	+/-	5.9516 µg/mL	Gravimetric
	CAS # 528-29-0		+/-	56.1943 µg/mL	Unstressed
	Purity 99%		+/-	57.5086 µg/mL	Stressed

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ $\mu$ 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\_00207**



# 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.:** A0172684

**Description :** 8330 Surrogate Mix

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

**Container Size :** 2 mL

**Pkg Amt:** > 1 mL

**Expiration Date :** May 31, 2026

**Storage:** 10°C or colder

**Ship:** Ambient

### 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	1,002.0 µg/mL	+/-	5.9516 µg/mL	Gravimetric
	CAS # 528-29-0		+/-	56.1943 µg/mL	Unstressed
	Purity 99%		+/-	57.5086 µg/mL	Stressed

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ $\mu$ 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 [www.restek.com/Contact-Us](http://www.restek.com/Contact-Us) for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

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

### Manufacturing Notes:

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

### Handling Notes:

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

Reagent

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**8330SurrStkSS\_00211**



# 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.: A0172684

Description : 8330 Surrogate Mix

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

Container Size : 2 mL

Pkg Amt: > 1 mL

Expiration Date : May 31, 2026

Storage: 10°C or colder

Ship: Ambient

### 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	1,002.0 µg/mL	+/-	5.9516 µg/mL	Gravimetric
	CAS # 528-29-0		+/-	56.1943 µg/mL	Unstressed
	Purity 99%		+/-	57.5086 µg/mL	Stressed

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ $\mu$ 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\_00212**



# 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.: A0172684

Description : 8330 Surrogate Mix

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

Container Size : 2 mL

Pkg Amt: > 1 mL

Expiration Date : May 31, 2026

Storage: 10°C or colder

Ship: Ambient

### 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	1,002.0 µg/mL	+/-	5.9516 µg/mL	Gravimetric
	CAS # 528-29-0		+/-	56.1943 µg/mL	Unstressed
	Purity 99%		+/-	57.5086 µg/mL	Stressed

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ $\mu$ 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 [www.restek.com/Contact-Us](http://www.restek.com/Contact-Us) for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

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

### Manufacturing Notes:

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

### Handling Notes:

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

Reagent

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**8330SurrStock\_00169**



# 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. 664/289871-17

<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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**MNX , TNX , DNX\_00057**



# 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-dinitro-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 LROA 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

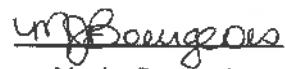
**Expiration of Certification:**

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 LRDA registered ISO 9001:2015 Quality Management System. Cert # 10303760  
Page: 2 of 2

[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\_00062**



# 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**

1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)

**CAS#**

N/A

**Analyte Lot**

RM12426

**Concentration ± Uncertainty**

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

Page: 2 of 2

[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\_00063**



# 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**

1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)

**CAS#**

N/A

**Analyte Lot**

RM12426

**Concentration ± Uncertainty**

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

Page: 2 of 2

[www.agilent.com/quality/](http://www.agilent.com/quality/)  
CSD-QA-015.1



ISO 17025 Cert  
No. AT-1937

Reagent

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**PicricARestek\_00099**



# 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.:** 31499

**Lot No.:** A0166597

**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 :** 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	Picric Acid <b>CAS #</b> 88-89-1 <b>Purity</b> 99%	1,002.0 $\mu$ g/mL	+/- 5.9516	$\mu$ g/mL	Gravimetric
			+/- 54.8926	$\mu$ g/mL	Unstressed
			+/- 64.0101	$\mu$ g/mL	Stressed

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

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

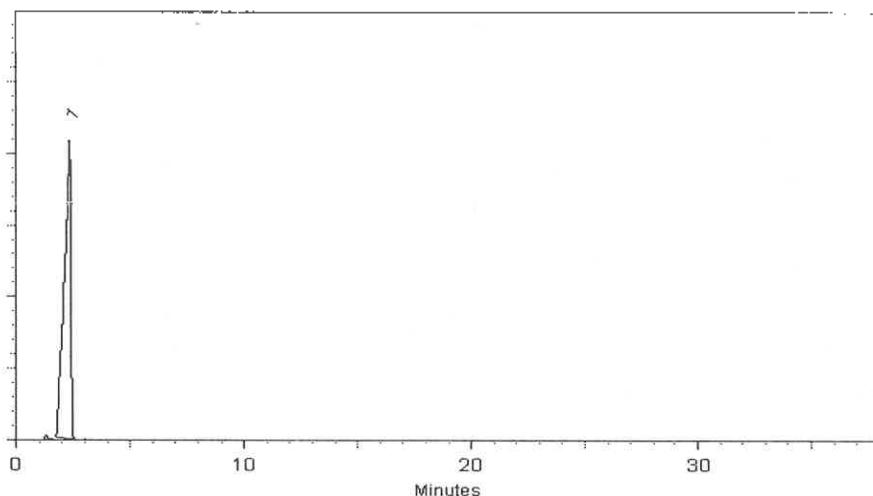
**Flow Rate:**  
1.0 ml/min.

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

**Mobile Phase B:**

**Mobile Phase Composition:**  
100%A

**Det. Type:**  
Wavelength: 210nm & 254nm



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

*Kylie Struble*  
Kylie Struble - Operations Technician I

Date Mixed: 22-Nov-2020      Balance: B251644995

*Martina Cowan*  
Martina Cowan - Operations Tech I

Date Passed: 24-Nov-2020

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

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

### Certified Uncertainty Value Notes:

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

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

*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.



# **8330A\_DOD5**

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**Nitroaromatics and Nitramines (HPLC)**

FORM II  
HPLC/IC SURROGATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-159130-1

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 #
OS003-DP08-35	280-159130-1	94	
OS003-DP08-35	280-159130-1		93
OS003-DP08-45	280-159130-2	97 M	
OS001-DP08-25	280-159130-3	98 M	
OS001-DP08-25	280-159130-3		101
OS501-DP08-25	280-159130-4	93 M	
OS501-DP08-25	280-159130-4		104
OS001-DP08-35	280-159130-5	107 M	
OS001-DP08-35	280-159130-5		104
OS001-DP08-45	280-159130-6	126 M Q	
OS001-DP08-45	280-159130-6		106
	MB 280-567330/1-A	95	
	LCS 280-567330/2-A	86	
	LCS 280-567330/3-A	111	
OS003-DP08-45 MS	280-159130-2 MS	101 M	
OS003-DP08-45 MSD	280-159130-2 MSD	93	

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 Denver Job No.: 280-159130-1  
 SDG No.: \_\_\_\_\_  
 Matrix: Water Level: Low Lab File ID: 03010044.D  
 Lab ID: LCS 280-567330/2-A Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.00	1.95	97	73-125	
1,3-Dinitrobenzene	2.00	1.87	94	78-120	
2,4,6-Trinitrotoluene	2.00	1.86	93	71-123	
2,4-Dinitrotoluene	2.00	1.74	87	78-120	
2,6-Dinitrotoluene	2.00	1.79	90	77-127	
2-Amino-4,6-dinitrotoluene	2.00	1.64	82	79-120	
2-Nitrotoluene	2.00	1.41	70	70-127	
3-Nitrotoluene	2.00	1.34	67	73-125	Q
4-Amino-2,6-dinitrotoluene	2.00	1.48	74	76-125	Q
4-Nitrotoluene	2.00	1.54	77	71-127	
HMX	2.00	1.88	94	65-135	
Nitrobenzene	2.00	1.62	81	65-134	
RDX	2.00	1.99	100	68-130	
Tetryl	2.00	1.79	90	64-128	

# Column to be used to flag recovery and RPD values

FORM III 8330A

FORM III  
HPLC/IC LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-159130-1

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

Matrix: Water Level: Low Lab File ID: 03010045.D

Lab ID: LCS 280-567330/3-A Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
MNX	2.33	2.54	109	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 Denver Job No.: 280-159130-1  
SDG No.:  
Matrix: Water Level: Low Lab File ID: 03010048.D  
Lab ID: 280-159130-2 MS Client ID: OS003-DP08-45 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.10	0.20 U	2.28	109	73-125	M
1,3-Dinitrobenzene	2.10	0.10 U	2.34	112	78-120	
2,4,6-Trinitrotoluene	2.10	0.10 U	2.22	106	71-123	
2,4-Dinitrotoluene	2.10	0.081 U	2.10	100	78-120	
2,6-Dinitrotoluene	2.10	0.081 U	2.17	104	77-127	
2-Amino-4,6-dinitrotoluene	2.10	0.10 U	2.04	98	79-120	
2-Nitrotoluene	2.10	0.20 U	1.75	84	70-127	
3-Nitrotoluene	2.10	0.41 U	1.61	77	73-125	
4-Amino-2,6-dinitrotoluene	2.10	0.12 U	1.99	95	76-125	
4-Nitrotoluene	2.10	0.41 U	1.96	94	71-127	
HMX	2.10	0.20 U	2.03	97	65-135	M
Nitrobenzene	2.10	0.20 U	2.01	96	65-134	
RDX	2.10	0.20 U	2.01	96	68-130	M
Tetryl	2.10	0.10 U	2.21	106	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 Denver Job No.: 280-159130-1

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

Matrix: Water Level: Low Lab File ID: 03010050.D

Lab ID: 280-159130-2 MS Client ID: OS003-DP08-45 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
MNX	2.45	0.41 U	2.63	107	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 Denver

Job No.: 280-159130-1

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

Matrix: Water Level: Low Lab File ID: 03010049.D

Lab ID: 280-159130-2 MSD Client ID: OS003-DP08-45 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
1,3,5-Trinitrobenzene	2.08	2.23	107	2	30	73-125	
1,3-Dinitrobenzene	2.08	2.07	100	12	30	78-120	
2,4,6-Trinitrotoluene	2.08	2.07	100	7	30	71-123	
2,4-Dinitrotoluene	2.08	1.81	87	15	30	78-120	
2,6-Dinitrotoluene	2.08	1.82	88	17	30	77-127	
2-Amino-4,6-dinitrotoluene	2.08	1.76	85	15	30	79-120	
2-Nitrotoluene	2.08	1.34	65	26	30	70-127	J1
3-Nitrotoluene	2.08	1.16	56	32	30	73-125	J1
4-Amino-2,6-dinitrotoluene	2.08	1.72	83	15	30	76-125	
4-Nitrotoluene	2.08	1.47	71	29	30	71-127	
HMX	2.08	2.12	102	4	30	65-135	M
Nitrobenzene	2.08	1.75	84	14	30	65-134	
RDX	2.08	2.03	98	1	30	68-130	M
Tetryl	2.08	2.13	103	4	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 Denver

Job No.: 280-159130-1

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

Matrix: Water Level: Low Lab File ID: 03010051.D

Lab ID: 280-159130-2 MSD Client ID: OS003-DP08-45 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD %	REC	RPD	QC LIMITS		#
						RPD	REC	
MNX	2.43	2.48	102	6	30	57-132	M	

# Column to be used to flag recovery and RPD values

FORM III 8330A

FORM IV  
HPLC/IC METHOD BLANK SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159130-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: MB 280-567330/1-A  
Matrix: Water Date Extracted: 03/01/2022 11:26  
Lab File ID: (1) 03010043.D Lab File ID: (2) \_\_\_\_\_  
Date Analyzed: (1) 03/02/2022 04:43 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 280-567330/2-A	03/02/2022 05:06	
	LCS 280-567330/3-A	03/02/2022 05:29	
OS003-DP08-35	280-159130-1	03/02/2022 05:52	03/03/2022 18:09
OS003-DP08-45	280-159130-2	03/02/2022 06:15	
OS003-DP08-45 MS	280-159130-2 MS	03/02/2022 06:38	
OS003-DP08-45 MSD	280-159130-2 MSD	03/02/2022 07:01	
OS003-DP08-45 MS	280-159130-2 MS	03/02/2022 07:23	
OS003-DP08-45 MSD	280-159130-2 MSD	03/02/2022 07:46	
OS001-DP08-25	280-159130-3	03/02/2022 08:09	03/03/2022 21:39
OS501-DP08-25	280-159130-4	03/02/2022 09:18	03/03/2022 23:24
OS001-DP08-35	280-159130-5	03/02/2022 09:41	03/03/2022 23:59
OS001-DP08-45	280-159130-6	03/02/2022 10:04	03/04/2022 00:35

FORM X  
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159130-1

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

Client Sample ID: OS003-DP08-35 Lab Sample ID: 280-159130-1

Instrument ID (1): CHHPLC\_X3 Instrument ID (2): CHHPLC\_X5

Date Analyzed (1): 03/02/2022 05:52 Date Analyzed (2): 03/03/2022 18:09

GC Column (1): UltraCarb5uOD ID: 4.6 (mm) GC Column (2): Luna-phenylhe ID: 4.6 (mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
2,4,6-Trinitrotoluene	1		10.87	10.76	10.96	0.14		2.7
	2		25.34	25.18	25.48	0.13		

FORM X  
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159130-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: OS001-DP08-25 Lab Sample ID: 280-159130-3  
Instrument ID (1): CHHPLC\_X3 Instrument ID (2): CHHPLC\_X5  
Date Analyzed (1): 03/02/2022 08:09 Date Analyzed (2): 03/03/2022 21:39  
GC Column (1): UltraCarb5uOD ID: 4.6 (mm) GC Column (2): Luna-phenylhe ID: 4.6 (mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
HMX	1		6.58	6.44	6.74	0.20		75.9
	2		6.88	6.77	7.07	0.45		
RDX	1		7.57	7.43	7.73	0.70		5.5
	2		9.12	9.00	9.30	0.66		
2,4,6-Trinitrotoluene	1		10.87	10.76	10.96	21		5.8
	2		25.28	25.18	25.48	20		
4-Amino-2,6-dinitrotoluene	1		11.05	10.94	11.14	3.7		11.2
	2		17.78	17.67	17.97	3.3		
2-Amino-4,6-dinitrotoluene	1		11.30	11.19	11.39	3.0		23.2
	2		18.78	18.69	18.99	3.7		

FORM X  
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159130-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: OS501-DP08-25 Lab Sample ID: 280-159130-4  
Instrument ID (1): CHHPLC\_X3 Instrument ID (2): CHHPLC\_X5  
Date Analyzed (1): 03/02/2022 09:18 Date Analyzed (2): 03/03/2022 23:24  
GC Column (1): UltraCarb5uOD ID: 4.6 (mm) GC Column (2): Luna-phenylhe ID: 4.6 (mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
RDX	1		7.58	7.43	7.73	0.69		20.0
	2		9.12	9.00	9.30	0.84		
2,4,6-Trinitrotoluene	1		10.87	10.76	10.96	21		1.8
	2		25.28	25.18	25.48	21		
4-Amino-2,6-dinitrotoluene	1		11.05	10.94	11.14	3.8		5.2
	2		17.79	17.67	17.97	3.6		
2-Amino-4,6-dinitrotoluene	1		11.30	11.19	11.39	3.0		27.3
	2		18.78	18.69	18.99	3.9		

FORM X  
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159130-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: OS001-DP08-35 Lab Sample ID: 280-159130-5  
Instrument ID (1): CHHPLC\_X3 Instrument ID (2): CHHPLC\_X5  
Date Analyzed (1): 03/02/2022 09:41 Date Analyzed (2): 03/03/2022 23:59  
GC Column (1): UltraCarb5uOD ID: 4.6 (mm) GC Column (2): Luna-phenylhe ID: 4.6 (mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
1,3,5-Trinitrobenzene	1		8.64	8.49	8.79	3.9		1.9
	2		18.97	18.85	19.15	3.9		
2,4,6-Trinitrotoluene	1		10.86	10.76	10.96	1.1		4.5
	2		25.28	25.18	25.48	1.1		
4-Amino-2,6-dinitrotoluene	1		11.04	10.94	11.14	1.0		11.1
	2		17.78	17.67	17.97	1.1		

FORM I  
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver

Job No.: 280-159130-1

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

Client Sample ID: OS003-DP08-35

Lab Sample ID: 280-159130-1

Matrix: Water

Lab File ID: 03010046.D

Analysis Method: 8330A

Date Collected: 02/23/2022 09:20

Extraction Method: 3535

Date Extracted: 03/01/2022 11:26

Sample wt/vol: 481.7 (mL)

Date Analyzed: 03/02/2022 05:52

Con. Extract Vol.: 5 (mL)

Dilution Factor: 1

Injection Volume: 100 (uL)

GC Column: UltraCarb5uODS ID: 4.6 (mm)

% Moisture: \_\_\_\_\_

GPC Cleanup: (Y/N) N

Analysis Batch No.: 567371

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-65-0	1,3-Dinitrobenzene	0.10	U M	0.11	0.10	0.038
118-96-7	2,4,6-Trinitrotoluene	0.14		0.11	0.10	0.047
121-14-2	2,4-Dinitrotoluene	0.083	U	0.10	0.083	0.028
606-20-2	2,6-Dinitrotoluene	0.083	U	0.10	0.083	0.042
88-72-2	2-Nitrotoluene	0.21	U	0.22	0.21	0.089
99-08-1	3-Nitrotoluene	0.42	U Q	0.42	0.42	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U Q	0.16	0.12	0.060
99-99-0	4-Nitrotoluene	0.42	U	0.43	0.42	0.10
2691-41-0	HMX	0.21	U	0.22	0.21	0.091
5755-27-1	MNX	0.42	U	2.1	0.42	0.16
98-95-3	Nitrobenzene	0.21	U M	0.22	0.21	0.094
121-82-4	RDX	0.21	U	0.22	0.21	0.053
479-45-8	Tetryl	0.10	U M	0.11	0.10	0.033

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	94		83-119

Eurofins Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\03010046.D  
 Lims ID: 280-159130-B-1-A  
 Client ID: OS003-DP08-35  
 Sample Type: Client  
 Inject. Date: 02-Mar-2022 05:52:17 ALS Bottle#: 46 Worklist Smp#: 46  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-159130-B-1-A  
 Misc. Info.: 280-0108907-046  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 02-Mar-2022 13:06:22 Calib Date: 05-Jan-2022 04:24:15  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040037.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1635

First Level Reviewer: zhangji Date: 02-Mar-2022 12:43:17

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1	6.588				ND	
7 MNX	1	7.206				ND	
8 RDX	1	7.575				ND	
\$ 10 1,2-Dinitrobenzene	1	8.520	8.515	0.005	23553	0.1889	
11 1,3,5-Trinitrobenzene	1	8.640	8.642	-0.002	2074	0.009510	
12 1,3-Dinitrobenzene	1	9.262				ND	U
13 Nitrobenzene	1	9.648				ND	U
15 Tetryl	1	9.955				ND	U
17 2,4,6-Trinitrotoluene	1	10.867	10.862	0.005	2643	0.0130	
18 4-Amino-2,6-dinitrotoluene	1	11.053	11.042	0.011	692	0.004583	
19 2-Amino-4,6-dinitrotoluene	1	11.300	11.288	0.012	1082	0.005352	
20 2,6-Dinitrotoluene	1	11.462				ND	
21 2,4-Dinitrotoluene	1	11.635				ND	
22 o-Nitrotoluene	1	12.475				ND	
23 p-Nitrotoluene	1	12.895				ND	
24 m-Nitrotoluene	1	13.462				ND	

### QC Flag Legend

Processing Flags

Review Flags

U - Marked Undetected

Report Date: 02-Mar-2022 13:06:24

Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\\denver\\chromdata\\chhplc\_x\\20220301-108907.b\\03010046.d

Injection Date: 02-Mar-2022 05:52:17

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: 280-159130-B-1-A

Lab Sample ID: 280-159130-1

Worklist Smp#: 46

Client ID: OS003-DP08-35

Dil. Factor: 1.0000

ALS Bottle#: 46

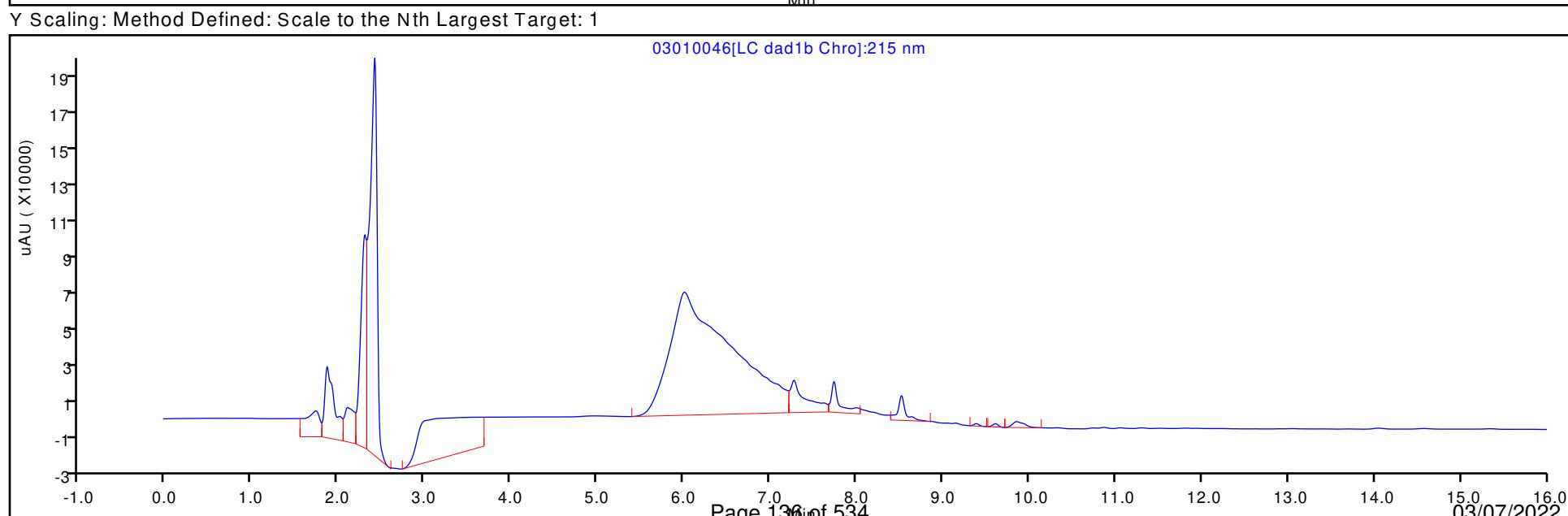
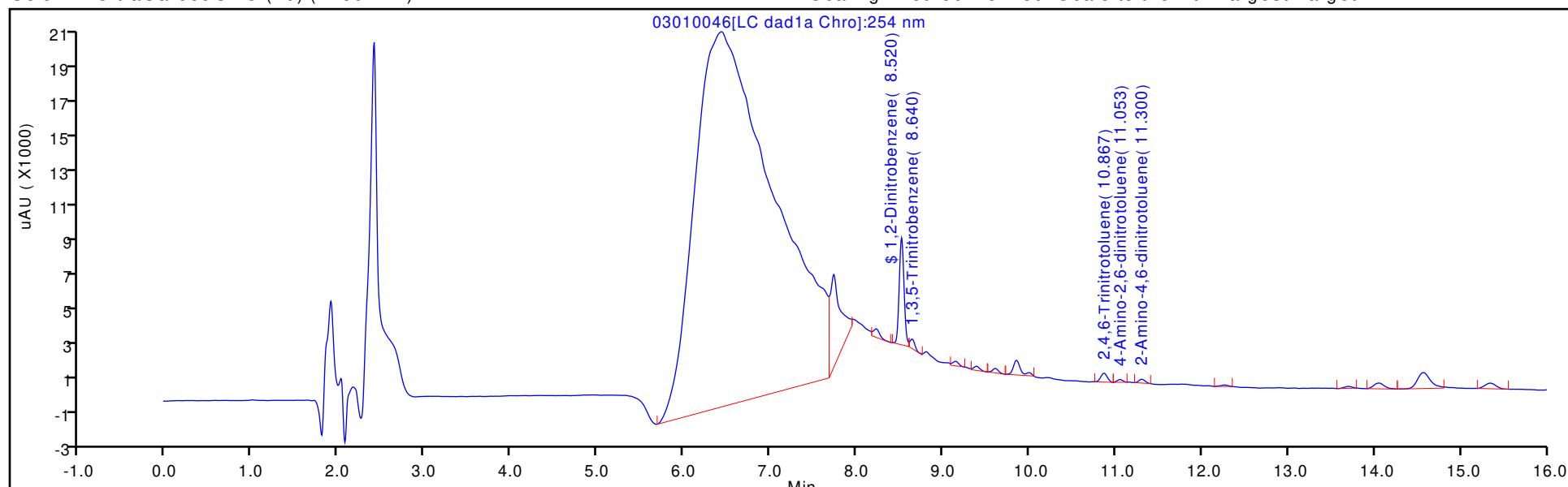
Injection Vol: 100.0 ul

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 Denver  
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\03010046.D  
 Lims ID: 280-159130-B-1-A  
 Client ID: OS003-DP08-35  
 Sample Type: Client  
 Inject. Date: 02-Mar-2022 05:52:17 ALS Bottle#: 46 Worklist Smp#: 46  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-159130-B-1-A  
 Misc. Info.: 280-0108907-046  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 02-Mar-2022 13:06:22 Calib Date: 05-Jan-2022 04:24:15  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040037.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1635

First Level Reviewer: zhangji Date: 02-Mar-2022 12:43:17

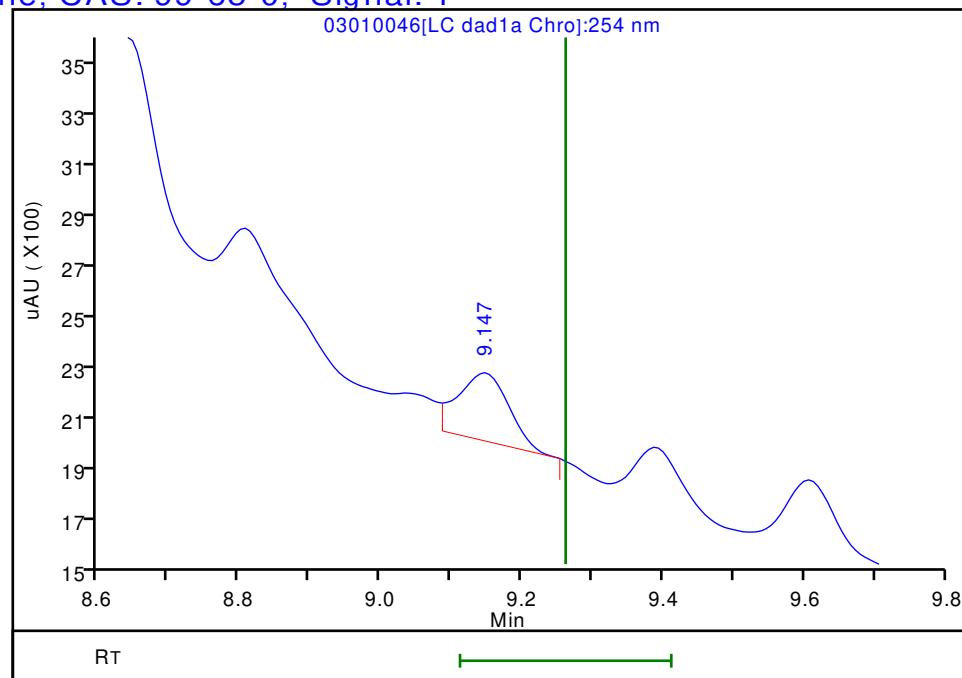
Compound	Amount Added	Amount Recovered	% Rec.
\$ 10 1,2-Dinitrobenzene	0.2000	0.1889	94.44

## Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010046.d  
Injection Date: 02-Mar-2022 05:52:17 Instrument ID: CHHPLC\_X3  
Lims ID: 280-159130-B-1-A Lab Sample ID: 280-159130-1  
Client ID: OS003-DP08-35  
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

## 12 1,3-Dinitrobenzene, CAS: 99-65-0, Signal: 1

RT: 9.15  
Response: 1256  
Amount: 0.004355



Reviewer: zhangji, 02-Mar-2022 12:43:17

Audit Action: Marked Compound Undetected

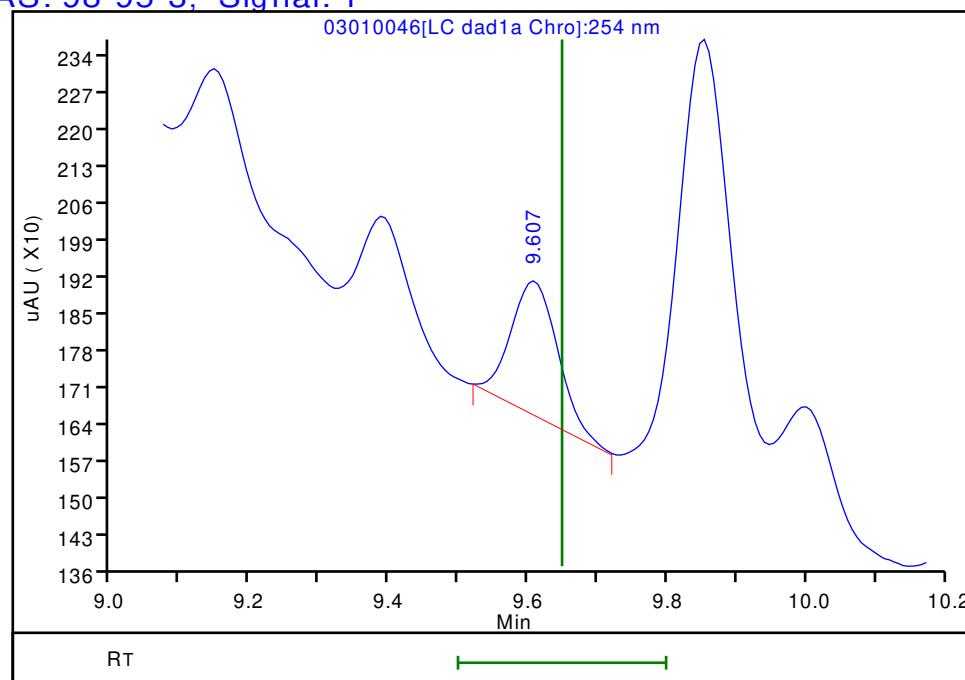
Audit Reason: Invalid Compound ID

## Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010046.d  
 Injection Date: 02-Mar-2022 05:52:17 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-159130-B-1-A Lab Sample ID: 280-159130-1  
 Client ID: OS003-DP08-35  
 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

## 13 Nitrobenzene, CAS: 98-95-3, Signal: 1

RT: 9.61  
 Response: 1194  
 Amount: 0.006220



Reviewer: zhangji, 02-Mar-2022 12:43:17

Audit Action: Marked Compound Undetected

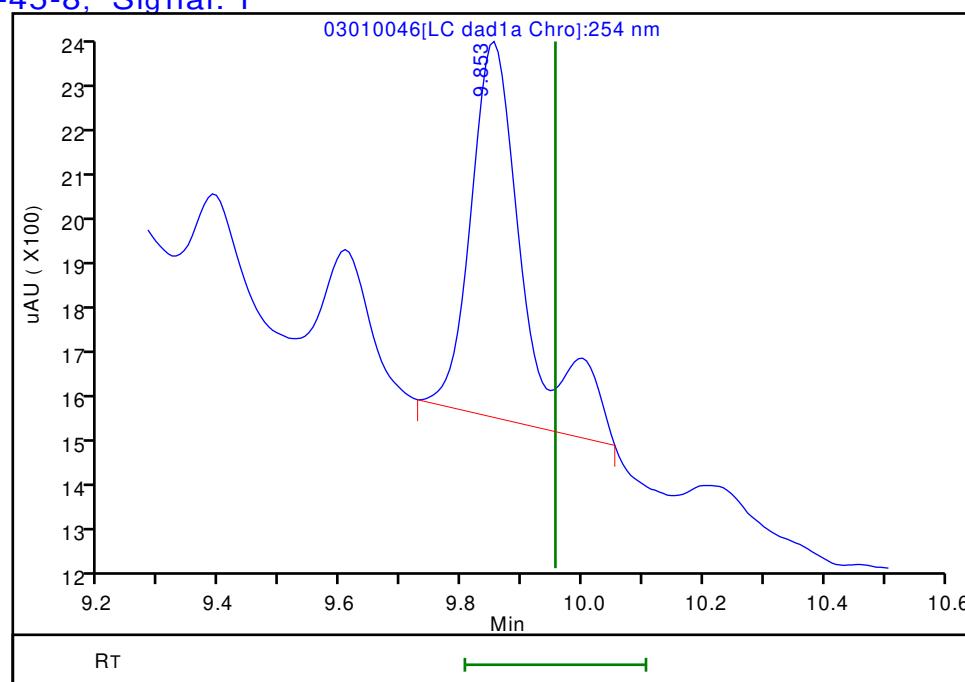
Audit Reason: Invalid Compound ID

## Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010046.d  
 Injection Date: 02-Mar-2022 05:52:17 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-159130-B-1-A Lab Sample ID: 280-159130-1  
 Client ID: OS003-DP08-35  
 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

**15 Tetryl, CAS: 479-45-8, Signal: 1**

RT: 9.85  
 Response: 5086  
 Amount: 0.029818



Reviewer: zhangji, 02-Mar-2022 12:43:17

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I  
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver Job No.: 280-159130-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: OS003-DP08-35 Lab Sample ID: 280-159130-1  
 Matrix: Water Lab File ID: 03030013.D  
 Analysis Method: 8330A Date Collected: 02/23/2022 09:20  
 Extraction Method: 3535 Date Extracted: 03/01/2022 11:26  
 Sample wt/vol: 481.7 (mL) Date Analyzed: 03/03/2022 18:09  
 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.: 567645 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.21	U	0.22	0.21	0.087
35572-78-2	2-Amino-4,6-dinitrotoluene	0.10	U M	0.11	0.10	0.053

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	93		83-119

**Eurofins Denver**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220303-108978.b\03030013.D  
 Lims ID: 280-159130-B-1-A  
 Client ID: OS003-DP08-35  
 Sample Type: Client  
 Inject. Date: 03-Mar-2022 18:09:03 ALS Bottle#: 13 Worklist Smp#: 13  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-159130-B-1-A  
 Misc. Info.: 280-0108978-013  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220303-108978.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 04-Mar-2022 12:18:20 Calib Date: 03-Mar-2022 07:19:48  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020027.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm) Det: LC mwd1A, 254 nm  
 Process Host: CTX1659

First Level Reviewer: zhangji Date: 03-Mar-2022 18:45:18

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
5 HMX	1		6.916			ND	
6 MNX	1		7.649			ND	
8 RDX	1	9.125	9.150	-0.025	2675	0.0138	M
9 Nitrobenzene	1		12.083			ND	
\$ 10 1,2-Dinitrobenzene	1	13.325	13.323	0.002	46678	0.1869	
12 1,3-Dinitrobenzene	1		15.683			ND	
14 o-Nitrotoluene	1		16.863			ND	7
16 p-Nitrotoluene	1		17.176			ND	
17 4-Amino-2,6-dinitrotoluene	1	17.825	17.823	0.002	1998	0.007712	
18 m-Nitrotoluene	1		18.150			ND	
19 2-Amino-4,6-dinitrotoluene	1	18.838	18.843	-0.005	1745	0.004840	M
20 1,3,5-Trinitrobenzene	1		18.996			ND	
21 2,6-Dinitrotoluene	1		20.316			ND	
22 2,4-Dinitrotoluene	1		20.836			ND	
23 Tetryl	1		24.583			ND	
24 2,4,6-Trinitrotoluene	1	25.338	25.330	0.008	4686	0.0127	

### QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Report Date: 04-Mar-2022 12:18:22

Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220303-108978.b\03030013.D

Injection Date: 03-Mar-2022 18:09:03

Instrument ID: CHHPLC\_X5

Operator ID: JZ

Lims ID: 280-159130-B-1-A

Lab Sample ID: 280-159130-1

Worklist Smp#: 13

Client ID: OS003-DP08-35

Dil. Factor: 1.0000

ALS Bottle#: 13

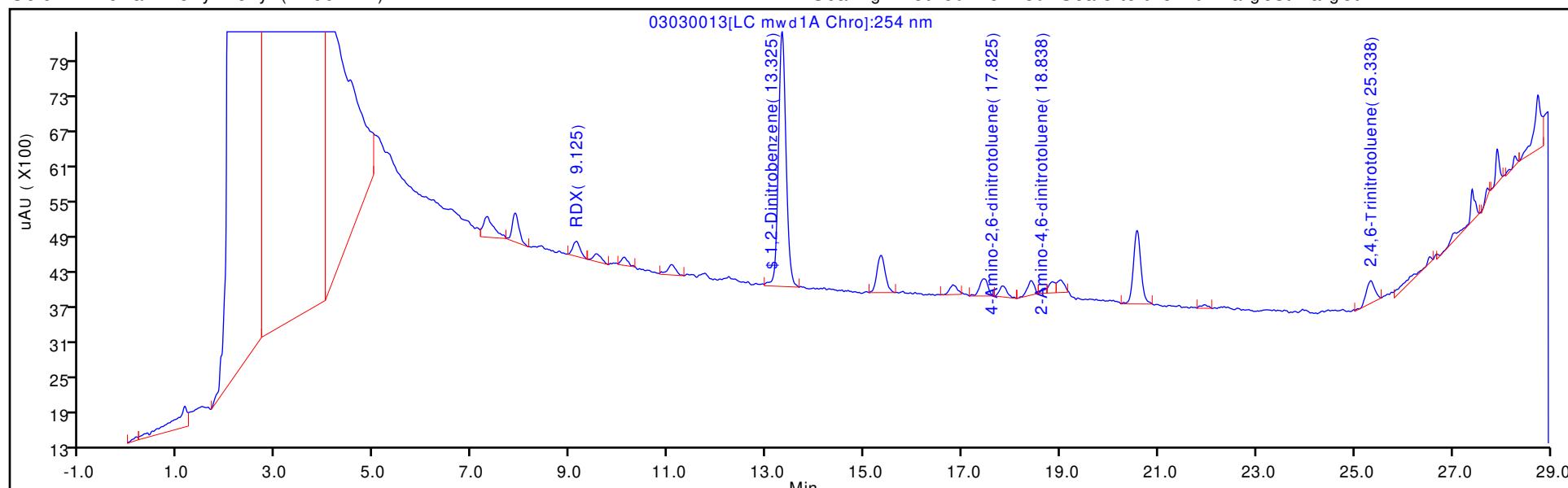
Injection Vol: 100.0 ul

Limit Group: GCSV - 8330

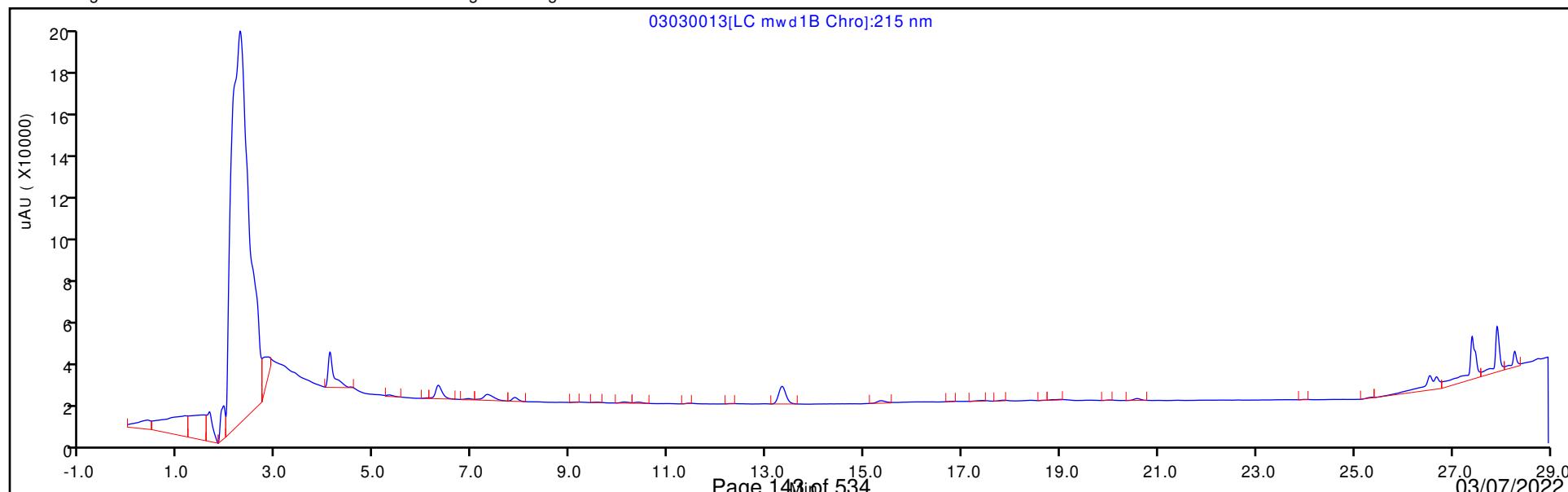
Method: 8330\_X5\_Luna

Column: Luna-Phenyl hexyl ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Denver  
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220303-108978.b\03030013.D  
 Lims ID: 280-159130-B-1-A  
 Client ID: OS003-DP08-35  
 Sample Type: Client  
 Inject. Date: 03-Mar-2022 18:09:03 ALS Bottle#: 13 Worklist Smp#: 13  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-159130-B-1-A  
 Misc. Info.: 280-0108978-013  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220303-108978.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 04-Mar-2022 12:18:20 Calib Date: 03-Mar-2022 07:19:48  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020027.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm ) Det: LC mwd1A, 254 nm  
 Process Host: CTX1659

First Level Reviewer: zhangji Date: 03-Mar-2022 18:45:18

Compound	Amount Added	Amount Recovered	% Rec.
\$ 10 1,2-Dinitrobenzene	0.2000	0.1869	93.45

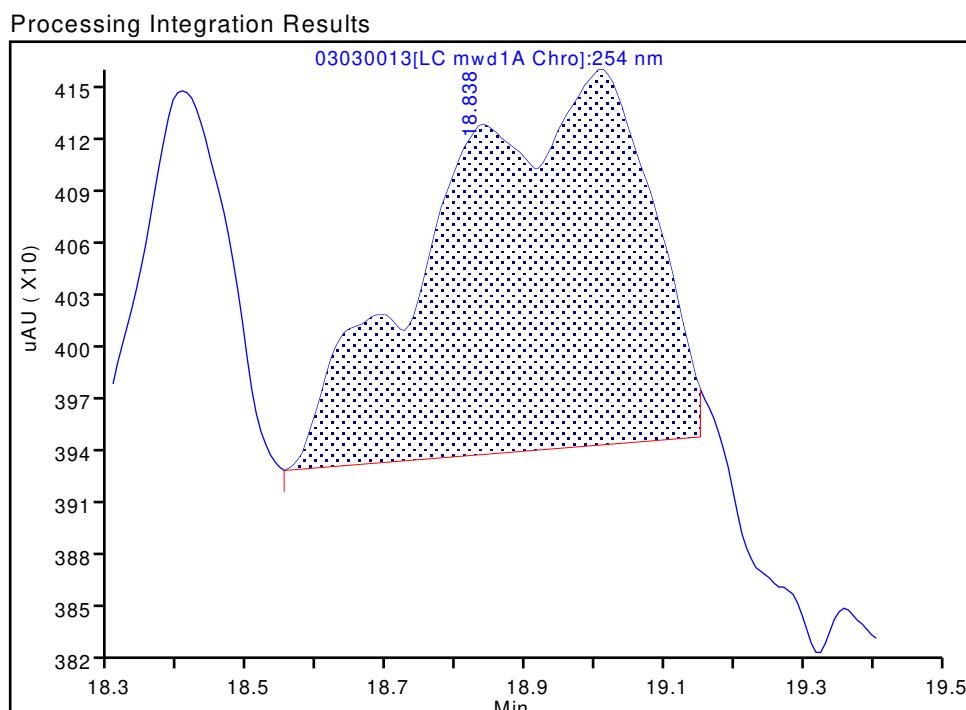
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220303-108978.b\03030013.D  
 Injection Date: 03-Mar-2022 18:09:03 Instrument ID: CHHPLC\_X5  
 Lims ID: 280-159130-B-1-A Lab Sample ID: 280-159130-1  
 Client ID: OS003-DP08-35  
 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: Luna-Phenyl hexyl ( 4.60 mm) Detector LC mwd1A, 254 nm

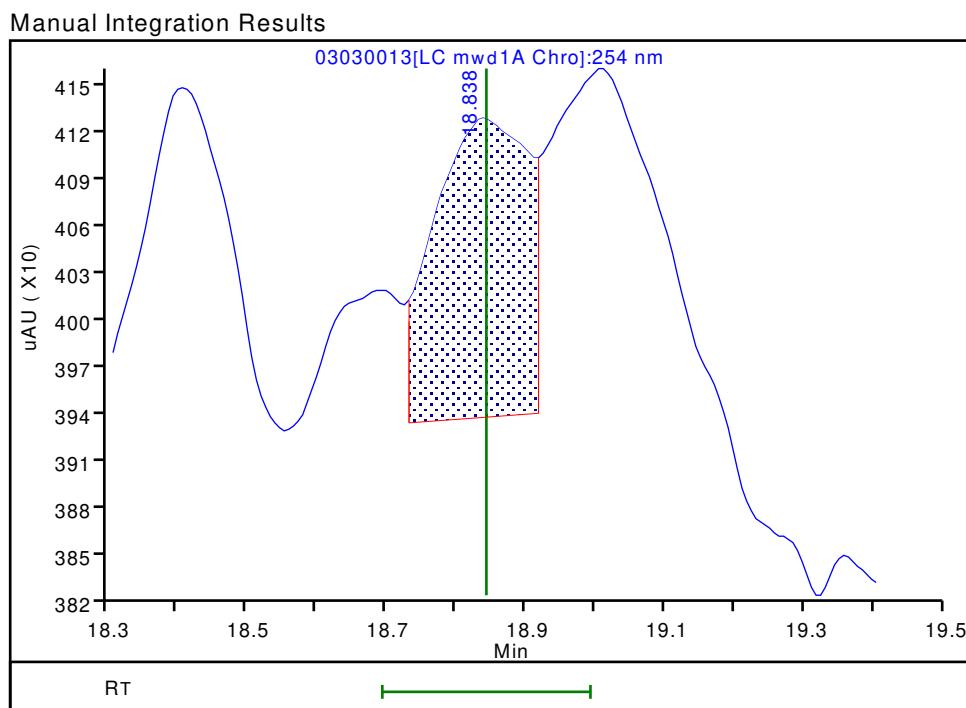
### 19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

RT: 18.84  
 Area: 4510  
 Amount: 0.012509  
 Amount Units: ug/ml



RT: 18.84  
 Area: 1745  
 Amount: 0.004840  
 Amount Units: ug/ml



Reviewer: zhangji, 03-Mar-2022 18:45:13

Audit Action: Split an Integrated Peak

Audit Reason: Baseline Smoothing

## Eurofins Denver

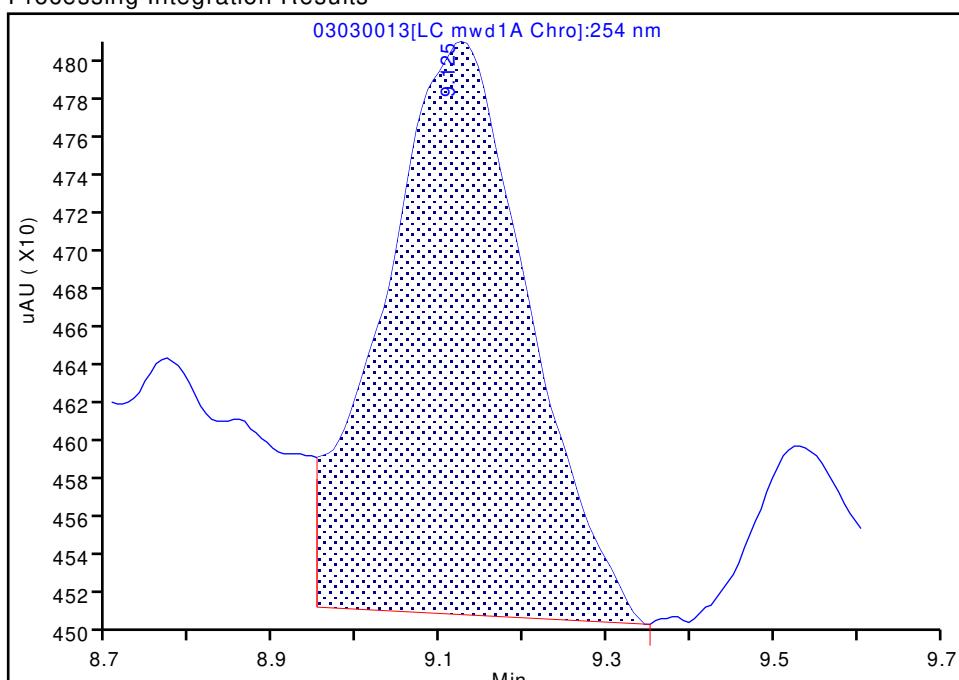
Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220303-108978.b\03030013.D  
 Injection Date: 03-Mar-2022 18:09:03 Instrument ID: CHHPLC\_X5  
 Lims ID: 280-159130-B-1-A Lab Sample ID: 280-159130-1  
 Client ID: OS003-DP08-35  
 Operator ID: JZ ALS Bottle#: 13 Worklist Smp#: 13  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X5\_Luna Limit Group: GCSV - 8330  
 Column: Luna-Phenyl hexyl ( 4.60 mm) Detector LC mwd1A, 254 nm

8 RDX, CAS: 121-82-4

Signal: 1

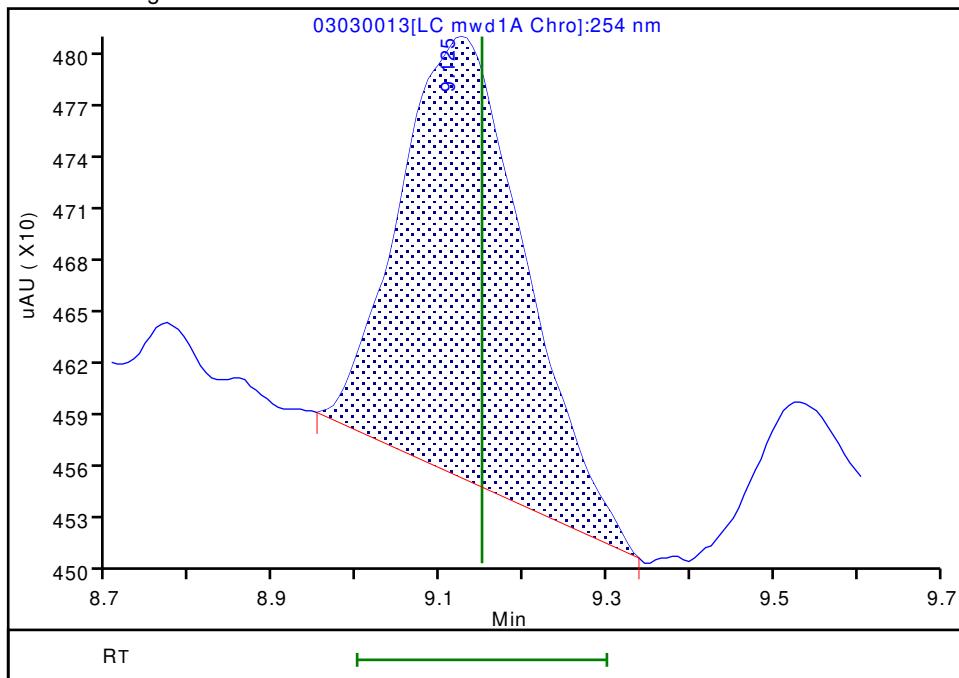
RT: 9.12  
 Area: 3612  
 Amount: 0.018587  
 Amount Units: ug/ml

## Processing Integration Results



RT: 9.12  
 Area: 2675  
 Amount: 0.013765  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: zhangji, 03-Mar-2022 18:45:02

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM I  
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver

Job No.: 280-159130-1

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

Client Sample ID: OS003-DP08-45

Lab Sample ID: 280-159130-2

Matrix: Water

Lab File ID: 03010047.D

Analysis Method: 8330A

Date Collected: 02/23/2022 10:05

Extraction Method: 3535

Date Extracted: 03/01/2022 11:26

Sample wt/vol: 491.3 (mL)

Date Analyzed: 03/02/2022 06:15

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.: 567371

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	0.086
99-65-0	1,3-Dinitrobenzene	0.10	U M	0.11	0.10	0.038
118-96-7	2,4,6-Trinitrotoluene	0.10	U	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	0.052
88-72-2	2-Nitrotoluene	0.20	U J1	0.21	0.20	0.087
99-08-1	3-Nitrotoluene	0.41	U Q J1	0.41	0.41	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U Q	0.15	0.12	0.059
99-99-0	4-Nitrotoluene	0.41	U	0.42	0.41	0.10
2691-41-0	HMX	0.20	U	0.21	0.20	0.089
5755-27-1	MNX	0.41	U	2.0	0.41	0.16
98-95-3	Nitrobenzene	0.20	U	0.21	0.20	0.093
121-82-4	RDX	0.20	U	0.21	0.20	0.052
479-45-8	Tetryl	0.10	U M	0.11	0.10	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	97	M	83-119

**Eurofins Denver**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\03010047.D  
 Lims ID: 280-159130-A-2-A  
 Client ID: OS003-DP08-45  
 Sample Type: Client  
 Inject. Date: 02-Mar-2022 06:15:10 ALS Bottle#: 47 Worklist Smp#: 47  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-159130-A-2-A  
 Misc. Info.: 280-0108907-047  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 02-Mar-2022 13:06:22 Calib Date: 05-Jan-2022 04:24:15  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040037.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1635

First Level Reviewer: zhangji Date: 02-Mar-2022 12:43:30

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
1 Triamine Trinitrobenzene	1	2.447			ND		
2 2,6-diamino-4-nitrotoluene	1	6.464			ND		U
3 TNX	1	6.472			ND		
4 HMX	1	6.588			ND		
5 2,4-diamino-6-nitrotoluene	1	6.650			ND		
6 DNX	1	6.792			ND		
7 MNX	1	7.206			ND		
8 RDX	1	7.575			ND		
9 2,4,6-Trinitrophenol	1	7.895			ND		
\$ 10 1,2-Dinitrobenzene	1	8.521	8.515	0.006	24158	0.1937	M
11 1,3,5-Trinitrobenzene	1	8.642			ND		
12 1,3-Dinitrobenzene	1	9.262			ND		U
13 Nitrobenzene	1	9.648			ND		
14 3,5-Dinitroaniline	1	9.877			ND		
15 Tetryl	1	9.955			ND		U
16 Nitroglycerin	2	10.408			ND		
17 2,4,6-Trinitrotoluene	1	10.862			ND		
18 4-Amino-2,6-dinitrotoluene	1	11.042			ND		
19 2-Amino-4,6-dinitrotoluene	1	11.288			ND		
20 2,6-Dinitrotoluene	1	11.462			ND		
21 2,4-Dinitrotoluene	1	11.635			ND		
22 o-Nitrotoluene	1	12.475			ND		
23 p-Nitrotoluene	1	12.895			ND		
24 m-Nitrotoluene	1	13.462			ND		
25 PETN	2	14.488			ND		
26 Ammonium Picrate	1	0.000			ND		

### QC Flag Legend

Processing Flags

Report Date: 02-Mar-2022 13:06:25

Chrom Revision: 2.3 16-Feb-2022 17:52:00

Review Flags

M - Manually Integrated

U - Marked Undetected

Report Date: 02-Mar-2022 13:06:25

Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\denver\chrom  
Injection Date: 02-Mar-2022 06:15:10

Lims ID: 280-159130-A-2-A  
Client ID: QS003-DP08-45

Client ID: 00000  
Injection Vol: 100.0  $\mu$   
Method: 8330\_V

Method: 8330\_λ3  
Column: UltraCarb5uODS (20) ( 4.60 mm)

Instrument ID: CHHPLC X3

Lab Sample ID: 280-159130-2

Operator ID: JZ

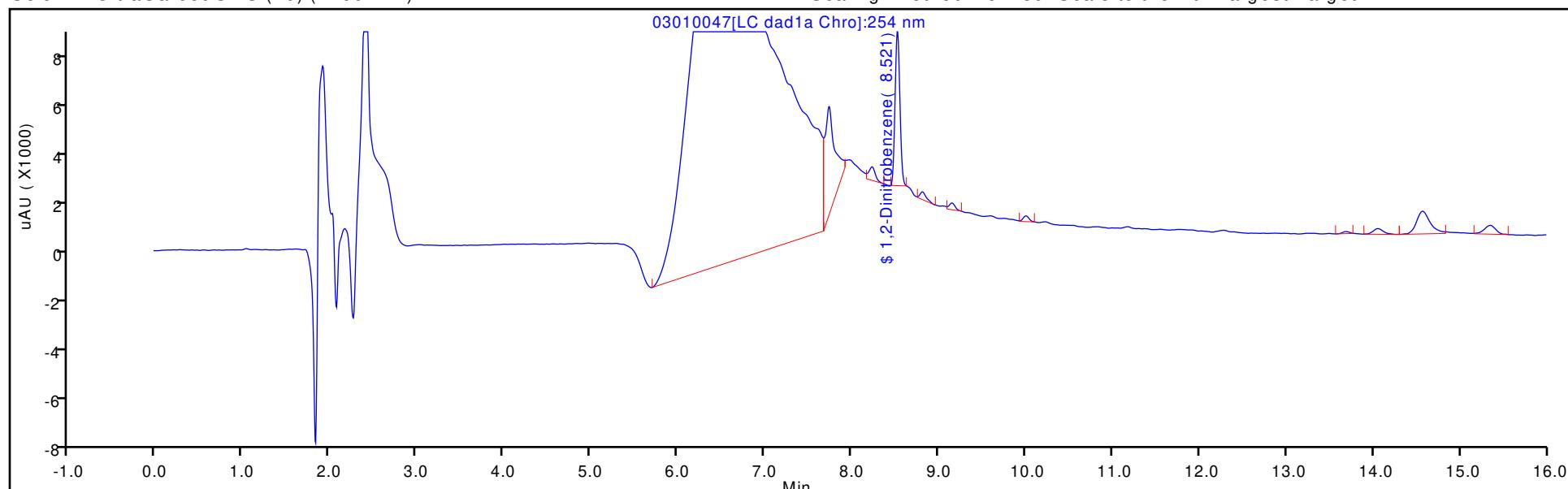
Worklist Smp#: 47

Dil Factor: 1.0000

Dil. Factor: 1.0000  
Limit Group: GCSV - 8330

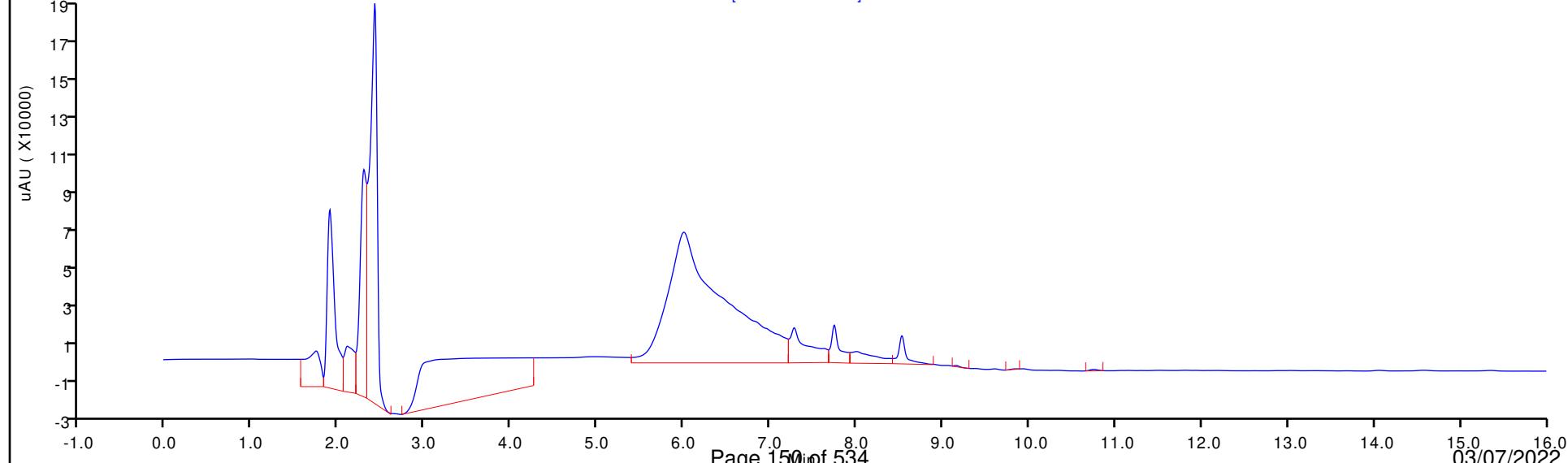
ALS Bottle#: 47

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

03010047[LC dad1b Chro]:215 nm



Eurofins Denver  
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\03010047.D  
 Lims ID: 280-159130-A-2-A  
 Client ID: OS003-DP08-45  
 Sample Type: Client  
 Inject. Date: 02-Mar-2022 06:15:10 ALS Bottle#: 47 Worklist Smp#: 47  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-159130-A-2-A  
 Misc. Info.: 280-0108907-047  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 02-Mar-2022 13:06:22 Calib Date: 05-Jan-2022 04:24:15  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040037.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1635

First Level Reviewer: zhangji Date: 02-Mar-2022 12:43:30

Compound	Amount Added	Amount Recovered	% Rec.
\$ 10 1,2-Dinitrobenzene	0.2000	0.1937	96.87

## Eurofins Denver

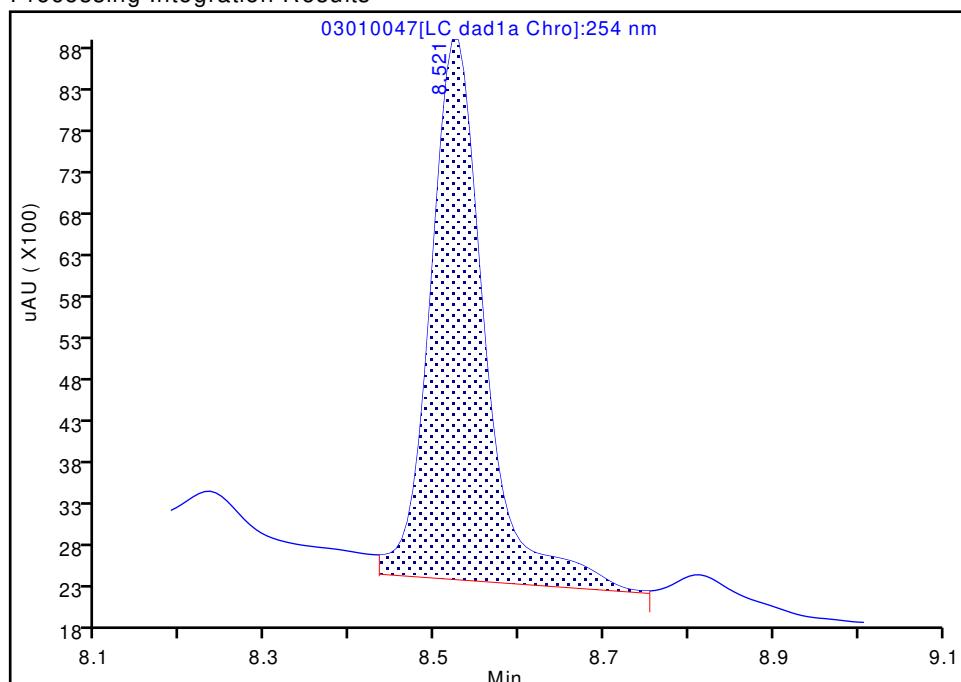
Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010047.d  
 Injection Date: 02-Mar-2022 06:15:10 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-159130-A-2-A Lab Sample ID: 280-159130-2  
 Client ID: OS003-DP08-45  
 Operator ID: JZ ALS Bottle#: 47 Worklist Smp#: 47  
 Injection Vol: 100.0 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

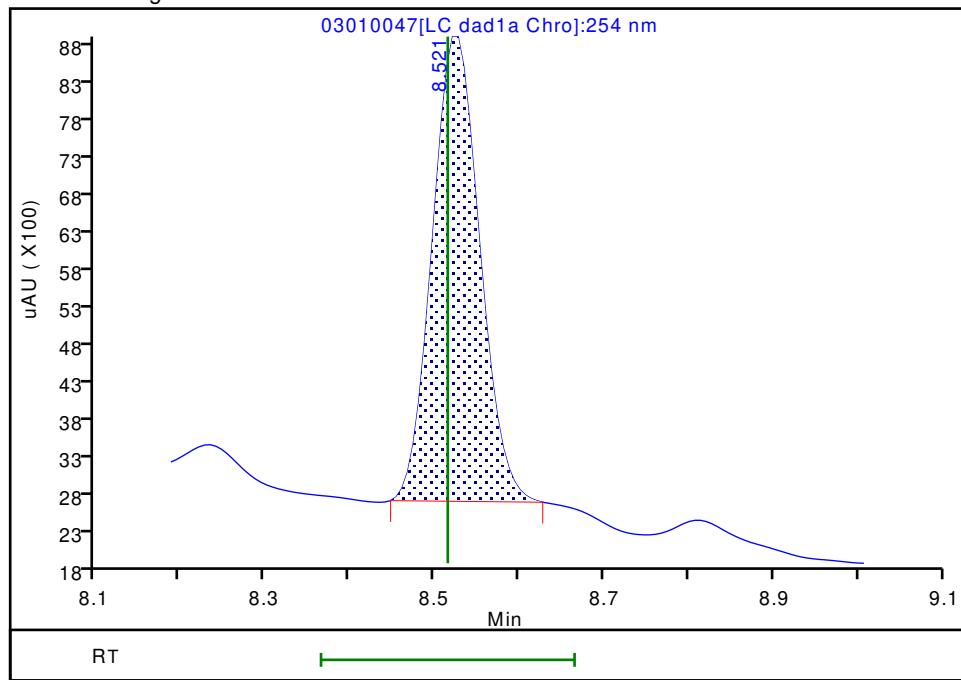
RT: 8.52  
 Area: 29264  
 Amount: 0.234680  
 Amount Units: ug/mL

## Processing Integration Results



RT: 8.52  
 Area: 24158  
 Amount: 0.193733  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 02-Mar-2022 12:43:29

Audit Action: Manually Integrated

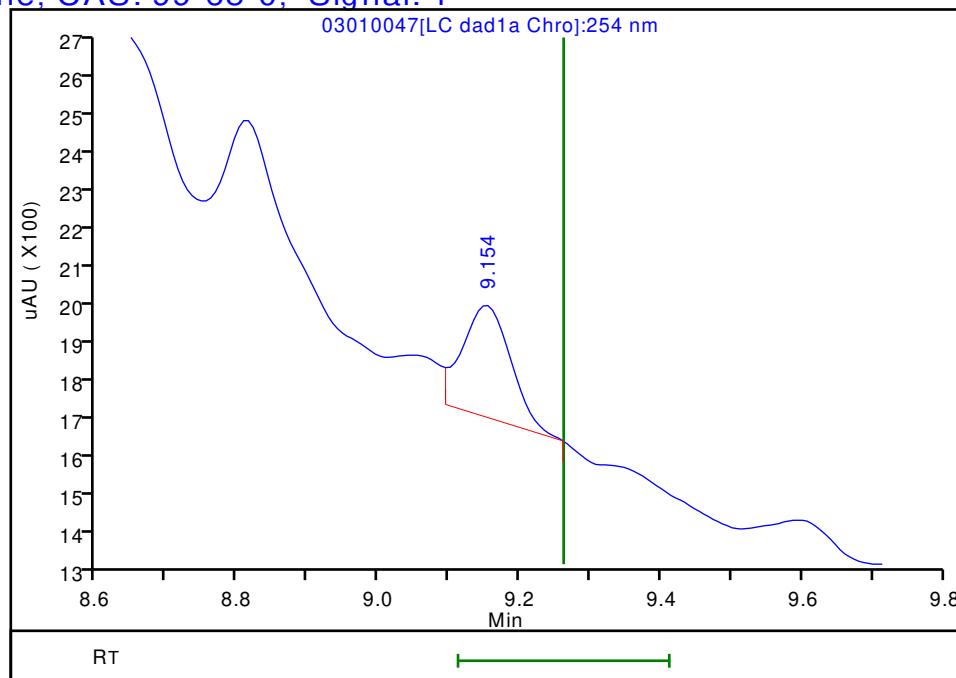
Audit Reason: Baseline

## Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010047.d  
Injection Date: 02-Mar-2022 06:15:10 Instrument ID: CHHPLC\_X3  
Lims ID: 280-159130-A-2-A Lab Sample ID: 280-159130-2  
Client ID: OS003-DP08-45  
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

## 12 1,3-Dinitrobenzene, CAS: 99-65-0, Signal: 1

RT: 9.15  
Response: 1281  
Amount: 0.004442



Reviewer: zhangji, 02-Mar-2022 12:43:30

Audit Action: Marked Compound Undetected

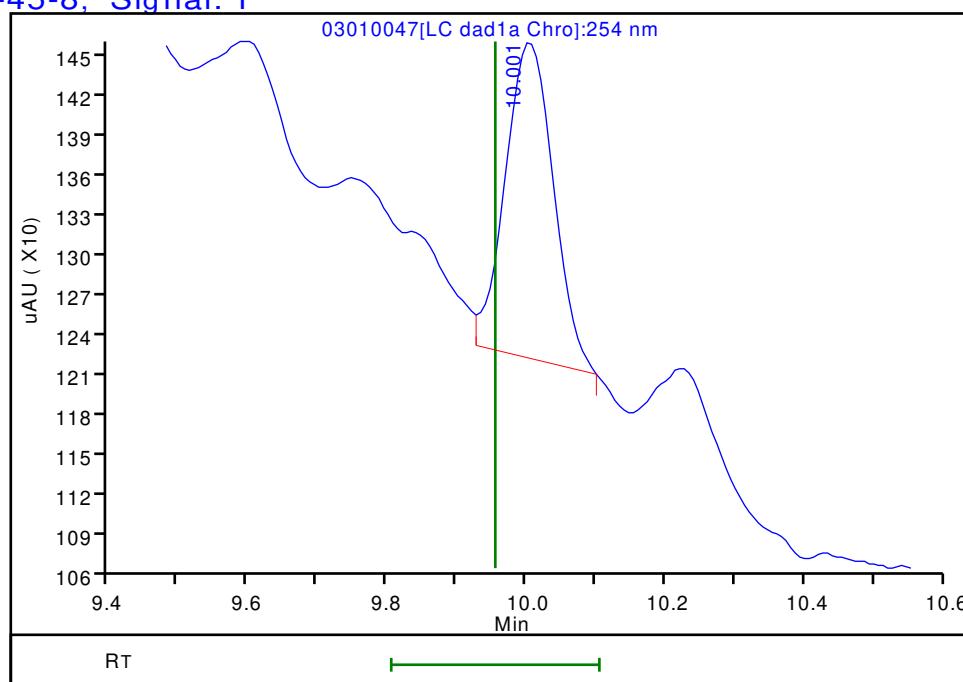
Audit Reason: Invalid Compound ID

## Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010047.d  
Injection Date: 02-Mar-2022 06:15:10 Instrument ID: CHHPLC\_X3  
Lims ID: 280-159130-A-2-A Lab Sample ID: 280-159130-2  
Client ID: OS003-DP08-45  
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

## 15 Tetryl, CAS: 479-45-8, Signal: 1

RT: 10.00  
Response: 1107  
Amount: 0.006490



Reviewer: zhangji, 02-Mar-2022 12:43:30

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I  
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver

Job No.: 280-159130-1

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

Client Sample ID: OS001-DP08-25 Lab Sample ID: 280-159130-3

Matrix: Water Lab File ID: 03010052.D

Analysis Method: 8330A Date Collected: 02/23/2022 11:20

Extraction Method: 3535 Date Extracted: 03/01/2022 11:26

Sample wt/vol: 501.5 (mL) Date Analyzed: 03/02/2022 08:09

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.: 567371 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
118-96-7	2,4,6-Trinitrotoluene	21		0.11	0.10	0.045
606-20-2	2,6-Dinitrotoluene	0.080	U	0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	3.0		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 Q	0.40	0.40	0.19
19406-51-0	4-Amino-2,6-dinitrotoluene	3.7	Q	0.15	0.12	0.058
2691-41-0	HMX	0.20	J M J1	0.21	0.20	0.087
5755-27-1	MNX	0.40	U M	2.0	0.40	0.15
98-95-3	Nitrobenzene	0.20	U	0.21	0.20	0.091
121-82-4	RDX	0.70	M	0.21	0.20	0.051
479-45-8	Tetryl	0.10	U M	0.11	0.10	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	98	M	83-119

**Eurofins Denver**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\03010052.D  
 Lims ID: 280-159130-B-3-A  
 Client ID: OS001-DP08-25  
 Sample Type: Client  
 Inject. Date: 02-Mar-2022 08:09:56 ALS Bottle#: 52 Worklist Smp#: 52  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-159130-B-3-A  
 Misc. Info.: 280-0108907-052  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 02-Mar-2022 13:06:22 Calib Date: 05-Jan-2022 04:24:15  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040037.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1635

First Level Reviewer: zhangji Date: 02-Mar-2022 12:46:06

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1	6.580	6.588	-0.008	1707	0.0204	M
7 MNX	1		7.206			ND	U
8 RDX	1	7.573	7.575	-0.002	7246	0.0699	M
\$ 10 1,2-Dinitrobenzene	1	8.520	8.515	0.005	24553	0.1969	M
11 1,3,5-Trinitrobenzene	1	8.647	8.642	0.005	18473	0.0847	M
12 1,3-Dinitrobenzene	1	9.253	9.262	-0.009	2567	0.008901	
13 Nitrobenzene	1		9.648			ND	7
15 Tetryl	1		9.955			ND	U
17 2,4,6-Trinitrotoluene	1	10.867	10.862	0.005	436405	2.15	
18 4-Amino-2,6-dinitrotoluene	1	11.047	11.042	0.005	56703	0.3756	
19 2-Amino-4,6-dinitrotoluene	1	11.300	11.288	0.012	59864	0.2961	
20 2,6-Dinitrotoluene	1		11.462			ND	
21 2,4-Dinitrotoluene	1	11.673	11.635	0.038	2879	0.0099	
22 o-Nitrotoluene	1		12.475			ND	
23 p-Nitrotoluene	1	12.887	12.895	-0.008	1393	0.0131	
24 m-Nitrotoluene	1		13.462			ND	

### QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

U - Marked Undetected

Report Date: 02-Mar-2022 13:06:28

Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\\denver\\chromdata\\chhplc\_x\\20220301-108907.b\\03010052.d

Injection Date: 02-Mar-2022 08:09:56

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: 280-159130-B-3-A

Lab Sample ID: 280-159130-3

Worklist Smp#: 52

Client ID: OS001-DP08-25

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

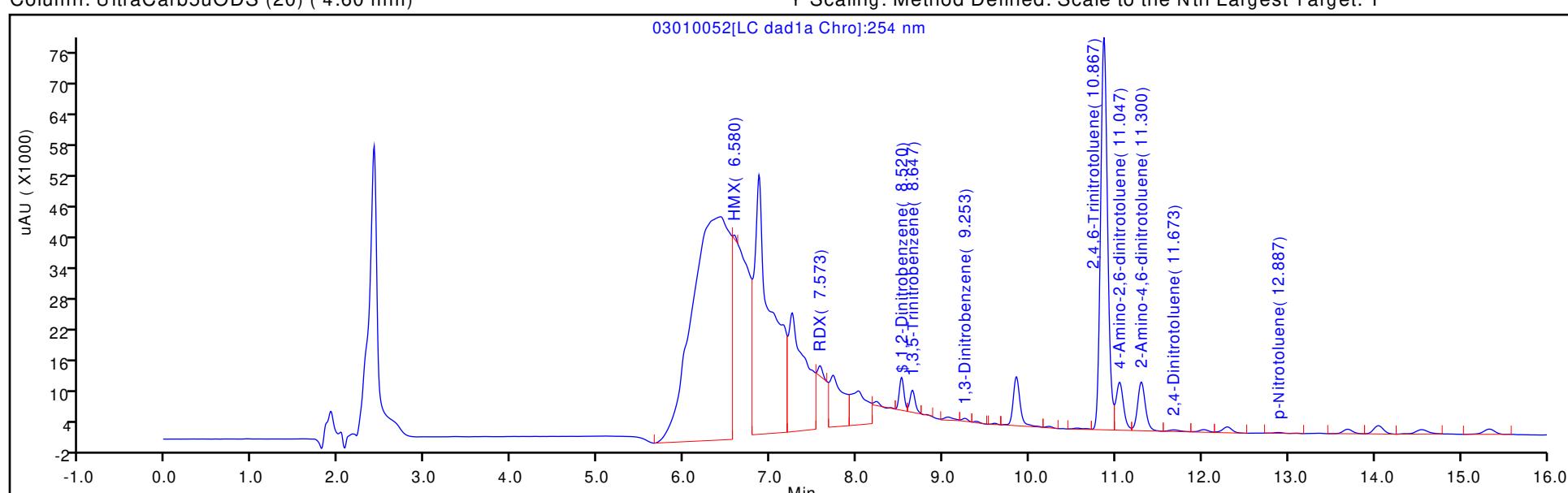
ALS Bottle#: 52

Method: 8330\_X3

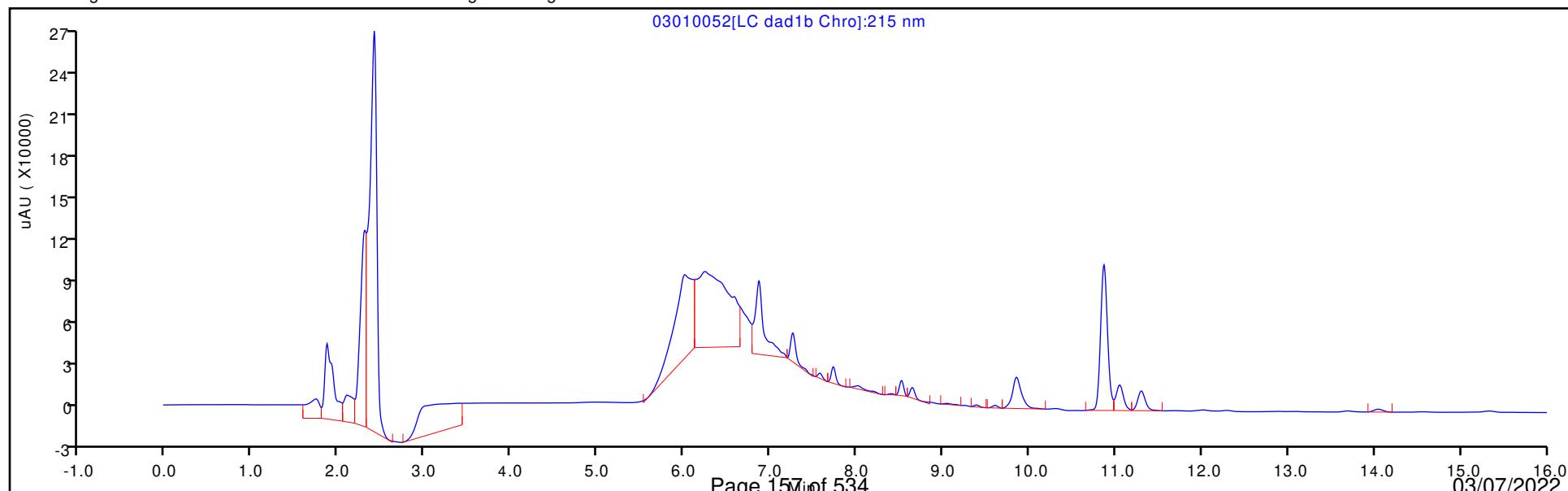
Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Denver  
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\03010052.D  
 Lims ID: 280-159130-B-3-A  
 Client ID: OS001-DP08-25  
 Sample Type: Client  
 Inject. Date: 02-Mar-2022 08:09:56 ALS Bottle#: 52 Worklist Smp#: 52  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-159130-B-3-A  
 Misc. Info.: 280-0108907-052  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 02-Mar-2022 13:06:22 Calib Date: 05-Jan-2022 04:24:15  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040037.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1635

First Level Reviewer: zhangji Date: 02-Mar-2022 12:46:06

Compound	Amount Added	Amount Recovered	% Rec.
\$ 10 1,2-Dinitrobenzene	0.2000	0.1969	98.45

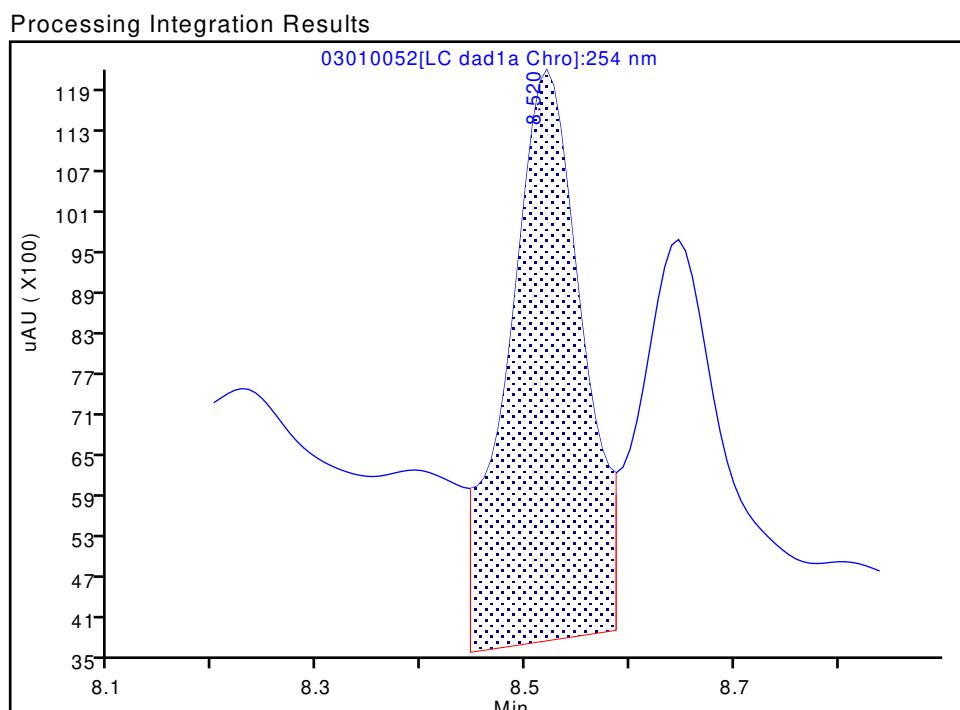
## Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010052.d  
 Injection Date: 02-Mar-2022 08:09:56 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-159130-B-3-A Lab Sample ID: 280-159130-3  
 Client ID: OS001-DP08-25  
 Operator ID: JZ ALS Bottle#: 52 Worklist Smp#: 52  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

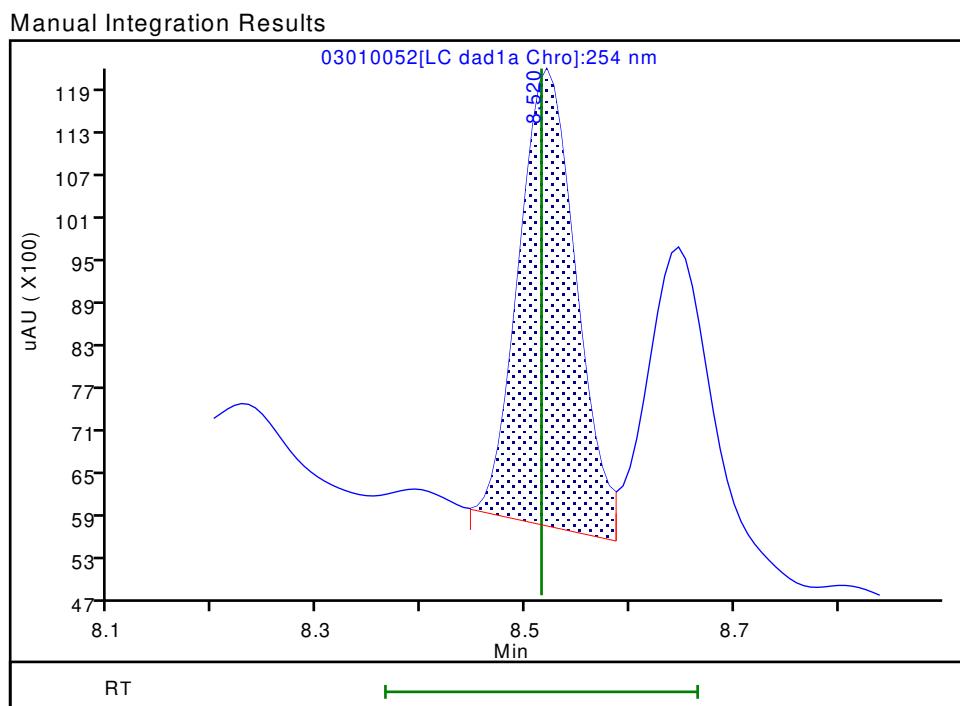
## \$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

RT: 8.52  
 Area: 41542  
 Amount: 0.333142  
 Amount Units: ug/mL



RT: 8.52  
 Area: 24553  
 Amount: 0.196900  
 Amount Units: ug/mL



Reviewer: zhangji, 02-Mar-2022 12:45:23

Audit Action: Assigned New Baseline

Audit Reason: Baseline

## Eurofins Denver

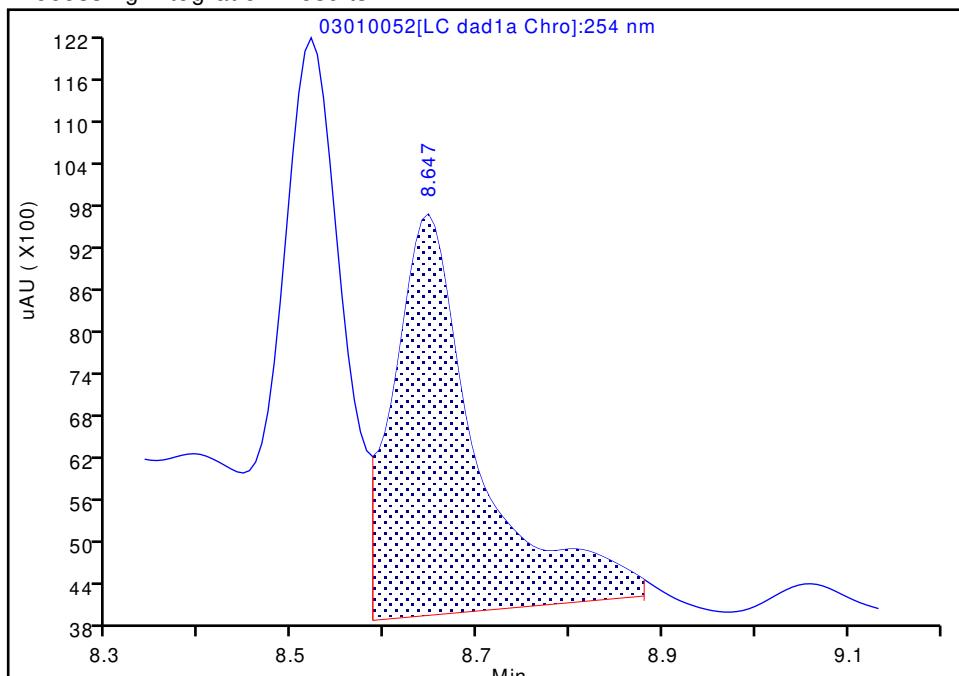
Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010052.d  
 Injection Date: 02-Mar-2022 08:09:56 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-159130-B-3-A Lab Sample ID: 280-159130-3  
 Client ID: OS001-DP08-25  
 Operator ID: JZ ALS Bottle#: 52 Worklist Smp#: 52  
 Injection Vol: 100.0 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

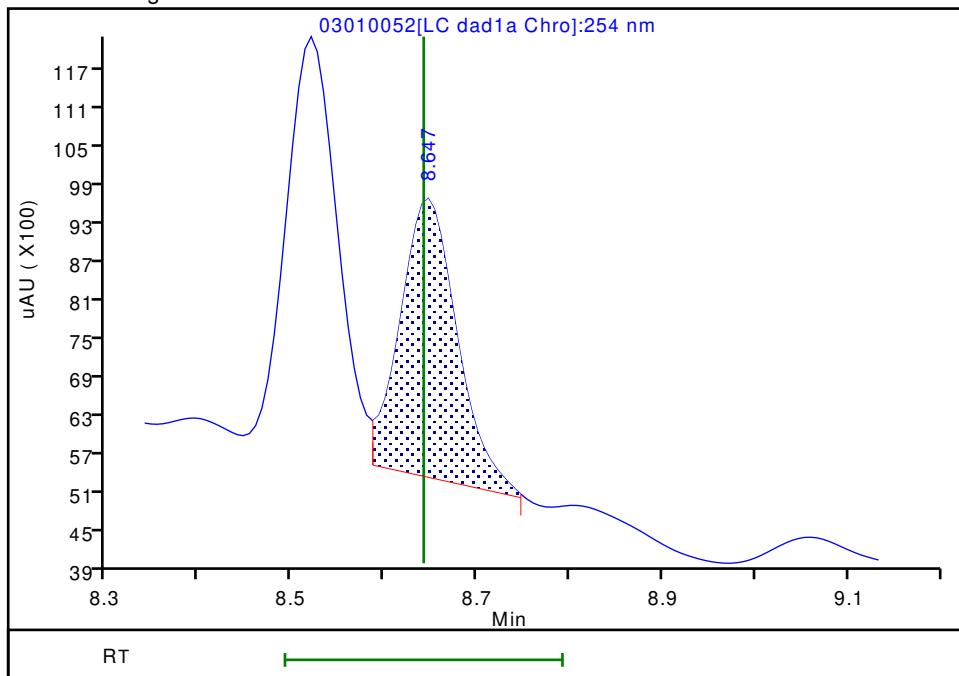
RT: 8.65  
 Area: 36110  
 Amount: 0.165570  
 Amount Units: ug/mL

## Processing Integration Results



RT: 8.65  
 Area: 18473  
 Amount: 0.084701  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 02-Mar-2022 12:45:26

Audit Action: Split an Integrated Peak

Audit Reason: Baseline

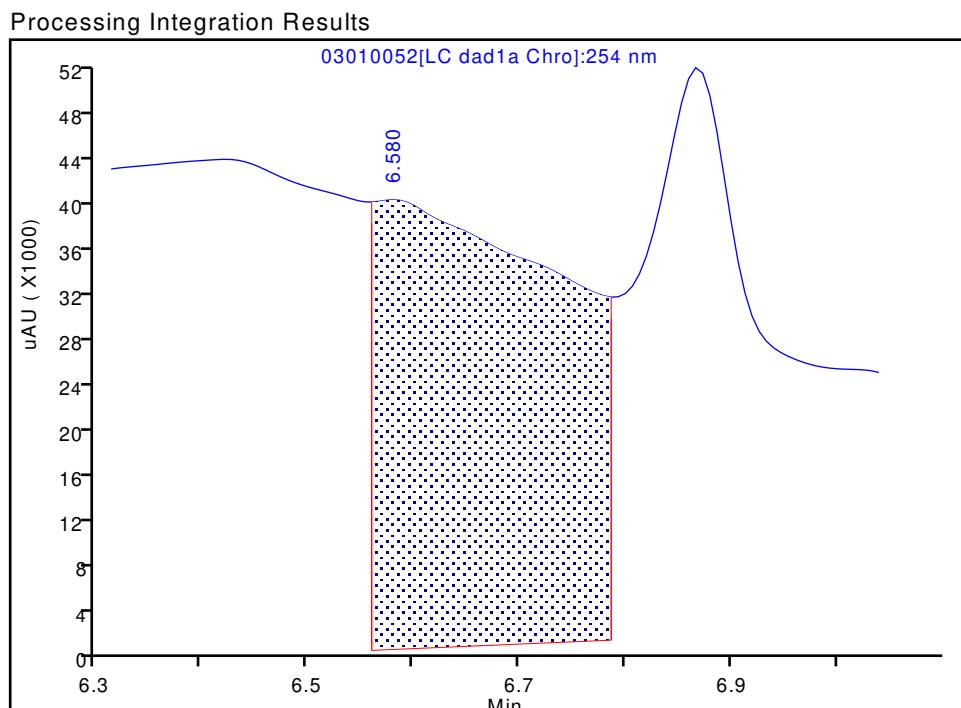
## Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010052.d  
 Injection Date: 02-Mar-2022 08:09:56 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-159130-B-3-A Lab Sample ID: 280-159130-3  
 Client ID: OS001-DP08-25  
 Operator ID: JZ ALS Bottle#: 52 Worklist Smp#: 52  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

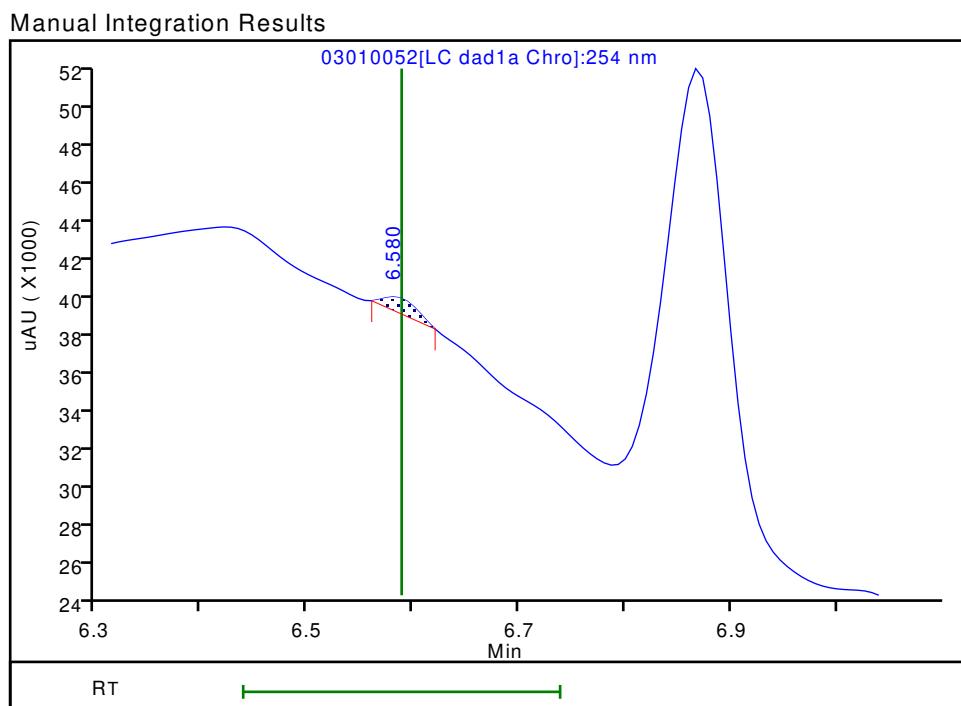
4 HMX, CAS: 2691-41-0

Signal: 1

RT: 6.58  
 Area: 483529  
 Amount: 5.768163  
 Amount Units: ug/mL



RT: 6.58  
 Area: 1707  
 Amount: 0.020363  
 Amount Units: ug/mL



Reviewer: zhangji, 02-Mar-2022 12:45:34

Audit Action: Manually Integrated

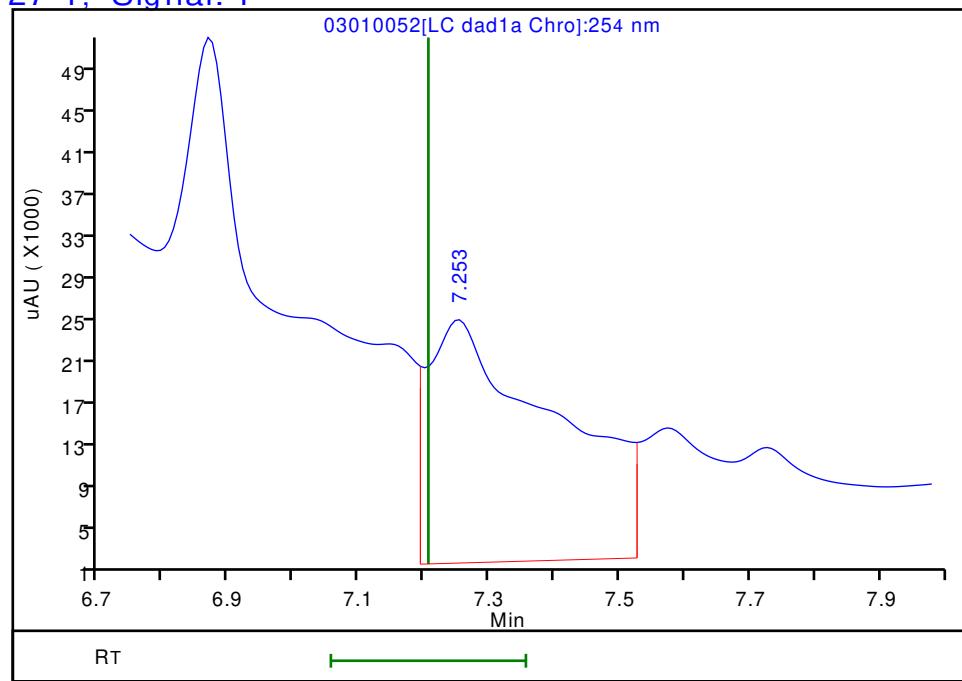
Audit Reason: Baseline

## Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010052.d  
Injection Date: 02-Mar-2022 08:09:56 Instrument ID: CHHPLC\_X3  
Lims ID: 280-159130-B-3-A Lab Sample ID: 280-159130-3  
Client ID: OS001-DP08-25  
Operator ID: JZ ALS Bottle#: 52 Worklist Smp#: 52  
Injection Vol: 100.0 ul Dil. Factor: 1.0000  
Method: 8330\_X3 Limit Group: GCSV - 8330  
Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

7 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.25  
Response: 316047  
Amount: 2.508401



Reviewer: zhangji, 02-Mar-2022 12:46:06

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

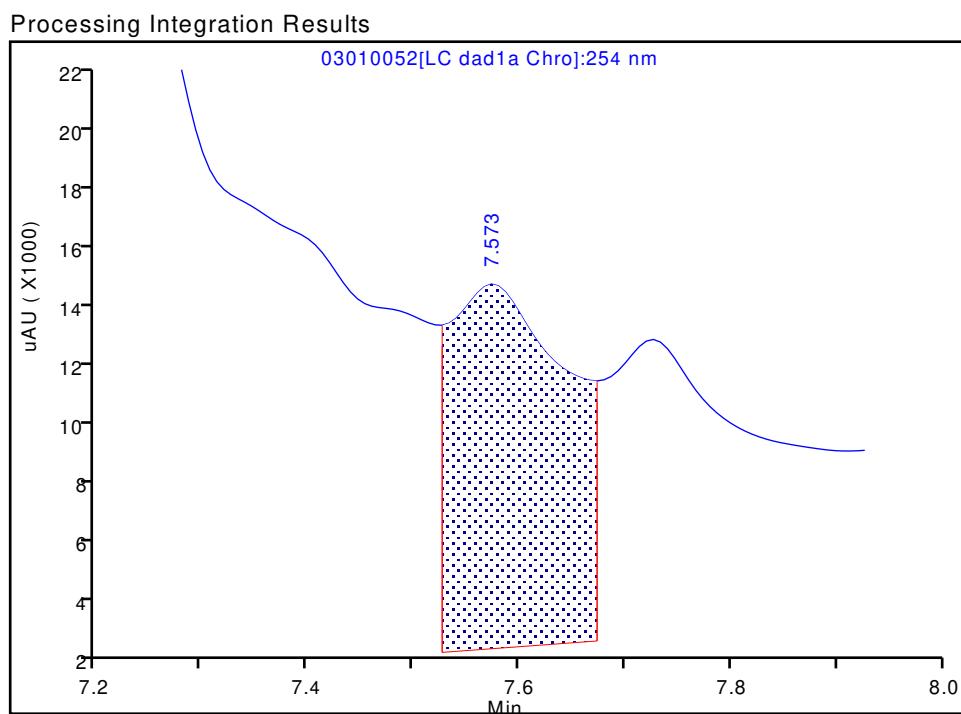
## Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010052.d  
 Injection Date: 02-Mar-2022 08:09:56 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-159130-B-3-A Lab Sample ID: 280-159130-3  
 Client ID: OS001-DP08-25  
 Operator ID: JZ ALS Bottle#: 52 Worklist Smp#: 52  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

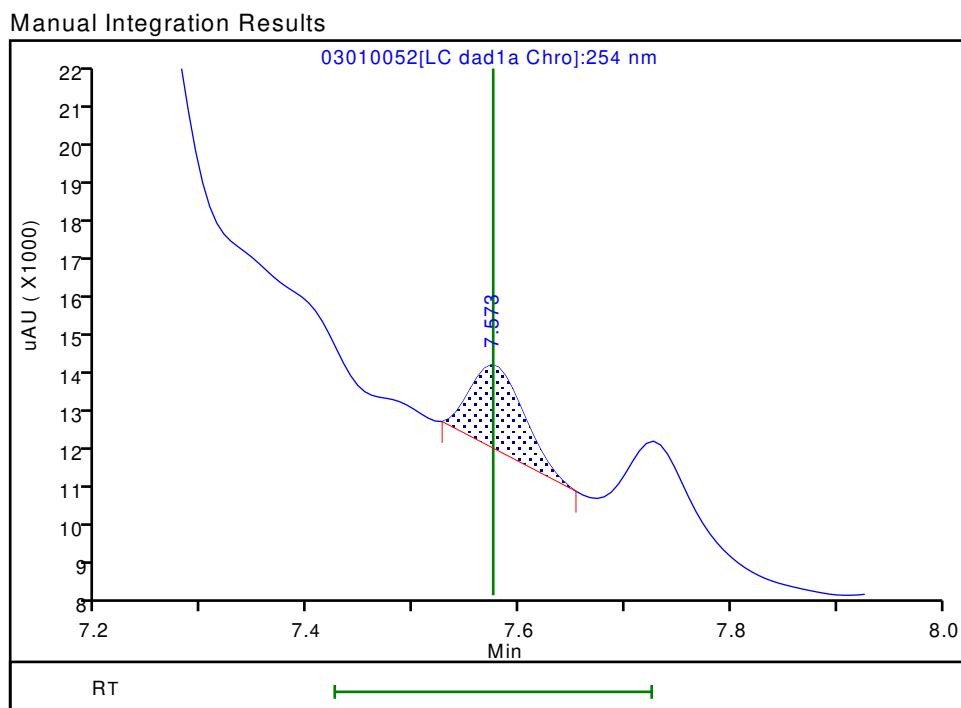
8 RDX, CAS: 121-82-4

Signal: 1

RT: 7.57  
 Area: 93907  
 Amount: 0.906358  
 Amount Units: ug/mL



RT: 7.57  
 Area: 7246  
 Amount: 0.069936  
 Amount Units: ug/mL



Reviewer: zhangji, 02-Mar-2022 12:45:44

Audit Action: Manually Integrated

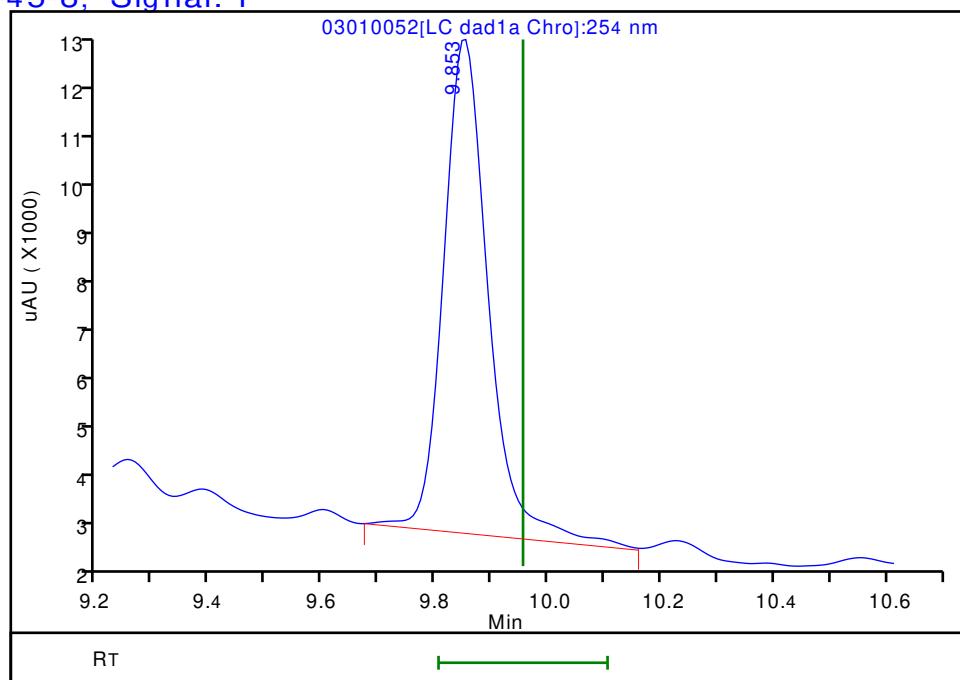
Audit Reason: Baseline

## Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010052.d  
Injection Date: 02-Mar-2022 08:09:56 Instrument ID: CHHPLC\_X3  
Lims ID: 280-159130-B-3-A Lab Sample ID: 280-159130-3  
Client ID: OS001-DP08-25  
Operator ID: JZ ALS Bottle#: 52 Worklist Smp#: 52  
Injection Vol: 100.0 ul Dil. Factor: 1.0000  
Method: 8330\_X3 Limit Group: GCSV - 8330  
Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

## 15 Tetryl, CAS: 479-45-8, Signal: 1

RT: 9.85  
Response: 53201  
Amount: 0.311907



Reviewer: zhangji, 02-Mar-2022 12:46:06

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I  
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver Job No.: 280-159130-1  
SDG No.:  
Client Sample ID: OS001-DP08-25 Lab Sample ID: 280-159130-3  
Matrix: Water Lab File ID: 03030019.D  
Analysis Method: 8330A Date Collected: 02/23/2022 11:20  
Extraction Method: 3535 Date Extracted: 03/01/2022 11:26  
Sample wt/vol: 501.5 (mL) Date Analyzed: 03/03/2022 21:39  
Con. Extract Vol.: 5 (mL) Dilution Factor: 1  
Injection Volume: 100 (uL) GC Column: Luna-phenylhex ID: 4.6 (mm)  
% Moisture:  
Analysis Batch No.: 567645 GPC Cleanup: (Y/N) N  
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
121-14-2	2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.027
99-99-0	4-Nitrotoluene	0.40	U	0.41	0.40	0.10
2691-41-0	HMX	0.45	M J1	0.21	0.20	0.087

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	101		83-119

**Eurofins Denver**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220303-108978.b\03030019.D  
 Lims ID: 280-159130-B-3-A  
 Client ID: OS001-DP08-25  
 Sample Type: Client  
 Inject. Date: 03-Mar-2022 21:39:27 ALS Bottle#: 19 Worklist Smp#: 19  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-159130-B-3-A  
 Misc. Info.: 280-0108978-019  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220303-108978.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 04-Mar-2022 12:18:20 Calib Date: 03-Mar-2022 07:19:48  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020027.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm) Det: LC mwd1A, 254 nm  
 Process Host: CTX1659

First Level Reviewer: zhangji Date: 04-Mar-2022 12:08:12

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
5 HMX	1	6.883	6.916	-0.033	7517	0.0452	M
6 MNX	1		7.649			ND	U
8 RDX	1	9.116	9.150	-0.034	12865	0.0662	M
9 Nitrobenzene	1		12.083			ND	
\$ 10 1,2-Dinitrobenzene	1	13.289	13.323	-0.034	50443	0.2020	
12 1,3-Dinitrobenzene	1		15.683			ND	
14 o-Nitrotoluene	1	16.783	16.863	-0.080	14081	0.0600	
16 p-Nitrotoluene	1		17.176			ND	
17 4-Amino-2,6-dinitrotoluene	1	17.776	17.823	-0.047	89694	0.3359	
18 m-Nitrotoluene	1		18.150			ND	
19 2-Amino-4,6-dinitrotoluene	1	18.776	18.843	-0.067	134782	0.3738	
20 1,3,5-Trinitrobenzene	1		18.996			ND	
21 2,6-Dinitrotoluene	1		20.316			ND	
22 2,4-Dinitrotoluene	1		20.836			ND	
23 Tetryl	1		24.583			ND	
24 2,4,6-Trinitrotoluene	1	25.276	25.330	-0.054	749662	2.03	

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

U - Marked Undetected

Report Date: 04-Mar-2022 12:18:25

Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220303-108978.b\03030019.D

Injection Date: 03-Mar-2022 21:39:27

Instrument ID: CHHPLC\_X5

Operator ID: JZ

Lims ID: 280-159130-B-3-A

Lab Sample ID: 280-159130-3

Worklist Smp#: 19

Client ID: OS001-DP08-25

Dil. Factor: 1.0000

ALS Bottle#: 19

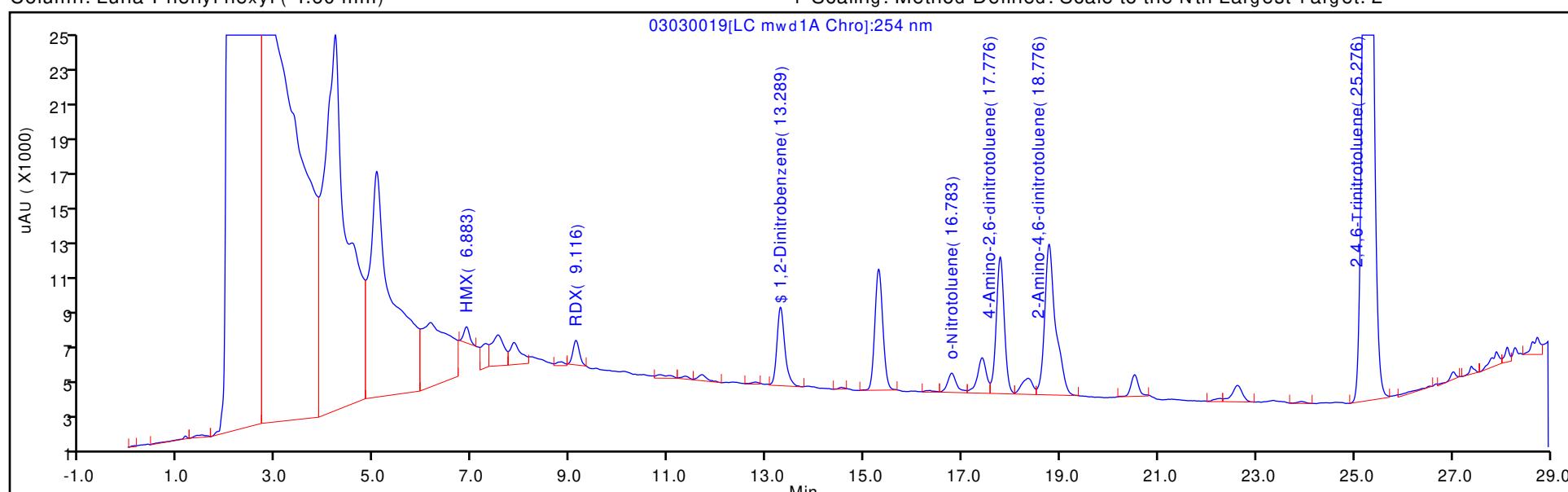
Injection Vol: 100.0 ul

Limit Group: GCSV - 8330

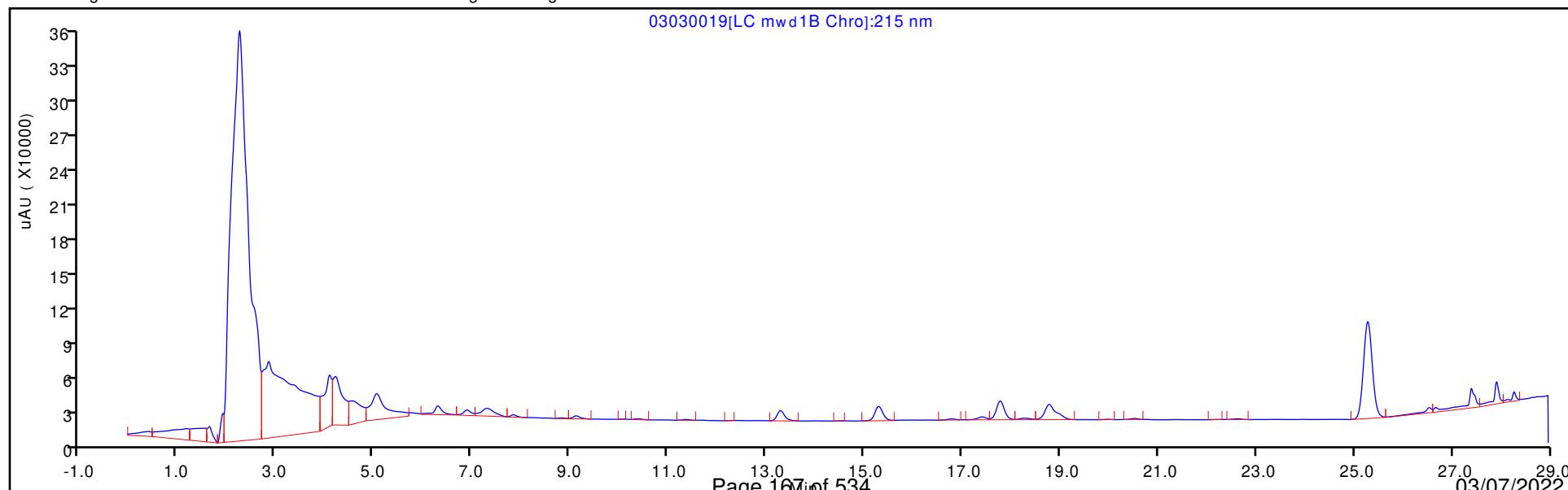
Method: 8330\_X5\_Luna

Column: Luna-Phenyl hexyl ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Denver  
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220303-108978.b\03030019.D  
 Lims ID: 280-159130-B-3-A  
 Client ID: OS001-DP08-25  
 Sample Type: Client  
 Inject. Date: 03-Mar-2022 21:39:27 ALS Bottle#: 19 Worklist Smp#: 19  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-159130-B-3-A  
 Misc. Info.: 280-0108978-019  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220303-108978.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 04-Mar-2022 12:18:20 Calib Date: 03-Mar-2022 07:19:48  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020027.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm ) Det: LC mwd1A, 254 nm  
 Process Host: CTX1659

First Level Reviewer: zhangji Date: 04-Mar-2022 12:08:12

Compound	Amount Added	Amount Recovered	% Rec.
\$ 10 1,2-Dinitrobenzene	0.2000	0.2020	100.99

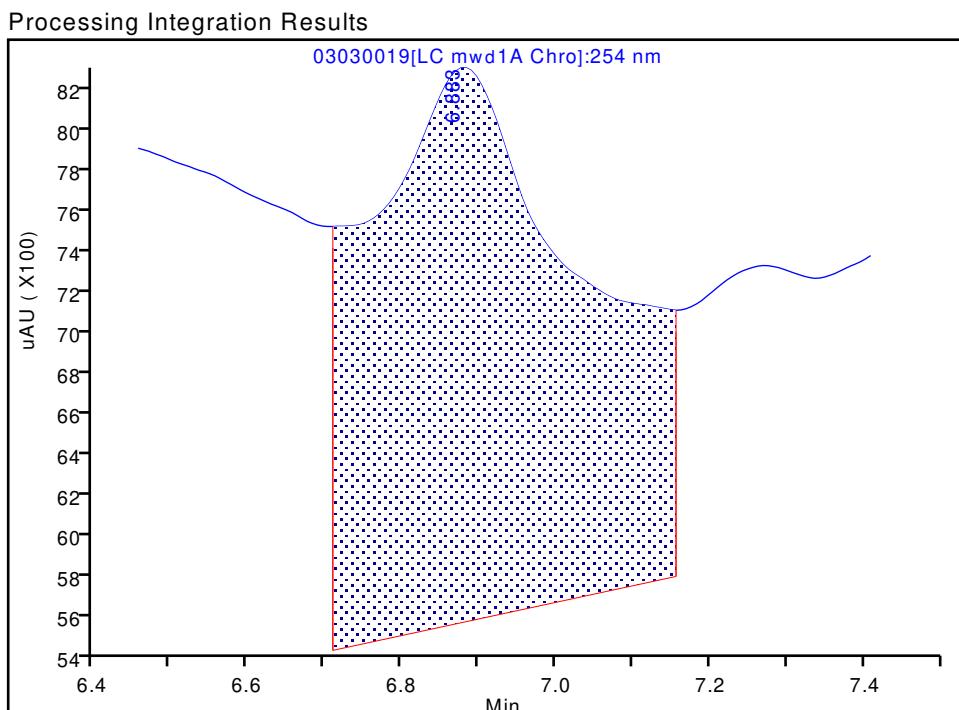
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220303-108978.b\03030019.D  
 Injection Date: 03-Mar-2022 21:39:27 Instrument ID: CHHPLC\_X5  
 Lims ID: 280-159130-B-3-A Lab Sample ID: 280-159130-3  
 Client ID: OS001-DP08-25  
 Operator ID: JZ ALS Bottle#: 19 Worklist Smp#: 19  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X5\_Luna Limit Group: GCSV - 8330  
 Column: Luna-Phenyl hexyl ( 4.60 mm) Detector LC mwd1A, 254 nm

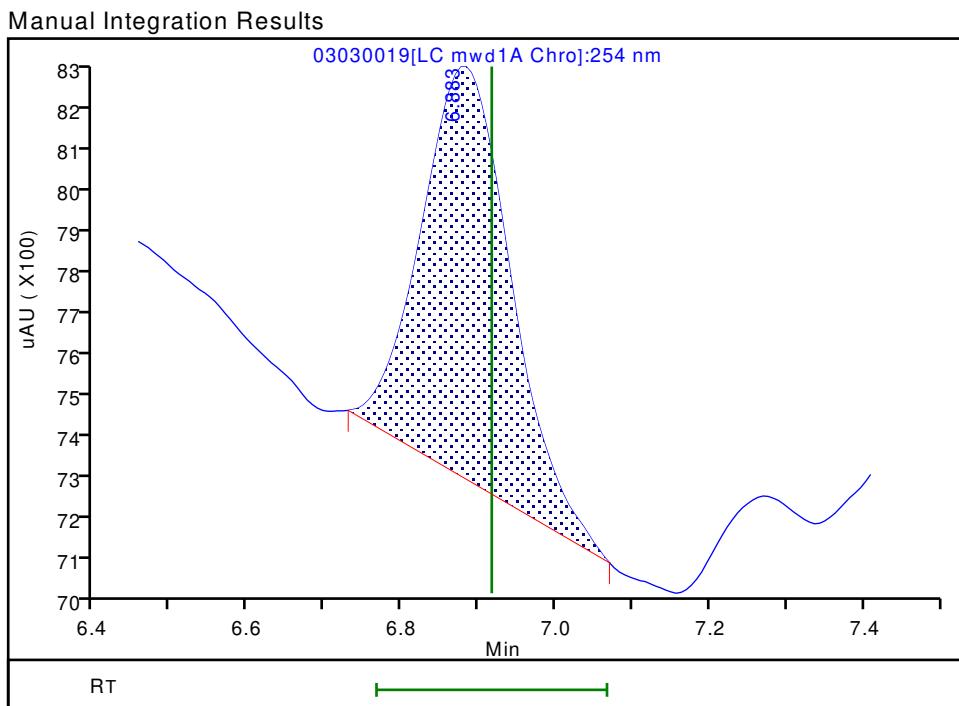
**5 HMX, CAS: 2691-41-0**

Signal: 1

RT: 6.88  
 Area: 52347  
 Amount: 0.315087  
 Amount Units: ug/ml



RT: 6.88  
 Area: 7517  
 Amount: 0.045246  
 Amount Units: ug/ml



Reviewer: zhangji, 04-Mar-2022 12:08:03

Audit Action: Manually Integrated

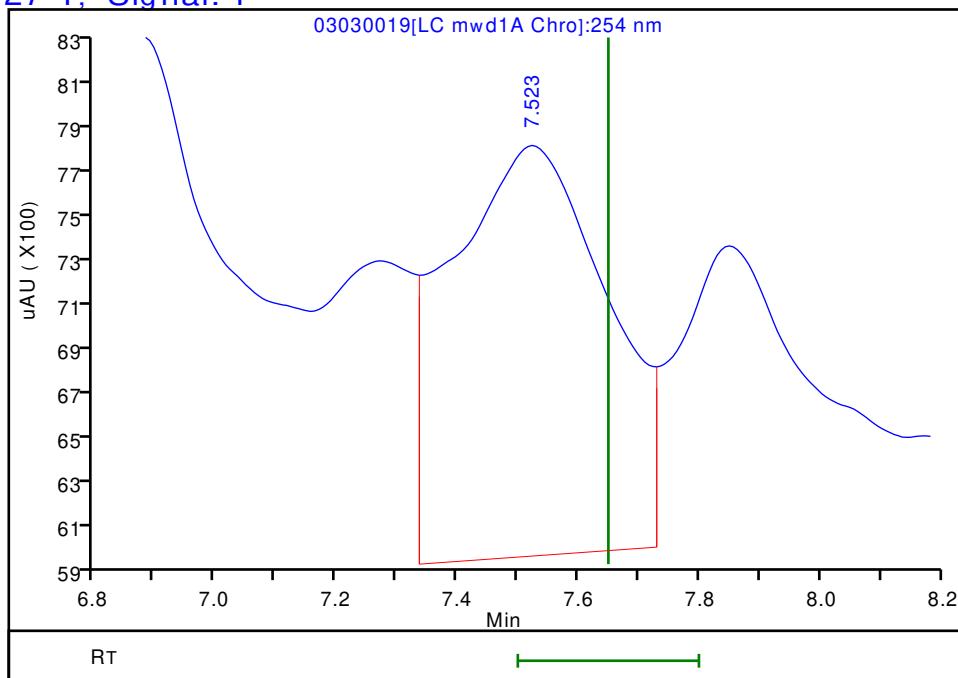
Audit Reason: Baseline Smoothing

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220303-108978.b\03030019.D  
Injection Date: 03-Mar-2022 21:39:27 Instrument ID: CHHPLC\_X5  
Lims ID: 280-159130-B-3-A Lab Sample ID: 280-159130-3  
Client ID: OS001-DP08-25  
Operator ID: JZ ALS Bottle#: 19 Worklist Smp#: 19  
Injection Vol: 100.0 ul Dil. Factor: 1.0000  
Method: 8330\_X5\_Luna Limit Group: GCSV - 8330  
Column: Luna-Phenyl hexyl ( 4.60 mm) Detector: LC mwd1A, 254 nm

6 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.52  
Response: 31766  
Amount: 0.127023



Reviewer: zhangji, 04-Mar-2022 12:08:12

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

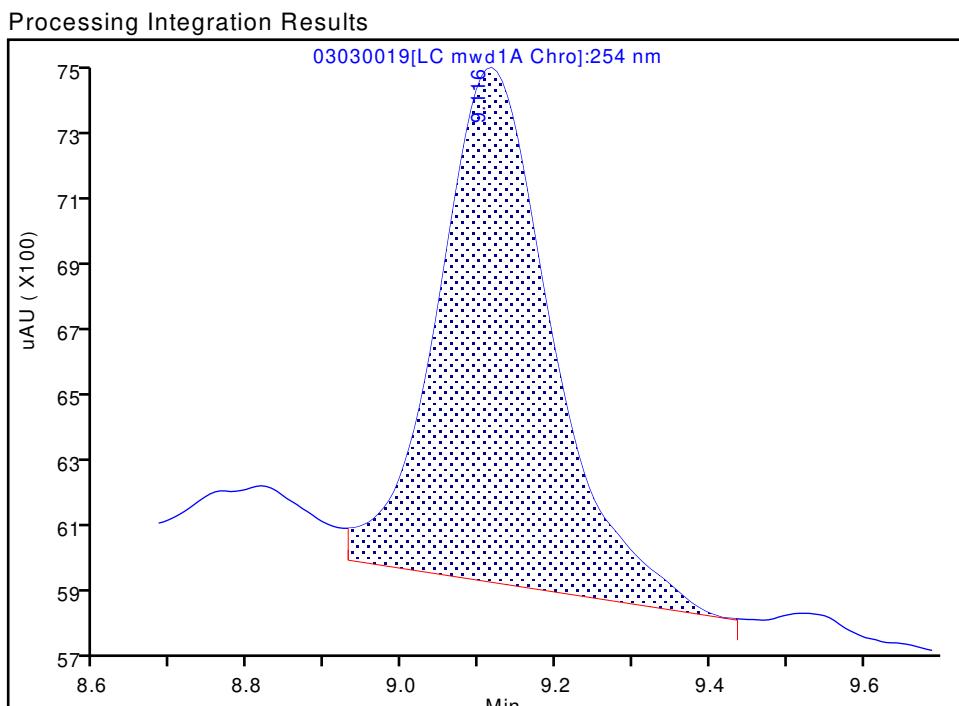
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220303-108978.b\03030019.D  
 Injection Date: 03-Mar-2022 21:39:27 Instrument ID: CHHPLC\_X5  
 Lims ID: 280-159130-B-3-A Lab Sample ID: 280-159130-3  
 Client ID: OS001-DP08-25  
 Operator ID: JZ ALS Bottle#: 19 Worklist Smp#: 19  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X5\_Luna Limit Group: GCSV - 8330  
 Column: Luna-Phenyl hexyl ( 4.60 mm) Detector: LC mwd1A, 254 nm

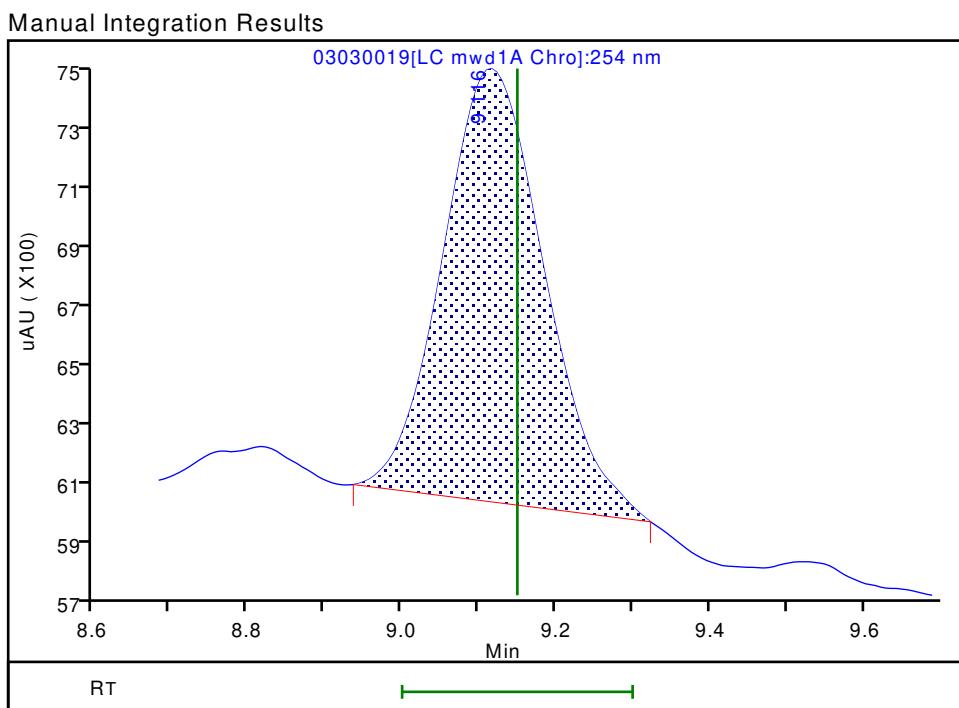
**8 RDX, CAS: 121-82-4**

Signal: 1

RT: 9.12  
 Area: 15555  
 Amount: 0.080044  
 Amount Units: ug/ml



RT: 9.12  
 Area: 12865  
 Amount: 0.066201  
 Amount Units: ug/ml



Reviewer: zhangji, 04-Mar-2022 12:08:07

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

FORM I  
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver

Job No.: 280-159130-1

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

Client Sample ID: OS501-DP08-25

Lab Sample ID: 280-159130-4

Matrix: Water

Lab File ID: 03010055.D

Analysis Method: 8330A

Date Collected: 02/23/2022 08:00

Extraction Method: 3535

Date Extracted: 03/01/2022 11:26

Sample wt/vol: 504.7 (mL)

Date Analyzed: 03/02/2022 09:18

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.: 567371

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
118-96-7	2,4,6-Trinitrotoluene	21		0.11	0.099	0.045
121-14-2	2,4-Dinitrotoluene	0.079	U M	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	3.0		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 Q	0.40	0.40	0.19
19406-51-0	4-Amino-2,6-dinitrotoluene	3.8	Q	0.15	0.12	0.057
99-99-0	4-Nitrotoluene	0.40	U	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 M	2.0	0.40	0.15
98-95-3	Nitrobenzene	0.20	U	0.21	0.20	0.090
121-82-4	RDX	0.69		0.21	0.20	0.051
479-45-8	Tetryl	0.099	U M	0.11	0.099	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	93	M	83-119

**Eurofins Denver**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\03010055.D  
 Lims ID: 280-159130-B-4-A  
 Client ID: OS501-DP08-25  
 Sample Type: Client  
 Inject. Date: 02-Mar-2022 09:18:43 ALS Bottle#: 55 Worklist Smp#: 55  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-159130-B-4-A  
 Misc. Info.: 280-0108907-055  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 02-Mar-2022 13:06:29 Calib Date: 05-Jan-2022 04:24:15  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040037.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1635

First Level Reviewer: zhangji Date: 02-Mar-2022 12:47:07

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1	6.588				ND	
7 MNX	1	7.206				ND	U
8 RDX	1	7.582	7.575	0.007	7200	0.0695	
\$ 10 1,2-Dinitrobenzene	1	8.522	8.515	0.007	23263	0.1866	M
11 1,3,5-Trinitrobenzene	1	8.648	8.642	0.006	18448	0.0846	M
12 1,3-Dinitrobenzene	1	9.255	9.262	-0.007	2108	0.007309	
13 Nitrobenzene	1	9.648				ND	7
15 Tetryl	1	9.955				ND	U
17 2,4,6-Trinitrotoluene	1	10.868	10.862	0.006	420753	2.08	
18 4-Amino-2,6-dinitrotoluene	1	11.048	11.042	0.006	57589	0.3814	
19 2-Amino-4,6-dinitrotoluene	1	11.301	11.288	0.013	60748	0.3005	
20 2,6-Dinitrotoluene	1	11.462				ND	
21 2,4-Dinitrotoluene	1	11.635				ND	U
22 o-Nitrotoluene	1	12.475				ND	
23 p-Nitrotoluene	1	12.895				ND	7
24 m-Nitrotoluene	1	13.462				ND	

### QC Flag Legend

#### Processing Flags

7 - Failed Limit of Detection

#### Review Flags

M - Manually Integrated

U - Marked Undetected

Report Date: 02-Mar-2022 13:06:30

Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010055.d

Injection Date: 02-Mar-2022 09:18:43

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: 280-159130-B-4-A

Lab Sample ID: 280-159130-4

Worklist Smp#: 55

Client ID: OS501-DP08-25

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

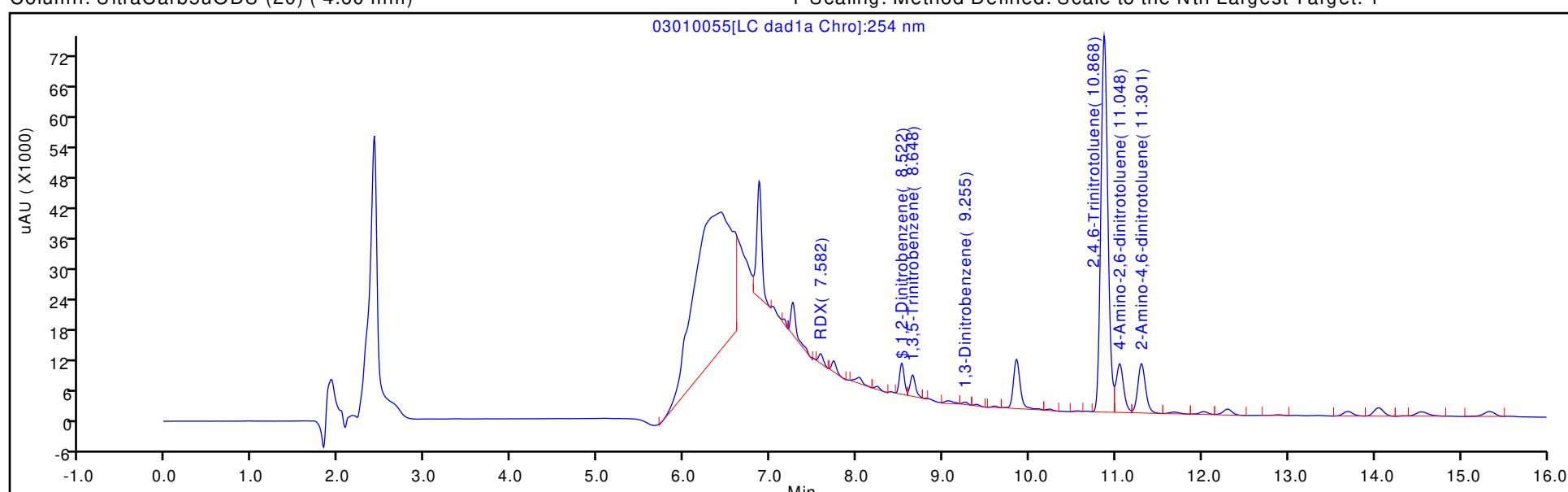
ALS Bottle#: 55

Method: 8330\_X3

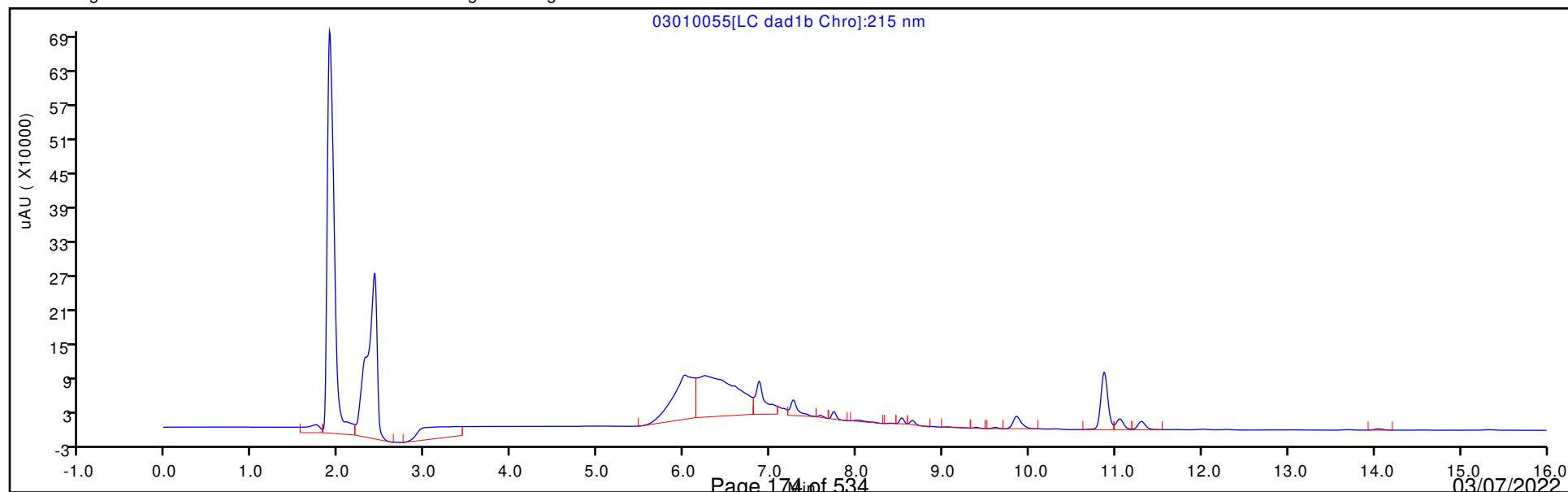
Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Denver  
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\03010055.D  
 Lims ID: 280-159130-B-4-A  
 Client ID: OS501-DP08-25  
 Sample Type: Client  
 Inject. Date: 02-Mar-2022 09:18:43 ALS Bottle#: 55 Worklist Smp#: 55  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-159130-B-4-A  
 Misc. Info.: 280-0108907-055  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 02-Mar-2022 13:06:29 Calib Date: 05-Jan-2022 04:24:15  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040037.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1635

First Level Reviewer: zhangji Date: 02-Mar-2022 12:47:07

Compound	Amount Added	Amount Recovered	% Rec.
\$ 10 1,2-Dinitrobenzene	0.2000	0.1866	93.28

## Eurofins Denver

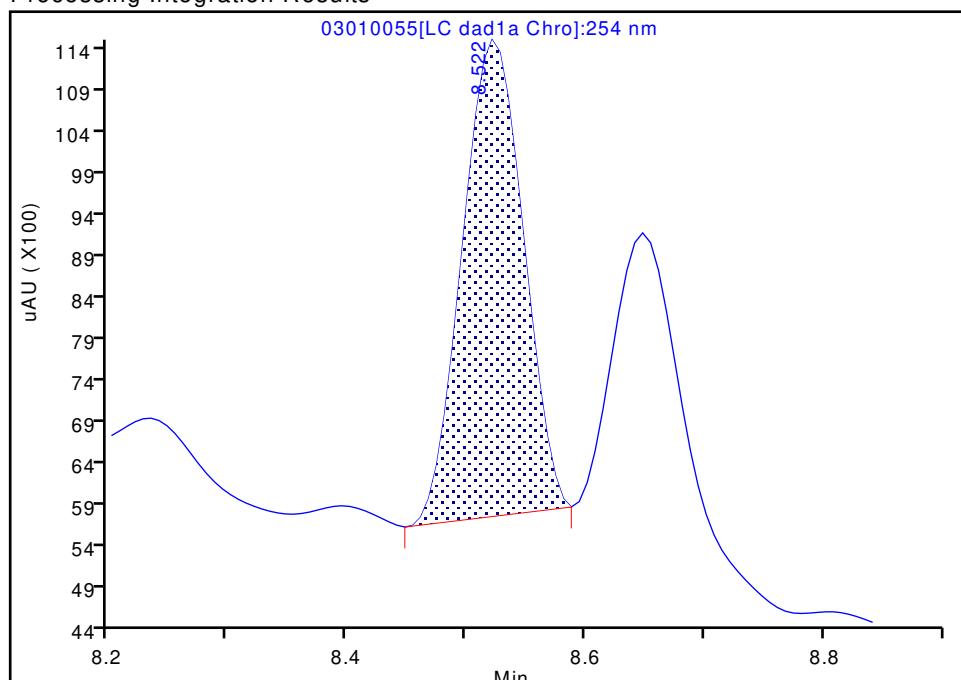
Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010055.d  
 Injection Date: 02-Mar-2022 09:18:43 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-159130-B-4-A Lab Sample ID: 280-159130-4  
 Client ID: OS501-DP08-25  
 Operator ID: JZ ALS Bottle#: 55 Worklist Smp#: 55  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

## \$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

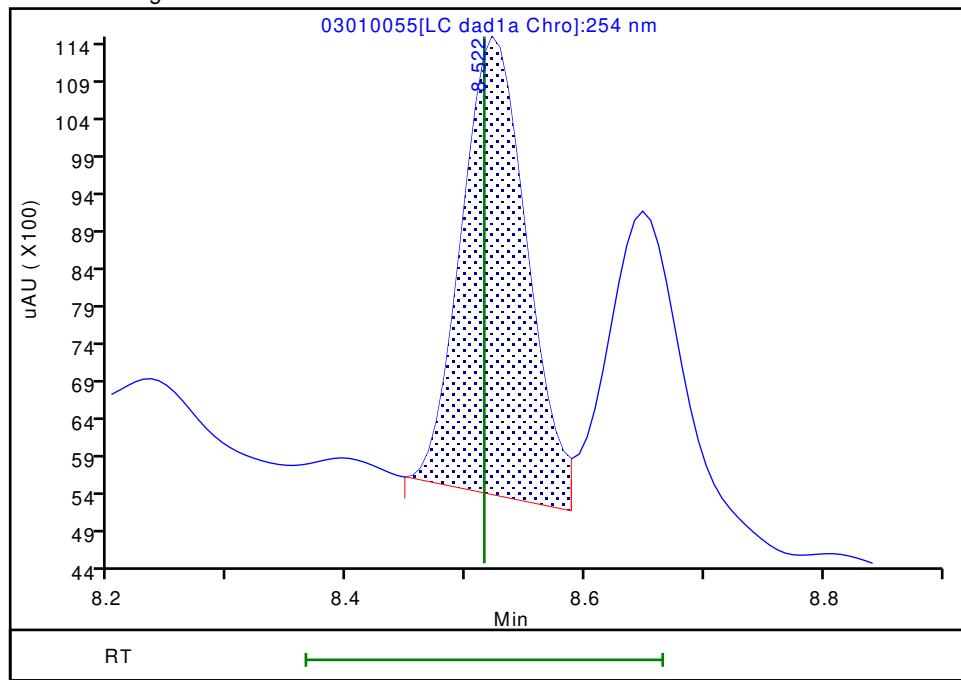
RT: 8.52  
 Area: 20399  
 Amount: 0.163588  
 Amount Units: ug/mL

## Processing Integration Results



RT: 8.52  
 Area: 23263  
 Amount: 0.186555  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 02-Mar-2022 12:46:57

Audit Action: Assigned New Baseline

Audit Reason: Baseline

## Eurofins Denver

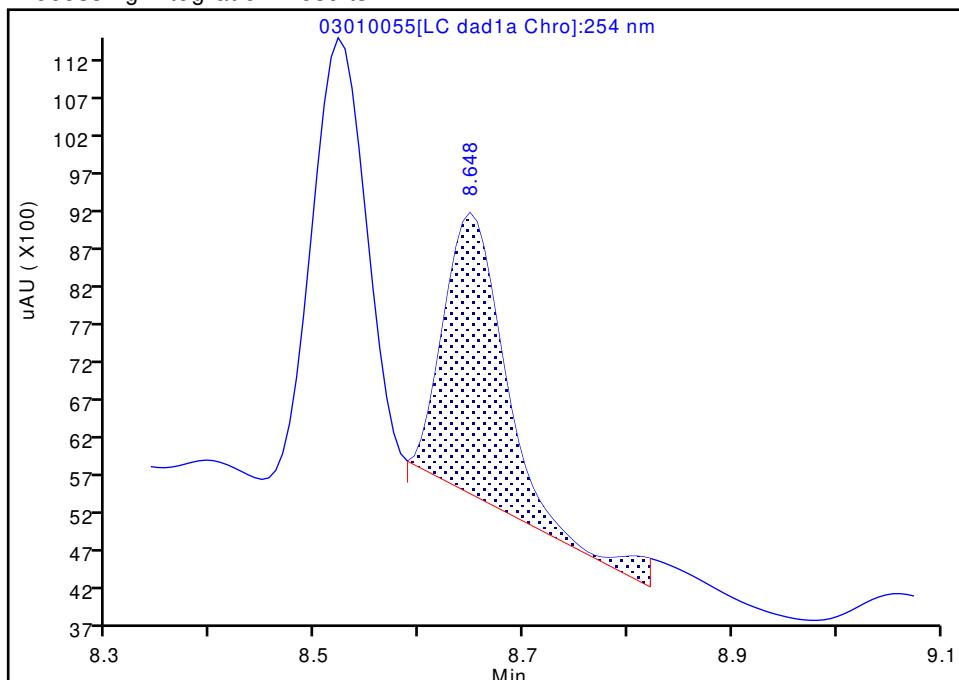
Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010055.d  
 Injection Date: 02-Mar-2022 09:18:43 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-159130-B-4-A Lab Sample ID: 280-159130-4  
 Client ID: OS501-DP08-25  
 Operator ID: JZ ALS Bottle#: 55 Worklist Smp#: 55  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

## 11 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

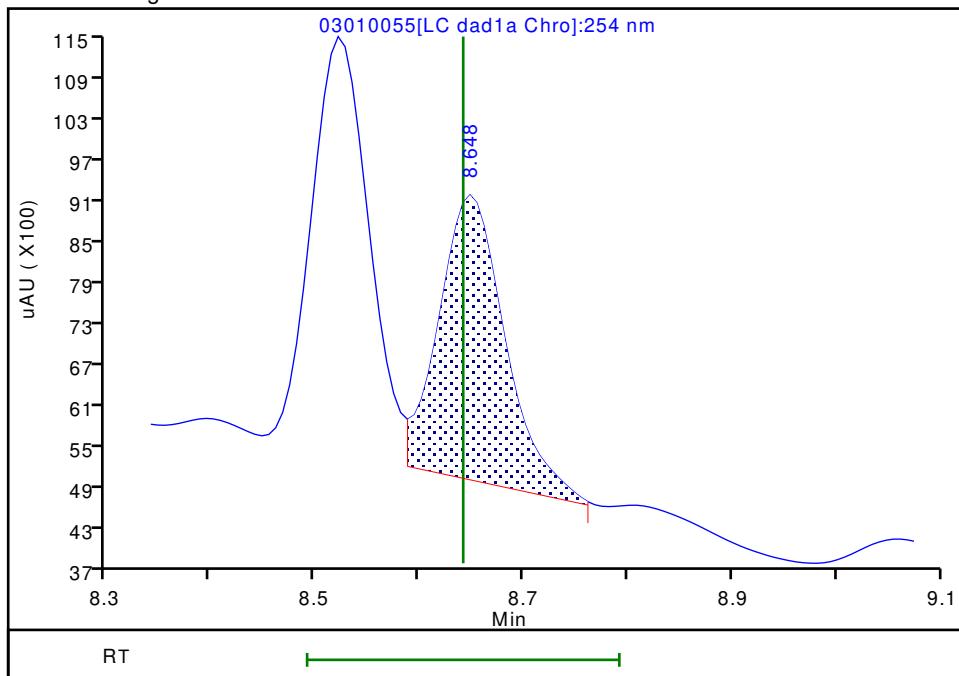
RT: 8.65  
 Area: 15453  
 Amount: 0.070854  
 Amount Units: ug/mL

## Processing Integration Results



RT: 8.65  
 Area: 18448  
 Amount: 0.084587  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 02-Mar-2022 12:47:00

Audit Action: Split an Integrated Peak

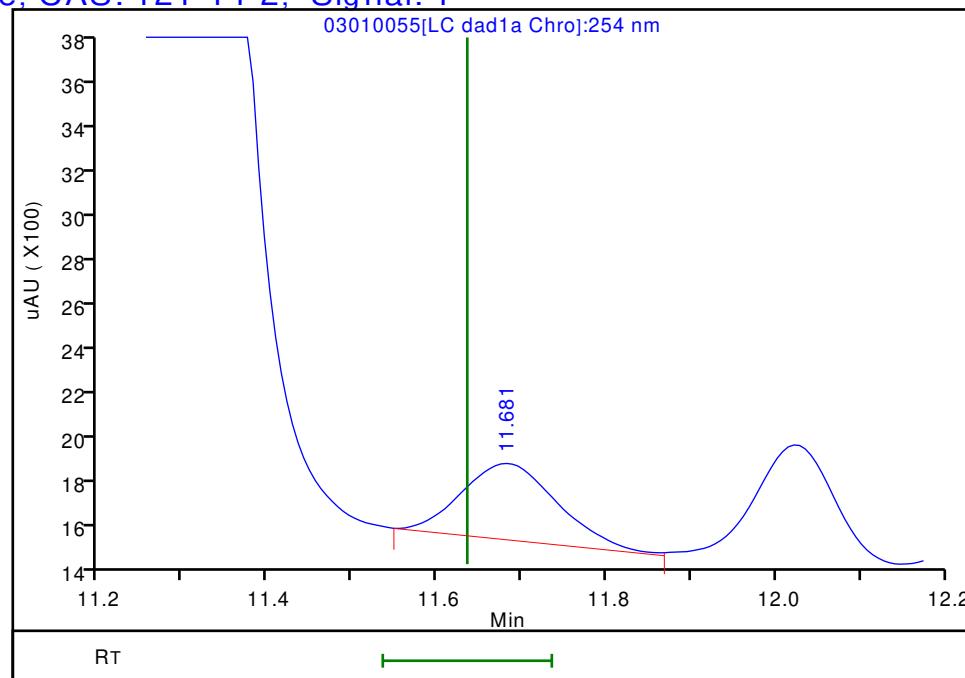
Audit Reason: Baseline

## Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010055.d  
Injection Date: 02-Mar-2022 09:18:43 Instrument ID: CHHPLC\_X3  
Lims ID: 280-159130-B-4-A Lab Sample ID: 280-159130-4  
Client ID: OS501-DP08-25  
Operator ID: JZ ALS Bottle#: 55 Worklist Smp#: 55  
Injection Vol: 100.0 ul Dil. Factor: 1.0000  
Method: 8330\_X3 Limit Group: GCSV - 8330  
Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

## 21 2,4-Dinitrotoluene, CAS: 121-14-2, Signal: 1

RT: 11.68  
Response: 2649  
Amount: 0.009155



Reviewer: zhangji, 02-Mar-2022 12:47:07

Audit Action: Marked Compound Undetected

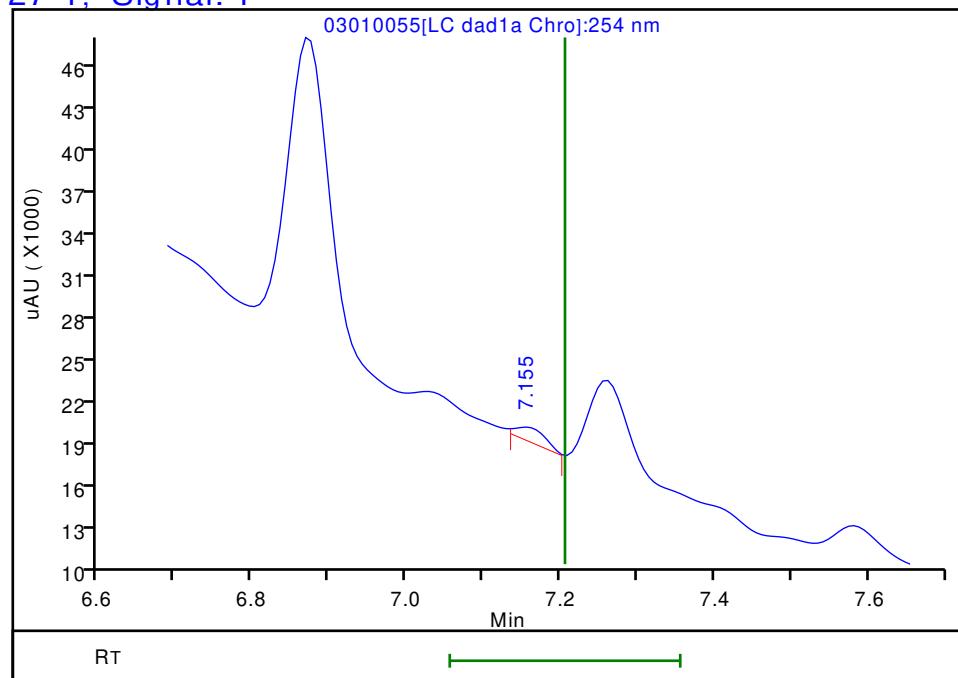
Audit Reason: Invalid Compound ID

## Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010055.d  
Injection Date: 02-Mar-2022 09:18:43 Instrument ID: CHHPLC\_X3  
Lims ID: 280-159130-B-4-A Lab Sample ID: 280-159130-4  
Client ID: OS501-DP08-25  
Operator ID: JZ ALS Bottle#: 55 Worklist Smp#: 55  
Injection Vol: 100.0 ul Dil. Factor: 1.0000  
Method: 8330\_X3 Limit Group: GCSV - 8330  
Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

7 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.15  
Response: 2635  
Amount: 0.020913



Reviewer: zhangji, 02-Mar-2022 12:47:07

Audit Action: Marked Compound Undetected

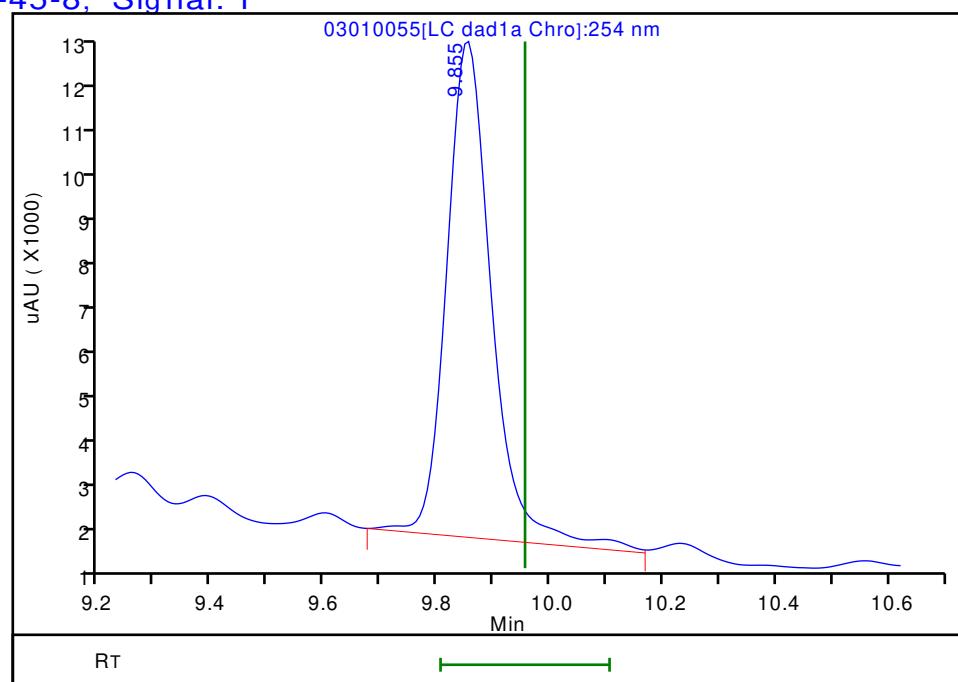
Audit Reason: Invalid Compound ID

## Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010055.d  
Injection Date: 02-Mar-2022 09:18:43 Instrument ID: CHHPLC\_X3  
Lims ID: 280-159130-B-4-A Lab Sample ID: 280-159130-4  
Client ID: OS501-DP08-25  
Operator ID: JZ ALS Bottle#: 55 Worklist Smp#: 55  
Injection Vol: 100.0 ul Dil. Factor: 1.0000  
Method: 8330\_X3 Limit Group: GCSV - 8330  
Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

## 15 Tetryl, CAS: 479-45-8, Signal: 1

RT: 9.85  
Response: 53700  
Amount: 0.314833



Reviewer: zhangji, 02-Mar-2022 12:47:07

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I  
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver

Job No.: 280-159130-1

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

Client Sample ID: OS501-DP08-25

Lab Sample ID: 280-159130-4

Matrix: Water

Lab File ID: 03030022.D

Analysis Method: 8330A

Date Collected: 02/23/2022 08:00

Extraction Method: 3535

Date Extracted: 03/01/2022 11:26

Sample wt/vol: 504.7 (mL)

Date Analyzed: 03/03/2022 23:24

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.: 567645

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	0.083
99-65-0	1,3-Dinitrobenzene	0.099	U	0.11	0.099	0.037

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	104		83-119

**Eurofins Denver**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220303-108978.b\03030022.D  
 Lims ID: 280-159130-B-4-A  
 Client ID: OS501-DP08-25  
 Sample Type: Client  
 Inject. Date: 03-Mar-2022 23:24:38 ALS Bottle#: 22 Worklist Smp#: 22  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-159130-B-4-A  
 Misc. Info.: 280-0108978-022  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220303-108978.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 04-Mar-2022 12:18:26 Calib Date: 03-Mar-2022 07:19:48  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020027.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm) Det: LC mwd1A, 254 nm  
 Process Host: CTX1659

First Level Reviewer: zhangji Date: 04-Mar-2022 12:08:41

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
5 HMX	1	6.884	6.916	-0.032	7567	0.0455	M
6 MNX	1		7.649			ND	U
8 RDX	1	9.124	9.150	-0.026	16508	0.0849	
9 Nitrobenzene	1		12.083			ND	
\$ 10 1,2-Dinitrobenzene	1	13.303	13.323	-0.020	52188	0.2090	
12 1,3-Dinitrobenzene	1		15.683			ND	
14 o-Nitrotoluene	1	16.797	16.863	-0.066	14661	0.0625	
16 p-Nitrotoluene	1		17.176			ND	
17 4-Amino-2,6-dinitrotoluene	1	17.790	17.823	-0.033	96684	0.3620	
18 m-Nitrotoluene	1		18.150			ND	
19 2-Amino-4,6-dinitrotoluene	1	18.783	18.843	-0.060	142562	0.3954	
20 1,3,5-Trinitrobenzene	1		18.996			ND	
21 2,6-Dinitrotoluene	1		20.316			ND	
22 2,4-Dinitrotoluene	1		20.836			ND	
23 Tetryl	1		24.583			ND	
24 2,4,6-Trinitrotoluene	1	25.284	25.330	-0.046	780251	2.11	

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

U - Marked Undetected

Report Date: 04-Mar-2022 12:18:27

Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220303-108978.b\03030022.D

Injection Date: 03-Mar-2022 23:24:38

Instrument ID: CHHPLC\_X5

Operator ID: JZ

Lims ID: 280-159130-B-4-A

Lab Sample ID: 280-159130-4

Worklist Smp#: 22

Client ID: OS501-DP08-25

Dil. Factor: 1.0000

ALS Bottle#: 22

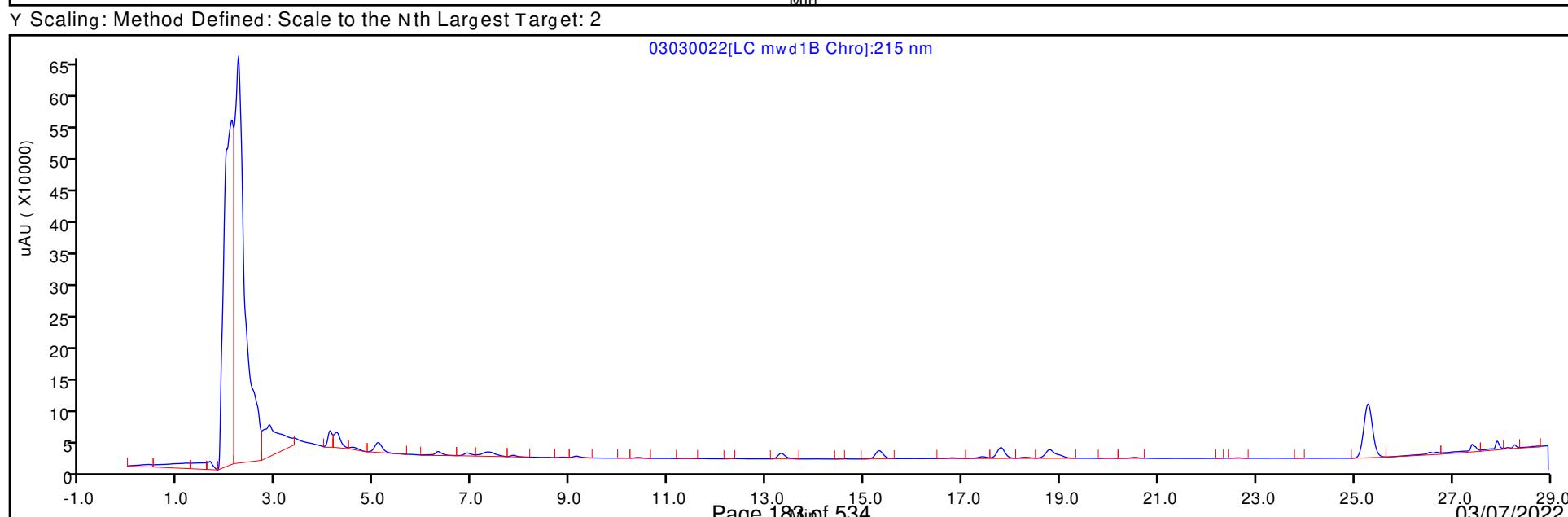
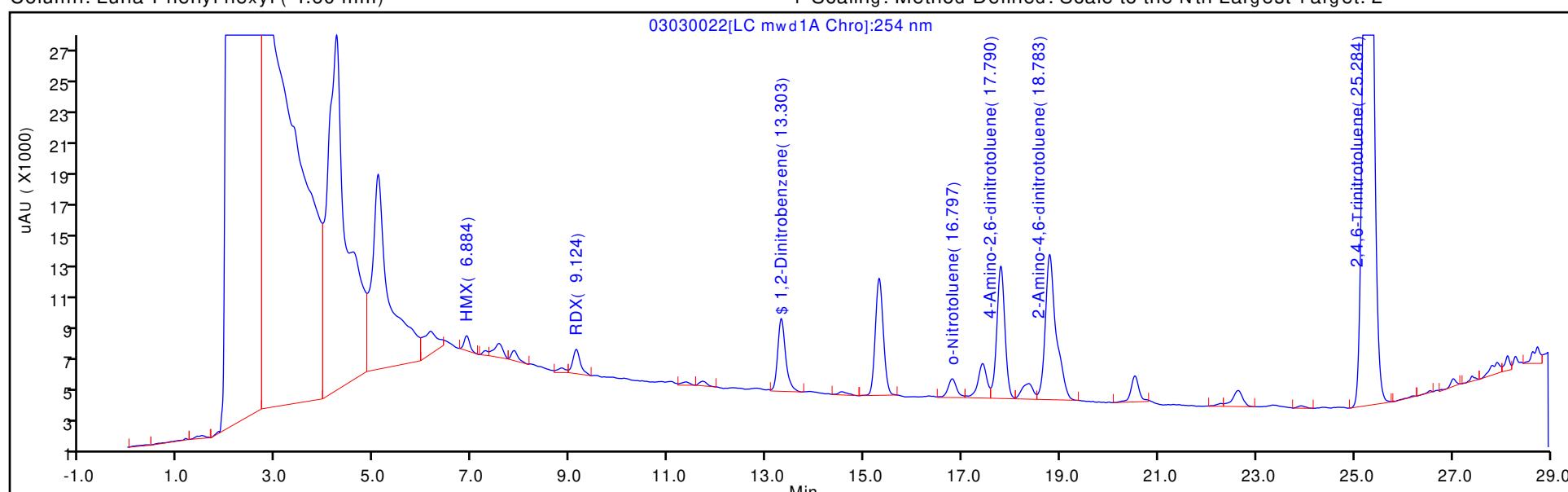
Injection Vol: 100.0 ul

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 Denver  
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220303-108978.b\03030022.D  
 Lims ID: 280-159130-B-4-A  
 Client ID: OS501-DP08-25  
 Sample Type: Client  
 Inject. Date: 03-Mar-2022 23:24:38 ALS Bottle#: 22 Worklist Smp#: 22  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-159130-B-4-A  
 Misc. Info.: 280-0108978-022  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220303-108978.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 04-Mar-2022 12:18:26 Calib Date: 03-Mar-2022 07:19:48  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020027.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm ) Det: LC mwd1A, 254 nm  
 Process Host: CTX1659

First Level Reviewer: zhangji Date: 04-Mar-2022 12:08:41

Compound	Amount Added	Amount Recovered	% Rec.
\$ 10 1,2-Dinitrobenzene	0.2000	0.2090	104.48

Eurofins Denver

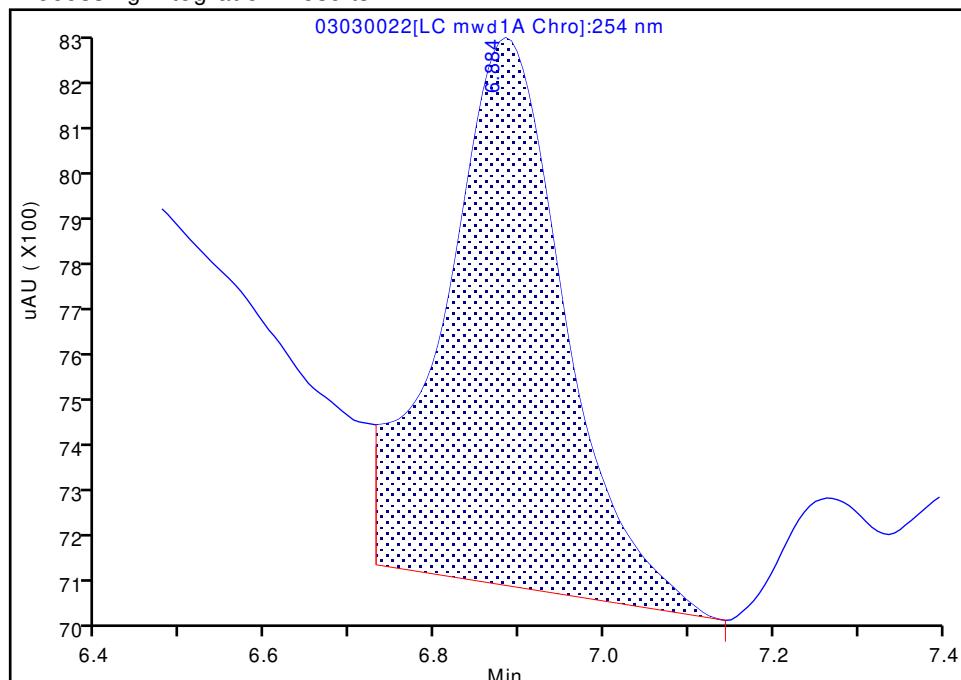
Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220303-108978.b\03030022.D  
 Injection Date: 03-Mar-2022 23:24:38 Instrument ID: CHHPLC\_X5  
 Lims ID: 280-159130-B-4-A Lab Sample ID: 280-159130-4  
 Client ID: OS501-DP08-25  
 Operator ID: JZ ALS Bottle#: 22 Worklist Smp#: 22  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X5\_Luna Limit Group: GCSV - 8330  
 Column: Luna-Phenyl hexyl ( 4.60 mm) Detector LC mwd1A, 254 nm

**5 HMX, CAS: 2691-41-0**

Signal: 1

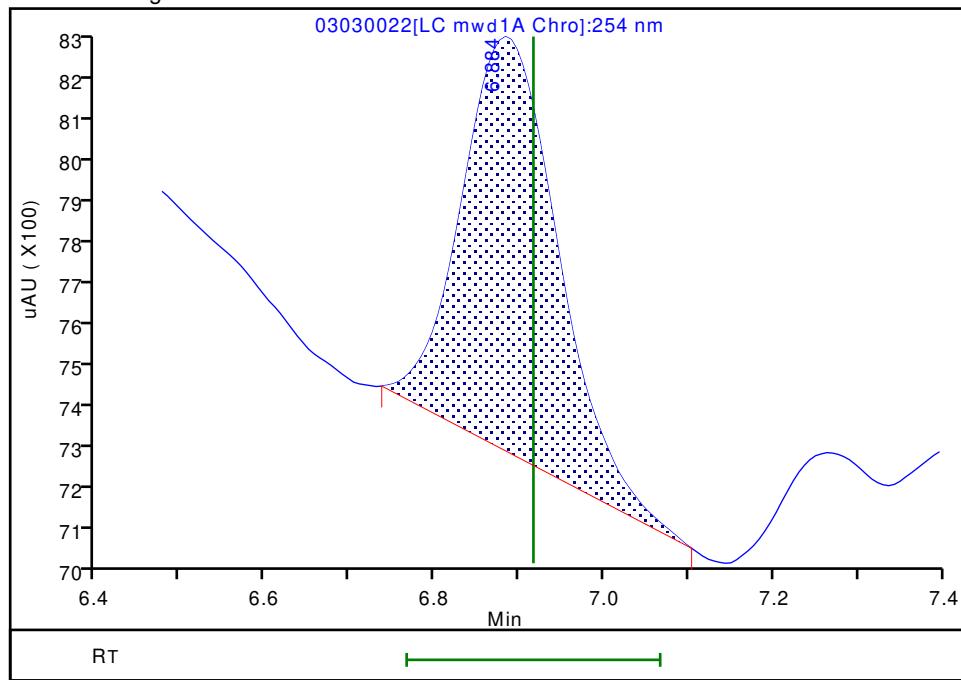
RT: 6.88  
 Area: 11140  
 Amount: 0.067054  
 Amount Units: ug/ml

Processing Integration Results



RT: 6.88  
 Area: 7567  
 Amount: 0.045547  
 Amount Units: ug/ml

Manual Integration Results



Reviewer: zhangji, 04-Mar-2022 12:08:37

Audit Action: Manually Integrated

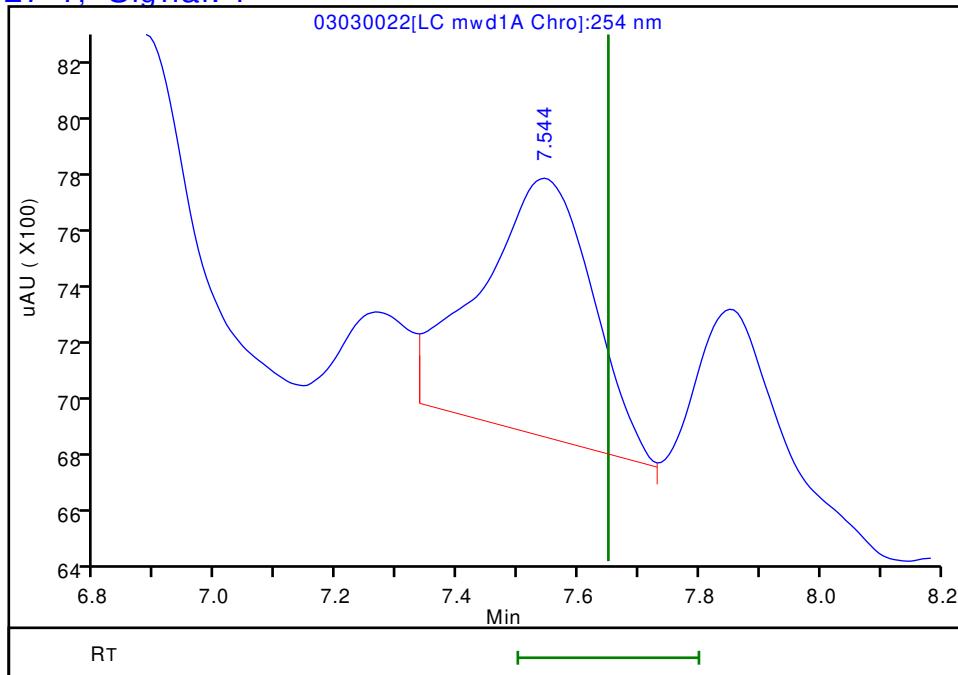
Audit Reason: Baseline Smoothing

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220303-108978.b\03030022.D  
Injection Date: 03-Mar-2022 23:24:38 Instrument ID: CHHPLC\_X5  
Lims ID: 280-159130-B-4-A Lab Sample ID: 280-159130-4  
Client ID: OS501-DP08-25  
Operator ID: JZ ALS Bottle#: 22 Worklist Smp#: 22  
Injection Vol: 100.0 ul Dil. Factor: 1.0000  
Method: 8330\_X5\_Luna Limit Group: GCSV - 8330  
Column: Luna-Phenyl hexyl ( 4.60 mm) Detector: LC mwd1A, 254 nm

6 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.54  
Response: 11261  
Amount: 0.045029



Reviewer: zhangji, 04-Mar-2022 12:08:41

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I  
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver

Job No.: 280-159130-1

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

Client Sample ID: OS001-DP08-35 Lab Sample ID: 280-159130-5

Matrix: Water Lab File ID: 03010056.D

Analysis Method: 8330A Date Collected: 02/23/2022 12:05

Extraction Method: 3535 Date Extracted: 03/01/2022 11:26

Sample wt/vol: 476.4 (mL) Date Analyzed: 03/02/2022 09:41

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.: 567371 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	3.9	M	0.22	0.21	0.088
99-65-0	1,3-Dinitrobenzene	0.10	U	0.12	0.10	0.039
118-96-7	2,4,6-Trinitrotoluene	1.1		0.12	0.10	0.047
606-20-2	2,6-Dinitrotoluene	0.084	U	0.10	0.084	0.042
88-72-2	2-Nitrotoluene	0.21	U	0.22	0.21	0.090
99-08-1	3-Nitrotoluene	0.42	U Q	0.42	0.42	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.0	Q	0.16	0.13	0.061
2691-41-0	HMX	0.21	U	0.22	0.21	0.092
5755-27-1	MNX	0.42	U	2.1	0.42	0.16
98-95-3	Nitrobenzene	0.21	U	0.22	0.21	0.096
121-82-4	RDX	0.21	U M	0.22	0.21	0.054
479-45-8	Tetryl	0.10	U M	0.12	0.10	0.033

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	107	M	83-119

**Eurofins Denver**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\03010056.D  
 Lims ID: 280-159130-A-5-A  
 Client ID: OS001-DP08-35  
 Sample Type: Client  
 Inject. Date: 02-Mar-2022 09:41:35 ALS Bottle#: 56 Worklist Smp#: 56  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Sample Info: 280-159130-A-5-A  
 Misc. Info.: 280-0108907-056  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 02-Mar-2022 13:06:29 Calib Date: 05-Jan-2022 04:24:15  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICAL File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040037.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1635

First Level Reviewer: zhangji Date: 02-Mar-2022 12:47:36

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1	6.588				ND	
7 MNX	1	7.206				ND	
8 RDX	1	7.575				ND	U
\$ 10 1,2-Dinitrobenzene	1	8.516	8.515	0.001	26637	0.2136	M
11 1,3,5-Trinitrobenzene	1	8.643	8.642	0.001	81730	0.3747	M
12 1,3-Dinitrobenzene	1	9.262				ND	
13 Nitrobenzene	1	9.648				ND	
15 Tetryl	1	9.955				ND	U
17 2,4,6-Trinitrotoluene	1	10.856	10.862	-0.006	21169	0.1044	
18 4-Amino-2,6-dinitrotoluene	1	11.036	11.042	-0.006	14712	0.0974	
19 2-Amino-4,6-dinitrotoluene	1	11.283	11.288	-0.005	10983	0.0543	
20 2,6-Dinitrotoluene	1	11.462				ND	
21 2,4-Dinitrotoluene	1	11.663	11.635	0.028	1196	0.004133	
22 o-Nitrotoluene	1	12.475				ND	
23 p-Nitrotoluene	1	12.876	12.895	-0.019	2243	0.0211	
24 m-Nitrotoluene	1	13.462				ND	

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

U - Marked Undetected

Report Date: 02-Mar-2022 13:06:31

Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010056.d

Injection Date: 02-Mar-2022 09:41:35

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: 280-159130-A-5-A

Lab Sample ID: 280-159130-5

Worklist Smp#: 56

Client ID: OS001-DP08-35

Injection Vol: 100.0  $\mu$ l

Dil. Factor: 1.0000

Method: 8330 X3

Limit Group: GCSV - 8330

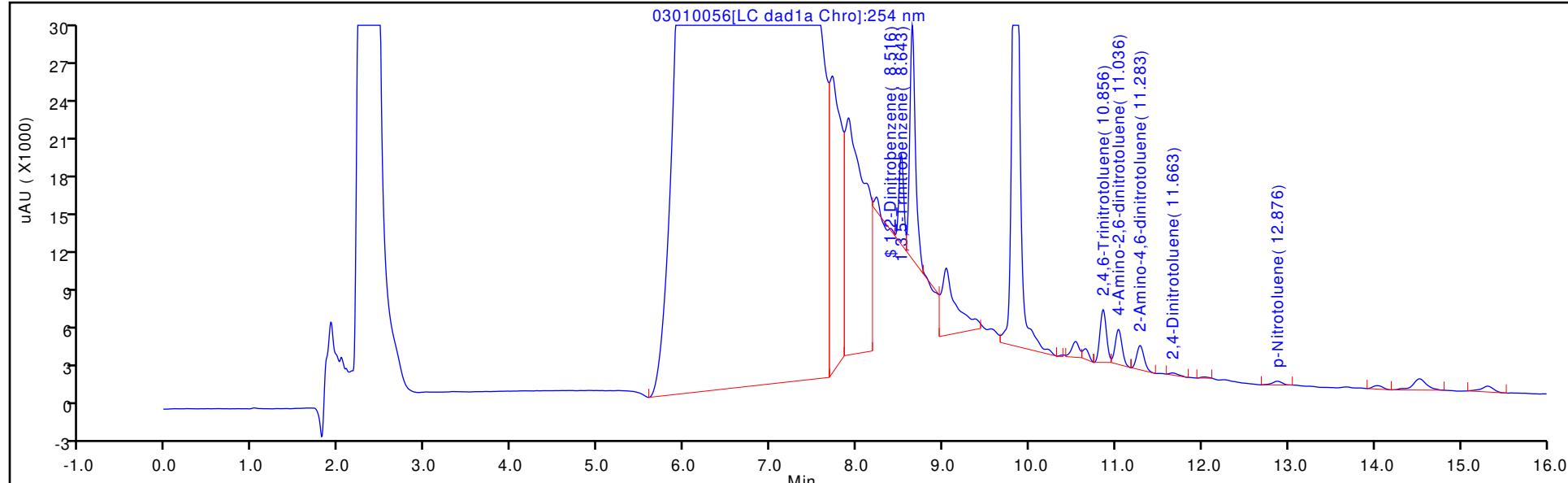
Column: UltraCarb5uODS (20) (4.60 mm)

X Scaling

ale to the Nth Largest T

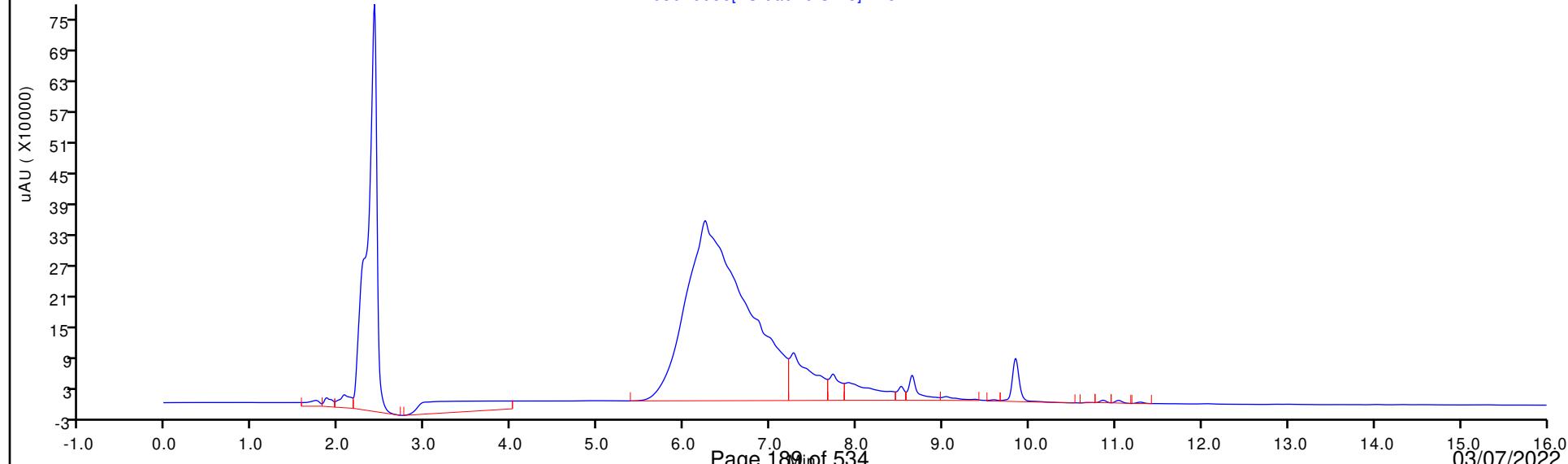
Column: UltraCarboDPS (20) (1.00 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

03010056[LC dad1b Chro]:215 nm



Eurofins Denver  
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\03010056.D  
 Lims ID: 280-159130-A-5-A  
 Client ID: OS001-DP08-35  
 Sample Type: Client  
 Inject. Date: 02-Mar-2022 09:41:35 ALS Bottle#: 56 Worklist Smp#: 56  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-159130-A-5-A  
 Misc. Info.: 280-0108907-056  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 02-Mar-2022 13:06:29 Calib Date: 05-Jan-2022 04:24:15  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040037.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1635

First Level Reviewer: zhangji Date: 02-Mar-2022 12:47:36

Compound	Amount Added	Amount Recovered	% Rec.
\$ 10 1,2-Dinitrobenzene	0.2000	0.2136	106.81

## Eurofins Denver

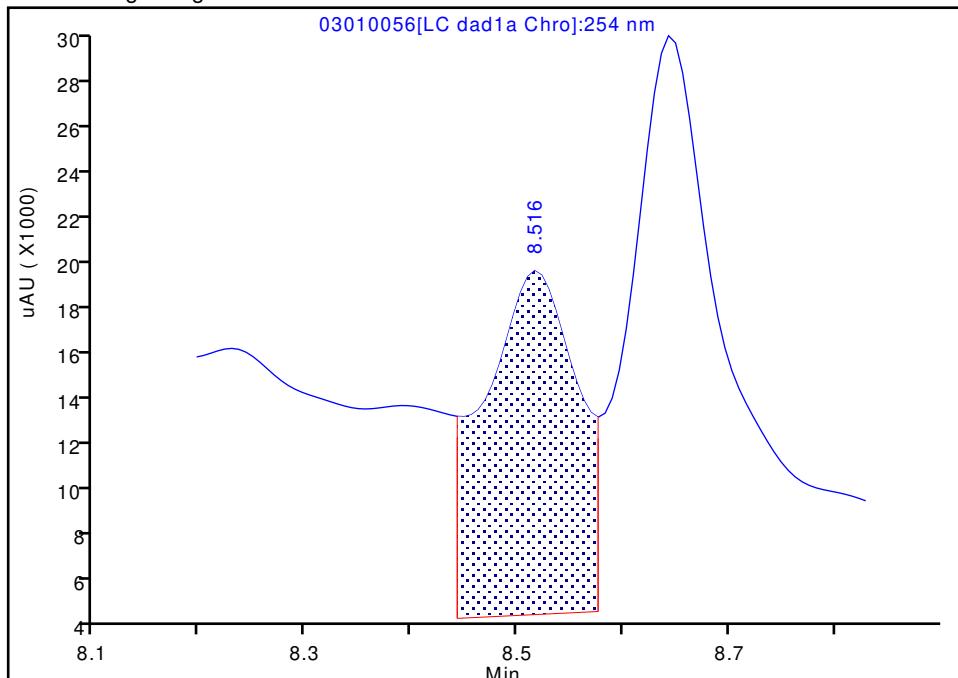
Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010056.d  
 Injection Date: 02-Mar-2022 09:41:35 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-159130-A-5-A Lab Sample ID: 280-159130-5  
 Client ID: OS001-DP08-35  
 Operator ID: JZ ALS Bottle#: 56 Worklist Smp#: 56  
 Injection Vol: 100.0 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

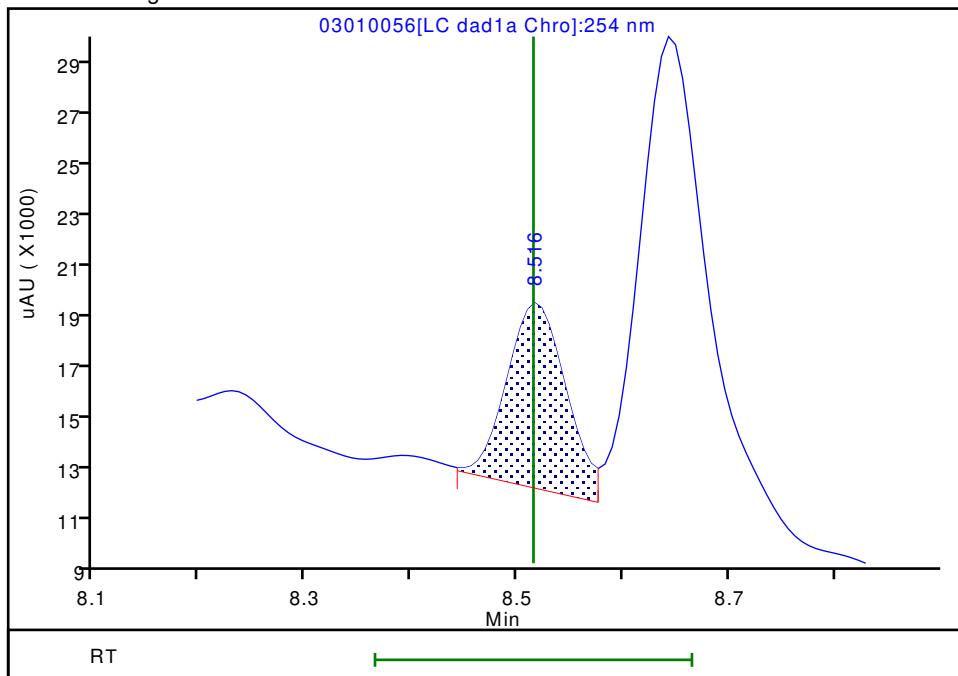
## Processing Integration Results

RT: 8.52  
 Area: 87441  
 Amount: 0.701224  
 Amount Units: ug/mL



## Manual Integration Results

RT: 8.52  
 Area: 26637  
 Amount: 0.213613  
 Amount Units: ug/mL



Reviewer: zhangji, 02-Mar-2022 12:47:33

Audit Action: Assigned New Baseline

Audit Reason: Baseline

## Eurofins Denver

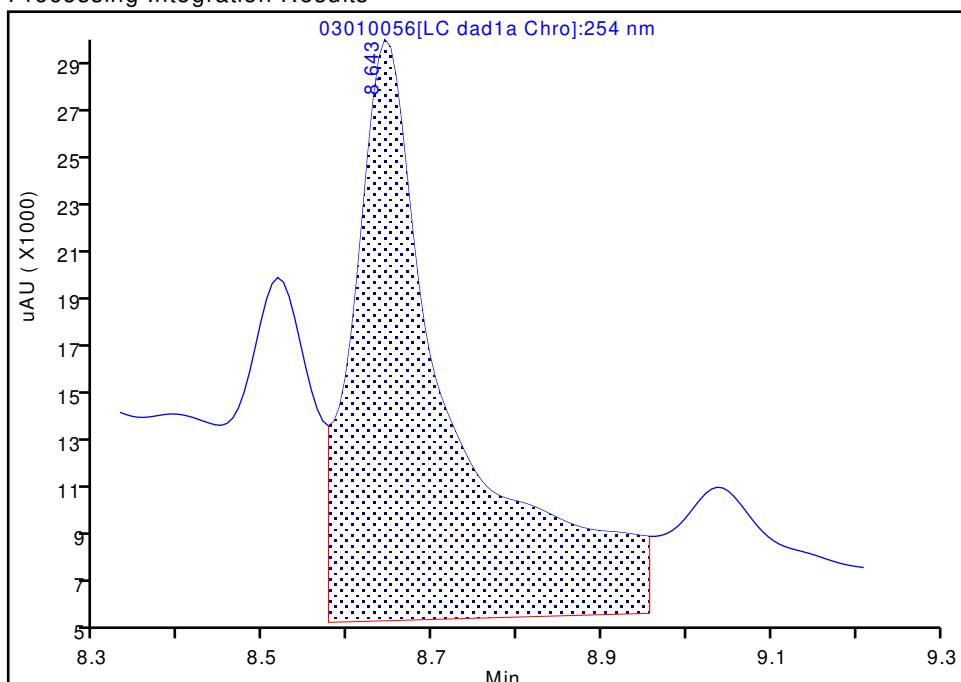
Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010056.d  
 Injection Date: 02-Mar-2022 09:41:35 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-159130-A-5-A Lab Sample ID: 280-159130-5  
 Client ID: OS001-DP08-35  
 Operator ID: JZ ALS Bottle#: 56 Worklist Smp#: 56  
 Injection Vol: 100.0 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

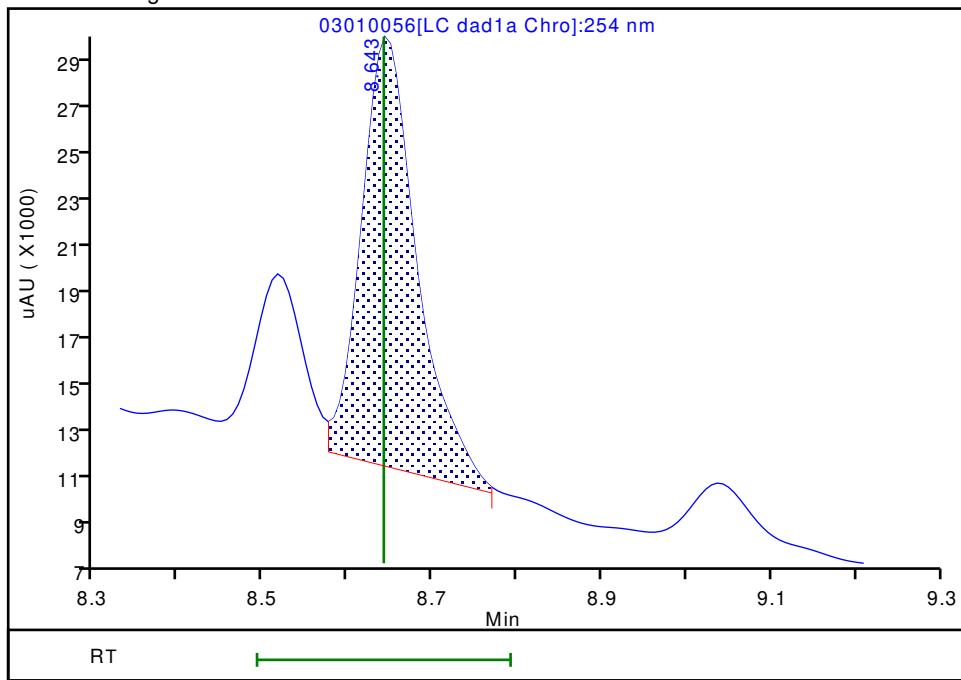
RT: 8.64  
 Area: 195068  
 Amount: 0.894415  
 Amount Units: ug/mL

## Processing Integration Results



RT: 8.64  
 Area: 81730  
 Amount: 0.374744  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 02-Mar-2022 12:47:35

Audit Action: Split an Integrated Peak

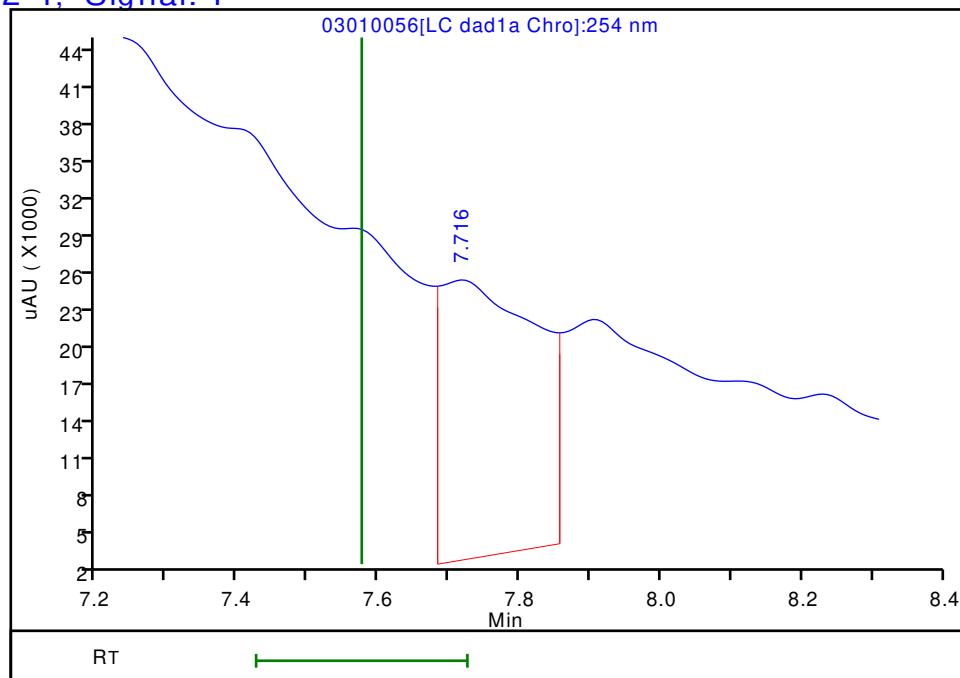
Audit Reason: Baseline

## Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010056.d  
 Injection Date: 02-Mar-2022 09:41:35 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-159130-A-5-A Lab Sample ID: 280-159130-5  
 Client ID: OS001-DP08-35  
 Operator ID: JZ ALS Bottle#: 56 Worklist Smp#: 56  
 Injection Vol: 100.0 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: 7.72  
 Response: 209185  
 Amount: 2.018981



Reviewer: zhangji, 02-Mar-2022 12:47:36

Audit Action: Marked Compound Undetected

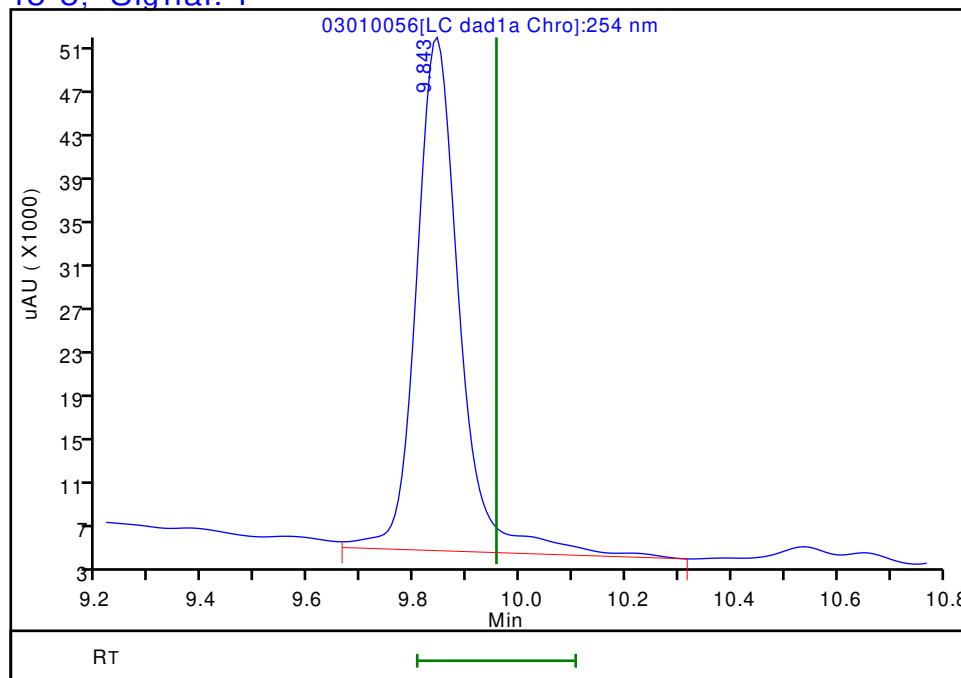
Audit Reason: Invalid Compound ID

## Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010056.d  
Injection Date: 02-Mar-2022 09:41:35 Instrument ID: CHHPLC\_X3  
Lims ID: 280-159130-A-5-A Lab Sample ID: 280-159130-5  
Client ID: OS001-DP08-35  
Operator ID: JZ ALS Bottle#: 56 Worklist Smp#: 56  
Injection Vol: 100.0 ul Dil. Factor: 1.0000  
Method: 8330\_X3 Limit Group: GCSV - 8330  
Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

## 15 Tetryl, CAS: 479-45-8, Signal: 1

RT: 9.84  
Response: 270092  
Amount: 1.583497



Reviewer: zhangji, 02-Mar-2022 12:47:36

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I  
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver

Job No.: 280-159130-1

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

Client Sample ID: OS001-DP08-35

Lab Sample ID: 280-159130-5

Matrix: Water

Lab File ID: 03030023.D

Analysis Method: 8330A

Date Collected: 02/23/2022 12:05

Extraction Method: 3535

Date Extracted: 03/01/2022 11:26

Sample wt/vol: 476.4 (mL)

Date Analyzed: 03/03/2022 23:59

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.: 567645

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
121-14-2	2,4-Dinitrotoluene	0.084	U	0.10	0.084	0.029
35572-78-2	2-Amino-4,6-dinitrotoluene	0.10	U	0.12	0.10	0.053
99-99-0	4-Nitrotoluene	0.42	U	0.43	0.42	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	104		83-119

**Eurofins Denver**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220303-108978.b\03030023.D  
 Lims ID: 280-159130-A-5-A  
 Client ID: OS001-DP08-35  
 Sample Type: Client  
 Inject. Date: 03-Mar-2022 23:59:54 ALS Bottle#: 23 Worklist Smp#: 23  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-159130-A-5-A  
 Misc. Info.: 280-0108978-023  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220303-108978.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 04-Mar-2022 12:18:26 Calib Date: 03-Mar-2022 07:19:48  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020027.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm) Det: LC mwd1A, 254 nm  
 Process Host: CTX1659

First Level Reviewer: zhangji Date: 04-Mar-2022 12:08:59

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
5 HMX	1	6.891	6.916	-0.025	5029	0.0303	
6 MNX	1		7.649			ND	
8 RDX	1	9.071	9.150	-0.079	25679	0.1321	M
9 Nitrobenzene	1		12.083			ND	
\$ 10 1,2-Dinitrobenzene	1	13.291	13.323	-0.032	51951	0.2080	
12 1,3-Dinitrobenzene	1		15.683			ND	
14 o-Nitrotoluene	1	16.784	16.863	-0.079	5685	0.0242	
16 p-Nitrotoluene	1		17.176			ND	
17 4-Amino-2,6-dinitrotoluene	1	17.784	17.823	-0.039	29042	0.1089	
18 m-Nitrotoluene	1		18.150			ND	
19 2-Amino-4,6-dinitrotoluene	1		18.843			ND	
20 1,3,5-Trinitrobenzene	1	18.971	18.996	-0.025	152736	0.3676	
21 2,6-Dinitrotoluene	1		20.316			ND	
22 2,4-Dinitrotoluene	1		20.836			ND	
23 Tetryl	1		24.583			ND	
24 2,4,6-Trinitrotoluene	1	25.284	25.330	-0.046	40305	0.1092	

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Report Date: 04-Mar-2022 12:18:27

Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220303-108978.b\03030023.D

Injection Date: 03-Mar-2022 23:59:54

Instrument ID: CHHPLC\_X5

Operator ID: JZ

Lims ID: 280-159130-A-5-A

Lab Sample ID: 280-159130-5

Worklist Smp#: 23

Client ID: OS001-DP08-35

Dil. Factor: 1.0000

ALS Bottle#: 23

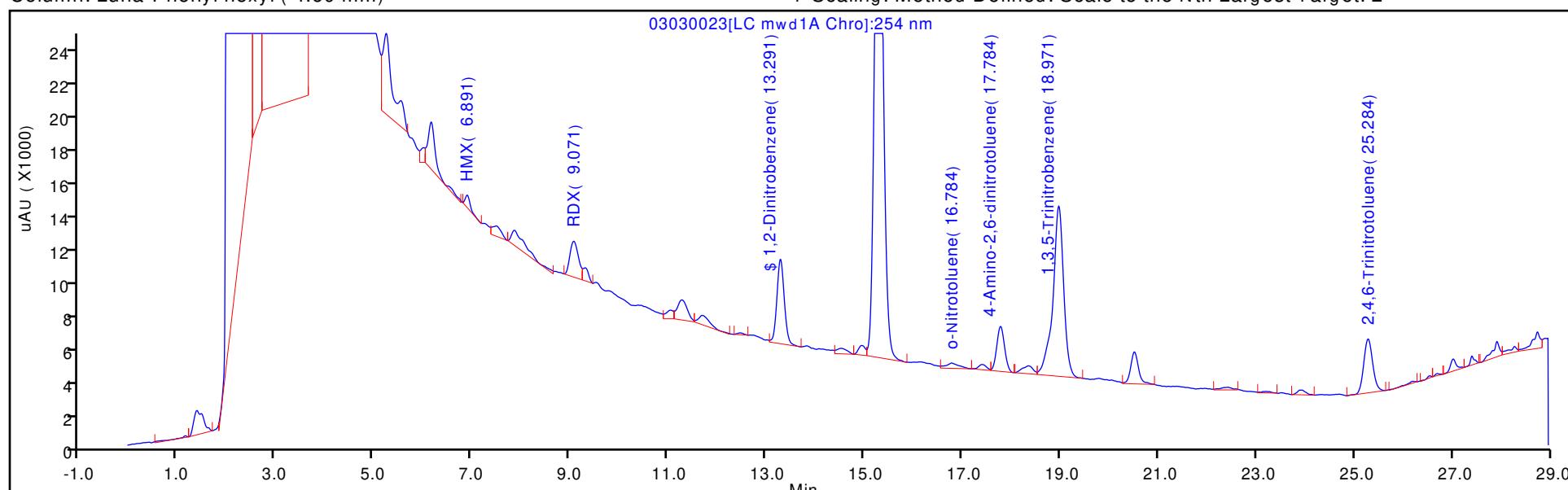
Injection Vol: 100.0 ul

Limit Group: GCSV - 8330

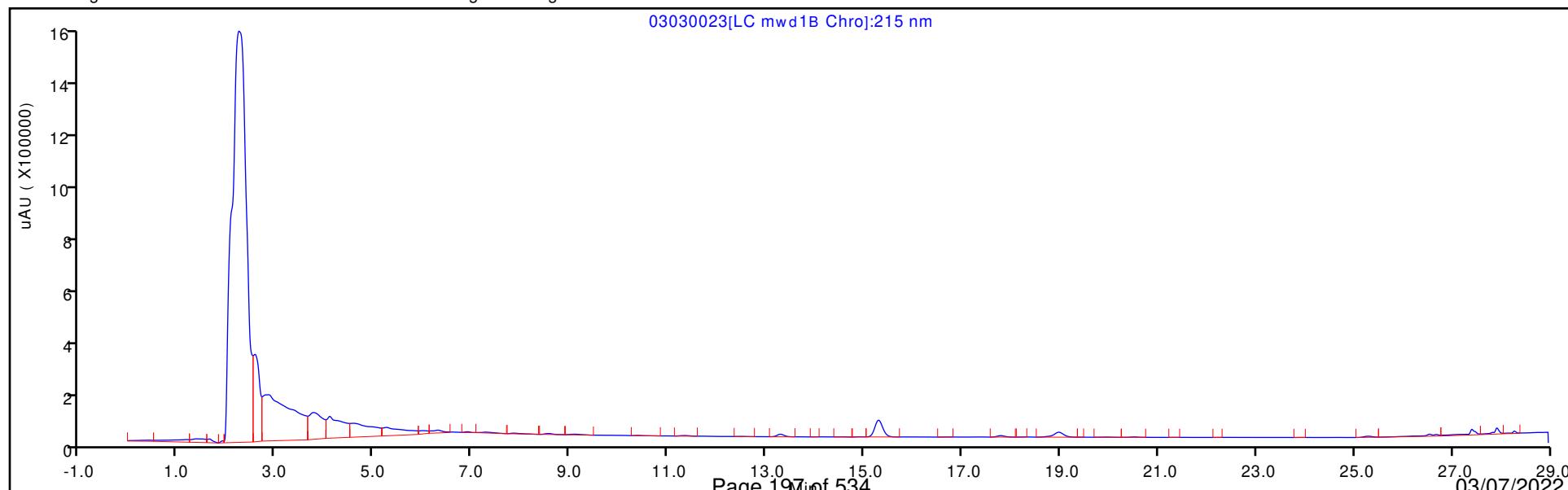
Method: 8330\_X5\_Luna

Column: Luna-Phenyl hexyl ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Denver  
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220303-108978.b\03030023.D  
 Lims ID: 280-159130-A-5-A  
 Client ID: OS001-DP08-35  
 Sample Type: Client  
 Inject. Date: 03-Mar-2022 23:59:54 ALS Bottle#: 23 Worklist Smp#: 23  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-159130-A-5-A  
 Misc. Info.: 280-0108978-023  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220303-108978.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 04-Mar-2022 12:18:26 Calib Date: 03-Mar-2022 07:19:48  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020027.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm ) Det: LC mwd1A, 254 nm  
 Process Host: CTX1659

First Level Reviewer: zhangji Date: 04-Mar-2022 12:08:59

Compound	Amount Added	Amount Recovered	% Rec.
\$ 10 1,2-Dinitrobenzene	0.2000	0.2080	104.00

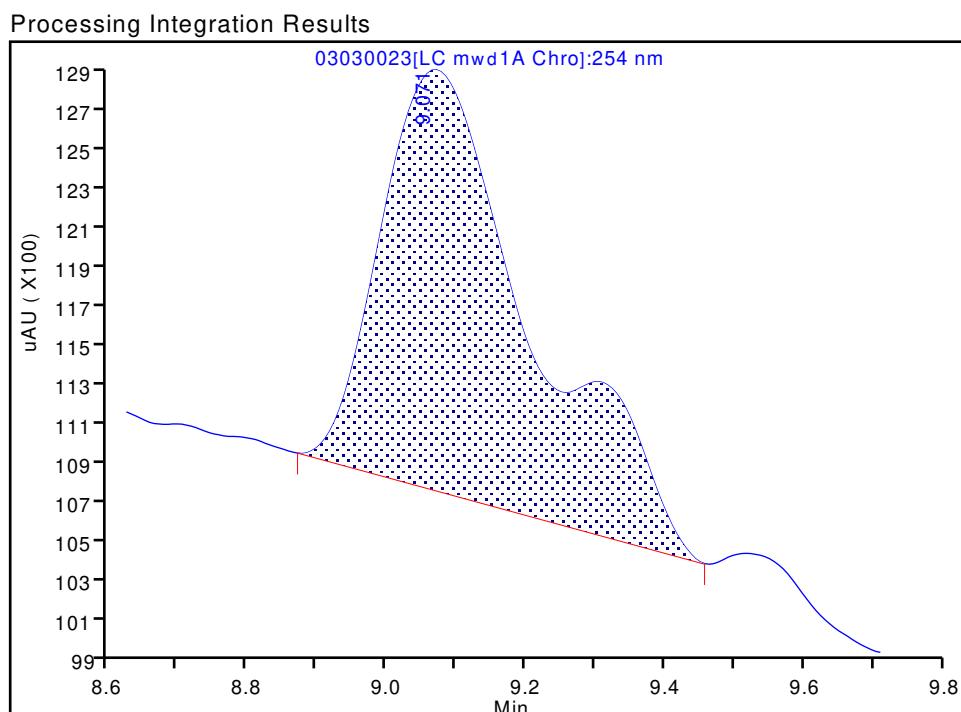
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220303-108978.b\03030023.D  
 Injection Date: 03-Mar-2022 23:59:54 Instrument ID: CHHPLC\_X5  
 Lims ID: 280-159130-A-5-A Lab Sample ID: 280-159130-5  
 Client ID: OS001-DP08-35  
 Operator ID: JZ ALS Bottle#: 23 Worklist Smp#: 23  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X5\_Luna Limit Group: GCSV - 8330  
 Column: Luna-Phenyl hexyl ( 4.60 mm) Detector LC mwd1A, 254 nm

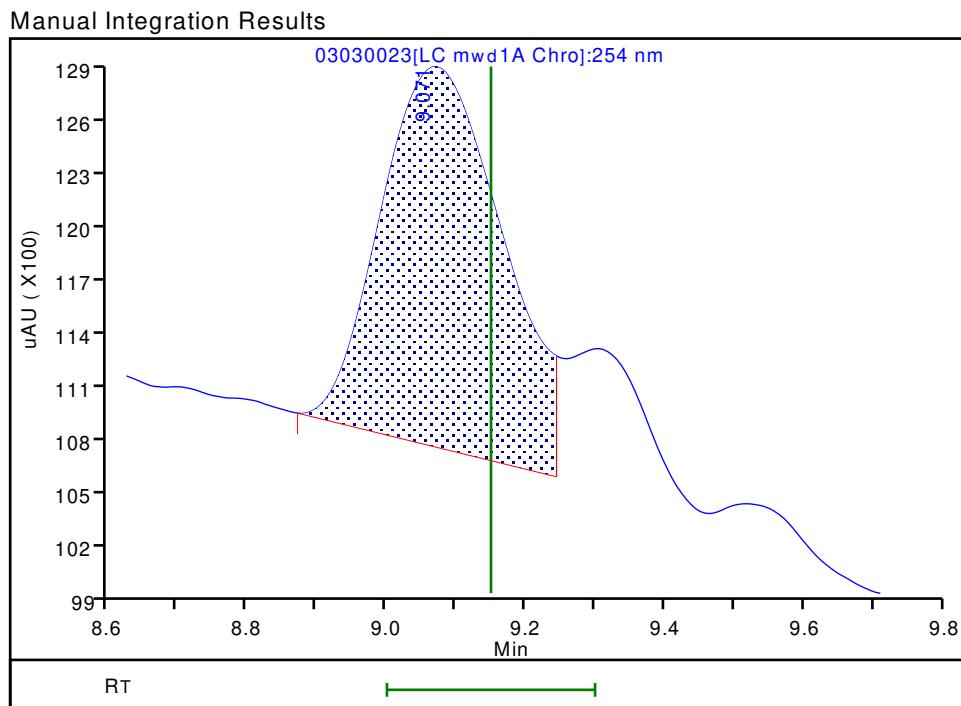
**8 RDX, CAS: 121-82-4**

Signal: 1

RT: 9.07  
 Area: 31769  
 Amount: 0.163479  
 Amount Units: ug/ml



RT: 9.07  
 Area: 25679  
 Amount: 0.132141  
 Amount Units: ug/ml



Reviewer: zhangji, 04-Mar-2022 12:08:58

Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

FORM I  
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver

Job No.: 280-159130-1

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

Client Sample ID: OS001-DP08-45

Lab Sample ID: 280-159130-6

Matrix: Water

Lab File ID: 03010057.D

Analysis Method: 8330A

Date Collected: 02/23/2022 12:50

Extraction Method: 3535

Date Extracted: 03/01/2022 11:26

Sample wt/vol: 497.7 (mL)

Date Analyzed: 03/02/2022 10:04

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.: 567371

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.20	U M Q	0.21	0.20	0.084
99-65-0	1,3-Dinitrobenzene	0.10	U M Q	0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	0.10	U Q	0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	0.080	U Q	0.10	0.080	0.028
606-20-2	2,6-Dinitrotoluene	0.080	U Q	0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.10	U Q	0.11	0.10	0.051
88-72-2	2-Nitrotoluene	0.20	U Q	0.21	0.20	0.086
99-08-1	3-Nitrotoluene	0.40	U Q	0.40	0.40	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U Q	0.15	0.12	0.058
99-99-0	4-Nitrotoluene	0.40	U M Q	0.41	0.40	0.10
2691-41-0	HMX	0.20	U Q	0.21	0.20	0.088
5755-27-1	MNX	0.40	U M	2.0	0.40	0.15
121-82-4	RDX	0.20	U M Q	0.21	0.20	0.052
479-45-8	Tetryl	0.10	U M Q	0.11	0.10	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	126	M Q	83-119

**Eurofins Denver**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\03010057.D  
 Lims ID: 280-159130-A-6-A  
 Client ID: OS001-DP08-45  
 Sample Type: Client  
 Inject. Date: 02-Mar-2022 10:04:30 ALS Bottle#: 57 Worklist Smp#: 57  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-159130-A-6-A  
 Misc. Info.: 280-0108907-057  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 02-Mar-2022 13:06:29 Calib Date: 05-Jan-2022 04:24:15  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040037.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1635

First Level Reviewer: zhangji Date: 02-Mar-2022 12:53:00

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1	6.588				ND	
7 MNX	1	7.206				ND	U
8 RDX	1	7.575				ND	U
\$ 10 1,2-Dinitrobenzene	1	8.522	8.515	0.007	31329	0.2512	M
11 1,3,5-Trinitrobenzene	1	8.642				ND	U
12 1,3-Dinitrobenzene	1	9.262				ND	U
13 Nitrobenzene	1	9.635	9.648	-0.013	50154	0.2613	
15 Tetryl	1	9.955				ND	U
17 2,4,6-Trinitrotoluene	1	10.862				ND	
18 4-Amino-2,6-dinitrotoluene	1	11.042				ND	
19 2-Amino-4,6-dinitrotoluene	1	11.288				ND	
20 2,6-Dinitrotoluene	1	11.462				ND	
21 2,4-Dinitrotoluene	1	11.635				ND	
22 o-Nitrotoluene	1	12.475				ND	
23 p-Nitrotoluene	1	12.915	12.895	0.020	910	0.008566	7M
24 m-Nitrotoluene	1	13.462				ND	

### QC Flag Legend

#### Processing Flags

7 - Failed Limit of Detection

#### Review Flags

M - Manually Integrated

U - Marked Undetected

Report Date: 02-Mar-2022 13:06:31

Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\\denver\\chromdata\\chhplc\_x\\20220301-108907.b\\03010057.d

Injection Date: 02-Mar-2022 10:04:30

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: 280-159130-A-6-A

Lab Sample ID: 280-159130-6

Worklist Smp#: 57

Client ID: OS001-DP08-45

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

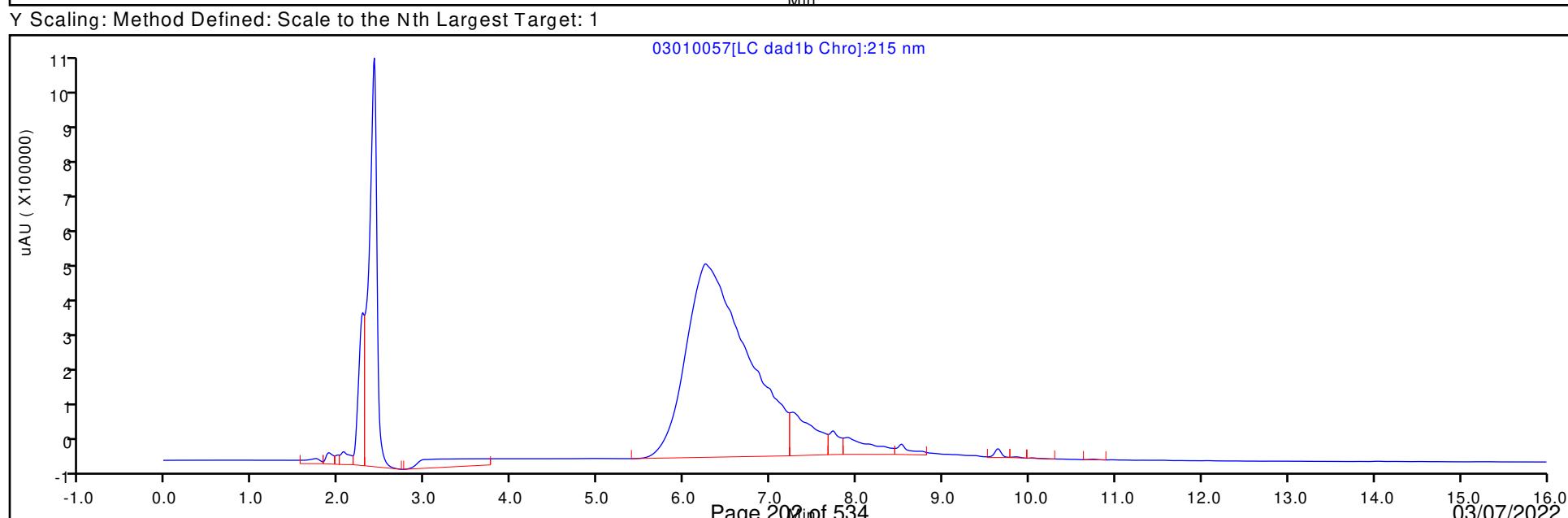
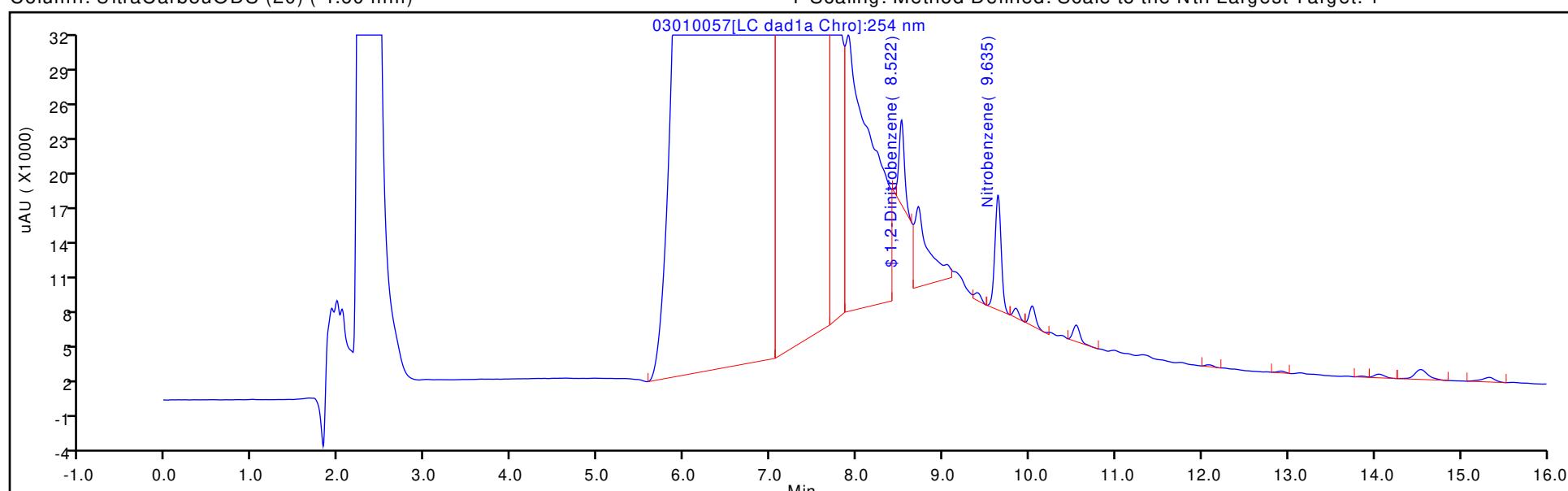
ALS Bottle#: 57

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 Denver  
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\03010057.D  
 Lims ID: 280-159130-A-6-A  
 Client ID: OS001-DP08-45  
 Sample Type: Client  
 Inject. Date: 02-Mar-2022 10:04:30 ALS Bottle#: 57 Worklist Smp#: 57  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-159130-A-6-A  
 Misc. Info.: 280-0108907-057  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 02-Mar-2022 13:06:29 Calib Date: 05-Jan-2022 04:24:15  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040037.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1635

First Level Reviewer: zhangji Date: 02-Mar-2022 12:53:00

Compound	Amount Added	Amount Recovered	% Rec.
\$ 10 1,2-Dinitrobenzene	0.2000	0.2512	125.62

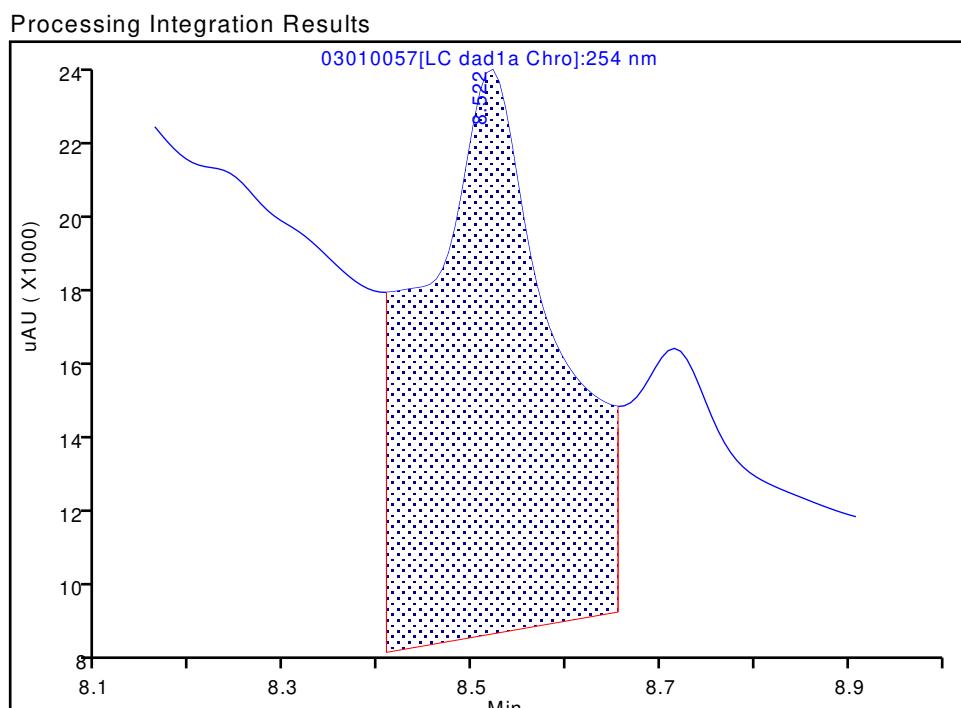
## Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010057.d  
 Injection Date: 02-Mar-2022 10:04:30 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-159130-A-6-A Lab Sample ID: 280-159130-6  
 Client ID: OS001-DP08-45  
 Operator ID: JZ ALS Bottle#: 57 Worklist Smp#: 57  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

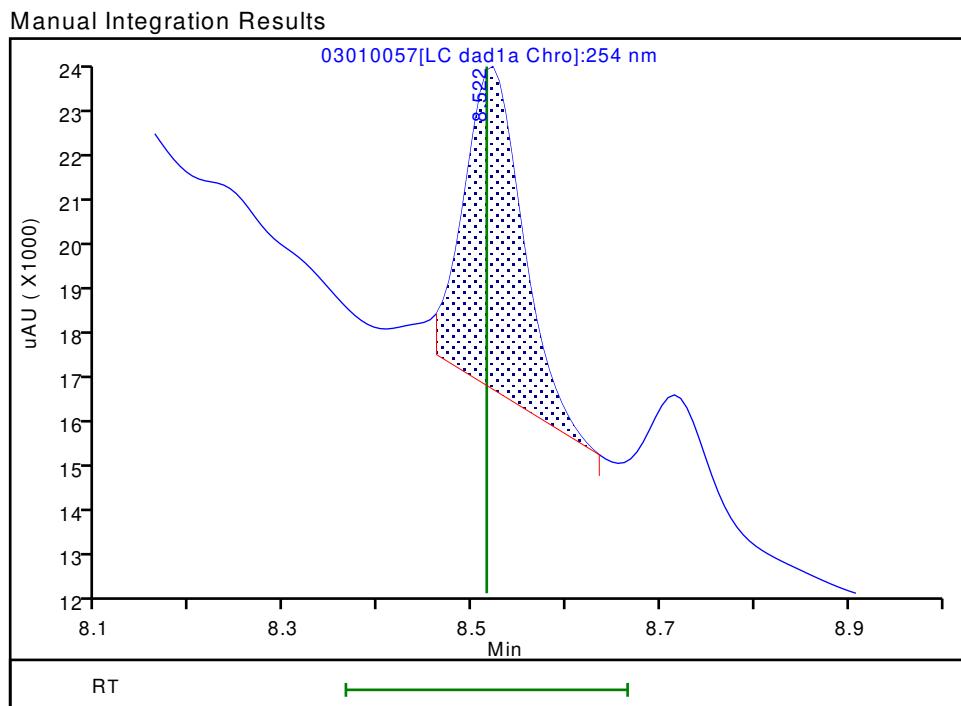
## \$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

RT: 8.52  
 Area: 143573  
 Amount: 1.151369  
 Amount Units: ug/mL



RT: 8.52  
 Area: 31329  
 Amount: 0.251240  
 Amount Units: ug/mL



Reviewer: zhangji, 02-Mar-2022 12:52:48

Audit Action: Split an Integrated Peak

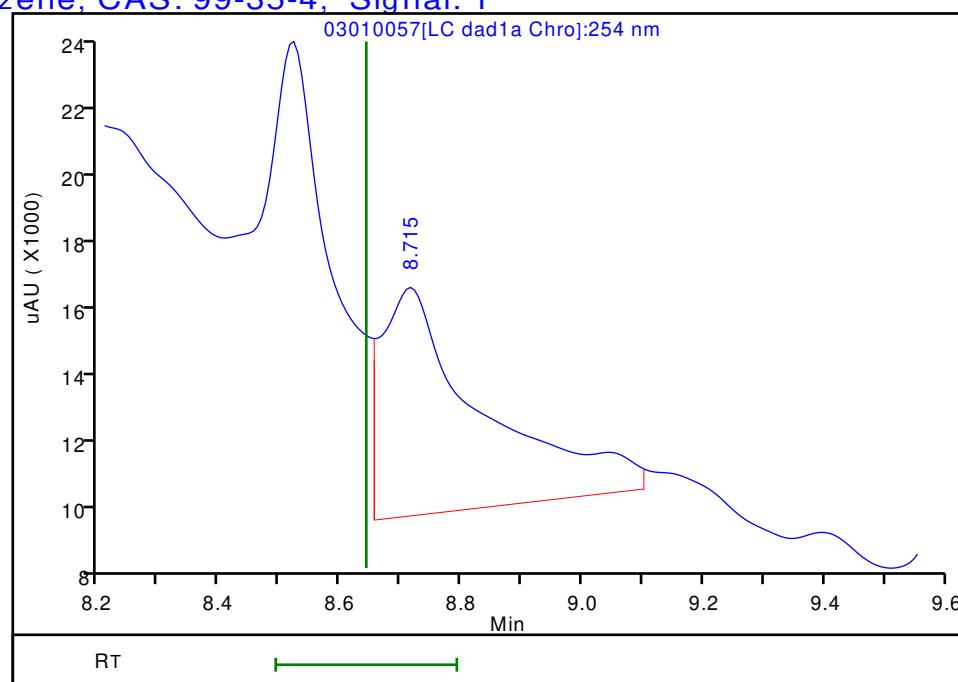
Audit Reason: Baseline

## Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010057.d  
Injection Date: 02-Mar-2022 10:04:30 Instrument ID: CHHPLC\_X3  
Lims ID: 280-159130-A-6-A Lab Sample ID: 280-159130-6  
Client ID: OS001-DP08-45  
Operator ID: JZ ALS Bottle#: 57 Worklist Smp#: 57  
Injection Vol: 100.0 ul Dil. Factor: 1.0000  
Method: 8330\_X3 Limit Group: GCSV - 8330  
Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

## 11 1,3,5-Trinitrobenzene, CAS: 99-35-4, Signal: 1

RT: 8.71  
Response: 79382  
Amount: 0.363978



Reviewer: zhangji, 02-Mar-2022 12:53:00

Audit Action: Marked Compound Undetected

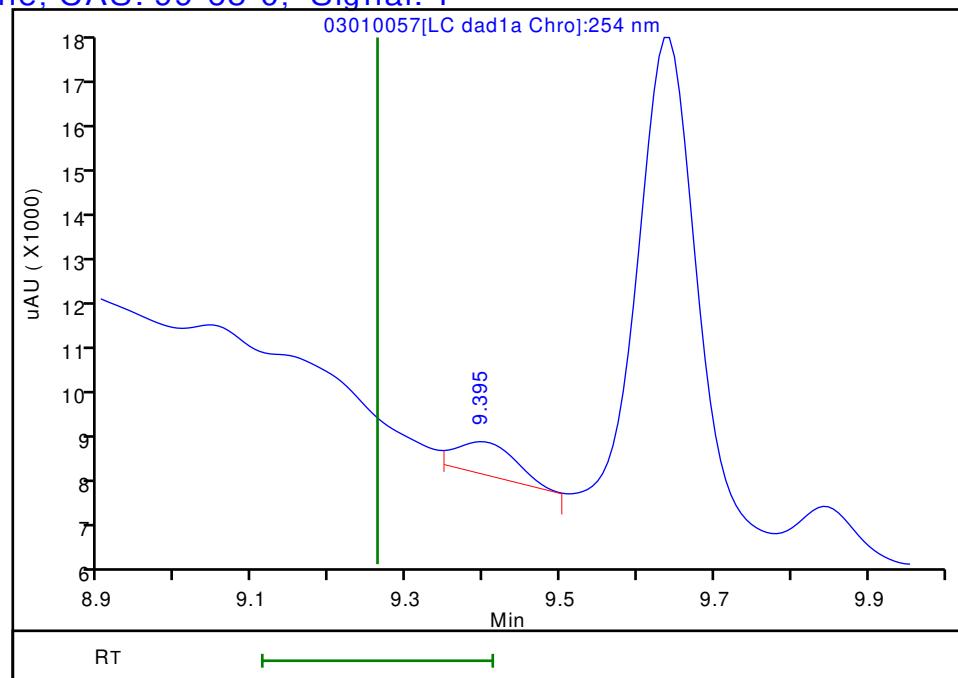
Audit Reason: Invalid Compound ID

## Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010057.d  
Injection Date: 02-Mar-2022 10:04:30 Instrument ID: CHHPLC\_X3  
Lims ID: 280-159130-A-6-A Lab Sample ID: 280-159130-6  
Client ID: OS001-DP08-45  
Operator ID: JZ ALS Bottle#: 57 Worklist Smp#: 57  
Injection Vol: 100.0 ul Dil. Factor: 1.0000  
Method: 8330\_X3 Limit Group: GCSV - 8330  
Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

## 12 1,3-Dinitrobenzene, CAS: 99-65-0, Signal: 1

RT: 9.39  
Response: 3602  
Amount: 0.012490



Reviewer: zhangji, 02-Mar-2022 12:53:00

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

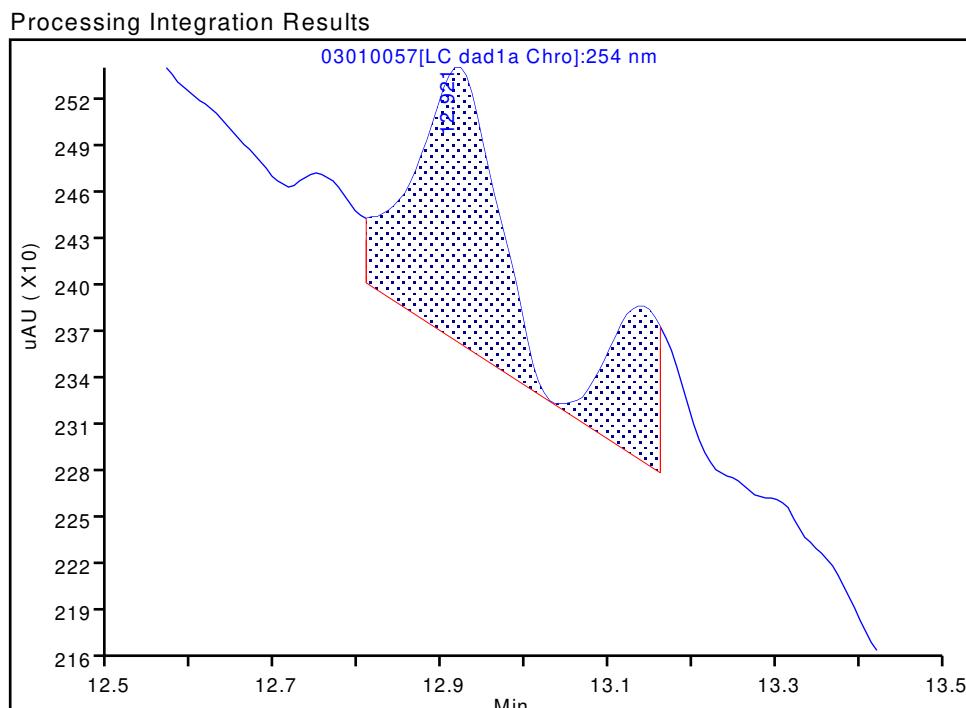
## Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010057.d  
 Injection Date: 02-Mar-2022 10:04:30 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-159130-A-6-A Lab Sample ID: 280-159130-6  
 Client ID: OS001-DP08-45  
 Operator ID: JZ ALS Bottle#: 57 Worklist Smp#: 57  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

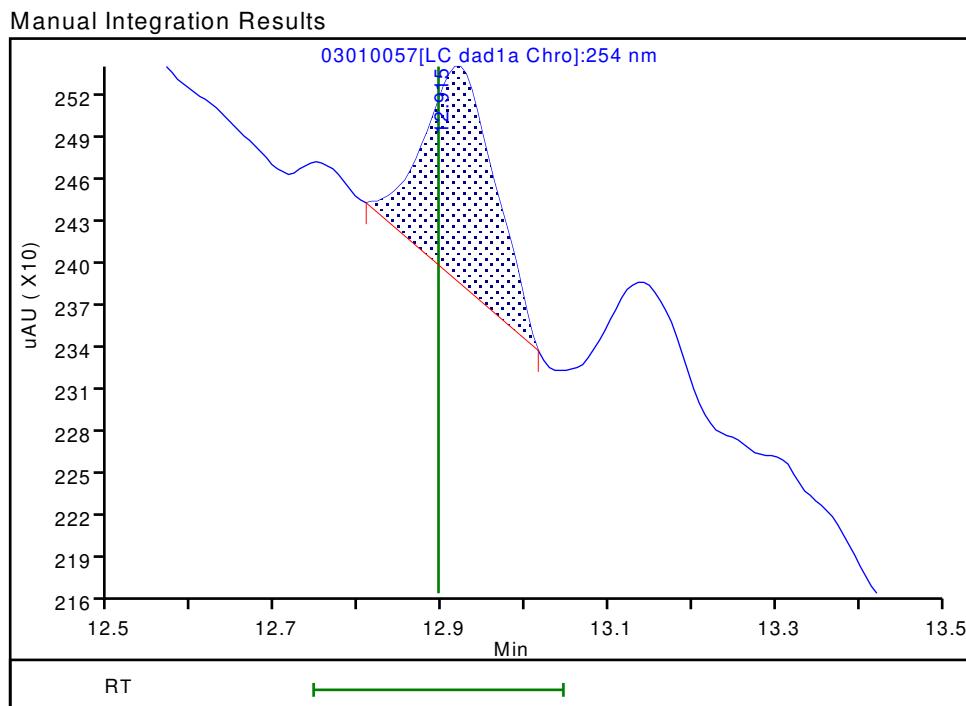
## 23 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

RT: 12.92  
 Area: 1621  
 Amount: 0.015259  
 Amount Units: ug/mL



RT: 12.91  
 Area: 910  
 Amount: 0.008566  
 Amount Units: ug/mL



Reviewer: zhangji, 02-Mar-2022 12:52:58

Audit Action: Manually Integrated

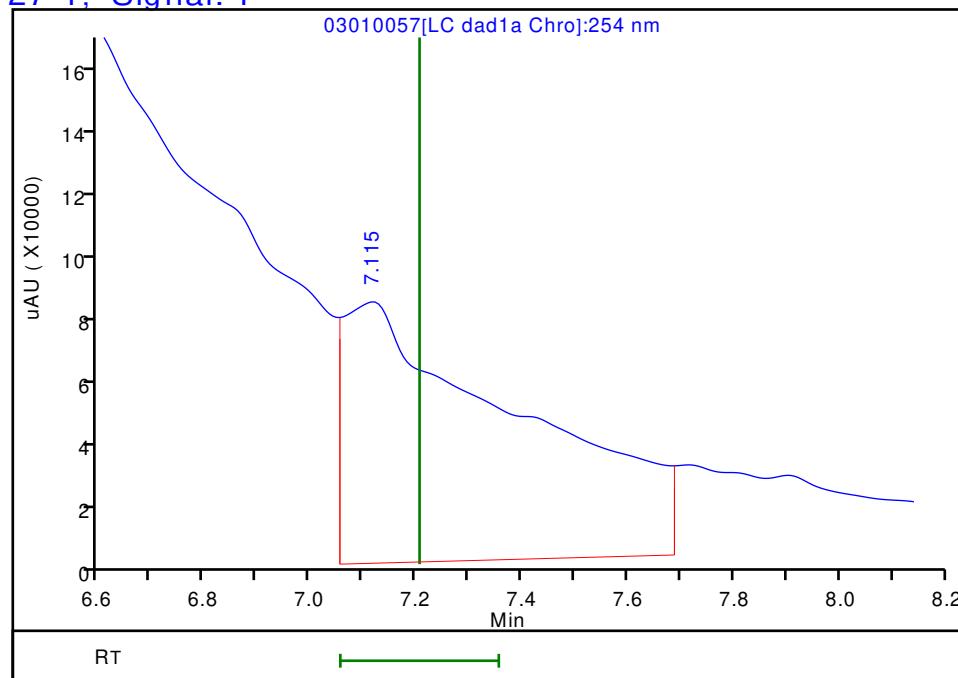
Audit Reason: Baseline

## Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010057.d  
Injection Date: 02-Mar-2022 10:04:30 Instrument ID: CHHPLC\_X3  
Lims ID: 280-159130-A-6-A Lab Sample ID: 280-159130-6  
Client ID: OS001-DP08-45  
Operator ID: JZ ALS Bottle#: 57 Worklist Smp#: 57  
Injection Vol: 100.0 ul Dil. Factor: 1.0000  
Method: 8330\_X3 Limit Group: GCSV - 8330  
Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

7 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.11  
Response: 1878610  
Amount: 14.910146



Reviewer: zhangji, 02-Mar-2022 12:53:00

Audit Action: Marked Compound Undetected

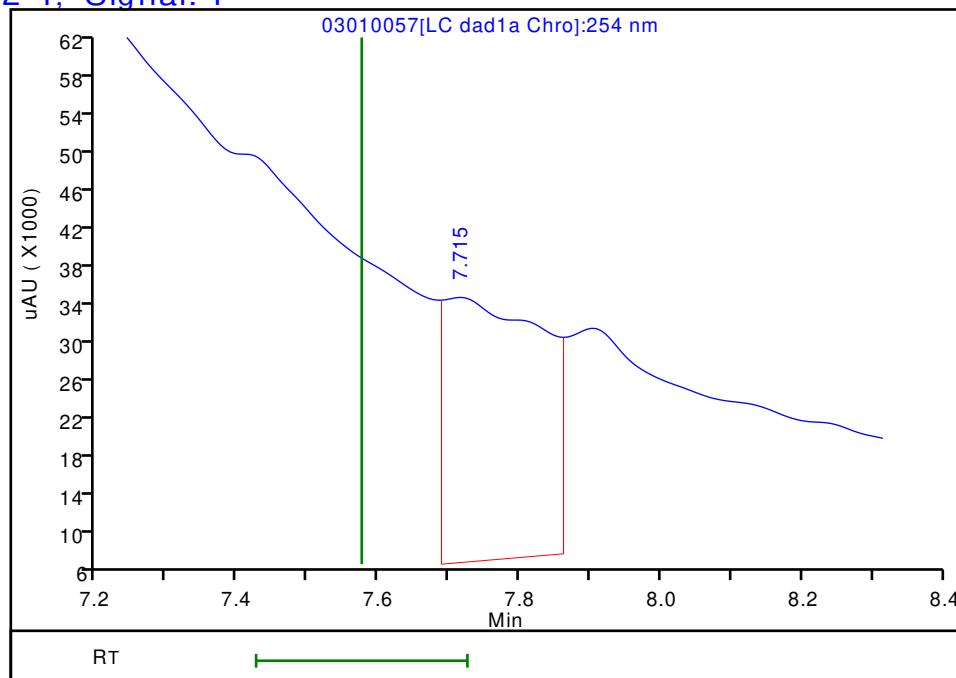
Audit Reason: Invalid Compound ID

## Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010057.d  
 Injection Date: 02-Mar-2022 10:04:30 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-159130-A-6-A Lab Sample ID: 280-159130-6  
 Client ID: OS001-DP08-45  
 Operator ID: JZ ALS Bottle#: 57 Worklist Smp#: 57  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

**8 RDX, CAS: 121-82-4, Signal: 1**

RT: 7.71  
 Response: 265586  
 Amount: 2.563344



Reviewer: zhangji, 02-Mar-2022 12:53:00

Audit Action: Marked Compound Undetected

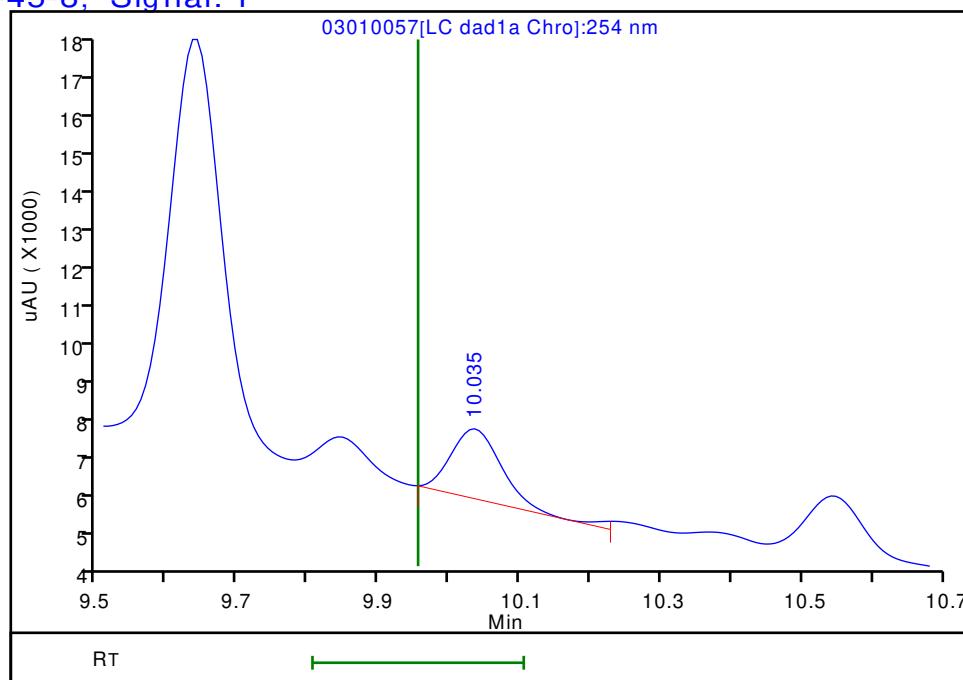
Audit Reason: Invalid Compound ID

## Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010057.d  
Injection Date: 02-Mar-2022 10:04:30 Instrument ID: CHHPLC\_X3  
Lims ID: 280-159130-A-6-A Lab Sample ID: 280-159130-6  
Client ID: OS001-DP08-45  
Operator ID: JZ ALS Bottle#: 57 Worklist Smp#: 57  
Injection Vol: 100.0 ul Dil. Factor: 1.0000  
Method: 8330\_X3 Limit Group: GCSV - 8330  
Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

## 15 Tetryl, CAS: 479-45-8, Signal: 1

RT: 10.03  
Response: 8665  
Amount: 0.050801



Reviewer: zhangji, 02-Mar-2022 12:53:00

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I  
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver

Job No.: 280-159130-1

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

Client Sample ID: OS001-DP08-45

Lab Sample ID: 280-159130-6

Matrix: Water

Lab File ID: 03030024.D

Analysis Method: 8330A

Date Collected: 02/23/2022 12:50

Extraction Method: 3535

Date Extracted: 03/01/2022 11:26

Sample wt/vol: 497.7 (mL)

Date Analyzed: 03/04/2022 00:35

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.: 567645

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
98-95-3	Nitrobenzene	0.20	U	0.21	0.20	0.091

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	106		83-119

Eurofins Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220303-108978.b\03030024.D  
 Lims ID: 280-159130-A-6-A  
 Client ID: OS001-DP08-45  
 Sample Type: Client  
 Inject. Date: 04-Mar-2022 00:35:00 ALS Bottle#: 24 Worklist Smp#: 24  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-159130-A-6-A  
 Misc. Info.: 280-0108978-024  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220303-108978.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 04-Mar-2022 12:18:26 Calib Date: 03-Mar-2022 07:19:48  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020027.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm) Det: LC mwd1A, 254 nm  
 Process Host: CTX1659

First Level Reviewer: zhangji Date: 04-Mar-2022 12:09:04

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
5 HMX	1	6.916				ND	
6 MNX	1	7.649				ND	
8 RDX	1	9.150				ND	
9 Nitrobenzene	1	12.083				ND	
\$ 10 1,2-Dinitrobenzene	1	13.286	13.323	-0.037	52978	0.2121	
12 1,3-Dinitrobenzene	1	15.683				ND	
14 o-Nitrotoluene	1	16.863				ND	U
16 p-Nitrotoluene	1	17.176				ND	
17 4-Amino-2,6-dinitrotoluene	1	17.823				ND	
18 m-Nitrotoluene	1	18.150				ND	
19 2-Amino-4,6-dinitrotoluene	1	18.843				ND	
20 1,3,5-Trinitrobenzene	1	18.996				ND	
21 2,6-Dinitrotoluene	1	20.316				ND	
22 2,4-Dinitrotoluene	1	20.836				ND	
23 Tetryl	1	24.583				ND	
24 2,4,6-Trinitrotoluene	1	25.330				ND	

### QC Flag Legend

Processing Flags

Review Flags

U - Marked Undetected

Report Date: 04-Mar-2022 12:18:28

Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220303-108978.b\03030024.D

Injection Date: 04-Mar-2022 00:35:00

Instrument ID: CHHPLC\_X5

Operator ID: JZ

Lims ID: 280-159130-A-6-A

Lab Sample ID: 280-159130-6

Worklist Smp#: 24

Client ID: OS001-DP08-45

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

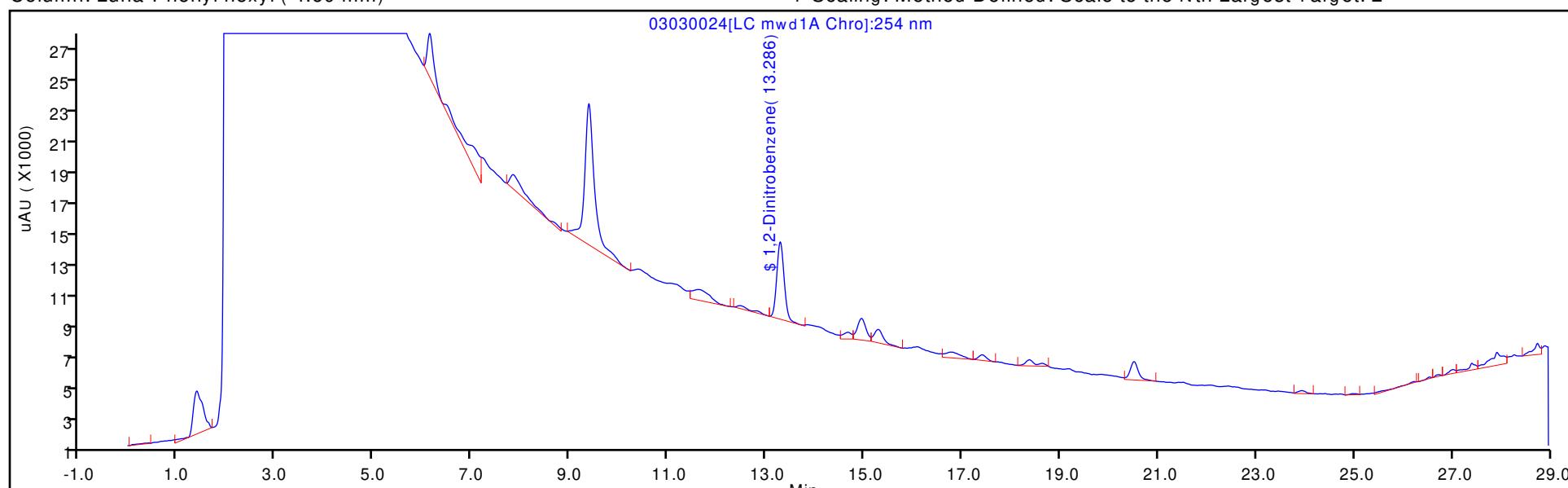
ALS Bottle#: 24

Method: 8330\_X5\_Luna

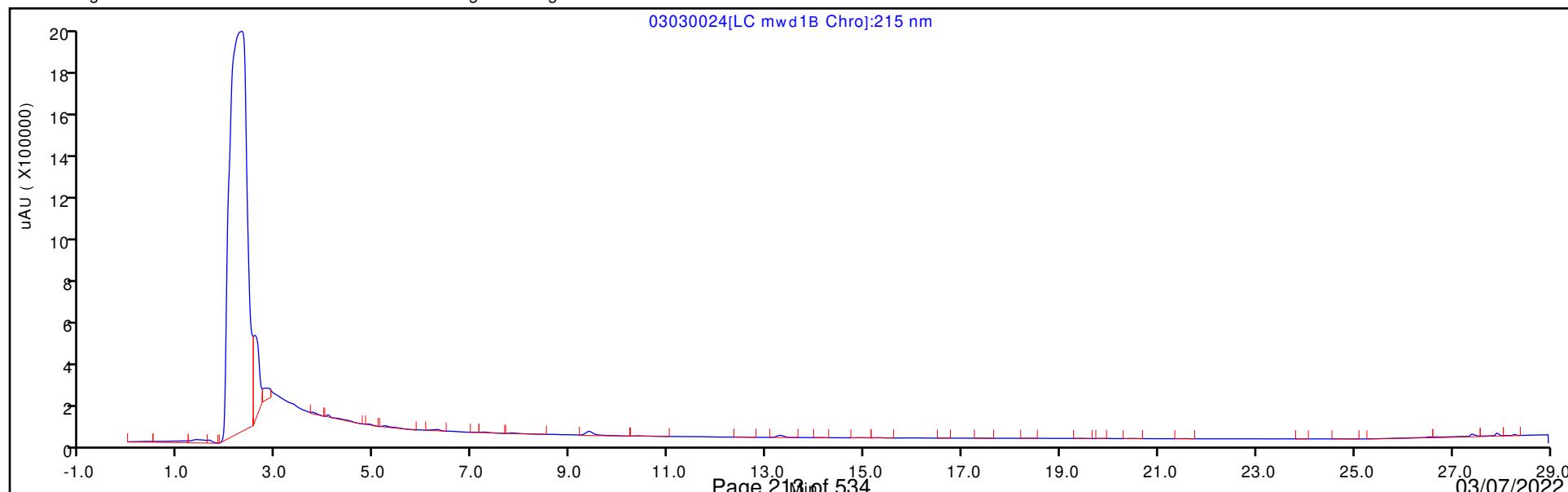
Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Denver  
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220303-108978.b\03030024.D  
 Lims ID: 280-159130-A-6-A  
 Client ID: OS001-DP08-45  
 Sample Type: Client  
 Inject. Date: 04-Mar-2022 00:35:00 ALS Bottle#: 24 Worklist Smp#: 24  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-159130-A-6-A  
 Misc. Info.: 280-0108978-024  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220303-108978.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 04-Mar-2022 12:18:26 Calib Date: 03-Mar-2022 07:19:48  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020027.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm ) Det: LC mwd1A, 254 nm  
 Process Host: CTX1659

First Level Reviewer: zhangji Date: 04-Mar-2022 12:09:04

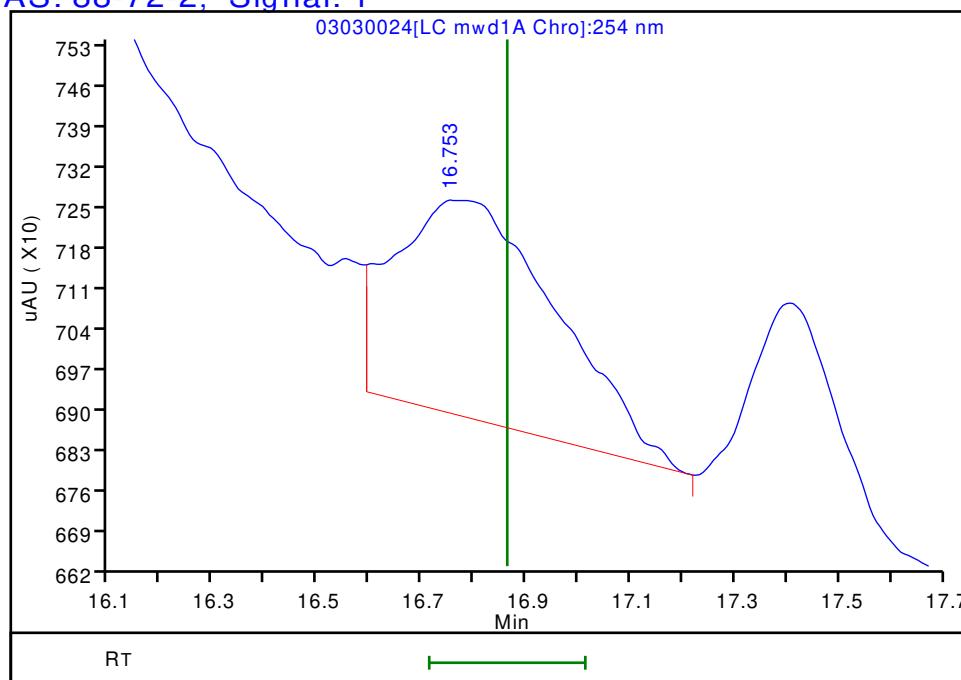
Compound	Amount Added	Amount Recovered	% Rec.
\$ 10 1,2-Dinitrobenzene	0.2000	0.2121	106.06

## Eurofins Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220303-108978.b\03030024.D  
Injection Date: 04-Mar-2022 00:35:00 Instrument ID: CHHPLC\_X5  
Lims ID: 280-159130-A-6-A Lab Sample ID: 280-159130-6  
Client ID: OS001-DP08-45  
Operator ID: JZ ALS Bottle#: 24 Worklist Smp#: 24  
Injection Vol: 100.0 ul Dil. Factor: 1.0000  
Method: 8330\_X5\_Luna Limit Group: GCSV - 8330  
Column: Luna-Phenyl hexyl ( 4.60 mm) Detector: LC mwd1A, 254 nm

## 14 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 16.75  
Response: 8126  
Amount: 0.034627



Reviewer: zhangji, 04-Mar-2022 12:09:04

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 Denver

Job No.: 280-159130-1

Analy Batch No.: 562503

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

Instrument ID: CHHPLC\_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/04/2022 18:28 Calibration End Date: 01/04/2022 21:31 Calibration ID: 61345

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-562503/19	01040019.D
Level 2	IC 280-562503/18	01040018.D
Level 3	IC 280-562503/17	01040017.D
Level 4	IC 280-562503/16	01040016.D
Level 5	IC 280-562503/15	01040015.D
Level 6	IC 280-562503/14	01040014.D
Level 7	IC 280-562503/13	01040013.D
Level 8	IC 280-562503/12	01040012.D
Level 9	IC 280-562503/11	01040011.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8	LVL 9	RT WINDOW	AVG RT
HMX	6.601	6.595	6.600	6.598	6.601	6.601	6.599	6.598	6.593	6.448 - 6.748	6.598
RDX	7.601	7.608	7.607	7.605	7.601	7.607	7.606	7.604	7.600	7.455 - 7.755	7.604
Picric acid	7.941	7.948	7.947	7.945	7.934	7.927	7.913	7.904	7.860	7.795 - 8.095	7.924
1,3,5-Trinitrobenzene	8.688	8.695	8.693	8.692	8.687	8.694	8.693	8.691	8.687	8.542 - 8.842	8.691
1,3-Dinitrobenzene	9.321	9.328	9.327	9.331	9.327	9.327	9.326	9.324	9.320	9.181 - 9.481	9.326
Nitrobenzene	9.714	9.722	9.727	9.725	9.720	9.727	9.726	9.717	9.713	9.575 - 9.875	9.721
Tetryl	10.041	10.055	10.060	10.058	10.054	10.061	10.053	10.051	10.046	9.908 - 10.208	10.053
Nitroglycerin	10.501	10.515	10.513	10.518	10.514	10.514	10.513	10.504	10.500	10.368 - 10.668	10.510
2,4,6-Trinitrotoluene	10.954	10.968	10.973	10.971	10.967	10.967	10.966	10.964	10.960	10.871 - 11.071	10.966
4-Amino-2,6-dinitrotoluene	11.154	11.175	11.173	11.171	11.167	11.174	11.173	11.164	11.160	11.071 - 11.271	11.168
2-Amino-4,6-dinitrotoluene	11.408	11.428	11.427	11.425	11.420	11.421	11.419	11.417	11.413	11.325 - 11.525	11.420
2,6-Dinitrotoluene	11.581	11.595	11.593	11.598	11.594	11.594	11.593	11.591	11.586	11.498 - 11.698	11.592
2,4-Dinitrotoluene	11.748	11.762	11.767	11.765	11.760	11.767	11.766	11.757	11.753	11.665 - 11.865	11.761
2-Nitrotoluene	12.614	12.642	12.640	12.638	12.634	12.634	12.633	12.631	12.620	12.488 - 12.788	12.632
4-Nitrotoluene	13.054	13.075	13.067	13.071	13.060	13.067	13.066	13.057	13.053	12.921 - 13.221	13.063
3-Nitrotoluene	13.634	13.655	13.653	13.651	13.647	13.647	13.646	13.644	13.633	13.501 - 13.801	13.646
PETN	14.708	14.735	14.733	14.738	14.727	14.734	14.733	14.724	14.713	14.588 - 14.888	14.727
1,2-Dinitrobenzene	8.561	8.575	8.573	8.572	8.567	8.574	8.573	8.571	8.567	8.422 - 8.722	8.570

FORM VI  
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA  
CURVE EVALUATION

Lab Name: Eurofins Denver

Job No.: 280-159130-1

Analy Batch No.: 562503

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

Instrument ID: CHHPLC\_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/04/2022 18:28 Calibration End Date: 01/04/2022 21:31 Calibration ID: 61345

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-562503/19	01040019.D
Level 2	IC 280-562503/18	01040018.D
Level 3	IC 280-562503/17	01040017.D
Level 4	IC 280-562503/16	01040016.D
Level 5	IC 280-562503/15	01040015.D
Level 6	IC 280-562503/14	01040014.D
Level 7	IC 280-562503/13	01040013.D
Level 8	IC 280-562503/12	01040012.D
Level 9	IC 280-562503/11	01040011.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5 LVL 9	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
HMX	90100 81580 81292	86750 82313	84600 81626	84890 81295	Ave		83827.201 6				3.6		20.0			
RDX	115200 98540 100273	104200 97815	114300 98669	104470 99016	Ave		103609.19 7				6.5		20.0			
Picric acid	71600 74240 80484	77700 76623	80580 76297	78550 77279	Ave		77039.182 5				3.7		20.0			
1,3,5-Trinitrobenzene	219261 209936 225698	212026 217802	213792 221958	218124 224262	Ave		218095.53 4				2.5		20.0			
1,3-Dinitrobenzene	262774 281713 296660	291068 291824	293074 292328	291567 294606	Ave		288401.48 1				3.6		20.0			
Nitrobenzene	205876 184653 193838	191484 188466	185837 191771	192102 193551	Ave		191953.20 6				3.2		20.0			
Tetryl	177445 163545 172217	174551 166432	165968 169313	172036 173594	Ave		170566.75 9				2.7		20.0			
Nitroglycerin	63480 60791 64852	60040 64322	61302 64183	63595 64770	Ave		63037.286 2				2.9		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI  
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA  
CURVE EVALUATION

Lab Name: Eurofins Denver

Job No.: 280-159130-1

Analy Batch No.: 562503

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

Instrument ID: CHHPLC\_X3 GC Column: UltraCarb5u ID: 4.6 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/04/2022 18:28 Calibration End Date: 01/04/2022 21:31 Calibration ID: 61345

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4		B	M1	M2								
2,4,6-Trinitrotoluene	211753 195486 202459	210508 199081	203227 198317	203267 200435	Ave		202725.95 2				2.7		20.0			
4-Amino-2,6-dinitrotoluene	171628 142434 147171	157343 146076	152967 145091	149600 146556	Ave		150985.19 4				5.9		20.0			
2-Amino-4,6-dinitrotoluene	227789 193171 199435	213247 197134	191235 196207	201992 199332	Ave		202171.24 0				5.7		20.0			
2,6-Dinitrotoluene	154482 136163 144227	149054 142460	137610 141928	141773 140340	Ave		143115.21 8				4.0		20.0			
2,4-Dinitrotoluene	303486 281295 293182	293327 286355	277550 285832	292380 290749	Ave		289350.65 5				2.6		20.0			
2-Nitrotoluene	138700 121120 126002	137150 123750	126280 123333	127770 124418	Ave		127613.60 6				4.8		20.0			
4-Nitrotoluene	108084 103090 108687	107335 105826	103054 106012	106936 107095	Ave		106235.48 3				1.9		20.0			
3-Nitrotoluene	176224 132507 139283	149301 136601	134525 135465	139890 136664	Ave		142273.33 8				9.6		20.0			
PETN	87840 71710 74726	78525 73771	70168 73720	74208 74427	Lin2	1383.2299 8	72545.147 8						0.9990		0.9900	
1,2-Dinitrobenzene	118800 123244 127495	125150 124888	122540 125351	127800 127011	Ave		124697.68 1				2.3		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI  
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA  
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver

Job No.: 280-159130-1

Analy Batch No.: 562503

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

Instrument ID: CHHPLC\_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/04/2022 18:28 Calibration End Date: 01/04/2022 21:31 Calibration ID: 61345

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-562503/19	01040019.D
Level 2	IC 280-562503/18	01040018.D
Level 3	IC 280-562503/17	01040017.D
Level 4	IC 280-562503/16	01040016.D
Level 5	IC 280-562503/15	01040015.D
Level 6	IC 280-562503/14	01040014.D
Level 7	IC 280-562503/13	01040013.D
Level 8	IC 280-562503/12	01040012.D
Level 9	IC 280-562503/11	01040011.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
HMX	Ave	901 32925	1735 57138	4230 81295	8489 203229	20395	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
RDX	Ave	1152 39126	2084 69068	5715 99016	10447 250683	24635	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Picric acid	Ave	716 30649	1554 53408	4029 77279	7855 201210	18560	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
1,3,5-Trinitrobenzene	Ave	2197 87295	4249 155681	10711 224711	21856 565374	52589	0.0100 0.401	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251
1,3-Dinitrobenzene	Ave	2633 116963	5833 205039	14683 295195	29215 743133	70569	0.0100 0.401	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251
Nitrobenzene	Ave	2067 75688	3845 134777	9329 194325	19287 486534	46348	0.0100 0.402	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251
Tetryl	Ave	1778 66706	3498 118756	8315 173941	17238 431404	40968	0.0100 0.401	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251
Nitroglycerin	Ave	6348 257287	12008 449283	30651 647703	63595 1621311	151977	0.100 4.00	0.200 7.00	0.500 10.0	1.00 25.0	2.50
2,4,6-Trinitrotoluene	Ave	2126 79951	4227 139377	10202 201237	20408 508173	49067	0.0100 0.402	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251
4-Amino-2,6-dinitrotoluene	Ave	1718 58489	3150 101665	7656 146703	14975 368296	35644	0.0100 0.400	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250
2-Amino-4,6-dinitrotoluene	Ave	2287 79169	4282 137894	9600 200129	20280 500581	48486	0.0100 0.402	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251
2,6-Dinitrotoluene	Ave	1551 57212	2993 99747	6908 140901	14234 362011	34177	0.0100 0.402	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251
2,4-Dinitrotoluene	Ave	3047	5890	13933	29355	70605	0.0100	0.0201	0.0502	0.100	0.251

FORM VI  
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA  
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver Job No.: 280-159130-1 Analy Batch No.: 562503

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

Instrument ID: CHHPLC\_X3 GC Column: UltraCarb5u ID: 4.6 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/04/2022 18:28 Calibration End Date: 01/04/2022 21:31 Calibration ID: 61345

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
		115000	200883	291912	735887		0.402	0.703	1.00	2.51	
2-Nitrotoluene	Ave	1387 49500	2743 86333	6314 124418	12777 315004	30280	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
4-Nitrotoluene	Ave	1083 42415	2151 74357	5163 107309	10715 272262	25824	0.0100 0.401	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251
3-Nitrotoluene	Ave	1764 54695	2989 94920	6733 136801	14003 348555	33160	0.0100 0.400	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250
PETN	Lin2	8784 295082	15705 516042	35084 744274	74208 1868141	179275	0.100 4.00	0.200 7.00	0.500 10.0	1.00 25.0	2.50
1,2-Dinitrobenzene	Ave	1188 49955	2503 87746	6127 127011	12780 318738	30811	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\20220104-107731.b\01040011.D  
 Lims ID: IC INT 9  
 Client ID:  
 Sample Type: IC Calib Level: 9  
 Inject. Date: 04-Jan-2022 18:28:10 ALS Bottle#: 11 Worklist Smp#: 11  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Sample Info: IC INT 9  
 Misc. Info.: 280-0107731-011  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Sublist: chrom-8330\_X3\*sub9  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Jan-2022 20:05:10 Calib Date: 05-Jan-2022 04:24:15  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040037.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm ) Det: LC DAD1B, 254 nm  
 Process Host: CTX1641

First Level Reviewer: zhangji Date: 04-Jan-2022 19:18:32

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.593	6.598	-0.005	203229	2.50	2.42	M
8 RDX	1	7.600	7.605	-0.005	250683	2.50	2.42	
9 2,4,6-Trinitrophenol	1	7.860	7.945	-0.085	201210	2.50	2.61	
\$ 10 1,2-Dinitrobenzene	1	8.567	8.572	-0.005	318738	2.50	2.56	
11 1,3,5-Trinitrobenzene	1	8.687	8.692	-0.005	565374	2.51	2.59	
12 1,3-Dinitrobenzene	1	9.320	9.331	-0.011	743133	2.51	2.58	
13 Nitrobenzene	1	9.713	9.725	-0.012	486534	2.51	2.53	
15 Tetryl	1	10.046	10.058	-0.012	431404	2.51	2.53	
16 Nitroglycerin	2	10.500	10.518	-0.018	1621311	25.0	25.7	
17 2,4,6-Trinitrotoluene	1	10.960	10.971	-0.011	508173	2.51	2.51	
18 4-Amino-2,6-dinitrotoluene	1	11.160	11.171	-0.011	368296	2.50	2.44	
19 2-Amino-4,6-dinitrotoluene	1	11.413	11.425	-0.012	500581	2.51	2.48	
20 2,6-Dinitrotoluene	1	11.586	11.598	-0.012	362011	2.51	2.53	
21 2,4-Dinitrotoluene	1	11.753	11.765	-0.012	735887	2.51	2.54	
22 o-Nitrotoluene	1	12.620	12.638	-0.018	315004	2.50	2.47	
23 p-Nitrotoluene	1	13.053	13.071	-0.018	272262	2.51	2.56	
24 m-Nitrotoluene	1	13.633	13.651	-0.018	348555	2.50	2.45	
25 PETN	2	14.713	14.738	-0.025	1868141	25.0	25.7	

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

### Reagents:

8330\IntermStk\_00070

Amount Added: 250.00

Units: uL

Report Date: 06-Jan-2022 20:05:10

Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220104-107731.b\01040011.d

Injection Date: 04-Jan-2022 18:28:10

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: IC INT 9

Worklist Smp#: 11

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

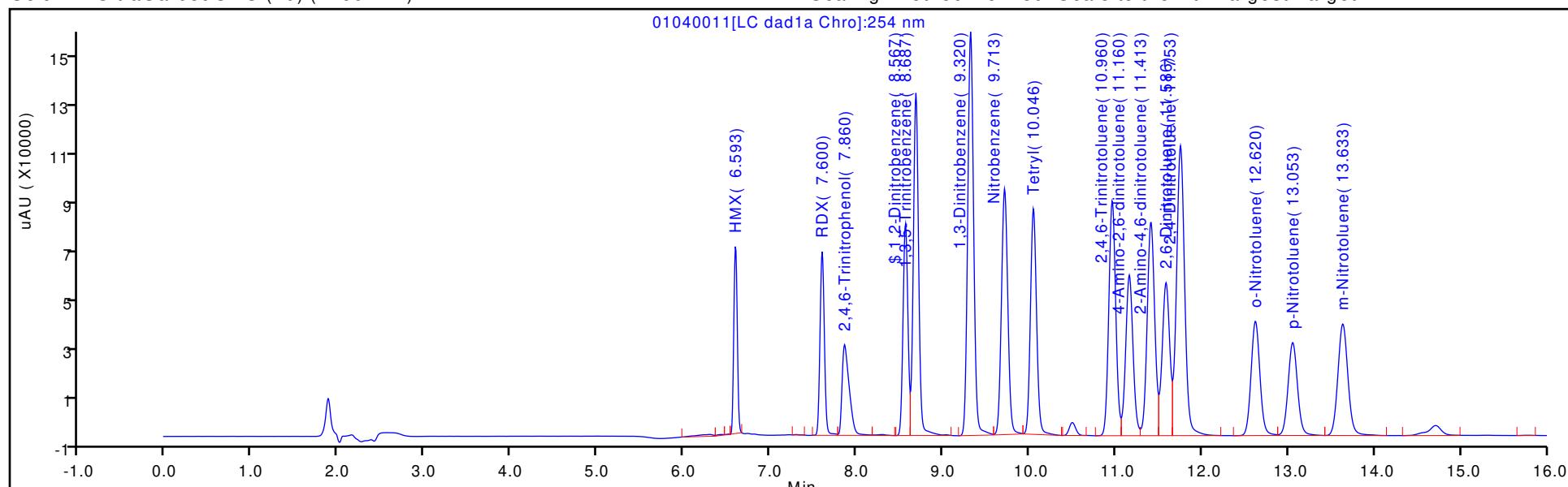
ALS Bottle#: 11

Method: 8330\_X3

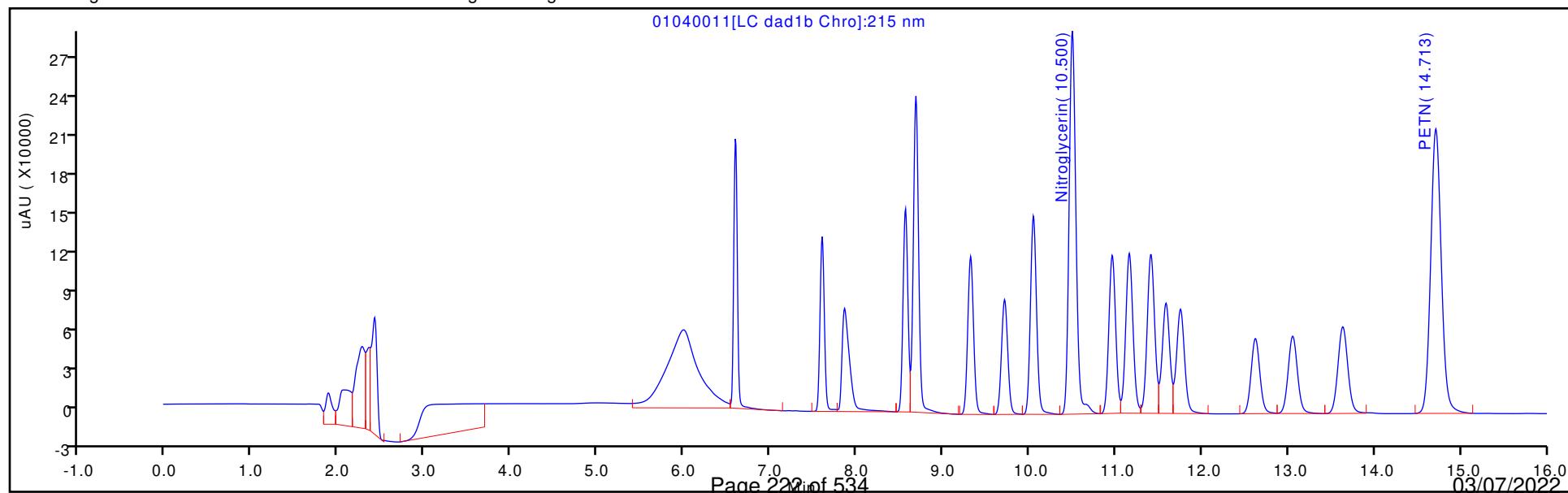
Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



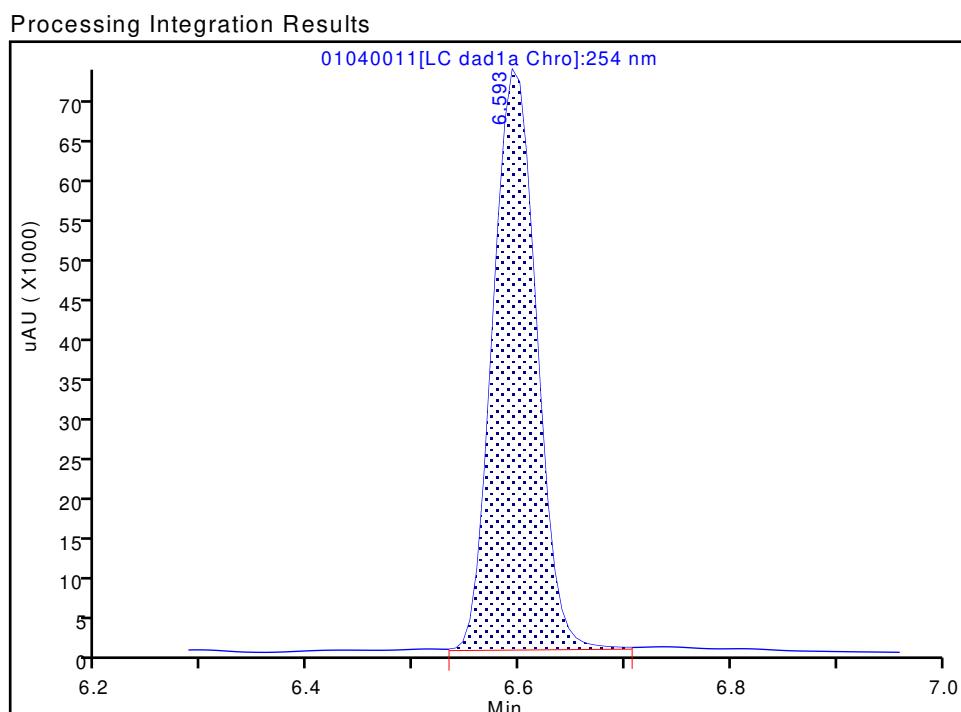
## Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220104-107731.b\01040011.d  
 Injection Date: 04-Jan-2022 18:28:10 Instrument ID: CHHPLC\_X3  
 Lims ID: IC INT 9  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 11 Worklist Smp#: 11  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

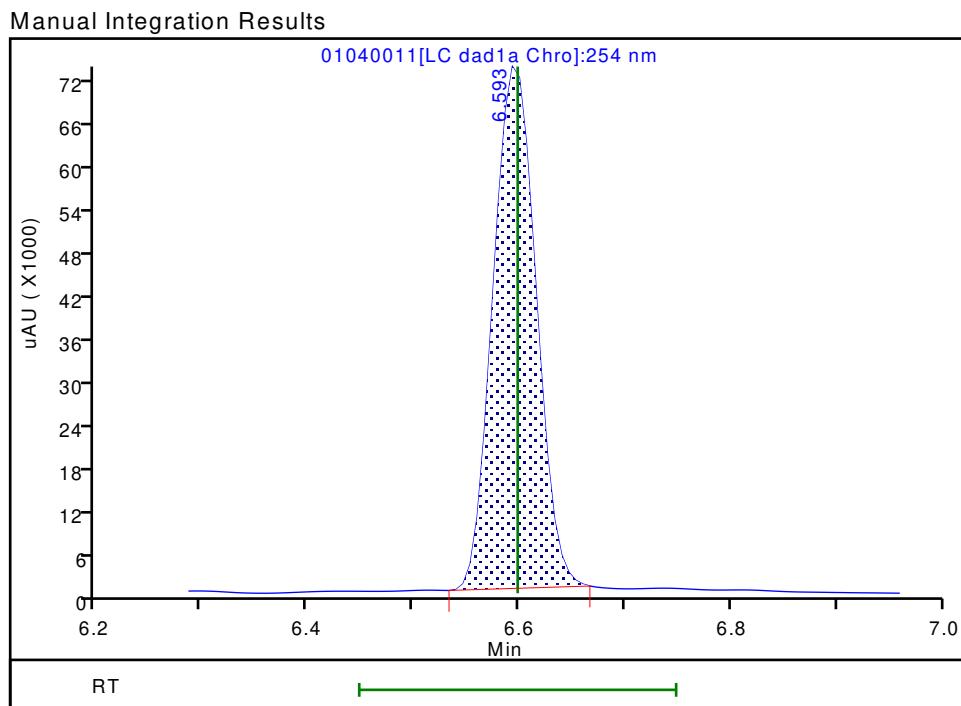
## 4 HMX, CAS: 2691-41-0

Signal: 1

RT: 6.59  
 Area: 207225  
 Amount: 2.498192  
 Amount Units: ug/mL



RT: 6.59  
 Area: 203229  
 Amount: 2.424380  
 Amount Units: ug/mL



Reviewer: zhangji, 04-Jan-2022 19:18:30

Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040012.D  
 Lims ID: IC INT 8  
 Client ID:  
 Sample Type: IC Calib Level: 8  
 Inject. Date: 04-Jan-2022 18:51:00 ALS Bottle#: 12 Worklist Smp#: 12  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Sample Info: IC INT 8  
 Misc. Info.: 280-0107731-012  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Sublist: chrom-8330\_X3\*sub9  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Jan-2022 20:05:11 Calib Date: 05-Jan-2022 04:24:15  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040037.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm ) Det: LC DAD1B, 254 nm  
 Process Host: CTX1641

First Level Reviewer: zhangji Date: 04-Jan-2022 19:18:25

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.598	6.598	0.000	81295	1.00	0.9698	M
8 RDX	1	7.604	7.605	-0.001	99016	1.00	0.9557	
9 2,4,6-Trinitrophenol	1	7.904	7.945	-0.041	77279	1.00	1.00	
\$ 10 1,2-Dinitrobenzene	1	8.571	8.572	-0.001	127011	1.00	1.02	
11 1,3,5-Trinitrobenzene	1	8.691	8.692	-0.001	224711	1.00	1.03	
12 1,3-Dinitrobenzene	1	9.324	9.331	-0.007	295195	1.00	1.02	
13 Nitrobenzene	1	9.717	9.725	-0.008	194325	1.00	1.01	
15 Tetryl	1	10.051	10.058	-0.007	173941	1.00	1.02	
16 Nitroglycerin	2	10.504	10.518	-0.014	647703	10.0	10.3	
17 2,4,6-Trinitrotoluene	1	10.964	10.971	-0.007	201237	1.00	0.99	
18 4-Amino-2,6-dinitrotoluene	1	11.164	11.171	-0.007	146703	1.00	0.9716	
19 2-Amino-4,6-dinitrotoluene	1	11.417	11.425	-0.008	200129	1.00	0.9899	
20 2,6-Dinitrotoluene	1	11.591	11.598	-0.007	140901	1.00	0.9845	
21 2,4-Dinitrotoluene	1	11.757	11.765	-0.008	291912	1.00	1.01	
22 o-Nitrotoluene	1	12.631	12.638	-0.007	124418	1.00	0.9750	
23 p-Nitrotoluene	1	13.057	13.071	-0.014	107309	1.00	1.01	
24 m-Nitrotoluene	1	13.644	13.651	-0.007	136801	1.00	0.9615	
25 PETN	2	14.724	14.738	-0.014	744274	10.0	10.2	

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

### Reagents:

8330\IntermStk\_00070

Amount Added: 100.00

Units: uL

Report Date: 06-Jan-2022 20:05:11

Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220104-107731.b\01040012.d

Injection Date: 04-Jan-2022 18:51:00

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: IC INT 8

Worklist Smp#: 12

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

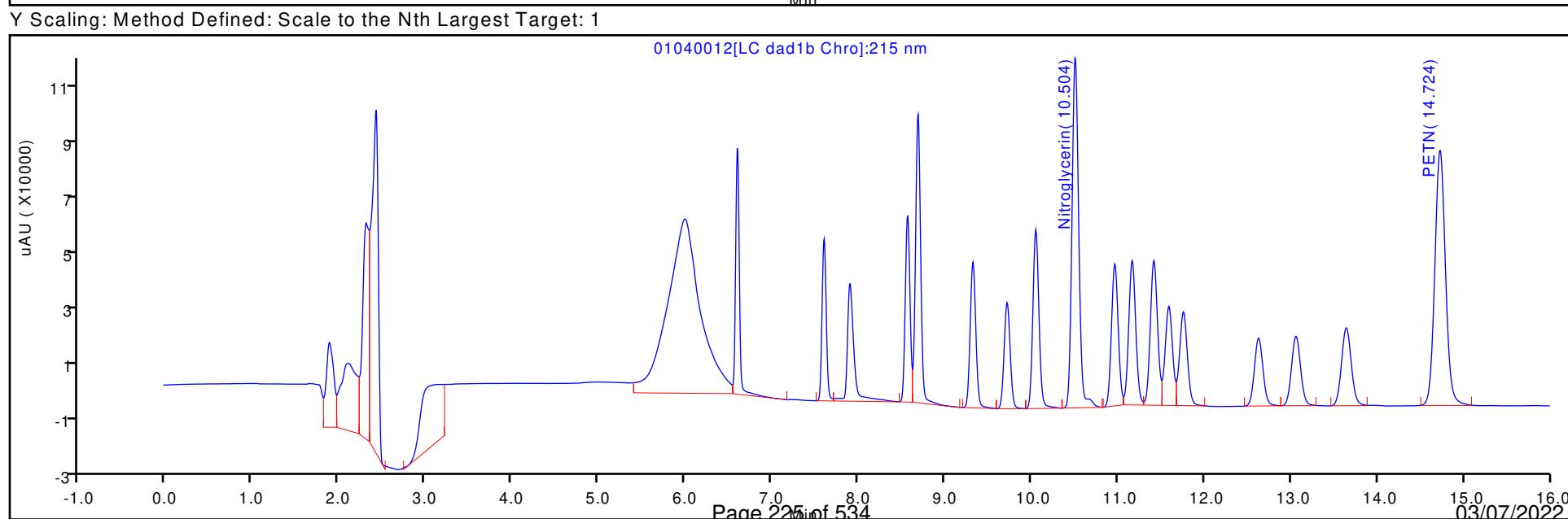
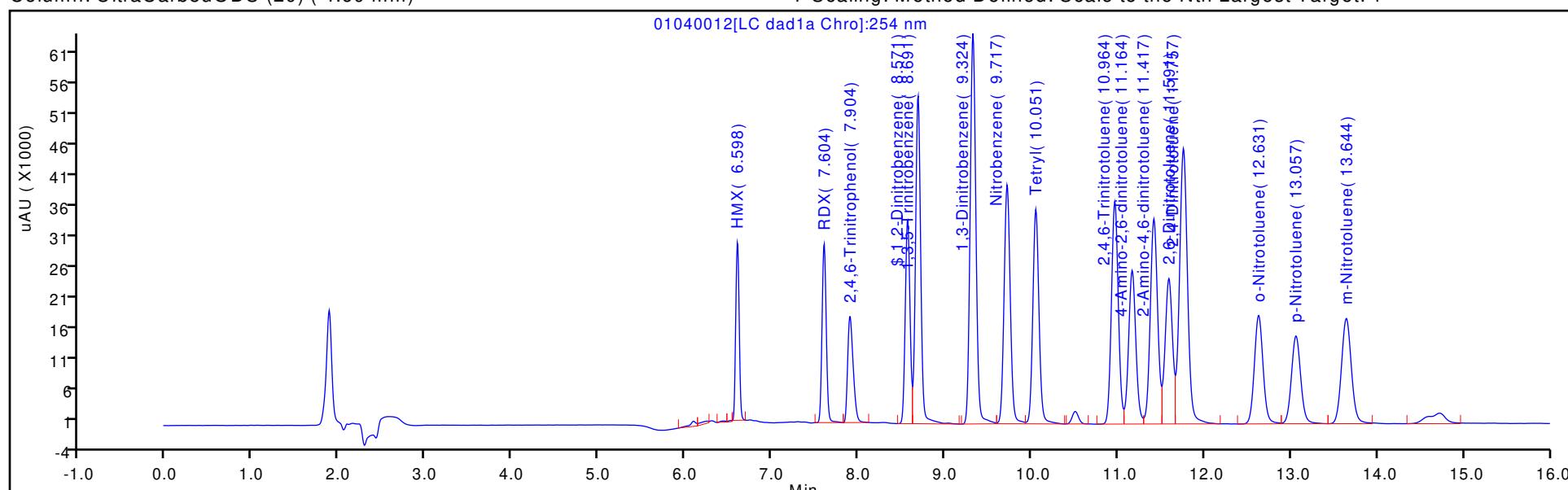
ALS Bottle#: 12

Method: 8330\_X3

Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



## Eurofins TestAmerica, Denver

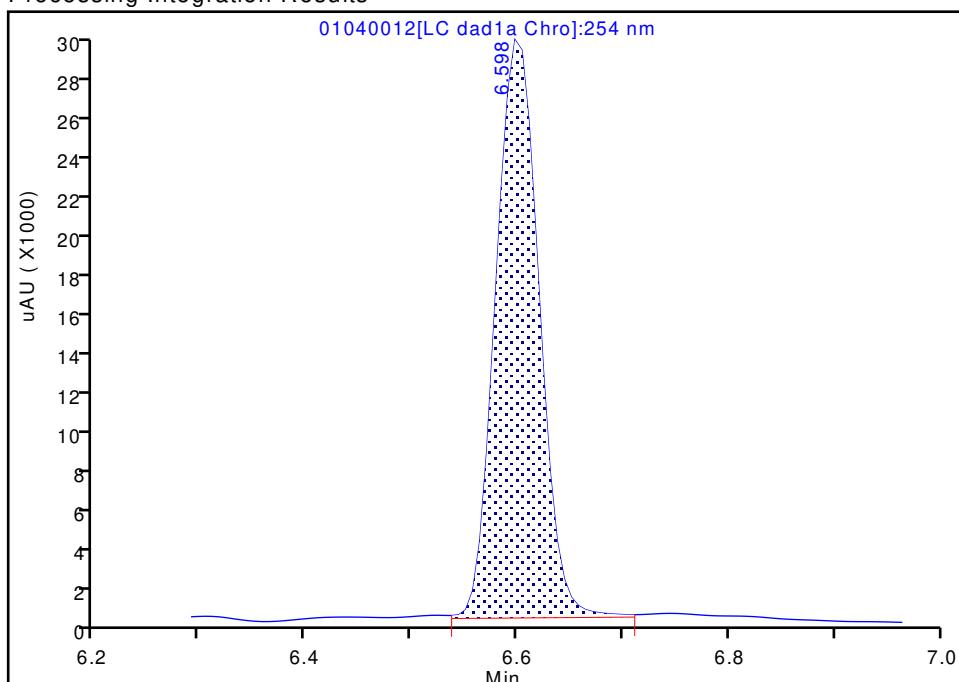
Data File: \\chromfs\denver\chromdata\chhplc\_x\20220104-107731.b\01040012.d  
 Injection Date: 04-Jan-2022 18:51:00 Instrument ID: CHHPLC\_X3  
 Lims ID: IC INT 8  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 12 Worklist Smp#: 12  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

## 4 HMX, CAS: 2691-41-0

Signal: 1

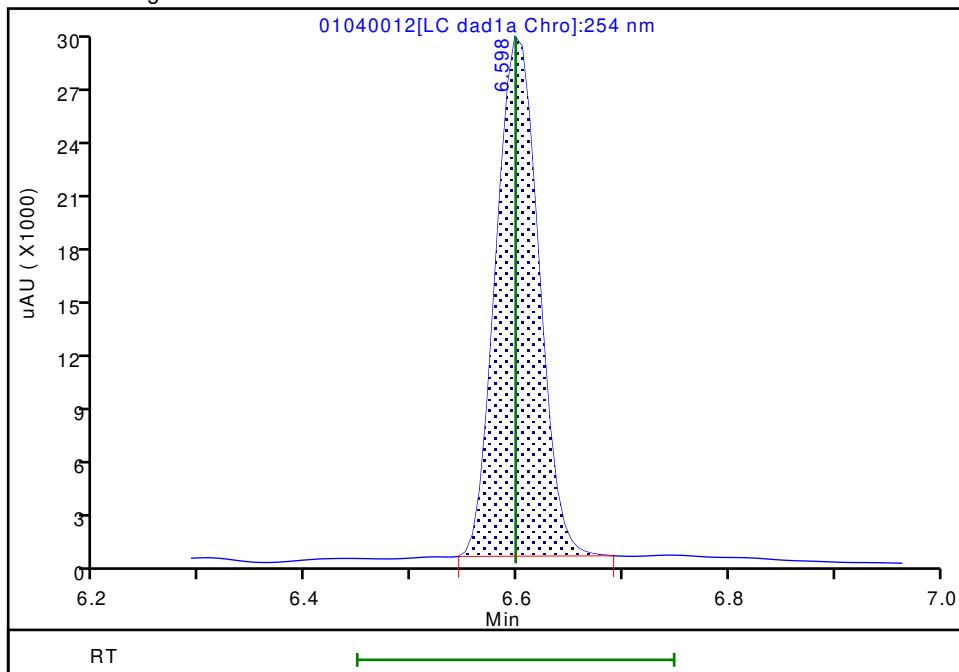
RT: 6.60  
 Area: 83010  
 Amount: 1.010459  
 Amount Units: ug/mL

## Processing Integration Results



RT: 6.60  
 Area: 81295  
 Amount: 0.969793  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 04-Jan-2022 19:18:46

Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040013.D  
 Lims ID: IC INT 7  
 Client ID:  
 Sample Type: IC Calib Level: 7  
 Inject. Date: 04-Jan-2022 19:13:53 ALS Bottle#: 13 Worklist Smp#: 13  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Sample Info: IC INT 7  
 Misc. Info.: 280-0107731-013  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Sublist: chrom-8330\_X3\*sub9  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Jan-2022 20:05:11 Calib Date: 05-Jan-2022 04:24:15  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040037.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm ) Det: LC DAD1B, 254 nm  
 Process Host: CTX1641

First Level Reviewer: zhangji Date: 04-Jan-2022 19:38:01

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.599	6.598	0.001	57138	0.7000	0.6816	
8 RDX	1	7.606	7.605	0.001	69068	0.7000	0.6666	
9 2,4,6-Trinitrophenol	1	7.913	7.945	-0.032	53408	0.7000	0.6933	
\$ 10 1,2-Dinitrobenzene	1	8.573	8.572	0.001	87746	0.7000	0.7037	
11 1,3,5-Trinitrobenzene	1	8.693	8.692	0.001	155681	0.7014	0.7138	
12 1,3-Dinitrobenzene	1	9.326	9.331	-0.005	205039	0.7014	0.7109	
13 Nitrobenzene	1	9.726	9.725	0.001	134777	0.7028	0.7021	
15 Tetryl	1	10.053	10.058	-0.005	118756	0.7014	0.6962	
16 Nitroglycerin	2	10.513	10.518	-0.005	449283	7.00	7.13	
17 2,4,6-Trinitrotoluene	1	10.966	10.971	-0.005	139377	0.7028	0.6875	
18 4-Amino-2,6-dinitrotoluene	1	11.173	11.171	0.002	101665	0.7007	0.6733	
19 2-Amino-4,6-dinitrotoluene	1	11.419	11.425	-0.006	137894	0.7028	0.6821	
20 2,6-Dinitrotoluene	1	11.593	11.598	-0.005	99747	0.7028	0.6970	
21 2,4-Dinitrotoluene	1	11.766	11.765	0.001	200883	0.7028	0.6943	
22 o-Nitrotoluene	1	12.633	12.638	-0.005	86333	0.7000	0.6765	
23 p-Nitrotoluene	1	13.066	13.071	-0.005	74357	0.7014	0.6999	
24 m-Nitrotoluene	1	13.646	13.651	-0.005	94920	0.7007	0.6672	
25 PETN	2	14.733	14.738	-0.005	516042	7.00	7.09	

### QC Flag Legend

Processing Flags

### Reagents:

8330\TermStk\_00070 Amount Added: 70.00 Units: uL

Report Date: 06-Jan-2022 20:05:11

Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220104-107731.b\01040013.d

Injection Date: 04-Jan-2022 19:13:53

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: IC INT 7

Worklist Smp#: 13

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

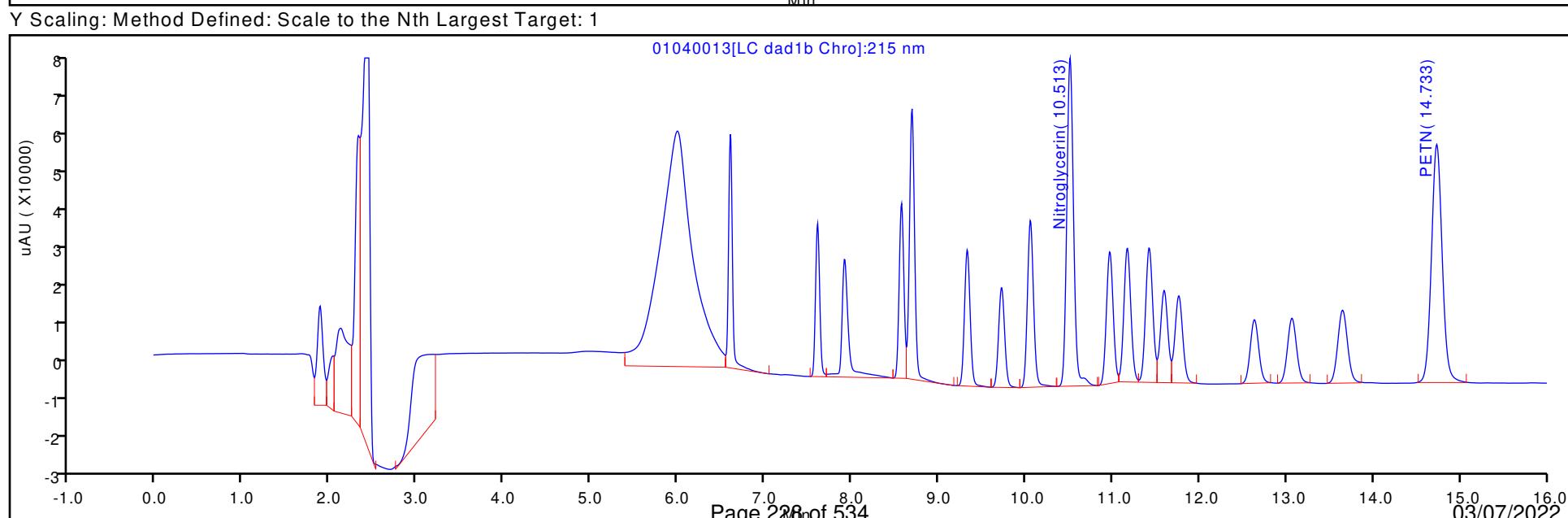
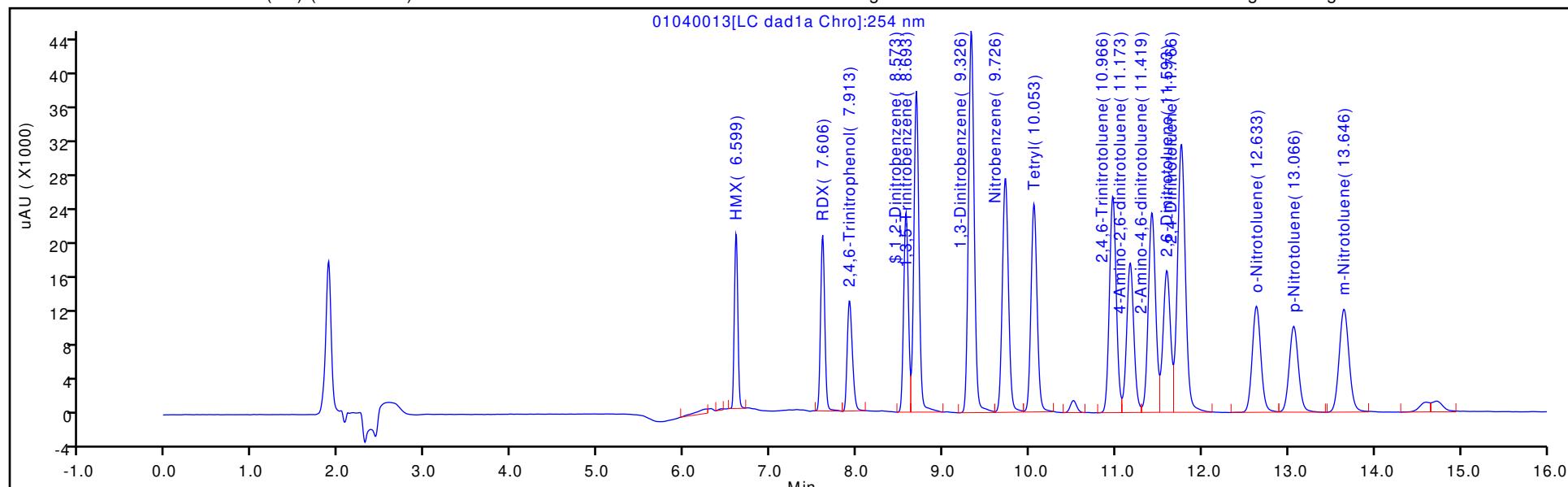
ALS Bottle#: 13

Method: 8330\_X3

Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040014.D  
 Lims ID: IC INT 6  
 Client ID:  
 Sample Type: IC Calib Level: 6  
 Inject. Date: 04-Jan-2022 19:36:46 ALS Bottle#: 14 Worklist Smp#: 14  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Sample Info: IC INT 6  
 Misc. Info.: 280-0107731-014  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Sublist: chrom-8330\_X3\*sub9  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Jan-2022 20:05:12 Calib Date: 05-Jan-2022 04:24:15  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040037.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm ) Det: LC DAD1B, 254 nm  
 Process Host: CTX1641

First Level Reviewer: zhangji

Date:

04-Jan-2022 20:03:49

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.601	6.598	0.003	32925	0.4000	0.3928	
8 RDX	1	7.607	7.605	0.002	39126	0.4000	0.3776	
9 2,4,6-Trinitrophenol	1	7.927	7.945	-0.018	30649	0.4000	0.3978	
\$ 10 1,2-Dinitrobenzene	1	8.574	8.572	0.002	49955	0.4000	0.4006	
11 1,3,5-Trinitrobenzene	1	8.694	8.692	0.002	87295	0.4008	0.4003	
12 1,3-Dinitrobenzene	1	9.327	9.331	-0.004	116963	0.4008	0.4056	
13 Nitrobenzene	1	9.727	9.725	0.002	75688	0.4016	0.3943	
15 Tetryl	1	10.061	10.058	0.003	66706	0.4008	0.3911	
16 Nitroglycerin	2	10.514	10.518	-0.004	257287	4.00	4.08	
17 2,4,6-Trinitrotoluene	1	10.967	10.971	-0.004	79951	0.4016	0.3944	
18 4-Amino-2,6-dinitrotoluene	1	11.174	11.171	0.003	58489	0.4004	0.3874	
19 2-Amino-4,6-dinitrotoluene	1	11.421	11.425	-0.004	79169	0.4016	0.3916	
20 2,6-Dinitrotoluene	1	11.594	11.598	-0.004	57212	0.4016	0.3998	
21 2,4-Dinitrotoluene	1	11.767	11.765	0.002	115000	0.4016	0.3974	
22 o-Nitrotoluene	1	12.634	12.638	-0.004	49500	0.4000	0.3879	
23 p-Nitrotoluene	1	13.067	13.071	-0.004	42415	0.4008	0.3993	
24 m-Nitrotoluene	1	13.647	13.651	-0.004	54695	0.4004	0.3844	
25 PETN	2	14.734	14.738	-0.004	295082	4.00	4.05	

**QC Flag Legend**

Processing Flags

**Reagents:**

8330\TermStk\_00070

Amount Added: 40.00

Units: uL

Report Date: 06-Jan-2022 20:05:12

Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220104-107731.b\01040014.d

Injection Date: 04-Jan-2022 19:36:46

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: IC INT 6

Worklist Smp#: 14

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

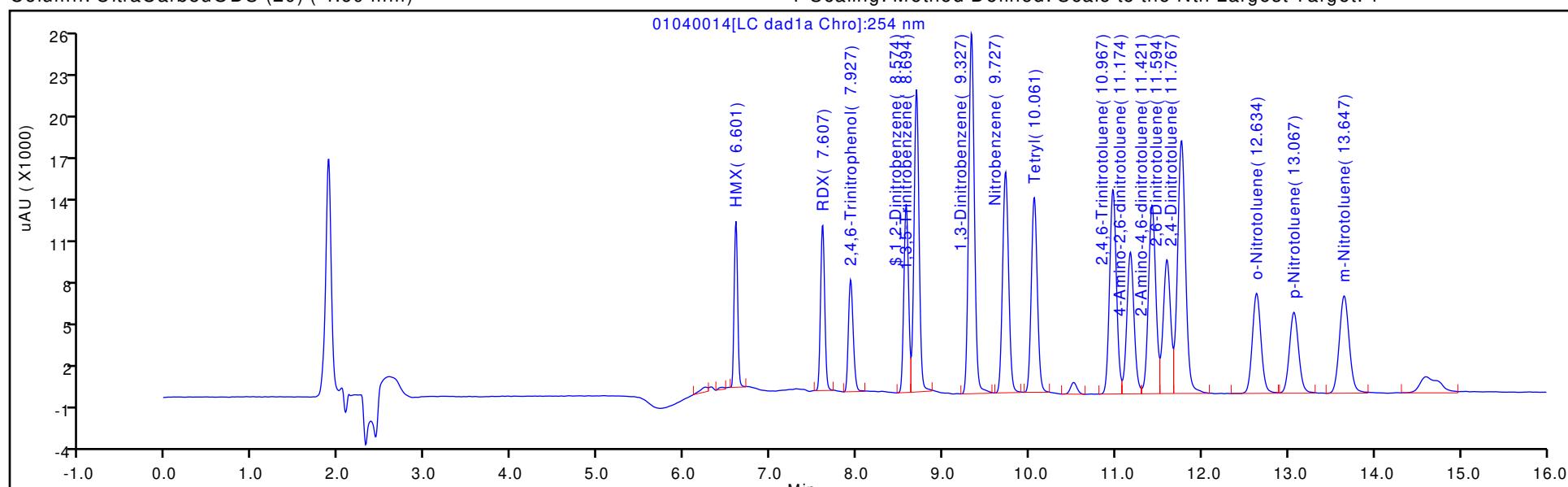
ALS Bottle#: 14

Method: 8330\_X3

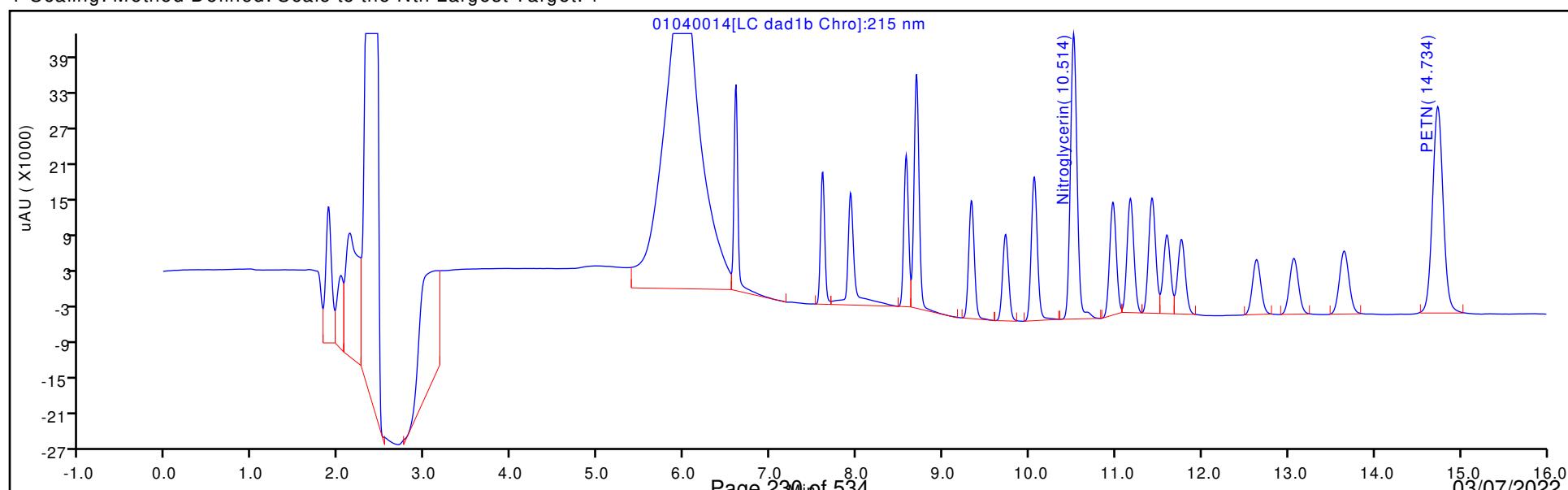
Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040015.D  
 Lims ID: IC INT 5  
 Client ID:  
 Sample Type: IC Calib Level: 5  
 Inject. Date: 04-Jan-2022 19:59:42 ALS Bottle#: 15 Worklist Smp#: 15  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Sample Info: IC INT 5  
 Misc. Info.: 280-0107731-015  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Sublist: chrom-8330\_X3\*sub9  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Jan-2022 20:05:12 Calib Date: 05-Jan-2022 04:24:15  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040037.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm ) Det: LC DAD1B, 254 nm  
 Process Host: CTX1641

First Level Reviewer: zhangji Date: 04-Jan-2022 20:30:59

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.601	6.598	0.003	20395	0.2500	0.2433	
8 RDX	1	7.601	7.605	-0.004	24635	0.2500	0.2378	
9 2,4,6-Trinitrophenol	1	7.934	7.945	-0.011	18560	0.2500	0.2409	
\$ 10 1,2-Dinitrobenzene	1	8.567	8.572	-0.005	30811	0.2500	0.2471	
11 1,3,5-Trinitrobenzene	1	8.687	8.692	-0.005	52589	0.2505	0.2411	
12 1,3-Dinitrobenzene	1	9.327	9.331	-0.004	70569	0.2505	0.2447	
13 Nitrobenzene	1	9.720	9.725	-0.005	46348	0.2510	0.2415	
15 Tetryl	1	10.054	10.058	-0.004	40968	0.2505	0.2402	
16 Nitroglycerin	2	10.514	10.518	-0.004	151977	2.50	2.41	
17 2,4,6-Trinitrotoluene	1	10.967	10.971	-0.004	49067	0.2510	0.2420	
18 4-Amino-2,6-dinitrotoluene	1	11.167	11.171	-0.004	35644	0.2503	0.2361	
19 2-Amino-4,6-dinitrotoluene	1	11.420	11.425	-0.005	48486	0.2510	0.2398	
20 2,6-Dinitrotoluene	1	11.594	11.598	-0.004	34177	0.2510	0.2388	
21 2,4-Dinitrotoluene	1	11.760	11.765	-0.005	70605	0.2510	0.2440	
22 o-Nitrotoluene	1	12.634	12.638	-0.004	30280	0.2500	0.2373	
23 p-Nitrotoluene	1	13.060	13.071	-0.011	25824	0.2505	0.2431	
24 m-Nitrotoluene	1	13.647	13.651	-0.004	33160	0.2503	0.2331	
25 PETN	2	14.727	14.738	-0.011	179275	2.50	2.45	

### QC Flag Legend

Processing Flags

### Reagents:

8330\TermStk\_00070 Amount Added: 25.00 Units: uL

Report Date: 06-Jan-2022 20:05:12

Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220104-107731.b\01040015.d

Injection Date: 04-Jan-2022 19:59:42

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: IC INT 5

Worklist Smp#: 15

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

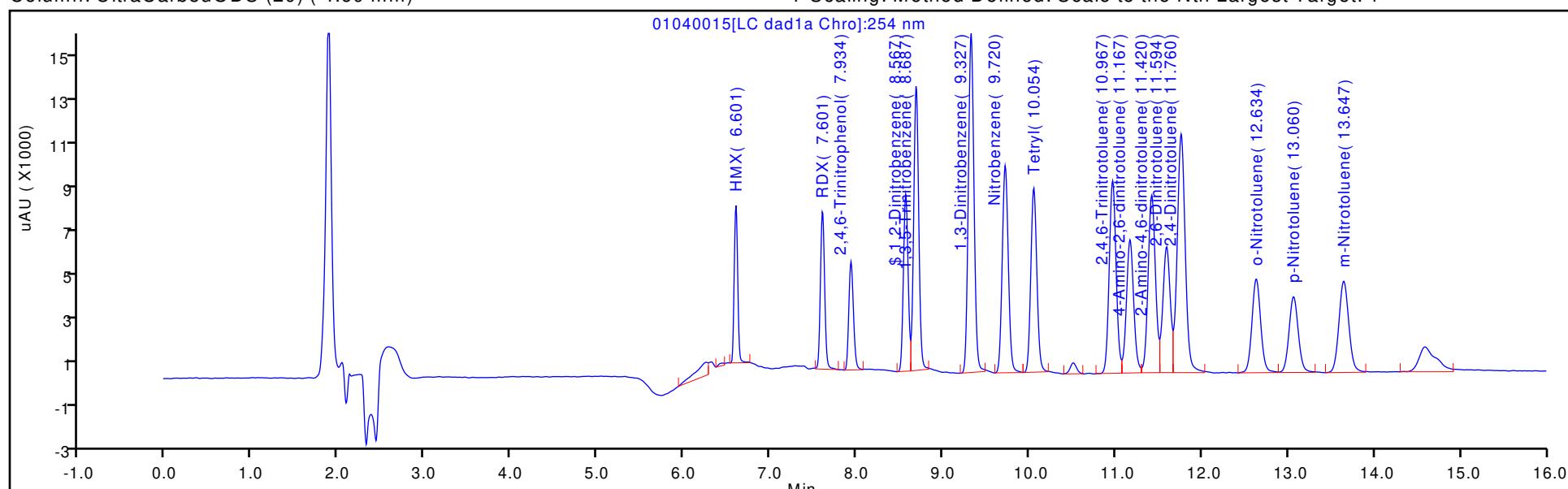
ALS Bottle#: 15

Method: 8330\_X3

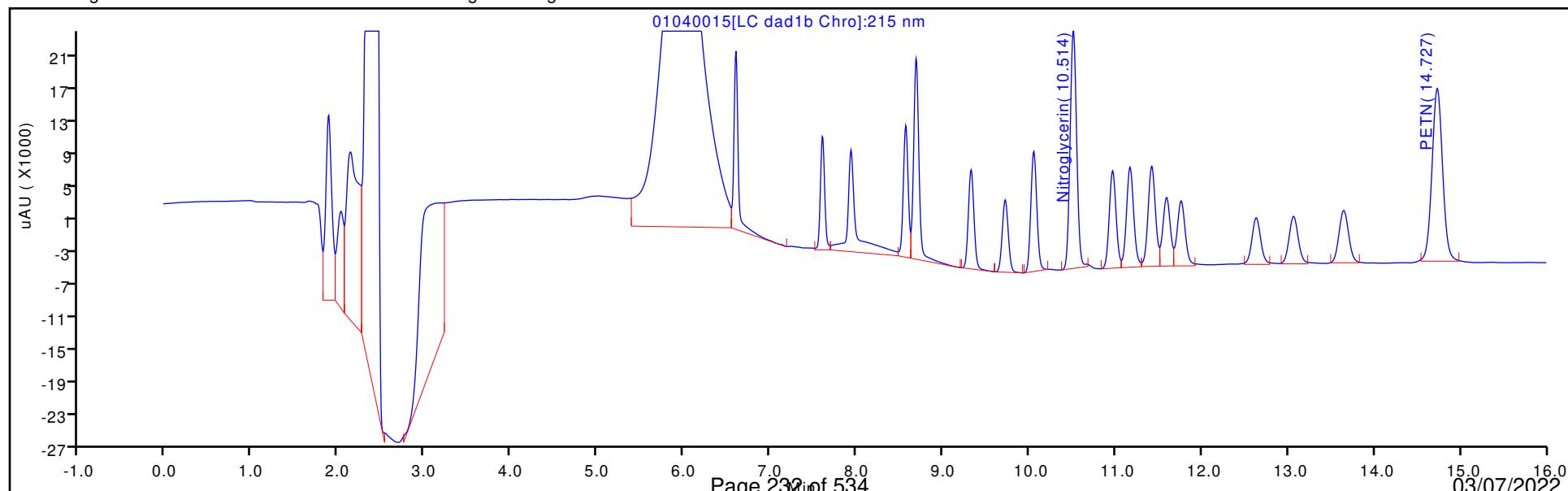
Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040016.D  
 Lims ID: IC INT 4  
 Client ID:  
 Sample Type: IC Calib Level: 4  
 Inject. Date: 04-Jan-2022 20:22:36 ALS Bottle#: 16 Worklist Smp#: 16  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Sample Info: IC INT 4  
 Misc. Info.: 280-0107731-016  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Sublist: chrom-8330\_X3\*sub9  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Jan-2022 20:05:12 Calib Date: 05-Jan-2022 04:24:15  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040037.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm ) Det: LC DAD1B, 254 nm  
 Process Host: CTX1641

First Level Reviewer: zhangji

Date:

04-Jan-2022 20:49:54

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.598	6.598	0.000	8489	0.1000	0.1013	
8 RDX	1	7.605	7.605	0.000	10447	0.1000	0.1008	
9 2,4,6-Trinitrophenol	1	7.945	7.945	0.000	7855	0.1000	0.1020	
\$ 10 1,2-Dinitrobenzene	1	8.572	8.572	0.000	12780	0.1000	0.1025	
11 1,3,5-Trinitrobenzene	1	8.692	8.692	0.000	21856	0.1002	0.1002	
12 1,3-Dinitrobenzene	1	9.331	9.331	0.000	29215	0.1002	0.1013	
13 Nitrobenzene	1	9.725	9.725	0.000	19287	0.1004	0.1005	
15 Tetryl	1	10.058	10.058	0.000	17238	0.1002	0.1011	
16 Nitroglycerin	2	10.518	10.518	0.000	63595	1.00	1.01	
17 2,4,6-Trinitrotoluene	1	10.971	10.971	0.000	20408	0.1004	0.1007	
18 4-Amino-2,6-dinitrotoluene	1	11.171	11.171	0.000	14975	0.1001	0.0992	
19 2-Amino-4,6-dinitrotoluene	1	11.425	11.425	0.000	20280	0.1004	0.1003	
20 2,6-Dinitrotoluene	1	11.598	11.598	0.000	14234	0.1004	0.0995	
21 2,4-Dinitrotoluene	1	11.765	11.765	0.000	29355	0.1004	0.1015	
22 o-Nitrotoluene	1	12.638	12.638	0.000	12777	0.1000	0.1001	
23 p-Nitrotoluene	1	13.071	13.071	0.000	10715	0.1002	0.1009	
24 m-Nitrotoluene	1	13.651	13.651	0.000	14003	0.1001	0.0984	
25 PETN	2	14.738	14.738	0.000	74208	1.00	1.00	

**QC Flag Legend**

Processing Flags

**Reagents:**

8330\TermStk\_00070

Amount Added: 10.00

Units: uL

Report Date: 06-Jan-2022 20:05:13

Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220104-107731.b\01040016.d

Injection Date: 04-Jan-2022 20:22:36

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: IC INT 4

Worklist Smp#: 16

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

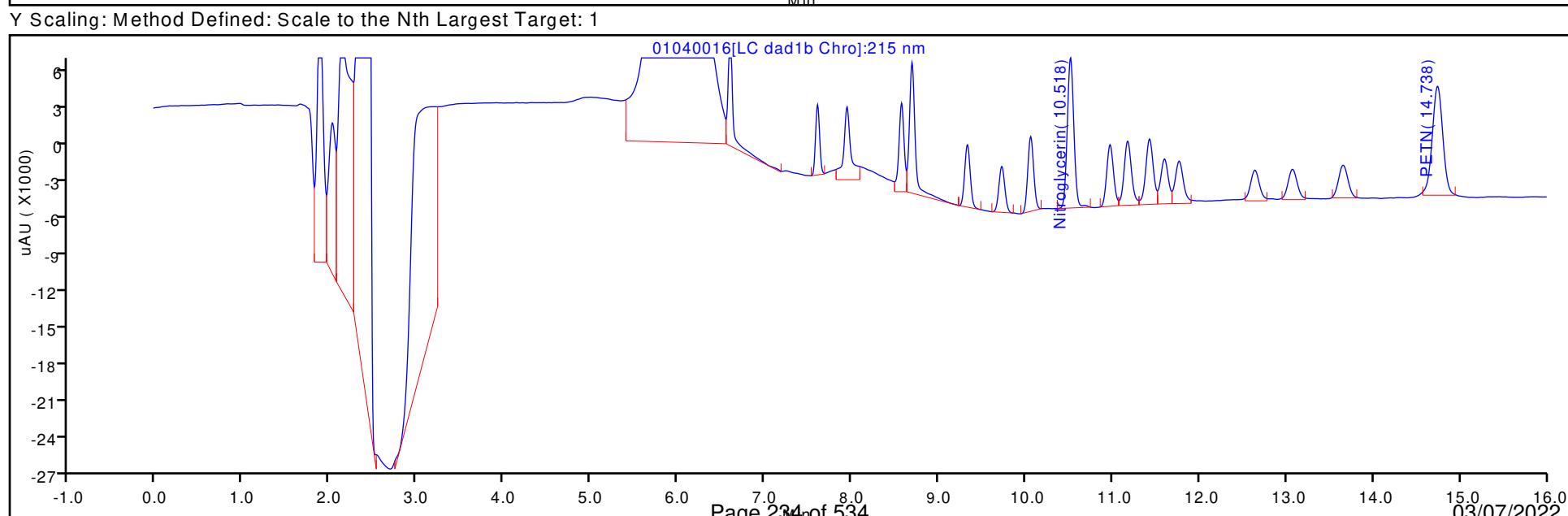
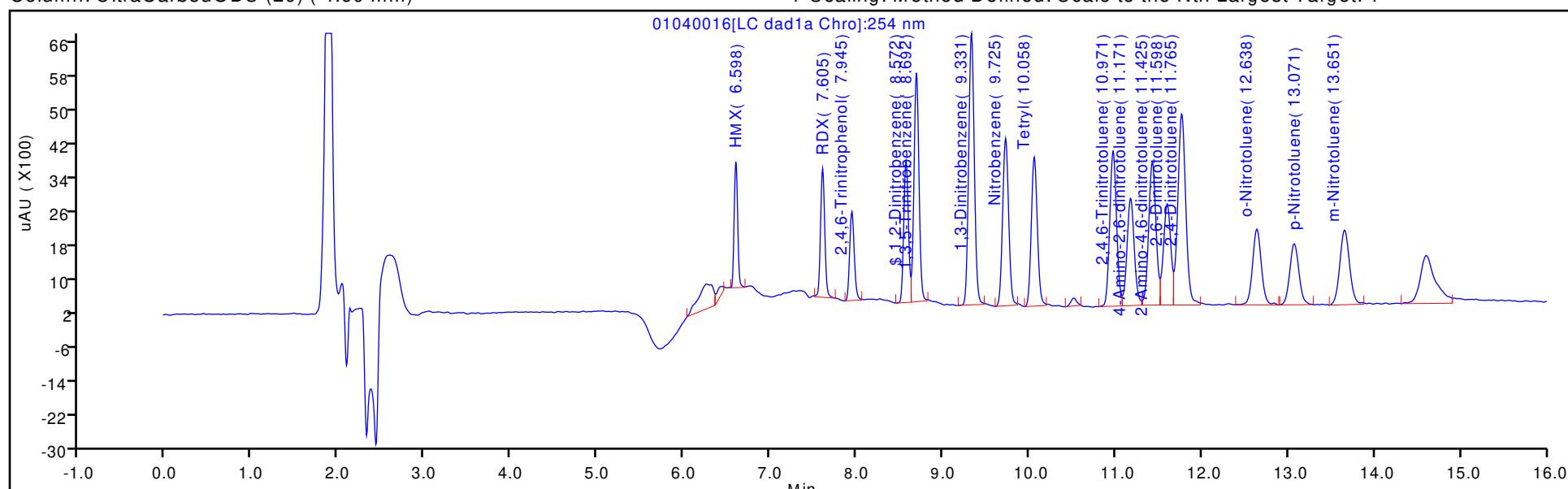
ALS Bottle#: 16

Method: 8330\_X3

Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040017.D  
 Lims ID: IC INT 3  
 Client ID:  
 Sample Type: IC Calib Level: 3  
 Inject. Date: 04-Jan-2022 20:45:29 ALS Bottle#: 17 Worklist Smp#: 17  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Sample Info: IC INT 3  
 Misc. Info.: 280-0107731-017  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Sublist: chrom-8330\_X3\*sub9  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Jan-2022 20:05:13 Calib Date: 05-Jan-2022 04:24:15  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040037.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm ) Det: LC DAD1B, 254 nm  
 Process Host: CTX1641

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.600	6.598	0.002	4230	0.0500	0.0505	
8 RDX	1	7.607	7.605	0.002	5715	0.0500	0.0552	
9 2,4,6-Trinitrophenol	1	7.947	7.945	0.002	4029	0.0500	0.0523	
\$ 10 1,2-Dinitrobenzene	1	8.573	8.572	0.001	6127	0.0500	0.0491	
11 1,3,5-Trinitrobenzene	1	8.693	8.692	0.001	10711	0.0501	0.0491	
12 1,3-Dinitrobenzene	1	9.327	9.331	-0.004	14683	0.0501	0.0509	
13 Nitrobenzene	1	9.727	9.725	0.002	9329	0.0502	0.0486	
15 Tetryl	1	10.060	10.058	0.002	8315	0.0501	0.0487	
16 Nitroglycerin	2	10.513	10.518	-0.005	30651	0.5000	0.4862	
17 2,4,6-Trinitrotoluene	1	10.973	10.971	0.002	10202	0.0502	0.0503	
18 4-Amino-2,6-dinitrotoluene	1	11.173	11.171	0.002	7656	0.0501	0.0507	
19 2-Amino-4,6-dinitrotoluene	1	11.427	11.425	0.002	9600	0.0502	0.0475	
20 2,6-Dinitrotoluene	1	11.593	11.598	-0.005	6908	0.0502	0.0483	
21 2,4-Dinitrotoluene	1	11.767	11.765	0.002	13933	0.0502	0.0482	
22 o-Nitrotoluene	1	12.640	12.638	0.002	6314	0.0500	0.0495	
23 p-Nitrotoluene	1	13.067	13.071	-0.004	5163	0.0501	0.0486	
24 m-Nitrotoluene	1	13.653	13.651	0.002	6733	0.0501	0.0473	
25 PETN	2	14.733	14.738	-0.005	35084	0.5000	0.4645	

**Reagents:**

8330IntermStk\_00070 Amount Added: 5.00 Units: uL

Report Date: 06-Jan-2022 20:05:13

Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220104-107731.b\01040017.d

Injection Date: 04-Jan-2022 20:45:29

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: IC INT 3

Worklist Smp#: 17

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

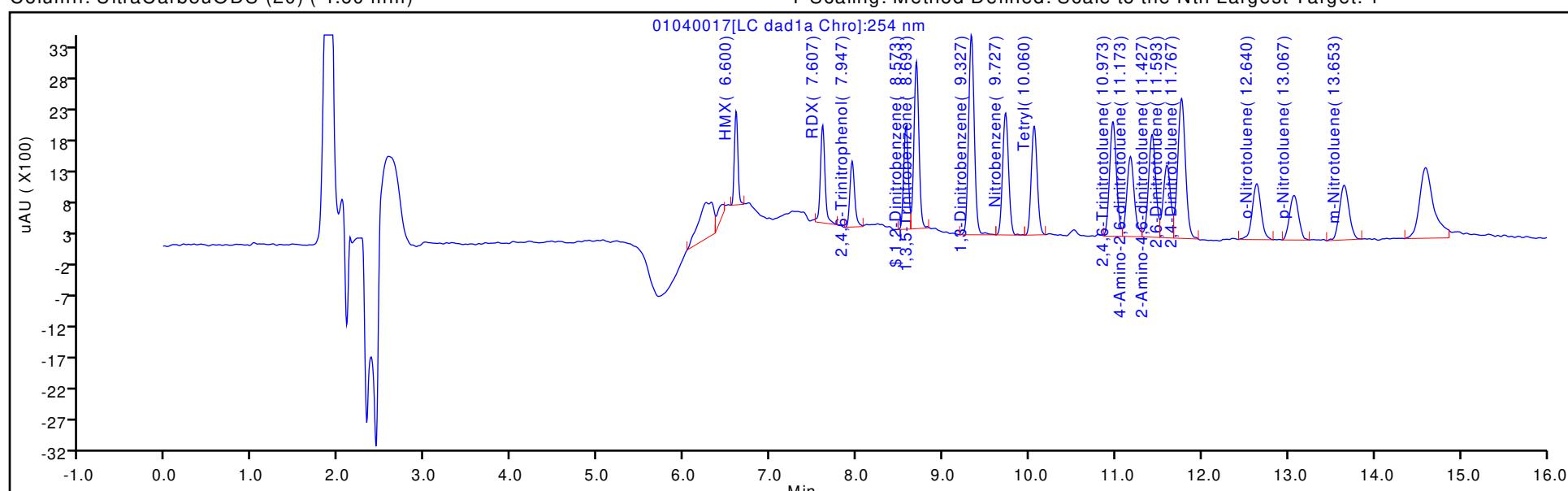
ALS Bottle#: 17

Method: 8330\_X3

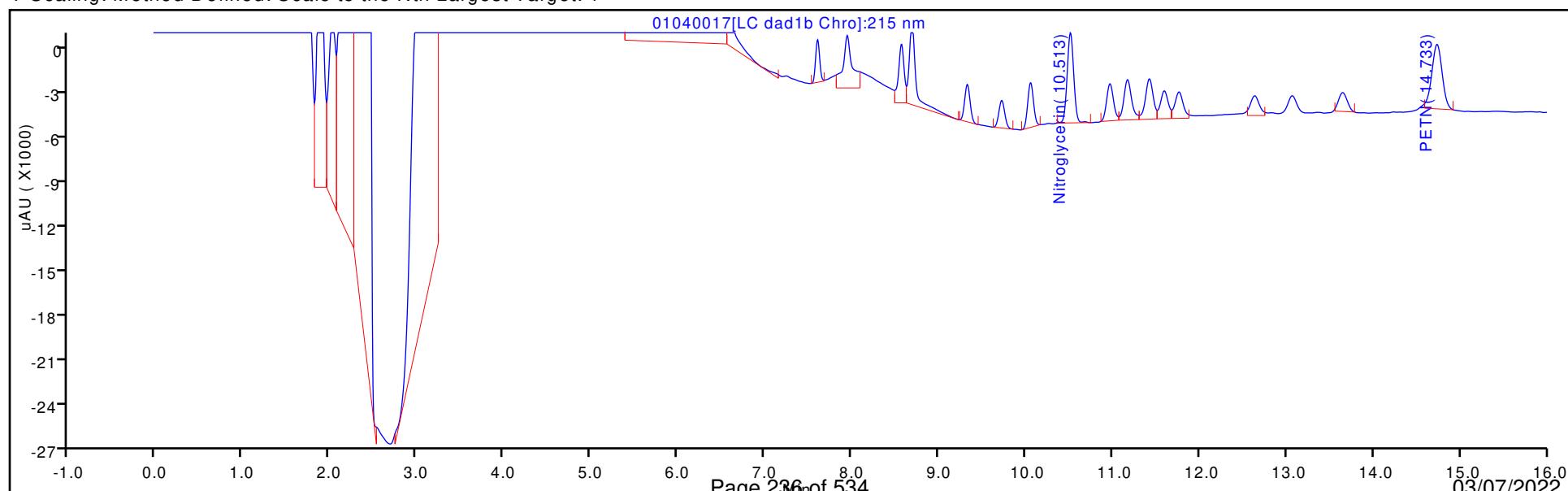
Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040018.D  
 Lims ID: IC INT 2  
 Client ID:  
 Sample Type: IC Calib Level: 2  
 Inject. Date: 04-Jan-2022 21:08:26 ALS Bottle#: 18 Worklist Smp#: 18  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Sample Info: IC INT 2  
 Misc. Info.: 280-0107731-018  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Sublist: chrom-8330\_X3\*sub9  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Jan-2022 20:05:13 Calib Date: 05-Jan-2022 04:24:15  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040037.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm ) Det: LC DAD1B, 254 nm  
 Process Host: CTX1641

First Level Reviewer: zhangji Date: 05-Jan-2022 12:01:28

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.595	6.598	-0.003	1735	0.0200	0.0207	
8 RDX	1	7.608	7.605	0.003	2084	0.0200	0.0201	M
9 2,4,6-Trinitrophenol	1	7.948	7.945	0.003	1554	0.0200	0.0202	M
\$ 10 1,2-Dinitrobenzene	1	8.575	8.572	0.003	2503	0.0200	0.0201	
11 1,3,5-Trinitrobenzene	1	8.695	8.692	0.003	4249	0.0200	0.0195	
12 1,3-Dinitrobenzene	1	9.328	9.331	-0.003	5833	0.0200	0.0202	
13 Nitrobenzene	1	9.722	9.725	-0.003	3845	0.0201	0.0200	
15 Tetryl	1	10.055	10.058	-0.003	3498	0.0200	0.0205	
16 Nitroglycerin	2	10.515	10.518	-0.003	12008	0.2000	0.1905	
17 2,4,6-Trinitrotoluene	1	10.968	10.971	-0.003	4227	0.0201	0.0209	
18 4-Amino-2,6-dinitrotoluene	1	11.175	11.171	0.004	3150	0.0200	0.0209	
19 2-Amino-4,6-dinitrotoluene	1	11.428	11.425	0.003	4282	0.0201	0.0212	
20 2,6-Dinitrotoluene	1	11.595	11.598	-0.003	2993	0.0201	0.0209	
21 2,4-Dinitrotoluene	1	11.762	11.765	-0.003	5890	0.0201	0.0204	
22 o-Nitrotoluene	1	12.642	12.638	0.004	2743	0.0200	0.0215	
23 p-Nitrotoluene	1	13.075	13.071	0.004	2151	0.0200	0.0202	
24 m-Nitrotoluene	1	13.655	13.651	0.004	2989	0.0200	0.0210	
25 PETN	2	14.735	14.738	-0.003	15705	0.2000	0.1974	M

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

### Reagents:

8330\IntermStk\_00070

Amount Added: 2.00

Units: uL

Report Date: 06-Jan-2022 20:05:13

Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220104-107731.b\01040018.d

Injection Date: 04-Jan-2022 21:08:26

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: IC INT 2

Worklist Smp#: 18

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

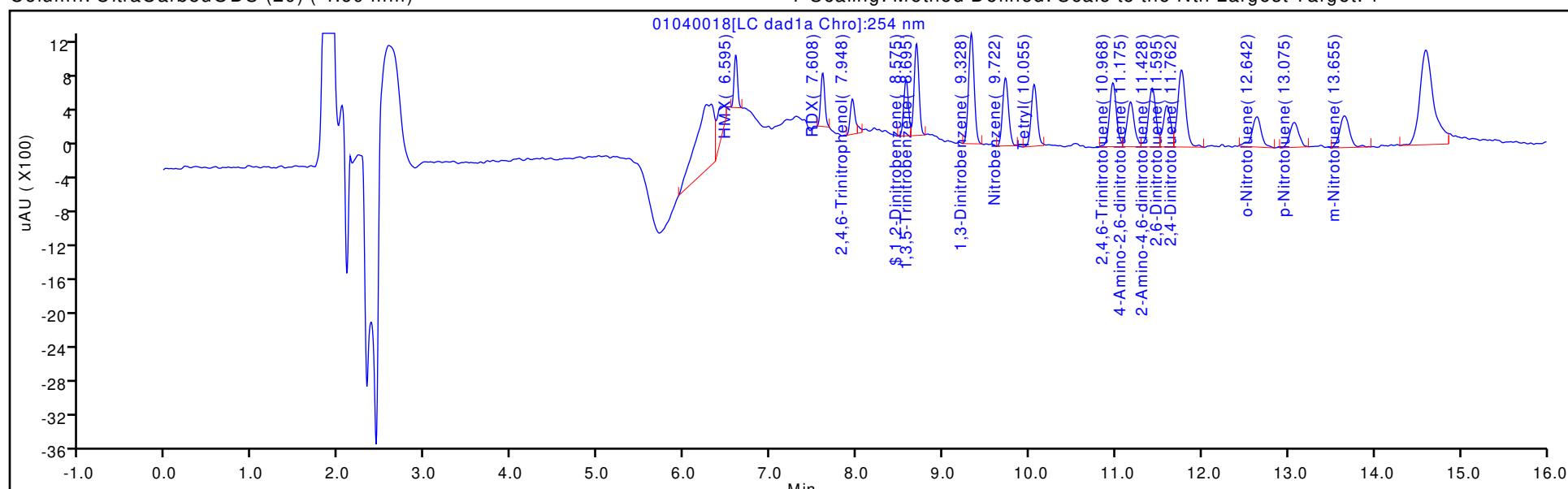
ALS Bottle#: 18

Method: 8330\_X3

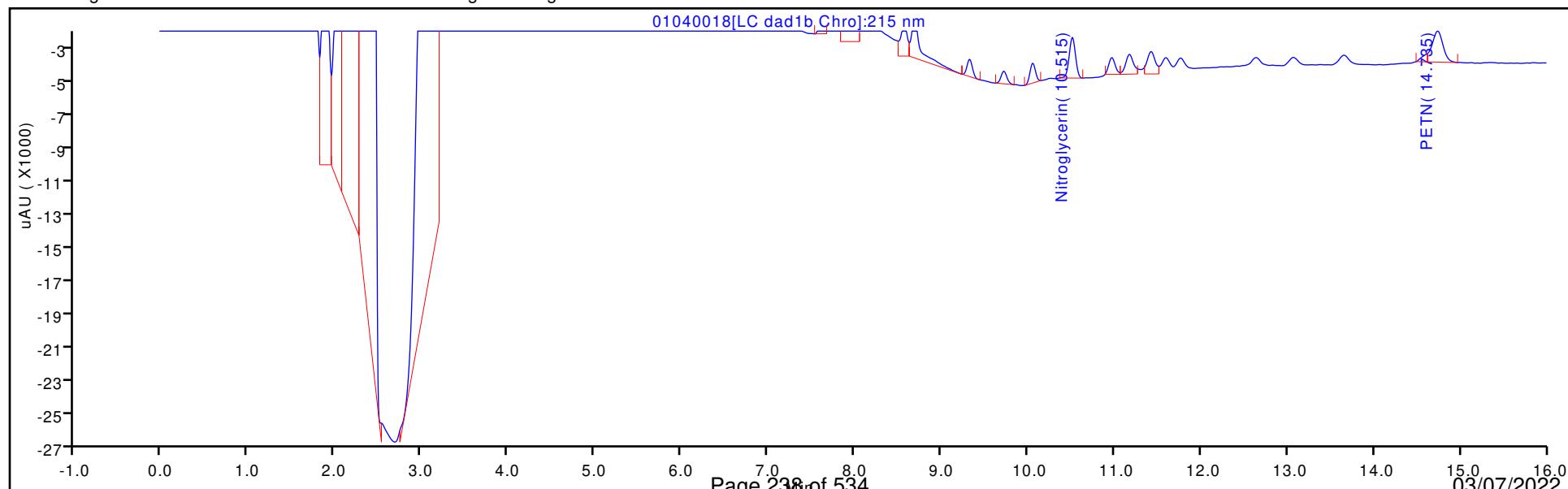
Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1

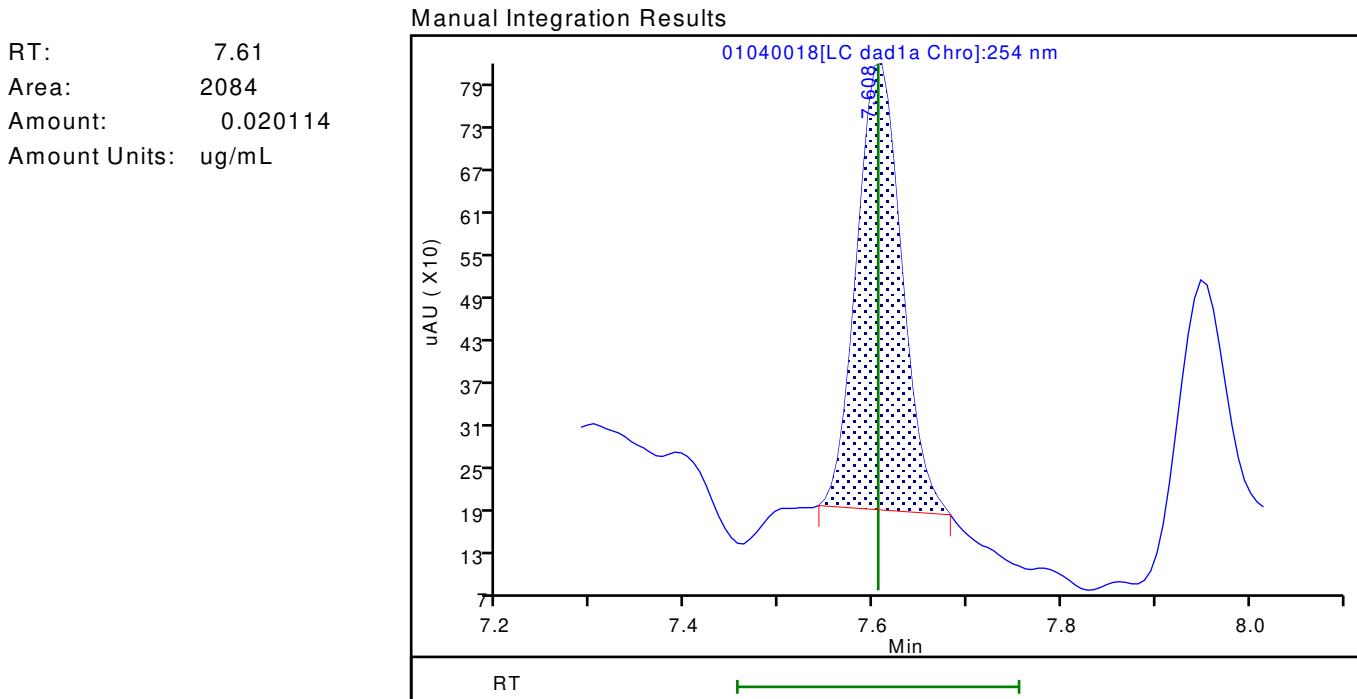
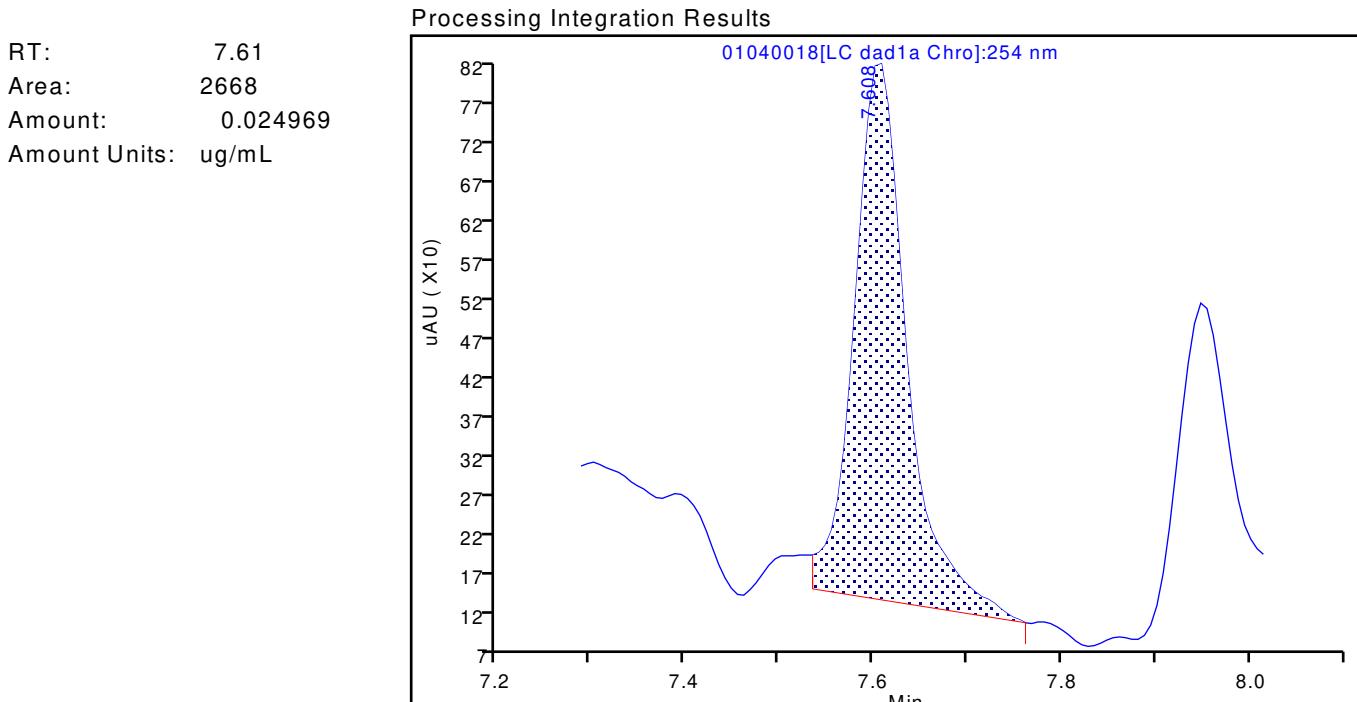


## Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220104-107731.b\01040018.d  
 Injection Date: 04-Jan-2022 21:08:26 Instrument ID: CHHPLC\_X3  
 Lims ID: IC INT 2  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 18 Worklist Smp#: 18  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

**8 RDX, CAS: 121-82-4**

Signal: 1



Reviewer: zhangji, 05-Jan-2022 12:01:55

Audit Action: Manually Integrated

Audit Reason: Baseline

## Eurofins TestAmerica, Denver

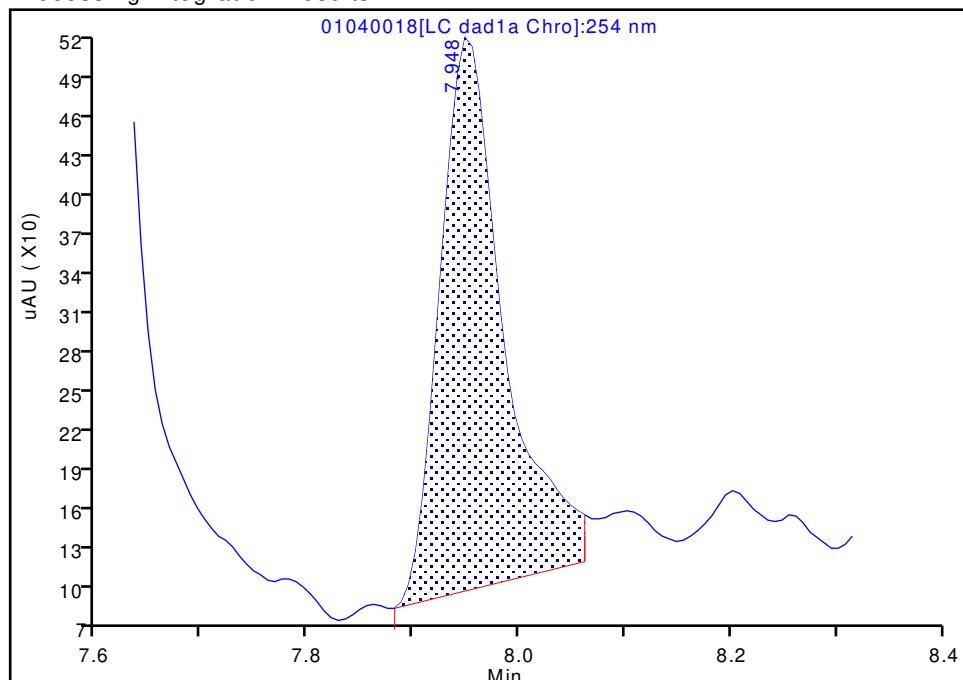
Data File: \\chromfs\denver\chromdata\chhplc\_x\20220104-107731.b\01040018.d  
 Injection Date: 04-Jan-2022 21:08:26 Instrument ID: CHHPLC\_X3  
 Lims ID: IC INT 2  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 18 Worklist Smp#: 18  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

**9 2,4,6-Trinitrophenol, CAS: 88-89-1**

Signal: 1

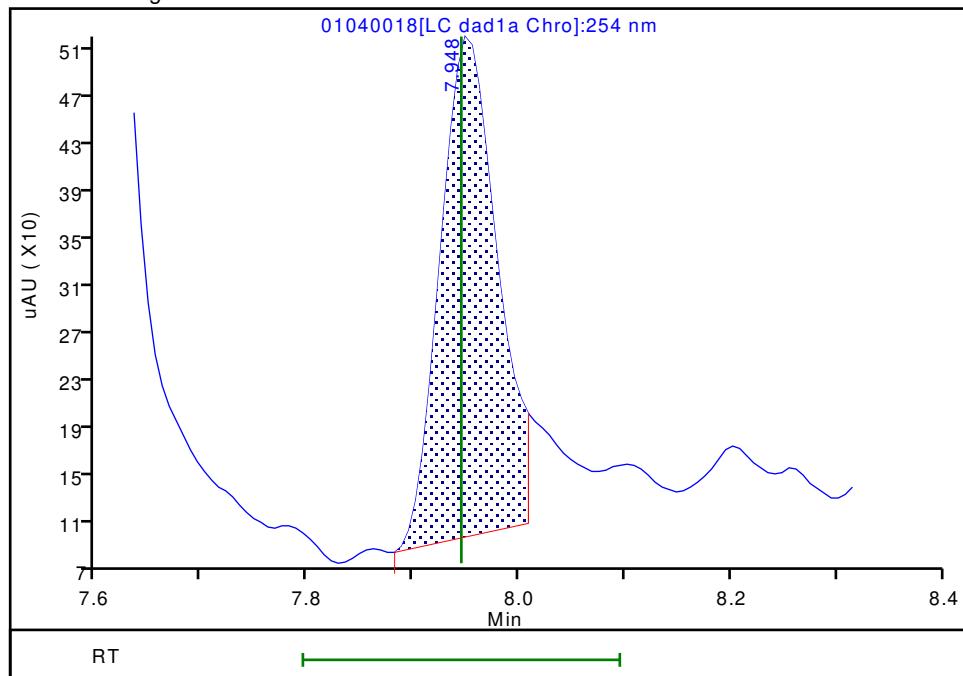
RT: 7.95  
 Area: 1744  
 Amount: 0.022332  
 Amount Units: ug/mL

## Processing Integration Results



RT: 7.95  
 Area: 1554  
 Amount: 0.020172  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 05-Jan-2022 12:02:02

Audit Action: Split an Integrated Peak

Audit Reason: Baseline

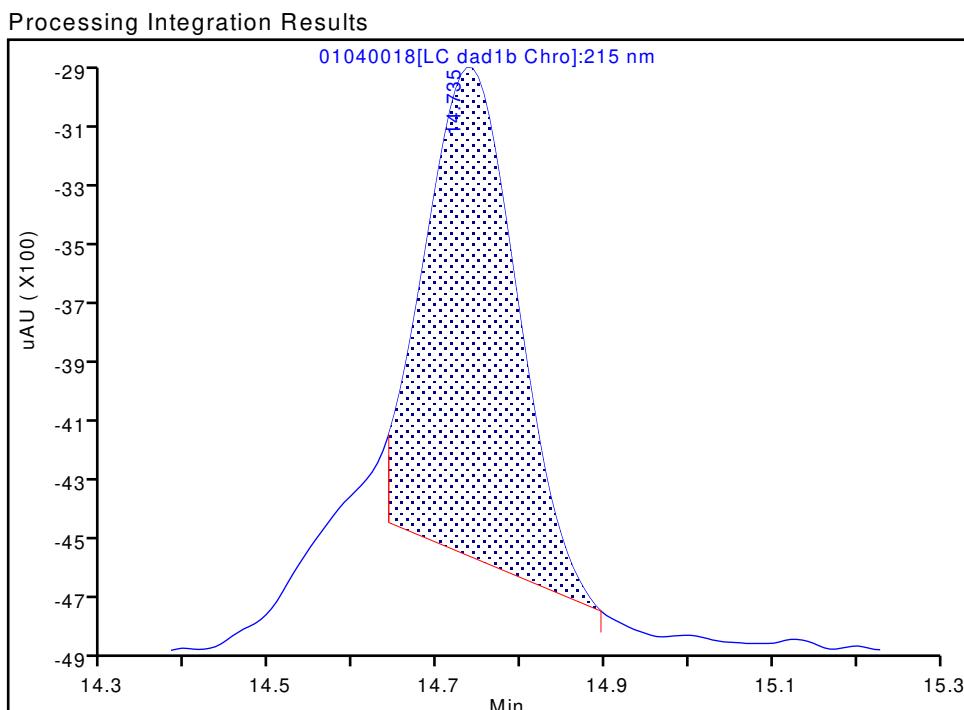
## Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220104-107731.b\01040018.d  
 Injection Date: 04-Jan-2022 21:08:26 Instrument ID: CHHPLC\_X3  
 Lims ID: IC INT 2  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 18 Worklist Smp#: 18  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: Detector LC DAD1C, 215 nm

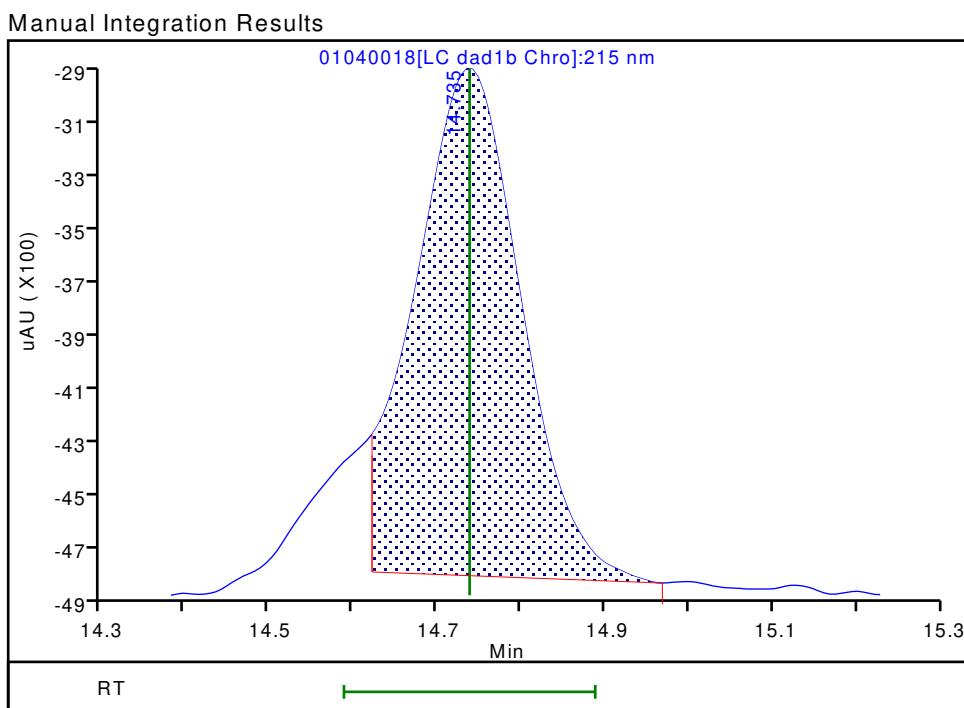
## 25 PETN, CAS: 78-11-5

Signal: 1

RT: 14.73  
 Area: 11890  
 Amount: 0.166241  
 Amount Units: ug/mL



RT: 14.73  
 Area: 15705  
 Amount: 0.197419  
 Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:01:38

Audit Action: Split an Integrated Peak

Audit Reason: Baseline

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040019.D  
 Lims ID: IC INT 1  
 Client ID:  
 Sample Type: IC Calib Level: 1  
 Inject. Date: 04-Jan-2022 21:31:24 ALS Bottle#: 19 Worklist Smp#: 19  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Sample Info: IC INT 1  
 Misc. Info.: 280-0107731-019  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Sublist: chrom-8330\_X3\*sub9  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Jan-2022 20:05:14 Calib Date: 05-Jan-2022 04:24:15  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040037.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm ) Det: LC DAD1B, 254 nm  
 Process Host: CTX1641

First Level Reviewer: zhangji Date: 06-Jan-2022 20:05:03

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.601	6.598	0.003	901	0.0100	0.0107	M
8 RDX	1	7.601	7.605	-0.004	1152	0.0100	0.0111	M
9 2,4,6-Trinitrophenol	1	7.941	7.945	-0.004	716	0.0100	0.009294	M
\$ 10 1,2-Dinitrobenzene	1	8.561	8.572	-0.011	1188	0.0100	0.009527	
11 1,3,5-Trinitrobenzene	1	8.688	8.692	-0.004	2197	0.0100	0.0101	
12 1,3-Dinitrobenzene	1	9.321	9.331	-0.010	2633	0.0100	0.009130	
13 Nitrobenzene	1	9.714	9.725	-0.011	2067	0.0100	0.0108	
15 Tetryl	1	10.041	10.058	-0.017	1778	0.0100	0.0104	
16 Nitroglycerin	2	10.501	10.518	-0.017	6348	0.1000	0.1007	
17 2,4,6-Trinitrotoluene	1	10.954	10.971	-0.017	2126	0.0100	0.0105	M
18 4-Amino-2,6-dinitrotoluene	1	11.154	11.171	-0.017	1718	0.0100	0.0114	M
19 2-Amino-4,6-dinitrotoluene	1	11.408	11.425	-0.017	2287	0.0100	0.0113	M
20 2,6-Dinitrotoluene	1	11.581	11.598	-0.017	1551	0.0100	0.0108	M
21 2,4-Dinitrotoluene	1	11.748	11.765	-0.017	3047	0.0100	0.0105	M
22 o-Nitrotoluene	1	12.614	12.638	-0.024	1387	0.0100	0.0109	
23 p-Nitrotoluene	1	13.054	13.071	-0.017	1083	0.0100	0.0102	
24 m-Nitrotoluene	1	13.634	13.651	-0.017	1764	0.0100	0.0124	
25 PETN	2	14.708	14.738	-0.030	8784	0.1000	0.1020	M

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

### Reagents:

8330\IntermStk\_00070

Amount Added: 1.00

Units: uL

Report Date: 06-Jan-2022 20:05:14

Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220104-107731.b\01040019.d

Injection Date: 04-Jan-2022 21:31:24

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: IC INT 1

Worklist Smp#: 19

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

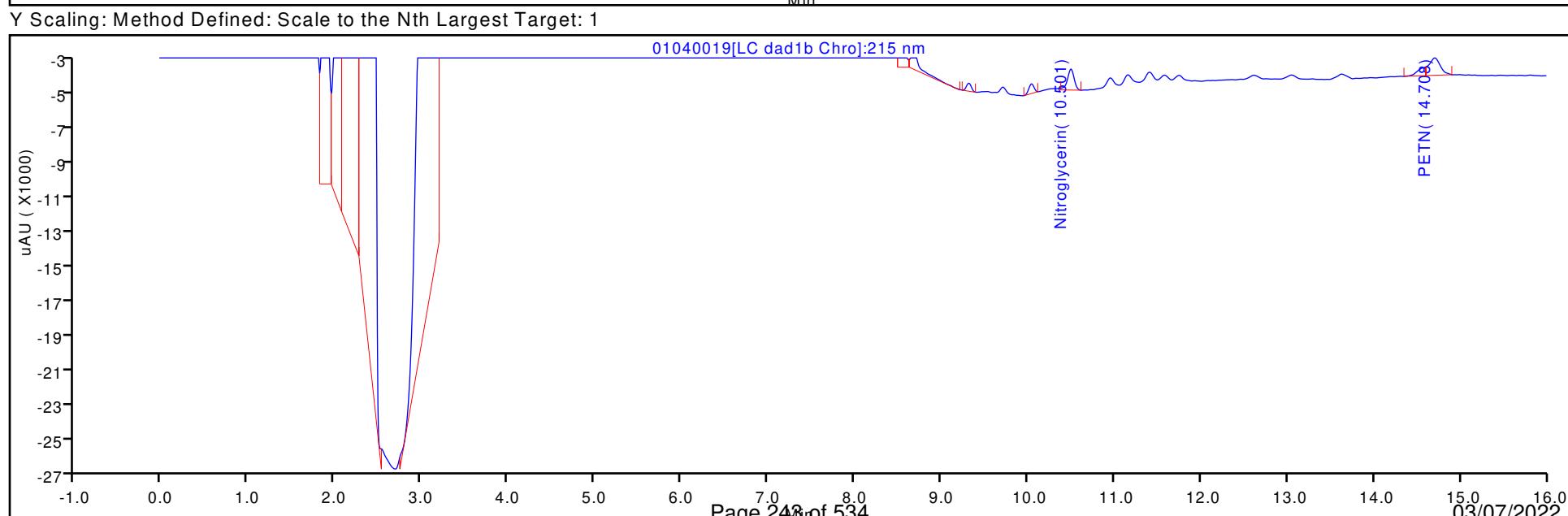
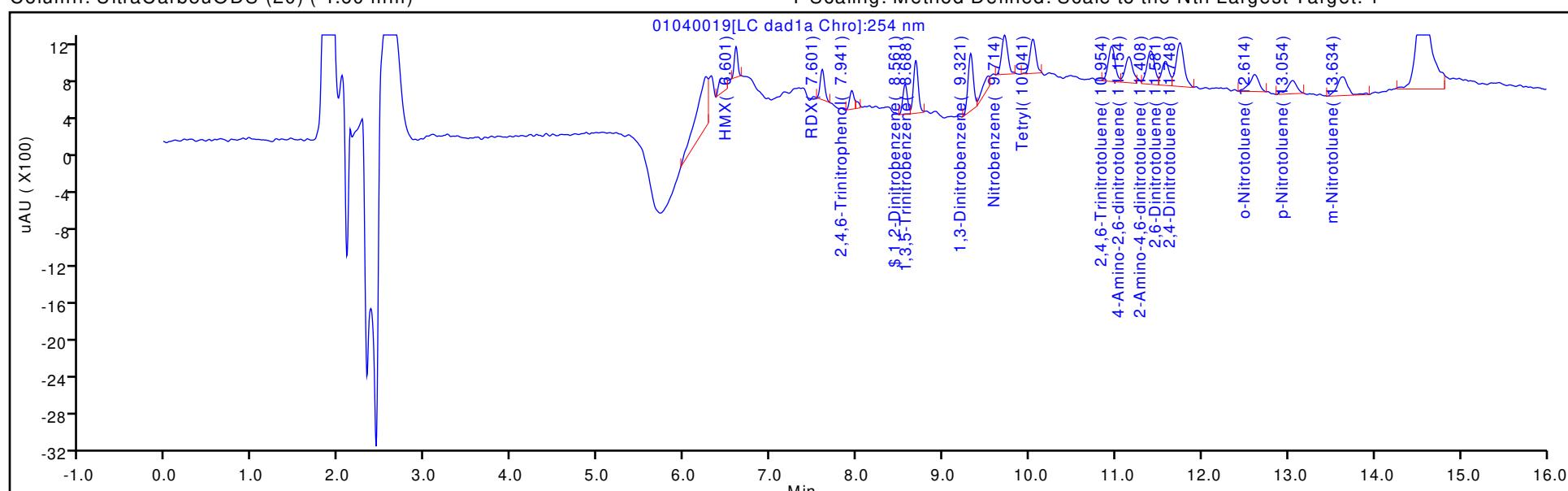
ALS Bottle#: 19

Method: 8330\_X3

Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



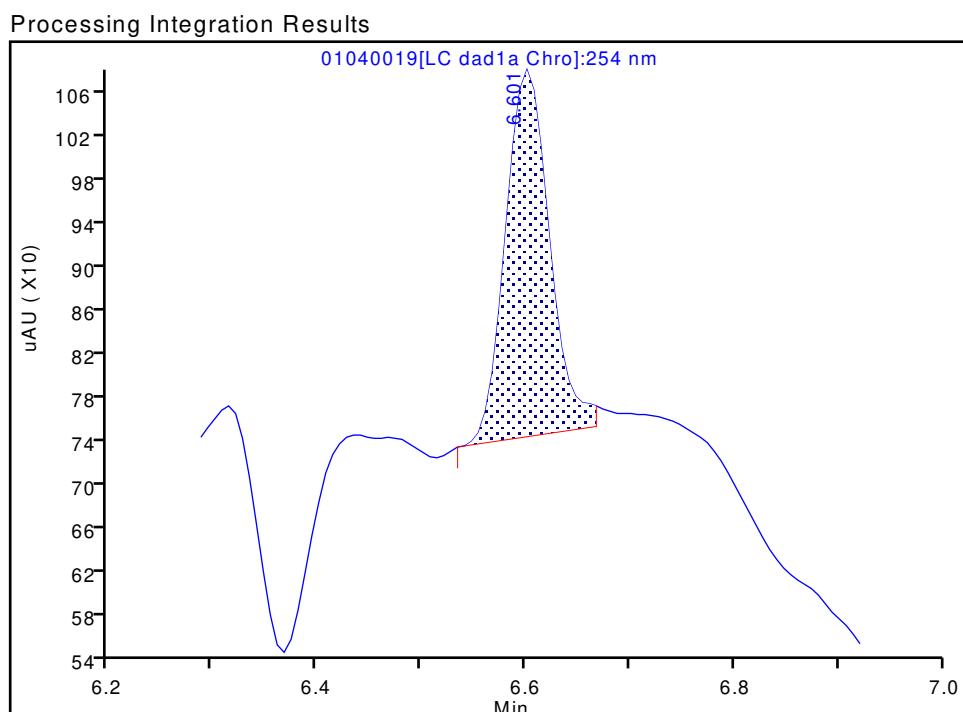
## Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220104-107731.b\01040019.d  
 Injection Date: 04-Jan-2022 21:31:24 Instrument ID: CHHPLC\_X3  
 Lims ID: IC INT 1  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 19 Worklist Smp#: 19  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

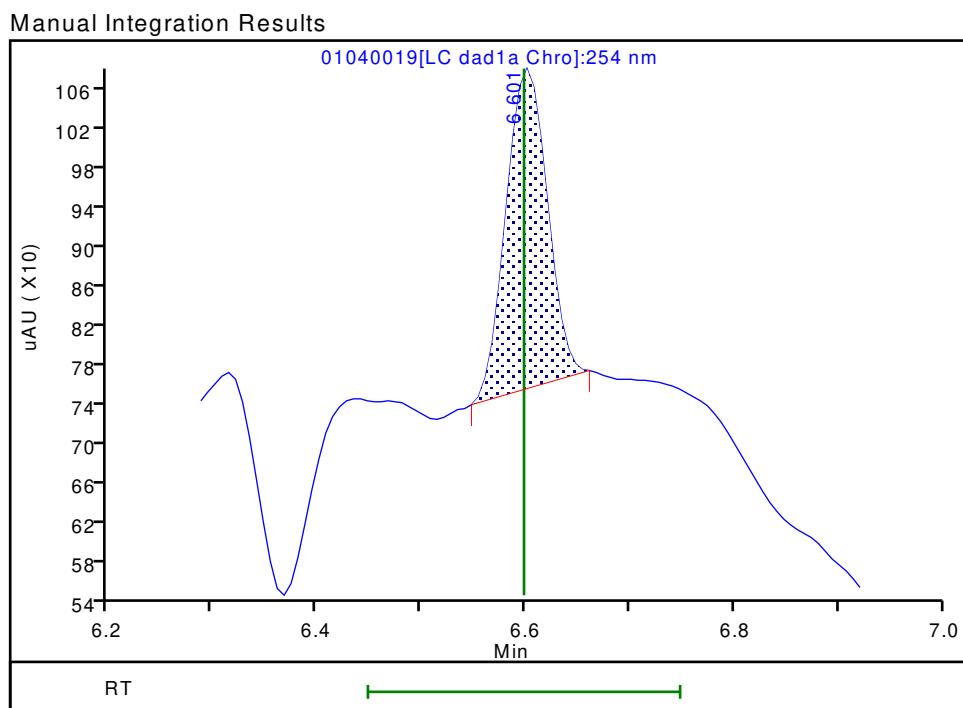
**4 HMX, CAS: 2691-41-0**

Signal: 1

RT: 6.60  
 Area: 995  
 Amount: 0.011724  
 Amount Units: ug/mL



RT: 6.60  
 Area: 901  
 Amount: 0.010748  
 Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 11:59:58

Audit Action: Manually Integrated

Audit Reason: Baseline

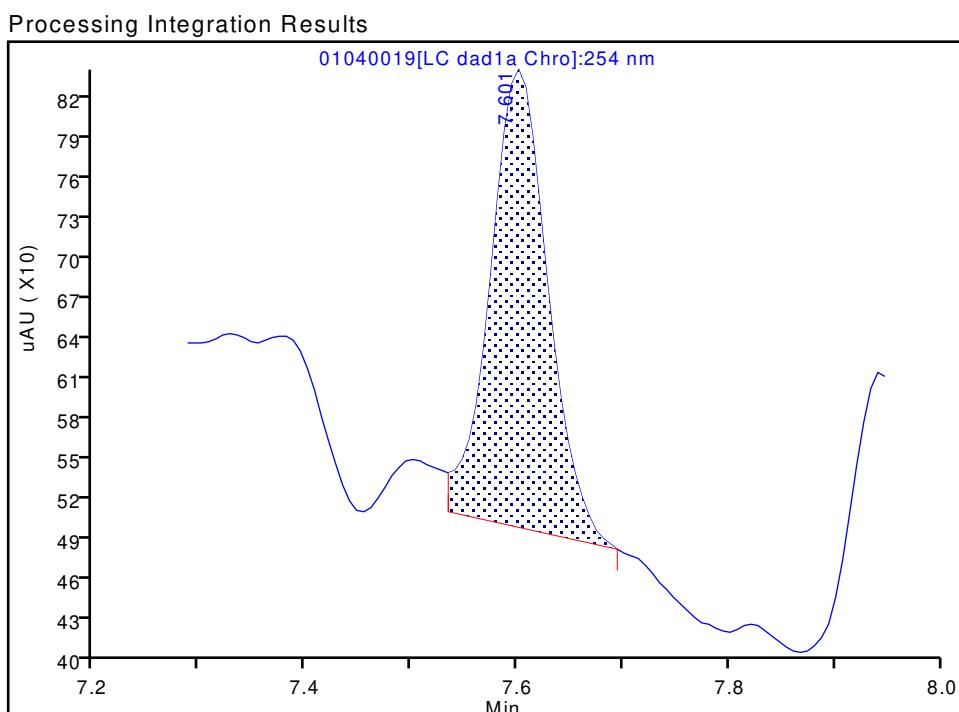
## Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220104-107731.b\01040019.d  
 Injection Date: 04-Jan-2022 21:31:24 Instrument ID: CHHPLC\_X3  
 Lims ID: IC INT 1  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 19 Worklist Smp#: 19  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

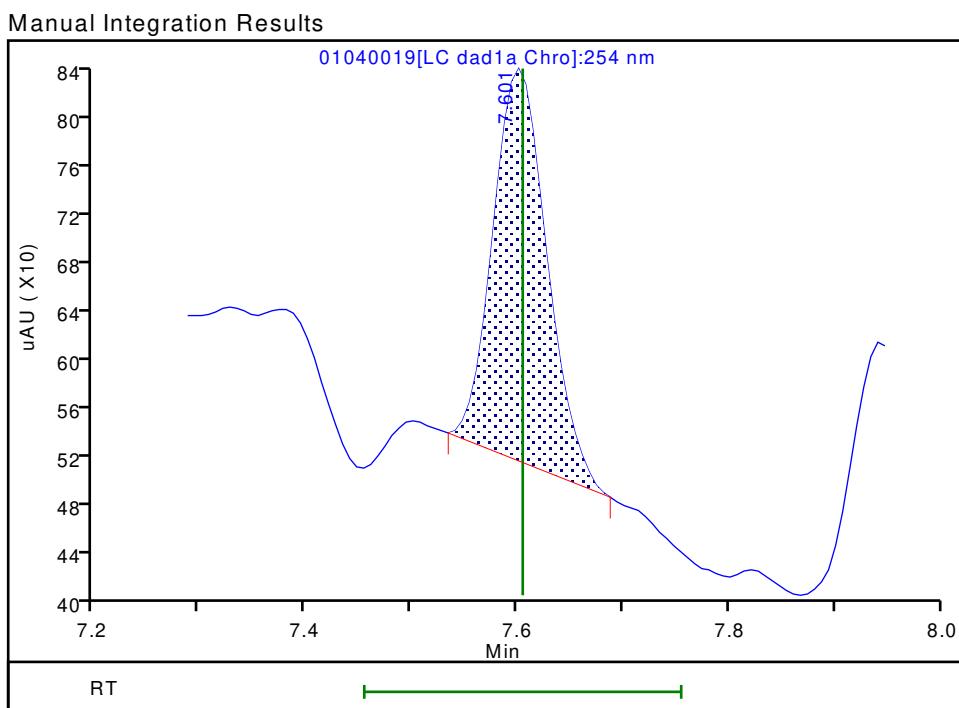
8 RDX, CAS: 121-82-4

Signal: 1

RT: 7.60  
 Area: 1299  
 Amount: 0.011974  
 Amount Units: ug/mL



RT: 7.60  
 Area: 1152  
 Amount: 0.011119  
 Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:00:04

Audit Action: Manually Integrated

Audit Reason: Baseline

## Eurofins TestAmerica, Denver

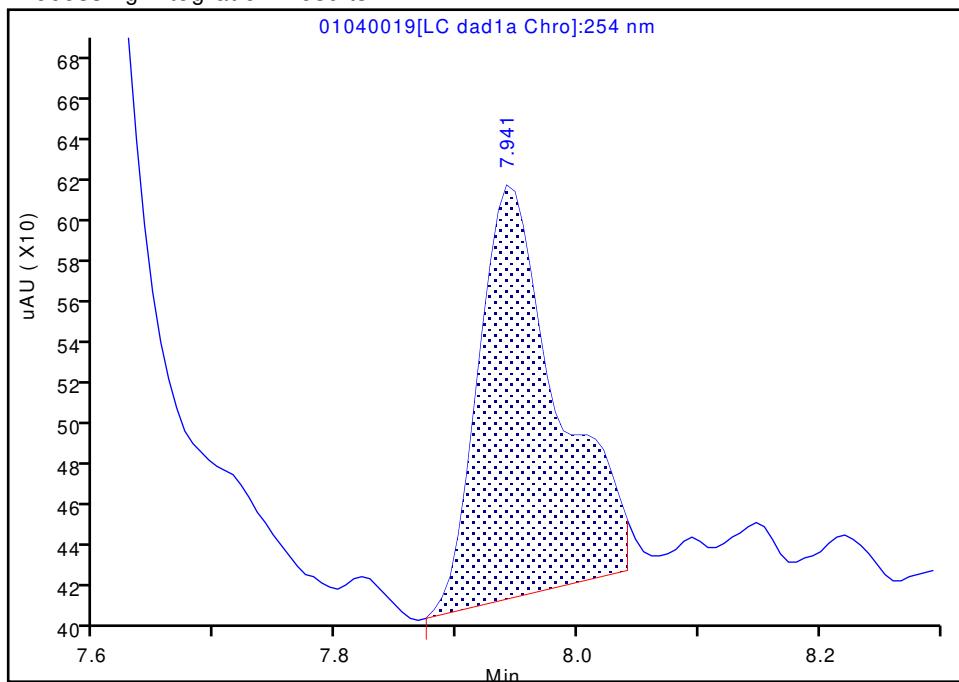
Data File: \\chromfs\denver\chromdata\chhplc\_x\20220104-107731.b\01040019.d  
 Injection Date: 04-Jan-2022 21:31:24 Instrument ID: CHHPLC\_X3  
 Lims ID: IC INT 1  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 19 Worklist Smp#: 19  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

**9 2,4,6-Trinitrophenol, CAS: 88-89-1**

Signal: 1

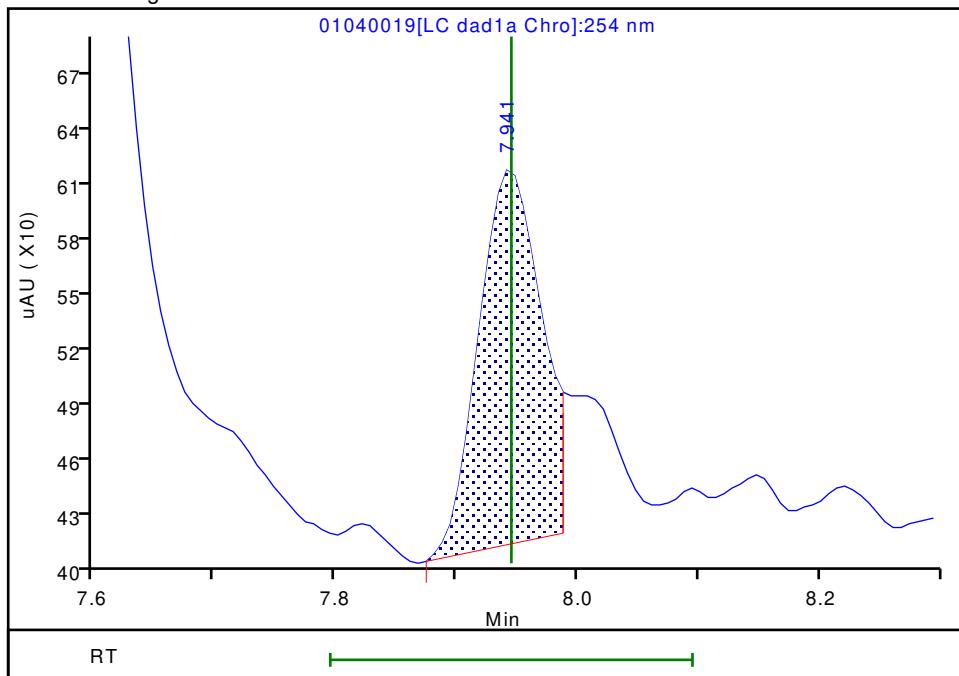
RT: 7.94  
 Area: 903  
 Amount: 0.011263  
 Amount Units: ug/mL

## Processing Integration Results



RT: 7.94  
 Area: 716  
 Amount: 0.009294  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 05-Jan-2022 12:00:13

Audit Action: Split an Integrated Peak

Audit Reason: Baseline

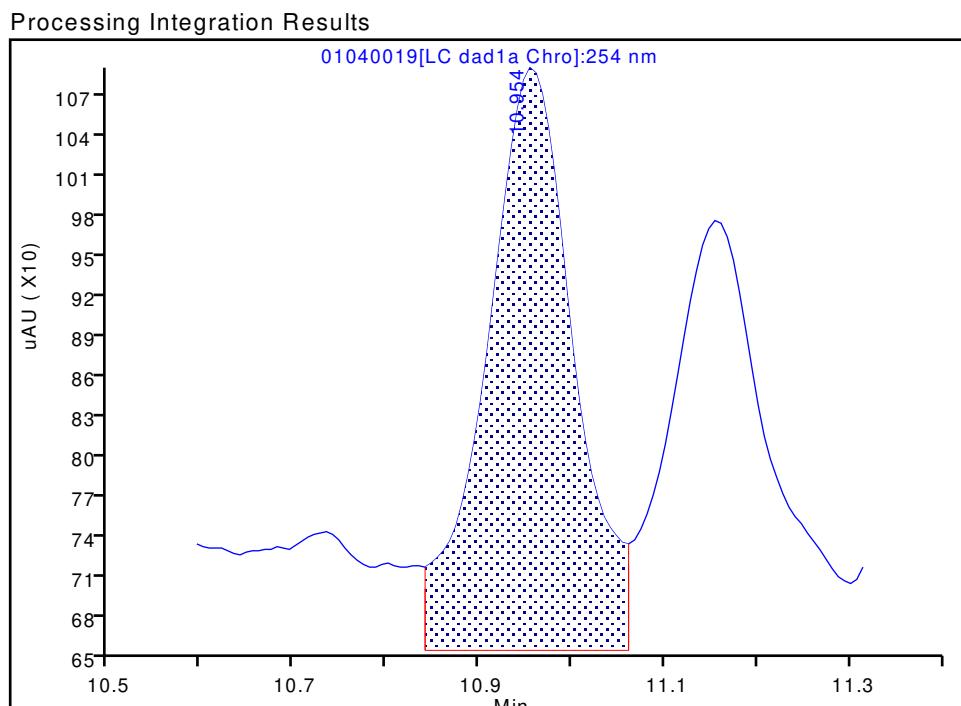
## Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220104-107731.b\01040019.d  
 Injection Date: 04-Jan-2022 21:31:24 Instrument ID: CHHPLC\_X3  
 Lims ID: IC INT 1  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 19 Worklist Smp#: 19  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

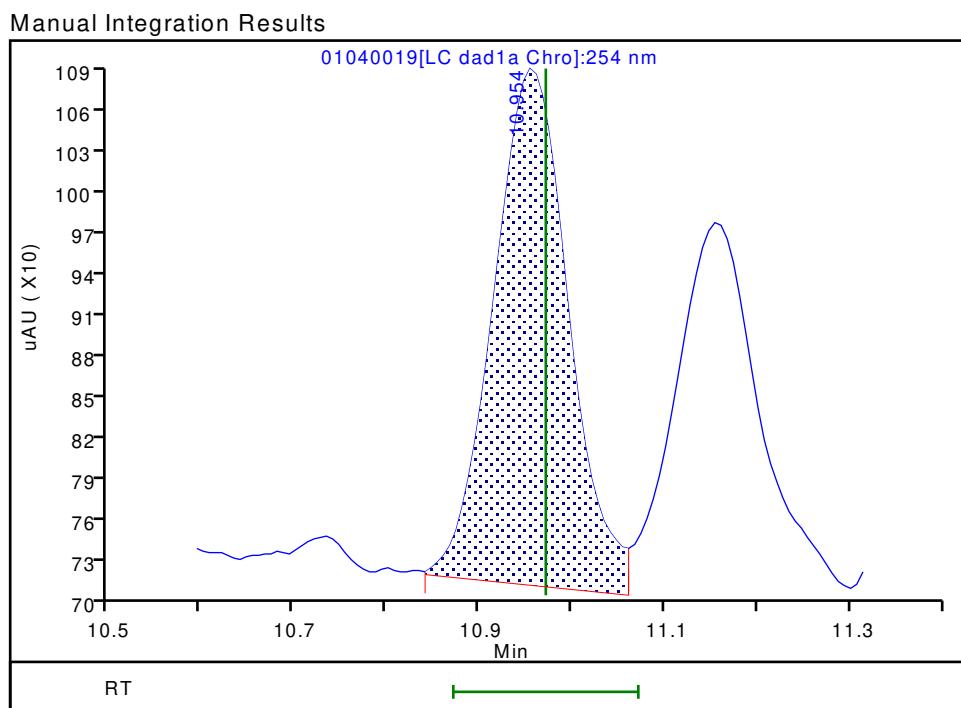
## 17 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

RT: 10.95  
 Area: 2806  
 Amount: 0.013346  
 Amount Units: ug/mL



RT: 10.95  
 Area: 2126  
 Amount: 0.010487  
 Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:00:35

Audit Action: Assigned New Baseline

Audit Reason: Baseline

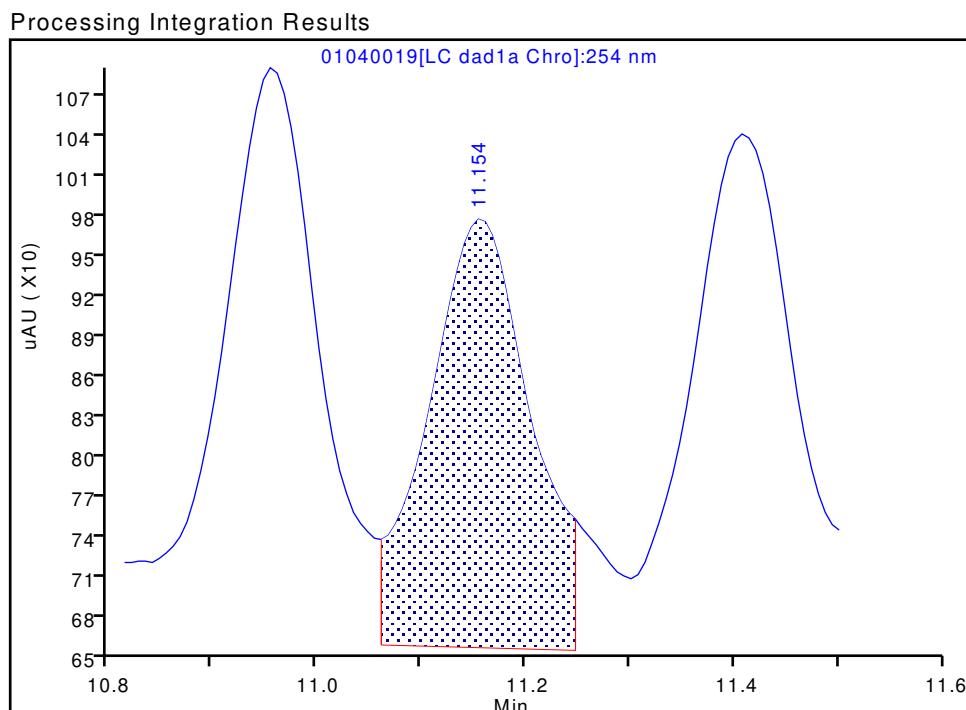
## Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220104-107731.b\01040019.d  
 Injection Date: 04-Jan-2022 21:31:24 Instrument ID: CHHPLC\_X3  
 Lims ID: IC INT 1  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 19 Worklist Smp#: 19  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

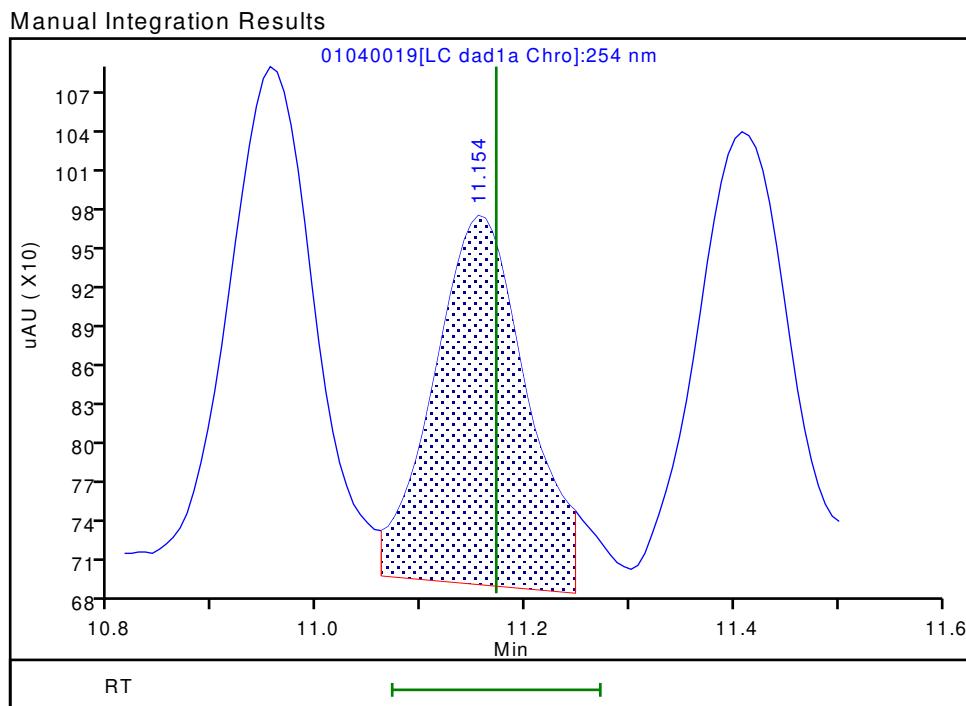
**18 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0**

Signal: 1

RT: 11.15  
 Area: 2160  
 Amount: 0.013856  
 Amount Units: ug/mL



RT: 11.15  
 Area: 1718  
 Amount: 0.011379  
 Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:00:35

Audit Action: Assigned New Baseline

Audit Reason: Baseline

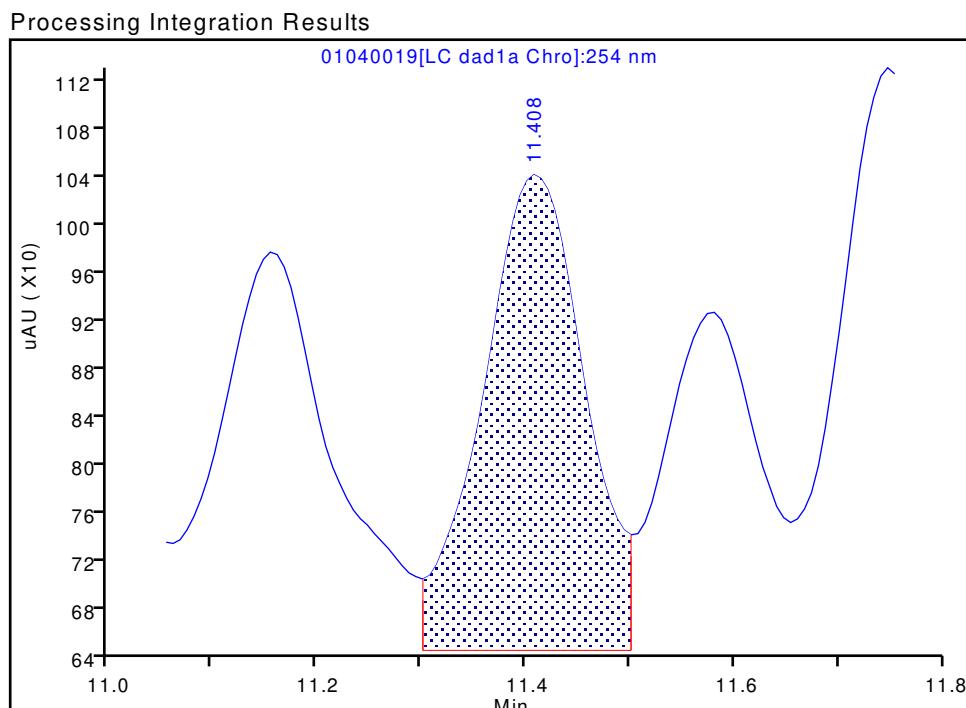
## Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220104-107731.b\01040019.d  
 Injection Date: 04-Jan-2022 21:31:24 Instrument ID: CHHPLC\_X3  
 Lims ID: IC INT 1  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 19 Worklist Smp#: 19  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

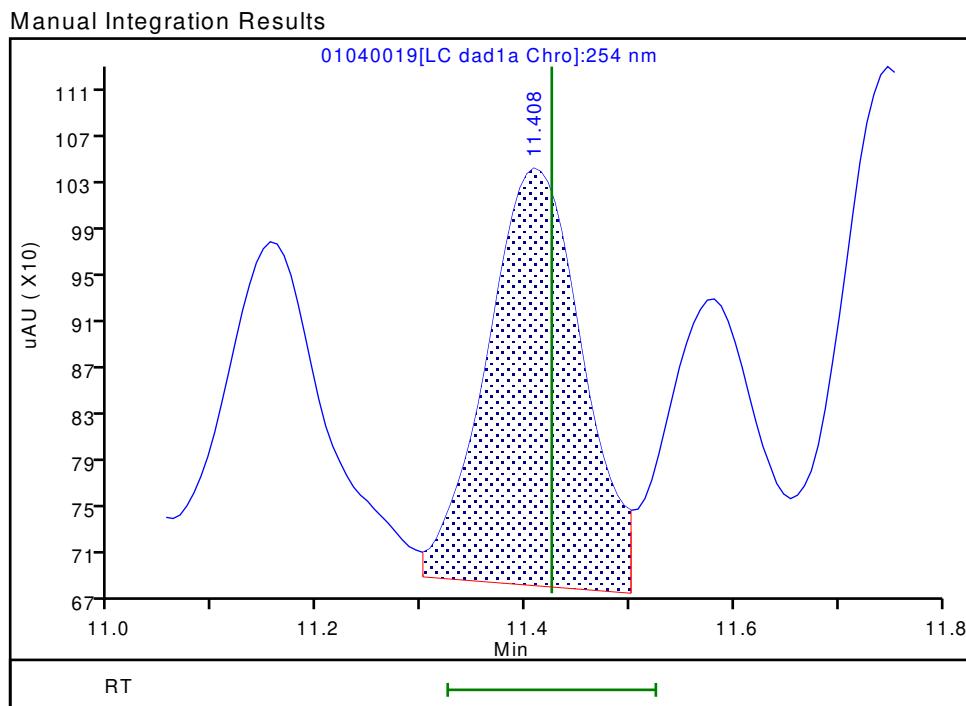
## 19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

RT: 11.41  
 Area: 2647  
 Amount: 0.012840  
 Amount Units: ug/mL



RT: 11.41  
 Area: 2287  
 Amount: 0.011312  
 Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:00:35

Audit Action: Assigned New Baseline

Audit Reason: Baseline

## Eurofins TestAmerica, Denver

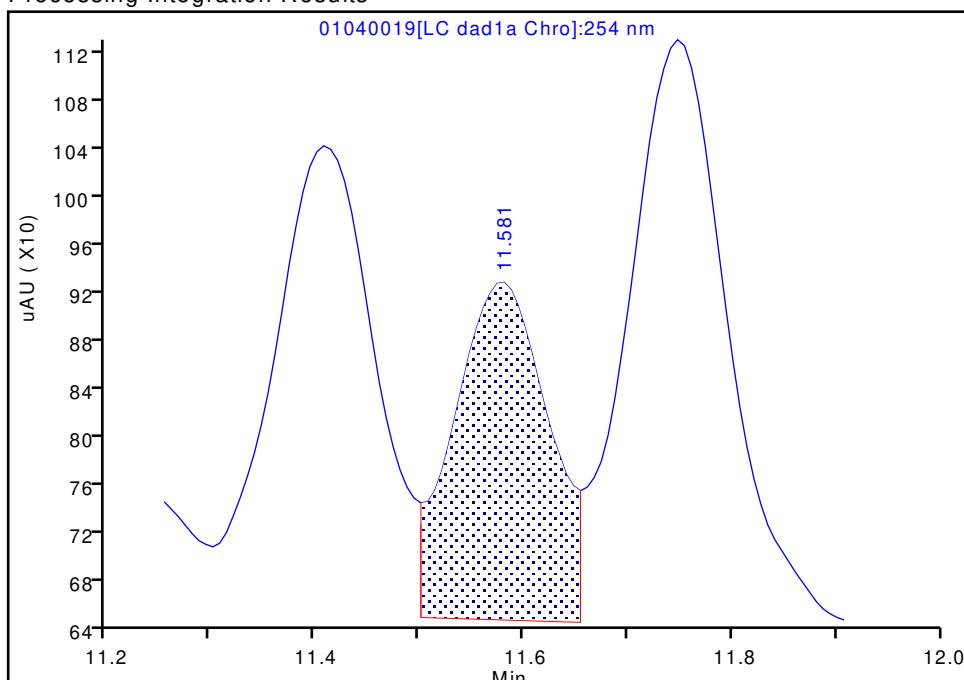
Data File: \\chromfs\denver\chromdata\chhplc\_x\20220104-107731.b\01040019.d  
 Injection Date: 04-Jan-2022 21:31:24 Instrument ID: CHHPLC\_X3  
 Lims ID: IC INT 1  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 19 Worklist Smp#: 19  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

## 20 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

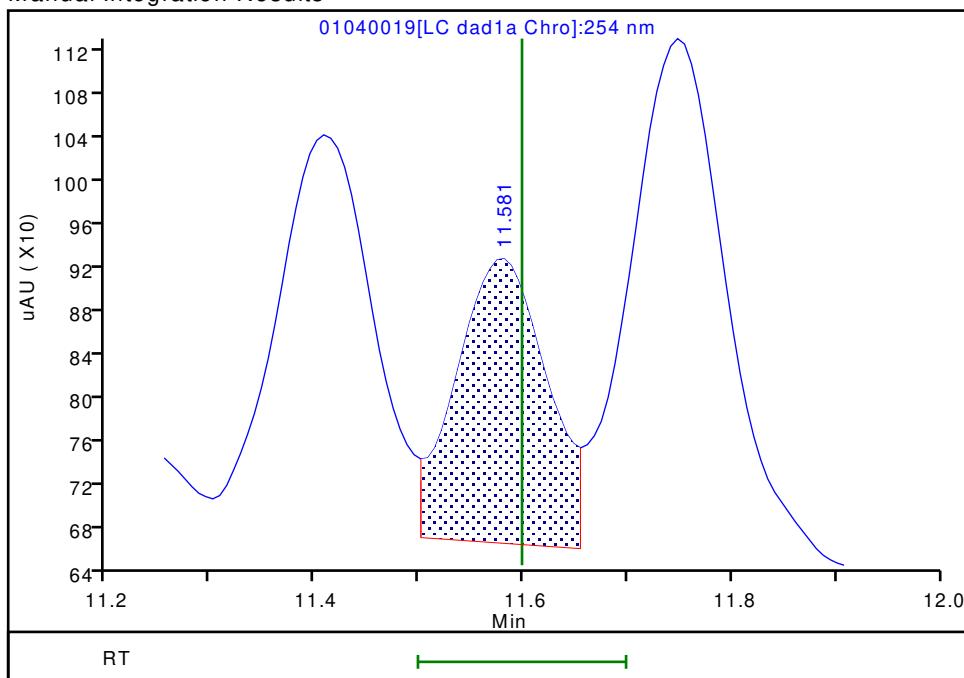
RT: 11.58  
 Area: 1735  
 Amount: 0.011953  
 Amount Units: ug/mL

## Processing Integration Results



RT: 11.58  
 Area: 1551  
 Amount: 0.010837  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 05-Jan-2022 12:00:35

Audit Action: Assigned New Baseline

Audit Reason: Baseline

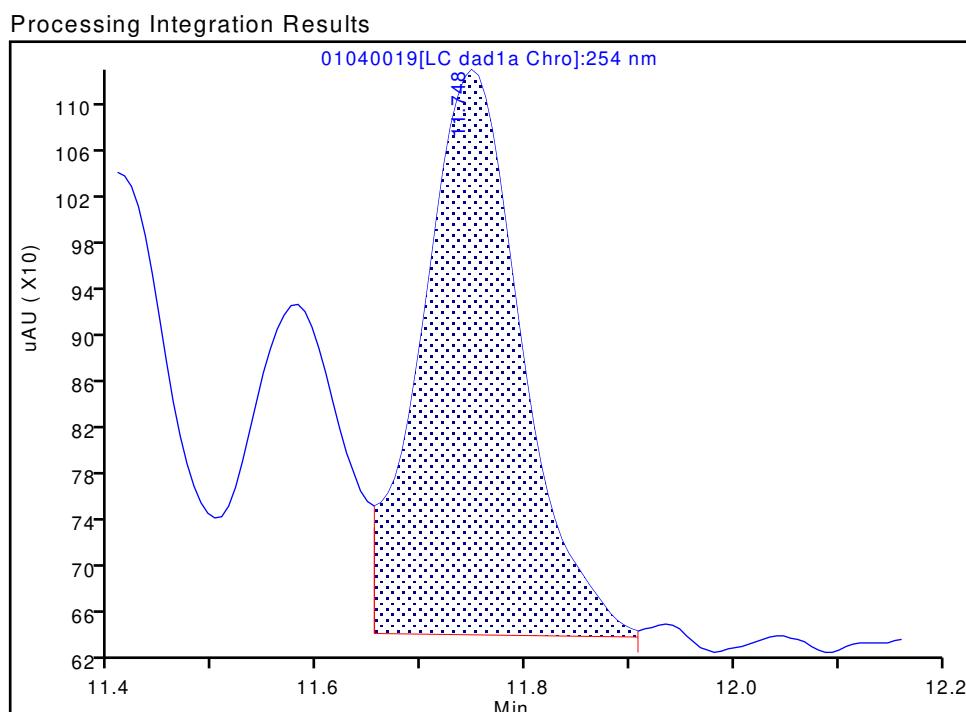
## Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220104-107731.b\01040019.d  
 Injection Date: 04-Jan-2022 21:31:24 Instrument ID: CHHPLC\_X3  
 Lims ID: IC INT 1  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 19 Worklist Smp#: 19  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

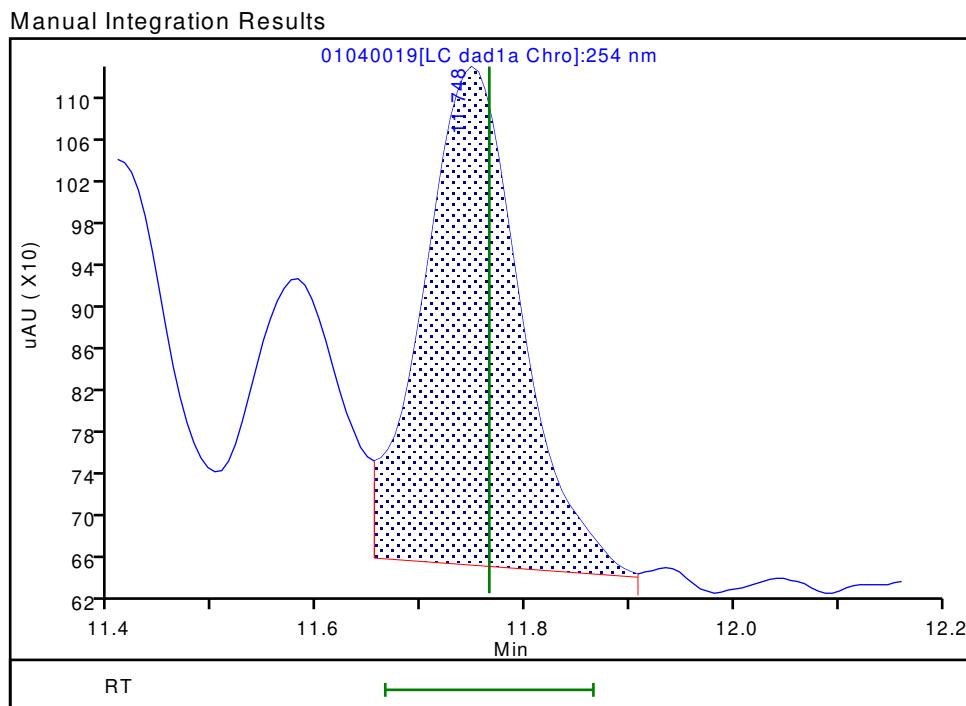
## 21 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

RT: 11.75  
 Area: 3191  
 Amount: 0.010968  
 Amount Units: ug/mL



RT: 11.75  
 Area: 3047  
 Amount: 0.010530  
 Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:00:35

Audit Action: Assigned New Baseline

Audit Reason: Baseline

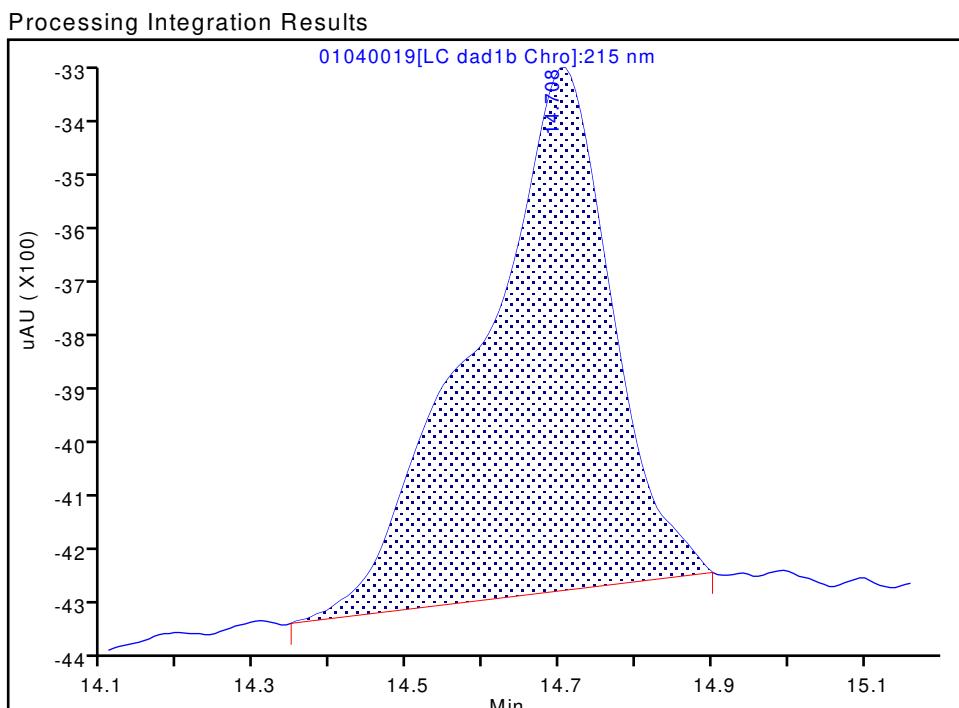
## Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220104-107731.b\01040019.d  
 Injection Date: 04-Jan-2022 21:31:24 Instrument ID: CHHPLC\_X3  
 Lims ID: IC INT 1  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 19 Worklist Smp#: 19  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: Detector LC DAD1C, 215 nm

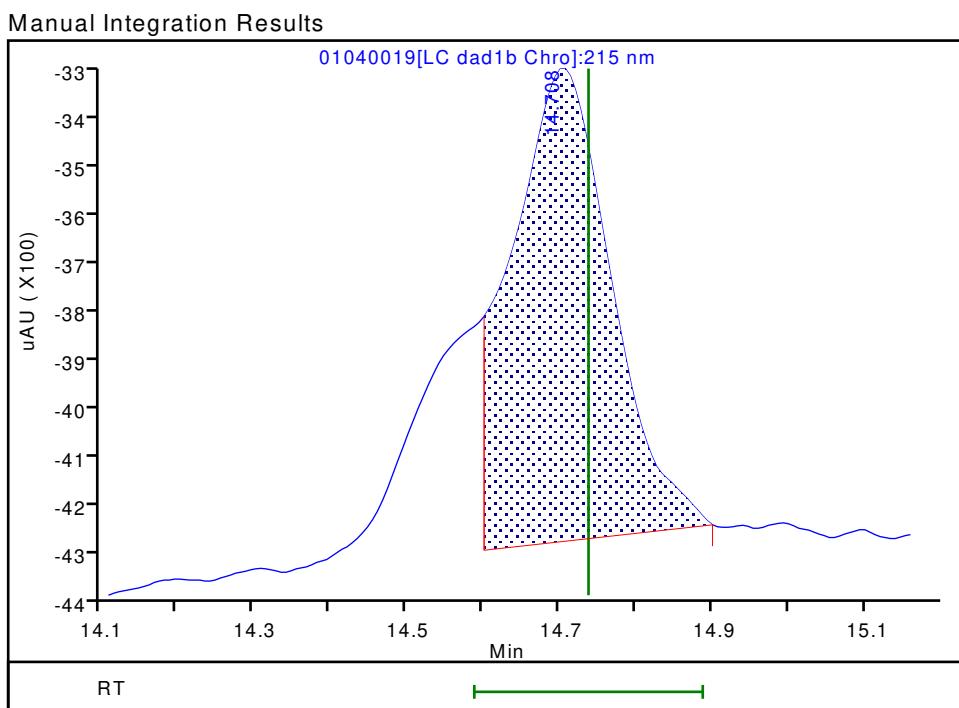
## 25 PETN, CAS: 78-11-5

Signal: 1

RT: 14.71  
 Area: 11771  
 Amount: 0.142232  
 Amount Units: ug/mL



RT: 14.71  
 Area: 8784  
 Amount: 0.102016  
 Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:00:58

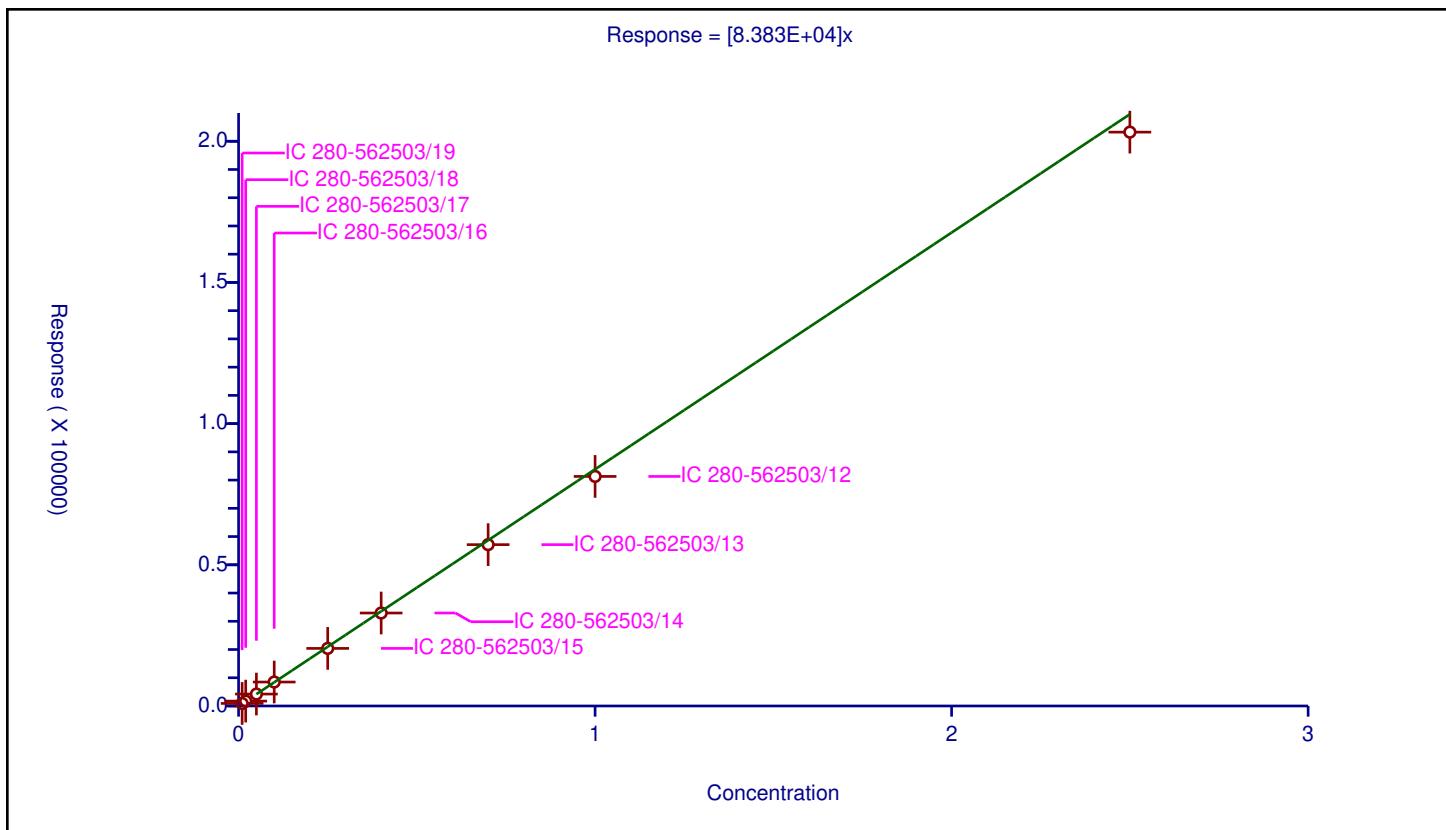
Audit Action: Split an Integrated Peak

Audit Reason: Baseline

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

<b>Curve Coefficients</b>	
<b>Intercept:</b>	0
<b>Slope:</b>	8.383E+04
<b>Error Coefficients</b>	
<b>Standard Error:</b>	2490
<b>Relative Standard Error:</b>	3.6
<b>Correlation Coefficient:</b>	1.000
<b>Coefficient of Determination (Adjusted):</b>	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.01	901.0			90100.0	Y
2	IC 280-562503/18	0.02	1735.0			86750.0	Y
3	IC 280-562503/17	0.05	4230.0			84600.0	Y
4	IC 280-562503/16	0.1	8489.0			84890.0	Y
5	IC 280-562503/15	0.25	20395.0			81580.0	Y
6	IC 280-562503/14	0.4	32925.0			82312.5	Y
7	IC 280-562503/13	0.7	57138.0			81625.714286	Y
8	IC 280-562503/12	1.0	81295.0			81295.0	Y
9	IC 280-562503/11	2.5	203229.0			81291.6	Y



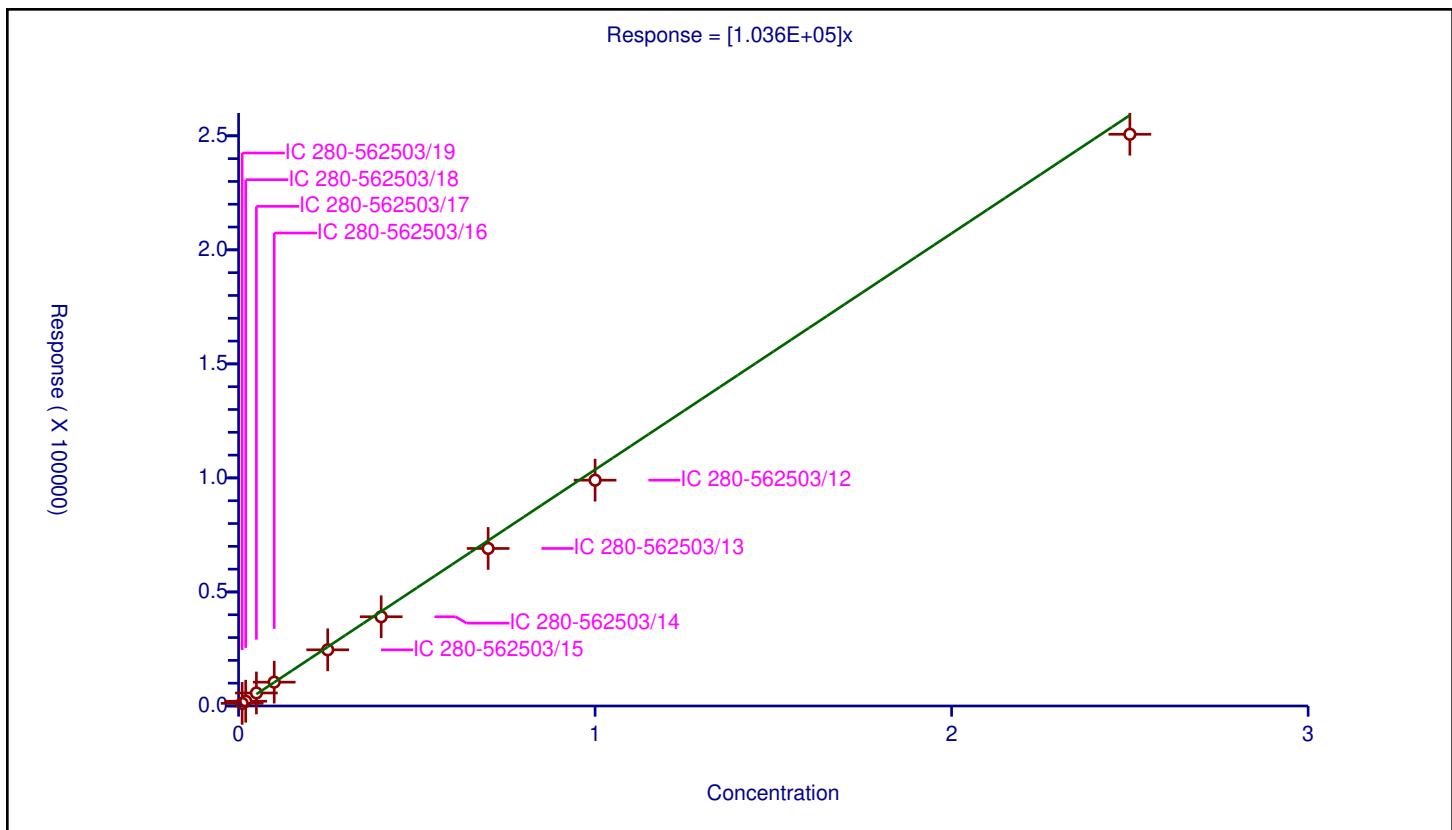
## Calibration

/ RDX

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	1.036E+05
Error Coefficients	
Standard Error:	3710
Relative Standard Error:	6.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.01	1152.0			115200.0	Y
2	IC 280-562503/18	0.02	2084.0			104200.0	Y
3	IC 280-562503/17	0.05	5715.0			114300.0	Y
4	IC 280-562503/16	0.1	10447.0			104470.0	Y
5	IC 280-562503/15	0.25	24635.0			98540.0	Y
6	IC 280-562503/14	0.4	39126.0			97815.0	Y
7	IC 280-562503/13	0.7	69068.0			98668.571429	Y
8	IC 280-562503/12	1.0	99016.0			99016.0	Y
9	IC 280-562503/11	2.5	250683.0			100273.2	Y



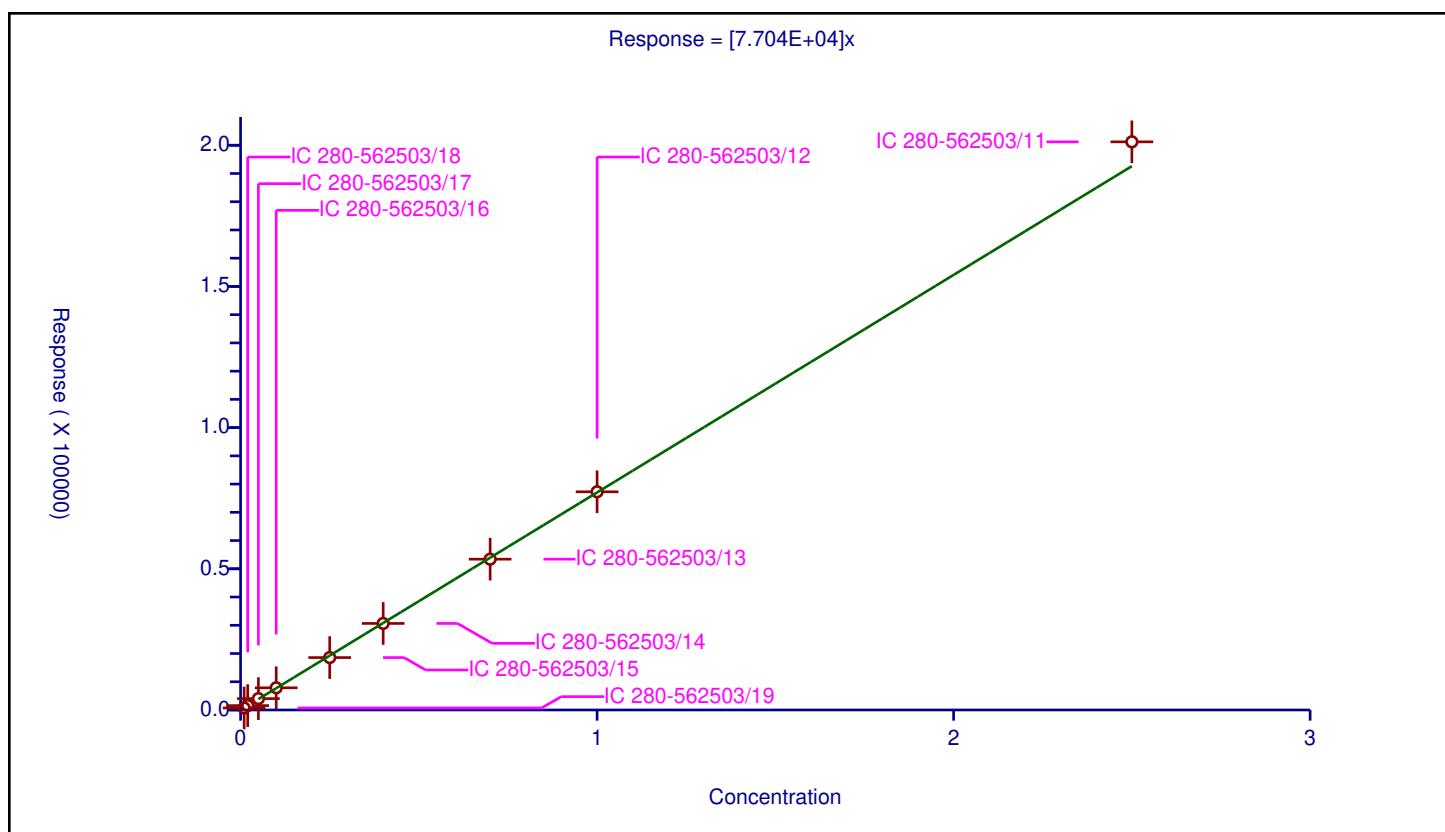
## Calibration

/ 2,4,6-Trinitrophenol

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	7.704E+04
Error Coefficients	
Standard Error:	3060
Relative Standard Error:	3.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.01	716.0			71600.0	Y
2	IC 280-562503/18	0.02	1554.0			77700.0	Y
3	IC 280-562503/17	0.05	4029.0			80580.0	Y
4	IC 280-562503/16	0.1	7855.0			78550.0	Y
5	IC 280-562503/15	0.25	18560.0			74240.0	Y
6	IC 280-562503/14	0.4	30649.0			76622.5	Y
7	IC 280-562503/13	0.7	53408.0			76297.142857	Y
8	IC 280-562503/12	1.0	77279.0			77279.0	Y
9	IC 280-562503/11	2.5	201210.0			80484.0	Y



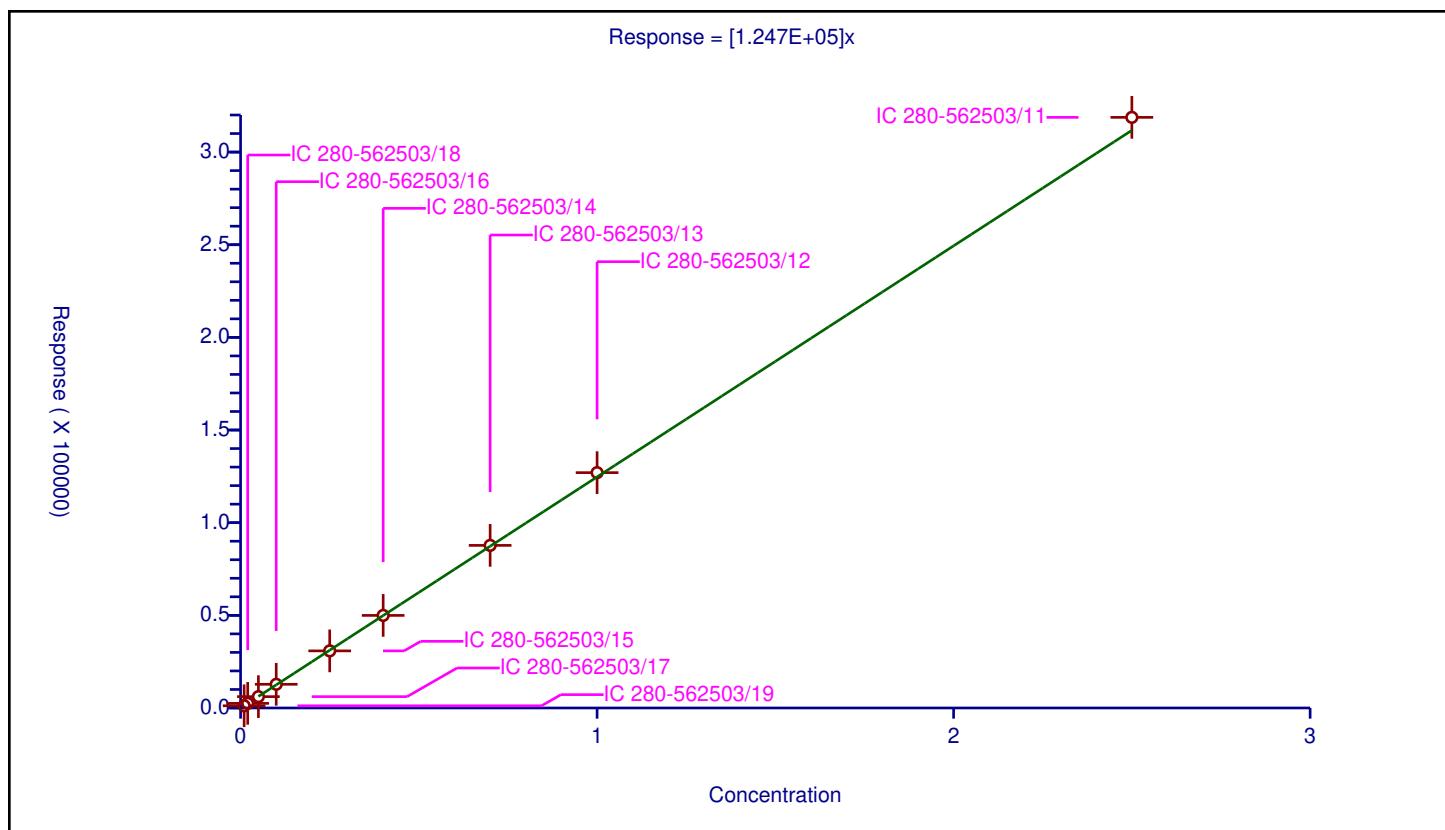
## Calibration

/ 1,2-Dinitrobenzene

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	1.247E+05
Error Coefficients	
Standard Error:	2620
Relative Standard Error:	2.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.01	1188.0			118800.0	Y
2	IC 280-562503/18	0.02	2503.0			125150.0	Y
3	IC 280-562503/17	0.05	6127.0			122540.0	Y
4	IC 280-562503/16	0.1	12780.0			127800.0	Y
5	IC 280-562503/15	0.25	30811.0			123244.0	Y
6	IC 280-562503/14	0.4	49955.0			124887.5	Y
7	IC 280-562503/13	0.7	87746.0			125351.428571	Y
8	IC 280-562503/12	1.0	127011.0			127011.0	Y
9	IC 280-562503/11	2.5	318738.0			127495.2	Y



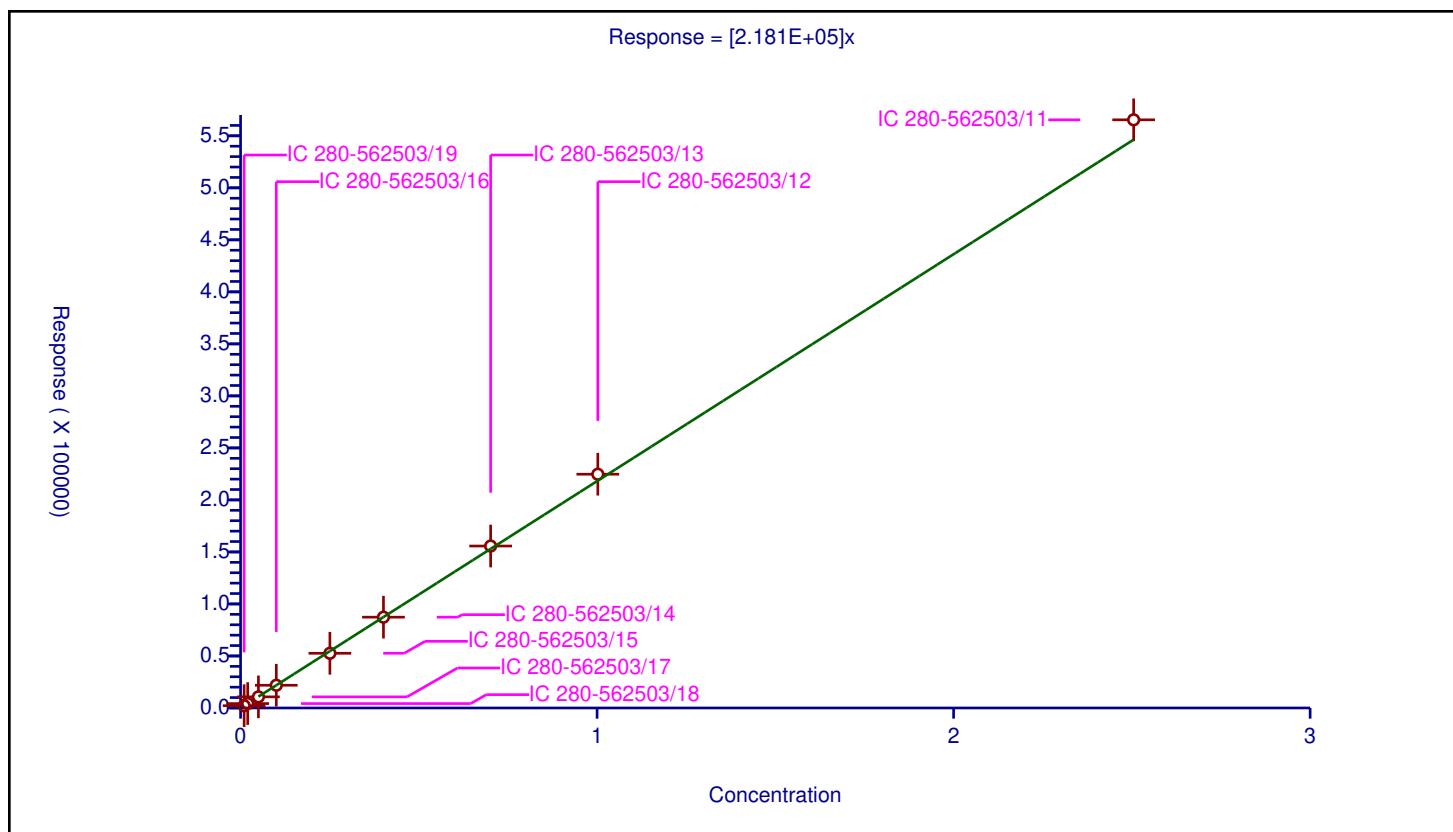
## Calibration

/ 1,3,5-Trinitrobenzene

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	2.181E+05
Error Coefficients	
Standard Error:	7180
Relative Standard Error:	2.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.01002	2197.0			219261.477046	Y
2	IC 280-562503/18	0.02004	4249.0			212025.948104	Y
3	IC 280-562503/17	0.0501	10711.0			213792.41517	Y
4	IC 280-562503/16	0.1002	21856.0			218123.752495	Y
5	IC 280-562503/15	0.2505	52589.0			209936.127745	Y
6	IC 280-562503/14	0.4008	87295.0			217801.896208	Y
7	IC 280-562503/13	0.7014	155681.0			221957.513544	Y
8	IC 280-562503/12	1.002	224711.0			224262.47505	Y
9	IC 280-562503/11	2.505	565374.0			225698.203593	Y



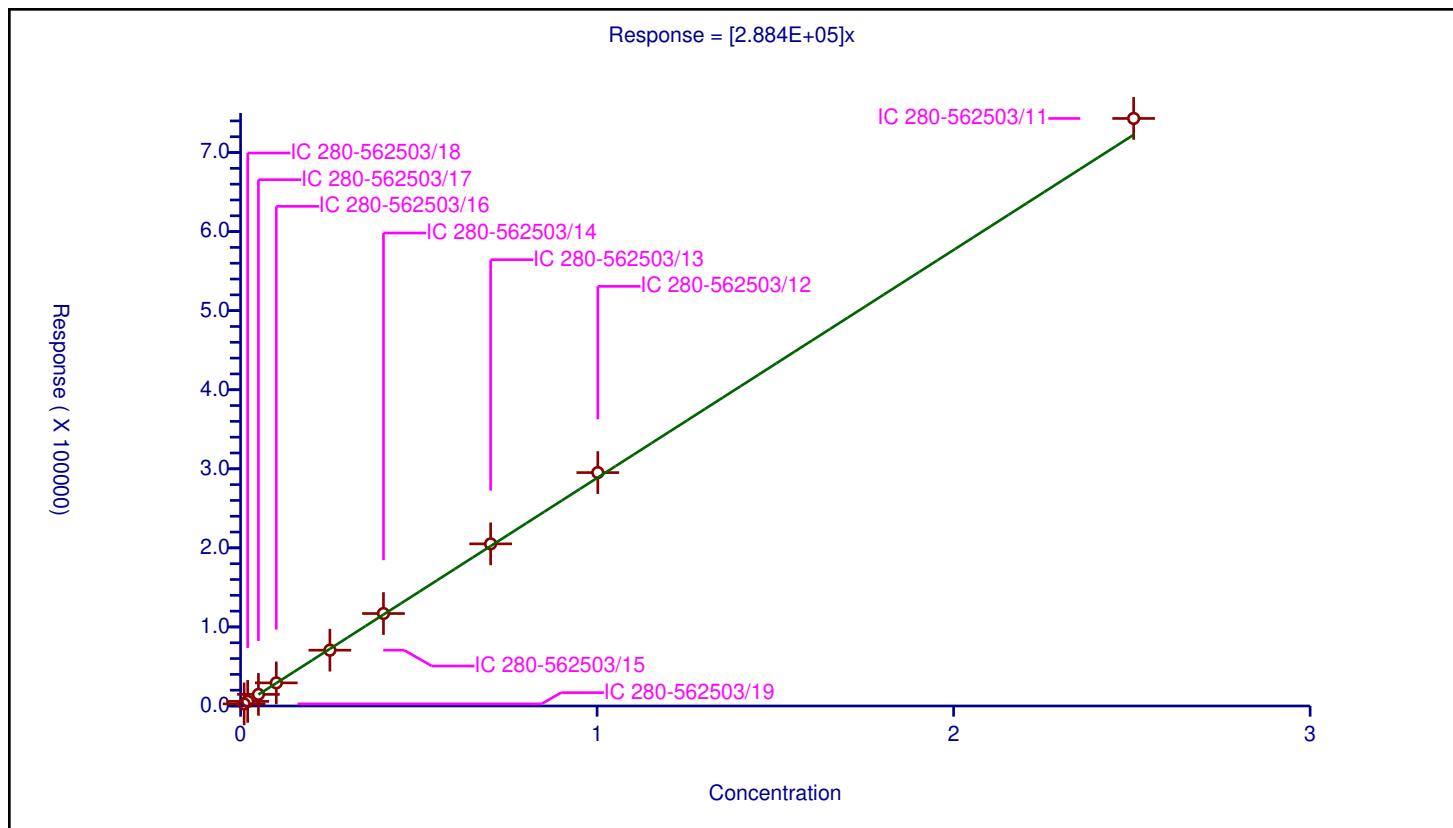
## Calibration

/ 1,3-Dinitrobenzene

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	2.884E+05
Error Coefficients	
Standard Error:	7740
Relative Standard Error:	3.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.01002	2633.0			262774.451098	Y
2	IC 280-562503/18	0.02004	5833.0			291067.864271	Y
3	IC 280-562503/17	0.0501	14683.0			293073.852295	Y
4	IC 280-562503/16	0.1002	29215.0			291566.866267	Y
5	IC 280-562503/15	0.2505	70569.0			281712.57485	Y
6	IC 280-562503/14	0.4008	116963.0			291823.852295	Y
7	IC 280-562503/13	0.7014	205039.0			292328.200741	Y
8	IC 280-562503/12	1.002	295195.0			294605.788423	Y
9	IC 280-562503/11	2.505	743133.0			296659.88024	Y



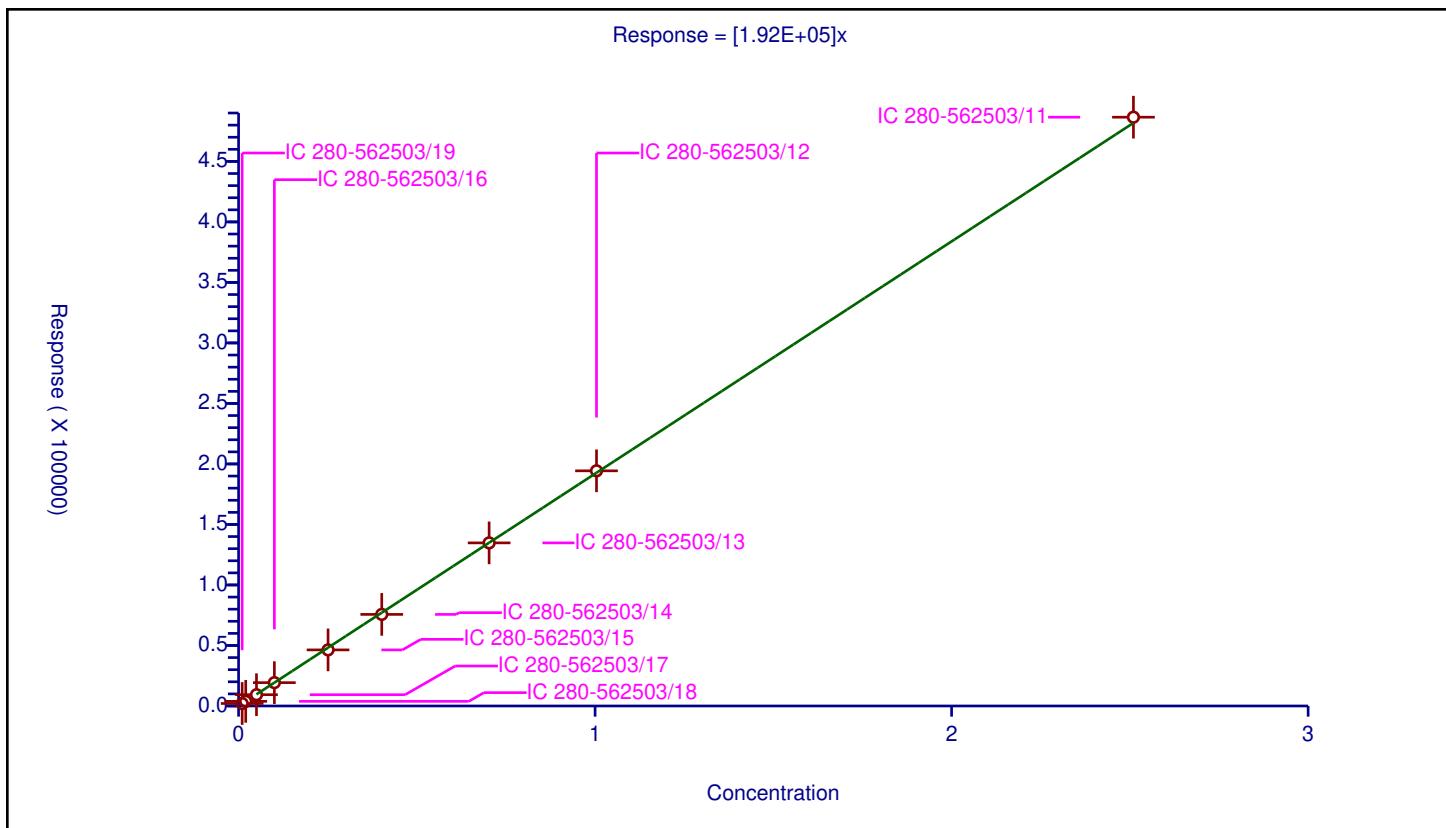
## Calibration

/ Nitrobenzene

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	1.92E+05
Error Coefficients	
Standard Error:	1950
Relative Standard Error:	3.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

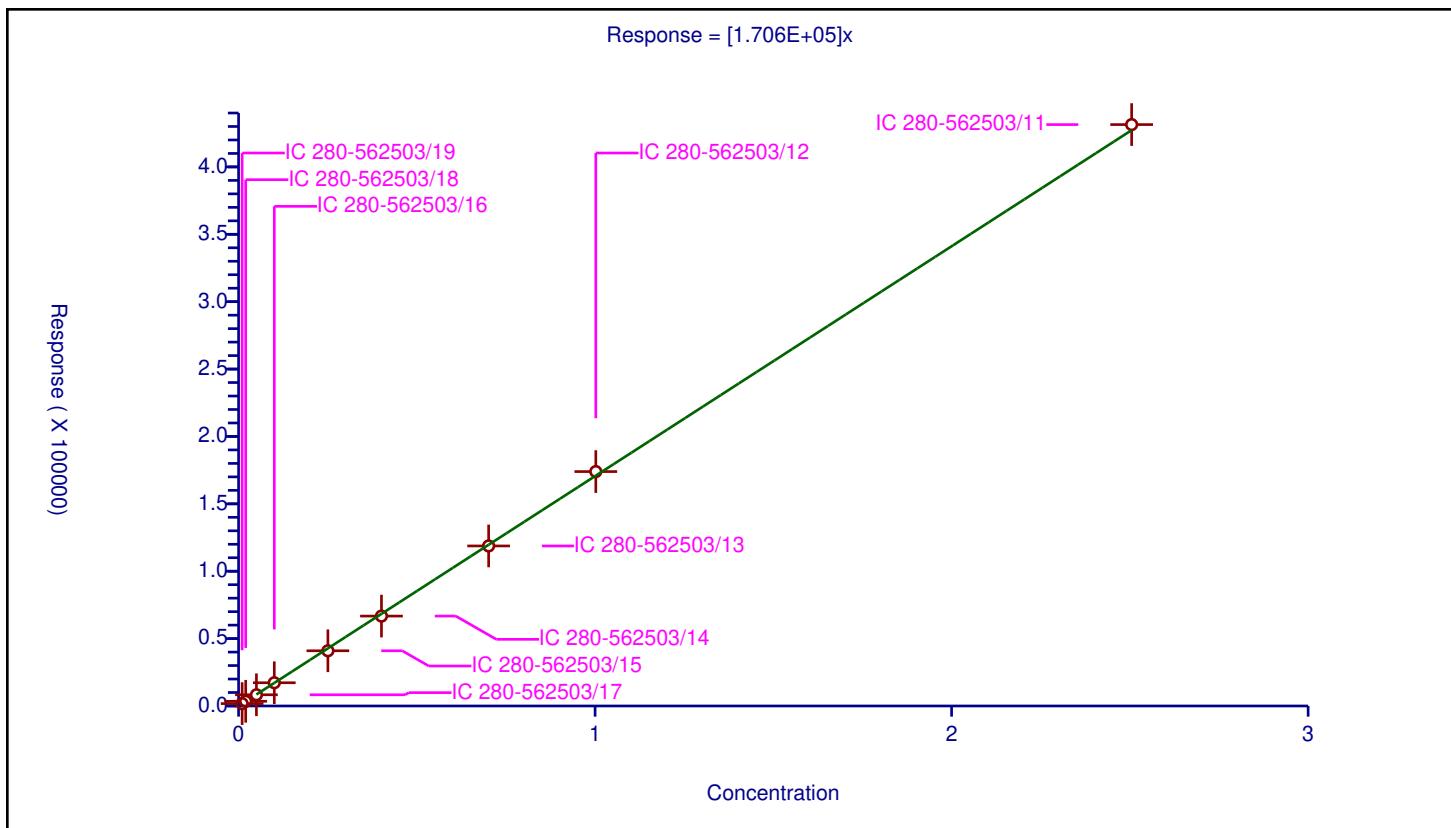
ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.01004	2067.0			205876.494024	Y
2	IC 280-562503/18	0.02008	3845.0			191484.063745	Y
3	IC 280-562503/17	0.0502	9329.0			185836.653386	Y
4	IC 280-562503/16	0.1004	19287.0			192101.593625	Y
5	IC 280-562503/15	0.251	46348.0			184653.386454	Y
6	IC 280-562503/14	0.4016	75688.0			188466.135458	Y
7	IC 280-562503/13	0.7028	134777.0			191771.485487	Y
8	IC 280-562503/12	1.004	194325.0			193550.796813	Y
9	IC 280-562503/11	2.51	486534.0			193838.247012	Y



**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	1.706E+05
Error Coefficients	
Standard Error:	2030
Relative Standard Error:	2.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.01002	1778.0			177445.10978	Y
2	IC 280-562503/18	0.02004	3498.0			174550.898204	Y
3	IC 280-562503/17	0.0501	8315.0			165968.063872	Y
4	IC 280-562503/16	0.1002	17238.0			172035.928144	Y
5	IC 280-562503/15	0.2505	40968.0			163544.91018	Y
6	IC 280-562503/14	0.4008	66706.0			166432.135729	Y
7	IC 280-562503/13	0.7014	118756.0			169312.802965	Y
8	IC 280-562503/12	1.002	173941.0			173593.812375	Y
9	IC 280-562503/11	2.505	431404.0			172217.165669	Y



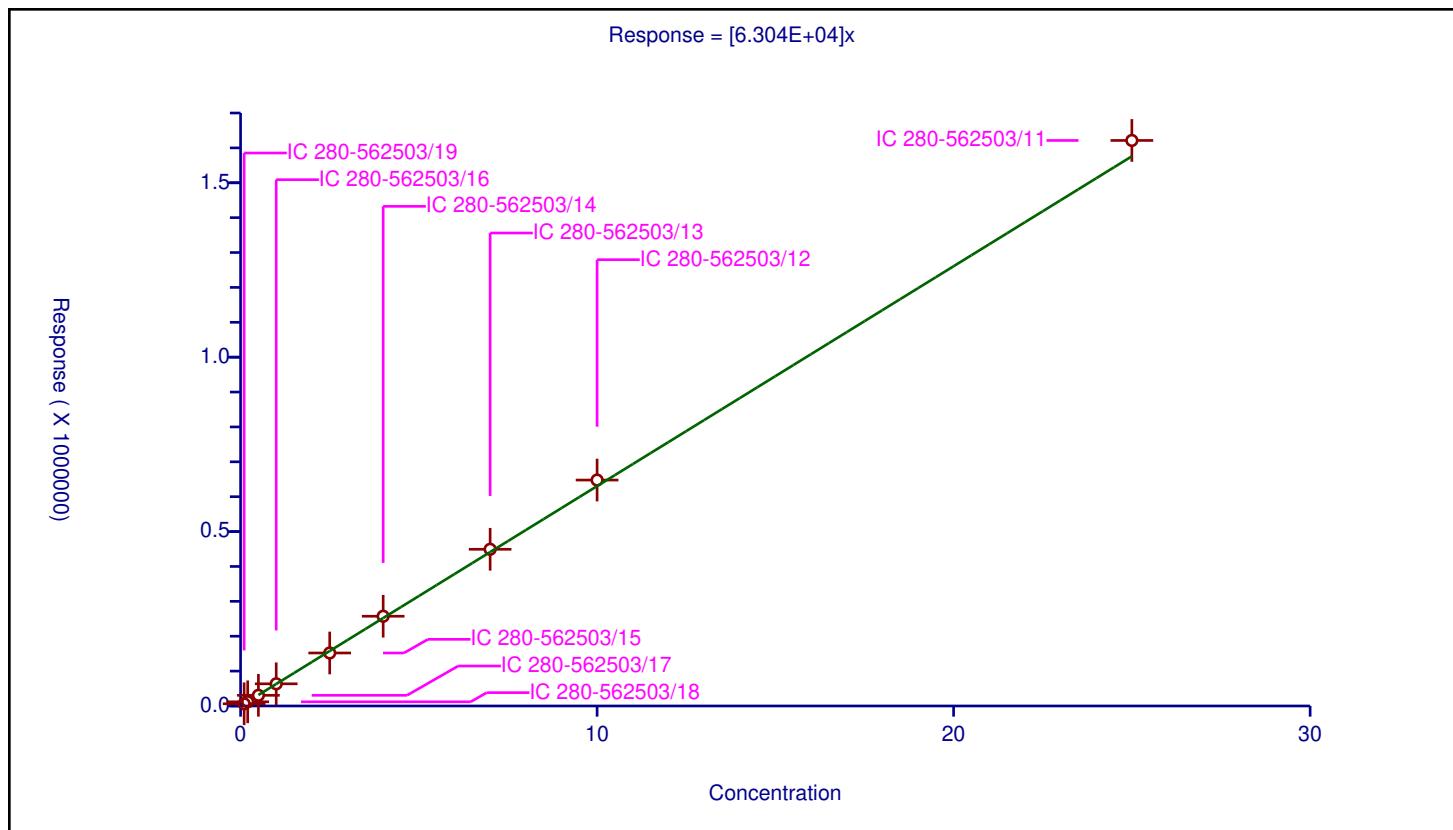
## Calibration

/ 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:	6.304E+04
Error Coefficients	
Standard Error:	17600
Relative Standard Error:	2.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.1	63480.0			63480.0	Y
2	IC 280-562503/18	0.2	12008.0			60040.0	Y
3	IC 280-562503/17	0.5	30651.0			61302.0	Y
4	IC 280-562503/16	1.0	63595.0			63595.0	Y
5	IC 280-562503/15	2.5	151977.0			60790.8	Y
6	IC 280-562503/14	4.0	257287.0			64321.75	Y
7	IC 280-562503/13	7.0	449283.0			64183.285714	Y
8	IC 280-562503/12	10.0	647703.0			64770.3	Y
9	IC 280-562503/11	25.0	1621311.0			64852.44	Y



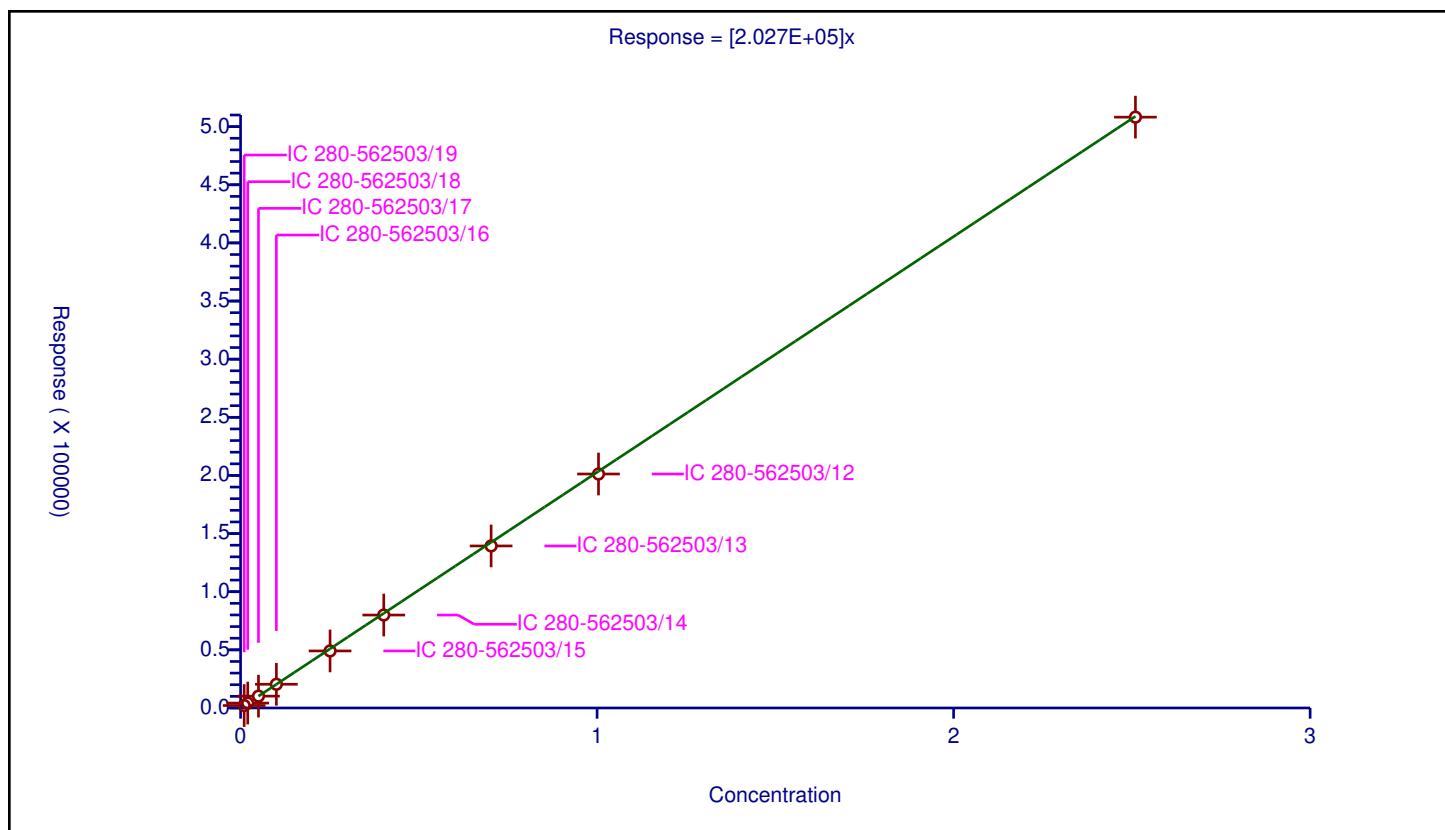
## Calibration

/ 2,4,6-Trinitrotoluene

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	2.027E+05
Error Coefficients	
Standard Error:	1610
Relative Standard Error:	2.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.01004	2126.0			211752.988048	Y
2	IC 280-562503/18	0.02008	4227.0			210507.968127	Y
3	IC 280-562503/17	0.0502	10202.0			203227.091633	Y
4	IC 280-562503/16	0.1004	20408.0			203266.932271	Y
5	IC 280-562503/15	0.251	49067.0			195486.055777	Y
6	IC 280-562503/14	0.4016	79951.0			199081.175299	Y
7	IC 280-562503/13	0.7028	139377.0			198316.733068	Y
8	IC 280-562503/12	1.004	201237.0			200435.258964	Y
9	IC 280-562503/11	2.51	508173.0			202459.36255	Y



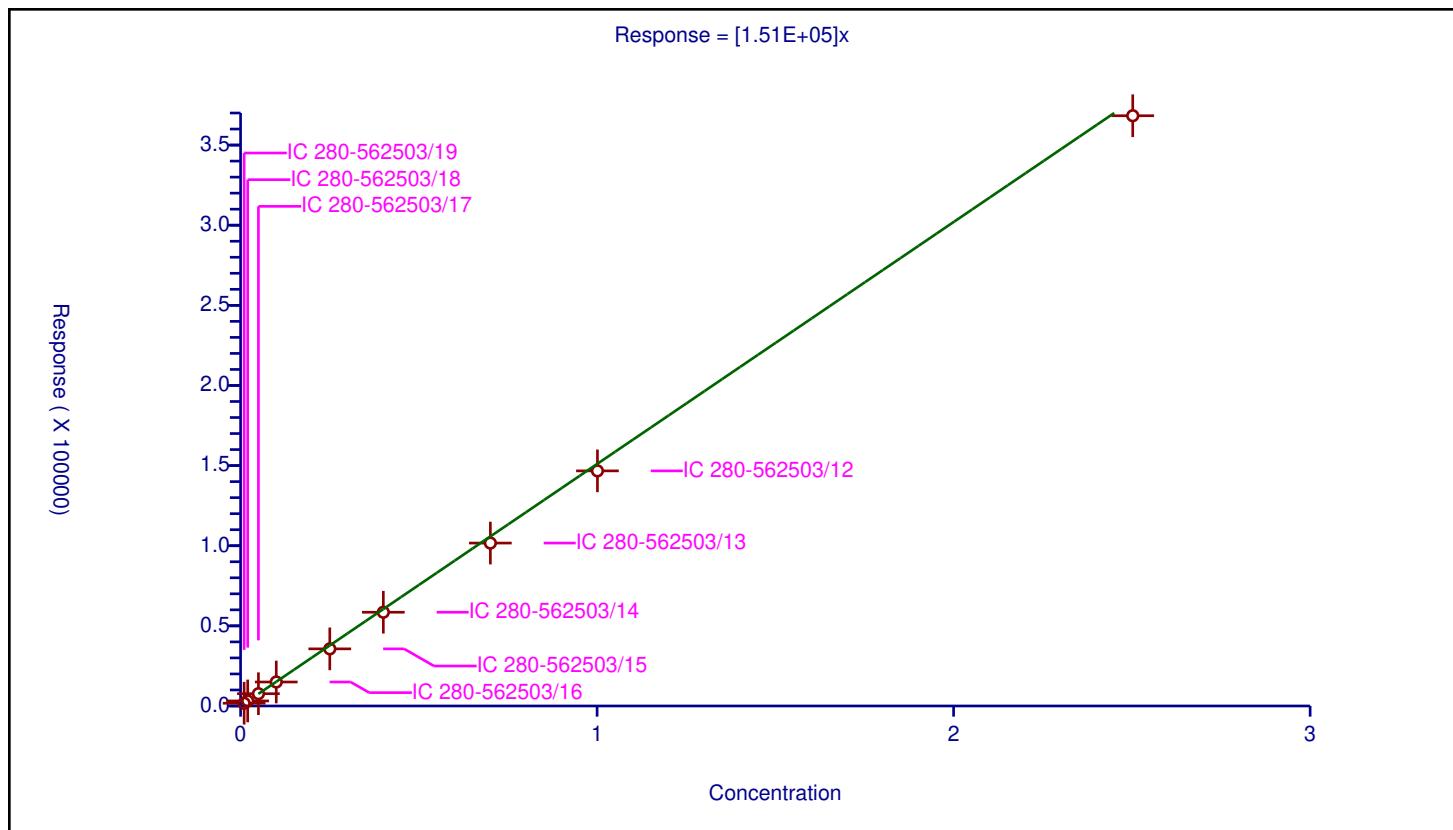
## Calibration

/ 4-Amino-2,6-dinitrotoluene

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	1.51E+05
Error Coefficients	
Standard Error:	4130
Relative Standard Error:	5.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.01001	1718.0			171628.371628	Y
2	IC 280-562503/18	0.02002	3150.0			157342.657343	Y
3	IC 280-562503/17	0.05005	7656.0			152967.032967	Y
4	IC 280-562503/16	0.1001	14975.0			149600.3996	Y
5	IC 280-562503/15	0.25025	35644.0			142433.566434	Y
6	IC 280-562503/14	0.4004	58489.0			146076.423576	Y
7	IC 280-562503/13	0.7007	101665.0			145090.623662	Y
8	IC 280-562503/12	1.001	146703.0			146556.443556	Y
9	IC 280-562503/11	2.5025	368296.0			147171.228771	Y



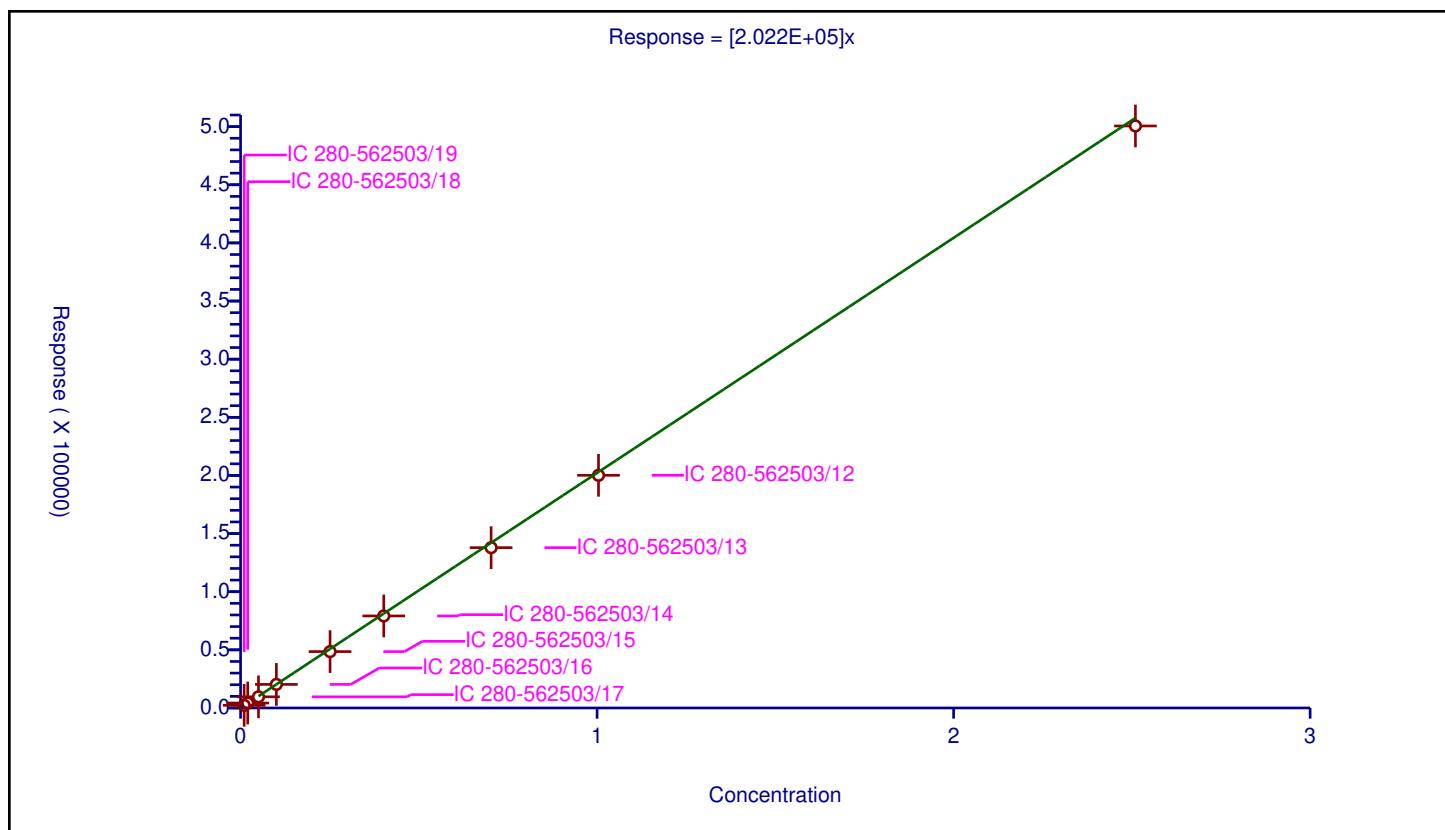
## Calibration

/ 2-Amino-4,6-dinitrotoluene

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	2.022E+05
Error Coefficients	
Standard Error:	3210
Relative Standard Error:	5.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.01004	2287.0			227788.844622	Y
2	IC 280-562503/18	0.02008	4282.0			213247.011952	Y
3	IC 280-562503/17	0.0502	9600.0			191235.059761	Y
4	IC 280-562503/16	0.1004	20280.0			201992.031873	Y
5	IC 280-562503/15	0.251	48486.0			193171.314741	Y
6	IC 280-562503/14	0.4016	79169.0			197133.964143	Y
7	IC 280-562503/13	0.7028	137894.0			196206.602163	Y
8	IC 280-562503/12	1.004	200129.0			199331.673307	Y
9	IC 280-562503/11	2.51	500581.0			199434.661355	Y



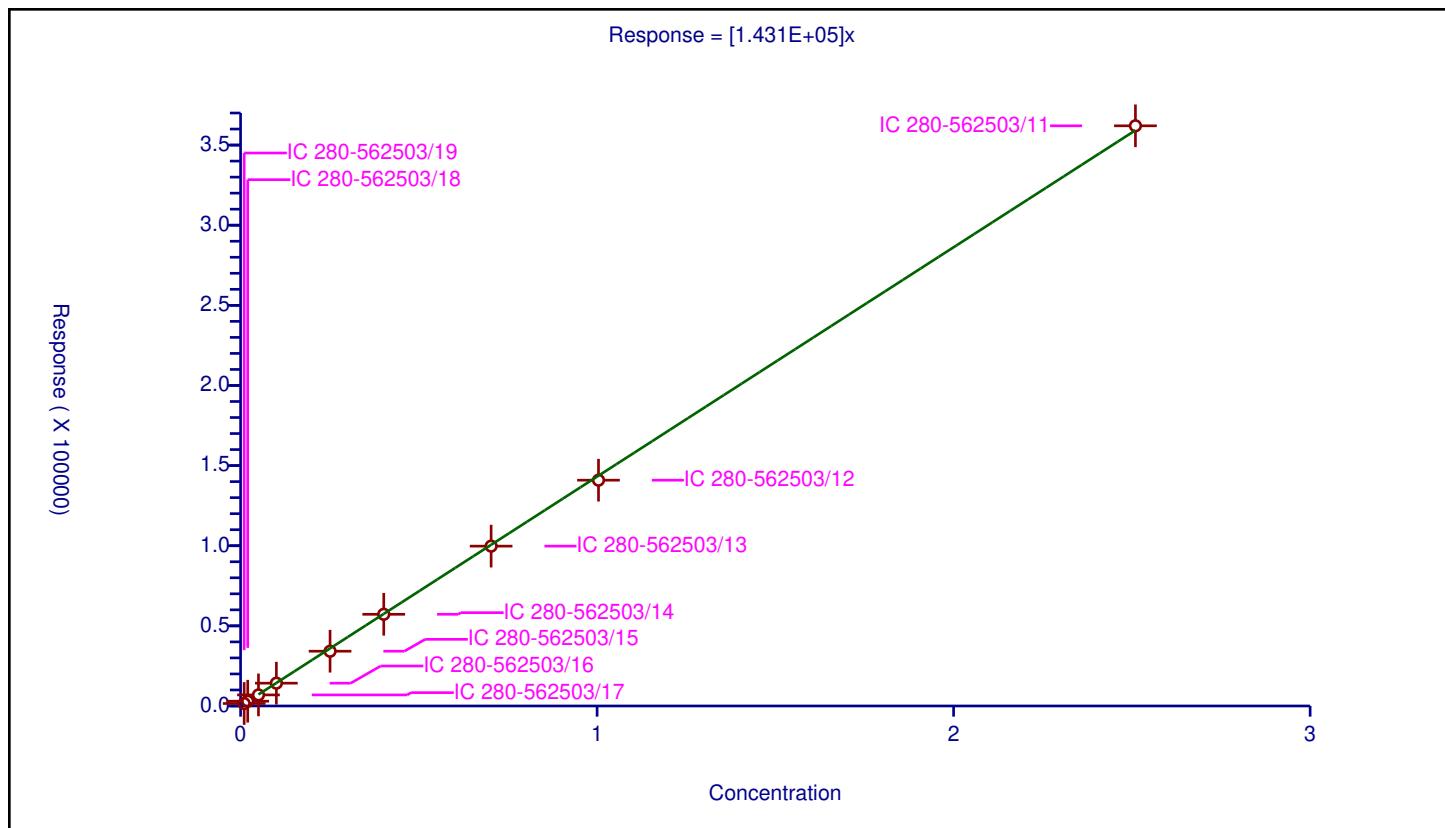
## Calibration

/ 2,6-Dinitrotoluene

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	1.431E+05
Error Coefficients	
Standard Error:	1560
Relative Standard Error:	4.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.01004	1551.0			154482.071713	Y
2	IC 280-562503/18	0.02008	2993.0			149053.784861	Y
3	IC 280-562503/17	0.0502	6908.0			137609.561753	Y
4	IC 280-562503/16	0.1004	14234.0			141772.908367	Y
5	IC 280-562503/15	0.251	34177.0			136163.346614	Y
6	IC 280-562503/14	0.4016	57212.0			142460.159363	Y
7	IC 280-562503/13	0.7028	99747.0			141928.002277	Y
8	IC 280-562503/12	1.004	140901.0			140339.641434	Y
9	IC 280-562503/11	2.51	362011.0			144227.49004	Y



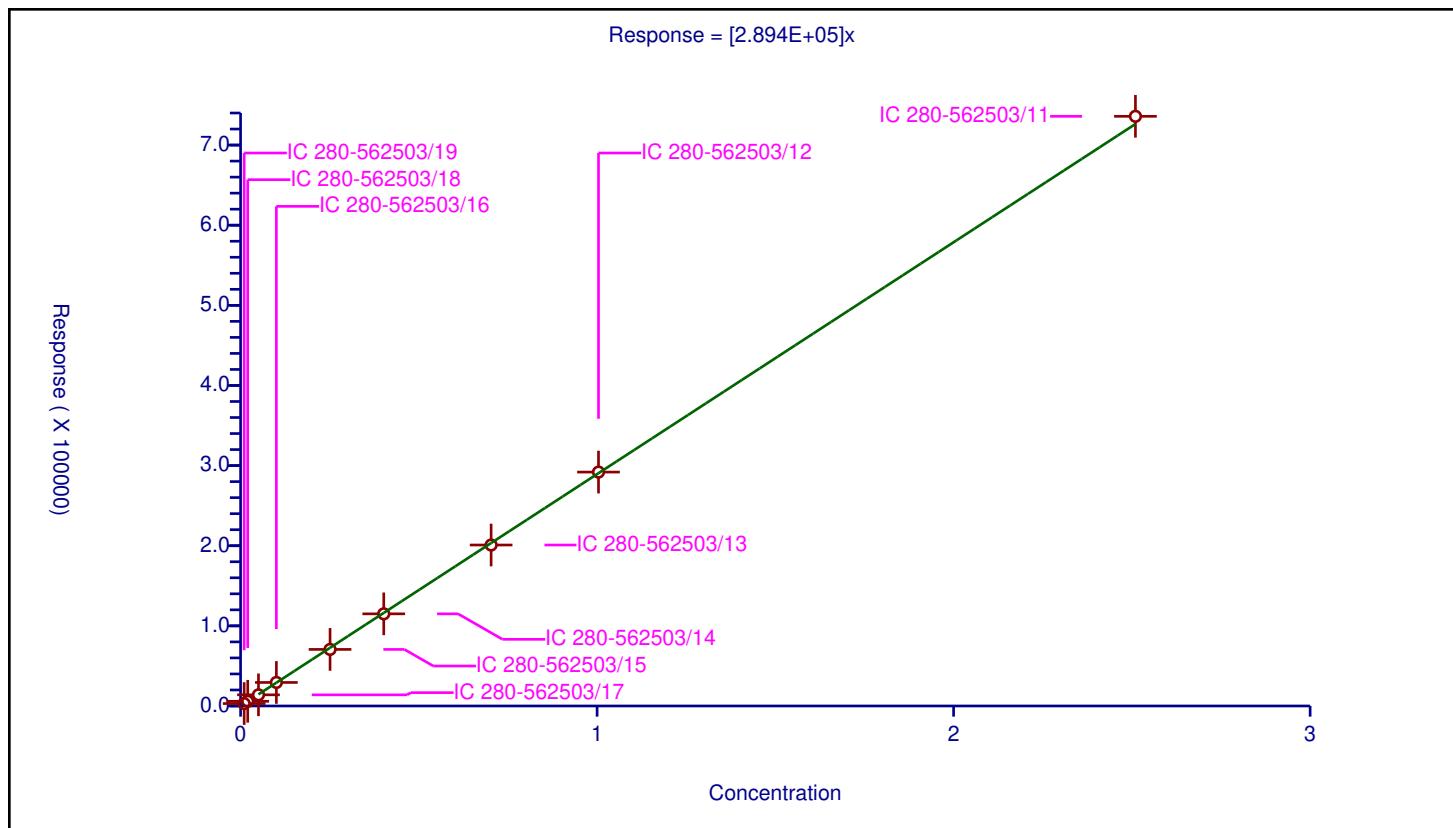
## Calibration

/ 2,4-Dinitrotoluene

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	2.894E+05
Error Coefficients	
Standard Error:	3650
Relative Standard Error:	2.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.01004	3047.0			303486.055777	Y
2	IC 280-562503/18	0.02008	5890.0			293326.693227	Y
3	IC 280-562503/17	0.0502	13933.0			277549.800797	Y
4	IC 280-562503/16	0.1004	29355.0			292380.478088	Y
5	IC 280-562503/15	0.251	70605.0			281294.820717	Y
6	IC 280-562503/14	0.4016	115000.0			286354.581673	Y
7	IC 280-562503/13	0.7028	200883.0			285832.384747	Y
8	IC 280-562503/12	1.004	291912.0			290749.003984	Y
9	IC 280-562503/11	2.51	735887.0			293182.071713	Y



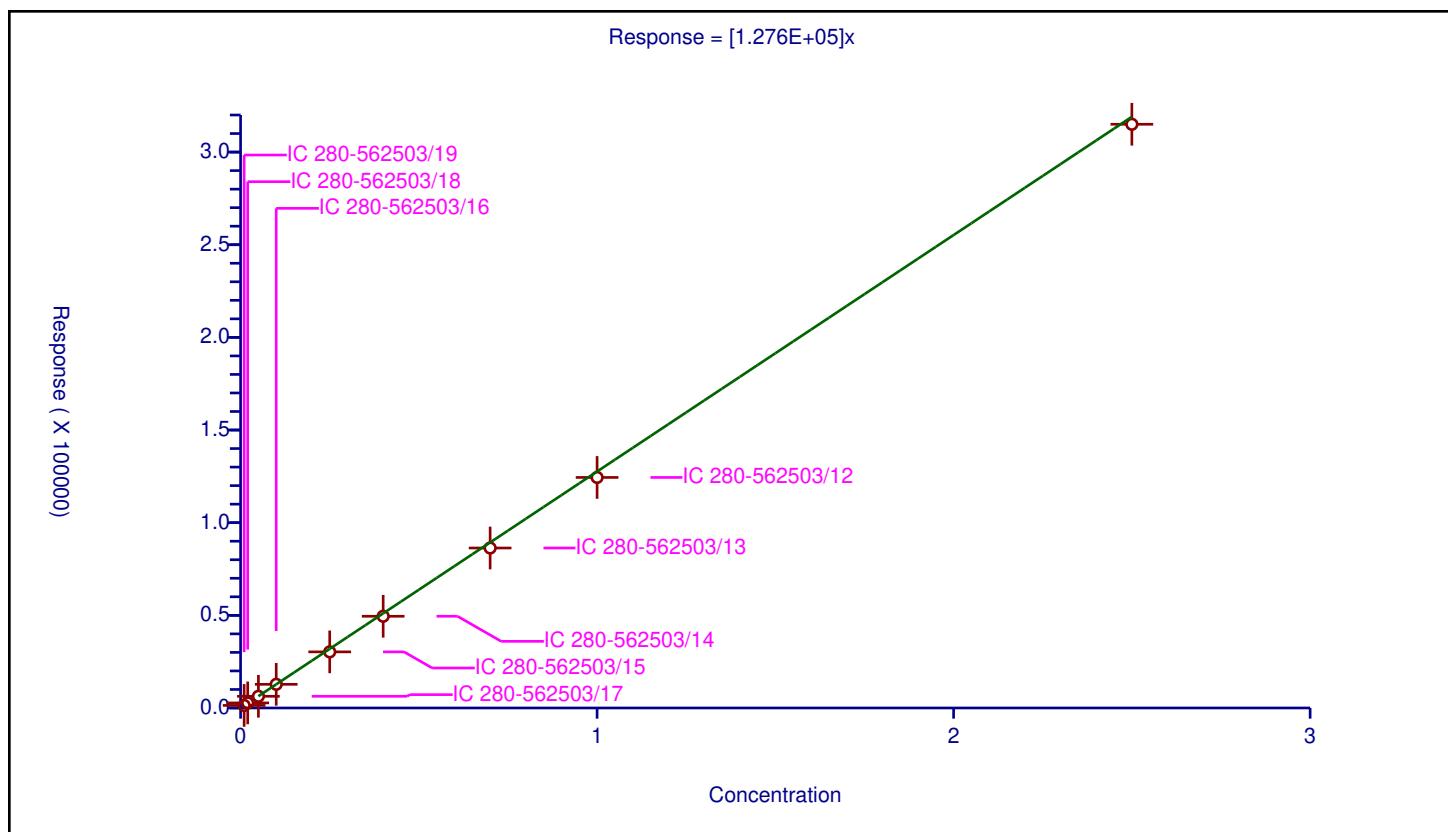
## Calibration

/ o-Nitrotoluene

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	1.276E+05
Error Coefficients	
Standard Error:	2250
Relative Standard Error:	4.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.01	1387.0			138700.0	Y
2	IC 280-562503/18	0.02	2743.0			137150.0	Y
3	IC 280-562503/17	0.05	6314.0			126280.0	Y
4	IC 280-562503/16	0.1	12777.0			127770.0	Y
5	IC 280-562503/15	0.25	30280.0			121120.0	Y
6	IC 280-562503/14	0.4	49500.0			123750.0	Y
7	IC 280-562503/13	0.7	86333.0			123332.857143	Y
8	IC 280-562503/12	1.0	124418.0			124418.0	Y
9	IC 280-562503/11	2.5	315004.0			126001.6	Y



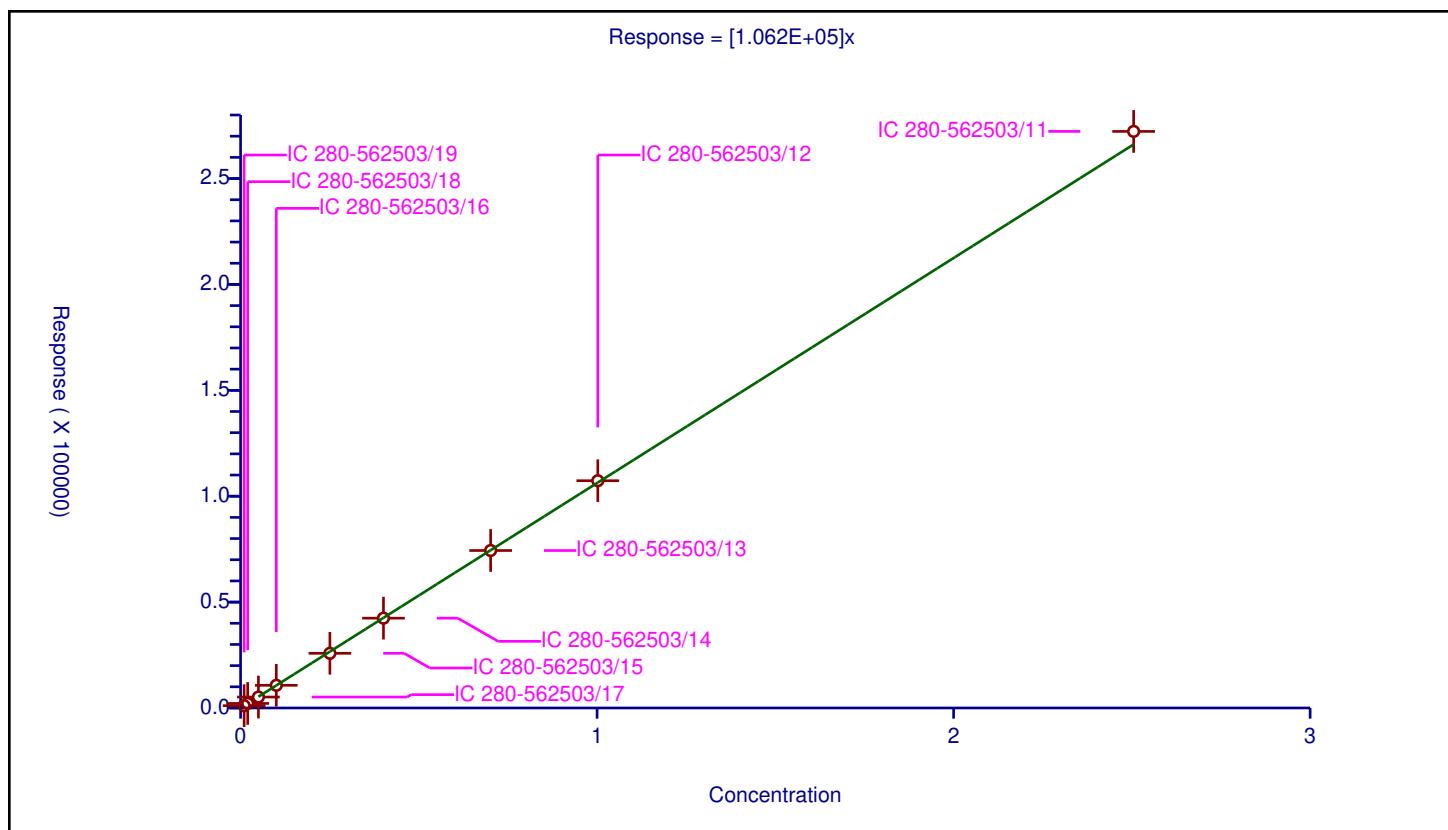
## Calibration

/ p-Nitrotoluene

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	1.062E+05
Error Coefficients	
Standard Error:	2210
Relative Standard Error:	1.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.01002	1083.0			108083.832335	Y
2	IC 280-562503/18	0.02004	2151.0			107335.329341	Y
3	IC 280-562503/17	0.0501	5163.0			103053.892216	Y
4	IC 280-562503/16	0.1002	10715.0			106936.127745	Y
5	IC 280-562503/15	0.2505	25824.0			103089.820359	Y
6	IC 280-562503/14	0.4008	42415.0			105825.848303	Y
7	IC 280-562503/13	0.7014	74357.0			106012.261192	Y
8	IC 280-562503/12	1.002	107309.0			107094.810379	Y
9	IC 280-562503/11	2.505	272262.0			108687.42515	Y



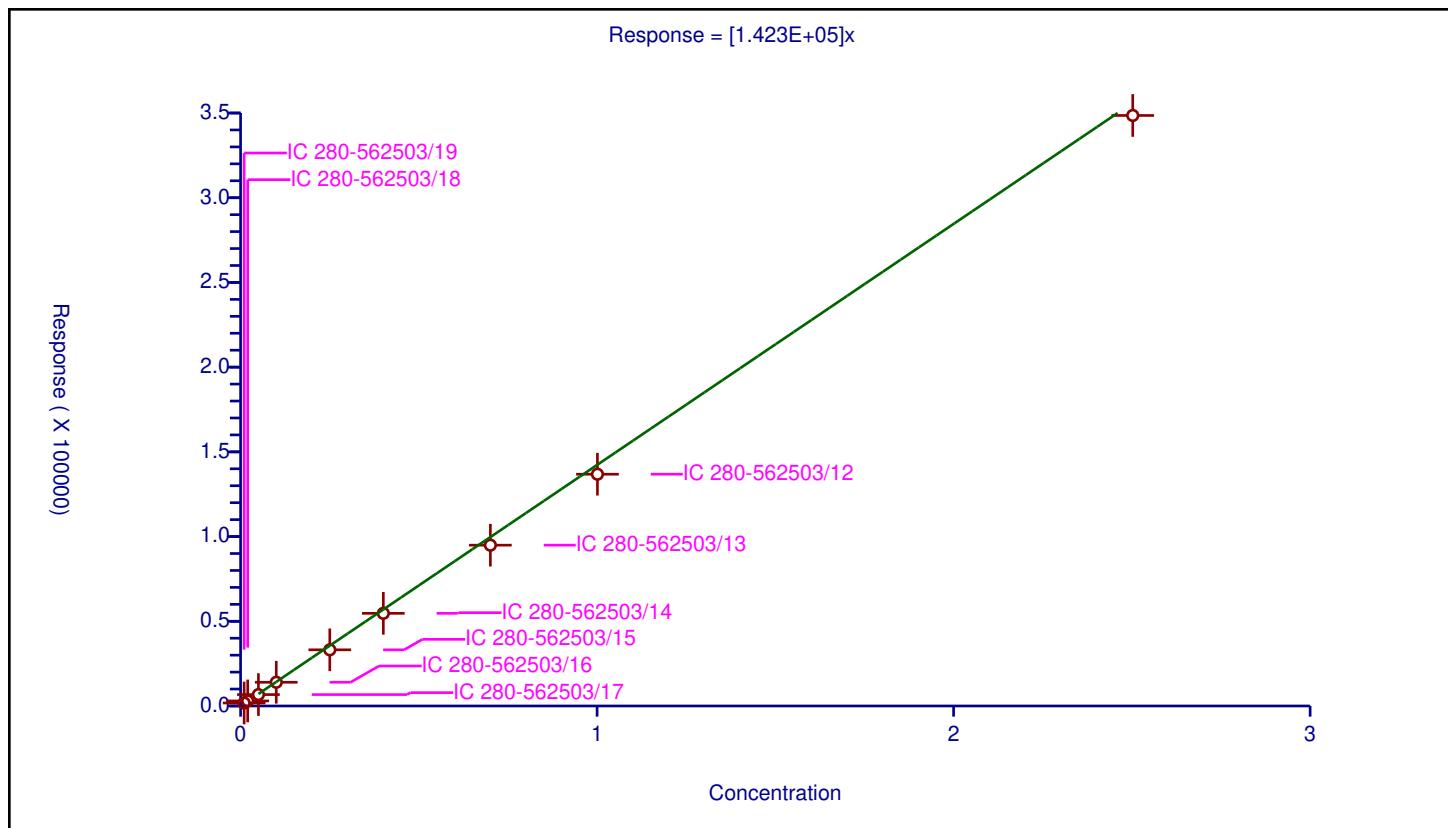
## Calibration

/ m-Nitrotoluene

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	1.423E+05
Error Coefficients	
Standard Error:	3900
Relative Standard Error:	9.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.987

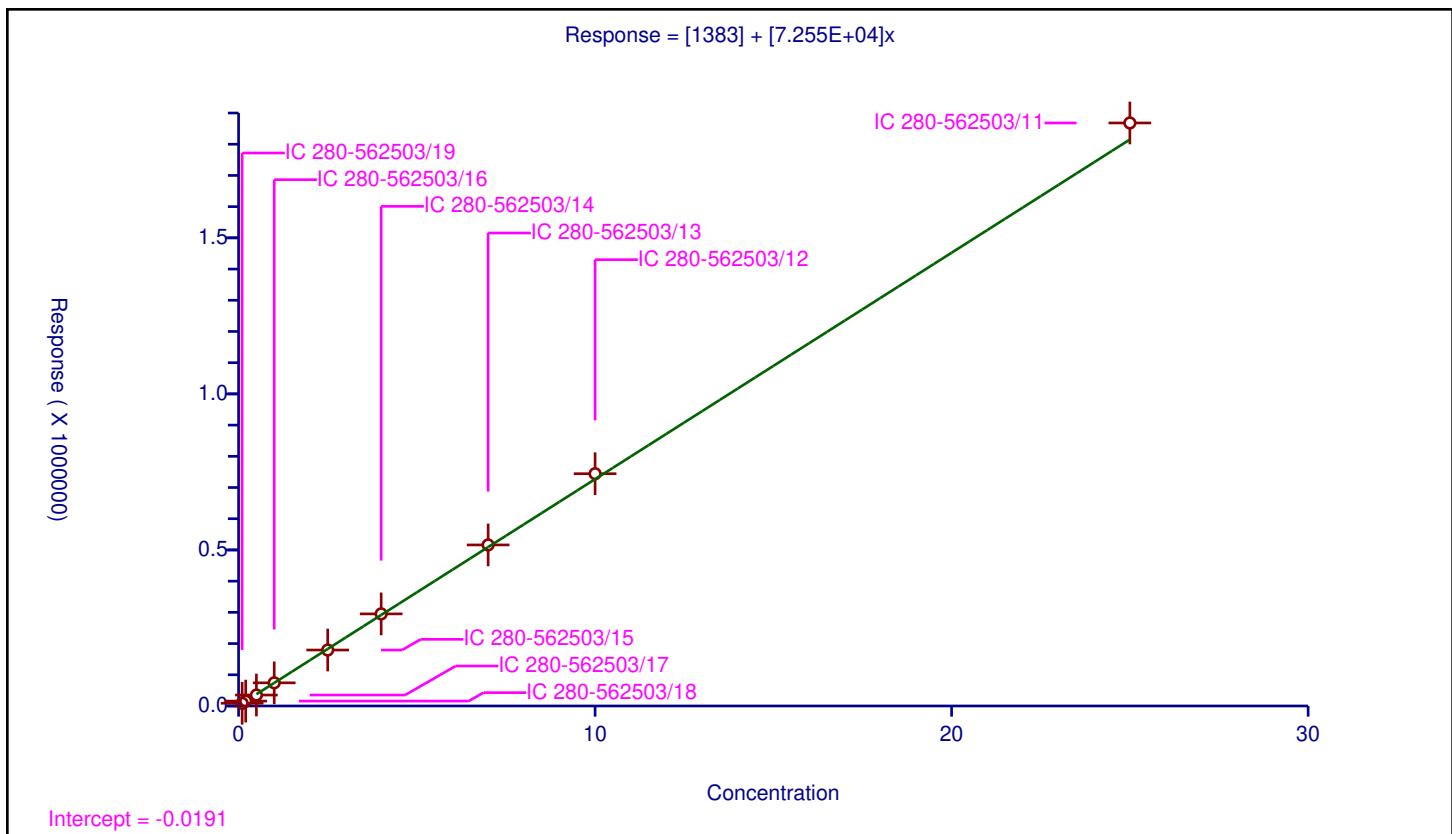
ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.01001	1764.0			176223.776224	Y
2	IC 280-562503/18	0.02002	2989.0			149300.699301	Y
3	IC 280-562503/17	0.05005	6733.0			134525.474525	Y
4	IC 280-562503/16	0.1001	14003.0			139890.10989	Y
5	IC 280-562503/15	0.25025	33160.0			132507.492507	Y
6	IC 280-562503/14	0.4004	54695.0			136600.899101	Y
7	IC 280-562503/13	0.7007	94920.0			135464.535465	Y
8	IC 280-562503/12	1.001	136801.0			136664.335664	Y
9	IC 280-562503/11	2.5025	348555.0			139282.717283	Y



**Curve Type:** Linear  
**Weighting:** Conc\_Sq  
**Origin:** None  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	1383
Slope:	7.255E+04
Error Coefficients	
Standard Error:	21400
Relative Standard Error:	3.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.1	8784.0			87840.0	Y
2	IC 280-562503/18	0.2	15705.0			78525.0	Y
3	IC 280-562503/17	0.5	35084.0			70168.0	Y
4	IC 280-562503/16	1.0	74208.0			74208.0	Y
5	IC 280-562503/15	2.5	179275.0			71710.0	Y
6	IC 280-562503/14	4.0	295082.0			73770.5	Y
7	IC 280-562503/13	7.0	516042.0			73720.285714	Y
8	IC 280-562503/12	10.0	744274.0			74427.4	Y
9	IC 280-562503/11	25.0	1868141.0			74725.64	Y



FORM VI  
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA  
RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159130-1 Analy Batch No.: 562503

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

Instrument ID: CHHPLC\_X3 GC Column: UltraCarb5u ID: 4.6 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/05/2022 01:43 Calibration End Date: 01/05/2022 04:24 Calibration ID: 61347

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-562503/37	01040037.D
Level 2	IC 280-562503/36	01040036.D
Level 3	IC 280-562503/35	01040035.D
Level 4	IC 280-562503/34	01040034.D
Level 5	IC 280-562503/33	01040033.D
Level 6	IC 280-562503/32	01040032.D
Level 7	IC 280-562503/31	01040031.D
Level 8	IC 280-562503/30	01040030.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
TNX	6.479	6.478	6.483	6.484	6.483	6.477	6.478	6.472			6.384 - 6.584	6.479
DNX	6.799	6.798	6.796	6.797	6.803	6.797	6.798	6.792			6.697 - 6.897	6.798
MNX	7.219	7.224	7.223	7.224	7.223	7.217	7.218	7.218			7.074 - 7.374	7.221

FORM VI  
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA  
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-159130-1 Analy Batch No.: 562503

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

Instrument ID: CHHPLC\_X3 GC Column: UltraCarb5u ID: 4.6 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/05/2022 01:43 Calibration End Date: 01/05/2022 04:24 Calibration ID: 61347

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-562503/37	01040037.D
Level 2	IC 280-562503/36	01040036.D
Level 3	IC 280-562503/35	01040035.D
Level 4	IC 280-562503/34	01040034.D
Level 5	IC 280-562503/33	01040033.D
Level 6	IC 280-562503/32	01040032.D
Level 7	IC 280-562503/31	01040031.D
Level 8	IC 280-562503/30	01040030.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
TNX	179820 181618	180440 185306	179710 183906	170821 188038	Ave		181207.47 1				2.8		20.0			
DNX	140709 139048	139620 138881	139141 137206	129534 140763	Ave		138112.95 0				2.6		20.0			
MNX	130334 127284	125073 127309	123719 126586	118458 129201	Ave		125995.41 6				2.9		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI  
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA  
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver Job No.: 280-159130-1 Analy Batch No.: 562503

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

Instrument ID: CHHPLC\_X3 GC Column: UltraCarb5u ID: 4.6 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/05/2022 01:43 Calibration End Date: 01/05/2022 04:24 Calibration ID: 61347

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-562503/37	01040037.D
Level 2	IC 280-562503/36	01040036.D
Level 3	IC 280-562503/35	01040035.D
Level 4	IC 280-562503/34	01040034.D
Level 5	IC 280-562503/33	01040033.D
Level 6	IC 280-562503/32	01040032.D
Level 7	IC 280-562503/31	01040031.D
Level 8	IC 280-562503/30	01040030.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
TNX	Ave	3600 129844	9031 184090	17989 470565	42748	72720	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
DNX	Ave	2817 97314	6988 137343	13928 352260	32416	55675	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
MNX	Ave	3042 103999	7298 147726	14438 376943	34560	59416	0.0233 0.817	0.0584 1.17	0.117 2.92	0.292	0.467

Curve Type Legend

Ave = Average

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040030.D  
 Lims ID: IC DMT 8  
 Client ID:  
 Sample Type: IC Calib Level: 8  
 Inject. Date: 05-Jan-2022 01:43:42 ALS Bottle#: 30 Worklist Smp#: 30  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Sample Info: IC DMT 8  
 Misc. Info.: 280-0107731-030  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Sublist: chrom-8330\_X3\*sub17  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 05-Jan-2022 12:10:05 Calib Date: 05-Jan-2022 04:24:15  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040037.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm ) Det: LC DAD1B, 254 nm  
 Process Host: CTX1613

First Level Reviewer: zhangji Date: 05-Jan-2022 12:07:13

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.472	6.484	-0.012	470565	2.50	2.60	M
6 DNX	1	6.792	6.797	-0.005	352260	2.50	2.55	M
7 MNX	1	7.218	7.224	-0.006	376943	2.92	2.99	M

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

### Reagents:

8330 DMT\_00010 Amount Added: 125.00 Units: uL

Report Date: 05-Jan-2022 12:10:05

Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

Data File: \\chromfs\\denver\\chromdata\\chhplc\_x\\20220104-107731.b\\01040030.d

Injection Date: 05-Jan-2022 01:43:42

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: IC DMT 8

Worklist Smp#: 30

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

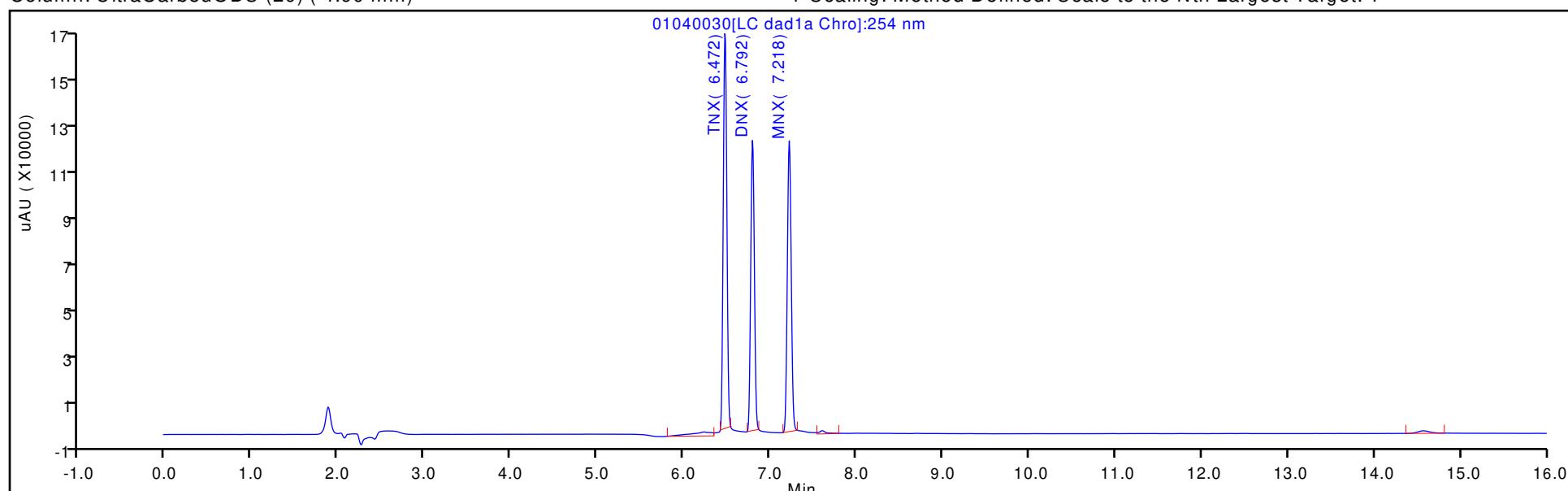
ALS Bottle#: 30

Method: 8330\_X3

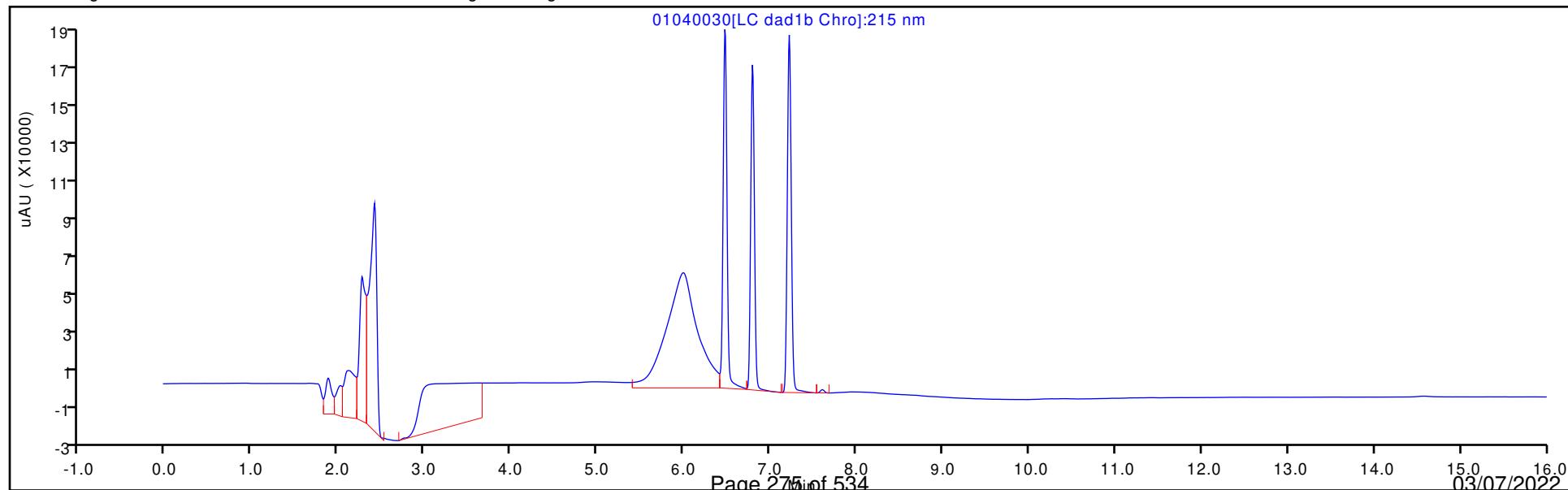
Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



## Eurofins TestAmerica, Denver

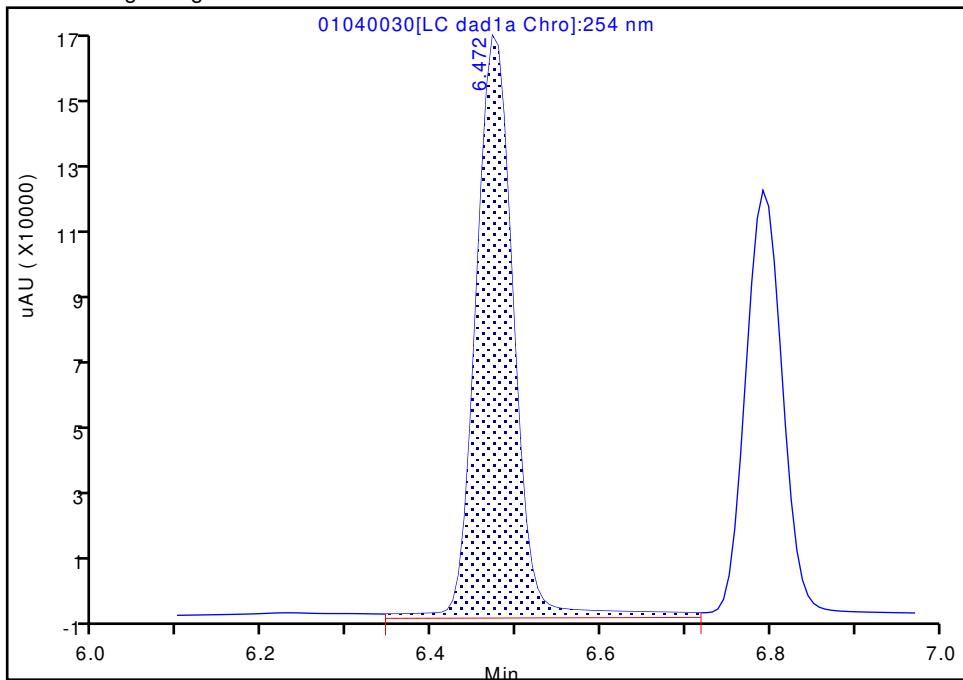
Data File: \\chromfs\denver\chromdata\chhplc\_x\20220104-107731.b\01040030.d  
 Injection Date: 05-Jan-2022 01:43:42 Instrument ID: CHHPLC\_X3  
 Lims ID: IC DMT 8  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 30 Worklist Smp#: 30  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

**3 TNX, CAS: 13980-04-6**

Signal: 1

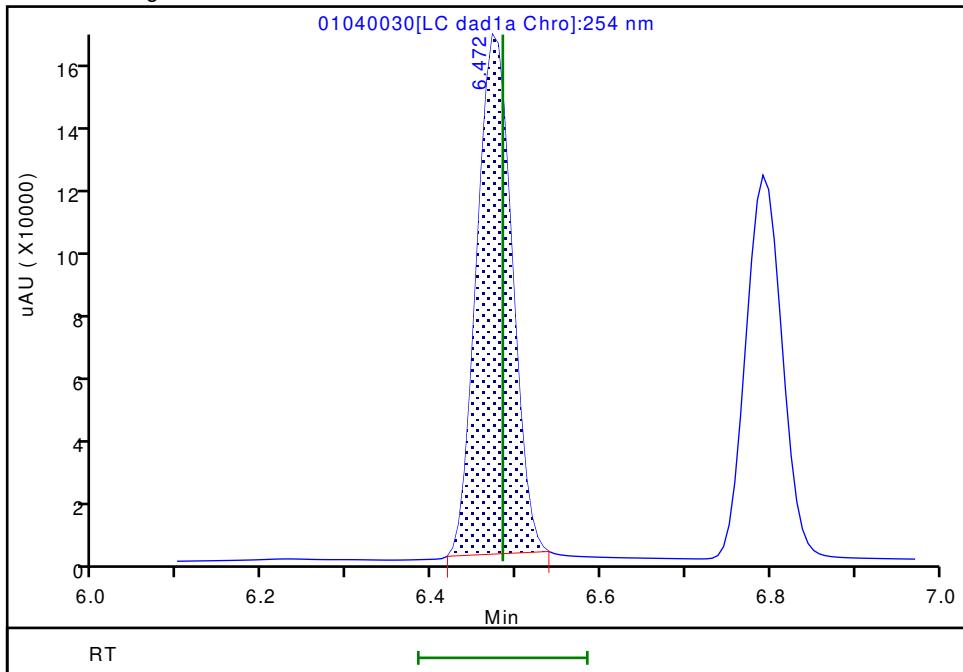
## Processing Integration Results

RT: 6.47  
 Area: 518954  
 Amount: 2.391054  
 Amount Units: ug/mL



## Manual Integration Results

RT: 6.47  
 Area: 470565  
 Amount: 2.596830  
 Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:05:51

Audit Action: Manually Integrated

Audit Reason: Baseline

## Eurofins TestAmerica, Denver

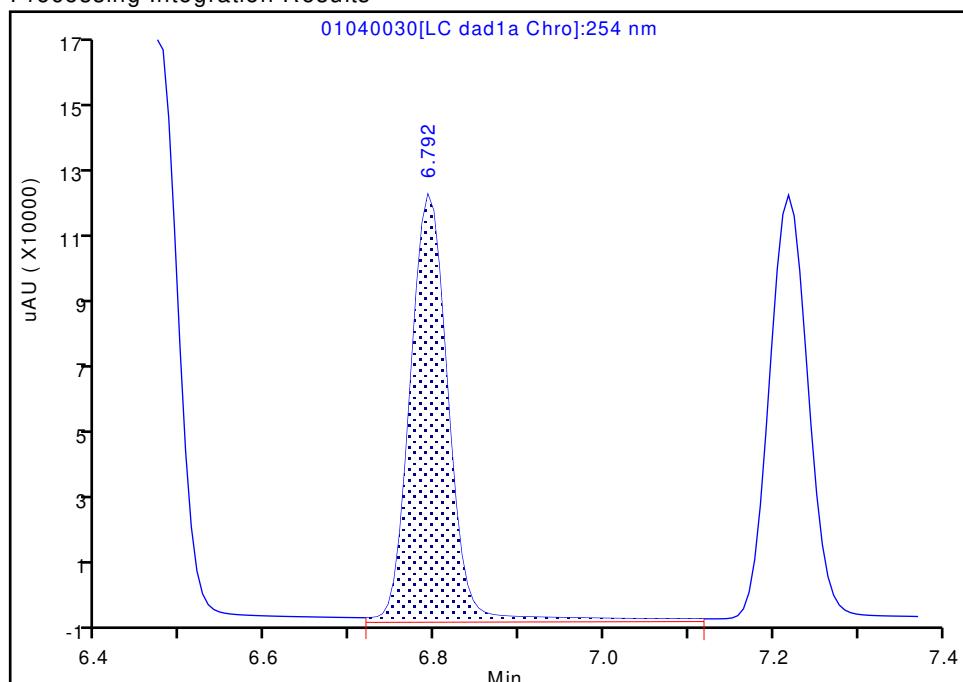
Data File: \\chromfs\denver\chromdata\chhplc\_x\20220104-107731.b\01040030.d  
 Injection Date: 05-Jan-2022 01:43:42 Instrument ID: CHHPLC\_X3  
 Lims ID: IC DMT 8  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 30 Worklist Smp#: 30  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

**6 DNX, CAS: 80251-29-2**

Signal: 1

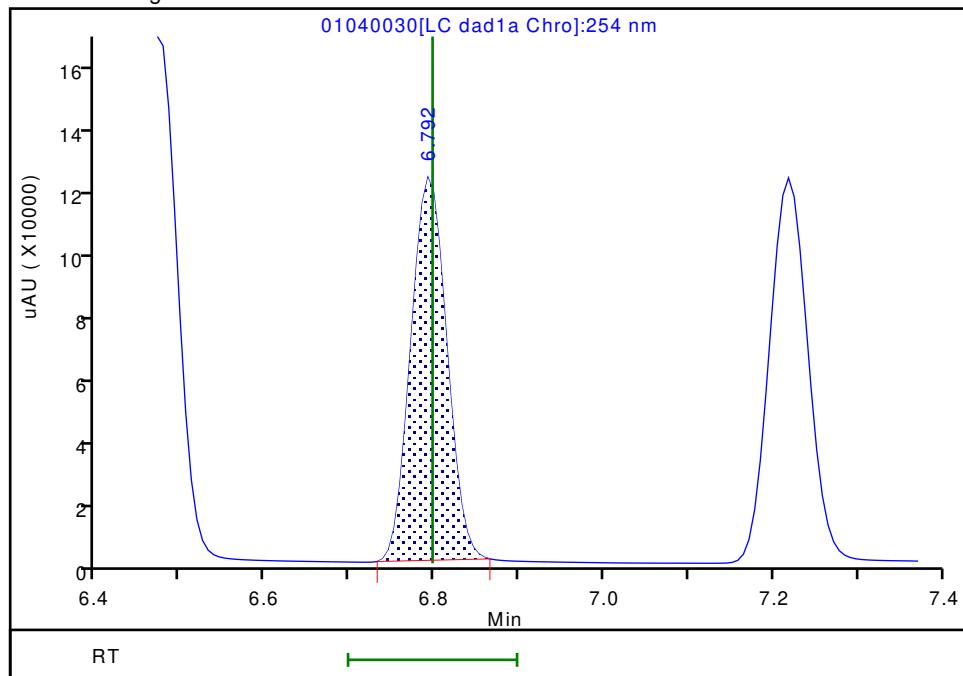
RT: 6.79  
 Area: 385621  
 Amount: 2.575003  
 Amount Units: ug/mL

## Processing Integration Results



RT: 6.79  
 Area: 352260  
 Amount: 2.550521  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 05-Jan-2022 12:07:08

Audit Action: Manually Integrated

Audit Reason: Baseline

## Eurofins TestAmerica, Denver

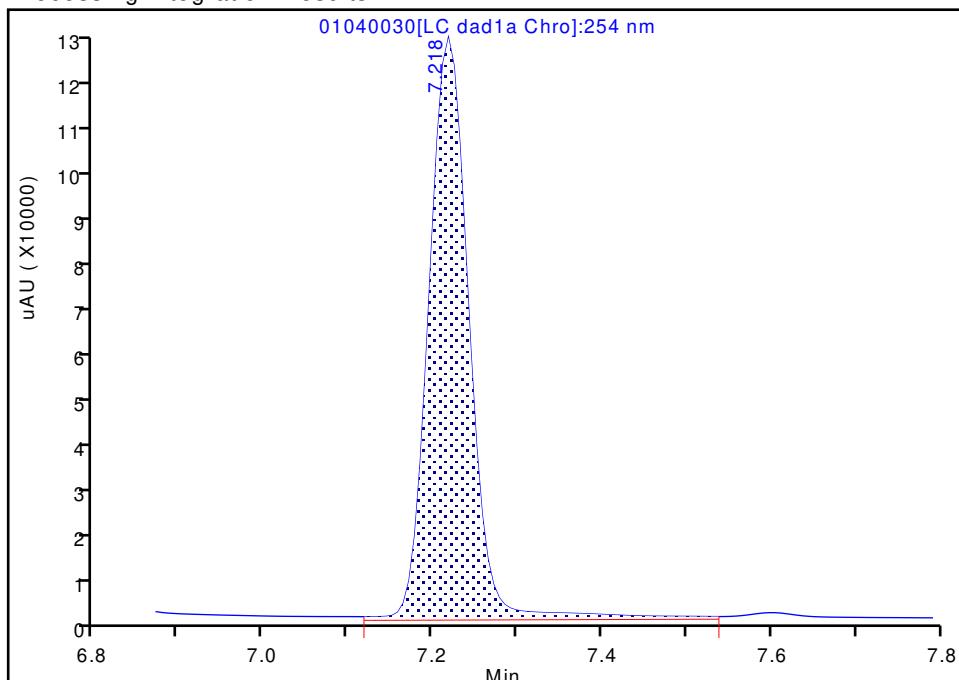
Data File: \\chromfs\denver\chromdata\chhplc\_x\20220104-107731.b\01040030.d  
 Injection Date: 05-Jan-2022 01:43:42 Instrument ID: CHHPLC\_X3  
 Lims ID: IC DMT 8  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 30 Worklist Smp#: 30  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

## 7 MNX, CAS: 5755-27-1

Signal: 1

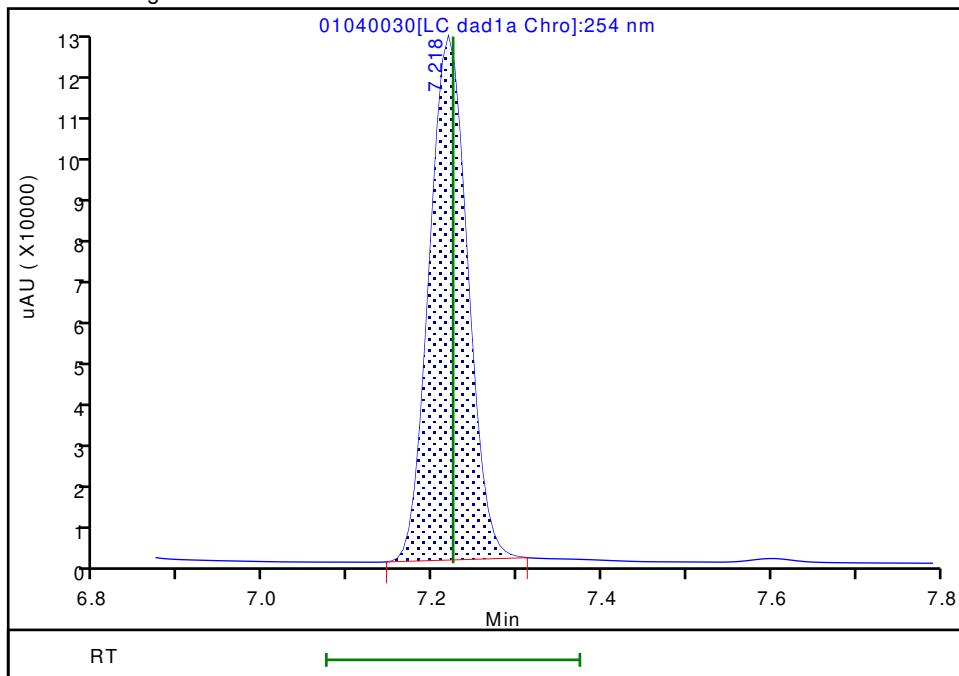
RT: 7.22  
 Area: 403714  
 Amount: 3.070267  
 Amount Units: ug/mL

## Processing Integration Results



RT: 7.22  
 Area: 376943  
 Amount: 2.991720  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 05-Jan-2022 12:07:12

Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040031.D  
 Lims ID: IC DMT 7  
 Client ID:  
 Sample Type: IC Calib Level: 7  
 Inject. Date: 05-Jan-2022 02:06:41 ALS Bottle#: 31 Worklist Smp#: 31  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Sample Info: IC DMT 7  
 Misc. Info.: 280-0107731-031  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Sublist: chrom-8330\_X3\*sub17  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 05-Jan-2022 12:10:06 Calib Date: 05-Jan-2022 04:24:15  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040037.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm ) Det: LC DAD1B, 254 nm  
 Process Host: CTX1613

First Level Reviewer: zhangji Date: 05-Jan-2022 12:07:30

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.478	6.484	-0.006	184090	1.00	1.02	M
6 DNX	1	6.798	6.797	0.001	137343	1.00	0.99	M
7 MNX	1	7.218	7.224	-0.006	147726	1.17	1.17	M

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

### Reagents:

8330 DMT\_00010 Amount Added: 50.00 Units: uL

Report Date: 05-Jan-2022 12:10:06

Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

Data File: \\chromfs\\denver\\chromdata\\chhplc\_x\\20220104-107731.b\\01040031.d

Injection Date: 05-Jan-2022 02:06:41

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: IC DMT 7

Worklist Smp#: 31

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

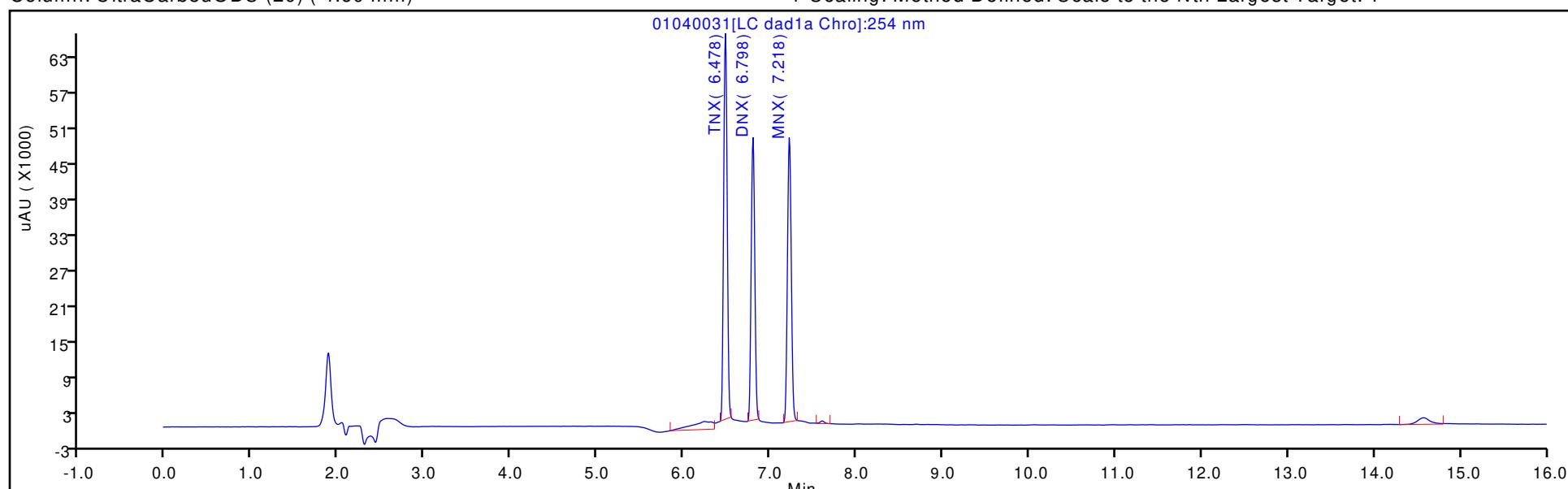
ALS Bottle#: 31

Method: 8330\_X3

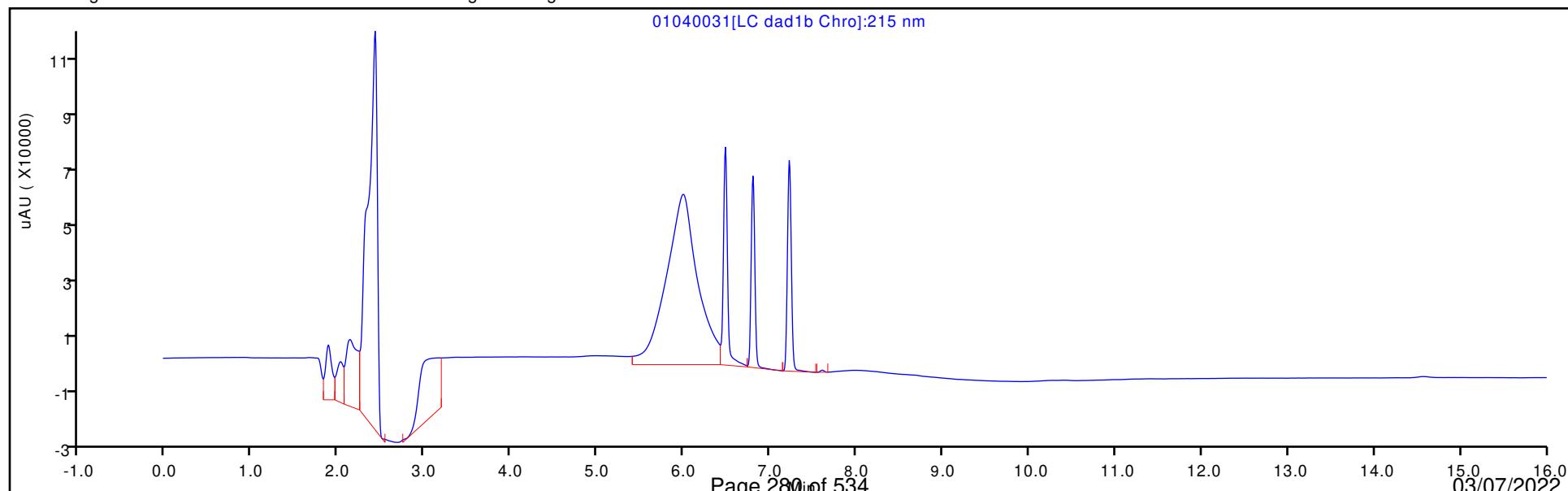
Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



## Eurofins TestAmerica, Denver

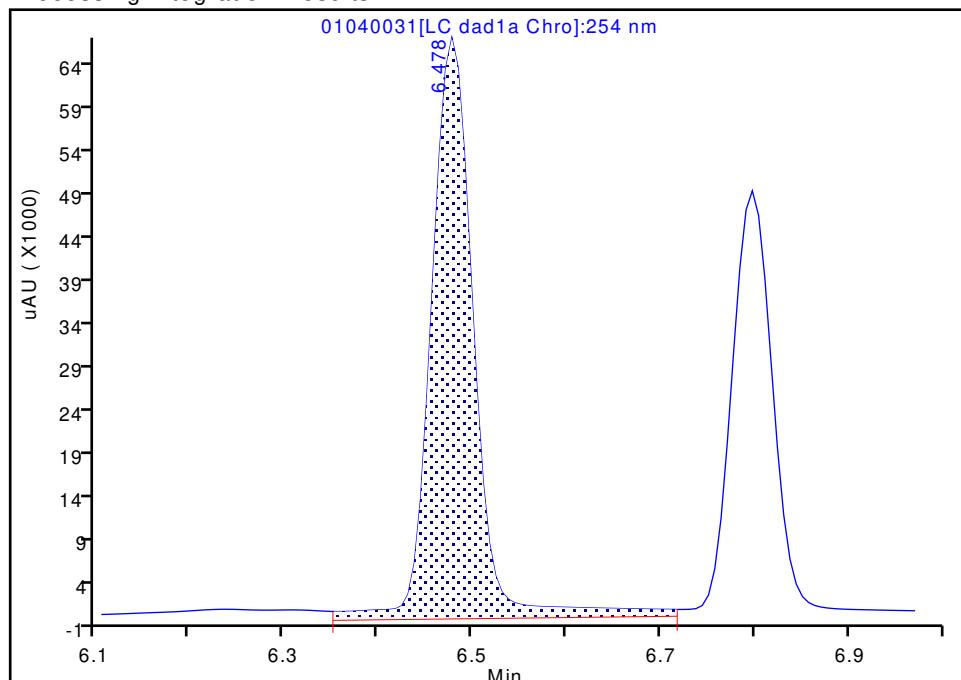
Data File: \\chromfs\denver\chromdata\chhplc\_x\20220104-107731.b\01040031.d  
 Injection Date: 05-Jan-2022 02:06:41 Instrument ID: CHHPLC\_X3  
 Lims ID: IC DMT 7  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 31 Worklist Smp#: 31  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

**3 TNX, CAS: 13980-04-6**

Signal: 1

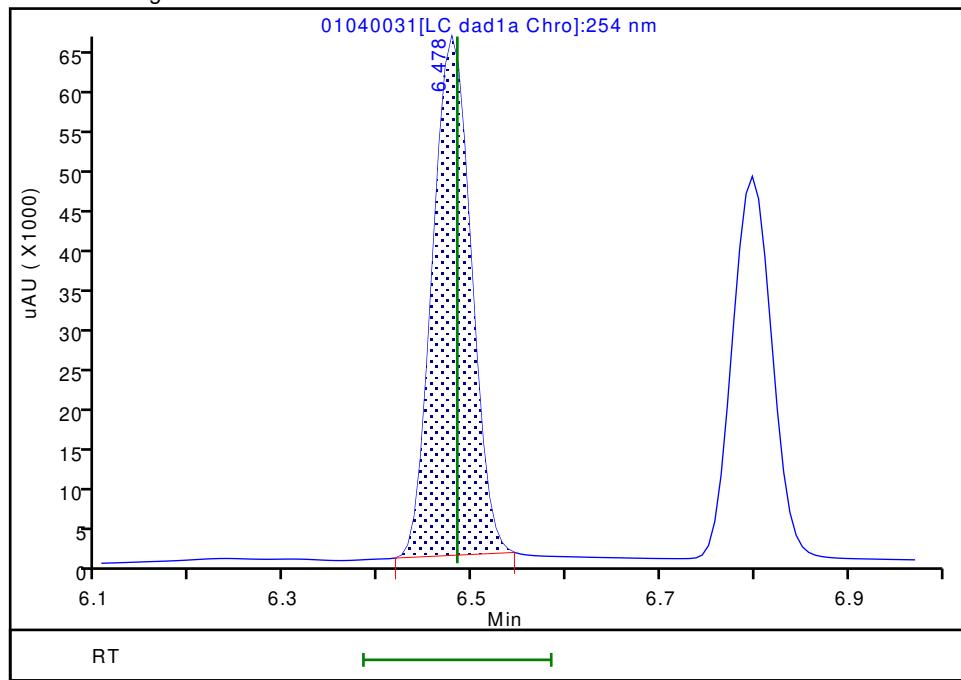
RT: 6.48  
 Area: 210952  
 Amount: 0.982896  
 Amount Units: ug/mL

## Processing Integration Results



RT: 6.48  
 Area: 184090  
 Amount: 1.015907  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 05-Jan-2022 12:07:22

Audit Action: Manually Integrated

Audit Reason: Baseline

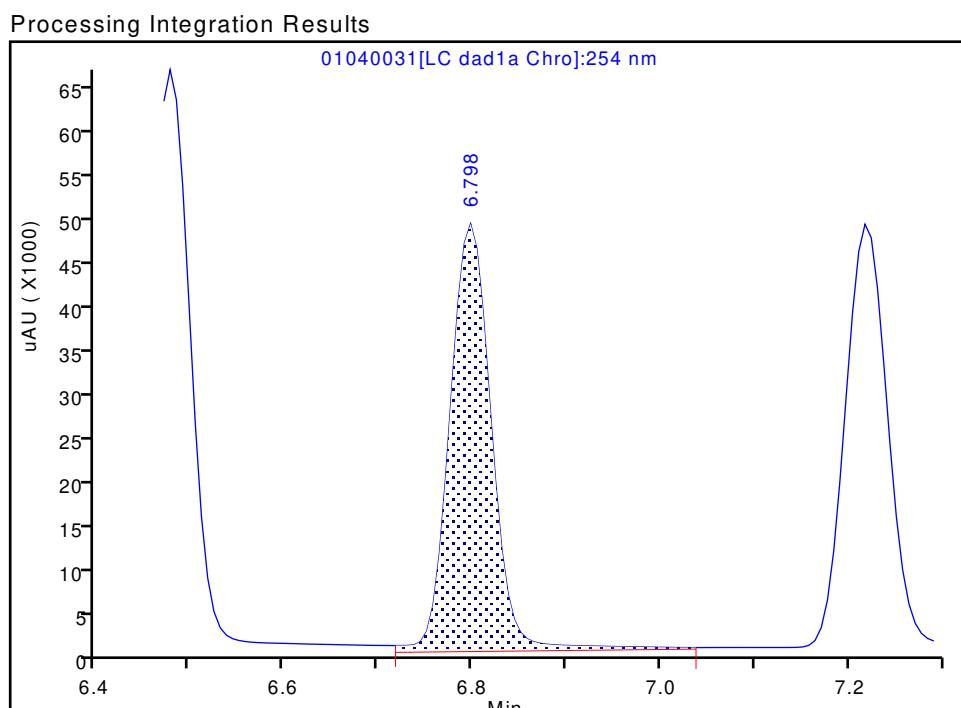
## Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220104-107731.b\01040031.d  
 Injection Date: 05-Jan-2022 02:06:41 Instrument ID: CHHPLC\_X3  
 Lims ID: IC DMT 7  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 31 Worklist Smp#: 31  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

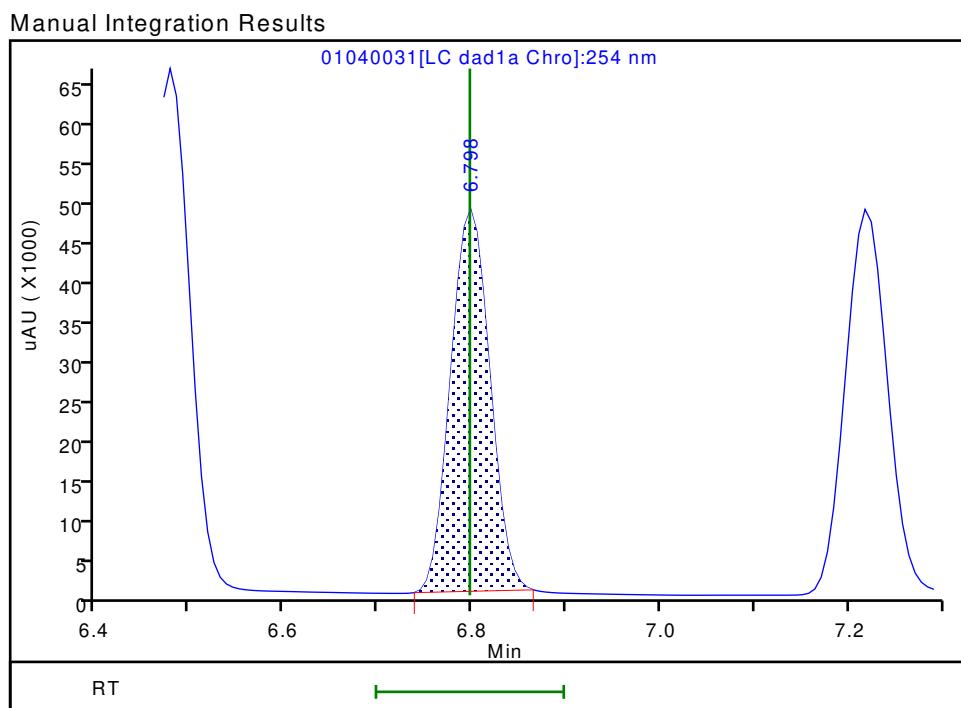
**6 DNX, CAS: 80251-29-2**

Signal: 1

RT: 6.80  
 Area: 149885  
 Amount: 1.012127  
 Amount Units: ug/mL



RT: 6.80  
 Area: 137343  
 Amount: 0.994425  
 Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:07:25

Audit Action: Manually Integrated

Audit Reason: Baseline

## Eurofins TestAmerica, Denver

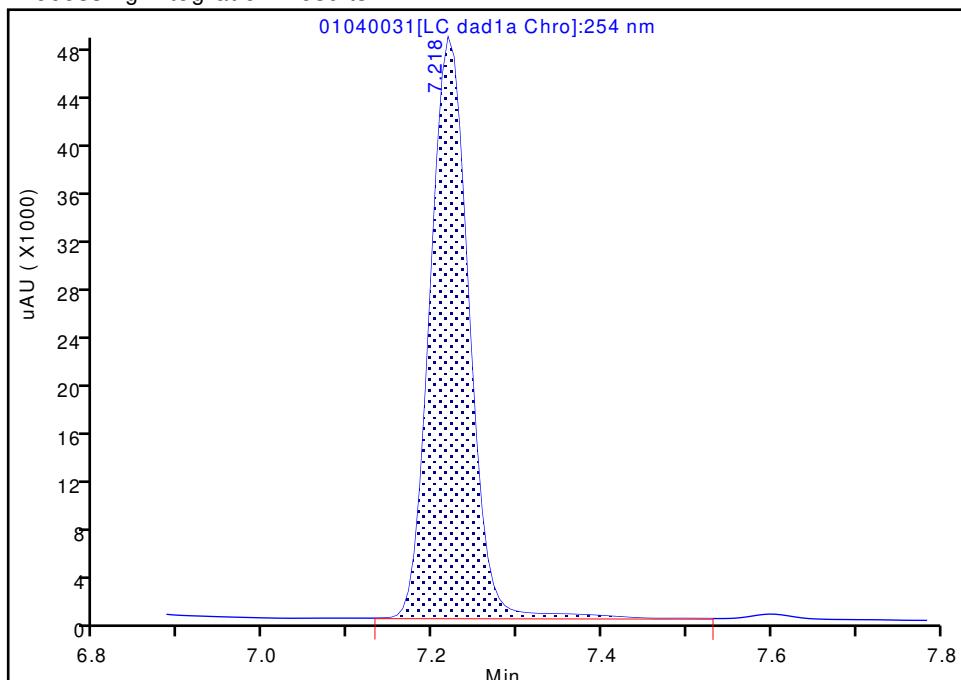
Data File: \\chromfs\denver\chromdata\chhplc\_x\20220104-107731.b\01040031.d  
 Injection Date: 05-Jan-2022 02:06:41 Instrument ID: CHHPLC\_X3  
 Lims ID: IC DMT 7  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 31 Worklist Smp#: 31  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

7 MNX, CAS: 5755-27-1

Signal: 1

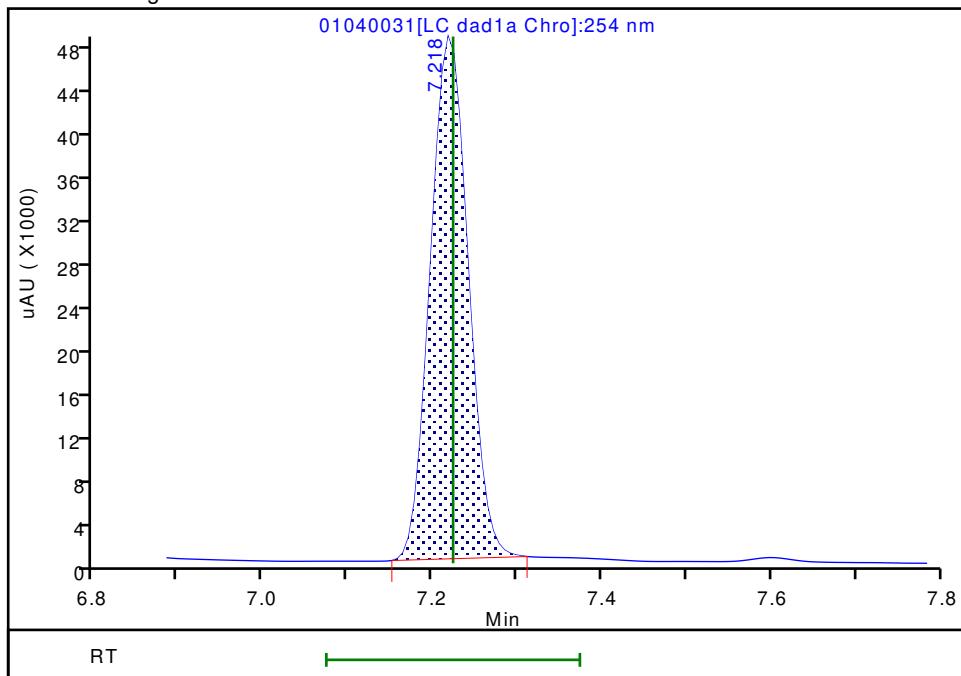
RT: 7.22  
 Area: 153452  
 Amount: 1.177280  
 Amount Units: ug/mL

## Processing Integration Results



RT: 7.22  
 Area: 147726  
 Amount: 1.172471  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 05-Jan-2022 12:07:29

Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040032.D  
 Lims ID: IC DMT 6  
 Client ID:  
 Sample Type: IC Calib Level: 6  
 Inject. Date: 05-Jan-2022 02:29:42 ALS Bottle#: 32 Worklist Smp#: 32  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Sample Info: IC DMT 6  
 Misc. Info.: 280-0107731-032  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Sublist: chrom-8330\_X3\*sub17  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 05-Jan-2022 12:10:06 Calib Date: 05-Jan-2022 04:24:15  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040037.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm ) Det: LC DAD1B, 254 nm  
 Process Host: CTX1613

First Level Reviewer: zhangji Date: 05-Jan-2022 12:07:46

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.477	6.484	-0.007	129844	0.7007	0.7165	M
6 DNX	1	6.797	6.797	0.000	97314	0.7007	0.7046	M
7 MNX	1	7.217	7.224	-0.007	103999	0.8169	0.8254	M

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

### Reagents:

8330 DMT\_00010 Amount Added: 35.00 Units: uL

Report Date: 05-Jan-2022 12:10:06

Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

Data File: \\chromfs\\denver\\chromdata\\chhplc\_x\\20220104-107731.b\\01040032.d

Injection Date: 05-Jan-2022 02:29:42

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: IC DMT 6

Worklist Smp#: 32

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

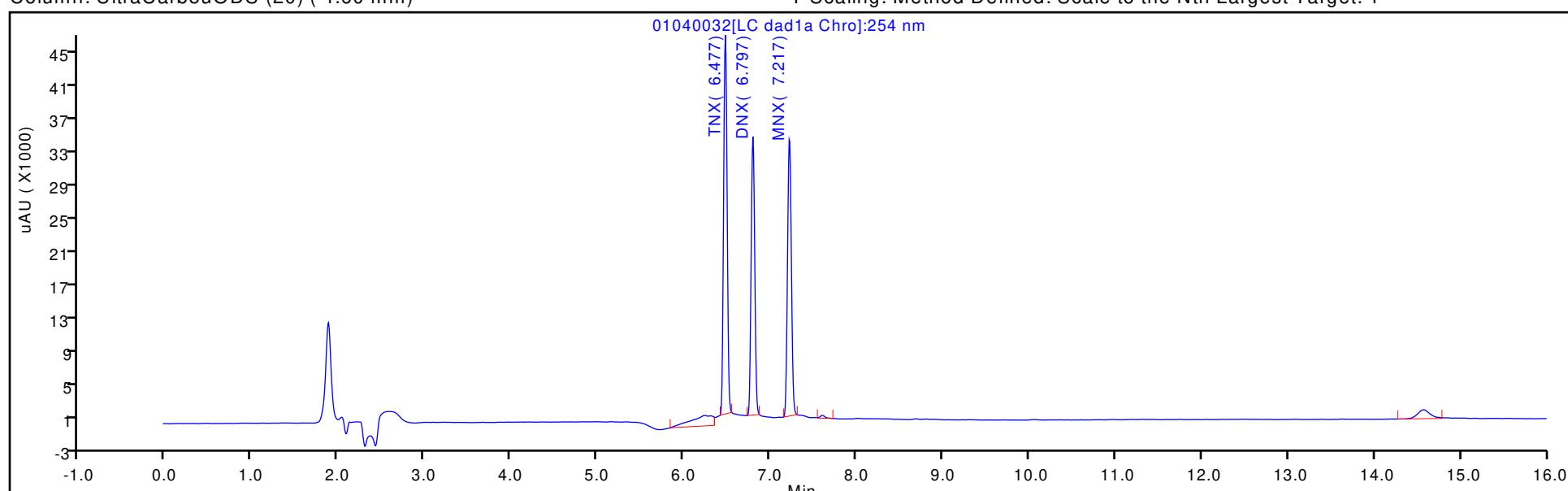
ALS Bottle#: 32

Method: 8330\_X3

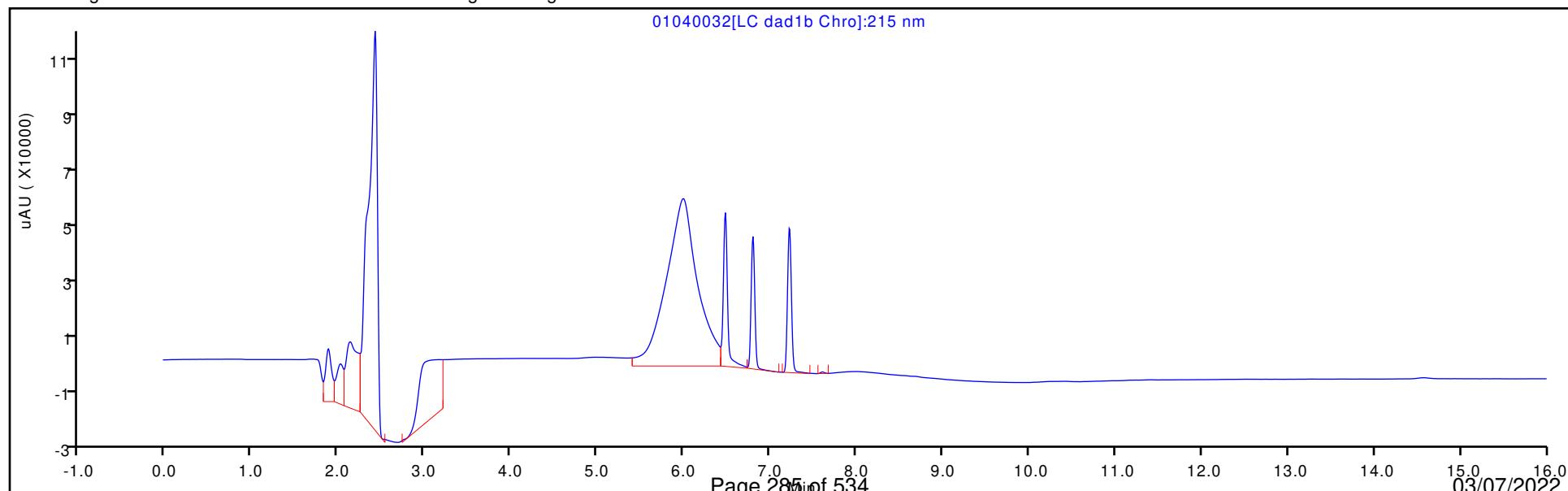
Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



## Eurofins TestAmerica, Denver

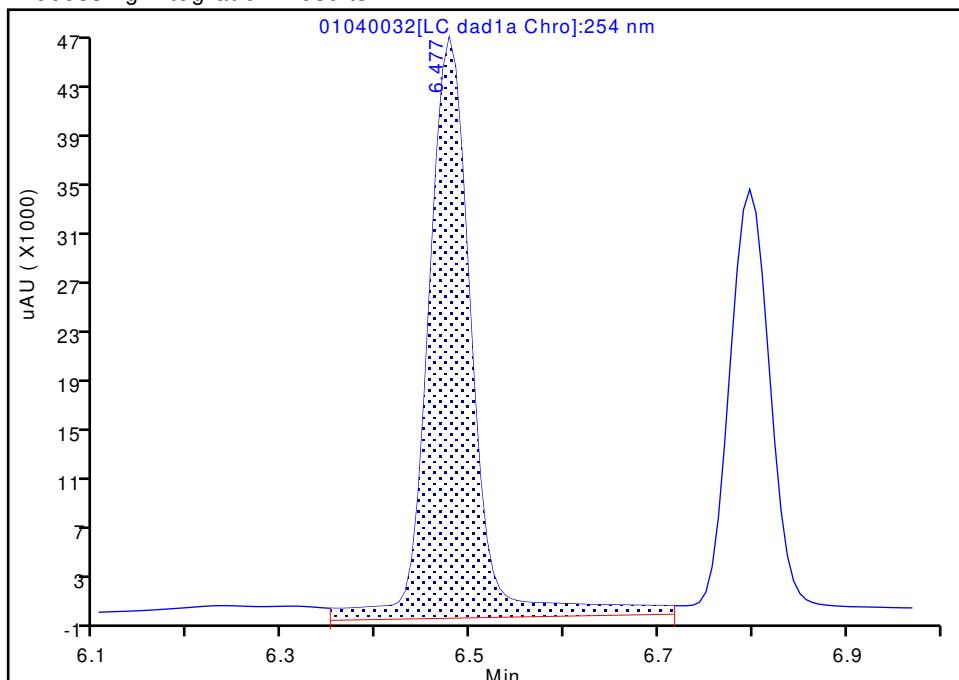
Data File: \\chromfs\denver\chromdata\chhplc\_x\20220104-107731.b\01040032.d  
 Injection Date: 05-Jan-2022 02:29:42 Instrument ID: CHHPLC\_X3  
 Lims ID: IC DMT 6  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 32 Worklist Smp#: 32  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

**3 TNX, CAS: 13980-04-6**

Signal: 1

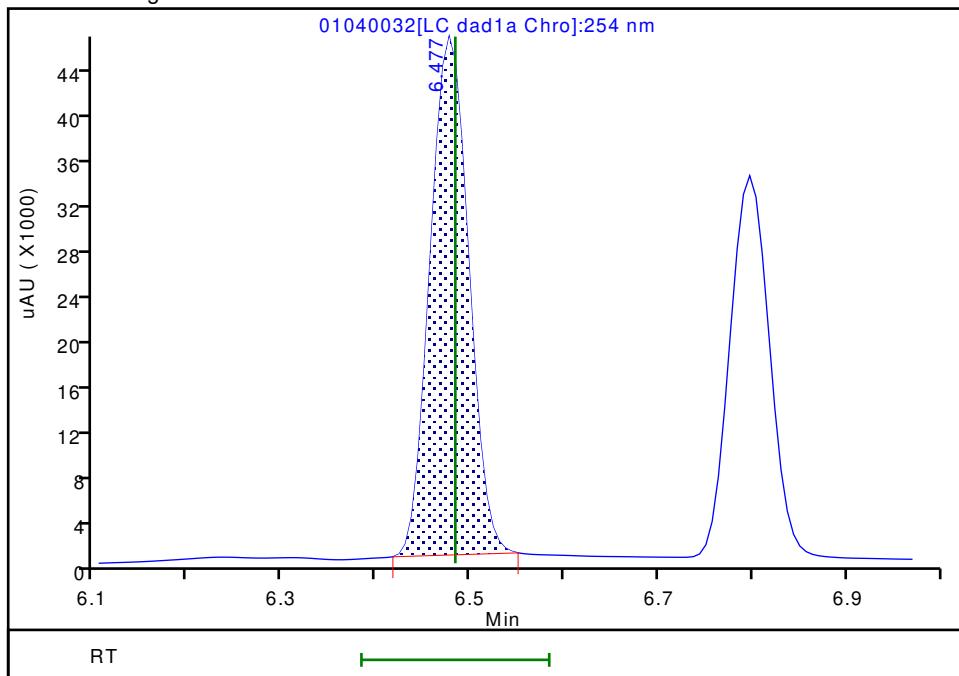
RT: 6.48  
 Area: 152631  
 Amount: 0.722450  
 Amount Units: ug/mL

## Processing Integration Results



RT: 6.48  
 Area: 129844  
 Amount: 0.716549  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 05-Jan-2022 12:07:40

Audit Action: Manually Integrated

Audit Reason: Baseline

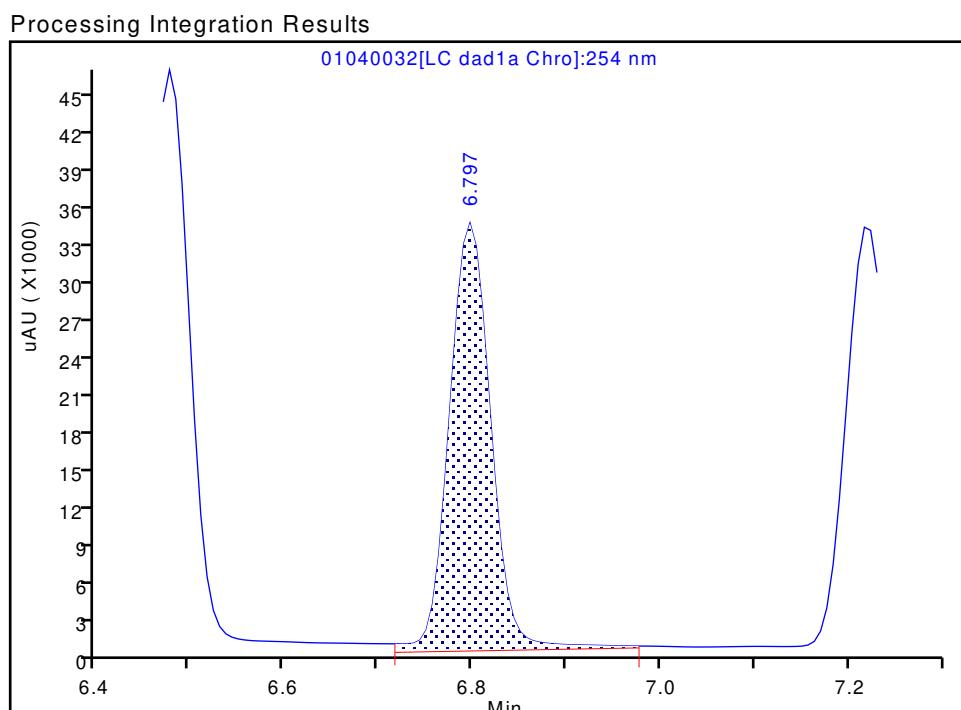
## Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220104-107731.b\01040032.d  
 Injection Date: 05-Jan-2022 02:29:42 Instrument ID: CHHPLC\_X3  
 Lims ID: IC DMT 6  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 32 Worklist Smp#: 32  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

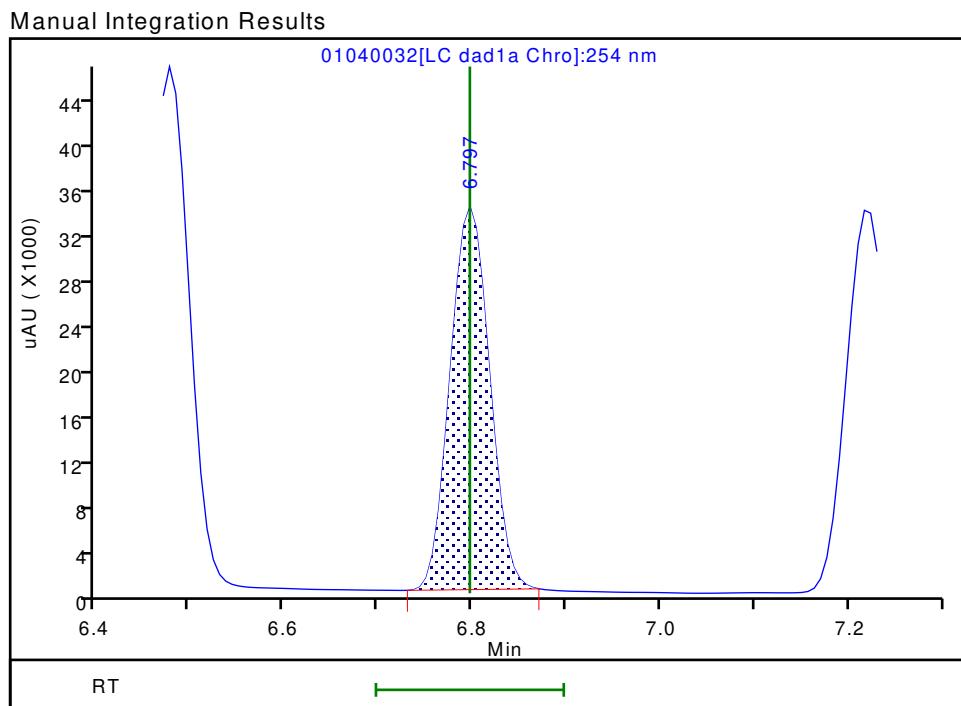
**6 DNX, CAS: 80251-29-2**

Signal: 1

RT: 6.80  
 Area: 105159  
 Amount: 0.717696  
 Amount Units: ug/mL



RT: 6.80  
 Area: 97314  
 Amount: 0.704597  
 Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:07:43

Audit Action: Manually Integrated

Audit Reason: Baseline

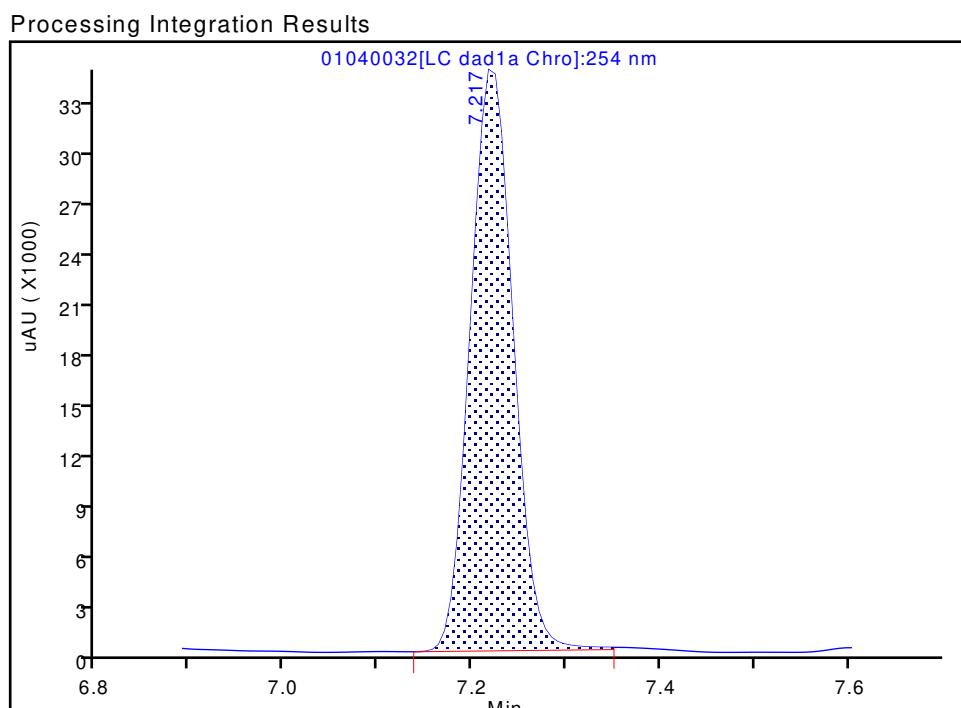
## Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220104-107731.b\01040032.d  
 Injection Date: 05-Jan-2022 02:29:42 Instrument ID: CHHPLC\_X3  
 Lims ID: IC DMT 6  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 32 Worklist Smp#: 32  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

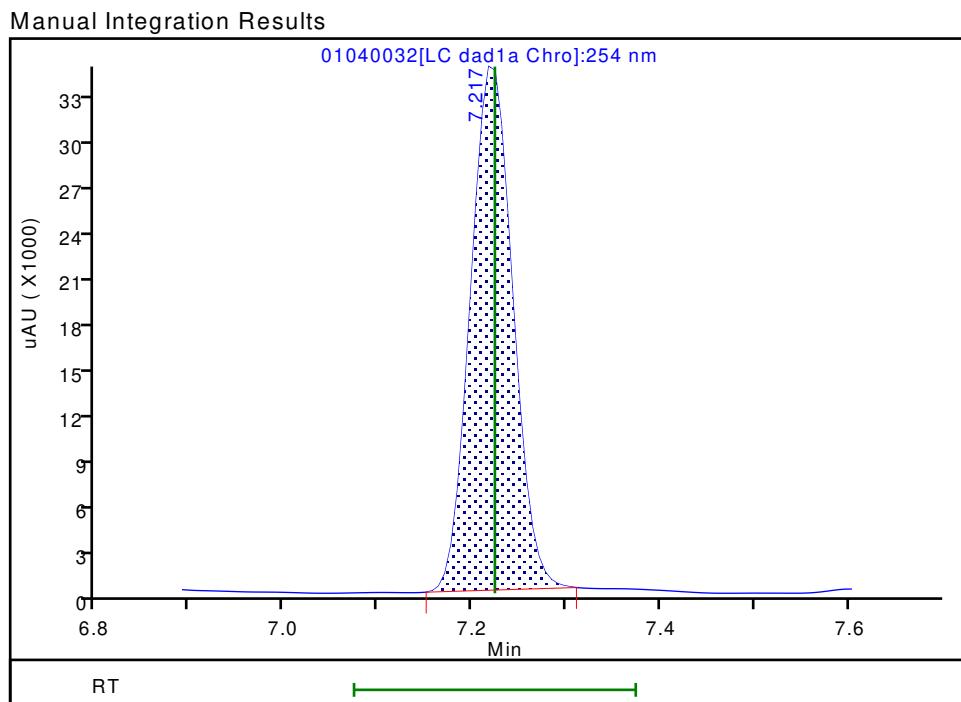
**7 MNX, CAS: 5755-27-1**

Signal: 1

RT: 7.22  
 Area: 105581  
 Amount: 0.816470  
 Amount Units: ug/mL



RT: 7.22  
 Area: 103999  
 Amount: 0.825419  
 Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:08:26

Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040033.D  
 Lims ID: IC DMT 5  
 Client ID:  
 Sample Type: IC Calib Level: 5  
 Inject. Date: 05-Jan-2022 02:52:35 ALS Bottle#: 33 Worklist Smp#: 33  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Sample Info: IC DMT 5  
 Misc. Info.: 280-0107731-033  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Sublist: chrom-8330\_X3\*sub17  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 05-Jan-2022 12:10:07 Calib Date: 05-Jan-2022 04:24:15  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040037.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm ) Det: LC DAD1B, 254 nm  
 Process Host: CTX1613

First Level Reviewer: zhangji Date: 05-Jan-2022 12:08:18

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.483	6.484	-0.001	72720	0.4004	0.4013	M
6 DNX	1	6.803	6.797	0.006	55675	0.4004	0.4031	M
7 MNX	1	7.223	7.224	-0.001	59416	0.4668	0.4716	M

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

### Reagents:

8330 DMT\_00010 Amount Added: 20.00 Units: uL

Report Date: 05-Jan-2022 12:10:07

Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220104-107731.b\01040033.d

Injection Date: 05-Jan-2022 02:52:35

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: IC DMT 5

Worklist Smp#: 33

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

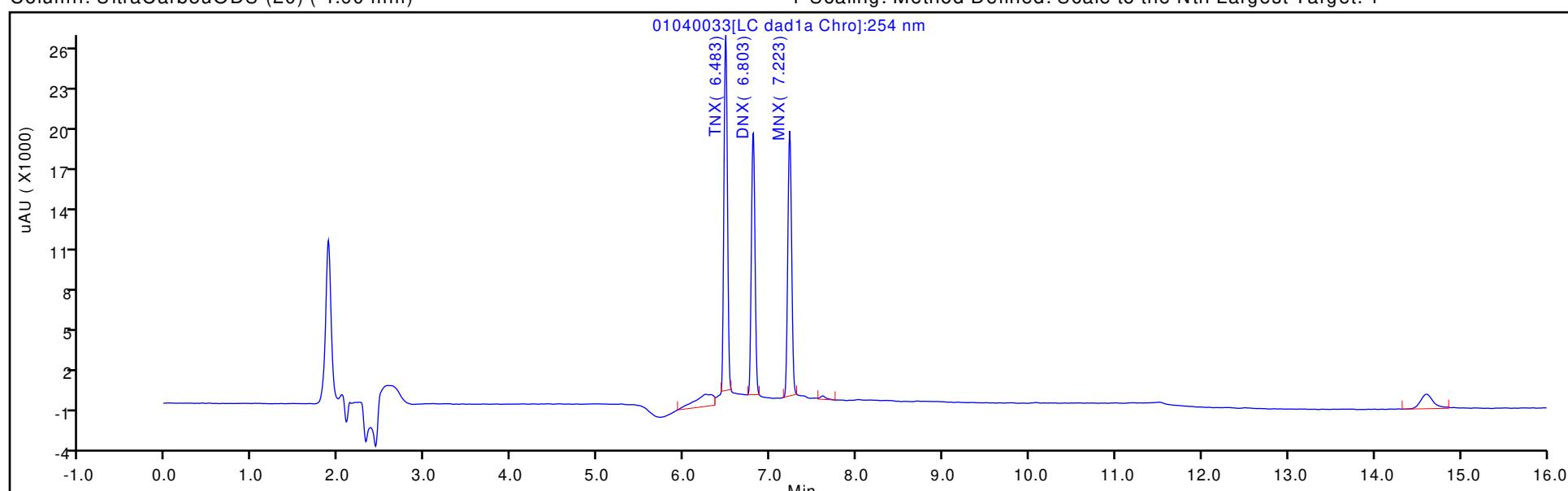
ALS Bottle#: 33

Method: 8330\_X3

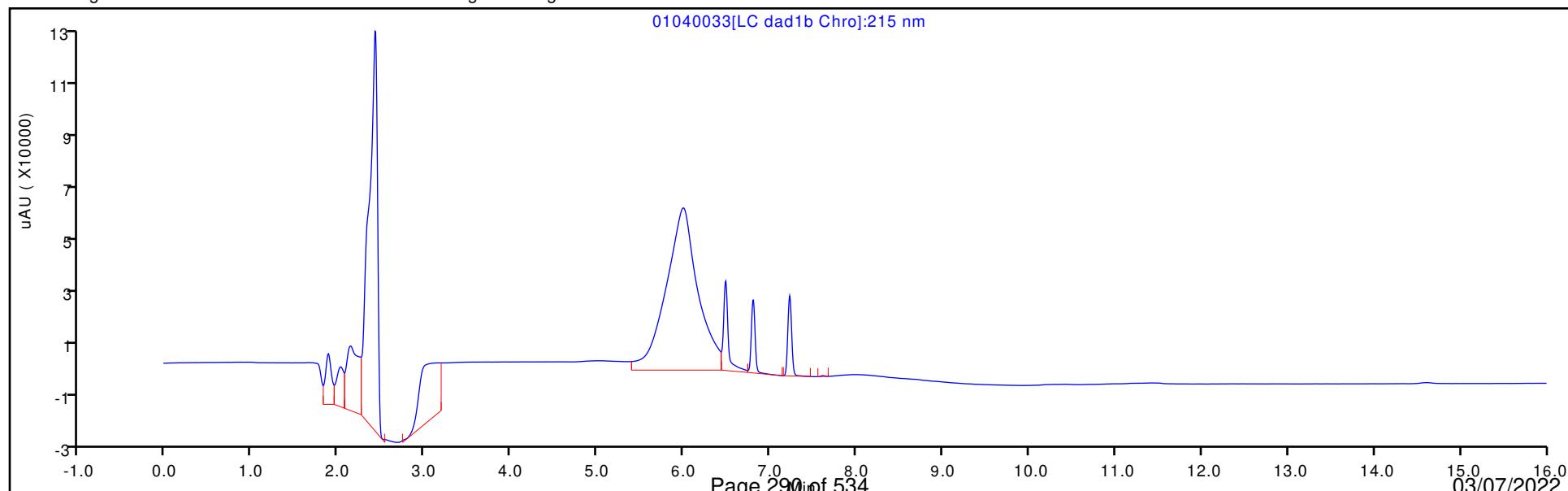
Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



## Eurofins TestAmerica, Denver

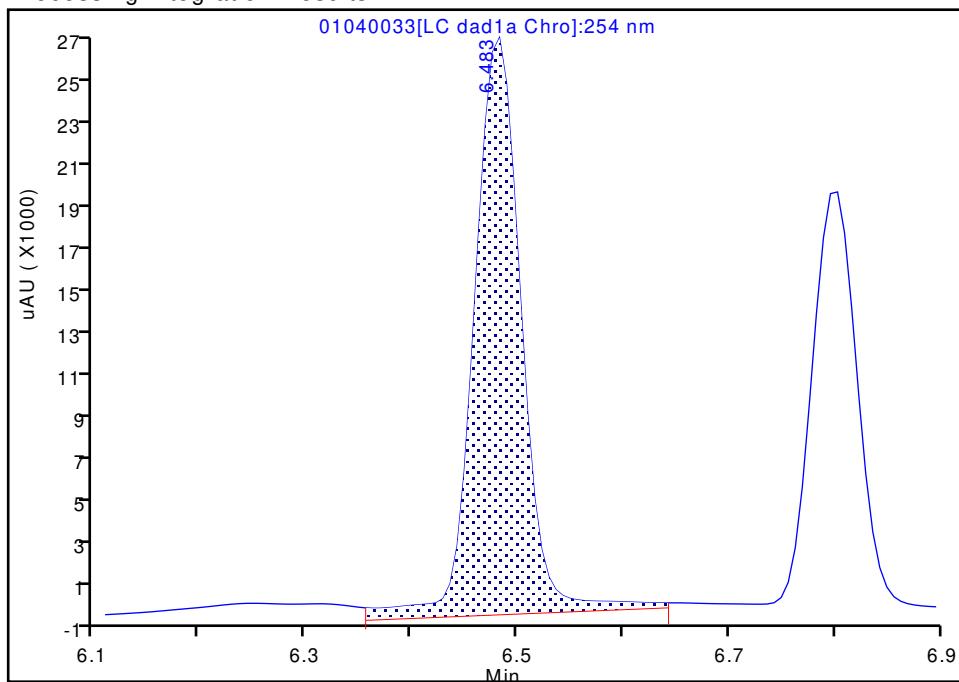
Data File: \\chromfs\denver\chromdata\chhplc\_x\20220104-107731.b\01040033.d  
 Injection Date: 05-Jan-2022 02:52:35 Instrument ID: CHHPLC\_X3  
 Lims ID: IC DMT 5  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 33 Worklist Smp#: 33  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

**3 TNX, CAS: 13980-04-6**

Signal: 1

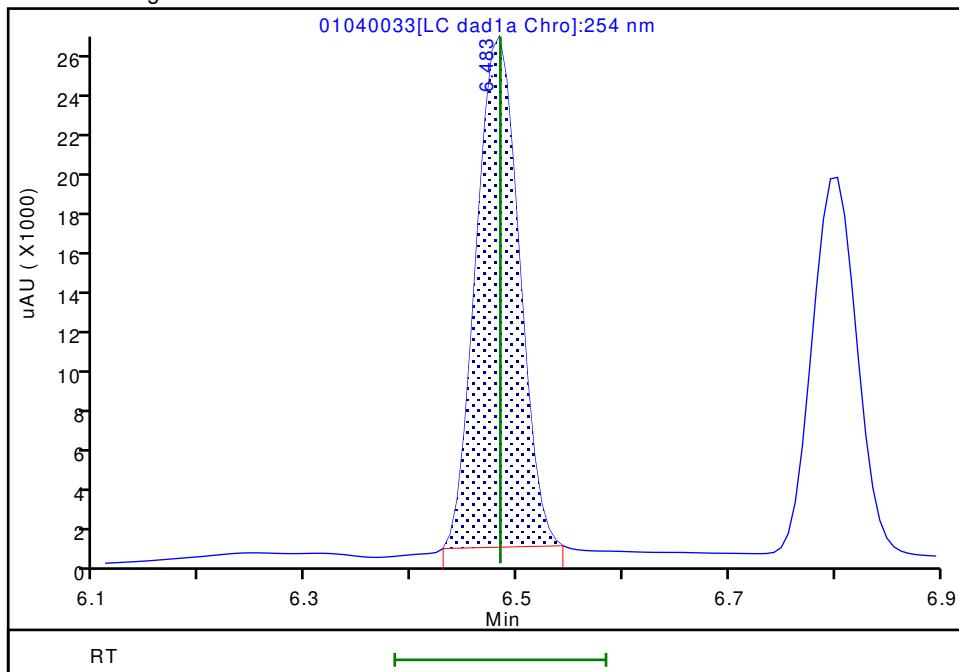
RT: 6.48  
 Area: 83275  
 Amount: 0.401900  
 Amount Units: ug/mL

## Processing Integration Results



RT: 6.48  
 Area: 72720  
 Amount: 0.401308  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 05-Jan-2022 12:07:54

Audit Action: Manually Integrated

Audit Reason: Baseline

## Eurofins TestAmerica, Denver

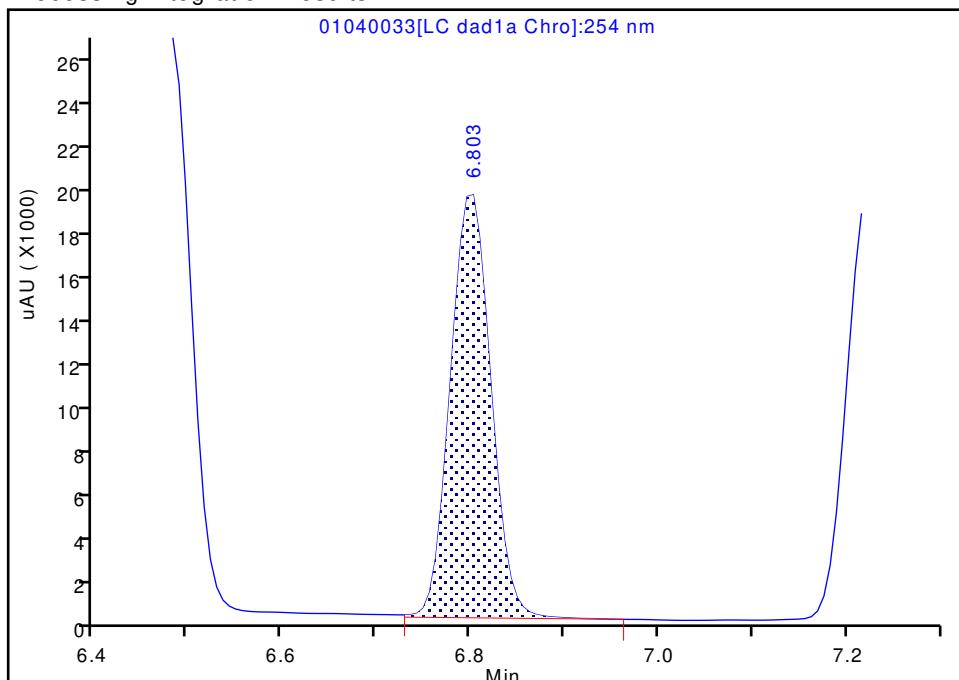
Data File: \\chromfs\denver\chromdata\chhplc\_x\20220104-107731.b\01040033.d  
 Injection Date: 05-Jan-2022 02:52:35 Instrument ID: CHHPLC\_X3  
 Lims ID: IC DMT 5  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 33 Worklist Smp#: 33  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

**6 DNX, CAS: 80251-29-2**

Signal: 1

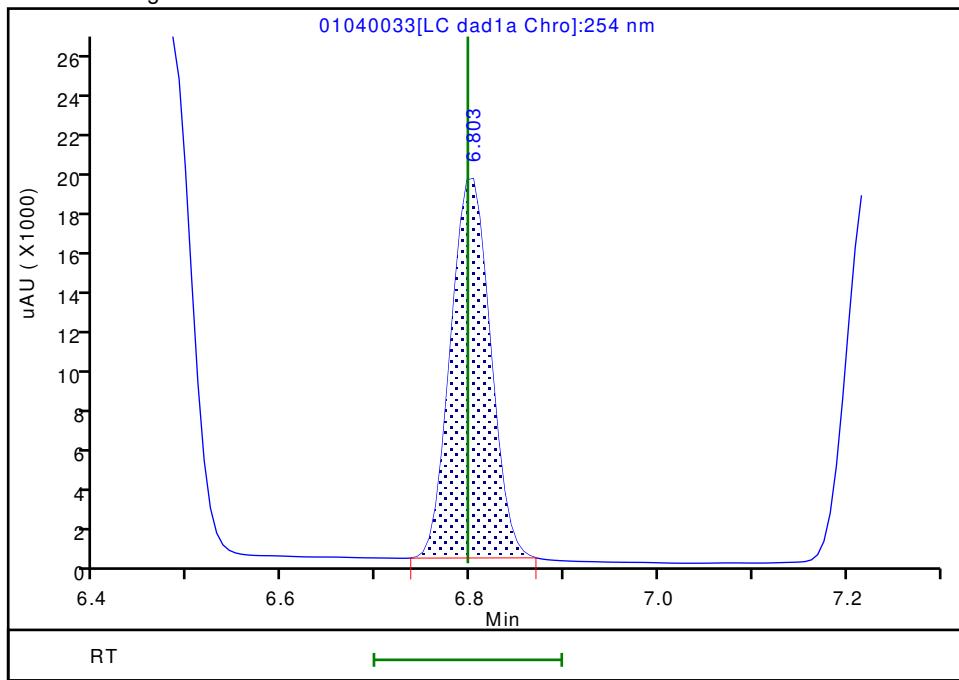
RT: 6.80  
 Area: 57132  
 Amount: 0.393678  
 Amount Units: ug/mL

## Processing Integration Results



RT: 6.80  
 Area: 55675  
 Amount: 0.403112  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 05-Jan-2022 12:07:58

Audit Action: Manually Integrated

Audit Reason: Baseline

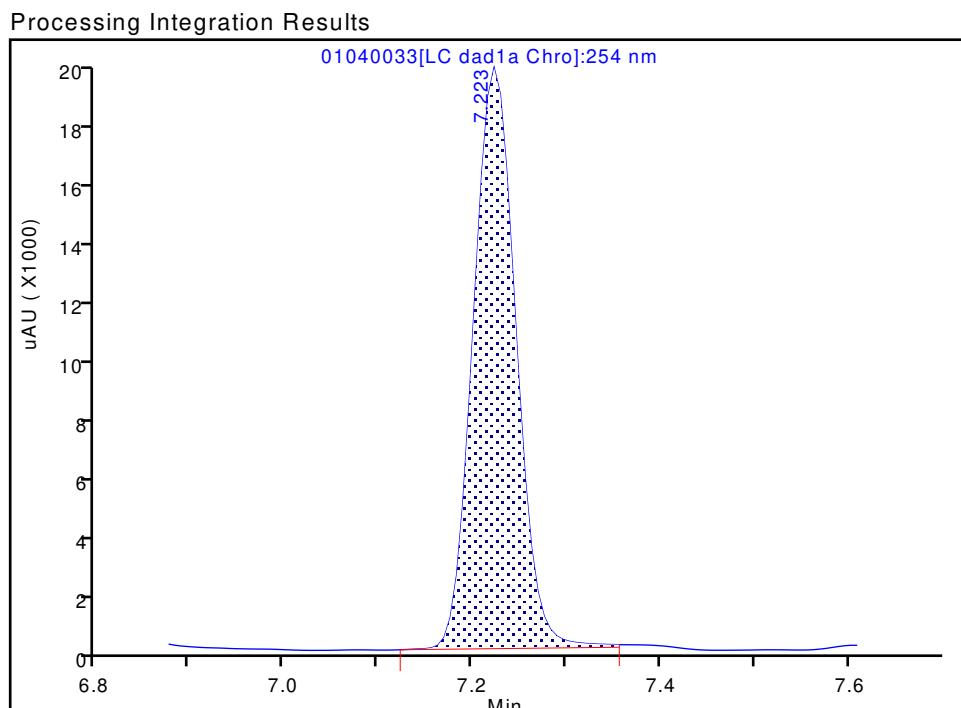
## Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220104-107731.b\01040033.d  
 Injection Date: 05-Jan-2022 02:52:35 Instrument ID: CHHPLC\_X3  
 Lims ID: IC DMT 5  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 33 Worklist Smp#: 33  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

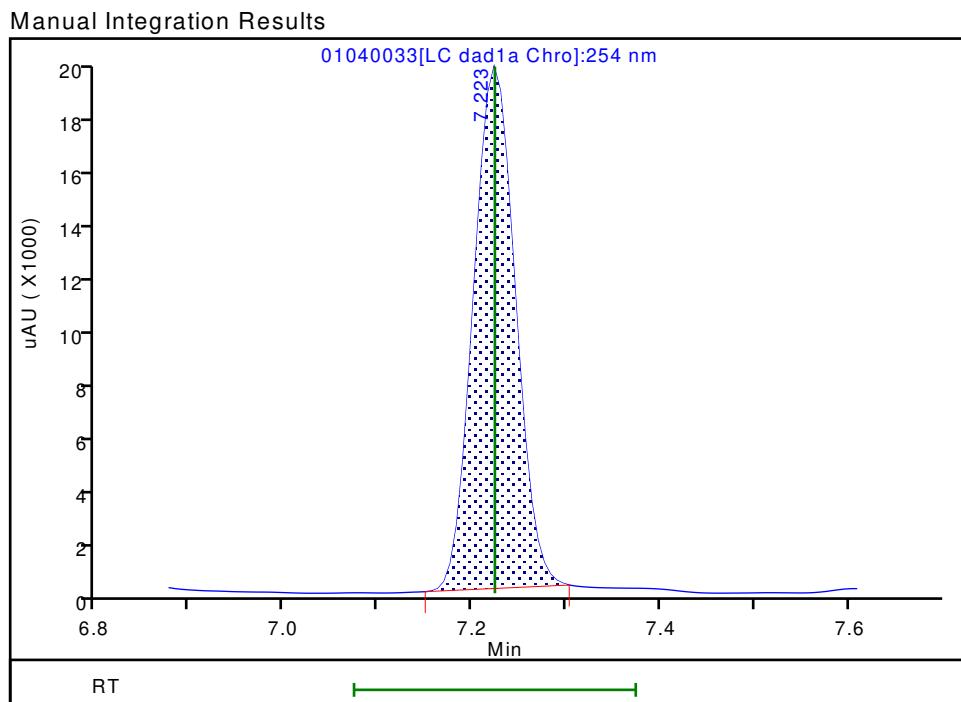
**7 MNX, CAS: 5755-27-1**

Signal: 1

RT: 7.22  
 Area: 60974  
 Amount: 0.470003  
 Amount Units: ug/mL



RT: 7.22  
 Area: 59416  
 Amount: 0.471573  
 Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:08:17

Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040034.D  
 Lims ID: IC DMT 4  
 Client ID:  
 Sample Type: IC Calib Level: 4  
 Inject. Date: 05-Jan-2022 03:15:30 ALS Bottle#: 34 Worklist Smp#: 34  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Sample Info: IC DMT 4  
 Misc. Info.: 280-0107731-034  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Sublist: chrom-8330\_X3\*sub17  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 05-Jan-2022 12:10:07 Calib Date: 05-Jan-2022 04:24:15  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040037.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm ) Det: LC DAD1B, 254 nm  
 Process Host: CTX1613

First Level Reviewer: zhangji Date: 05-Jan-2022 12:08:44

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.484	6.484	0.000	42748	0.2503	0.2359	M
6 DNX	1	6.797	6.797	0.000	32416	0.2503	0.2347	M
7 MNX	1	7.224	7.224	0.000	34560	0.2918	0.2743	M

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

### Reagents:

8330 DMT\_00010 Amount Added: 12.50 Units: uL

Report Date: 05-Jan-2022 12:10:07

Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

Data File: \\chromfs\\denver\\chromdata\\chhplc\_x\\20220104-107731.b\\01040034.d

Injection Date: 05-Jan-2022 03:15:30

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: IC DMT 4

Worklist Smp#: 34

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

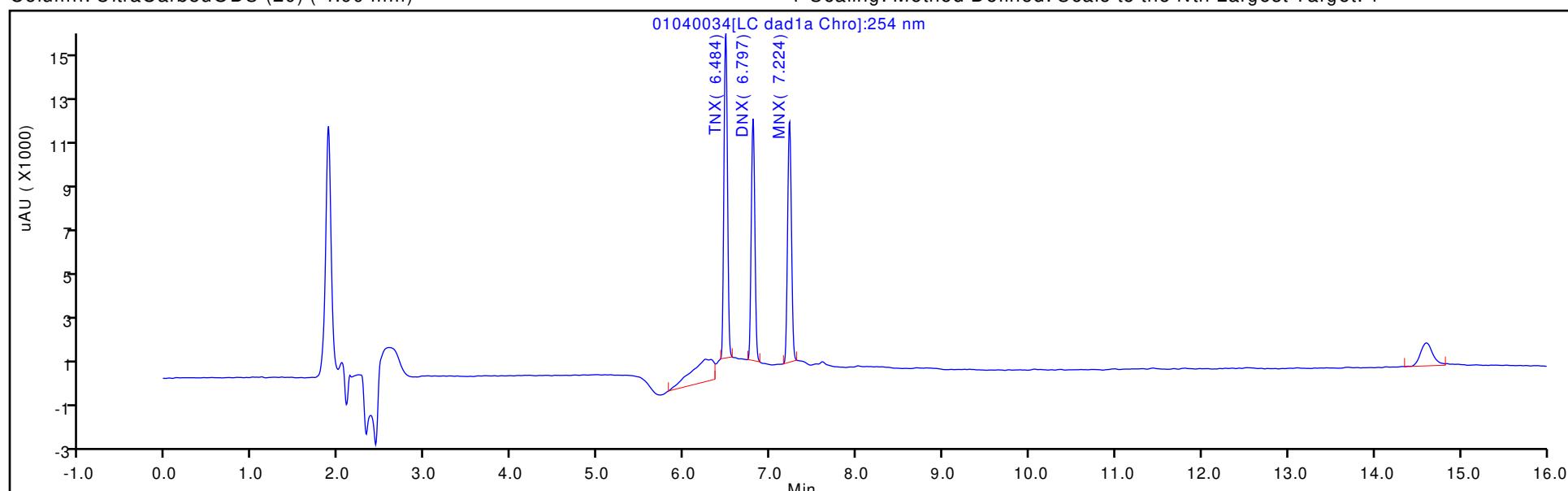
ALS Bottle#: 34

Method: 8330\_X3

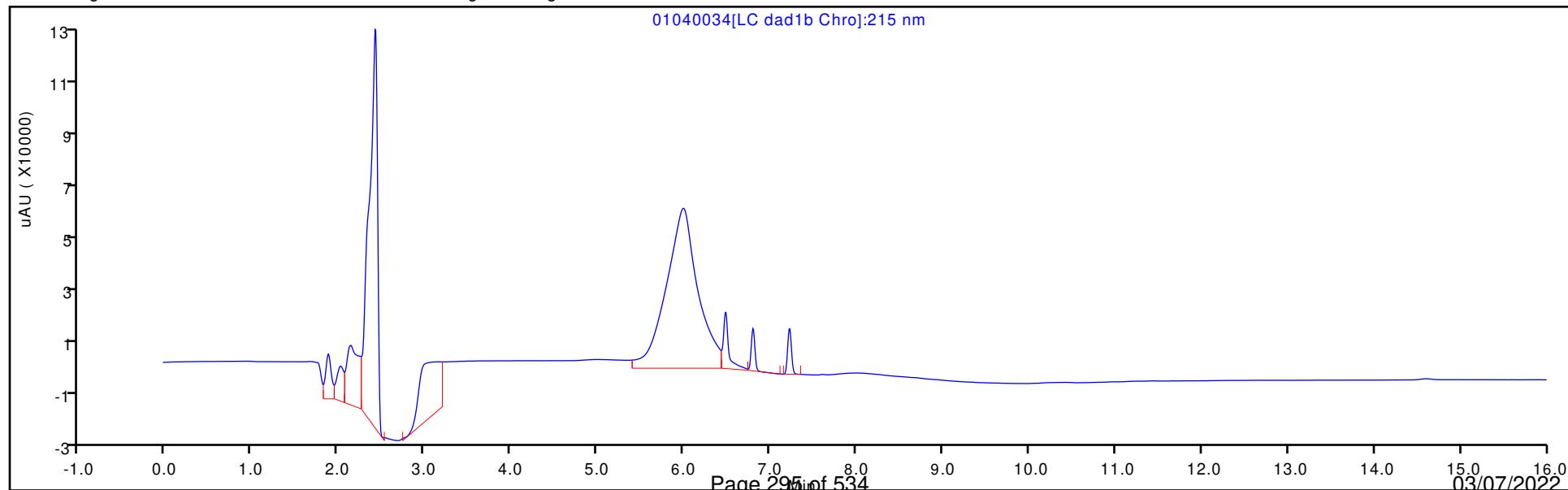
Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



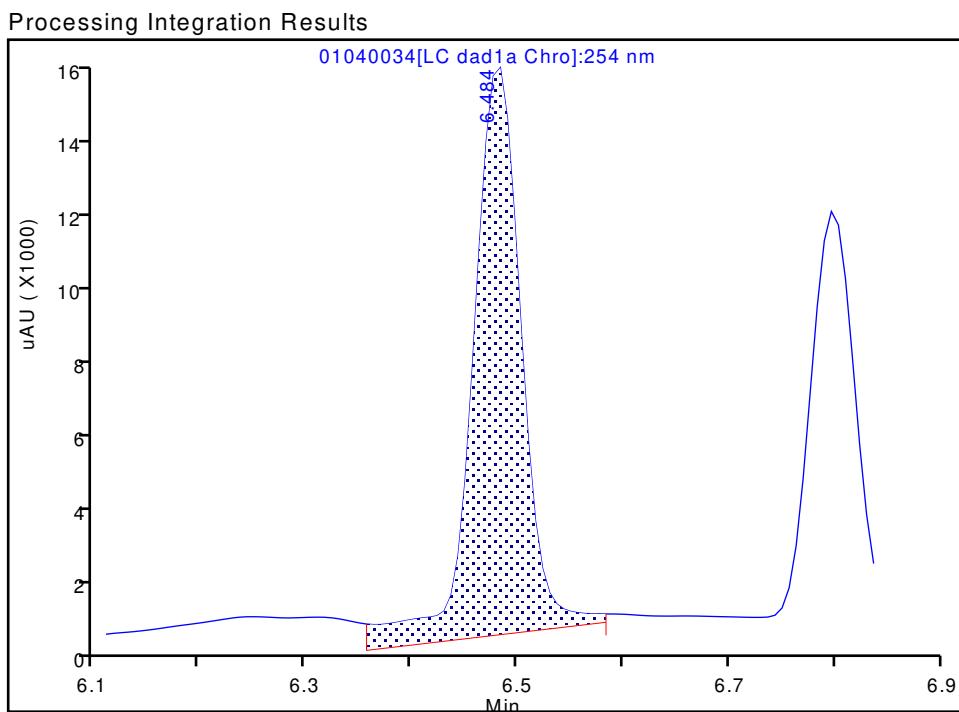
## Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220104-107731.b\01040034.d  
 Injection Date: 05-Jan-2022 03:15:30 Instrument ID: CHHPLC\_X3  
 Lims ID: IC DMT 4  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 34 Worklist Smp#: 34  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

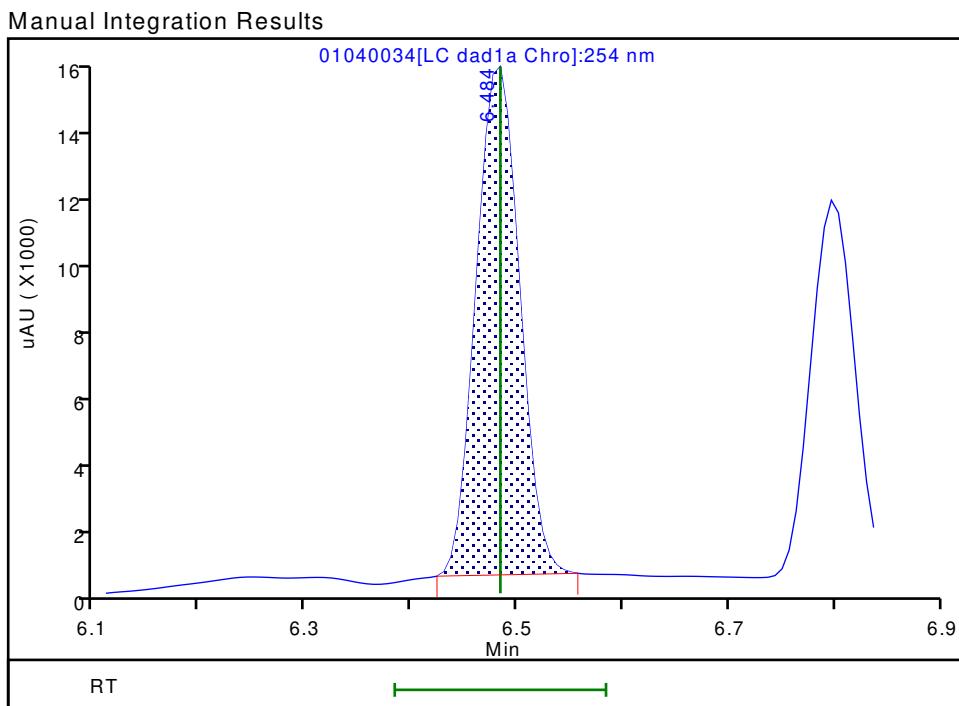
**3 TNX, CAS: 13980-04-6**

Signal: 1

RT: 6.48  
 Area: 50220  
 Amount: 0.246287  
 Amount Units: ug/mL



RT: 6.48  
 Area: 42748  
 Amount: 0.235906  
 Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:08:35

Audit Action: Manually Integrated

Audit Reason: Baseline

## Eurofins TestAmerica, Denver

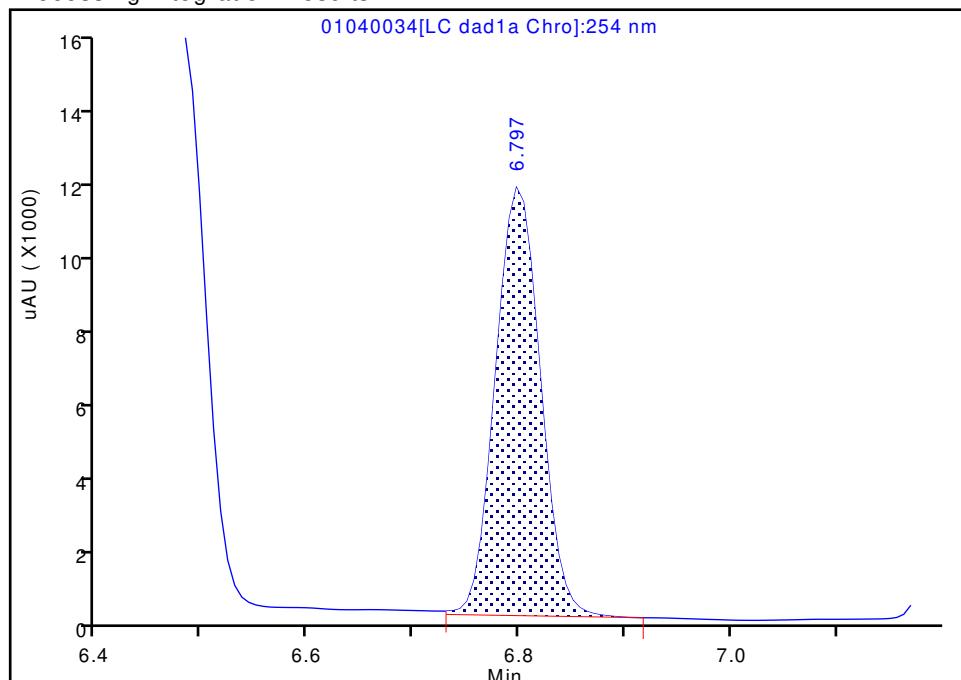
Data File: \\chromfs\denver\chromdata\chhplc\_x\20220104-107731.b\01040034.d  
 Injection Date: 05-Jan-2022 03:15:30 Instrument ID: CHHPLC\_X3  
 Lims ID: IC DMT 4  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 34 Worklist Smp#: 34  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

**6 DNX, CAS: 80251-29-2**

Signal: 1

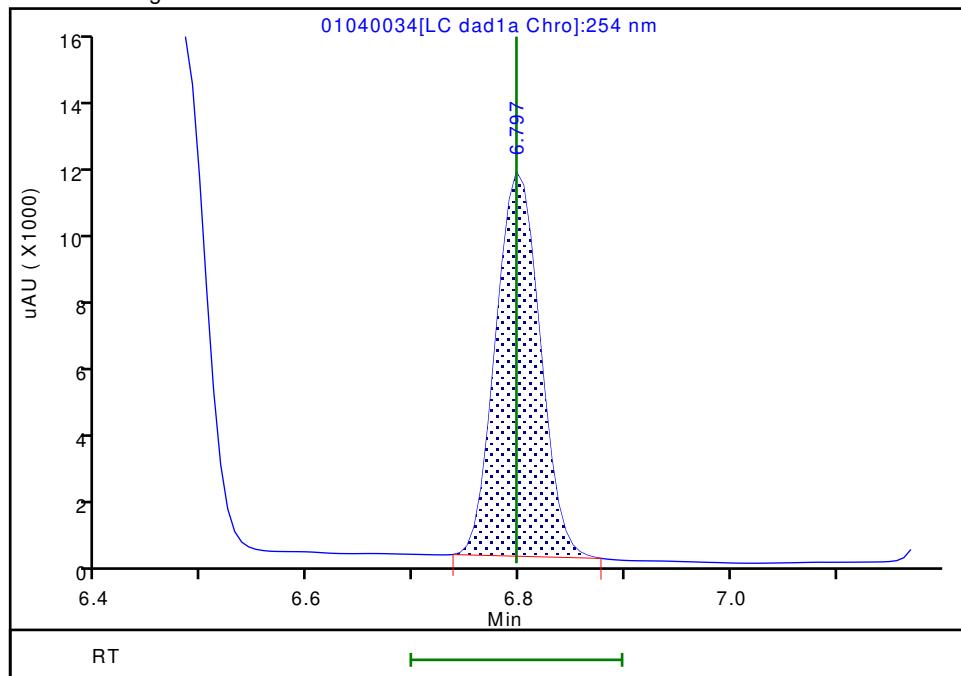
RT: 6.80  
 Area: 33123  
 Amount: 0.228958  
 Amount Units: ug/mL

## Processing Integration Results



RT: 6.80  
 Area: 32416  
 Amount: 0.234706  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 05-Jan-2022 12:08:39

Audit Action: Manually Integrated

Audit Reason: Baseline

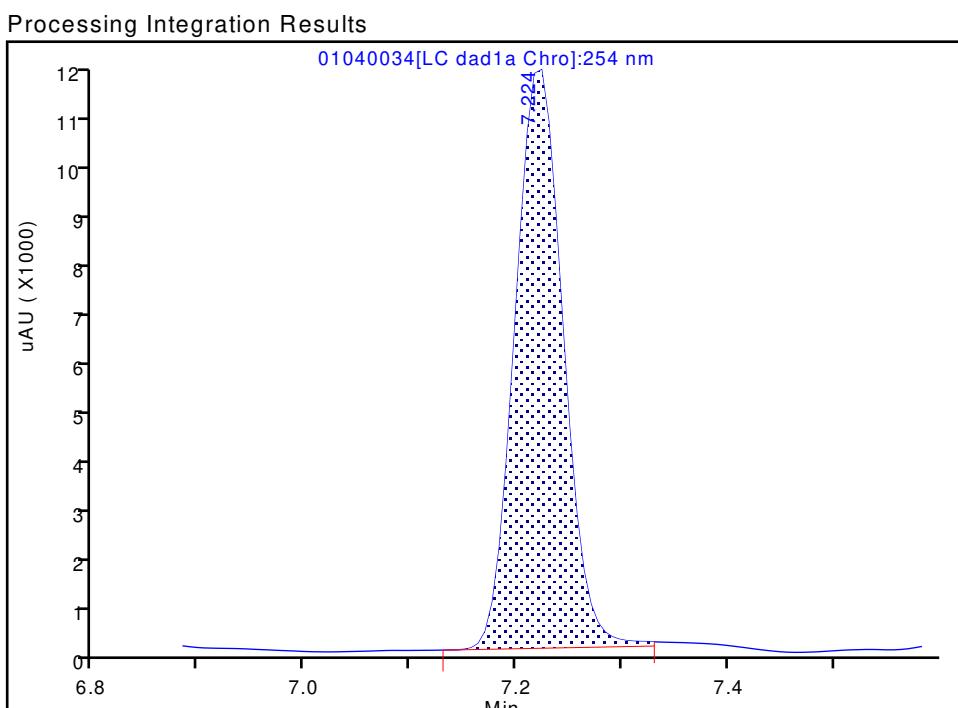
## Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220104-107731.b\01040034.d  
 Injection Date: 05-Jan-2022 03:15:30 Instrument ID: CHHPLC\_X3  
 Lims ID: IC DMT 4  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 34 Worklist Smp#: 34  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

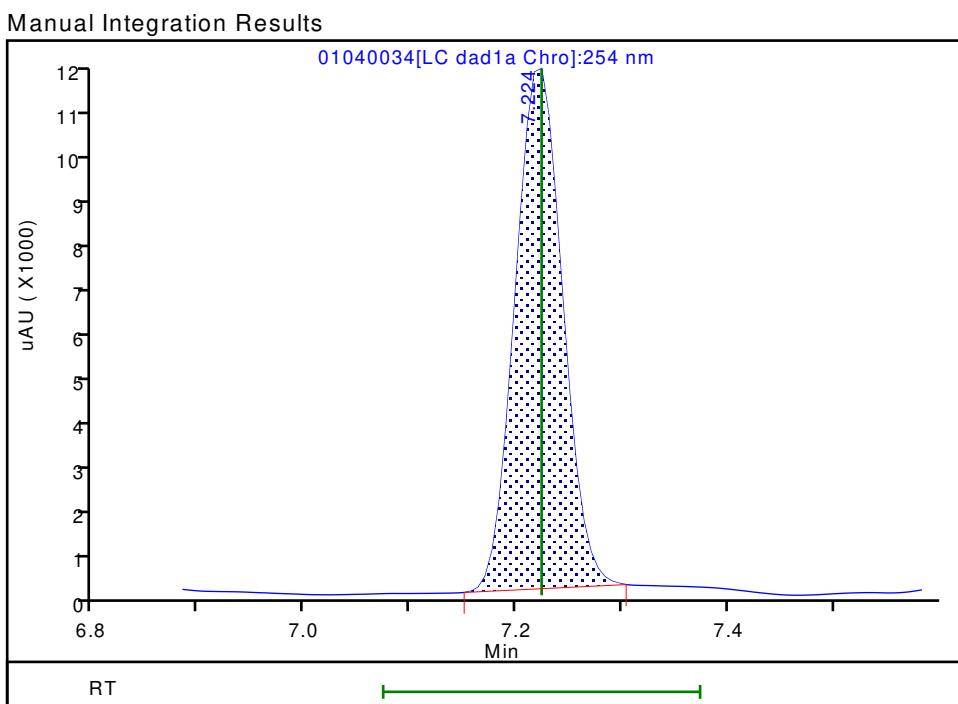
7 MNX, CAS: 5755-27-1

Signal: 1

RT: 7.22  
 Area: 35288  
 Amount: 0.273398  
 Amount Units: ug/mL



RT: 7.22  
 Area: 34560  
 Amount: 0.274296  
 Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:08:43

Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040035.D  
 Lims ID: IC DMT 3  
 Client ID:  
 Sample Type: IC Calib Level: 3  
 Inject. Date: 05-Jan-2022 03:38:24 ALS Bottle#: 35 Worklist Smp#: 35  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Sample Info: IC DMT 3  
 Misc. Info.: 280-0107731-035  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Sublist: chrom-8330\_X3\*sub17  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 05-Jan-2022 12:10:07 Calib Date: 05-Jan-2022 04:24:15  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040037.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm ) Det: LC DAD1B, 254 nm  
 Process Host: CTX1613

First Level Reviewer: zhangji Date: 05-Jan-2022 12:08:58

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.483	6.484	-0.001	17989	0.1001	0.0993	M
6 DNX	1	6.796	6.797	-0.001	13928	0.1001	0.1008	M
7 MNX	1	7.223	7.224	-0.001	14438	0.1167	0.1146	M

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

### Reagents:

8330 DMT\_00010 Amount Added: 5.00 Units: uL

Report Date: 05-Jan-2022 12:10:08

Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

Data File: \\chromfs\\denver\\chromdata\\chhplc\_x\\20220104-107731.b\\01040035.d

Injection Date: 05-Jan-2022 03:38:24

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: IC DMT 3

Worklist Smp#: 35

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

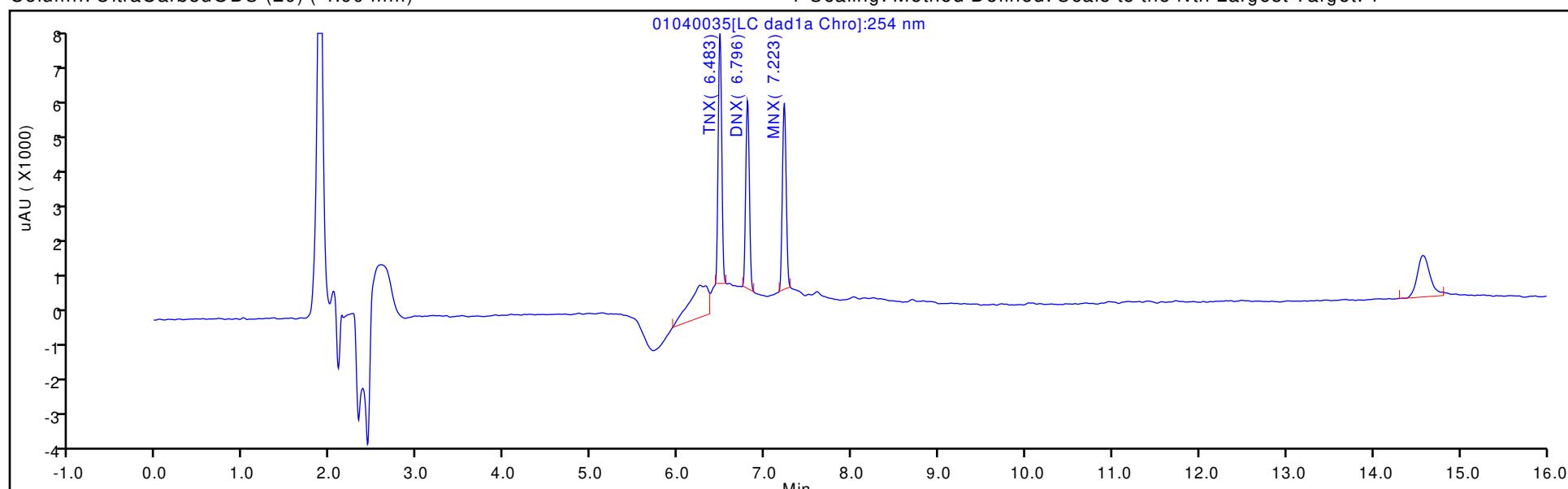
ALS Bottle#: 35

Method: 8330\_X3

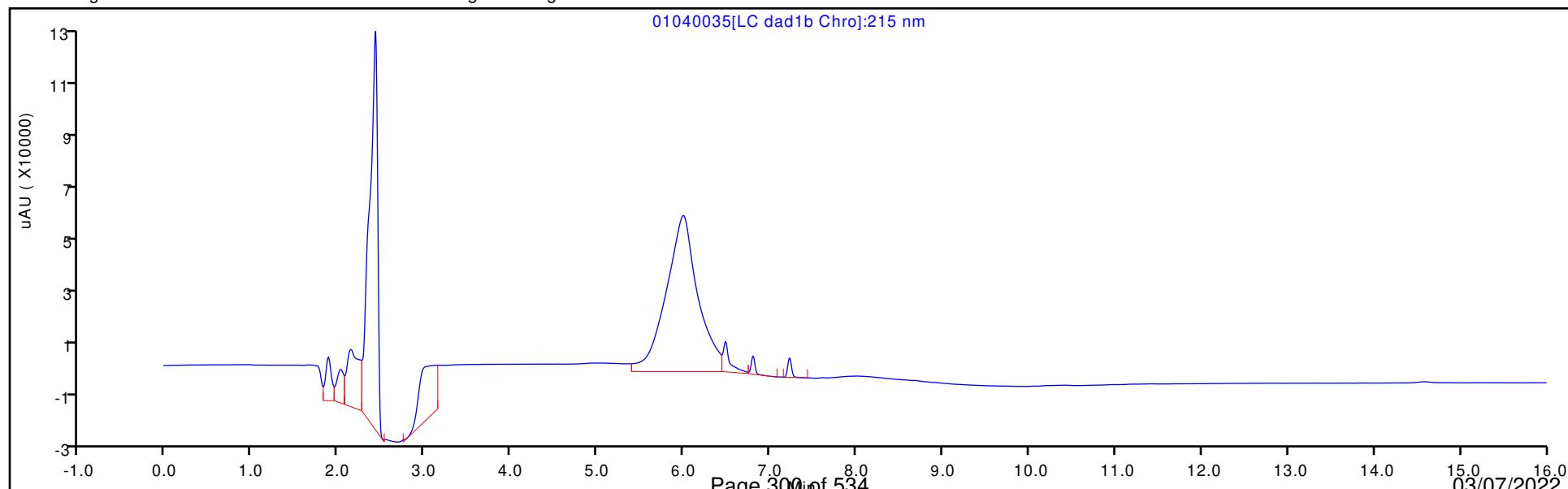
Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



## Eurofins TestAmerica, Denver

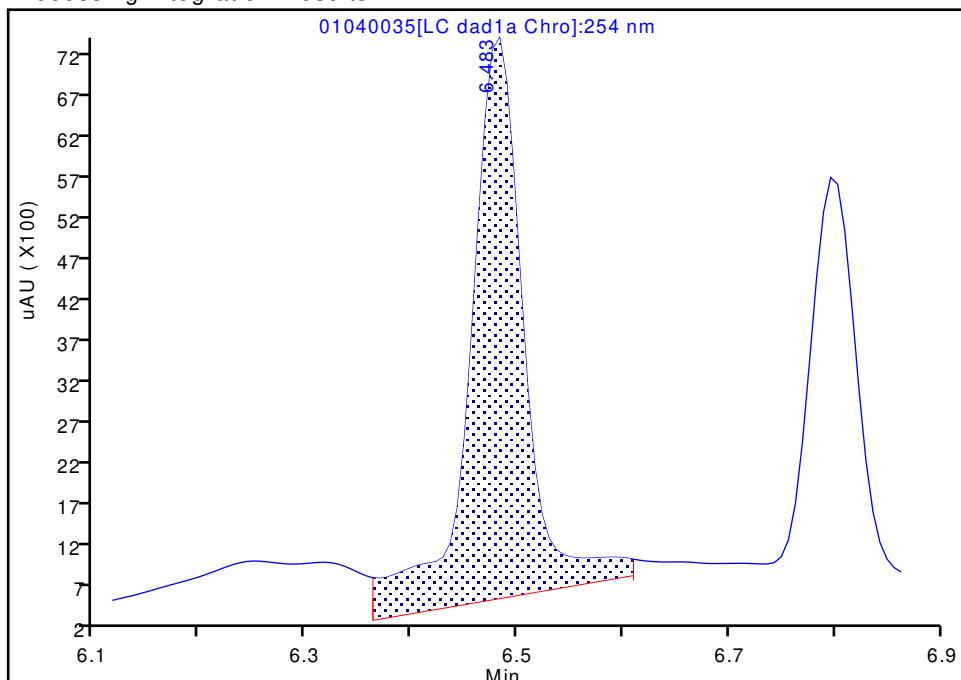
Data File: \\chromfs\denver\chromdata\chhplc\_x\20220104-107731.b\01040035.d  
 Injection Date: 05-Jan-2022 03:38:24 Instrument ID: CHHPLC\_X3  
 Lims ID: IC DMT 3  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 35 Worklist Smp#: 35  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

**3 TNX, CAS: 13980-04-6**

Signal: 1

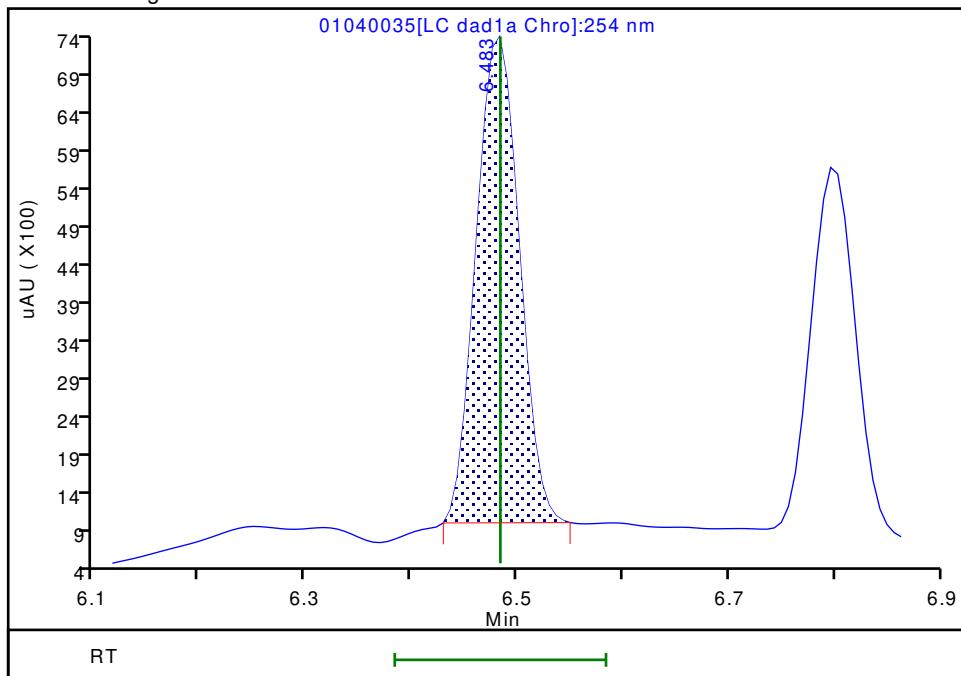
RT: 6.48  
 Area: 24762  
 Amount: 0.123701  
 Amount Units: ug/mL

## Processing Integration Results



RT: 6.48  
 Area: 17989  
 Amount: 0.099273  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 05-Jan-2022 12:08:50

Audit Action: Manually Integrated

Audit Reason: Baseline

## Eurofins TestAmerica, Denver

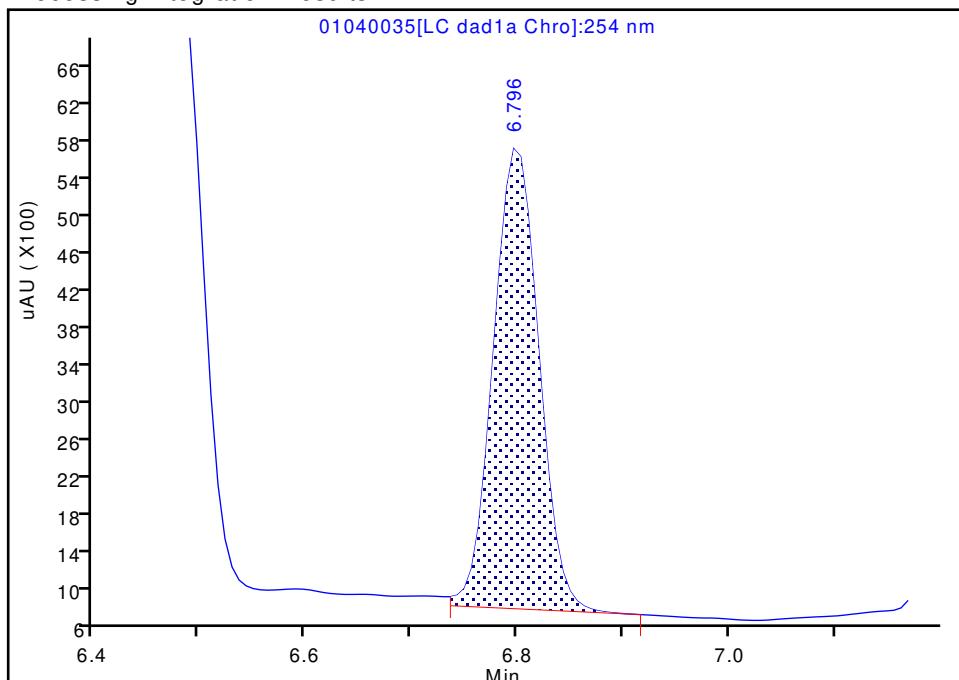
Data File: \\chromfs\denver\chromdata\chhplc\_x\20220104-107731.b\01040035.d  
 Injection Date: 05-Jan-2022 03:38:24 Instrument ID: CHHPLC\_X3  
 Lims ID: IC DMT 3  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 35 Worklist Smp#: 35  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

**6 DNX, CAS: 80251-29-2**

Signal: 1

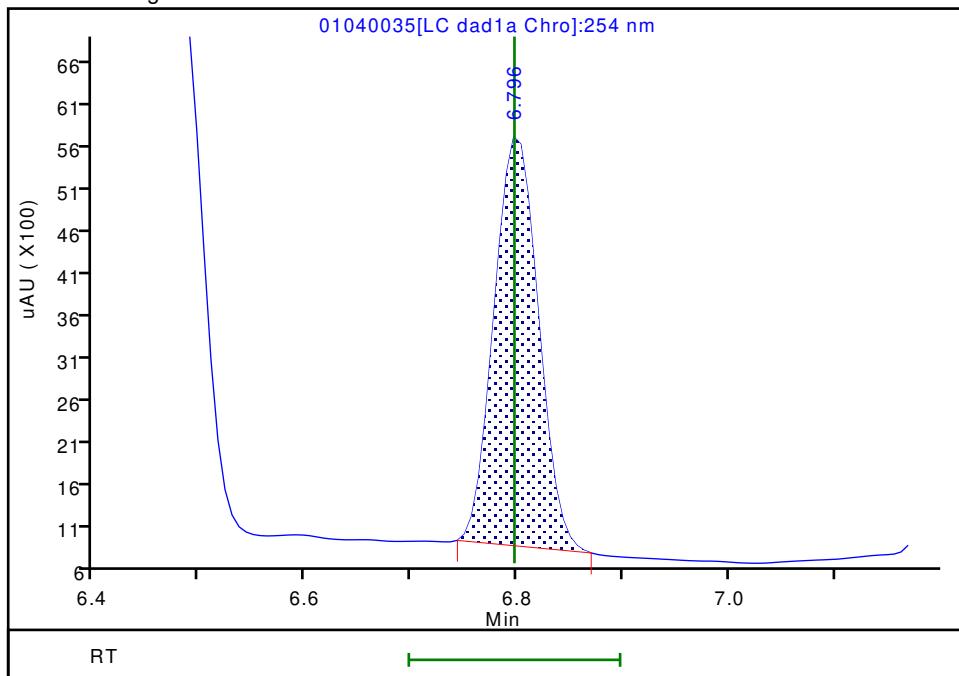
RT: 6.80  
 Area: 14564  
 Amount: 0.100918  
 Amount Units: ug/mL

## Processing Integration Results



RT: 6.80  
 Area: 13928  
 Amount: 0.100845  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 05-Jan-2022 12:08:53

Audit Action: Manually Integrated

Audit Reason: Baseline

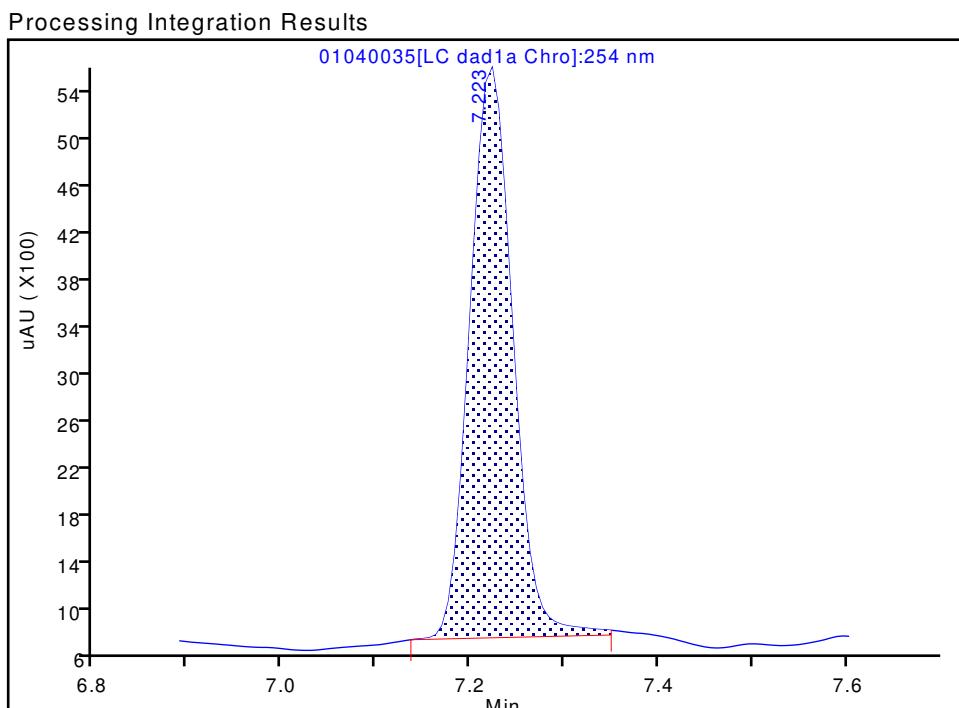
## Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220104-107731.b\01040035.d  
 Injection Date: 05-Jan-2022 03:38:24 Instrument ID: CHHPLC\_X3  
 Lims ID: IC DMT 3  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 35 Worklist Smp#: 35  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

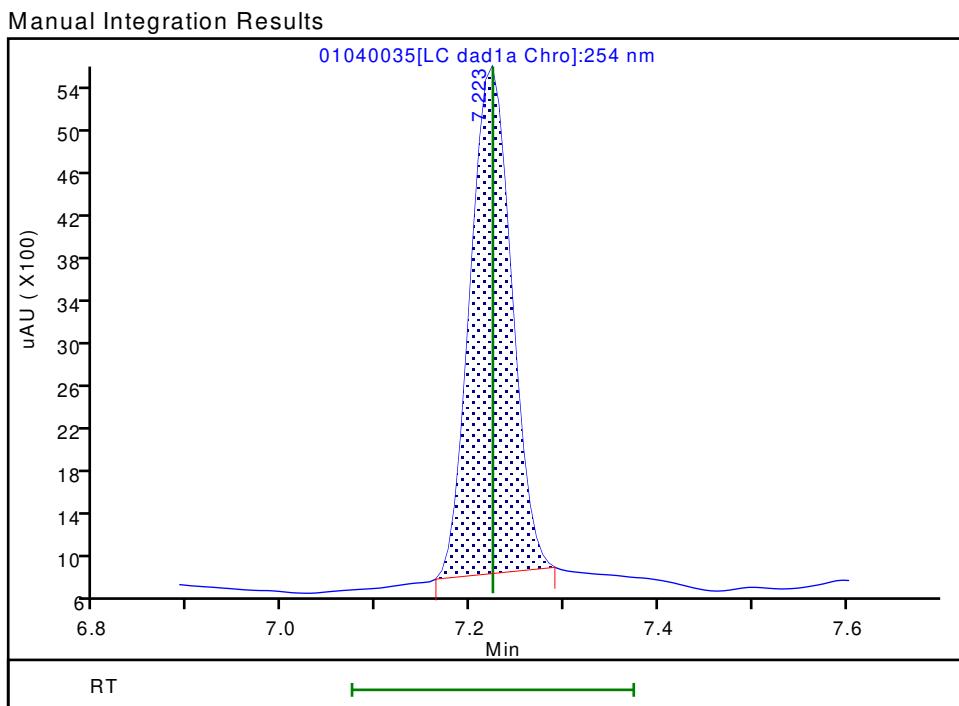
7 MNX, CAS: 5755-27-1

Signal: 1

RT: 7.22  
 Area: 15316  
 Amount: 0.118950  
 Amount Units: ug/mL



RT: 7.22  
 Area: 14438  
 Amount: 0.114591  
 Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:08:56

Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040036.D  
 Lims ID: IC DMT 2  
 Client ID:  
 Sample Type: IC Calib Level: 2  
 Inject. Date: 05-Jan-2022 04:01:20 ALS Bottle#: 36 Worklist Smp#: 36  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Sample Info: IC DMT 2  
 Misc. Info.: 280-0107731-036  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Sublist: chrom-8330\_X3\*sub17  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 05-Jan-2022 12:10:08 Calib Date: 05-Jan-2022 04:24:15  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040037.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm ) Det: LC DAD1B, 254 nm  
 Process Host: CTX1613

First Level Reviewer: zhangji Date: 05-Jan-2022 12:09:13

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.478	6.484	-0.006	9031	0.0501	0.0498	M
6 DNX	1	6.798	6.797	0.001	6988	0.0501	0.0506	M
7 MNX	1	7.224	7.224	0.000	7298	0.0584	0.0579	M

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

### Reagents:

8330 DMT\_00010 Amount Added: 2.50 Units: uL

Report Date: 05-Jan-2022 12:10:08

Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

Data File: \\chromfs\\denver\\chromdata\\chhplc\_x\\20220104-107731.b\\01040036.d

Injection Date: 05-Jan-2022 04:01:20

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: IC DMT 2

Worklist Smp#: 36

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

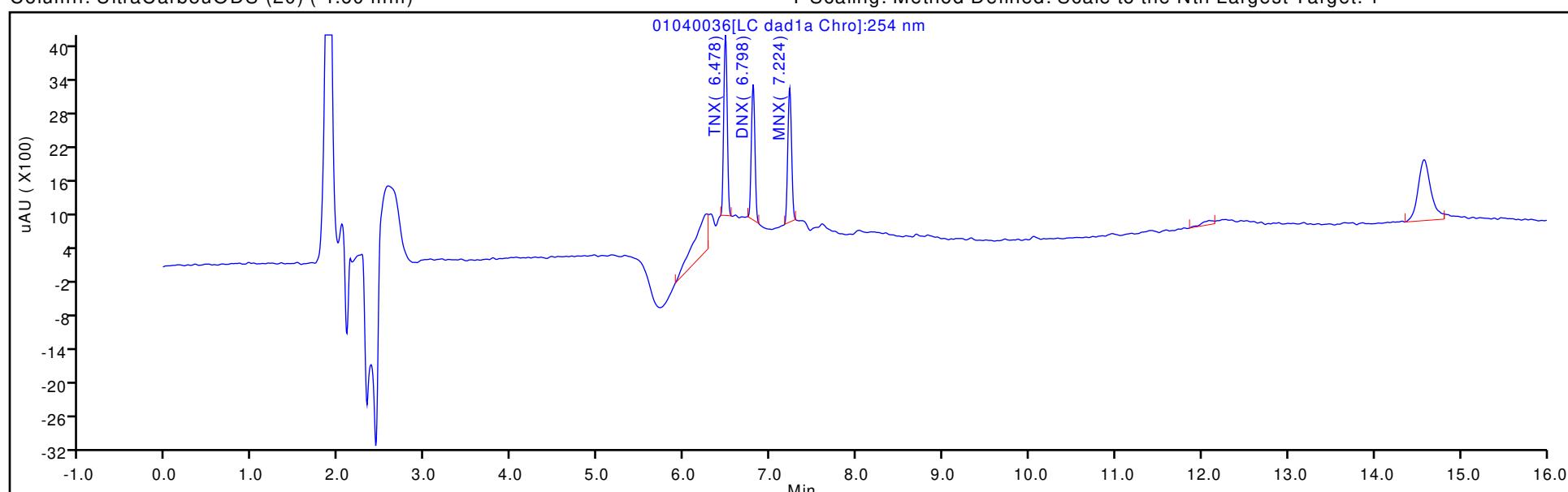
ALS Bottle#: 36

Method: 8330\_X3

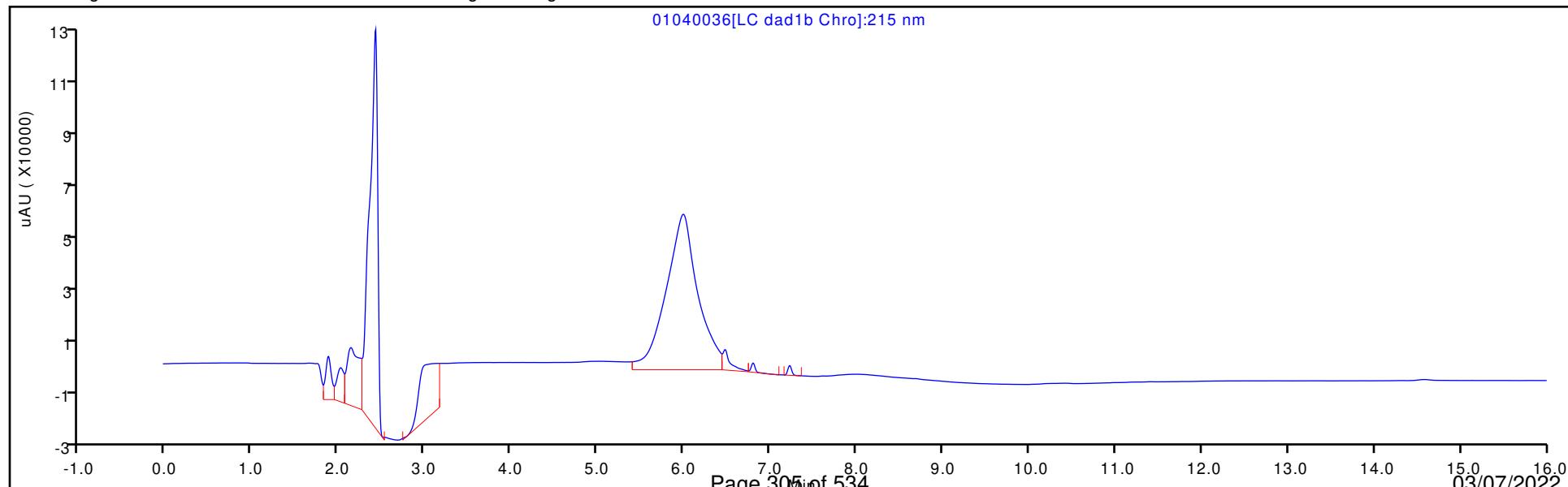
Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



## Eurofins TestAmerica, Denver

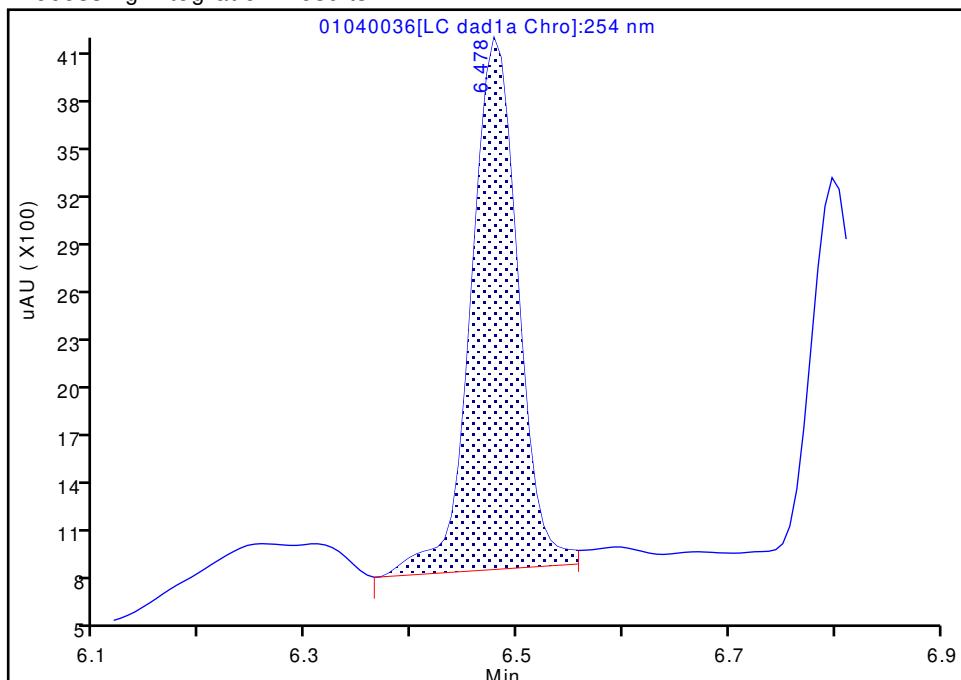
Data File: \\chromfs\denver\chromdata\chhplc\_x\20220104-107731.b\01040036.d  
 Injection Date: 05-Jan-2022 04:01:20 Instrument ID: CHHPLC\_X3  
 Lims ID: IC DMT 2  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 36 Worklist Smp#: 36  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

**3 TNX, CAS: 13980-04-6**

Signal: 1

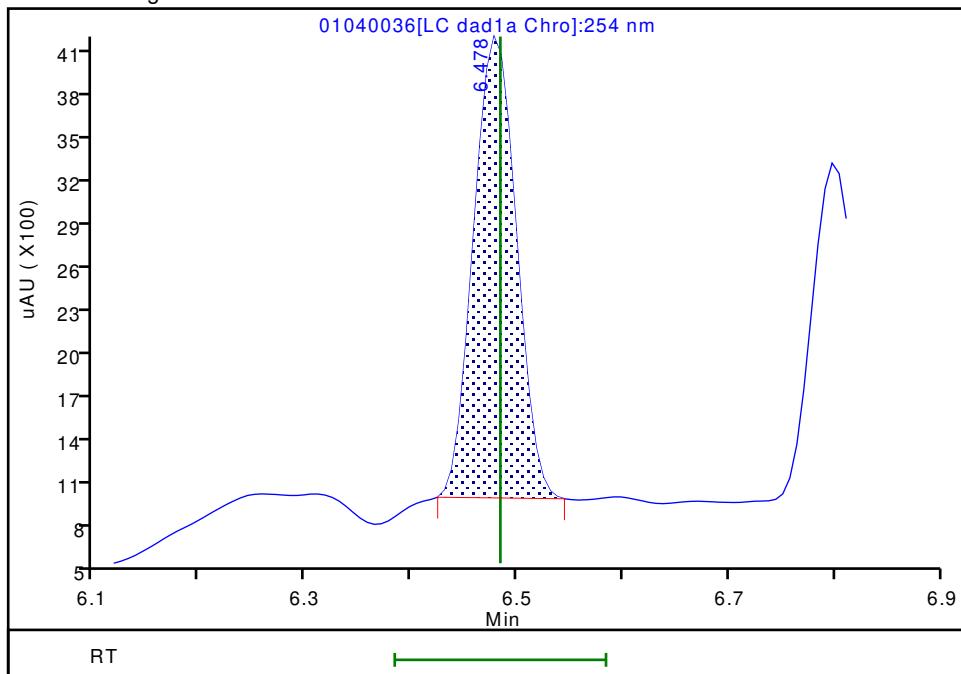
RT: 6.48  
 Area: 10352  
 Amount: 0.053996  
 Amount Units: ug/mL

## Processing Integration Results



RT: 6.48  
 Area: 9031  
 Amount: 0.049838  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 05-Jan-2022 12:09:04

Audit Action: Manually Integrated

Audit Reason: Baseline

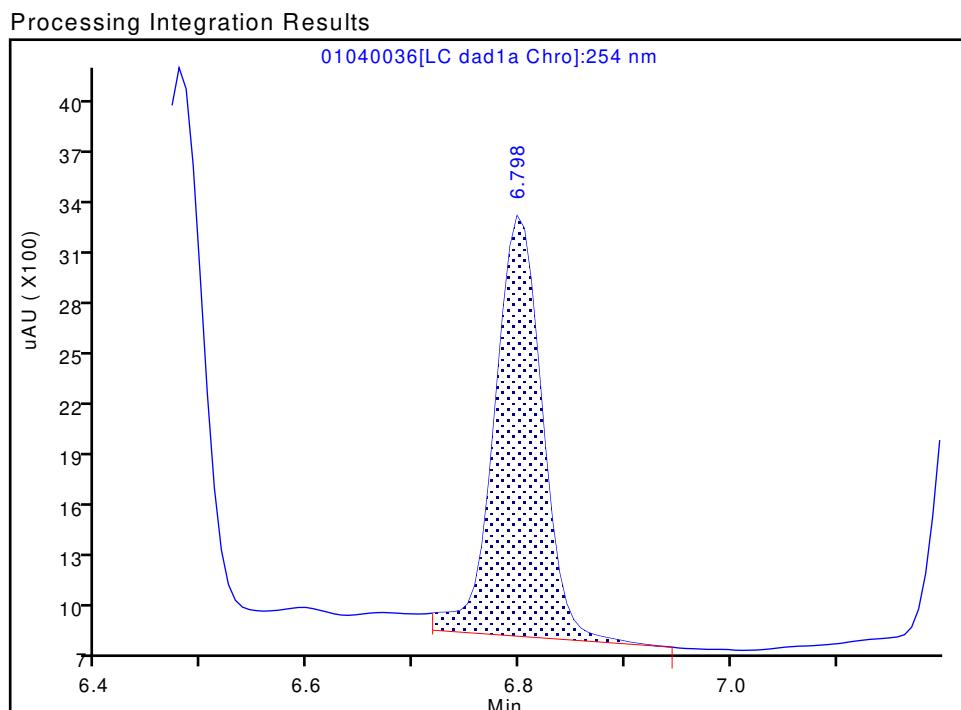
## Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220104-107731.b\01040036.d  
 Injection Date: 05-Jan-2022 04:01:20 Instrument ID: CHHPLC\_X3  
 Lims ID: IC DMT 2  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 36 Worklist Smp#: 36  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

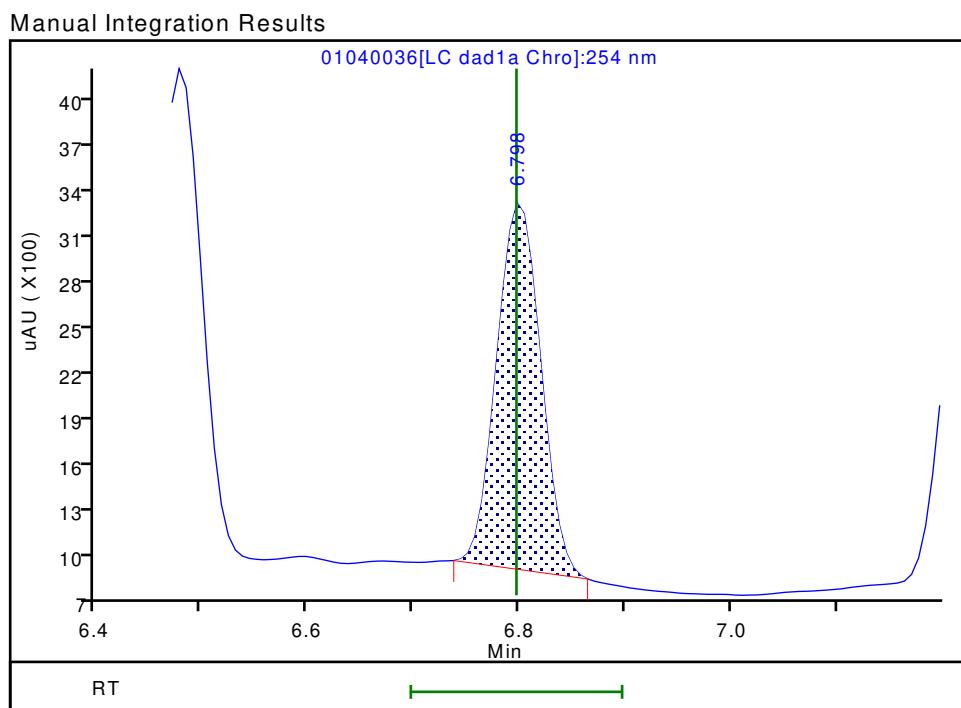
**6 DNX, CAS: 80251-29-2**

Signal: 1

RT: 6.80  
 Area: 7841  
 Amount: 0.054633  
 Amount Units: ug/mL



RT: 6.80  
 Area: 6988  
 Amount: 0.050596  
 Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:09:07

Audit Action: Manually Integrated

Audit Reason: Baseline

## Eurofins TestAmerica, Denver

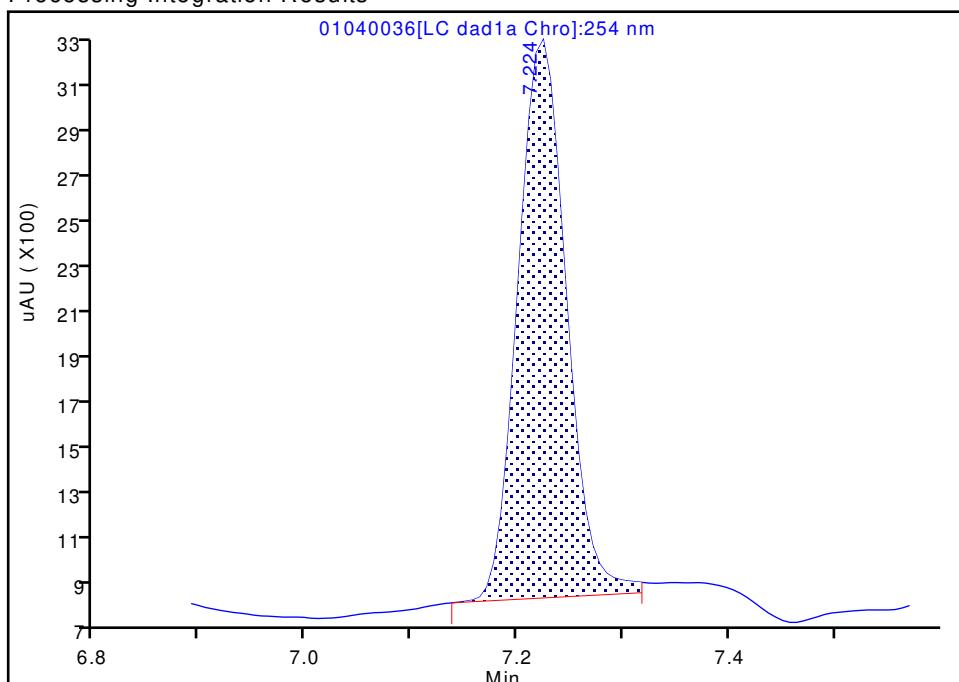
Data File: \\chromfs\denver\chromdata\chhplc\_x\20220104-107731.b\01040036.d  
 Injection Date: 05-Jan-2022 04:01:20 Instrument ID: CHHPLC\_X3  
 Lims ID: IC DMT 2  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 36 Worklist Smp#: 36  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

7 MNX, CAS: 5755-27-1

Signal: 1

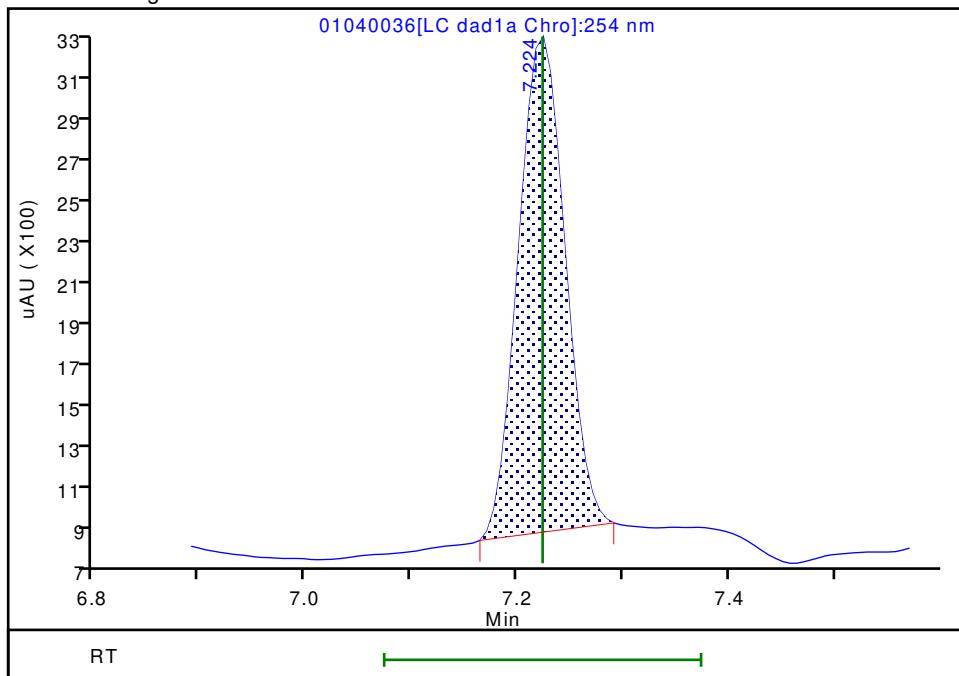
RT: 7.22  
 Area: 7737  
 Amount: 0.060531  
 Amount Units: ug/mL

## Processing Integration Results



RT: 7.22  
 Area: 7298  
 Amount: 0.057923  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 05-Jan-2022 12:09:11

Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040037.D  
 Lims ID: IC DMT 1  
 Client ID:  
 Sample Type: IC Calib Level: 1  
 Inject. Date: 05-Jan-2022 04:24:15 ALS Bottle#: 37 Worklist Smp#: 37  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Sample Info: IC DMT 1  
 Misc. Info.: 280-0107731-037  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Sublist: chrom-8330\_X3\*sub17  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 05-Jan-2022 12:10:08 Calib Date: 05-Jan-2022 04:24:15  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040037.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm ) Det: LC DAD1B, 254 nm  
 Process Host: CTX1613

First Level Reviewer: zhangji Date: 05-Jan-2022 12:09:28

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.479	6.484	-0.005	3600	0.0200	0.0199	M
6 DNX	1	6.799	6.797	0.002	2817	0.0200	0.0204	M
7 MNX	1	7.219	7.224	-0.005	3042	0.0233	0.0241	M

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

### Reagents:

8330 DMT\_00010 Amount Added: 1.00 Units: uL

Report Date: 05-Jan-2022 12:10:09

Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

Data File: \\chromfs\\denver\\chromdata\\chhplc\_x\\20220104-107731.b\\01040037.d

Injection Date: 05-Jan-2022 04:24:15

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: IC DMT 1

Worklist Smp#: 37

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

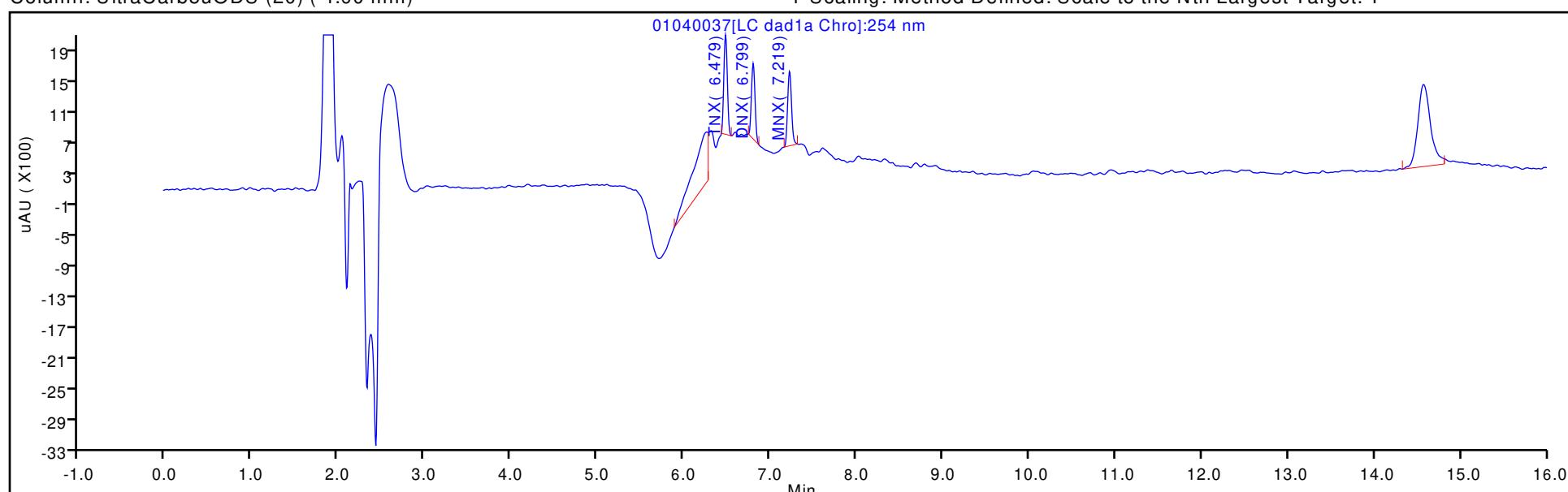
ALS Bottle#: 37

Method: 8330\_X3

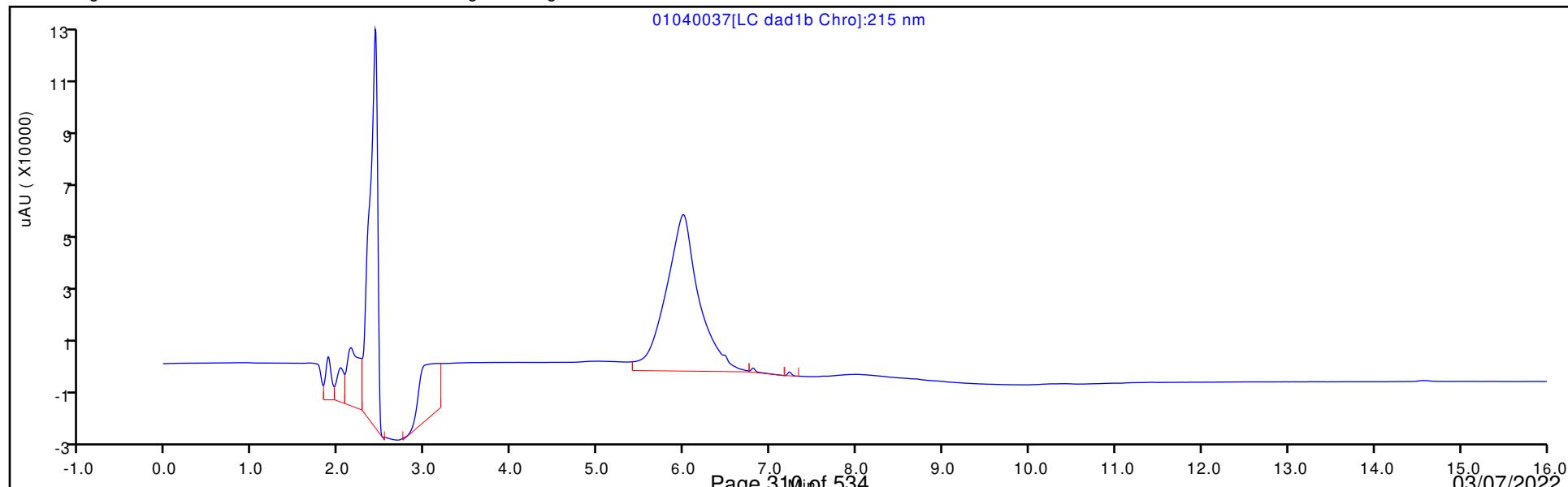
Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



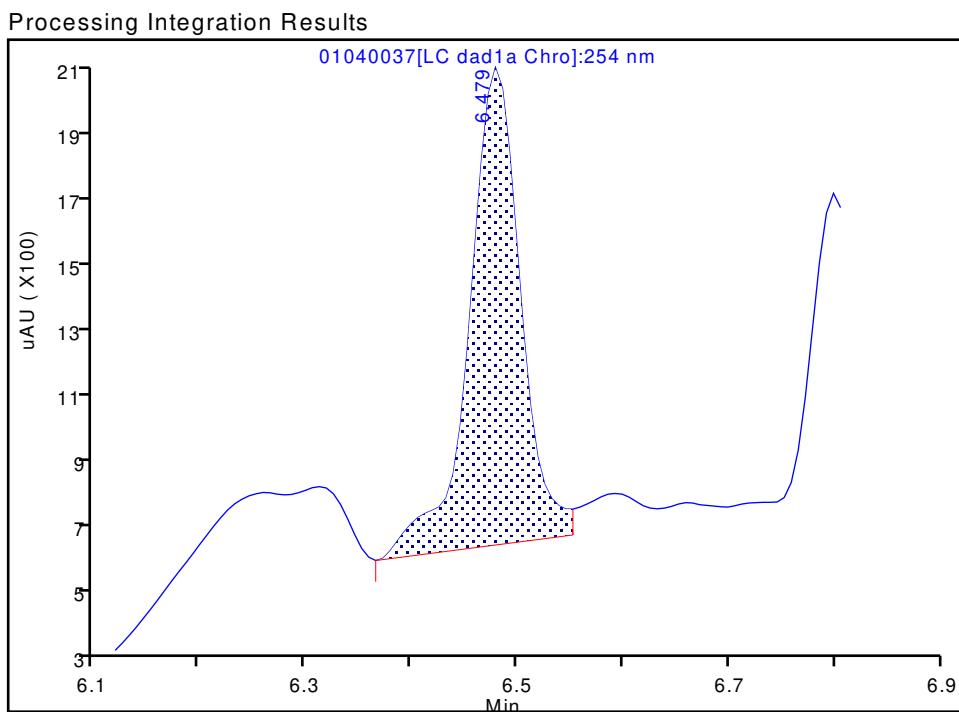
## Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220104-107731.b\01040037.d  
 Injection Date: 05-Jan-2022 04:24:15 Instrument ID: CHHPLC\_X3  
 Lims ID: IC DMT 1  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 37 Worklist Smp#: 37  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

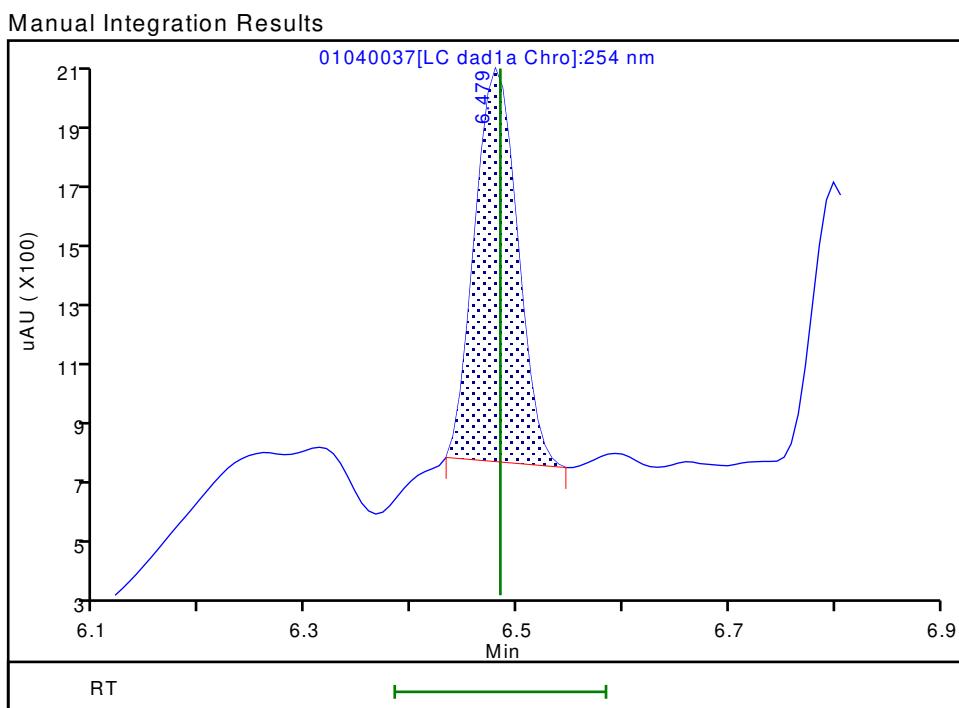
**3 TNX, CAS: 13980-04-6**

Signal: 1

RT: 6.48  
 Area: 4755  
 Amount: 0.025236  
 Amount Units: ug/mL



RT: 6.48  
 Area: 3600  
 Amount: 0.019867  
 Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:09:20

Audit Action: Manually Integrated

Audit Reason: Baseline

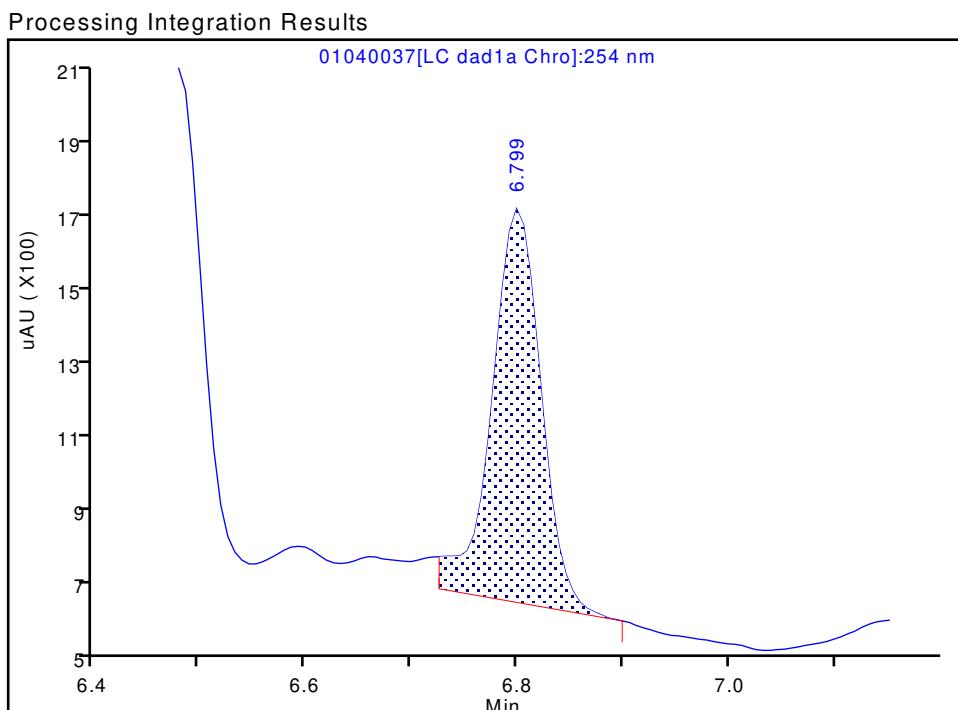
## Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220104-107731.b\01040037.d  
 Injection Date: 05-Jan-2022 04:24:15 Instrument ID: CHHPLC\_X3  
 Lims ID: IC DMT 1  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 37 Worklist Smp#: 37  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

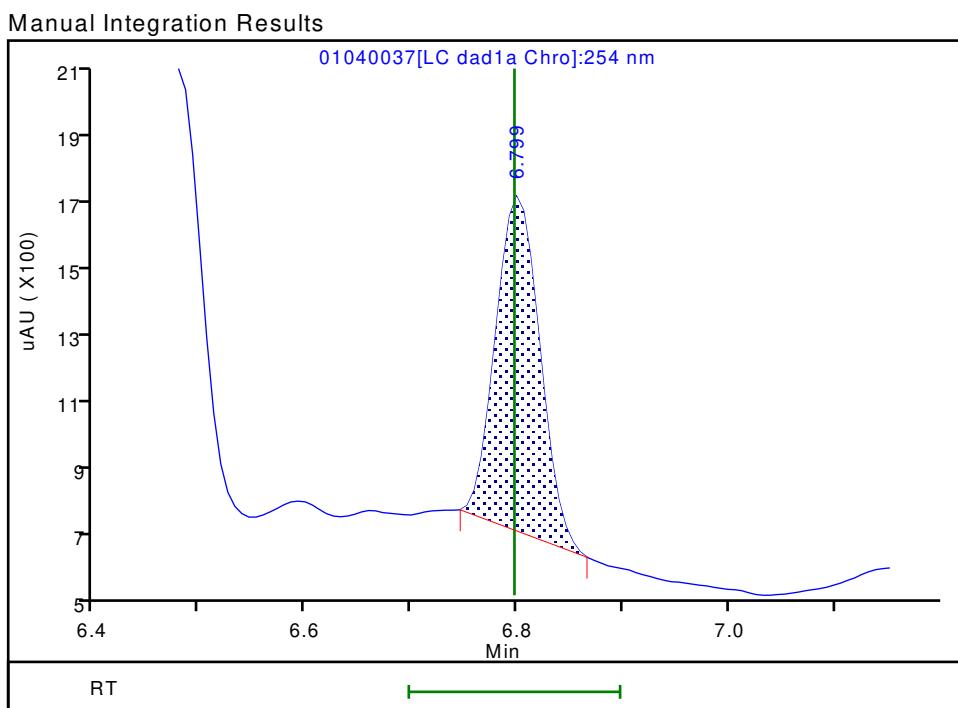
**6 DNX, CAS: 80251-29-2**

Signal: 1

RT: 6.80  
 Area: 3342  
 Amount: 0.023637  
 Amount Units: ug/mL



RT: 6.80  
 Area: 2817  
 Amount: 0.020396  
 Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:09:23

Audit Action: Manually Integrated

Audit Reason: Baseline

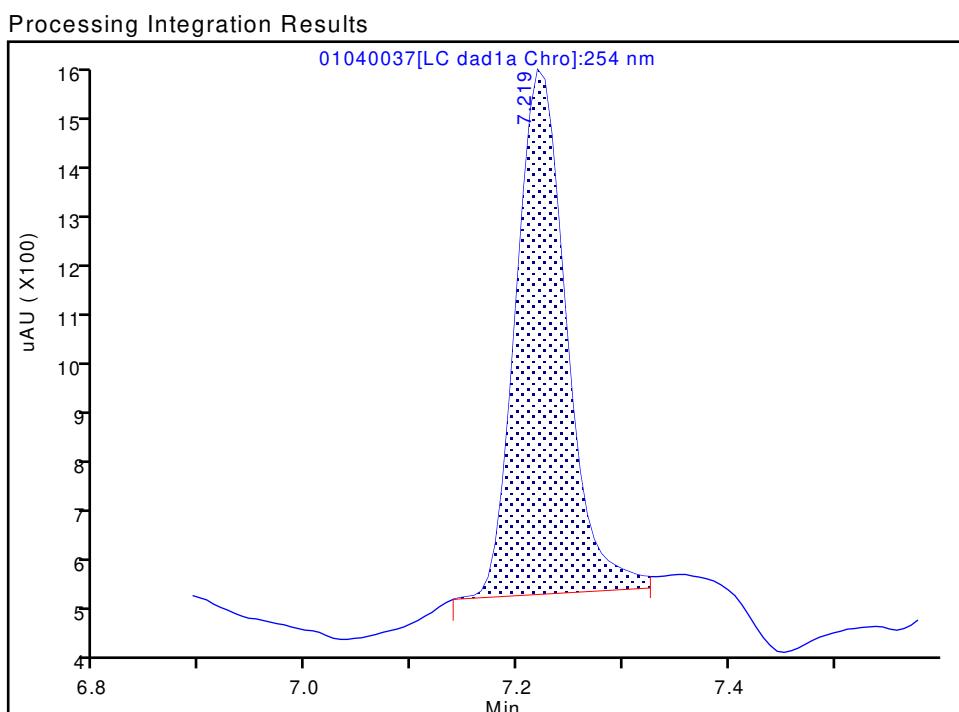
## Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220104-107731.b\01040037.d  
 Injection Date: 05-Jan-2022 04:24:15 Instrument ID: CHHPLC\_X3  
 Lims ID: IC DMT 1  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 37 Worklist Smp#: 37  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

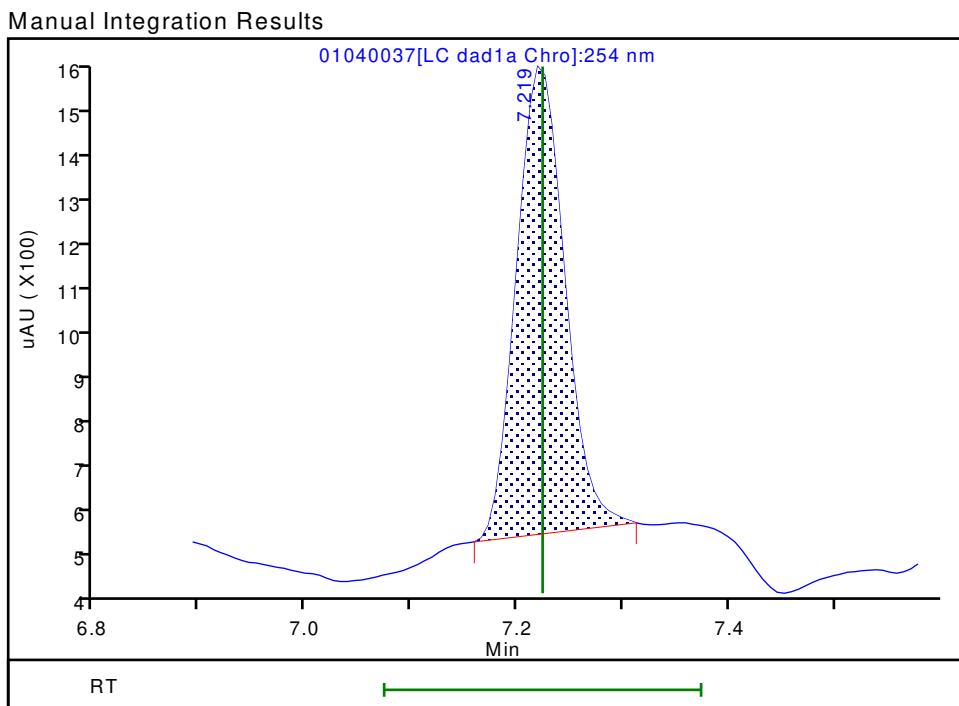
**7 MNX, CAS: 5755-27-1**

Signal: 1

RT: 7.22  
 Area: 3207  
 Amount: 0.025276  
 Amount Units: ug/mL



RT: 7.22  
 Area: 3042  
 Amount: 0.024144  
 Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:09:26

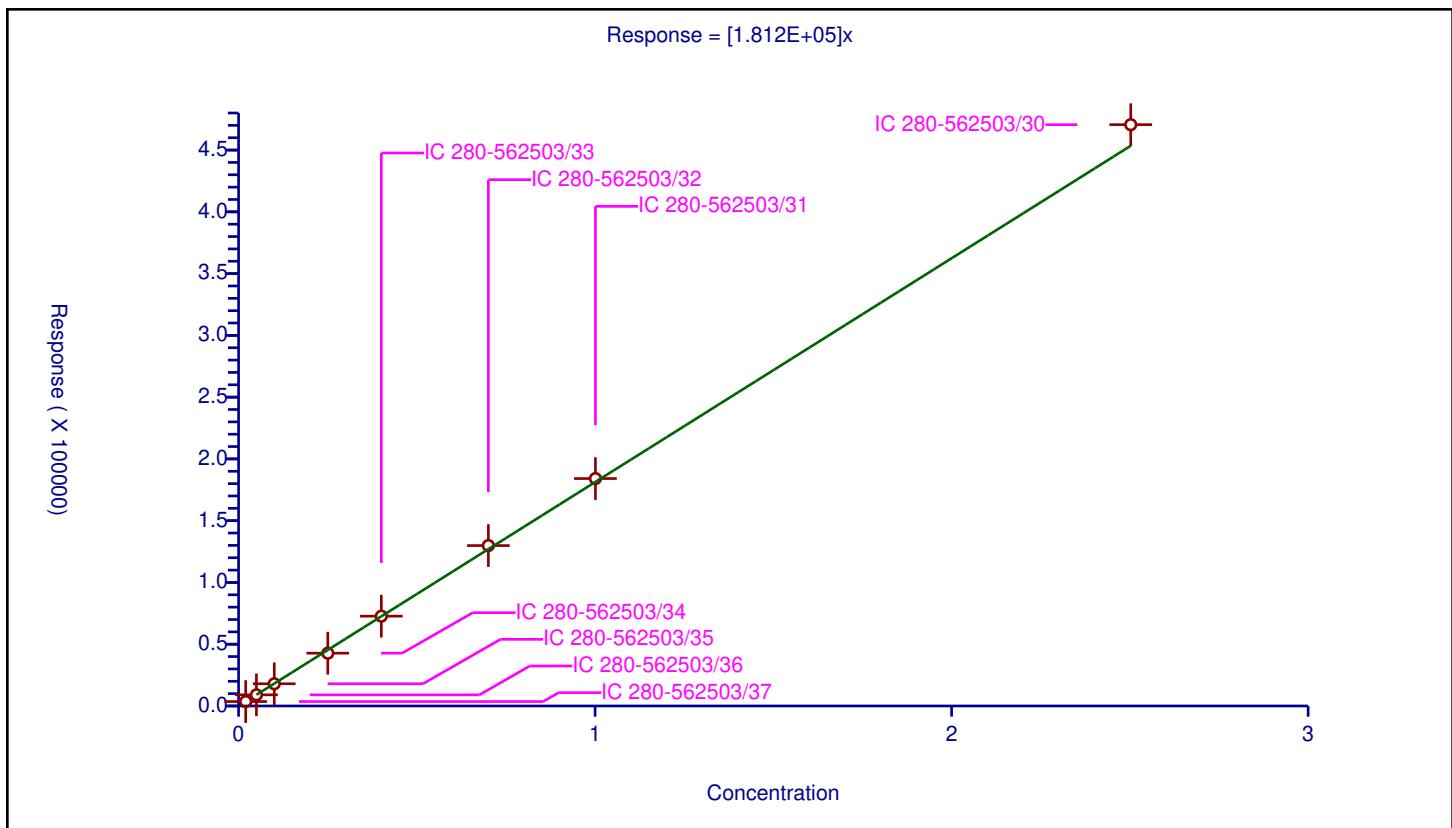
Audit Action: Manually Integrated

Audit Reason: Baseline

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	1.812E+05
Error Coefficients	
Standard Error:	6700
Relative Standard Error:	2.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

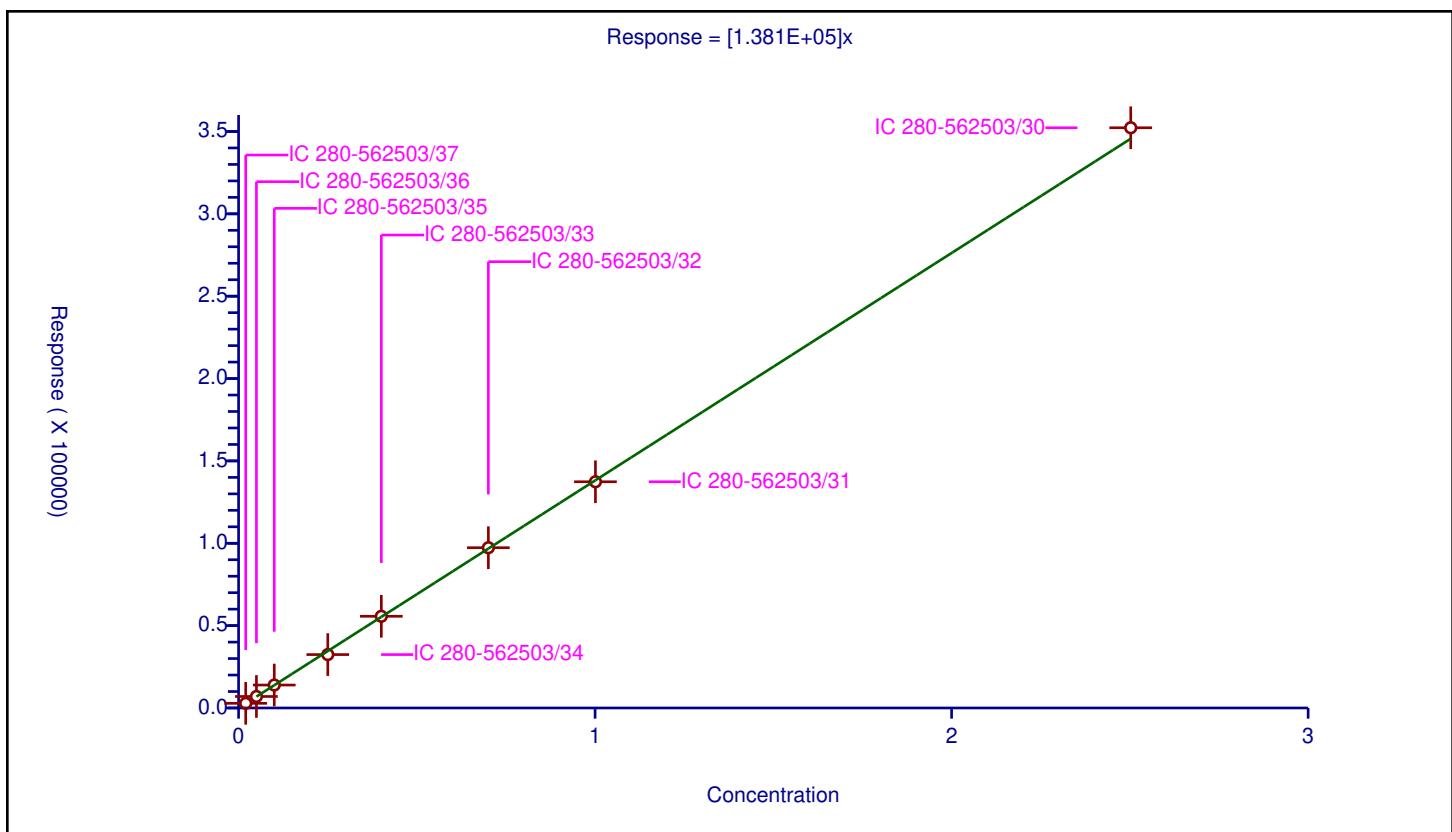
ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/37	0.02002	3600.0			179820.17982	Y
2	IC 280-562503/36	0.05005	9031.0			180439.56044	Y
3	IC 280-562503/35	0.1001	17989.0			179710.28971	Y
4	IC 280-562503/34	0.25025	42748.0			170821.178821	Y
5	IC 280-562503/33	0.4004	72720.0			181618.381618	Y
6	IC 280-562503/32	0.7007	129844.0			185306.122449	Y
7	IC 280-562503/31	1.001	184090.0			183906.093906	Y
8	IC 280-562503/30	2.5025	470565.0			188037.962038	Y



**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	1.381E+05
Error Coefficients	
Standard Error:	2670
Relative Standard Error:	2.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

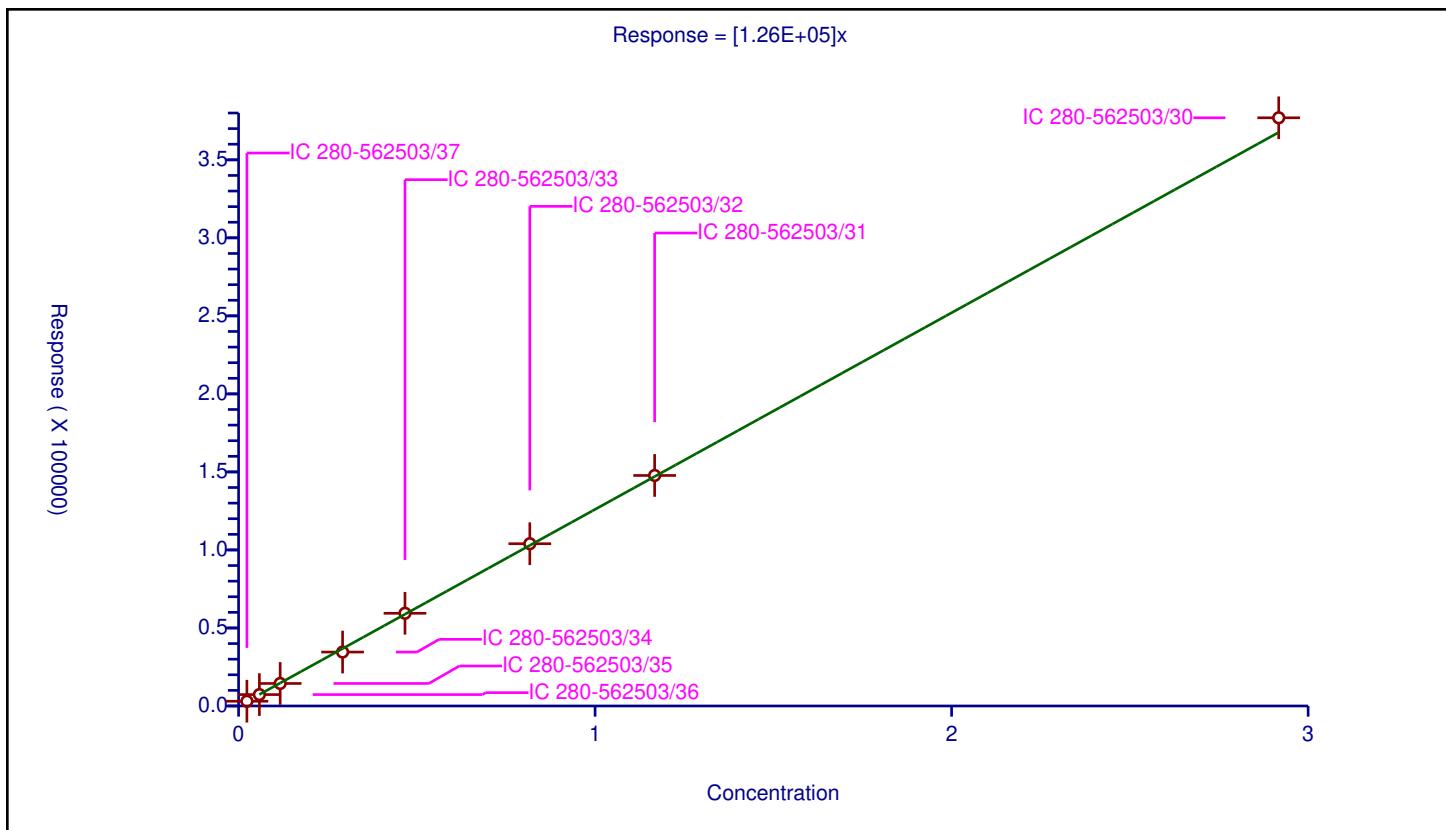
ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/37	0.02002	2817.0			140709.290709	Y
2	IC 280-562503/36	0.05005	6988.0			139620.37962	Y
3	IC 280-562503/35	0.1001	13928.0			139140.859141	Y
4	IC 280-562503/34	0.25025	32416.0			129534.465534	Y
5	IC 280-562503/33	0.4004	55675.0			139048.451548	Y
6	IC 280-562503/32	0.7007	97314.0			138881.118881	Y
7	IC 280-562503/31	1.001	137343.0			137205.794206	Y
8	IC 280-562503/30	2.5025	352260.0			140763.236763	Y



**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	1.26E+05
Error Coefficients	
Standard Error:	3670
Relative Standard Error:	2.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/37	0.02334	3042.0			130334.190231	Y
2	IC 280-562503/36	0.05835	7298.0			125072.836332	Y
3	IC 280-562503/35	0.1167	14438.0			123718.937446	Y
4	IC 280-562503/34	0.29175	34560.0			118457.583548	Y
5	IC 280-562503/33	0.4668	59416.0			127283.633248	Y
6	IC 280-562503/32	0.8169	103999.0			127309.340189	Y
7	IC 280-562503/31	1.167	147726.0			126586.118252	Y
8	IC 280-562503/30	2.9175	376943.0			129200.685518	Y



FORM VI  
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA  
RETENTION TIME SUMMARY

Lab Name: Eurofins Denver

Job No.: 280-159130-1

Analy Batch No.: 567560

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

Instrument ID: CHHPLC\_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/02/2022 21:22 Calibration End Date: 03/03/2022 02:03 Calibration ID: 62762

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-567560/18	03020018.D
Level 2	IC 280-567560/17	03020017.D
Level 3	IC 280-567560/16	03020016.D
Level 4	IC 280-567560/15	03020015.D
Level 5	IC 280-567560/14	03020014.D
Level 6	IC 280-567560/13	03020013.D
Level 7	IC 280-567560/12	03020012.D
Level 8	IC 280-567560/11	03020011.D
Level 9	IC 280-567560/10	03020010.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8	LVL 9	RT WINDOW	AVG RT
HMX	6.887	6.896	6.894	6.896	6.889	6.880	6.863	6.860	6.791	6.739 - 7.039	6.873
Picric acid		7.863	7.767	7.696	7.602	7.527	7.430	7.346	7.231	7.452 - 7.752	7.558
RDX	9.114	9.129	9.120	9.129	9.115	9.100	9.083	9.066	8.985	8.965 - 9.265	9.093
Nitrobenzene	12.047	12.069	12.073	12.069	12.062	12.060	12.036	12.020	11.925	11.912 - 12.212	12.040
1,3-Dinitrobenzene	15.627	15.642	15.647	15.642	15.635	15.627	15.616	15.600	15.525	15.485 - 15.785	15.618
Nitroglycerin	16.054	16.062	16.073	16.062	16.055	16.054	16.050	16.033	15.971	15.905 - 16.205	16.046
2-Nitrotoluene	16.807	16.829	16.833	16.829	16.822	16.820	16.810	16.793	16.725	16.672 - 16.972	16.808
4-Nitrotoluene	17.147	17.129	17.147	17.136	17.129	17.127	17.123	17.100	17.018	16.979 - 17.279	17.117
4-Amino-2,6-dinitrotoluene	17.734	17.756	17.773	17.756	17.755	17.747	17.736	17.720	17.651	17.605 - 17.905	17.736
3-Nitrotoluene	18.094	18.116	18.120	18.109	18.102	18.100	18.090	18.073	18.005	17.952 - 18.252	18.090
2-Amino-4,6-dinitrotoluene	18.754	18.762	18.773	18.749	18.742	18.740	18.730	18.706	18.725	18.592 - 18.892	18.742
1,3,5-Trinitrobenzene	18.947	18.956	18.973	18.956	18.949	18.947	18.936	18.920	18.851	18.799 - 19.099	18.937
2,6-Dinitrotoluene	20.260	20.262	20.267	20.256	20.255	20.254	20.243	20.233	20.171	20.105 - 20.405	20.245
2,4-Dinitrotoluene	20.674	20.716	20.767	20.756	20.762	20.760	20.750	20.733	20.671	20.612 - 20.912	20.732
Tetryl	24.514	24.496	24.500	24.483	24.489	24.494	24.483	24.466	24.425	24.339 - 24.639	24.483
2,4,6-Trinitrotoluene	25.274	25.269	25.274	25.256	25.262	25.267	25.257	25.246	25.198	25.112 - 25.412	25.256
PETN	26.220	26.223	26.220	26.209	26.215	26.220	26.217	26.206	26.185	26.065 - 26.365	26.213
1,2-Dinitrobenzene	13.260	13.282	13.287	13.282	13.282	13.274	13.256	13.240	13.158	13.132 - 13.432	13.258

FORM VI  
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA  
CURVE EVALUATION

Lab Name: Eurofins Denver

Job No.: 280-159130-1

Analy Batch No.: 567560

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

Instrument ID: CHHPLC\_X5 GC Column: Luna-phenyl ID: 4.6 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/02/2022 21:22 Calibration End Date: 03/03/2022 02:03 Calibration ID: 62762

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-567560/18	03020018.D
Level 2	IC 280-567560/17	03020017.D
Level 3	IC 280-567560/16	03020016.D
Level 4	IC 280-567560/15	03020015.D
Level 5	IC 280-567560/14	03020014.D
Level 6	IC 280-567560/13	03020013.D
Level 7	IC 280-567560/12	03020012.D
Level 8	IC 280-567560/11	03020011.D
Level 9	IC 280-567560/10	03020010.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5 LVL 9	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
HMX	204000 153272 187359	156350 157048	161060 156446	161090 158593	Ave		166135.26 8				10.5		20.0			
Picric acid	137152 100000	115050 145895	127120 147056	140090 150719	Ave		132885.21 4				13.3		20.0			
RDX	209700 185668 192949	185950 191778	200560 191473	197500 193402	Ave		194331.01 7				3.8		20.0			
Nitrobenzene	387450 359546 376404	332968 370117	381454 369358	371225 366118	Ave		368293.36 1				4.2		20.0			
1,3-Dinitrobenzene	594910 544854 583320	531088 563411	602415 562742	594182 568076	Ave		571666.38 3				4.2		20.0			
Nitroglycerin	106640 123863 126320	108750 129921	119788 126936	133241 127202	Ave		122517.80 1				7.5		20.0			
2-Nitrotoluene	249100 224884 232108	230350 232660	241140 230763	238570 232476	Ave		234672.31 7				3.1		20.0			
4-Nitrotoluene	219860 201816 215781	203493 209224	211477 208958	215818 210922	Ave		210816.65 7				2.8		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI  
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA  
CURVE EVALUATION

Lab Name: Eurofins Denver

Job No.: 280-159130-1

Analy Batch No.: 567560

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

Instrument ID: CHHPLC\_X5 GC Column: Luna-phenyl ID: 4.6 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/02/2022 21:22 Calibration End Date: 03/03/2022 02:03 Calibration ID: 62762

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4		B	M1	M2								
4-Amino-2,6-dinitrotoluene	260739 258018 268817	263287 267340	268232 265560	271888 269422	Lin2	-62.90014 1	267244.42 3							1.0000		0.9900
3-Nitrotoluene	254046 256344 271648	240010 266386	267473 265219	269510 267544	Lin2	-189.4931 8	266002.36 0							0.9990		0.9900
2-Amino-4,6-dinitrotoluene	369024 350637 335952	343576 365448	369761 366702	370299 373422	Ave		360535.69 8				3.8		20.0			
1,3,5-Trinitrobenzene	393912 409485 468023	347804 424182	425928 421012	424291 424539	Ave		415464.12 6				7.7		20.0			
2,6-Dinitrotoluene	269323 256928 267124	260608 264846	274044 264869	265807 267408	Ave		265661.83 8				1.8		20.0			
2,4-Dinitrotoluene	1185259 555279 545162	839791 549871	675657 543624	639313 546924	Lin2	6399.5904 9	541564.59 1							0.9990		0.9900
Tetryl	471257 308379 316049	345958 315734	361477 313195	331218 316267	Ave		342170.50 7				15.0		20.0			
2,4,6-Trinitrotoluene	370518 363896 385306	324054 376581	369641 378025	370568 384024	Ave		369179.22 1				5.0		20.0			
PETN	108420 131804 136767	109615 136247	134164 135887	134076 136984	Ave		129329.18 2				9.0		20.0			
1,2-Dinitrobenzene	246100 244792 252426	240450 249510	257280 250511	254990 251717	Ave		249752.93 7				2.1		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI  
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA  
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver

Job No.: 280-159130-1

Analy Batch No.: 567560

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

Instrument ID: CHHPLC\_X5 GC Column: Luna-phenyl ID: 4.6 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/02/2022 21:22 Calibration End Date: 03/03/2022 02:03 Calibration ID: 62762

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-567560/18	03020018.D
Level 2	IC 280-567560/17	03020017.D
Level 3	IC 280-567560/16	03020016.D
Level 4	IC 280-567560/15	03020015.D
Level 5	IC 280-567560/14	03020014.D
Level 6	IC 280-567560/13	03020013.D
Level 7	IC 280-567560/12	03020012.D
Level 8	IC 280-567560/11	03020011.D
Level 9	IC 280-567560/10	03020010.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
HMX	Ave	2040 62819	3127 109512	8053 158593	16109 468398	38318	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Picric acid	Ave	2301 58358	6356 102939	14009 150719	250000	34288	0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
RDX	Ave	2097 76711	3719 134031	10028 193402	19750 482372	46417	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Nitrobenzene	Ave	3890 148639	6686 259585	19149 367582	37271 944774	90246	0.0100 0.402	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251
1,3-Dinitrobenzene	Ave	5961 225815	10643 394707	30181 569212	59537 1461217	136486	0.0100 0.401	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251
Nitroglycerin	Ave	10664 519683	21750 888552	59894 1272015	133241 3158004	309657	0.100 4.00	0.200 7.00	0.500 10.0	1.00 25.0	2.50
2-Nitrotoluene	Ave	2491 93064	4607 161534	12057 232476	23857 580270	56221	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
4-Nitrotoluene	Ave	2203 83857	4078 146563	10595 211344	21625 540531	50555	0.0100 0.401	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251
4-Amino-2,6-dinitrotoluene	Lin2	2610 107043	5271 186078	13425 269691	27216 672715	64569	0.0100 0.400	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250
3-Nitrotoluene	Lin2	2543 106661	4805 185839	13387 267812	26978 679800	64150	0.0100 0.400	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250
2-Amino-4,6-dinitrotoluene	Ave	3705 146764	6899 257718	18562 374916	37178 843240	88010	0.0100 0.402	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251
1,3,5-Trinitrobenzene	Ave	3947 170012	6970 295298	21339 425388	42514 1172398	102576	0.0100 0.401	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251
2,6-Dinitrotoluene	Ave	2704	5233	13757	26687	64489	0.0100	0.0201	0.0502	0.100	0.251

FORM VI  
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA  
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver

Job No.: 280-159130-1

Analy Batch No.: 567560

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

Instrument ID: CHHPLC\_X5 GC Column: Luna-phenyl ID: 4.6 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/02/2022 21:22 Calibration End Date: 03/03/2022 02:03 Calibration ID: 62762

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
		106362	186150	268478	670482		0.402	0.703	1.00	2.51	
2,4-Dinitrotoluene	Lin2	11900 220828	16863 382059	33918 549112	64187 1368356	139375	0.0100 0.402	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251
Tetryl	Ave	4722 126546	6933 219675	18110 316900	33188 791703	77249	0.0100 0.401	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251
2,4,6-Trinitrotoluene	Ave	3720 151235	6507 265676	18556 385560	37205 967117	91338	0.0100 0.402	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251
PETN	Ave	10842 544987	21923 951206	67082 1369840	134076 3419168	329509	0.100 4.00	0.200 7.00	0.500 10.0	1.00 25.0	2.50
1,2-Dinitrobenzene	Ave	2461 99804	4809 175358	12864 251717	25499 631065	61198	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250

Curve Type Legend

Ave = Average

Lin2 = Linear 1/conc^2

**Eurofins Denver**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020010.D  
 Lims ID: IC INT/ADD 9  
 Client ID:  
 Sample Type: IC Calib Level: 9  
 Inject. Date: 02-Mar-2022 21:22:03 ALS Bottle#: 10 Worklist Smp#: 10  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: IC INT/ADD 9  
 Misc. Info.: 280-0108949-010  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Sublist: chrom-8330\_X5\_Luna\*sub1  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 03-Mar-2022 12:49:12 Calib Date: 03-Mar-2022 07:19:48  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020027.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm) Det: LC mwd1A, 254 nm  
 Process Host: CTX1618

First Level Reviewer: zhangji

Date:

03-Mar-2022 12:05:51

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.071	4.142	-0.071	1053484	2.50	2.59	M
2 2,4-diamino-6-nitrotoluene	1	4.698	4.669	0.029	475027	2.50	2.09	M
5 HMX	1	6.791	6.889	-0.098	468398	2.50	2.82	
7 2,4,6-Trinitrophenol	1	7.231	7.602	-0.371	250000	2.50	1.88	
8 RDX	1	8.985	9.115	-0.130	482372	2.50	2.48	
9 Nitrobenzene	1	11.925	12.062	-0.137	944774	2.51	2.57	
\$ 10 1,2-Dinitrobenzene	1	13.158	13.282	-0.124	631065	2.50	2.53	
11 3,5-Dinitroaniline	1	15.151	15.269	-0.118	1039131	2.50	2.53	
12 1,3-Dinitrobenzene	1	15.525	15.635	-0.110	1461217	2.51	2.56	
13 Nitroglycerin	2	15.971	16.055	-0.084	3158004	25.0	25.8	
14 o-Nitrotoluene	1	16.725	16.822	-0.097	580270	2.50	2.47	
16 p-Nitrotoluene	1	17.018	17.129	-0.111	540531	2.51	2.56	
17 4-Amino-2,6-dinitrotoluene	1	17.651	17.755	-0.104	672715	2.50	2.52	
18 m-Nitrotoluene	1	18.005	18.102	-0.097	679800	2.50	2.56	
19 2-Amino-4,6-dinitrotoluene	1	18.725	18.742	-0.017	843240	2.51	2.34	M
20 1,3,5-Trinitrobenzene	1	18.851	18.949	-0.098	1172398	2.51	2.82	M
21 2,6-Dinitrotoluene	1	20.171	20.255	-0.084	670482	2.51	2.52	
22 2,4-Dinitrotoluene	1	20.671	20.762	-0.091	1368356	2.51	2.51	
23 Tetryl	1	24.425	24.489	-0.064	791703	2.51	2.31	
24 2,4,6-Trinitrotoluene	1	25.198	25.262	-0.064	967117	2.51	2.62	
25 PETN	2	26.185	26.215	-0.030	3419168	25.0	26.4	

**QC Flag Legend**

Processing Flags

Review Flags

M - Manually Integrated

**Reagents:**

8330\IntermStk_00070	Amount Added: 250.00	Units: uL
8330_ADDs_00031	Amount Added: 125.00	Units: uL

Report Date: 03-Mar-2022 12:49:12

Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020010.D

Injection Date: 02-Mar-2022 21:22:03

Instrument ID: CHHPLC\_X5

Operator ID: JZ

Lims ID: IC INT/ADD 9

Worklist Smp#: 10

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

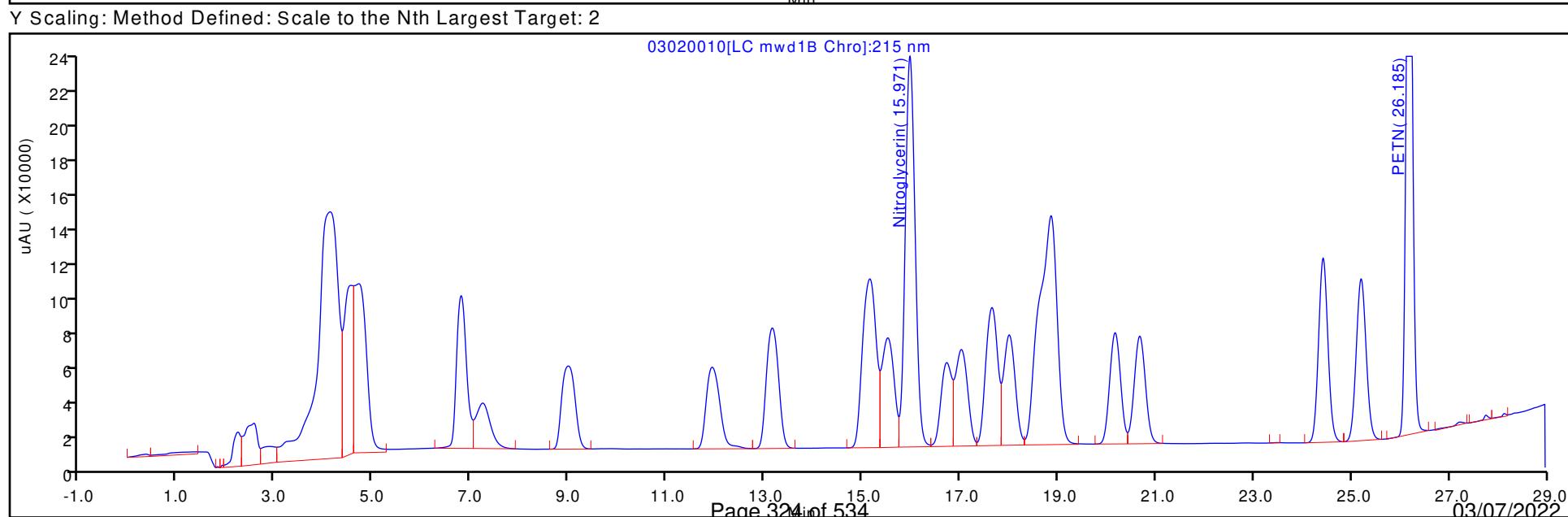
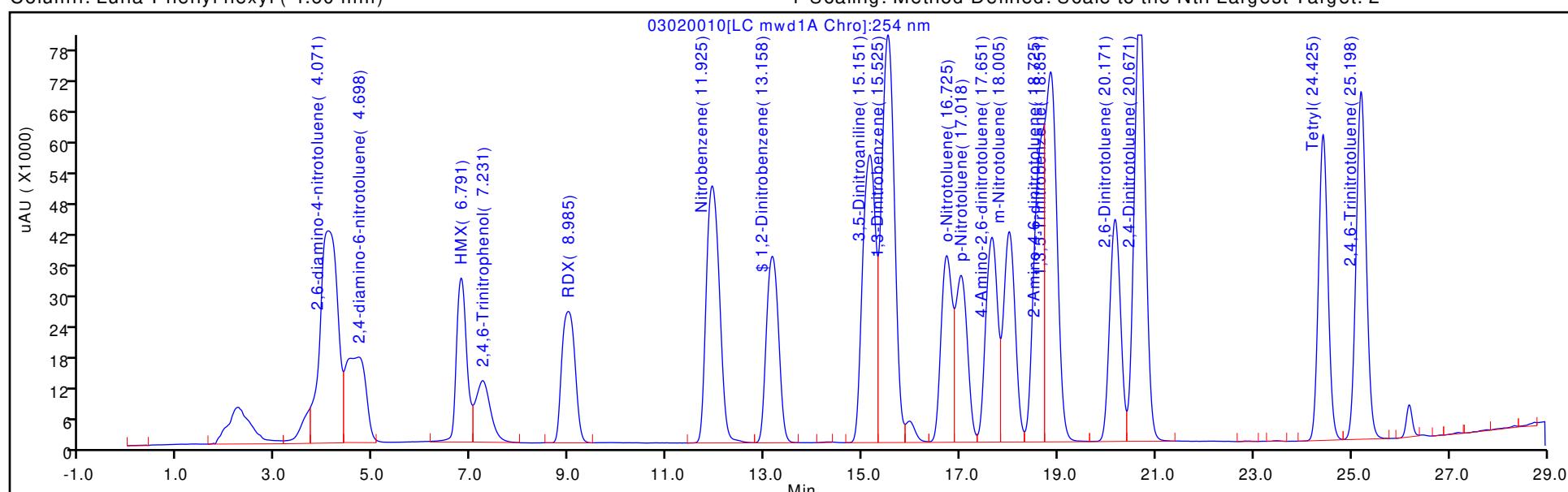
ALS Bottle#: 10

Method: 8330\_X5\_Luna

Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



## Eurofins Denver

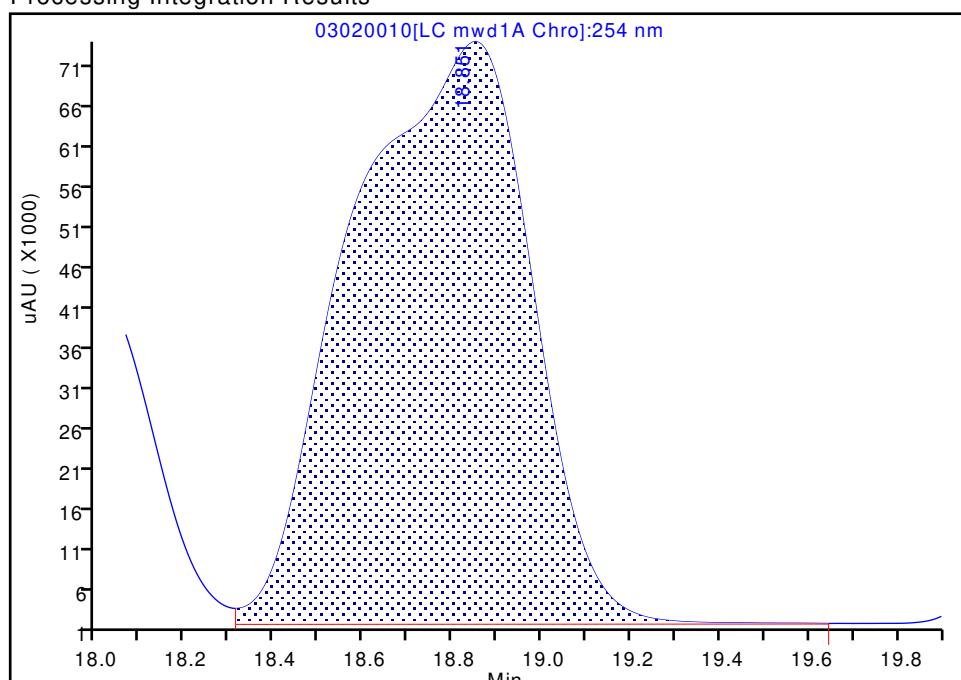
Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020010.D  
 Injection Date: 02-Mar-2022 21:22:03 Instrument ID: CHHPLC\_X5  
 Lims ID: IC INT/ADD 9  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 10 Worklist Smp#: 10  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X5\_Luna Limit Group: GCSV - 8330  
 Column: Luna-Phenyl hexyl ( 4.60 mm) Detector: LC mwd1A, 254 nm

## 20 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

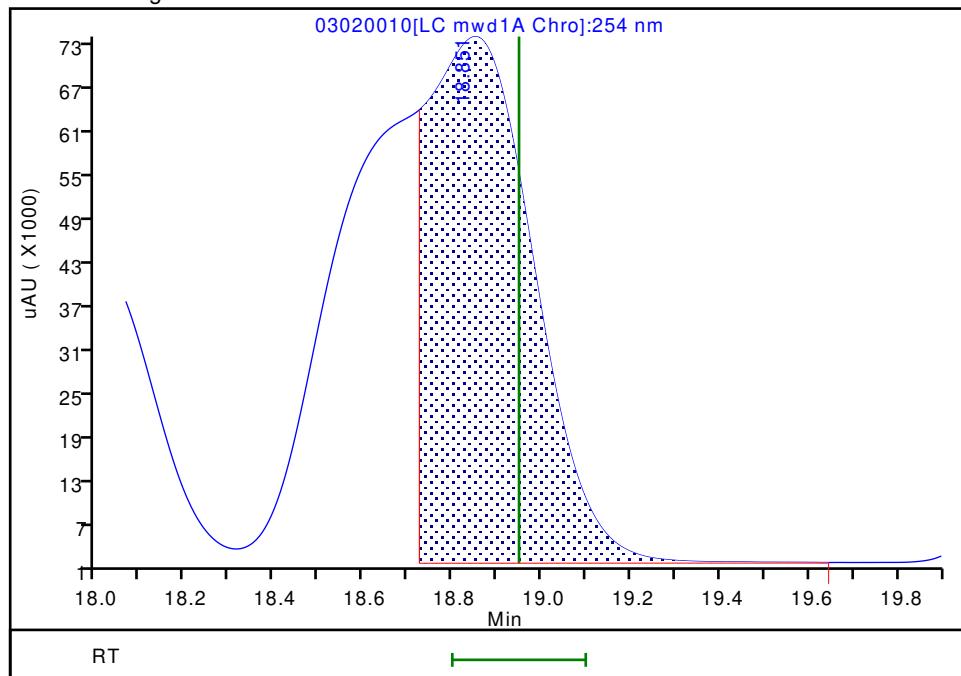
RT: 18.85  
 Area: 2015640  
 Amount: 4.231891  
 Amount Units: ug/ml

## Processing Integration Results



RT: 18.85  
 Area: 1172398  
 Amount: 2.821899  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: zhangji, 03-Mar-2022 12:08:36

Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

**Eurofins Denver**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020011.D  
 Lims ID: IC INT/ADD 8  
 Client ID:  
 Sample Type: IC Calib Level: 8  
 Inject. Date: 02-Mar-2022 21:57:13 ALS Bottle#: 11 Worklist Smp#: 11  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: IC INT/ADD 8  
 Misc. Info.: 280-0108949-011  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Sublist: chrom-8330\_X5\_Luna\*sub1  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 03-Mar-2022 12:49:13 Calib Date: 03-Mar-2022 07:19:48  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020027.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm) Det: LC mwd1A, 254 nm  
 Process Host: CTX1618

First Level Reviewer: zhangji

Date:

03-Mar-2022 12:09:27

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.093	4.142	-0.049	386260	1.00	0.9503	M
2 2,4-diamino-6-nitrotoluene	1	4.713	4.669	0.044	247885	1.00	1.09	M
5 HMX	1	6.860	6.889	-0.029	158593	1.00	0.9546	
7 2,4,6-Trinitrophenol	1	7.346	7.602	-0.256	150719	1.00	1.13	
8 RDX	1	9.066	9.115	-0.049	193402	1.00	1.00	
9 Nitrobenzene	1	12.020	12.062	-0.042	367582	1.00	1.00	
\$ 10 1,2-Dinitrobenzene	1	13.240	13.282	-0.042	251717	1.00	1.01	
11 3,5-Dinitroaniline	1	15.226	15.269	-0.043	419224	1.00	1.02	
12 1,3-Dinitrobenzene	1	15.600	15.635	-0.035	569212	1.00	1.00	
13 Nitroglycerin	2	16.033	16.055	-0.022	1272015	10.0	10.4	
14 o-Nitrotoluene	1	16.793	16.822	-0.029	232476	1.00	0.99	
16 p-Nitrotoluene	1	17.100	17.129	-0.029	211344	1.00	1.00	
17 4-Amino-2,6-dinitrotoluene	1	17.720	17.755	-0.035	269691	1.00	1.01	
18 m-Nitrotoluene	1	18.073	18.102	-0.029	267812	1.00	1.01	
19 2-Amino-4,6-dinitrotoluene	1	18.706	18.742	-0.036	374916	1.00	1.04	
20 1,3,5-Trinitrobenzene	1	18.920	18.949	-0.029	425388	1.00	1.02	
21 2,6-Dinitrotoluene	1	20.233	20.255	-0.022	268478	1.00	1.01	
22 2,4-Dinitrotoluene	1	20.733	20.762	-0.029	549112	1.00	1.00	
23 Tetryl	1	24.466	24.489	-0.023	316900	1.00	0.9261	
24 2,4,6-Trinitrotoluene	1	25.246	25.262	-0.016	385560	1.00	1.04	
25 PETN	2	26.206	26.215	-0.009	1369840	10.0	10.6	

**QC Flag Legend**

Processing Flags

Review Flags

M - Manually Integrated

**Reagents:**

8330IntermStk_00070	Amount Added: 100.00	Units: uL
8330_ADDs_00031	Amount Added: 50.00	Units: uL

Report Date: 03-Mar-2022 12:49:13

Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020011.D

Injection Date: 02-Mar-2022 21:57:13

Instrument ID: CHHPLC X5

Operator ID: JZ

Lims ID: IC INT/ADD 8

Worklist Smp#: 11

Client ID:

Injection Vol: 100.0  $\mu$

Dil. Factor: 1.0000

ALS Bottle#: 11

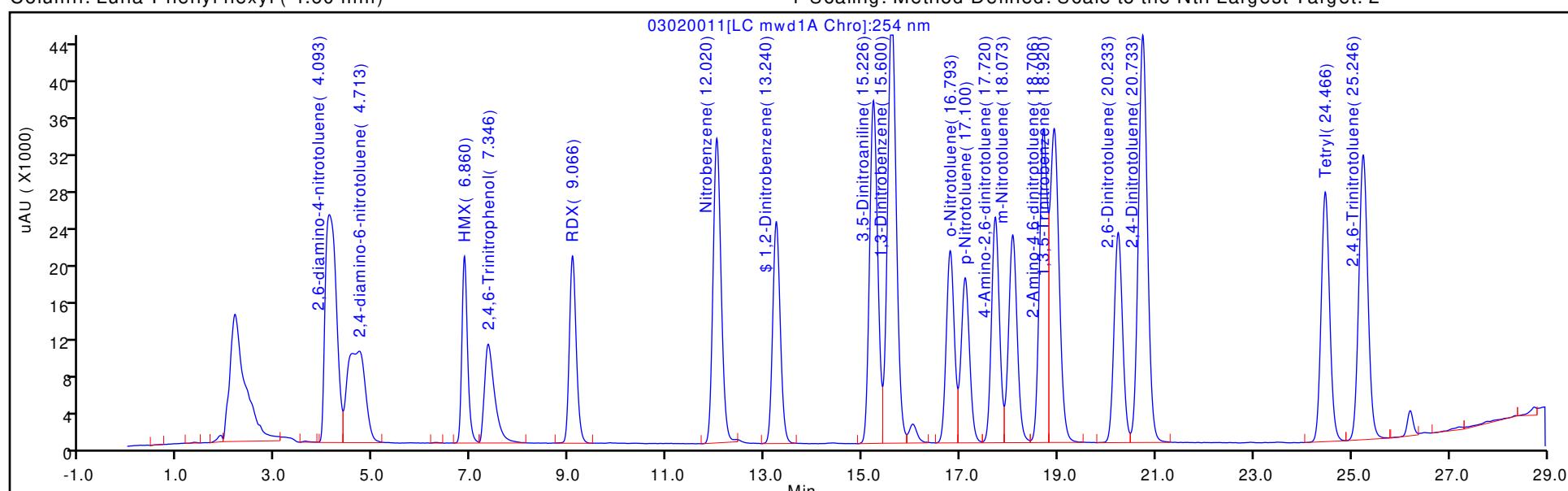
Method: 8330 X

Limit Group: GCSV - 8330

ANS Bottom

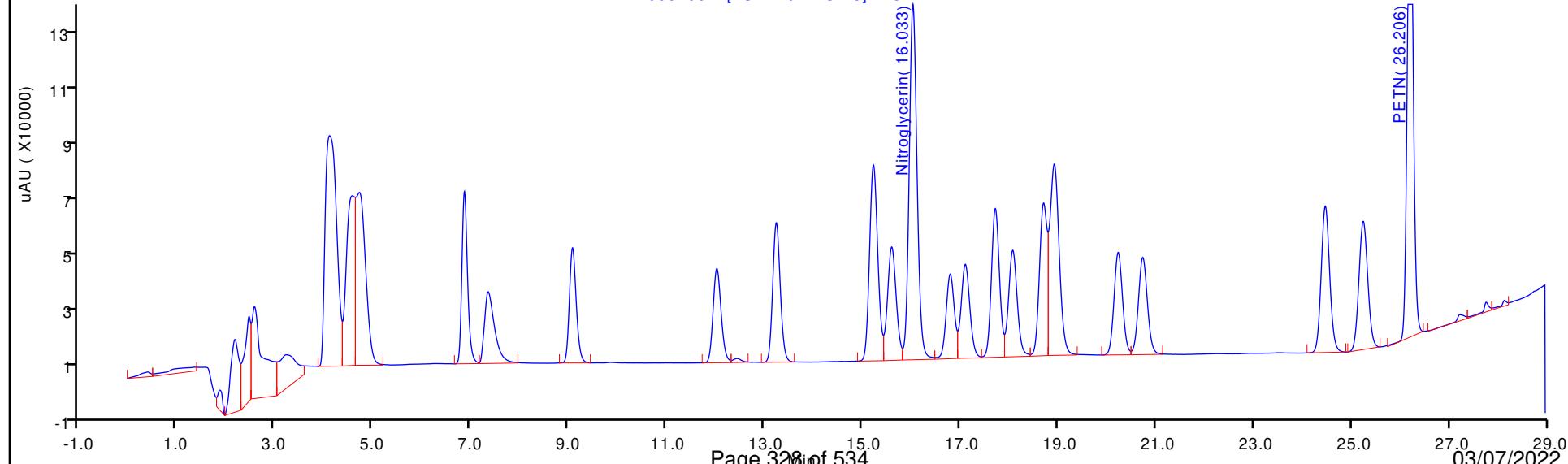
Column: Luna-Phenyl hexyl (4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2

03020011[LC mwd1B Chro]:215 nm



**Eurofins Denver**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020012.D  
 Lims ID: IC INT/ADD 7  
 Client ID:  
 Sample Type: IC Calib Level: 7  
 Inject. Date: 02-Mar-2022 22:32:16 ALS Bottle#: 12 Worklist Smp#: 12  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: IC INT/ADD 7  
 Misc. Info.: 280-0108949-012  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Sublist: chrom-8330\_X5\_Luna\*sub1  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 03-Mar-2022 12:49:14 Calib Date: 03-Mar-2022 07:19:48  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020027.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm) Det: LC mwd1A, 254 nm  
 Process Host: CTX1618

First Level Reviewer: zhangji Date: 03-Mar-2022 12:09:45

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.110	4.142	-0.032	273235	0.7000	0.6722	M
2 2,4-diamino-6-nitrotoluene	1	4.710	4.669	0.041	172644	0.7000	0.7557	M
5 HMX	1	6.863	6.889	-0.026	109512	0.7000	0.6592	
7 2,4,6-Trinitrophenol	1	7.430	7.602	-0.172	102939	0.7000	0.7746	
8 RDX	1	9.083	9.115	-0.032	134031	0.7000	0.6897	
9 Nitrobenzene	1	12.036	12.062	-0.026	259585	0.7028	0.7048	
\$ 10 1,2-Dinitrobenzene	1	13.256	13.282	-0.026	175358	0.7000	0.7021	
11 3,5-Dinitroaniline	1	15.243	15.269	-0.026	294648	0.7000	0.7162	
12 1,3-Dinitrobenzene	1	15.616	15.635	-0.019	394707	0.7014	0.6904	
13 Nitroglycerin	2	16.050	16.055	-0.005	888552	7.00	7.25	
14 o-Nitrotoluene	1	16.810	16.822	-0.012	161534	0.7000	0.6883	
16 p-Nitrotoluene	1	17.123	17.129	-0.006	146563	0.7014	0.6952	
17 4-Amino-2,6-dinitrotoluene	1	17.736	17.755	-0.019	186078	0.7007	0.6965	
18 m-Nitrotoluene	1	18.090	18.102	-0.012	185839	0.7007	0.6993	
19 2-Amino-4,6-dinitrotoluene	1	18.730	18.742	-0.012	257718	0.7028	0.7148	
20 1,3,5-Trinitrobenzene	1	18.936	18.949	-0.013	295298	0.7014	0.7108	
21 2,6-Dinitrotoluene	1	20.243	20.255	-0.012	186150	0.7028	0.7007	
22 2,4-Dinitrotoluene	1	20.750	20.762	-0.012	382059	0.7028	0.6937	
23 Tetryl	1	24.483	24.489	-0.006	219675	0.7014	0.6420	
24 2,4,6-Trinitrotoluene	1	25.257	25.262	-0.005	265676	0.7028	0.7196	
25 PETN	2	26.217	26.215	0.002	951206	7.00	7.35	

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

**Reagents:**

8330IntermStk_00070	Amount Added: 70.00	Units: uL
8330_ADDs_00031	Amount Added: 35.00	Units: uL

Report Date: 03-Mar-2022 12:49:14

Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020012.D

Injection Date: 02-Mar-2022 22:32:16

Instrument ID: CHHPLC\_X5

Operator ID: JZ

Lims ID: IC INT/ADD 7

Worklist Smp#: 12

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

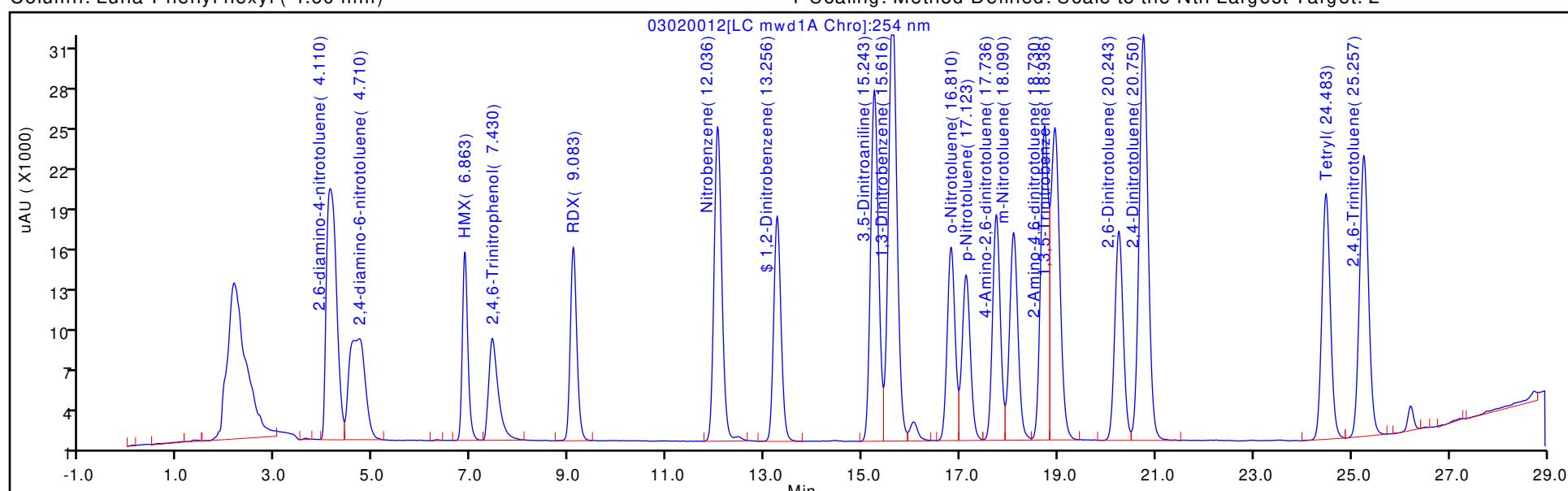
ALS Bottle#: 12

Method: 8330\_X5\_Luna

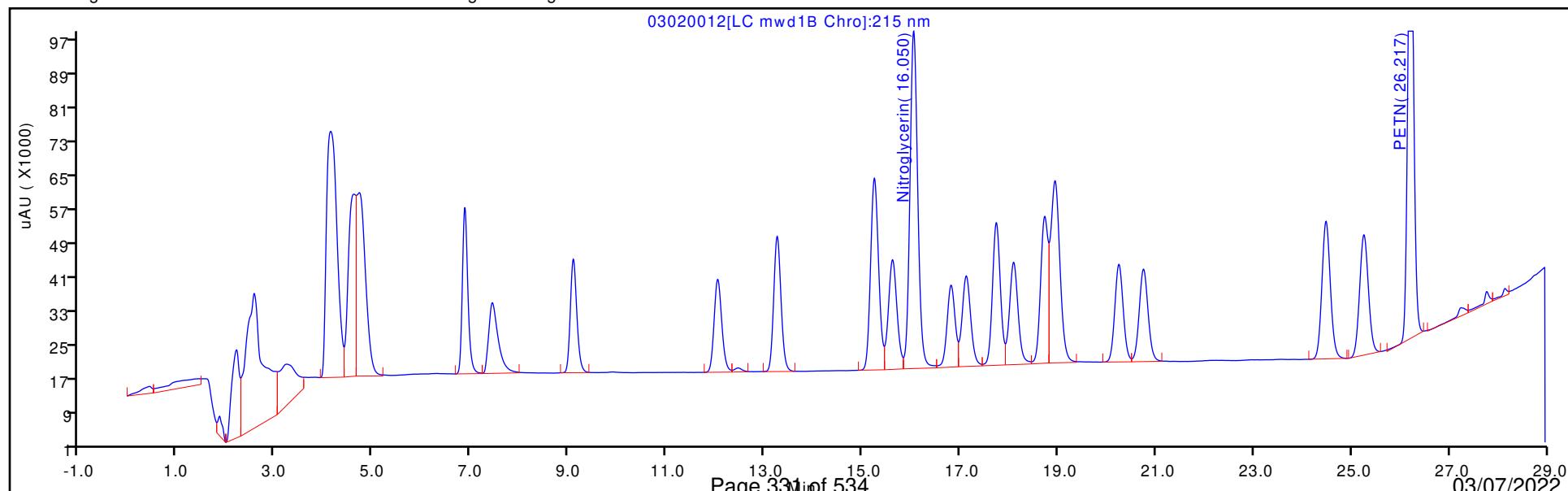
Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020013.D  
 Lims ID: IC INT/ADD 6  
 Client ID:  
 Sample Type: IC Calib Level: 6  
 Inject. Date: 02-Mar-2022 23:07:23 ALS Bottle#: 13 Worklist Smp#: 13  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Sample Info: IC INT/ADD 6  
 Misc. Info.: 280-0108949-013  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Sublist: chrom-8330\_X5\_Luna\*sub1  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 03-Mar-2022 12:49:14 Calib Date: 03-Mar-2022 07:19:48  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020027.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm) Det: LC mwd1A, 254 nm  
 Process Host: CTX1618

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.127	4.142	-0.015	147662	0.4000	0.3633	
2 2,4-diamino-6-nitrotoluene	1	4.700	4.669	0.031	93419	0.4000	0.4055	
5 HMX	1	6.880	6.889	-0.009	62819	0.4000	0.3781	
7 2,4,6-Trinitrophenol	1	7.527	7.602	-0.075	58358	0.4000	0.4392	
8 RDX	1	9.100	9.115	-0.015	76711	0.4000	0.3947	
9 Nitrobenzene	1	12.060	12.062	-0.002	148639	0.4016	0.4036	
\$ 10 1,2-Dinitrobenzene	1	13.274	13.282	-0.008	99804	0.4000	0.3996	
11 3,5-Dinitroaniline	1	15.260	15.269	-0.009	157805	0.4000	0.3835	
12 1,3-Dinitrobenzene	1	15.627	15.635	-0.008	225815	0.4008	0.3950	
13 Nitroglycerin	2	16.054	16.055	-0.001	519683	4.00	4.24	
14 o-Nitrotoluene	1	16.820	16.822	-0.002	93064	0.4000	0.3966	
16 p-Nitrotoluene	1	17.127	17.129	-0.002	83857	0.4008	0.3978	
17 4-Amino-2,6-dinitrotoluene	1	17.747	17.755	-0.008	107043	0.4004	0.4008	
18 m-Nitrotoluene	1	18.100	18.102	-0.002	106661	0.4004	0.4017	
19 2-Amino-4,6-dinitrotoluene	1	18.740	18.742	-0.002	146764	0.4016	0.4071	
20 1,3,5-Trinitrobenzene	1	18.947	18.949	-0.002	170012	0.4008	0.4092	
21 2,6-Dinitrotoluene	1	20.254	20.255	-0.001	106362	0.4016	0.4004	
22 2,4-Dinitrotoluene	1	20.760	20.762	-0.002	220828	0.4016	0.3959	
23 Tetryl	1	24.494	24.489	0.005	126546	0.4008	0.3698	
24 2,4,6-Trinitrotoluene	1	25.267	25.262	0.005	151235	0.4016	0.4097	
25 PETN	2	26.220	26.215	0.005	544987	4.00	4.21	

**Reagents:**

8330IntermStk_00070	Amount Added: 40.00	Units: uL
8330_ADDs_00031	Amount Added: 20.00	Units: uL

Report Date: 03-Mar-2022 12:49:14

Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020013.D

Injection Date: 02-Mar-2022 23:07:23

Instrument ID: CHHPLC\_X5

Operator ID: JZ

Lims ID: IC INT/ADD 6

Worklist Smp#: 13

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

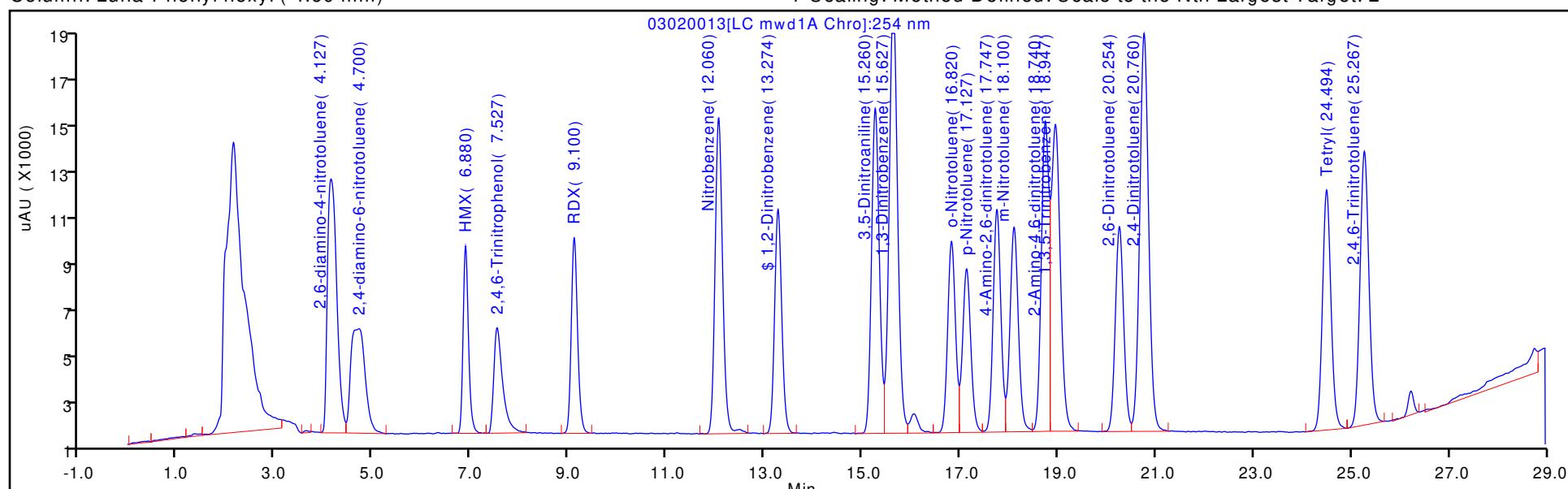
ALS Bottle#: 13

Method: 8330\_X5\_Luna

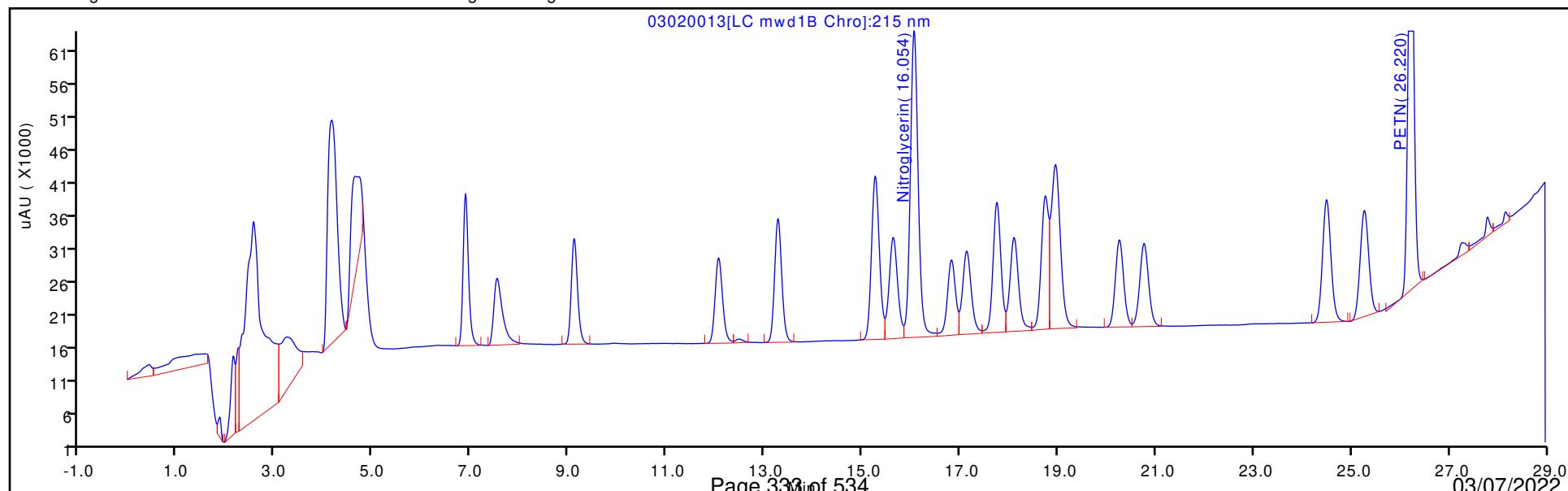
Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



**Eurofins Denver**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020014.D  
 Lims ID: IC INT/ADD 5  
 Client ID:  
 Sample Type: IC Calib Level: 5  
 Inject. Date: 02-Mar-2022 23:42:39 ALS Bottle#: 14 Worklist Smp#: 14  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: IC INT/ADD 5  
 Misc. Info.: 280-0108949-014  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Sublist: chrom-8330\_X5\_Luna\*sub1  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 03-Mar-2022 12:49:15 Calib Date: 03-Mar-2022 07:19:48  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020027.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm) Det: LC mwd1A, 254 nm  
 Process Host: CTX1618

First Level Reviewer: zhangji Date: 03-Mar-2022 12:06:29

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.142	4.142	0.000	96596	0.2500	0.2377	
2 2,4-diamino-6-nitrotoluene	1	4.669	4.669	0.000	59944	0.2500	0.2576	
5 HMX	1	6.889	6.889	0.000	38318	0.2500	0.2306	
7 2,4,6-Trinitrophenol	1	7.602	7.602	0.000	34288	0.2500	0.2580	
8 RDX	1	9.115	9.115	0.000	46417	0.2500	0.2389	
9 Nitrobenzene	1	12.062	12.062	0.000	90246	0.2510	0.2450	
\$ 10 1,2-Dinitrobenzene	1	13.282	13.282	0.000	61198	0.2500	0.2450	
11 3,5-Dinitroaniline	1	15.269	15.269	0.000	102787	0.2500	0.2497	
12 1,3-Dinitrobenzene	1	15.635	15.635	0.000	136486	0.2505	0.2388	
13 Nitroglycerin	2	16.055	16.055	0.000	309657	2.50	2.53	
14 o-Nitrotoluene	1	16.822	16.822	0.000	56221	0.2500	0.2396	
16 p-Nitrotoluene	1	17.129	17.129	0.000	50555	0.2505	0.2398	
17 4-Amino-2,6-dinitrotoluene	1	17.755	17.755	0.000	64569	0.2503	0.2418	
18 m-Nitrotoluene	1	18.102	18.102	0.000	64150	0.2503	0.2419	
19 2-Amino-4,6-dinitrotoluene	1	18.742	18.742	0.000	88010	0.2510	0.2441	
20 1,3,5-Trinitrobenzene	1	18.949	18.949	0.000	102576	0.2505	0.2469	
21 2,6-Dinitrotoluene	1	20.255	20.255	0.000	64489	0.2510	0.2427	
22 2,4-Dinitrotoluene	1	20.762	20.762	0.000	139375	0.2510	0.2455	
23 Tetryl	1	24.489	24.489	0.000	77249	0.2505	0.2258	
24 2,4,6-Trinitrotoluene	1	25.262	25.262	0.000	91338	0.2510	0.2474	
25 PETN	2	26.215	26.215	0.000	329509	2.50	2.55	

### QC Flag Legend

Processing Flags

**Reagents:**

8330IntermStk_00070	Amount Added: 25.00	Units: uL
8330_ADDs_00031	Amount Added: 12.50	Units: uL

Report Date: 03-Mar-2022 12:49:15

Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020014.D

Injection Date: 02-Mar-2022 23:42:39

Instrument ID: CHHPLC\_X5

Operator ID: JZ

Lims ID: IC INT/ADD 5

Worklist Smp#: 14

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

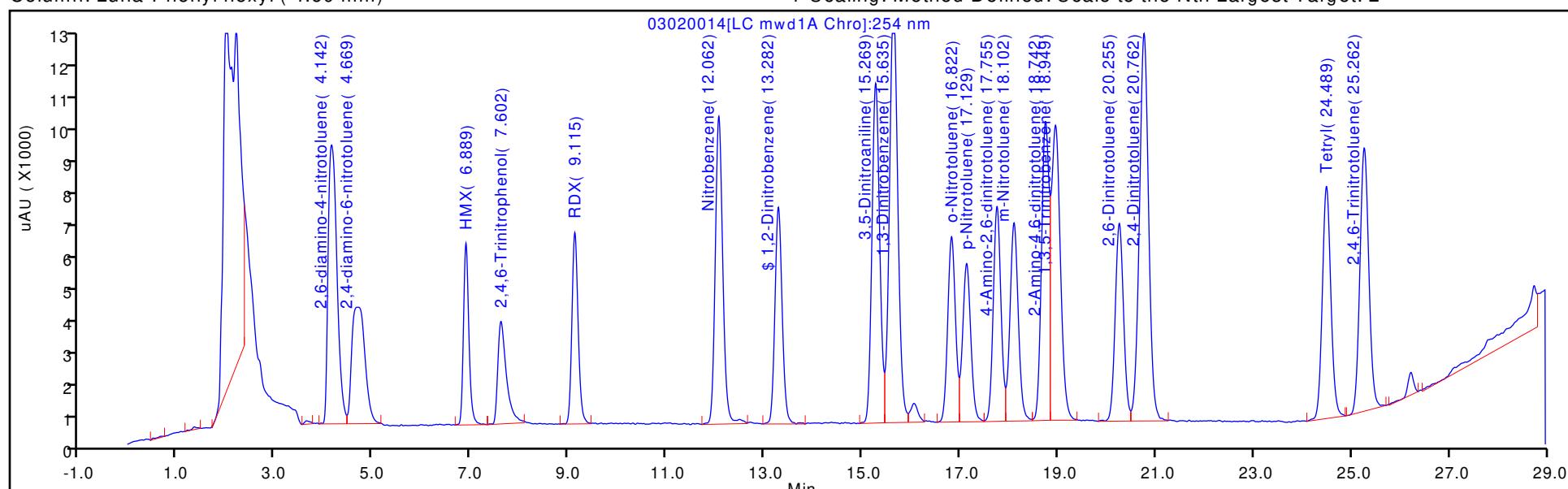
ALS Bottle#: 14

Method: 8330\_X5\_Luna

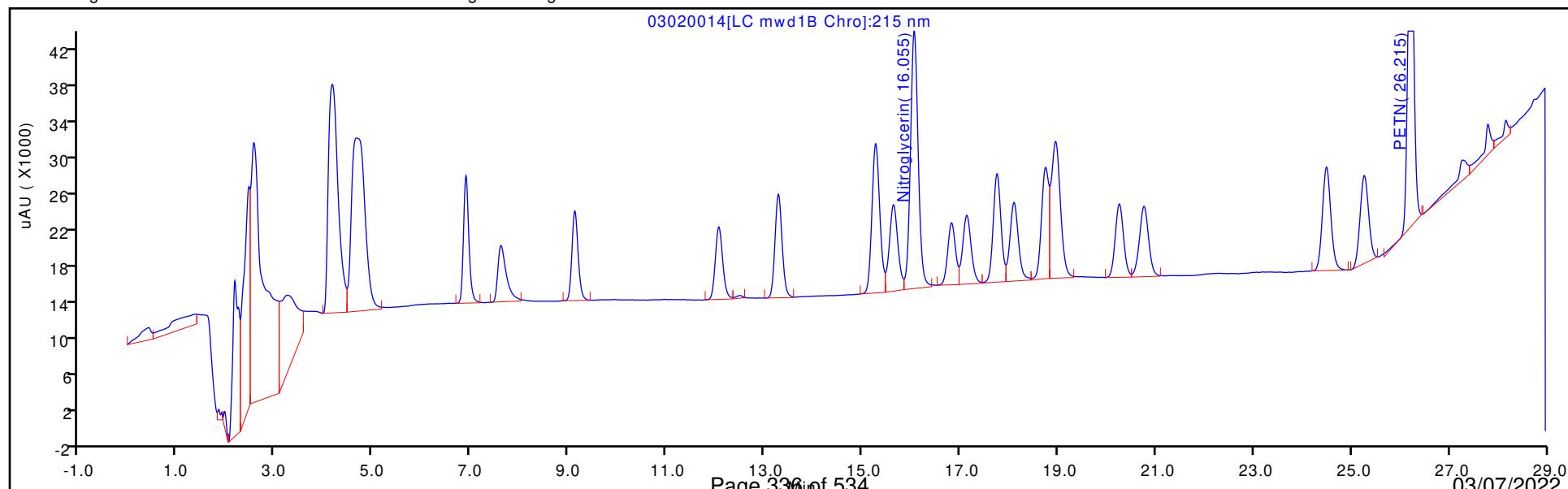
Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



**Eurofins Denver**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020015.D  
 Lims ID: IC INT/ADD 4  
 Client ID:  
 Sample Type: IC Calib Level: 4  
 Inject. Date: 03-Mar-2022 00:17:55 ALS Bottle#: 15 Worklist Smp#: 15  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: IC INT/ADD 4  
 Misc. Info.: 280-0108949-015  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Sublist: chrom-8330\_X5\_Luna\*sub1  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 03-Mar-2022 12:49:16 Calib Date: 03-Mar-2022 07:19:48  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020027.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm) Det: LC mwd1A, 254 nm  
 Process Host: CTX1618

First Level Reviewer: zhangji

Date:

03-Mar-2022 12:12:37

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.149	4.142	0.007	41030	0.1000	0.1009	
2 2,4-diamino-6-nitrotoluene	1	4.669	4.669	0.000	24932	0.1000	0.1028	
5 HMX	1	6.896	6.889	0.007	16109	0.1000	0.0970	
7 2,4,6-Trinitrophenol	1	7.696	7.602	0.094	14009	0.1000	0.1054	
8 RDX	1	9.129	9.115	0.014	19750	0.1000	0.1016	
9 Nitrobenzene	1	12.069	12.062	0.007	37271	0.1004	0.1012	
\$ 10 1,2-Dinitrobenzene	1	13.282	13.282	0.000	25499	0.1000	0.1021	
11 3,5-Dinitroaniline	1	15.276	15.269	0.007	42107	0.1000	0.1022	
12 1,3-Dinitrobenzene	1	15.642	15.635	0.007	59537	0.1002	0.1041	
13 Nitroglycerin	2	16.062	16.055	0.007	133241	1.00	1.09	
14 o-Nitrotoluene	1	16.829	16.822	0.007	23857	0.1000	0.1017	
16 p-Nitrotoluene	1	17.136	17.129	0.007	21625	0.1002	0.1026	
17 4-Amino-2,6-dinitrotoluene	1	17.756	17.755	0.001	27216	0.1001	0.1021	
18 m-Nitrotoluene	1	18.109	18.102	0.007	26978	0.1001	0.1021	
19 2-Amino-4,6-dinitrotoluene	1	18.749	18.742	0.007	37178	0.1004	0.1031	
20 1,3,5-Trinitrobenzene	1	18.956	18.949	0.007	42514	0.1002	0.1023	
21 2,6-Dinitrotoluene	1	20.256	20.255	0.001	26687	0.1004	0.1005	
22 2,4-Dinitrotoluene	1	20.756	20.762	-0.006	64187	0.1004	0.1067	
23 Tetryl	1	24.483	24.489	-0.006	33188	0.1002	0.0970	
24 2,4,6-Trinitrotoluene	1	25.256	25.262	-0.006	37205	0.1004	0.1008	
25 PETN	2	26.209	26.215	-0.006	134076	1.00	1.04	M

**QC Flag Legend**

Processing Flags

Review Flags

M - Manually Integrated

**Reagents:**

8330IntermStk_00070	Amount Added: 10.00	Units: uL
8330_ADDs_00031	Amount Added: 5.00	Units: uL

Report Date: 03-Mar-2022 12:49:16

Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020015.D

Injection Date: 03-Mar-2022 00:17:55

Instrument ID: CHHPLC\_X5

Operator ID: JZ

Lims ID: IC INT/ADD 4

Worklist Smp#: 15

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

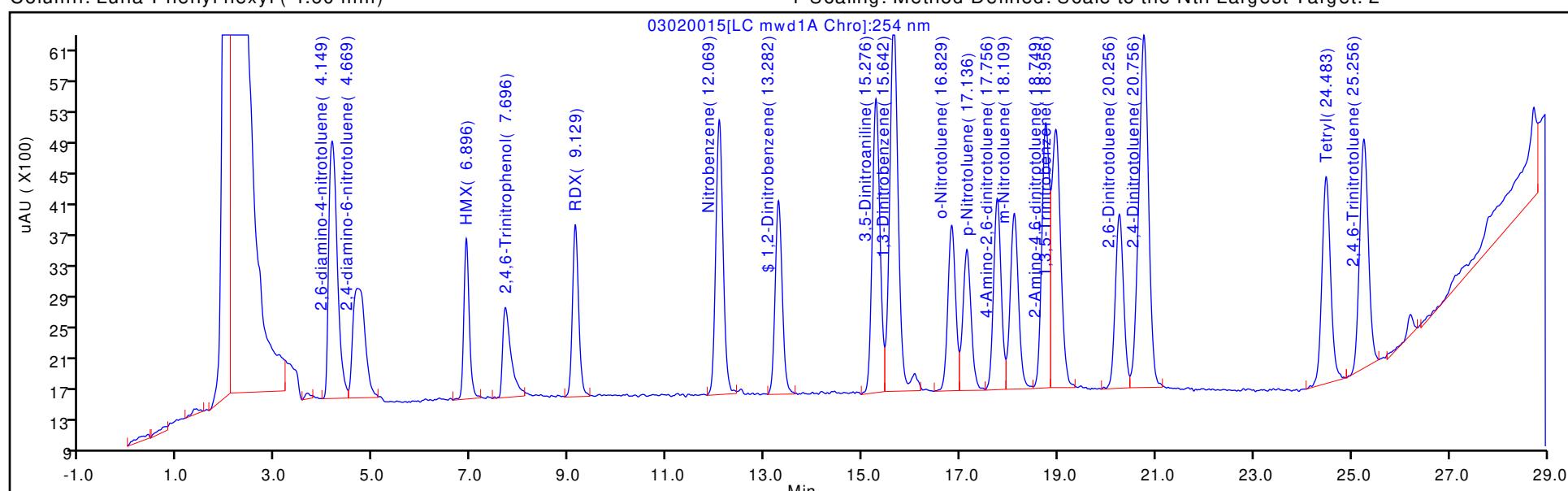
ALS Bottle#: 15

Method: 8330\_X5\_Luna

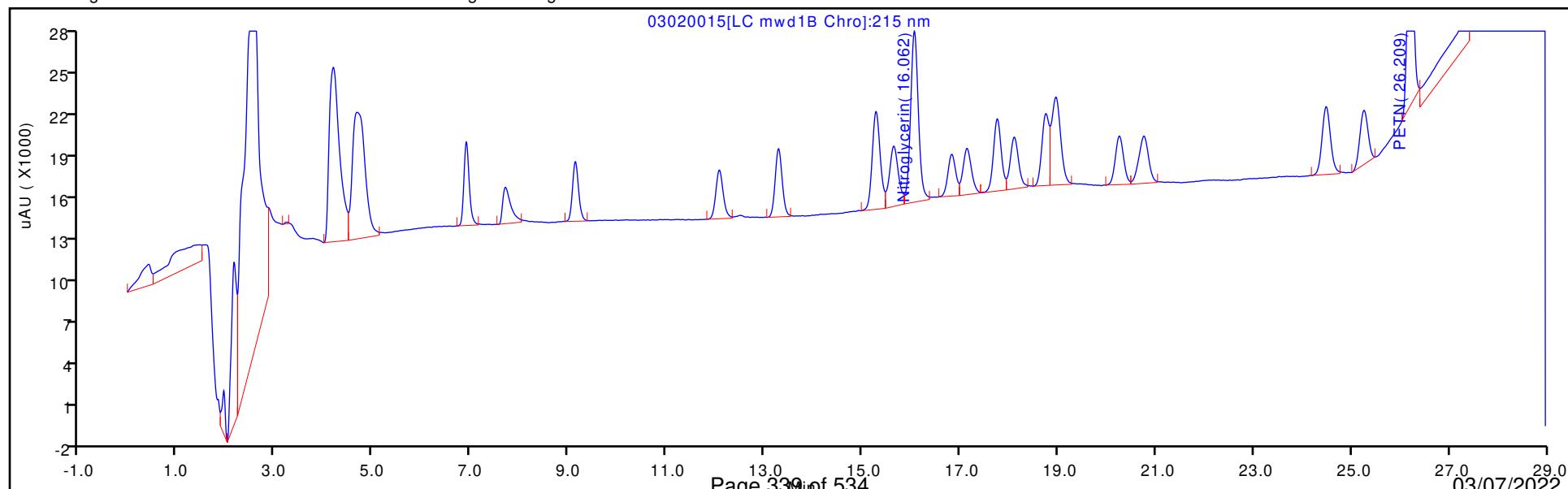
Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



## Eurofins Denver

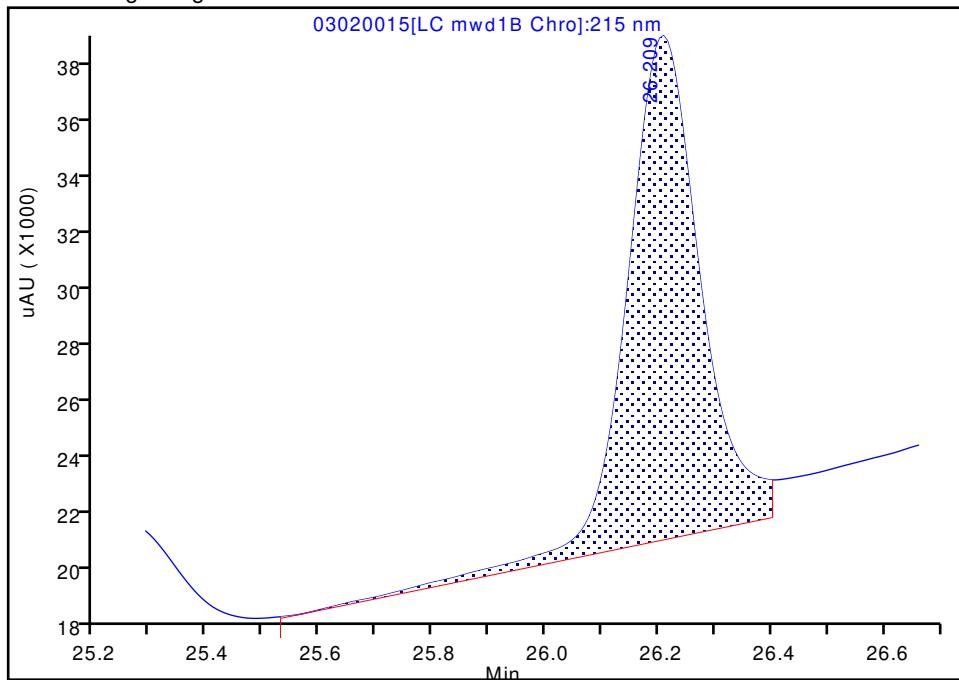
Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020015.D  
 Injection Date: 03-Mar-2022 00:17:55 Instrument ID: CHHPLC\_X5  
 Lims ID: IC INT/ADD 4  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 15 Worklist Smp#: 15  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X5\_Luna Limit Group: GCSV - 8330  
 Column: Detector LC mwd1B, 215 nm

## 25 PETN, CAS: 78-11-5

Signal: 1

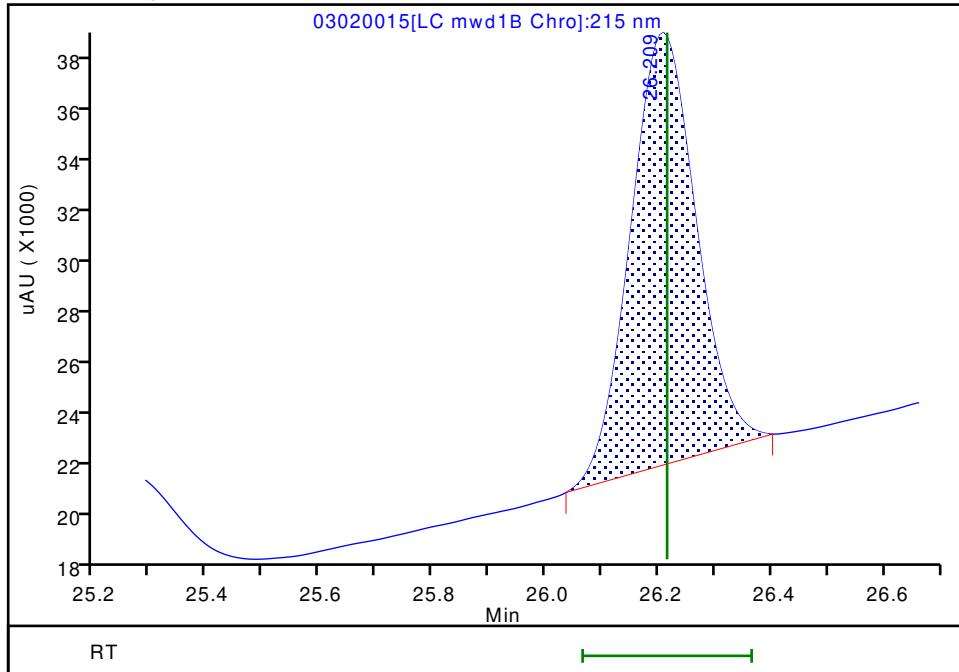
RT: 26.21  
 Area: 159234  
 Amount: 1.166681  
 Amount Units: ug/ml

## Processing Integration Results



## Manual Integration Results

RT: 26.21  
 Area: 134076  
 Amount: 1.036703  
 Amount Units: ug/ml



Reviewer: zhangji, 03-Mar-2022 12:12:35

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

**Eurofins Denver**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020016.D  
 Lims ID: IC INT/ADD 3  
 Client ID:  
 Sample Type: IC Calib Level: 3  
 Inject. Date: 03-Mar-2022 00:53:03 ALS Bottle#: 16 Worklist Smp#: 16  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: IC INT/ADD 3  
 Misc. Info.: 280-0108949-016  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Sublist: chrom-8330\_X5\_Luna\*sub1  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 03-Mar-2022 12:49:16 Calib Date: 03-Mar-2022 07:19:48  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020027.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm) Det: LC mwd1A, 254 nm  
 Process Host: CTX1618

First Level Reviewer: zhangji Date: 03-Mar-2022 12:09:56

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.154	4.142	0.012	21526	0.0500	0.0530	
2 2,4-diamino-6-nitrotoluene	1	4.674	4.669	0.005	12869	0.0500	0.0495	
5 HMX	1	6.894	6.889	0.005	8053	0.0500	0.0485	
7 2,4,6-Trinitrophenol	1	7.767	7.602	0.165	6356	0.0500	0.0478	
8 RDX	1	9.120	9.115	0.005	10028	0.0500	0.0516	
9 Nitrobenzene	1	12.073	12.062	0.011	19149	0.0502	0.0520	
\$ 10 1,2-Dinitrobenzene	1	13.287	13.282	0.005	12864	0.0500	0.0515	
11 3,5-Dinitroaniline	1	15.287	15.269	0.018	20966	0.0500	0.0508	
12 1,3-Dinitrobenzene	1	15.647	15.635	0.012	30181	0.0501	0.0528	
13 Nitroglycerin	2	16.073	16.055	0.018	59894	0.5000	0.4889	M
14 o-Nitrotoluene	1	16.833	16.822	0.011	12057	0.0500	0.0514	
16 p-Nitrotoluene	1	17.147	17.129	0.018	10595	0.0501	0.0503	
17 4-Amino-2,6-dinitrotoluene	1	17.773	17.755	0.018	13425	0.0501	0.0505	
18 m-Nitrotoluene	1	18.120	18.102	0.018	13387	0.0501	0.0510	
19 2-Amino-4,6-dinitrotoluene	1	18.773	18.742	0.031	18562	0.0502	0.0515	
20 1,3,5-Trinitrobenzene	1	18.973	18.949	0.024	21339	0.0501	0.0514	
21 2,6-Dinitrotoluene	1	20.267	20.255	0.012	13757	0.0502	0.0518	
22 2,4-Dinitrotoluene	1	20.767	20.762	0.005	33918	0.0502	0.0508	
23 Tetryl	1	24.500	24.489	0.011	18110	0.0501	0.0529	
24 2,4,6-Trinitrotoluene	1	25.274	25.262	0.012	18556	0.0502	0.0503	
25 PETN	2	26.220	26.215	0.005	67082	0.5000	0.5187	M

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

**Reagents:**

8330\TermStk_00070	Amount Added: 5.00	Units: uL
8330_ADDs_00031	Amount Added: 2.50	Units: uL

Report Date: 03-Mar-2022 12:49:17

Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020016.D

Injection Date: 03-Mar-2022 00:53:03

Instrument ID: CHHPLC\_X5

Operator ID: JZ

Lims ID: IC INT/ADD 3

Worklist Smp#: 16

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

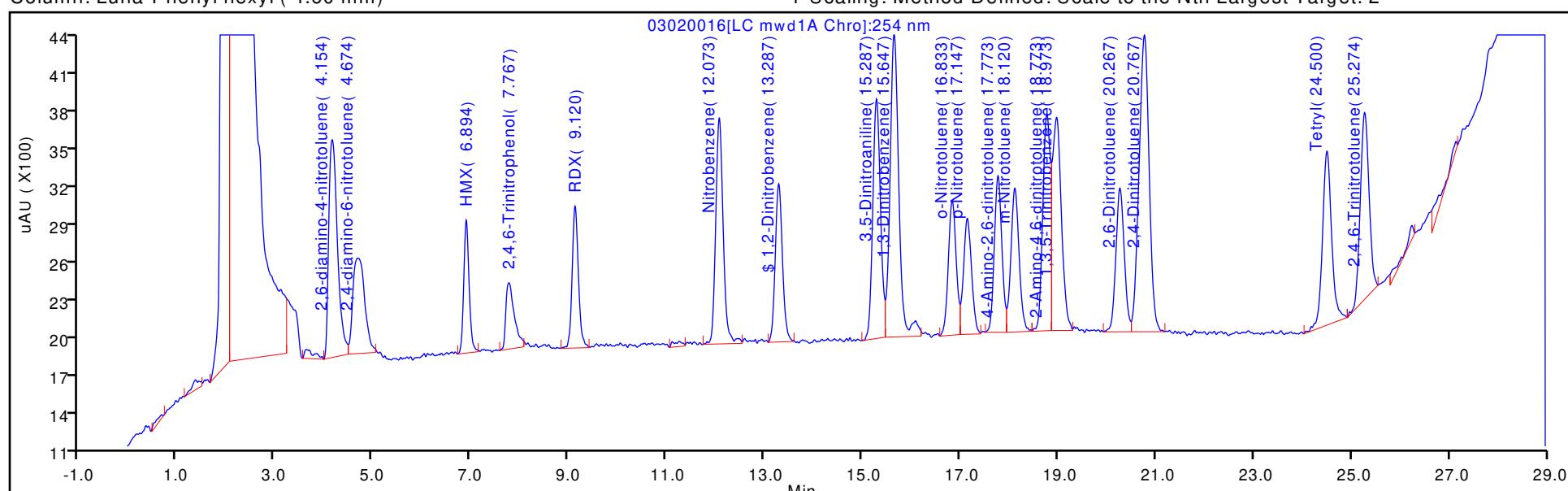
ALS Bottle#: 16

Method: 8330\_X5\_Luna

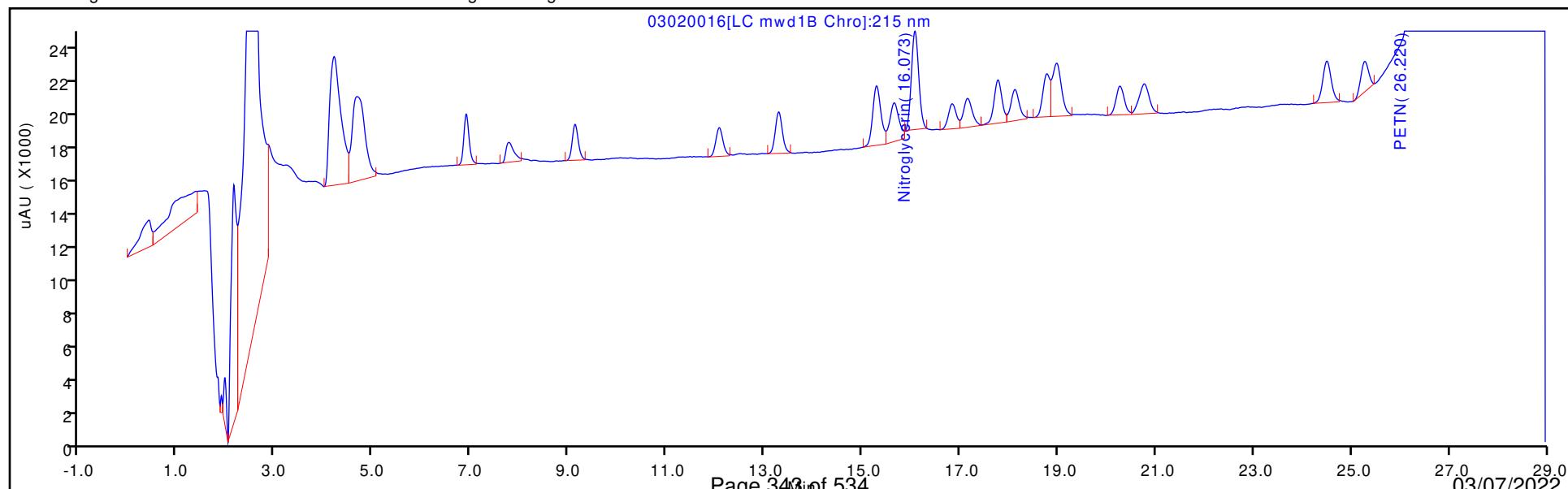
Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



## Eurofins Denver

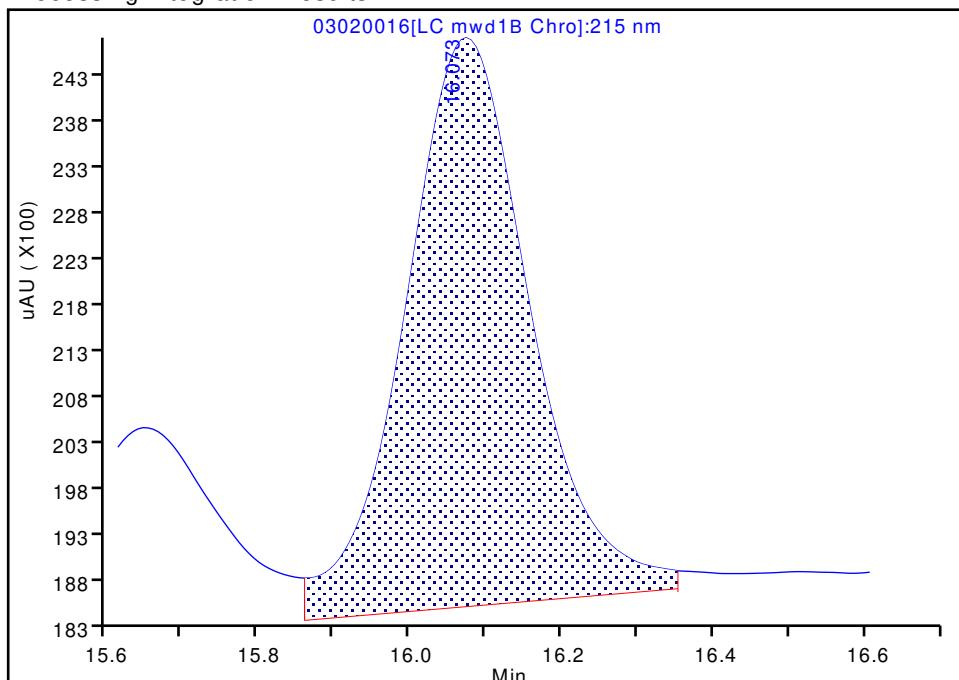
Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020016.D  
 Injection Date: 03-Mar-2022 00:53:03 Instrument ID: CHHPLC\_X5  
 Lims ID: IC INT/ADD 3  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 16 Worklist Smp#: 16  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X5\_Luna Limit Group: GCSV - 8330  
 Column: Detector LC mwd1B, 215 nm

**13 Nitroglycerin, CAS: 55-63-0**

Signal: 1

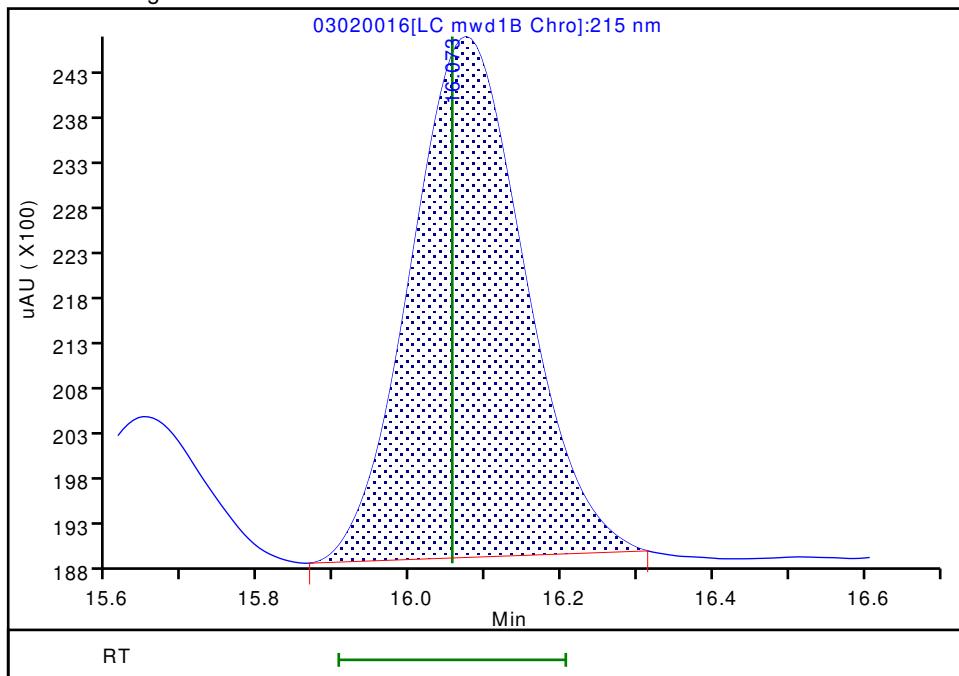
RT: 16.07  
 Area: 70358  
 Amount: 0.563571  
 Amount Units: ug/ml

## Processing Integration Results



RT: 16.07  
 Area: 59894  
 Amount: 0.488860  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: zhangji, 03-Mar-2022 12:12:24

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

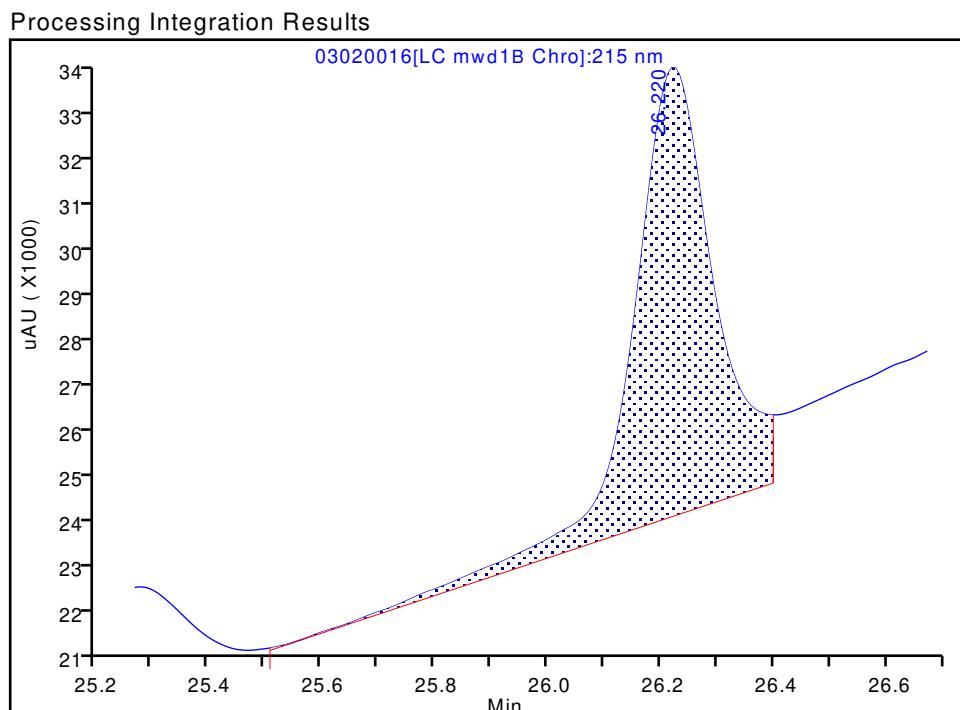
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020016.D  
 Injection Date: 03-Mar-2022 00:53:03 Instrument ID: CHHPLC\_X5  
 Lims ID: IC INT/ADD 3  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 16 Worklist Smp#: 16  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X5\_Luna Limit Group: GCSV - 8330  
 Column: Detector LC mwd1B, 215 nm

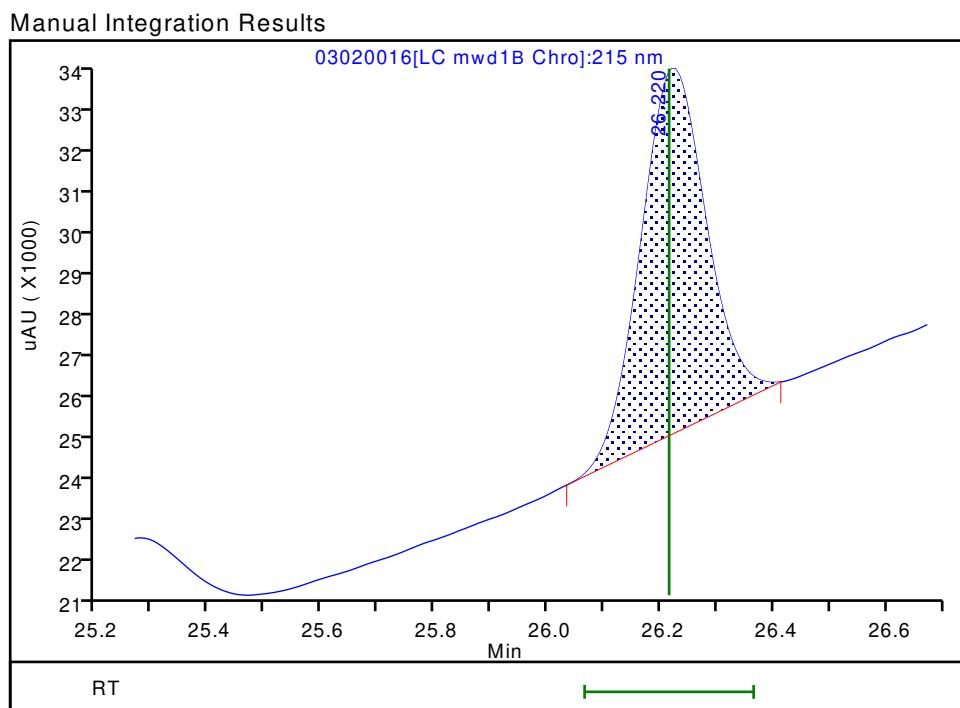
**25 PETN, CAS: 78-11-5**

Signal: 1

RT: 26.22  
 Area: 91339  
 Amount: 0.654475  
 Amount Units: ug/ml



RT: 26.22  
 Area: 67082  
 Amount: 0.518692  
 Amount Units: ug/ml



Reviewer: zhangji, 03-Mar-2022 12:12:20

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

**Eurofins Denver**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020017.D  
 Lims ID: IC INT/ADD 2  
 Client ID:  
 Sample Type: IC Calib Level: 2  
 Inject. Date: 03-Mar-2022 01:28:22 ALS Bottle#: 17 Worklist Smp#: 17  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: IC INT/ADD 2  
 Misc. Info.: 280-0108949-017  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Sublist: chrom-8330\_X5\_Luna\*sub1  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 03-Mar-2022 12:49:17 Calib Date: 03-Mar-2022 07:19:48  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020027.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm) Det: LC mwd1A, 254 nm  
 Process Host: CTX1618

First Level Reviewer: zhangji

Date:

03-Mar-2022 12:10:52

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.169	4.142	0.027	9145	0.0200	0.0225	
2 2,4-diamino-6-nitrotoluene	1	4.716	4.669	0.047	5618	0.0200	0.0175	
5 HMX	1	6.896	6.889	0.007	3127	0.0200	0.0188	
7 2,4,6-Trinitrophenol	1	7.863	7.602	0.261	2301	0.0200	0.0173	
8 RDX	1	9.129	9.115	0.014	3719	0.0200	0.0191	
9 Nitrobenzene	1	12.069	12.062	0.007	6686	0.0201	0.0182	
\$ 10 1,2-Dinitrobenzene	1	13.282	13.282	0.000	4809	0.0200	0.0193	
11 3,5-Dinitroaniline	1	15.282	15.269	0.013	7621	0.0200	0.0183	
12 1,3-Dinitrobenzene	1	15.642	15.635	0.007	10643	0.0200	0.0186	
13 Nitroglycerin	2	16.062	16.055	0.007	21750	0.2000	0.1775	M
14 o-Nitrotoluene	1	16.829	16.822	0.007	4607	0.0200	0.0196	
16 p-Nitrotoluene	1	17.129	17.129	0.000	4078	0.0200	0.0193	
17 4-Amino-2,6-dinitrotoluene	1	17.756	17.755	0.001	5271	0.0200	0.0200	
18 m-Nitrotoluene	1	18.116	18.102	0.014	4805	0.0200	0.0188	
19 2-Amino-4,6-dinitrotoluene	1	18.762	18.742	0.020	6899	0.0201	0.0191	M
20 1,3,5-Trinitrobenzene	1	18.956	18.949	0.007	6970	0.0200	0.0168	M
21 2,6-Dinitrotoluene	1	20.262	20.255	0.007	5233	0.0201	0.0197	
22 2,4-Dinitrotoluene	1	20.716	20.762	-0.046	16863	0.0201	0.0193	
23 Tetryl	1	24.496	24.489	0.007	6933	0.0200	0.0203	
24 2,4,6-Trinitrotoluene	1	25.269	25.262	0.007	6507	0.0201	0.0176	
25 PETN	2	26.223	26.215	0.008	21923	0.2000	0.1695	M

**QC Flag Legend**

Processing Flags

Review Flags

M - Manually Integrated

**Reagents:**

8330\TermStk_00070	Amount Added: 2.00	Units: uL
8330_ADDs_00031	Amount Added: 1.00	Units: uL

Report Date: 03-Mar-2022 12:49:17

Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020017.D

Injection Date: 03-Mar-2022 01:28:22

Instrument ID: CHHPLC\_X5

Operator ID: JZ

Lims ID: IC INT/ADD 2

Worklist Smp#: 17

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

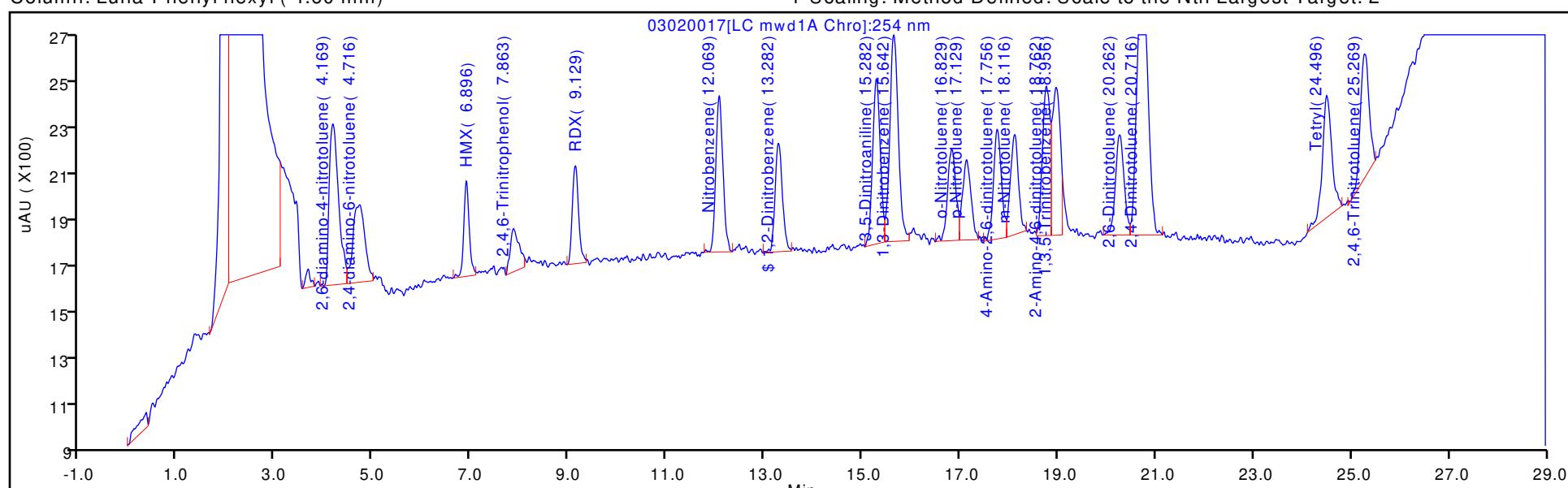
ALS Bottle#: 17

Method: 8330\_X5\_Luna

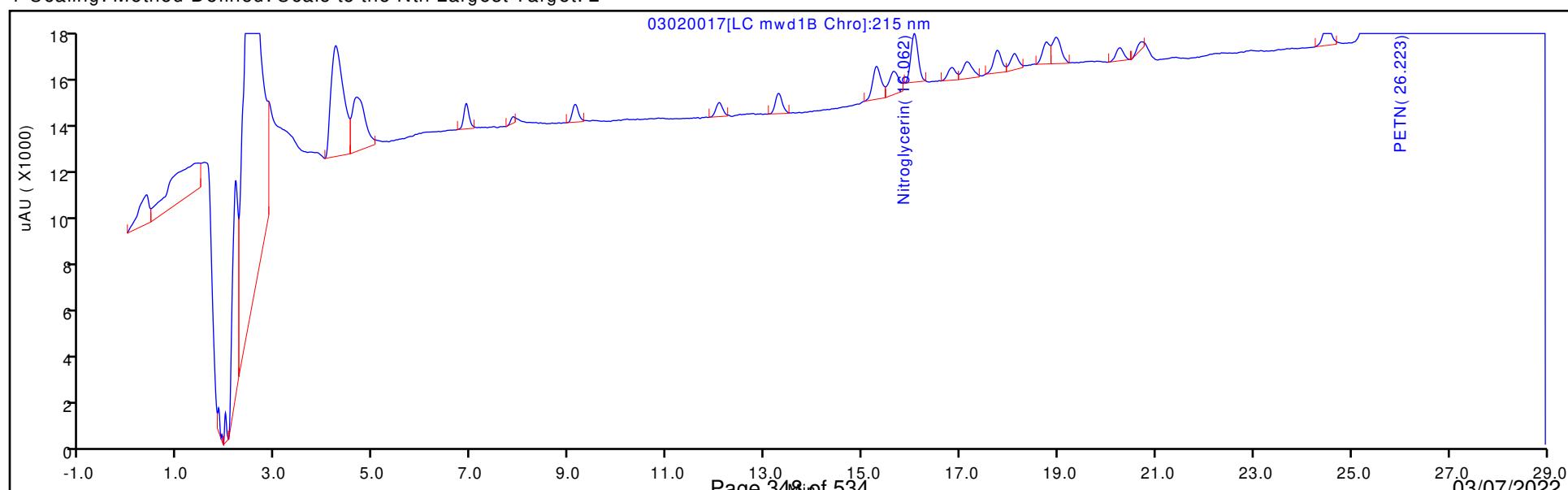
Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



## Eurofins Denver

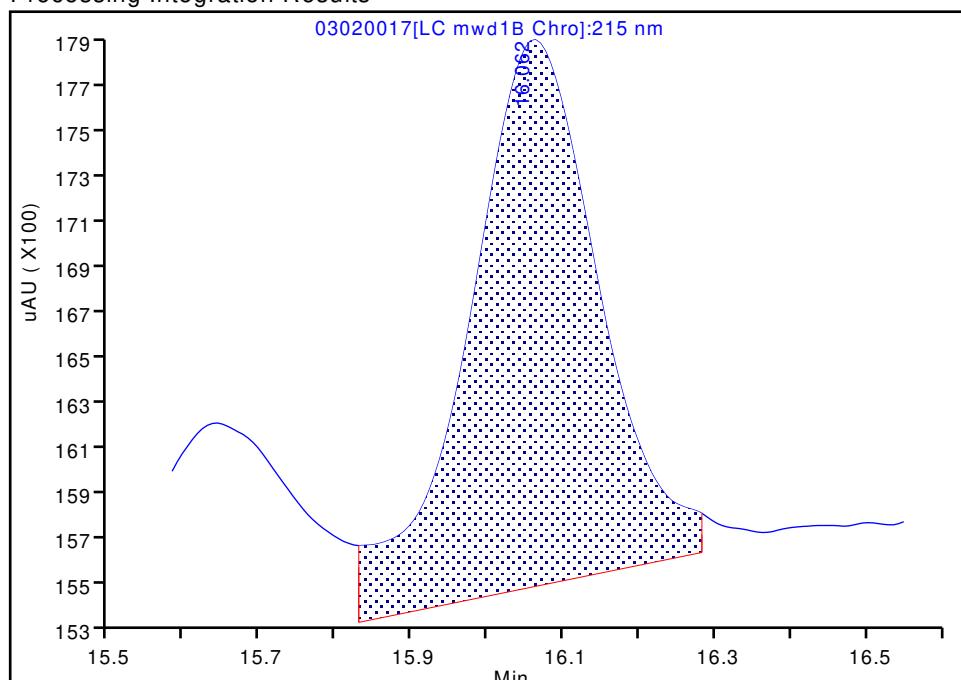
Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020017.D  
 Injection Date: 03-Mar-2022 01:28:22 Instrument ID: CHHPLC\_X5  
 Lims ID: IC INT/ADD 2  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 17 Worklist Smp#: 17  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X5\_Luna Limit Group: GCSV - 8330  
 Column: Detector LC mwd1B, 215 nm

**13 Nitroglycerin, CAS: 55-63-0**

Signal: 1

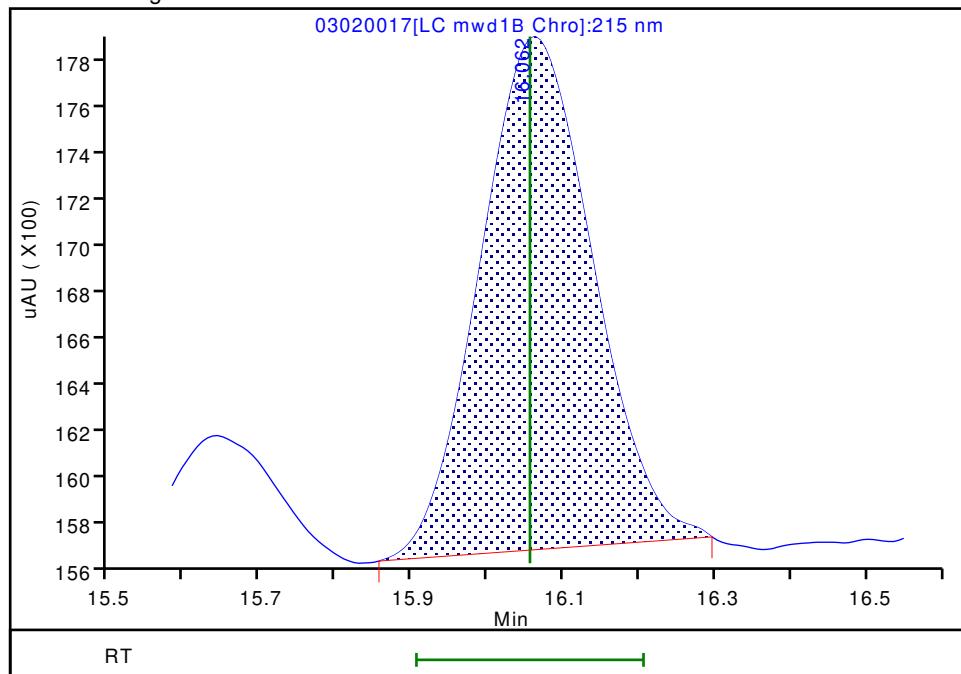
RT: 16.06  
 Area: 28042  
 Amount: 0.218500  
 Amount Units: ug/ml

## Processing Integration Results



RT: 16.06  
 Area: 21750  
 Amount: 0.177525  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: zhangji, 03-Mar-2022 12:12:09

Audit Action: Manually Integrated

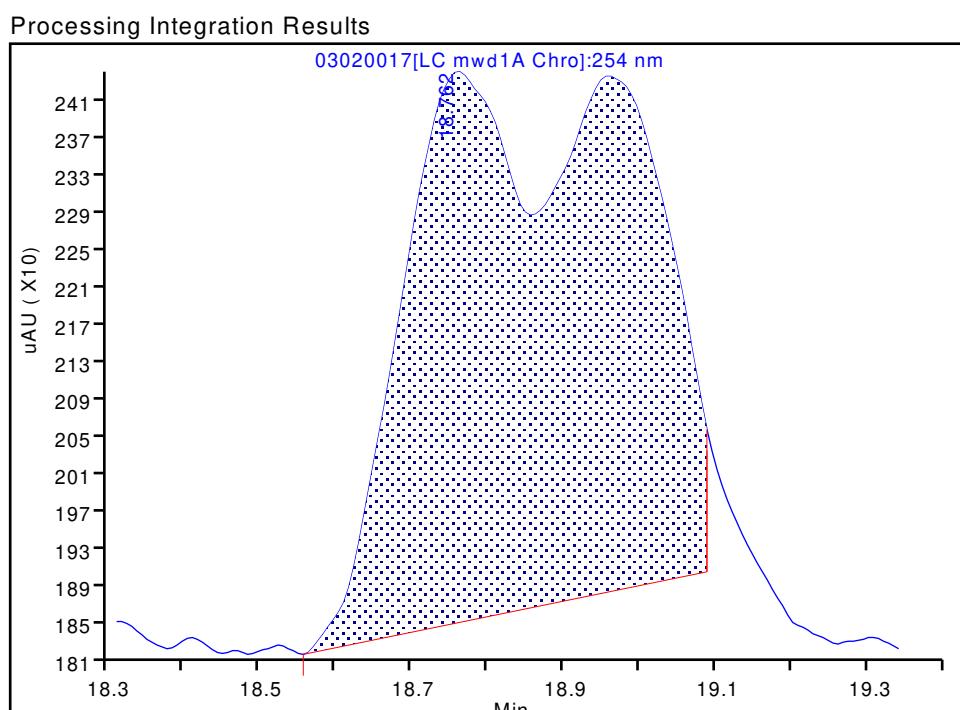
Audit Reason: Baseline Smoothing

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020017.D  
 Injection Date: 03-Mar-2022 01:28:22 Instrument ID: CHHPLC\_X5  
 Lims ID: IC INT/ADD 2  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 17 Worklist Smp#: 17  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X5\_Luna Limit Group: GCSV - 8330  
 Column: Luna-Phenyl hexyl ( 4.60 mm) Detector LC mwd1A, 254 nm

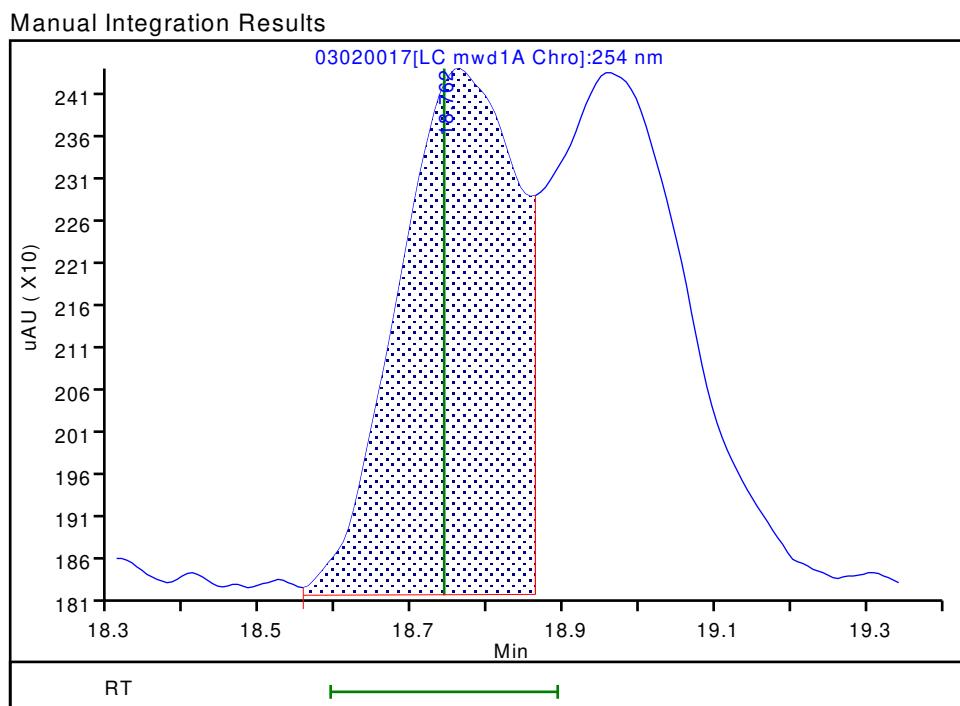
### 19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

RT: 18.76  
 Area: 12210  
 Amount: 0.025658  
 Amount Units: ug/ml



RT: 18.76  
 Area: 6899  
 Amount: 0.019135  
 Amount Units: ug/ml



Reviewer: zhangji, 03-Mar-2022 12:10:14

Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

## Eurofins Denver

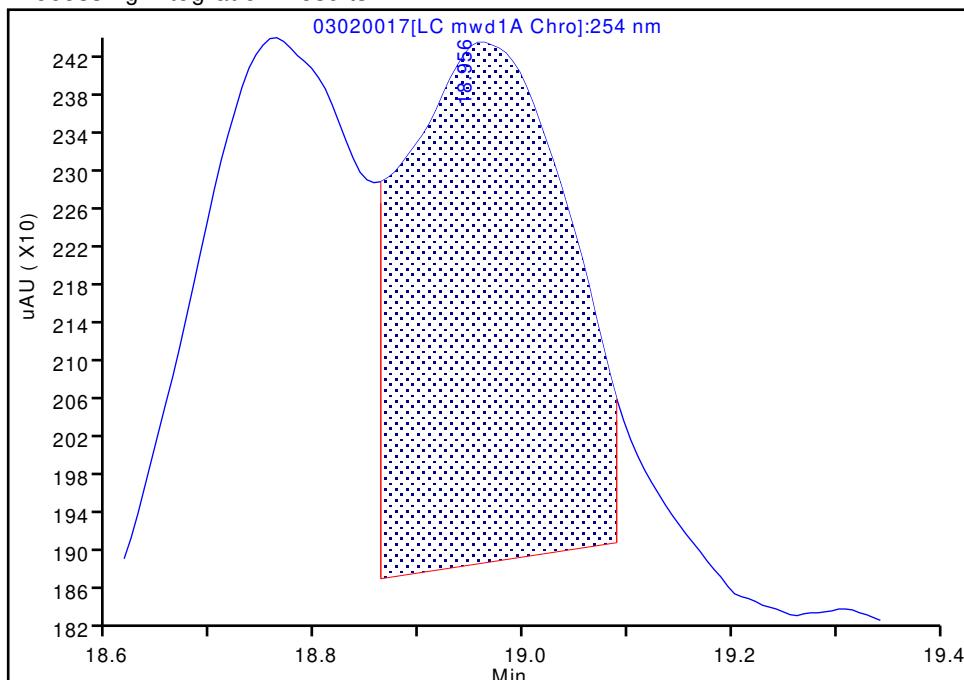
Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020017.D  
 Injection Date: 03-Mar-2022 01:28:22 Instrument ID: CHHPLC\_X5  
 Lims ID: IC INT/ADD 2  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 17 Worklist Smp#: 17  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X5\_Luna Limit Group: GCSV - 8330  
 Column: Luna-Phenyl hexyl ( 4.60 mm) Detector: LC mwd1A, 254 nm

**20 1,3,5-Trinitrobenzene, CAS: 99-35-4**

Signal: 1

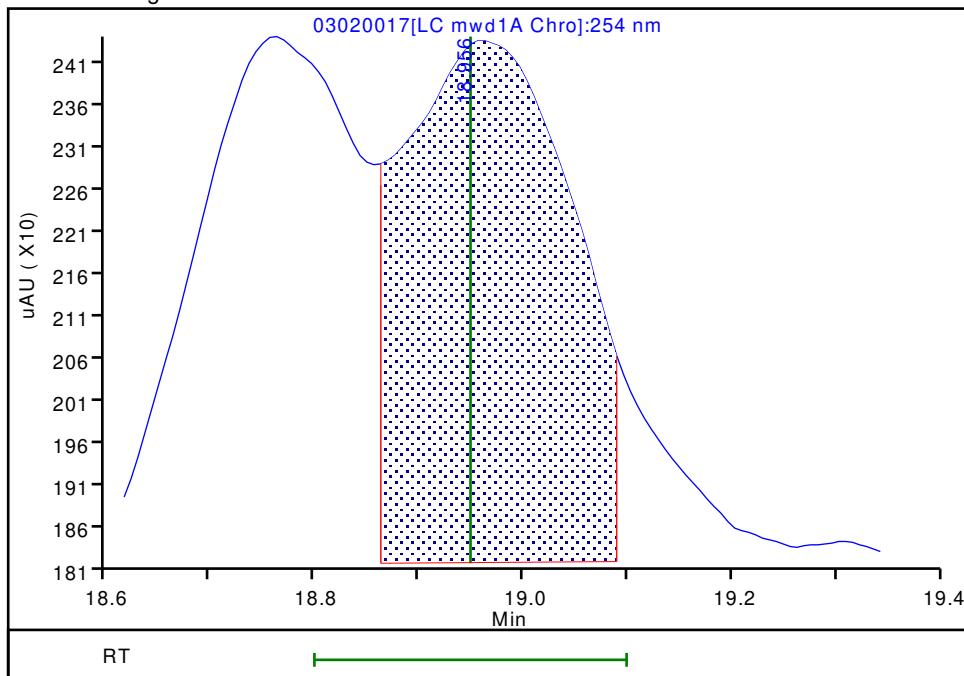
RT: 18.96  
 Area: 5936  
 Amount: 0.014418  
 Amount Units: ug/ml

## Processing Integration Results



RT: 18.96  
 Area: 6970  
 Amount: 0.016776  
 Amount Units: ug/ml

## Manual Integration Results



Reviewer: zhangji, 03-Mar-2022 12:10:14

Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

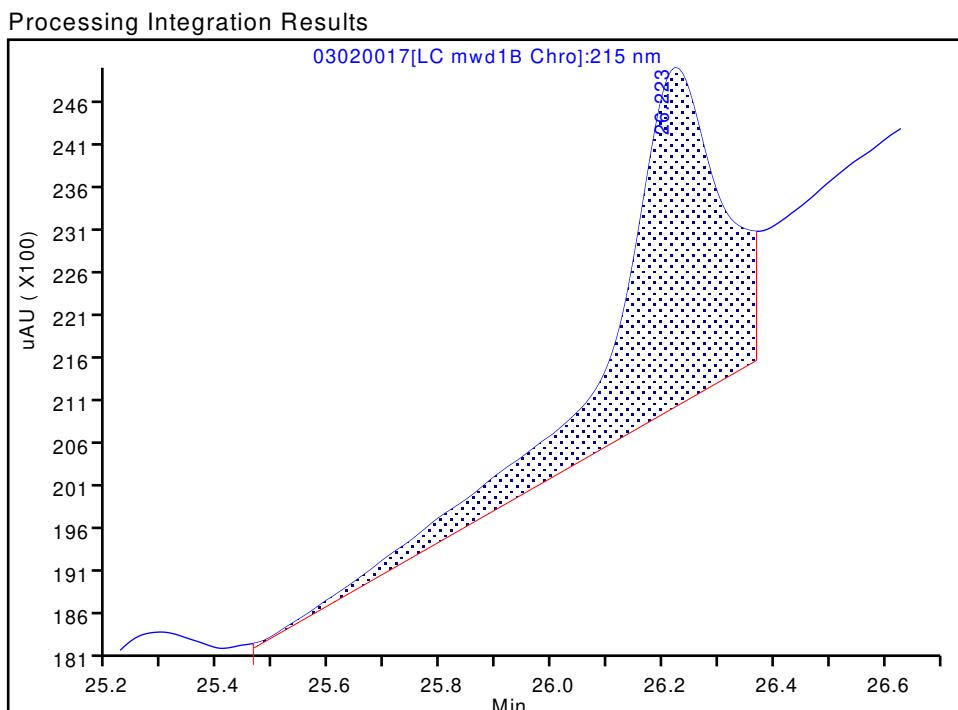
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020017.D  
 Injection Date: 03-Mar-2022 01:28:22 Instrument ID: CHHPLC\_X5  
 Lims ID: IC INT/ADD 2  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 17 Worklist Smp#: 17  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X5\_Luna Limit Group: GCSV - 8330  
 Column: Detector LC mwd1B, 215 nm

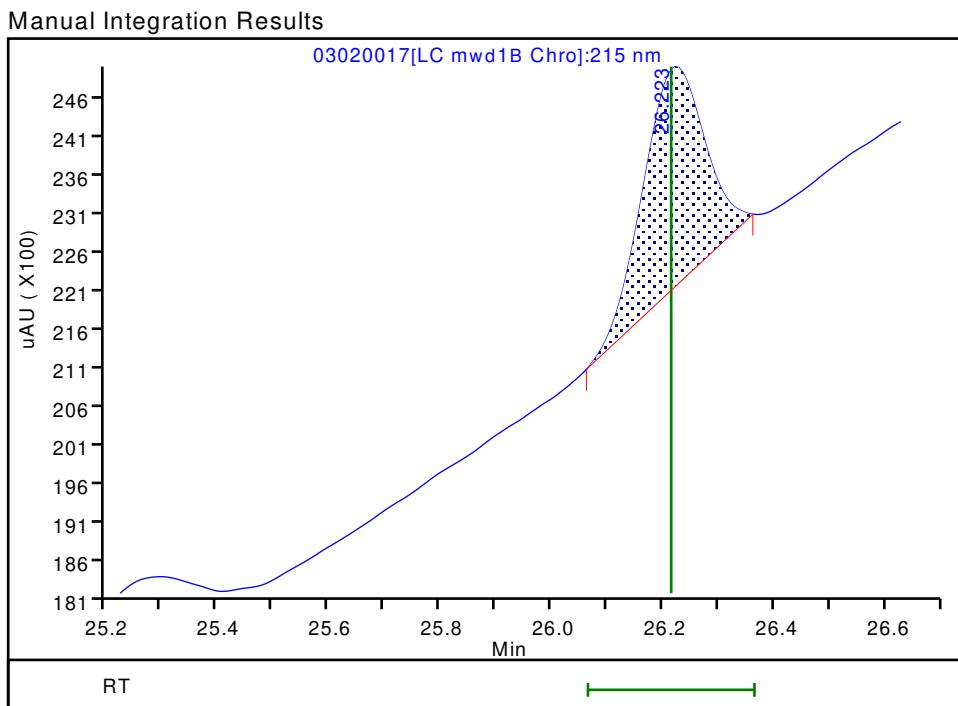
**25 PETN, CAS: 78-11-5**

Signal: 1

RT: 26.22  
 Area: 51157  
 Amount: 0.330478  
 Amount Units: ug/ml



RT: 26.22  
 Area: 21923  
 Amount: 0.169513  
 Amount Units: ug/ml



Reviewer: zhangji, 03-Mar-2022 12:12:13

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

**Eurofins Denver**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020018.D  
 Lims ID: IC INT/ADD 1  
 Client ID:  
 Sample Type: IC Calib Level: 1  
 Inject. Date: 03-Mar-2022 02:03:29 ALS Bottle#: 18 Worklist Smp#: 18  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: IC INT/ADD 1  
 Misc. Info.: 280-0108949-018  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Sublist: chrom-8330\_X5\_Luna\*sub1  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 03-Mar-2022 12:49:18 Calib Date: 03-Mar-2022 07:19:48  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020027.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm) Det: LC mwd1A, 254 nm  
 Process Host: CTX1618

First Level Reviewer: zhangji

Date:

03-Mar-2022 12:07:10

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.174	4.142	0.032	6283	0.0100	0.0155	
2 2,4-diamino-6-nitrotoluene	1	4.714	4.669	0.045	4064	0.0100	0.0106	
5 HMX	1	6.887	6.889	-0.002	2040	0.0100	0.0123	
7 2,4,6-Trinitrophenol	1		7.602			ND	ND	
8 RDX	1	9.114	9.115	-0.001	2097	0.0100	0.0108	
9 Nitrobenzene	1	12.047	12.062	-0.015	3890	0.0100	0.0106	
\$ 10 1,2-Dinitrobenzene	1	13.260	13.282	-0.022	2461	0.0100	0.009854	
11 3,5-Dinitroaniline	1	15.287	15.269	0.018	4362	0.0100	0.0104	
12 1,3-Dinitrobenzene	1	15.627	15.635	-0.008	5961	0.0100	0.0104	
13 Nitroglycerin	2	16.054	16.055	-0.001	10664	0.1000	0.0870	M
14 o-Nitrotoluene	1	16.807	16.822	-0.015	2491	0.0100	0.0106	
16 p-Nitrotoluene	1	17.147	17.129	0.018	2203	0.0100	0.0104	
17 4-Amino-2,6-dinitrotoluene	1	17.734	17.755	-0.021	2610	0.0100	0.0100	
18 m-Nitrotoluene	1	18.094	18.102	-0.008	2543	0.0100	0.0103	
19 2-Amino-4,6-dinitrotoluene	1	18.754	18.742	0.012	3705	0.0100	0.0103	M
20 1,3,5-Trinitrobenzene	1	18.947	18.949	-0.002	3947	0.0100	0.009500	Ma
21 2,6-Dinitrotoluene	1	20.260	20.255	0.005	2704	0.0100	0.0102	
22 2,4-Dinitrotoluene	1	20.674	20.762	-0.088	11900	0.0100	0.0102	
23 Tetryl	1	24.514	24.489	0.025	4722	0.0100	0.0138	
24 2,4,6-Trinitrotoluene	1	25.274	25.262	0.012	3720	0.0100	0.0101	
25 PETN	2	26.220	26.215	0.005	10842	0.1000	0.0838	M

**QC Flag Legend**

## Processing Flags

ND - Not Detected or Marked ND

## Review Flags

M - Manually Integrated

a - User Assigned ID

**Reagents:**

8330lntermStk\_00070

Amount Added: 1.00 Units: uL

8330\_ADDs\_00031

Amount Added: 0.50 Units: uL

Report Date: 03-Mar-2022 12:49:18

Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020018.D

Injection Date: 03-Mar-2022 02:03:29

Instrument ID: CHHPLC\_X5

Operator ID: JZ

Lims ID: IC INT/ADD 1

Worklist Smp#: 18

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

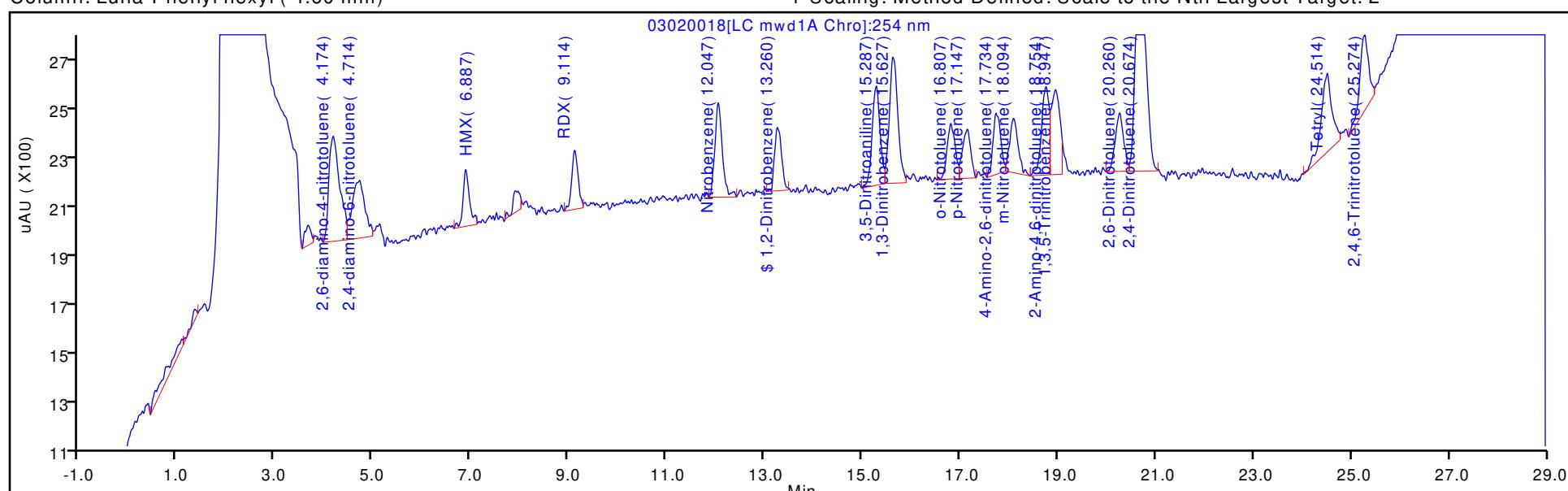
ALS Bottle#: 18

Method: 8330\_X5\_Luna

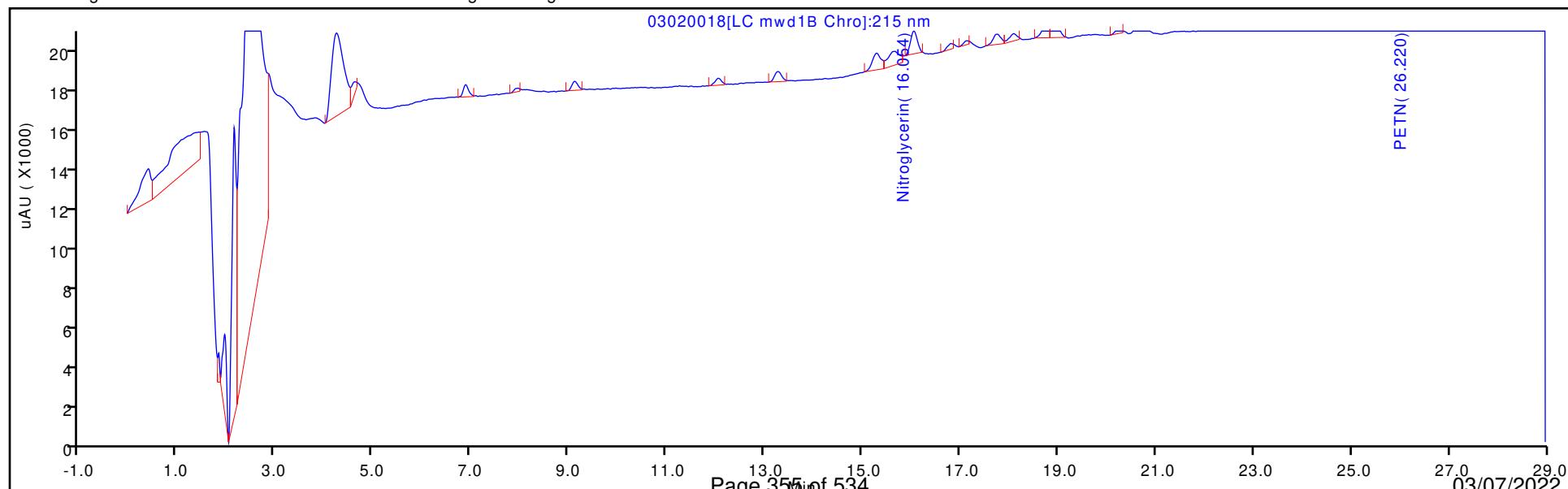
Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



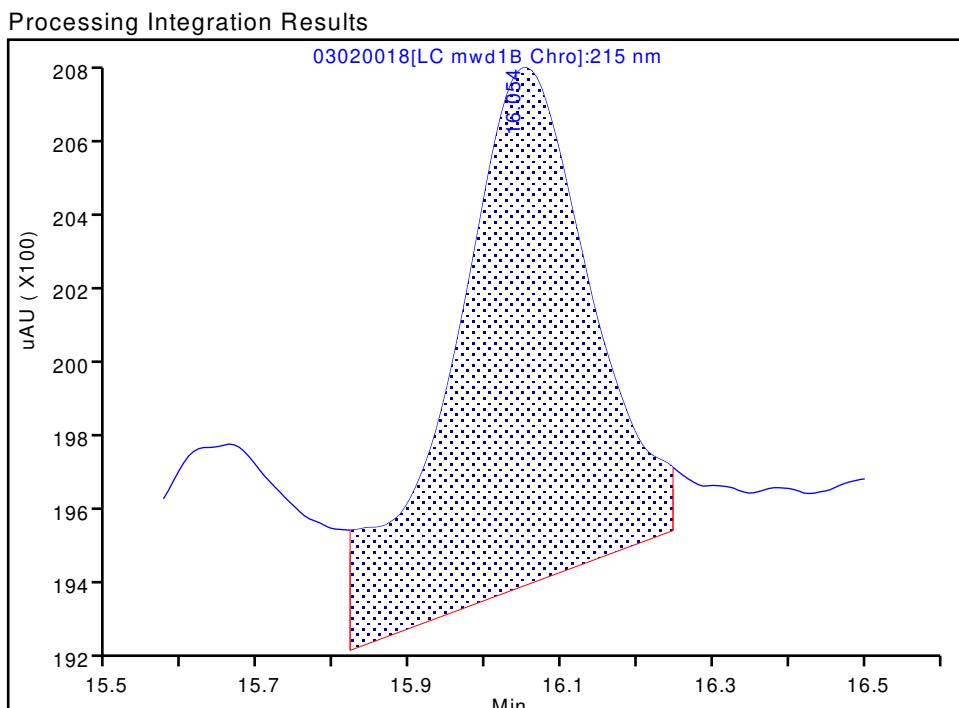
## Eurofins Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020018.D  
 Injection Date: 03-Mar-2022 02:03:29 Instrument ID: CHHPLC\_X5  
 Lims ID: IC INT/ADD 1  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 18 Worklist Smp#: 18  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X5\_Luna Limit Group: GCSV - 8330  
 Column: Detector LC mwd1B, 215 nm

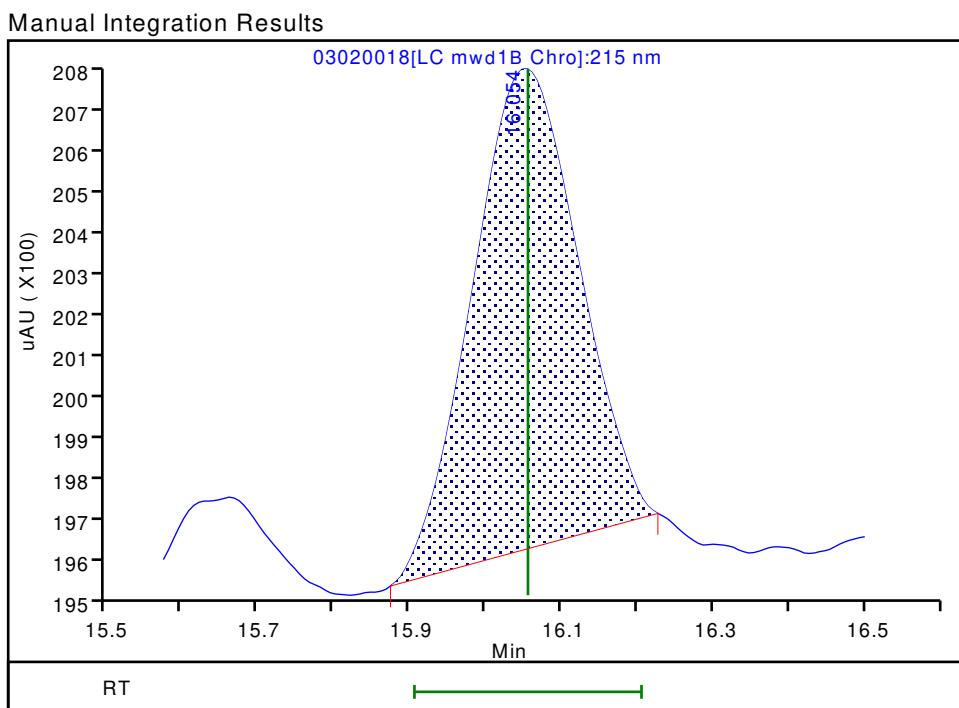
**13 Nitroglycerin, CAS: 55-63-0**

Signal: 1

RT: 16.05  
 Area: 17086  
 Amount: 0.126120  
 Amount Units: ug/ml



RT: 16.05  
 Area: 10664  
 Amount: 0.087040  
 Amount Units: ug/ml



Reviewer: zhangji, 03-Mar-2022 12:12:01

Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

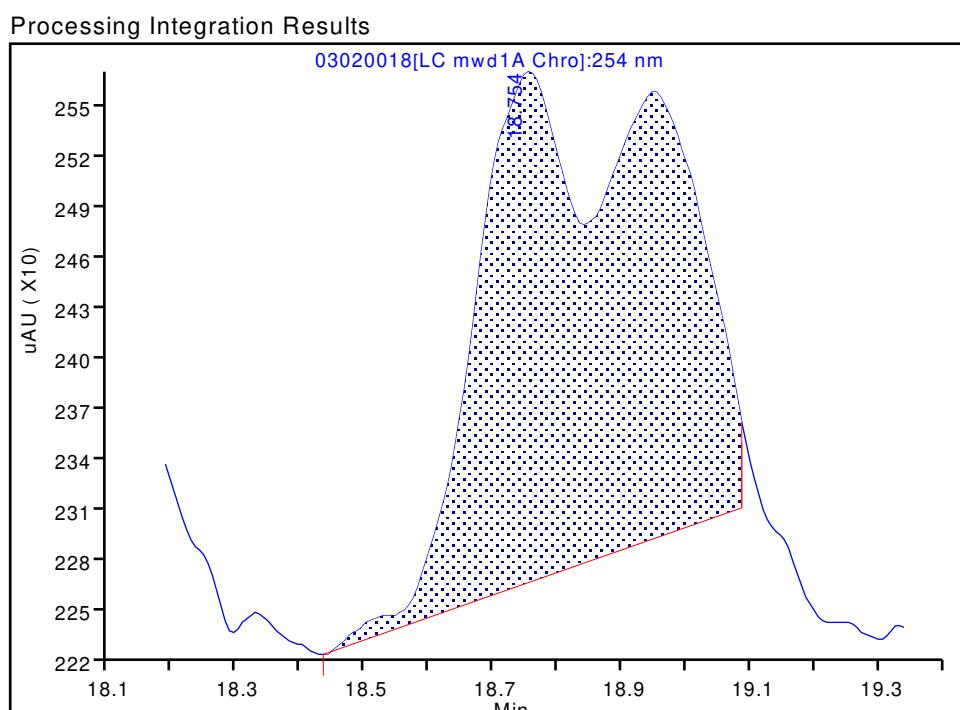
## Eurofins Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020018.D  
 Injection Date: 03-Mar-2022 02:03:29 Instrument ID: CHHPLC\_X5  
 Lims ID: IC INT/ADD 1  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 18 Worklist Smp#: 18  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X5\_Luna Limit Group: GCSV - 8330  
 Column: Luna-Phenyl hexyl ( 4.60 mm) Detector LC mwd1A, 254 nm

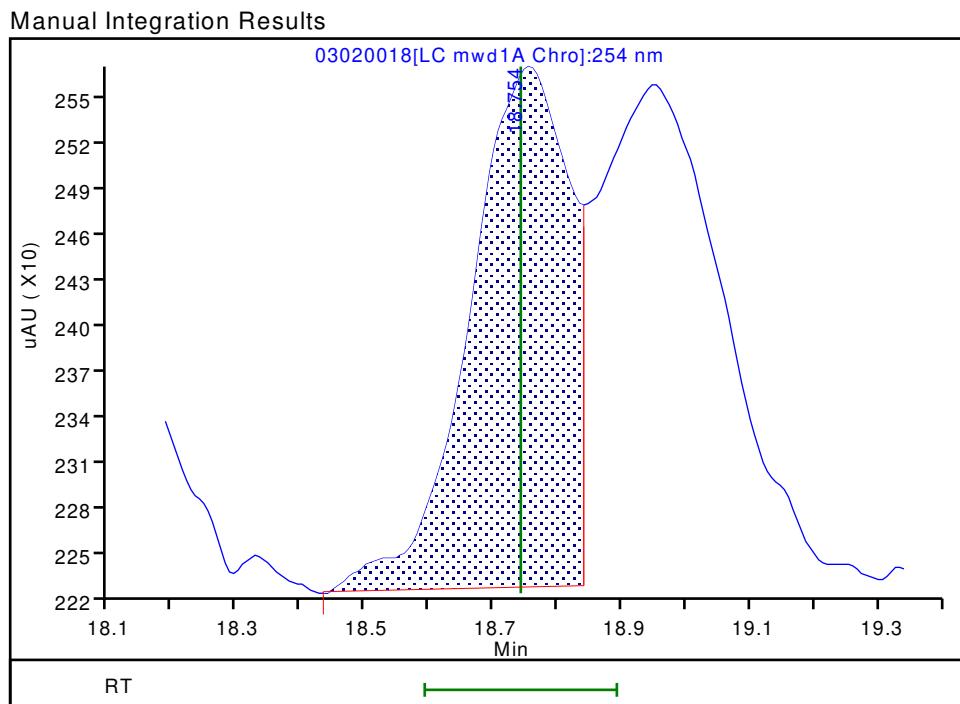
## 19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

RT: 18.75  
 Area: 6109  
 Amount: 0.012300  
 Amount Units: ug/ml



RT: 18.75  
 Area: 3705  
 Amount: 0.010276  
 Amount Units: ug/ml



Reviewer: zhangji, 03-Mar-2022 12:11:46

Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

## Eurofins Denver

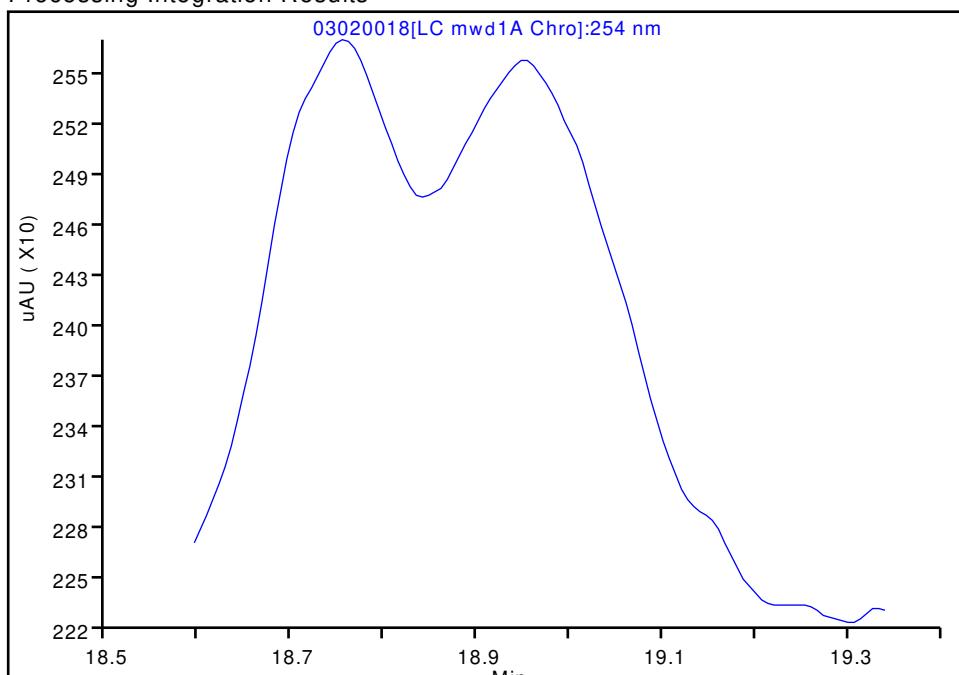
Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020018.D  
 Injection Date: 03-Mar-2022 02:03:29 Instrument ID: CHHPLC\_X5  
 Lims ID: IC INT/ADD 1  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 18 Worklist Smp#: 18  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X5\_Luna Limit Group: GCSV - 8330  
 Column: Luna-Phenyl hexyl ( 4.60 mm) Detector: LC mwd1A, 254 nm

**20 1,3,5-Trinitrobenzene, CAS: 99-35-4**

Signal: 1

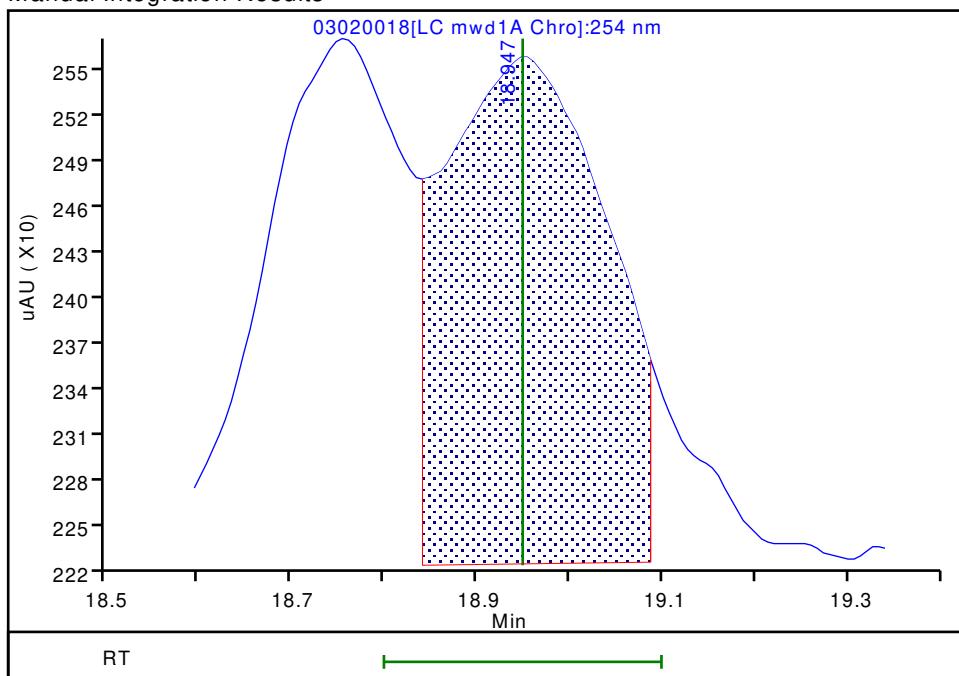
Not Detected  
 Expected RT: 18.95

## Processing Integration Results



## Manual Integration Results

RT: 18.95  
 Area: 3947  
 Amount: 0.009500  
 Amount Units: ug/ml



Reviewer: zhangji, 03-Mar-2022 12:11:46

Audit Action: Assigned New Baseline

Audit Reason: Baseline Smoothing

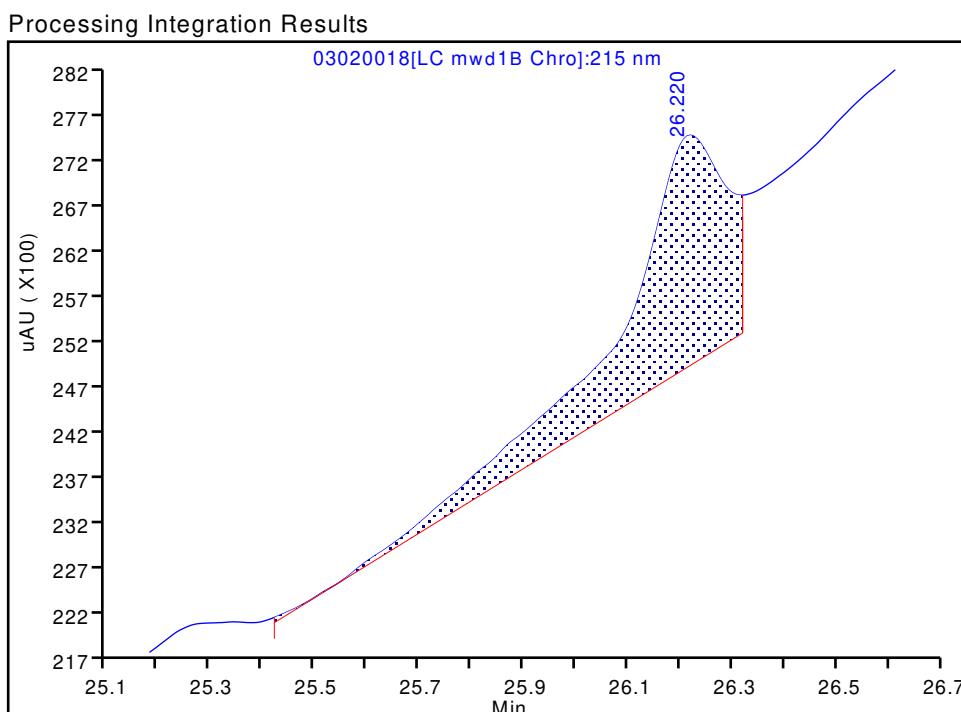
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020018.D  
 Injection Date: 03-Mar-2022 02:03:29 Instrument ID: CHHPLC\_X5  
 Lims ID: IC INT/ADD 1  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 18 Worklist Smp#: 18  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X5\_Luna Limit Group: GCSV - 8330  
 Column: Detector LC mwd1B, 215 nm

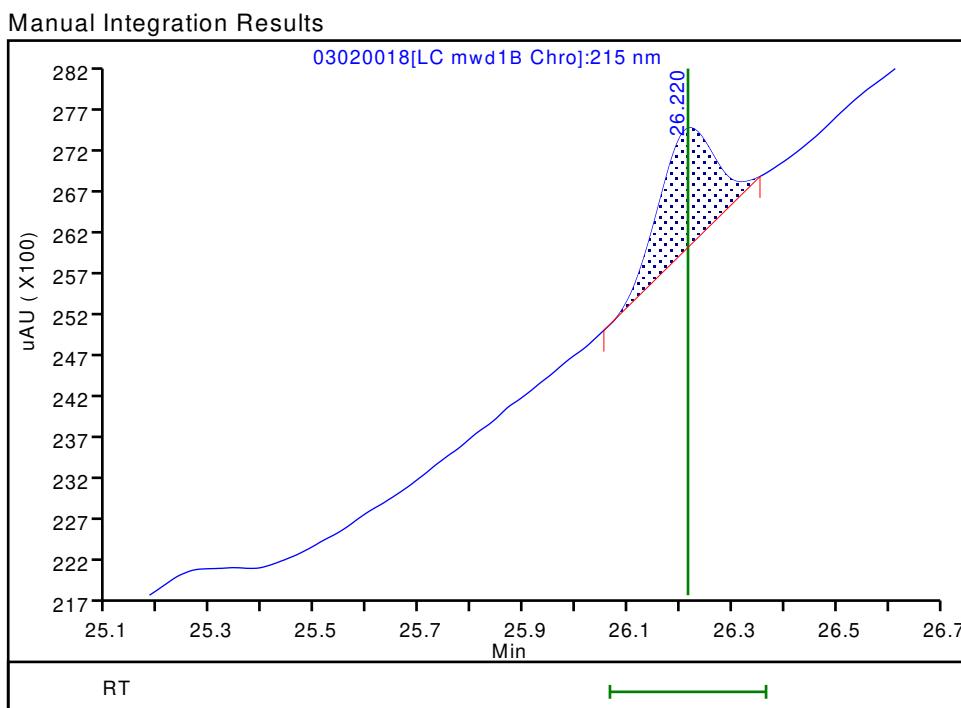
**25 PETN, CAS: 78-11-5**

Signal: 1

RT: 26.22  
 Area: 35507  
 Amount: 0.096197  
 Amount Units: ug/ml



RT: 26.22  
 Area: 10842  
 Amount: 0.083833  
 Amount Units: ug/ml



Reviewer: zhangji, 03-Mar-2022 12:11:57

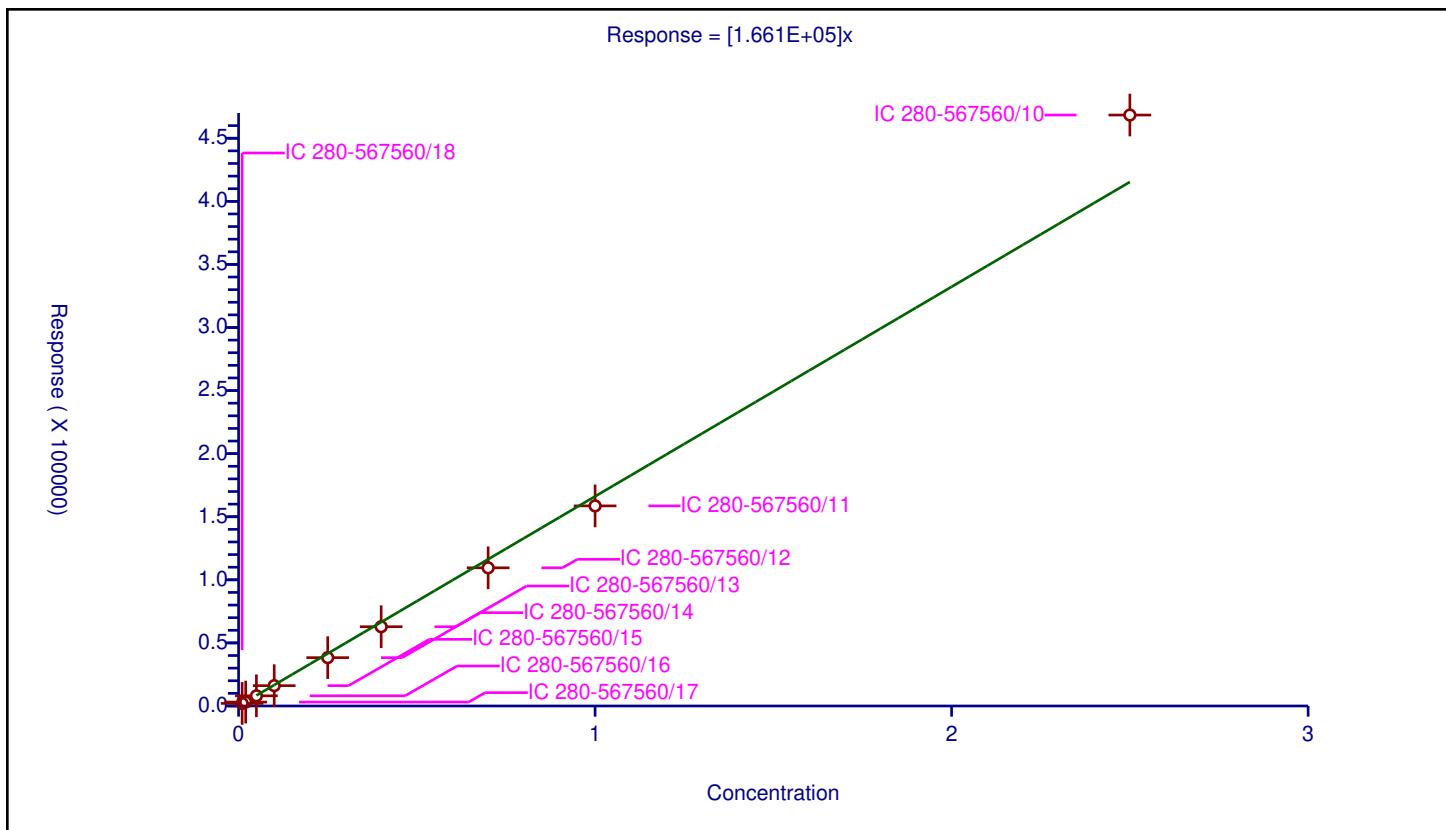
Audit Action: Manually Integrated

Audit Reason: Baseline Smoothing

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	1.661E+05
Error Coefficients	
Standard Error:	19200
Relative Standard Error:	10.5
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-567560/18	0.01	2040.0			204000.0	Y
2	IC 280-567560/17	0.02	3127.0			156350.0	Y
3	IC 280-567560/16	0.05	8053.0			161060.0	Y
4	IC 280-567560/15	0.1	16109.0			161090.0	Y
5	IC 280-567560/14	0.25	38318.0			153272.0	Y
6	IC 280-567560/13	0.4	62819.0			157047.5	Y
7	IC 280-567560/12	0.7	109512.0			156445.714286	Y
8	IC 280-567560/11	1.0	158593.0			158593.0	Y
9	IC 280-567560/10	2.5	468398.0			187359.2	Y



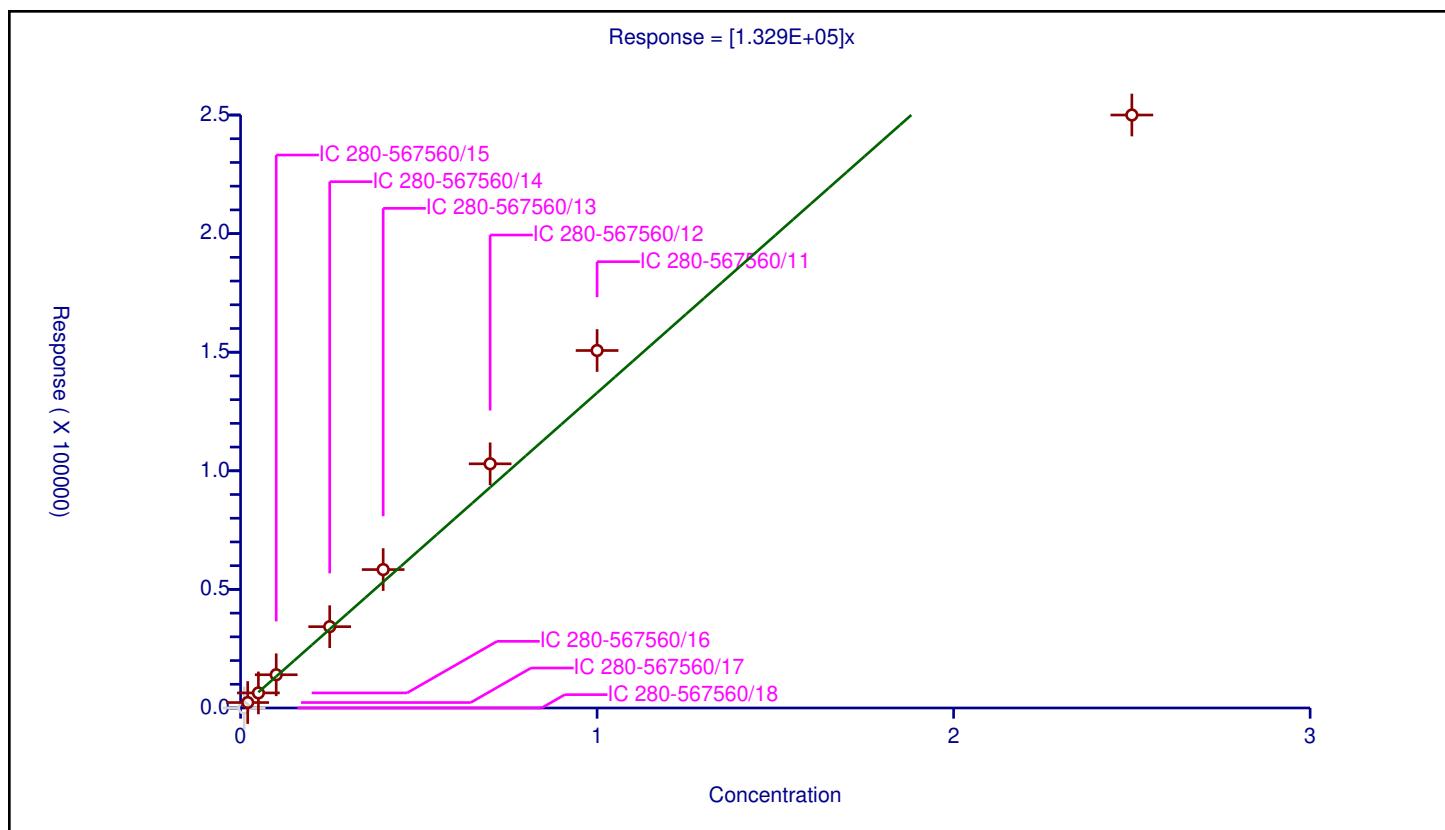
## Calibration

/ 2,4,6-Trinitrophenol

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	1.329E+05
Error Coefficients	
Standard Error:	32100
Relative Standard Error:	13.3
Correlation Coefficient:	0.955
Coefficient of Determination (Adjusted):	0.979

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-567560/18	0.01	0.0			0.0	N
2	IC 280-567560/17	0.02	2301.0			115050.0	Y
3	IC 280-567560/16	0.05	6356.0			127120.0	Y
4	IC 280-567560/15	0.1	14009.0			140090.0	Y
5	IC 280-567560/14	0.25	34288.0			137152.0	Y
6	IC 280-567560/13	0.4	58358.0			145895.0	Y
7	IC 280-567560/12	0.7	102939.0			147055.714286	Y
8	IC 280-567560/11	1.0	150719.0			150719.0	Y
9	IC 280-567560/10	2.5	250000.0			100000.0	Y



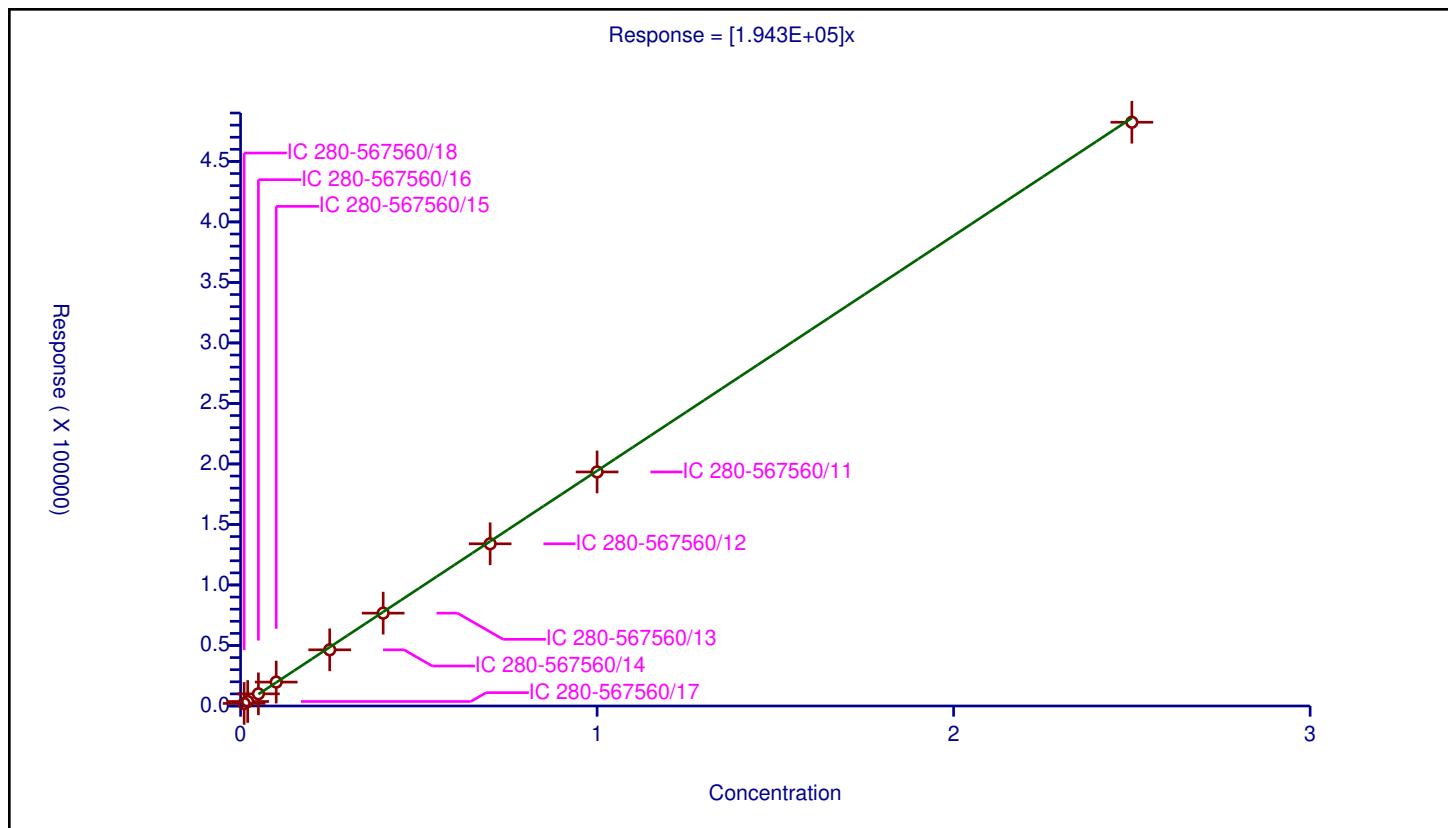
## Calibration

/ RDX

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	1.943E+05
Error Coefficients	
Standard Error:	1690
Relative Standard Error:	3.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-567560/18	0.01	2097.0			209700.0	Y
2	IC 280-567560/17	0.02	3719.0			185950.0	Y
3	IC 280-567560/16	0.05	10028.0			200560.0	Y
4	IC 280-567560/15	0.1	19750.0			197500.0	Y
5	IC 280-567560/14	0.25	46417.0			185668.0	Y
6	IC 280-567560/13	0.4	76711.0			191777.5	Y
7	IC 280-567560/12	0.7	134031.0			191472.857143	Y
8	IC 280-567560/11	1.0	193402.0			193402.0	Y
9	IC 280-567560/10	2.5	482372.0			192948.8	Y



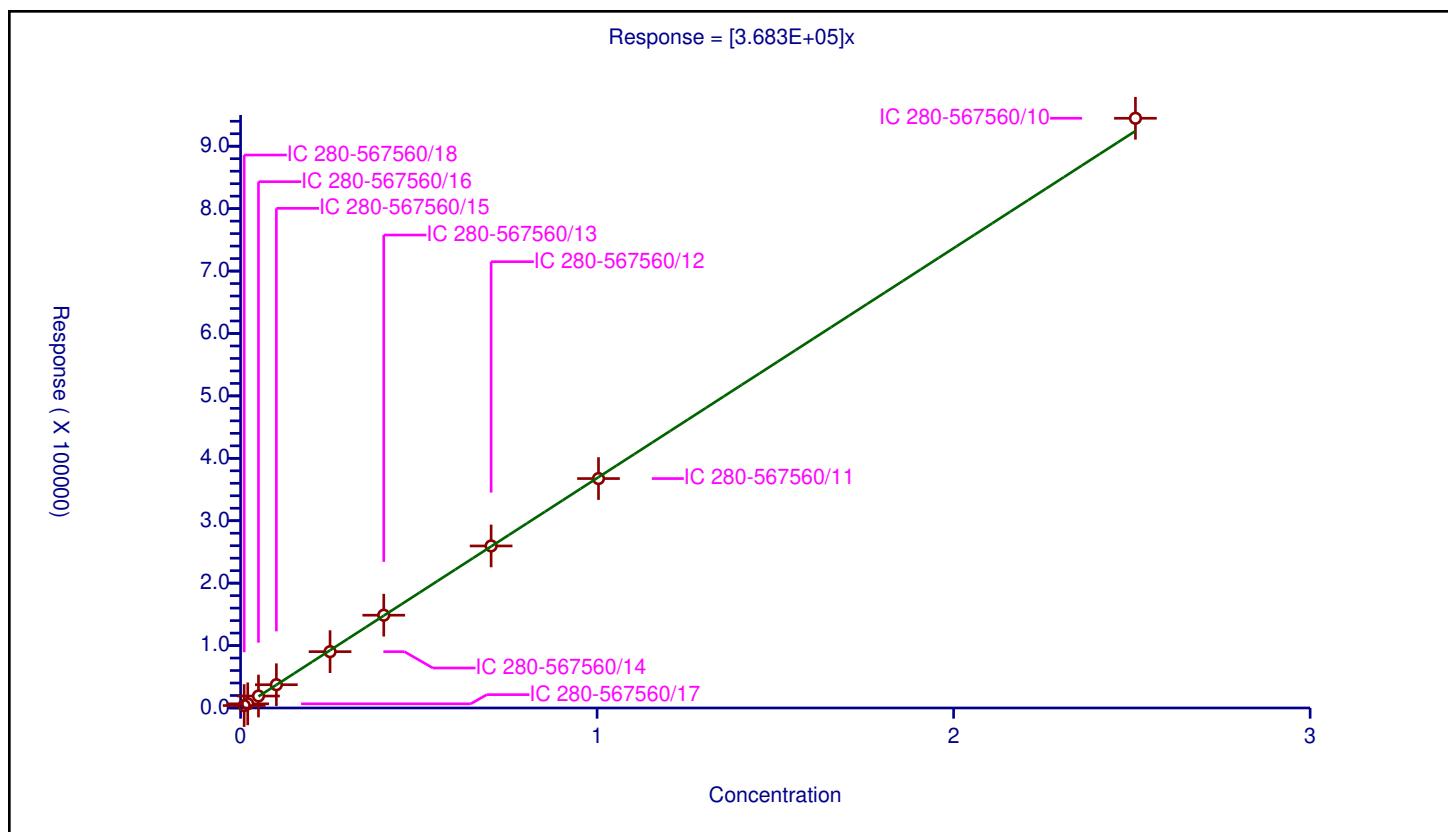
## Calibration

/ Nitrobenzene

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	3.683E+05
Error Coefficients	
Standard Error:	7300
Relative Standard Error:	4.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-567560/18	0.01004	3890.0			387450.199203	Y
2	IC 280-567560/17	0.02008	6686.0			332968.12749	Y
3	IC 280-567560/16	0.0502	19149.0			381454.183267	Y
4	IC 280-567560/15	0.1004	37271.0			371225.099602	Y
5	IC 280-567560/14	0.251	90246.0			359545.816733	Y
6	IC 280-567560/13	0.4016	148639.0			370117.031873	Y
7	IC 280-567560/12	0.7028	259585.0			369358.281161	Y
8	IC 280-567560/11	1.004	367582.0			366117.52988	Y
9	IC 280-567560/10	2.51	944774.0			376403.984064	Y



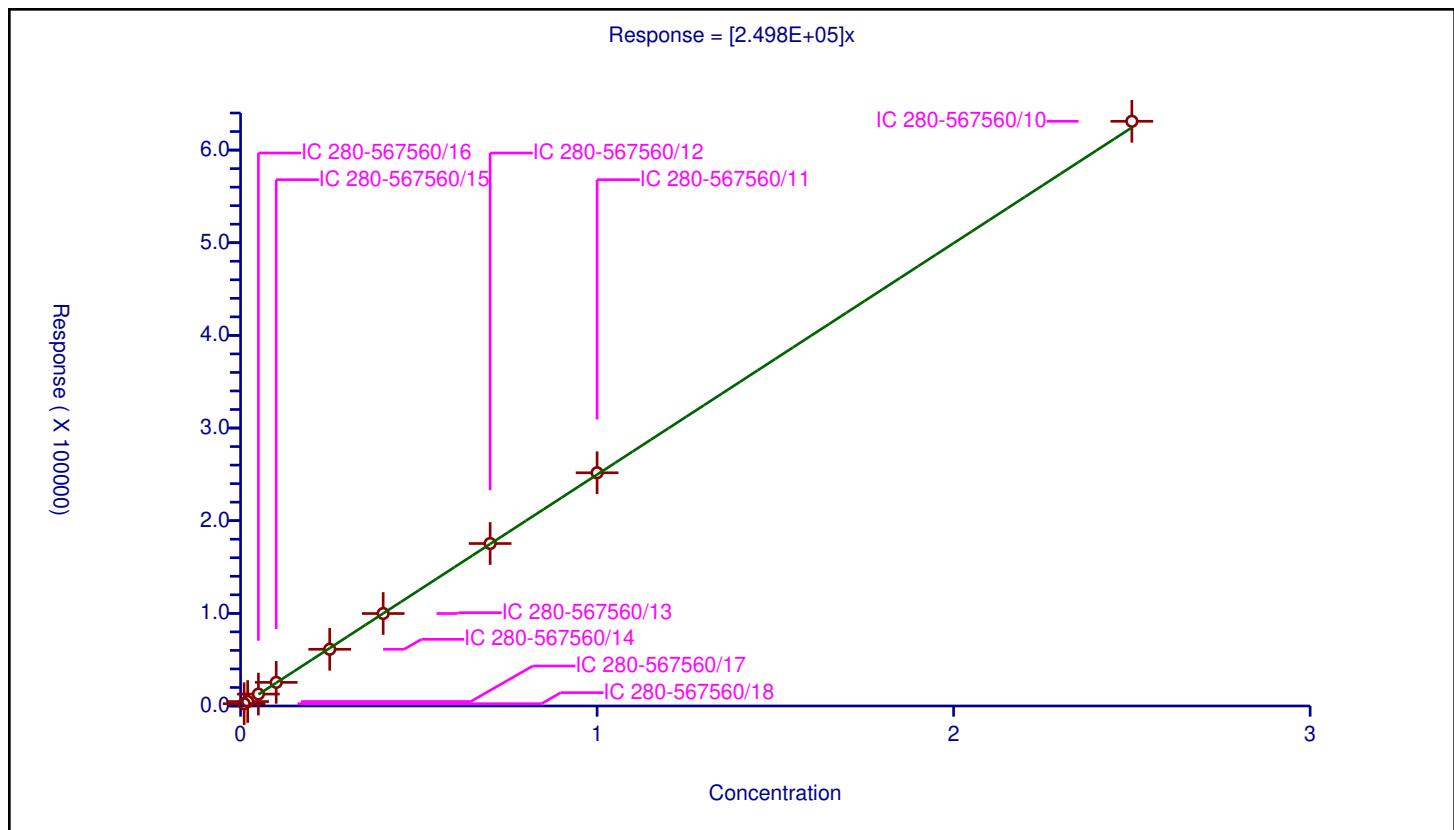
## Calibration

/ 1,2-Dinitrobenzene

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	2.498E+05
Error Coefficients	
Standard Error:	2520
Relative Standard Error:	2.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-567560/18	0.01	2461.0			246100.0	Y
2	IC 280-567560/17	0.02	4809.0			240450.0	Y
3	IC 280-567560/16	0.05	12864.0			257280.0	Y
4	IC 280-567560/15	0.1	25499.0			254990.0	Y
5	IC 280-567560/14	0.25	61198.0			244792.0	Y
6	IC 280-567560/13	0.4	99804.0			249510.0	Y
7	IC 280-567560/12	0.7	175358.0			250511.428571	Y
8	IC 280-567560/11	1.0	251717.0			251717.0	Y
9	IC 280-567560/10	2.5	631065.0			252426.0	Y



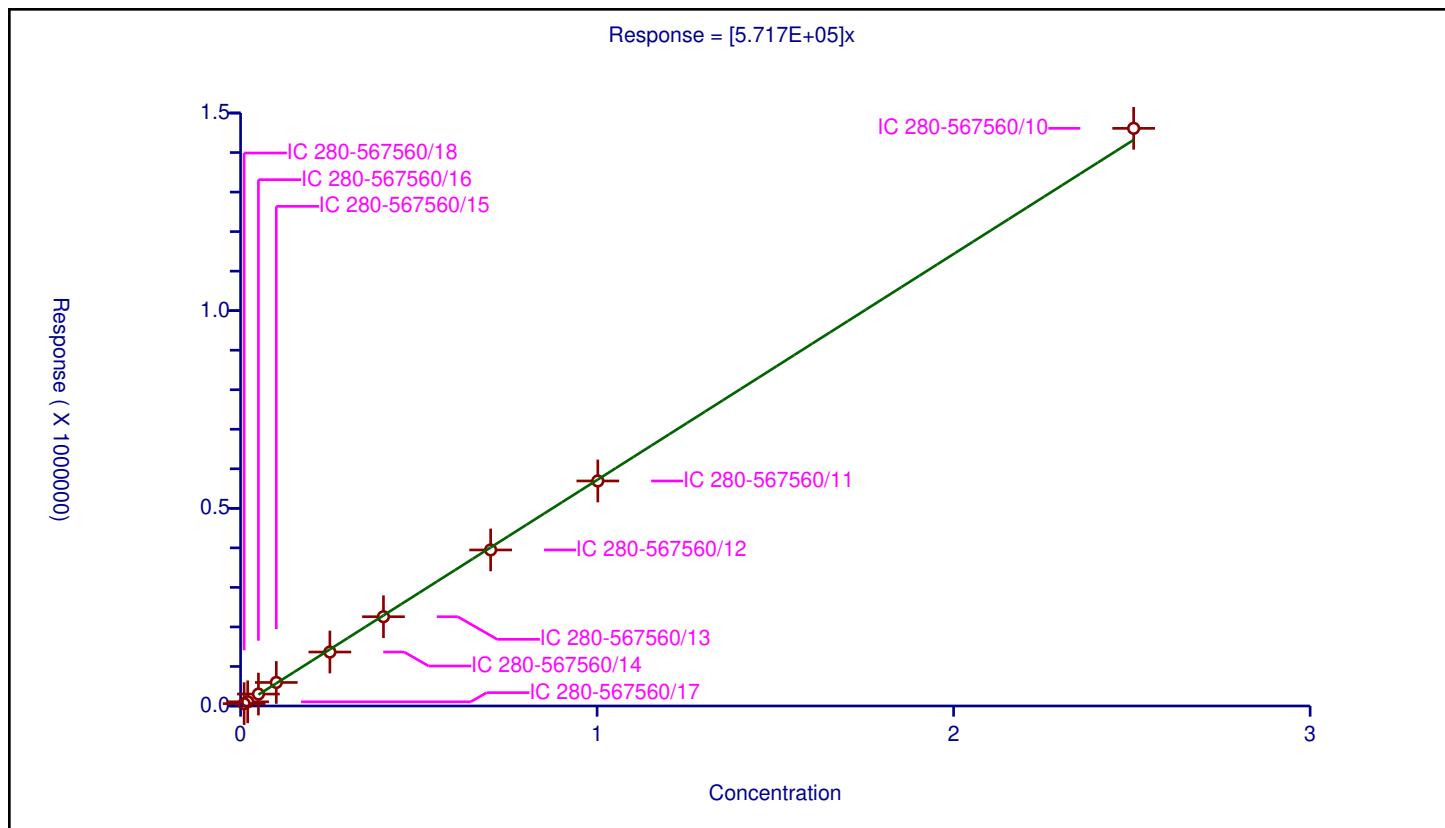
## Calibration

/ 1,3-Dinitrobenzene

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	5.717E+05
Error Coefficients	
Standard Error:	11000
Relative Standard Error:	4.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-567560/18	0.01002	5961.0			594910.179641	Y
2	IC 280-567560/17	0.02004	10643.0			531087.824351	Y
3	IC 280-567560/16	0.0501	30181.0			602415.169661	Y
4	IC 280-567560/15	0.1002	59537.0			594181.636727	Y
5	IC 280-567560/14	0.2505	136486.0			544854.291417	Y
6	IC 280-567560/13	0.4008	225815.0			563410.678643	Y
7	IC 280-567560/12	0.7014	394707.0			562741.659538	Y
8	IC 280-567560/11	1.002	569212.0			568075.848303	Y
9	IC 280-567560/10	2.505	1461217.0			583320.159681	Y



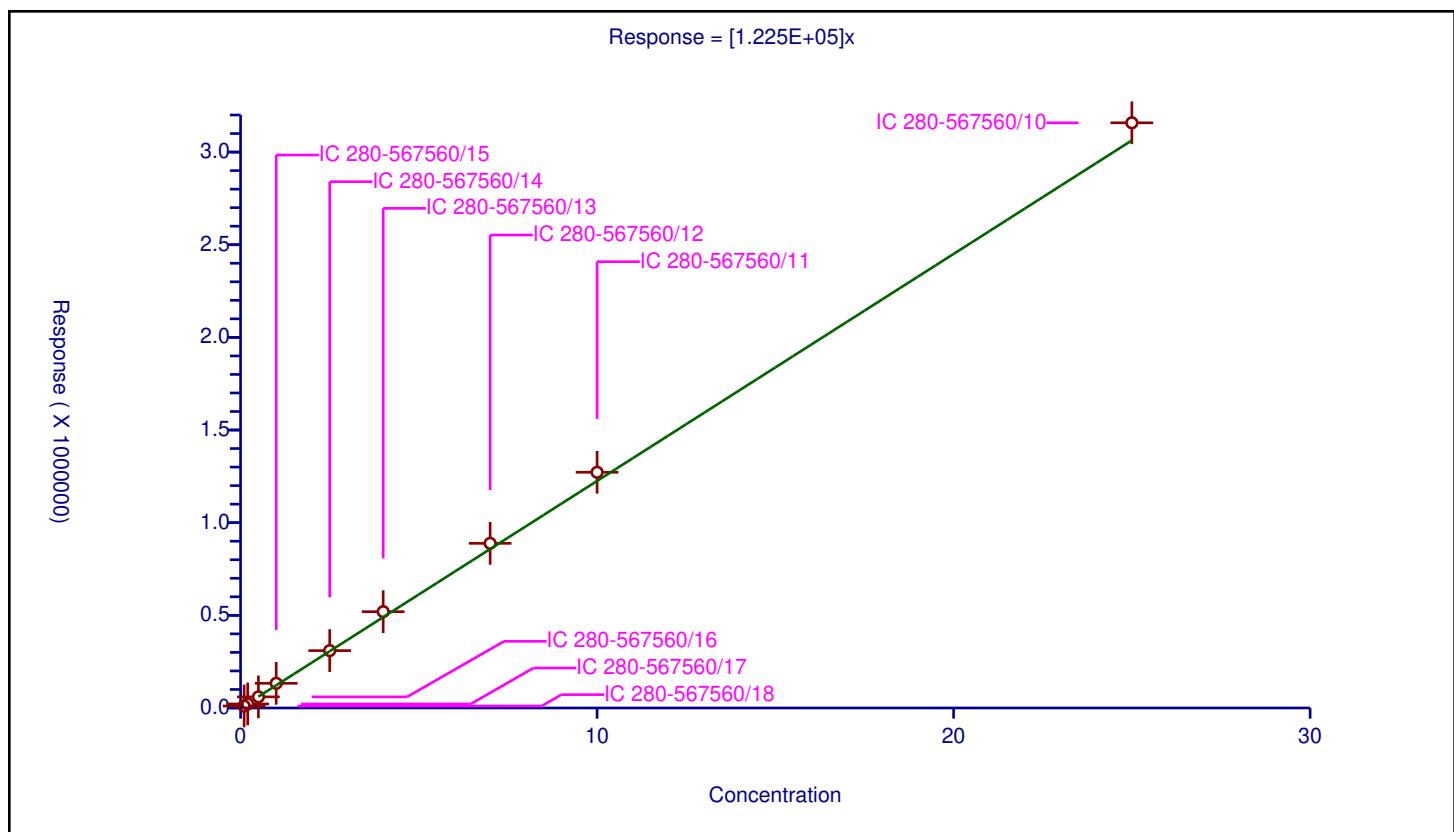
## Calibration

/ 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:	1.225E+05
Error Coefficients	
Standard Error:	40600
Relative Standard Error:	7.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-567560/18	0.1	10664.0			106640.0	Y
2	IC 280-567560/17	0.2	21750.0			108750.0	Y
3	IC 280-567560/16	0.5	59894.0			119788.0	Y
4	IC 280-567560/15	1.0	133241.0			133241.0	Y
5	IC 280-567560/14	2.5	309657.0			123862.8	Y
6	IC 280-567560/13	4.0	519683.0			129920.75	Y
7	IC 280-567560/12	7.0	888552.0			126936.0	Y
8	IC 280-567560/11	10.0	1272015.0			127201.5	Y
9	IC 280-567560/10	25.0	3158004.0			126320.16	Y



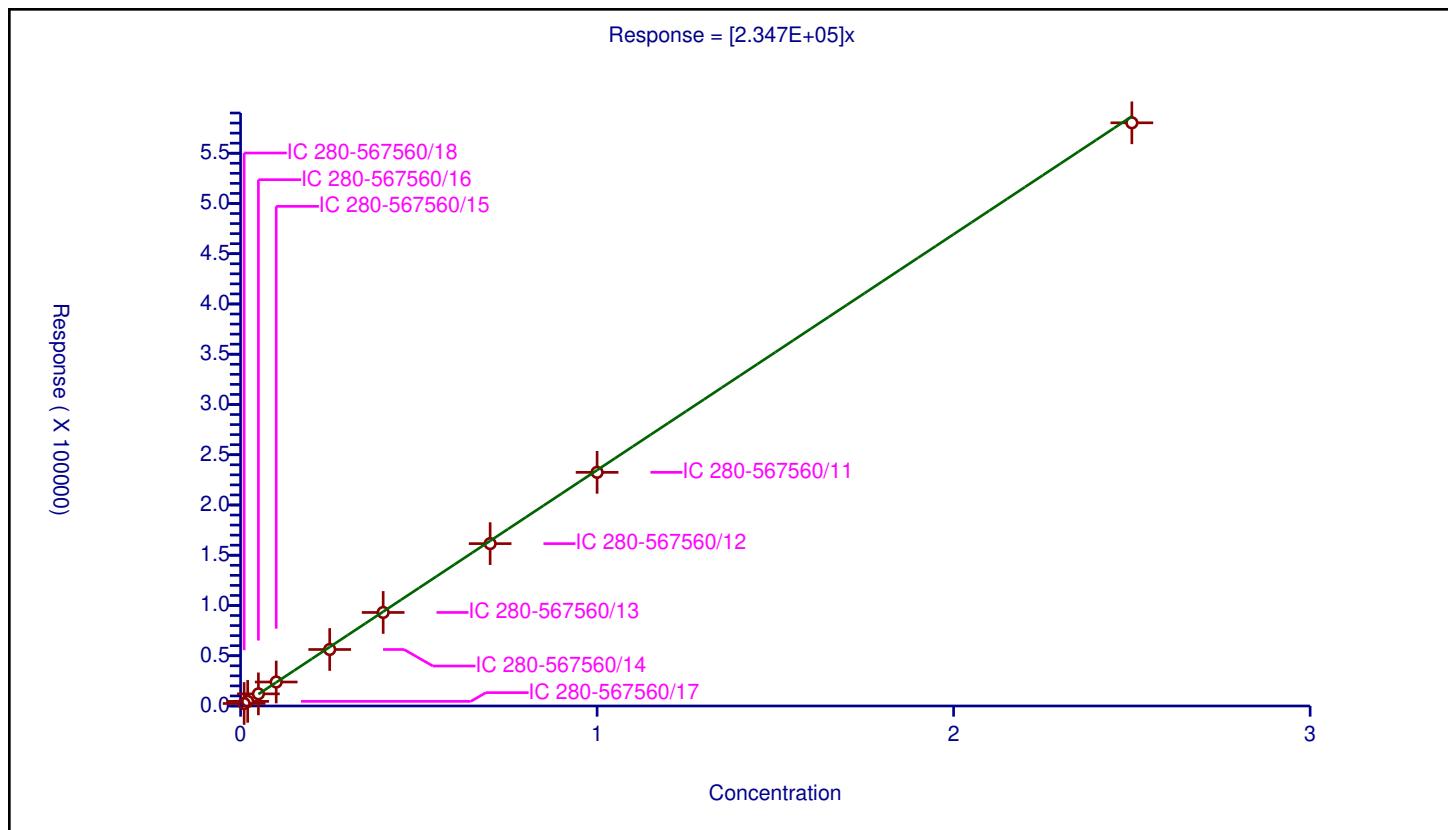
## Calibration

/ o-Nitrotoluene

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	2.347E+05
Error Coefficients	
Standard Error:	2750
Relative Standard Error:	3.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-567560/18	0.01	2491.0			249100.0	Y
2	IC 280-567560/17	0.02	4607.0			230350.0	Y
3	IC 280-567560/16	0.05	12057.0			241140.0	Y
4	IC 280-567560/15	0.1	23857.0			238570.0	Y
5	IC 280-567560/14	0.25	56221.0			224884.0	Y
6	IC 280-567560/13	0.4	93064.0			232660.0	Y
7	IC 280-567560/12	0.7	161534.0			230762.857143	Y
8	IC 280-567560/11	1.0	232476.0			232476.0	Y
9	IC 280-567560/10	2.5	580270.0			232108.0	Y



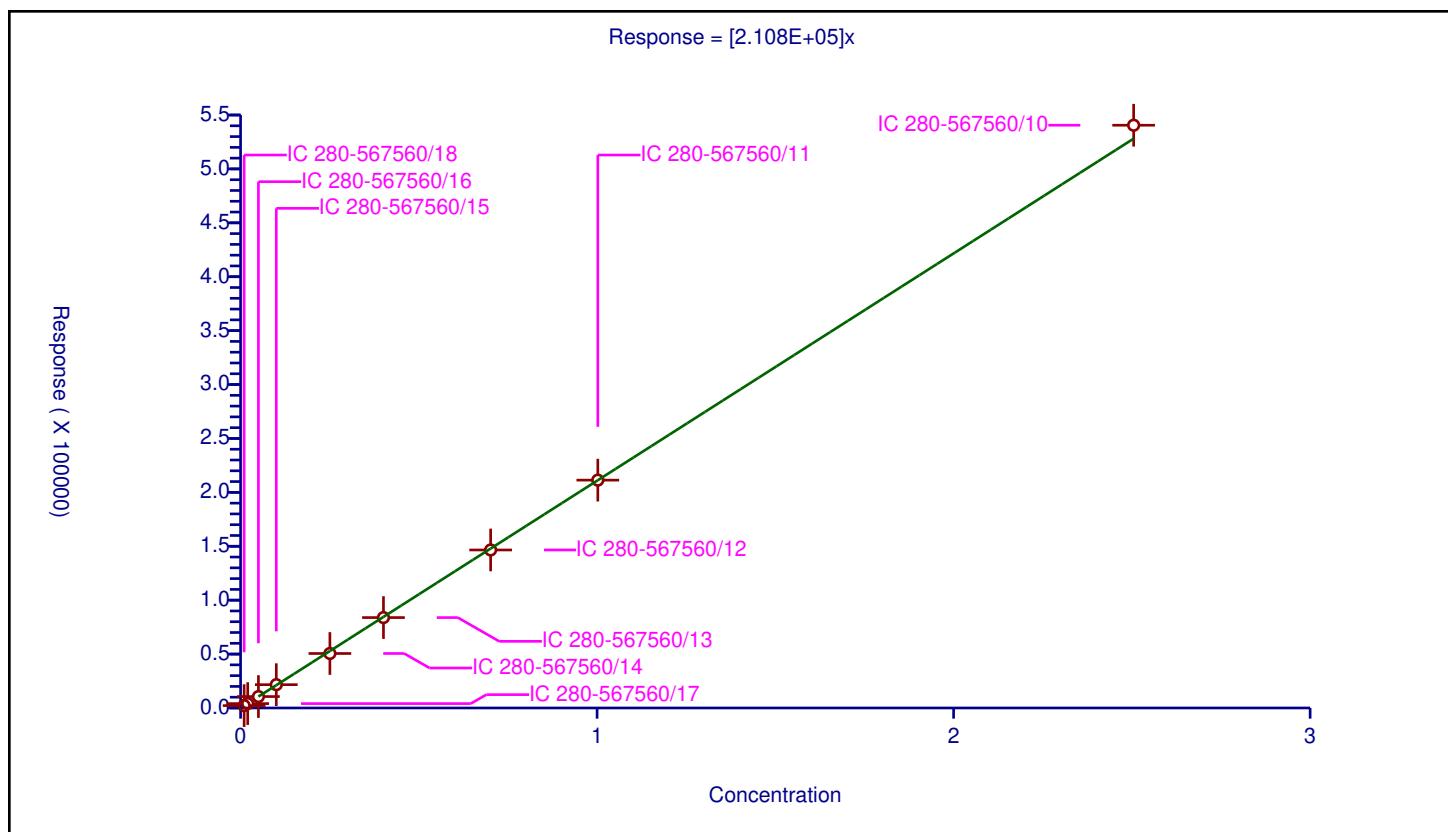
## Calibration

/ p-Nitrotoluene

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	2.108E+05
Error Coefficients	
Standard Error:	4500
Relative Standard Error:	2.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-567560/18	0.01002	2203.0			219860.279441	Y
2	IC 280-567560/17	0.02004	4078.0			203493.013972	Y
3	IC 280-567560/16	0.0501	10595.0			211477.045908	Y
4	IC 280-567560/15	0.1002	21625.0			215818.363273	Y
5	IC 280-567560/14	0.2505	50555.0			201816.367265	Y
6	IC 280-567560/13	0.4008	83857.0			209224.051896	Y
7	IC 280-567560/12	0.7014	146563.0			208957.798688	Y
8	IC 280-567560/11	1.002	211344.0			210922.155689	Y
9	IC 280-567560/10	2.505	540531.0			215780.838323	Y



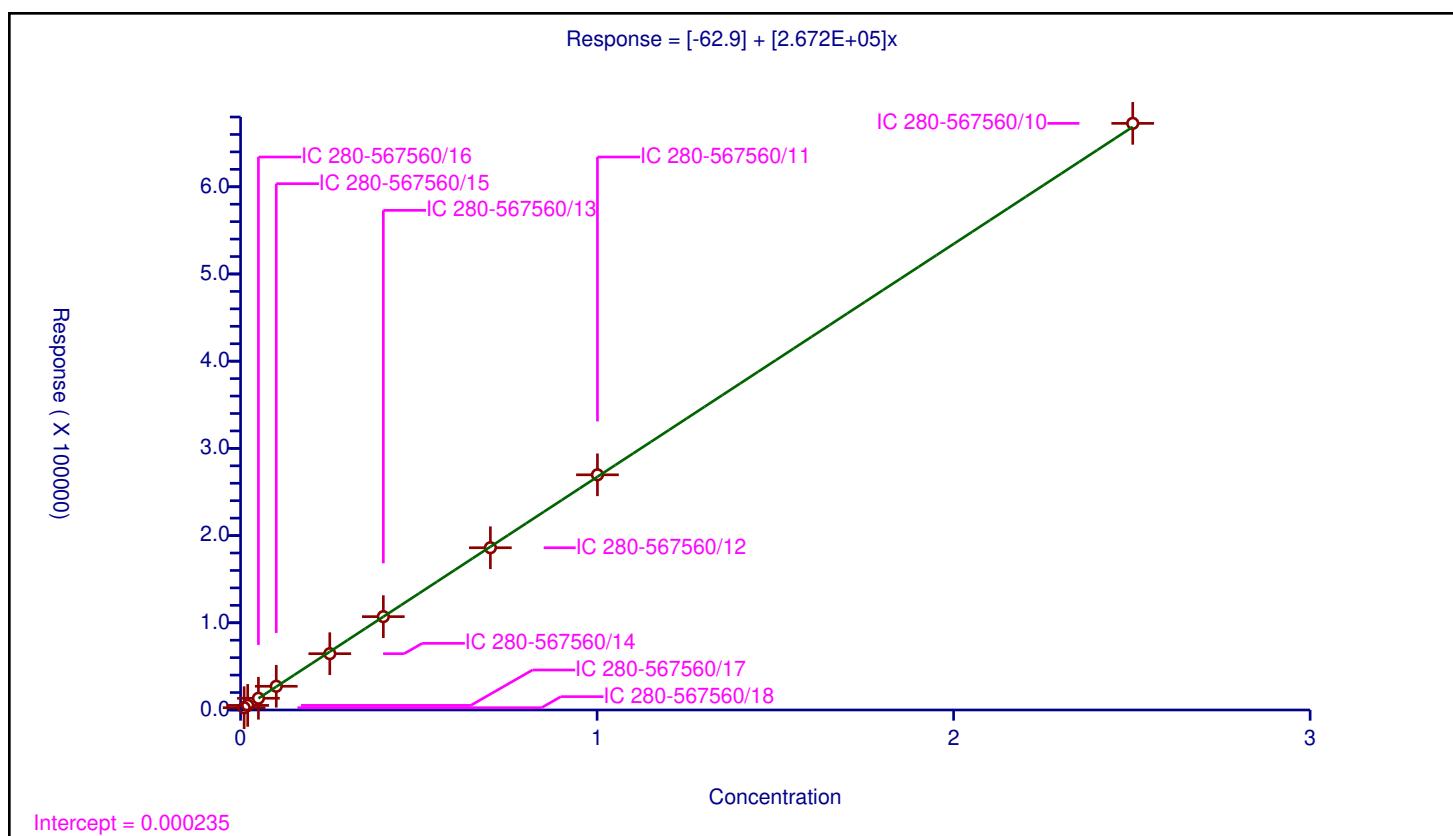
## Calibration

## / 4-Amino-2,6-dinitrotoluene

Curve Type: Linear  
 Weighting: Conc\_Sq  
 Origin: None  
 Dependency: Response  
 Calib Mode: ESTD  
 Response Base: AREA  
 RF Rounding: 0

Curve Coefficients	
Intercept:	-62.9
Slope:	2.672E+05
Error Coefficients	
Standard Error:	1990
Relative Standard Error:	1.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-567560/18	0.01001	2610.0			260739.260739	Y
2	IC 280-567560/17	0.02002	5271.0			263286.713287	Y
3	IC 280-567560/16	0.05005	13425.0			268231.768232	Y
4	IC 280-567560/15	0.1001	27216.0			271888.111888	Y
5	IC 280-567560/14	0.25025	64569.0			258017.982018	Y
6	IC 280-567560/13	0.4004	107043.0			267340.15984	Y
7	IC 280-567560/12	0.7007	186078.0			265560.154132	Y
8	IC 280-567560/11	1.001	269691.0			269421.578422	Y
9	IC 280-567560/10	2.5025	672715.0			268817.182817	Y



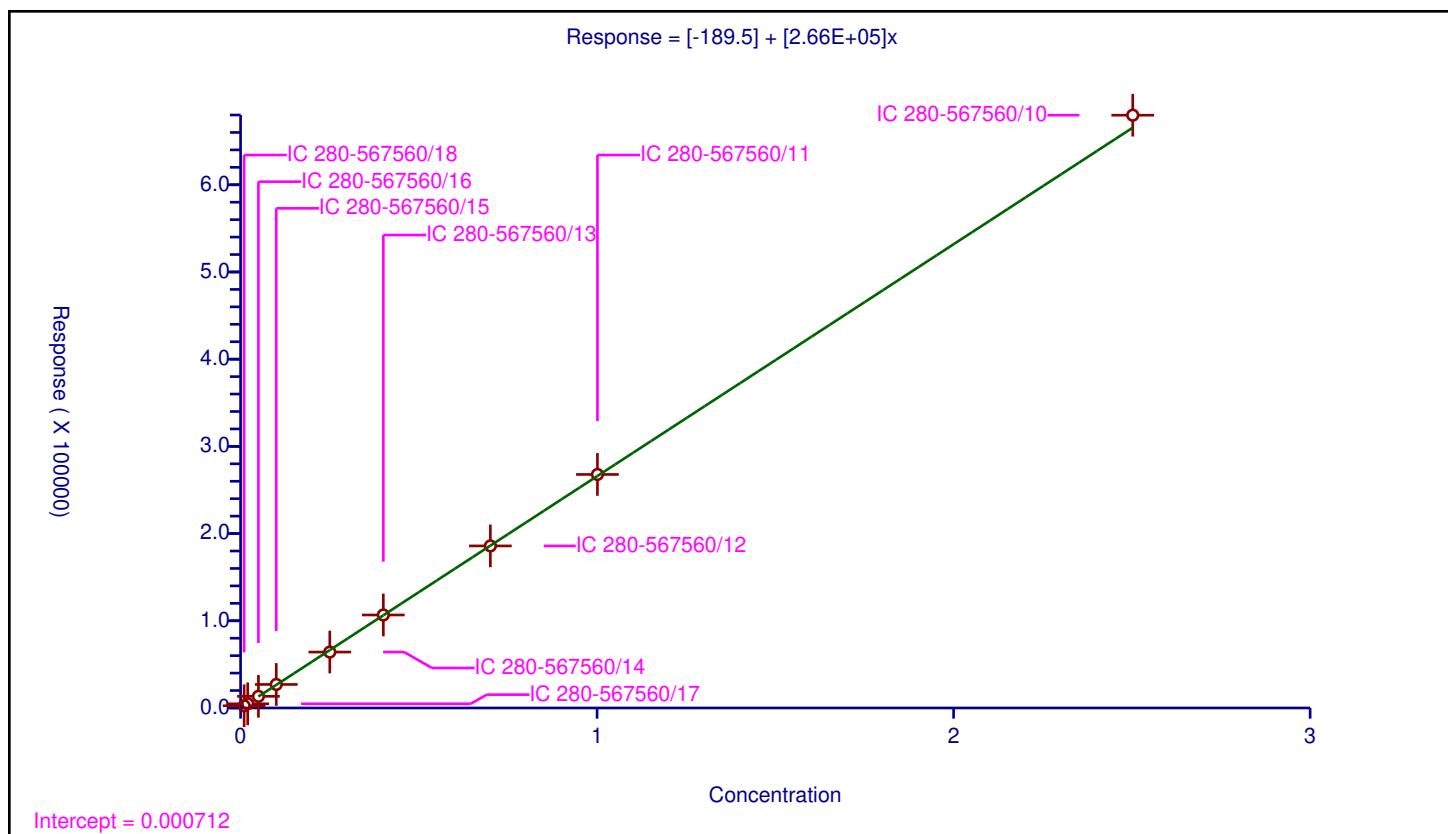
## Calibration

/ m-Nitrotoluene

**Curve Type:** Linear  
**Weighting:** Conc\_Sq  
**Origin:** None  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	-189.5
Slope:	2.66E+05
Error Coefficients	
Standard Error:	5530
Relative Standard Error:	3.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-567560/18	0.01001	2543.0			254045.954046	Y
2	IC 280-567560/17	0.02002	4805.0			240009.99001	Y
3	IC 280-567560/16	0.05005	13387.0			267472.527473	Y
4	IC 280-567560/15	0.1001	26978.0			269510.48951	Y
5	IC 280-567560/14	0.25025	64150.0			256343.656344	Y
6	IC 280-567560/13	0.4004	106661.0			266386.113886	Y
7	IC 280-567560/12	0.7007	185839.0			265219.066648	Y
8	IC 280-567560/11	1.001	267812.0			267544.455544	Y
9	IC 280-567560/10	2.5025	679800.0			271648.351648	Y



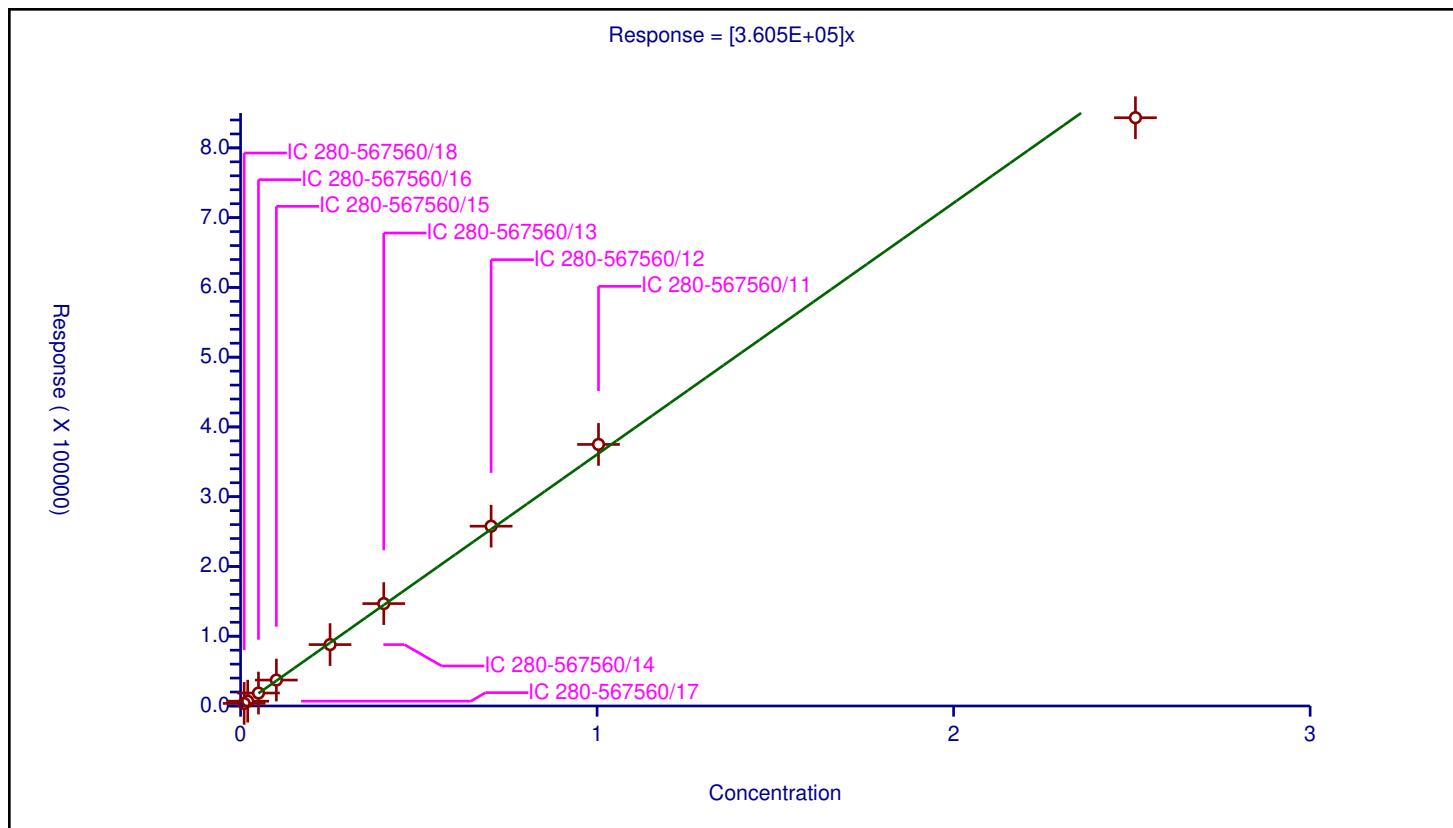
## Calibration

/ 2-Amino-4,6-dinitrotoluene

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	3.605E+05
Error Coefficients	
Standard Error:	22400
Relative Standard Error:	3.8
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-567560/18	0.01004	3705.0			369023.904382	Y
2	IC 280-567560/17	0.02008	6899.0			343575.697211	Y
3	IC 280-567560/16	0.0502	18562.0			369760.956175	Y
4	IC 280-567560/15	0.1004	37178.0			370298.804781	Y
5	IC 280-567560/14	0.251	88010.0			350637.450199	Y
6	IC 280-567560/13	0.4016	146764.0			365448.207171	Y
7	IC 280-567560/12	0.7028	257718.0			366701.764371	Y
8	IC 280-567560/11	1.004	374916.0			373422.310757	Y
9	IC 280-567560/10	2.51	843240.0			335952.191235	Y



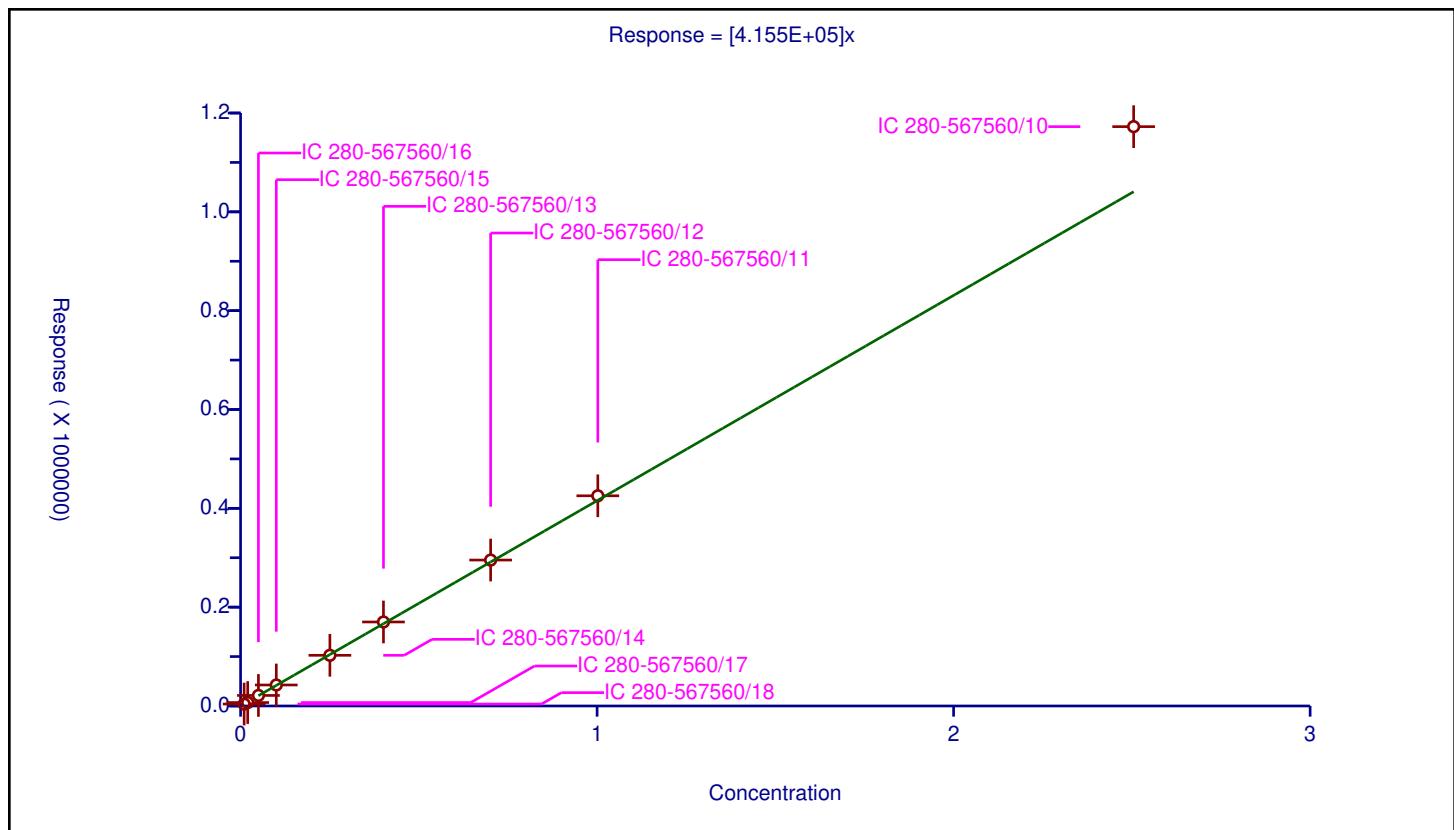
## Calibration

/ 1,3,5-Trinitrobenzene

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	4.155E+05
Error Coefficients	
Standard Error:	46700
Relative Standard Error:	7.7
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-567560/18	0.01002	3947.0			393912.175649	Y
2	IC 280-567560/17	0.02004	6970.0			347804.391218	Y
3	IC 280-567560/16	0.0501	21339.0			425928.143713	Y
4	IC 280-567560/15	0.1002	42514.0			424291.417166	Y
5	IC 280-567560/14	0.2505	102576.0			409485.02994	Y
6	IC 280-567560/13	0.4008	170012.0			424181.636727	Y
7	IC 280-567560/12	0.7014	295298.0			421012.261192	Y
8	IC 280-567560/11	1.002	425388.0			424538.922156	Y
9	IC 280-567560/10	2.505	1172398.0			468023.153693	Y



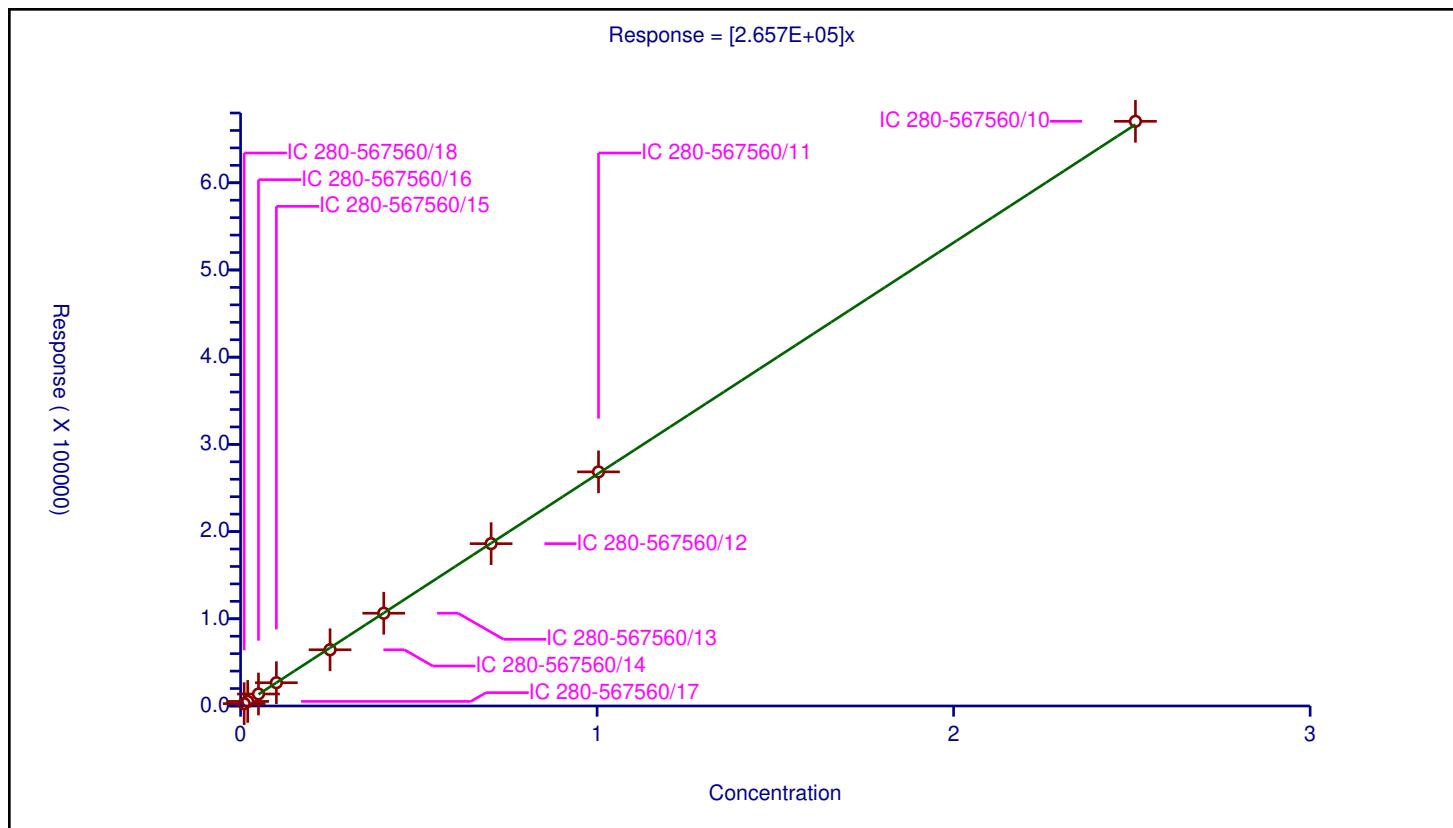
## Calibration

/ 2,6-Dinitrotoluene

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	2.657E+05
Error Coefficients	
Standard Error:	1660
Relative Standard Error:	1.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-567560/18	0.01004	2704.0			269322.709163	Y
2	IC 280-567560/17	0.02008	5233.0			260607.569721	Y
3	IC 280-567560/16	0.0502	13757.0			274043.824701	Y
4	IC 280-567560/15	0.1004	26687.0			265806.772908	Y
5	IC 280-567560/14	0.251	64489.0			256928.286853	Y
6	IC 280-567560/13	0.4016	106362.0			264845.61753	Y
7	IC 280-567560/12	0.7028	186150.0			264869.095048	Y
8	IC 280-567560/11	1.004	268478.0			267408.366534	Y
9	IC 280-567560/10	2.51	670482.0			267124.302789	Y



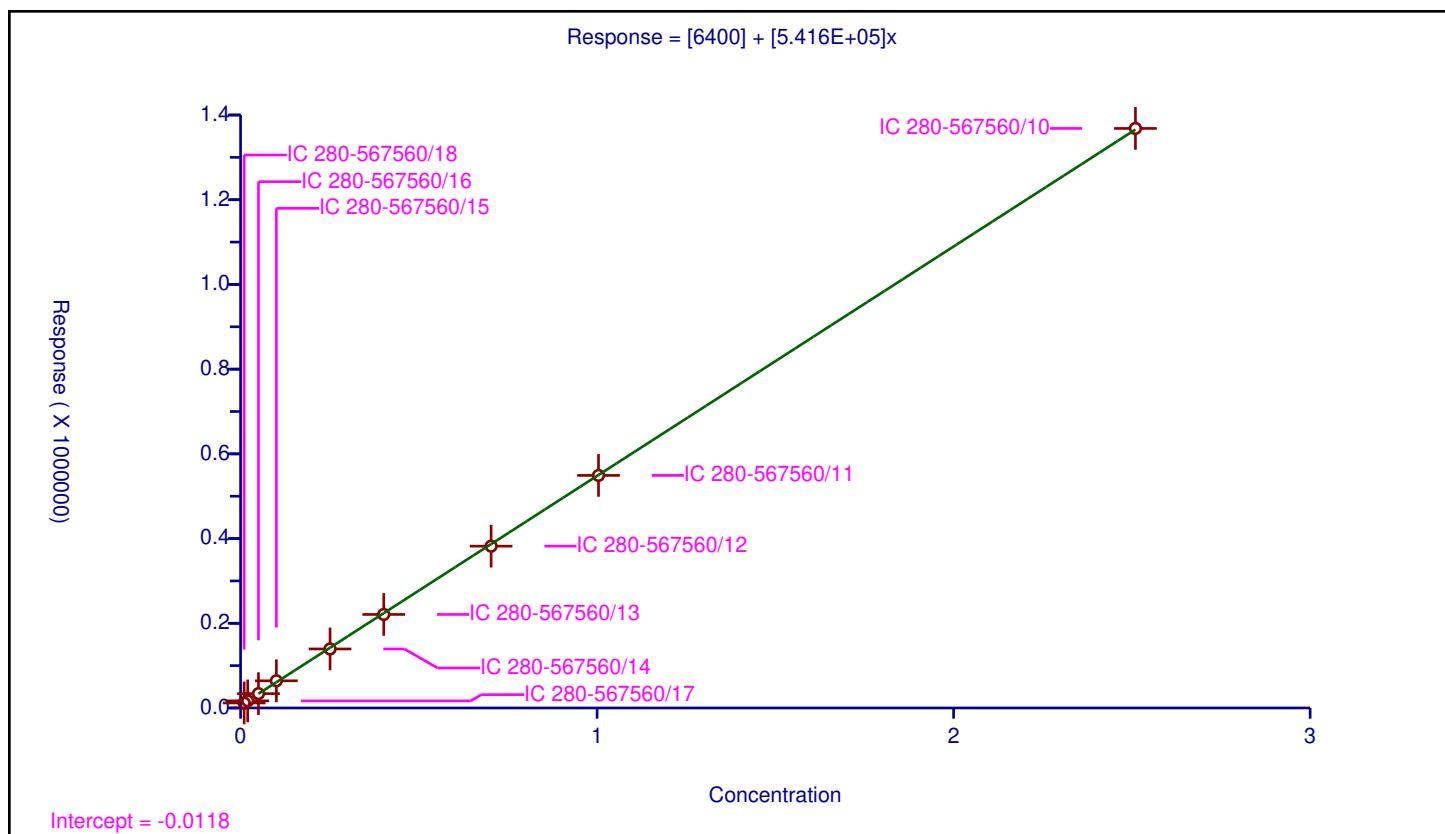
## Calibration

/ 2,4-Dinitrotoluene

**Curve Type:** Linear  
**Weighting:** Conc\_Sq  
**Origin:** None  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	6400
Slope:	5.416E+05
Error Coefficients	
Standard Error:	2990
Relative Standard Error:	3.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

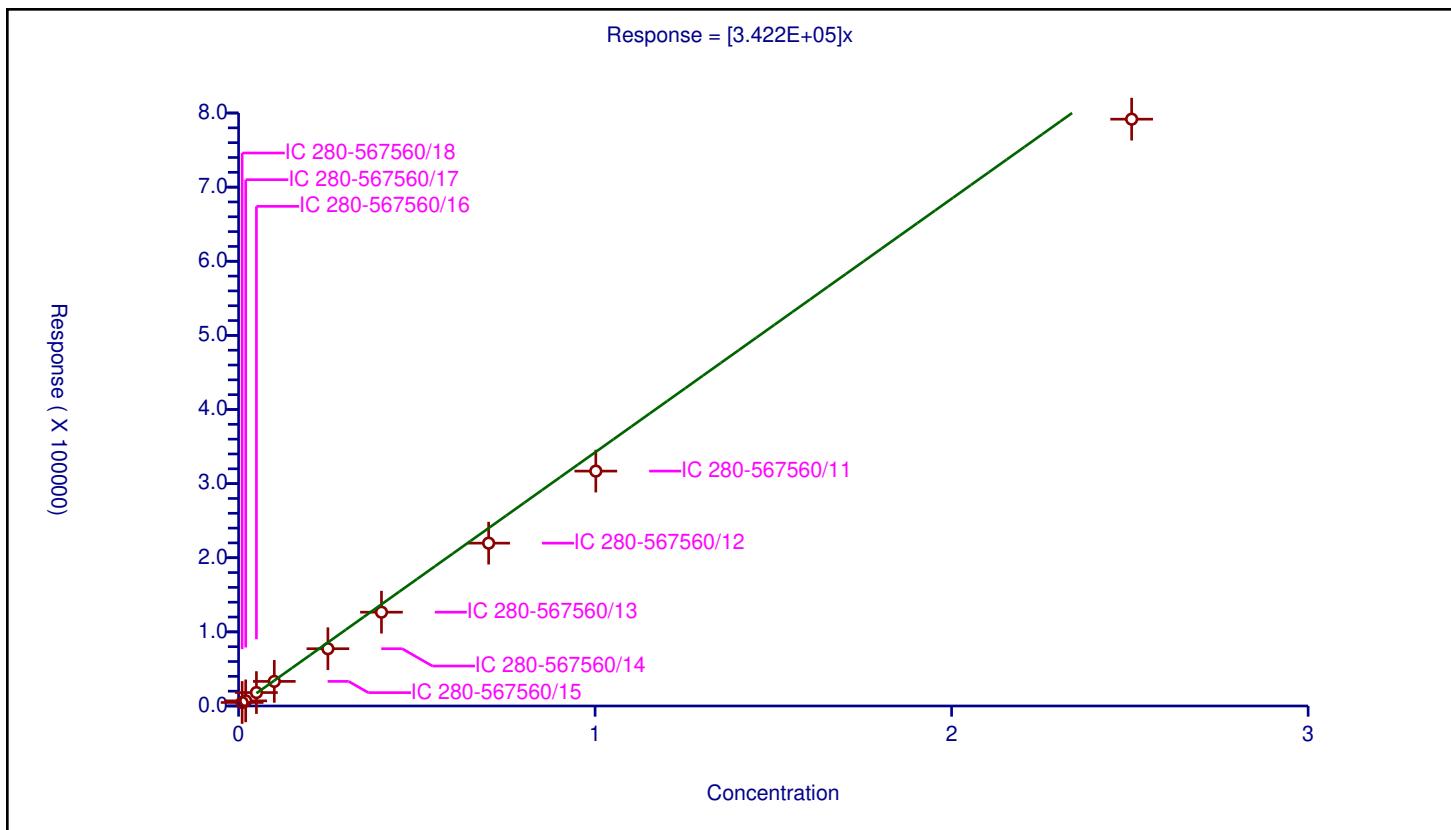
ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-567560/18	0.01004	11900.0			1185258.964143	Y
2	IC 280-567560/17	0.02008	16863.0			839790.836653	Y
3	IC 280-567560/16	0.0502	33918.0			675657.370518	Y
4	IC 280-567560/15	0.1004	64187.0			639312.749004	Y
5	IC 280-567560/14	0.251	139375.0			555278.884462	Y
6	IC 280-567560/13	0.4016	220828.0			549870.517928	Y
7	IC 280-567560/12	0.7028	382059.0			543624.075128	Y
8	IC 280-567560/11	1.004	549112.0			546924.302789	Y
9	IC 280-567560/10	2.51	1368356.0			545161.752988	Y



**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	3.422E+05
Error Coefficients	
Standard Error:	26400
Relative Standard Error:	15.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.965

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-567560/18	0.01002	4722.0			471257.48503	Y
2	IC 280-567560/17	0.02004	6933.0			345958.083832	Y
3	IC 280-567560/16	0.0501	18110.0			361477.045908	Y
4	IC 280-567560/15	0.1002	33188.0			331217.56487	Y
5	IC 280-567560/14	0.2505	77249.0			308379.241517	Y
6	IC 280-567560/13	0.4008	126546.0			315733.532934	Y
7	IC 280-567560/12	0.7014	219675.0			313195.038494	Y
8	IC 280-567560/11	1.002	316900.0			316267.46507	Y
9	IC 280-567560/10	2.505	791703.0			316049.101796	Y



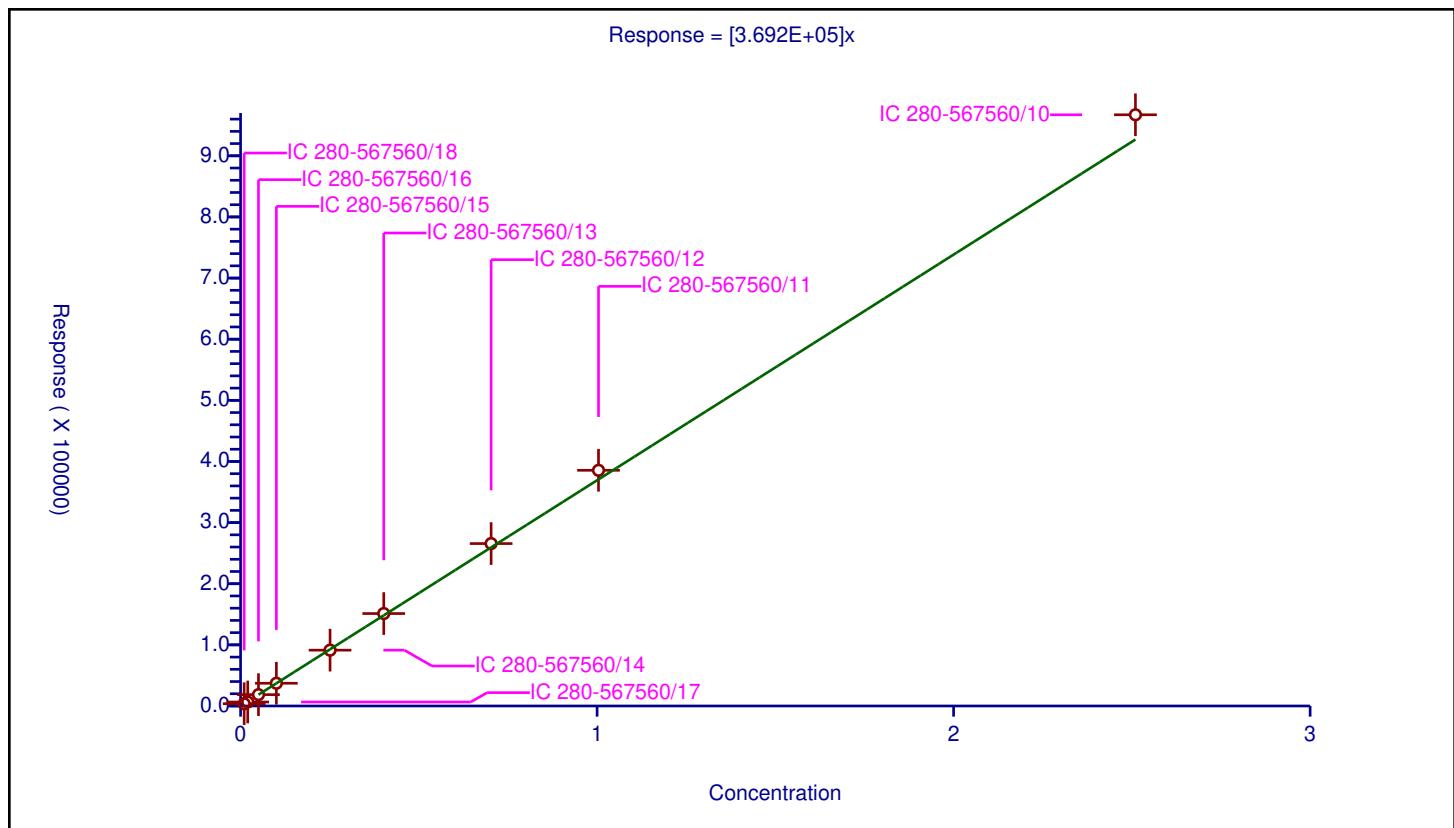
## Calibration

/ 2,4,6-Trinitrotoluene

**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	3.692E+05
Error Coefficients	
Standard Error:	15500
Relative Standard Error:	5.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

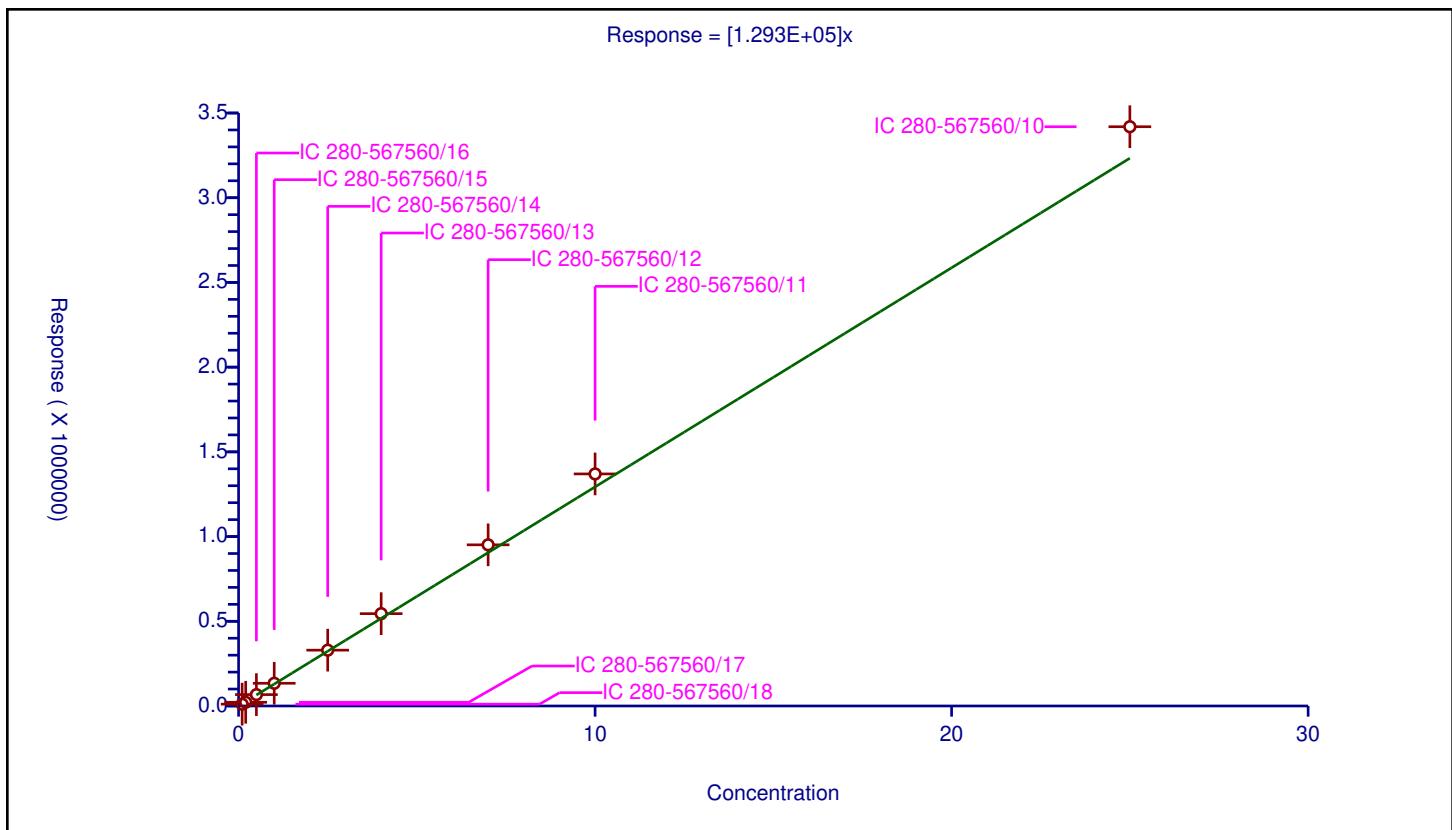
ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-567560/18	0.01004	3720.0			370517.928287	Y
2	IC 280-567560/17	0.02008	6507.0			324053.784861	Y
3	IC 280-567560/16	0.0502	18556.0			369641.434263	Y
4	IC 280-567560/15	0.1004	37205.0			370567.729084	Y
5	IC 280-567560/14	0.251	91338.0			363896.414343	Y
6	IC 280-567560/13	0.4016	151235.0			376581.175299	Y
7	IC 280-567560/12	0.7028	265676.0			378025.042686	Y
8	IC 280-567560/11	1.004	385560.0			384023.904382	Y
9	IC 280-567560/10	2.51	967117.0			385305.577689	Y



**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

<b>Curve Coefficients</b>	
<b>Intercept:</b>	0
<b>Slope:</b>	1.293E+05
<b>Error Coefficients</b>	
<b>Standard Error:</b>	73600
<b>Relative Standard Error:</b>	9.0
<b>Correlation Coefficient:</b>	1.000
<b>Coefficient of Determination (Adjusted):</b>	0.991

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-567560/18	0.1	10842.0			108420.0	Y
2	IC 280-567560/17	0.2	21923.0			109615.0	Y
3	IC 280-567560/16	0.5	67082.0			134164.0	Y
4	IC 280-567560/15	1.0	134076.0			134076.0	Y
5	IC 280-567560/14	2.5	329509.0			131803.6	Y
6	IC 280-567560/13	4.0	544987.0			136246.75	Y
7	IC 280-567560/12	7.0	951206.0			135886.571429	Y
8	IC 280-567560/11	10.0	1369840.0			136984.0	Y
9	IC 280-567560/10	25.0	3419168.0			136766.72	Y



FORM VI  
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA  
RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159130-1 Analy Batch No.: 567560

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

Instrument ID: CHHPLC\_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/03/2022 03:13 Calibration End Date: 03/03/2022 07:19 Calibration ID: 62763

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-567560/27	03020027.D
Level 2	IC 280-567560/26	03020026.D
Level 3	IC 280-567560/25	03020025.D
Level 4	IC 280-567560/24	03020024.D
Level 5	IC 280-567560/23	03020023.D
Level 6	IC 280-567560/22	03020022.D
Level 7	IC 280-567560/21	03020021.D
Level 8	IC 280-567560/20	03020020.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
TNX	5.170	5.168	5.172	5.164	5.171	5.157	5.156	5.140			5.021 - 5.321	5.162
DNX	6.030	6.028	6.032	6.024	6.031	6.017	6.016	6.000			5.881 - 6.181	6.022
MNX	7.624	7.621	7.625	7.617	7.625	7.610	7.602	7.593			7.475 - 7.775	7.615

FORM VI  
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA  
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-159130-1 Analy Batch No.: 567560

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

Instrument ID: CHHPLC\_X5 GC Column: Luna-phenyl ID: 4.6 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/03/2022 03:13 Calibration End Date: 03/03/2022 07:19 Calibration ID: 62763

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-567560/27	03020027.D
Level 2	IC 280-567560/26	03020026.D
Level 3	IC 280-567560/25	03020025.D
Level 4	IC 280-567560/24	03020024.D
Level 5	IC 280-567560/23	03020023.D
Level 6	IC 280-567560/22	03020022.D
Level 7	IC 280-567560/21	03020021.D
Level 8	IC 280-567560/20	03020020.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
TNX	349201 351611	355385 355367	353267 354987	350933 361808	Ave		354069.85 0				1.1		20.0			
DNX	317133 267552	289031 269316	277622 267891	269419 271146	Ave		278638.90 0				6.2		20.0			
MNX	257326 246598	252785 247481	254053 246929	246461 249015	Ave		250081.02 0				1.6		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI  
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA  
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver Job No.: 280-159130-1 Analy Batch No.: 567560

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

Instrument ID: CHHPLC\_X5 GC Column: Luna-phenyl ID: 4.6 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/03/2022 03:13 Calibration End Date: 03/03/2022 07:19 Calibration ID: 62763

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-567560/27	03020027.D
Level 2	IC 280-567560/26	03020026.D
Level 3	IC 280-567560/25	03020025.D
Level 4	IC 280-567560/24	03020024.D
Level 5	IC 280-567560/23	03020023.D
Level 6	IC 280-567560/22	03020022.D
Level 7	IC 280-567560/21	03020021.D
Level 8	IC 280-567560/20	03020020.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
TNX	Ave	6991 249006	17787 355342	35362 905425	87821	140785	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
DNX	Ave	6349 188710	14466 268159	27790 678544	67422	107128	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
MNX	Ave	6006 202167	14750 288166	29648 726501	71905	115112	0.0233 0.817	0.0584 1.17	0.117 2.92	0.292	0.467

Curve Type Legend

Ave = Average

Eurofins Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020020.D  
 Lims ID: IC DMT 8  
 Client ID:  
 Sample Type: IC Calib Level: 8  
 Inject. Date: 03-Mar-2022 03:13:58 ALS Bottle#: 20 Worklist Smp#: 20  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: IC DMT 8  
 Misc. Info.: 280-0108949-020  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Sublist: chrom-8330\_X5\_Luna\*sub2  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 03-Mar-2022 12:49:18 Calib Date: 03-Mar-2022 07:19:48  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020027.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm) Det: LC mwd1A, 254 nm  
 Process Host: CTX1618

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.140	5.171	-0.031	905425	2.50	2.56	
4 DNX	1	6.000	6.031	-0.031	678544	2.50	2.44	
6 MNX	1	7.593	7.625	-0.032	726501	2.92	2.91	

**Reagents:**

8330 DMT\_00010 Amount Added: 125.00 Units: uL

Report Date: 03-Mar-2022 12:49:19

Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020020.D

Injection Date: 03-Mar-2022 03:13:58

Instrument ID: CHHPLC\_X5

Operator ID: JZ

Lims ID: IC DMT 8

Worklist Smp#: 20

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

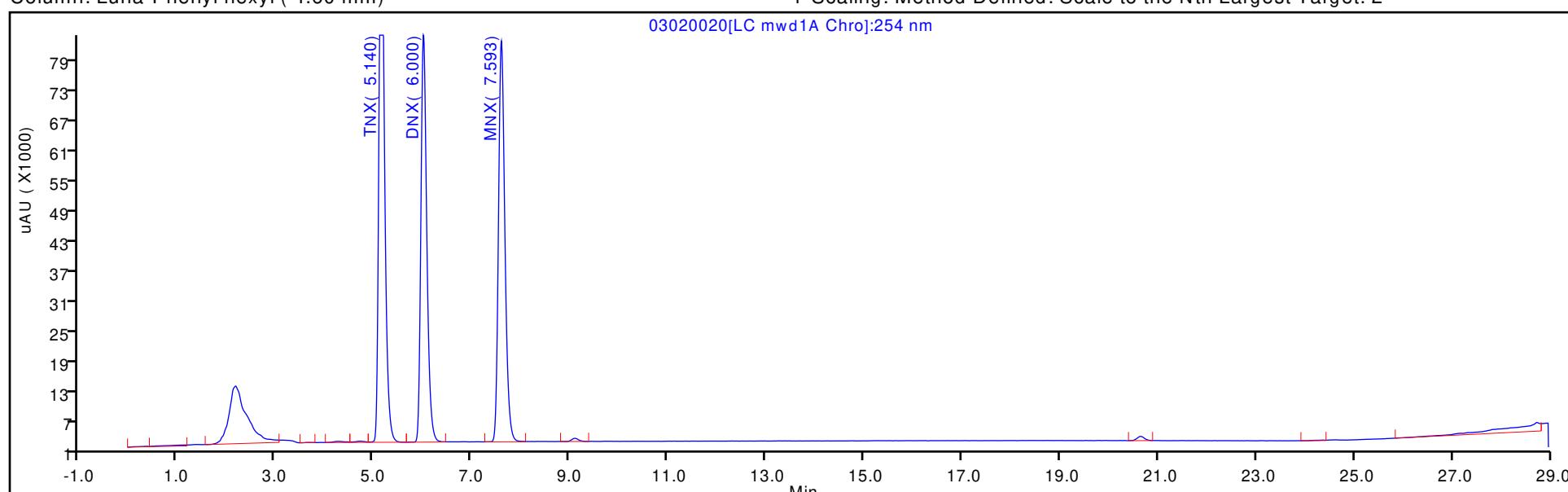
ALS Bottle#: 20

Method: 8330\_X5\_Luna

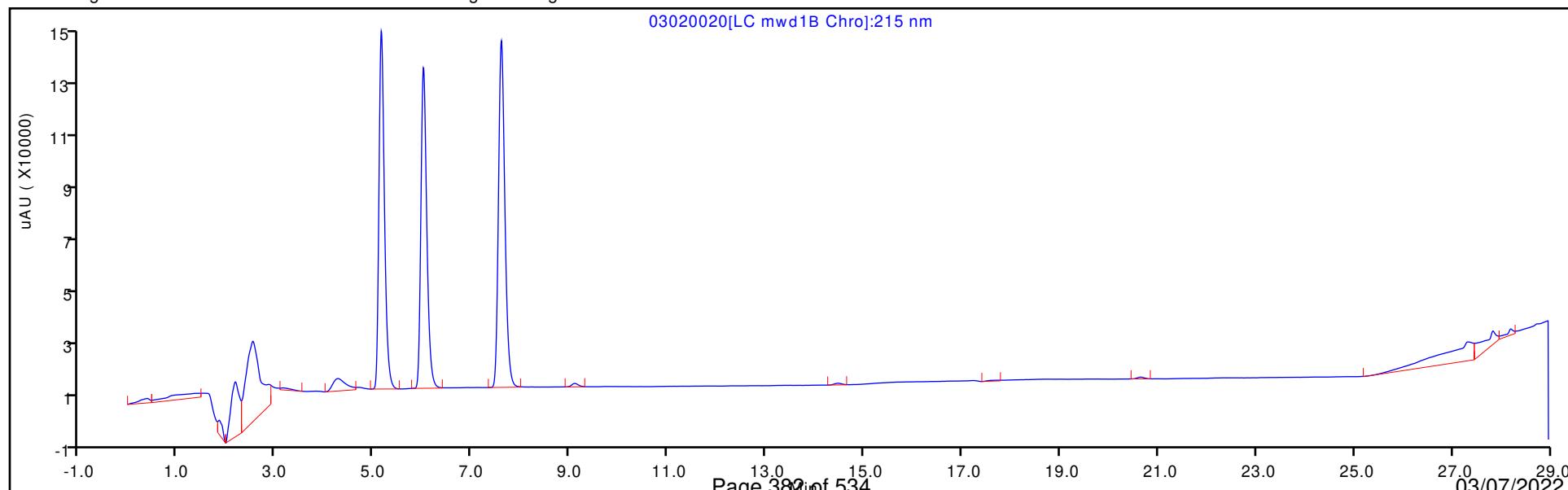
Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020021.D  
 Lims ID: IC DMT 7  
 Client ID:  
 Sample Type: IC Calib Level: 7  
 Inject. Date: 03-Mar-2022 03:49:08 ALS Bottle#: 21 Worklist Smp#: 21  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: IC DMT 7  
 Misc. Info.: 280-0108949-021  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Sublist: chrom-8330\_X5\_Luna\*sub2  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 03-Mar-2022 12:49:19 Calib Date: 03-Mar-2022 07:19:48  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020027.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm) Det: LC mwd1A, 254 nm  
 Process Host: CTX1618

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.156	5.171	-0.015	355342	1.00	1.00	
4 DNX	1	6.016	6.031	-0.015	268159	1.00	0.9624	
6 MNX	1	7.602	7.625	-0.023	288166	1.17	1.15	

**Reagents:**

8330 DMT\_00010 Amount Added: 50.00 Units: uL

Report Date: 03-Mar-2022 12:49:19

Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020021.D

Injection Date: 03-Mar-2022 03:49:08

Instrument ID: CHHPLC\_X5

Operator ID: JZ

Lims ID: IC DMT 7

Worklist Smp#: 21

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

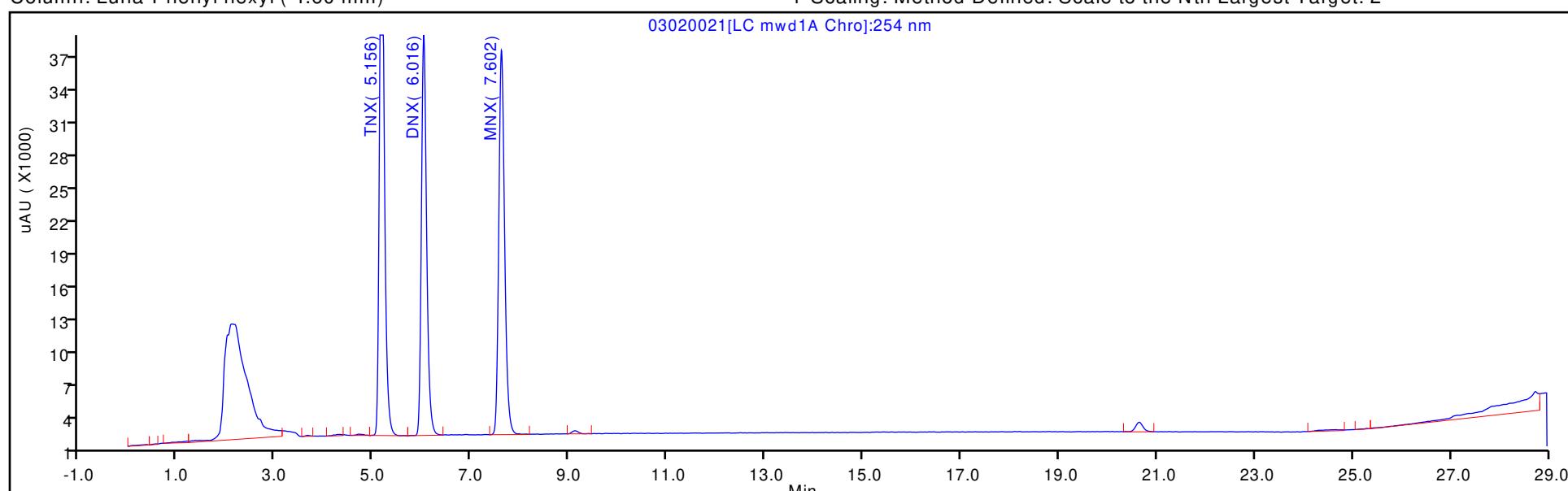
ALS Bottle#: 21

Method: 8330\_X5\_Luna

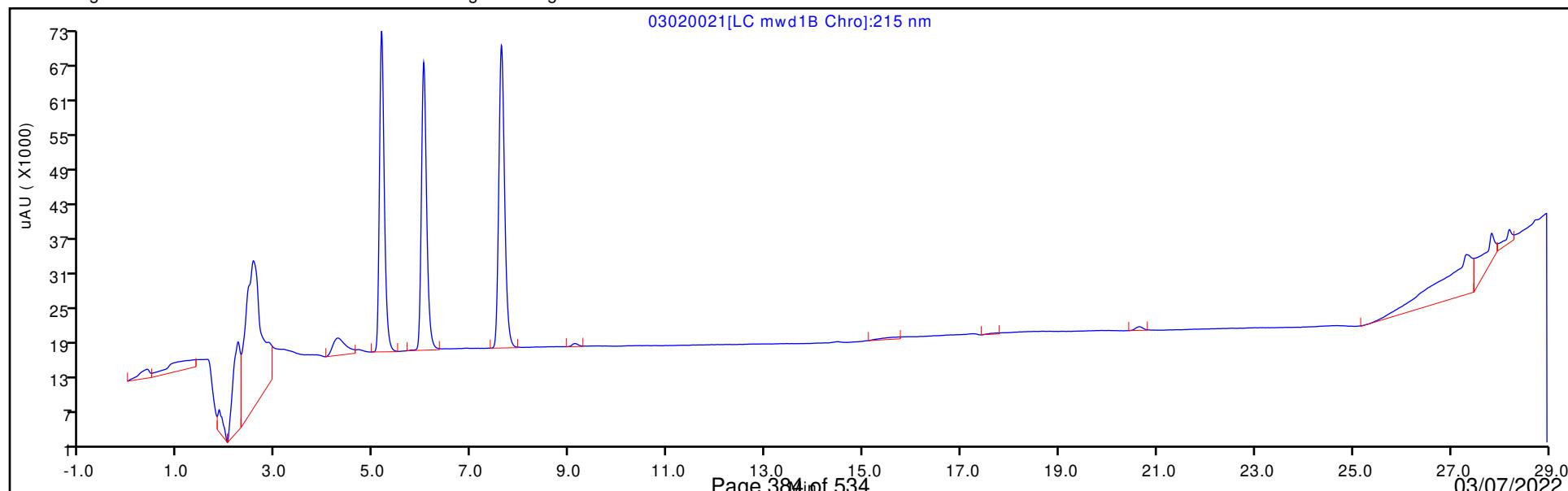
Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020022.D  
 Lims ID: IC DMT 6  
 Client ID:  
 Sample Type: IC Calib Level: 6  
 Inject. Date: 03-Mar-2022 04:24:13 ALS Bottle#: 22 Worklist Smp#: 22  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: IC DMT 6  
 Misc. Info.: 280-0108949-022  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Sublist: chrom-8330\_X5\_Luna\*sub2  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 03-Mar-2022 12:49:19 Calib Date: 03-Mar-2022 07:19:48  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020027.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm) Det: LC mwd1A, 254 nm  
 Process Host: CTX1618

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.157	5.171	-0.014	249006	0.7007	0.7033	
4 DNX	1	6.017	6.031	-0.014	188710	0.7007	0.6773	
6 MNX	1	7.610	7.625	-0.015	202167	0.8169	0.8084	

**Reagents:**

8330 DMT\_00010 Amount Added: 35.00 Units: uL

Report Date: 03-Mar-2022 12:49:19

Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020022.D

Injection Date: 03-Mar-2022 04:24:13

Instrument ID: CHHPLC\_X5

Operator ID: JZ

Lims ID: IC DMT 6

Worklist Smp#: 22

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

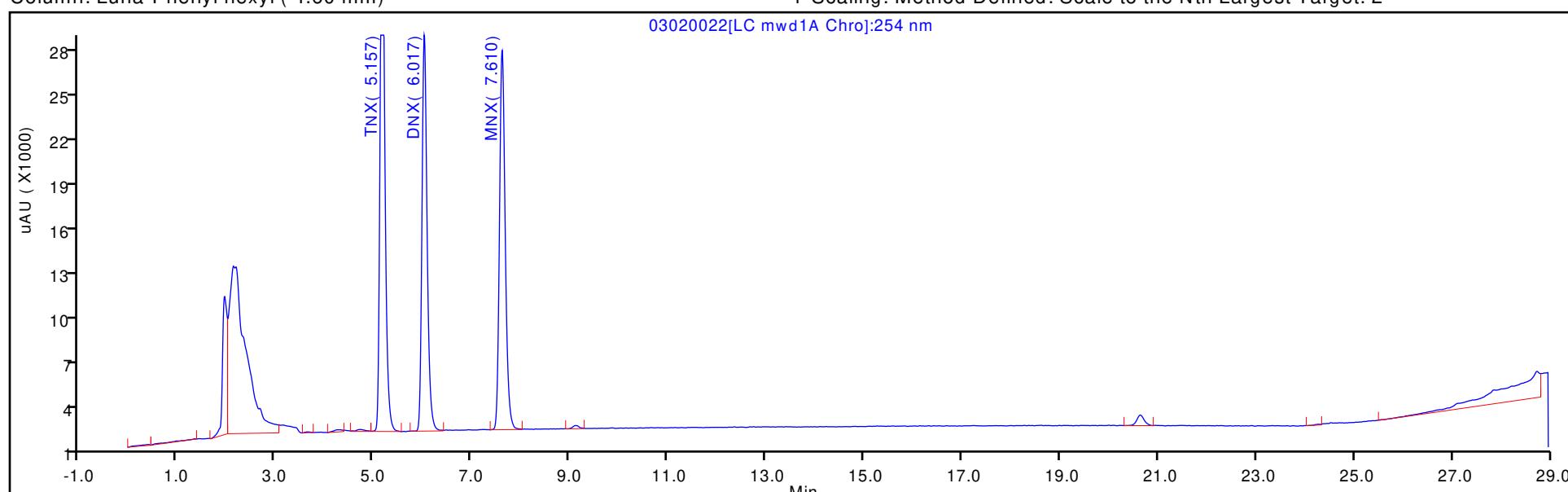
ALS Bottle#: 22

Method: 8330\_X5\_Luna

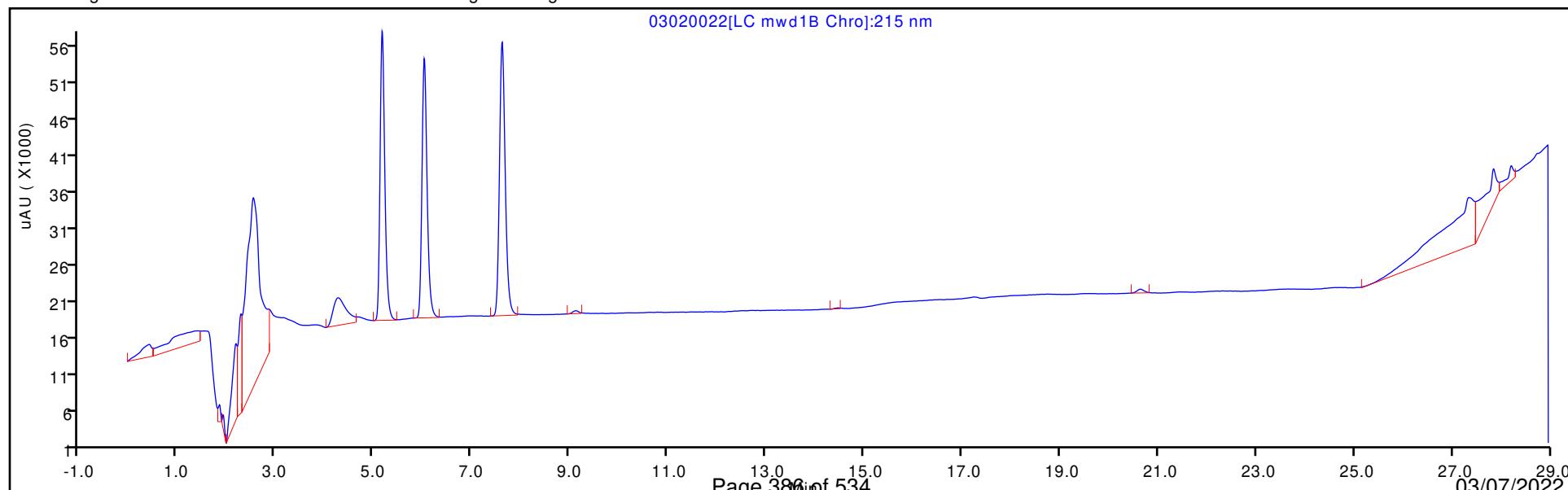
Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



**Eurofins Denver**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020023.D  
 Lims ID: IC DMT 5  
 Client ID:  
 Sample Type: IC Calib Level: 5  
 Inject. Date: 03-Mar-2022 04:59:22 ALS Bottle#: 23 Worklist Smp#: 23  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: IC DMT 5  
 Misc. Info.: 280-0108949-023  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Sublist: chrom-8330\_X5\_Luna\*sub2  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 03-Mar-2022 12:49:20 Calib Date: 03-Mar-2022 07:19:48  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020027.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm) Det: LC mwd1A, 254 nm  
 Process Host: CTX1618

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.171	5.171	0.000	140785	0.4004	0.3976	
4 DNX	1	6.031	6.031	0.000	107128	0.4004	0.3845	
6 MNX	1	7.625	7.625	0.000	115112	0.4668	0.4603	

**Reagents:**

8330 DMT\_00010 Amount Added: 20.00 Units: uL

Report Date: 03-Mar-2022 12:49:20

Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020023.D

Injection Date: 03-Mar-2022 04:59:22

Instrument ID: CHHPLC\_X5

Operator ID: JZ

Lims ID: IC DMT 5

Worklist Smp#: 23

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

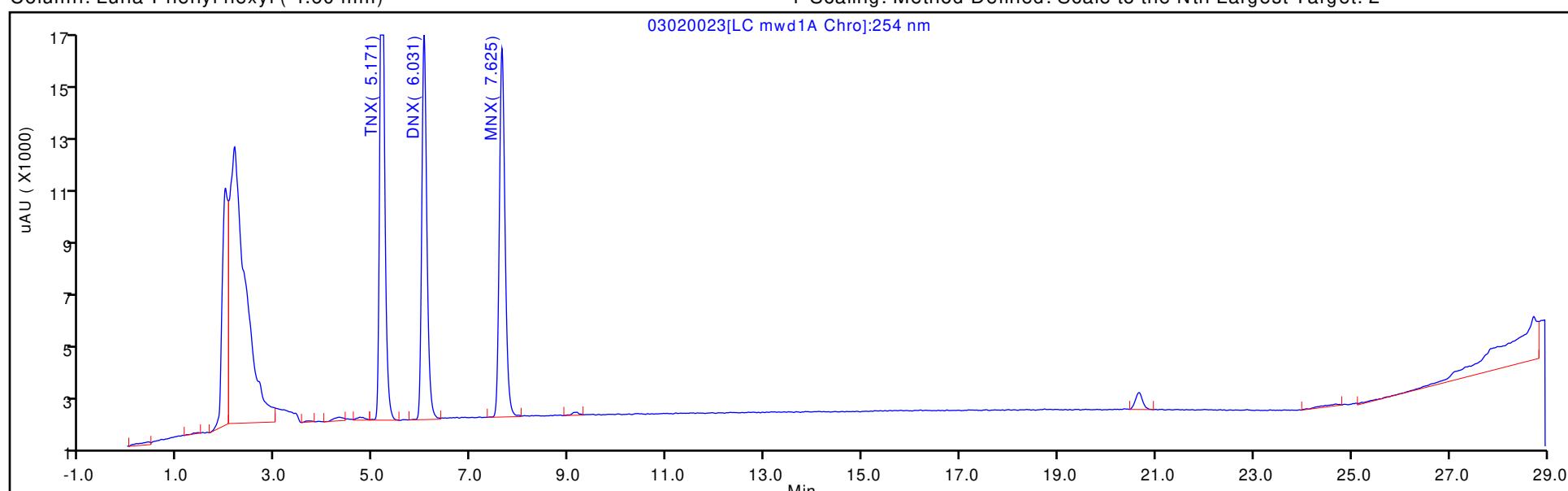
ALS Bottle#: 23

Method: 8330\_X5\_Luna

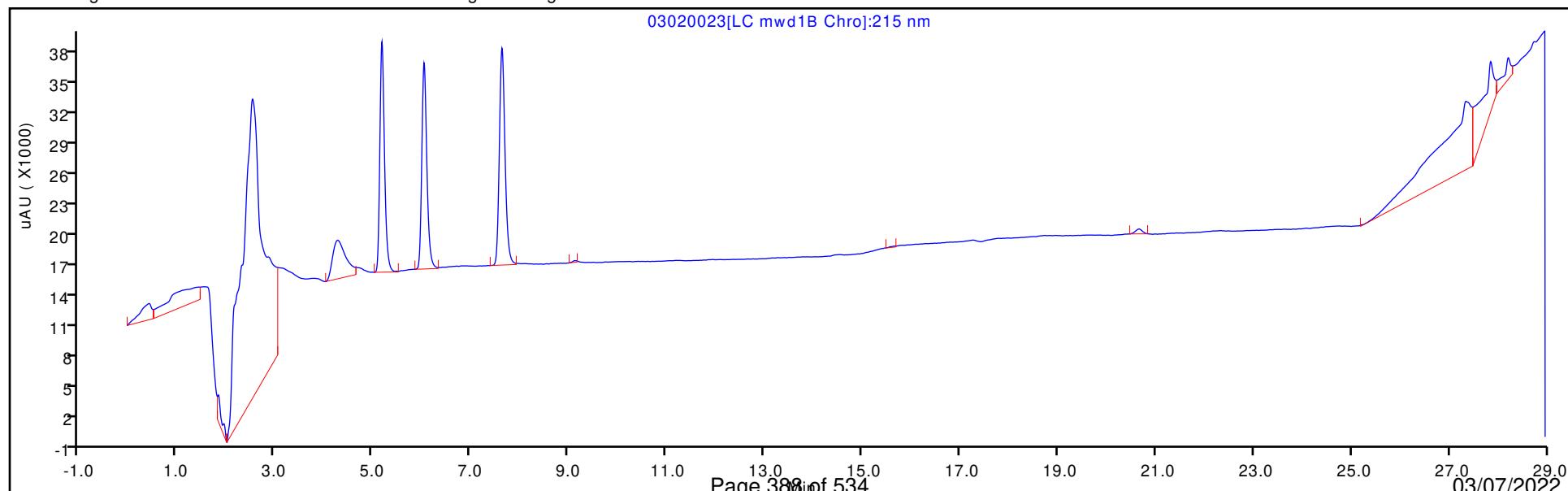
Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



**Eurofins Denver**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020024.D  
 Lims ID: IC DMT 4  
 Client ID:  
 Sample Type: IC Calib Level: 4  
 Inject. Date: 03-Mar-2022 05:34:27 ALS Bottle#: 24 Worklist Smp#: 24  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: IC DMT 4  
 Misc. Info.: 280-0108949-024  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Sublist: chrom-8330\_X5\_Luna\*sub2  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 03-Mar-2022 12:49:20 Calib Date: 03-Mar-2022 07:19:48  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020027.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm) Det: LC mwd1A, 254 nm  
 Process Host: CTX1618

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.164	5.171	-0.007	87821	0.2503	0.2480	
4 DNX	1	6.024	6.031	-0.007	67422	0.2503	0.2420	
6 MNX	1	7.617	7.625	-0.008	71905	0.2918	0.2875	

**Reagents:**

8330 DMT\_00010 Amount Added: 12.50 Units: uL

Report Date: 03-Mar-2022 12:49:20

Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020024.D

Injection Date: 03-Mar-2022 05:34:27

Instrument ID: CHHPLC\_X5

Operator ID: JZ

Lims ID: IC DMT 4

Worklist Smp#: 24

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

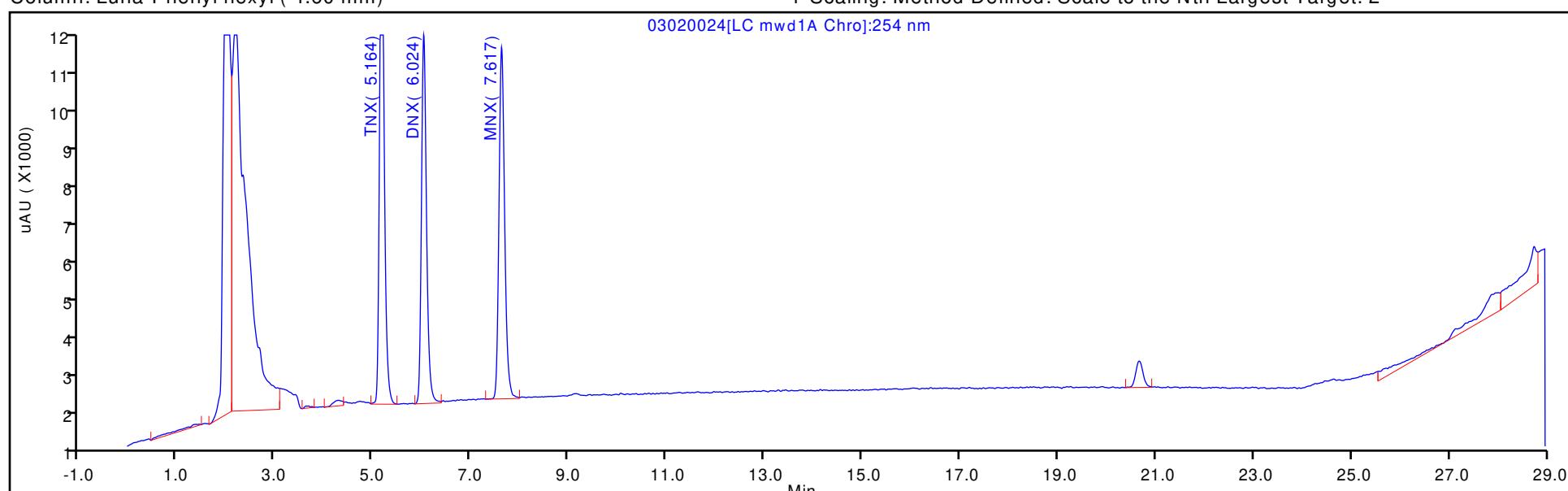
ALS Bottle#: 24

Method: 8330\_X5\_Luna

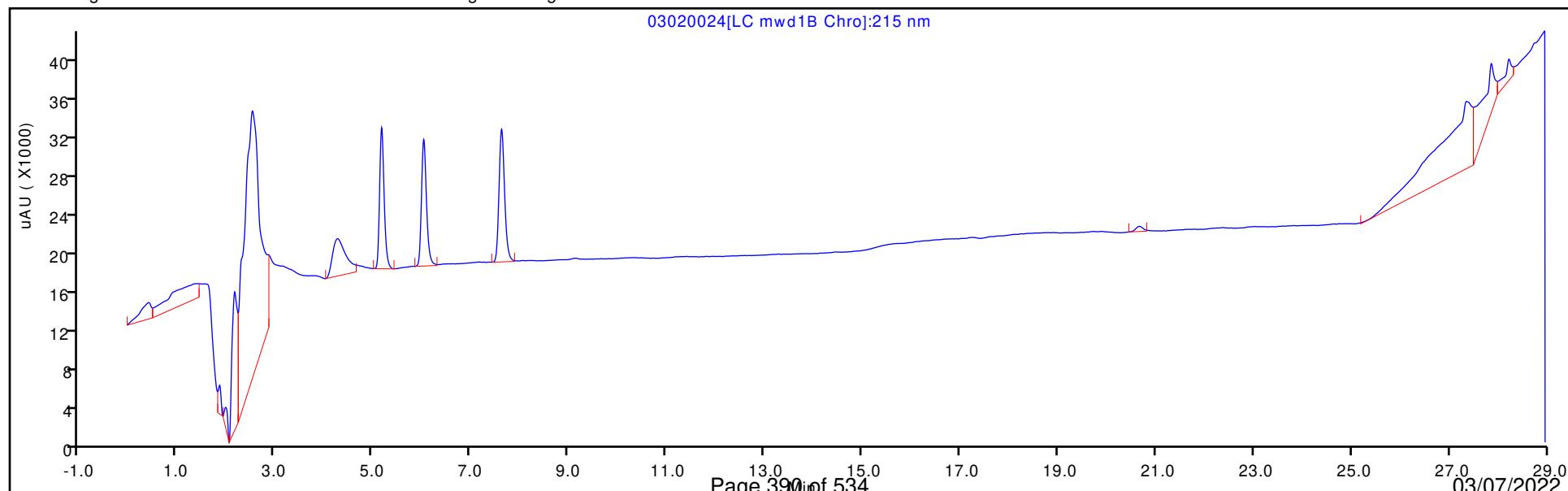
Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020025.D  
 Lims ID: IC DMT 3  
 Client ID:  
 Sample Type: IC Calib Level: 3  
 Inject. Date: 03-Mar-2022 06:09:35 ALS Bottle#: 25 Worklist Smp#: 25  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Sample Info: IC DMT 3  
 Misc. Info.: 280-0108949-025  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Sublist: chrom-8330\_X5\_Luna\*sub2  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 03-Mar-2022 12:49:21 Calib Date: 03-Mar-2022 07:19:48  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020027.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm) Det: LC mwd1A, 254 nm  
 Process Host: CTX1618

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.172	5.171	0.001	35362	0.1001	0.0999	
4 DNX	1	6.032	6.031	0.001	27790	0.1001	0.0997	
6 MNX	1	7.625	7.625	0.000	29648	0.1167	0.1186	

**Reagents:**

8330 DMT\_00010 Amount Added: 5.00 Units: uL

Report Date: 03-Mar-2022 12:49:21

Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020025.D

Injection Date: 03-Mar-2022 06:09:35

Instrument ID: CHHPLC\_X5

Operator ID: JZ

Lims ID: IC DMT 3

Worklist Smp#: 25

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

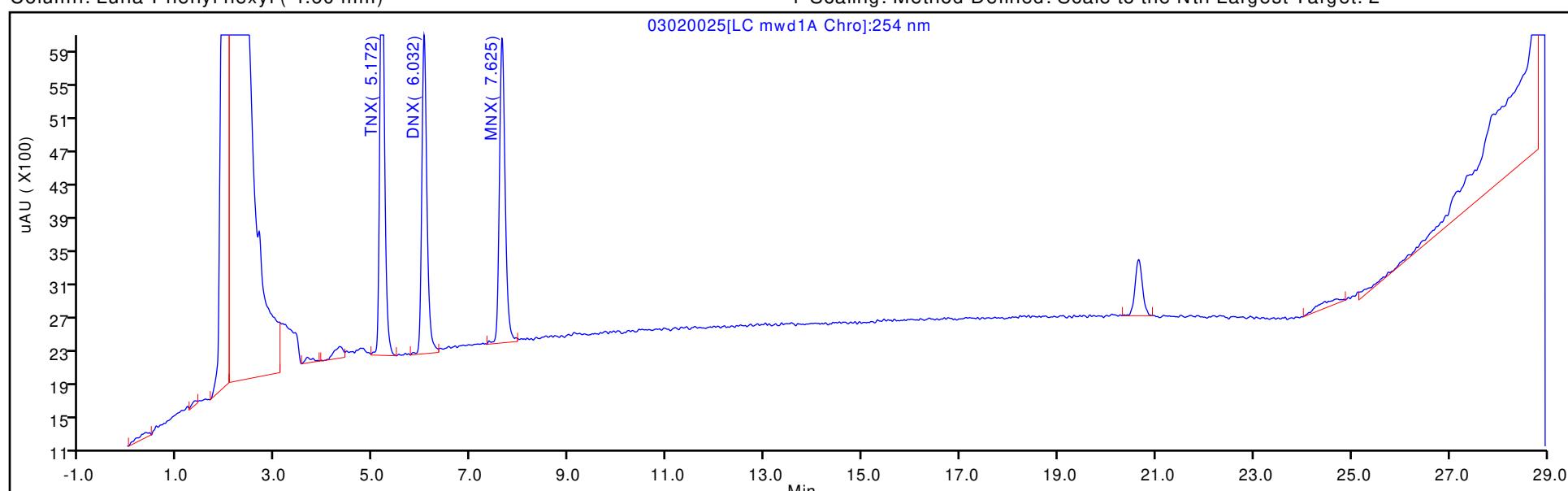
ALS Bottle#: 25

Method: 8330\_X5\_Luna

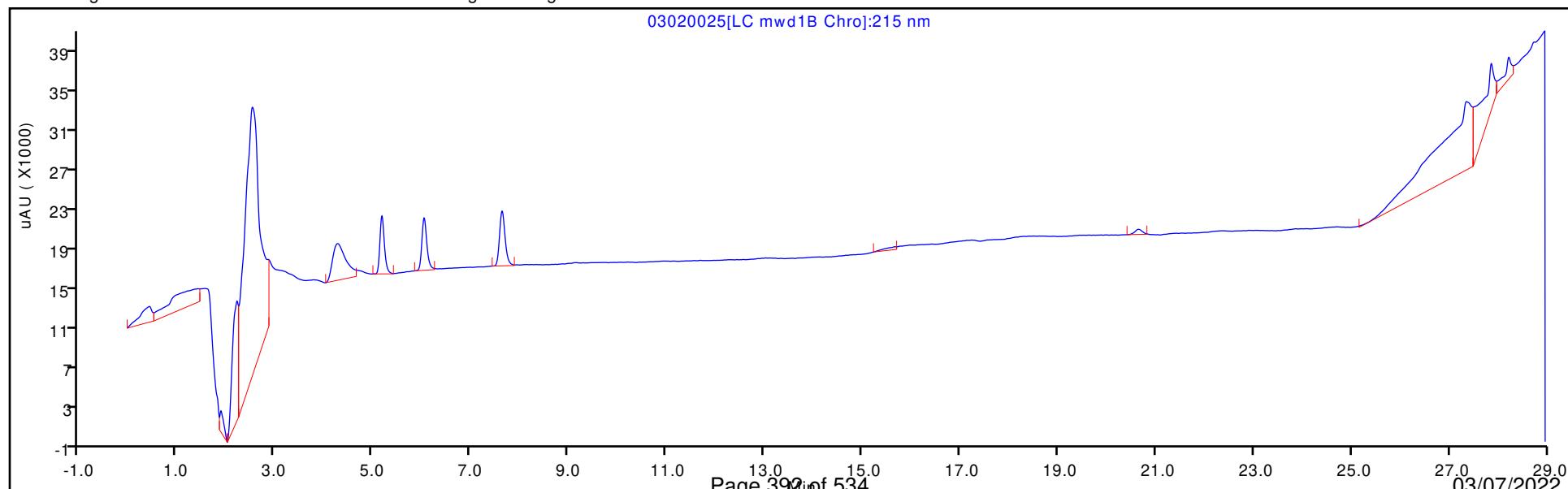
Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020026.D  
 Lims ID: IC DMT 2  
 Client ID:  
 Sample Type: IC Calib Level: 2  
 Inject. Date: 03-Mar-2022 06:44:40 ALS Bottle#: 26 Worklist Smp#: 26  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: IC DMT 2  
 Misc. Info.: 280-0108949-026  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Sublist: chrom-8330\_X5\_Luna\*sub2  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 03-Mar-2022 12:49:21 Calib Date: 03-Mar-2022 07:19:48  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020027.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm) Det: LC mwd1A, 254 nm  
 Process Host: CTX1618

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.168	5.171	-0.003	17787	0.0501	0.0502	
4 DNX	1	6.028	6.031	-0.003	14466	0.0501	0.0519	
6 MNX	1	7.621	7.625	-0.004	14750	0.0584	0.0590	

**Reagents:**

8330 DMT\_00010 Amount Added: 2.50 Units: uL

Report Date: 03-Mar-2022 12:49:21

Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020026.D

Injection Date: 03-Mar-2022 06:44:40

Instrument ID: CHHPLC\_X5

Operator ID: JZ

Lims ID: IC DMT 2

Worklist Smp#: 26

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

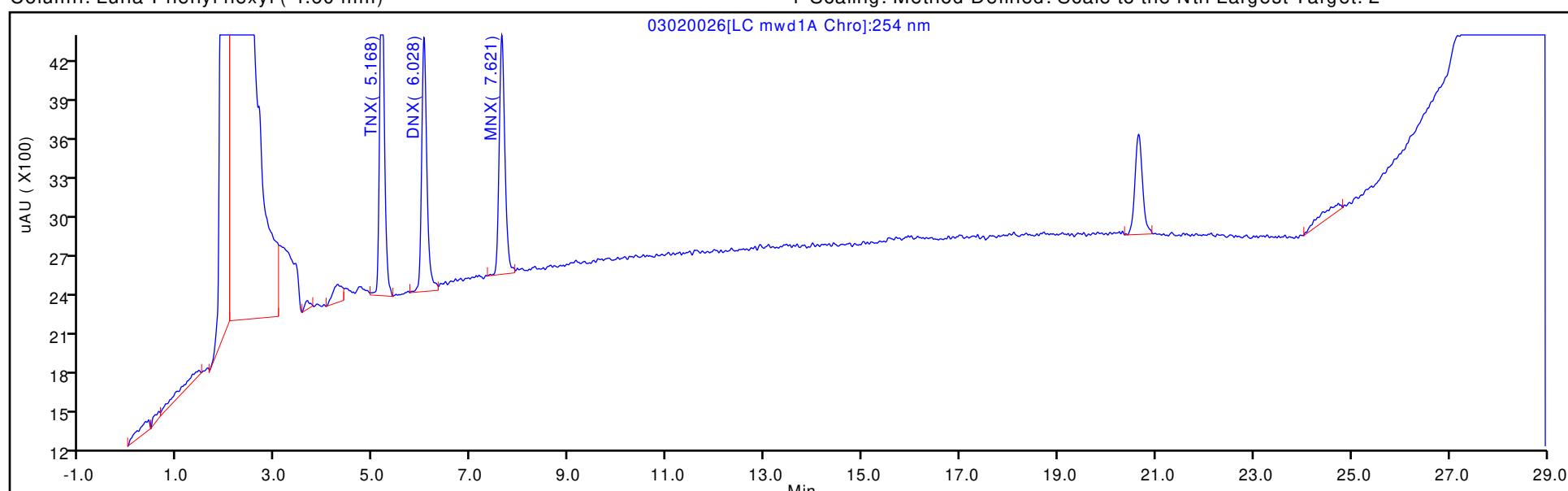
ALS Bottle#: 26

Method: 8330\_X5\_Luna

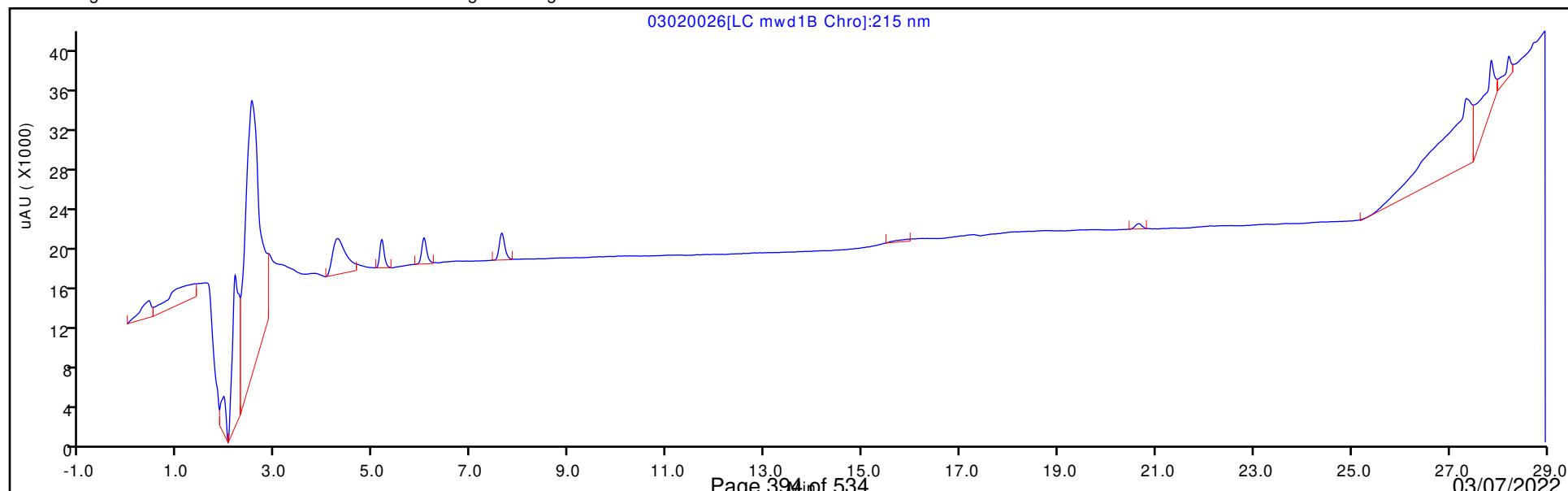
Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020027.D  
 Lims ID: IC DMT 1  
 Client ID:  
 Sample Type: IC Calib Level: 1  
 Inject. Date: 03-Mar-2022 07:19:48 ALS Bottle#: 27 Worklist Smp#: 27  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: IC DMT 1  
 Misc. Info.: 280-0108949-027  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Sublist: chrom-8330\_X5\_Luna\*sub2  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 03-Mar-2022 12:49:22 Calib Date: 03-Mar-2022 07:19:48  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020027.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm) Det: LC mwd1A, 254 nm  
 Process Host: CTX1618

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.170	5.171	-0.001	6991	0.0200	0.0197	
4 DNX	1	6.030	6.031	-0.001	6349	0.0200	0.0228	
6 MNX	1	7.624	7.625	-0.001	6006	0.0233	0.0240	

**Reagents:**

8330 DMT\_00010 Amount Added: 1.00 Units: uL

Report Date: 03-Mar-2022 12:49:22

Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020027.D

Injection Date: 03-Mar-2022 07:19:48

Instrument ID: CHHPLC\_X5

Operator ID: JZ

Lims ID: IC DMT 1

Worklist Smp#: 27

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

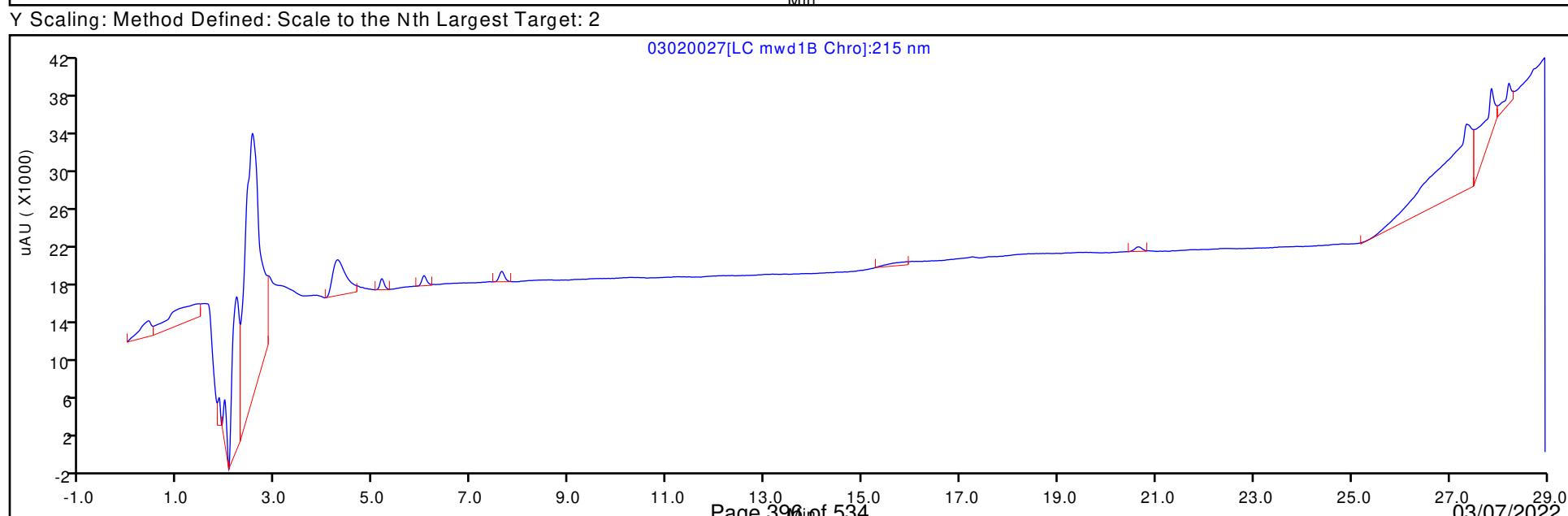
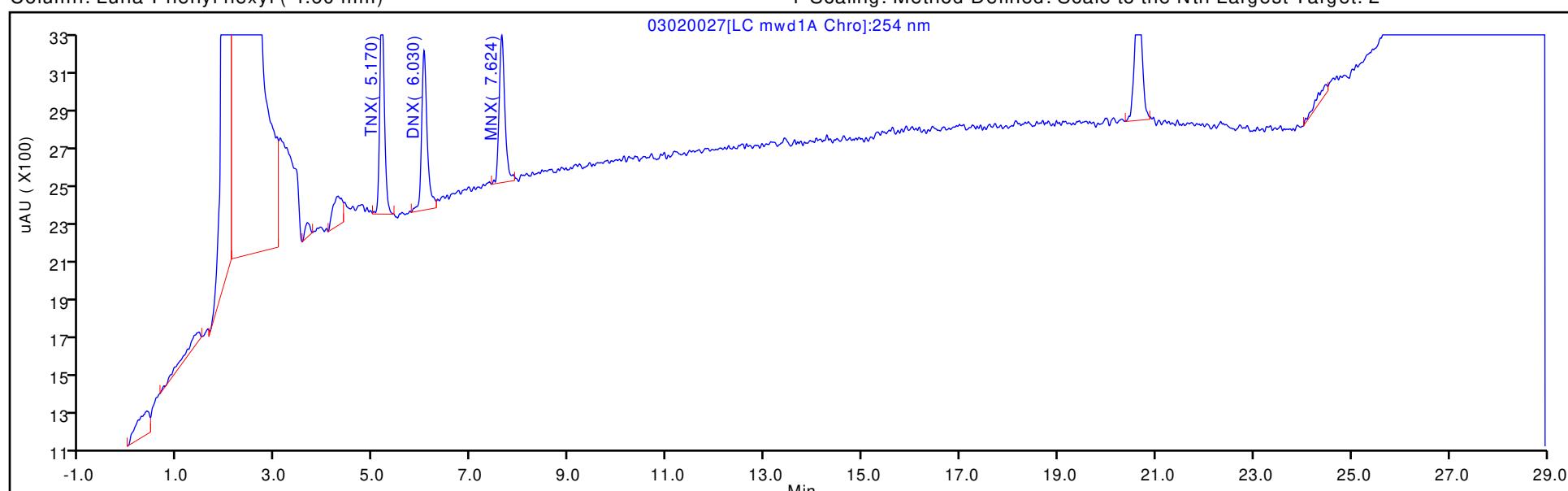
ALS Bottle#: 27

Method: 8330\_X5\_Luna

Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl ( 4.60 mm)

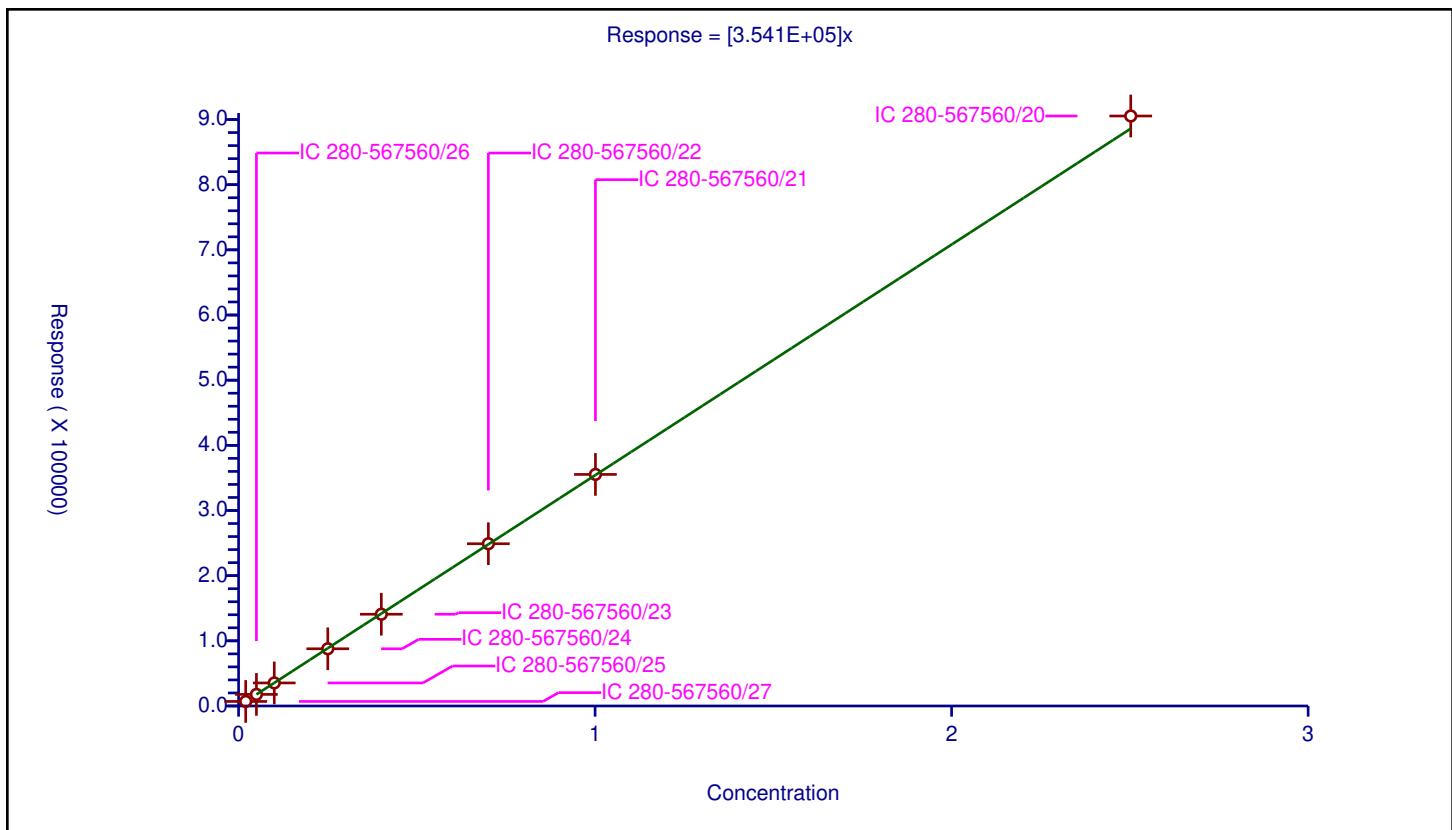
Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	3.541E+05
Error Coefficients	
Standard Error:	7350
Relative Standard Error:	1.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

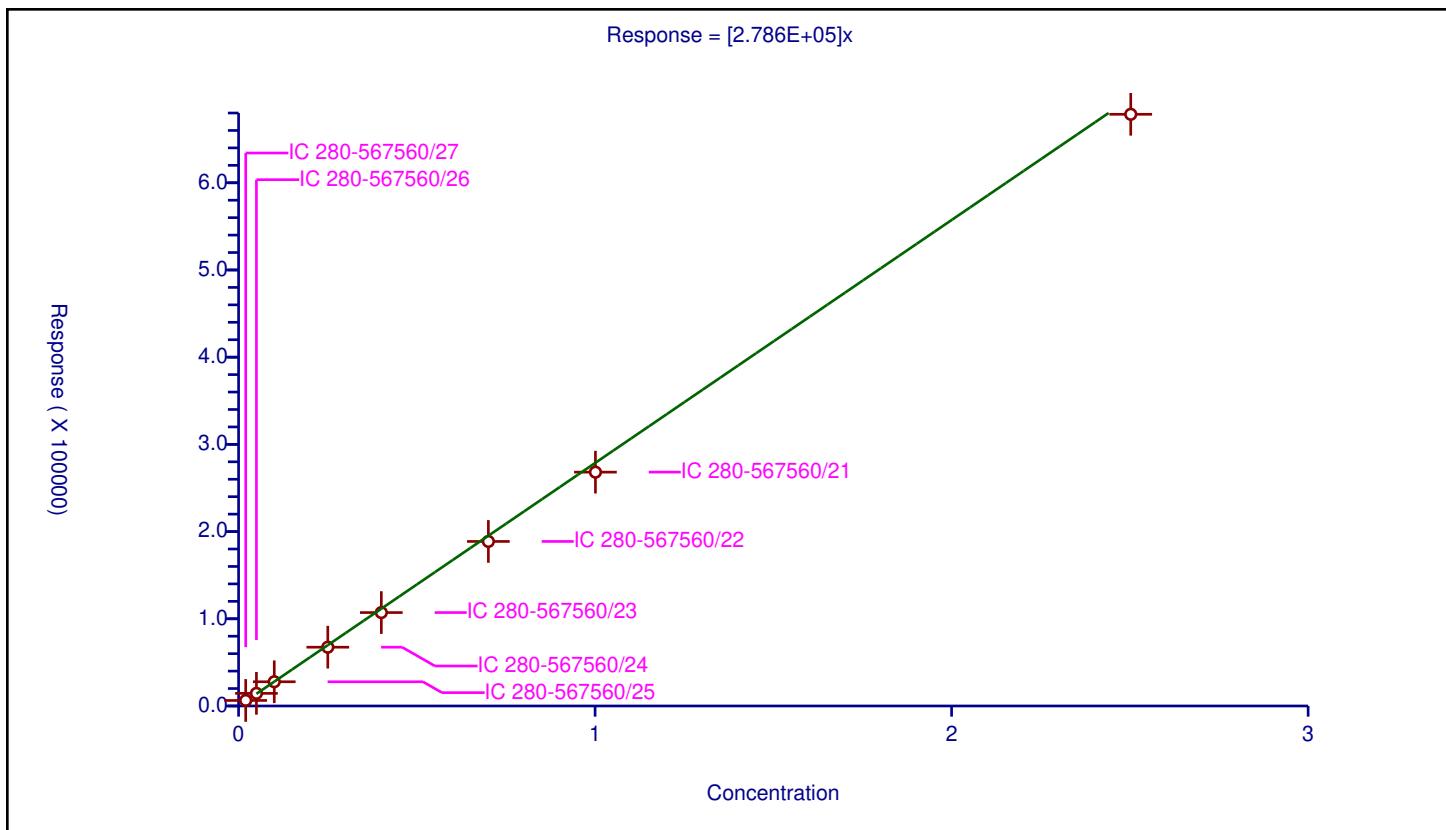
ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-567560/27	0.02002	6991.0			349200.799201	Y
2	IC 280-567560/26	0.05005	17787.0			355384.615385	Y
3	IC 280-567560/25	0.1001	35362.0			353266.733267	Y
4	IC 280-567560/24	0.25025	87821.0			350933.066933	Y
5	IC 280-567560/23	0.4004	140785.0			351610.889111	Y
6	IC 280-567560/22	0.7007	249006.0			355367.489653	Y
7	IC 280-567560/21	1.001	355342.0			354987.012987	Y
8	IC 280-567560/20	2.5025	905425.0			361808.191808	Y



**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	2.786E+05
Error Coefficients	
Standard Error:	8750
Relative Standard Error:	6.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

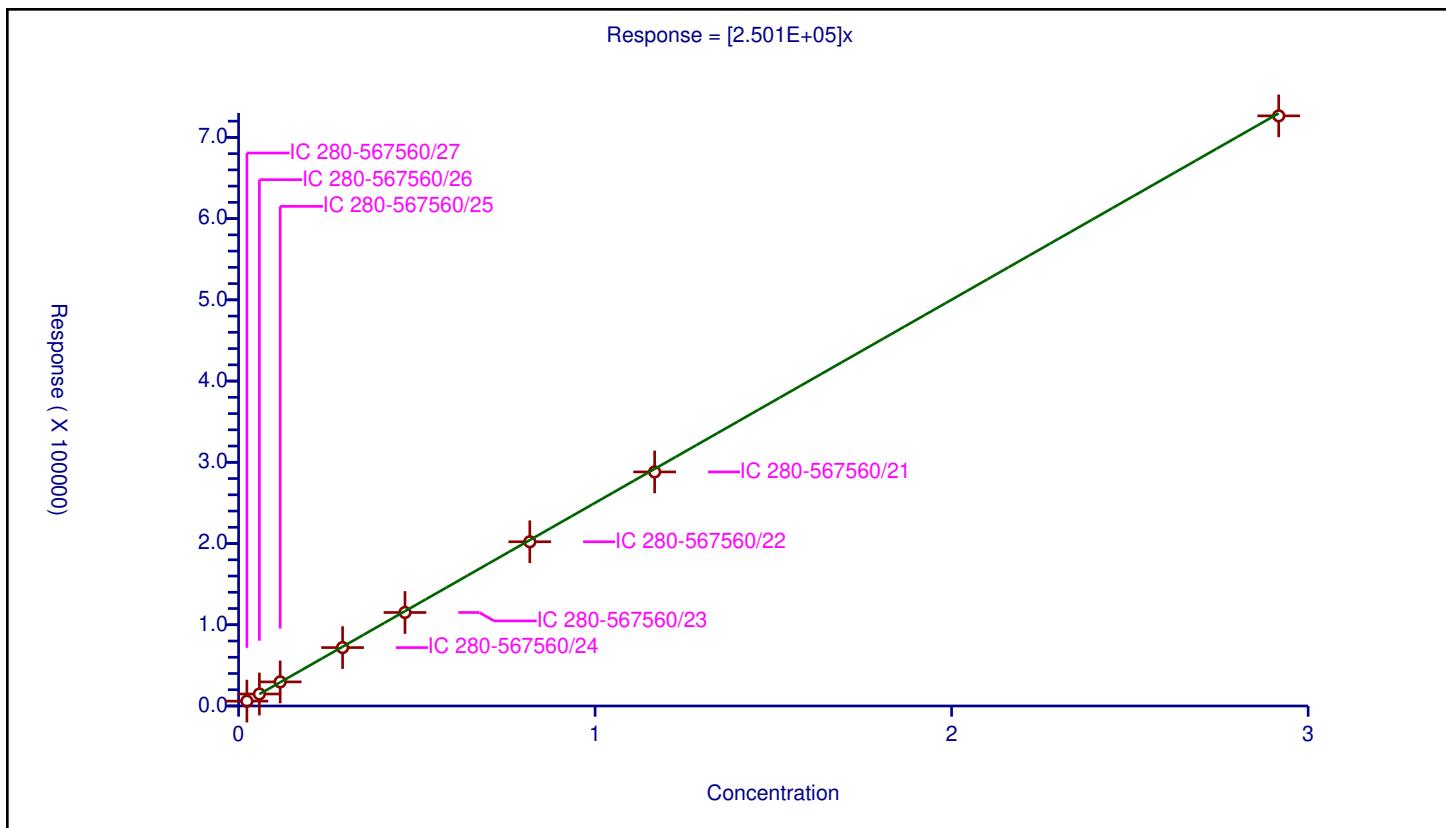
ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-567560/27	0.02002	6349.0			317132.867133	Y
2	IC 280-567560/26	0.05005	14466.0			289030.969031	Y
3	IC 280-567560/25	0.1001	27790.0			277622.377622	Y
4	IC 280-567560/24	0.25025	67422.0			269418.581419	Y
5	IC 280-567560/23	0.4004	107128.0			267552.447552	Y
6	IC 280-567560/22	0.7007	188710.0			269316.397888	Y
7	IC 280-567560/21	1.001	268159.0			267891.108891	Y
8	IC 280-567560/20	2.5025	678544.0			271146.453546	Y



**Curve Type:** Average  
**Weighting:** Conc\_Sq  
**Origin:** Force  
**Dependency:** Response  
**Calib Mode:** ESTD  
**Response Base:** AREA  
**RF Rounding:** 0

Curve Coefficients	
Intercept:	0
Slope:	2.501E+05
Error Coefficients	
Standard Error:	2130
Relative Standard Error:	1.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-567560/27	0.02334	6006.0			257326.478149	Y
2	IC 280-567560/26	0.05835	14750.0			252784.918595	Y
3	IC 280-567560/25	0.1167	29648.0			254053.127678	Y
4	IC 280-567560/24	0.29175	71905.0			246461.01114	Y
5	IC 280-567560/23	0.4668	115112.0			246598.114824	Y
6	IC 280-567560/22	0.8169	202167.0			247480.719794	Y
7	IC 280-567560/21	1.167	288166.0			246928.877464	Y
8	IC 280-567560/20	2.9175	726501.0			249014.910026	Y



FORM VII  
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159130-1

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

Lab Sample ID: ICV 280-562503/20 Calibration Date: 01/04/2022 21:54

Instrument ID: CHHPLC\_X3 Calib Start Date: 01/04/2022 18:28

GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 01/04/2022 21:31

Lab File ID: 01040020.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	83827	81972		489	500	-2.2	15.0
RDX	Ave	103609	97016		468	500	-6.4	15.0
Picric acid	Ave	77039	79050		513	500	2.6	15.0
1,3,5-Trinitrobenzene	Ave	218096	225924		518	500	3.6	15.0
1,3-Dinitrobenzene	Ave	288401	300348		521	500	4.1	15.0
Nitrobenzene	Ave	191953	197872		515	500	3.1	15.0
Tetryl	Ave	170567	173346		508	500	1.6	15.0
Nitroglycerin	Ave	63037	66420		5270	5000	5.4	15.0
2,4,6-Trinitrotoluene	Ave	202726	207174		511	500	2.2	15.0
4-Amino-2,6-dinitrotoluene	Ave	150985	149862		496	500	-0.7	15.0
2-Amino-4,6-dinitrotoluene	Ave	202171	202042		500	500	-0.0	15.0
2,6-Dinitrotoluene	Ave	143115	146810		513	500	2.6	15.0
2,4-Dinitrotoluene	Ave	289351	286440		495	500	-1.0	15.0
2-Nitrotoluene	Ave	127614	127510		500	500	-0.0	15.0
4-Nitrotoluene	Ave	106235	113254		533	500	6.6	15.0
3-Nitrotoluene	Ave	142273	134496		473	500	-5.5	15.0
PETN	Lin2		76139		5230	5000	4.6	15.0
1,2-Dinitrobenzene	Ave	124698	132072		530	500	5.9	15.0

FORM VII  
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159130-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: ICV 280-562503/20 Calibration Date: 01/04/2022 21:54  
Instrument ID: CHHPLC\_X3 Calib Start Date: 01/04/2022 18:28  
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 01/04/2022 21:31  
Lab File ID: 01040020.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.60	6.45	6.75
RDX	7.60	7.46	7.76
Picric acid	7.92	7.80	8.10
1,3,5-Trinitrobenzene	8.68	8.54	8.84
1,3-Dinitrobenzene	9.32	9.18	9.48
Nitrobenzene	9.71	9.58	9.88
Tetryl	10.04	9.91	10.21
Nitroglycerin	10.50	10.37	10.67
2,4,6-Trinitrotoluene	10.96	10.87	11.07
4-Amino-2,6-dinitrotoluene	11.16	11.07	11.27
2-Amino-4,6-dinitrotoluene	11.41	11.33	11.53
2,6-Dinitrotoluene	11.58	11.50	11.70
2,4-Dinitrotoluene	11.75	11.67	11.87
2-Nitrotoluene	12.62	12.49	12.79
4-Nitrotoluene	13.05	12.92	13.22
3-Nitrotoluene	13.63	13.50	13.80
PETN	14.72	14.59	14.89
1,2-Dinitrobenzene	8.56	8.42	8.72

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040020.D  
 Lims ID: ICV INT  
 Client ID:  
 Sample Type: ICV  
 Inject. Date: 04-Jan-2022 21:54:19 ALS Bottle#: 20 Worklist Smp#: 20  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Sample Info: ICV INT  
 Misc. Info.: 280-0107731-020  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Sublist:  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 06-Jan-2022 20:07:47 Calib Date: 04-Jan-2022 21:31:24  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040019.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1641

First Level Reviewer: zhangji Date: 06-Jan-2022 20:07:47

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.602	6.598	0.004	40986	0.5000	0.4889	
8 RDX	1	7.602	7.605	-0.003	48508	0.5000	0.4682	M
9 2,4,6-Trinitrophenol	1	7.915	7.945	-0.030	39525	0.5000	0.5131	M
\$ 10 1,2-Dinitrobenzene	1	8.562	8.572	-0.010	66036	0.5000	0.5296	
11 1,3,5-Trinitrobenzene	1	8.682	8.692	-0.010	112962	0.5000	0.5179	
12 1,3-Dinitrobenzene	1	9.315	9.331	-0.016	150174	0.5000	0.5207	
13 Nitrobenzene	1	9.708	9.725	-0.017	98936	0.5000	0.5154	
15 Tetryl	1	10.042	10.058	-0.016	86673	0.5000	0.5081	
16 Nitroglycerin	2	10.502	10.518	-0.016	332100	5.00	5.27	
17 2,4,6-Trinitrotoluene	1	10.955	10.971	-0.016	103587	0.5000	0.5110	
18 4-Amino-2,6-dinitrotoluene	1	11.155	11.171	-0.016	74931	0.5000	0.4963	
19 2-Amino-4,6-dinitrotoluene	1	11.408	11.425	-0.017	101021	0.5000	0.4997	
20 2,6-Dinitrotoluene	1	11.582	11.598	-0.016	73405	0.5000	0.5129	
21 2,4-Dinitrotoluene	1	11.748	11.765	-0.017	143220	0.5000	0.4950	
22 o-Nitrotoluene	1	12.615	12.638	-0.023	63755	0.5000	0.4996	
23 p-Nitrotoluene	1	13.048	13.071	-0.023	56627	0.5000	0.5330	
24 m-Nitrotoluene	1	13.628	13.651	-0.023	67248	0.5000	0.4727	
25 PETN	2	14.715	14.738	-0.023	380697	5.00	5.23	

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

### Reagents:

8330Surrogate_00127	Amount Added: 50.00	Units: uL
8330 LCS_00111	Amount Added: 50.00	Units: uL

Report Date: 06-Jan-2022 20:08:00

Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220104-107731.b\01040020.d

Injection Date: 04-Jan-2022 21:54:19

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: ICV INT

Worklist Smp#: 20

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

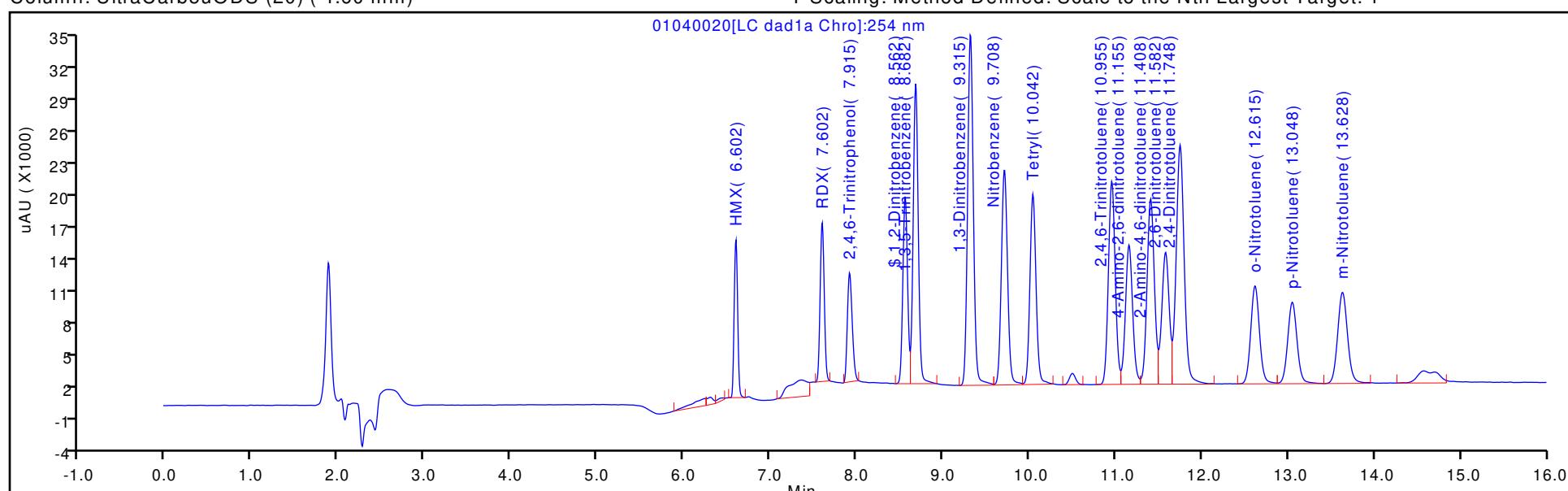
ALS Bottle#: 20

Method: 8330\_X3

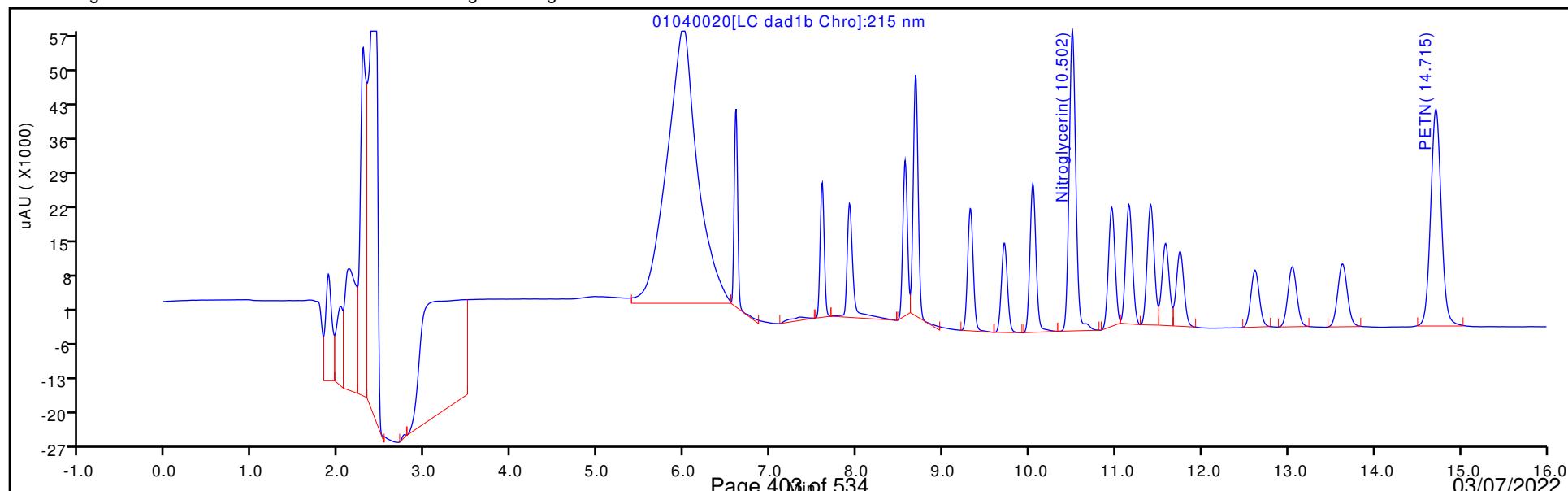
Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



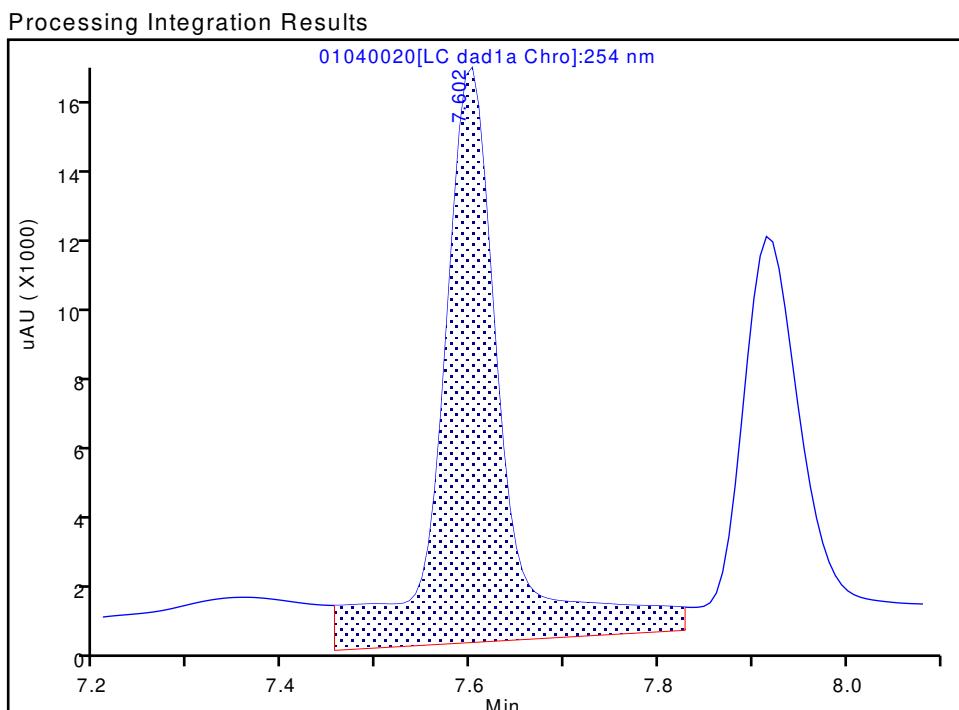
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 Injection Date: 04-Jan-2022 21:54:19 Instrument ID: CHHPLC\_X3  
 Lims ID: ICV INT  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 20 Worklist Smp#: 20  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

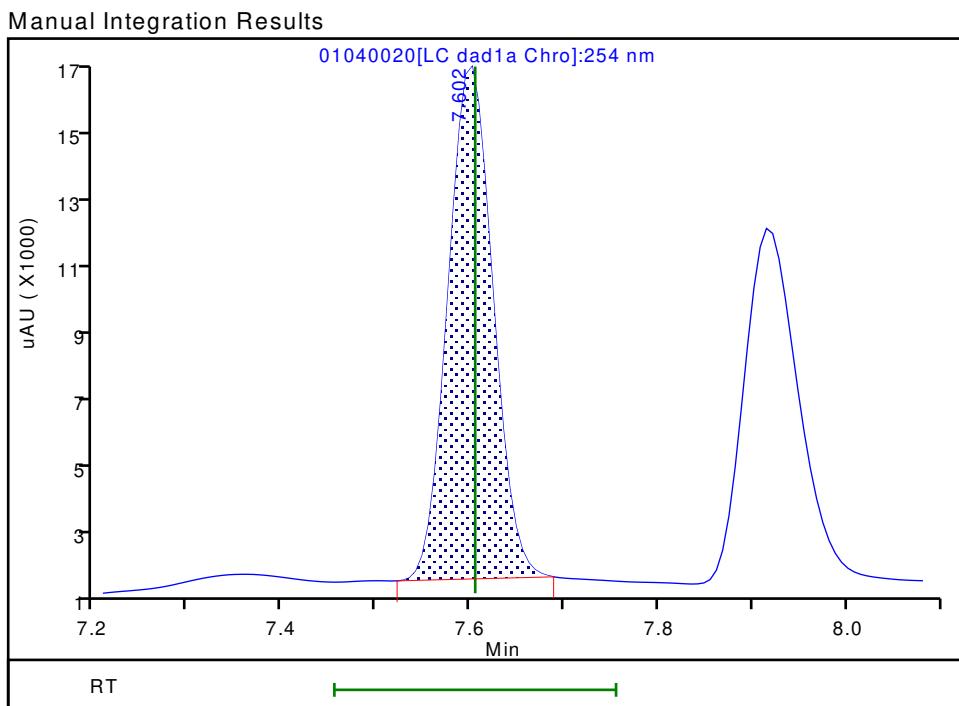
**8 RDX, CAS: 121-82-4**

Signal: 1

RT: 7.60  
 Area: 71144  
 Amount: 0.655784  
 Amount Units: ug/mL



RT: 7.60  
 Area: 48508  
 Amount: 0.468182  
 Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 11:59:11

Audit Action: Manually Integrated

Audit Reason: Baseline

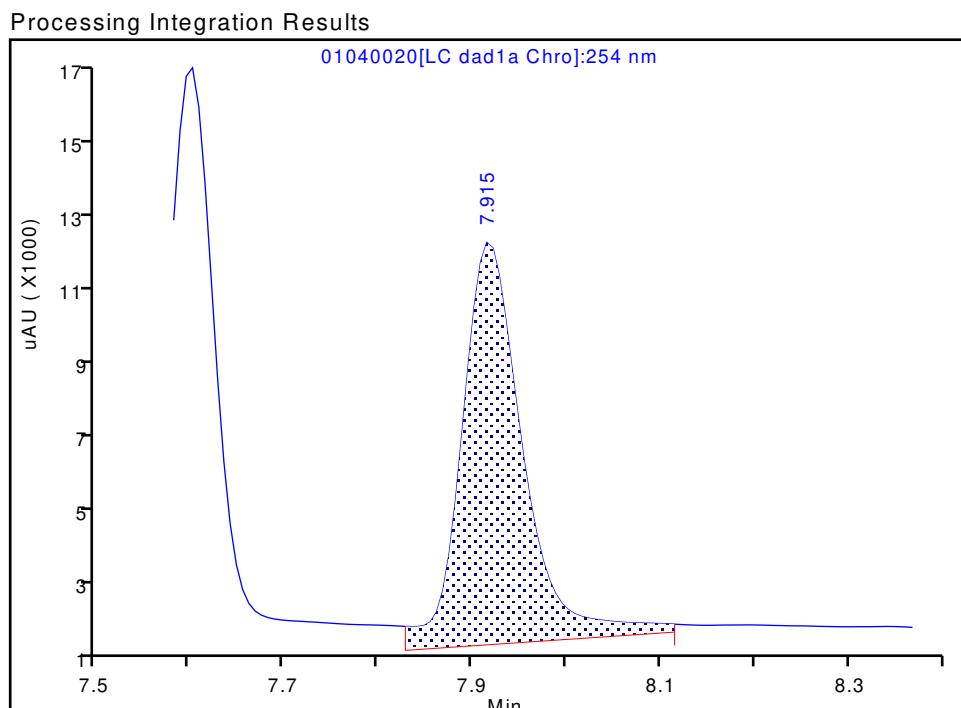
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Data File: \\chromfs\denver\chromdata\chhplc\_x\20220104-107731.b\01040020.d  
 Injection Date: 04-Jan-2022 21:54:19 Instrument ID: CHHPLC\_X3  
 Lims ID: ICV INT  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 20 Worklist Smp#: 20  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

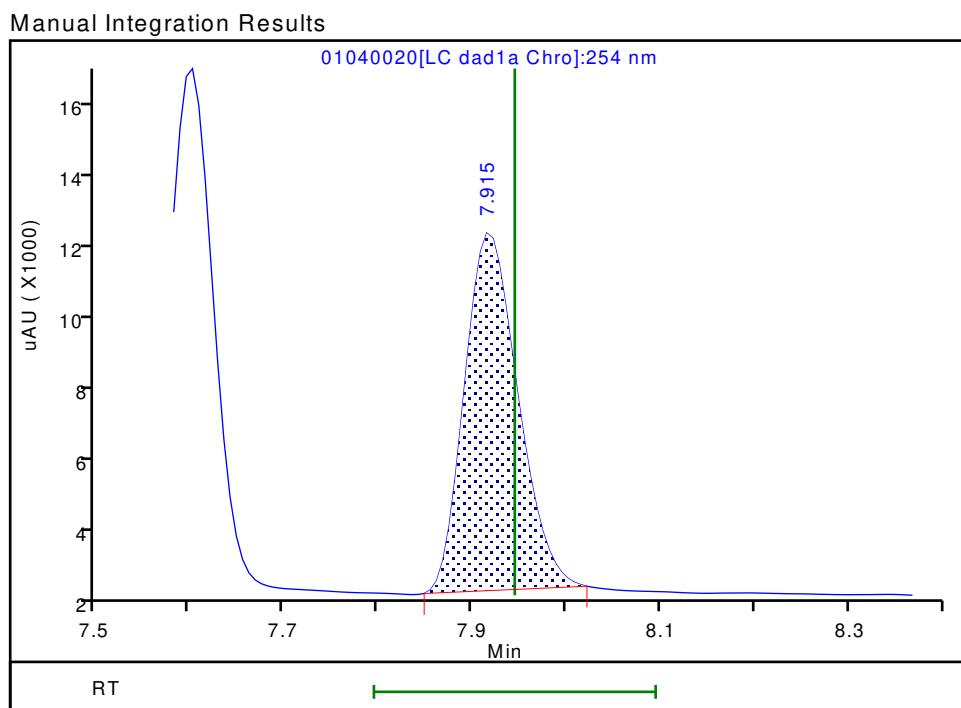
**9 2,4,6-Trinitrophenol, CAS: 88-89-1**

Signal: 1

RT: 7.92  
 Area: 48188  
 Amount: 0.601054  
 Amount Units: ug/mL



RT: 7.92  
 Area: 39525  
 Amount: 0.513051  
 Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 11:59:15

Audit Action: Manually Integrated

Audit Reason: Baseline

FORM VII  
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159130-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: ICV 280-562503/38 Calibration Date: 01/05/2022 04:47  
Instrument ID: CHHPLC\_X3 Calib Start Date: 01/05/2022 01:43  
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 01/05/2022 04:24  
Lab File ID: 01040038.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	181207	178414		493	501	-1.5	15.0
DNX	Ave	138113	139363		505	501	0.9	15.0
MNX	Ave	125995	128593		596	584	2.1	15.0

FORM VII  
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver

Job No.: 280-159130-1

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

Lab Sample ID: ICV 280-562503/38 Calibration Date: 01/05/2022 04:47

Instrument ID: CHHPLC\_X3 Calib Start Date: 01/05/2022 01:43

GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 01/05/2022 04:24

Lab File ID: 01040038.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.48	6.38	6.58
DNX	6.80	6.70	6.90
MNX	7.22	7.07	7.37

Eurofins TestAmerica, Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040038.D  
 Lims ID: ICV DMT  
 Client ID:  
 Sample Type: ICV  
 Inject. Date: 05-Jan-2022 04:47:17 ALS Bottle#: 38 Worklist Smp#: 38  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Sample Info: ICV DMT  
 Misc. Info.: 280-0107731-038  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Sublist:  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 05-Jan-2022 12:18:54 Calib Date: 05-Jan-2022 04:24:15  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040037.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1613

First Level Reviewer: zhangji Date: 05-Jan-2022 12:09:42

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.482	6.484	-0.002	89296	0.5005	0.4928	M
6 DNX	1	6.796	6.797	-0.001	69751	0.5005	0.5050	M
7 MNX	1	7.222	7.224	-0.002	75034	0.5835	0.5955	M

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

### Reagents:

8330\_OP\_DMT\_00012 Amount Added: 50.00 Units: uL

Report Date: 05-Jan-2022 12:19:19

Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

Data File: \\chromfs\\denver\\chromdata\\chhplc\_x\\20220104-107731.b\\01040038.d

Injection Date: 05-Jan-2022 04:47:17

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: ICV DMT

Worklist Smp#: 38

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

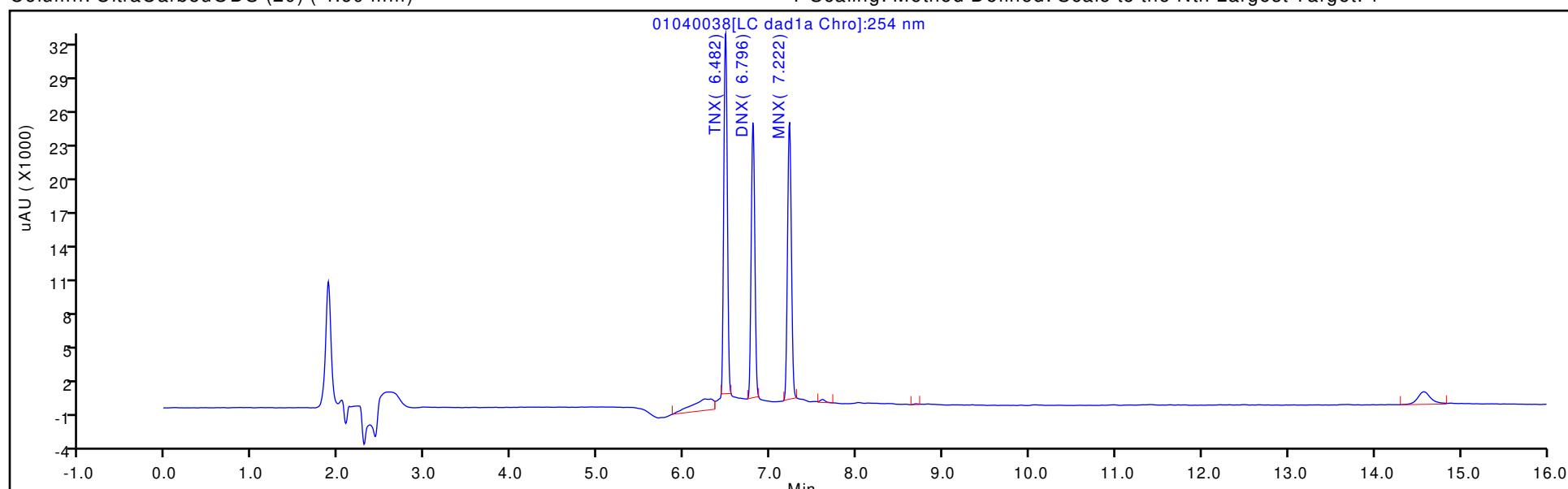
ALS Bottle#: 38

Method: 8330\_X3

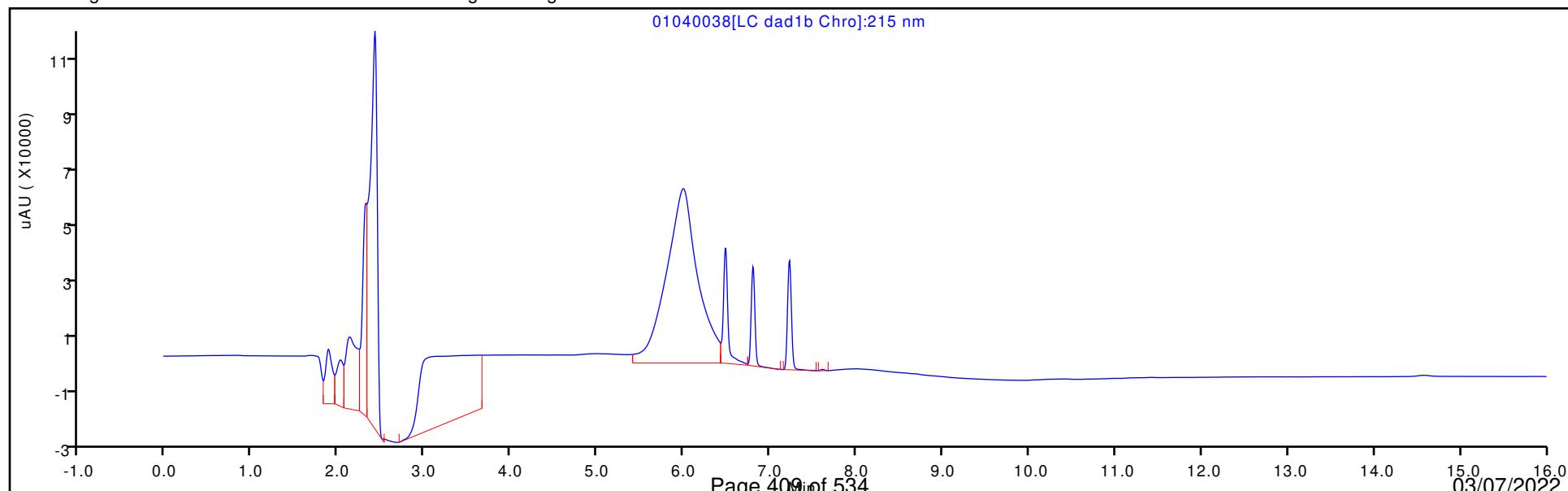
Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



## Eurofins TestAmerica, Denver

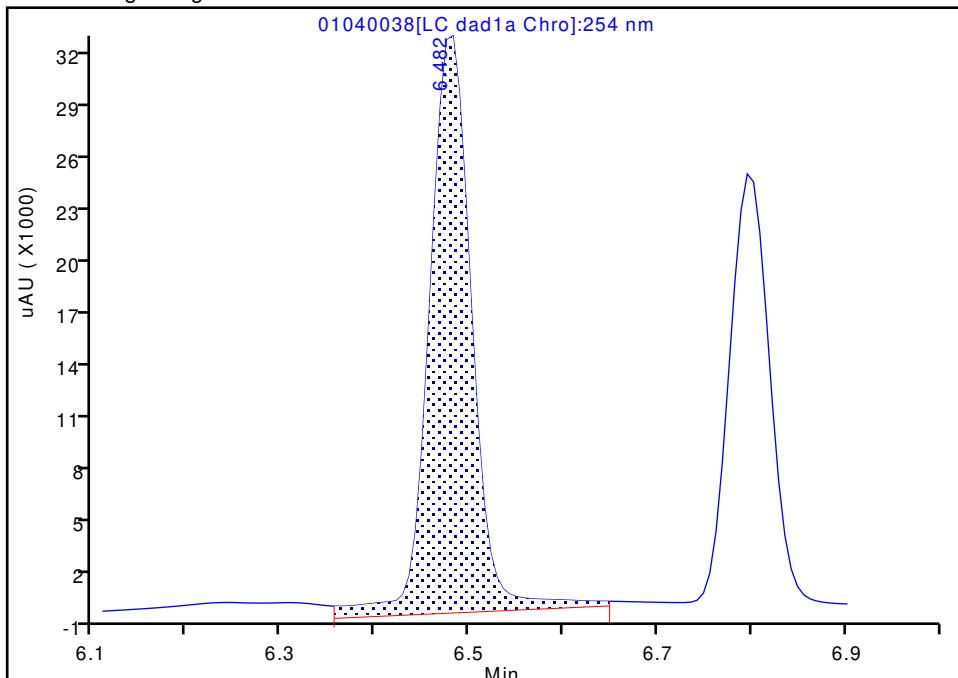
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 Injection Date: 05-Jan-2022 04:47:17 Instrument ID: CHHPLC\_X3  
 Lims ID: ICV DMT  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 38 Worklist Smp#: 38  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

**3 TNX, CAS: 13980-04-6**

Signal: 1

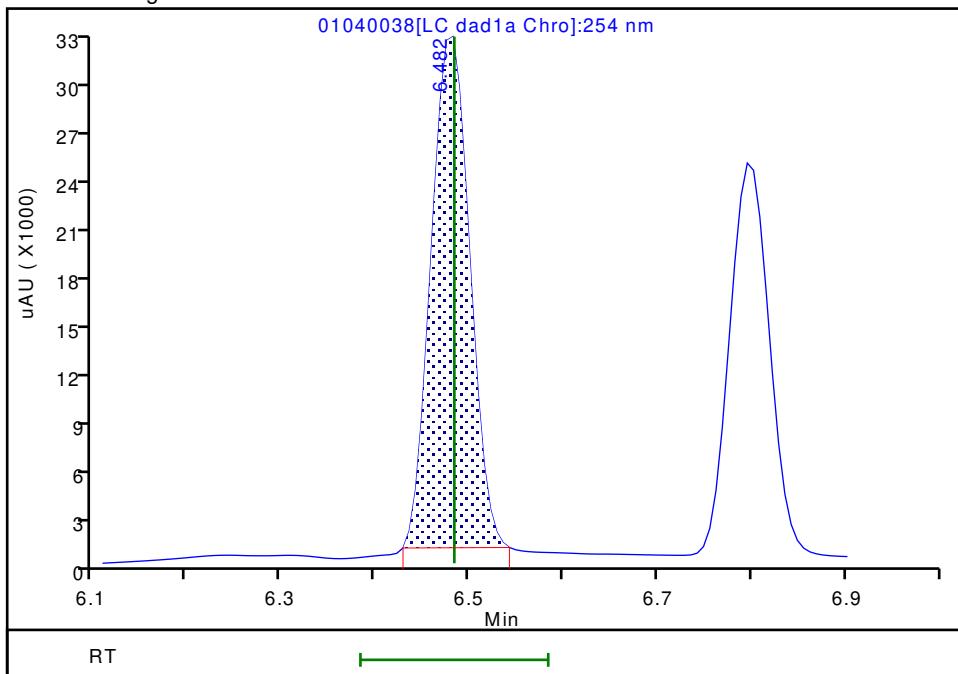
## Processing Integration Results

RT: 6.48  
 Area: 102738  
 Amount: 0.566963  
 Amount Units: ug/mL



## Manual Integration Results

RT: 6.48  
 Area: 89296  
 Amount: 0.492783  
 Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:09:35

Audit Action: Manually Integrated

Audit Reason: Baseline

## Eurofins TestAmerica, Denver

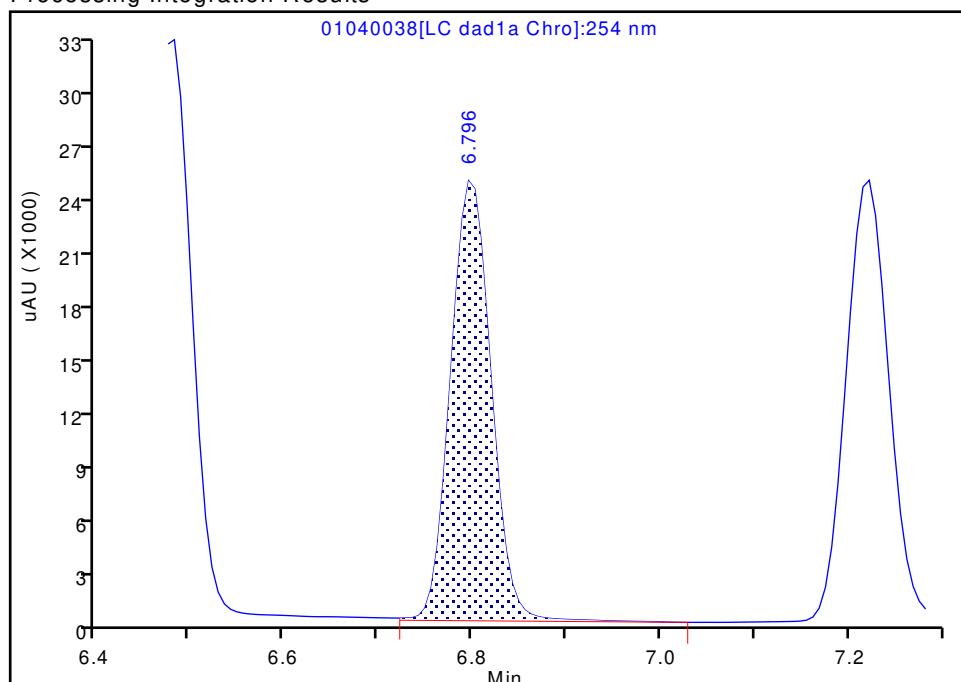
Data File: \\chromfs\denver\chromdata\chhplc\_x\20220104-107731.b\01040038.d  
 Injection Date: 05-Jan-2022 04:47:17 Instrument ID: CHHPLC\_X3  
 Lims ID: ICV DMT  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 38 Worklist Smp#: 38  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

**6 DNX, CAS: 80251-29-2**

Signal: 1

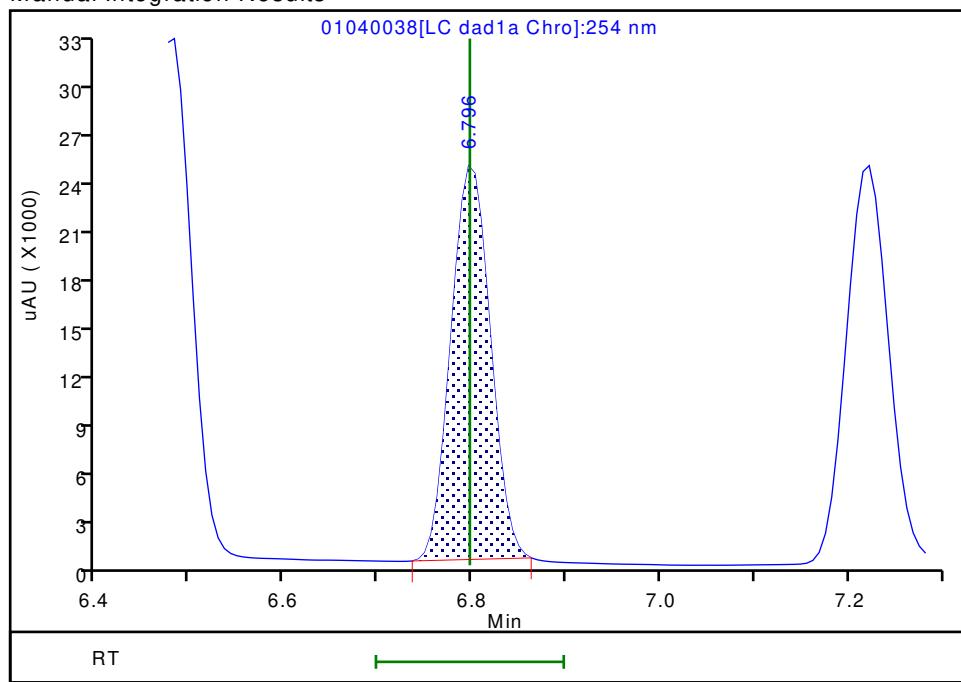
RT: 6.80  
 Area: 72644  
 Amount: 0.525975  
 Amount Units: ug/mL

## Processing Integration Results



RT: 6.80  
 Area: 69751  
 Amount: 0.505029  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 05-Jan-2022 12:09:38

Audit Action: Manually Integrated

Audit Reason: Baseline

## Eurofins TestAmerica, Denver

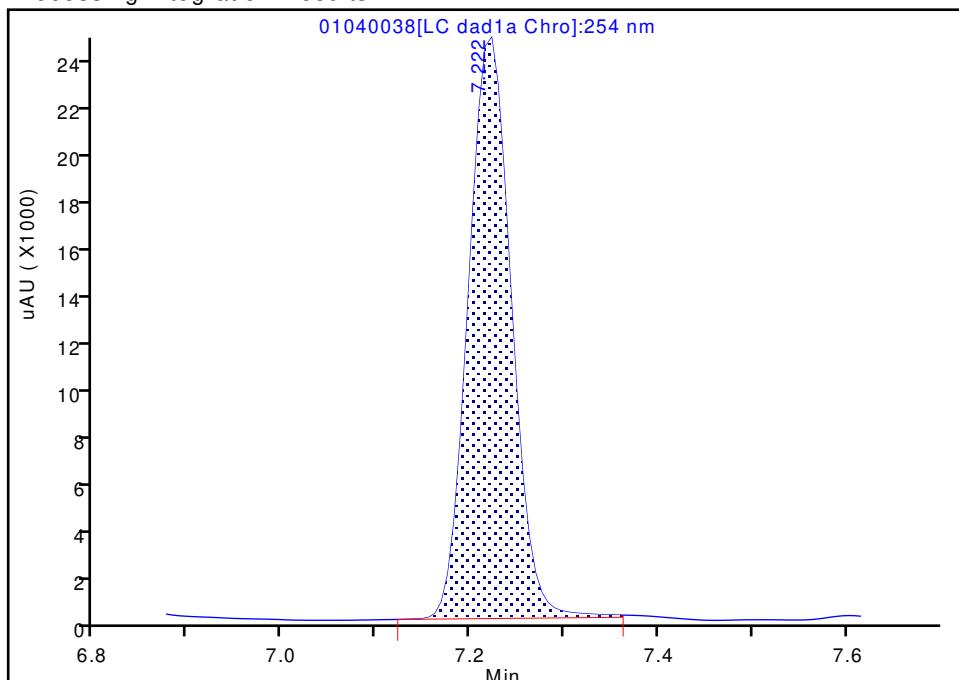
Data File: \\chromfs\denver\chromdata\chhplc\_x\20220104-107731.b\01040038.d  
 Injection Date: 05-Jan-2022 04:47:17 Instrument ID: CHHPLC\_X3  
 Lims ID: ICV DMT  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 38 Worklist Smp#: 38  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

**7 MNX, CAS: 5755-27-1**

Signal: 1

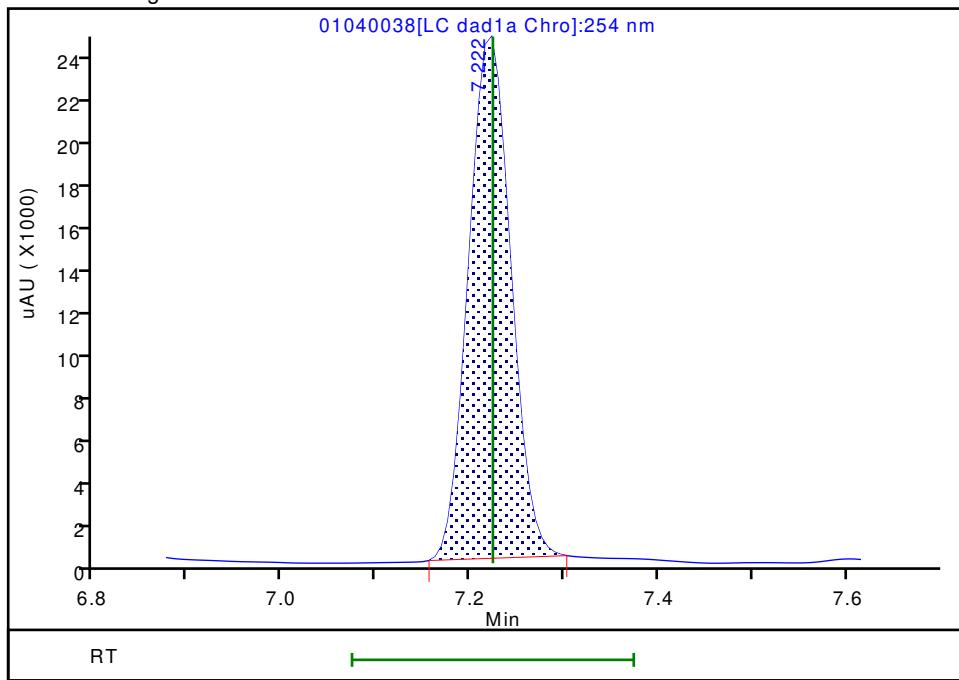
RT: 7.22  
 Area: 76990  
 Amount: 0.611054  
 Amount Units: ug/mL

## Processing Integration Results



RT: 7.22  
 Area: 75034  
 Amount: 0.595530  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 05-Jan-2022 12:09:41

Audit Action: Manually Integrated

Audit Reason: Baseline

FORM VII  
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159130-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCV 280-567371/41 Calibration Date: 03/02/2022 03:57  
Instrument ID: CHHPLC\_X3 Calib Start Date: 01/04/2022 18:28  
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 01/04/2022 21:31  
Lab File ID: 03010041.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	83827	81848		244	250	-2.4	15.0
RDX	Ave	103609	105360		254	250	1.7	15.0
Picric acid	Ave	77039	77940		253	250	1.2	15.0
1,3,5-Trinitrobenzene	Ave	218096	224152		257	251	2.8	15.0
1,3-Dinitrobenzene	Ave	288401	300128		261	251	4.1	15.0
Nitrobenzene	Ave	191953	187462		245	251	-2.3	15.0
Tetryl	Ave	170567	168291		247	251	-1.3	15.0
Nitroglycerin	Ave	63037	66101		2620	2500	4.9	15.0
2,4,6-Trinitrotoluene	Ave	202726	202869		251	251	0.0	15.0
4-Amino-2,6-dinitrotoluene	Ave	150985	148839		247	250	-1.4	15.0
2-Amino-4,6-dinitrotoluene	Ave	202171	197896		246	251	-2.1	15.0
2,6-Dinitrotoluene	Ave	143115	146825		258	251	2.6	15.0
2,4-Dinitrotoluene	Ave	289351	293964		255	251	1.6	15.0
2-Nitrotoluene	Ave	127614	119768		235	250	-6.1	15.0
4-Nitrotoluene	Ave	106235	105357		248	251	-0.8	15.0
3-Nitrotoluene	Ave	142273	132176		232	250	-7.1	15.0
PETN	Lin2		77345		2650	2500	5.9	15.0
1,2-Dinitrobenzene	Ave	124698	128184		257	250	2.8	15.0

FORM VII  
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159130-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCV 280-567371/41 Calibration Date: 03/02/2022 03:57  
Instrument ID: CHHPLC\_X3 Calib Start Date: 01/04/2022 18:28  
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 01/04/2022 21:31  
Lab File ID: 03010041.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.60	6.44	6.74
RDX	7.58	7.43	7.73
Picric acid	7.91	7.75	8.05
1,3,5-Trinitrobenzene	8.65	8.49	8.79
1,3-Dinitrobenzene	9.27	9.11	9.41
Nitrobenzene	9.66	9.50	9.80
Tetryl	9.96	9.81	10.11
Nitroglycerin	10.42	10.26	10.56
2,4,6-Trinitrotoluene	10.87	10.76	10.96
4-Amino-2,6-dinitrotoluene	11.05	10.94	11.14
2-Amino-4,6-dinitrotoluene	11.30	11.19	11.39
2,6-Dinitrotoluene	11.47	11.36	11.56
2,4-Dinitrotoluene	11.64	11.54	11.74
2-Nitrotoluene	12.48	12.33	12.63
4-Nitrotoluene	12.90	12.75	13.05
3-Nitrotoluene	13.47	13.31	13.61
PETN	14.50	14.34	14.64
1,2-Dinitrobenzene	8.52	8.37	8.67

**Eurofins Denver**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\03010041.D  
 Lims ID: CCV INT  
 Client ID:  
 Sample Type: CCV  
 Inject. Date: 02-Mar-2022 03:57:34 ALS Bottle#: 7 Worklist Smp#: 41  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Sample Info: CCV INT  
 Misc. Info.: 280-0108907-041  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Sublist: chrom-8330\_X3\*sub9  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 02-Mar-2022 13:06:21 Calib Date: 05-Jan-2022 04:24:15  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040037.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1635

First Level Reviewer: zhangji

Date: 02-Mar-2022 12:41:19

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	6.588	0.008	20462	0.2500	0.2441	M
8 RDX	1	7.576	7.575	0.001	26340	0.2500	0.2542	
9 2,4,6-Trinitrophenol	1	7.910	7.895	0.015	19485	0.2500	0.2529	
\$ 10 1,2-Dinitrobenzene	1	8.523	8.515	0.008	32046	0.2500	0.2570	
11 1,3,5-Trinitrobenzene	1	8.650	8.642	0.008	56150	0.2505	0.2575	
12 1,3-Dinitrobenzene	1	9.270	9.262	0.008	75182	0.2505	0.2607	
13 Nitrobenzene	1	9.656	9.648	0.008	47053	0.2510	0.2451	
15 Tetryl	1	9.963	9.955	0.008	42157	0.2505	0.2472	
16 Nitroglycerin	2	10.416	10.408	0.008	165252	2.50	2.62	
17 2,4,6-Trinitrotoluene	1	10.870	10.862	0.008	50920	0.2510	0.2512	
18 4-Amino-2,6-dinitrotoluene	1	11.050	11.042	0.008	37247	0.2503	0.2467	
19 2-Amino-4,6-dinitrotoluene	1	11.303	11.288	0.015	49672	0.2510	0.2457	
20 2,6-Dinitrotoluene	1	11.470	11.462	0.008	36853	0.2510	0.2575	
21 2,4-Dinitrotoluene	1	11.636	11.635	0.001	73785	0.2510	0.2550	
22 o-Nitrotoluene	1	12.483	12.475	0.008	29942	0.2500	0.2346	
23 p-Nitrotoluene	1	12.903	12.895	0.008	26392	0.2505	0.2484	
24 m-Nitrotoluene	1	13.470	13.462	0.008	33077	0.2503	0.2325	
25 PETN	2	14.503	14.488	0.015	193363	2.50	2.65	

**QC Flag Legend**

Processing Flags

Review Flags

M - Manually Integrated

**Reagents:**

8330\IntermStk\_00070

Amount Added: 25.00

Units: uL

Report Date: 02-Mar-2022 13:06:21

Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010041.d

Injection Date: 02-Mar-2022 03:57:34

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

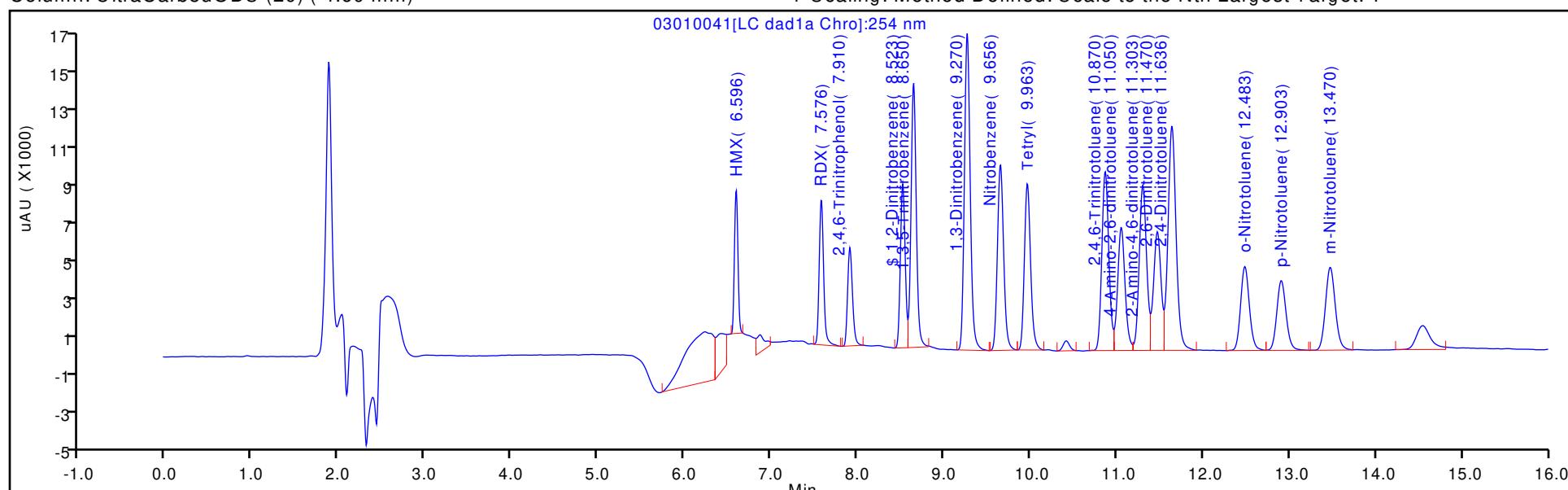
ALS Bottle#: 7

Method: 8330\_X3

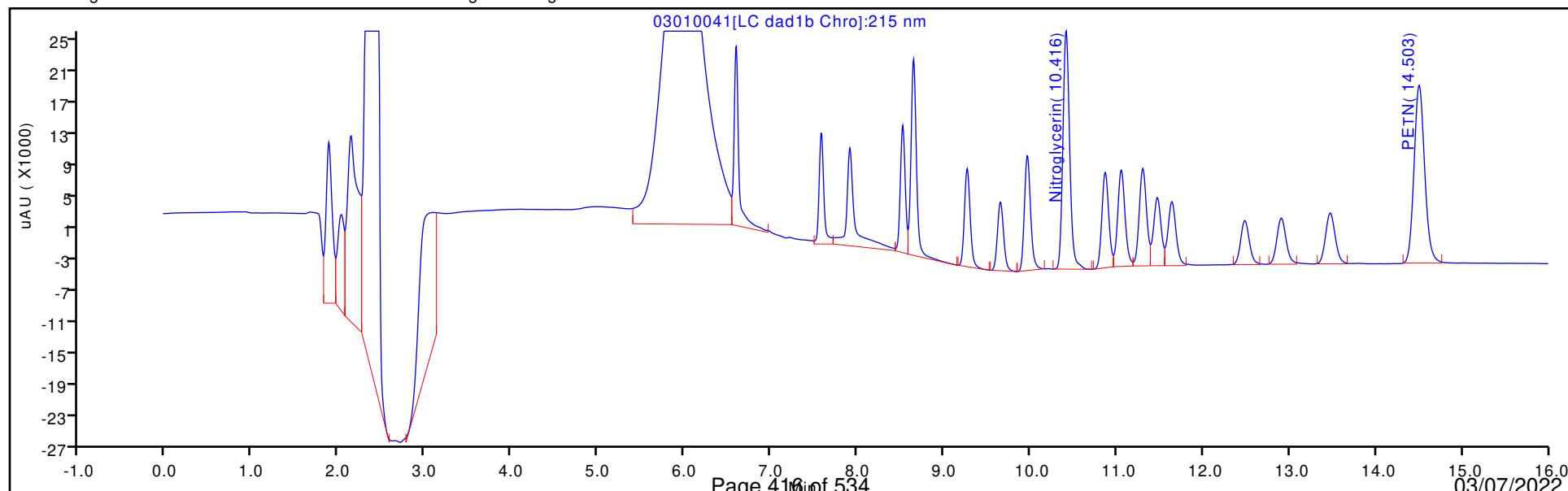
Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



## Eurofins Denver

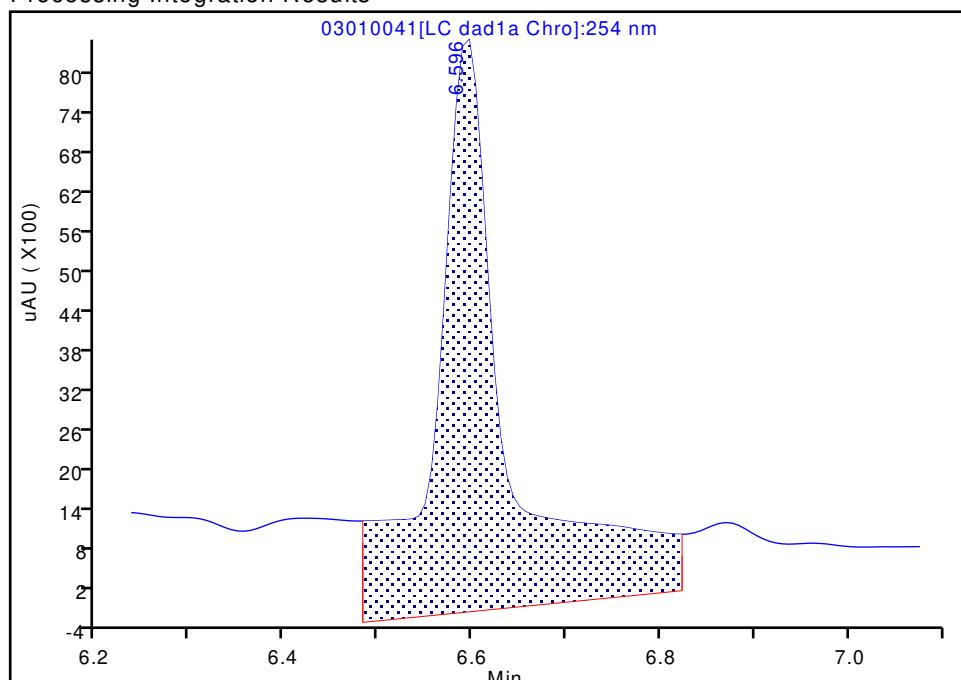
Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010041.d  
 Injection Date: 02-Mar-2022 03:57:34 Instrument ID: CHHPLC\_X3  
 Lims ID: CCV INT  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 41  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

## 4 HMX, CAS: 2691-41-0

Signal: 1

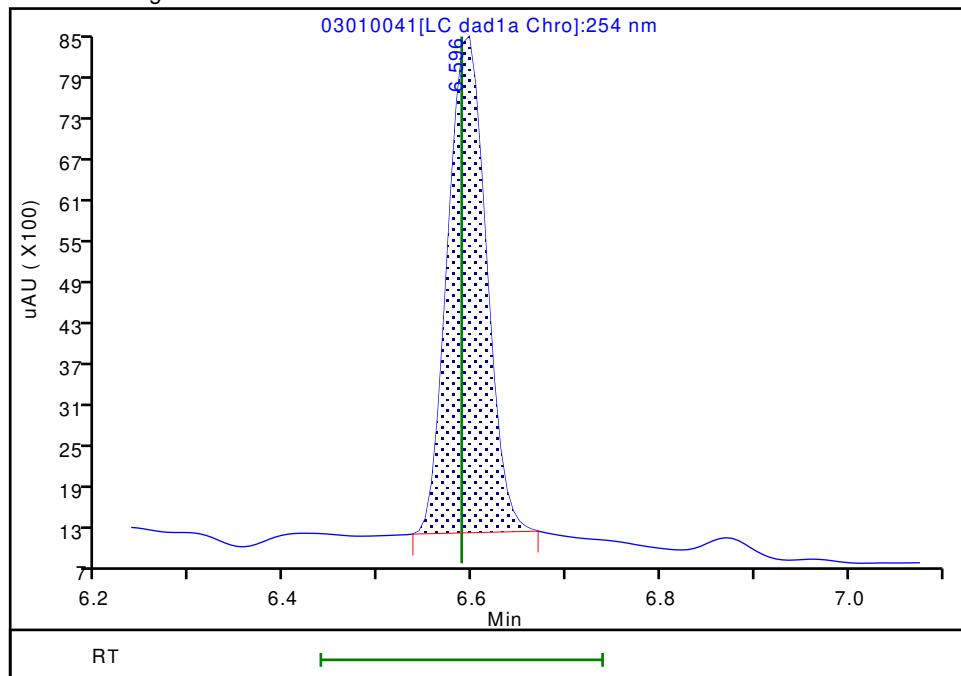
RT: 6.60  
 Area: 46427  
 Amount: 0.553842  
 Amount Units: ug/mL

## Processing Integration Results



RT: 6.60  
 Area: 20462  
 Amount: 0.244097  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 02-Mar-2022 12:41:18

Audit Action: Manually Integrated

Audit Reason: Baseline

FORM VII  
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159130-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCV 280-567371/42 Calibration Date: 03/02/2022 04:20  
Instrument ID: CHHPLC\_X3 Calib Start Date: 01/05/2022 01:43  
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 01/05/2022 04:24  
Lab File ID: 03010042.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	181207	173355		239	250	-4.3	15.0
DNX	Ave	138113	134641		244	250	-2.5	15.0
MNX	Ave	125995	123685		286	292	-1.8	15.0

FORM VII  
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver

Job No.: 280-159130-1

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

Lab Sample ID: CCV 280-567371/42 Calibration Date: 03/02/2022 04:20

Instrument ID: CHHPLC\_X3 Calib Start Date: 01/05/2022 01:43

GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 01/05/2022 04:24

Lab File ID: 03010042.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.48	6.37	6.57
DNX	6.79	6.69	6.89
MNX	7.21	7.06	7.36

Eurofins Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\03010042.D  
 Lims ID: CCV DMT  
 Client ID:  
 Sample Type: CCV  
 Inject. Date: 02-Mar-2022 04:20:31 ALS Bottle#: 9 Worklist Smp#: 42  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Sample Info: CCV DMT  
 Misc. Info.: 280-0108907-042  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Sublist: chrom-8330\_X3\*sub17  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 02-Mar-2022 13:06:22 Calib Date: 05-Jan-2022 04:24:15  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040037.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm ) Det: LC DAD1B, 254 nm  
 Process Host: CTX1635

First Level Reviewer: zhangji Date: 02-Mar-2022 12:41:36

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	6.472	0.003	43382	0.2503	0.2394	M
6 DNX	1	6.788	6.792	-0.004	33694	0.2503	0.2440	M
7 MNX	1	7.208	7.206	0.002	36085	0.2918	0.2864	M

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

### Reagents:

8330 DMT\_00010 Amount Added: 12.50 Units: uL

Report Date: 02-Mar-2022 13:06:22

Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010042.d

Injection Date: 02-Mar-2022 04:20:31

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

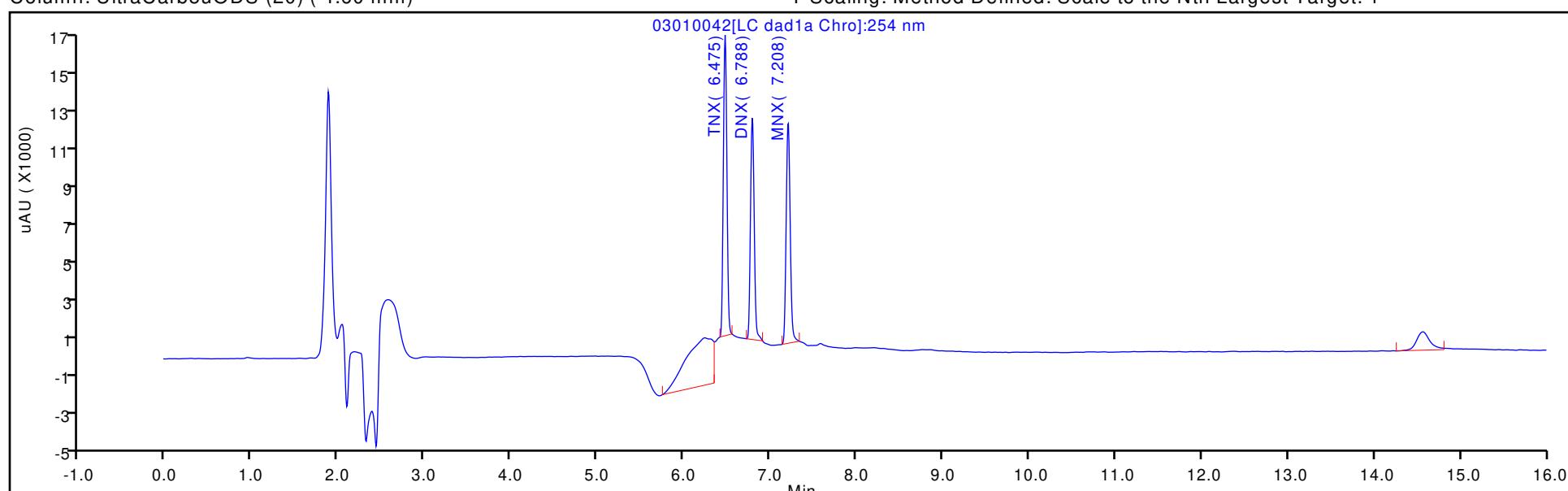
ALS Bottle#: 9

Method: 8330\_X3

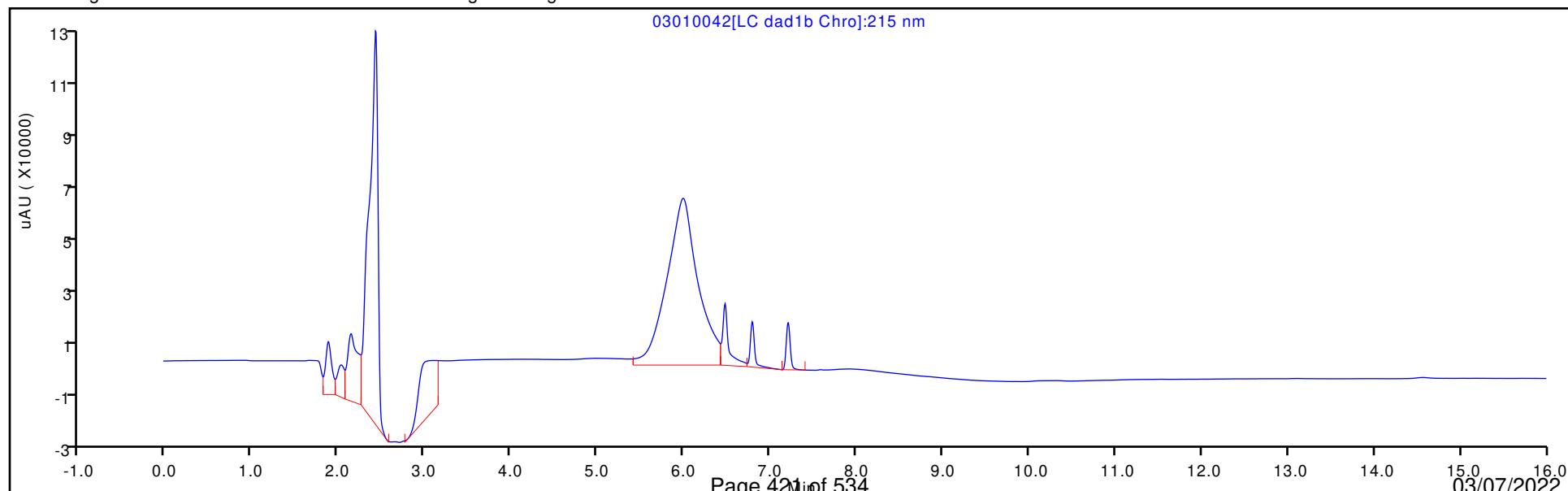
Limit Group: GCSV - 8330

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 Denver

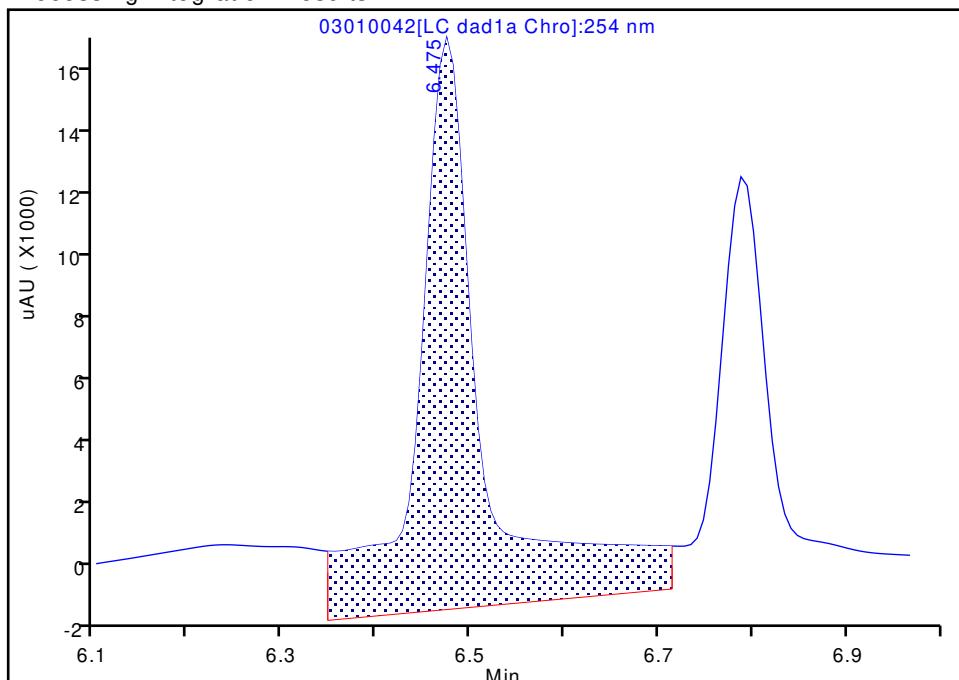
Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010042.d  
 Injection Date: 02-Mar-2022 04:20:31 Instrument ID: CHHPLC\_X3  
 Lims ID: CCV DMT  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 9 Worklist Smp#: 42  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

**3 TNX, CAS: 13980-04-6**

Signal: 1

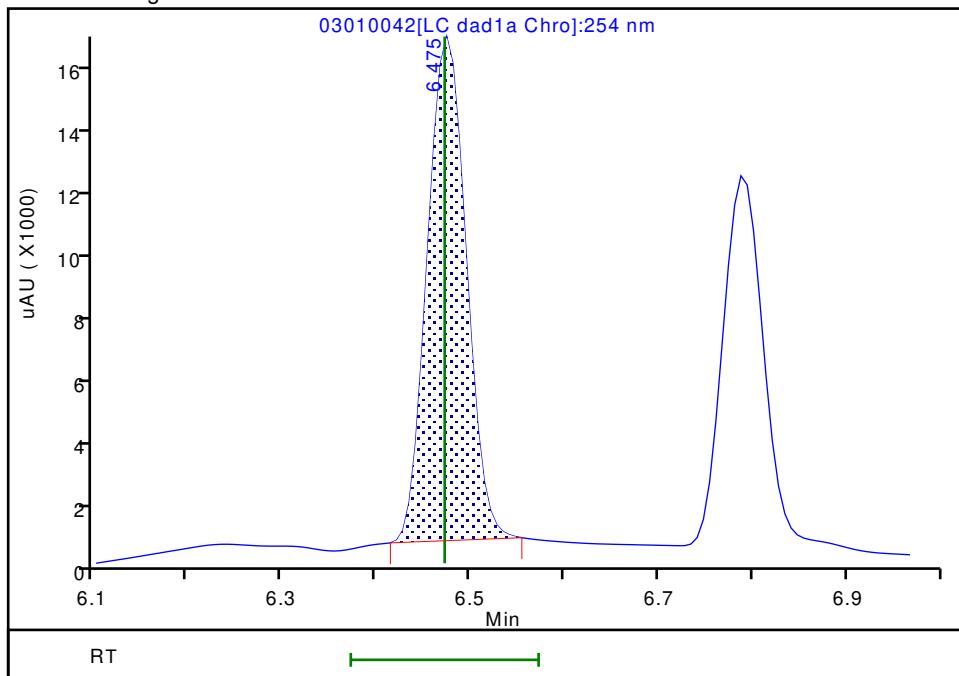
RT: 6.47  
 Area: 83941  
 Amount: 0.463231  
 Amount Units: ug/mL

## Processing Integration Results



RT: 6.47  
 Area: 43382  
 Amount: 0.239405  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 02-Mar-2022 12:41:27

Audit Action: Manually Integrated

Audit Reason: Baseline

## Eurofins Denver

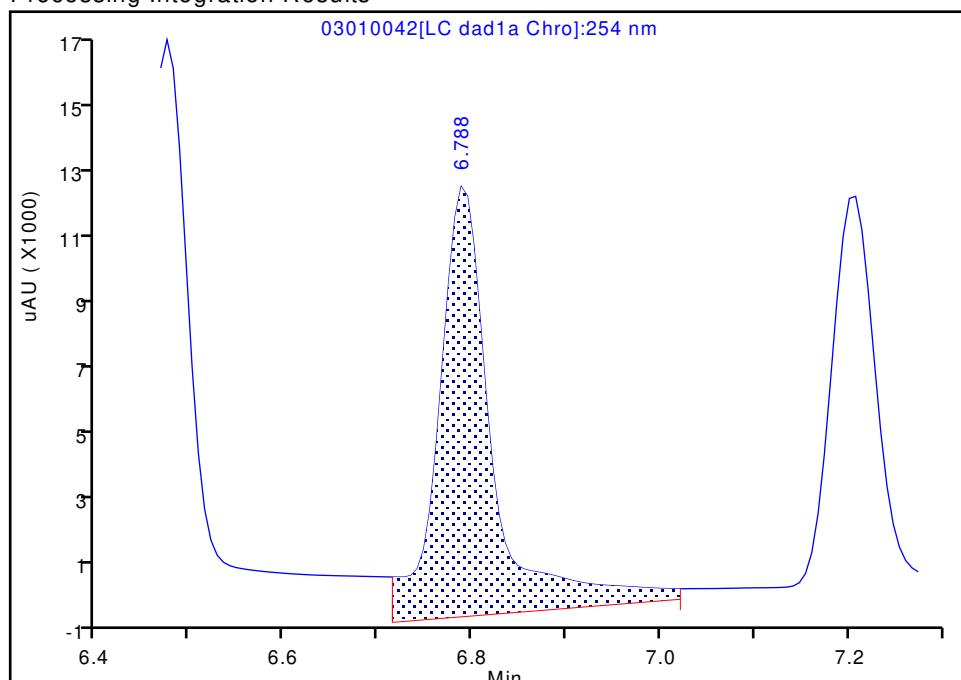
Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010042.d  
 Injection Date: 02-Mar-2022 04:20:31 Instrument ID: CHHPLC\_X3  
 Lims ID: CCV DMT  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 9 Worklist Smp#: 42  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

**6 DNX, CAS: 80251-29-2**

Signal: 1

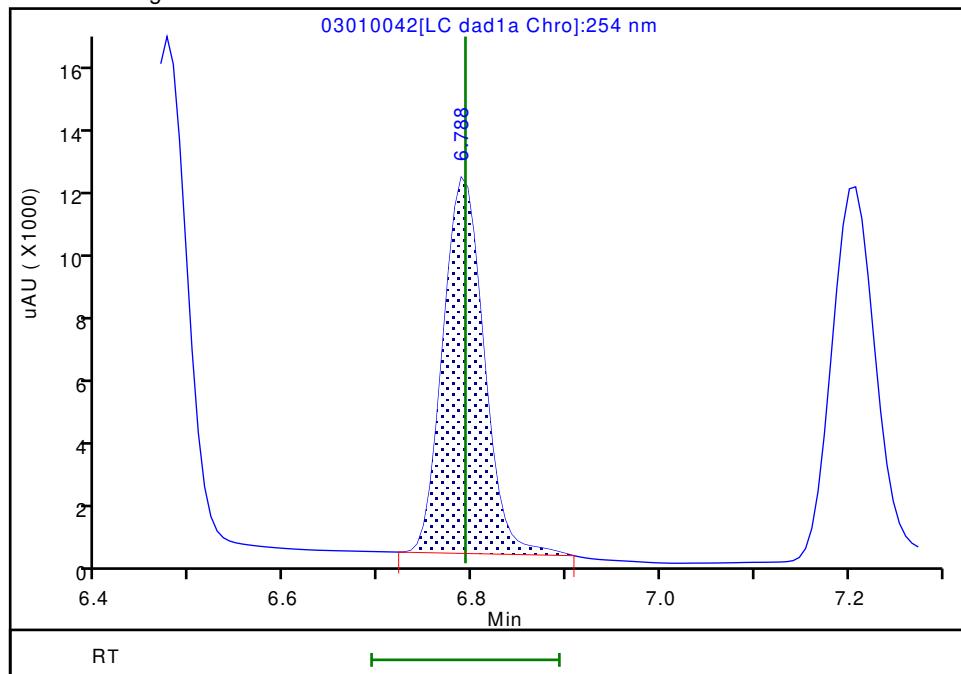
RT: 6.79  
 Area: 48952  
 Amount: 0.354435  
 Amount Units: ug/mL

## Processing Integration Results



RT: 6.79  
 Area: 33694  
 Amount: 0.243960  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 02-Mar-2022 12:41:30

Audit Action: Manually Integrated

Audit Reason: Baseline

## Eurofins Denver

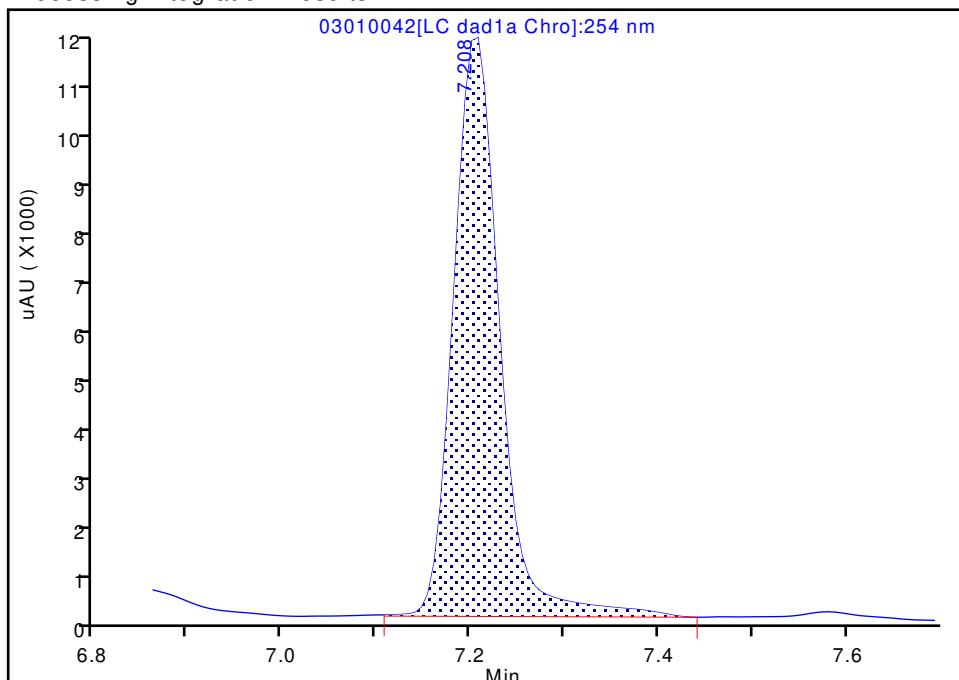
Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010042.d  
 Injection Date: 02-Mar-2022 04:20:31 Instrument ID: CHHPLC\_X3  
 Lims ID: CCV DMT  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 9 Worklist Smp#: 42  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

## 7 MNX, CAS: 5755-27-1

Signal: 1

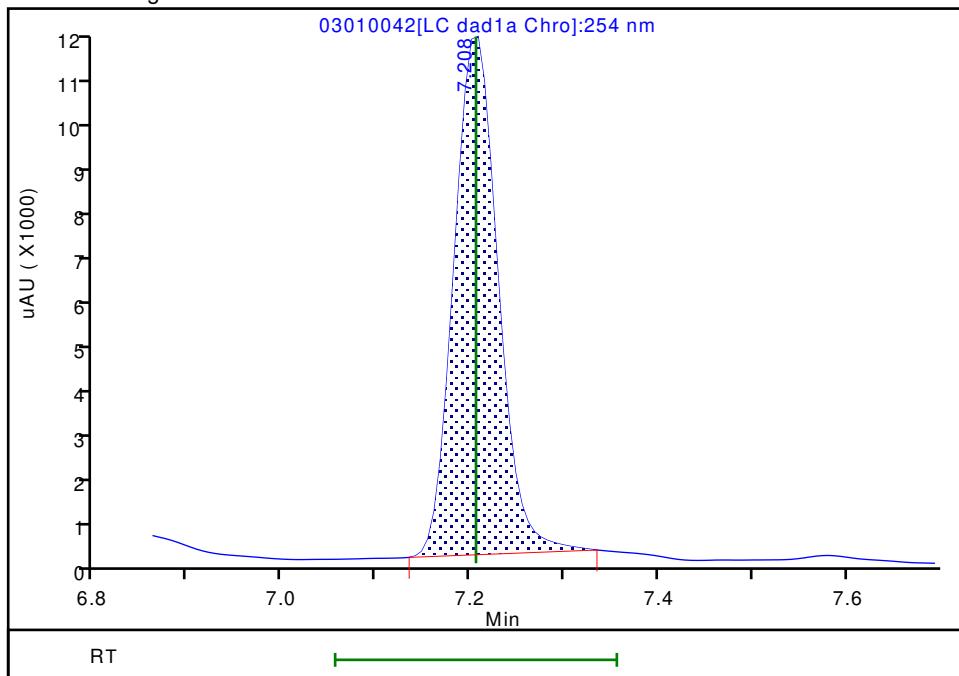
RT: 7.21  
 Area: 38382  
 Amount: 0.304630  
 Amount Units: ug/mL

## Processing Integration Results



RT: 7.21  
 Area: 36085  
 Amount: 0.286399  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 02-Mar-2022 12:41:35

Audit Action: Manually Integrated

Audit Reason: Baseline

FORM VII  
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159130-1

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

Lab Sample ID: CCV 280-567371/53 Calibration Date: 03/02/2022 08:32

Instrument ID: CHHPLC\_X3 Calib Start Date: 01/04/2022 18:28

GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 01/04/2022 21:31

Lab File ID: 03010053.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	83827	81296		242	250	-3.0	15.0
RDX	Ave	103609	105100		254	250	1.4	15.0
Picric acid	Ave	77039	78300		254	250	1.6	15.0
1,3,5-Trinitrobenzene	Ave	218096	224551		258	251	3.0	15.0
1,3-Dinitrobenzene	Ave	288401	300687		261	251	4.3	15.0
Nitrobenzene	Ave	191953	183470		240	251	-4.4	15.0
Tetryl	Ave	170567	168068		247	251	-1.5	15.0
Nitroglycerin	Ave	63037	66333		2630	2500	5.2	15.0
2,4,6-Trinitrotoluene	Ave	202726	201287		249	251	-0.7	15.0
4-Amino-2,6-dinitrotoluene	Ave	150985	149495		248	250	-1.0	15.0
2-Amino-4,6-dinitrotoluene	Ave	202171	198769		247	251	-1.7	15.0
2,6-Dinitrotoluene	Ave	143115	146398		257	251	2.3	15.0
2,4-Dinitrotoluene	Ave	289351	295908		257	251	2.3	15.0
2-Nitrotoluene	Ave	127614	117528		230	250	-7.9	15.0
4-Nitrotoluene	Ave	106235	103525		244	251	-2.6	15.0
3-Nitrotoluene	Ave	142273	130314		229	250	-8.4	15.0
PETN	Lin2		77664		2660	2500	6.3	15.0
1,2-Dinitrobenzene	Ave	124698	128660		258	250	3.2	15.0

FORM VII  
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver

Job No.: 280-159130-1

SDG No.:

Lab Sample ID: CCV 280-567371/53

Calibration Date: 03/02/2022 08:32

Instrument ID: CHHPLC\_X3

Calib Start Date: 01/04/2022 18:28

GC Column: UltraCarb5uODS ID: 4.60 (mm)

Calib End Date: 01/04/2022 21:31

Lab File ID: 03010053.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.59	6.44	6.74
RDX	7.57	7.43	7.73
Picric acid	7.90	7.75	8.05
1,3,5-Trinitrobenzene	8.65	8.49	8.79
1,3-Dinitrobenzene	9.27	9.11	9.41
Nitrobenzene	9.65	9.50	9.80
Tetryl	9.96	9.81	10.11
Nitroglycerin	10.41	10.26	10.56
2,4,6-Trinitrotoluene	10.87	10.76	10.96
4-Amino-2,6-dinitrotoluene	11.05	10.94	11.14
2-Amino-4,6-dinitrotoluene	11.30	11.19	11.39
2,6-Dinitrotoluene	11.47	11.36	11.56
2,4-Dinitrotoluene	11.64	11.54	11.74
2-Nitrotoluene	12.48	12.33	12.63
4-Nitrotoluene	12.91	12.75	13.05
3-Nitrotoluene	13.47	13.31	13.61
PETN	14.51	14.34	14.64
1,2-Dinitrobenzene	8.52	8.37	8.67

**Eurofins Denver**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\03010053.D  
 Lims ID: CCV INT  
 Client ID:  
 Sample Type: CCV  
 Inject. Date: 02-Mar-2022 08:32:47 ALS Bottle#: 7 Worklist Smp#: 53  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Sample Info: CCV INT  
 Misc. Info.: 280-0108907-053  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Sublist: chrom-8330\_X3\*sub9  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 02-Mar-2022 13:06:29 Calib Date: 05-Jan-2022 04:24:15  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040037.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1635

First Level Reviewer: zhangji Date: 02-Mar-2022 12:46:16

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.586	6.588	-0.002	20324	0.2500	0.2425	M
8 RDX	1	7.573	7.575	-0.002	26275	0.2500	0.2536	
9 2,4,6-Trinitrophenol	1	7.899	7.895	0.004	19575	0.2500	0.2541	
\$ 10 1,2-Dinitrobenzene	1	8.519	8.515	0.004	32165	0.2500	0.2579	
11 1,3,5-Trinitrobenzene	1	8.646	8.642	0.004	56250	0.2505	0.2579	
12 1,3-Dinitrobenzene	1	9.266	9.262	0.004	75322	0.2505	0.2612	
13 Nitrobenzene	1	9.653	9.648	0.005	46051	0.2510	0.2399	
15 Tetryl	1	9.959	9.955	0.004	42101	0.2505	0.2468	
16 Nitroglycerin	2	10.413	10.408	0.005	165833	2.50	2.63	
17 2,4,6-Trinitrotoluene	1	10.866	10.862	0.004	50523	0.2510	0.2492	
18 4-Amino-2,6-dinitrotoluene	1	11.046	11.042	0.004	37411	0.2503	0.2478	
19 2-Amino-4,6-dinitrotoluene	1	11.299	11.288	0.011	49891	0.2510	0.2468	
20 2,6-Dinitrotoluene	1	11.466	11.462	0.004	36746	0.2510	0.2568	
21 2,4-Dinitrotoluene	1	11.639	11.635	0.004	74273	0.2510	0.2567	
22 o-Nitrotoluene	1	12.479	12.475	0.004	29382	0.2500	0.2302	
23 p-Nitrotoluene	1	12.906	12.895	0.011	25933	0.2505	0.2441	
24 m-Nitrotoluene	1	13.473	13.462	0.011	32611	0.2503	0.2292	
25 PETN	2	14.506	14.488	0.018	194160	2.50	2.66	

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

### Reagents:

8330\IntermStk\_00070

Amount Added: 25.00

Units: uL

Report Date: 02-Mar-2022 13:06:29

Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010053.d

Injection Date: 02-Mar-2022 08:32:47

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: CCV INT

Worklist Smp#: 53

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

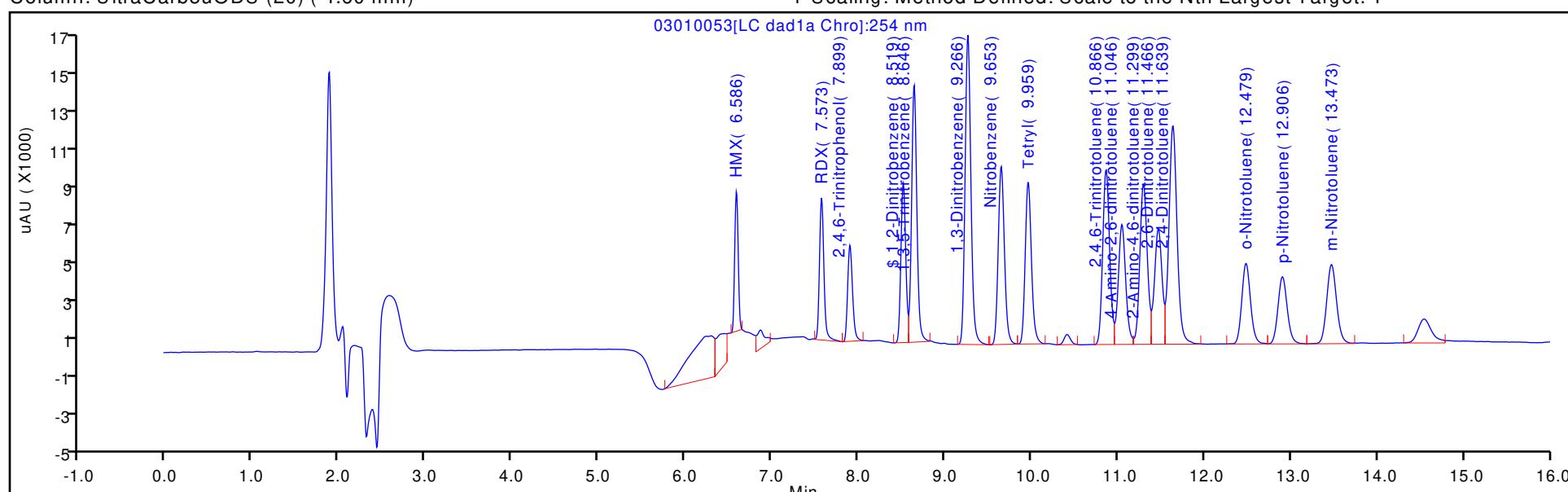
ALS Bottle#: 7

Method: 8330\_X3

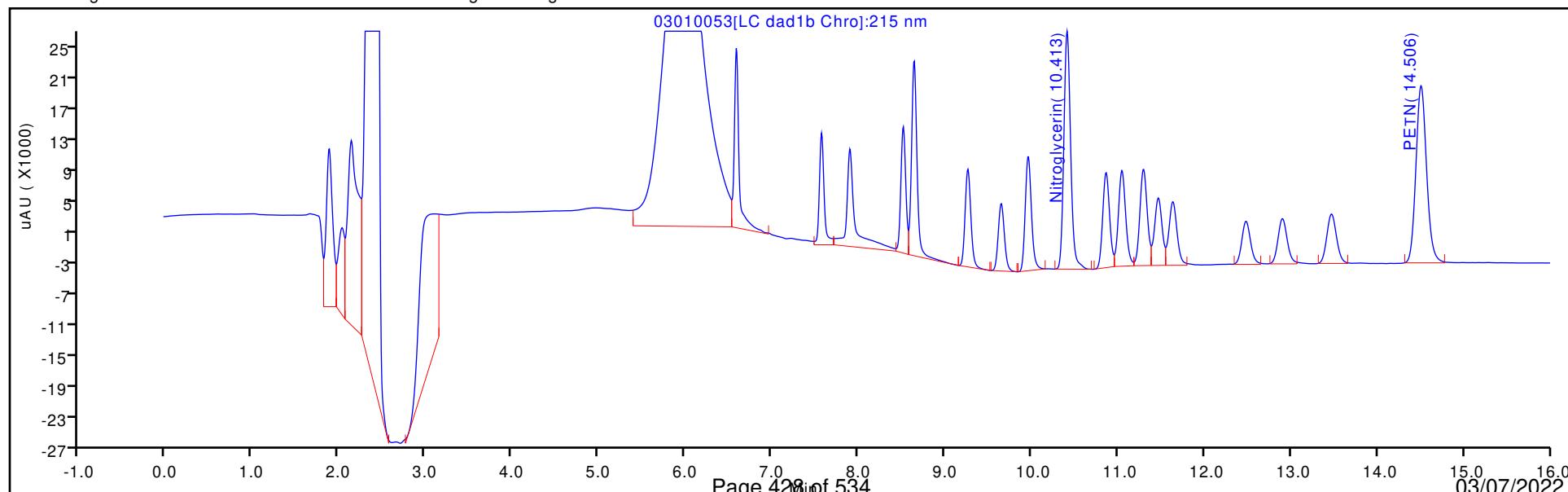
Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



## Eurofins Denver

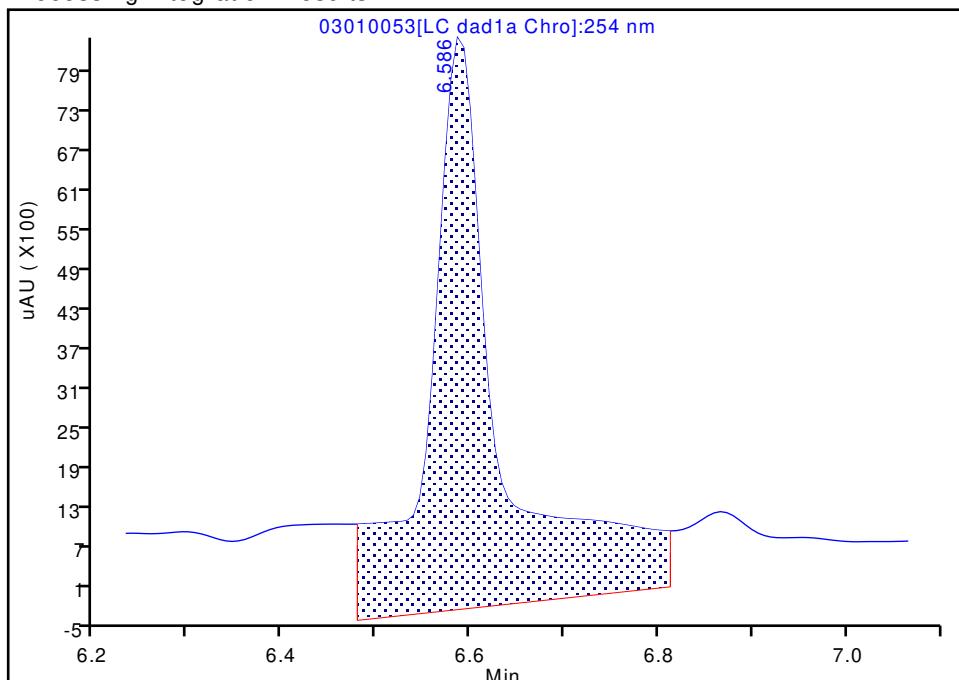
Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010053.d  
 Injection Date: 02-Mar-2022 08:32:47 Instrument ID: CHHPLC\_X3  
 Lims ID: CCV INT  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 53  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

4 HMX, CAS: 2691-41-0

Signal: 1

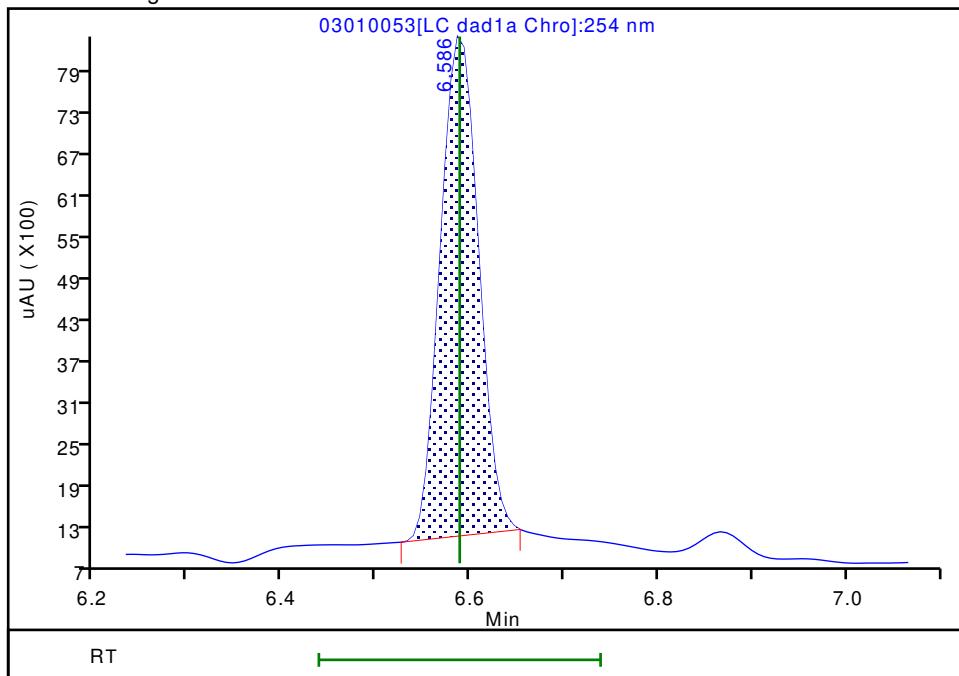
RT: 6.59  
 Area: 45694  
 Amount: 0.545098  
 Amount Units: ug/mL

## Processing Integration Results



RT: 6.59  
 Area: 20324  
 Amount: 0.242451  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 02-Mar-2022 12:46:15

Audit Action: Manually Integrated

Audit Reason: Baseline

FORM VII  
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159130-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCV 280-567371/54 Calibration Date: 03/02/2022 08:55  
Instrument ID: CHHPLC\_X3 Calib Start Date: 01/05/2022 01:43  
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 01/05/2022 04:24  
Lab File ID: 03010054.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	181207	166709		230	250	-8.0	15.0
DNX	Ave	138113	126801		230	250	-8.2	15.0
MNX	Ave	125995	123369		286	292	-2.1	15.0

FORM VII  
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver

Job No.: 280-159130-1

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

Lab Sample ID: CCV 280-567371/54

Calibration Date: 03/02/2022 08:55

Instrument ID: CHHPLC\_X3

Calib Start Date: 01/05/2022 01:43

GC Column: UltraCarb5uODS ID: 4.60 (mm)

Calib End Date: 01/05/2022 04:24

Lab File ID: 03010054.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.47	6.37	6.57
DNX	6.79	6.69	6.89
MNX	7.21	7.06	7.36

Eurofins Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\03010054.D  
 Lims ID: CCV DMT  
 Client ID:  
 Sample Type: CCV  
 Inject. Date: 02-Mar-2022 08:55:46 ALS Bottle#: 9 Worklist Smp#: 54  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Sample Info: CCV DMT  
 Misc. Info.: 280-0108907-054  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Sublist: chrom-8330\_X3\*sub17  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 02-Mar-2022 13:06:29 Calib Date: 05-Jan-2022 04:24:15  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040037.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm ) Det: LC DAD1B, 254 nm  
 Process Host: CTX1635

First Level Reviewer: zhangji Date: 02-Mar-2022 12:46:32

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.471	6.472	-0.001	41719	0.2503	0.2302	M
6 DNX	1	6.785	6.792	-0.007	31732	0.2503	0.2298	M
7 MNX	1	7.205	7.206	-0.001	35993	0.2918	0.2857	M

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

### Reagents:

8330 DMT\_00010 Amount Added: 12.50 Units: uL

Report Date: 02-Mar-2022 13:06:30

Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010054.d

Injection Date: 02-Mar-2022 08:55:46

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: CCV DMT

Worklist Smp#: 54

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

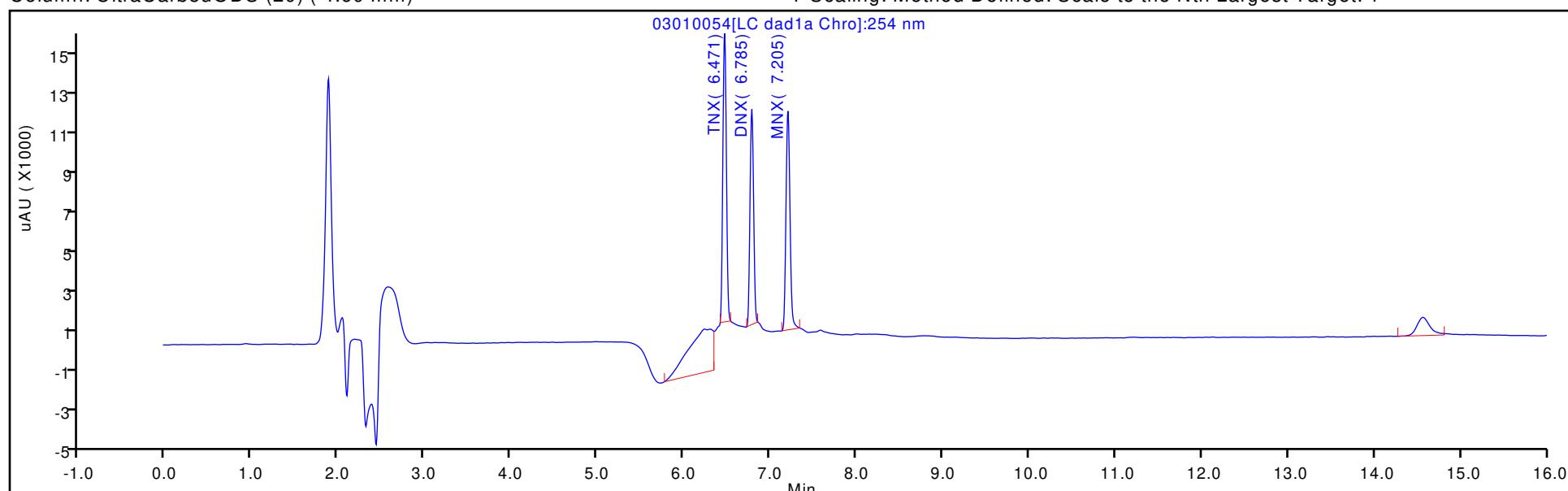
ALS Bottle#: 9

Method: 8330\_X3

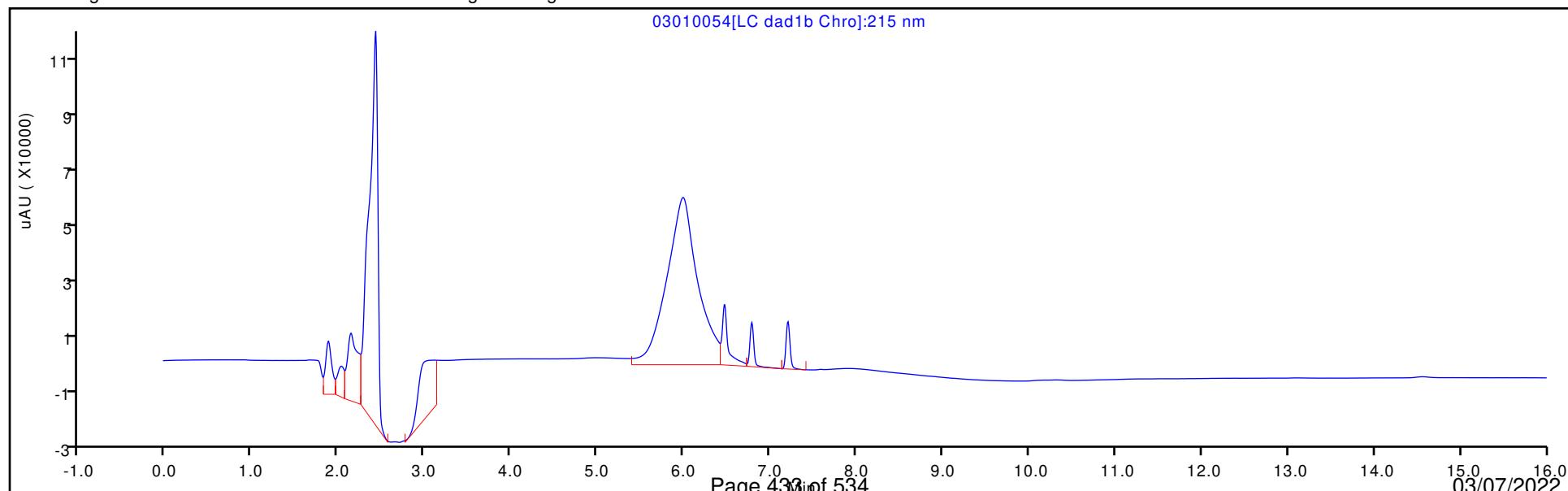
Limit Group: GCSV - 8330

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 Denver

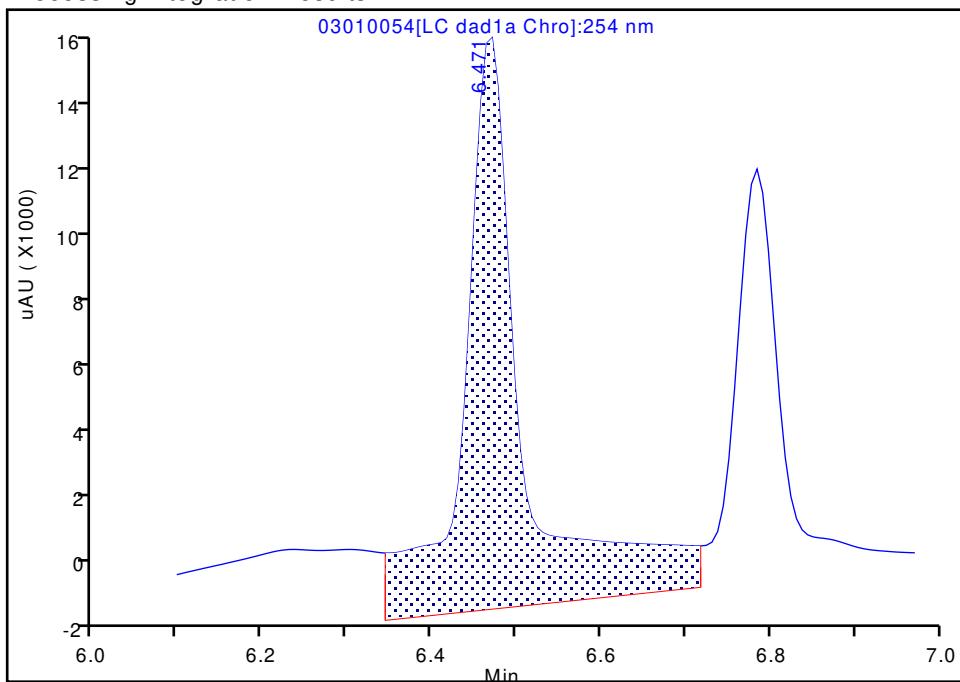
Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010054.d  
 Injection Date: 02-Mar-2022 08:55:46 Instrument ID: CHHPLC\_X3  
 Lims ID: CCV DMT  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 9 Worklist Smp#: 54  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

**3 TNX, CAS: 13980-04-6**

Signal: 1

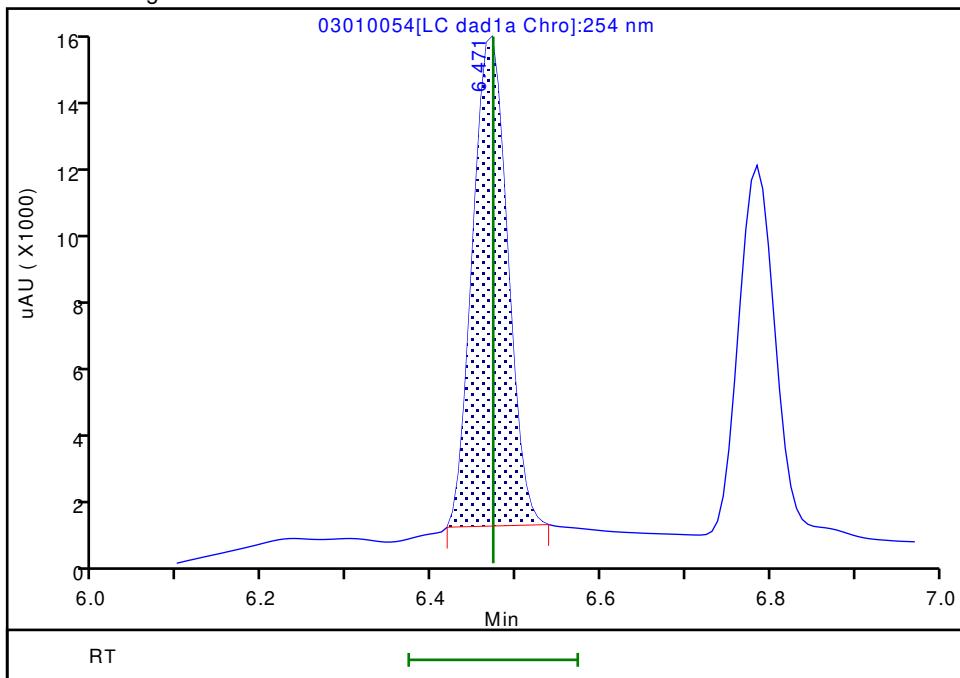
RT: 6.47  
 Area: 82527  
 Amount: 0.455428  
 Amount Units: ug/mL

## Processing Integration Results



RT: 6.47  
 Area: 41719  
 Amount: 0.230228  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 02-Mar-2022 12:46:22

Audit Action: Manually Integrated

Audit Reason: Baseline

## Eurofins Denver

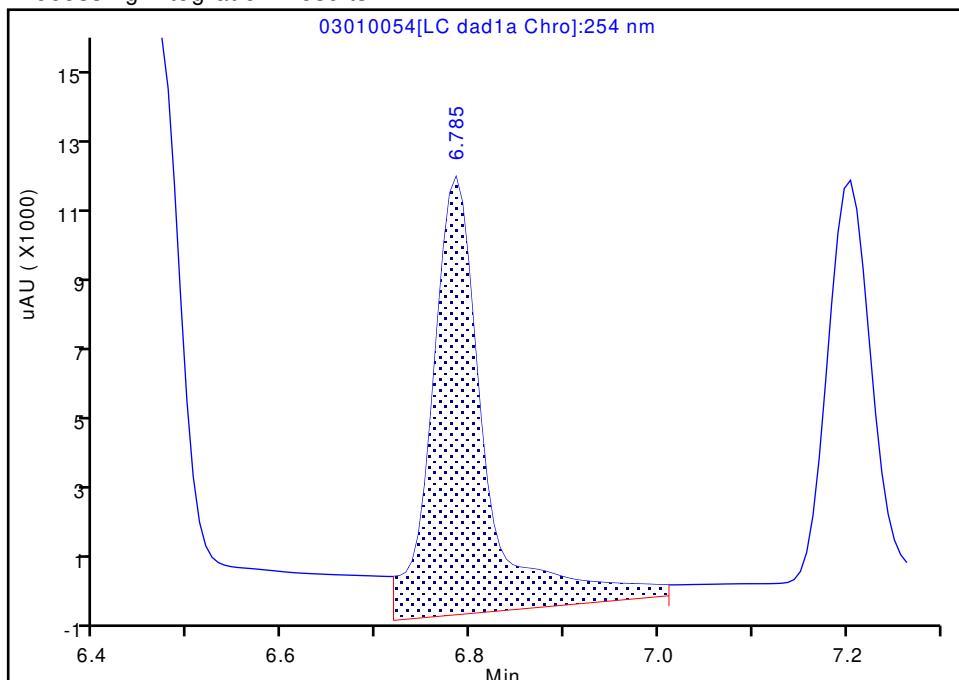
Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010054.d  
 Injection Date: 02-Mar-2022 08:55:46 Instrument ID: CHHPLC\_X3  
 Lims ID: CCV DMT  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 9 Worklist Smp#: 54  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

**6 DNX, CAS: 80251-29-2**

Signal: 1

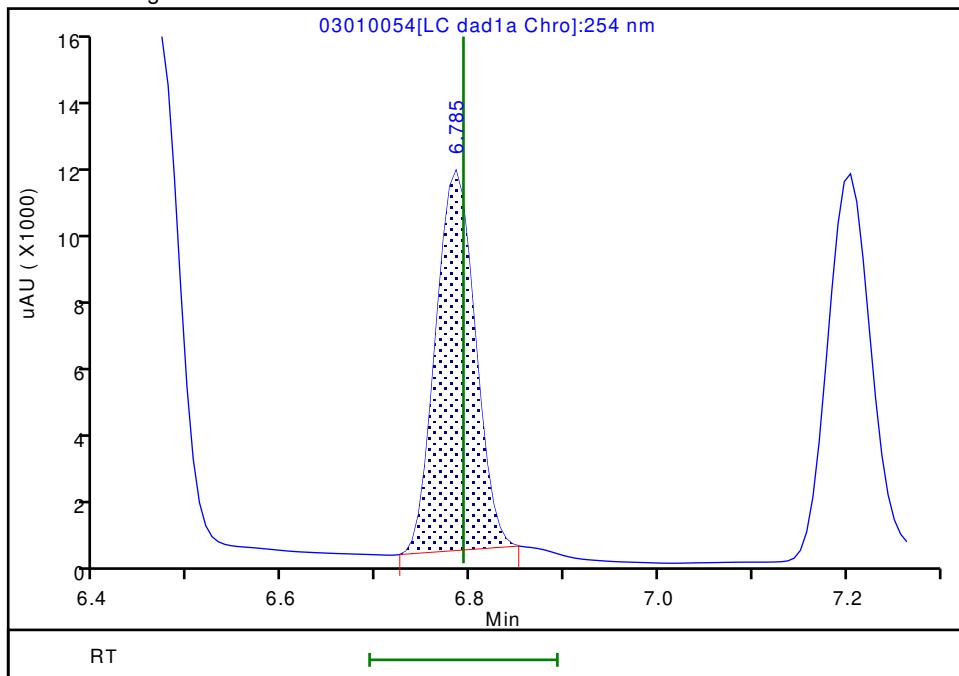
RT: 6.78  
 Area: 47432  
 Amount: 0.343429  
 Amount Units: ug/mL

## Processing Integration Results



RT: 6.78  
 Area: 31732  
 Amount: 0.229754  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 02-Mar-2022 12:46:26

Audit Action: Manually Integrated

Audit Reason: Baseline

## Eurofins Denver

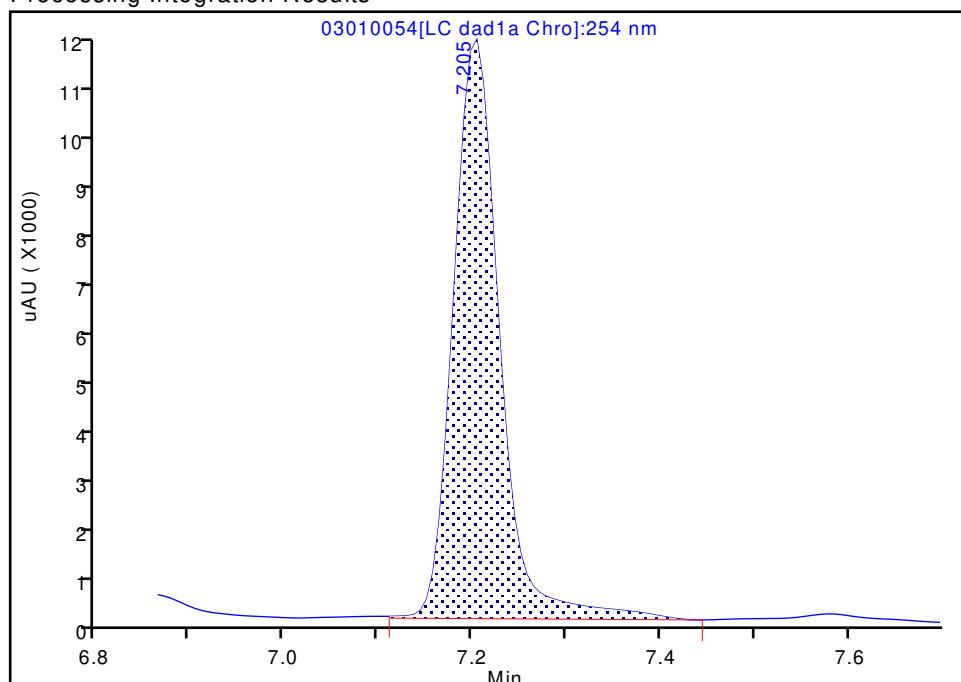
Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010054.d  
 Injection Date: 02-Mar-2022 08:55:46 Instrument ID: CHHPLC\_X3  
 Lims ID: CCV DMT  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 9 Worklist Smp#: 54  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

## 7 MNX, CAS: 5755-27-1

Signal: 1

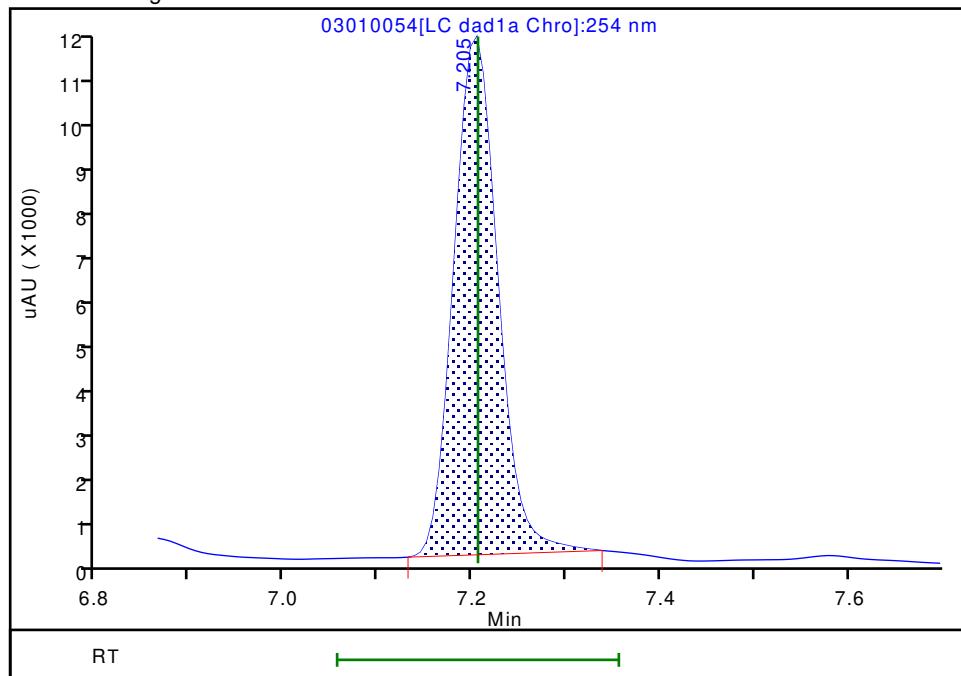
RT: 7.20  
 Area: 38310  
 Amount: 0.304059  
 Amount Units: ug/mL

## Processing Integration Results



RT: 7.20  
 Area: 35993  
 Amount: 0.285669  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 02-Mar-2022 12:46:31

Audit Action: Manually Integrated

Audit Reason: Baseline

FORM VII  
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159130-1

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

Lab Sample ID: CCV 280-567371/65 Calibration Date: 03/02/2022 13:08

Instrument ID: CHHPLC\_X3 Calib Start Date: 01/04/2022 18:28

GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 01/04/2022 21:31

Lab File ID: 03010065.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	83827	82388		246	250	-1.7	15.0
RDX	Ave	103609	105704		255	250	2.0	15.0
Picric acid	Ave	77039	78576		255	250	2.0	15.0
1,3,5-Trinitrobenzene	Ave	218096	225717		259	251	3.5	15.0
1,3-Dinitrobenzene	Ave	288401	301792		262	251	4.6	15.0
Nitrobenzene	Ave	191953	180880		237	251	-5.8	15.0
Tetryl	Ave	170567	168798		248	251	-1.0	15.0
Nitroglycerin	Ave	63037	66368		2630	2500	5.3	15.0
2,4,6-Trinitrotoluene	Ave	202726	202223		250	251	-0.2	15.0
4-Amino-2,6-dinitrotoluene	Ave	150985	148384		246	250	-1.7	15.0
2-Amino-4,6-dinitrotoluene	Ave	202171	197542		245	251	-2.3	15.0
2,6-Dinitrotoluene	Ave	143115	146904		258	251	2.6	15.0
2,4-Dinitrotoluene	Ave	289351	297438		258	251	2.8	15.0
2-Nitrotoluene	Ave	127614	114592		224	250	-10.2	15.0
4-Nitrotoluene	Ave	106235	102643		242	251	-3.4	15.0
3-Nitrotoluene	Ave	142273	127988		225	250	-10.0	15.0
PETN	Lin2		77777		2660	2500	6.4	15.0
1,2-Dinitrobenzene	Ave	124698	128964		259	250	3.4	15.0

FORM VII  
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159130-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCV 280-567371/65 Calibration Date: 03/02/2022 13:08  
Instrument ID: CHHPLC\_X3 Calib Start Date: 01/04/2022 18:28  
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 01/04/2022 21:31  
Lab File ID: 03010065.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.59	6.44	6.74
RDX	7.57	7.43	7.73
Picric acid	7.90	7.75	8.05
1,3,5-Trinitrobenzene	8.65	8.49	8.79
1,3-Dinitrobenzene	9.27	9.11	9.41
Nitrobenzene	9.65	9.50	9.80
Tetryl	9.96	9.81	10.11
Nitroglycerin	10.41	10.26	10.56
2,4,6-Trinitrotoluene	10.87	10.76	10.96
4-Amino-2,6-dinitrotoluene	11.05	10.94	11.14
2-Amino-4,6-dinitrotoluene	11.30	11.19	11.39
2,6-Dinitrotoluene	11.47	11.36	11.56
2,4-Dinitrotoluene	11.64	11.54	11.74
2-Nitrotoluene	12.49	12.33	12.63
4-Nitrotoluene	12.91	12.75	13.05
3-Nitrotoluene	13.47	13.31	13.61
PETN	14.51	14.34	14.64
1,2-Dinitrobenzene	8.52	8.37	8.67

**Eurofins Denver**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\03010065.D  
 Lims ID: CCV INT  
 Client ID:  
 Sample Type: CCV  
 Inject. Date: 02-Mar-2022 13:08:13 ALS Bottle#: 7 Worklist Smp#: 65  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Sample Info: CCV INT  
 Misc. Info.: 280-0108907-065  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Sublist: chrom-8330\_X3\*sub9  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 02-Mar-2022 13:56:57 Calib Date: 05-Jan-2022 04:24:15  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040037.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1635

First Level Reviewer: zhangji

Date:

02-Mar-2022 13:36:21

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.593	6.588	0.005	20597	0.2500	0.2457	M
8 RDX	1	7.573	7.575	-0.002	26426	0.2500	0.2551	
9 2,4,6-Trinitrophenol	1	7.900	7.895	0.005	19644	0.2500	0.2550	
\$ 10 1,2-Dinitrobenzene	1	8.520	8.515	0.005	32241	0.2500	0.2586	
11 1,3,5-Trinitrobenzene	1	8.646	8.642	0.004	56542	0.2505	0.2593	
12 1,3-Dinitrobenzene	1	9.266	9.262	0.004	75599	0.2505	0.2621	
13 Nitrobenzene	1	9.653	9.648	0.005	45401	0.2510	0.2365	
15 Tetryl	1	9.960	9.955	0.005	42284	0.2505	0.2479	
16 Nitroglycerin	2	10.413	10.408	0.005	165919	2.50	2.63	
17 2,4,6-Trinitrotoluene	1	10.866	10.862	0.004	50758	0.2510	0.2504	
18 4-Amino-2,6-dinitrotoluene	1	11.046	11.042	0.004	37133	0.2503	0.2459	
19 2-Amino-4,6-dinitrotoluene	1	11.300	11.288	0.012	49583	0.2510	0.2453	
20 2,6-Dinitrotoluene	1	11.466	11.462	0.004	36873	0.2510	0.2576	
21 2,4-Dinitrotoluene	1	11.640	11.635	0.005	74657	0.2510	0.2580	
22 o-Nitrotoluene	1	12.486	12.475	0.011	28648	0.2500	0.2245	
23 p-Nitrotoluene	1	12.906	12.895	0.011	25712	0.2505	0.2420	
24 m-Nitrotoluene	1	13.473	13.462	0.011	32029	0.2503	0.2251	
25 PETN	2	14.506	14.488	0.018	194442	2.50	2.66	

**QC Flag Legend**

Processing Flags

Review Flags

M - Manually Integrated

**Reagents:**

8330\IntermStk\_00070

Amount Added: 25.00

Units: uL

Report Date: 02-Mar-2022 13:56:57

Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010065.d

Injection Date: 02-Mar-2022 13:08:13

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: CCV INT

Worklist Smp#: 65

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

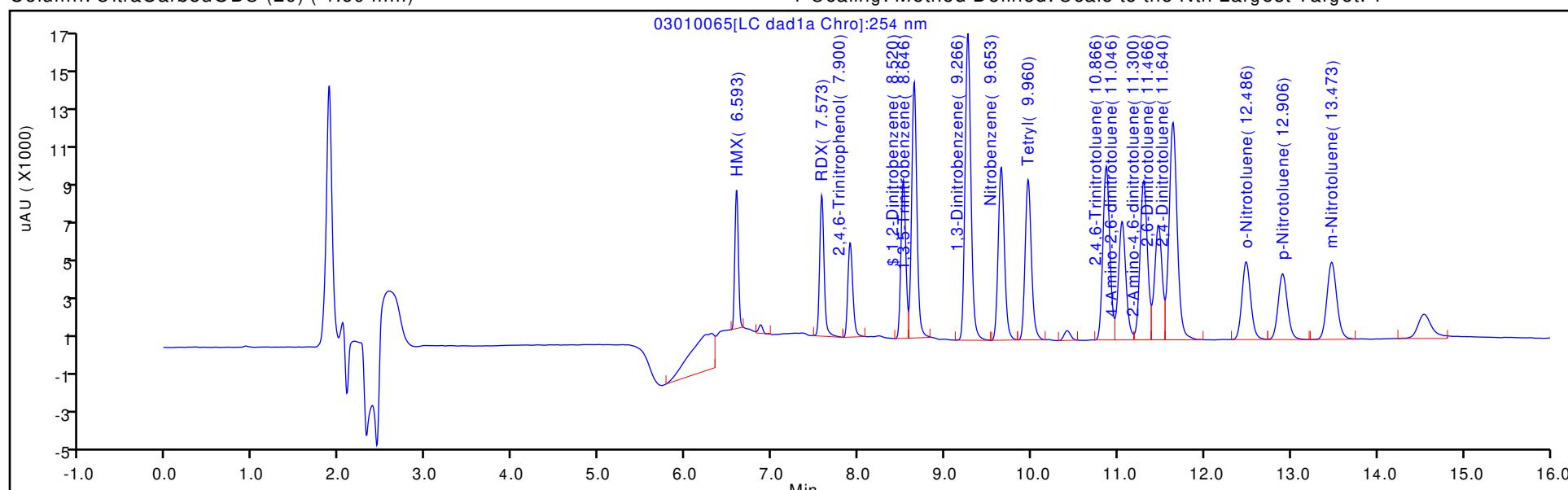
ALS Bottle#: 7

Method: 8330\_X3

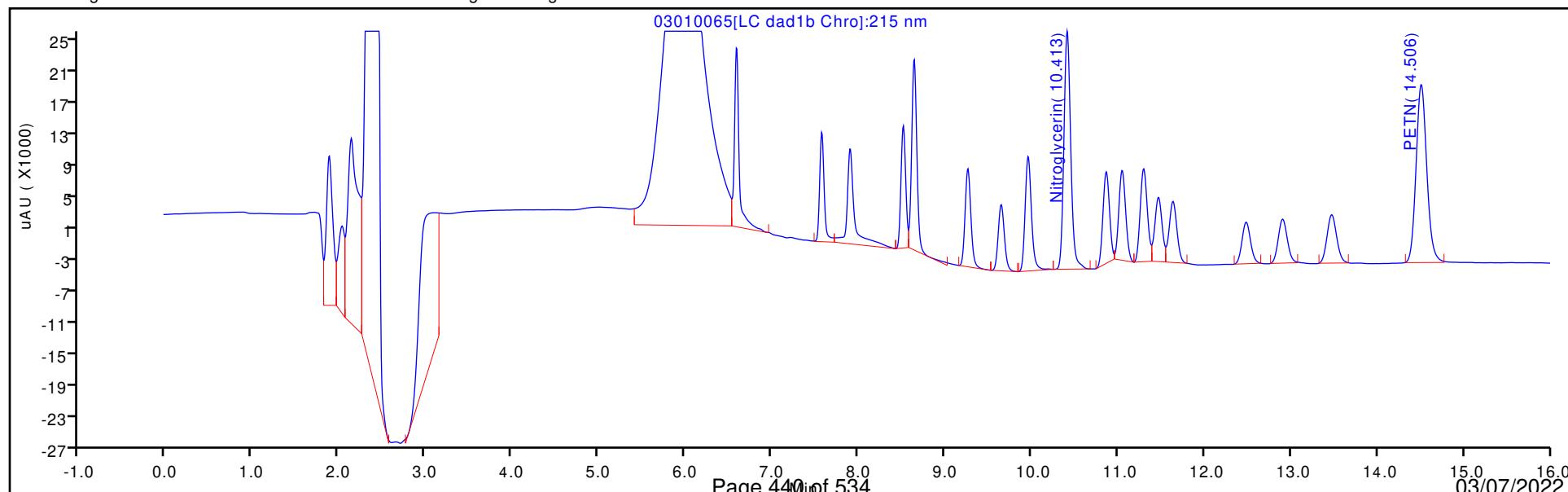
Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



## Eurofins Denver

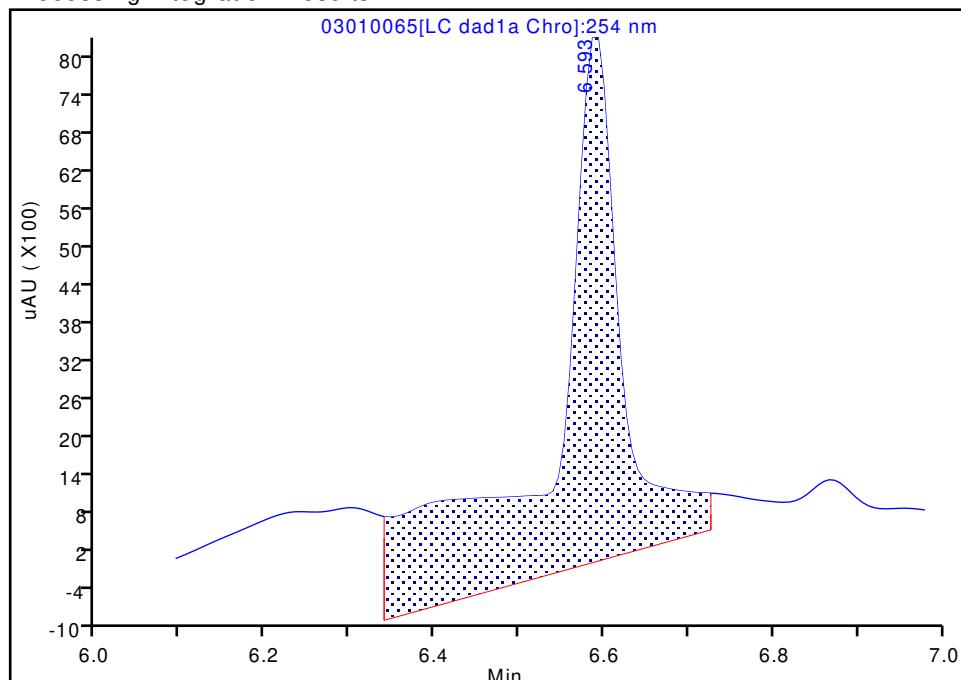
Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010065.d  
 Injection Date: 02-Mar-2022 13:08:13 Instrument ID: CHHPLC\_X3  
 Lims ID: CCV INT  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 65  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

**4 HMX, CAS: 2691-41-0**

Signal: 1

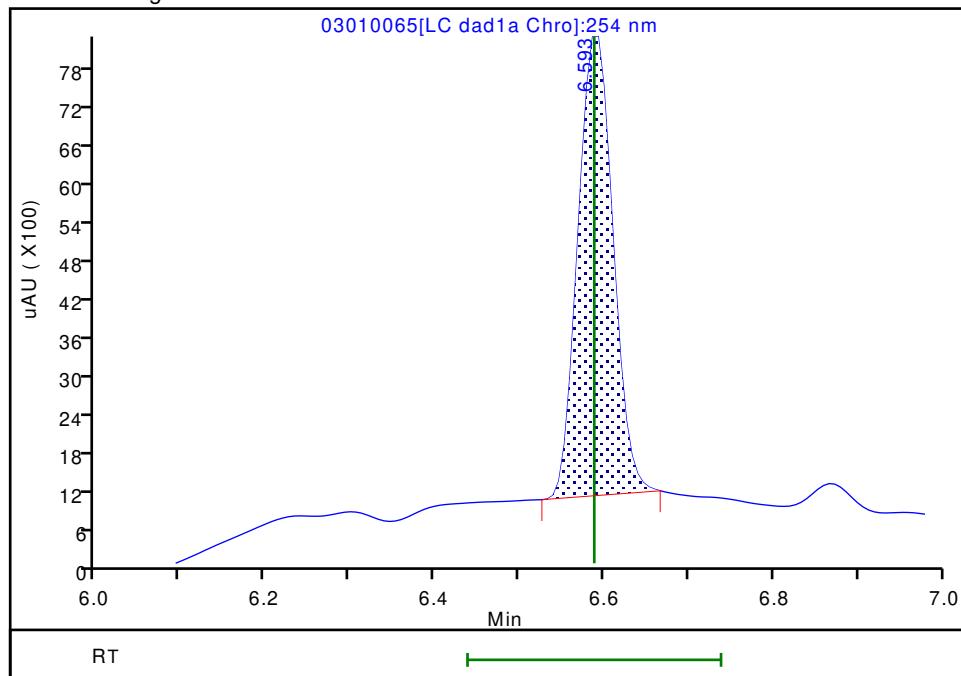
RT: 6.59  
 Area: 49361  
 Amount: 0.588842  
 Amount Units: ug/mL

## Processing Integration Results



RT: 6.59  
 Area: 20597  
 Amount: 0.245708  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 02-Mar-2022 13:36:20

Audit Action: Manually Integrated

Audit Reason: Baseline

FORM VII  
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159130-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCV 280-567371/66 Calibration Date: 03/02/2022 13:31  
Instrument ID: CHHPLC\_X3 Calib Start Date: 01/05/2022 01:43  
GC Column: UltraCarb5uODS ID: 4.60 (mm) Calib End Date: 01/05/2022 04:24  
Lab File ID: 03010066.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	181207	165471		229	250	-8.7	15.0
DNX	Ave	138113	124659		226	250	-9.7	15.0
MNX	Ave	125995	119458		277	292	-5.2	15.0

FORM VII  
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver

Job No.: 280-159130-1

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

Lab Sample ID: CCV 280-567371/66

Calibration Date: 03/02/2022 13:31

Instrument ID: CHHPLC\_X3

Calib Start Date: 01/05/2022 01:43

GC Column: UltraCarb5uODS ID: 4.60 (mm)

Calib End Date: 01/05/2022 04:24

Lab File ID: 03010066.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.47	6.37	6.57
DNX	6.79	6.69	6.89
MNX	7.21	7.06	7.36

**Eurofins Denver**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\03010066.D  
 Lims ID: CCV DMT  
 Client ID:  
 Sample Type: CCV  
 Inject. Date: 02-Mar-2022 13:31:06 ALS Bottle#: 9 Worklist Smp#: 66  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Sample Info: CCV DMT  
 Misc. Info.: 280-0108907-066  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Sublist: chrom-8330\_X3\*sub17  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 02-Mar-2022 15:13:37 Calib Date: 05-Jan-2022 04:24:15  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040037.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1635

First Level Reviewer: zhangji Date: 02-Mar-2022 13:58:44

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.473	6.472	0.001	41409	0.2503	0.2285	M
6 DNX	1	6.793	6.792	0.001	31196	0.2503	0.2259	M
7 MNX	1	7.206	7.206	0.000	34852	0.2918	0.2766	M

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

### Reagents:

8330 DMT\_00010 Amount Added: 12.50 Units: uL

Report Date: 02-Mar-2022 15:13:37

Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010066.d

Injection Date: 02-Mar-2022 13:31:06

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: CCV DMT

Worklist Smp#: 66

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

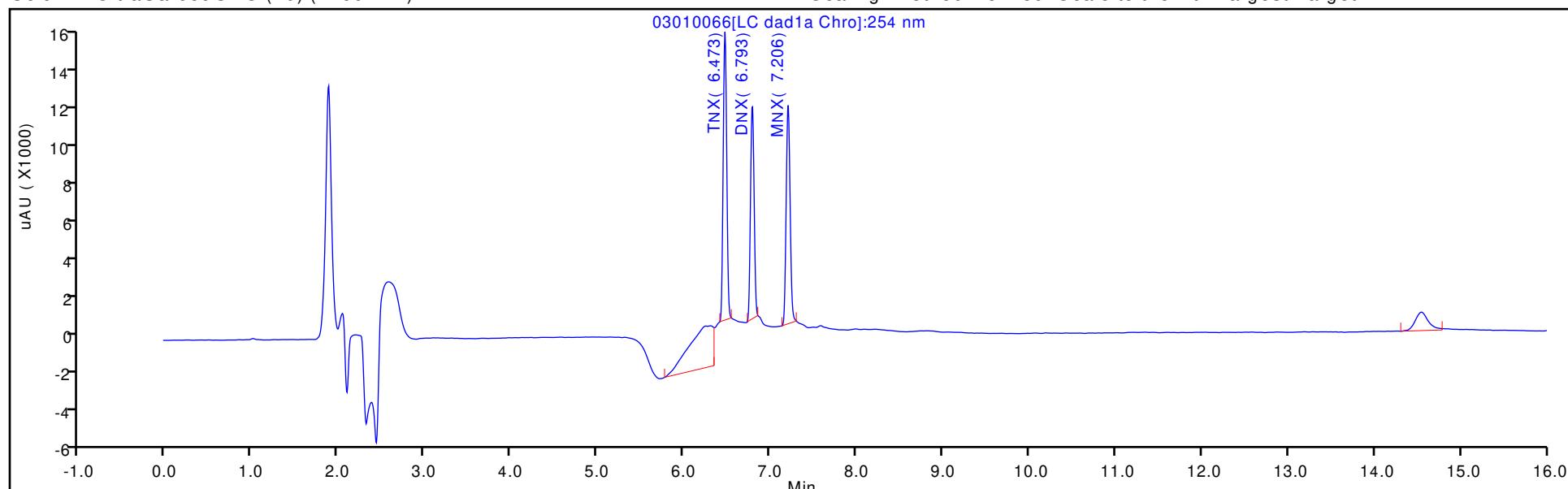
ALS Bottle#: 9

Method: 8330\_X3

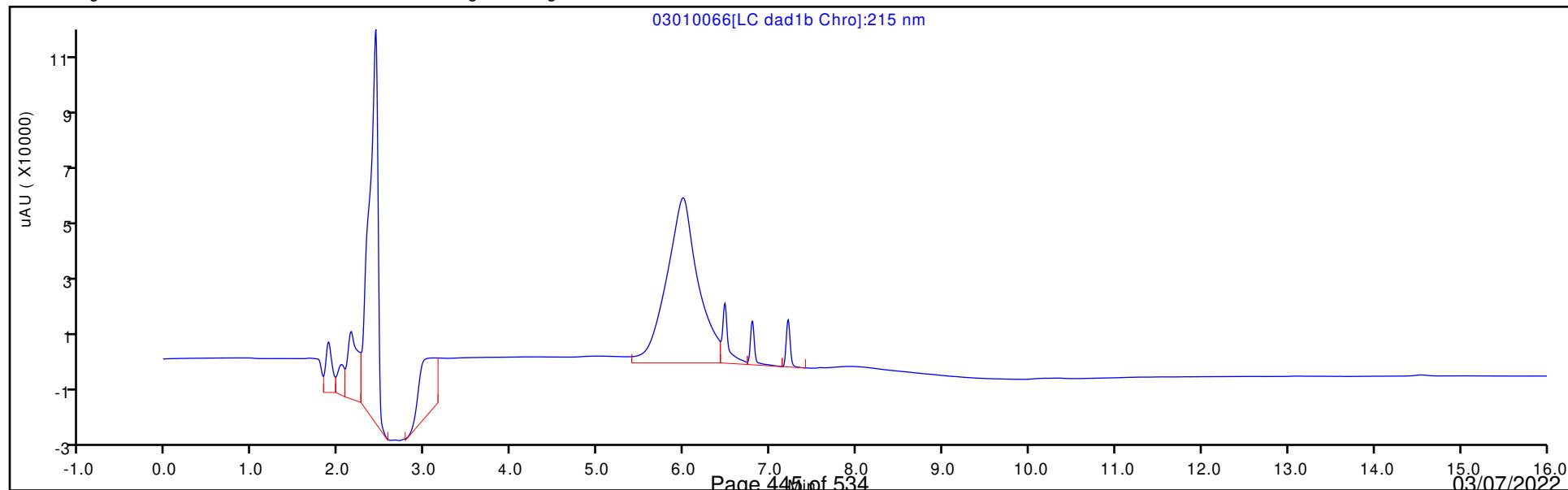
Limit Group: GCSV - 8330

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 Denver

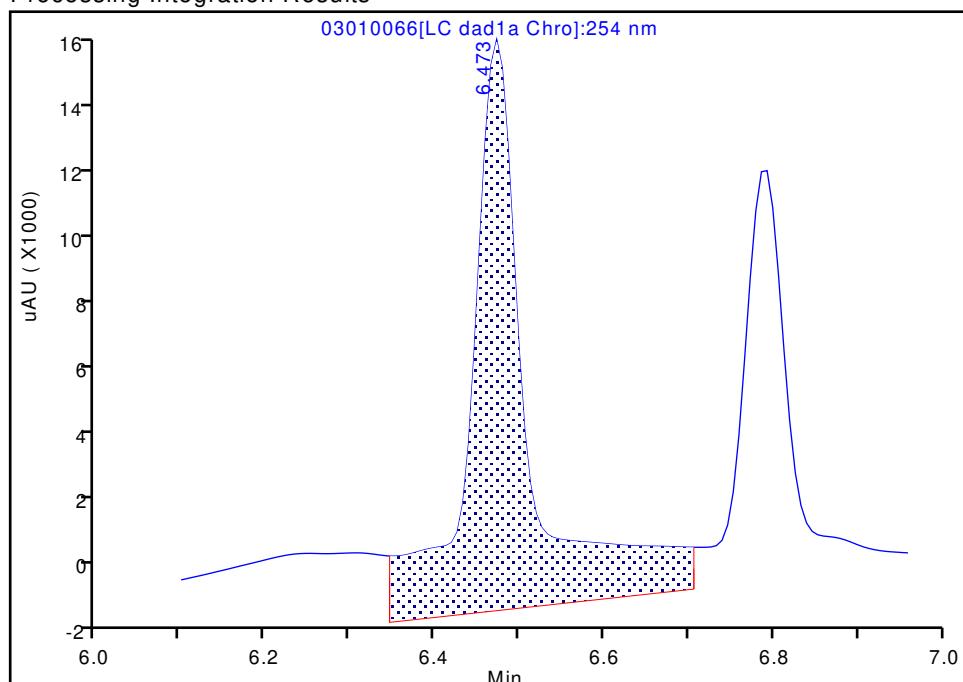
Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010066.d  
 Injection Date: 02-Mar-2022 13:31:06 Instrument ID: CHHPLC\_X3  
 Lims ID: CCV DMT  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 9 Worklist Smp#: 66  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

**3 TNX, CAS: 13980-04-6**

Signal: 1

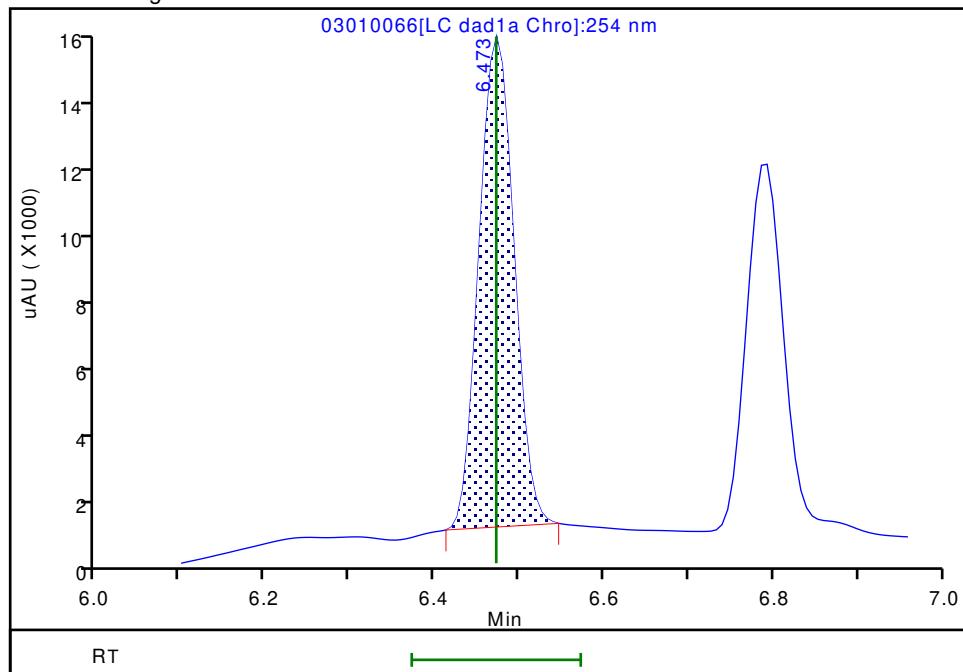
RT: 6.47  
 Area: 79054  
 Amount: 0.436262  
 Amount Units: ug/mL

## Processing Integration Results



RT: 6.47  
 Area: 41409  
 Amount: 0.228517  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 02-Mar-2022 13:58:33

Audit Action: Manually Integrated

Audit Reason: Baseline

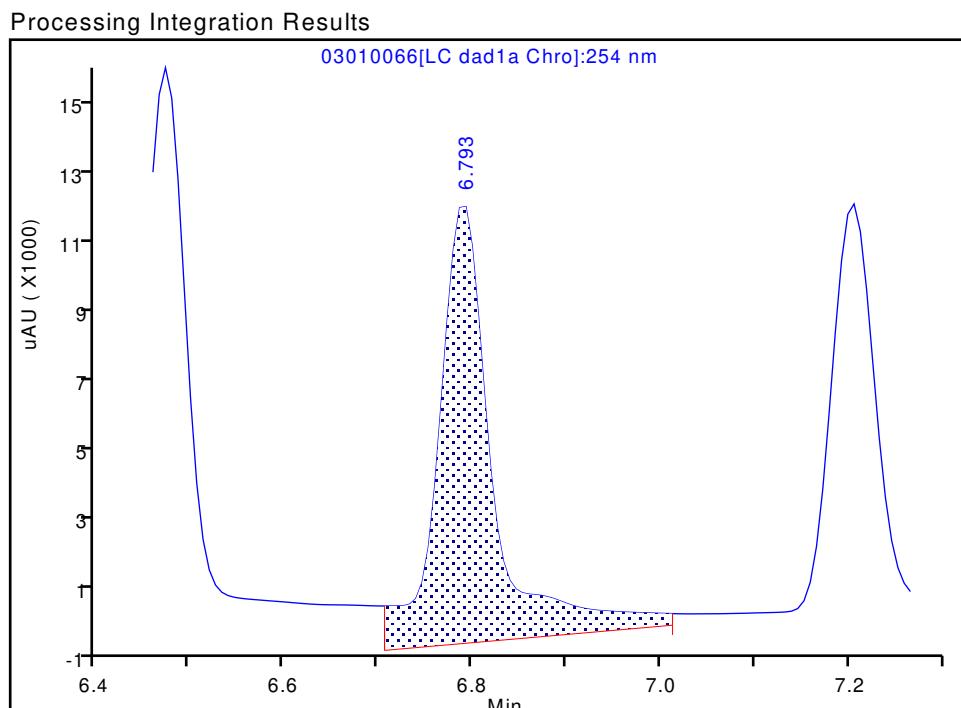
## Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010066.d  
 Injection Date: 02-Mar-2022 13:31:06 Instrument ID: CHHPLC\_X3  
 Lims ID: CCV DMT  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 9 Worklist Smp#: 66  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

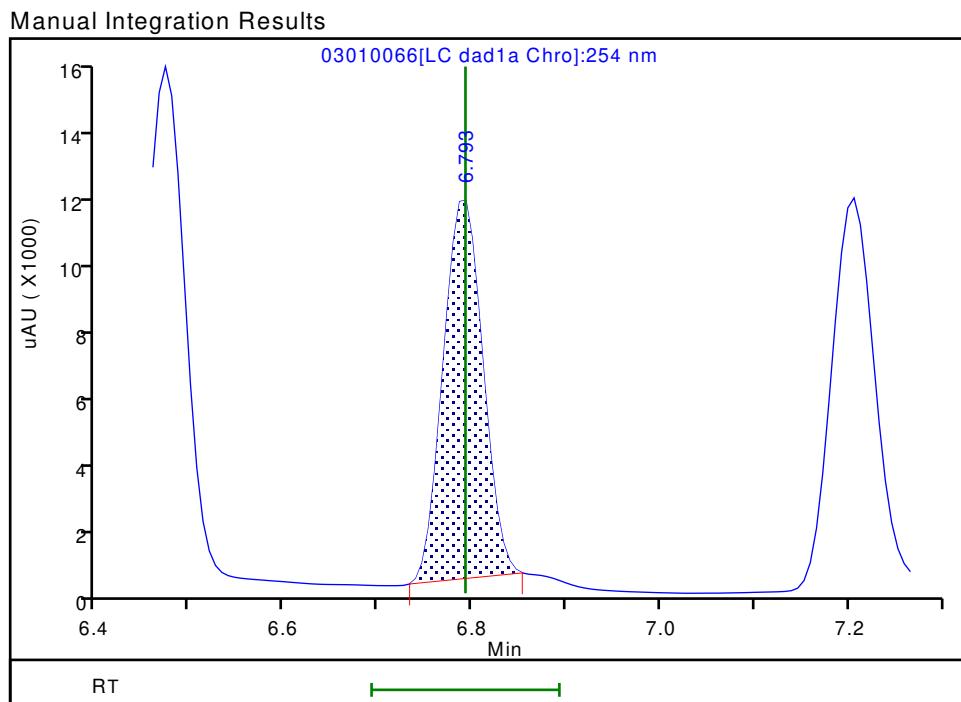
**6 DNX, CAS: 80251-29-2**

Signal: 1

RT: 6.79  
 Area: 48290  
 Amount: 0.349641  
 Amount Units: ug/mL



RT: 6.79  
 Area: 31196  
 Amount: 0.225873  
 Amount Units: ug/mL



Reviewer: zhangji, 02-Mar-2022 13:58:36

Audit Action: Manually Integrated

Audit Reason: Baseline

## Eurofins Denver

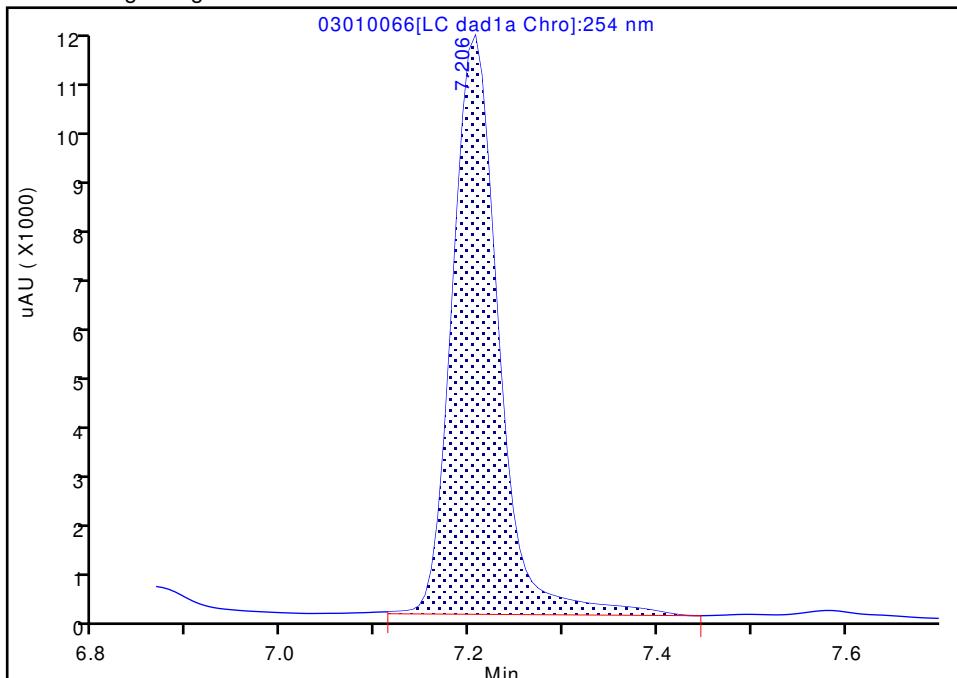
Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010066.d  
 Injection Date: 02-Mar-2022 13:31:06 Instrument ID: CHHPLC\_X3  
 Lims ID: CCV DMT  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 9 Worklist Smp#: 66  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

## 7 MNX, CAS: 5755-27-1

Signal: 1

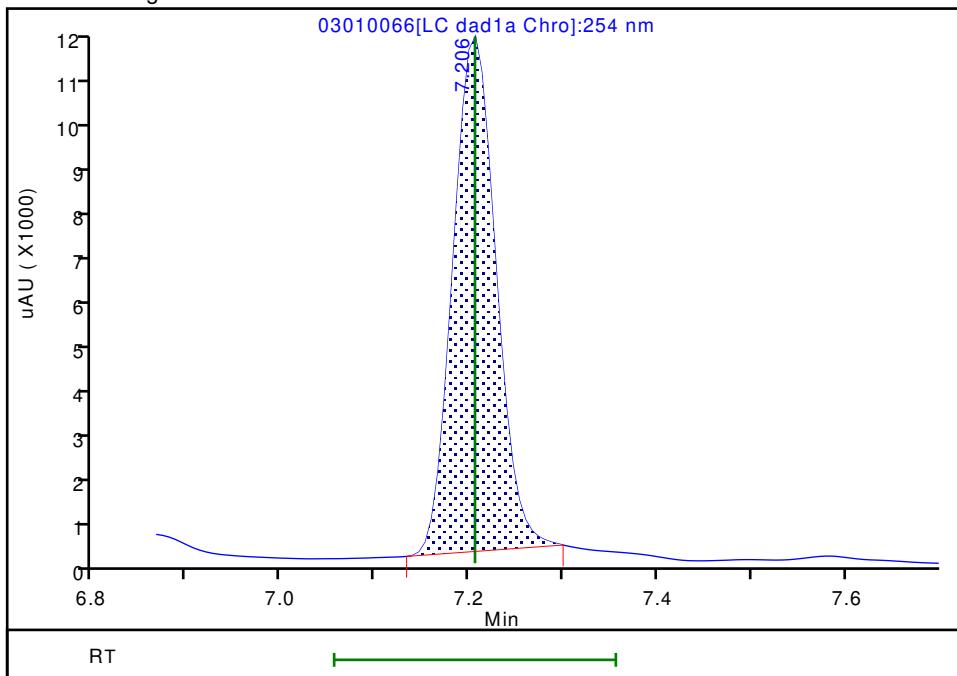
## Processing Integration Results

RT: 7.21  
 Area: 38016  
 Amount: 0.301725  
 Amount Units: ug/mL



## Manual Integration Results

RT: 7.21  
 Area: 34852  
 Amount: 0.276613  
 Amount Units: ug/mL



Reviewer: zhangji, 02-Mar-2022 13:58:42

Audit Action: Manually Integrated

Audit Reason: Baseline

FORM VII  
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159130-1

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

Lab Sample ID: ICV 280-567560/19 Calibration Date: 03/03/2022 02:38

Instrument ID: CHHPLC\_X5 Calib Start Date: 03/02/2022 21:22

GC Column: Luna-phenylhex ID: 4.60 (mm) Calib End Date: 03/03/2022 02:03

Lab File ID: 03020019.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	166135	152908		460	500	-8.0	15.0
Picric acid	Ave	132885	149388		562	500	12.4	15.0
RDX	Ave	194331	186788		481	500	-3.9	15.0
Nitrobenzene	Ave	368293	368460		500	500	0.0	15.0
1,3-Dinitrobenzene	Ave	571666	563218		493	500	-1.5	15.0
Nitroglycerin	Ave	122518	128779		5260	5000	5.1	15.0
2-Nitrotoluene	Ave	234672	232836		496	500	-0.8	15.0
4-Nitrotoluene	Ave	210817	216650		514	500	2.8	15.0
4-Amino-2,6-dinitrotoluene	Lin2		269688		505	500	1.0	15.0
3-Nitrotoluene	Lin2		254816		480	500	-4.1	15.0
2-Amino-4,6-dinitrotoluene	Ave	360536	361200		501	500	0.2	15.0
1,3,5-Trinitrobenzene	Ave	415464	433072		521	500	4.2	15.0
2,6-Dinitrotoluene	Ave	265662	266814		502	500	0.4	15.0
2,4-Dinitrotoluene	Lin2		522322		470	500	-5.9	15.0
Tetryl	Ave	342171	323254		472	500	-5.5	15.0
2,4,6-Trinitrotoluene	Ave	369179	384614		521	500	4.2	15.0
PETN	Ave	129329	137808		5330	5000	6.6	15.0
1,2-Dinitrobenzene	Ave	249753	254466		509	500	1.9	15.0

FORM VII  
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159130-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: ICV 280-567560/19 Calibration Date: 03/03/2022 02:38  
Instrument ID: CHHPLC\_X5 Calib Start Date: 03/02/2022 21:22  
GC Column: Luna-phenylhex ID: 4.60 (mm) Calib End Date: 03/03/2022 02:03  
Lab File ID: 03020019.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.87	6.74	7.04
Picric acid	7.62	7.45	7.75
RDX	9.08	8.97	9.27
Nitrobenzene	12.01	11.91	12.21
1,3-Dinitrobenzene	15.60	15.49	15.79
Nitroglycerin	16.04	15.91	16.21
2-Nitrotoluene	16.78	16.67	16.97
4-Nitrotoluene	17.08	16.98	17.28
4-Amino-2,6-dinitrotoluene	17.72	17.61	17.91
3-Nitrotoluene	18.06	17.95	18.25
2-Amino-4,6-dinitrotoluene	18.72	18.59	18.89
1,3,5-Trinitrobenzene	18.92	18.80	19.10
2,6-Dinitrotoluene	20.22	20.11	20.41
2,4-Dinitrotoluene	20.73	20.61	20.91
Tetryl	24.48	24.34	24.64
2,4,6-Trinitrotoluene	25.24	25.11	25.41
PETN	26.21	26.07	26.37
1,2-Dinitrobenzene	13.24	13.13	13.43

Eurofins Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020019.D  
 Lims ID: ICV INT  
 Client ID:  
 Sample Type: ICV  
 Inject. Date: 03-Mar-2022 02:38:50 ALS Bottle#: 19 Worklist Smp#: 19  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: ICV INT  
 Misc. Info.: 280-0108949-019  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Sublist:  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 03-Mar-2022 12:52:22 Calib Date: 03-Mar-2022 02:03:29  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020018.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm) Det: LC mwd1A, 254 nm  
 Process Host: CTX1618

First Level Reviewer: zhangji Date: 03-Mar-2022 12:42:44  
 Second Level Reviewer: zhangji Date: 03-Mar-2022 12:52:22

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.143	4.142	0.001	223893	0.5000	0.5509	
2 2,4-diamino-6-nitrotoluene	1	4.749	4.669	0.080	110582	0.5000	0.4814	M
5 HMX	1	6.869	6.889	-0.020	76454	0.5000	0.4602	
7 2,4,6-Trinitrophenol	1	7.623	7.602	0.021	74694	0.5000	0.5621	
8 RDX	1	9.076	9.115	-0.039	93394	0.5000	0.4806	
9 Nitrobenzene	1	12.009	12.062	-0.053	184230	0.5000	0.5002	
\$ 10 1,2-Dinitrobenzene	1	13.236	13.282	-0.046	127233	0.5000	0.5094	
11 3,5-Dinitroaniline	1	15.229	15.269	-0.040	225413	0.5000	0.5479	
12 1,3-Dinitrobenzene	1	15.596	15.635	-0.039	281609	0.5000	0.4926	
13 Nitroglycerin	2	16.036	16.055	-0.019	643894	5.00	5.26	
14 o-Nitrotoluene	1	16.776	16.822	-0.046	116418	0.5000	0.4961	
16 p-Nitrotoluene	1	17.083	17.129	-0.046	108325	0.5000	0.5138	
17 4-Amino-2,6-dinitrotoluene	1	17.716	17.755	-0.039	134844	0.5000	0.5048	
18 m-Nitrotoluene	1	18.056	18.102	-0.046	127408	0.5000	0.4797	
19 2-Amino-4,6-dinitrotoluene	1	18.716	18.742	-0.026	180600	0.5000	0.5009	
20 1,3,5-Trinitrobenzene	1	18.916	18.949	-0.033	216536	0.5000	0.5212	
21 2,6-Dinitrotoluene	1	20.223	20.255	-0.032	133407	0.5000	0.5022	
22 2,4-Dinitrotoluene	1	20.729	20.762	-0.033	261161	0.5000	0.4704	
23 Tetryl	1	24.476	24.489	-0.013	161627	0.5000	0.4724	
24 2,4,6-Trinitrotoluene	1	25.243	25.262	-0.019	192307	0.5000	0.5209	
25 PETN	2	26.209	26.215	-0.006	689039	5.00	5.33	

**QC Flag Legend**

Processing Flags

Review Flags

M - Manually Integrated

**Reagents:**

8330 LCS_00111	Amount Added: 50.00	Units: uL
8330Surrogate_00127	Amount Added: 50.00	Units: uL
3,5-DNA LCS_00040	Amount Added: 50.00	Units: uL
8330DiaminLCS_00047	Amount Added: 50.00	Units: uL

Report Date: 03-Mar-2022 12:52:29

Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020019.D

Injection Date: 03-Mar-2022 02:38:50

Instrument ID: CHHPLC\_X5

Operator ID: JZ

Lims ID: ICV INT

Worklist Smp#: 19

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

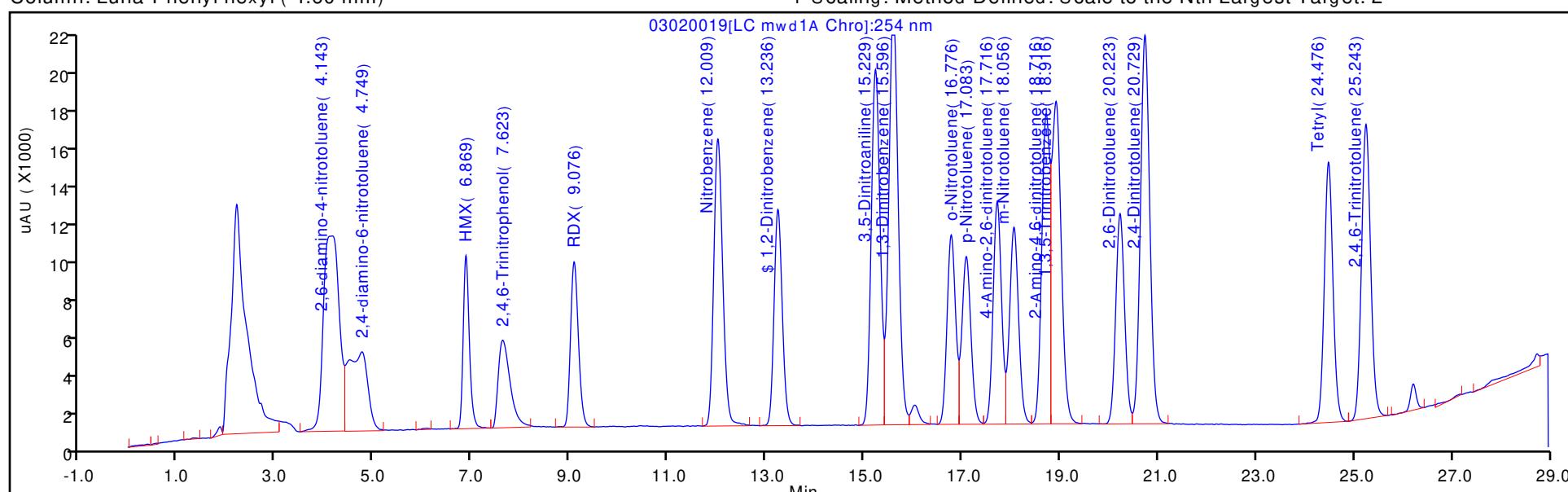
ALS Bottle#: 19

Method: 8330\_X5\_Luna

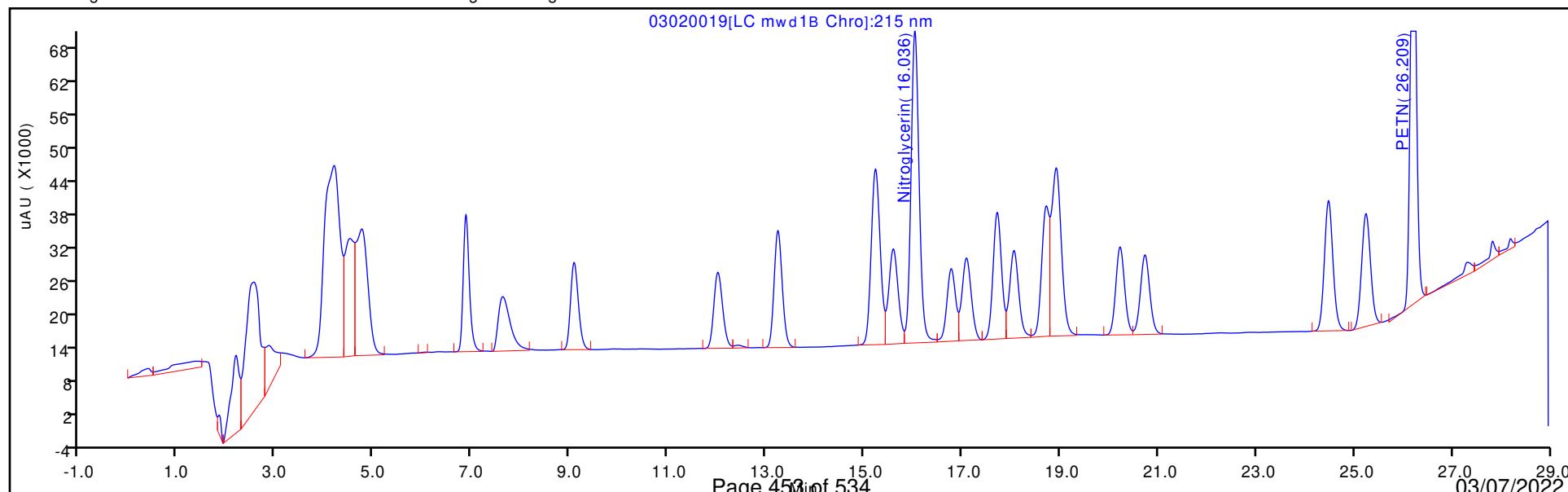
Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII  
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159130-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: ICV 280-567560/28 Calibration Date: 03/03/2022 07:54  
Instrument ID: CHHPLC\_X5 Calib Start Date: 03/03/2022 03:13  
GC Column: Luna-phenylhex ID: 4.60 (mm) Calib End Date: 03/03/2022 07:19  
Lab File ID: 03020028.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	354070	354839		502	501	0.2	15.0
DNX	Ave	278639	276448		497	501	-0.8	15.0
MNX	Ave	250081	253925		592	584	1.5	15.0

FORM VII  
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159130-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: ICV 280-567560/28 Calibration Date: 03/03/2022 07:54  
Instrument ID: CHHPLC\_X5 Calib Start Date: 03/03/2022 03:13  
GC Column: Luna-phenylhex ID: 4.60 (mm) Calib End Date: 03/03/2022 07:19  
Lab File ID: 03020028.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.16	5.02	5.32
DNX	6.02	5.88	6.18
MNX	7.61	7.48	7.78

Eurofins Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020028.D  
 Lims ID: ICV DMT  
 Client ID:  
 Sample Type: ICV  
 Inject. Date: 03-Mar-2022 07:54:47 ALS Bottle#: 28 Worklist Smp#: 28  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Sample Info: ICV DMT  
 Misc. Info.: 280-0108949-028  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Sublist:  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 03-Mar-2022 13:02:36 Calib Date: 03-Mar-2022 07:19:48  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020027.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm) Det: LC mwd1A, 254 nm  
 Process Host: CTX1618

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.157	5.171	-0.014	177597	0.5005	0.5016	
4 DNX	1	6.017	6.031	-0.014	138362	0.5005	0.4966	
6 MNX	1	7.610	7.625	-0.015	148165	0.5835	0.5925	

**Reagents:**

8330\_OP\_DMT\_00012 Amount Added: 50.00 Units: uL

Report Date: 03-Mar-2022 13:02:44

Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020028.D

Injection Date: 03-Mar-2022 07:54:47

Instrument ID: CHHPLC\_X5

Operator ID: JZ

Lims ID: ICV DMT

Worklist Smp#: 28

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

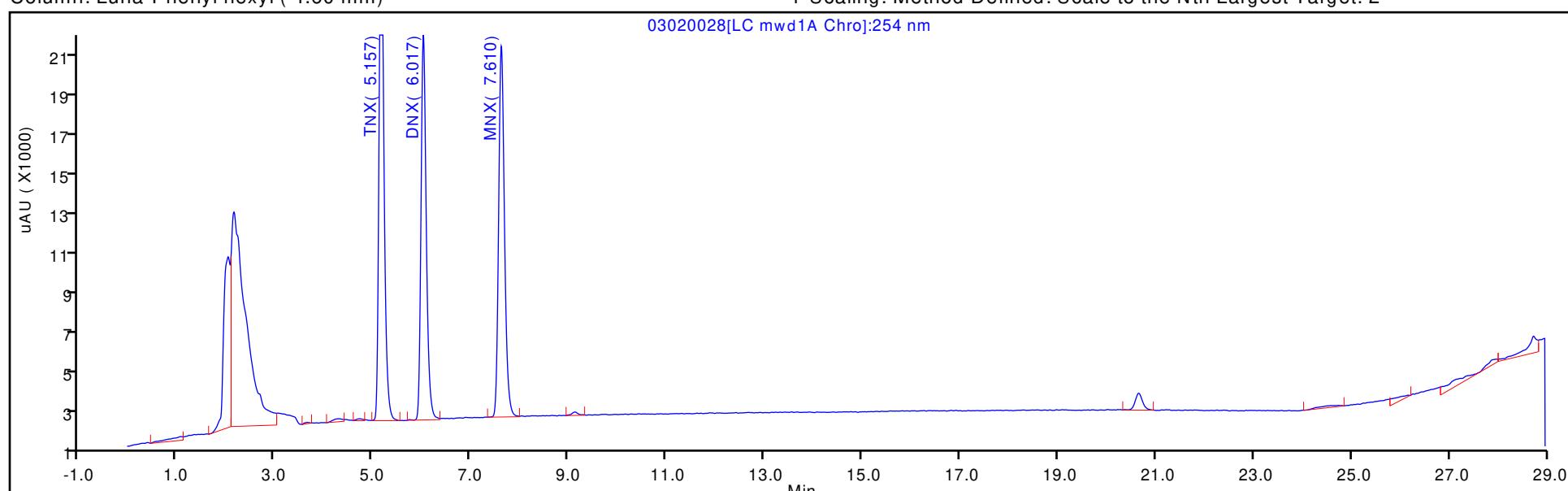
ALS Bottle#: 28

Method: 8330\_X5\_Luna

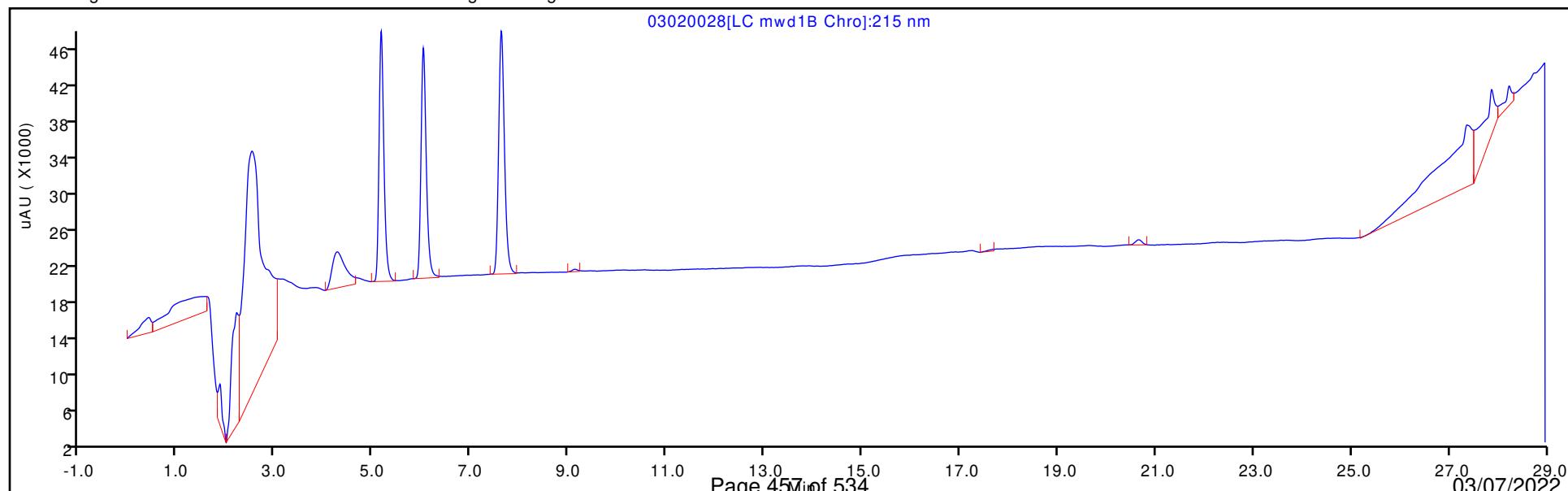
Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII  
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159130-1

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

Lab Sample ID: CCV 280-567645/7 Calibration Date: 03/03/2022 15:13

Instrument ID: CHHPLC\_X5 Calib Start Date: 03/02/2022 21:22

GC Column: Luna-phenylhex ID: 4.60 (mm) Calib End Date: 03/03/2022 02:03

Lab File ID: 03030007.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	166135	162020		244	250	-2.5	15.0
Picric acid	Ave	132885	149388		281	250	12.4	15.0
RDX	Ave	194331	194120		250	250	-0.1	15.0
Nitrobenzene	Ave	368293	383777		262	251	4.2	15.0
1,3-Dinitrobenzene	Ave	571666	577166		253	251	1.0	15.0
Nitroglycerin	Ave	122518	128956		2630	2500	5.3	15.0
2-Nitrotoluene	Ave	234672	240568		256	250	2.5	15.0
4-Nitrotoluene	Ave	210817	215657		256	251	2.3	15.0
4-Amino-2,6-dinitrotoluene	Lin2		273063		256	250	2.3	15.0
3-Nitrotoluene	Lin2		273059		258	250	2.9	15.0
2-Amino-4,6-dinitrotoluene	Ave	360536	372813		260	251	3.4	15.0
1,3,5-Trinitrobenzene	Ave	415464	431142		260	251	3.8	15.0
2,6-Dinitrotoluene	Ave	265662	273028		258	251	2.8	15.0
2,4-Dinitrotoluene	Lin2		567506		251	251	0.0	15.0
Tetryl	Ave	342171	323082		237	251	-5.6	15.0
2,4,6-Trinitrotoluene	Ave	369179	384008		261	251	4.0	15.0
PETN	Ave	129329	137252		2650	2500	6.1	15.0
1,2-Dinitrobenzene	Ave	249753	253956		254	250	1.7	15.0

FORM VII  
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159130-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCV 280-567645/7 Calibration Date: 03/03/2022 15:13  
Instrument ID: CHHPLC\_X5 Calib Start Date: 03/02/2022 21:22  
GC Column: Luna-phenylhex ID: 4.60 (mm) Calib End Date: 03/03/2022 02:03  
Lab File ID: 03030007.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.92	6.77	7.07
Picric acid	8.06	7.91	8.21
RDX	9.15	9.00	9.30
Nitrobenzene	12.08	11.93	12.23
1,3-Dinitrobenzene	15.68	15.53	15.83
Nitroglycerin	16.11	15.96	16.26
2-Nitrotoluene	16.86	16.71	17.01
4-Nitrotoluene	17.18	17.03	17.33
4-Amino-2,6-dinitrotoluene	17.82	17.67	17.97
3-Nitrotoluene	18.15	18.00	18.30
2-Amino-4,6-dinitrotoluene	18.84	18.69	18.99
1,3,5-Trinitrobenzene	19.00	18.85	19.15
2,6-Dinitrotoluene	20.32	20.17	20.47
2,4-Dinitrotoluene	20.84	20.69	20.99
Tetryl	24.58	24.43	24.73
2,4,6-Trinitrotoluene	25.33	25.18	25.48
PETN	26.27	26.12	26.42
1,2-Dinitrobenzene	13.32	13.17	13.47

**Eurofins Denver**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220303-108978.b\03030007.D  
 Lims ID: CCV  
 Client ID:  
 Sample Type: CCV  
 Inject. Date: 03-Mar-2022 15:13:50 ALS Bottle#: 7 Worklist Smp#: 7  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: CCV  
 Misc. Info.: 280-0108978-007  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Sublist: chrom-8330\_X5\_Luna\*sub1  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220303-108978.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 04-Mar-2022 12:18:19 Calib Date: 03-Mar-2022 07:19:48  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020027.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm) Det: LC mwd1A, 254 nm  
 Process Host: CTX1659

First Level Reviewer: zhangji

Date:

03-Mar-2022 15:50:46

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	4.136	4.136	0.000	93260	0.2500	0.2295	
2 2,4-diamino-6-nitrotoluene	1	4.730	4.730	0.000	47808	0.2500	0.2039	M
5 HMX	1	6.916	6.916	0.000	40505	0.2500	0.2438	
7 2,4,6-Trinitrophenol	1	8.063	8.063	0.000	37347	0.2500	0.2810	
8 RDX	1	9.150	9.150	0.000	48530	0.2500	0.2497	
9 Nitrobenzene	1	12.083	12.083	0.000	96328	0.2510	0.2616	
\$ 10 1,2-Dinitrobenzene	1	13.323	13.323	0.000	63489	0.2500	0.2542	
11 3,5-Dinitroaniline	1	15.336	15.336	0.000	102007	0.2500	0.2478	
12 1,3-Dinitrobenzene	1	15.683	15.683	0.000	144580	0.2505	0.2529	
13 Nitroglycerin	2	16.110	16.110	0.000	322390	2.50	2.63	
14 o-Nitrotoluene	1	16.863	16.863	0.000	60142	0.2500	0.2563	
16 p-Nitrotoluene	1	17.176	17.176	0.000	54022	0.2505	0.2563	
17 4-Amino-2,6-dinitrotoluene	1	17.823	17.823	0.000	68334	0.2503	0.2559	
18 m-Nitrotoluene	1	18.150	18.150	0.000	68333	0.2503	0.2576	
19 2-Amino-4,6-dinitrotoluene	1	18.843	18.843	0.000	93576	0.2510	0.2595	
20 1,3,5-Trinitrobenzene	1	18.996	18.996	0.000	108001	0.2505	0.2600	
21 2,6-Dinitrotoluene	1	20.316	20.316	0.000	68530	0.2510	0.2580	
22 2,4-Dinitrotoluene	1	20.836	20.836	0.000	142444	0.2510	0.2512	
23 Tetryl	1	24.583	24.583	0.000	80932	0.2505	0.2365	
24 2,4,6-Trinitrotoluene	1	25.330	25.330	0.000	96386	0.2510	0.2611	
25 PETN	2	26.270	26.270	0.000	343131	2.50	2.65	

**QC Flag Legend**

Processing Flags

Review Flags

M - Manually Integrated

**Reagents:**

8330IntermStk_00070	Amount Added: 25.00	Units: uL
8330_ADDs_00031	Amount Added: 12.50	Units: uL

Report Date: 04-Mar-2022 12:18:19

Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220303-108978.b\03030007.D

Injection Date: 03-Mar-2022 15:13:50

Instrument ID: CHHPLC\_X5

Operator ID: JZ

Lims ID: CCV

Worklist Smp#: 7

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

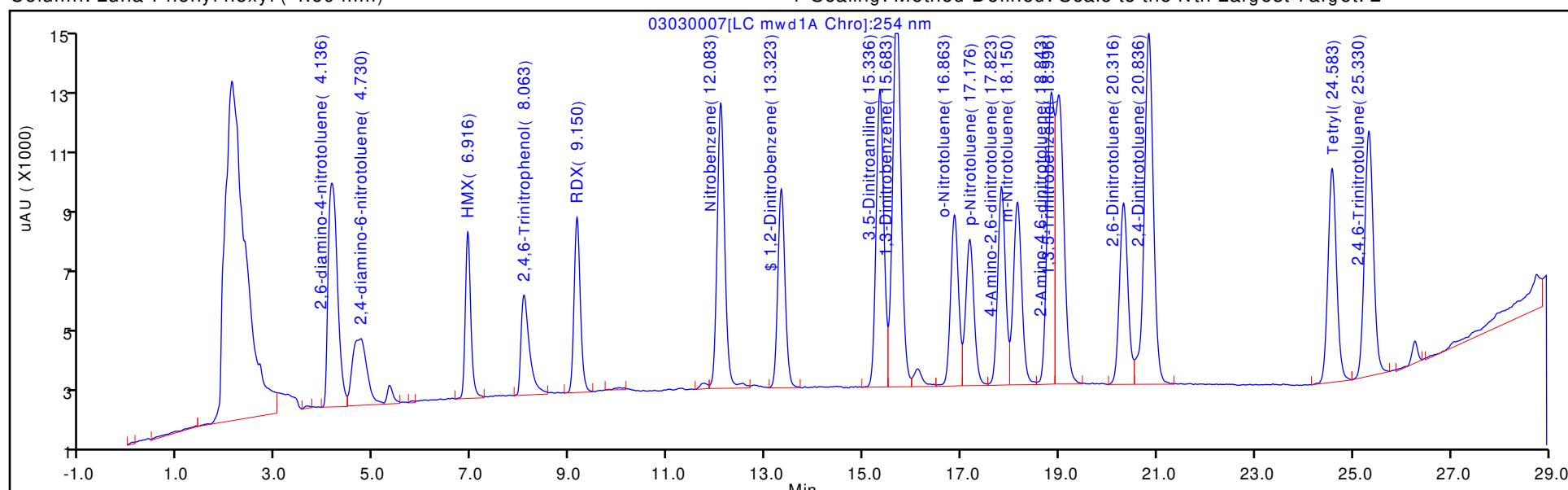
ALS Bottle#: 7

Method: 8330\_X5\_Luna

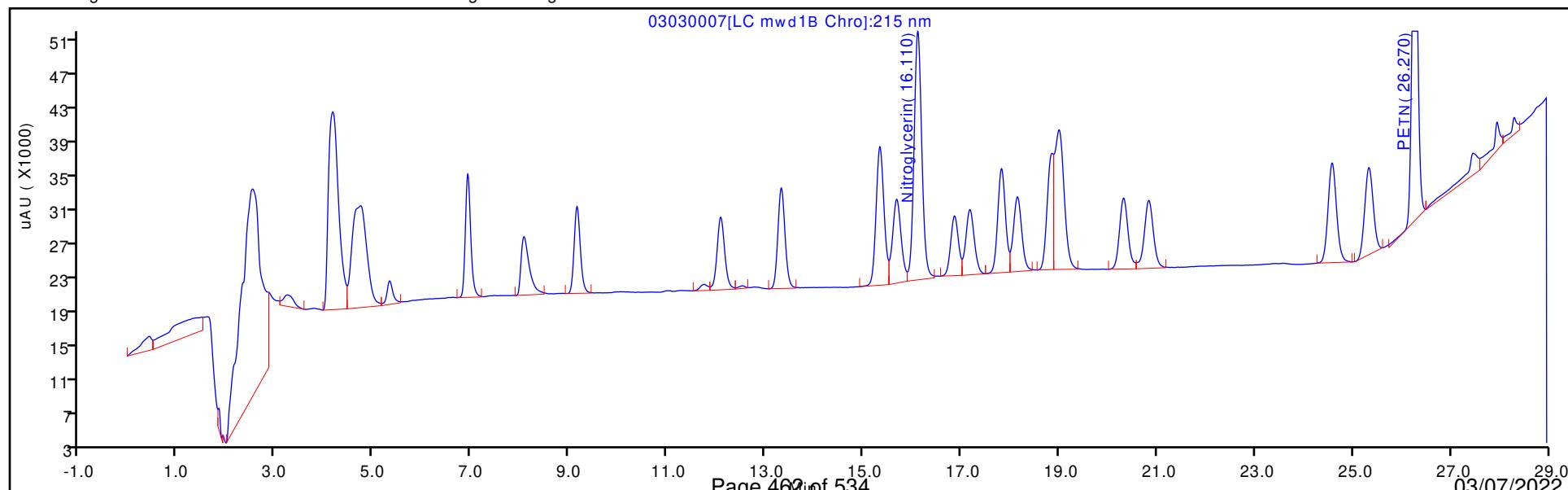
Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII  
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159130-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCV 280-567645/8 Calibration Date: 03/03/2022 15:48  
Instrument ID: CHHPLC\_X5 Calib Start Date: 03/03/2022 03:13  
GC Column: Luna-phenylhex ID: 4.60 (mm) Calib End Date: 03/03/2022 07:19  
Lab File ID: 03030008.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	354070	359740		254	250	1.6	15.0
DNX	Ave	278639	269518		242	250	-3.3	15.0
MNX	Ave	250081	244953		286	292	-2.1	15.0

FORM VII  
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159130-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCV 280-567645/8 Calibration Date: 03/03/2022 15:48  
Instrument ID: CHHPLC\_X5 Calib Start Date: 03/03/2022 03:13  
GC Column: Luna-phenylhex ID: 4.60 (mm) Calib End Date: 03/03/2022 07:19  
Lab File ID: 03030008.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.18	5.03	5.33
DNX	6.05	5.90	6.20
MNX	7.65	7.50	7.80

Eurofins Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220303-108978.b\03030008.D  
 Lims ID: CCV DMT  
 Client ID:  
 Sample Type: CCV  
 Inject. Date: 03-Mar-2022 15:48:50 ALS Bottle#: 8 Worklist Smp#: 8  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Sample Info: CCV DMT  
 Misc. Info.: 280-0108978-008  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Sublist: chrom-8330\_X5\_Luna\*sub2  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220303-108978.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 04-Mar-2022 12:18:20 Calib Date: 03-Mar-2022 07:19:48  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020027.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm) Det: LC mwd1A, 254 nm  
 Process Host: CTX1659

First Level Reviewer: zhangji Date: 03-Mar-2022 16:22:57

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.183	5.183	0.000	90025	0.2503	0.2543	
4 DNX	1	6.049	6.049	0.000	67447	0.2503	0.2421	
6 MNX	1	7.649	7.649	0.000	71465	0.2918	0.2858	

**Reagents:**

8330 DMT\_00010 Amount Added: 12.50 Units: uL

Report Date: 04-Mar-2022 12:18:20

Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220303-108978.b\03030008.D

Injection Date: 03-Mar-2022 15:48:50

Instrument ID: CHHPLC\_X5

Operator ID: JZ

Lims ID: CCV DMT

Worklist Smp#: 8

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

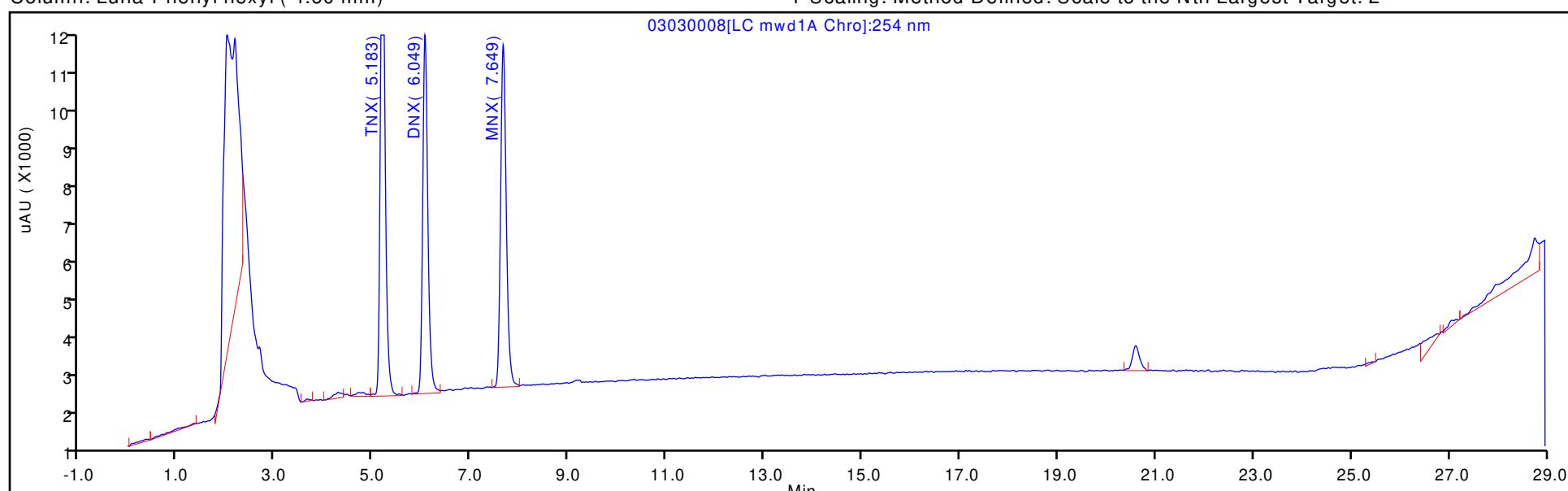
ALS Bottle#: 8

Method: 8330\_X5\_Luna

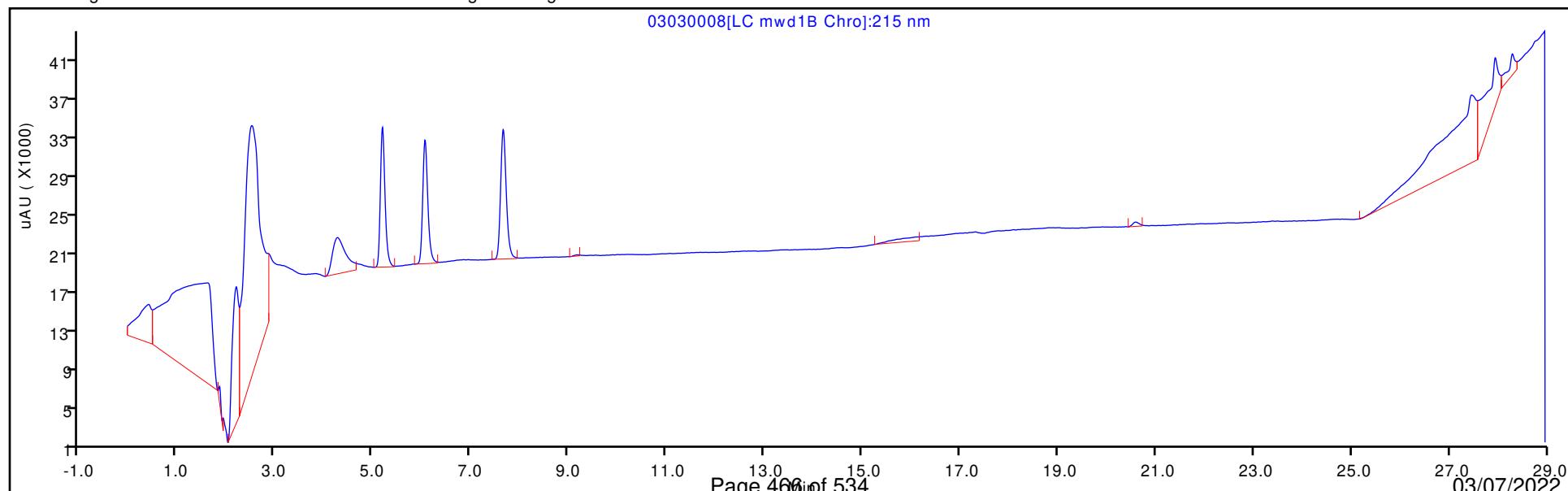
Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII  
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159130-1

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

Lab Sample ID: CCV 280-567645/20 Calibration Date: 03/03/2022 22:14

Instrument ID: CHHPLC\_X5 Calib Start Date: 03/02/2022 21:22

GC Column: Luna-phenylhex ID: 4.60 (mm) Calib End Date: 03/03/2022 02:03

Lab File ID: 03030020.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	166135	165736		249	250	-0.2	15.0
Picric acid	Ave	132885	148552		279	250	11.8	15.0
RDX	Ave	194331	196180		252	250	1.0	15.0
Nitrobenzene	Ave	368293	390235		266	251	6.0	15.0
1,3-Dinitrobenzene	Ave	571666	575665		252	251	0.7	15.0
Nitroglycerin	Ave	122518	132188		2700	2500	7.9	15.0
2-Nitrotoluene	Ave	234672	231548		247	250	-1.3	15.0
4-Nitrotoluene	Ave	210817	208850		248	251	-0.9	15.0
4-Amino-2,6-dinitrotoluene	Lin2		271556		255	250	1.7	15.0
3-Nitrotoluene	Lin2		269558		254	250	1.6	15.0
2-Amino-4,6-dinitrotoluene	Ave	360536	372064		259	251	3.2	15.0
1,3,5-Trinitrobenzene	Ave	415464	435553		263	251	4.8	15.0
2,6-Dinitrotoluene	Ave	265662	286737		271	251	7.9	15.0
2,4-Dinitrotoluene	Lin2		552319		244	251	-2.7	15.0
Tetryl	Ave	342171	320691		235	251	-6.3	15.0
2,4,6-Trinitrotoluene	Ave	369179	379394		258	251	2.8	15.0
PETN	Ave	129329	138142		2670	2500	6.8	15.0
1,2-Dinitrobenzene	Ave	249753	258900		259	250	3.7	15.0

FORM VII  
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver

Job No.: 280-159130-1

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

Lab Sample ID: CCV 280-567645/20 Calibration Date: 03/03/2022 22:14

Instrument ID: CHHPLC\_X5 Calib Start Date: 03/02/2022 21:22

GC Column: Luna-phenylhex ID: 4.60 (mm) Calib End Date: 03/03/2022 02:03

Lab File ID: 03030020.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.91	6.77	7.07
Picric acid	8.01	7.91	8.21
RDX	9.13	9.00	9.30
Nitrobenzene	12.07	11.93	12.23
1,3-Dinitrobenzene	15.66	15.53	15.83
Nitroglycerin	16.09	15.96	16.26
2-Nitrotoluene	16.84	16.71	17.01
4-Nitrotoluene	17.15	17.03	17.33
4-Amino-2,6-dinitrotoluene	17.79	17.67	17.97
3-Nitrotoluene	18.13	18.00	18.30
2-Amino-4,6-dinitrotoluene	18.80	18.69	18.99
1,3,5-Trinitrobenzene	18.97	18.85	19.15
2,6-Dinitrotoluene	20.28	20.17	20.47
2,4-Dinitrotoluene	20.79	20.69	20.99
Tetryl	24.53	24.43	24.73
2,4,6-Trinitrotoluene	25.29	25.18	25.48
PETN	26.24	26.12	26.42
1,2-Dinitrobenzene	13.31	13.17	13.47

**Eurofins Denver**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220303-108978.b\03030020.D  
 Lims ID: CCV  
 Client ID:  
 Sample Type: CCV  
 Inject. Date: 03-Mar-2022 22:14:33 ALS Bottle#: 7 Worklist Smp#: 20  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: CCV  
 Misc. Info.: 280-0108978-020  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Sublist: chrom-8330\_X5\_Luna\*sub1  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220303-108978.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 04-Mar-2022 12:18:25 Calib Date: 03-Mar-2022 07:19:48  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020027.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm) Det: LC mwd1A, 254 nm  
 Process Host: CTX1659

First Level Reviewer: zhangji

Date:

04-Mar-2022 12:08:17

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.148	4.136	0.012	88240	0.2500	0.2171	
2 2,4-diamino-6-nitrotoluene	1	4.668	4.730	-0.062	30286	0.2500	0.1265	
5 HMX	1	6.908	6.916	-0.008	41434	0.2500	0.2494	
7 2,4,6-Trinitrophenol	1	8.008	8.063	-0.055	37138	0.2500	0.2795	
8 RDX	1	9.134	9.150	-0.016	49045	0.2500	0.2524	
9 Nitrobenzene	1	12.074	12.083	-0.009	97949	0.2510	0.2660	
\$ 10 1,2-Dinitrobenzene	1	13.308	13.323	-0.015	64725	0.2500	0.2592	
11 3,5-Dinitroaniline	1	15.314	15.336	-0.022	101713	0.2500	0.2471	
12 1,3-Dinitrobenzene	1	15.661	15.683	-0.022	144204	0.2505	0.2523	
13 Nitroglycerin	2	16.094	16.110	-0.016	330469	2.50	2.70	
14 o-Nitrotoluene	1	16.841	16.863	-0.022	57887	0.2500	0.2467	
16 p-Nitrotoluene	1	17.154	17.176	-0.022	52317	0.2505	0.2482	
17 4-Amino-2,6-dinitrotoluene	1	17.794	17.823	-0.029	67957	0.2503	0.2545	
18 m-Nitrotoluene	1	18.128	18.150	-0.022	67457	0.2503	0.2543	
19 2-Amino-4,6-dinitrotoluene	1	18.801	18.843	-0.042	93388	0.2510	0.2590	
20 1,3,5-Trinitrobenzene	1	18.968	18.996	-0.028	109106	0.2505	0.2626	
21 2,6-Dinitrotoluene	1	20.281	20.316	-0.035	71971	0.2510	0.2709	
22 2,4-Dinitrotoluene	1	20.794	20.836	-0.042	138632	0.2510	0.2442	
23 Tetryl	1	24.534	24.583	-0.049	80333	0.2505	0.2348	
24 2,4,6-Trinitrotoluene	1	25.288	25.330	-0.042	95228	0.2510	0.2579	
25 PETN	2	26.241	26.270	-0.029	345356	2.50	2.67	

**QC Flag Legend**

Processing Flags

**Reagents:**

8330\IntermStk_00070	Amount Added: 25.00	Units: uL
8330_ADDs_00031	Amount Added: 12.50	Units: uL

Report Date: 04-Mar-2022 12:18:26

Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220303-108978.b\03030020.D

Injection Date: 03-Mar-2022 22:14:33

Instrument ID: CHHPLC\_X5

Operator ID: JZ

Lims ID: CCV

Worklist Smp#: 20

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

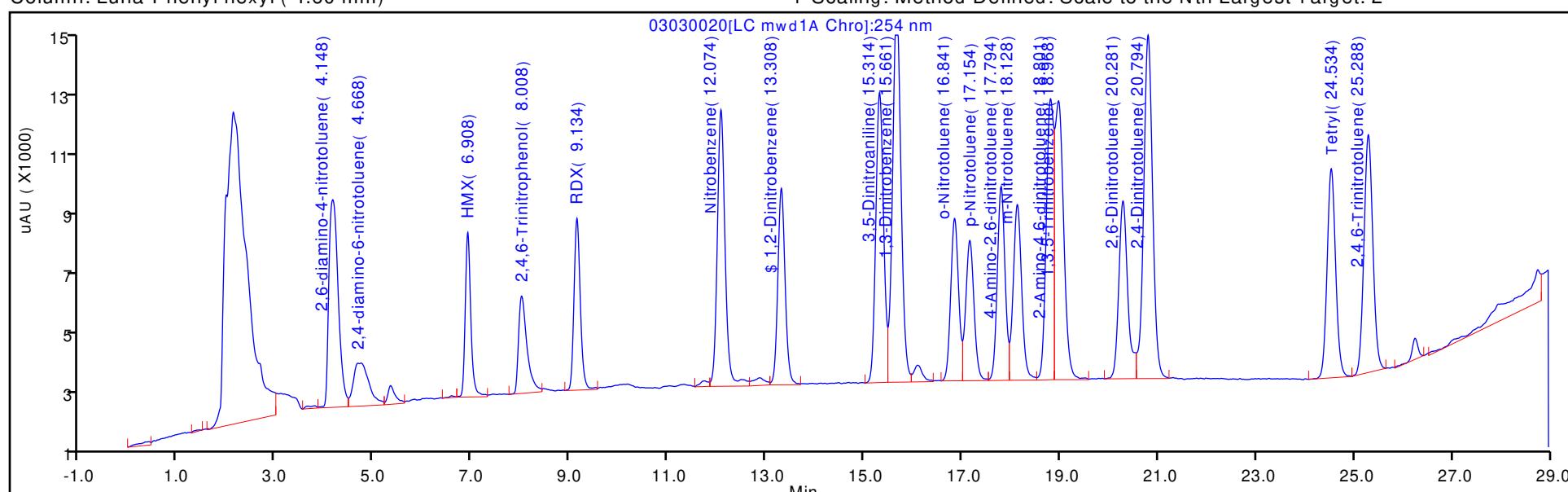
ALS Bottle#: 7

Method: 8330\_X5\_Luna

Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII  
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159130-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCV 280-567645/21 Calibration Date: 03/03/2022 22:49  
Instrument ID: CHHPLC\_X5 Calib Start Date: 03/03/2022 03:13  
GC Column: Luna-phenylhex ID: 4.60 (mm) Calib End Date: 03/03/2022 07:19  
Lab File ID: 03030021.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	354070	355101		251	250	0.3	15.0
DNX	Ave	278639	269510		242	250	-3.3	15.0
MNX	Ave	250081	244562		285	292	-2.2	15.0

FORM VII  
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159130-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCV 280-567645/21 Calibration Date: 03/03/2022 22:49  
Instrument ID: CHHPLC\_X5 Calib Start Date: 03/03/2022 03:13  
GC Column: Luna-phenylhex ID: 4.60 (mm) Calib End Date: 03/03/2022 07:19  
Lab File ID: 03030021.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.17	5.03	5.33
DNX	6.03	5.90	6.20
MNX	7.63	7.50	7.80

**Eurofins Denver**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220303-108978.b\03030021.D  
 Lims ID: CCV DMT  
 Client ID:  
 Sample Type: CCV  
 Inject. Date: 03-Mar-2022 22:49:32 ALS Bottle#: 8 Worklist Smp#: 21  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: CCV DMT  
 Misc. Info.: 280-0108978-021  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Sublist: chrom-8330\_X5\_Luna\*sub2  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220303-108978.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 04-Mar-2022 12:18:26 Calib Date: 03-Mar-2022 07:19:48  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020027.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm) Det: LC mwd1A, 254 nm  
 Process Host: CTX1659

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.173	5.183	-0.010	88864	0.2503	0.2510	
4 DNX	1	6.033	6.049	-0.016	67445	0.2503	0.2421	
6 MNX	1	7.626	7.649	-0.023	71351	0.2918	0.2853	

**Reagents:**

8330 DMT\_00010 Amount Added: 12.50 Units: uL

Report Date: 04-Mar-2022 12:18:26

Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220303-108978.b\03030021.D

Injection Date: 03-Mar-2022 22:49:32

Instrument ID: CHHPLC\_X5

Operator ID: JZ

Lims ID: CCV DMT

Worklist Smp#: 21

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

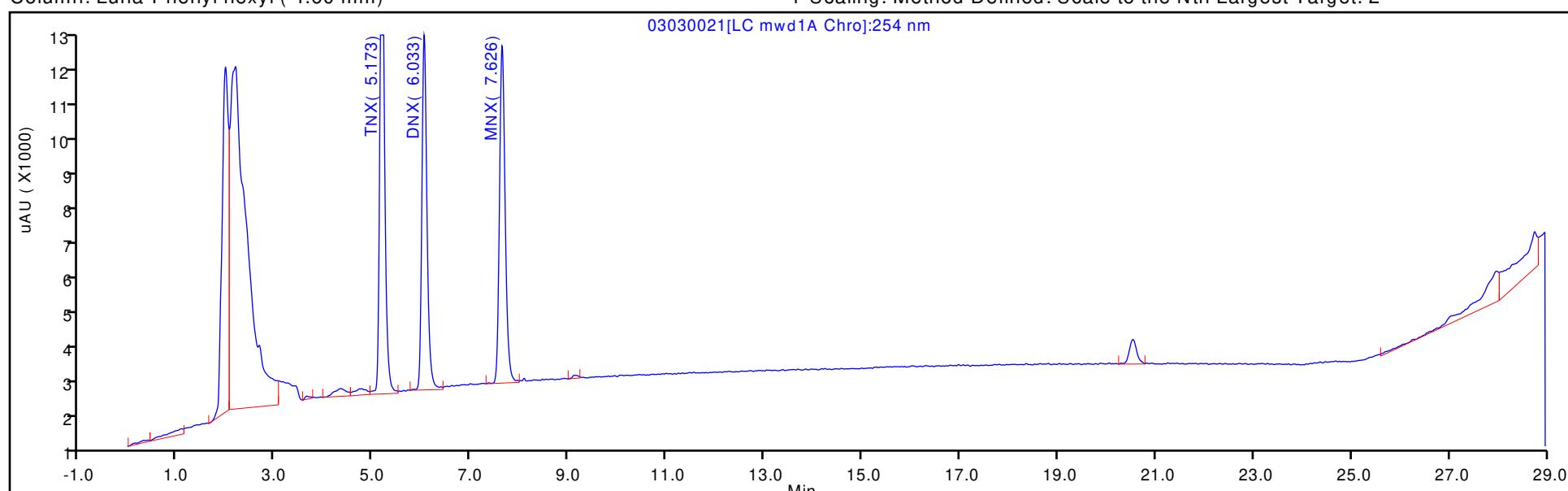
ALS Bottle#: 8

Method: 8330\_X5\_Luna

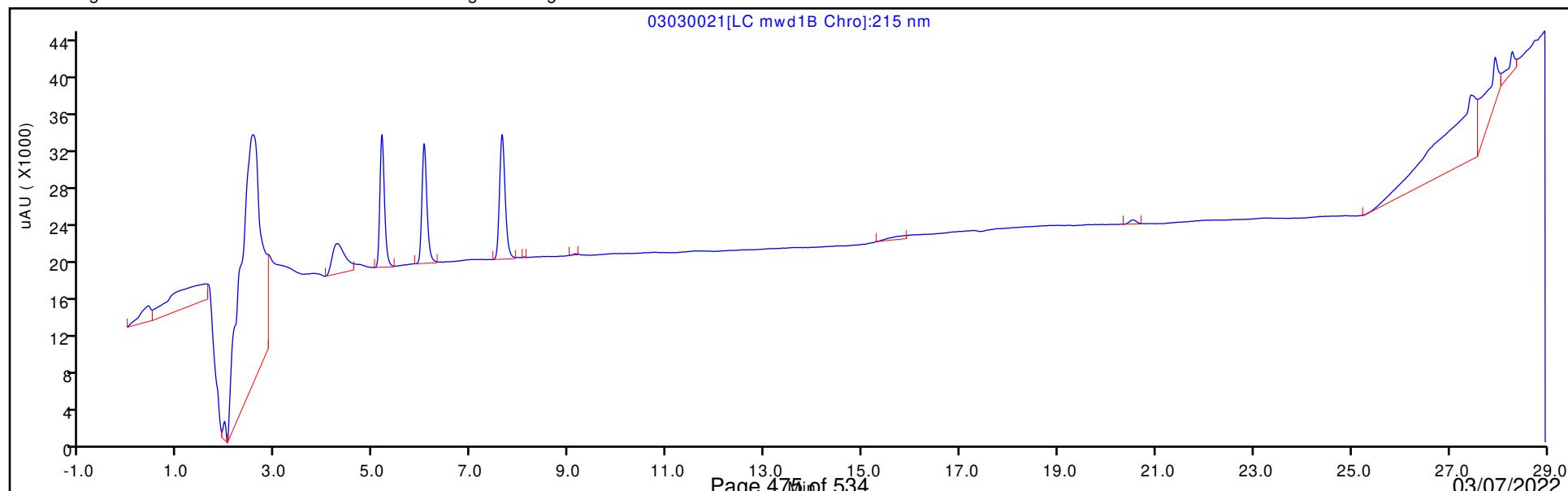
Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII  
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159130-1

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

Lab Sample ID: CCV 280-567645/32 Calibration Date: 03/04/2022 05:16

Instrument ID: CHHPLC\_X5 Calib Start Date: 03/02/2022 21:22

GC Column: Luna-phenylhex ID: 4.60 (mm) Calib End Date: 03/03/2022 02:03

Lab File ID: 03030032.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	166135	162452		244	250	-2.2	15.0
Picric acid	Ave	132885	148164		279	250	11.5	15.0
RDX	Ave	194331	196636		253	250	1.2	15.0
Nitrobenzene	Ave	368293	358100		244	251	-2.8	15.0
1,3-Dinitrobenzene	Ave	571666	577796		253	251	1.1	15.0
Nitroglycerin	Ave	122518	129259		2640	2500	5.5	15.0
2-Nitrotoluene	Ave	234672	227896		243	250	-2.9	15.0
4-Nitrotoluene	Ave	210817	206519		245	251	-2.0	15.0
4-Amino-2,6-dinitrotoluene	Lin2		273099		256	250	2.3	15.0
3-Nitrotoluene	Lin2		260671		246	250	-1.7	15.0
2-Amino-4,6-dinitrotoluene	Ave	360536	374378		261	251	3.8	15.0
1,3,5-Trinitrobenzene	Ave	415464	430970		260	251	3.7	15.0
2,6-Dinitrotoluene	Ave	265662	290502		274	251	9.4	15.0
2,4-Dinitrotoluene	Lin2		550291		243	251	-3.1	15.0
Tetryl	Ave	342171	321313		235	251	-6.1	15.0
2,4,6-Trinitrotoluene	Ave	369179	382159		260	251	3.5	15.0
PETN	Ave	129329	138363		2670	2500	7.0	15.0
1,2-Dinitrobenzene	Ave	249753	254896		255	250	2.1	15.0

FORM VII  
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159130-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCV 280-567645/32 Calibration Date: 03/04/2022 05:16  
Instrument ID: CHHPLC\_X5 Calib Start Date: 03/02/2022 21:22  
GC Column: Luna-phenylhex ID: 4.60 (mm) Calib End Date: 03/03/2022 02:03  
Lab File ID: 03030032.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.91	6.77	7.07
Picric acid	8.03	7.91	8.21
RDX	9.14	9.00	9.30
Nitrobenzene	12.07	11.93	12.23
1,3-Dinitrobenzene	15.66	15.53	15.83
Nitroglycerin	16.08	15.96	16.26
2-Nitrotoluene	16.84	16.71	17.01
4-Nitrotoluene	17.14	17.03	17.33
4-Amino-2,6-dinitrotoluene	17.79	17.67	17.97
3-Nitrotoluene	18.12	18.00	18.30
2-Amino-4,6-dinitrotoluene	18.80	18.69	18.99
1,3,5-Trinitrobenzene	18.96	18.85	19.15
2,6-Dinitrotoluene	20.28	20.17	20.47
2,4-Dinitrotoluene	20.79	20.69	20.99
Tetryl	24.54	24.43	24.73
2,4,6-Trinitrotoluene	25.29	25.18	25.48
PETN	26.24	26.12	26.42
1,2-Dinitrobenzene	13.30	13.17	13.47

**Eurofins Denver**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220303-108978.b\03030032.D  
 Lims ID: CCV  
 Client ID:  
 Sample Type: CCV  
 Inject. Date: 04-Mar-2022 05:16:21 ALS Bottle#: 7 Worklist Smp#: 32  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Sample Info: CCV  
 Misc. Info.: 280-0108978-032  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Sublist: chrom-8330\_X5\_Luna\*sub1  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220303-108978.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 04-Mar-2022 12:18:32 Calib Date: 03-Mar-2022 07:19:48  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020027.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm) Det: LC mwd1A, 254 nm  
 Process Host: CTX1659

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	4.137	4.136	0.001	93067	0.2500	0.2290	
2 2,4-diamino-6-nitrotoluene	1	4.677	4.730	-0.053	45052	0.2500	0.1918	
5 HMX	1	6.910	6.916	-0.006	40613	0.2500	0.2445	
7 2,4,6-Trinitrophenol	1	8.030	8.063	-0.033	37041	0.2500	0.2787	
8 RDX	1	9.137	9.150	-0.013	49159	0.2500	0.2530	
9 Nitrobenzene	1	12.070	12.083	-0.013	89883	0.2510	0.2441	
\$ 10 1,2-Dinitrobenzene	1	13.303	13.323	-0.020	63724	0.2500	0.2551	
11 3,5-Dinitroaniline	1	15.310	15.336	-0.026	101613	0.2500	0.2469	
12 1,3-Dinitrobenzene	1	15.657	15.683	-0.026	144738	0.2505	0.2532	
13 Nitroglycerin	2	16.083	16.110	-0.027	323147	2.50	2.64	
14 o-Nitrotoluene	1	16.837	16.863	-0.026	56974	0.2500	0.2428	
16 p-Nitrotoluene	1	17.143	17.176	-0.033	51733	0.2505	0.2454	
17 4-Amino-2,6-dinitrotoluene	1	17.790	17.823	-0.033	68343	0.2503	0.2560	
18 m-Nitrotoluene	1	18.117	18.150	-0.033	65233	0.2503	0.2459	
19 2-Amino-4,6-dinitrotoluene	1	18.797	18.843	-0.046	93969	0.2510	0.2606	
20 1,3,5-Trinitrobenzene	1	18.957	18.996	-0.039	107958	0.2505	0.2598	
21 2,6-Dinitrotoluene	1	20.277	20.316	-0.039	72916	0.2510	0.2745	
22 2,4-Dinitrotoluene	1	20.790	20.836	-0.046	138123	0.2510	0.2432	
23 Tetryl	1	24.537	24.583	-0.046	80489	0.2505	0.2352	
24 2,4,6-Trinitrotoluene	1	25.290	25.330	-0.040	95922	0.2510	0.2598	
25 PETN	2	26.237	26.270	-0.033	345908	2.50	2.67	

**Reagents:**

8330\TermStk_00070	Amount Added: 25.00	Units: uL
8330_ADDs_00031	Amount Added: 12.50	Units: uL

Report Date: 04-Mar-2022 12:18:32

Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220303-108978.b\03030032.D

Injection Date: 04-Mar-2022 05:16:21

Instrument ID: CHHPLC\_X5

Operator ID: JZ

Lims ID: CCV

Worklist Smp#: 32

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

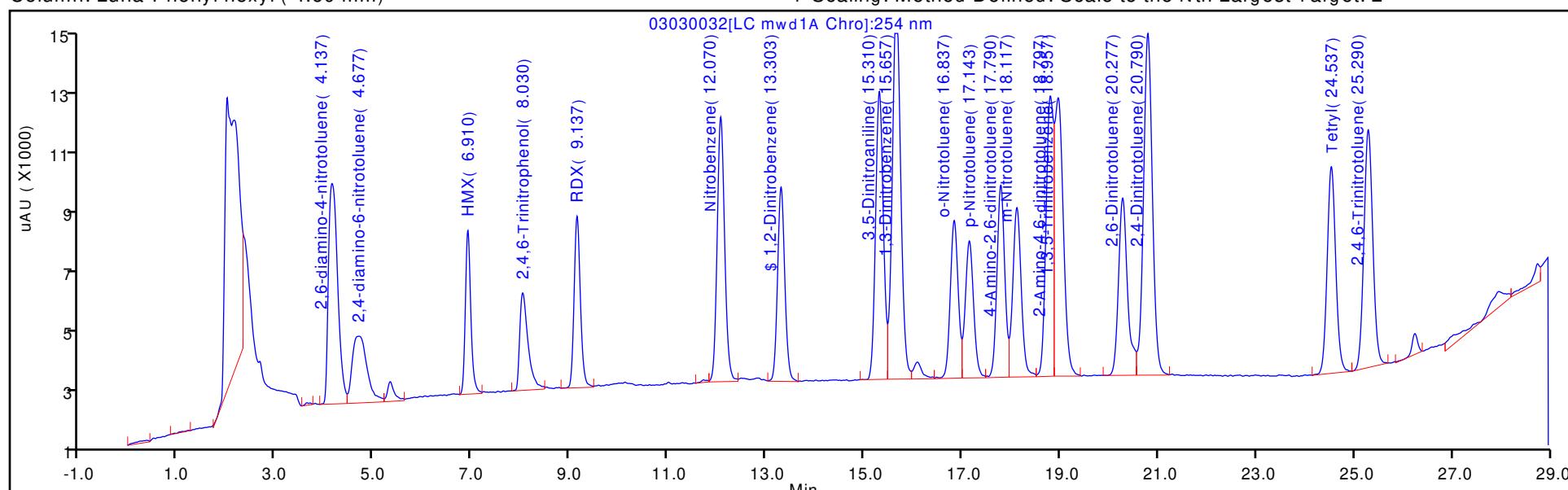
ALS Bottle#: 7

Method: 8330\_X5\_Luna

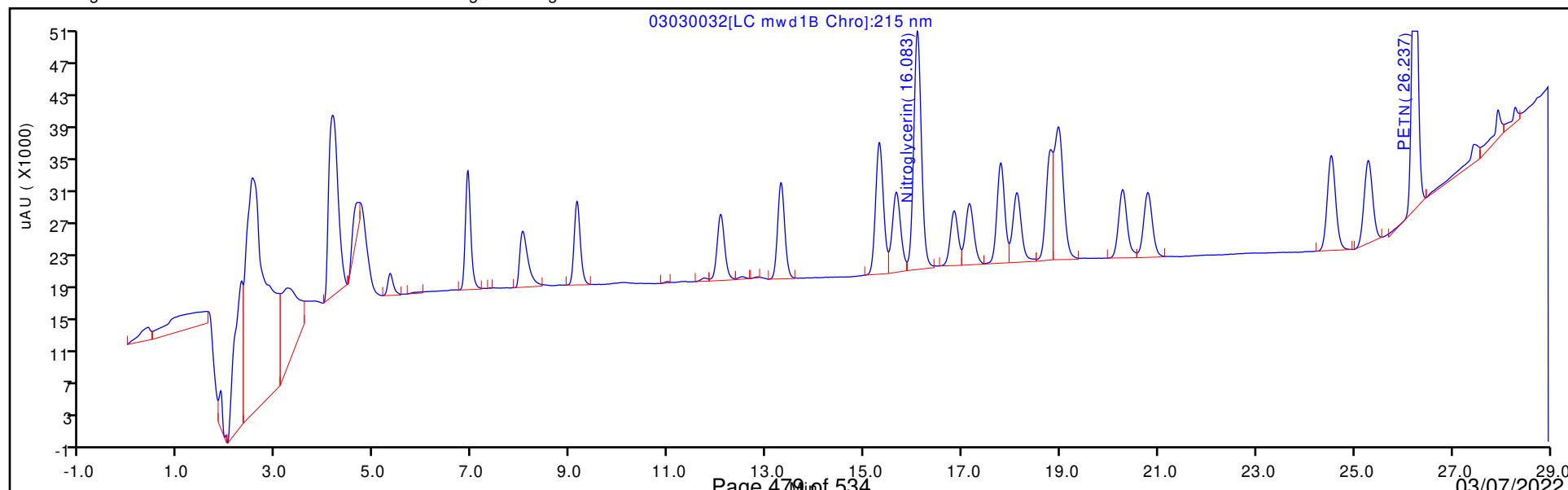
Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII  
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159130-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCV 280-567645/33 Calibration Date: 03/04/2022 05:51  
Instrument ID: CHHPLC\_X5 Calib Start Date: 03/03/2022 03:13  
GC Column: Luna-phenylhex ID: 4.60 (mm) Calib End Date: 03/03/2022 07:19  
Lab File ID: 03030033.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	354070	346458		245	250	-2.1	15.0
DNX	Ave	278639	265107		238	250	-4.9	15.0
MNX	Ave	250081	244089		285	292	-2.4	15.0

FORM VII  
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159130-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCV 280-567645/33 Calibration Date: 03/04/2022 05:51  
Instrument ID: CHHPLC\_X5 Calib Start Date: 03/03/2022 03:13  
GC Column: Luna-phenylhex ID: 4.60 (mm) Calib End Date: 03/03/2022 07:19  
Lab File ID: 03030033.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.17	5.03	5.33
DNX	6.04	5.90	6.20
MNX	7.64	7.50	7.80

Eurofins Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220303-108978.b\03030033.D  
 Lims ID: CCV DMT  
 Client ID:  
 Sample Type: CCV  
 Inject. Date: 04-Mar-2022 05:51:28 ALS Bottle#: 8 Worklist Smp#: 33  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: CCV DMT  
 Misc. Info.: 280-0108978-033  
 Operator ID: JZ Instrument ID: CHHPLC\_X5  
 Sublist: chrom-8330\_X5\_Luna\*sub2  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220303-108978.b\8330\_X5\_Luna.m  
 Limit Group: GCSV - 8330  
 Last Update: 04-Mar-2022 12:18:33 Calib Date: 03-Mar-2022 07:19:48  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220302-108949.b\03020027.D  
 Column 1 : Luna-Phenyl hexyl ( 4.60 mm) Det: LC mwd1A, 254 nm  
 Process Host: CTX1659

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.170	5.183	-0.013	86701	0.2503	0.2449	
4 DNX	1	6.037	6.049	-0.012	66343	0.2503	0.2381	
6 MNX	1	7.637	7.649	-0.012	71213	0.2918	0.2848	

**Reagents:**

8330 DMT\_00010 Amount Added: 12.50 Units: uL

Report Date: 04-Mar-2022 12:18:33

Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X5\20220303-108978.b\03030033.D

Injection Date: 04-Mar-2022 05:51:28

Instrument ID: CHHPLC\_X5

Operator ID: JZ

Lims ID: CCV DMT

Worklist Smp#: 33

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

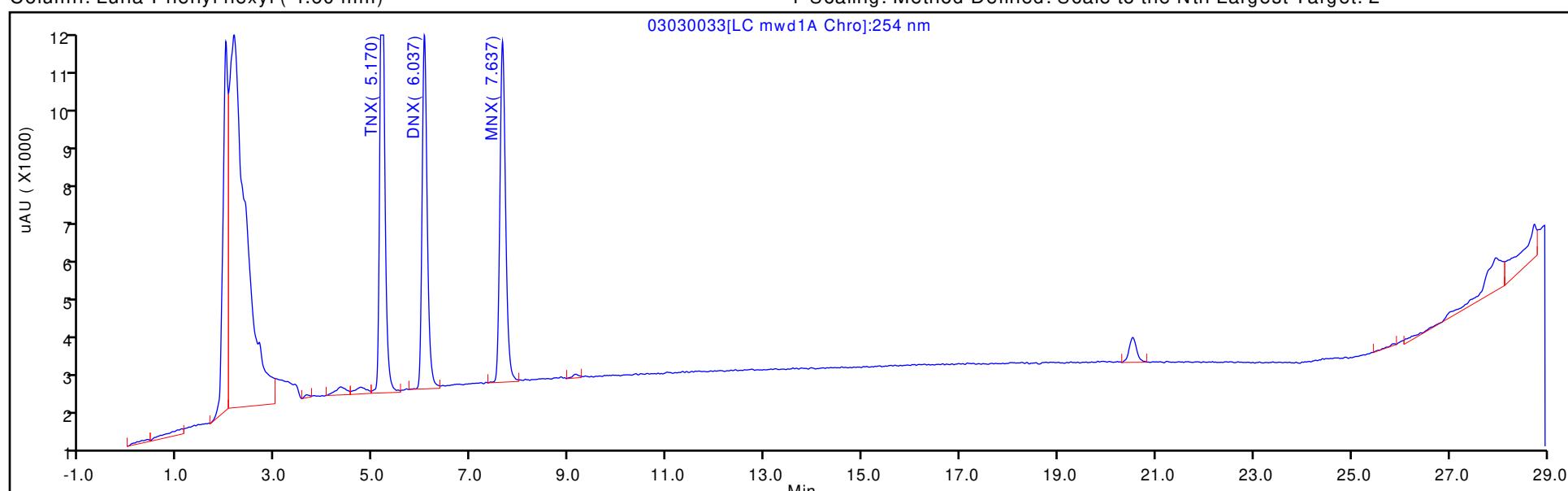
ALS Bottle#: 8

Method: 8330\_X5\_Luna

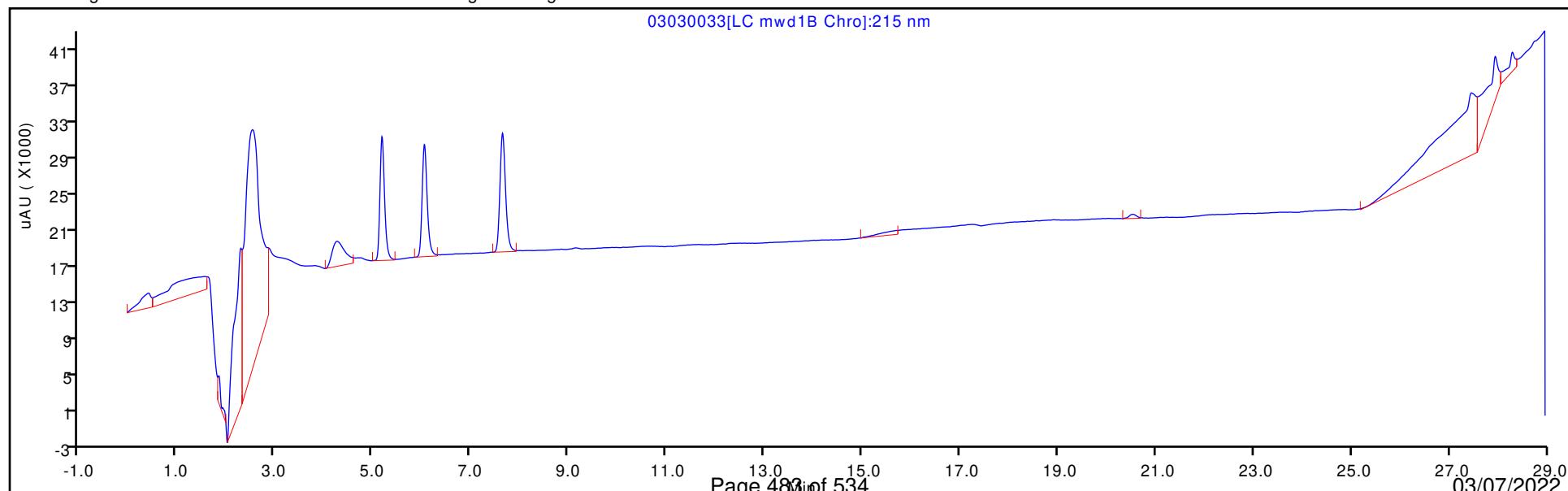
Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM I  
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver

Job No.: 280-159130-1

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

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

Lab Sample ID: MB 280-567330/1-A

Matrix: Water

Lab File ID: 03010043.D

Analysis Method: 8330A

Date Collected: \_\_\_\_\_

Extraction Method: 3535

Date Extracted: 03/01/2022 11:26

Sample wt/vol: 500 (mL)

Date Analyzed: 03/02/2022 04:43

Con. Extract Vol.: 5 (mL)

Dilution Factor: 1

Injection Volume: 100 (uL)

GC Column: UltraCarb5uODS ID: 4.6 (mm)

% Moisture: \_\_\_\_\_

GPC Cleanup: (Y/N) N

Analysis Batch No.: 567371

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.20	U	0.21	0.20	0.084
99-65-0	1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.027
606-20-2	2,6-Dinitrotoluene	0.080	U	0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051
88-72-2	2-Nitrotoluene	0.20	U	0.21	0.20	0.086
99-08-1	3-Nitrotoluene	0.40	U	0.40	0.40	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.058
99-99-0	4-Nitrotoluene	0.40	U	0.41	0.40	0.10
2691-41-0	HMX	0.20	U	0.21	0.20	0.088
5755-27-1	MNX	0.40	U M	2.0	0.40	0.15
98-95-3	Nitrobenzene	0.20	U	0.21	0.20	0.091
121-82-4	RDX	0.20	U M	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	95		83-119

Eurofins Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\03010043.D  
 Lims ID: MB 280-567330/1-A  
 Client ID:  
 Sample Type: MB  
 Inject. Date: 02-Mar-2022 04:43:32 ALS Bottle#: 43 Worklist Smp#: 43  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: MB 280-567330/1-  
 Misc. Info.: 280-0108907-043  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 02-Mar-2022 13:06:22 Calib Date: 05-Jan-2022 04:24:15  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040037.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1635

First Level Reviewer: zhangji Date: 02-Mar-2022 12:41:44

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
1 Triamine Trinitrobenzene	1	2.447				ND		
2 2,6-diamino-4-nitrotoluene	1	6.464				ND		U
3 TNX	1	6.472				ND		
4 HMX	1	6.588				ND		
5 2,4-diamino-6-nitrotoluene	1	6.650				ND		
6 DNX	1	6.792				ND		
7 MNX	1	7.206				ND		U
8 RDX	1	7.575				ND		U
9 2,4,6-Trinitrophenol	1	7.895				ND		
\$ 10 1,2-Dinitrobenzene	1	8.522	8.515	0.007	23569	0.2000	0.1890	
11 1,3,5-Trinitrobenzene	1	8.642				ND		
12 1,3-Dinitrobenzene	1	9.262				ND		
13 Nitrobenzene	1	9.648				ND		
14 3,5-Dinitroaniline	1	9.877				ND		
15 Tetryl	1	9.955				ND		
16 Nitroglycerin	2	10.408				ND		
17 2,4,6-Trinitrotoluene	1	10.862				ND		
18 4-Amino-2,6-dinitrotoluene	1	11.042				ND		
19 2-Amino-4,6-dinitrotoluene	1	11.288				ND		
20 2,6-Dinitrotoluene	1	11.462				ND		
21 2,4-Dinitrotoluene	1	11.635				ND		
22 o-Nitrotoluene	1	12.475				ND		
23 p-Nitrotoluene	1	12.895				ND		
24 m-Nitrotoluene	1	13.462				ND		
25 PETN	2	14.488				ND		
26 Ammonium Picrate	1	0.000				ND		

### QC Flag Legend

Processing Flags

Report Date: 02-Mar-2022 13:06:23

Chrom Revision: 2.3 16-Feb-2022 17:52:00

Review Flags

U - Marked Undetected

Report Date: 02-Mar-2022 13:06:23

Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\\denver\\chromdata\\chhplc\_x\\20220301-108907.b\\03010043.d

Injection Date: 02-Mar-2022 04:43:32

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: MB 280-567330/1-A

Worklist Smp#: 43

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

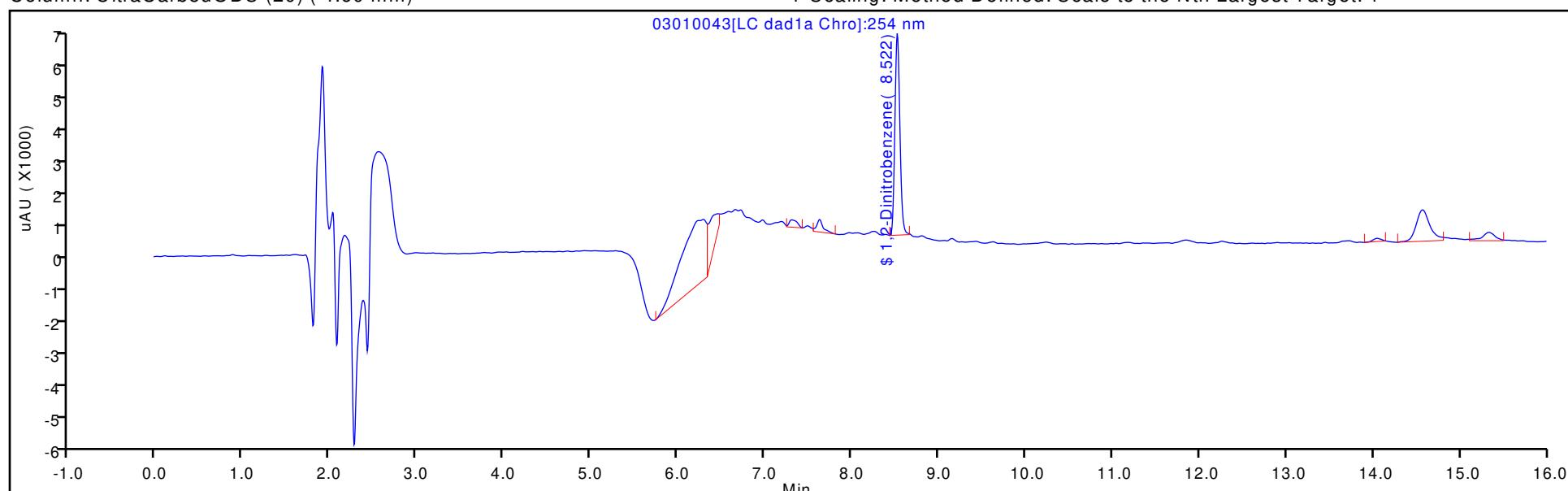
ALS Bottle#: 43

Method: 8330\_X3

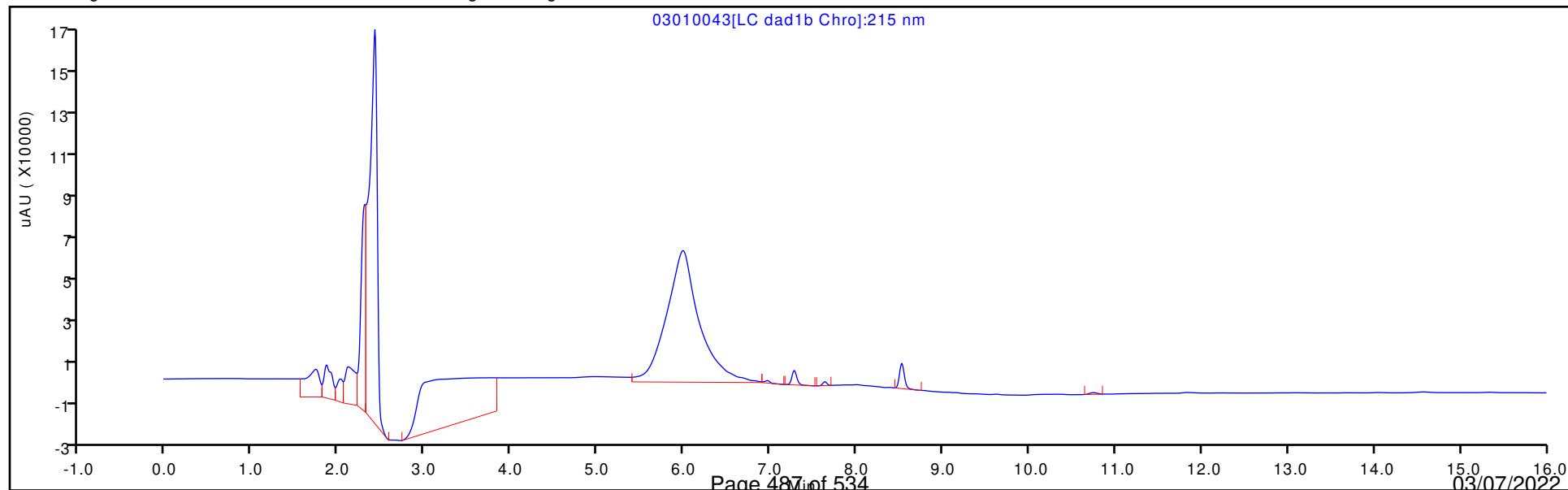
Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Denver  
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\03010043.D  
 Lims ID: MB 280-567330/1-A  
 Client ID:  
 Sample Type: MB  
 Inject. Date: 02-Mar-2022 04:43:32 ALS Bottle#: 43 Worklist Smp#: 43  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: MB 280-567330/1-  
 Misc. Info.: 280-0108907-043  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 02-Mar-2022 13:06:22 Calib Date: 05-Jan-2022 04:24:15  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040037.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1635

First Level Reviewer: zhangji Date: 02-Mar-2022 12:41:44

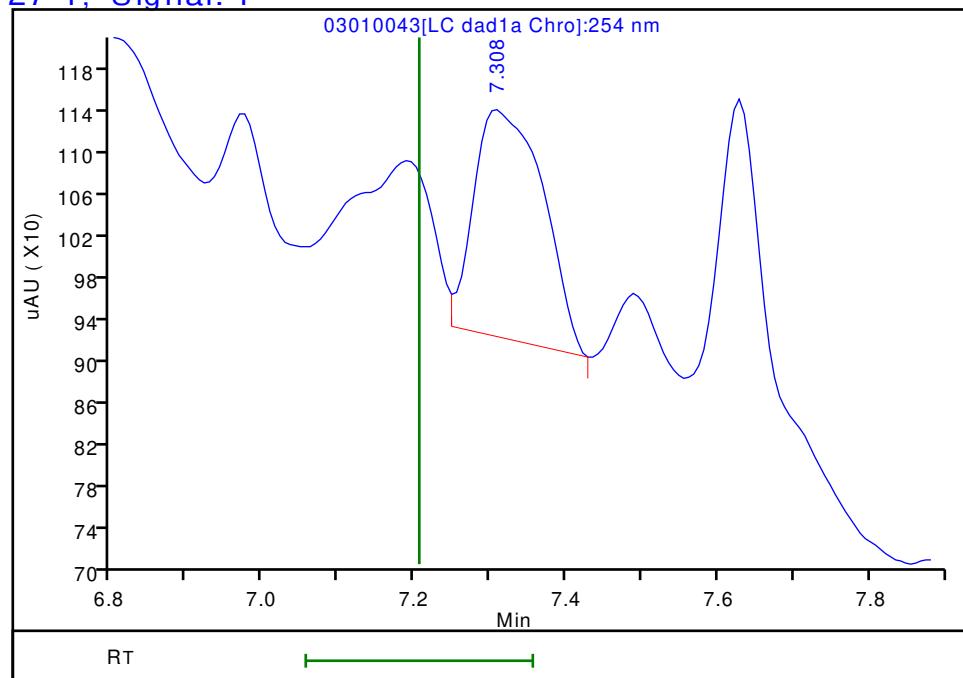
Compound	Amount Added	Amount Recovered	% Rec.
\$ 10 1,2-Dinitrobenzene	0.2000	0.1890	94.50

## Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010043.d  
Injection Date: 02-Mar-2022 04:43:32 Instrument ID: CHHPLC\_X3  
Lims ID: MB 280-567330/1-A  
Client ID:  
Operator ID: JZ ALS Bottle#: 43 Worklist Smp#: 43  
Injection Vol: 100.0 ul Dil. Factor: 1.0000  
Method: 8330\_X3 Limit Group: GCSV - 8330  
Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

7 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.31  
Response: 1376  
Amount: 0.010921



Reviewer: zhangji, 02-Mar-2022 12:41:44

Audit Action: Marked Compound Undetected

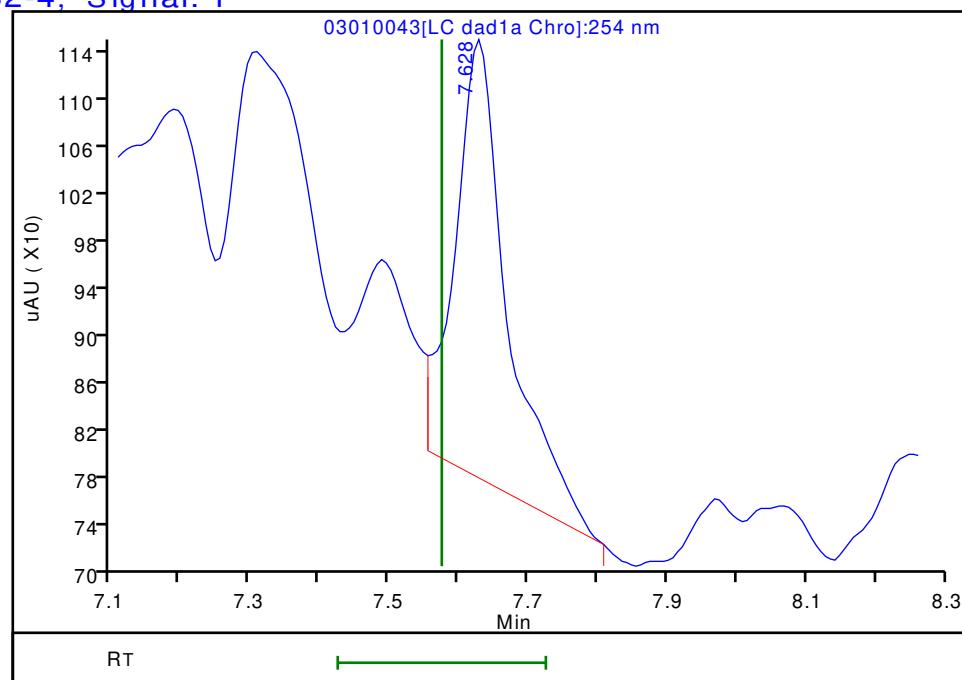
Audit Reason: Invalid Compound ID

## Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010043.d  
Injection Date: 02-Mar-2022 04:43:32 Instrument ID: CHHPLC\_X3  
Lims ID: MB 280-567330/1-A  
Client ID:  
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

8 RDX, CAS: 121-82-4, Signal: 1

RT: 7.63  
Response: 1916  
Amount: 0.018493



Reviewer: zhangji, 02-Mar-2022 12:41:44

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I  
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver

Job No.: 280-159130-1

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

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

Lab Sample ID: LCS 280-567330/2-A

Matrix: Water

Lab File ID: 03010044.D

Analysis Method: 8330A

Date Collected: \_\_\_\_\_

Extraction Method: 3535

Date Extracted: 03/01/2022 11:26

Sample wt/vol: 500 (mL)

Date Analyzed: 03/02/2022 05:06

Con. Extract Vol.: 5 (mL)

Dilution Factor: 1

Injection Volume: 100 (uL)

GC Column: UltraCarb5uODS ID: 4.6 (mm)

% Moisture: \_\_\_\_\_

GPC Cleanup: (Y/N) N

Analysis Batch No.: 567371

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	1.95		0.21	0.20	0.084
99-65-0	1,3-Dinitrobenzene	1.87		0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	1.86		0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	1.74		0.10	0.080	0.027
606-20-2	2,6-Dinitrotoluene	1.79		0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	1.64		0.11	0.10	0.051
88-72-2	2-Nitrotoluene	1.41		0.21	0.20	0.086
99-08-1	3-Nitrotoluene	1.34	Q	0.40	0.40	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.48	Q	0.15	0.12	0.058
99-99-0	4-Nitrotoluene	1.54		0.41	0.40	0.10
2691-41-0	HMX	1.88		0.21	0.20	0.088
98-95-3	Nitrobenzene	1.62		0.21	0.20	0.091
121-82-4	RDX	1.99		0.21	0.20	0.052
479-45-8	Tetryl	1.79		0.11	0.10	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	86		83-119

**Eurofins Denver**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\03010044.D  
 Lims ID: LCS 280-567330/2-A  
 Client ID:  
 Sample Type: LCS  
 Inject. Date: 02-Mar-2022 05:06:27 ALS Bottle#: 44 Worklist Smp#: 44  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: LCS 280-567330/2  
 Misc. Info.: 280-0108907-044  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 02-Mar-2022 13:06:22 Calib Date: 05-Jan-2022 04:24:15  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040037.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1635

First Level Reviewer: zhangji Date: 02-Mar-2022 12:42:35

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.590	6.588	0.002	15770	0.2000	0.1881	
8 RDX	1	7.576	7.575	0.001	20657	0.2000	0.1994	
9 2,4,6-Trinitrophenol	1	7.896	7.895	0.001	14957	0.2000	0.1941	
\$ 10 1,2-Dinitrobenzene	1	8.523	8.515	0.008	21456	0.2000	0.1721	
11 1,3,5-Trinitrobenzene	1	8.643	8.642	0.001	42477	0.2000	0.1948	
12 1,3-Dinitrobenzene	1	9.270	9.262	0.008	53965	0.2000	0.1871	
13 Nitrobenzene	1	9.650	9.648	0.002	31083	0.2000	0.1619	
15 Tetryl	1	9.963	9.955	0.008	30600	0.2000	0.1794	
16 Nitroglycerin	2	10.416	10.408	0.008	125683	2.00	1.99	
17 2,4,6-Trinitrotoluene	1	10.870	10.862	0.008	37622	0.2000	0.1856	
18 4-Amino-2,6-dinitrotoluene	1	11.050	11.042	0.008	22372	0.2000	0.1482	
19 2-Amino-4,6-dinitrotoluene	1	11.303	11.288	0.015	33230	0.2000	0.1644	
20 2,6-Dinitrotoluene	1	11.470	11.462	0.008	25673	0.2000	0.1794	
21 2,4-Dinitrotoluene	1	11.636	11.635	0.001	50301	0.2000	0.1738	
22 o-Nitrotoluene	1	12.483	12.475	0.008	17933	0.2000	0.1405	
23 p-Nitrotoluene	1	12.903	12.895	0.008	16342	0.2000	0.1538	
24 m-Nitrotoluene	1	13.476	13.462	0.014	19018	0.2000	0.1337	
25 PETN	2	14.510	14.488	0.022	145730	2.00	1.99	

### QC Flag Legend

Processing Flags

Report Date: 02-Mar-2022 13:06:23

Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010044.d

Injection Date: 02-Mar-2022 05:06:27

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: LCS 280-567330/2-A

Worklist Smp#: 44

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

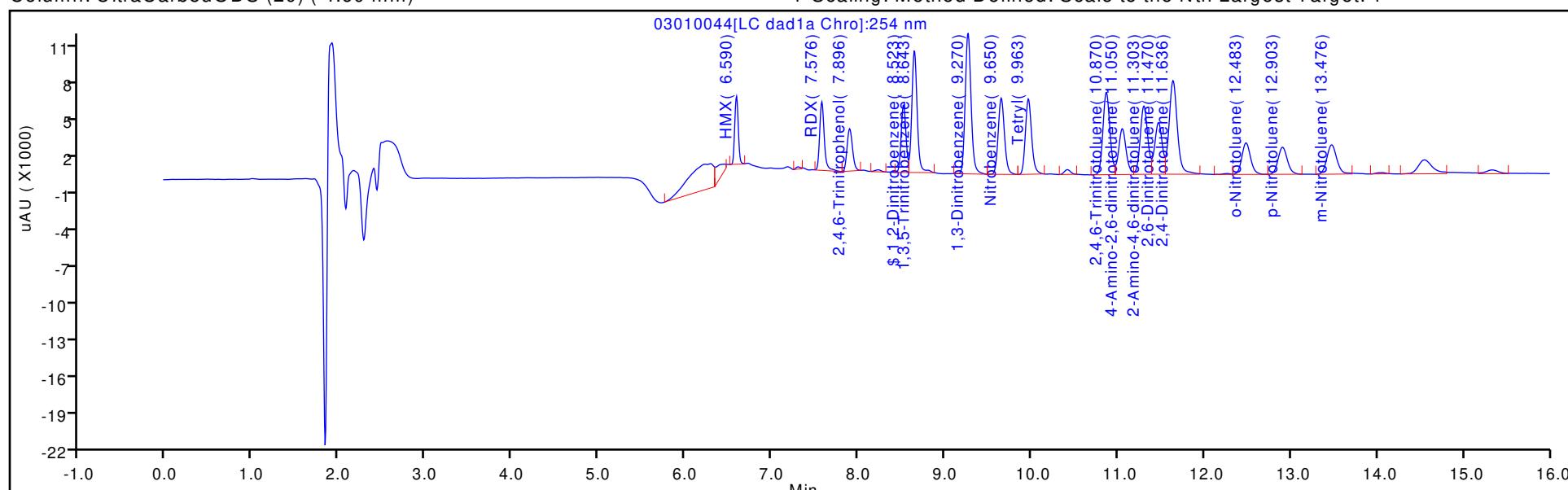
ALS Bottle#: 44

Method: 8330\_X3

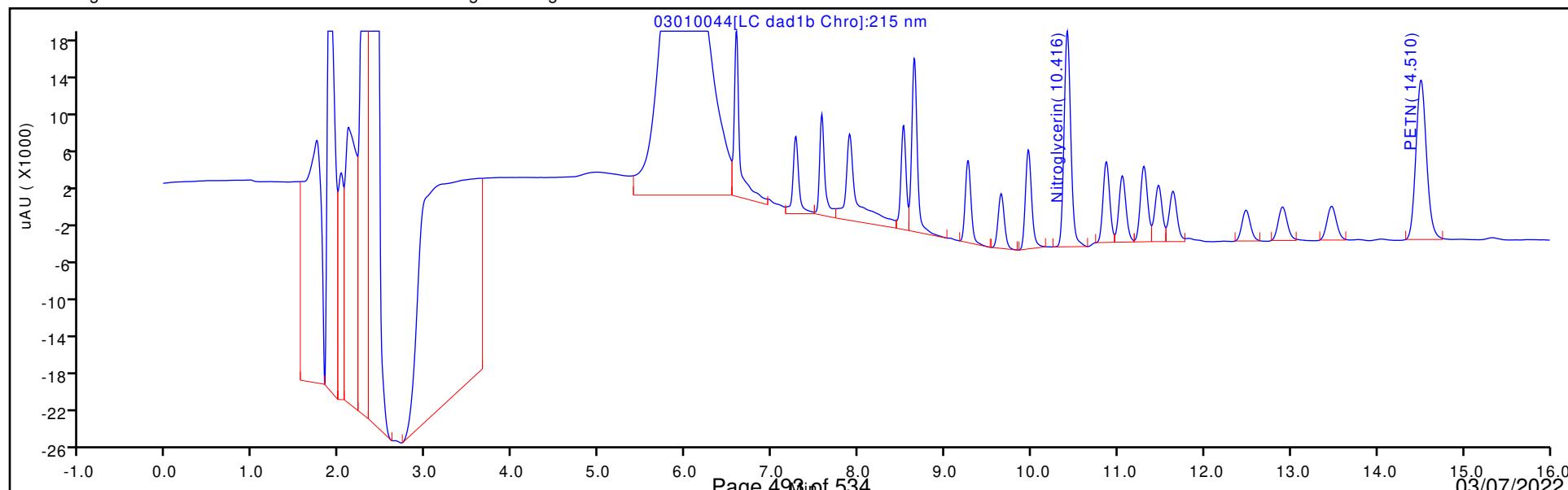
Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Denver  
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\03010044.D  
 Lims ID: LCS 280-567330/2-A  
 Client ID:  
 Sample Type: LCS  
 Inject. Date: 02-Mar-2022 05:06:27 ALS Bottle#: 44 Worklist Smp#: 44  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: LCS 280-567330/2  
 Misc. Info.: 280-0108907-044  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 02-Mar-2022 13:06:22 Calib Date: 05-Jan-2022 04:24:15  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040037.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1635

First Level Reviewer: zhangji Date: 02-Mar-2022 12:42:35

Compound	Amount Added	Amount Recovered	% Rec.
\$ 10 1,2-Dinitrobenzene	0.2000	0.1721	86.03

FORM I  
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver

Job No.: 280-159130-1

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

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

Lab Sample ID: LCS 280-567330/3-A

Matrix: Water

Lab File ID: 03010045.D

Analysis Method: 8330A

Date Collected: \_\_\_\_\_

Extraction Method: 3535

Date Extracted: 03/01/2022 11:26

Sample wt/vol: 500 (mL)

Date Analyzed: 03/02/2022 05:29

Con. Extract Vol.: 5 (mL)

Dilution Factor: 1

Injection Volume: 100 (uL)

GC Column: UltraCarb5uODS ID: 4.6 (mm)

% Moisture: \_\_\_\_\_

GPC Cleanup: (Y/N) N

Analysis Batch No.: 567371

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
5755-27-1	MNX	2.54	M	2.0	0.40	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	111		83-119

Eurofins Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\03010045.D  
 Lims ID: LCS 280-567330/3-A  
 Client ID:  
 Sample Type: LCS  
 Inject. Date: 02-Mar-2022 05:29:23 ALS Bottle#: 45 Worklist Smp#: 45  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: LCS 280-567330/3  
 Misc. Info.: 280-0108907-045  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 02-Mar-2022 13:06:22 Calib Date: 05-Jan-2022 04:24:15  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040037.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1635

First Level Reviewer: zhangji Date: 02-Mar-2022 12:42:52

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.470	6.472	-0.002	37453	0.2002	0.2067	M
6 DNX	1	6.790	6.792	-0.002	29376	0.2002	0.2127	M
7 MNX	1	7.204	7.206	-0.002	31943	0.2334	0.2535	M
\$ 10 1,2-Dinitrobenzene	1	8.517	8.515	0.002	27617	0.2000	0.2215	

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Report Date: 02-Mar-2022 13:06:24

Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\\denver\\chromdata\\chhplc\_x\\20220301-108907.b\\03010045.d

Injection Date: 02-Mar-2022 05:29:23

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: LCS 280-567330/3-A

Worklist Smp#: 45

Client ID:

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

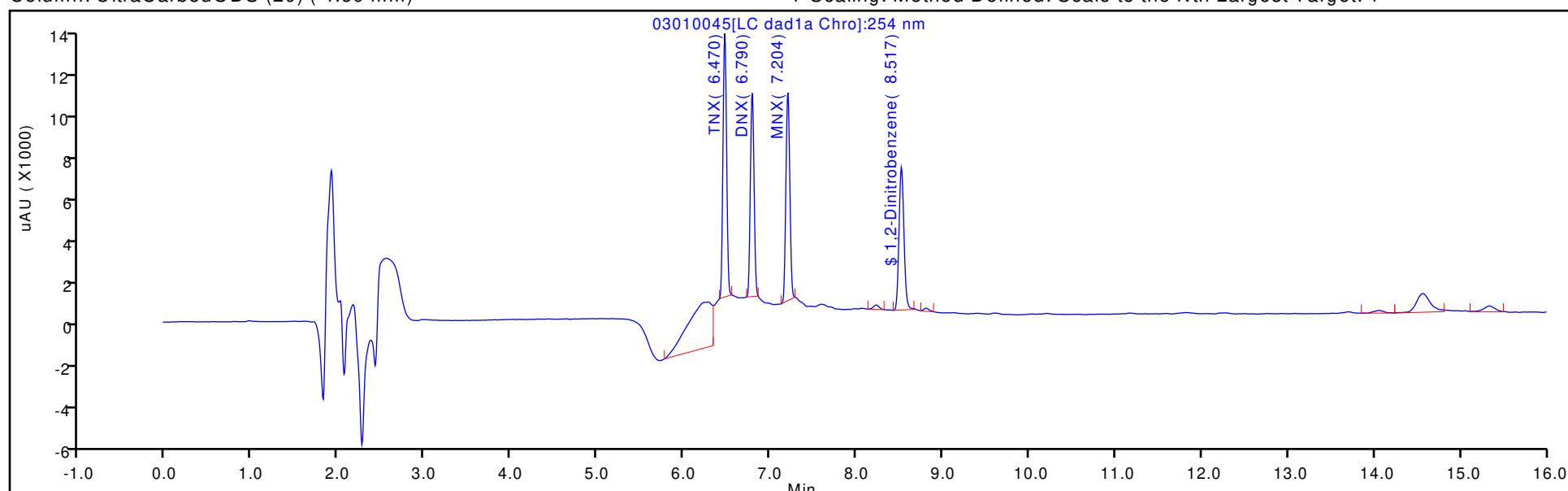
ALS Bottle#: 45

Method: 8330\_X3

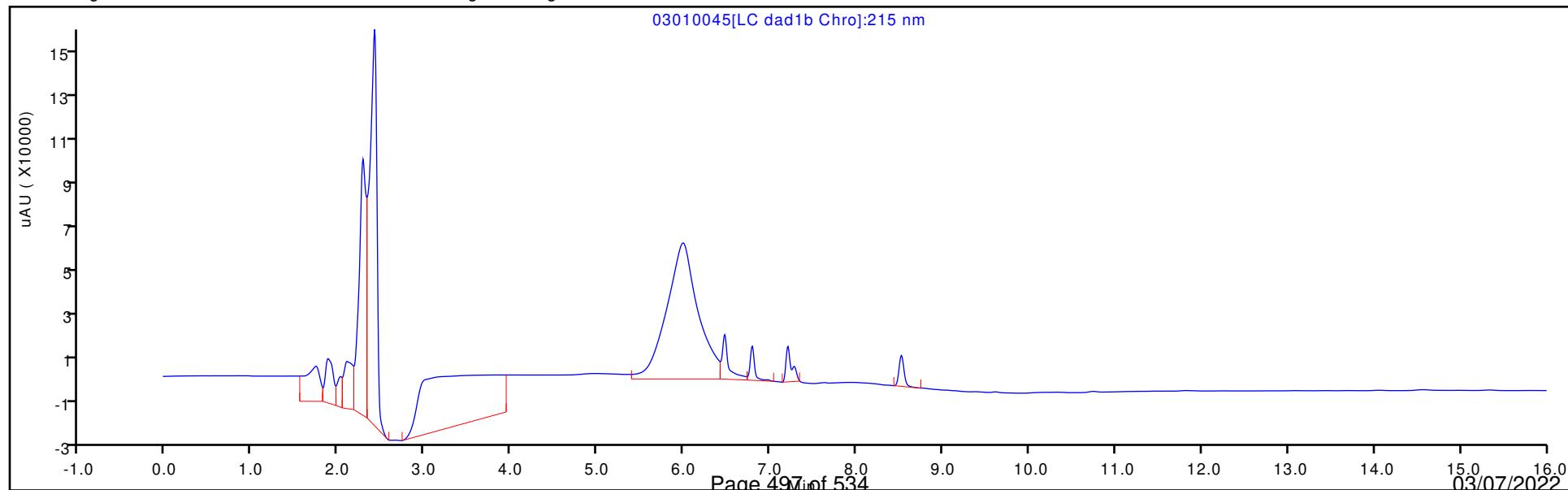
Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Denver  
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\03010045.D  
 Lims ID: LCS 280-567330/3-A  
 Client ID:  
 Sample Type: LCS  
 Inject. Date: 02-Mar-2022 05:29:23 ALS Bottle#: 45 Worklist Smp#: 45  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: LCS 280-567330/3  
 Misc. Info.: 280-0108907-045  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 02-Mar-2022 13:06:22 Calib Date: 05-Jan-2022 04:24:15  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040037.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1635

First Level Reviewer: zhangji Date: 02-Mar-2022 12:42:52

Compound	Amount Added	Amount Recovered	% Rec.
\$ 10 1,2-Dinitrobenzene	0.2000	0.2215	110.74

## Eurofins Denver

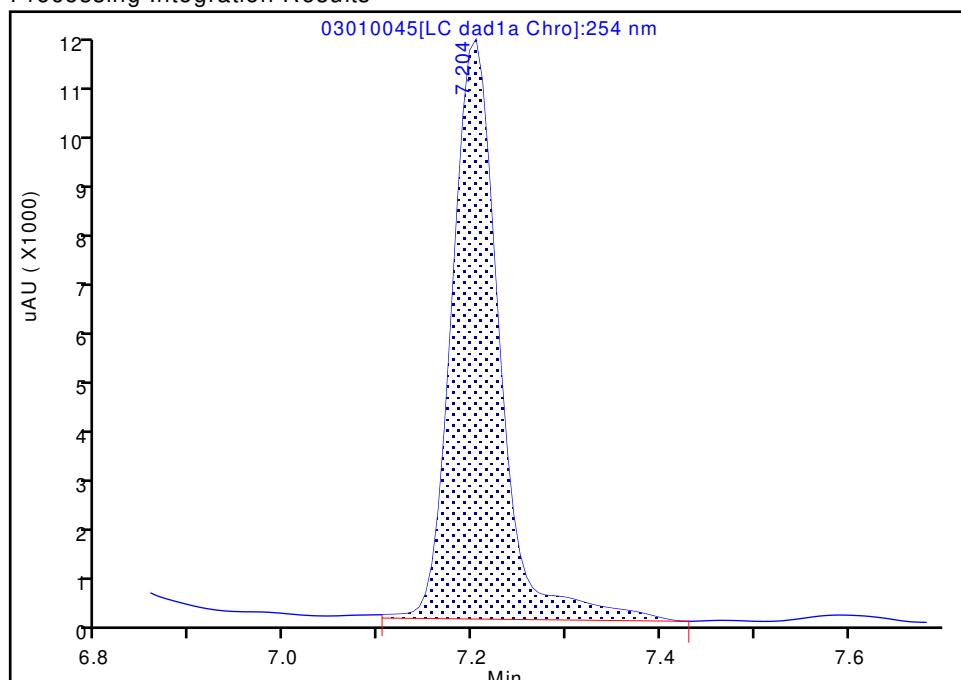
Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010045.d  
 Injection Date: 02-Mar-2022 05:29:23 Instrument ID: CHHPLC\_X3  
 Lims ID: LCS 280-567330/3-A  
 Client ID:  
 Operator ID: JZ ALS Bottle#: 45 Worklist Smp#: 45  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector: LC DAD1B, 254 nm

## 7 MNX, CAS: 5755-27-1

Signal: 1

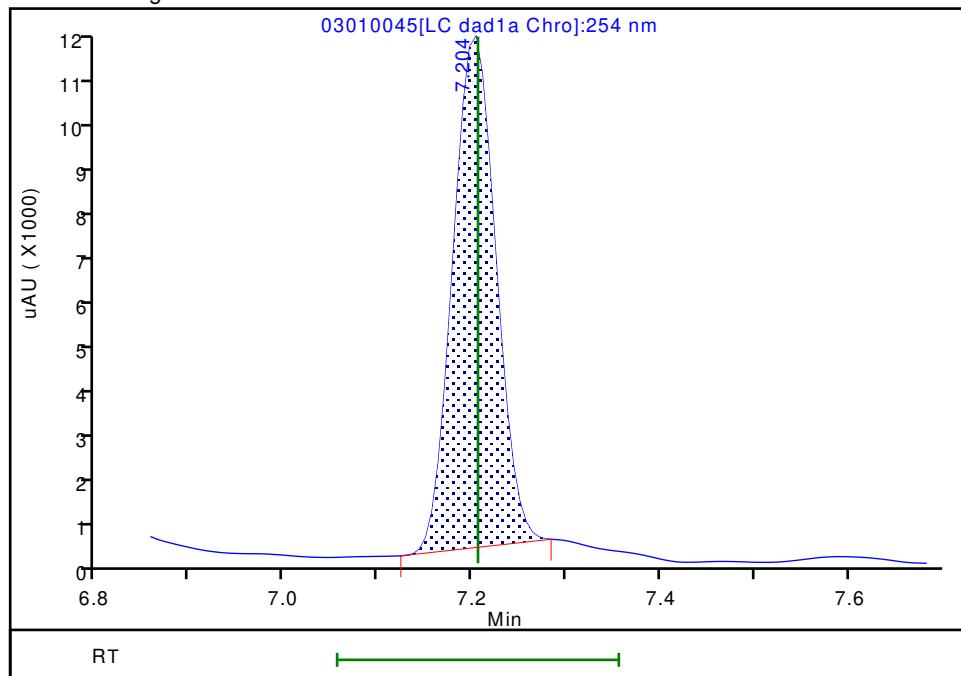
RT: 7.20  
 Area: 36179  
 Amount: 0.287145  
 Amount Units: ug/mL

## Processing Integration Results



RT: 7.20  
 Area: 31943  
 Amount: 0.253525  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 02-Mar-2022 12:42:48

Audit Action: Manually Integrated

Audit Reason: Baseline

FORM I  
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver

Job No.: 280-159130-1

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

Client Sample ID: OS003-DP08-45 MS

Lab Sample ID: 280-159130-2 MS

Matrix: Water

Lab File ID: 03010048.D

Analysis Method: 8330A

Date Collected: 02/23/2022 10:05

Extraction Method: 3535

Date Extracted: 03/01/2022 11:26

Sample wt/vol: 477.2 (mL)

Date Analyzed: 03/02/2022 06:38

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.: 567371

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.28	M	0.22	0.21	0.088
99-65-0	1,3-Dinitrobenzene	2.34		0.12	0.10	0.039
118-96-7	2,4,6-Trinitrotoluene	2.22		0.12	0.10	0.047
121-14-2	2,4-Dinitrotoluene	2.10		0.10	0.084	0.029
606-20-2	2,6-Dinitrotoluene	2.17		0.10	0.084	0.042
35572-78-2	2-Amino-4,6-dinitrotoluene	2.04		0.12	0.10	0.053
88-72-2	2-Nitrotoluene	1.75		0.22	0.21	0.090
99-08-1	3-Nitrotoluene	1.61		0.42	0.42	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.99		0.16	0.13	0.060
99-99-0	4-Nitrotoluene	1.96		0.43	0.42	0.10
2691-41-0	HMX	2.03	M	0.22	0.21	0.092
98-95-3	Nitrobenzene	2.01		0.22	0.21	0.095
121-82-4	RDX	2.01	M	0.22	0.21	0.054
479-45-8	Tetryl	2.21		0.12	0.10	0.033

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	101	M	83-119

**Eurofins Denver**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\03010048.D  
 Lims ID: 280-159130-B-2-A MS  
 Client ID: OS003-DP08-45  
 Sample Type: MS  
 Inject. Date: 02-Mar-2022 06:38:05 ALS Bottle#: 48 Worklist Smp#: 48  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-159130-B-2-A  
 Misc. Info.: 280-0108907-048  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 02-Mar-2022 13:06:22 Calib Date: 05-Jan-2022 04:24:15  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040037.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1635

First Level Reviewer: zhangji Date: 02-Mar-2022 12:44:03

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.590	6.588	0.002	16227	0.2000	0.1936	M
8 RDX	1	7.576	7.575	0.001	19842	0.2000	0.1915	M
9 2,4,6-Trinitrophenol	1	7.890	7.895	-0.005	15579	0.2000	0.2022	M
\$ 10 1,2-Dinitrobenzene	1	8.523	8.515	0.008	25132	0.2000	0.2015	M
11 1,3,5-Trinitrobenzene	1	8.643	8.642	0.001	47528	0.2000	0.2179	M
12 1,3-Dinitrobenzene	1	9.263	9.262	0.001	64423	0.2000	0.2234	
13 Nitrobenzene	1	9.650	9.648	0.002	36819	0.2000	0.1918	
15 Tetryl	1	9.963	9.955	0.008	36037	0.2000	0.2113	
16 Nitroglycerin	2	10.416	10.408	0.008	139151	2.00	2.21	
17 2,4,6-Trinitrotoluene	1	10.863	10.862	0.001	42976	0.2000	0.2120	
18 4-Amino-2,6-dinitrotoluene	1	11.050	11.042	0.008	28732	0.2000	0.1903	
19 2-Amino-4,6-dinitrotoluene	1	11.303	11.288	0.015	39430	0.2000	0.1950	
20 2,6-Dinitrotoluene	1	11.470	11.462	0.008	29674	0.2000	0.2073	
21 2,4-Dinitrotoluene	1	11.636	11.635	0.001	57926	0.2000	0.2002	
22 o-Nitrotoluene	1	12.483	12.475	0.008	21353	0.2000	0.1673	
23 p-Nitrotoluene	1	12.903	12.895	0.008	19899	0.2000	0.1873	
24 m-Nitrotoluene	1	13.476	13.462	0.014	21824	0.2000	0.1534	
25 PETN	2	14.510	14.488	0.022	162020	2.00	2.21	

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

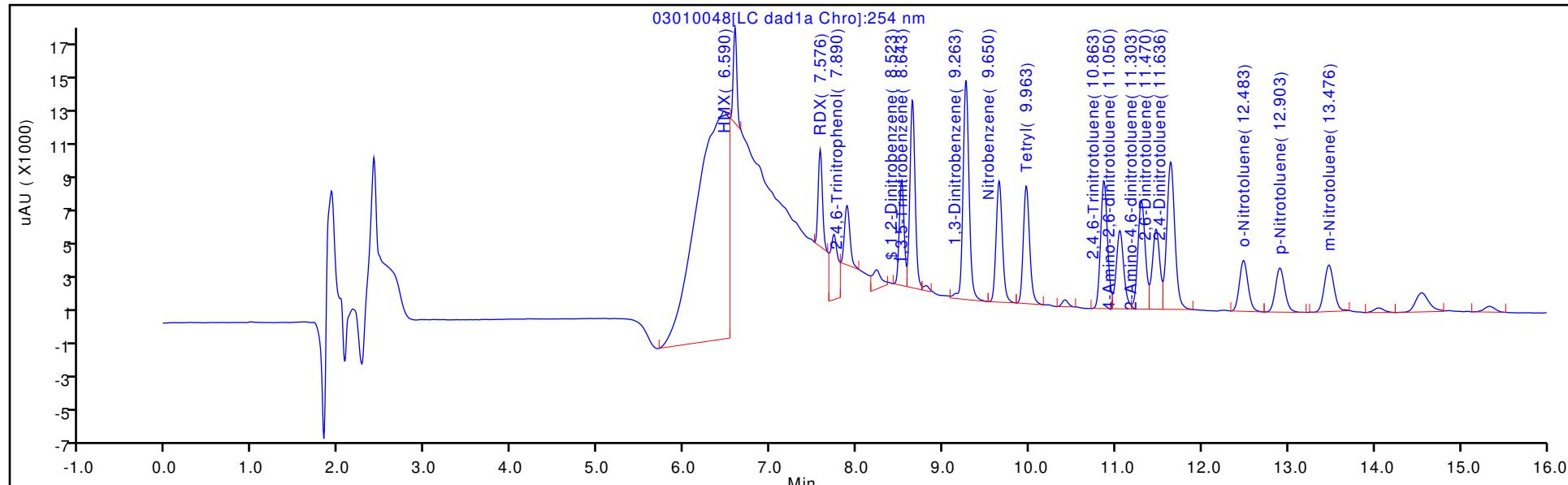
Report Date: 02-Mar-2022 13:06:26

Chrom Revision: 2.3 16-Feb-2022 17:52:00

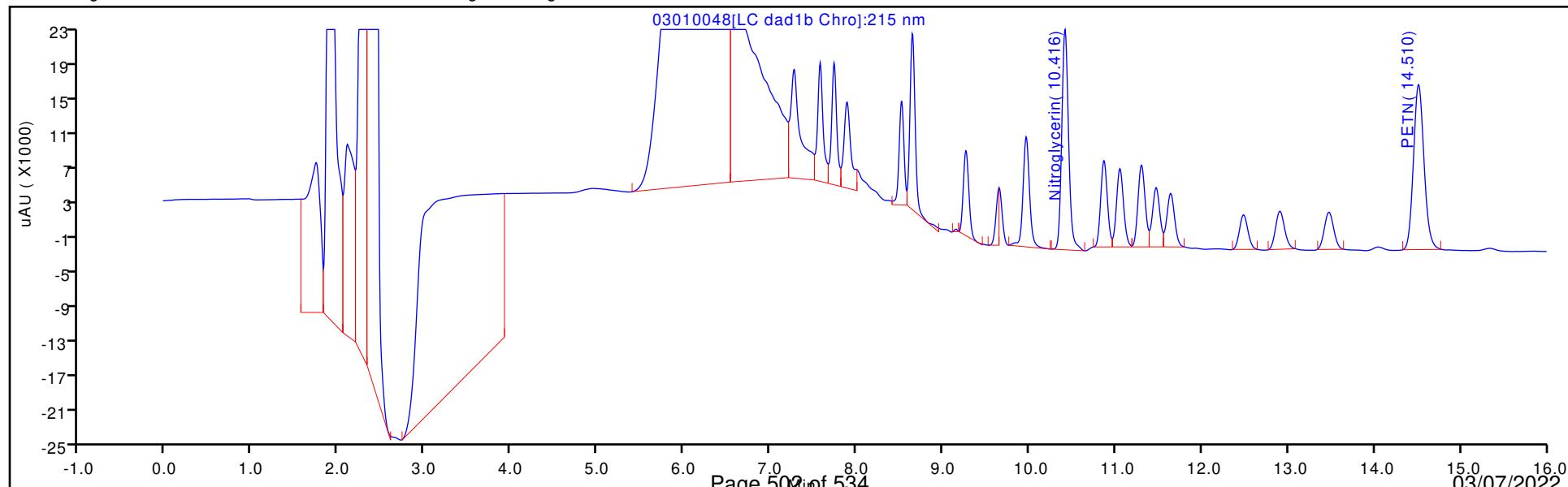
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010048.d  
 Injection Date: 02-Mar-2022 06:38:05 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-159130-B-2-A MS Operator ID: JZ  
 Client ID: OS003-DP08-45 Worklist Smp#: 48  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000 ALS Bottle#: 48  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Denver  
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\03010048.D  
 Lims ID: 280-159130-B-2-A MS  
 Client ID: OS003-DP08-45  
 Sample Type: MS  
 Inject. Date: 02-Mar-2022 06:38:05 ALS Bottle#: 48 Worklist Smp#: 48  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-159130-B-2-A  
 Misc. Info.: 280-0108907-048  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 02-Mar-2022 13:06:22 Calib Date: 05-Jan-2022 04:24:15  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040037.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1635

First Level Reviewer: zhangji Date: 02-Mar-2022 12:44:03

Compound	Amount Added	Amount Recovered	% Rec.
\$ 10 1,2-Dinitrobenzene	0.2000	0.2015	100.77

## Eurofins Denver

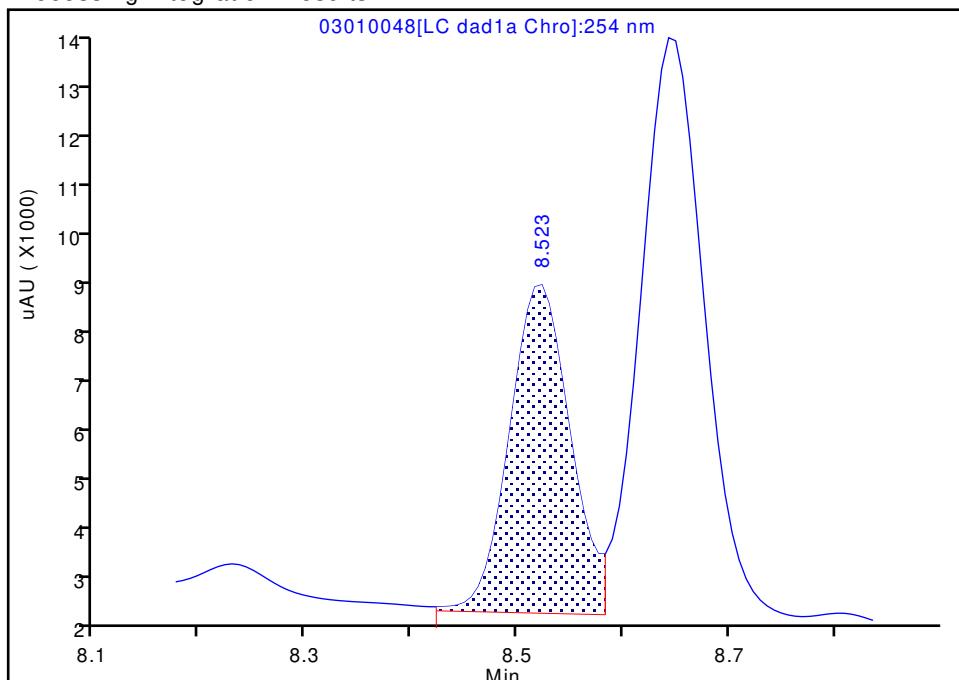
Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010048.d  
 Injection Date: 02-Mar-2022 06:38:05 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-159130-B-2-A MS  
 Client ID: OS003-DP08-45  
 Operator ID: JZ ALS Bottle#: 48 Worklist Smp#: 48  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

## \$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

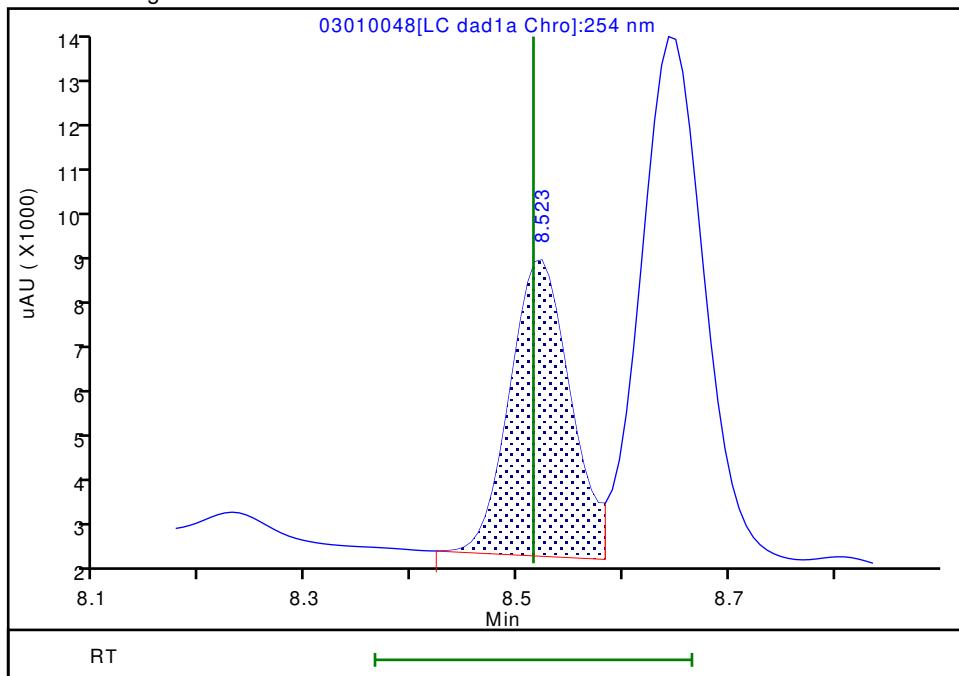
RT: 8.52  
 Area: 25358  
 Amount: 0.203356  
 Amount Units: ug/mL

## Processing Integration Results



RT: 8.52  
 Area: 25132  
 Amount: 0.201543  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 02-Mar-2022 12:43:54

Audit Action: Assigned New Baseline

Audit Reason: Baseline

## Eurofins Denver

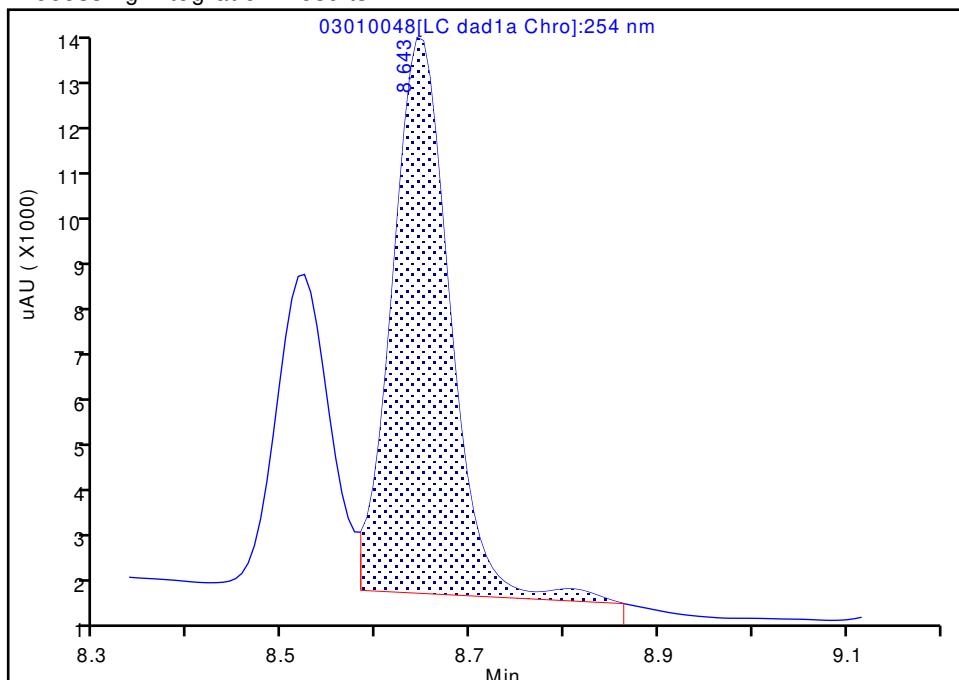
Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010048.d  
 Injection Date: 02-Mar-2022 06:38:05 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-159130-B-2-A MS  
 Client ID: OS003-DP08-45  
 Operator ID: JZ ALS Bottle#: 48 Worklist Smp#: 48  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

## 11 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

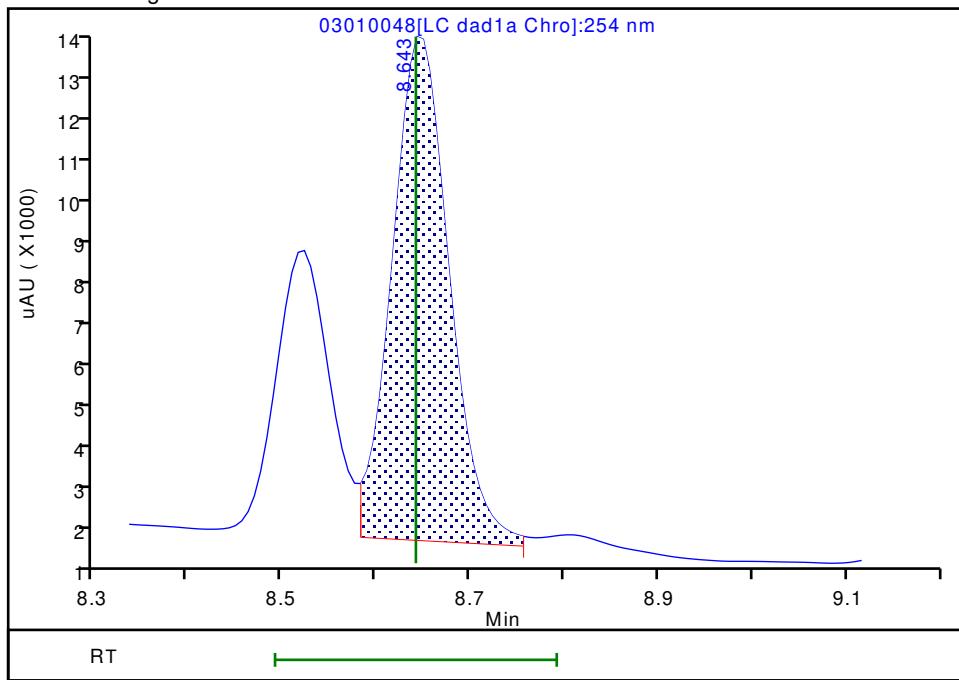
RT: 8.64  
 Area: 48082  
 Amount: 0.220463  
 Amount Units: ug/mL

## Processing Integration Results



RT: 8.64  
 Area: 47528  
 Amount: 0.217923  
 Amount Units: ug/mL

## Manual Integration Results



Reviewer: zhangji, 02-Mar-2022 12:43:57

Audit Action: Split an Integrated Peak

Audit Reason: Baseline

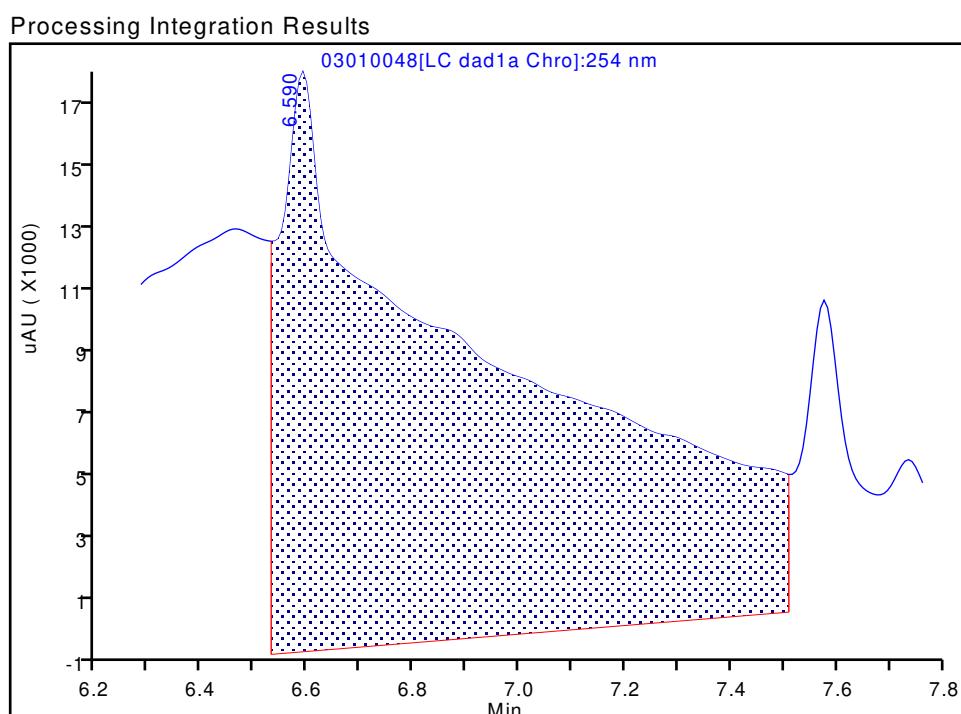
## Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010048.d  
 Injection Date: 02-Mar-2022 06:38:05 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-159130-B-2-A MS  
 Client ID: OS003-DP08-45  
 Operator ID: JZ ALS Bottle#: 48 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

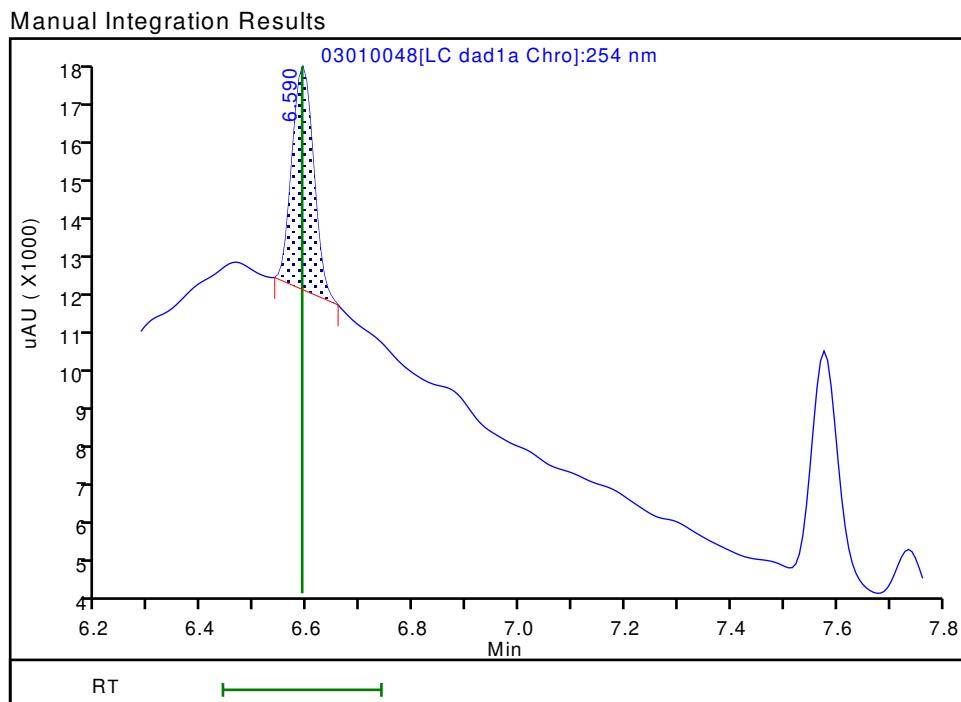
**4 HMX, CAS: 2691-41-0**

Signal: 1

RT: 6.59  
 Area: 511800  
 Amount: 6.105417  
 Amount Units: ug/mL



RT: 6.59  
 Area: 16227  
 Amount: 0.193577  
 Amount Units: ug/mL



Reviewer: zhangji, 02-Mar-2022 12:43:39

Audit Action: Manually Integrated

Audit Reason: Baseline

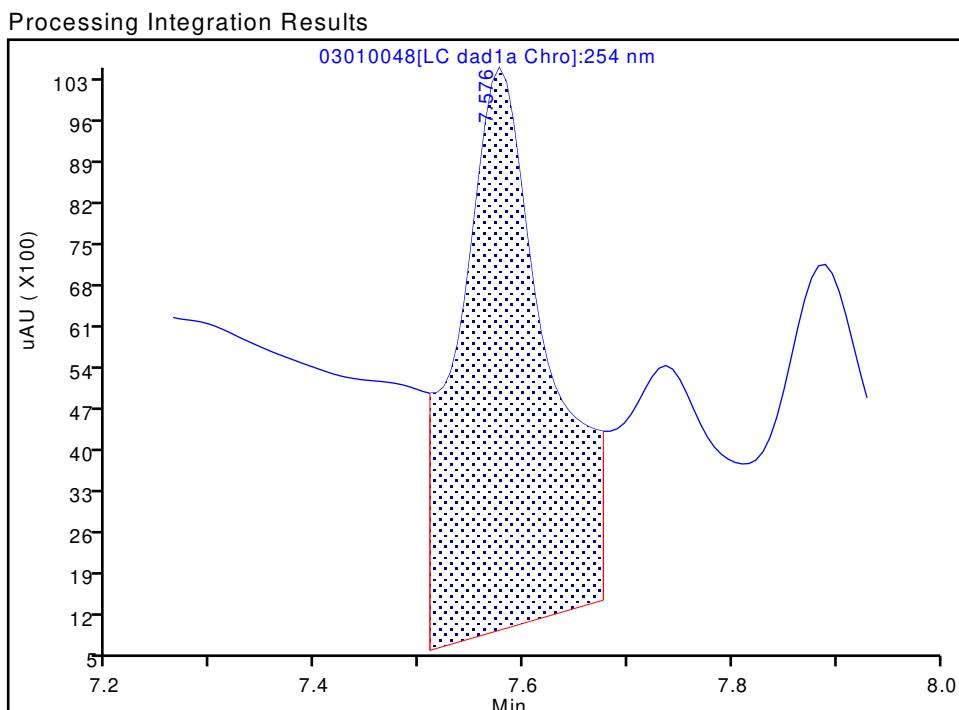
## Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010048.d  
 Injection Date: 02-Mar-2022 06:38:05 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-159130-B-2-A MS  
 Client ID: OS003-DP08-45  
 Operator ID: JZ ALS Bottle#: 48 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

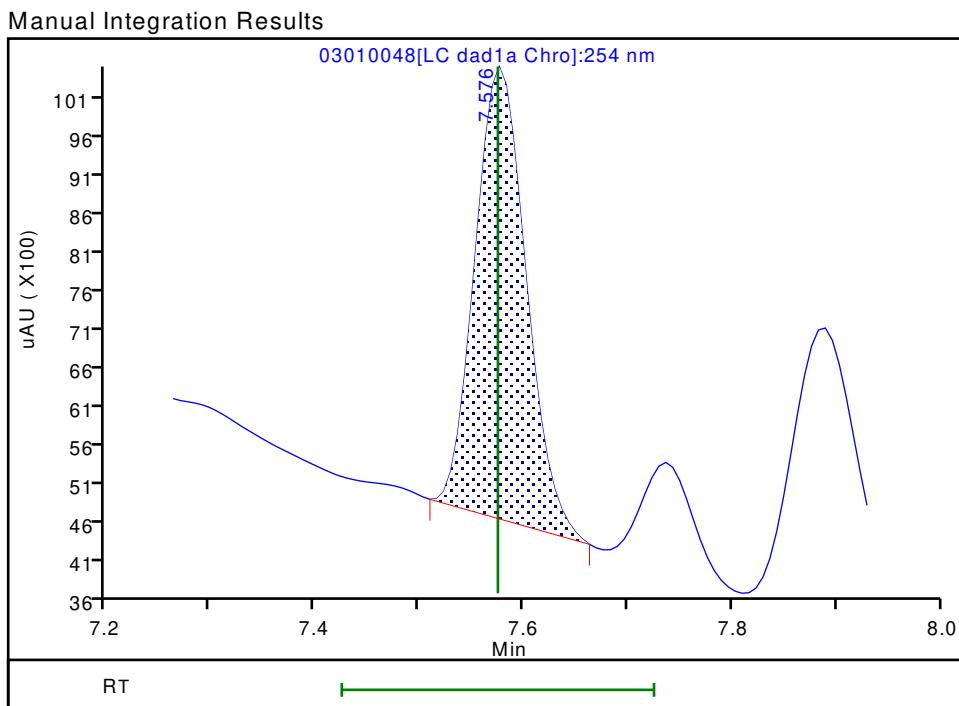
## 8 RDX, CAS: 121-82-4

Signal: 1

RT: 7.58  
 Area: 56338  
 Amount: 0.543755  
 Amount Units: ug/mL



RT: 7.58  
 Area: 19842  
 Amount: 0.191508  
 Amount Units: ug/mL



Reviewer: zhangji, 02-Mar-2022 12:43:43

Audit Action: Manually Integrated

Audit Reason: Baseline

FORM I  
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver Job No.: 280-159130-1  
SDG No.:  
Client Sample ID: OS003-DP08-45 MS Lab Sample ID: 280-159130-2 MS  
Matrix: Water Lab File ID: 03010050.D  
Analysis Method: 8330A Date Collected: 02/23/2022 10:05  
Extraction Method: 3535 Date Extracted: 03/01/2022 11:26  
Sample wt/vol: 475.9 (mL) Date Analyzed: 03/02/2022 07:23  
Con. Extract Vol.: 5 (mL) Dilution Factor: 1  
Injection Volume: 100 (uL) GC Column: UltraCarb5uODS ID: 4.6 (mm)  
% Moisture:  
Analysis Batch No.: 567371 GPC Cleanup: (Y/N) N  
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
5755-27-1	MNX	2.63	M	2.1	0.42	0.16

**Eurofins Denver**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\03010050.D  
 Lims ID: 280-159130-A-2-B MS  
 Client ID: OS003-DP08-45  
 Sample Type: MS  
 Inject. Date: 02-Mar-2022 07:23:59 ALS Bottle#: 50 Worklist Smp#: 50  
 Injection Vol: 100.0  $\mu$ L Dil. Factor: 1.0000  
 Sample Info: 280-159130-A-2-B  
 Misc. Info.: 280-0108907-050  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 02-Mar-2022 13:06:22 Calib Date: 05-Jan-2022 04:24:15  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040037.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1635

First Level Reviewer: zhangji Date: 02-Mar-2022 12:44:57

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.466	6.472	-0.006	39007	0.2002	0.2153	M
6 DNX	1	6.786	6.792	-0.006	27608	0.2002	0.1999	M
7 MNX	1	7.199	7.206	-0.007	31574	0.2334	0.2506	M
\$ 10 1,2-Dinitrobenzene	1	8.519	8.515	0.004	26587	0.2000	0.2132	M

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Report Date: 02-Mar-2022 13:06:27

Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\\denver\\chromdata\\chhplc\_x\\20220301-108907.b\\03010050.d

Injection Date: 02-Mar-2022 07:23:59

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: 280-159130-A-2-B MS

Worklist Smp#: 50

Client ID: OS003-DP08-45

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

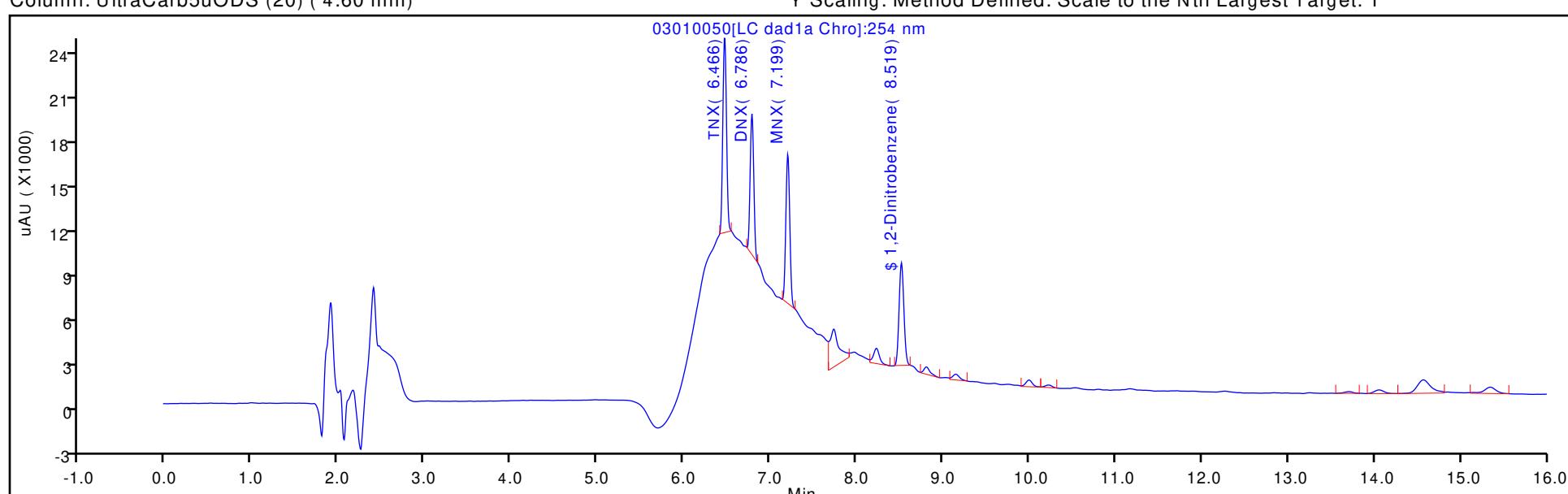
ALS Bottle#: 50

Method: 8330\_X3

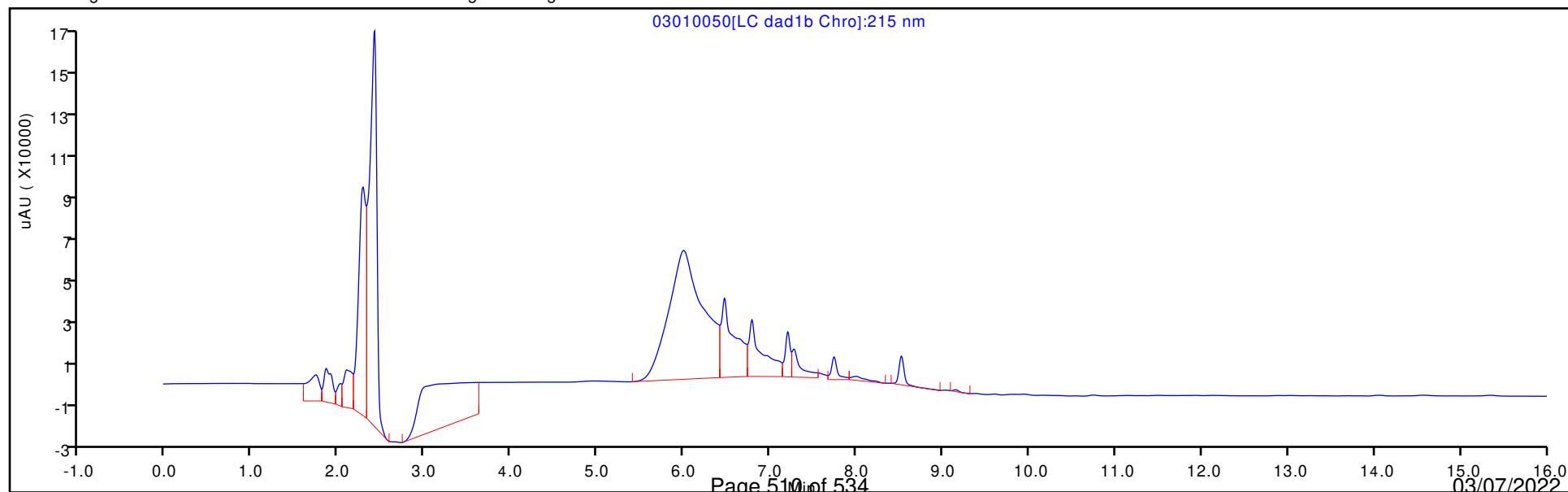
Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Denver  
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\03010050.D  
 Lims ID: 280-159130-A-2-B MS  
 Client ID: OS003-DP08-45  
 Sample Type: MS  
 Inject. Date: 02-Mar-2022 07:23:59 ALS Bottle#: 50 Worklist Smp#: 50  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-159130-A-2-B  
 Misc. Info.: 280-0108907-050  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 02-Mar-2022 13:06:22 Calib Date: 05-Jan-2022 04:24:15  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040037.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1635

First Level Reviewer: zhangji Date: 02-Mar-2022 12:44:57

Compound	Amount Added	Amount Recovered	% Rec.
\$ 10 1,2-Dinitrobenzene	0.2000	0.2132	106.61

## Eurofins Denver

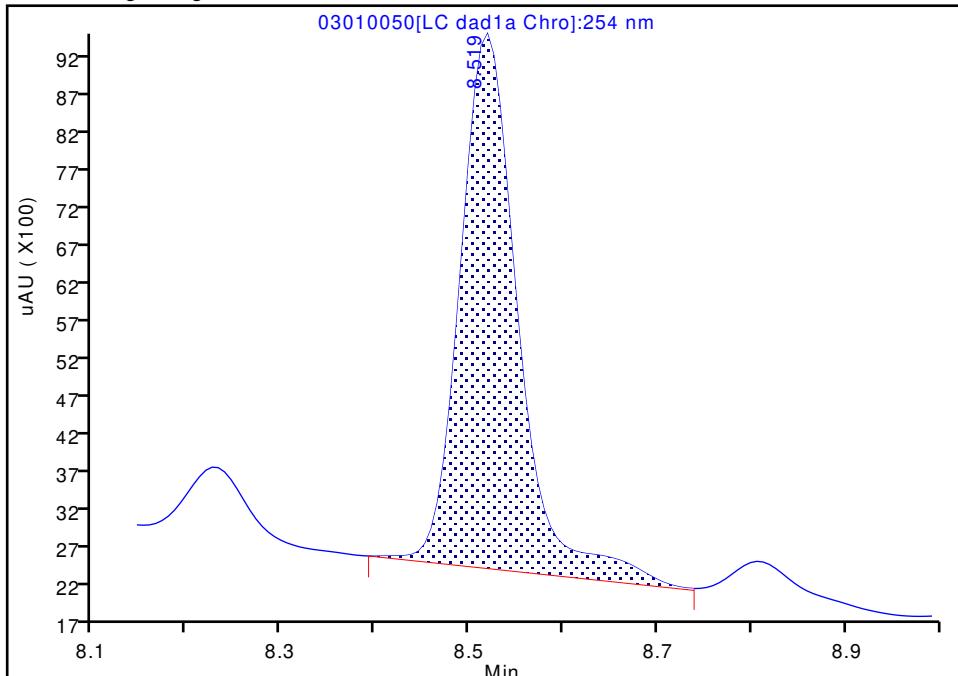
Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010050.d  
 Injection Date: 02-Mar-2022 07:23:59 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-159130-A-2-B MS  
 Client ID: OS003-DP08-45  
 Operator ID: JZ ALS Bottle#: 50 Worklist Smp#: 50  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 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

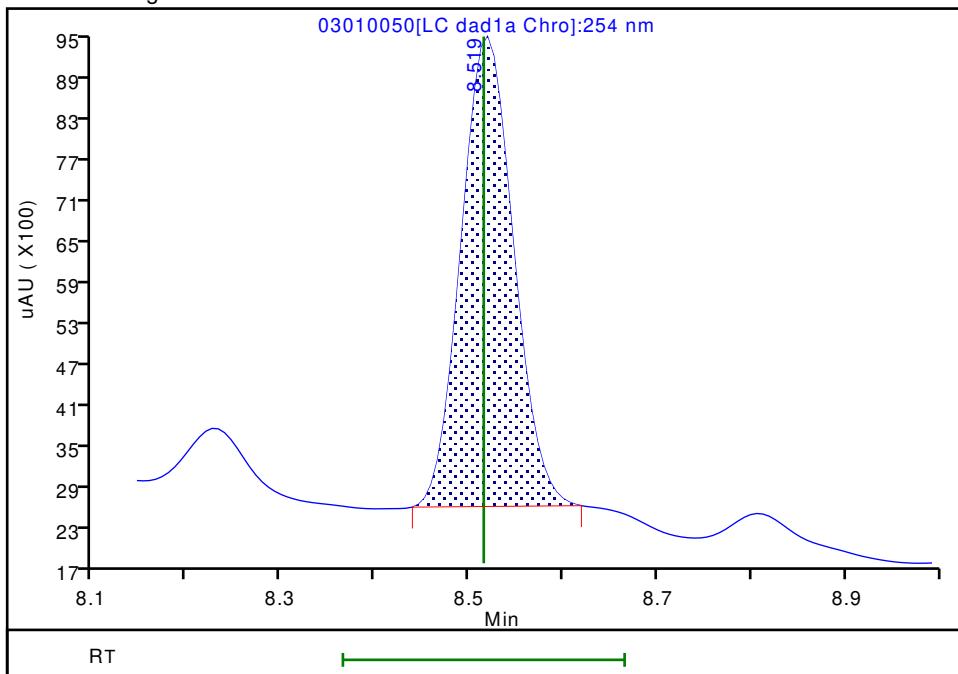
## Processing Integration Results

RT: 8.52  
 Area: 30347  
 Amount: 0.243365  
 Amount Units: ug/mL



## Manual Integration Results

RT: 8.52  
 Area: 26587  
 Amount: 0.213212  
 Amount Units: ug/mL



Reviewer: zhangji, 02-Mar-2022 12:44:56

Audit Action: Manually Integrated

Audit Reason: Baseline

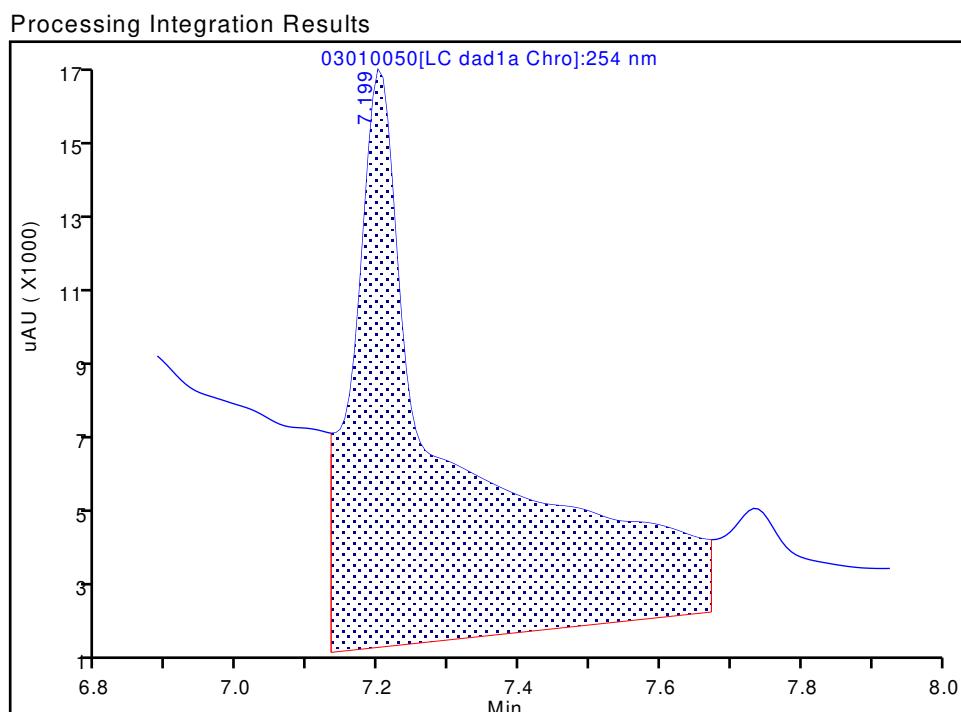
## Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010050.d  
 Injection Date: 02-Mar-2022 07:23:59 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-159130-A-2-B MS  
 Client ID: OS003-DP08-45  
 Operator ID: JZ ALS Bottle#: 50 Worklist Smp#: 50  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

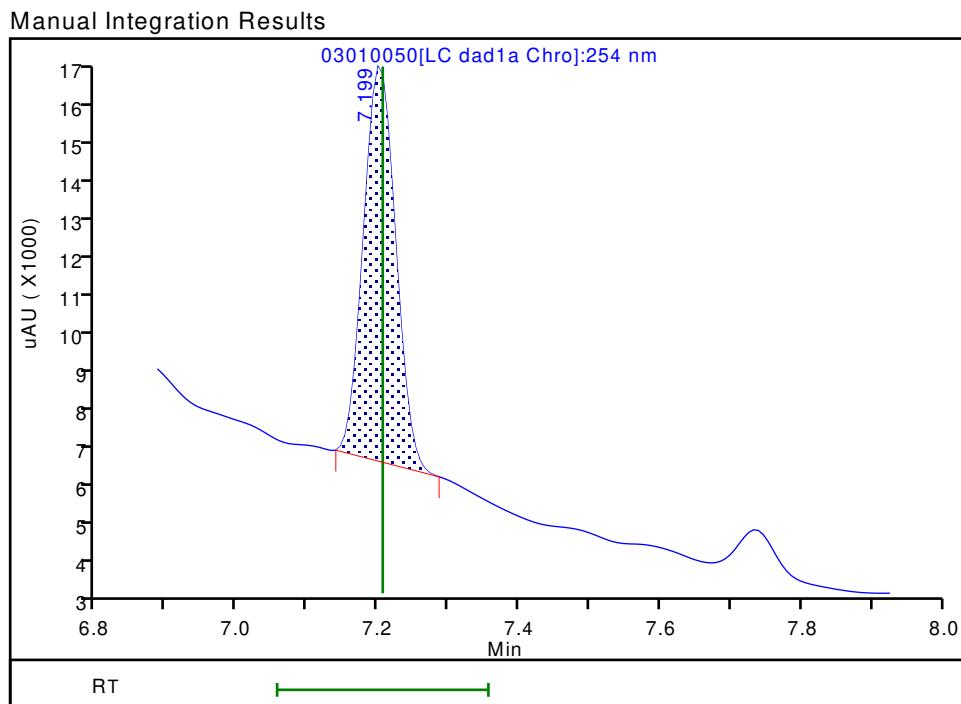
7 MNX, CAS: 5755-27-1

Signal: 1

RT: 7.20  
 Area: 155300  
 Amount: 1.232585  
 Amount Units: ug/mL



RT: 7.20  
 Area: 31574  
 Amount: 0.250596  
 Amount Units: ug/mL



Reviewer: zhangji, 02-Mar-2022 12:44:53

Audit Action: Manually Integrated

Audit Reason: Baseline

FORM I  
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver

Job No.: 280-159130-1

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

Client Sample ID: OS003-DP08-45 MSD

Lab Sample ID: 280-159130-2 MSD

Matrix: Water

Lab File ID: 03010049.D

Analysis Method: 8330A

Date Collected: 02/23/2022 10:05

Extraction Method: 3535

Date Extracted: 03/01/2022 11:26

Sample wt/vol: 481.3 (mL)

Date Analyzed: 03/02/2022 07:01

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.: 567371

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.23		0.22	0.21	0.087
99-65-0	1,3-Dinitrobenzene	2.07		0.11	0.10	0.038
118-96-7	2,4,6-Trinitrotoluene	2.07		0.11	0.10	0.047
121-14-2	2,4-Dinitrotoluene	1.81		0.10	0.083	0.028
606-20-2	2,6-Dinitrotoluene	1.82		0.10	0.083	0.042
35572-78-2	2-Amino-4,6-dinitrotoluene	1.76		0.11	0.10	0.053
88-72-2	2-Nitrotoluene	1.34	J1	0.22	0.21	0.089
99-08-1	3-Nitrotoluene	1.16	J1	0.42	0.42	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.72		0.16	0.12	0.060
99-99-0	4-Nitrotoluene	1.47		0.43	0.42	0.10
2691-41-0	HMX	2.12	M	0.22	0.21	0.091
98-95-3	Nitrobenzene	1.75		0.22	0.21	0.095
121-82-4	RDX	2.03	M	0.22	0.21	0.054
479-45-8	Tetryl	2.13		0.11	0.10	0.033

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	93		83-119

**Eurofins Denver**  
**Target Compound Quantitation Report**

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\03010049.D  
 Lims ID: 280-159130-B-2-B MSD  
 Client ID: OS003-DP08-45  
 Sample Type: MSD  
 Inject. Date: 02-Mar-2022 07:01:02 ALS Bottle#: 49 Worklist Smp#: 49  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-159130-B-2-B  
 Misc. Info.: 280-0108907-049  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 02-Mar-2022 13:06:22 Calib Date: 05-Jan-2022 04:24:15  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040037.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1635

First Level Reviewer: zhangji Date: 02-Mar-2022 12:44:34

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.592	6.588	0.004	17113	0.2000	0.2041	M
8 RDX	1	7.578	7.575	0.003	20284	0.2000	0.1958	M
9 2,4,6-Trinitrophenol	1	7.885	7.895	-0.010	15569	0.2000	0.2021	M
\$ 10 1,2-Dinitrobenzene	1	8.518	8.515	0.003	23265	0.2000	0.1866	
11 1,3,5-Trinitrobenzene	1	8.645	8.642	0.003	46756	0.2000	0.2144	
12 1,3-Dinitrobenzene	1	9.265	9.262	0.003	57593	0.2000	0.1997	
13 Nitrobenzene	1	9.652	9.648	0.004	32279	0.2000	0.1682	
15 Tetryl	1	9.965	9.955	0.010	35032	0.2000	0.2054	
16 Nitroglycerin	2	10.412	10.408	0.004	139792	2.00	2.22	
17 2,4,6-Trinitrotoluene	1	10.865	10.862	0.003	40367	0.2000	0.1991	
18 4-Amino-2,6-dinitrotoluene	1	11.052	11.042	0.010	25054	0.2000	0.1659	
19 2-Amino-4,6-dinitrotoluene	1	11.298	11.288	0.010	34222	0.2000	0.1693	
20 2,6-Dinitrotoluene	1	11.472	11.462	0.010	25128	0.2000	0.1756	
21 2,4-Dinitrotoluene	1	11.638	11.635	0.003	50441	0.2000	0.1743	
22 o-Nitrotoluene	1	12.485	12.475	0.010	16501	0.2000	0.1293	
23 p-Nitrotoluene	1	12.905	12.895	0.010	14996	0.2000	0.1412	
24 m-Nitrotoluene	1	13.472	13.462	0.010	15877	0.2000	0.1116	
25 PETN	2	14.505	14.488	0.017	160329	2.00	2.19	

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

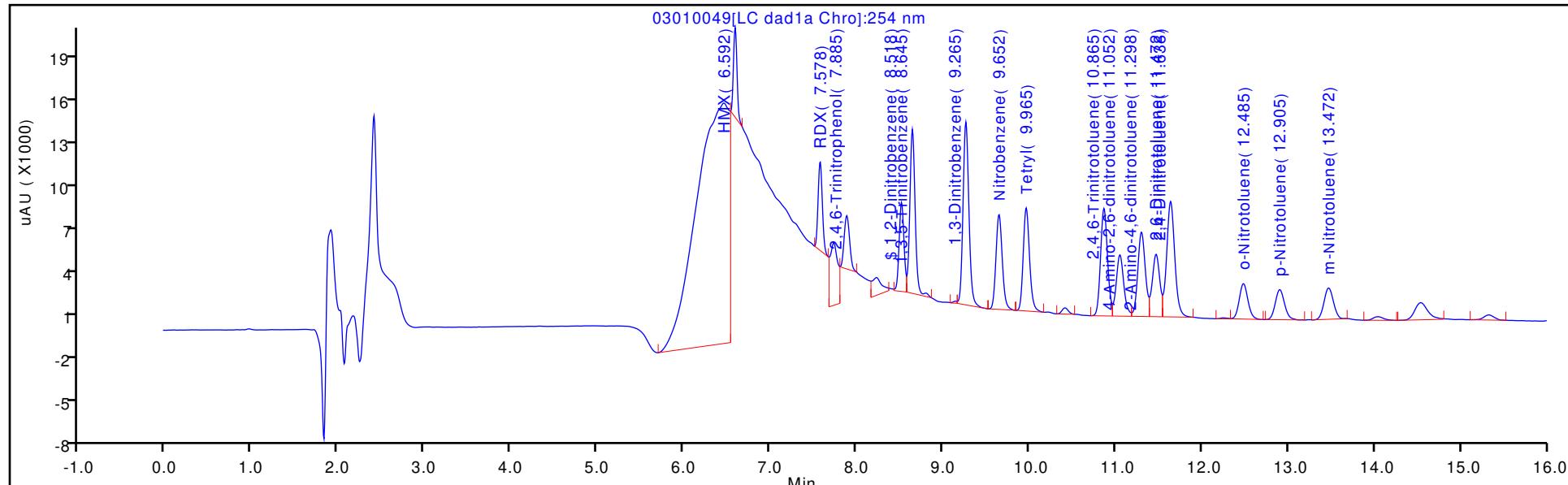
Report Date: 02-Mar-2022 13:06:26

Chrom Revision: 2.3 16-Feb-2022 17:52:00

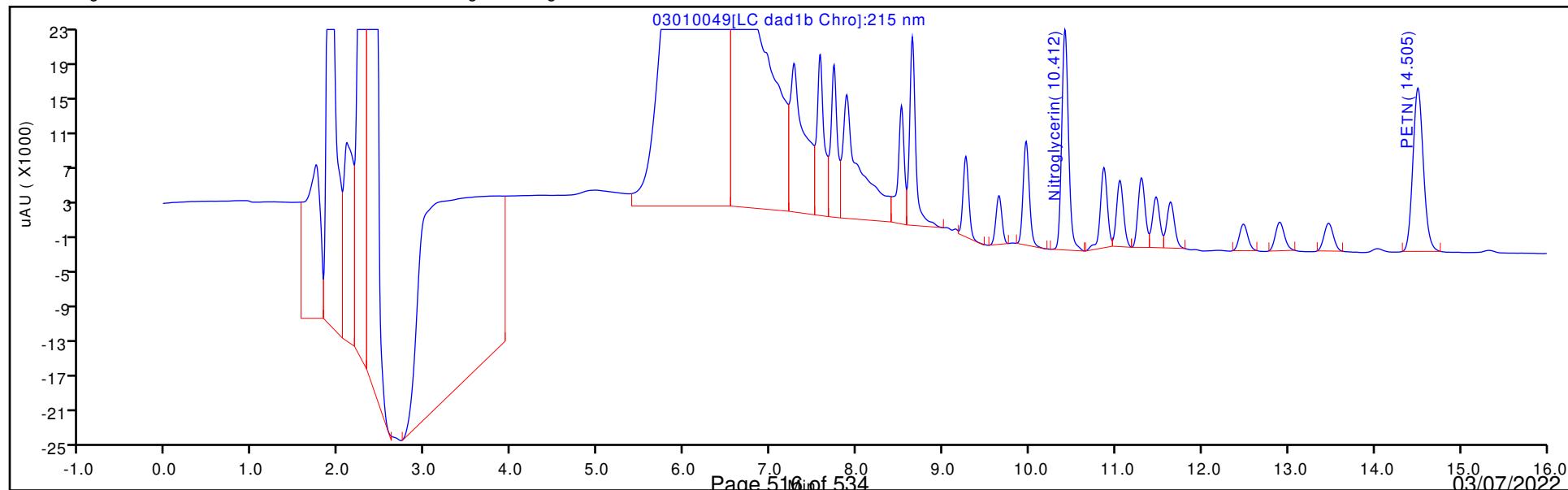
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010049.d  
 Injection Date: 02-Mar-2022 07:01:02 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-159130-B-2-B MSD Operator ID: JZ  
 Client ID: OS003-DP08-45 Worklist Smp#: 49  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000 ALS Bottle#: 49  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Denver  
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\03010049.D  
 Lims ID: 280-159130-B-2-B MSD  
 Client ID: OS003-DP08-45  
 Sample Type: MSD  
 Inject. Date: 02-Mar-2022 07:01:02 ALS Bottle#: 49 Worklist Smp#: 49  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-159130-B-2-B  
 Misc. Info.: 280-0108907-049  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 02-Mar-2022 13:06:22 Calib Date: 05-Jan-2022 04:24:15  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040037.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1635

First Level Reviewer: zhangji Date: 02-Mar-2022 12:44:34

Compound	Amount Added	Amount Recovered	% Rec.
\$ 10 1,2-Dinitrobenzene	0.2000	0.1866	93.29

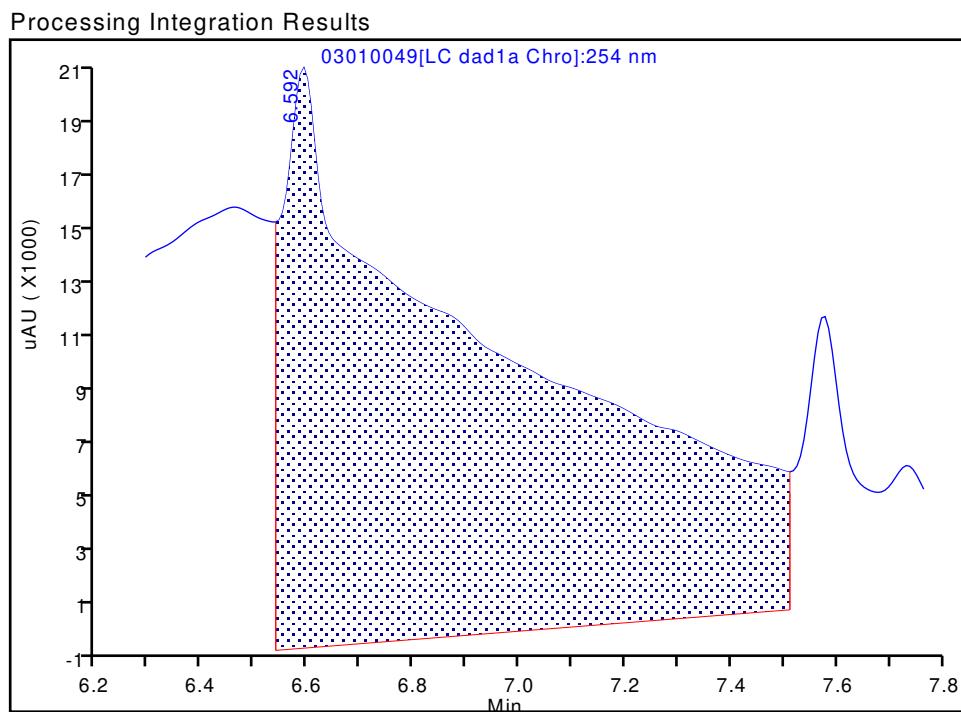
## Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010049.d  
 Injection Date: 02-Mar-2022 07:01:02 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-159130-B-2-B MSD  
 Client ID: OS003-DP08-45  
 Operator ID: JZ ALS Bottle#: 49 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

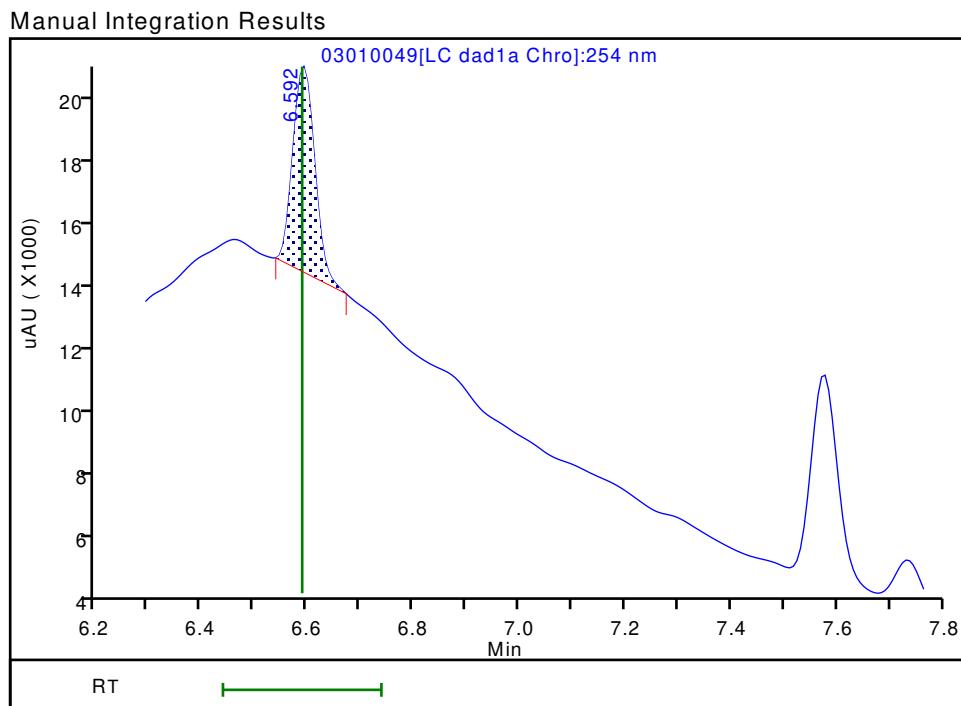
**4 HMX, CAS: 2691-41-0**

Signal: 1

RT: 6.59  
 Area: 585941  
 Amount: 6.989867  
 Amount Units: ug/mL



RT: 6.59  
 Area: 17113  
 Amount: 0.204146  
 Amount Units: ug/mL



Reviewer: zhangji, 02-Mar-2022 12:44:21

Audit Action: Manually Integrated

Audit Reason: Baseline

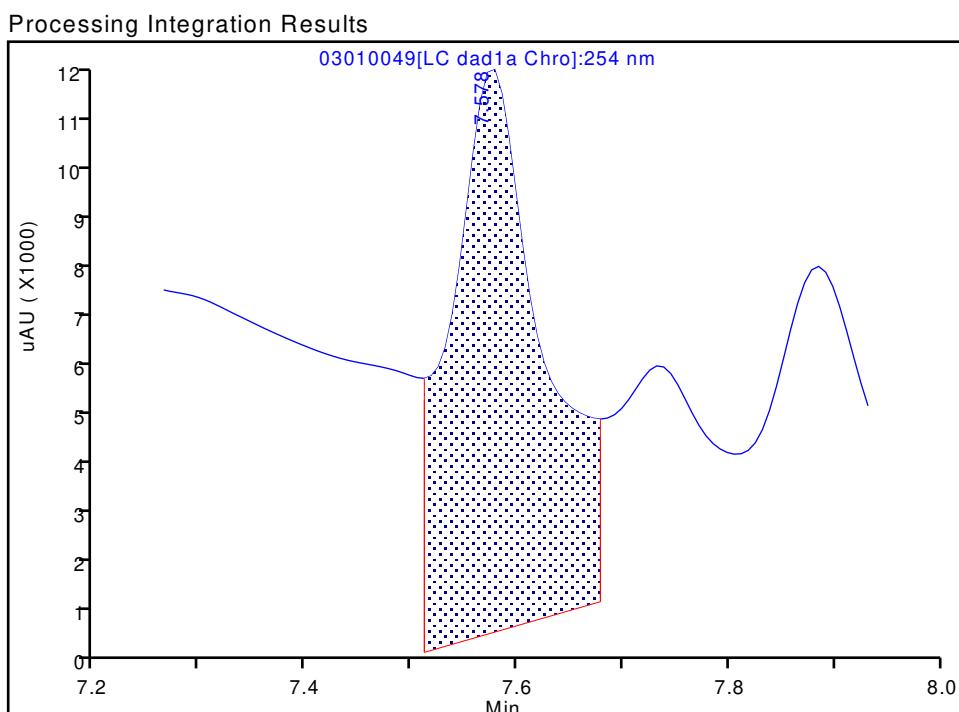
## Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010049.d  
 Injection Date: 02-Mar-2022 07:01:02 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-159130-B-2-B MSD  
 Client ID: OS003-DP08-45  
 Operator ID: JZ ALS Bottle#: 49 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

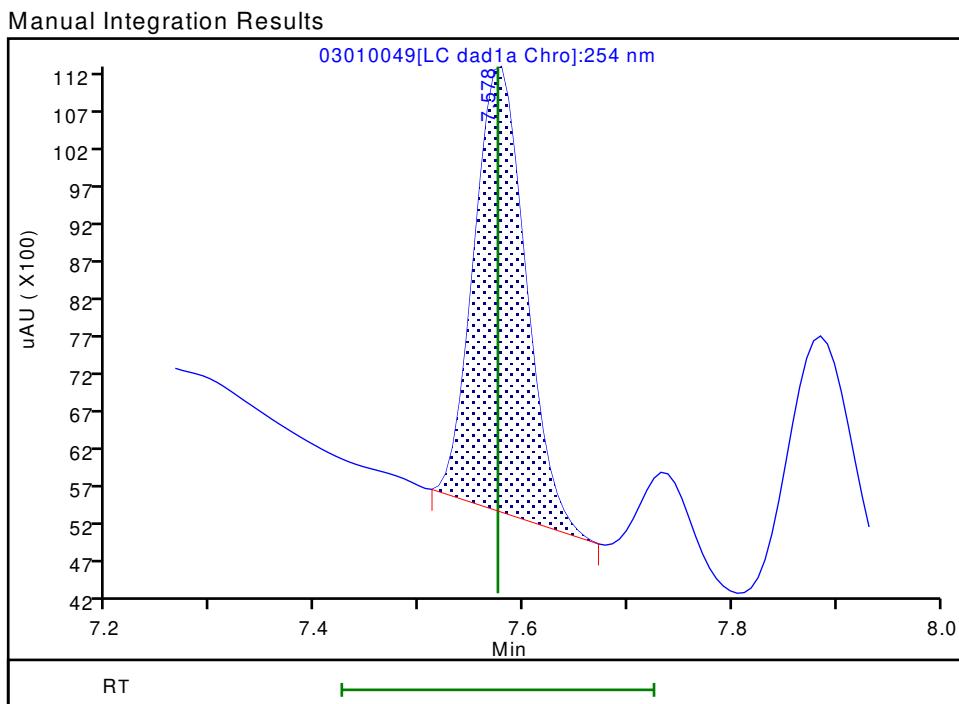
**8 RDX, CAS: 121-82-4**

Signal: 1

RT: 7.58  
 Area: 61467  
 Amount: 0.593258  
 Amount Units: ug/mL



RT: 7.58  
 Area: 20284  
 Amount: 0.195774  
 Amount Units: ug/mL



Reviewer: zhangji, 02-Mar-2022 12:44:25

Audit Action: Manually Integrated

Audit Reason: Baseline

FORM I  
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver Job No.: 280-159130-1  
SDG No.:  
Client Sample ID: OS003-DP08-45 MSD Lab Sample ID: 280-159130-2 MSD  
Matrix: Water Lab File ID: 03010051.D  
Analysis Method: 8330A Date Collected: 02/23/2022 10:05  
Extraction Method: 3535 Date Extracted: 03/01/2022 11:26  
Sample wt/vol: 481 (mL) Date Analyzed: 03/02/2022 07:46  
Con. Extract Vol.: 5 (mL) Dilution Factor: 1  
Injection Volume: 100 (uL) GC Column: UltraCarb5uODS ID: 4.6 (mm)  
% Moisture:  
Analysis Batch No.: 567371 GPC Cleanup: (Y/N) N  
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
5755-27-1	MNX	2.48	M	2.1	0.42	0.16

Eurofins Denver  
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\03010051.D  
 Lims ID: 280-159130-A-2-C MSD  
 Client ID: OS003-DP08-45  
 Sample Type: MSD  
 Inject. Date: 02-Mar-2022 07:46:57 ALS Bottle#: 51 Worklist Smp#: 51  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-159130-A-2-C  
 Misc. Info.: 280-0108907-051  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 02-Mar-2022 13:06:22 Calib Date: 05-Jan-2022 04:24:15  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040037.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1635

First Level Reviewer: zhangji Date: 02-Mar-2022 12:45:13

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.468	6.472	-0.004	36425	0.2002	0.2010	M
6 DNX	1	6.788	6.792	-0.004	26399	0.2002	0.1911	M
7 MNX	1	7.195	7.206	-0.011	30035	0.2334	0.2384	M
\$ 10 1,2-Dinitrobenzene	1	8.522	8.515	0.007	24941	0.2000	0.2000	

### QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Report Date: 02-Mar-2022 13:06:28

Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\\denver\\chromdata\\chhplc\_x\\20220301-108907.b\\03010051.d

Injection Date: 02-Mar-2022 07:46:57

Instrument ID: CHHPLC\_X3

Operator ID: JZ

Lims ID: 280-159130-A-2-C MSD

Worklist Smp#: 51

Client ID: OS003-DP08-45

Injection Vol: 100.0 ul

Dil. Factor: 1.0000

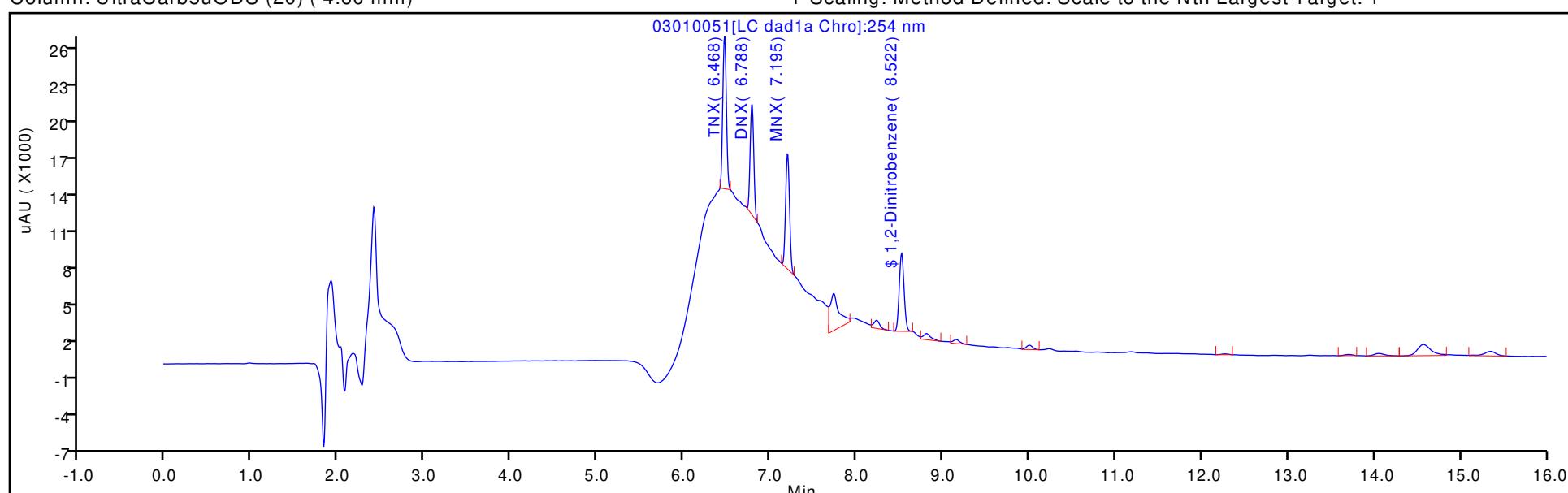
ALS Bottle#: 51

Method: 8330\_X3

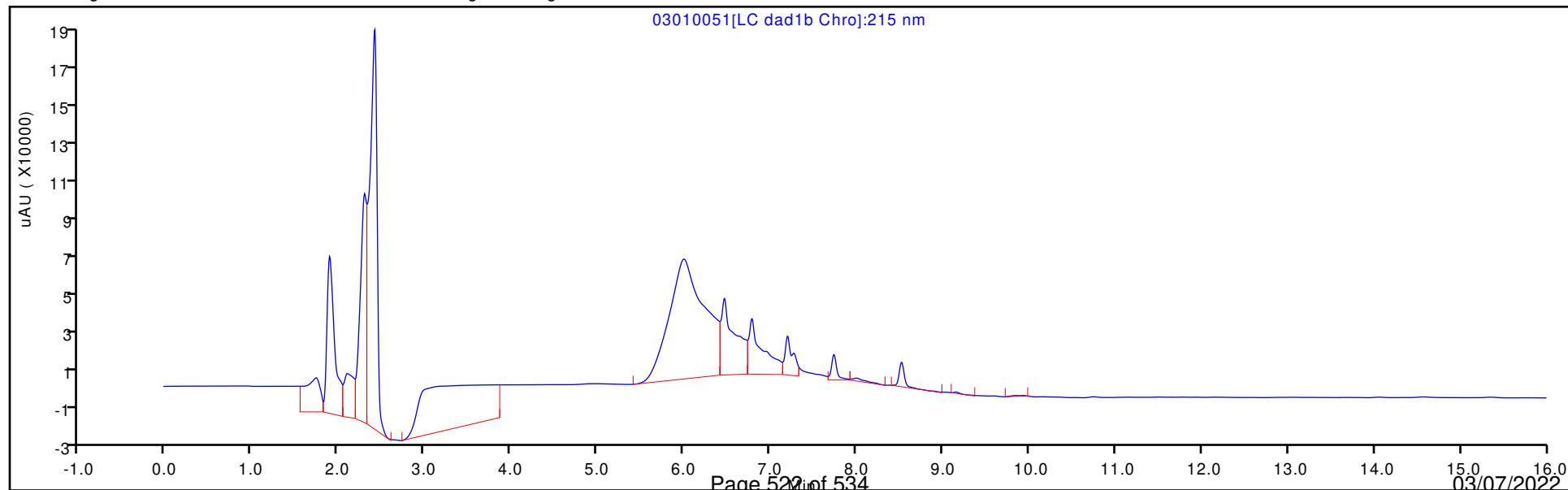
Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) ( 4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Denver  
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\03010051.D  
 Lims ID: 280-159130-A-2-C MSD  
 Client ID: OS003-DP08-45  
 Sample Type: MSD  
 Inject. Date: 02-Mar-2022 07:46:57 ALS Bottle#: 51 Worklist Smp#: 51  
 Injection Vol: 100.0 ul Dil. Factor: 1.0000  
 Sample Info: 280-159130-A-2-C  
 Misc. Info.: 280-0108907-051  
 Operator ID: JZ Instrument ID: CHHPLC\_X3  
 Method: \\chromfs\Denver\ChromData\CHHPLC\_X\20220301-108907.b\8330\_X3.m  
 Limit Group: GCSV - 8330  
 Last Update: 02-Mar-2022 13:06:22 Calib Date: 05-Jan-2022 04:24:15  
 Integrator: Falcon  
 Quant Method: External Standard Quant By: Initial Calibration  
 Last ICal File: \\chromfs\Denver\ChromData\CHHPLC\_X\20220104-107731.b\01040037.D  
 Column 1 : UltraCarb5uODS (20) ( 4.60 mm) Det: LC DAD1B, 254 nm  
 Process Host: CTX1635

First Level Reviewer: zhangji Date: 02-Mar-2022 12:45:13

Compound	Amount Added	Amount Recovered	% Rec.
\$ 10 1,2-Dinitrobenzene	0.2000	0.2000	100.01

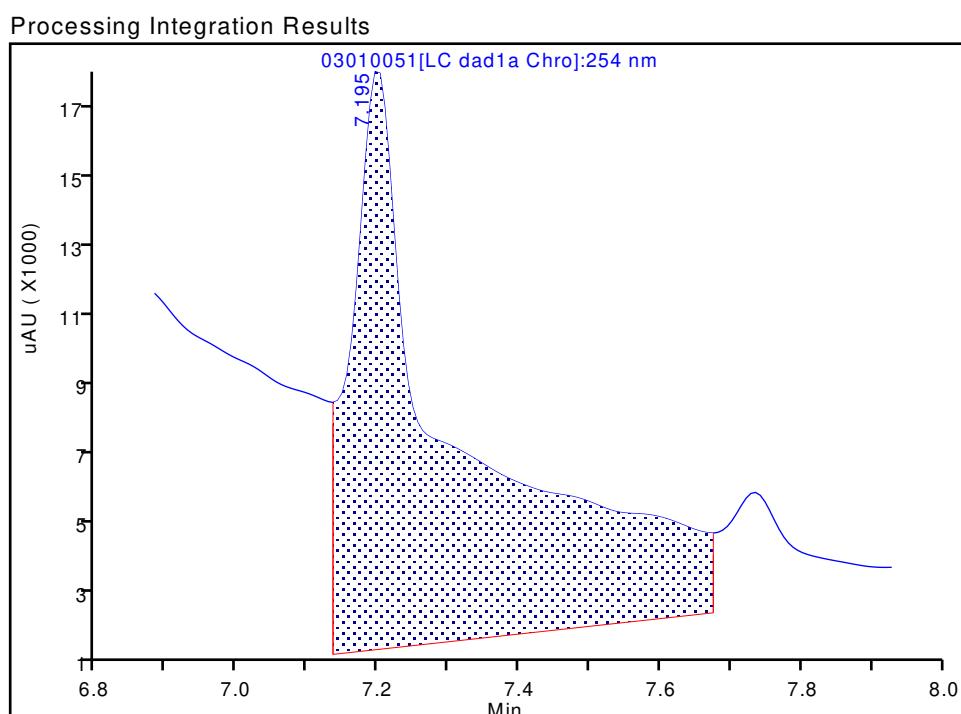
## Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc\_x\20220301-108907.b\03010051.d  
 Injection Date: 02-Mar-2022 07:46:57 Instrument ID: CHHPLC\_X3  
 Lims ID: 280-159130-A-2-C MSD  
 Client ID: OS003-DP08-45  
 Operator ID: JZ ALS Bottle#: 51 Worklist Smp#: 51  
 Injection Vol: 100.0 uL Dil. Factor: 1.0000  
 Method: 8330\_X3 Limit Group: GCSV - 8330  
 Column: UltraCarb5uODS (20) ( 4.60 mm) Detector LC DAD1B, 254 nm

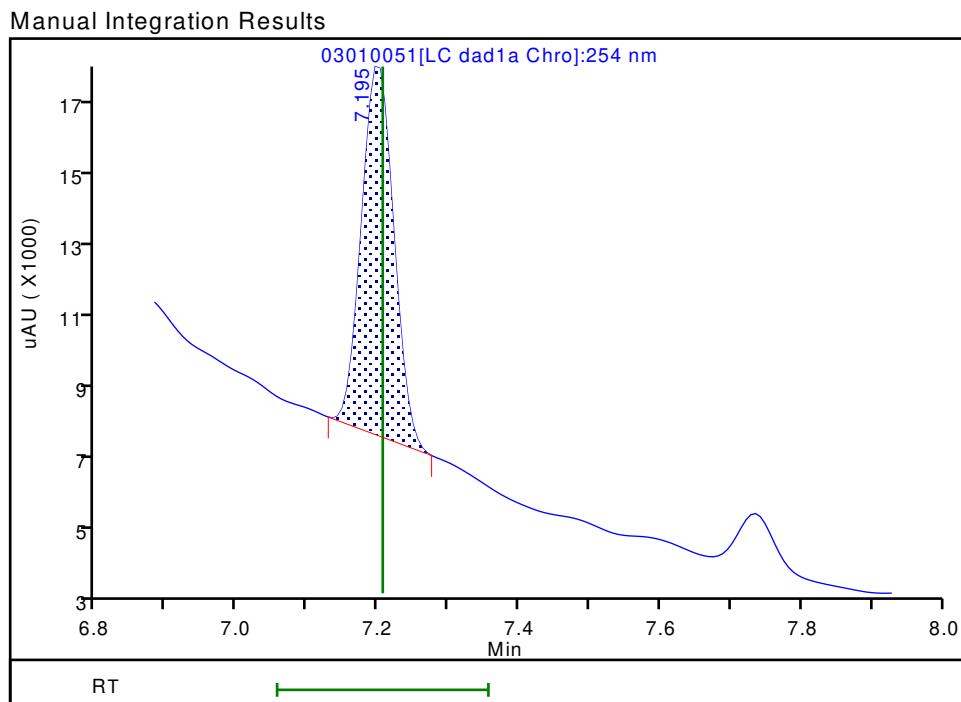
7 MNX, CAS: 5755-27-1

Signal: 1

RT: 7.20  
 Area: 169747  
 Amount: 1.347247  
 Amount Units: ug/mL



RT: 7.20  
 Area: 30035  
 Amount: 0.238382  
 Amount Units: ug/mL



Reviewer: zhangji, 02-Mar-2022 12:45:11

Audit Action: Manually Integrated

Audit Reason: Baseline

## HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver

Job No.: 280-159130-1

SDG No.:

Instrument ID: CHHPLC\_X3

Start Date: 01/04/2022 18:28

Analysis Batch Number: 562503

End Date: 01/05/2022 04:47

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-562503/11		01/04/2022 18:28	1	01040011.D	UltraCarb5uODS 4.6 (mm)
IC 280-562503/12		01/04/2022 18:51	1	01040012.D	UltraCarb5uODS 4.6 (mm)
IC 280-562503/13		01/04/2022 19:13	1	01040013.D	UltraCarb5uODS 4.6 (mm)
IC 280-562503/14		01/04/2022 19:36	1	01040014.D	UltraCarb5uODS 4.6 (mm)
IC 280-562503/15		01/04/2022 19:59	1	01040015.D	UltraCarb5uODS 4.6 (mm)
IC 280-562503/16		01/04/2022 20:22	1	01040016.D	UltraCarb5uODS 4.6 (mm)
IC 280-562503/17		01/04/2022 20:45	1	01040017.D	UltraCarb5uODS 4.6 (mm)
IC 280-562503/18		01/04/2022 21:08	1	01040018.D	UltraCarb5uODS 4.6 (mm)
IC 280-562503/19		01/04/2022 21:31	1	01040019.D	UltraCarb5uODS 4.6 (mm)
ICV 280-562503/20		01/04/2022 21:54	1	01040020.D	UltraCarb5uODS 4.6 (mm)
IC 280-562503/21		01/04/2022 22:17	1		UltraCarb5uODS 4.6 (mm)
IC 280-562503/22		01/04/2022 22:40	1		UltraCarb5uODS 4.6 (mm)
IC 280-562503/23		01/04/2022 23:03	1		UltraCarb5uODS 4.6 (mm)
IC 280-562503/24		01/04/2022 23:26	1		UltraCarb5uODS 4.6 (mm)
IC 280-562503/25		01/04/2022 23:49	1		UltraCarb5uODS 4.6 (mm)
IC 280-562503/26		01/05/2022 00:11	1		UltraCarb5uODS 4.6 (mm)
IC 280-562503/27		01/05/2022 00:34	1		UltraCarb5uODS 4.6 (mm)
IC 280-562503/28		01/05/2022 00:57	1		UltraCarb5uODS 4.6 (mm)
ICV 280-562503/29		01/05/2022 01:20	1		UltraCarb5uODS 4.6 (mm)
IC 280-562503/30		01/05/2022 01:43	1	01040030.D	UltraCarb5uODS 4.6 (mm)
IC 280-562503/31		01/05/2022 02:06	1	01040031.D	UltraCarb5uODS 4.6 (mm)
IC 280-562503/32		01/05/2022 02:29	1	01040032.D	UltraCarb5uODS 4.6 (mm)
IC 280-562503/33		01/05/2022 02:52	1	01040033.D	UltraCarb5uODS 4.6 (mm)
IC 280-562503/34		01/05/2022 03:15	1	01040034.D	UltraCarb5uODS 4.6 (mm)
IC 280-562503/35		01/05/2022 03:38	1	01040035.D	UltraCarb5uODS 4.6 (mm)
IC 280-562503/36		01/05/2022 04:01	1	01040036.D	UltraCarb5uODS 4.6 (mm)
IC 280-562503/37		01/05/2022 04:24	1	01040037.D	UltraCarb5uODS 4.6 (mm)
ICV 280-562503/38		01/05/2022 04:47	1	01040038.D	UltraCarb5uODS 4.6 (mm)

## HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver

Job No.: 280-159130-1

SDG No.:

Instrument ID: CHHPLC\_X3

Start Date: 03/02/2022 03:57

Analysis Batch Number: 567371

End Date: 03/02/2022 14:39

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-567371/41		03/02/2022 03:57	1	03010041.D	UltraCarb5uODS 4.6 (mm)
CCV 280-567371/42		03/02/2022 04:20	1	03010042.D	UltraCarb5uODS 4.6 (mm)
MB 280-567330/1-A		03/02/2022 04:43	1	03010043.D	UltraCarb5uODS 4.6 (mm)
LCS 280-567330/2-A		03/02/2022 05:06	1	03010044.D	UltraCarb5uODS 4.6 (mm)
LCS 280-567330/3-A		03/02/2022 05:29	1	03010045.D	UltraCarb5uODS 4.6 (mm)
280-159130-1	OS003-DP08-35	03/02/2022 05:52	1	03010046.D	UltraCarb5uODS 4.6 (mm)
280-159130-2	OS003-DP08-45	03/02/2022 06:15	1	03010047.D	UltraCarb5uODS 4.6 (mm)
280-159130-2 MS	OS003-DP08-45 MS	03/02/2022 06:38	1	03010048.D	UltraCarb5uODS 4.6 (mm)
280-159130-2 MSD	OS003-DP08-45 MSD	03/02/2022 07:01	1	03010049.D	UltraCarb5uODS 4.6 (mm)
280-159130-2 MS	OS003-DP08-45 MS	03/02/2022 07:23	1	03010050.D	UltraCarb5uODS 4.6 (mm)
280-159130-2 MSD	OS003-DP08-45 MSD	03/02/2022 07:46	1	03010051.D	UltraCarb5uODS 4.6 (mm)
280-159130-3	OS001-DP08-25	03/02/2022 08:09	1	03010052.D	UltraCarb5uODS 4.6 (mm)
CCV 280-567371/53		03/02/2022 08:32	1	03010053.D	UltraCarb5uODS 4.6 (mm)
CCV 280-567371/54		03/02/2022 08:55	1	03010054.D	UltraCarb5uODS 4.6 (mm)
280-159130-4	OS501-DP08-25	03/02/2022 09:18	1	03010055.D	UltraCarb5uODS 4.6 (mm)
280-159130-5	OS001-DP08-35	03/02/2022 09:41	1	03010056.D	UltraCarb5uODS 4.6 (mm)
280-159130-6	OS001-DP08-45	03/02/2022 10:04	1	03010057.D	UltraCarb5uODS 4.6 (mm)
ZZZZZ		03/02/2022 10:27	1		UltraCarb5uODS 4.6 (mm)
ZZZZZ		03/02/2022 10:50	1		UltraCarb5uODS 4.6 (mm)
ZZZZZ		03/02/2022 11:13	1		UltraCarb5uODS 4.6 (mm)
ZZZZZ		03/02/2022 11:36	1		UltraCarb5uODS 4.6 (mm)
ZZZZZ		03/02/2022 11:59	1		UltraCarb5uODS 4.6 (mm)
ZZZZZ		03/02/2022 12:22	1		UltraCarb5uODS 4.6 (mm)
ZZZZZ		03/02/2022 12:45	1		UltraCarb5uODS 4.6 (mm)
CCV 280-567371/65		03/02/2022 13:08	1	03010065.D	UltraCarb5uODS 4.6 (mm)
CCV 280-567371/66		03/02/2022 13:31	1	03010066.D	UltraCarb5uODS 4.6 (mm)
ZZZZZ		03/02/2022 13:54	5		UltraCarb5uODS 4.6 (mm)
CCV 280-567371/69		03/02/2022 14:16	1		UltraCarb5uODS 4.6 (mm)
CCV 280-567371/70		03/02/2022 14:39	1		UltraCarb5uODS 4.6 (mm)

## HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver

Job No.: 280-159130-1

SDG No.:

Instrument ID: CHHPLC\_X5

Start Date: 03/02/2022 21:22

Analysis Batch Number: 567560

End Date: 03/03/2022 07:54

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-567560/10		03/02/2022 21:22	1	03020010.D	Luna-phenylhex 4.6 (mm)
IC 280-567560/11		03/02/2022 21:57	1	03020011.D	Luna-phenylhex 4.6 (mm)
IC 280-567560/12		03/02/2022 22:32	1	03020012.D	Luna-phenylhex 4.6 (mm)
IC 280-567560/13		03/02/2022 23:07	1	03020013.D	Luna-phenylhex 4.6 (mm)
IC 280-567560/14		03/02/2022 23:42	1	03020014.D	Luna-phenylhex 4.6 (mm)
IC 280-567560/15		03/03/2022 00:17	1	03020015.D	Luna-phenylhex 4.6 (mm)
IC 280-567560/16		03/03/2022 00:53	1	03020016.D	Luna-phenylhex 4.6 (mm)
IC 280-567560/17		03/03/2022 01:28	1	03020017.D	Luna-phenylhex 4.6 (mm)
IC 280-567560/18		03/03/2022 02:03	1	03020018.D	Luna-phenylhex 4.6 (mm)
ICV 280-567560/19		03/03/2022 02:38	1	03020019.D	Luna-phenylhex 4.6 (mm)
IC 280-567560/20		03/03/2022 03:13	1	03020020.D	Luna-phenylhex 4.6 (mm)
IC 280-567560/21		03/03/2022 03:49	1	03020021.D	Luna-phenylhex 4.6 (mm)
IC 280-567560/22		03/03/2022 04:24	1	03020022.D	Luna-phenylhex 4.6 (mm)
IC 280-567560/23		03/03/2022 04:59	1	03020023.D	Luna-phenylhex 4.6 (mm)
IC 280-567560/24		03/03/2022 05:34	1	03020024.D	Luna-phenylhex 4.6 (mm)
IC 280-567560/25		03/03/2022 06:09	1	03020025.D	Luna-phenylhex 4.6 (mm)
IC 280-567560/26		03/03/2022 06:44	1	03020026.D	Luna-phenylhex 4.6 (mm)
IC 280-567560/27		03/03/2022 07:19	1	03020027.D	Luna-phenylhex 4.6 (mm)
ICV 280-567560/28		03/03/2022 07:54	1	03020028.D	Luna-phenylhex 4.6 (mm)

## HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver

Job No.: 280-159130-1

SDG No.:

Instrument ID: CHHPLC\_X5

Start Date: 03/03/2022 15:13

Analysis Batch Number: 567645

End Date: 03/04/2022 07:36

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-567645/7		03/03/2022 15:13	1	03030007.D	Luna-phenylhex 4.6 (mm)
CCV 280-567645/8		03/03/2022 15:48	1	03030008.D	Luna-phenylhex 4.6 (mm)
ZZZZZ		03/03/2022 16:23	1		Luna-phenylhex 4.6 (mm)
ZZZZZ		03/03/2022 16:58	1		Luna-phenylhex 4.6 (mm)
ZZZZZ		03/03/2022 17:34	1		Luna-phenylhex 4.6 (mm)
280-159130-1	OS003-DP08-35	03/03/2022 18:09	1	03030013.D	Luna-phenylhex 4.6 (mm)
ZZZZZ		03/03/2022 18:44	1		Luna-phenylhex 4.6 (mm)
ZZZZZ		03/03/2022 19:19	1		Luna-phenylhex 4.6 (mm)
ZZZZZ		03/03/2022 19:54	1		Luna-phenylhex 4.6 (mm)
ZZZZZ		03/03/2022 20:29	1		Luna-phenylhex 4.6 (mm)
ZZZZZ		03/03/2022 21:04	1		Luna-phenylhex 4.6 (mm)
280-159130-3	OS001-DP08-25	03/03/2022 21:39	1	03030019.D	Luna-phenylhex 4.6 (mm)
CCV 280-567645/20		03/03/2022 22:14	1	03030020.D	Luna-phenylhex 4.6 (mm)
CCV 280-567645/21		03/03/2022 22:49	1	03030021.D	Luna-phenylhex 4.6 (mm)
280-159130-4	OS501-DP08-25	03/03/2022 23:24	1	03030022.D	Luna-phenylhex 4.6 (mm)
280-159130-5	OS001-DP08-35	03/03/2022 23:59	1	03030023.D	Luna-phenylhex 4.6 (mm)
280-159130-6	OS001-DP08-45	03/04/2022 00:35	1	03030024.D	Luna-phenylhex 4.6 (mm)
ZZZZZ		03/04/2022 01:10	1		Luna-phenylhex 4.6 (mm)
ZZZZZ		03/04/2022 01:45	1		Luna-phenylhex 4.6 (mm)
ZZZZZ		03/04/2022 02:20	1		Luna-phenylhex 4.6 (mm)
ZZZZZ		03/04/2022 02:55	1		Luna-phenylhex 4.6 (mm)
ZZZZZ		03/04/2022 03:30	1		Luna-phenylhex 4.6 (mm)
ZZZZZ		03/04/2022 04:06	1		Luna-phenylhex 4.6 (mm)
ZZZZZ		03/04/2022 04:41	1		Luna-phenylhex 4.6 (mm)
CCV 280-567645/32		03/04/2022 05:16	1	03030032.D	Luna-phenylhex 4.6 (mm)
CCV 280-567645/33		03/04/2022 05:51	1	03030033.D	Luna-phenylhex 4.6 (mm)
ZZZZZ		03/04/2022 06:26	5		Luna-phenylhex 4.6 (mm)
CCV 280-567645/35		03/04/2022 07:01	1		Luna-phenylhex 4.6 (mm)
CCV 280-567645/36		03/04/2022 07:36	1		Luna-phenylhex 4.6 (mm)

## HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins Denver

Job No.: 280-159130-1

SDG No.:

Batch Number: 567330

Batch Start Date: 03/01/22 11:26

Batch Analyst: Cook, Ashleigh R

Batch Method: 3535

Batch End Date: 03/01/22 14:49

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	8330 LCS 00112	8330 OP DMT 00013
MB 280-567330/1		3535, 8330A				500 mL	5 mL		
LCS 280-567330/2		3535, 8330A				500 mL	5 mL	0.1 mL	
LCS 280-567330/3		3535, 8330A				500 mL	5 mL		0.1 mL
280-159130-B-1	OS003-DP08-35	3535, 8330A	T	769.6 g	287.9 g	481.7 mL	5 mL		
280-159130-A-2	OS003-DP08-45	3535, 8330A	T	776.8 g	285.5 g	491.3 mL	5 mL		
280-159130-B-2	OS003-DP08-45	3535, 8330A	T	773.9 g	296.7 g	477.2 mL	5 mL	0.1 mL	
MSD	OS003-DP08-45	3535, 8330A	T	769.6 g	288.3 g	481.3 mL	5 mL	0.1 mL	
280-159130-B-2	OS003-DP08-45	3535, 8330A	T	764.9 g	289.0 g	475.9 mL	5 mL		0.1 mL
MS	OS003-DP08-45	3535, 8330A	T	770.9 g	289.9 g	481 mL	5 mL		0.1 mL
280-159130-A-2	OS003-DP08-45	3535, 8330A	T	789.8 g	288.3 g	501.5 mL	5 mL		
280-159130-B-3	OS001-DP08-25	3535, 8330A	T	791.2 g	286.5 g	504.7 mL	5 mL		
280-159130-B-4	OS501-DP08-25	3535, 8330A	T	763.8 g	287.4 g	476.4 mL	5 mL		
280-159130-A-5	OS001-DP08-35	3535, 8330A	T	785.8 g	288.1 g	497.7 mL	5 mL		
280-159130-A-6	OS001-DP08-45	3535, 8330A	T						

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330 Surrogate 00127	AnalysisComment				
MB 280-567330/1		3535, 8330A		0.1 mL					
LCS 280-567330/2		3535, 8330A		0.1 mL					
LCS 280-567330/3		3535, 8330A		0.1 mL					
280-159130-B-1	OS003-DP08-35	3535, 8330A	T	0.1 mL					
280-159130-A-2	OS003-DP08-45	3535, 8330A	T	0.1 mL					
280-159130-B-2	OS003-DP08-45	3535, 8330A	T	0.1 mL	8330 LCS				
MSD	OS003-DP08-45	3535, 8330A	T	0.1 mL	8330 LCS				
280-159130-A-2	OS003-DP08-45	3535, 8330A	T	0.1 mL	DMT spike				
MS	OS003-DP08-45	3535, 8330A	T	0.1 mL	DMT spike				
MSD	OS003-DP08-45	3535, 8330A	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

## HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins Denver

Job No.: 280-159130-1

SDG No.:

Batch Number: 567330

Batch Start Date: 03/01/22 11:26

Batch Analyst: Cook, Ashleigh R

Batch Method: 3535

Batch End Date: 03/01/22 14:49

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330Surrogate 00127	AnalysisComment				
280-159130-B-3	OS001-DP08-25	3535, 8330A	T	0.1 mL					
280-159130-B-4	OS501-DP08-25	3535, 8330A	T	0.1 mL					
280-159130-A-5	OS001-DP08-35	3535, 8330A	T	0.1 mL					
280-159130-A-6	OS001-DP08-45	3535, 8330A	T	0.1 mL					

## Batch Notes

First Start time	03/01/2022 11:40
First End time	03/01/2022 14:00
SPE Cartridge Type	Porapak RDX
SPE Cartridge Lot ID	004838C18A
Balance ID	24350888
Pipette/Syringe/Dispenser ID	JiJi, Soot, DOD
Solvent Name	Acetonitrile
Solvent Lot #	Acetonitrile_0055
Rinse Solvent Name	0.1%AAinACN
Rinse Solvent Lot	0.1%AAinACN_00178
Acid Name	Ca2Cl
Acid ID	Ca2Cl_Sol_00079
Analyst ID - Spike Analyst	ARC
Analyst ID - Spike Witness Analyst	Reviewer: SMQ
Batch Comment	DV-OP-0017; Mantel: A

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

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# **Shipping and Receiving Documents**

12230 Shamrock Plaza Suite 300 Omaha, NE 68154 (402) 334-8181 fax (402) 334-6984

**CHAIN OF CUSTODY RECORDED**

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 standard TAT
Sampler(s): <b>K6 B6 BN</b>								
Sample Date	Type	Sample Identification		Matrix No.	Containers	Method/Technique (FRSK 175)		
Time	Comp.	Grab	03/08/18 - DP08-35	Ag	2	DOC (9060A)*	6°C	
3.23.18	DP05	X	03/08/18 - DP08-45	Ag	2	SO <sub>4</sub> (9054), Alkalinity (22081)		
3.23.18	DP05	X	03/08/18 - DP08-45	Ag	4	Si(9034)		
<i>Duff</i>								
Signature _____								
280-158130 Chain of Custody _____								
Page 532 of 534								
Bar Code:								
Relinquished by: <i>[Signature]</i>								
Received by: <i>[Signature]</i>								
Relinquished by: <i>[Signature]</i>								
Lab Address: TestAmerica Lab, Inc. Attn: Patrick McEntee 4935 Yarrow St. Arvada, CO 80002 (303) 736-0107								
Special Instructions: * Filter groundwater sample before analyzing for DOC								
Shipping Details								
Date: 3-29-21	Time: 1620	Method of Shipment: Airbill Number: <b>535539185700</b>						
Comments:								

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White copy - Laboratory      Yellow copy - Laboratory      Pink copy - Sammler

2020600

130 Shattocks Plaza Suite 100, Omaha, NE 68102-3141-134-1934

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Project Name: CHAAP 2019  
AECOM Project Number: 60563355  
Analytical Parameters  
Bill to: Bruce Engineering

Project Location: AECOM Project Manager: Dean Converse  
Project ID: 32040 OA#:

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Sample Identification

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2020601

## Login Sample Receipt Checklist

Client: Brice Environmental Services, Corp

Job Number: 280-159130-1

**Login Number: 159130**

**List Source: Eurofins 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?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	