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ANALYTICAL REPORT

PREPARED FOR

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Picatinny Arsenal
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Generated 10/15/2024 4:48 PM

JOB DESCRIPTION

RVAAP FWGW

JOB NUMBER

280-197447-1

Eurofins Denver
4955 Yarrow Street
Arvada CO 80002

See page two for job notes and contact information.

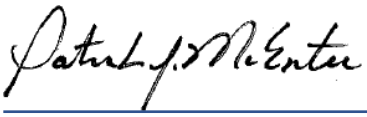
Eurofins Denver

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

Authorization



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Qualifiers

HPLC/IC

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
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

Job Narrative
280-197447-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Receipt
The samples were received on 10/2/2024 9:10 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 0.4°C and 0.4°C.

Receipt Exceptions
The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): SCFmw-004-240901-GW (280-197447-1[MS]). One of the container labels list LL1mw-087-240901-GW-MSD, while the COC lists SCFmw-004-240901-GW-MSD. The times match. Logged per the COC.

Method 8330B - Nitroaromatics and Nitramines (HPLC)
Samples SCFmw-004-240901-GW (280-197447-1), SCFmw-004-240901-GW (280-197447-1MS), SCFmw-004-240901-GW (280-197447-1MSD), SCFmw-004-240902-GW (280-197447-2), LL1mw-087-240901-GW (280-197447-3), LL1mw-086-240901-GW (280-197447-4), LL1mw-091-240901-GW (280-197447-5), LL1mw-091-240902-GW (280-197447-6), LL1mw-064-240901-GW (280-197447-7) and FWGmw-007-240901-GW (280-197447-8) were analyzed for Nitroaromatics and Nitramines (HPLC). The samples were prepared on 10/4/2024, 10/7/2024 and 10/11/2024 and analyzed on 10/8/2024, 10/9/2024, 10/10/2024, 10/11/2024 and 10/12/2024.

In preparation batch 280-669777, the following samples required filtration to reduce matrix interferences: LL1mw-087-240901-GW (280-197447-3), LL1mw-086-240901-GW (280-197447-4), LL1mw-091-240901-GW (280-197447-5), LL1mw-091-240902-GW (280-197447-6) and LL1mw-064-240901-GW (280-197447-7).

In preparation batch 280-669777, the following samples: LL1mw-086-240901-GW (280-197447-4), LL1mw-091-240901-GW (280-197447-5), LL1mw-091-240902-GW (280-197447-6) and LL1mw-064-240901-GW (280-197447-7) were decanted prior to preparation as sample bottles contained insufficient headspace for the addition of sodium chloride.

In preparation batch 280-669777, the following sample: LL1mw-087-240901-GW (280-197447-3) was decanted into a new container prior to preparation due to excessive sediment (gray mud) at the bottom of the sample container. Because the sample was decanted, the original sample container could not be rinsed.

The laboratory control sample (LCS) for preparation batch 280-669777 and analytical batch 280-670184 recovered outside control limits for the following analytes:m-Nitrotoluene(73-125%R) at 62%R, o-Nitrotoluene(70-127%R) at 61%R, and p-Nitrotoluene(71-127%R) at 63%R. The associated samples are impacted: SCFmw-004-240901-GW (280-197447-1), SCFmw-004-240901-GW (280-197447-1[MS]), SCFmw-004-240901-GW (280-197447-1[MSD]), SCFmw-004-240902-GW (280-197447-2), LL1mw-087-240901-GW (280-197447-3), LL1mw-086-240901-GW (280-197447-4), LL1mw-091-240901-GW (280-197447-5), LL1mw-091-240902-GW (280-197447-6) and LL1mw-064-240901-GW (280-197447-7). LCS recovered within recovery control limit for m-Nitrotoluene, o-Nitrotoluene and p-Nitrotoluene in the re-extraction which was performed outside of the holding time, but withing 2x the holding time. m-Nitrotoluene, o-Nitrotoluene and p-Nitrotoluene are ND in all associated samples in the re-extraction. The client instructed the lab to report both sets of data.

In preparation batch 280-670642, the following samples were re-prepared outside of preparation holding time due to low LCS recovery during initial extraction: SCFmw-004-240901-GW (280-197447-1), SCFmw-004-240901-GW (280-197447-1[MS]), SCFmw-004-240901-GW (280-197447-1[MSD]), SCFmw-004-240902-GW (280-197447-2), LL1mw-087-240901-GW (280-197447-3), LL1mw-086-240901-GW (280-197447-4), LL1mw-091-240901-GW (280-197447-5), LL1mw-091-240902-GW (280-197447-6) and LL1mw-064-240901-GW (280-197447-7).

In preparation batch 280-670642, the following samples required filtration to reduce matrix interferences: LL1mw-087-240901-GW (280-197447-3), LL1mw-086-240901-GW (280-197447-4), LL1mw-091-240901-GW (280-197447-5), LL1mw-091-240902-GW (280-197447-6) and LL1mw-064-240901-GW (280-197447-7).

In preparation batch 280-670642, the following samples: LL1mw-086-240901-GW (280-197447-4), LL1mw-091-240901-GW (280-197447-5) and LL1mw-064-240901-GW (280-197447-7) were decanted prior to preparation due to insufficient headspace for the addition of sodium chloride.

The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 280-669777 and analytical batch 280-670184 were outside control limits for one or more analytes. See QC Sample Results for detail.Sample matrix interference is suspected. The following samples are impacted: SCFmw-004-240901-GW (280-197447-1), SCFmw-004-240901-GW (280-197447-1[MS]), SCFmw-004-240901-GW (280-197447-1[MSD]), SCFmw-004-240902-GW (280-197447-2), LL1mw-087-240901-GW (280-197447-3), LL1mw-086-240901-GW (280-197447-4), LL1mw-091-240901-GW (280-197447-5), LL1mw-091-240902-GW (280-197447-6) and LL1mw-064-240901-GW (280-197447-7).

The %RPD between the primary and confirmation column exceeded 40% for 1,3,5-Trinitrobenzene for the following samples: LL1mw-091-240901-GW (280-197447-5) and LL1mw-091-240902-GW (280-197447-6) in preparation batch 280-669777 and analytical batch 280-670184. The results from both columns has been qualified and reported in accordance with the laboratory's QAS.

The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 280-670642 and analytical batch 280-670729 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits. The following samples are impacted: SCFmw-004-240901-GW (280-197447-1), SCFmw-004-240901-GW (280-197447-1[MS]), SCFmw-004-240901-GW (280-197447-1[MSD]), SCFmw-004-240902-GW (280-197447-2), LL1mw-087-240901-GW (280-197447-3), LL1mw-086-240901-GW (280-197447-4), LL1mw-091-240901-GW (280-197447-5), LL1mw-091-240902-GW (280-197447-6) and LL1mw-064-240901-GW (280-197447-7).

Detection Summary

Client: Leidos, Inc.
Project/Site: RVAAP FWGW

Job ID: 280-197447-1

Client Sample ID: SCFmw-004-240901-GW — Lab Sample ID: 280-197447-1

No Detections.

Client Sample ID: SCFmw-004-240902-GW — Lab Sample ID: 280-197447-2

No Detections.

Client Sample ID: LL1mw-087-240901-GW — Lab Sample ID: 280-197447-3

No Detections.

Client Sample ID: LL1mw-086-240901-GW — Lab Sample ID: 280-197447-4

No Detections.

Client Sample ID: LL1mw-091-240901-GW — Lab Sample ID: 280-197447-5

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
1,3,5-Trinitrobenzene	0.11	J M J1	0.24	0.23	0.096	ug/L	1		8330B	Total/NA
1,3,5-Trinitrobenzene	0.75	M J1	0.24	0.23	0.096	ug/L	1		8330B	Total/NA

Client Sample ID: LL1mw-091-240902-GW — Lab Sample ID: 280-197447-6

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
1,3,5-Trinitrobenzene	0.13	J M J1	0.24	0.23	0.095	ug/L	1		8330B	Total/NA
1,3,5-Trinitrobenzene	0.78	J1	0.24	0.23	0.095	ug/L	1		8330B	Total/NA

Client Sample ID: LL1mw-064-240901-GW — Lab Sample ID: 280-197447-7

No Detections.

Client Sample ID: FWGmw-007-240901-GW — Lab Sample ID: 280-197447-8

No Detections.

This Detection Summary does not include radiochemical test results.

Method: EPA 8330B - Nitroaromatics and Nitramines (HPLC)

Client Sample ID: SCFmw-004-240901-GW
Date Collected: 09/30/24 13:59
Date Received: 10/02/24 09:10

Lab Sample ID: 280-197447-1
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.22	U	0.24	0.22	0.094	ug/L		10/09/24 09:26	1
1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.041	ug/L		10/09/24 09:26	1
2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.050	ug/L		10/09/24 09:26	1
2,4-Dinitrotoluene	0.090	U	0.11	0.090	0.031	ug/L		10/09/24 09:26	1
2,6-Dinitrotoluene	0.090	U	0.11	0.090	0.045	ug/L		10/09/24 09:26	1
2-Amino-4,6-dinitrotoluene	0.11	U	0.12	0.11	0.057	ug/L		10/09/24 09:26	1
2-Nitrotoluene	0.22	U J1 Q	0.24	0.22	0.096	ug/L		10/09/24 09:26	1
3-Nitrotoluene	0.39	U M J1 Q	0.45	0.39	0.22	ug/L		10/09/24 09:26	1
4-Amino-2,6-dinitrotoluene	0.13	U	0.17	0.13	0.065	ug/L		10/09/24 09:26	1
4-Nitrotoluene	0.45	U Q	0.46	0.45	0.11	ug/L		10/09/24 09:26	1
HMX	0.22	U	0.24	0.22	0.098	ug/L		10/09/24 09:26	1
Nitrobenzene	0.22	U	0.24	0.22	0.10	ug/L		10/09/24 09:26	1
Nitroglycerin	2.2	U	2.4	2.2	1.0	ug/L		10/09/24 09:26	1
PETN	1.1	U	1.2	1.1	0.50	ug/L		10/09/24 09:26	1
RDX	0.22	U	0.24	0.22	0.058	ug/L		10/09/24 09:26	1
Tetryl	0.11	U	0.12	0.11	0.036	ug/L		10/09/24 09:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*95*	*M*	*83 - 119*	*10/04/24 12:25*	*10/09/24 09:26*	*1*

Client Sample ID: SCFmw-004-240902-GW
Date Collected: 09/30/24 13:59
Date Received: 10/02/24 09:10

Lab Sample ID: 280-197447-2
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.22	U	0.23	0.22	0.094	ug/L		10/09/24 10:32	1
1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.041	ug/L		10/09/24 10:32	1
2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.050	ug/L		10/09/24 10:32	1
2,4-Dinitrotoluene	0.089	U	0.11	0.089	0.030	ug/L		10/09/24 10:32	1
2,6-Dinitrotoluene	0.089	U	0.11	0.089	0.045	ug/L		10/09/24 10:32	1
2-Amino-4,6-dinitrotoluene	0.11	U	0.12	0.11	0.056	ug/L		10/09/24 10:32	1
2-Nitrotoluene	0.22	U Q	0.23	0.22	0.095	ug/L		10/09/24 10:32	1
3-Nitrotoluene	0.39	U M Q	0.44	0.39	0.22	ug/L		10/09/24 10:32	1
4-Amino-2,6-dinitrotoluene	0.13	U	0.17	0.13	0.064	ug/L		10/09/24 10:32	1
4-Nitrotoluene	0.44	U Q	0.46	0.44	0.11	ug/L		10/09/24 10:32	1
HMX	0.22	U M	0.23	0.22	0.097	ug/L		10/09/24 10:32	1
Nitrobenzene	0.22	U	0.23	0.22	0.10	ug/L		10/09/24 10:32	1
Nitroglycerin	2.2	U M	2.3	2.2	1.0	ug/L		10/09/24 10:32	1
PETN	1.1	U	1.2	1.1	0.50	ug/L		10/09/24 10:32	1
RDX	0.22	U	0.23	0.22	0.057	ug/L		10/09/24 10:32	1
Tetryl	0.11	U	0.12	0.11	0.035	ug/L		10/09/24 10:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*85*	*M*	*83 - 119*	*10/04/24 12:25*	*10/09/24 10:32*	*1*

Client Sample ID: LL1mw-087-240901-GW
Date Collected: 10/01/24 08:53
Date Received: 10/02/24 09:10

Lab Sample ID: 280-197447-3
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.23	U M	0.24	0.23	0.095	ug/L		10/09/24 10:54	1
1,3-Dinitrobenzene	0.11	U M	0.12	0.11	0.042	ug/L		10/09/24 10:54	1

Method: EPA 8330B - Nitroaromatics and Nitramines (HPLC) (Continued)

Client Sample ID: LL1mw-087-240901-GW
Date Collected: 10/01/24 08:53
Date Received: 10/02/24 09:10

Lab Sample ID: 280-197447-3
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.051	ug/L		10/09/24 10:54	1
2,4-Dinitrotoluene	0.090	U	0.11	0.090	0.031	ug/L		10/09/24 10:54	1
2,6-Dinitrotoluene	0.090	U	0.11	0.090	0.045	ug/L		10/09/24 10:54	1
2-Amino-4,6-dinitrotoluene	0.11	U	0.12	0.11	0.057	ug/L		10/09/24 10:54	1
2-Nitrotoluene	0.23	U Q	0.24	0.23	0.097	ug/L		10/09/24 10:54	1
3-Nitrotoluene	0.40	U M Q	0.45	0.40	0.22	ug/L		10/09/24 10:54	1
4-Amino-2,6-dinitrotoluene	0.14	U	0.17	0.14	0.065	ug/L		10/09/24 10:54	1
4-Nitrotoluene	0.45	U M Q	0.46	0.45	0.11	ug/L		10/09/24 10:54	1
HMX	0.23	U M	0.24	0.23	0.099	ug/L		10/09/24 10:54	1
Nitrobenzene	0.23	U	0.24	0.23	0.10	ug/L		10/09/24 10:54	1
Nitroglycerin	2.3	U	2.4	2.3	1.0	ug/L		10/09/24 10:54	1
PETN	1.1	U	1.2	1.1	0.51	ug/L		10/09/24 10:54	1
RDX	0.23	U	0.24	0.23	0.058	ug/L		10/09/24 10:54	1
Tetryl	0.11	U M	0.12	0.11	0.036	ug/L		10/09/24 10:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*96*	*M*	*83 - 119*	*10/04/24 12:25*	*10/09/24 10:54*	*1*

Client Sample ID: LL1mw-086-240901-GW
Date Collected: 10/01/24 11:56
Date Received: 10/02/24 09:10

Lab Sample ID: 280-197447-4
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.23	U M	0.24	0.23	0.096	ug/L		10/09/24 11:16	1
1,3-Dinitrobenzene	0.11	U M	0.13	0.11	0.042	ug/L		10/09/24 11:16	1
2,4,6-Trinitrotoluene	0.11	U	0.13	0.11	0.051	ug/L		10/09/24 11:16	1
2,4-Dinitrotoluene	0.092	U	0.11	0.092	0.031	ug/L		10/09/24 11:16	1
2,6-Dinitrotoluene	0.092	U	0.11	0.092	0.046	ug/L		10/09/24 11:16	1
2-Amino-4,6-dinitrotoluene	0.11	U	0.13	0.11	0.058	ug/L		10/09/24 11:16	1
2-Nitrotoluene	0.23	U Q	0.24	0.23	0.098	ug/L		10/09/24 11:16	1
3-Nitrotoluene	0.40	U M Q	0.46	0.40	0.22	ug/L		10/09/24 11:16	1
4-Amino-2,6-dinitrotoluene	0.14	U	0.17	0.14	0.066	ug/L		10/09/24 11:16	1
4-Nitrotoluene	0.46	U Q	0.47	0.46	0.11	ug/L		10/09/24 11:16	1
HMX	0.23	U M	0.24	0.23	0.10	ug/L		10/09/24 11:16	1
Nitrobenzene	0.23	U	0.24	0.23	0.10	ug/L		10/09/24 11:16	1
Nitroglycerin	2.3	U	2.4	2.3	1.1	ug/L		10/09/24 11:16	1
PETN	1.1	U	1.3	1.1	0.51	ug/L		10/09/24 11:16	1
RDX	0.23	U	0.24	0.23	0.059	ug/L		10/09/24 11:16	1
Tetryl	0.11	U M	0.13	0.11	0.036	ug/L		10/09/24 11:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*93*	*M*	*83 - 119*	*10/04/24 12:25*	*10/09/24 11:16*	*1*

Client Sample ID: LL1mw-091-240901-GW
Date Collected: 10/01/24 12:28
Date Received: 10/02/24 09:10

Lab Sample ID: 280-197447-5
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	**0.11**	**J M J1**	0.24	0.23	0.096	ug/L		10/09/24 11:38	1
1,3,5-Trinitrobenzene	**0.75**	**M J1**	0.24	0.23	0.096	ug/L		10/10/24 01:45	1
1,3-Dinitrobenzene	0.11	U M	0.13	0.11	0.042	ug/L		10/09/24 11:38	1
2,4,6-Trinitrotoluene	0.11	U	0.13	0.11	0.051	ug/L		10/09/24 11:38	1

Method: EPA 8330B - Nitroaromatics and Nitramines (HPLC) (Continued)

Client Sample ID: LL1mw-091-240901-GW
Date Collected: 10/01/24 12:28
Date Received: 10/02/24 09:10

Lab Sample ID: 280-197447-5
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2,4-Dinitrotoluene	0.091	U M	0.11	0.091	0.031	ug/L		10/09/24 11:38	1
2,6-Dinitrotoluene	0.091	U	0.11	0.091	0.046	ug/L		10/09/24 11:38	1
2-Amino-4,6-dinitrotoluene	0.11	U	0.13	0.11	0.058	ug/L		10/09/24 11:38	1
2-Nitrotoluene	0.23	U Q	0.24	0.23	0.098	ug/L		10/09/24 11:38	1
3-Nitrotoluene	0.40	U Q M	0.46	0.40	0.22	ug/L		10/09/24 11:38	1
4-Amino-2,6-dinitrotoluene	0.14	U	0.17	0.14	0.066	ug/L		10/09/24 11:38	1
4-Nitrotoluene	0.46	U Q M	0.47	0.46	0.11	ug/L		10/09/24 11:38	1
HMX	0.23	U M	0.24	0.23	0.10	ug/L		10/09/24 11:38	1
Nitrobenzene	0.23	U	0.24	0.23	0.10	ug/L		10/09/24 11:38	1
Nitroglycerin	2.3	U	2.4	2.3	1.1	ug/L		10/09/24 11:38	1
PETN	1.1	U	1.3	1.1	0.51	ug/L		10/09/24 11:38	1
RDX	0.23	U M	0.24	0.23	0.059	ug/L		10/09/24 11:38	1
Tetryl	0.11	U	0.13	0.11	0.036	ug/L		10/09/24 11:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*96*	*M*	*83 - 119*	*10/04/24 12:25*	*10/09/24 11:38*	*1*
1,2-Dinitrobenzene	*92*		*83 - 119*	*10/04/24 12:25*	*10/10/24 01:45*	*1*

Client Sample ID: LL1mw-091-240902-GW
Date Collected: 10/01/24 12:28
Date Received: 10/02/24 09:10

Lab Sample ID: 280-197447-6
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	**0.13**	**J M J1**	0.24	0.23	0.095	ug/L		10/09/24 12:00	1
1,3,5-Trinitrobenzene	**0.78**	**J1**	0.24	0.23	0.095	ug/L		10/10/24 02:55	1
1,3-Dinitrobenzene	0.11	U M	0.12	0.11	0.042	ug/L		10/09/24 12:00	1
2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.051	ug/L		10/09/24 12:00	1
2,4-Dinitrotoluene	0.090	U	0.11	0.090	0.031	ug/L		10/10/24 02:55	1
2,6-Dinitrotoluene	0.090	U	0.11	0.090	0.045	ug/L		10/09/24 12:00	1
2-Amino-4,6-dinitrotoluene	0.11	U	0.12	0.11	0.057	ug/L		10/09/24 12:00	1
2-Nitrotoluene	0.23	U Q	0.24	0.23	0.096	ug/L		10/09/24 12:00	1
3-Nitrotoluene	0.39	U Q M	0.45	0.39	0.22	ug/L		10/09/24 12:00	1
4-Amino-2,6-dinitrotoluene	0.14	U	0.17	0.14	0.065	ug/L		10/09/24 12:00	1
4-Nitrotoluene	0.45	U Q M	0.46	0.45	0.11	ug/L		10/09/24 12:00	1
HMX	0.23	U M	0.24	0.23	0.099	ug/L		10/09/24 12:00	1
Nitrobenzene	0.23	U	0.24	0.23	0.10	ug/L		10/09/24 12:00	1
Nitroglycerin	2.3	U	2.4	2.3	1.0	ug/L		10/09/24 12:00	1
PETN	1.1	U	1.2	1.1	0.50	ug/L		10/09/24 12:00	1
RDX	0.23	U M	0.24	0.23	0.058	ug/L		10/09/24 12:00	1
Tetryl	0.11	U	0.12	0.11	0.036	ug/L		10/10/24 02:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*96*	*M*	*83 - 119*	*10/04/24 12:25*	*10/09/24 12:00*	*1*
1,2-Dinitrobenzene	*96*	*M*	*83 - 119*	*10/04/24 12:25*	*10/10/24 02:55*	*1*

Client Sample ID: LL1mw-064-240901-GW
Date Collected: 10/01/24 13:38
Date Received: 10/02/24 09:10

Lab Sample ID: 280-197447-7
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.23	U	0.24	0.23	0.096	ug/L		10/09/24 12:22	1
1,3-Dinitrobenzene	0.11	U M	0.13	0.11	0.042	ug/L		10/09/24 12:22	1

Method: EPA 8330B - Nitroaromatics and Nitramines (HPLC) (Continued)

Client Sample ID: LL1mw-064-240901-GW
Date Collected: 10/01/24 13:38
Date Received: 10/02/24 09:10

Lab Sample ID: 280-197447-7
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2,4,6-Trinitrotoluene	0.11	U	0.13	0.11	0.051	ug/L		10/09/24 12:22	1
2,4-Dinitrotoluene	0.091	U	0.11	0.091	0.031	ug/L		10/09/24 12:22	1
2,6-Dinitrotoluene	0.091	U	0.11	0.091	0.046	ug/L		10/09/24 12:22	1
2-Amino-4,6-dinitrotoluene	0.11	U	0.13	0.11	0.058	ug/L		10/09/24 12:22	1
2-Nitrotoluene	0.23	U Q	0.24	0.23	0.097	ug/L		10/09/24 12:22	1
3-Nitrotoluene	0.40	U M Q	0.46	0.40	0.22	ug/L		10/09/24 12:22	1
4-Amino-2,6-dinitrotoluene	0.14	U	0.17	0.14	0.066	ug/L		10/09/24 12:22	1
4-Nitrotoluene	0.46	U Q	0.47	0.46	0.11	ug/L		10/09/24 12:22	1
HMX	0.23	U M	0.24	0.23	0.10	ug/L		10/09/24 12:22	1
Nitrobenzene	0.23	U	0.24	0.23	0.10	ug/L		10/09/24 12:22	1
Nitroglycerin	2.3	U	2.4	2.3	1.0	ug/L		10/09/24 12:22	1
PETN	1.1	U	1.3	1.1	0.51	ug/L		10/09/24 12:22	1
RDX	0.23	U	0.24	0.23	0.059	ug/L		10/09/24 12:22	1
Tetryl	0.11	U	0.13	0.11	0.036	ug/L		10/09/24 12:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*92*	*M*	*83 - 119*	*10/04/24 12:25*	*10/09/24 12:22*	*1*

Client Sample ID: FWGmw-007-240901-GW
Date Collected: 10/01/24 15:35
Date Received: 10/02/24 09:10

Lab Sample ID: 280-197447-8
Matrix: Water

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		10/08/24 19:10	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.038	ug/L		10/08/24 19:10	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.047	ug/L		10/08/24 19:10	1
2,4-Dinitrotoluene	0.083	U	0.10	0.083	0.028	ug/L		10/08/24 19:10	1
2,6-Dinitrotoluene	0.083	U	0.10	0.083	0.041	ug/L		10/08/24 19:10	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.052	ug/L		10/08/24 19:10	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.088	ug/L		10/08/24 19:10	1
3-Nitrotoluene	0.36	U M	0.41	0.36	0.20	ug/L		10/08/24 19:10	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.16	0.12	0.060	ug/L		10/08/24 19:10	1
4-Nitrotoluene	0.41	U	0.42	0.41	0.10	ug/L		10/08/24 19:10	1
HMX	0.21	U M	0.22	0.21	0.091	ug/L		10/08/24 19:10	1
Nitrobenzene	0.21	U	0.22	0.21	0.094	ug/L		10/08/24 19:10	1
Nitroglycerin	2.1	U	2.2	2.1	0.95	ug/L		10/08/24 19:10	1
PETN	1.0	U	1.1	1.0	0.46	ug/L		10/08/24 19:10	1
RDX	0.21	U	0.22	0.21	0.053	ug/L		10/08/24 19:10	1
Tetryl	0.10	U	0.11	0.10	0.033	ug/L		10/08/24 19:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*94*	*M*	*83 - 119*	*10/07/24 13:45*	*10/08/24 19:10*	*1*

Method: EPA 8330B - Nitroaromatics and Nitramines (HPLC) - RE

Client Sample ID: SCFmw-004-240901-GW
Date Collected: 09/30/24 13:59
Date Received: 10/02/24 09:10

Lab Sample ID: 280-197447-1
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2-Nitrotoluene	0.21	U H J1	0.22	0.21	0.089	ug/L		10/11/24 22:20	1
3-Nitrotoluene	0.36	U H J1	0.42	0.36	0.20	ug/L		10/11/24 22:20	1
4-Nitrotoluene	0.42	U H J1	0.43	0.42	0.10	ug/L		10/11/24 22:20	1

Method: EPA 8330B - Nitroaromatics and Nitramines (HPLC) - RE

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dinitrobenzene	93	M	83 - 119	10/11/24 12:06	10/11/24 22:20	1

Client Sample ID: SCFmw-004-240902-GW — **Lab Sample ID: 280-197447-2**
Date Collected: 09/30/24 13:59 — **Matrix: Water**
Date Received: 10/02/24 09:10

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2-Nitrotoluene	0.22	U H	0.23	0.22	0.094	ug/L		10/11/24 23:25	1
3-Nitrotoluene	0.38	U H	0.44	0.38	0.21	ug/L		10/11/24 23:25	1
4-Nitrotoluene	0.44	U H	0.45	0.44	0.11	ug/L		10/11/24 23:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dinitrobenzene	89	M	83 - 119	10/11/24 12:06	10/11/24 23:25	1

Client Sample ID: LL1mw-087-240901-GW — **Lab Sample ID: 280-197447-3**
Date Collected: 10/01/24 08:53 — **Matrix: Water**
Date Received: 10/02/24 09:10

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2-Nitrotoluene	0.22	U H	0.23	0.22	0.092	ug/L		10/11/24 23:47	1
3-Nitrotoluene	0.38	U H	0.43	0.38	0.21	ug/L		10/11/24 23:47	1
4-Nitrotoluene	0.43	U H	0.44	0.43	0.11	ug/L		10/11/24 23:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dinitrobenzene	91	M	83 - 119	10/11/24 12:06	10/11/24 23:47	1

Client Sample ID: LL1mw-086-240901-GW — **Lab Sample ID: 280-197447-4**
Date Collected: 10/01/24 11:56 — **Matrix: Water**
Date Received: 10/02/24 09:10

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2-Nitrotoluene	0.22	U H	0.23	0.22	0.092	ug/L		10/12/24 00:09	1
3-Nitrotoluene	0.38	U H	0.43	0.38	0.21	ug/L		10/12/24 00:09	1
4-Nitrotoluene	0.43	U H	0.44	0.43	0.11	ug/L		10/12/24 00:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dinitrobenzene	94	M	83 - 119	10/11/24 12:06	10/12/24 00:09	1

Client Sample ID: LL1mw-091-240901-GW — **Lab Sample ID: 280-197447-5**
Date Collected: 10/01/24 12:28 — **Matrix: Water**
Date Received: 10/02/24 09:10

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2-Nitrotoluene	0.21	U H	0.22	0.21	0.090	ug/L		10/12/24 00:31	1
3-Nitrotoluene	0.37	U H	0.42	0.37	0.21	ug/L		10/12/24 00:31	1
4-Nitrotoluene	0.42	U H	0.43	0.42	0.11	ug/L		10/12/24 00:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dinitrobenzene	92		83 - 119	10/11/24 12:06	10/12/24 00:31	1

Client Sample ID: LL1mw-091-240902-GW — **Lab Sample ID: 280-197447-6**
Date Collected: 10/01/24 12:28 — **Matrix: Water**
Date Received: 10/02/24 09:10

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2-Nitrotoluene	0.22	U H	0.23	0.22	0.092	ug/L		10/12/24 00:53	1
3-Nitrotoluene	0.38	U H	0.43	0.38	0.21	ug/L		10/12/24 00:53	1
4-Nitrotoluene	0.43	U H	0.44	0.43	0.11	ug/L		10/12/24 00:53	1

Method: EPA 8330B - Nitroaromatics and Nitramines (HPLC) - RE (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dinitrobenzene	97		83 - 119	10/11/24 12:06	10/12/24 00:53	1

Client Sample ID: LL1mw-064-240901-GW **Lab Sample ID: 280-197447-7**
Date Collected: 10/01/24 13:38 **Matrix: Water**
Date Received: 10/02/24 09:10

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2-Nitrotoluene	0.22	U H	0.24	0.22	0.096	ug/L		10/12/24 01:37	1
3-Nitrotoluene	0.39	U H	0.45	0.39	0.22	ug/L		10/12/24 01:37	1
4-Nitrotoluene	0.45	U H	0.46	0.45	0.11	ug/L		10/12/24 01:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dinitrobenzene	95	M	83 - 119	10/11/24 12:06	10/12/24 01:37	1

Default Detection Limits

Client: Leidos, Inc.
Project/Site: RVAAP FWGW

Job ID: 280-197447-1

Method: 8330B - 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
Nitrobenzene	0.21	0.091	ug/L
Nitroglycerin	2.1	0.92	ug/L
PETN	1.1	0.45	ug/L
RDX	0.21	0.052	ug/L
Tetryl	0.11	0.032	ug/L

Surrogate Summary

Client: Leidos, Inc.
Project/Site: RVAAP FWGW

Job ID: 280-197447-1

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

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

		Percent Surrogate Recovery (Acceptance Limits)						
Lab Sample ID	Client Sample ID	12DNB1 (83-119)						
280-197447-1	SCFmw-004-240901-GW	95 M						
280-197447-1 - RE	SCFmw-004-240901-GW	93 M						
280-197447-1 MS	SCFmw-004-240901-GW	96 M						
280-197447-1 MS - RE	SCFmw-004-240901-GW	88 M						
280-197447-1 MSD	SCFmw-004-240901-GW	96 M						
280-197447-1 MSD - RE	SCFmw-004-240901-GW	92						
280-197447-2	SCFmw-004-240902-GW	85 M						
280-197447-2 - RE	SCFmw-004-240902-GW	89 M						
280-197447-3	LL1mw-087-240901-GW	96 M						
280-197447-3 - RE	LL1mw-087-240901-GW	91 M						
280-197447-4	LL1mw-086-240901-GW	93 M						
280-197447-4 - RE	LL1mw-086-240901-GW	94 M						
280-197447-5	LL1mw-091-240901-GW	96 M						
280-197447-5 - RE	LL1mw-091-240901-GW	92						
280-197447-6	LL1mw-091-240902-GW	96 M						
280-197447-6 - RE	LL1mw-091-240902-GW	97						
280-197447-7	LL1mw-064-240901-GW	92 M						
280-197447-7 - RE	LL1mw-064-240901-GW	95 M						
280-197447-8	FWGmw-007-240901-GW	94 M						
LCS 280-669777/2-A	Lab Control Sample	87						
LCS 280-670001/2-A	Lab Control Sample	99						
LCS 280-670642/2-A	Lab Control Sample	93						
MB 280-669777/1-A	Method Blank	101 M						
MB 280-670001/1-A	Method Blank	97 M						
MB 280-670642/1-A	Method Blank	97 M						

Surrogate Legend

12DNB = 1,2-Dinitrobenzene

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

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

		Percent Surrogate Recovery (Acceptance Limits)						
Lab Sample ID	Client Sample ID	12DNB2 (83-119)						
280-197447-5	LL1mw-091-240901-GW	92						
280-197447-6	LL1mw-091-240902-GW	96 M						

Surrogate Legend

12DNB = 1,2-Dinitrobenzene

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Lab Sample ID: MB 280-669777/1-A
Matrix: Water
Analysis Batch: 670184

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 669777

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.20	U M	0.21	0.20	0.084	ug/L		10/09/24 05:24	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037	ug/L		10/09/24 05:24	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045	ug/L		10/09/24 05:24	1
2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.027	ug/L		10/09/24 05:24	1
2,6-Dinitrotoluene	0.080	U	0.10	0.080	0.040	ug/L		10/09/24 05:24	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051	ug/L		10/09/24 05:24	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.086	ug/L		10/09/24 05:24	1
3-Nitrotoluene	0.35	U	0.40	0.35	0.20	ug/L		10/09/24 05:24	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.058	ug/L		10/09/24 05:24	1
4-Nitrotoluene	0.40	U	0.41	0.40	0.10	ug/L		10/09/24 05:24	1
HMX	0.20	U	0.21	0.20	0.088	ug/L		10/09/24 05:24	1
Nitrobenzene	0.20	U	0.21	0.20	0.091	ug/L		10/09/24 05:24	1
Nitroglycerin	2.0	U	2.1	2.0	0.92	ug/L		10/09/24 05:24	1
PETN	1.0	U	1.1	1.0	0.45	ug/L		10/09/24 05:24	1
RDX	0.20	U	0.21	0.20	0.052	ug/L		10/09/24 05:24	1
Tetryl	0.10	U	0.11	0.10	0.032	ug/L		10/09/24 05:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*101*	*M*	*83 - 119*	*10/04/24 12:25*	*10/09/24 05:24*	*1*

Lab Sample ID: LCS 280-669777/2-A
Matrix: Water
Analysis Batch: 670184

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 669777

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,3,5-Trinitrobenzene			2.00	1.83	M	ug/L		91	73 - 125		
1,3-Dinitrobenzene			2.00	1.70		ug/L		85	78 - 120		
2,4,6-Trinitrotoluene			2.00	1.65		ug/L		83	71 - 123		
2,4-Dinitrotoluene			2.00	1.58		ug/L		79	78 - 120		
2,6-Dinitrotoluene			2.00	1.65		ug/L		82	77 - 127		
2-Amino-4,6-dinitrotoluene			2.00	1.62		ug/L		81	79 - 120		
2-Nitrotoluene			2.00	1.22	Q	ug/L		61	70 - 127		
3-Nitrotoluene			2.00	1.23	Q	ug/L		62	73 - 125		
4-Amino-2,6-dinitrotoluene			2.00	1.52		ug/L		76	76 - 125		
4-Nitrotoluene			2.00	1.27	Q	ug/L		63	71 - 127		
HMX			2.00	1.68	M	ug/L		84	65 - 135		
Nitrobenzene			2.00	1.42		ug/L		71	65 - 134		
Nitroglycerin			20.0	19.2		ug/L		96	74 - 127		
PETN			20.0	18.6		ug/L		93	73 - 127		
RDX			2.00	1.77		ug/L		88	68 - 130		
Tetryl			2.00	1.76		ug/L		88	64 - 128		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dinitrobenzene	*87*		*83 - 119*

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

Lab Sample ID: 280-197447-1 MS
Matrix: Water
Analysis Batch: 670184

Client Sample ID: SCFmw-004-240901-GW
Prep Type: Total/NA
Prep Batch: 669777

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,3,5-Trinitrobenzene	0.22	U	2.21	2.36	M	ug/L		107	73 - 125
1,3-Dinitrobenzene	0.11	U	2.21	2.25		ug/L		101	78 - 120
2,4,6-Trinitrotoluene	0.11	U	2.21	2.17		ug/L		98	71 - 123
2,4-Dinitrotoluene	0.090	U	2.21	2.05		ug/L		92	78 - 120
2,6-Dinitrotoluene	0.090	U	2.21	2.09		ug/L		94	77 - 127
2-Amino-4,6-dinitrotoluene	0.11	U	2.21	2.16		ug/L		97	79 - 120
2-Nitrotoluene	0.22	U J1 Q	2.21	1.54	J1	ug/L		69	70 - 127
3-Nitrotoluene	0.39	U M J1 Q	2.21	1.53	J1	ug/L		69	73 - 125
4-Amino-2,6-dinitrotoluene	0.13	U	2.21	2.11		ug/L		95	76 - 125
4-Nitrotoluene	0.45	U Q	2.21	1.63		ug/L		73	71 - 127
HMX	0.22	U	2.21	1.95	M	ug/L		88	65 - 135
Nitrobenzene	0.22	U	2.21	1.84		ug/L		83	65 - 134
Nitroglycerin	2.2	U	22.1	23.0		ug/L		104	74 - 127
PETN	1.1	U	22.1	23.0		ug/L		104	73 - 127
RDX	0.22	U	2.21	2.17	M	ug/L		98	68 - 130
Tetryl	0.11	U	2.21	2.19		ug/L		99	64 - 128

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

Lab Sample ID: 280-197447-1 MSD
Matrix: Water
Analysis Batch: 670184

Client Sample ID: SCFmw-004-240901-GW
Prep Type: Total/NA
Prep Batch: 669777

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,3,5-Trinitrobenzene	0.22	U	2.20	2.43	M	ug/L		110	73 - 125	3	20
1,3-Dinitrobenzene	0.11	U	2.20	2.30		ug/L		105	78 - 120	2	20
2,4,6-Trinitrotoluene	0.11	U	2.20	2.19		ug/L		100	71 - 123	1	20
2,4-Dinitrotoluene	0.090	U	2.20	2.14		ug/L		97	78 - 120	4	20
2,6-Dinitrotoluene	0.090	U	2.20	2.23		ug/L		101	77 - 127	6	20
2-Amino-4,6-dinitrotoluene	0.11	U	2.20	2.17		ug/L		99	79 - 120	1	20
2-Nitrotoluene	0.22	U J1 Q	2.20	1.70		ug/L		77	70 - 127	10	20
3-Nitrotoluene	0.39	U M J1 Q	2.20	1.71		ug/L		78	73 - 125	11	20
4-Amino-2,6-dinitrotoluene	0.13	U	2.20	2.22		ug/L		101	76 - 125	5	20
4-Nitrotoluene	0.45	U Q	2.20	1.81		ug/L		82	71 - 127	11	20
HMX	0.22	U	2.20	2.00	M	ug/L		91	65 - 135	2	20
Nitrobenzene	0.22	U	2.20	1.93		ug/L		88	65 - 134	5	20
Nitroglycerin	2.2	U	22.0	24.0		ug/L		109	74 - 127	4	20
PETN	1.1	U	22.0	23.2	M	ug/L		106	73 - 127	1	20
RDX	0.22	U	2.20	2.21	M	ug/L		100	68 - 130	2	20
Tetryl	0.11	U	2.20	2.19		ug/L		99	64 - 128	0	20

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

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

Lab Sample ID: MB 280-670001/1-A
Matrix: Water
Analysis Batch: 670183

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 670001

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.20	U	0.21	0.20	0.084	ug/L		10/08/24 18:04	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037	ug/L		10/08/24 18:04	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045	ug/L		10/08/24 18:04	1
2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.027	ug/L		10/08/24 18:04	1
2,6-Dinitrotoluene	0.080	U	0.10	0.080	0.040	ug/L		10/08/24 18:04	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051	ug/L		10/08/24 18:04	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.086	ug/L		10/08/24 18:04	1
3-Nitrotoluene	0.35	U	0.40	0.35	0.20	ug/L		10/08/24 18:04	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.058	ug/L		10/08/24 18:04	1
4-Nitrotoluene	0.40	U	0.41	0.40	0.10	ug/L		10/08/24 18:04	1
HMX	0.20	U	0.21	0.20	0.088	ug/L		10/08/24 18:04	1
Nitrobenzene	0.20	U	0.21	0.20	0.091	ug/L		10/08/24 18:04	1
Nitroglycerin	2.0	U	2.1	2.0	0.92	ug/L		10/08/24 18:04	1
PETN	1.0	U	1.1	1.0	0.45	ug/L		10/08/24 18:04	1
RDX	0.20	U	0.21	0.20	0.052	ug/L		10/08/24 18:04	1
Tetryl	0.10	U	0.11	0.10	0.032	ug/L		10/08/24 18:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*97*	*M*	*83 - 119*	*10/07/24 13:45*	*10/08/24 18:04*	*1*

Lab Sample ID: LCS 280-670001/2-A
Matrix: Water
Analysis Batch: 670183

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 670001

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,3,5-Trinitrobenzene	2.00	2.20		ug/L		110	73 - 125
1,3-Dinitrobenzene	2.00	2.04		ug/L		102	78 - 120
2,4,6-Trinitrotoluene	2.00	1.96		ug/L		98	71 - 123
2,4-Dinitrotoluene	2.00	1.93		ug/L		97	78 - 120
2,6-Dinitrotoluene	2.00	2.02		ug/L		101	77 - 127
2-Amino-4,6-dinitrotoluene	2.00	1.94		ug/L		97	79 - 120
2-Nitrotoluene	2.00	1.69		ug/L		85	70 - 127
3-Nitrotoluene	2.00	1.71		ug/L		86	73 - 125
4-Amino-2,6-dinitrotoluene	2.00	1.94		ug/L		97	76 - 125
4-Nitrotoluene	2.00	1.70		ug/L		85	71 - 127
HMX	2.00	1.80		ug/L		90	65 - 135
Nitrobenzene	2.00	1.86		ug/L		93	65 - 134
Nitroglycerin	20.0	21.2	M	ug/L		106	74 - 127
PETN	20.0	21.3		ug/L		107	73 - 127
RDX	2.00	1.97		ug/L		99	68 - 130
Tetryl	2.00	2.04		ug/L		102	64 - 128

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dinitrobenzene	*99*		*83 - 119*

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

Lab Sample ID: MB 280-670642/1-A
Matrix: Water
Analysis Batch: 670729

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 670642

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.20	U	0.21	0.20	0.084	ug/L		10/11/24 17:34	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037	ug/L		10/11/24 17:34	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045	ug/L		10/11/24 17:34	1
2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.027	ug/L		10/11/24 17:34	1
2,6-Dinitrotoluene	0.080	U	0.10	0.080	0.040	ug/L		10/11/24 17:34	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051	ug/L		10/11/24 17:34	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.086	ug/L		10/11/24 17:34	1
3-Nitrotoluene	0.35	U	0.40	0.35	0.20	ug/L		10/11/24 17:34	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.058	ug/L		10/11/24 17:34	1
4-Nitrotoluene	0.40	U	0.41	0.40	0.10	ug/L		10/11/24 17:34	1
HMX	0.20	U	0.21	0.20	0.088	ug/L		10/11/24 17:34	1
Nitrobenzene	0.20	U	0.21	0.20	0.091	ug/L		10/11/24 17:34	1
Nitroglycerin	2.0	U	2.1	2.0	0.92	ug/L		10/11/24 17:34	1
PETN	1.0	U	1.1	1.0	0.45	ug/L		10/11/24 17:34	1
RDX	0.20	U	0.21	0.20	0.052	ug/L		10/11/24 17:34	1
Tetryl	0.10	U	0.11	0.10	0.032	ug/L		10/11/24 17:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*97*	*M*	*83 - 119*	*10/11/24 12:06*	*10/11/24 17:34*	*1*

Lab Sample ID: LCS 280-670642/2-A
Matrix: Water
Analysis Batch: 670729

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 670642

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,3,5-Trinitrobenzene			2.00	2.21		ug/L		110	73 - 125		
1,3-Dinitrobenzene			2.00	2.04		ug/L		102	78 - 120		
2,4,6-Trinitrotoluene			2.00	1.97		ug/L		98	71 - 123		
2,4-Dinitrotoluene			2.00	1.96		ug/L		98	78 - 120		
2,6-Dinitrotoluene			2.00	2.07		ug/L		103	77 - 127		
2-Amino-4,6-dinitrotoluene			2.00	1.98		ug/L		99	79 - 120		
2-Nitrotoluene			2.00	1.75		ug/L		88	70 - 127		
3-Nitrotoluene			2.00	1.81		ug/L		91	73 - 125		
4-Amino-2,6-dinitrotoluene			2.00	2.05		ug/L		102	76 - 125		
4-Nitrotoluene			2.00	1.80		ug/L		90	71 - 127		
HMX			2.00	1.77		ug/L		88	65 - 135		
Nitrobenzene			2.00	1.90		ug/L		95	65 - 134		
Nitroglycerin			20.0	21.6		ug/L		108	74 - 127		
PETN			20.0	21.0		ug/L		105	73 - 127		
RDX			2.00	1.97		ug/L		98	68 - 130		
Tetryl			2.00	2.00		ug/L		100	64 - 128		

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

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

Lab Sample ID: 280-197447-1 MS
Matrix: Water
Analysis Batch: 670729

Client Sample ID: SCFmw-004-240901-GW
Prep Type: Total/NA
Prep Batch: 670642

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
2-Nitrotoluene - RE	0.21	U H J1	2.20	1.43	H J1	ug/L		65	70 - 127		
3-Nitrotoluene - RE	0.36	U H J1	2.20	1.38	H J1	ug/L		63	73 - 125		
4-Nitrotoluene - RE	0.42	U H J1	2.20	1.46	H J1	ug/L		67	71 - 127		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dinitrobenzene - RE	*88*	*M*	*83 - 119*

Lab Sample ID: 280-197447-1 MSD
Matrix: Water
Analysis Batch: 670729

Client Sample ID: SCFmw-004-240901-GW
Prep Type: Total/NA
Prep Batch: 670642

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2-Nitrotoluene - RE	0.21	U H J1	2.16	1.97	H J1	ug/L		91	70 - 127	32	20
3-Nitrotoluene - RE	0.36	U H J1	2.16	1.97	H J1	ug/L		91	73 - 125	35	20
4-Nitrotoluene - RE	0.42	U H J1	2.16	2.00	H J1	ug/L		92	71 - 127	31	20

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

HPLC/IC

Prep Batch: 669777

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-197447-1	SCFmw-004-240901-GW	Total/NA	Water	3535	
280-197447-2	SCFmw-004-240902-GW	Total/NA	Water	3535	
280-197447-3	LL1mw-087-240901-GW	Total/NA	Water	3535	
280-197447-4	LL1mw-086-240901-GW	Total/NA	Water	3535	
280-197447-5	LL1mw-091-240901-GW	Total/NA	Water	3535	
280-197447-6	LL1mw-091-240902-GW	Total/NA	Water	3535	
280-197447-7	LL1mw-064-240901-GW	Total/NA	Water	3535	
MB 280-669777/1-A	Method Blank	Total/NA	Water	3535	
LCS 280-669777/2-A	Lab Control Sample	Total/NA	Water	3535	
280-197447-1 MS	SCFmw-004-240901-GW	Total/NA	Water	3535	
280-197447-1 MSD	SCFmw-004-240901-GW	Total/NA	Water	3535	

Prep Batch: 670001

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-197447-8	FWGmw-007-240901-GW	Total/NA	Water	3535	
MB 280-670001/1-A	Method Blank	Total/NA	Water	3535	
LCS 280-670001/2-A	Lab Control Sample	Total/NA	Water	3535	

Analysis Batch: 670183

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-197447-8	FWGmw-007-240901-GW	Total/NA	Water	8330B	670001
MB 280-670001/1-A	Method Blank	Total/NA	Water	8330B	670001
LCS 280-670001/2-A	Lab Control Sample	Total/NA	Water	8330B	670001

Analysis Batch: 670184

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-197447-1	SCFmw-004-240901-GW	Total/NA	Water	8330B	669777
280-197447-2	SCFmw-004-240902-GW	Total/NA	Water	8330B	669777
280-197447-3	LL1mw-087-240901-GW	Total/NA	Water	8330B	669777
280-197447-4	LL1mw-086-240901-GW	Total/NA	Water	8330B	669777
280-197447-5	LL1mw-091-240901-GW	Total/NA	Water	8330B	669777
280-197447-6	LL1mw-091-240902-GW	Total/NA	Water	8330B	669777
280-197447-7	LL1mw-064-240901-GW	Total/NA	Water	8330B	669777
MB 280-669777/1-A	Method Blank	Total/NA	Water	8330B	669777
LCS 280-669777/2-A	Lab Control Sample	Total/NA	Water	8330B	669777
280-197447-1 MS	SCFmw-004-240901-GW	Total/NA	Water	8330B	669777
280-197447-1 MSD	SCFmw-004-240901-GW	Total/NA	Water	8330B	669777

Analysis Batch: 670394

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-197447-5	LL1mw-091-240901-GW	Total/NA	Water	8330B	669777
280-197447-6	LL1mw-091-240902-GW	Total/NA	Water	8330B	669777

Prep Batch: 670642

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-197447-1 - RE	SCFmw-004-240901-GW	Total/NA	Water	3535	
280-197447-2 - RE	SCFmw-004-240902-GW	Total/NA	Water	3535	
280-197447-3 - RE	LL1mw-087-240901-GW	Total/NA	Water	3535	
280-197447-4 - RE	LL1mw-086-240901-GW	Total/NA	Water	3535	
280-197447-5 - RE	LL1mw-091-240901-GW	Total/NA	Water	3535	
280-197447-6 - RE	LL1mw-091-240902-GW	Total/NA	Water	3535	

HPLC/IC (Continued)

Prep Batch: 670642 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-197447-7 - RE	LL1mw-064-240901-GW	Total/NA	Water	3535	
MB 280-670642/1-A	Method Blank	Total/NA	Water	3535	
LCS 280-670642/2-A	Lab Control Sample	Total/NA	Water	3535	
280-197447-1 MS - RE	SCFmw-004-240901-GW	Total/NA	Water	3535	
280-197447-1 MSD - RE	SCFmw-004-240901-GW	Total/NA	Water	3535	

Analysis Batch: 670729

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-197447-1 - RE	SCFmw-004-240901-GW	Total/NA	Water	8330B	670642
280-197447-2 - RE	SCFmw-004-240902-GW	Total/NA	Water	8330B	670642
280-197447-3 - RE	LL1mw-087-240901-GW	Total/NA	Water	8330B	670642
280-197447-4 - RE	LL1mw-086-240901-GW	Total/NA	Water	8330B	670642
280-197447-5 - RE	LL1mw-091-240901-GW	Total/NA	Water	8330B	670642
280-197447-6 - RE	LL1mw-091-240902-GW	Total/NA	Water	8330B	670642
280-197447-7 - RE	LL1mw-064-240901-GW	Total/NA	Water	8330B	670642
MB 280-670642/1-A	Method Blank	Total/NA	Water	8330B	670642
LCS 280-670642/2-A	Lab Control Sample	Total/NA	Water	8330B	670642
280-197447-1 MS - RE	SCFmw-004-240901-GW	Total/NA	Water	8330B	670642
280-197447-1 MSD - RE	SCFmw-004-240901-GW	Total/NA	Water	8330B	670642

Client Sample ID: SCFmw-004-240901-GW
Lab Sample ID: 280-197447-1
Date Collected: 09/30/24 13:59
Matrix: Water
Date Received: 10/02/24 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			446.4 mL	5 mL	669777	10/04/24 12:25	AAA	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	670184	10/09/24 09:26	JZ	EET DEN
Total/NA	Prep	3535	RE		480.7 mL	5 mL	670642	10/11/24 12:06	AAA	EET DEN
Total/NA	Analysis	8330B	RE	1	1 mL	1 mL	670729	10/11/24 22:20	JZ	EET DEN

Client Sample ID: SCFmw-004-240902-GW
Lab Sample ID: 280-197447-2
Date Collected: 09/30/24 13:59
Matrix: Water
Date Received: 10/02/24 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			449.5 mL	5 mL	669777	10/04/24 12:25	AAA	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	670184	10/09/24 10:32	JZ	EET DEN
Total/NA	Prep	3535	RE		456.5 mL	5 mL	670642	10/11/24 12:06	AAA	EET DEN
Total/NA	Analysis	8330B	RE	1	1 mL	1 mL	670729	10/11/24 23:25	JZ	EET DEN

Client Sample ID: LL1mw-087-240901-GW
Lab Sample ID: 280-197447-3
Date Collected: 10/01/24 08:53
Matrix: Water
Date Received: 10/02/24 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			442.5 mL	5 mL	669777	10/04/24 12:25	AAA	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	670184	10/09/24 10:54	JZ	EET DEN
Total/NA	Prep	3535	RE		465.1 mL	5 mL	670642	10/11/24 12:06	AAA	EET DEN
Total/NA	Analysis	8330B	RE	1	1 mL	1 mL	670729	10/11/24 23:47	JZ	EET DEN

Client Sample ID: LL1mw-086-240901-GW
Lab Sample ID: 280-197447-4
Date Collected: 10/01/24 11:56
Matrix: Water
Date Received: 10/02/24 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			436.9 mL	5 mL	669777	10/04/24 12:25	AAA	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	670184	10/09/24 11:16	JZ	EET DEN
Total/NA	Prep	3535	RE		462.3 mL	5 mL	670642	10/11/24 12:06	AAA	EET DEN
Total/NA	Analysis	8330B	RE	1	1 mL	1 mL	670729	10/12/24 00:09	JZ	EET DEN

Client Sample ID: LL1mw-091-240901-GW
Lab Sample ID: 280-197447-5
Date Collected: 10/01/24 12:28
Matrix: Water
Date Received: 10/02/24 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			437.3 mL	5 mL	669777	10/04/24 12:25	AAA	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	670184	10/09/24 11:38	JZ	EET DEN
Total/NA	Prep	3535	RE		474.9 mL	5 mL	670642	10/11/24 12:06	AAA	EET DEN
Total/NA	Analysis	8330B	RE	1	1 mL	1 mL	670729	10/12/24 00:31	JZ	EET DEN
Total/NA	Prep	3535			437.3 mL	5 mL	669777	10/04/24 12:25	AAA	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	670394	10/10/24 01:45	JZ	EET DEN

Client Sample ID: LL1mw-091-240902-GW
Lab Sample ID: 280-197447-6

Date Collected: 10/01/24 12:28
Matrix: Water
Date Received: 10/02/24 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			444 mL	5 mL	669777	10/04/24 12:25	AAA	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	670184	10/09/24 12:00	JZ	EET DEN
Total/NA	Prep	3535	RE		462.9 mL	5 mL	670642	10/11/24 12:06	AAA	EET DEN
Total/NA	Analysis	8330B	RE	1	1 mL	1 mL	670729	10/12/24 00:53	JZ	EET DEN
Total/NA	Prep	3535			444 mL	5 mL	669777	10/04/24 12:25	AAA	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	670394	10/10/24 02:55	JZ	EET DEN

Client Sample ID: LL1mw-064-240901-GW
Lab Sample ID: 280-197447-7

Date Collected: 10/01/24 13:38
Matrix: Water
Date Received: 10/02/24 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			439 mL	5 mL	669777	10/04/24 12:25	AAA	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	670184	10/09/24 12:22	JZ	EET DEN
Total/NA	Prep	3535	RE		446.6 mL	5 mL	670642	10/11/24 12:06	AAA	EET DEN
Total/NA	Analysis	8330B	RE	1	1 mL	1 mL	670729	10/12/24 01:37	JZ	EET DEN

Client Sample ID: FWGmw-007-240901-GW
Lab Sample ID: 280-197447-8

Date Collected: 10/01/24 15:35
Matrix: Water
Date Received: 10/02/24 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			483.7 mL	5 mL	670001	10/07/24 13:45	AAA	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	670183	10/08/24 19:10	JZ	EET DEN

Laboratory References:

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

Accreditation/Certification Summary

Client: Leidos, Inc.
Job ID: 280-197447-1
Project/Site: RVAAP FWGW

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	10-31-25

Method Summary

Client: Leidos, Inc.
Project/Site: RVAAP FWGW

Job ID: 280-197447-1

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

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

Sample Summary

Client: Leidos, Inc.
Project/Site: RVAAP FWGW

Job ID: 280-197447-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-197447-1	SCFmw-004-240901-GW	Water	09/30/24 13:59	10/02/24 09:10
280-197447-2	SCFmw-004-240902-GW	Water	09/30/24 13:59	10/02/24 09:10
280-197447-3	LL1mw-087-240901-GW	Water	10/01/24 08:53	10/02/24 09:10
280-197447-4	LL1mw-086-240901-GW	Water	10/01/24 11:56	10/02/24 09:10
280-197447-5	LL1mw-091-240901-GW	Water	10/01/24 12:28	10/02/24 09:10
280-197447-6	LL1mw-091-240902-GW	Water	10/01/24 12:28	10/02/24 09:10
280-197447-7	LL1mw-064-240901-GW	Water	10/01/24 13:38	10/02/24 09:10
280-197447-8	FWGmw-007-240901-GW	Water	10/01/24 15:35	10/02/24 09:10

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 669870

Lab Sample ID: IC 280-669870/11 Client Sample ID:

Date Analyzed: 10/04/24 16:59 Lab File ID: 10040011.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.43	Baseline	LV5D	10/04/24 17:24
HMX	6.57	Baseline	LV5D	10/04/24 17:24
DNX	6.74	Baseline	LV5D	10/04/24 17:24
MNX	7.14	Baseline	LV5D	10/04/24 17:24
Nitroglycerin	10.11	Baseline	LV5D	10/08/24 13:08

Lab Sample ID: IC 280-669870/12 Client Sample ID:

Date Analyzed: 10/04/24 17:21 Lab File ID: 10040012.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.57	Baseline	LV5D	10/08/24 12:59
DNX	6.75	Baseline	LV5D	10/08/24 12:59
Nitroglycerin	10.13	Baseline	LV5D	10/08/24 13:08

Lab Sample ID: IC 280-669870/13 Client Sample ID:

Date Analyzed: 10/04/24 17:43 Lab File ID: 10040013.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitroglycerin	10.13	Baseline	LV5D	10/08/24 13:09

Lab Sample ID: IC 280-669870/14 Client Sample ID:

Date Analyzed: 10/04/24 18:05 Lab File ID: 10040014.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitroglycerin	10.14	Baseline	LV5D	10/08/24 13:09

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 669870

Lab Sample ID: IC 280-669870/15 Client Sample ID:

Date Analyzed: 10/04/24 18:27 Lab File ID: 10040015.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.44	Baseline	LV5D	10/08/24 13:01
HMX	6.58	Baseline	LV5D	10/08/24 13:01
DNX	6.75	Baseline	LV5D	10/08/24 13:01
Nitroglycerin	10.12	Baseline	LV5D	10/08/24 13:09

Lab Sample ID: IC 280-669870/16 Client Sample ID:

Date Analyzed: 10/04/24 18:49 Lab File ID: 10040016.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.44	Baseline	LV5D	10/08/24 13:02
HMX	6.58	Baseline	LV5D	10/08/24 13:02
DNX	6.75	Baseline	LV5D	10/08/24 13:02
RDX	7.51	Baseline	LV5D	10/08/24 13:02
Picric acid	7.94	Baseline	LV5D	10/08/24 13:02
Tetryl	9.68	Baseline	LV5D	10/08/24 13:03
Nitroglycerin	10.12	Baseline	LV5D	10/08/24 13:03
2-Nitrotoluene	11.85	Baseline	LV5D	10/08/24 13:03
4-Nitrotoluene	12.22	Baseline	LV5D	10/08/24 13:03
3-Nitrotoluene	12.72	Baseline	LV5D	10/08/24 13:03
PETN	13.80	Baseline	LV5D	10/08/24 13:04

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 669870

Lab Sample ID: IC 280-669870/17 Client Sample ID:

Date Analyzed: 10/04/24 19:11 Lab File ID: 10040017.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.43	Baseline	LV5D	10/08/24 13:05
HMX	6.57	Baseline	LV5D	10/08/24 13:05
DNX	6.75	Baseline	LV5D	10/08/24 13:04
MNX	7.15	Baseline	LV5D	10/08/24 13:04
RDX	7.51	Baseline	LV5D	10/08/24 13:04
Picric acid	7.94	Baseline	LV5D	10/08/24 13:04
1,2-Dinitrobenzene	8.37	Baseline	LV5D	10/08/24 13:04
1,3,5-Trinitrobenzene	8.47	Baseline	LV5D	10/08/24 13:04
Nitroglycerin	10.12	Baseline	LV5D	10/08/24 13:09
PETN	13.79	Baseline	LV5D	10/08/24 13:04

Lab Sample ID: IC 280-669870/18 Client Sample ID:

Date Analyzed: 10/04/24 19:33 Lab File ID: 10040018.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.43	Baseline	LV5D	10/08/24 13:05
HMX	6.57	Baseline	LV5D	10/08/24 13:05
DNX	6.75	Baseline	LV5D	10/08/24 13:05
MNX	7.15	Baseline	LV5D	10/08/24 13:05
RDX	7.51	Baseline	LV5D	10/08/24 13:05
Picric acid	7.94	Baseline	LV5D	10/08/24 13:05
Nitroglycerin	10.13	Baseline	LV5D	10/08/24 13:09
PETN	13.79	Baseline	LV5D	10/08/24 13:06

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 669870

Lab Sample ID: IC 280-669870/19 Client Sample ID:

Date Analyzed: 10/04/24 19:55 Lab File ID: 10040019.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.44	Baseline	LV5D	10/08/24 13:07
HMX	6.57	Baseline	LV5D	10/08/24 13:07
DNX	6.75	Baseline	LV5D	10/08/24 13:07
Nitroglycerin	10.12	Baseline	LV5D	10/08/24 13:09
2-Nitrotoluene	11.84	Baseline	LV5D	10/08/24 13:06
3-Nitrotoluene	12.72	Baseline	LV5D	10/08/24 13:06
PETN	13.78	Baseline	LV5D	10/08/24 13:06

Lab Sample ID: ICV 280-669870/20 Client Sample ID:

Date Analyzed: 10/04/24 20:16 Lab File ID: 10040020.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetryl	9.67	Baseline	LV5D	10/08/24 13:11
Nitroglycerin	10.11	Baseline	LV5D	10/08/24 13:11

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 670183

Lab Sample ID: CCV 280-670183/8 Client Sample ID:

Date Analyzed: 10/08/24 17:42 Lab File ID: 10080008.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.43	Baseline	LV5D	10/08/24 18:15
HMX	6.56	Baseline	LV5D	10/08/24 18:15
DNX	6.74	Baseline	LV5D	10/08/24 18:15
Nitroglycerin	10.11	Baseline	LV5D	10/09/24 11:15
2-Nitrotoluene	11.82	Baseline	LV5D	10/08/24 18:14
4-Nitrotoluene	12.20	Baseline	LV5D	10/08/24 18:14
3-Nitrotoluene	12.70	Baseline	LV5D	10/08/24 18:14

Lab Sample ID: MB 280-670001/1-A Client Sample ID:

Date Analyzed: 10/08/24 18:04 Lab File ID: 10080011.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.38	Baseline	LV5D	10/08/24 18:47

Lab Sample ID: LCS 280-670001/2-A Client Sample ID:

Date Analyzed: 10/08/24 18:26 Lab File ID: 10080012.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitroglycerin	10.12	Baseline	LV5D	10/08/24 18:59

Lab Sample ID: 280-197447-8 Client Sample ID: FWGmw-007-240901-GW

Date Analyzed: 10/08/24 19:10 Lab File ID: 10080014.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.38	Baseline	LV5D	10/08/24 19:34
3-Nitrotoluene		Invalid Compound ID	LV5D	10/08/24 19:34
HMX		Invalid Compound ID	LV5D	10/08/24 19:34

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 670183

Lab Sample ID: CCV 280-670183/21 Client Sample ID:

Date Analyzed: 10/08/24 21:44 Lab File ID: 10080021.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitroglycerin	10.10	Baseline	LV5D	10/09/24 11:15

Lab Sample ID: CCV 280-670183/30 Client Sample ID:

Date Analyzed: 10/09/24 01:01 Lab File ID: 10080030.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
DNX	6.77	Baseline	LV5D	10/09/24 11:10
Nitroglycerin	10.09	Baseline	LV5D	10/09/24 11:14

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 670184

Lab Sample ID: MB 280-669777/1-A Client Sample ID:

Date Analyzed: 10/09/24 05:24 Lab File ID: 10080042.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.37	Baseline	LV5D	10/09/24 11:16
1,3,5-Trinitrobenzene		Invalid Compound ID	LV5D	10/09/24 11:16

Lab Sample ID: LCS 280-669777/2-A Client Sample ID:

Date Analyzed: 10/09/24 05:46 Lab File ID: 10080043.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.58	Baseline	LV5D	10/09/24 11:16
1,3,5-Trinitrobenzene	8.48	Baseline	LV5D	10/09/24 11:16

Lab Sample ID: CCV 280-670184/52 Client Sample ID:

Date Analyzed: 10/09/24 09:04 Lab File ID: 10080052.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.44	Baseline	LV5D	10/09/24 11:30
HMX	6.58	Baseline	LV5D	10/09/24 11:31
DNX	6.76	Baseline	LV5D	10/09/24 11:31

Lab Sample ID: 280-197447-1 Client Sample ID: SCFmw-004-240901-GW

Date Analyzed: 10/09/24 09:26 Lab File ID: 10080053.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.36	Baseline	LV5D	10/09/24 11:31
3-Nitrotoluene		Invalid Compound ID	LV5D	10/09/24 11:31

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 670184

Lab Sample ID: 280-197447-1 MS Client Sample ID: SCFmw-004-240901-GW MS

Date Analyzed: 10/09/24 09:48 Lab File ID: 10080054.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.59	Baseline	LV5D	10/09/24 15:37
RDX	7.51	Baseline	LV5D	10/09/24 15:38
1,2-Dinitrobenzene	8.36	Baseline	LV5D	10/09/24 15:38
1,3,5-Trinitrobenzene	8.47	Baseline	LV5D	10/09/24 15:38

Lab Sample ID: 280-197447-1 MSD Client Sample ID: SCFmw-004-240901-GW MSD

Date Analyzed: 10/09/24 10:10 Lab File ID: 10080055.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.59	Baseline	LV5D	10/09/24 15:38
RDX	7.51	Baseline	LV5D	10/09/24 15:38
1,2-Dinitrobenzene	8.36	Baseline	LV5D	10/09/24 15:38
1,3,5-Trinitrobenzene	8.47	Baseline	LV5D	10/09/24 15:38
PETN	13.60	Baseline	LV5D	10/09/24 15:38

Lab Sample ID: 280-197447-2 Client Sample ID: SCFmw-004-240902-GW

Date Analyzed: 10/09/24 10:32 Lab File ID: 10080056.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.36	Baseline	LV5D	10/09/24 15:39
3-Nitrotoluene		Invalid Compound ID	LV5D	10/09/24 15:39
HMX		Invalid Compound ID	LV5D	10/09/24 15:39
Nitroglycerin		Invalid Compound ID	LV5D	10/09/24 15:39

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 670184

Lab Sample ID: 280-197447-3 Client Sample ID: LL1mw-087-240901-GW

Date Analyzed: 10/09/24 10:54 Lab File ID: 10080057.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.36	Baseline	LV5D	10/09/24 11:35
1,3,5-Trinitrobenzene		Invalid Compound ID	LV5D	10/09/24 11:35
1,3-Dinitrobenzene		Invalid Compound ID	LV5D	10/09/24 11:35
3-Nitrotoluene		Invalid Compound ID	LV5D	10/09/24 11:35
4-Nitrotoluene		Invalid Compound ID	LV5D	10/09/24 11:35
HMX		Invalid Compound ID	LV5D	10/09/24 11:35
Tetryl		Invalid Compound ID	LV5D	10/09/24 11:35

Lab Sample ID: 280-197447-4 Client Sample ID: LL1mw-086-240901-GW

Date Analyzed: 10/09/24 11:16 Lab File ID: 10080058.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.36	Baseline	LV5D	10/09/24 11:47
1,3,5-Trinitrobenzene		Invalid Compound ID	LV5D	10/09/24 11:47
1,3-Dinitrobenzene		Invalid Compound ID	LV5D	10/09/24 11:47
3-Nitrotoluene		Invalid Compound ID	LV5D	10/09/24 11:47
HMX		Invalid Compound ID	LV5D	10/09/24 11:47
Tetryl		Invalid Compound ID	LV5D	10/09/24 11:47

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 670184

Lab Sample ID: 280-197447-5 Client Sample ID: LL1mw-091-240901-GW

Date Analyzed: 10/09/24 11:38 Lab File ID: 10080059.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.36	Baseline	LV5D	10/09/24 13:11
1,3,5-Trinitrobenzene	8.49	Baseline	LV5D	10/09/24 13:11
1,3-Dinitrobenzene		Invalid Compound ID	LV5D	10/09/24 13:11
2,4-Dinitrotoluene		Invalid Compound ID	LV5D	10/09/24 13:11
3-Nitrotoluene		Invalid Compound ID	LV5D	10/09/24 13:11
4-Nitrotoluene		Invalid Compound ID	LV5D	10/09/24 13:11
HMX		Invalid Compound ID	LV5D	10/09/24 13:11
RDX		Invalid Compound ID	LV5D	10/09/24 13:11

Lab Sample ID: 280-197447-6 Client Sample ID: LL1mw-091-240902-GW

Date Analyzed: 10/09/24 12:00 Lab File ID: 10080060.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.36	Baseline	LV5D	10/09/24 13:12
1,3,5-Trinitrobenzene	8.50	Baseline	LV5D	10/09/24 13:12
Tetryl	9.68	Baseline	LV5D	10/09/24 13:12
1,3-Dinitrobenzene		Invalid Compound ID	LV5D	10/09/24 13:12
3-Nitrotoluene		Invalid Compound ID	LV5D	10/09/24 13:12
4-Nitrotoluene		Invalid Compound ID	LV5D	10/09/24 13:12
HMX		Invalid Compound ID	LV5D	10/09/24 13:11
RDX		Invalid Compound ID	LV5D	10/09/24 13:11
2,4-Dinitrotoluene	11.14	Baseline	LV5D	10/09/24 13:12

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 670184

Lab Sample ID: 280-197447-7 Client Sample ID: LL1mw-064-240901-GW

Date Analyzed: 10/09/24 12:22 Lab File ID: 10080061.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.36	Baseline	LV5D	10/09/24 13:12
1,3-Dinitrobenzene		Invalid Compound ID	LV5D	10/09/24 13:12
3-Nitrotoluene		Invalid Compound ID	LV5D	10/09/24 13:12
HMX		Invalid Compound ID	LV5D	10/09/24 13:12

Lab Sample ID: CCV 280-670184/63 Client Sample ID:

Date Analyzed: 10/09/24 13:06 Lab File ID: 10080063.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.46	Baseline	LV5D	10/09/24 14:23
HMX	6.59	Baseline	LV5D	10/09/24 14:23
DNX	6.77	Baseline	LV5D	10/09/24 14:24
PETN	13.60	Baseline	LV5D	10/09/24 14:23

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 670729

Lab Sample ID: MB 280-670642/1-A Client Sample ID:

Date Analyzed: 10/11/24 17:34 Lab File ID: 10110011.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.37	Baseline	LV5D	10/11/24 18:05

Lab Sample ID: 280-197447-1 RE Client Sample ID: SCFmw-004-240901-GW RE

Date Analyzed: 10/11/24 22:20 Lab File ID: 10110024.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.37	Baseline	LV5D	10/12/24 10:10

Lab Sample ID: 280-197447-1 MS RE Client Sample ID: SCFmw-004-240901-GW MS RE

Date Analyzed: 10/11/24 22:42 Lab File ID: 10110025.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.57	Baseline	LV5D	10/12/24 10:11
RDX	7.51	Baseline	LV5D	10/12/24 10:11
1,2-Dinitrobenzene	8.37	Baseline	LV5D	10/12/24 10:11
1,3,5-Trinitrobenzene	8.47	Baseline	LV5D	10/12/24 10:11

Lab Sample ID: 280-197447-1 MSD RE Client Sample ID: SCFmw-004-240901-GW MSD RE

Date Analyzed: 10/11/24 23:03 Lab File ID: 10110026.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.57	Baseline	LV5D	10/12/24 10:11
RDX	7.51	Baseline	LV5D	10/12/24 10:11

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 670729

Lab Sample ID: 280-197447-2 RE Client Sample ID: SCFmw-004-240902-GW RE

Date Analyzed: 10/11/24 23:25 Lab File ID: 10110027.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.37	Baseline	LV5D	10/12/24 10:11
HMX		Invalid Compound ID	LV5D	10/12/24 10:11

Lab Sample ID: 280-197447-3 RE Client Sample ID: LL1mw-087-240901-GW RE

Date Analyzed: 10/11/24 23:47 Lab File ID: 10110028.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.36	Baseline	LV5D	10/12/24 10:11
Tetryl	9.66	Baseline	LV5D	10/12/24 10:12
1,3,5-Trinitrobenzene		Invalid Compound ID	LV5D	10/12/24 10:11
1,3-Dinitrobenzene		Invalid Compound ID	LV5D	10/12/24 10:11
HMX		Invalid Compound ID	LV5D	10/12/24 10:11

Lab Sample ID: 280-197447-4 RE Client Sample ID: LL1mw-086-240901-GW RE

Date Analyzed: 10/12/24 00:09 Lab File ID: 10110029.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.36	Baseline	LV5D	10/12/24 10:12
1,3-Dinitrobenzene		Invalid Compound ID	LV5D	10/12/24 10:12
HMX		Invalid Compound ID	LV5D	10/12/24 10:12
Tetryl		Invalid Compound ID	LV5D	10/12/24 10:12

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 670729

Lab Sample ID: 280-197447-5 RE Client Sample ID: LL1mw-091-240901-GW RE

Date Analyzed: 10/12/24 00:31 Lab File ID: 10110030.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.57	Baseline	LV5D	10/12/24 10:12
1,3,5-Trinitrobenzene	8.50	Baseline	LV5D	10/12/24 10:12
1,3-Dinitrobenzene		Invalid Compound ID	LV5D	10/12/24 10:12
2,4-Dinitrotoluene		Invalid Compound ID	LV5D	10/12/24 10:12

Lab Sample ID: 280-197447-6 RE Client Sample ID: LL1mw-091-240902-GW RE

Date Analyzed: 10/12/24 00:53 Lab File ID: 10110031.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.58	Baseline	LV5D	10/12/24 10:12
RDX	7.52	Baseline	LV5D	10/12/24 10:12
1,3,5-Trinitrobenzene	8.50	Baseline	LV5D	10/12/24 10:13
Tetryl	9.68	Baseline	LV5D	10/12/24 10:12
1,3-Dinitrobenzene		Invalid Compound ID	LV5D	10/12/24 10:12
2,4-Dinitrotoluene	11.17	Baseline	LV5D	10/12/24 10:12

Lab Sample ID: 280-197447-7 RE Client Sample ID: LL1mw-064-240901-GW RE

Date Analyzed: 10/12/24 01:37 Lab File ID: 10110033.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.60	Baseline	LV5D	10/12/24 10:13
1,2-Dinitrobenzene	8.37	Baseline	LV5D	10/12/24 10:13
1,3-Dinitrobenzene		Invalid Compound ID	LV5D	10/12/24 10:13

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 663590

Lab Sample ID: IC 280-663590/10 Client Sample ID:

Date Analyzed: 08/10/24 20:22 Lab File ID: 08100010.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Picric acid	7.63	Peak assignment corrected	LV5D	08/13/24 13:45
Tetryl	21.11	Baseline Smoothing	LV5D	08/13/24 15:16
2,4,6-Trinitrotoluene	21.99	Baseline Smoothing	LV5D	08/13/24 15:11

Lab Sample ID: IC 280-663590/11 Client Sample ID:

Date Analyzed: 08/10/24 20:57 Lab File ID: 08100011.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Picric acid	7.76	Baseline Smoothing	LV5D	08/13/24 15:11
Tetryl	21.14	Baseline Smoothing	LV5D	08/13/24 15:16
2,4,6-Trinitrotoluene	22.01	Baseline Smoothing	LV5D	08/13/24 15:11

Lab Sample ID: IC 280-663590/12 Client Sample ID:

Date Analyzed: 08/10/24 21:31 Lab File ID: 08100012.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Picric acid	7.79	Baseline Smoothing	LV5D	08/13/24 15:11
Tetryl	21.13	Baseline Smoothing	LV5D	08/13/24 15:11
2,4,6-Trinitrotoluene	22.01	Baseline Smoothing	LV5D	08/13/24 15:11

Lab Sample ID: IC 280-663590/13 Client Sample ID:

Date Analyzed: 08/10/24 22:06 Lab File ID: 08100013.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Picric acid	7.83	Baseline Smoothing	LV5D	08/13/24 15:11
Tetryl	21.17	Baseline Smoothing	LV5D	08/13/24 15:12
2,4,6-Trinitrotoluene	22.05	Baseline Smoothing	LV5D	08/13/24 15:12

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 663590

Lab Sample ID: IC 280-663590/14 Client Sample ID:

Date Analyzed: 08/10/24 22:41 Lab File ID: 08100014.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Picric acid	7.81	Baseline Smoothing	LV5D	08/13/24 15:12
Tetryl	21.10	Baseline Smoothing	LV5D	08/13/24 15:12
2,4,6-Trinitrotoluene	21.98	Baseline Smoothing	LV5D	08/13/24 15:12

Lab Sample ID: IC 280-663590/15 Client Sample ID:

Date Analyzed: 08/10/24 23:16 Lab File ID: 08100015.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Picric acid	7.86	Baseline Smoothing	LV5D	08/13/24 15:12
Tetryl	21.15	Baseline Smoothing	LV5D	08/13/24 15:12
2,4,6-Trinitrotoluene	22.03	Baseline Smoothing	LV5D	08/13/24 15:12

Lab Sample ID: IC 280-663590/16 Client Sample ID:

Date Analyzed: 08/10/24 23:51 Lab File ID: 08100016.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Picric acid	7.87	Baseline Smoothing	LV5D	08/13/24 15:12
Tetryl	21.16	Baseline Smoothing	LV5D	08/13/24 15:12
2,4,6-Trinitrotoluene	22.03	Baseline Smoothing	LV5D	08/13/24 15:12

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 663590

Lab Sample ID: IC 280-663590/17 Client Sample ID:

Date Analyzed: 08/11/24 00:26 Lab File ID: 08100017.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Picric acid	7.87	Baseline Smoothing	LV5D	08/13/24 15:12
Nitrobenzene	11.02	Baseline Smoothing	LV5D	08/13/24 15:13
1,2-Dinitrobenzene	11.84	Baseline Smoothing	LV5D	08/13/24 15:13
3,5-Dinitroaniline	13.52	Baseline Smoothing	LV5D	08/13/24 15:13
1,3-Dinitrobenzene	13.86	Baseline Smoothing	LV5D	08/13/24 15:13
Nitroglycerin	14.53	Baseline Smoothing	LV5D	08/13/24 15:13
2-Nitrotoluene	15.04	Baseline Smoothing	LV5D	08/13/24 15:13
4-Nitrotoluene	15.28	Baseline Smoothing	LV5D	08/13/24 15:13
4-Amino-2,6-dinitrotoluene	15.62	Baseline Smoothing	LV5D	08/13/24 15:13
3-Nitrotoluene	16.10	Baseline Smoothing	LV5D	08/13/24 15:13
2-Amino-4,6-dinitrotoluene	16.36	Baseline Smoothing	LV5D	08/13/24 15:13
1,3,5-Trinitrobenzene	16.58	Baseline Smoothing	LV5D	08/13/24 15:13
Tetryl	21.15	Baseline Smoothing	LV5D	08/13/24 15:14
2,4,6-Trinitrotoluene	22.02	Baseline Smoothing	LV5D	08/13/24 15:14

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 663590

Lab Sample ID: IC 280-663590/18 Client Sample ID:

Date Analyzed: 08/11/24 01:01 Lab File ID: 08100018.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.32	Baseline Smoothing	LV5D	08/13/24 15:15
Picric acid	7.86	Baseline Smoothing	LV5D	08/13/24 15:14
Nitrobenzene	11.00	Baseline Smoothing	LV5D	08/13/24 15:15
1,2-Dinitrobenzene	11.83	Baseline Smoothing	LV5D	08/13/24 15:15
3,5-Dinitroaniline	13.51	Baseline Smoothing	LV5D	08/13/24 15:15
1,3-Dinitrobenzene	13.85	Baseline Smoothing	LV5D	08/13/24 15:15
2-Nitrotoluene	15.03	Baseline Smoothing	LV5D	08/13/24 15:15
4-Nitrotoluene	15.28	Baseline Smoothing	LV5D	08/13/24 15:15
4-Amino-2,6-dinitrotoluene	15.61	Baseline Smoothing	LV5D	08/13/24 15:15
3-Nitrotoluene	16.09	Baseline Smoothing	LV5D	08/13/24 15:15
2-Amino-4,6-dinitrotoluene	16.36	Baseline Smoothing	LV5D	08/13/24 15:15
1,3,5-Trinitrobenzene	16.58	Baseline Smoothing	LV5D	08/13/24 15:15
2,6-Dinitrotoluene	17.69	Baseline Smoothing	LV5D	08/13/24 15:15
2,4-Dinitrotoluene	18.13	Baseline Smoothing	LV5D	08/13/24 15:15
Tetryl	21.15	Baseline Smoothing	LV5D	08/13/24 15:14
2,4,6-Trinitrotoluene	22.02	Baseline Smoothing	LV5D	08/13/24 15:14

Lab Sample ID: ICV 280-663590/19 Client Sample ID:

Date Analyzed: 08/11/24 01:36 Lab File ID: 08100019.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetryl	21.14	Baseline Smoothing	LV5D	08/13/24 15:17
2,4,6-Trinitrotoluene	22.01	Baseline Smoothing	LV5D	08/13/24 15:17

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 670394

Lab Sample ID: 280-197447-5 Client Sample ID: LL1mw-091-240901-GW

Date Analyzed: 10/10/24 01:45 Lab File ID: 10090019.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Amino-2,6-dinitrotoluene		Invalid Compound ID	LV5D	10/10/24 15:41
4-Nitrotoluene		Invalid Compound ID	LV5D	10/10/24 15:41
HMX		Invalid Compound ID	LV5D	10/10/24 15:41
1,3,5-Trinitrobenzene	16.45	Baseline Smoothing	LV5D	10/10/24 15:41

Lab Sample ID: 280-197447-6 Client Sample ID: LL1mw-091-240902-GW

Date Analyzed: 10/10/24 02:55 Lab File ID: 10090021.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Amino-2,6-dinitrotoluene		Invalid Compound ID	LV5D	10/10/24 15:41
4-Nitrotoluene		Invalid Compound ID	LV5D	10/10/24 15:41
HMX		Invalid Compound ID	LV5D	10/10/24 15:41
Nitrobenzene		Invalid Compound ID	LV5D	10/10/24 15:41
1,2-Dinitrobenzene	11.72	Baseline Smoothing	LV5D	10/10/24 15:41

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
8330 DMT_00018	03/28/25	09/28/24	Acetonitrile, Lot ACN_00243	5 mL	MNX,TNX,DNX_00118	1 mL	DNX	20.02 ug/mL
							MNX	23.34 ug/mL
							TNX	20.06 ug/mL
.MNX,TNX,DNX_00118	07/31/25		Agilent, Lot 0006801476		(Purchased Reagent)		DNX	100.1 ug/mL
							MNX	116.7 ug/mL
							TNX	100.3 ug/mL
8330 LCS_00136	01/04/25	07/04/24	Acetonitrile, Lot Acetonitrile_00092	100 mL	8330 LCSMix2_00117	1 mL	2,6-Dinitrotoluene	10 ug/mL
							2-Amino-4,6-dinitrotoluene	10 ug/mL
							2-Nitrotoluene	10 ug/mL
							3-Nitrotoluene	10 ug/mL
							4-Amino-2,6-dinitrotoluene	10 ug/mL
							4-Nitrotoluene	10 ug/mL
							Tetryl	10 ug/mL
					8330_NG_Stk_00149	1 mL	Nitroglycerin	100 ug/mL
					8330_NG_Stk_00151	1 mL	Nitroglycerin	100 ug/mL
					8330_PETN_Stk_00157	1 mL	PETN	100 ug/mL
					8330_PETN_Stk_00158	1 mL	PETN	100 ug/mL
					8330LCSMix1_00153	1 mL	1,3,5-Trinitrobenzene	10 ug/mL
							1,3-Dinitrobenzene	10 ug/mL
							2,4,6-Trinitrotoluene	10 ug/mL
							2,4-Dinitrotoluene	10 ug/mL
							HMX	10 ug/mL
							Nitrobenzene	10 ug/mL
							RDX	10 ug/mL
.8330 LCSMix2_00117	07/04/25		Restek, Lot A199657		(Purchased Reagent)		2,6-Dinitrotoluene	1000 ug/mL
							2-Amino-4,6-dinitrotoluene	1000 ug/mL
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1000 ug/mL
							4-Amino-2,6-dinitrotoluene	1000 ug/mL
							4-Nitrotoluene	1000 ug/mL
							Tetryl	1000 ug/mL
.8330_NG_Stk_00149	07/04/25		Restek, Lot A0203257		(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_NG_Stk_00151	07/04/25		Restek, Lot A0203257		(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_PETN_Stk_00157	07/04/25		Restek, Lot A0205209		(Purchased Reagent)		PETN	5000 ug/mL
.8330_PETN_Stk_00158	07/04/25		Restek, Lot A0205209		(Purchased Reagent)		PETN	5000 ug/mL
.8330LCSMix1_00153	07/04/25		Restek, Lot A196548		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							2,4,6-Trinitrotoluene	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							RDX	1000 ug/mL
8330 LCS_00137	02/14/25	08/14/24	Acetonitrile, Lot Acetonitrile_00092	100 mL	3,5-DNA Stock_00058	1 mL	3,5-Dinitroaniline	10 ug/mL
					8330 LCSMix2_00118	1 mL	2,6-Dinitrotoluene	10 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Amino-4,6-dinitrotoluene	10 ug/mL
							2-Nitrotoluene	10 ug/mL
							3-Nitrotoluene	10 ug/mL
							4-Amino-2,6-dinitrotoluene	10 ug/mL
							4-Nitrotoluene	10 ug/mL
							Tetryl	10 ug/mL
					8330_NG_Stk_00152	1 mL	Nitroglycerin	100 ug/mL
					8330_NG_Stk_00153	1 mL	Nitroglycerin	100 ug/mL
					8330_PETN_Stk_00159	1 mL	PETN	100 ug/mL
					8330_PETN_Stk_00160	1 mL	PETN	100 ug/mL
					8330LCSMix1_00154	1 mL	1,3,5-Trinitrobenzene	10 ug/mL
							1,3-Dinitrobenzene	10 ug/mL
							2,4,6-Trinitrotoluene	10 ug/mL
							2,4-Dinitrotoluene	10 ug/mL
							HMX	10 ug/mL
							Nitrobenzene	10 ug/mL
							RDX	10 ug/mL
					PicricARestek_00125	1 mL	2,4,6-Trinitrophenol	10 ug/mL
							Ammonium Picrate	10.74 ug/mL
.3,5-DNA Stock_00058	08/14/25		Restek, Lot A0202640		(Purchased Reagent)		3,5-Dinitroaniline	1000 ug/mL
.8330 LCSMix2_00118	08/14/25		Restek, Lot A199657		(Purchased Reagent)		2,6-Dinitrotoluene	1000 ug/mL
							2-Amino-4,6-dinitrotoluene	1000 ug/mL
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1000 ug/mL
							4-Amino-2,6-dinitrotoluene	1000 ug/mL
							4-Nitrotoluene	1000 ug/mL
							Tetryl	1000 ug/mL
.8330_NG_Stk_00152	08/14/25		Restek, Lot A0211998		(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_NG_Stk_00153	08/14/25		Restek, Lot A0211998		(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_PETN_Stk_00159	08/14/25		Restek, Lot A0205209		(Purchased Reagent)		PETN	5000 ug/mL
.8330_PETN_Stk_00160	08/14/25		Restek, Lot A0205209		(Purchased Reagent)		PETN	5000 ug/mL
.8330LCSMix1_00154	08/14/25		Restek, Lot A196548		(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_00125	08/14/25		Restek, Lot A0195778		(Purchased Reagent)		2,4,6-Trinitrophenol	1000 ug/mL
							Ammonium Picrate	1074 ug/mL
8330_OP_DMT_00030	06/30/25	07/08/24	Acetonitrile, Lot Acetonitrile_00091	10 mL	MNX,TNX,DNX_00116	1 mL	DNX	10.01 ug/mL
							MNX	11.67 ug/mL
							TNX	10.03 ug/mL
.MNX,TNX,DNX_00116	06/30/25		Agilent, Lot 0006796152		(Purchased Reagent)		DNX	100.1 ug/mL
							MNX	116.7 ug/mL
							TNX	100.3 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
8330IntermStk_00082	01/06/25	08/02/24	Acetonitrile, Lot ACN_242	10 mL	8330_NG1000_00015	1 mL	Nitroglycerin	100 ug/mL
					8330_PETN1000_00018	1 mL	PETN	100 ug/mL
					833035DNAStk_00062	1 mL	3,5-Dinitroaniline	10 ug/mL
					8330ICALStock_00035	1 mL	1,3,5-Trinitrobenzene	10 ug/mL
							1,3-Dinitrobenzene	10 ug/mL
							2,4,6-Trinitrotoluene	10 ug/mL
							2,4-Dinitrotoluene	10 ug/mL
							2,6-Dinitrotoluene	10 ug/mL
							2-Amino-4,6-dinitrotoluene	10 ug/mL
							2-Nitrotoluene	10 ug/mL
							3-Nitrotoluene	10 ug/mL
							4-Amino-2,6-dinitrotoluene	10 ug/mL
							4-Nitrotoluene	10 ug/mL
							HMX	10 ug/mL
							Nitrobenzene	10 ug/mL
							RDX	10 ug/mL
							Tetryl	10 ug/mL
							1,2-Dinitrobenzene	10 ug/mL
					8330PAStkPS_00077	1 mL	2,4,6-Trinitrophenol	10 ug/mL
.8330_NG1000_00015	08/02/25		Restek, Lot A0208632		(Purchased Reagent)		Nitroglycerin	1000 ug/mL
.8330_PETN1000_00018	08/02/25		Restek, Lot A0207895		(Purchased Reagent)		PETN	1000 ug/mL
.833035DNAStk_00062	01/06/25		Accustandard, Lot 223041214-01		(Purchased Reagent)		3,5-Dinitroaniline	100 ug/mL
.8330ICALStock_00035	01/23/25	01/23/24	Acetonitrile, Lot 233799	10 mL	8330 Stock_TS_00024	1 mL	1,3,5-Trinitrobenzene	100 ug/mL
							1,3-Dinitrobenzene	100 ug/mL
							2,4,6-Trinitrotoluene	100 ug/mL
							2,4-Dinitrotoluene	100 ug/mL
							2,6-Dinitrotoluene	100 ug/mL
							2-Amino-4,6-dinitrotoluene	100 ug/mL
							2-Nitrotoluene	100 ug/mL
							3-Nitrotoluene	100 ug/mL
							4-Amino-2,6-dinitrotoluene	100 ug/mL
							4-Nitrotoluene	100 ug/mL
							HMX	100 ug/mL
							Nitrobenzene	100 ug/mL
							RDX	100 ug/mL
							Tetryl	100 ug/mL
					8330SurrStock_00173	1 mL	1,2-Dinitrobenzene	100 ug/mL
..8330 Stock_TS_00024	01/23/25		Agilent, Lot 0006684308		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							2,4,6-Trinitrotoluene	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Amino-4,6-dinitrotoluene	1000 ug/mL
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1000 ug/mL
							4-Amino-2,6-dinitrotoluene	1000 ug/mL

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Nitrotoluene	1000 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							RDX	1000 ug/mL
							Tetryl	1000 ug/mL
..8330SurrStock_00173	01/23/25	AccuStandard, Lot 219051500			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330PAStkPS_00077	08/02/25	AccuStandard, Lot 223031306-01			(Purchased Reagent)		2,4,6-Trinitrophenol	100 ug/mL
8330IntermStk_00083	04/04/25	10/04/24	Acetonitrile, Lot ACN_244	10 mL	8330_NG1000_00017	1 mL	Nitroglycerin	100 ug/mL
					8330_PETN1000_00020	1 mL	PETN	100 ug/mL
					833035DNAStk_00064	1 mL	3,5-Dinitroaniline	10 ug/mL
					8330ICALStock_00036	1 mL	1,3,5-Trinitrobenzene	10 ug/mL
							1,3-Dinitrobenzene	10 ug/mL
							2,4,6-Trinitrotoluene	10 ug/mL
							2,4-Dinitrotoluene	10 ug/mL
							2,6-Dinitrotoluene	10 ug/mL
							2-Amino-4,6-dinitrotoluene	10 ug/mL
							2-Nitrotoluene	10 ug/mL
							3-Nitrotoluene	10 ug/mL
							4-Amino-2,6-dinitrotoluene	10 ug/mL
							4-Nitrotoluene	10 ug/mL
							HMX	10 ug/mL
							Nitrobenzene	10 ug/mL
							RDX	10 ug/mL
							Tetryl	10 ug/mL
							1,2-Dinitrobenzene	10 ug/mL
					8330PAStkPS_00078	1 mL	2,4,6-Trinitrophenol	10 ug/mL
.8330_NG1000_00017	10/04/25	Restek, Lot A0213231			(Purchased Reagent)		Nitroglycerin	1000 ug/mL
.8330_PETN1000_00020	10/04/25	Restek, Lot A0211856			(Purchased Reagent)		PETN	1000 ug/mL
.833035DNAStk_00064	10/04/25	Accustandard, Lot 223011692-04			(Purchased Reagent)		3,5-Dinitroaniline	100 ug/mL
.8330ICALStock_00036	06/05/25	10/04/24	Acetonitrile, Lot ACN_244	10 mL	8330 Stock_TS_00025	1 mL	1,3,5-Trinitrobenzene	100 ug/mL
							1,3-Dinitrobenzene	100 ug/mL
							2,4,6-Trinitrotoluene	100 ug/mL
							2,4-Dinitrotoluene	100 ug/mL
							2,6-Dinitrotoluene	100 ug/mL
							2-Amino-4,6-dinitrotoluene	100 ug/mL
							2-Nitrotoluene	100 ug/mL
							3-Nitrotoluene	100 ug/mL
							4-Amino-2,6-dinitrotoluene	100 ug/mL
							4-Nitrotoluene	100 ug/mL
							HMX	100 ug/mL
							Nitrobenzene	100 ug/mL
							RDX	100 ug/mL
							Tetryl	100 ug/mL
					8330SurrStock_00174	1 mL	1,2-Dinitrobenzene	100 ug/mL
..8330 Stock_TS_00025	06/05/25	Agilent, Lot 0006684308			(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3-Dinitrobenzene	1000 ug/mL
							2,4,6-Trinitrotoluene	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Amino-4,6-dinitrotoluene	1000 ug/mL
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1000 ug/mL
							4-Amino-2,6-dinitrotoluene	1000 ug/mL
							4-Nitrotoluene	1000 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							RDX	1000 ug/mL
							Tetryl	1000 ug/mL
..8330SurrStock_00174	10/04/25	AccuStandard, Lot 219051500			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330PAStkPS_00078	10/04/25	AccuStandard, Lot 223031306-01			(Purchased Reagent)		2,4,6-Trinitrophenol	100 ug/mL
8330Surrogate_00158	02/09/25	08/09/24	Acetonitrile, Lot Acetonitrile_00092	500 mL	8330SurrStkSS_00324	0.7 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00325	1.1 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00326	1.2 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00327	1.2 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00328	0.8 mL	1,2-Dinitrobenzene	10 ug/mL
.8330SurrStkSS_00324	07/15/25	Restek, Lot A0205460			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00325	08/09/25	Restek, Lot A0205460			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00326	08/09/25	Restek, Lot A0205460			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00327	08/09/25	Restek, Lot A0205460			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00328	08/09/25	Restek, Lot A0205460			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
8330Surrogate_00159	03/19/25	09/19/24	Acetonitrile, Lot Acetonitrile_00092	500 mL	8330SurrStkSS_00329	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00336	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00337	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00339	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00340	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
.8330SurrStkSS_00329	09/19/25	Restek, Lot A0205460			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00336	09/19/25	Restek, Lot A0211455			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00337	09/19/25	Restek, Lot A0211455			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00339	09/19/25	Restek, Lot A0211455			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00340	09/19/25	Restek, Lot A0211455			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL

Reagent

3,5-DNA Stock_00058

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

Certificate of Analysis

chromatographic plus

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. : 31661 **Lot No.:** A0202640

Description : 3,5-Dinitroaniline Standard

3, 5-Dinitroaniline Std 1000µg/mL, Acetonitrile, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2028 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	3,5-Dinitroaniline	618-87-1	10311HS	99%	1,008.0 µg/mL	+/- 37.5994

* Expanded Uncertainty displayed in same units as Grav. Conc.

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

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

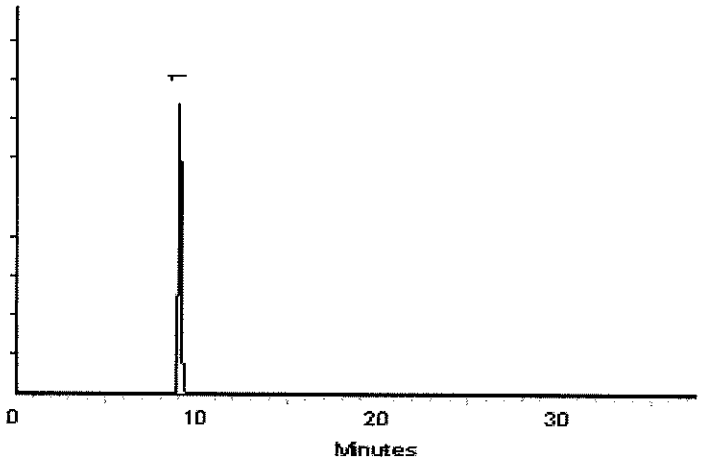
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
2.0µl



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.

Dakota Parson - Operations Technician I **Date Mixed:** 29-Sep-2023 **Balance Serial #** 1128342314

Jennifer Pollino - Operations Tech III - ARM QC **Date Passed:** 09-Oct-2023

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 expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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 ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330 LCS_00136

Preliminary Report

Eurofins Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20240709-135286.b\07090012.D

Lims ID: 8330LCS136 Inj. Date: 09-Jul-2024 17:15:14

Worklist ID: 280-0135286-012 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 3535	Limits 2 3535
4 HMX	0.5000	0.4360	87.2	65-135	66-115
8 RDX	0.5000	0.4659	93.2	68-130	69-122
9 2,4,6-Trinitrophenol	0.5000	0.5251	105.0	80-120	63-135
11 1,3,5-Trinitrobenzene	0.5000	0.5198	104.0	73-125	62-127
12 1,3-Dinitrobenzene	0.5000	0.5209	104.2	78-120	59-131
13 Nitrobenzene	0.5000	0.5223	104.5	65-134	46-144
14 3,5-Dinitroaniline	0.5000	0.5227	104.5	71-117	55-119
15 Tetryl	0.5000	0.5226	104.5	64-128	56-131
16 Nitroglycerin	5.00	5.08	101.7	74-127	70-125
17 2,4,6-Trinitrotoluene	0.5000	0.5032	100.6	71-123	46-139
18 4-Amino-2,6-dinitrotolu	0.5000	0.4896	97.9	76-125	43-120
19 2-Amino-4,6-dinitrotolu	0.5000	0.5095	101.9	79-120	46-124
20 2,6-Dinitrotoluene	0.5000	0.4875	97.5	77-127	51-130
21 2,4-Dinitrotoluene	0.5000	0.4975	99.5	78-120	53-127
22 o-Nitrotoluene	0.5000	0.5031	100.6	70-127	37-138
23 p-Nitrotoluene	0.5000	0.5028	100.6	71-127	41-137
24 m-Nitrotoluene	0.5000	0.5003	100.1	73-125	31-140
25 PETN	5.00	5.33	106.7	73-127	67-127

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

280-193262-A-1-A 280-193262-B-2-A 280-193262-B-3-A

280-193262-A-4-A 280-193262-B-5-A 280-193262-A-6-A

280-193578-G-1-A 280-193578-F-2-A 280-193578-F-3-A

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

280-193627-B-1-A

Reagent

8330 LCS_00137

Preliminary Report

Eurofins Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20240814-136489.b\08140011.D

Lims ID: 8330LCS137 Inj. Date: 14-Aug-2024 18:04:14

Worklist ID: 280-0136489-011 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 3535
4 HMX	0.5000	0.4297	85.9	65-135
8 RDX	0.5000	0.4576	91.5	68-130
9 2,4,6-Trinitrophenol	0.5000	0.5132	102.6	80-120
11 1,3,5-Trinitrobenzene	0.5000	0.5094	101.9	73-125
12 1,3-Dinitrobenzene	0.5000	0.5076	101.5	78-120
13 Nitrobenzene	0.5000	0.5129	102.6	65-134
14 3,5-Dinitroaniline	0.5000	0.4881	97.6	71-117
15 Tetryl	0.5000	0.5447	108.9	64-128
16 Nitroglycerin	5.00	4.99	99.8	74-127
17 2,4,6-Trinitrotoluene	0.5000	0.4855	97.1	71-123
18 4-Amino-2,6-dinitrotolu	0.5000	0.4859	97.2	76-125
19 2-Amino-4,6-dinitrotolu	0.5000	0.4949	99.0	79-120
20 2,6-Dinitrotoluene	0.5000	0.4816	96.3	77-127
21 2,4-Dinitrotoluene	0.5000	0.4875	97.5	78-120
22 o-Nitrotoluene	0.5000	0.4945	98.9	70-127
23 p-Nitrotoluene	0.5000	0.4946	98.9	71-127
24 m-Nitrotoluene	0.5000	0.4967	99.3	73-125
25 PETN	5.00	5.25	105.1	73-127

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

280-195171-B-1-A 280-195171-B-2-A 280-195171-B-3-A

280-195171-B-4-A 280-195171-C-5-A 280-195171-C-6-A

280-195171-B-7-A 280-195171-C-8-A

Reagent

8330 LCSMix2_00117

RESTEK
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Tel: 1-814-353-1300
Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31451 **Lot No.:** A0199657

Description : 8330 Calibration Mix #2

8330 Calibration Std #2 1000µg/mL, Acetonitrile, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2028 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Tetryl	479-45-8	211028JLM	99%	1,010.0 µg/mL	+/- 47.1183
2	4-Amino-2,6-dinitrotoluene	19406-51-0	ER070908-01	99%	1,008.0 µg/mL	+/- 47.0250
3	2-Amino-4,6-dinitrotoluene	35572-78-2	A210503-001	99%	1,006.0 µg/mL	+/- 46.9317
4	2,6-Dinitrotoluene	606-20-2	BCCG1833	99%	1,010.0 µg/mL	+/- 47.1183
5	2-Nitrotoluene	88-72-2	BCBZ7826	99%	1,000.0 µg/mL	+/- 46.6518
6	4-Nitrotoluene	99-99-0	BCCB0171	99%	1,006.0 µg/mL	+/- 46.9317
7	3-Nitrotoluene	99-08-1	07329LG	99%	1,006.0 µg/mL	+/- 46.9317

* Expanded Uncertainty displayed in same units as Grav. Conc.

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

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

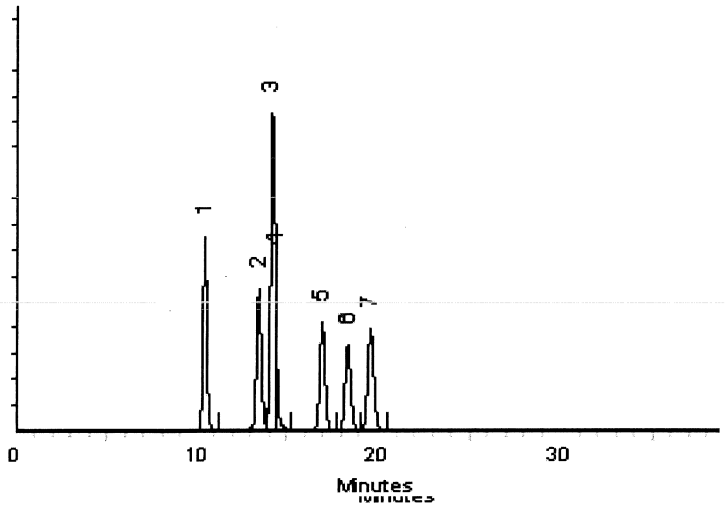
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
5µl



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.

Alicia Leathers - Operation Technician I

Date Mixed: 07-Jul-2023 **Balance Serial #** B251644995

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 20-Jul-2023

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 expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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 ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330 LCSMix2_00118

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31451 **Lot No.:** A0199657

Description : 8330 Calibration Mix #2

8330 Calibration Std #2 1000µg/mL, Acetonitrile, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2028 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Tetryl	479-45-8	211028JLM	99%	1,010.0 µg/mL	+/- 47.1183
2	4-Amino-2,6-dinitrotoluene	19406-51-0	ER070908-01	99%	1,008.0 µg/mL	+/- 47.0250
3	2-Amino-4,6-dinitrotoluene	35572-78-2	A210503-001	99%	1,006.0 µg/mL	+/- 46.9317
4	2,6-Dinitrotoluene	606-20-2	BCCG1833	99%	1,010.0 µg/mL	+/- 47.1183
5	2-Nitrotoluene	88-72-2	BCBZ7826	99%	1,000.0 µg/mL	+/- 46.6518
6	4-Nitrotoluene	99-99-0	BCCB0171	99%	1,006.0 µg/mL	+/- 46.9317
7	3-Nitrotoluene	99-08-1	07329LG	99%	1,006.0 µg/mL	+/- 46.9317

* Expanded Uncertainty displayed in same units as Grav. Conc.

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

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

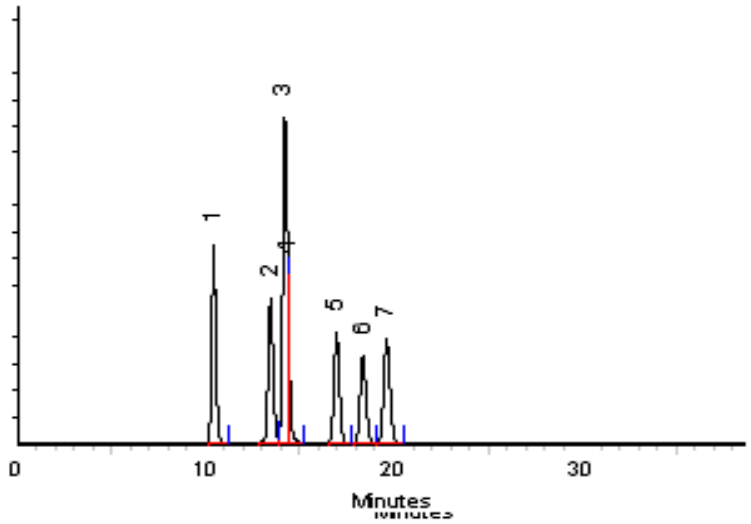
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
5µl



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.

Alicia Leathers - Operation Technician I

Date Mixed: 07-Jul-2023 **Balance Serial #** B251644995

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 20-Jul-2023

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 expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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 ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330 Stock_TS_00024

Agilent
Trusted Answers

ISO 17034

Reference Material Certificate

Product Information Sheet

Product Name: Stock Standard
Product Number: NAIM-833E-1
Storage Conditions: Store at Room Temperature (15° to 30°C).

Lot Number: 0006684308
Lot Issue Date: 01-Jun-2022
Expiration Date: 30-Jun-2025

Component Name	CERTIFIED VALUES Concentration	Expanded Uncertainty	CAS#	Analyte Lot
HMX	1001	± 5 µg/mL	002691-41-0	RM06237
RDX	1001	± 5 µg/mL	000121-82-4	RM10915
1,3,5-trinitrobenzene	1001	± 5 µg/mL	000099-35-4	RM17843
m-dinitrobenzene	1002	± 5 µg/mL	000099-65-0	RM14290
nitrobenzene	1002	± 5 µg/mL	000098-95-3	RM11472
2,4,6-trinitrotoluene (TNT)	1001	± 5 µg/mL	000118-96-7	RM16204
2,4-dinitrotoluene	1002	± 5 µg/mL	000121-14-2	RM10279
tetryl	1003	± 5 µg/mL	000479-45-8	RM14651
2,6-dinitrotoluene	1003	± 5 µg/mL	000606-20-2	RM16636
2-nitrotoluene	1003	± 5 µg/mL	000088-72-2	NT01996
3-nitrotoluene	1002	± 5 µg/mL	000099-08-1	NT02212
4-nitrotoluene	1003	± 5 µg/mL	000099-99-0	NT02096
2-amino-4,6-dinitrotoluene	1003	± 5 µg/mL	035572-78-2	RM04232
4-amino-2,6-dinitrotoluene	1004	± 5 µg/mL	019406-51-0	RM04226

Matrix: acetonitrile

Description:
This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above.

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This analytical reference standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Reagent

8330 Stock_TS_00025

Agilent
Trusted Answers

ISO 17034

Reference Material Certificate

Product Information Sheet

Product Name: Stock Standard
Product Number: NAIM-833E-1
Storage Conditions: Store at Room Temperature (15° to 30°C).

Lot Number: 0006684308
Lot Issue Date: 01-Jun-2022
Expiration Date: 30-Jun-2025

Component Name	CERTIFIED VALUES Concentration	Expanded Uncertainty	CAS#	Analyte Lot
HMX	1001	± 5 µg/mL	002691-41-0	RM06237
RDX	1001	± 5 µg/mL	000121-82-4	RM10915
1,3,5-trinitrobenzene	1001	± 5 µg/mL	000099-35-4	RM17843
m-dinitrobenzene	1002	± 5 µg/mL	000099-65-0	RM14290
nitrobenzene	1002	± 5 µg/mL	000098-95-3	RM11472
2,4,6-trinitrotoluene (TNT)	1001	± 5 µg/mL	000118-96-7	RM16204
2,4-dinitrotoluene	1002	± 5 µg/mL	000121-14-2	RM10279
tetryl	1003	± 5 µg/mL	000479-45-8	RM14651
2,6-dinitrotoluene	1003	± 5 µg/mL	000606-20-2	RM16636
2-nitrotoluene	1003	± 5 µg/mL	000088-72-2	NT01996
3-nitrotoluene	1002	± 5 µg/mL	000099-08-1	NT02212
4-nitrotoluene	1003	± 5 µg/mL	000099-99-0	NT02096
2-amino-4,6-dinitrotoluene	1003	± 5 µg/mL	035572-78-2	RM04232
4-amino-2,6-dinitrotoluene	1004	± 5 µg/mL	019406-51-0	RM04226

Matrix: acetonitrile

Description:
This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above.

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This analytical reference standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Reagent

8330_NG_Stk_00149

RESTEK
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Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568871 **Lot No.:** A0203257

Description : Custom Nitroglycerin Standard

Custom Nitroglycerin Standard 5,000µg/mL, Acetonitrile, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2026 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Nitroglycerin	55-63-0	200507JLM	99%	5,004.0 µg/mL	+/- 236.1755

* Expanded Uncertainty displayed in same units as Grav. Conc.

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

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

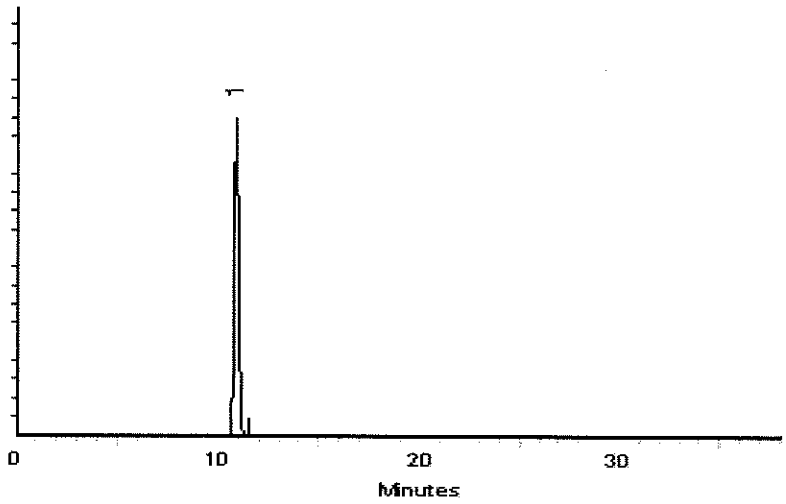
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
2.0µl



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

Sam Moodler - Operations Tech I

Date Mixed: 17-Oct-2023 **Balance Serial #** B442140311

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 19-Oct-2023

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 expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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 ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330_NG_Stk_00151

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568871 **Lot No.:** A0203257

Description : Custom Nitroglycerin Standard

Custom Nitroglycerin Standard 5,000µg/mL, Acetonitrile, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2026 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Nitroglycerin	55-63-0	200507JLM	99%	5,004.0 µg/mL	+/- 236.1755

* Expanded Uncertainty displayed in same units as Grav. Conc.

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

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

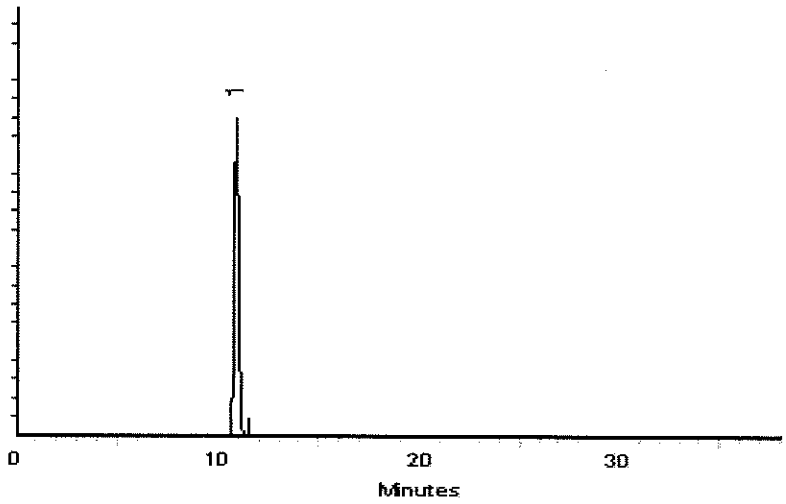
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
2.0µl



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

Sam Moodler - Operations Tech I

Date Mixed: 17-Oct-2023 **Balance Serial #** B442140311

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 19-Oct-2023

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 expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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 ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330_NG_Stk_00152

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568871 **Lot No.:** A0211998

Description : Custom Nitroglycerin Standard

Custom Nitroglycerin Standard 5,000µg/mL, Acetonitrile, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2027 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Nitroglycerin	55-63-0	200507JLM	99%	5,000.0 µg/mL	+/- 235.9867

* Expanded Uncertainty displayed in same units as Grav. Conc.

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

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

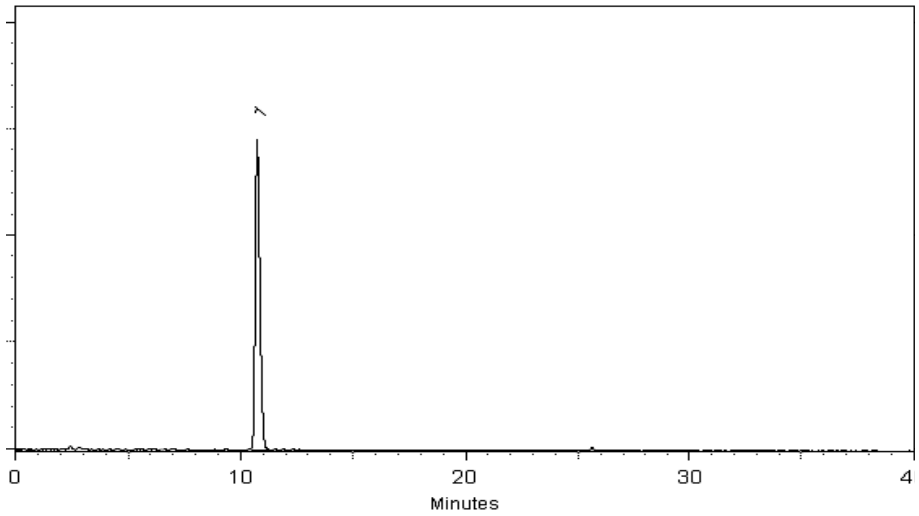
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
2.0µl



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

Matt Fragassi - Mix Technician

Date Mixed: 24-May-2024 **Balance Serial #** 1127510105

Dillan Murphy - Operations Technician I

Date Passed: 03-Jun-2024

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 expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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 ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330_NG_Stk_00153

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568871 **Lot No.:** A0211998

Description : Custom Nitroglycerin Standard

Custom Nitroglycerin Standard 5,000µg/mL, Acetonitrile, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2027 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Nitroglycerin	55-63-0	200507JLM	99%	5,000.0 µg/mL	+/- 235.9867

* Expanded Uncertainty displayed in same units as Grav. Conc.

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

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

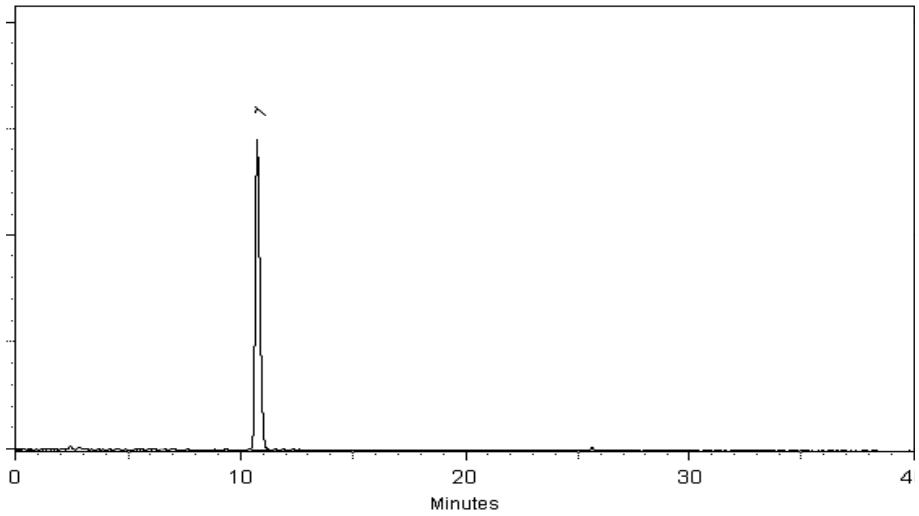
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
2.0µl



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

Matt Fragassi - Mix Technician

Date Mixed: 24-May-2024 **Balance Serial #** 1127510105

Dillan Murphy - Operations Technician I

Date Passed: 03-Jun-2024

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 expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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 ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330_NG1000_00015

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Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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ilac-MRA A2LA ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ilac-MRA A2LA ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31498 **Lot No.:** A0208632

Description : Nitroglycerin Standard

Nitroglycerin Standard 1,000µg/mL, Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2029 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Nitroglycerin	55-63-0	200507JLM	99%	1,002.0 µg/mL	+/- 46.7451

* Expanded Uncertainty displayed in same units as Grav. Conc.

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

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

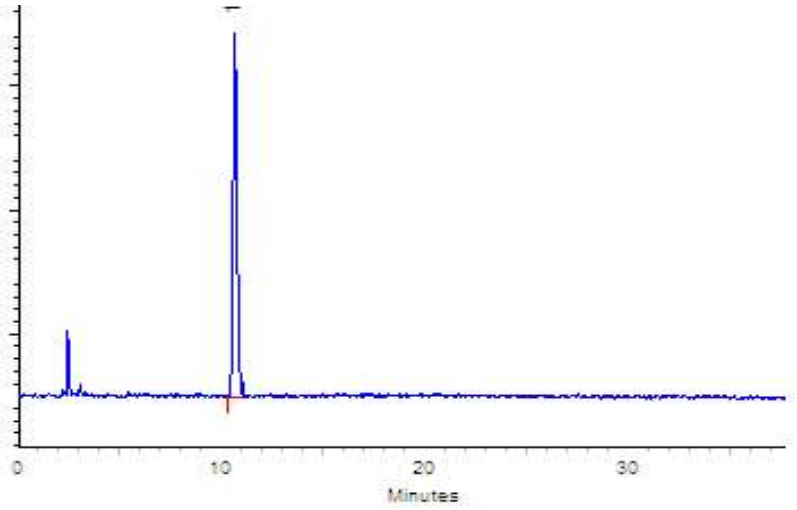
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
5µl



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.

Morgan Craighead - Mix Technician

Date Mixed: 04-Mar-2024 **Balance Serial #** 1128342314

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 06-Mar-2024

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 expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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 ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330_NG1000_00017

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31498 **Lot No.:** A0213231

Description : Nitroglycerin Standard

Nitroglycerin Standard 1,000µg/mL, Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2029 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Nitroglycerin	55-63-0	200507JLM	99%	1,004.0 µg/mL	+/- 46.8384

* Expanded Uncertainty displayed in same units as Grav. Conc.

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

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

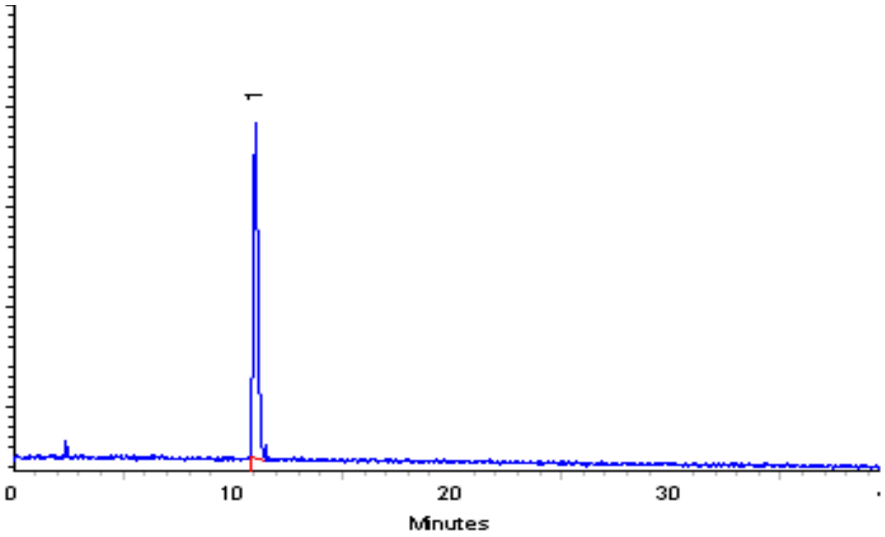
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
5µl



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

Brittany Federinko - Operations Tech I

Date Mixed: 26-Jun-2024 **Balance Serial #** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 08-Jul-2024

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 expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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 ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330_PETN_Stk_00157

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Tel: 1-814-353-1300
Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

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ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568872 **Lot No.:** A0205209

Description : Custom PETN Standard

Custom PETN Standard 5,000µg/mL, Acetonitrile, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2026 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	PETN	78-11-5	051108JLM	99%	5,028.0 µg/mL	+/- 237.3082

* Expanded Uncertainty displayed in same units as Grav. Conc.

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

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

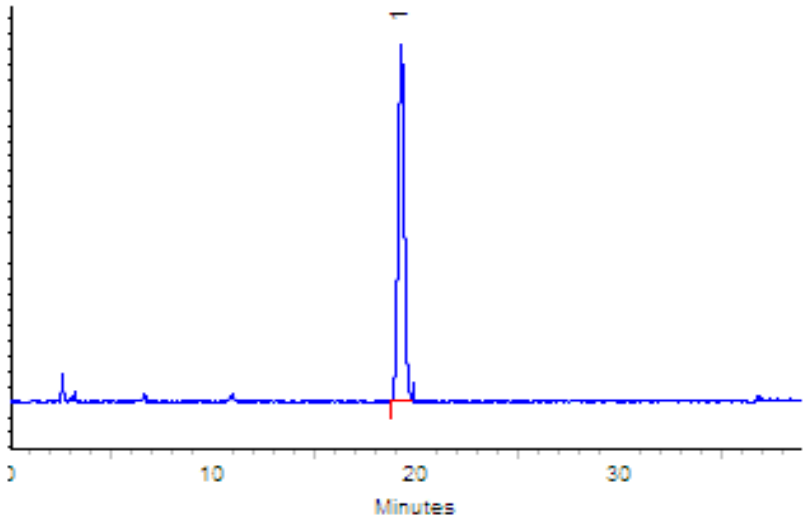
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
1µl



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

Russ Bookhamer - Operations Technician I

Date Mixed: 07-Dec-2023 **Balance Serial #** B251644995

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 12-Dec-2023

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 expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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 ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330_PETN_Stk_00158

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Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568872 **Lot No.:** A0205209

Description : Custom PETN Standard

Custom PETN Standard 5,000µg/mL, Acetonitrile, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2026 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	PETN	78-11-5	051108JLM	99%	5,028.0 µg/mL	+/- 237.3082

* Expanded Uncertainty displayed in same units as Grav. Conc.

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

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

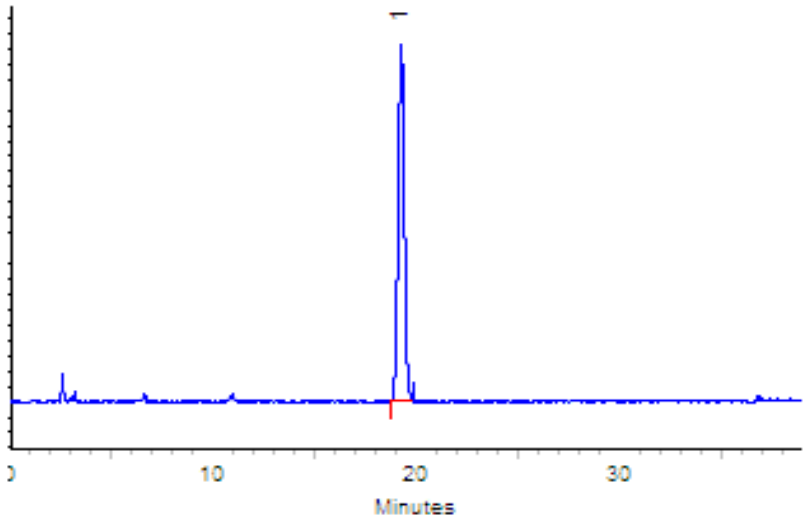
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
1µl



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

Russ Bookhamer - Operations Technician I

Date Mixed: 07-Dec-2023 **Balance Serial #** B251644995

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 12-Dec-2023

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:

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Manufacturing Notes:

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Handling Notes:

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- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330_PETN_Stk_00159

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Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568872 **Lot No.:** A0205209

Description : Custom PETN Standard

Custom PETN Standard 5,000µg/mL, Acetonitrile, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2026 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	PETN	78-11-5	051108JLM	99%	5,028.0 µg/mL	+/- 237.3082

* Expanded Uncertainty displayed in same units as Grav. Conc.

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

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

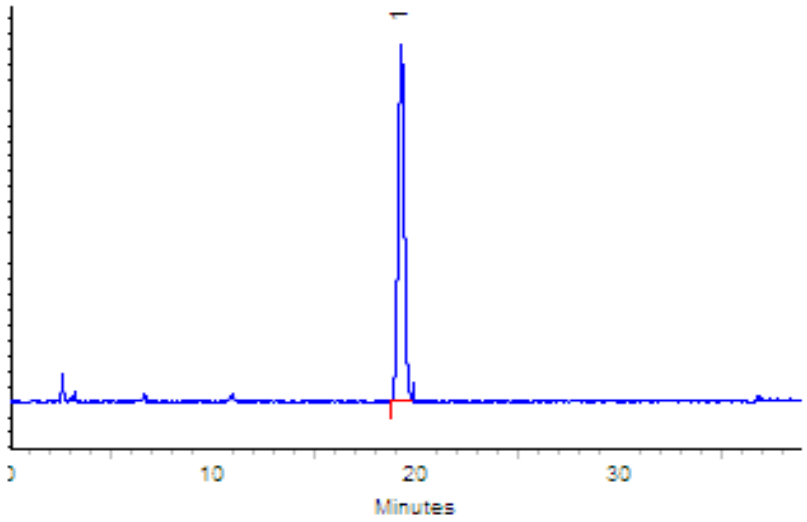
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
1µl



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

Russ Bookhamer - Operations Technician I

Date Mixed: 07-Dec-2023 **Balance Serial #** B251644995

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 12-Dec-2023

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

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
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Purity Notes:

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- Purity values are rounded to the nearest whole number.

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Handling Notes:

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- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330_PETN_Stk_00160

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568872 **Lot No.:** A0205209

Description : Custom PETN Standard

Custom PETN Standard 5,000µg/mL, Acetonitrile, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2026 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	PETN	78-11-5	051108JLM	99%	5,028.0 µg/mL	+/- 237.3082

* Expanded Uncertainty displayed in same units as Grav. Conc.

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

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

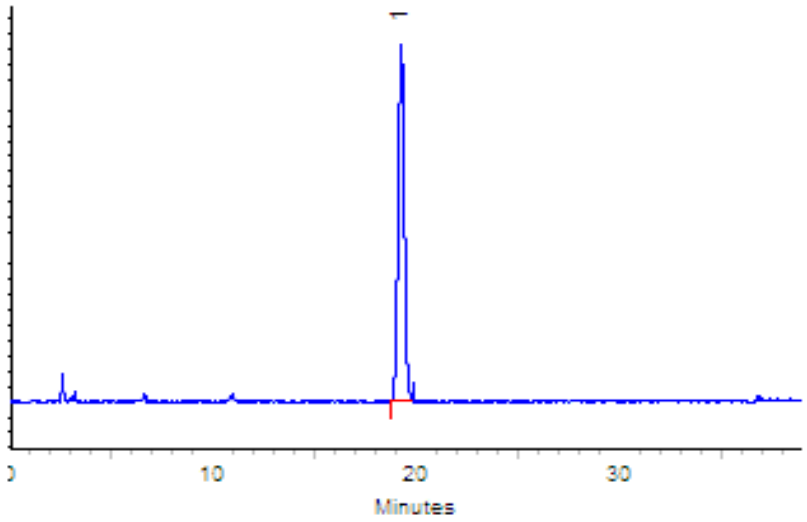
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
1µl



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

Russ Bookhamer - Operations Technician I

Date Mixed: 07-Dec-2023 **Balance Serial #** B251644995

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 12-Dec-2023

REVIEWED

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 expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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 ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330_PETN1000_00018

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Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

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ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31600 **Lot No.:** A0207895

Description : PETN Standard

PETN Standard 1000µg/mL, Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 28, 2029 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	PETN	78-11-5	051108JLM	99%	1,006.3 µg/mL	+/- 46.9434

* Expanded Uncertainty displayed in same units as Grav. Conc.

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

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

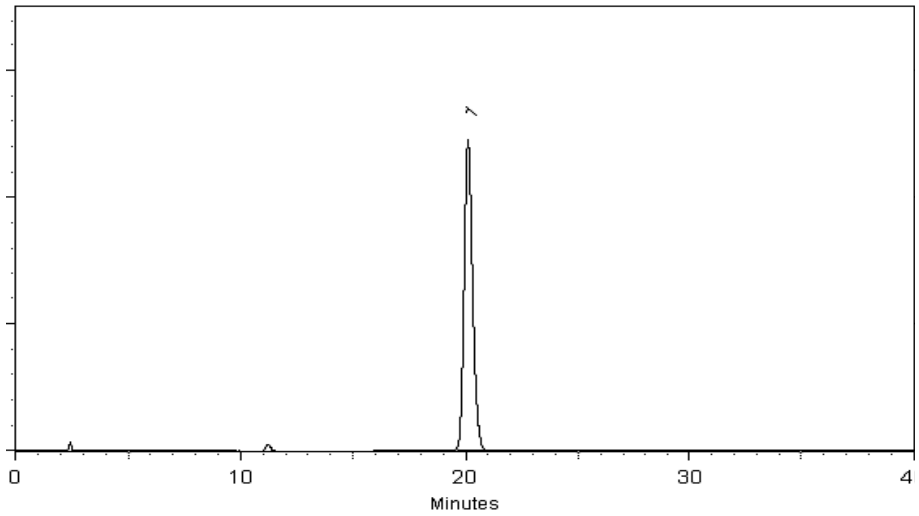
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
2µl



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.

John Friedline - Operations Technician I

Date Mixed: 15-Feb-2024 **Balance Serial #** 1127510105

Dillan Murphy - Operations Technician I

Date Passed: 20-Feb-2024

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 expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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 ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330_PETN1000_00020

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CERTIFIED REFERENCE MATERIAL

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Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31600 **Lot No.:** A0211856

Description : PETN Standard

PETN Standard 1000µg/mL, Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2029 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	PETN	78-11-5	051108JLM	99%	1,003.8 µg/mL	+/- 46.8267

* Expanded Uncertainty displayed in same units as Grav. Conc.

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

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

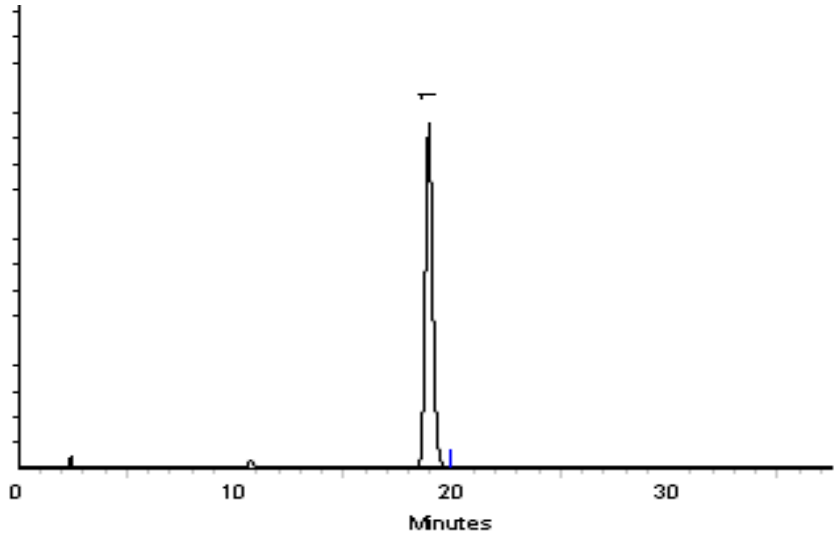
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
2.0µl



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

Brittany Federinko - Operations Tech I

Date Mixed: 22-May-2024 **Balance Serial #** 1128353505

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 24-May-2024

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 expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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 ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

833035DNAStk_00062

125 Market Street
New Haven, CT 06513
USA

AccuStandard® Inc.

Tel (203)786-5290
Fax (203)786-5287
www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: M-8330-ADD-4
Description: 3,5-Dinitroaniline
Lot: 223041214-01
Solvent: Methanol (50%)
Acetonitrile (50%)
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Dec 6, 2023
Expiration: Jan 6, 2025
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity[3] %	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
3,5-Dinitroaniline	618-87-1	100.0	100.8	100.8

This Certified Reference Material was verified in accordance with ISO/IEC 17025 (AT-1339) and ISO 17034 (AR-1463)

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[1] Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

[2] All weights are traceable through NIST, Test No. 684/291344-18 & 684/292805-19

[3] Purity/Identity determined by one or more of the following methods: GC/MS, LC/MS, NMR, FTIR, Melting Point.

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.

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

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

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard is accredited to ISO 17034, ISO/IEC 17025 and certified to ISO 9001:2015

QR-ORG/INO-001
Rev. 5/18

10/15/2024
4:48:23 PM

1. **Quality Standards:**

   ISO 17034:2016 – General Requirements for the Competence of Reference Material Producers

   ISO/IEC 17025:2017 – General Requirements for the Competence of Testing And Calibration Laboratories

   ISO 9001:2015 – Quality Management System – Requirements Eagle Registrations

2. **Intended Use:** The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 7.

3. **Manufacturing:** All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards. Good Laboratory Practices have been used throughout the preparation of this Standard.

4. **Homogeneity:** This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.

5. **Stability:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label

6. **Uncertainty:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(\mathrm{V}))^2 + (u(\mathrm{m}))^2 + (u(\mathrm{IV}))^2 + (u(\mathrm{RO}))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.

7. **Legal Notice and Limit of Liability:** This product is for routine laboratory analysis and research purposes only. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

Reagent

833035DNAStk_00064

125 Market Street
New Haven, CT 06513
USA

AccuStandard® Inc.

Tel (203)786-5290
Fax (203)786-5287
www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: M-8330-ADD-4
Description: 3,5-Dinitroaniline
Lot: 222011692-04
Solvent: Methanol (50%)
Acetonitrile (50%)
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Jun 17, 2024
Expiration: Jul 17, 2026
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity[3] %	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
3,5-Dinitroaniline	618-87-1	100.0	100.6	100.6

This Certified Reference Material was verified in accordance with ISO/IEC 17025 (AT-1339) and ISO 17034 (AR-1463)

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[1] Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4% and was determined in accordance with ISO 17034. 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.

[2] All weights are traceable through NIST, Test No. 684/289871-17

[3] Purity/Identity determined by one or more of the following methods: GC/MS, LC/MS, NMR, FTIR, Melting Point.

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.

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

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

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard is accredited to ISO 17034, ISO/IEC 17025 and certified to ISO 9001:2015

QR-ORG/INO-001
Rev. 5/18

10/15/2024
4:48:23 PM

1. **Quality Standards:**

   ISO 17034:2016 – General Requirements for the Competence of Reference Material Producers

   ISO/IEC 17025:2017 – General Requirements for the Competence of Testing And Calibration Laboratories

   ISO 9001:2015 – Quality Management System – Requirements Eagle Registrations

2. **Intended Use:** The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 7.

3. **Manufacturing:** All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards. Good Laboratory Practices have been used throughout the preparation of this Standard.

4. **Homogeneity:** This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.

5. **Stability:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label

6. **Uncertainty:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(\mathrm{V}))^2 + (u(\mathrm{m}))^2 + (u(\mathrm{IV}))^2 + (u(\mathrm{RO}))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.

7. **Legal Notice and Limit of Liability:** This product is for routine laboratory analysis and research purposes only. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

Reagent

8330LCSMix1_00153

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CERTIFIED REFERENCE MATERIAL

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Testing Laboratory
Certificate #3222.02

Certificate of Analysis

chromatographic plus

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31450 **Lot No.:** A0196548

Description : 8330 Calibration Mix #1

8330 Calibration Std #1 1000µg/mL, Acetonitrile, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2028 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	HMX	2691-41-0	220927JLM	99%	1,010.0 µg/mL	+/- 47.1183
2	RDX	121-82-4	080228JLM	99%	1,002.0 µg/mL	+/- 46.7451
3	1,3,5-Trinitrobenzene	99-35-4	A6TDK	99%	1,010.0 µg/mL	+/- 47.1183
4	1,3-Dinitrobenzene	99-65-0	1-DXX-24-1	99%	1,008.0 µg/mL	+/- 47.0250
5	Nitrobenzene	98-95-3	10224044	99%	1,009.0 µg/mL	+/- 47.0716
6	2,4,6-Trinitrotoluene	118-96-7	D13332500	99%	1,007.0 µg/mL	+/- 46.9783
7	2,4-Dinitrotoluene	121-14-2	MKAA0690V	99%	1,006.0 µg/mL	+/- 46.9317

* Expanded Uncertainty displayed in same units as Grav. Conc.

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

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

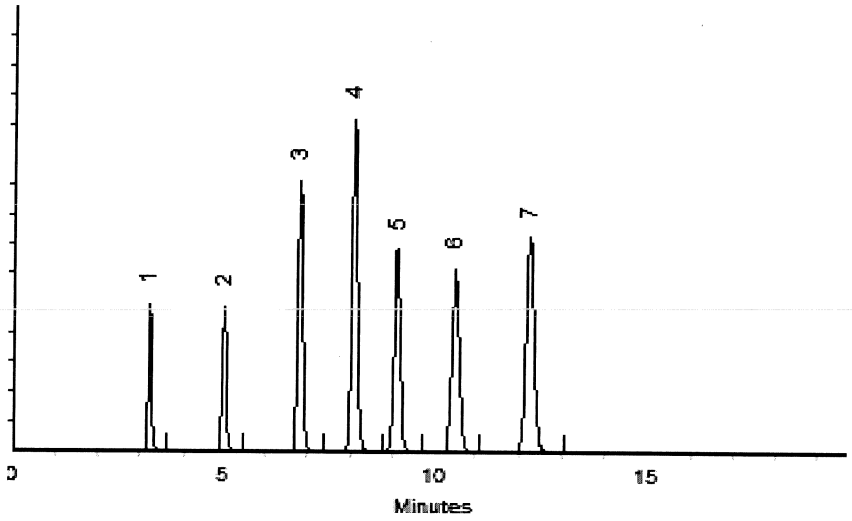
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
2µl



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

Sam Moodler - Operations Tech I

Date Mixed: 03-Apr-2023 **Balance Serial #** B251644995

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 05-Apr-2023

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 expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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 ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330LCSMix1_00154

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ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

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ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

Certificate of Analysis

chromatographic plus

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31450 **Lot No.:** A0196548

Description : 8330 Calibration Mix #1

8330 Calibration Std #1 1000µg/mL, Acetonitrile, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2028 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	HMX	2691-41-0	220927JLM	99%	1,010.0 µg/mL	+/- 47.1183
2	RDX	121-82-4	080228JLM	99%	1,002.0 µg/mL	+/- 46.7451
3	1,3,5-Trinitrobenzene	99-35-4	A6TDK	99%	1,010.0 µg/mL	+/- 47.1183
4	1,3-Dinitrobenzene	99-65-0	1-DXX-24-1	99%	1,008.0 µg/mL	+/- 47.0250
5	Nitrobenzene	98-95-3	10224044	99%	1,009.0 µg/mL	+/- 47.0716
6	2,4,6-Trinitrotoluene	118-96-7	D13332500	99%	1,007.0 µg/mL	+/- 46.9783
7	2,4-Dinitrotoluene	121-14-2	MKAA0690V	99%	1,006.0 µg/mL	+/- 46.9317

* Expanded Uncertainty displayed in same units as Grav. Conc.

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

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

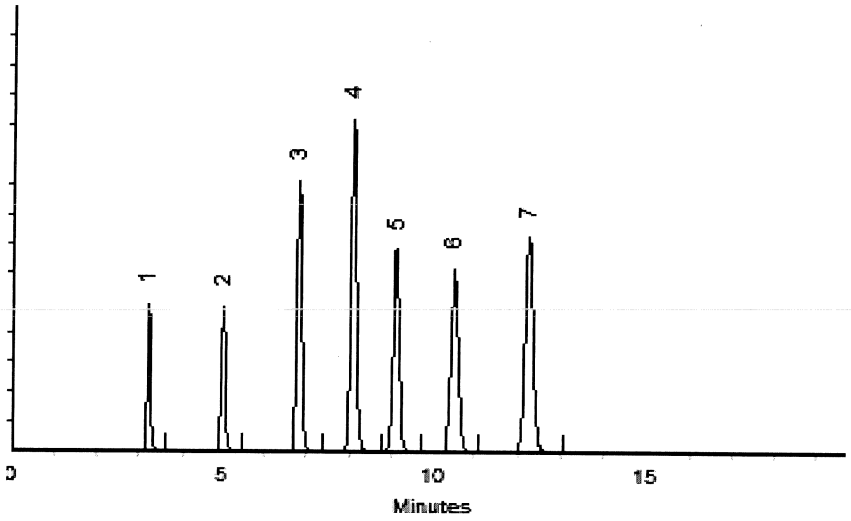
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
2µl



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

Sam Moodler - Operations Tech I

Date Mixed: 03-Apr-2023 **Balance Serial #** B251644995

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 05-Apr-2023

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 expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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 ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330PAStkPS_00077

125 Market Street
New Haven, CT 06513
USA

AccuStandard® Inc.

Tel (203)786-5290
Fax (203)786-5287
www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: M-8330-ADD-3
Description: Picric acid
Lot: 223031306-01
Solvent: Acetonitrile (50%)
Methanol (50%)
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Oct 27, 2023
Expiration: Nov 27, 2025
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity[3] %	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
Picric acid	88-89-1	99.1	100.4	99.5

This Certified Reference Material was verified in accordance with ISO/IEC 17025 (AT-1339) and ISO 17034 (AR-1463)

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[1] Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

[2] All weights are traceable through NIST, Test No. 684/291344-18 & 684/292805-19

[3] Purity/Identity determined by one or more of the following methods: GC/MS, LC/MS, NMR, FTIR, Melting Point.

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.

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

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

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard is accredited to ISO 17034, ISO/IEC 17025 and certified to ISO 9001:2015

QR-ORG/INO-001
Rev. 5/18

10/15/2024
4:48:23 PM

1. **Quality Standards:**

   ISO 17034:2016 – General Requirements for the Competence of Reference Material Producers

   ISO/IEC 17025:2017 – General Requirements for the Competence of Testing And Calibration Laboratories

   ISO 9001:2015 – Quality Management System – Requirements Eagle Registrations

2. **Intended Use:** The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 7.

3. **Manufacturing:** All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards. Good Laboratory Practices have been used throughout the preparation of this Standard.

4. **Homogeneity:** This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.

5. **Stability:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label

6. **Uncertainty:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(\mathrm{V}))^2 + (u(\mathrm{m}))^2 + (u(\mathrm{IV}))^2 + (u(\mathrm{RO}))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.

7. **Legal Notice and Limit of Liability:** This product is for routine laboratory analysis and research purposes only. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

Reagent

8330PAStkPS_00078

125 Market Street
New Haven, CT 06513
USA

AccuStandard® Inc.

Tel (203)786-5290
Fax (203)786-5287
www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: M-8330-ADD-3
Description: Picric acid
Lot: 223031306-01
Solvent: Acetonitrile (50%)
Methanol (50%)
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Oct 27, 2023
Expiration: Nov 27, 2025
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity[3] %	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
Picric acid	88-89-1	99.1	100.4	99.5

This Certified Reference Material was verified in accordance with ISO/IEC 17025 (AT-1339) and ISO 17034 (AR-1463)

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[1] Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

[2] All weights are traceable through NIST, Test No. 684/291344-18 & 684/292805-19

[3] Purity/Identity determined by one or more of the following methods: GC/MS, LC/MS, NMR, FTIR, Melting Point.

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.

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

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

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard is accredited to ISO 17034, ISO/IEC 17025 and certified to ISO 9001:2015

QR-ORG/INO-001
Rev. 5/18

10/15/2024
4:48:23 PM

1. **Quality Standards:**

   ISO 17034:2016 – General Requirements for the Competence of Reference Material Producers

   ISO/IEC 17025:2017 – General Requirements for the Competence of Testing And Calibration Laboratories

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2. **Intended Use:** The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 7.

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6. **Uncertainty:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(\mathrm{V}))^2 + (u(\mathrm{m}))^2 + (u(\mathrm{IV}))^2 + (u(\mathrm{RO}))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.

7. **Legal Notice and Limit of Liability:** This product is for routine laboratory analysis and research purposes only. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

Reagent

8330Surrogate_00158

Preliminary Report

Eurofins Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20240809-136341.b\08090011.D

Lims ID: 8330Surr158 Inj. Date: 09-Aug-2024 15:22:10

Worklist ID: 280-0136341-011 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 3535
$ 10 1,2-Dinitrobenzene	0.5000	0.5401	108.0	83-119

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

280-194788-A-1-A	280-194788-B-2-A	280-194788-B-3-A
280-194788-B-4-A	280-194788-A-5-A	280-194788-B-6-A
280-194788-B-7-A	280-194788-B-8-A	280-194788-A-9-A
280-194788-A-10-A	280-194788-B-11-A	280-194788-B-12-A
280-194788-A-13-A	280-194788-A-14-A	280-194788-A-15-A
280-194788-A-16-A	280-194788-B-17-A	280-194788-B-18-A
280-194788-A-19-A	280-194788-B-20-A	

Reagent

8330Surrogate_00159

Preliminary Report

Eurofins Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20240919-137694.b\09190011.D

Lims ID: 8330Surr159 Inj. Date: 19-Sep-2024 15:53:23

Worklist ID: 280-0137694-011 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 0B_Sonc_
$ 10 1,2-Dinitrobenzene	0.5000	0.5089	101.8	83-119

Samples for Limit Group: 1, Lims Prep Method: 8330B_Sonc_10g

280-196605-A-1-A 280-196605-A-2-A 280-196605-B-3-A

280-196715-B-1-A 280-196715-A-2-A 280-196715-B-3-A

280-196715-A-4-A

Reagent

8330SurrStkSS_00324

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31453 **Lot No.:** A0205460

Description : 8330 Surrogate Mix

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

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2028 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2-Dinitrobenzene	528-29-0	RP231117RSR	99%	1,004.0 µg/mL	+/- 56.4136

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methanol

CAS # 67-56-1

Purity 99%

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

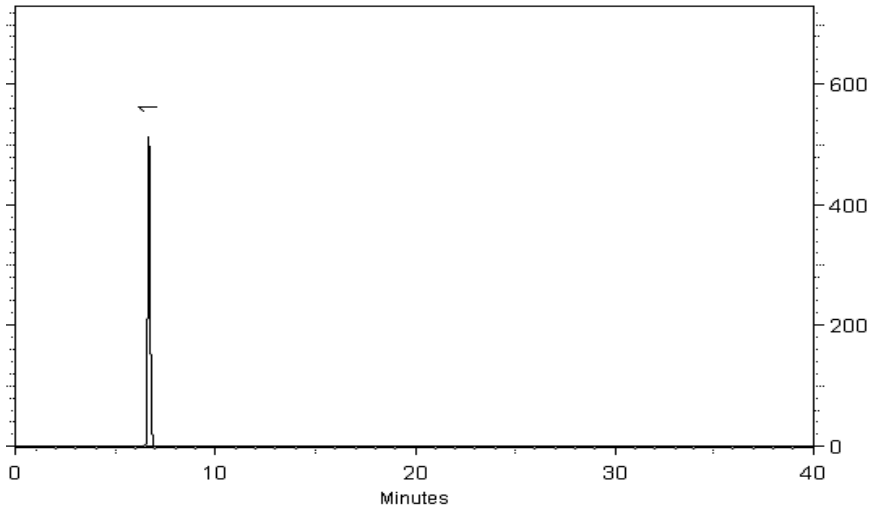
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
2.0µl



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.

Malina Homan - Operations Technician I

Date Mixed: 13-Dec-2023 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 19-Dec-2023

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 expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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 ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330SurrStkSS_00325

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31453 **Lot No.:** A0205460

Description : 8330 Surrogate Mix

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

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2028 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2-Dinitrobenzene	528-29-0	RP231117RSR	99%	1,004.0 µg/mL	+/- 56.4136

* Expanded Uncertainty displayed in same units as Grav. Conc.

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

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

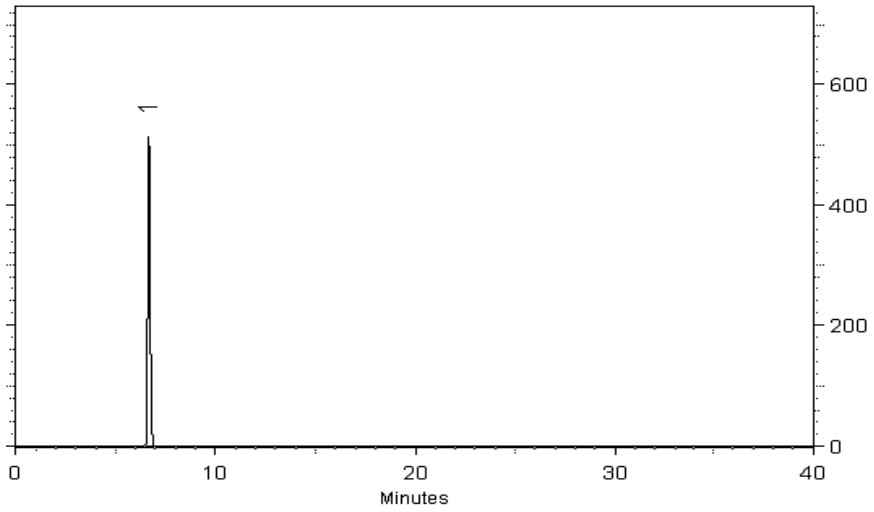
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
2.0µl



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.

Malina Homan - Operations Technician I

Date Mixed: 13-Dec-2023 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 19-Dec-2023

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:

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- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

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- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330SurrStkSS_00326

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31453 **Lot No.:** A0205460

Description : 8330 Surrogate Mix

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

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2028 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2-Dinitrobenzene	528-29-0	RP231117RSR	99%	1,004.0 µg/mL	+/- 56.4136

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methanol

CAS # 67-56-1

Purity 99%

Quality Confirmation Test

Column:
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Ultra C18 (cat.# 9174575)

Flow Rate:
1.0 ml/min.

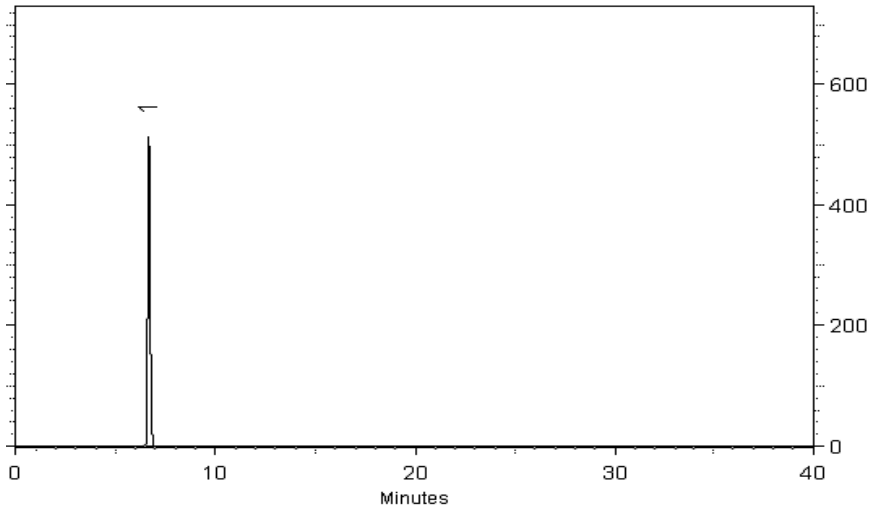
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
2.0µl



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Malina Homan - Operations Technician I

Date Mixed: 13-Dec-2023 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 19-Dec-2023

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

General Certified Reference Material Notes

Expiration Notes:

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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 expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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 ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330SurrStkSS_00327

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31453 **Lot No.:** A0205460

Description : 8330 Surrogate Mix

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

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2028 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2-Dinitrobenzene	528-29-0	RP231117RSR	99%	1,004.0 µg/mL	+/- 56.4136

* Expanded Uncertainty displayed in same units as Grav. Conc.

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

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

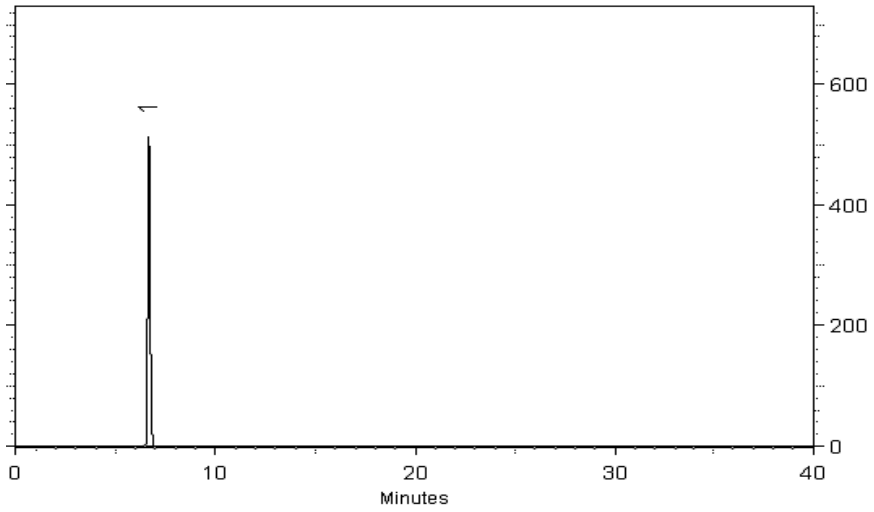
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
2.0µl



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.

Malina Homan - Operations Technician I

Date Mixed: 13-Dec-2023 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 19-Dec-2023

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 expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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 ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330SurrStkSS_00328

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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Reference Material Producer
Certificate #3222.01

ACCREDITED
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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31453 **Lot No.:** A0205460

Description : 8330 Surrogate Mix

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

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2028 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2-Dinitrobenzene	528-29-0	RP231117RSR	99%	1,004.0 µg/mL	+/- 56.4136

* Expanded Uncertainty displayed in same units as Grav. Conc.

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

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

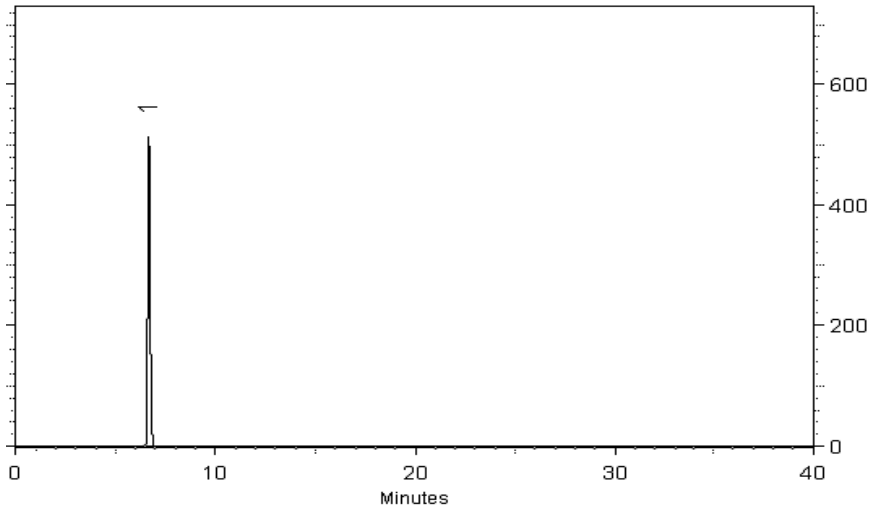
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
2.0µl



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.

Malina Homan - Operations Technician I

Date Mixed: 13-Dec-2023 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 19-Dec-2023

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 expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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 ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330SurrStkSS_00329

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110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31453 **Lot No.:** A0205460

Description : 8330 Surrogate Mix

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

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2028 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2-Dinitrobenzene	528-29-0	RP231117RSR	99%	1,004.0 µg/mL	+/- 56.4136

* Expanded Uncertainty displayed in same units as Grav. Conc.

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

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

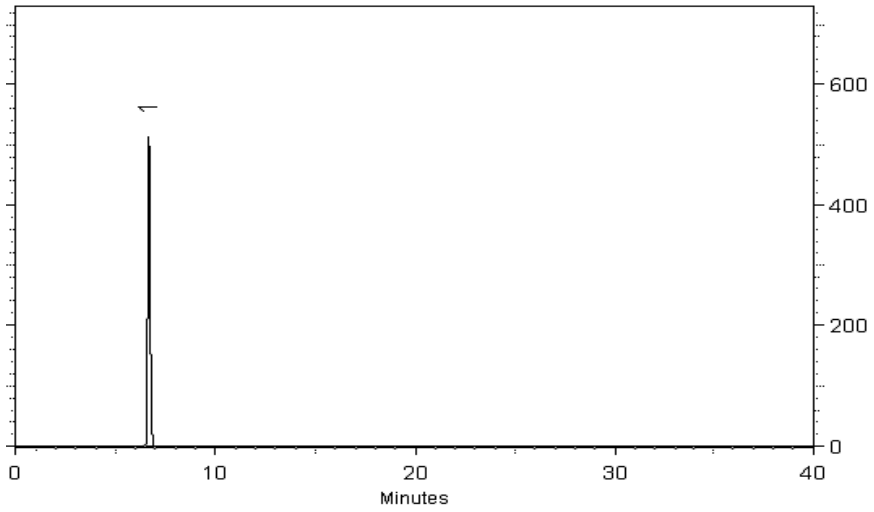
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
2.0µl



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.

Malina Homan - Operations Technician I

Date Mixed: 13-Dec-2023 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 19-Dec-2023

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 expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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 ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330SurrStkSS_00336

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31453 **Lot No.:** A0211455

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, 2029 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2-Dinitrobenzene	528-29-0	RP231229CTH	99%	1,000.0 µg/mL	+/- 56.1888

* Expanded Uncertainty displayed in same units as Grav. Conc.

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

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

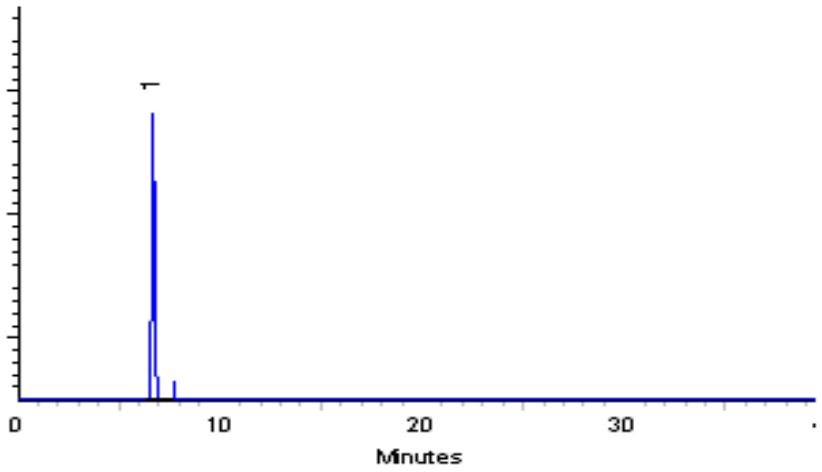
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
2.0µl



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.

Wilner Torres - Operation Tech I

Date Mixed: 15-May-2024 **Balance Serial #** 1128342314

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 17-May-2024

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 expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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 ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330SurrStkSS_00337

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31453 **Lot No.:** A0211455

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, 2029 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2-Dinitrobenzene	528-29-0	RP231229CTH	99%	1,000.0 µg/mL	+/- 56.1888

* Expanded Uncertainty displayed in same units as Grav. Conc.

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

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

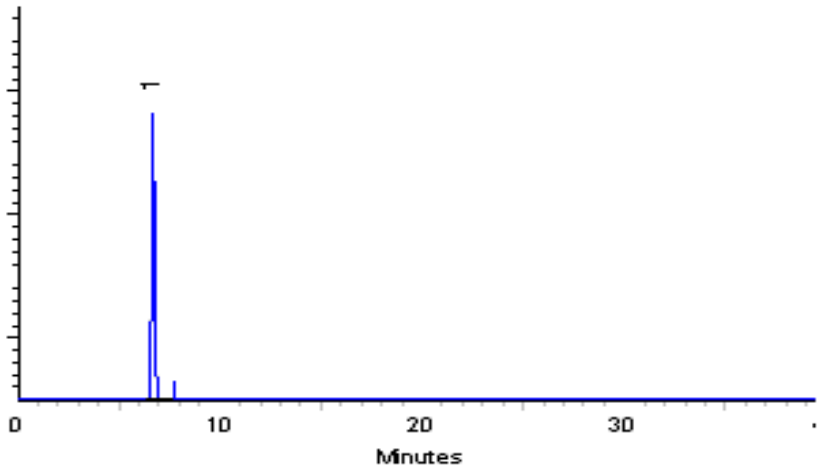
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
2.0µl



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.

Wilner Torres - Operation Tech I

Date Mixed: 15-May-2024 **Balance Serial #** 1128342314

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 17-May-2024

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:

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  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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 ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330SurrStkSS_00339

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

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ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31453 **Lot No.:** A0211455

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, 2029 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2-Dinitrobenzene	528-29-0	RP231229CTH	99%	1,000.0 µg/mL	+/- 56.1888

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methanol

CAS # 67-56-1

Purity 99%

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

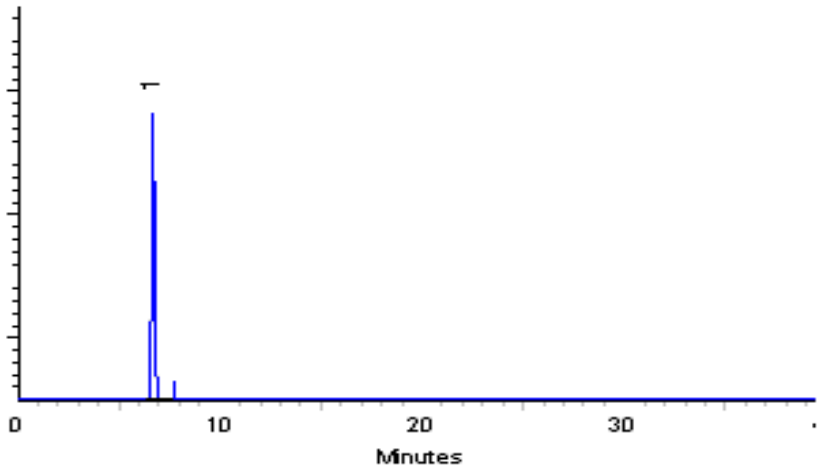
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
2.0µl



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.

Wilner Torres - Operation Tech I

Date Mixed: 15-May-2024 **Balance Serial #** 1128342314

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 17-May-2024

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 expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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 ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330SurrStkSS_00340

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31453 **Lot No.:** A0211455

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, 2029 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2-Dinitrobenzene	528-29-0	RP231229CTH	99%	1,000.0 µg/mL	+/- 56.1888

* Expanded Uncertainty displayed in same units as Grav. Conc.

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

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

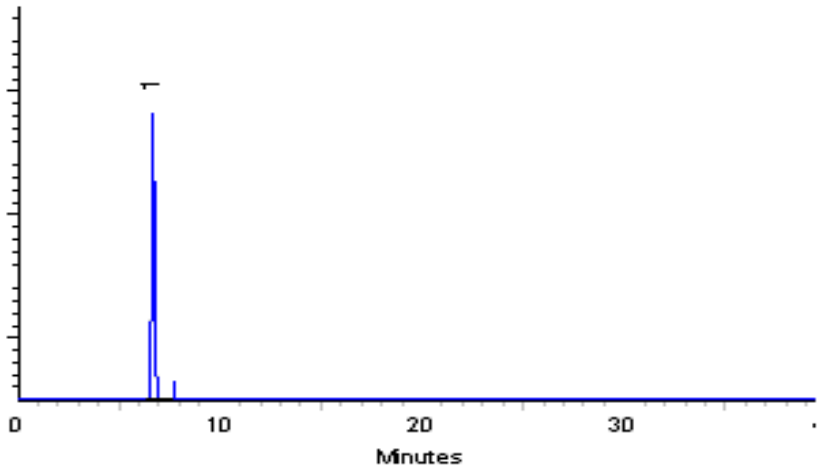
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
2.0µl



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.

Wilner Torres - Operation Tech I

Date Mixed: 15-May-2024 **Balance Serial #** 1128342314

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 17-May-2024

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 expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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 ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330SurrStock_00173

125 Market Street
New Haven, CT 06513
USA

AccuStandard®

Tel (203)786-5290
Fax (203)786-5287
www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: M-8330-SS
Description: 1,2-Dinitrobenzene
Lot: 219051500
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: May 22, 2019
Expiration: May 22, 2029
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/FID)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
1,2-Dinitrobenzene	528-29-0	100.0	1002	1002

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[2] All weights are traceable through NIST, Test No. 684/289871-17

[1] Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

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

8330SurrStock_00174

125 Market Street
New Haven, CT 06513
USA

AccuStandard®

Tel (203)786-5290
Fax (203)786-5287
www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: M-8330-SS
Description: 1,2-Dinitrobenzene
Lot: 219051500
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: May 22, 2019
Expiration: May 22, 2029
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/FID)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
1,2-Dinitrobenzene	528-29-0	100.0	1002	1002

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[2] All weights are traceable through NIST, Test No. 684/289871-17

[1] Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

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

MNX,TNX,DNX_00116

Agilent
Trusted Answers

ISO 17034

Reference Material Certificate

Product Information Sheet

Product Name: Custom Standard
Product Number: CUS-23984
Storage Conditions: Store at Room Temperature (15° to 30°C).

Lot Number: 0006796152
Lot Issue Date: 10-May-2024
Expiration Date: 30-Jun-2025

Component Name	Concentration		Uncertainty	CAS#	Analyte Lot
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)	100.3	±	0.5 µg/mL	N/A	RM12426
1-nitro-3,5-dinitroso-1,3,5-triazacyclohexane (DNX)	100.4	±	0.5 µg/mL	N/A	RM12428
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane (MNX)	117.0	±	0.6 µg/mL	N/A	RM12428

Matrix: acetonitrile

Description:
This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above.

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This analytical reference standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20ºC to 25ºC immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Safety:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this analytical reference material.

Intended Use:
This analytical reference standard is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Expiration of Certification:
The certification of this analytical reference standard is valid until the expiration date specified above, provided the material is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the material is damaged, contaminated, or otherwise modified.

Agilent

Trusted Answers

Maintenance of Certification:
If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

Monica Bourgeois
QMS Representative

Reagent

MNX,TNX,DNX_00118

Agilent
Trusted Answers

ISO 17034

Reference Material Certificate

Product Information Sheet

Product Name:	Custom Standard	**Lot Number:**	0006801479
Product Number:	CUS-23984	**Lot Issue Date:**	21-Jun-2024
Storage Conditions:	Store at Room Temperature (15° to 30°C).	**Expiration Date:**	31-Jul-2025

Component Name	Concentration		Uncertainty	CAS#	Analyte Lot
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)	100.3	±	0.5 µg/mL	N/A	RM12426
1-nitro-3,5-dinitroso-1,3,5-triazacyclohexane (DNX)	100.1	±	0.5 µg/mL	N/A	RM12428
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane (MNX)	116.7	±	0.6 µg/mL	N/A	RM12428

Matrix: acetonitrile

Description:
This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above.

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

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This analytical reference standard is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

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The certification of this analytical reference standard is valid until the expiration date specified above, provided the material is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the material is damaged, contaminated, or otherwise modified.

Agilent
Trusted Answers

Maintenance of Certification:
If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

Monica Bourgeois
QMS Representative

Reagent

PicricARestek_00125

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31499 **Lot No.:** A0195778

Description : Picric Acid Standard

Picric Acid Standard 1000µg/mL, Methanol, 1mL/1000µg/mL *PGI BOX REQUIRED* SHIP FED EX GROUND ONLY

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2028 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Picric Acid	88-89-1	06130CU	99%	1,002.0 µg/mL	+/- 46.7451

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methanol

CAS # 67-56-1

Purity 99%

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

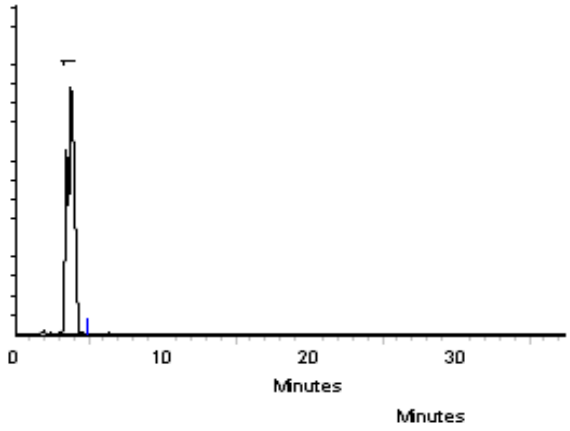
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
0.2µl



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.

Alicia Leathers - Operation Technician I

Date Mixed: 12-Mar-2023 **Balance Serial #** 1127510105

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 14-Mar-2023

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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- 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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$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls 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 ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

8330B_DOD5

Nitroaromatics and Nitramines (HPLC)

FORM II
HPLC/IC SURROGATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-197447-1

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 #
SCFmw-004-240901-GW	280-197447-1	95 M	
SCFmw-004-240901-GW RE	280-197447-1 RE	93 M	
SCFmw-004-240902-GW	280-197447-2	85 M	
SCFmw-004-240902-GW RE	280-197447-2 RE	89 M	
LL1mw-087-240901-GW	280-197447-3	96 M	
LL1mw-087-240901-GW RE	280-197447-3 RE	91 M	
LL1mw-086-240901-GW	280-197447-4	93 M	
LL1mw-086-240901-GW RE	280-197447-4 RE	94 M	
LL1mw-091-240901-GW	280-197447-5	96 M	
LL1mw-091-240901-GW	280-197447-5		92
LL1mw-091-240901-GW RE	280-197447-5 RE	92	
LL1mw-091-240902-GW	280-197447-6	96 M	
LL1mw-091-240902-GW	280-197447-6		96 M
LL1mw-091-240902-GW RE	280-197447-6 RE	97	
LL1mw-064-240901-GW	280-197447-7	92 M	
LL1mw-064-240901-GW RE	280-197447-7 RE	95 M	
FWGmw-007-240901-GW	280-197447-8	94 M	
	MB 280-669777/1-A	101 M	
	MB 280-670001/1-A	97 M	
	MB 280-670642/1-A	97 M	
	LCS 280-669777/2-A	87	
	LCS 280-670001/2-A	99	
	LCS 280-670642/2-A	93	
SCFmw-004-240901-GW MS	280-197447-1 MS	96 M	

	QC LIMITS
12DNB = 1,2-Dinitrobenzene	83-119

Column to be used to flag recovery values

FORM II 8330B

FORM II
HPLC/IC SURROGATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): UltraCarb5u ID: 4.6 (mm) GC Column (2):

Client Sample ID	Lab Sample ID	12DNB1 #	12DNB2 #
SCFmw-004-240901-GW MS RE	280-197447-1 MS RE	88 M	
SCFmw-004-240901-GW MSD	280-197447-1 MSD	96 M	
SCFmw-004-240901-GW MSD RE	280-197447-1 MSD RE	92	

	QC LIMITS
12DNB = 1,2-Dinitrobenzene	83-119

Column to be used to flag recovery values

FORM II 8330B

FORM III
HPLC/IC LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 10080043.D

Lab ID: LCS 280-669777/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.00	1.83	91	73-125	M
1,3-Dinitrobenzene	2.00	1.70	85	78-120	
2,4,6-Trinitrotoluene	2.00	1.65	83	71-123	
2,4-Dinitrotoluene	2.00	1.58	79	78-120	
2,6-Dinitrotoluene	2.00	1.65	82	77-127	
2-Amino-4,6-dinitrotoluene	2.00	1.62	81	79-120	
2-Nitrotoluene	2.00	1.22	61	70-127	Q
3-Nitrotoluene	2.00	1.23	62	73-125	Q
4-Amino-2,6-dinitrotoluene	2.00	1.52	76	76-125	
4-Nitrotoluene	2.00	1.27	63	71-127	Q
HMX	2.00	1.68	84	65-135	M
Nitrobenzene	2.00	1.42	71	65-134	
Nitroglycerin	20.0	19.2	96	74-127	
PETN	20.0	18.6	93	73-127	
RDX	2.00	1.77	88	68-130	
Tetryl	2.00	1.76	88	64-128	

Column to be used to flag recovery and RPD values

FORM III 8330B

FORM III
HPLC/IC LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 10080012.D

Lab ID: LCS 280-670001/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.00	2.20	110	73-125	
1,3-Dinitrobenzene	2.00	2.04	102	78-120	
2,4,6-Trinitrotoluene	2.00	1.96	98	71-123	
2,4-Dinitrotoluene	2.00	1.93	97	78-120	
2,6-Dinitrotoluene	2.00	2.02	101	77-127	
2-Amino-4,6-dinitrotoluene	2.00	1.94	97	79-120	
2-Nitrotoluene	2.00	1.69	85	70-127	
3-Nitrotoluene	2.00	1.71	86	73-125	
4-Amino-2,6-dinitrotoluene	2.00	1.94	97	76-125	
4-Nitrotoluene	2.00	1.70	85	71-127	
HMX	2.00	1.80	90	65-135	
Nitrobenzene	2.00	1.86	93	65-134	
Nitroglycerin	20.0	21.2	106	74-127	M
PETN	20.0	21.3	107	73-127	
RDX	2.00	1.97	99	68-130	
Tetryl	2.00	2.04	102	64-128	

Column to be used to flag recovery and RPD values

FORM III 8330B

FORM III
HPLC/IC LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 10110012.D

Lab ID: LCS 280-670642/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.00	2.21	110	73-125	
1,3-Dinitrobenzene	2.00	2.04	102	78-120	
2,4,6-Trinitrotoluene	2.00	1.97	98	71-123	
2,4-Dinitrotoluene	2.00	1.96	98	78-120	
2,6-Dinitrotoluene	2.00	2.07	103	77-127	
2-Amino-4,6-dinitrotoluene	2.00	1.98	99	79-120	
2-Nitrotoluene	2.00	1.75	88	70-127	
3-Nitrotoluene	2.00	1.81	91	73-125	
4-Amino-2,6-dinitrotoluene	2.00	2.05	102	76-125	
4-Nitrotoluene	2.00	1.80	90	71-127	
HMX	2.00	1.77	88	65-135	
Nitrobenzene	2.00	1.90	95	65-134	
Nitroglycerin	20.0	21.6	108	74-127	
PETN	20.0	21.0	105	73-127	
RDX	2.00	1.97	98	68-130	
Tetryl	2.00	2.00	100	64-128	

Column to be used to flag recovery and RPD values

FORM III 8330B

FORM III
HPLC/IC MATRIX SPIKE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 10080054.D

Lab ID: 280-197447-1 MS Client ID: SCFmw-004-240901-GW MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.21	0.22 U	2.36	107	73-125	M
1,3-Dinitrobenzene	2.21	0.11 U	2.25	101	78-120	
2,4,6-Trinitrotoluene	2.21	0.11 U	2.17	98	71-123	
2,4-Dinitrotoluene	2.21	0.090 U	2.05	92	78-120	
2,6-Dinitrotoluene	2.21	0.090 U	2.09	94	77-127	
2-Amino-4,6-dinitrotoluene	2.21	0.11 U	2.16	97	79-120	
2-Nitrotoluene	2.21	0.22 U	1.54	69	70-127	J1
3-Nitrotoluene	2.21	0.39 U	1.53	69	73-125	J1
4-Amino-2,6-dinitrotoluene	2.21	0.13 U	2.11	95	76-125	
4-Nitrotoluene	2.21	0.45 U	1.63	73	71-127	
HMX	2.21	0.22 U	1.95	88	65-135	M
Nitrobenzene	2.21	0.22 U	1.84	83	65-134	
Nitroglycerin	22.1	2.2 U	23.0	104	74-127	
PETN	22.1	1.1 U	23.0	104	73-127	
RDX	2.21	0.22 U	2.17	98	68-130	M
Tetryl	2.21	0.11 U	2.19	99	64-128	

Column to be used to flag recovery and RPD values

FORM III 8330B

FORM III
HPLC/IC MATRIX SPIKE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 10110025.D

Lab ID: 280-197447-1 MS RE Client ID: SCFmw-004-240901-GW MS RE

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
2-Nitrotoluene	2.20	0.21 U	1.43	65	70-127	H J1
3-Nitrotoluene	2.20	0.36 U	1.38	63	73-125	H J1
4-Nitrotoluene	2.20	0.42 U	1.46	67	71-127	H J1

Column to be used to flag recovery and RPD values

FORM III 8330B

FORM III
HPLC/IC MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 10080055.D

Lab ID: 280-197447-1 MSD Client ID: SCFmw-004-240901-GW MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.20	2.43	110	3	20	73-125	M
1,3-Dinitrobenzene	2.20	2.30	105	2	20	78-120	
2,4,6-Trinitrotoluene	2.20	2.19	100	1	20	71-123	
2,4-Dinitrotoluene	2.20	2.14	97	4	20	78-120	
2,6-Dinitrotoluene	2.20	2.23	101	6	20	77-127	
2-Amino-4,6-dinitrotoluene	2.20	2.17	99	1	20	79-120	
2-Nitrotoluene	2.20	1.70	77	10	20	70-127	
3-Nitrotoluene	2.20	1.71	78	11	20	73-125	
4-Amino-2,6-dinitrotoluene	2.20	2.22	101	5	20	76-125	
4-Nitrotoluene	2.20	1.81	82	11	20	71-127	
HMX	2.20	2.00	91	2	20	65-135	M
Nitrobenzene	2.20	1.93	88	5	20	65-134	
Nitroglycerin	22.0	24.0	109	4	20	74-127	
PETN	22.0	23.2	106	1	20	73-127	M
RDX	2.20	2.21	100	2	20	68-130	M
Tetryl	2.20	2.19	99	0	20	64-128	

Column to be used to flag recovery and RPD values

FORM III 8330B

FORM III
HPLC/IC MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 10110026.D

Lab ID: 280-197447-1 MSD RE Client ID: SCFmw-004-240901-GW MSD RE

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
2-Nitrotoluene	2.16	1.97	91	32	20	70-127	H J1
3-Nitrotoluene	2.16	1.97	91	35	20	73-125	H J1
4-Nitrotoluene	2.16	2.00	92	31	20	71-127	H J1

Column to be used to flag recovery and RPD values

FORM III 8330B

FORM IV
HPLC/IC METHOD BLANK SUMMARY

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Lab Sample ID: MB 280-669777/1-A

Matrix: Water Date Extracted: 10/04/2024 12:25

Lab File ID:(1) 10080042.D Lab File ID:(2)

Date Analyzed:(1) 10/09/2024 05:24 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 280-669777/2-A	10/09/2024 05:46	
SCFmw-004-240901-GW	280-197447-1	10/09/2024 09:26	
SCFmw-004-240901-GW MS	280-197447-1 MS	10/09/2024 09:48	
SCFmw-004-240901-GW MSD	280-197447-1 MSD	10/09/2024 10:10	
SCFmw-004-240902-GW	280-197447-2	10/09/2024 10:32	
LL1mw-087-240901-GW	280-197447-3	10/09/2024 10:54	
LL1mw-086-240901-GW	280-197447-4	10/09/2024 11:16	
LL1mw-091-240901-GW	280-197447-5	10/09/2024 11:38	10/10/2024 01:45
LL1mw-091-240902-GW	280-197447-6	10/09/2024 12:00	10/10/2024 02:55
LL1mw-064-240901-GW	280-197447-7	10/09/2024 12:22	

FORM IV
HPLC/IC METHOD BLANK SUMMARY

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Lab Sample ID: MB 280-670001/1-A

Matrix: Water Date Extracted: 10/07/2024 13:45

Lab File ID:(1) 10080011.D Lab File ID:(2)

Date Analyzed:(1) 10/08/2024 18:04 Date Analyzed:(2)

Instrument ID:(1) CHHPLC_X3 Instrument ID:(2)

GC Column:(1) UltraCarb5uO ID: 4.6(mm) GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 280-670001/2-A	10/08/2024 18:26	
FWGmw-007-240901-GW	280-197447-8	10/08/2024 19:10	

FORM IV
HPLC/IC METHOD BLANK SUMMARY

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Lab Sample ID: MB 280-670642/1-A

Matrix: Water Date Extracted: 10/11/2024 12:06

Lab File ID:(1) 10110011.D Lab File ID:(2)

Date Analyzed:(1) 10/11/2024 17:34 Date Analyzed:(2)

Instrument ID:(1) CHHPLC_X3 Instrument ID:(2)

GC Column:(1) UltraCarb5uO ID: 4.6(mm) GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 280-670642/2-A	10/11/2024 17:56	
SCFmw-004-240901-GW RE	280-197447-1 RE	10/11/2024 22:20	
SCFmw-004-240901-GW MS RE	280-197447-1 MS RE	10/11/2024 22:42	
SCFmw-004-240901-GW MSD RE	280-197447-1 MSD RE	10/11/2024 23:03	
SCFmw-004-240902-GW RE	280-197447-2 RE	10/11/2024 23:25	
LL1mw-087-240901-GW RE	280-197447-3 RE	10/11/2024 23:47	
LL1mw-086-240901-GW RE	280-197447-4 RE	10/12/2024 00:09	
LL1mw-091-240901-GW RE	280-197447-5 RE	10/12/2024 00:31	
LL1mw-091-240902-GW RE	280-197447-6 RE	10/12/2024 00:53	
LL1mw-064-240901-GW RE	280-197447-7 RE	10/12/2024 01:37	

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Client Sample ID: LL1mw-091-240901-GW Lab Sample ID: 280-197447-5

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_X5

Date Analyzed (1): 10/09/2024 11:38 Date Analyzed (2): 10/10/2024 01:45

GC Column (1): UltraCarb5uODS ID: 4.6(mm) GC Column (2): Luna-phenylh ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
1,3,5-Trinitrobenzene	1		8.49	8.31	8.61	0.11		147.5
	2		16.45	16.30	16.60	0.75		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Client Sample ID: LL1mw-091-240902-GW Lab Sample ID: 280-197447-6

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_X5

Date Analyzed (1): 10/09/2024 12:00 Date Analyzed (2): 10/10/2024 02:55

GC Column (1): UltraCarb5uODS ID: 4.6(mm) GC Column (2): Luna-phenylh ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
1,3,5-Trinitrobenzene	1		8.50	8.31	8.61	0.13		141.8
	2		16.46	16.30	16.60	0.78		

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-197447-1

SDG No.:

Client Sample ID: SCFmw-004-240901-GW | Lab Sample ID: 280-197447-1

Matrix: Water | Lab File ID: 10080053.D

Analysis Method: 8330B | Date Collected: 09/30/2024 13:59

Extraction Method: 3535 | Date Extracted: 10/04/2024 12:25

Sample wt/vol: 446.4(mL) | Date Analyzed: 10/09/2024 09:26

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 670184 | Units: ug/L

Preparation Batch No.: 669777 | Instrument ID: CHHPLC_X3

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.22	U	0.24	0.22	0.094
99-65-0	1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.041
118-96-7	2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.050
121-14-2	2,4-Dinitrotoluene	0.090	U	0.11	0.090	0.031
606-20-2	2,6-Dinitrotoluene	0.090	U	0.11	0.090	0.045
35572-78-2	2-Amino-4,6-dinitrotoluene	0.11	U	0.12	0.11	0.057
88-72-2	2-Nitrotoluene	0.22	U J1 Q	0.24	0.22	0.096
99-08-1	3-Nitrotoluene	0.39	U M J1 Q	0.45	0.39	0.22
19406-51-0	4-Amino-2,6-dinitrotoluene	0.13	U	0.17	0.13	0.065
99-99-0	4-Nitrotoluene	0.45	U Q	0.46	0.45	0.11
2691-41-0	HMX	0.22	U	0.24	0.22	0.098
98-95-3	Nitrobenzene	0.22	U	0.24	0.22	0.10
55-63-0	Nitroglycerin	2.2	U	2.4	2.2	1.0
78-11-5	PETN	1.1	U	1.2	1.1	0.50
121-82-4	RDX	0.22	U	0.24	0.22	0.058
479-45-8	Tetryl	0.11	U	0.12	0.11	0.036

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	95	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\10080053.D
Lims ID: 280-197447-A-1-A
Client ID: SCFmw-004-240901-GW
Sample Type: Client
Inject. Date: 09-Oct-2024 09:26:25 ALS Bottle#: 53 Worklist Smp#: 53
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-197447-A-1-A
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Oct-2024 11:37:36 Calib Date: 04-Oct-2024 19:55:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1609

First Level Reviewer: LV5D Date: 09-Oct-2024 11:31:25

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	1 Triamine Trinitrobenzene	1		2.444			ND	
	2 2,6-diamino-4-nitrotoluene	1		6.407			ND	
	3 TNX	1		6.430			ND	
	4 HMX	1		6.564			ND	
	5 2,4-diamino-6-nitrotoluene	1		6.588			ND	
	6 DNX	1		6.737			ND	U
	7 MNX	1		7.144			ND	
	8 RDX	1		7.497			ND	
	9 2,4,6-Trinitrophenol	1		7.917			ND	
$	10 1,2-Dinitrobenzene	1	8.360	8.364	-0.004	24850	0.1906	M
	11 1,3,5-Trinitrobenzene	1		8.464			ND	
	12 1,3-Dinitrobenzene	1		9.024			ND	
	13 Nitrobenzene	1		9.344			ND	
	14 3,5-Dinitroaniline	1		9.550			ND	
	15 Tetryl	1		9.664			ND	
	16 Nitroglycerin	2		10.110			ND	
	17 2,4,6-Trinitrotoluene	1		10.457			ND	
	18 4-Amino-2,6-dinitrotoluene	1		10.617			ND	
	19 2-Amino-4,6-dinitrotoluene	1		10.850			ND	
	20 2,6-Dinitrotoluene	1		10.984			ND	
	21 2,4-Dinitrotoluene	1		11.130			ND	
	22 o-Nitrotoluene	1		11.824			ND	
	23 p-Nitrotoluene	1		12.197			ND	
	24 m-Nitrotoluene	1		12.697			ND	U
	25 PETN	2		13.764			ND	
	26 Ammonium Picrate	1		0.000			ND	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
U - Marked Undetected

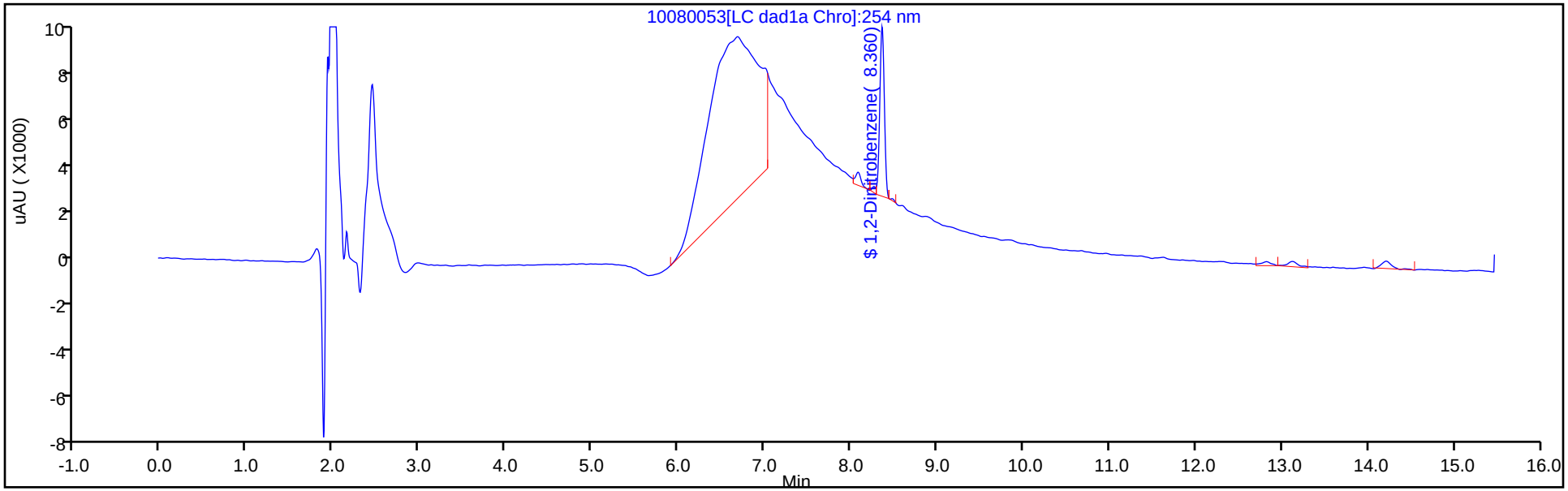
Report Date: 09-Oct-2024 11:37:38 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Denver

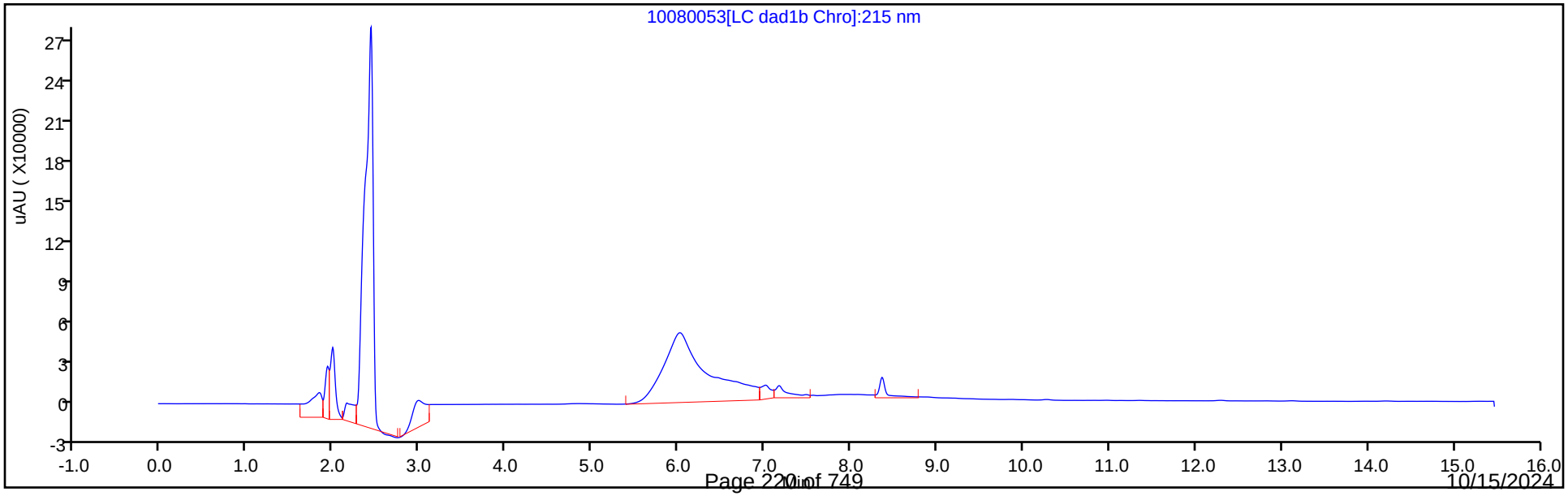
Data File: \\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080053.d

Injection Date:	09-Oct-2024 09:26:25	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-197447-A-1-A	Lab Sample ID:	280-197447-1	Worklist Smp#:	53
Client ID:	SCFmw-004-240901-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	53
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\10080053.D				
Lims ID:	280-197447-A-1-A				
Client ID:	SCFmw-004-240901-GW				
Sample Type:	Client				
Inject. Date:	09-Oct-2024 09:26:25	ALS Bottle#:	53	Worklist Smp#:	53
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-197447-A-1-A				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	09-Oct-2024 11:37:36	Calib Date:	04-Oct-2024 19:55:02		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1609				

First Level Reviewer: LV5D Date: 09-Oct-2024 11:31:25

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1906	95.28

Manual Integration/User Assign Peak Report

Eurofins Denver

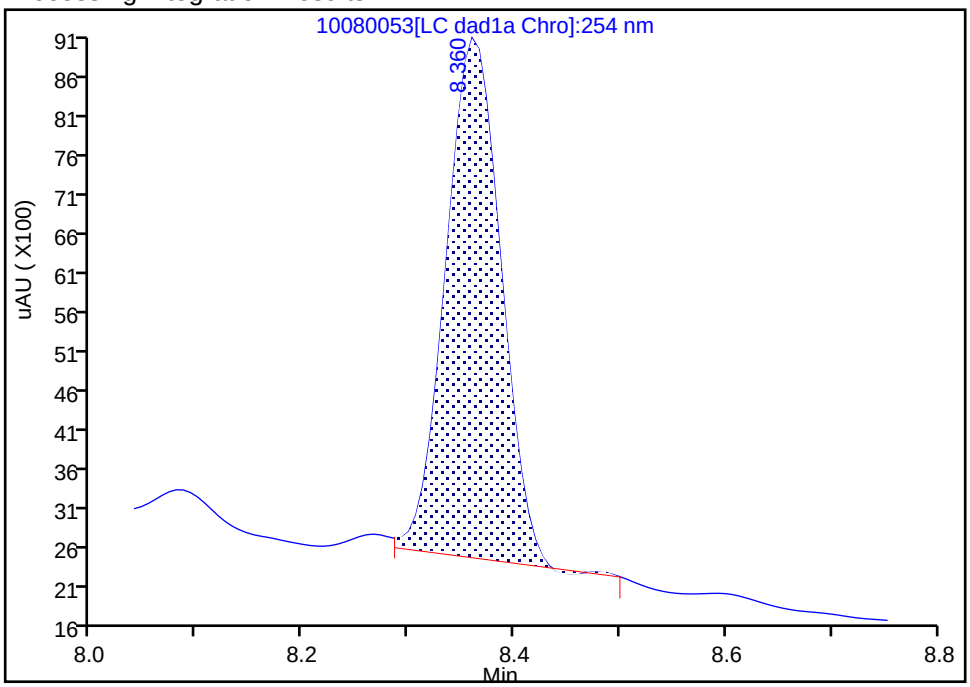
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080053.d				
Injection Date:	09-Oct-2024 09:26:25	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-A-1-A	Lab Sample ID:	280-197447-1		
Client ID:	SCFmw-004-240901-GW				
Operator ID:	JZ	ALS Bottle#:	53	Worklist Smp#:	53
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

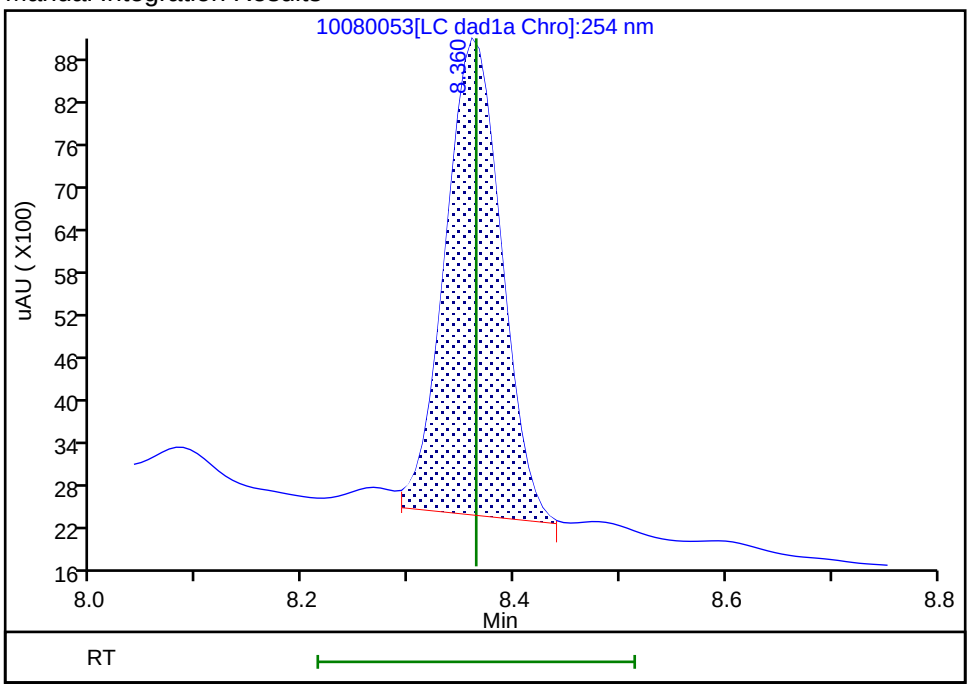
Processing Integration Results

RT: 8.36
Area: 24369
Amount: 0.186865
Amount Units: ug/mL



Manual Integration Results

RT: 8.36
Area: 24850
Amount: 0.190553
Amount Units: ug/mL



Reviewer: LV5D, 09-Oct-2024 11:31:24 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

User Disabled Compound Report

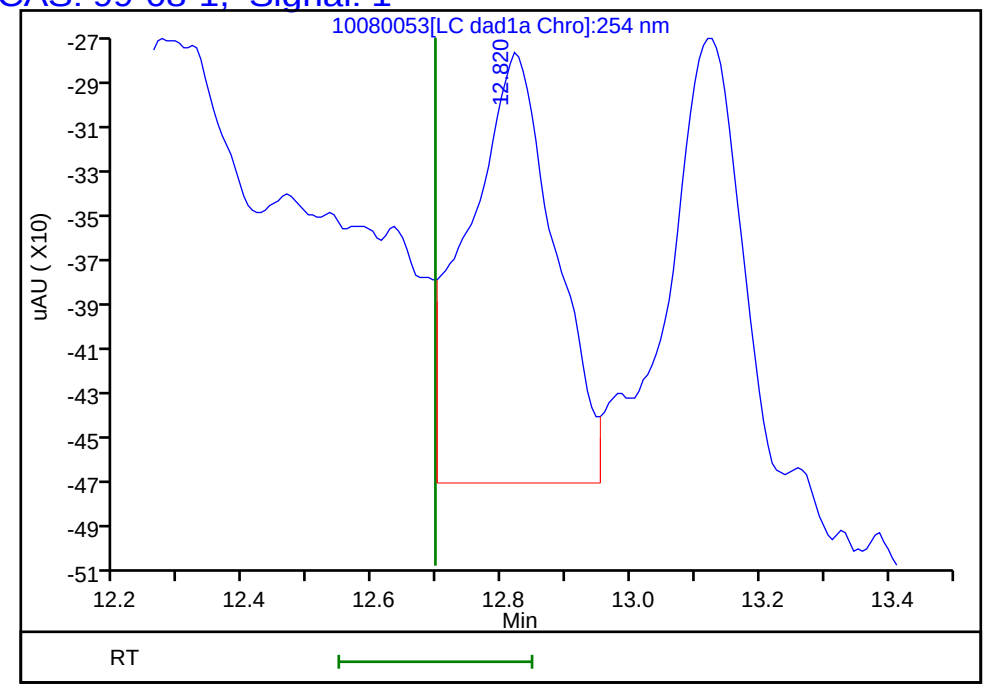
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080053.d
Injection Date: 09-Oct-2024 09:26:25 Instrument ID: CHHPLC_X3
Lims ID: 280-197447-A-1-A Lab Sample ID: 280-197447-1
Client ID: SCFmw-004-240901-GW
Operator ID: JZ ALS Bottle#: 53 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

24 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 12.82
Response: 1733
Amount: 0.010976



Reviewer: LV5D, 09-Oct-2024 11:31:25
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-197447-1

SDG No.:

Client Sample ID: SCFmw-004-240901-GW RE | Lab Sample ID: 280-197447-1 RE

Matrix: Water | Lab File ID: 10110024.D

Analysis Method: 8330B | Date Collected: 09/30/2024 13:59

Extraction Method: 3535 | Date Extracted: 10/11/2024 12:06

Sample wt/vol: 480.7(mL) | Date Analyzed: 10/11/2024 22:20

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 670729 | Units: ug/L

Preparation Batch No.: 670642 | Instrument ID: CHHPLC_X3

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
88-72-2	*2-Nitrotoluene*	*0.21*	*U H J1*	*0.22*	0.21	*0.089*
99-08-1	*3-Nitrotoluene*	*0.36*	*U H J1*	*0.42*	0.36	*0.20*
99-99-0	*4-Nitrotoluene*	*0.42*	*U H J1*	*0.43*	0.42	*0.10*

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\20241011-138518.b\10110024.D
Lims ID: 280-197447-B-1-A RE
Client ID: SCFmw-004-240901-GW
Sample Type: Client
Inject. Date: 11-Oct-2024 22:20:02 ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-197447-B-1-A
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20241011-138518.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 12-Oct-2024 10:13:32 Calib Date: 04-Oct-2024 19:55:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1603

First Level Reviewer: LV5D Date: 12-Oct-2024 10:11:00

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	1 Triamine Trinitrobenzene	1		2.444			ND	
	2 2,6-diamino-4-nitrotoluene	1		6.407			ND	
	3 TNX	1		6.448			ND	
	4 HMX	1		6.572			ND	
	5 2,4-diamino-6-nitrotoluene	1		6.582			ND	
	6 DNX	1		6.762			ND	U
	7 MNX	1		7.162			ND	
	8 RDX	1		7.498			ND	
	9 2,4,6-Trinitrophenol	1		7.912			ND	
$	10 1,2-Dinitrobenzene	1	8.366	8.365	0.001	24216	0.1857	M
	11 1,3,5-Trinitrobenzene	1		8.465			ND	
	12 1,3-Dinitrobenzene	1		9.032			ND	
	13 Nitrobenzene	1		9.345			ND	
	14 3,5-Dinitroaniline	1		9.558			ND	
	15 Tetryl	1		9.672			ND	
	16 Nitroglycerin	2		10.118			ND	
	17 2,4,6-Trinitrotoluene	1		10.472			ND	
	18 4-Amino-2,6-dinitrotoluene	1		10.632			ND	
	19 2-Amino-4,6-dinitrotoluene	1		10.858			ND	
	20 2,6-Dinitrotoluene	1		10.992			ND	
	21 2,4-Dinitrotoluene	1		11.145			ND	
	22 o-Nitrotoluene	1		11.832			ND	
	23 p-Nitrotoluene	1		12.198			ND	
	24 m-Nitrotoluene	1		12.705			ND	
	25 PETN	2		13.772			ND	
	26 Ammonium Picrate	1		0.000			ND	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
U - Marked Undetected

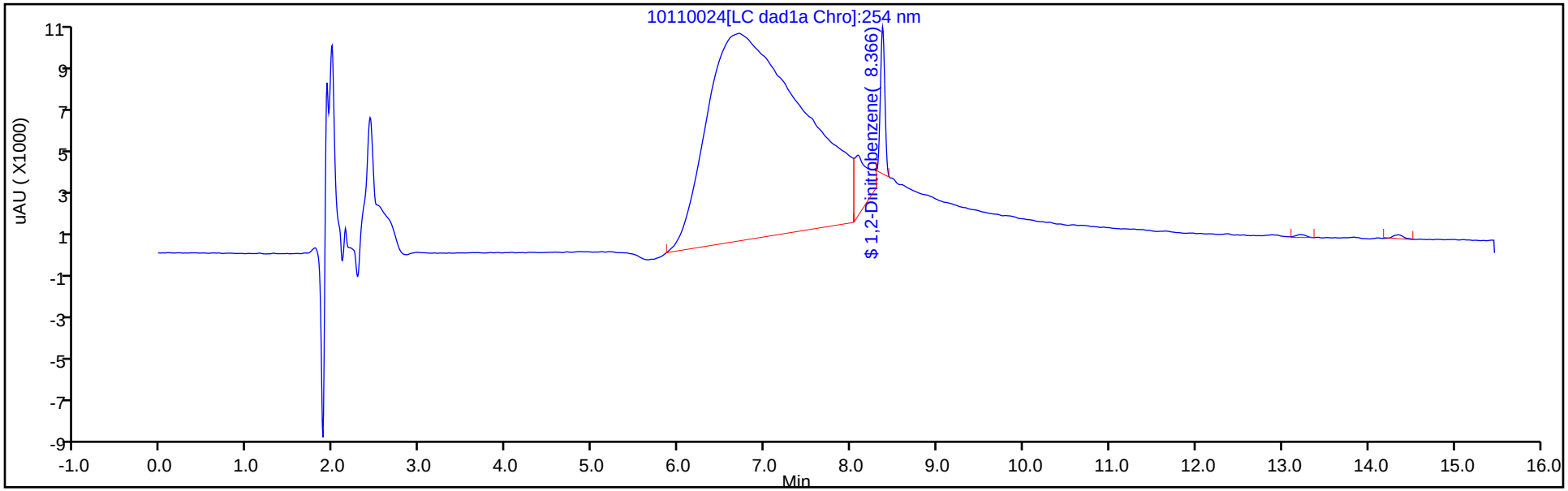
Report Date: 12-Oct-2024 10:13:34 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Denver

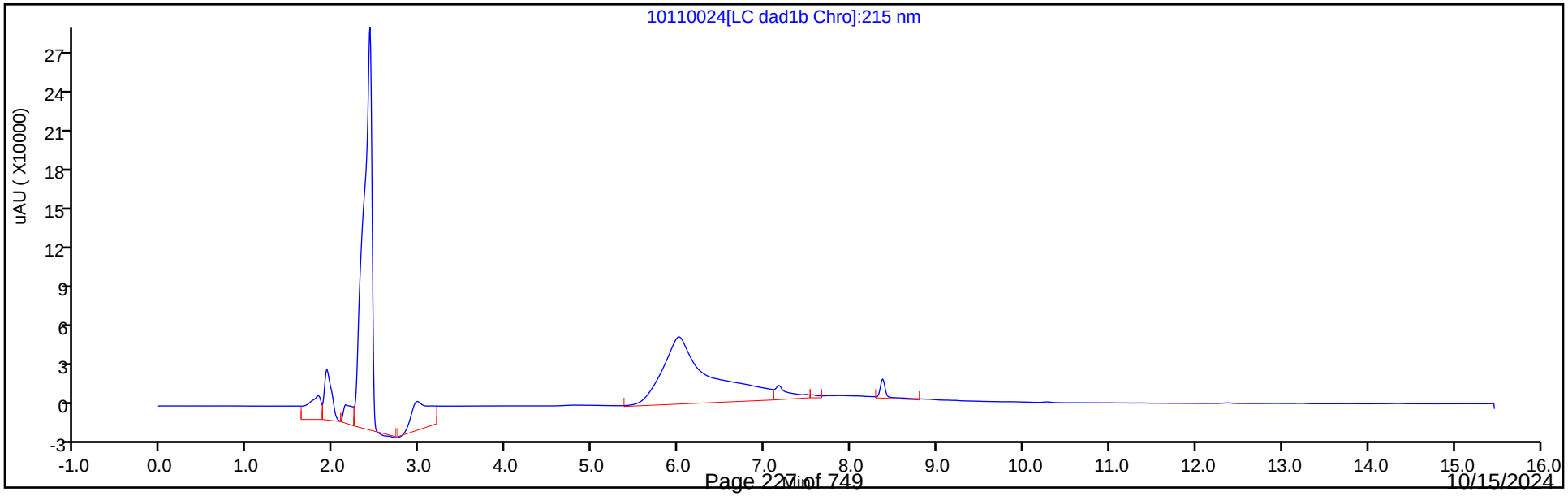
Data File: \\chromfs\denver\chromdata\chhplc_x\20241011-138518.b\10110024.d

Injection Date:	11-Oct-2024 22:20:02	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-197447-B-1-A RE	Lab Sample ID:	280-197447-1	Worklist Smp#:	24
Client ID:	SCFmw-004-240901-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



10/15/2024
4:48:23 PM

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20241011-138518.b\10110024.D				
Lims ID:	280-197447-B-1-A RE				
Client ID:	SCFmw-004-240901-GW				
Sample Type:	Client				
Inject. Date:	11-Oct-2024 22:20:02	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-197447-B-1-A				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20241011-138518.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	12-Oct-2024 10:13:32	Calib Date:	04-Oct-2024 19:55:02		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1603				

First Level Reviewer: LV5D Date: 12-Oct-2024 10:11:00

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1857	92.85

Manual Integration/User Assign Peak Report

Eurofins Denver

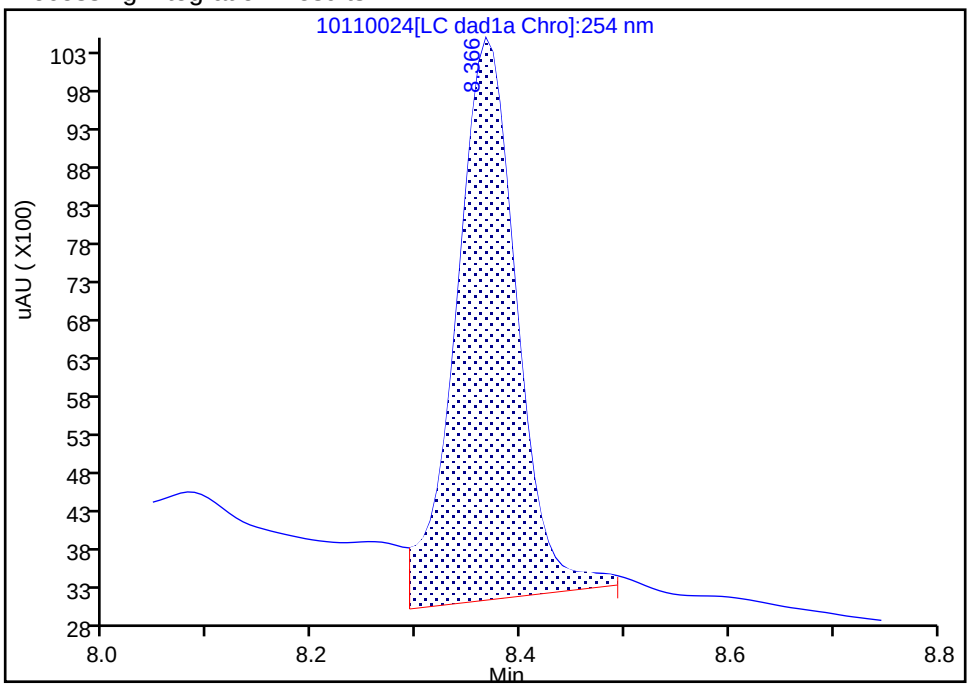
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241011-138518.b\10110024.d				
Injection Date:	11-Oct-2024 22:20:02	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-B-1-A RE	Lab Sample ID:	280-197447-1		
Client ID:	SCFmw-004-240901-GW				
Operator ID:	JZ	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

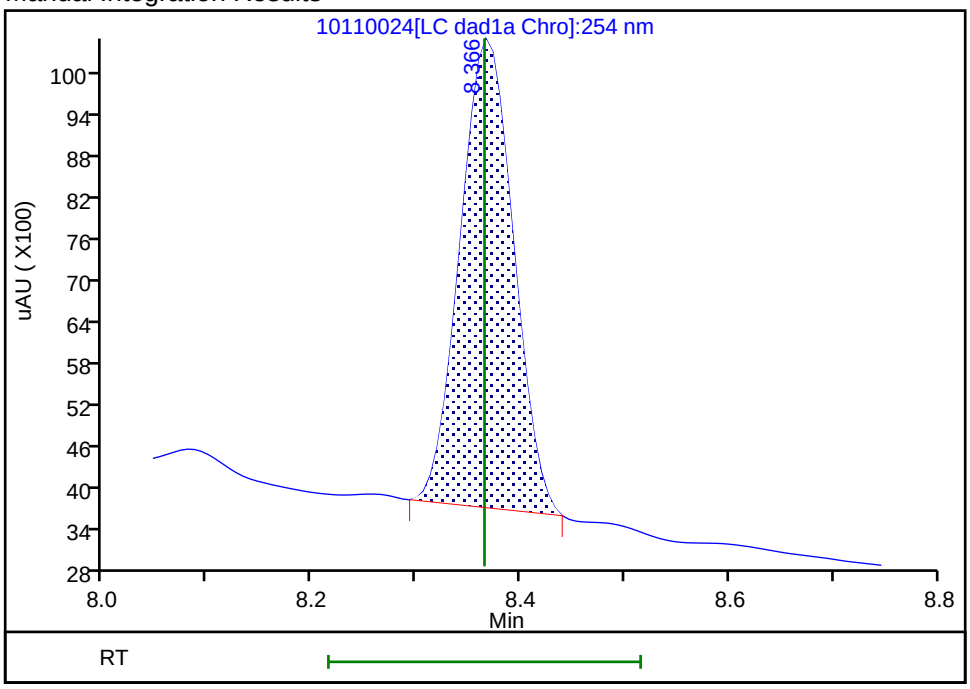
Processing Integration Results

RT: 8.37
Area: 29924
Amount: 0.229461
Amount Units: ug/mL



Manual Integration Results

RT: 8.37
Area: 24216
Amount: 0.185692
Amount Units: ug/mL



Reviewer: LV5D, 12-Oct-2024 10:10:59 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-197447-1

SDG No.:

Client Sample ID: SCFmw-004-240902-GW | Lab Sample ID: 280-197447-2

Matrix: Water | Lab File ID: 10080056.D

Analysis Method: 8330B | Date Collected: 09/30/2024 13:59

Extraction Method: 3535 | Date Extracted: 10/04/2024 12:25

Sample wt/vol: 449.5(mL) | Date Analyzed: 10/09/2024 10:32

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 670184 | Units: ug/L

Preparation Batch No.: 669777 | Instrument ID: CHHPLC_X3

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.22	U	0.23	0.22	0.094
99-65-0	1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.041
118-96-7	2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.050
121-14-2	2,4-Dinitrotoluene	0.089	U	0.11	0.089	0.030
606-20-2	2,6-Dinitrotoluene	0.089	U	0.11	0.089	0.045
35572-78-2	2-Amino-4,6-dinitrotoluene	0.11	U	0.12	0.11	0.056
88-72-2	2-Nitrotoluene	0.22	U Q	0.23	0.22	0.095
99-08-1	3-Nitrotoluene	0.39	U M Q	0.44	0.39	0.22
19406-51-0	4-Amino-2,6-dinitrotoluene	0.13	U	0.17	0.13	0.064
99-99-0	4-Nitrotoluene	0.44	U Q	0.46	0.44	0.11
2691-41-0	HMX	0.22	U M	0.23	0.22	0.097
98-95-3	Nitrobenzene	0.22	U	0.23	0.22	0.10
55-63-0	Nitroglycerin	2.2	U M	2.3	2.2	1.0
78-11-5	PETN	1.1	U	1.2	1.1	0.50
121-82-4	RDX	0.22	U	0.23	0.22	0.057
479-45-8	Tetryl	0.11	U	0.12	0.11	0.035

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	85	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\10080056.D
Lims ID: 280-197447-A-2-A
Client ID: SCFmw-004-240902-GW
Sample Type: Client
Inject. Date: 09-Oct-2024 10:32:18 ALS Bottle#: 56 Worklist Smp#: 56
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-197447-A-2-A
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Oct-2024 15:39:27 Calib Date: 04-Oct-2024 19:55:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1609

First Level Reviewer: LV5D Date: 09-Oct-2024 15:39:27

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	4 HMX	1		6.564			ND	U
	8 RDX	1		7.497			ND	
$	10 1,2-Dinitrobenzene	1	8.355	8.364	-0.009	22110	0.1695	M
	11 1,3,5-Trinitrobenzene	1		8.464			ND	
	12 1,3-Dinitrobenzene	1		9.024			ND	
	13 Nitrobenzene	1		9.344			ND	
	15 Tetryl	1		9.664			ND	
	16 Nitroglycerin	2		10.110			ND	U
	17 2,4,6-Trinitrotoluene	1		10.457			ND	
	18 4-Amino-2,6-dinitrotoluene	1		10.617			ND	
	19 2-Amino-4,6-dinitrotoluene	1		10.850			ND	
	20 2,6-Dinitrotoluene	1		10.984			ND	
	21 2,4-Dinitrotoluene	1		11.130			ND	
	22 o-Nitrotoluene	1		11.824			ND	
	23 p-Nitrotoluene	1		12.197			ND	
	24 m-Nitrotoluene	1		12.697			ND	U
	25 PETN	2		13.764			ND	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

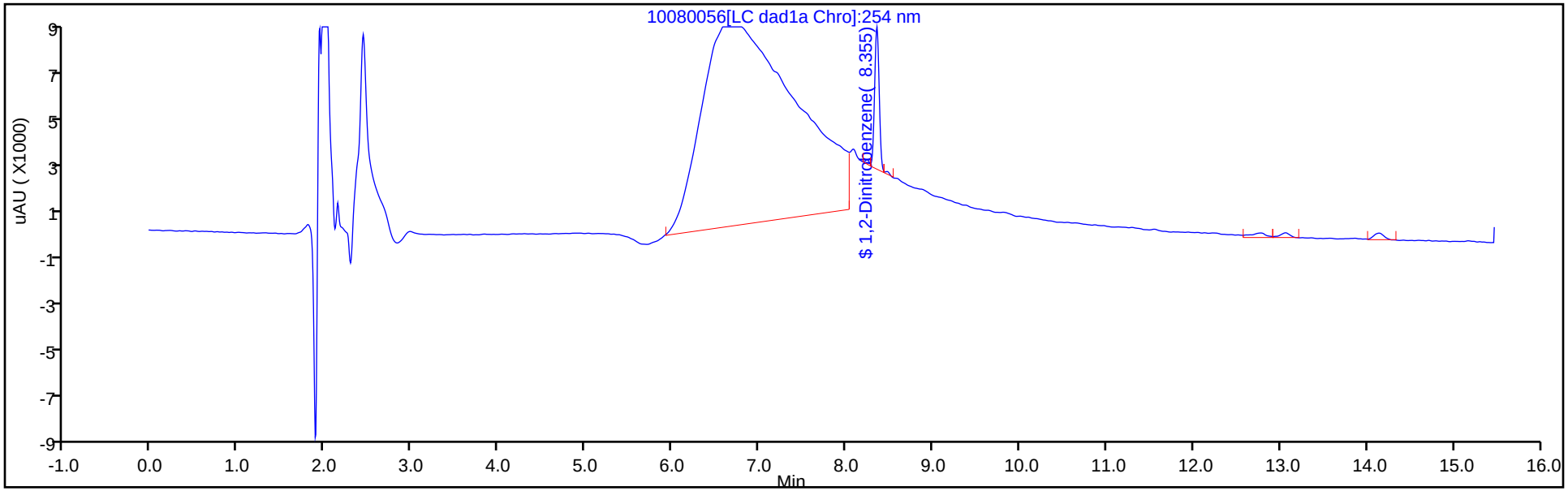
Report Date: 09-Oct-2024 15:39:27 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Denver

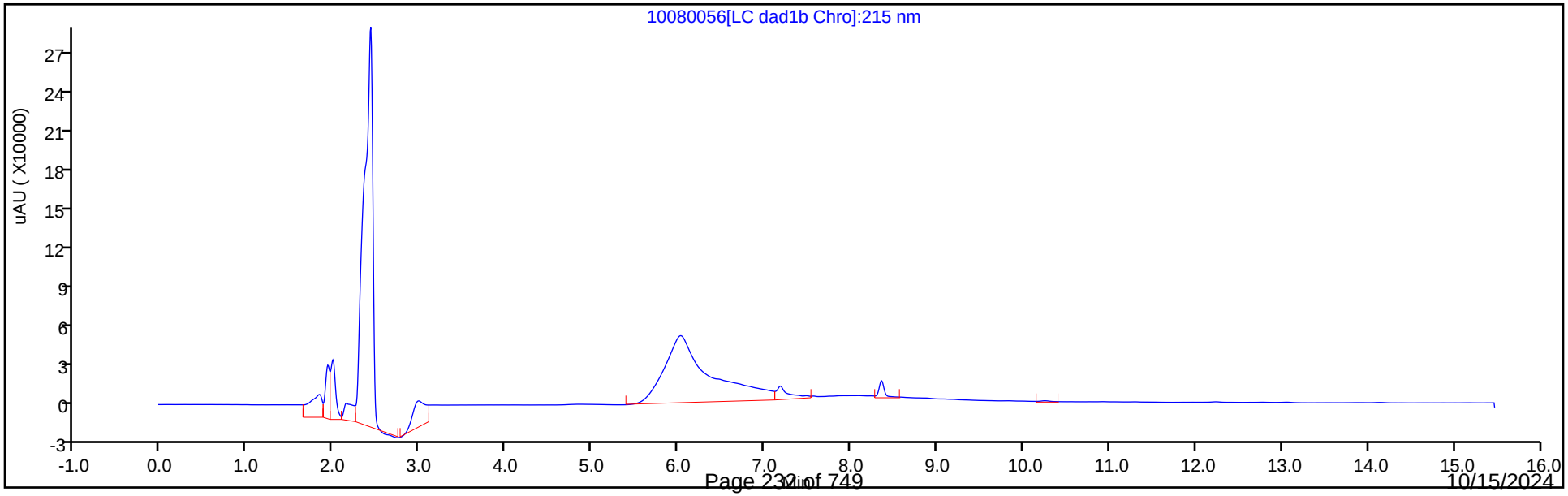
Data File: \\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080056.d

Injection Date:	09-Oct-2024 10:32:18	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-197447-A-2-A	Lab Sample ID:	280-197447-2	Worklist Smp#:	56
Client ID:	SCFmw-004-240902-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	56
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



10/15/2024
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Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\10080056.D				
Lims ID:	280-197447-A-2-A				
Client ID:	SCFmw-004-240902-GW				
Sample Type:	Client				
Inject. Date:	09-Oct-2024 10:32:18	ALS Bottle#:	56	Worklist Smp#:	56
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-197447-A-2-A				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	09-Oct-2024 15:39:27	Calib Date:	04-Oct-2024 19:55:02		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1609				

First Level Reviewer: LV5D Date: 09-Oct-2024 15:39:27

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1695	84.77

Manual Integration/User Assign Peak Report

Eurofins Denver

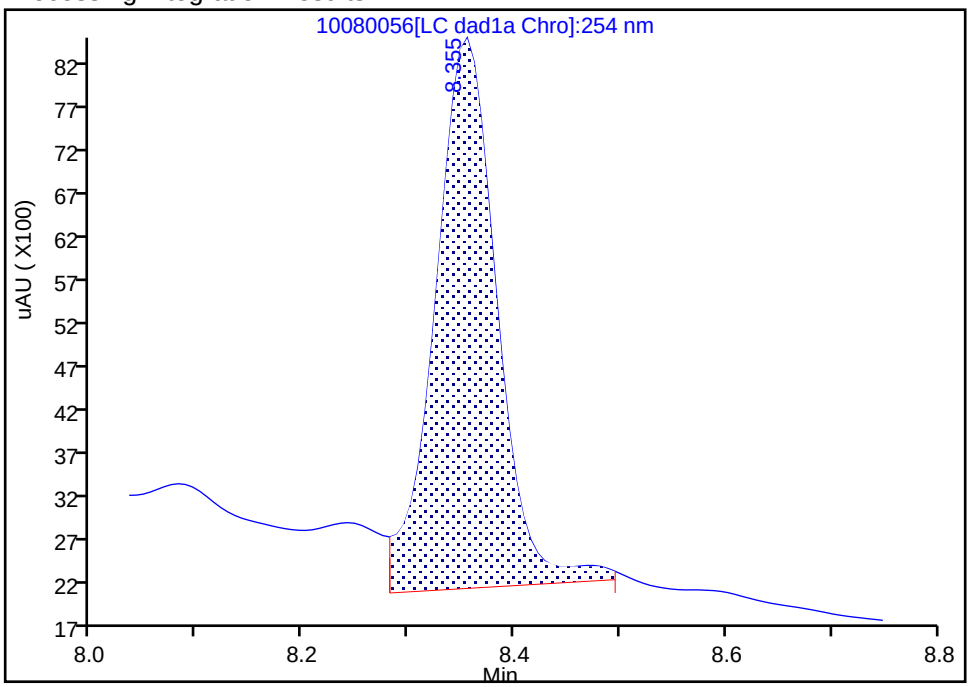
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080056.d				
Injection Date:	09-Oct-2024 10:32:18	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-A-2-A	Lab Sample ID:	280-197447-2		
Client ID:	SCFmw-004-240902-GW				
Operator ID:	JZ	ALS Bottle#:	56	Worklist Smp#:	56
Injection Vol:	100.0 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

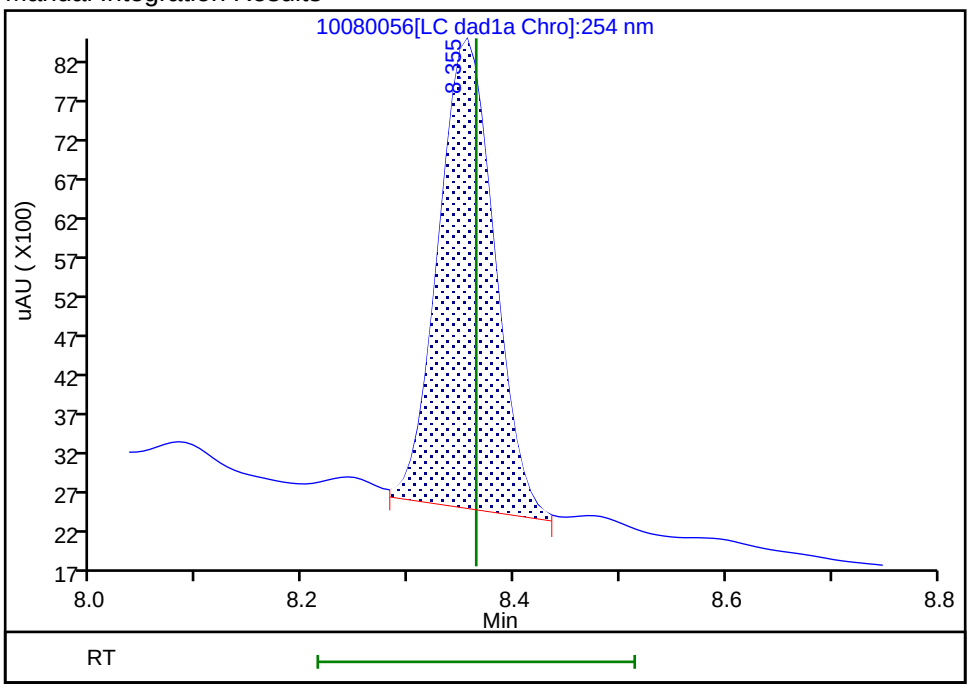
Processing Integration Results

RT: 8.36
Area: 26069
Amount: 0.199901
Amount Units: ug/mL



Manual Integration Results

RT: 8.36
Area: 22110
Amount: 0.169542
Amount Units: ug/mL



Reviewer: LV5D, 09-Oct-2024 15:39:25 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

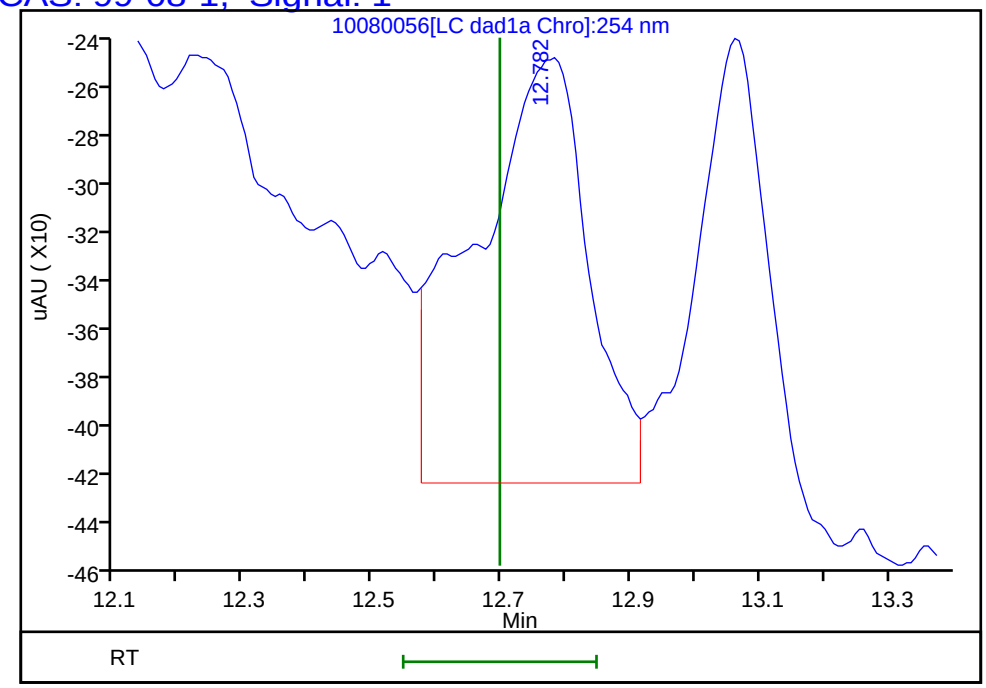
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080056.d				
Injection Date:	09-Oct-2024 10:32:18	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-A-2-A	Lab Sample ID:	280-197447-2		
Client ID:	SCFmw-004-240902-GW				
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		

24 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 12.78
Response: 2195
Amount: 0.014395



Reviewer: LV5D, 09-Oct-2024 15:39:27
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

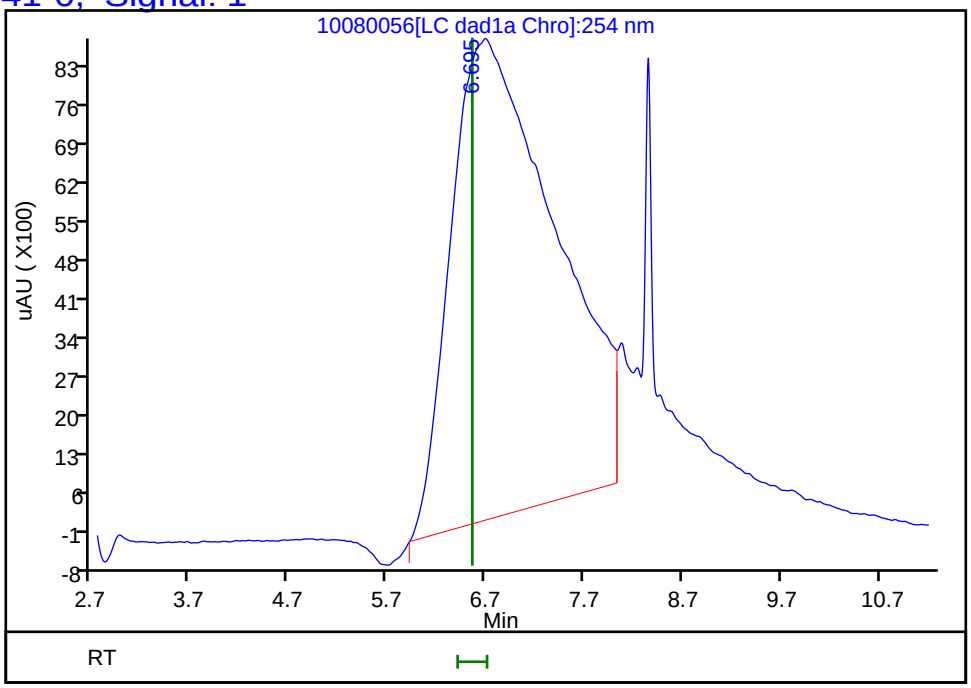
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080056.d
Injection Date: 09-Oct-2024 10:32:18 Instrument ID: CHHPLC_X3
Lims ID: 280-197447-A-2-A Lab Sample ID: 280-197447-2
Client ID: SCFmw-004-240902-GW
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

4 HMX, CAS: 2691-41-0, Signal: 1

RT: 6.70
Response: 640317
Amount: 6.624910



Reviewer: LV5D, 09-Oct-2024 15:39:27
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-197447-1

SDG No.:

Client Sample ID: SCFmw-004-240902-GW RE | Lab Sample ID: 280-197447-2 RE

Matrix: Water | Lab File ID: 10110027.D

Analysis Method: 8330B | Date Collected: 09/30/2024 13:59

Extraction Method: 3535 | Date Extracted: 10/11/2024 12:06

Sample wt/vol: 456.5(mL) | Date Analyzed: 10/11/2024 23:25

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 670729 | Units: ug/L

Preparation Batch No.: 670642 | Instrument ID: CHHPLC_X3

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
88-72-2	*2-Nitrotoluene*	*0.22*	*U H*	*0.23*	0.22	*0.094*
99-08-1	*3-Nitrotoluene*	*0.38*	*U H*	*0.44*	0.38	*0.21*
99-99-0	*4-Nitrotoluene*	*0.44*	*U H*	*0.45*	0.44	*0.11*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	89	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20241011-138518.b\10110027.D
Lims ID: 280-197447-B-2-A RE
Client ID: SCFmw-004-240902-GW
Sample Type: Client
Inject. Date: 11-Oct-2024 23:25:53 ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-197447-B-2-A
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20241011-138518.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 12-Oct-2024 10:13:32 Calib Date: 04-Oct-2024 19:55:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1603

First Level Reviewer: LV5D Date: 12-Oct-2024 10:11:43

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	4 HMX	1		6.572			ND	U
	8 RDX	1		7.498			ND	
$	10 1,2-Dinitrobenzene	1	8.367	8.365	0.002	23268	0.1784	M
	11 1,3,5-Trinitrobenzene	1		8.465			ND	
	12 1,3-Dinitrobenzene	1		9.032			ND	
	13 Nitrobenzene	1		9.345			ND	
	15 Tetryl	1		9.672			ND	
	16 Nitroglycerin	2		10.118			ND	
	17 2,4,6-Trinitrotoluene	1		10.472			ND	
	18 4-Amino-2,6-dinitrotoluene	1		10.632			ND	
	19 2-Amino-4,6-dinitrotoluene	1		10.858			ND	
	20 2,6-Dinitrotoluene	1		10.992			ND	
	21 2,4-Dinitrotoluene	1		11.145			ND	
	22 o-Nitrotoluene	1		11.832			ND	
	23 p-Nitrotoluene	1		12.198			ND	
	24 m-Nitrotoluene	1		12.705			ND	
	25 PETN	2		13.772			ND	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

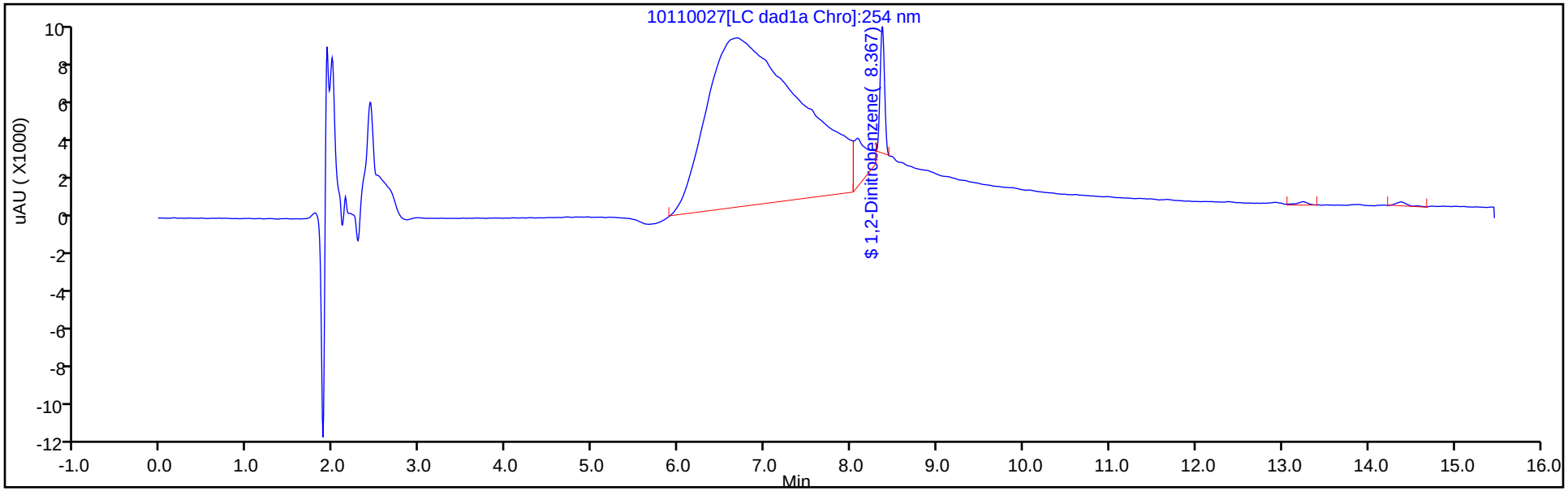
Report Date: 12-Oct-2024 10:13:37 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Denver

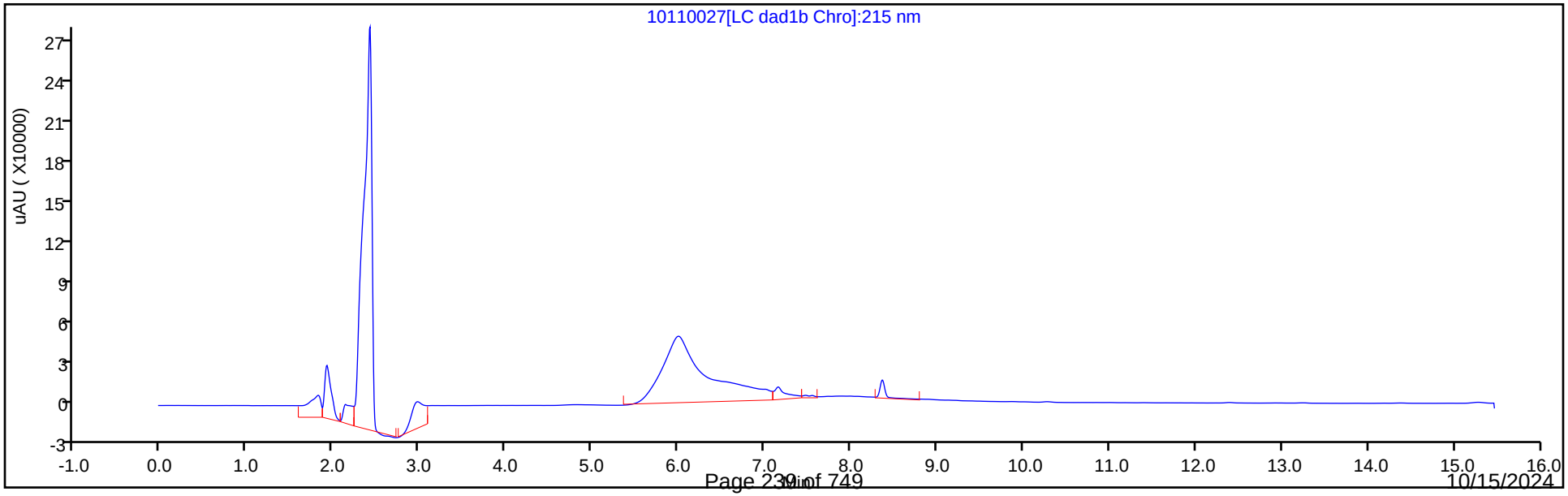
Data File: \\chromfs\denver\chromdata\chhplc_x\20241011-138518.b\10110027.d

Injection Date:	11-Oct-2024 23:25:53	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-197447-B-2-A RE	Lab Sample ID:	280-197447-2	Worklist Smp#:	27
Client ID:	SCFmw-004-240902-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20241011-138518.b\10110027.D
Lims ID: 280-197447-B-2-A RE
Client ID: SCFmw-004-240902-GW
Sample Type: Client
Inject. Date: 11-Oct-2024 23:25:53 ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-197447-B-2-A
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20241011-138518.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 12-Oct-2024 10:13:32 Calib Date: 04-Oct-2024 19:55:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1603

First Level Reviewer: LV5D Date: 12-Oct-2024 10:11:43

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1784	89.21

Manual Integration/User Assign Peak Report

Eurofins Denver

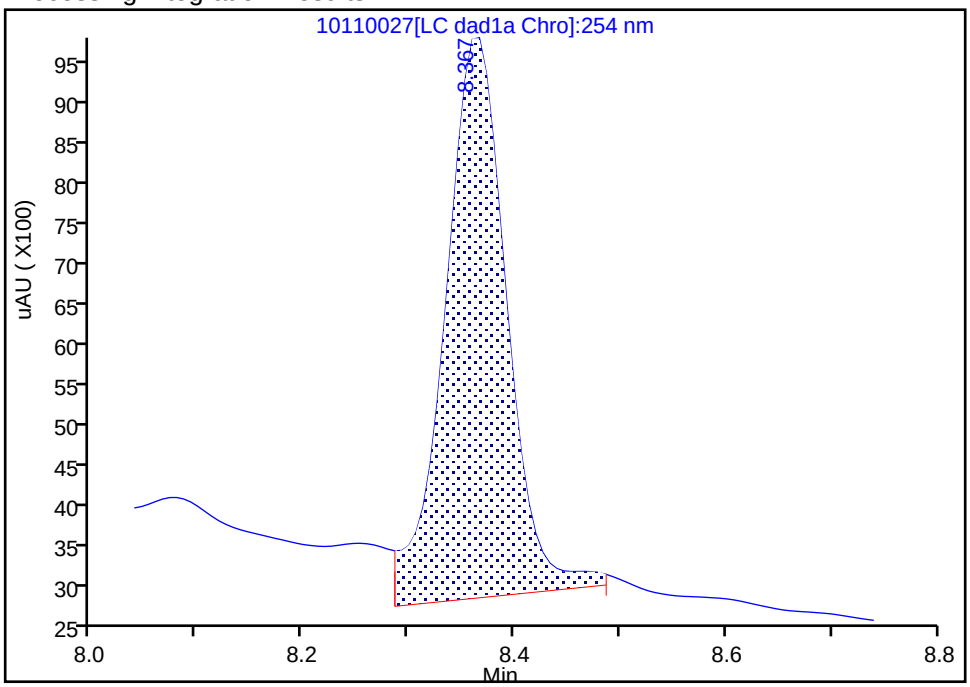
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241011-138518.b\10110027.d				
Injection Date:	11-Oct-2024 23:25:53	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-B-2-A RE	Lab Sample ID:	280-197447-2		
Client ID:	SCFmw-004-240902-GW				
Operator ID:	JZ	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

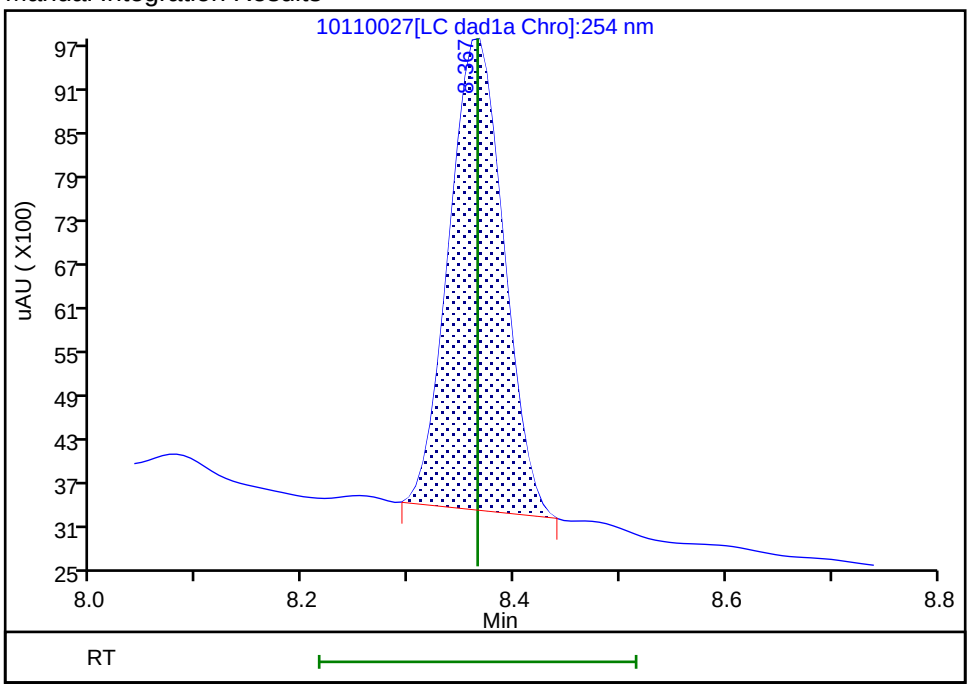
Processing Integration Results

RT: 8.37
Area: 28147
Amount: 0.215835
Amount Units: ug/mL



Manual Integration Results

RT: 8.37
Area: 23268
Amount: 0.178422
Amount Units: ug/mL



Reviewer: LV5D, 12-Oct-2024 10:11:42 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

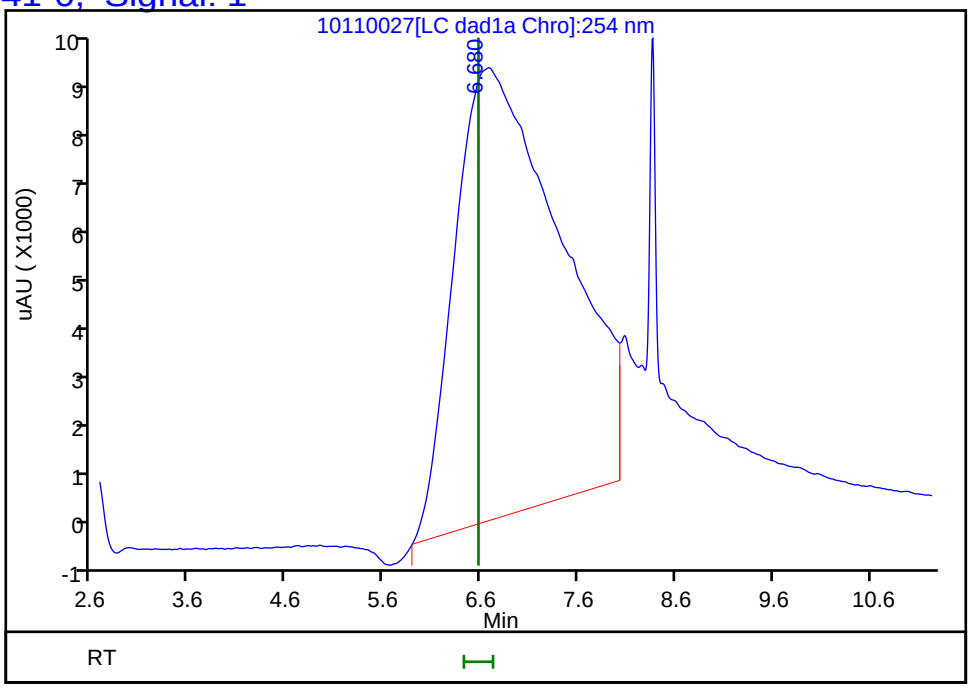
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20241011-138518.b\10110027.d				
Injection Date:	11-Oct-2024 23:25:53	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-B-2-A RE	Lab Sample ID:	280-197447-2		
Client ID:	SCFmw-004-240902-GW				
Operator ID:	JZ	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0, Signal: 1

RT: 6.68
Response: 658134
Amount: 6.809250



Reviewer: LV5D, 12-Oct-2024 10:11:43
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-197447-1

SDG No.:

Client Sample ID: LL1mw-087-240901-GW | Lab Sample ID: 280-197447-3

Matrix: Water | Lab File ID: 10080057.D

Analysis Method: 8330B | Date Collected: 10/01/2024 08:53

Extraction Method: 3535 | Date Extracted: 10/04/2024 12:25

Sample wt/vol: 442.5(mL) | Date Analyzed: 10/09/2024 10:54

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 670184 | Units: ug/L

Preparation Batch No.: 669777 | Instrument ID: CHHPLC_X3

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.23	U M	0.24	0.23	0.095
99-65-0	1,3-Dinitrobenzene	0.11	U M	0.12	0.11	0.042
118-96-7	2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.051
121-14-2	2,4-Dinitrotoluene	0.090	U	0.11	0.090	0.031
606-20-2	2,6-Dinitrotoluene	0.090	U	0.11	0.090	0.045
35572-78-2	2-Amino-4,6-dinitrotoluene	0.11	U	0.12	0.11	0.057
88-72-2	2-Nitrotoluene	0.23	U Q	0.24	0.23	0.097
99-08-1	3-Nitrotoluene	0.40	U M Q	0.45	0.40	0.22
19406-51-0	4-Amino-2,6-dinitrotoluene	0.14	U	0.17	0.14	0.065
99-99-0	4-Nitrotoluene	0.45	U M Q	0.46	0.45	0.11
2691-41-0	HMX	0.23	U M	0.24	0.23	0.099
98-95-3	Nitrobenzene	0.23	U	0.24	0.23	0.10
55-63-0	Nitroglycerin	2.3	U	2.4	2.3	1.0
78-11-5	PETN	1.1	U	1.2	1.1	0.51
121-82-4	RDX	0.23	U	0.24	0.23	0.058
479-45-8	Tetryl	0.11	U M	0.12	0.11	0.036

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	96	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\10080057.D
Lims ID: 280-197447-A-3-A
Client ID: LL1mw-087-240901-GW
Sample Type: Client
Inject. Date: 09-Oct-2024 10:54:12 ALS Bottle#: 57 Worklist Smp#: 57
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-197447-A-3-A
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Oct-2024 14:35:47 Calib Date: 04-Oct-2024 19:55:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1609

First Level Reviewer: LV5D Date: 09-Oct-2024 11:46:56

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	4 HMX	1		6.564			ND	U
	8 RDX	1		7.497			ND	
$	10 1,2-Dinitrobenzene	1	8.360	8.364	-0.004	25002	0.1917	M
	11 1,3,5-Trinitrobenzene	1		8.464			ND	U
	12 1,3-Dinitrobenzene	1		9.024			ND	U
	13 Nitrobenzene	1		9.344			ND	
	15 Tetryl	1		9.664			ND	U
	16 Nitroglycerin	2		10.110			ND	
	17 2,4,6-Trinitrotoluene	1		10.457			ND	
	18 4-Amino-2,6-dinitrotoluene	1		10.617			ND	
	19 2-Amino-4,6-dinitrotoluene	1		10.850			ND	
	20 2,6-Dinitrotoluene	1		10.984			ND	
	21 2,4-Dinitrotoluene	1		11.130			ND	
	22 o-Nitrotoluene	1		11.824			ND	
	23 p-Nitrotoluene	1		12.197			ND	U
	24 m-Nitrotoluene	1		12.697			ND	U
	25 PETN	2		13.764			ND	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

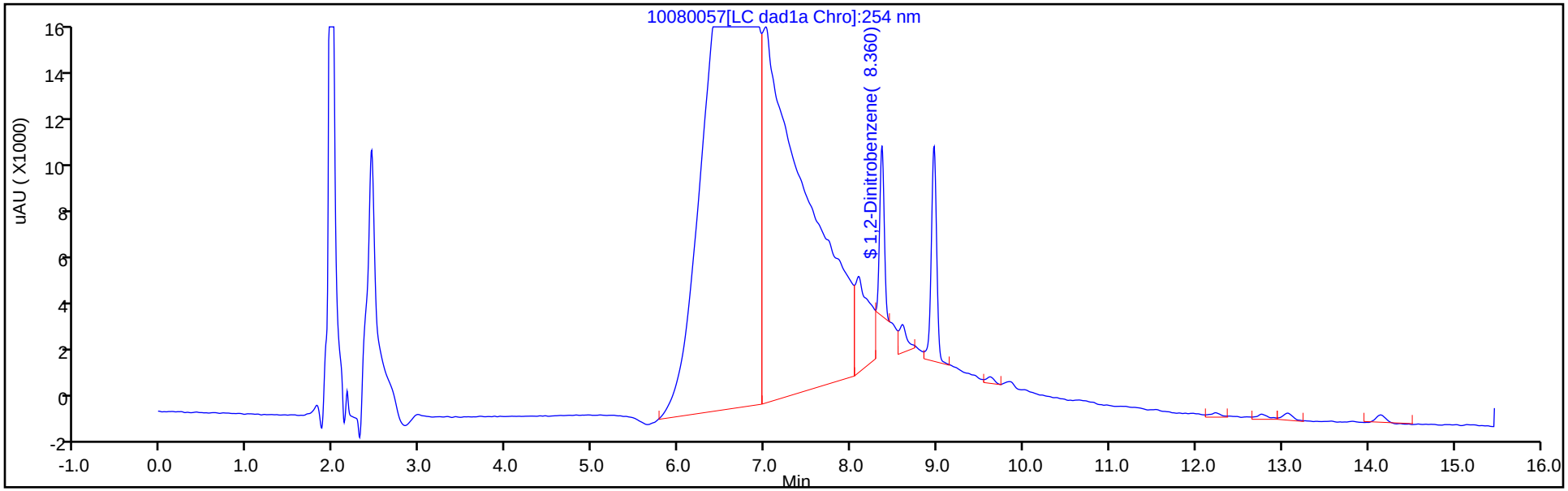
Report Date: 09-Oct-2024 14:46:01 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Denver

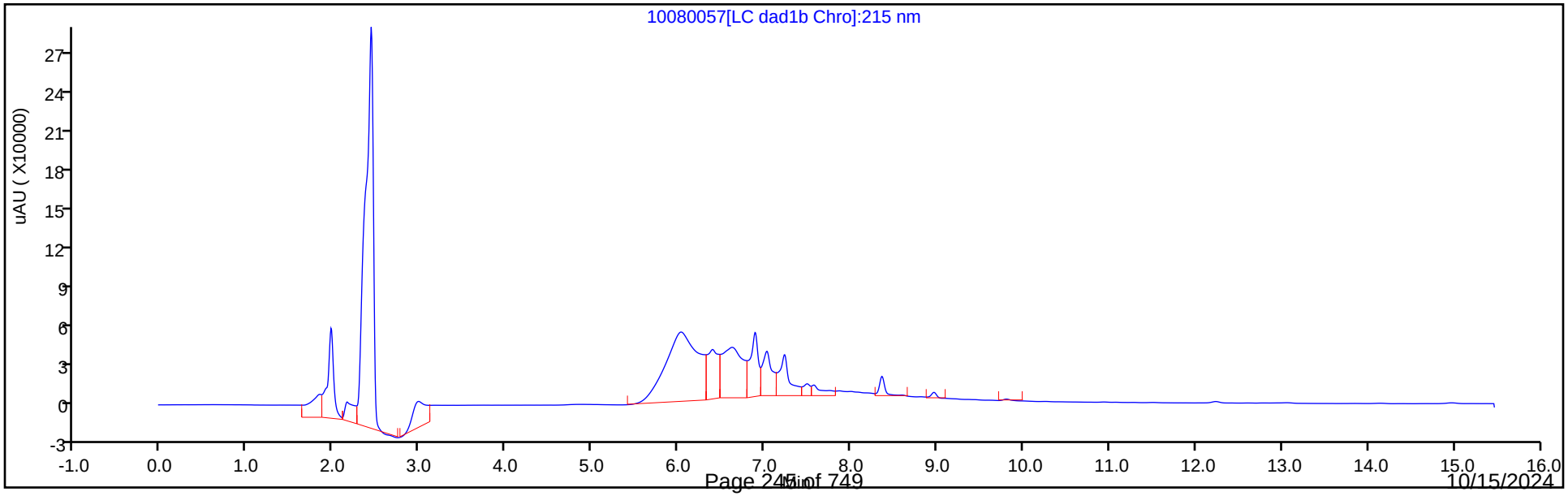
Data File: \\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080057.d

Injection Date:	09-Oct-2024 10:54:12	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-197447-A-3-A	Lab Sample ID:	280-197447-3	Worklist Smp#:	57
Client ID:	LL1mw-087-240901-GW				
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



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\10080057.D				
Lims ID:	280-197447-A-3-A				
Client ID:	LL1mw-087-240901-GW				
Sample Type:	Client				
Inject. Date:	09-Oct-2024 10:54:12	ALS Bottle#:	57	Worklist Smp#:	57
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-197447-A-3-A				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	09-Oct-2024 14:35:47	Calib Date:	04-Oct-2024 19:55:02		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1609				

First Level Reviewer: LV5D Date: 09-Oct-2024 11:46:56

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1917	95.86

Eurofins Denver

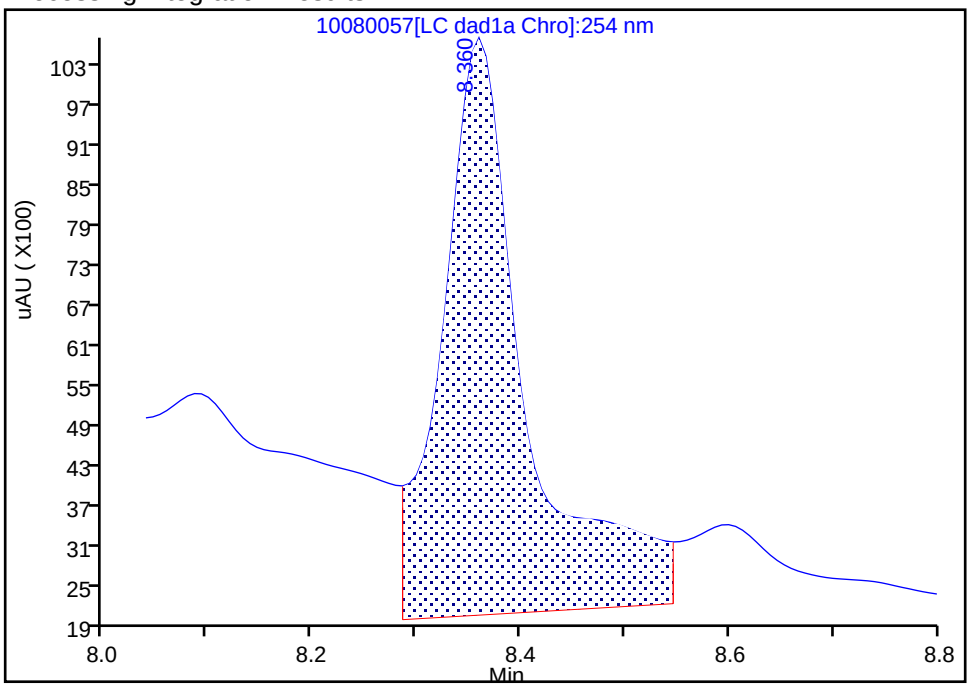
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080057.d				
Injection Date:	09-Oct-2024 10:54:12	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-A-3-A	Lab Sample ID:	280-197447-3		
Client ID:	LL1mw-087-240901-GW				
Operator ID:	JZ	ALS Bottle#:	57	Worklist Smp#:	57
Injection Vol:	100.0 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

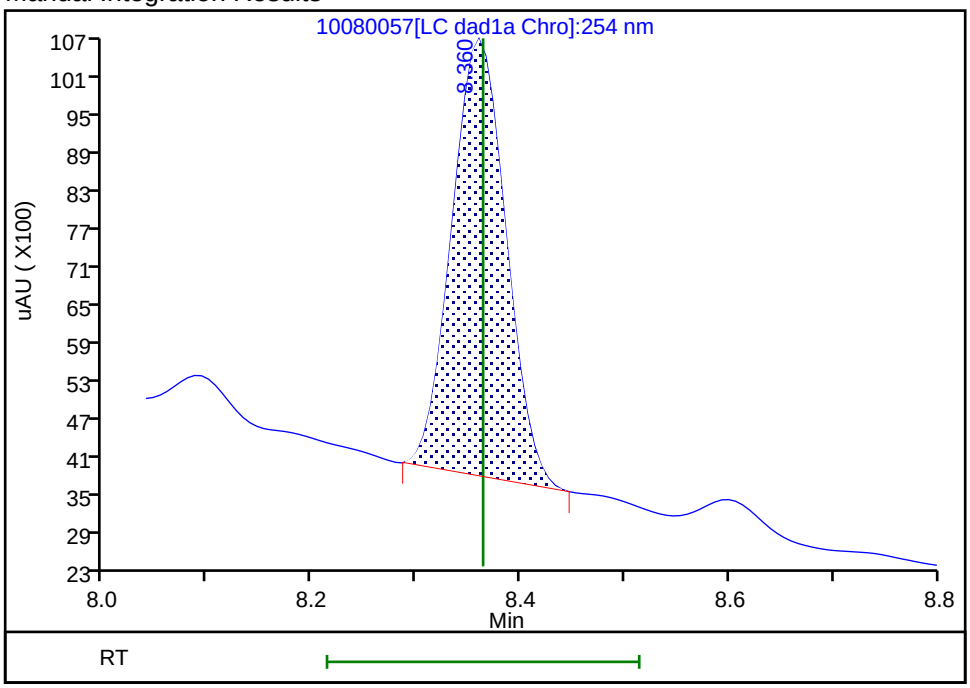
Processing Integration Results

RT: 8.36
Area: 48446
Amount: 0.371491
Amount Units: ug/mL



Manual Integration Results

RT: 8.36
Area: 25002
Amount: 0.191719
Amount Units: ug/mL



Reviewer: LV5D, 09-Oct-2024 11:35:46 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

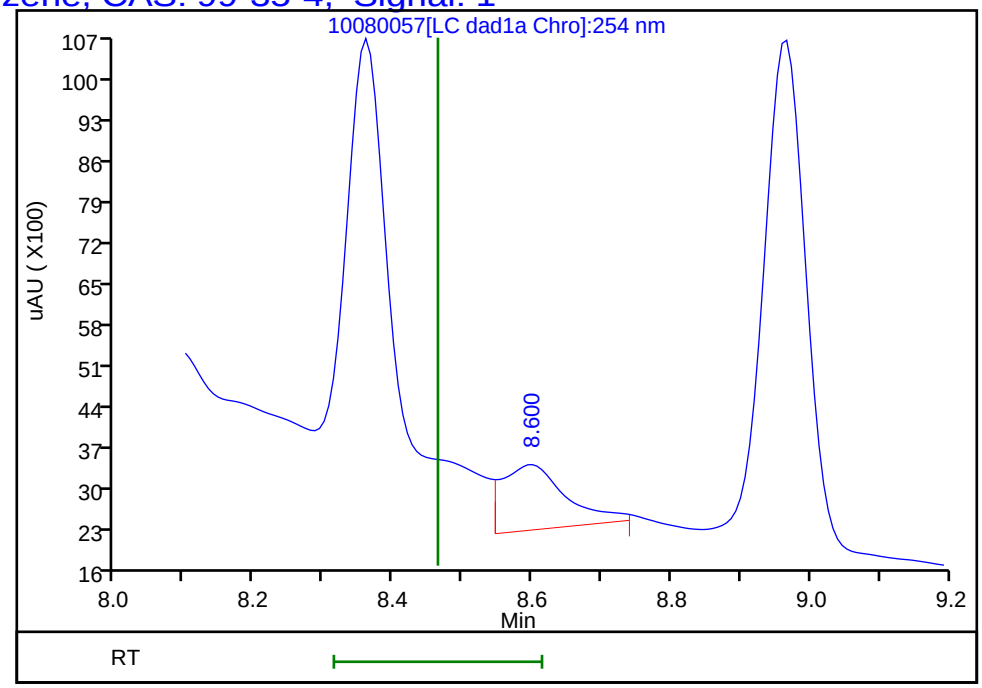
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080057.d
Injection Date: 09-Oct-2024 10:54:12 Instrument ID: CHHPLC_X3
Lims ID: 280-197447-A-3-A Lab Sample ID: 280-197447-3
Client ID: LL1mw-087-240901-GW
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: 8.60
Response: 7002
Amount: 0.032215



Reviewer: LV5D, 09-Oct-2024 11:46:56
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

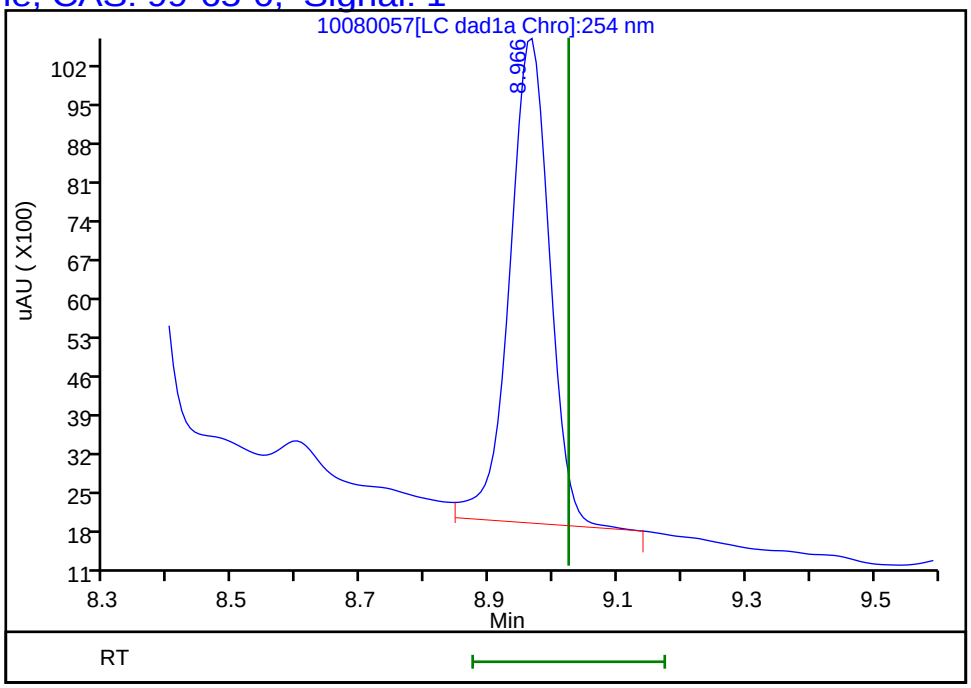
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080057.d
Injection Date: 09-Oct-2024 10:54:12 Instrument ID: CHHPLC_X3
Lims ID: 280-197447-A-3-A Lab Sample ID: 280-197447-3
Client ID: LL1mw-087-240901-GW
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: 8.97
Response: 37872
Amount: 0.126988



Reviewer: LV5D, 09-Oct-2024 11:46:56
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

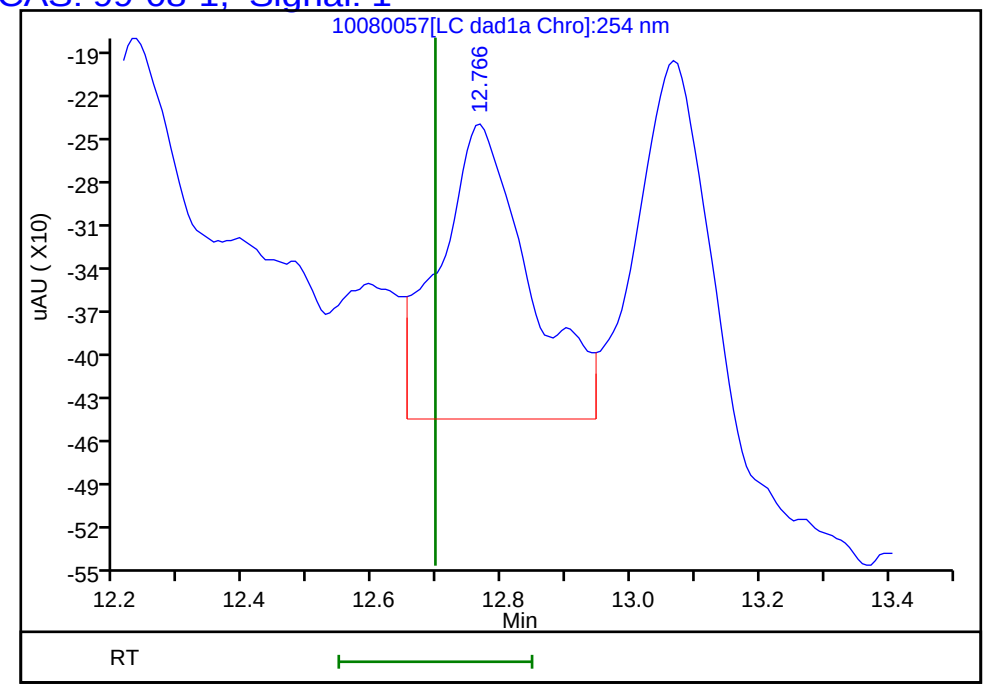
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080057.d				
Injection Date:	09-Oct-2024 10:54:12	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-A-3-A	Lab Sample ID:	280-197447-3		
Client ID:	LL1mw-087-240901-GW				
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		

24 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 12.77
Response: 1916
Amount: 0.012331



Reviewer: LV5D, 09-Oct-2024 11:46:56
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

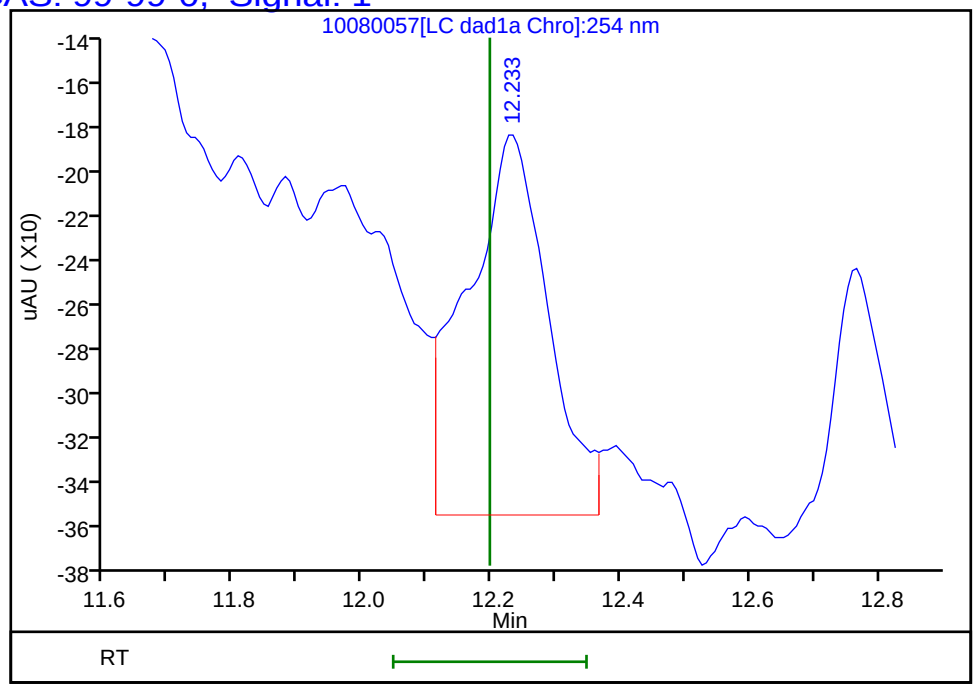
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080057.d
Injection Date: 09-Oct-2024 10:54:12 Instrument ID: CHHPLC_X3
Lims ID: 280-197447-A-3-A Lab Sample ID: 280-197447-3
Client ID: LL1mw-087-240901-GW
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: 12.23
Response: 1438
Amount: 0.011868



Reviewer: LV5D, 09-Oct-2024 11:46:56
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

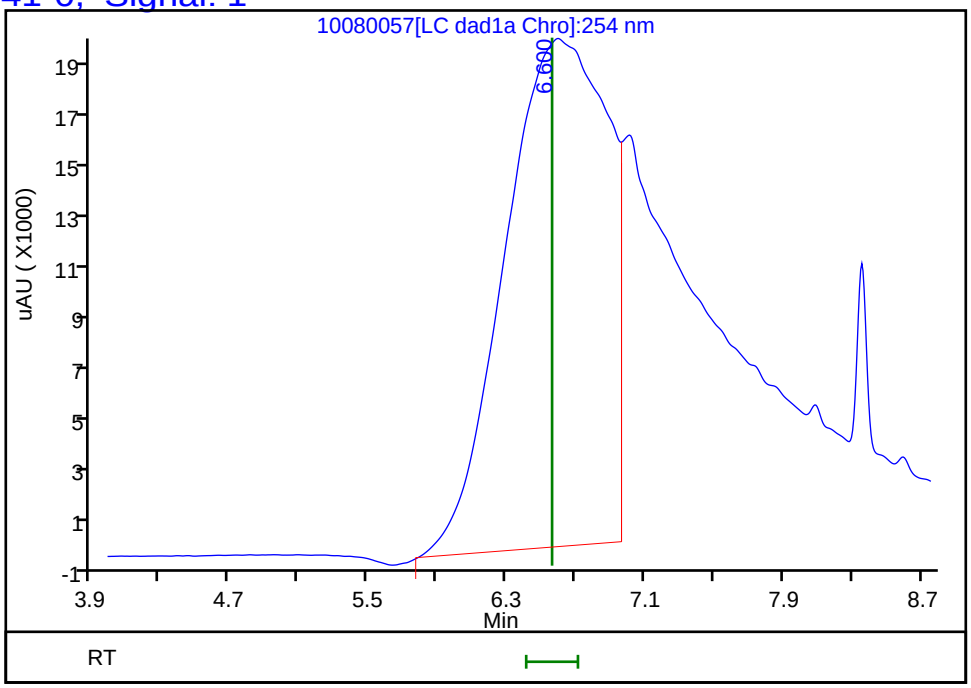
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080057.d
Injection Date: 09-Oct-2024 10:54:12 Instrument ID: CHHPLC_X3
Lims ID: 280-197447-A-3-A Lab Sample ID: 280-197447-3
Client ID: LL1mw-087-240901-GW
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

4 HMX, CAS: 2691-41-0, Signal: 1

RT: 6.60
Response: 795269
Amount: 8.228089



Reviewer: LV5D, 09-Oct-2024 11:46:56
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

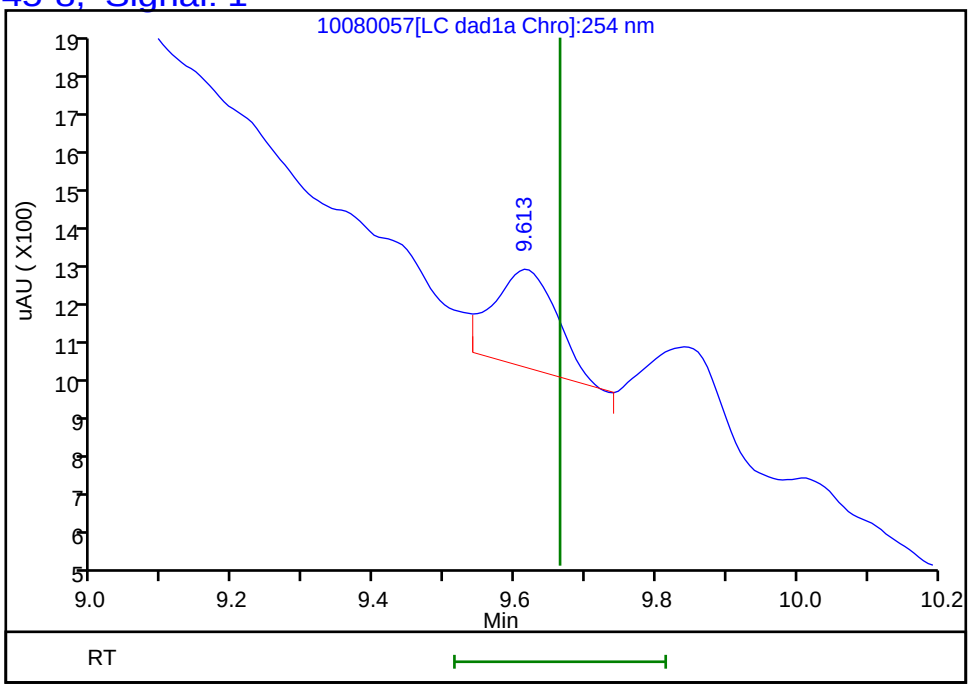
User Disabled Compound Report

Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080057.d
Injection Date: 09-Oct-2024 10:54:12 Instrument ID: CHHPLC_X3
Lims ID: 280-197447-A-3-A Lab Sample ID: 280-197447-3
Client ID: LL1mw-087-240901-GW
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: 9.61
Response: 1567
Amount: 0.009833



Reviewer: LV5D, 09-Oct-2024 11:46:56
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-197447-1

SDG No.:

Client Sample ID: LL1mw-087-240901-GW RE | Lab Sample ID: 280-197447-3 RE

Matrix: Water | Lab File ID: 10110028.D

Analysis Method: 8330B | Date Collected: 10/01/2024 08:53

Extraction Method: 3535 | Date Extracted: 10/11/2024 12:06

Sample wt/vol: 465.1(mL) | Date Analyzed: 10/11/2024 23:47

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 670729 | Units: ug/L

Preparation Batch No.: 670642 | Instrument ID: CHHPLC_X3

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
88-72-2	*2-Nitrotoluene*	*0.22*	*U H*	*0.23*	0.22	*0.092*
99-08-1	*3-Nitrotoluene*	*0.38*	*U H*	*0.43*	0.38	*0.21*
99-99-0	*4-Nitrotoluene*	*0.43*	*U H*	*0.44*	0.43	*0.11*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	91	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20241011-138518.b\10110028.D
Lims ID: 280-197447-B-3-A RE
Client ID: LL1mw-087-240901-GW
Sample Type: Client
Inject. Date: 11-Oct-2024 23:47:43 ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-197447-B-3-A
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20241011-138518.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 12-Oct-2024 10:13:32 Calib Date: 04-Oct-2024 19:55:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1603

First Level Reviewer: LV5D Date: 12-Oct-2024 10:12:01

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	4 HMX	1		6.572			ND	U
	8 RDX	1		7.498			ND	
$	10 1,2-Dinitrobenzene	1	8.364	8.365	-0.001	23666	0.1815	M
	11 1,3,5-Trinitrobenzene	1		8.465			ND	U
	12 1,3-Dinitrobenzene	1		9.032			ND	U
	13 Nitrobenzene	1		9.345			ND	
	15 Tetryl	1	9.658	9.672	-0.014	1087	0.007031	M
	16 Nitroglycerin	2		10.118			ND	
	17 2,4,6-Trinitrotoluene	1		10.472			ND	
	18 4-Amino-2,6-dinitrotoluene	1		10.632			ND	
	19 2-Amino-4,6-dinitrotoluene	1		10.858			ND	7
	20 2,6-Dinitrotoluene	1		10.992			ND	
	21 2,4-Dinitrotoluene	1		11.145			ND	
	22 o-Nitrotoluene	1		11.832			ND	
	23 p-Nitrotoluene	1		12.198			ND	
	24 m-Nitrotoluene	1		12.705			ND	
	25 PETN	2		13.772			ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

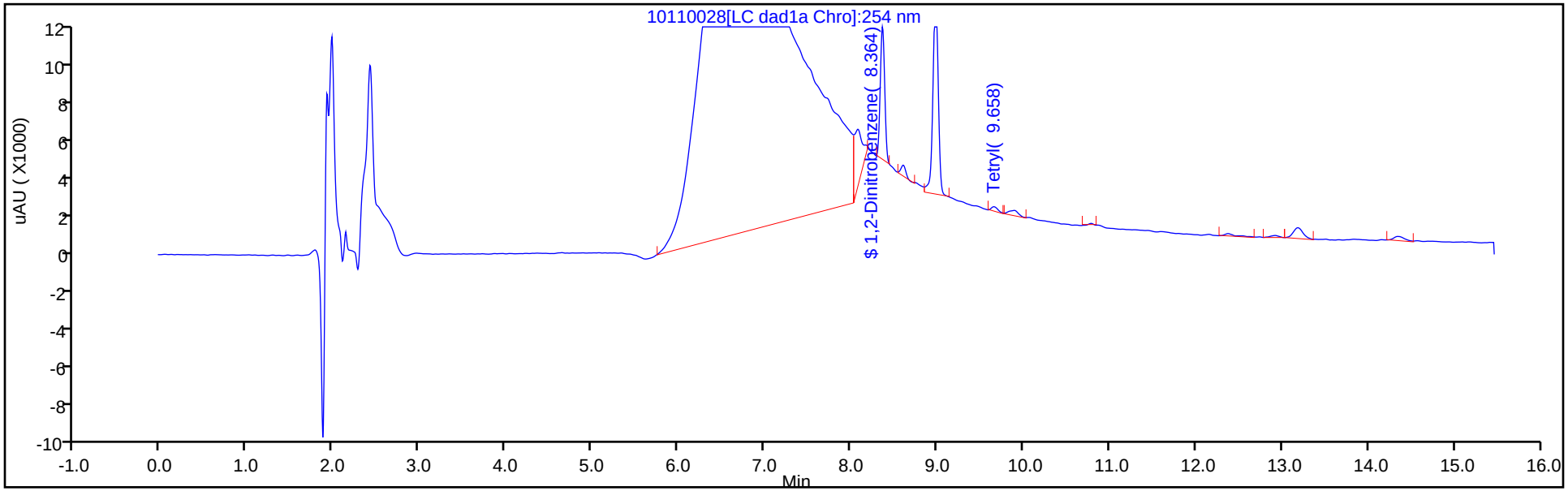
Report Date: 12-Oct-2024 10:13:37 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Denver

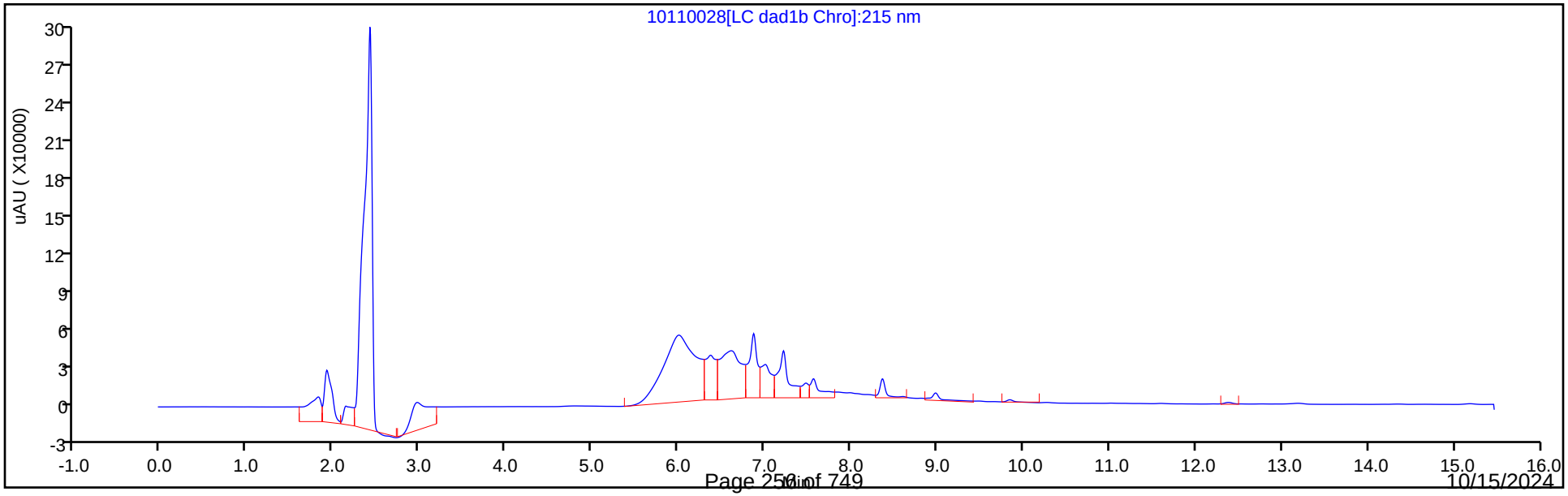
Data File: \\chromfs\denver\chromdata\chhplc_x\20241011-138518.b\10110028.d

Injection Date:	11-Oct-2024 23:47:43	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-197447-B-3-A RE	Lab Sample ID:	280-197447-3	Worklist Smp#:	28
Client ID:	LL1mw-087-240901-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



10/15/2024
4:48:23 PM

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20241011-138518.b\10110028.D				
Lims ID:	280-197447-B-3-A RE				
Client ID:	LL1mw-087-240901-GW				
Sample Type:	Client				
Inject. Date:	11-Oct-2024 23:47:43	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-197447-B-3-A				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20241011-138518.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	12-Oct-2024 10:13:32	Calib Date:	04-Oct-2024 19:55:02		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1603				

First Level Reviewer: LV5D Date: 12-Oct-2024 10:12:01

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1815	90.74

Manual Integration/User Assign Peak Report

Eurofins Denver

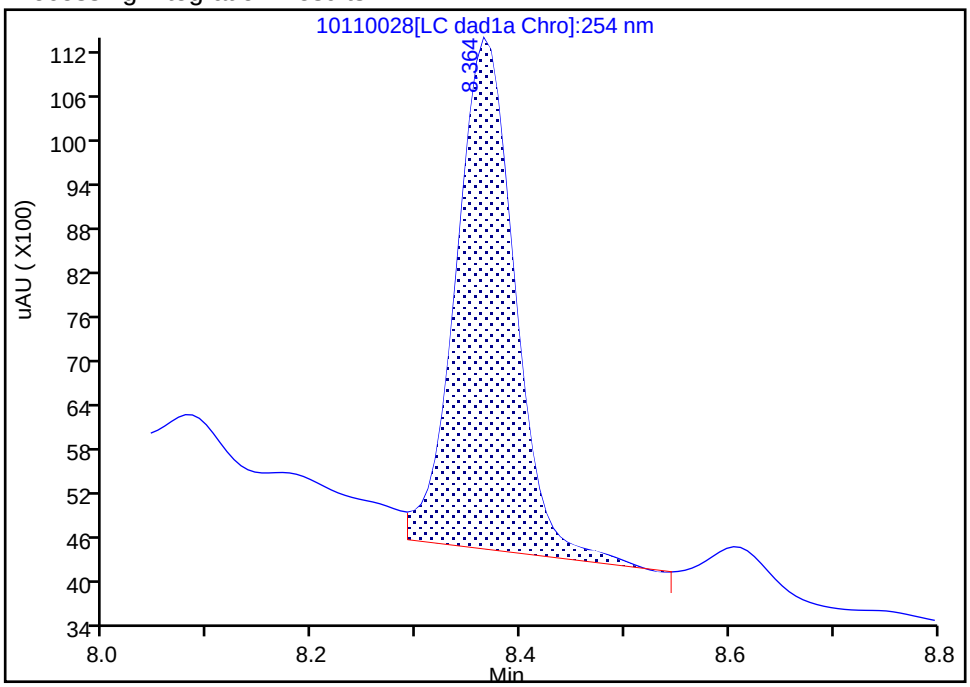
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241011-138518.b\10110028.d				
Injection Date:	11-Oct-2024 23:47:43	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-B-3-A RE	Lab Sample ID:	280-197447-3		
Client ID:	LL1mw-087-240901-GW				
Operator ID:	JZ	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

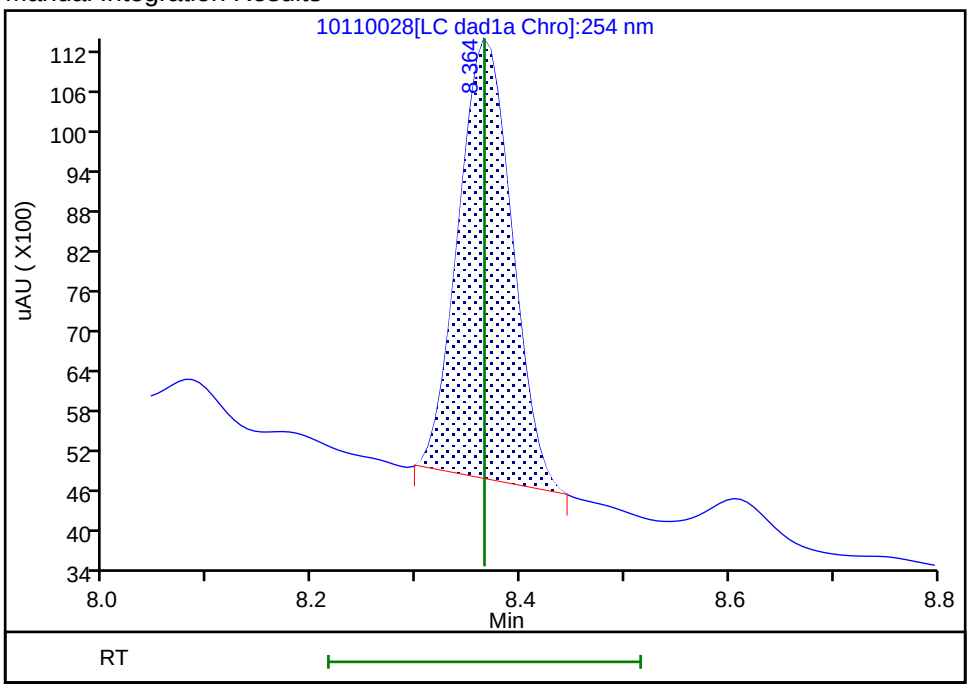
Processing Integration Results

RT: 8.36
Area: 27360
Amount: 0.209800
Amount Units: ug/mL



Manual Integration Results

RT: 8.36
Area: 23666
Amount: 0.181474
Amount Units: ug/mL



Reviewer: LV5D, 12-Oct-2024 10:11:46 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

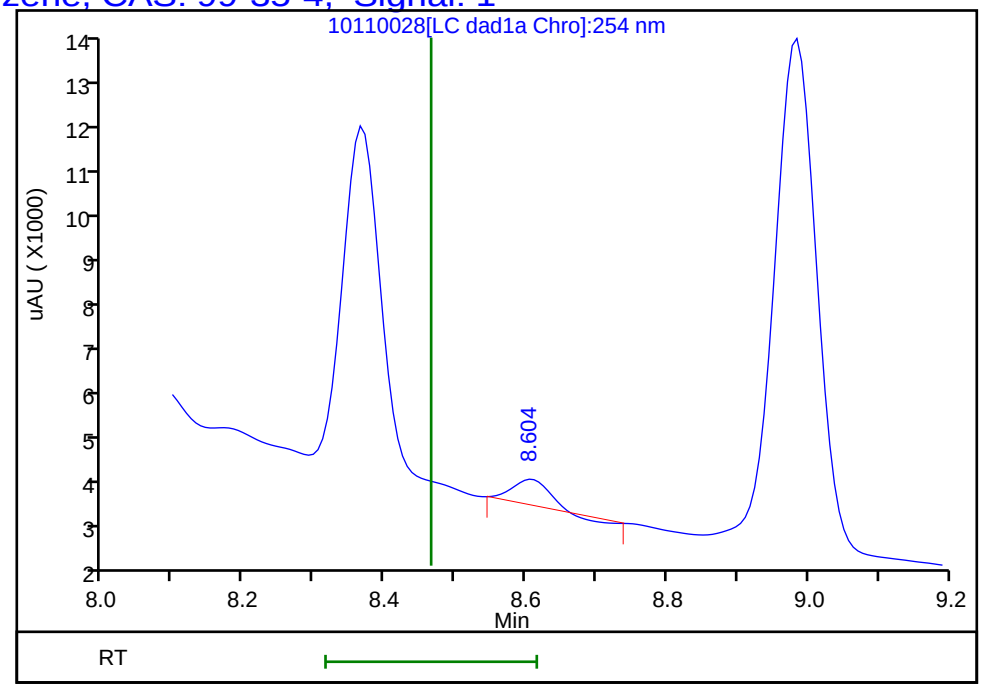
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20241011-138518.b\10110028.d
Injection Date: 11-Oct-2024 23:47:43 Instrument ID: CHHPLC_X3
Lims ID: 280-197447-B-3-A RE Lab Sample ID: 280-197447-3
Client ID: LL1mw-087-240901-GW
Operator ID: JZ ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

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

RT: 8.60
Response: 2149
Amount: 0.009887



Reviewer: LV5D, 12-Oct-2024 10:12:01
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

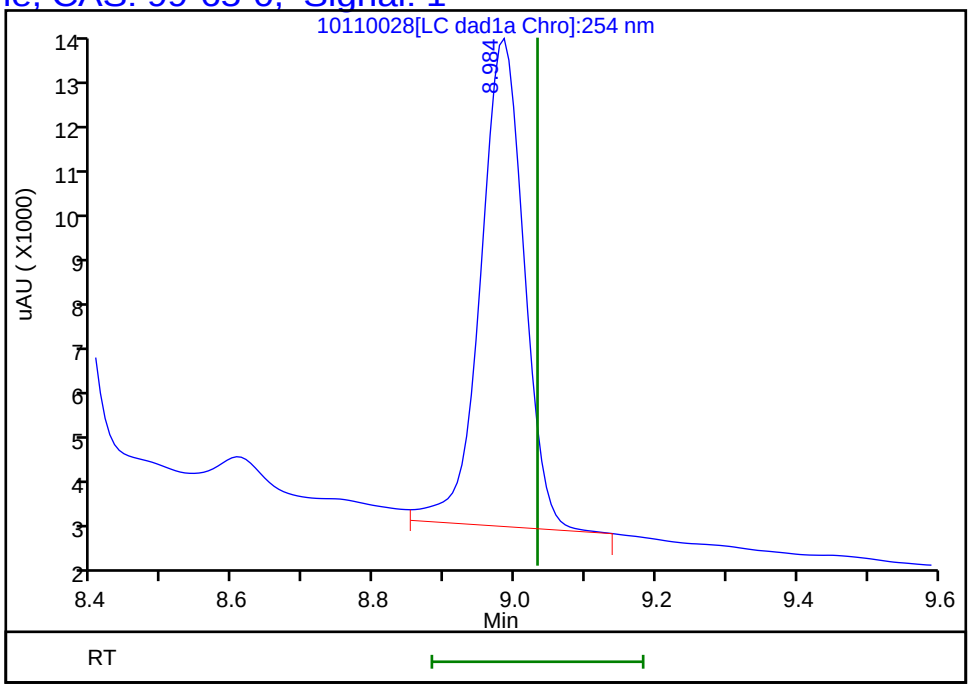
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20241011-138518.b\10110028.d
Injection Date: 11-Oct-2024 23:47:43 Instrument ID: CHHPLC_X3
Lims ID: 280-197447-B-3-A RE Lab Sample ID: 280-197447-3
Client ID: LL1mw-087-240901-GW
Operator ID: JZ ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

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

RT: 8.98
Response: 43335
Amount: 0.145306



Reviewer: LV5D, 12-Oct-2024 10:12:01
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

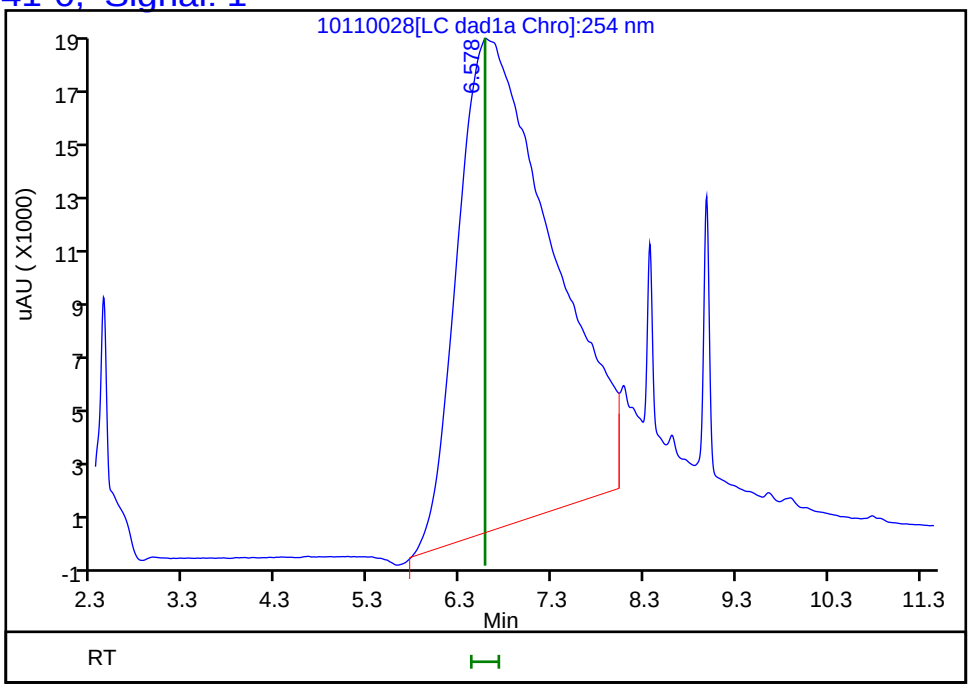
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20241011-138518.b\10110028.d				
Injection Date:	11-Oct-2024 23:47:43	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-B-3-A RE	Lab Sample ID:	280-197447-3		
Client ID:	LL1mw-087-240901-GW				
Operator ID:	JZ	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0, Signal: 1

RT: 6.58
Response: 1269670
Amount: 13.136383



Reviewer: LV5D, 12-Oct-2024 10:12:01
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

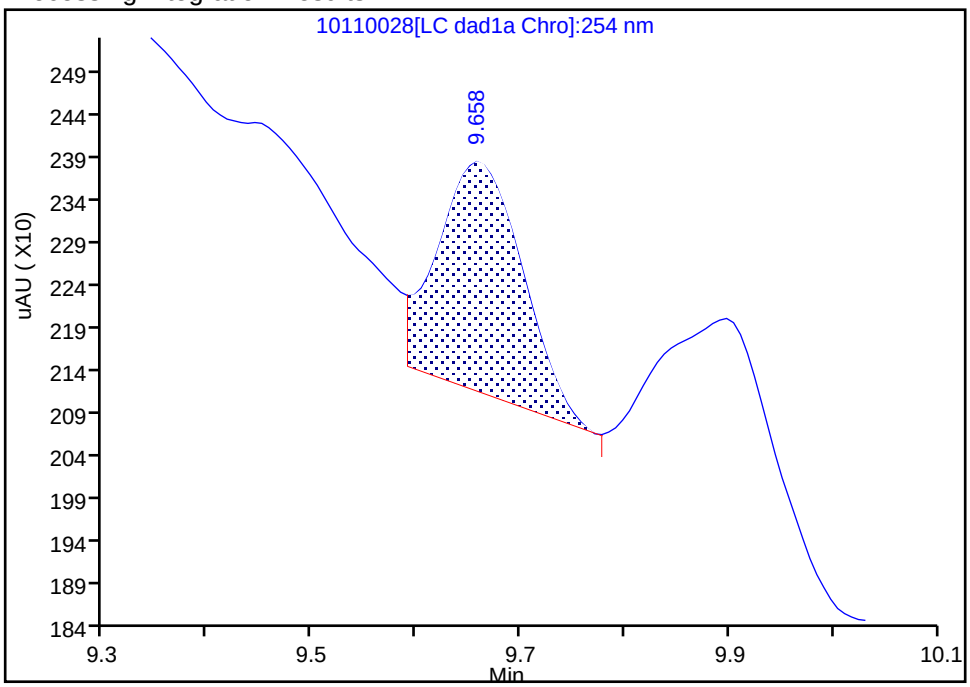
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241011-138518.b\10110028.d				
Injection Date:	11-Oct-2024 23:47:43	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-B-3-A RE	Lab Sample ID:	280-197447-3		
Client ID:	LL1mw-087-240901-GW				
Operator ID:	JZ	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

15 Tetryl, CAS: 479-45-8

Signal: 1

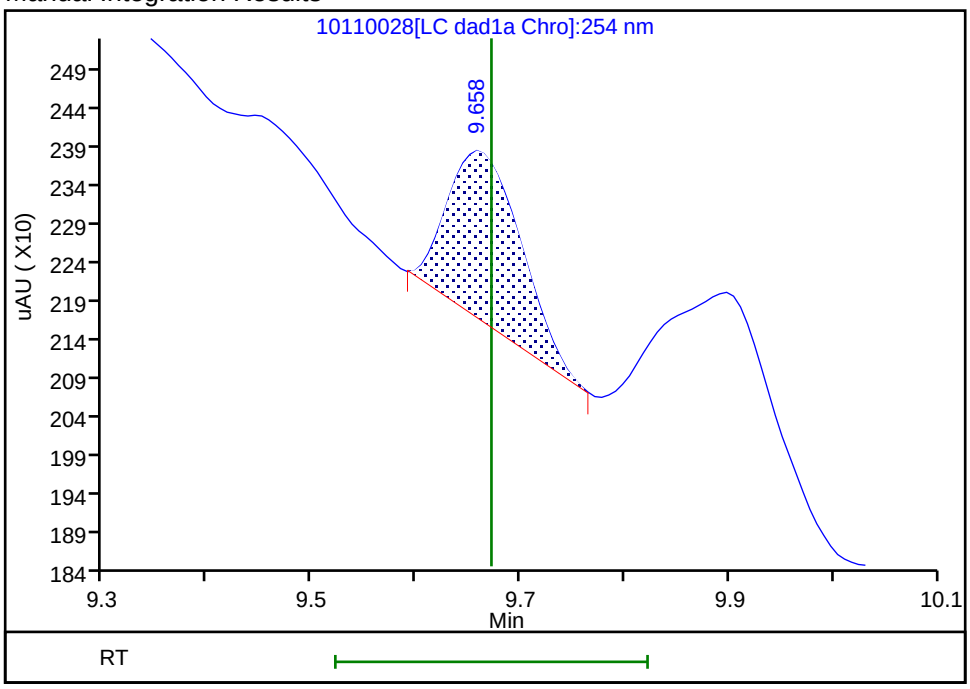
Processing Integration Results

RT: 9.66
Area: 1535
Amount: 0.009647
Amount Units: ug/mL



Manual Integration Results

RT: 9.66
Area: 1087
Amount: 0.007031
Amount Units: ug/mL



Reviewer: LV5D, 12-Oct-2024 10:12:00 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-197447-1

SDG No.:

Client Sample ID: LL1mw-086-240901-GW | Lab Sample ID: 280-197447-4

Matrix: Water | Lab File ID: 10080058.D

Analysis Method: 8330B | Date Collected: 10/01/2024 11:56

Extraction Method: 3535 | Date Extracted: 10/04/2024 12:25

Sample wt/vol: 436.9(mL) | Date Analyzed: 10/09/2024 11:16

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 670184 | Units: ug/L

Preparation Batch No.: 669777 | Instrument ID: CHHPLC_X3

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.23	U M	0.24	0.23	0.096
99-65-0	1,3-Dinitrobenzene	0.11	U M	0.13	0.11	0.042
118-96-7	2,4,6-Trinitrotoluene	0.11	U	0.13	0.11	0.051
121-14-2	2,4-Dinitrotoluene	0.092	U	0.11	0.092	0.031
606-20-2	2,6-Dinitrotoluene	0.092	U	0.11	0.092	0.046
35572-78-2	2-Amino-4,6-dinitrotoluene	0.11	U	0.13	0.11	0.058
88-72-2	2-Nitrotoluene	0.23	U Q	0.24	0.23	0.098
99-08-1	3-Nitrotoluene	0.40	U M Q	0.46	0.40	0.22
19406-51-0	4-Amino-2,6-dinitrotoluene	0.14	U	0.17	0.14	0.066
99-99-0	4-Nitrotoluene	0.46	U Q	0.47	0.46	0.11
2691-41-0	HMX	0.23	U M	0.24	0.23	0.10
98-95-3	Nitrobenzene	0.23	U	0.24	0.23	0.10
55-63-0	Nitroglycerin	2.3	U	2.4	2.3	1.1
78-11-5	PETN	1.1	U	1.3	1.1	0.51
121-82-4	RDX	0.23	U	0.24	0.23	0.059
479-45-8	Tetryl	0.11	U M	0.13	0.11	0.036

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

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\10080058.D
Lims ID: 280-197447-A-4-A
Client ID: LL1mw-086-240901-GW
Sample Type: Client
Inject. Date: 09-Oct-2024 11:16:10 ALS Bottle#: 58 Worklist Smp#: 58
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-197447-A-4-A
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Oct-2024 14:35:47 Calib Date: 04-Oct-2024 19:55:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1609

First Level Reviewer: LV5D Date: 09-Oct-2024 11:47:13

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	4 HMX	1		6.564			ND	U
	8 RDX	1		7.497			ND	
$	10 1,2-Dinitrobenzene	1	8.359	8.364	-0.005	24370	0.1869	M
	11 1,3,5-Trinitrobenzene	1		8.464			ND	U
	12 1,3-Dinitrobenzene	1		9.024			ND	U
	13 Nitrobenzene	1		9.344			ND	
	15 Tetryl	1		9.664			ND	U
	16 Nitroglycerin	2		10.110			ND	
	17 2,4,6-Trinitrotoluene	1		10.457			ND	
	18 4-Amino-2,6-dinitrotoluene	1		10.617			ND	
	19 2-Amino-4,6-dinitrotoluene	1		10.850			ND	
	20 2,6-Dinitrotoluene	1		10.984			ND	
	21 2,4-Dinitrotoluene	1		11.130			ND	
	22 o-Nitrotoluene	1		11.824			ND	
	23 p-Nitrotoluene	1		12.197			ND	
	24 m-Nitrotoluene	1		12.697			ND	U
	25 PETN	2		13.764			ND	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

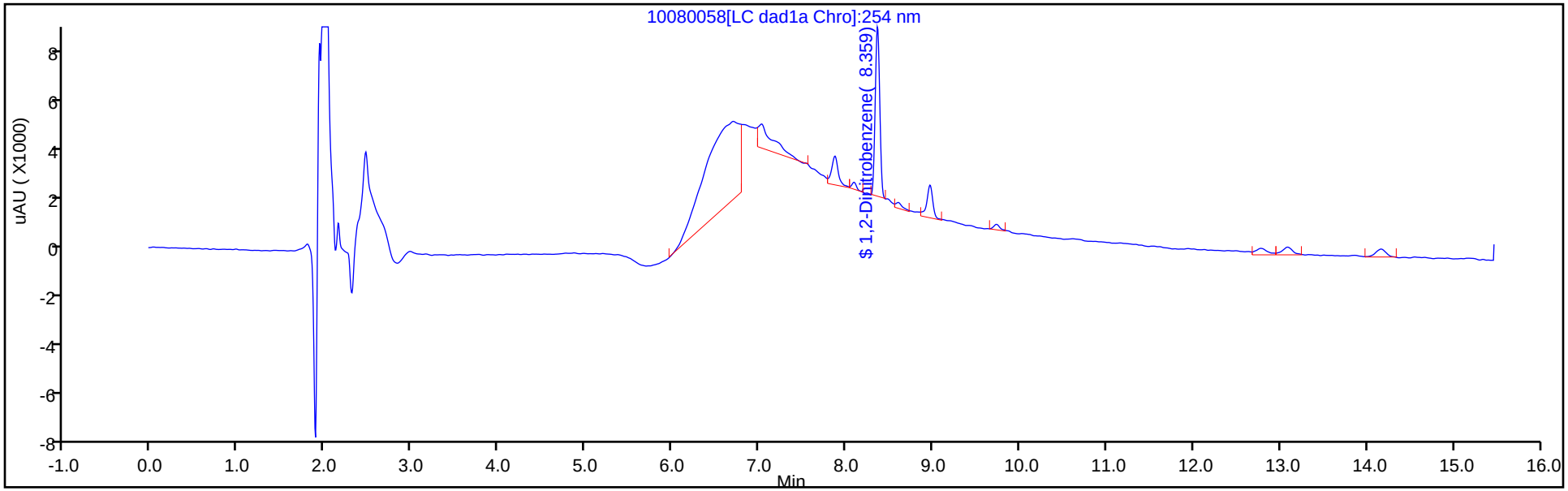
Report Date: 09-Oct-2024 14:46:03 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Denver

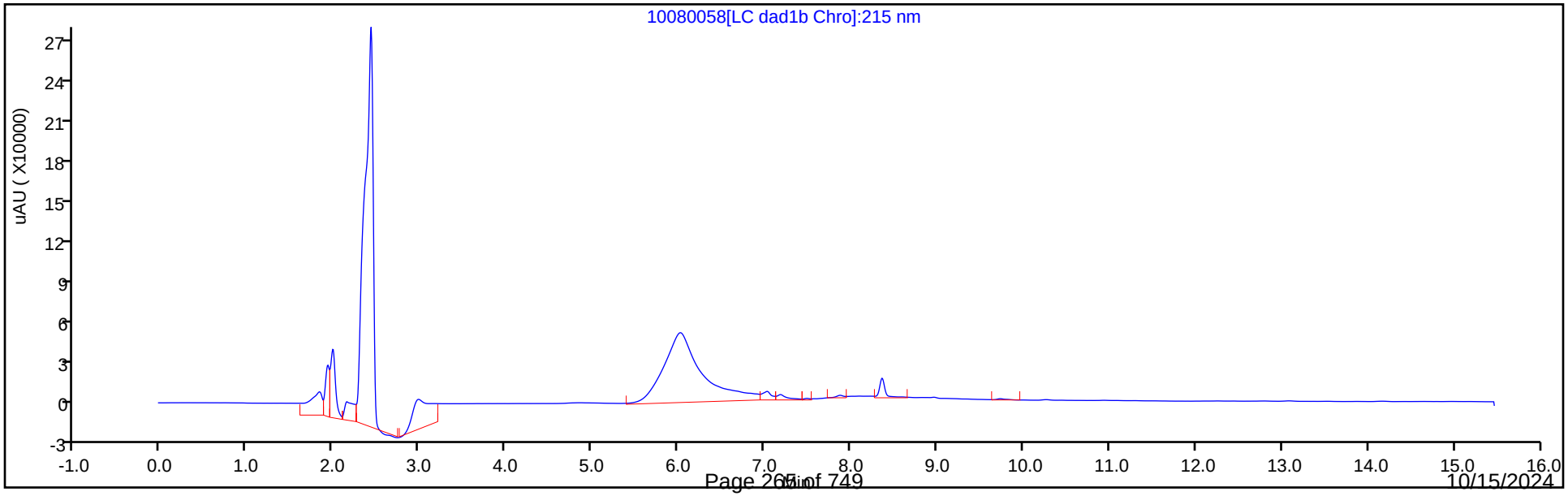
Data File: \\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080058.d

Injection Date:	09-Oct-2024 11:16:10	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-197447-A-4-A	Lab Sample ID:	280-197447-4	Worklist Smp#:	58
Client ID:	LL1mw-086-240901-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	58
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\10080058.D				
Lims ID:	280-197447-A-4-A				
Client ID:	LL1mw-086-240901-GW				
Sample Type:	Client				
Inject. Date:	09-Oct-2024 11:16:10	ALS Bottle#:	58	Worklist Smp#:	58
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-197447-A-4-A				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	09-Oct-2024 14:35:47	Calib Date:	04-Oct-2024 19:55:02		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1609				

First Level Reviewer: LV5D Date: 09-Oct-2024 11:47:13

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1869	93.44

Eurofins Denver

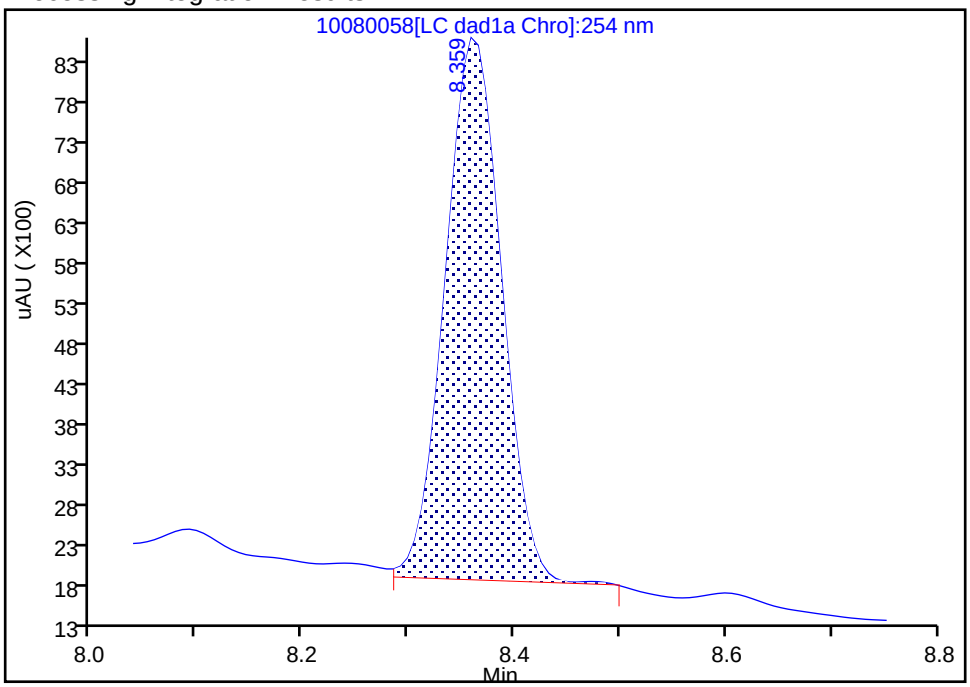
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080058.d				
Injection Date:	09-Oct-2024 11:16:10	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-A-4-A	Lab Sample ID:	280-197447-4		
Client ID:	LL1mw-086-240901-GW				
Operator ID:	JZ	ALS Bottle#:	58	Worklist Smp#:	58
Injection Vol:	100.0 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

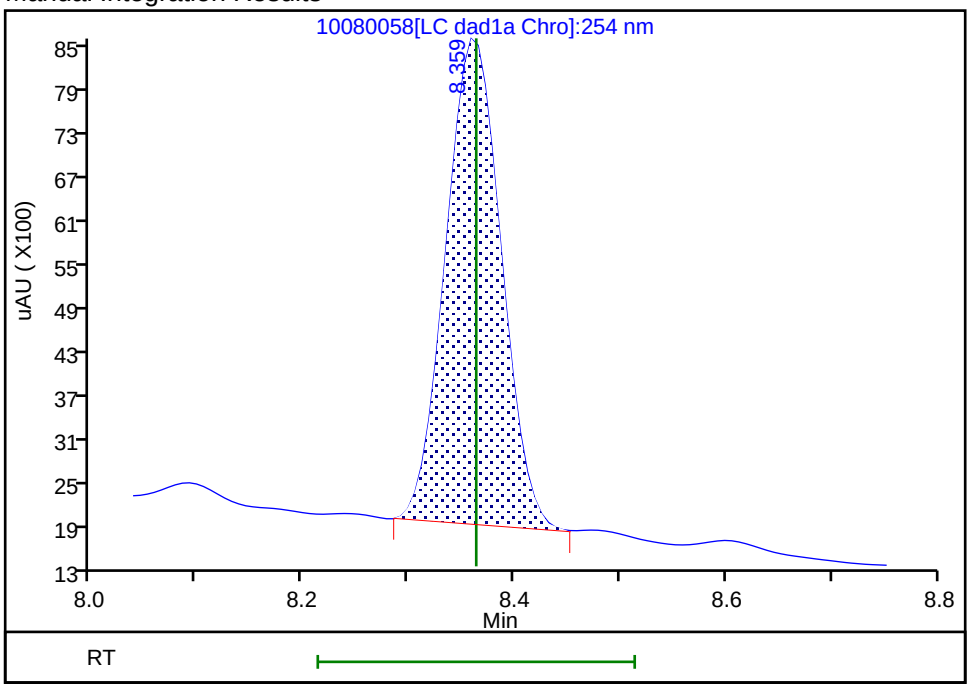
Processing Integration Results

RT: 8.36
Area: 25069
Amount: 0.192233
Amount Units: ug/mL



Manual Integration Results

RT: 8.36
Area: 24370
Amount: 0.186872
Amount Units: ug/mL



Reviewer: LV5D, 09-Oct-2024 11:47:11 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

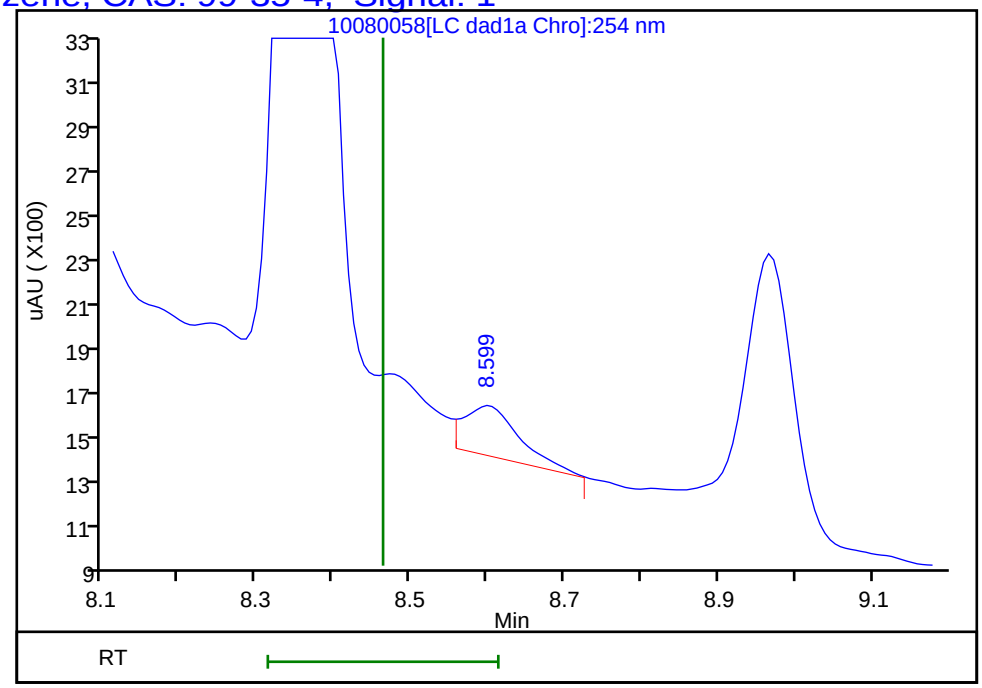
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080058.d				
Injection Date:	09-Oct-2024 11:16:10	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-A-4-A	Lab Sample ID:	280-197447-4		
Client ID:	LL1mw-086-240901-GW				
Operator ID:	JZ	ALS Bottle#:	58	Worklist Smp#:	58
Injection Vol:	100.0 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: 8.60
Response: 1080
Amount: 0.004969



Reviewer: LV5D, 09-Oct-2024 11:47:13
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

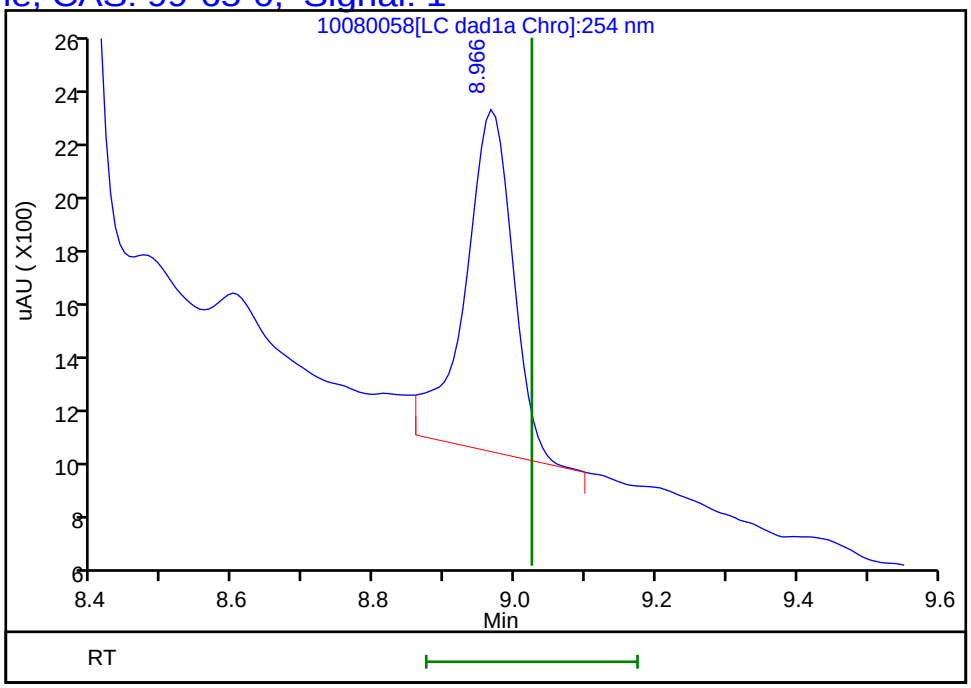
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080058.d
Injection Date: 09-Oct-2024 11:16:10 Instrument ID: CHHPLC_X3
Lims ID: 280-197447-A-4-A Lab Sample ID: 280-197447-4
Client ID: LL1mw-086-240901-GW
Operator ID: JZ ALS Bottle#: 58 Worklist Smp#: 58
Injection Vol: 100.0 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: 8.97
Response: 5975
Amount: 0.020035



Reviewer: LV5D, 09-Oct-2024 11:47:13
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

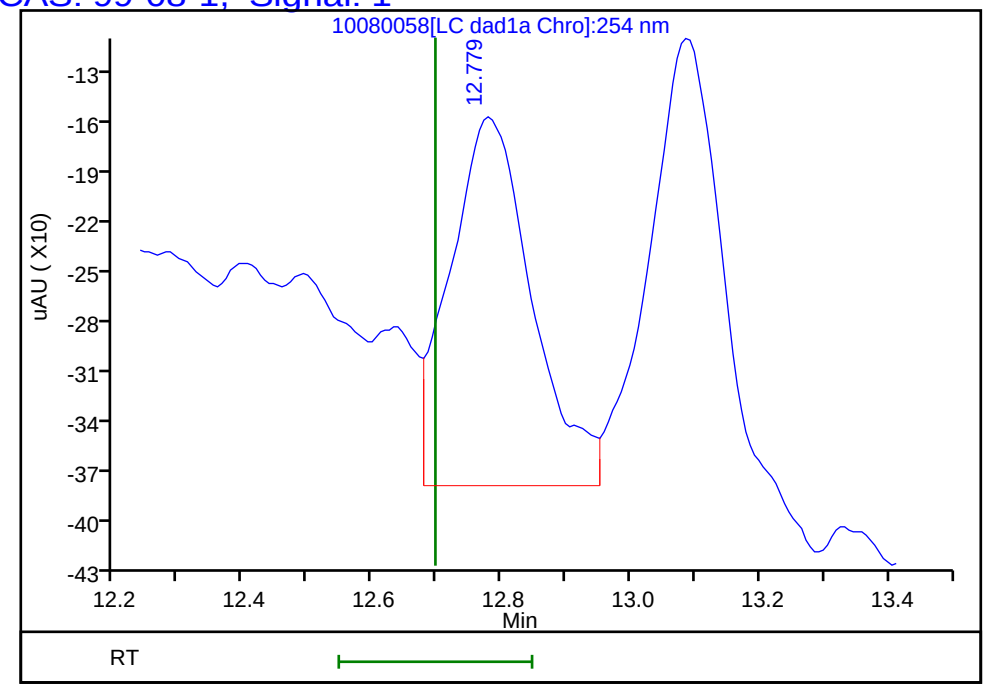
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080058.d				
Injection Date:	09-Oct-2024 11:16:10	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-A-4-A	Lab Sample ID:	280-197447-4		
Client ID:	LL1mw-086-240901-GW				
Operator ID:	JZ	ALS Bottle#:	58	Worklist Smp#:	58
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

24 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 12.78
Response: 1959
Amount: 0.012649



Reviewer: LV5D, 09-Oct-2024 11:47:13
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

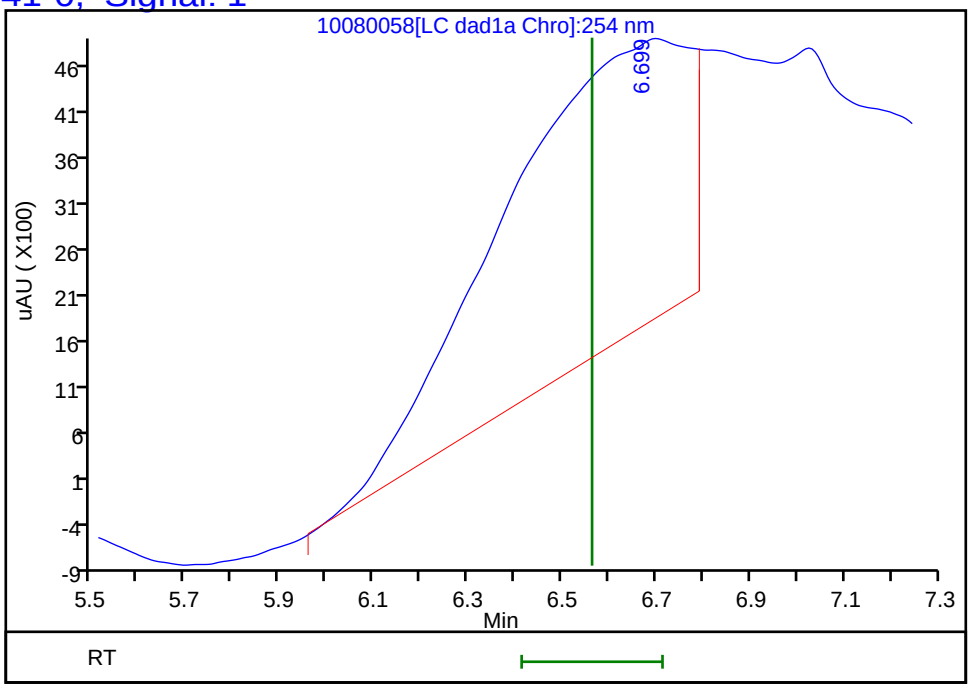
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080058.d
Injection Date: 09-Oct-2024 11:16:10 Instrument ID: CHHPLC_X3
Lims ID: 280-197447-A-4-A Lab Sample ID: 280-197447-4
Client ID: LL1mw-086-240901-GW
Operator ID: JZ ALS Bottle#: 58 Worklist Smp#: 58
Injection Vol: 100.0 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: 6.70
Response: 90223
Amount: 0.933474



Reviewer: LV5D, 09-Oct-2024 11:47:13
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

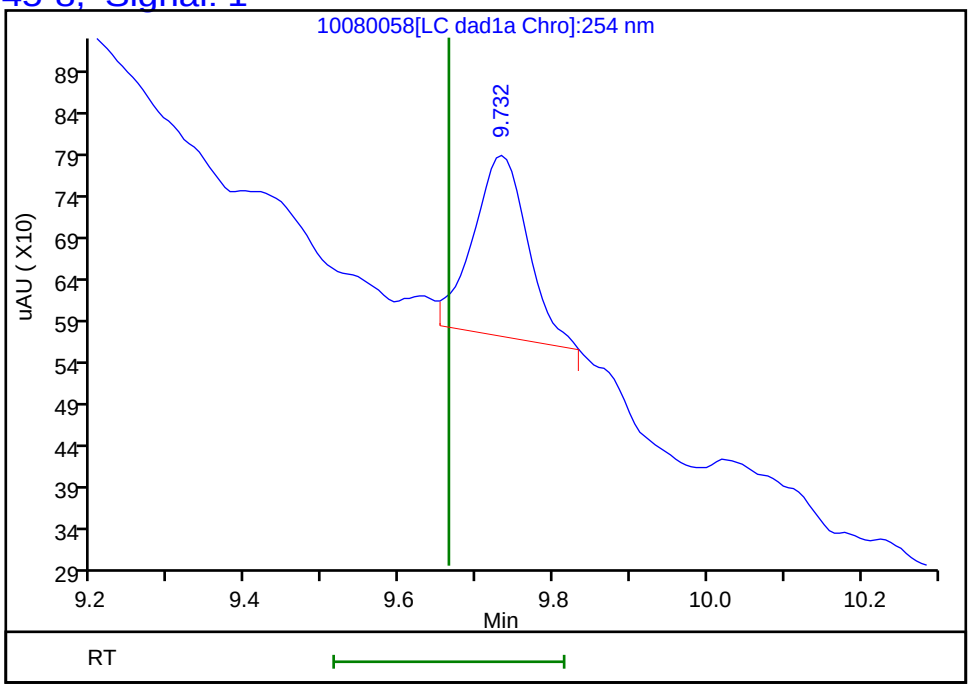
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080058.d				
Injection Date:	09-Oct-2024 11:16:10	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-A-4-A	Lab Sample ID:	280-197447-4		
Client ID:	LL1mw-086-240901-GW				
Operator ID:	JZ	ALS Bottle#:	58	Worklist Smp#:	58
Injection Vol:	100.0 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: 9.73
Response: 1055
Amount: 0.006844



Reviewer: LV5D, 09-Oct-2024 11:47:13
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-197447-1

SDG No.:

Client Sample ID: LL1mw-086-240901-GW RE | Lab Sample ID: 280-197447-4 RE

Matrix: Water | Lab File ID: 10110029.D

Analysis Method: 8330B | Date Collected: 10/01/2024 11:56

Extraction Method: 3535 | Date Extracted: 10/11/2024 12:06

Sample wt/vol: 462.3(mL) | Date Analyzed: 10/12/2024 00:09

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 670729 | Units: ug/L

Preparation Batch No.: 670642 | Instrument ID: CHHPLC_X3

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
88-72-2	*2-Nitrotoluene*	*0.22*	*U H*	*0.23*	0.22	*0.092*
99-08-1	*3-Nitrotoluene*	*0.38*	*U H*	*0.43*	0.38	*0.21*
99-99-0	*4-Nitrotoluene*	*0.43*	*U H*	*0.44*	0.43	*0.11*

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

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20241011-138518.b\10110029.D
Lims ID: 280-197447-B-4-A RE
Client ID: LL1mw-086-240901-GW
Sample Type: Client
Inject. Date: 12-Oct-2024 00:09:36 ALS Bottle#: 29 Worklist Smp#: 29
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-197447-B-4-A
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20241011-138518.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 12-Oct-2024 10:13:32 Calib Date: 04-Oct-2024 19:55:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1603

First Level Reviewer: LV5D Date: 12-Oct-2024 10:12:12

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	4 HMX	1		6.572			ND	U
	8 RDX	1		7.498			ND	
$	10 1,2-Dinitrobenzene	1	8.361	8.365	-0.004	24619	0.1888	M
	11 1,3,5-Trinitrobenzene	1		8.465			ND	
	12 1,3-Dinitrobenzene	1		9.032			ND	U
	13 Nitrobenzene	1		9.345			ND	
	15 Tetryl	1		9.672			ND	U
	16 Nitroglycerin	2		10.118			ND	
	17 2,4,6-Trinitrotoluene	1		10.472			ND	
	18 4-Amino-2,6-dinitrotoluene	1		10.632			ND	
	19 2-Amino-4,6-dinitrotoluene	1		10.858			ND	
	20 2,6-Dinitrotoluene	1		10.992			ND	
	21 2,4-Dinitrotoluene	1		11.145			ND	
	22 o-Nitrotoluene	1		11.832			ND	
	23 p-Nitrotoluene	1		12.198			ND	
	24 m-Nitrotoluene	1		12.705			ND	
	25 PETN	2		13.772			ND	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

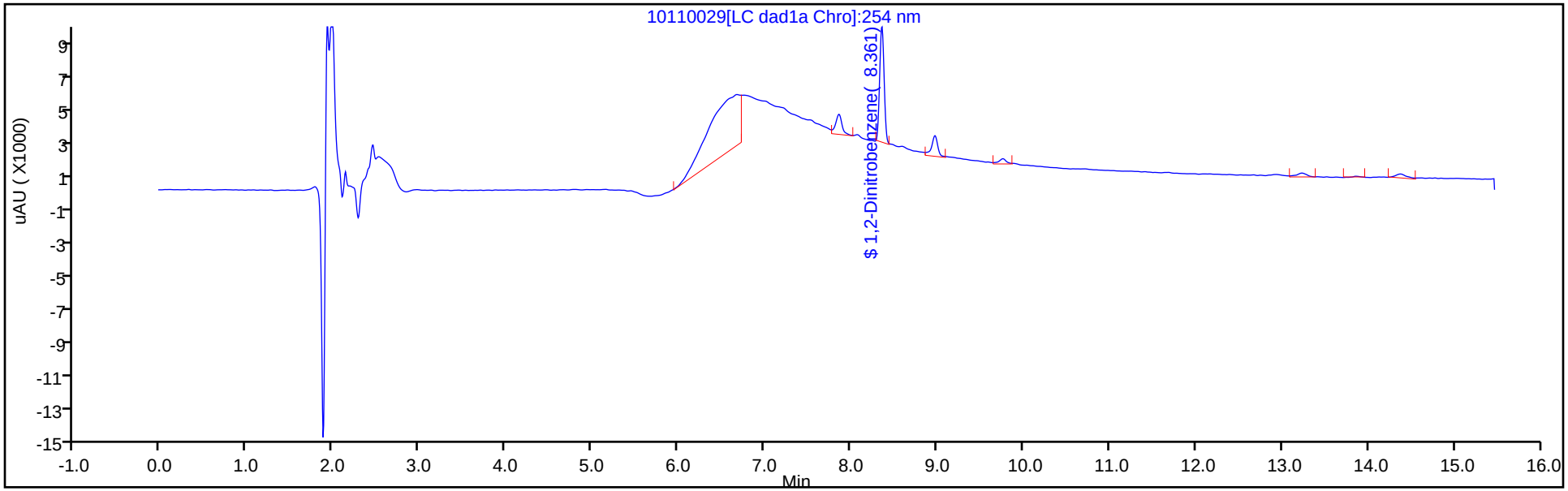
Report Date: 12-Oct-2024 10:13:38 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Denver

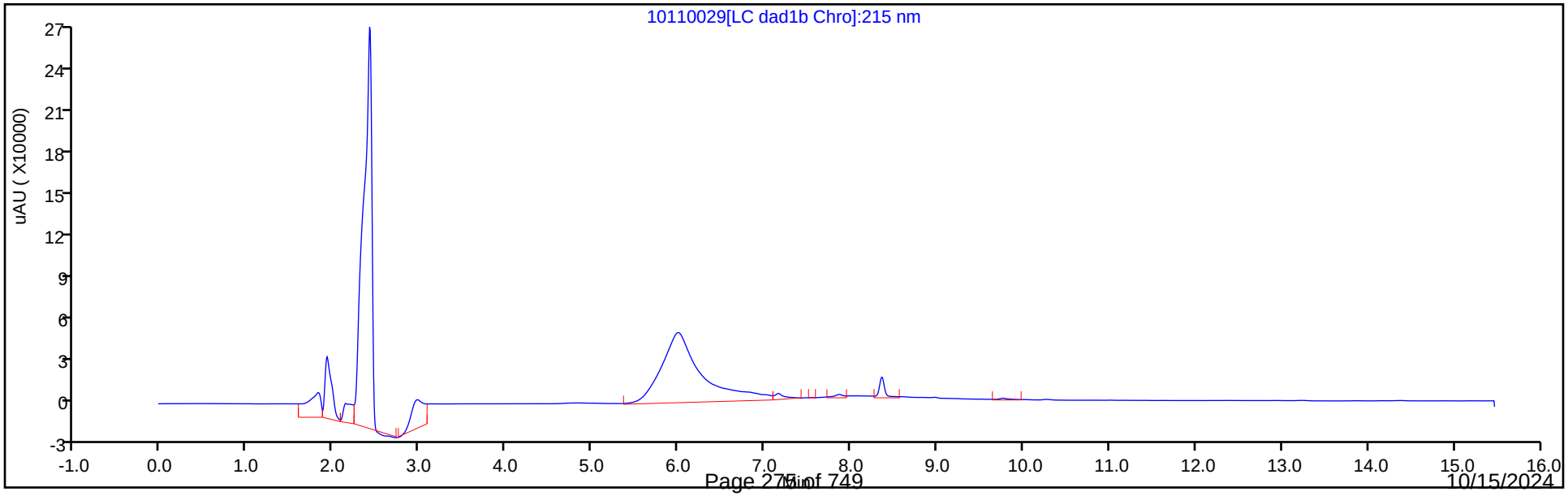
Data File: \\chromfs\denver\chromdata\chhplc_x\20241011-138518.b\10110029.d

Injection Date:	12-Oct-2024 00:09:36	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-197447-B-4-A RE	Lab Sample ID:	280-197447-4	Worklist Smp#:	29
Client ID:	LL1mw-086-240901-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20241011-138518.b\10110029.D				
Lims ID:	280-197447-B-4-A RE				
Client ID:	LL1mw-086-240901-GW				
Sample Type:	Client				
Inject. Date:	12-Oct-2024 00:09:36	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-197447-B-4-A				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20241011-138518.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	12-Oct-2024 10:13:32	Calib Date:	04-Oct-2024 19:55:02		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1603				

First Level Reviewer: LV5D Date: 12-Oct-2024 10:12:12

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1888	94.39

Eurofins Denver

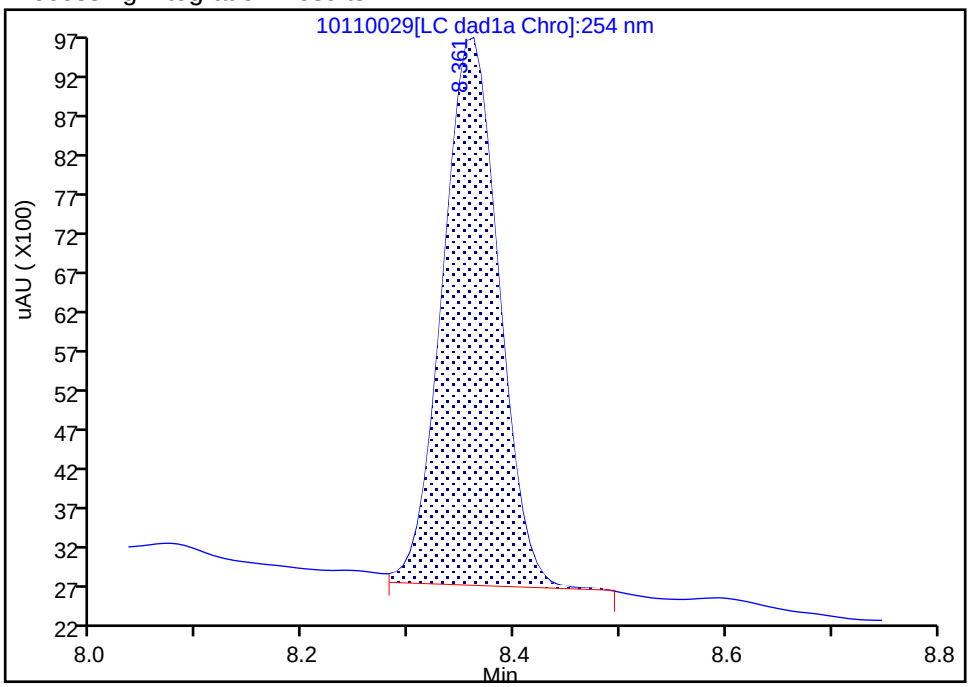
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241011-138518.b\10110029.d				
Injection Date:	12-Oct-2024 00:09:36	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-B-4-A RE	Lab Sample ID:	280-197447-4		
Client ID:	LL1mw-086-240901-GW				
Operator ID:	JZ	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

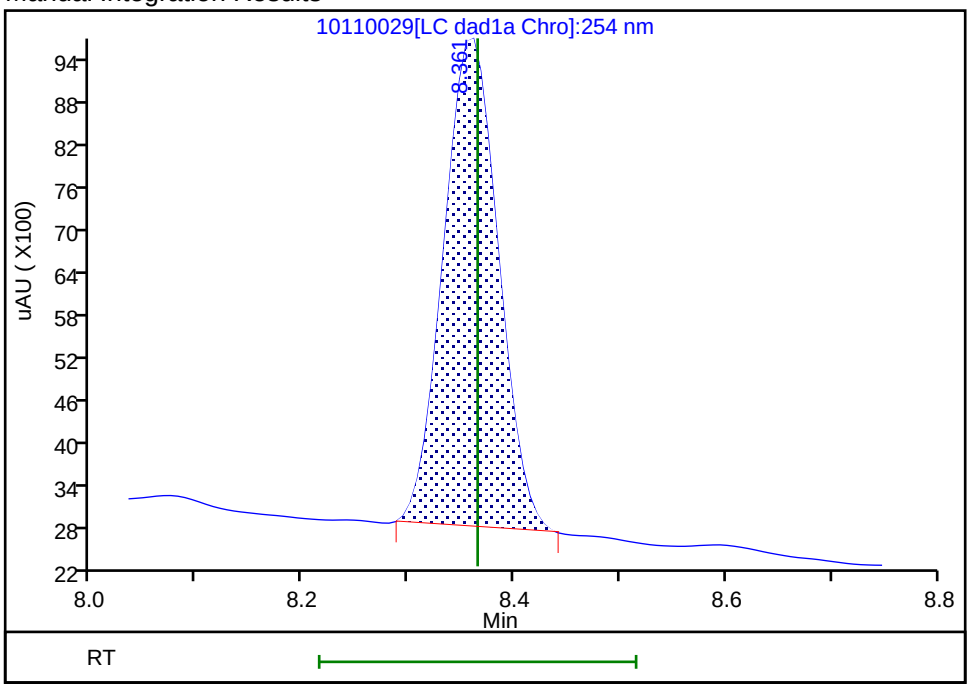
Processing Integration Results

RT: 8.36
Area: 25631
Amount: 0.196542
Amount Units: ug/mL



Manual Integration Results

RT: 8.36
Area: 24619
Amount: 0.188782
Amount Units: ug/mL



Reviewer: LV5D, 12-Oct-2024 10:12:11 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

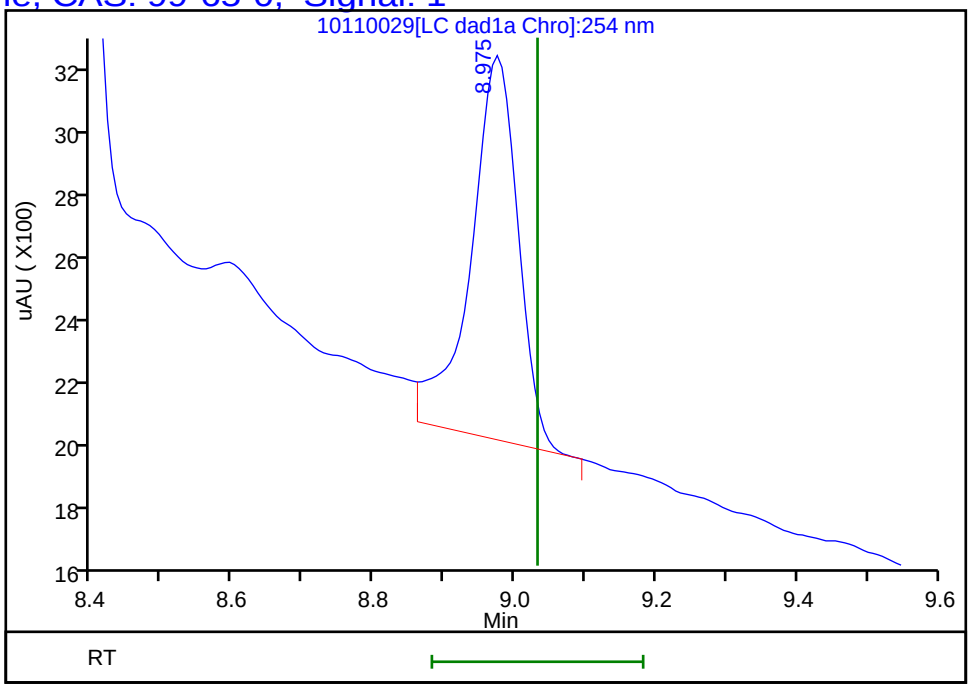
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20241011-138518.b\10110029.d				
Injection Date:	12-Oct-2024 00:09:36	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-B-4-A RE	Lab Sample ID:	280-197447-4		
Client ID:	LL1mw-086-240901-GW				
Operator ID:	JZ	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

RT: 8.97
Response: 5458
Amount: 0.018301



Reviewer: LV5D, 12-Oct-2024 10:12:12
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

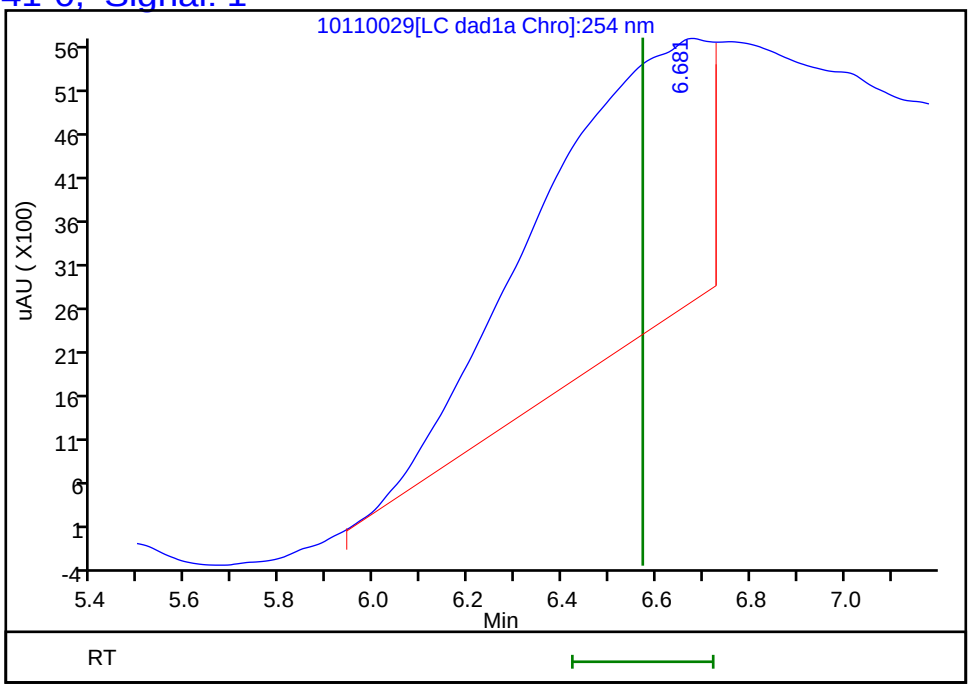
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20241011-138518.b\10110029.d
Injection Date: 12-Oct-2024 00:09:36 Instrument ID: CHHPLC_X3
Lims ID: 280-197447-B-4-A RE Lab Sample ID: 280-197447-4
Client ID: LL1mw-086-240901-GW
Operator ID: JZ ALS Bottle#: 29 Worklist Smp#: 29
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

4 HMX, CAS: 2691-41-0, Signal: 1

RT: 6.68
Response: 84342
Amount: 0.872627



Reviewer: LV5D, 12-Oct-2024 10:12:12
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

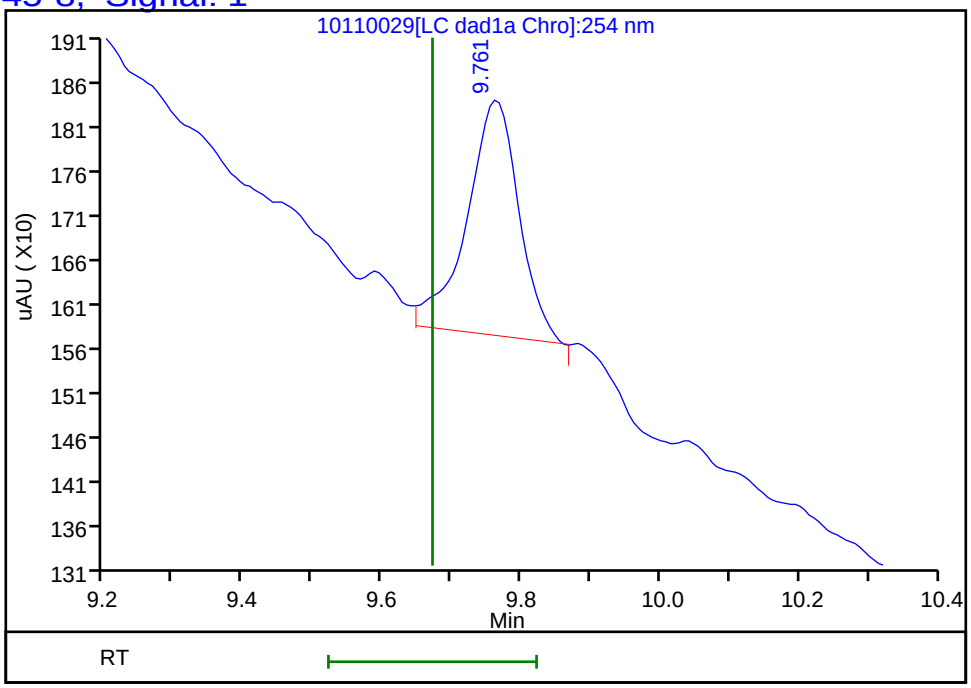
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20241011-138518.b\10110029.d
Injection Date: 12-Oct-2024 00:09:36 Instrument ID: CHHPLC_X3
Lims ID: 280-197447-B-4-A RE Lab Sample ID: 280-197447-4
Client ID: LL1mw-086-240901-GW
Operator ID: JZ ALS Bottle#: 29 Worklist Smp#: 29
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

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

RT: 9.76
Response: 1374
Amount: 0.008707



Reviewer: LV5D, 12-Oct-2024 10:12:12
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-197447-1

SDG No.:

Client Sample ID: LL1mw-091-240901-GW | Lab Sample ID: 280-197447-5

Matrix: Water | Lab File ID: 10080059.D

Analysis Method: 8330B | Date Collected: 10/01/2024 12:28

Extraction Method: 3535 | Date Extracted: 10/04/2024 12:25

Sample wt/vol: 437.3(mL) | Date Analyzed: 10/09/2024 11:38

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 670184 | Units: ug/L

Preparation Batch No.: 669777 | Instrument ID: CHHPLC_X3

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.11	J M J1	0.24	0.23	0.096
99-65-0	1,3-Dinitrobenzene	0.11	U M	0.13	0.11	0.042
118-96-7	2,4,6-Trinitrotoluene	0.11	U	0.13	0.11	0.051
121-14-2	2,4-Dinitrotoluene	0.091	U M	0.11	0.091	0.031
606-20-2	2,6-Dinitrotoluene	0.091	U	0.11	0.091	0.046
35572-78-2	2-Amino-4,6-dinitrotoluene	0.11	U	0.13	0.11	0.058
88-72-2	2-Nitrotoluene	0.23	U Q	0.24	0.23	0.098
99-08-1	3-Nitrotoluene	0.40	U Q M	0.46	0.40	0.22
19406-51-0	4-Amino-2,6-dinitrotoluene	0.14	U	0.17	0.14	0.066
99-99-0	4-Nitrotoluene	0.46	U Q M	0.47	0.46	0.11
2691-41-0	HMX	0.23	U M	0.24	0.23	0.10
98-95-3	Nitrobenzene	0.23	U	0.24	0.23	0.10
55-63-0	Nitroglycerin	2.3	U	2.4	2.3	1.1
78-11-5	PETN	1.1	U	1.3	1.1	0.51
121-82-4	RDX	0.23	U M	0.24	0.23	0.059
479-45-8	Tetryl	0.11	U	0.13	0.11	0.036

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	96	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\10080059.D
Lims ID: 280-197447-A-5-A
Client ID: LL1mw-091-240901-GW
Sample Type: Client
Inject. Date: 09-Oct-2024 11:38:09 ALS Bottle#: 59 Worklist Smp#: 59
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-197447-A-5-A
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Oct-2024 14:35:47 Calib Date: 04-Oct-2024 19:55:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1609

First Level Reviewer: LV5D Date: 09-Oct-2024 13:11:49

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	4 HMX	1		6.564			ND	U
	8 RDX	1		7.497			ND	U
$	10 1,2-Dinitrobenzene	1	8.360	8.364	-0.004	25081	0.1923	M
	11 1,3,5-Trinitrobenzene	1	8.487	8.464	0.023	2145	0.009869	M
	12 1,3-Dinitrobenzene	1		9.024			ND	U
	13 Nitrobenzene	1		9.344			ND	7
	15 Tetryl	1		9.664			ND	7
	16 Nitroglycerin	2		10.110			ND	
	17 2,4,6-Trinitrotoluene	1		10.457			ND	
	18 4-Amino-2,6-dinitrotoluene	1		10.617			ND	
	19 2-Amino-4,6-dinitrotoluene	1		10.850			ND	
	20 2,6-Dinitrotoluene	1		10.984			ND	
	21 2,4-Dinitrotoluene	1		11.130			ND	U
	22 o-Nitrotoluene	1		11.824			ND	7
	23 p-Nitrotoluene	1		12.197			ND	U
	24 m-Nitrotoluene	1		12.697			ND	U
	25 PETN	2		13.764			ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

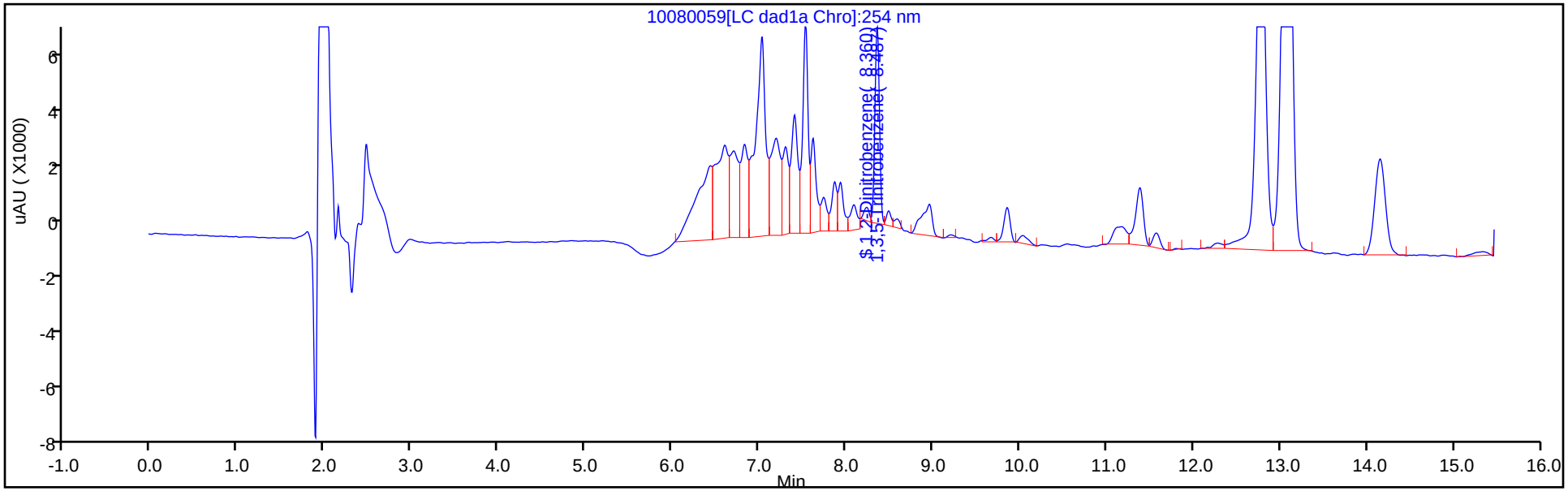
Report Date: 09-Oct-2024 14:46:04 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Denver

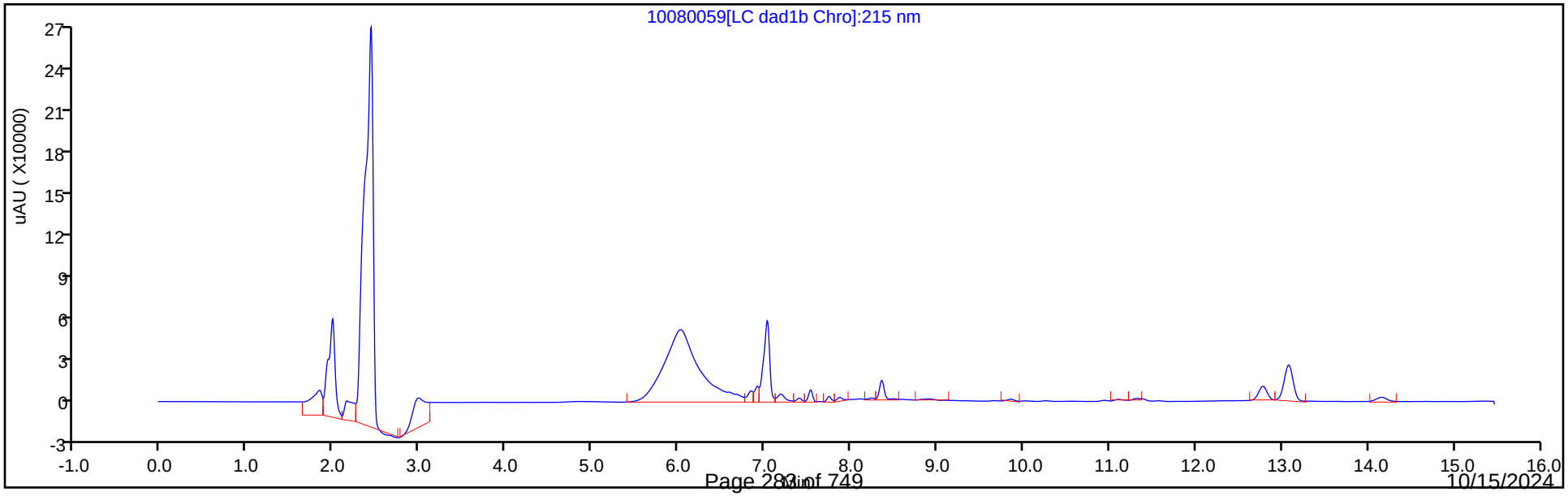
Data File: \\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080059.d

Injection Date:	09-Oct-2024 11:38:09	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-197447-A-5-A	Lab Sample ID:	280-197447-5	Worklist Smp#:	59
Client ID:	LL1mw-091-240901-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	59
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



10/15/2024
4:48:23 PM

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\10080059.D				
Lims ID:	280-197447-A-5-A				
Client ID:	LL1mw-091-240901-GW				
Sample Type:	Client				
Inject. Date:	09-Oct-2024 11:38:09	ALS Bottle#:	59	Worklist Smp#:	59
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-197447-A-5-A				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	09-Oct-2024 14:35:47	Calib Date:	04-Oct-2024 19:55:02		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1609				

First Level Reviewer: LV5D Date: 09-Oct-2024 13:11:49

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1923	96.16

Eurofins Denver

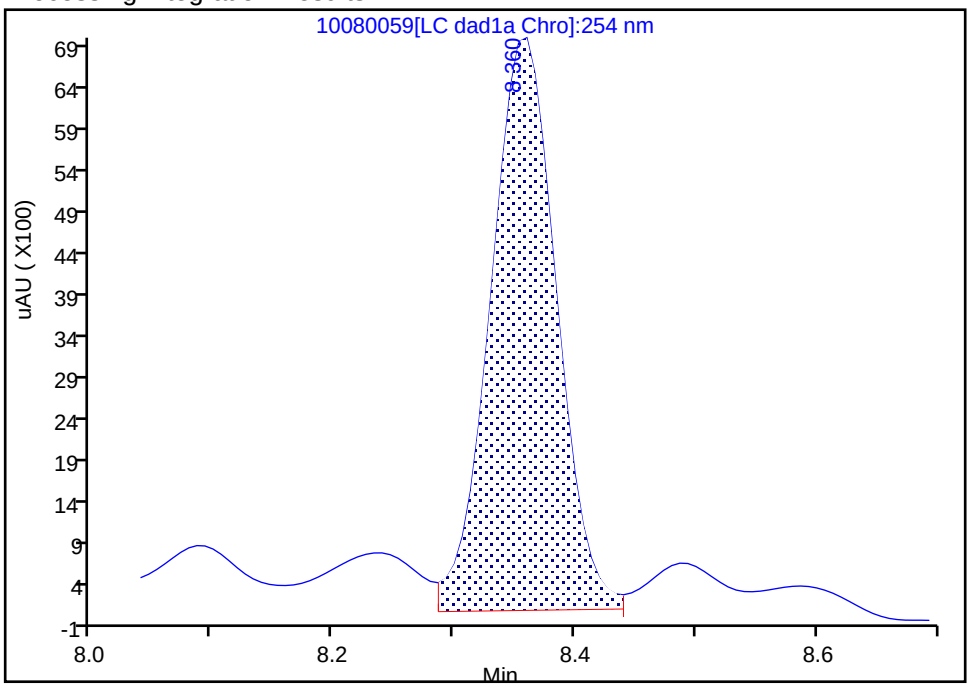
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080059.d				
Injection Date:	09-Oct-2024 11:38:09	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-A-5-A	Lab Sample ID:	280-197447-5		
Client ID:	LL1mw-091-240901-GW				
Operator ID:	JZ	ALS Bottle#:	59	Worklist Smp#:	59
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

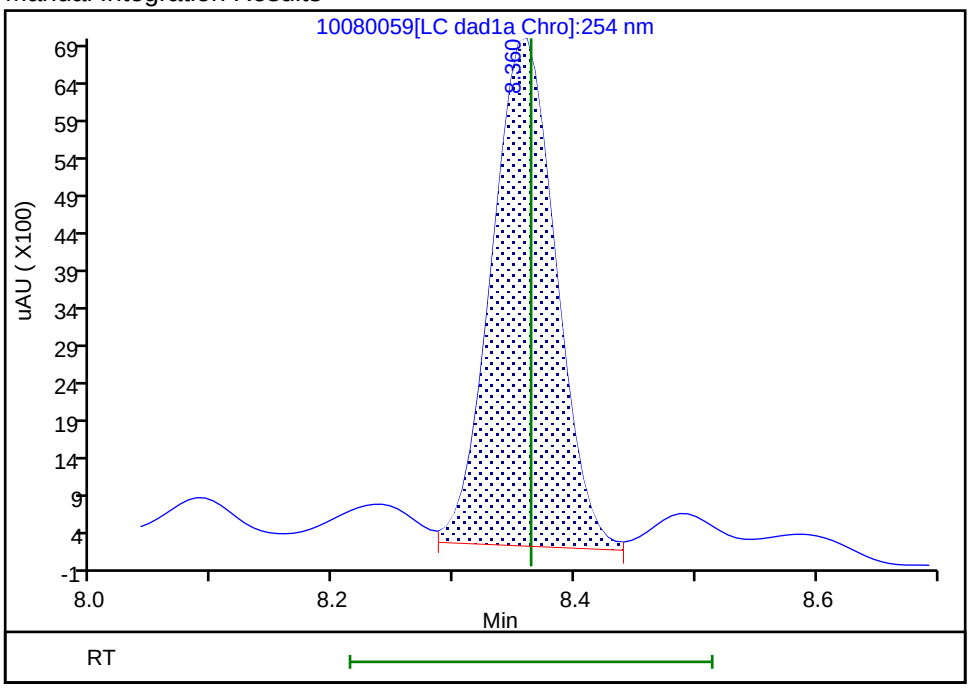
Processing Integration Results

RT: 8.36
Area: 26442
Amount: 0.202761
Amount Units: ug/mL



Manual Integration Results

RT: 8.36
Area: 25081
Amount: 0.192325
Amount Units: ug/mL



Reviewer: LV5D, 09-Oct-2024 13:11:42 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

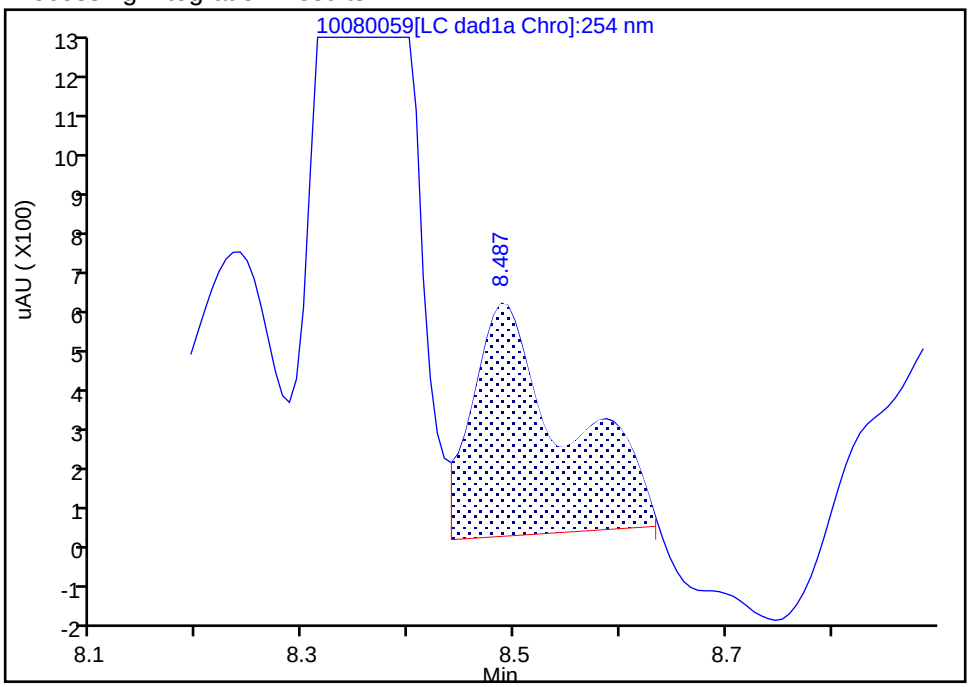
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080059.d				
Injection Date:	09-Oct-2024 11:38:09	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-A-5-A	Lab Sample ID:	280-197447-5		
Client ID:	LL1mw-091-240901-GW				
Operator ID:	JZ	ALS Bottle#:	59	Worklist Smp#:	59
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

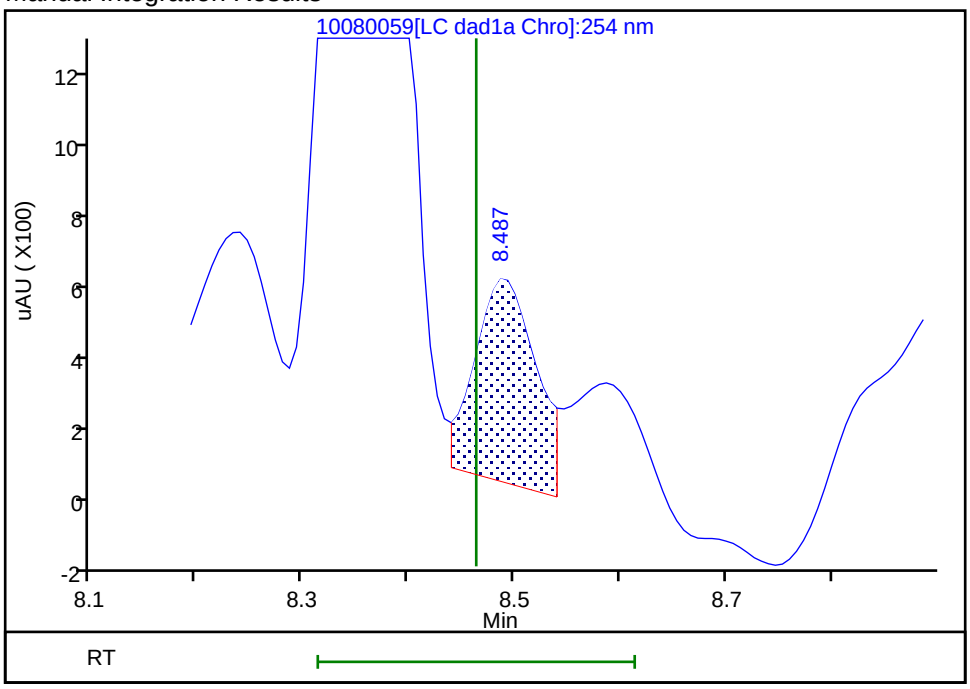
Processing Integration Results

RT: 8.49
Area: 3422
Amount: 0.015744
Amount Units: ug/mL



Manual Integration Results

RT: 8.49
Area: 2145
Amount: 0.009869
Amount Units: ug/mL



Reviewer: LV5D, 09-Oct-2024 13:11:47 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

User Disabled Compound Report

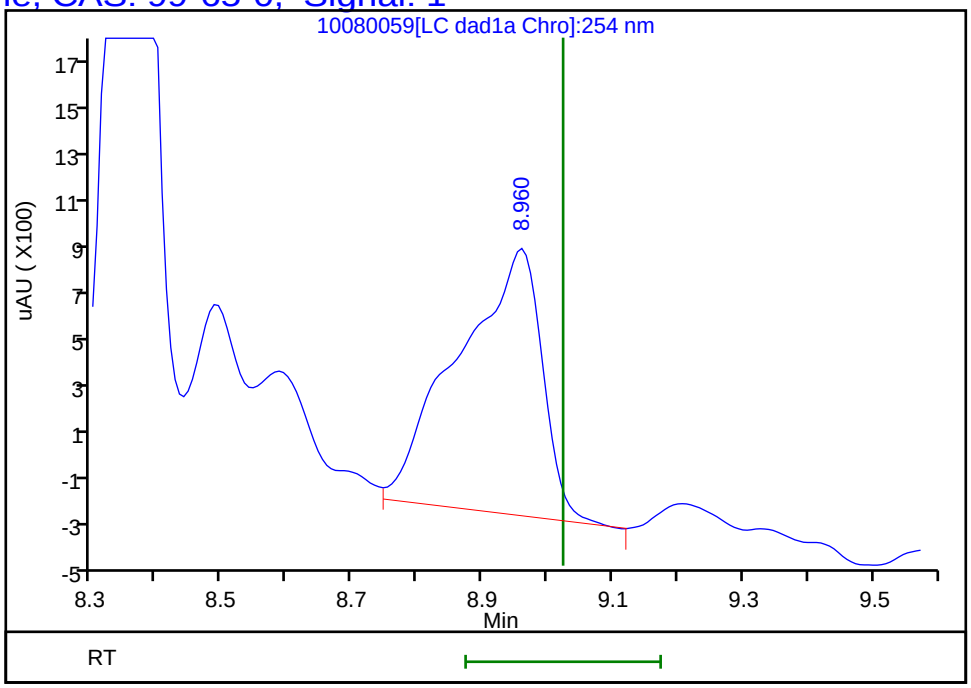
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080059.d
Injection Date: 09-Oct-2024 11:38:09 Instrument ID: CHHPLC_X3
Lims ID: 280-197447-A-5-A Lab Sample ID: 280-197447-5
Client ID: LL1mw-091-240901-GW
Operator ID: JZ ALS Bottle#: 59 Worklist Smp#: 59
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

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

RT: 8.96
Response: 9893
Amount: 0.033172



Reviewer: LV5D, 09-Oct-2024 13:11:49
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

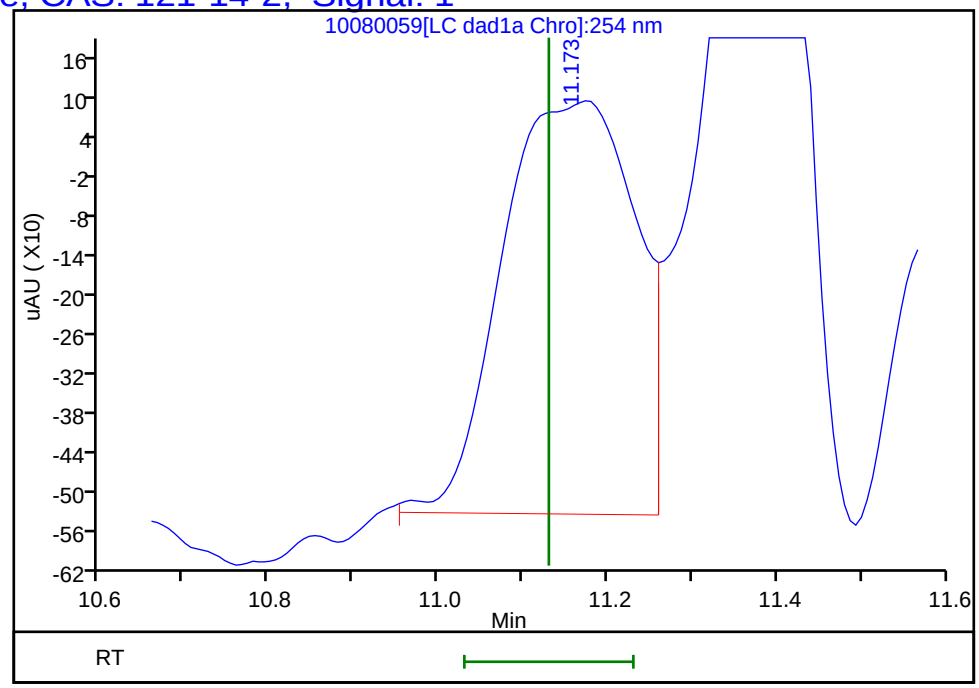
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080059.d
Injection Date: 09-Oct-2024 11:38:09 Instrument ID: CHHPLC_X3
Lims ID: 280-197447-A-5-A Lab Sample ID: 280-197447-5
Client ID: LL1mw-091-240901-GW
Operator ID: JZ ALS Bottle#: 59 Worklist Smp#: 59
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

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

RT: 11.17
Response: 6874
Amount: 0.023556



Reviewer: LV5D, 09-Oct-2024 13:11:49
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

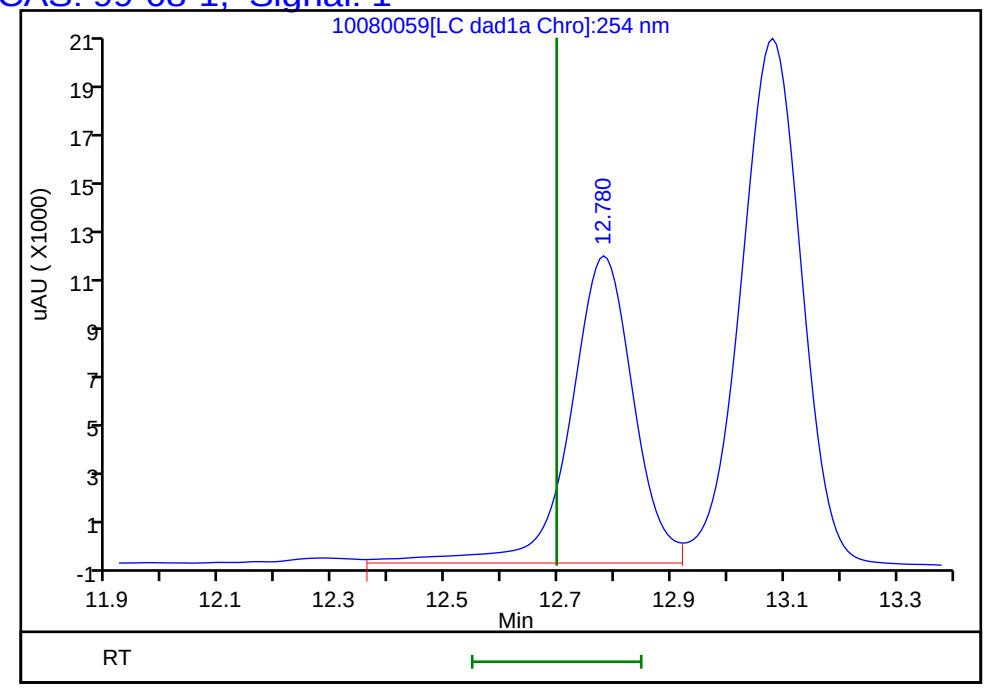
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080059.d				
Injection Date:	09-Oct-2024 11:38:09	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-A-5-A	Lab Sample ID:	280-197447-5		
Client ID:	LL1mw-091-240901-GW				
Operator ID:	JZ	ALS Bottle#:	59	Worklist Smp#:	59
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

24 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 12.78
Response: 97269
Amount: 0.718025



Reviewer: LV5D, 09-Oct-2024 13:11:49
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

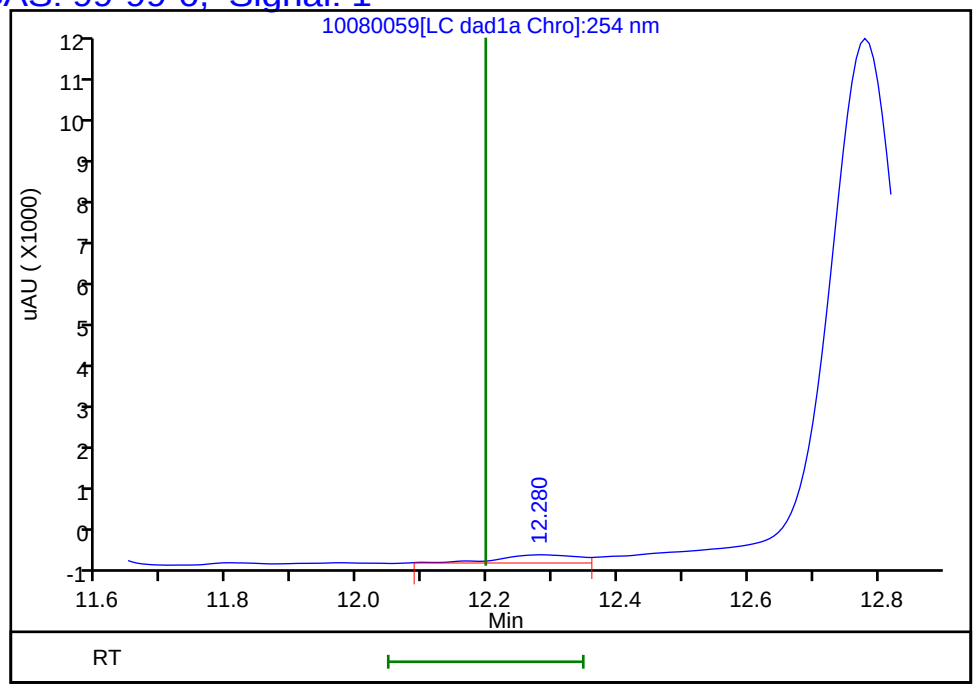
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080059.d				
Injection Date:	09-Oct-2024 11:38:09	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-A-5-A	Lab Sample ID:	280-197447-5		
Client ID:	LL1mw-091-240901-GW				
Operator ID:	JZ	ALS Bottle#:	59	Worklist Smp#:	59
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

23 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 12.28
Response: 1642
Amount: 0.013758



Reviewer: LV5D, 09-Oct-2024 13:11:49
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

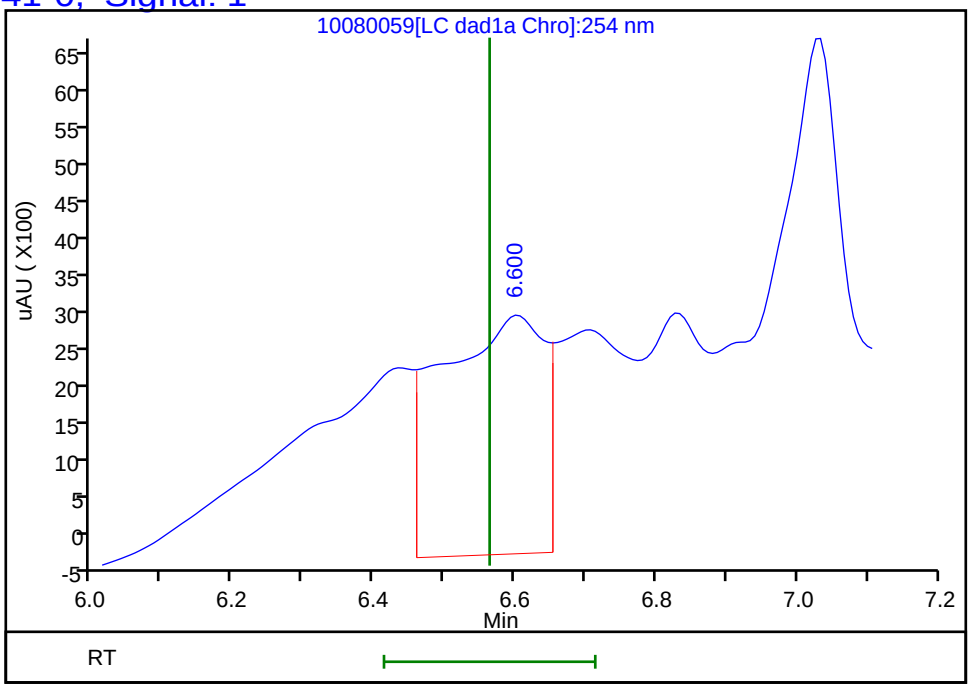
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080059.d
Injection Date: 09-Oct-2024 11:38:09 Instrument ID: CHHPLC_X3
Lims ID: 280-197447-A-5-A Lab Sample ID: 280-197447-5
Client ID: LL1mw-091-240901-GW
Operator ID: JZ ALS Bottle#: 59 Worklist Smp#: 59
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

4 HMX, CAS: 2691-41-0, Signal: 1

RT: 6.60
Response: 32782
Amount: 0.339172



Reviewer: LV5D, 09-Oct-2024 13:11:49
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

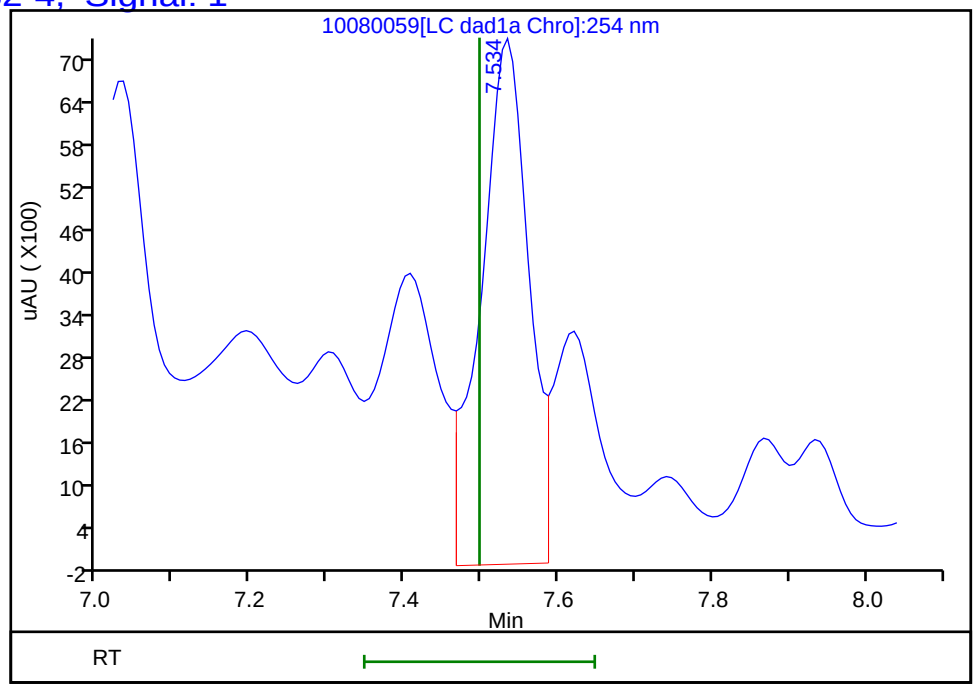
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080059.d
Injection Date: 09-Oct-2024 11:38:09 Instrument ID: CHHPLC_X3
Lims ID: 280-197447-A-5-A Lab Sample ID: 280-197447-5
Client ID: LL1mw-091-240901-GW
Operator ID: JZ ALS Bottle#: 59 Worklist Smp#: 59
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

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

RT: 7.53
Response: 31697
Amount: 0.300704



Reviewer: LV5D, 09-Oct-2024 13:11:49
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-197447-1

SDG No.:

Client Sample ID: LL1mw-091-240901-GW | Lab Sample ID: 280-197447-5

Matrix: Water | Lab File ID: 10090019.D

Analysis Method: 8330B | Date Collected: 10/01/2024 12:28

Extraction Method: 3535 | Date Extracted: 10/04/2024 12:25

Sample wt/vol: 437.3(mL) | Date Analyzed: 10/10/2024 01:45

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: Luna-phenylhex ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 670394 | Units: ug/L

Preparation Batch No.: 669777 | Instrument ID: CHHPLC_X5

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	*1,3,5-Trinitrobenzene*	*0.75*	*M J1*	*0.24*	0.23	*0.096*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	92		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20241009-138425.b\10090019.D
Lims ID: 280-197447-A-5-A
Client ID: LL1mw-091-240901-GW
Sample Type: Client
Inject. Date: 10-Oct-2024 01:45:16 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-197447-A-5-A
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20241009-138425.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 12-Oct-2024 16:19:05 Calib Date: 11-Aug-2024 06:16:04
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1604

First Level Reviewer: LV5D Date: 10-Oct-2024 15:41:42

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	5 HMX	1		6.270			ND	U
	8 RDX	1		8.370			ND	
	9 Nitrobenzene	1	10.991	10.930	0.061	9565	0.0254	
$	10 1,2-Dinitrobenzene	1	11.718	11.730	-0.012	48500	0.1848	
	12 1,3-Dinitrobenzene	1	13.711	13.750	-0.039	20491	0.0350	
	13 Nitroglycerin	2		14.390			ND	
	14 o-Nitrotoluene	1		14.930			ND	
	16 p-Nitrotoluene	1		15.156			ND	U
	17 4-Amino-2,6-dinitrotoluene	1		15.476			ND	U
	18 m-Nitrotoluene	1		15.976			ND	
	19 2-Amino-4,6-dinitrotoluene	1		16.210			ND	
	20 1,3,5-Trinitrobenzene	1	16.451	16.450	0.001	27658	0.0653	M
	21 2,6-Dinitrotoluene	1		17.576			ND	
	22 2,4-Dinitrotoluene	1		18.003			ND	7
	23 Tetryl	1		20.970			ND	
	24 2,4,6-Trinitrotoluene	1		21.863			ND	
	25 PETN	2		23.310			ND	7

QC Flag Legend

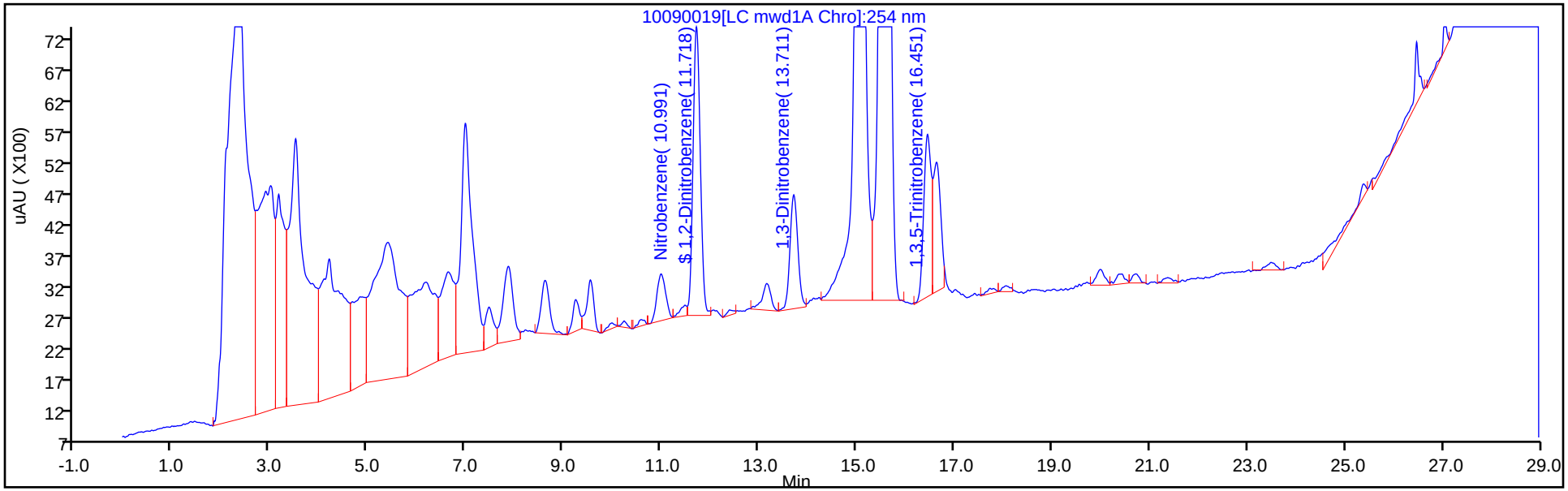
Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 12-Oct-2024 16:19:09 Chrom Revision: 2.3 24-Sep-2024 15:19:46

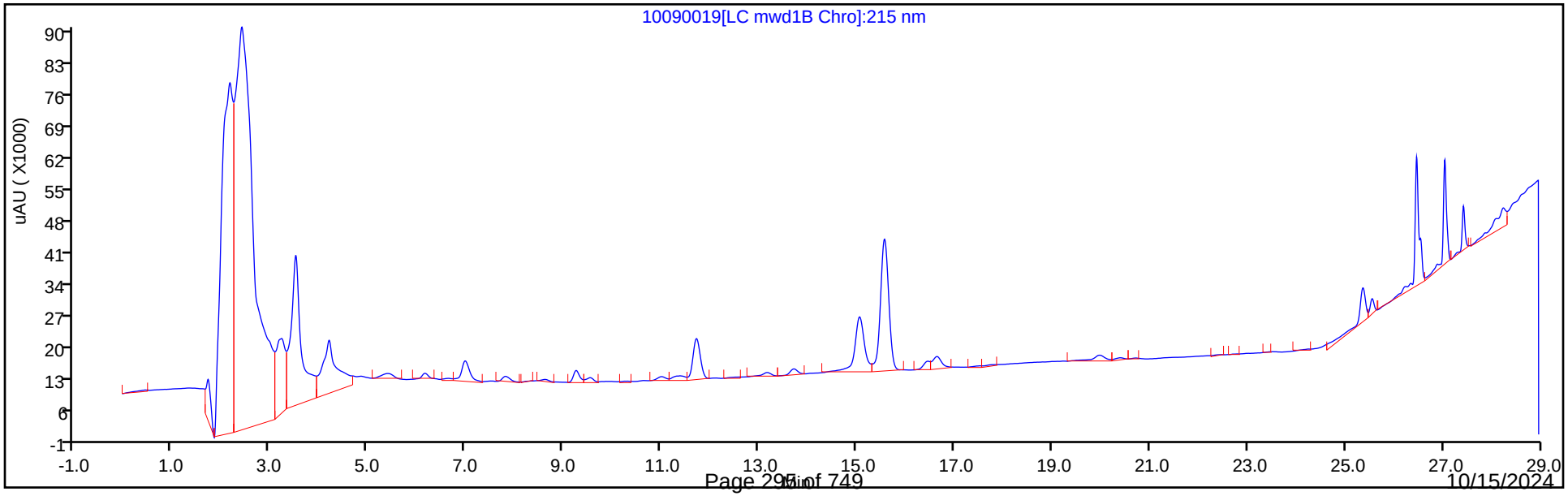
Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20241009-138425.b\10090019.D				
Injection Date:	10-Oct-2024 01:45:16	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-197447-A-5-A	Lab Sample ID:	280-197447-5	Worklist Smp#:	19
Client ID:	LL1mw-091-240901-GW				
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: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



10/15/2024
4:48:23 PM

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20241009-138425.b\10090019.D				
Lims ID:	280-197447-A-5-A				
Client ID:	LL1mw-091-240901-GW				
Sample Type:	Client				
Inject. Date:	10-Oct-2024 01:45:16	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-197447-A-5-A				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20241009-138425.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	12-Oct-2024 16:19:05	Calib Date:	11-Aug-2024 06:16:04		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1604				

First Level Reviewer: LV5D Date: 10-Oct-2024 15:41:42

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1848	92.39

Manual Integration/User Assign Peak Report

Eurofins Denver

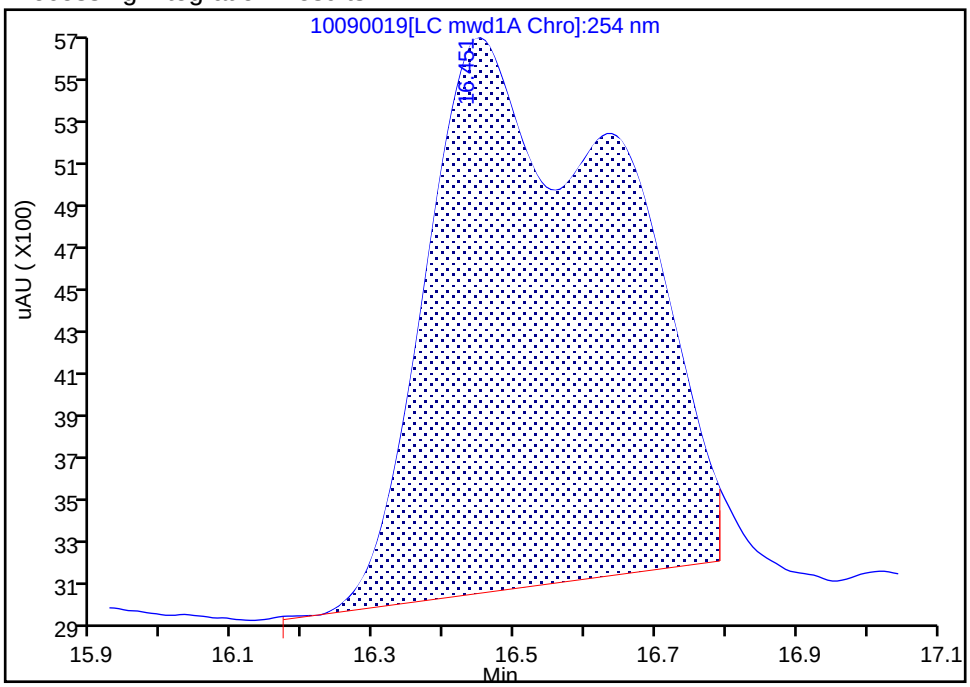
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20241009-138425.b\10090019.D				
Injection Date:	10-Oct-2024 01:45:16	Instrument ID:	CHHPLC_X5		
Lims ID:	280-197447-A-5-A	Lab Sample ID:	280-197447-5		
Client ID:	LL1mw-091-240901-GW				
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

20 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

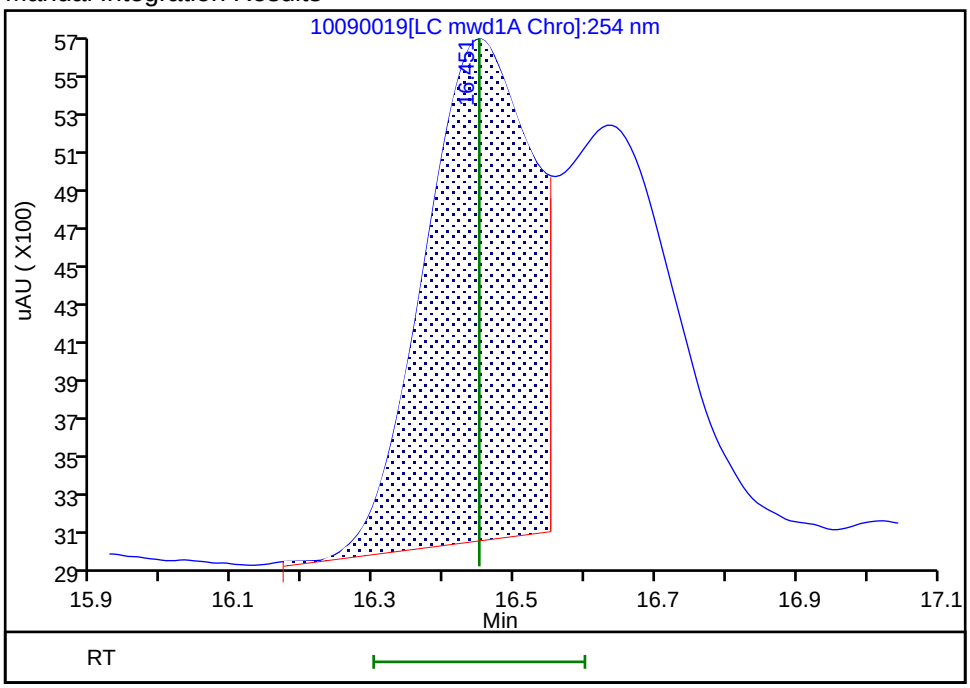
Processing Integration Results

RT: 16.45
Area: 49752
Amount: 0.117397
Amount Units: ug/ml



Manual Integration Results

RT: 16.45
Area: 27658
Amount: 0.065263
Amount Units: ug/ml



Reviewer: LV5D, 10-Oct-2024 15:41:41 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

User Disabled Compound Report

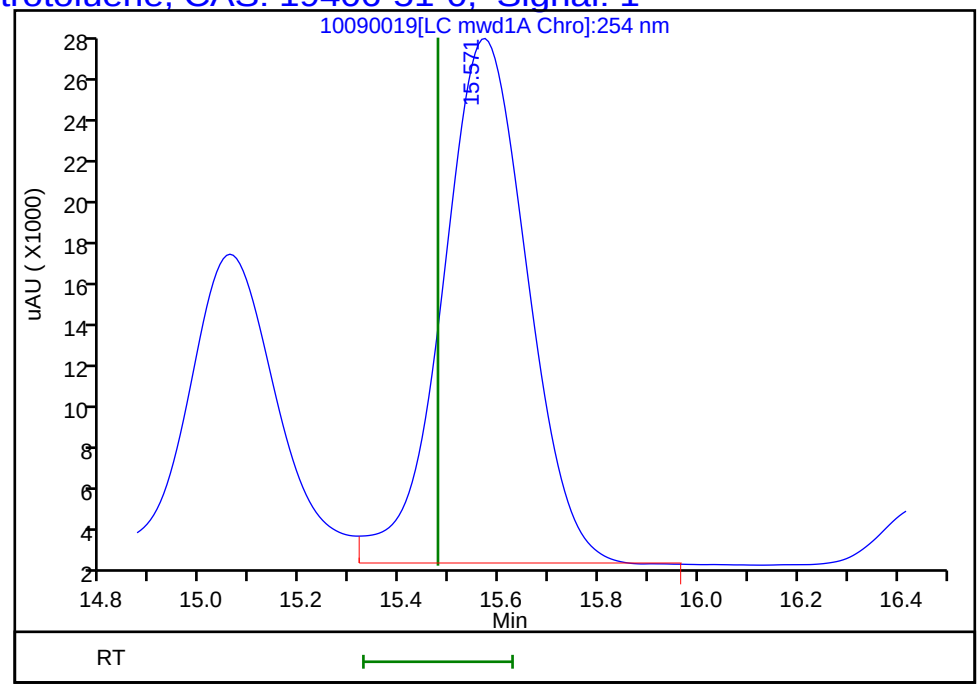
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20241009-138425.b\10090019.D
Injection Date: 10-Oct-2024 01:45:16 Instrument ID: CHHPLC_X5
Lims ID: 280-197447-A-5-A Lab Sample ID: 280-197447-5
Client ID: LL1mw-091-240901-GW
Operator ID: JZ ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl (4.60 mm) Detector LC mwd1A, 254 nm

17 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0, Signal: 1

RT: 15.57
Response: 288890
Amount: 1.036980



Reviewer: LV5D, 10-Oct-2024 15:41:42
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

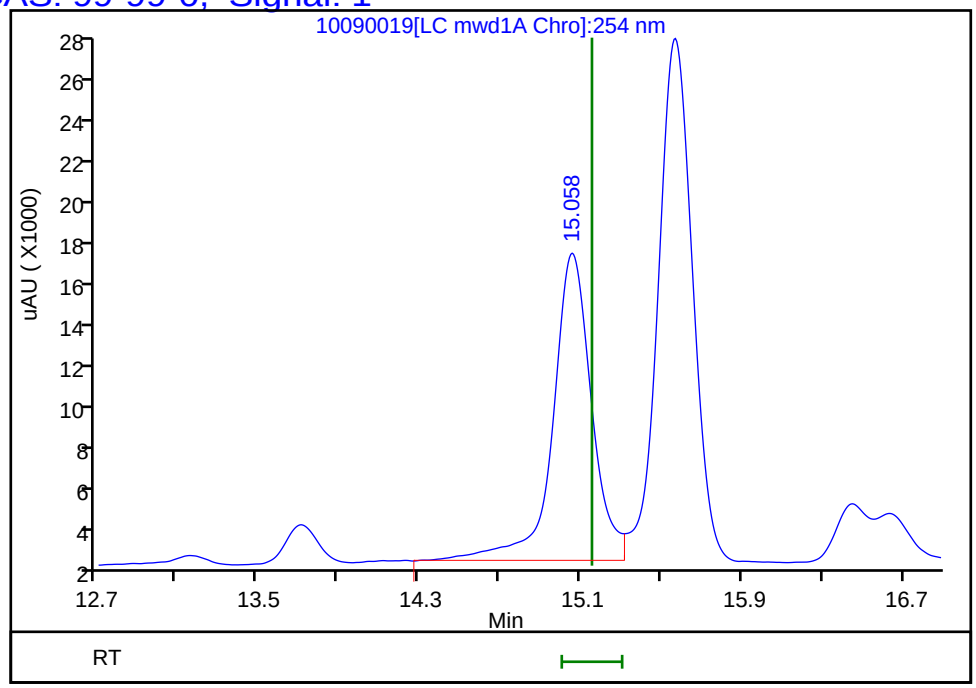
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20241009-138425.b\10090019.D				
Injection Date:	10-Oct-2024 01:45:16	Instrument ID:	CHHPLC_X5		
Lims ID:	280-197447-A-5-A	Lab Sample ID:	280-197447-5		
Client ID:	LL1mw-091-240901-GW				
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		

16 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 15.06
Response: 194961
Amount: 0.921058



Reviewer: LV5D, 10-Oct-2024 15:41:42
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

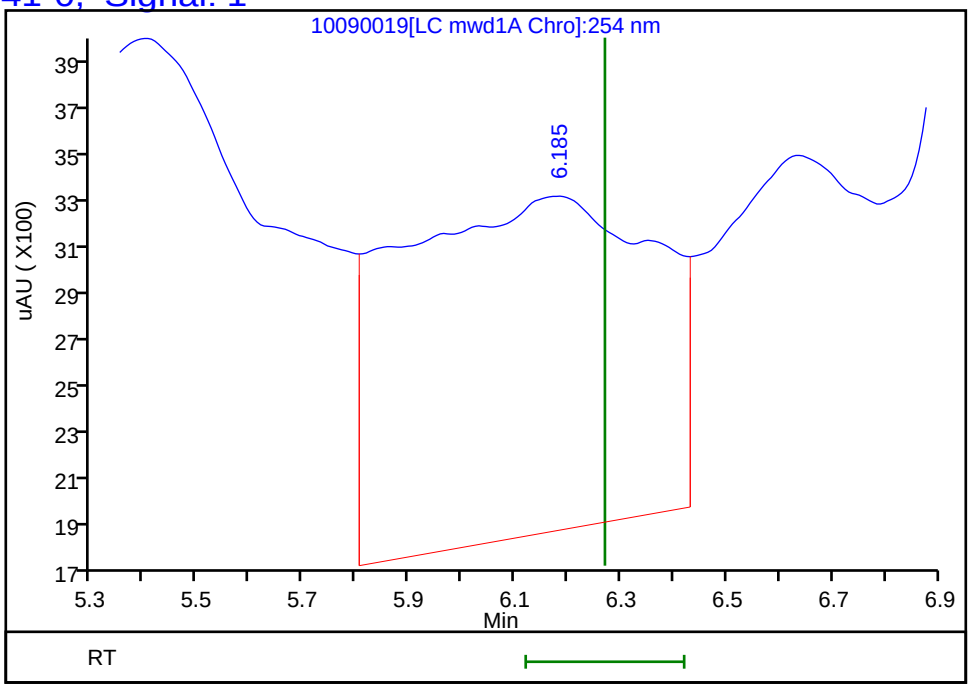
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20241009-138425.b\10090019.D
Injection Date: 10-Oct-2024 01:45:16 Instrument ID: CHHPLC_X5
Lims ID: 280-197447-A-5-A Lab Sample ID: 280-197447-5
Client ID: LL1mw-091-240901-GW
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: 6.18
Response: 46878
Amount: 0.259945



Reviewer: LV5D, 10-Oct-2024 15:41:42
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-197447-1

SDG No.:

Client Sample ID: LL1mw-091-240901-GW RE | Lab Sample ID: 280-197447-5 RE

Matrix: Water | Lab File ID: 10110030.D

Analysis Method: 8330B | Date Collected: 10/01/2024 12:28

Extraction Method: 3535 | Date Extracted: 10/11/2024 12:06

Sample wt/vol: 474.9(mL) | Date Analyzed: 10/12/2024 00:31

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 670729 | Units: ug/L

Preparation Batch No.: 670642 | Instrument ID: CHHPLC_X3

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
88-72-2	*2-Nitrotoluene*	*0.21*	*U H*	*0.22*	0.21	*0.090*
99-08-1	*3-Nitrotoluene*	*0.37*	*U H*	*0.42*	0.37	*0.21*
99-99-0	*4-Nitrotoluene*	*0.42*	*U H*	*0.43*	0.42	*0.11*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	92		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20241011-138518.b\10110030.D
Lims ID: 280-197447-B-5-A RE
Client ID: LL1mw-091-240901-GW
Sample Type: Client
Inject. Date: 12-Oct-2024 00:31:31 ALS Bottle#: 30 Worklist Smp#: 30
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-197447-B-5-A
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20241011-138518.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 12-Oct-2024 10:13:32 Calib Date: 04-Oct-2024 19:55:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1603

First Level Reviewer: LV5D Date: 12-Oct-2024 10:12:30

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4	HMX	1	6.571	6.572	-0.001	1027	0.0106	M
8	RDX	1	7.524	7.498	0.026	15222	0.1435	
$ 10	1,2-Dinitrobenzene	1	8.364	8.365	-0.001	23983	0.1839	
11	1,3,5-Trinitrobenzene	1	8.497	8.465	0.032	962	0.004426	M
12	1,3-Dinitrobenzene	1		9.032			ND	U
13	Nitrobenzene	1		9.345			ND	
15	Tetryl	1		9.672			ND	
16	Nitroglycerin	2		10.118			ND	
17	2,4,6-Trinitrotoluene	1		10.472			ND	
18	4-Amino-2,6-dinitrotoluene	1		10.632			ND	
19	2-Amino-4,6-dinitrotoluene	1		10.858			ND	
20	2,6-Dinitrotoluene	1		10.992			ND	
21	2,4-Dinitrotoluene	1		11.145			ND	U
22	o-Nitrotoluene	1		11.832			ND	
23	p-Nitrotoluene	1		12.198			ND	
24	m-Nitrotoluene	1		12.705			ND	
25	PETN	2		13.772			ND	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

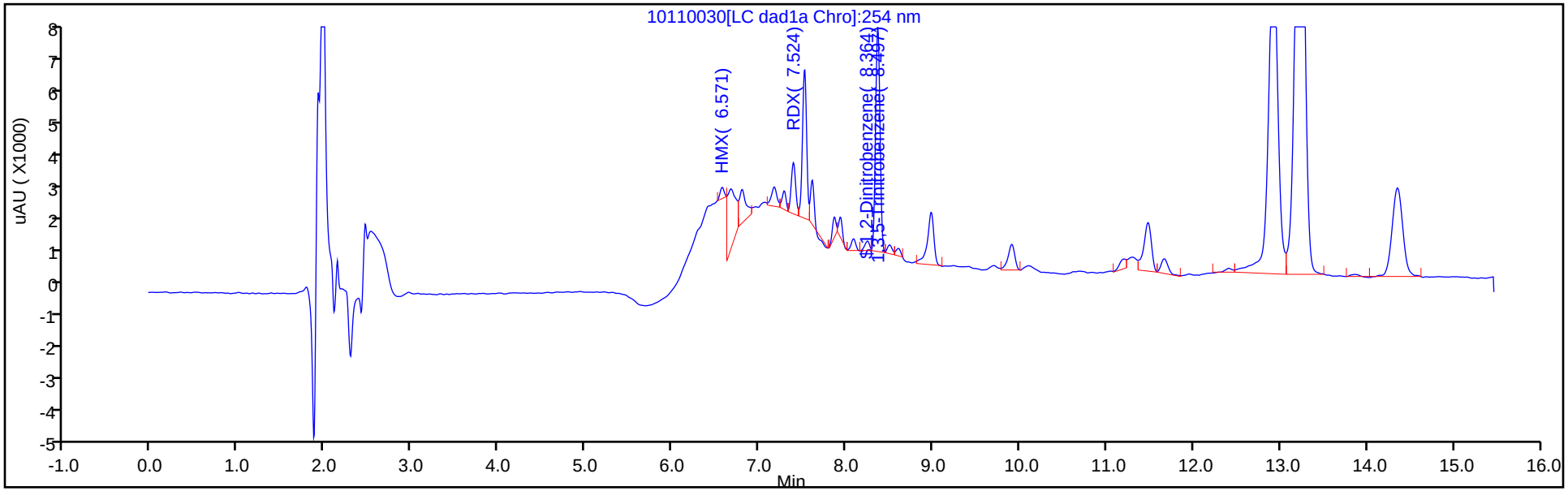
Report Date: 12-Oct-2024 10:13:38 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Denver

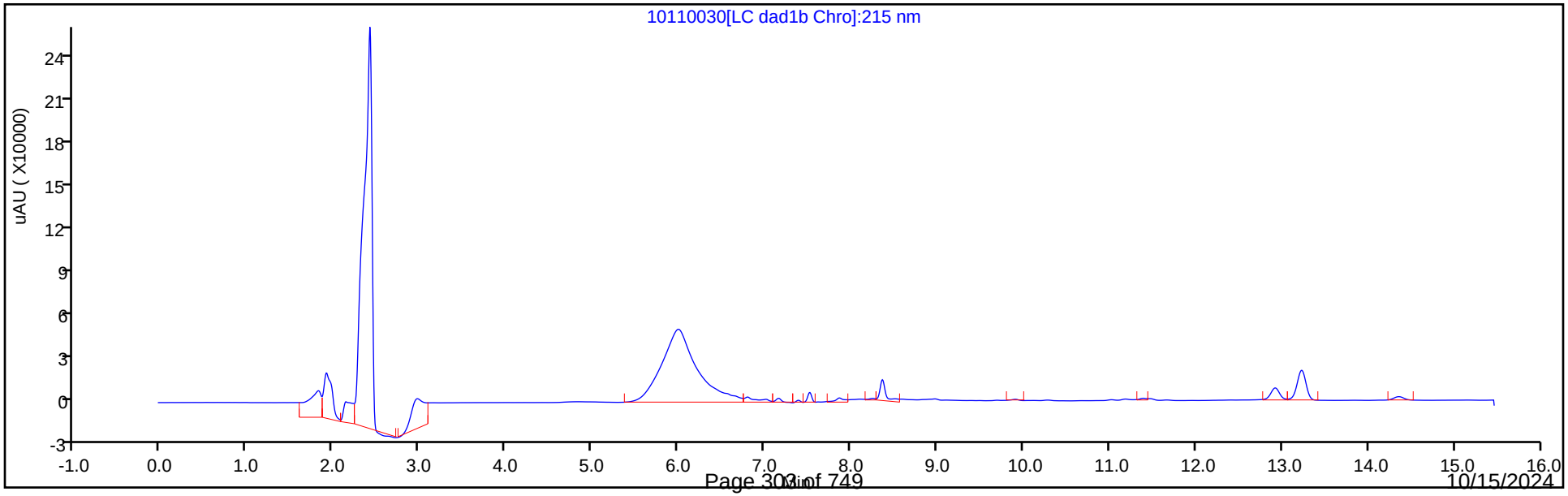
Data File: \\chromfs\denver\chromdata\chhplc_x\20241011-138518.b\10110030.d

Injection Date:	12-Oct-2024 00:31:31	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-197447-B-5-A RE	Lab Sample ID:	280-197447-5	Worklist Smp#:	30
Client ID:	LL1mw-091-240901-GW				
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



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



10/15/2024
4:48:23 PM

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20241011-138518.b\10110030.D				
Lims ID:	280-197447-B-5-A RE				
Client ID:	LL1mw-091-240901-GW				
Sample Type:	Client				
Inject. Date:	12-Oct-2024 00:31:31	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-197447-B-5-A				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20241011-138518.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	12-Oct-2024 10:13:32	Calib Date:	04-Oct-2024 19:55:02		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1603				

First Level Reviewer: LV5D Date: 12-Oct-2024 10:12:30

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1839	91.95

Manual Integration/User Assign Peak Report

Eurofins Denver

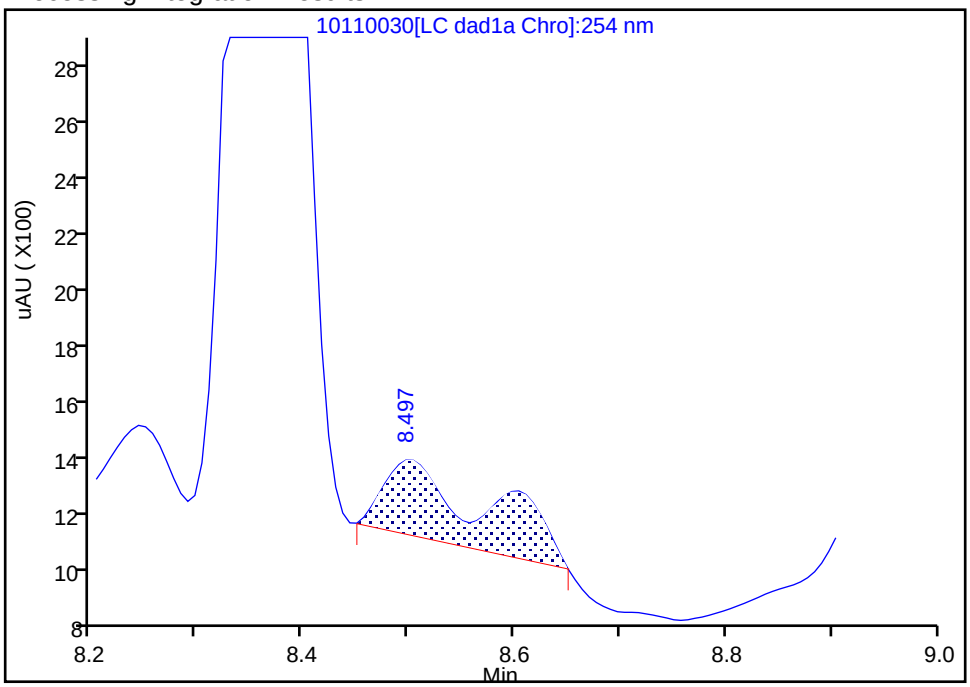
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241011-138518.b\10110030.d				
Injection Date:	12-Oct-2024 00:31:31	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-B-5-A RE	Lab Sample ID:	280-197447-5		
Client ID:	LL1mw-091-240901-GW				
Operator ID:	JZ	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

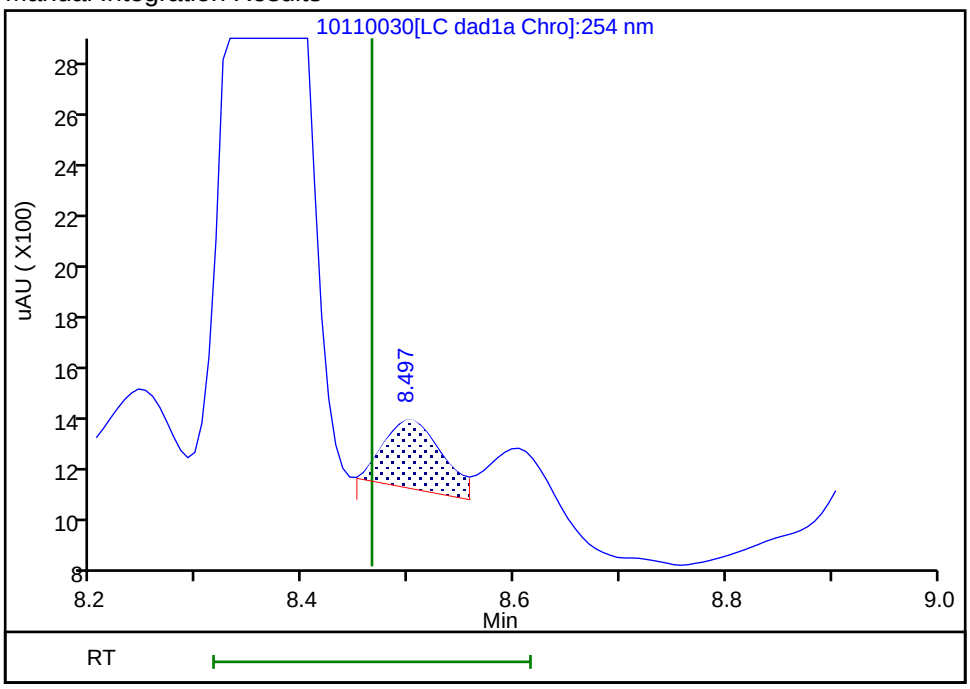
Processing Integration Results

RT: 8.50
Area: 1786
Amount: 0.008217
Amount Units: ug/mL



Manual Integration Results

RT: 8.50
Area: 962
Amount: 0.004426
Amount Units: ug/mL



Reviewer: LV5D, 12-Oct-2024 10:12:28 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

User Disabled Compound Report

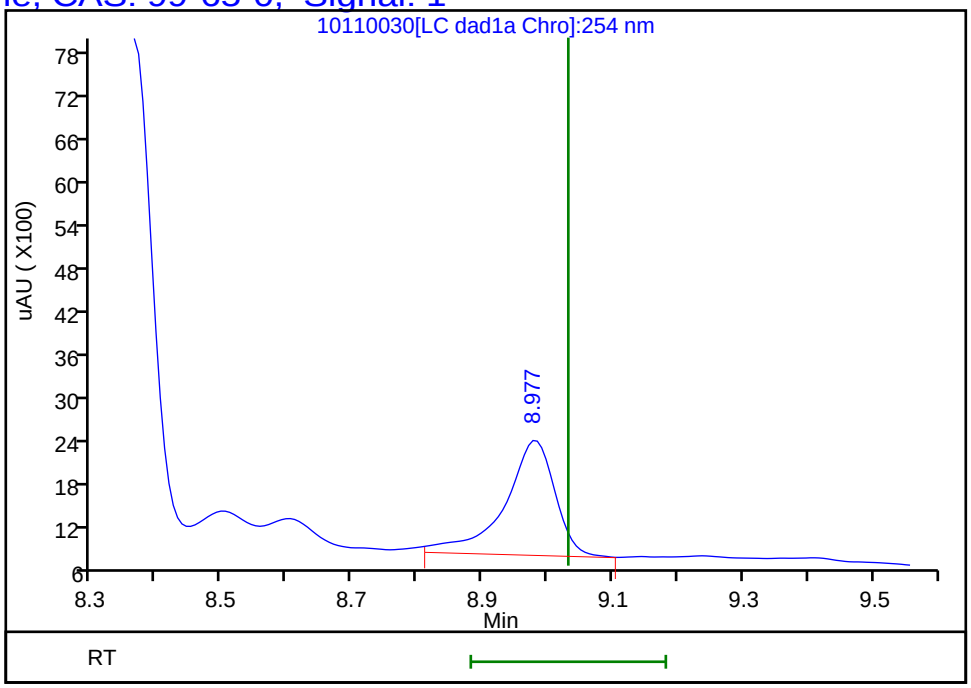
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20241011-138518.b\10110030.d
Injection Date: 12-Oct-2024 00:31:31 Instrument ID: CHHPLC_X3
Lims ID: 280-197447-B-5-A RE Lab Sample ID: 280-197447-5
Client ID: LL1mw-091-240901-GW
Operator ID: JZ ALS Bottle#: 30 Worklist Smp#: 30
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

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

RT: 8.98
Response: 8561
Amount: 0.028706



Reviewer: LV5D, 12-Oct-2024 10:12:30
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

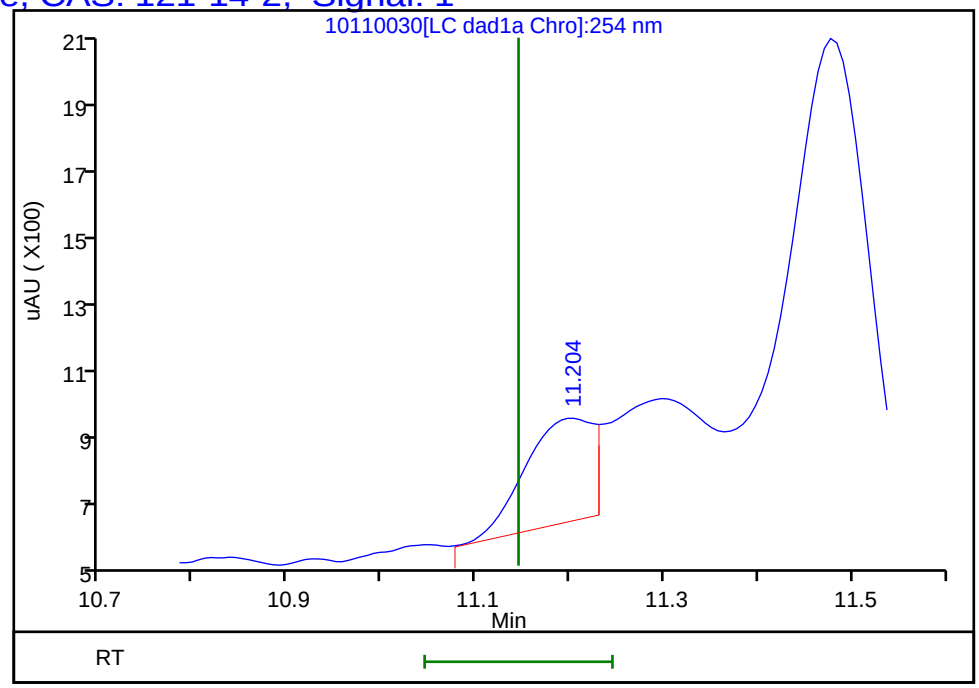
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20241011-138518.b\10110030.d
Injection Date: 12-Oct-2024 00:31:31 Instrument ID: CHHPLC_X3
Lims ID: 280-197447-B-5-A RE Lab Sample ID: 280-197447-5
Client ID: LL1mw-091-240901-GW
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

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

RT: 11.20
Response: 1540
Amount: 0.005277



Reviewer: LV5D, 12-Oct-2024 10:12:30
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

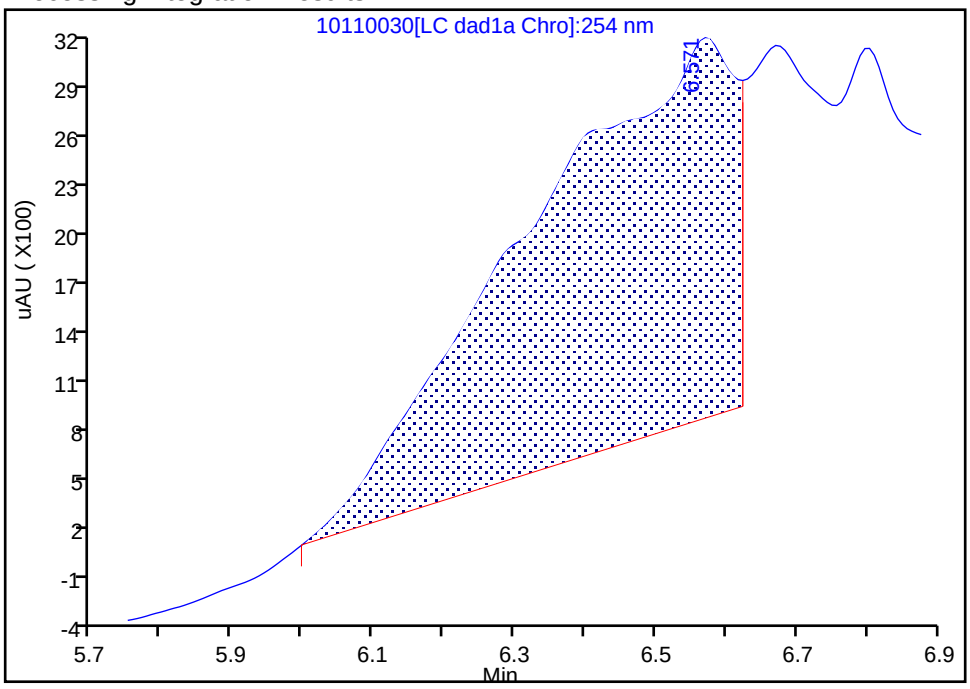
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241011-138518.b\10110030.d				
Injection Date:	12-Oct-2024 00:31:31	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-B-5-A RE	Lab Sample ID:	280-197447-5		
Client ID:	LL1mw-091-240901-GW				
Operator ID:	JZ	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

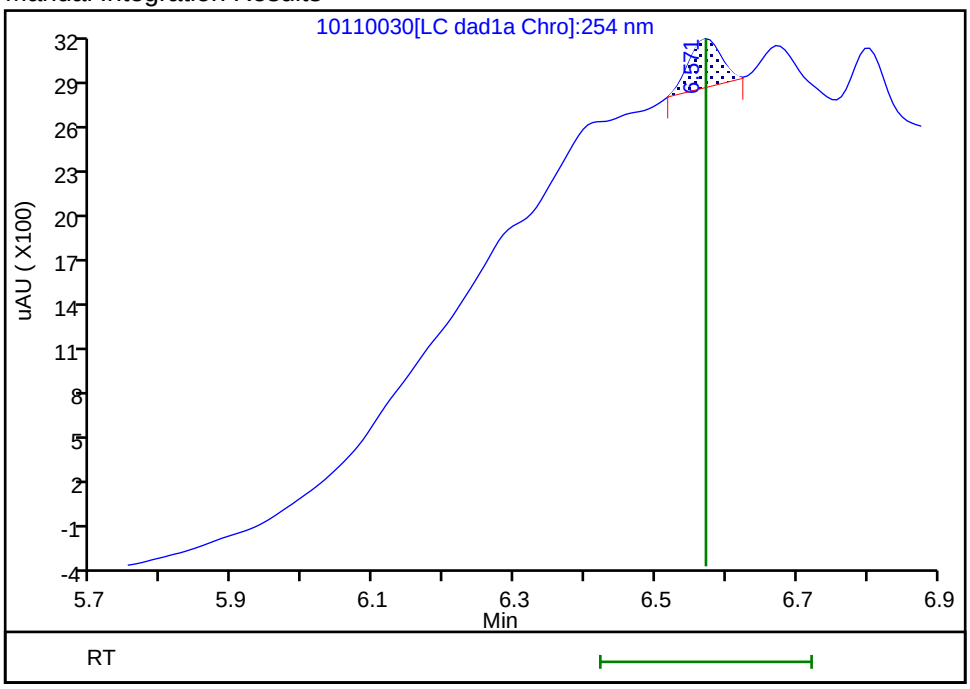
Processing Integration Results

RT: 6.57
Area: 48878
Amount: 0.505706
Amount Units: ug/mL



Manual Integration Results

RT: 6.57
Area: 1027
Amount: 0.010626
Amount Units: ug/mL



Reviewer: LV5D, 12-Oct-2024 10:12:18 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-197447-1

SDG No.:

Client Sample ID: LL1mw-091-240902-GW | Lab Sample ID: 280-197447-6

Matrix: Water | Lab File ID: 10080060.D

Analysis Method: 8330B | Date Collected: 10/01/2024 12:28

Extraction Method: 3535 | Date Extracted: 10/04/2024 12:25

Sample wt/vol: 444(mL) | Date Analyzed: 10/09/2024 12:00

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 670184 | Units: ug/L

Preparation Batch No.: 669777 | Instrument ID: CHHPLC_X3

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.13	J M J1	0.24	0.23	0.095
99-65-0	1,3-Dinitrobenzene	0.11	U M	0.12	0.11	0.042
118-96-7	2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.051
606-20-2	2,6-Dinitrotoluene	0.090	U	0.11	0.090	0.045
35572-78-2	2-Amino-4,6-dinitrotoluene	0.11	U	0.12	0.11	0.057
88-72-2	2-Nitrotoluene	0.23	U Q	0.24	0.23	0.096
99-08-1	3-Nitrotoluene	0.39	U Q M	0.45	0.39	0.22
19406-51-0	4-Amino-2,6-dinitrotoluene	0.14	U	0.17	0.14	0.065
99-99-0	4-Nitrotoluene	0.45	U Q M	0.46	0.45	0.11
2691-41-0	HMX	0.23	U M	0.24	0.23	0.099
98-95-3	Nitrobenzene	0.23	U	0.24	0.23	0.10
55-63-0	Nitroglycerin	2.3	U	2.4	2.3	1.0
78-11-5	PETN	1.1	U	1.2	1.1	0.50
121-82-4	RDX	0.23	U M	0.24	0.23	0.058

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	96	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\10080060.D
Lims ID: 280-197447-A-6-A
Client ID: LL1mw-091-240902-GW
Sample Type: Client
Inject. Date: 09-Oct-2024 12:00:06 ALS Bottle#: 60 Worklist Smp#: 60
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-197447-A-6-A
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Oct-2024 14:35:47 Calib Date: 04-Oct-2024 19:55:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1609

First Level Reviewer: LV5D Date: 09-Oct-2024 13:12:34

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	4 HMX	1		6.564			ND	U
	8 RDX	1		7.497			ND	U
$	10 1,2-Dinitrobenzene	1	8.362	8.364	-0.002	24959	0.1914	M
	11 1,3,5-Trinitrobenzene	1	8.495	8.464	0.031	2555	0.0118	M
	12 1,3-Dinitrobenzene	1		9.024			ND	U
	13 Nitrobenzene	1		9.344			ND	
	15 Tetryl	1	9.675	9.664	0.011	844	0.005612	M
	16 Nitroglycerin	2		10.110			ND	
	17 2,4,6-Trinitrotoluene	1		10.457			ND	
	18 4-Amino-2,6-dinitrotoluene	1		10.617			ND	
	19 2-Amino-4,6-dinitrotoluene	1		10.850			ND	
	20 2,6-Dinitrotoluene	1		10.984			ND	
	21 2,4-Dinitrotoluene	1	11.135	11.130	0.005	3003	0.0103	M
	22 o-Nitrotoluene	1		11.824			ND	
	23 p-Nitrotoluene	1		12.197			ND	U
	24 m-Nitrotoluene	1		12.697			ND	U
	25 PETN	2		13.764			ND	

QC Flag Legend

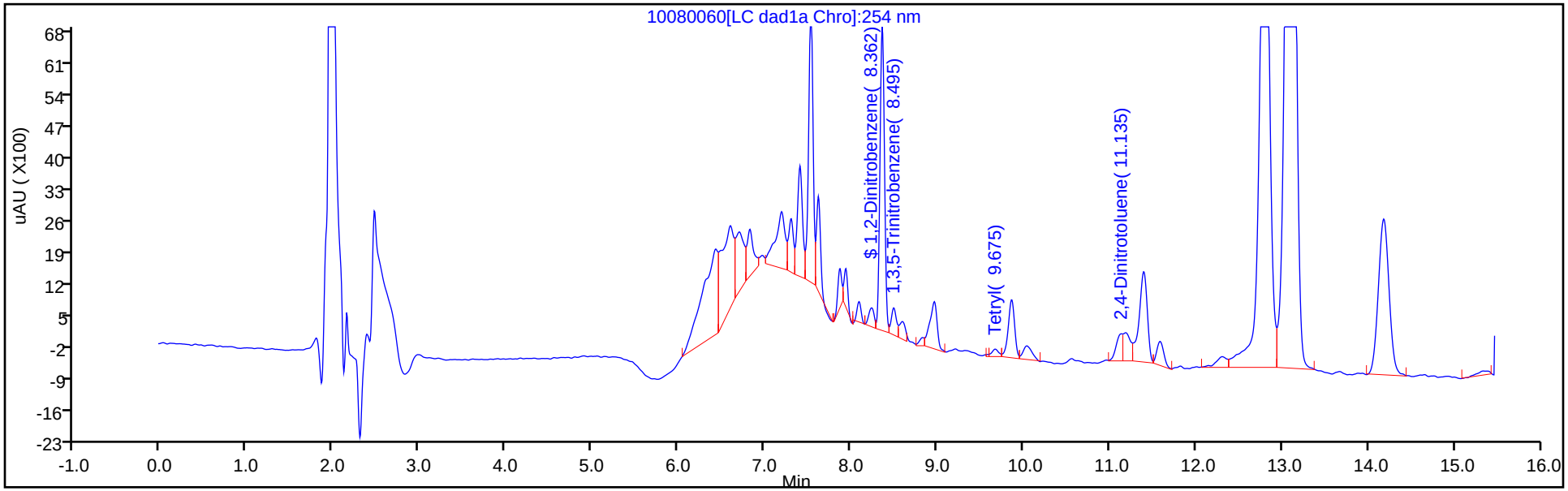
Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 09-Oct-2024 14:46:06 Chrom Revision: 2.3 24-Sep-2024 15:19:46

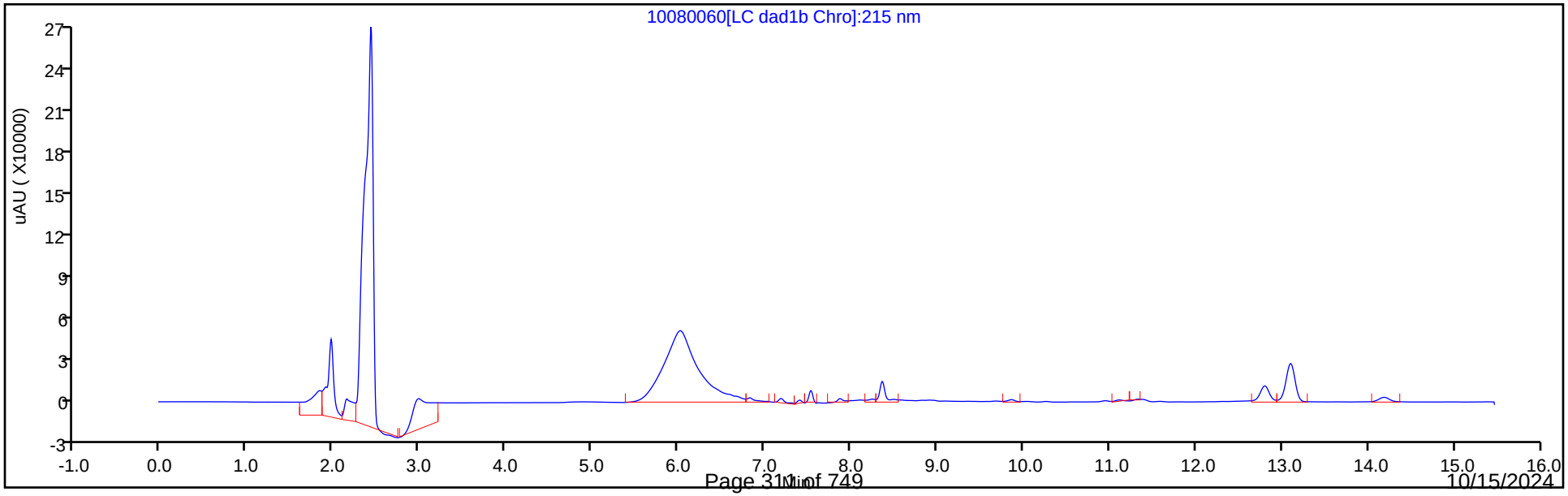
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080060.d				
Injection Date:	09-Oct-2024 12:00:06	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-197447-A-6-A	Lab Sample ID:	280-197447-6	Worklist Smp#:	60
Client ID:	LL1mw-091-240902-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	60
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



10/15/2024
4:48:23 PM

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\10080060.D				
Lims ID:	280-197447-A-6-A				
Client ID:	LL1mw-091-240902-GW				
Sample Type:	Client				
Inject. Date:	09-Oct-2024 12:00:06	ALS Bottle#:	60	Worklist Smp#:	60
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-197447-A-6-A				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	09-Oct-2024 14:35:47	Calib Date:	04-Oct-2024 19:55:02		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1609				

First Level Reviewer: LV5D Date: 09-Oct-2024 13:12:34

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1914	95.69

Manual Integration/User Assign Peak Report

Eurofins Denver

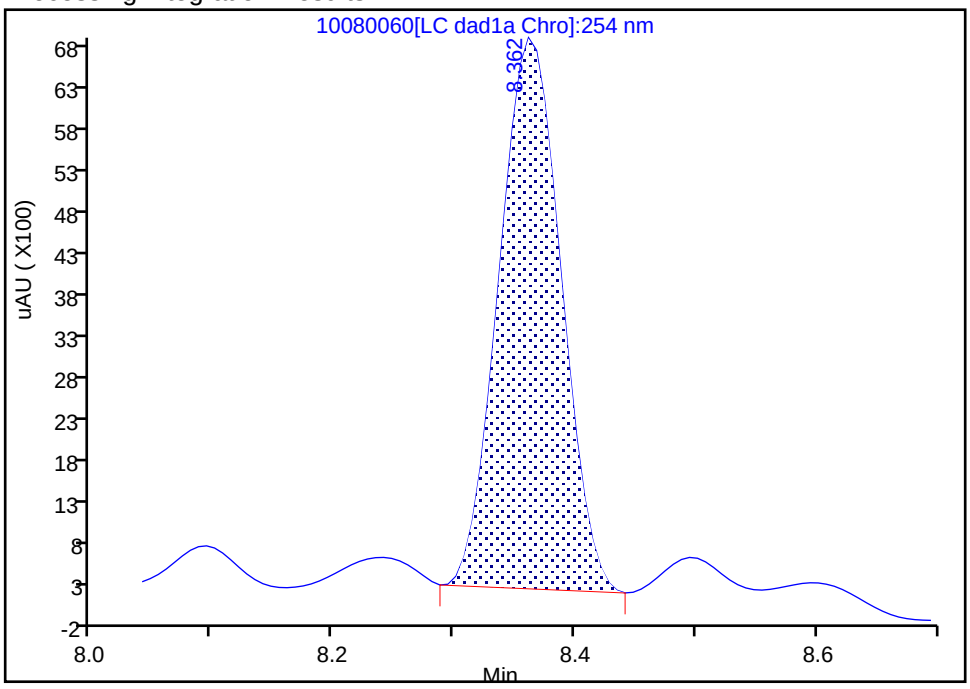
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080060.d				
Injection Date:	09-Oct-2024 12:00:06	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-A-6-A	Lab Sample ID:	280-197447-6		
Client ID:	LL1mw-091-240902-GW				
Operator ID:	JZ	ALS Bottle#:	60	Worklist Smp#:	60
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

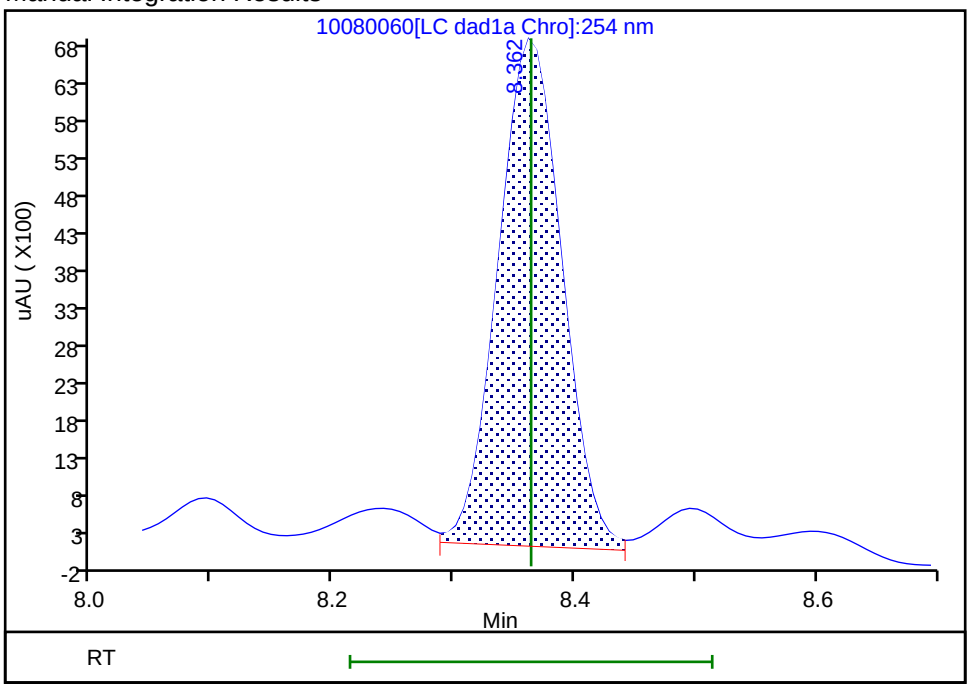
Processing Integration Results

RT: 8.36
Area: 23712
Amount: 0.181827
Amount Units: ug/mL



Manual Integration Results

RT: 8.36
Area: 24959
Amount: 0.191389
Amount Units: ug/mL



Reviewer: LV5D, 09-Oct-2024 13:12:26 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

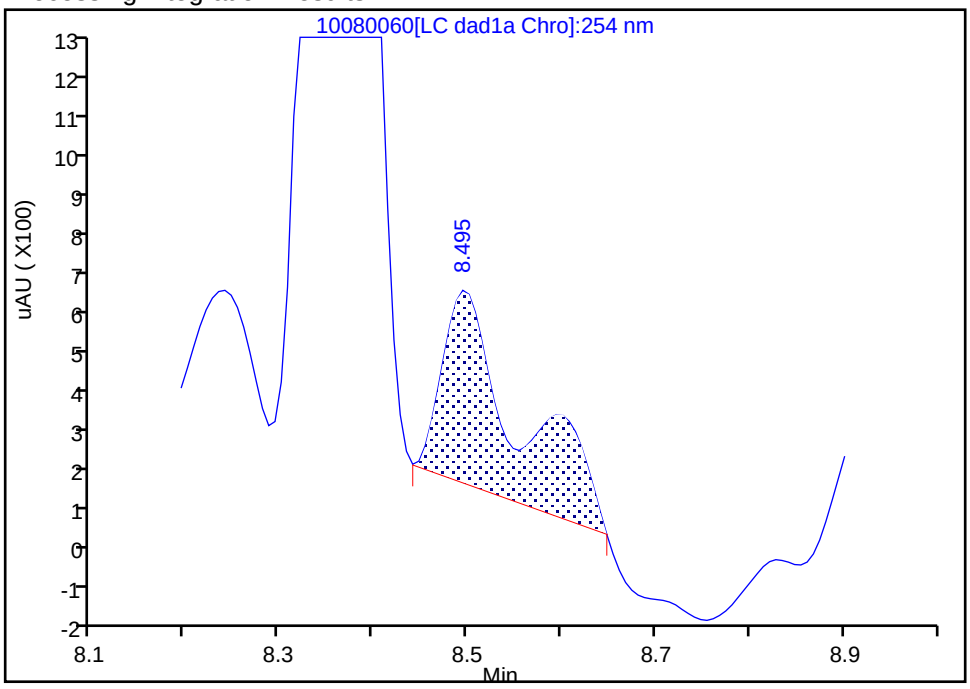
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080060.d				
Injection Date:	09-Oct-2024 12:00:06	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-A-6-A	Lab Sample ID:	280-197447-6		
Client ID:	LL1mw-091-240902-GW				
Operator ID:	JZ	ALS Bottle#:	60	Worklist Smp#:	60
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

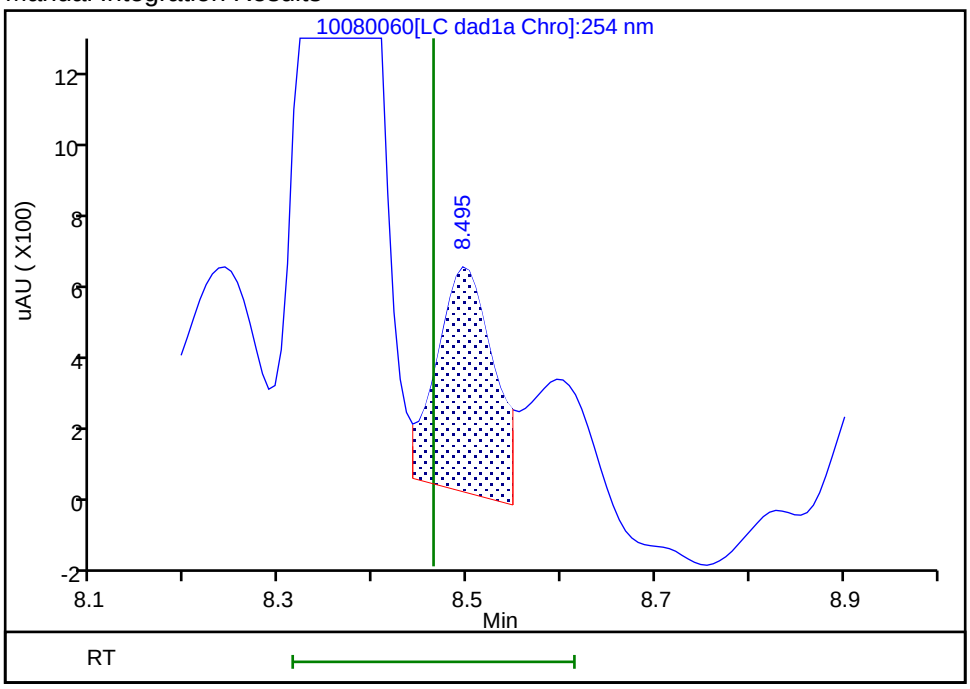
Processing Integration Results

RT: 8.49
Area: 2699
Amount: 0.012418
Amount Units: ug/mL



Manual Integration Results

RT: 8.49
Area: 2555
Amount: 0.011755
Amount Units: ug/mL



Reviewer: LV5D, 09-Oct-2024 13:12:32 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

User Disabled Compound Report

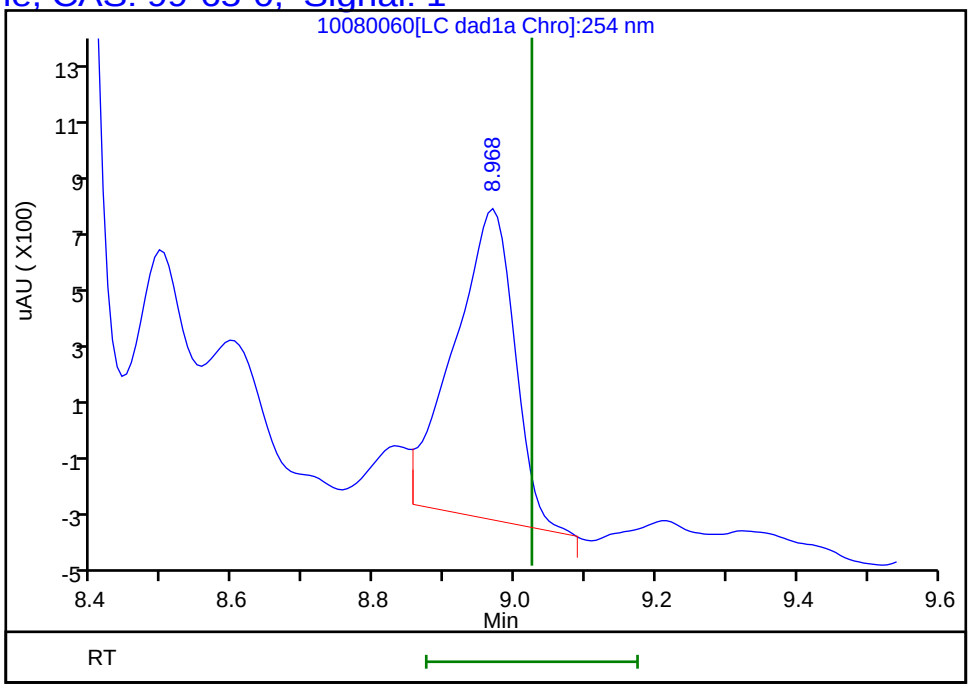
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080060.d
Injection Date: 09-Oct-2024 12:00:06 Instrument ID: CHHPLC_X3
Lims ID: 280-197447-A-6-A Lab Sample ID: 280-197447-6
Client ID: LL1mw-091-240902-GW
Operator ID: JZ ALS Bottle#: 60 Worklist Smp#: 60
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

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

RT: 8.97
Response: 6246
Amount: 0.020943



Reviewer: LV5D, 09-Oct-2024 13:12:34
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

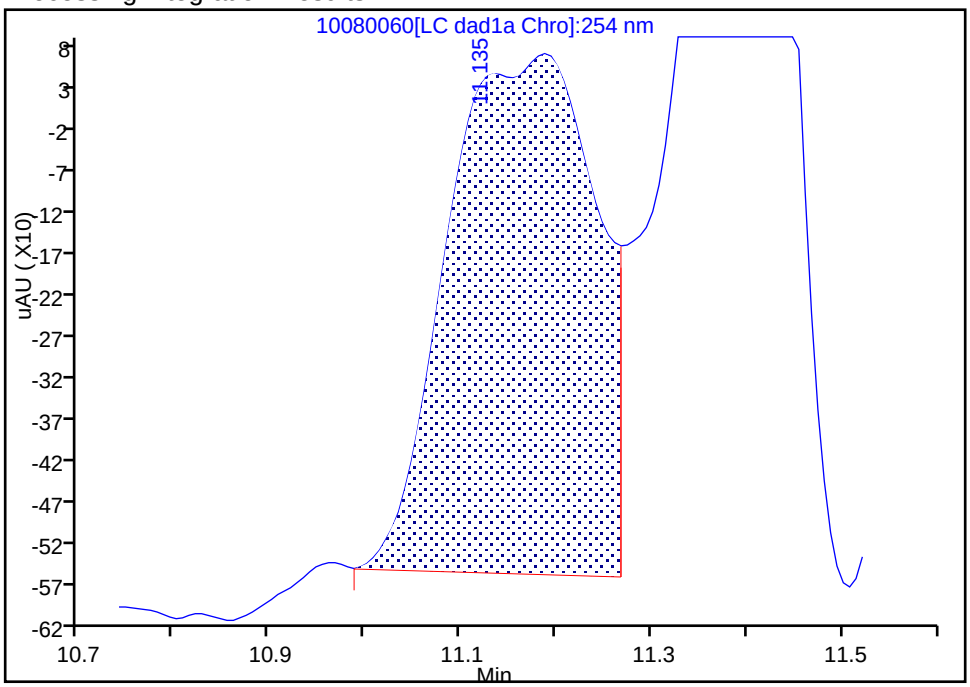
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080060.d				
Injection Date:	09-Oct-2024 12:00:06	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-A-6-A	Lab Sample ID:	280-197447-6		
Client ID:	LL1mw-091-240902-GW				
Operator ID:	JZ	ALS Bottle#:	60	Worklist Smp#:	60
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

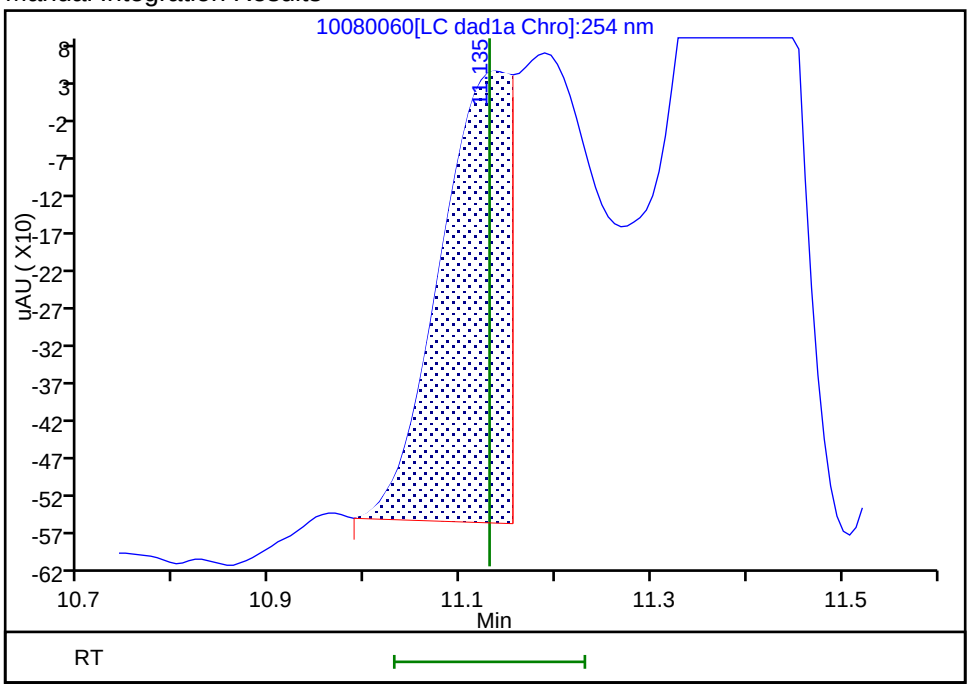
Processing Integration Results

RT: 11.13
Area: 6666
Amount: 0.022843
Amount Units: ug/mL



Manual Integration Results

RT: 11.13
Area: 3003
Amount: 0.010291
Amount Units: ug/mL



Reviewer: LV5D, 09-Oct-2024 13:12:10 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

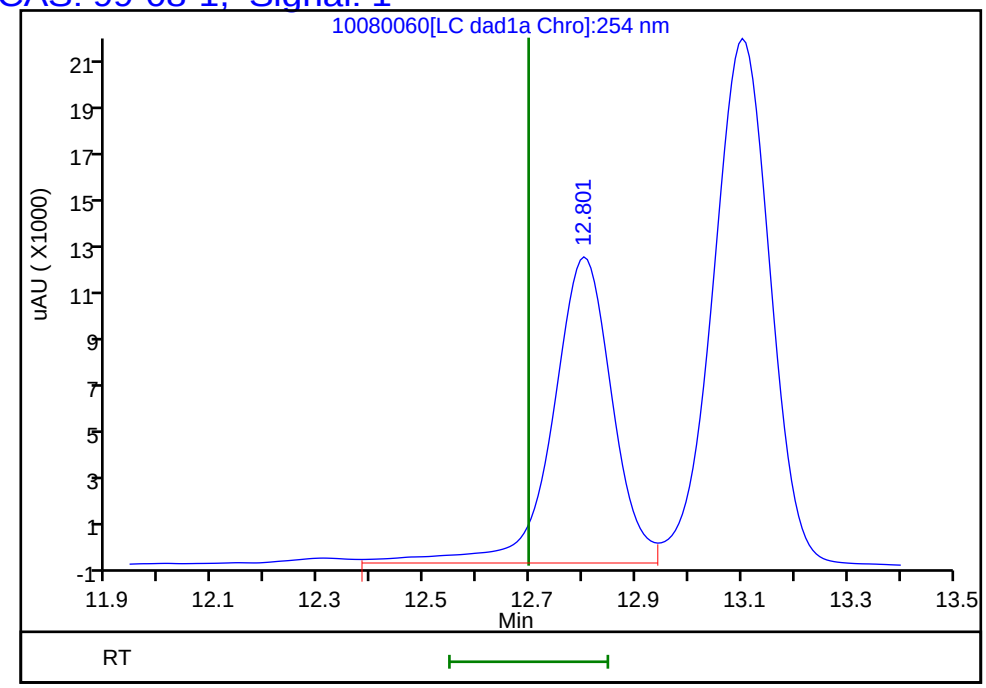
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080060.d				
Injection Date:	09-Oct-2024 12:00:06	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-A-6-A	Lab Sample ID:	280-197447-6		
Client ID:	LL1mw-091-240902-GW				
Operator ID:	JZ	ALS Bottle#:	60	Worklist Smp#:	60
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

24 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 12.80
Response: 104016
Amount: 0.767958



Reviewer: LV5D, 09-Oct-2024 13:12:34
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

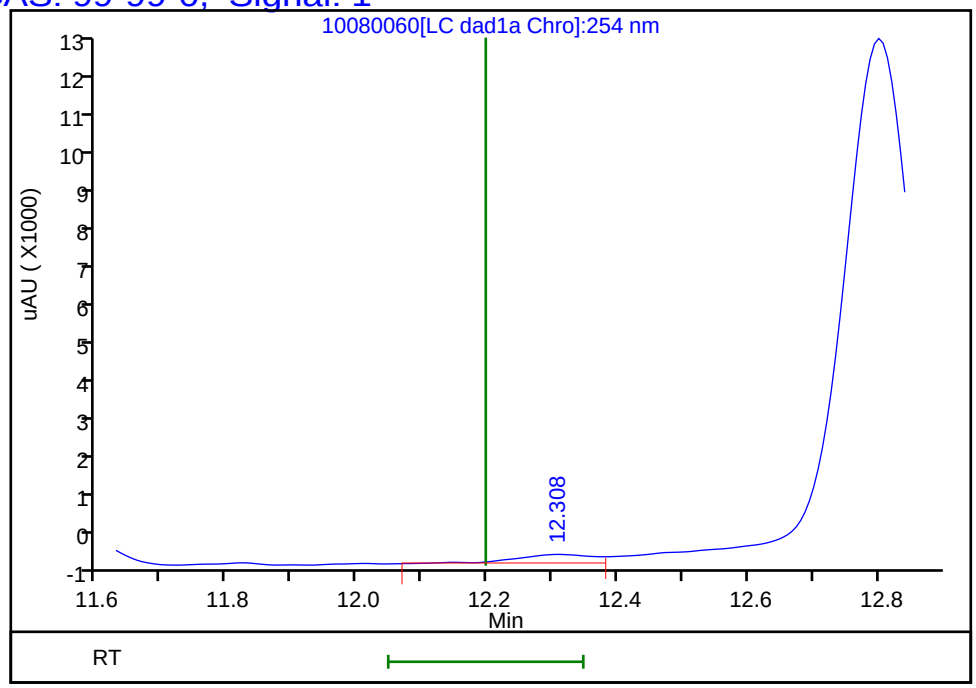
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080060.d				
Injection Date:	09-Oct-2024 12:00:06	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-A-6-A	Lab Sample ID:	280-197447-6		
Client ID:	LL1mw-091-240902-GW				
Operator ID:	JZ	ALS Bottle#:	60	Worklist Smp#:	60
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

23 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 12.31
Response: 2083
Amount: 0.017845



Reviewer: LV5D, 09-Oct-2024 13:12:34
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

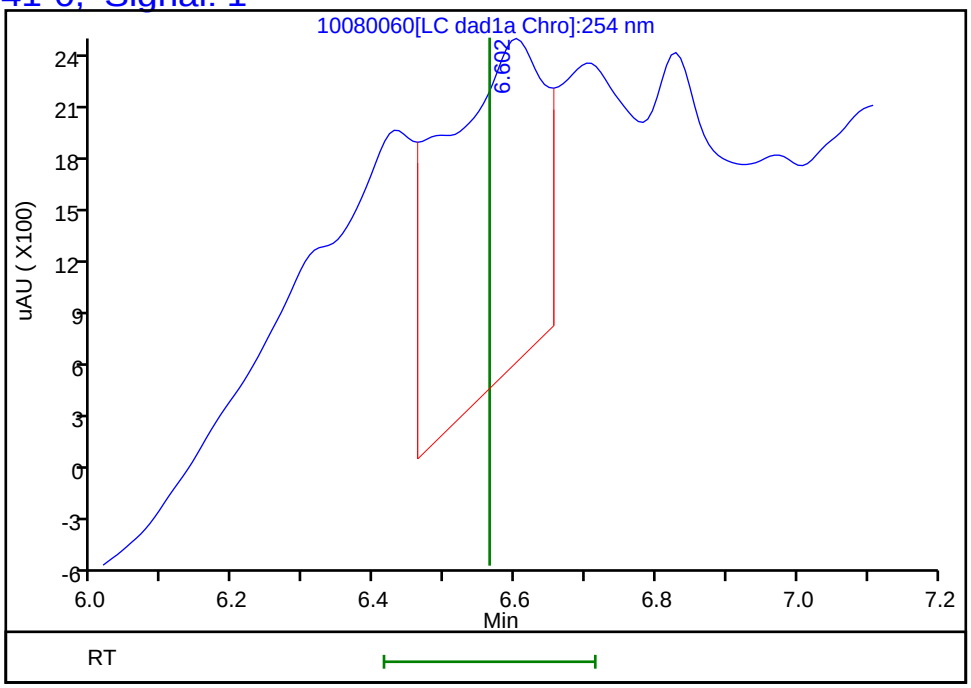
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080060.d
Injection Date: 09-Oct-2024 12:00:06 Instrument ID: CHHPLC_X3
Lims ID: 280-197447-A-6-A Lab Sample ID: 280-197447-6
Client ID: LL1mw-091-240902-GW
Operator ID: JZ ALS Bottle#: 60 Worklist Smp#: 60
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

4 HMX, CAS: 2691-41-0, Signal: 1

RT: 6.60
Response: 19423
Amount: 0.200956



Reviewer: LV5D, 09-Oct-2024 13:12:34
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

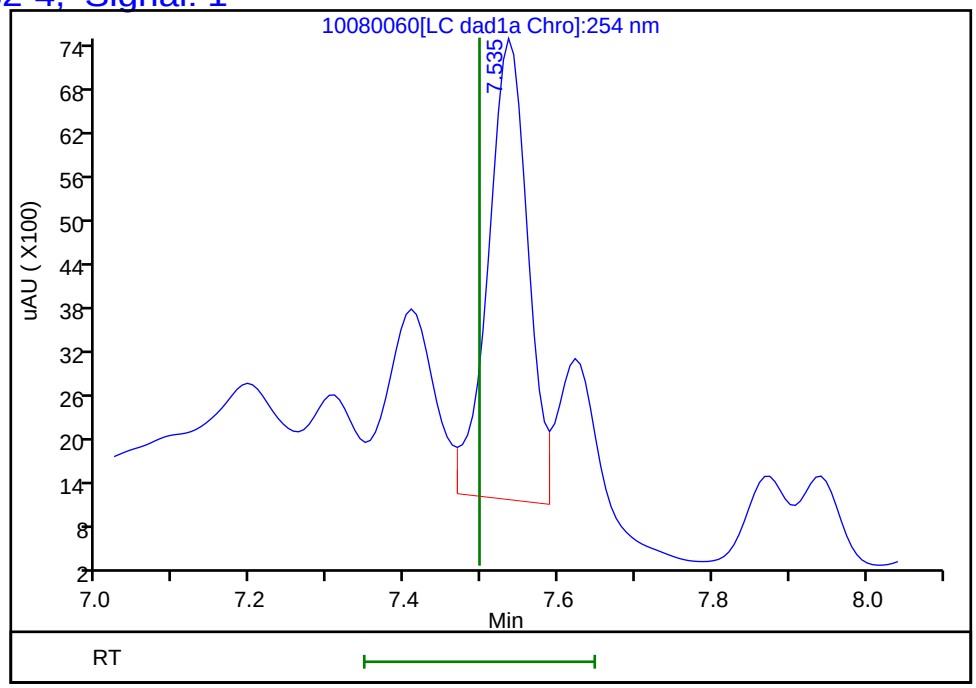
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080060.d
Injection Date: 09-Oct-2024 12:00:06 Instrument ID: CHHPLC_X3
Lims ID: 280-197447-A-6-A Lab Sample ID: 280-197447-6
Client ID: LL1mw-091-240902-GW
Operator ID: JZ ALS Bottle#: 60 Worklist Smp#: 60
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

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

RT: 7.53
Response: 22520
Amount: 0.213164



Reviewer: LV5D, 09-Oct-2024 13:12:34
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

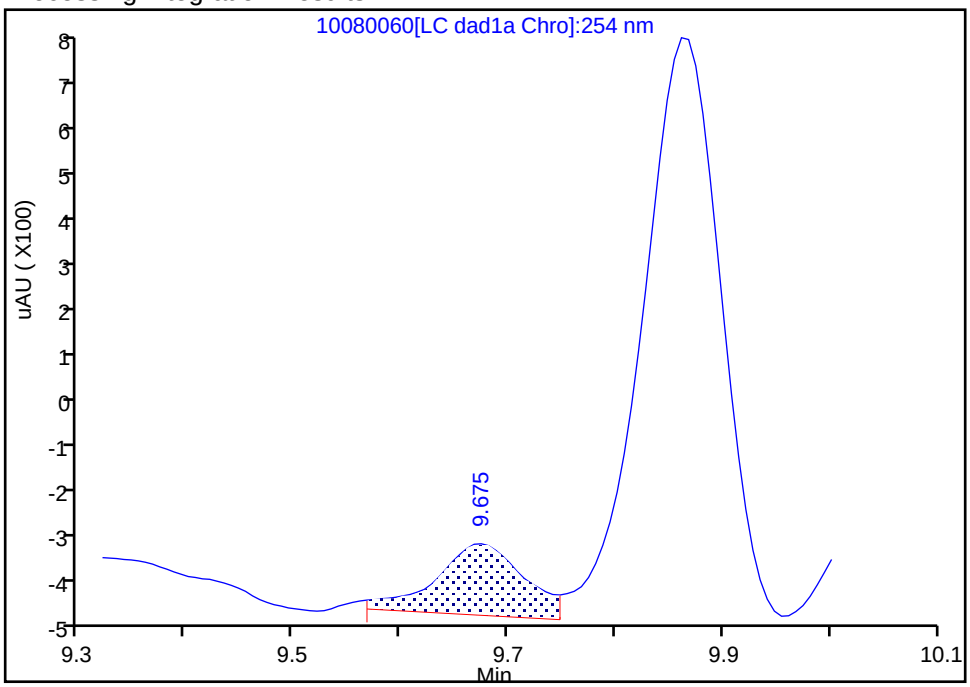
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080060.d				
Injection Date:	09-Oct-2024 12:00:06	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-A-6-A	Lab Sample ID:	280-197447-6		
Client ID:	LL1mw-091-240902-GW				
Operator ID:	JZ	ALS Bottle#:	60	Worklist Smp#:	60
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

15 Tetryl, CAS: 479-45-8

Signal: 1

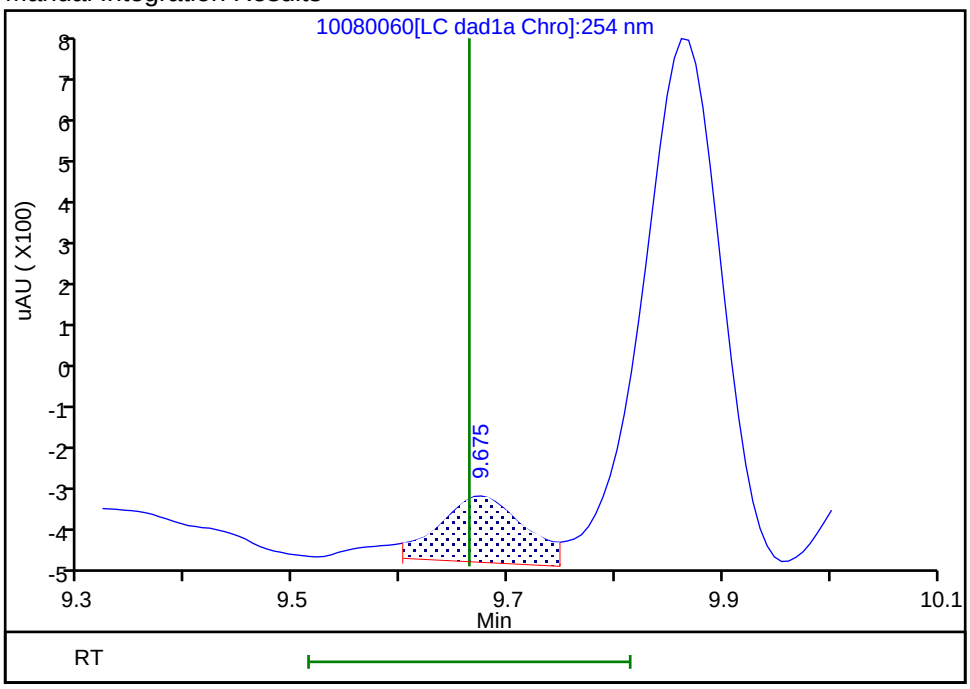
Processing Integration Results

RT: 9.67
Area: 904
Amount: 0.005963
Amount Units: ug/mL



Manual Integration Results

RT: 9.67
Area: 844
Amount: 0.005612
Amount Units: ug/mL



Reviewer: LV5D, 09-Oct-2024 13:12:15 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-197447-1

SDG No.:

Client Sample ID: LL1mw-091-240902-GW | Lab Sample ID: 280-197447-6

Matrix: Water | Lab File ID: 10090021.D

Analysis Method: 8330B | Date Collected: 10/01/2024 12:28

Extraction Method: 3535 | Date Extracted: 10/04/2024 12:25

Sample wt/vol: 444(mL) | Date Analyzed: 10/10/2024 02:55

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: Luna-phenylhex ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 670394 | Units: ug/L

Preparation Batch No.: 669777 | Instrument ID: CHHPLC_X5

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	*1,3,5-Trinitrobenzene*	*0.78*	*J1*	*0.24*	0.23	*0.095*
121-14-2	2,4-Dinitrotoluene	0.090	U	0.11	0.090	0.031
479-45-8	Tetryl	0.11	U	0.12	0.11	0.036

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	96	*M*	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20241009-138425.b\10090021.D
Lims ID: 280-197447-A-6-A
Client ID: LL1mw-091-240902-GW
Sample Type: Client
Inject. Date: 10-Oct-2024 02:55:07 ALS Bottle#: 21 Worklist Smp#: 21
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-197447-A-6-A
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20241009-138425.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 10-Oct-2024 15:42:18 Calib Date: 11-Aug-2024 06:16:04
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1604

First Level Reviewer: LV5D Date: 10-Oct-2024 15:41:59

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	5 HMX	1		6.270			ND	U
	8 RDX	1		8.370			ND	
	9 Nitrobenzene	1		10.930			ND	U
$	10 1,2-Dinitrobenzene	1	11.724	11.730	-0.006	50657	0.1930	M
	12 1,3-Dinitrobenzene	1	13.724	13.750	-0.026	20479	0.0350	
	13 Nitroglycerin	2		14.390			ND	
	14 o-Nitrotoluene	1		14.930			ND	
	16 p-Nitrotoluene	1		15.156			ND	U
	17 4-Amino-2,6-dinitrotoluene	1		15.476			ND	U
	18 m-Nitrotoluene	1		15.976			ND	
	19 2-Amino-4,6-dinitrotoluene	1		16.210			ND	
	20 1,3,5-Trinitrobenzene	1	16.464	16.450	0.014	29268	0.0691	
	21 2,6-Dinitrotoluene	1		17.576			ND	
	22 2,4-Dinitrotoluene	1		18.003			ND	
	23 Tetryl	1		20.970			ND	
	24 2,4,6-Trinitrotoluene	1		21.863			ND	
	25 PETN	2		23.310			ND	

QC Flag Legend

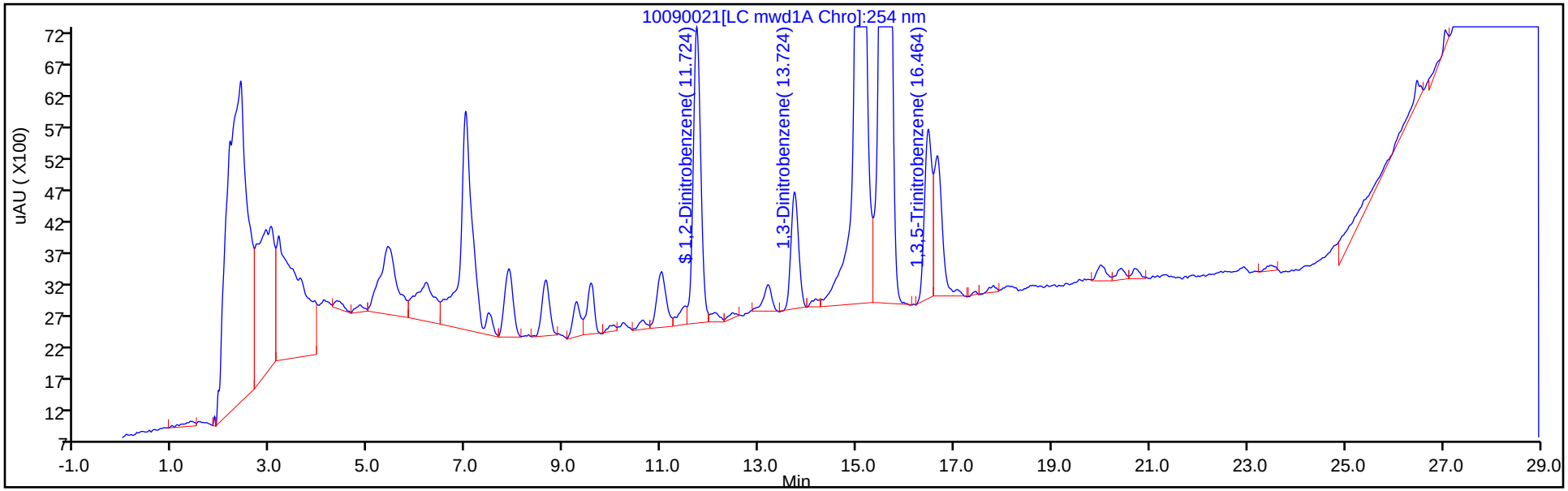
Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 12-Oct-2024 16:19:05 Chrom Revision: 2.3 24-Sep-2024 15:19:46

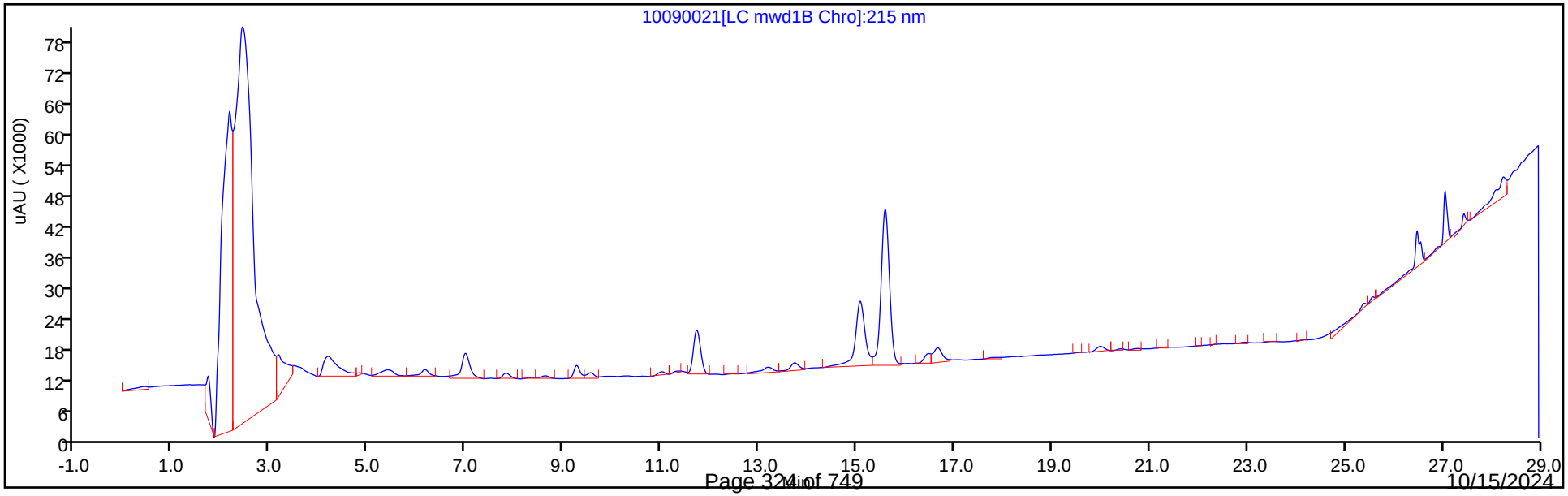
Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20241009-138425.b\10090021.D				
Injection Date:	10-Oct-2024 02:55:07	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-197447-A-6-A	Lab Sample ID:	280-197447-6	Worklist Smp#:	21
Client ID:	LL1mw-091-240902-GW				
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: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20241009-138425.b\10090021.D				
Lims ID:	280-197447-A-6-A				
Client ID:	LL1mw-091-240902-GW				
Sample Type:	Client				
Inject. Date:	10-Oct-2024 02:55:07	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-197447-A-6-A				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20241009-138425.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	10-Oct-2024 15:42:18	Calib Date:	11-Aug-2024 06:16:04		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1604				

First Level Reviewer: LV5D Date: 10-Oct-2024 15:41:59

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1930	96.49

Manual Integration/User Assign Peak Report

Eurofins Denver

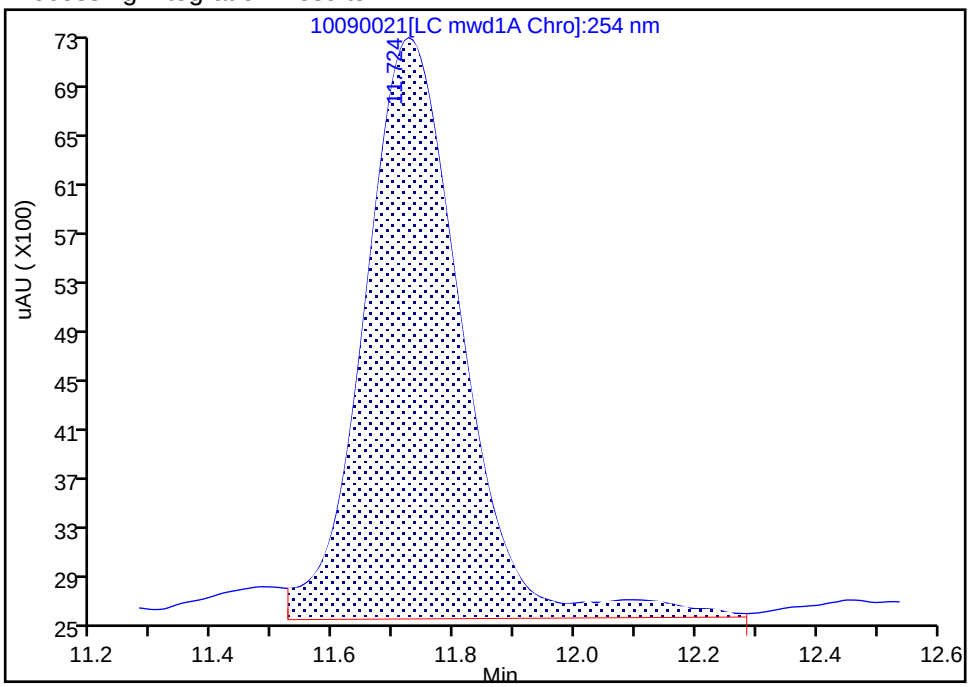
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20241009-138425.b\10090021.D				
Injection Date:	10-Oct-2024 02:55:07	Instrument ID:	CHHPLC_X5		
Lims ID:	280-197447-A-6-A	Lab Sample ID:	280-197447-6		
Client ID:	LL1mw-091-240902-GW				
Operator ID:	JZ	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

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

Signal: 1

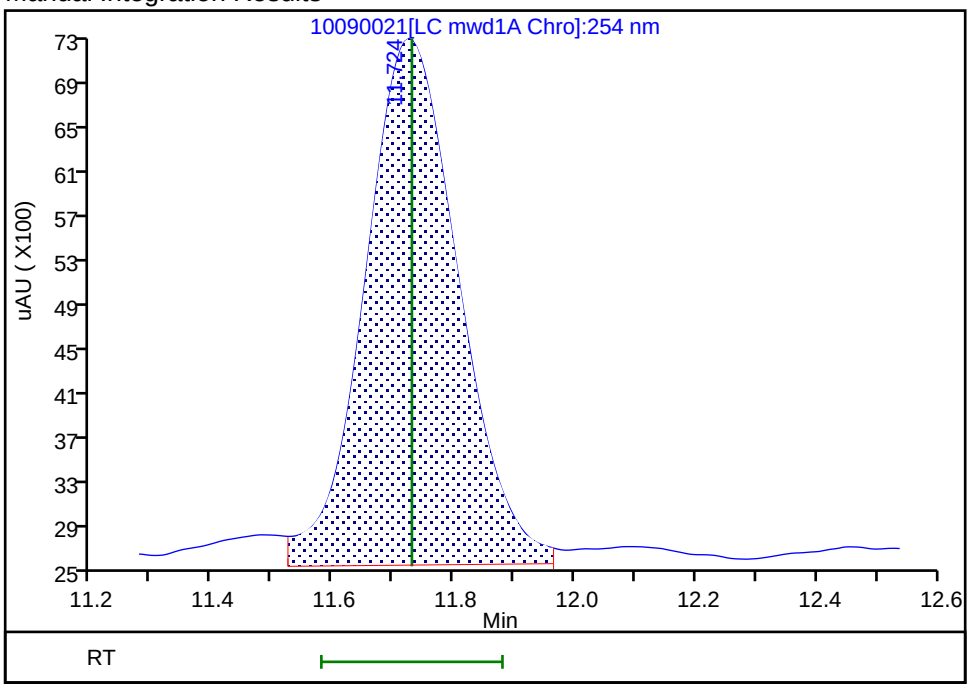
Processing Integration Results

RT: 11.72
Area: 52696
Amount: 0.200755
Amount Units: ug/ml



Manual Integration Results

RT: 11.72
Area: 50657
Amount: 0.192988
Amount Units: ug/ml



Reviewer: LV5D, 10-Oct-2024 15:41:57 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

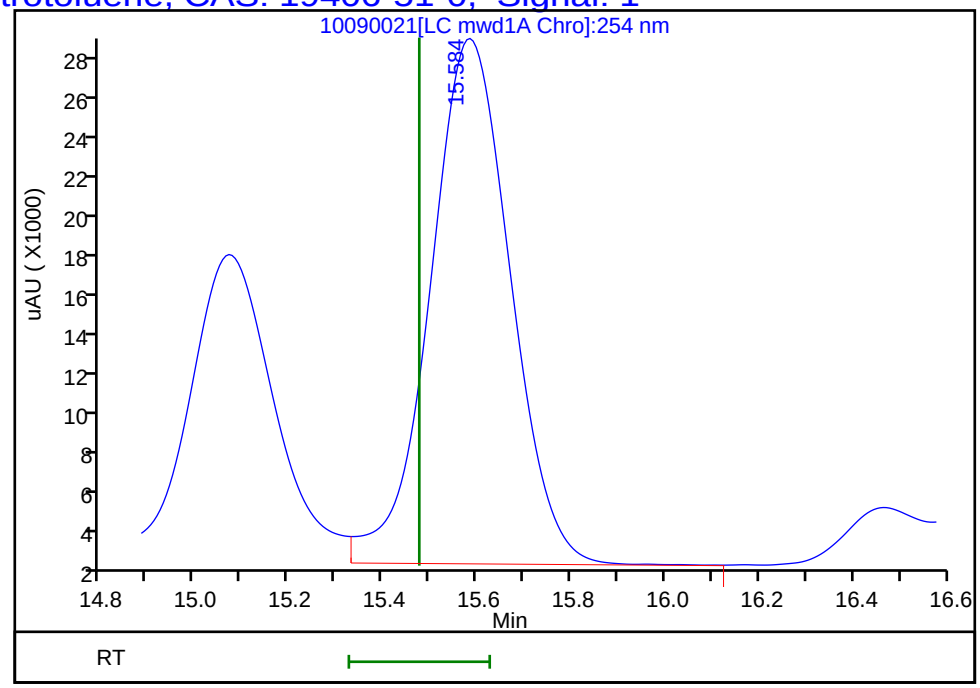
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20241009-138425.b\10090021.D				
Injection Date:	10-Oct-2024 02:55:07	Instrument ID:	CHHPLC_X5		
Lims ID:	280-197447-A-6-A	Lab Sample ID:	280-197447-6		
Client ID:	LL1mw-091-240902-GW				
Operator ID:	JZ	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

17 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0, Signal: 1

RT: 15.58
Response: 303194
Amount: 1.088325



Reviewer: LV5D, 10-Oct-2024 15:41:59
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

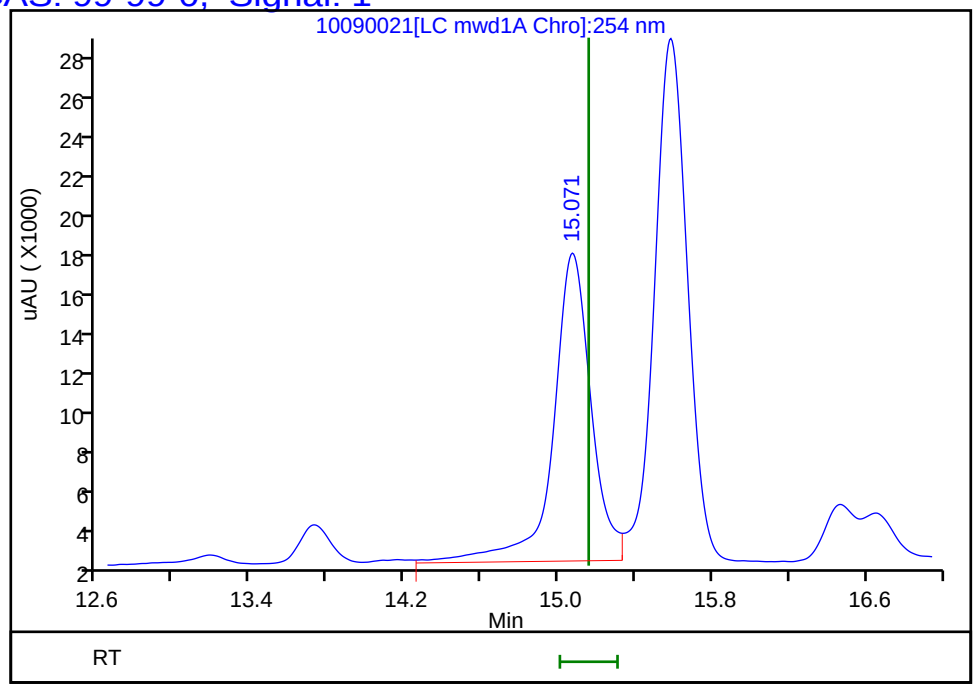
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20241009-138425.b\10090021.D				
Injection Date:	10-Oct-2024 02:55:07	Instrument ID:	CHHPLC_X5		
Lims ID:	280-197447-A-6-A	Lab Sample ID:	280-197447-6		
Client ID:	LL1mw-091-240902-GW				
Operator ID:	JZ	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

16 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 15.07
Response: 205184
Amount: 0.969355



Reviewer: LV5D, 10-Oct-2024 15:41:59
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

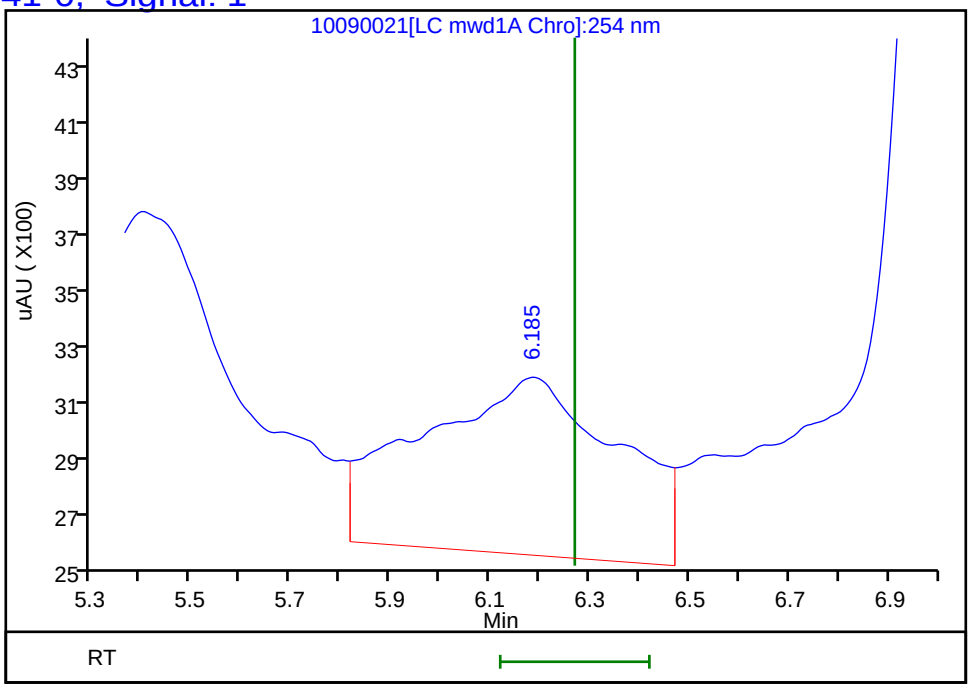
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20241009-138425.b\10090021.D				
Injection Date:	10-Oct-2024 02:55:07	Instrument ID:	CHHPLC_X5		
Lims ID:	280-197447-A-6-A	Lab Sample ID:	280-197447-6		
Client ID:	LL1mw-091-240902-GW				
Operator ID:	JZ	ALS Bottle#:	21	Worklist Smp#:	21
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: 6.18
Response: 16803
Amount: 0.093175



Reviewer: LV5D, 10-Oct-2024 15:41:59
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

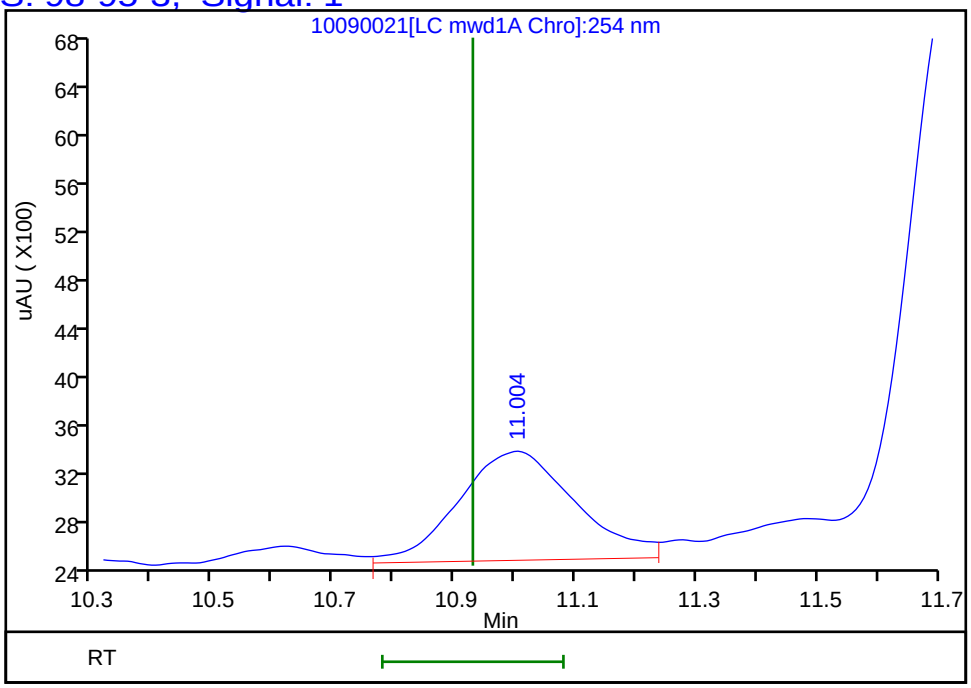
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20241009-138425.b\10090021.D				
Injection Date:	10-Oct-2024 02:55:07	Instrument ID:	CHHPLC_X5		
Lims ID:	280-197447-A-6-A	Lab Sample ID:	280-197447-6		
Client ID:	LL1mw-091-240902-GW				
Operator ID:	JZ	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

9 Nitrobenzene, CAS: 98-95-3, Signal: 1

RT: 11.00
Response: 11598
Amount: 0.030769



Reviewer: LV5D, 10-Oct-2024 15:41:59
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-197447-1

SDG No.:

Client Sample ID: LL1mw-091-240902-GW RE | Lab Sample ID: 280-197447-6 RE

Matrix: Water | Lab File ID: 10110031.D

Analysis Method: 8330B | Date Collected: 10/01/2024 12:28

Extraction Method: 3535 | Date Extracted: 10/11/2024 12:06

Sample wt/vol: 462.9(mL) | Date Analyzed: 10/12/2024 00:53

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 670729 | Units: ug/L

Preparation Batch No.: 670642 | Instrument ID: CHHPLC_X3

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
88-72-2	*2-Nitrotoluene*	*0.22*	*U H*	*0.23*	0.22	*0.092*
99-08-1	*3-Nitrotoluene*	*0.38*	*U H*	*0.43*	0.38	*0.21*
99-99-0	*4-Nitrotoluene*	*0.43*	*U H*	*0.44*	0.43	*0.11*

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

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20241011-138518.b\10110031.D
Lims ID: 280-197447-B-6-A RE
Client ID: LL1mw-091-240902-GW
Sample Type: Client
Inject. Date: 12-Oct-2024 00:53:34 ALS Bottle#: 31 Worklist Smp#: 31
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-197447-B-6-A
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20241011-138518.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 12-Oct-2024 10:13:32 Calib Date: 04-Oct-2024 19:55:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1603

First Level Reviewer: LV5D Date: 12-Oct-2024 10:13:01

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4	HMX	1	6.579	6.572	0.007	841	0.008701	M
8	RDX	1	7.519	7.498	0.021	12791	0.1204	M
$ 10	1,2-Dinitrobenzene	1	8.359	8.365	-0.006	25171	0.1930	
11	1,3,5-Trinitrobenzene	1	8.499	8.465	0.034	1526	0.007021	M
12	1,3-Dinitrobenzene	1		9.032			ND	U
13	Nitrobenzene	1		9.345			ND	
15	Tetryl	1	9.679	9.672	0.007	379	0.002898	7M
16	Nitroglycerin	2		10.118			ND	
17	2,4,6-Trinitrotoluene	1		10.472			ND	
18	4-Amino-2,6-dinitrotoluene	1		10.632			ND	
19	2-Amino-4,6-dinitrotoluene	1		10.858			ND	
20	2,6-Dinitrotoluene	1		10.992			ND	
21	2,4-Dinitrotoluene	1	11.172	11.145	0.027	2338	0.008012	M
22	o-Nitrotoluene	1		11.832			ND	
23	p-Nitrotoluene	1		12.198			ND	
24	m-Nitrotoluene	1		12.705			ND	
25	PETN	2		13.772			ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

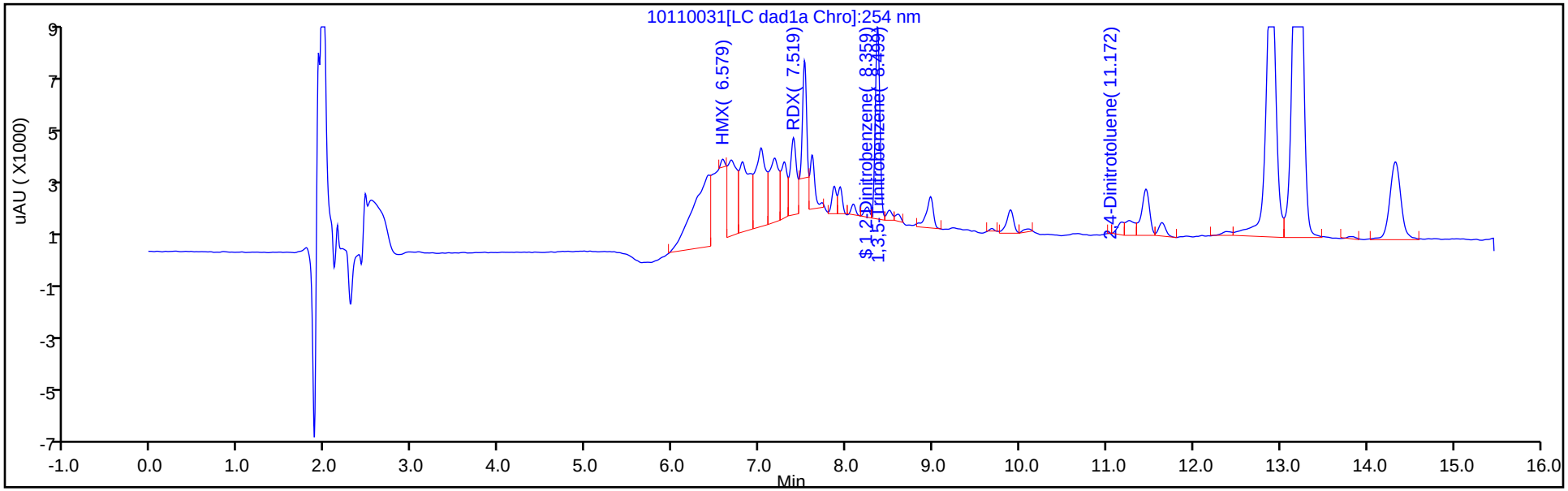
Report Date: 12-Oct-2024 10:13:39 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Denver

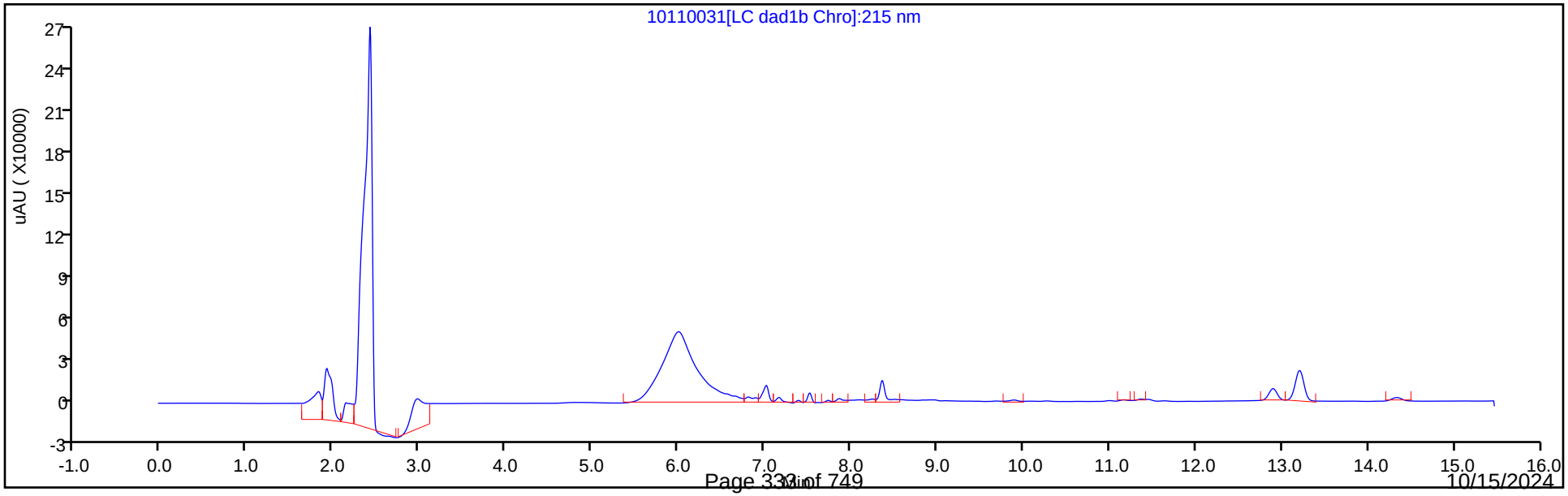
Data File: \\chromfs\denver\chromdata\chhplc_x\20241011-138518.b\10110031.d

Injection Date:	12-Oct-2024 00:53:34	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-197447-B-6-A RE	Lab Sample ID:	280-197447-6	Worklist Smp#:	31
Client ID:	LL1mw-091-240902-GW				
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



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20241011-138518.b\10110031.D				
Lims ID:	280-197447-B-6-A RE				
Client ID:	LL1mw-091-240902-GW				
Sample Type:	Client				
Inject. Date:	12-Oct-2024 00:53:34	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-197447-B-6-A				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20241011-138518.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	12-Oct-2024 10:13:32	Calib Date:	04-Oct-2024 19:55:02		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1603				

First Level Reviewer: LV5D Date: 12-Oct-2024 10:13:01

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1930	96.51

Manual Integration/User Assign Peak Report

Eurofins Denver

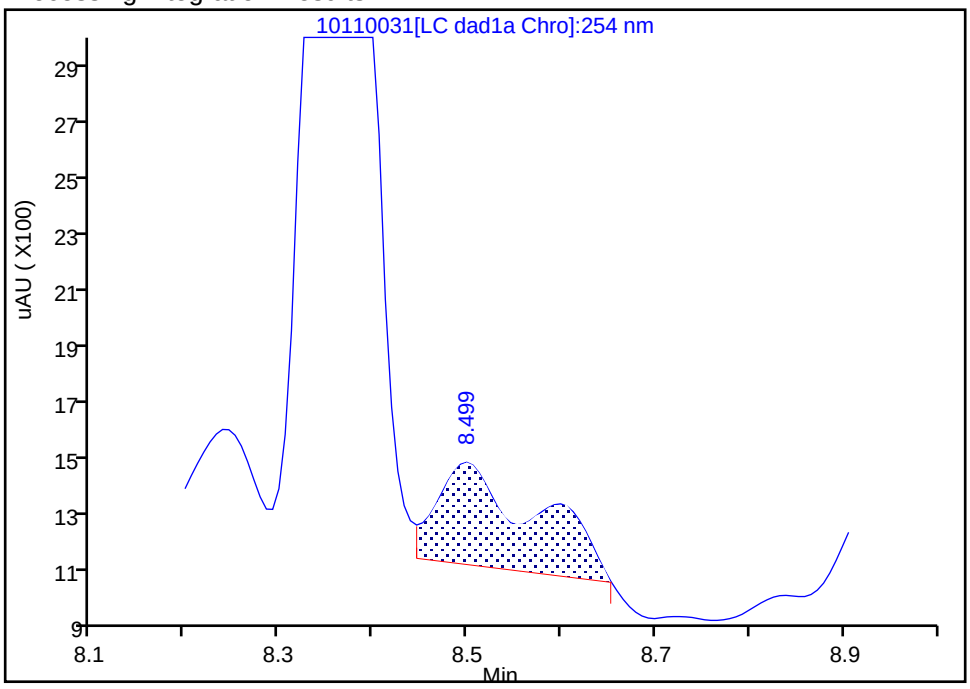
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241011-138518.b\10110031.d				
Injection Date:	12-Oct-2024 00:53:34	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-B-6-A RE	Lab Sample ID:	280-197447-6		
Client ID:	LL1mw-091-240902-GW				
Operator ID:	JZ	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

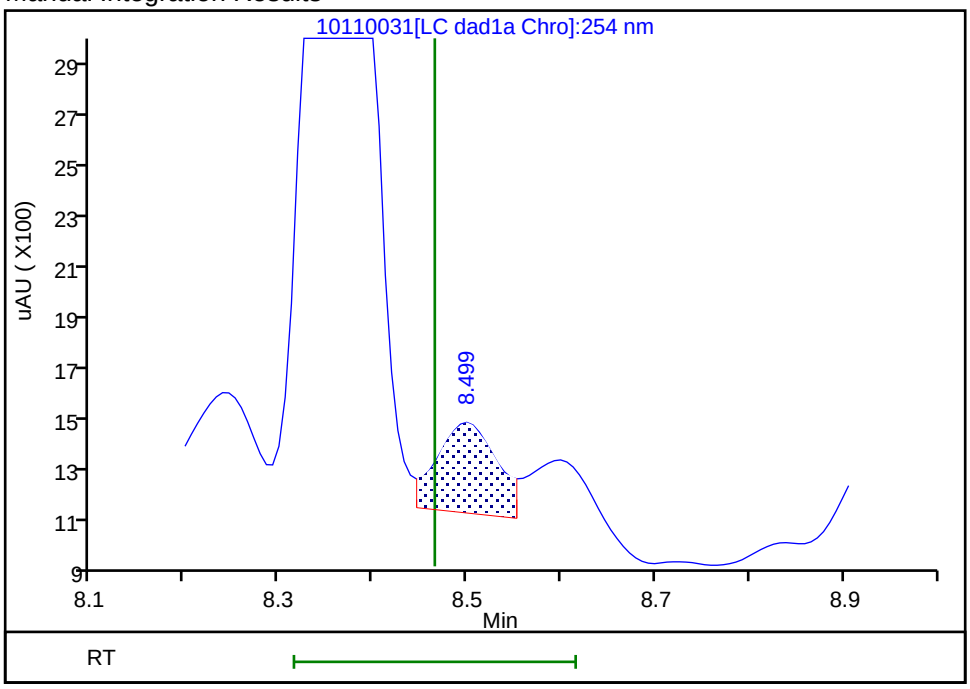
Processing Integration Results

RT: 8.50
Area: 2563
Amount: 0.011792
Amount Units: ug/mL



Manual Integration Results

RT: 8.50
Area: 1526
Amount: 0.007021
Amount Units: ug/mL



Reviewer: LV5D, 12-Oct-2024 10:13:00 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

User Disabled Compound Report

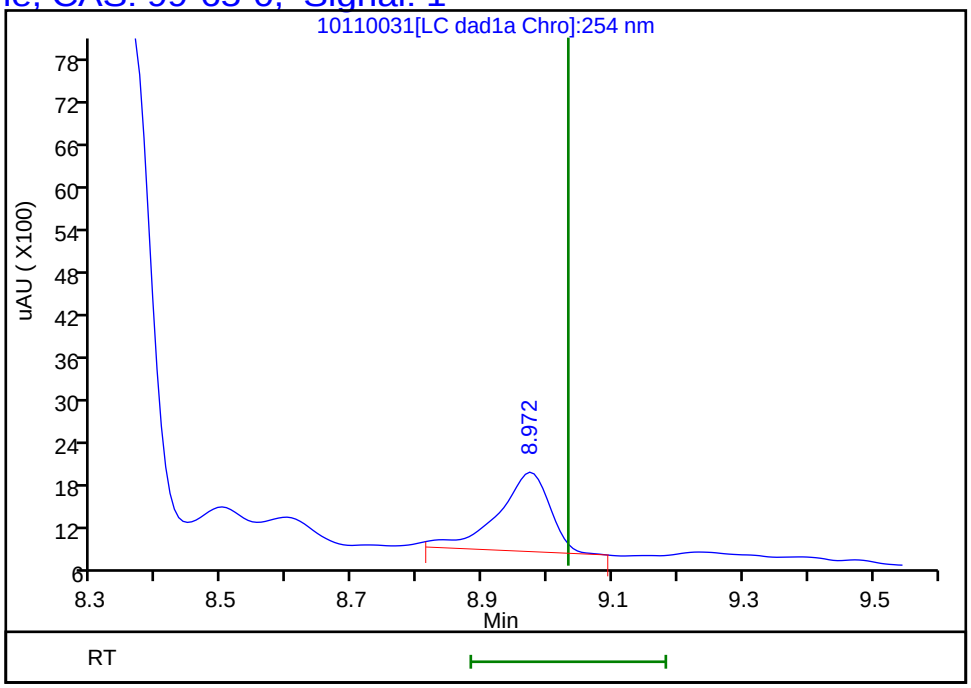
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20241011-138518.b\10110031.d
Injection Date: 12-Oct-2024 00:53:34 Instrument ID: CHHPLC_X3
Lims ID: 280-197447-B-6-A RE Lab Sample ID: 280-197447-6
Client ID: LL1mw-091-240902-GW
Operator ID: JZ ALS Bottle#: 31 Worklist Smp#: 31
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

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

RT: 8.97
Response: 6340
Amount: 0.021259



Reviewer: LV5D, 12-Oct-2024 10:13:01
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

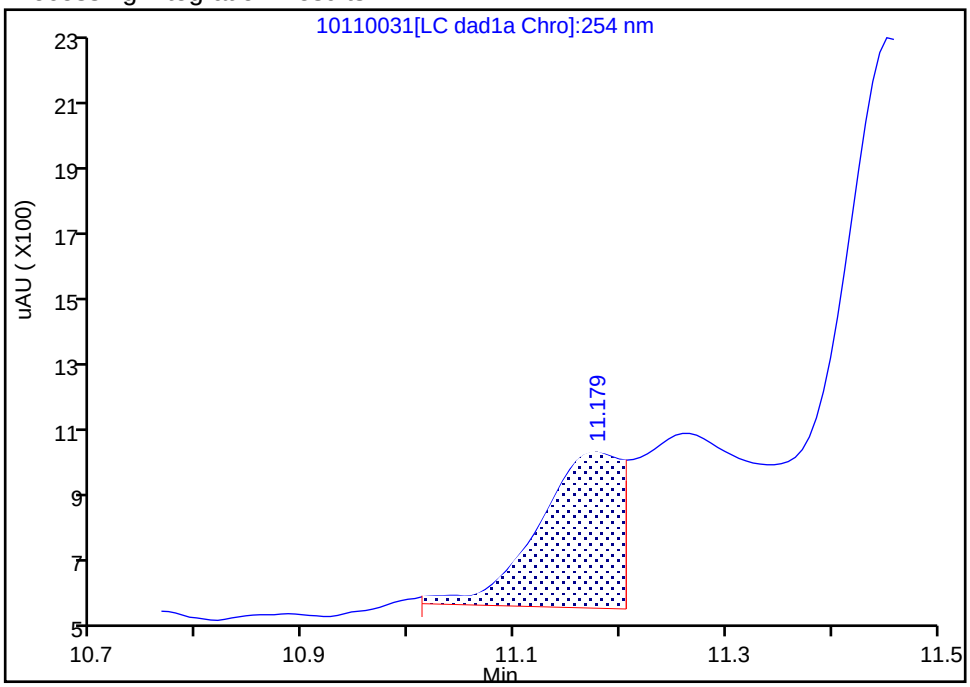
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241011-138518.b\10110031.d				
Injection Date:	12-Oct-2024 00:53:34	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-B-6-A RE	Lab Sample ID:	280-197447-6		
Client ID:	LL1mw-091-240902-GW				
Operator ID:	JZ	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	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		

21 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

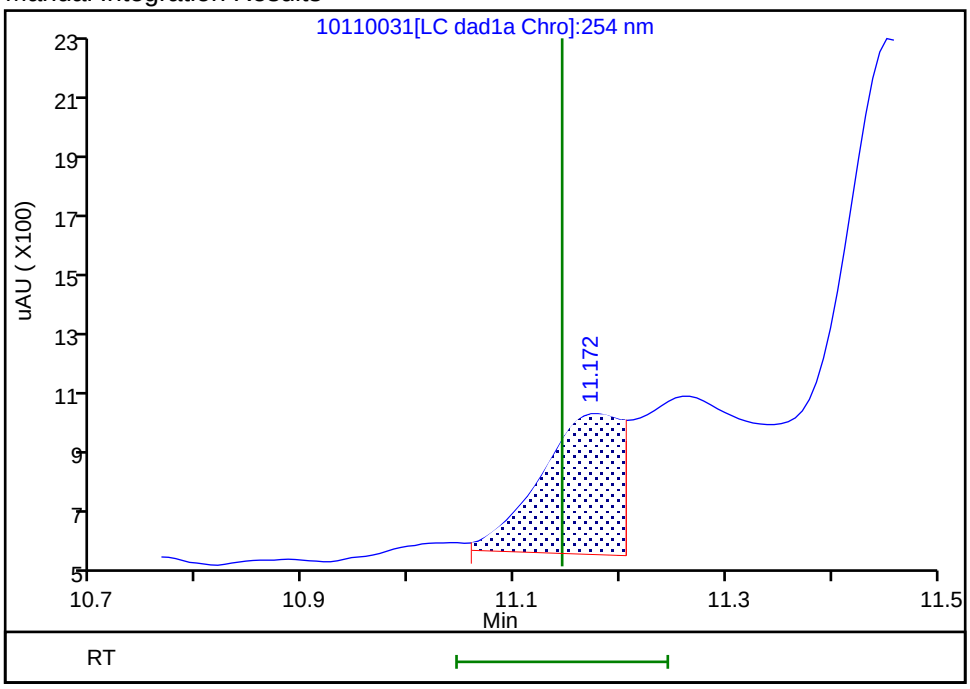
Processing Integration Results

RT: 11.18
Area: 2411
Amount: 0.008262
Amount Units: ug/mL



Manual Integration Results

RT: 11.17
Area: 2338
Amount: 0.008012
Amount Units: ug/mL



Reviewer: LV5D, 12-Oct-2024 10:12:37 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

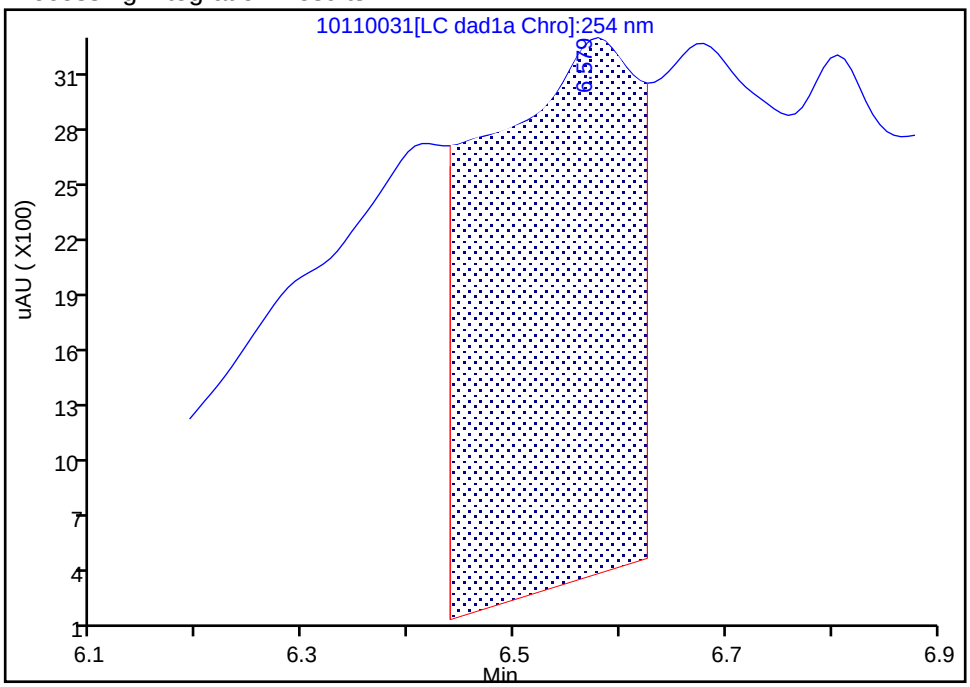
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241011-138518.b\10110031.d				
Injection Date:	12-Oct-2024 00:53:34	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-B-6-A RE	Lab Sample ID:	280-197447-6		
Client ID:	LL1mw-091-240902-GW				
Operator ID:	JZ	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

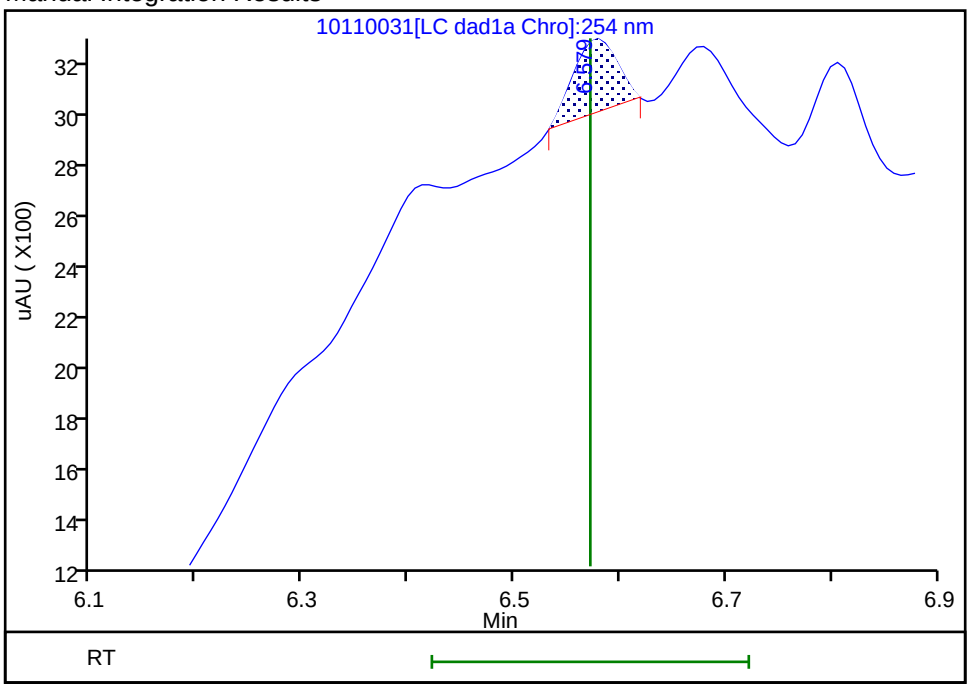
Processing Integration Results

RT: 6.58
Area: 29721
Amount: 0.307502
Amount Units: ug/mL



Manual Integration Results

RT: 6.58
Area: 841
Amount: 0.008701
Amount Units: ug/mL



Reviewer: LV5D, 12-Oct-2024 10:12:49 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

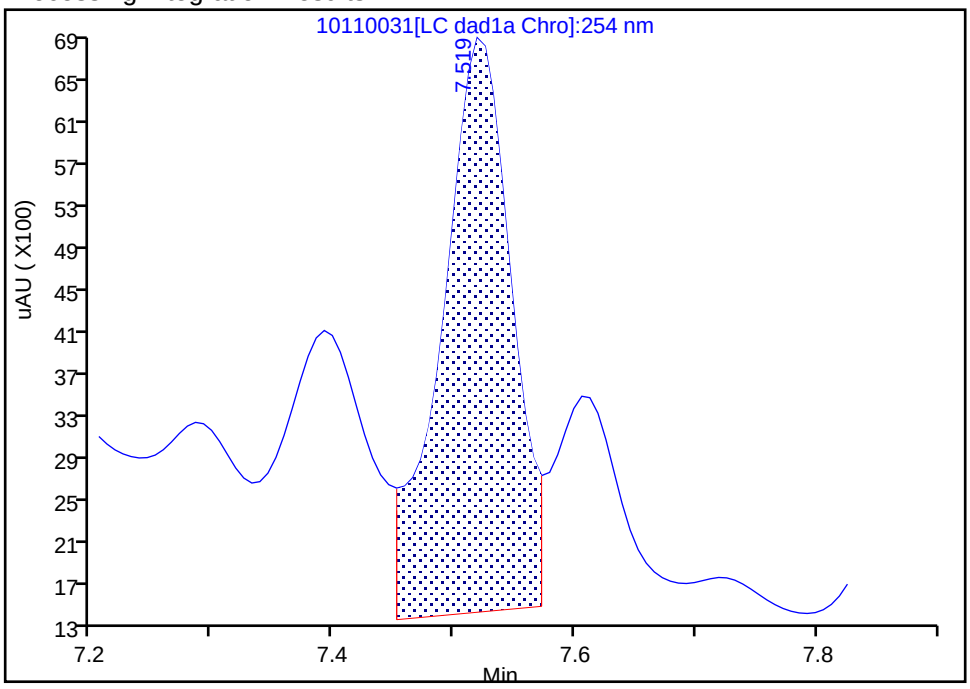
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241011-138518.b\10110031.d				
Injection Date:	12-Oct-2024 00:53:34	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-B-6-A RE	Lab Sample ID:	280-197447-6		
Client ID:	LL1mw-091-240902-GW				
Operator ID:	JZ	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	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		

8 RDX, CAS: 121-82-4

Signal: 1

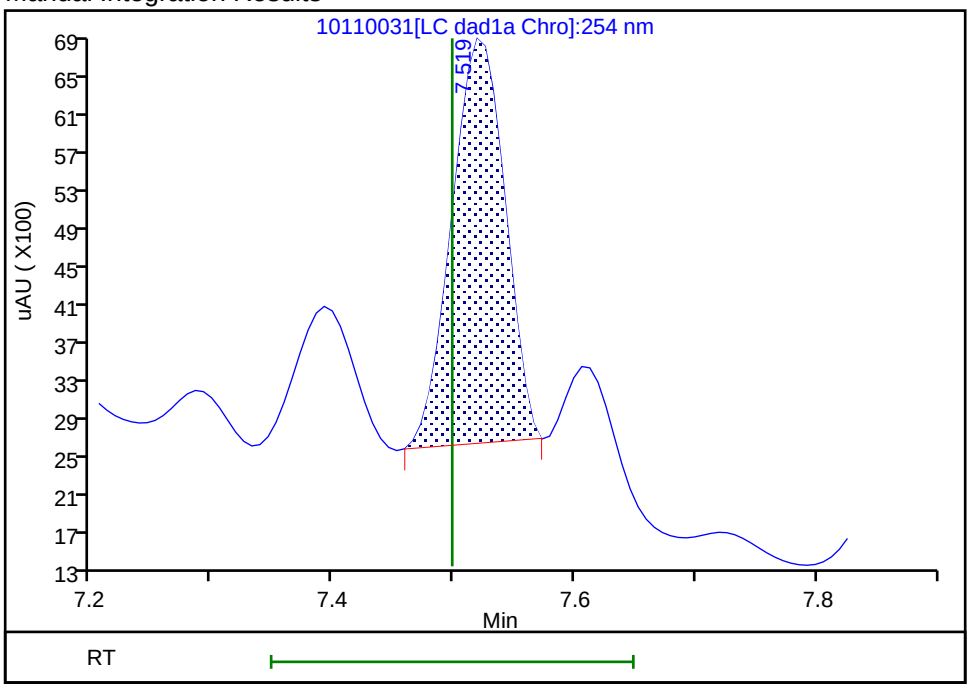
Processing Integration Results

RT: 7.52
Area: 21738
Amount: 0.205705
Amount Units: ug/mL



Manual Integration Results

RT: 7.52
Area: 12791
Amount: 0.120359
Amount Units: ug/mL



Reviewer: LV5D, 12-Oct-2024 10:12:53 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

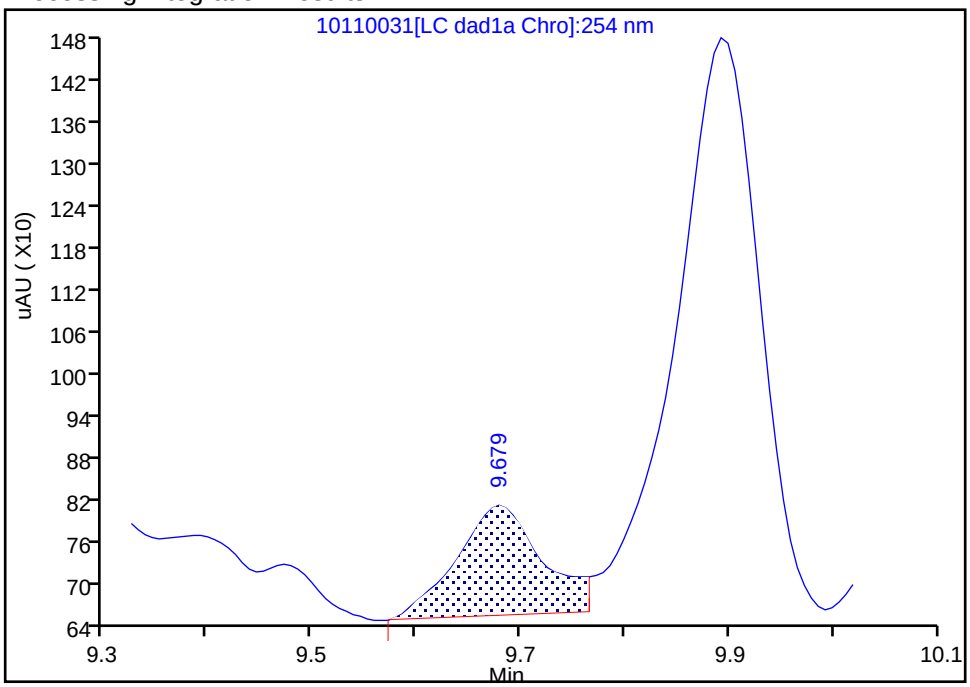
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241011-138518.b\10110031.d				
Injection Date:	12-Oct-2024 00:53:34	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-B-6-A RE	Lab Sample ID:	280-197447-6		
Client ID:	LL1mw-091-240902-GW				
Operator ID:	JZ	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

15 Tetryl, CAS: 479-45-8

Signal: 1

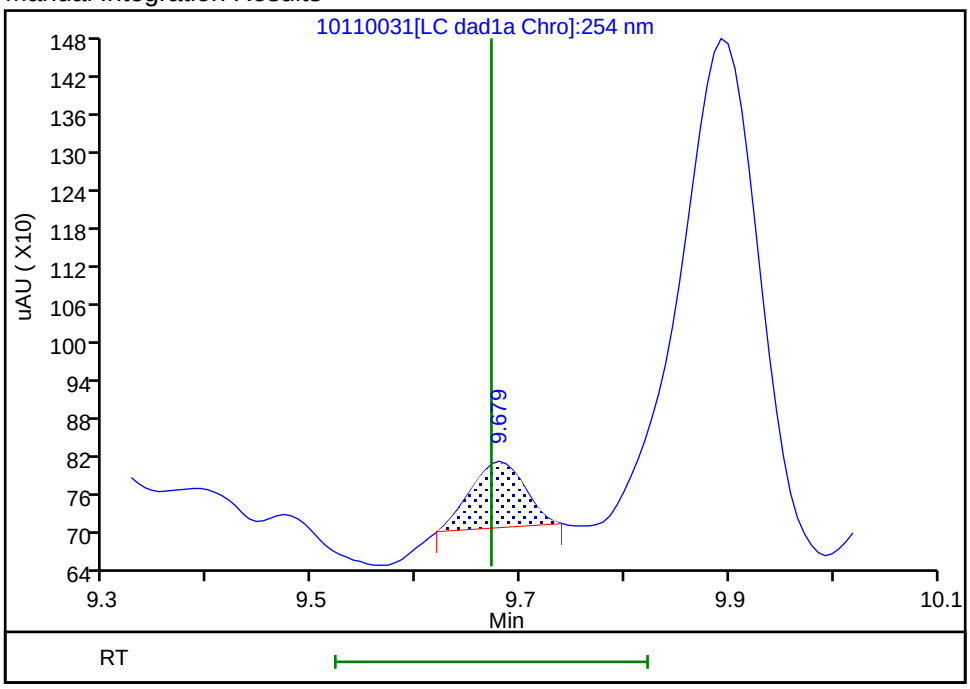
Processing Integration Results

RT: 9.68
Area: 888
Amount: 0.005869
Amount Units: ug/mL



Manual Integration Results

RT: 9.68
Area: 379
Amount: 0.002898
Amount Units: ug/mL



Reviewer: LV5D, 12-Oct-2024 10:12:42 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-197447-1

SDG No.:

Client Sample ID: LL1mw-064-240901-GW | Lab Sample ID: 280-197447-7

Matrix: Water | Lab File ID: 10080061.D

Analysis Method: 8330B | Date Collected: 10/01/2024 13:38

Extraction Method: 3535 | Date Extracted: 10/04/2024 12:25

Sample wt/vol: 439(mL) | Date Analyzed: 10/09/2024 12:22

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 670184 | Units: ug/L

Preparation Batch No.: 669777 | Instrument ID: CHHPLC_X3

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.23	U	0.24	0.23	0.096
99-65-0	1,3-Dinitrobenzene	0.11	U M	0.13	0.11	0.042
118-96-7	2,4,6-Trinitrotoluene	0.11	U	0.13	0.11	0.051
121-14-2	2,4-Dinitrotoluene	0.091	U	0.11	0.091	0.031
606-20-2	2,6-Dinitrotoluene	0.091	U	0.11	0.091	0.046
35572-78-2	2-Amino-4,6-dinitrotoluene	0.11	U	0.13	0.11	0.058
88-72-2	2-Nitrotoluene	0.23	U Q	0.24	0.23	0.097
99-08-1	3-Nitrotoluene	0.40	U M Q	0.46	0.40	0.22
19406-51-0	4-Amino-2,6-dinitrotoluene	0.14	U	0.17	0.14	0.066
99-99-0	4-Nitrotoluene	0.46	U Q	0.47	0.46	0.11
2691-41-0	HMX	0.23	U M	0.24	0.23	0.10
98-95-3	Nitrobenzene	0.23	U	0.24	0.23	0.10
55-63-0	Nitroglycerin	2.3	U	2.4	2.3	1.0
78-11-5	PETN	1.1	U	1.3	1.1	0.51
121-82-4	RDX	0.23	U	0.24	0.23	0.059
479-45-8	Tetryl	0.11	U	0.13	0.11	0.036

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	92	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\10080061.D
Lims ID: 280-197447-A-7-A
Client ID: LL1mw-064-240901-GW
Sample Type: Client
Inject. Date: 09-Oct-2024 12:22:05 ALS Bottle#: 61 Worklist Smp#: 61
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-197447-A-7-A
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Oct-2024 14:35:47 Calib Date: 04-Oct-2024 19:55:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1609

First Level Reviewer: LV5D Date: 09-Oct-2024 13:12:48

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	4 HMX	1		6.564			ND	U
	8 RDX	1		7.497			ND	
$	10 1,2-Dinitrobenzene	1	8.361	8.364	-0.003	23948	0.1836	M
	11 1,3,5-Trinitrobenzene	1		8.464			ND	
	12 1,3-Dinitrobenzene	1		9.024			ND	U
	13 Nitrobenzene	1		9.344			ND	
	15 Tetryl	1		9.664			ND	
	16 Nitroglycerin	2		10.110			ND	
	17 2,4,6-Trinitrotoluene	1		10.457			ND	
	18 4-Amino-2,6-dinitrotoluene	1		10.617			ND	
	19 2-Amino-4,6-dinitrotoluene	1		10.850			ND	
	20 2,6-Dinitrotoluene	1		10.984			ND	
	21 2,4-Dinitrotoluene	1		11.130			ND	
	22 o-Nitrotoluene	1		11.824			ND	
	23 p-Nitrotoluene	1		12.197			ND	
	24 m-Nitrotoluene	1		12.697			ND	U
	25 PETN	2		13.764			ND	

QC Flag Legend

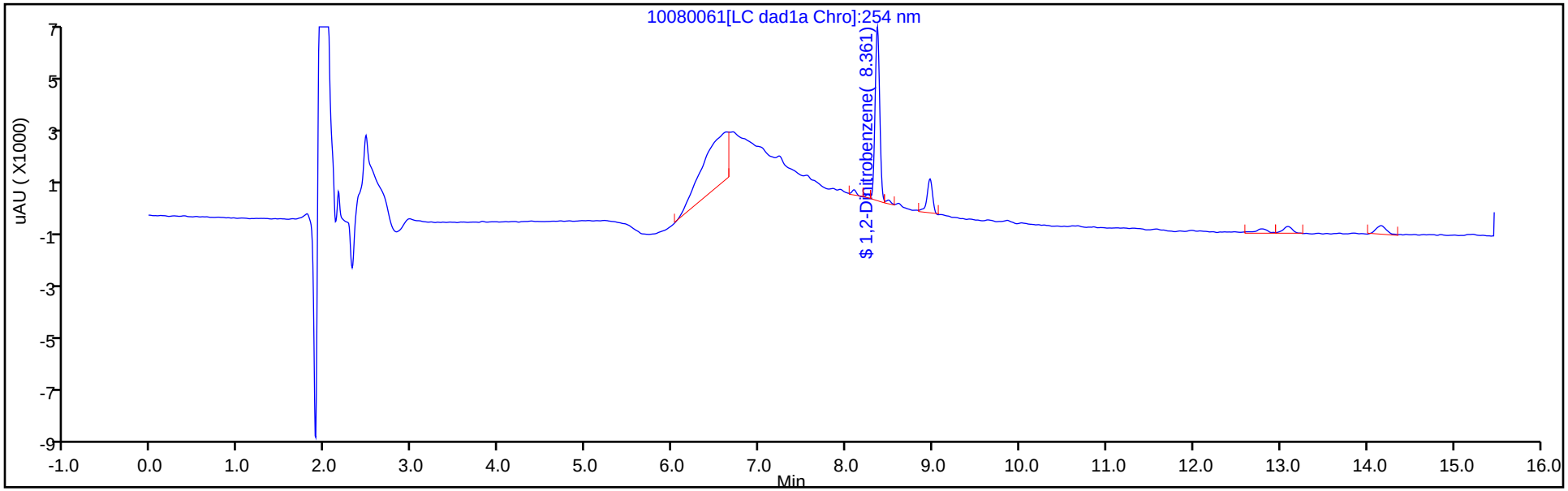
Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 09-Oct-2024 14:46:07 Chrom Revision: 2.3 24-Sep-2024 15:19:46

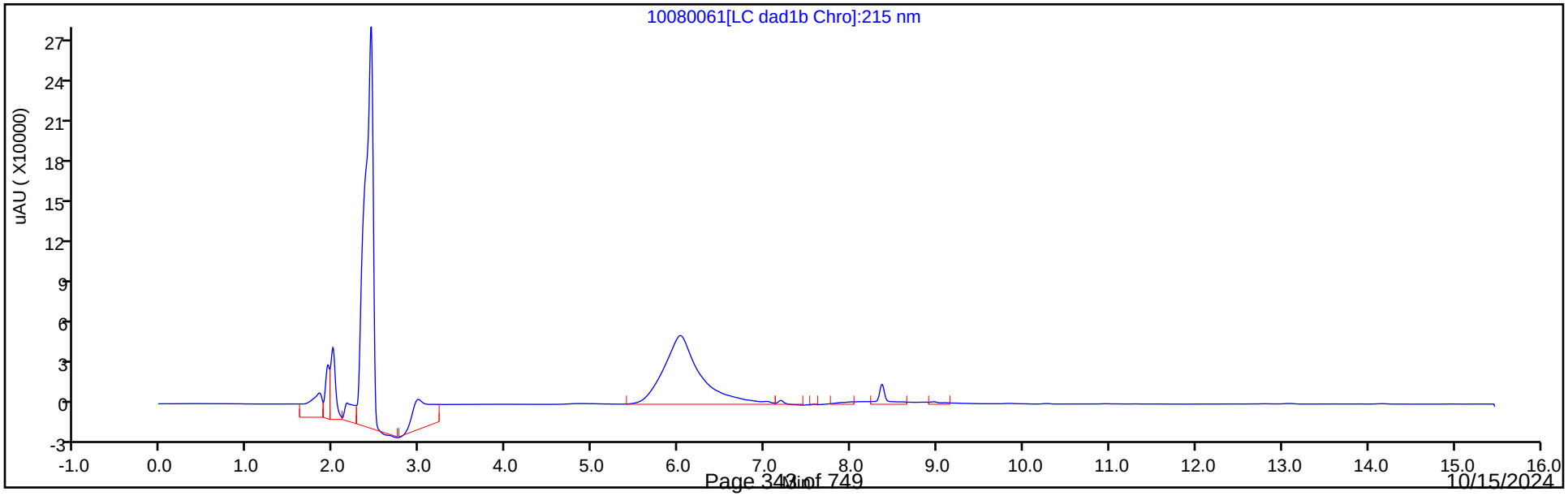
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080061.d				
Injection Date:	09-Oct-2024 12:22:05	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-197447-A-7-A	Lab Sample ID:	280-197447-7	Worklist Smp#:	61
Client ID:	LL1mw-064-240901-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	61
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



10/15/2024
4:48:23 PM

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\10080061.D				
Lims ID:	280-197447-A-7-A				
Client ID:	LL1mw-064-240901-GW				
Sample Type:	Client				
Inject. Date:	09-Oct-2024 12:22:05	ALS Bottle#:	61	Worklist Smp#:	61
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-197447-A-7-A				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	09-Oct-2024 14:35:47	Calib Date:	04-Oct-2024 19:55:02		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1609				

First Level Reviewer: LV5D Date: 09-Oct-2024 13:12:48

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1836	91.82

Manual Integration/User Assign Peak Report

Eurofins Denver

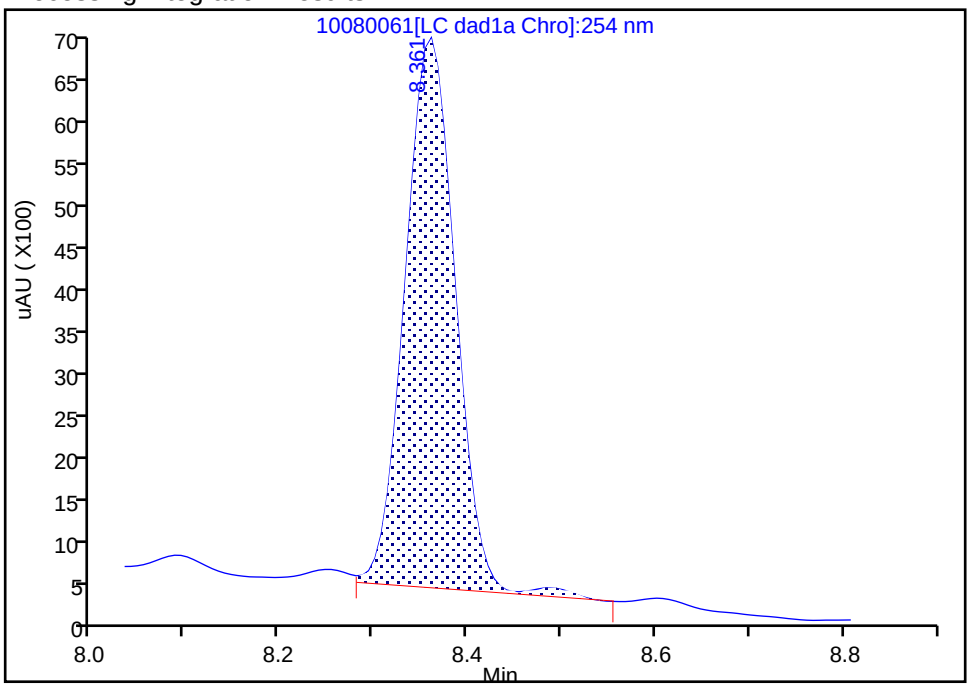
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080061.d				
Injection Date:	09-Oct-2024 12:22:05	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-A-7-A	Lab Sample ID:	280-197447-7		
Client ID:	LL1mw-064-240901-GW				
Operator ID:	JZ	ALS Bottle#:	61	Worklist Smp#:	61
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

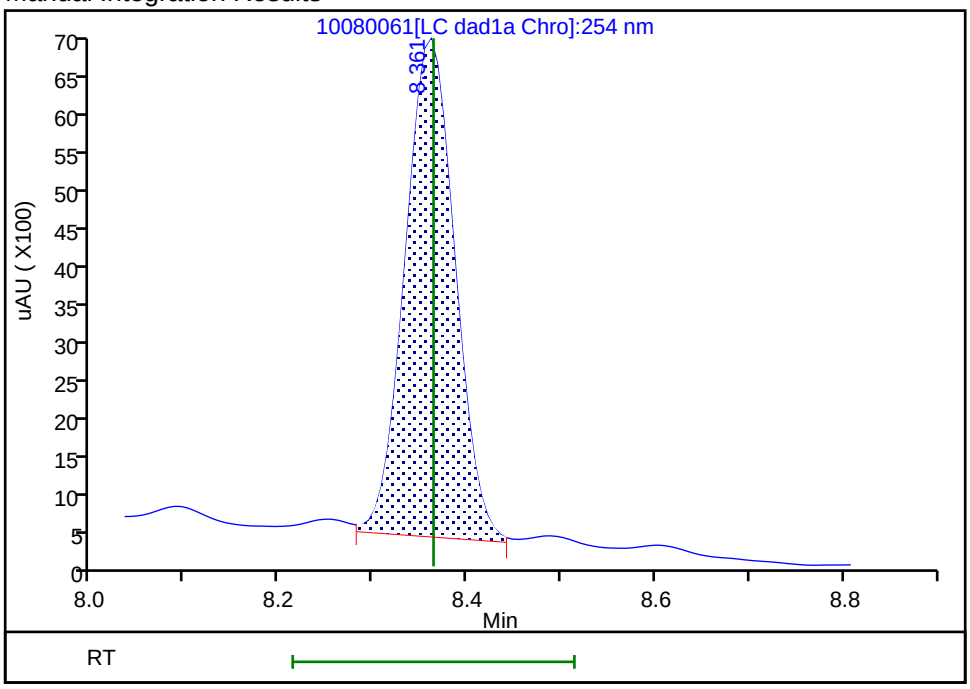
Processing Integration Results

RT: 8.36
Area: 24336
Amount: 0.186612
Amount Units: ug/mL



Manual Integration Results

RT: 8.36
Area: 23948
Amount: 0.183637
Amount Units: ug/mL



Reviewer: LV5D, 09-Oct-2024 13:12:46 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

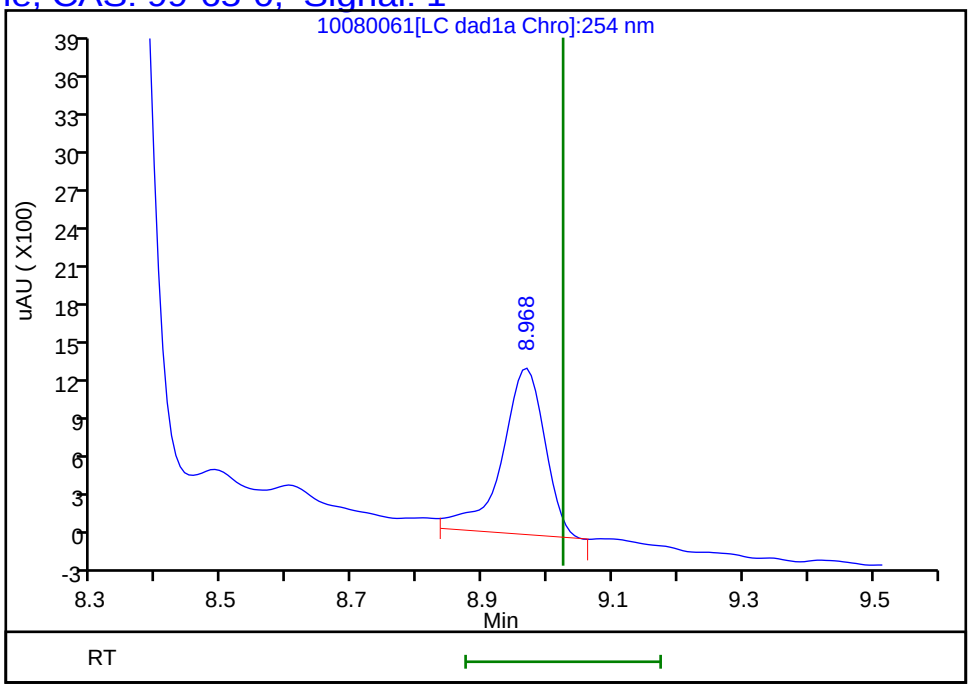
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080061.d				
Injection Date:	09-Oct-2024 12:22:05	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-A-7-A	Lab Sample ID:	280-197447-7		
Client ID:	LL1mw-064-240901-GW				
Operator ID:	JZ	ALS Bottle#:	61	Worklist Smp#:	61
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

RT: 8.97
Response: 6077
Amount: 0.020377



Reviewer: LV5D, 09-Oct-2024 13:12:48
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

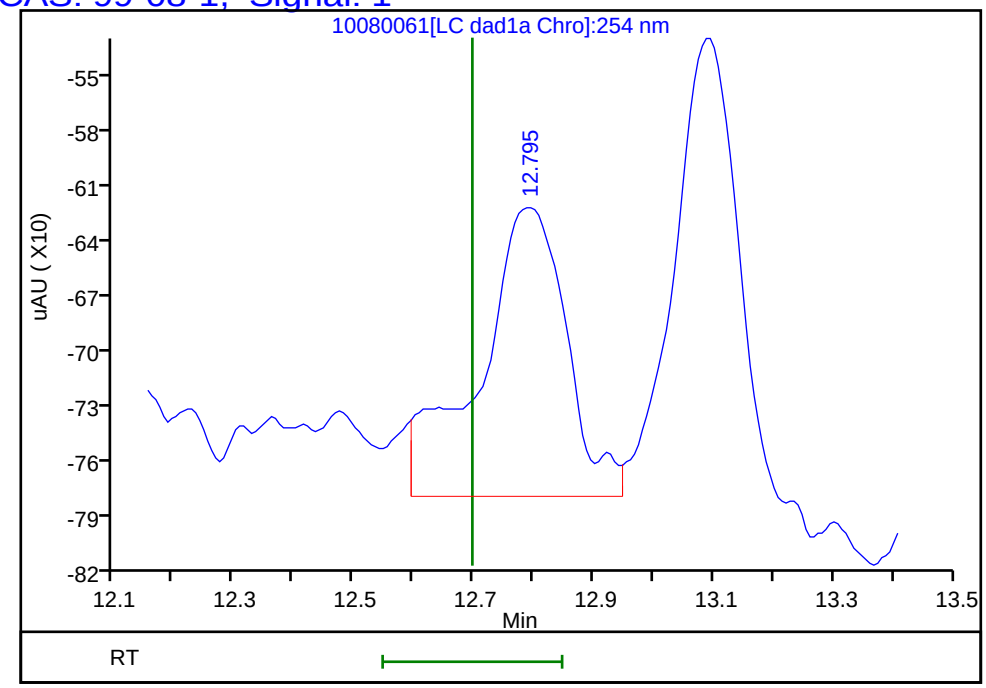
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080061.d				
Injection Date:	09-Oct-2024 12:22:05	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-A-7-A	Lab Sample ID:	280-197447-7		
Client ID:	LL1mw-064-240901-GW				
Operator ID:	JZ	ALS Bottle#:	61	Worklist Smp#:	61
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

24 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 12.79
Response: 1566
Amount: 0.009740



Reviewer: LV5D, 09-Oct-2024 13:12:48
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

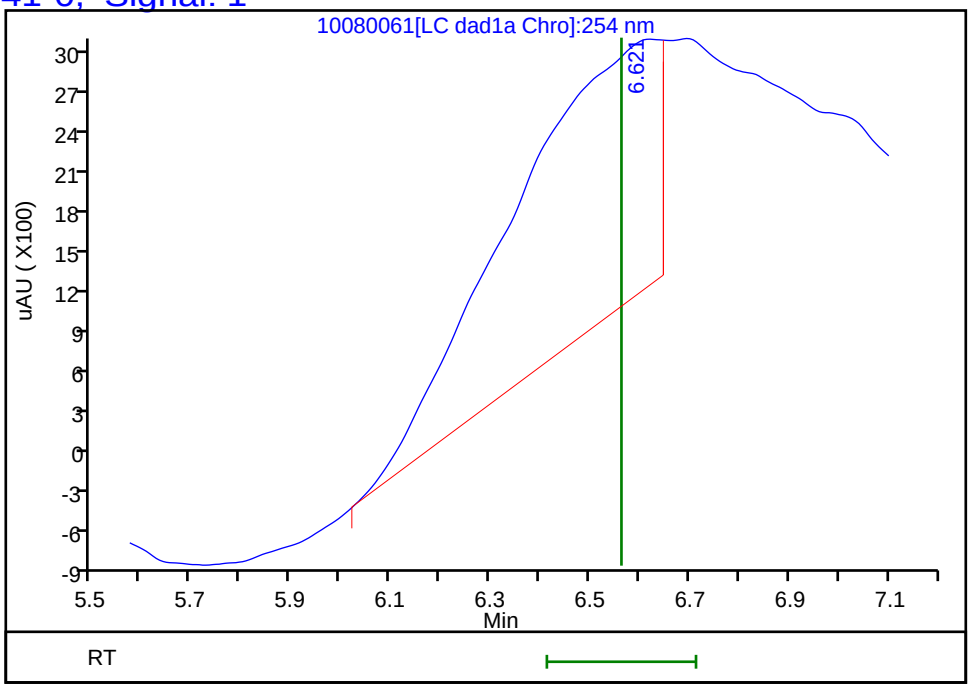
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080061.d
Injection Date: 09-Oct-2024 12:22:05 Instrument ID: CHHPLC_X3
Lims ID: 280-197447-A-7-A Lab Sample ID: 280-197447-7
Client ID: LL1mw-064-240901-GW
Operator ID: JZ ALS Bottle#: 61 Worklist Smp#: 61
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

4 HMX, CAS: 2691-41-0, Signal: 1

RT: 6.62
Response: 41063
Amount: 0.424850



Reviewer: LV5D, 09-Oct-2024 13:12:48
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-197447-1

SDG No.:

Client Sample ID: LL1mw-064-240901-GW RE | Lab Sample ID: 280-197447-7 RE

Matrix: Water | Lab File ID: 10110033.D

Analysis Method: 8330B | Date Collected: 10/01/2024 13:38

Extraction Method: 3535 | Date Extracted: 10/11/2024 12:06

Sample wt/vol: 446.6(mL) | Date Analyzed: 10/12/2024 01:37

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 670729 | Units: ug/L

Preparation Batch No.: 670642 | Instrument ID: CHHPLC_X3

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
88-72-2	*2-Nitrotoluene*	*0.22*	*U H*	*0.24*	0.22	*0.096*
99-08-1	*3-Nitrotoluene*	*0.39*	*U H*	*0.45*	0.39	*0.22*
99-99-0	*4-Nitrotoluene*	*0.45*	*U H*	*0.46*	0.45	*0.11*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	95	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20241011-138518.b\10110033.D
Lims ID: 280-197447-B-7-A RE
Client ID: LL1mw-064-240901-GW
Sample Type: Client
Inject. Date: 12-Oct-2024 01:37:31 ALS Bottle#: 33 Worklist Smp#: 33
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-197447-B-7-A
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20241011-138518.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 12-Oct-2024 10:13:40 Calib Date: 04-Oct-2024 19:55:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1603

First Level Reviewer: LV5D Date: 12-Oct-2024 10:13:18

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4	HMX	1	6.598	6.572	0.026	109	0.001128	7M
8	RDX	1		7.498			ND	
$ 10	1,2-Dinitrobenzene	1	8.365	8.365	0.000	24811	0.1903	M
11	1,3,5-Trinitrobenzene	1		8.465			ND	
12	1,3-Dinitrobenzene	1		9.032			ND	U
13	Nitrobenzene	1		9.345			ND	
15	Tetryl	1		9.672			ND	
16	Nitroglycerin	2		10.118			ND	
17	2,4,6-Trinitrotoluene	1		10.472			ND	
18	4-Amino-2,6-dinitrotoluene	1		10.632			ND	
19	2-Amino-4,6-dinitrotoluene	1		10.858			ND	
20	2,6-Dinitrotoluene	1		10.992			ND	
21	2,4-Dinitrotoluene	1		11.145			ND	
22	o-Nitrotoluene	1		11.832			ND	
23	p-Nitrotoluene	1		12.198			ND	
24	m-Nitrotoluene	1		12.705			ND	
25	PETN	2		13.772			ND	

QC Flag Legend

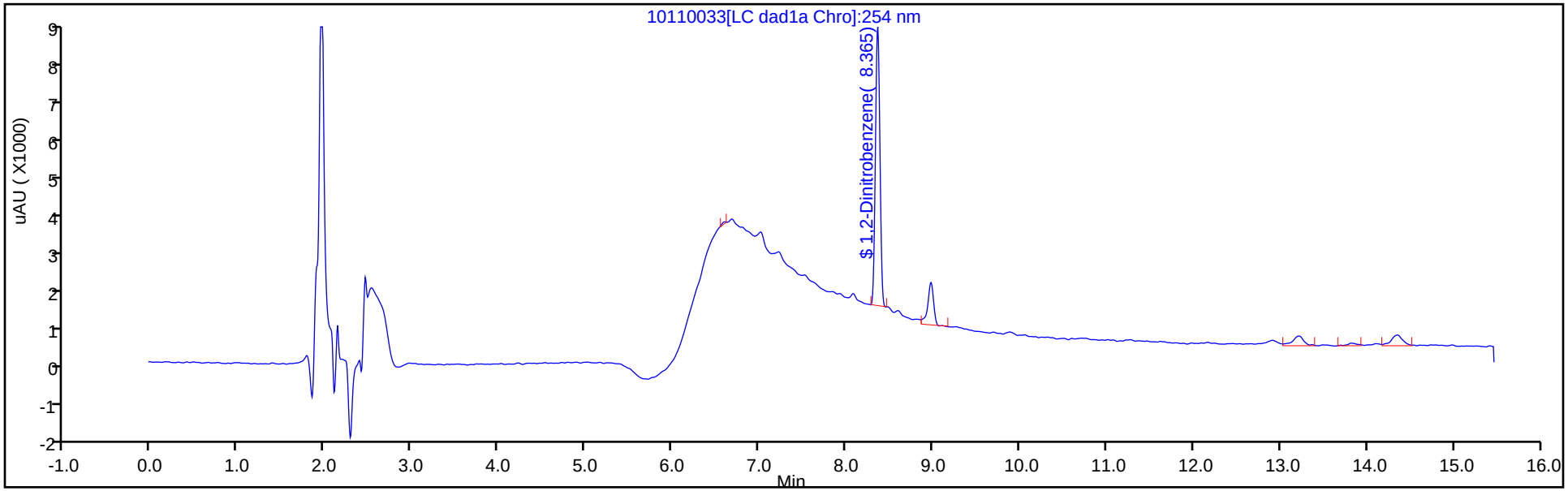
Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 12-Oct-2024 10:13:40 Chrom Revision: 2.3 24-Sep-2024 15:19:46

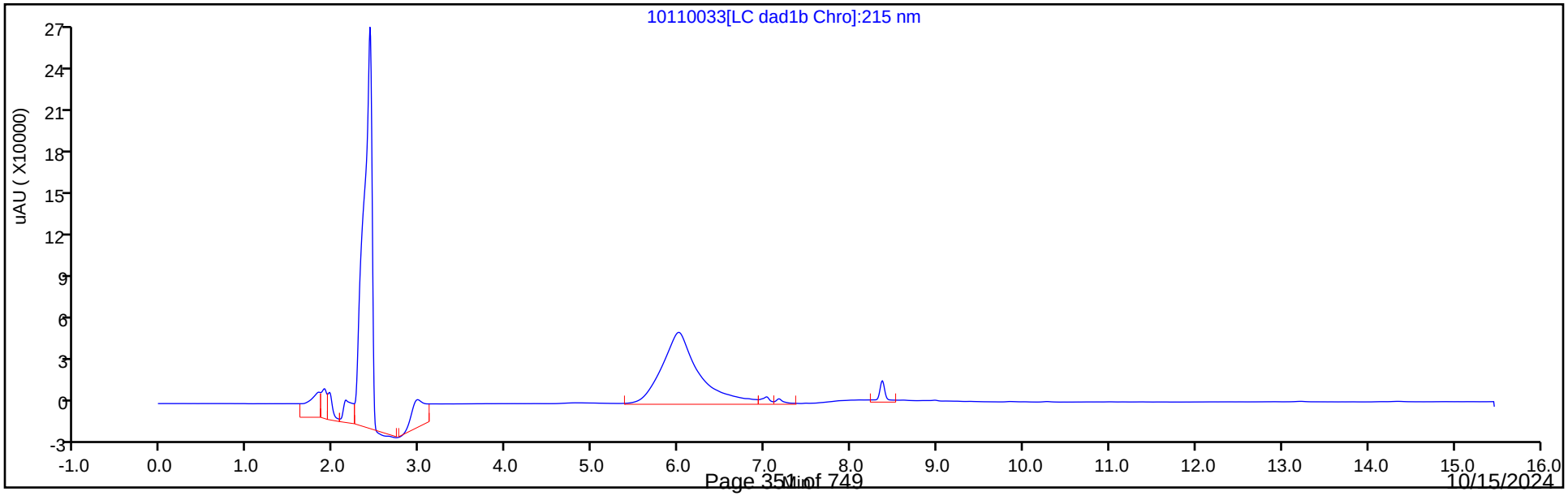
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20241011-138518.b\10110033.d				
Injection Date:	12-Oct-2024 01:37:31	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-197447-B-7-A RE	Lab Sample ID:	280-197447-7	Worklist Smp#:	33
Client ID:	LL1mw-064-240901-GW				
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



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20241011-138518.b\10110033.D
Lims ID: 280-197447-B-7-A RE
Client ID: LL1mw-064-240901-GW
Sample Type: Client
Inject. Date: 12-Oct-2024 01:37:31 ALS Bottle#: 33 Worklist Smp#: 33
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-197447-B-7-A
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20241011-138518.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 12-Oct-2024 10:13:40 Calib Date: 04-Oct-2024 19:55:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1603

First Level Reviewer: LV5D Date: 12-Oct-2024 10:13:18

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1903	95.13

Manual Integration/User Assign Peak Report

Eurofins Denver

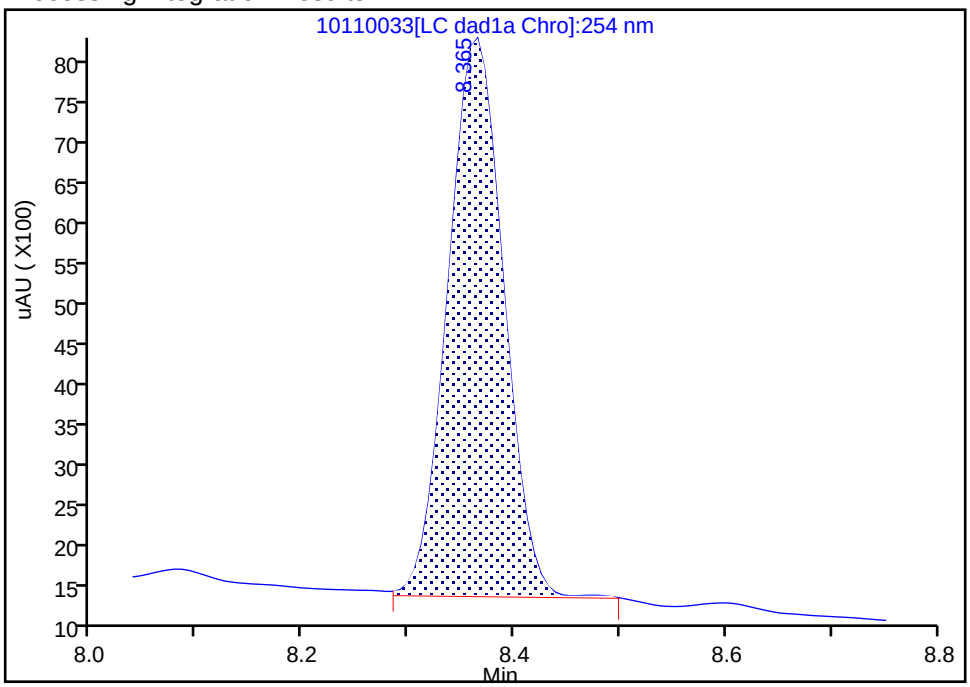
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241011-138518.b\10110033.d				
Injection Date:	12-Oct-2024 01:37:31	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-B-7-A RE	Lab Sample ID:	280-197447-7		
Client ID:	LL1mw-064-240901-GW				
Operator ID:	JZ	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

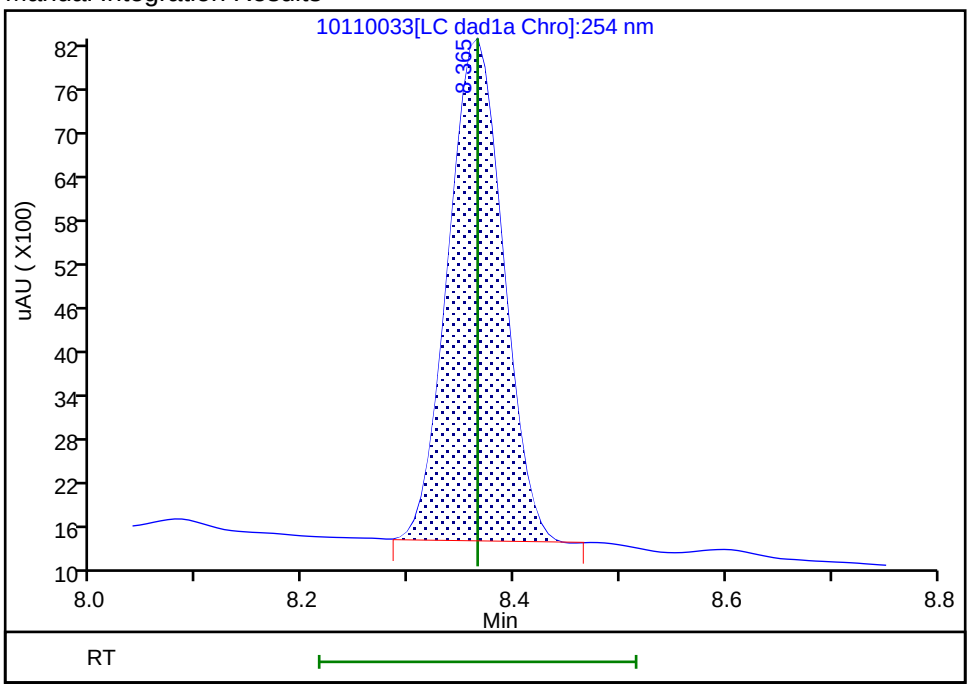
Processing Integration Results

RT: 8.37
Area: 25174
Amount: 0.193038
Amount Units: ug/mL



Manual Integration Results

RT: 8.37
Area: 24811
Amount: 0.190254
Amount Units: ug/mL



Reviewer: LV5D, 12-Oct-2024 10:13:14 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

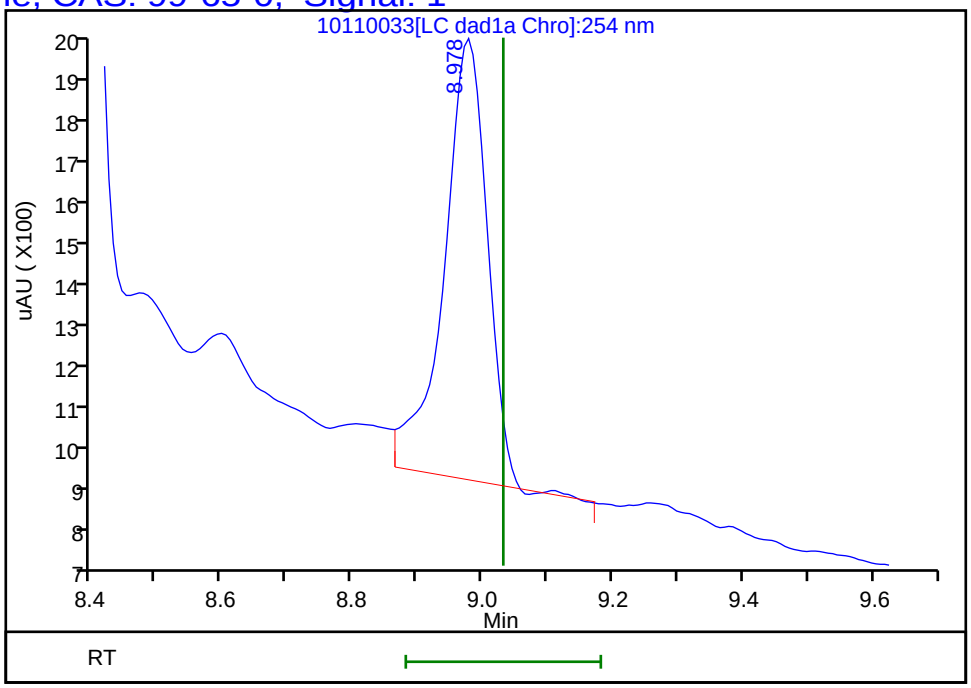
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20241011-138518.b\10110033.d				
Injection Date:	12-Oct-2024 01:37:31	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-B-7-A RE	Lab Sample ID:	280-197447-7		
Client ID:	LL1mw-064-240901-GW				
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		

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

RT: 8.98
Response: 4890
Amount: 0.016397



Reviewer: LV5D, 12-Oct-2024 10:13:18
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

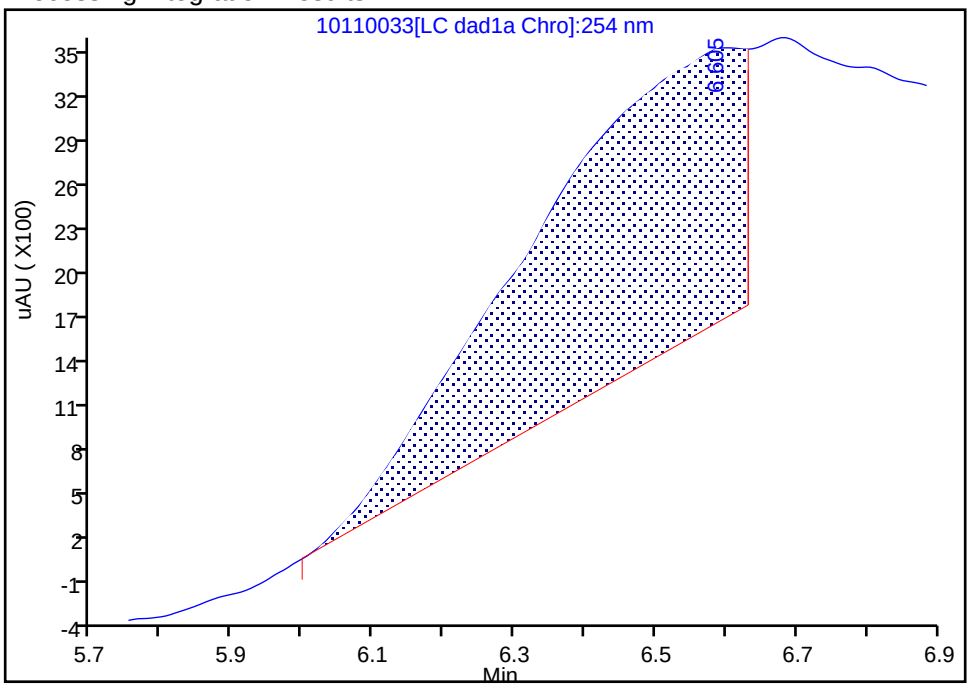
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241011-138518.b\10110033.d				
Injection Date:	12-Oct-2024 01:37:31	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-B-7-A RE	Lab Sample ID:	280-197447-7		
Client ID:	LL1mw-064-240901-GW				
Operator ID:	JZ	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	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		

4 HMX, CAS: 2691-41-0

Signal: 1

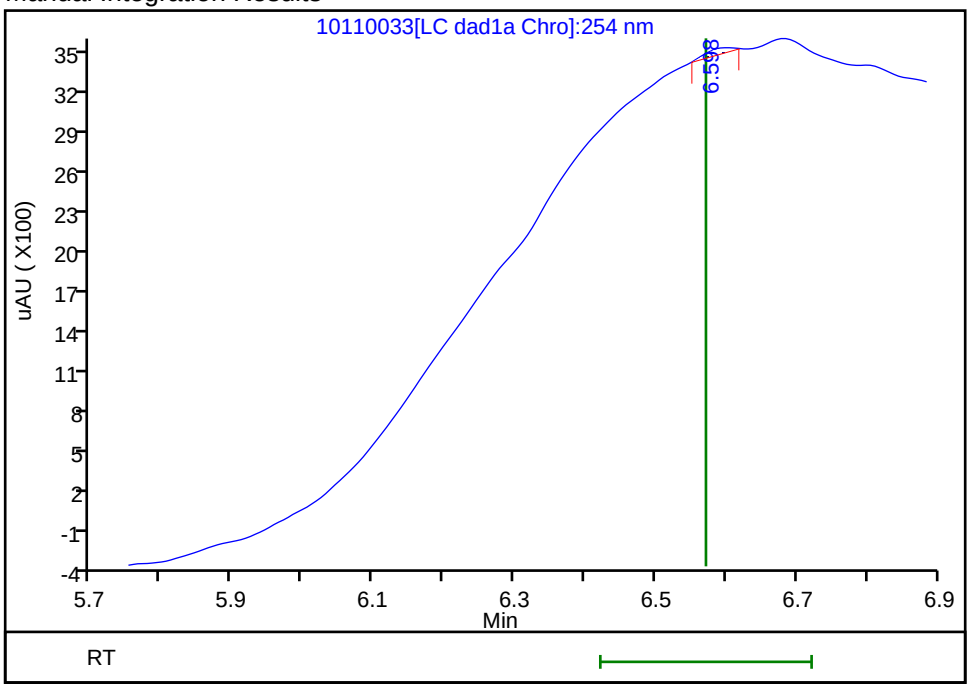
Processing Integration Results

RT: 6.61
Area: 41390
Amount: 0.428233
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 109
Amount: 0.001128
Amount Units: ug/mL



Reviewer: LV5D, 12-Oct-2024 10:13:17 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-197447-1

SDG No.:

Client Sample ID: FWGmw-007-240901-GW | Lab Sample ID: 280-197447-8

Matrix: Water | Lab File ID: 10080014.D

Analysis Method: 8330B | Date Collected: 10/01/2024 15:35

Extraction Method: 3535 | Date Extracted: 10/07/2024 13:45

Sample wt/vol: 483.7(mL) | Date Analyzed: 10/08/2024 19:10

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 670183 | Units: ug/L

Preparation Batch No.: 670001 | Instrument ID: CHHPLC_X3

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
99-65-0	1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.038
118-96-7	2,4,6-Trinitrotoluene	0.10	U	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	0.041
35572-78-2	2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.052
88-72-2	2-Nitrotoluene	0.21	U	0.22	0.21	0.088
99-08-1	3-Nitrotoluene	0.36	U M	0.41	0.36	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U	0.16	0.12	0.060
99-99-0	4-Nitrotoluene	0.41	U	0.42	0.41	0.10
2691-41-0	HMX	0.21	U M	0.22	0.21	0.091
98-95-3	Nitrobenzene	0.21	U	0.22	0.21	0.094
55-63-0	Nitroglycerin	2.1	U	2.2	2.1	0.95
78-11-5	PETN	1.0	U	1.1	1.0	0.46
121-82-4	RDX	0.21	U	0.22	0.21	0.053
479-45-8	Tetryl	0.10	U	0.11	0.10	0.033

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

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\10080014.D
Lims ID: 280-197447-A-8-A
Client ID: FWGmw-007-240901-GW
Sample Type: Client
Inject. Date: 08-Oct-2024 19:10:33 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-197447-A-8-A
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Oct-2024 11:35:58 Calib Date: 04-Oct-2024 19:55:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1609

First Level Reviewer: LV5D Date: 08-Oct-2024 19:34:38

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	4 HMX	1		6.564			ND	U
	8 RDX	1		7.497			ND	
$	10 1,2-Dinitrobenzene	1	8.376	8.364	0.012	24427	0.1873	M
	11 1,3,5-Trinitrobenzene	1		8.464			ND	
	12 1,3-Dinitrobenzene	1		9.024			ND	
	13 Nitrobenzene	1		9.344			ND	
	15 Tetryl	1		9.664			ND	
	16 Nitroglycerin	2		10.110			ND	
	17 2,4,6-Trinitrotoluene	1		10.457			ND	
	18 4-Amino-2,6-dinitrotoluene	1		10.617			ND	
	19 2-Amino-4,6-dinitrotoluene	1		10.850			ND	
	20 2,6-Dinitrotoluene	1		10.984			ND	
	21 2,4-Dinitrotoluene	1		11.130			ND	
	22 o-Nitrotoluene	1		11.824			ND	
	23 p-Nitrotoluene	1		12.197			ND	
	24 m-Nitrotoluene	1		12.697			ND	U
	25 PETN	2		13.764			ND	

QC Flag Legend

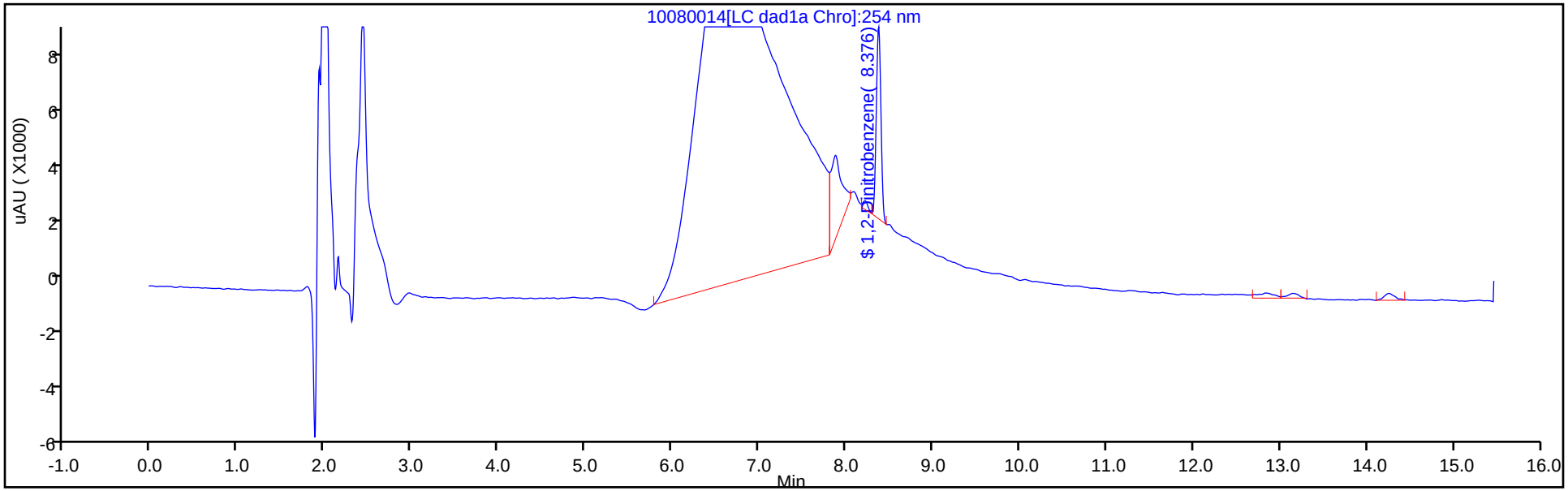
Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 09-Oct-2024 11:36:12 Chrom Revision: 2.3 24-Sep-2024 15:19:46

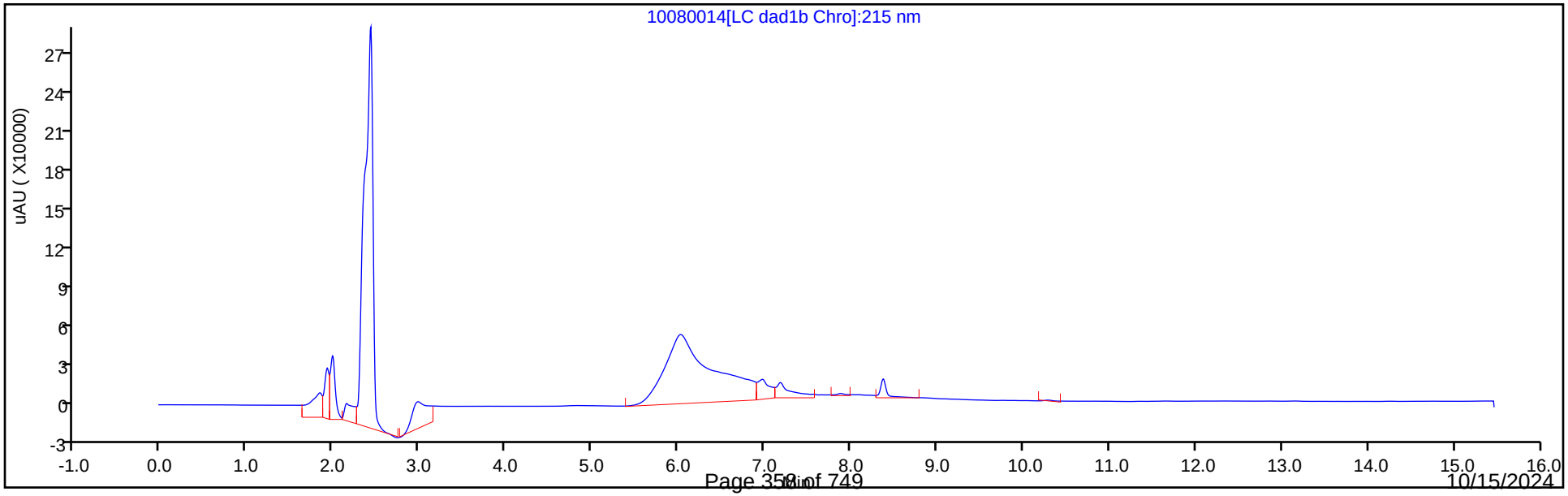
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080014.d				
Injection Date:	08-Oct-2024 19:10:33	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-197447-A-8-A	Lab Sample ID:	280-197447-8	Worklist Smp#:	14
Client ID:	FWGmw-007-240901-GW				
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



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



10/15/2024
4:48:23 PM

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\10080014.D				
Lims ID:	280-197447-A-8-A				
Client ID:	FWGmw-007-240901-GW				
Sample Type:	Client				
Inject. Date:	08-Oct-2024 19:10:33	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-197447-A-8-A				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	09-Oct-2024 11:35:58	Calib Date:	04-Oct-2024 19:55:02		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1609				

First Level Reviewer: LV5D Date: 08-Oct-2024 19:34:38

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1873	93.65

Manual Integration/User Assign Peak Report

Eurofins Denver

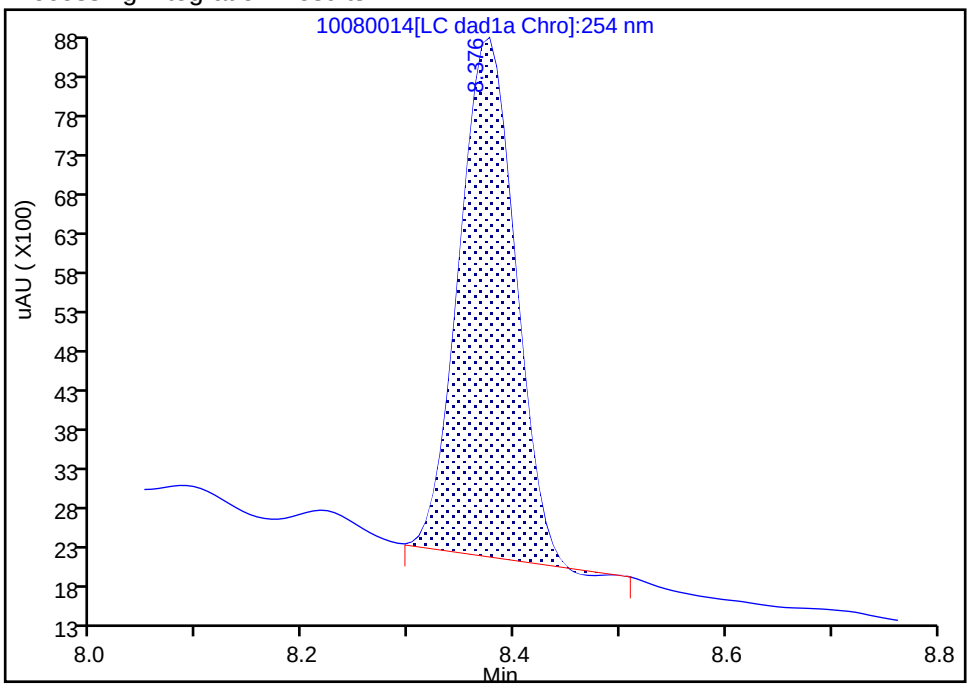
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080014.d				
Injection Date:	08-Oct-2024 19:10:33	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-A-8-A	Lab Sample ID:	280-197447-8		
Client ID:	FWGmw-007-240901-GW				
Operator ID:	JZ	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

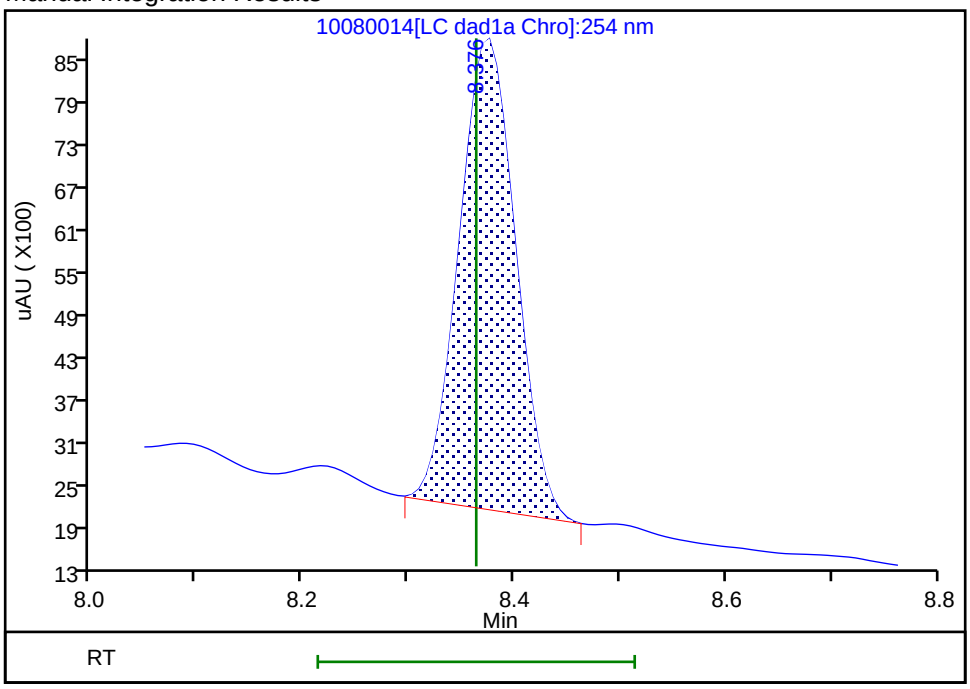
Processing Integration Results

RT: 8.38
Area: 24454
Amount: 0.187517
Amount Units: ug/mL



Manual Integration Results

RT: 8.38
Area: 24427
Amount: 0.187310
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 19:34:36 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

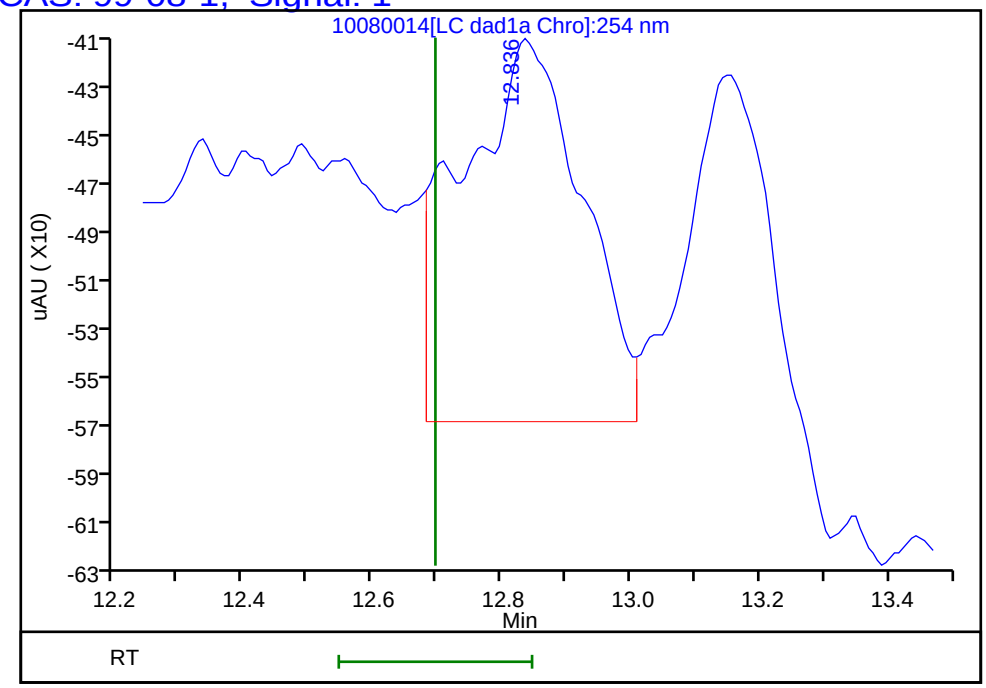
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080014.d				
Injection Date:	08-Oct-2024 19:10:33	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-A-8-A	Lab Sample ID:	280-197447-8		
Client ID:	FWGmw-007-240901-GW				
Operator ID:	JZ	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

24 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 12.84
Response: 2015
Amount: 0.013063



Reviewer: LV5D, 08-Oct-2024 19:34:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

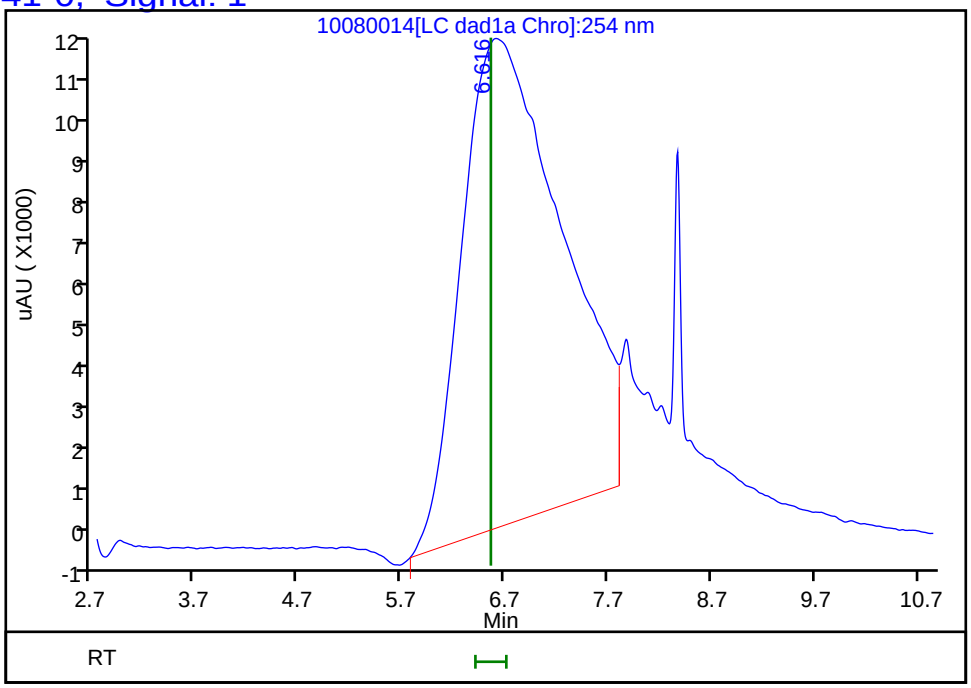
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080014.d
Injection Date: 08-Oct-2024 19:10:33 Instrument ID: CHHPLC_X3
Lims ID: 280-197447-A-8-A Lab Sample ID: 280-197447-8
Client ID: FWGmw-007-240901-GW
Operator ID: JZ ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

4 HMX, CAS: 2691-41-0, Signal: 1

RT: 6.62
Response: 772772
Amount: 7.995329



Reviewer: LV5D, 08-Oct-2024 19:34:38
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.: 280-197447-1 | Analy Batch No.: 669870

SDG No.:

Instrument ID: CHHPLC_X3 | GC Column: UltraCarb5u ID: 4.6(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 10/04/2024 16:59 | Calibration End Date: 10/04/2024 19:55 | Calibration ID: 98019

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-669870/19	10040019.D
Level 2	IC 280-669870/18	10040018.D
Level 3	IC 280-669870/17	10040017.D
Level 4	IC 280-669870/16	10040016.D
Level 5	IC 280-669870/15	10040015.D
Level 6	IC 280-669870/14	10040014.D
Level 7	IC 280-669870/13	10040013.D
Level 8	IC 280-669870/12	10040012.D
Level 9	IC 280-669870/11	10040011.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8	LVL 9		RT WINDOW	AVG RT
TNX	6.438	6.433	6.434	6.437	6.436	6.434	6.436	6.438	6.428		6.337 - 6.537	6.435
HMX	6.571	6.573	6.574	6.577	6.576	6.567	6.576	6.571	6.568		6.427 - 6.727	6.573
DNX	6.751	6.747	6.747	6.751	6.749	6.747	6.749	6.751	6.741		6.651 - 6.851	6.748
MNX	7.151	7.153	7.154	7.151	7.156	7.154	7.156	7.151	7.141		7.001 - 7.301	7.152
RDX	7.505	7.507	7.507	7.511	7.509	7.507	7.509	7.505	7.501		7.361 - 7.661	7.507
Picric acid	+++++	7.940	7.941	7.937	7.936	7.927	7.916	7.905	7.868		7.787 - 8.087	7.921
1,3,5-Trinitrobenzene	8.471	8.473	8.474	8.477	8.476	8.480	8.476	8.478	8.468		8.327 - 8.627	8.475
1,3-Dinitrobenzene	9.031	9.033	9.034	9.037	9.036	9.047	9.036	9.038	9.028		8.887 - 9.187	9.036
Nitrobenzene	9.351	9.353	9.354	9.357	9.356	9.367	9.356	9.358	9.341		9.207 - 9.507	9.355
3,5-Dinitroaniline	9.558	9.560	9.561	9.564	9.563	9.573	9.562	9.558	9.548		9.414 - 9.714	9.561
Tetryl	9.678	9.680	9.681	9.684	9.683	9.700	9.682	9.685	9.668		9.534 - 9.834	9.682
Nitroglycerin	10.124	10.127	10.121	10.124	10.123	10.140	10.129	10.125	10.108		9.974 - 10.274	10.125
2,4,6-Trinitrotoluene	10.478	10.473	10.474	10.477	10.476	10.493	10.482	10.478	10.468		10.377 - 10.577	10.478
4-Amino-2,6-dinitrotoluene	10.638	10.640	10.634	10.637	10.636	10.653	10.642	10.631	10.621		10.537 - 10.737	10.637
2-Amino-4,6-dinitrotoluene	10.864	10.867	10.861	10.864	10.863	10.880	10.869	10.865	10.848		10.764 - 10.964	10.865
2,6-Dinitrotoluene	11.004	11.007	11.001	11.004	11.003	11.020	11.009	11.005	10.988		10.904 - 11.104	11.005
2,4-Dinitrotoluene	11.151	11.153	11.154	11.150	11.149	11.167	11.156	11.151	11.134		11.050 - 11.250	11.152
2-Nitrotoluene	11.844	11.847	11.847	11.850	11.849	11.867	11.862	11.851	11.834		11.700 - 12.000	11.850
4-Nitrotoluene	12.218	12.220	12.221	12.217	12.223	12.240	12.229	12.218	12.208		12.067 - 12.367	12.222
3-Nitrotoluene	12.718	12.713	12.721	12.724	12.723	12.740	12.736	12.725	12.708		12.574 - 12.874	12.723
PETN	13.784	13.787	13.794	13.797	13.796	13.827	13.822	13.805	13.794		13.647 - 13.947	13.801
1,2-Dinitrobenzene	8.371	8.373	8.374	8.377	8.376	8.380	8.376	8.371	8.368		8.227 - 8.527	8.374

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

Lab Name: Eurofins Denver Job No.: 280-197447-1 Analy Batch No.: 669870

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/04/2024 16:59 Calibration End Date: 10/04/2024 19:55 Calibration ID: 98019

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-669870/19	10040019.D
Level 2	IC 280-669870/18	10040018.D
Level 3	IC 280-669870/17	10040017.D
Level 4	IC 280-669870/16	10040016.D
Level 5	IC 280-669870/15	10040015.D
Level 6	IC 280-669870/14	10040014.D
Level 7	IC 280-669870/13	10040013.D
Level 8	IC 280-669870/12	10040012.D
Level 9	IC 280-669870/11	10040011.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD /RSE	#	MAX %RSD /RSE	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								
TNX	194516 207358 206104	200399 202293	206720 203873	202742 203696	Ave		203077.887				1.9		20.0			
HMX	93000 97508 95522	106250 97445	99580 96131	87750 96690	Ave		96652.9365				5.1		20.0			
DNX	140460 150134 150243	140060 149128	146114 149306	141349 147581	Ave		146041.715				2.9		20.0			
MNX	139160 134612 134910	126735 131392	131962 133087	131422 133128	Ave		132934.348				2.5		20.0			
RDX	126400 106776 105154	104900 106223	107720 104480	107730 106956	Lin2	173.498292	104832.257							0.9990		0.9900
Picric acid	+++++ 75344 74908	77950 75140	76140 74266	73910 75756	Ave		75426.7643				1.7		20.0			
1,3,5-Trinitrobenzene	220300 214216 215272	214050 212963	233920 212653	214070 218705	Ave		217349.773				3.1		20.0			
1,3-Dinitrobenzene	301200 294592 296094	302700 296218	301160 293594	296590 301939	Ave		298231.910				1.2		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

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

Lab Name: Eurofins Denver Job No.: 280-197447-1 Analy Batch No.: 669870

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/04/2024 16:59 Calibration End Date: 10/04/2024 19:55 Calibration ID: 98019

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD /RSE	#	MAX %RSD /RSE	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								
Nitrobenzene	203800 189692 194988	195200 192533	196020 191901	193600 198867	Ave		195177.925				2.1		20.0			
3,5-Dinitroaniline	223700 227780 235024	233250 231803	231220 229723	232920 238621	Lin2	-77.787847	233196.469							1.0000		0.9900
Tetryl	164200 169664 172761	155150 166958	171240 168961	171300 179110	Lin2	-117.30615	171283.726							0.9990		0.9900
Nitroglycerin	61210 65034 64690	60715 64271	64318 63656	63200 65375	Lin2	-403.23201	64455.8736							1.0000		0.9900
2,4,6-Trinitrotoluene	225700 213288 217208	219100 214585	218880 212211	216850 217864	Ave		217298.492				1.8		20.0			
4-Amino-2,6-dinitrotoluene	209900 146676 143972	167850 143735	155020 144779	151470 148480	Lin2	625.424427	143718.940							0.9990		0.9900
2-Amino-4,6-dinitrotoluene	202900 201384 207688	211200 199510	204980 198944	206120 208057	Ave		204531.476				2.0		20.0			
2,6-Dinitrotoluene	160000 139512 134291	146450 143753	146900 142416	143340 141490	Lin2	188.154614	140280.930							0.9990		0.9900
2,4-Dinitrotoluene	296800 287776 296269	296350 284400	286560 284846	297230 296080	Ave		291812.279				2.0		20.0			
2-Nitrotoluene	127300 124236 126481	120550 124605	129460 124796	124870 126917	Ave		125468.324				2.0		20.0			
4-Nitrotoluene	122900 107584 109290	117150 107470	113220 107763	106240 109373	Lin2	157.366410	107910.700							1.0000		0.9900
3-Nitrotoluene	159800 134928 138727	149600 135250	138940 134671	133450 138022	Lin2	249.900612	135119.434							1.0000		0.9900

Note: The M1 coefficient is the same as Ave CF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

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

Lab Name: Eurofins Denver Job No.: 280-197447-1 Analy Batch No.: 669870

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/04/2024 16:59 Calibration End Date: 10/04/2024 19:55 Calibration ID: 98019

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD /RSE	#	MAX %RSD /RSE	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								
PETN	70530 72744 73523	68860 72834	72696 72584	71766 74375	Ave		72212.3292				2.3		20.0			
1,2-Dinitrobenzene	131500 129000 131478	126500 128563	135900 128147	132380 130220	Ave		130409.783				2.1		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

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

Lab Name: Eurofins Denver | Job No.: 280-197447-1 | Analy Batch No.: 669870

SDG No.:

Instrument ID: CHHPLC_X3 | GC Column: UltraCarb5 ID: 4.6(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 10/04/2024 16:59 | Calibration End Date: 10/04/2024 19:55 | Calibration ID: 98019

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-669870/19	10040019.D
Level 2	IC 280-669870/18	10040018.D
Level 3	IC 280-669870/17	10040017.D
Level 4	IC 280-669870/16	10040016.D
Level 5	IC 280-669870/15	10040015.D
Level 6	IC 280-669870/14	10040014.D
Level 7	IC 280-669870/13	10040013.D
Level 8	IC 280-669870/12	10040012.D
Level 9	IC 280-669870/11	10040011.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
TNX	Ave	1951 81160	4020 143139	10367 204307	20335 516807	51995	0.0100 0.401	0.0201 0.702	0.0502 1.00	0.100 2.51	0.251
HMX	Ave	930 38978	2125 67292	4979 96690	8775 238805	24377	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
DNX	Ave	1406 59711	2804 104619	7313 147729	14149 375984	37571	0.0100 0.400	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250
MNX	Ave	1624 61334	2958 108719	7700 155360	15337 393599	39273	0.0117 0.467	0.0233 0.817	0.0584 1.17	0.117 2.92	0.292
RDX	Lin2	1264 42489	2098 73136	5386 106956	10773 262885	26694	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Picric acid	Ave	+++++ 30056	1559 51986	3807 75756	7391 187271	18836	+++++ 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
1,3,5-Trinitrobenzene	Ave	2203 85185	4281 148857	11696 218705	21407 538179	53554	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
1,3-Dinitrobenzene	Ave	3012 118487	6054 205516	15058 301939	29659 740236	73648	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Nitrobenzene	Ave	2038 77013	3904 134331	9801 198867	19360 487471	47423	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
3,5-Dinitroaniline	Lin2	2237 92721	4665 160806	11561 238621	23292 587561	56945	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Tetryl	Lin2	1642 66783	3103 118273	8562 179110	17130 431903	42416	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Nitroglycerin	Lin2	6121 257082	12143 445595	32159 653746	63200 1617250	162585	0.100 4.00	0.200 7.00	0.500 10.0	1.00 25.0	2.50
2,4,6-Trinitrotoluene	Ave	2257 85834	4382 148548	10944 217864	21685 543020	53322	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
4-Amino-2,6-dinitrotoluene	Lin2	2099 57494	3357 101345	7751 148480	15147 359929	36669	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
2-Amino-4,6-dinitrotoluene	Ave	2029	4224	10249	20612	50346	0.0100	0.0200	0.0500	0.100	0.250

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

Lab Name: Eurofins Denver | Job No.: 280-197447-1 | Analy Batch No.: 669870

SDG No.:

Instrument ID: CHHPLC_X3 | GC Column: UltraCarb5 ID: 4.6(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 10/04/2024 16:59 | Calibration End Date: 10/04/2024 19:55 | Calibration ID: 98019

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
		79804	139261	208057	519220		0.400	0.700	1.00	2.50	
2,6-Dinitrotoluene	Lin2	1600 57501	2929 99691	7345 141490	14334 335728	34878	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
2,4-Dinitrotoluene	Ave	2968 113760	5927 199392	14328 296080	29723 740672	71944	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
2-Nitrotoluene	Ave	1273 49842	2411 87357	6473 126917	12487 316203	31059	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
4-Nitrotoluene	Lin2	1229 42988	2343 75434	5661 109373	10624 273226	26896	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
3-Nitrotoluene	Lin2	1598 54100	2992 94270	6947 138022	13345 346817	33732	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
PETN	Ave	7053 291336	13772 508089	36348 743747	71766 1838063	181859	0.100 4.00	0.200 7.00	0.500 10.0	1.00 25.0	2.50
1,2-Dinitrobenzene	Ave	1315 51425	2530 89703	6795 130220	13238 328696	32250	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_X\20241004-138284.b\10040011.D
Lims ID: IC INT/DMT 9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 04-Oct-2024 16:59:29 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/DMT 9
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 08-Oct-2024 13:19:10 Calib Date: 04-Oct-2024 19:55:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1654

First Level Reviewer: LV5D Date: 04-Oct-2024 17:24:36

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.428	6.437	-0.009	516807	2.51	2.54	M
4 HMX	1	6.568	6.577	-0.009	238805	2.50	2.47	M
6 DNX	1	6.741	6.751	-0.010	375984	2.50	2.57	M
7 MNX	1	7.141	7.151	-0.010	393599	2.92	2.96	M
8 RDX	1	7.501	7.511	-0.010	262885	2.50	2.51	
9 2,4,6-Trinitrophenol	1	7.868	7.937	-0.069	187271	2.50	2.48	
$ 10 1,2-Dinitrobenzene	1	8.368	8.377	-0.009	328696	2.50	2.52	
11 1,3,5-Trinitrobenzene	1	8.468	8.477	-0.009	538179	2.50	2.48	
12 1,3-Dinitrobenzene	1	9.028	9.037	-0.009	740236	2.50	2.48	
13 Nitrobenzene	1	9.341	9.357	-0.016	487471	2.50	2.50	
14 3,5-Dinitroaniline	1	9.548	9.564	-0.016	587561	2.50	2.52	
15 Tetryl	1	9.668	9.684	-0.016	431903	2.50	2.52	
16 Nitroglycerin	2	10.108	10.124	-0.016	1617250	25.0	25.1	M
17 2,4,6-Trinitrotoluene	1	10.468	10.477	-0.009	543020	2.50	2.50	
18 4-Amino-2,6-dinitrotoluene	1	10.621	10.637	-0.016	359929	2.50	2.50	
19 2-Amino-4,6-dinitrotoluene	1	10.848	10.864	-0.016	519220	2.50	2.54	
20 2,6-Dinitrotoluene	1	10.988	11.004	-0.016	335728	2.50	2.39	
21 2,4-Dinitrotoluene	1	11.134	11.150	-0.016	740672	2.50	2.54	
22 o-Nitrotoluene	1	11.834	11.850	-0.016	316203	2.50	2.52	
23 p-Nitrotoluene	1	12.208	12.217	-0.009	273226	2.50	2.53	
24 m-Nitrotoluene	1	12.708	12.724	-0.016	346817	2.50	2.56	
25 PETN	2	13.794	13.797	-0.003	1838063	25.0	25.5	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00083	Amount Added: 250.00	Units: uL
8330 DMT_00018	Amount Added: 125.00	Units: uL

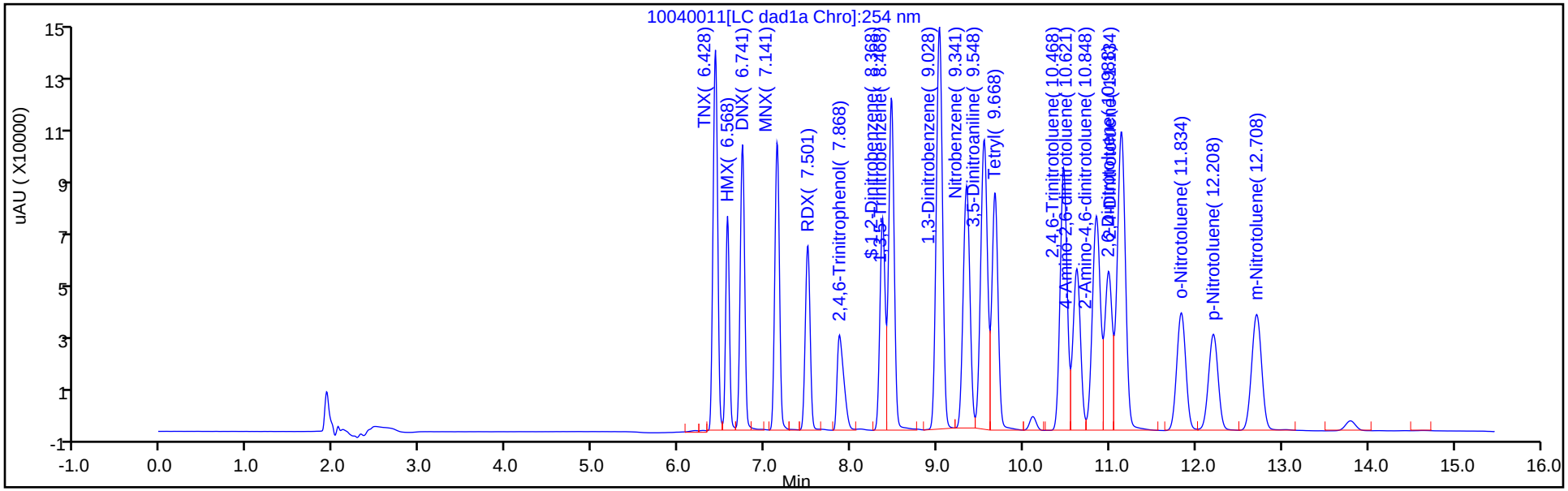
Report Date: 08-Oct-2024 13:19:10 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Denver

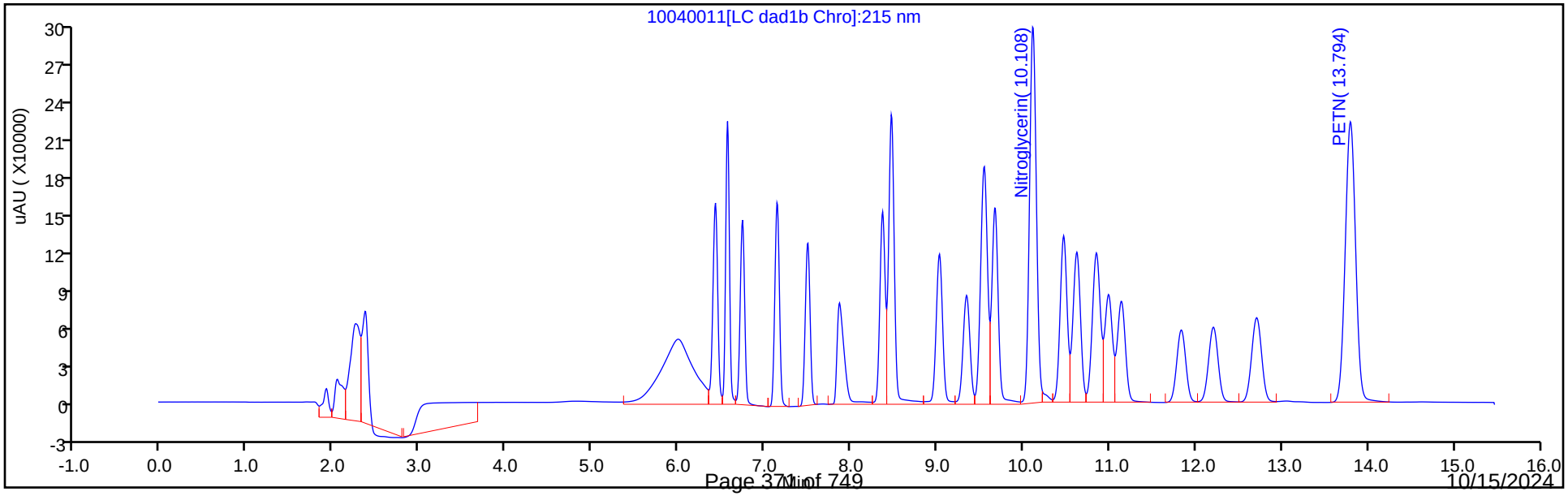
Data File: \\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040011.d

Injection Date:	04-Oct-2024 16:59:29	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	IC INT/DMT 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



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



10/15/2024
4:48:23 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

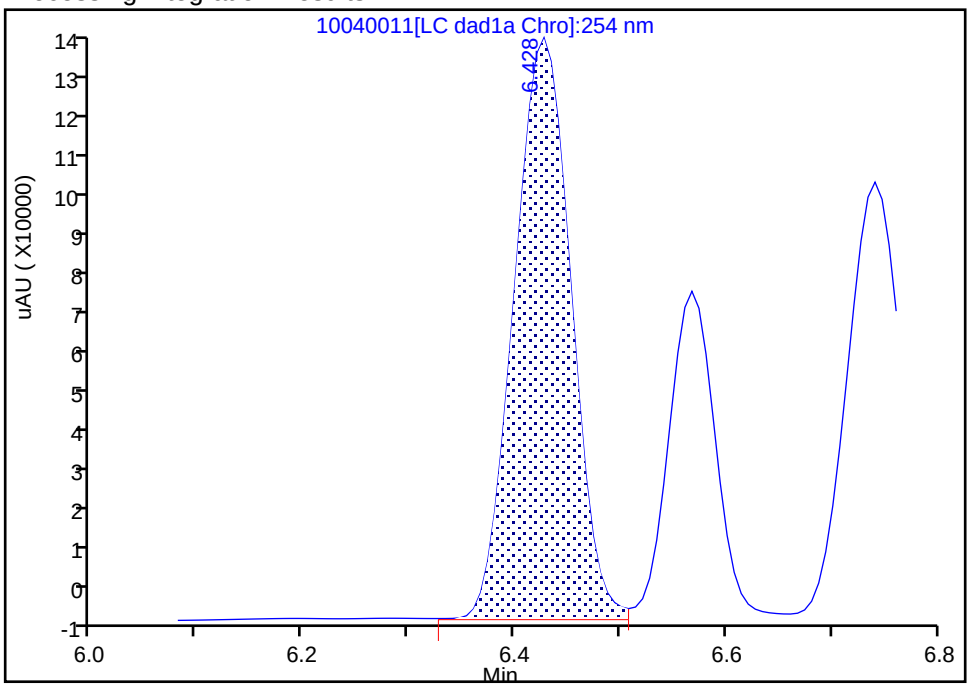
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040011.d				
Injection Date:	04-Oct-2024 16:59:29	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 9				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

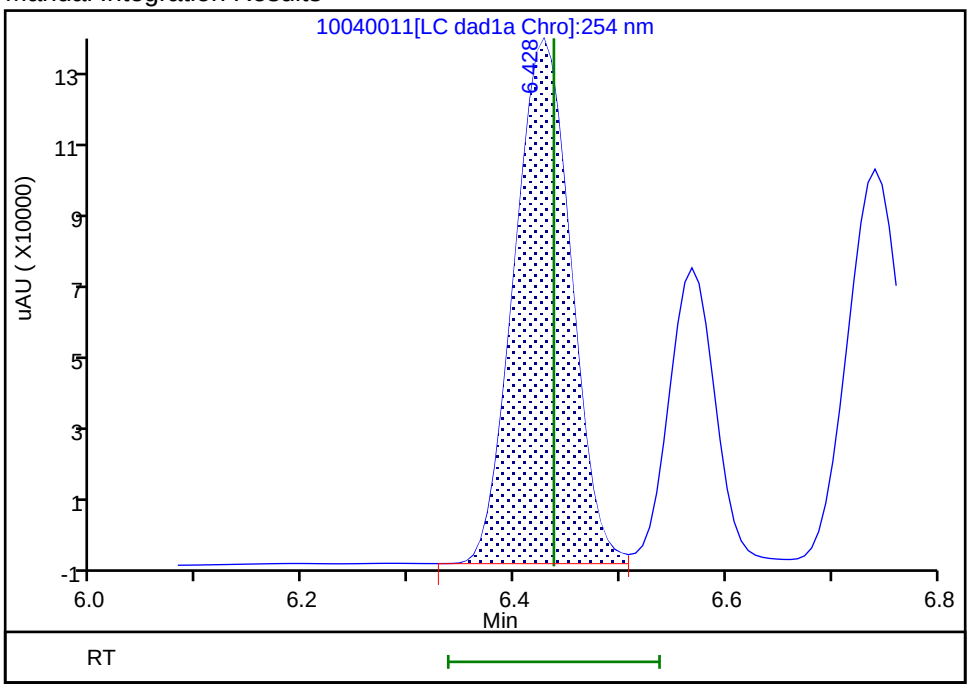
Processing Integration Results

RT: 6.43
Area: 518719
Amount: 2.507500
Amount Units: ug/mL



Manual Integration Results

RT: 6.43
Area: 516807
Amount: 2.544871
Amount Units: ug/mL



Reviewer: LV5D, 04-Oct-2024 17:24:16 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

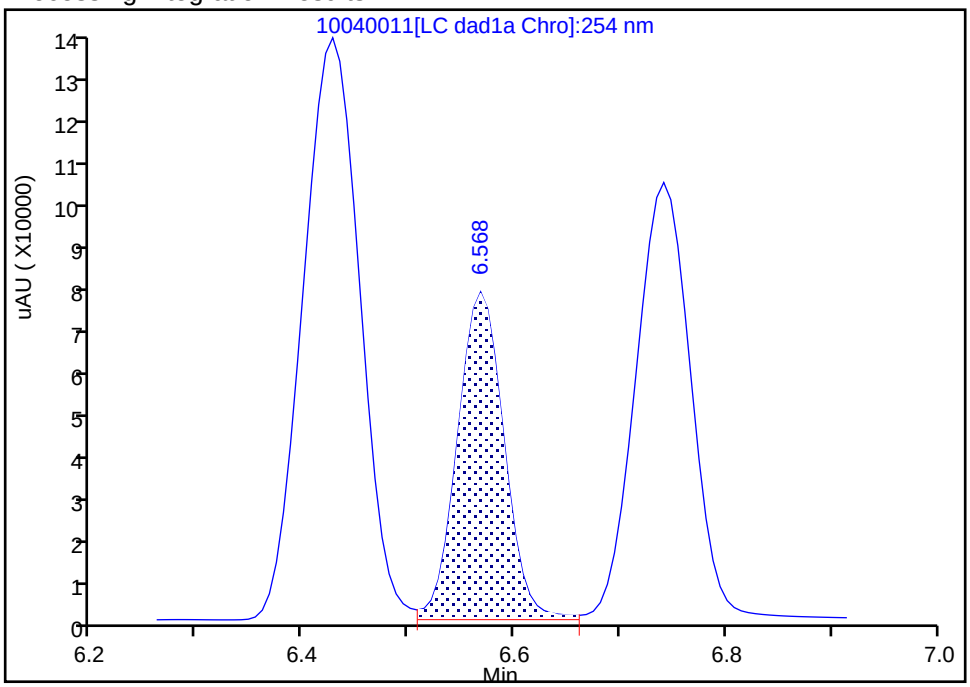
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040011.d				
Injection Date:	04-Oct-2024 16:59:29	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 9				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

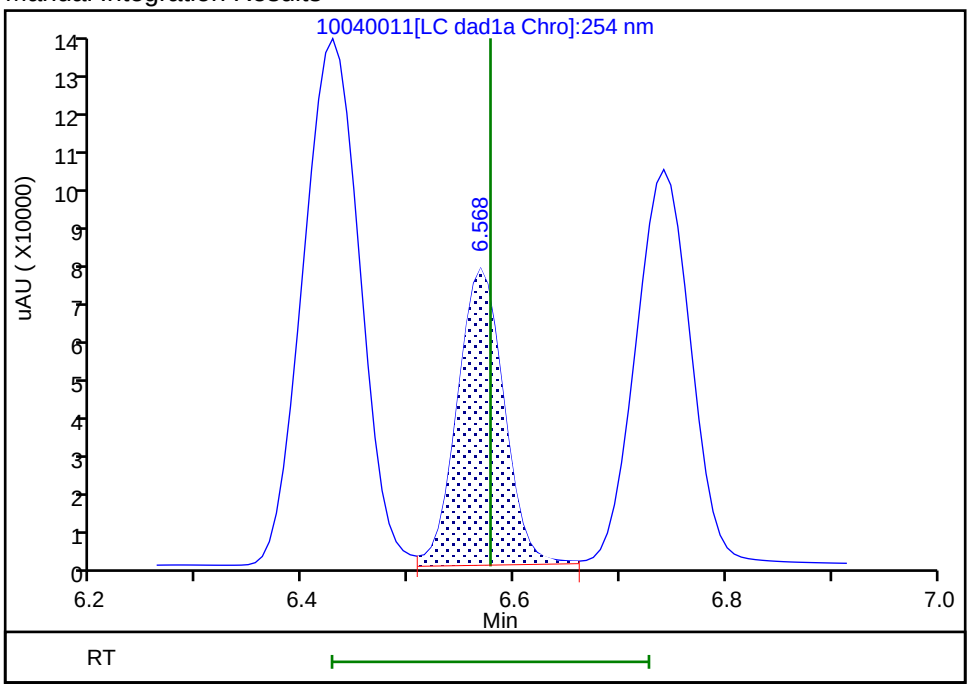
Processing Integration Results

RT: 6.57
Area: 239730
Amount: 2.500000
Amount Units: ug/mL



Manual Integration Results

RT: 6.57
Area: 238805
Amount: 2.470747
Amount Units: ug/mL



Reviewer: LV5D, 04-Oct-2024 17:24:16 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

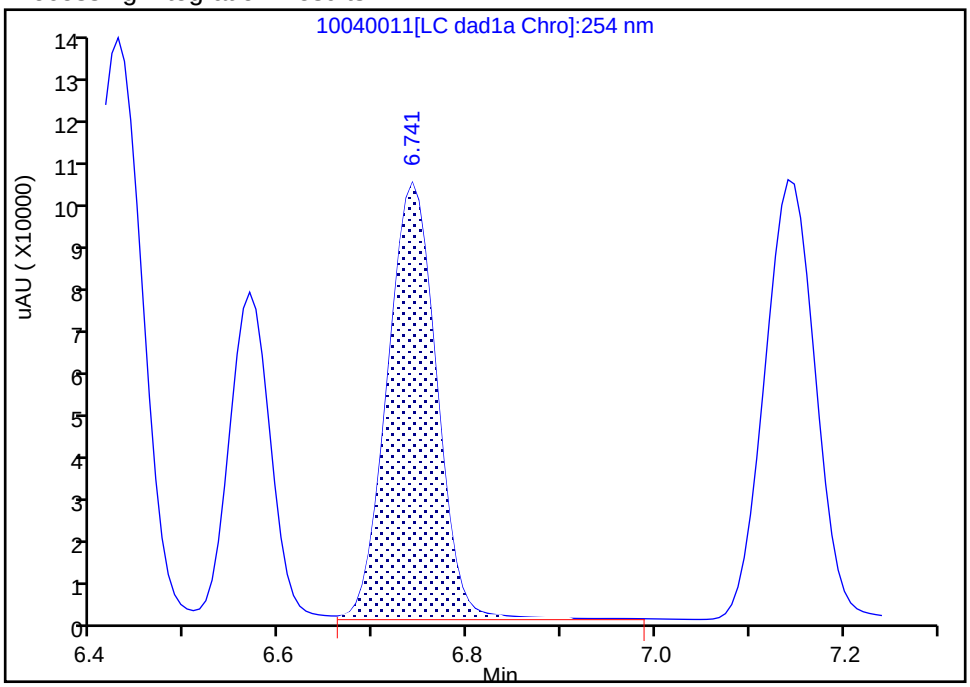
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040011.d				
Injection Date:	04-Oct-2024 16:59:29	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 9				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

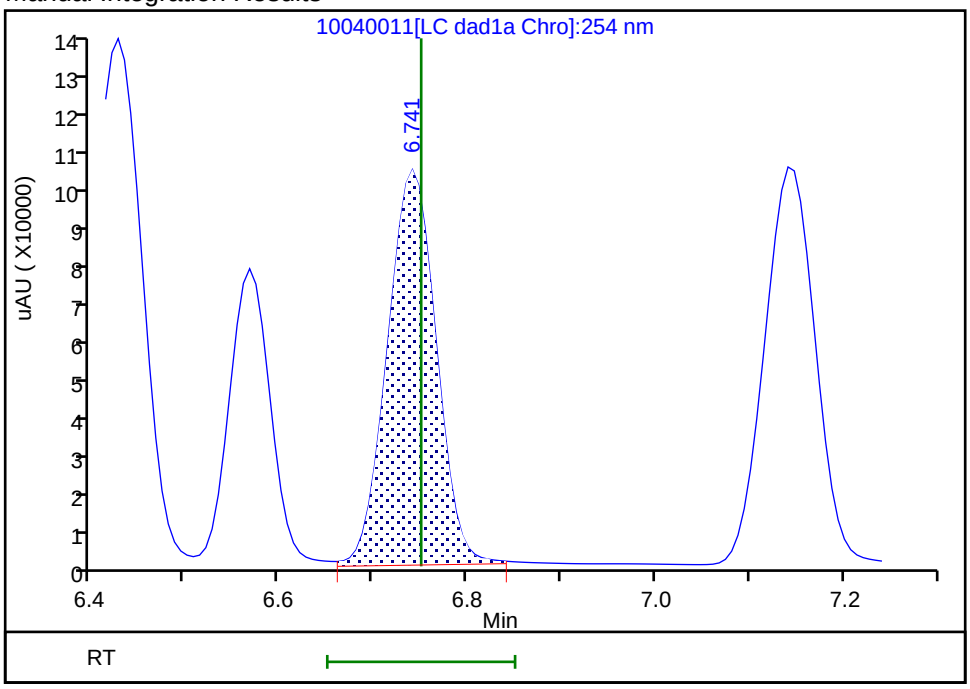
Processing Integration Results

RT: 6.74
Area: 379790
Amount: 2.502500
Amount Units: ug/mL



Manual Integration Results

RT: 6.74
Area: 375984
Amount: 2.574497
Amount Units: ug/mL



Reviewer: LV5D, 04-Oct-2024 17:24:19 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

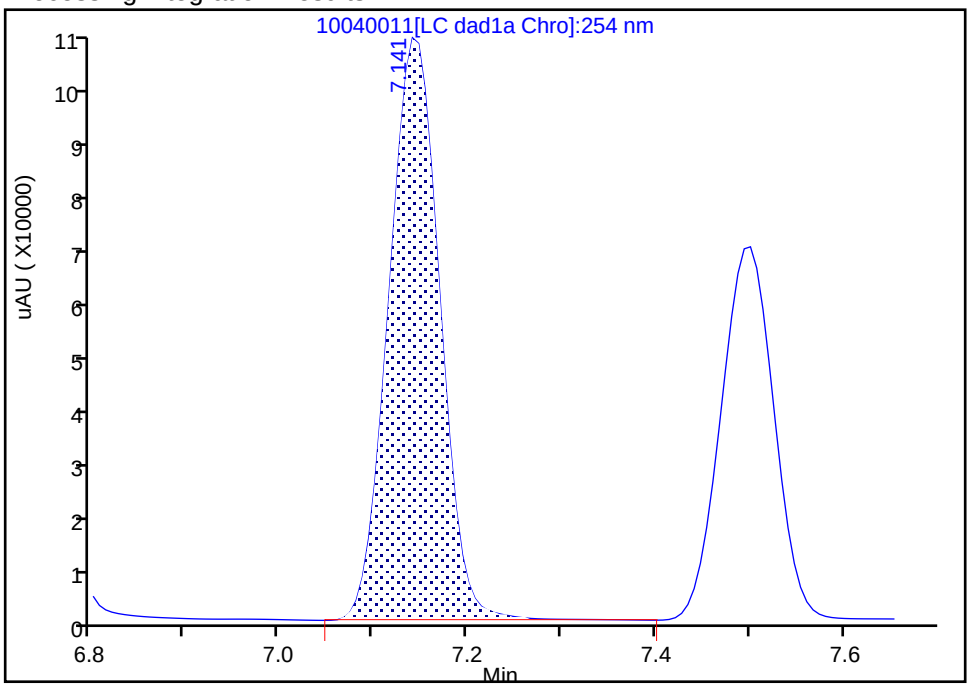
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040011.d				
Injection Date:	04-Oct-2024 16:59:29	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 9				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

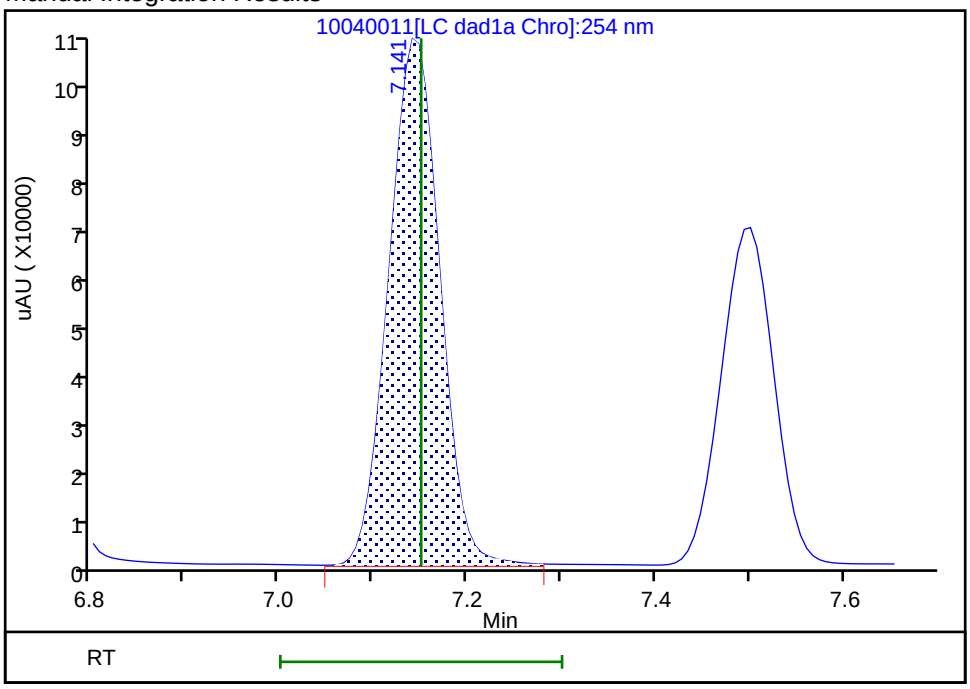
Processing Integration Results

RT: 7.14
Area: 394458
Amount: 2.917500
Amount Units: ug/mL



Manual Integration Results

RT: 7.14
Area: 393599
Amount: 2.960853
Amount Units: ug/mL



Reviewer: LV5D, 04-Oct-2024 17:24:24 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

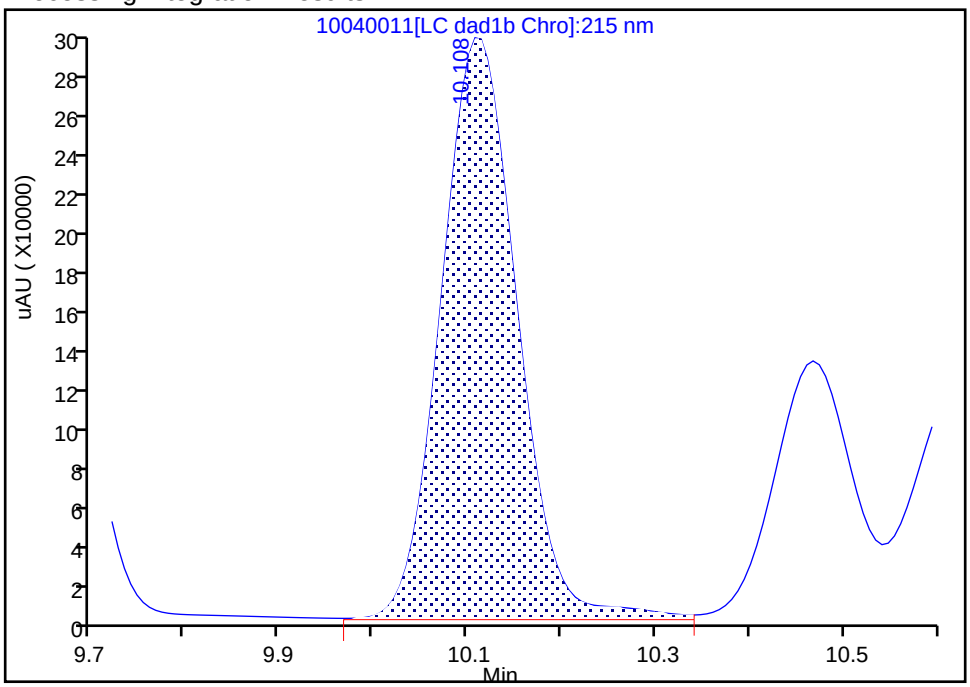
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040011.d				
Injection Date:	04-Oct-2024 16:59:29	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 9				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1C, 215 nm		

16 Nitroglycerin, CAS: 55-63-0

Signal: 1

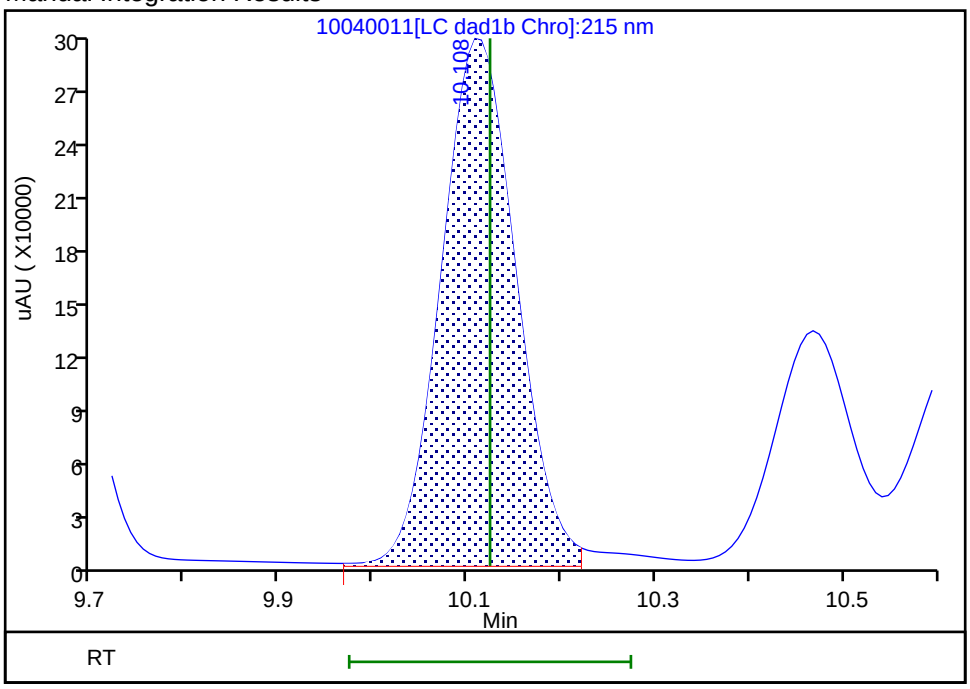
Processing Integration Results

RT: 10.11
Area: 1655248
Amount: 23.821068
Amount Units: ug/mL



Manual Integration Results

RT: 10.11
Area: 1617250
Amount: 25.097065
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 13:08:47 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040012.D
Lims ID: IC INT/DMT 8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 04-Oct-2024 17:21:25 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/DMT 8
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 08-Oct-2024 13:19:12 Calib Date: 04-Oct-2024 19:55:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1654

First Level Reviewer: LV5D Date: 08-Oct-2024 12:59:39

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.438	6.437	0.001	204307	1.00	1.01	
4 HMX	1	6.571	6.577	-0.006	96690	1.00	1.00	M
6 DNX	1	6.751	6.751	0.000	147729	1.00	1.01	M
7 MNX	1	7.151	7.151	0.000	155360	1.17	1.17	
8 RDX	1	7.505	7.511	-0.006	106956	1.00	1.02	
9 2,4,6-Trinitrophenol	1	7.905	7.937	-0.032	75756	1.00	1.00	
$ 10 1,2-Dinitrobenzene	1	8.371	8.377	-0.006	130220	1.00	1.00	
11 1,3,5-Trinitrobenzene	1	8.478	8.477	0.001	218705	1.00	1.01	
12 1,3-Dinitrobenzene	1	9.038	9.037	0.001	301939	1.00	1.01	
13 Nitrobenzene	1	9.358	9.357	0.001	198867	1.00	1.02	
14 3,5-Dinitroaniline	1	9.558	9.564	-0.006	238621	1.00	1.02	
15 Tetryl	1	9.685	9.684	0.001	179110	1.00	1.05	
16 Nitroglycerin	2	10.125	10.124	0.001	653746	10.0	10.1	M
17 2,4,6-Trinitrotoluene	1	10.478	10.477	0.001	217864	1.00	1.00	
18 4-Amino-2,6-dinitrotoluene	1	10.631	10.637	-0.006	148480	1.00	1.03	
19 2-Amino-4,6-dinitrotoluene	1	10.865	10.864	0.001	208057	1.00	1.02	
20 2,6-Dinitrotoluene	1	11.005	11.004	0.001	141490	1.00	1.01	
21 2,4-Dinitrotoluene	1	11.151	11.150	0.001	296080	1.00	1.01	
22 o-Nitrotoluene	1	11.851	11.850	0.001	126917	1.00	1.01	
23 p-Nitrotoluene	1	12.218	12.217	0.001	109373	1.00	1.01	
24 m-Nitrotoluene	1	12.725	12.724	0.001	138022	1.00	1.02	
25 PETN	2	13.805	13.797	0.008	743747	10.0	10.3	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00018	Amount Added: 50.00	Units: uL
8330IntermStk_00083	Amount Added: 100.00	Units: uL

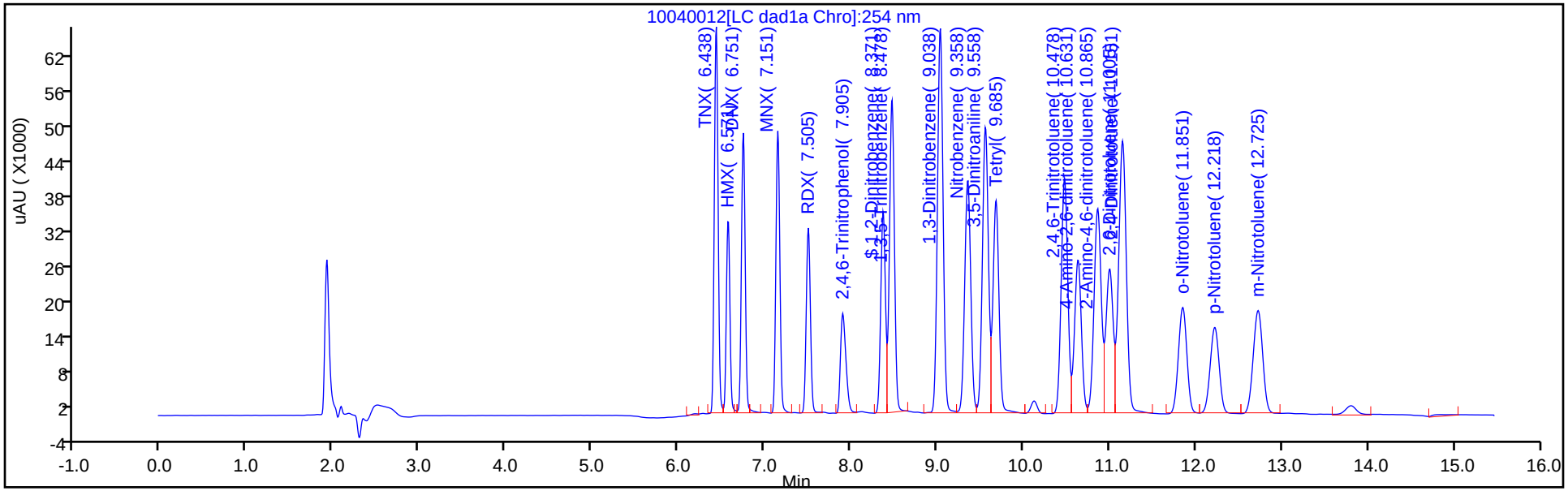
Report Date: 08-Oct-2024 13:19:12 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Denver

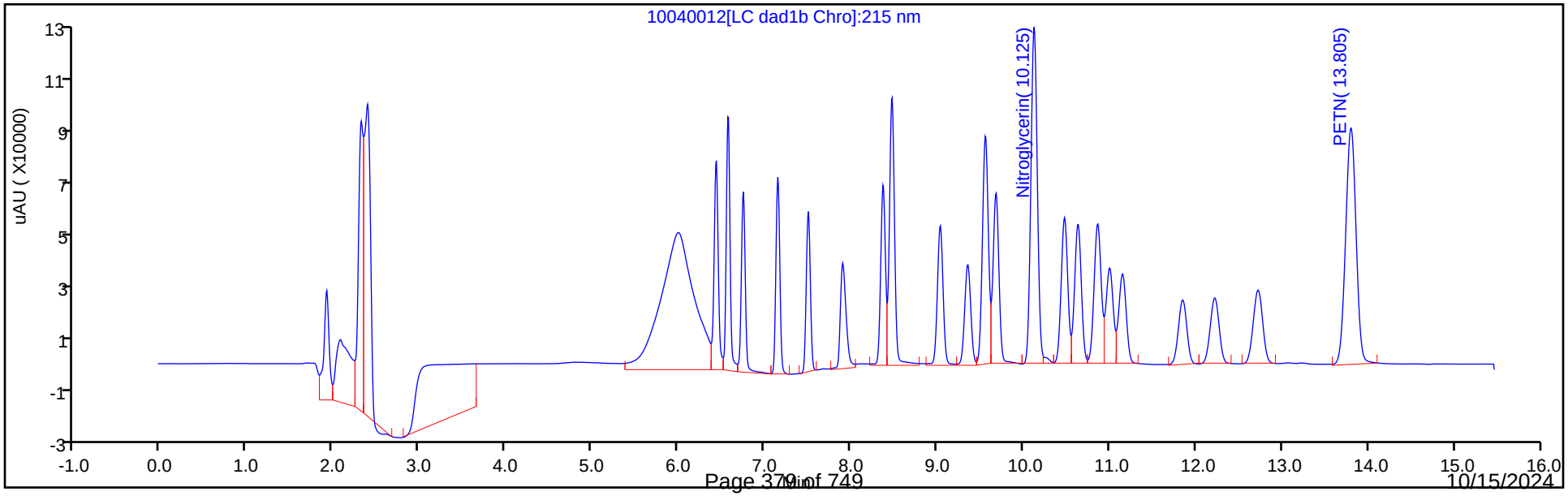
Data File: \\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040012.d

Injection Date:	04-Oct-2024 17:21:25	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	IC INT/DMT 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



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



10/15/2024
4:48:23 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

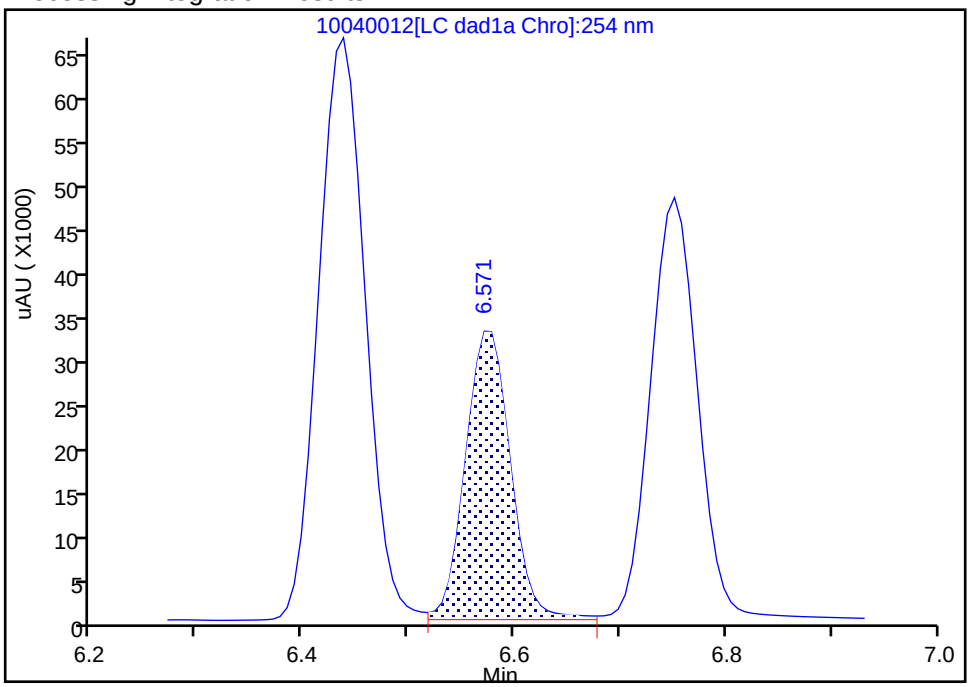
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040012.d				
Injection Date:	04-Oct-2024 17:21:25	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 8				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

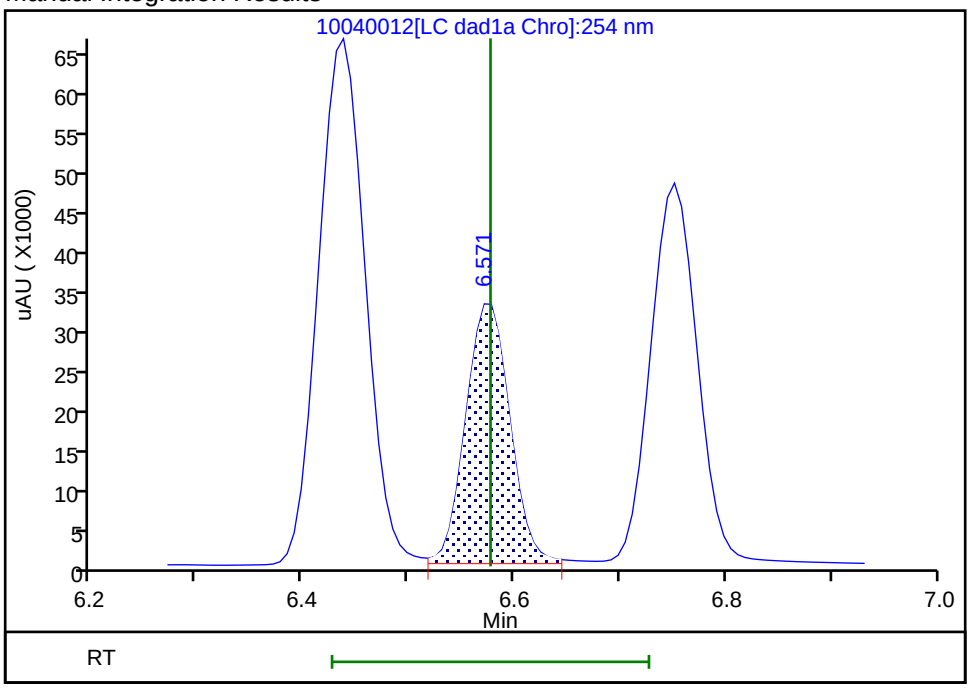
Processing Integration Results

RT: 6.57
Area: 97637
Amount: 1.048050
Amount Units: ug/mL



Manual Integration Results

RT: 6.57
Area: 96690
Amount: 1.000383
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 12:59:37 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

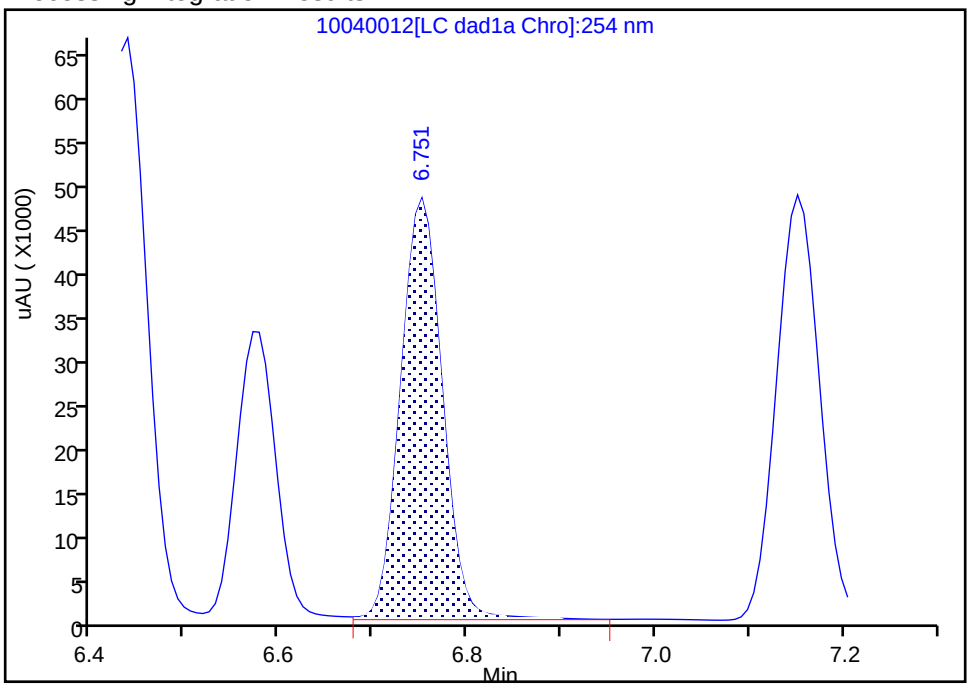
Data File: \\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040012.d
Injection Date: 04-Oct-2024 17:21:25 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 8
Client ID:
Operator ID: JZ ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

6 DNX, CAS: 80251-29-2

Signal: 1

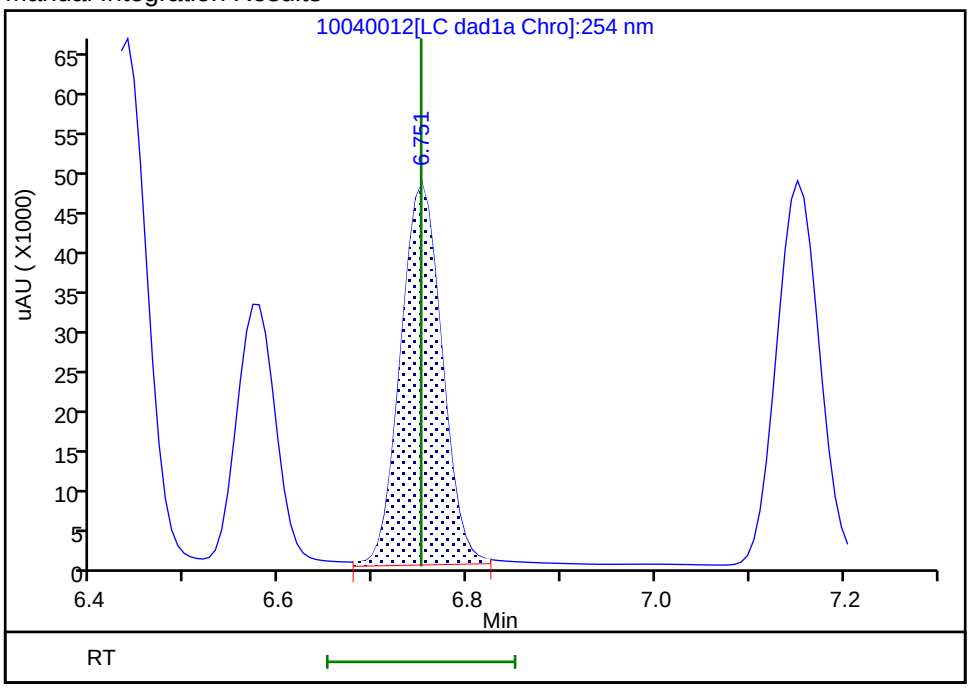
Processing Integration Results

RT: 6.75
Area: 149634
Amount: 0.974610
Amount Units: ug/mL



Manual Integration Results

RT: 6.75
Area: 147729
Amount: 1.011553
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 12:59:36 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

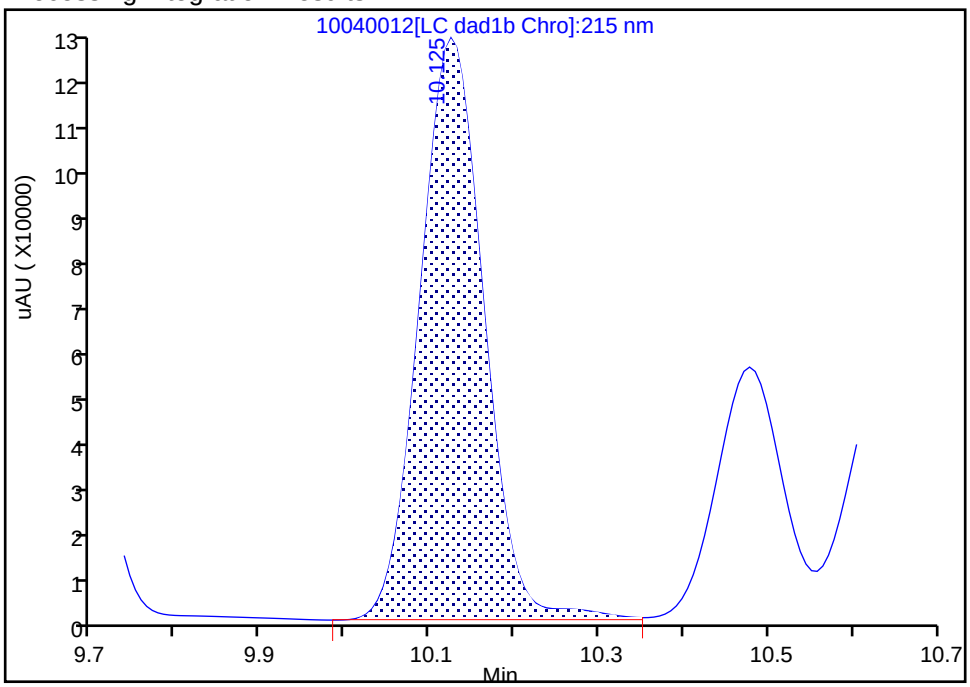
Data File: \\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040012.d
Injection Date: 04-Oct-2024 17:21:25 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 8
Client ID:
Operator ID: JZ ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1C, 215 nm

16 Nitroglycerin, CAS: 55-63-0

Signal: 1

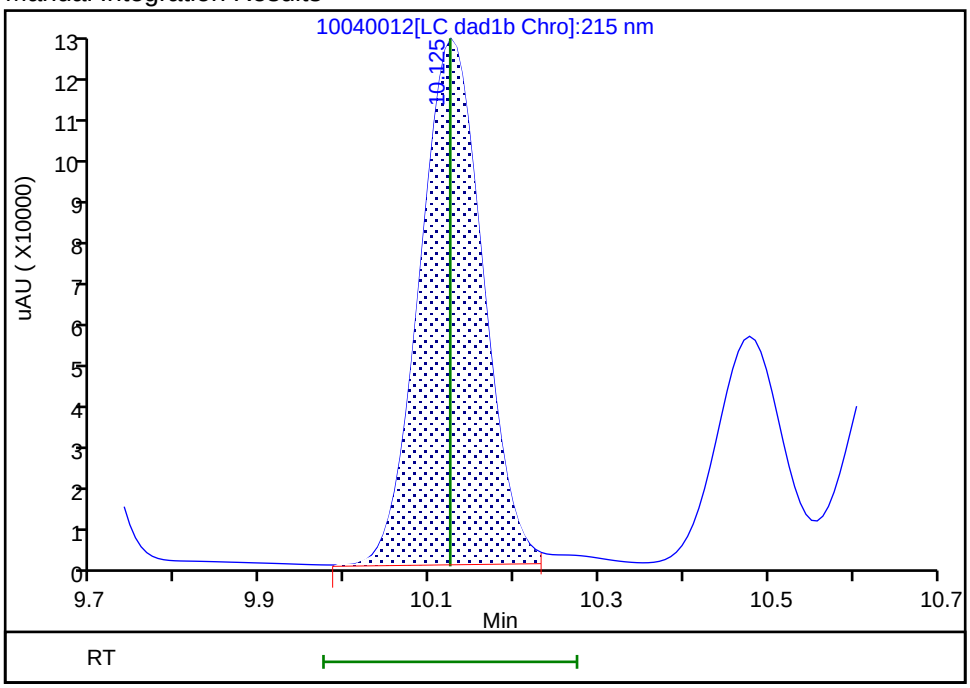
Processing Integration Results

RT: 10.12
Area: 665997
Amount: 9.607872
Amount Units: ug/mL



Manual Integration Results

RT: 10.12
Area: 653746
Amount: 10.148792
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 13:08:54 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040013.D
Lims ID: IC INT/DMT 7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 04-Oct-2024 17:43:18 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/DMT 7
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 08-Oct-2024 13:19:14 Calib Date: 04-Oct-2024 19:55:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1654

First Level Reviewer: LV5D Date: 08-Oct-2024 13:09:03

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.436	6.437	-0.001	143139	0.7021	0.7048	
4 HMX	1	6.576	6.577	-0.001	67292	0.7000	0.6962	
6 DNX	1	6.749	6.751	-0.002	104619	0.7007	0.7164	
7 MNX	1	7.156	7.151	0.005	108719	0.8169	0.8178	
8 RDX	1	7.509	7.511	-0.002	73136	0.7000	0.6960	
9 2,4,6-Trinitrophenol	1	7.916	7.937	-0.021	51986	0.7000	0.6892	
$ 10 1,2-Dinitrobenzene	1	8.376	8.377	-0.001	89703	0.7000	0.6879	
11 1,3,5-Trinitrobenzene	1	8.476	8.477	-0.001	148857	0.7000	0.6849	
12 1,3-Dinitrobenzene	1	9.036	9.037	-0.001	205516	0.7000	0.6891	
13 Nitrobenzene	1	9.356	9.357	-0.001	134331	0.7000	0.6882	
14 3,5-Dinitroaniline	1	9.562	9.564	-0.002	160806	0.7000	0.6899	
15 Tetryl	1	9.682	9.684	-0.002	118273	0.7000	0.6912	
16 Nitroglycerin	2	10.129	10.124	0.005	445595	7.00	6.92	M
17 2,4,6-Trinitrotoluene	1	10.482	10.477	0.005	148548	0.7000	0.6836	
18 4-Amino-2,6-dinitrotoluene	1	10.642	10.637	0.005	101345	0.7000	0.7008	
19 2-Amino-4,6-dinitrotoluene	1	10.869	10.864	0.005	139261	0.7000	0.6809	
20 2,6-Dinitrotoluene	1	11.009	11.004	0.005	99691	0.7000	0.7093	
21 2,4-Dinitrotoluene	1	11.156	11.150	0.006	199392	0.7000	0.6833	
22 o-Nitrotoluene	1	11.862	11.850	0.012	87357	0.7000	0.6962	
23 p-Nitrotoluene	1	12.229	12.217	0.012	75434	0.7000	0.6976	
24 m-Nitrotoluene	1	12.736	12.724	0.012	94270	0.7000	0.6958	
25 PETN	2	13.822	13.797	0.025	508089	7.00	7.04	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00018	Amount Added:	35.00	Units: uL
8330IntermStk_00083	Amount Added:	70.00	Units: uL

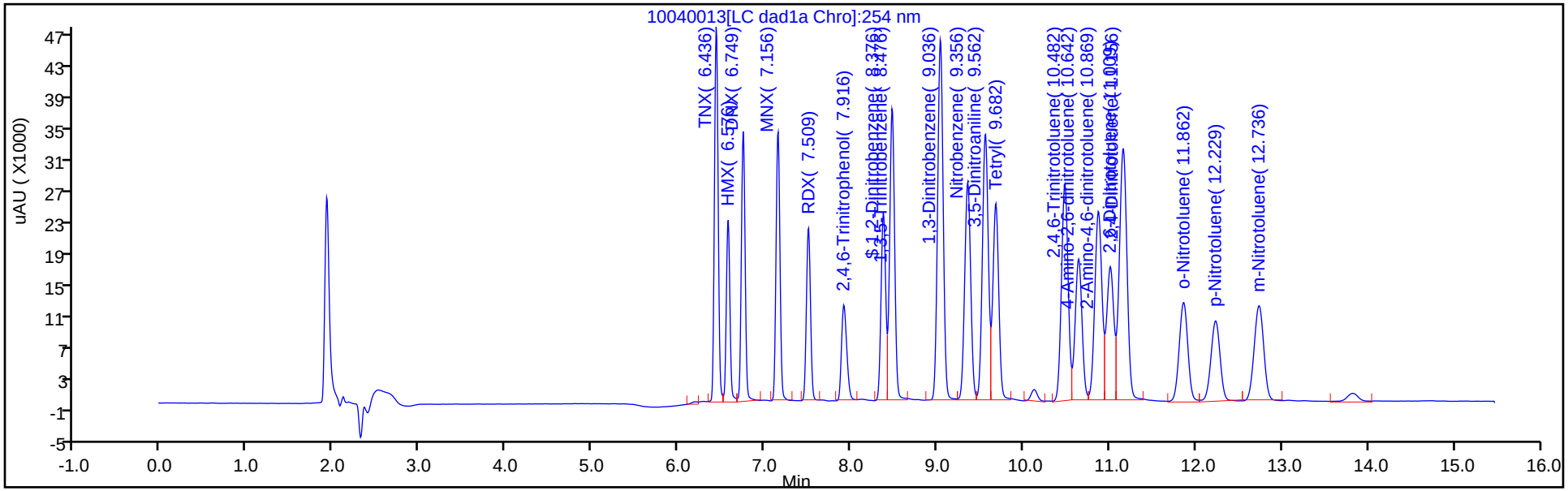
Report Date: 08-Oct-2024 13:19:14 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Denver

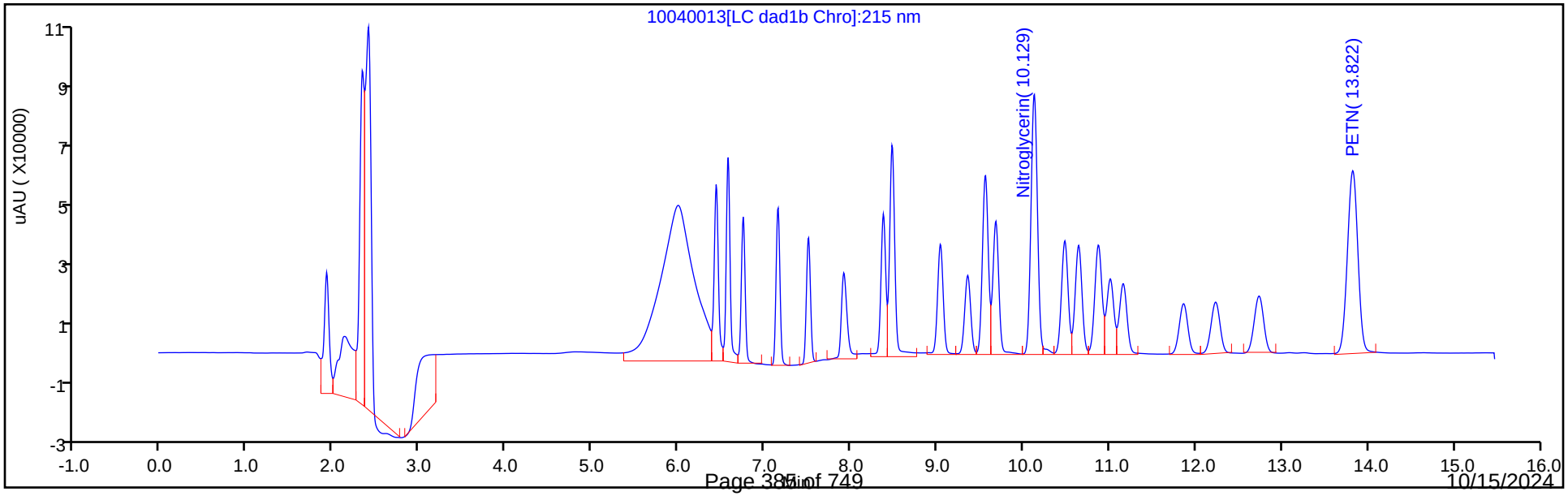
Data File: \\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040013.d

Injection Date:	04-Oct-2024 17:43:18	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	IC INT/DMT 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



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



10/15/2024
4:48:23 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

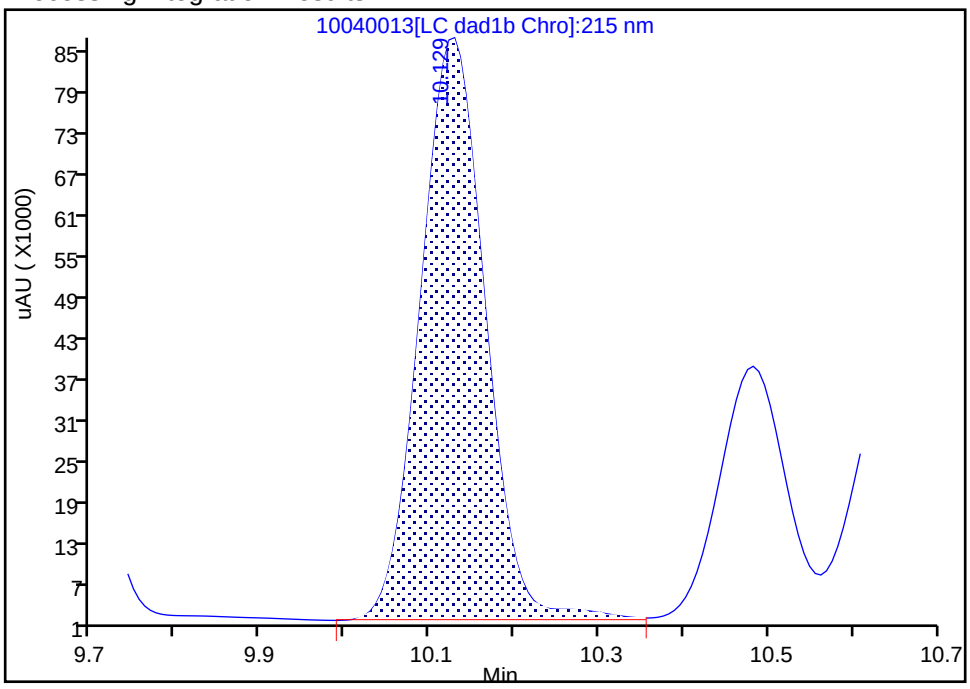
Data File: \\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040013.d
Injection Date: 04-Oct-2024 17:43:18 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 7
Client ID:
Operator ID: JZ ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1C, 215 nm

16 Nitroglycerin, CAS: 55-63-0

Signal: 1

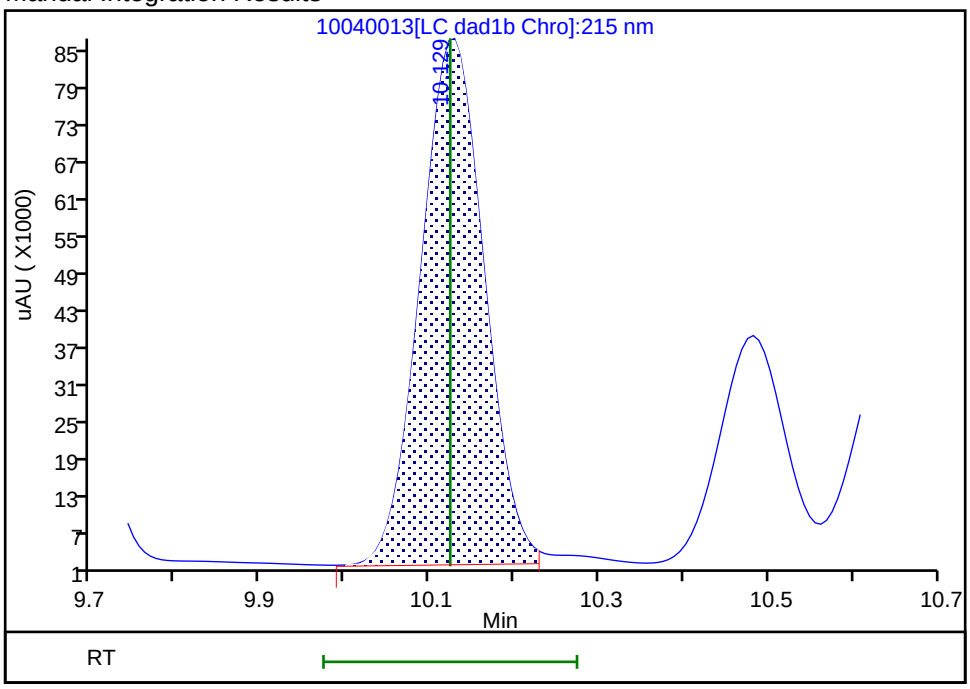
Processing Integration Results

RT: 10.13
Area: 453503
Amount: 6.555243
Amount Units: ug/mL



Manual Integration Results

RT: 10.13
Area: 445595
Amount: 6.919435
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 13:09:02 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040014.D
Lims ID: IC INT/DMT 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 04-Oct-2024 18:05:18 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/DMT 6
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 08-Oct-2024 13:19:15 Calib Date: 04-Oct-2024 19:55:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1654

First Level Reviewer: LV5D Date: 08-Oct-2024 13:01:15

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.434	6.437	-0.003	81160	0.4012	0.3996	
4 HMX	1	6.567	6.577	-0.010	38978	0.4000	0.4033	
6 DNX	1	6.747	6.751	-0.004	59711	0.4004	0.4089	
7 MNX	1	7.154	7.151	0.003	61334	0.4668	0.4614	
8 RDX	1	7.507	7.511	-0.004	42489	0.4000	0.4036	
9 2,4,6-Trinitrophenol	1	7.927	7.937	-0.010	30056	0.4000	0.3985	
$ 10 1,2-Dinitrobenzene	1	8.380	8.377	0.003	51425	0.4000	0.3943	
11 1,3,5-Trinitrobenzene	1	8.480	8.477	0.003	85185	0.4000	0.3919	
12 1,3-Dinitrobenzene	1	9.047	9.037	0.010	118487	0.4000	0.3973	
13 Nitrobenzene	1	9.367	9.357	0.010	77013	0.4000	0.3946	
14 3,5-Dinitroaniline	1	9.573	9.564	0.009	92721	0.4000	0.3979	
15 Tetryl	1	9.700	9.684	0.016	66783	0.4000	0.3906	
16 Nitroglycerin	2	10.140	10.124	0.016	257082	4.00	3.99	M
17 2,4,6-Trinitrotoluene	1	10.493	10.477	0.016	85834	0.4000	0.3950	
18 4-Amino-2,6-dinitrotoluene	1	10.653	10.637	0.016	57494	0.4000	0.3957	
19 2-Amino-4,6-dinitrotoluene	1	10.880	10.864	0.016	79804	0.4000	0.3902	
20 2,6-Dinitrotoluene	1	11.020	11.004	0.016	57501	0.4000	0.4086	
21 2,4-Dinitrotoluene	1	11.167	11.150	0.017	113760	0.4000	0.3898	
22 o-Nitrotoluene	1	11.867	11.850	0.017	49842	0.4000	0.3972	
23 p-Nitrotoluene	1	12.240	12.217	0.023	42988	0.4000	0.3969	
24 m-Nitrotoluene	1	12.740	12.724	0.016	54100	0.4000	0.3985	
25 PETN	2	13.827	13.797	0.030	291336	4.00	4.03	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00083	Amount Added:	40.00	Units: uL
8330 DMT_00018	Amount Added:	20.00	Units: uL

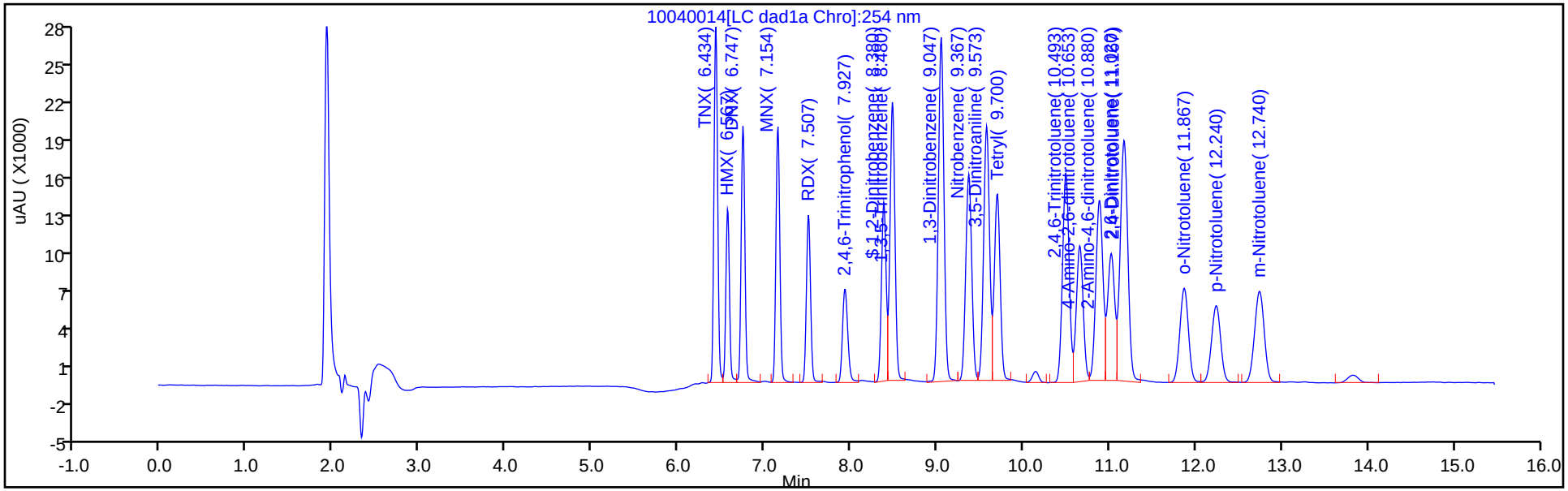
Report Date: 08-Oct-2024 13:19:16 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Denver

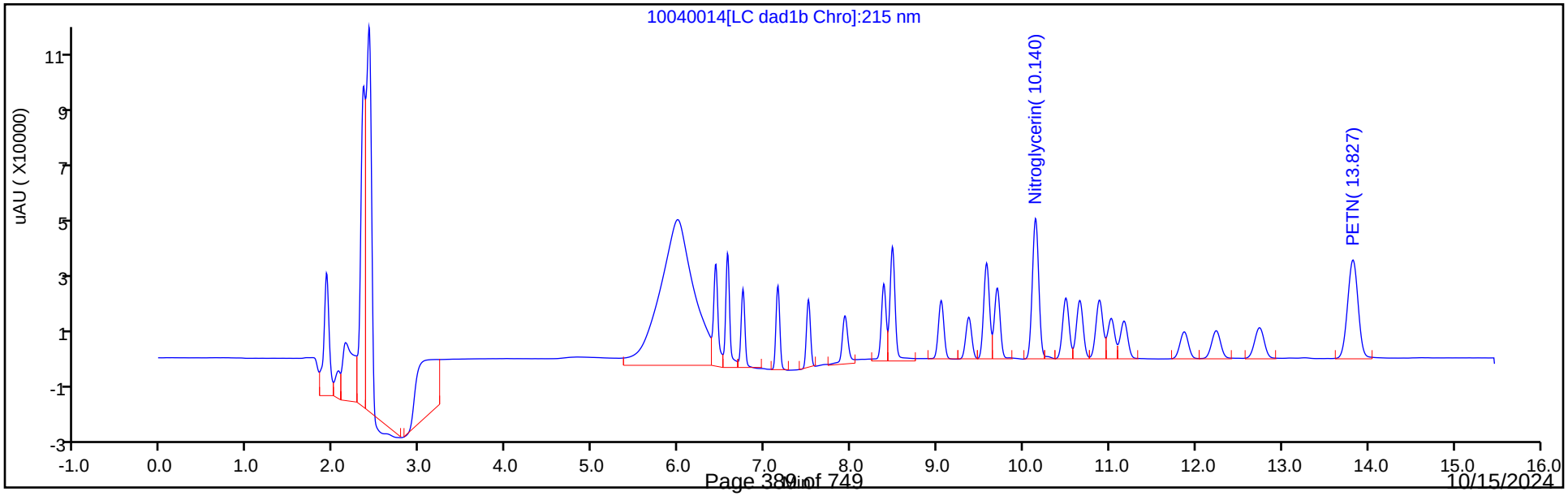
Data File: \\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040014.d

Injection Date:	04-Oct-2024 18:05:18	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	IC INT/DMT 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



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



10/15/2024
4:48:23 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

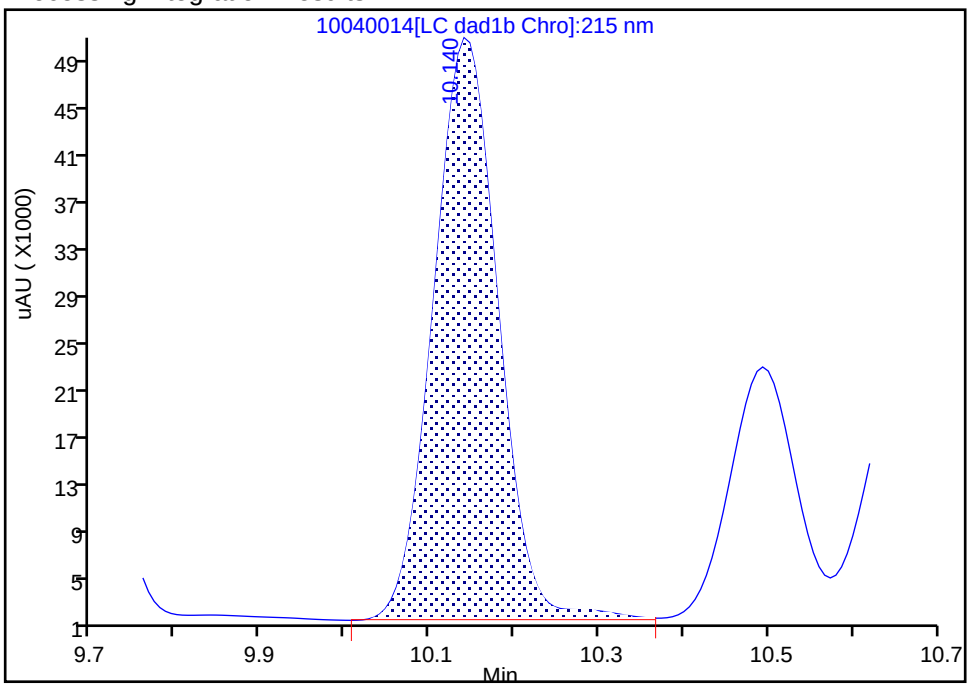
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040014.d				
Injection Date:	04-Oct-2024 18:05:18	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 6				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1C, 215 nm		

16 Nitroglycerin, CAS: 55-63-0

Signal: 1

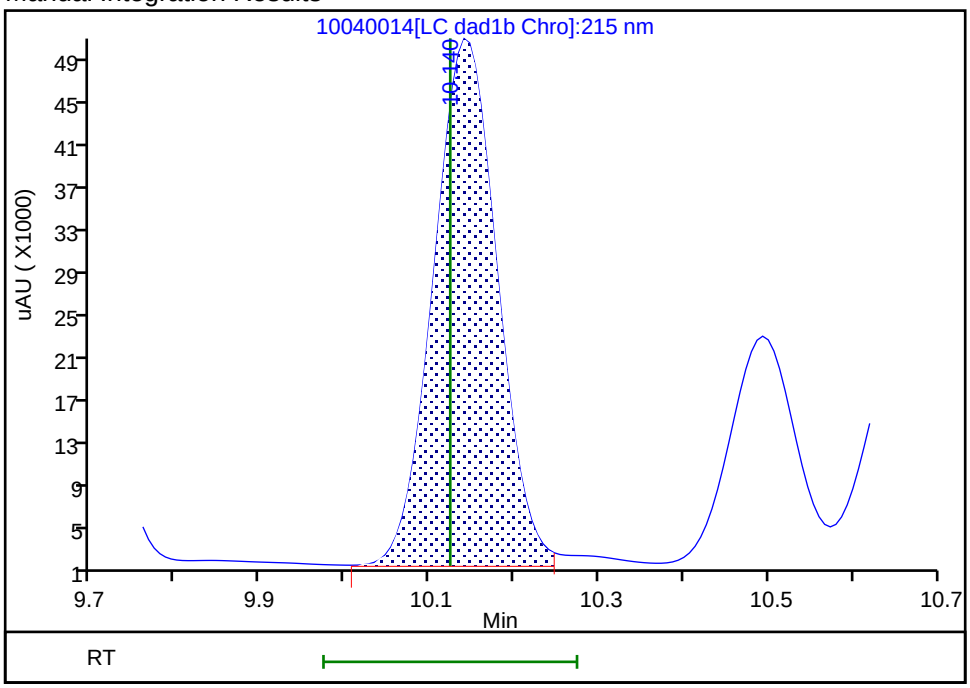
Processing Integration Results

RT: 10.14
Area: 261803
Amount: 3.791159
Amount Units: ug/mL



Manual Integration Results

RT: 10.14
Area: 257082
Amount: 3.994752
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 13:09:09 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040015.D
Lims ID: IC INT/DMT 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 04-Oct-2024 18:27:10 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/DMT 5
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 08-Oct-2024 13:19:18 Calib Date: 04-Oct-2024 19:55:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1654

First Level Reviewer: LV5D Date: 08-Oct-2024 13:01:47

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.436	6.437	-0.001	51995	0.2508	0.2560	M
4 HMX	1	6.576	6.577	-0.001	24377	0.2500	0.2522	M
6 DNX	1	6.749	6.751	-0.002	37571	0.2503	0.2573	M
7 MNX	1	7.156	7.151	0.005	39273	0.2918	0.2954	
8 RDX	1	7.509	7.511	-0.002	26694	0.2500	0.2530	
9 2,4,6-Trinitrophenol	1	7.936	7.937	-0.001	18836	0.2500	0.2497	
$ 10 1,2-Dinitrobenzene	1	8.376	8.377	-0.001	32250	0.2500	0.2473	
11 1,3,5-Trinitrobenzene	1	8.476	8.477	-0.001	53554	0.2500	0.2464	
12 1,3-Dinitrobenzene	1	9.036	9.037	-0.001	73648	0.2500	0.2469	
13 Nitrobenzene	1	9.356	9.357	-0.001	47423	0.2500	0.2430	
14 3,5-Dinitroaniline	1	9.563	9.564	-0.001	56945	0.2500	0.2445	
15 Tetryl	1	9.683	9.684	-0.001	42416	0.2500	0.2483	
16 Nitroglycerin	2	10.123	10.124	-0.001	162585	2.50	2.53	M
17 2,4,6-Trinitrotoluene	1	10.476	10.477	-0.001	53322	0.2500	0.2454	
18 4-Amino-2,6-dinitrotoluene	1	10.636	10.637	-0.001	36669	0.2500	0.2508	
19 2-Amino-4,6-dinitrotoluene	1	10.863	10.864	-0.001	50346	0.2500	0.2462	
20 2,6-Dinitrotoluene	1	11.003	11.004	-0.001	34878	0.2500	0.2473	
21 2,4-Dinitrotoluene	1	11.149	11.150	-0.001	71944	0.2500	0.2465	
22 o-Nitrotoluene	1	11.849	11.850	-0.001	31059	0.2500	0.2475	
23 p-Nitrotoluene	1	12.223	12.217	0.006	26896	0.2500	0.2478	
24 m-Nitrotoluene	1	12.723	12.724	-0.001	33732	0.2500	0.2478	
25 PETN	2	13.796	13.797	-0.001	181859	2.50	2.52	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00083	Amount Added:	25.00	Units: uL
8330 DMT_00018	Amount Added:	12.50	Units: uL

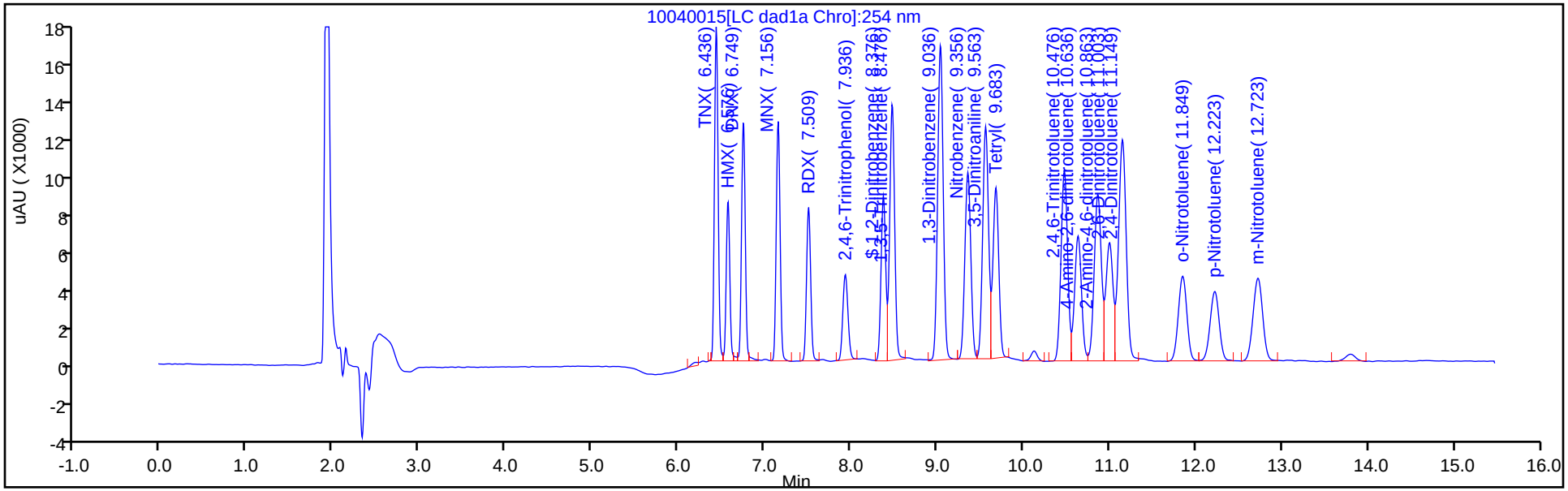
Report Date: 08-Oct-2024 13:19:18 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Denver

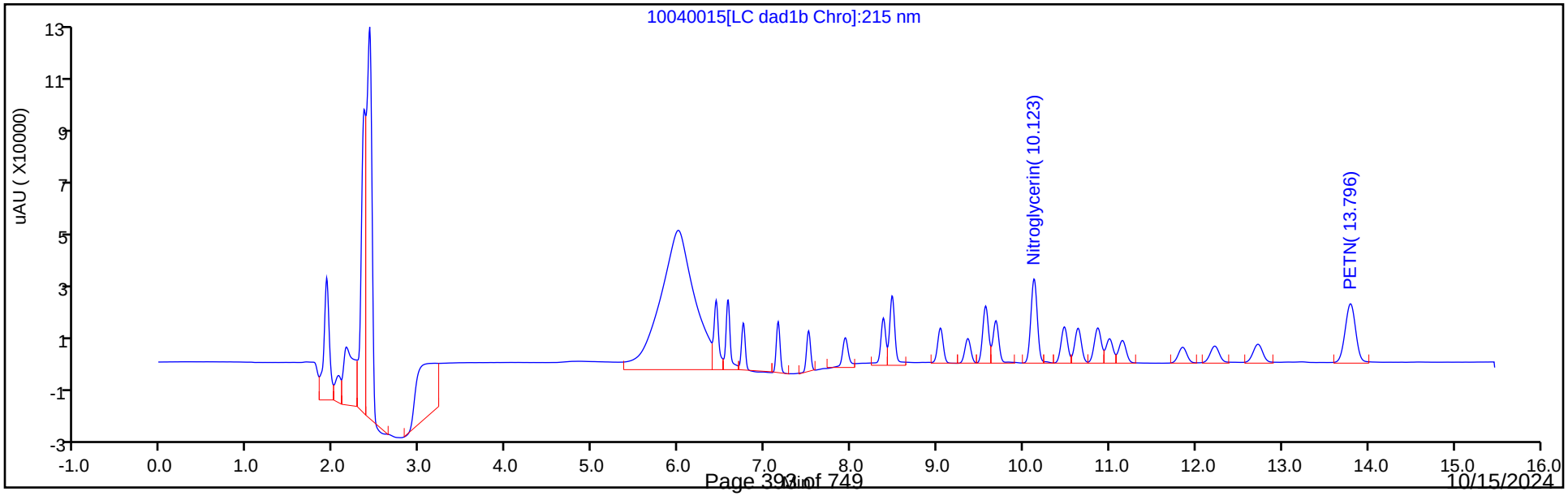
Data File: \\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040015.d

Injection Date:	04-Oct-2024 18:27:10	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	IC INT/DMT 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



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

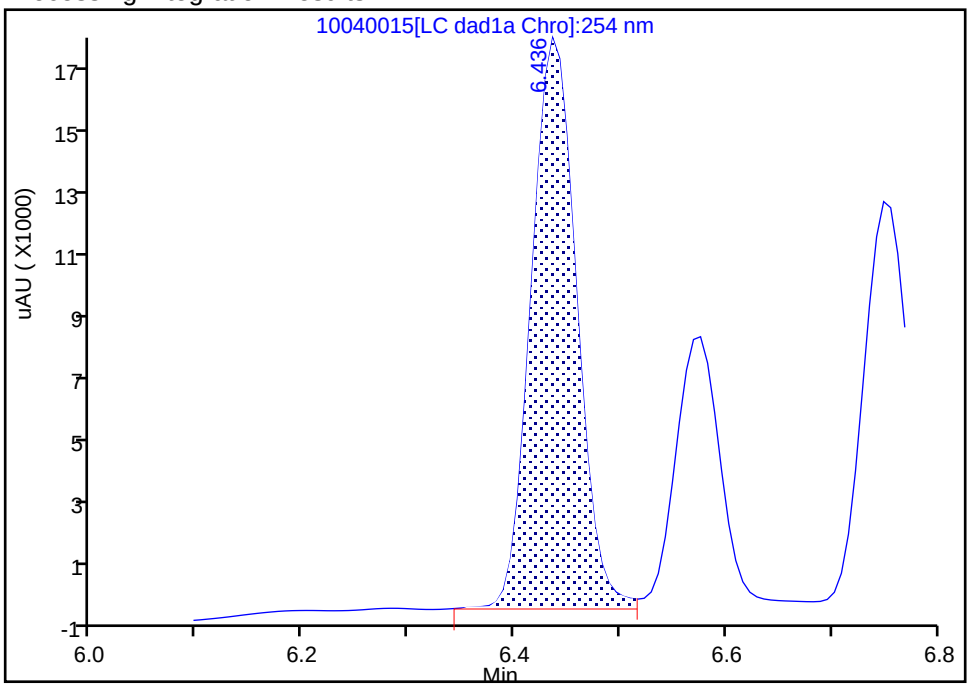
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040015.d				
Injection Date:	04-Oct-2024 18:27:10	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 5				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

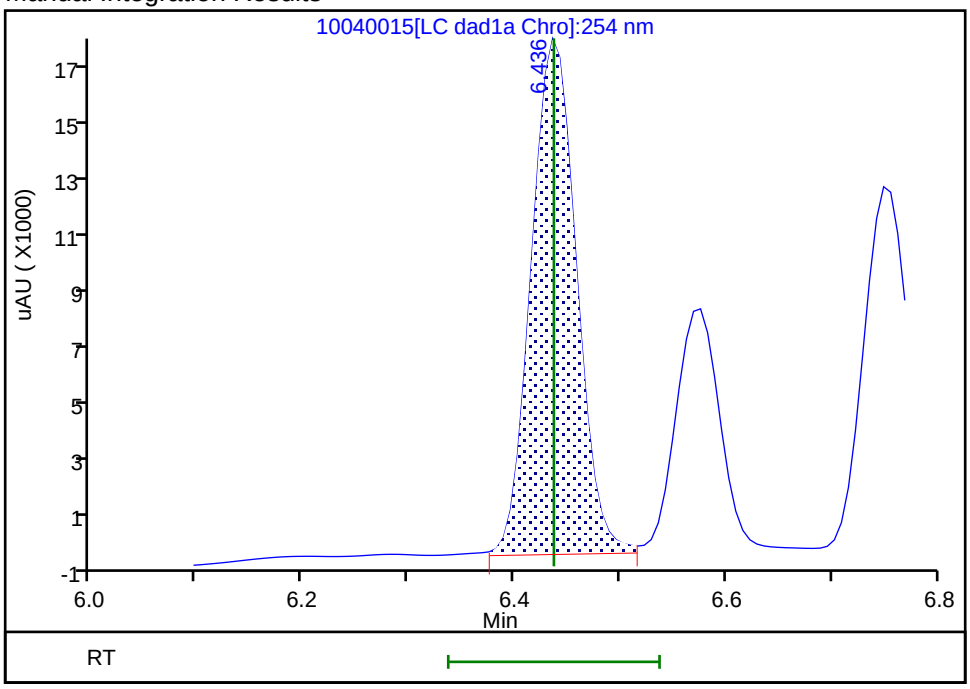
Processing Integration Results

RT: 6.44
Area: 52071
Amount: 0.246404
Amount Units: ug/mL



Manual Integration Results

RT: 6.44
Area: 51995
Amount: 0.256035
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 13:01:42 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

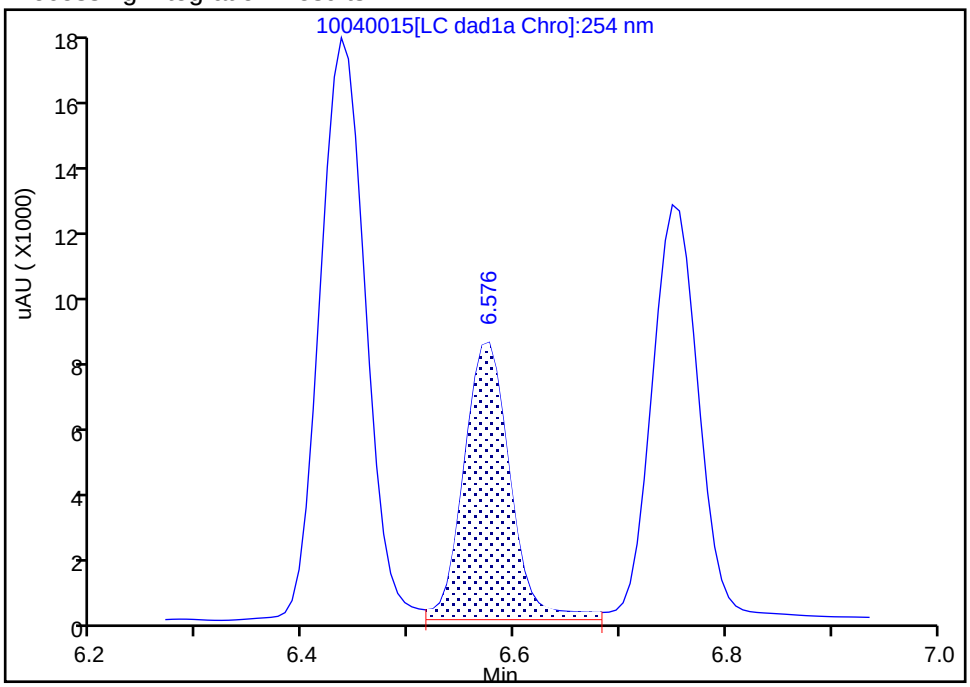
Data File: \\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040015.d
Injection Date: 04-Oct-2024 18:27:10 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 5
Client ID:
Operator ID: JZ ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

4 HMX, CAS: 2691-41-0

Signal: 1

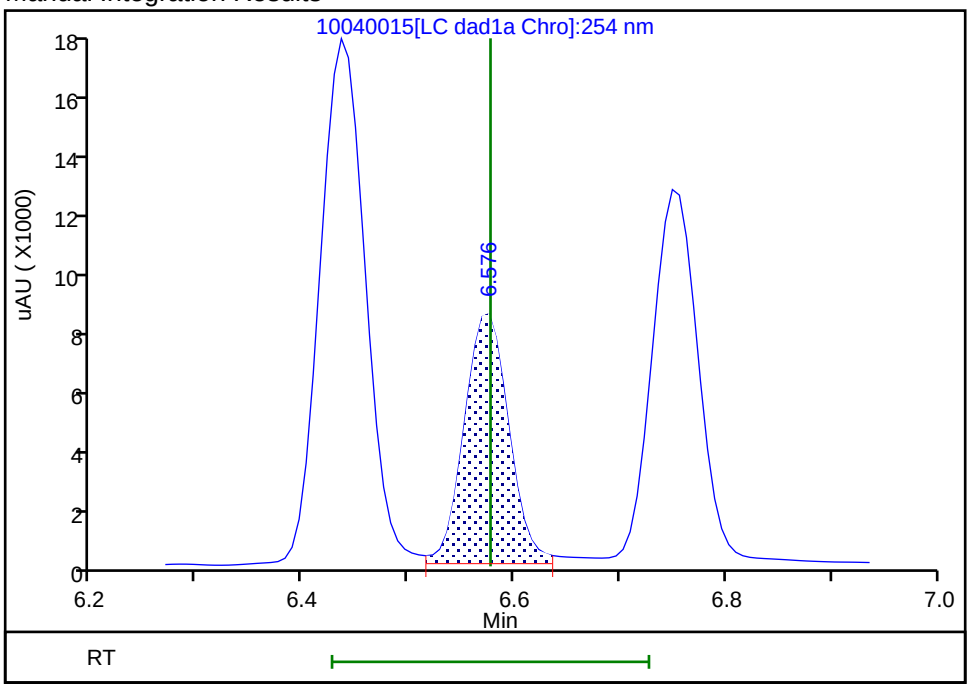
Processing Integration Results

RT: 6.58
Area: 24952
Amount: 0.261690
Amount Units: ug/mL



Manual Integration Results

RT: 6.58
Area: 24377
Amount: 0.252212
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 13:01:43 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

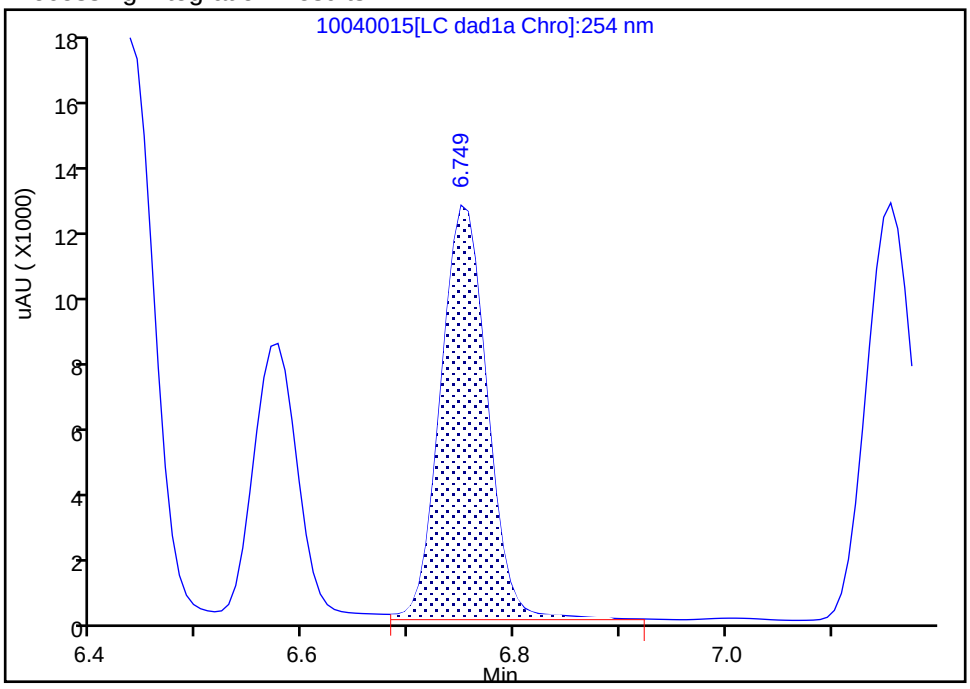
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040015.d				
Injection Date:	04-Oct-2024 18:27:10	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 5				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

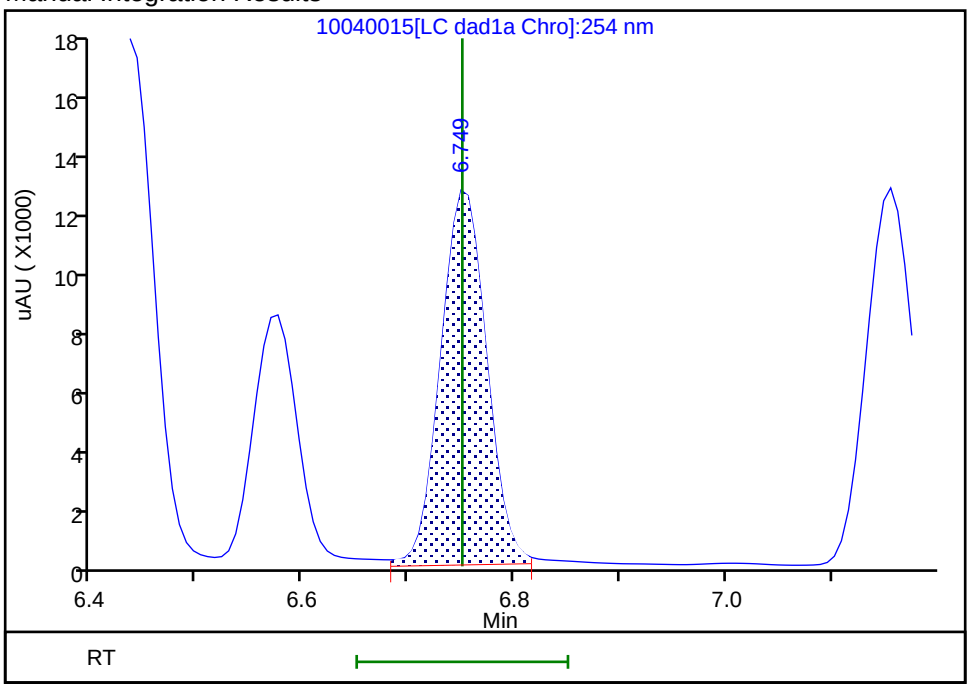
Processing Integration Results

RT: 6.75
Area: 38135
Amount: 0.248727
Amount Units: ug/mL



Manual Integration Results

RT: 6.75
Area: 37571
Amount: 0.257262
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 13:01:45 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

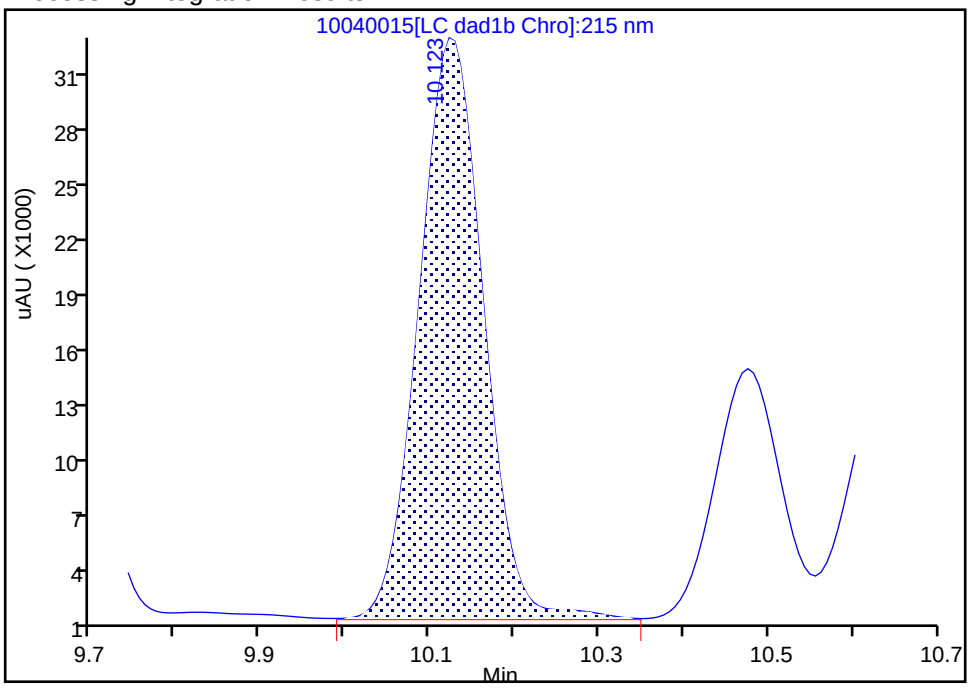
Data File: \\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040015.d
Injection Date: 04-Oct-2024 18:27:10 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 5
Client ID:
Operator ID: JZ ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1C, 215 nm

16 Nitroglycerin, CAS: 55-63-0

Signal: 1

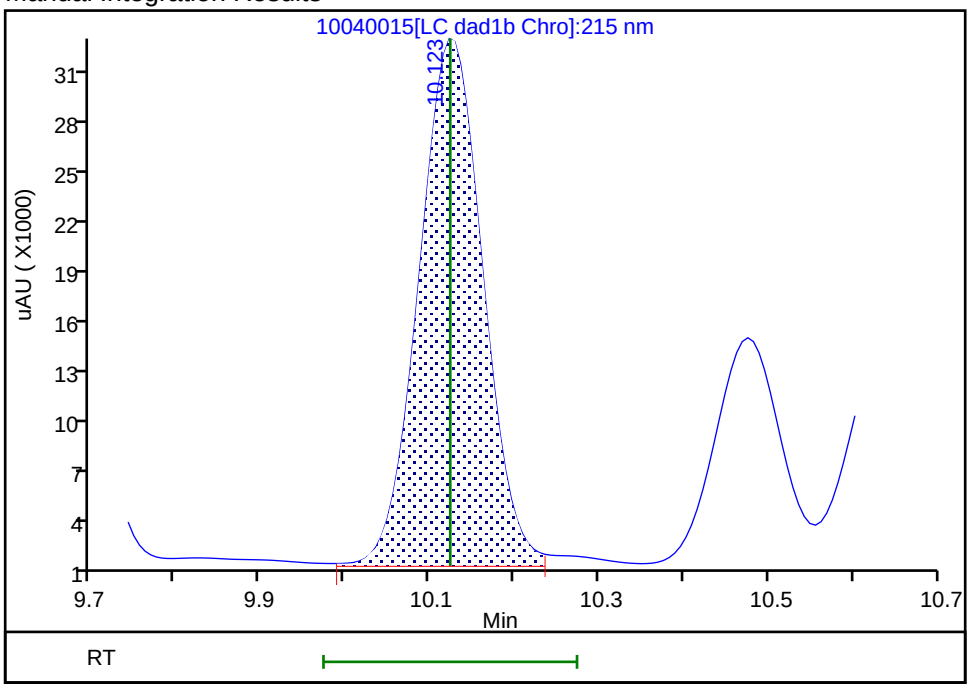
Processing Integration Results

RT: 10.12
Area: 165170
Amount: 2.396371
Amount Units: ug/mL



Manual Integration Results

RT: 10.12
Area: 162585
Amount: 2.528679
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 13:09:17 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040016.D
Lims ID: IC INT/DMT 4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 04-Oct-2024 18:49:07 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/DMT 4
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 08-Oct-2024 13:19:19 Calib Date: 04-Oct-2024 19:55:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1654

First Level Reviewer: LV5D Date: 08-Oct-2024 13:04:07

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.437	6.437	0.000	20335	0.1003	0.1001	M
4 HMX	1	6.577	6.577	0.000	8775	0.1000	0.0908	M
6 DNX	1	6.751	6.751	0.000	14149	0.1001	0.0969	M
7 MNX	1	7.151	7.151	0.000	15337	0.1167	0.1154	
8 RDX	1	7.511	7.511	0.000	10773	0.1000	0.1011	M
9 2,4,6-Trinitrophenol	1	7.937	7.937	0.000	7391	0.1000	0.0980	M
$ 10 1,2-Dinitrobenzene	1	8.377	8.377	0.000	13238	0.1000	0.1015	
11 1,3,5-Trinitrobenzene	1	8.477	8.477	0.000	21407	0.1000	0.0985	
12 1,3-Dinitrobenzene	1	9.037	9.037	0.000	29659	0.1000	0.0994	
13 Nitrobenzene	1	9.357	9.357	0.000	19360	0.1000	0.0992	
14 3,5-Dinitroaniline	1	9.564	9.564	0.000	23292	0.1000	0.1002	
15 Tetryl	1	9.684	9.684	0.000	17130	0.1000	0.1007	M
16 Nitroglycerin	2	10.124	10.124	0.000	63200	1.00	0.9868	M
17 2,4,6-Trinitrotoluene	1	10.477	10.477	0.000	21685	0.1000	0.0998	
18 4-Amino-2,6-dinitrotoluene	1	10.637	10.637	0.000	15147	0.1000	0.1010	
19 2-Amino-4,6-dinitrotoluene	1	10.864	10.864	0.000	20612	0.1000	0.1008	
20 2,6-Dinitrotoluene	1	11.004	11.004	0.000	14334	0.1000	0.1008	
21 2,4-Dinitrotoluene	1	11.150	11.150	0.000	29723	0.1000	0.1019	
22 o-Nitrotoluene	1	11.850	11.850	0.000	12487	0.1000	0.0995	M
23 p-Nitrotoluene	1	12.217	12.217	0.000	10624	0.1000	0.0970	M
24 m-Nitrotoluene	1	12.724	12.724	0.000	13345	0.1000	0.0969	M
25 PETN	2	13.797	13.797	0.000	71766	1.00	0.99	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00083	Amount Added: 10.00	Units: uL
8330 DMT_00018	Amount Added: 5.00	Units: uL

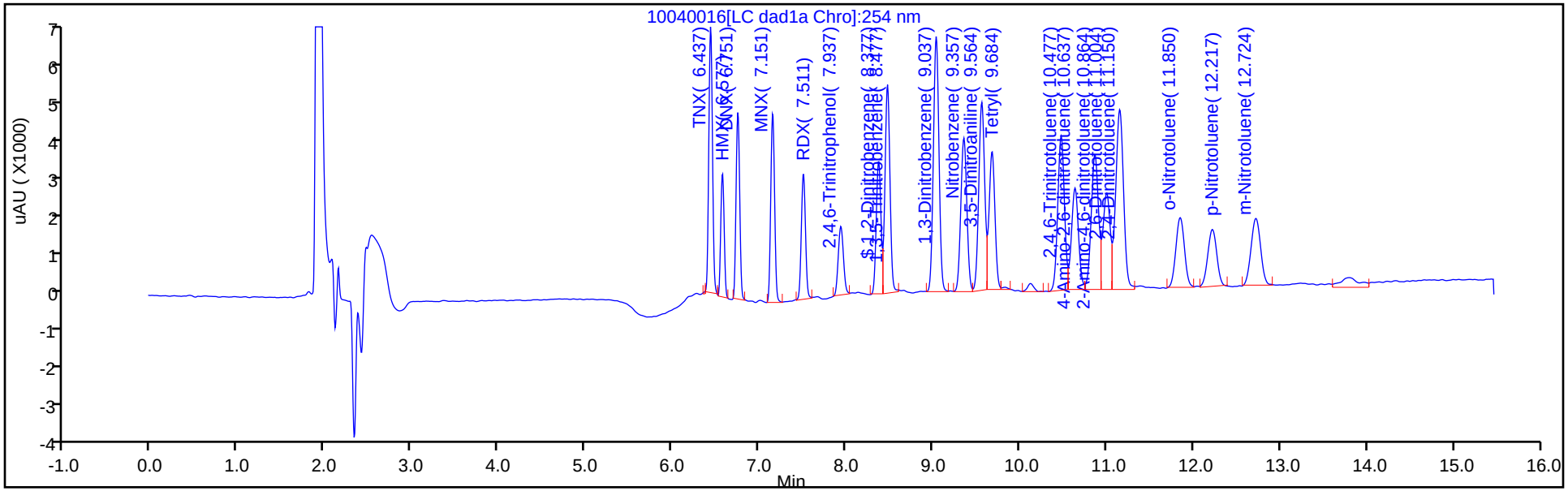
Report Date: 08-Oct-2024 13:19:20 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Denver

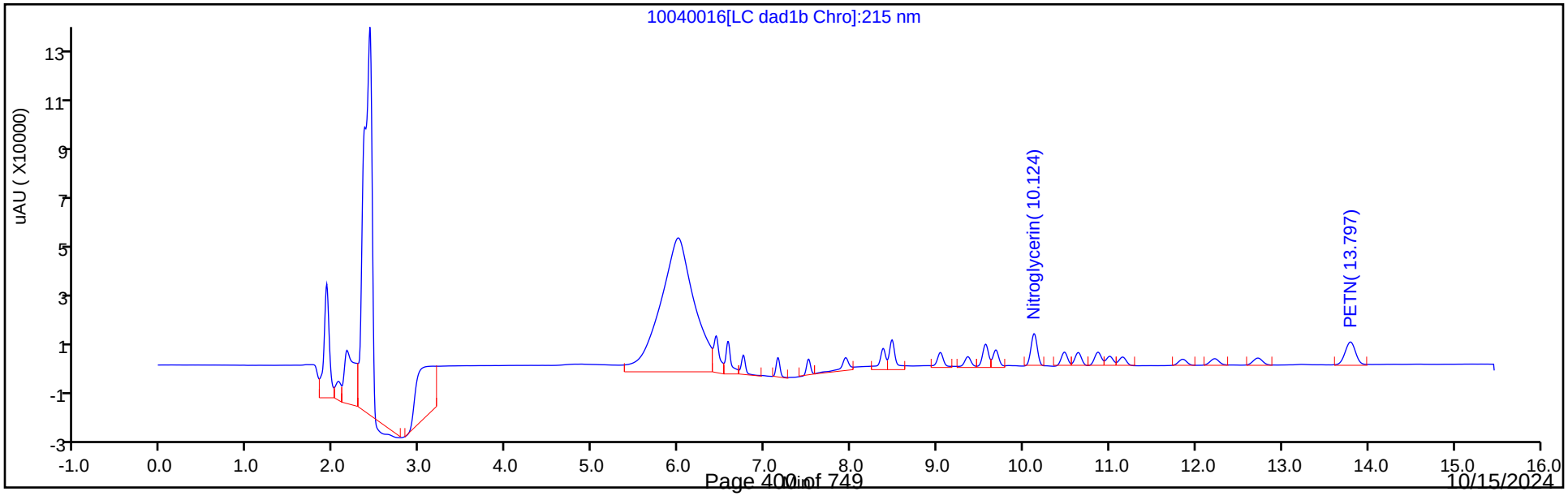
Data File: \\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040016.d

Injection Date:	04-Oct-2024 18:49:07	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	IC INT/DMT 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



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



10/15/2024
4:48:23 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

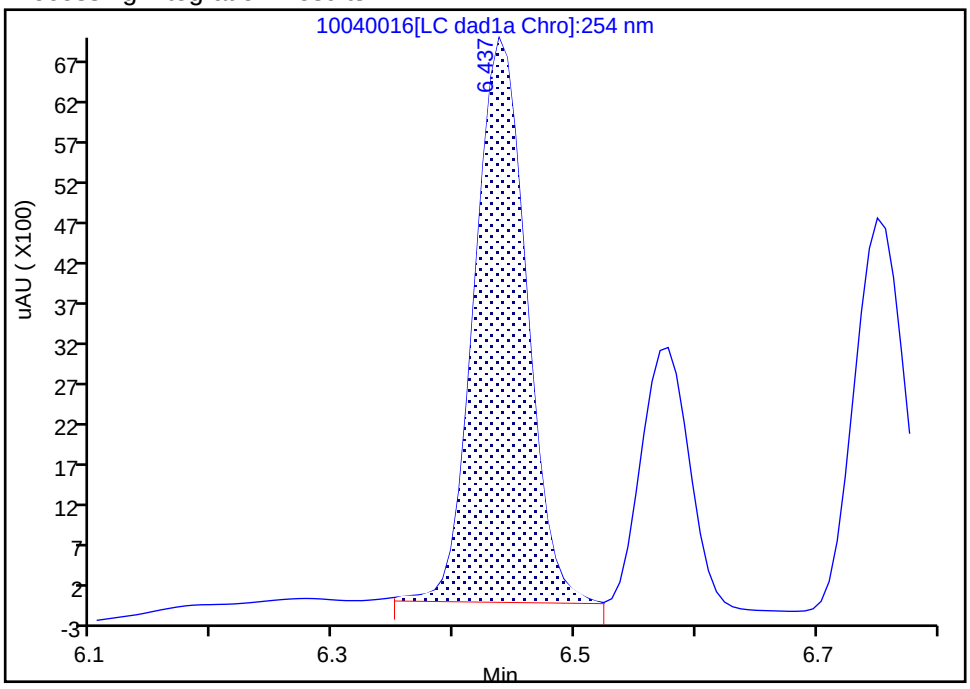
Data File: \\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040016.d
Injection Date: 04-Oct-2024 18:49:07 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 4
Client ID:
Operator ID: JZ ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 TNX, CAS: 13980-04-6

Signal: 1

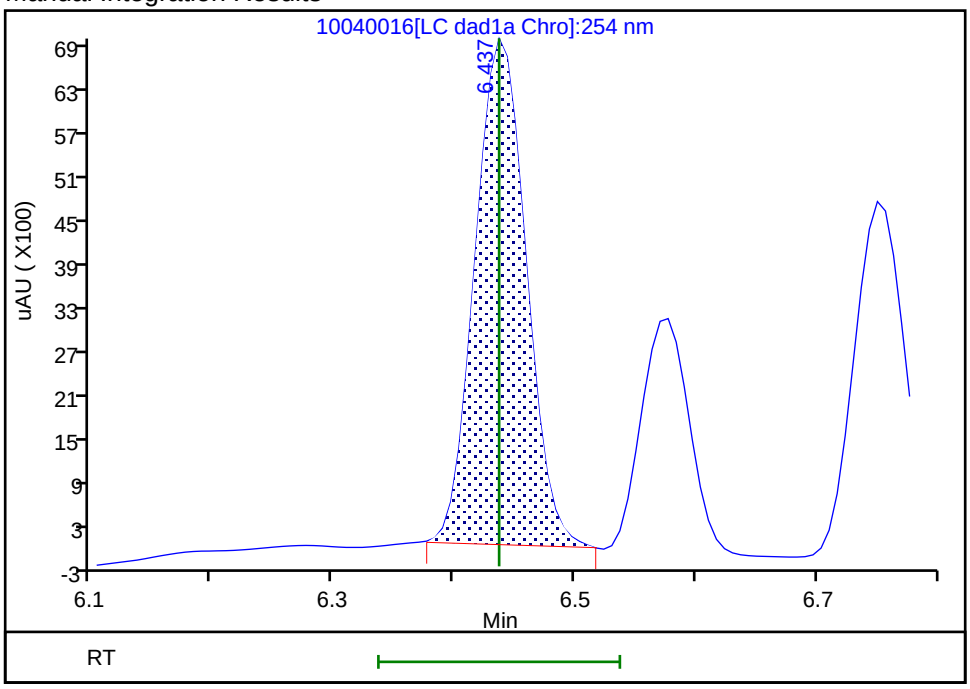
Processing Integration Results

RT: 6.44
Area: 20842
Amount: 0.098642
Amount Units: ug/mL



Manual Integration Results

RT: 6.44
Area: 20335
Amount: 0.100134
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 13:02:31 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

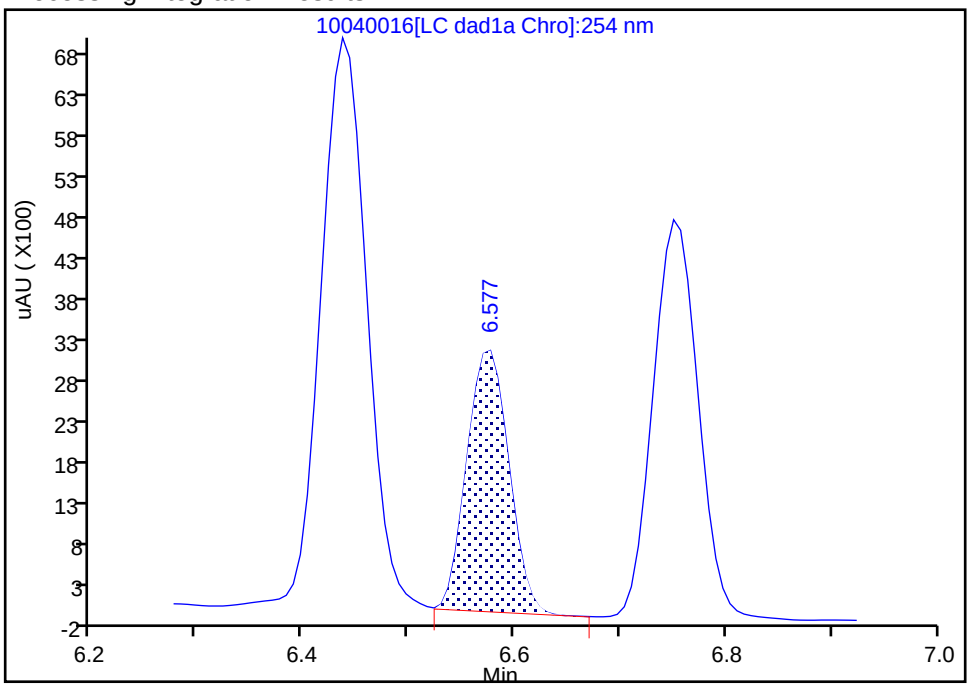
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040016.d				
Injection Date:	04-Oct-2024 18:49:07	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 4				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

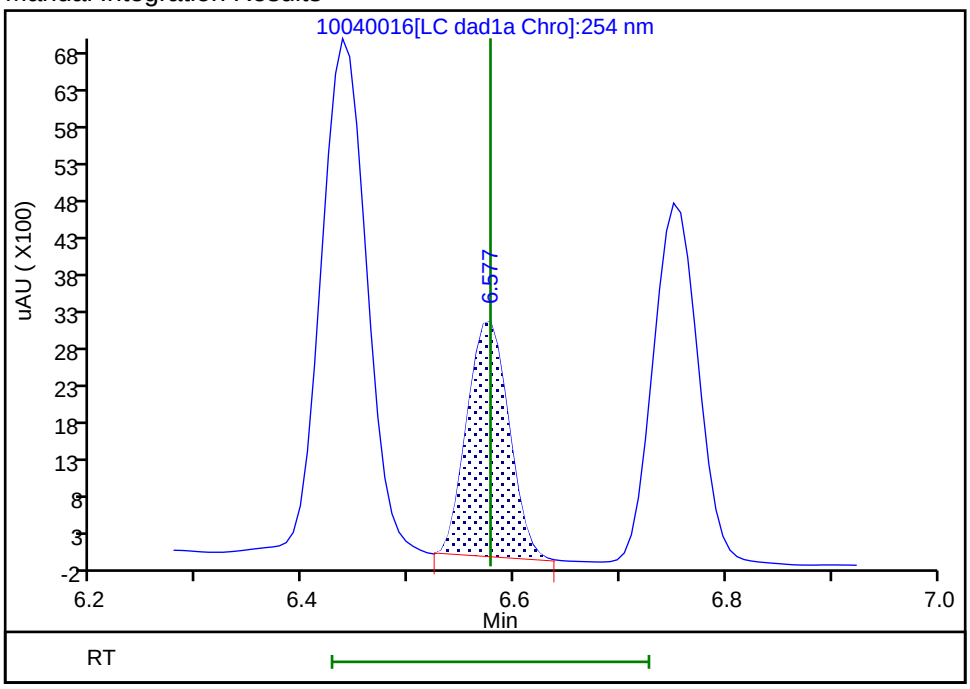
Processing Integration Results

RT: 6.58
Area: 8824
Amount: 0.087114
Amount Units: ug/mL



Manual Integration Results

RT: 6.58
Area: 8775
Amount: 0.090789
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 13:02:33 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

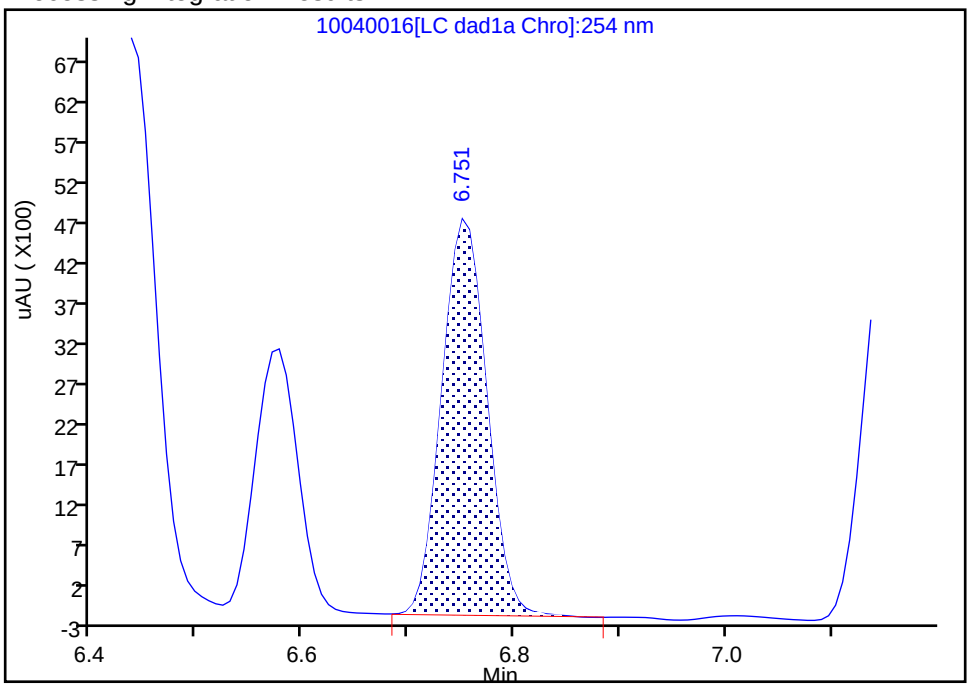
Data File: \\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040016.d
Injection Date: 04-Oct-2024 18:49:07 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 4
Client ID:
Operator ID: JZ ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

6 DNX, CAS: 80251-29-2

Signal: 1

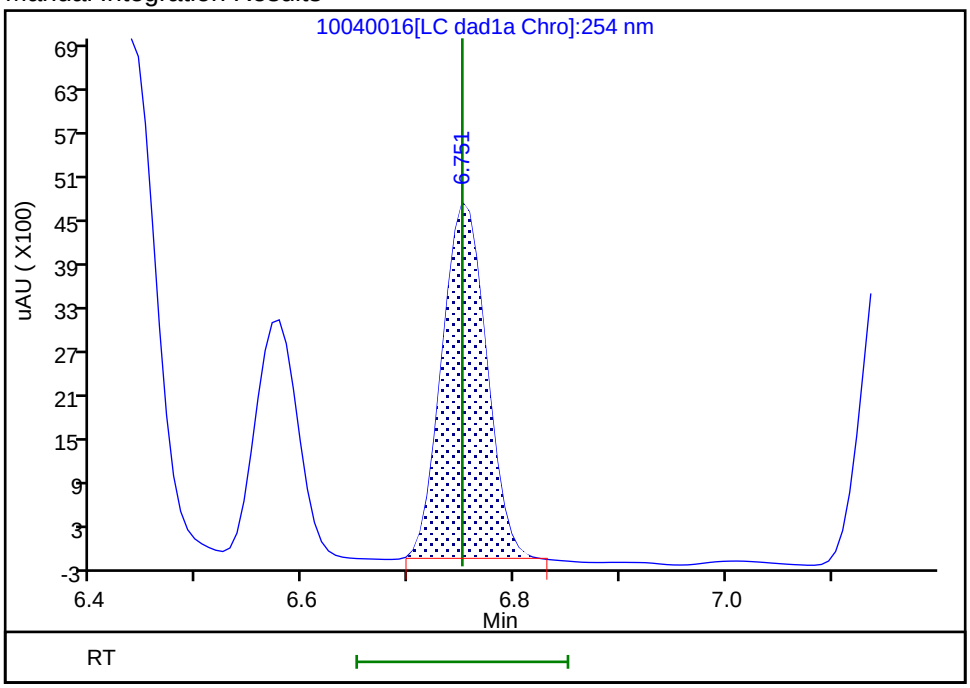
Processing Integration Results

RT: 6.75
Area: 14575
Amount: 0.095218
Amount Units: ug/mL



Manual Integration Results

RT: 6.75
Area: 14149
Amount: 0.096883
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 13:02:38 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

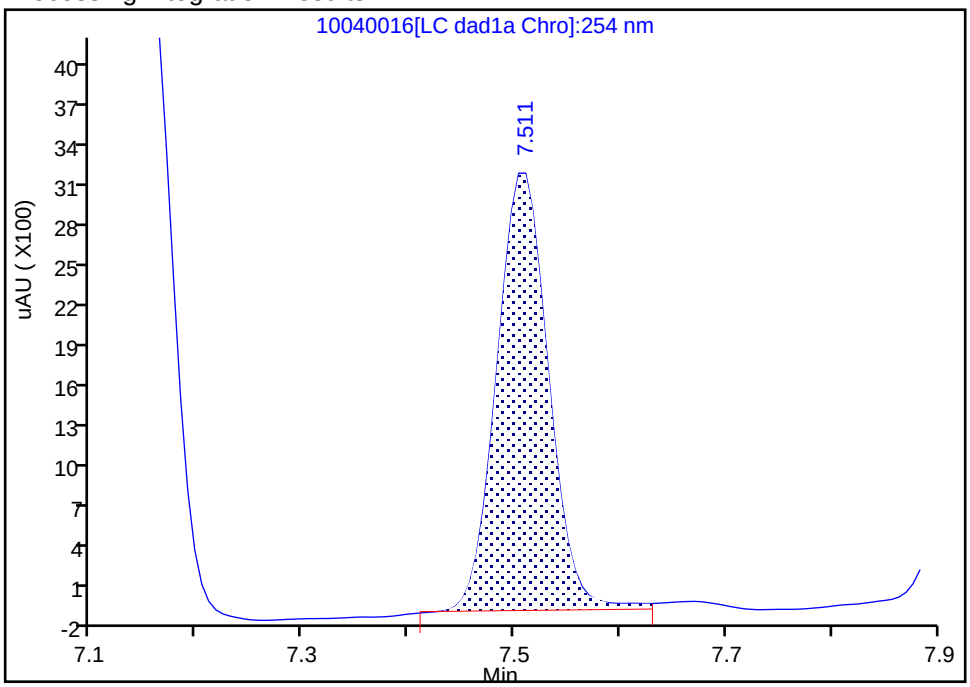
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040016.d				
Injection Date:	04-Oct-2024 18:49:07	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 4				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

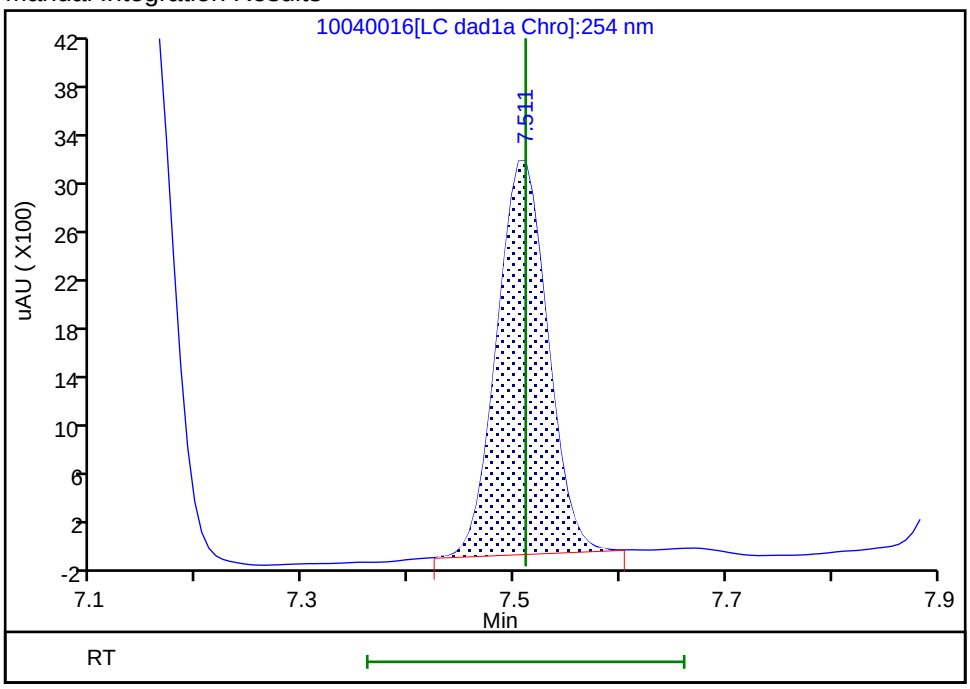
Processing Integration Results

RT: 7.51
Area: 11085
Amount: 0.100964
Amount Units: ug/mL



Manual Integration Results

RT: 7.51
Area: 10773
Amount: 0.101109
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 13:02:47 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

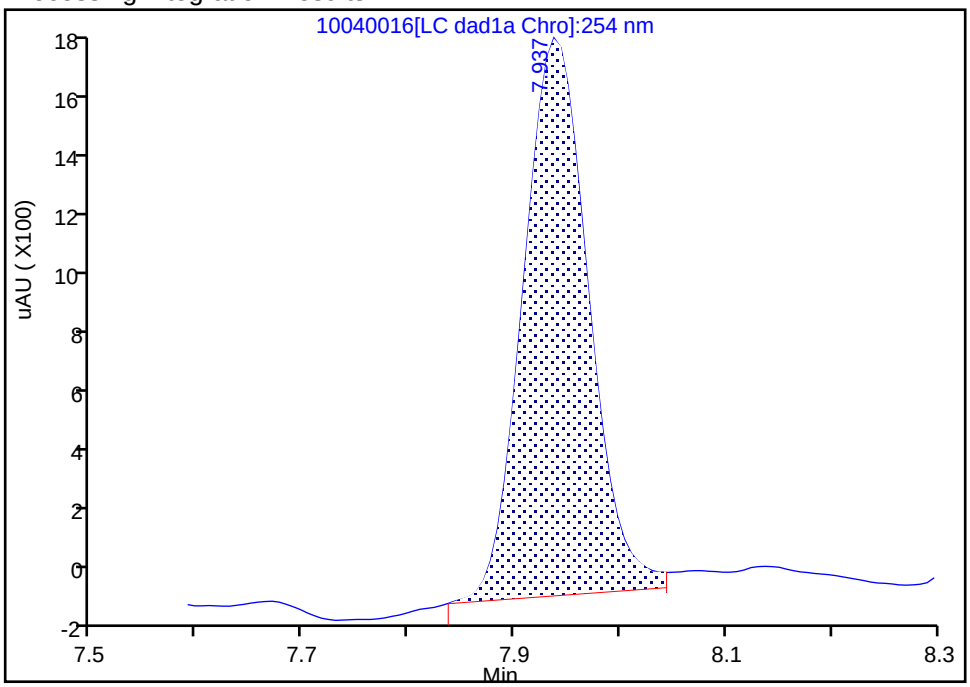
Data File: \\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040016.d
Injection Date: 04-Oct-2024 18:49:07 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 4
Client ID:
Operator ID: JZ ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

9 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

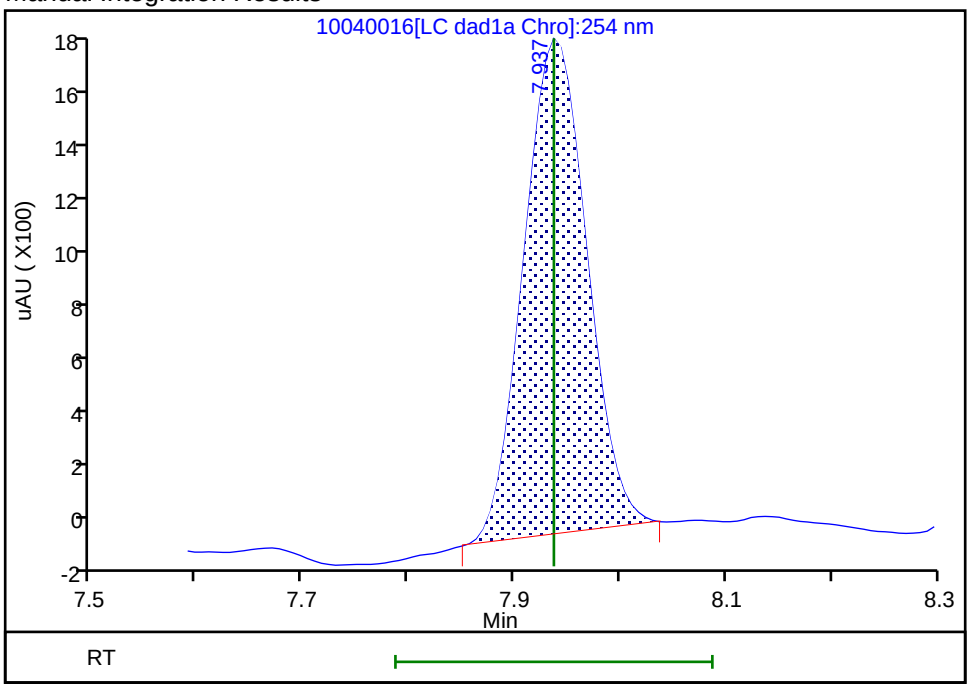
Processing Integration Results

RT: 7.94
Area: 7772
Amount: 0.095498
Amount Units: ug/mL



Manual Integration Results

RT: 7.94
Area: 7391
Amount: 0.097989
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 13:02:51 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

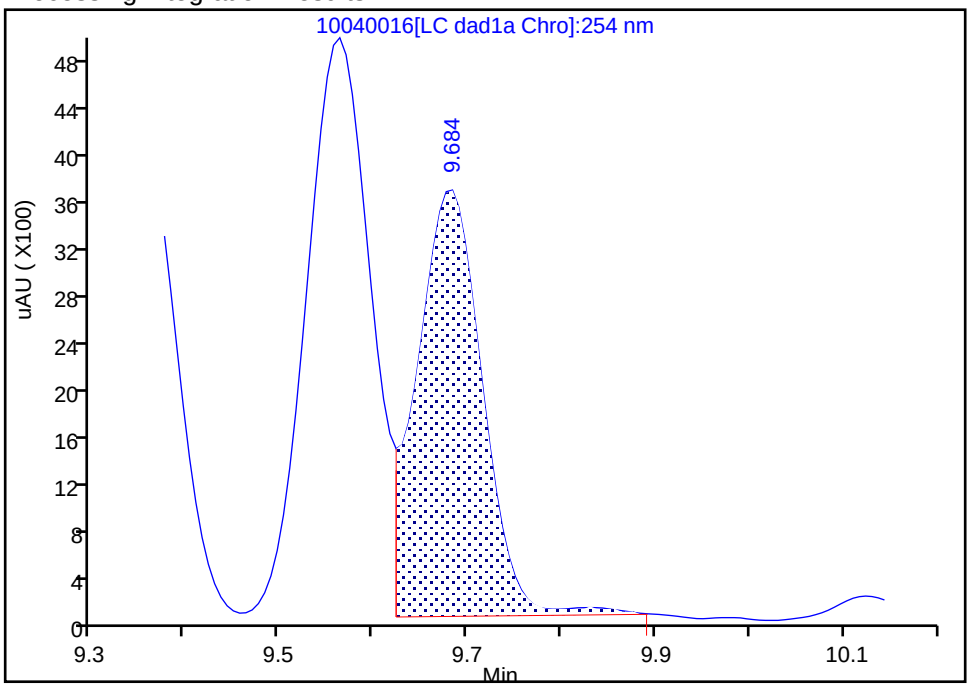
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040016.d				
Injection Date:	04-Oct-2024 18:49:07	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 4				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

15 Tetryl, CAS: 479-45-8

Signal: 1

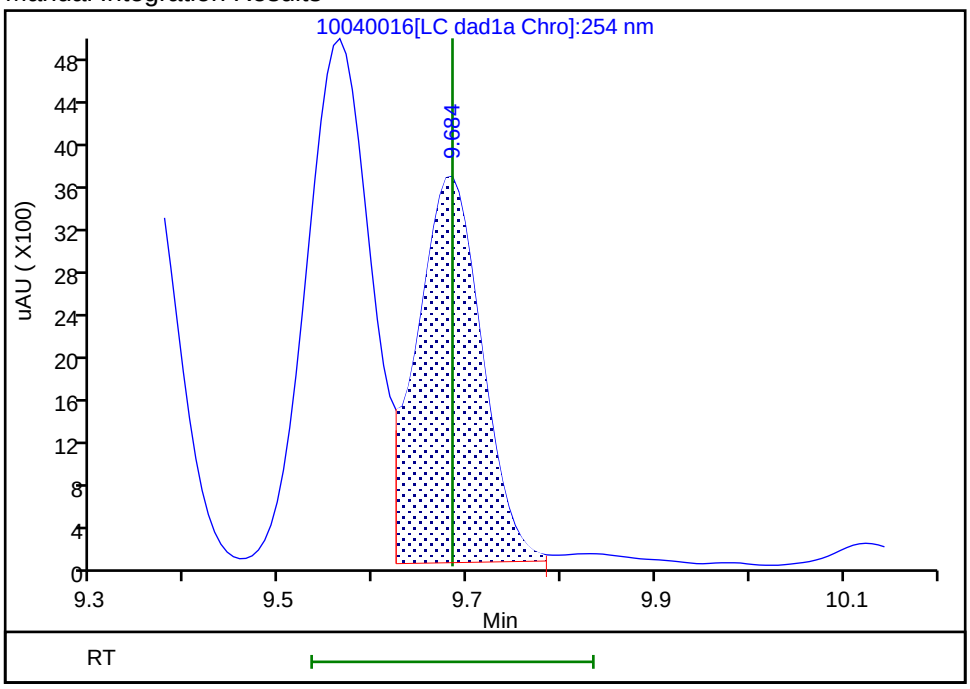
Processing Integration Results

RT: 9.68
Area: 17446
Amount: 0.103129
Amount Units: ug/mL



Manual Integration Results

RT: 9.68
Area: 17130
Amount: 0.100694
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 13:03:04 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

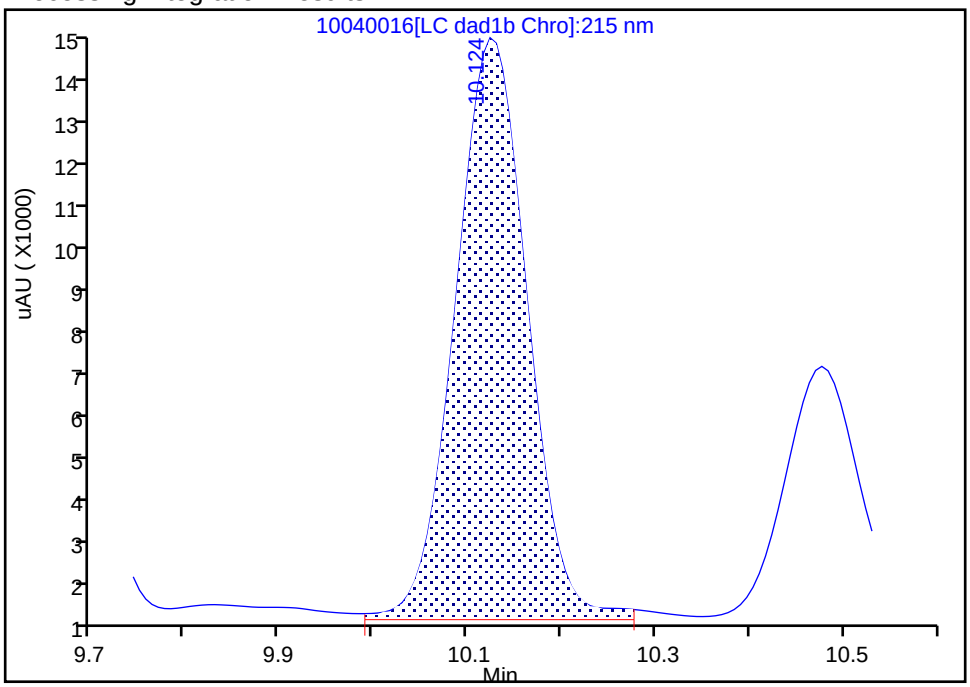
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040016.d				
Injection Date:	04-Oct-2024 18:49:07	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 4				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1C, 215 nm		

16 Nitroglycerin, CAS: 55-63-0

Signal: 1

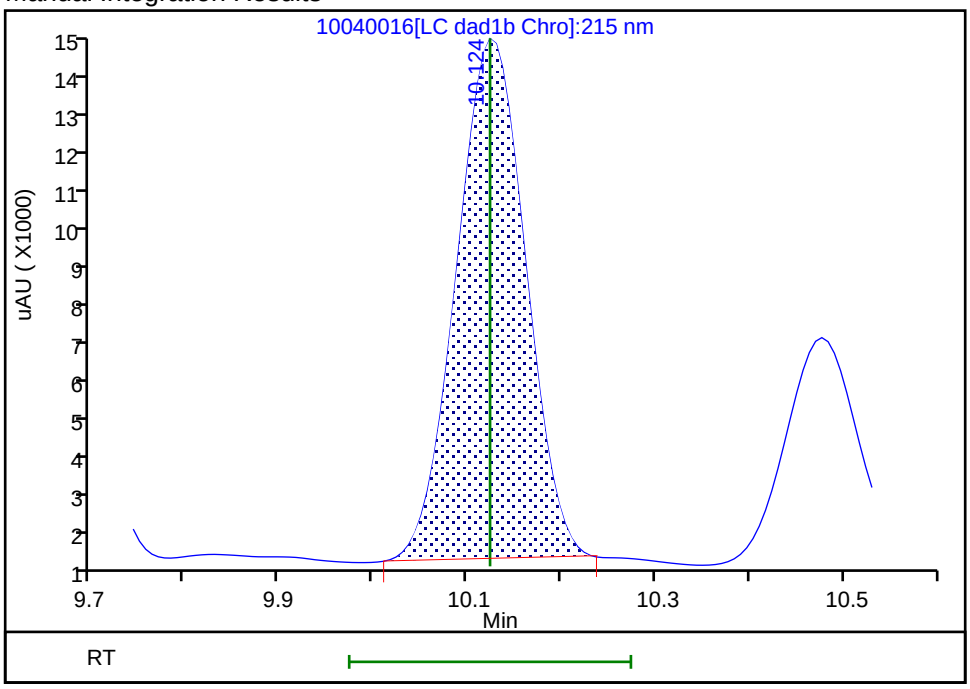
Processing Integration Results

RT: 10.12
Area: 67088
Amount: 0.959514
Amount Units: ug/mL



Manual Integration Results

RT: 10.12
Area: 63200
Amount: 0.986772
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 13:03:11 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

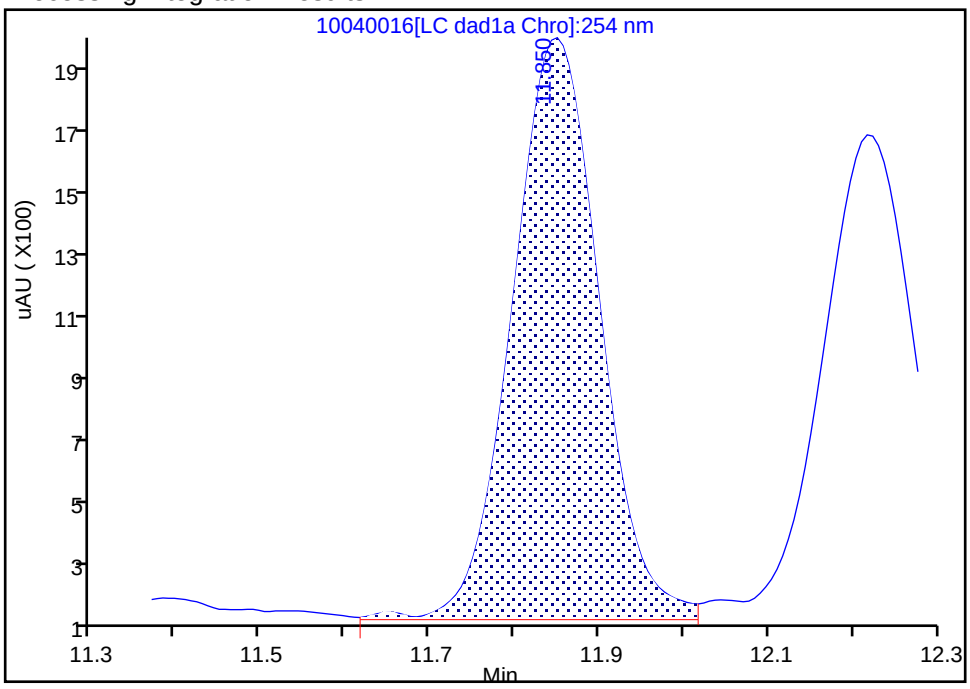
Data File: \\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040016.d
Injection Date: 04-Oct-2024 18:49:07 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 4
Client ID:
Operator ID: JZ ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

22 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

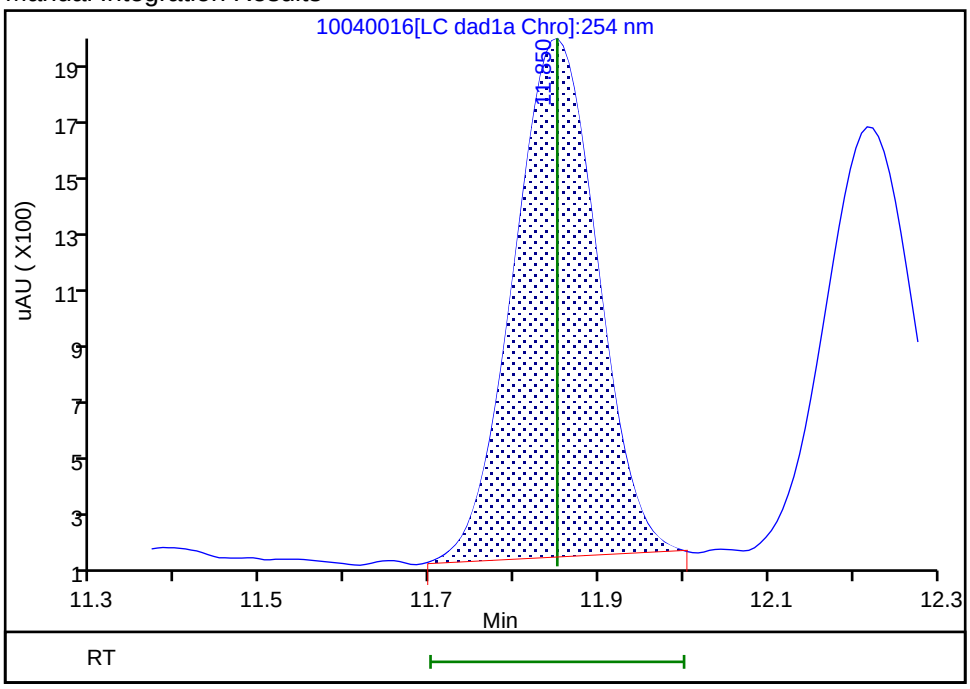
Processing Integration Results

RT: 11.85
Area: 13314
Amount: 0.103639
Amount Units: ug/mL



Manual Integration Results

RT: 11.85
Area: 12487
Amount: 0.099523
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 13:03:36 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

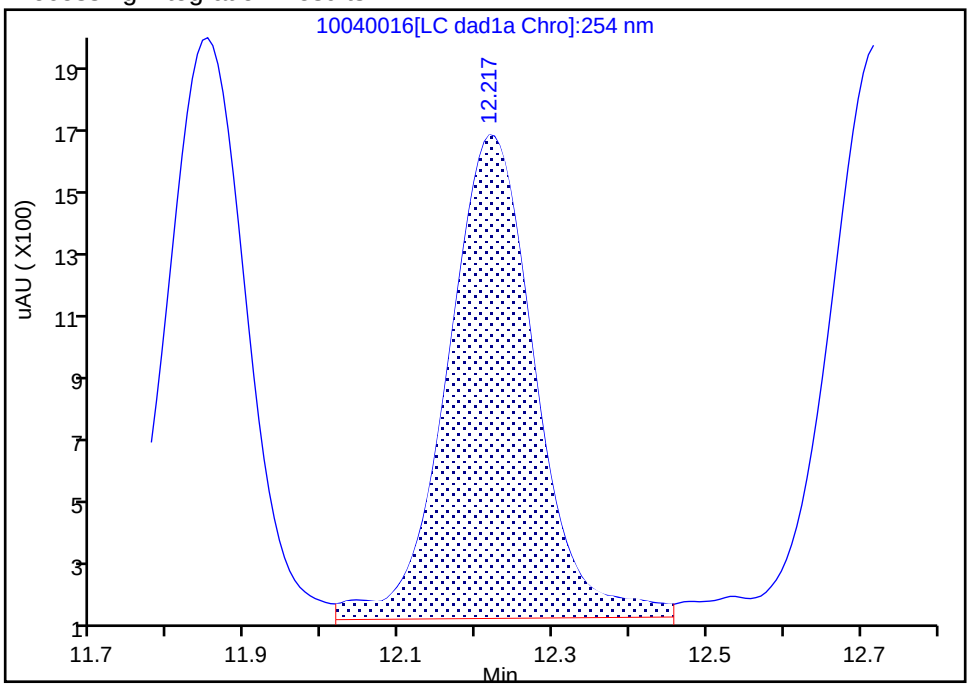
Data File: \\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040016.d
Injection Date: 04-Oct-2024 18:49:07 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 4
Client ID:
Operator ID: JZ ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

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

Signal: 1

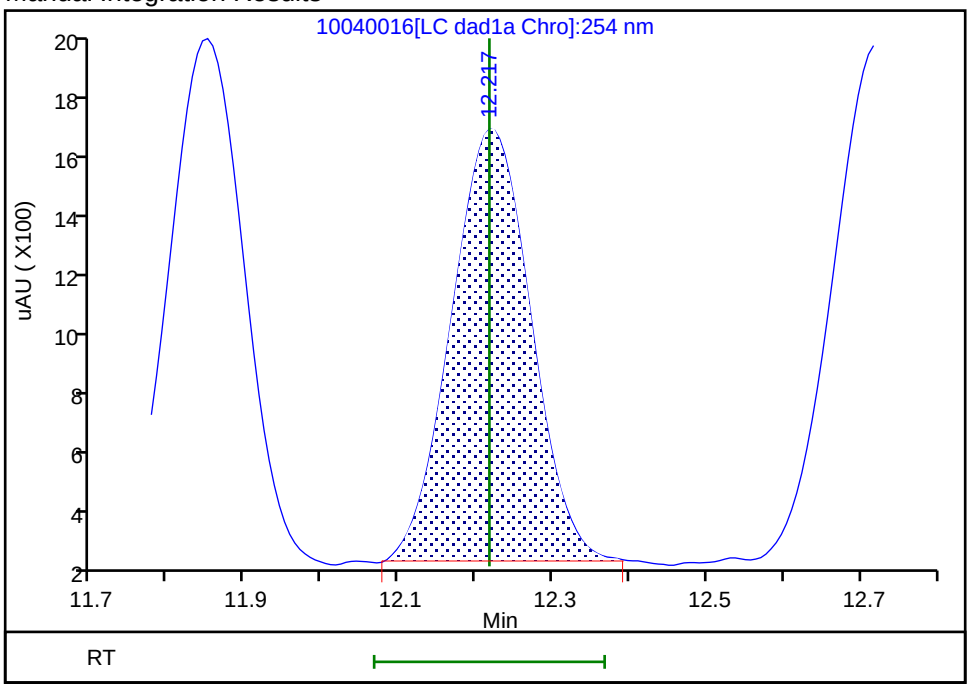
Processing Integration Results

RT: 12.22
Area: 12196
Amount: 0.107960
Amount Units: ug/mL



Manual Integration Results

RT: 12.22
Area: 10624
Amount: 0.096993
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 13:03:40 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

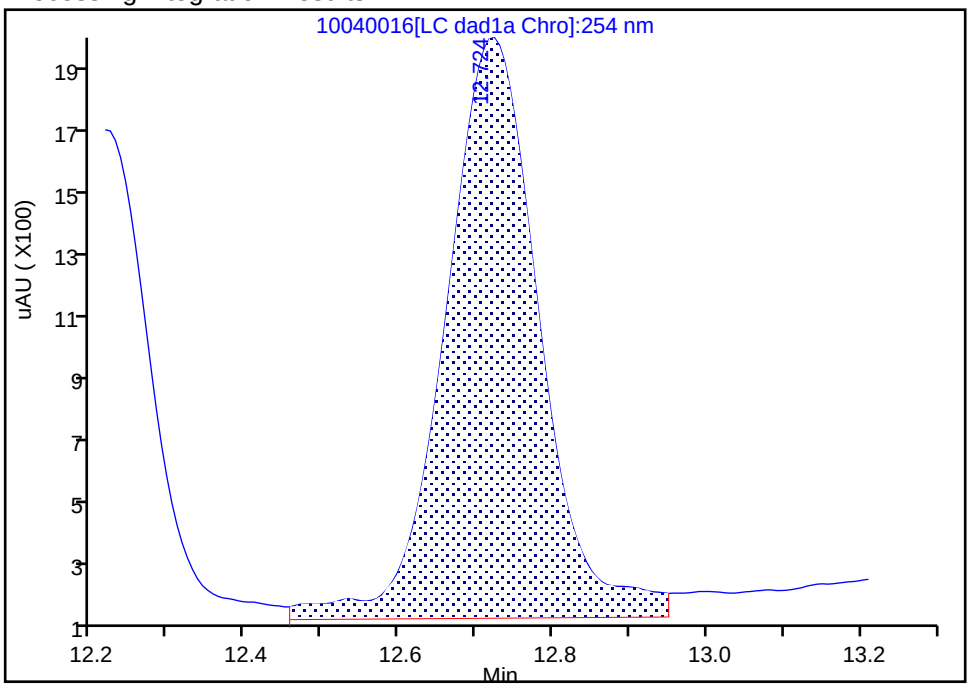
Data File: \\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040016.d
Injection Date: 04-Oct-2024 18:49:07 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 4
Client ID:
Operator ID: JZ ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

24 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

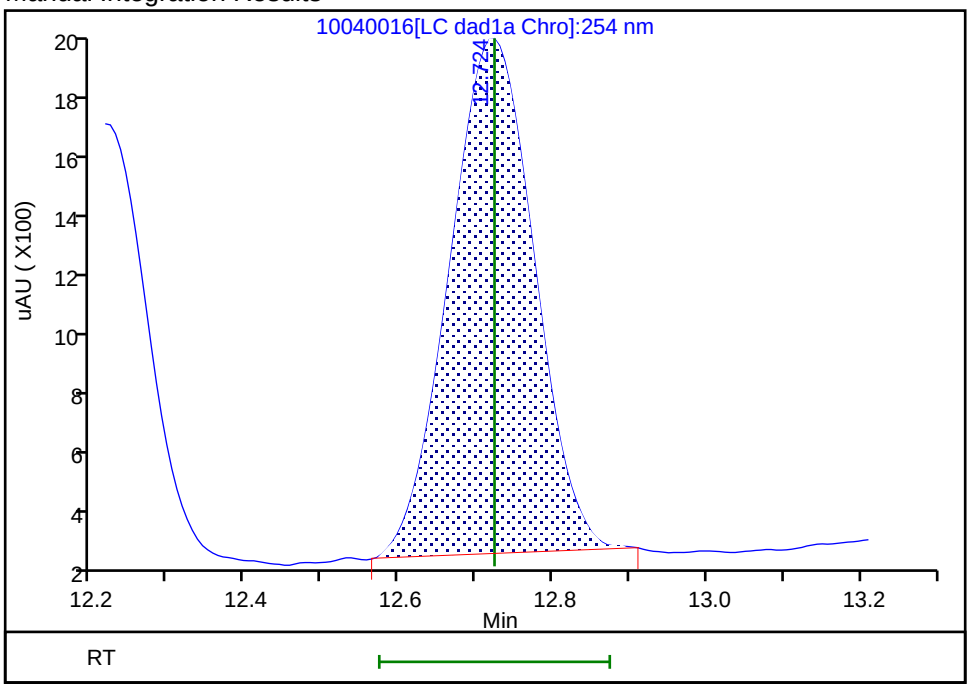
Processing Integration Results

RT: 12.72
Area: 15464
Amount: 0.107416
Amount Units: ug/mL



Manual Integration Results

RT: 12.72
Area: 13345
Amount: 0.096915
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 13:03:43 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

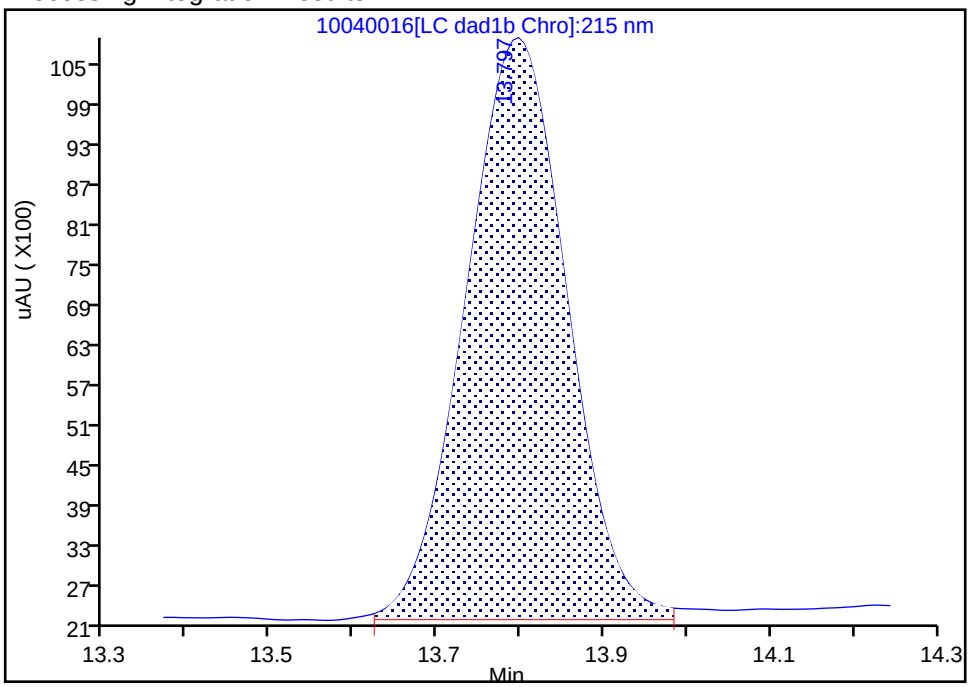
Data File: \\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040016.d
Injection Date: 04-Oct-2024 18:49:07 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 4
Client ID:
Operator ID: JZ ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1C, 215 nm

25 PETN, CAS: 78-11-5

Signal: 1

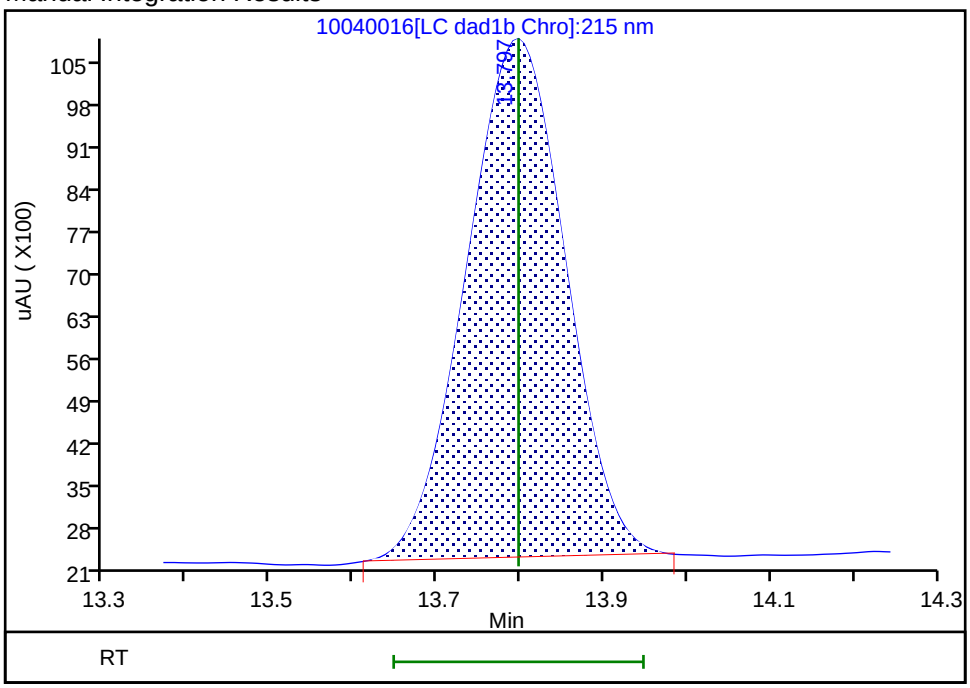
Processing Integration Results

RT: 13.80
Area: 74197
Amount: 1.031477
Amount Units: ug/mL



Manual Integration Results

RT: 13.80
Area: 71766
Amount: 0.993819
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 13:04:03 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040017.D
Lims ID: IC INT/DMT 3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 04-Oct-2024 19:11:05 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/DMT 3
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 08-Oct-2024 13:19:21 Calib Date: 04-Oct-2024 19:55:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1654

First Level Reviewer: LV5D Date: 08-Oct-2024 13:05:11

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.434	6.437	-0.003	10367	0.0502	0.0510	M
4 HMX	1	6.574	6.577	-0.003	4979	0.0500	0.0515	M
6 DNX	1	6.747	6.751	-0.004	7313	0.0501	0.0501	M
7 MNX	1	7.154	7.151	0.003	7700	0.0584	0.0579	M
8 RDX	1	7.507	7.511	-0.004	5386	0.0500	0.0497	M
9 2,4,6-Trinitrophenol	1	7.941	7.937	0.004	3807	0.0500	0.0505	M
$ 10 1,2-Dinitrobenzene	1	8.374	8.377	-0.003	6795	0.0500	0.0521	M
11 1,3,5-Trinitrobenzene	1	8.474	8.477	-0.003	11696	0.0500	0.0538	M
12 1,3-Dinitrobenzene	1	9.034	9.037	-0.003	15058	0.0500	0.0505	
13 Nitrobenzene	1	9.354	9.357	-0.003	9801	0.0500	0.0502	
14 3,5-Dinitroaniline	1	9.561	9.564	-0.003	11561	0.0500	0.0499	
15 Tetryl	1	9.681	9.684	-0.003	8562	0.0500	0.0507	
16 Nitroglycerin	2	10.121	10.124	-0.003	32159	0.5000	0.5052	M
17 2,4,6-Trinitrotoluene	1	10.474	10.477	-0.003	10944	0.0500	0.0504	
18 4-Amino-2,6-dinitrotoluene	1	10.634	10.637	-0.003	7751	0.0500	0.0496	
19 2-Amino-4,6-dinitrotoluene	1	10.861	10.864	-0.003	10249	0.0500	0.0501	
20 2,6-Dinitrotoluene	1	11.001	11.004	-0.003	7345	0.0500	0.0510	
21 2,4-Dinitrotoluene	1	11.154	11.150	0.004	14328	0.0500	0.0491	
22 o-Nitrotoluene	1	11.847	11.850	-0.003	6473	0.0500	0.0516	
23 p-Nitrotoluene	1	12.221	12.217	0.004	5661	0.0500	0.0510	
24 m-Nitrotoluene	1	12.721	12.724	-0.003	6947	0.0500	0.0496	
25 PETN	2	13.794	13.797	-0.003	36348	0.5000	0.5033	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00083	Amount Added:	5.00	Units: uL
8330 DMT_00018	Amount Added:	2.50	Units: uL

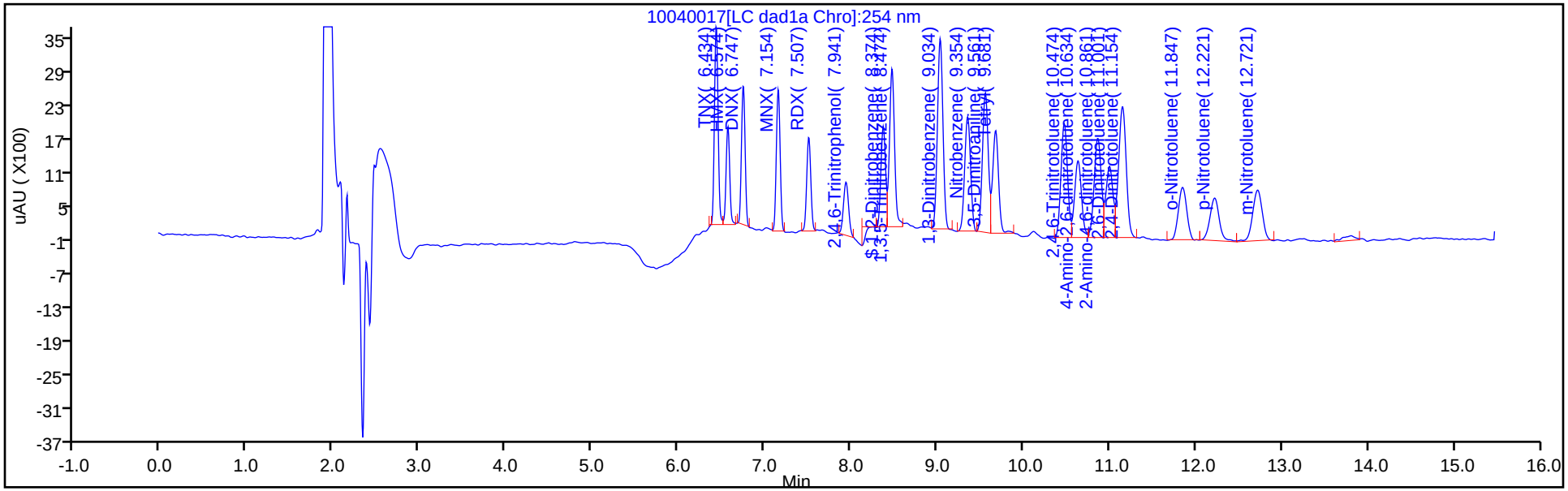
Report Date: 08-Oct-2024 13:19:22 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Denver

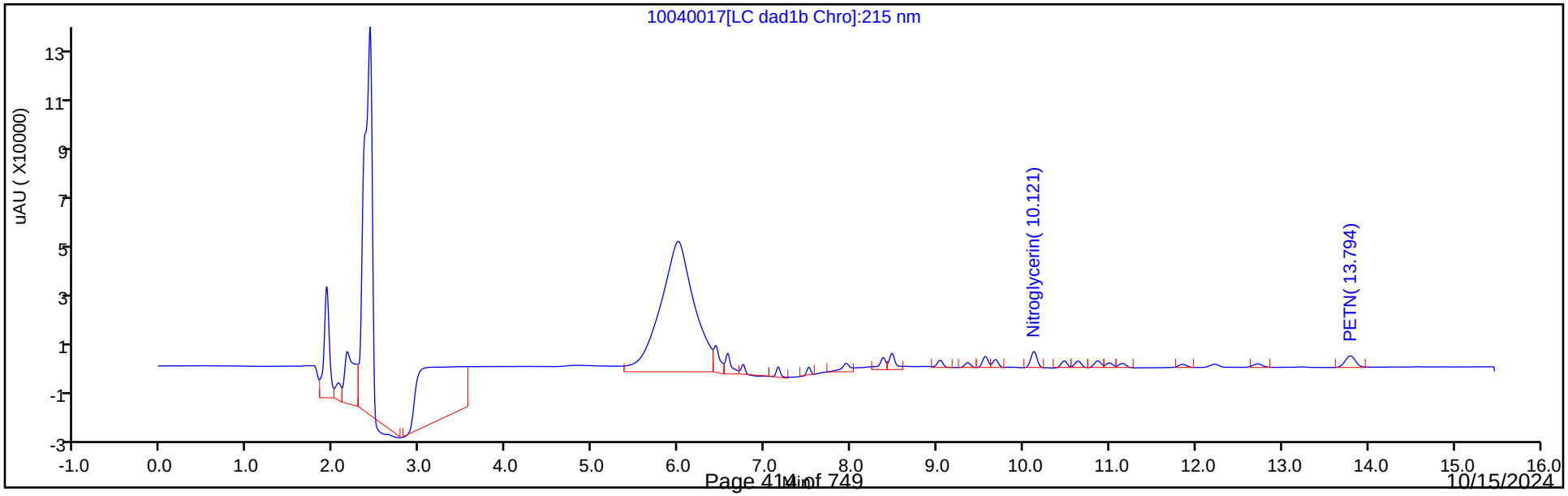
Data File: \\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040017.d

Injection Date:	04-Oct-2024 19:11:05	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	IC INT/DMT 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



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



10/15/2024
4:48:23 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

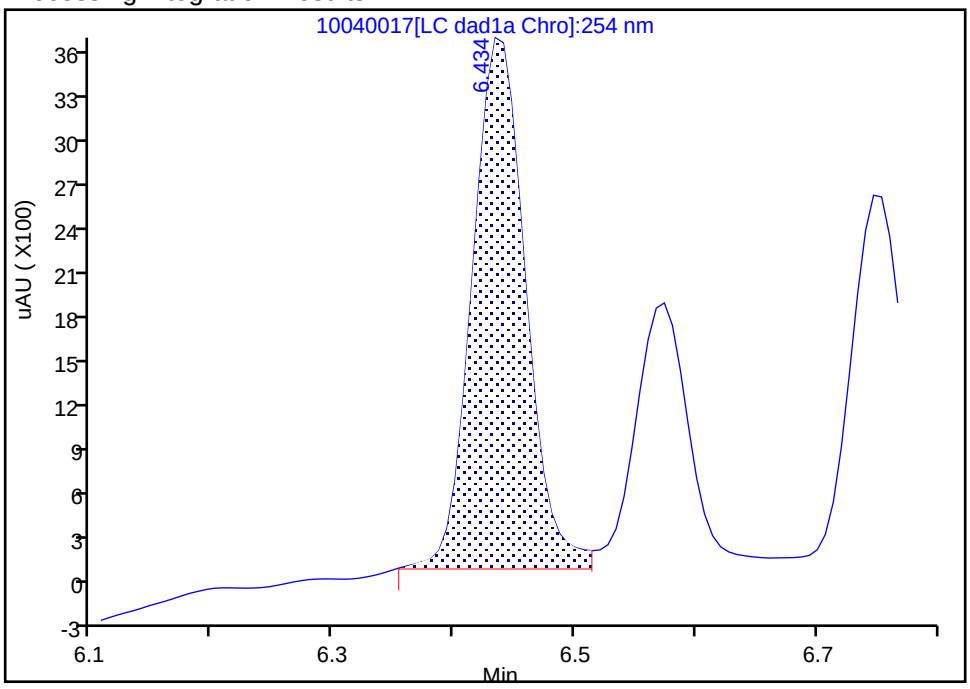
Data File: \\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040017.d
Injection Date: 04-Oct-2024 19:11:05 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 3
Client ID:
Operator ID: JZ ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 TNX, CAS: 13980-04-6

Signal: 1

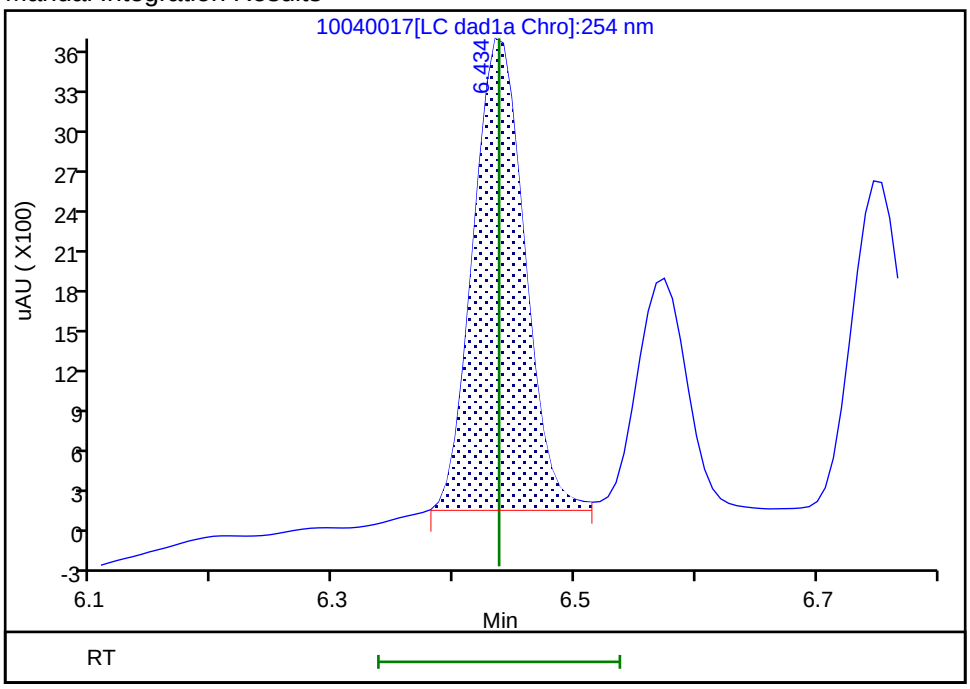
Processing Integration Results

RT: 6.43
Area: 10875
Amount: 0.051607
Amount Units: ug/mL



Manual Integration Results

RT: 6.43
Area: 10367
Amount: 0.051049
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 13:05:07 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

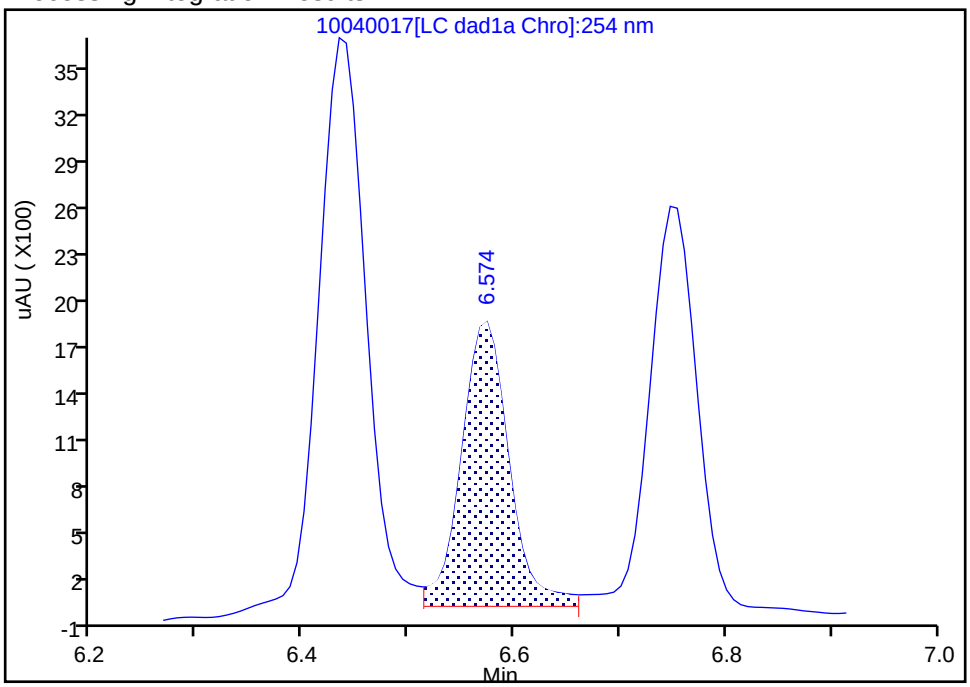
Data File: \\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040017.d
Injection Date: 04-Oct-2024 19:11:05 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 3
Client ID:
Operator ID: JZ ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

4 HMX, CAS: 2691-41-0

Signal: 1

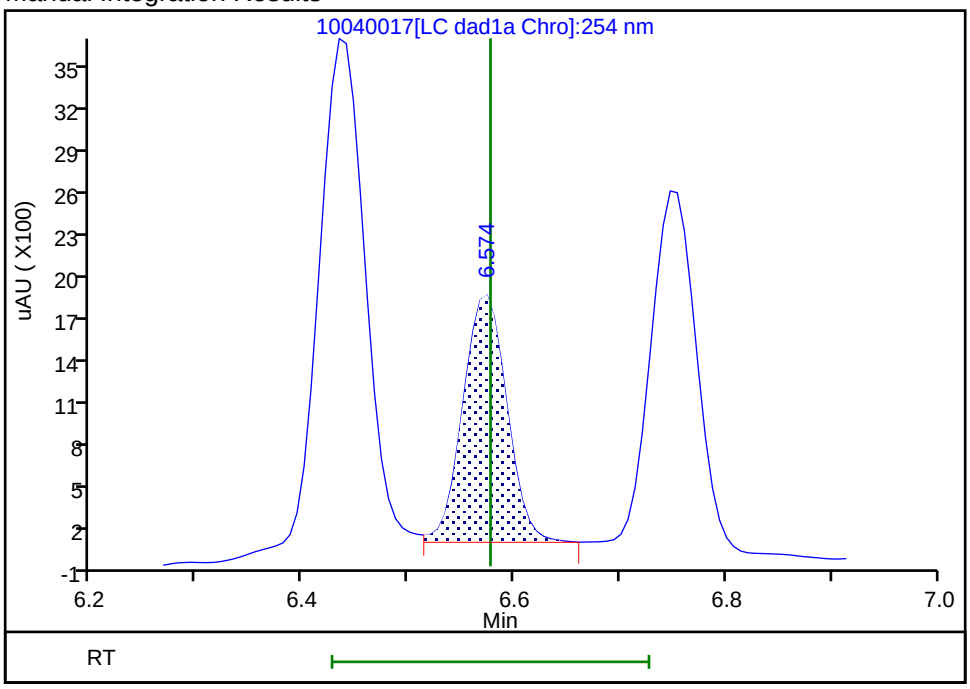
Processing Integration Results

RT: 6.57
Area: 5573
Amount: 0.051766
Amount Units: ug/mL



Manual Integration Results

RT: 6.57
Area: 4979
Amount: 0.051514
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 13:05:03 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

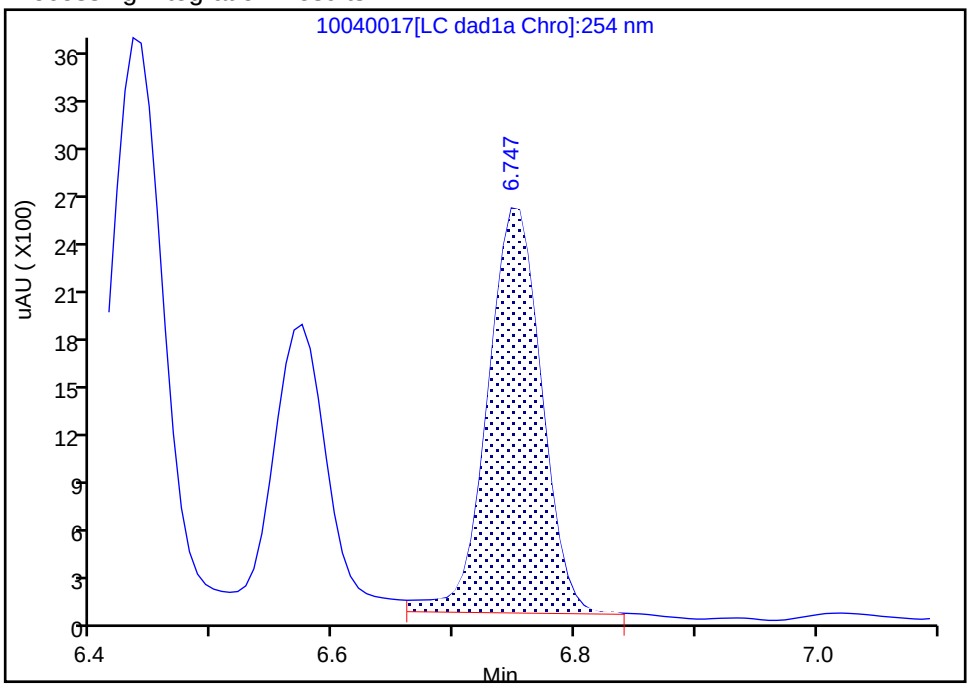
Data File: \\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040017.d
Injection Date: 04-Oct-2024 19:11:05 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 3
Client ID:
Operator ID: JZ ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

6 DNX, CAS: 80251-29-2

Signal: 1

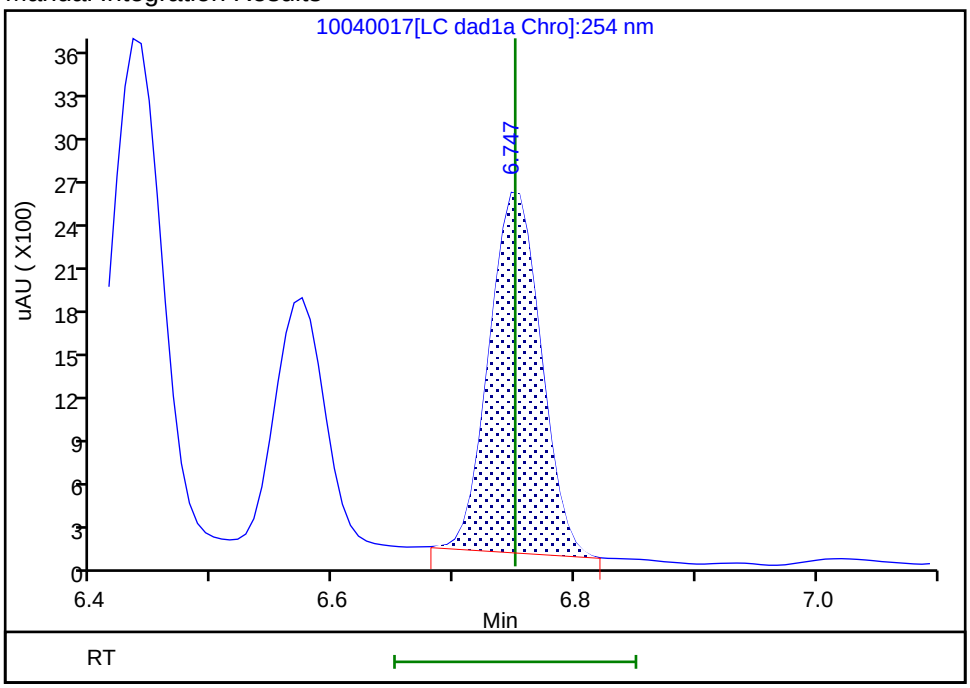
Processing Integration Results

RT: 6.75
Area: 7771
Amount: 0.050925
Amount Units: ug/mL



Manual Integration Results

RT: 6.75
Area: 7313
Amount: 0.050075
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 13:04:59 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

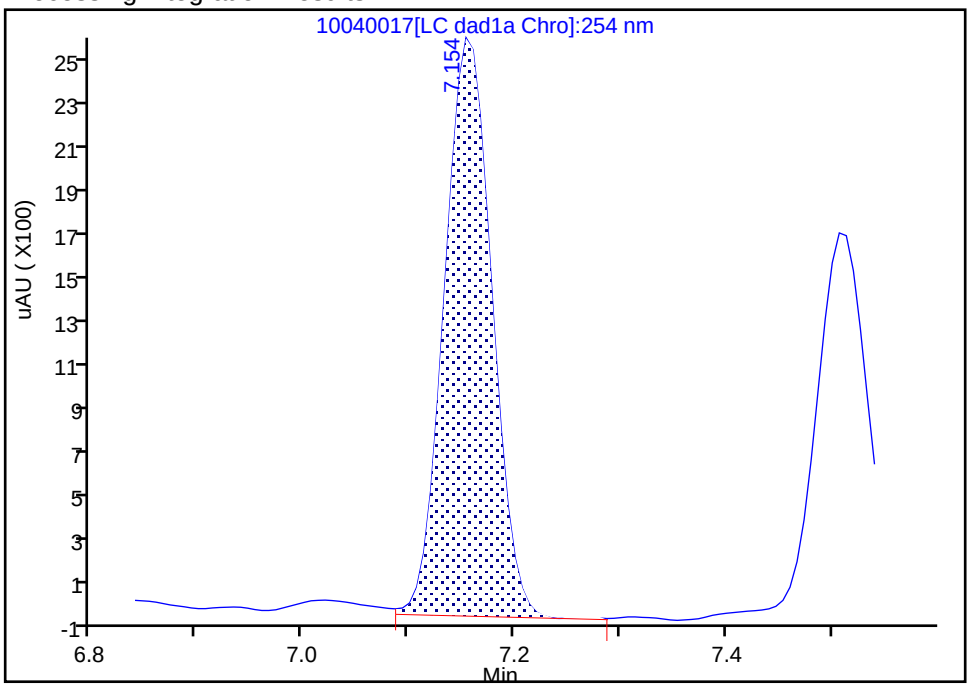
Data File: \\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040017.d
Injection Date: 04-Oct-2024 19:11:05 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 3
Client ID:
Operator ID: JZ ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

7 MNX, CAS: 5755-27-1

Signal: 1

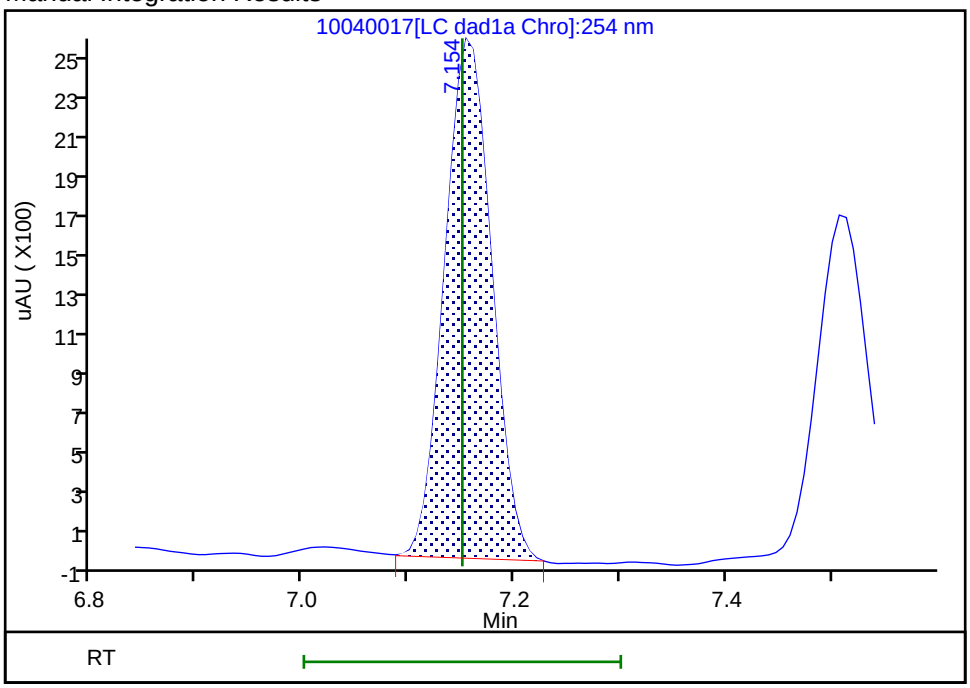
Processing Integration Results

RT: 7.15
Area: 7839
Amount: 0.058573
Amount Units: ug/mL



Manual Integration Results

RT: 7.15
Area: 7700
Amount: 0.057923
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 13:04:53 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

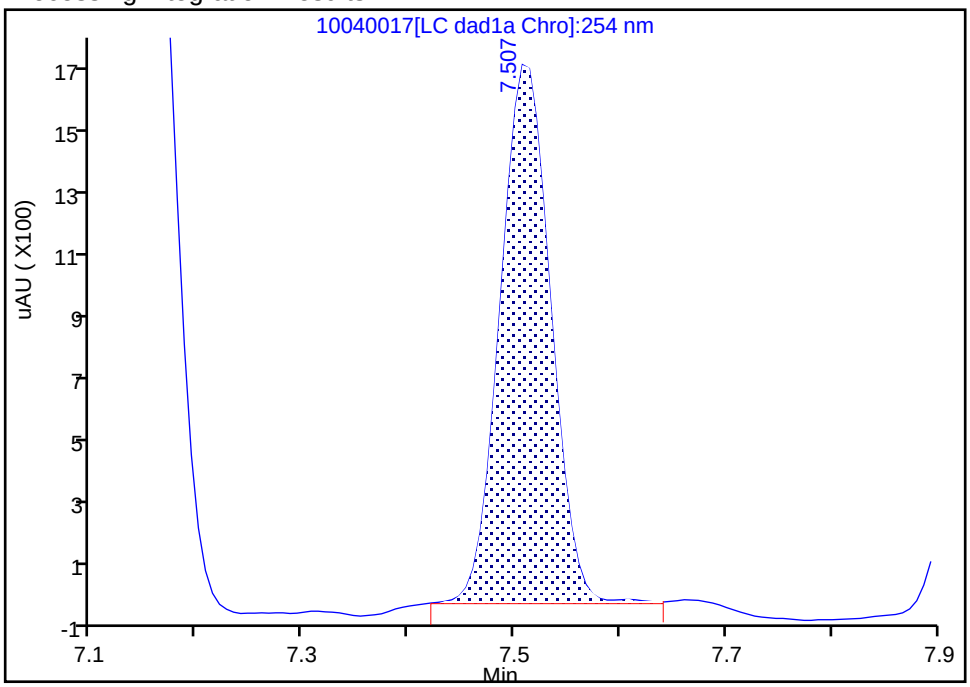
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040017.d				
Injection Date:	04-Oct-2024 19:11:05	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 3				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

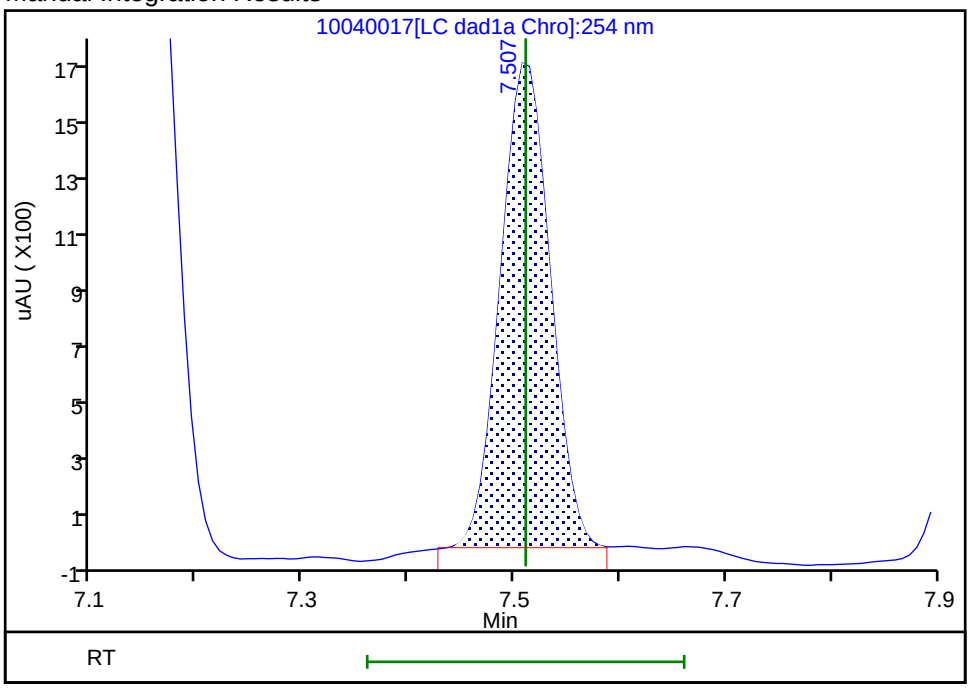
Processing Integration Results

RT: 7.51
Area: 5457
Amount: 0.049860
Amount Units: ug/mL



Manual Integration Results

RT: 7.51
Area: 5386
Amount: 0.049722
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 13:04:45 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

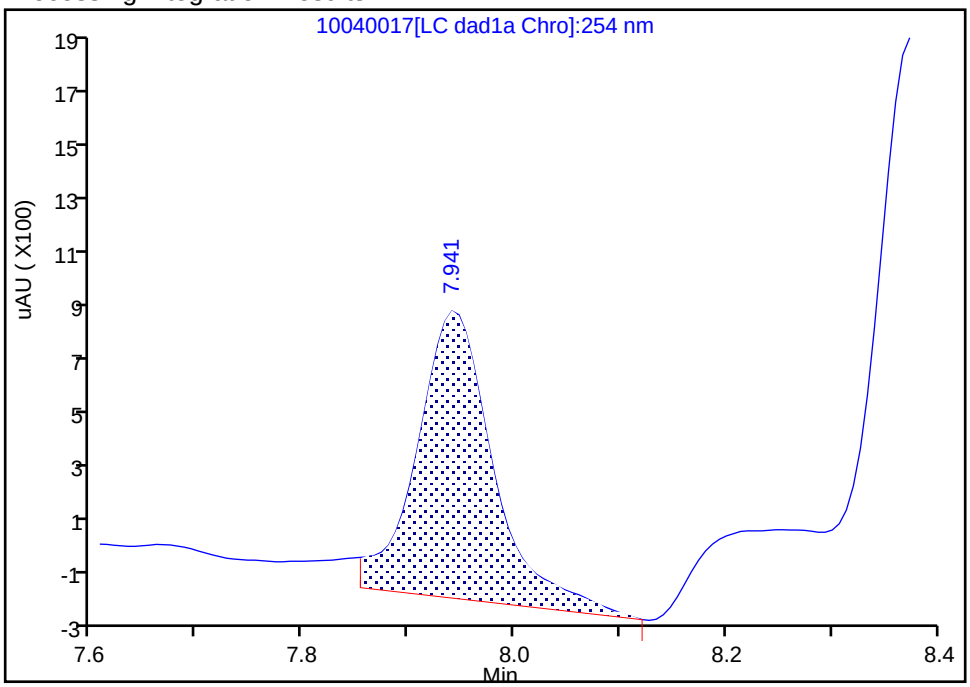
Data File: \\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040017.d
Injection Date: 04-Oct-2024 19:11:05 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 3
Client ID:
Operator ID: JZ ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

9 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

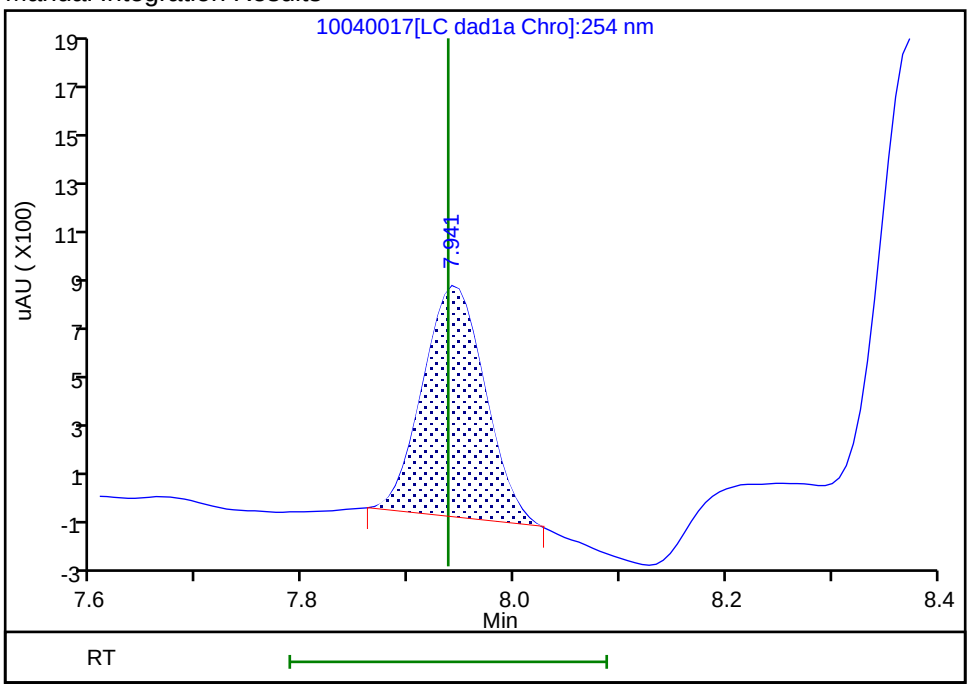
Processing Integration Results

RT: 7.94
Area: 5246
Amount: 0.064797
Amount Units: ug/mL



Manual Integration Results

RT: 7.94
Area: 3807
Amount: 0.050473
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 13:04:36 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

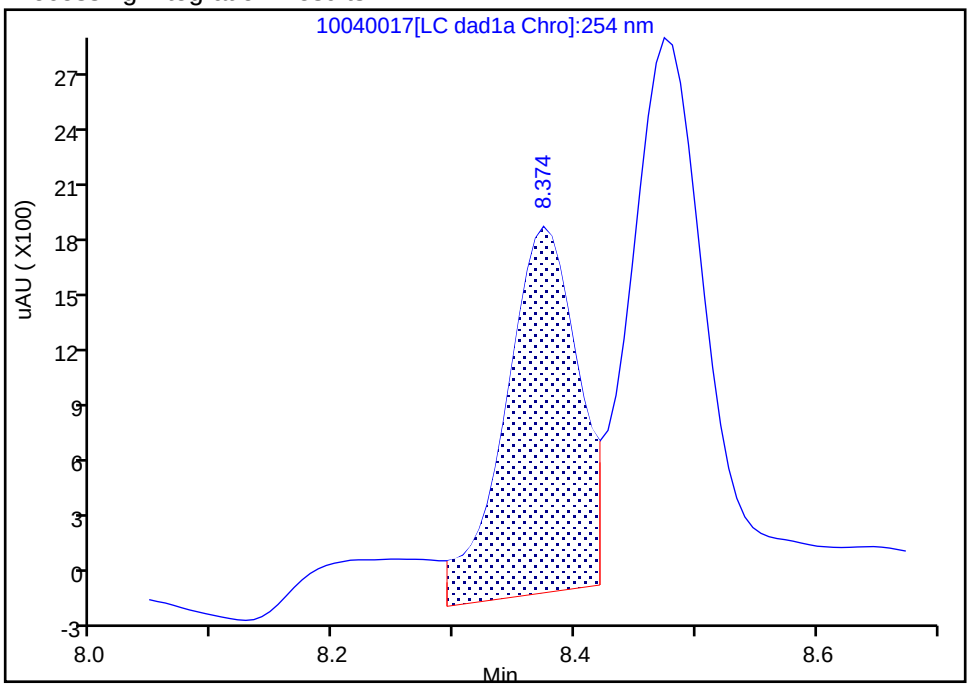
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040017.d				
Injection Date:	04-Oct-2024 19:11:05	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 3				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

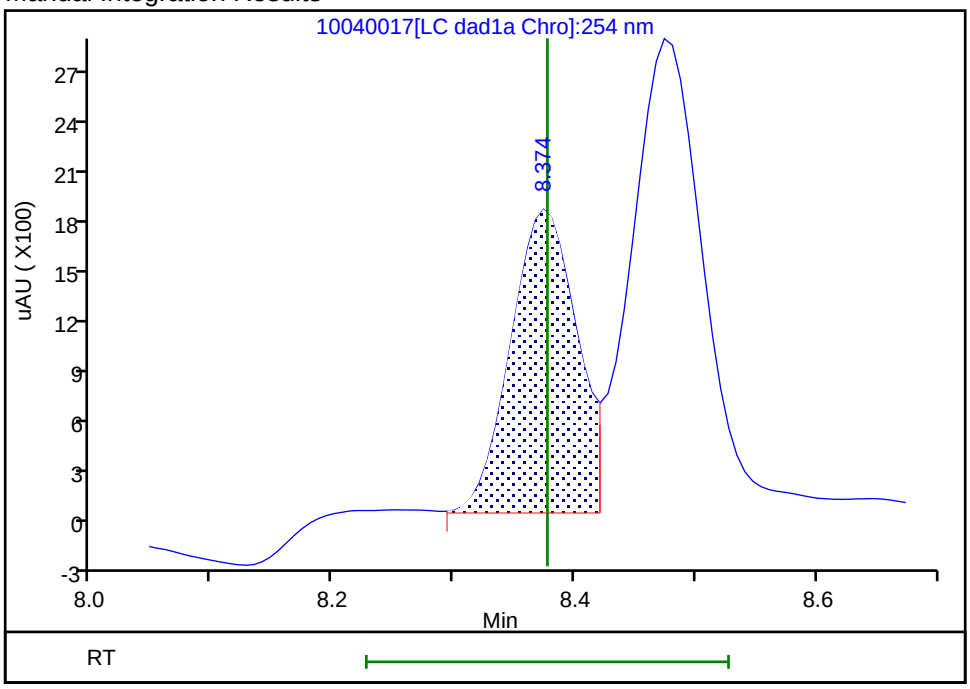
Processing Integration Results

RT: 8.37
Area: 8186
Amount: 0.061318
Amount Units: ug/mL



Manual Integration Results

RT: 8.37
Area: 6795
Amount: 0.052105
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 13:04:29 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

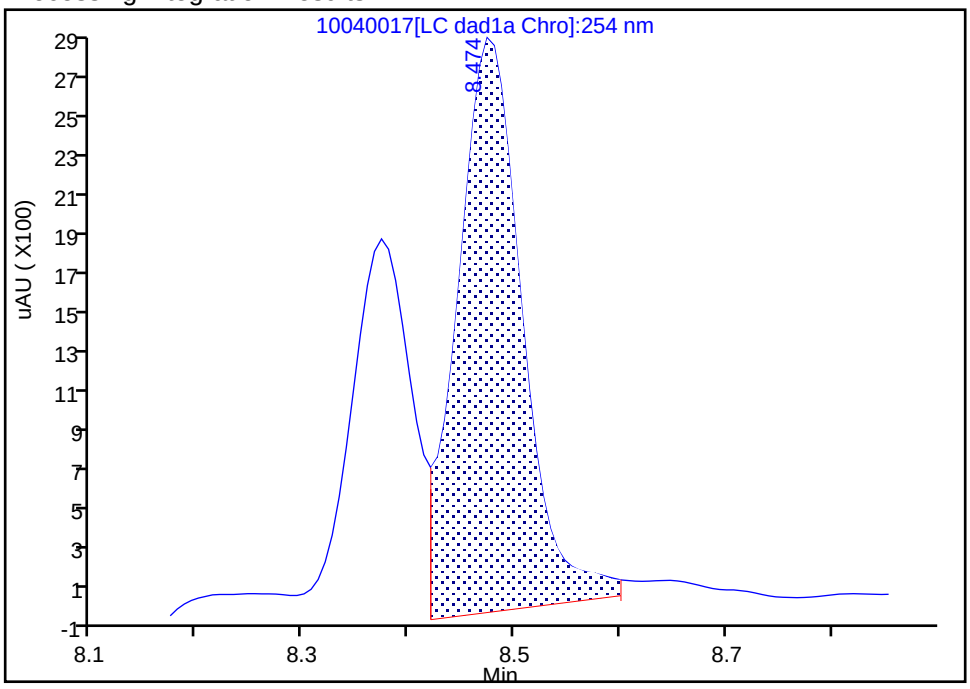
Data File: \\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040017.d
Injection Date: 04-Oct-2024 19:11:05 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 3
Client ID:
Operator ID: JZ ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

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

Signal: 1

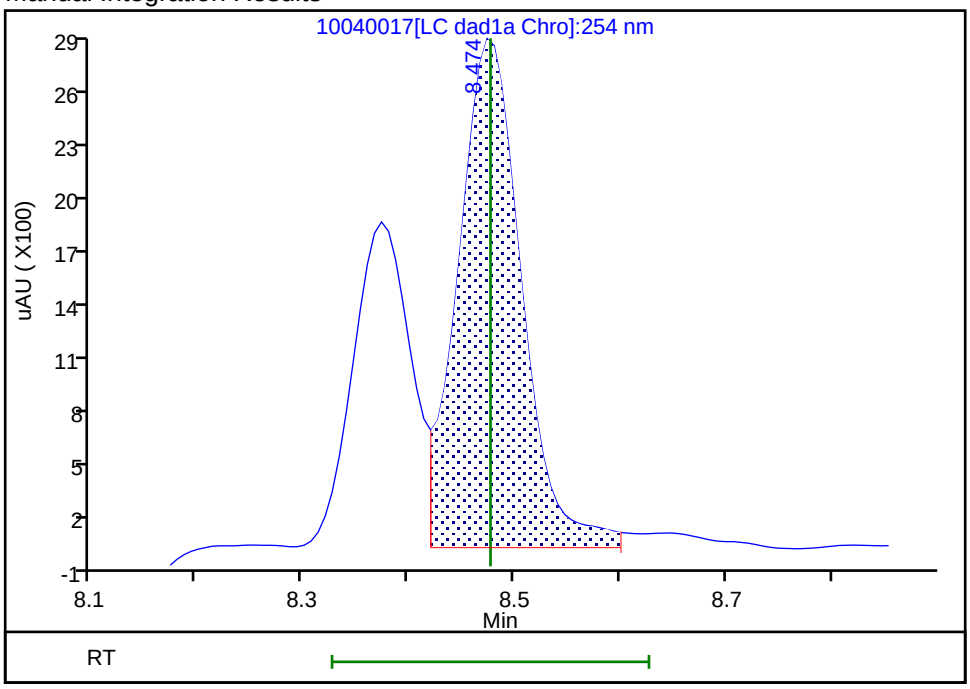
Processing Integration Results

RT: 8.47
Area: 12317
Amount: 0.056311
Amount Units: ug/mL



Manual Integration Results

RT: 8.47
Area: 11696
Amount: 0.053812
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 13:04:29 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

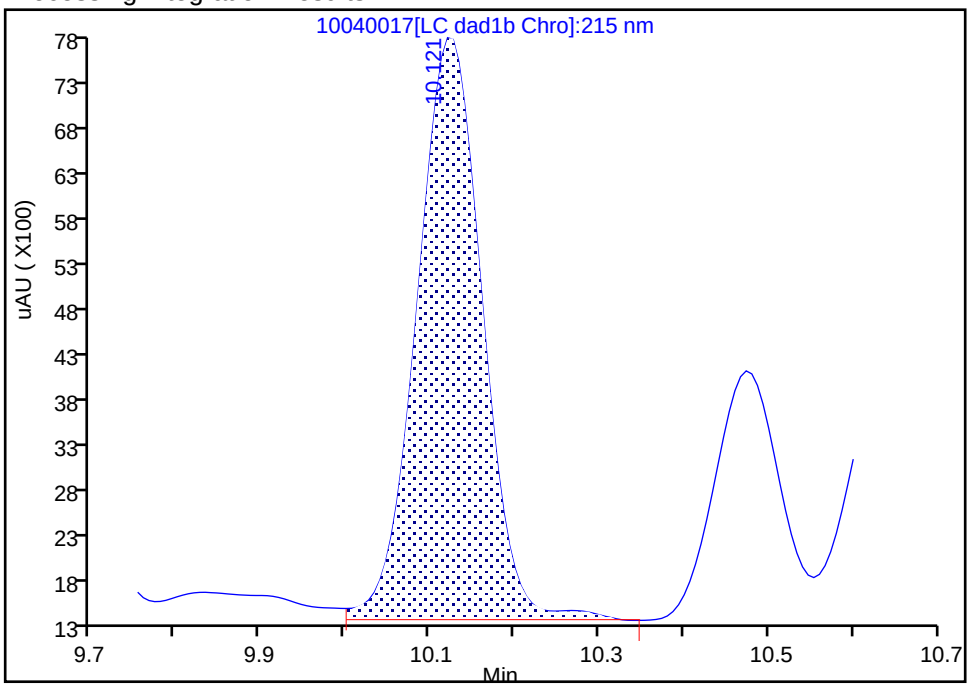
Data File: \\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040017.d
Injection Date: 04-Oct-2024 19:11:05 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 3
Client ID:
Operator ID: JZ ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1C, 215 nm

16 Nitroglycerin, CAS: 55-63-0

Signal: 1

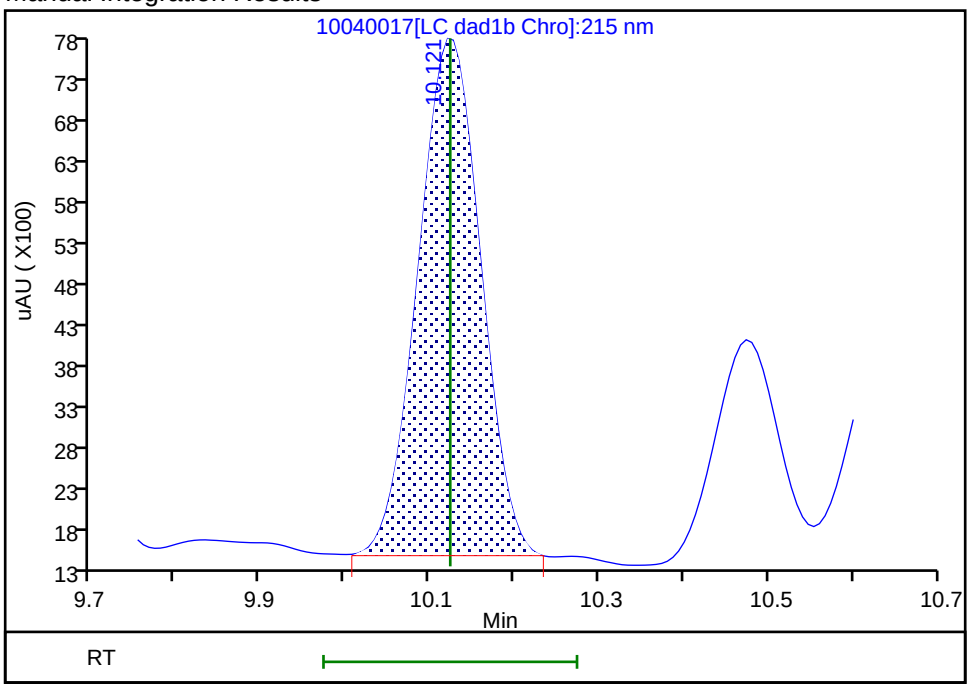
Processing Integration Results

RT: 10.12
Area: 34193
Amount: 0.496918
Amount Units: ug/mL



Manual Integration Results

RT: 10.12
Area: 32159
Amount: 0.505186
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 13:09:34 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

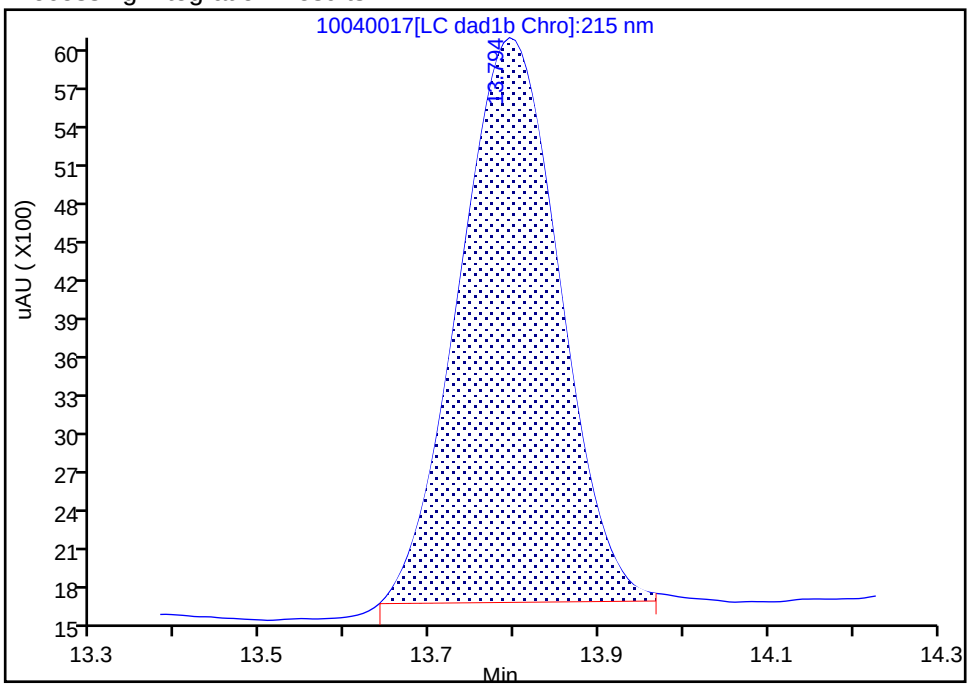
Data File: \\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040017.d
Injection Date: 04-Oct-2024 19:11:05 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 3
Client ID:
Operator ID: JZ ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1C, 215 nm

25 PETN, CAS: 78-11-5

Signal: 1

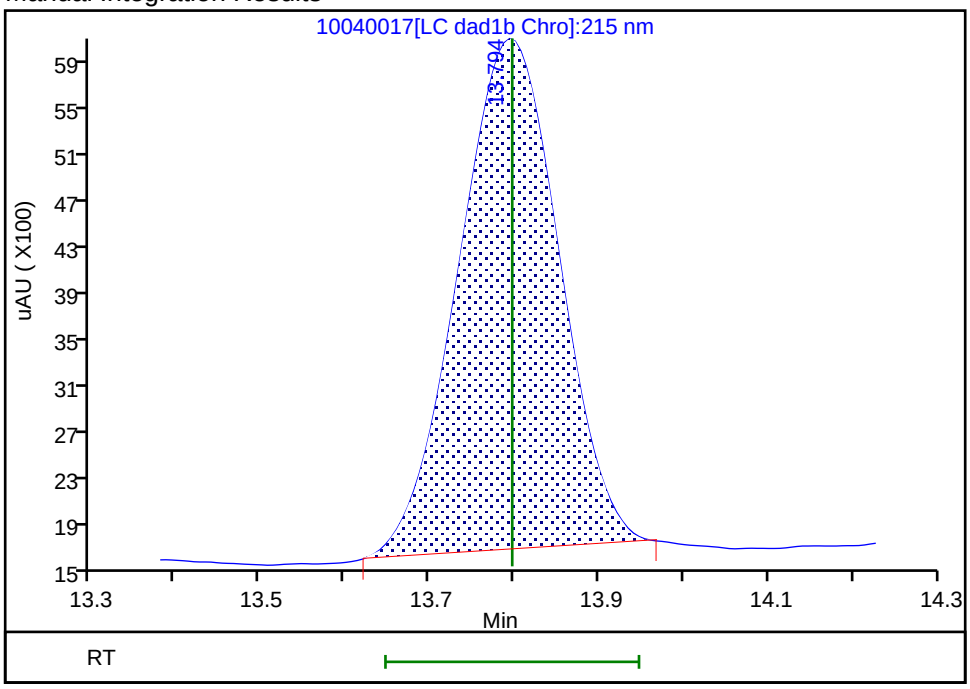
Processing Integration Results

RT: 13.79
Area: 36213
Amount: 0.505564
Amount Units: ug/mL



Manual Integration Results

RT: 13.79
Area: 36348
Amount: 0.503349
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 13:04:14 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040018.D
Lims ID: IC INT/DMT 2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 04-Oct-2024 19:33:04 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/DMT 2
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 08-Oct-2024 13:19:23 Calib Date: 04-Oct-2024 19:55:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1654

First Level Reviewer: LV5D Date: 08-Oct-2024 13:06:11

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.433	6.437	-0.004	4020	0.0201	0.0198	M
4 HMX	1	6.573	6.577	-0.004	2125	0.0200	0.0220	M
6 DNX	1	6.747	6.751	-0.004	2804	0.0200	0.0192	M
7 MNX	1	7.153	7.151	0.002	2958	0.0233	0.0223	M
8 RDX	1	7.507	7.511	-0.004	2098	0.0200	0.0184	M
9 2,4,6-Trinitrophenol	1	7.940	7.937	0.003	1559	0.0200	0.0207	M
$ 10 1,2-Dinitrobenzene	1	8.373	8.377	-0.004	2530	0.0200	0.0194	
11 1,3,5-Trinitrobenzene	1	8.473	8.477	-0.004	4281	0.0200	0.0197	
12 1,3-Dinitrobenzene	1	9.033	9.037	-0.004	6054	0.0200	0.0203	
13 Nitrobenzene	1	9.353	9.357	-0.004	3904	0.0200	0.0200	
14 3,5-Dinitroaniline	1	9.560	9.564	-0.004	4665	0.0200	0.0203	
15 Tetryl	1	9.680	9.684	-0.004	3103	0.0200	0.0188	
16 Nitroglycerin	2	10.127	10.124	0.003	12143	0.2000	0.1946	M
17 2,4,6-Trinitrotoluene	1	10.473	10.477	-0.004	4382	0.0200	0.0202	
18 4-Amino-2,6-dinitrotoluene	1	10.640	10.637	0.003	3357	0.0200	0.0190	
19 2-Amino-4,6-dinitrotoluene	1	10.867	10.864	0.003	4224	0.0200	0.0207	
20 2,6-Dinitrotoluene	1	11.007	11.004	0.003	2929	0.0200	0.0195	
21 2,4-Dinitrotoluene	1	11.153	11.150	0.003	5927	0.0200	0.0203	
22 o-Nitrotoluene	1	11.847	11.850	-0.003	2411	0.0200	0.0192	
23 p-Nitrotoluene	1	12.220	12.217	0.003	2343	0.0200	0.0203	
24 m-Nitrotoluene	1	12.713	12.724	-0.011	2992	0.0200	0.0203	
25 PETN	2	13.787	13.797	-0.010	13772	0.2000	0.1907	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00083	Amount Added:	2.00	Units: uL
8330 DMT_00018	Amount Added:	1.00	Units: uL

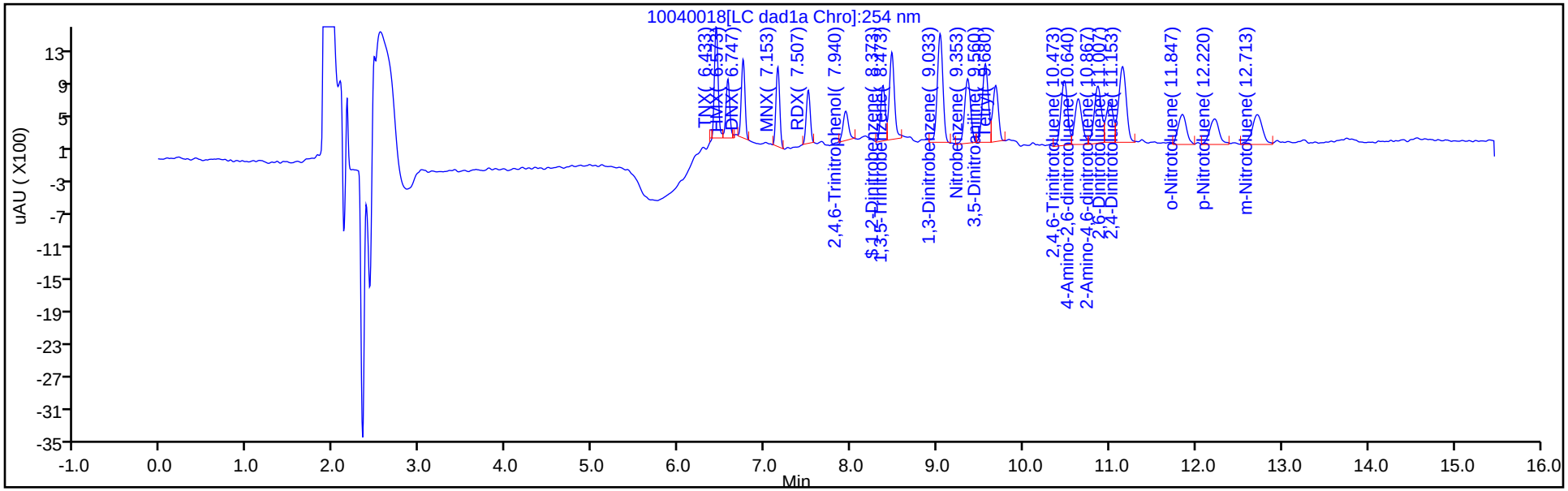
Report Date: 08-Oct-2024 13:19:23 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Denver

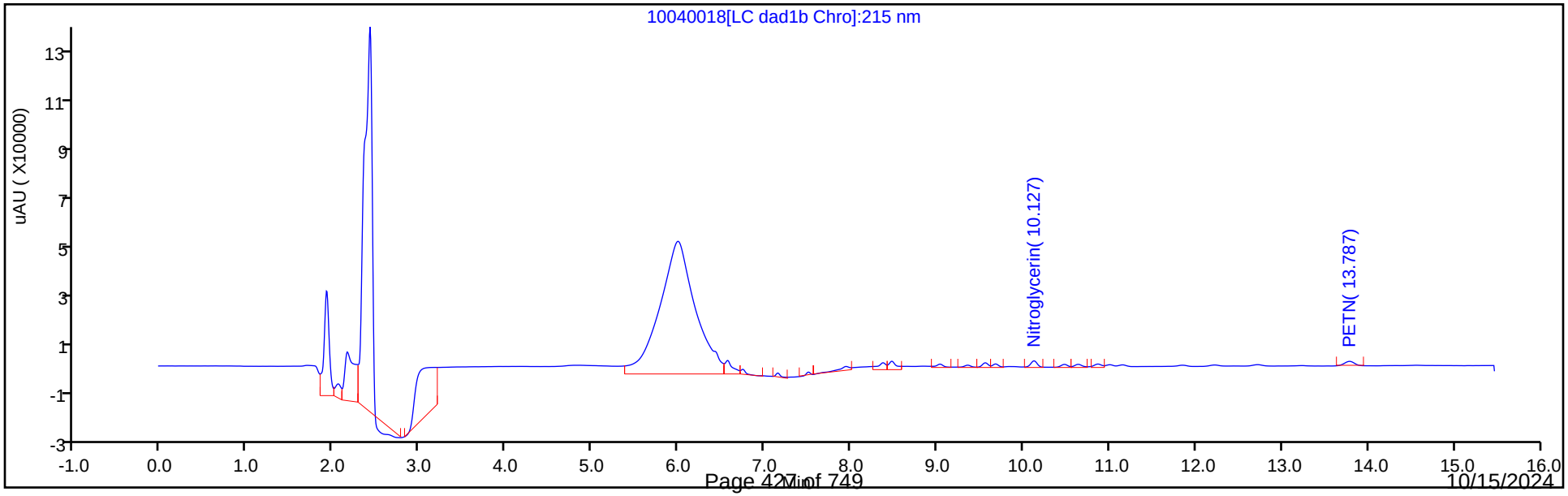
Data File: \\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040018.d

Injection Date:	04-Oct-2024 19:33:04	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	IC INT/DMT 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



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



10/15/2024
4:48:23 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

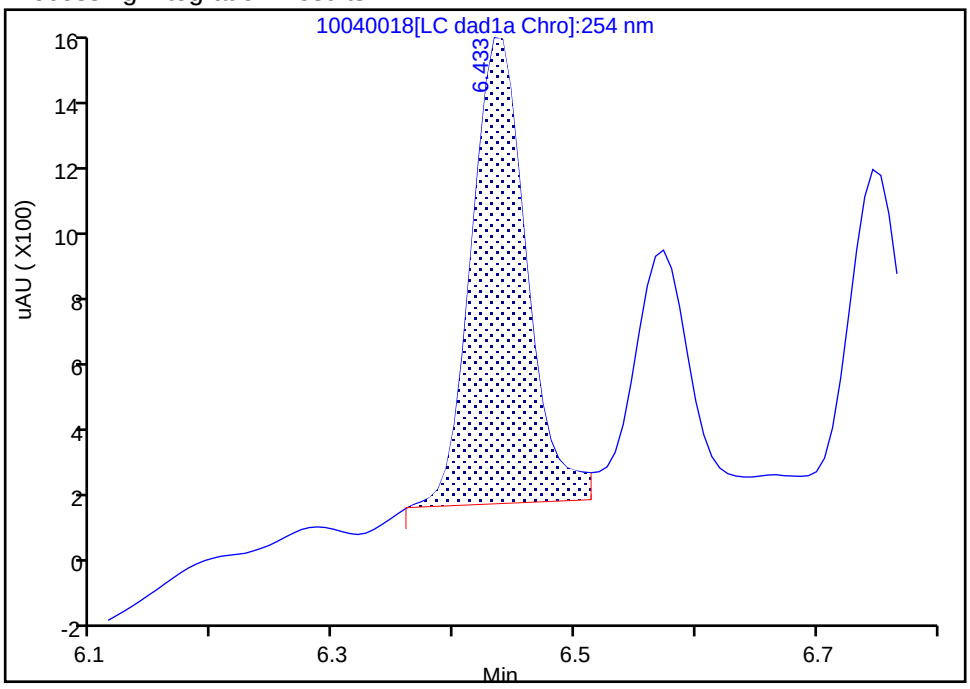
Data File: \\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040018.d
Injection Date: 04-Oct-2024 19:33:04 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 2
Client ID:
Operator ID: JZ ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 TNX, CAS: 13980-04-6

Signal: 1

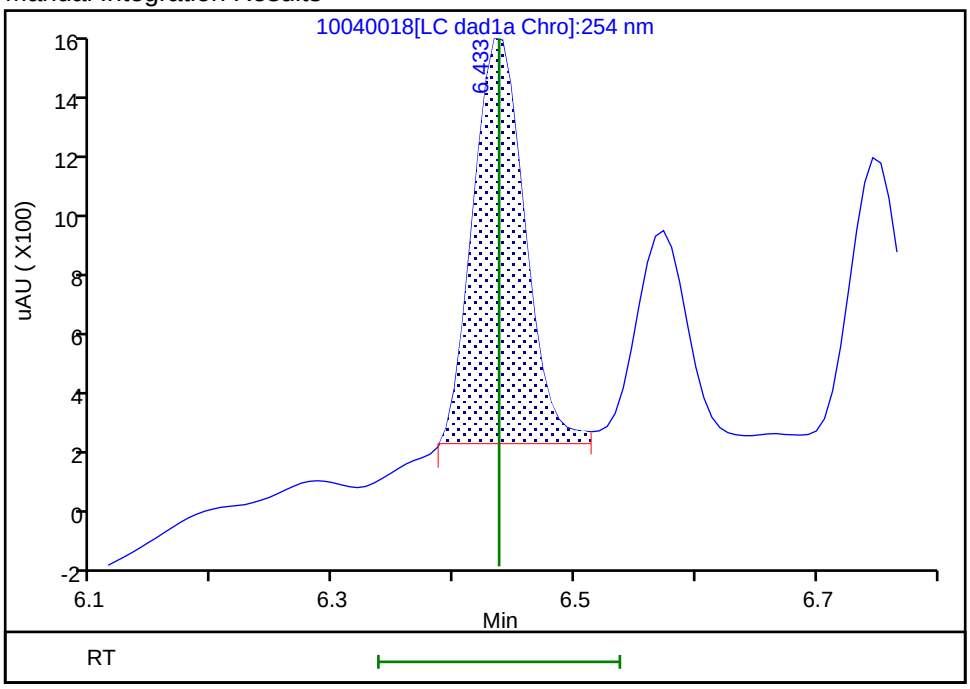
Processing Integration Results

RT: 6.43
Area: 4490
Amount: 0.021421
Amount Units: ug/mL



Manual Integration Results

RT: 6.43
Area: 4020
Amount: 0.019795
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 13:05:26 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

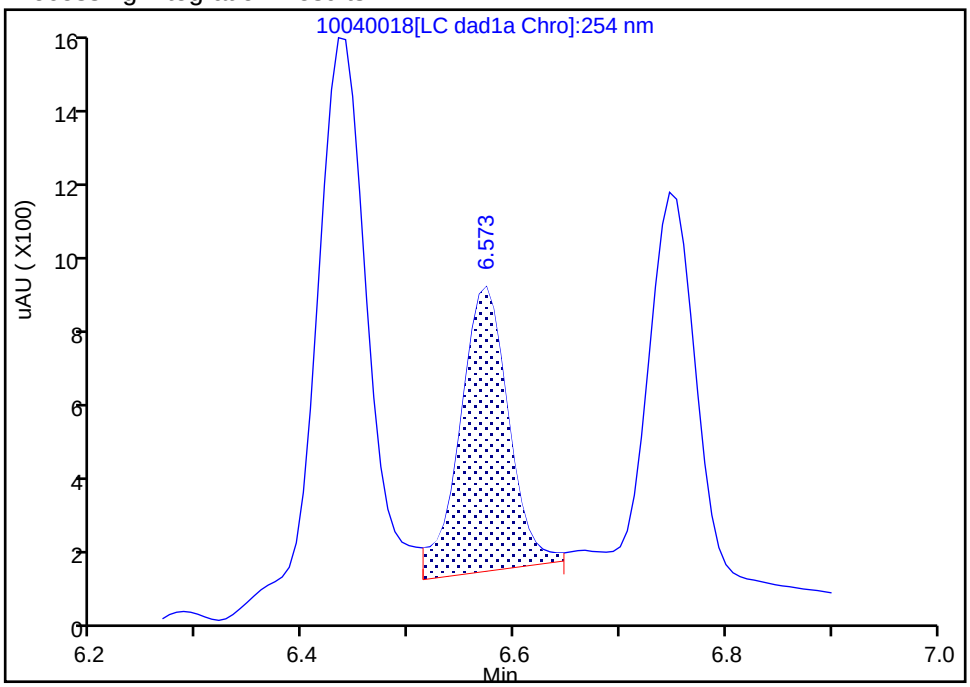
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040018.d				
Injection Date:	04-Oct-2024 19:33:04	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

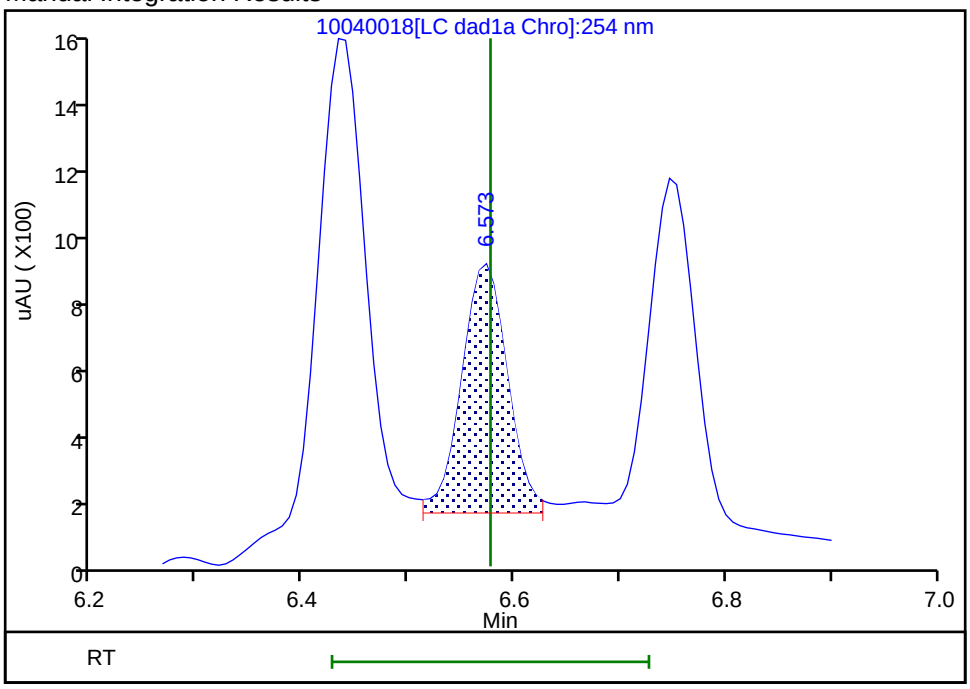
Processing Integration Results

RT: 6.57
Area: 2344
Amount: 0.018346
Amount Units: ug/mL



Manual Integration Results

RT: 6.57
Area: 2125
Amount: 0.021986
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 13:05:28 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

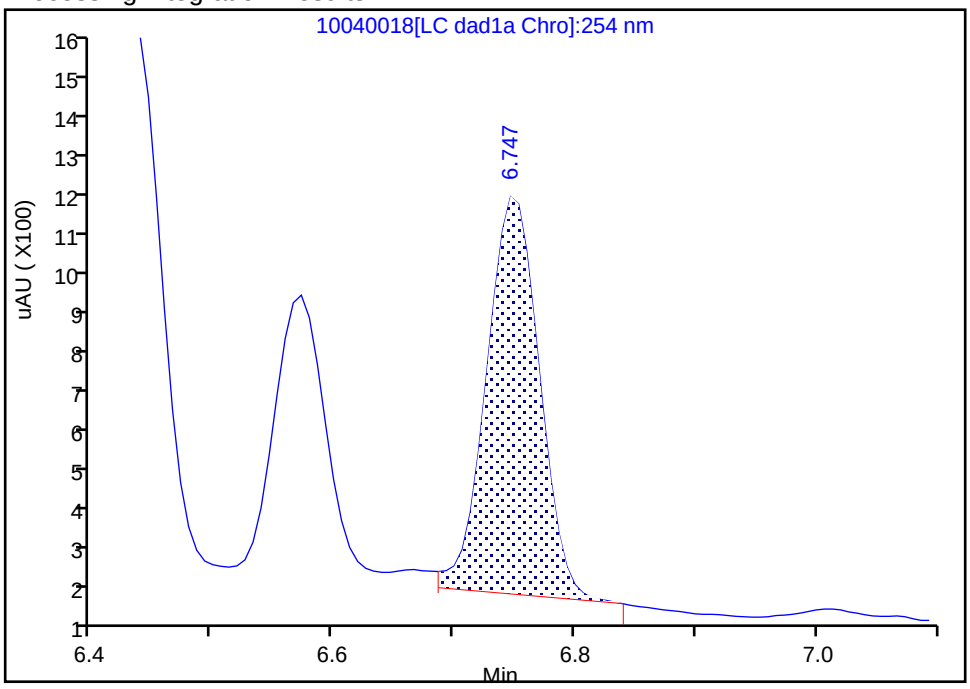
Data File: \\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040018.d
Injection Date: 04-Oct-2024 19:33:04 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 2
Client ID:
Operator ID: JZ ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

6 DNX, CAS: 80251-29-2

Signal: 1

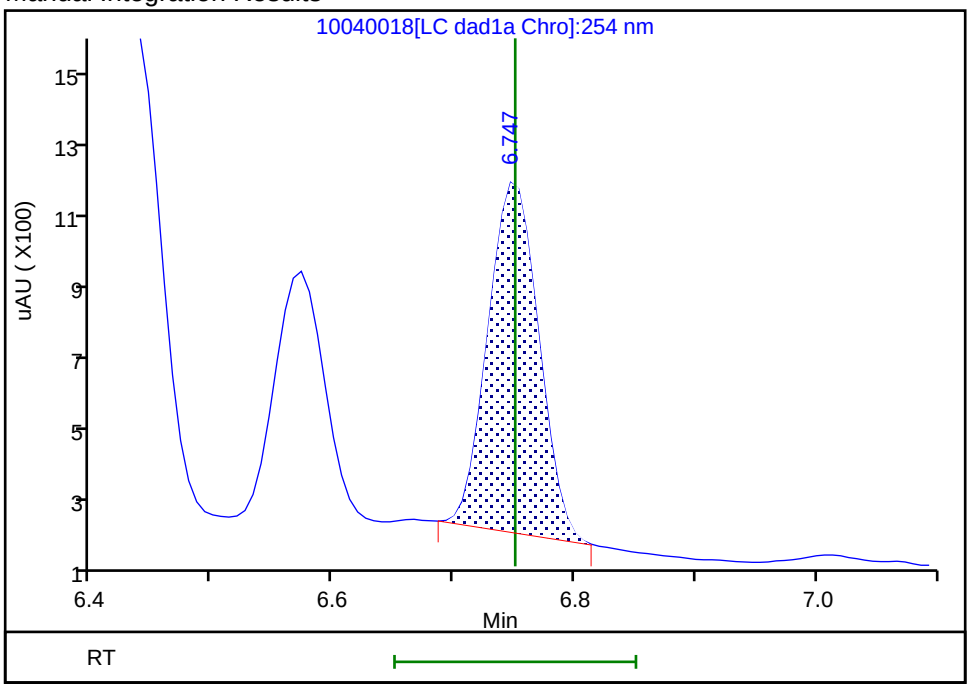
Processing Integration Results

RT: 6.75
Area: 3002
Amount: 0.019805
Amount Units: ug/mL



Manual Integration Results

RT: 6.75
Area: 2804
Amount: 0.019200
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 13:05:36 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

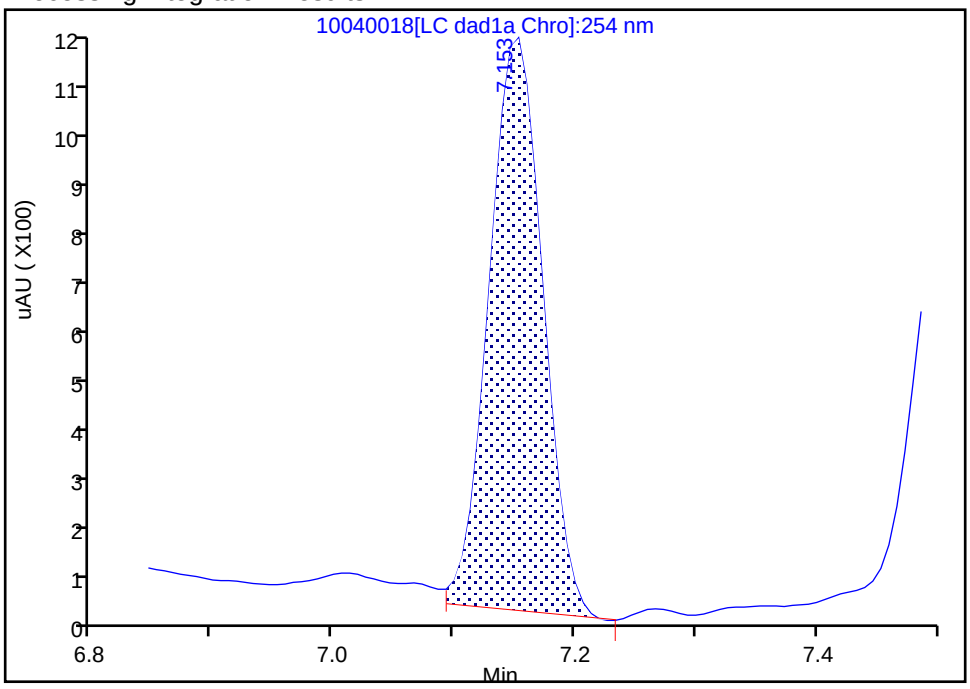
Data File: \\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040018.d
Injection Date: 04-Oct-2024 19:33:04 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 2
Client ID:
Operator ID: JZ ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

7 MNX, CAS: 5755-27-1

Signal: 1

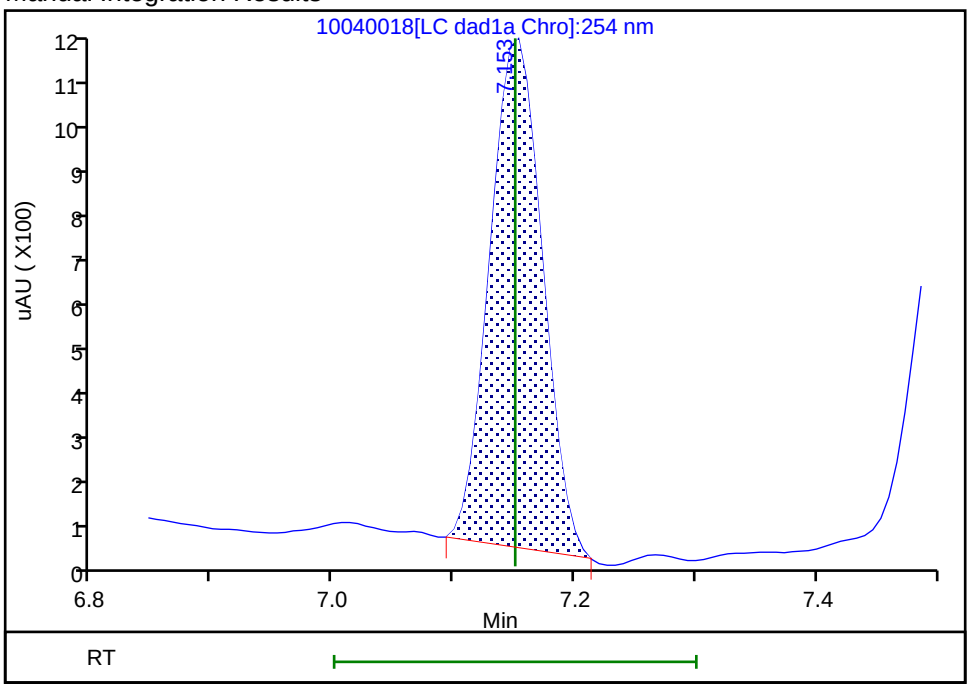
Processing Integration Results

RT: 7.15
Area: 3091
Amount: 0.023142
Amount Units: ug/mL



Manual Integration Results

RT: 7.15
Area: 2958
Amount: 0.022252
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 13:05:43 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

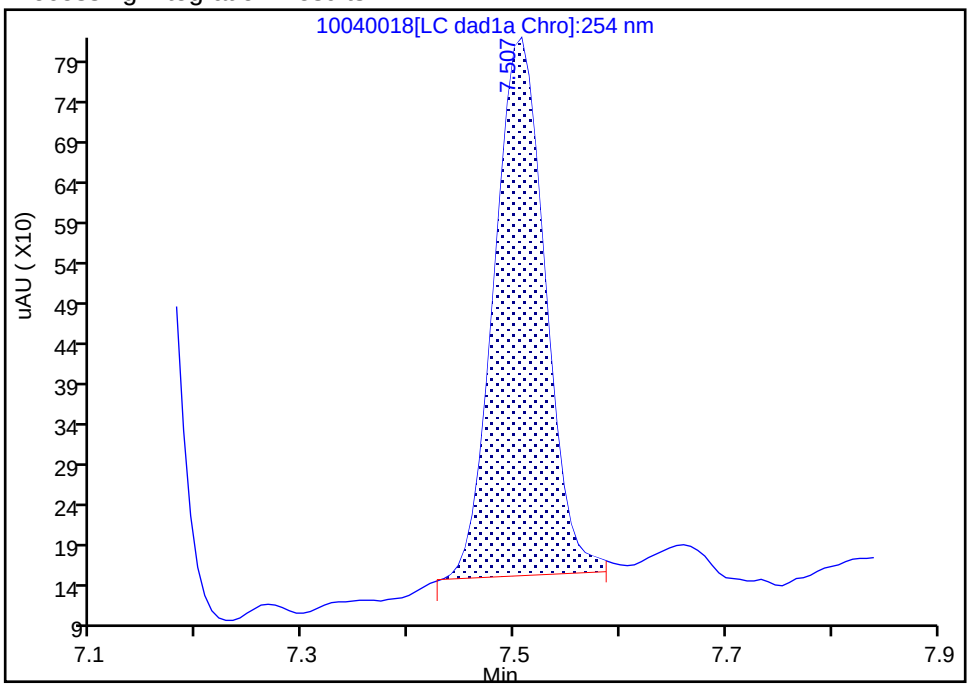
Data File: \\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040018.d
Injection Date: 04-Oct-2024 19:33:04 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 2
Client ID:
Operator ID: JZ ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

8 RDX, CAS: 121-82-4

Signal: 1

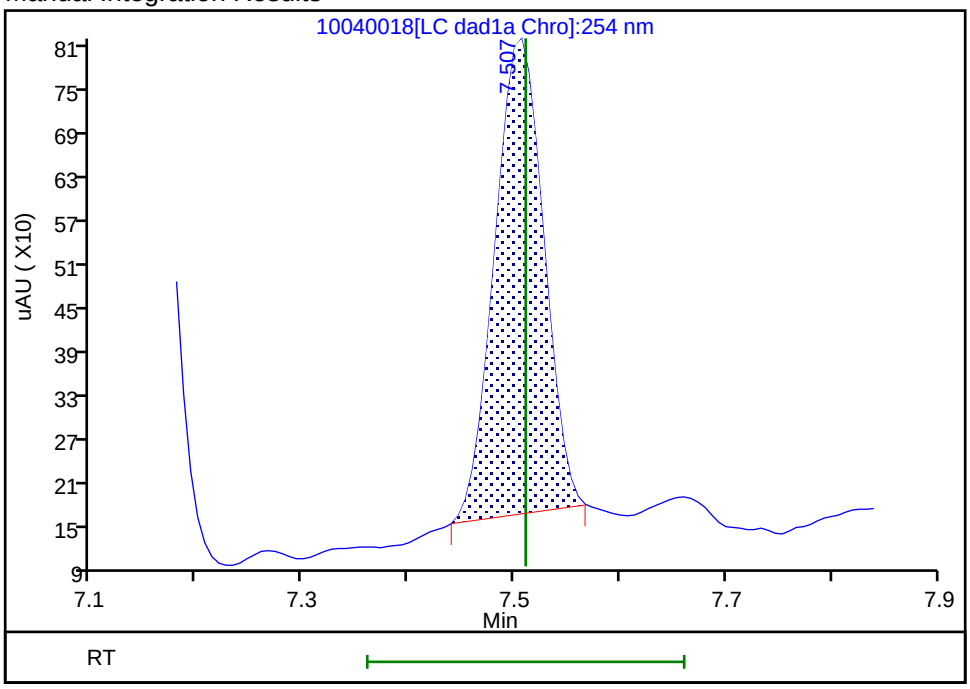
Processing Integration Results

RT: 7.51
Area: 2243
Amount: 0.020524
Amount Units: ug/mL



Manual Integration Results

RT: 7.51
Area: 2098
Amount: 0.018358
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 13:05:48 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

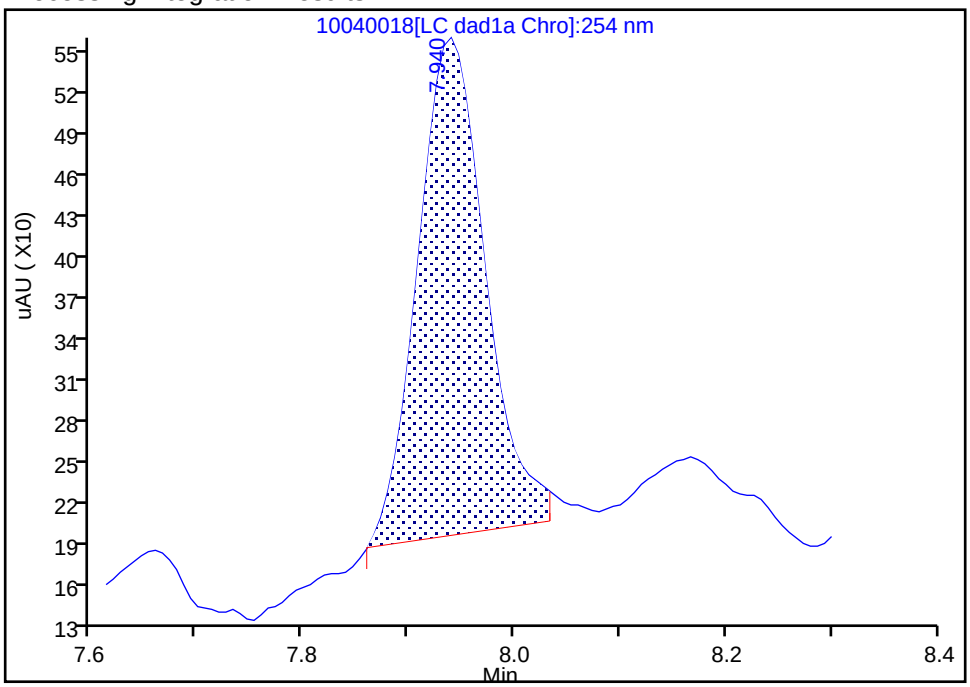
Data File: \\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040018.d
Injection Date: 04-Oct-2024 19:33:04 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 2
Client ID:
Operator ID: JZ ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

9 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

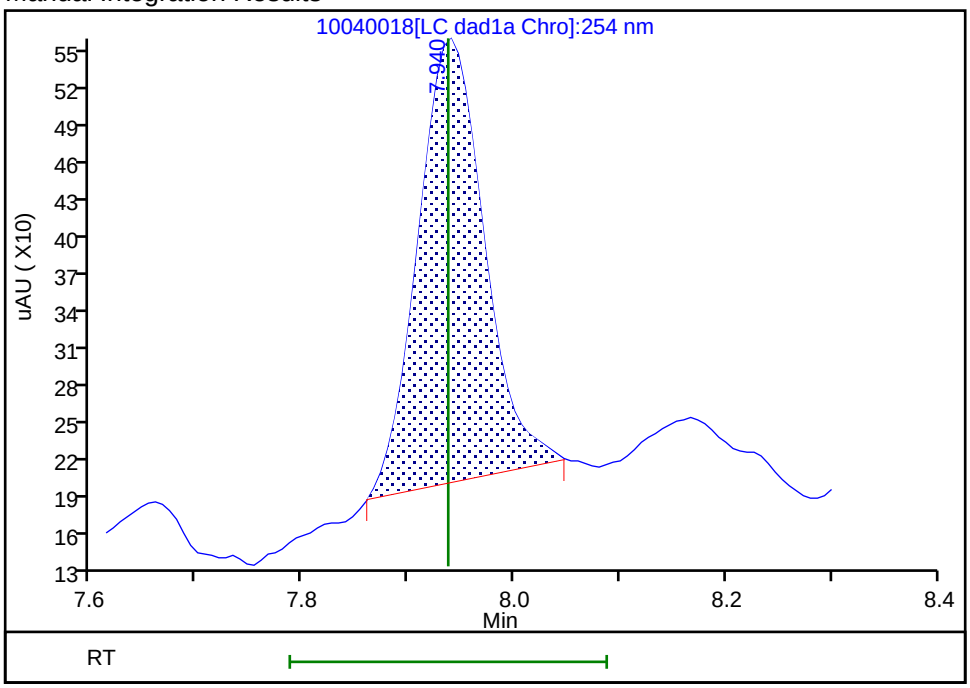
Processing Integration Results

RT: 7.94
Area: 1610
Amount: 0.020704
Amount Units: ug/mL



Manual Integration Results

RT: 7.94
Area: 1559
Amount: 0.020669
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 13:05:52 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

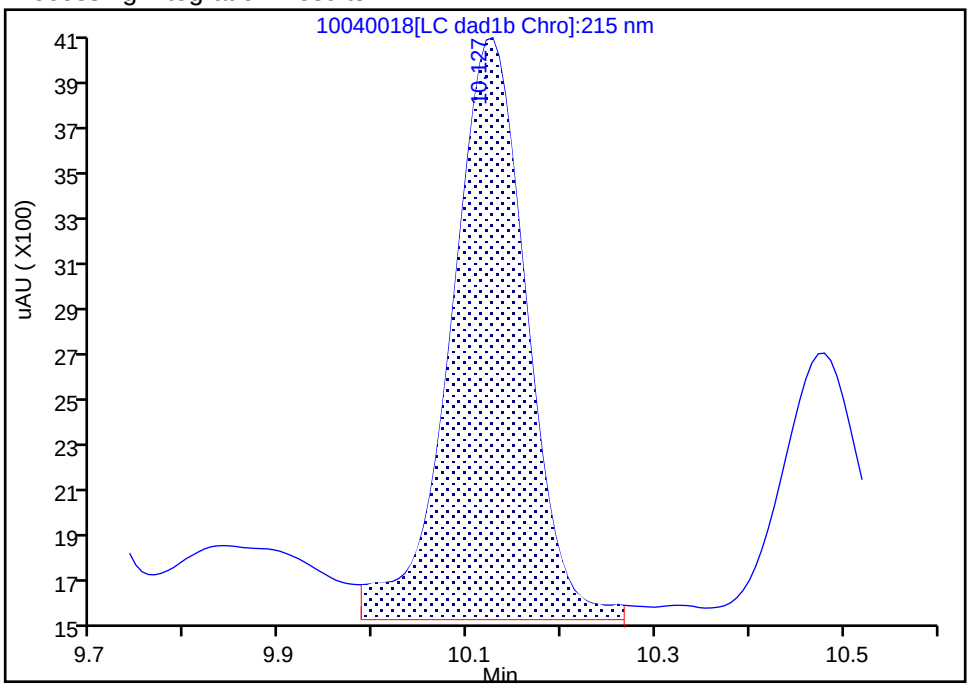
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040018.d				
Injection Date:	04-Oct-2024 19:33:04	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1C, 215 nm		

16 Nitroglycerin, CAS: 55-63-0

Signal: 1

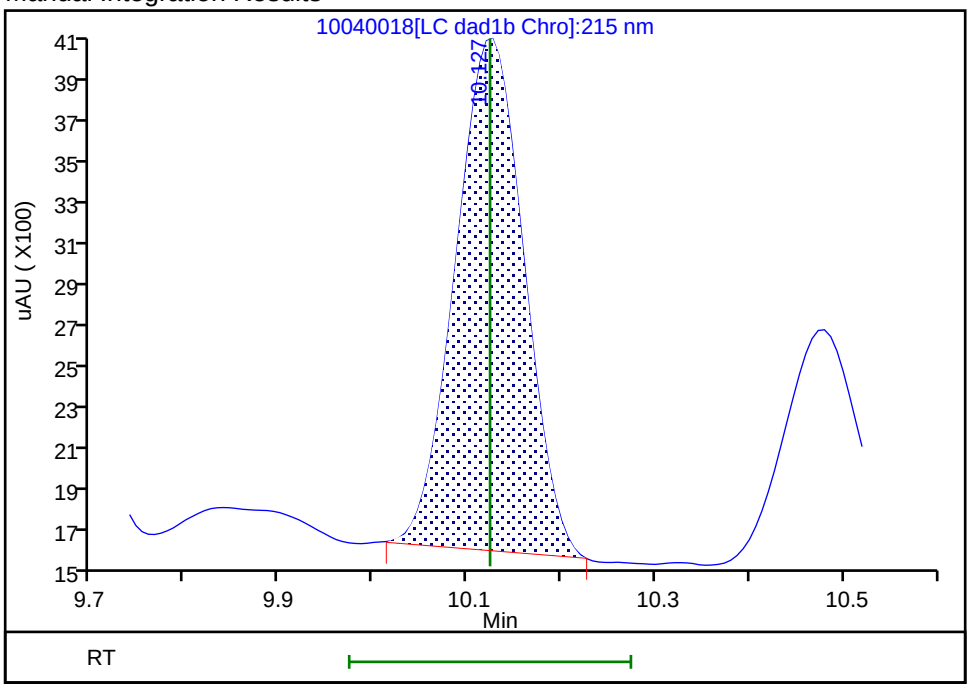
Processing Integration Results

RT: 10.13
Area: 14150
Amount: 0.206998
Amount Units: ug/mL



Manual Integration Results

RT: 10.13
Area: 12143
Amount: 0.194648
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 13:09:41 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

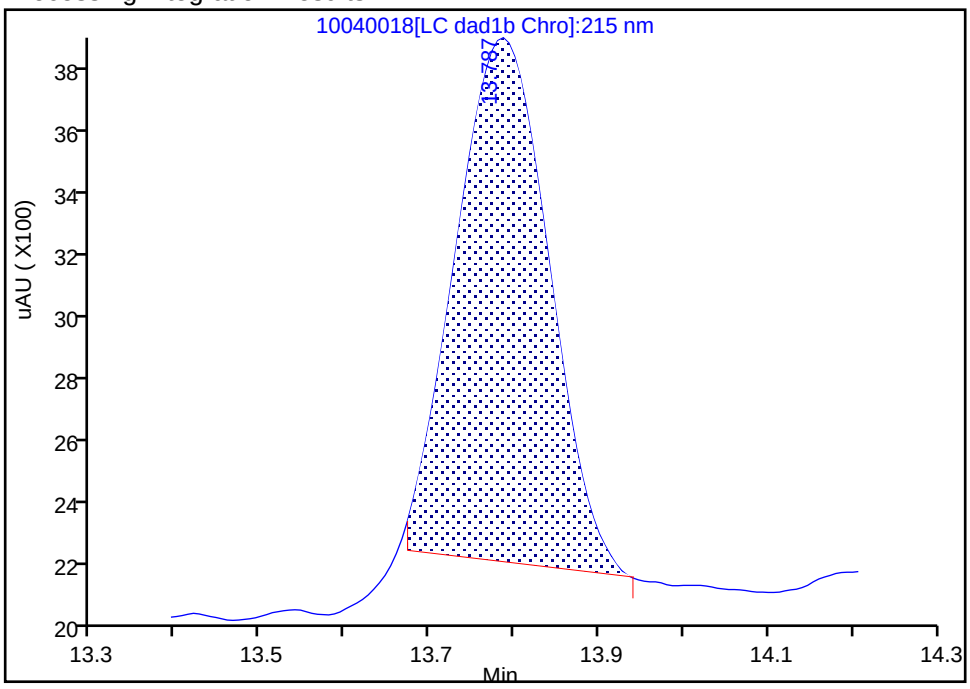
Data File: \\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040018.d
Injection Date: 04-Oct-2024 19:33:04 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 2
Client ID:
Operator ID: JZ ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1C, 215 nm

25 PETN, CAS: 78-11-5

Signal: 1

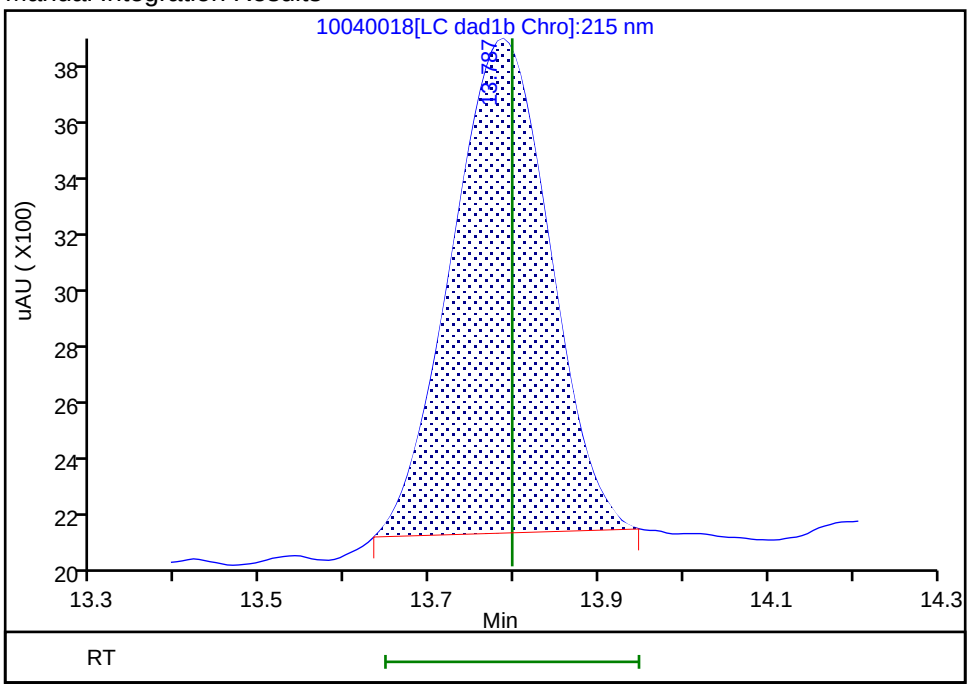
Processing Integration Results

RT: 13.79
Area: 12556
Amount: 0.175210
Amount Units: ug/mL



Manual Integration Results

RT: 13.79
Area: 13772
Amount: 0.190715
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 13:06:07 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D
Lims ID: IC INT/DMT 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 04-Oct-2024 19:55:02 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/DMT 1
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 08-Oct-2024 13:19:25 Calib Date: 04-Oct-2024 19:55:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1654

First Level Reviewer: LV5D Date: 08-Oct-2024 13:08:37

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.438	6.437	0.001	1951	0.0100	0.009607	M
4 HMX	1	6.571	6.577	-0.006	930	0.0100	0.009622	M
6 DNX	1	6.751	6.751	0.000	1406	0.0100	0.009627	M
7 MNX	1	7.151	7.151	0.000	1624	0.0117	0.0122	
8 RDX	1	7.505	7.511	-0.006	1264	0.0100	0.0104	
9 2,4,6-Trinitrophenol	1	7.938	7.937	0.001	939	0.0100	0.0124	
$ 10 1,2-Dinitrobenzene	1	8.371	8.377	-0.006	1315	0.0100	0.0101	
11 1,3,5-Trinitrobenzene	1	8.471	8.477	-0.006	2203	0.0100	0.0101	
12 1,3-Dinitrobenzene	1	9.031	9.037	-0.006	3012	0.0100	0.0101	
13 Nitrobenzene	1	9.351	9.357	-0.006	2038	0.0100	0.0104	
14 3,5-Dinitroaniline	1	9.558	9.564	-0.006	2237	0.0100	0.0099	
15 Tetryl	1	9.678	9.684	-0.006	1642	0.0100	0.0103	
16 Nitroglycerin	2	10.124	10.124	0.000	6121	0.1000	0.1012	M
17 2,4,6-Trinitrotoluene	1	10.478	10.477	0.001	2257	0.0100	0.0104	
18 4-Amino-2,6-dinitrotoluene	1	10.638	10.637	0.001	2099	0.0100	0.0103	
19 2-Amino-4,6-dinitrotoluene	1	10.864	10.864	0.000	2029	0.0100	0.0099	
20 2,6-Dinitrotoluene	1	11.004	11.004	0.000	1600	0.0100	0.0101	
21 2,4-Dinitrotoluene	1	11.151	11.150	0.001	2968	0.0100	0.0102	
22 o-Nitrotoluene	1	11.844	11.850	-0.006	1273	0.0100	0.0101	M
23 p-Nitrotoluene	1	12.218	12.217	0.001	1229	0.0100	0.0099	
24 m-Nitrotoluene	1	12.718	12.724	-0.006	1598	0.0100	0.0100	M
25 PETN	2	13.784	13.797	-0.013	7053	0.1000	0.0977	Ma

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

8330IntermStk_00083	Amount Added:	1.00	Units: uL
8330 DMT_00018	Amount Added:	0.50	Units: uL

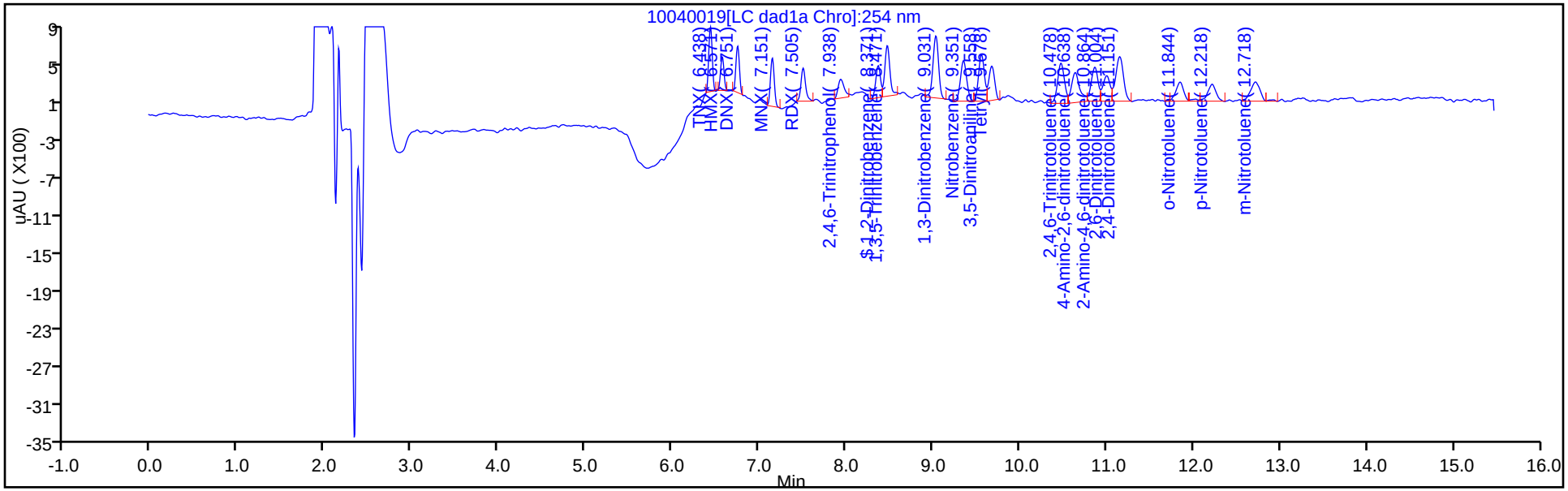
Report Date: 08-Oct-2024 13:19:26 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Denver

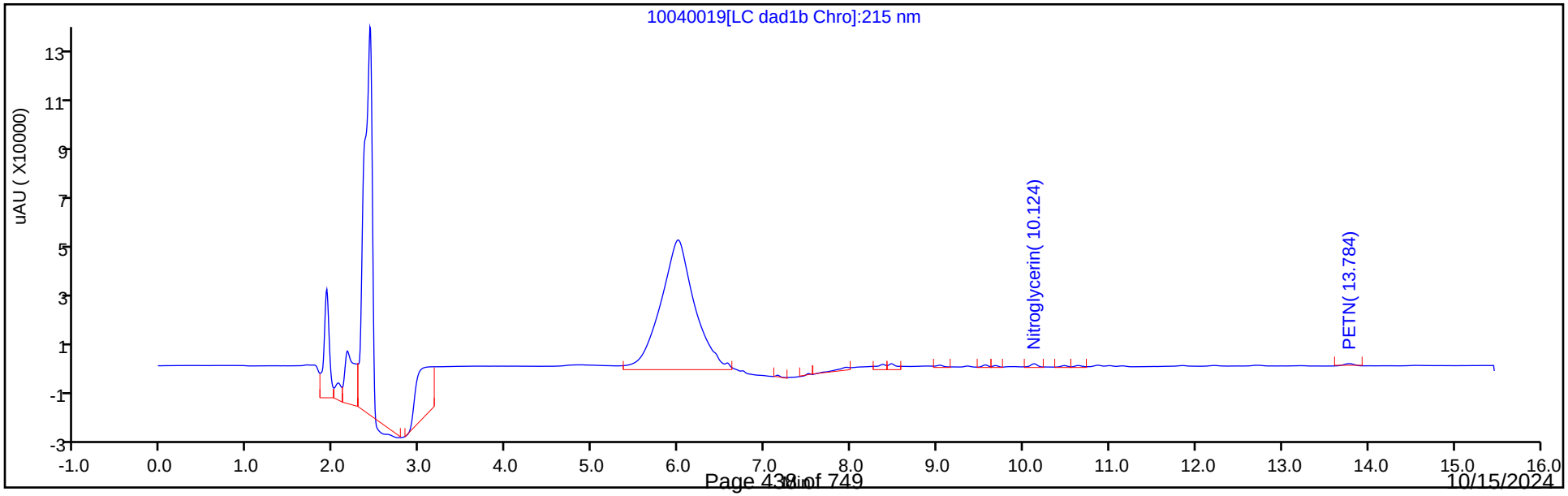
Data File: \\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040019.d

Injection Date:	04-Oct-2024 19:55:02	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	IC INT/DMT 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



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



10/15/2024
4:48:23 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

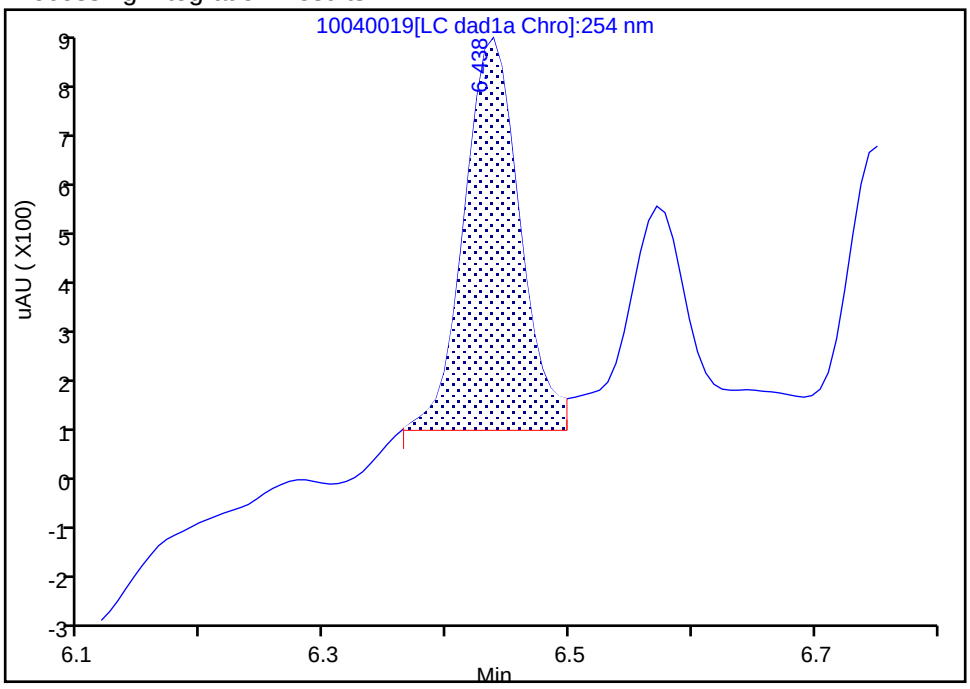
Data File: \\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040019.d
Injection Date: 04-Oct-2024 19:55:02 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 1
Client ID:
Operator ID: JZ ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 TNX, CAS: 13980-04-6

Signal: 1

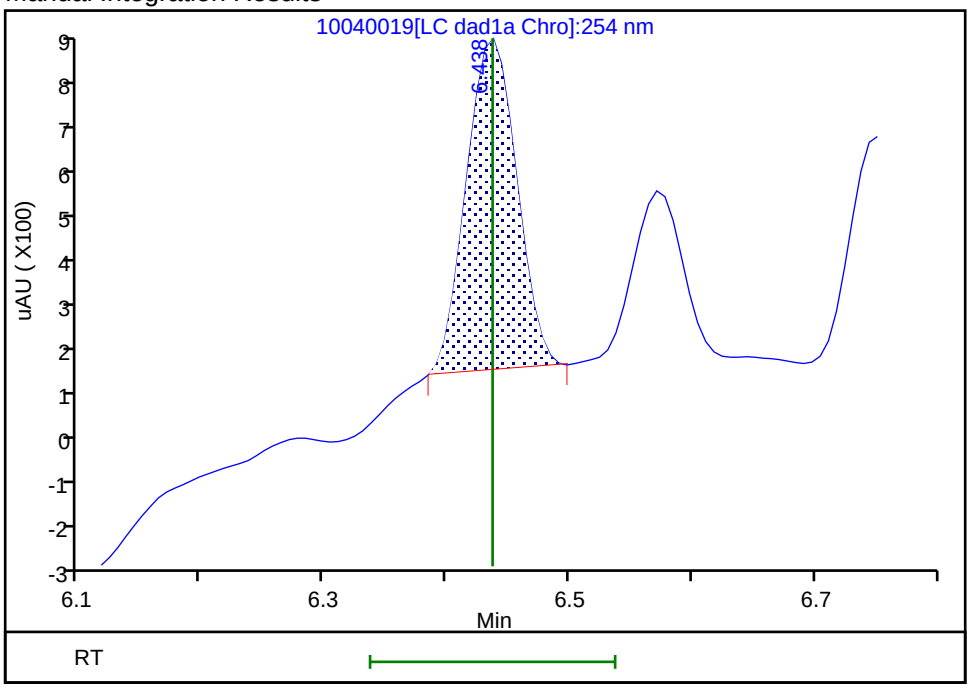
Processing Integration Results

RT: 6.44
Area: 2305
Amount: 0.011135
Amount Units: ug/mL



Manual Integration Results

RT: 6.44
Area: 1951
Amount: 0.009607
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 13:07:17 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

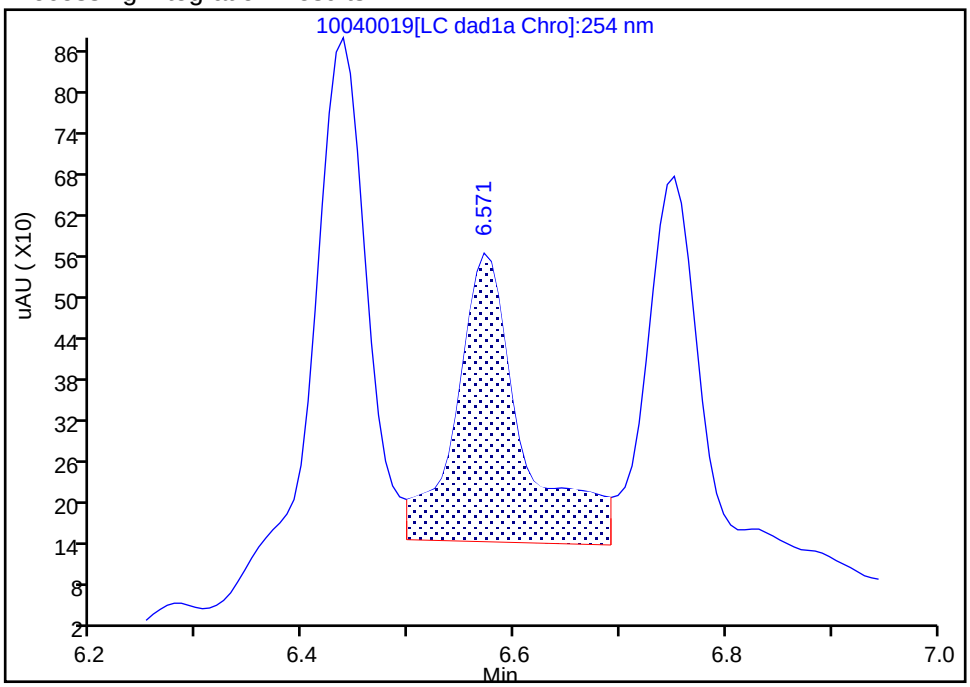
Data File: \\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040019.d
Injection Date: 04-Oct-2024 19:55:02 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 1
Client ID:
Operator ID: JZ ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

4 HMX, CAS: 2691-41-0

Signal: 1

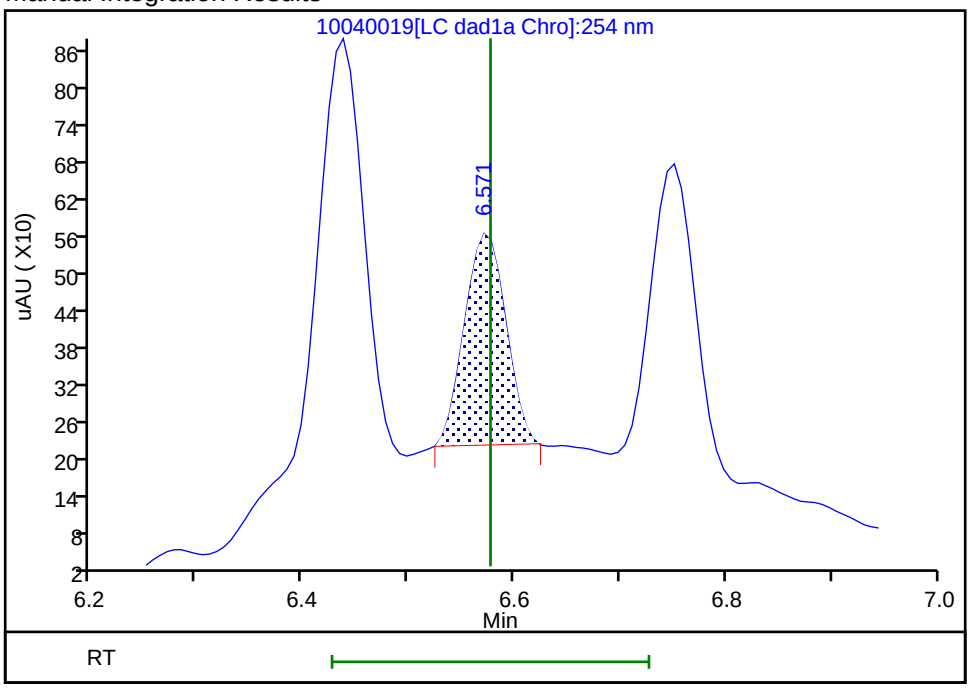
Processing Integration Results

RT: 6.57
Area: 1819
Amount: 0.013460
Amount Units: ug/mL



Manual Integration Results

RT: 6.57
Area: 930
Amount: 0.009622
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 13:07:10 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

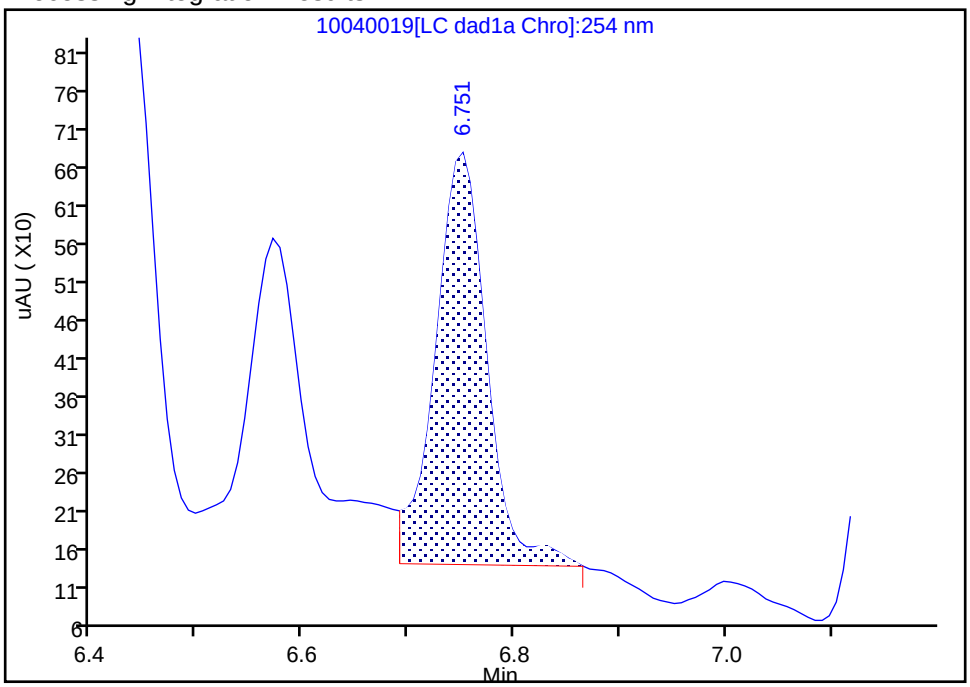
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040019.d				
Injection Date:	04-Oct-2024 19:55:02	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

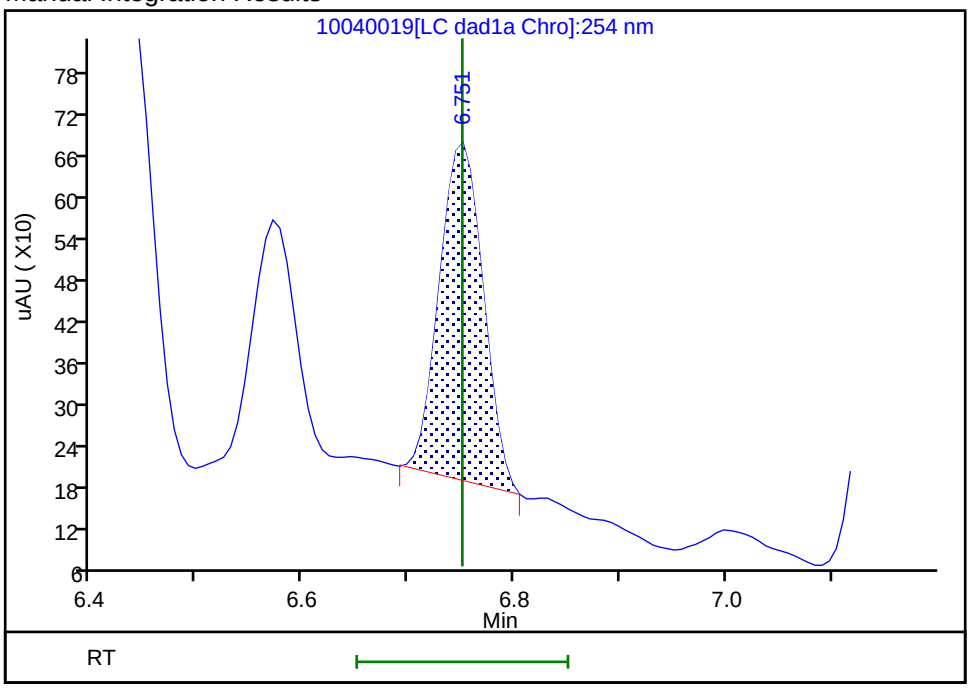
Processing Integration Results

RT: 6.75
Area: 1806
Amount: 0.012001
Amount Units: ug/mL



Manual Integration Results

RT: 6.75
Area: 1406
Amount: 0.009627
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 13:07:06 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

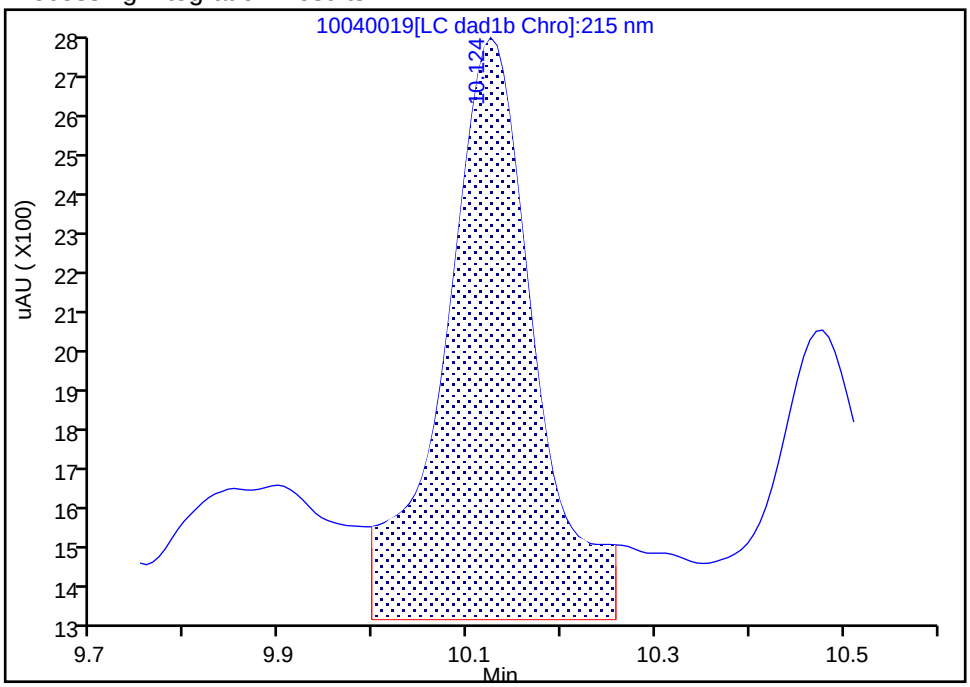
Data File: \\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040019.d
Injection Date: 04-Oct-2024 19:55:02 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 1
Client ID:
Operator ID: JZ ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1C, 215 nm

16 Nitroglycerin, CAS: 55-63-0

Signal: 1

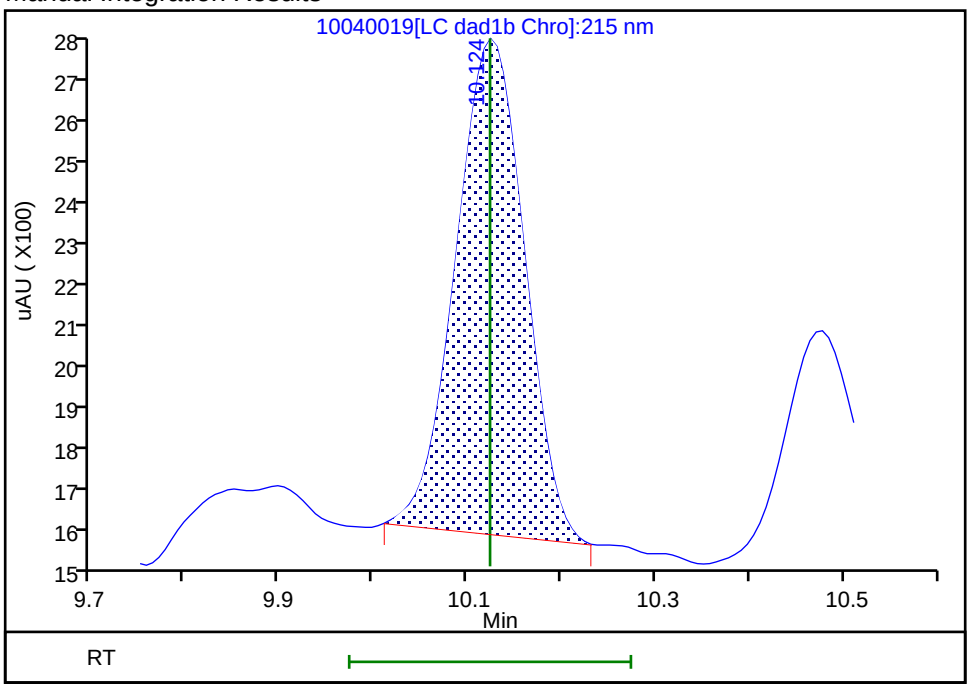
Processing Integration Results

RT: 10.12
Area: 9393
Amount: 0.139687
Amount Units: ug/mL



Manual Integration Results

RT: 10.12
Area: 6121
Amount: 0.101220
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 13:09:48 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

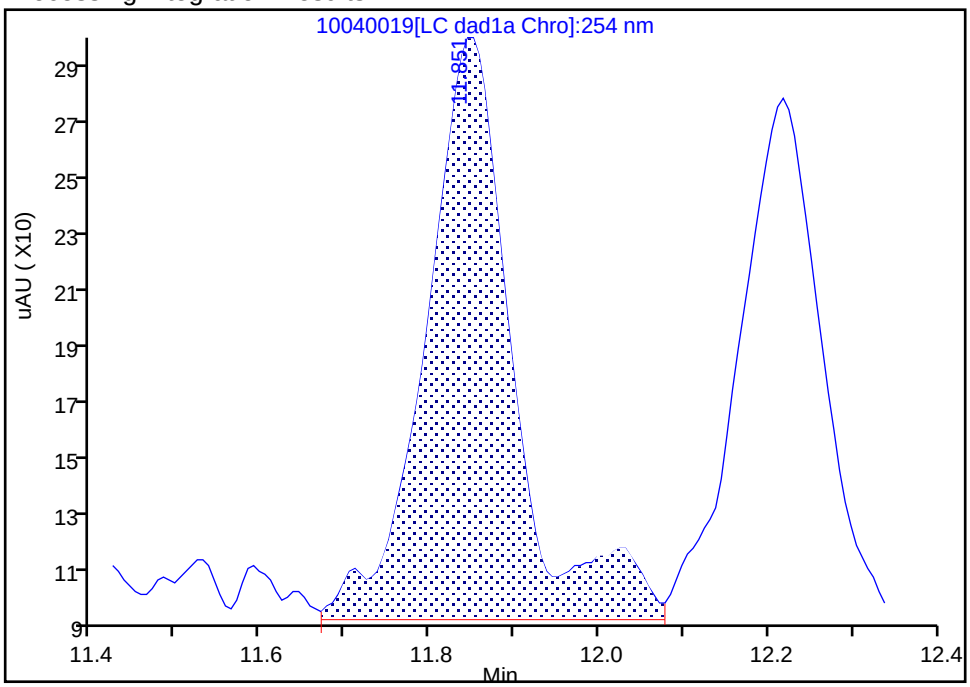
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040019.d				
Injection Date:	04-Oct-2024 19:55:02	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

22 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

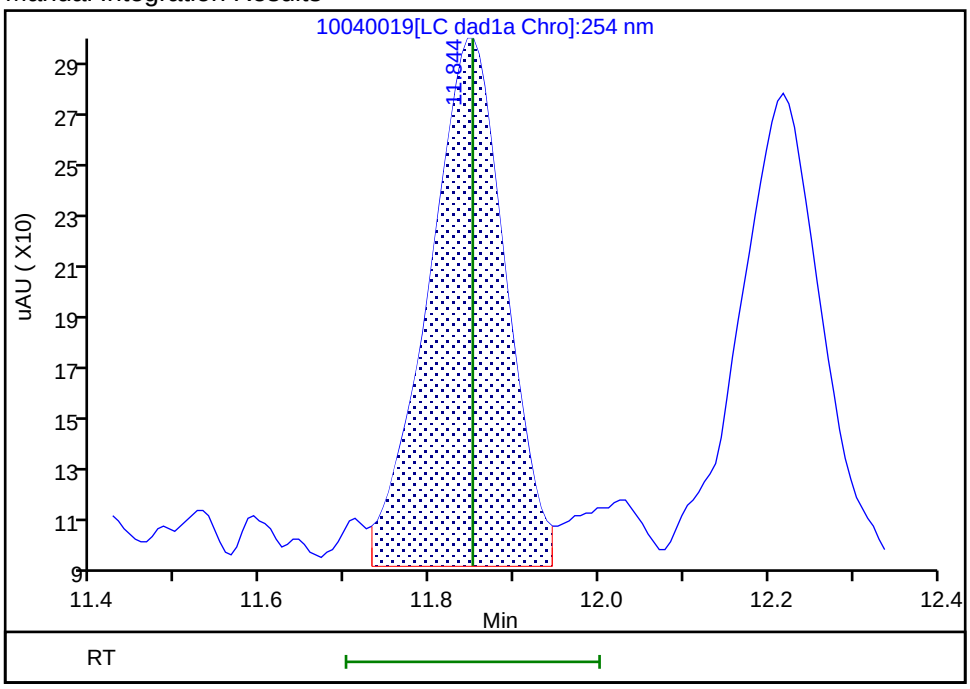
Processing Integration Results

RT: 11.85
Area: 1460
Amount: 0.011447
Amount Units: ug/mL



Manual Integration Results

RT: 11.84
Area: 1273
Amount: 0.010146
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 13:06:44 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

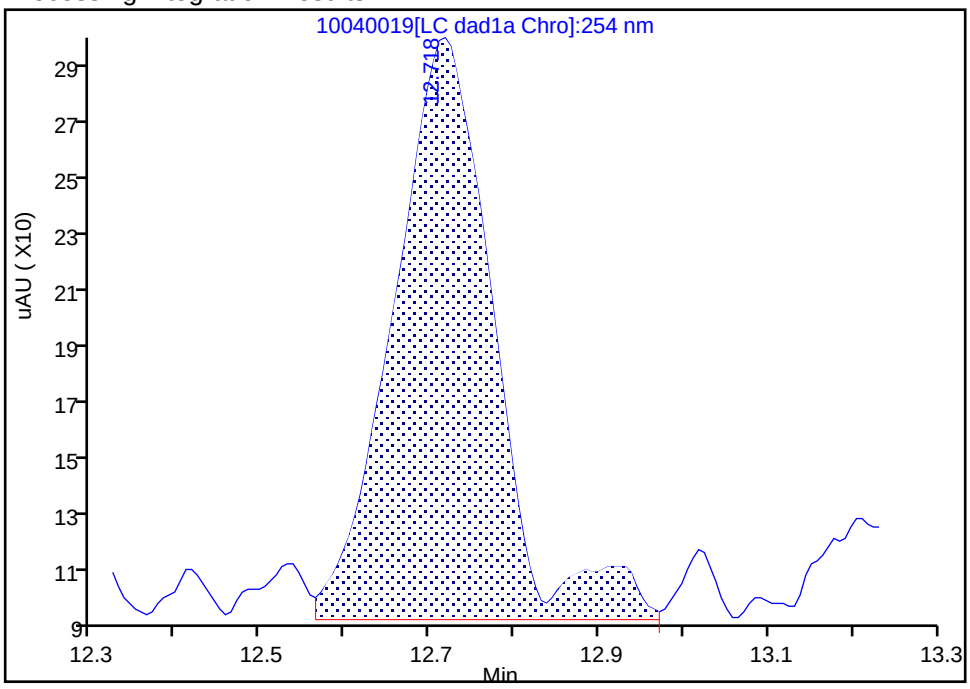
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040019.d				
Injection Date:	04-Oct-2024 19:55:02	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

24 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

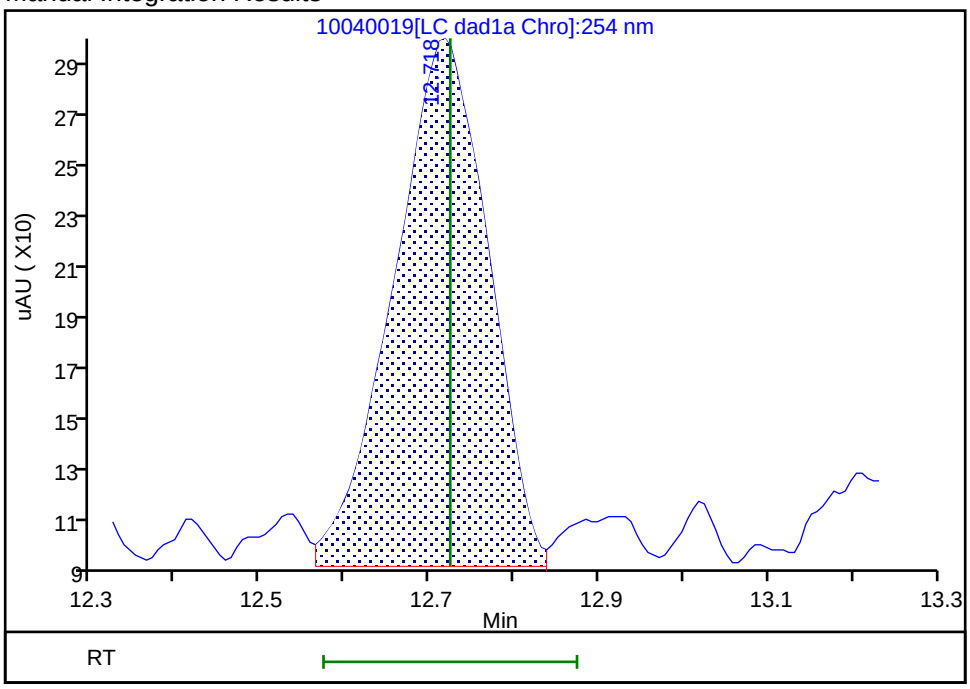
Processing Integration Results

RT: 12.72
Area: 1709
Amount: 0.012068
Amount Units: ug/mL



Manual Integration Results

RT: 12.72
Area: 1598
Amount: 0.009977
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 13:06:32 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

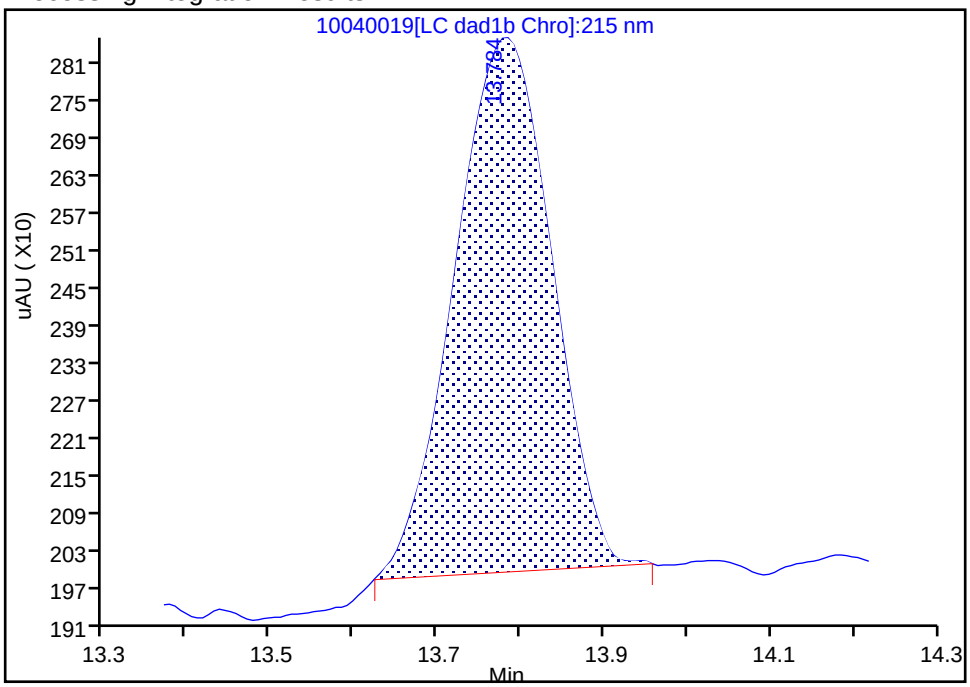
Data File: \\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040019.d
Injection Date: 04-Oct-2024 19:55:02 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 1
Client ID:
Operator ID: JZ ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1C, 215 nm

25 PETN, CAS: 78-11-5

Signal: 1

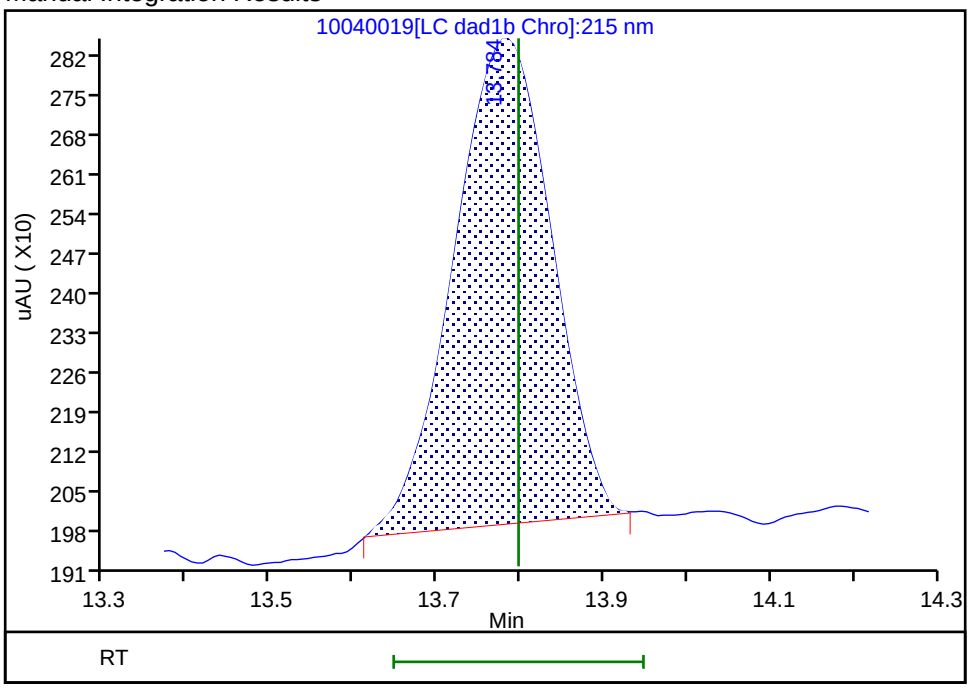
Processing Integration Results

RT: 13.78
Area: 6952
Amount: 0.096421
Amount Units: ug/mL



Manual Integration Results

RT: 13.78
Area: 7053
Amount: 0.097670
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 13:06:22 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Calibration / TNX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

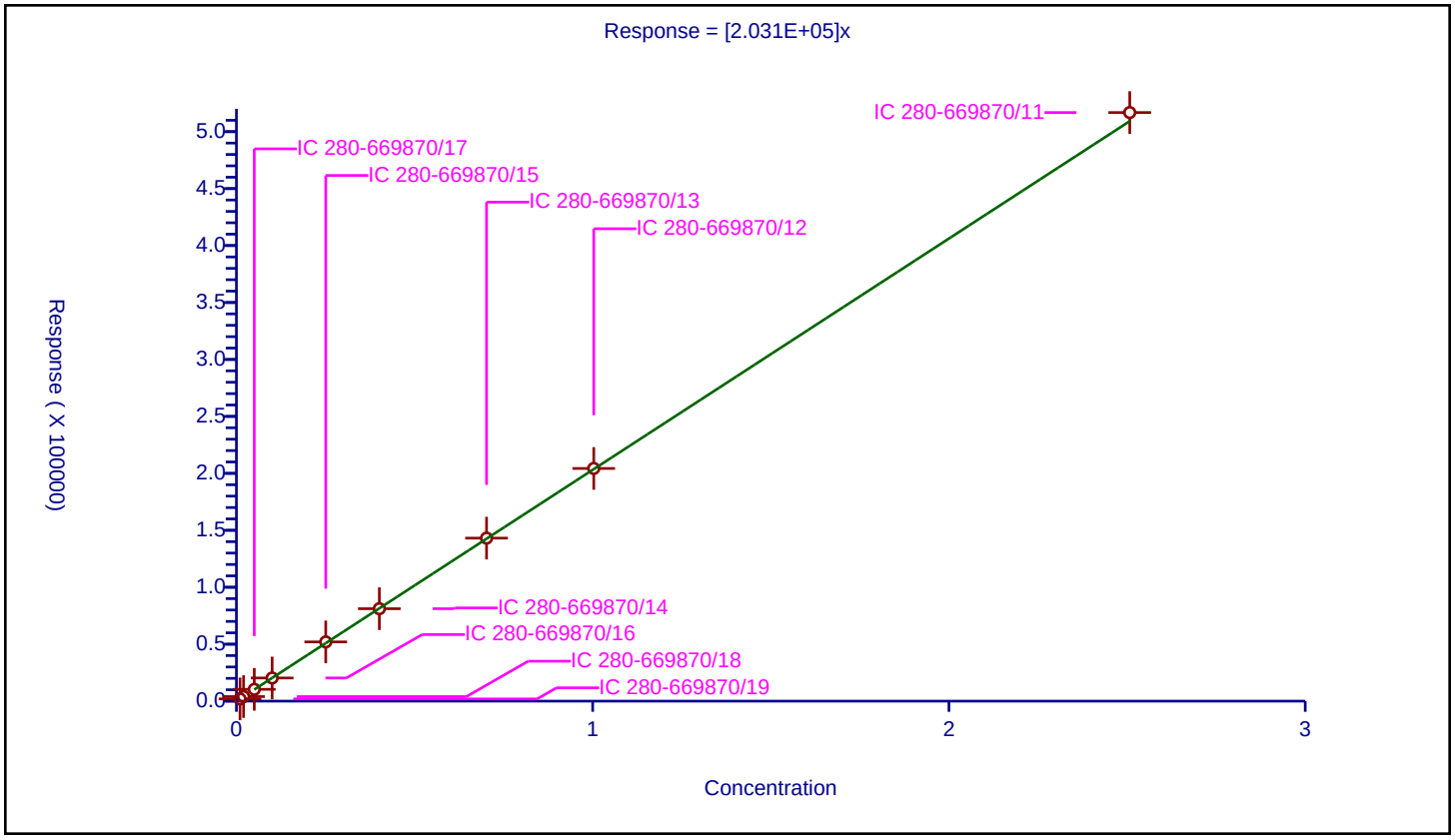
Curve Coefficients

Intercept:	0
Slope:	2.031E+05

Error Coefficients

Relative Standard Deviation:	1.9

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-669870/19	0.01003	1951.0			194516.450648	Y
2	IC 280-669870/18	0.02006	4020.0			200398.803589	Y
3	IC 280-669870/17	0.05015	10367.0			206719.840479	Y
4	IC 280-669870/16	0.1003	20335.0			202741.774676	Y
5	IC 280-669870/15	0.25075	51995.0			207357.926221	Y
6	IC 280-669870/14	0.4012	81160.0			202293.120638	Y
7	IC 280-669870/13	0.7021	143139.0			203872.667711	Y
8	IC 280-669870/12	1.003	204307.0			203695.912263	Y
9	IC 280-669870/11	2.5075	516807.0			206104.48654	Y



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Calibration / HMX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

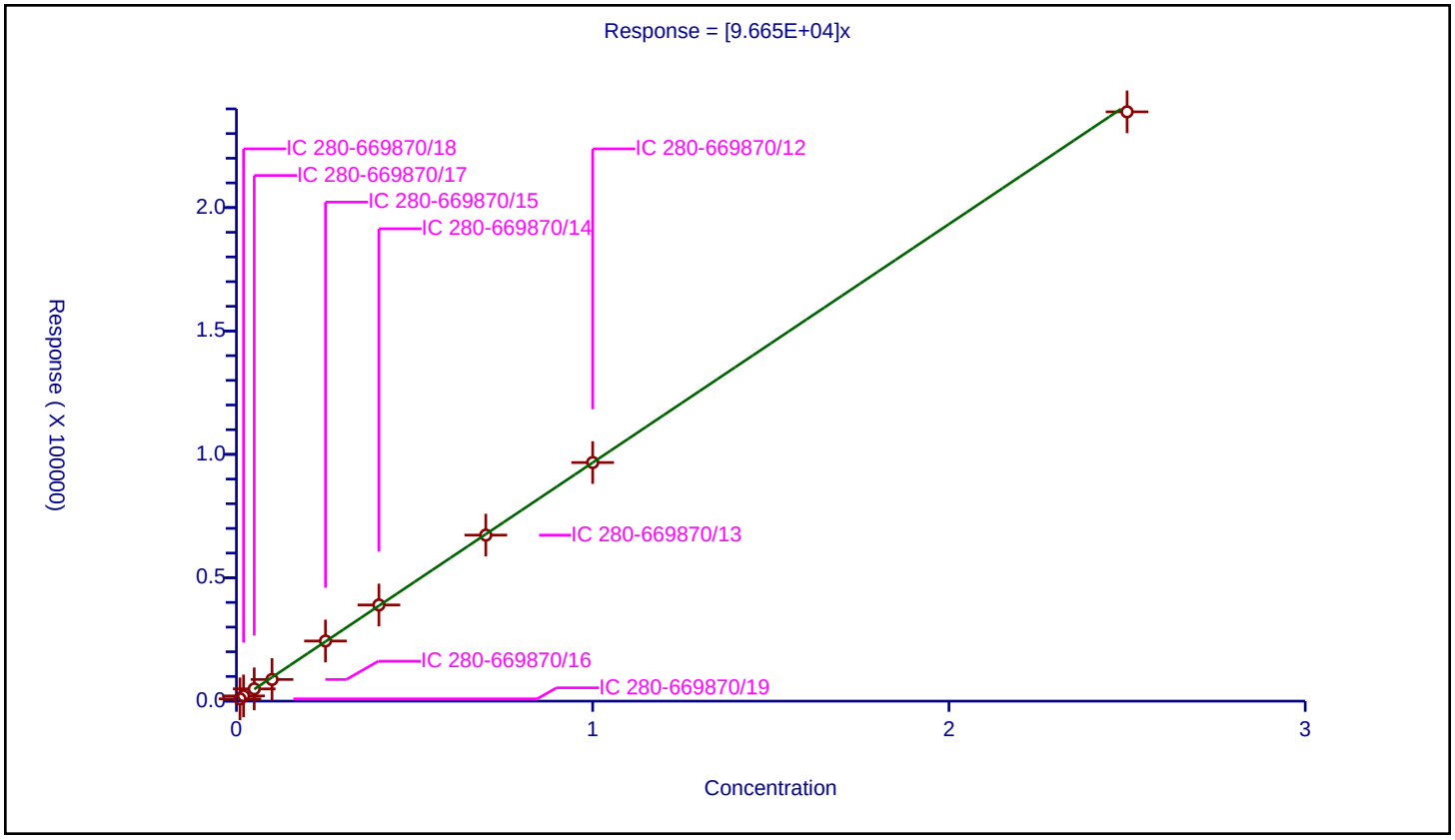
Curve Coefficients

Intercept:	0
Slope:	9.665E+04

Error Coefficients

Relative Standard Deviation:	5.1

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-669870/19	0.01	930.0			93000.0	Y
2	IC 280-669870/18	0.02	2125.0			106250.0	Y
3	IC 280-669870/17	0.05	4979.0			99580.0	Y
4	IC 280-669870/16	0.1	8775.0			87750.0	Y
5	IC 280-669870/15	0.25	24377.0			97508.0	Y
6	IC 280-669870/14	0.4	38978.0			97445.0	Y
7	IC 280-669870/13	0.7	67292.0			96131.428571	Y
8	IC 280-669870/12	1.0	96690.0			96690.0	Y
9	IC 280-669870/11	2.5	238805.0			95522.0	Y



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Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

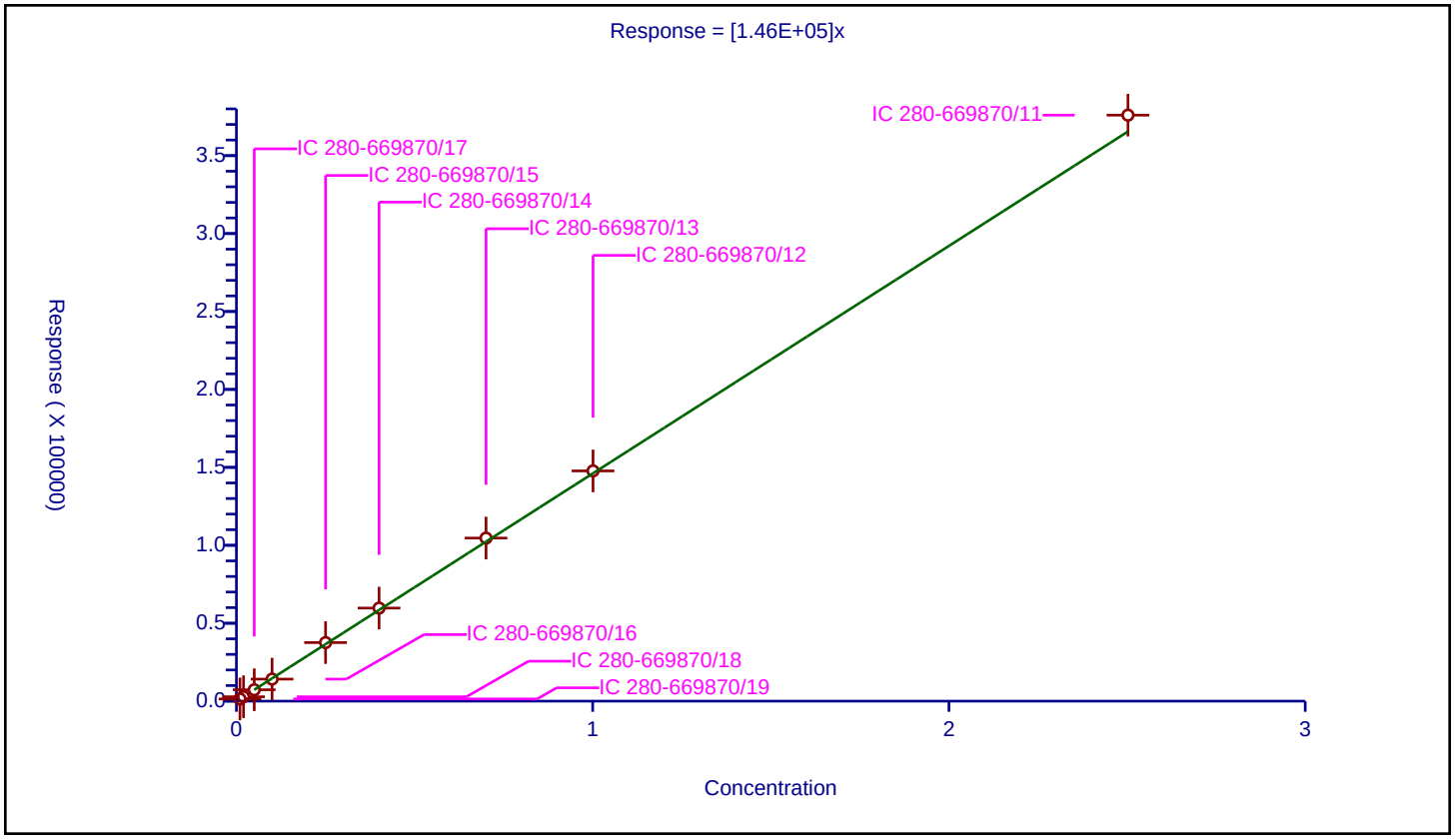
Curve Coefficients

Intercept:	0
Slope:	1.46E+05

Error Coefficients

Relative Standard Deviation:	2.9

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-669870/19	0.01001	1406.0			140459.54046	Y
2	IC 280-669870/18	0.02002	2804.0			140059.94006	Y
3	IC 280-669870/17	0.05005	7313.0			146113.886114	Y
4	IC 280-669870/16	0.1001	14149.0			141348.651349	Y
5	IC 280-669870/15	0.25025	37571.0			150133.866134	Y
6	IC 280-669870/14	0.4004	59711.0			149128.371628	Y
7	IC 280-669870/13	0.7007	104619.0			149306.407878	Y
8	IC 280-669870/12	1.001	147729.0			147581.418581	Y
9	IC 280-669870/11	2.5025	375984.0			150243.356643	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

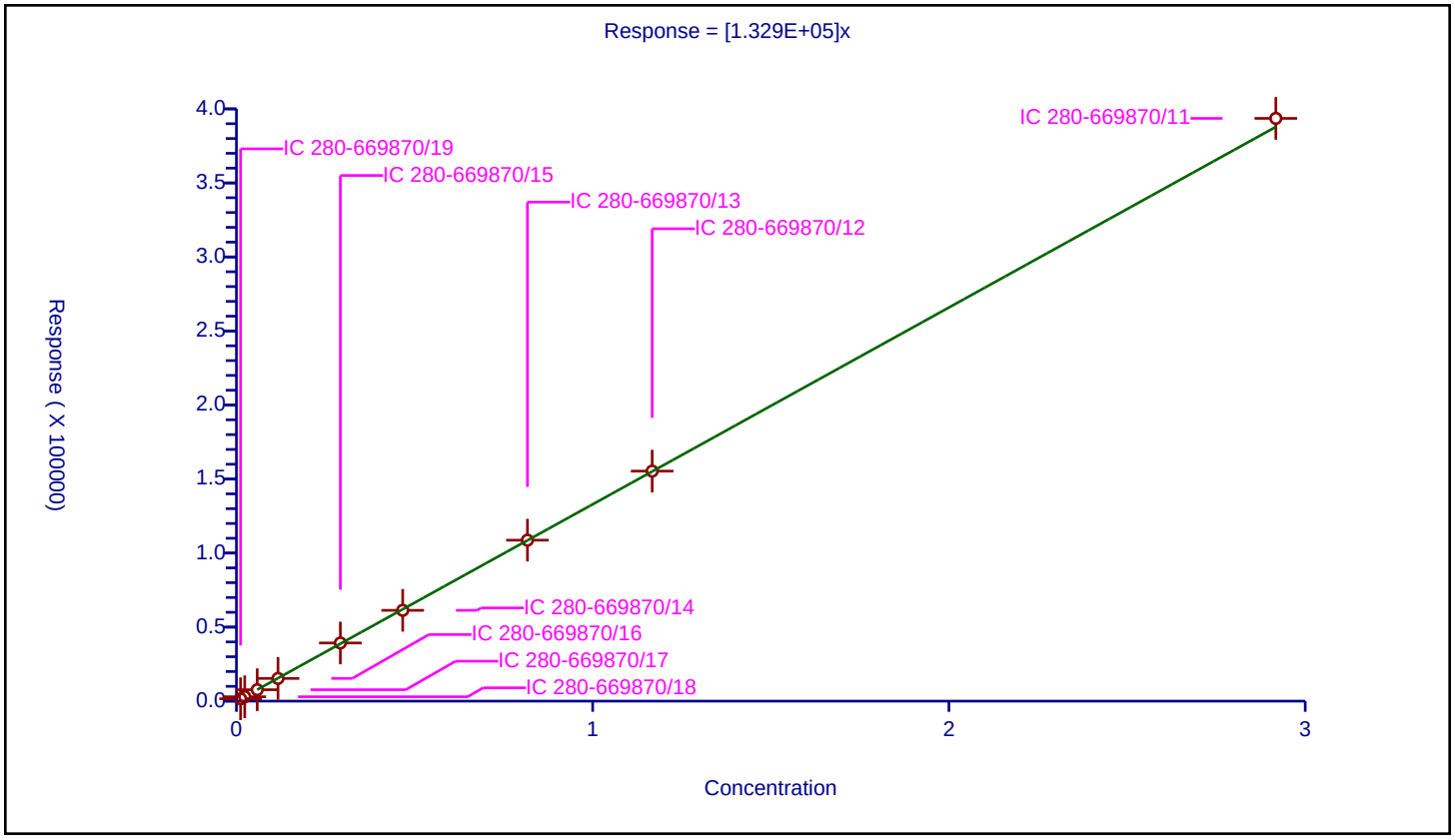
Curve Coefficients

Intercept:	0
Slope:	1.329E+05

Error Coefficients

Relative Standard Deviation:	2.5

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-669870/19	0.01167	1624.0			139160.239931	Y
2	IC 280-669870/18	0.02334	2958.0			126735.218509	Y
3	IC 280-669870/17	0.05835	7700.0			131962.296487	Y
4	IC 280-669870/16	0.1167	15337.0			131422.450728	Y
5	IC 280-669870/15	0.29175	39273.0			134611.825193	Y
6	IC 280-669870/14	0.4668	61334.0			131392.459297	Y
7	IC 280-669870/13	0.8169	108719.0			133087.281185	Y
8	IC 280-669870/12	1.167	155360.0			133127.677806	Y
9	IC 280-669870/11	2.9175	393599.0			134909.682948	Y



Calibration / RDX

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

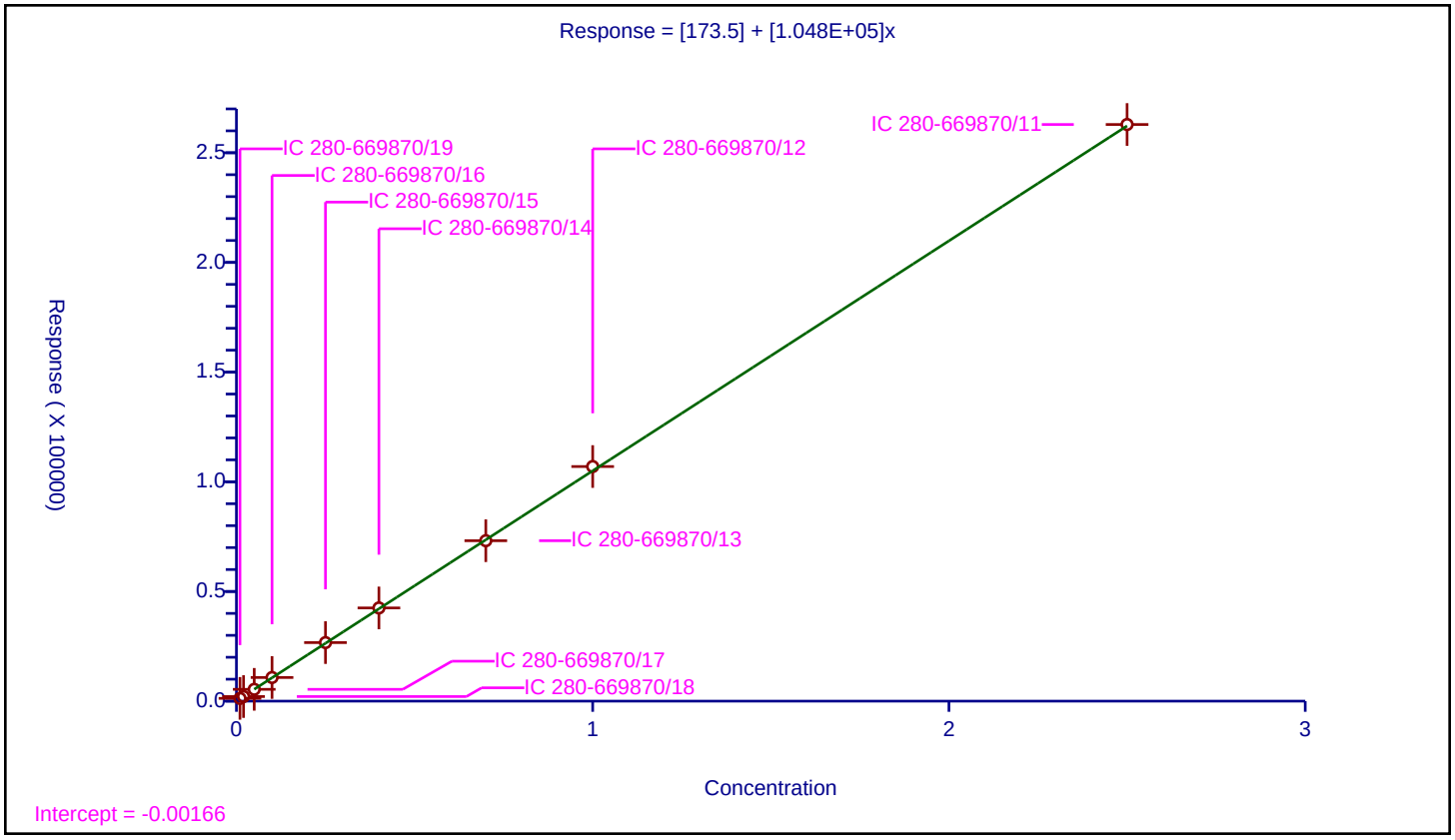
Curve Coefficients

Intercept:	173.5
Slope:	1.048E+05

Error Coefficients

Relative Standard Deviation:	3.6

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-669870/19	0.01	1264.0			126400.0	Y
2	IC 280-669870/18	0.02	2098.0			104900.0	Y
3	IC 280-669870/17	0.05	5386.0			107720.0	Y
4	IC 280-669870/16	0.1	10773.0			107730.0	Y
5	IC 280-669870/15	0.25	26694.0			106776.0	Y
6	IC 280-669870/14	0.4	42489.0			106222.5	Y
7	IC 280-669870/13	0.7	73136.0			104480.0	Y
8	IC 280-669870/12	1.0	106956.0			106956.0	Y
9	IC 280-669870/11	2.5	262885.0			105154.0	Y



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Calibration / 2,4,6-Trinitrophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

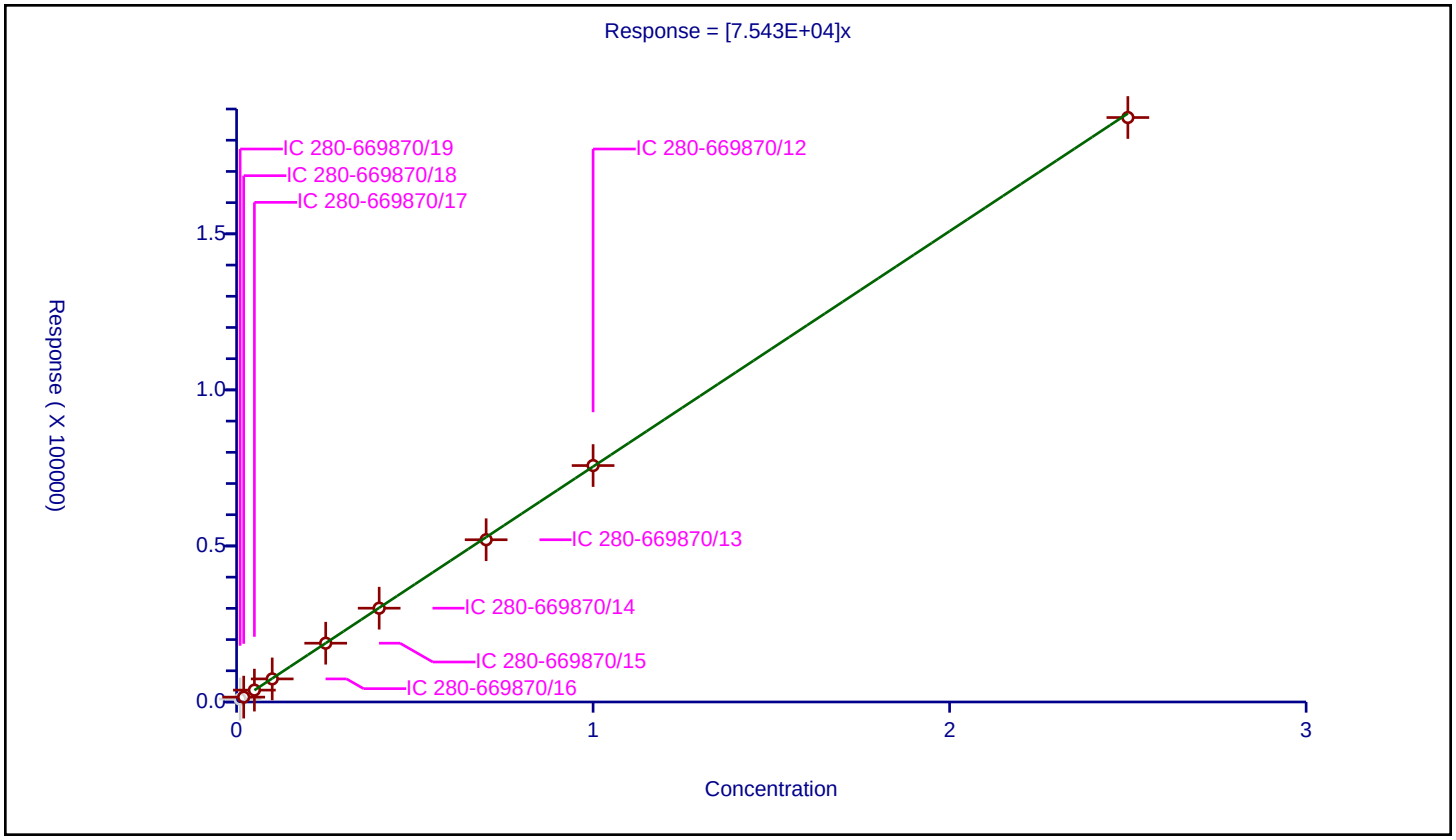
Curve Coefficients

Intercept:	0
Slope:	7.543E+04

Error Coefficients

Relative Standard Deviation:	1.7

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-669870/19	0.01	939.0			93900.0	N
2	IC 280-669870/18	0.02	1559.0			77950.0	Y
3	IC 280-669870/17	0.05	3807.0			76140.0	Y
4	IC 280-669870/16	0.1	7391.0			73910.0	Y
5	IC 280-669870/15	0.25	18836.0			75344.0	Y
6	IC 280-669870/14	0.4	30056.0			75140.0	Y
7	IC 280-669870/13	0.7	51986.0			74265.714286	Y
8	IC 280-669870/12	1.0	75756.0			75756.0	Y
9	IC 280-669870/11	2.5	187271.0			74908.4	Y



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Calibration / 1,2-Dinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

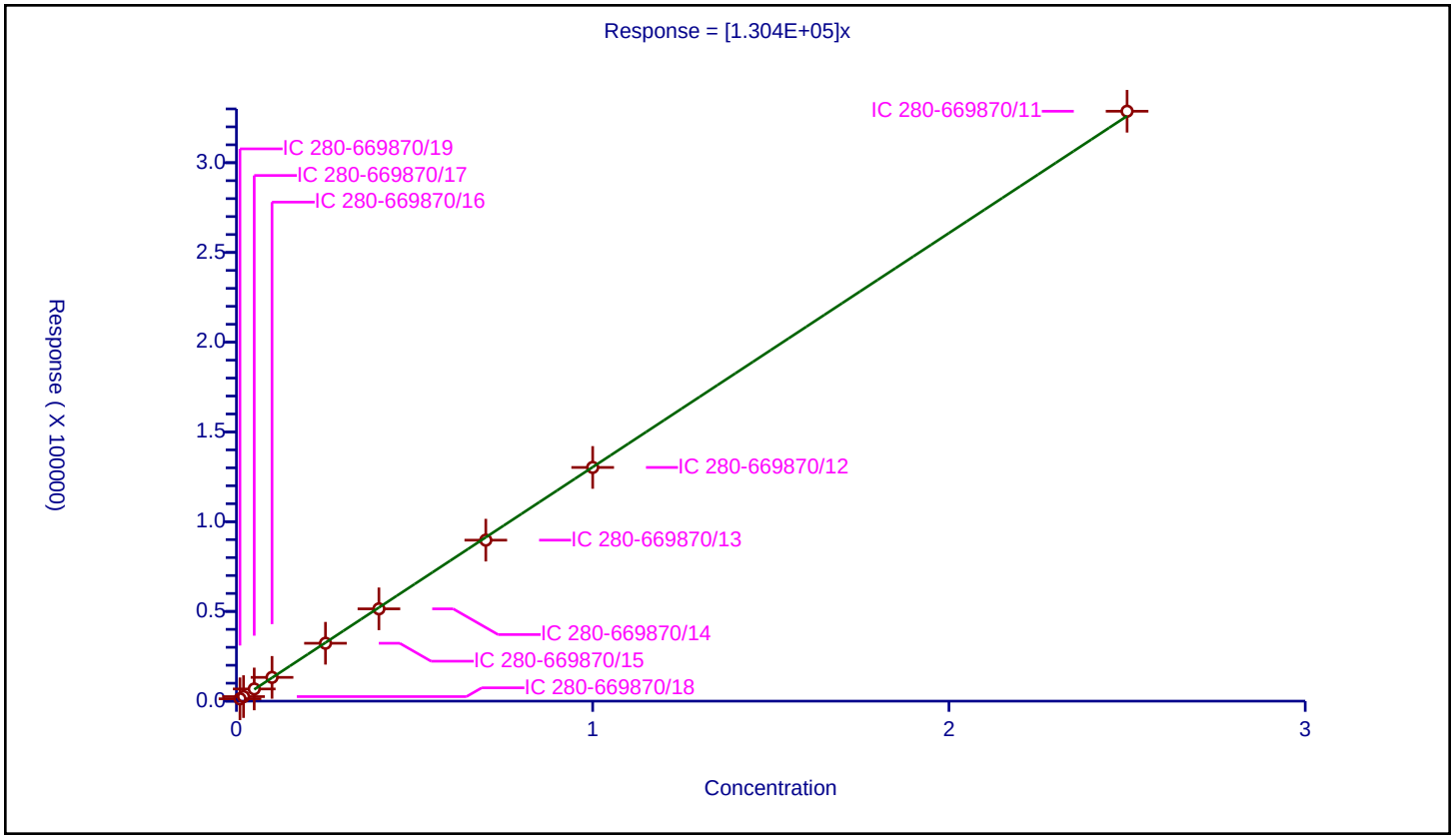
Curve Coefficients

Intercept:	0
Slope:	1.304E+05

Error Coefficients

Relative Standard Deviation:	2.1

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-669870/19	0.01	1315.0			131500.0	Y
2	IC 280-669870/18	0.02	2530.0			126500.0	Y
3	IC 280-669870/17	0.05	6795.0			135900.0	Y
4	IC 280-669870/16	0.1	13238.0			132380.0	Y
5	IC 280-669870/15	0.25	32250.0			129000.0	Y
6	IC 280-669870/14	0.4	51425.0			128562.5	Y
7	IC 280-669870/13	0.7	89703.0			128147.142857	Y
8	IC 280-669870/12	1.0	130220.0			130220.0	Y
9	IC 280-669870/11	2.5	328696.0			131478.4	Y



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Calibration / 1,3,5-Trinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

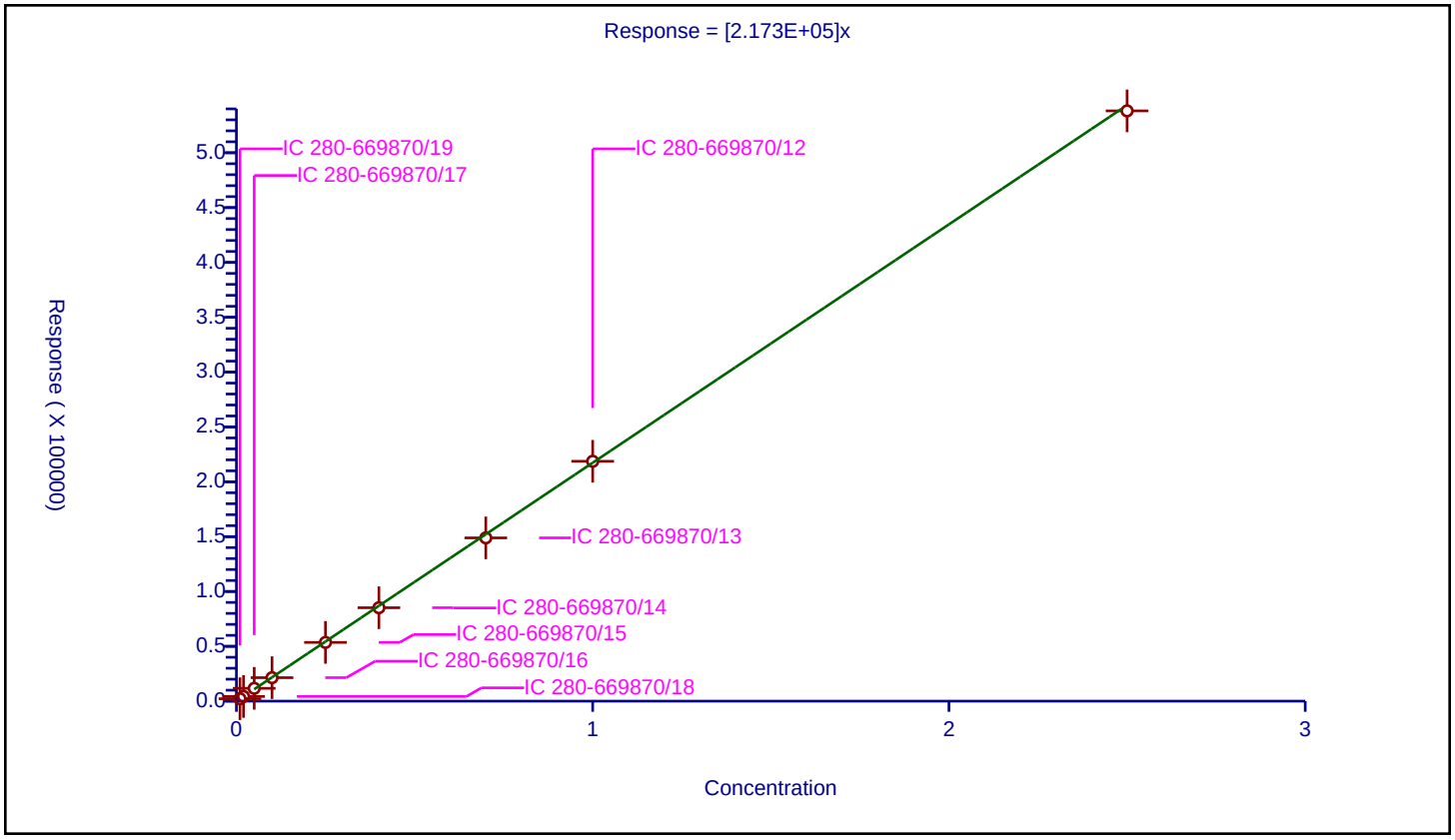
Curve Coefficients

Intercept:	0
Slope:	2.173E+05

Error Coefficients

Relative Standard Deviation:	3.1

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-669870/19	0.01	2203.0			220300.0	Y
2	IC 280-669870/18	0.02	4281.0			214050.0	Y
3	IC 280-669870/17	0.05	11696.0			233920.0	Y
4	IC 280-669870/16	0.1	21407.0			214070.0	Y
5	IC 280-669870/15	0.25	53554.0			214216.0	Y
6	IC 280-669870/14	0.4	85185.0			212962.5	Y
7	IC 280-669870/13	0.7	148857.0			212652.857143	Y
8	IC 280-669870/12	1.0	218705.0			218705.0	Y
9	IC 280-669870/11	2.5	538179.0			215271.6	Y



Calibration / 1,3-Dinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

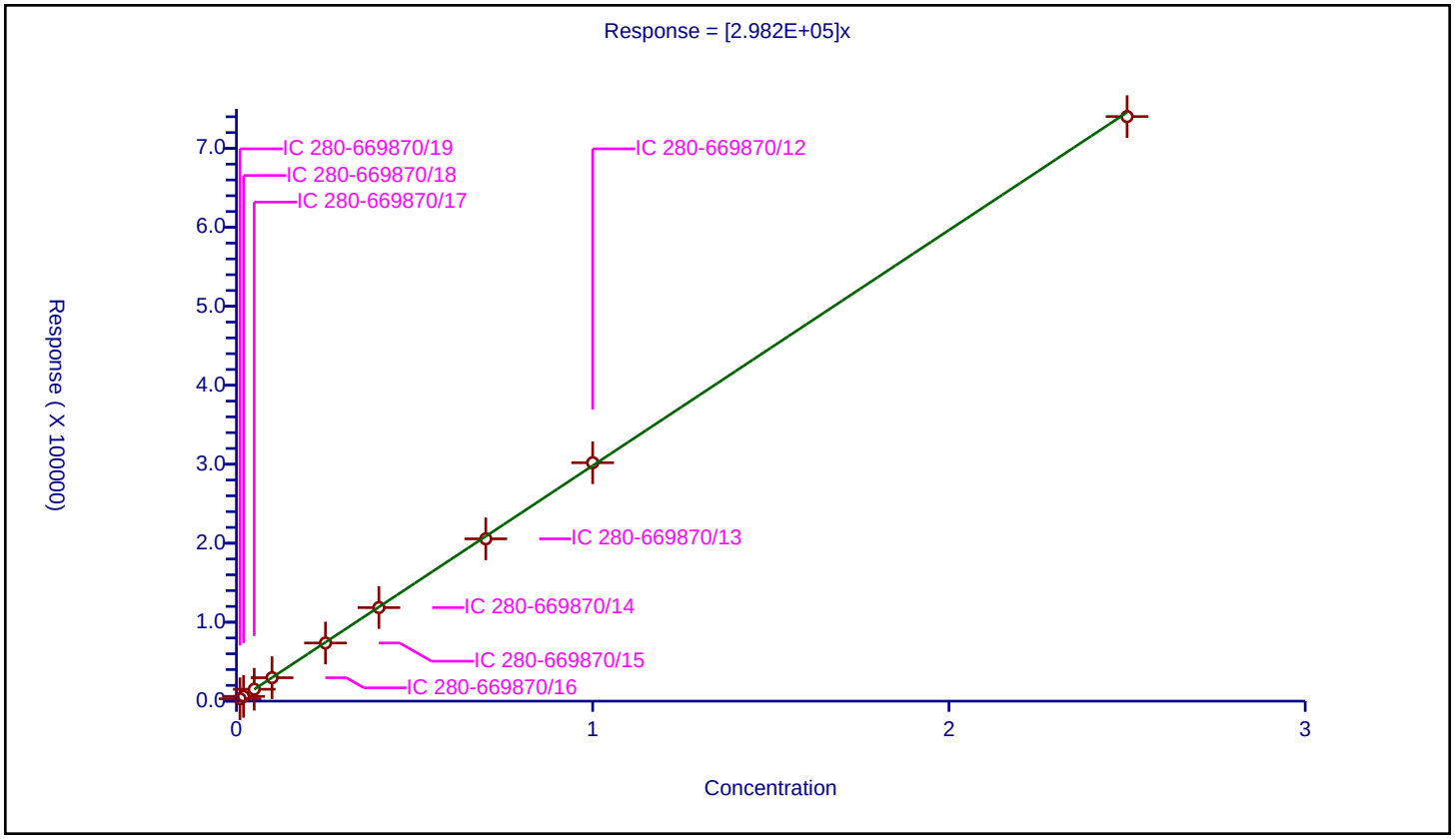
Curve Coefficients

Intercept:	0
Slope:	2.982E+05

Error Coefficients

Relative Standard Deviation:	1.2

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-669870/19	0.01	3012.0			301200.0	Y
2	IC 280-669870/18	0.02	6054.0			302700.0	Y
3	IC 280-669870/17	0.05	15058.0			301160.0	Y
4	IC 280-669870/16	0.1	29659.0			296590.0	Y
5	IC 280-669870/15	0.25	73648.0			294592.0	Y
6	IC 280-669870/14	0.4	118487.0			296217.5	Y
7	IC 280-669870/13	0.7	205516.0			293594.285714	Y
8	IC 280-669870/12	1.0	301939.0			301939.0	Y
9	IC 280-669870/11	2.5	740236.0			296094.4	Y



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Calibration / Nitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

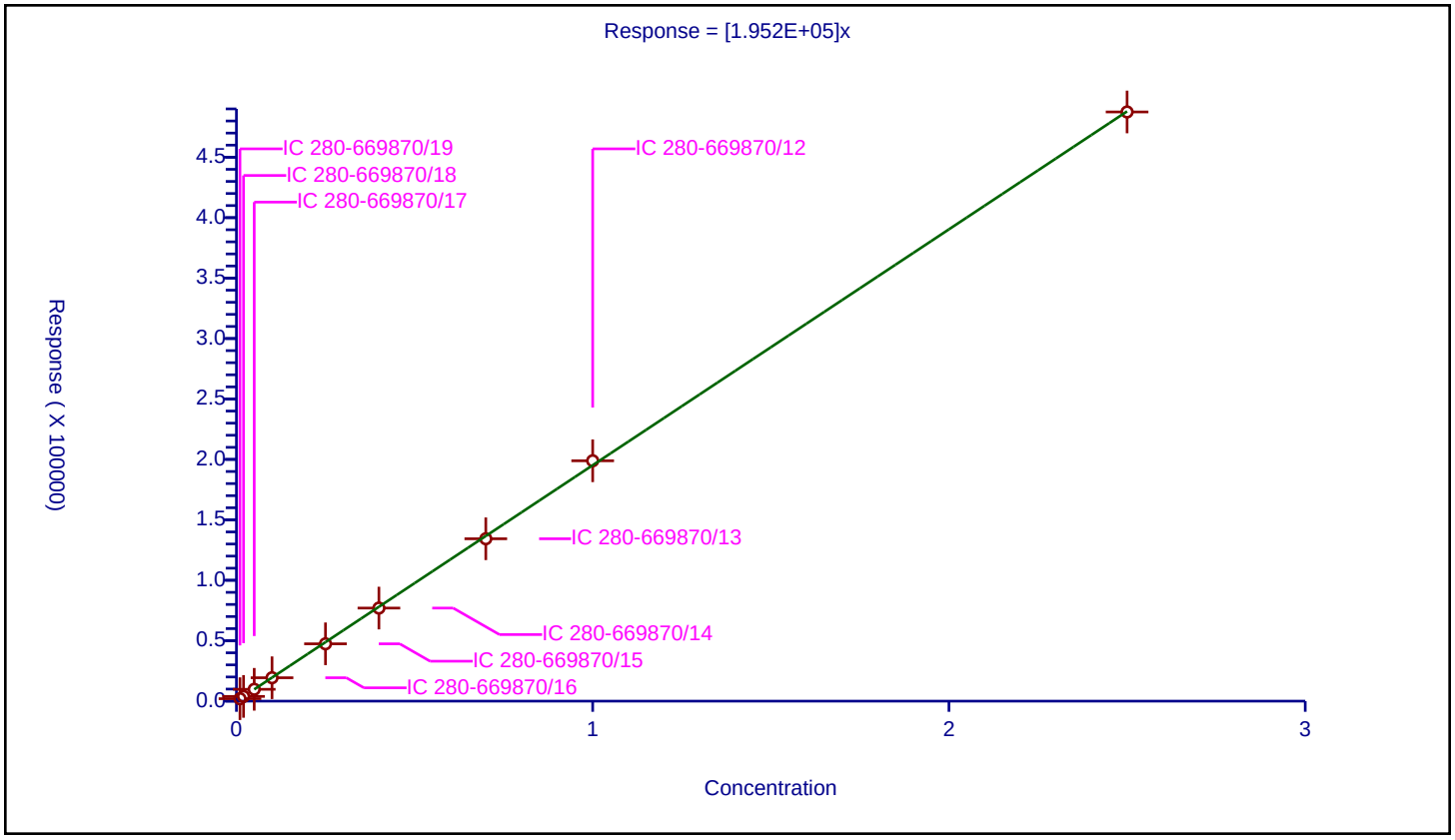
Curve Coefficients

Intercept:	0
Slope:	1.952E+05

Error Coefficients

Relative Standard Deviation:	2.1

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-669870/19	0.01	2038.0			203800.0	Y
2	IC 280-669870/18	0.02	3904.0			195200.0	Y
3	IC 280-669870/17	0.05	9801.0			196020.0	Y
4	IC 280-669870/16	0.1	19360.0			193600.0	Y
5	IC 280-669870/15	0.25	47423.0			189692.0	Y
6	IC 280-669870/14	0.4	77013.0			192532.5	Y
7	IC 280-669870/13	0.7	134331.0			191901.428571	Y
8	IC 280-669870/12	1.0	198867.0			198867.0	Y
9	IC 280-669870/11	2.5	487471.0			194988.4	Y



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Calibration / 3,5-Dinitroaniline

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

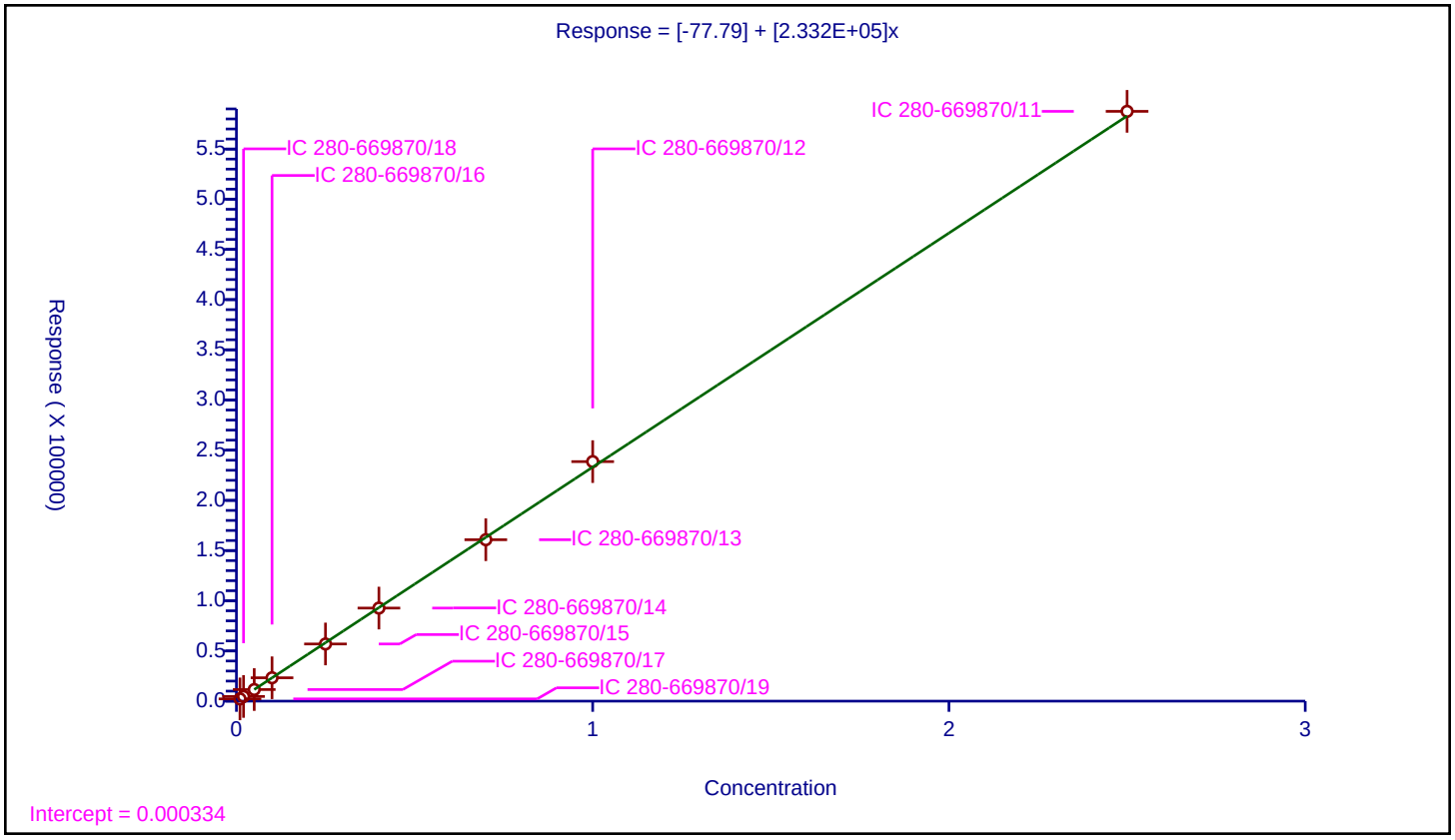
Curve Coefficients

Intercept:	-77.79
Slope:	2.332E+05

Error Coefficients

Relative Standard Deviation:	1.6

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-669870/19	0.01	2237.0			223700.0	Y
2	IC 280-669870/18	0.02	4665.0			233250.0	Y
3	IC 280-669870/17	0.05	11561.0			231220.0	Y
4	IC 280-669870/16	0.1	23292.0			232920.0	Y
5	IC 280-669870/15	0.25	56945.0			227780.0	Y
6	IC 280-669870/14	0.4	92721.0			231802.5	Y
7	IC 280-669870/13	0.7	160806.0			229722.857143	Y
8	IC 280-669870/12	1.0	238621.0			238621.0	Y
9	IC 280-669870/11	2.5	587561.0			235024.4	Y



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Calibration / Tetryl

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

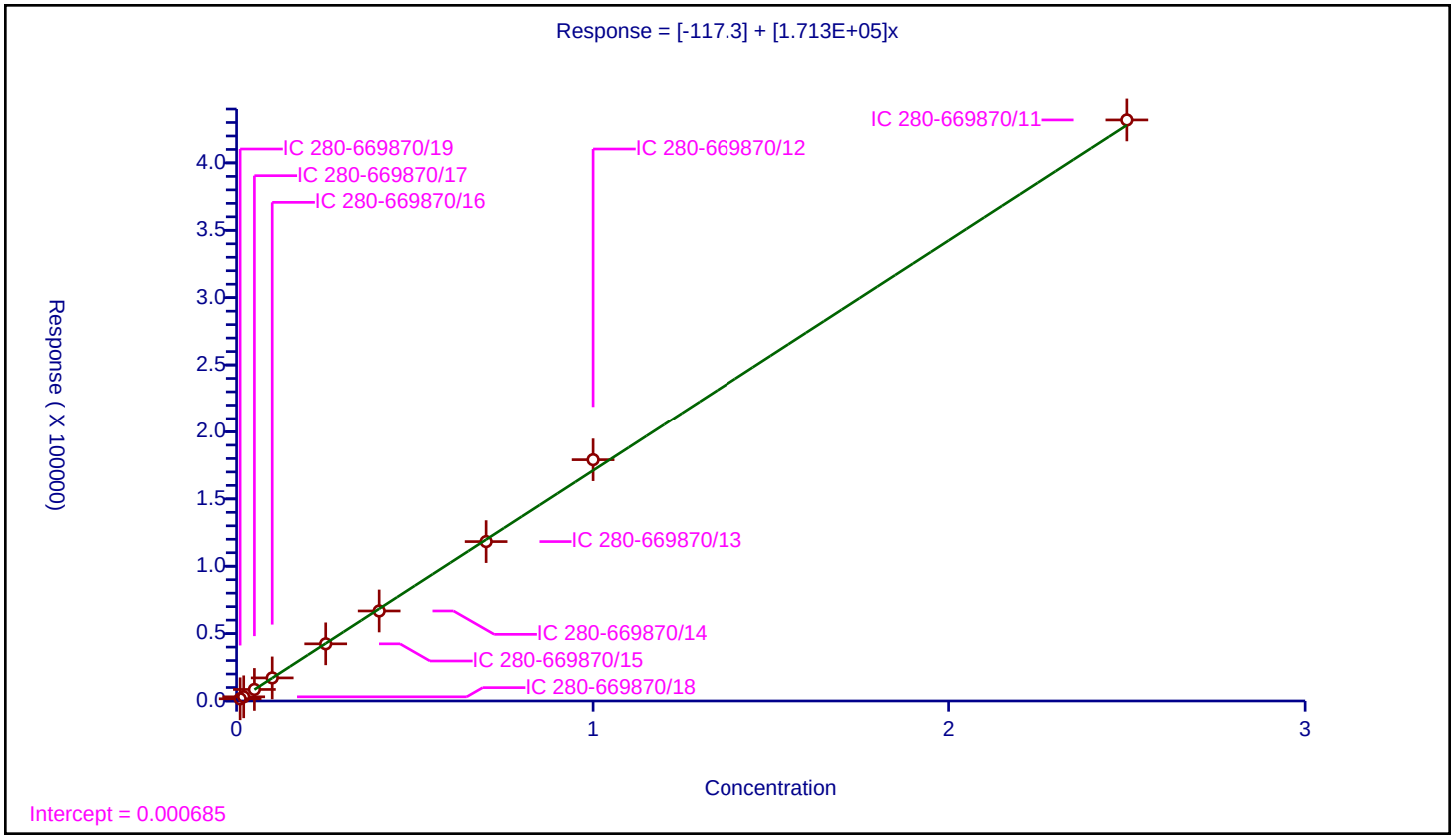
Curve Coefficients

Intercept:	-117.3
Slope:	1.713E+05

Error Coefficients

Relative Standard Deviation:	3.3

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-669870/19	0.01	1642.0			164200.0	Y
2	IC 280-669870/18	0.02	3103.0			155150.0	Y
3	IC 280-669870/17	0.05	8562.0			171240.0	Y
4	IC 280-669870/16	0.1	17130.0			171300.0	Y
5	IC 280-669870/15	0.25	42416.0			169664.0	Y
6	IC 280-669870/14	0.4	66783.0			166957.5	Y
7	IC 280-669870/13	0.7	118273.0			168961.428571	Y
8	IC 280-669870/12	1.0	179110.0			179110.0	Y
9	IC 280-669870/11	2.5	431903.0			172761.2	Y



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Calibration / Nitroglycerin

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

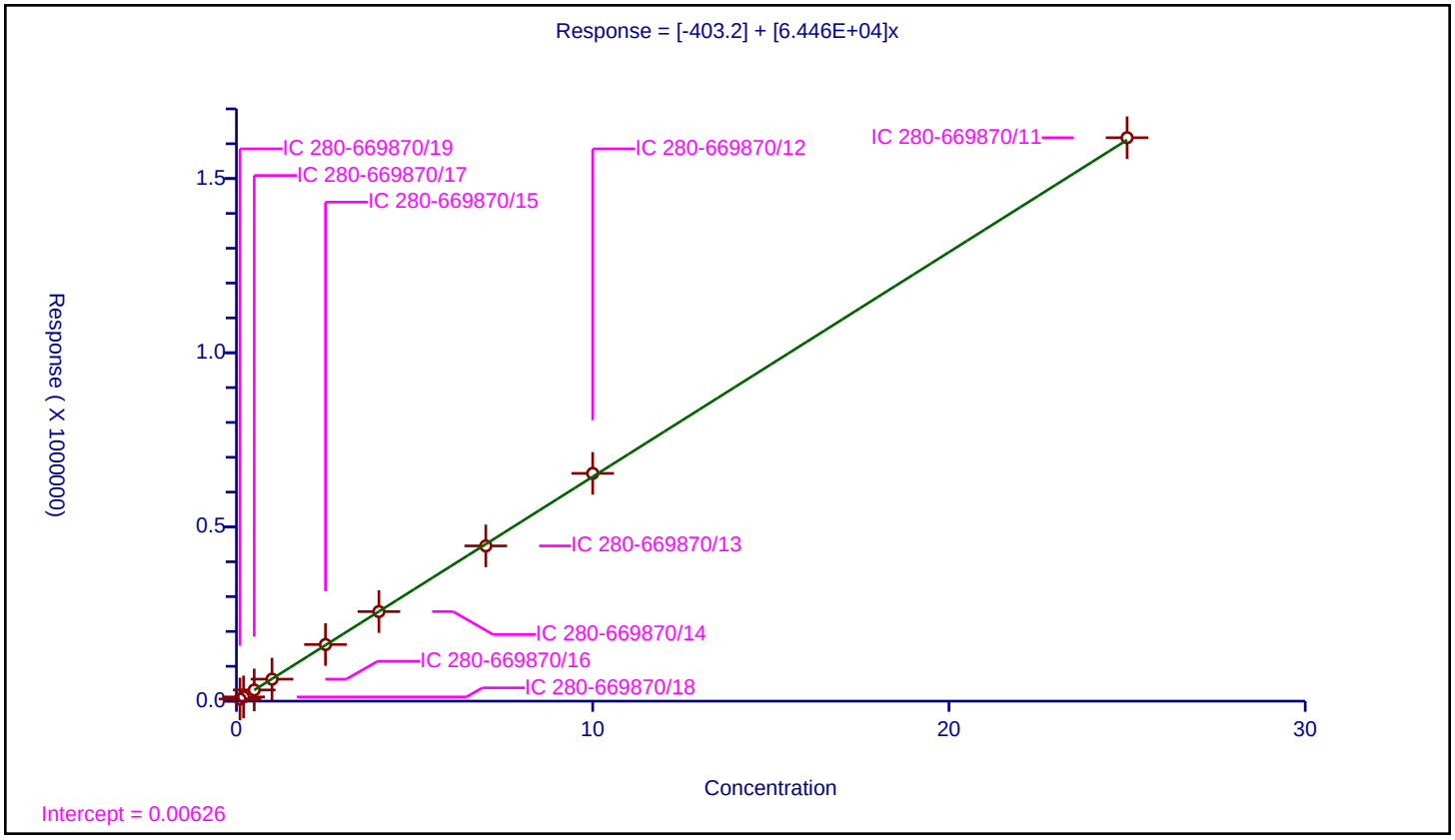
Curve Coefficients

Intercept:	-403.2
Slope:	6.446E+04

Error Coefficients

Relative Standard Deviation:	1.5

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-669870/19	0.1	6121.0			61210.0	Y
2	IC 280-669870/18	0.2	12143.0			60715.0	Y
3	IC 280-669870/17	0.5	32159.0			64318.0	Y
4	IC 280-669870/16	1.0	63200.0			63200.0	Y
5	IC 280-669870/15	2.5	162585.0			65034.0	Y
6	IC 280-669870/14	4.0	257082.0			64270.5	Y
7	IC 280-669870/13	7.0	445595.0			63656.428571	Y
8	IC 280-669870/12	10.0	653746.0			65374.6	Y
9	IC 280-669870/11	25.0	1617250.0			64690.0	Y



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Calibration / 2,4,6-Trinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

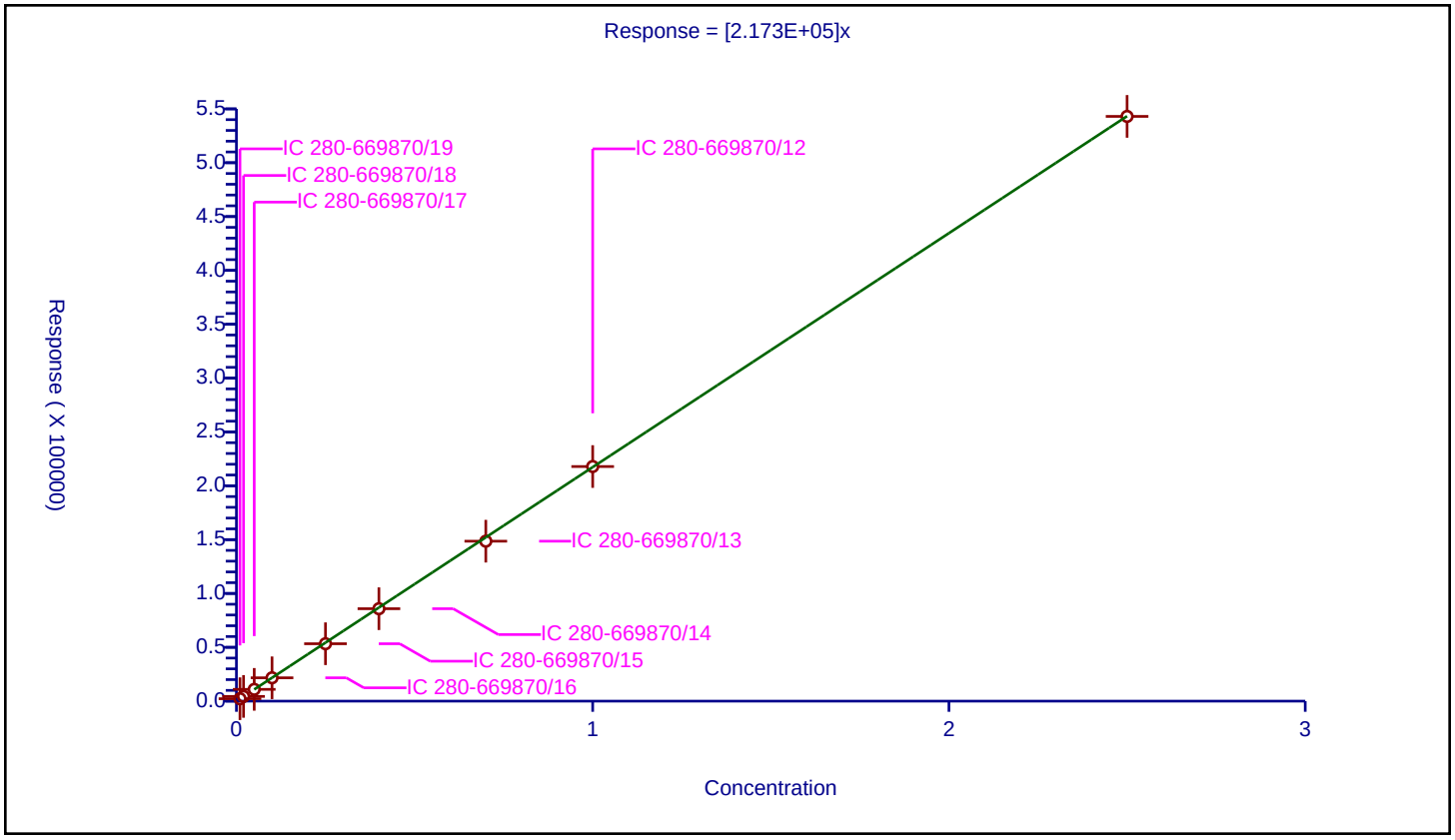
Curve Coefficients

Intercept:	0
Slope:	2.173E+05

Error Coefficients

Relative Standard Deviation:	1.8

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-669870/19	0.01	2257.0			225700.0	Y
2	IC 280-669870/18	0.02	4382.0			219100.0	Y
3	IC 280-669870/17	0.05	10944.0			218880.0	Y
4	IC 280-669870/16	0.1	21685.0			216850.0	Y
5	IC 280-669870/15	0.25	53322.0			213288.0	Y
6	IC 280-669870/14	0.4	85834.0			214585.0	Y
7	IC 280-669870/13	0.7	148548.0			212211.428571	Y
8	IC 280-669870/12	1.0	217864.0			217864.0	Y
9	IC 280-669870/11	2.5	543020.0			217208.0	Y



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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

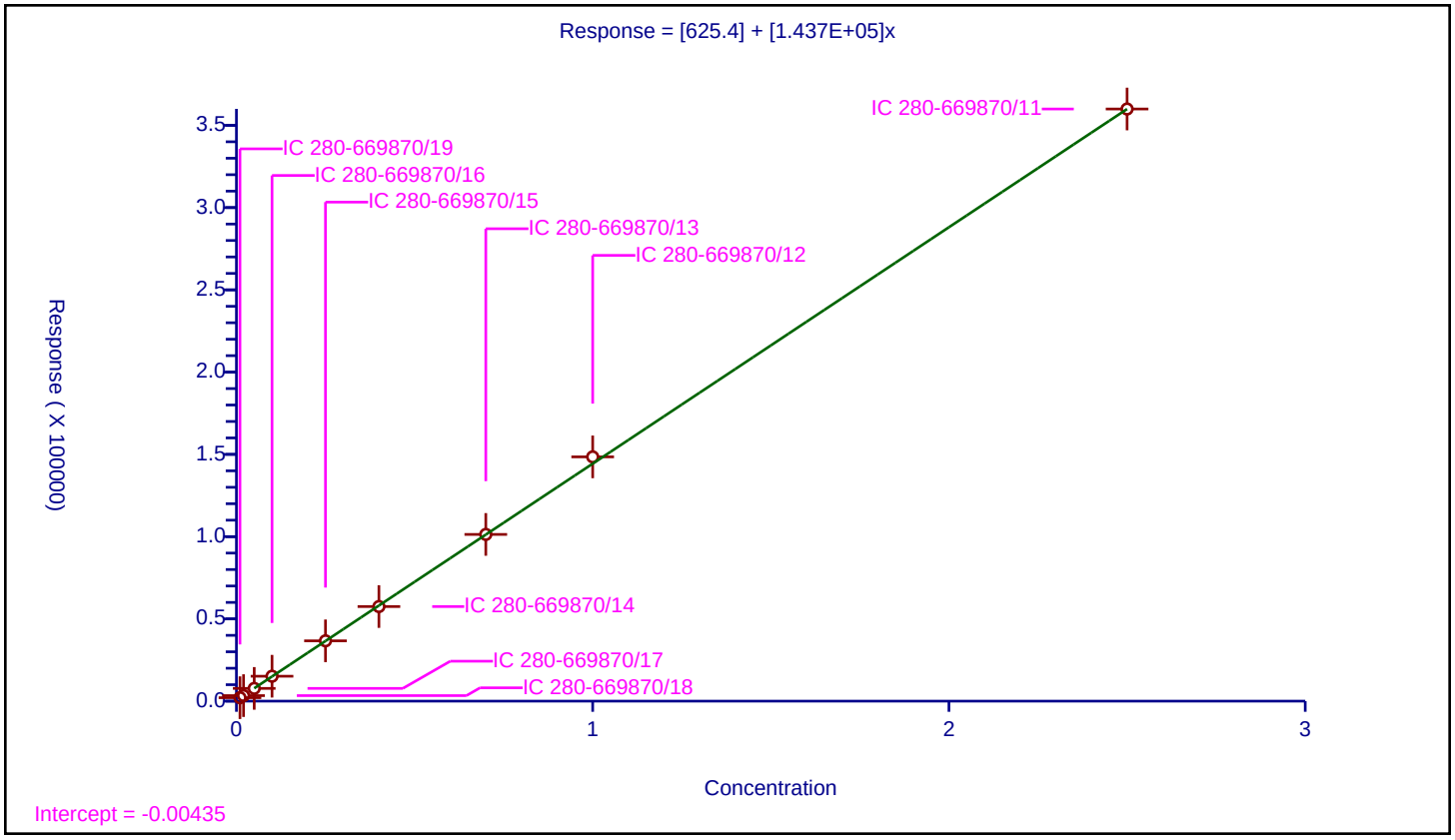
Curve Coefficients

Intercept:	625.4
Slope:	1.437E+05

Error Coefficients

Relative Standard Deviation:	2.5

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-669870/19	0.01	2099.0			209900.0	Y
2	IC 280-669870/18	0.02	3357.0			167850.0	Y
3	IC 280-669870/17	0.05	7751.0			155020.0	Y
4	IC 280-669870/16	0.1	15147.0			151470.0	Y
5	IC 280-669870/15	0.25	36669.0			146676.0	Y
6	IC 280-669870/14	0.4	57494.0			143735.0	Y
7	IC 280-669870/13	0.7	101345.0			144778.571429	Y
8	IC 280-669870/12	1.0	148480.0			148480.0	Y
9	IC 280-669870/11	2.5	359929.0			143971.6	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

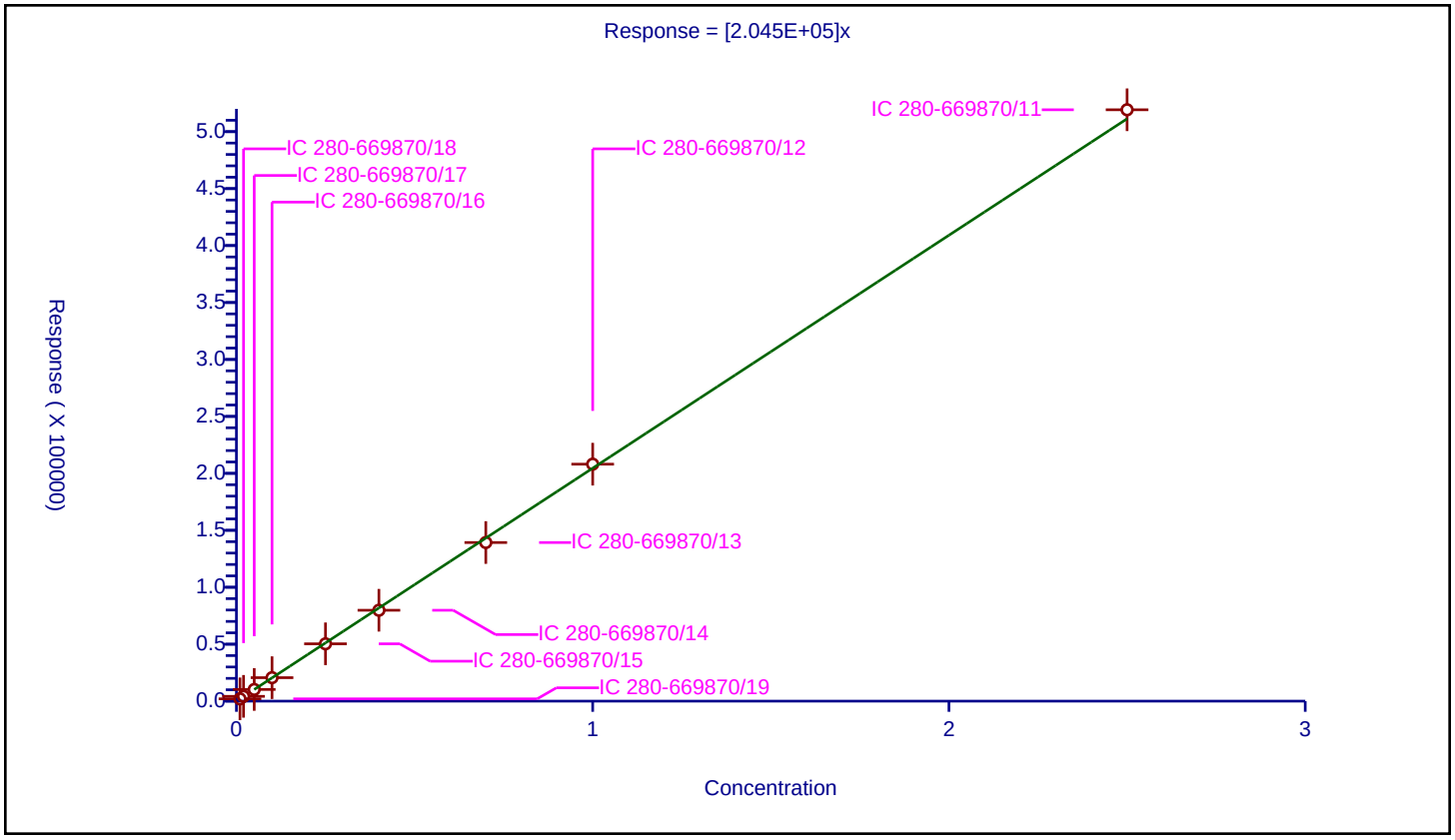
Curve Coefficients

Intercept:	0
Slope:	2.045E+05

Error Coefficients

Relative Standard Deviation:	2.0

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-669870/19	0.01	2029.0			202900.0	Y
2	IC 280-669870/18	0.02	4224.0			211200.0	Y
3	IC 280-669870/17	0.05	10249.0			204980.0	Y
4	IC 280-669870/16	0.1	20612.0			206120.0	Y
5	IC 280-669870/15	0.25	50346.0			201384.0	Y
6	IC 280-669870/14	0.4	79804.0			199510.0	Y
7	IC 280-669870/13	0.7	139261.0			198944.285714	Y
8	IC 280-669870/12	1.0	208057.0			208057.0	Y
9	IC 280-669870/11	2.5	519220.0			207688.0	Y



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Calibration / 2,6-Dinitrotoluene

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

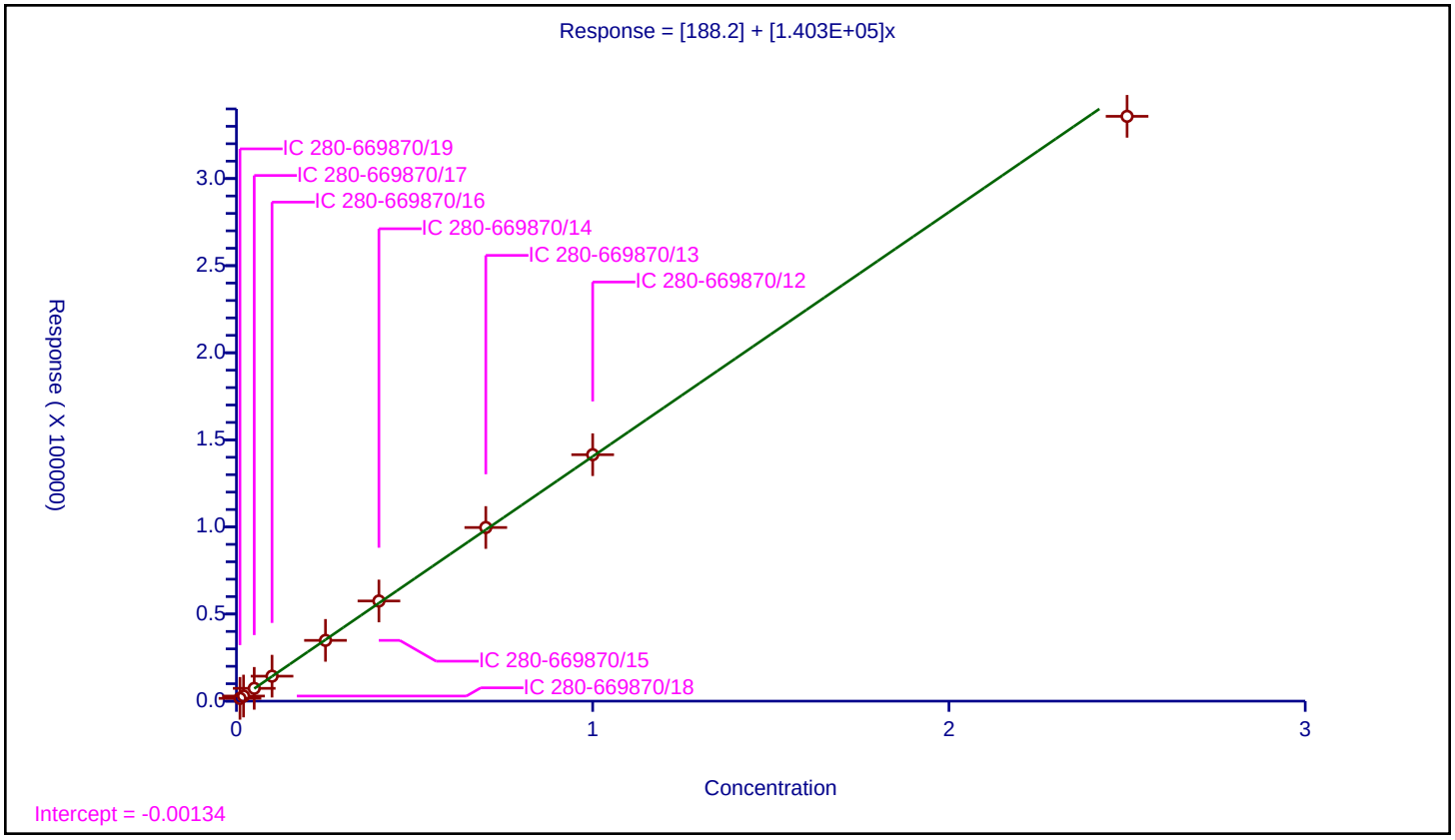
Curve Coefficients

Intercept:	188.2
Slope:	1.403E+05

Error Coefficients

Relative Standard Deviation:	2.3

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-669870/19	0.01	1600.0			160000.0	Y
2	IC 280-669870/18	0.02	2929.0			146450.0	Y
3	IC 280-669870/17	0.05	7345.0			146900.0	Y
4	IC 280-669870/16	0.1	14334.0			143340.0	Y
5	IC 280-669870/15	0.25	34878.0			139512.0	Y
6	IC 280-669870/14	0.4	57501.0			143752.5	Y
7	IC 280-669870/13	0.7	99691.0			142415.714286	Y
8	IC 280-669870/12	1.0	141490.0			141490.0	Y
9	IC 280-669870/11	2.5	335728.0			134291.2	Y



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Calibration / 2,4-Dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

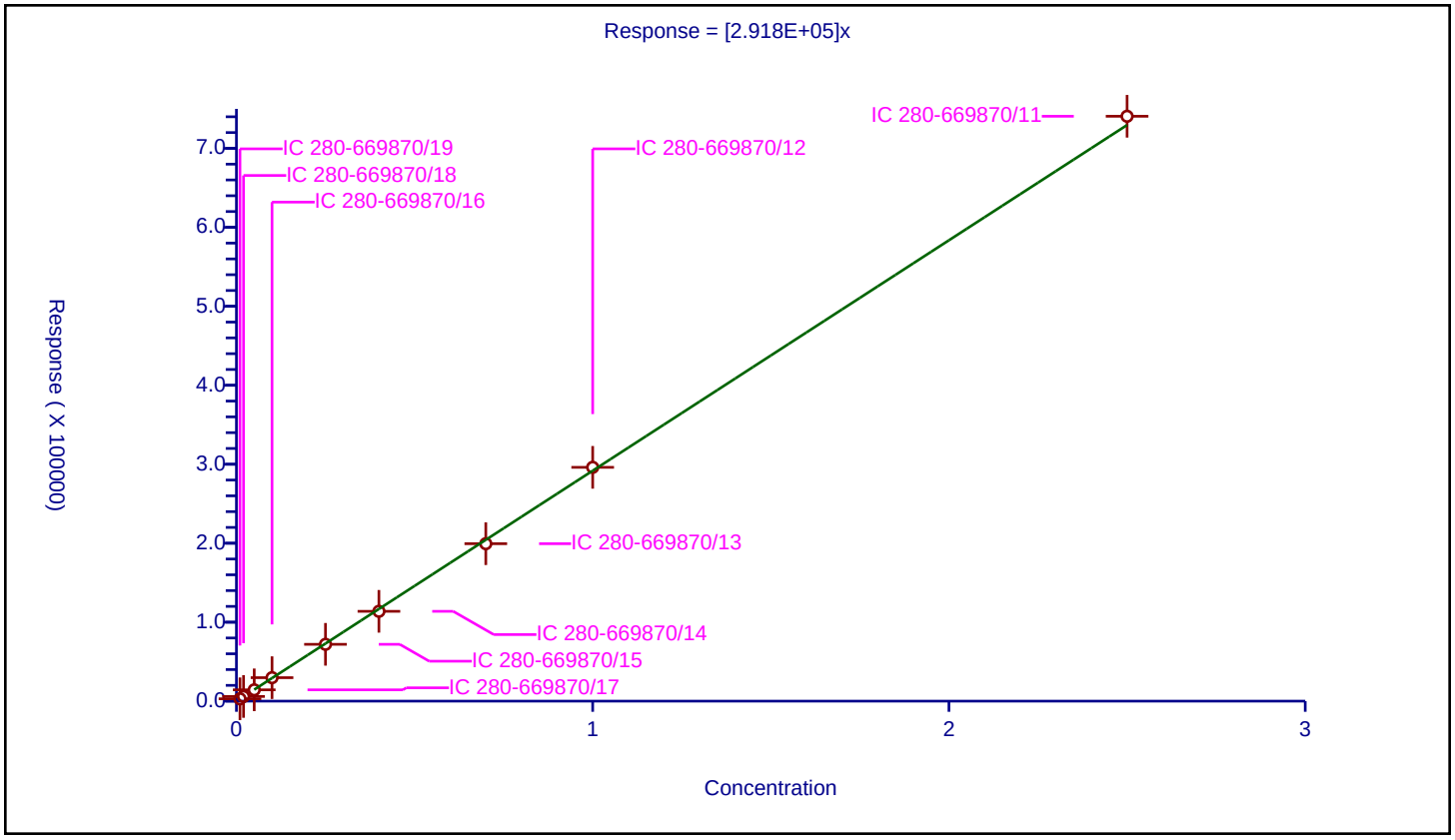
Curve Coefficients

Intercept:	0
Slope:	2.918E+05

Error Coefficients

Relative Standard Deviation:	2.0

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-669870/19	0.01	2968.0			296800.0	Y
2	IC 280-669870/18	0.02	5927.0			296350.0	Y
3	IC 280-669870/17	0.05	14328.0			286560.0	Y
4	IC 280-669870/16	0.1	29723.0			297230.0	Y
5	IC 280-669870/15	0.25	71944.0			287776.0	Y
6	IC 280-669870/14	0.4	113760.0			284400.0	Y
7	IC 280-669870/13	0.7	199392.0			284845.714286	Y
8	IC 280-669870/12	1.0	296080.0			296080.0	Y
9	IC 280-669870/11	2.5	740672.0			296268.8	Y



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Calibration / o-Nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

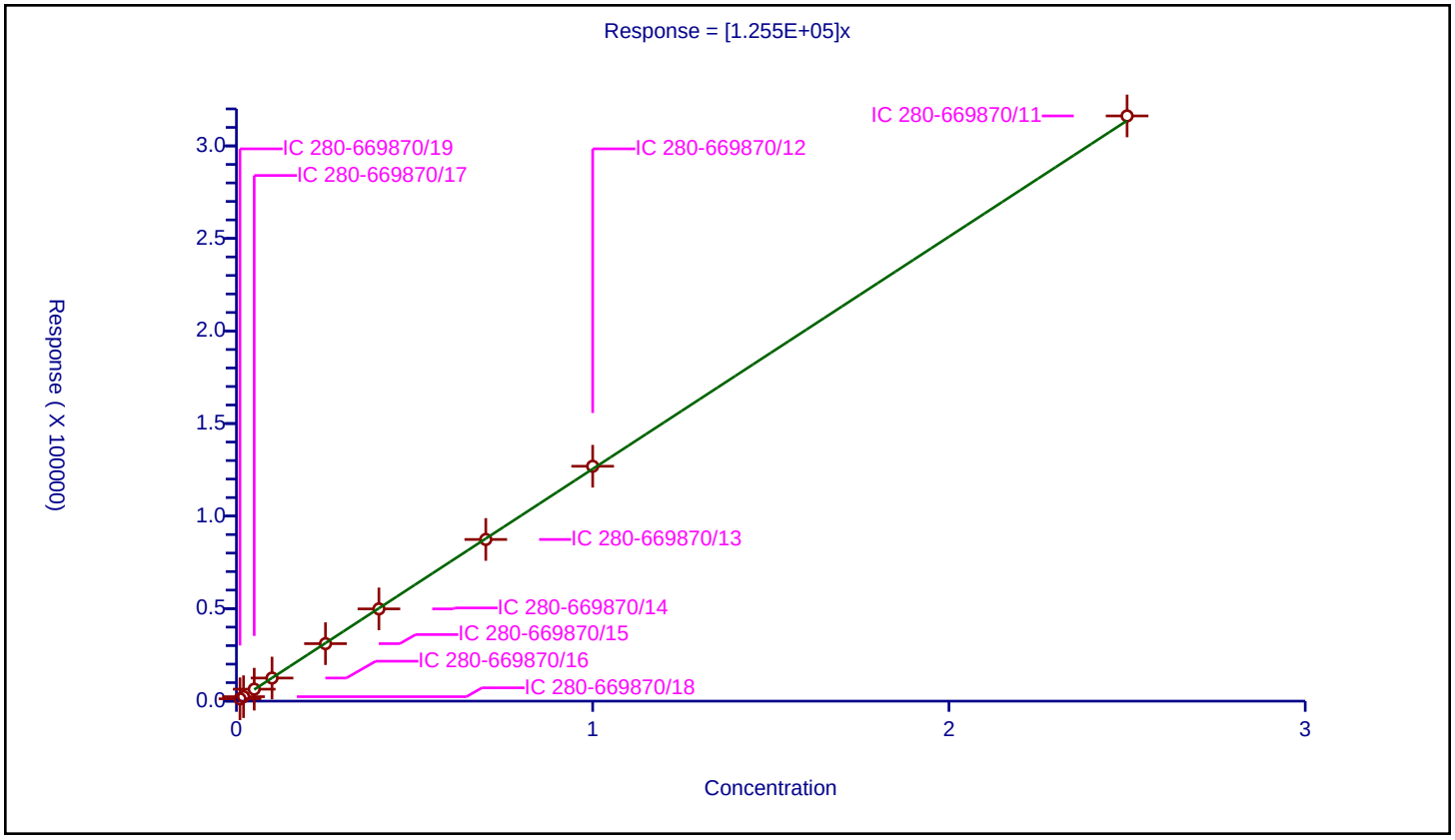
Curve Coefficients

Intercept:	0
Slope:	1.255E+05

Error Coefficients

Relative Standard Deviation:	2.0

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-669870/19	0.01	1273.0			127300.0	Y
2	IC 280-669870/18	0.02	2411.0			120550.0	Y
3	IC 280-669870/17	0.05	6473.0			129460.0	Y
4	IC 280-669870/16	0.1	12487.0			124870.0	Y
5	IC 280-669870/15	0.25	31059.0			124236.0	Y
6	IC 280-669870/14	0.4	49842.0			124605.0	Y
7	IC 280-669870/13	0.7	87357.0			124795.714286	Y
8	IC 280-669870/12	1.0	126917.0			126917.0	Y
9	IC 280-669870/11	2.5	316203.0			126481.2	Y



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Calibration / p-Nitrotoluene

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

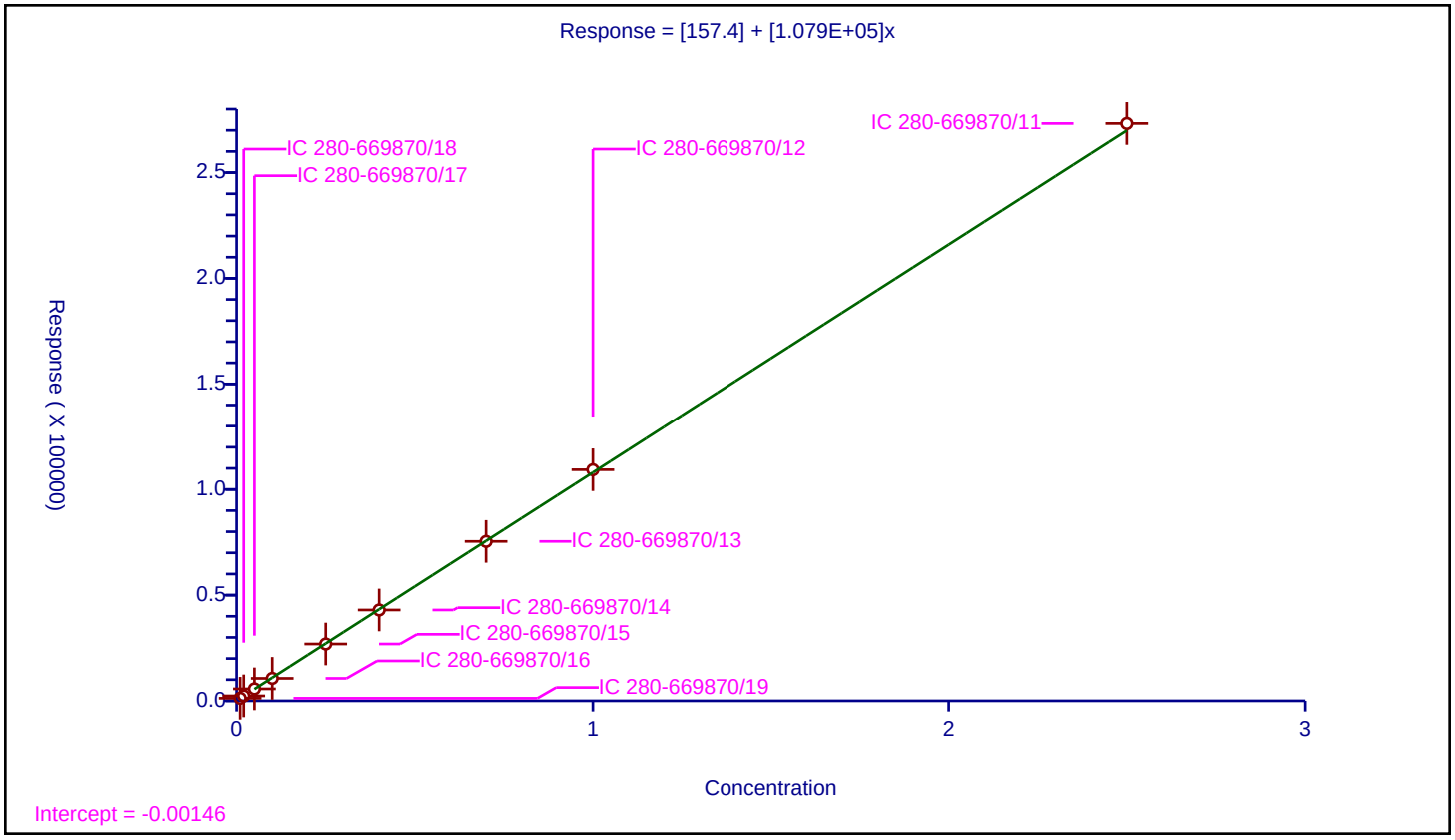
Curve Coefficients

Intercept:	157.4
Slope:	1.079E+05

Error Coefficients

Relative Standard Deviation:	1.7

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-669870/19	0.01	1229.0			122900.0	Y
2	IC 280-669870/18	0.02	2343.0			117150.0	Y
3	IC 280-669870/17	0.05	5661.0			113220.0	Y
4	IC 280-669870/16	0.1	10624.0			106240.0	Y
5	IC 280-669870/15	0.25	26896.0			107584.0	Y
6	IC 280-669870/14	0.4	42988.0			107470.0	Y
7	IC 280-669870/13	0.7	75434.0			107762.857143	Y
8	IC 280-669870/12	1.0	109373.0			109373.0	Y
9	IC 280-669870/11	2.5	273226.0			109290.4	Y



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Calibration / m-Nitrotoluene

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

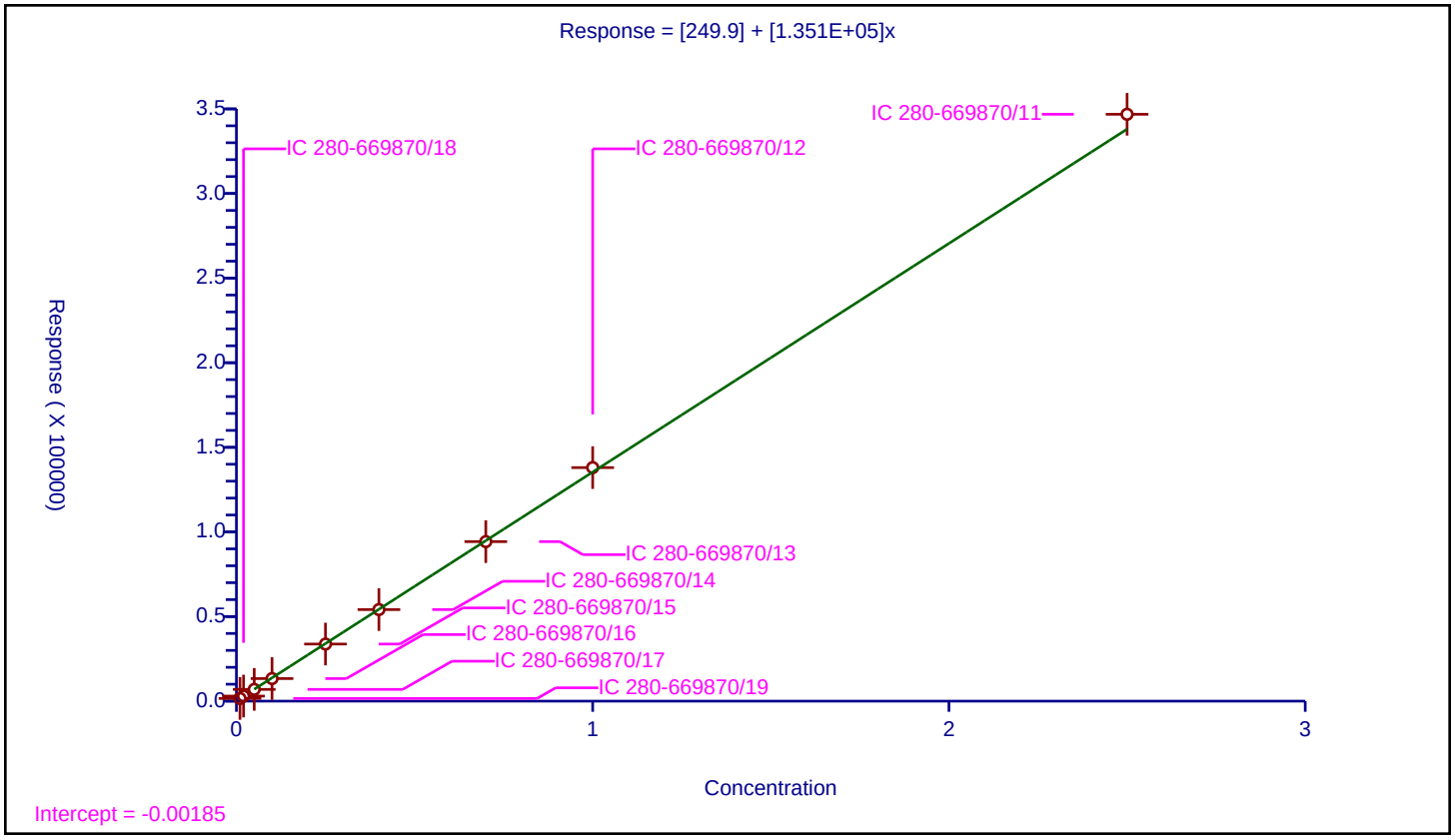
Curve Coefficients

Intercept:	249.9
Slope:	1.351E+05

Error Coefficients

Relative Standard Deviation:	1.9

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-669870/19	0.01	1598.0			159800.0	Y
2	IC 280-669870/18	0.02	2992.0			149600.0	Y
3	IC 280-669870/17	0.05	6947.0			138940.0	Y
4	IC 280-669870/16	0.1	13345.0			133450.0	Y
5	IC 280-669870/15	0.25	33732.0			134928.0	Y
6	IC 280-669870/14	0.4	54100.0			135250.0	Y
7	IC 280-669870/13	0.7	94270.0			134671.428571	Y
8	IC 280-669870/12	1.0	138022.0			138022.0	Y
9	IC 280-669870/11	2.5	346817.0			138726.8	Y



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Calibration / PETN

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

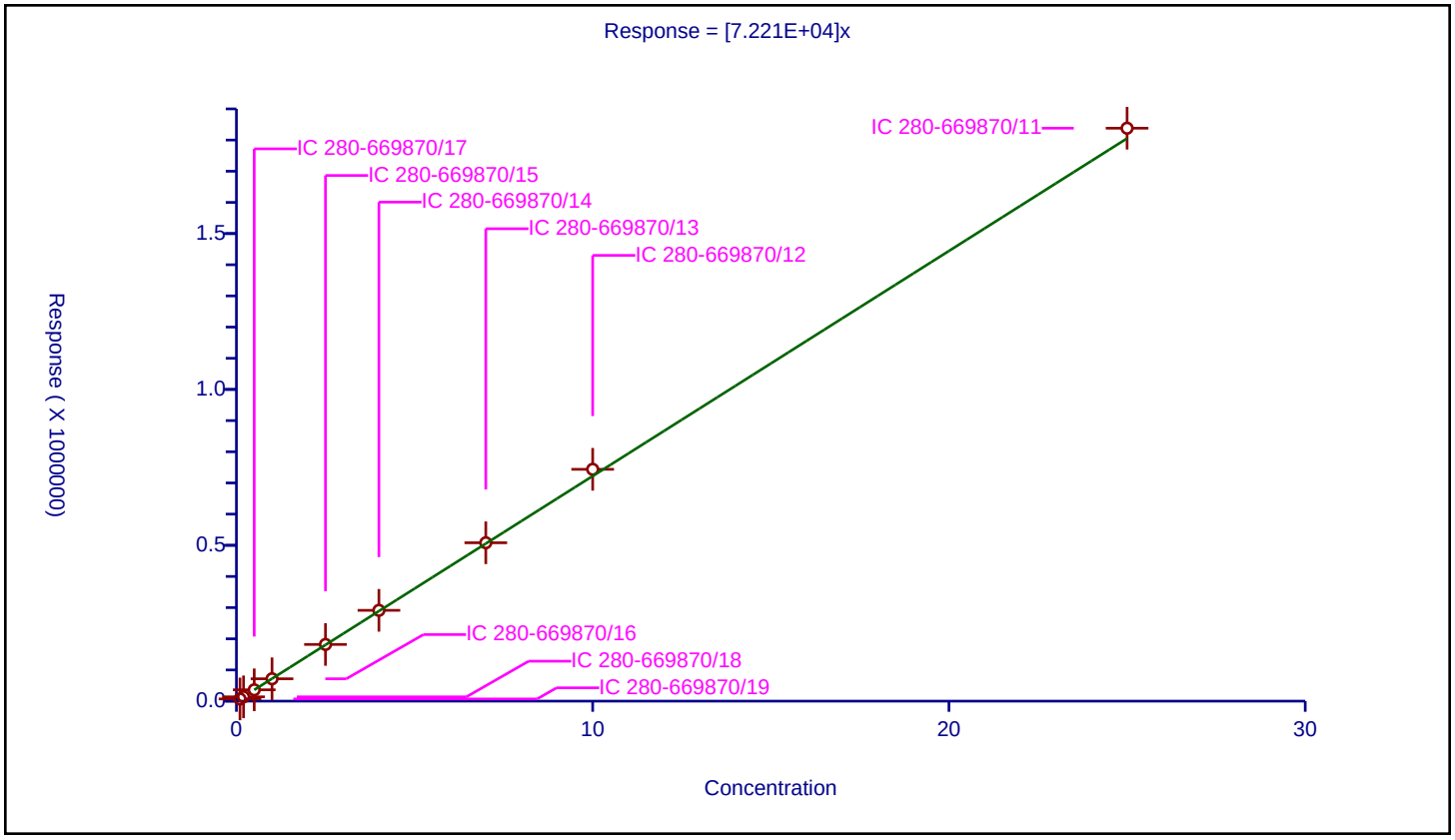
Curve Coefficients

Intercept:	0
Slope:	7.221E+04

Error Coefficients

Relative Standard Deviation:	2.3

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-669870/19	0.1	7053.0			70530.0	Y
2	IC 280-669870/18	0.2	13772.0			68860.0	Y
3	IC 280-669870/17	0.5	36348.0			72696.0	Y
4	IC 280-669870/16	1.0	71766.0			71766.0	Y
5	IC 280-669870/15	2.5	181859.0			72743.6	Y
6	IC 280-669870/14	4.0	291336.0			72834.0	Y
7	IC 280-669870/13	7.0	508089.0			72584.142857	Y
8	IC 280-669870/12	10.0	743747.0			74374.7	Y
9	IC 280-669870/11	25.0	1838063.0			73522.52	Y



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FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins Denver | Job No.: 280-197447-1 | Analy Batch No.: 663590

SDG No.:

Instrument ID: CHHPLC_X5 | GC Column: Luna-phenyl ID: 4.6(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 08/10/2024 20:22 | Calibration End Date: 08/11/2024 01:01 | Calibration ID: 96518

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-663590/18	08100018.D
Level 2	IC 280-663590/17	08100017.D
Level 3	IC 280-663590/16	08100016.D
Level 4	IC 280-663590/15	08100015.D
Level 5	IC 280-663590/14	08100014.D
Level 6	IC 280-663590/13	08100013.D
Level 7	IC 280-663590/12	08100012.D
Level 8	IC 280-663590/11	08100011.D
Level 9	IC 280-663590/10	08100010.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	6.324	6.336	6.325	6.327	6.324	6.334	6.325	6.309	6.272		6.174 - 6.474	6.320
Picric acid	7.864	7.870	7.865	7.861	7.810	7.827	7.785	7.756	7.625		7.660 - 7.960	7.807
RDX	8.457	8.470	8.459	8.461	8.437	8.467	8.445	8.436	8.379		8.287 - 8.587	8.446
Nitrobenzene	11.004	11.016	11.012	11.014	10.983	11.020	10.999	10.982	10.945		10.833 - 11.133	10.997
3,5-Dinitroaniline	13.511	13.516	13.512	13.514	13.470	13.520	13.492	13.476	13.438		13.320 - 13.620	13.494
1,3-Dinitrobenzene	13.851	13.863	13.858	13.861	13.823	13.874	13.845	13.829	13.798		13.673 - 13.973	13.845
Nitroglycerin	14.524	14.529	14.525	14.527	14.477	14.540	14.512	14.496	14.472		14.327 - 14.627	14.511
2-Nitrotoluene	15.031	15.036	15.038	15.041	14.990	15.054	15.025	15.016	14.985		14.840 - 15.140	15.024
4-Nitrotoluene	15.284	15.276	15.272	15.274	15.223	15.287	15.259	15.249	15.212		15.073 - 15.373	15.260
4-Amino-2,6-dinitrotoluene	15.611	15.616	15.612	15.614	15.557	15.627	15.592	15.589	15.552		15.407 - 15.707	15.597
3-Nitrotoluene	16.091	16.096	16.092	16.094	16.043	16.114	16.079	16.076	16.045		15.893 - 16.193	16.081
2-Amino-4,6-dinitrotoluene	16.364	16.363	16.358	16.361	16.310	16.374	16.339	16.336	16.292		16.160 - 16.460	16.344
1,3,5-Trinitrobenzene	16.577	16.576	16.572	16.574	16.537	16.600	16.559	16.556	16.525		16.387 - 16.687	16.564
2,6-Dinitrotoluene	17.691	17.703	17.705	17.707	17.657	17.727	17.685	17.689	17.652		17.507 - 17.807	17.691
2,4-Dinitrotoluene	18.131	18.136	18.138	18.141	18.090	18.160	18.119	18.122	18.085		17.940 - 18.240	18.125
Tetryl	21.151	21.150	21.159	21.154	21.097	21.174	21.125	21.136	21.105		20.947 - 21.247	21.139
2,4,6-Trinitrotoluene	22.017	22.023	22.025	22.027	21.977	22.047	22.012	22.009	21.985		21.827 - 22.127	22.014
PETN	23.537	23.516	23.532	23.521	23.457	23.534	23.505	23.503	23.492		23.307 - 23.607	23.511
1,2-Dinitrobenzene	11.831	11.843	11.832	11.834	11.797	11.840	11.819	11.802	11.765		11.647 - 11.947	11.818

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

Lab Name: Eurofins Denver Job No.: 280-197447-1 Analy Batch No.: 663590

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/10/2024 20:22 Calibration End Date: 08/11/2024 01:01 Calibration ID: 96518

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-663590/18	08100018.D
Level 2	IC 280-663590/17	08100017.D
Level 3	IC 280-663590/16	08100016.D
Level 4	IC 280-663590/15	08100015.D
Level 5	IC 280-663590/14	08100014.D
Level 6	IC 280-663590/13	08100013.D
Level 7	IC 280-663590/12	08100012.D
Level 8	IC 280-663590/11	08100011.D
Level 9	IC 280-663590/10	08100010.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD /RSE	#	MAX %RSD /RSE	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	167100 187892 178359	198350 179333	182040 175713	178880 175376	Ave		180338.062				4.9		20.0			
Picric acid	156400 152484 150086	145900 148028	151340 146489	151030 146979	Ave		149859.408				2.3		20.0			
RDX	277300 214188 206076	242600 206623	218540 202049	213350 202487	Ave		220356.852				11.2		20.0			
Nitrobenzene	375500 387368 379398	372600 375673	381820 371520	378560 369980	Ave		376935.389				1.5		20.0			
3,5-Dinitroaniline	450800 452192 432321	457900 436468	439520 428406	435660 429142	Lin2	207.991011	435892.153							1.0000		0.9900
1,3-Dinitrobenzene	605900 601876 589502	577050 583780	583600 572897	578310 574265	Ave		585242.238				2.0		20.0			
Nitroglycerin	142060 132493 125422	120080 127644	130950 123552	127672 123497	Ave		128152.221				5.1		20.0			
2-Nitrotoluene	234000 239776 236821	236900 236095	238440 233080	234990 232656	Ave		235861.978				1.0		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

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

Lab Name: Eurofins Denver Job No.: 280-197447-1 Analy Batch No.: 663590

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/10/2024 20:22 Calibration End Date: 08/11/2024 01:01 Calibration ID: 96518

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5 LVL 9	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
4-Nitrotoluene	203700 219364 216000	207400 212670	216340 209859	209940 209764	Ave		211670.686				2.3		20.0			
4-Amino-2,6-dinitrotoluene	278700 287232 280327	272750 278370	286900 271741	278250 273020	Ave		278587.803				2.0		20.0			
3-Nitrotoluene	254700 265552 256553	254050 257968	266720 252994	259990 255490	Ave		258224.065				1.9		20.0			
2-Amino-4,6-dinitrotoluene	397200 404268 381848	389200 392835	388980 385583	386520 378245	Ave		389408.806				2.0		20.0			
1,3,5-Trinitrobenzene	418500 431928 436338	415750 420285	433580 411416	427420 418932	Ave		423794.257				2.1		20.0			
2,6-Dinitrotoluene	306500 287840 274880	307200 275720	290420 269370	279620 270535	Ave		284676.156				5.1		20.0			
2,4-Dinitrotoluene	593900 574708 554930	600600 555490	593380 543620	554870 545089	Ave		568509.622				4.0		20.0			
Tetryl	243000 301688 292584	243550 290473	314500 284443	292970 286831	Ave		283337.551				8.6		20.0			
2,4,6-Trinitrotoluene	408200 423736 411163	443700 410750	418720 403344	423050 403353	Ave		416224.054				3.1		20.0			
PETN	135550 140865 135829	136830 135773	134630 133598	135423 133762	Ave		135806.618				1.6		20.0			
1,2-Dinitrobenzene	258500 275348 260959	252650 261225	272100 257476	267380 256759	Ave		262488.502				2.9		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

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

Lab Name: Eurofins Denver | Job No.: 280-197447-1 | Analy Batch No.: 663590

SDG No.:

Instrument ID: CHHPLC_X5 | GC Column: Luna-pheny ID: 4.6(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 08/10/2024 20:22 | Calibration End Date: 08/11/2024 01:01 | Calibration ID: 96518

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-663590/18	08100018.D
Level 2	IC 280-663590/17	08100017.D
Level 3	IC 280-663590/16	08100016.D
Level 4	IC 280-663590/15	08100015.D
Level 5	IC 280-663590/14	08100014.D
Level 6	IC 280-663590/13	08100013.D
Level 7	IC 280-663590/12	08100012.D
Level 8	IC 280-663590/11	08100011.D
Level 9	IC 280-663590/10	08100010.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	1671 71733	3967 122999	9102 175376	17888 445898	46973	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Picric acid	Ave	1564 59211	2918 102542	7567 146979	15103 375214	38121	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
RDX	Ave	2773 82649	4852 141434	10927 202487	21335 515189	53547	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Nitrobenzene	Ave	3755 150269	7452 260064	19091 369980	37856 948495	96842	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
3,5-Dinitroaniline	Lin2	4508 174587	9158 299884	21976 429142	43566 1080802	113048	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
1,3-Dinitrobenzene	Ave	6059 233512	11541 401028	29180 574265	57831 1473755	150469	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Nitroglycerin	Ave	14206 510574	24016 864867	65475 1234967	127672 3135554	331233	0.100 4.00	0.200 7.00	0.500 10.0	1.00 25.0	2.50
2-Nitrotoluene	Ave	2340 94438	4738 163156	11922 232656	23499 592052	59944	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
4-Nitrotoluene	Ave	2037 85068	4148 146901	10817 209764	20994 539999	54841	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
4-Amino-2,6-dinitrotoluene	Ave	2787 111348	5455 190219	14345 273020	27825 700817	71808	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
3-Nitrotoluene	Ave	2547 103187	5081 177096	13336 255490	25999 641382	66388	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
2-Amino-4,6-dinitrotoluene	Ave	3972 157134	7784 269908	19449 378245	38652 954621	101067	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
1,3,5-Trinitrobenzene	Ave	4185 168114	8315 287991	21679 418932	42742 1090844	107982	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
2,6-Dinitrotoluene	Ave	3065 110288	6144 188559	14521 270535	27962 687201	71960	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
2,4-Dinitrotoluene	Ave	5939	12012	29669	55487	143677	0.0100	0.0200	0.0500	0.100	0.250

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

Lab Name: Eurofins Denver | Job No.: 280-197447-1 | Analy Batch No.: 663590

SDG No.:

Instrument ID: CHHPLC_X5 | GC Column: Luna-pheny ID: 4.6(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 08/10/2024 20:22 | Calibration End Date: 08/11/2024 01:01 | Calibration ID: 96518

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
		222196	380534	545089	1387324		0.400	0.700	1.00	2.50	
Tetryl	Ave	2430 116189	4871 199110	15725 286831	29297 731459	75422	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
2,4,6-Trinitrotoluene	Ave	4082 164300	8874 282341	20936 403353	42305 1027908	105934	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
PETN	Ave	13555 543090	27366 935188	67315 1337623	135423 3395717	352162	0.100 4.00	0.200 7.00	0.500 10.0	1.00 25.0	2.50
1,2-Dinitrobenzene	Ave	2585 104490	5053 180233	13605 256759	26738 652397	68837	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\20240810-136368.b\08100010.D
Lims ID: IC INT 9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 10-Aug-2024 20:22:02 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 9
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub7

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 13-Aug-2024 15:40:38 Calib Date: 11-Aug-2024 06:16:04
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1604

First Level Reviewer: LV5D Date: 13-Aug-2024 13:45:58

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
5 HMX	1	6.272	6.324	-0.052	445898	2.50	2.47	
7 2,4,6-Trinitrophenol	1	7.625	7.810	-0.185	375214	2.50	2.50	a
8 RDX	1	8.379	8.437	-0.058	515189	2.50	2.34	
9 Nitrobenzene	1	10.945	10.983	-0.038	948495	2.50	2.52	
$ 10 1,2-Dinitrobenzene	1	11.765	11.797	-0.032	652397	2.50	2.49	
11 3,5-Dinitroaniline	1	13.438	13.470	-0.032	1080802	2.50	2.48	
12 1,3-Dinitrobenzene	1	13.798	13.823	-0.025	1473755	2.50	2.52	
13 Nitroglycerin	2	14.472	14.477	-0.005	3135554	25.0	24.5	
14 o-Nitrotoluene	1	14.985	14.990	-0.005	592052	2.50	2.51	
16 p-Nitrotoluene	1	15.212	15.223	-0.011	539999	2.50	2.55	
17 4-Amino-2,6-dinitrotoluene	1	15.552	15.557	-0.005	700817	2.50	2.52	
18 m-Nitrotoluene	1	16.045	16.043	0.002	641382	2.50	2.48	
19 2-Amino-4,6-dinitrotoluene	1	16.292	16.310	-0.018	954621	2.50	2.45	
20 1,3,5-Trinitrobenzene	1	16.525	16.537	-0.012	1090844	2.50	2.57	
21 2,6-Dinitrotoluene	1	17.652	17.657	-0.005	687201	2.50	2.41	
22 2,4-Dinitrotoluene	1	18.085	18.090	-0.005	1387324	2.50	2.44	
23 Tetryl	1	21.105	21.097	0.008	731459	2.50	2.58	M
24 2,4,6-Trinitrotoluene	1	21.985	21.977	0.008	1027908	2.50	2.47	M
25 PETN	2	23.492	23.457	0.035	3395717	25.0	25.0	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

8330IntermStk_00082 Amount Added: 250.00 Units: uL

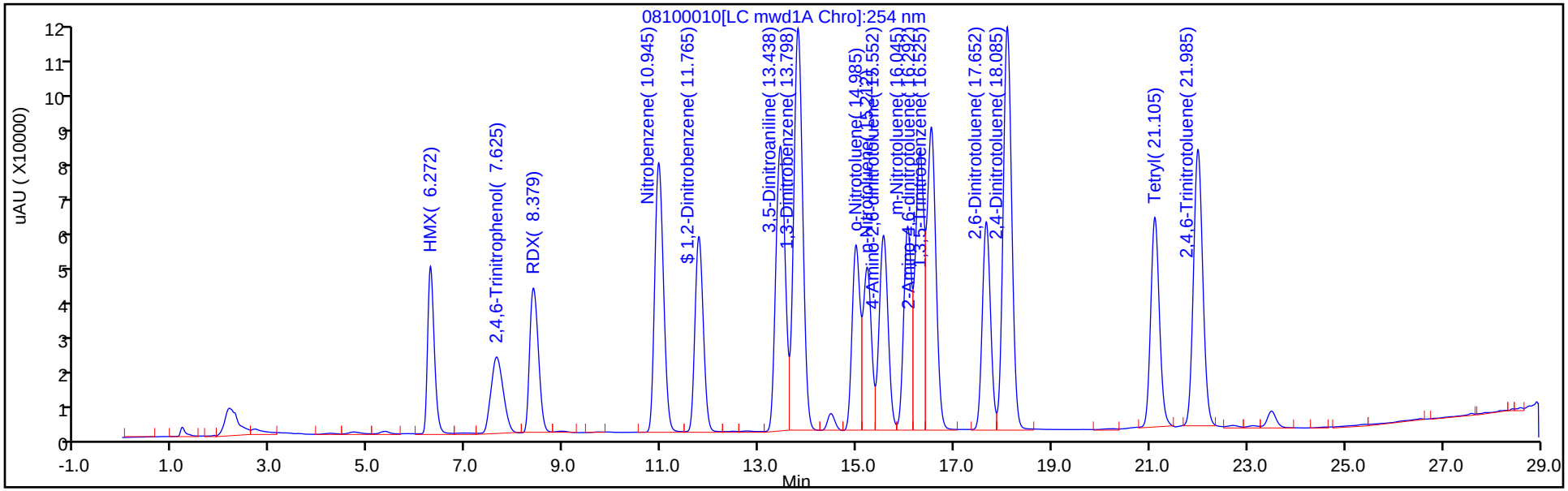
Report Date: 13-Aug-2024 15:40:38 Chrom Revision: 2.3 16-Jul-2024 14:17:34

Eurofins Denver

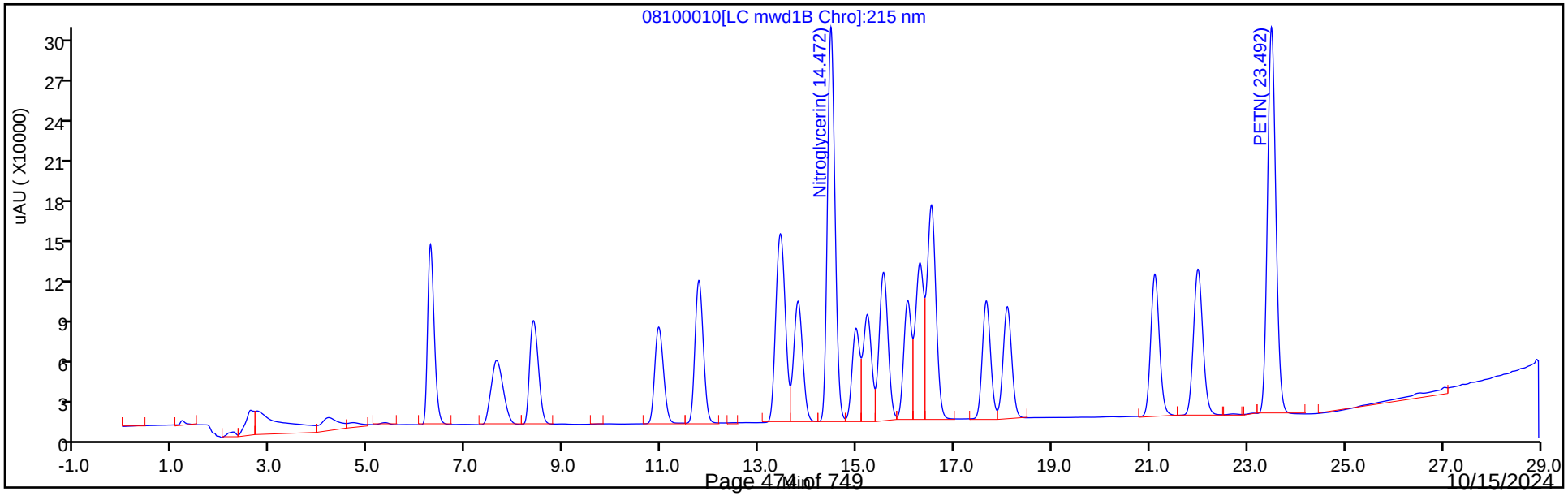
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100010.D

Injection Date:	10-Aug-2024 20:22:02	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC INT 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: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



10/15/2024
4:48:23 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

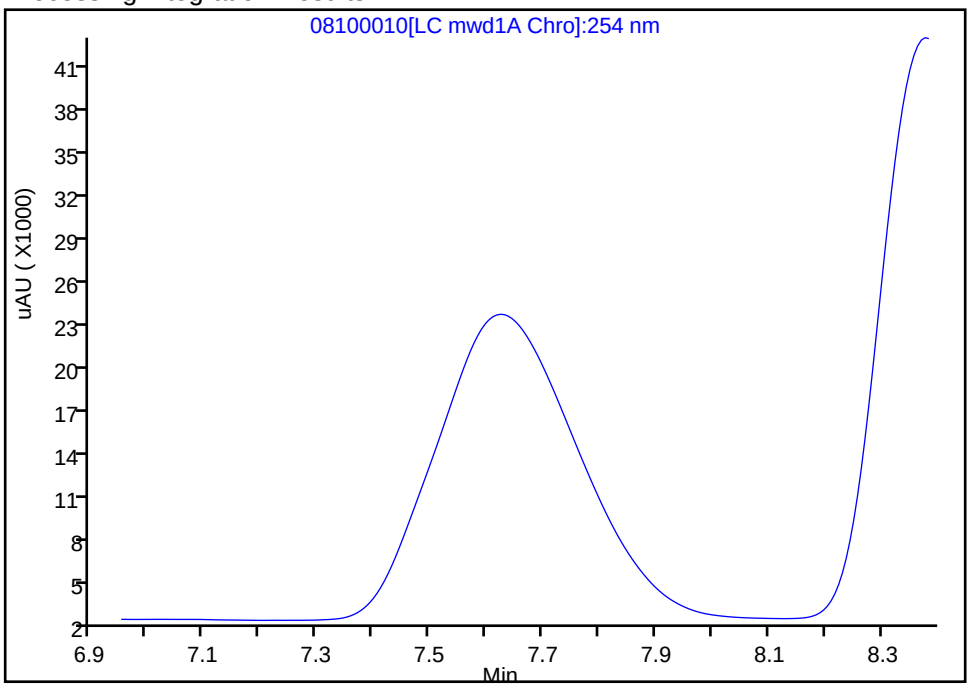
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100010.D
Injection Date: 10-Aug-2024 20:22:02 Instrument ID: CHHPLC_X5
Lims ID: IC INT 9
Client ID:
Operator ID: JZ ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC mwd1A, 254 nm

7 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

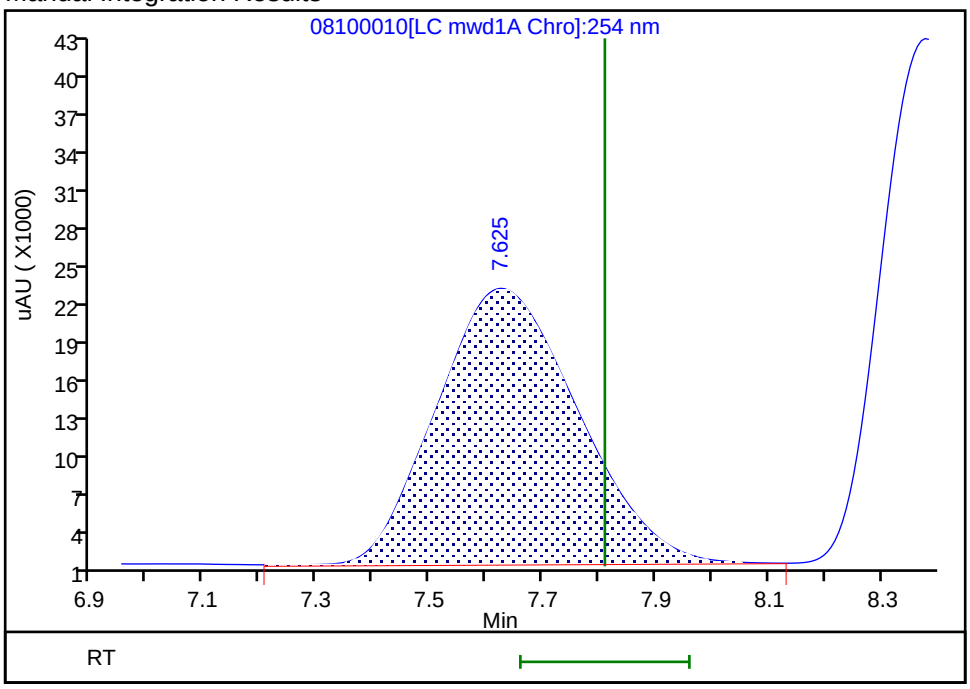
Not Detected
Expected RT: 7.81

Processing Integration Results



Manual Integration Results

RT: 7.63
Area: 375214
Amount: 2.503773
Amount Units: ug/ml



Reviewer: LV5D, 13-Aug-2024 13:45:56 -06:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Denver

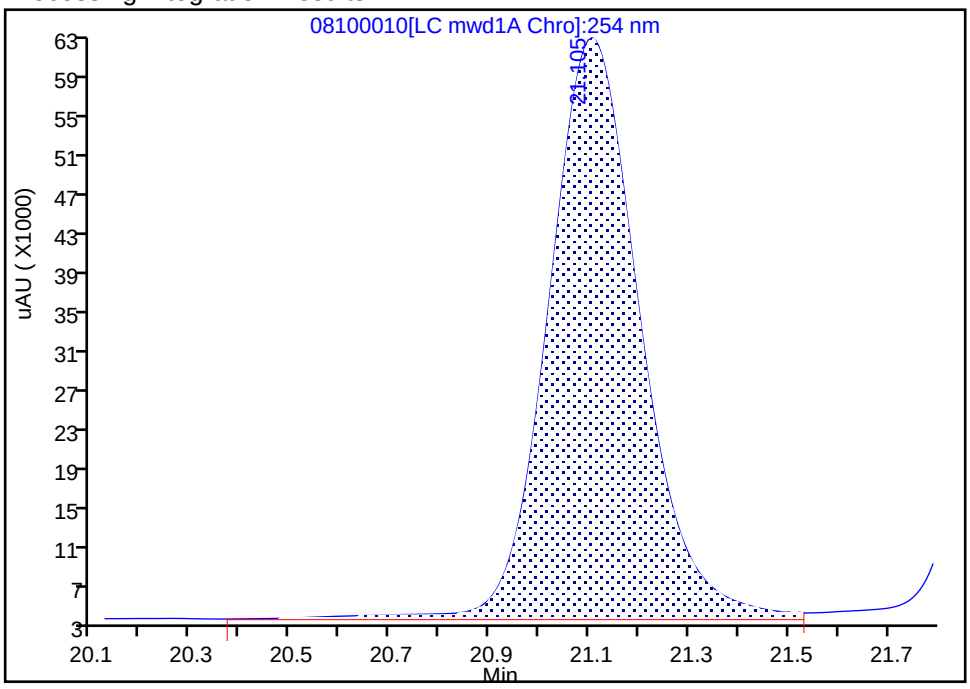
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100010.D
Injection Date: 10-Aug-2024 20:22:02 Instrument ID: CHHPLC_X5
Lims ID: IC INT 9
Client ID:
Operator ID: JZ ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC mwd1A, 254 nm

23 Tetryl, CAS: 479-45-8

Signal: 1

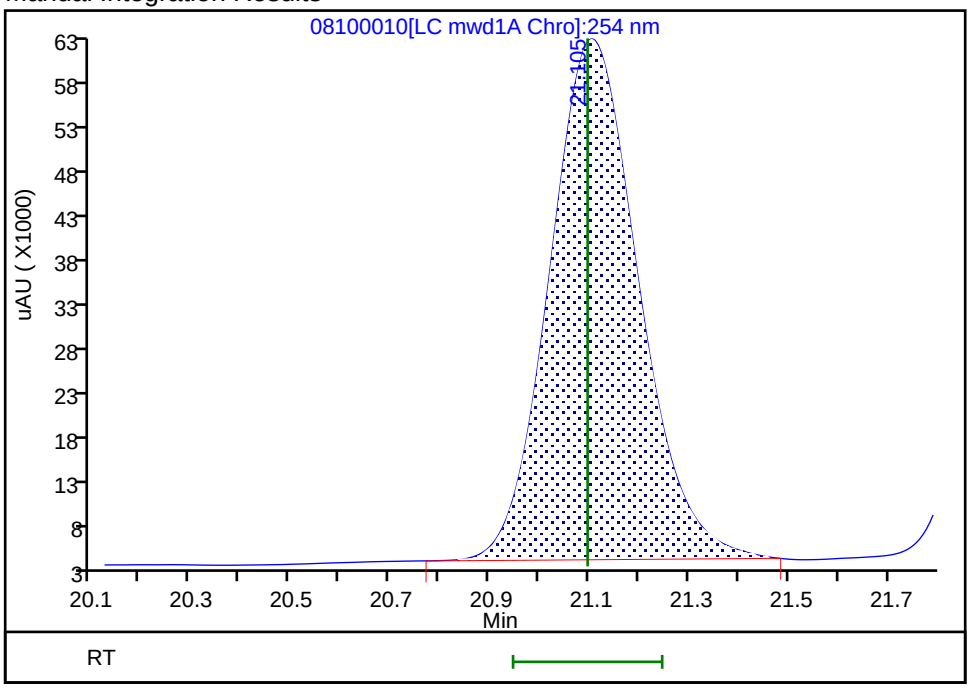
Processing Integration Results

RT: 21.11
Area: 772503
Amount: 2.511632
Amount Units: ug/ml



Manual Integration Results

RT: 21.11
Area: 731459
Amount: 2.581582
Amount Units: ug/ml



Reviewer: LV5D, 13-Aug-2024 15:16:52 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

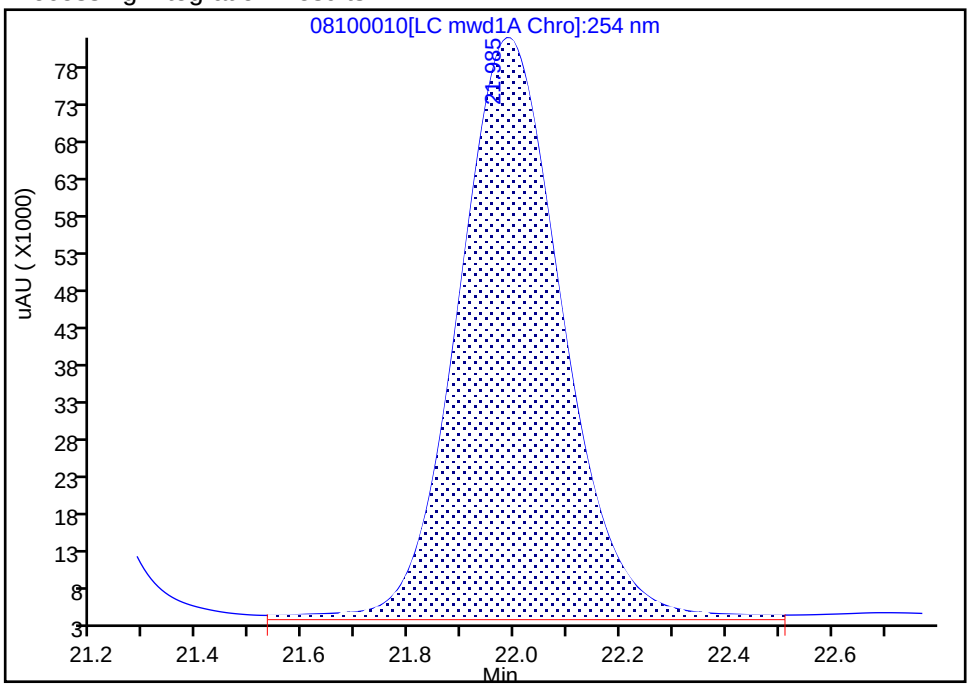
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100010.D				
Injection Date:	10-Aug-2024 20:22:02	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 9				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

24 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

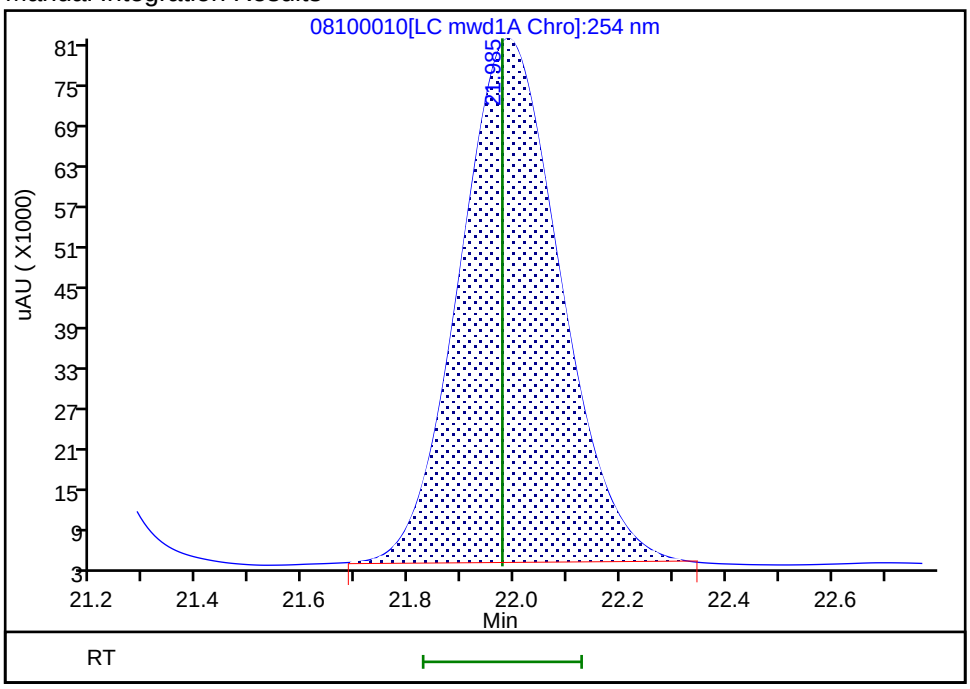
Processing Integration Results

RT: 21.99
Area: 1083310
Amount: 2.337258
Amount Units: ug/ml



Manual Integration Results

RT: 21.99
Area: 1027908
Amount: 2.469603
Amount Units: ug/ml



Reviewer: LV5D, 13-Aug-2024 15:11:03 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100011.D
Lims ID: IC INT 8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 10-Aug-2024 20:57:00 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 8
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub7

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 13-Aug-2024 15:40:38 Calib Date: 11-Aug-2024 06:16:04
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1604

First Level Reviewer: LV5D Date: 13-Aug-2024 15:11:33

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
5 HMX	1	6.309	6.324	-0.015	175376	1.00	0.9725	
7 2,4,6-Trinitrophenol	1	7.756	7.810	-0.054	146979	1.00	0.9808	a
8 RDX	1	8.436	8.437	-0.001	202487	1.00	0.9189	
9 Nitrobenzene	1	10.982	10.983	-0.001	369980	1.00	0.9815	
$ 10 1,2-Dinitrobenzene	1	11.802	11.797	0.005	256759	1.00	0.9782	
11 3,5-Dinitroaniline	1	13.476	13.470	0.006	429142	1.00	0.9840	
12 1,3-Dinitrobenzene	1	13.829	13.823	0.006	574265	1.00	0.9812	
13 Nitroglycerin	2	14.496	14.477	0.019	1234967	10.0	9.64	
14 o-Nitrotoluene	1	15.016	14.990	0.026	232656	1.00	0.9864	
16 p-Nitrotoluene	1	15.249	15.223	0.026	209764	1.00	0.99	
17 4-Amino-2,6-dinitrotoluene	1	15.589	15.557	0.032	273020	1.00	0.9800	
18 m-Nitrotoluene	1	16.076	16.043	0.033	255490	1.00	0.9894	
19 2-Amino-4,6-dinitrotoluene	1	16.336	16.310	0.026	378245	1.00	0.9713	
20 1,3,5-Trinitrobenzene	1	16.556	16.537	0.019	418932	1.00	0.9885	
21 2,6-Dinitrotoluene	1	17.689	17.657	0.032	270535	1.00	0.9503	
22 2,4-Dinitrotoluene	1	18.122	18.090	0.032	545089	1.00	0.9588	
23 Tetryl	1	21.136	21.097	0.039	286831	1.00	1.01	M
24 2,4,6-Trinitrotoluene	1	22.009	21.977	0.032	403353	1.00	0.9691	M
25 PETN	2	23.503	23.457	0.046	1337623	10.0	9.85	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

8330IntermStk_00082 Amount Added: 100.00 Units: uL

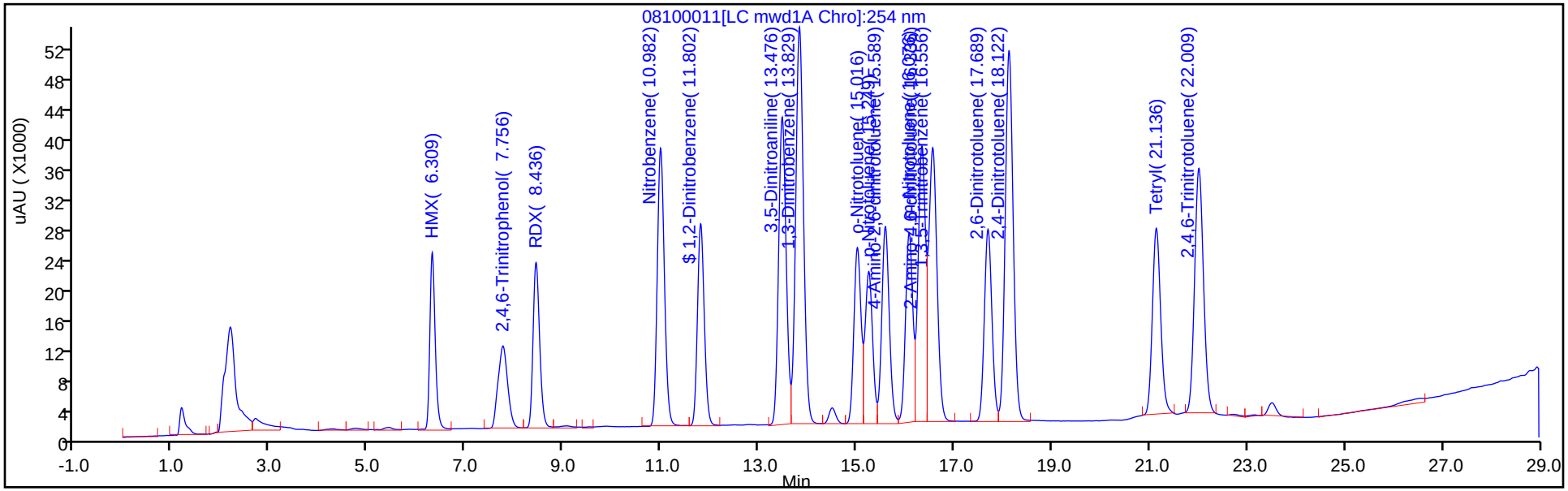
Report Date: 13-Aug-2024 15:40:39 Chrom Revision: 2.3 16-Jul-2024 14:17:34

Eurofins Denver

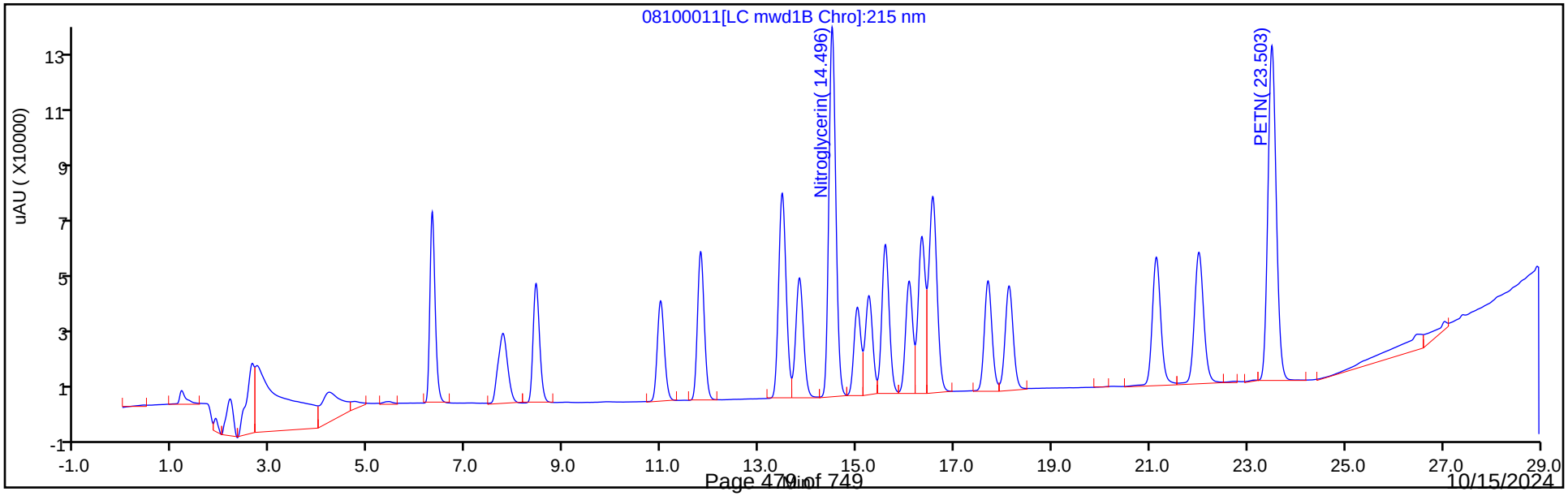
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100011.D

Injection Date:	10-Aug-2024 20:57:00	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC INT 8			Worklist Smp#:	11
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



10/15/2024
4:48:23 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

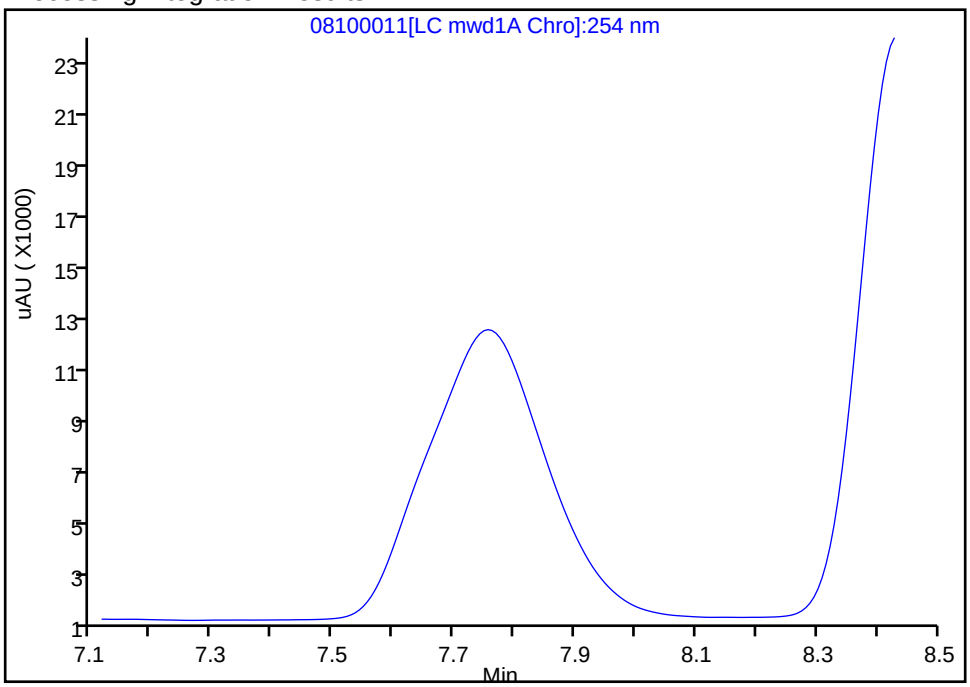
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100011.D				
Injection Date:	10-Aug-2024 20:57:00	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 8				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

7 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

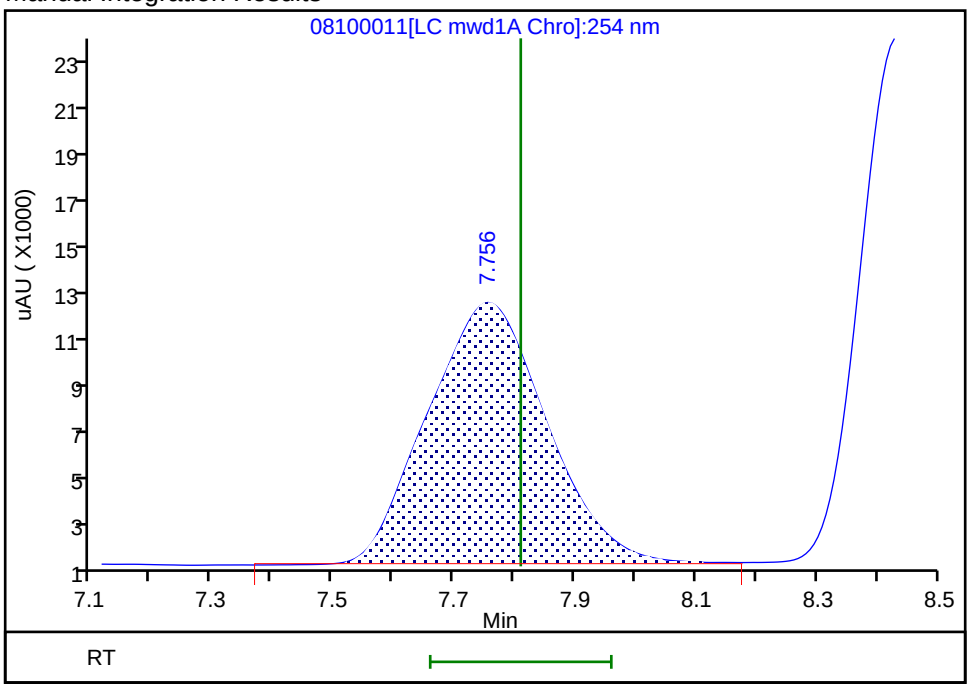
Not Detected
Expected RT: 7.81

Processing Integration Results



Manual Integration Results

RT: 7.76
Area: 146979
Amount: 0.980779
Amount Units: ug/ml



Reviewer: LV5D, 13-Aug-2024 15:11:18 -06:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

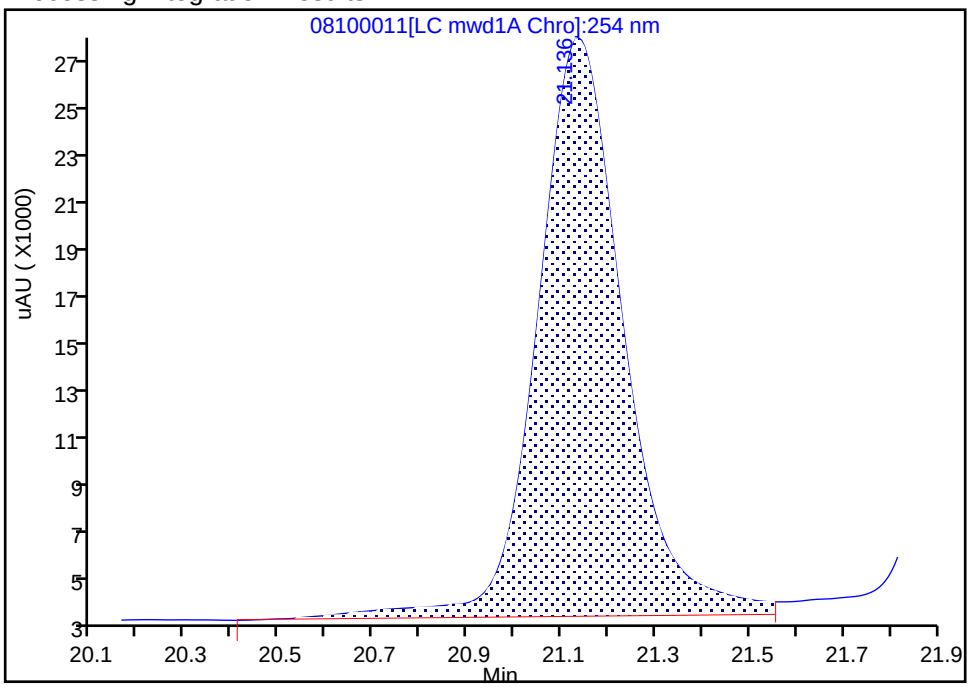
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100011.D				
Injection Date:	10-Aug-2024 20:57:00	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 8				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

23 Tetryl, CAS: 479-45-8

Signal: 1

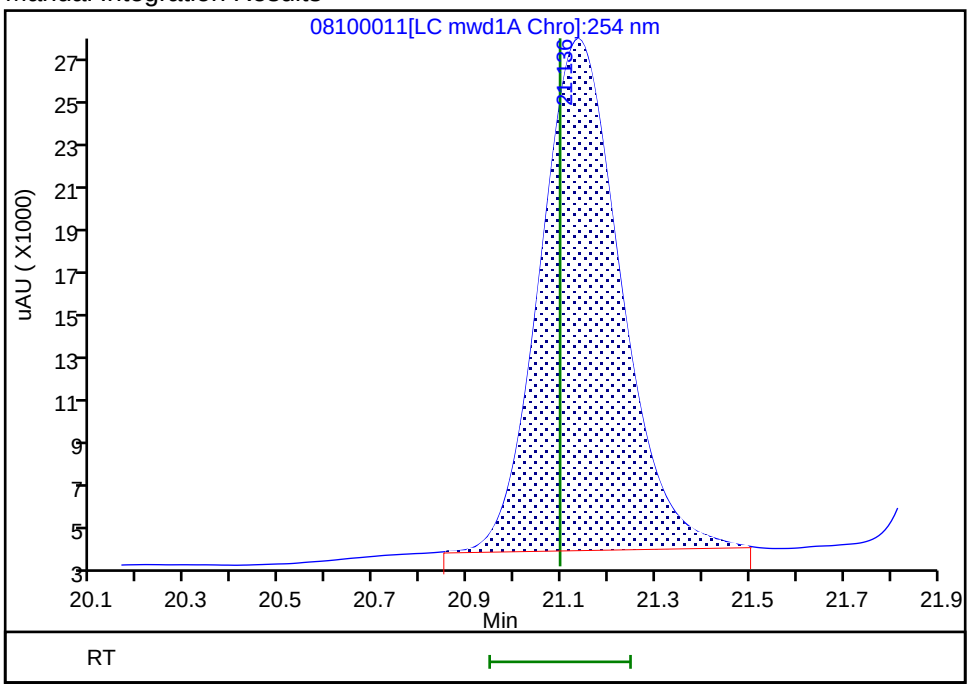
Processing Integration Results

RT: 21.14
Area: 316106
Amount: 0.999552
Amount Units: ug/ml



Manual Integration Results

RT: 21.14
Area: 286831
Amount: 1.012330
Amount Units: ug/ml



Reviewer: LV5D, 13-Aug-2024 15:16:56 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

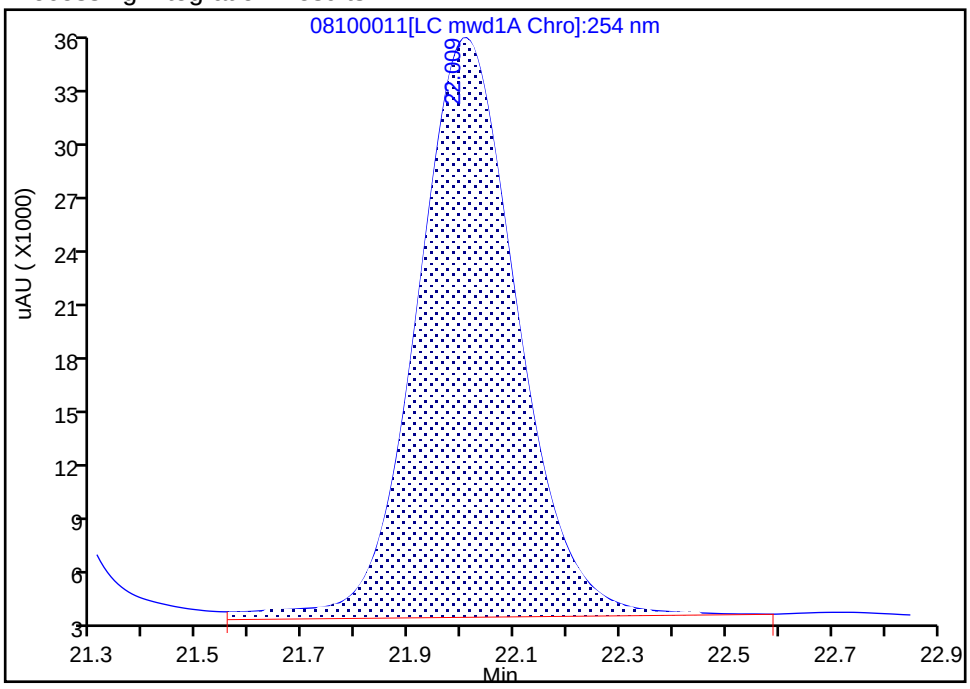
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100011.D				
Injection Date:	10-Aug-2024 20:57:00	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 8				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

24 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

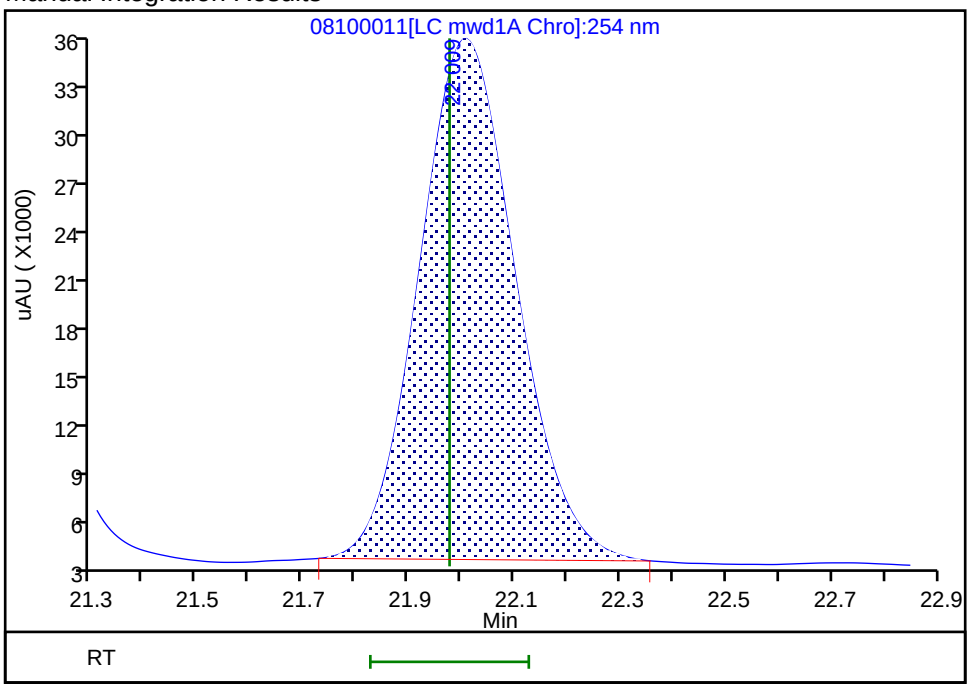
Processing Integration Results

RT: 22.01
Area: 428577
Amount: 0.902485
Amount Units: ug/ml



Manual Integration Results

RT: 22.01
Area: 403353
Amount: 0.969077
Amount Units: ug/ml



Reviewer: LV5D, 13-Aug-2024 15:11:31 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100012.D
Lims ID: IC INT 7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 10-Aug-2024 21:31:57 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 7
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub7

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 13-Aug-2024 15:40:39 Calib Date: 11-Aug-2024 06:16:04
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1604

First Level Reviewer: LV5D Date: 13-Aug-2024 15:11:47

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
5 HMX	1	6.325	6.324	0.001	122999	0.7000	0.6820	
7 2,4,6-Trinitrophenol	1	7.785	7.810	-0.025	102542	0.7000	0.6843	a
8 RDX	1	8.445	8.437	0.008	141434	0.7000	0.6418	
9 Nitrobenzene	1	10.999	10.983	0.016	260064	0.7000	0.6899	
$ 10 1,2-Dinitrobenzene	1	11.819	11.797	0.022	180233	0.7000	0.6866	
11 3,5-Dinitroaniline	1	13.492	13.470	0.022	299884	0.7000	0.6875	
12 1,3-Dinitrobenzene	1	13.845	13.823	0.022	401028	0.7000	0.6852	
13 Nitroglycerin	2	14.512	14.477	0.035	864867	7.00	6.75	
14 o-Nitrotoluene	1	15.025	14.990	0.035	163156	0.7000	0.6917	
16 p-Nitrotoluene	1	15.259	15.223	0.036	146901	0.7000	0.6940	
17 4-Amino-2,6-dinitrotoluene	1	15.592	15.557	0.035	190219	0.7000	0.6828	
18 m-Nitrotoluene	1	16.079	16.043	0.036	177096	0.7000	0.6858	
19 2-Amino-4,6-dinitrotoluene	1	16.339	16.310	0.029	269908	0.7000	0.6931	
20 1,3,5-Trinitrobenzene	1	16.559	16.537	0.022	287991	0.7000	0.6796	
21 2,6-Dinitrotoluene	1	17.685	17.657	0.028	188559	0.7000	0.6624	
22 2,4-Dinitrotoluene	1	18.119	18.090	0.029	380534	0.7000	0.6694	
23 Tetryl	1	21.125	21.097	0.028	199110	0.7000	0.7027	M
24 2,4,6-Trinitrotoluene	1	22.012	21.977	0.035	282341	0.7000	0.6783	M
25 PETN	2	23.505	23.457	0.048	935188	7.00	6.89	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

8330IntermStk_00082 Amount Added: 70.00 Units: uL

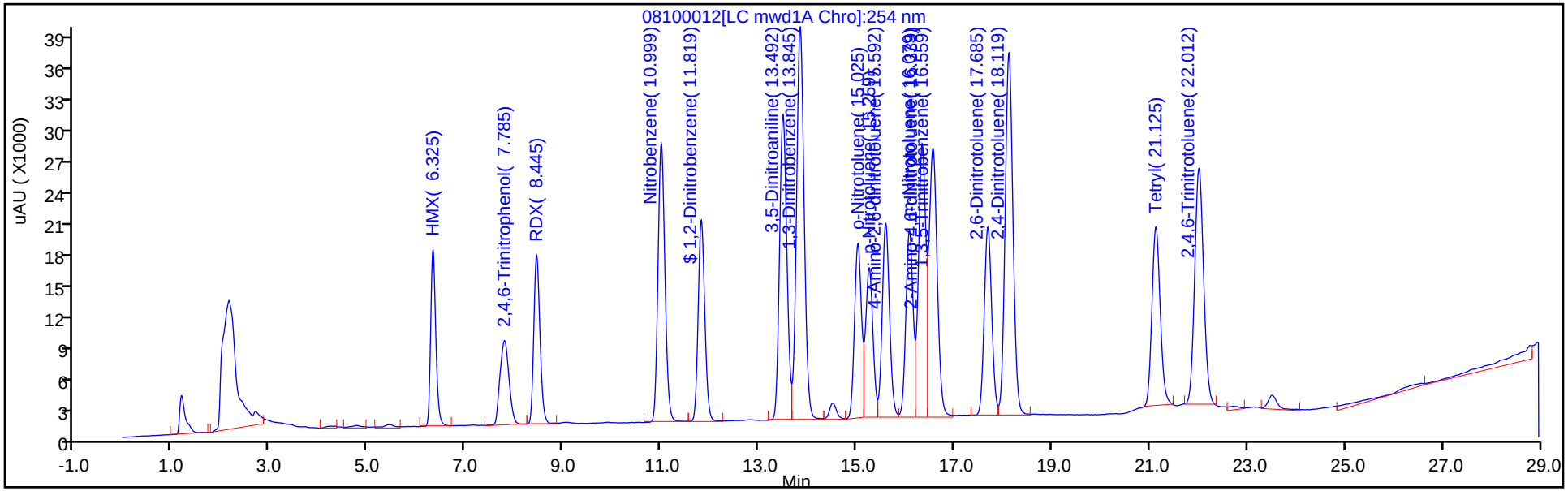
Report Date: 13-Aug-2024 15:40:39 Chrom Revision: 2.3 16-Jul-2024 14:17:34

Eurofins Denver

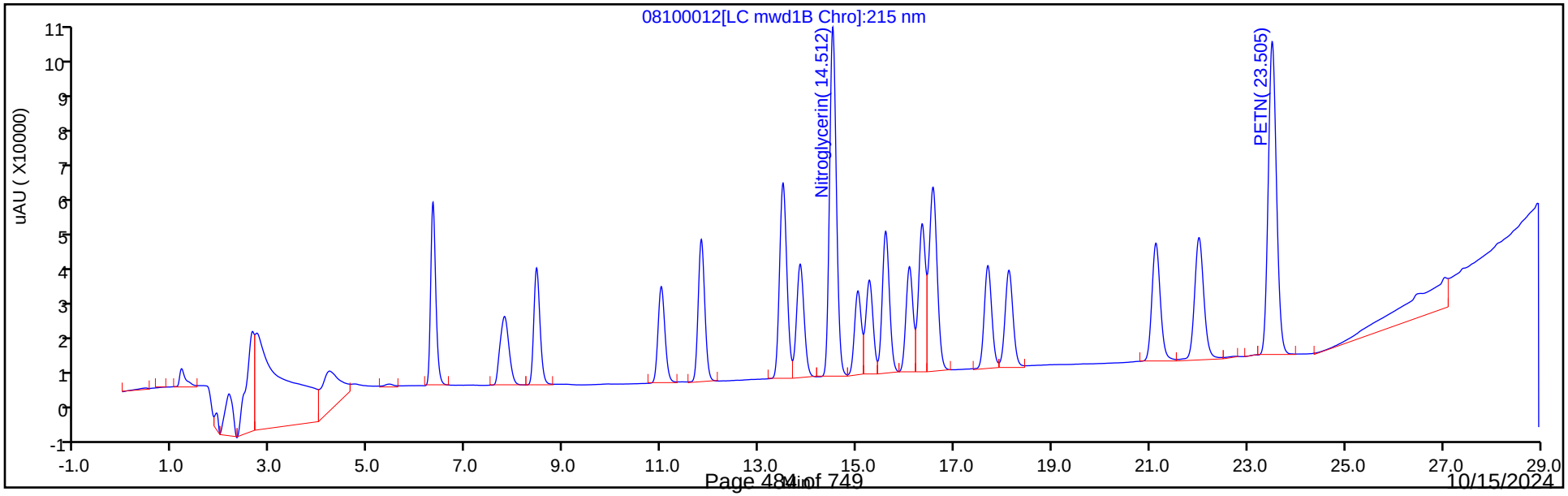
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100012.D

Injection Date:	10-Aug-2024 21:31:57	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC INT 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: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



10/15/2024
4:48:23 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

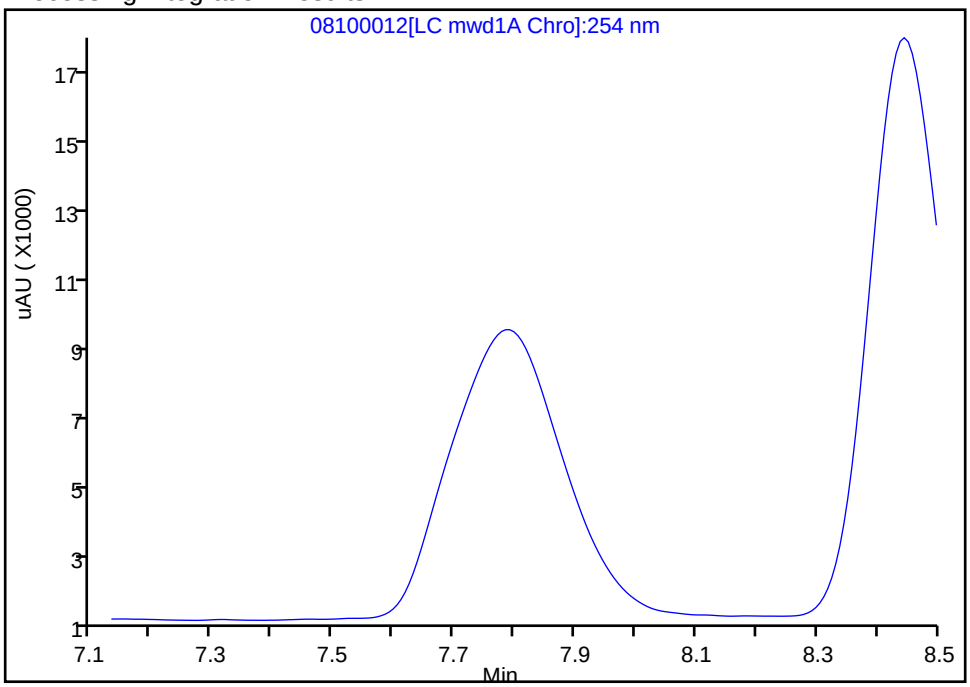
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100012.D				
Injection Date:	10-Aug-2024 21:31:57	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 7				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

7 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

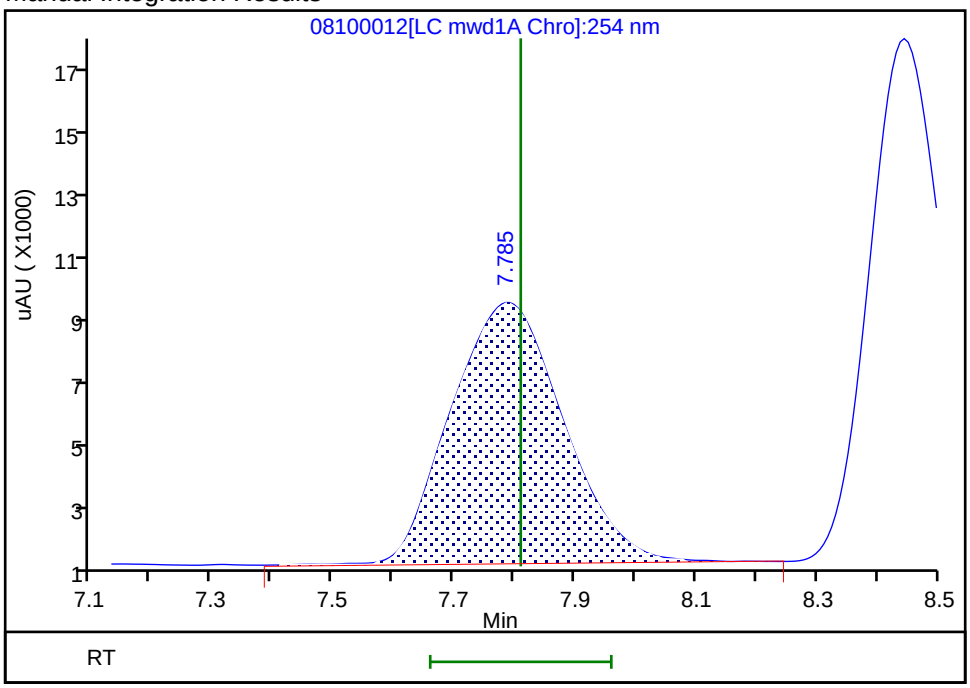
Not Detected
Expected RT: 7.81

Processing Integration Results



Manual Integration Results

RT: 7.79
Area: 102542
Amount: 0.684255
Amount Units: ug/ml



Reviewer: LV5D, 13-Aug-2024 15:11:46 -06:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

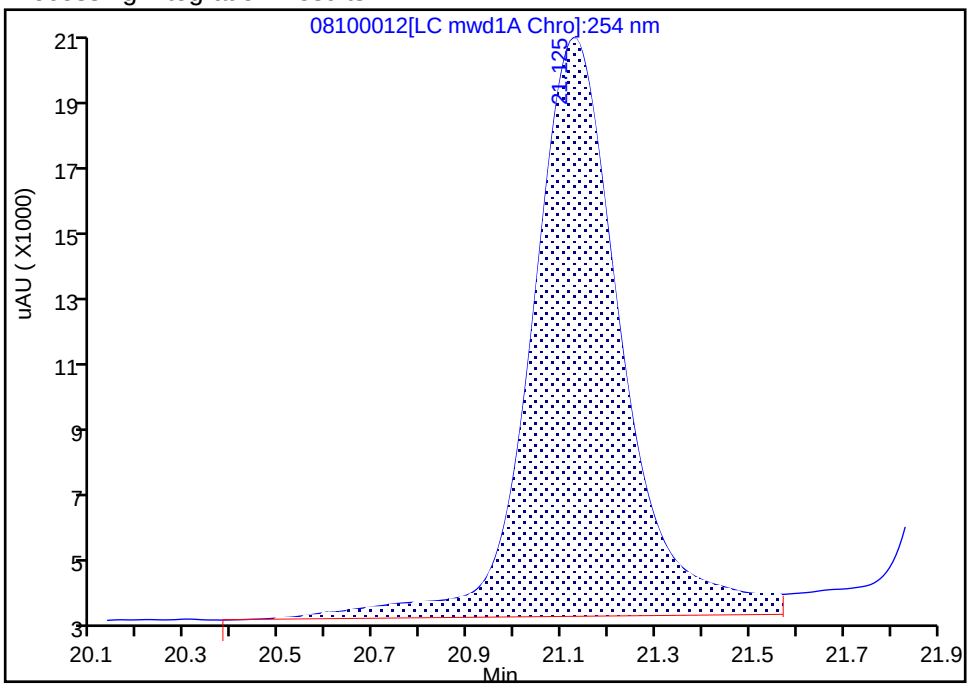
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100012.D				
Injection Date:	10-Aug-2024 21:31:57	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 7				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

23 Tetryl, CAS: 479-45-8

Signal: 1

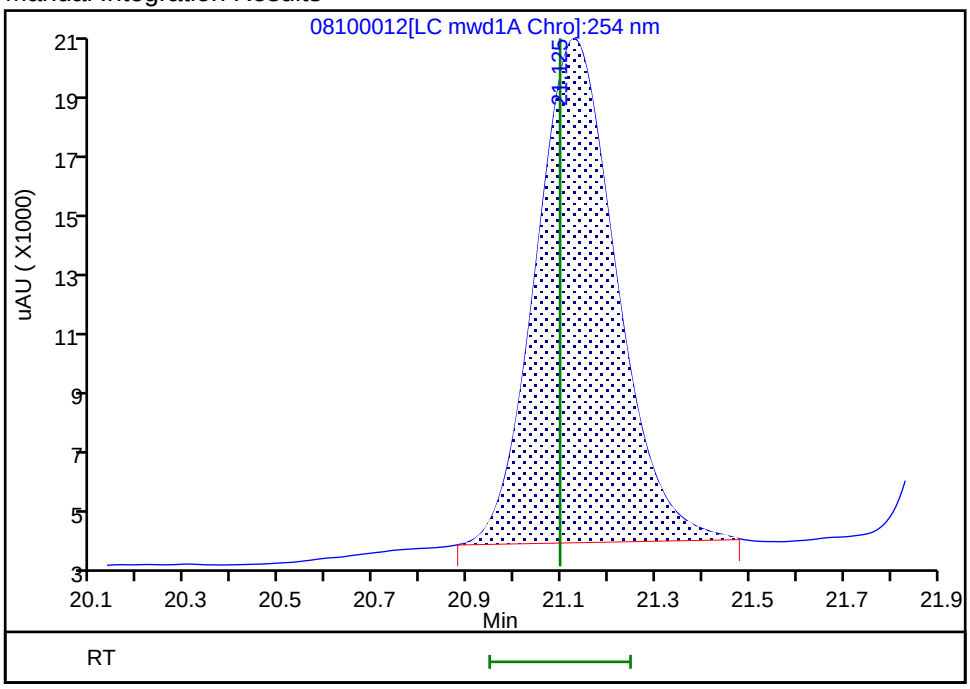
Processing Integration Results

RT: 21.13
Area: 234580
Amount: 0.728938
Amount Units: ug/ml



Manual Integration Results

RT: 21.13
Area: 199110
Amount: 0.702731
Amount Units: ug/ml



Reviewer: LV5D, 13-Aug-2024 15:11:39 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

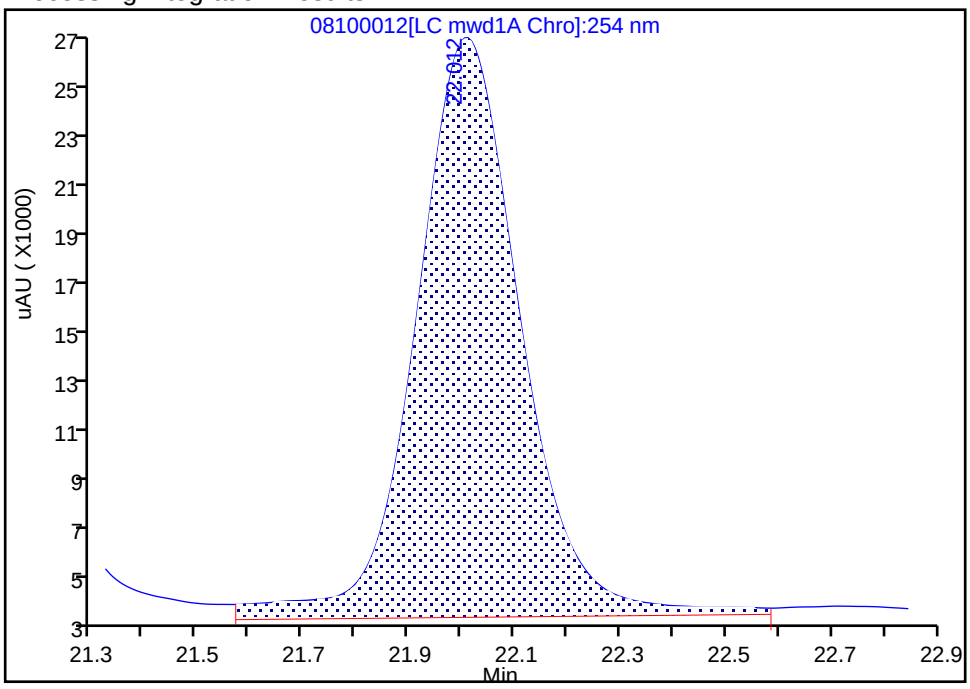
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100012.D				
Injection Date:	10-Aug-2024 21:31:57	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 7				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

24 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

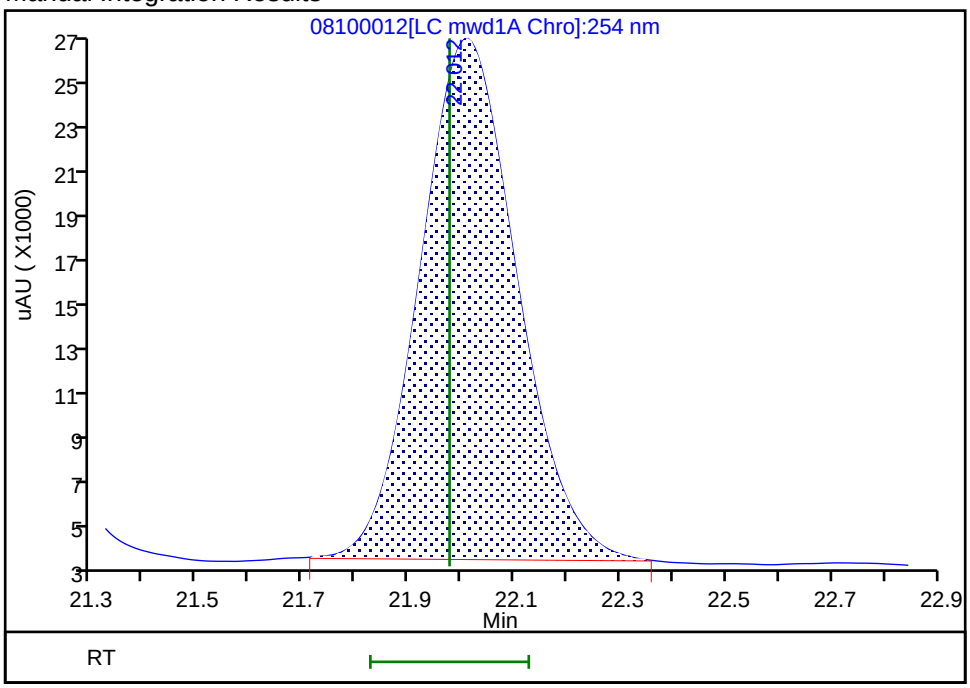
Processing Integration Results

RT: 22.01
Area: 317355
Amount: 0.661382
Amount Units: ug/ml



Manual Integration Results

RT: 22.01
Area: 282341
Amount: 0.678339
Amount Units: ug/ml



Reviewer: LV5D, 13-Aug-2024 15:11:37 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100013.D
Lims ID: IC INT 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 10-Aug-2024 22:06:53 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 6
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub7

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 13-Aug-2024 15:40:40 Calib Date: 11-Aug-2024 06:16:04
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1604

First Level Reviewer: LV5D Date: 13-Aug-2024 15:12:08

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
5 HMX	1	6.334	6.324	0.010	71733	0.4000	0.3978	
7 2,4,6-Trinitrophenol	1	7.827	7.810	0.017	59211	0.4000	0.3951	a
8 RDX	1	8.467	8.437	0.030	82649	0.4000	0.3751	
9 Nitrobenzene	1	11.020	10.983	0.037	150269	0.4000	0.3987	
$ 10 1,2-Dinitrobenzene	1	11.840	11.797	0.043	104490	0.4000	0.3981	
11 3,5-Dinitroaniline	1	13.520	13.470	0.050	174587	0.4000	0.4001	
12 1,3-Dinitrobenzene	1	13.874	13.823	0.051	233512	0.4000	0.3990	
13 Nitroglycerin	2	14.540	14.477	0.063	510574	4.00	3.98	
14 o-Nitrotoluene	1	15.054	14.990	0.064	94438	0.4000	0.4004	
16 p-Nitrotoluene	1	15.287	15.223	0.064	85068	0.4000	0.4019	
17 4-Amino-2,6-dinitrotoluene	1	15.627	15.557	0.070	111348	0.4000	0.3997	
18 m-Nitrotoluene	1	16.114	16.043	0.071	103187	0.4000	0.3996	
19 2-Amino-4,6-dinitrotoluene	1	16.374	16.310	0.064	157134	0.4000	0.4035	
20 1,3,5-Trinitrobenzene	1	16.600	16.537	0.063	168114	0.4000	0.3967	
21 2,6-Dinitrotoluene	1	17.727	17.657	0.070	110288	0.4000	0.3874	
22 2,4-Dinitrotoluene	1	18.160	18.090	0.070	222196	0.4000	0.3908	
23 Tetryl	1	21.174	21.097	0.077	116189	0.4000	0.4101	M
24 2,4,6-Trinitrotoluene	1	22.047	21.977	0.070	164300	0.4000	0.3947	M
25 PETN	2	23.534	23.457	0.077	543090	4.00	4.00	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

8330IntermStk_00082 Amount Added: 40.00 Units: uL

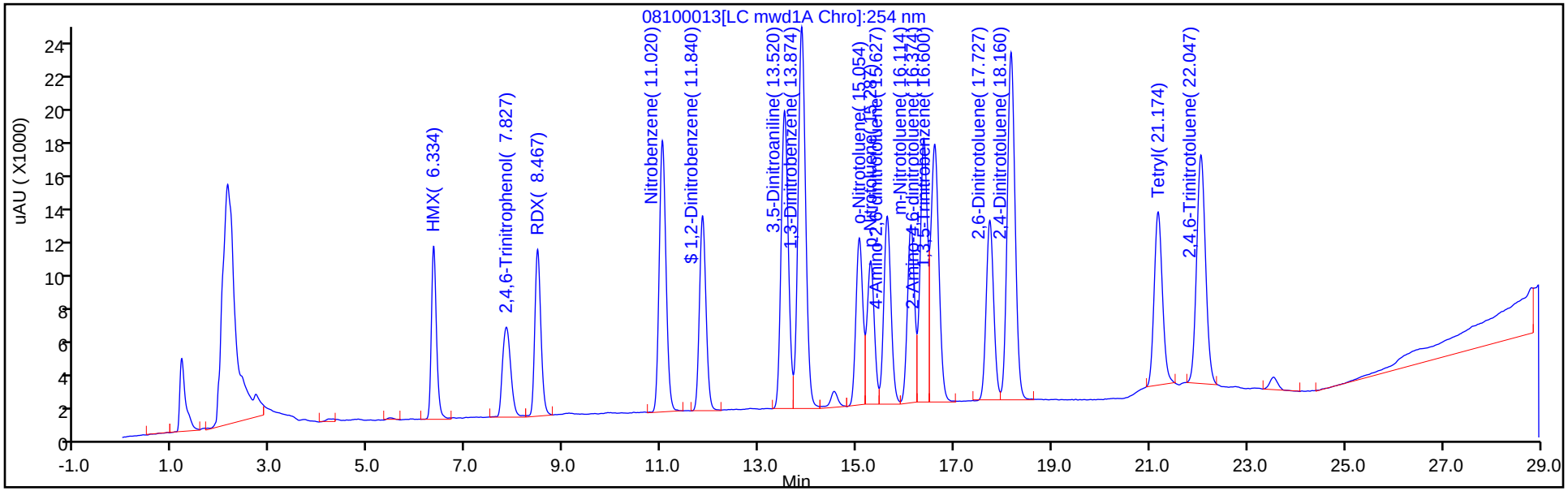
Report Date: 13-Aug-2024 15:40:40 Chrom Revision: 2.3 16-Jul-2024 14:17:34

Eurofins Denver

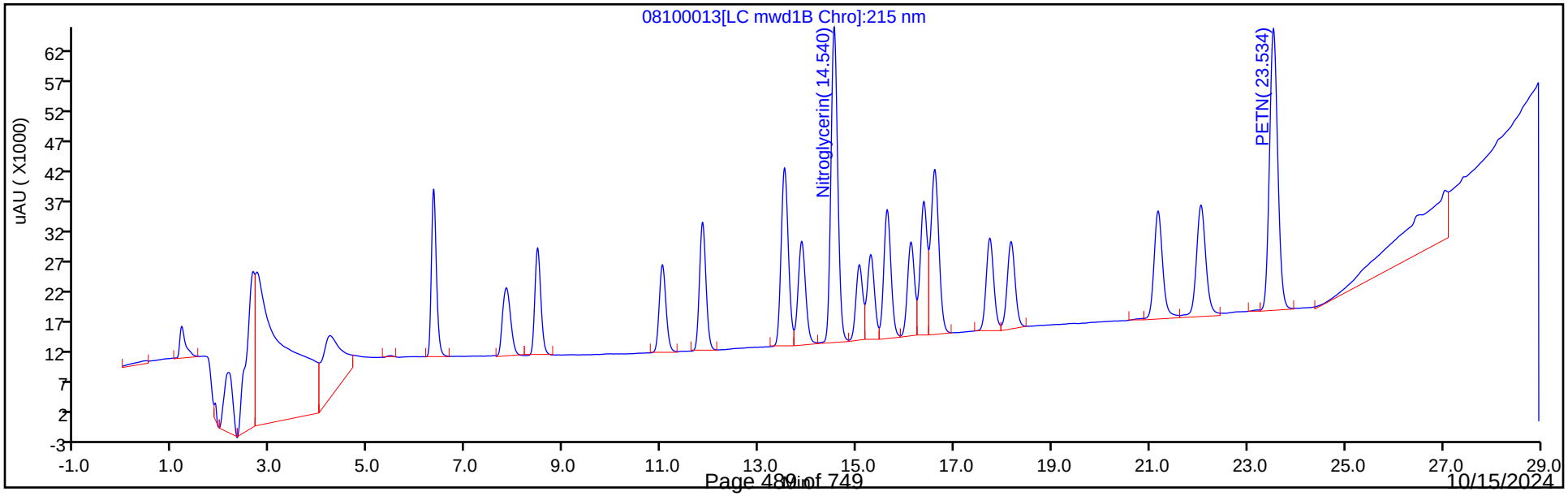
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100013.D

Injection Date:	10-Aug-2024 22:06:53	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC INT 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: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



10/15/2024
4:48:23 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

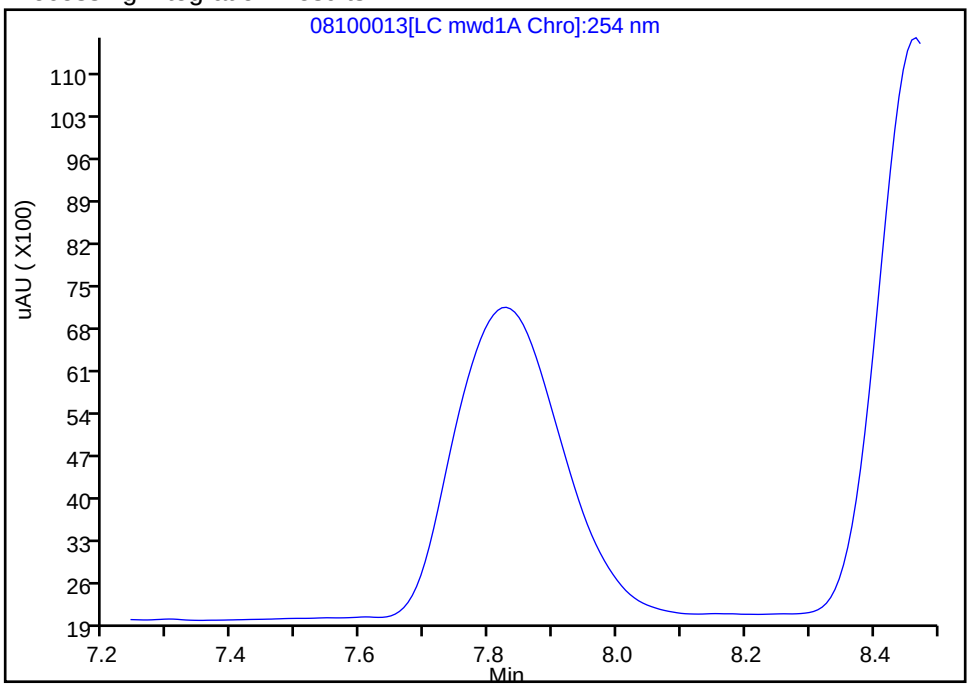
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100013.D				
Injection Date:	10-Aug-2024 22:06:53	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 6				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

7 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

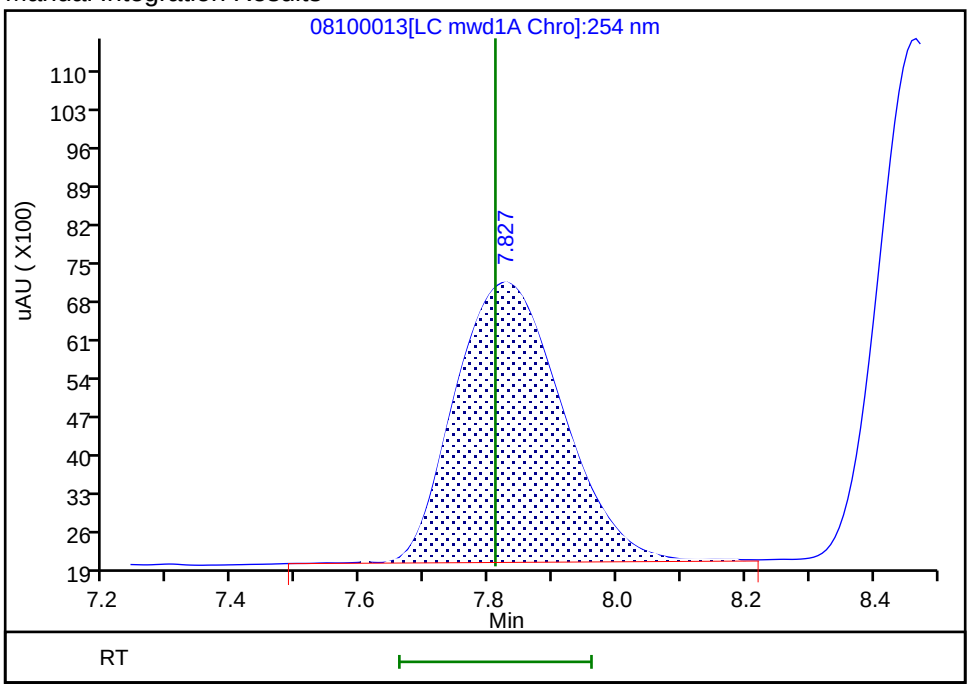
Not Detected
Expected RT: 7.81

Processing Integration Results



Manual Integration Results

RT: 7.83
Area: 59211
Amount: 0.395110
Amount Units: ug/ml



Reviewer: LV5D, 13-Aug-2024 15:11:52 -06:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

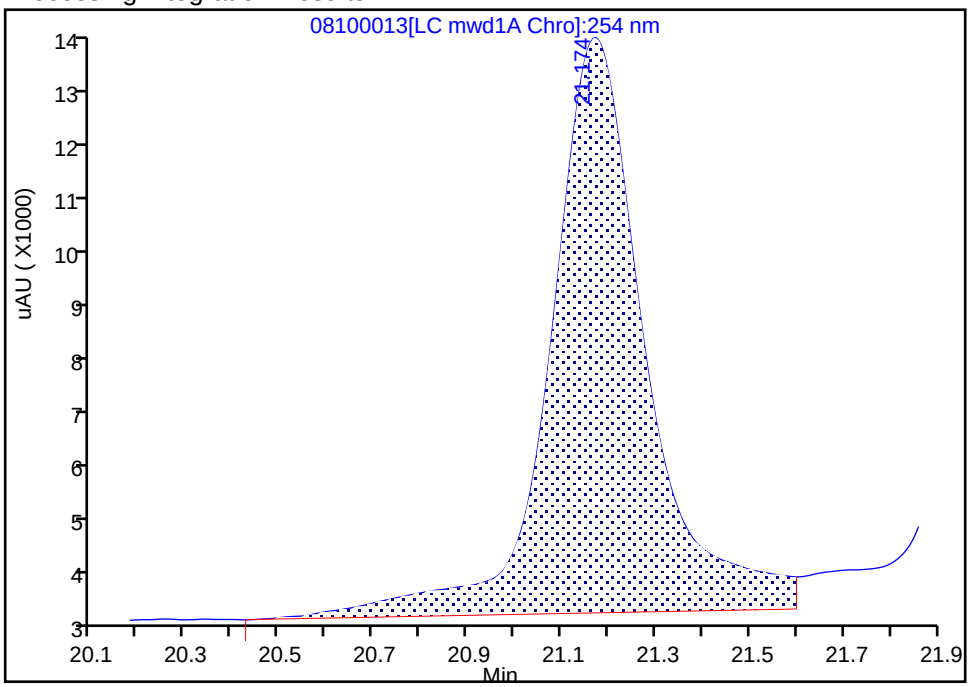
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100013.D
Injection Date: 10-Aug-2024 22:06:53 Instrument ID: CHHPLC_X5
Lims ID: IC INT 6
Client ID:
Operator ID: JZ ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC mwd1A, 254 nm

23 Tetryl, CAS: 479-45-8

Signal: 1

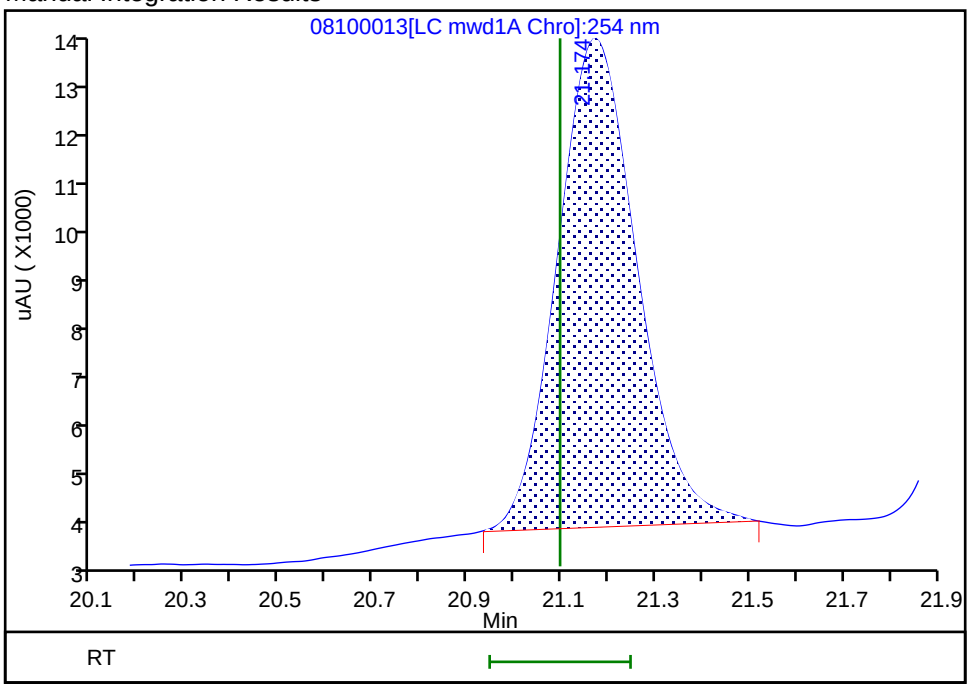
Processing Integration Results

RT: 21.17
Area: 149013
Amount: 0.434317
Amount Units: ug/ml



Manual Integration Results

RT: 21.17
Area: 116189
Amount: 0.410073
Amount Units: ug/ml



Reviewer: LV5D, 13-Aug-2024 15:12:03 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

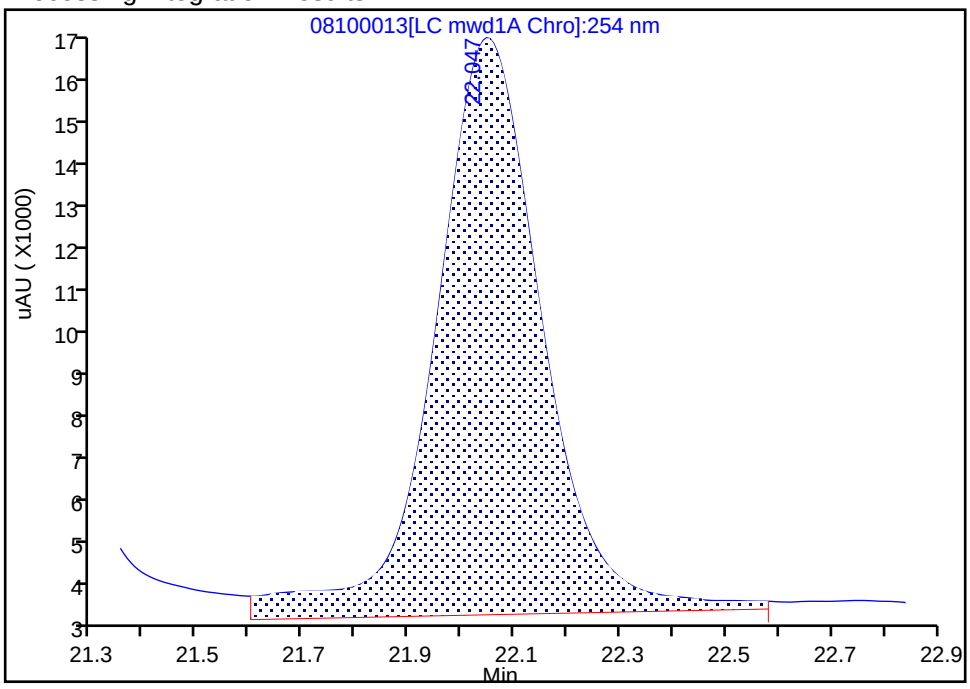
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100013.D				
Injection Date:	10-Aug-2024 22:06:53	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 6				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

24 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

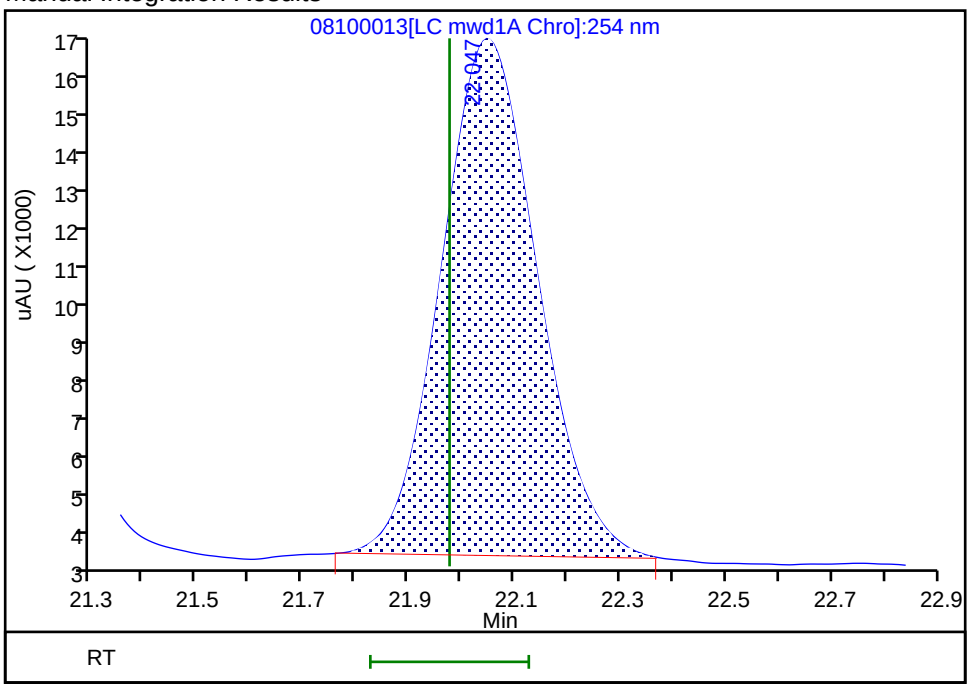
Processing Integration Results

RT: 22.05
Area: 193878
Amount: 0.391557
Amount Units: ug/ml



Manual Integration Results

RT: 22.05
Area: 164300
Amount: 0.394739
Amount Units: ug/ml



Reviewer: LV5D, 13-Aug-2024 15:12:06 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100014.D
Lims ID: IC INT 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 10-Aug-2024 22:41:52 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 5
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub7

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 13-Aug-2024 15:40:41 Calib Date: 11-Aug-2024 06:16:04
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1604

First Level Reviewer: LV5D Date: 13-Aug-2024 15:12:24

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
5 HMX	1	6.324	6.324	0.000	46973	0.2500	0.2605	
7 2,4,6-Trinitrophenol	1	7.810	7.810	0.000	38121	0.2500	0.2544	a
8 RDX	1	8.437	8.437	0.000	53547	0.2500	0.2430	
9 Nitrobenzene	1	10.983	10.983	0.000	96842	0.2500	0.2569	
$ 10 1,2-Dinitrobenzene	1	11.797	11.797	0.000	68837	0.2500	0.2622	
11 3,5-Dinitroaniline	1	13.470	13.470	0.000	113048	0.2500	0.2589	
12 1,3-Dinitrobenzene	1	13.823	13.823	0.000	150469	0.2500	0.2571	
13 Nitroglycerin	2	14.477	14.477	0.000	331233	2.50	2.58	
14 o-Nitrotoluene	1	14.990	14.990	0.000	59944	0.2500	0.2541	
16 p-Nitrotoluene	1	15.223	15.223	0.000	54841	0.2500	0.2591	
17 4-Amino-2,6-dinitrotoluene	1	15.557	15.557	0.000	71808	0.2500	0.2578	
18 m-Nitrotoluene	1	16.043	16.043	0.000	66388	0.2500	0.2571	
19 2-Amino-4,6-dinitrotoluene	1	16.310	16.310	0.000	101067	0.2500	0.2595	
20 1,3,5-Trinitrobenzene	1	16.537	16.537	0.000	107982	0.2500	0.2548	
21 2,6-Dinitrotoluene	1	17.657	17.657	0.000	71960	0.2500	0.2528	
22 2,4-Dinitrotoluene	1	18.090	18.090	0.000	143677	0.2500	0.2527	
23 Tetryl	1	21.097	21.097	0.000	75422	0.2500	0.2662	M
24 2,4,6-Trinitrotoluene	1	21.977	21.977	0.000	105934	0.2500	0.2545	M
25 PETN	2	23.457	23.457	0.000	352162	2.50	2.59	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

8330IntermStk_00082 Amount Added: 25.00 Units: uL

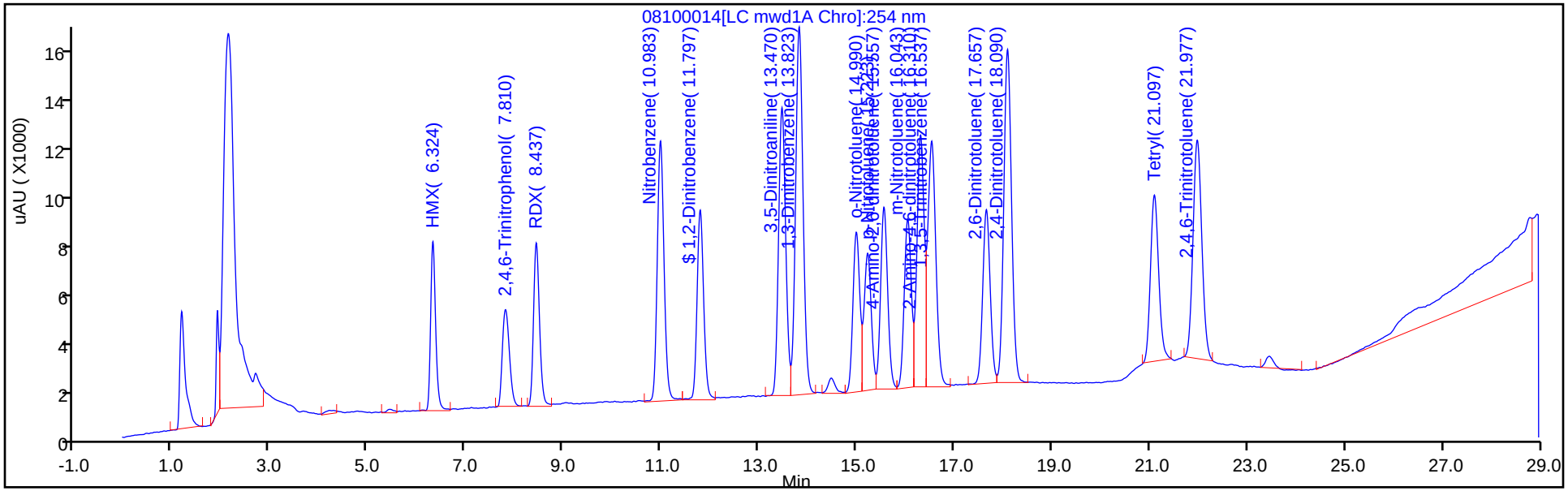
Report Date: 13-Aug-2024 15:40:41 Chrom Revision: 2.3 16-Jul-2024 14:17:34

Eurofins Denver

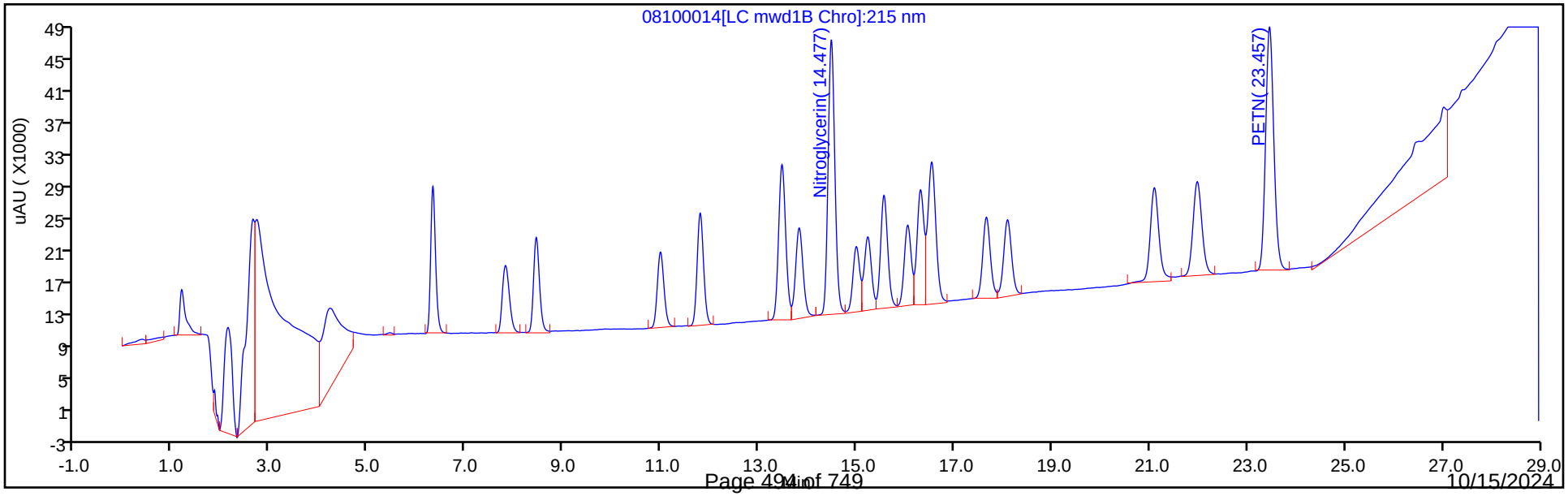
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100014.D

Injection Date:	10-Aug-2024 22:41:52	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC INT 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: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



10/15/2024
4:48:23 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

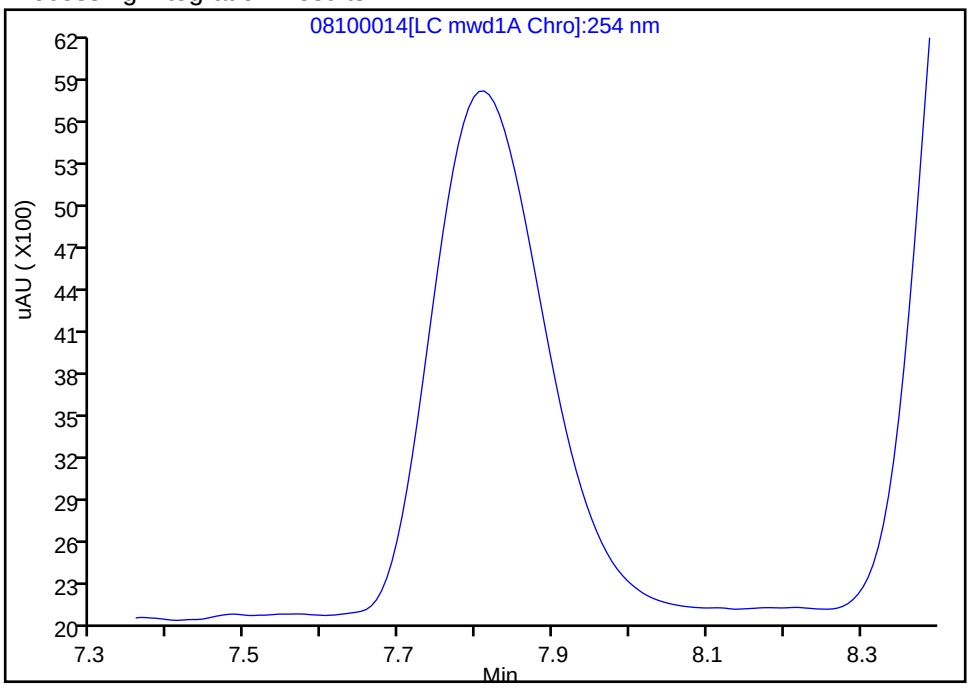
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100014.D				
Injection Date:	10-Aug-2024 22:41:52	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 5				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

7 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

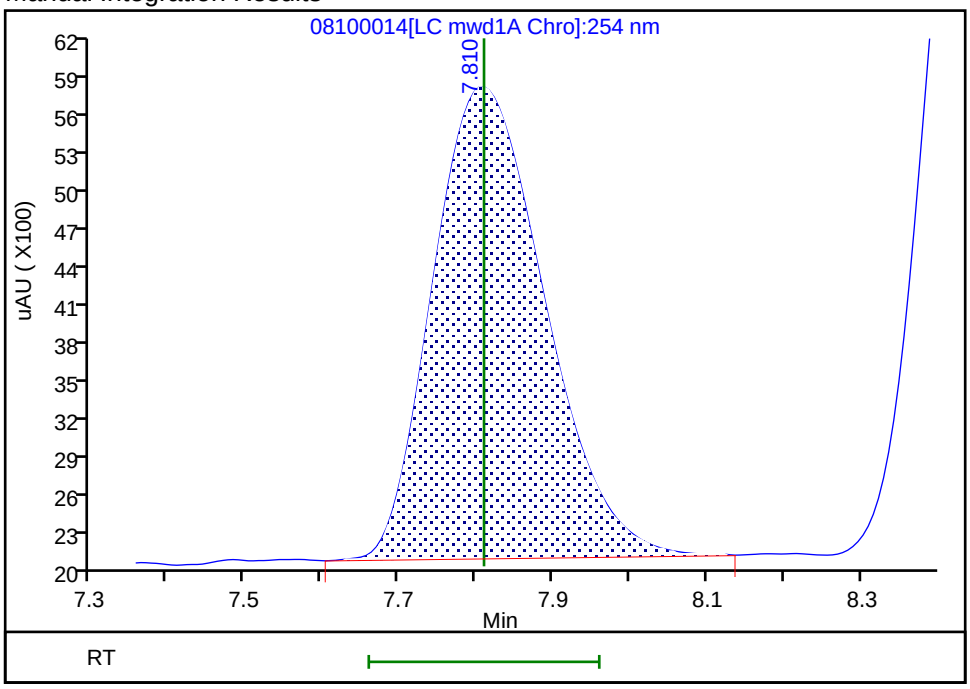
Not Detected
Expected RT: 7.81

Processing Integration Results



Manual Integration Results

RT: 7.81
Area: 38121
Amount: 0.254378
Amount Units: ug/ml



Reviewer: LV5D, 13-Aug-2024 15:12:23 -06:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

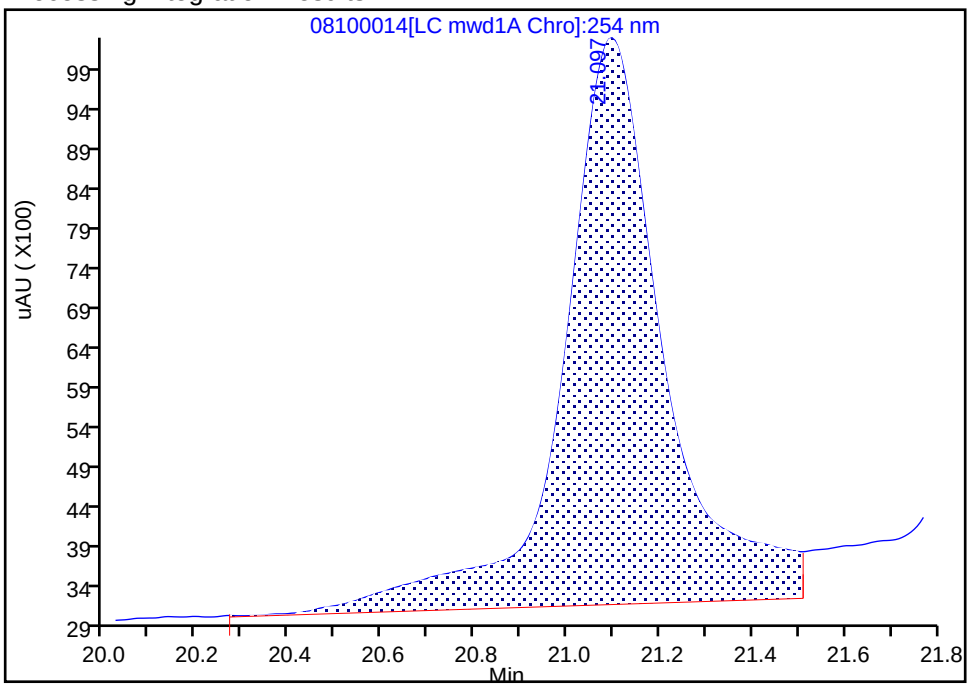
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100014.D				
Injection Date:	10-Aug-2024 22:41:52	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 5				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

23 Tetryl, CAS: 479-45-8

Signal: 1

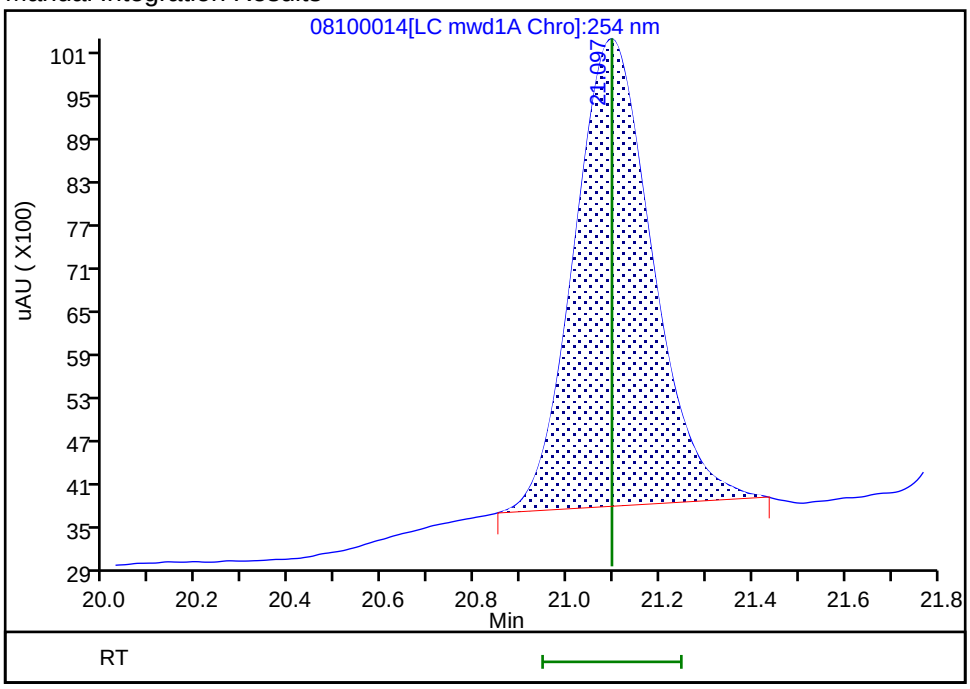
Processing Integration Results

RT: 21.10
Area: 107445
Amount: 0.289154
Amount Units: ug/ml



Manual Integration Results

RT: 21.10
Area: 75422
Amount: 0.266191
Amount Units: ug/ml



Reviewer: LV5D, 13-Aug-2024 15:12:15 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

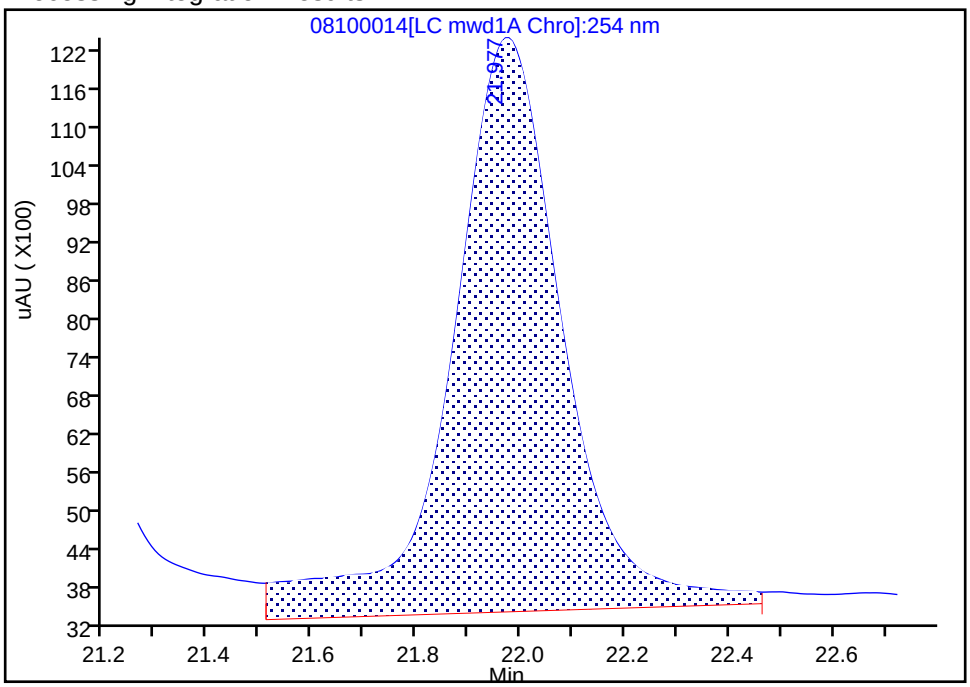
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100014.D				
Injection Date:	10-Aug-2024 22:41:52	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 5				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

24 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

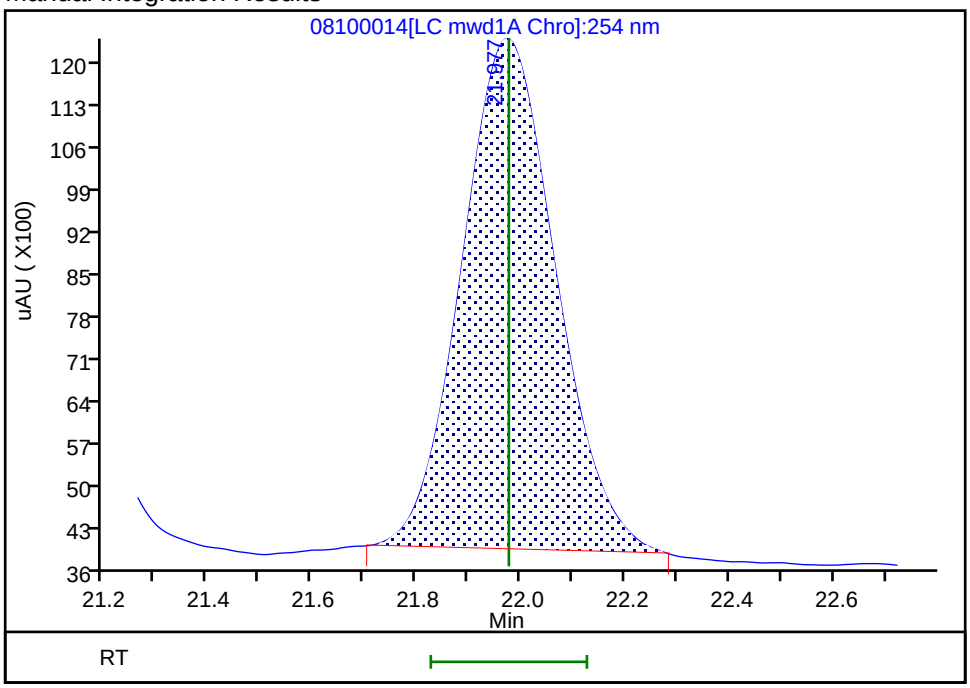
Processing Integration Results

RT: 21.98
Area: 134446
Amount: 0.262596
Amount Units: ug/ml



Manual Integration Results

RT: 21.98
Area: 105934
Amount: 0.254512
Amount Units: ug/ml



Reviewer: LV5D, 13-Aug-2024 15:12:13 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100015.D
Lims ID: IC INT 4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 10-Aug-2024 23:16:47 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 4
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub7

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 13-Aug-2024 15:40:41 Calib Date: 11-Aug-2024 06:16:04
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1604

First Level Reviewer: LV5D Date: 13-Aug-2024 15:12:40

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
5 HMX	1	6.327	6.324	0.003	17888	0.1000	0.0992	
7 2,4,6-Trinitrophenol	1	7.861	7.810	0.051	15103	0.1000	0.1008	a
8 RDX	1	8.461	8.437	0.024	21335	0.1000	0.0968	
9 Nitrobenzene	1	11.014	10.983	0.031	37856	0.1000	0.1004	
$ 10 1,2-Dinitrobenzene	1	11.834	11.797	0.037	26738	0.1000	0.1019	
11 3,5-Dinitroaniline	1	13.514	13.470	0.044	43566	0.1000	0.0995	
12 1,3-Dinitrobenzene	1	13.861	13.823	0.038	57831	0.1000	0.0988	
13 Nitroglycerin	2	14.527	14.477	0.050	127672	1.00	1.00	
14 o-Nitrotoluene	1	15.041	14.990	0.051	23499	0.1000	0.0996	
16 p-Nitrotoluene	1	15.274	15.223	0.051	20994	0.1000	0.0992	
17 4-Amino-2,6-dinitrotoluene	1	15.614	15.557	0.057	27825	0.1000	0.0999	
18 m-Nitrotoluene	1	16.094	16.043	0.051	25999	0.1000	0.1007	
19 2-Amino-4,6-dinitrotoluene	1	16.361	16.310	0.051	38652	0.1000	0.0993	
20 1,3,5-Trinitrobenzene	1	16.574	16.537	0.037	42742	0.1000	0.1009	
21 2,6-Dinitrotoluene	1	17.707	17.657	0.050	27962	0.1000	0.0982	
22 2,4-Dinitrotoluene	1	18.141	18.090	0.051	55487	0.1000	0.0976	
23 Tetryl	1	21.154	21.097	0.057	29297	0.1000	0.1034	M
24 2,4,6-Trinitrotoluene	1	22.027	21.977	0.050	42305	0.1000	0.1016	M
25 PETN	2	23.521	23.457	0.064	135423	1.00	1.00	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

8330IntermStk_00082 Amount Added: 10.00 Units: uL

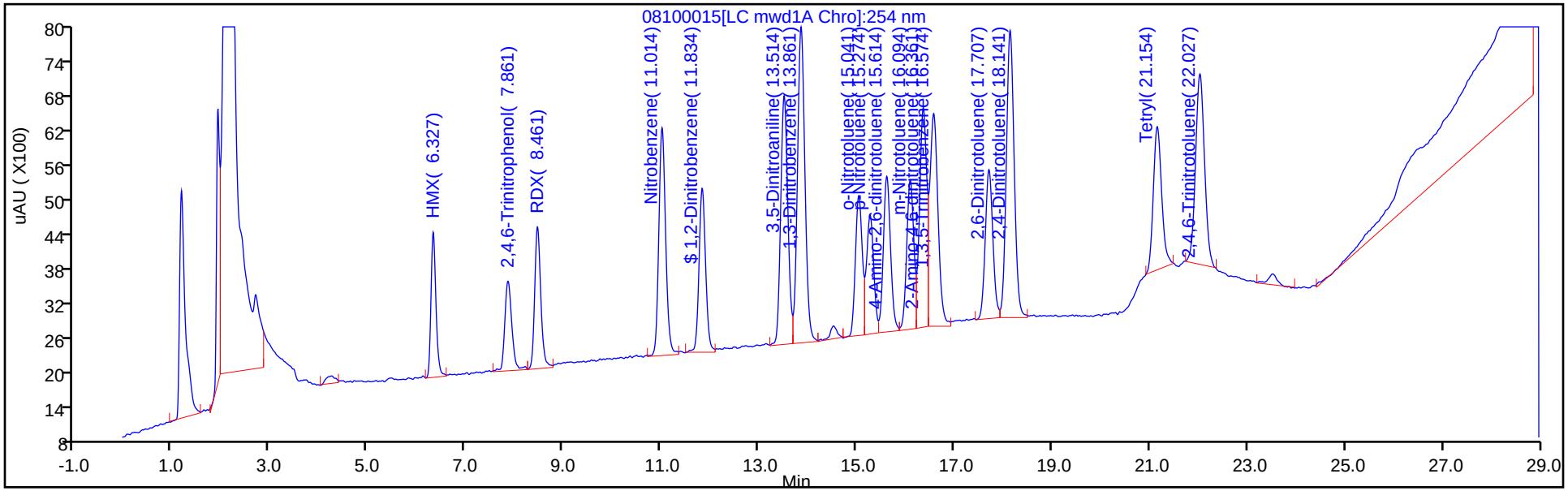
Report Date: 13-Aug-2024 15:40:42 Chrom Revision: 2.3 16-Jul-2024 14:17:34

Eurofins Denver

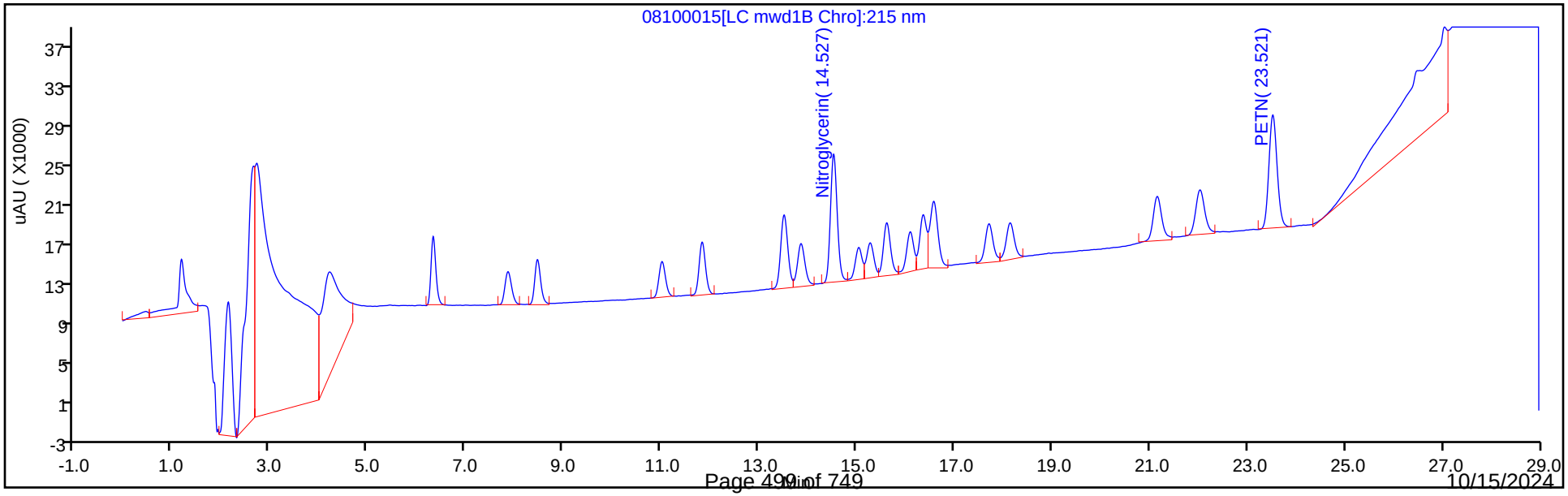
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100015.D

Injection Date:	10-Aug-2024 23:16:47	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC INT 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: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



10/15/2024
4:48:23 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

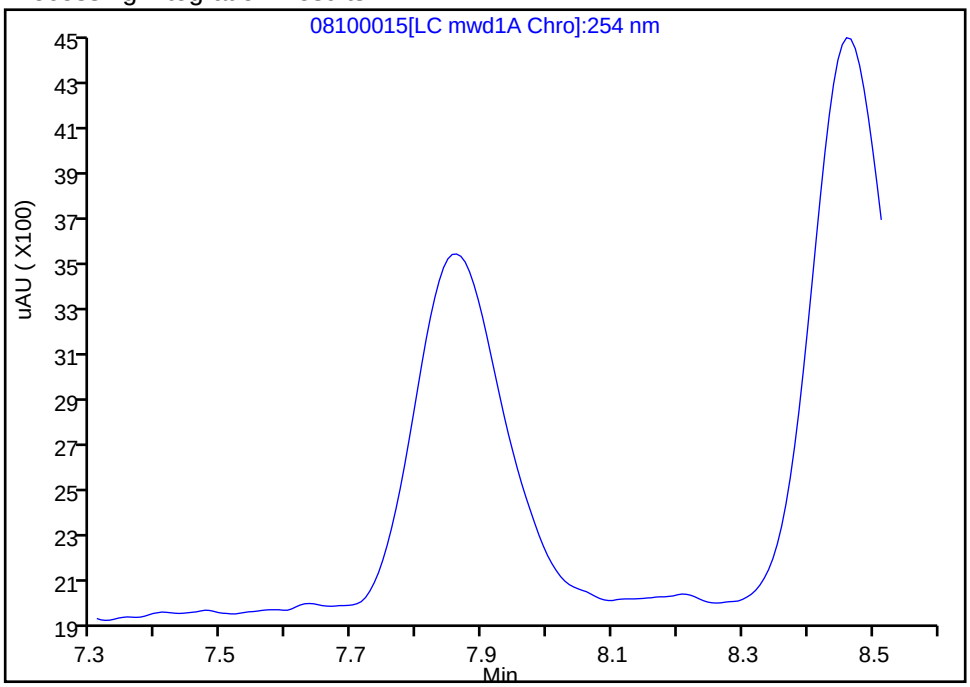
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100015.D				
Injection Date:	10-Aug-2024 23:16:47	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 4				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

7 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

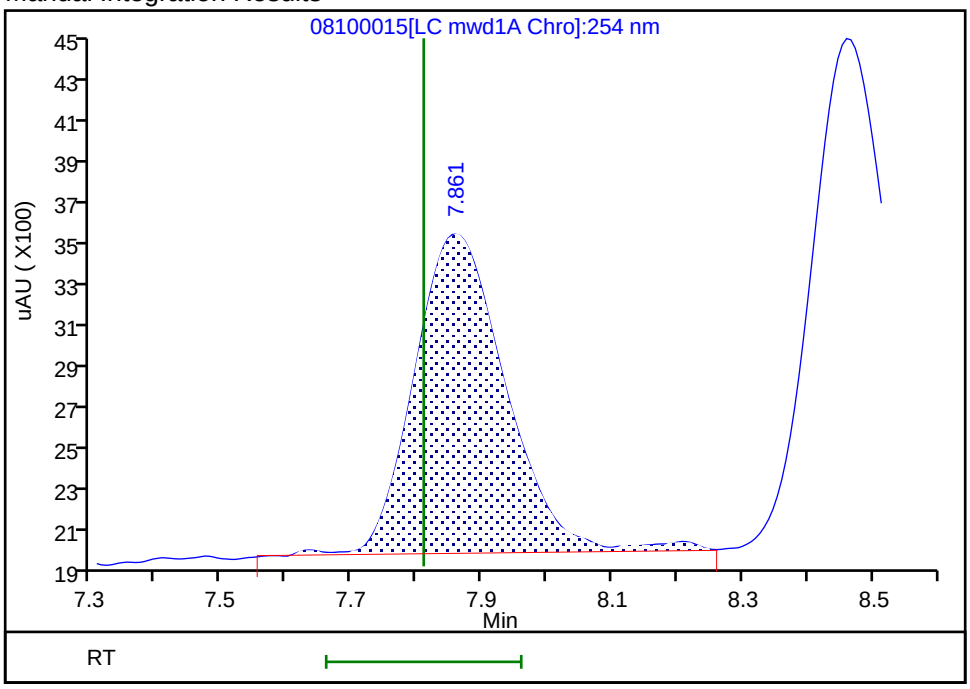
Not Detected
Expected RT: 7.81

Processing Integration Results



Manual Integration Results

RT: 7.86
Area: 15103
Amount: 0.100781
Amount Units: ug/ml



Reviewer: LV5D, 13-Aug-2024 15:12:28 -06:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

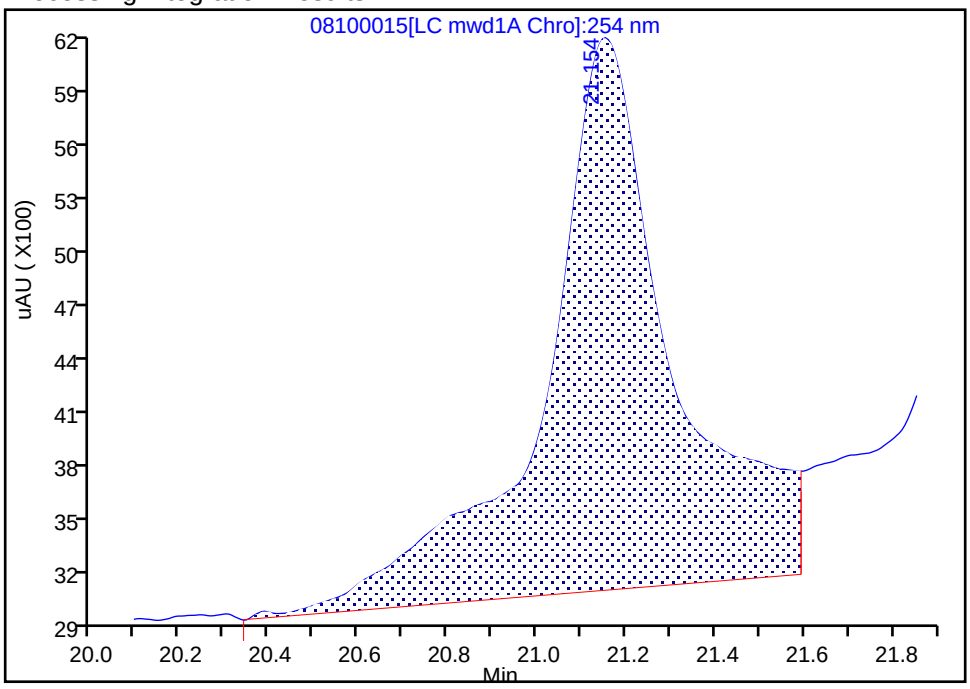
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100015.D				
Injection Date:	10-Aug-2024 23:16:47	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 4				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

23 Tetryl, CAS: 479-45-8

Signal: 1

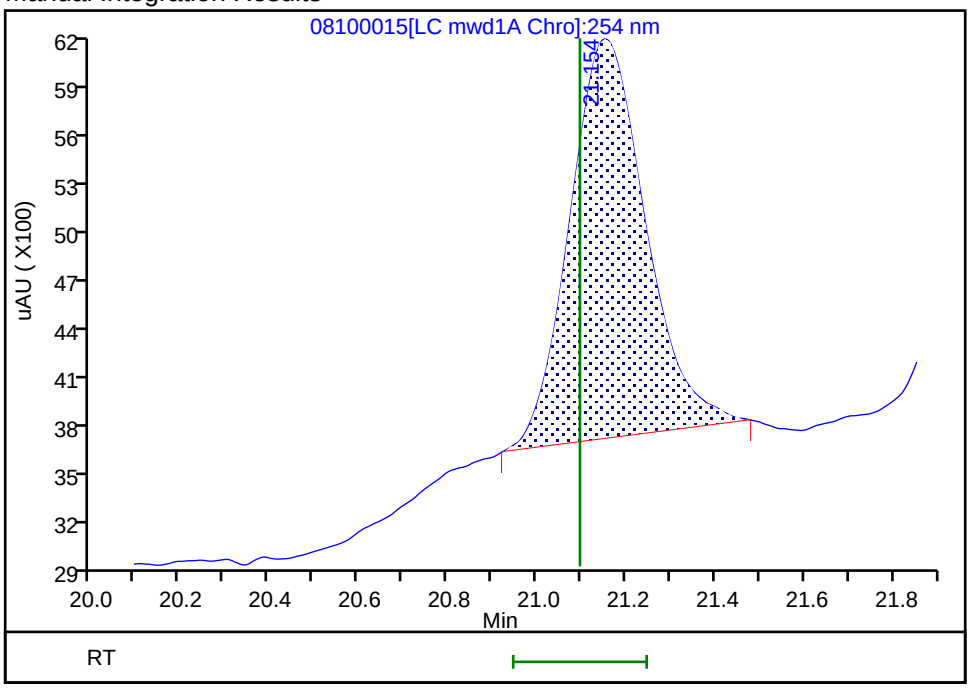
Processing Integration Results

RT: 21.15
Area: 62706
Amount: 0.151929
Amount Units: ug/ml



Manual Integration Results

RT: 21.15
Area: 29297
Amount: 0.103400
Amount Units: ug/ml



Reviewer: LV5D, 13-Aug-2024 15:12:36 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

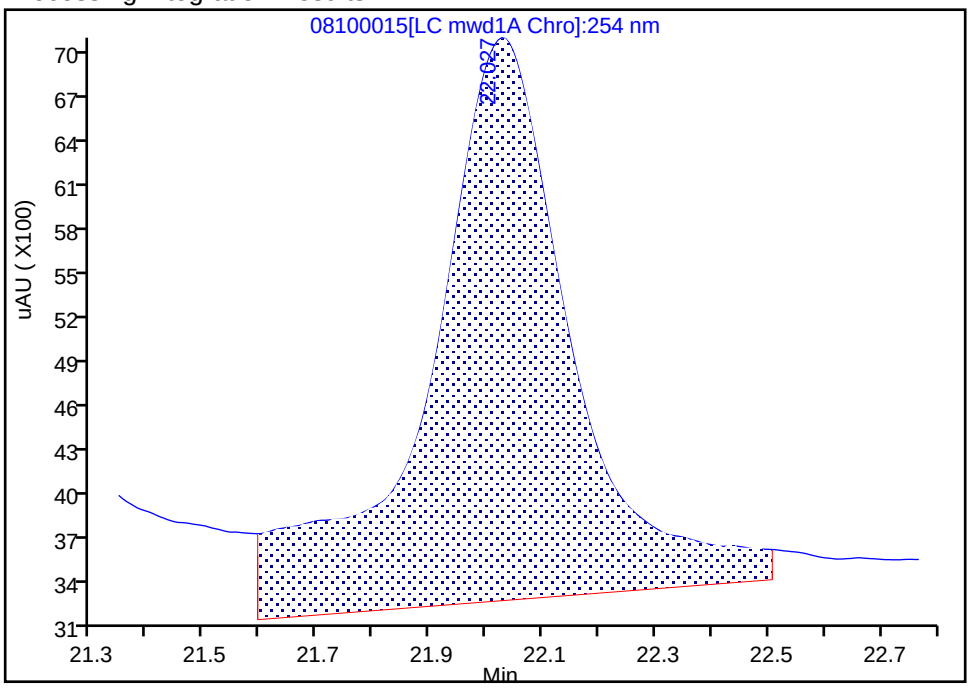
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100015.D				
Injection Date:	10-Aug-2024 23:16:47	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 4				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

24 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

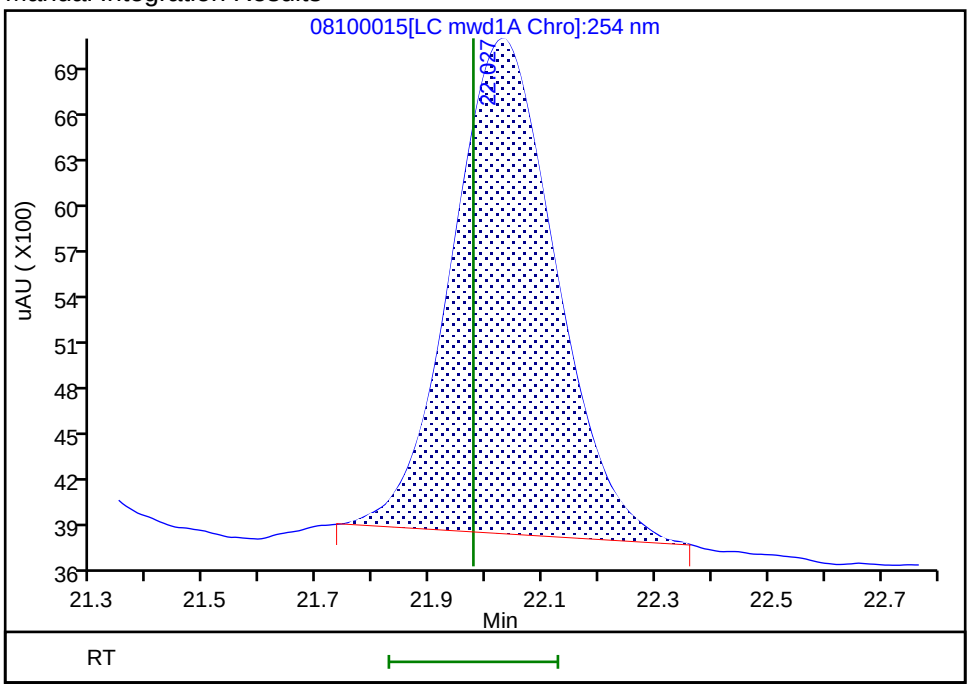
Processing Integration Results

RT: 22.03
Area: 67590
Amount: 0.110097
Amount Units: ug/ml



Manual Integration Results

RT: 22.03
Area: 42305
Amount: 0.101640
Amount Units: ug/ml



Reviewer: LV5D, 13-Aug-2024 15:12:38 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100016.D
Lims ID: IC INT 3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 10-Aug-2024 23:51:43 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 3
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub7

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 13-Aug-2024 15:40:42 Calib Date: 11-Aug-2024 06:16:04
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1604

First Level Reviewer: LV5D Date: 13-Aug-2024 15:12:55

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
5 HMX	1	6.325	6.324	0.001	9102	0.0500	0.0505	
7 2,4,6-Trinitrophenol	1	7.865	7.810	0.055	7567	0.0500	0.0505	a
8 RDX	1	8.459	8.437	0.022	10927	0.0500	0.0496	
9 Nitrobenzene	1	11.012	10.983	0.029	19091	0.0500	0.0506	
$ 10 1,2-Dinitrobenzene	1	11.832	11.797	0.035	13605	0.0500	0.0518	
11 3,5-Dinitroaniline	1	13.512	13.470	0.042	21976	0.0500	0.0499	
12 1,3-Dinitrobenzene	1	13.858	13.823	0.035	29180	0.0500	0.0499	
13 Nitroglycerin	2	14.525	14.477	0.048	65475	0.5000	0.5109	
14 o-Nitrotoluene	1	15.038	14.990	0.048	11922	0.0500	0.0505	
16 p-Nitrotoluene	1	15.272	15.223	0.049	10817	0.0500	0.0511	
17 4-Amino-2,6-dinitrotoluene	1	15.612	15.557	0.055	14345	0.0500	0.0515	
18 m-Nitrotoluene	1	16.092	16.043	0.049	13336	0.0500	0.0516	
19 2-Amino-4,6-dinitrotoluene	1	16.358	16.310	0.048	19449	0.0500	0.0499	
20 1,3,5-Trinitrobenzene	1	16.572	16.537	0.035	21679	0.0500	0.0512	
21 2,6-Dinitrotoluene	1	17.705	17.657	0.048	14521	0.0500	0.0510	
22 2,4-Dinitrotoluene	1	18.138	18.090	0.048	29669	0.0500	0.0522	
23 Tetryl	1	21.159	21.097	0.062	15725	0.0500	0.0555	M
24 2,4,6-Trinitrotoluene	1	22.025	21.977	0.048	20936	0.0500	0.0503	M
25 PETN	2	23.532	23.457	0.075	67315	0.5000	0.4957	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

8330IntermStk_00082 Amount Added: 5.00 Units: uL

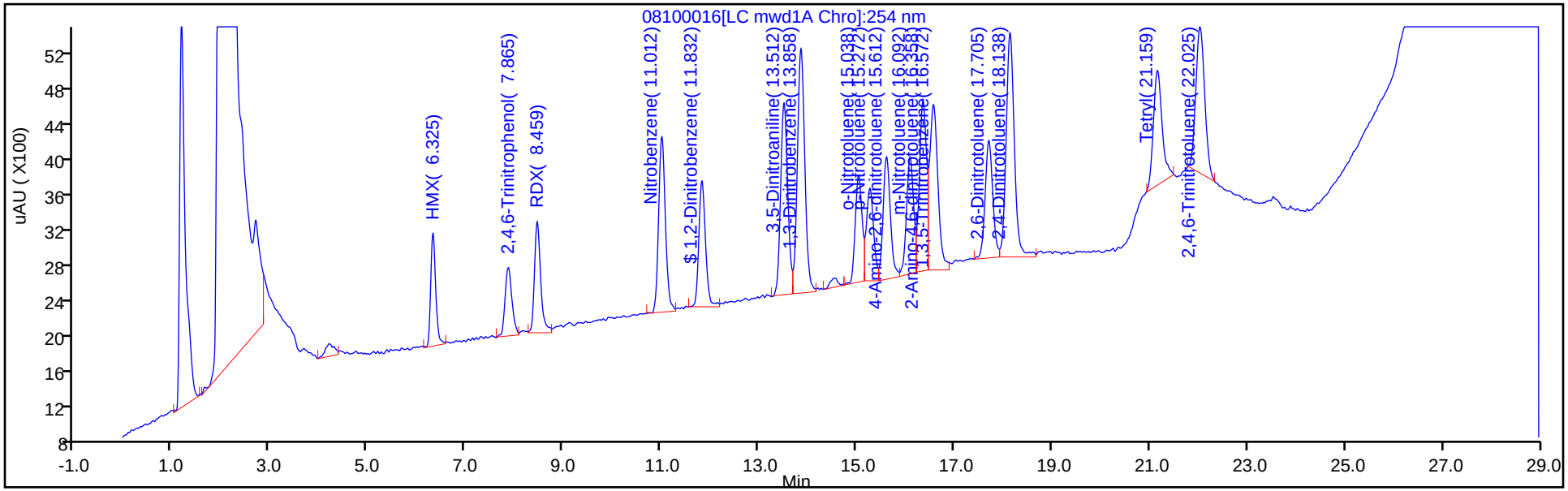
Report Date: 13-Aug-2024 15:40:42 Chrom Revision: 2.3 16-Jul-2024 14:17:34

Eurofins Denver

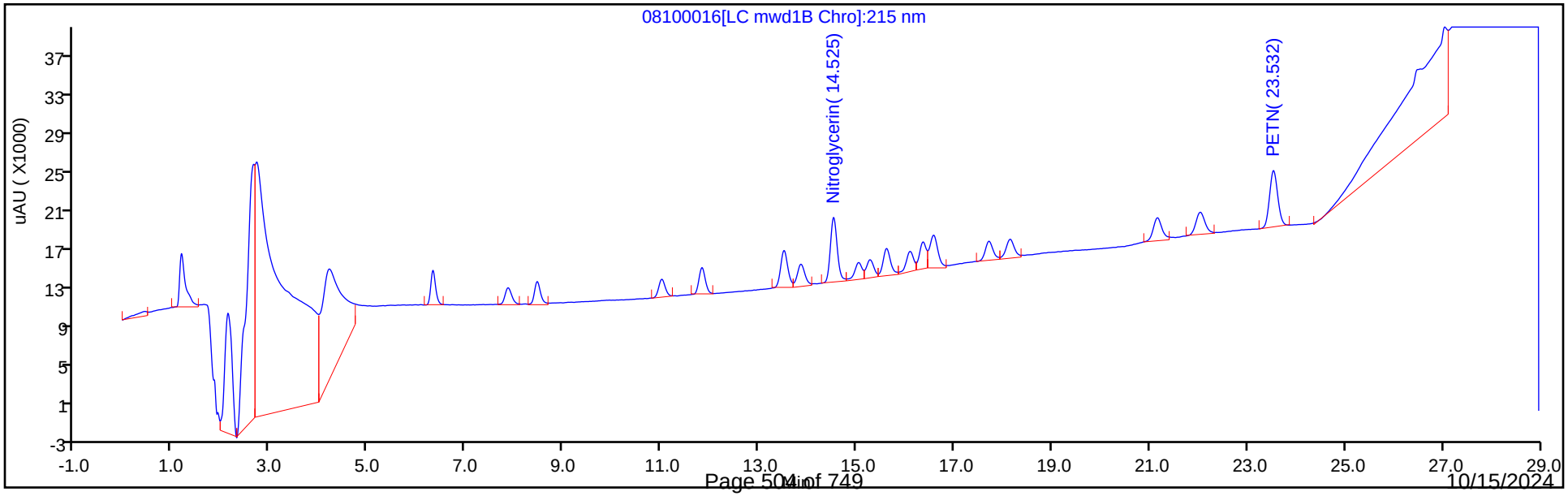
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100016.D

Injection Date:	10-Aug-2024 23:51:43	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC INT 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: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



10/15/2024
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Manual Integration/User Assign Peak Report

Eurofins Denver

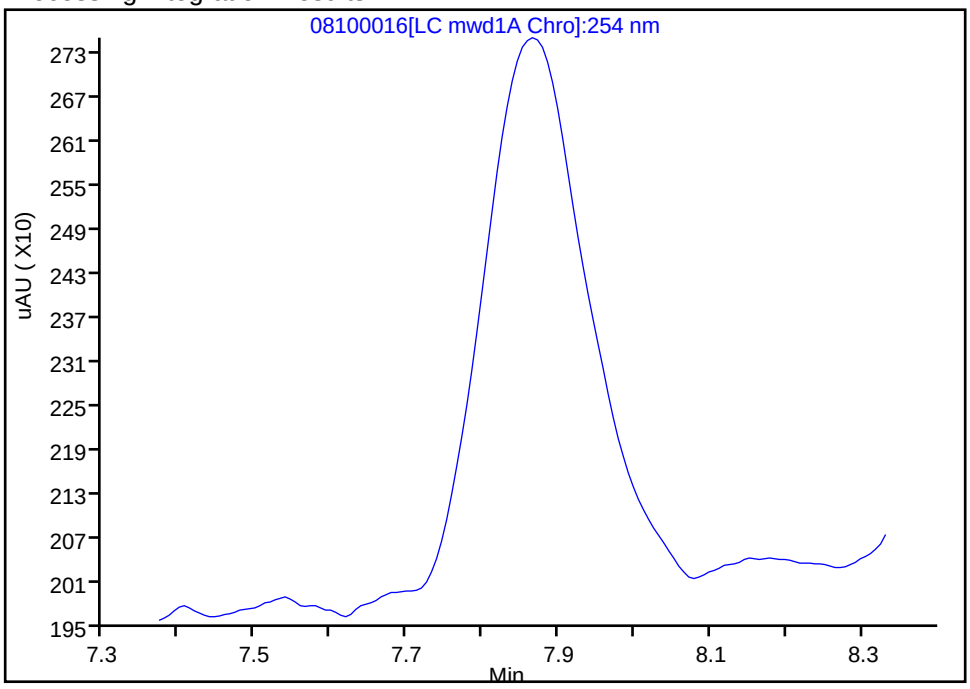
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100016.D				
Injection Date:	10-Aug-2024 23:51:43	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 3				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

7 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

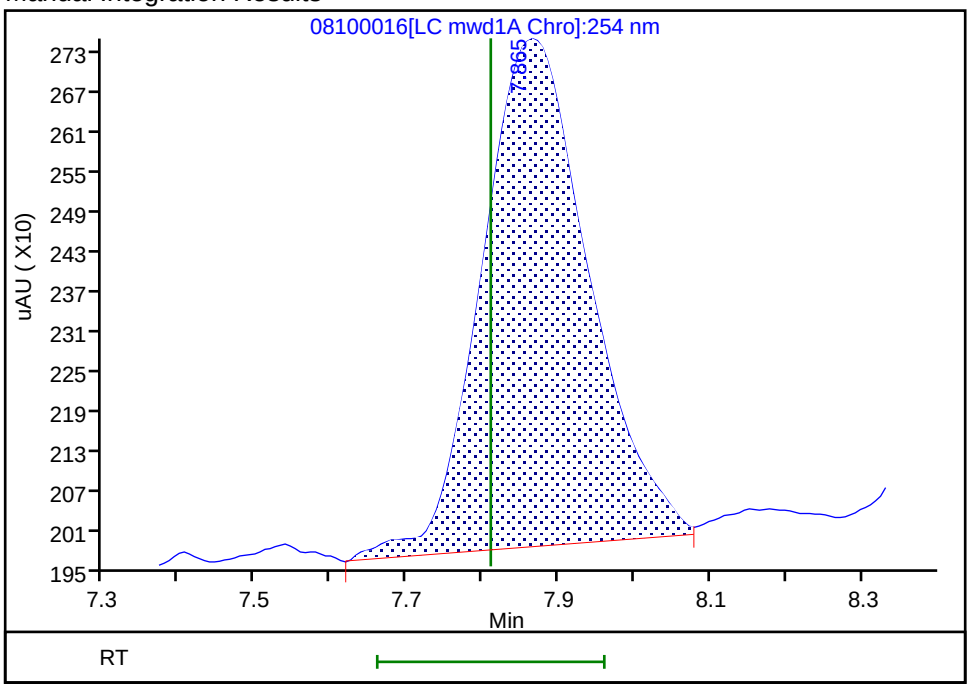
Not Detected
Expected RT: 7.81

Processing Integration Results



Manual Integration Results

RT: 7.87
Area: 7567
Amount: 0.050494
Amount Units: ug/ml



Reviewer: LV5D, 13-Aug-2024 15:12:53 -06:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

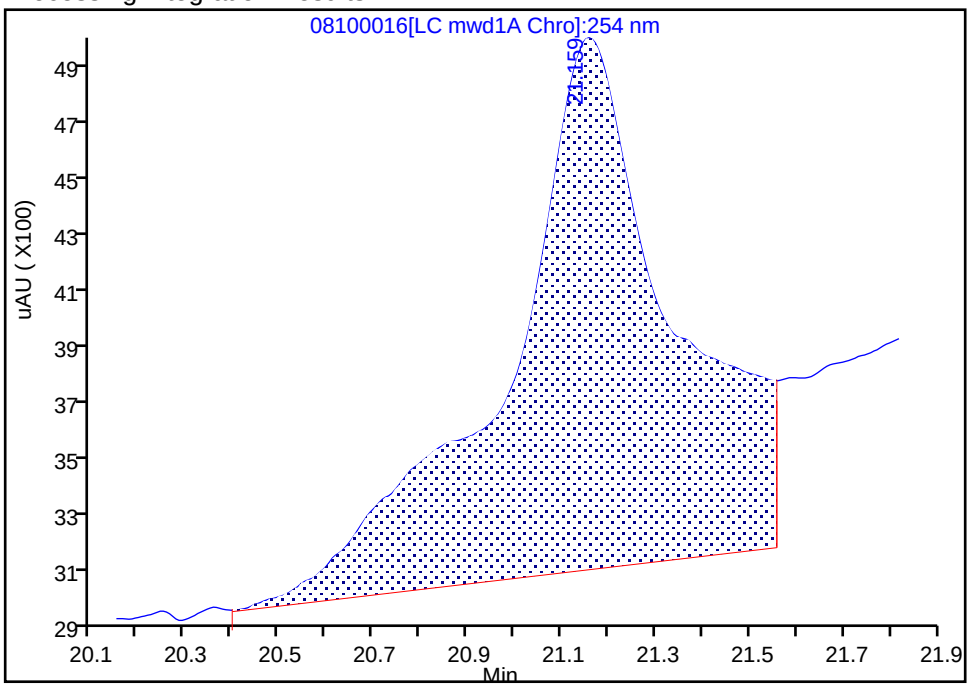
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100016.D				
Injection Date:	10-Aug-2024 23:51:43	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 3				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

23 Tetryl, CAS: 479-45-8

Signal: 1

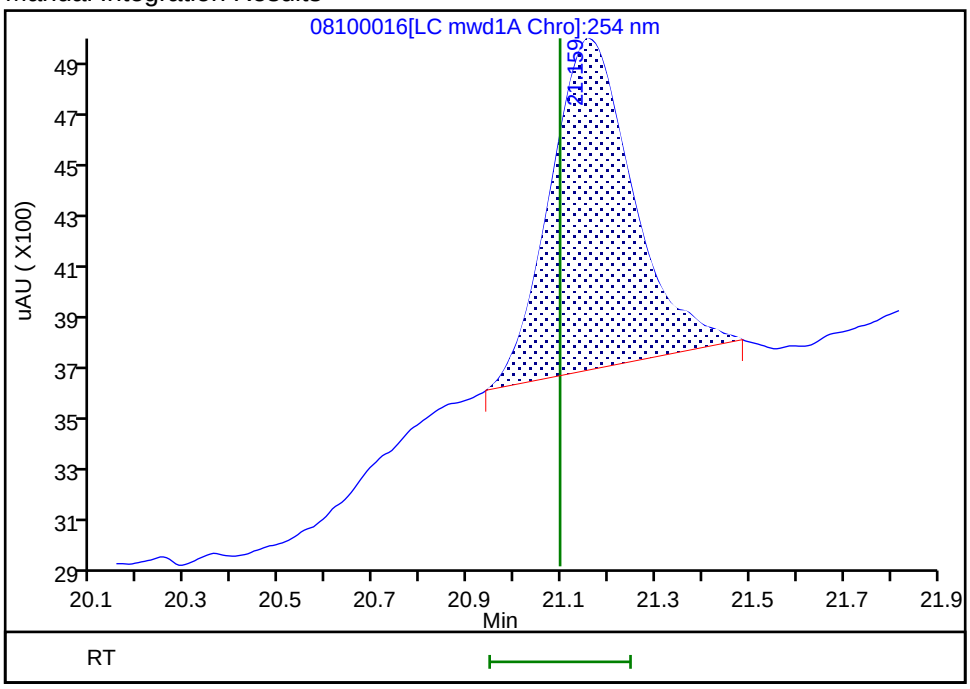
Processing Integration Results

RT: 21.16
Area: 45404
Amount: 0.053183
Amount Units: ug/ml



Manual Integration Results

RT: 21.16
Area: 15725
Amount: 0.055499
Amount Units: ug/ml



Reviewer: LV5D, 13-Aug-2024 15:12:47 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

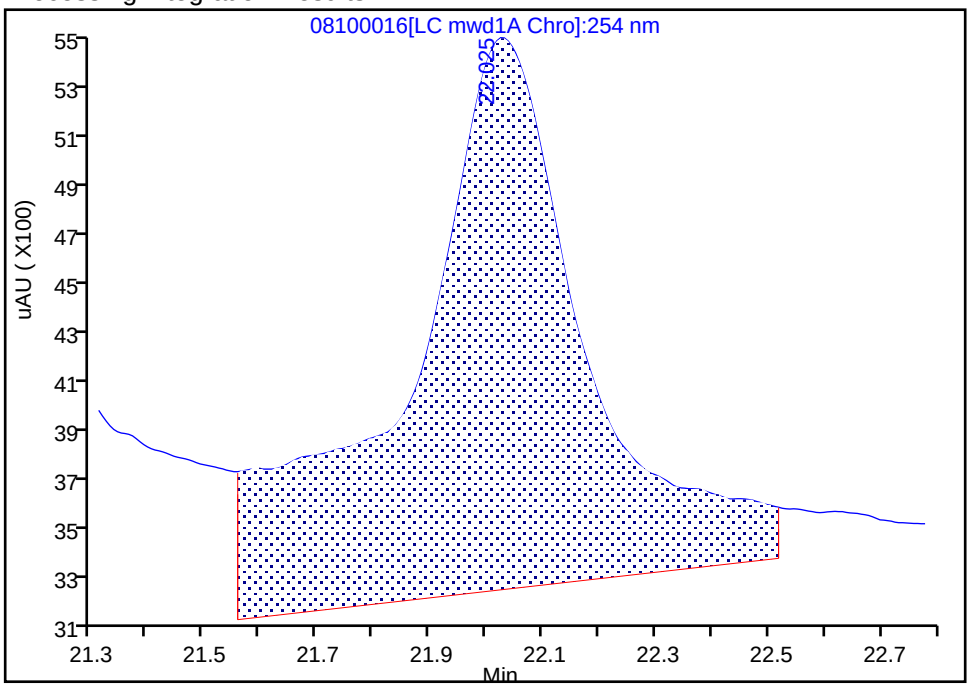
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100016.D				
Injection Date:	10-Aug-2024 23:51:43	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 3				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

24 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

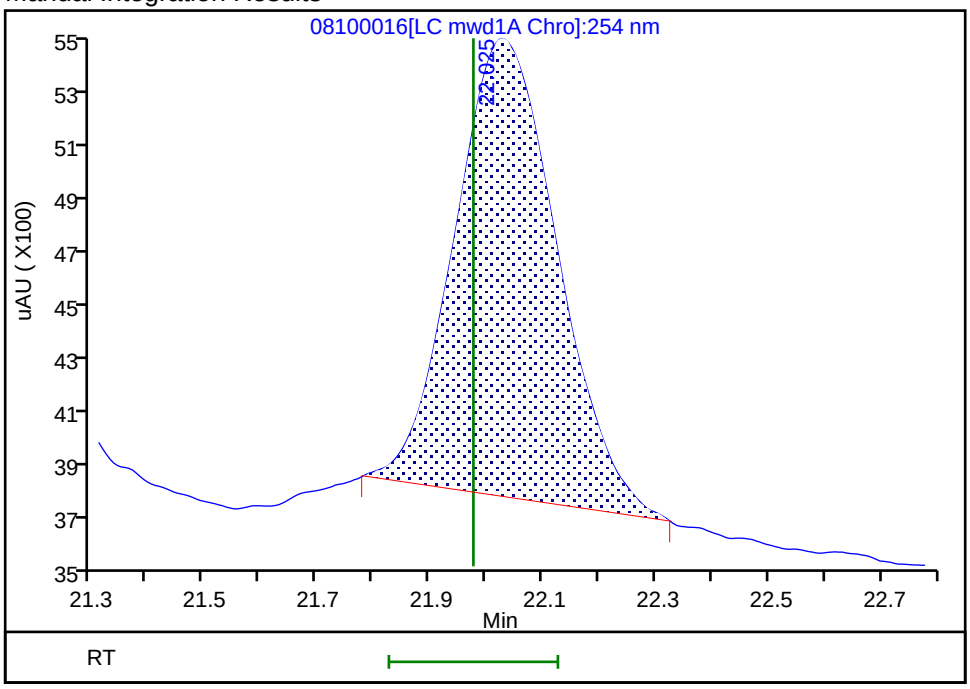
Processing Integration Results

RT: 22.03
Area: 47856
Amount: 0.066877
Amount Units: ug/ml



Manual Integration Results

RT: 22.03
Area: 20936
Amount: 0.050300
Amount Units: ug/ml



Reviewer: LV5D, 13-Aug-2024 15:12:45 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100017.D
Lims ID: IC INT 2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 11-Aug-2024 00:26:39 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 2
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub7

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 13-Aug-2024 15:40:43 Calib Date: 11-Aug-2024 06:16:04
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1604

First Level Reviewer: LV5D Date: 13-Aug-2024 15:14:38

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
5 HMX	1	6.336	6.324	0.012	3967	0.0200	0.0220	
7 2,4,6-Trinitrophenol	1	7.870	7.810	0.060	2918	0.0200	0.0195	a
8 RDX	1	8.470	8.437	0.033	4852	0.0200	0.0220	
9 Nitrobenzene	1	11.016	10.983	0.033	7452	0.0200	0.0198	M
$ 10 1,2-Dinitrobenzene	1	11.843	11.797	0.046	5053	0.0200	0.0193	M
11 3,5-Dinitroaniline	1	13.516	13.470	0.046	9158	0.0200	0.0205	M
12 1,3-Dinitrobenzene	1	13.863	13.823	0.040	11541	0.0200	0.0197	M
13 Nitroglycerin	2	14.529	14.477	0.052	24016	0.2000	0.1874	M
14 o-Nitrotoluene	1	15.036	14.990	0.046	4738	0.0200	0.0201	M
16 p-Nitrotoluene	1	15.276	15.223	0.053	4148	0.0200	0.0196	M
17 4-Amino-2,6-dinitrotoluene	1	15.616	15.557	0.059	5455	0.0200	0.0196	M
18 m-Nitrotoluene	1	16.096	16.043	0.053	5081	0.0200	0.0197	M
19 2-Amino-4,6-dinitrotoluene	1	16.363	16.310	0.053	7784	0.0200	0.0200	M
20 1,3,5-Trinitrobenzene	1	16.576	16.537	0.039	8315	0.0200	0.0196	M
21 2,6-Dinitrotoluene	1	17.703	17.657	0.046	6144	0.0200	0.0216	
22 2,4-Dinitrotoluene	1	18.136	18.090	0.046	12012	0.0200	0.0211	
23 Tetryl	1	21.150	21.097	0.053	4871	0.0200	0.0172	M
24 2,4,6-Trinitrotoluene	1	22.023	21.977	0.046	8874	0.0200	0.0213	M
25 PETN	2	23.516	23.457	0.059	27366	0.2000	0.2015	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

8330IntermStk_00082 Amount Added: 2.00 Units: uL

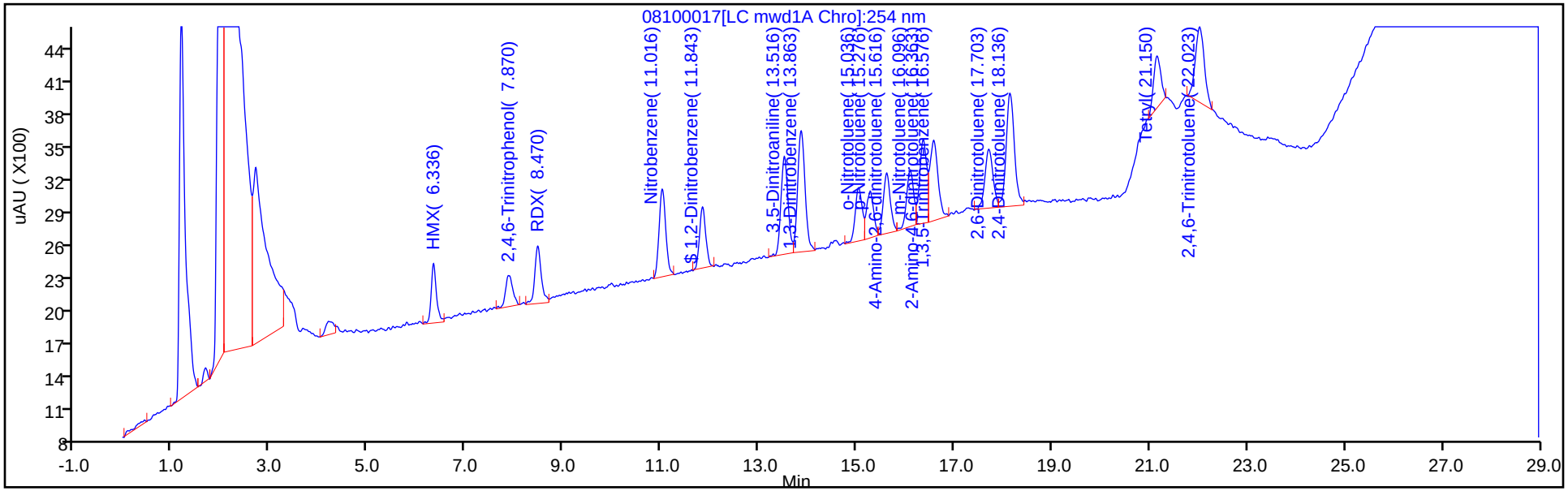
Report Date: 13-Aug-2024 15:40:43 Chrom Revision: 2.3 16-Jul-2024 14:17:34

Eurofins Denver

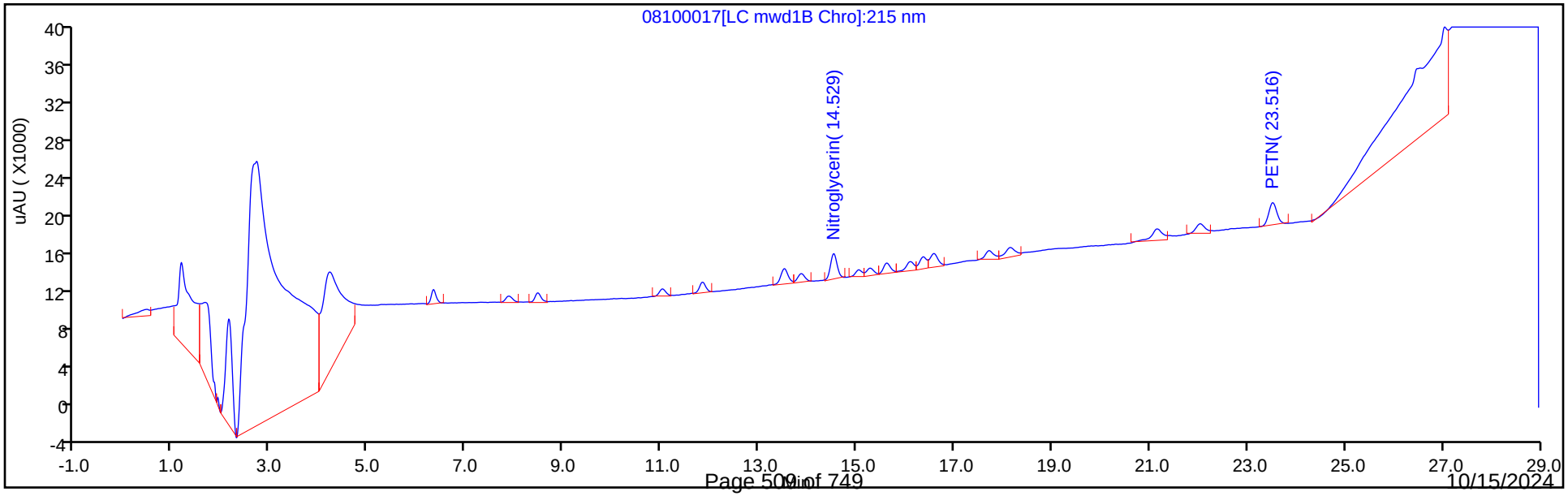
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100017.D

Injection Date:	11-Aug-2024 00:26:39	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC INT 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: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



10/15/2024
4:48:23 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

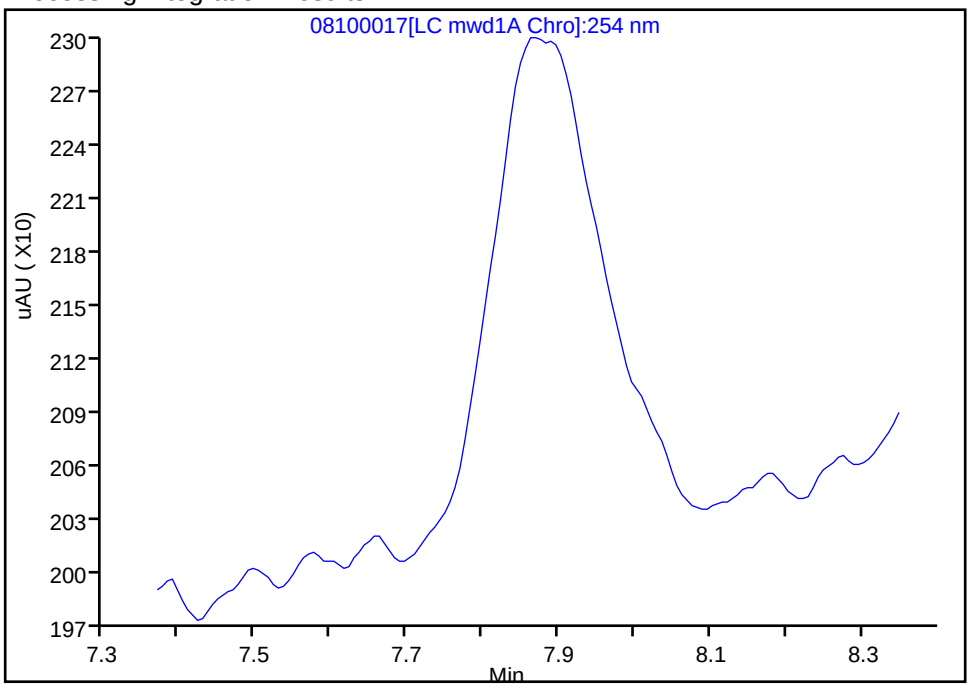
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100017.D				
Injection Date:	11-Aug-2024 00:26:39	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

7 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

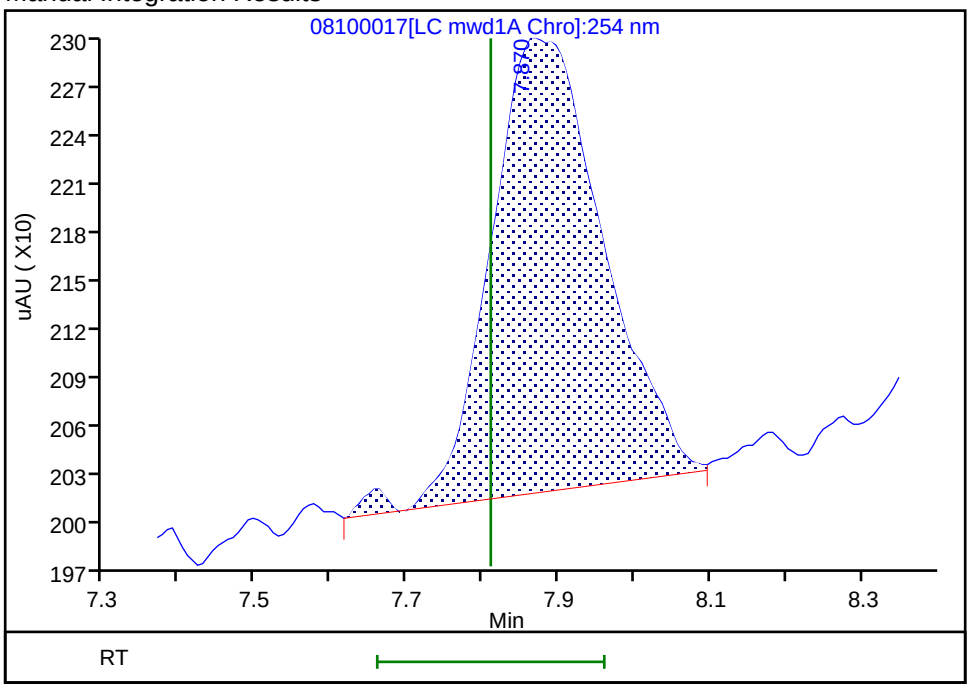
Not Detected
Expected RT: 7.81

Processing Integration Results



Manual Integration Results

RT: 7.87
Area: 2918
Amount: 0.019472
Amount Units: ug/ml



Reviewer: LV5D, 13-Aug-2024 15:12:58 -06:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

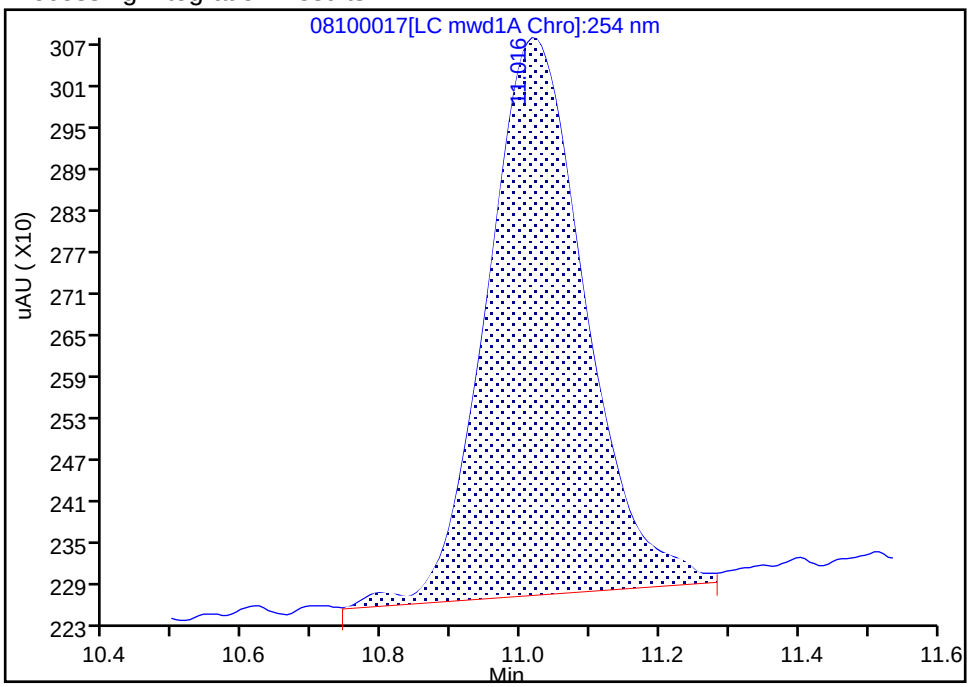
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100017.D				
Injection Date:	11-Aug-2024 00:26:39	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

9 Nitrobenzene, CAS: 98-95-3

Signal: 1

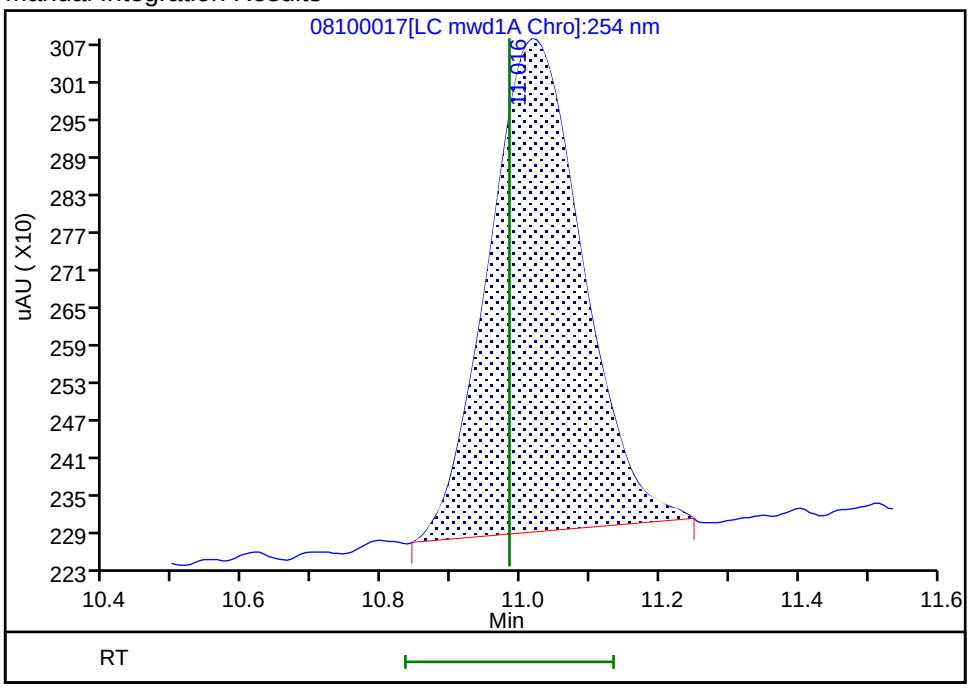
Processing Integration Results

RT: 11.02
Area: 7978
Amount: 0.020754
Amount Units: ug/ml



Manual Integration Results

RT: 11.02
Area: 7452
Amount: 0.019770
Amount Units: ug/ml



Reviewer: LV5D, 13-Aug-2024 15:13:28 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

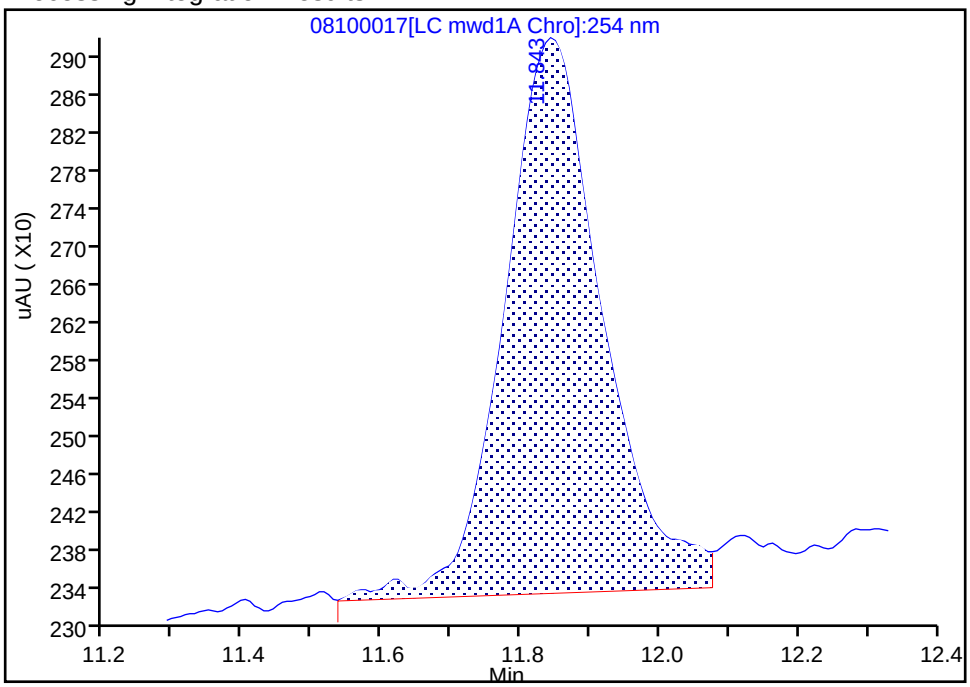
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100017.D				
Injection Date:	11-Aug-2024 00:26:39	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

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

Signal: 1

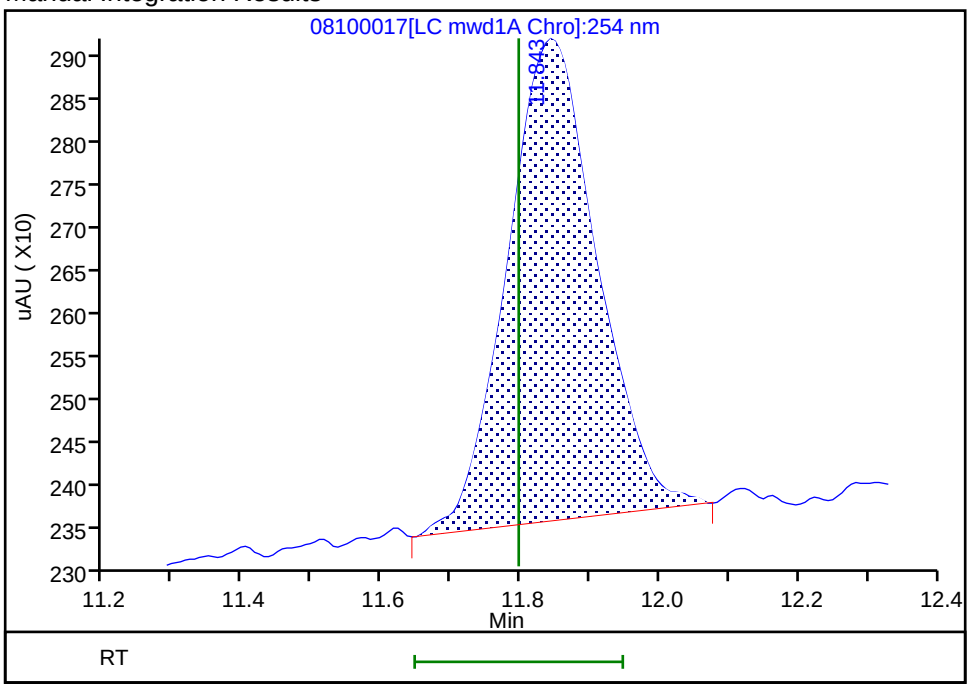
Processing Integration Results

RT: 11.84
Area: 5737
Amount: 0.020889
Amount Units: ug/ml



Manual Integration Results

RT: 11.84
Area: 5053
Amount: 0.019250
Amount Units: ug/ml



Reviewer: LV5D, 13-Aug-2024 15:13:24 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

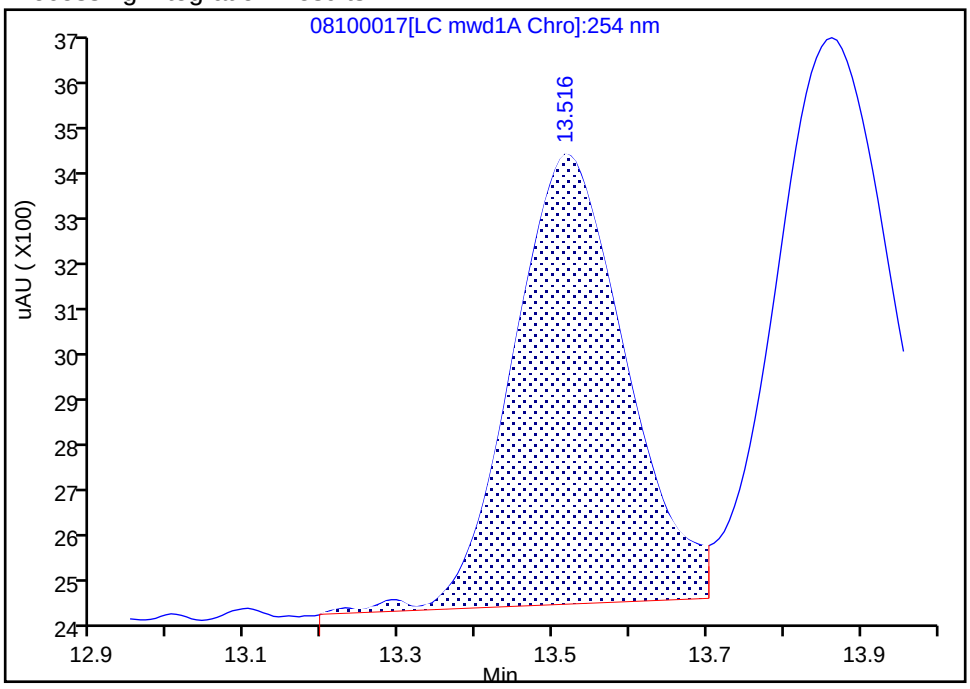
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100017.D				
Injection Date:	11-Aug-2024 00:26:39	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

11 3,5-Dinitroaniline, CAS: 618-87-1

Signal: 1

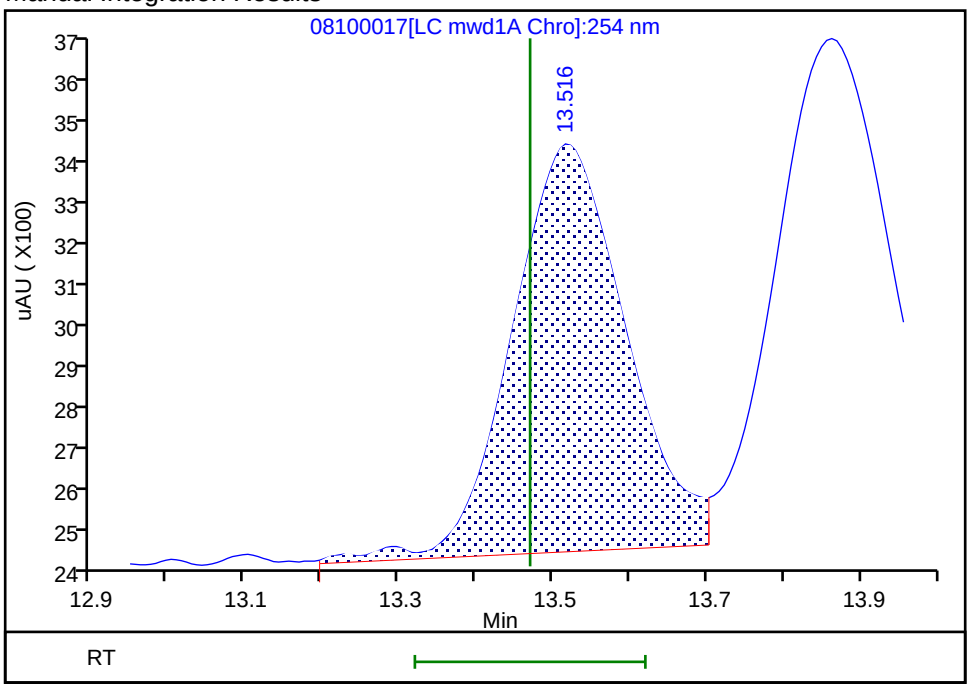
Processing Integration Results

RT: 13.52
Area: 9142
Amount: 0.020297
Amount Units: ug/ml



Manual Integration Results

RT: 13.52
Area: 9158
Amount: 0.020533
Amount Units: ug/ml



Reviewer: LV5D, 13-Aug-2024 15:13:13 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

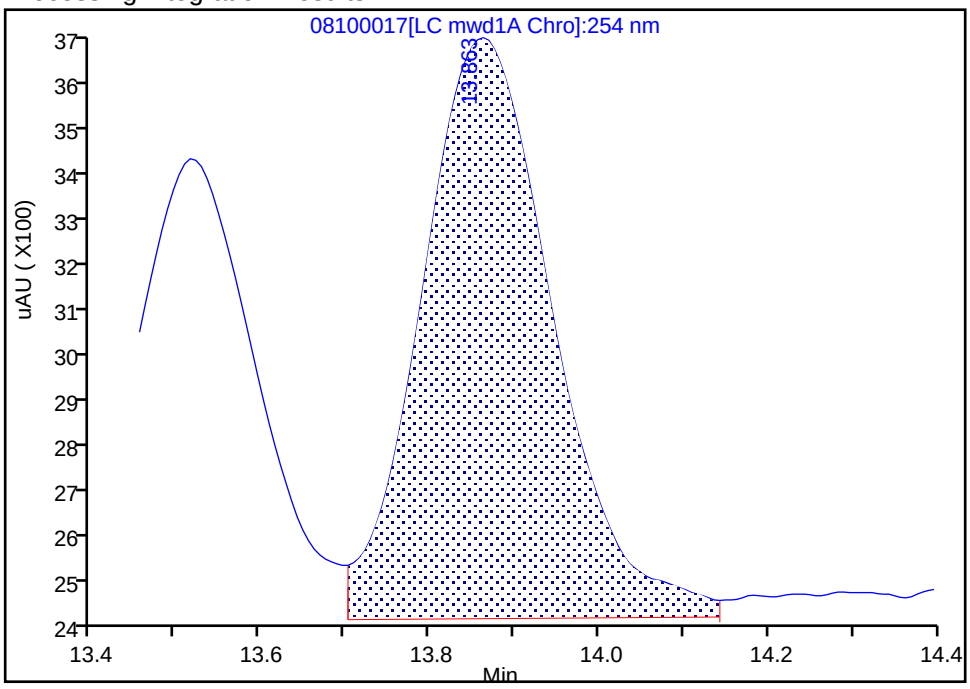
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100017.D				
Injection Date:	11-Aug-2024 00:26:39	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

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

Signal: 1

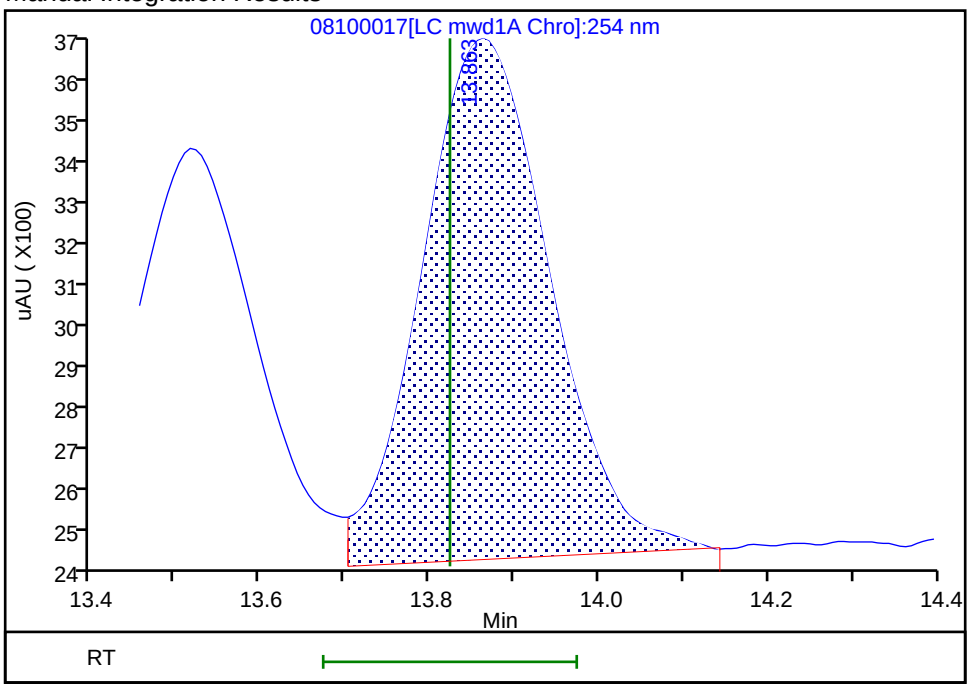
Processing Integration Results

RT: 13.86
Area: 12029
Amount: 0.020297
Amount Units: ug/ml



Manual Integration Results

RT: 13.86
Area: 11541
Amount: 0.019720
Amount Units: ug/ml



Reviewer: LV5D, 13-Aug-2024 15:13:13 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

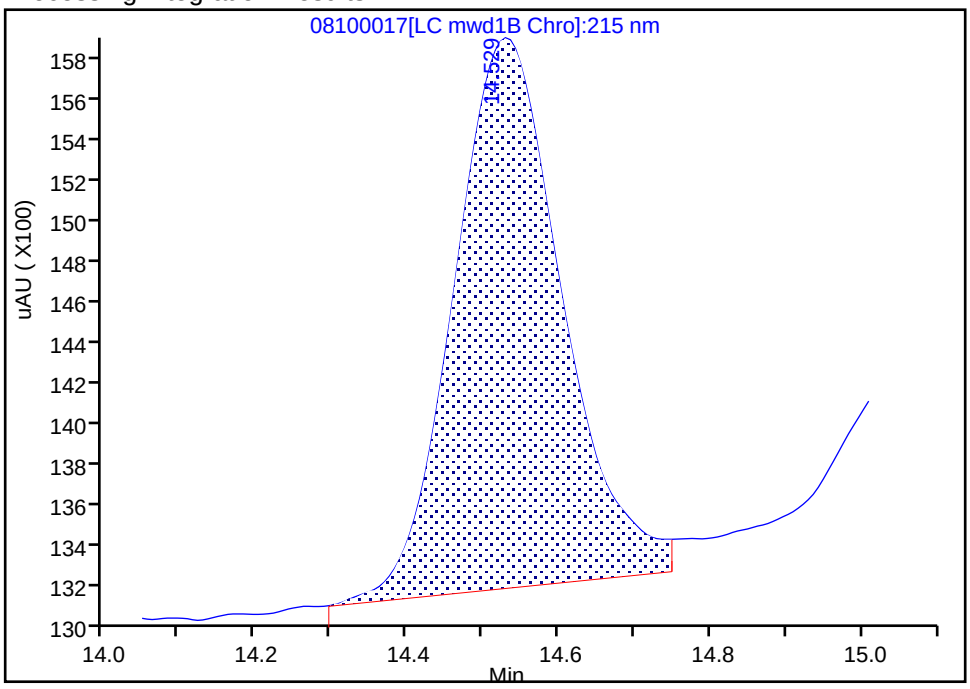
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100017.D				
Injection Date:	11-Aug-2024 00:26:39	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1B, 215 nm		

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

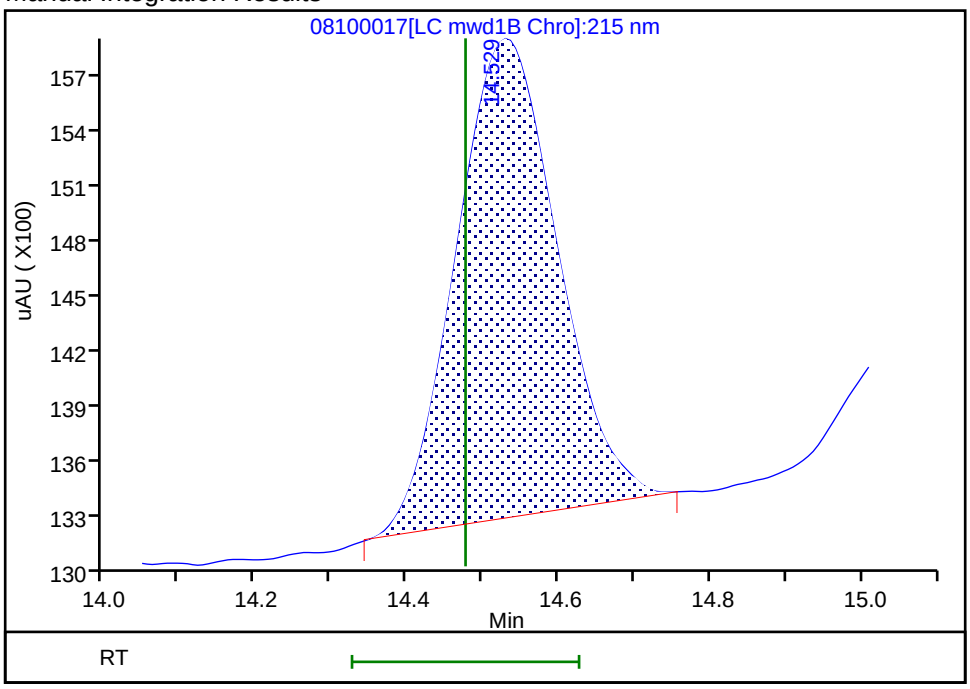
Processing Integration Results

RT: 14.53
Area: 26510
Amount: 0.204651
Amount Units: ug/ml



Manual Integration Results

RT: 14.53
Area: 24016
Amount: 0.187402
Amount Units: ug/ml



Reviewer: LV5D, 13-Aug-2024 15:13:06 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

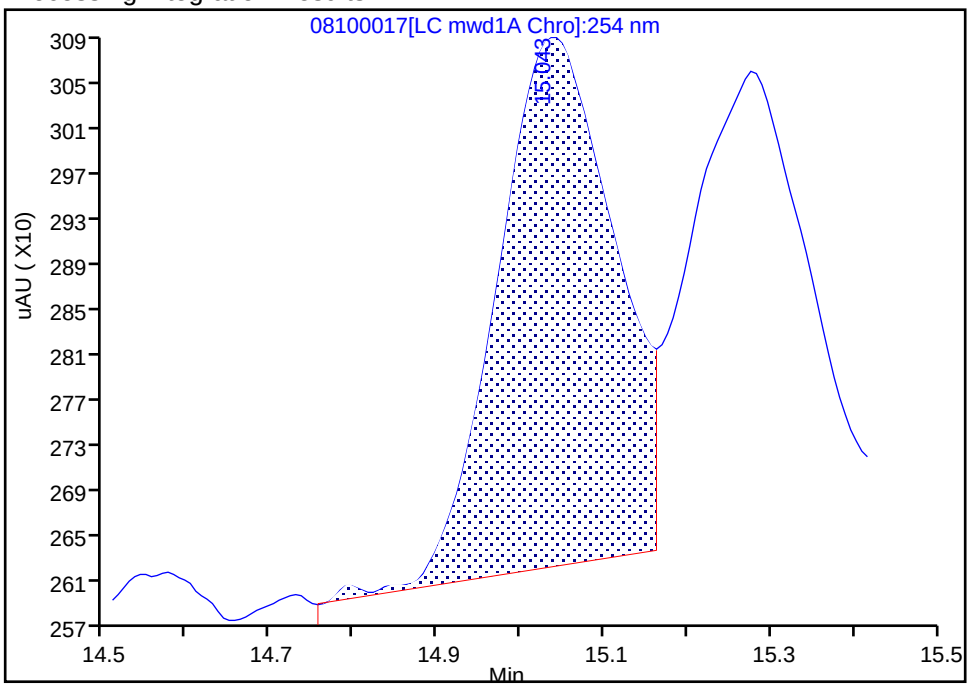
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100017.D				
Injection Date:	11-Aug-2024 00:26:39	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

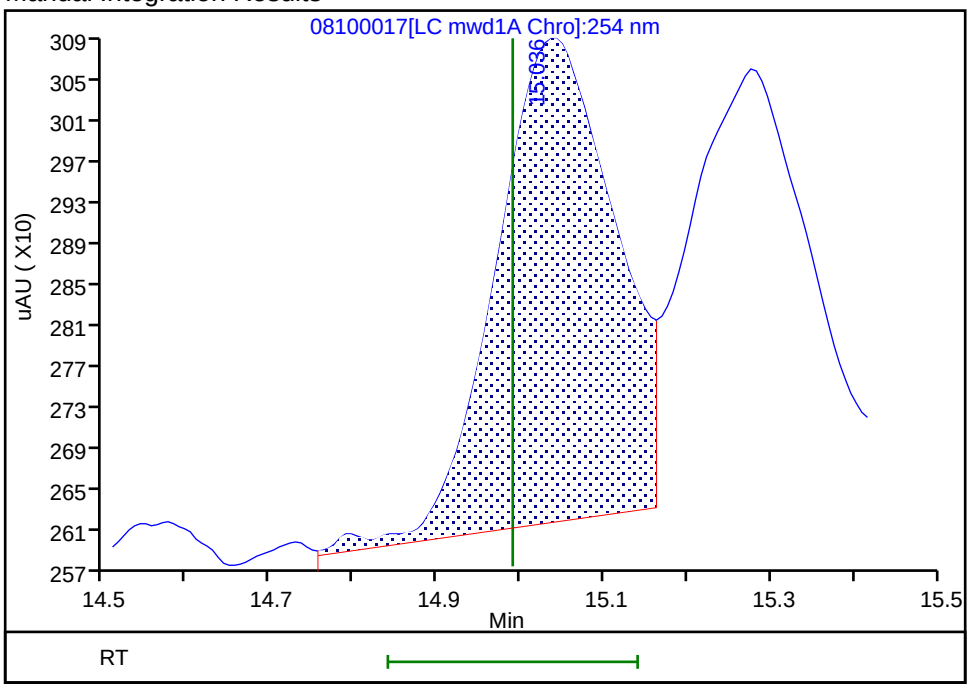
Processing Integration Results

RT: 15.04
Area: 4641
Amount: 0.019753
Amount Units: ug/ml



Manual Integration Results

RT: 15.04
Area: 4738
Amount: 0.020088
Amount Units: ug/ml



Reviewer: LV5D, 13-Aug-2024 15:13:11 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

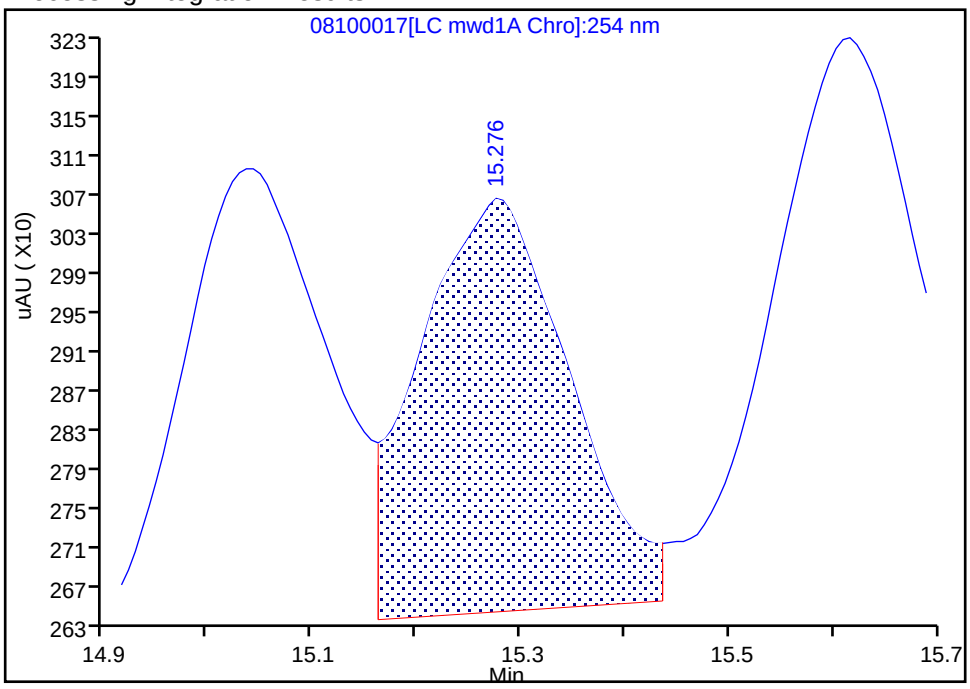
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100017.D				
Injection Date:	11-Aug-2024 00:26:39	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

16 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

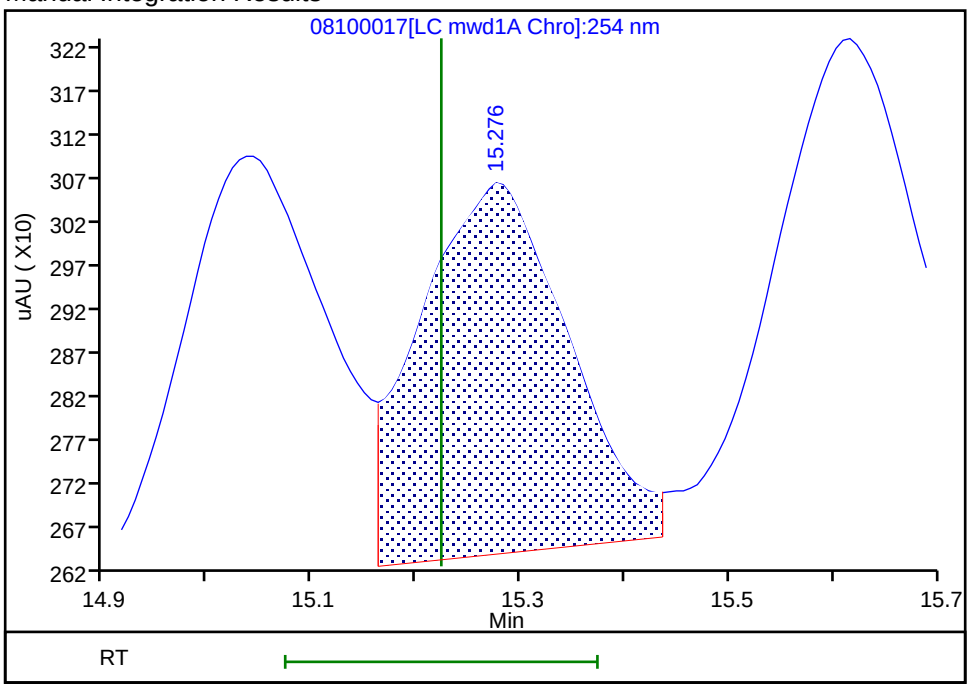
Processing Integration Results

RT: 15.28
Area: 4181
Amount: 0.019726
Amount Units: ug/ml



Manual Integration Results

RT: 15.28
Area: 4148
Amount: 0.019596
Amount Units: ug/ml



Reviewer: LV5D, 13-Aug-2024 15:13:11 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

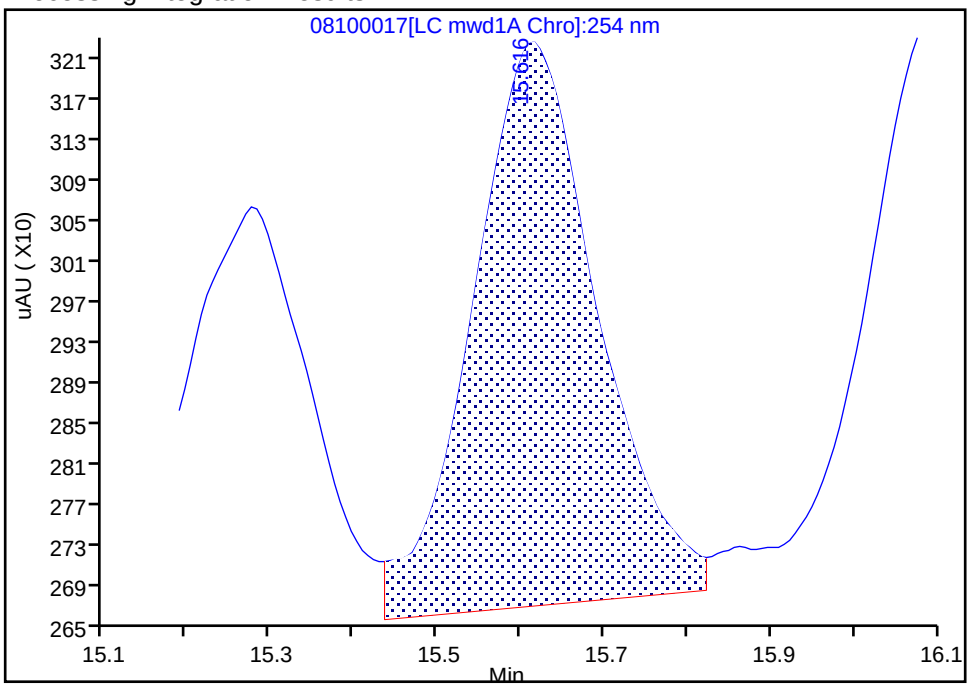
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100017.D				
Injection Date:	11-Aug-2024 00:26:39	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

17 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

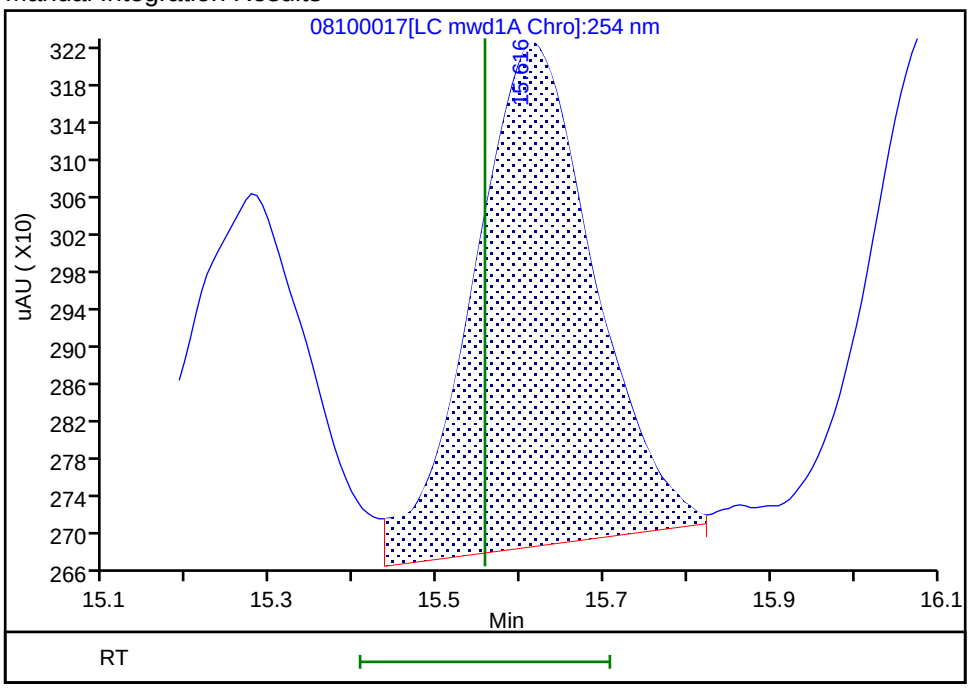
Processing Integration Results

RT: 15.62
Area: 5814
Amount: 0.019929
Amount Units: ug/ml



Manual Integration Results

RT: 15.62
Area: 5455
Amount: 0.019581
Amount Units: ug/ml



Reviewer: LV5D, 13-Aug-2024 15:13:11 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

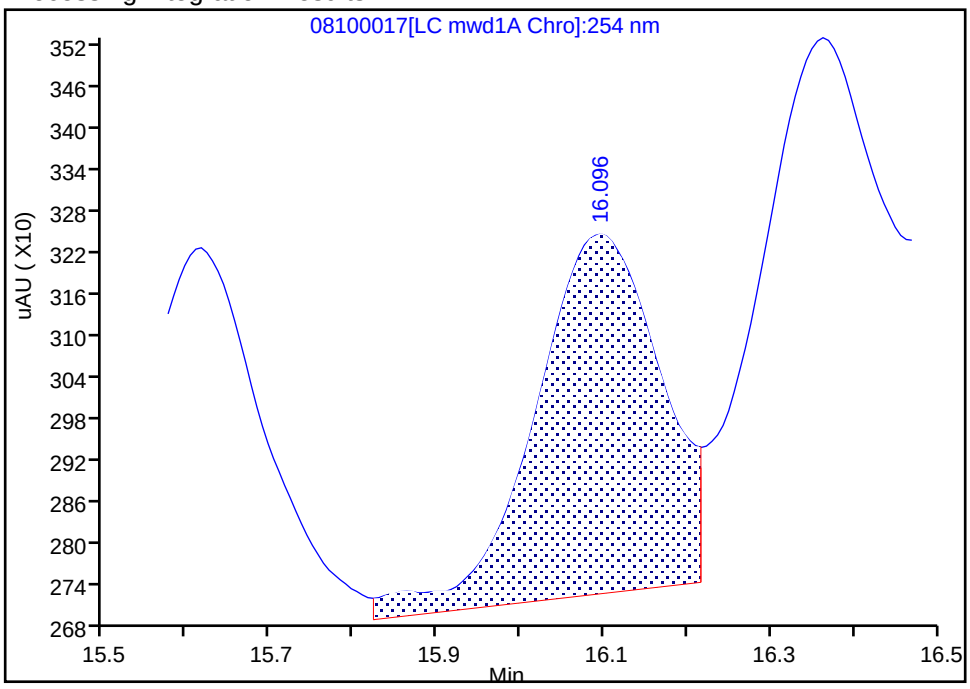
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100017.D				
Injection Date:	11-Aug-2024 00:26:39	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

18 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

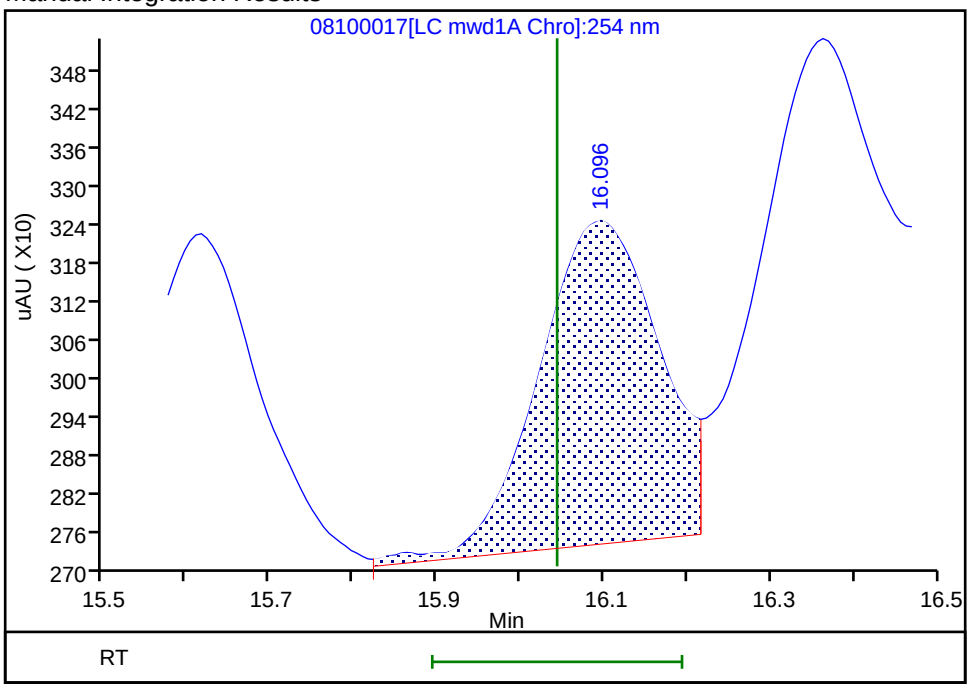
Processing Integration Results

RT: 16.10
Area: 5506
Amount: 0.020883
Amount Units: ug/ml



Manual Integration Results

RT: 16.10
Area: 5081
Amount: 0.019677
Amount Units: ug/ml



Reviewer: LV5D, 13-Aug-2024 15:13:11 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

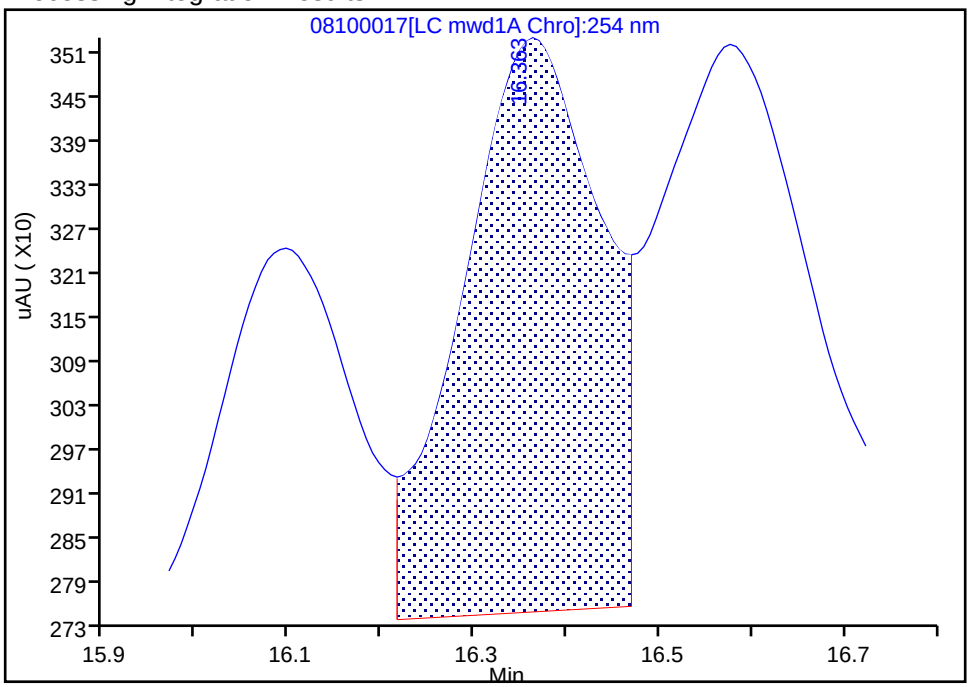
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100017.D				
Injection Date:	11-Aug-2024 00:26:39	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

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

Signal: 1

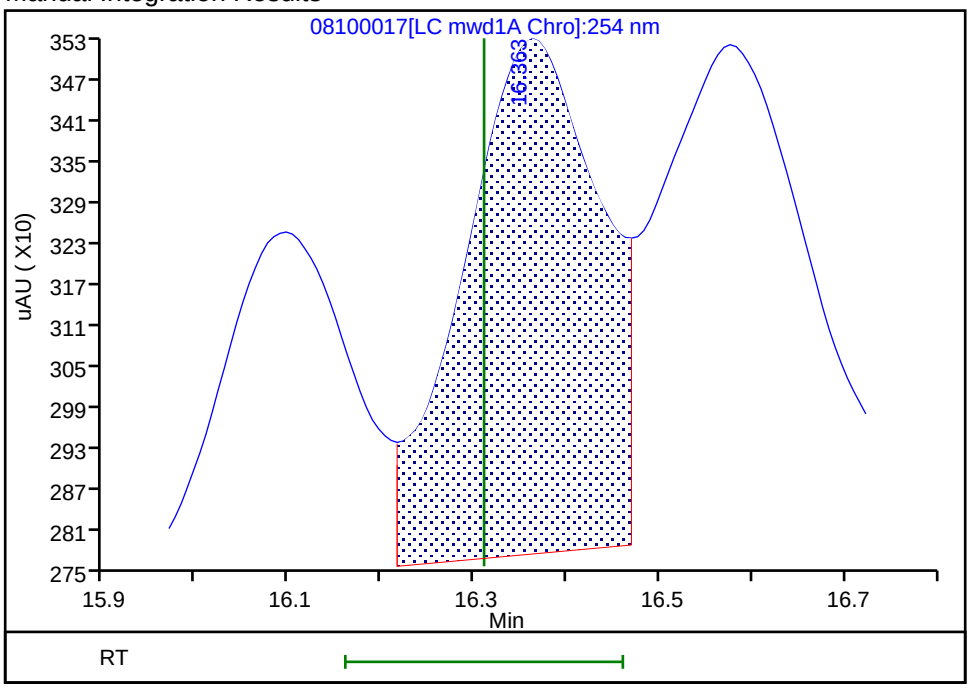
Processing Integration Results

RT: 16.36
Area: 8065
Amount: 0.020539
Amount Units: ug/ml



Manual Integration Results

RT: 16.36
Area: 7784
Amount: 0.019989
Amount Units: ug/ml



Reviewer: LV5D, 13-Aug-2024 15:13:11 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

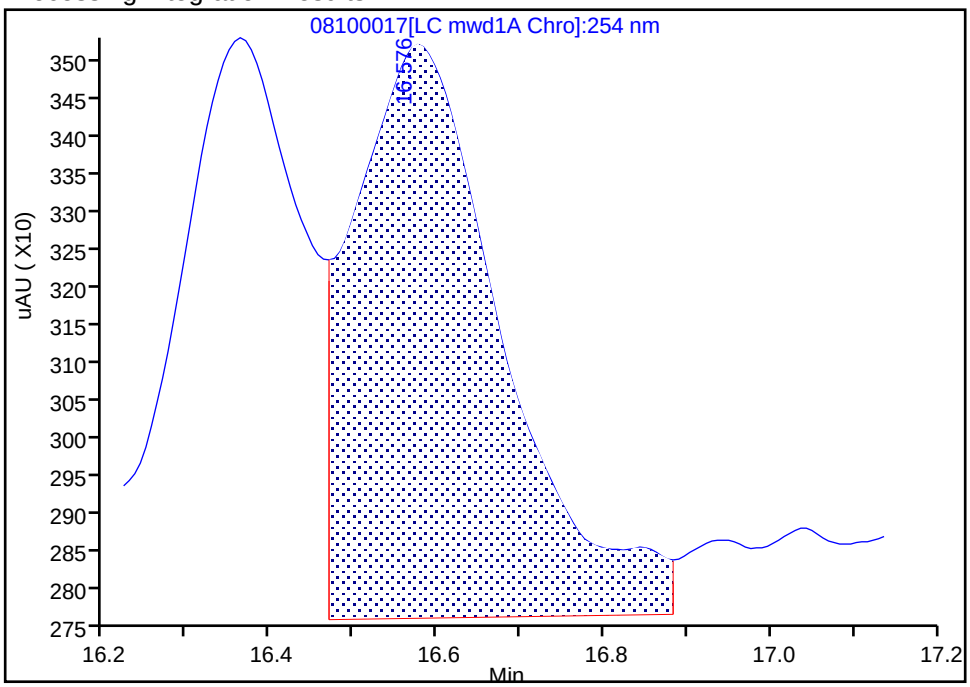
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100017.D				
Injection Date:	11-Aug-2024 00:26:39	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

20 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

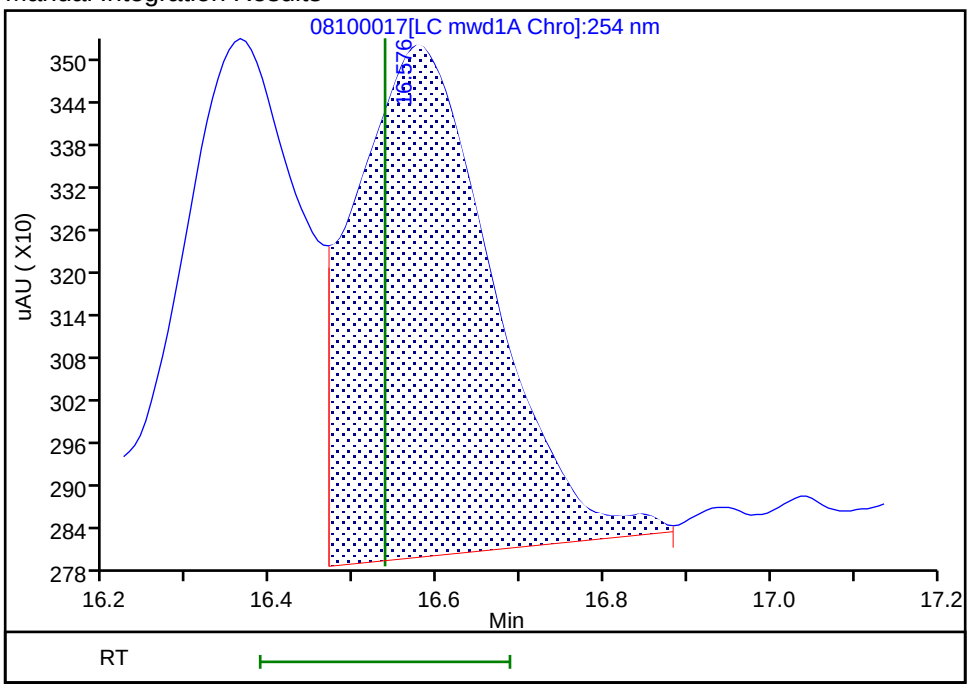
Processing Integration Results

RT: 16.58
Area: 9419
Amount: 0.021531
Amount Units: ug/ml



Manual Integration Results

RT: 16.58
Area: 8315
Amount: 0.019620
Amount Units: ug/ml



Reviewer: LV5D, 13-Aug-2024 15:13:11 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

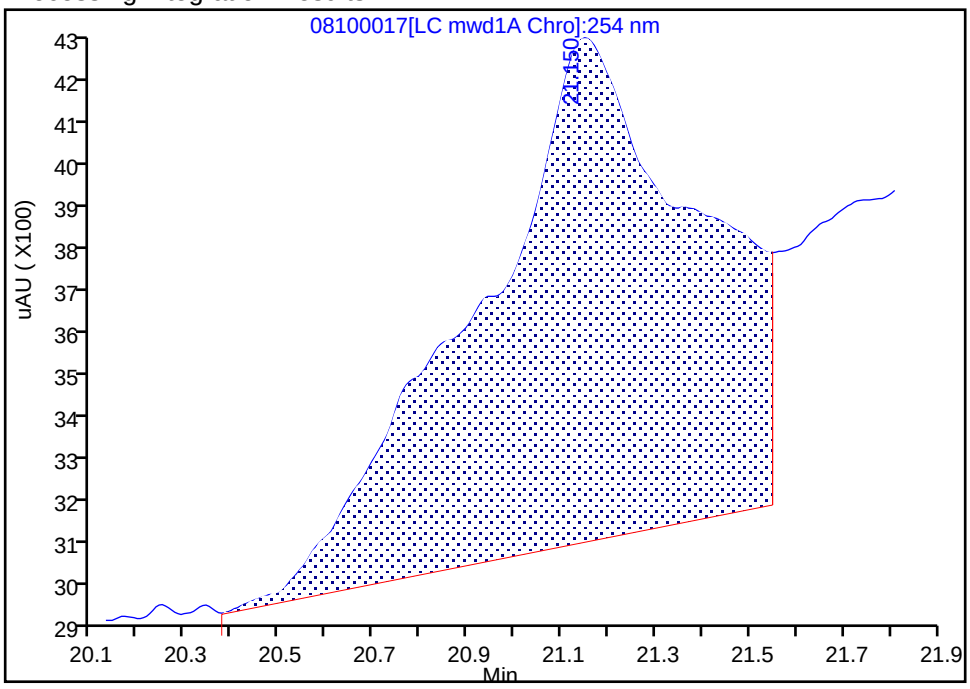
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100017.D				
Injection Date:	11-Aug-2024 00:26:39	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

23 Tetryl, CAS: 479-45-8

Signal: 1

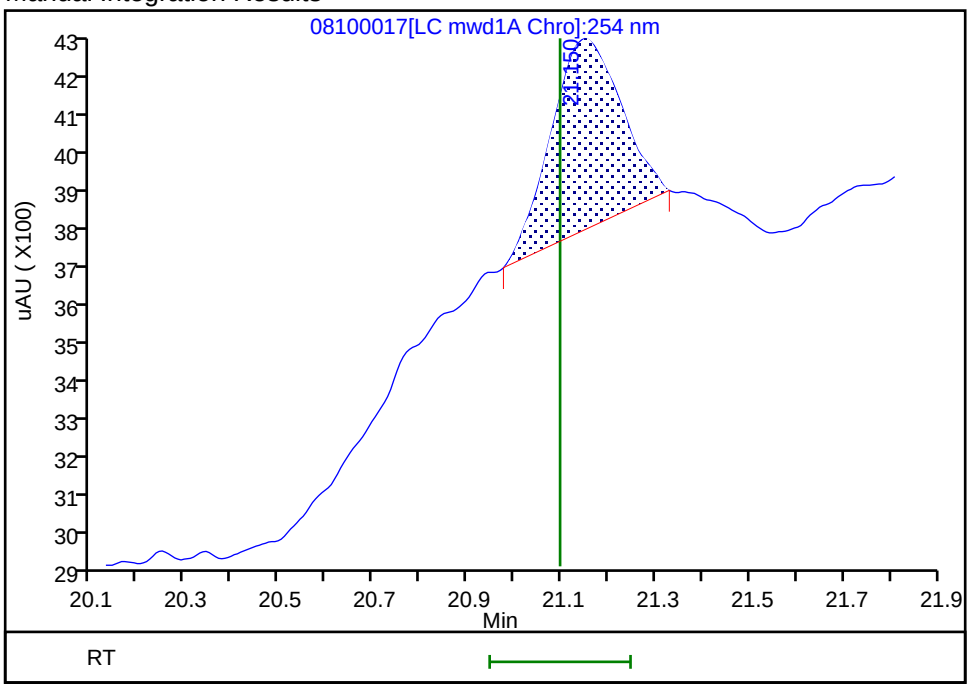
Processing Integration Results

RT: 21.15
Area: 36766
Amount: 0.046671
Amount Units: ug/ml



Manual Integration Results

RT: 21.15
Area: 4871
Amount: 0.017192
Amount Units: ug/ml



Reviewer: LV5D, 13-Aug-2024 15:14:37 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

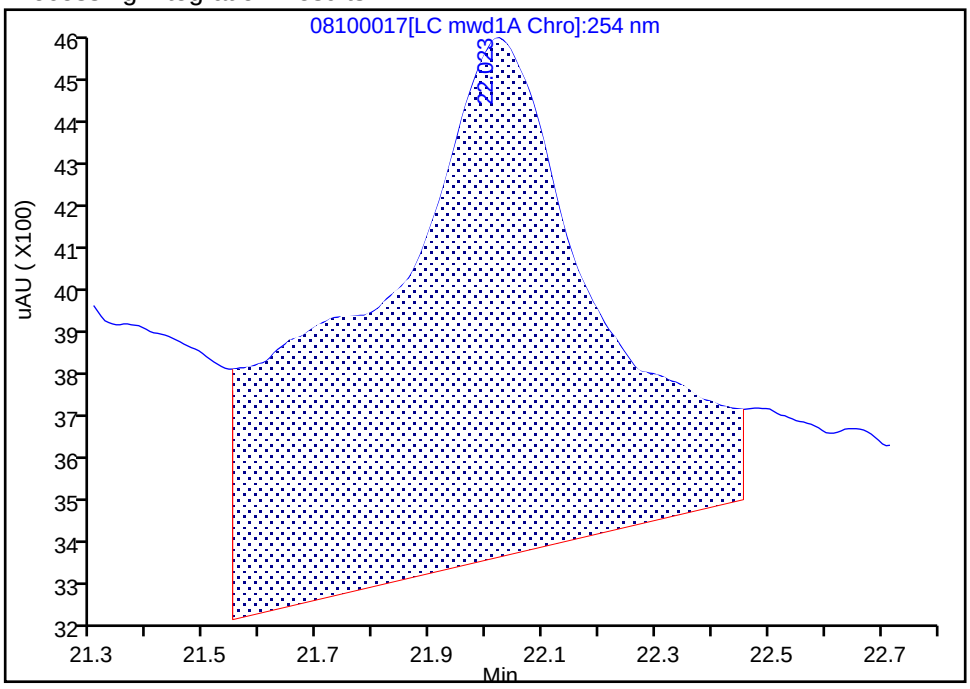
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100017.D				
Injection Date:	11-Aug-2024 00:26:39	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

24 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

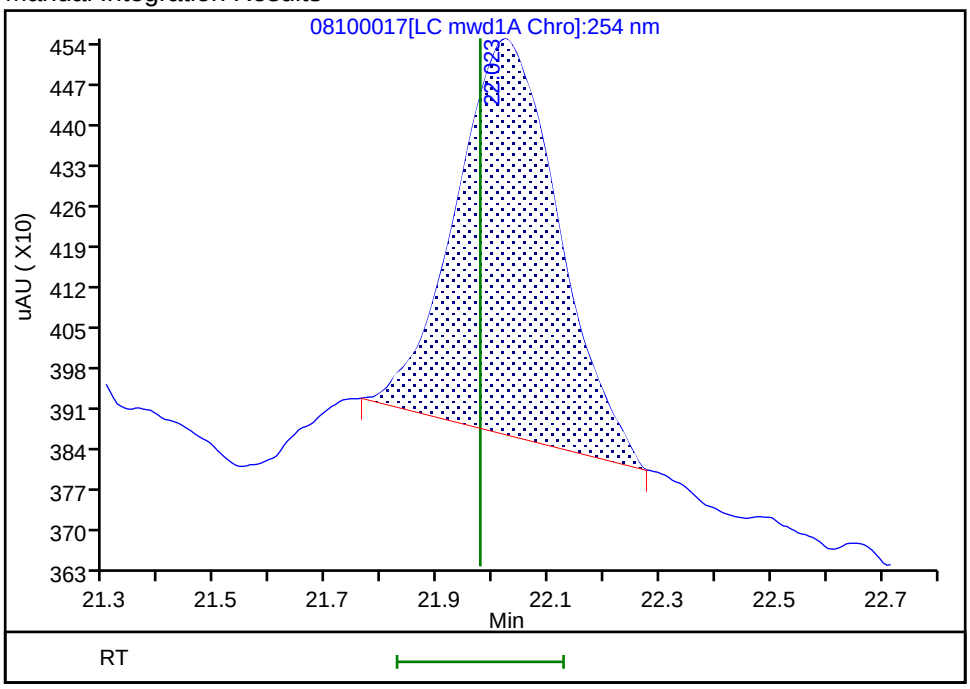
Processing Integration Results

RT: 22.02
Area: 34096
Amount: 0.035925
Amount Units: ug/ml



Manual Integration Results

RT: 22.02
Area: 8874
Amount: 0.021320
Amount Units: ug/ml



Reviewer: LV5D, 13-Aug-2024 15:14:33 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100018.D
Lims ID: IC INT 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 11-Aug-2024 01:01:34 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 1
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub7

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 13-Aug-2024 15:40:44 Calib Date: 11-Aug-2024 06:16:04
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1604

First Level Reviewer: LV5D Date: 13-Aug-2024 15:15:36

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
5 HMX	1	6.324	6.324	0.000	1671	0.0100	0.009266	M
7 2,4,6-Trinitrophenol	1	7.864	7.810	0.054	1564	0.0100	0.0104	a
8 RDX	1	8.457	8.437	0.020	2773	0.0100	0.0126	
9 Nitrobenzene	1	11.004	10.983	0.021	3755	0.0100	0.0100	M
$ 10 1,2-Dinitrobenzene	1	11.831	11.797	0.034	2585	0.0100	0.009848	M
11 3,5-Dinitroaniline	1	13.511	13.470	0.041	4508	0.0100	0.009865	M
12 1,3-Dinitrobenzene	1	13.851	13.823	0.028	6059	0.0100	0.0104	M
13 Nitroglycerin	2	14.524	14.477	0.047	14206	0.1000	0.1109	
14 o-Nitrotoluene	1	15.031	14.990	0.041	2340	0.0100	0.0099	M
16 p-Nitrotoluene	1	15.284	15.223	0.061	2037	0.0100	0.009623	M
17 4-Amino-2,6-dinitrotoluene	1	15.611	15.557	0.054	2787	0.0100	0.0100	M
18 m-Nitrotoluene	1	16.091	16.043	0.048	2547	0.0100	0.009864	M
19 2-Amino-4,6-dinitrotoluene	1	16.364	16.310	0.054	3972	0.0100	0.0102	M
20 1,3,5-Trinitrobenzene	1	16.577	16.537	0.040	4185	0.0100	0.009875	M
21 2,6-Dinitrotoluene	1	17.691	17.657	0.034	3065	0.0100	0.0108	M
22 2,4-Dinitrotoluene	1	18.131	18.090	0.041	5939	0.0100	0.0104	M
23 Tetryl	1	21.151	21.097	0.054	2430	0.0100	0.008576	M
24 2,4,6-Trinitrotoluene	1	22.017	21.977	0.040	4082	0.0100	0.009807	M
25 PETN	2	23.537	23.457	0.080	13555	0.1000	0.0998	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

8330IntermStk_00082 Amount Added: 1.00 Units: uL

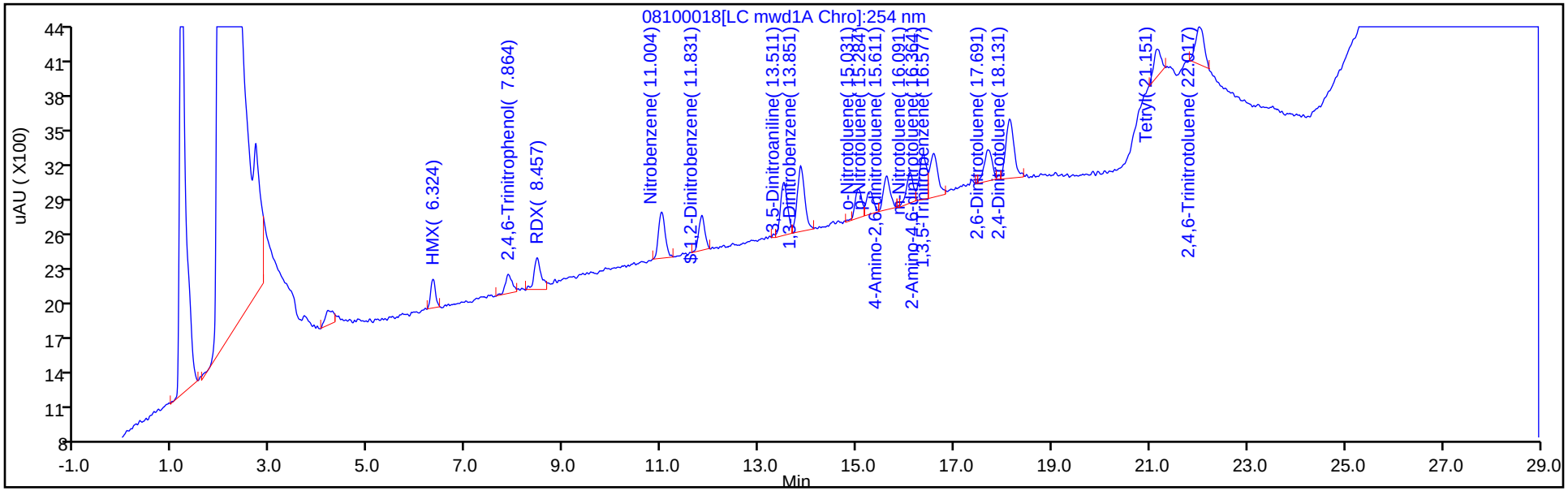
Report Date: 13-Aug-2024 15:40:44 Chrom Revision: 2.3 16-Jul-2024 14:17:34

Eurofins Denver

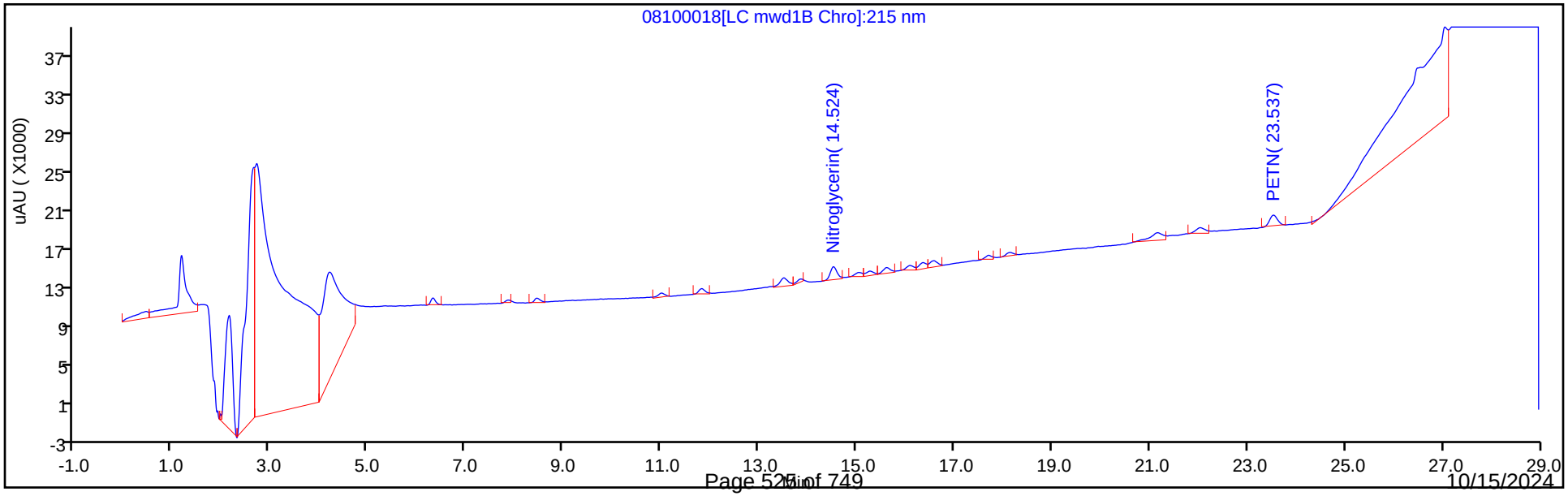
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100018.D

Injection Date:	11-Aug-2024 01:01:34	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC INT 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: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



10/15/2024
4:48:23 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

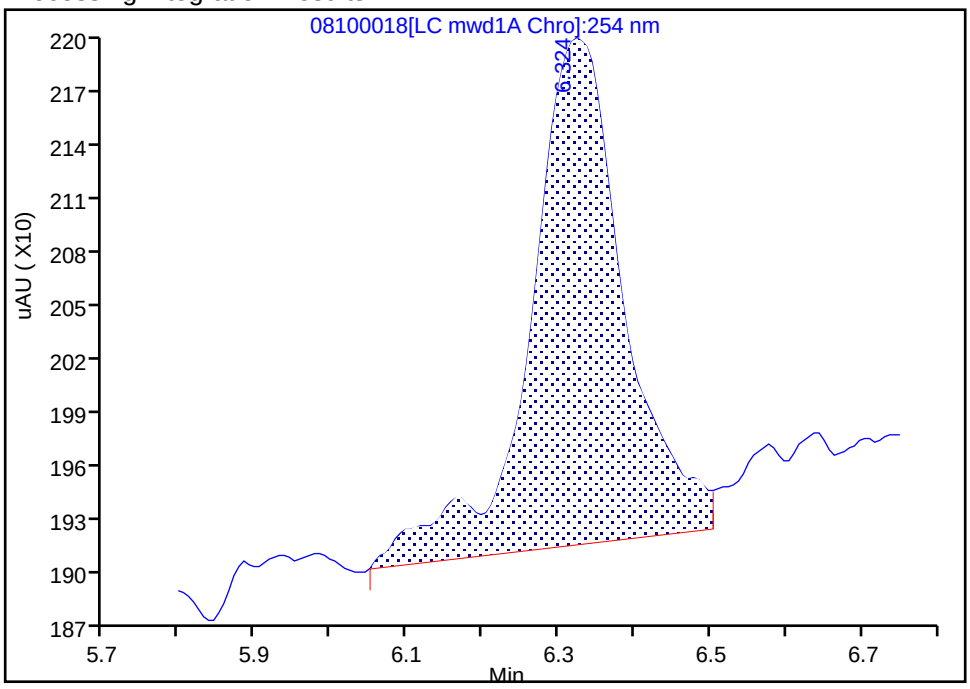
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100018.D
Injection Date: 11-Aug-2024 01:01:34 Instrument ID: CHHPLC_X5
Lims ID: IC INT 1
Client ID:
Operator ID: JZ ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC mwd1A, 254 nm

5 HMX, CAS: 2691-41-0

Signal: 1

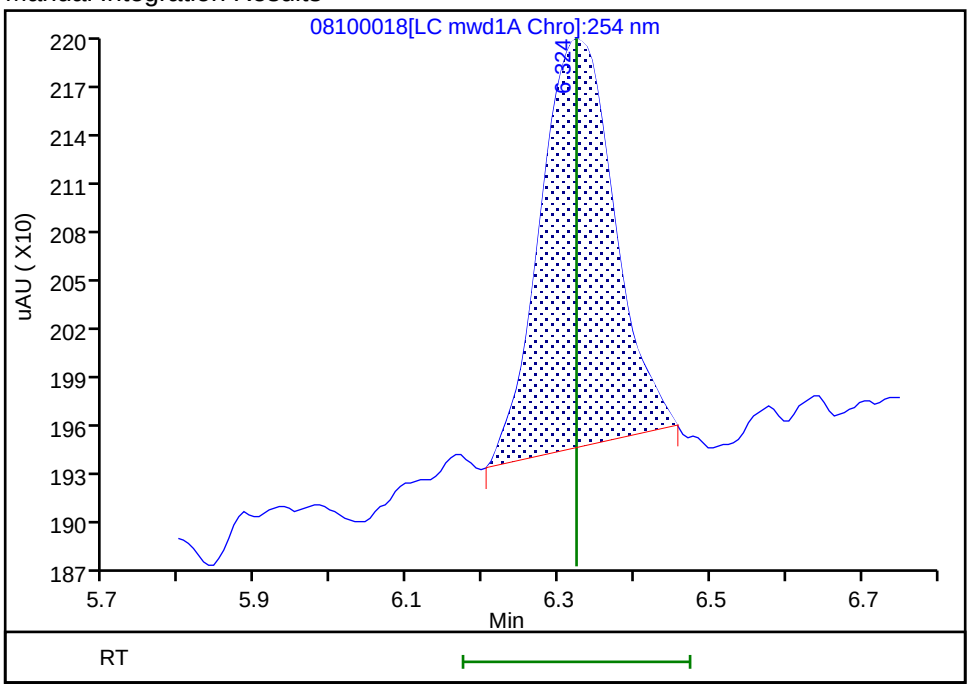
Processing Integration Results

RT: 6.32
Area: 2379
Amount: 0.010242
Amount Units: ug/ml



Manual Integration Results

RT: 6.32
Area: 1671
Amount: 0.009266
Amount Units: ug/ml



Reviewer: LV5D, 13-Aug-2024 15:15:33 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

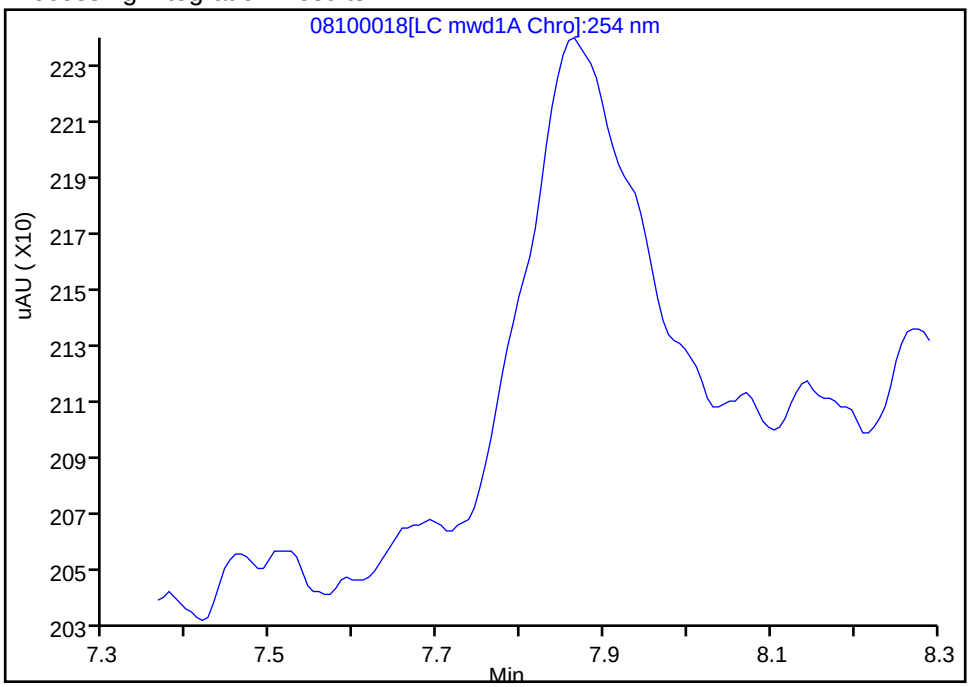
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100018.D				
Injection Date:	11-Aug-2024 01:01:34	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

7 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

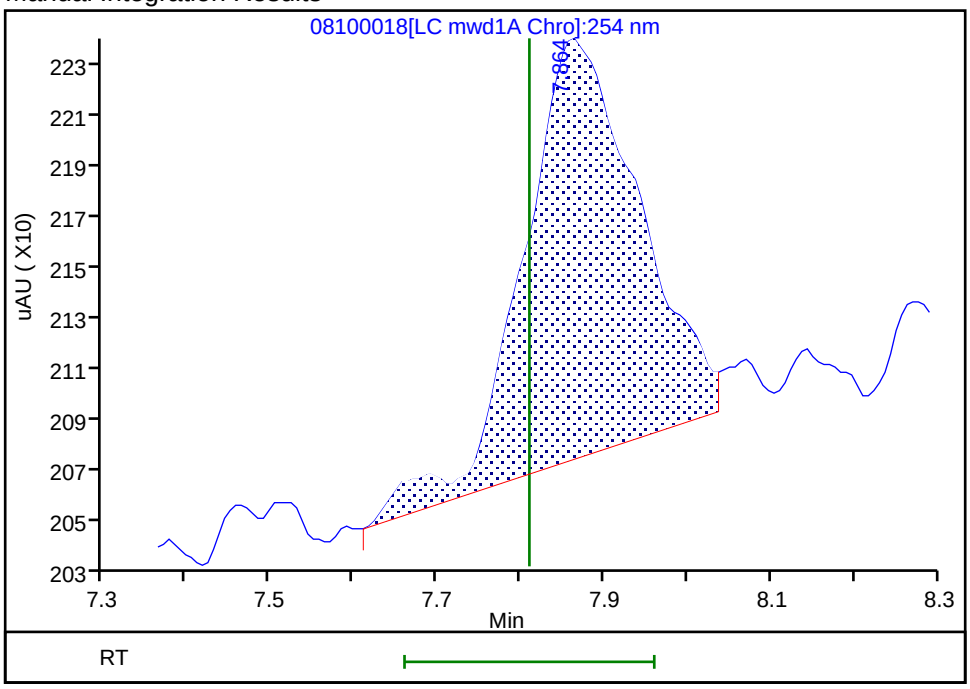
Not Detected
Expected RT: 7.81

Processing Integration Results



Manual Integration Results

RT: 7.86
Area: 1564
Amount: 0.010436
Amount Units: ug/ml



Reviewer: LV5D, 13-Aug-2024 15:14:51 -06:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

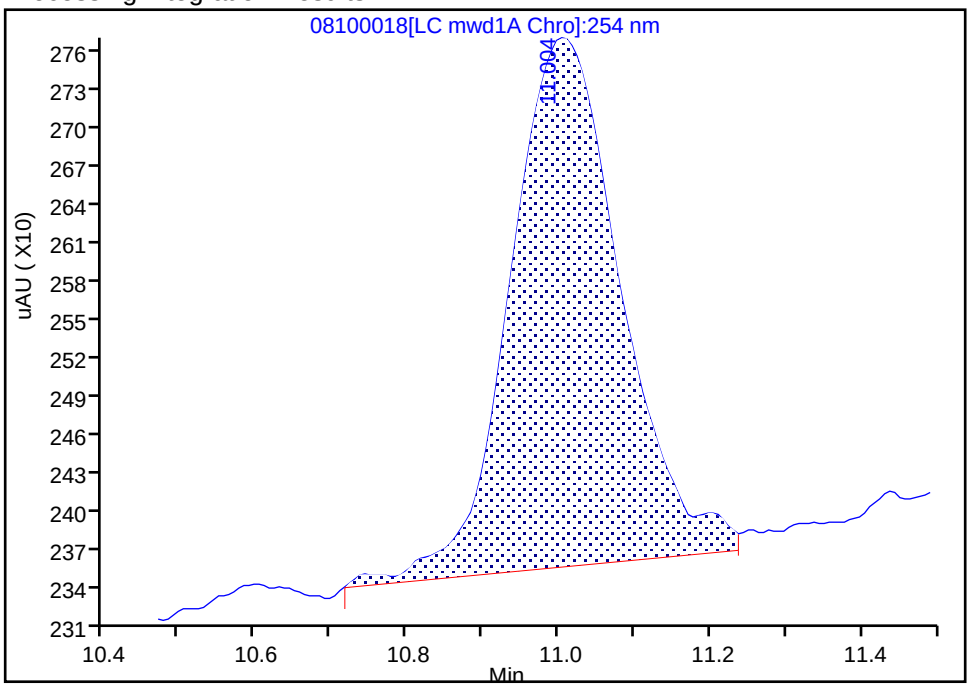
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100018.D				
Injection Date:	11-Aug-2024 01:01:34	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

9 Nitrobenzene, CAS: 98-95-3

Signal: 1

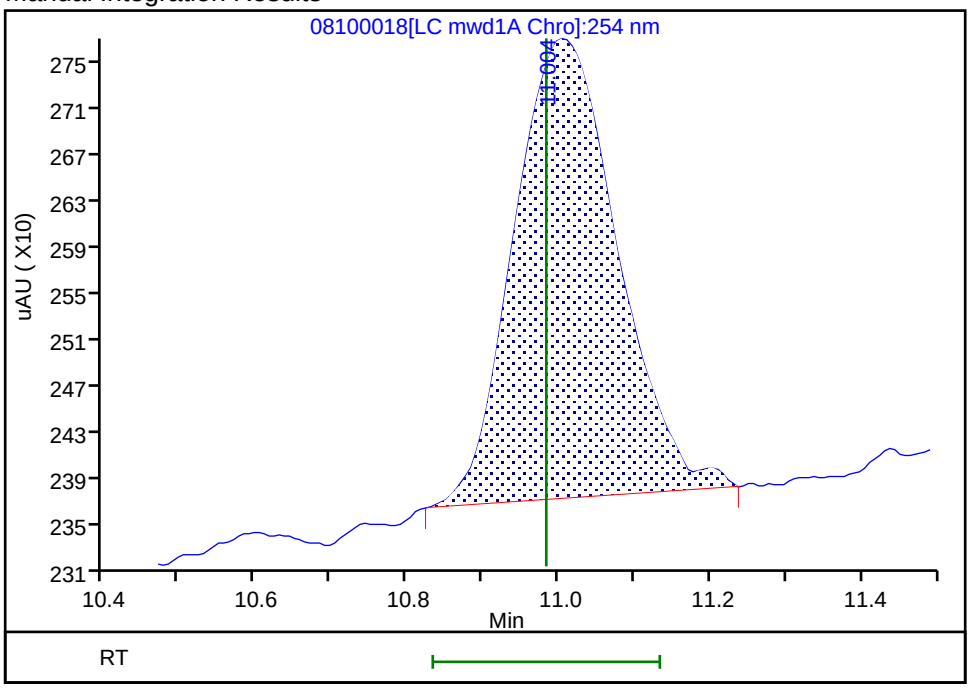
Processing Integration Results

RT: 11.00
Area: 4164
Amount: 0.010915
Amount Units: ug/ml



Manual Integration Results

RT: 11.00
Area: 3755
Amount: 0.009962
Amount Units: ug/ml



Reviewer: LV5D, 13-Aug-2024 15:15:28 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

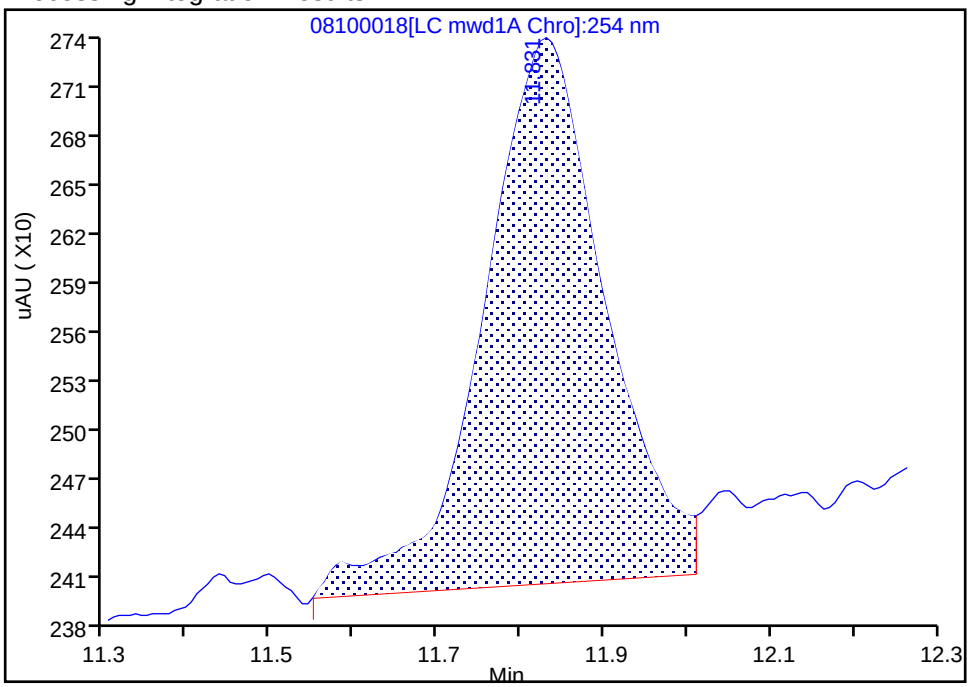
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100018.D				
Injection Date:	11-Aug-2024 01:01:34	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

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

Signal: 1

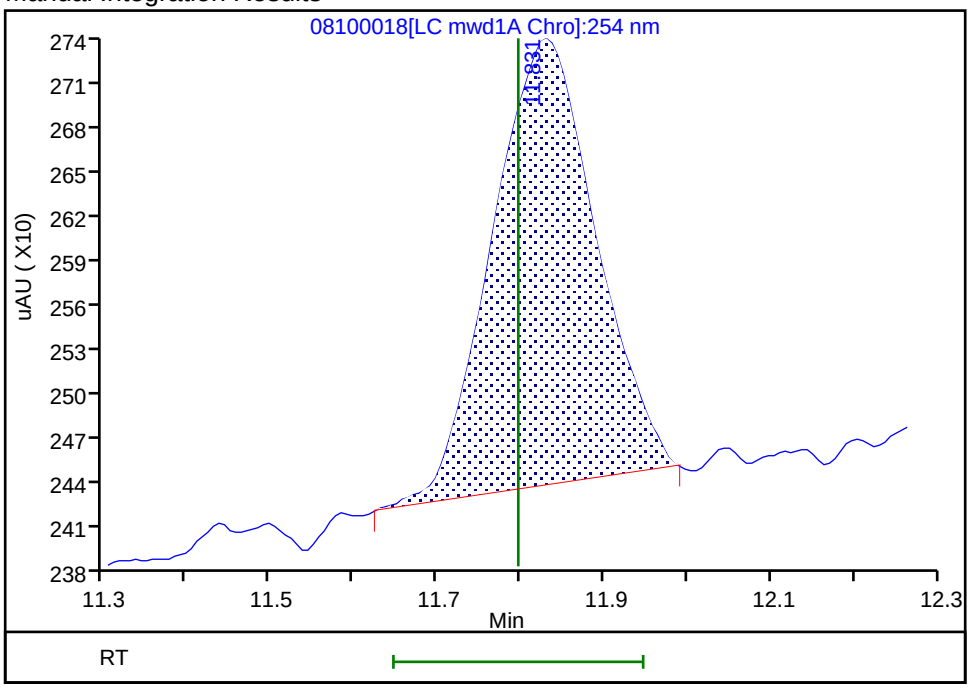
Processing Integration Results

RT: 11.83
Area: 3337
Amount: 0.012321
Amount Units: ug/ml



Manual Integration Results

RT: 11.83
Area: 2585
Amount: 0.009848
Amount Units: ug/ml



Reviewer: LV5D, 13-Aug-2024 15:15:26 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

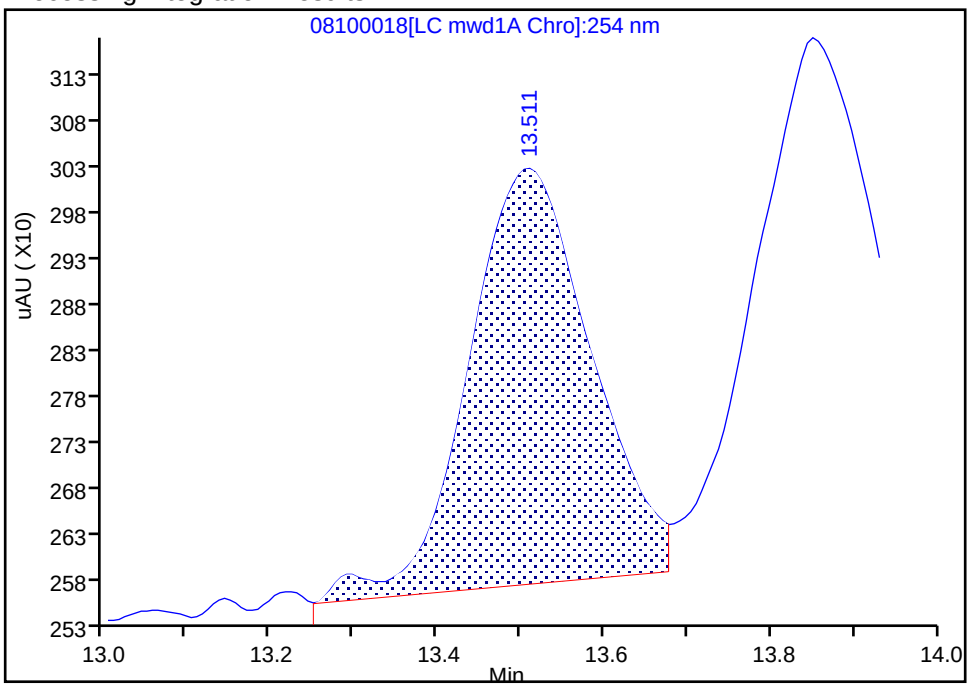
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100018.D				
Injection Date:	11-Aug-2024 01:01:34	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

11 3,5-Dinitroaniline, CAS: 618-87-1

Signal: 1

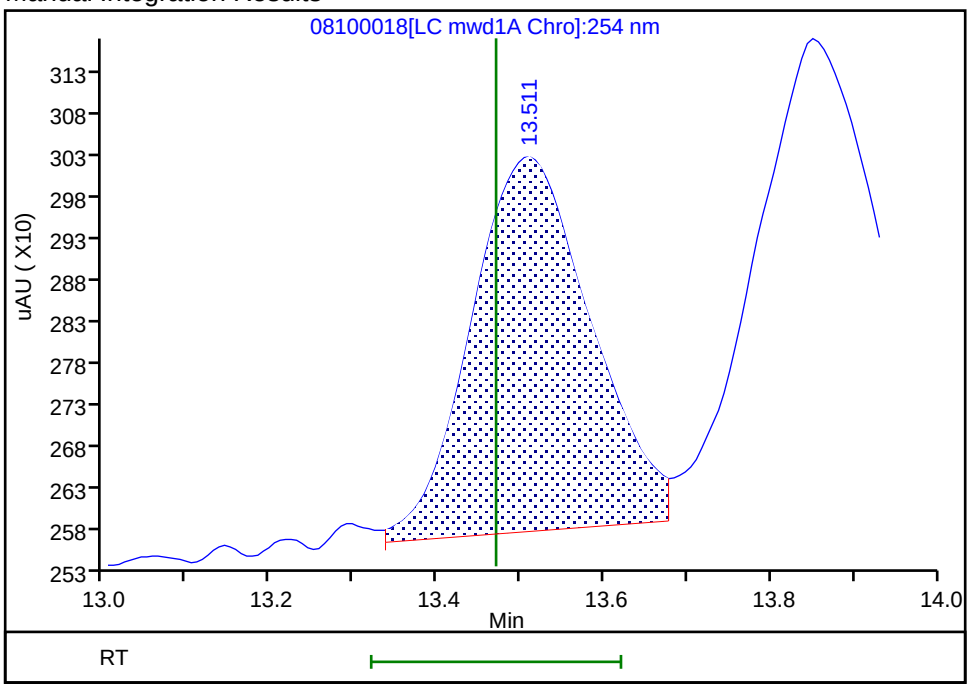
Processing Integration Results

RT: 13.51
Area: 4632
Amount: 0.009921
Amount Units: ug/ml



Manual Integration Results

RT: 13.51
Area: 4508
Amount: 0.009865
Amount Units: ug/ml



Reviewer: LV5D, 13-Aug-2024 15:15:22 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

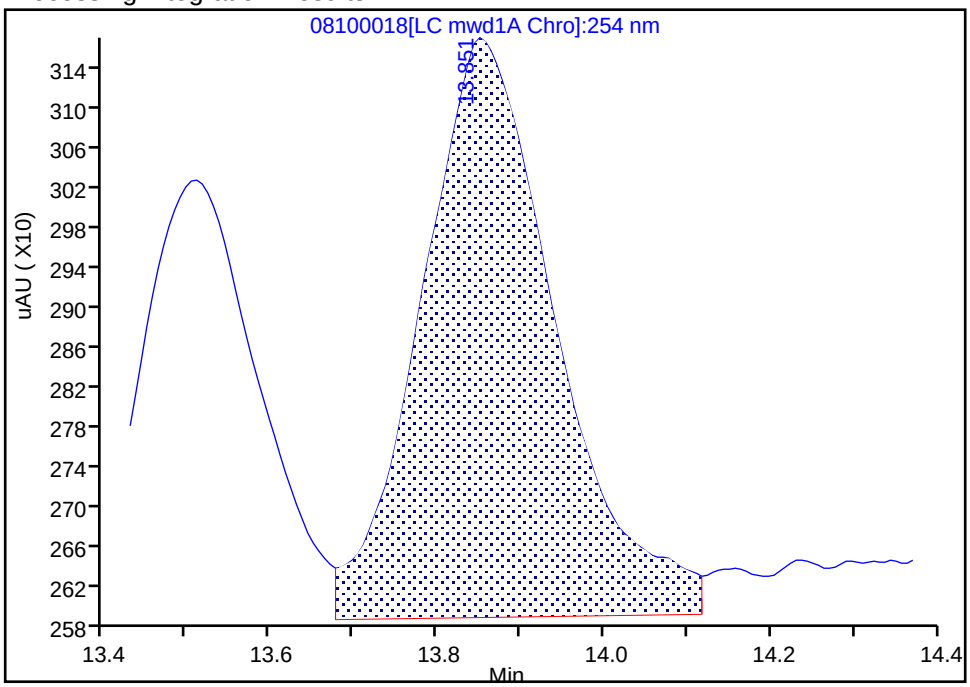
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100018.D				
Injection Date:	11-Aug-2024 01:01:34	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

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

Signal: 1

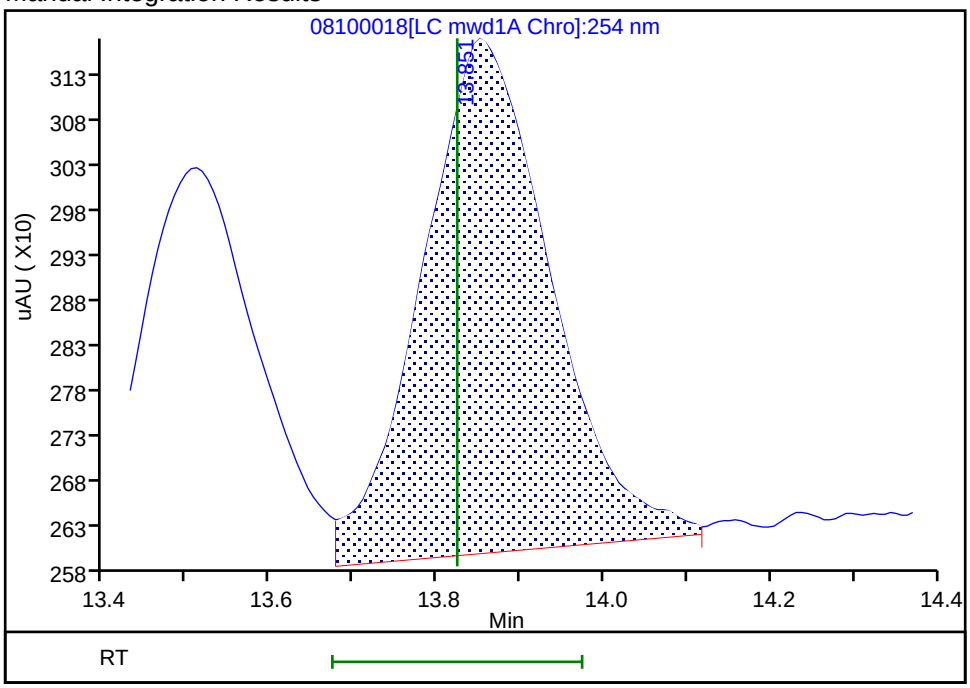
Processing Integration Results

RT: 13.85
Area: 6481
Amount: 0.010986
Amount Units: ug/ml



Manual Integration Results

RT: 13.85
Area: 6059
Amount: 0.010353
Amount Units: ug/ml



Reviewer: LV5D, 13-Aug-2024 15:15:19 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

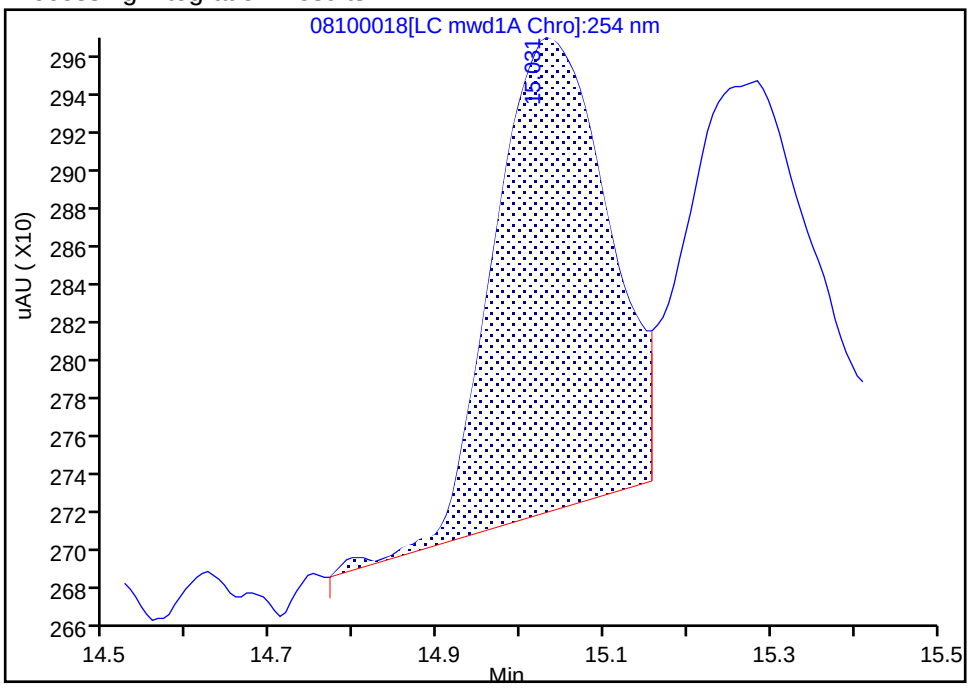
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100018.D				
Injection Date:	11-Aug-2024 01:01:34	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

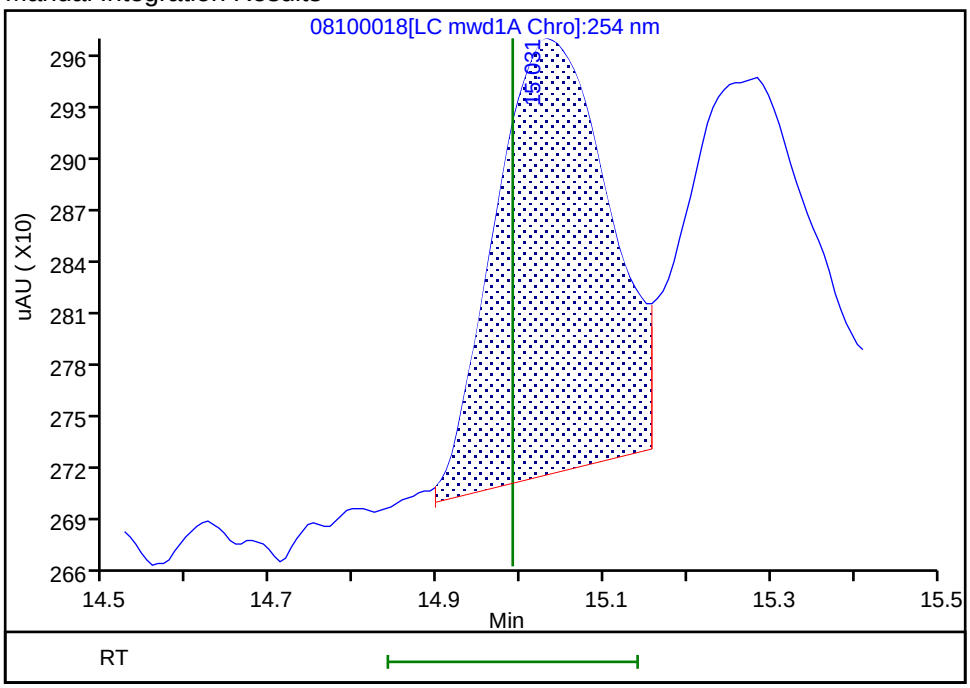
Processing Integration Results

RT: 15.03
Area: 2307
Amount: 0.009796
Amount Units: ug/ml



Manual Integration Results

RT: 15.03
Area: 2340
Amount: 0.009921
Amount Units: ug/ml



Reviewer: LV5D, 13-Aug-2024 15:15:05 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

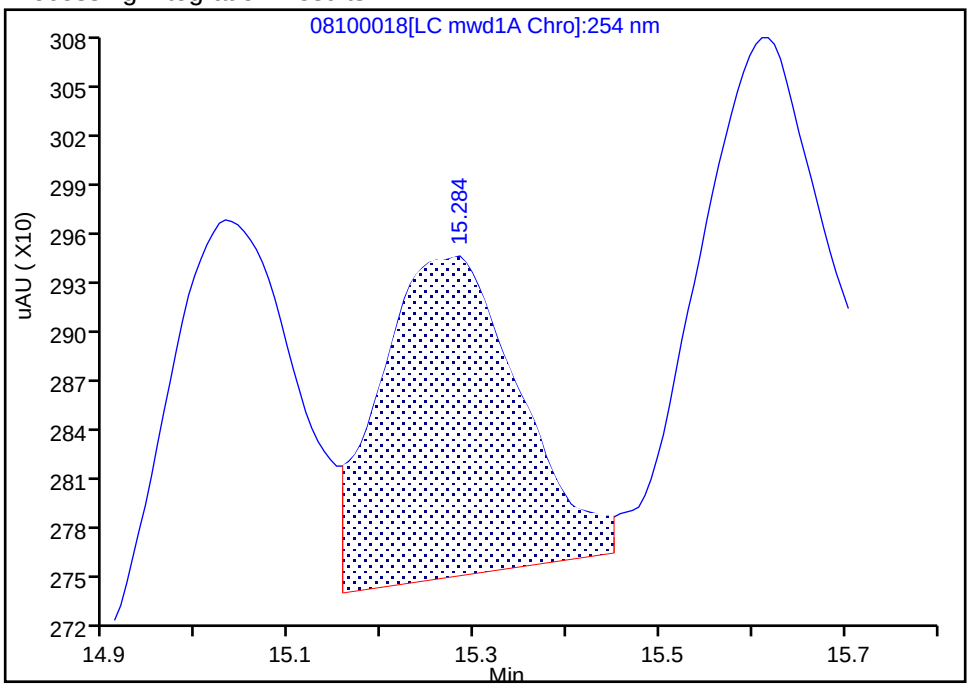
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100018.D				
Injection Date:	11-Aug-2024 01:01:34	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

16 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

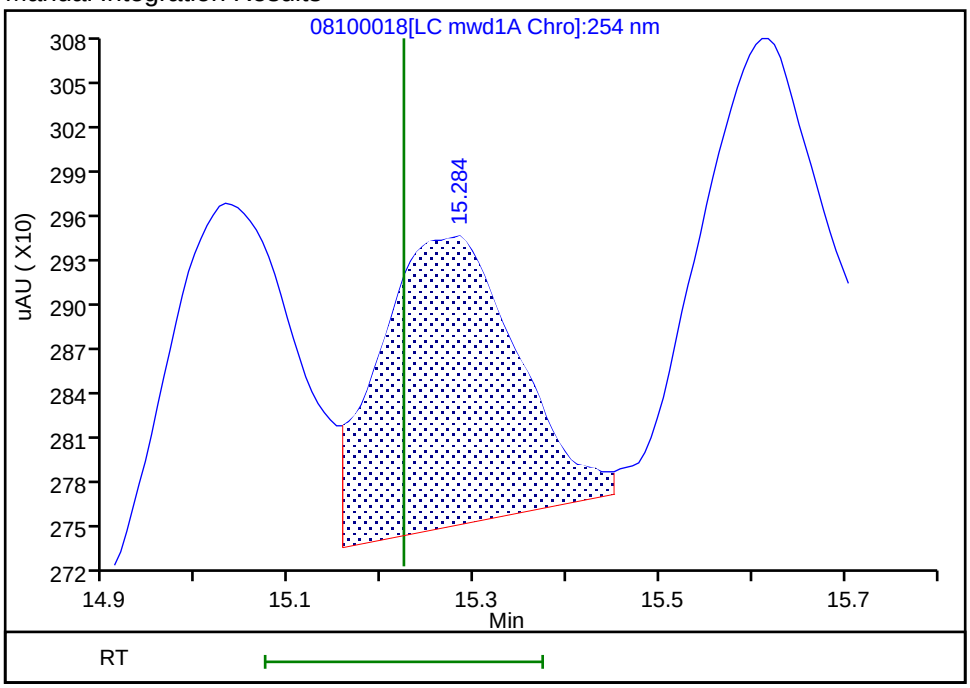
Processing Integration Results

RT: 15.28
Area: 2046
Amount: 0.009661
Amount Units: ug/ml



Manual Integration Results

RT: 15.28
Area: 2037
Amount: 0.009623
Amount Units: ug/ml



Reviewer: LV5D, 13-Aug-2024 15:15:01 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

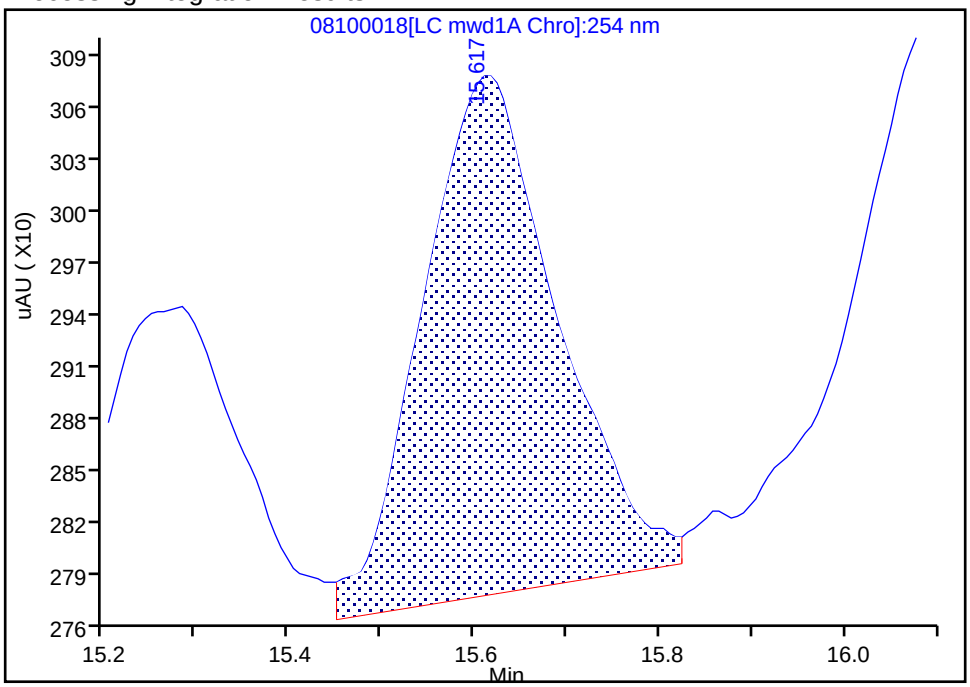
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100018.D				
Injection Date:	11-Aug-2024 01:01:34	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

17 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

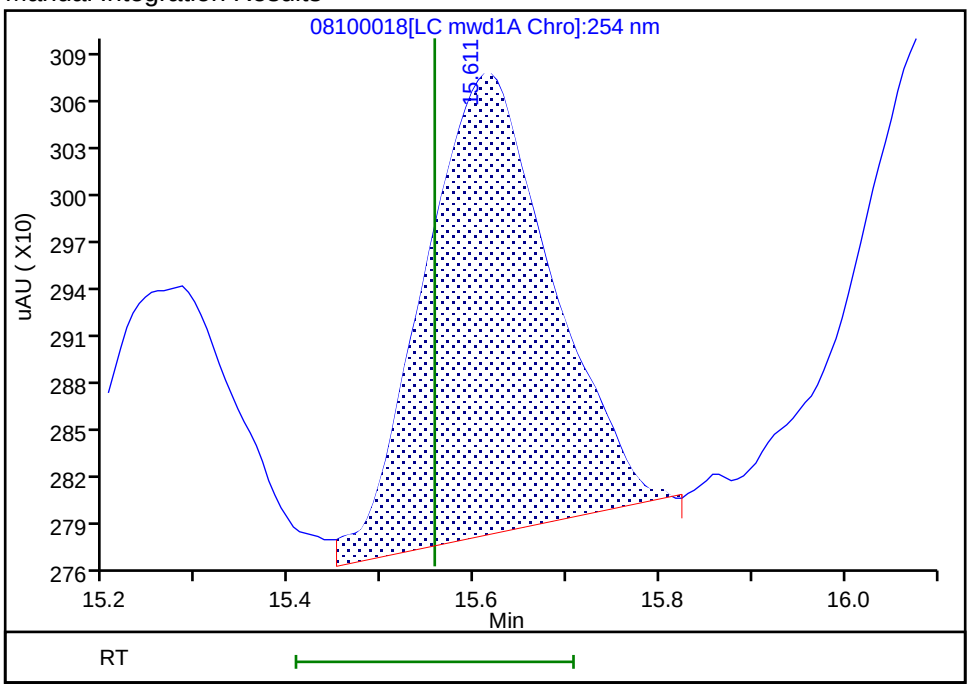
Processing Integration Results

RT: 15.62
Area: 3055
Amount: 0.010228
Amount Units: ug/ml



Manual Integration Results

RT: 15.61
Area: 2787
Amount: 0.010004
Amount Units: ug/ml



Reviewer: LV5D, 13-Aug-2024 15:15:01 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

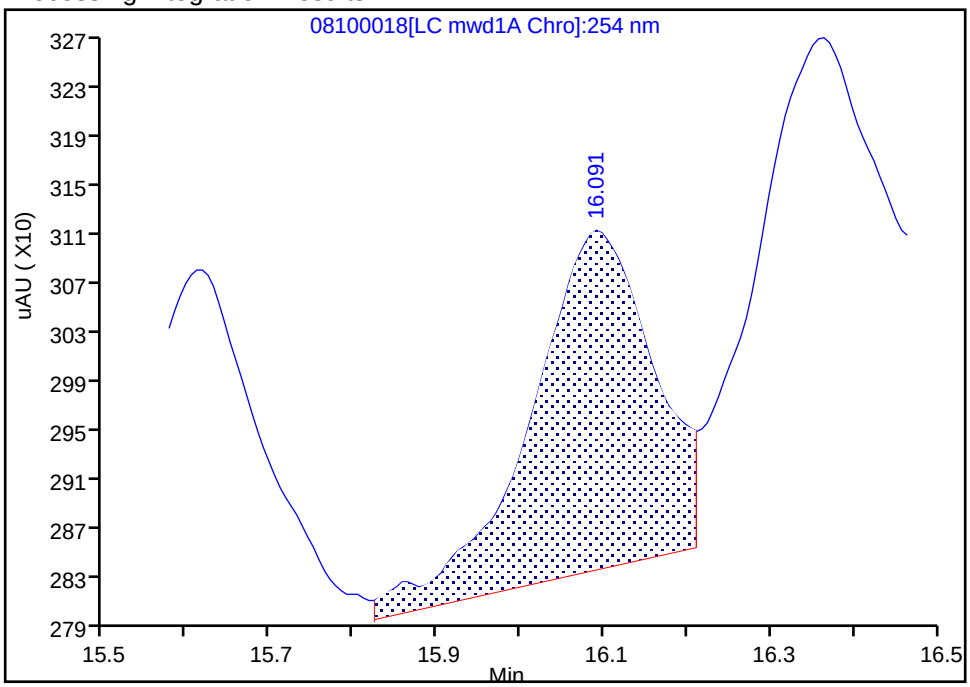
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100018.D				
Injection Date:	11-Aug-2024 01:01:34	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

18 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

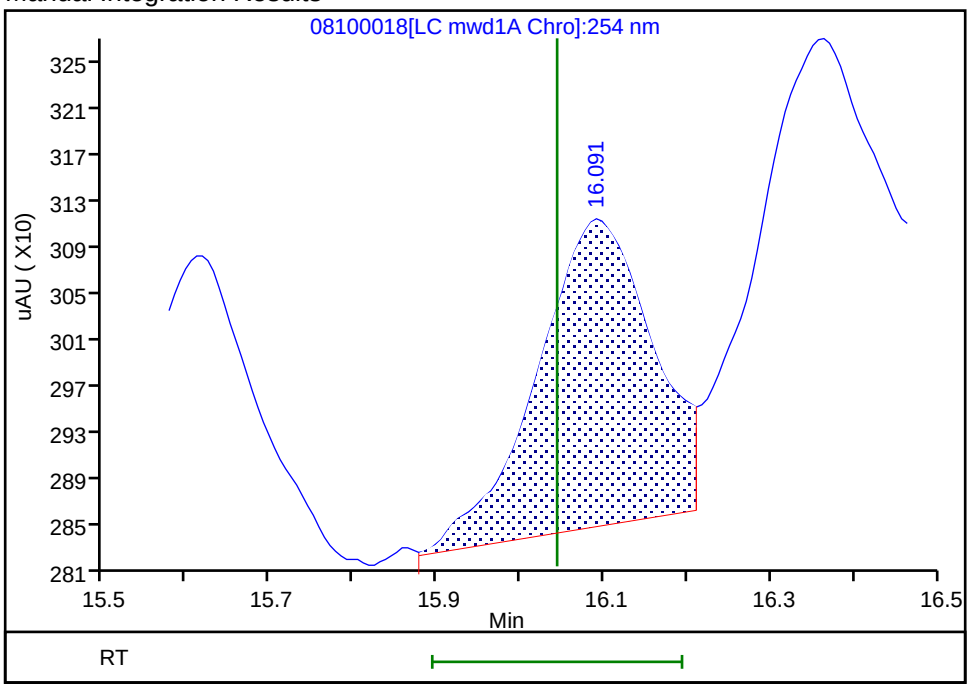
Processing Integration Results

RT: 16.09
Area: 2824
Amount: 0.010807
Amount Units: ug/ml



Manual Integration Results

RT: 16.09
Area: 2547
Amount: 0.009864
Amount Units: ug/ml



Reviewer: LV5D, 13-Aug-2024 15:15:04 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

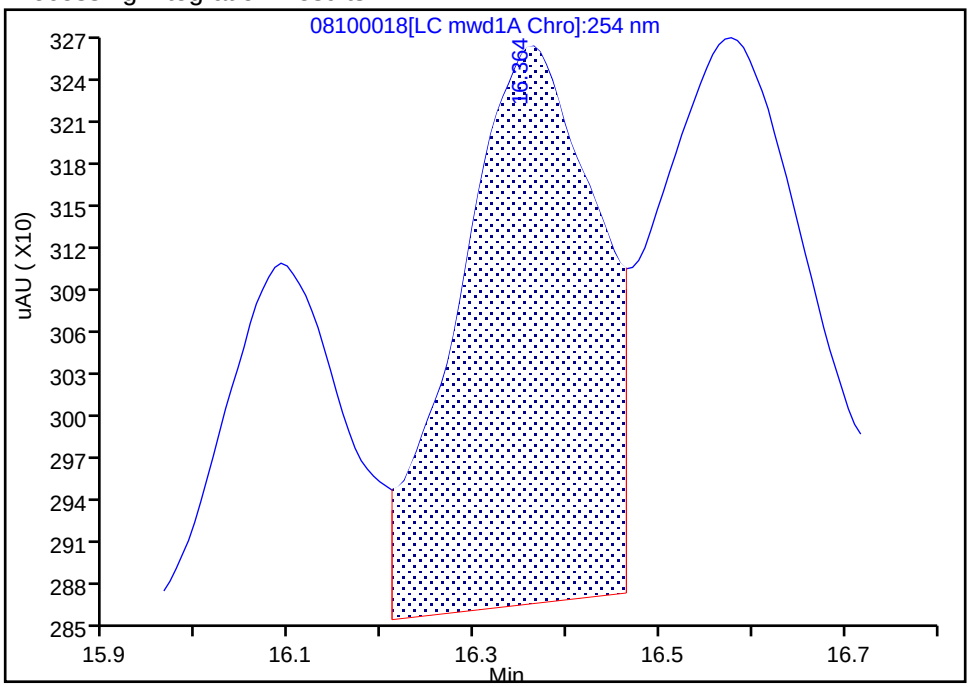
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100018.D				
Injection Date:	11-Aug-2024 01:01:34	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

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

Signal: 1

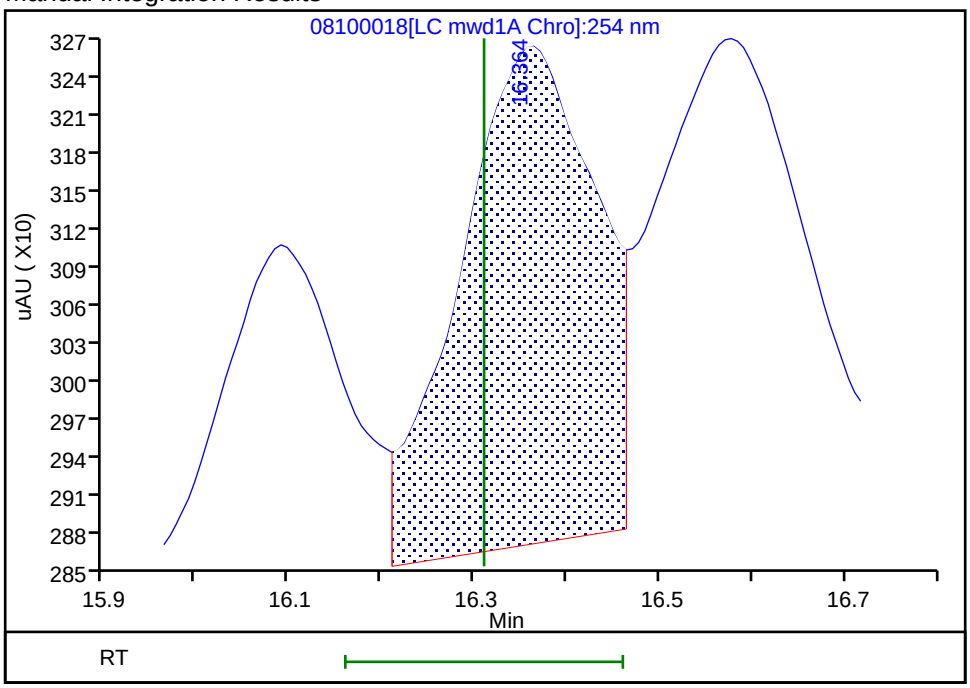
Processing Integration Results

RT: 16.36
Area: 4124
Amount: 0.010545
Amount Units: ug/ml



Manual Integration Results

RT: 16.36
Area: 3972
Amount: 0.010200
Amount Units: ug/ml



Reviewer: LV5D, 13-Aug-2024 15:15:01 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

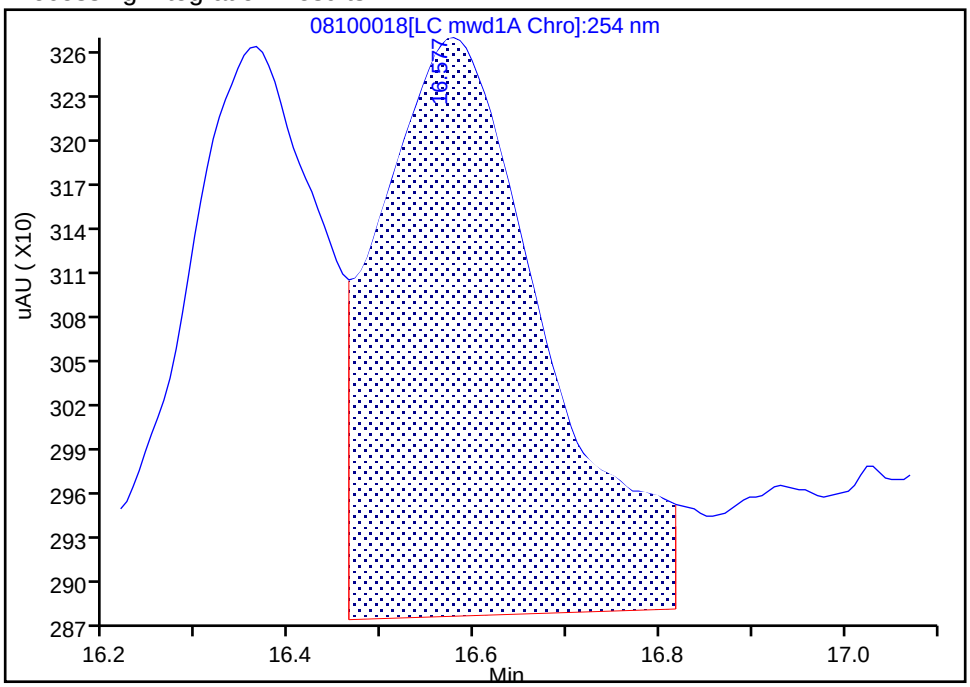
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100018.D				
Injection Date:	11-Aug-2024 01:01:34	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit 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

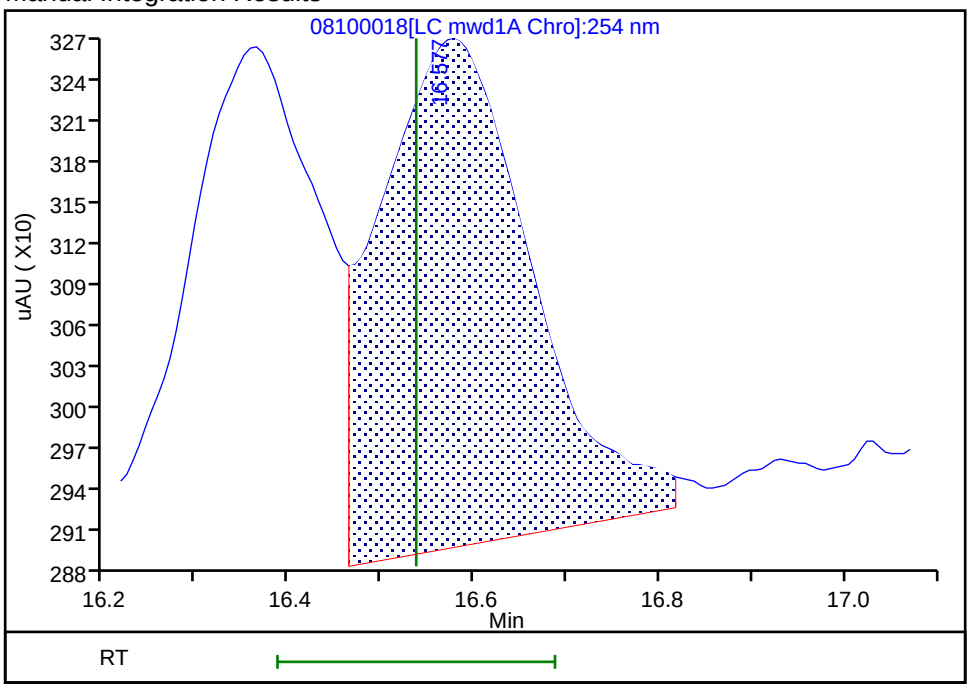
Processing Integration Results

RT: 16.58
Area: 4863
Amount: 0.011274
Amount Units: ug/ml



Manual Integration Results

RT: 16.58
Area: 4185
Amount: 0.009875
Amount Units: ug/ml



Reviewer: LV5D, 13-Aug-2024 15:15:01 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

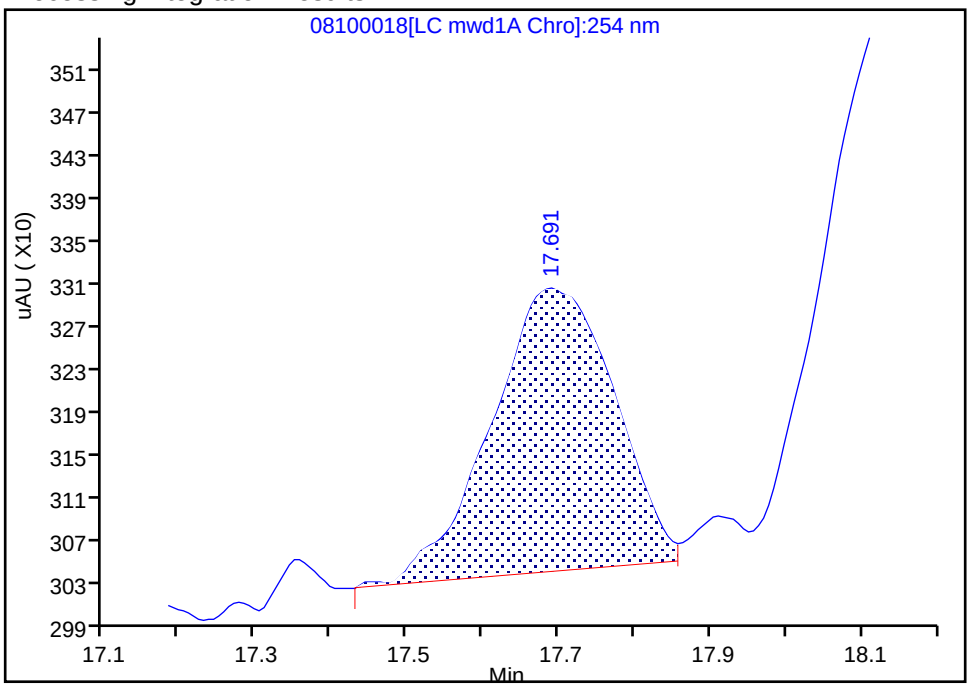
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100018.D				
Injection Date:	11-Aug-2024 01:01:34	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

21 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

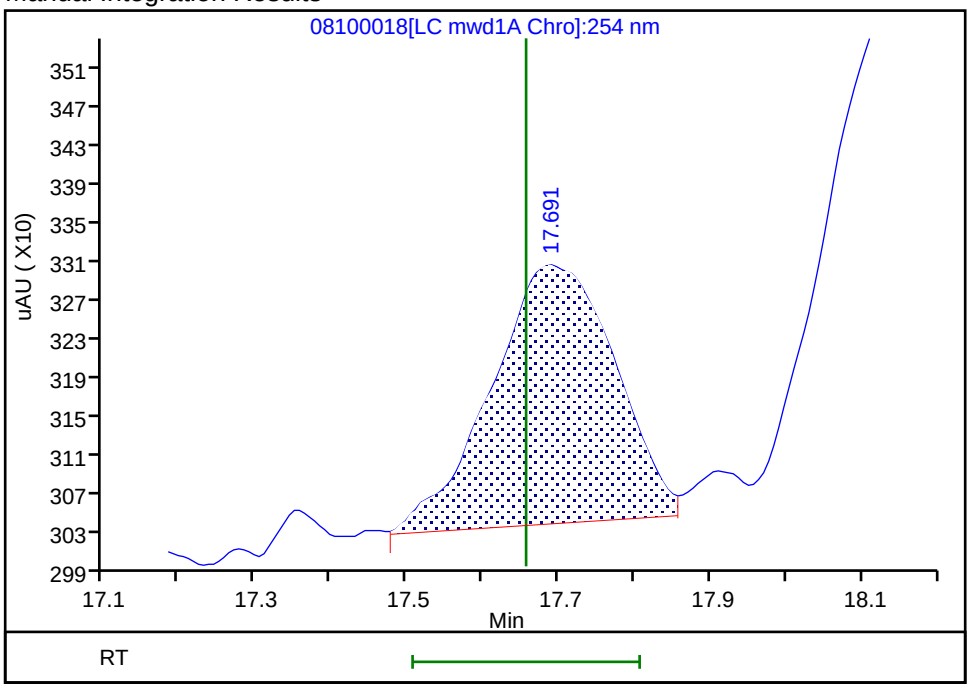
Processing Integration Results

RT: 17.69
Area: 3008
Amount: 0.009700
Amount Units: ug/ml



Manual Integration Results

RT: 17.69
Area: 3065
Amount: 0.010767
Amount Units: ug/ml



Reviewer: LV5D, 13-Aug-2024 15:15:11 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

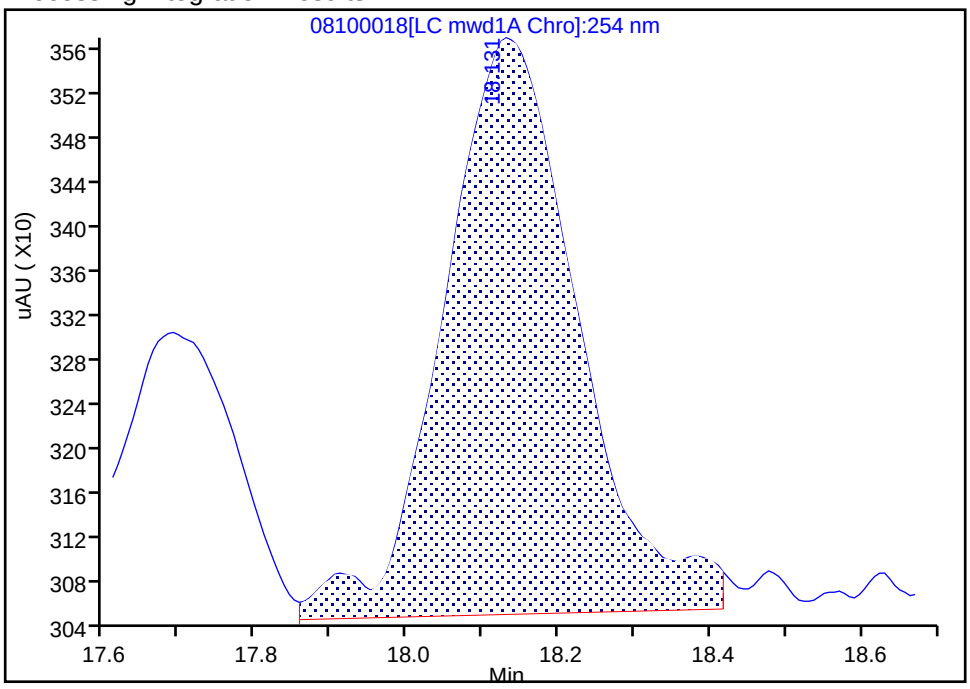
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100018.D				
Injection Date:	11-Aug-2024 01:01:34	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

22 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

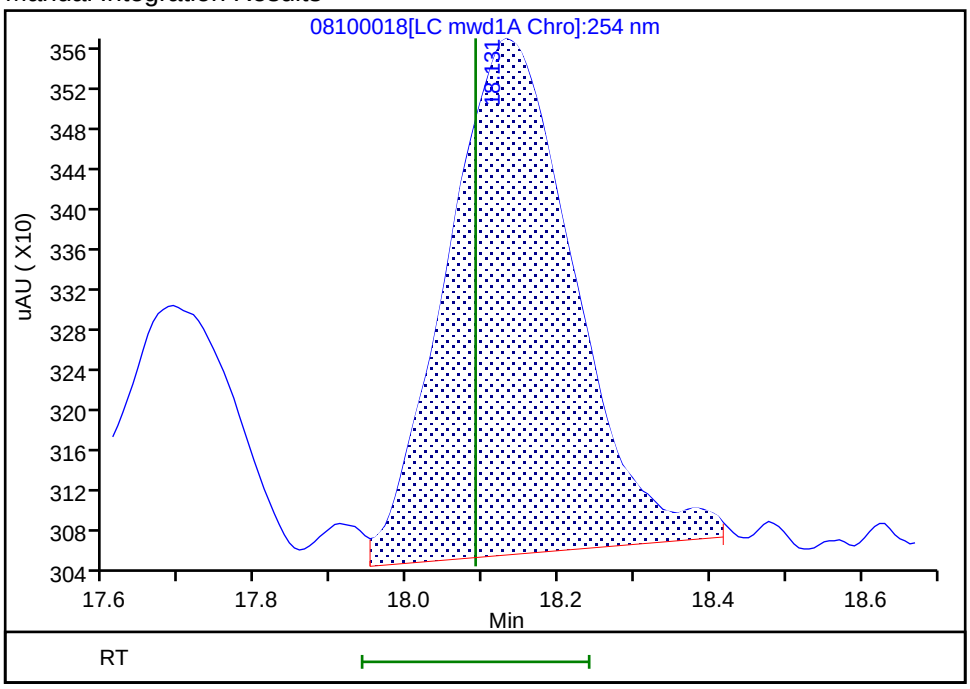
Processing Integration Results

RT: 18.13
Area: 6357
Amount: 0.011091
Amount Units: ug/ml



Manual Integration Results

RT: 18.13
Area: 5939
Amount: 0.010447
Amount Units: ug/ml



Reviewer: LV5D, 13-Aug-2024 15:15:13 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

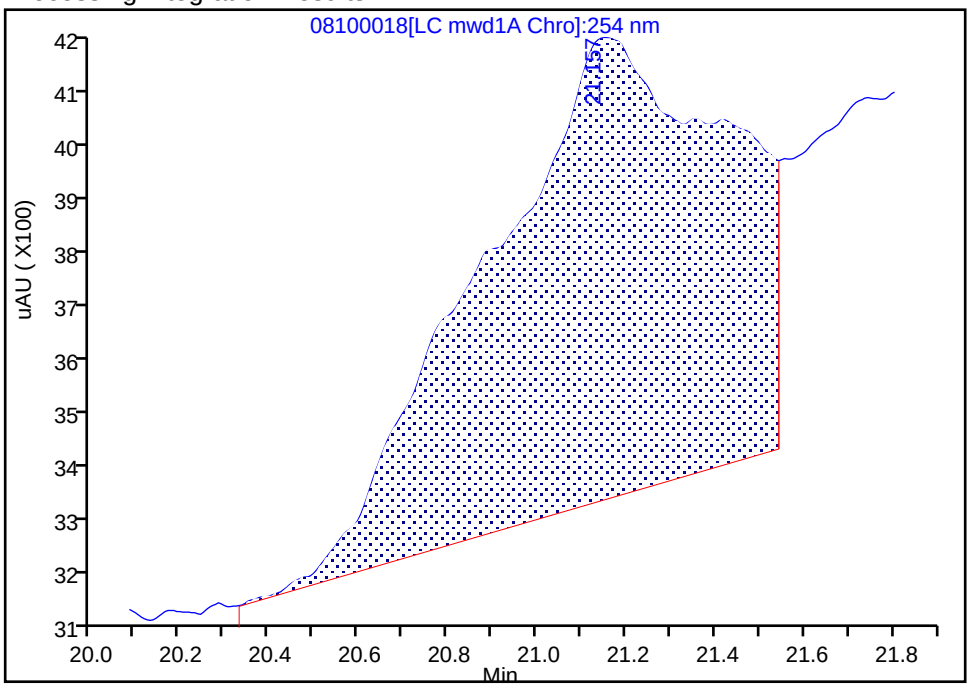
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100018.D
Injection Date: 11-Aug-2024 01:01:34 Instrument ID: CHHPLC_X5
Lims ID: IC INT 1
Client ID:
Operator ID: JZ ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC mwd1A, 254 nm

23 Tetryl, CAS: 479-45-8

Signal: 1

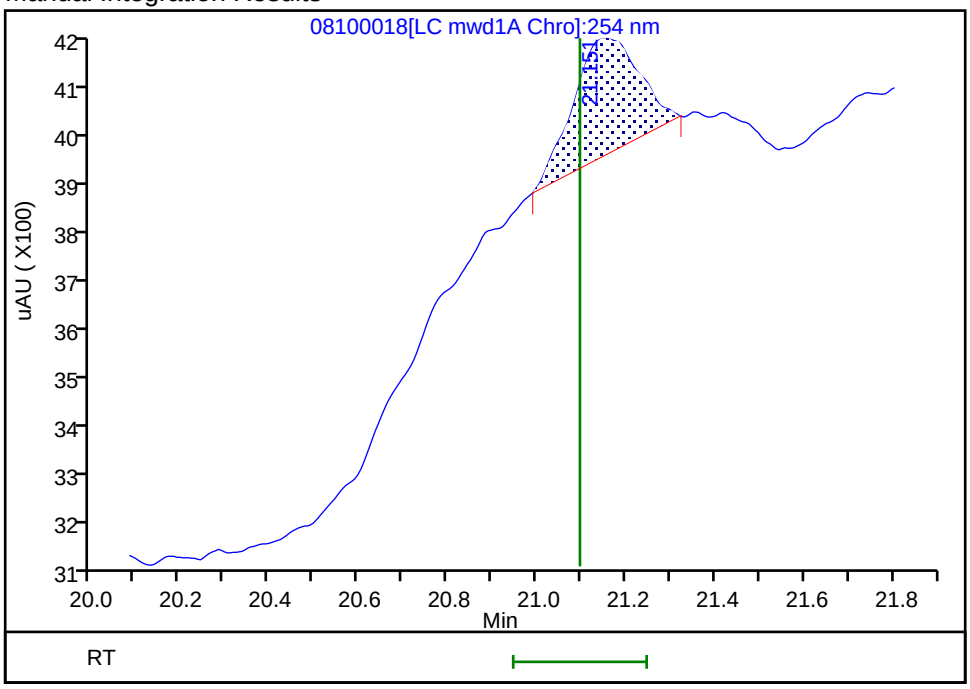
Processing Integration Results

RT: 21.16
Area: 31890
Amount: 0.052229
Amount Units: ug/ml



Manual Integration Results

RT: 21.15
Area: 2430
Amount: 0.008576
Amount Units: ug/ml



Reviewer: LV5D, 13-Aug-2024 15:14:42 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

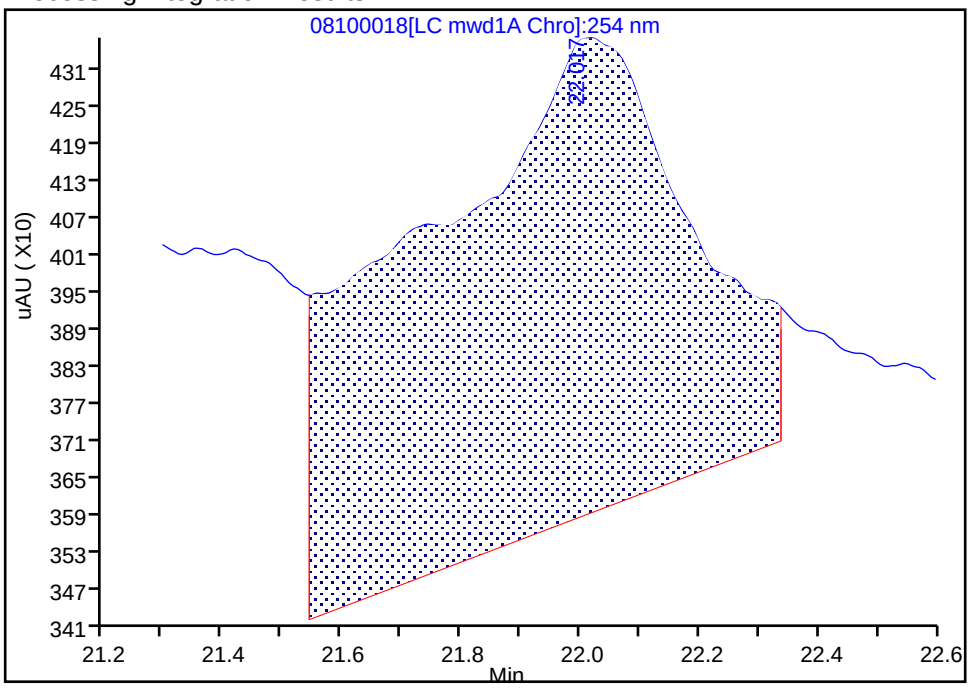
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100018.D				
Injection Date:	11-Aug-2024 01:01:34	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

24 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

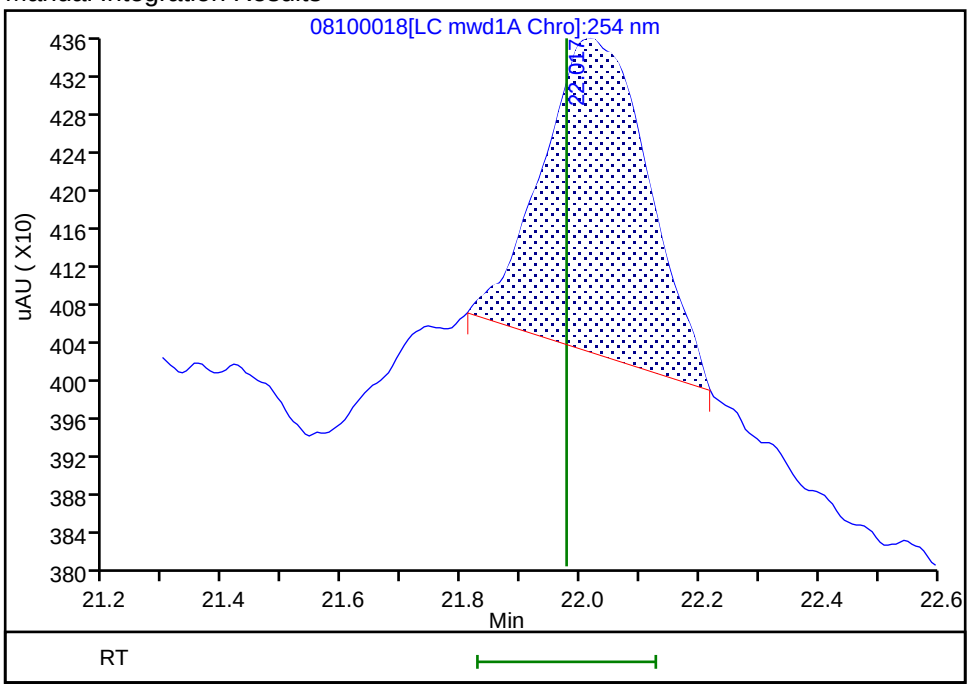
Processing Integration Results

RT: 22.02
Area: 25478
Amount: 0.025910
Amount Units: ug/ml



Manual Integration Results

RT: 22.02
Area: 4082
Amount: 0.009807
Amount Units: ug/ml



Reviewer: LV5D, 13-Aug-2024 15:14:45 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Calibration / HMX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

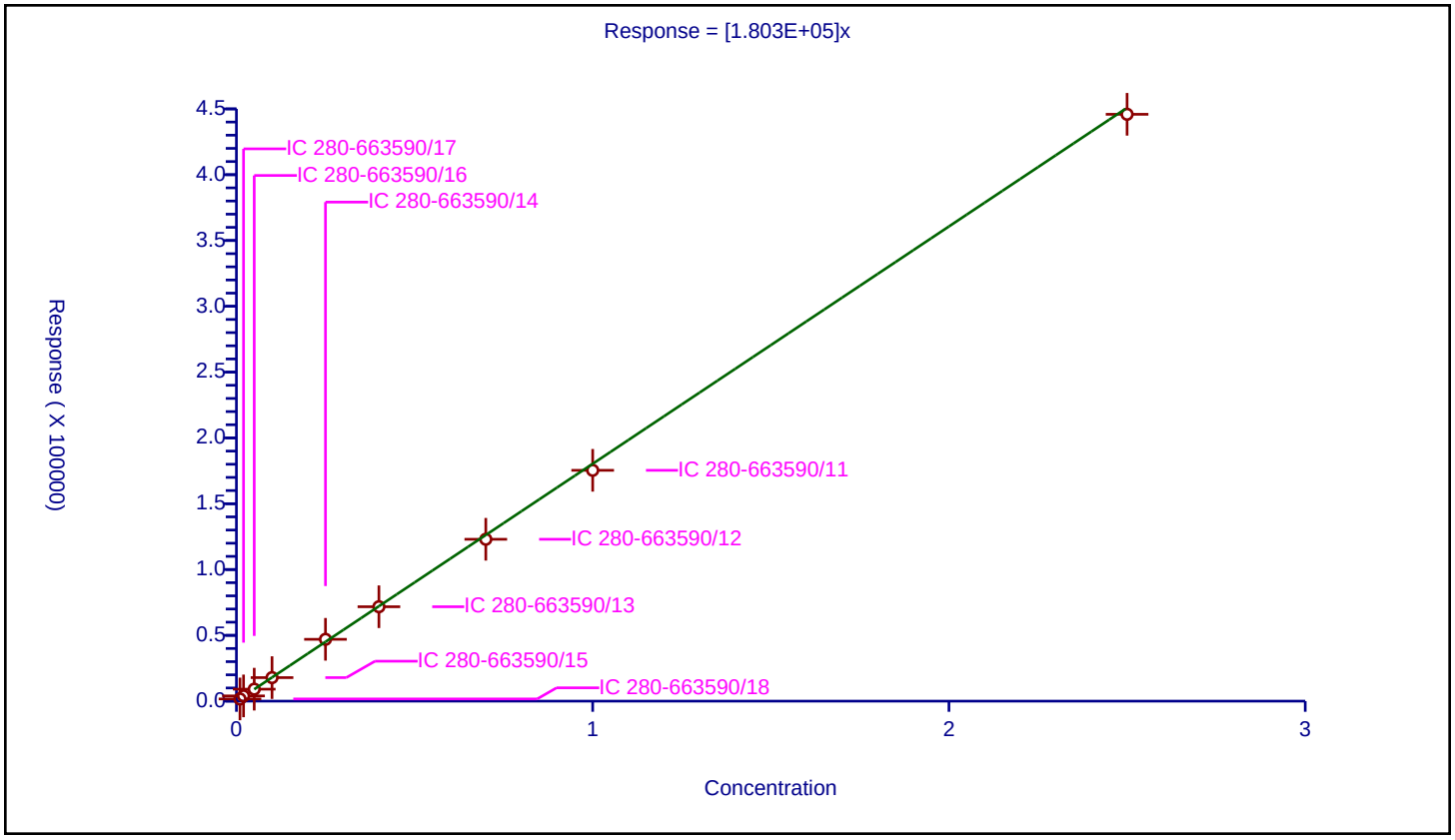
Curve Coefficients

Intercept:	0
Slope:	1.803E+05

Error Coefficients

Relative Standard Deviation:	4.9

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-663590/18	0.01	1671.0			167100.0	Y
2	IC 280-663590/17	0.02	3967.0			198350.0	Y
3	IC 280-663590/16	0.05	9102.0			182040.0	Y
4	IC 280-663590/15	0.1	17888.0			178880.0	Y
5	IC 280-663590/14	0.25	46973.0			187892.0	Y
6	IC 280-663590/13	0.4	71733.0			179332.5	Y
7	IC 280-663590/12	0.7	122999.0			175712.857143	Y
8	IC 280-663590/11	1.0	175376.0			175376.0	Y
9	IC 280-663590/10	2.5	445898.0			178359.2	Y



10/15/2024
4:48:23 PM

Calibration / 2,4,6-Trinitrophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

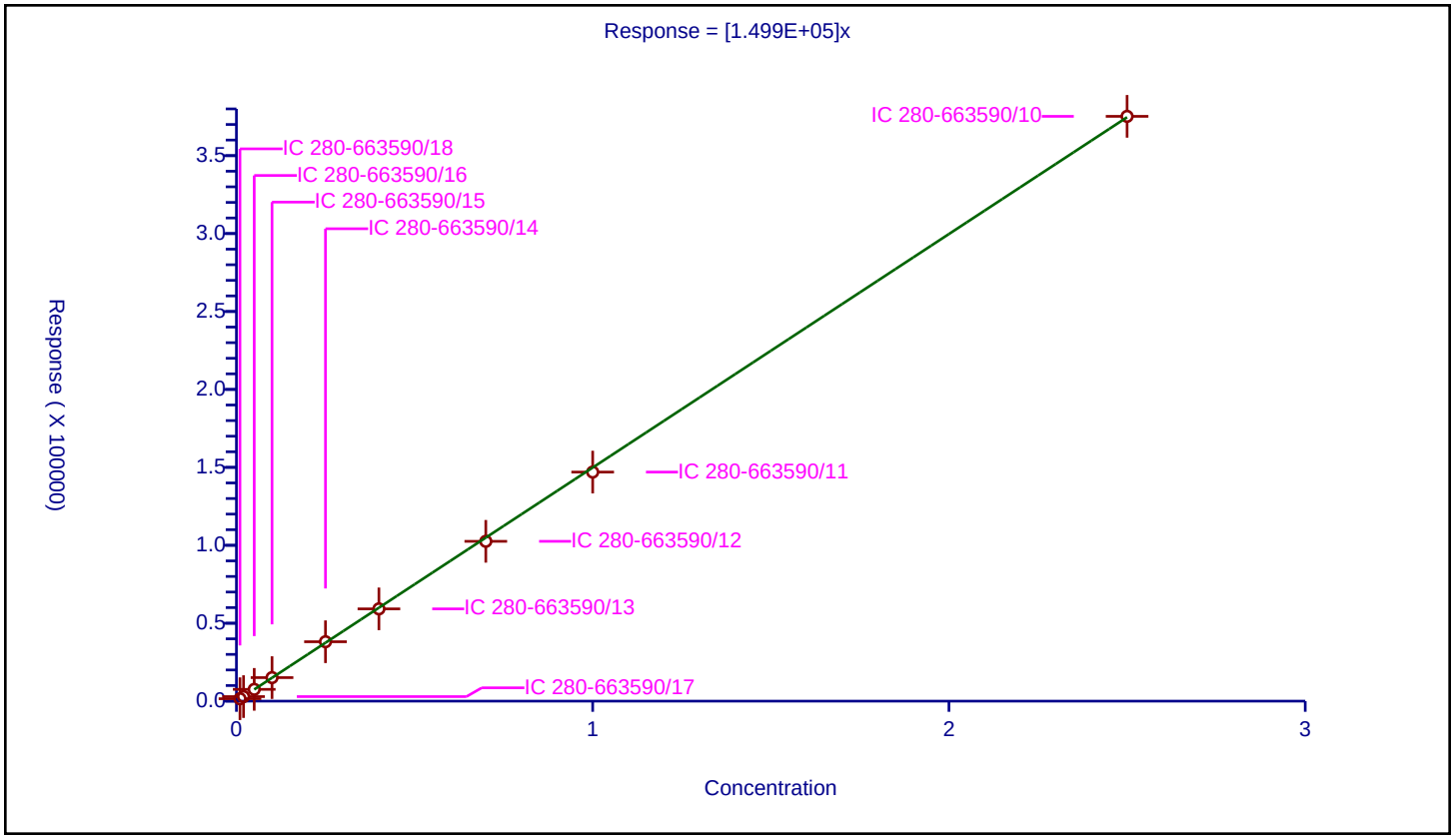
Curve Coefficients

Intercept:	0
Slope:	1.499E+05

Error Coefficients

Relative Standard Deviation:	2.3

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-663590/18	0.01	1564.0			156400.0	Y
2	IC 280-663590/17	0.02	2918.0			145900.0	Y
3	IC 280-663590/16	0.05	7567.0			151340.0	Y
4	IC 280-663590/15	0.1	15103.0			151030.0	Y
5	IC 280-663590/14	0.25	38121.0			152484.0	Y
6	IC 280-663590/13	0.4	59211.0			148027.5	Y
7	IC 280-663590/12	0.7	102542.0			146488.571429	Y
8	IC 280-663590/11	1.0	146979.0			146979.0	Y
9	IC 280-663590/10	2.5	375214.0			150085.6	Y



10/15/2024
4:48:23 PM

Calibration / RDX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

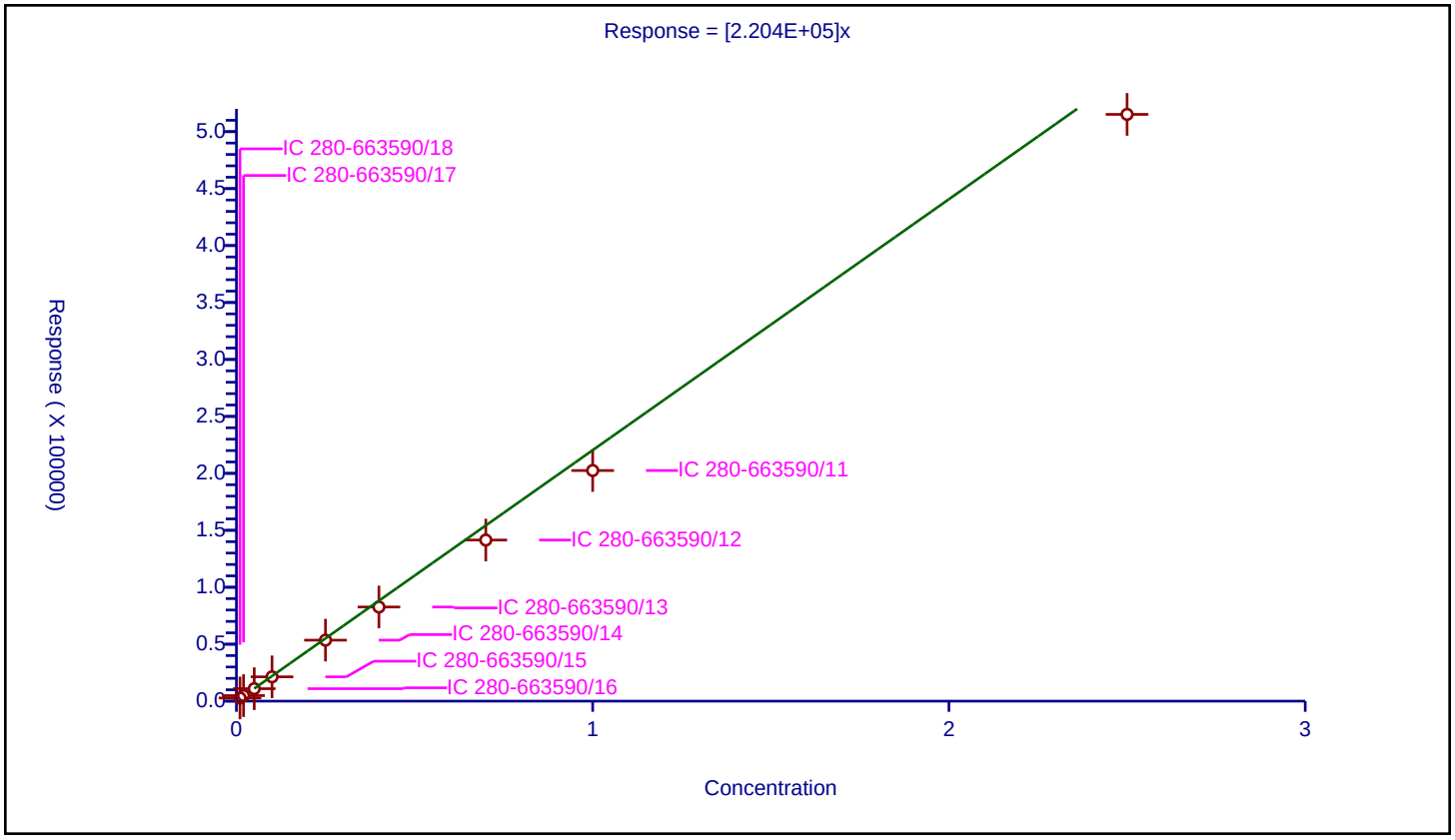
Curve Coefficients

Intercept:	0
Slope:	2.204E+05

Error Coefficients

Relative Standard Deviation:	11.2

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-663590/18	0.01	2773.0			277300.0	Y
2	IC 280-663590/17	0.02	4852.0			242600.0	Y
3	IC 280-663590/16	0.05	10927.0			218540.0	Y
4	IC 280-663590/15	0.1	21335.0			213350.0	Y
5	IC 280-663590/14	0.25	53547.0			214188.0	Y
6	IC 280-663590/13	0.4	82649.0			206622.5	Y
7	IC 280-663590/12	0.7	141434.0			202048.571429	Y
8	IC 280-663590/11	1.0	202487.0			202487.0	Y
9	IC 280-663590/10	2.5	515189.0			206075.6	Y



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Calibration / Nitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

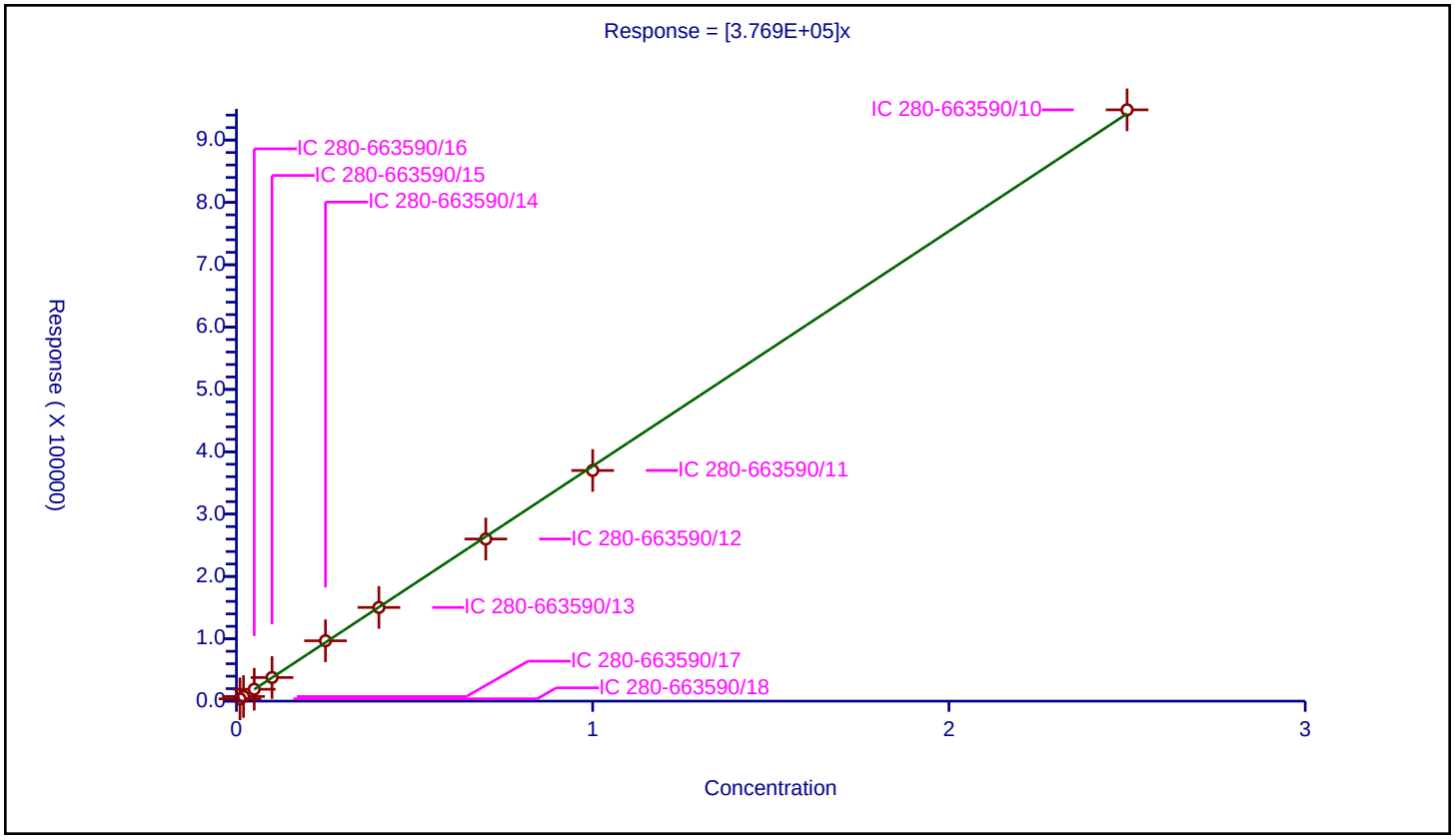
Curve Coefficients

Intercept:	0
Slope:	3.769E+05

Error Coefficients

Relative Standard Deviation:	1.5

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-663590/18	0.01	3755.0			375500.0	Y
2	IC 280-663590/17	0.02	7452.0			372600.0	Y
3	IC 280-663590/16	0.05	19091.0			381820.0	Y
4	IC 280-663590/15	0.1	37856.0			378560.0	Y
5	IC 280-663590/14	0.25	96842.0			387368.0	Y
6	IC 280-663590/13	0.4	150269.0			375672.5	Y
7	IC 280-663590/12	0.7	260064.0			371520.0	Y
8	IC 280-663590/11	1.0	369980.0			369980.0	Y
9	IC 280-663590/10	2.5	948495.0			379398.0	Y



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Calibration / 1,2-Dinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

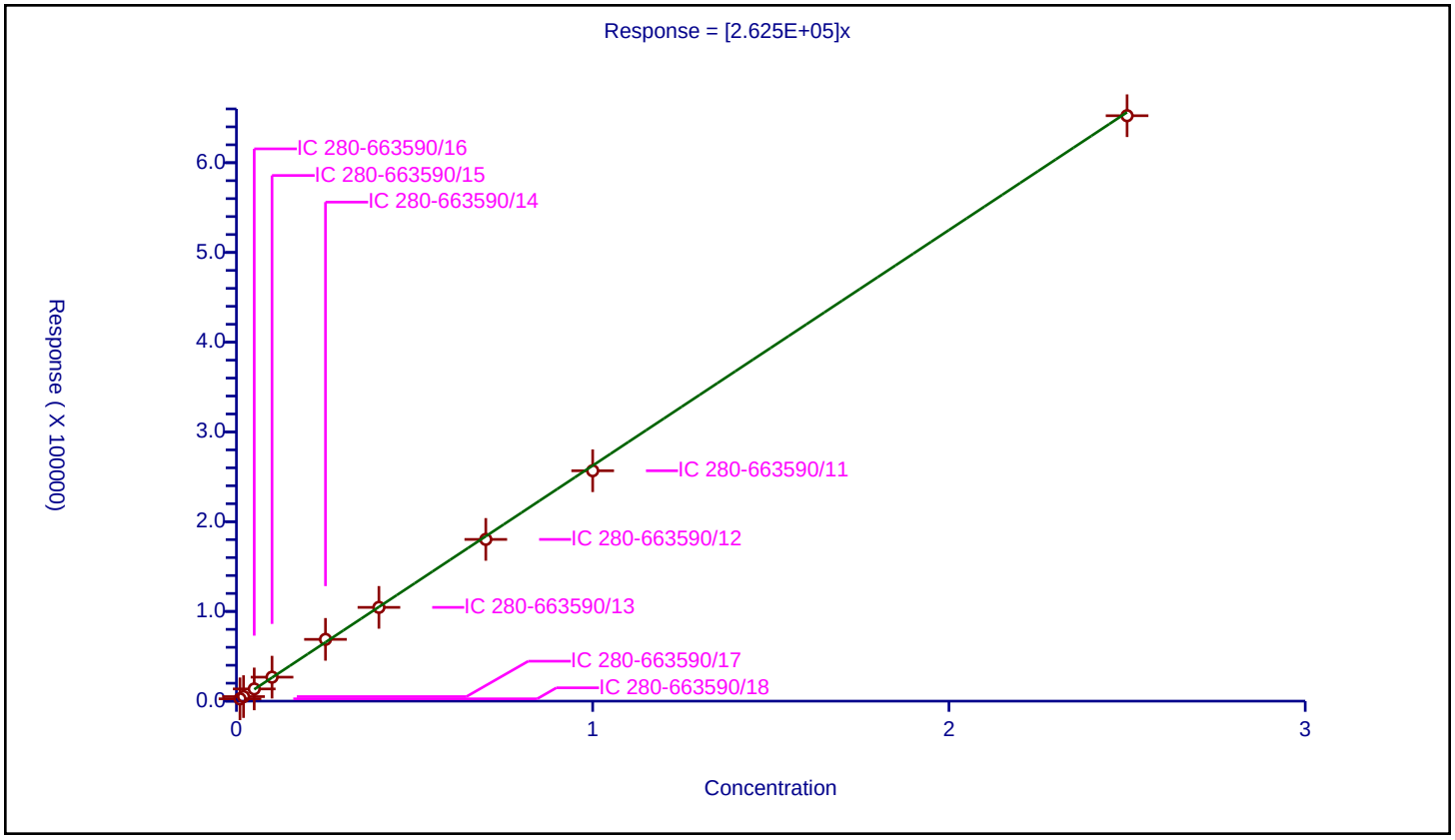
Curve Coefficients

Intercept:	0
Slope:	2.625E+05

Error Coefficients

Relative Standard Deviation:	2.9

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-663590/18	0.01	2585.0			258500.0	Y
2	IC 280-663590/17	0.02	5053.0			252650.0	Y
3	IC 280-663590/16	0.05	13605.0			272100.0	Y
4	IC 280-663590/15	0.1	26738.0			267380.0	Y
5	IC 280-663590/14	0.25	68837.0			275348.0	Y
6	IC 280-663590/13	0.4	104490.0			261225.0	Y
7	IC 280-663590/12	0.7	180233.0			257475.714286	Y
8	IC 280-663590/11	1.0	256759.0			256759.0	Y
9	IC 280-663590/10	2.5	652397.0			260958.8	Y



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Calibration / 3,5-Dinitroaniline

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

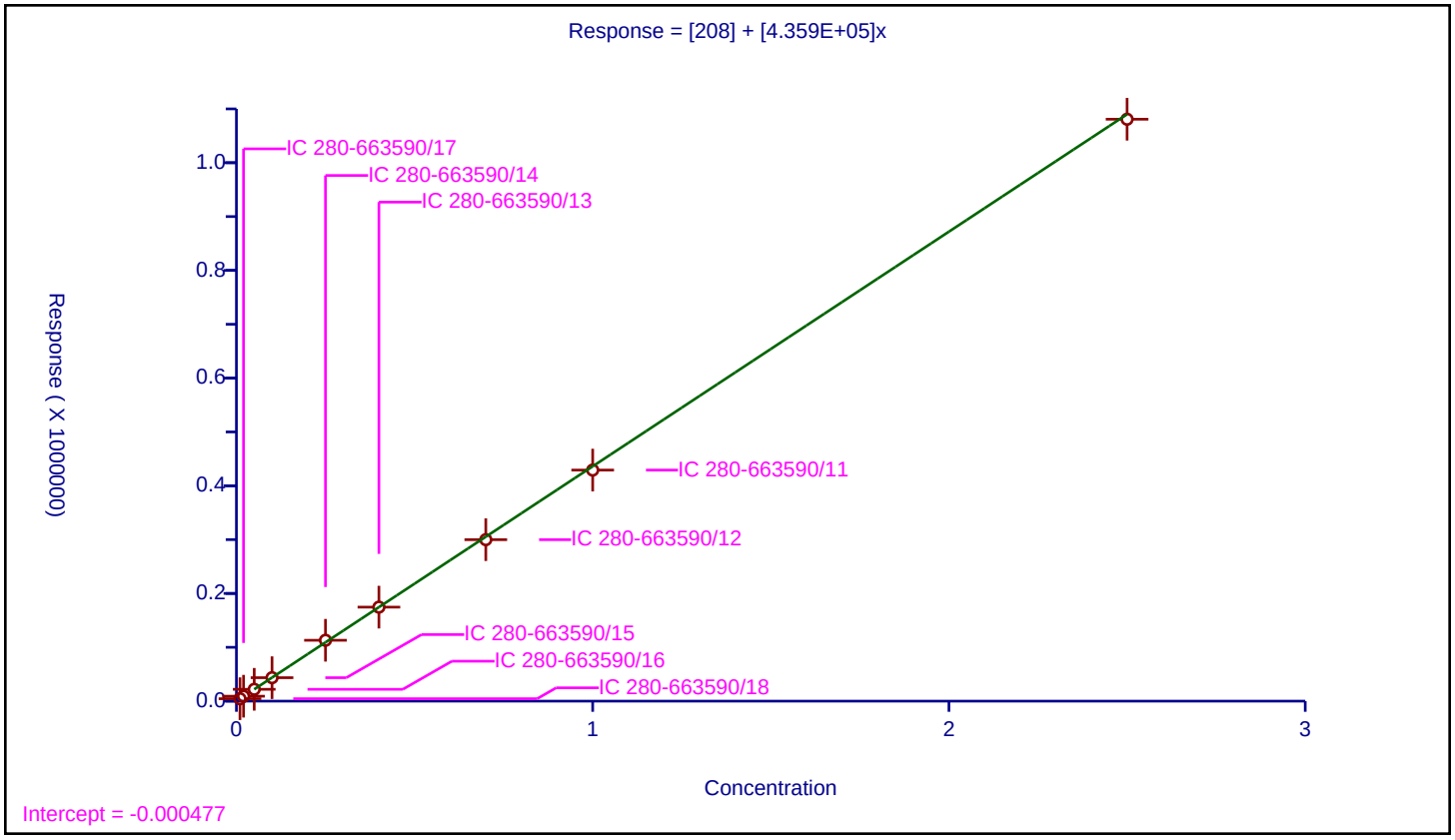
Curve Coefficients

Intercept:	208
Slope:	4.359E+05

Error Coefficients

Relative Standard Deviation:	2.0

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-663590/18	0.01	4508.0			450800.0	Y
2	IC 280-663590/17	0.02	9158.0			457900.0	Y
3	IC 280-663590/16	0.05	21976.0			439520.0	Y
4	IC 280-663590/15	0.1	43566.0			435660.0	Y
5	IC 280-663590/14	0.25	113048.0			452192.0	Y
6	IC 280-663590/13	0.4	174587.0			436467.5	Y
7	IC 280-663590/12	0.7	299884.0			428405.714286	Y
8	IC 280-663590/11	1.0	429142.0			429142.0	Y
9	IC 280-663590/10	2.5	1080802.0			432320.8	Y



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Calibration / 1,3-Dinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

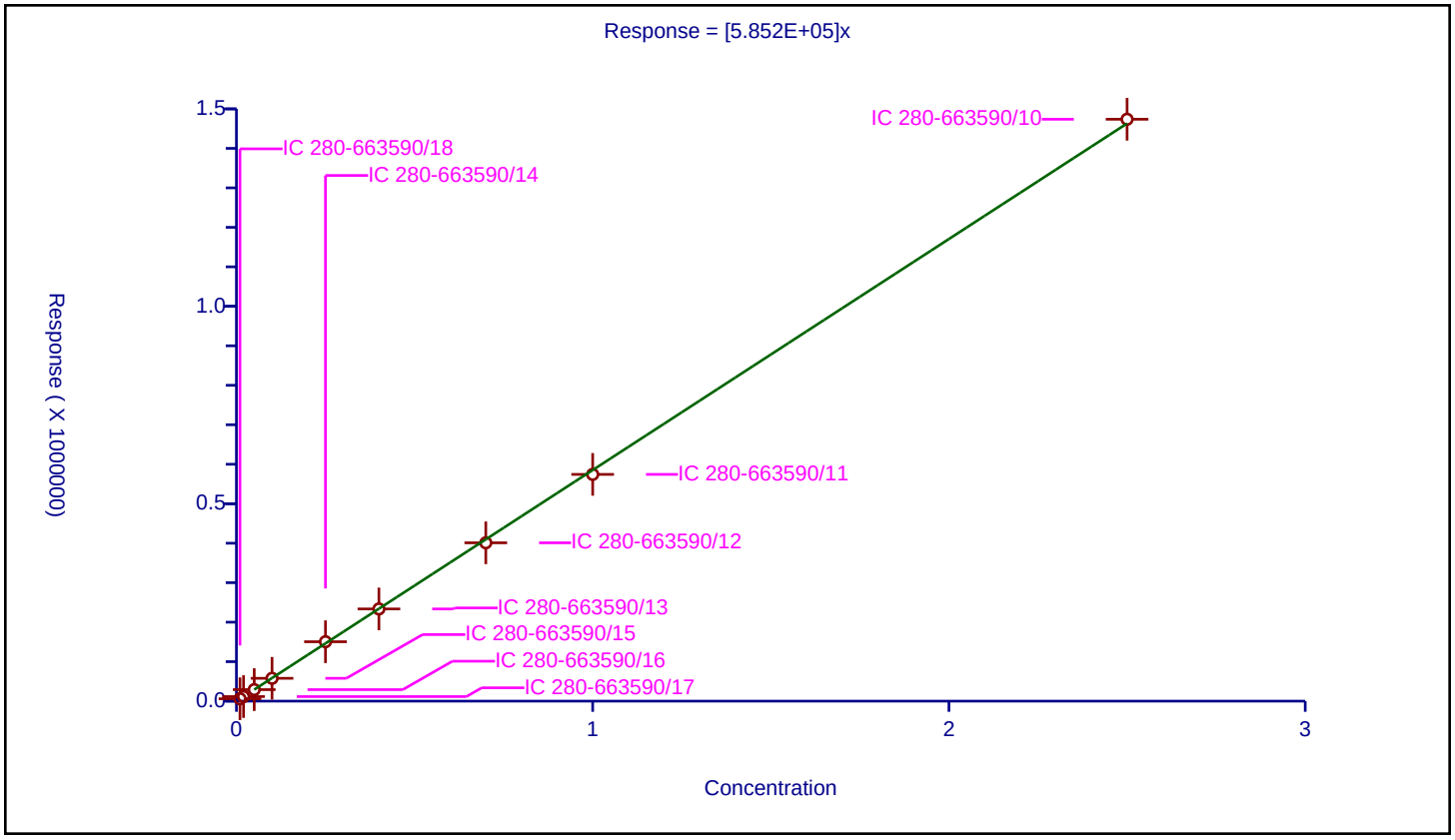
Curve Coefficients

Intercept:	0
Slope:	5.852E+05

Error Coefficients

Relative Standard Deviation:	2.0

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-663590/18	0.01	6059.0			605900.0	Y
2	IC 280-663590/17	0.02	11541.0			577050.0	Y
3	IC 280-663590/16	0.05	29180.0			583600.0	Y
4	IC 280-663590/15	0.1	57831.0			578310.0	Y
5	IC 280-663590/14	0.25	150469.0			601876.0	Y
6	IC 280-663590/13	0.4	233512.0			583780.0	Y
7	IC 280-663590/12	0.7	401028.0			572897.142857	Y
8	IC 280-663590/11	1.0	574265.0			574265.0	Y
9	IC 280-663590/10	2.5	1473755.0			589502.0	Y



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Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

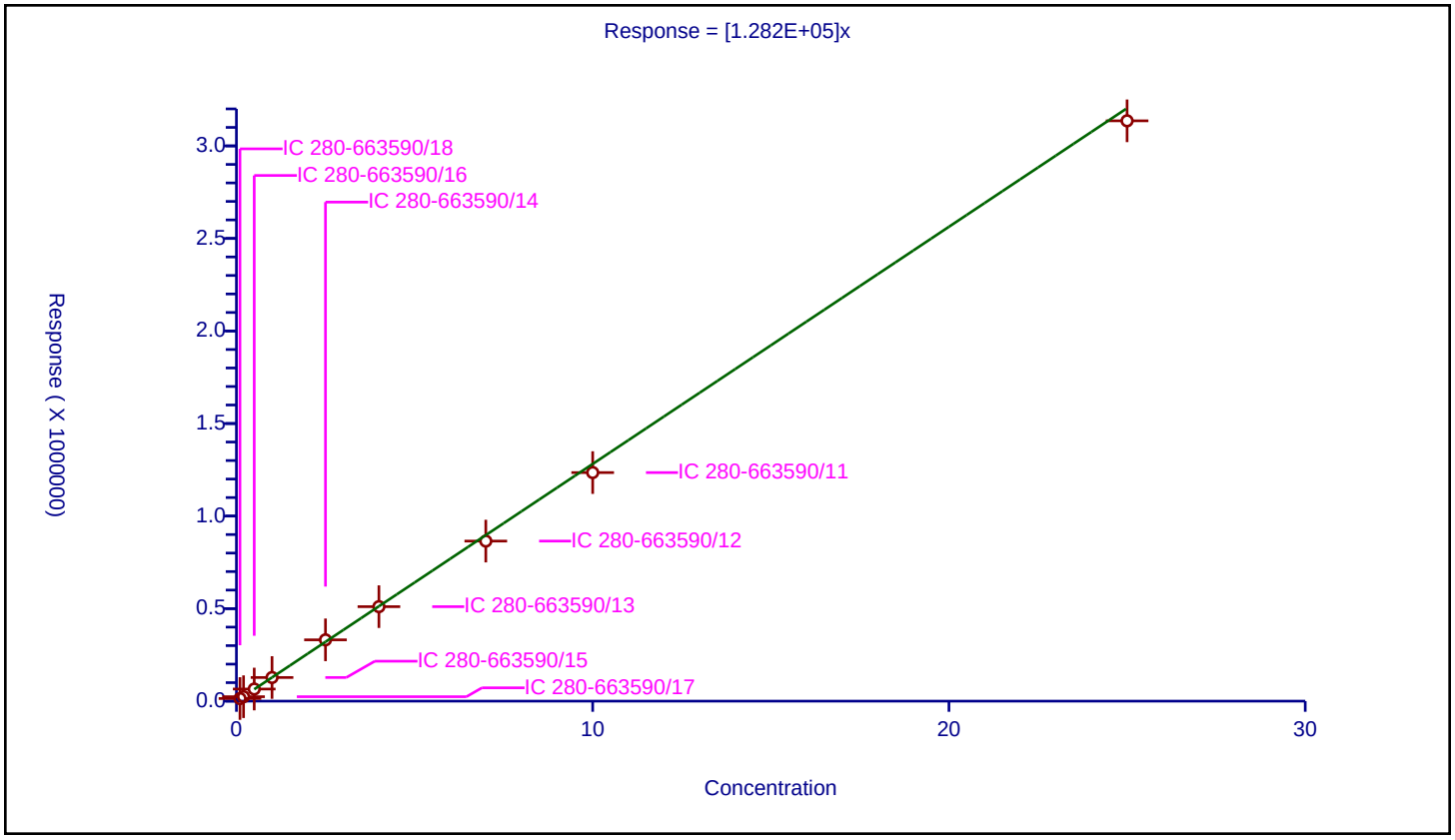
Curve Coefficients

Intercept:	0
Slope:	1.282E+05

Error Coefficients

Relative Standard Deviation:	5.1

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-663590/18	0.1	14206.0			142060.0	Y
2	IC 280-663590/17	0.2	24016.0			120080.0	Y
3	IC 280-663590/16	0.5	65475.0			130950.0	Y
4	IC 280-663590/15	1.0	127672.0			127672.0	Y
5	IC 280-663590/14	2.5	331233.0			132493.2	Y
6	IC 280-663590/13	4.0	510574.0			127643.5	Y
7	IC 280-663590/12	7.0	864867.0			123552.428571	Y
8	IC 280-663590/11	10.0	1234967.0			123496.7	Y
9	IC 280-663590/10	25.0	3135554.0			125422.16	Y



Calibration / o-Nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

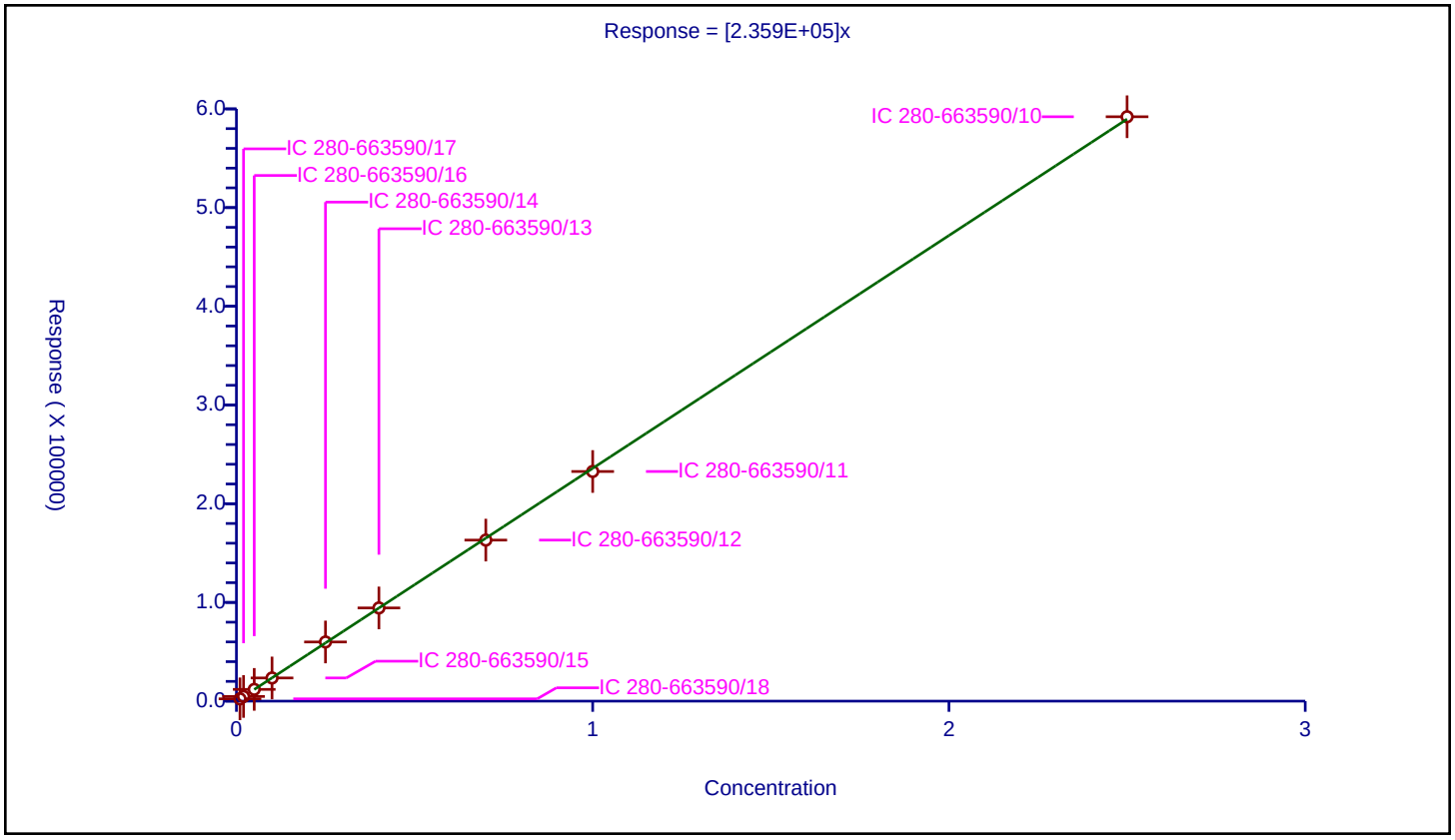
Curve Coefficients

Intercept:	0
Slope:	2.359E+05

Error Coefficients

Relative Standard Deviation:	1.0

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-663590/18	0.01	2340.0			234000.0	Y
2	IC 280-663590/17	0.02	4738.0			236900.0	Y
3	IC 280-663590/16	0.05	11922.0			238440.0	Y
4	IC 280-663590/15	0.1	23499.0			234990.0	Y
5	IC 280-663590/14	0.25	59944.0			239776.0	Y
6	IC 280-663590/13	0.4	94438.0			236095.0	Y
7	IC 280-663590/12	0.7	163156.0			233080.0	Y
8	IC 280-663590/11	1.0	232656.0			232656.0	Y
9	IC 280-663590/10	2.5	592052.0			236820.8	Y



Calibration / p-Nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

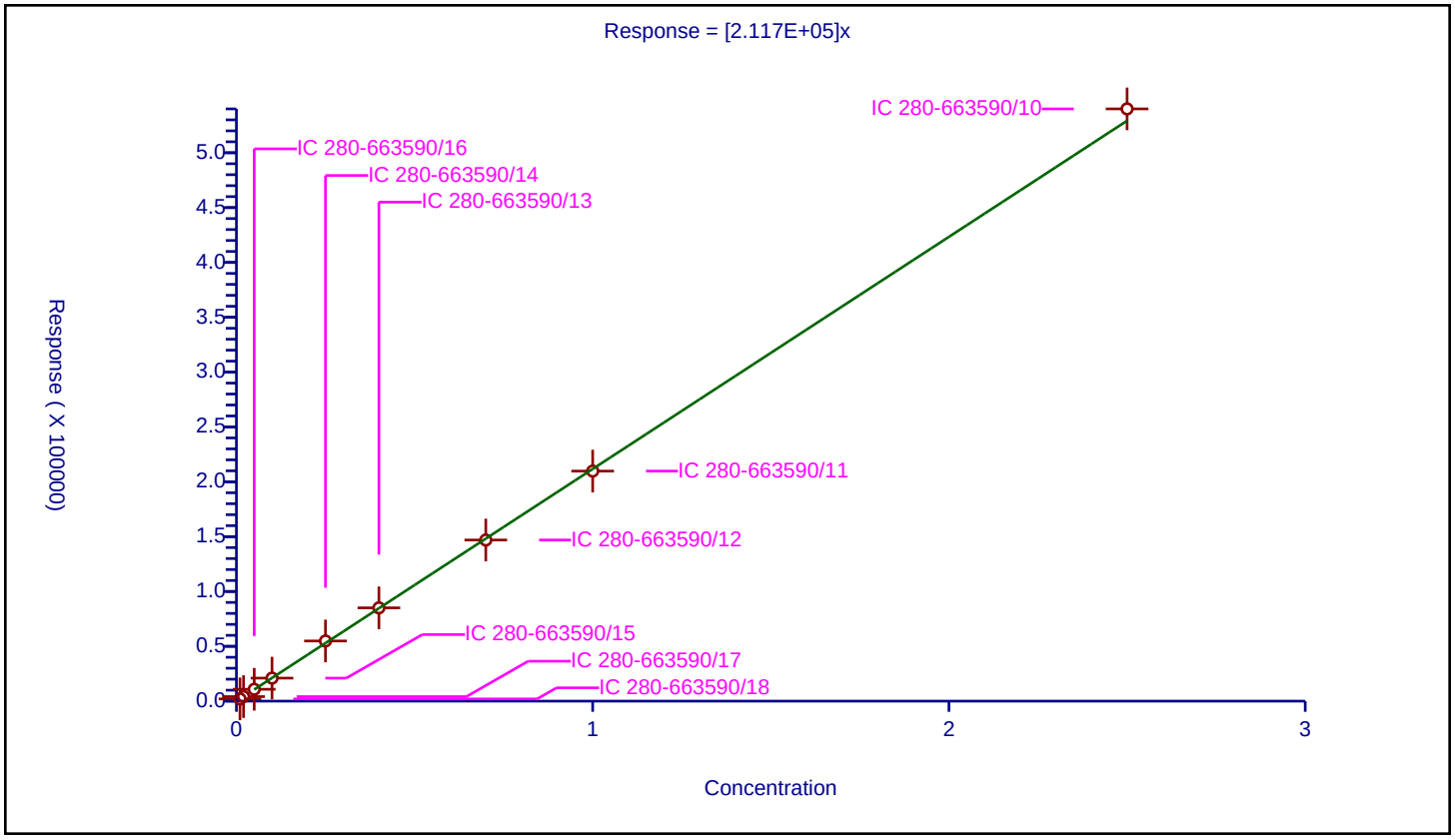
Curve Coefficients

Intercept:	0
Slope:	2.117E+05

Error Coefficients

Relative Standard Deviation:	2.3

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-663590/18	0.01	2037.0			203700.0	Y
2	IC 280-663590/17	0.02	4148.0			207400.0	Y
3	IC 280-663590/16	0.05	10817.0			216340.0	Y
4	IC 280-663590/15	0.1	20994.0			209940.0	Y
5	IC 280-663590/14	0.25	54841.0			219364.0	Y
6	IC 280-663590/13	0.4	85068.0			212670.0	Y
7	IC 280-663590/12	0.7	146901.0			209858.571429	Y
8	IC 280-663590/11	1.0	209764.0			209764.0	Y
9	IC 280-663590/10	2.5	539999.0			215999.6	Y



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Calibration / 4-Amino-2,6-dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

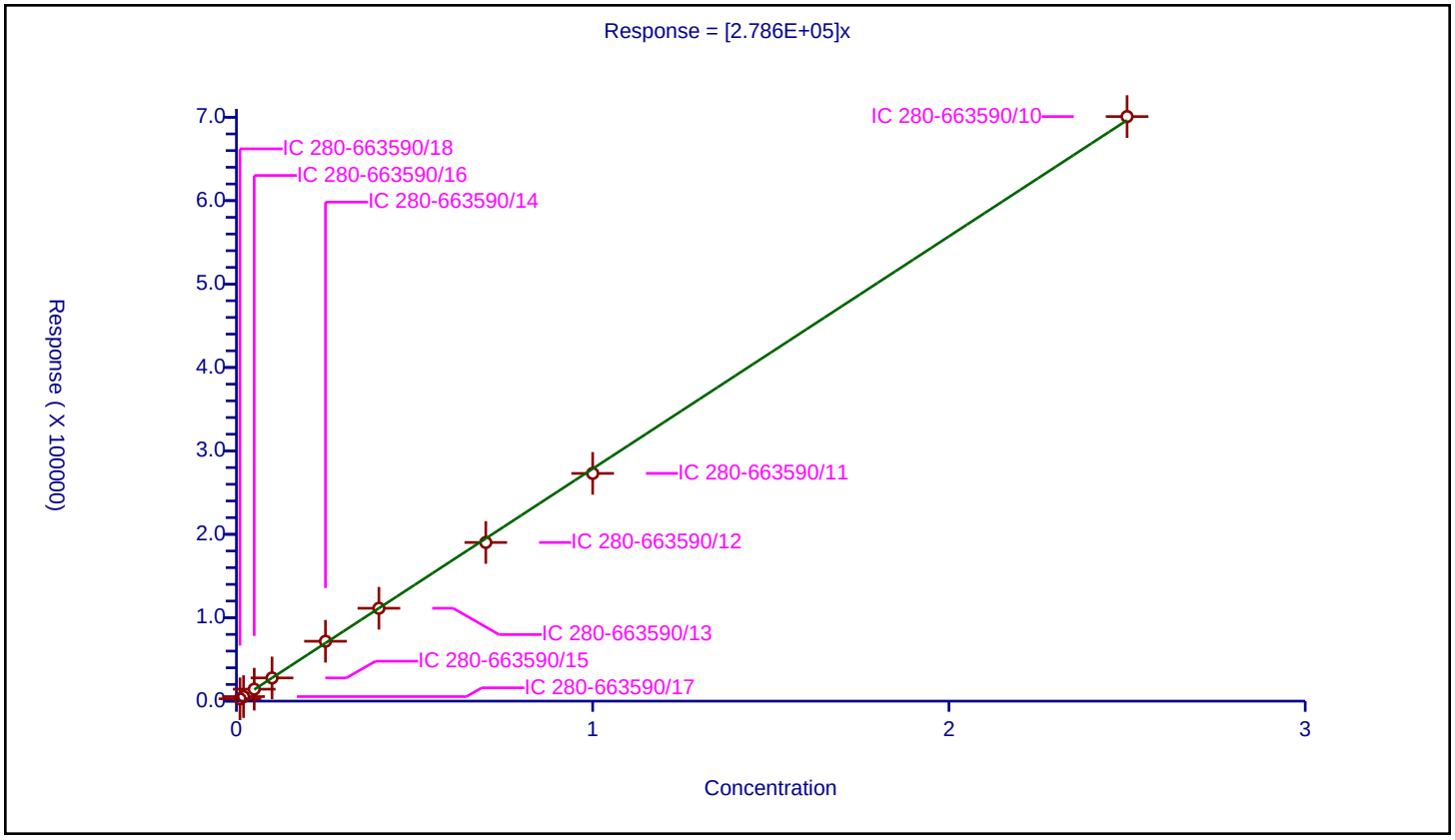
Curve Coefficients

Intercept:	0
Slope:	2.786E+05

Error Coefficients

Relative Standard Deviation:	2.0

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-663590/18	0.01	2787.0			278700.0	Y
2	IC 280-663590/17	0.02	5455.0			272750.0	Y
3	IC 280-663590/16	0.05	14345.0			286900.0	Y
4	IC 280-663590/15	0.1	27825.0			278250.0	Y
5	IC 280-663590/14	0.25	71808.0			287232.0	Y
6	IC 280-663590/13	0.4	111348.0			278370.0	Y
7	IC 280-663590/12	0.7	190219.0			271741.428571	Y
8	IC 280-663590/11	1.0	273020.0			273020.0	Y
9	IC 280-663590/10	2.5	700817.0			280326.8	Y



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Calibration / m-Nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

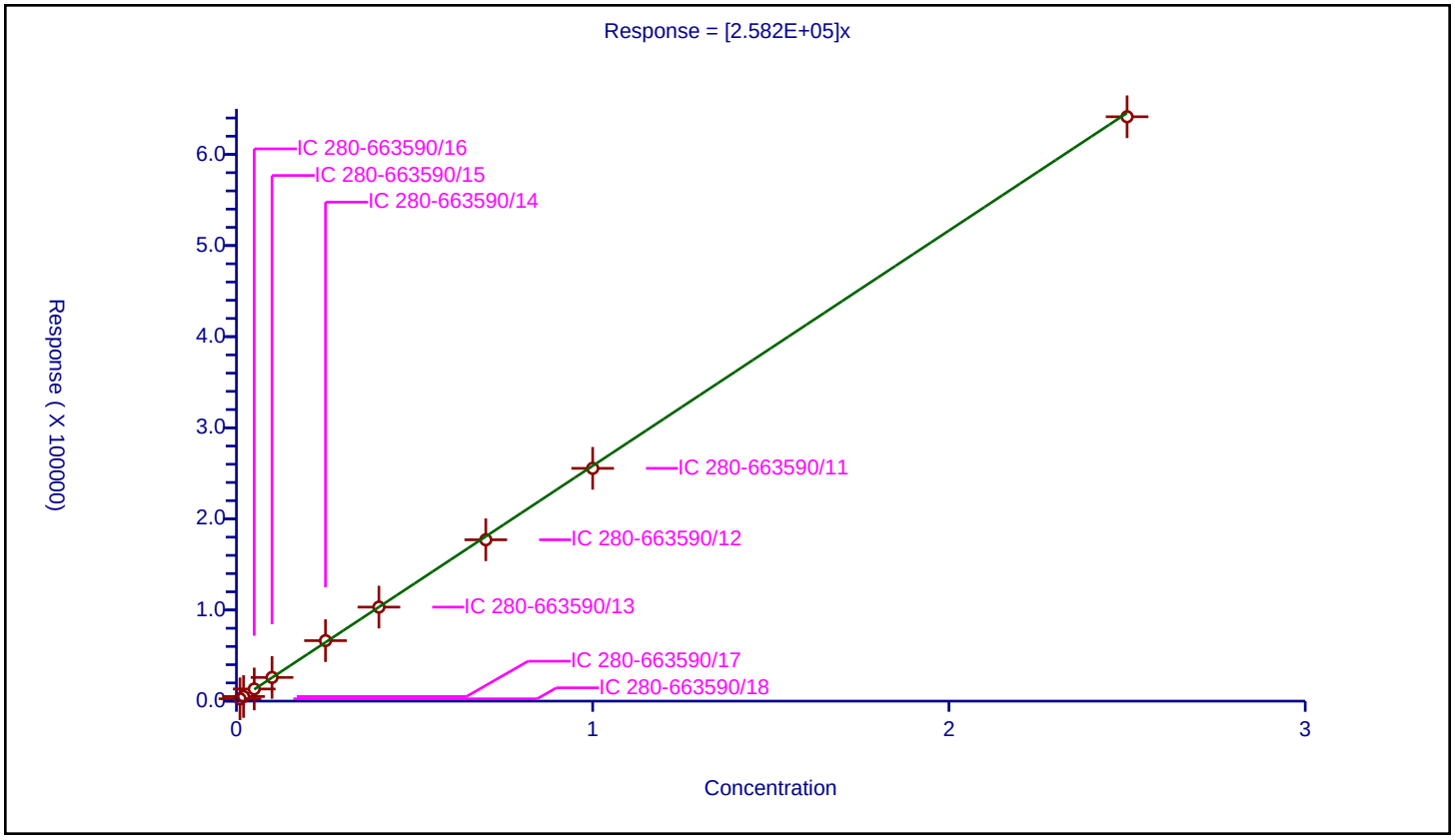
Curve Coefficients

Intercept:	0
Slope:	2.582E+05

Error Coefficients

Relative Standard Deviation:	1.9

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-663590/18	0.01	2547.0			254700.0	Y
2	IC 280-663590/17	0.02	5081.0			254050.0	Y
3	IC 280-663590/16	0.05	13336.0			266720.0	Y
4	IC 280-663590/15	0.1	25999.0			259990.0	Y
5	IC 280-663590/14	0.25	66388.0			265552.0	Y
6	IC 280-663590/13	0.4	103187.0			257967.5	Y
7	IC 280-663590/12	0.7	177096.0			252994.285714	Y
8	IC 280-663590/11	1.0	255490.0			255490.0	Y
9	IC 280-663590/10	2.5	641382.0			256552.8	Y



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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

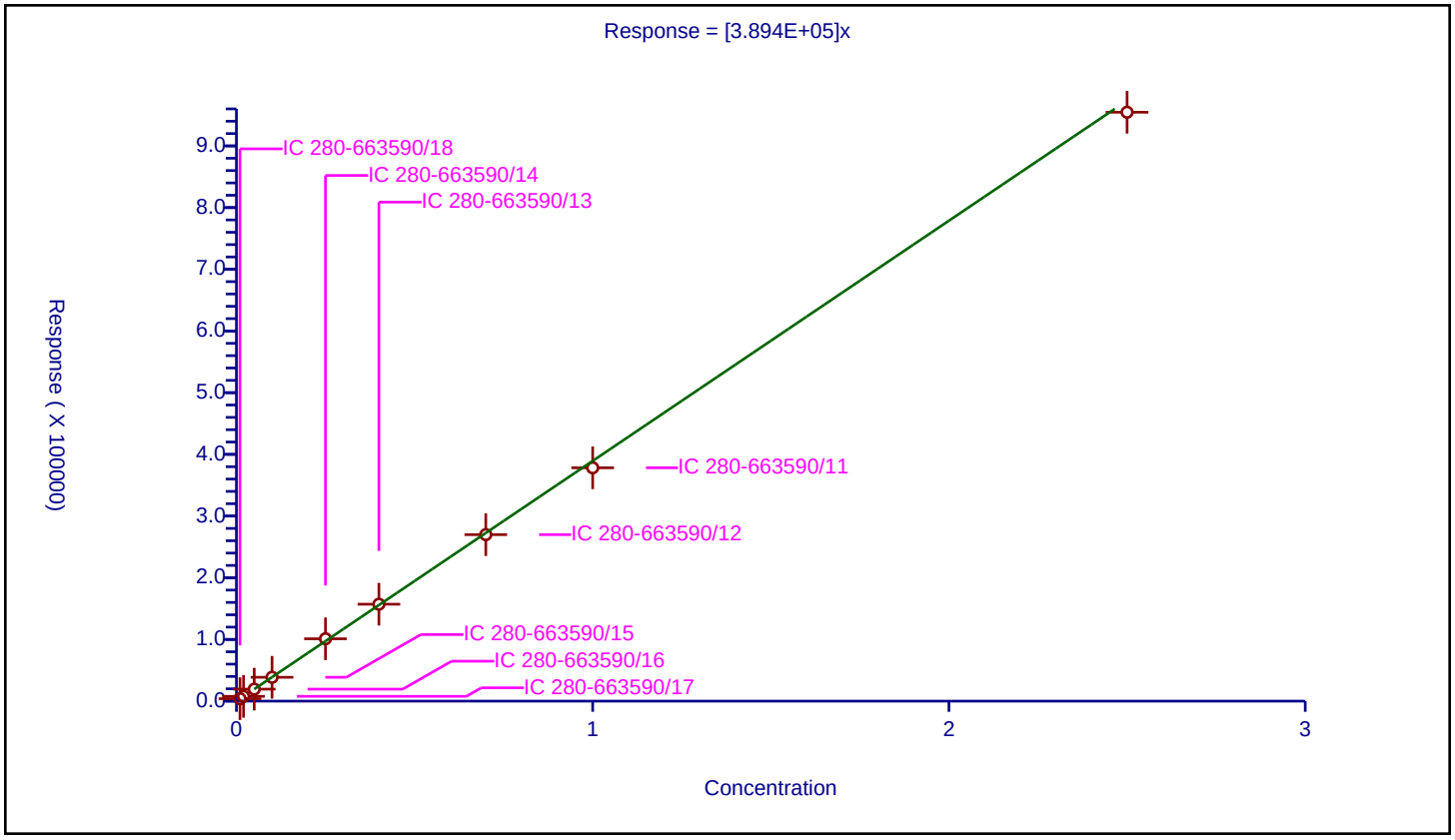
Curve Coefficients

Intercept:	0
Slope:	3.894E+05

Error Coefficients

Relative Standard Deviation:	2.0

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-663590/18	0.01	3972.0			397200.0	Y
2	IC 280-663590/17	0.02	7784.0			389200.0	Y
3	IC 280-663590/16	0.05	19449.0			388980.0	Y
4	IC 280-663590/15	0.1	38652.0			386520.0	Y
5	IC 280-663590/14	0.25	101067.0			404268.0	Y
6	IC 280-663590/13	0.4	157134.0			392835.0	Y
7	IC 280-663590/12	0.7	269908.0			385582.857143	Y
8	IC 280-663590/11	1.0	378245.0			378245.0	Y
9	IC 280-663590/10	2.5	954621.0			381848.4	Y



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Calibration / 1,3,5-Trinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

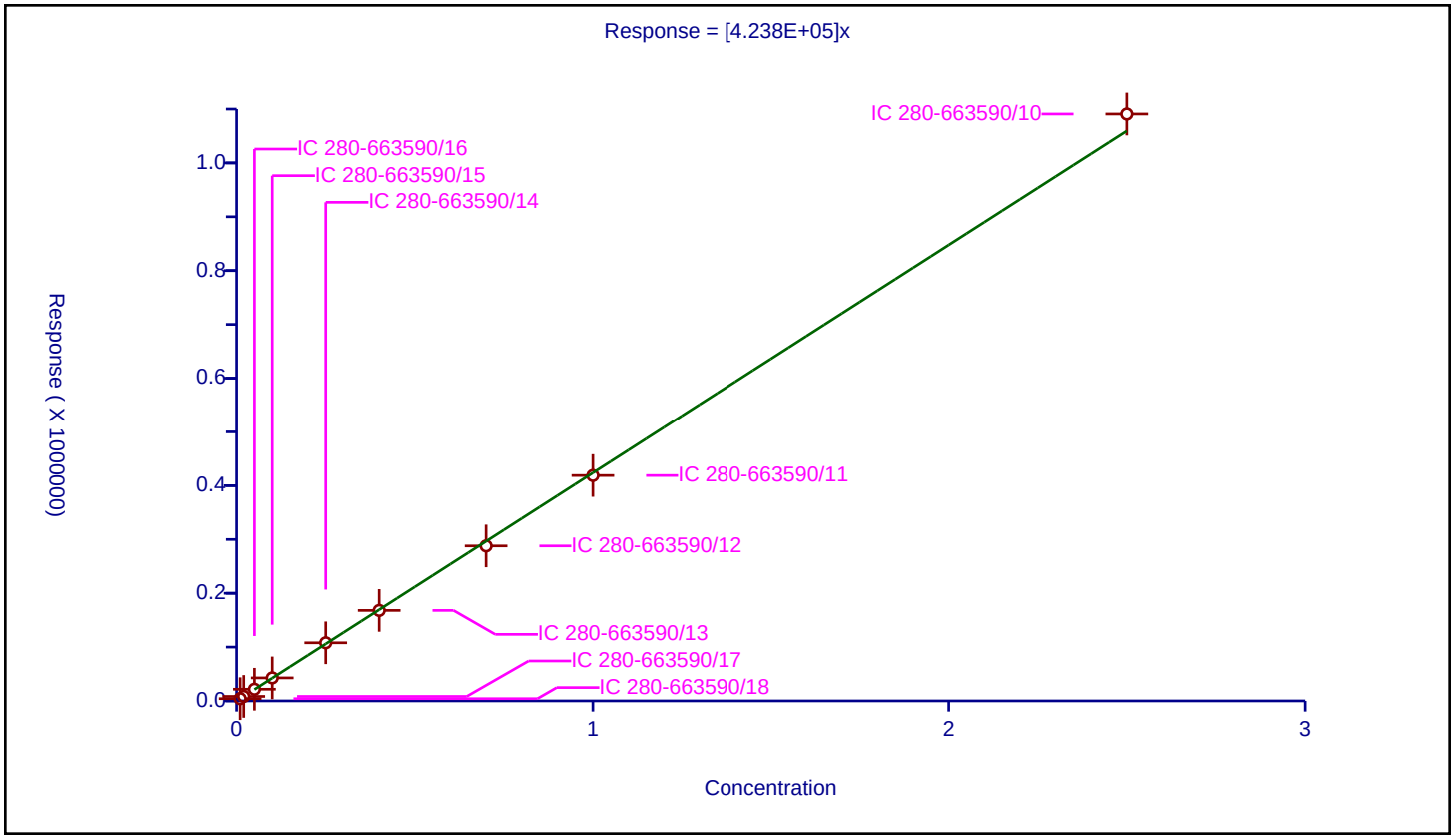
Curve Coefficients

Intercept:	0
Slope:	4.238E+05

Error Coefficients

Relative Standard Deviation:	2.1

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-663590/18	0.01	4185.0			418500.0	Y
2	IC 280-663590/17	0.02	8315.0			415750.0	Y
3	IC 280-663590/16	0.05	21679.0			433580.0	Y
4	IC 280-663590/15	0.1	42742.0			427420.0	Y
5	IC 280-663590/14	0.25	107982.0			431928.0	Y
6	IC 280-663590/13	0.4	168114.0			420285.0	Y
7	IC 280-663590/12	0.7	287991.0			411415.714286	Y
8	IC 280-663590/11	1.0	418932.0			418932.0	Y
9	IC 280-663590/10	2.5	1090844.0			436337.6	Y



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Calibration / 2,6-Dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

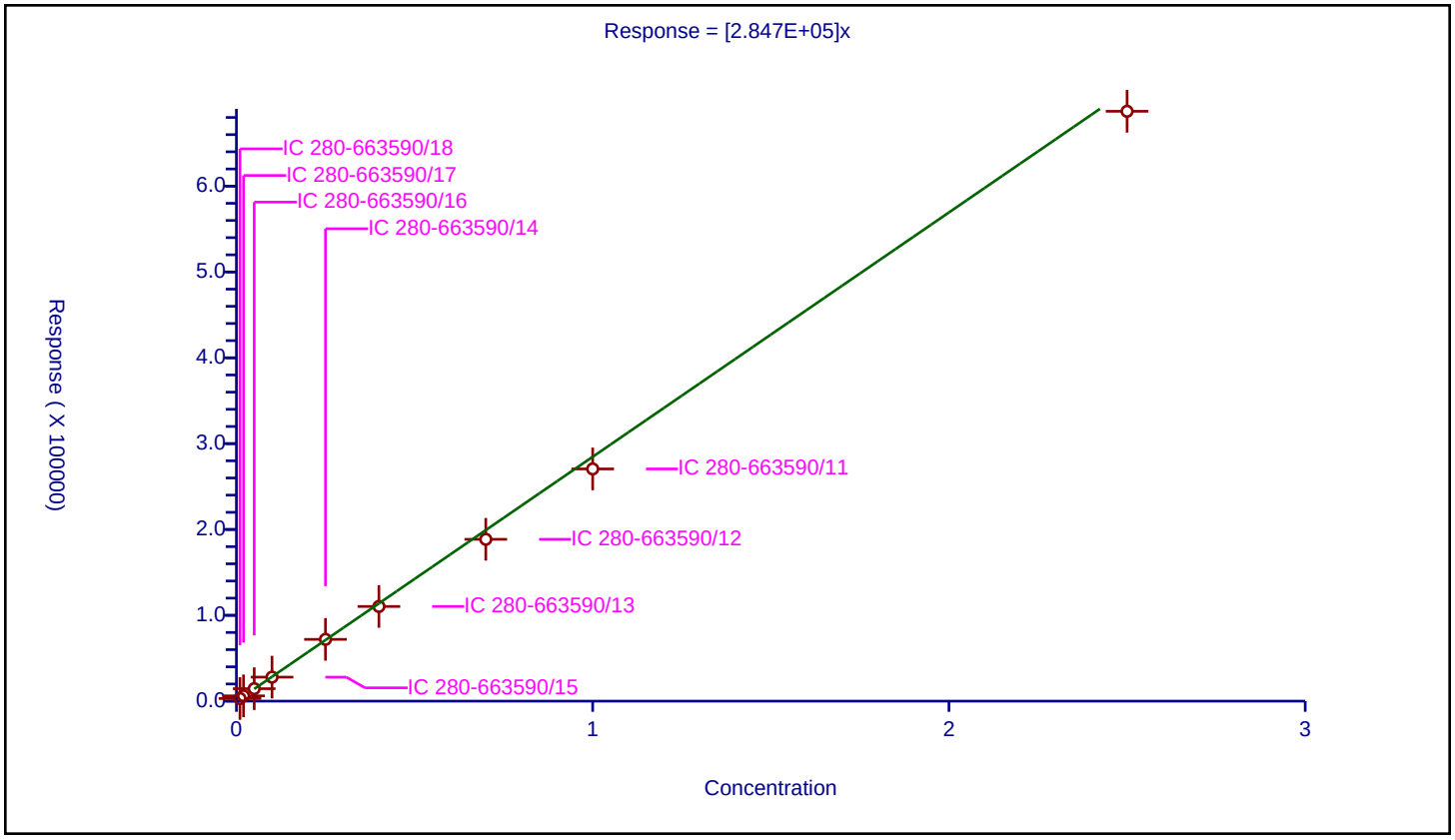
Curve Coefficients

Intercept:	0
Slope:	2.847E+05

Error Coefficients

Relative Standard Deviation:	5.1

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-663590/18	0.01	3065.0			306500.0	Y
2	IC 280-663590/17	0.02	6144.0			307200.0	Y
3	IC 280-663590/16	0.05	14521.0			290420.0	Y
4	IC 280-663590/15	0.1	27962.0			279620.0	Y
5	IC 280-663590/14	0.25	71960.0			287840.0	Y
6	IC 280-663590/13	0.4	110288.0			275720.0	Y
7	IC 280-663590/12	0.7	188559.0			269370.0	Y
8	IC 280-663590/11	1.0	270535.0			270535.0	Y
9	IC 280-663590/10	2.5	687201.0			274880.4	Y



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Calibration / 2,4-Dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

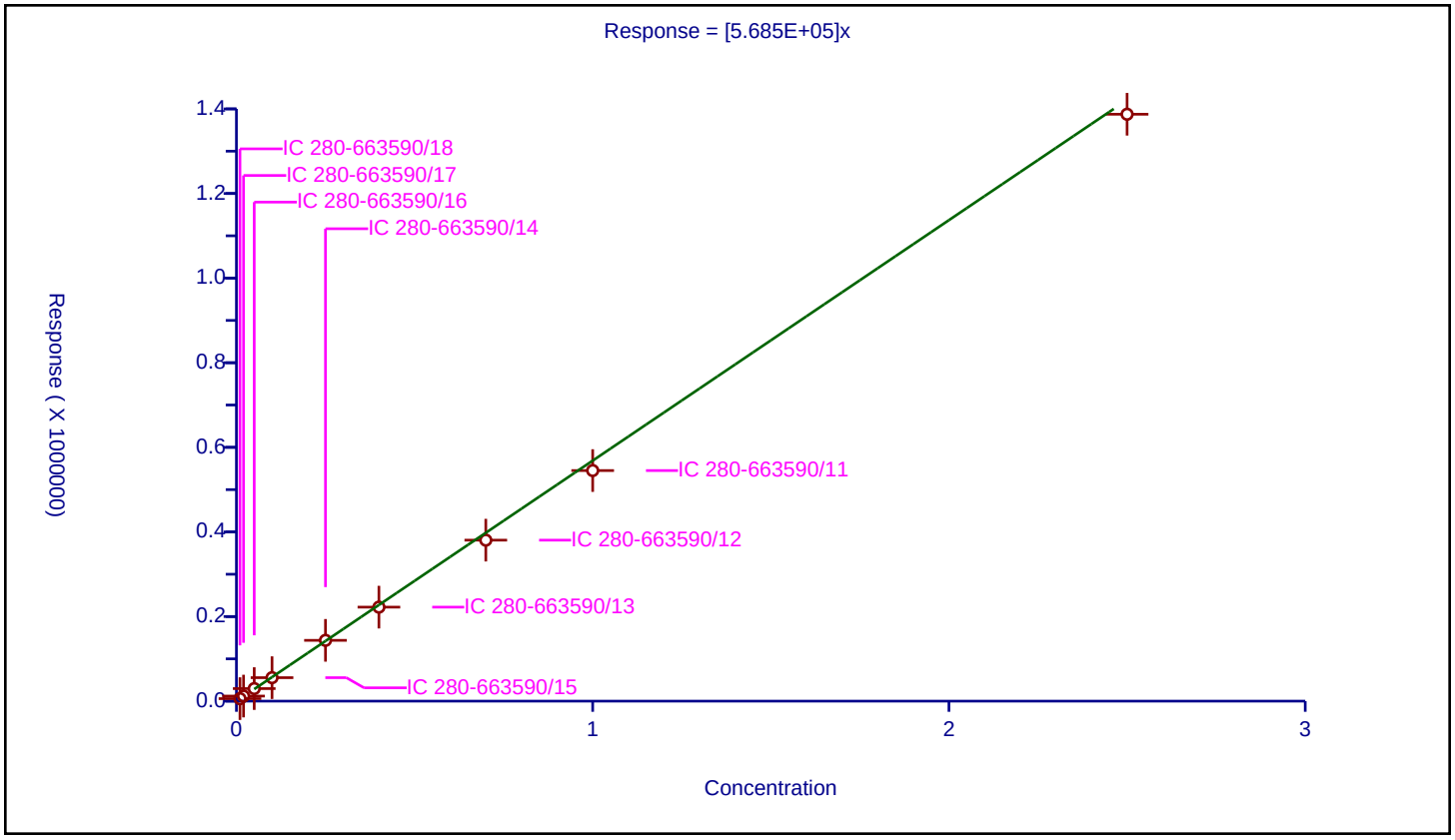
Curve Coefficients

Intercept:	0
Slope:	5.685E+05

Error Coefficients

Relative Standard Deviation:	4.0

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-663590/18	0.01	5939.0			593900.0	Y
2	IC 280-663590/17	0.02	12012.0			600600.0	Y
3	IC 280-663590/16	0.05	29669.0			593380.0	Y
4	IC 280-663590/15	0.1	55487.0			554870.0	Y
5	IC 280-663590/14	0.25	143677.0			574708.0	Y
6	IC 280-663590/13	0.4	222196.0			555490.0	Y
7	IC 280-663590/12	0.7	380534.0			543620.0	Y
8	IC 280-663590/11	1.0	545089.0			545089.0	Y
9	IC 280-663590/10	2.5	1387324.0			554929.6	Y



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Calibration / Tetryl

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

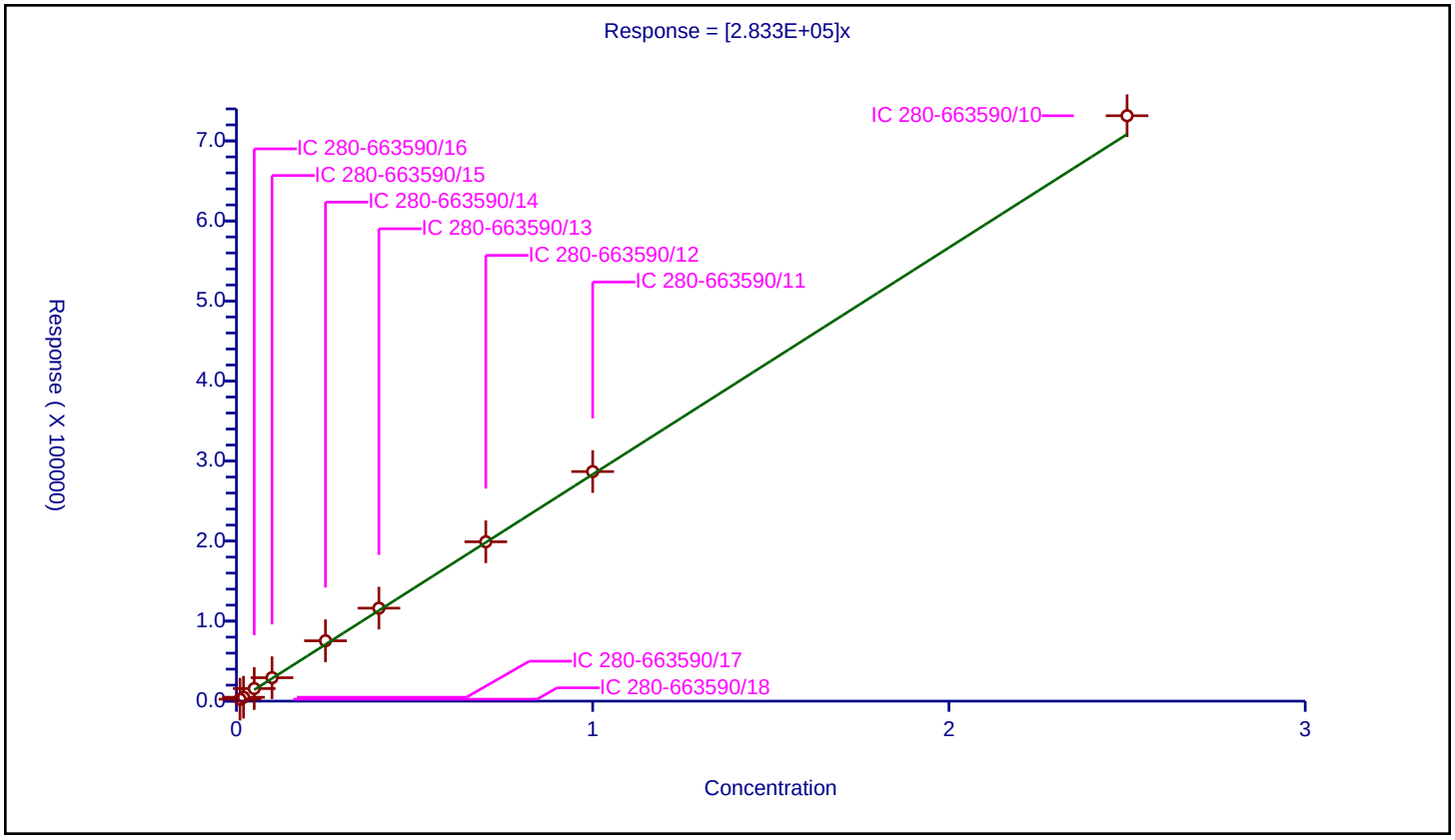
Curve Coefficients

Intercept:	0
Slope:	2.833E+05

Error Coefficients

Relative Standard Deviation:	8.6

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-663590/18	0.01	2430.0			243000.0	Y
2	IC 280-663590/17	0.02	4871.0			243550.0	Y
3	IC 280-663590/16	0.05	15725.0			314500.0	Y
4	IC 280-663590/15	0.1	29297.0			292970.0	Y
5	IC 280-663590/14	0.25	75422.0			301688.0	Y
6	IC 280-663590/13	0.4	116189.0			290472.5	Y
7	IC 280-663590/12	0.7	199110.0			284442.857143	Y
8	IC 280-663590/11	1.0	286831.0			286831.0	Y
9	IC 280-663590/10	2.5	731459.0			292583.6	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

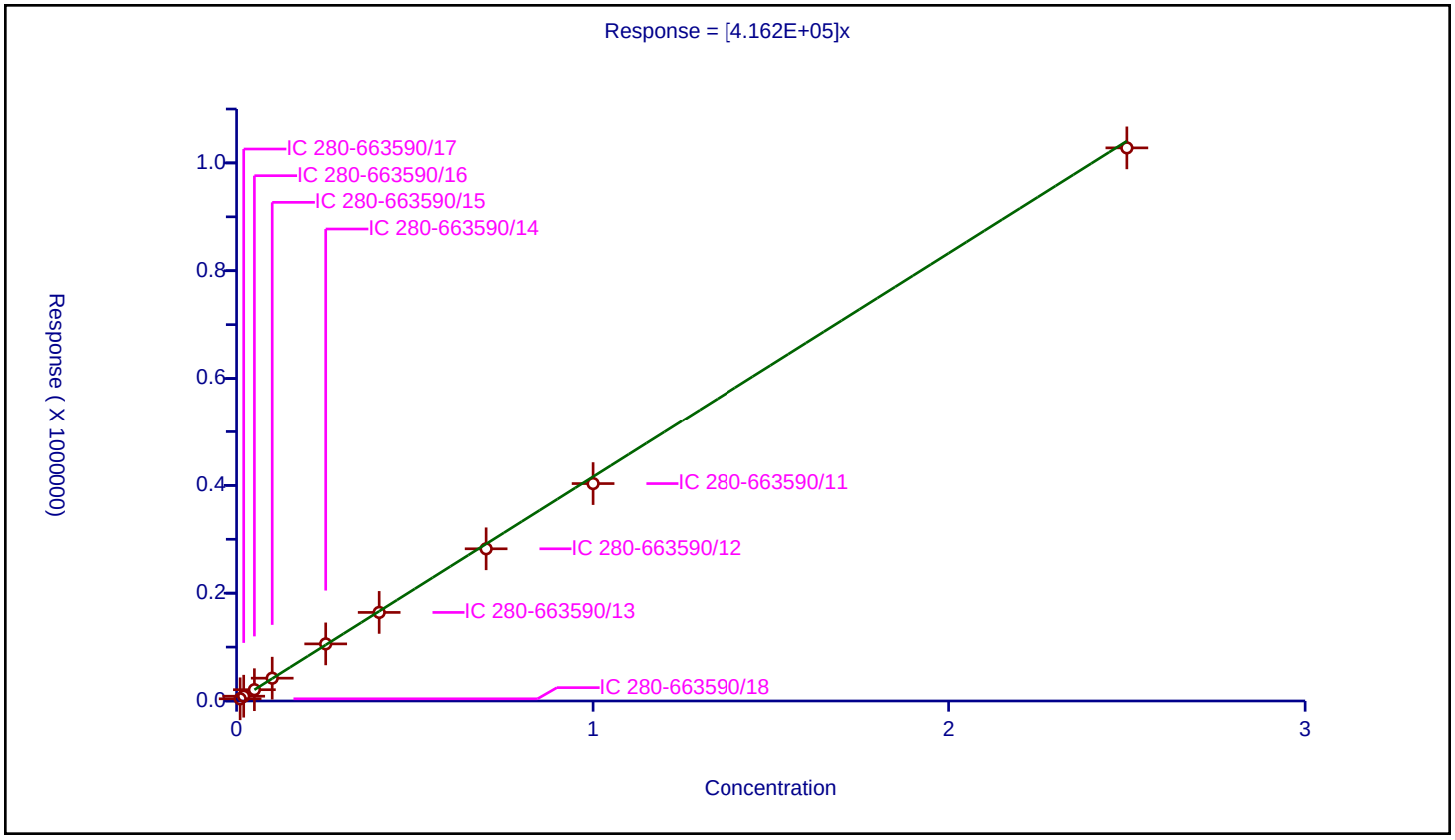
Curve Coefficients

Intercept:	0
Slope:	4.162E+05

Error Coefficients

Relative Standard Deviation:	3.1

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-663590/18	0.01	4082.0			408200.0	Y
2	IC 280-663590/17	0.02	8874.0			443700.0	Y
3	IC 280-663590/16	0.05	20936.0			418720.0	Y
4	IC 280-663590/15	0.1	42305.0			423050.0	Y
5	IC 280-663590/14	0.25	105934.0			423736.0	Y
6	IC 280-663590/13	0.4	164300.0			410750.0	Y
7	IC 280-663590/12	0.7	282341.0			403344.285714	Y
8	IC 280-663590/11	1.0	403353.0			403353.0	Y
9	IC 280-663590/10	2.5	1027908.0			411163.2	Y



10/15/2024
4:48:23 PM

Calibration / PETN

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

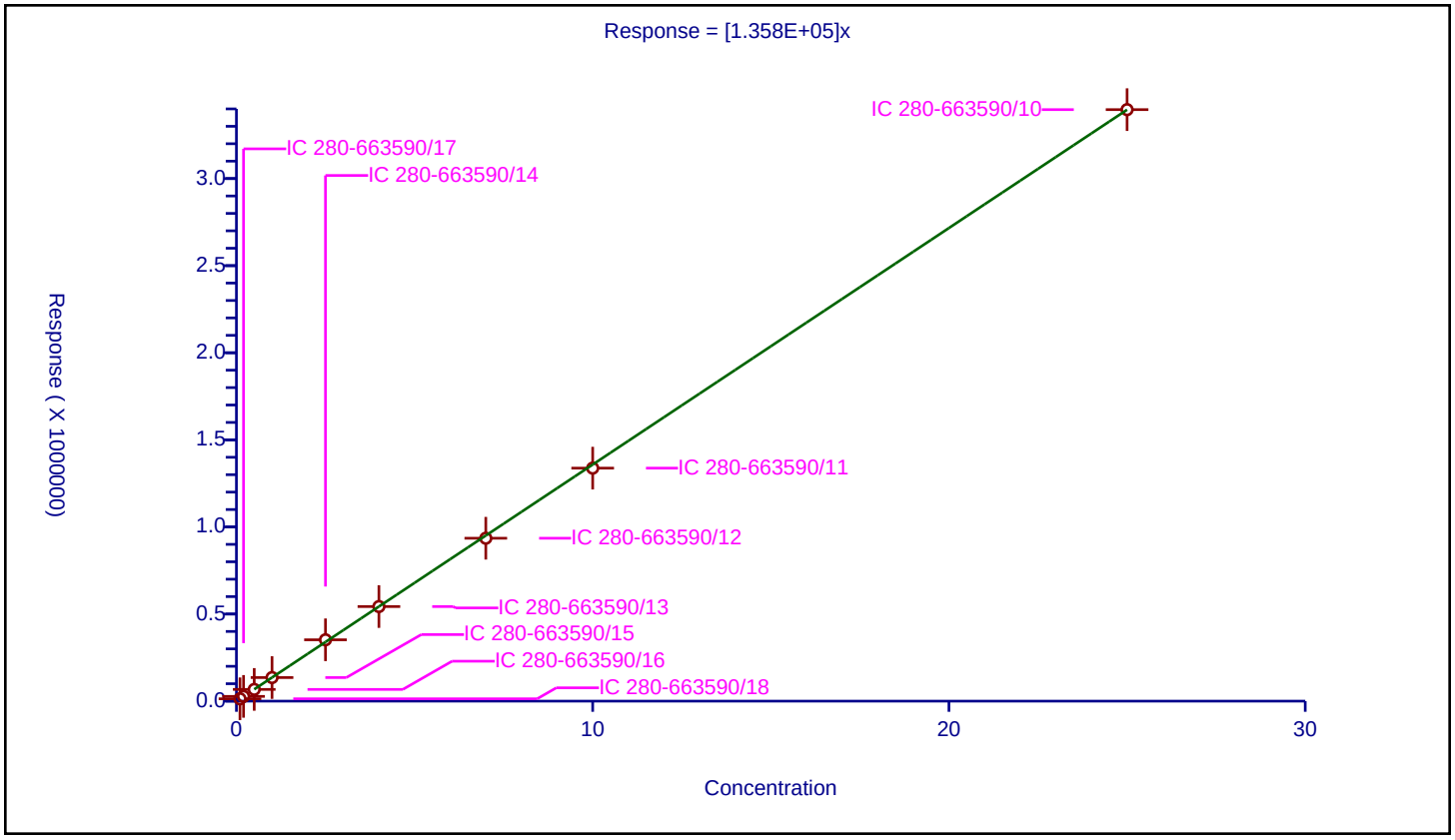
Curve Coefficients

Intercept:	0
Slope:	1.358E+05

Error Coefficients

Relative Standard Deviation:	1.6

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-663590/18	0.1	13555.0			135550.0	Y
2	IC 280-663590/17	0.2	27366.0			136830.0	Y
3	IC 280-663590/16	0.5	67315.0			134630.0	Y
4	IC 280-663590/15	1.0	135423.0			135423.0	Y
5	IC 280-663590/14	2.5	352162.0			140864.8	Y
6	IC 280-663590/13	4.0	543090.0			135772.5	Y
7	IC 280-663590/12	7.0	935188.0			133598.285714	Y
8	IC 280-663590/11	10.0	1337623.0			133762.3	Y
9	IC 280-663590/10	25.0	3395717.0			135828.68	Y



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-197447-1

SDG No.:

Lab Sample ID: ICV 280-669870/20 | Calibration Date: 10/04/2024 20:16

Instrument ID: CHHPLC_X3 | Calib Start Date: 10/04/2024 16:59

GC Column: UltraCarb5uODS ID: 4.60(mm) | Calib End Date: 10/04/2024 19:55

Lab File ID: 10040020.D | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	203078	184574		456	502	-9.1	20.0
HMX	Ave	96653	94070		487	500	-2.7	20.0
DNX	Ave	146042	146310		501	501	0.2	20.0
MNX	Ave	132934	127743		561	584	-3.9	20.0
RDX	Lin2		108094		514	500	2.8	20.0
Picric acid	Ave	75427	86634		574	500	14.9	20.0
1,3,5-Trinitrobenzene	Ave	217350	245010		564	500	12.7	20.0
1,3-Dinitrobenzene	Ave	298232	321326		539	500	7.7	20.0
Nitrobenzene	Ave	195178	208278		534	500	6.7	20.0
3,5-Dinitroaniline	Lin2		247186		530	500	6.1	20.0
Tetryl	Lin2		185704		543	500	8.6	20.0
Nitroglycerin	Lin2		69773		5420	5000	8.4	20.0
2,4,6-Trinitrotoluene	Ave	217298	224058		516	500	3.1	20.0
4-Amino-2,6-dinitrotoluene	Lin2		158314		546	500	9.3	20.0
2-Amino-4,6-dinitrotoluene	Ave	204531	216724		530	500	6.0	20.0
2,6-Dinitrotoluene	Lin2		149116		530	500	6.0	20.0
2,4-Dinitrotoluene	Ave	291812	309686		531	500	6.1	20.0
2-Nitrotoluene	Ave	125468	130908		522	500	4.3	20.0
4-Nitrotoluene	Lin2		114438		529	500	5.8	20.0
3-Nitrotoluene	Lin2		143934		531	500	6.2	20.0
PETN	Ave	72212	79177		5480	5000	9.6	20.0
1,2-Dinitrobenzene	Ave	130410	128386		492	500	-1.6	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Lab Sample ID: ICV 280-669870/20 Calibration Date: 10/04/2024 20:16

Instrument ID: CHHPLC_X3 Calib Start Date: 10/04/2024 16:59

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 10/04/2024 19:55

Lab File ID: 10040020.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.43	6.34	6.54
HMX	6.57	6.43	6.73
DNX	6.75	6.65	6.85
MNX	7.15	7.00	7.30
RDX	7.50	7.36	7.66
Picric acid	7.91	7.79	8.09
1,3,5-Trinitrobenzene	8.47	8.33	8.63
1,3-Dinitrobenzene	9.03	8.89	9.19
Nitrobenzene	9.35	9.21	9.51
3,5-Dinitroaniline	9.55	9.41	9.71
Tetryl	9.67	9.53	9.83
Nitroglycerin	10.11	9.97	10.27
2,4,6-Trinitrotoluene	10.47	10.38	10.58
4-Amino-2,6-dinitrotoluene	10.62	10.54	10.74
2-Amino-4,6-dinitrotoluene	10.85	10.76	10.96
2,6-Dinitrotoluene	10.99	10.90	11.10
2,4-Dinitrotoluene	11.13	11.05	11.25
2-Nitrotoluene	11.83	11.70	12.00
4-Nitrotoluene	12.19	12.07	12.37
3-Nitrotoluene	12.70	12.57	12.87
PETN	13.77	13.65	13.95
1,2-Dinitrobenzene	8.37	8.23	8.53

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040020.D
Lims ID: ICV INT/DMT
Client ID:
Sample Type: ICV
Inject. Date: 04-Oct-2024 20:16:59 ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICV INT/DMT
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist:

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 08-Oct-2024 13:50:35 Calib Date: 04-Oct-2024 19:55:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1654

First Level Reviewer: LV5D Date: 08-Oct-2024 13:12:02

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.434	6.437	-0.003	92564	0.5015	0.4558	
4 HMX	1	6.574	6.577	-0.003	47035	0.5000	0.4866	
6 DNX	1	6.747	6.751	-0.004	73228	0.5005	0.5014	
7 MNX	1	7.154	7.151	0.003	74538	0.5835	0.5607	
8 RDX	1	7.501	7.511	-0.010	54047	0.5000	0.5139	
9 2,4,6-Trinitrophenol	1	7.914	7.937	-0.023	43317	0.5000	0.5743	
$ 10 1,2-Dinitrobenzene	1	8.367	8.377	-0.010	64193	0.5000	0.4922	
11 1,3,5-Trinitrobenzene	1	8.474	8.477	-0.003	122505	0.5000	0.5636	
12 1,3-Dinitrobenzene	1	9.034	9.037	-0.003	160663	0.5000	0.5387	
13 Nitrobenzene	1	9.347	9.357	-0.010	104139	0.5000	0.5336	
14 3,5-Dinitroaniline	1	9.554	9.564	-0.010	123593	0.5000	0.5303	
15 Tetryl	1	9.674	9.684	-0.010	92852	0.5000	0.5428	M
16 Nitroglycerin	2	10.114	10.124	-0.010	348863	5.00	5.42	M
17 2,4,6-Trinitrotoluene	1	10.467	10.477	-0.010	112029	0.5000	0.5156	
18 4-Amino-2,6-dinitrotoluene	1	10.620	10.637	-0.017	79157	0.5000	0.5464	
19 2-Amino-4,6-dinitrotoluene	1	10.847	10.864	-0.017	108362	0.5000	0.5298	
20 2,6-Dinitrotoluene	1	10.987	11.004	-0.017	74558	0.5000	0.5301	
21 2,4-Dinitrotoluene	1	11.134	11.150	-0.016	154843	0.5000	0.5306	
22 o-Nitrotoluene	1	11.827	11.850	-0.023	65454	0.5000	0.5217	
23 p-Nitrotoluene	1	12.194	12.217	-0.023	57219	0.5000	0.5288	
24 m-Nitrotoluene	1	12.700	12.724	-0.024	71967	0.5000	0.5308	
25 PETN	2	13.767	13.797	-0.030	395884	5.00	5.48	
26 Ammonium Picrate	1		0.000			ND	ND	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND

Review Flags
M - Manually Integrated

Reagents:

8330Surrogate_00159	Amount Added:	50.00	Units: uL
8330 LCS_00137	Amount Added:	50.00	Units: uL
8330_OP_DMT_00030	Amount Added:	50.00	Units: uL

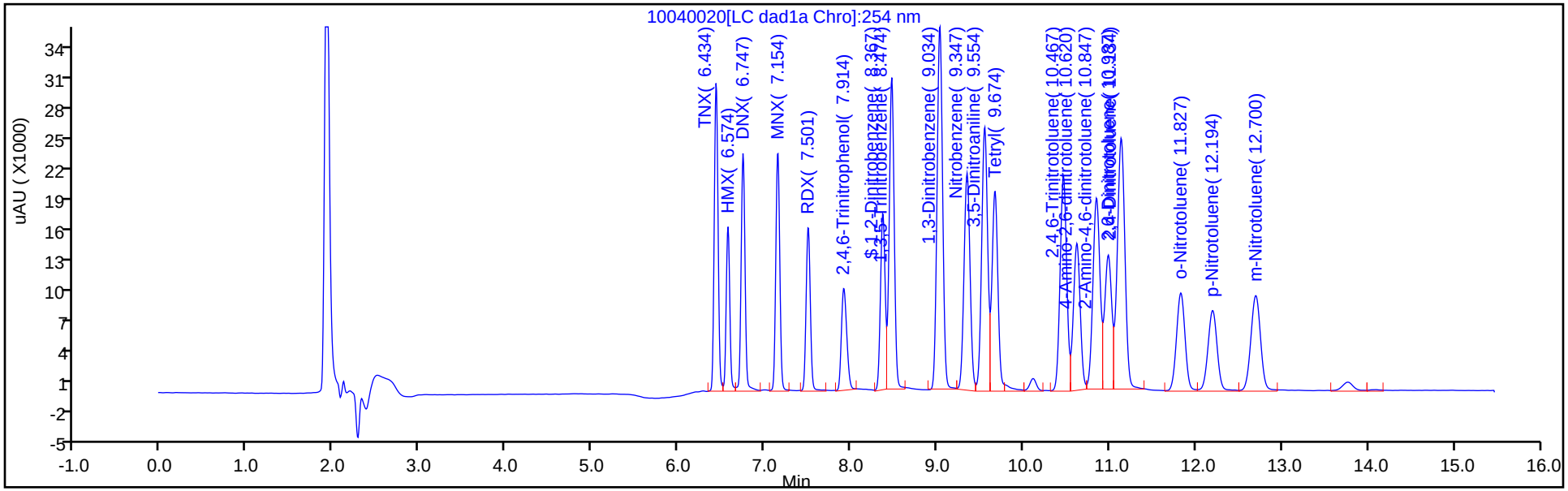
Report Date: 08-Oct-2024 13:50:49 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Denver

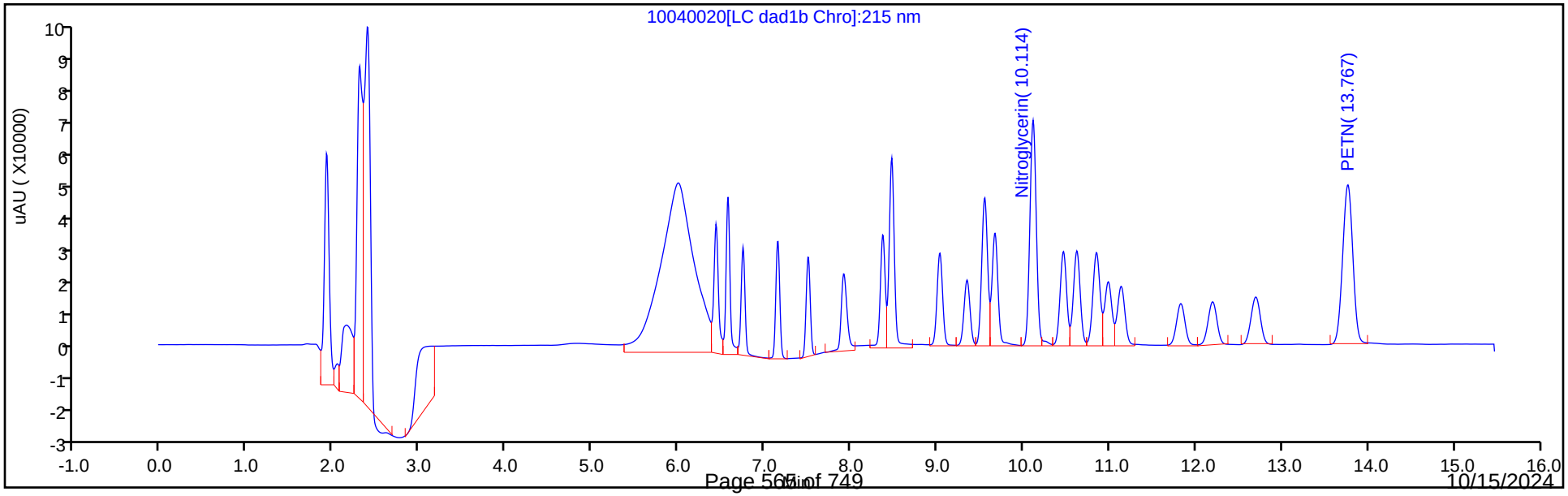
Data File: \\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040020.d

Injection Date:	04-Oct-2024 20:16:59	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	ICV INT/DMT			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



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



10/15/2024
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Manual Integration/User Assign Peak Report

Eurofins Denver

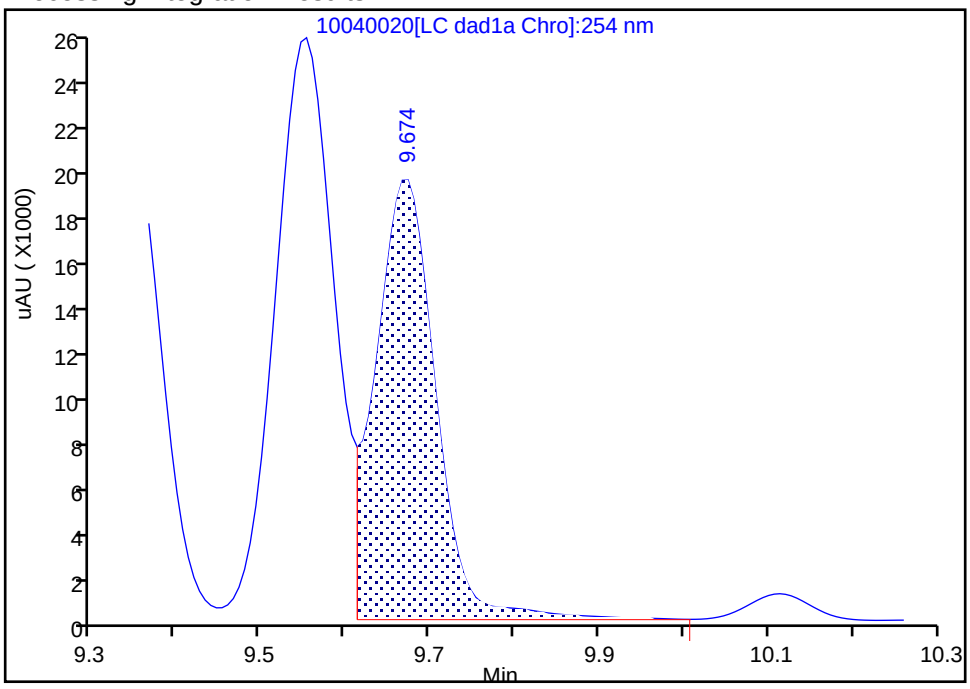
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040020.d				
Injection Date:	04-Oct-2024 20:16:59	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV INT/DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

15 Tetryl, CAS: 479-45-8

Signal: 1

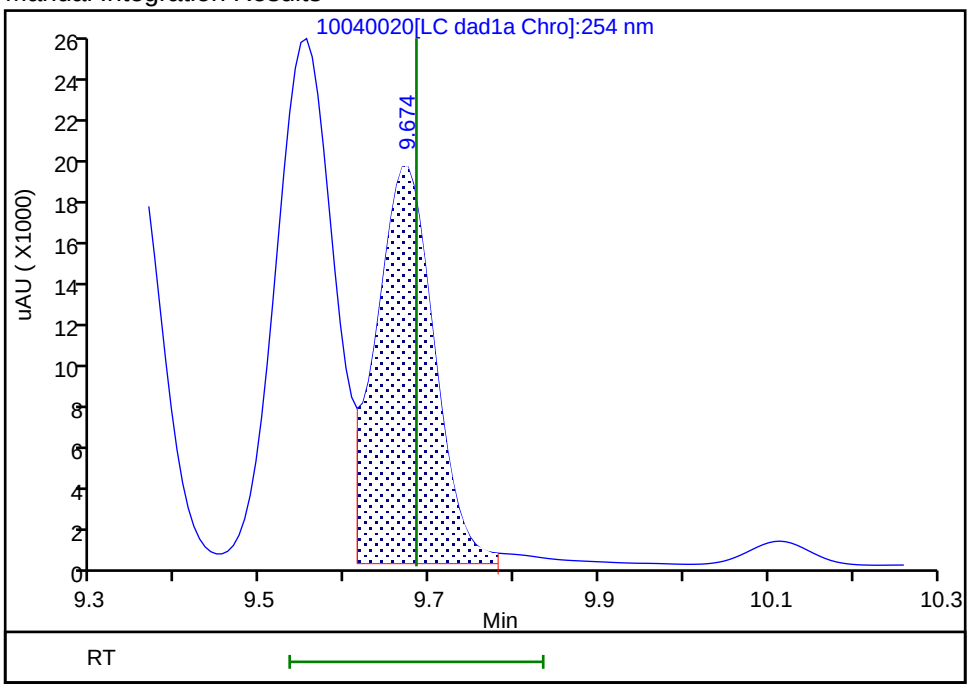
Processing Integration Results

RT: 9.67
Area: 95739
Amount: 0.567120
Amount Units: ug/mL



Manual Integration Results

RT: 9.67
Area: 92852
Amount: 0.542780
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 13:11:49 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

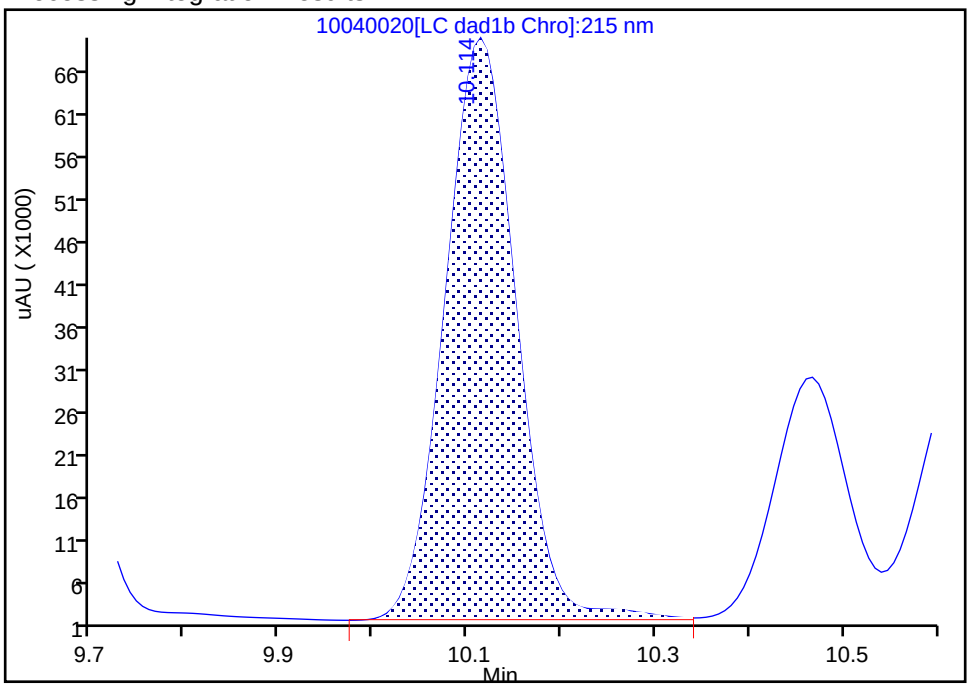
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241004-138284.b\10040020.d				
Injection Date:	04-Oct-2024 20:16:59	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV INT/DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1C, 215 nm		

16 Nitroglycerin, CAS: 55-63-0

Signal: 1

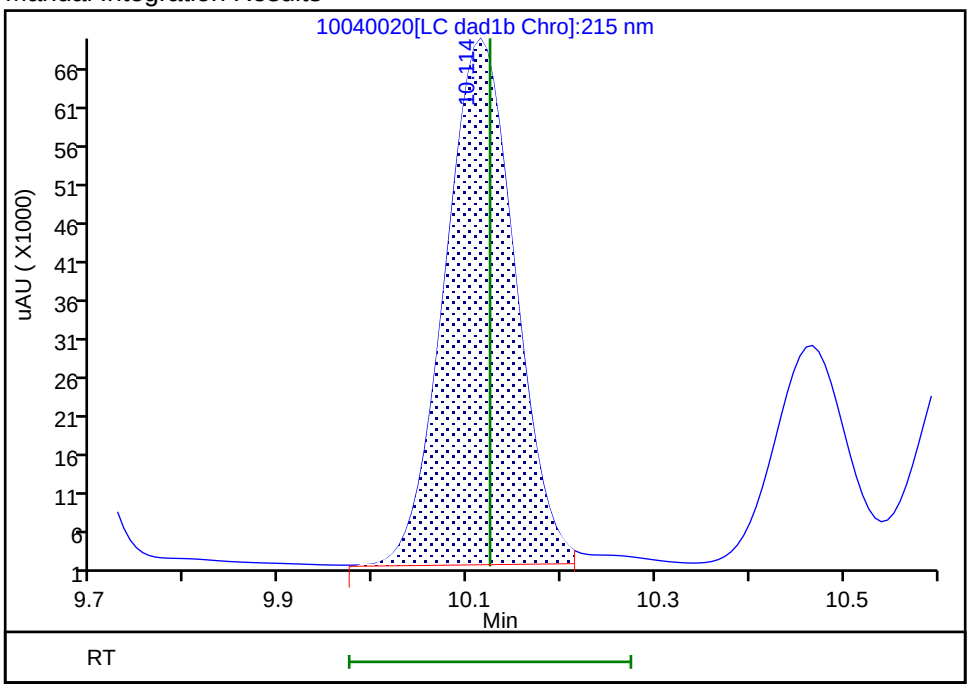
Processing Integration Results

RT: 10.11
Area: 355382
Amount: 5.587098
Amount Units: ug/mL



Manual Integration Results

RT: 10.11
Area: 348863
Amount: 5.418687
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 13:11:57 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Lab Sample ID: CCV 280-670183/8 Calibration Date: 10/08/2024 17:42

Instrument ID: CHHPLC_X3 Calib Start Date: 10/04/2024 16:59

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 10/04/2024 19:55

Lab File ID: 10080008.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	203078	208702		258	251	2.8	20.0
HMX	Ave	96653	94092		243	250	-2.6	20.0
DNX	Ave	146042	148344		254	250	1.6	20.0
MNX	Ave	132934	137686		302	292	3.6	20.0
RDX	Lin2		105108		249	250	-0.4	20.0
Picric acid	Ave	75427	75500		250	250	0.1	20.0
1,3,5-Trinitrobenzene	Ave	217350	213440		246	250	-1.8	20.0
1,3-Dinitrobenzene	Ave	298232	293548		246	250	-1.6	20.0
Nitrobenzene	Ave	195178	192164		246	250	-1.5	20.0
3,5-Dinitroaniline	Lin2		230688		248	250	-0.9	20.0
Tetryl	Lin2		166668		244	250	-2.4	20.0
Nitroglycerin	Lin2		64439		2510	2500	0.2	20.0
2,4,6-Trinitrotoluene	Ave	217298	214440		247	250	-1.3	20.0
4-Amino-2,6-dinitrotoluene	Lin2		143692		246	250	-1.8	20.0
2-Amino-4,6-dinitrotoluene	Ave	204531	199508		244	250	-2.5	20.0
2,6-Dinitrotoluene	Lin2		140520		249	250	-0.4	20.0
2,4-Dinitrotoluene	Ave	291812	290808		249	250	-0.3	20.0
2-Nitrotoluene	Ave	125468	121380		242	250	-3.3	20.0
4-Nitrotoluene	Lin2		104320		240	250	-3.9	20.0
3-Nitrotoluene	Lin2		133436		245	250	-2.0	20.0
PETN	Ave	72212	73225		2540	2500	1.4	20.0
1,2-Dinitrobenzene	Ave	130410	128852		247	250	-1.2	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Lab Sample ID: CCV 280-670183/8 Calibration Date: 10/08/2024 17:42

Instrument ID: CHHPLC_X3 Calib Start Date: 10/04/2024 16:59

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 10/04/2024 19:55

Lab File ID: 10080008.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.43	6.33	6.53
HMX	6.56	6.41	6.71
DNX	6.74	6.64	6.84
MNX	7.14	6.99	7.29
RDX	7.50	7.35	7.65
Picric acid	7.92	7.77	8.07
1,3,5-Trinitrobenzene	8.46	8.31	8.61
1,3-Dinitrobenzene	9.02	8.87	9.17
Nitrobenzene	9.34	9.19	9.49
3,5-Dinitroaniline	9.55	9.40	9.70
Tetryl	9.66	9.51	9.81
Nitroglycerin	10.11	9.96	10.26
2,4,6-Trinitrotoluene	10.46	10.36	10.56
4-Amino-2,6-dinitrotoluene	10.62	10.52	10.72
2-Amino-4,6-dinitrotoluene	10.85	10.75	10.95
2,6-Dinitrotoluene	10.98	10.88	11.08
2,4-Dinitrotoluene	11.13	11.03	11.23
2-Nitrotoluene	11.82	11.67	11.97
4-Nitrotoluene	12.20	12.05	12.35
3-Nitrotoluene	12.70	12.55	12.85
PETN	13.76	13.61	13.91
1,2-Dinitrobenzene	8.36	8.21	8.51

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\10080008.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 08-Oct-2024 17:42:45 ALS Bottle#: 7 Worklist Smp#: 8
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Oct-2024 11:35:58 Calib Date: 04-Oct-2024 19:55:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1609

First Level Reviewer: LV5D Date: 08-Oct-2024 18:15:16

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.430	6.430	0.000	52332	0.2508	0.2577	M
4 HMX	1	6.564	6.564	0.000	23523	0.2500	0.2434	M
6 DNX	1	6.737	6.737	0.000	37123	0.2503	0.2542	M
7 MNX	1	7.144	7.144	0.000	40170	0.2918	0.3022	
8 RDX	1	7.497	7.497	0.000	26277	0.2500	0.2490	
9 2,4,6-Trinitrophenol	1	7.917	7.917	0.000	18875	0.2500	0.2502	
$ 10 1,2-Dinitrobenzene	1	8.364	8.364	0.000	32213	0.2500	0.2470	
11 1,3,5-Trinitrobenzene	1	8.464	8.464	0.000	53360	0.2500	0.2455	
12 1,3-Dinitrobenzene	1	9.024	9.024	0.000	73387	0.2500	0.2461	
13 Nitrobenzene	1	9.344	9.344	0.000	48041	0.2500	0.2461	
14 3,5-Dinitroaniline	1	9.550	9.550	0.000	57672	0.2500	0.2476	
15 Tetryl	1	9.664	9.664	0.000	41667	0.2500	0.2439	
16 Nitroglycerin	2	10.110	10.110	0.000	161097	2.50	2.51	M
17 2,4,6-Trinitrotoluene	1	10.457	10.457	0.000	53610	0.2500	0.2467	
18 4-Amino-2,6-dinitrotoluene	1	10.617	10.617	0.000	35923	0.2500	0.2456	
19 2-Amino-4,6-dinitrotoluene	1	10.850	10.850	0.000	49877	0.2500	0.2439	
20 2,6-Dinitrotoluene	1	10.984	10.984	0.000	35130	0.2500	0.2491	
21 2,4-Dinitrotoluene	1	11.130	11.130	0.000	72702	0.2500	0.2491	
22 o-Nitrotoluene	1	11.824	11.824	0.000	30345	0.2500	0.2419	M
23 p-Nitrotoluene	1	12.197	12.197	0.000	26080	0.2500	0.2402	M
24 m-Nitrotoluene	1	12.697	12.697	0.000	33359	0.2500	0.2450	M
25 PETN	2	13.764	13.764	0.000	183062	2.50	2.54	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00018	Amount Added:	12.50	Units: uL
8330IntermStk_00083	Amount Added:	25.00	Units: uL

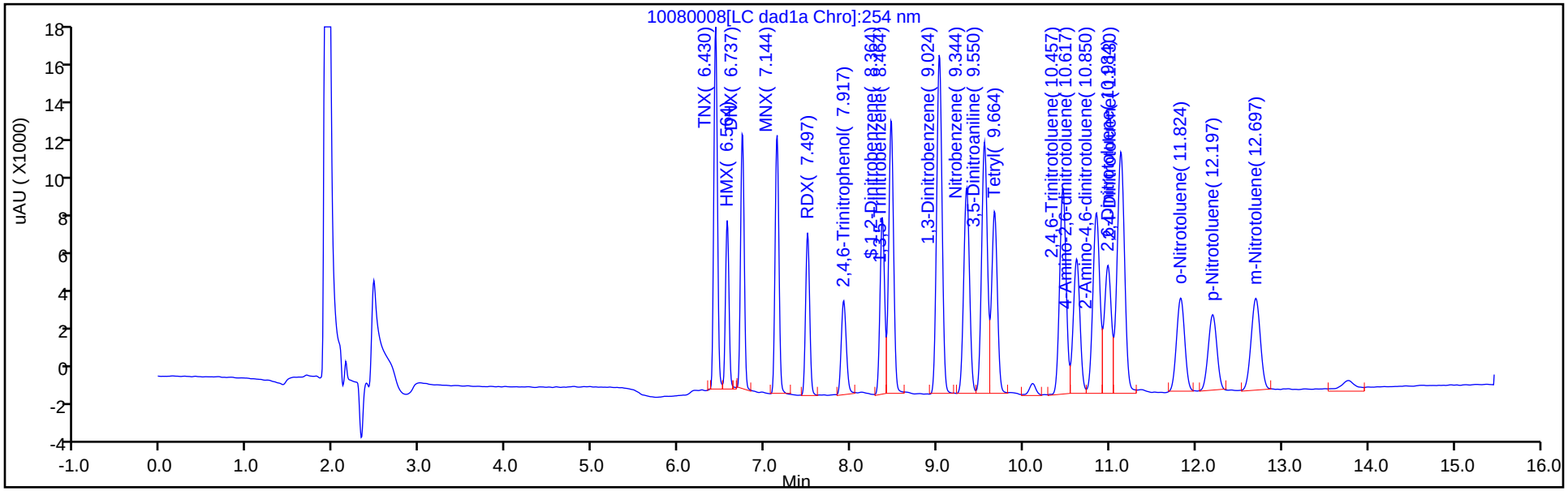
Report Date: 09-Oct-2024 11:35:59 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Denver

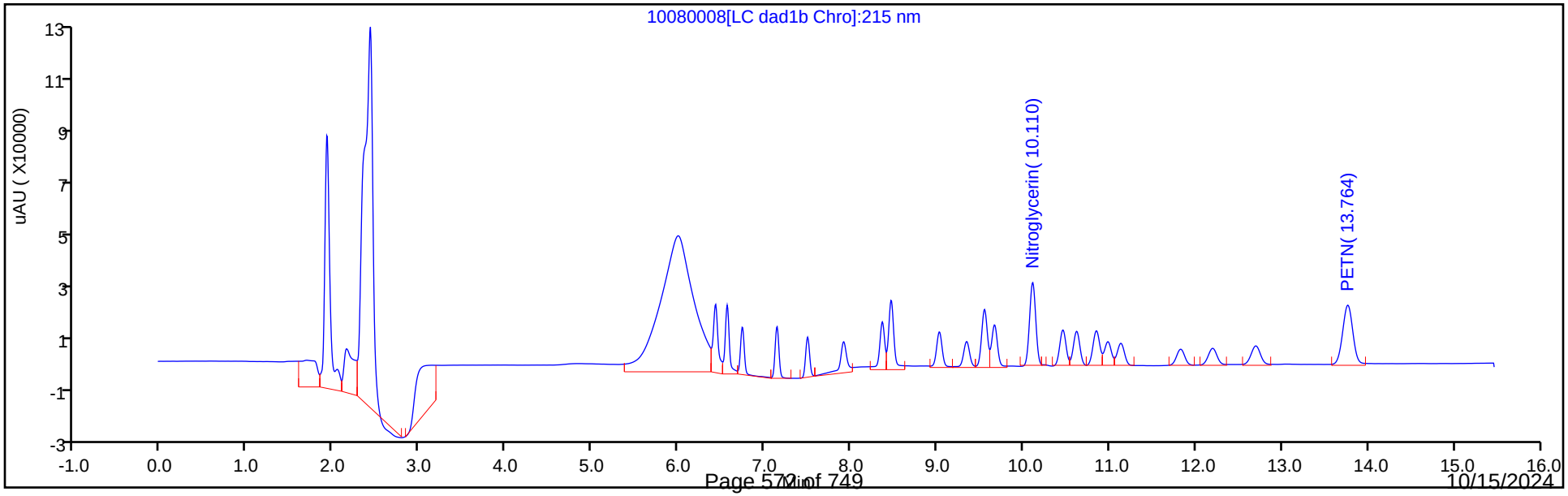
Data File: \\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080008.d

Injection Date:	08-Oct-2024 17:42:45	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	8
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



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



10/15/2024
4:48:23 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

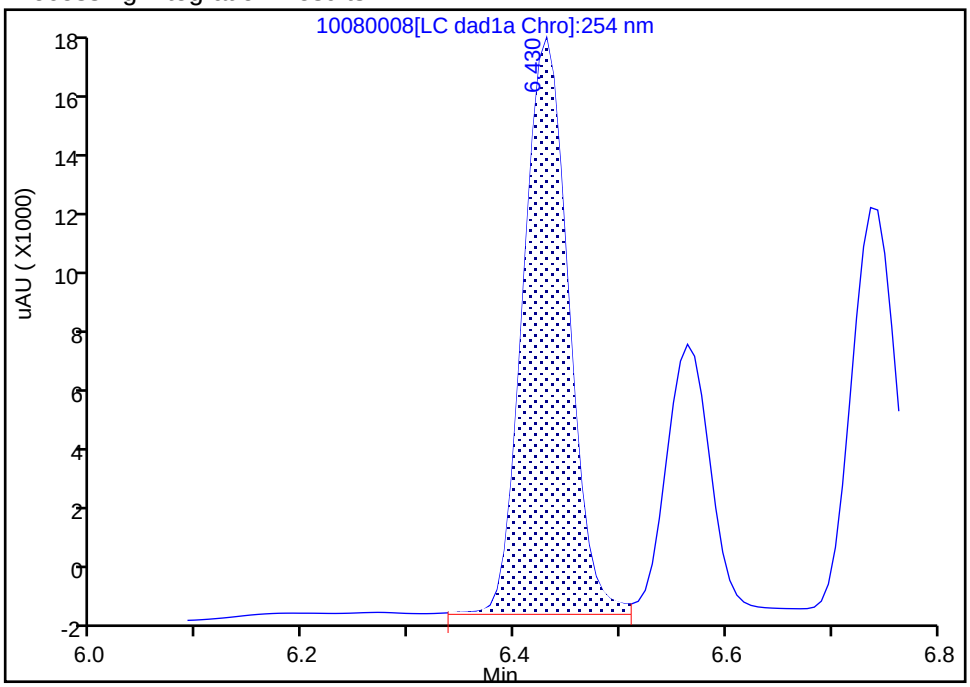
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080008.d				
Injection Date:	08-Oct-2024 17:42:45	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	8
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

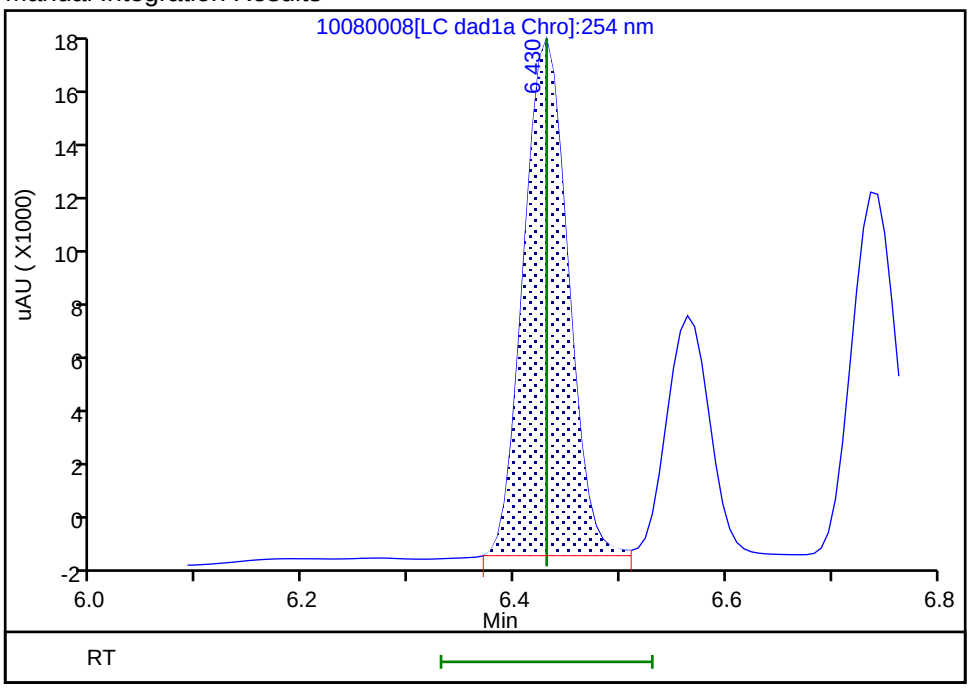
Processing Integration Results

RT: 6.43
Area: 53360
Amount: 0.262756
Amount Units: ug/mL



Manual Integration Results

RT: 6.43
Area: 52332
Amount: 0.257694
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 18:15:01 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

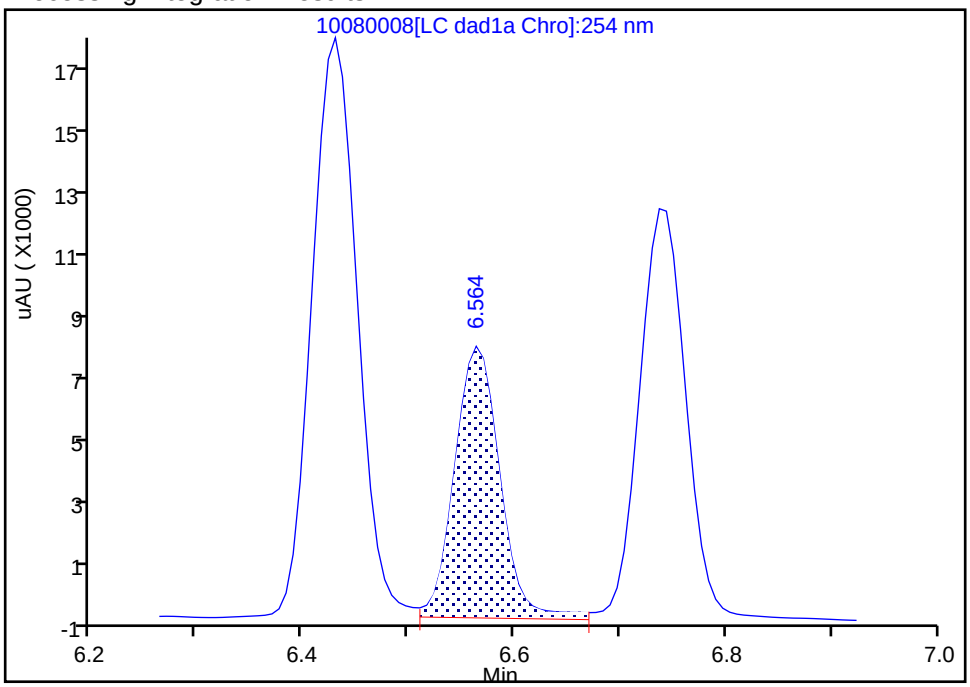
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080008.d				
Injection Date:	08-Oct-2024 17:42:45	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	8
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

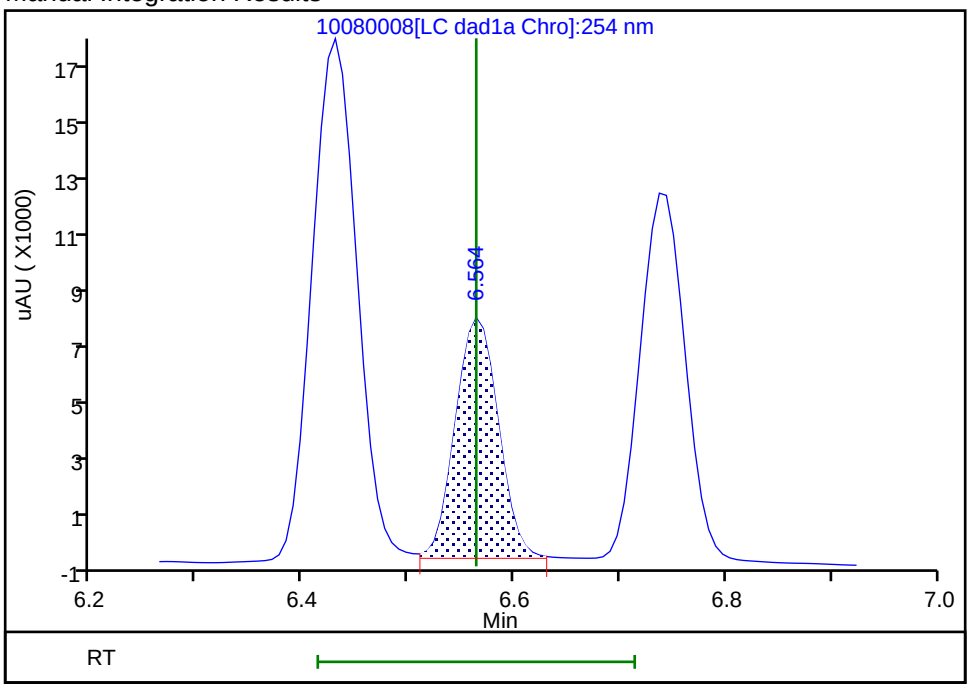
Processing Integration Results

RT: 6.56
Area: 24943
Amount: 0.258068
Amount Units: ug/mL



Manual Integration Results

RT: 6.56
Area: 23523
Amount: 0.243376
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 18:15:03 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

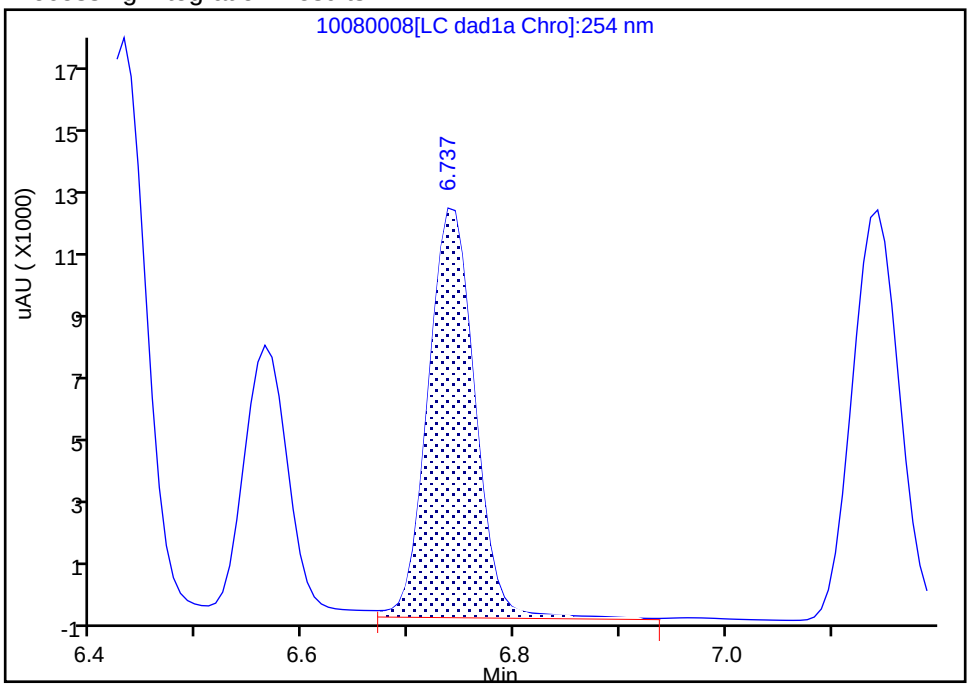
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080008.d				
Injection Date:	08-Oct-2024 17:42:45	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	8
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

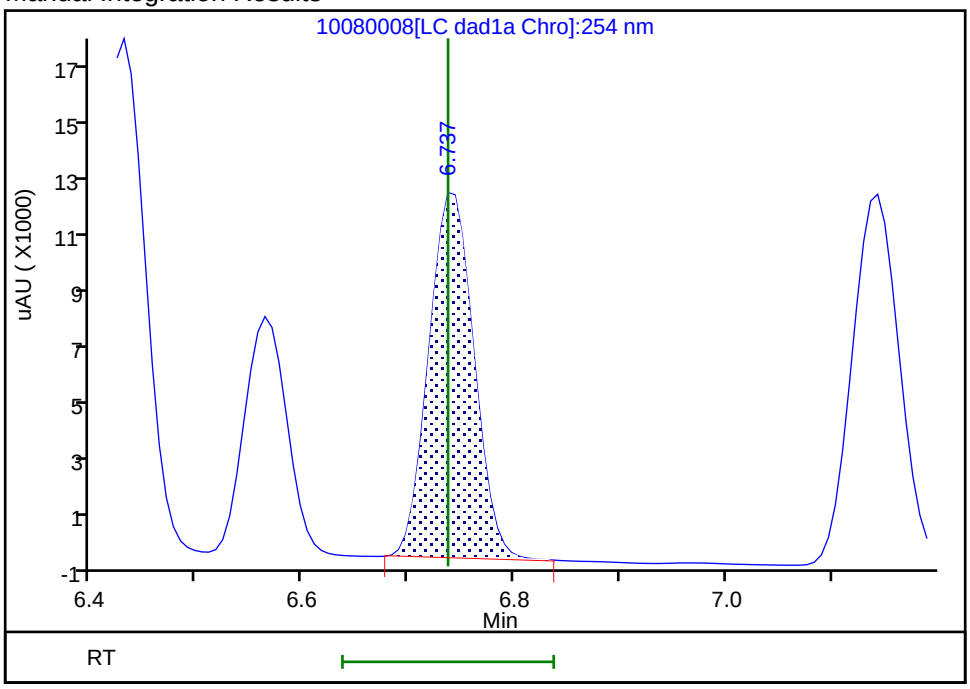
Processing Integration Results

RT: 6.74
Area: 38858
Amount: 0.266075
Amount Units: ug/mL



Manual Integration Results

RT: 6.74
Area: 37123
Amount: 0.254194
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 18:15:07 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

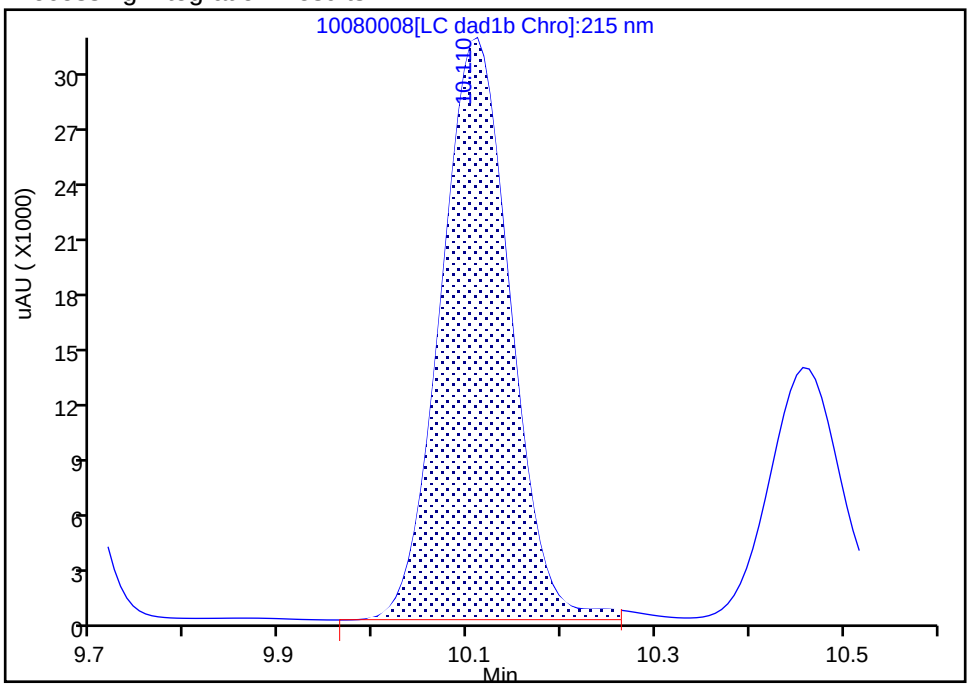
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080008.d				
Injection Date:	08-Oct-2024 17:42:45	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	8
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1C, 215 nm		

16 Nitroglycerin, CAS: 55-63-0

Signal: 1

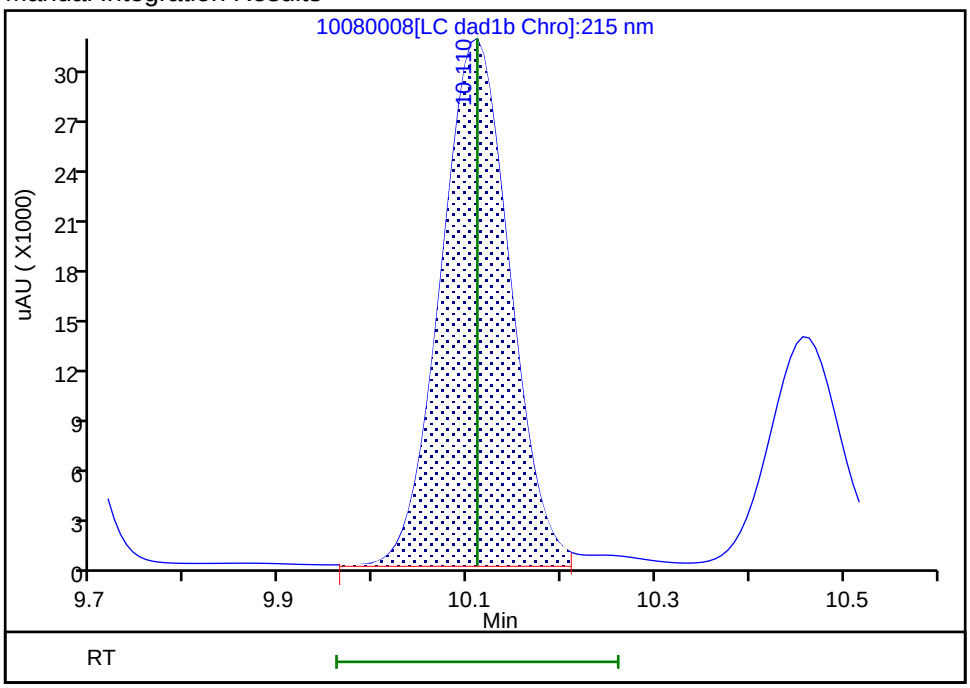
Processing Integration Results

RT: 10.11
Area: 163071
Amount: 2.536219
Amount Units: ug/mL



Manual Integration Results

RT: 10.11
Area: 161097
Amount: 2.505594
Amount Units: ug/mL



Reviewer: LV5D, 09-Oct-2024 11:15:23 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

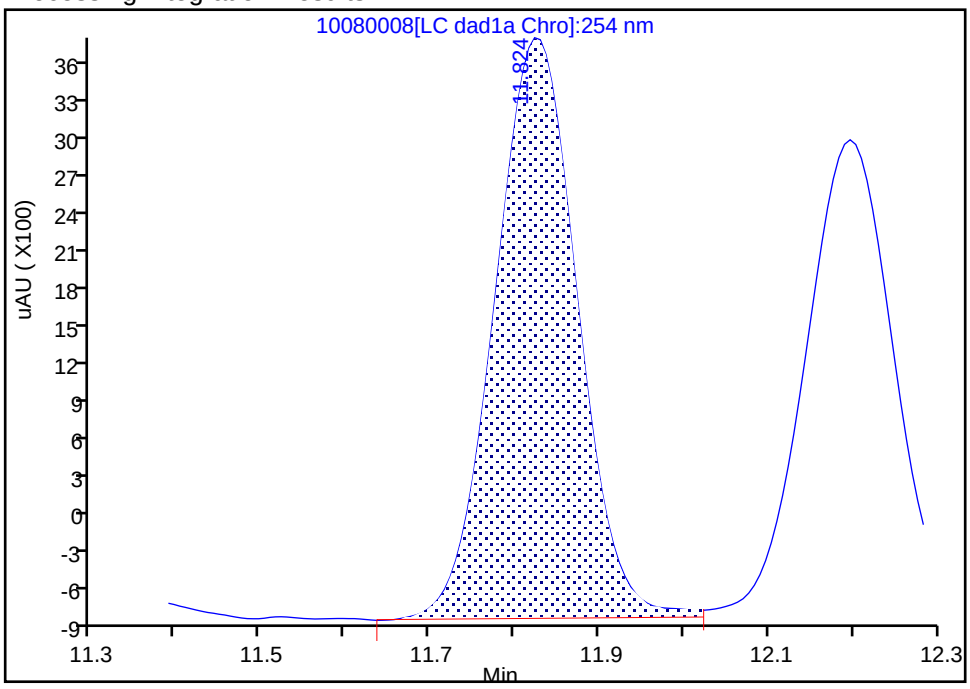
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080008.d				
Injection Date:	08-Oct-2024 17:42:45	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	8
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

22 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

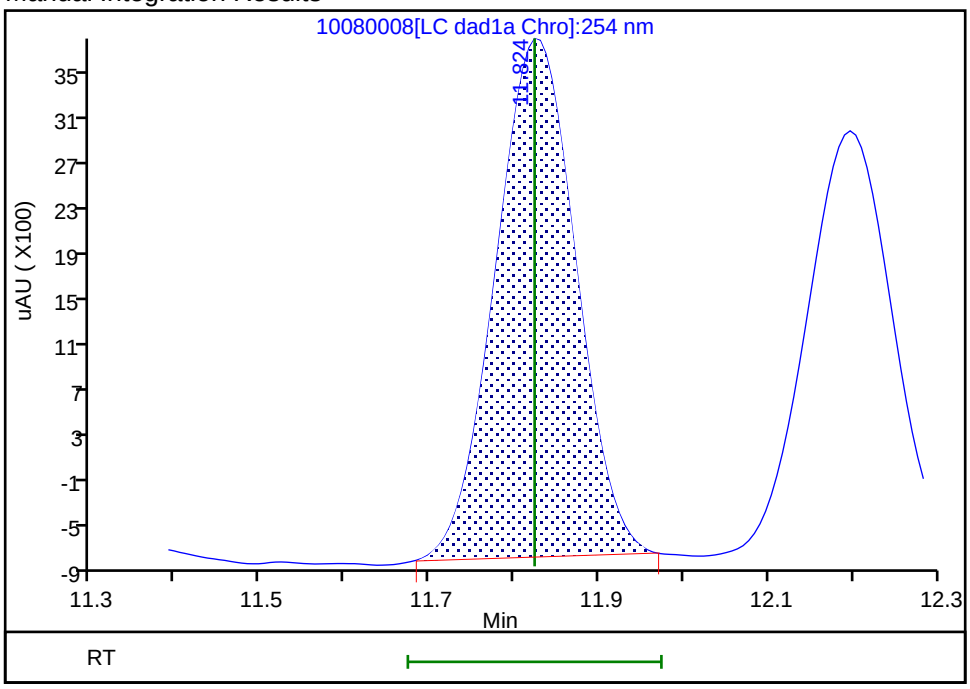
Processing Integration Results

RT: 11.82
Area: 31688
Amount: 0.252558
Amount Units: ug/mL



Manual Integration Results

RT: 11.82
Area: 30345
Amount: 0.241854
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 18:14:52 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

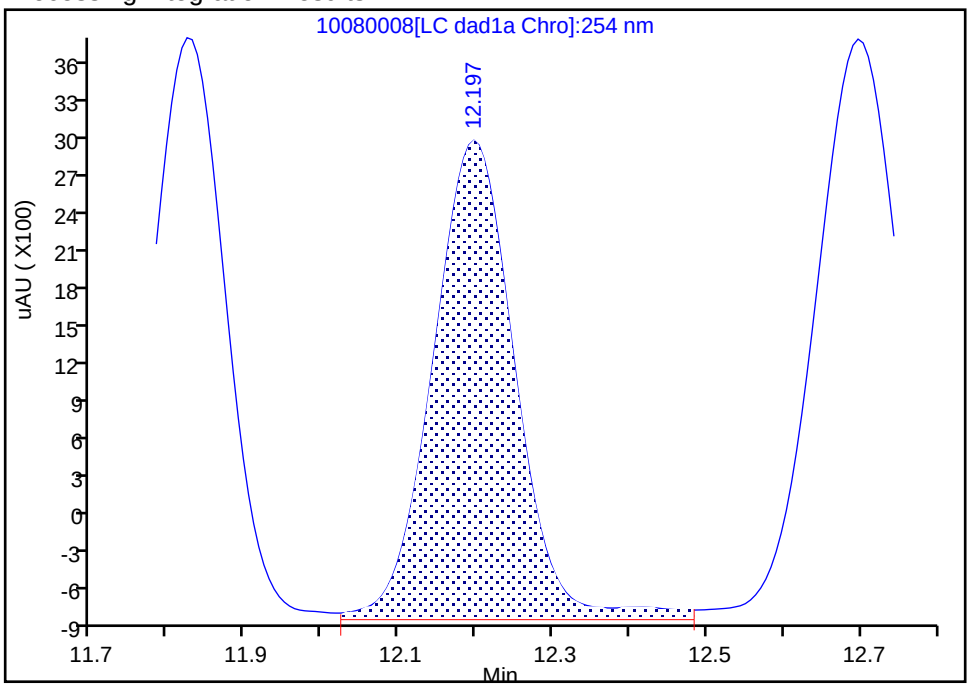
Data File: \\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080008.d
Injection Date: 08-Oct-2024 17:42:45 Instrument ID: CHHPLC_X3
Lims ID: CCV DMT
Client ID:
Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 8
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

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

Signal: 1

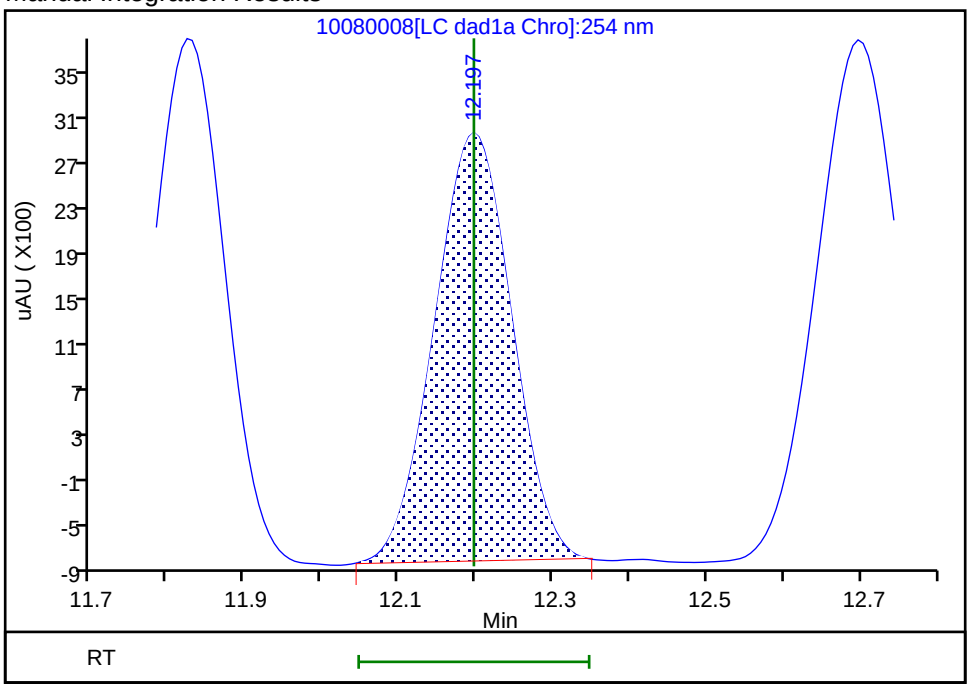
Processing Integration Results

RT: 12.20
Area: 28468
Amount: 0.262352
Amount Units: ug/mL



Manual Integration Results

RT: 12.20
Area: 26080
Amount: 0.240223
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 18:14:48 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

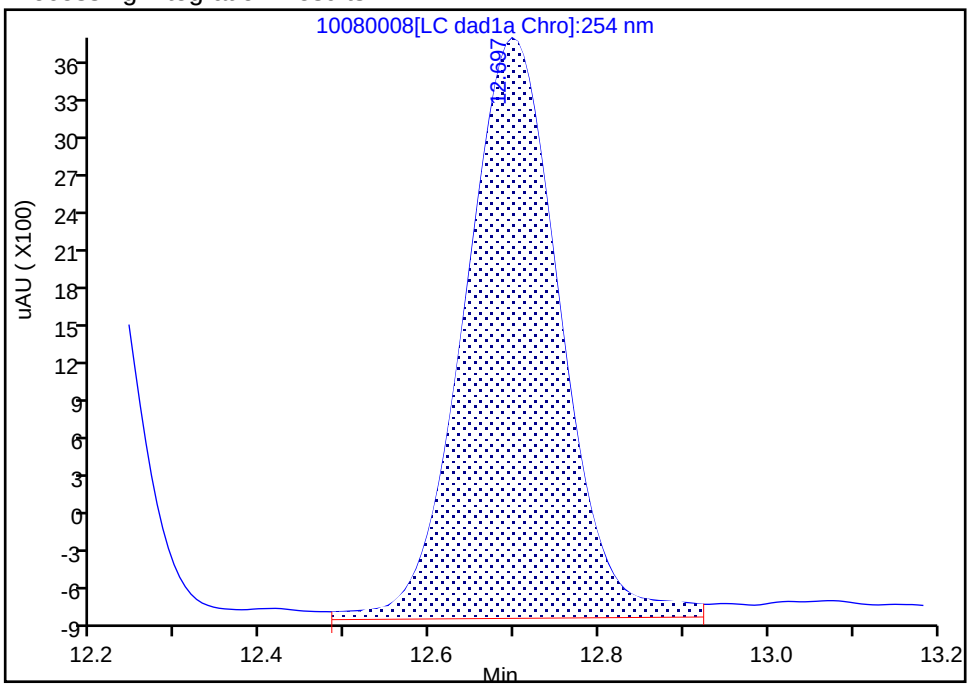
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080008.d				
Injection Date:	08-Oct-2024 17:42:45	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	8
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

24 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

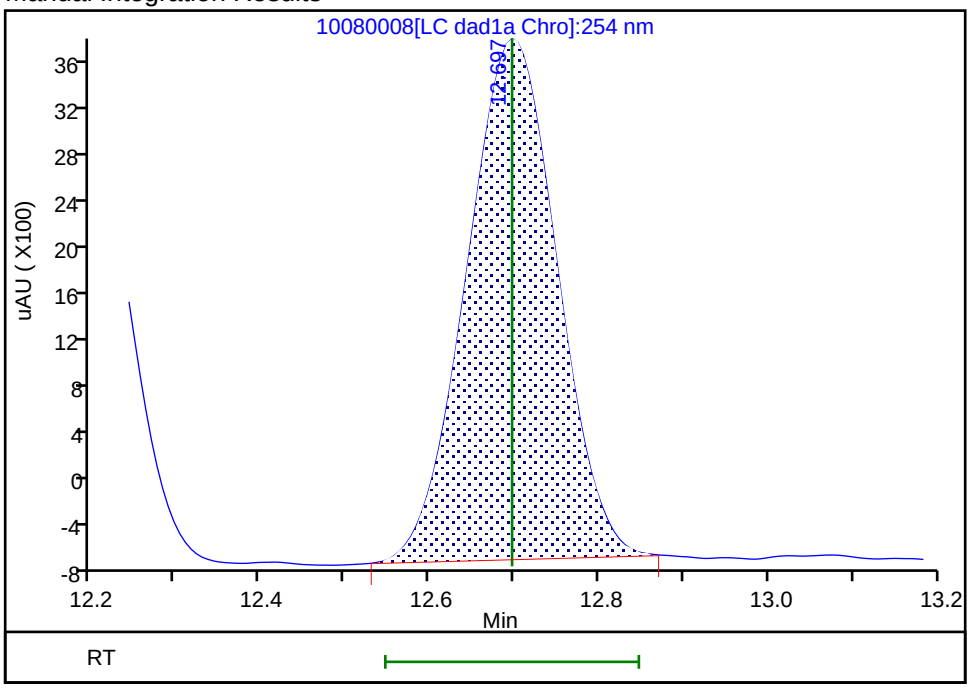
Processing Integration Results

RT: 12.70
Area: 36270
Amount: 0.266580
Amount Units: ug/mL



Manual Integration Results

RT: 12.70
Area: 33359
Amount: 0.245036
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 18:14:44 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Lab Sample ID: CCV 280-670183/21 Calibration Date: 10/08/2024 21:44

Instrument ID: CHHPLC_X3 Calib Start Date: 10/04/2024 16:59

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 10/04/2024 19:55

Lab File ID: 10080021.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	203078	210185		260	251	3.5	20.0
HMX	Ave	96653	96172		249	250	-0.5	20.0
DNX	Ave	146042	151049		259	250	3.4	20.0
MNX	Ave	132934	139352		306	292	4.8	20.0
RDX	Lin2		106900		253	250	1.3	20.0
Picric acid	Ave	75427	75608		251	250	0.2	20.0
1,3,5-Trinitrobenzene	Ave	217350	213256		245	250	-1.9	20.0
1,3-Dinitrobenzene	Ave	298232	296764		249	250	-0.5	20.0
Nitrobenzene	Ave	195178	192800		247	250	-1.2	20.0
3,5-Dinitroaniline	Lin2		237368		255	250	1.9	20.0
Tetryl	Lin2		164352		241	250	-3.8	20.0
Nitroglycerin	Lin2		65572		2550	2500	2.0	20.0
2,4,6-Trinitrotoluene	Ave	217298	213764		246	250	-1.6	20.0
4-Amino-2,6-dinitrotoluene	Lin2		142572		244	250	-2.5	20.0
2-Amino-4,6-dinitrotoluene	Ave	204531	197928		242	250	-3.2	20.0
2,6-Dinitrotoluene	Lin2		142568		253	250	1.1	20.0
2,4-Dinitrotoluene	Ave	291812	283964		243	250	-2.7	20.0
2-Nitrotoluene	Ave	125468	124168		247	250	-1.0	20.0
4-Nitrotoluene	Lin2		107492		248	250	-1.0	20.0
3-Nitrotoluene	Lin2		136472		251	250	0.3	20.0
PETN	Ave	72212	72882		2520	2500	0.9	20.0
1,2-Dinitrobenzene	Ave	130410	132852		255	250	1.9	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Lab Sample ID: CCV 280-670183/21 Calibration Date: 10/08/2024 21:44

Instrument ID: CHHPLC_X3 Calib Start Date: 10/04/2024 16:59

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 10/04/2024 19:55

Lab File ID: 10080021.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.46	6.33	6.53
HMX	6.59	6.41	6.71
DNX	6.77	6.64	6.84
MNX	7.17	6.99	7.29
RDX	7.52	7.35	7.65
Picric acid	7.93	7.77	8.07
1,3,5-Trinitrobenzene	8.48	8.31	8.61
1,3-Dinitrobenzene	9.03	8.87	9.17
Nitrobenzene	9.35	9.19	9.49
3,5-Dinitroaniline	9.55	9.40	9.70
Tetryl	9.65	9.51	9.81
Nitroglycerin	10.10	9.96	10.26
2,4,6-Trinitrotoluene	10.45	10.36	10.56
4-Amino-2,6-dinitrotoluene	10.60	10.52	10.72
2-Amino-4,6-dinitrotoluene	10.83	10.75	10.95
2,6-Dinitrotoluene	10.97	10.88	11.08
2,4-Dinitrotoluene	11.12	11.03	11.23
2-Nitrotoluene	11.80	11.67	11.97
4-Nitrotoluene	12.17	12.05	12.35
3-Nitrotoluene	12.67	12.55	12.85
PETN	13.70	13.61	13.91
1,2-Dinitrobenzene	8.37	8.21	8.51

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\10080021.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 08-Oct-2024 21:44:00 ALS Bottle#: 7 Worklist Smp#: 21
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Oct-2024 11:36:32 Calib Date: 04-Oct-2024 19:55:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1609

First Level Reviewer: LV5D Date: 09-Oct-2024 11:07:55

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.460	6.430	0.030	52704	0.2508	0.2595	
4 HMX	1	6.593	6.564	0.029	24043	0.2500	0.2488	
6 DNX	1	6.773	6.737	0.036	37800	0.2503	0.2588	
7 MNX	1	7.173	7.144	0.029	40656	0.2918	0.3058	
8 RDX	1	7.520	7.497	0.023	26725	0.2500	0.2533	
9 2,4,6-Trinitrophenol	1	7.933	7.917	0.016	18902	0.2500	0.2506	
$ 10 1,2-Dinitrobenzene	1	8.373	8.364	0.009	33213	0.2500	0.2547	
11 1,3,5-Trinitrobenzene	1	8.480	8.464	0.016	53314	0.2500	0.2453	
12 1,3-Dinitrobenzene	1	9.033	9.024	0.009	74191	0.2500	0.2488	
13 Nitrobenzene	1	9.346	9.344	0.002	48200	0.2500	0.2470	
14 3,5-Dinitroaniline	1	9.546	9.550	-0.004	59342	0.2500	0.2548	
15 Tetryl	1	9.653	9.664	-0.011	41088	0.2500	0.2406	
16 Nitroglycerin	2	10.100	10.110	-0.010	163930	2.50	2.55	M
17 2,4,6-Trinitrotoluene	1	10.453	10.457	-0.004	53441	0.2500	0.2459	
18 4-Amino-2,6-dinitrotoluene	1	10.600	10.617	-0.017	35643	0.2500	0.2437	
19 2-Amino-4,6-dinitrotoluene	1	10.833	10.850	-0.017	49482	0.2500	0.2419	
20 2,6-Dinitrotoluene	1	10.966	10.984	-0.018	35642	0.2500	0.2527	
21 2,4-Dinitrotoluene	1	11.120	11.130	-0.010	70991	0.2500	0.2433	
22 o-Nitrotoluene	1	11.800	11.824	-0.024	31042	0.2500	0.2474	
23 p-Nitrotoluene	1	12.166	12.197	-0.031	26873	0.2500	0.2476	
24 m-Nitrotoluene	1	12.666	12.697	-0.031	34118	0.2500	0.2507	
25 PETN	2	13.700	13.764	-0.064	182204	2.50	2.52	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00018	Amount Added:	12.50	Units: uL
8330IntermStk_00083	Amount Added:	25.00	Units: uL

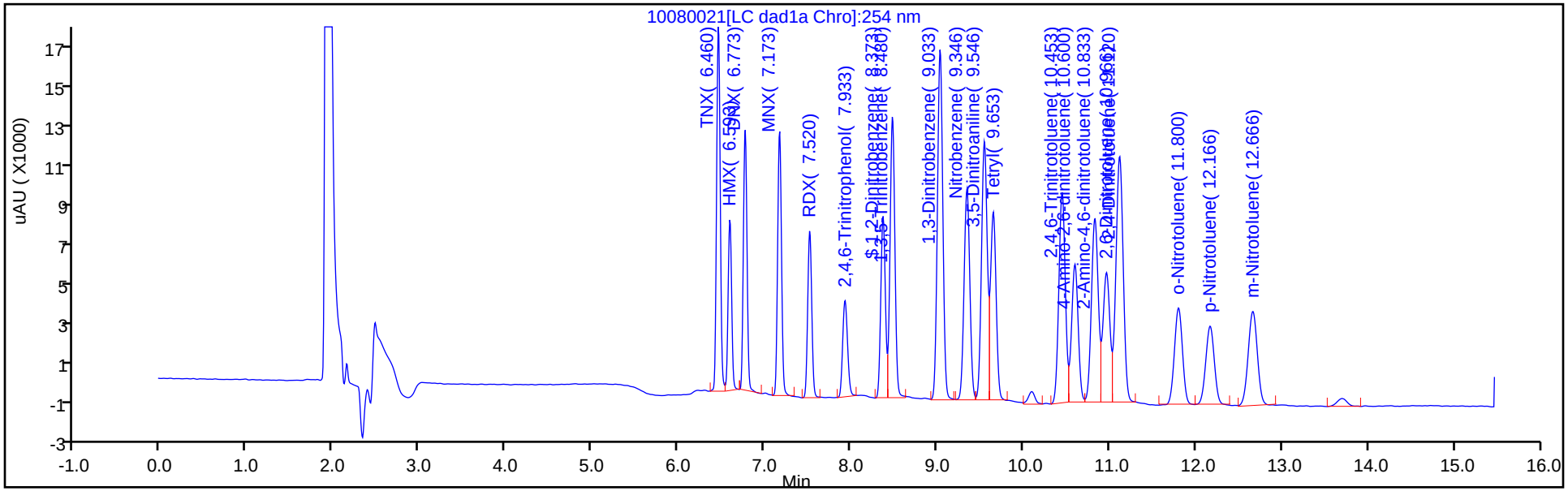
Report Date: 09-Oct-2024 11:36:33 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Denver

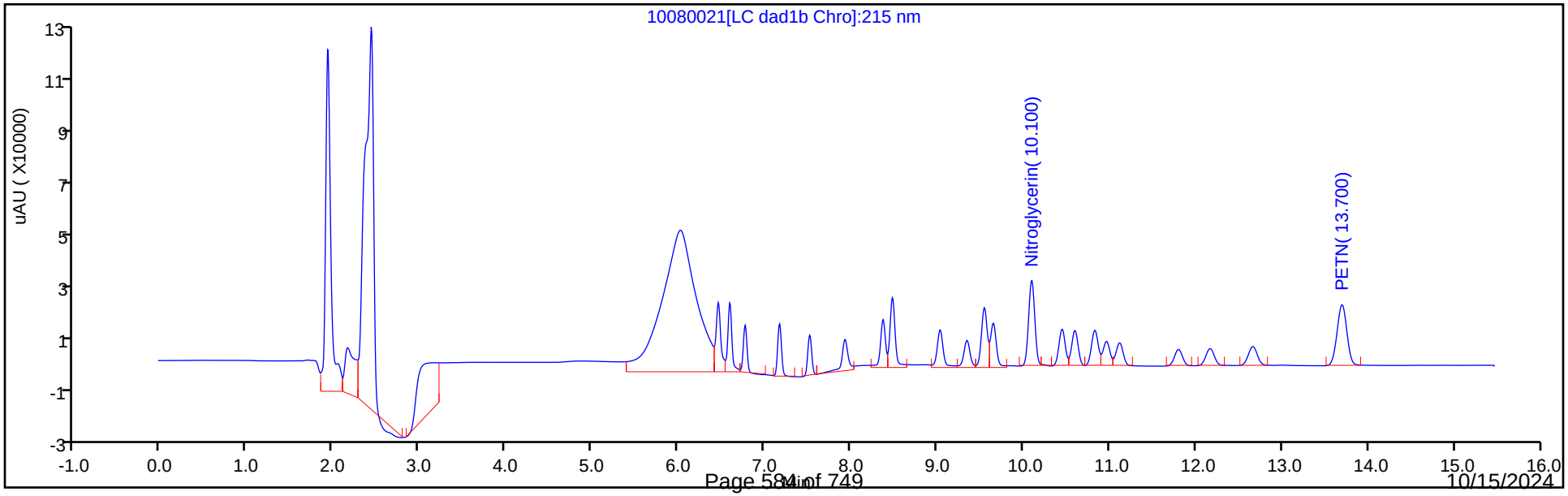
Data File: \\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080021.d

Injection Date:	08-Oct-2024 21:44:00	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	21
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



10/15/2024
4:48:23 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

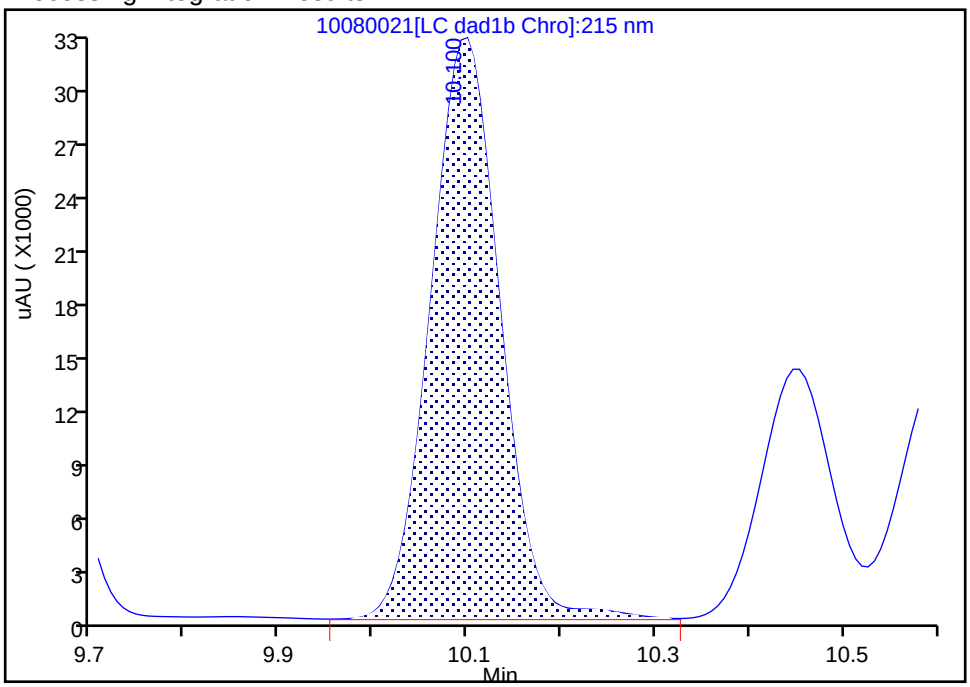
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080021.d				
Injection Date:	08-Oct-2024 21:44:00	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1C, 215 nm		

16 Nitroglycerin, CAS: 55-63-0

Signal: 1

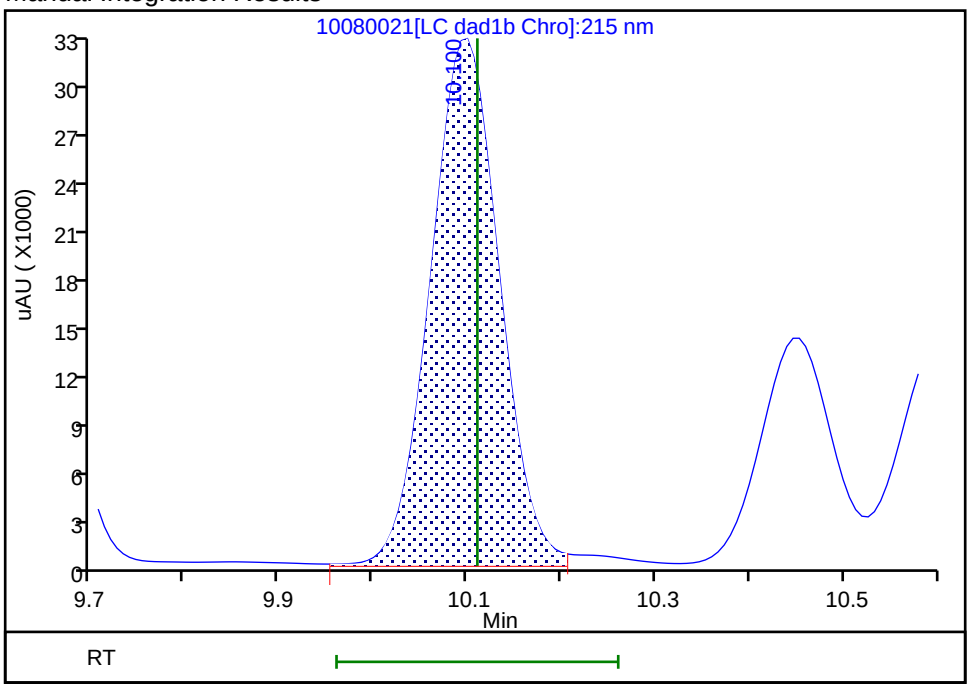
Processing Integration Results

RT: 10.10
Area: 166741
Amount: 2.593157
Amount Units: ug/mL



Manual Integration Results

RT: 10.10
Area: 163930
Amount: 2.549546
Amount Units: ug/mL



Reviewer: LV5D, 09-Oct-2024 11:15:00 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Lab Sample ID: CCV 280-670183/30 Calibration Date: 10/09/2024 01:01

Instrument ID: CHHPLC_X3 Calib Start Date: 10/04/2024 16:59

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 10/04/2024 19:55

Lab File ID: 10080030.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	203078	207581		256	251	2.2	20.0
HMX	Ave	96653	95736		248	250	-0.9	20.0
DNX	Ave	146042	147936		253	250	1.3	20.0
MNX	Ave	132934	139921		307	292	5.3	20.0
RDX	Lin2		106388		252	250	0.8	20.0
Picric acid	Ave	75427	76956		255	250	2.0	20.0
1,3,5-Trinitrobenzene	Ave	217350	215960		248	250	-0.6	20.0
1,3-Dinitrobenzene	Ave	298232	296800		249	250	-0.5	20.0
Nitrobenzene	Ave	195178	191144		245	250	-2.1	20.0
3,5-Dinitroaniline	Lin2		232840		250	250	-0.0	20.0
Tetryl	Lin2		168140		246	250	-1.6	20.0
Nitroglycerin	Lin2		65513		2550	2500	1.9	20.0
2,4,6-Trinitrotoluene	Ave	217298	214392		247	250	-1.3	20.0
4-Amino-2,6-dinitrotoluene	Lin2		143212		245	250	-2.1	20.0
2-Amino-4,6-dinitrotoluene	Ave	204531	199452		244	250	-2.5	20.0
2,6-Dinitrotoluene	Lin2		139600		247	250	-1.0	20.0
2,4-Dinitrotoluene	Ave	291812	287036		246	250	-1.6	20.0
2-Nitrotoluene	Ave	125468	123496		246	250	-1.6	20.0
4-Nitrotoluene	Lin2		106132		244	250	-2.2	20.0
3-Nitrotoluene	Lin2		134284		247	250	-1.4	20.0
PETN	Ave	72212	72868		2520	2500	0.9	20.0
1,2-Dinitrobenzene	Ave	130410	130468		250	250	0.0	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Lab Sample ID: CCV 280-670183/30 Calibration Date: 10/09/2024 01:01

Instrument ID: CHHPLC_X3 Calib Start Date: 10/04/2024 16:59

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 10/04/2024 19:55

Lab File ID: 10080030.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.46	6.33	6.53
HMX	6.59	6.41	6.71
DNX	6.77	6.64	6.84
MNX	7.17	6.99	7.29
RDX	7.52	7.35	7.65
Picric acid	7.93	7.77	8.07
1,3,5-Trinitrobenzene	8.48	8.31	8.61
1,3-Dinitrobenzene	9.03	8.87	9.17
Nitrobenzene	9.35	9.19	9.49
3,5-Dinitroaniline	9.55	9.40	9.70
Tetryl	9.65	9.51	9.81
Nitroglycerin	10.09	9.96	10.26
2,4,6-Trinitrotoluene	10.45	10.36	10.56
4-Amino-2,6-dinitrotoluene	10.60	10.52	10.72
2-Amino-4,6-dinitrotoluene	10.83	10.75	10.95
2,6-Dinitrotoluene	10.96	10.88	11.08
2,4-Dinitrotoluene	11.11	11.03	11.23
2-Nitrotoluene	11.79	11.67	11.97
4-Nitrotoluene	12.15	12.05	12.35
3-Nitrotoluene	12.65	12.55	12.85
PETN	13.67	13.61	13.91
1,2-Dinitrobenzene	8.37	8.21	8.51

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\10080030.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 09-Oct-2024 01:01:28 ALS Bottle#: 7 Worklist Smp#: 30
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Oct-2024 11:36:55 Calib Date: 04-Oct-2024 19:55:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1609

First Level Reviewer: LV5D Date: 09-Oct-2024 11:10:21

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 TNX	1	6.460	6.430	0.030	52051	0.2508	0.2563	
	4 HMX	1	6.594	6.564	0.030	23934	0.2500	0.2476	
	6 DNX	1	6.774	6.737	0.037	37021	0.2503	0.2535	M
	7 MNX	1	7.174	7.144	0.030	40822	0.2918	0.3071	
	8 RDX	1	7.520	7.497	0.023	26597	0.2500	0.2521	
	9 2,4,6-Trinitrophenol	1	7.934	7.917	0.017	19239	0.2500	0.2551	
$	10 1,2-Dinitrobenzene	1	8.374	8.364	0.010	32617	0.2500	0.2501	
	11 1,3,5-Trinitrobenzene	1	8.480	8.464	0.016	53990	0.2500	0.2484	
	12 1,3-Dinitrobenzene	1	9.034	9.024	0.010	74200	0.2500	0.2488	
	13 Nitrobenzene	1	9.347	9.344	0.003	47786	0.2500	0.2448	
	14 3,5-Dinitroaniline	1	9.554	9.550	0.004	58210	0.2500	0.2500	
	15 Tetryl	1	9.654	9.664	-0.010	42035	0.2500	0.2461	
	16 Nitroglycerin	2	10.094	10.110	-0.016	163783	2.50	2.55	M
	17 2,4,6-Trinitrotoluene	1	10.447	10.457	-0.010	53598	0.2500	0.2467	
	18 4-Amino-2,6-dinitrotoluene	1	10.600	10.617	-0.017	35803	0.2500	0.2448	
	19 2-Amino-4,6-dinitrotoluene	1	10.834	10.850	-0.016	49863	0.2500	0.2438	
	20 2,6-Dinitrotoluene	1	10.960	10.984	-0.024	34900	0.2500	0.2474	
	21 2,4-Dinitrotoluene	1	11.114	11.130	-0.016	71759	0.2500	0.2459	
	22 o-Nitrotoluene	1	11.794	11.824	-0.030	30874	0.2500	0.2461	
	23 p-Nitrotoluene	1	12.154	12.197	-0.043	26533	0.2500	0.2444	
	24 m-Nitrotoluene	1	12.647	12.697	-0.050	33571	0.2500	0.2466	
	25 PETN	2	13.674	13.764	-0.090	182171	2.50	2.52	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00018	Amount Added:	12.50	Units: uL
8330IntermStk_00083	Amount Added:	25.00	Units: uL

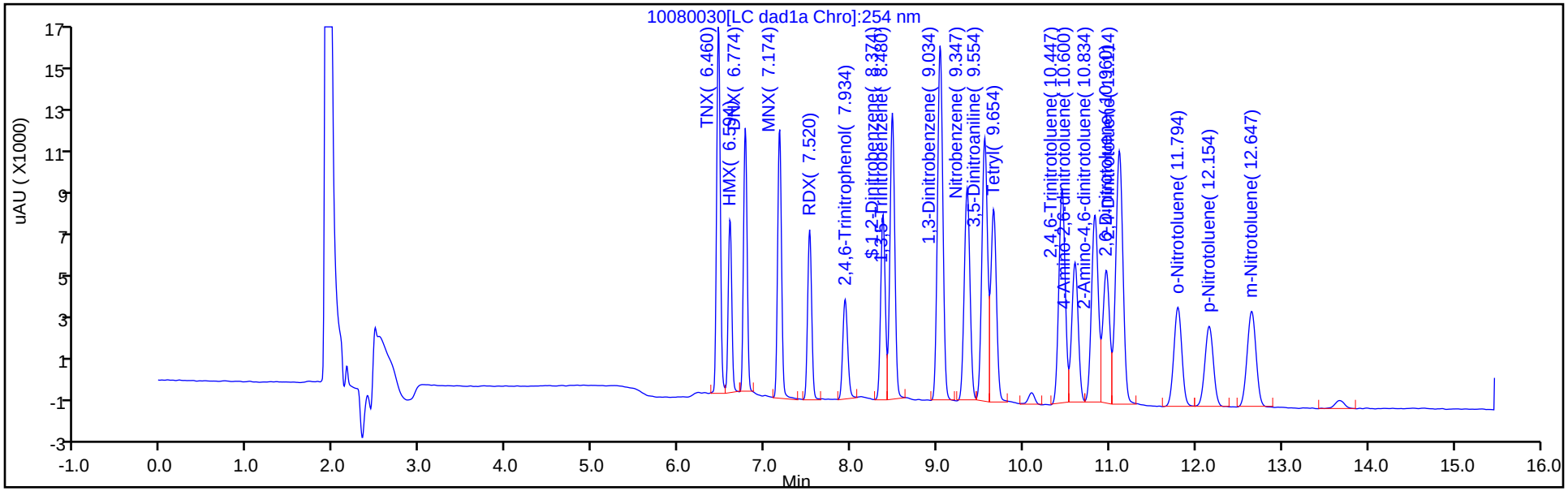
Report Date: 09-Oct-2024 11:36:55 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Denver

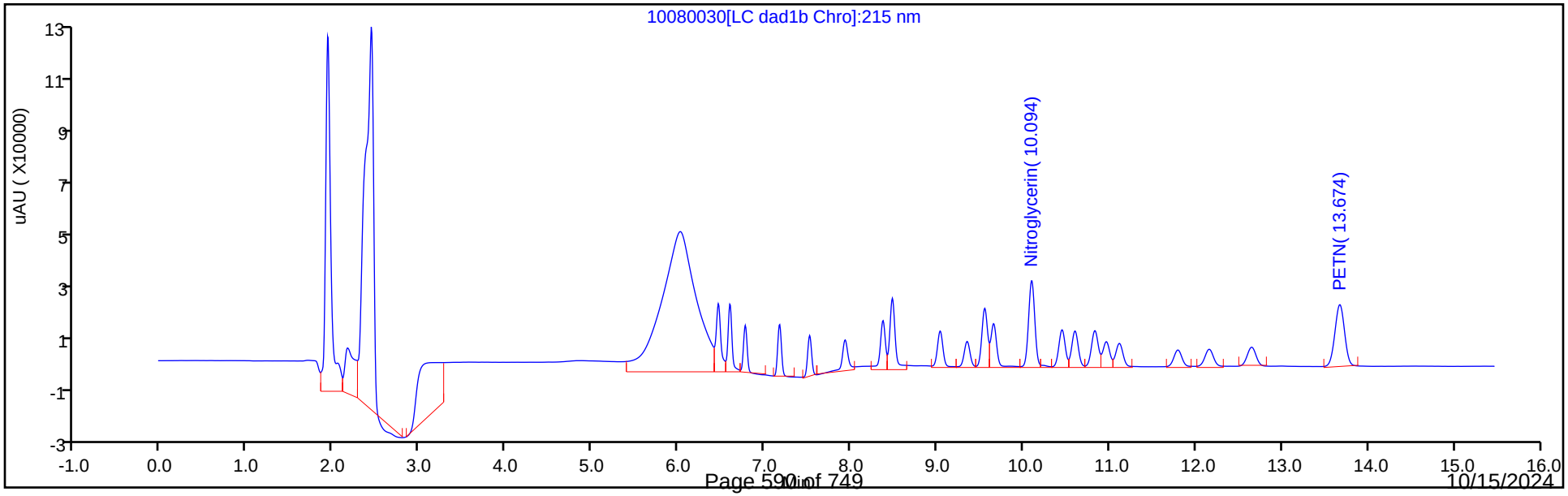
Data File: \\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080030.d

Injection Date:	09-Oct-2024 01:01:28	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	30
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



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



10/15/2024
4:48:23 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

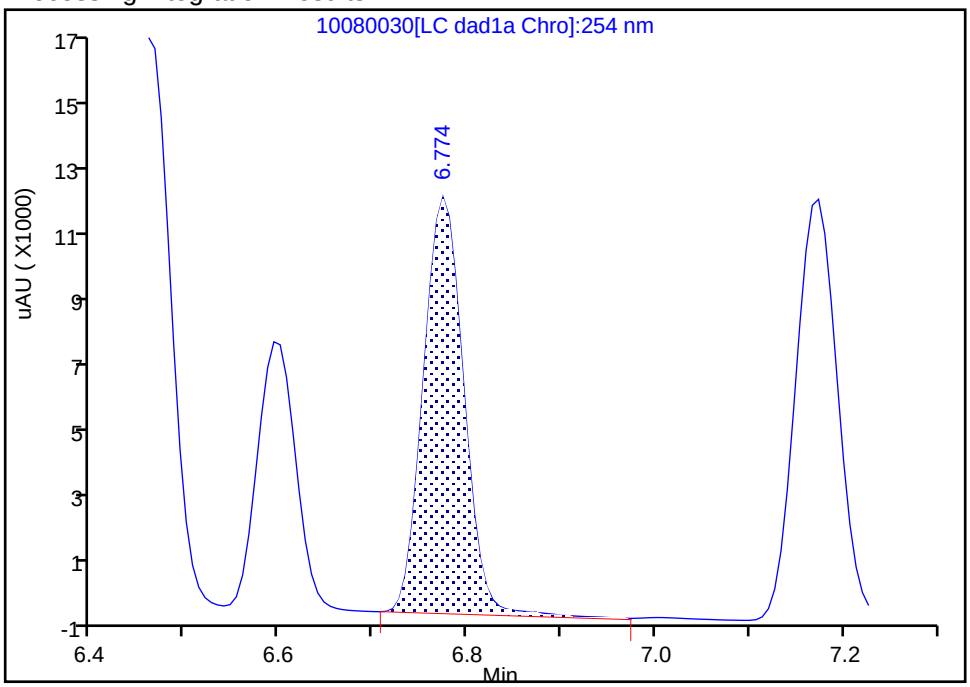
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080030.d				
Injection Date:	09-Oct-2024 01:01:28	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

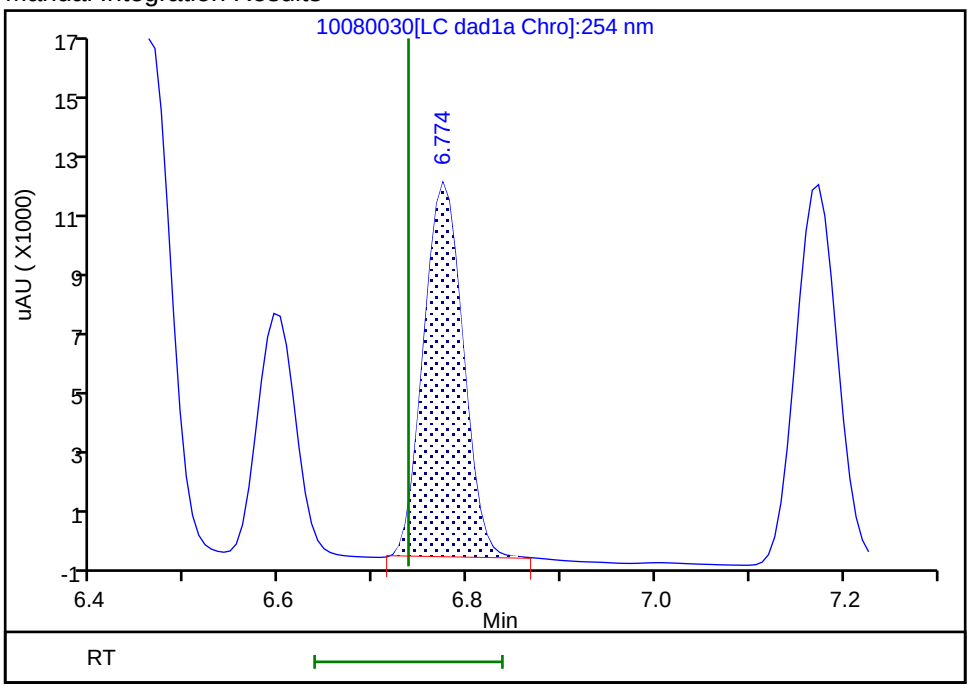
Processing Integration Results

RT: 6.77
Area: 37998
Amount: 0.260186
Amount Units: ug/mL



Manual Integration Results

RT: 6.77
Area: 37021
Amount: 0.253496
Amount Units: ug/mL



Reviewer: LV5D, 09-Oct-2024 11:10:20 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

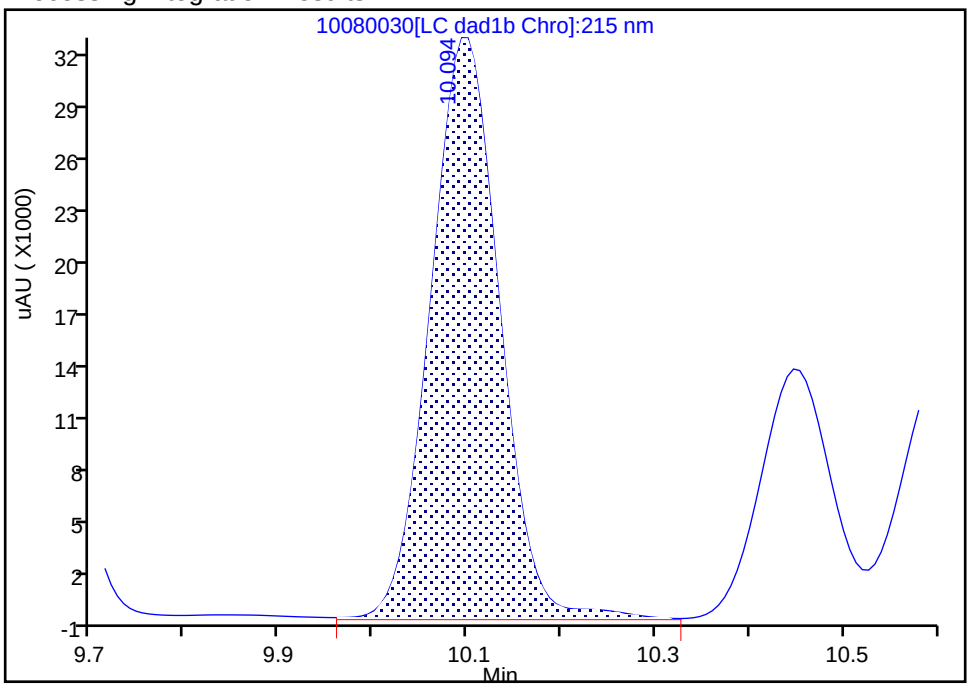
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080030.d				
Injection Date:	09-Oct-2024 01:01:28	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1C, 215 nm		

16 Nitroglycerin, CAS: 55-63-0

Signal: 1

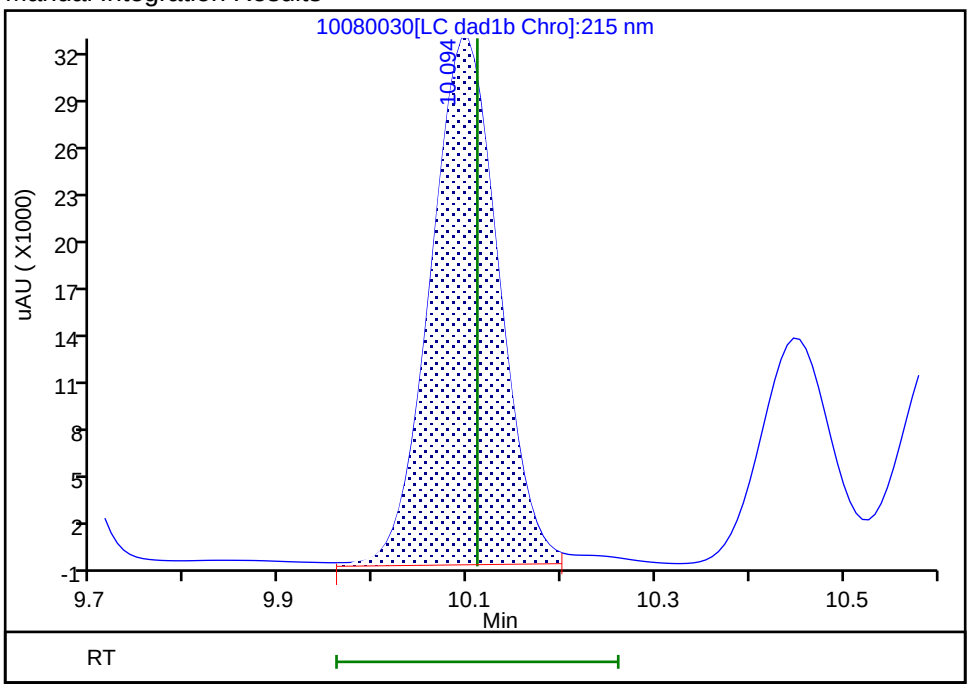
Processing Integration Results

RT: 10.09
Area: 166246
Amount: 2.585478
Amount Units: ug/mL



Manual Integration Results

RT: 10.09
Area: 163783
Amount: 2.547266
Amount Units: ug/mL



Reviewer: LV5D, 09-Oct-2024 11:14:53 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Lab Sample ID: CCV 280-670184/41 Calibration Date: 10/09/2024 05:02

Instrument ID: CHHPLC_X3 Calib Start Date: 10/04/2024 16:59

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 10/04/2024 19:55

Lab File ID: 10080041.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	203078	206277		255	251	1.6	20.0
HMX	Ave	96653	95476		247	250	-1.2	20.0
DNX	Ave	146042	151856		260	250	4.0	20.0
MNX	Ave	132934	137789		302	292	3.7	20.0
RDX	Lin2		106816		253	250	1.2	20.0
Picric acid	Ave	75427	76024		252	250	0.8	20.0
1,3,5-Trinitrobenzene	Ave	217350	214524		247	250	-1.3	20.0
1,3-Dinitrobenzene	Ave	298232	297428		249	250	-0.3	20.0
Nitrobenzene	Ave	195178	187764		241	250	-3.8	20.0
3,5-Dinitroaniline	Lin2		230912		248	250	-0.8	20.0
Tetryl	Lin2		166196		243	250	-2.7	20.0
Nitroglycerin	Lin2		66274		2580	2500	3.1	20.0
2,4,6-Trinitrotoluene	Ave	217298	214188		246	250	-1.4	20.0
4-Amino-2,6-dinitrotoluene	Lin2		142244		243	250	-2.8	20.0
2-Amino-4,6-dinitrotoluene	Ave	204531	199308		244	250	-2.6	20.0
2,6-Dinitrotoluene	Lin2		140628		249	250	-0.3	20.0
2,4-Dinitrotoluene	Ave	291812	286412		245	250	-1.9	20.0
2-Nitrotoluene	Ave	125468	121492		242	250	-3.2	20.0
4-Nitrotoluene	Lin2		104468		241	250	-3.8	20.0
3-Nitrotoluene	Lin2		133300		245	250	-2.1	20.0
PETN	Ave	72212	73568		2550	2500	1.9	20.0
1,2-Dinitrobenzene	Ave	130410	131720		253	250	1.0	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Lab Sample ID: CCV 280-670184/41 Calibration Date: 10/09/2024 05:02

Instrument ID: CHHPLC_X3 Calib Start Date: 10/04/2024 16:59

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 10/04/2024 19:55

Lab File ID: 10080041.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.45	6.33	6.53
HMX	6.59	6.41	6.71
DNX	6.77	6.64	6.84
MNX	7.17	6.99	7.29
RDX	7.51	7.35	7.65
Picric acid	7.94	7.77	8.07
1,3,5-Trinitrobenzene	8.48	8.31	8.61
1,3-Dinitrobenzene	9.05	8.87	9.17
Nitrobenzene	9.36	9.19	9.49
3,5-Dinitroaniline	9.57	9.40	9.70
Tetryl	9.69	9.51	9.81
Nitroglycerin	10.13	9.96	10.26
2,4,6-Trinitrotoluene	10.48	10.36	10.56
4-Amino-2,6-dinitrotoluene	10.65	10.52	10.72
2-Amino-4,6-dinitrotoluene	10.88	10.75	10.95
2,6-Dinitrotoluene	11.01	10.88	11.08
2,4-Dinitrotoluene	11.16	11.03	11.23
2-Nitrotoluene	11.85	11.67	11.97
4-Nitrotoluene	12.21	12.05	12.35
3-Nitrotoluene	12.71	12.55	12.85
PETN	13.77	13.61	13.91
1,2-Dinitrobenzene	8.37	8.21	8.51

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\10080041.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 09-Oct-2024 05:02:52 ALS Bottle#: 7 Worklist Smp#: 41
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Oct-2024 11:37:18 Calib Date: 04-Oct-2024 19:55:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1609

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.454	6.430	0.024	51724	0.2508	0.2547	
4 HMX	1	6.587	6.564	0.023	23869	0.2500	0.2470	
6 DNX	1	6.767	6.737	0.030	38002	0.2503	0.2602	
7 MNX	1	7.167	7.144	0.023	40200	0.2918	0.3024	
8 RDX	1	7.514	7.497	0.017	26704	0.2500	0.2531	
9 2,4,6-Trinitrophenol	1	7.941	7.917	0.024	19006	0.2500	0.2520	
$ 10 1,2-Dinitrobenzene	1	8.374	8.364	0.010	32930	0.2500	0.2525	
11 1,3,5-Trinitrobenzene	1	8.481	8.464	0.017	53631	0.2500	0.2467	
12 1,3-Dinitrobenzene	1	9.047	9.024	0.023	74357	0.2500	0.2493	
13 Nitrobenzene	1	9.361	9.344	0.017	46941	0.2500	0.2405	
14 3,5-Dinitroaniline	1	9.574	9.550	0.024	57728	0.2500	0.2479	
15 Tetryl	1	9.687	9.664	0.023	41549	0.2500	0.2433	
16 Nitroglycerin	2	10.127	10.110	0.017	165685	2.50	2.58	
17 2,4,6-Trinitrotoluene	1	10.481	10.457	0.024	53547	0.2500	0.2464	
18 4-Amino-2,6-dinitrotoluene	1	10.647	10.617	0.030	35561	0.2500	0.2431	
19 2-Amino-4,6-dinitrotoluene	1	10.881	10.850	0.031	49827	0.2500	0.2436	
20 2,6-Dinitrotoluene	1	11.007	10.984	0.023	35157	0.2500	0.2493	
21 2,4-Dinitrotoluene	1	11.161	11.130	0.031	71603	0.2500	0.2454	
22 o-Nitrotoluene	1	11.847	11.824	0.023	30373	0.2500	0.2421	
23 p-Nitrotoluene	1	12.214	12.197	0.017	26117	0.2500	0.2406	
24 m-Nitrotoluene	1	12.714	12.697	0.017	33325	0.2500	0.2448	
25 PETN	2	13.774	13.764	0.010	183919	2.50	2.55	

Reagents:

8330 DMT_00018 Amount Added: 12.50 Units: uL
8330IntermStk_00083 Amount Added: 25.00 Units: uL

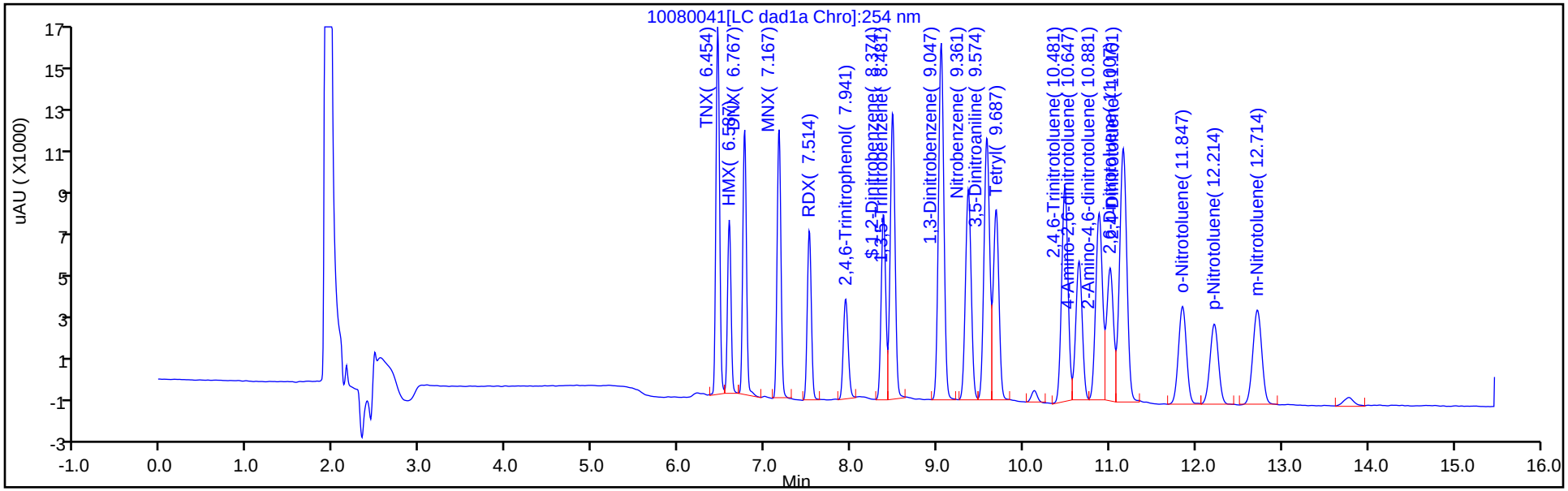
Report Date: 09-Oct-2024 11:37:19 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Denver

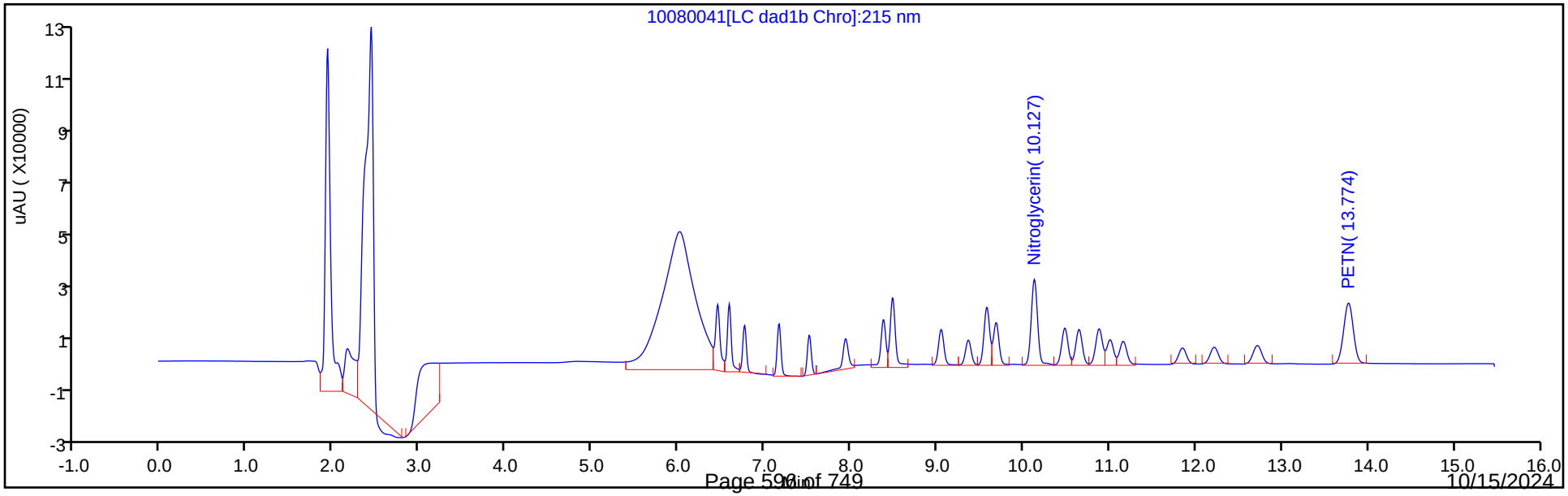
Data File: \\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080041.d

Injection Date:	09-Oct-2024 05:02:52	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV DMT			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



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



10/15/2024
4:48:23 PM

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Lab Sample ID: CCV 280-670184/52 Calibration Date: 10/09/2024 09:04

Instrument ID: CHHPLC_X3 Calib Start Date: 10/04/2024 16:59

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 10/04/2024 19:55

Lab File ID: 10080052.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	203078	204534		253	251	0.7	20.0
HMX	Ave	96653	94948		246	250	-1.8	20.0
DNX	Ave	146042	144907		248	250	-0.8	20.0
MNX	Ave	132934	138756		305	292	4.4	20.0
RDX	Lin2		106284		252	250	0.7	20.0
Picric acid	Ave	75427	75632		251	250	0.3	20.0
1,3,5-Trinitrobenzene	Ave	217350	214260		246	250	-1.4	20.0
1,3-Dinitrobenzene	Ave	298232	296448		249	250	-0.6	20.0
Nitrobenzene	Ave	195178	184932		237	250	-5.2	20.0
3,5-Dinitroaniline	Lin2		229600		246	250	-1.4	20.0
Tetryl	Lin2		167236		245	250	-2.1	20.0
Nitroglycerin	Lin2		65357		2540	2500	1.6	20.0
2,4,6-Trinitrotoluene	Ave	217298	214820		247	250	-1.1	20.0
4-Amino-2,6-dinitrotoluene	Lin2		141372		242	250	-3.4	20.0
2-Amino-4,6-dinitrotoluene	Ave	204531	198804		243	250	-2.8	20.0
2,6-Dinitrotoluene	Lin2		139380		247	250	-1.2	20.0
2,4-Dinitrotoluene	Ave	291812	286404		245	250	-1.9	20.0
2-Nitrotoluene	Ave	125468	119868		239	250	-4.5	20.0
4-Nitrotoluene	Lin2		105220		242	250	-3.1	20.0
3-Nitrotoluene	Lin2		130760		240	250	-4.0	20.0
PETN	Ave	72212	73279		2540	2500	1.5	20.0
1,2-Dinitrobenzene	Ave	130410	131224		252	250	0.6	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Lab Sample ID: CCV 280-670184/52 Calibration Date: 10/09/2024 09:04

Instrument ID: CHHPLC_X3 Calib Start Date: 10/04/2024 16:59

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 10/04/2024 19:55

Lab File ID: 10080052.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.44	6.33	6.53
HMX	6.58	6.41	6.71
DNX	6.76	6.64	6.84
MNX	7.16	6.99	7.29
RDX	7.51	7.35	7.65
Picric acid	7.92	7.77	8.07
1,3,5-Trinitrobenzene	8.47	8.31	8.61
1,3-Dinitrobenzene	9.03	8.87	9.17
Nitrobenzene	9.34	9.19	9.49
3,5-Dinitroaniline	9.55	9.40	9.70
Tetryl	9.66	9.51	9.81
Nitroglycerin	10.10	9.96	10.26
2,4,6-Trinitrotoluene	10.46	10.36	10.56
4-Amino-2,6-dinitrotoluene	10.61	10.52	10.72
2-Amino-4,6-dinitrotoluene	10.84	10.75	10.95
2,6-Dinitrotoluene	10.97	10.88	11.08
2,4-Dinitrotoluene	11.12	11.03	11.23
2-Nitrotoluene	11.81	11.67	11.97
4-Nitrotoluene	12.18	12.05	12.35
3-Nitrotoluene	12.68	12.55	12.85
PETN	13.72	13.61	13.91
1,2-Dinitrobenzene	8.37	8.21	8.51

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\10080052.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 09-Oct-2024 09:04:27 ALS Bottle#: 7 Worklist Smp#: 52
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Oct-2024 11:37:36 Calib Date: 04-Oct-2024 19:55:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1609

First Level Reviewer: LV5D Date: 09-Oct-2024 11:31:05

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.444	6.430	0.014	51287	0.2508	0.2525	M
4 HMX	1	6.577	6.564	0.013	23737	0.2500	0.2456	M
6 DNX	1	6.757	6.737	0.020	36263	0.2503	0.2483	M
7 MNX	1	7.157	7.144	0.013	40482	0.2918	0.3045	
8 RDX	1	7.511	7.497	0.014	26571	0.2500	0.2518	
9 2,4,6-Trinitrophenol	1	7.917	7.917	0.000	18908	0.2500	0.2507	
$ 10 1,2-Dinitrobenzene	1	8.371	8.364	0.007	32806	0.2500	0.2516	
11 1,3,5-Trinitrobenzene	1	8.471	8.464	0.007	53565	0.2500	0.2464	
12 1,3-Dinitrobenzene	1	9.031	9.024	0.007	74112	0.2500	0.2485	
13 Nitrobenzene	1	9.344	9.344	0.000	46233	0.2500	0.2369	
14 3,5-Dinitroaniline	1	9.550	9.550	0.000	57400	0.2500	0.2465	
15 Tetryl	1	9.664	9.664	0.000	41809	0.2500	0.2448	
16 Nitroglycerin	2	10.104	10.110	-0.006	163392	2.50	2.54	
17 2,4,6-Trinitrotoluene	1	10.457	10.457	0.000	53705	0.2500	0.2471	
18 4-Amino-2,6-dinitrotoluene	1	10.610	10.617	-0.007	35343	0.2500	0.2416	
19 2-Amino-4,6-dinitrotoluene	1	10.837	10.850	-0.013	49701	0.2500	0.2430	
20 2,6-Dinitrotoluene	1	10.970	10.984	-0.014	34845	0.2500	0.2471	
21 2,4-Dinitrotoluene	1	11.124	11.130	-0.006	71601	0.2500	0.2454	
22 o-Nitrotoluene	1	11.810	11.824	-0.014	29967	0.2500	0.2388	
23 p-Nitrotoluene	1	12.177	12.197	-0.020	26305	0.2500	0.2423	
24 m-Nitrotoluene	1	12.677	12.697	-0.020	32690	0.2500	0.2401	
25 PETN	2	13.724	13.764	-0.040	183197	2.50	2.54	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00018	Amount Added:	12.50	Units: uL
8330IntermStk_00083	Amount Added:	25.00	Units: uL

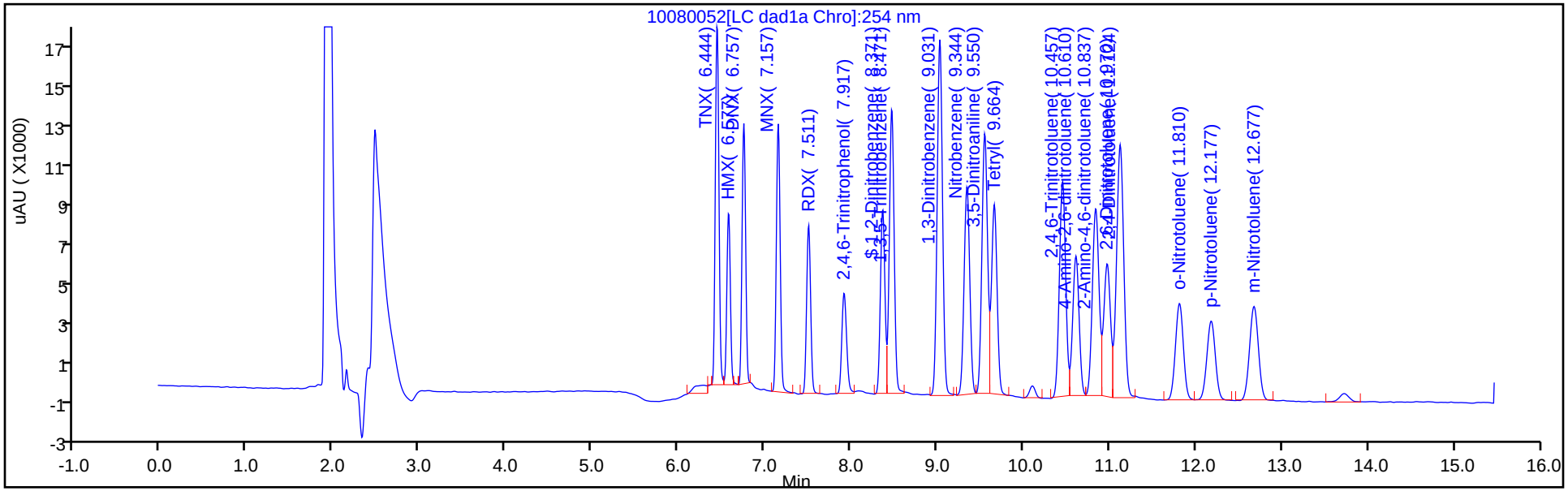
Report Date: 09-Oct-2024 11:37:37 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Denver

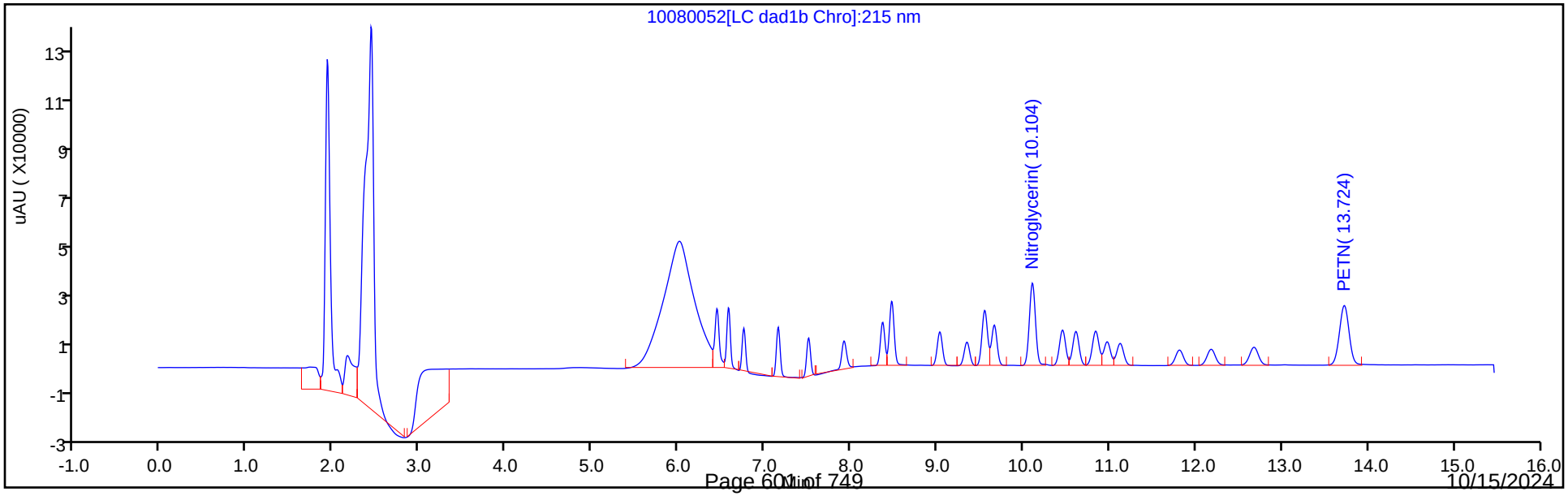
Data File: \\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080052.d

Injection Date:	09-Oct-2024 09:04:27	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	52
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



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



10/15/2024
4:48:23 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

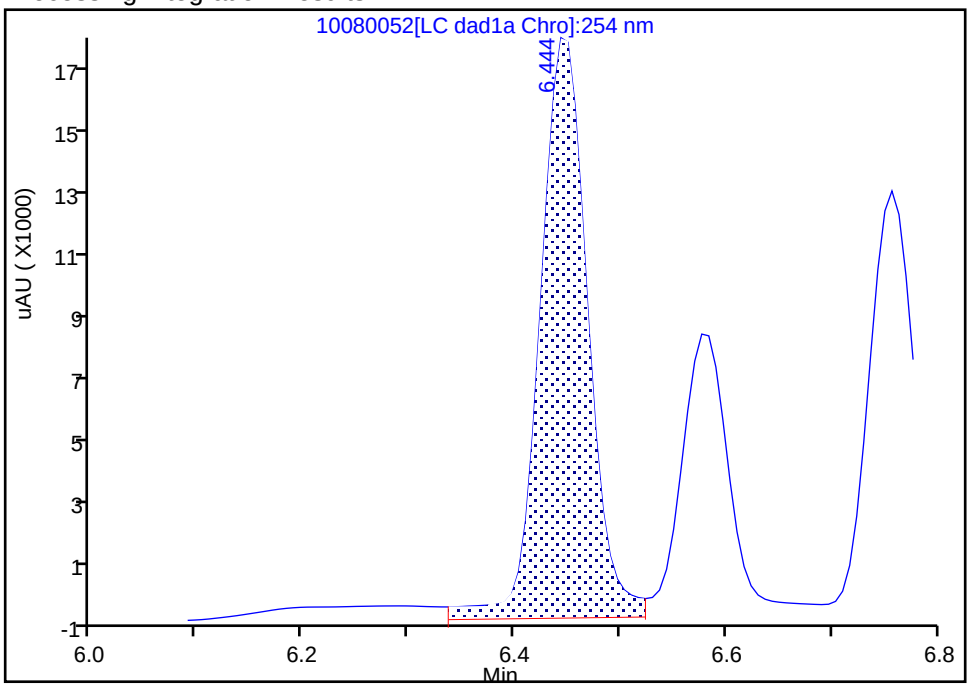
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080052.d				
Injection Date:	09-Oct-2024 09:04:27	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	52
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

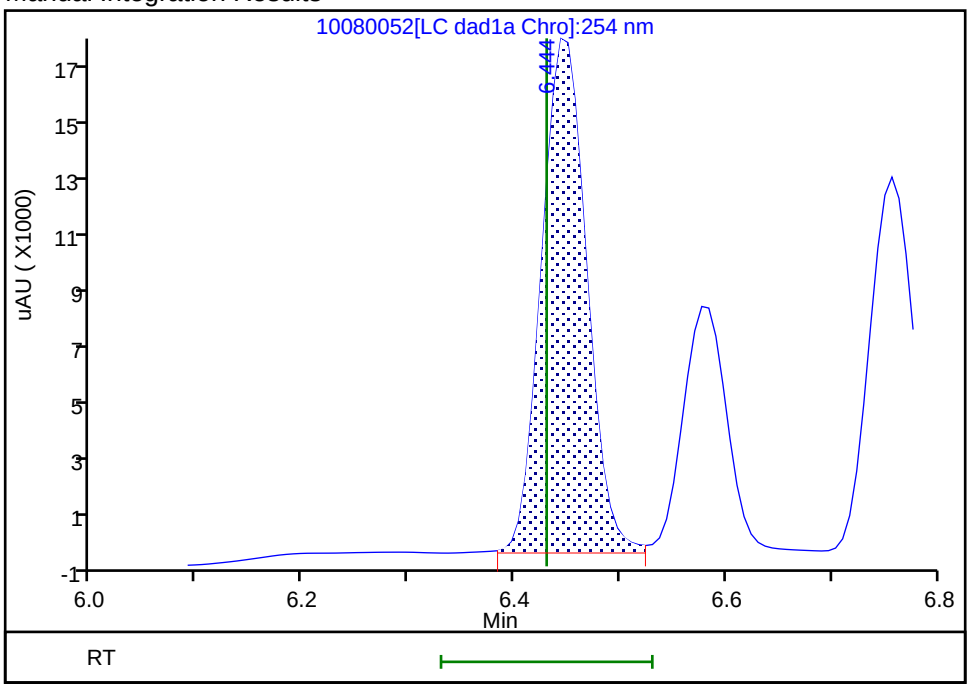
Processing Integration Results

RT: 6.44
Area: 55579
Amount: 0.273683
Amount Units: ug/mL



Manual Integration Results

RT: 6.44
Area: 51287
Amount: 0.252548
Amount Units: ug/mL



Reviewer: LV5D, 09-Oct-2024 11:30:59 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

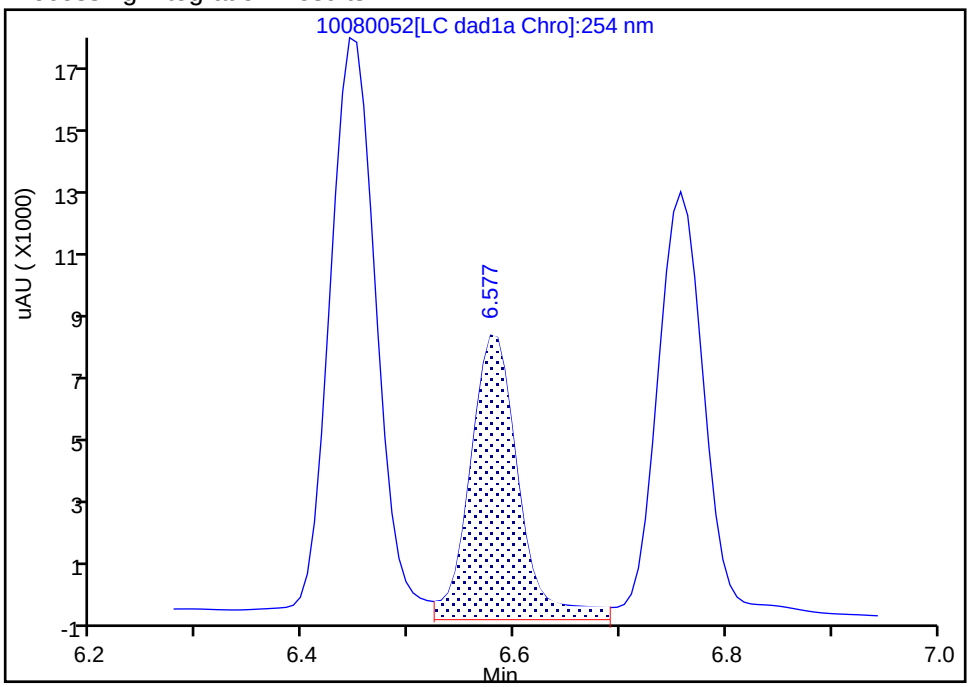
Data File: \\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080052.d
Injection Date: 09-Oct-2024 09:04:27 Instrument ID: CHHPLC_X3
Lims ID: CCV DMT
Client ID:
Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 52
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

4 HMX, CAS: 2691-41-0

Signal: 1

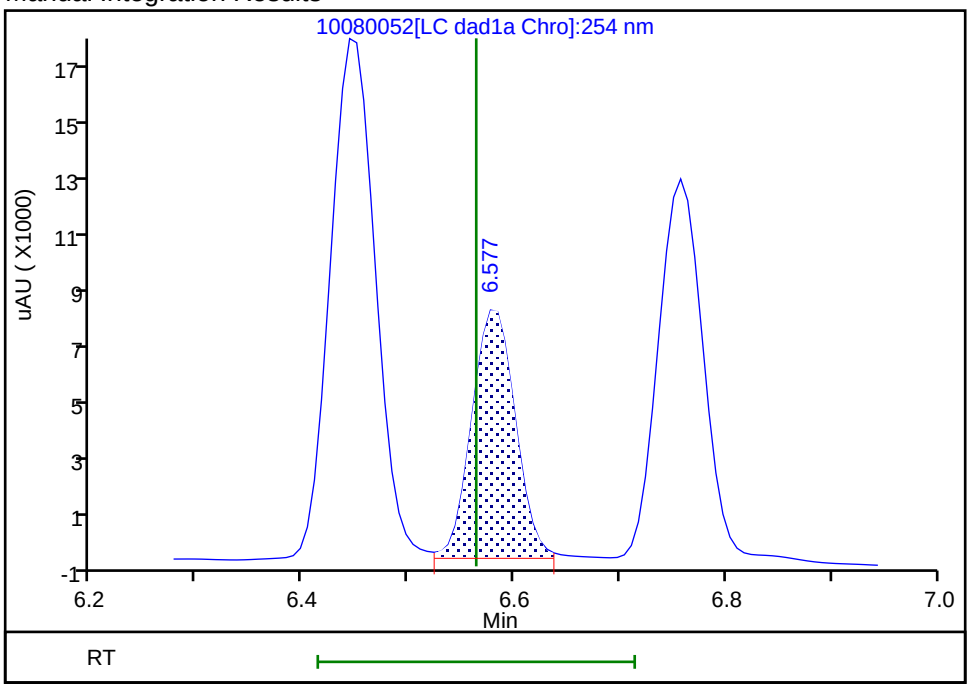
Processing Integration Results

RT: 6.58
Area: 27356
Amount: 0.283033
Amount Units: ug/mL



Manual Integration Results

RT: 6.58
Area: 23737
Amount: 0.245590
Amount Units: ug/mL



Reviewer: LV5D, 09-Oct-2024 11:31:00 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

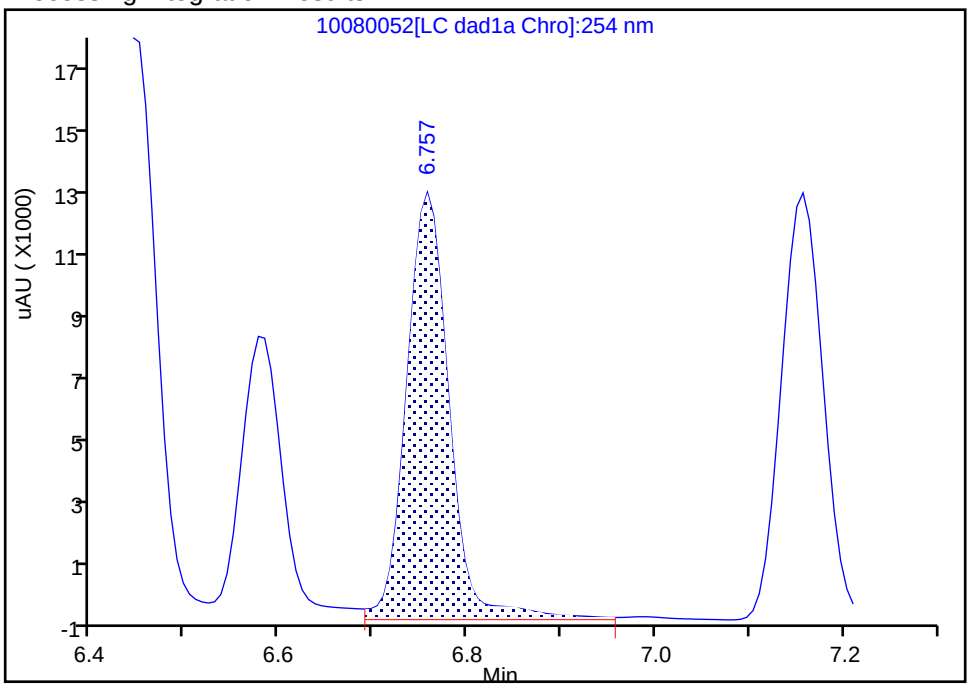
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080052.d				
Injection Date:	09-Oct-2024 09:04:27	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	52
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

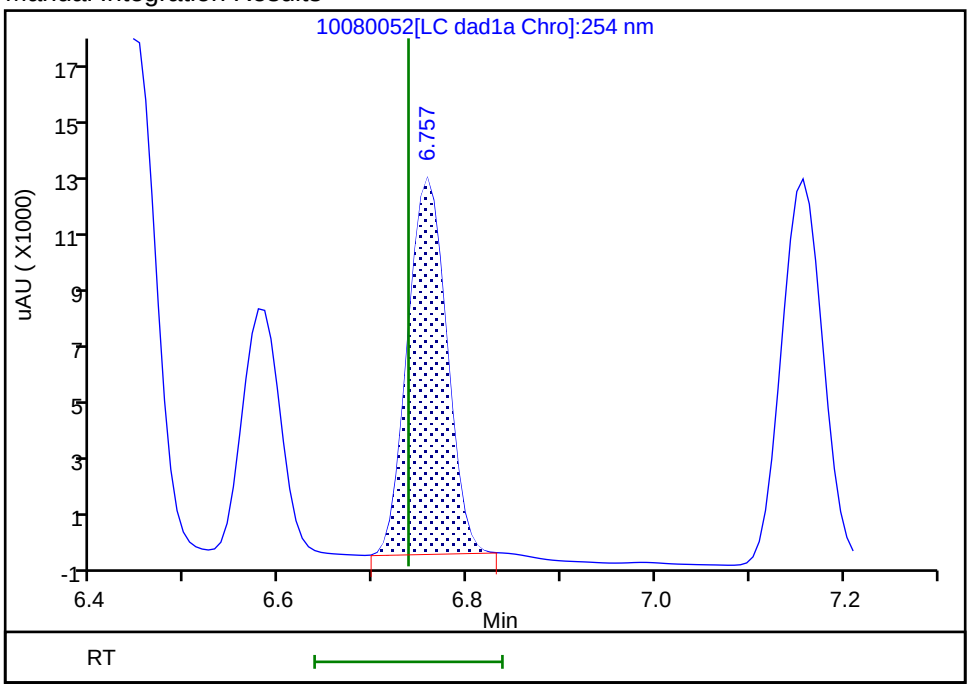
Processing Integration Results

RT: 6.76
Area: 40802
Amount: 0.279386
Amount Units: ug/mL



Manual Integration Results

RT: 6.76
Area: 36263
Amount: 0.248306
Amount Units: ug/mL



Reviewer: LV5D, 09-Oct-2024 11:31:03 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Lab Sample ID: CCV 280-670184/63 Calibration Date: 10/09/2024 13:06

Instrument ID: CHHPLC_X3 Calib Start Date: 10/04/2024 16:59

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 10/04/2024 19:55

Lab File ID: 10080063.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	203078	201743		249	251	-0.7	20.0
HMX	Ave	96653	95512		247	250	-1.2	20.0
DNX	Ave	146042	147812		253	250	1.2	20.0
MNX	Ave	132934	139249		306	292	4.8	20.0
RDX	Lin2		107172		254	250	1.6	20.0
Picric acid	Ave	75427	75640		251	250	0.3	20.0
1,3,5-Trinitrobenzene	Ave	217350	217884		251	250	0.2	20.0
1,3-Dinitrobenzene	Ave	298232	297788		250	250	-0.1	20.0
Nitrobenzene	Ave	195178	185980		238	250	-4.7	20.0
3,5-Dinitroaniline	Lin2		235600		253	250	1.2	20.0
Tetryl	Lin2		166696		244	250	-2.4	20.0
Nitroglycerin	Lin2		67649		2630	2500	5.2	20.0
2,4,6-Trinitrotoluene	Ave	217298	216208		249	250	-0.5	20.0
4-Amino-2,6-dinitrotoluene	Lin2		142260		243	250	-2.8	20.0
2-Amino-4,6-dinitrotoluene	Ave	204531	200164		245	250	-2.1	20.0
2,6-Dinitrotoluene	Lin2		143008		254	250	1.4	20.0
2,4-Dinitrotoluene	Ave	291812	286908		246	250	-1.7	20.0
2-Nitrotoluene	Ave	125468	118232		236	250	-5.8	20.0
4-Nitrotoluene	Lin2		103284		238	250	-4.9	20.0
3-Nitrotoluene	Lin2		131084		241	250	-3.7	20.0
PETN	Ave	72212	73525		2550	2500	1.8	20.0
1,2-Dinitrobenzene	Ave	130410	132492		254	250	1.6	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Lab Sample ID: CCV 280-670184/63 Calibration Date: 10/09/2024 13:06

Instrument ID: CHHPLC_X3 Calib Start Date: 10/04/2024 16:59

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 10/04/2024 19:55

Lab File ID: 10080063.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.46	6.33	6.53
HMX	6.59	6.41	6.71
DNX	6.77	6.64	6.84
MNX	7.16	6.99	7.29
RDX	7.52	7.35	7.65
Picric acid	7.92	7.77	8.07
1,3,5-Trinitrobenzene	8.48	8.31	8.61
1,3-Dinitrobenzene	9.02	8.87	9.17
Nitrobenzene	9.34	9.19	9.49
3,5-Dinitroaniline	9.54	9.40	9.70
Tetryl	9.64	9.51	9.81
Nitroglycerin	10.08	9.96	10.26
2,4,6-Trinitrotoluene	10.43	10.36	10.56
4-Amino-2,6-dinitrotoluene	10.57	10.52	10.72
2-Amino-4,6-dinitrotoluene	10.80	10.75	10.95
2,6-Dinitrotoluene	10.94	10.88	11.08
2,4-Dinitrotoluene	11.08	11.03	11.23
2-Nitrotoluene	11.76	11.67	11.97
4-Nitrotoluene	12.12	12.05	12.35
3-Nitrotoluene	12.60	12.55	12.85
PETN	13.60	13.61	13.91
1,2-Dinitrobenzene	8.36	8.21	8.51

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\10080063.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 09-Oct-2024 13:06:03 ALS Bottle#: 7 Worklist Smp#: 63
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Oct-2024 14:46:10 Calib Date: 04-Oct-2024 19:55:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1609

First Level Reviewer: LV5D Date: 09-Oct-2024 14:24:08

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.457	6.430	0.027	50587	0.2508	0.2491	M
4 HMX	1	6.590	6.564	0.026	23878	0.2500	0.2470	M
6 DNX	1	6.770	6.737	0.033	36990	0.2503	0.2533	M
7 MNX	1	7.163	7.144	0.019	40626	0.2918	0.3056	
8 RDX	1	7.517	7.497	0.020	26793	0.2500	0.2539	
9 2,4,6-Trinitrophenol	1	7.923	7.917	0.006	18910	0.2500	0.2507	
$ 10 1,2-Dinitrobenzene	1	8.363	8.364	-0.001	33123	0.2500	0.2540	
11 1,3,5-Trinitrobenzene	1	8.477	8.464	0.013	54471	0.2500	0.2506	
12 1,3-Dinitrobenzene	1	9.023	9.024	-0.001	74447	0.2500	0.2496	
13 Nitrobenzene	1	9.337	9.344	-0.007	46495	0.2500	0.2382	
14 3,5-Dinitroaniline	1	9.537	9.550	-0.013	58900	0.2500	0.2529	
15 Tetryl	1	9.637	9.664	-0.027	41674	0.2500	0.2440	
16 Nitroglycerin	2	10.077	10.110	-0.033	169122	2.50	2.63	
17 2,4,6-Trinitrotoluene	1	10.430	10.457	-0.027	54052	0.2500	0.2487	
18 4-Amino-2,6-dinitrotoluene	1	10.570	10.617	-0.047	35565	0.2500	0.2431	
19 2-Amino-4,6-dinitrotoluene	1	10.797	10.850	-0.053	50041	0.2500	0.2447	
20 2,6-Dinitrotoluene	1	10.937	10.984	-0.047	35752	0.2500	0.2535	
21 2,4-Dinitrotoluene	1	11.083	11.130	-0.047	71727	0.2500	0.2458	
22 o-Nitrotoluene	1	11.757	11.824	-0.067	29558	0.2500	0.2356	
23 p-Nitrotoluene	1	12.117	12.197	-0.080	25821	0.2500	0.2378	
24 m-Nitrotoluene	1	12.603	12.697	-0.094	32771	0.2500	0.2407	
25 PETN	2	13.603	13.764	-0.161	183812	2.50	2.55	a

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

8330 DMT_00018	Amount Added:	12.50	Units: uL
8330IntermStk_00083	Amount Added:	25.00	Units: uL

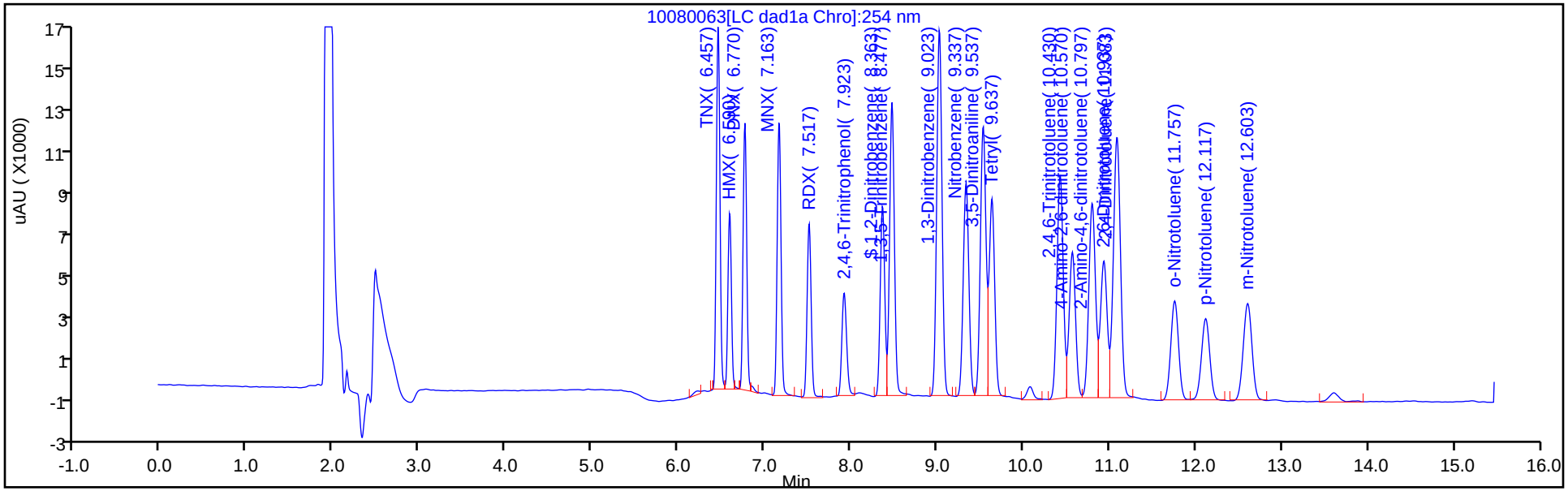
Report Date: 09-Oct-2024 14:46:10 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Denver

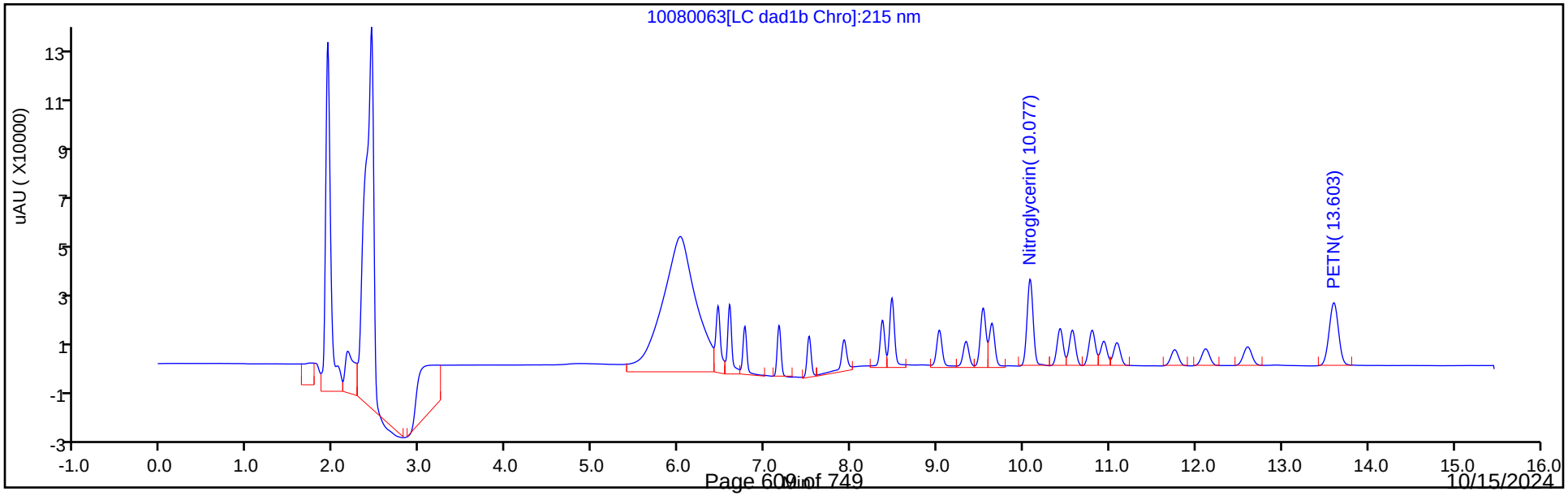
Data File: \\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080063.d

Injection Date:	09-Oct-2024 13:06:03	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	63
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



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



10/15/2024
4:48:23 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

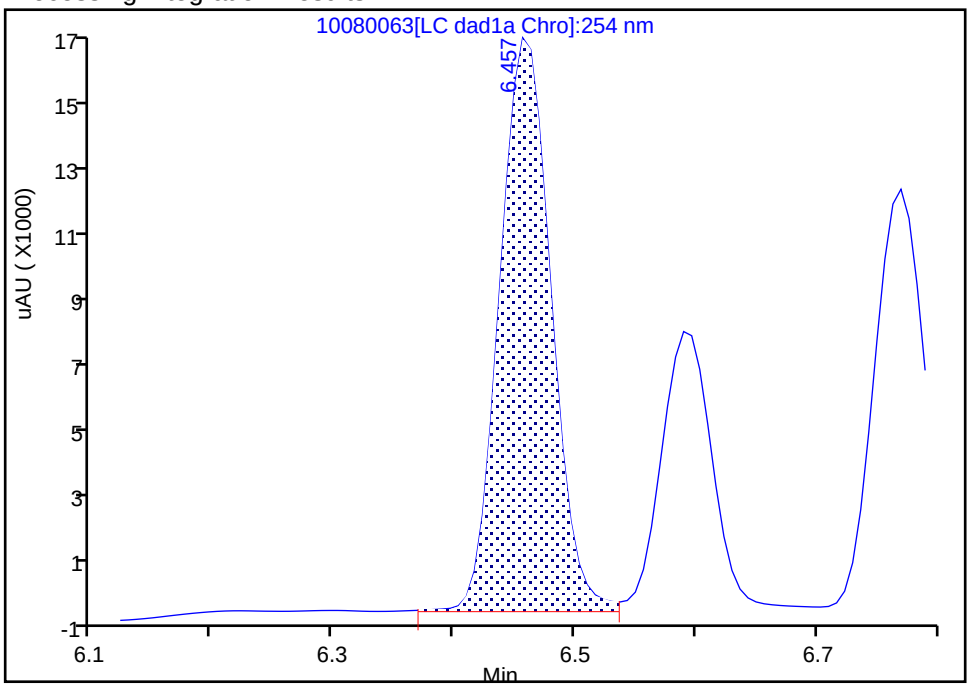
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080063.d				
Injection Date:	09-Oct-2024 13:06:03	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	63
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

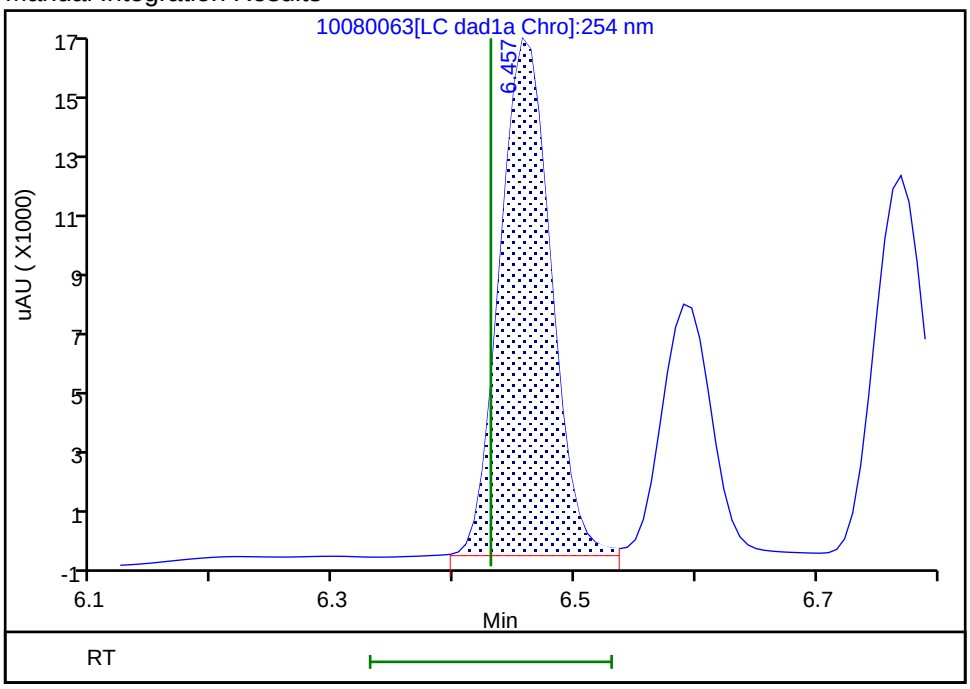
Processing Integration Results

RT: 6.46
Area: 51380
Amount: 0.253006
Amount Units: ug/mL



Manual Integration Results

RT: 6.46
Area: 50587
Amount: 0.249101
Amount Units: ug/mL



Reviewer: LV5D, 09-Oct-2024 14:23:50 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

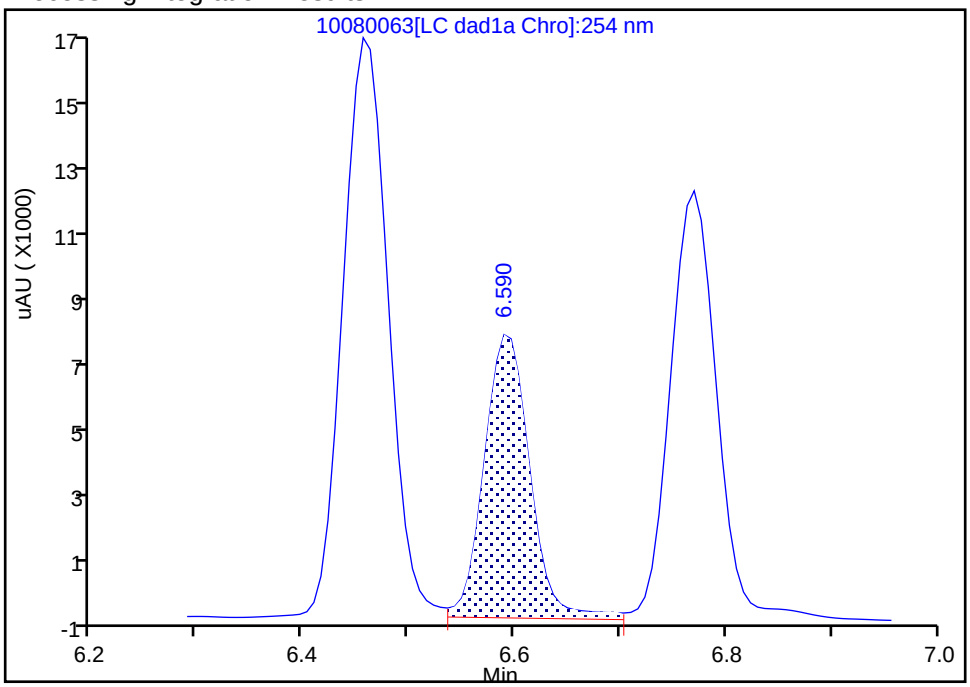
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080063.d				
Injection Date:	09-Oct-2024 13:06:03	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	63
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

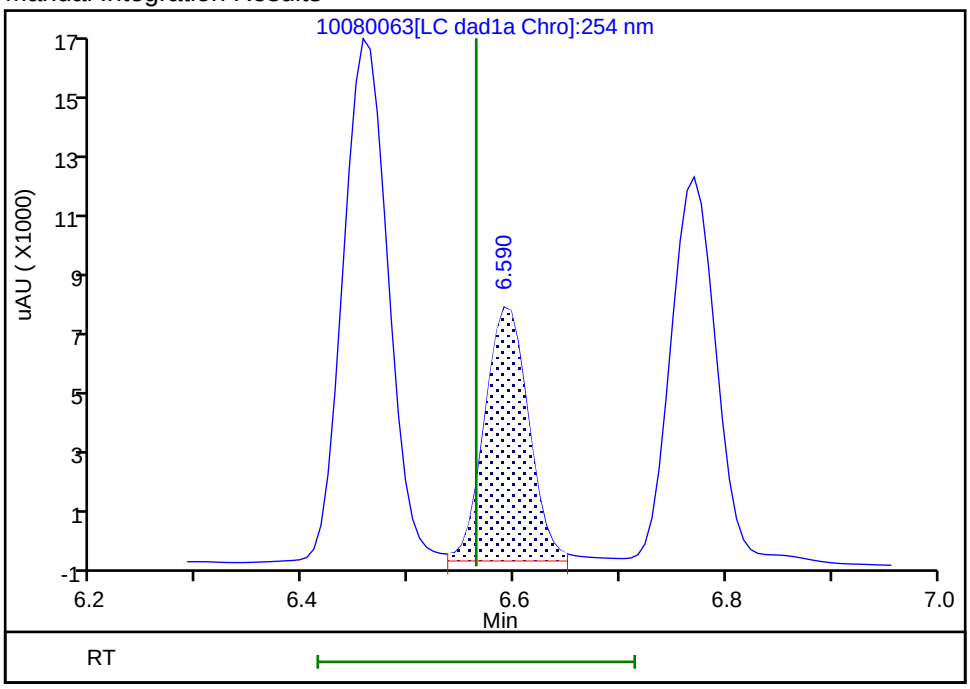
Processing Integration Results

RT: 6.59
Area: 25254
Amount: 0.261285
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 23878
Amount: 0.247049
Amount Units: ug/mL



Reviewer: LV5D, 09-Oct-2024 14:23:52 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

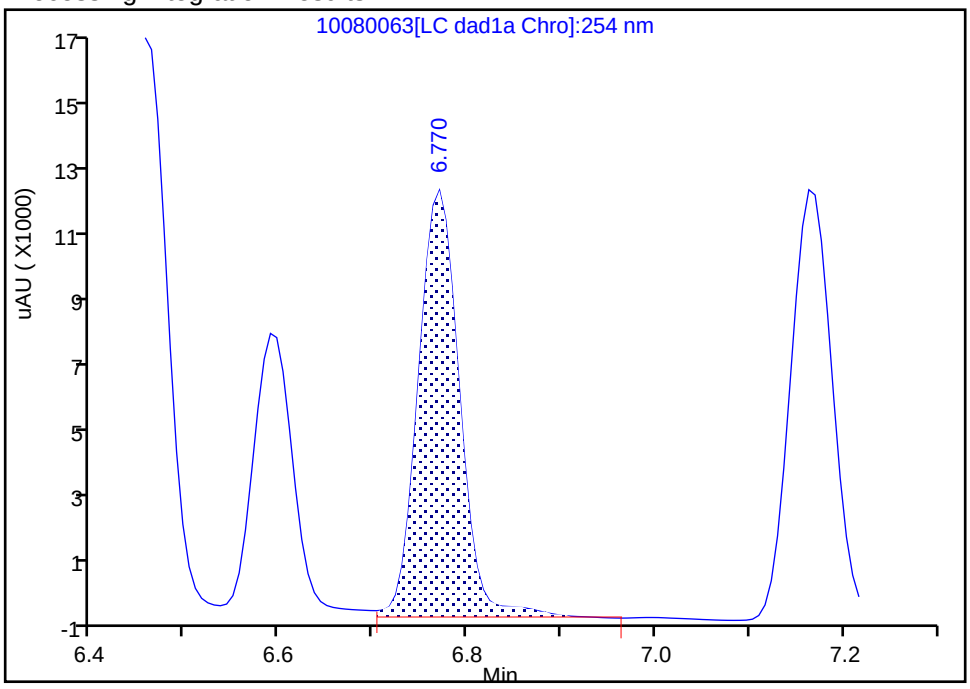
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080063.d				
Injection Date:	09-Oct-2024 13:06:03	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	63
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

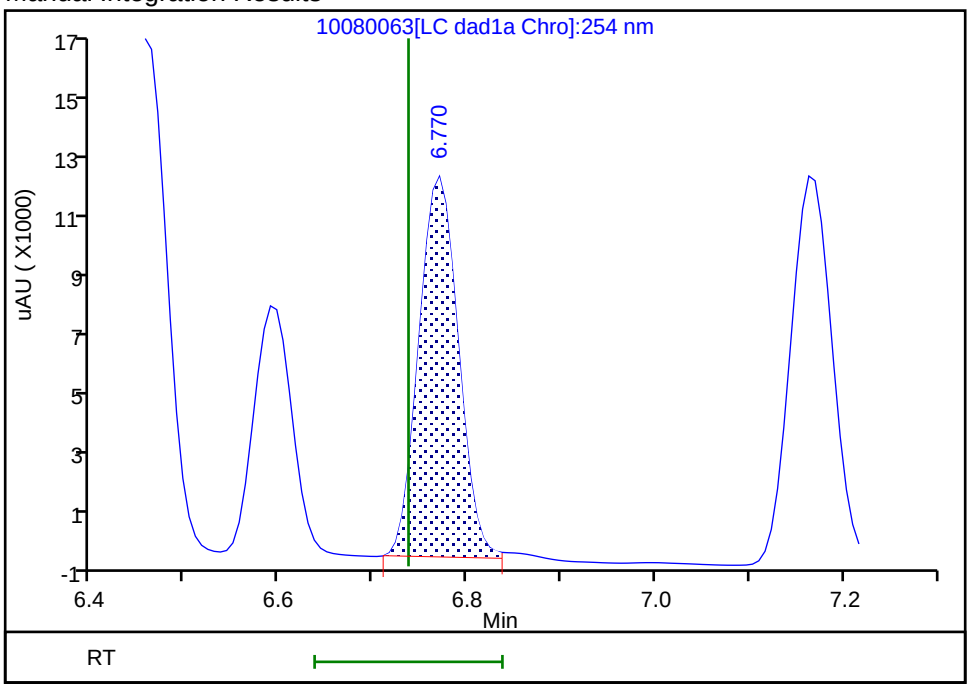
Processing Integration Results

RT: 6.77
Area: 39092
Amount: 0.267677
Amount Units: ug/mL



Manual Integration Results

RT: 6.77
Area: 36990
Amount: 0.253284
Amount Units: ug/mL



Reviewer: LV5D, 09-Oct-2024 14:24:04 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

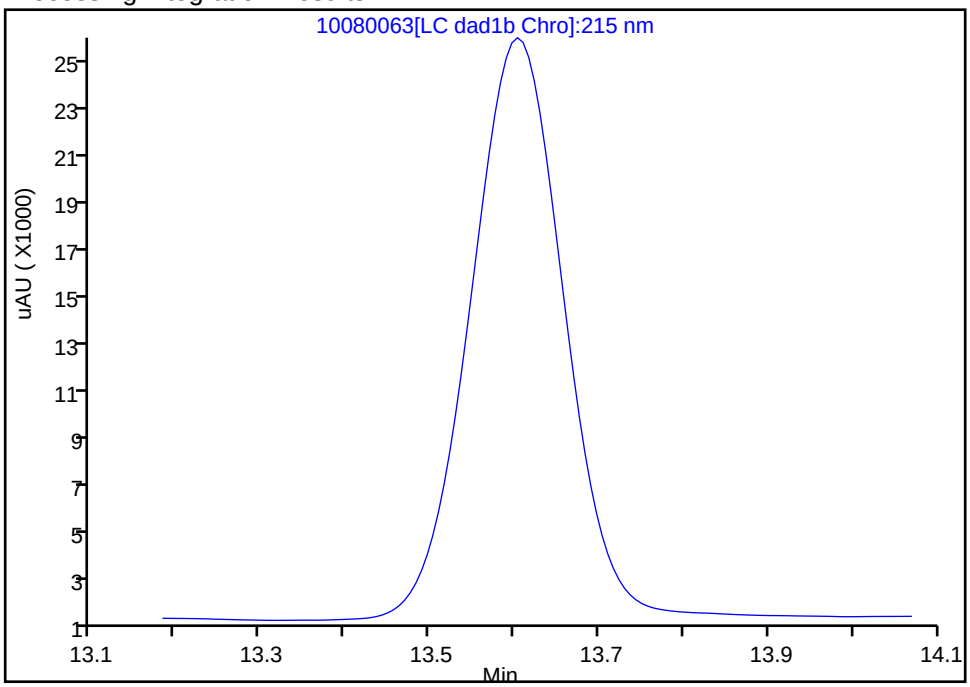
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080063.d				
Injection Date:	09-Oct-2024 13:06:03	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	63
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1C, 215 nm		

25 PETN, CAS: 78-11-5

Signal: 1

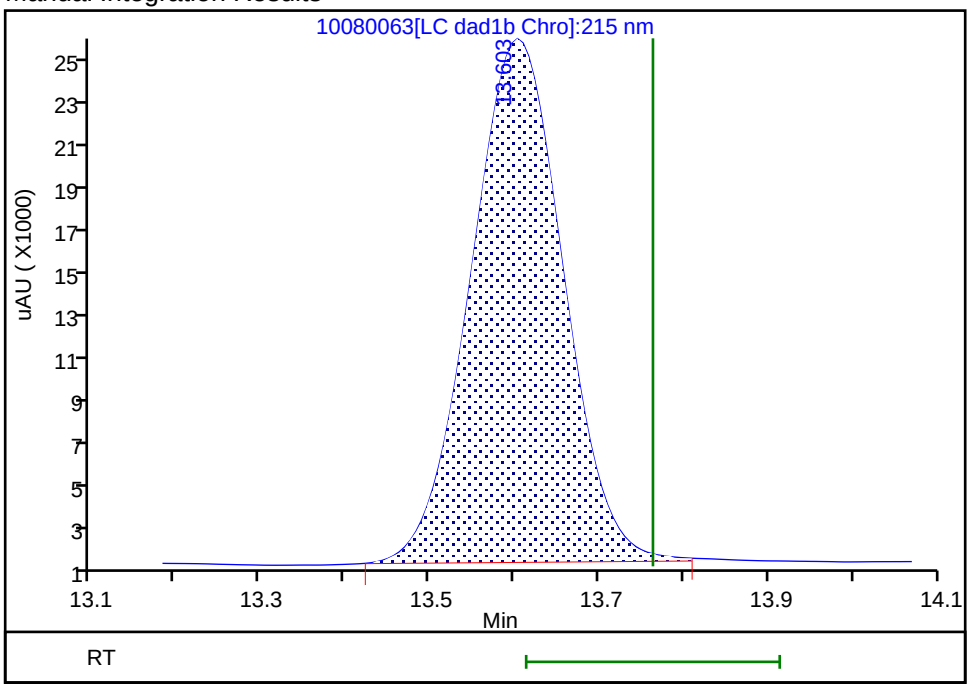
Not Detected
Expected RT: 13.76

Processing Integration Results



Manual Integration Results

RT: 13.60
Area: 183812
Amount: 2.545438
Amount Units: ug/mL



Reviewer: LV5D, 09-Oct-2024 14:23:42 -06:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-197447-1

SDG No.:

Lab Sample ID: CCV 280-670729/7 | Calibration Date: 10/11/2024 17:12

Instrument ID: CHHPLC_X3 | Calib Start Date: 10/04/2024 16:59

GC Column: UltraCarb5uODS ID: 4.60(mm) | Calib End Date: 10/04/2024 19:55

Lab File ID: 10110007.D | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	96653	92068		238	250	-4.7	20.0
RDX	Lin2		105292		249	250	-0.2	20.0
Picric acid	Ave	75427	76704		254	250	1.7	20.0
1,3,5-Trinitrobenzene	Ave	217350	214504		247	250	-1.3	20.0
1,3-Dinitrobenzene	Ave	298232	295824		248	250	-0.8	20.0
Nitrobenzene	Ave	195178	191784		246	250	-1.7	20.0
3,5-Dinitroaniline	Lin2		229436		246	250	-1.5	20.0
Tetryl	Lin2		165288		242	250	-3.2	20.0
Nitroglycerin	Lin2		65327		2540	2500	1.6	20.0
2,4,6-Trinitrotoluene	Ave	217298	212540		245	250	-2.2	20.0
4-Amino-2,6-dinitrotoluene	Lin2		142836		244	250	-2.4	20.0
2-Amino-4,6-dinitrotoluene	Ave	204531	200052		245	250	-2.2	20.0
2,6-Dinitrotoluene	Lin2		139484		247	250	-1.1	20.0
2,4-Dinitrotoluene	Ave	291812	285380		244	250	-2.2	20.0
2-Nitrotoluene	Ave	125468	125268		250	250	-0.2	20.0
4-Nitrotoluene	Lin2		106268		245	250	-2.1	20.0
3-Nitrotoluene	Lin2		135120		248	250	-0.7	20.0
PETN	Ave	72212	73096		2530	2500	1.2	20.0
1,2-Dinitrobenzene	Ave	130410	130268		250	250	-0.1	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Lab Sample ID: CCV 280-670729/7 Calibration Date: 10/11/2024 17:12

Instrument ID: CHHPLC_X3 Calib Start Date: 10/04/2024 16:59

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 10/04/2024 19:55

Lab File ID: 10110007.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.57	6.42	6.72
RDX	7.50	7.35	7.65
Picric acid	7.91	7.76	8.06
1,3,5-Trinitrobenzene	8.47	8.32	8.62
1,3-Dinitrobenzene	9.03	8.88	9.18
Nitrobenzene	9.35	9.20	9.50
3,5-Dinitroaniline	9.56	9.41	9.71
Tetryl	9.67	9.52	9.82
Nitroglycerin	10.12	9.97	10.27
2,4,6-Trinitrotoluene	10.47	10.37	10.57
4-Amino-2,6-dinitrotoluene	10.63	10.53	10.73
2-Amino-4,6-dinitrotoluene	10.86	10.76	10.96
2,6-Dinitrotoluene	10.99	10.89	11.09
2,4-Dinitrotoluene	11.15	11.05	11.25
2-Nitrotoluene	11.83	11.68	11.98
4-Nitrotoluene	12.20	12.05	12.35
3-Nitrotoluene	12.71	12.56	12.86
PETN	13.77	13.62	13.92
1,2-Dinitrobenzene	8.37	8.22	8.52

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20241011-138518.b\10110007.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 11-Oct-2024 17:12:36 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub26

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20241011-138518.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 12-Oct-2024 10:13:25 Calib Date: 04-Oct-2024 19:55:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1603

First Level Reviewer: LV5D Date: 11-Oct-2024 17:45:56

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.572	6.572	0.000	23017	0.2500	0.2381	
8 RDX	1	7.498	7.498	0.000	26323	0.2500	0.2494	
9 2,4,6-Trinitrophenol	1	7.912	7.912	0.000	19176	0.2500	0.2542	
$ 10 1,2-Dinitrobenzene	1	8.365	8.365	0.000	32567	0.2500	0.2497	
11 1,3,5-Trinitrobenzene	1	8.465	8.465	0.000	53626	0.2500	0.2467	
12 1,3-Dinitrobenzene	1	9.032	9.032	0.000	73956	0.2500	0.2480	
13 Nitrobenzene	1	9.345	9.345	0.000	47946	0.2500	0.2457	
14 3,5-Dinitroaniline	1	9.558	9.558	0.000	57359	0.2500	0.2463	
15 Tetryl	1	9.672	9.672	0.000	41322	0.2500	0.2419	
16 Nitroglycerin	2	10.118	10.118	0.000	163318	2.50	2.54	
17 2,4,6-Trinitrotoluene	1	10.472	10.472	0.000	53135	0.2500	0.2445	
18 4-Amino-2,6-dinitrotoluene	1	10.632	10.632	0.000	35709	0.2500	0.2441	
19 2-Amino-4,6-dinitrotoluene	1	10.858	10.858	0.000	50013	0.2500	0.2445	
20 2,6-Dinitrotoluene	1	10.992	10.992	0.000	34871	0.2500	0.2472	
21 2,4-Dinitrotoluene	1	11.145	11.145	0.000	71345	0.2500	0.2445	
22 o-Nitrotoluene	1	11.832	11.832	0.000	31317	0.2500	0.2496	
23 p-Nitrotoluene	1	12.198	12.198	0.000	26567	0.2500	0.2447	
24 m-Nitrotoluene	1	12.705	12.705	0.000	33780	0.2500	0.2482	
25 PETN	2	13.772	13.772	0.000	182739	2.50	2.53	

QC Flag Legend
Processing Flags

Reagents:
8330IntermStk_00083 Amount Added: 25.00 Units: uL

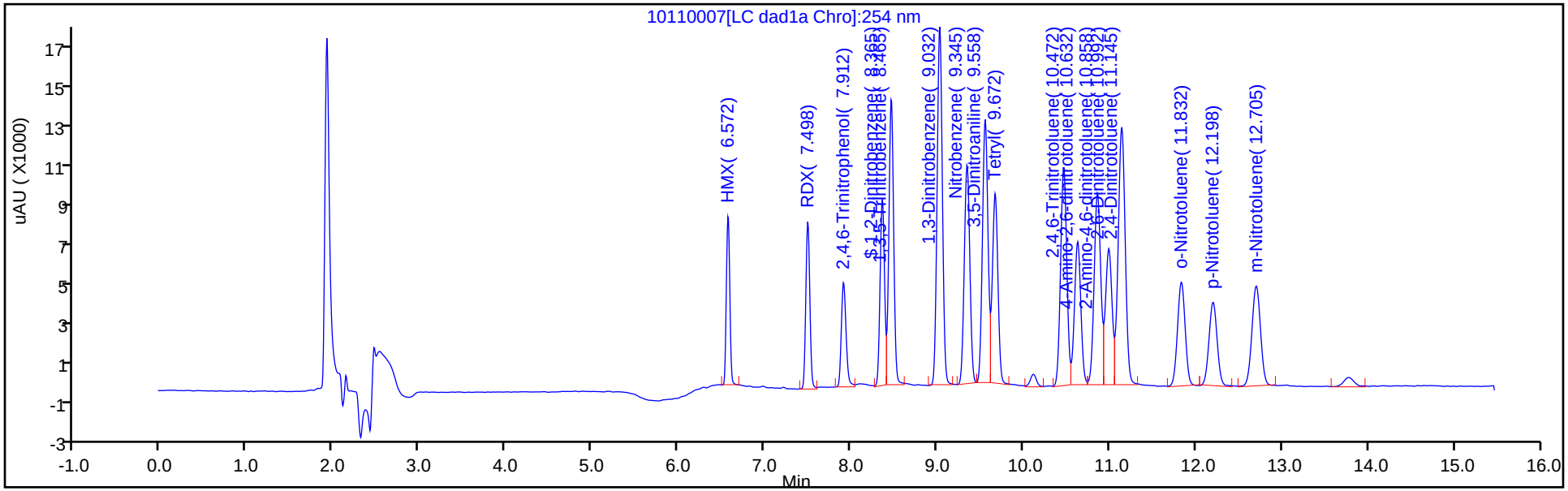
Report Date: 12-Oct-2024 10:13:26 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Denver

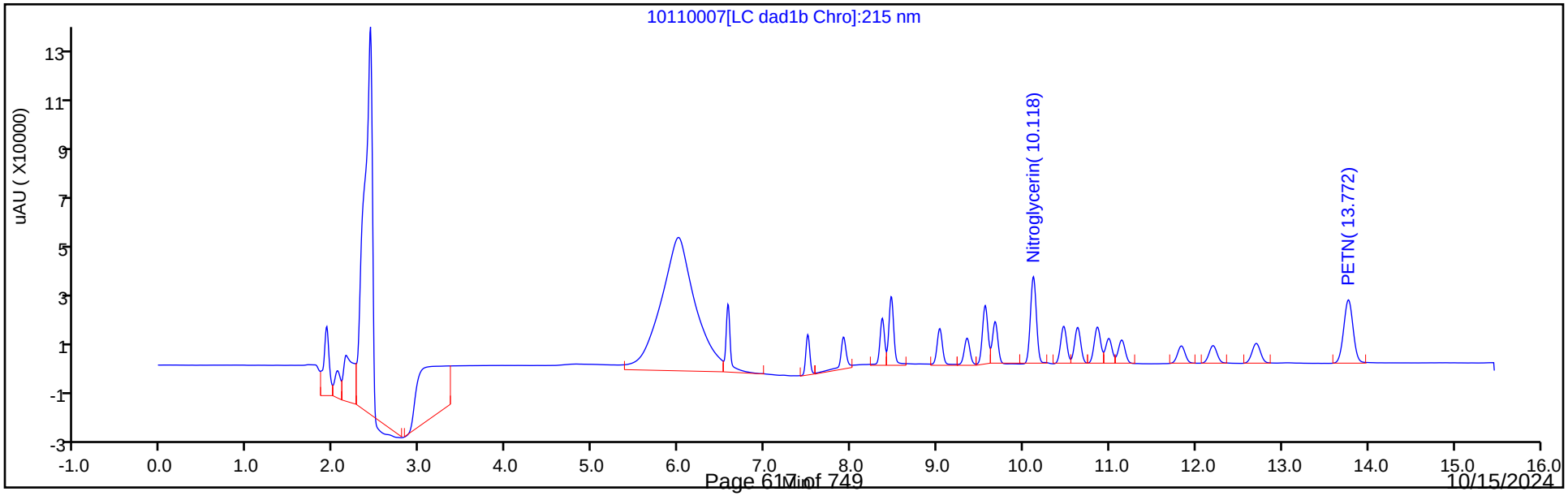
Data File: \\chromfs\denver\chromdata\chhplc_x\20241011-138518.b\10110007.d

Injection Date:	11-Oct-2024 17:12:36	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV INT			Worklist Smp#:	7
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



10/15/2024
4:48:23 PM

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-197447-1

SDG No.:

Lab Sample ID: CCV 280-670729/21 | Calibration Date: 10/11/2024 21:14

Instrument ID: CHHPLC_X3 | Calib Start Date: 10/04/2024 16:59

GC Column: UltraCarb5uODS ID: 4.60(mm) | Calib End Date: 10/04/2024 19:55

Lab File ID: 10110021.D | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	96653	92844		240	250	-3.9	20.0
RDX	Lin2		107028		254	250	1.4	20.0
Picric acid	Ave	75427	76500		254	250	1.4	20.0
1,3,5-Trinitrobenzene	Ave	217350	215308		248	250	-0.9	20.0
1,3-Dinitrobenzene	Ave	298232	296056		248	250	-0.7	20.0
Nitrobenzene	Ave	195178	190664		244	250	-2.3	20.0
3,5-Dinitroaniline	Lin2		228832		246	250	-1.7	20.0
Tetryl	Lin2		167456		245	250	-2.0	20.0
Nitroglycerin	Lin2		66688		2590	2500	3.7	20.0
2,4,6-Trinitrotoluene	Ave	217298	214448		247	250	-1.3	20.0
4-Amino-2,6-dinitrotoluene	Lin2		142808		244	250	-2.4	20.0
2-Amino-4,6-dinitrotoluene	Ave	204531	197712		242	250	-3.3	20.0
2,6-Dinitrotoluene	Lin2		144232		256	250	2.3	20.0
2,4-Dinitrotoluene	Ave	291812	285972		245	250	-2.0	20.0
2-Nitrotoluene	Ave	125468	123660		246	250	-1.4	20.0
4-Nitrotoluene	Lin2		106188		245	250	-2.2	20.0
3-Nitrotoluene	Lin2		135236		248	250	-0.7	20.0
PETN	Ave	72212	73222		2530	2500	1.4	20.0
1,2-Dinitrobenzene	Ave	130410	131300		252	250	0.7	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Lab Sample ID: CCV 280-670729/21 Calibration Date: 10/11/2024 21:14

Instrument ID: CHHPLC_X3 Calib Start Date: 10/04/2024 16:59

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 10/04/2024 19:55

Lab File ID: 10110021.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.58	6.42	6.72
RDX	7.50	7.35	7.65
Picric acid	7.91	7.76	8.06
1,3,5-Trinitrobenzene	8.46	8.32	8.62
1,3-Dinitrobenzene	9.02	8.88	9.18
Nitrobenzene	9.34	9.20	9.50
3,5-Dinitroaniline	9.55	9.41	9.71
Tetryl	9.66	9.52	9.82
Nitroglycerin	10.11	9.97	10.27
2,4,6-Trinitrotoluene	10.46	10.37	10.57
4-Amino-2,6-dinitrotoluene	10.62	10.53	10.73
2-Amino-4,6-dinitrotoluene	10.86	10.76	10.96
2,6-Dinitrotoluene	10.99	10.89	11.09
2,4-Dinitrotoluene	11.14	11.05	11.25
2-Nitrotoluene	11.84	11.68	11.98
4-Nitrotoluene	12.20	12.05	12.35
3-Nitrotoluene	12.71	12.56	12.86
PETN	13.79	13.62	13.92
1,2-Dinitrobenzene	8.36	8.22	8.52

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20241011-138518.b\10110021.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 11-Oct-2024 21:14:07 ALS Bottle#: 7 Worklist Smp#: 21
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub26

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20241011-138518.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 12-Oct-2024 10:13:32 Calib Date: 04-Oct-2024 19:55:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1603

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.577	6.572	0.005	23211	0.2500	0.2401	
8 RDX	1	7.504	7.498	0.006	26757	0.2500	0.2536	
9 2,4,6-Trinitrophenol	1	7.911	7.912	-0.001	19125	0.2500	0.2536	
$ 10 1,2-Dinitrobenzene	1	8.364	8.365	-0.001	32825	0.2500	0.2517	
11 1,3,5-Trinitrobenzene	1	8.464	8.465	-0.001	53827	0.2500	0.2477	
12 1,3-Dinitrobenzene	1	9.024	9.032	-0.008	74014	0.2500	0.2482	
13 Nitrobenzene	1	9.344	9.345	-0.001	47666	0.2500	0.2442	
14 3,5-Dinitroaniline	1	9.551	9.558	-0.007	57208	0.2500	0.2457	
15 Tetryl	1	9.664	9.672	-0.008	41864	0.2500	0.2451	
16 Nitroglycerin	2	10.111	10.118	-0.007	166721	2.50	2.59	
17 2,4,6-Trinitrotoluene	1	10.464	10.472	-0.008	53612	0.2500	0.2467	
18 4-Amino-2,6-dinitrotoluene	1	10.624	10.632	-0.008	35702	0.2500	0.2441	
19 2-Amino-4,6-dinitrotoluene	1	10.857	10.858	-0.001	49428	0.2500	0.2417	
20 2,6-Dinitrotoluene	1	10.991	10.992	-0.001	36058	0.2500	0.2557	
21 2,4-Dinitrotoluene	1	11.137	11.145	-0.008	71493	0.2500	0.2450	
22 o-Nitrotoluene	1	11.837	11.832	0.005	30915	0.2500	0.2464	
23 p-Nitrotoluene	1	12.204	12.198	0.006	26547	0.2500	0.2446	
24 m-Nitrotoluene	1	12.711	12.705	0.006	33809	0.2500	0.2484	
25 PETN	2	13.791	13.772	0.019	183054	2.50	2.53	

Reagents:

8330IntermStk_00083 Amount Added: 25.00 Units: uL

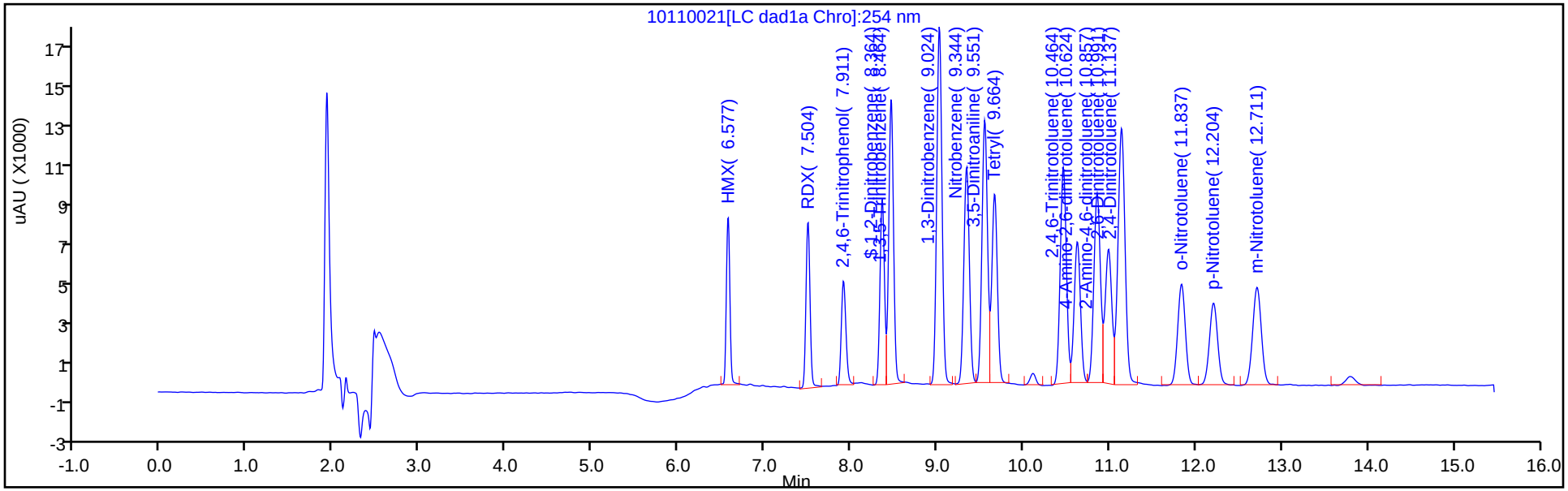
Report Date: 12-Oct-2024 10:13:32 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Denver

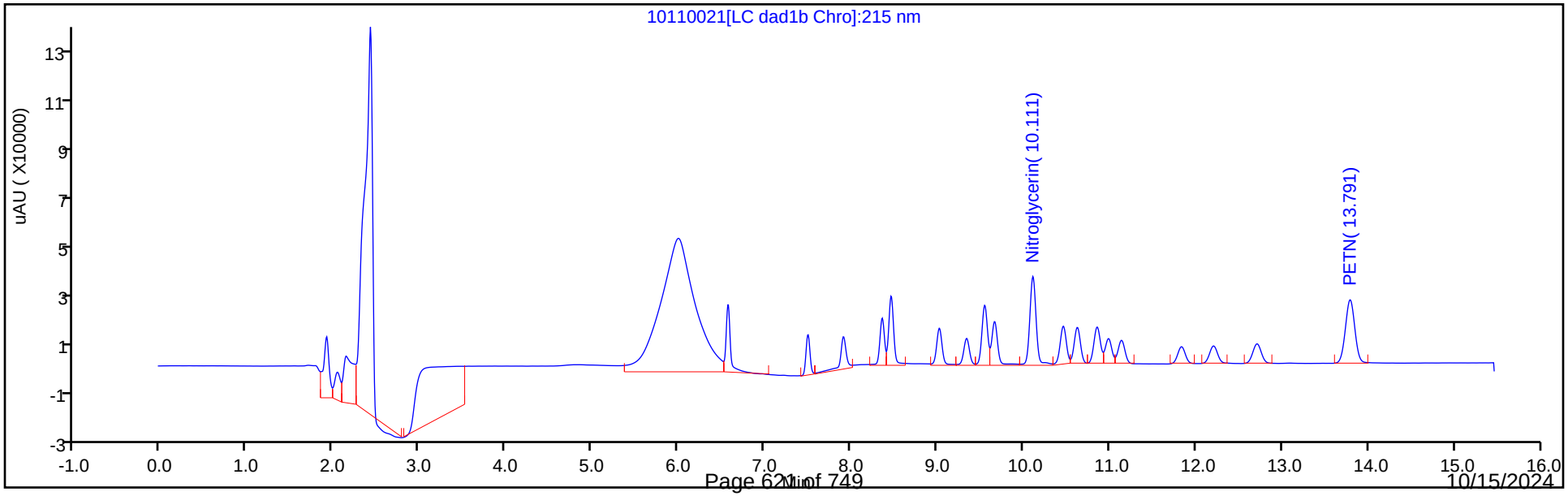
Data File: \\chromfs\denver\chromdata\chhplc_x\20241011-138518.b\10110021.d

Injection Date:	11-Oct-2024 21:14:07	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV INT			Worklist Smp#:	21
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



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FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-197447-1

SDG No.:

Lab Sample ID: CCV 280-670729/32 | Calibration Date: 10/12/2024 01:15

Instrument ID: CHHPLC_X3 | Calib Start Date: 10/04/2024 16:59

GC Column: UltraCarb5uODS ID: 4.60(mm) | Calib End Date: 10/04/2024 19:55

Lab File ID: 10110032.D | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	96653	95200		246	250	-1.5	20.0
RDX	Lin2		105612		250	250	0.0	20.0
Picric acid	Ave	75427	76376		253	250	1.3	20.0
1,3,5-Trinitrobenzene	Ave	217350	214976		247	250	-1.1	20.0
1,3-Dinitrobenzene	Ave	298232	297368		249	250	-0.3	20.0
Nitrobenzene	Ave	195178	190168		244	250	-2.6	20.0
3,5-Dinitroaniline	Lin2		231844		249	250	-0.4	20.0
Tetryl	Lin2		169876		249	250	-0.5	20.0
Nitroglycerin	Lin2		65997		2570	2500	2.6	20.0
2,4,6-Trinitrotoluene	Ave	217298	217572		250	250	0.1	20.0
4-Amino-2,6-dinitrotoluene	Lin2		146268		250	250	0.0	20.0
2-Amino-4,6-dinitrotoluene	Ave	204531	201676		247	250	-1.4	20.0
2,6-Dinitrotoluene	Lin2		145876		259	250	3.5	20.0
2,4-Dinitrotoluene	Ave	291812	288528		247	250	-1.1	20.0
2-Nitrotoluene	Ave	125468	122396		244	250	-2.4	20.0
4-Nitrotoluene	Lin2		106292		245	250	-2.1	20.0
3-Nitrotoluene	Lin2		133236		245	250	-2.1	20.0
PETN	Ave	72212	73882		2560	2500	2.3	20.0
1,2-Dinitrobenzene	Ave	130410	132920		255	250	1.9	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Lab Sample ID: CCV 280-670729/32 Calibration Date: 10/12/2024 01:15

Instrument ID: CHHPLC_X3 Calib Start Date: 10/04/2024 16:59

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 10/04/2024 19:55

Lab File ID: 10110032.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.58	6.42	6.72
RDX	7.50	7.35	7.65
Picric acid	7.92	7.76	8.06
1,3,5-Trinitrobenzene	8.47	8.32	8.62
1,3-Dinitrobenzene	9.03	8.88	9.18
Nitrobenzene	9.35	9.20	9.50
3,5-Dinitroaniline	9.56	9.41	9.71
Tetryl	9.68	9.52	9.82
Nitroglycerin	10.12	9.97	10.27
2,4,6-Trinitrotoluene	10.47	10.37	10.57
4-Amino-2,6-dinitrotoluene	10.63	10.53	10.73
2-Amino-4,6-dinitrotoluene	10.86	10.76	10.96
2,6-Dinitrotoluene	11.00	10.89	11.09
2,4-Dinitrotoluene	11.14	11.05	11.25
2-Nitrotoluene	11.84	11.68	11.98
4-Nitrotoluene	12.21	12.05	12.35
3-Nitrotoluene	12.71	12.56	12.86
PETN	13.78	13.62	13.92
1,2-Dinitrobenzene	8.36	8.22	8.52

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20241011-138518.b\10110032.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 12-Oct-2024 01:15:32 ALS Bottle#: 7 Worklist Smp#: 32
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub26

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20241011-138518.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 12-Oct-2024 10:13:40 Calib Date: 04-Oct-2024 19:55:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1603

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.576	6.572	0.004	23800	0.2500	0.2462	
8 RDX	1	7.502	7.498	0.004	26403	0.2500	0.2502	
9 2,4,6-Trinitrophenol	1	7.916	7.912	0.004	19094	0.2500	0.2531	
$ 10 1,2-Dinitrobenzene	1	8.362	8.365	-0.003	33230	0.2500	0.2548	
11 1,3,5-Trinitrobenzene	1	8.469	8.465	0.004	53744	0.2500	0.2473	
12 1,3-Dinitrobenzene	1	9.029	9.032	-0.003	74342	0.2500	0.2493	
13 Nitrobenzene	1	9.349	9.345	0.004	47542	0.2500	0.2436	
14 3,5-Dinitroaniline	1	9.556	9.558	-0.002	57961	0.2500	0.2489	
15 Tetryl	1	9.676	9.672	0.004	42469	0.2500	0.2486	
16 Nitroglycerin	2	10.116	10.118	-0.002	164993	2.50	2.57	
17 2,4,6-Trinitrotoluene	1	10.469	10.472	-0.003	54393	0.2500	0.2503	
18 4-Amino-2,6-dinitrotoluene	1	10.629	10.632	-0.003	36567	0.2500	0.2501	
19 2-Amino-4,6-dinitrotoluene	1	10.862	10.858	0.004	50419	0.2500	0.2465	
20 2,6-Dinitrotoluene	1	10.996	10.992	0.004	36469	0.2500	0.2586	
21 2,4-Dinitrotoluene	1	11.142	11.145	-0.003	72132	0.2500	0.2472	
22 o-Nitrotoluene	1	11.836	11.832	0.004	30599	0.2500	0.2439	
23 p-Nitrotoluene	1	12.209	12.198	0.011	26573	0.2500	0.2448	
24 m-Nitrotoluene	1	12.709	12.705	0.004	33309	0.2500	0.2447	
25 PETN	2	13.782	13.772	0.010	184704	2.50	2.56	

Reagents:

8330IntermStk_00083 Amount Added: 25.00 Units: uL

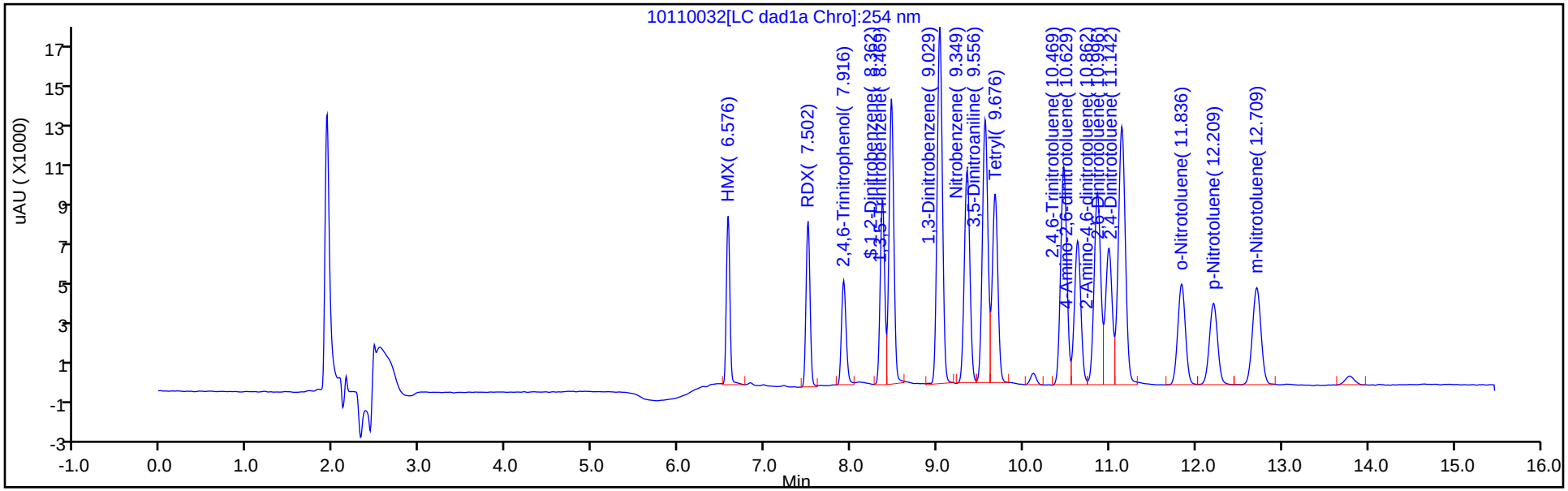
Report Date: 12-Oct-2024 10:13:40 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Denver

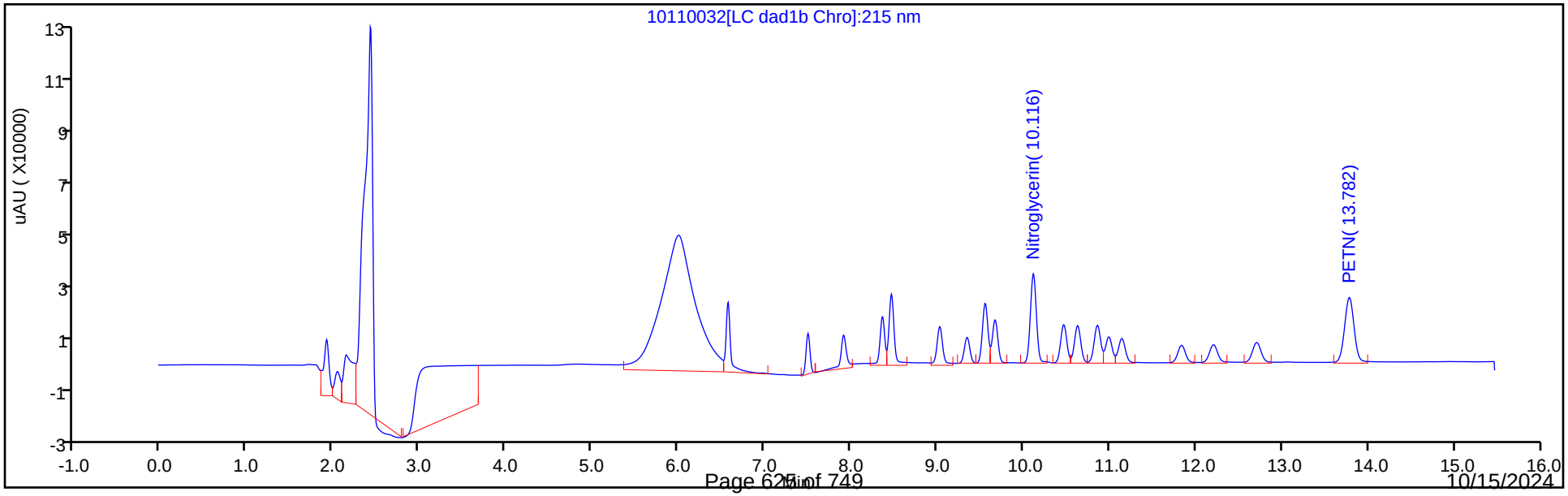
Data File: \\chromfs\denver\chromdata\chhplc_x\20241011-138518.b\10110032.d

Injection Date:	12-Oct-2024 01:15:32	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV INT			Worklist Smp#:	32
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



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



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FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-197447-1

SDG No.:

Lab Sample ID: CCV 280-670729/34 | Calibration Date: 10/12/2024 01:59

Instrument ID: CHHPLC_X3 | Calib Start Date: 10/04/2024 16:59

GC Column: UltraCarb5uODS ID: 4.60(mm) | Calib End Date: 10/04/2024 19:55

Lab File ID: 10110034.D | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	96653	95500		247	250	-1.2	20.0
RDX	Lin2		105748		251	250	0.2	20.0
Picric acid	Ave	75427	76832		255	250	1.9	20.0
1,3,5-Trinitrobenzene	Ave	217350	215476		248	250	-0.9	20.0
1,3-Dinitrobenzene	Ave	298232	297516		249	250	-0.2	20.0
Nitrobenzene	Ave	195178	187544		240	250	-3.9	20.0
3,5-Dinitroaniline	Lin2		233492		251	250	0.3	20.0
Tetryl	Lin2		163764		240	250	-4.1	20.0
Nitroglycerin	Lin2		66362		2580	2500	3.2	20.0
2,4,6-Trinitrotoluene	Ave	217298	213184		245	250	-1.9	20.0
4-Amino-2,6-dinitrotoluene	Lin2		143968		246	250	-1.6	20.0
2-Amino-4,6-dinitrotoluene	Ave	204531	202724		248	250	-0.9	20.0
2,6-Dinitrotoluene	Lin2		140172		248	250	-0.6	20.0
2,4-Dinitrotoluene	Ave	291812	287312		246	250	-1.5	20.0
2-Nitrotoluene	Ave	125468	122072		243	250	-2.7	20.0
4-Nitrotoluene	Lin2		104620		241	250	-3.6	20.0
3-Nitrotoluene	Lin2		134208		246	250	-1.4	20.0
PETN	Ave	72212	73592		2550	2500	1.9	20.0
1,2-Dinitrobenzene	Ave	130410	131156		251	250	0.6	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Lab Sample ID: CCV 280-670729/34 Calibration Date: 10/12/2024 01:59

Instrument ID: CHHPLC_X3 Calib Start Date: 10/04/2024 16:59

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 10/04/2024 19:55

Lab File ID: 10110034.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.57	6.42	6.72
RDX	7.51	7.35	7.65
Picric acid	7.92	7.76	8.06
1,3,5-Trinitrobenzene	8.47	8.32	8.62
1,3-Dinitrobenzene	9.04	8.88	9.18
Nitrobenzene	9.35	9.20	9.50
3,5-Dinitroaniline	9.57	9.41	9.71
Tetryl	9.69	9.52	9.82
Nitroglycerin	10.13	9.97	10.27
2,4,6-Trinitrotoluene	10.48	10.37	10.57
4-Amino-2,6-dinitrotoluene	10.65	10.53	10.73
2-Amino-4,6-dinitrotoluene	10.88	10.76	10.96
2,6-Dinitrotoluene	11.01	10.89	11.09
2,4-Dinitrotoluene	11.16	11.05	11.25
2-Nitrotoluene	11.86	11.68	11.98
4-Nitrotoluene	12.23	12.05	12.35
3-Nitrotoluene	12.73	12.56	12.86
PETN	13.82	13.62	13.92
1,2-Dinitrobenzene	8.37	8.22	8.52

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20241011-138518.b\10110034.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 12-Oct-2024 01:59:29 ALS Bottle#: 7 Worklist Smp#: 34
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub26

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20241011-138518.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 12-Oct-2024 10:13:41 Calib Date: 04-Oct-2024 19:55:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1603

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	4 HMX	1	6.574	6.572	0.002	23875	0.2500	0.2470	
	8 RDX	1	7.507	7.498	0.009	26437	0.2500	0.2505	
	9 2,4,6-Trinitrophenol	1	7.920	7.912	0.008	19208	0.2500	0.2547	
$	10 1,2-Dinitrobenzene	1	8.374	8.365	0.009	32789	0.2500	0.2514	
	11 1,3,5-Trinitrobenzene	1	8.474	8.465	0.009	53869	0.2500	0.2478	
	12 1,3-Dinitrobenzene	1	9.040	9.032	0.008	74379	0.2500	0.2494	
	13 Nitrobenzene	1	9.354	9.345	0.009	46886	0.2500	0.2402	
	14 3,5-Dinitroaniline	1	9.567	9.558	0.009	58373	0.2500	0.2507	
	15 Tetryl	1	9.687	9.672	0.015	40941	0.2500	0.2397	
	16 Nitroglycerin	2	10.134	10.118	0.016	165905	2.50	2.58	
	17 2,4,6-Trinitrotoluene	1	10.480	10.472	0.008	53296	0.2500	0.2453	
	18 4-Amino-2,6-dinitrotoluene	1	10.647	10.632	0.015	35992	0.2500	0.2461	
	19 2-Amino-4,6-dinitrotoluene	1	10.880	10.858	0.022	50681	0.2500	0.2478	
	20 2,6-Dinitrotoluene	1	11.014	10.992	0.022	35043	0.2500	0.2485	
	21 2,4-Dinitrotoluene	1	11.160	11.145	0.015	71828	0.2500	0.2461	
	22 o-Nitrotoluene	1	11.860	11.832	0.028	30518	0.2500	0.2432	
	23 p-Nitrotoluene	1	12.234	12.198	0.036	26155	0.2500	0.2409	
	24 m-Nitrotoluene	1	12.734	12.705	0.029	33552	0.2500	0.2465	
	25 PETN	2	13.820	13.772	0.048	183981	2.50	2.55	

Reagents:

8330IntermStk_00083 Amount Added: 25.00 Units: uL

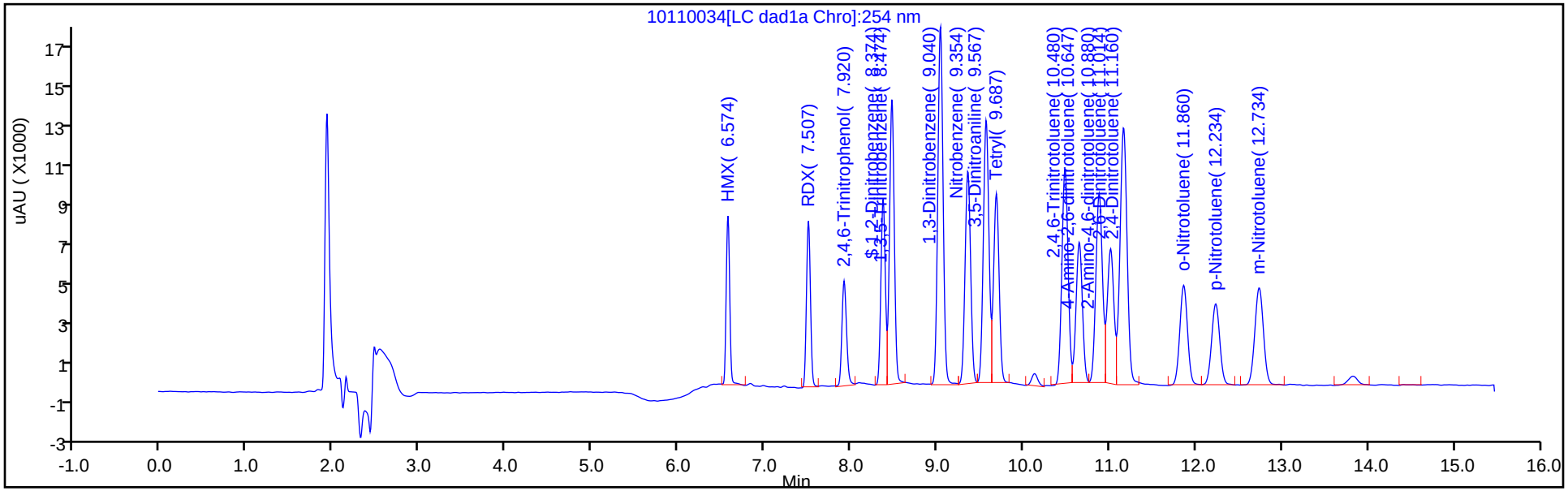
Report Date: 12-Oct-2024 10:13:41 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Denver

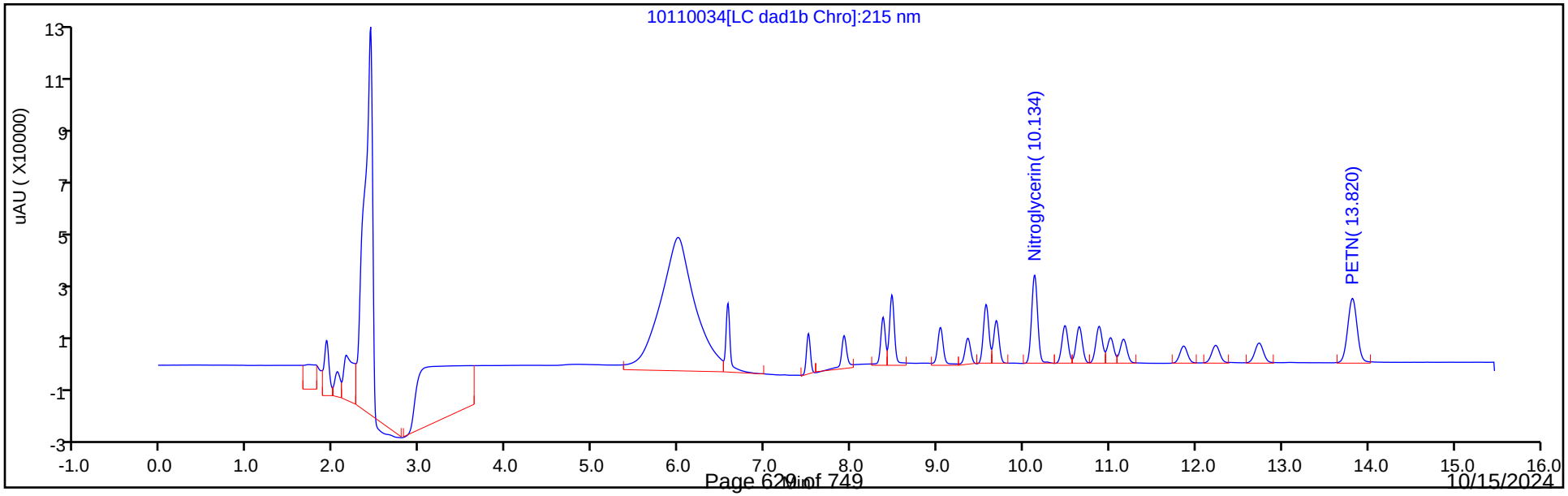
Data File: \\chromfs\denver\chromdata\chhplc_x\20241011-138518.b\10110034.d

Injection Date:	12-Oct-2024 01:59:29	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV INT			Worklist Smp#:	34
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



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FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-197447-1

SDG No.:

Lab Sample ID: ICV 280-663590/19 | Calibration Date: 08/11/2024 01:36

Instrument ID: CHHPLC_X5 | Calib Start Date: 08/10/2024 20:22

GC Column: Luna-phenylhex ID: 4.60(mm) | Calib End Date: 08/11/2024 01:01

Lab File ID: 08100019.D | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	180338	168968		468	500	-6.3	20.0
Picric acid	Ave	149859	166618		556	500	11.2	20.0
RDX	Ave	220357	203186		461	500	-7.8	20.0
Nitrobenzene	Ave	376935	397300		527	500	5.4	20.0
3,5-Dinitroaniline	Lin2		456342		523	500	4.6	20.0
1,3-Dinitrobenzene	Ave	585242	609262		521	500	4.1	20.0
Nitroglycerin	Ave	128152	132206		5160	5000	3.2	20.0
2-Nitrotoluene	Ave	235862	244000		517	500	3.5	20.0
4-Nitrotoluene	Ave	211671	217406		514	500	2.7	20.0
4-Amino-2,6-dinitrotoluene	Ave	278588	293012		526	500	5.2	20.0
3-Nitrotoluene	Ave	258224	265526		514	500	2.8	20.0
2-Amino-4,6-dinitrotoluene	Ave	389409	396736		509	500	1.9	20.0
1,3,5-Trinitrobenzene	Ave	423794	469618		554	500	10.8	20.0
2,6-Dinitrotoluene	Ave	284676	280972		493	500	-1.3	20.0
2,4-Dinitrotoluene	Ave	568510	561942		494	500	-1.2	20.0
Tetryl	Ave	283338	335136		591	500	18.3	20.0
2,4,6-Trinitrotoluene	Ave	416224	416670		501	500	0.1	20.0
PETN	Ave	135807	144523		5320	5000	6.4	20.0
1,2-Dinitrobenzene	Ave	262489	279208		532	500	6.4	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Lab Sample ID: ICV 280-663590/19 Calibration Date: 08/11/2024 01:36

Instrument ID: CHHPLC_X5 Calib Start Date: 08/10/2024 20:22

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 08/11/2024 01:01

Lab File ID: 08100019.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.32	6.17	6.47
Picric acid	7.78	7.66	7.96
RDX	8.44	8.29	8.59
Nitrobenzene	10.99	10.83	11.13
3,5-Dinitroaniline	13.48	13.32	13.62
1,3-Dinitrobenzene	13.84	13.67	13.97
Nitroglycerin	14.51	14.33	14.63
2-Nitrotoluene	15.02	14.84	15.14
4-Nitrotoluene	15.25	15.07	15.37
4-Amino-2,6-dinitrotoluene	15.59	15.41	15.71
3-Nitrotoluene	16.08	15.89	16.19
2-Amino-4,6-dinitrotoluene	16.34	16.16	16.46
1,3,5-Trinitrobenzene	16.56	16.39	16.69
2,6-Dinitrotoluene	17.69	17.51	17.81
2,4-Dinitrotoluene	18.12	17.94	18.24
Tetryl	21.14	20.95	21.25
2,4,6-Trinitrotoluene	22.01	21.83	22.13
PETN	23.51	23.31	23.61
1,2-Dinitrobenzene	11.82	11.65	11.95

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100019.D
Lims ID: ICV INT
Client ID:
Sample Type: ICV
Inject. Date: 11-Aug-2024 01:36:30 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICV INT
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist:

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 13-Aug-2024 15:55:09 Calib Date: 11-Aug-2024 01:01:34
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100018.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1604

First Level Reviewer: LV5D Date: 13-Aug-2024 15:15:57

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
5 HMX	1	6.316	6.324	-0.008	84484	0.5000	0.4685	
7 2,4,6-Trinitrophenol	1	7.776	7.810	-0.034	83309	0.5000	0.5559	
8 RDX	1	8.443	8.437	0.006	101593	0.5000	0.4610	
9 Nitrobenzene	1	10.989	10.983	0.006	198650	0.5000	0.5270	
$ 10 1,2-Dinitrobenzene	1	11.816	11.797	0.019	139604	0.5000	0.5318	
11 3,5-Dinitroaniline	1	13.483	13.470	0.013	228171	0.5000	0.5230	
12 1,3-Dinitrobenzene	1	13.836	13.823	0.013	304631	0.5000	0.5205	
13 Nitroglycerin	2	14.509	14.477	0.032	661029	5.00	5.16	
14 o-Nitrotoluene	1	15.023	14.990	0.033	122000	0.5000	0.5173	
16 p-Nitrotoluene	1	15.249	15.223	0.026	108703	0.5000	0.5135	
17 4-Amino-2,6-dinitrotoluene	1	15.589	15.557	0.032	146506	0.5000	0.5259	
18 m-Nitrotoluene	1	16.076	16.043	0.033	132763	0.5000	0.5141	
19 2-Amino-4,6-dinitrotoluene	1	16.336	16.310	0.026	198368	0.5000	0.5094	
20 1,3,5-Trinitrobenzene	1	16.563	16.537	0.026	234809	0.5000	0.5541	
21 2,6-Dinitrotoluene	1	17.689	17.657	0.032	140486	0.5000	0.4935	
22 2,4-Dinitrotoluene	1	18.123	18.090	0.033	280971	0.5000	0.4942	
23 Tetryl	1	21.136	21.097	0.039	167568	0.5000	0.5914	M
24 2,4,6-Trinitrotoluene	1	22.010	21.977	0.033	208335	0.5000	0.5005	M
25 PETN	2	23.510	23.457	0.053	722615	5.00	5.32	
26 Ammonium Picrate	1		0.000			ND	ND	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND
Review Flags
M - Manually Integrated

Reagents:

8330Surrogate_00158	Amount Added:	50.00	Units: uL
8330 LCS_00136	Amount Added:	50.00	Units: uL

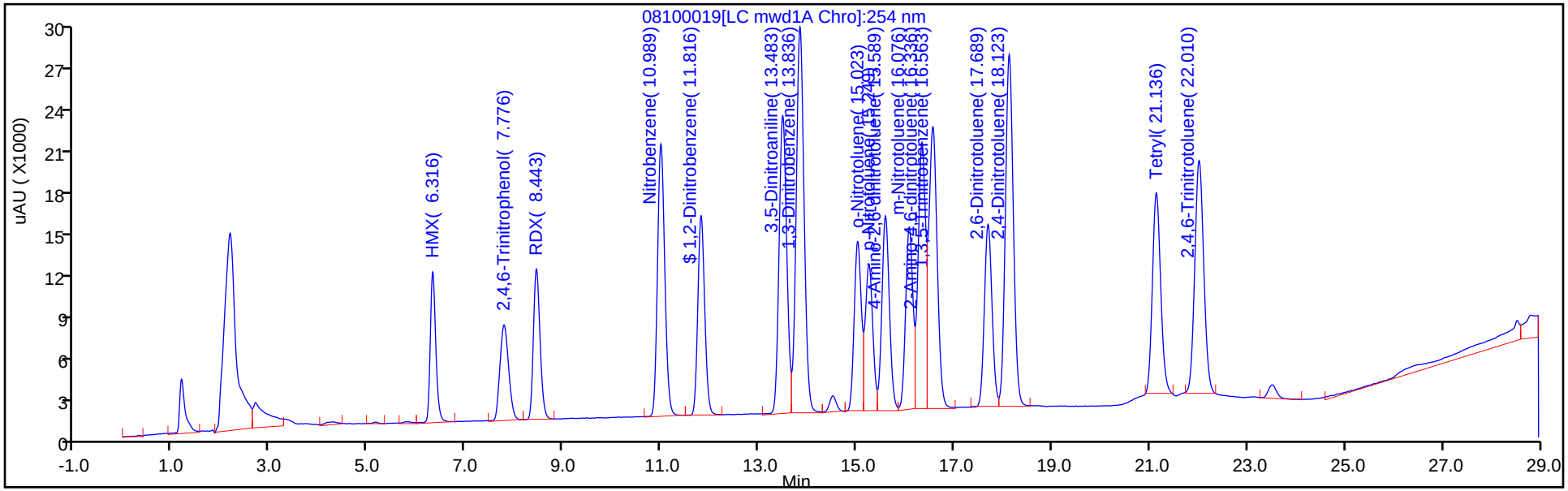
Report Date: 13-Aug-2024 15:55:15 Chrom Revision: 2.3 16-Jul-2024 14:17:34

Eurofins Denver

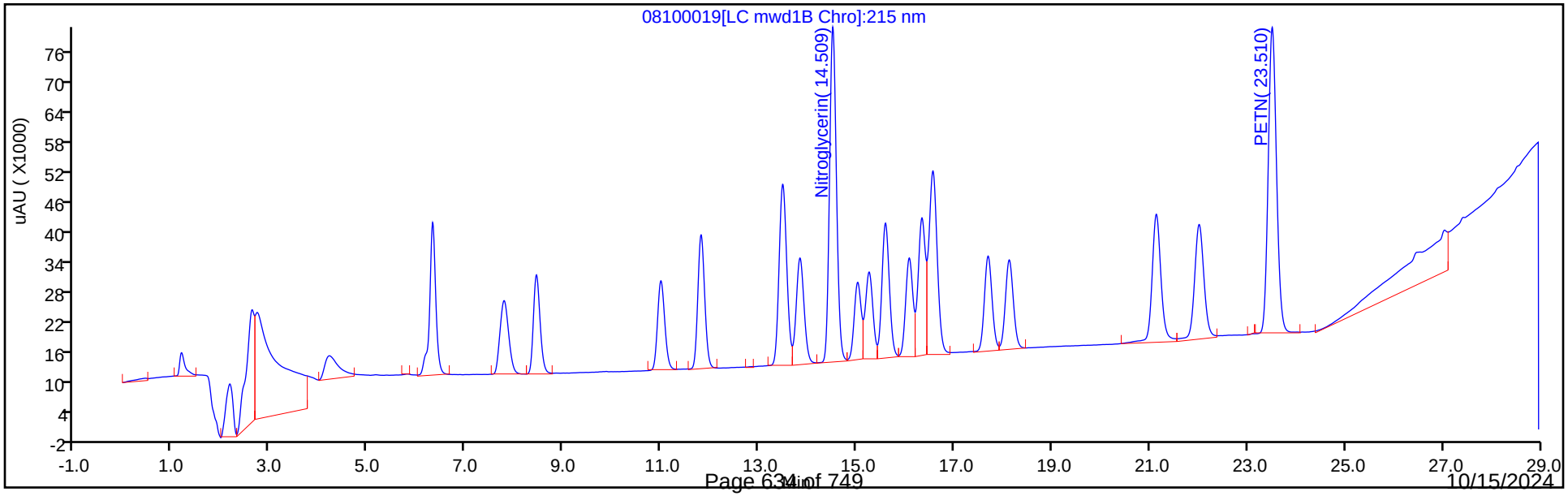
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100019.D

Injection Date:	11-Aug-2024 01:36:30	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: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



10/15/2024
4:48:23 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

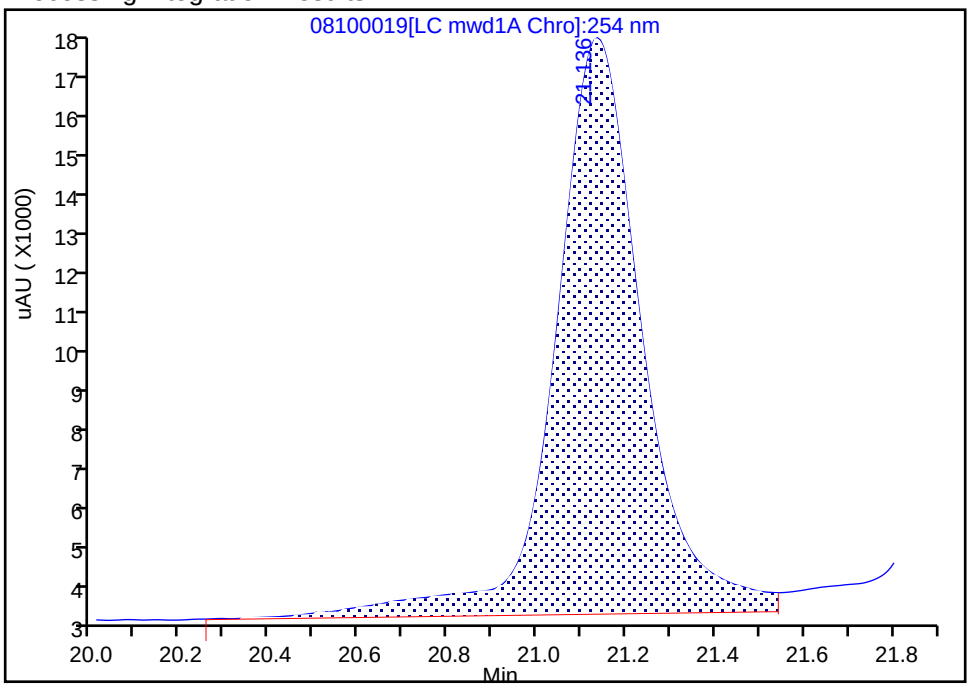
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100019.D				
Injection Date:	11-Aug-2024 01:36:30	Instrument ID:	CHHPLC_X5		
Lims ID:	ICV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

23 Tetryl, CAS: 479-45-8

Signal: 1

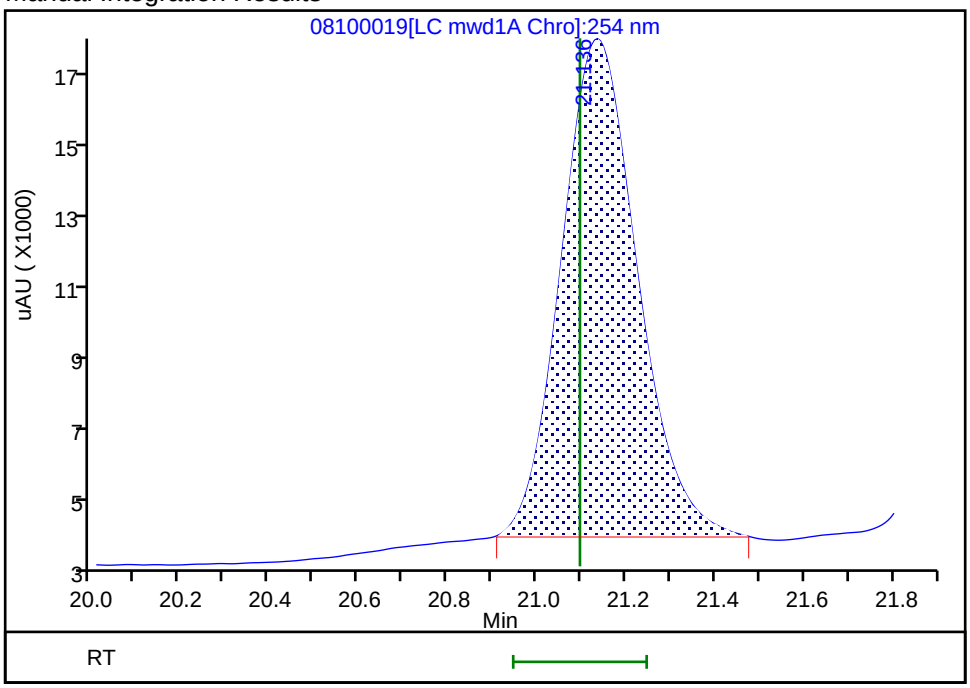
Processing Integration Results

RT: 21.14
Area: 201204
Amount: 0.710356
Amount Units: ug/ml



Manual Integration Results

RT: 21.14
Area: 167568
Amount: 0.591408
Amount Units: ug/ml



Reviewer: LV5D, 13-Aug-2024 15:17:38 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

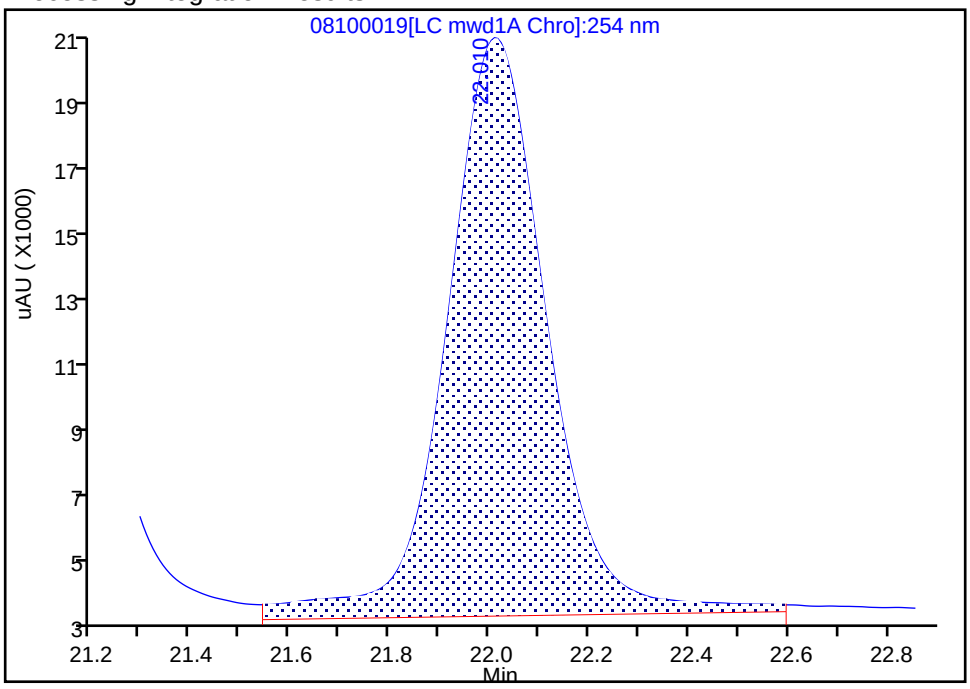
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100019.D				
Injection Date:	11-Aug-2024 01:36:30	Instrument ID:	CHHPLC_X5		
Lims ID:	ICV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

24 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

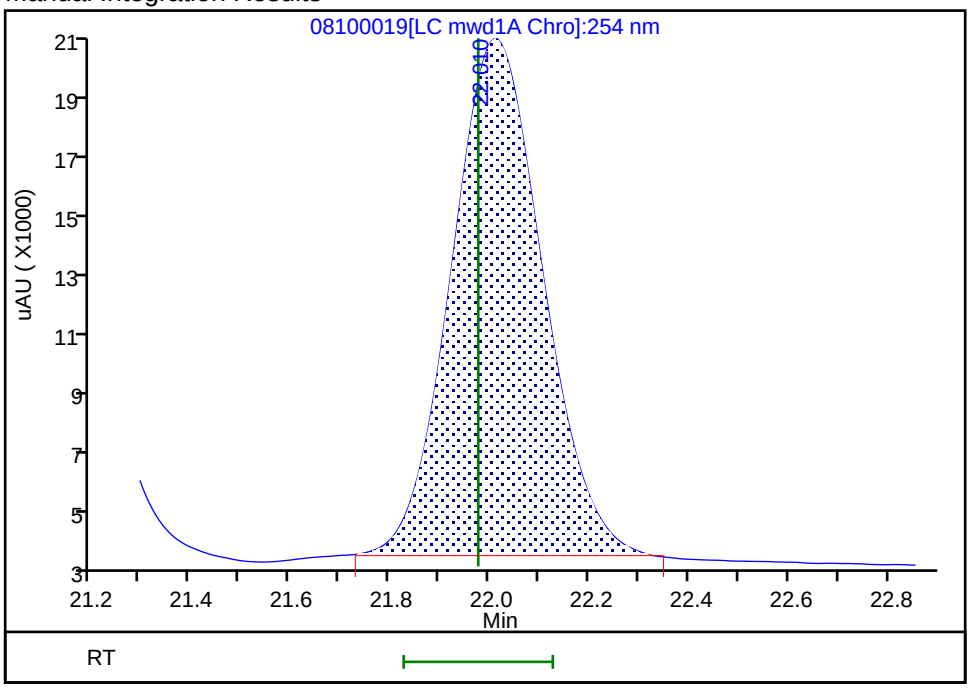
Processing Integration Results

RT: 22.01
Area: 238659
Amount: 0.575375
Amount Units: ug/ml



Manual Integration Results

RT: 22.01
Area: 208335
Amount: 0.500536
Amount Units: ug/ml



Reviewer: LV5D, 13-Aug-2024 15:17:42 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-197447-1

SDG No.:

Lab Sample ID: CCV 280-670394/8 | Calibration Date: 10/09/2024 19:55

Instrument ID: CHHPLC_X5 | Calib Start Date: 08/10/2024 20:22

GC Column: Luna-phenylhex ID: 4.60(mm) | Calib End Date: 08/11/2024 01:01

Lab File ID: 10090008.D | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	180338	175612		243	250	-2.6	20.0
Picric acid	Ave	149859	148876		248	250	-0.7	20.0
RDX	Ave	220357	211808		240	250	-3.9	20.0
Nitrobenzene	Ave	376935	372308		247	250	-1.2	20.0
3,5-Dinitroaniline	Lin2		445808		255	250	2.1	20.0
1,3-Dinitrobenzene	Ave	585242	576792		246	250	-1.4	20.0
Nitroglycerin	Ave	128152	125379		2450	2500	-2.2	20.0
2-Nitrotoluene	Ave	235862	237720		252	250	0.8	20.0
4-Nitrotoluene	Ave	211671	213664		252	250	0.9	20.0
4-Amino-2,6-dinitrotoluene	Ave	278588	279536		251	250	0.3	20.0
3-Nitrotoluene	Ave	258224	244496		237	250	-5.3	20.0
2-Amino-4,6-dinitrotoluene	Ave	389409	394856		253	250	1.4	20.0
1,3,5-Trinitrobenzene	Ave	423794	428376		253	250	1.1	20.0
2,6-Dinitrotoluene	Ave	284676	270928		238	250	-4.8	20.0
2,4-Dinitrotoluene	Ave	568510	549912		242	250	-3.3	20.0
Tetryl	Ave	283338	316860		280	250	11.8	20.0
2,4,6-Trinitrotoluene	Ave	416224	412152		248	250	-1.0	20.0
PETN	Ave	135807	137138		2520	2500	1.0	20.0
1,2-Dinitrobenzene	Ave	262489	258020		246	250	-1.7	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Lab Sample ID: CCV 280-670394/8 Calibration Date: 10/09/2024 19:55

Instrument ID: CHHPLC_X5 Calib Start Date: 08/10/2024 20:22

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 08/11/2024 01:01

Lab File ID: 10090008.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.27	6.12	6.42
Picric acid	7.77	7.62	7.92
RDX	8.37	8.22	8.52
Nitrobenzene	10.93	10.78	11.08
3,5-Dinitroaniline	13.39	13.24	13.54
1,3-Dinitrobenzene	13.75	13.60	13.90
Nitroglycerin	14.39	14.24	14.54
2-Nitrotoluene	14.93	14.78	15.08
4-Nitrotoluene	15.16	15.01	15.31
4-Amino-2,6-dinitrotoluene	15.48	15.33	15.63
3-Nitrotoluene	15.98	15.83	16.13
2-Amino-4,6-dinitrotoluene	16.21	16.06	16.36
1,3,5-Trinitrobenzene	16.45	16.30	16.60
2,6-Dinitrotoluene	17.58	17.43	17.73
2,4-Dinitrotoluene	18.00	17.85	18.15
Tetryl	20.97	20.82	21.12
2,4,6-Trinitrotoluene	21.86	21.71	22.01
PETN	23.31	23.16	23.46
1,2-Dinitrobenzene	11.73	11.58	11.88

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20241009-138425.b\10090008.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 09-Oct-2024 19:55:48 ALS Bottle#: 7 Worklist Smp#: 8
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub6

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20241009-138425.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 10-Oct-2024 15:42:07 Calib Date: 11-Aug-2024 06:16:04
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1665

First Level Reviewer: LV5D Date: 09-Oct-2024 20:34:26

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	4.977	4.977	0.000	91973	0.2508	0.2394	
4 DNX	1	5.737	5.737	0.000	66682	0.2503	0.2304	
5 HMX	1	6.270	6.270	0.000	43903	0.2500	0.2434	
6 MNX	1	7.090	7.090	0.000	72105	0.2918	0.2710	
7 2,4,6-Trinitrophenol	1	7.770	7.770	0.000	37219	0.2500	0.2484	
8 RDX	1	8.370	8.370	0.000	52952	0.2500	0.2403	
9 Nitrobenzene	1	10.930	10.930	0.000	93077	0.2500	0.2469	
$ 10 1,2-Dinitrobenzene	1	11.730	11.730	0.000	64505	0.2500	0.2457	
11 3,5-Dinitroaniline	1	13.390	13.390	0.000	111452	0.2500	0.2552	
12 1,3-Dinitrobenzene	1	13.750	13.750	0.000	144198	0.2500	0.2464	
13 Nitroglycerin	2	14.390	14.390	0.000	313448	2.50	2.45	
14 o-Nitrotoluene	1	14.930	14.930	0.000	59430	0.2500	0.2520	
16 p-Nitrotoluene	1	15.156	15.156	0.000	53416	0.2500	0.2524	
17 4-Amino-2,6-dinitrotoluene	1	15.476	15.476	0.000	69884	0.2500	0.2509	
18 m-Nitrotoluene	1	15.976	15.976	0.000	61124	0.2500	0.2367	
19 2-Amino-4,6-dinitrotoluene	1	16.210	16.210	0.000	98714	0.2500	0.2535	
20 1,3,5-Trinitrobenzene	1	16.450	16.450	0.000	107094	0.2500	0.2527	
21 2,6-Dinitrotoluene	1	17.576	17.576	0.000	67732	0.2500	0.2379	
22 2,4-Dinitrotoluene	1	18.003	18.003	0.000	137478	0.2500	0.2418	
23 Tetryl	1	20.970	20.970	0.000	79215	0.2500	0.2796	
24 2,4,6-Trinitrotoluene	1	21.863	21.863	0.000	103038	0.2500	0.2476	
25 PETN	2	23.310	23.310	0.000	342844	2.50	2.52	

QC Flag Legend
Processing Flags

Reagents:

8330 DMT_00018	Amount Added:	12.50	Units: uL
8330IntermStk_00082	Amount Added:	25.00	Units: uL

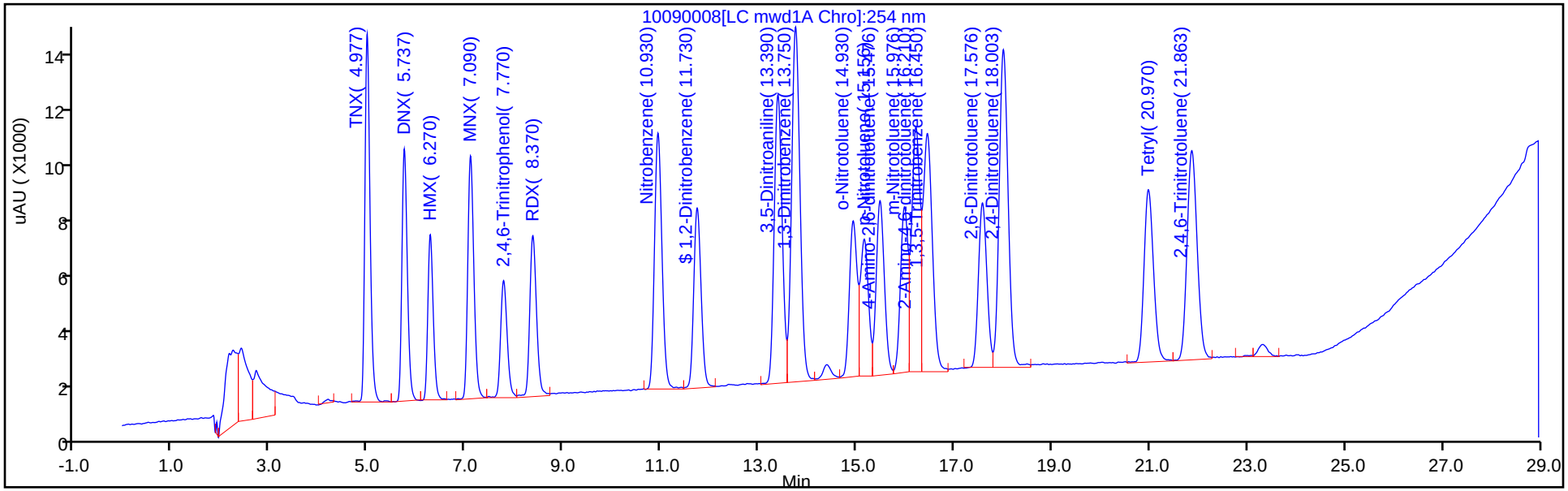
Report Date: 10-Oct-2024 15:42:08 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Denver

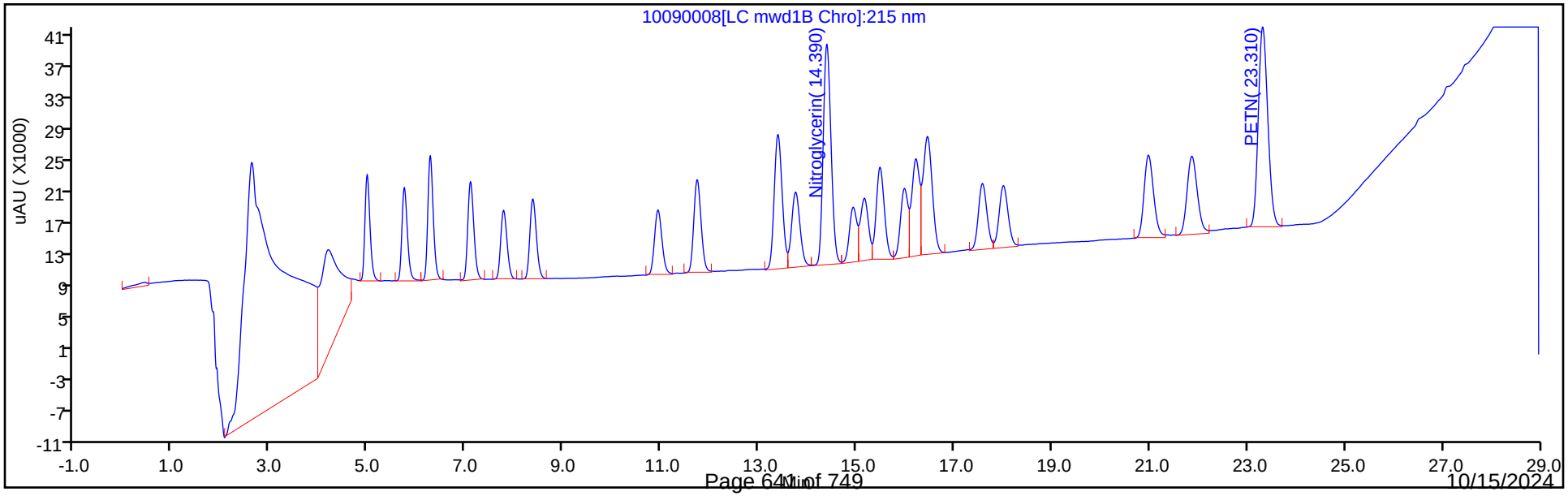
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20241009-138425.b\10090008.D

Injection Date:	09-Oct-2024 19:55:48	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#:	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: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Lab Sample ID: CCV 280-670394/8 Calibration Date: 10/09/2024 19:55

Instrument ID: CHHPLC_X5 Calib Start Date: 08/11/2024 02:11

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 08/11/2024 06:16

Lab File ID: 10090008.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Lin2		366792		239	251	-4.5	20.0
DNX	Lin2		266462		230	250	-7.9	20.0
MNX	Lin2		247147		271	292	-7.1	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Lab Sample ID: CCV 280-670394/8 Calibration Date: 10/09/2024 19:55

Instrument ID: CHHPLC_X5 Calib Start Date: 08/11/2024 02:11

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 08/11/2024 06:16

Lab File ID: 10090008.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	4.98	4.83	5.13
DNX	5.74	5.59	5.89
MNX	7.09	6.94	7.24

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20241009-138425.b\10090008.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 09-Oct-2024 19:55:48 ALS Bottle#: 7 Worklist Smp#: 8
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub6

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20241009-138425.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 10-Oct-2024 15:42:07 Calib Date: 11-Aug-2024 06:16:04
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1665

First Level Reviewer: LV5D Date: 09-Oct-2024 20:34:26

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	4.977	4.977	0.000	91973	0.2508	0.2394	
4 DNX	1	5.737	5.737	0.000	66682	0.2503	0.2304	
5 HMX	1	6.270	6.270	0.000	43903	0.2500	0.2434	
6 MNX	1	7.090	7.090	0.000	72105	0.2918	0.2710	
7 2,4,6-Trinitrophenol	1	7.770	7.770	0.000	37219	0.2500	0.2484	
8 RDX	1	8.370	8.370	0.000	52952	0.2500	0.2403	
9 Nitrobenzene	1	10.930	10.930	0.000	93077	0.2500	0.2469	
$ 10 1,2-Dinitrobenzene	1	11.730	11.730	0.000	64505	0.2500	0.2457	
11 3,5-Dinitroaniline	1	13.390	13.390	0.000	111452	0.2500	0.2552	
12 1,3-Dinitrobenzene	1	13.750	13.750	0.000	144198	0.2500	0.2464	
13 Nitroglycerin	2	14.390	14.390	0.000	313448	2.50	2.45	
14 o-Nitrotoluene	1	14.930	14.930	0.000	59430	0.2500	0.2520	
16 p-Nitrotoluene	1	15.156	15.156	0.000	53416	0.2500	0.2524	
17 4-Amino-2,6-dinitrotoluene	1	15.476	15.476	0.000	69884	0.2500	0.2509	
18 m-Nitrotoluene	1	15.976	15.976	0.000	61124	0.2500	0.2367	
19 2-Amino-4,6-dinitrotoluene	1	16.210	16.210	0.000	98714	0.2500	0.2535	
20 1,3,5-Trinitrobenzene	1	16.450	16.450	0.000	107094	0.2500	0.2527	
21 2,6-Dinitrotoluene	1	17.576	17.576	0.000	67732	0.2500	0.2379	
22 2,4-Dinitrotoluene	1	18.003	18.003	0.000	137478	0.2500	0.2418	
23 Tetryl	1	20.970	20.970	0.000	79215	0.2500	0.2796	
24 2,4,6-Trinitrotoluene	1	21.863	21.863	0.000	103038	0.2500	0.2476	
25 PETN	2	23.310	23.310	0.000	342844	2.50	2.52	

QC Flag Legend
Processing Flags

Reagents:

8330 DMT_00018	Amount Added:	12.50	Units: uL
8330IntermStk_00082	Amount Added:	25.00	Units: uL

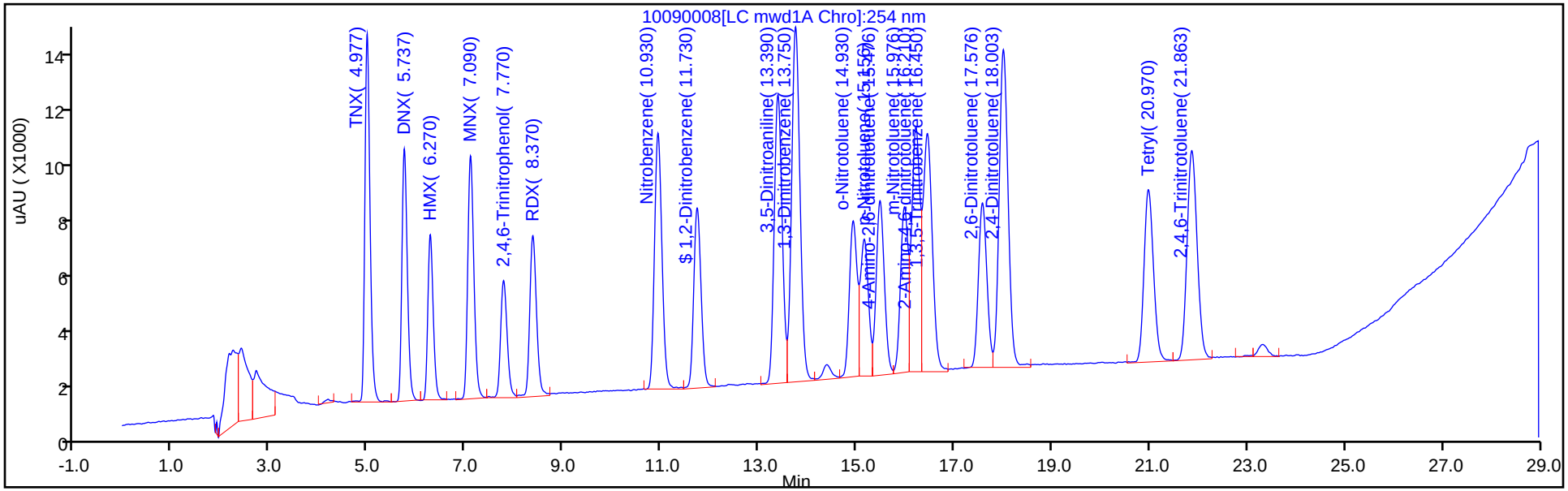
Report Date: 10-Oct-2024 15:42:08 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Denver

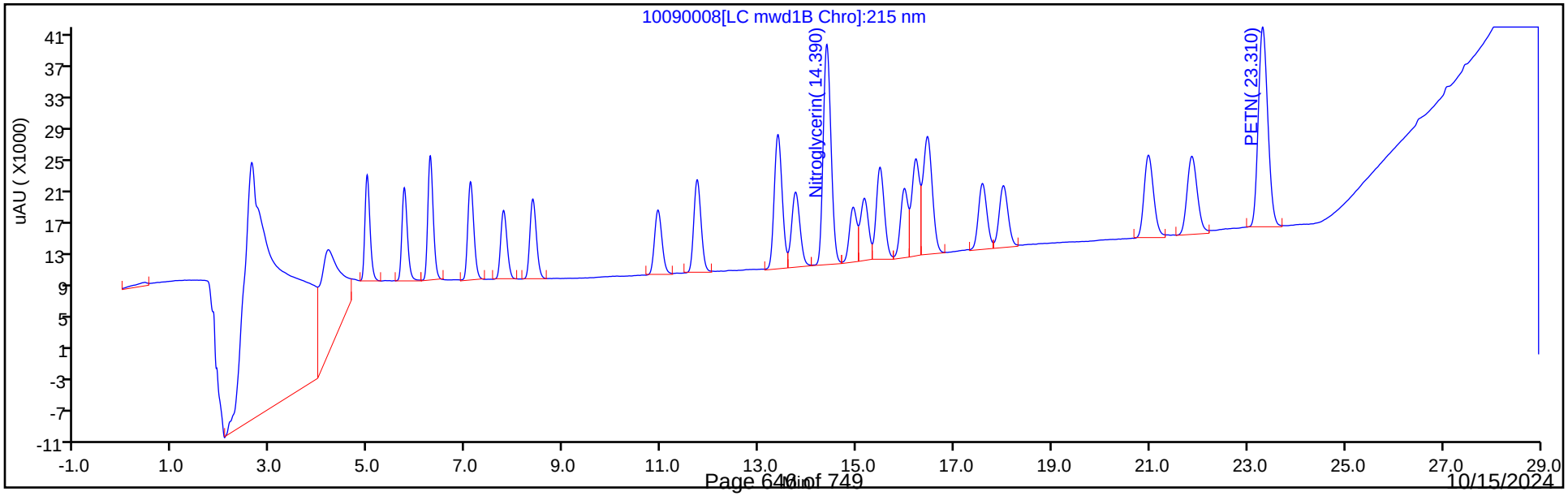
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20241009-138425.b\10090008.D

Injection Date:	09-Oct-2024 19:55:48	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#:	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: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



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FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-197447-1

SDG No.:

Lab Sample ID: CCV 280-670394/20 | Calibration Date: 10/10/2024 02:20

Instrument ID: CHHPLC_X5 | Calib Start Date: 08/10/2024 20:22

GC Column: Luna-phenylhex ID: 4.60(mm) | Calib End Date: 08/11/2024 01:01

Lab File ID: 10090020.D | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	180338	176344		244	250	-2.2	20.0
Picric acid	Ave	149859	152864		255	250	2.0	20.0
RDX	Ave	220357	211244		240	250	-4.1	20.0
Nitrobenzene	Ave	376935	366564		243	250	-2.8	20.0
3,5-Dinitroaniline	Lin2		443712		254	250	1.6	20.0
1,3-Dinitrobenzene	Ave	585242	578964		247	250	-1.1	20.0
Nitroglycerin	Ave	128152	126488		2470	2500	-1.3	20.0
2-Nitrotoluene	Ave	235862	232828		247	250	-1.3	20.0
4-Nitrotoluene	Ave	211671	210596		249	250	-0.5	20.0
4-Amino-2,6-dinitrotoluene	Ave	278588	278844		250	250	0.0	20.0
3-Nitrotoluene	Ave	258224	240696		233	250	-6.8	20.0
2-Amino-4,6-dinitrotoluene	Ave	389409	392944		252	250	0.9	20.0
1,3,5-Trinitrobenzene	Ave	423794	434268		256	250	2.5	20.0
2,6-Dinitrotoluene	Ave	284676	272524		239	250	-4.3	20.0
2,4-Dinitrotoluene	Ave	568510	550552		242	250	-3.2	20.0
Tetryl	Ave	283338	318616		281	250	12.5	20.0
2,4,6-Trinitrotoluene	Ave	416224	417956		251	250	0.4	20.0
PETN	Ave	135807	139178		2560	2500	2.5	20.0
1,2-Dinitrobenzene	Ave	262489	258932		247	250	-1.4	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Lab Sample ID: CCV 280-670394/20 Calibration Date: 10/10/2024 02:20

Instrument ID: CHHPLC_X5 Calib Start Date: 08/10/2024 20:22

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 08/11/2024 01:01

Lab File ID: 10090020.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.27	6.12	6.42
Picric acid	7.73	7.62	7.92
RDX	8.37	8.22	8.52
Nitrobenzene	10.93	10.78	11.08
3,5-Dinitroaniline	13.39	13.24	13.54
1,3-Dinitrobenzene	13.75	13.60	13.90
Nitroglycerin	14.39	14.24	14.54
2-Nitrotoluene	14.93	14.78	15.08
4-Nitrotoluene	15.16	15.01	15.31
4-Amino-2,6-dinitrotoluene	15.49	15.33	15.63
3-Nitrotoluene	15.98	15.83	16.13
2-Amino-4,6-dinitrotoluene	16.22	16.06	16.36
1,3,5-Trinitrobenzene	16.45	16.30	16.60
2,6-Dinitrotoluene	17.58	17.43	17.73
2,4-Dinitrotoluene	18.01	17.85	18.15
Tetryl	20.99	20.82	21.12
2,4,6-Trinitrotoluene	21.87	21.71	22.01
PETN	23.33	23.16	23.46
1,2-Dinitrobenzene	11.73	11.58	11.88

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20241009-138425.b\10090020.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 10-Oct-2024 02:20:12 ALS Bottle#: 7 Worklist Smp#: 20
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub6

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20241009-138425.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 10-Oct-2024 15:42:17 Calib Date: 11-Aug-2024 06:16:04
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1665

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	4.979	4.977	0.002	91247	0.2508	0.2374	
4 DNX	1	5.739	5.737	0.002	66668	0.2503	0.2304	
5 HMX	1	6.272	6.270	0.002	44086	0.2500	0.2445	
6 MNX	1	7.092	7.090	0.002	72206	0.2918	0.2714	
7 2,4,6-Trinitrophenol	1	7.732	7.770	-0.038	38216	0.2500	0.2550	
8 RDX	1	8.372	8.370	0.002	52811	0.2500	0.2397	
9 Nitrobenzene	1	10.932	10.930	0.002	91641	0.2500	0.2431	
$ 10 1,2-Dinitrobenzene	1	11.732	11.730	0.002	64733	0.2500	0.2466	
11 3,5-Dinitroaniline	1	13.385	13.390	-0.005	110928	0.2500	0.2540	
12 1,3-Dinitrobenzene	1	13.752	13.750	0.002	144741	0.2500	0.2473	
13 Nitroglycerin	2	14.385	14.390	-0.005	316221	2.50	2.47	
14 o-Nitrotoluene	1	14.932	14.930	0.002	58207	0.2500	0.2468	
16 p-Nitrotoluene	1	15.159	15.156	0.003	52649	0.2500	0.2487	
17 4-Amino-2,6-dinitrotoluene	1	15.485	15.476	0.009	69711	0.2500	0.2502	
18 m-Nitrotoluene	1	15.979	15.976	0.003	60174	0.2500	0.2330	
19 2-Amino-4,6-dinitrotoluene	1	16.219	16.210	0.009	98236	0.2500	0.2523	
20 1,3,5-Trinitrobenzene	1	16.452	16.450	0.002	108567	0.2500	0.2562	
21 2,6-Dinitrotoluene	1	17.579	17.576	0.003	68131	0.2500	0.2393	
22 2,4-Dinitrotoluene	1	18.012	18.003	0.009	137638	0.2500	0.2421	
23 Tetryl	1	20.986	20.970	0.016	79654	0.2500	0.2811	
24 2,4,6-Trinitrotoluene	1	21.866	21.863	0.003	104489	0.2500	0.2510	
25 PETN	2	23.326	23.310	0.016	347945	2.50	2.56	

Reagents:

8330 DMT_00018 Amount Added: 12.50 Units: uL
8330IntermStk_00082 Amount Added: 25.00 Units: uL

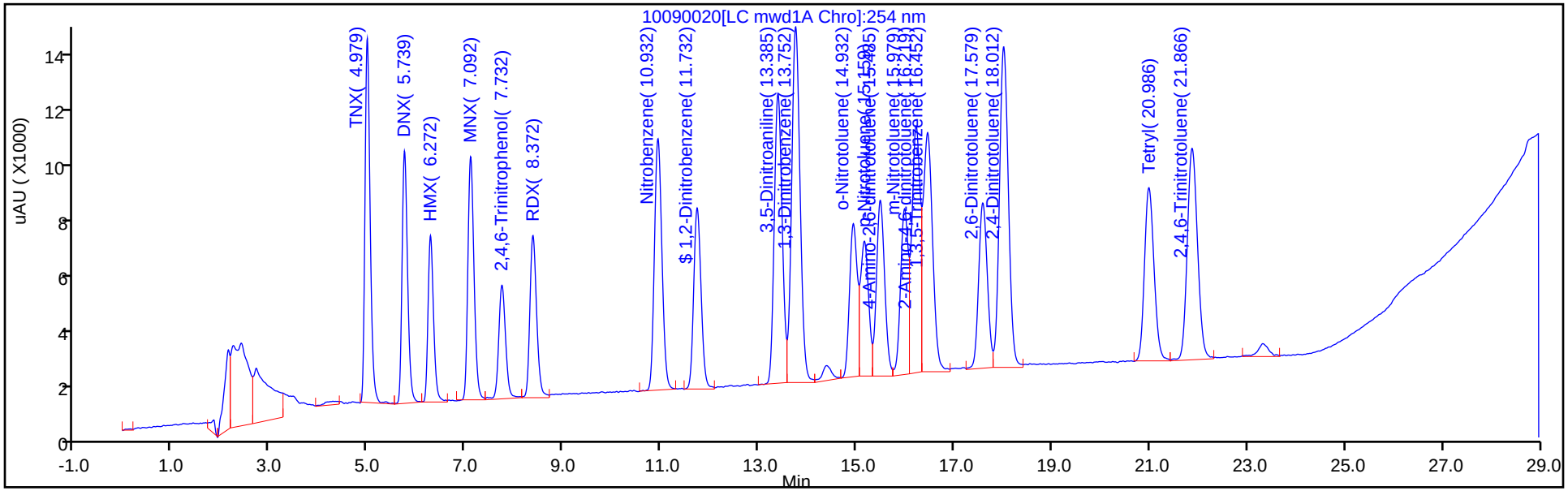
Report Date: 10-Oct-2024 15:42:17 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Denver

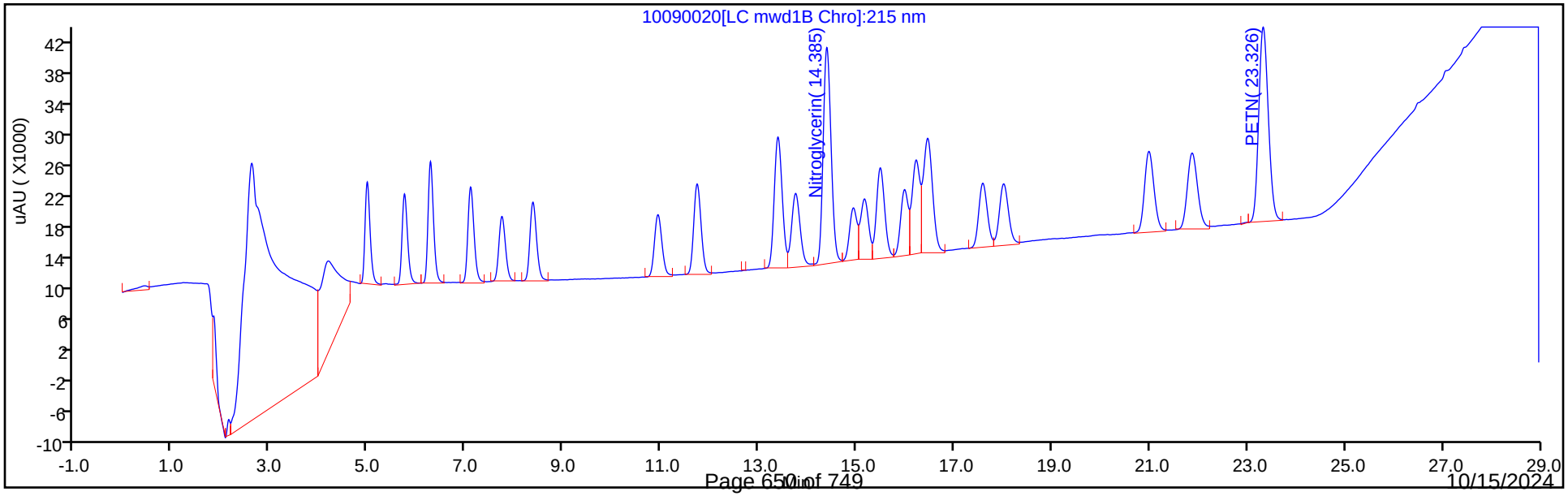
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20241009-138425.b\10090020.D

Injection Date:	10-Oct-2024 02:20:12	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	CCV DMT			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: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



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FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Lab Sample ID: CCV 280-670394/20 Calibration Date: 10/10/2024 02:20

Instrument ID: CHHPLC_X5 Calib Start Date: 08/11/2024 02:11

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 08/11/2024 06:16

Lab File ID: 10090020.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Lin2		363896		237	251	-5.3	20.0
DNX	Lin2		266406		230	250	-7.9	20.0
MNX	Lin2		247493		271	292	-7.0	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Lab Sample ID: CCV 280-670394/20 Calibration Date: 10/10/2024 02:20

Instrument ID: CHHPLC_X5 Calib Start Date: 08/11/2024 02:11

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 08/11/2024 06:16

Lab File ID: 10090020.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	4.98	4.83	5.13
DNX	5.74	5.59	5.89
MNX	7.09	6.94	7.24

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20241009-138425.b\10090020.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 10-Oct-2024 02:20:12 ALS Bottle#: 7 Worklist Smp#: 20
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub6

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20241009-138425.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 10-Oct-2024 15:42:17 Calib Date: 11-Aug-2024 06:16:04
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1665

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	4.979	4.977	0.002	91247	0.2508	0.2374	
4 DNX	1	5.739	5.737	0.002	66668	0.2503	0.2304	
5 HMX	1	6.272	6.270	0.002	44086	0.2500	0.2445	
6 MNX	1	7.092	7.090	0.002	72206	0.2918	0.2714	
7 2,4,6-Trinitrophenol	1	7.732	7.770	-0.038	38216	0.2500	0.2550	
8 RDX	1	8.372	8.370	0.002	52811	0.2500	0.2397	
9 Nitrobenzene	1	10.932	10.930	0.002	91641	0.2500	0.2431	
$ 10 1,2-Dinitrobenzene	1	11.732	11.730	0.002	64733	0.2500	0.2466	
11 3,5-Dinitroaniline	1	13.385	13.390	-0.005	110928	0.2500	0.2540	
12 1,3-Dinitrobenzene	1	13.752	13.750	0.002	144741	0.2500	0.2473	
13 Nitroglycerin	2	14.385	14.390	-0.005	316221	2.50	2.47	
14 o-Nitrotoluene	1	14.932	14.930	0.002	58207	0.2500	0.2468	
16 p-Nitrotoluene	1	15.159	15.156	0.003	52649	0.2500	0.2487	
17 4-Amino-2,6-dinitrotoluene	1	15.485	15.476	0.009	69711	0.2500	0.2502	
18 m-Nitrotoluene	1	15.979	15.976	0.003	60174	0.2500	0.2330	
19 2-Amino-4,6-dinitrotoluene	1	16.219	16.210	0.009	98236	0.2500	0.2523	
20 1,3,5-Trinitrobenzene	1	16.452	16.450	0.002	108567	0.2500	0.2562	
21 2,6-Dinitrotoluene	1	17.579	17.576	0.003	68131	0.2500	0.2393	
22 2,4-Dinitrotoluene	1	18.012	18.003	0.009	137638	0.2500	0.2421	
23 Tetryl	1	20.986	20.970	0.016	79654	0.2500	0.2811	
24 2,4,6-Trinitrotoluene	1	21.866	21.863	0.003	104489	0.2500	0.2510	
25 PETN	2	23.326	23.310	0.016	347945	2.50	2.56	

Reagents:

8330 DMT_00018 Amount Added: 12.50 Units: uL
8330IntermStk_00082 Amount Added: 25.00 Units: uL

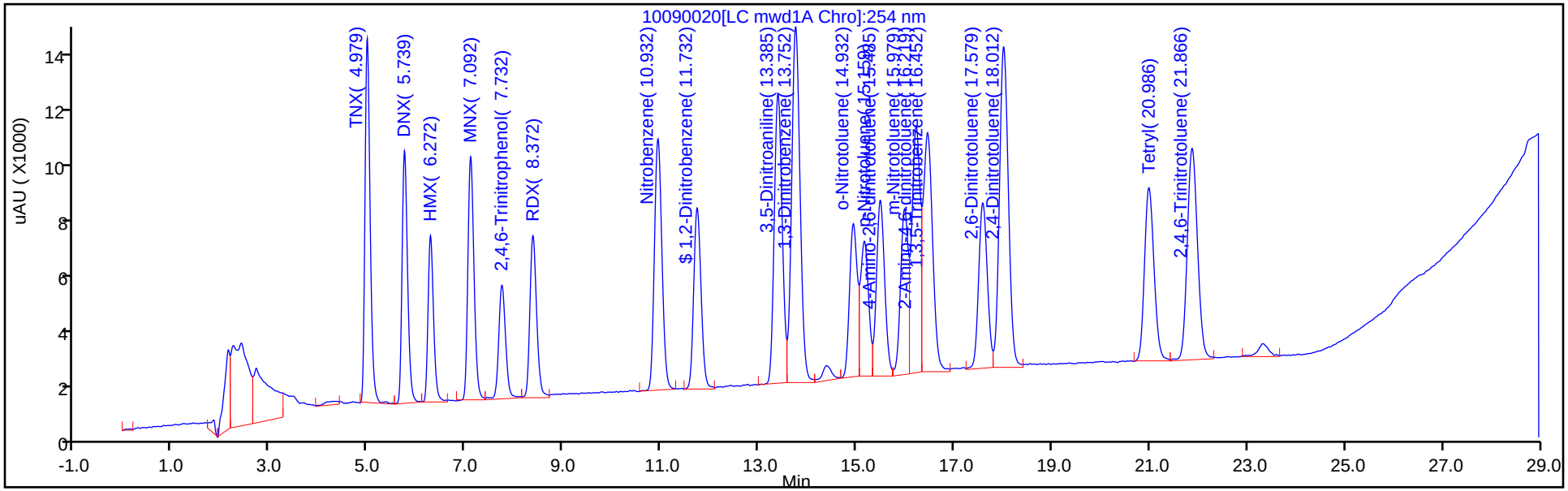
Report Date: 10-Oct-2024 15:42:17 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Denver

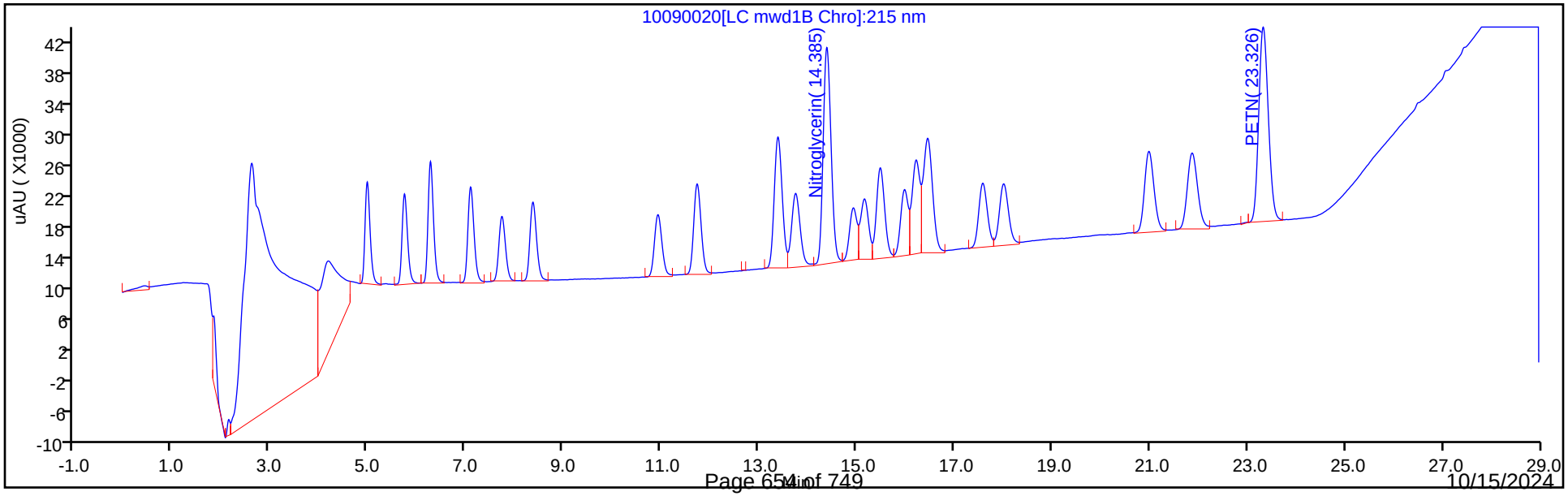
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20241009-138425.b\10090020.D

Injection Date:	10-Oct-2024 02:20:12	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	CCV DMT			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: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



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FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-197447-1

SDG No.:

Lab Sample ID: CCV 280-670394/22 | Calibration Date: 10/10/2024 03:30

Instrument ID: CHHPLC_X5 | Calib Start Date: 08/10/2024 20:22

GC Column: Luna-phenylhex ID: 4.60(mm) | Calib End Date: 08/11/2024 01:01

Lab File ID: 10090022.D | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	180338	179000		248	250	-0.7	20.0
Picric acid	Ave	149859	151536		253	250	1.1	20.0
RDX	Ave	220357	210588		239	250	-4.4	20.0
Nitrobenzene	Ave	376935	368564		244	250	-2.2	20.0
3,5-Dinitroaniline	Lin2		446100		255	250	2.2	20.0
1,3-Dinitrobenzene	Ave	585242	578936		247	250	-1.1	20.0
Nitroglycerin	Ave	128152	124720		2430	2500	-2.7	20.0
2-Nitrotoluene	Ave	235862	227772		241	250	-3.4	20.0
4-Nitrotoluene	Ave	211671	212432		251	250	0.4	20.0
4-Amino-2,6-dinitrotoluene	Ave	278588	277060		249	250	-0.5	20.0
3-Nitrotoluene	Ave	258224	239284		232	250	-7.3	20.0
2-Amino-4,6-dinitrotoluene	Ave	389409	392896		252	250	0.9	20.0
1,3,5-Trinitrobenzene	Ave	423794	425284		251	250	0.4	20.0
2,6-Dinitrotoluene	Ave	284676	270608		238	250	-4.9	20.0
2,4-Dinitrotoluene	Ave	568510	548840		241	250	-3.5	20.0
Tetryl	Ave	283338	318088		281	250	12.3	20.0
2,4,6-Trinitrotoluene	Ave	416224	419504		252	250	0.8	20.0
PETN	Ave	135807	138394		2550	2500	1.9	20.0
1,2-Dinitrobenzene	Ave	262489	261968		250	250	-0.2	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Lab Sample ID: CCV 280-670394/22 Calibration Date: 10/10/2024 03:30

Instrument ID: CHHPLC_X5 Calib Start Date: 08/10/2024 20:22

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 08/11/2024 01:01

Lab File ID: 10090022.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.27	6.12	6.42
Picric acid	7.72	7.62	7.92
RDX	8.36	8.22	8.52
Nitrobenzene	10.92	10.78	11.08
3,5-Dinitroaniline	13.38	13.24	13.54
1,3-Dinitrobenzene	13.74	13.60	13.90
Nitroglycerin	14.38	14.24	14.54
2-Nitrotoluene	14.92	14.78	15.08
4-Nitrotoluene	15.15	15.01	15.31
4-Amino-2,6-dinitrotoluene	15.47	15.33	15.63
3-Nitrotoluene	15.97	15.83	16.13
2-Amino-4,6-dinitrotoluene	16.21	16.06	16.36
1,3,5-Trinitrobenzene	16.44	16.30	16.60
2,6-Dinitrotoluene	17.57	17.43	17.73
2,4-Dinitrotoluene	18.00	17.85	18.15
Tetryl	20.98	20.82	21.12
2,4,6-Trinitrotoluene	21.86	21.71	22.01
PETN	23.32	23.16	23.46
1,2-Dinitrobenzene	11.72	11.58	11.88

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20241009-138425.b\10090022.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 10-Oct-2024 03:30:04 ALS Bottle#: 7 Worklist Smp#: 22
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub6

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20241009-138425.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 12-Oct-2024 16:19:05 Calib Date: 11-Aug-2024 06:16:04
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1604

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	4.972	4.977	-0.005	90665	0.2508	0.2358	
4 DNX	1	5.732	5.737	-0.005	67013	0.2503	0.2316	
5 HMX	1	6.265	6.270	-0.005	44750	0.2500	0.2481	
6 MNX	1	7.085	7.090	-0.005	71898	0.2918	0.2702	
7 2,4,6-Trinitrophenol	1	7.718	7.770	-0.052	37884	0.2500	0.2528	
8 RDX	1	8.358	8.370	-0.012	52647	0.2500	0.2389	
9 Nitrobenzene	1	10.918	10.930	-0.012	92141	0.2500	0.2444	
$ 10 1,2-Dinitrobenzene	1	11.718	11.730	-0.012	65492	0.2500	0.2495	
11 3,5-Dinitroaniline	1	13.378	13.390	-0.012	111525	0.2500	0.2554	
12 1,3-Dinitrobenzene	1	13.738	13.750	-0.012	144734	0.2500	0.2473	
13 Nitroglycerin	2	14.378	14.390	-0.012	311799	2.50	2.43	
14 o-Nitrotoluene	1	14.918	14.930	-0.012	56943	0.2500	0.2414	
16 p-Nitrotoluene	1	15.145	15.156	-0.011	53108	0.2500	0.2509	
17 4-Amino-2,6-dinitrotoluene	1	15.472	15.476	-0.004	69265	0.2500	0.2486	
18 m-Nitrotoluene	1	15.972	15.976	-0.004	59821	0.2500	0.2317	
19 2-Amino-4,6-dinitrotoluene	1	16.205	16.210	-0.005	98224	0.2500	0.2522	
20 1,3,5-Trinitrobenzene	1	16.438	16.450	-0.012	106321	0.2500	0.2509	
21 2,6-Dinitrotoluene	1	17.572	17.576	-0.004	67652	0.2500	0.2376	
22 2,4-Dinitrotoluene	1	17.998	18.003	-0.005	137210	0.2500	0.2414	
23 Tetryl	1	20.978	20.970	0.008	79522	0.2500	0.2807	
24 2,4,6-Trinitrotoluene	1	21.858	21.863	-0.005	104876	0.2500	0.2520	
25 PETN	2	23.318	23.310	0.008	345985	2.50	2.55	

Reagents:

8330 DMT_00018 Amount Added: 12.50 Units: uL
8330IntermStk_00082 Amount Added: 25.00 Units: uL

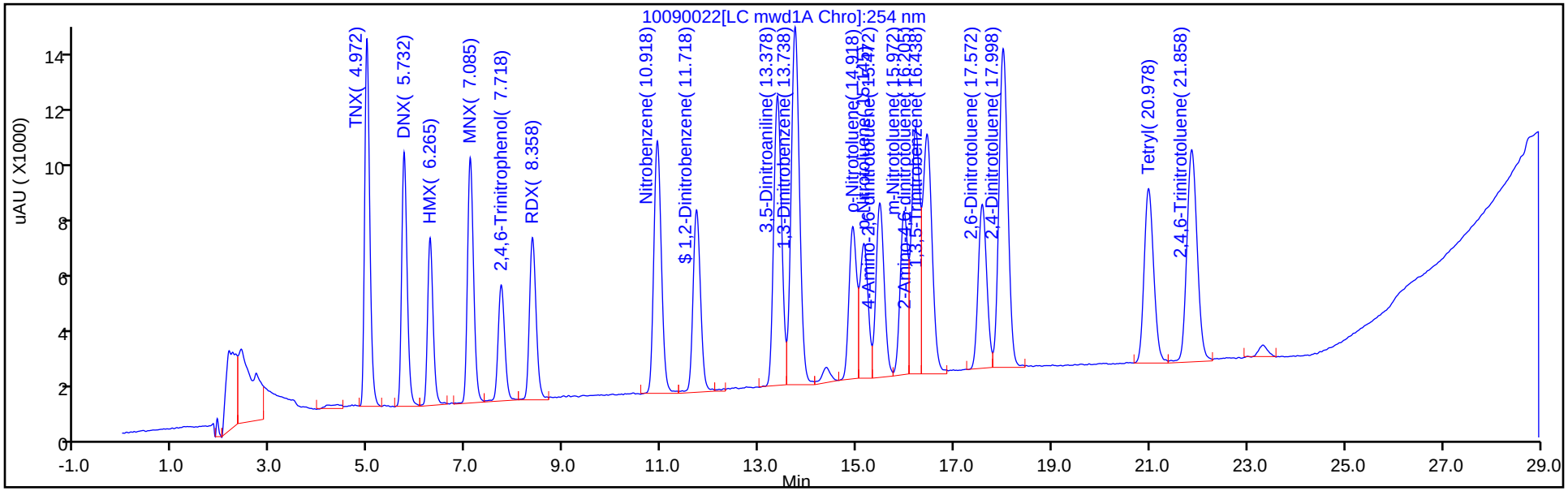
Report Date: 12-Oct-2024 16:19:05 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Denver

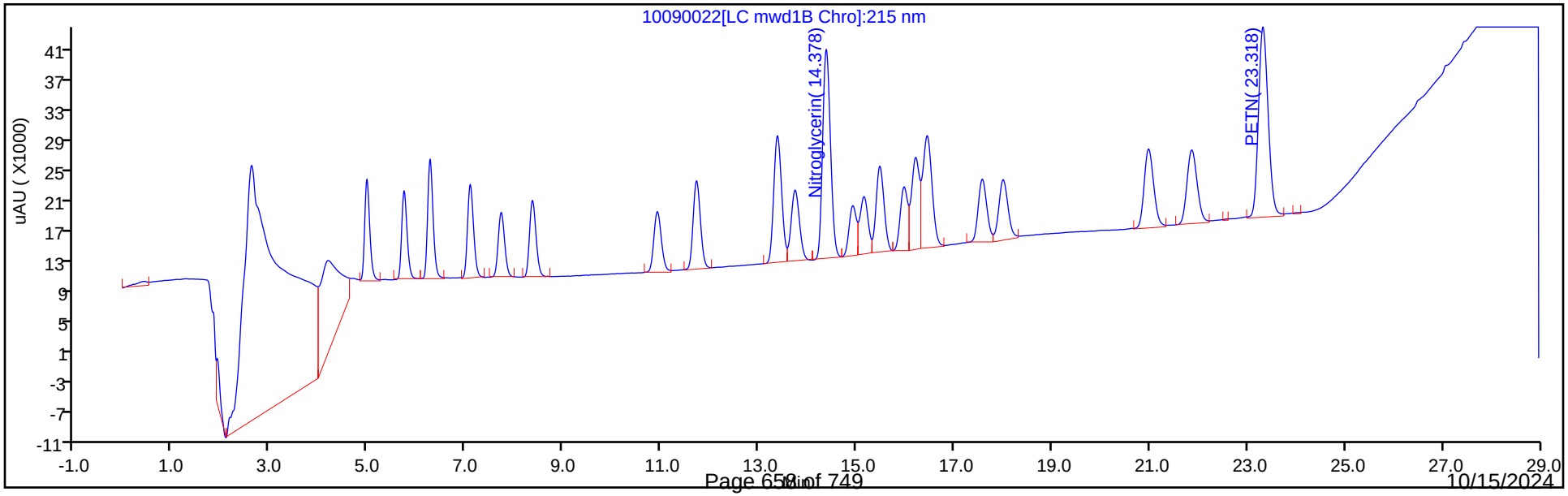
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20241009-138425.b\10090022.D

Injection Date:	10-Oct-2024 03:30:04	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	22
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: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



10/15/2024
4:48:23 PM

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Lab Sample ID: CCV 280-670394/22 Calibration Date: 10/10/2024 03:30

Instrument ID: CHHPLC_X5 Calib Start Date: 08/11/2024 02:11

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 08/11/2024 06:16

Lab File ID: 10090022.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Lin2		361575		236	251	-6.0	20.0
DNX	Lin2		267784		232	250	-7.4	20.0
MNX	Lin2		246437		270	292	-7.4	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Lab Sample ID: CCV 280-670394/22 Calibration Date: 10/10/2024 03:30

Instrument ID: CHHPLC_X5 Calib Start Date: 08/11/2024 02:11

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 08/11/2024 06:16

Lab File ID: 10090022.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	4.97	4.83	5.13
DNX	5.73	5.59	5.89
MNX	7.09	6.94	7.24

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20241009-138425.b\10090022.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 10-Oct-2024 03:30:04 ALS Bottle#: 7 Worklist Smp#: 22
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub6

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20241009-138425.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 12-Oct-2024 16:19:05 Calib Date: 11-Aug-2024 06:16:04
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20240810-136368.b\08100027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1604

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	4.972	4.977	-0.005	90665	0.2508	0.2358	
4 DNX	1	5.732	5.737	-0.005	67013	0.2503	0.2316	
5 HMX	1	6.265	6.270	-0.005	44750	0.2500	0.2481	
6 MNX	1	7.085	7.090	-0.005	71898	0.2918	0.2702	
7 2,4,6-Trinitrophenol	1	7.718	7.770	-0.052	37884	0.2500	0.2528	
8 RDX	1	8.358	8.370	-0.012	52647	0.2500	0.2389	
9 Nitrobenzene	1	10.918	10.930	-0.012	92141	0.2500	0.2444	
$ 10 1,2-Dinitrobenzene	1	11.718	11.730	-0.012	65492	0.2500	0.2495	
11 3,5-Dinitroaniline	1	13.378	13.390	-0.012	111525	0.2500	0.2554	
12 1,3-Dinitrobenzene	1	13.738	13.750	-0.012	144734	0.2500	0.2473	
13 Nitroglycerin	2	14.378	14.390	-0.012	311799	2.50	2.43	
14 o-Nitrotoluene	1	14.918	14.930	-0.012	56943	0.2500	0.2414	
16 p-Nitrotoluene	1	15.145	15.156	-0.011	53108	0.2500	0.2509	
17 4-Amino-2,6-dinitrotoluene	1	15.472	15.476	-0.004	69265	0.2500	0.2486	
18 m-Nitrotoluene	1	15.972	15.976	-0.004	59821	0.2500	0.2317	
19 2-Amino-4,6-dinitrotoluene	1	16.205	16.210	-0.005	98224	0.2500	0.2522	
20 1,3,5-Trinitrobenzene	1	16.438	16.450	-0.012	106321	0.2500	0.2509	
21 2,6-Dinitrotoluene	1	17.572	17.576	-0.004	67652	0.2500	0.2376	
22 2,4-Dinitrotoluene	1	17.998	18.003	-0.005	137210	0.2500	0.2414	
23 Tetryl	1	20.978	20.970	0.008	79522	0.2500	0.2807	
24 2,4,6-Trinitrotoluene	1	21.858	21.863	-0.005	104876	0.2500	0.2520	
25 PETN	2	23.318	23.310	0.008	345985	2.50	2.55	

Reagents:

8330 DMT_00018 Amount Added: 12.50 Units: uL
8330IntermStk_00082 Amount Added: 25.00 Units: uL

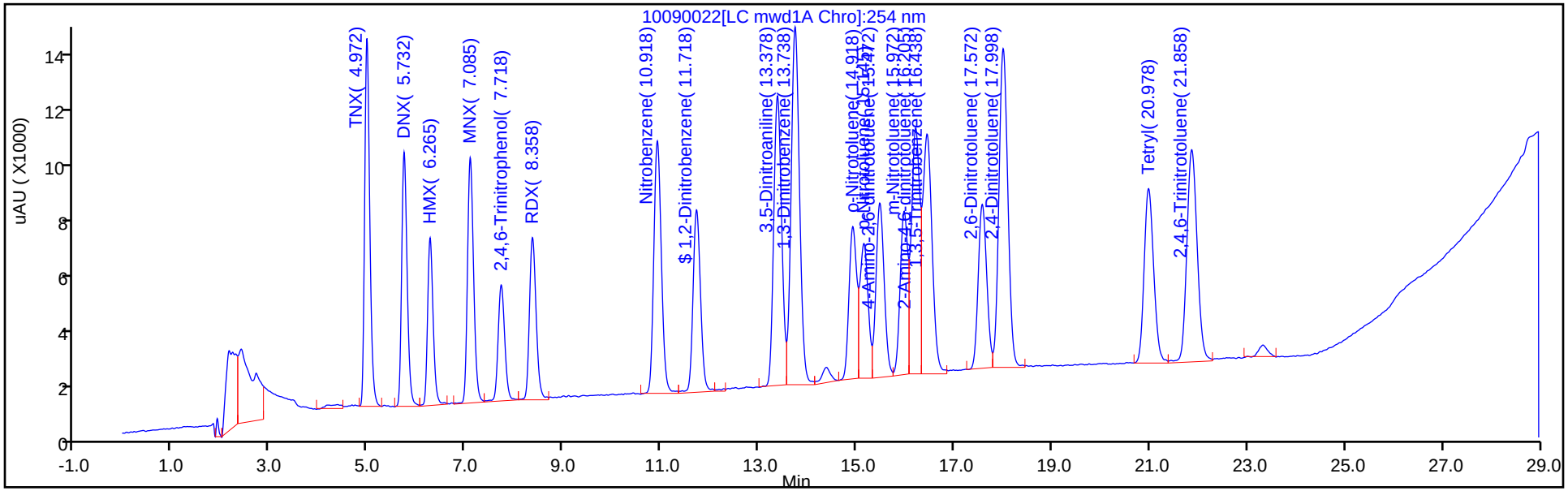
Report Date: 12-Oct-2024 16:19:05 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Denver

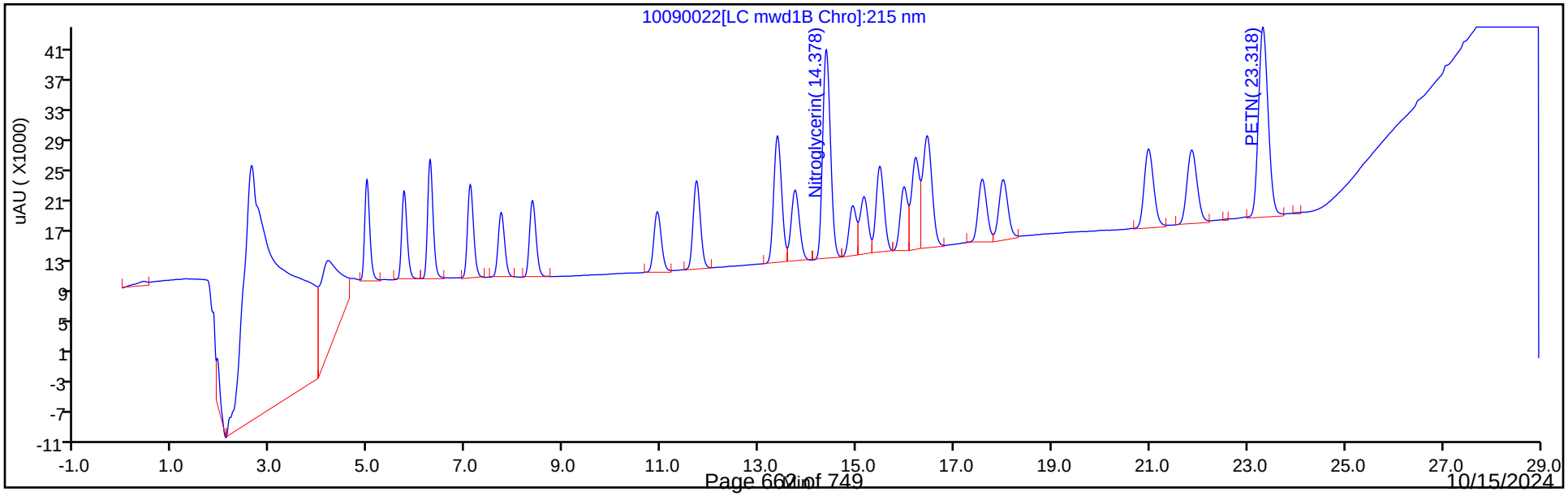
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20241009-138425.b\10090022.D

Injection Date:	10-Oct-2024 03:30:04	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	22
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: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



10/15/2024
4:48:23 PM

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-197447-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-669777/1-A

Matrix: Water | Lab File ID: 10080042.D

Analysis Method: 8330B | Date Collected:

Extraction Method: 3535 | Date Extracted: 10/04/2024 12:25

Sample wt/vol: 500(mL) | Date Analyzed: 10/09/2024 05:24

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 670184 | Units: ug/L

Preparation Batch No.: 669777 | Instrument ID: CHHPLC_X3

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.20	U M	0.21	0.20	0.084
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	0.35	U	0.40	0.35	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
98-95-3	Nitrobenzene	0.20	U	0.21	0.20	0.091
55-63-0	Nitroglycerin	2.0	U	2.1	2.0	0.92
78-11-5	PETN	1.0	U	1.1	1.0	0.45
121-82-4	RDX	0.20	U	0.21	0.20	0.052
479-45-8	Tetryl	0.10	U	0.11	0.10	0.032

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

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\10080042.D
Lims ID: MB 280-669777/1-A
Client ID:
Sample Type: MB
Inject. Date: 09-Oct-2024 05:24:47 ALS Bottle#: 42 Worklist Smp#: 42
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-669777/1-A
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Oct-2024 11:37:18 Calib Date: 04-Oct-2024 19:55:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1609

First Level Reviewer: LV5D Date: 09-Oct-2024 11:16:13

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	1 Triamine Trinitrobenzene	1		2.444				ND	
	2 2,6-diamino-4-nitrotoluene	1		6.407				ND	
	3 TNX	1		6.430				ND	
	4 HMX	1		6.564				ND	
	5 2,4-diamino-6-nitrotoluene	1		6.588				ND	
	6 DNX	1		6.737				ND	
	7 MNX	1		7.144				ND	
	8 RDX	1		7.497				ND	
	9 2,4,6-Trinitrophenol	1		7.917				ND	
$	10 1,2-Dinitrobenzene	1	8.373	8.364	0.009	26288	0.2000	0.2016	M
	11 1,3,5-Trinitrobenzene	1		8.464				ND	U
	12 1,3-Dinitrobenzene	1		9.024				ND	
	13 Nitrobenzene	1		9.344				ND	
	14 3,5-Dinitroaniline	1		9.550				ND	
	15 Tetryl	1		9.664				ND	
	16 Nitroglycerin	2		10.110				ND	
	17 2,4,6-Trinitrotoluene	1		10.457				ND	
	18 4-Amino-2,6-dinitrotoluene	1		10.617				ND	7
	19 2-Amino-4,6-dinitrotoluene	1		10.850				ND	
	20 2,6-Dinitrotoluene	1		10.984				ND	
	21 2,4-Dinitrotoluene	1		11.130				ND	
	22 o-Nitrotoluene	1		11.824				ND	
	23 p-Nitrotoluene	1		12.197				ND	
	24 m-Nitrotoluene	1		12.697				ND	
	25 PETN	2		13.764				ND	
	26 Ammonium Picrate	1		0.000				ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Review Flags
M - Manually Integrated
U - Marked Undetected

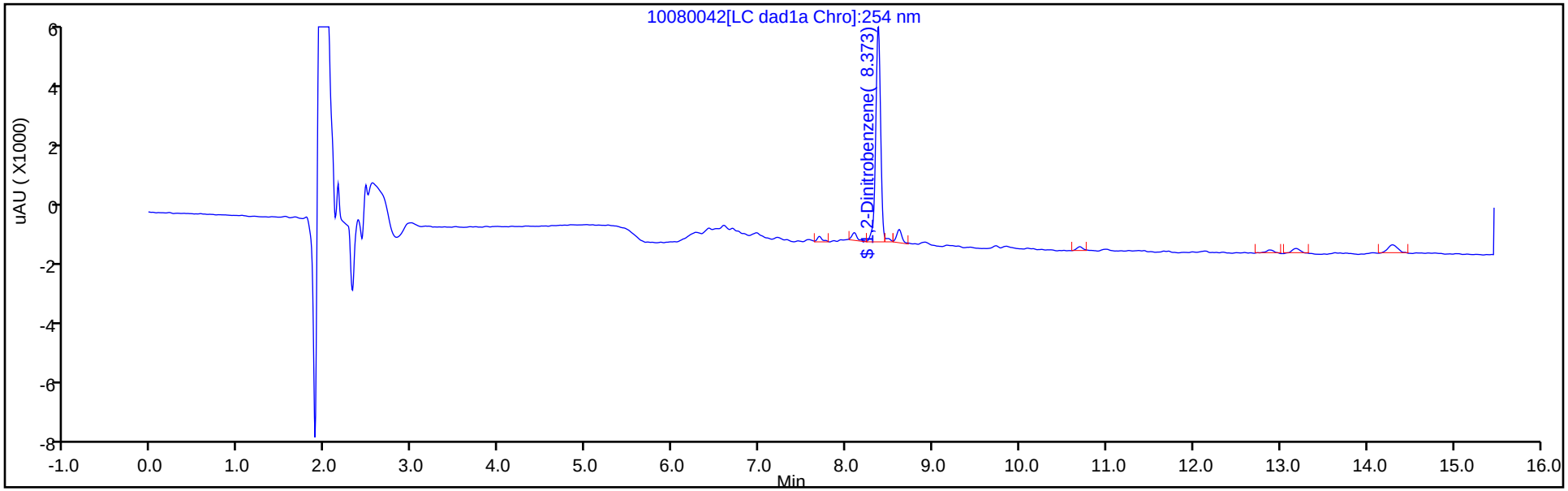
Report Date: 09-Oct-2024 11:37:20 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Denver

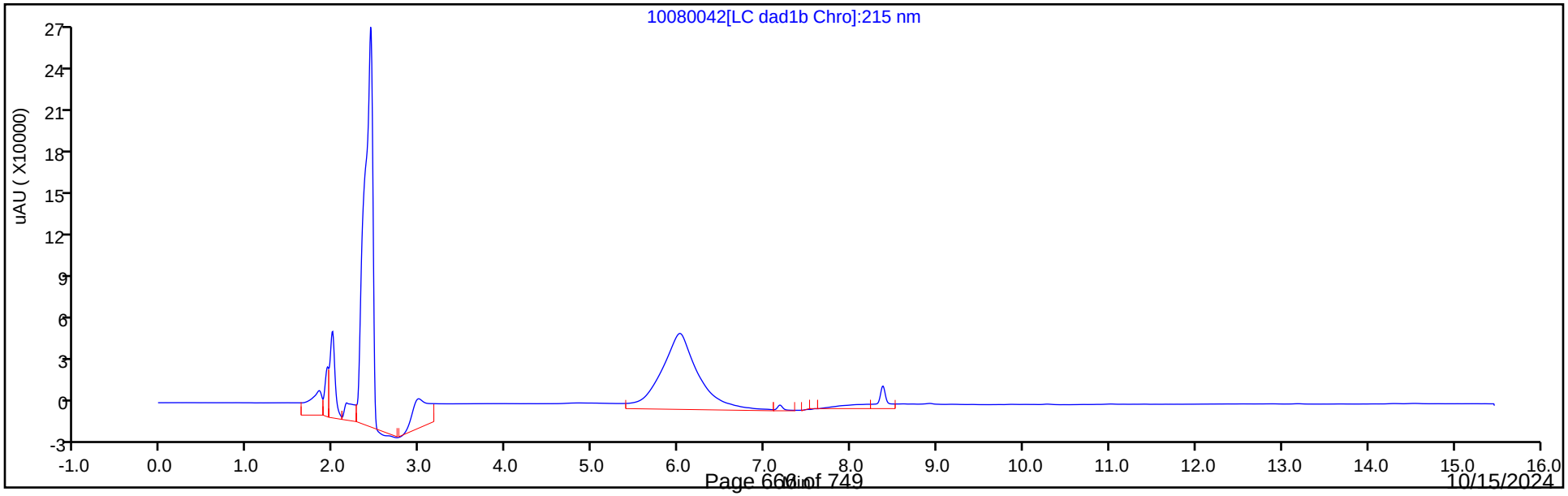
Data File: \\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080042.d

Injection Date:	09-Oct-2024 05:24:47	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	MB 280-669777/1-A			Worklist Smp#:	42
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	42
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\10080042.D				
Lims ID:	MB 280-669777/1-A				
Client ID:					
Sample Type:	MB				
Inject. Date:	09-Oct-2024 05:24:47	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	MB 280-669777/1-A				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	09-Oct-2024 11:37:18	Calib Date:	04-Oct-2024 19:55:02		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1609				

First Level Reviewer: LV5D Date: 09-Oct-2024 11:16:13

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2016	100.79

Manual Integration/User Assign Peak Report

Eurofins Denver

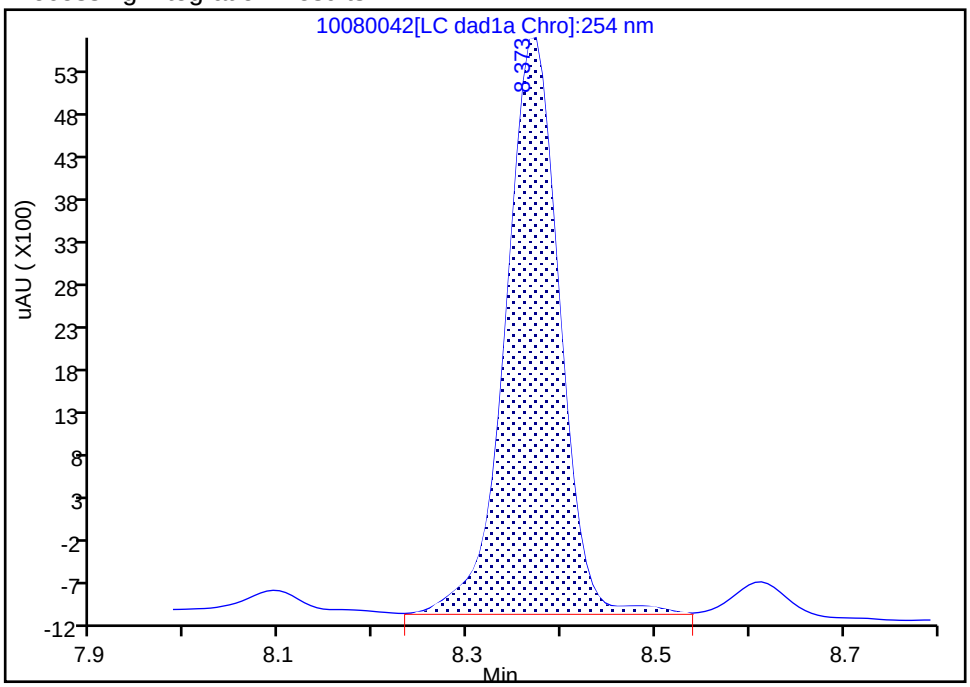
Data File: \\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080042.d
Injection Date: 09-Oct-2024 05:24:47 Instrument ID: CHHPLC_X3
Lims ID: MB 280-669777/1-A
Client ID:
Operator ID: JZ ALS Bottle#: 42 Worklist Smp#: 42
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

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

Signal: 1

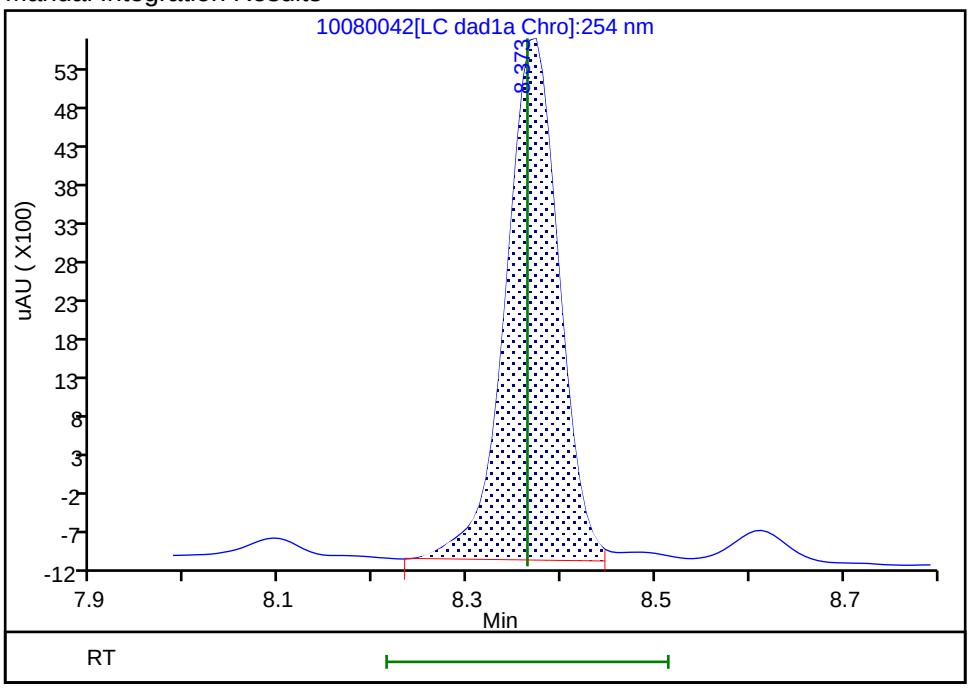
Processing Integration Results

RT: 8.37
Area: 26749
Amount: 0.205115
Amount Units: ug/mL



Manual Integration Results

RT: 8.37
Area: 26288
Amount: 0.201580
Amount Units: ug/mL



Reviewer: LV5D, 09-Oct-2024 11:16:12 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

User Disabled Compound Report

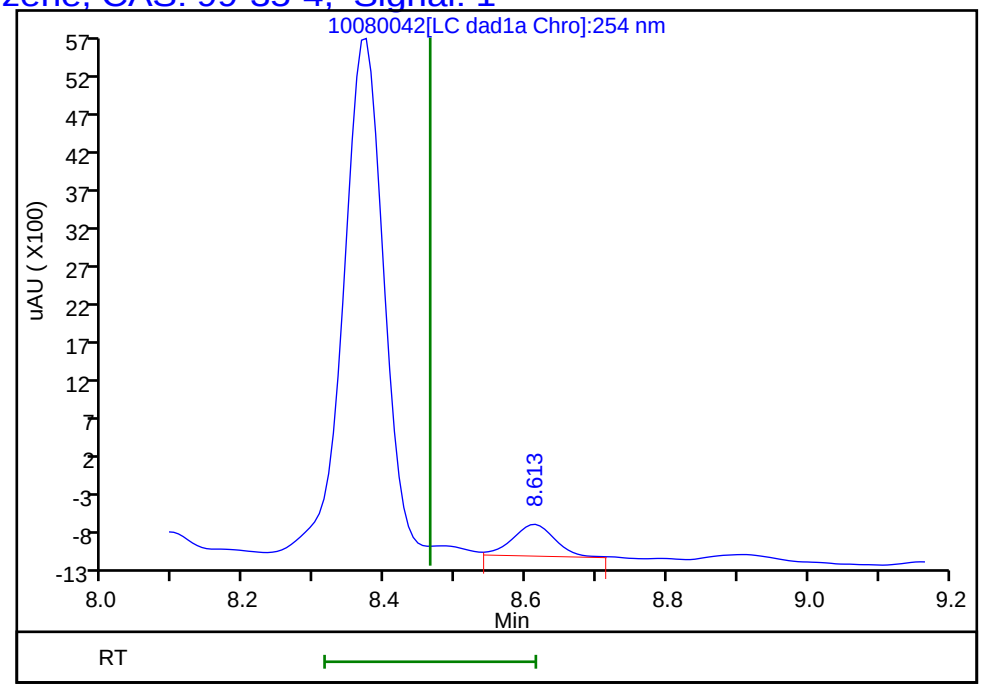
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080042.d
Injection Date: 09-Oct-2024 05:24:47 Instrument ID: CHHPLC_X3
Lims ID: MB 280-669777/1-A
Client ID:
Operator ID: JZ ALS Bottle#: 42 Worklist Smp#: 42
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

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

RT: 8.61
Response: 1612
Amount: 0.007417



Reviewer: LV5D, 09-Oct-2024 11:16:13
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-197447-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-670001/1-A

Matrix: Water | Lab File ID: 10080011.D

Analysis Method: 8330B | Date Collected:

Extraction Method: 3535 | Date Extracted: 10/07/2024 13:45

Sample wt/vol: 500(mL) | Date Analyzed: 10/08/2024 18:04

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 670183 | Units: ug/L

Preparation Batch No.: 670001 | Instrument ID: CHHPLC_X3

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	0.35	U	0.40	0.35	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
98-95-3	Nitrobenzene	0.20	U	0.21	0.20	0.091
55-63-0	Nitroglycerin	2.0	U	2.1	2.0	0.92
78-11-5	PETN	1.0	U	1.1	1.0	0.45
121-82-4	RDX	0.20	U	0.21	0.20	0.052
479-45-8	Tetryl	0.10	U	0.11	0.10	0.032

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

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\10080011.D
Lims ID: MB 280-670001/1-A
Client ID:
Sample Type: MB
Inject. Date: 08-Oct-2024 18:04:39 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-670001/1-A
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Oct-2024 11:35:58 Calib Date: 04-Oct-2024 19:55:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1609

First Level Reviewer: LV5D Date: 08-Oct-2024 18:47:59

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	1 Triamine Trinitrobenzene	1		2.444				ND	
	2 2,6-diamino-4-nitrotoluene	1		6.407				ND	
	3 TNX	1		6.430				ND	
	4 HMX	1		6.564				ND	
	5 2,4-diamino-6-nitrotoluene	1		6.588				ND	
	6 DNX	1		6.737				ND	
	7 MNX	1		7.144				ND	
	8 RDX	1		7.497				ND	
	9 2,4,6-Trinitrophenol	1		7.917				ND	
$	10 1,2-Dinitrobenzene	1	8.375	8.364	0.011	25345	0.2000	0.1943	M
	11 1,3,5-Trinitrobenzene	1		8.464				ND	
	12 1,3-Dinitrobenzene	1		9.024				ND	
	13 Nitrobenzene	1		9.344				ND	
	14 3,5-Dinitroaniline	1		9.550				ND	
	15 Tetryl	1		9.664				ND	
	16 Nitroglycerin	2		10.110				ND	
	17 2,4,6-Trinitrotoluene	1		10.457				ND	
	18 4-Amino-2,6-dinitrotoluene	1		10.617				ND	
	19 2-Amino-4,6-dinitrotoluene	1		10.850				ND	
	20 2,6-Dinitrotoluene	1		10.984				ND	
	21 2,4-Dinitrotoluene	1		11.130				ND	
	22 o-Nitrotoluene	1		11.824				ND	
	23 p-Nitrotoluene	1		12.197				ND	
	24 m-Nitrotoluene	1		12.697				ND	
	25 PETN	2		13.764				ND	
	26 Ammonium Picrate	1		0.000				ND	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated

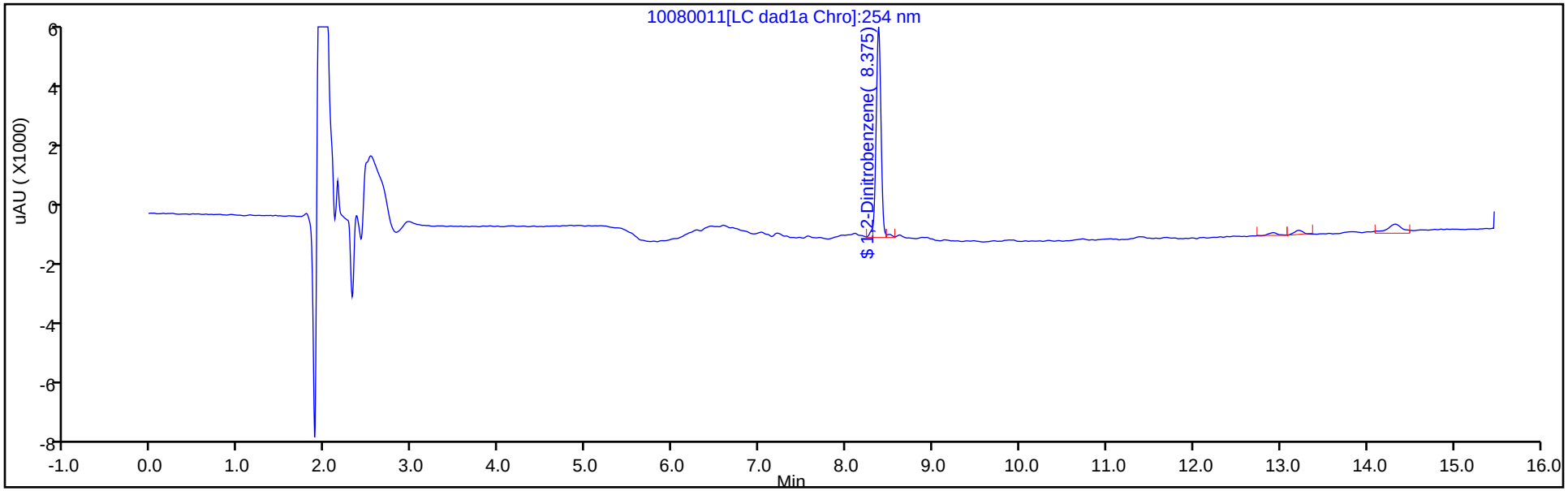
Report Date: 09-Oct-2024 11:36:02 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Denver

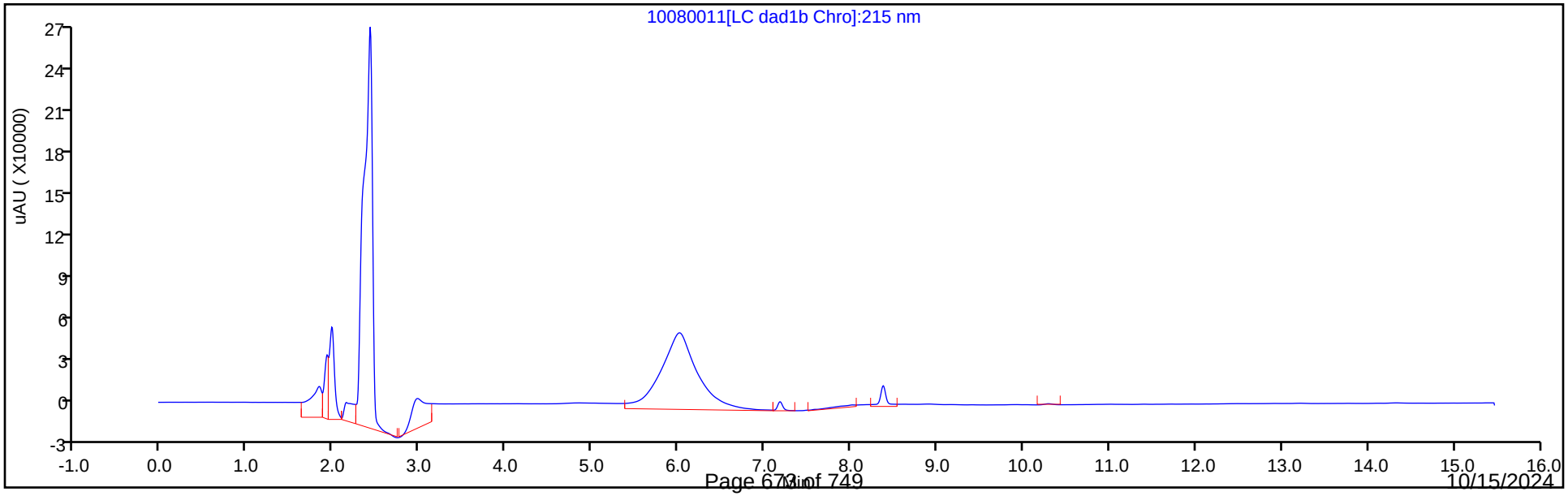
Data File: \\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080011.d

Injection Date:	08-Oct-2024 18:04:39	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	MB 280-670001/1-A			Worklist Smp#:	11
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



10/15/2024
4:48:23 PM

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\10080011.D				
Lims ID:	MB 280-670001/1-A				
Client ID:					
Sample Type:	MB				
Inject. Date:	08-Oct-2024 18:04:39	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	MB 280-670001/1-A				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	09-Oct-2024 11:35:58	Calib Date:	04-Oct-2024 19:55:02		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1609				

First Level Reviewer: LV5D Date: 08-Oct-2024 18:47:59

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1943	97.17

Manual Integration/User Assign Peak Report

Eurofins Denver

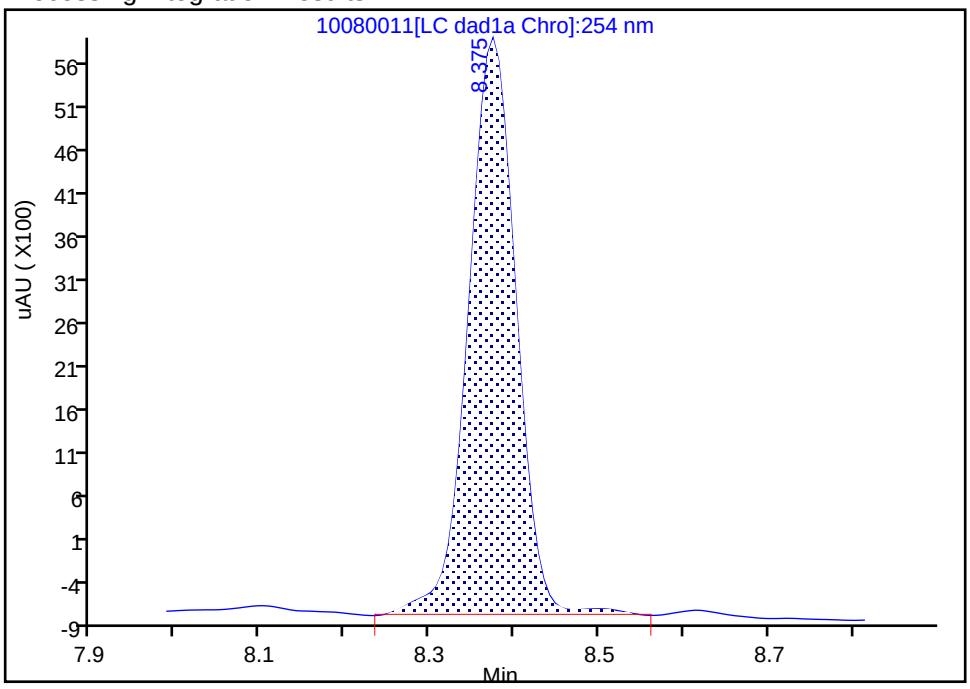
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080011.d				
Injection Date:	08-Oct-2024 18:04:39	Instrument ID:	CHHPLC_X3		
Lims ID:	MB 280-670001/1-A				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

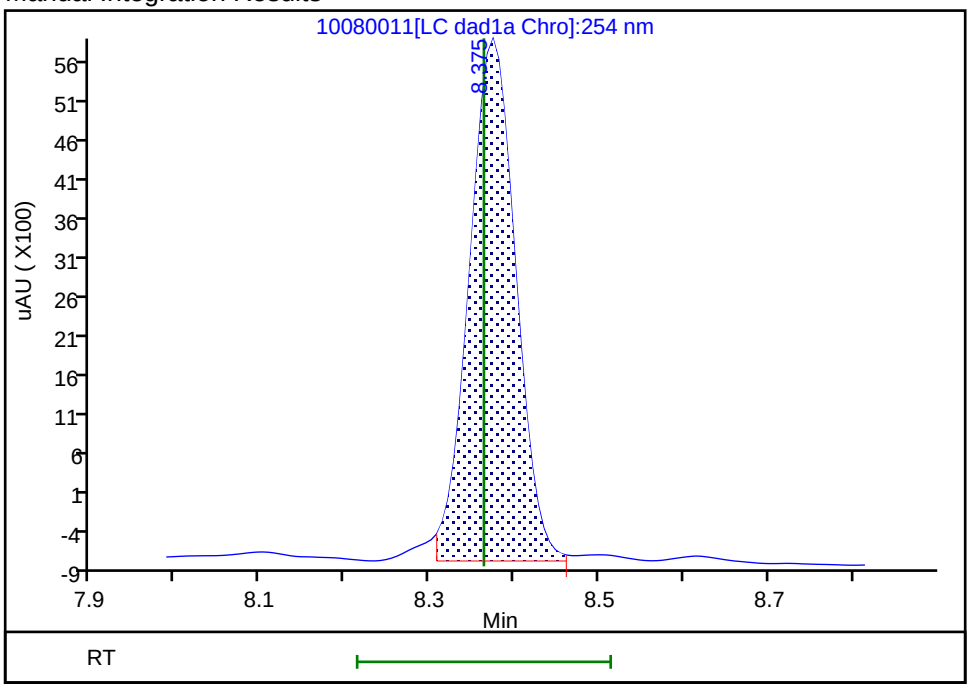
Processing Integration Results

RT: 8.37
Area: 26209
Amount: 0.200974
Amount Units: ug/mL



Manual Integration Results

RT: 8.37
Area: 25345
Amount: 0.194349
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 18:47:57 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-197447-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-670642/1-A

Matrix: Water | Lab File ID: 10110011.D

Analysis Method: 8330B | Date Collected:

Extraction Method: 3535 | Date Extracted: 10/11/2024 12:06

Sample wt/vol: 500(mL) | Date Analyzed: 10/11/2024 17:34

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 670729 | Units: ug/L

Preparation Batch No.: 670642 | Instrument ID: CHHPLC_X3

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	0.35	U	0.40	0.35	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
98-95-3	Nitrobenzene	0.20	U	0.21	0.20	0.091
55-63-0	Nitroglycerin	2.0	U	2.1	2.0	0.92
78-11-5	PETN	1.0	U	1.1	1.0	0.45
121-82-4	RDX	0.20	U	0.21	0.20	0.052
479-45-8	Tetryl	0.10	U	0.11	0.10	0.032

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

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20241011-138518.b\10110011.D
Lims ID: MB 280-670642/1-A
Client ID:
Sample Type: MB
Inject. Date: 11-Oct-2024 17:34:35 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-670642/1-A
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20241011-138518.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 12-Oct-2024 10:13:25 Calib Date: 04-Oct-2024 19:55:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1603

First Level Reviewer: LV5D Date: 11-Oct-2024 18:05:53

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	1 Triamine Trinitrobenzene	1		2.444				ND	
	2 2,6-diamino-4-nitrotoluene	1		6.407				ND	
	3 TNX	1		6.448				ND	
	4 HMX	1		6.572				ND	
	5 2,4-diamino-6-nitrotoluene	1		6.582				ND	
	6 DNX	1		6.762				ND	
	7 MNX	1		7.162				ND	
	8 RDX	1		7.498				ND	
	9 2,4,6-Trinitrophenol	1		7.912				ND	
$	10 1,2-Dinitrobenzene	1	8.367	8.365	0.002	25287	0.2000	0.1939	M
	11 1,3,5-Trinitrobenzene	1		8.465				ND	7
	12 1,3-Dinitrobenzene	1		9.032				ND	
	13 Nitrobenzene	1		9.345				ND	
	14 3,5-Dinitroaniline	1		9.558				ND	
	15 Tetryl	1		9.672				ND	
	16 Nitroglycerin	2		10.118				ND	
	17 2,4,6-Trinitrotoluene	1		10.472				ND	
	18 4-Amino-2,6-dinitrotoluene	1		10.632				ND	
	19 2-Amino-4,6-dinitrotoluene	1		10.858				ND	
	20 2,6-Dinitrotoluene	1		10.992				ND	
	21 2,4-Dinitrotoluene	1		11.145				ND	
	22 o-Nitrotoluene	1		11.832				ND	
	23 p-Nitrotoluene	1		12.198				ND	
	24 m-Nitrotoluene	1		12.705				ND	
	25 PETN	2		13.772				ND	
	26 Ammonium Picrate	1		0.000				ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Review Flags
M - Manually Integrated

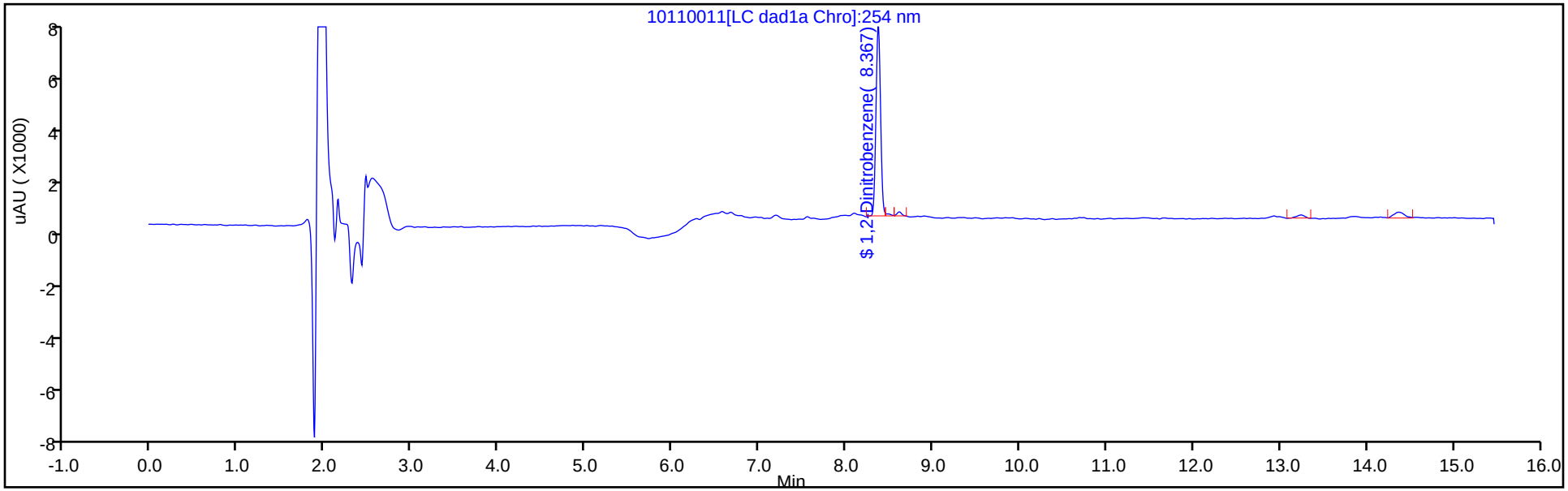
Report Date: 12-Oct-2024 10:13:26 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Denver

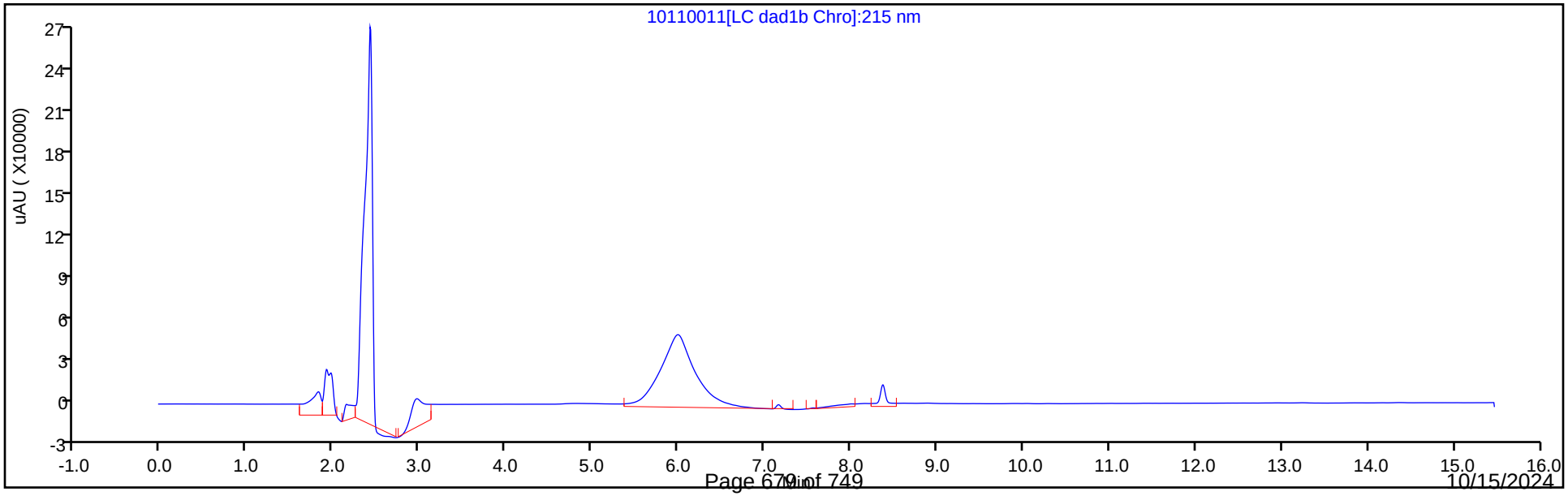
Data File: \\chromfs\denver\chromdata\chhplc_x\20241011-138518.b\10110011.d

Injection Date:	11-Oct-2024 17:34:35	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	MB 280-670642/1-A			Worklist Smp#:	11
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



10/15/2024
4:48:23 PM

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20241011-138518.b\10110011.D				
Lims ID:	MB 280-670642/1-A				
Client ID:					
Sample Type:	MB				
Inject. Date:	11-Oct-2024 17:34:35	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	MB 280-670642/1-A				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20241011-138518.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	12-Oct-2024 10:13:25	Calib Date:	04-Oct-2024 19:55:02		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1603				

First Level Reviewer: LV5D Date: 11-Oct-2024 18:05:53

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1939	96.95

Manual Integration/User Assign Peak Report

Eurofins Denver

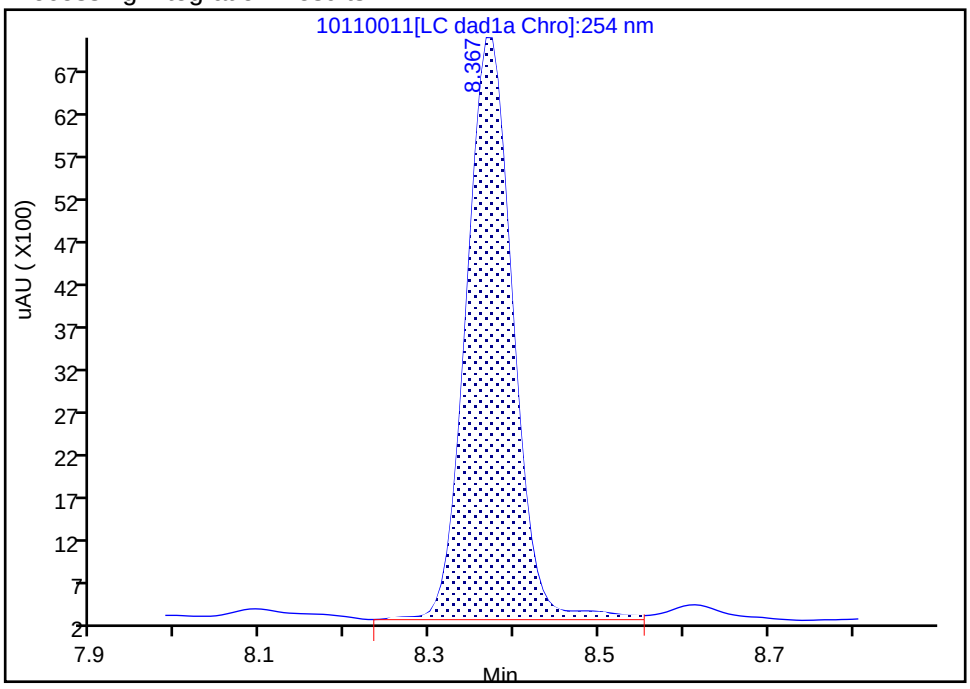
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241011-138518.b\10110011.d				
Injection Date:	11-Oct-2024 17:34:35	Instrument ID:	CHHPLC_X3		
Lims ID:	MB 280-670642/1-A				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

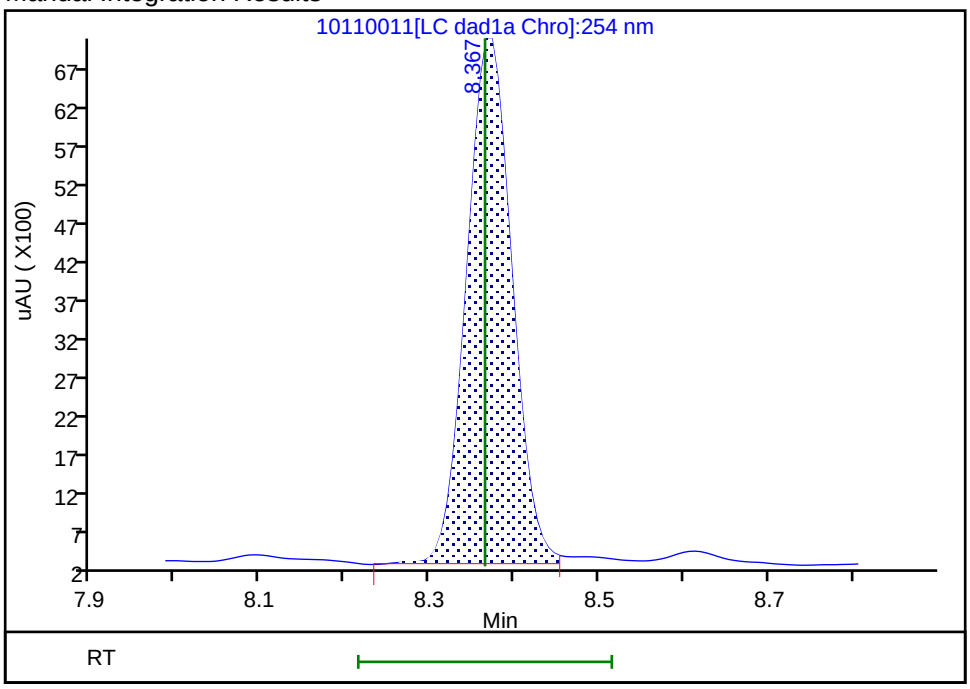
Processing Integration Results

RT: 8.37
Area: 25720
Amount: 0.197224
Amount Units: ug/mL



Manual Integration Results

RT: 8.37
Area: 25287
Amount: 0.193904
Amount Units: ug/mL



Reviewer: LV5D, 11-Oct-2024 18:05:51 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-197447-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-669777/2-A

Matrix: Water | Lab File ID: 10080043.D

Analysis Method: 8330B | Date Collected:

Extraction Method: 3535 | Date Extracted: 10/04/2024 12:25

Sample wt/vol: 500(mL) | Date Analyzed: 10/09/2024 05:46

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 670184 | Units: ug/L

Preparation Batch No.: 669777 | Instrument ID: CHHPLC_X3

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	1.83	M	0.21	0.20	0.084
99-65-0	1,3-Dinitrobenzene	1.70		0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	1.65		0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	1.58		0.10	0.080	0.027
606-20-2	2,6-Dinitrotoluene	1.65		0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	1.62		0.11	0.10	0.051
88-72-2	2-Nitrotoluene	1.22	Q	0.21	0.20	0.086
99-08-1	3-Nitrotoluene	1.23	Q	0.40	0.35	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.52		0.15	0.12	0.058
99-99-0	4-Nitrotoluene	1.27	Q	0.41	0.40	0.10
2691-41-0	HMX	1.68	M	0.21	0.20	0.088
98-95-3	Nitrobenzene	1.42		0.21	0.20	0.091
55-63-0	Nitroglycerin	19.2		2.1	2.0	0.92
78-11-5	PETN	18.6		1.1	1.0	0.45
121-82-4	RDX	1.77		0.21	0.20	0.052
479-45-8	Tetryl	1.76		0.11	0.10	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	87		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\10080043.D
Lims ID: LCS 280-669777/2-A
Client ID:
Sample Type: LCS
Inject. Date: 09-Oct-2024 05:46:44 ALS Bottle#: 43 Worklist Smp#: 43
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-669777/2-A
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Oct-2024 11:37:18 Calib Date: 04-Oct-2024 19:55:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1609

First Level Reviewer: LV5D Date: 09-Oct-2024 11:16:42

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 TNX	1	6.450	6.430	0.020	32066	0.2006	0.1579	M
	4 HMX	1	6.583	6.564	0.019	16263	0.2000	0.1683	M
	6 DNX	1	6.756	6.737	0.019	23751	0.2002	0.1626	M
	7 MNX	1	7.163	7.144	0.019	26548	0.2334	0.1997	
	8 RDX	1	7.516	7.497	0.019	18677	0.2000	0.1765	
	9 2,4,6-Trinitrophenol	1	7.923	7.917	0.006	15143	0.2000	0.2008	
$	10 1,2-Dinitrobenzene	1	8.376	8.364	0.012	22596	0.2000	0.1733	
	11 1,3,5-Trinitrobenzene	1	8.476	8.464	0.012	39676	0.2000	0.1825	M
	12 1,3-Dinitrobenzene	1	9.043	9.024	0.019	50847	0.2000	0.1705	
	13 Nitrobenzene	1	9.356	9.344	0.012	27728	0.2000	0.1421	
	14 3,5-Dinitroaniline	1	9.570	9.550	0.020	37072	0.2000	0.1593	
	15 Tetryl	1	9.676	9.664	0.012	29951	0.2000	0.1755	
	16 Nitroglycerin	2	10.116	10.110	0.006	123393	2.00	1.92	
	17 2,4,6-Trinitrotoluene	1	10.470	10.457	0.013	35910	0.2000	0.1653	
	18 4-Amino-2,6-dinitrotoluene	1	10.636	10.617	0.019	22500	0.2000	0.1522	
	19 2-Amino-4,6-dinitrotoluene	1	10.863	10.850	0.013	33223	0.2000	0.1624	
	20 2,6-Dinitrotoluene	1	10.996	10.984	0.012	23322	0.2000	0.1649	
	21 2,4-Dinitrotoluene	1	11.143	11.130	0.013	46251	0.2000	0.1585	
	22 o-Nitrotoluene	1	11.836	11.824	0.012	15367	0.2000	0.1225	
	23 p-Nitrotoluene	1	12.203	12.197	0.006	13856	0.2000	0.1269	
	24 m-Nitrotoluene	1	12.703	12.697	0.006	16875	0.2000	0.1230	
	25 PETN	2	13.750	13.764	-0.014	134469	2.00	1.86	
	26 Ammonium Picrate	1		0.000			ND	ND	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND
Review Flags
M - Manually Integrated

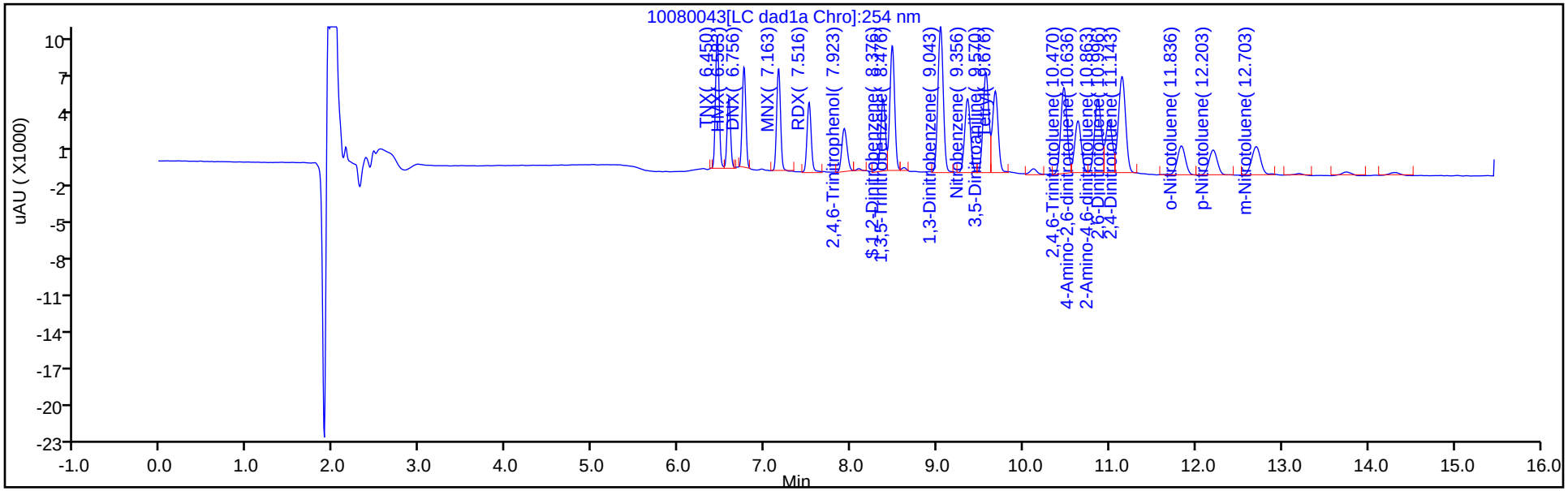
Report Date: 09-Oct-2024 11:37:22 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Denver

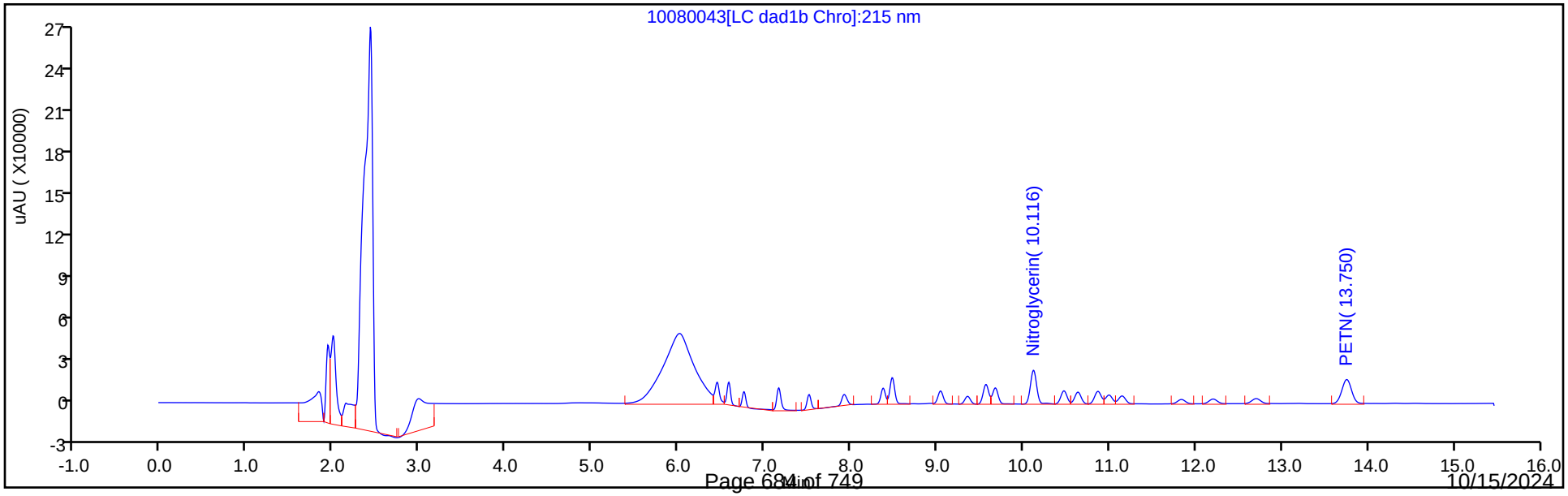
Data File: \\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080043.d

Injection Date:	09-Oct-2024 05:46:44	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	LCS 280-669777/2-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



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



10/15/2024
4:48:23 PM

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\10080043.D				
Lims ID:	LCS 280-669777/2-A				
Client ID:					
Sample Type:	LCS				
Inject. Date:	09-Oct-2024 05:46:44	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCS 280-669777/2-A				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	09-Oct-2024 11:37:18	Calib Date:	04-Oct-2024 19:55:02		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1609				

First Level Reviewer: LV5D Date: 09-Oct-2024 11:16:42

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1733	86.63

Manual Integration/User Assign Peak Report

Eurofins Denver

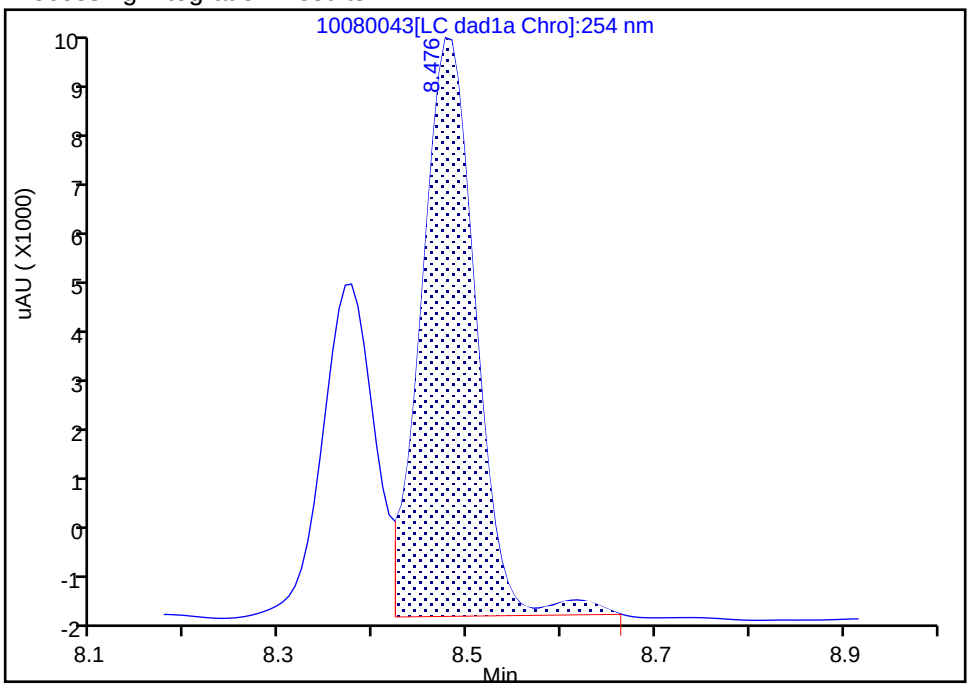
Data File: \\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080043.d
Injection Date: 09-Oct-2024 05:46:44 Instrument ID: CHHPLC_X3
Lims ID: LCS 280-669777/2-A
Client ID:
Operator ID: JZ ALS Bottle#: 43 Worklist Smp#: 43
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

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

Signal: 1

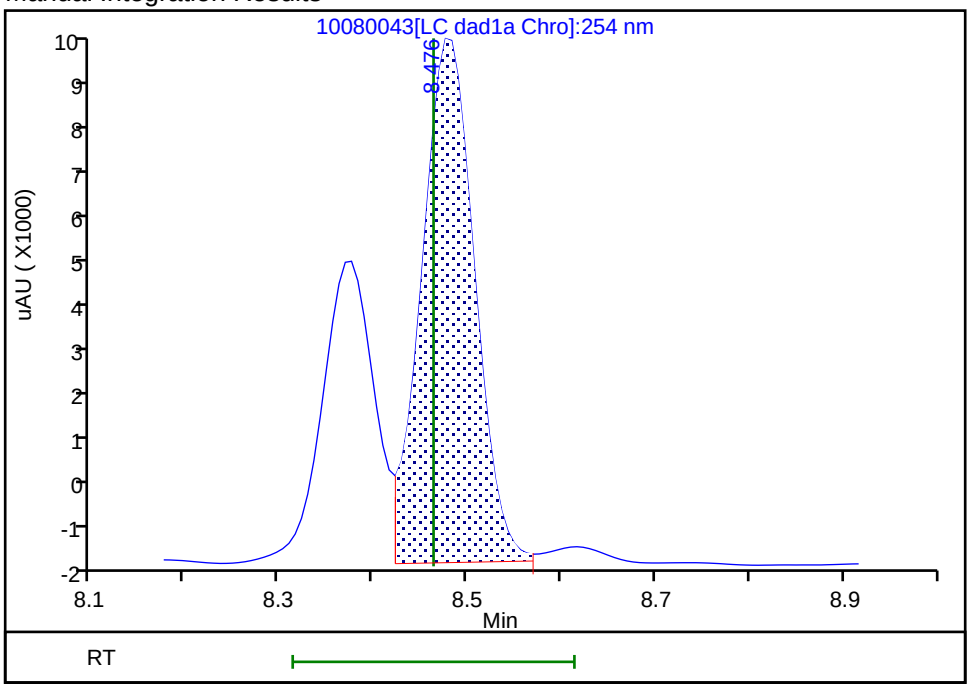
Processing Integration Results

RT: 8.48
Area: 40714
Amount: 0.187320
Amount Units: ug/mL



Manual Integration Results

RT: 8.48
Area: 39676
Amount: 0.182544
Amount Units: ug/mL



Reviewer: LV5D, 09-Oct-2024 11:16:21 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

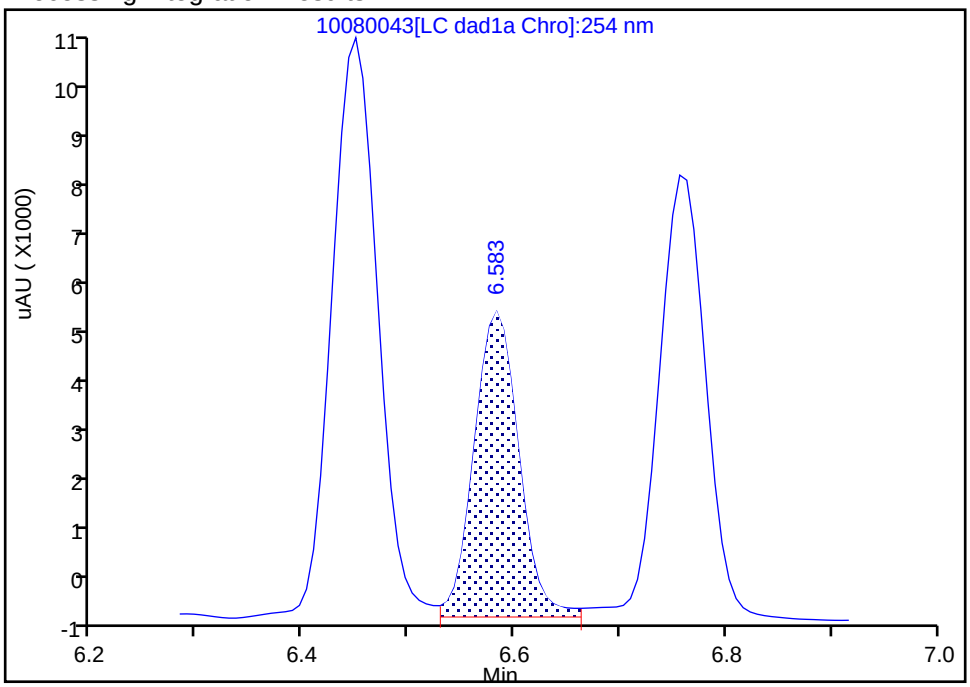
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080043.d				
Injection Date:	09-Oct-2024 05:46:44	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-669777/2-A				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

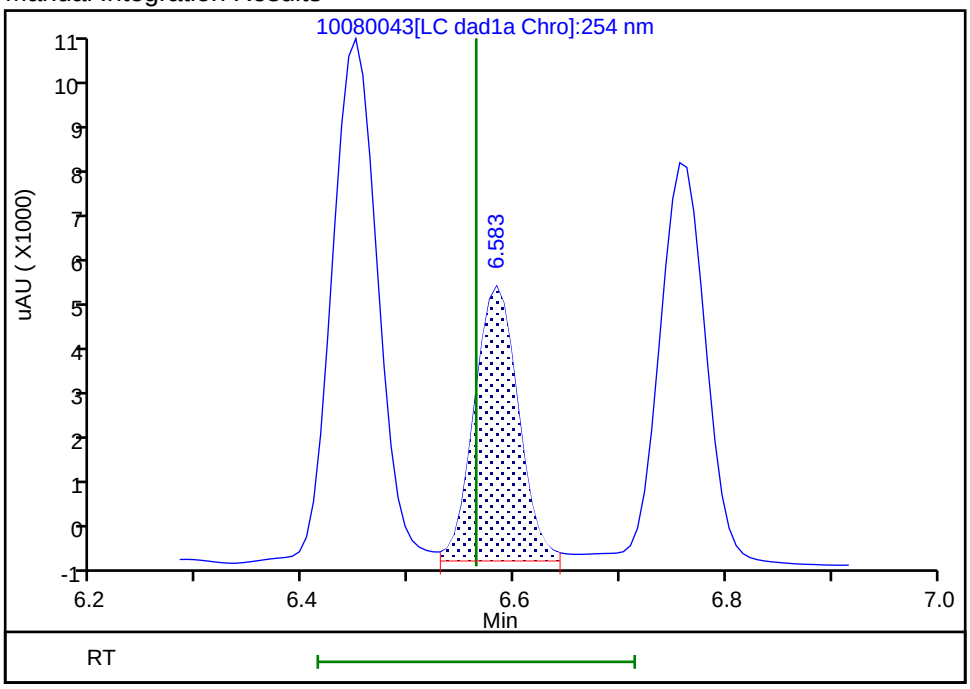
Processing Integration Results

RT: 6.58
Area: 16737
Amount: 0.173166
Amount Units: ug/mL



Manual Integration Results

RT: 6.58
Area: 16263
Amount: 0.168262
Amount Units: ug/mL



Reviewer: LV5D, 09-Oct-2024 11:16:35 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-197447-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-670001/2-A

Matrix: Water | Lab File ID: 10080012.D

Analysis Method: 8330B | Date Collected:

Extraction Method: 3535 | Date Extracted: 10/07/2024 13:45

Sample wt/vol: 500(mL) | Date Analyzed: 10/08/2024 18:26

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 670183 | Units: ug/L

Preparation Batch No.: 670001 | Instrument ID: CHHPLC_X3

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.20		0.21	0.20	0.084
99-65-0	1,3-Dinitrobenzene	2.04		0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	1.96		0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	1.93		0.10	0.080	0.027
606-20-2	2,6-Dinitrotoluene	2.02		0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	1.94		0.11	0.10	0.051
88-72-2	2-Nitrotoluene	1.69		0.21	0.20	0.086
99-08-1	3-Nitrotoluene	1.71		0.40	0.35	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.94		0.15	0.12	0.058
99-99-0	4-Nitrotoluene	1.70		0.41	0.40	0.10
2691-41-0	HMX	1.80		0.21	0.20	0.088
98-95-3	Nitrobenzene	1.86		0.21	0.20	0.091
55-63-0	Nitroglycerin	21.2	M	2.1	2.0	0.92
78-11-5	PETN	21.3		1.1	1.0	0.45
121-82-4	RDX	1.97		0.21	0.20	0.052
479-45-8	Tetryl	2.04		0.11	0.10	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	99		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\10080012.D
Lims ID: LCS 280-670001/2-A
Client ID:
Sample Type: LCS
Inject. Date: 08-Oct-2024 18:26:37 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-670001/2-A
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Oct-2024 11:35:58 Calib Date: 04-Oct-2024 19:55:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1609

First Level Reviewer: LV5D Date: 08-Oct-2024 18:59:19

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.588	6.564	0.024	17386	0.2000	0.1799	
8 RDX	1	7.522	7.497	0.025	20851	0.2000	0.1972	
9 2,4,6-Trinitrophenol	1	7.922	7.917	0.005	17137	0.2000	0.2272	
$ 10 1,2-Dinitrobenzene	1	8.382	8.364	0.018	25788	0.2000	0.1977	
11 1,3,5-Trinitrobenzene	1	8.488	8.464	0.024	47841	0.2000	0.2201	
12 1,3-Dinitrobenzene	1	9.042	9.024	0.018	60735	0.2000	0.2037	
13 Nitrobenzene	1	9.361	9.344	0.017	36375	0.2000	0.1864	
14 3,5-Dinitroaniline	1	9.568	9.550	0.018	44889	0.2000	0.1928	
15 Tetryl	1	9.675	9.664	0.011	34907	0.2000	0.2045	
16 Nitroglycerin	2	10.121	10.110	0.011	136411	2.00	2.12	M
17 2,4,6-Trinitrotoluene	1	10.475	10.457	0.018	42690	0.2000	0.1965	
18 4-Amino-2,6-dinitrotoluene	1	10.635	10.617	0.018	28503	0.2000	0.1940	
19 2-Amino-4,6-dinitrotoluene	1	10.868	10.850	0.018	39624	0.2000	0.1937	
20 2,6-Dinitrotoluene	1	11.001	10.984	0.017	28542	0.2000	0.2021	
21 2,4-Dinitrotoluene	1	11.148	11.130	0.018	56443	0.2000	0.1934	
22 o-Nitrotoluene	1	11.841	11.824	0.017	21227	0.2000	0.1692	
23 p-Nitrotoluene	1	12.208	12.197	0.011	18526	0.2000	0.1702	
24 m-Nitrotoluene	1	12.708	12.697	0.011	23386	0.2000	0.1712	
25 PETN	2	13.761	13.764	-0.003	153840	2.00	2.13	
26 Ammonium Picrate	1		0.000			ND	ND	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND
Review Flags
M - Manually Integrated

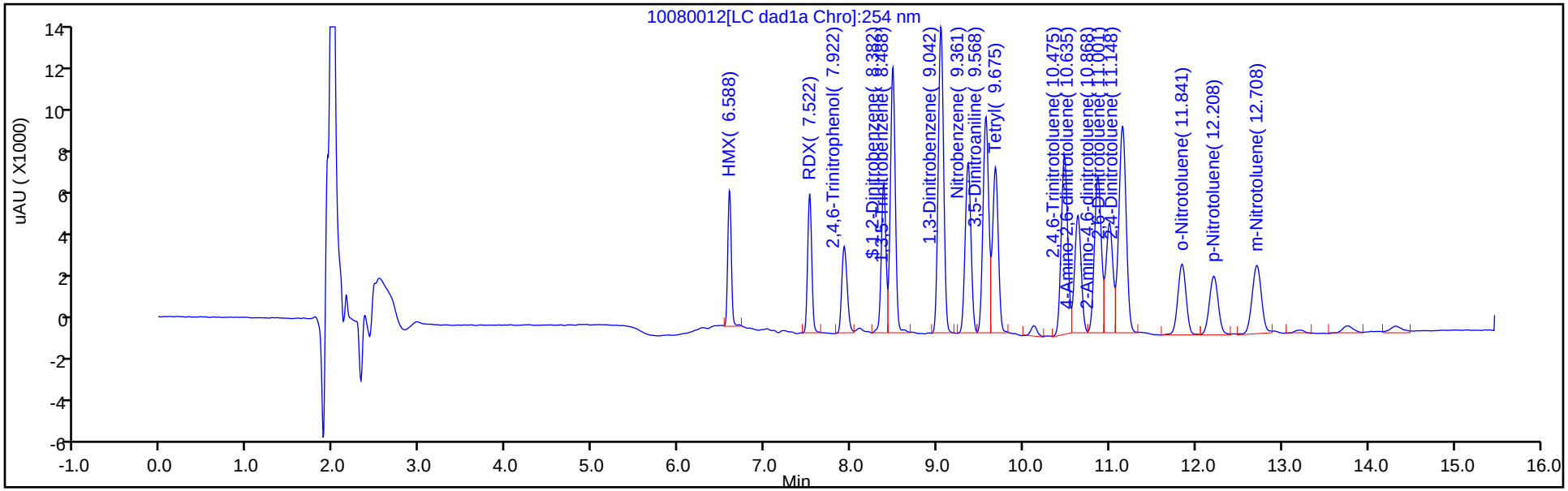
Report Date: 09-Oct-2024 11:36:04 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Denver

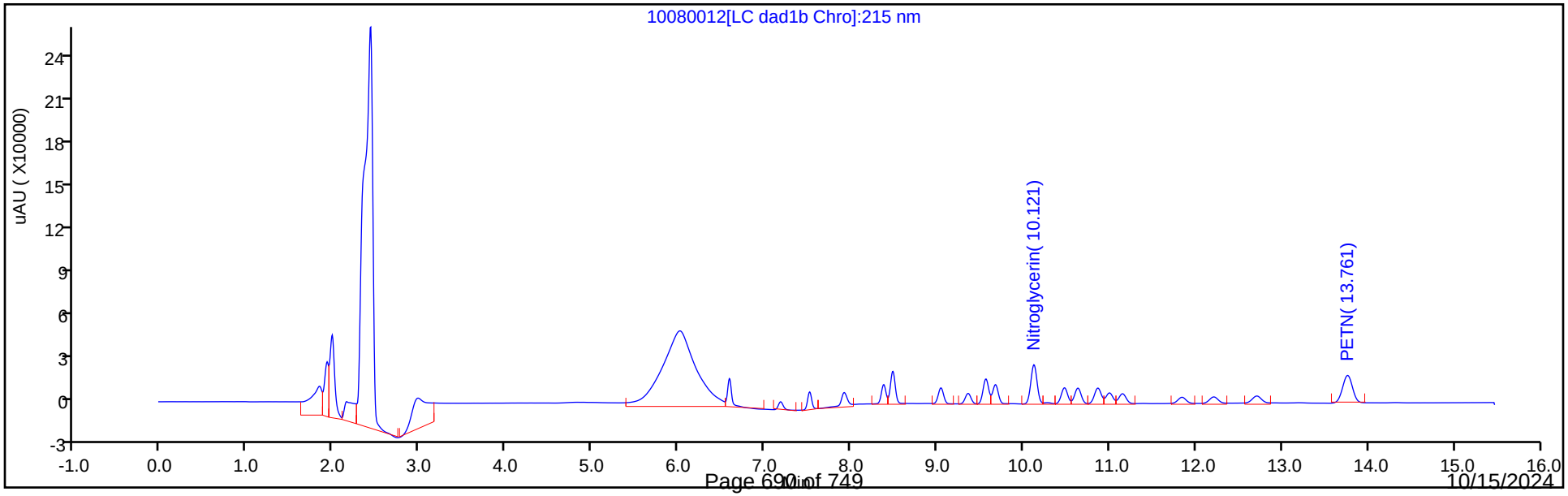
Data File: \\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080012.d

Injection Date:	08-Oct-2024 18:26:37	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	LCS 280-670001/2-A			Worklist Smp#:	12
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



10/15/2024
4:48:23 PM

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\10080012.D				
Lims ID:	LCS 280-670001/2-A				
Client ID:					
Sample Type:	LCS				
Inject. Date:	08-Oct-2024 18:26:37	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCS 280-670001/2-A				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	09-Oct-2024 11:35:58	Calib Date:	04-Oct-2024 19:55:02		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1609				

First Level Reviewer: LV5D Date: 08-Oct-2024 18:59:19

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1977	98.87

Manual Integration/User Assign Peak Report

Eurofins Denver

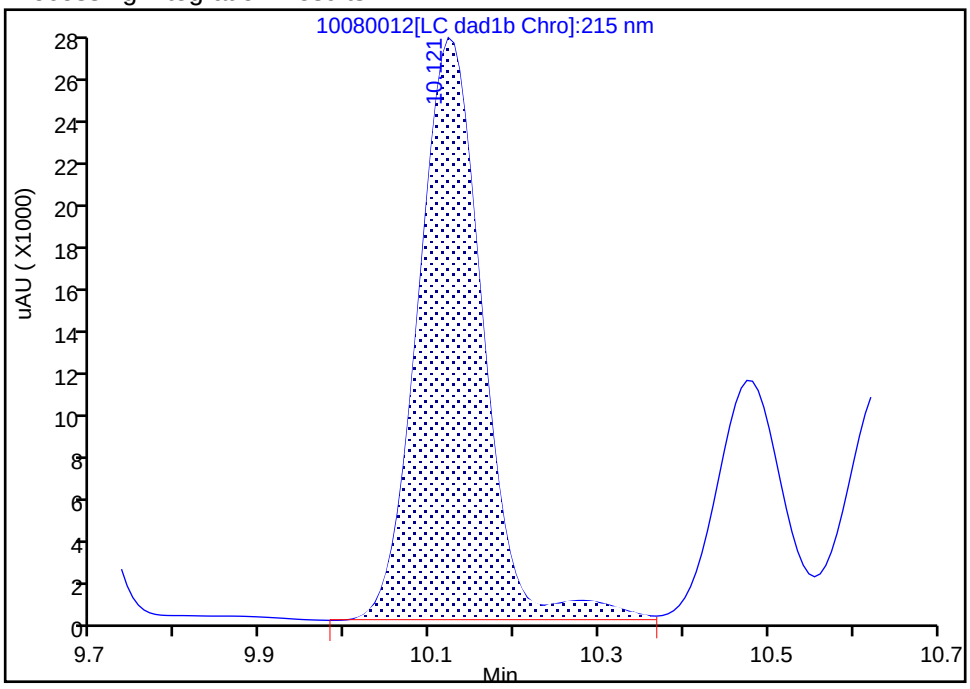
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080012.d				
Injection Date:	08-Oct-2024 18:26:37	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-670001/2-A				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1C, 215 nm		

16 Nitroglycerin, CAS: 55-63-0

Signal: 1

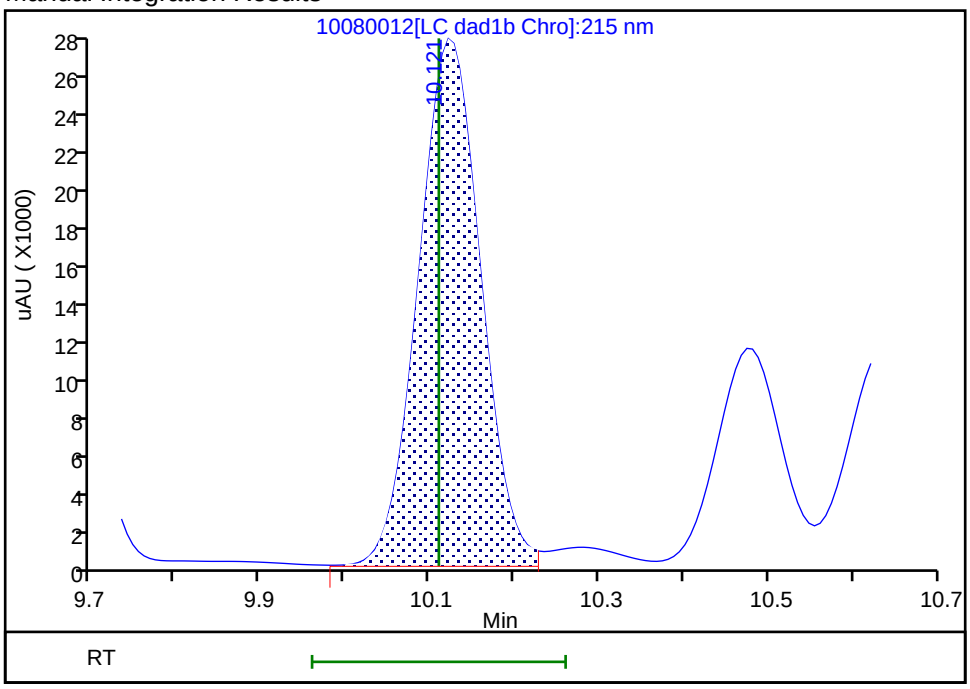
Processing Integration Results

RT: 10.12
Area: 141695
Amount: 2.204582
Amount Units: ug/mL



Manual Integration Results

RT: 10.12
Area: 136411
Amount: 2.122603
Amount Units: ug/mL



Reviewer: LV5D, 08-Oct-2024 18:59:08 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-197447-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-670642/2-A

Matrix: Water | Lab File ID: 10110012.D

Analysis Method: 8330B | Date Collected:

Extraction Method: 3535 | Date Extracted: 10/11/2024 12:06

Sample wt/vol: 500(mL) | Date Analyzed: 10/11/2024 17:56

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 670729 | Units: ug/L

Preparation Batch No.: 670642 | Instrument ID: CHHPLC_X3

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.21		0.21	0.20	0.084
99-65-0	1,3-Dinitrobenzene	2.04		0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	1.97		0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	1.96		0.10	0.080	0.027
606-20-2	2,6-Dinitrotoluene	2.07		0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	1.98		0.11	0.10	0.051
88-72-2	2-Nitrotoluene	1.75		0.21	0.20	0.086
99-08-1	3-Nitrotoluene	1.81		0.40	0.35	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	2.05		0.15	0.12	0.058
99-99-0	4-Nitrotoluene	1.80		0.41	0.40	0.10
2691-41-0	HMX	1.77		0.21	0.20	0.088
98-95-3	Nitrobenzene	1.90		0.21	0.20	0.091
55-63-0	Nitroglycerin	21.6		2.1	2.0	0.92
78-11-5	PETN	21.0		1.1	1.0	0.45
121-82-4	RDX	1.97		0.21	0.20	0.052
479-45-8	Tetryl	2.00		0.11	0.10	0.032

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\20241011-138518.b\10110012.D
Lims ID: LCS 280-670642/2-A
Client ID:
Sample Type: LCS
Inject. Date: 11-Oct-2024 17:56:36 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-670642/2-A
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20241011-138518.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 12-Oct-2024 10:13:25 Calib Date: 04-Oct-2024 19:55:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1603

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4	HMX	1	6.580	6.572	0.008	17084	0.2000	0.1768	
8	RDX	1	7.506	7.498	0.008	20816	0.2000	0.1969	
9	2,4,6-Trinitrophenol	1	7.913	7.912	0.001	17047	0.2000	0.2260	
$ 10	1,2-Dinitrobenzene	1	8.366	8.365	0.001	24318	0.2000	0.1865	
11	1,3,5-Trinitrobenzene	1	8.473	8.465	0.008	47976	0.2000	0.2207	
12	1,3-Dinitrobenzene	1	9.033	9.032	0.001	60707	0.2000	0.2036	
13	Nitrobenzene	1	9.346	9.345	0.001	36994	0.2000	0.1895	
14	3,5-Dinitroaniline	1	9.560	9.558	0.002	46228	0.2000	0.1986	
15	Tetryl	1	9.673	9.672	0.001	34201	0.2000	0.2004	
16	Nitroglycerin	2	10.113	10.118	-0.005	138785	2.00	2.16	
17	2,4,6-Trinitrotoluene	1	10.466	10.472	-0.006	42716	0.2000	0.1966	
18	4-Amino-2,6-dinitrotoluene	1	10.626	10.632	-0.006	30025	0.2000	0.2046	
19	2-Amino-4,6-dinitrotoluene	1	10.860	10.858	0.002	40543	0.2000	0.1982	
20	2,6-Dinitrotoluene	1	10.993	10.992	0.001	29205	0.2000	0.2068	
21	2,4-Dinitrotoluene	1	11.140	11.145	-0.005	57064	0.2000	0.1956	
22	o-Nitrotoluene	1	11.833	11.832	0.001	22004	0.2000	0.1754	
23	p-Nitrotoluene	1	12.206	12.198	0.008	19591	0.2000	0.1801	
24	m-Nitrotoluene	1	12.706	12.705	0.001	24762	0.2000	0.1814	
25	PETN	2	13.773	13.772	0.001	151366	2.00	2.10	
26	Ammonium Picrate	1		0.000			ND	ND	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND

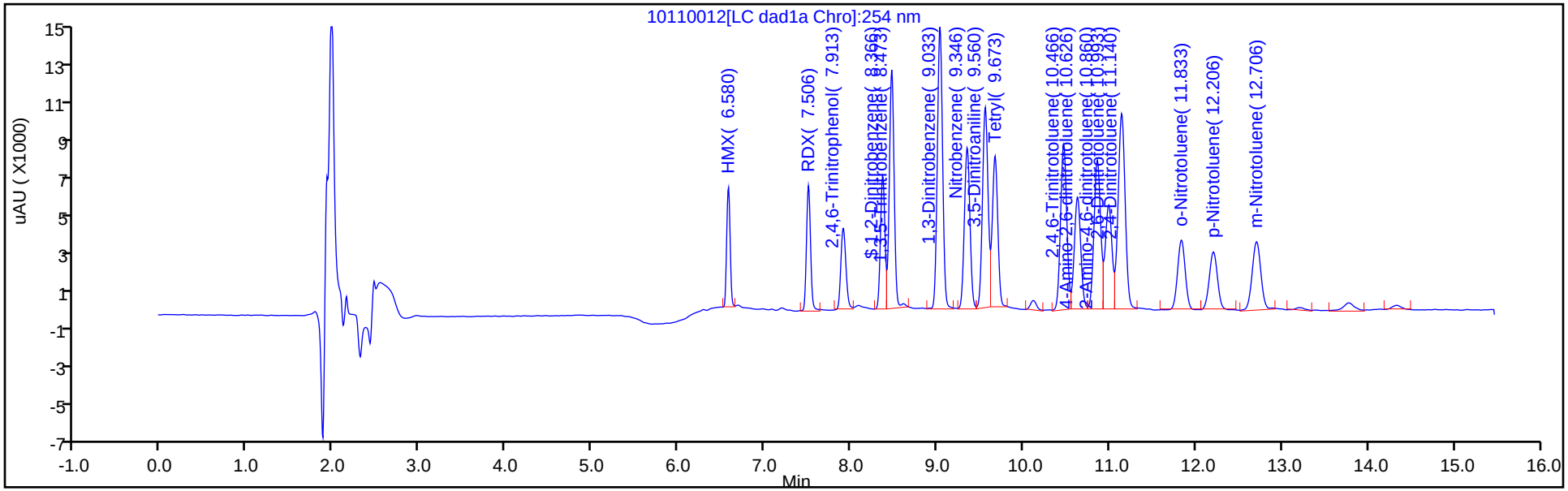
Report Date: 12-Oct-2024 10:13:27 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Denver

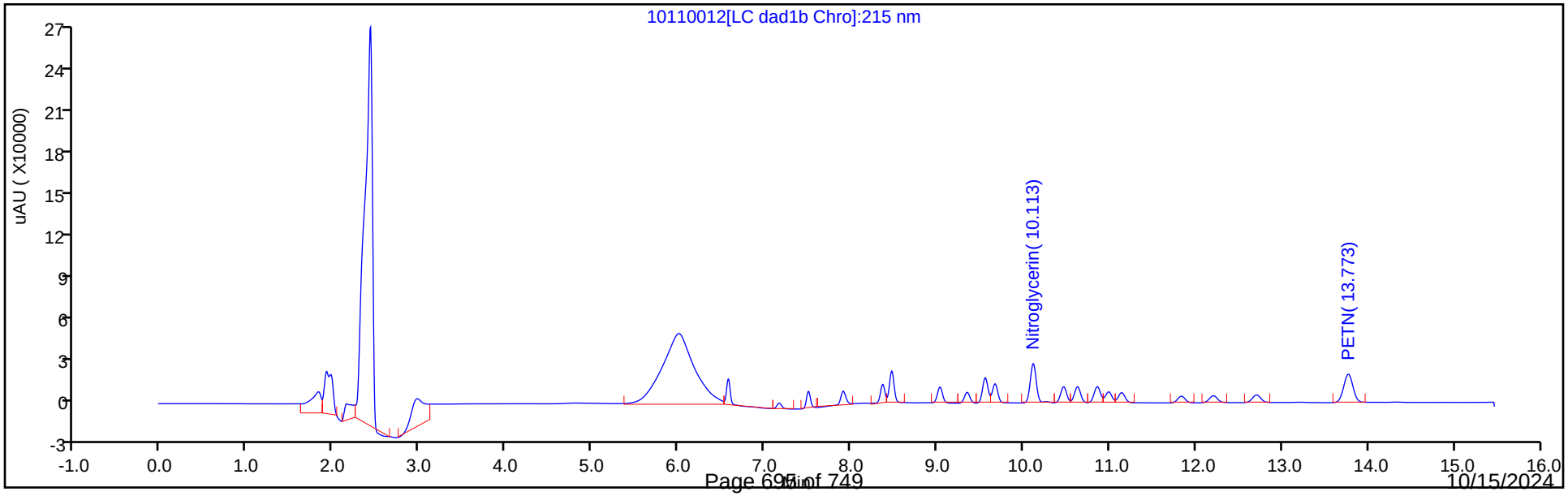
Data File: \\chromfs\denver\chromdata\chhplc_x\20241011-138518.b\10110012.d

Injection Date:	11-Oct-2024 17:56:36	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	LCS 280-670642/2-A			Worklist Smp#:	12
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



10/15/2024
4:48:23 PM

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20241011-138518.b\10110012.D
Lims ID: LCS 280-670642/2-A
Client ID:
Sample Type: LCS
Inject. Date: 11-Oct-2024 17:56:36 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-670642/2-A
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20241011-138518.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 12-Oct-2024 10:13:25 Calib Date: 04-Oct-2024 19:55:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1603

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1865	93.24

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-197447-1

SDG No.:

Client Sample ID: SCFmw-004-240901-GW MS | Lab Sample ID: 280-197447-1 MS

Matrix: Water | Lab File ID: 10080054.D

Analysis Method: 8330B | Date Collected: 09/30/2024 13:59

Extraction Method: 3535 | Date Extracted: 10/04/2024 12:25

Sample wt/vol: 451.5(mL) | Date Analyzed: 10/09/2024 09:48

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 670184 | Units: ug/L

Preparation Batch No.: 669777 | Instrument ID: CHHPLC_X3

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.36	M	0.23	0.22	0.093
99-65-0	1,3-Dinitrobenzene	2.25		0.12	0.11	0.041
118-96-7	2,4,6-Trinitrotoluene	2.17		0.12	0.11	0.050
121-14-2	2,4-Dinitrotoluene	2.05		0.11	0.089	0.030
606-20-2	2,6-Dinitrotoluene	2.09		0.11	0.089	0.044
35572-78-2	2-Amino-4,6-dinitrotoluene	2.16		0.12	0.11	0.056
88-72-2	2-Nitrotoluene	1.54	J1	0.23	0.22	0.095
99-08-1	3-Nitrotoluene	1.53	J1	0.44	0.39	0.22
19406-51-0	4-Amino-2,6-dinitrotoluene	2.11		0.17	0.13	0.064
99-99-0	4-Nitrotoluene	1.63		0.45	0.44	0.11
2691-41-0	HMX	1.95	M	0.23	0.22	0.097
98-95-3	Nitrobenzene	1.84		0.23	0.22	0.10
55-63-0	Nitroglycerin	23.0		2.3	2.2	1.0
78-11-5	PETN	23.0		1.2	1.1	0.50
121-82-4	RDX	2.17	M	0.23	0.22	0.057
479-45-8	Tetryl	2.19		0.12	0.11	0.035

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	96	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\10080054.D
Lims ID: 280-197447-A-1-B MS
Client ID: SCFmw-004-240901-GW
Sample Type: MS
Inject. Date: 09-Oct-2024 09:48:25 ALS Bottle#: 54 Worklist Smp#: 54
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-197447-A-1-B MS
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Oct-2024 15:38:22 Calib Date: 04-Oct-2024 19:55:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1609

First Level Reviewer: LV5D Date: 09-Oct-2024 15:38:22

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 TNX	1	6.452	6.430	0.022	35215	0.2006	0.1734	M
	4 HMX	1	6.585	6.564	0.021	17051	0.2000	0.1764	M
	6 DNX	1	6.758	6.737	0.021	26720	0.2002	0.1830	M
	7 MNX	1	7.158	7.144	0.014	28124	0.2334	0.2116	M
	8 RDX	1	7.505	7.497	0.008	20748	0.2000	0.1963	M
	9 2,4,6-Trinitrophenol	1	7.892	7.917	-0.025	16761	0.2000	0.2222	M
$	10 1,2-Dinitrobenzene	1	8.358	8.364	-0.006	24978	0.2000	0.1915	M
	11 1,3,5-Trinitrobenzene	1	8.472	8.464	0.008	46401	0.2000	0.2135	M
	12 1,3-Dinitrobenzene	1	9.018	9.024	-0.006	60538	0.2000	0.2030	
	13 Nitrobenzene	1	9.331	9.344	-0.013	32454	0.2000	0.1663	
	14 3,5-Dinitroaniline	1	9.531	9.550	-0.019	43616	0.2000	0.1874	
	15 Tetryl	1	9.638	9.664	-0.026	33785	0.2000	0.1979	
	16 Nitroglycerin	2	10.078	10.110	-0.032	133377	2.00	2.08	
	17 2,4,6-Trinitrotoluene	1	10.425	10.457	-0.032	42507	0.2000	0.1956	
	18 4-Amino-2,6-dinitrotoluene	1	10.571	10.617	-0.046	28049	0.2000	0.1908	
	19 2-Amino-4,6-dinitrotoluene	1	10.798	10.850	-0.052	39836	0.2000	0.1948	
	20 2,6-Dinitrotoluene	1	10.931	10.984	-0.053	26633	0.2000	0.1885	
	21 2,4-Dinitrotoluene	1	11.085	11.130	-0.045	53958	0.2000	0.1849	
	22 o-Nitrotoluene	1	11.758	11.824	-0.066	17416	0.2000	0.1388	
	23 p-Nitrotoluene	1	12.125	12.197	-0.072	15994	0.2000	0.1468	
	24 m-Nitrotoluene	1	12.611	12.697	-0.086	18857	0.2000	0.1377	
	25 PETN	2	13.625	13.764	-0.139	149900	2.00	2.08	
	26 Ammonium Picrate	1		0.000			ND	ND	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND
Review Flags
M - Manually Integrated

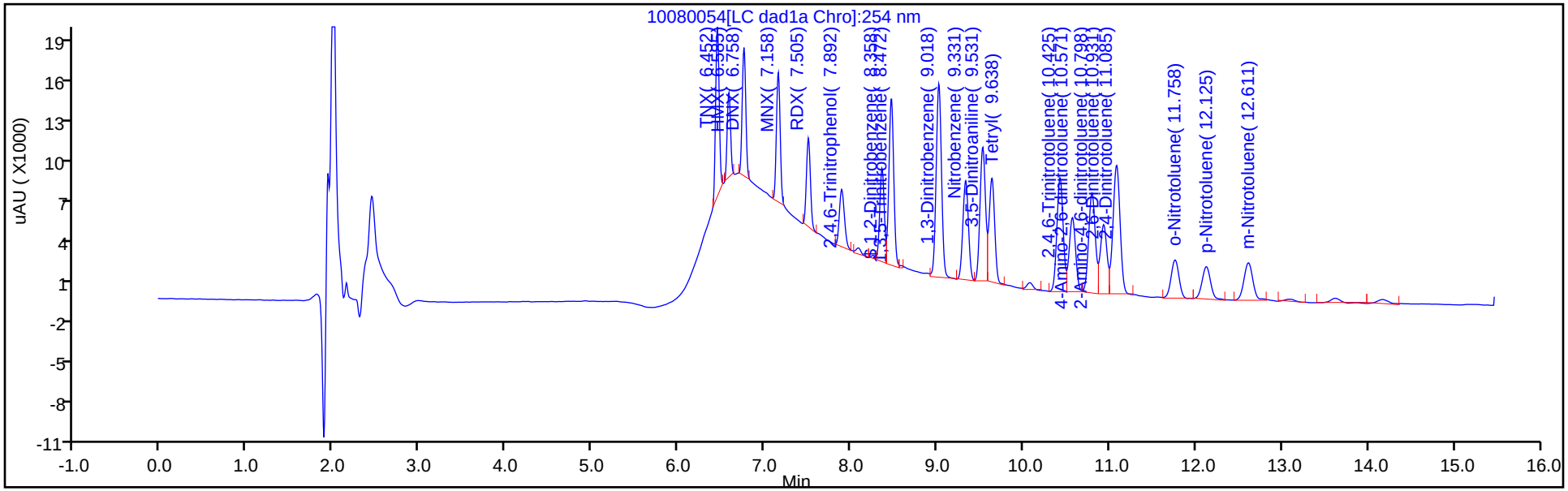
Report Date: 09-Oct-2024 15:38:22 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Denver

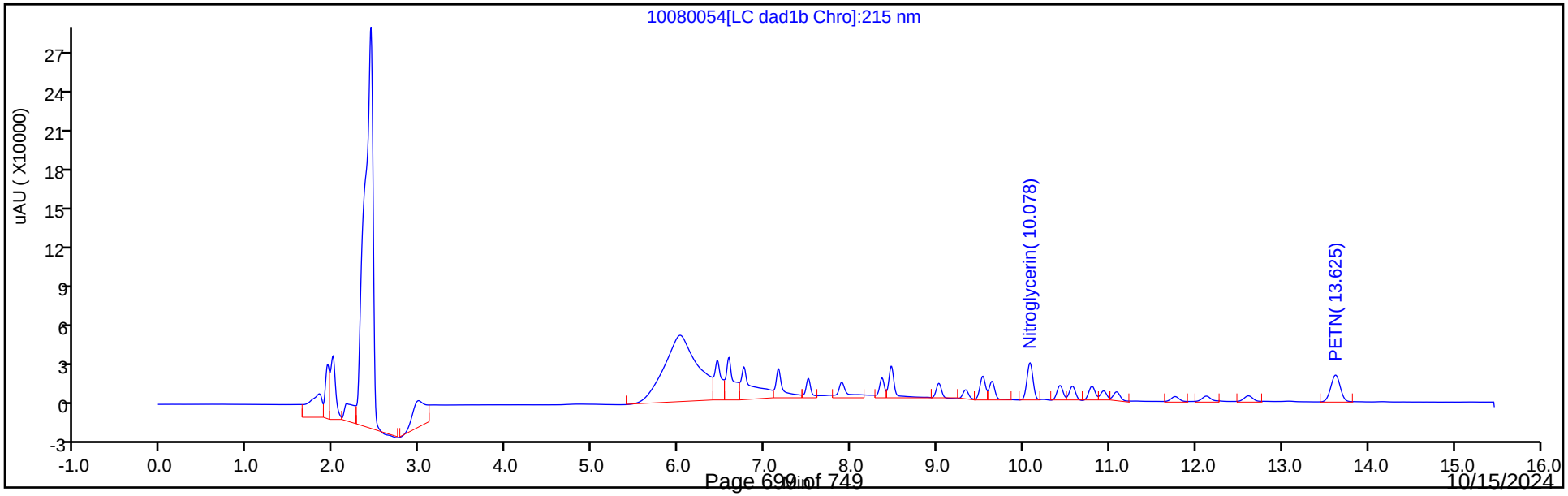
Data File: \\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080054.d

Injection Date:	09-Oct-2024 09:48:25	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-197447-A-1-B MS			Worklist Smp#:	54
Client ID:	SCFmw-004-240901-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	54
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



10/15/2024
4:48:23 PM

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\10080054.D				
Lims ID:	280-197447-A-1-B MS				
Client ID:	SCFmw-004-240901-GW				
Sample Type:	MS				
Inject. Date:	09-Oct-2024 09:48:25	ALS Bottle#:	54	Worklist Smp#:	54
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-197447-A-1-B MS				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	09-Oct-2024 15:38:22	Calib Date:	04-Oct-2024 19:55:02		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1609				

First Level Reviewer: LV5D Date: 09-Oct-2024 15:38:22

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1915	95.77

Manual Integration/User Assign Peak Report

Eurofins Denver

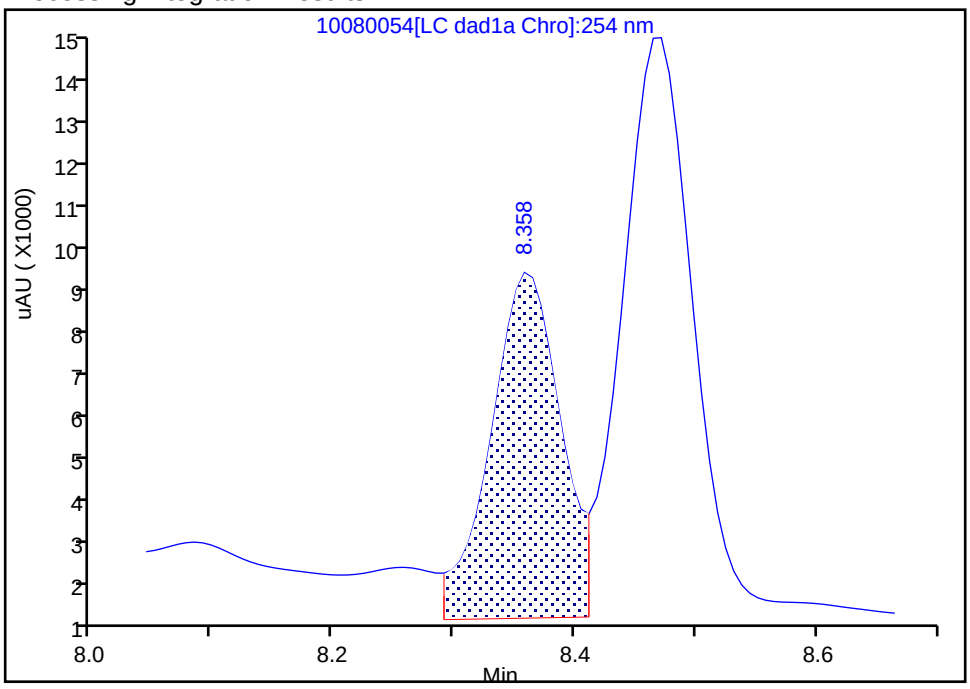
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080054.d				
Injection Date:	09-Oct-2024 09:48:25	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-A-1-B MS				
Client ID:	SCFmw-004-240901-GW				
Operator ID:	JZ	ALS Bottle#:	54	Worklist Smp#:	54
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

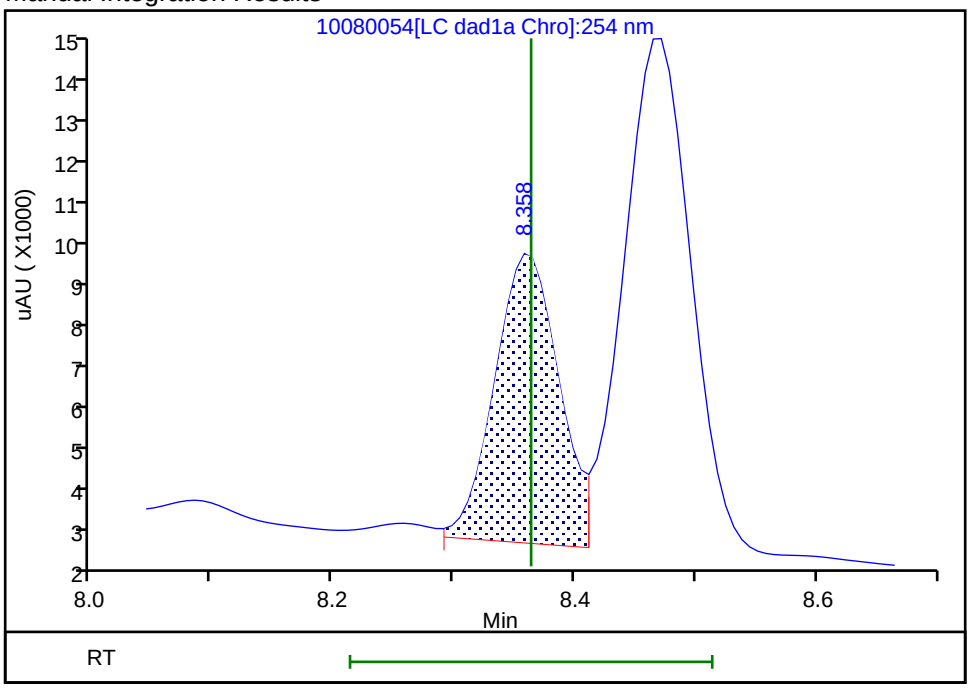
Processing Integration Results

RT: 8.36
Area: 29503
Amount: 0.226233
Amount Units: ug/mL



Manual Integration Results

RT: 8.36
Area: 24978
Amount: 0.191535
Amount Units: ug/mL



Reviewer: LV5D, 09-Oct-2024 15:38:16 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

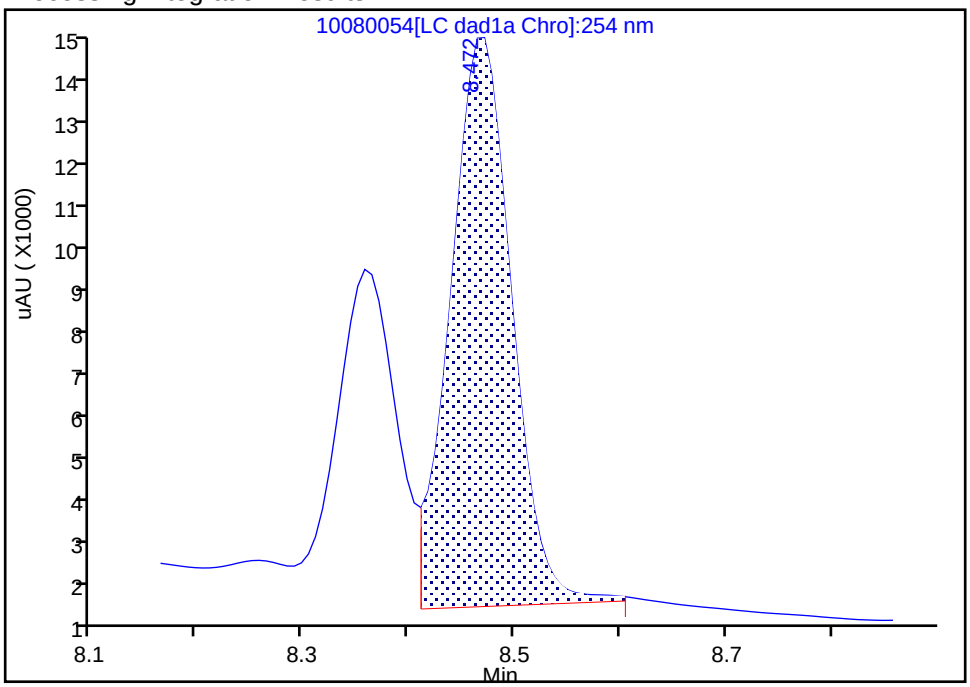
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080054.d				
Injection Date:	09-Oct-2024 09:48:25	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-A-1-B MS				
Client ID:	SCFmw-004-240901-GW				
Operator ID:	JZ	ALS Bottle#:	54	Worklist Smp#:	54
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

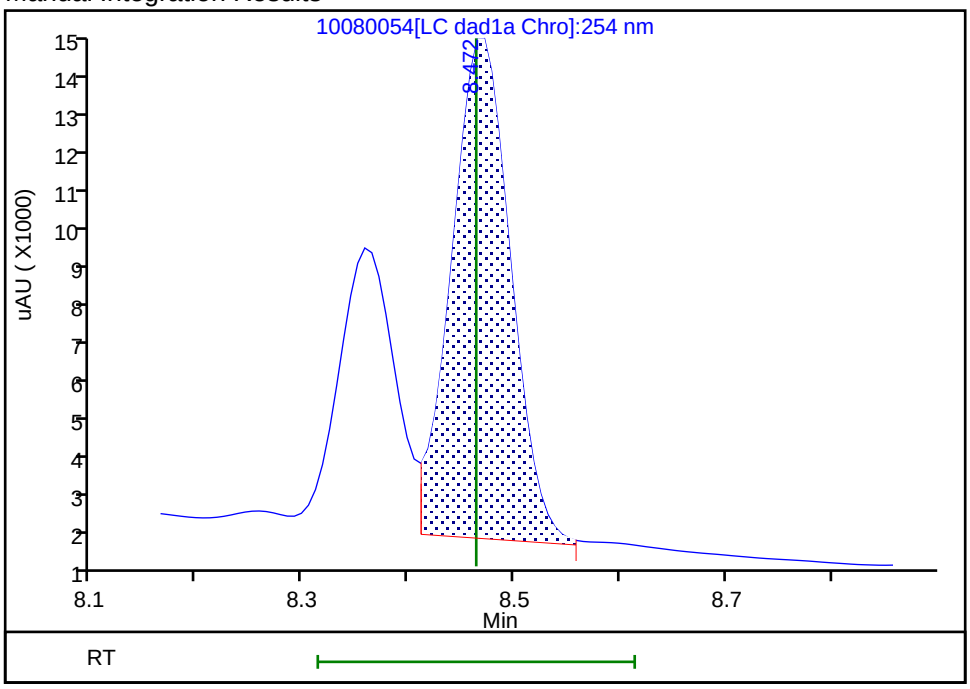
Processing Integration Results

RT: 8.47
Area: 49301
Amount: 0.226828
Amount Units: ug/mL



Manual Integration Results

RT: 8.47
Area: 46401
Amount: 0.213485
Amount Units: ug/mL



Reviewer: LV5D, 09-Oct-2024 15:38:20 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

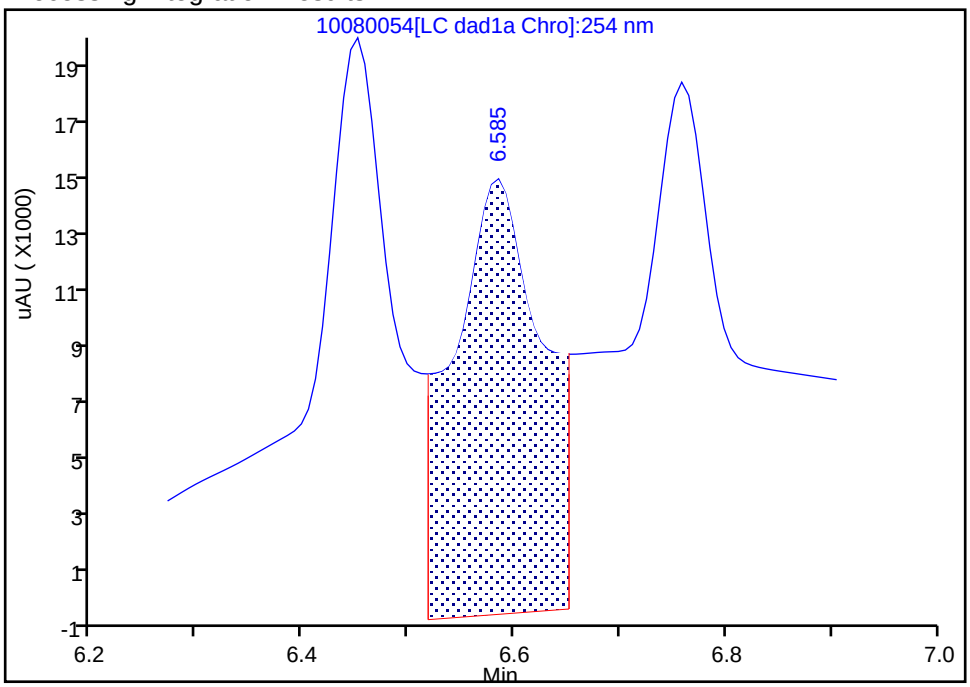
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080054.d				
Injection Date:	09-Oct-2024 09:48:25	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-A-1-B MS				
Client ID:	SCFmw-004-240901-GW				
Operator ID:	JZ	ALS Bottle#:	54	Worklist Smp#:	54
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

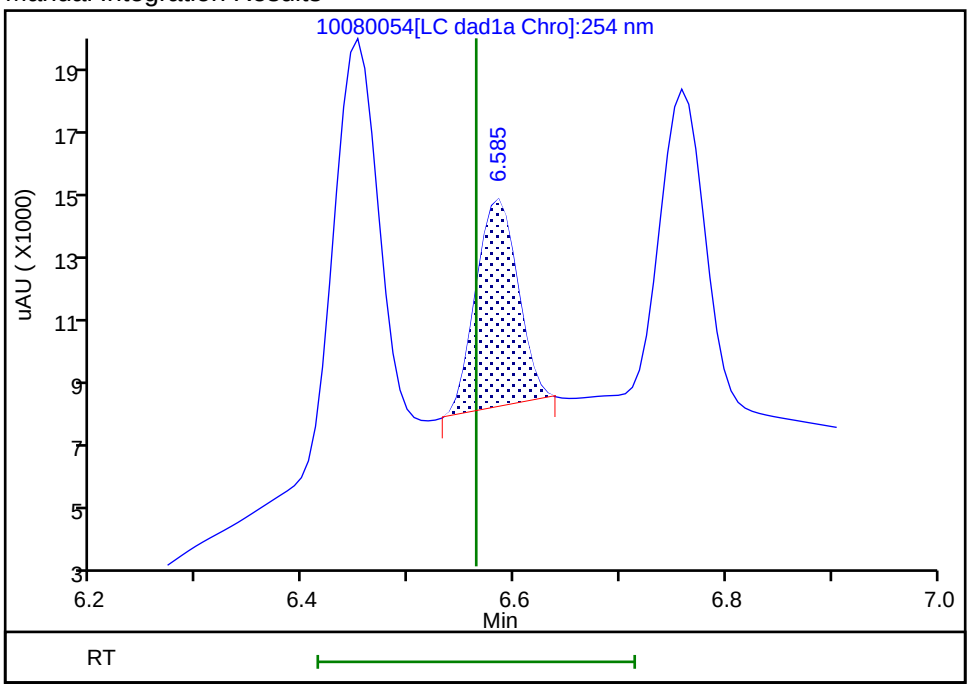
Processing Integration Results

RT: 6.58
Area: 85027
Amount: 0.879715
Amount Units: ug/mL



Manual Integration Results

RT: 6.58
Area: 17051
Amount: 0.176415
Amount Units: ug/mL



Reviewer: LV5D, 09-Oct-2024 15:37:55 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

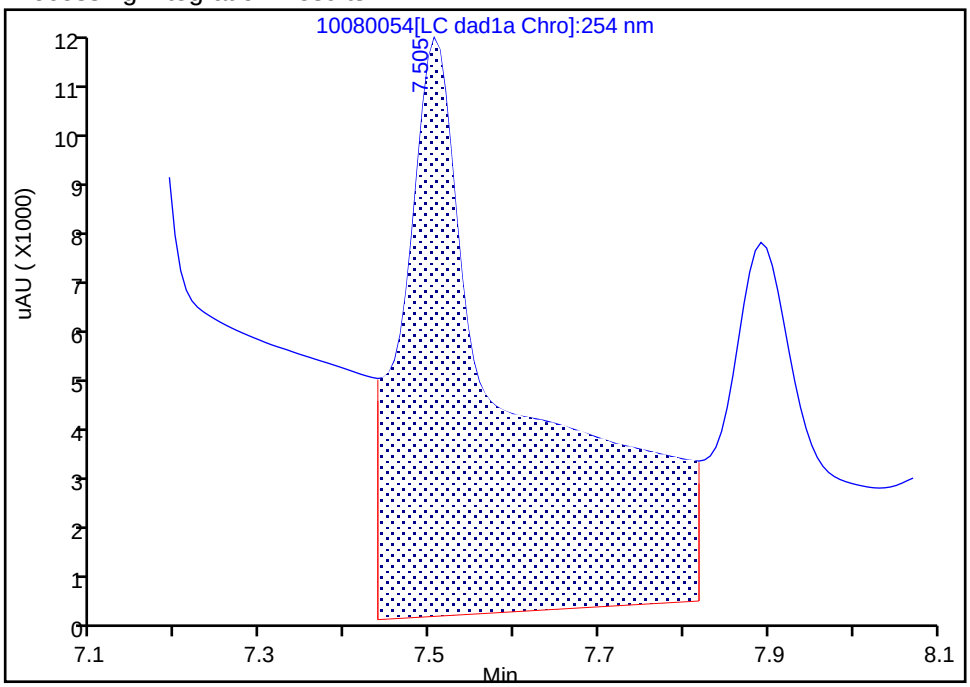
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080054.d				
Injection Date:	09-Oct-2024 09:48:25	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-A-1-B MS				
Client ID:	SCFmw-004-240901-GW				
Operator ID:	JZ	ALS Bottle#:	54	Worklist Smp#:	54
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

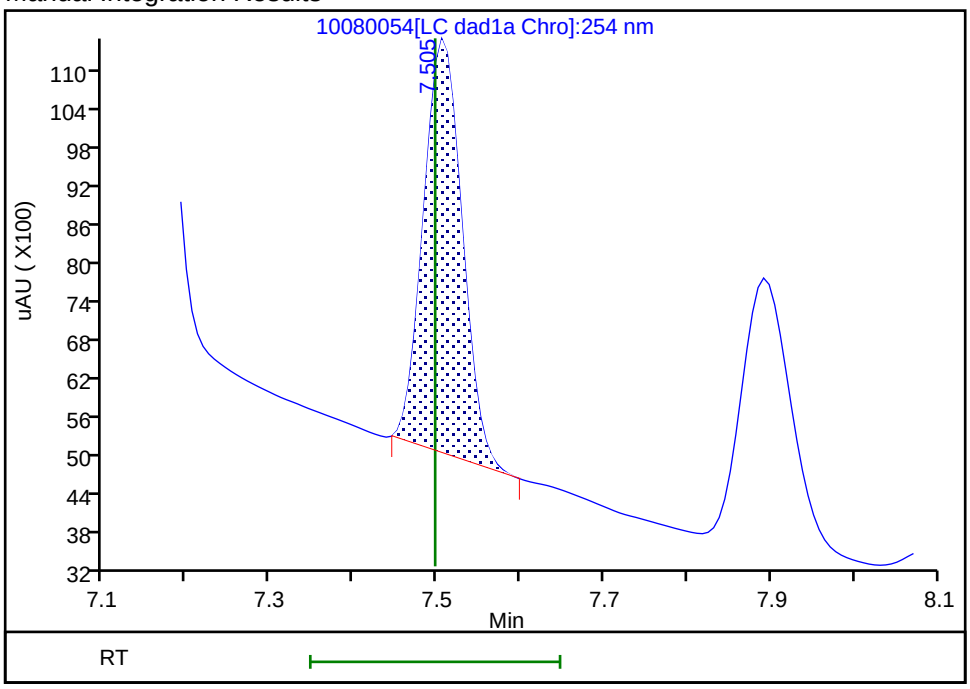
Processing Integration Results

RT: 7.50
Area: 99184
Amount: 0.944466
Amount Units: ug/mL



Manual Integration Results

RT: 7.50
Area: 20748
Amount: 0.196261
Amount Units: ug/mL



Reviewer: LV5D, 09-Oct-2024 15:38:07 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-197447-1

SDG No.:

Client Sample ID: SCFmw-004-240901-GW MS RE | Lab Sample ID: 280-197447-1 MS RE

Matrix: Water | Lab File ID: 10110025.D

Analysis Method: 8330B | Date Collected: 09/30/2024 13:59

Extraction Method: 3535 | Date Extracted: 10/11/2024 12:06

Sample wt/vol: 455.5(mL) | Date Analyzed: 10/11/2024 22:42

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 670729 | Units: ug/L

Preparation Batch No.: 670642 | Instrument ID: CHHPLC_X3

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
88-72-2	*2-Nitrotoluene*	*1.43*	*H J1*	*0.23*	0.22	*0.094*
99-08-1	*3-Nitrotoluene*	*1.38*	*H J1*	*0.44*	0.38	*0.21*
99-99-0	*4-Nitrotoluene*	*1.46*	*H J1*	*0.45*	0.44	*0.11*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	88	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20241011-138518.b\10110025.D
Lims ID: 280-197447-B-1-B MS RE
Client ID: SCFmw-004-240901-GW
Sample Type: MS
Inject. Date: 11-Oct-2024 22:42:02 ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-197447-B-1-B MS
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20241011-138518.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 12-Oct-2024 10:13:32 Calib Date: 04-Oct-2024 19:55:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1603

First Level Reviewer: LV5D Date: 12-Oct-2024 10:11:12

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.574	6.572	0.002	17326	0.2000	0.1793	M
8 RDX	1	7.508	7.498	0.010	20116	0.2000	0.1902	M
9 2,4,6-Trinitrophenol	1	7.901	7.912	-0.011	16438	0.2000	0.2179	
$ 10 1,2-Dinitrobenzene	1	8.368	8.365	0.003	23077	0.2000	0.1770	M
11 1,3,5-Trinitrobenzene	1	8.468	8.465	0.003	44464	0.2000	0.2046	M
12 1,3-Dinitrobenzene	1	9.028	9.032	-0.004	56460	0.2000	0.1893	
13 Nitrobenzene	1	9.341	9.345	-0.004	31199	0.2000	0.1598	
14 3,5-Dinitroaniline	1	9.554	9.558	-0.004	39042	0.2000	0.1678	
15 Tetryl	1	9.674	9.672	0.002	33023	0.2000	0.1935	
16 Nitroglycerin	2	10.121	10.118	0.003	137883	2.00	2.15	
17 2,4,6-Trinitrotoluene	1	10.474	10.472	0.002	39766	0.2000	0.1830	
18 4-Amino-2,6-dinitrotoluene	1	10.641	10.632	0.009	25411	0.2000	0.1725	
19 2-Amino-4,6-dinitrotoluene	1	10.868	10.858	0.010	35058	0.2000	0.1714	
20 2,6-Dinitrotoluene	1	11.001	10.992	0.009	24122	0.2000	0.1706	
21 2,4-Dinitrotoluene	1	11.154	11.145	0.009	48336	0.2000	0.1656	
22 o-Nitrotoluene	1	11.848	11.832	0.016	16385	0.2000	0.1306	
23 p-Nitrotoluene	1	12.221	12.198	0.023	14549	0.2000	0.1334	
24 m-Nitrotoluene	1	12.728	12.705	0.023	17231	0.2000	0.1257	
25 PETN	2	13.808	13.772	0.036	148626	2.00	2.06	
26 Ammonium Picrate	1		0.000			ND	ND	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND
Review Flags
M - Manually Integrated

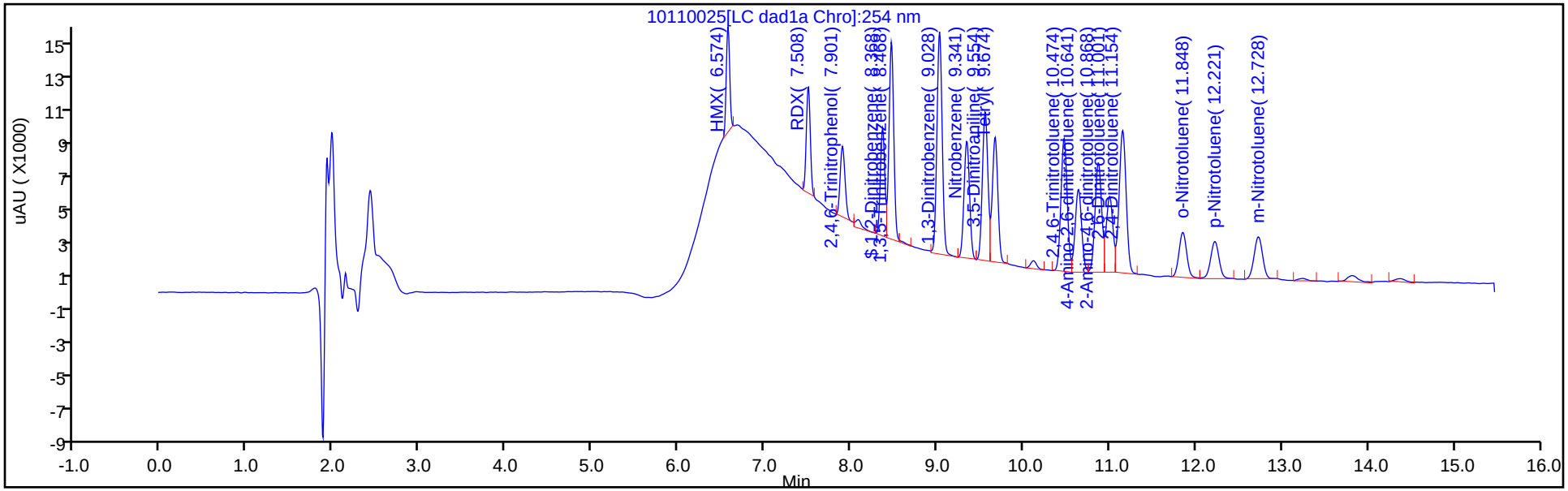
Report Date: 12-Oct-2024 10:13:35 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Denver

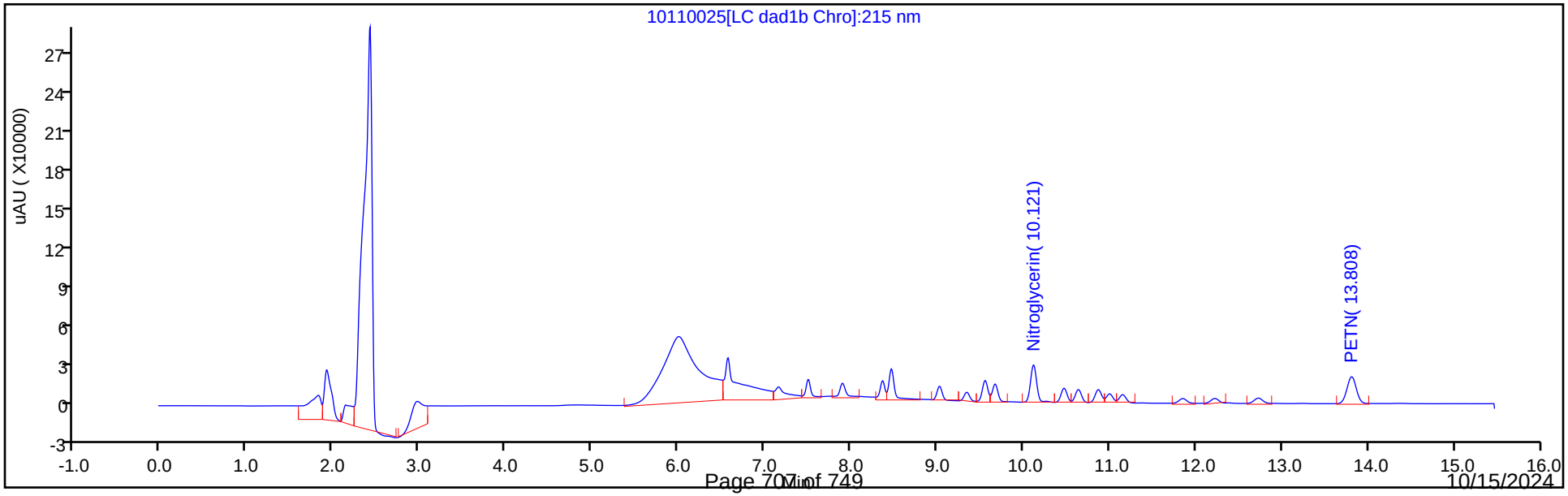
Data File: \\chromfs\denver\chromdata\chhplc_x\20241011-138518.b\10110025.d

Injection Date:	11-Oct-2024 22:42:02	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-197447-B-1-B MS RE			Worklist Smp#:	25
Client ID:	SCFmw-004-240901-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



10/15/2024
4:48:23 PM

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20241011-138518.b\10110025.D				
Lims ID:	280-197447-B-1-B MS RE				
Client ID:	SCFmw-004-240901-GW				
Sample Type:	MS				
Inject. Date:	11-Oct-2024 22:42:02	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-197447-B-1-B MS				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20241011-138518.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	12-Oct-2024 10:13:32	Calib Date:	04-Oct-2024 19:55:02		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1603				

First Level Reviewer: LV5D Date: 12-Oct-2024 10:11:12

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1770	88.48

Manual Integration/User Assign Peak Report

Eurofins Denver

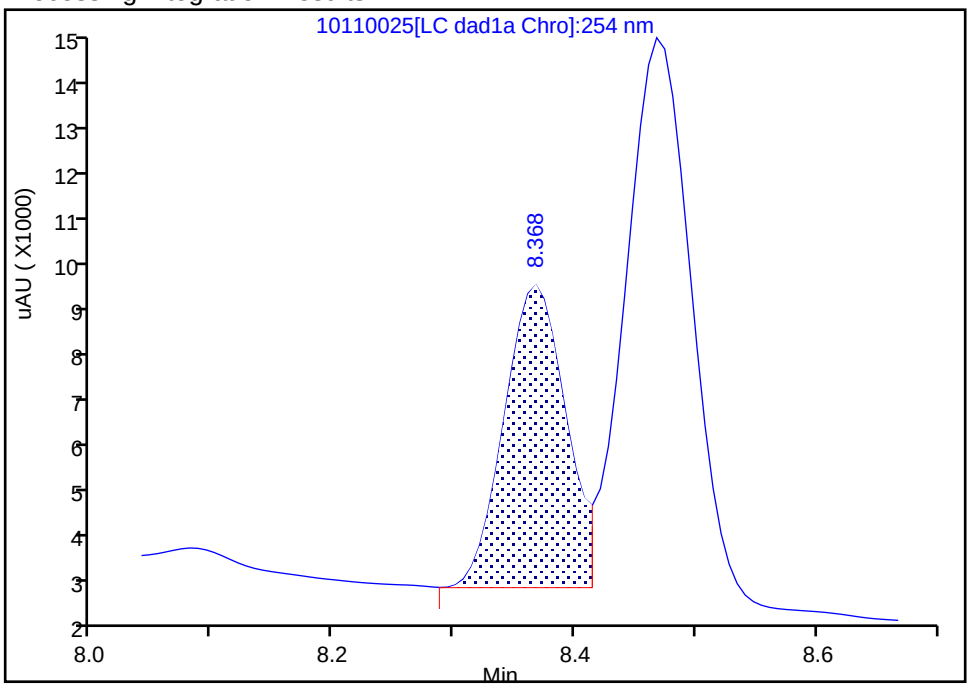
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241011-138518.b\10110025.d				
Injection Date:	11-Oct-2024 22:42:02	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-B-1-B MS RE				
Client ID:	SCFmw-004-240901-GW				
Operator ID:	JZ	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

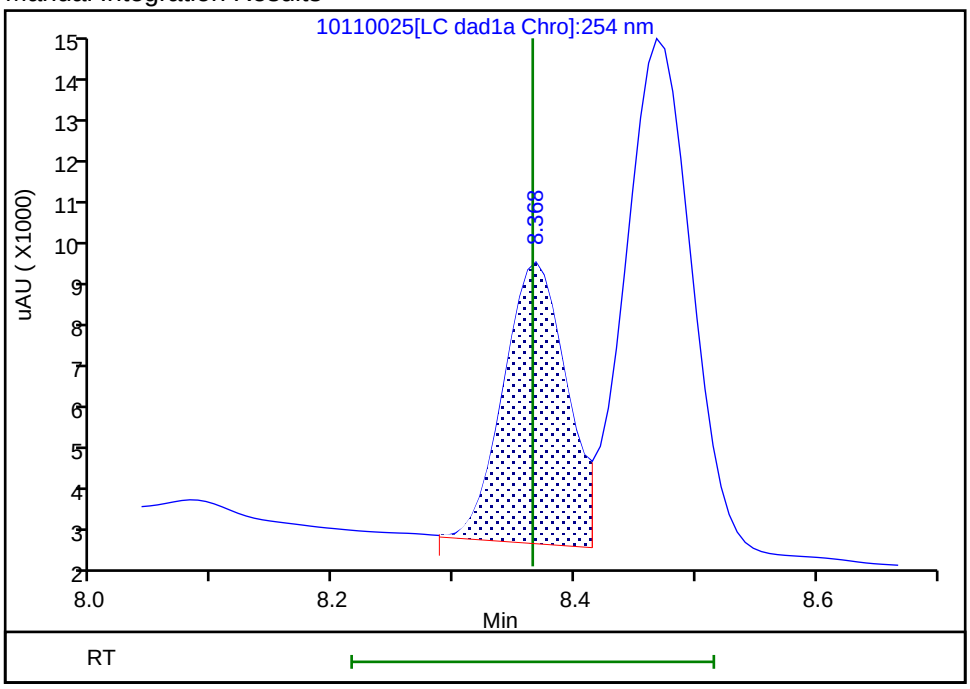
Processing Integration Results

RT: 8.37
Area: 21873
Amount: 0.167725
Amount Units: ug/mL



Manual Integration Results

RT: 8.37
Area: 23077
Amount: 0.176958
Amount Units: ug/mL



Reviewer: LV5D, 12-Oct-2024 10:11:18 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

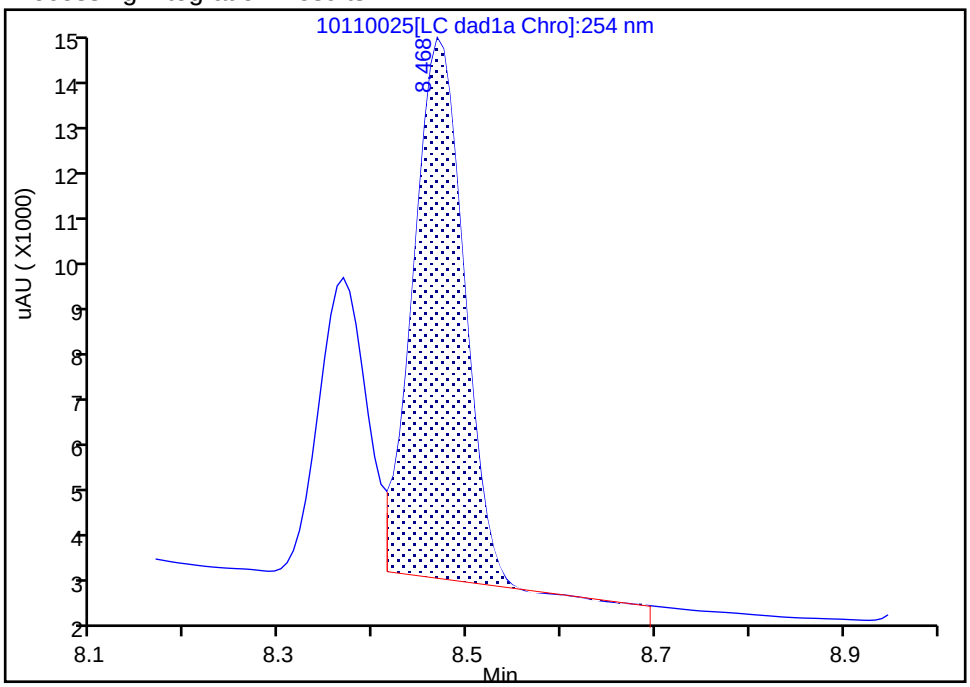
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241011-138518.b\10110025.d				
Injection Date:	11-Oct-2024 22:42:02	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-B-1-B MS RE				
Client ID:	SCFmw-004-240901-GW				
Operator ID:	JZ	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

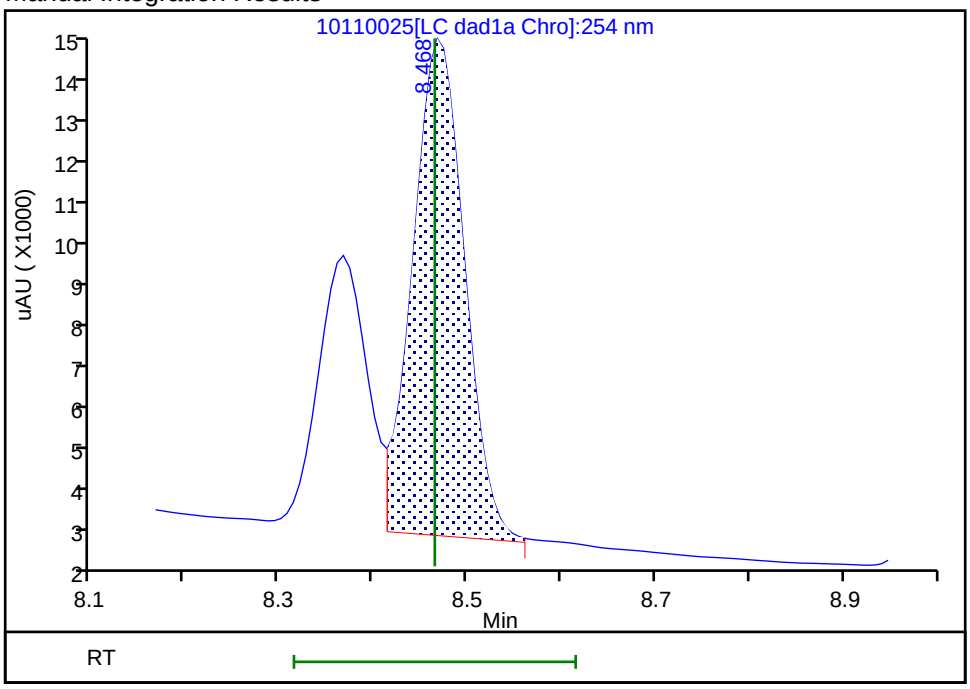
Processing Integration Results

RT: 8.47
Area: 43052
Amount: 0.198077
Amount Units: ug/mL



Manual Integration Results

RT: 8.47
Area: 44464
Amount: 0.204573
Amount Units: ug/mL



Reviewer: LV5D, 12-Oct-2024 10:11:21 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

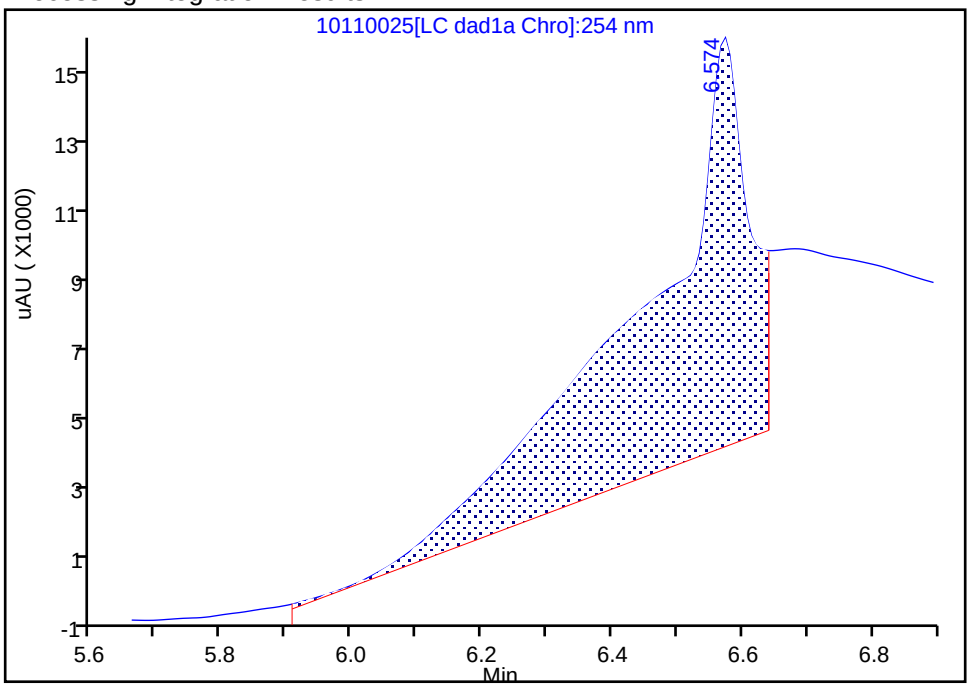
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241011-138518.b\10110025.d				
Injection Date:	11-Oct-2024 22:42:02	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-B-1-B MS RE				
Client ID:	SCFmw-004-240901-GW				
Operator ID:	JZ	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

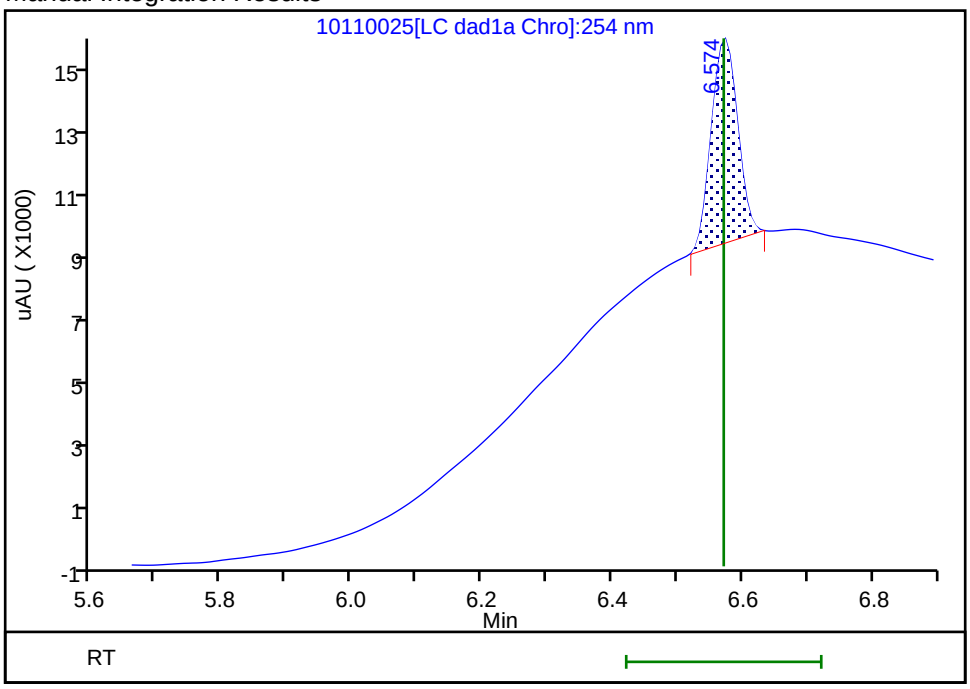
Processing Integration Results

RT: 6.57
Area: 126925
Amount: 1.313204
Amount Units: ug/mL



Manual Integration Results

RT: 6.57
Area: 17326
Amount: 0.179260
Amount Units: ug/mL



Reviewer: LV5D, 12-Oct-2024 10:11:05 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

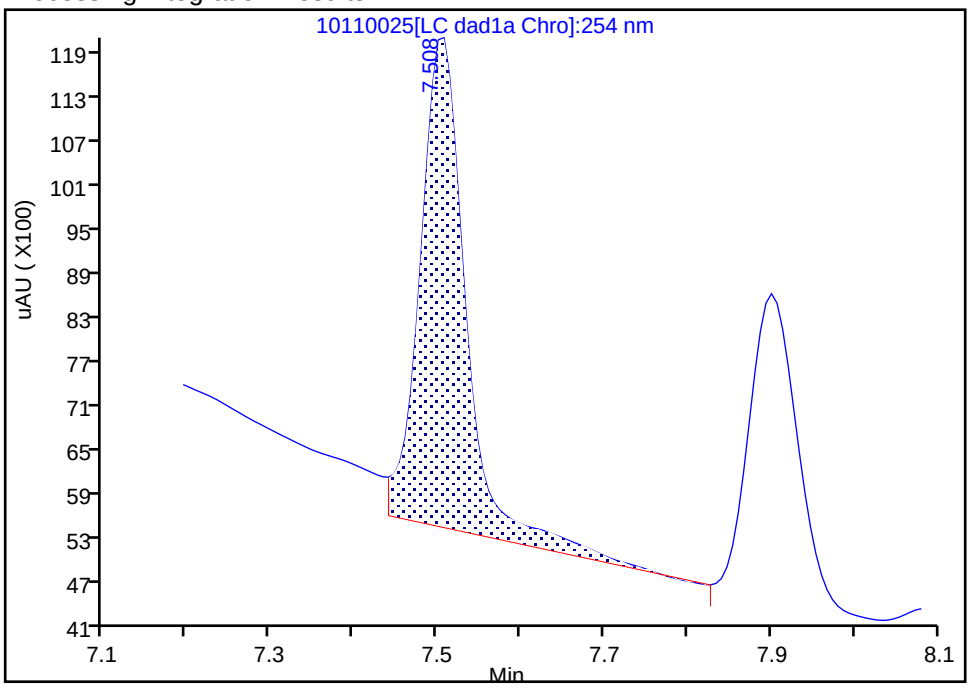
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241011-138518.b\10110025.d				
Injection Date:	11-Oct-2024 22:42:02	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-B-1-B MS RE				
Client ID:	SCFmw-004-240901-GW				
Operator ID:	JZ	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

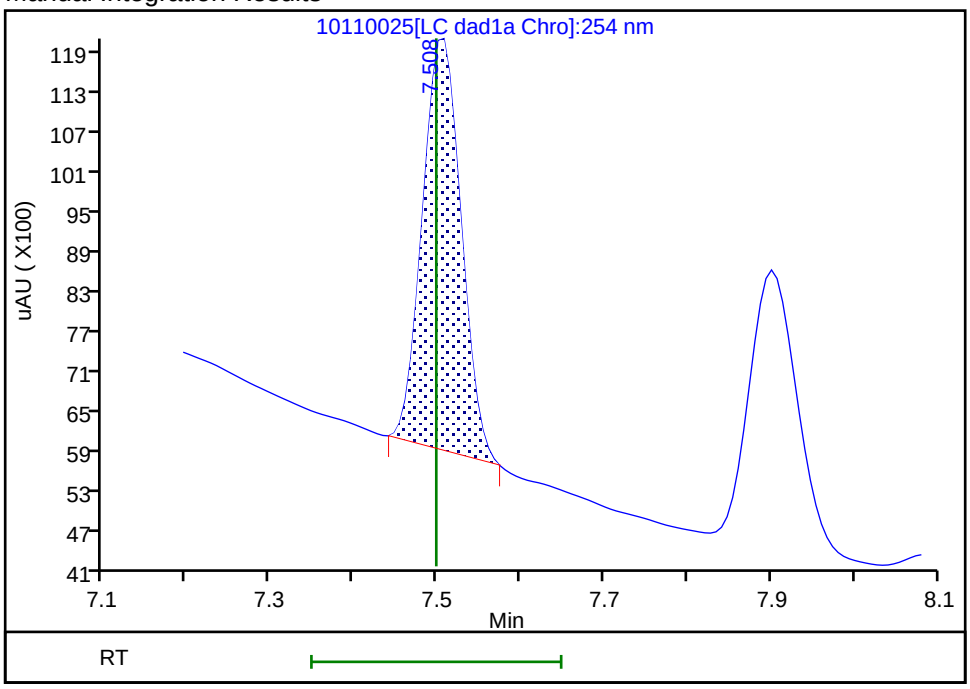
Processing Integration Results

RT: 7.51
Area: 25926
Amount: 0.245654
Amount Units: ug/mL



Manual Integration Results

RT: 7.51
Area: 20116
Amount: 0.190232
Amount Units: ug/mL



Reviewer: LV5D, 12-Oct-2024 10:11:10 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-197447-1

SDG No.:

Client Sample ID: SCFmw-004-240901-GW MSD | Lab Sample ID: 280-197447-1 MSD

Matrix: Water | Lab File ID: 10080055.D

Analysis Method: 8330B | Date Collected: 09/30/2024 13:59

Extraction Method: 3535 | Date Extracted: 10/04/2024 12:25

Sample wt/vol: 454.4(mL) | Date Analyzed: 10/09/2024 10:10

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 670184 | Units: ug/L

Preparation Batch No.: 669777 | Instrument ID: CHHPLC_X3

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.43	M	0.23	0.22	0.093
99-65-0	1,3-Dinitrobenzene	2.30		0.12	0.11	0.041
118-96-7	2,4,6-Trinitrotoluene	2.19		0.12	0.11	0.050
121-14-2	2,4-Dinitrotoluene	2.14		0.11	0.088	0.030
606-20-2	2,6-Dinitrotoluene	2.23		0.11	0.088	0.044
35572-78-2	2-Amino-4,6-dinitrotoluene	2.17		0.12	0.11	0.056
88-72-2	2-Nitrotoluene	1.70		0.23	0.22	0.094
99-08-1	3-Nitrotoluene	1.71		0.44	0.39	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	2.22		0.17	0.13	0.063
99-99-0	4-Nitrotoluene	1.81		0.45	0.44	0.11
2691-41-0	HMX	2.00	M	0.23	0.22	0.096
98-95-3	Nitrobenzene	1.93		0.23	0.22	0.10
55-63-0	Nitroglycerin	24.0		2.3	2.2	1.0
78-11-5	PETN	23.2	M	1.2	1.1	0.49
121-82-4	RDX	2.21	M	0.23	0.22	0.057
479-45-8	Tetryl	2.19		0.12	0.11	0.035

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	96	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\10080055.D
Lims ID: 280-197447-A-1-C MSD
Client ID: SCFmw-004-240901-GW
Sample Type: MSD
Inject. Date: 09-Oct-2024 10:10:22 ALS Bottle#: 55 Worklist Smp#: 55
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-197447-A-1-C MSD
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Oct-2024 15:38:56 Calib Date: 04-Oct-2024 19:55:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1609

First Level Reviewer: LV5D Date: 09-Oct-2024 15:38:56

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 TNX	1	6.454	6.430	0.024	36017	0.2006	0.1774	M
	4 HMX	1	6.588	6.564	0.024	17542	0.2000	0.1815	M
	6 DNX	1	6.761	6.737	0.024	27028	0.2002	0.1851	M
	7 MNX	1	7.161	7.144	0.017	28329	0.2334	0.2131	M
	8 RDX	1	7.514	7.497	0.017	21241	0.2000	0.2010	M
	9 2,4,6-Trinitrophenol	1	7.894	7.917	-0.023	16823	0.2000	0.2230	M
$	10 1,2-Dinitrobenzene	1	8.361	8.364	-0.003	25063	0.2000	0.1922	M
	11 1,3,5-Trinitrobenzene	1	8.468	8.464	0.004	48022	0.2000	0.2209	M
	12 1,3-Dinitrobenzene	1	9.021	9.024	-0.003	62399	0.2000	0.2092	
	13 Nitrobenzene	1	9.328	9.344	-0.016	34197	0.2000	0.1752	
	14 3,5-Dinitroaniline	1	9.521	9.550	-0.029	45214	0.2000	0.1942	
	15 Tetryl	1	9.628	9.664	-0.036	33935	0.2000	0.1988	
	16 Nitroglycerin	2	10.068	10.110	-0.042	140299	2.00	2.18	
	17 2,4,6-Trinitrotoluene	1	10.414	10.457	-0.043	43276	0.2000	0.1992	
	18 4-Amino-2,6-dinitrotoluene	1	10.554	10.617	-0.063	29636	0.2000	0.2019	
	19 2-Amino-4,6-dinitrotoluene	1	10.781	10.850	-0.069	40409	0.2000	0.1976	
	20 2,6-Dinitrotoluene	1	10.921	10.984	-0.063	28575	0.2000	0.2024	
	21 2,4-Dinitrotoluene	1	11.074	11.130	-0.056	56711	0.2000	0.1943	
	22 o-Nitrotoluene	1	11.748	11.824	-0.076	19415	0.2000	0.1547	
	23 p-Nitrotoluene	1	12.101	12.197	-0.096	17863	0.2000	0.1641	
	24 m-Nitrotoluene	1	12.594	12.697	-0.103	21248	0.2000	0.1554	
	25 PETN	2	13.601	13.764	-0.163	152457	2.00	2.11	a
	26 Ammonium Picrate	1		0.000			ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags
M - Manually Integrated
a - User Assigned ID

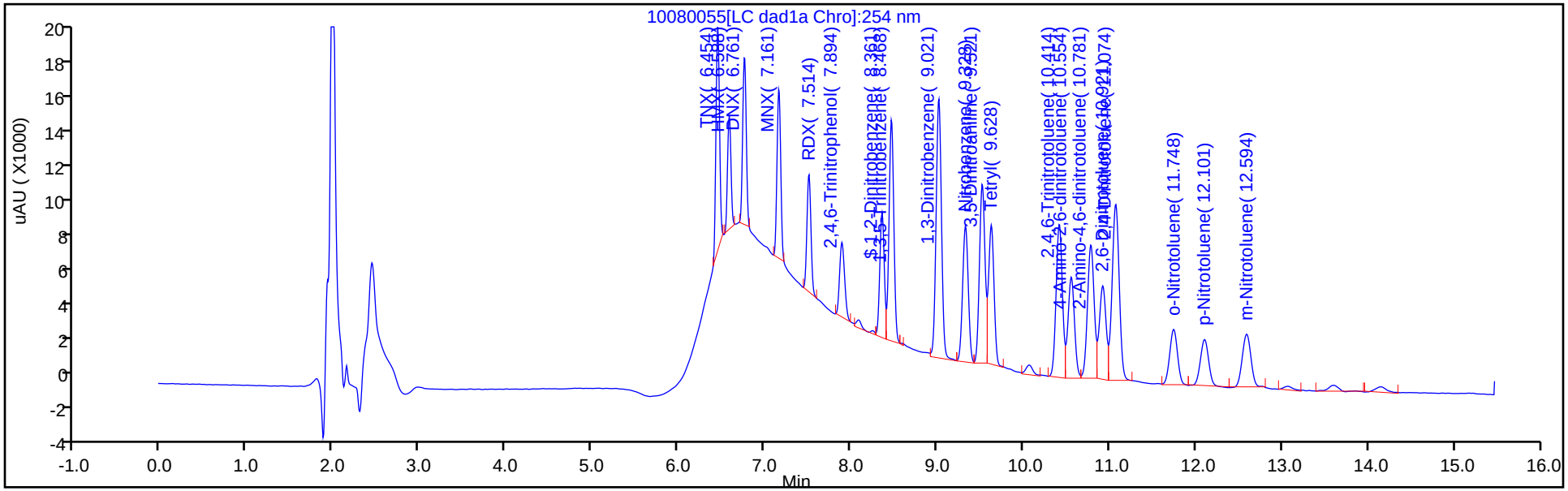
Report Date: 09-Oct-2024 15:38:56 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Denver

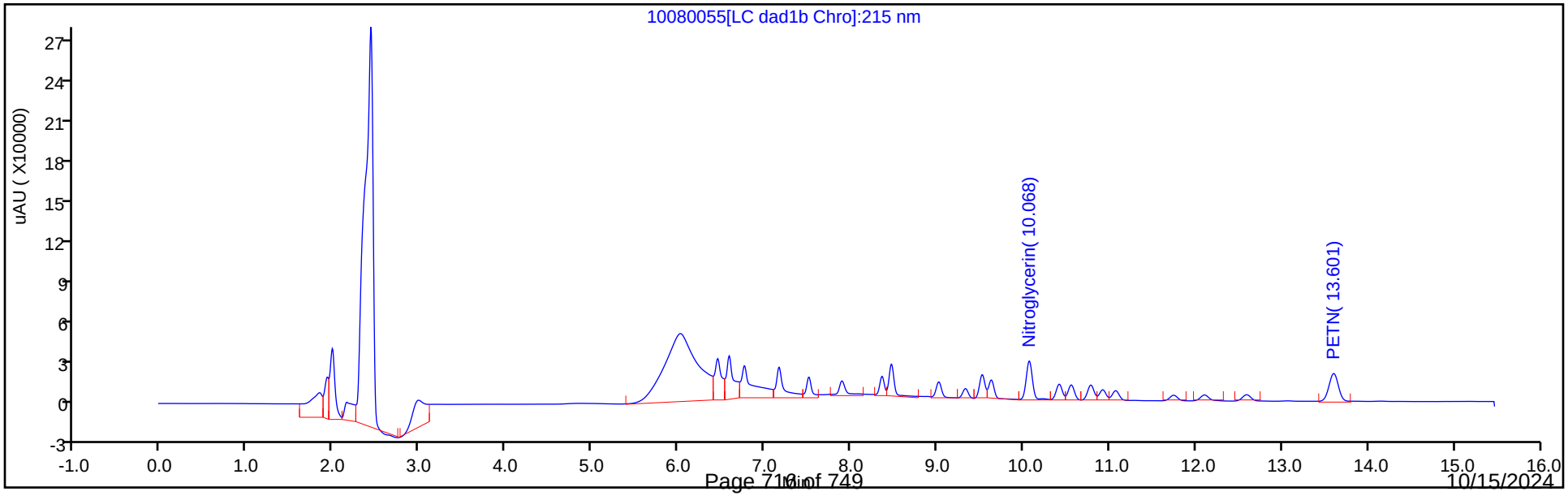
Data File: \\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080055.d

Injection Date:	09-Oct-2024 10:10:22	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-197447-A-1-C MSD			Worklist Smp#:	55
Client ID:	SCFmw-004-240901-GW				
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



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



10/15/2024
4:48:23 PM

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\10080055.D				
Lims ID:	280-197447-A-1-C MSD				
Client ID:	SCFmw-004-240901-GW				
Sample Type:	MSD				
Inject. Date:	09-Oct-2024 10:10:22	ALS Bottle#:	55	Worklist Smp#:	55
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-197447-A-1-C MSD				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20241008-138371.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	09-Oct-2024 15:38:56	Calib Date:	04-Oct-2024 19:55:02		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1609				

First Level Reviewer: LV5D Date: 09-Oct-2024 15:38:56

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1922	96.09

Eurofins Denver

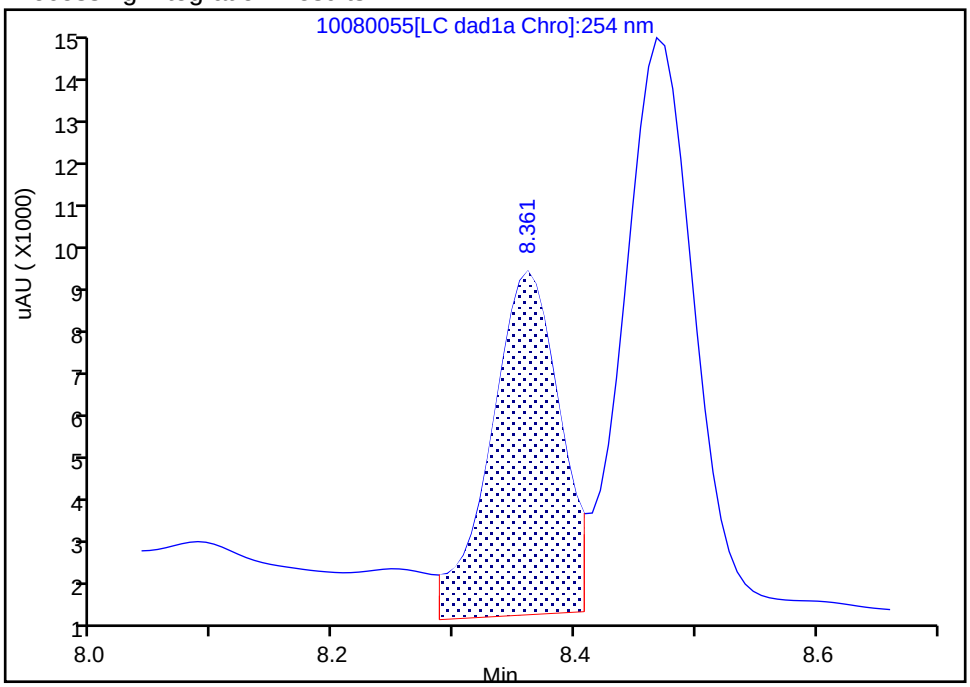
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080055.d				
Injection Date:	09-Oct-2024 10:10:22	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-A-1-C MSD				
Client ID:	SCFmw-004-240901-GW				
Operator ID:	JZ	ALS Bottle#:	55	Worklist Smp#:	55
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
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

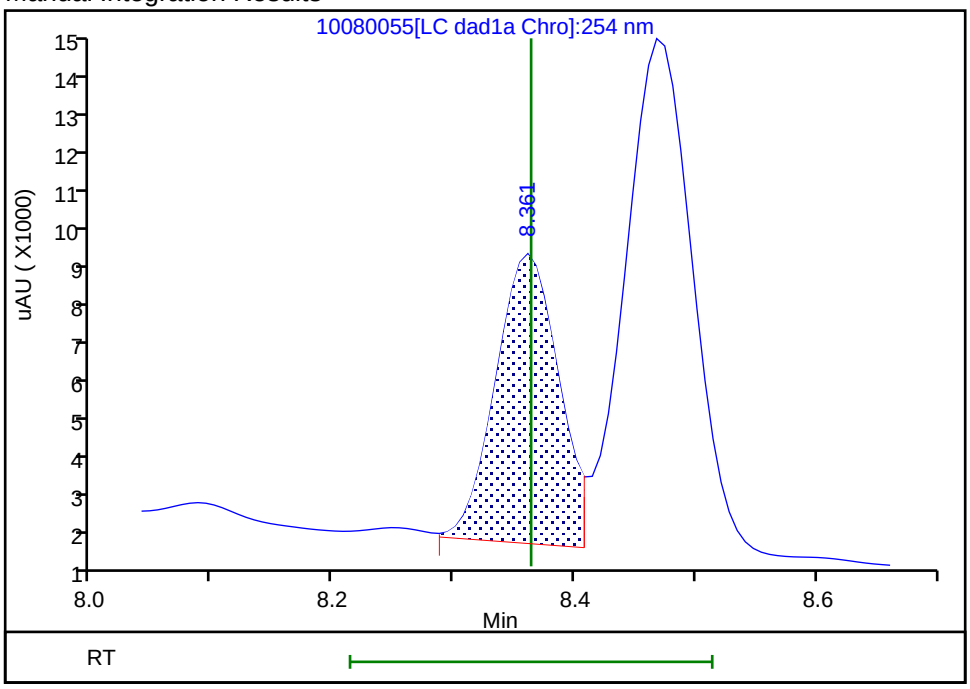
Processing Integration Results

RT: 8.36
Area: 30100
Amount: 0.230811
Amount Units: ug/mL



Manual Integration Results

RT: 8.36
Area: 25063
Amount: 0.192187
Amount Units: ug/mL



Reviewer: LV5D, 09-Oct-2024 15:38:50 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

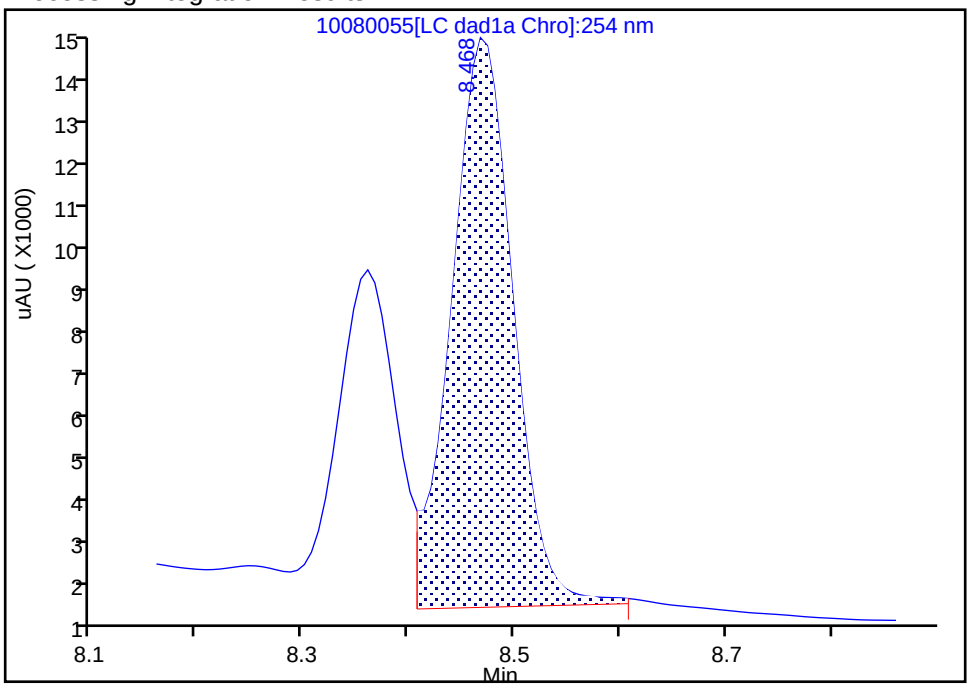
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080055.d				
Injection Date:	09-Oct-2024 10:10:22	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-A-1-C MSD				
Client ID:	SCFmw-004-240901-GW				
Operator ID:	JZ	ALS Bottle#:	55	Worklist Smp#:	55
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
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

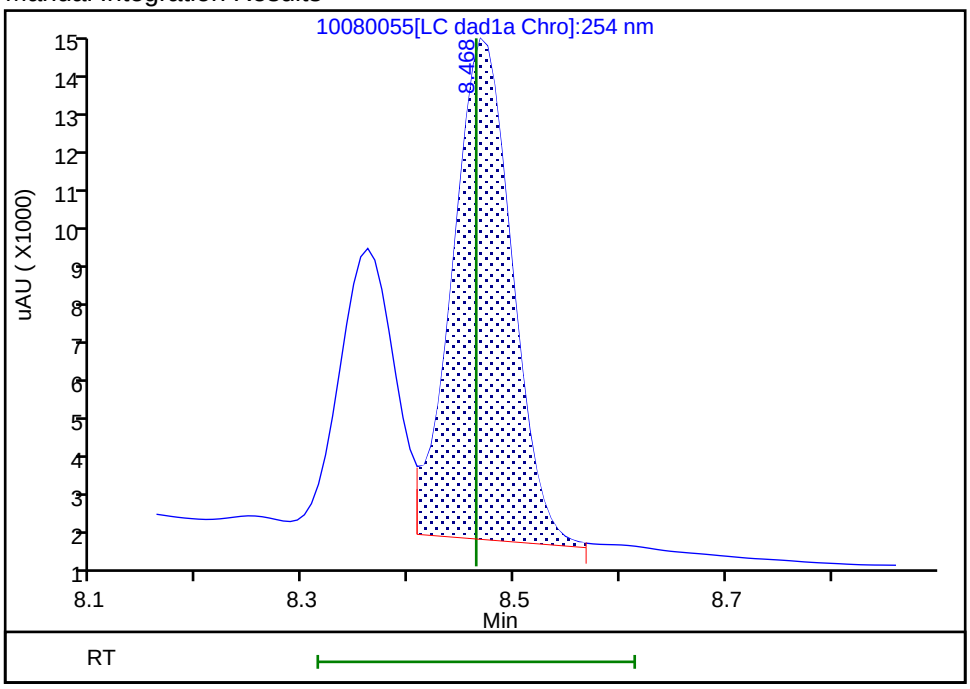
Processing Integration Results

RT: 8.47
Area: 51187
Amount: 0.235505
Amount Units: ug/mL



Manual Integration Results

RT: 8.47
Area: 48022
Amount: 0.220943
Amount Units: ug/mL



Reviewer: LV5D, 09-Oct-2024 15:38:53 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

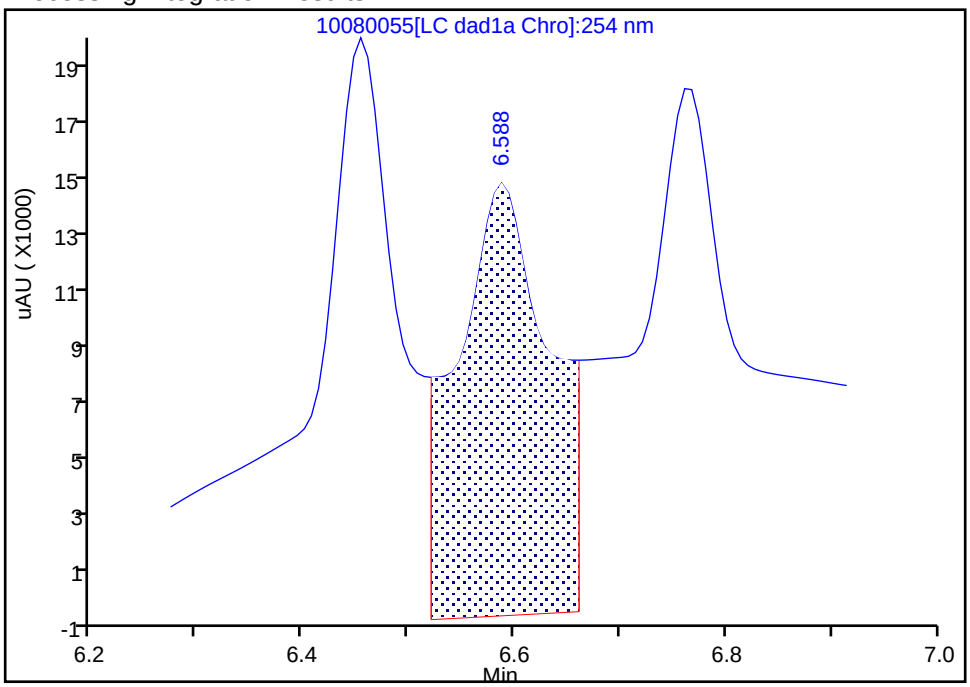
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080055.d				
Injection Date:	09-Oct-2024 10:10:22	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-A-1-C MSD				
Client ID:	SCFmw-004-240901-GW				
Operator ID:	JZ	ALS Bottle#:	55	Worklist Smp#:	55
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

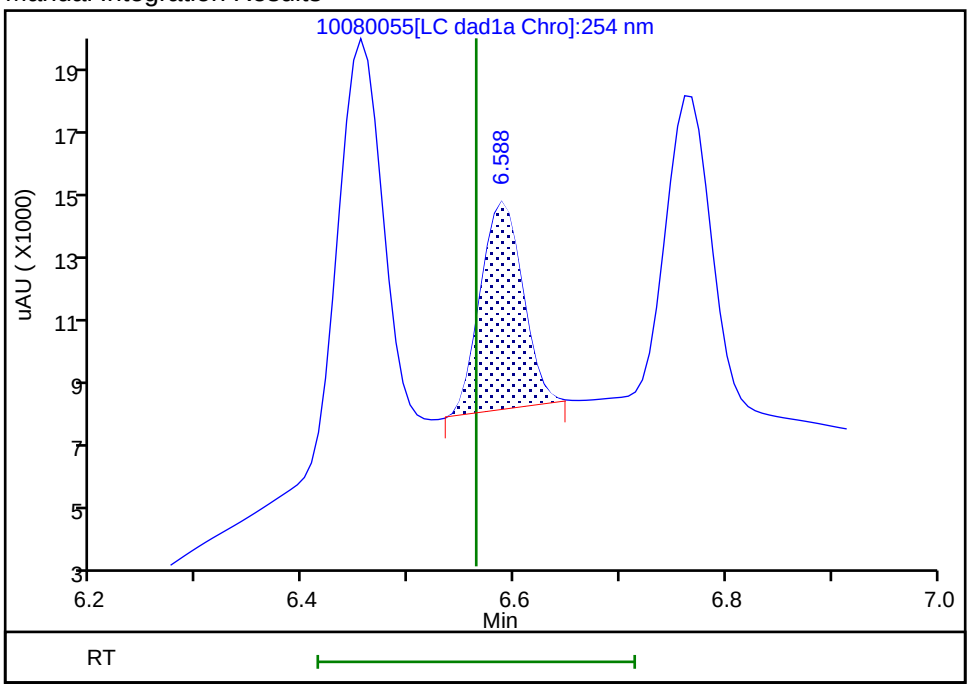
Processing Integration Results

RT: 6.59
Area: 88370
Amount: 0.914302
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 17542
Amount: 0.181495
Amount Units: ug/mL



Reviewer: LV5D, 09-Oct-2024 15:38:31 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

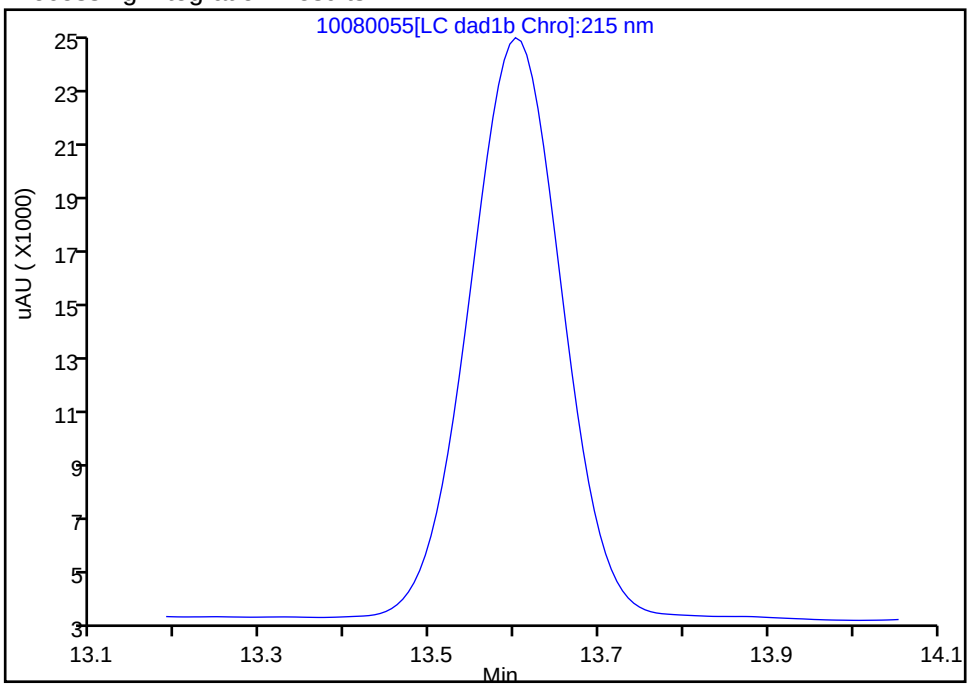
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080055.d				
Injection Date:	09-Oct-2024 10:10:22	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-A-1-C MSD				
Client ID:	SCFmw-004-240901-GW				
Operator ID:	JZ	ALS Bottle#:	55	Worklist Smp#:	55
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1C, 215 nm		

25 PETN, CAS: 78-11-5

Signal: 1

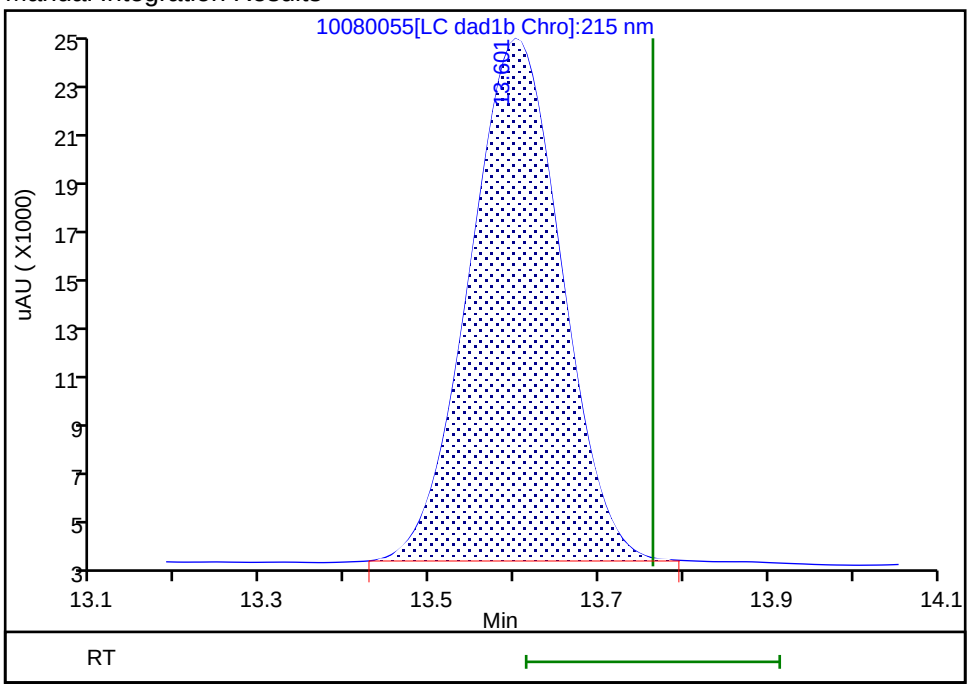
Not Detected
Expected RT: 13.76

Processing Integration Results



Manual Integration Results

RT: 13.60
Area: 152457
Amount: 2.111232
Amount Units: ug/mL



Reviewer: LV5D, 09-Oct-2024 15:38:55 -06:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

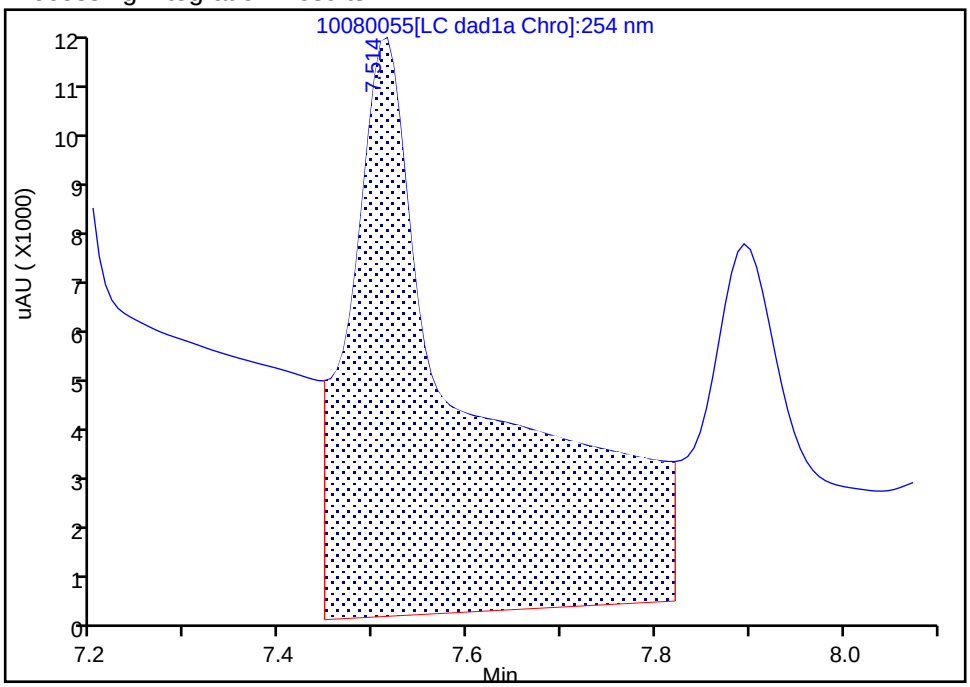
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241008-138371.b\10080055.d				
Injection Date:	09-Oct-2024 10:10:22	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-A-1-C MSD				
Client ID:	SCFmw-004-240901-GW				
Operator ID:	JZ	ALS Bottle#:	55	Worklist Smp#:	55
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

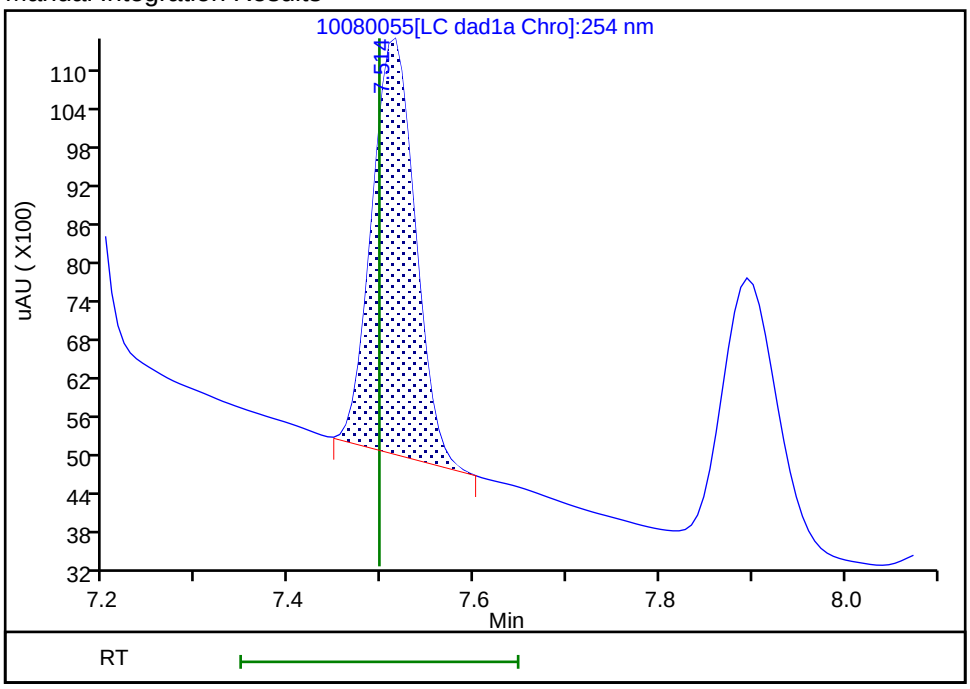
Processing Integration Results

RT: 7.51
Area: 98439
Amount: 0.937359
Amount Units: ug/mL



Manual Integration Results

RT: 7.51
Area: 21241
Amount: 0.200964
Amount Units: ug/mL



Reviewer: LV5D, 09-Oct-2024 15:38:41 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-197447-1

SDG No.:

Client Sample ID: SCFmw-004-240901-GW MSD RE | Lab Sample ID: 280-197447-1 MSD RE

Matrix: Water | Lab File ID: 10110026.D

Analysis Method: 8330B | Date Collected: 09/30/2024 13:59

Extraction Method: 3535 | Date Extracted: 10/11/2024 12:06

Sample wt/vol: 462.7(mL) | Date Analyzed: 10/11/2024 23:03

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 670729 | Units: ug/L

Preparation Batch No.: 670642 | Instrument ID: CHHPLC_X3

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
88-72-2	*2-Nitrotoluene*	*1.97*	*H J1*	*0.23*	0.22	*0.092*
99-08-1	*3-Nitrotoluene*	*1.97*	*H J1*	*0.43*	0.38	*0.21*
99-99-0	*4-Nitrotoluene*	*2.00*	*H J1*	*0.44*	0.43	*0.11*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	92		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20241011-138518.b\10110026.D
Lims ID: 280-197447-B-1-C MSD RE
Client ID: SCFmw-004-240901-GW
Sample Type: MSD
Inject. Date: 11-Oct-2024 23:03:58 ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-197447-B-1-C MSD
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20241011-138518.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 12-Oct-2024 10:13:32 Calib Date: 04-Oct-2024 19:55:02
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1603

First Level Reviewer: LV5D Date: 12-Oct-2024 10:11:35

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4	HMX	1	6.565	6.572	-0.007	18203	0.2000	0.1883	M
8	RDX	1	7.505	7.498	0.007	21200	0.2000	0.2006	M
9	2,4,6-Trinitrophenol	1	7.905	7.912	-0.007	17326	0.2000	0.2297	
$ 10	1,2-Dinitrobenzene	1	8.371	8.365	0.006	24090	0.2000	0.1847	
11	1,3,5-Trinitrobenzene	1	8.478	8.465	0.013	47674	0.2000	0.2193	
12	1,3-Dinitrobenzene	1	9.038	9.032	0.006	64791	0.2000	0.2173	
13	Nitrobenzene	1	9.358	9.345	0.013	39165	0.2000	0.2007	
14	3,5-Dinitroaniline	1	9.571	9.558	0.013	48109	0.2000	0.2066	
15	Tetryl	1	9.691	9.672	0.019	35659	0.2000	0.2089	
16	Nitroglycerin	2	10.138	10.118	0.020	137284	2.00	2.14	
17	2,4,6-Trinitrotoluene	1	10.491	10.472	0.019	44427	0.2000	0.2045	
18	4-Amino-2,6-dinitrotoluene	1	10.658	10.632	0.026	30913	0.2000	0.2107	
19	2-Amino-4,6-dinitrotoluene	1	10.891	10.858	0.033	42156	0.2000	0.2061	
20	2,6-Dinitrotoluene	1	11.018	10.992	0.026	29558	0.2000	0.2094	
21	2,4-Dinitrotoluene	1	11.171	11.145	0.026	59427	0.2000	0.2036	
22	o-Nitrotoluene	1	11.871	11.832	0.039	22904	0.2000	0.1825	
23	p-Nitrotoluene	1	12.244	12.198	0.046	20109	0.2000	0.1849	
24	m-Nitrotoluene	1	12.751	12.705	0.046	24879	0.2000	0.1823	
25	PETN	2	13.844	13.772	0.072	158106	2.00	2.19	
26	Ammonium Picrate	1		0.000			ND	ND	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND
Review Flags
M - Manually Integrated

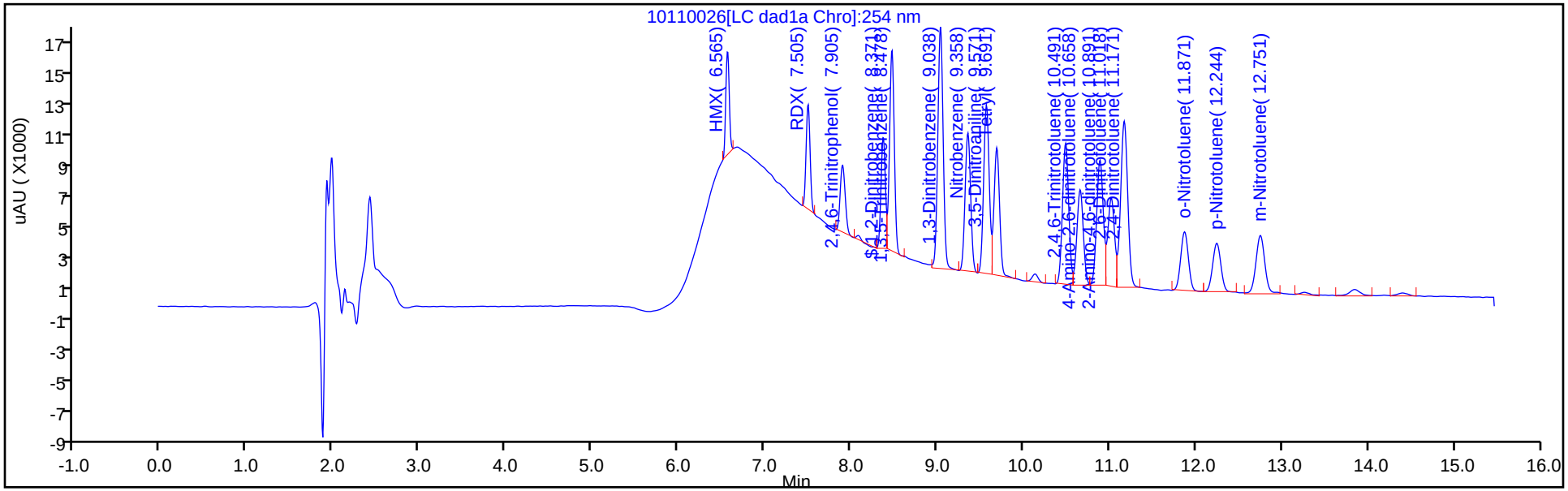
Report Date: 12-Oct-2024 10:13:36 Chrom Revision: 2.3 24-Sep-2024 15:19:46

Eurofins Denver

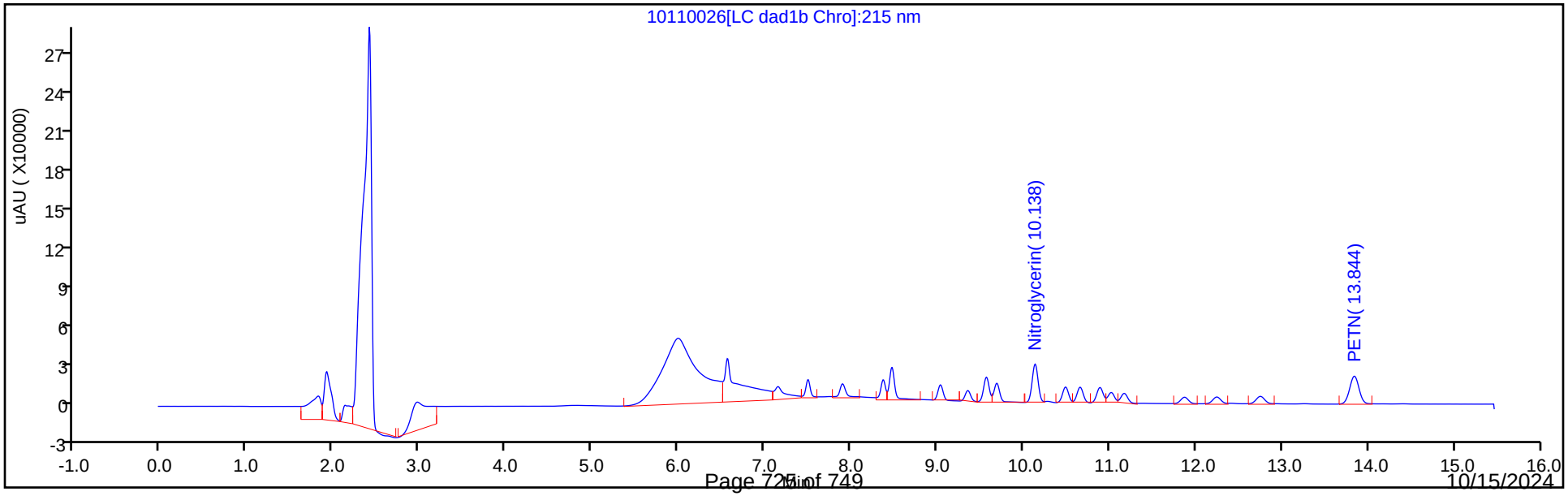
Data File: \\chromfs\denver\chromdata\chhplc_x\20241011-138518.b\10110026.d

Injection Date:	11-Oct-2024 23:03:58	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-197447-B-1-C MSD RE			Worklist Smp#:	26
Client ID:	SCFmw-004-240901-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20241011-138518.b\10110026.D				
Lims ID:	280-197447-B-1-C MSD RE				
Client ID:	SCFmw-004-240901-GW				
Sample Type:	MSD				
Inject. Date:	11-Oct-2024 23:03:58	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-197447-B-1-C MSD				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20241011-138518.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	12-Oct-2024 10:13:32	Calib Date:	04-Oct-2024 19:55:02		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20241004-138284.b\10040019.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1603				

First Level Reviewer: LV5D Date: 12-Oct-2024 10:11:35

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1847	92.36

Manual Integration/User Assign Peak Report

Eurofins Denver

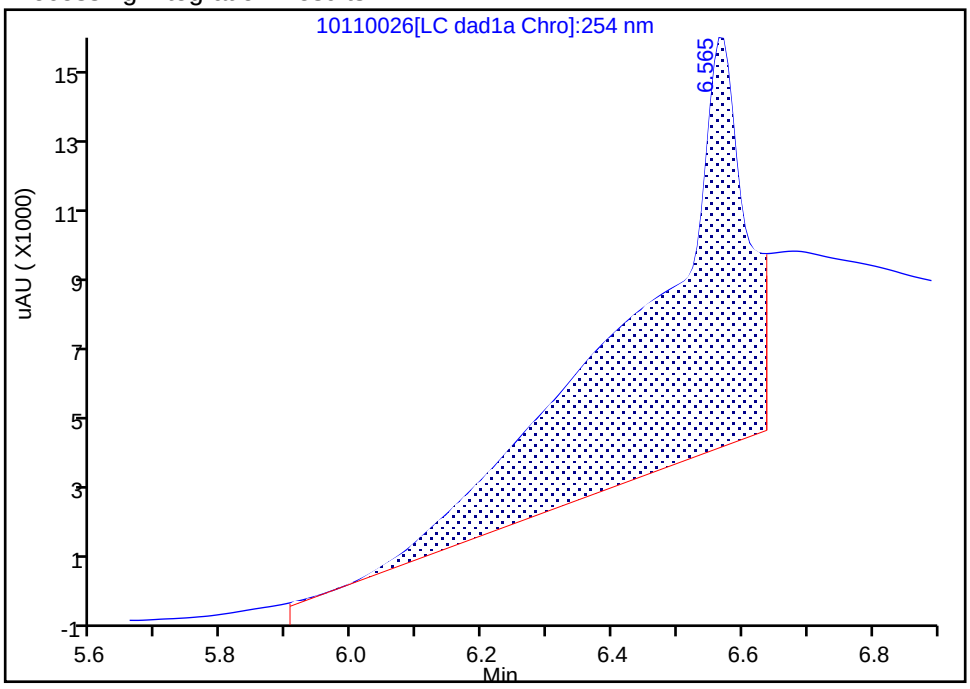
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241011-138518.b\10110026.d				
Injection Date:	11-Oct-2024 23:03:58	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-B-1-C MSD RE				
Client ID:	SCFmw-004-240901-GW				
Operator ID:	JZ	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

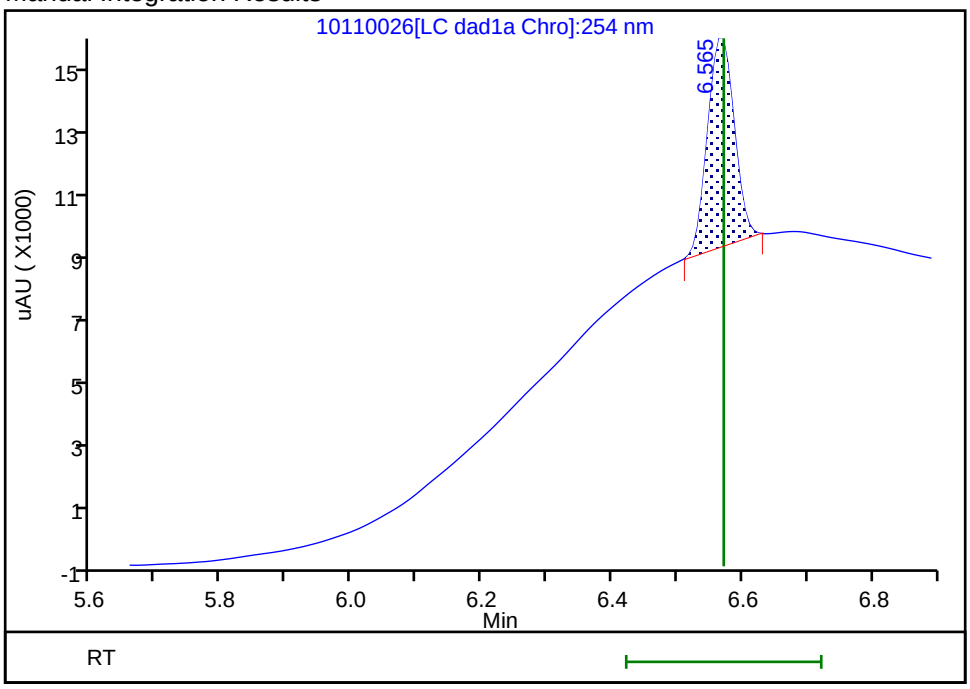
Processing Integration Results

RT: 6.56
Area: 129654
Amount: 1.341439
Amount Units: ug/mL



Manual Integration Results

RT: 6.56
Area: 18203
Amount: 0.188334
Amount Units: ug/mL



Reviewer: LV5D, 12-Oct-2024 10:11:29 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

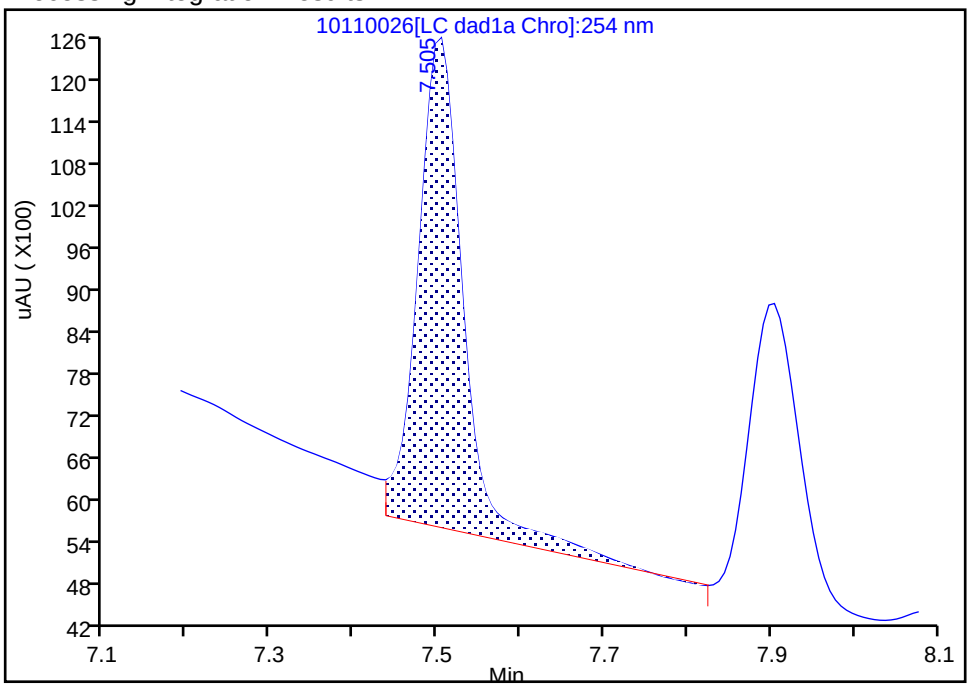
Data File:	\\chromfs\denver\chromdata\chhplc_x\20241011-138518.b\10110026.d				
Injection Date:	11-Oct-2024 23:03:58	Instrument ID:	CHHPLC_X3		
Lims ID:	280-197447-B-1-C MSD RE				
Client ID:	SCFmw-004-240901-GW				
Operator ID:	JZ	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

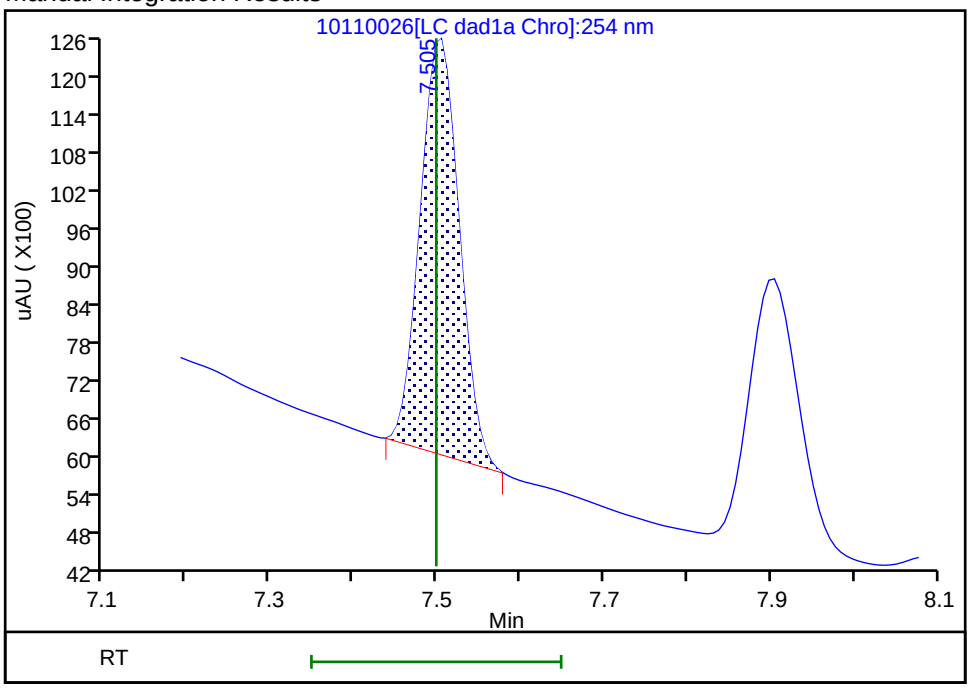
Processing Integration Results

RT: 7.50
Area: 26679
Amount: 0.252837
Amount Units: ug/mL



Manual Integration Results

RT: 7.50
Area: 21200
Amount: 0.200573
Amount Units: ug/mL



Reviewer: LV5D, 12-Oct-2024 10:11:32 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Instrument ID: CHHPLC_X5 Start Date: 08/10/2024 20:22

Analysis Batch Number: 663590 End Date: 08/11/2024 06:50

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-663590/10		08/10/2024 20:22	1	08100010.D	Luna-phenylhex 4.6(mm)
IC 280-663590/11		08/10/2024 20:57	1	08100011.D	Luna-phenylhex 4.6(mm)
IC 280-663590/12		08/10/2024 21:31	1	08100012.D	Luna-phenylhex 4.6(mm)
IC 280-663590/13		08/10/2024 22:06	1	08100013.D	Luna-phenylhex 4.6(mm)
IC 280-663590/14		08/10/2024 22:41	1	08100014.D	Luna-phenylhex 4.6(mm)
IC 280-663590/15		08/10/2024 23:16	1	08100015.D	Luna-phenylhex 4.6(mm)
IC 280-663590/16		08/10/2024 23:51	1	08100016.D	Luna-phenylhex 4.6(mm)
IC 280-663590/17		08/11/2024 00:26	1	08100017.D	Luna-phenylhex 4.6(mm)
IC 280-663590/18		08/11/2024 01:01	1	08100018.D	Luna-phenylhex 4.6(mm)
ICV 280-663590/19		08/11/2024 01:36	1	08100019.D	Luna-phenylhex 4.6(mm)
IC 280-663590/20		08/11/2024 02:11	1		Luna-phenylhex 4.6(mm)
IC 280-663590/21		08/11/2024 02:46	1		Luna-phenylhex 4.6(mm)
IC 280-663590/22		08/11/2024 03:21	1		Luna-phenylhex 4.6(mm)
IC 280-663590/23		08/11/2024 03:56	1		Luna-phenylhex 4.6(mm)
IC 280-663590/24		08/11/2024 04:31	1		Luna-phenylhex 4.6(mm)
IC 280-663590/25		08/11/2024 05:06	1		Luna-phenylhex 4.6(mm)
IC 280-663590/26		08/11/2024 05:41	1		Luna-phenylhex 4.6(mm)
IC 280-663590/27		08/11/2024 06:16	1		Luna-phenylhex 4.6(mm)
ICV 280-663590/28		08/11/2024 06:50	1		Luna-phenylhex 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 10/04/2024 16:59

Analysis Batch Number: 669870 End Date: 10/04/2024 20:16

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-669870/11		10/04/2024 16:59	1	10040011.D	UltraCarb5uODS 4.6(mm)
IC 280-669870/12		10/04/2024 17:21	1	10040012.D	UltraCarb5uODS 4.6(mm)
IC 280-669870/13		10/04/2024 17:43	1	10040013.D	UltraCarb5uODS 4.6(mm)
IC 280-669870/14		10/04/2024 18:05	1	10040014.D	UltraCarb5uODS 4.6(mm)
IC 280-669870/15		10/04/2024 18:27	1	10040015.D	UltraCarb5uODS 4.6(mm)
IC 280-669870/16		10/04/2024 18:49	1	10040016.D	UltraCarb5uODS 4.6(mm)
IC 280-669870/17		10/04/2024 19:11	1	10040017.D	UltraCarb5uODS 4.6(mm)
IC 280-669870/18		10/04/2024 19:33	1	10040018.D	UltraCarb5uODS 4.6(mm)
IC 280-669870/19		10/04/2024 19:55	1	10040019.D	UltraCarb5uODS 4.6(mm)
ICV 280-669870/20		10/04/2024 20:16	1	10040020.D	UltraCarb5uODS 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 10/08/2024 17:42

Analysis Batch Number: 670183 End Date: 10/09/2024 05:02

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-670183/8		10/08/2024 17:42	1	10080008.D	UltraCarb5uODS 4.6(mm)
MB 280-670001/1-A		10/08/2024 18:04	1	10080011.D	UltraCarb5uODS 4.6(mm)
LCS 280-670001/2-A		10/08/2024 18:26	1	10080012.D	UltraCarb5uODS 4.6(mm)
ZZZZZ (Client)		10/08/2024 18:48	1		UltraCarb5uODS 4.6(mm)
280-197447-8	FWGmw-007-240901-GW	10/08/2024 19:10	1	10080014.D	UltraCarb5uODS 4.6(mm)
ZZZZZ (Client)		10/08/2024 19:32	1		UltraCarb5uODS 4.6(mm)
ZZZZZ (Client)		10/08/2024 19:54	1		UltraCarb5uODS 4.6(mm)
ZZZZZ (Client)		10/08/2024 20:16	20		UltraCarb5uODS 4.6(mm)
ZZZZZ (Client)		10/08/2024 20:38	20		UltraCarb5uODS 4.6(mm)
ZZZZZ (Client)		10/08/2024 21:00	1		UltraCarb5uODS 4.6(mm)
ZZZZZ (Client)		10/08/2024 21:22	1		UltraCarb5uODS 4.6(mm)
CCV 280-670183/21		10/08/2024 21:44	1	10080021.D	UltraCarb5uODS 4.6(mm)
ZZZZZ (Client)		10/08/2024 22:06	1		UltraCarb5uODS 4.6(mm)
ZZZZZ (QC)		10/08/2024 22:27	1		UltraCarb5uODS 4.6(mm)
ZZZZZ (QC)		10/08/2024 22:49	1		UltraCarb5uODS 4.6(mm)
ZZZZZ (Client)		10/08/2024 23:11	1		UltraCarb5uODS 4.6(mm)
ZZZZZ (Client)		10/08/2024 23:33	1		UltraCarb5uODS 4.6(mm)
ZZZZZ (Client)		10/08/2024 23:55	1		UltraCarb5uODS 4.6(mm)
ZZZZZ (Client)		10/09/2024 00:17	1		UltraCarb5uODS 4.6(mm)
ZZZZZ (Client)		10/09/2024 00:39	1		UltraCarb5uODS 4.6(mm)
CCV 280-670183/30		10/09/2024 01:01	1	10080030.D	UltraCarb5uODS 4.6(mm)
ZZZZZ (Client)		10/09/2024 01:23	1		UltraCarb5uODS 4.6(mm)
ZZZZZ (QC)		10/09/2024 01:45	1		UltraCarb5uODS 4.6(mm)
ZZZZZ (QC)		10/09/2024 02:07	1		UltraCarb5uODS 4.6(mm)
ZZZZZ (Client)		10/09/2024 02:29	1		UltraCarb5uODS 4.6(mm)
ZZZZZ (QC)		10/09/2024 02:51	1		UltraCarb5uODS 4.6(mm)
ZZZZZ (QC)		10/09/2024 03:13	1		UltraCarb5uODS 4.6(mm)
ZZZZZ (Client)		10/09/2024 03:35	1		UltraCarb5uODS 4.6(mm)
ZZZZZ (Client)		10/09/2024 03:57	1		UltraCarb5uODS 4.6(mm)
ZZZZZ (Client)		10/09/2024 04:18	1		UltraCarb5uODS 4.6(mm)
CCV 280-670183/41		10/09/2024 05:02	1		UltraCarb5uODS 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 10/09/2024 05:02

Analysis Batch Number: 670184 End Date: 10/09/2024 14:55

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-670184/41		10/09/2024 05:02	1	10080041.D	UltraCarb5uODS 4.6(mm)
MB 280-669777/1-A		10/09/2024 05:24	1	10080042.D	UltraCarb5uODS 4.6(mm)
LCS 280-669777/2-A		10/09/2024 05:46	1	10080043.D	UltraCarb5uODS 4.6(mm)
ZZZZZ (Client)		10/09/2024 06:08	1		UltraCarb5uODS 4.6(mm)
ZZZZZ (Client)		10/09/2024 06:30	1		UltraCarb5uODS 4.6(mm)
ZZZZZ (Client)		10/09/2024 06:52	1		UltraCarb5uODS 4.6(mm)
ZZZZZ (Client)		10/09/2024 07:14	1		UltraCarb5uODS 4.6(mm)
ZZZZZ (Client)		10/09/2024 07:36	1		UltraCarb5uODS 4.6(mm)
ZZZZZ (Client)		10/09/2024 07:58	1		UltraCarb5uODS 4.6(mm)
ZZZZZ (Client)		10/09/2024 08:20	1		UltraCarb5uODS 4.6(mm)
ZZZZZ (Client)		10/09/2024 08:42	1		UltraCarb5uODS 4.6(mm)
CCV 280-670184/52		10/09/2024 09:04	1	10080052.D	UltraCarb5uODS 4.6(mm)
280-197447-1	SCFmw-004-240901-GW	10/09/2024 09:26	1	10080053.D	UltraCarb5uODS 4.6(mm)
280-197447-1 MS	SCFmw-004-240901-GW MS	10/09/2024 09:48	1	10080054.D	UltraCarb5uODS 4.6(mm)
280-197447-1 MSD	SCFmw-004-240901-GW MSD	10/09/2024 10:10	1	10080055.D	UltraCarb5uODS 4.6(mm)
280-197447-2	SCFmw-004-240902-GW	10/09/2024 10:32	1	10080056.D	UltraCarb5uODS 4.6(mm)
280-197447-3	LL1mw-087-240901-GW	10/09/2024 10:54	1	10080057.D	UltraCarb5uODS 4.6(mm)
280-197447-4	LL1mw-086-240901-GW	10/09/2024 11:16	1	10080058.D	UltraCarb5uODS 4.6(mm)
280-197447-5	LL1mw-091-240901-GW	10/09/2024 11:38	1	10080059.D	UltraCarb5uODS 4.6(mm)
280-197447-6	LL1mw-091-240902-GW	10/09/2024 12:00	1	10080060.D	UltraCarb5uODS 4.6(mm)
280-197447-7	LL1mw-064-240901-GW	10/09/2024 12:22	1	10080061.D	UltraCarb5uODS 4.6(mm)
ZZZZZ (Client)		10/09/2024 12:44	1		UltraCarb5uODS 4.6(mm)
CCV 280-670184/63		10/09/2024 13:06	1	10080063.D	UltraCarb5uODS 4.6(mm)
ZZZZZ (Client)		10/09/2024 13:28	1		UltraCarb5uODS 4.6(mm)
ZZZZZ (Client)		10/09/2024 13:49	1		UltraCarb5uODS 4.6(mm)
ZZZZZ (Client)		10/09/2024 14:12	1		UltraCarb5uODS 4.6(mm)
ZZZZZ (Client)		10/09/2024 14:34	5		UltraCarb5uODS 4.6(mm)
CCV 280-670184/67		10/09/2024 14:55	1		UltraCarb5uODS 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Instrument ID: CHHPLC_X5 Start Date: 10/09/2024 19:55

Analysis Batch Number: 670394 End Date: 10/10/2024 03:30

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-670394/8		10/09/2024 19:55	1	10090008.D	Luna-phenylhex 4.6(mm)
ZZZZZ (QC)		10/09/2024 20:30	1		Luna-phenylhex 4.6(mm)
ZZZZZ (QC)		10/09/2024 21:05	1		Luna-phenylhex 4.6(mm)
ZZZZZ (Client)		10/09/2024 21:40	1		Luna-phenylhex 4.6(mm)
ZZZZZ (Client)		10/09/2024 22:15	1		Luna-phenylhex 4.6(mm)
ZZZZZ (Client)		10/09/2024 22:50	1		Luna-phenylhex 4.6(mm)
ZZZZZ (Client)		10/09/2024 23:25	5		Luna-phenylhex 4.6(mm)
ZZZZZ (Client)		10/10/2024 00:00	1		Luna-phenylhex 4.6(mm)
ZZZZZ (Client)		10/10/2024 00:35	1		Luna-phenylhex 4.6(mm)
ZZZZZ (Client)		10/10/2024 01:10	1		Luna-phenylhex 4.6(mm)
280-197447-5	LL1mw-091-240901-GW	10/10/2024 01:45	1	10090019.D	Luna-phenylhex 4.6(mm)
CCV 280-670394/20		10/10/2024 02:20	1	10090020.D	Luna-phenylhex 4.6(mm)
280-197447-6	LL1mw-091-240902-GW	10/10/2024 02:55	1	10090021.D	Luna-phenylhex 4.6(mm)
CCV 280-670394/22		10/10/2024 03:30	1	10090022.D	Luna-phenylhex 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 10/11/2024 17:12

Analysis Batch Number: 670729 End Date: 10/12/2024 01:59

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-670729/7		10/11/2024 17:12	1	10110007.D	UltraCarb5uODS 4.6(mm)
MB 280-670642/1-A		10/11/2024 17:34	1	10110011.D	UltraCarb5uODS 4.6(mm)
LCS 280-670642/2-A		10/11/2024 17:56	1	10110012.D	UltraCarb5uODS 4.6(mm)
ZZZZZ (Client)		10/11/2024 18:18	1		UltraCarb5uODS 4.6(mm)
ZZZZZ (Client)		10/11/2024 18:40	1		UltraCarb5uODS 4.6(mm)
ZZZZZ (Client)		10/11/2024 19:02	1		UltraCarb5uODS 4.6(mm)
ZZZZZ (Client)		10/11/2024 19:24	1		UltraCarb5uODS 4.6(mm)
ZZZZZ (Client)		10/11/2024 19:46	1		UltraCarb5uODS 4.6(mm)
ZZZZZ (Client)		10/11/2024 20:08	1		UltraCarb5uODS 4.6(mm)
ZZZZZ (Client)		10/11/2024 20:30	1		UltraCarb5uODS 4.6(mm)
ZZZZZ (Client)		10/11/2024 20:52	1		UltraCarb5uODS 4.6(mm)
CCV 280-670729/21		10/11/2024 21:14	1	10110021.D	UltraCarb5uODS 4.6(mm)
ZZZZZ (Client)		10/11/2024 21:36	1		UltraCarb5uODS 4.6(mm)
ZZZZZ (Client)		10/11/2024 21:58	1		UltraCarb5uODS 4.6(mm)
280-197447-1 RE	SCFmw-004-240901-GW RE	10/11/2024 22:20	1	10110024.D	UltraCarb5uODS 4.6(mm)
280-197447-1 MS RE	SCFmw-004-240901-GW MS RE	10/11/2024 22:42	1	10110025.D	UltraCarb5uODS 4.6(mm)
280-197447-1 MSD RE	SCFmw-004-240901-GW MSD RE	10/11/2024 23:03	1	10110026.D	UltraCarb5uODS 4.6(mm)
280-197447-2 RE	SCFmw-004-240902-GW RE	10/11/2024 23:25	1	10110027.D	UltraCarb5uODS 4.6(mm)
280-197447-3 RE	LL1mw-087-240901-GW RE	10/11/2024 23:47	1	10110028.D	UltraCarb5uODS 4.6(mm)
280-197447-4 RE	LL1mw-086-240901-GW RE	10/12/2024 00:09	1	10110029.D	UltraCarb5uODS 4.6(mm)
280-197447-5 RE	LL1mw-091-240901-GW RE	10/12/2024 00:31	1	10110030.D	UltraCarb5uODS 4.6(mm)
280-197447-6 RE	LL1mw-091-240902-GW RE	10/12/2024 00:53	1	10110031.D	UltraCarb5uODS 4.6(mm)
CCV 280-670729/32		10/12/2024 01:15	1	10110032.D	UltraCarb5uODS 4.6(mm)
280-197447-7 RE	LL1mw-064-240901-GW RE	10/12/2024 01:37	1	10110033.D	UltraCarb5uODS 4.6(mm)
CCV 280-670729/34		10/12/2024 01:59	1	10110034.D	UltraCarb5uODS 4.6(mm)

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Batch Number: 663590 Batch Start Date: 08/10/24 20:22 Batch Analyst: Zhang, Jian

Batch Method: 8330B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Matrix	Basis	FinalAmount	8330 LCS 00136	8330IntermStk 00082	8330Surrogate 00158		
IC 280-663590/10		8330B			1 mL		250 uL			
IC 280-663590/11		8330B			1 mL		100 uL			
IC 280-663590/12		8330B			1 mL		70 uL			
IC 280-663590/13		8330B			1 mL		40 uL			
IC 280-663590/14		8330B			1 mL		25 uL			
IC 280-663590/15		8330B			1 mL		10 uL			
IC 280-663590/16		8330B			1 mL		5 uL			
IC 280-663590/17		8330B			1 mL		2 uL			
IC 280-663590/18		8330B			1 mL		1 uL			
ICV 280-663590/19		8330B			1 mL	50 uL		50 uL		

Batch Notes	
Reagent Water ID	N.ELGA 8/10/24
Methanol ID	64110
Vial Lot Number	231260007
Diluting Solvent ID	8330ACidH2O_00007
Batch Comment	8330BufferStk_00017, Acetic Acid_00171

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Batch Number: 669777 Batch Start Date: 10/04/24 12:25 Batch Analyst: Alwes, Ashley A

Batch Method: 3535 Batch End Date: 10/04/24 16:10

Lab Sample ID	Client Sample ID	Method Chain	Matrix	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	8330 LCS 00137	8330_OP_DMT 00030
MB 280-669777/1		3535, 8330B					500 mL	5 mL		
LCS 280-669777/2		3535, 8330B					500 mL	5 mL	0.1 mL	0.1 mL
280-197447-A-1	SCFmw-004-24090 1-GW	3535, 8330B	Water	T	728.0 g	281.6 g	446.4 mL	5 mL		
280-197447-A-1 MS	SCFmw-004-24090 1-GW	3535, 8330B	Water	T	731.6 g	280.1 g	451.5 mL	5 mL	0.1 mL	0.1 mL
280-197447-A-1 MSD	SCFmw-004-24090 1-GW	3535, 8330B	Water	T	733.3 g	278.9 g	454.4 mL	5 mL	0.1 mL	0.1 mL
280-197447-A-2	SCFmw-004-24090 2-GW	3535, 8330B	Water	T	733.2 g	283.7 g	449.5 mL	5 mL		
280-197447-A-3	LL1mw-087-24090 1-GW	3535, 8330B	Water	T	726.6 g	284.1 g	442.5 mL	5 mL		
280-197447-A-4	LL1mw-086-24090 1-GW	3535, 8330B	Water	T	716.1 g	279.2 g	436.9 mL	5 mL		
280-197447-A-5	LL1mw-091-24090 1-GW	3535, 8330B	Water	T	720.1 g	282.8 g	437.3 mL	5 mL		
280-197447-A-6	LL1mw-091-24090 2-GW	3535, 8330B	Water	T	724.5 g	280.5 g	444 mL	5 mL		
280-197447-A-7	LL1mw-064-24090 1-GW	3535, 8330B	Water	T	721.0 g	282.0 g	439 mL	5 mL		

Lab Sample ID	Client Sample ID	Method Chain	Matrix	Basis	8330Surrogate 00159					
MB 280-669777/1		3535, 8330B			0.1 mL					
LCS 280-669777/2		3535, 8330B			0.1 mL					
280-197447-A-1	SCFmw-004-24090 1-GW	3535, 8330B	Water	T	0.1 mL					
280-197447-A-1 MS	SCFmw-004-24090 1-GW	3535, 8330B	Water	T	0.1 mL					
280-197447-A-1 MSD	SCFmw-004-24090 1-GW	3535, 8330B	Water	T	0.1 mL					
280-197447-A-2	SCFmw-004-24090 2-GW	3535, 8330B	Water	T	0.1 mL					
280-197447-A-3	LL1mw-087-24090 1-GW	3535, 8330B	Water	T	0.1 mL					
280-197447-A-4	LL1mw-086-24090 1-GW	3535, 8330B	Water	T	0.1 mL					
280-197447-A-5	LL1mw-091-24090 1-GW	3535, 8330B	Water	T	0.1 mL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Batch Number: 669777 Batch Start Date: 10/04/24 12:25 Batch Analyst: Alwes, Ashley A

Batch Method: 3535 Batch End Date: 10/04/24 16:10

Lab Sample ID	Client Sample ID	Method Chain	Matrix	Basis	8330Surrogate 00159					
280-197447-A-6	LL1mw-091-240902-GW	3535, 8330B	Water	T	0.1 mL					
280-197447-A-7	LL1mw-064-240901-GW	3535, 8330B	Water	T	0.1 mL					

Batch Notes	
First Start time	10/04/2024 12:55
First End time	10/04/2024 15:53
SPE Cartridge Type	Sep-Pak Porapak Rdx
SPE Cartridge Lot ID	005534026A
Balance ID	24350888
Balance is Level? (Y/N)	yes
Manifold ID	Manifold: B/C
QC Bottle Lot ID	0202401I
Pipette/Syringe/Dispenser ID	Doddy/DOD/Pugsley
Solvent Name	Calcium Chloride in Water
Solvent Lot #	CaCl2_Sol_00094
Rinse Solvent Name	Acetonitrile
Rinse Solvent Lot	Acetonitrile_00091
Acid Name	0.2% AAinACN
Acid ID	0.2% AAinACN_00007
Analyst ID - Spike Analyst	AA
Analyst ID - Spike Witness Analyst	Reviewer: NR
Batch Comment	DV-OP-0017, NaCl Baked_00035 (Fisher)

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Batch Number: 669870 Batch Start Date: 10/04/24 16:59 Batch Analyst: Zhang, Jian

Batch Method: 8330B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Matrix	Basis	FinalAmount	8330 DMT 00018	8330 LCS 00137	8330_OP_DMT 00030	8330IntermStk 00083	8330Surrogate 00159
IC 280-669870/11		8330B			1 mL	125 uL			250 uL	
IC 280-669870/12		8330B			1 mL	50 uL			100 uL	
IC 280-669870/13		8330B			1 mL	35 uL			70 uL	
IC 280-669870/14		8330B			1 mL	20 uL			40 uL	
IC 280-669870/15		8330B			1 mL	12.5 uL			25 uL	
IC 280-669870/16		8330B			1 mL	5 uL			10 uL	
IC 280-669870/17		8330B			1 mL	2.5 uL			5 uL	
IC 280-669870/18		8330B			1 mL	1 uL			2 uL	
IC 280-669870/19		8330B			1 mL	0.5 uL			1 uL	
ICV 280-669870/20		8330B			1 mL		50 uL	50 uL		50 uL

Batch Notes	
Reagent Water ID	N.ELGA 10/4/24
Methanol ID	64208
Vial Lot Number	2402678
Diluting Solvent ID	8330ACIDH2O00008
Batch Comment	8330BUFFERSTK00018,ACETICACID00171

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Batch Number: 670001 Batch Start Date: 10/07/24 13:45 Batch Analyst: Alwes, Ashley A

Batch Method: 3535 Batch End Date: 10/07/24 16:10

Lab Sample ID	Client Sample ID	Method Chain	Matrix	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	8330 LCS 00137	8330Surrogate 00159
MB 280-670001/1		3535, 8330B					500 mL	5 mL		0.1 mL
LCS 280-670001/2		3535, 8330B					500 mL	5 mL	0.1 mL	0.1 mL
280-197447-A-8	FWGmw-007-240901-GW	3535, 8330B	Water	T	762.2 g	278.5 g	483.7 mL	5 mL		0.1 mL

Batch Notes	
First Start time	10/07/2024 13:55
First End time	10/07/2024 15:52
SPE Cartridge Type	Sep-Pak Porapak Rdx
SPE Cartridge Lot ID	005534026A
Balance ID	24350888
Balance is Level? (Y/N)	yes
Manifold ID	Manifold: A/B
QC Bottle Lot ID	0202401I
Pipette/Syringe/Dispenser ID	Doddy/DOD/Pugsley
Solvent Name	Calcium Chloride in Water
Solvent Lot #	CaCl2_Sol_00094
Rinse Solvent Name	Acetonitrile
Rinse Solvent Lot	Acetonitrile_00091
Acid Name	0.2% AAinACN
Acid ID	0.2% AAinACN_00007
Analyst ID - Spike Analyst	AA
Analyst ID - Spike Witness Analyst	Reviewer: NR
Batch Comment	DV-OP-0017, NaCl Baked_00035 (Fisher)

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Batch Number: 670642 Batch Start Date: 10/11/24 12:06 Batch Analyst: Alwes, Ashley A

Batch Method: 3535 Batch End Date: 10/11/24 14:24

Lab Sample ID	Client Sample ID	Method Chain	Matrix	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	8330 LCS 00137	8330Surrogate 00159
MB 280-670642/1		3535, 8330B					500 mL	5 mL		0.1 mL
LCS 280-670642/2		3535, 8330B					500 mL	5 mL	0.1 mL	0.1 mL
280-197447-B-1	SCFmw-004-240901-GW	3535, 8330B	Water	T	762.9 g	282.2 g	480.7 mL	5 mL		0.1 mL
280-197447-B-1 MS	SCFmw-004-240901-GW	3535, 8330B	Water	T	739.5 g	284.0 g	455.5 mL	5 mL	0.1 mL	0.1 mL
280-197447-B-1 MSD	SCFmw-004-240901-GW	3535, 8330B	Water	T	742.8 g	280.1 g	462.7 mL	5 mL	0.1 mL	0.1 mL
280-197447-B-2	SCFmw-004-240902-GW	3535, 8330B	Water	T	744.0 g	287.5 g	456.5 mL	5 mL		0.1 mL
280-197447-B-3	LL1mw-087-240901-GW	3535, 8330B	Water	T	745.5 g	280.4 g	465.1 mL	5 mL		0.1 mL
280-197447-B-4	LL1mw-086-240901-GW	3535, 8330B	Water	T	743.0 g	280.7 g	462.3 mL	5 mL		0.1 mL
280-197447-B-5	LL1mw-091-240901-GW	3535, 8330B	Water	T	755.6 g	280.7 g	474.9 mL	5 mL		0.1 mL
280-197447-B-6	LL1mw-091-240902-GW	3535, 8330B	Water	T	742.2 g	279.3 g	462.9 mL	5 mL		0.1 mL
280-197447-B-7	LL1mw-064-240901-GW	3535, 8330B	Water	T	728.7 g	282.1 g	446.6 mL	5 mL		0.1 mL

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-197447-1

SDG No.:

Batch Number: 670642 Batch Start Date: 10/11/24 12:06 Batch Analyst: Alwes, Ashley A

Batch Method: 3535 Batch End Date: 10/11/24 14:24

Batch Notes	
First Start time	10/11/2024 12:15
First End time	10/11/2024 14:04
SPE Cartridge Type	Sep-Pak Porapak Rdx
SPE Cartridge Lot ID	005534026A
Balance ID	24350888
Balance is Level? (Y/N)	yes
Manifold ID	Manifold: A/B
QC Bottle Lot ID	0202401I
Pipette/Syringe/Dispenser ID	Doddy/DOD/Pugsley
Solvent Name	Calcium Chloride in Water
Solvent Lot #	CaCl2_Sol_00094
Rinse Solvent Name	Acetonitrile
Rinse Solvent Lot	Acetonitrile_00091
Acid Name	0.2% AAinACN
Acid ID	0.2% AAinACN_00007
Analyst ID - Spike Analyst	AA
Analyst ID - Spike Witness Analyst	Reviewer: NR
Batch Comment	DV-OP-0017, NaCl Baked_00035 (Fisher)

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.

Shipping and Receiving Documents

leidos

Chain of Custody Record

COC No.: RVAAP-446-TA
Date: 10/1/24

Name Leidos
Address: 8866 Commons Blvd. Suite 201, Twinsburg, OH 44087
Phone Number: (330) 405-5802
Project Manager: Jed Thomas
Project: RVAAP FWGW Sampling Event Fall 2024
Job/P.O. No.: P010216426
Sampler (Signature) (Printed Name)

Joe Kravetz

Laboratory Name: TA- Denver
Address: 4955 Yarrow Street
Arvada, CO 80002
Phone: 303-736-0107
Contact: Patrick McEntee

Laboratory No	Sample ID	Site Type	Depth	Date	Time	Matrix	Explosives (6)(A)	Temperature Blank	Total Number of Containers	OBSERVATIONS, COMMENTS SPECIAL INSTRUCTIONS
	SCFmw-004-240901-GW	—	—	9/30/24	1359	W	2		2	
	SCFmw-004-240902-GW	—	—	9/30/24	1359	W	2		2	
	SCFmw-004-240901-GW-MSD	—	—	9/30/24	1359	W	4		4	extra volume for MS/MSD

Requested Parameters

CF 10/1/24

Relinquished by	Date	Received by	Date	Time
Signature: Charles Spurr	10/1/24	Signature: Ben Jester	10/2/24	09:10
Printed Name: Charles Spurr	Time: 1800	Printed Name: Ben Jester		
Company: Leidos		Company: EET DEN		
Relinquished by	Date	Received by	Date	Time
Signature		Signature		
Printed Name	Time	Printed Name		
Company		Company		

Notes: Total Number of Containers: 8

A. Cool, 4C
B. HCl, pH<2, Cool, 4C
C. HNO3, pH<2, Cool, 4C
D. NaOH, pH>12, Cool 4C

1. SW 8260B Notes:
2. SW 8270D
3. SW 8270D SIM
4. SW 8082A
5. SW 8081B
6. SW 8330
7. SW 6010/6020/7470
8. SW 9012B
9. SW 9034
10. SW 9056/9056A
11. SW 6860
12. EPA 353.2
13. SW 7196
14. SM2320B

Shipment Method: Courier

818082603591

818082603580

Temperature Blank

Lab:
Leidos
8866 Commons Drive
Twinsburg, OH 44087
(330) 405-5802

Leidos White Laboratory Pink Project Manager Yellow Project QAO Goldenrod Field Project Manager

0.3/0.3 IR TLF CF+0.1

Chain of Custody Record

leidos

COC No.: RVAAP- 446-TA
Date: 10/1/24

Name Leidos
Address: 8866 Commons Blvd. Suite 201, Twinsburg, OH 44087
Phone Number: (330) 405-5802
Project Manager: Jed Thomas
Project: RVAAP FWGW Sampling Event Fall 2024
Job/P.O. No.: P010216426
Sampler (Signature) (Printed Name)

Laboratory Name: TA- Denver
Address: 4955 Yarrow Street
Arvada, CO 80002
Phone: 303-736-0107
Contact: Patrick McEntee

Requested Parameters

Laboratory No	Sample ID	Site Type	Depth	Date	Time	Matrix	Explosives (6)(A)	Temperature Blank	Total Number of Containers	OBSERVATIONS, COMMENTS SPECIAL INSTRUCTIONS
	LL1mw-087-240901-GW	-	-	10/1/24	0853	W	2		2	
	LL1mw-087-240901-GWMSD			CS 10/1/24		W	4		4	extra volume for MS/MSD

CS 10/1/24

Relinquished by	Date	Received by	Date	Notes: Total Number of Containers: 6	Shipment Method: Courier
Signature: Charles Spurr	10/1/24	Signature	10/2/24	A. Cool, 4C B. HCl, pH<2, Cool, 4C C. HNO3, pH<2, Cool, 4C D. NaOH, pH>12, Cool 4C	
Printed Name: Charles Spurr	Time: 1800	Printed Name: Ben Jester	Time: 09:20	1. SW 8260B Notes: 2. SW 8270D 3. SW 8270D SIM 4. SW 8082A 5. SW 8081B	
Leidos		EET DEN		6. SW 8330 7. SW 6010/6020/7470 8. SW 9012B 9. SW 9034 10. SW 9056/9056A	Temperature Blank
Company		Company		11. SW 6860 12. EPA 353.2 13. SW 7196 14. SM2320B	Lab: Leidos 8866 Commons Drive Twinsburg, OH 44087 (330) 405-5802
Relinquished by	Date	Received by	Date		
Signature	Time	Signature	Time		
Printed Name		Printed Name			
Company		Company			

Leidos

White Laboratory Pink Project Manager Yellow Project QAO Goldenrod Field Project Manager

0.3/0.3 IR THI CF+0.1

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Chain of Custody Record

Page 3 of 6

COC No.: RVAAP-446-TA

Date: 10/1/24

Name Leidos
Address: 8866 Commons Blvd. Suite 201, Twinsburg, OH 44087
Phone Number: (330) 405-5802
Project Manager: Jed Thomas
Project: RVAAP FWGW Sampling Event Fall 2024
Job/P.O. No.: P010216426
Sampler (Signature) (Printed Name) Joe Kravetz

Laboratory Name: TA- Denver
Address: 4955 Yarrow Street
Arvada, CO 80002
Phone: 303-736-0107
Contact: Patrick McEntee

Laboratory No	Sample ID	Site Type	Depth	Date	Time	Matrix	Explosives (6)(A)	Temperature Blank	Total Number of Containers	OBSERVATIONS, COMMENTS SPECIAL INSTRUCTIONS
	LL1mw-086-240901-GW	—	—	10/1/24	1156	W	2		2	
										~~extra volume for MS/MSD~~ 10/1/24

CS 10/1/24

Relinquished by	Date	Received by	Date	Notes: Total Number of Containers: 2	Shipment Method: Courier
Signature:	10/1/24	Signature:	10/2/24	A. Cool, 4C B. HCl, pH<2, Cool, 4C C. HNO3, pH<2, Cool, 4C D. NaOH, pH>12, Cool 4C	
Printed Name: Charles Spurr	Time: 1800	Printed Name: Ben Jester	Time: 09:20	1. SW 8260B Notes: 2. SW 8270D 3. SW 8270D SIM 4. SW 8082A 5. SW 8081B	
Company: Leidos		Company: EET DEN		6. SW 8330 7. SW 6010/6020/7470 8. SW 9012B 9. SW 9034 10. SW 9056/9056A 11. SW 6860 12. EPA 353.2 13. SW 7196 14. SM2320B	Temperature Blank Lab: Leidos 8866 Commons Drive Twinsburg, OH 44087 (330) 405-5802
Relinquished by	Date	Received by	Date		
Signature:		Signature:			
Printed Name:	Time	Printed Name:	Time		
Company:		Company:			

Leidos

White Laboratory Pink Project Manager Yellow Project QAO Goldenrod Field Project Manager

0.3/0.3 IR TLH CF+0.1

leidos

Chain of Custody Record

COC No.: RVAAP-446-TA
Date: 10/1/24

Name Leidos
Address: 8866 Commons Blvd. Suite 201, Twinsburg, OH 44087
Phone Number: (330) 405-5802
Project Manager: Jed Thomas
Project: RVAAP FWGW Sampling Event Fall 2024
Job/P.O. No.: P010216426
Sampler (Signature) (Printed Name)
KATIE LEE

Laboratory Name: TA- Denver
Address: 4955 Yarrow Street
Arvada, CO 80002
Phone: 303-736-0107
Contact: Patrick McEntee

Laboratory No	Sample ID	Site Type	Depth	Date	Time	Matrix	Explosives (6)(A)	Temperature Blank	Total Number of Containers	OBSERVATIONS, COMMENTS SPECIAL INSTRUCTIONS
	LL1mw-091-240901-GW		35	10/1/24	1228	W	2		2	
	LL1mw-091-240902-GW		35	10/1/24	1228	W	2		2	

Requested Parameters

Relinquished by	Date	Received by	Date	Notes: Total Number of Containers: 4 2	Shipment Method: Courier
Signature	10/1/24	Signature	10/2/24	A. Cool, 4C B. HCl, pH<2, Cool, 4C C. HNO3, pH<2, Cool, 4C D. NaOH, pH>12, Cool 4C	
Charles Spurr	Time	Ben Jester	Time	1. SW 8260B Notes:	
Printed Name	1800	Printed Name	09:10	2. SW 8270D	
Leidos		EET DEN		3. SW 8270D SIM	
Company		Company		4. SW 8082A	
				5. SW 8081B	
Relinquished by	Date	Received by	Date	6. SW 8330	
				7. SW 6010/6020/7470	
Signature		Signature		8. SW 9012B	
				9. SW 9034	Temperature Blank
	Time		Time	10. SW 9056/9056A	
Printed Name		Printed Name		11. SW 6860	Lab:
				12. EPA 353.2	Leidos
Company		Company		13. SW 7196	8866 Commons Drive
				14. SM2320B	Twinsburg, OH 44087
					(330) 405-5802

Leidos

White Laboratory Pink Project Manager Yellow Project QAO Goldenrod Field Project Manager

0.3/0.3 IR TUI CF+0.1

leidos

Chain of Custody Record

Page 5 of 6

COC No.: RVAAP-446-TA

Date: 10/1/24

Name Leidos
Address: 8866 Commons Blvd. Suite 201, Twinsburg, OH 44087
Phone Number: (330) 405-5802
Project Manager: Jed Thomas
Project: RVAAP FWGW Sampling Event Fall 2024
Job/P.O. No.: P010216426
Sampler (Signature) (Printed Name)

Joe Kravetz

Laboratory Name: TA- Denver
Address: 4955 Yarrow Street
Arvada, CO 80002
Phone: 303-736-0107
Contact: Patrick McEntee

Requested Parameters

Laboratory No	Sample ID	Site Type	Depth	Date	Time	Matrix	Explosives (6)(A)	Temperature Blank	Total Number of Containers	OBSERVATIONS, COMMENTS SPECIAL INSTRUCTIONS
	LL1mw-064-240901-GW	-	-	10/1/24	1338	W	2		2	

CS 10/1/24

Relinquished by	Date	Received by	Date
Signature	10/1/24	Signature	10/2/24
Printed Name: Charles Spurr	Time: 1800	Printed Name: Ben Jester	Time: 09:10
Company: Leidos		Company: EET DEN	
Relinquished by	Date	Received by	Date
Signature		Signature	
Printed Name	Time	Printed Name	Time
Company		Company	

Notes: Total Number of Containers: 2

A. Cool, 4C
B. HCl, pH<2, Cool, 4C
C. HNO3, pH<2, Cool, 4C
D. NaOH, pH>12, Cool 4C

1. SW 8260B
2. SW 8270D
3. SW 8270D SIM
4. SW 8082A
5. SW 8081B
6. SW 8330
7. SW 6010/6020/7470
8. SW 9012B
9. SW 9034
10. SW 9056/9056A
11. SW 6860
12. EPA 353.2
13. SW 7196
14. SM2320B

Notes:

Shipment Method: Courier

Temperature Blank

Lab:
Leidos
8866 Commons Drive
Twinsburg, OH 44087
(330) 405-5802

Leidos

White Laboratory Pink Project Manager Yellow Project QAO Goldenrod Field Project Manager

0.3/0.3 IR TLI CF +0.1

Chain of Custody Record

leidos

Page 6 of 6

COC No.: RVAAP-496-TA
Date: 10/1/24

Name Leidos
Address: 8866 Commons Blvd. Suite 201, Twinsburg, OH 44087
Phone Number: (330) 405-5802
Project Manager: Jed Thomas
Project: RVAAP FWGW Sampling Fall 2024
Job/P.O. No.: P010216426
Sampler (Signature) (Printed Name)
Jc Kravetz

Laboratory Name: TA- Denver
Address: 4955 Yarrow Street
Arvada, CO 80002
Phone: 303-736-0107
Contact: Patrick McEntee

Laboratory No	Sample ID	Site Type	Depth	Date	Time	Matrix	Requested Parameters: Explosives (6)(A)	Temperature Blank	Total Number of Containers	OBSERVATIONS, COMMENTS SPECIAL INSTRUCTIONS
	FWGmw-007-240901-GW	—	-	10/1/24	1535	W	2		2	

CS
10/1/24

Relinquished by	Date	Received by	Date
Signature	10/1/24	Signature	10/2/24
Printed Name: Charles Spicer	Time: 1800	Printed Name: Ben Jester	Time: 09:10
Company: Leidos		Company: EET DEN	
Relinquished by	Date	Received by	Date
Signature		Signature	
Printed Name	Time	Printed Name	Time
Company		Company	

Notes:
Total Number of Containers: 2
A. Cool, 4C
B. HCl, pH<2, Cool, 4C
C. HNO3, pH<2, Cool, 4C
D. NaOH, pH>12, Cool 4C

Notes:
1. SW 8260B
2. SW 8270D
3. SW 8270D SIM
4. SW 8082A
5. SW 8081B
6. SW 8330
7. SW 6010/6020/7470
8. SW 9012B
9. SW 9034
10. SW 9056/9056A
11. SW 6860
12. EPA 353.2
13. SW 7196
14. SM2320B

Shipment Method: Courier

Temperature Blank

Lab:
Leidos
8866 Commons Drive
Twinsburg, OH 44087
(330) 405-5802

Leidos

White Laboratory Pink Project Manager Yellow Project QAO Goldenrod Field Project Manager

0.3/0.3 IR TUI CF +0.1

Login Sample Receipt Checklist

Client: Leidos, Inc.

Job Number: 280-197447-1

Login Number: 197447
List Number: 1
Creator: Roehsner, Karen P

List Source: Eurofins Denver

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	Refer to Job Narrative for details.
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	