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ANALYTICAL REPORT

PREPARED FOR

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Generated 5/8/2024 6:07 AM

JOB DESCRIPTION

RVAAP FWGW

JOB NUMBER

280-190799-1

Eurofins Denver
4955 Yarrow Street
Arvada CO 80002

See page two for job notes and contact information.

my EOL

Job Notes

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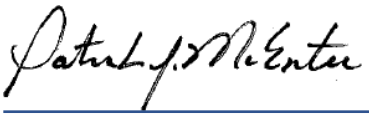

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Qualifiers

HPLC/IC

Qualifier	Qualifier Description
J1	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
M	Manual integrated compound.
Q	One or more quality control criteria failed.
U	Undetected at the Limit of Detection.

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
280-190799-1

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 are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample 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 4/30/2024 9:15 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 1.0°C and 3.4°C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

Method 8330B - Nitroaromatics and Nitramines (HPLC)
Samples SCFmw-004-240401-GW (280-190799-1), SCFmw-004-240402-GW (280-190799-2), LL1mw-084-240401-GW (280-190799-3), LL1mw-084-240402-GW (280-190799-4), LL1mw-080-240401-GW (280-190799-5), LL1mw-087-240401-GW (280-190799-6), LL1mw-087-240401-GW (280-190799-6MS), LL1mw-087-240401-GW (280-190799-6MSD), LL1mw-087-240402-GW (280-190799-7), LL1mw-086-240401-GW (280-190799-8) and FWGmw-010-240401-GW (280-190799-9) were analyzed for Nitroaromatics and Nitramines (HPLC). The samples were prepared on 5/2/2024 and analyzed on 5/4/2024 and 5/5/2024.

In preparation batch 280-651841, the following samples were decanted prior to preparation to prevent overflowing due to the addition of sodium chloride: SCFmw-004-240401-GW (280-190799-1), LL1mw-084-240401-GW (280-190799-3) and LL1mw-087-240401-GW (280-190799-6[MSD]).

The %RPD between the primary and confirmation column exceeded 40% for 1,3-Dinitrobenzene, HMX and RDX for the following sample: LL1mw-084-240401-GW (280-190799-3) and LL1mw-084-240402-GW (280-190799-4) in preparation batch 280-651841 and analytical batch 280-652057. The results from both columns has been qualified and reported in accordance with the laboratory's QAS.

Surrogate recovery for the following sample in preparation batch 280-651841 and analytical batch 280-652145 was outside the upper control limit in the primary instrument: LL1mw-084-240401-GW (280-190799-3) and LL1mw-084-240402-GW (280-190799-4). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed. Surrogate recovered within control limit in the confirmation instrument.

The laboratory control sample and laboratory control sample duplicate (LCS/LCSD) for preparation batch 280-651841 and analytical batch 280-652145 recovered outside lower control limits for the following analytes:m-Nitrotoluene(73-125%R) at 69%R(LCS)/68%R(LCSD) and p-Nitrotoluene(71-127%R) at 69%R(LCSD). The LCS/LCSD recovered within control limit in the confirmation instrument. m-Nitrotoluene is ND in both primary and confirmation instrument. p-Nitrotoluene is ND in both primary and confirmation instrument or reported ND from the confirmation instrument. The associated samples are impacted: SCFmw-004-240401-GW (280-190799-1), SCFmw-004-240402-GW (280-190799-2), LL1mw-084-240401-GW (280-190799-3), LL1mw-084-240402-GW (280-190799-4), LL1mw-080-240401-GW (280-190799-5), LL1mw-087-240401-GW (280-190799-6), LL1mw-087-240402-GW (280-190799-7), LL1mw-086-240401-GW (280-190799-8) and FWGmw-010-240401-GW (280-190799-9).

The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 280-651841 and analytical batch 280-652145 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-004-240401-GW (280-190799-1),

SCFmw-004-240402-GW (280-190799-2), LL1mw-084-240401-GW (280-190799-3), LL1mw-084-240402-GW (280-190799-4), LL1mw-080-240401-GW (280-190799-5), LL1mw-087-240401-GW (280-190799-6), LL1mw-087-240401-GW (280-190799-6[MS]), LL1mw-087-240401-GW (280-190799-6[MSD]), LL1mw-087-240402-GW (280-190799-7), LL1mw-086-240401-GW (280-190799-8) and FWGmw-010-240401-GW (280-190799-9).

Detection Summary

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

Job ID: 280-190799-1

Client Sample ID: SCFmw-004-240401-GW — Lab Sample ID: 280-190799-1

No Detections.

Client Sample ID: SCFmw-004-240402-GW — Lab Sample ID: 280-190799-2

No Detections.

Client Sample ID: LL1mw-084-240401-GW — Lab Sample ID: 280-190799-3

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
2,4,6-Trinitrotoluene	1.9	M Q	0.12	0.11	0.049	ug/L	1		8330B	Total/NA
2,4-Dinitrotoluene	0.87	Q	0.11	0.087	0.030	ug/L	1		8330B	Total/NA
2-Amino-4,6-dinitrotoluene	6.3	Q	0.12	0.11	0.055	ug/L	1		8330B	Total/NA
4-Amino-2,6-dinitrotoluene	16	Q	0.16	0.13	0.063	ug/L	1		8330B	Total/NA
HMX	0.79	M Q	0.23	0.22	0.096	ug/L	1		8330B	Total/NA
RDX	2.8	M J1	0.23	0.22	0.056	ug/L	1		8330B	Total/NA
RDX	1.1	M Q J1	0.23	0.22	0.056	ug/L	1		8330B	Total/NA

Client Sample ID: LL1mw-084-240402-GW — Lab Sample ID: 280-190799-4

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
1,3-Dinitrobenzene	0.17	M J1	0.12	0.11	0.040	ug/L	1		8330B	Total/NA
1,3-Dinitrobenzene	0.99	M Q J1	0.12	0.11	0.040	ug/L	1		8330B	Total/NA
2,4,6-Trinitrotoluene	2.0	M Q	0.12	0.11	0.048	ug/L	1		8330B	Total/NA
2,4-Dinitrotoluene	0.90	M Q	0.11	0.086	0.029	ug/L	1		8330B	Total/NA
2-Amino-4,6-dinitrotoluene	6.3	M Q	0.12	0.11	0.054	ug/L	1		8330B	Total/NA
4-Amino-2,6-dinitrotoluene	17	M Q	0.16	0.13	0.062	ug/L	1		8330B	Total/NA
HMX	0.43	M J1	0.23	0.21	0.094	ug/L	1		8330B	Total/NA
HMX	0.72	M Q J1	0.23	0.21	0.094	ug/L	1		8330B	Total/NA
RDX	1.1	Q	0.23	0.21	0.055	ug/L	1		8330B	Total/NA

Client Sample ID: LL1mw-080-240401-GW — Lab Sample ID: 280-190799-5

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
2-Amino-4,6-dinitrotoluene	0.80		0.12	0.11	0.055	ug/L	1		8330B	Total/NA
4-Amino-2,6-dinitrotoluene	2.4		0.16	0.13	0.062	ug/L	1		8330B	Total/NA
HMX	2.0	M	0.23	0.22	0.095	ug/L	1		8330B	Total/NA
RDX	12	M	0.23	0.22	0.056	ug/L	1		8330B	Total/NA

Client Sample ID: LL1mw-087-240401-GW — Lab Sample ID: 280-190799-6

No Detections.

Client Sample ID: LL1mw-087-240402-GW — Lab Sample ID: 280-190799-7

No Detections.

Client Sample ID: LL1mw-086-240401-GW — Lab Sample ID: 280-190799-8

No Detections.

Client Sample ID: FWGmw-010-240401-GW — Lab Sample ID: 280-190799-9

No Detections.

This Detection Summary does not include radiochemical test results.

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

Client Sample ID: SCFmw-004-240401-GW
Date Collected: 04/29/24 09:25
Date Received: 04/30/24 09:15

Lab Sample ID: 280-190799-1
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	0.098	ug/L		05/04/24 22:20	1
1,3-Dinitrobenzene	0.12	U M	0.13	0.12	0.043	ug/L		05/04/24 22:20	1
2,4,6-Trinitrotoluene	0.12	U	0.13	0.12	0.052	ug/L		05/04/24 22:20	1
2,4-Dinitrotoluene	0.093	U	0.12	0.093	0.032	ug/L		05/04/24 22:20	1
2,6-Dinitrotoluene	0.093	U	0.12	0.093	0.047	ug/L		05/04/24 22:20	1
2-Amino-4,6-dinitrotoluene	0.12	U	0.13	0.12	0.059	ug/L		05/04/24 22:20	1
2-Nitrotoluene	0.23	U	0.24	0.23	0.099	ug/L		05/04/24 22:20	1
3-Nitrotoluene	0.41	U Q	0.47	0.41	0.23	ug/L		05/04/24 22:20	1
4-Amino-2,6-dinitrotoluene	0.14	U	0.17	0.14	0.067	ug/L		05/04/24 22:20	1
4-Nitrotoluene	0.47	U M Q	0.48	0.47	0.12	ug/L		05/04/24 22:20	1
HMX	0.23	U M	0.24	0.23	0.10	ug/L		05/04/24 22:20	1
Nitrobenzene	0.23	U	0.24	0.23	0.11	ug/L		05/04/24 22:20	1
Nitroglycerin	2.3	U	2.4	2.3	1.1	ug/L		05/04/24 22:20	1
PETN	1.2	U	1.3	1.2	0.52	ug/L		05/04/24 22:20	1
RDX	0.23	U	0.24	0.23	0.060	ug/L		05/04/24 22:20	1
Tetryl	0.12	U	0.13	0.12	0.037	ug/L		05/04/24 22:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*90*		*83 - 119*	*05/02/24 12:39*	*05/04/24 22:20*	*1*

Client Sample ID: SCFmw-004-240402-GW
Date Collected: 04/29/24 09:25
Date Received: 04/30/24 09:15

Lab Sample ID: 280-190799-2
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.21	U M	0.22	0.21	0.087	ug/L		05/04/24 22:43	1
1,3-Dinitrobenzene	0.10	U M	0.11	0.10	0.038	ug/L		05/04/24 22:43	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.047	ug/L		05/04/24 22:43	1
2,4-Dinitrotoluene	0.083	U	0.10	0.083	0.028	ug/L		05/04/24 22:43	1
2,6-Dinitrotoluene	0.083	U	0.10	0.083	0.042	ug/L		05/04/24 22:43	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.053	ug/L		05/04/24 22:43	1
2-Nitrotoluene	0.21	U M	0.22	0.21	0.089	ug/L		05/04/24 22:43	1
3-Nitrotoluene	0.36	U Q	0.41	0.36	0.20	ug/L		05/04/24 22:43	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.16	0.12	0.060	ug/L		05/04/24 22:43	1
4-Nitrotoluene	0.41	U Q	0.43	0.41	0.10	ug/L		05/04/24 22:43	1
HMX	0.21	U M	0.22	0.21	0.091	ug/L		05/04/24 22:43	1
Nitrobenzene	0.21	U	0.22	0.21	0.094	ug/L		05/04/24 22:43	1
Nitroglycerin	2.1	U	2.2	2.1	0.96	ug/L		05/04/24 22:43	1
PETN	1.0	U	1.1	1.0	0.46	ug/L		05/04/24 22:43	1
RDX	0.21	U	0.22	0.21	0.053	ug/L		05/04/24 22:43	1
Tetryl	0.10	U	0.11	0.10	0.033	ug/L		05/04/24 22:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*94*	*M*	*83 - 119*	*05/02/24 12:39*	*05/04/24 22:43*	*1*

Client Sample ID: LL1mw-084-240401-GW
Date Collected: 04/29/24 10:05
Date Received: 04/30/24 09:15

Lab Sample ID: 280-190799-3
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.22	U	0.23	0.22	0.092	ug/L		05/04/24 01:03	1
1,3-Dinitrobenzene	0.11	U M Q	0.12	0.11	0.040	ug/L		05/04/24 23:06	1

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

Client Sample ID: LL1mw-084-240401-GW
Date Collected: 04/29/24 10:05
Date Received: 04/30/24 09:15

Lab Sample ID: 280-190799-3
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2,4,6-Trinitrotoluene	**1.9**	**M Q**	0.12	0.11	0.049	ug/L		05/04/24 23:06	1
2,4-Dinitrotoluene	**0.87**	**Q**	0.11	0.087	0.030	ug/L		05/04/24 23:06	1
2,6-Dinitrotoluene	0.087	U Q	0.11	0.087	0.044	ug/L		05/04/24 23:06	1
2-Amino-4,6-dinitrotoluene	**6.3**	**Q**	0.12	0.11	0.055	ug/L		05/04/24 23:06	1
2-Nitrotoluene	0.22	U Q	0.23	0.22	0.093	ug/L		05/04/24 23:06	1
3-Nitrotoluene	0.38	U Q	0.44	0.38	0.21	ug/L		05/04/24 23:06	1
4-Amino-2,6-dinitrotoluene	**16**	**Q**	0.16	0.13	0.063	ug/L		05/04/24 23:06	1
4-Nitrotoluene	0.44	U	0.45	0.44	0.11	ug/L		05/04/24 01:03	1
HMX	**0.79**	**M Q**	0.23	0.22	0.096	ug/L		05/04/24 23:06	1
Nitrobenzene	0.22	U M Q	0.23	0.22	0.099	ug/L		05/04/24 23:06	1
Nitroglycerin	2.2	U Q	2.3	2.2	1.0	ug/L		05/04/24 23:06	1
PETN	1.1	U Q	1.2	1.1	0.49	ug/L		05/04/24 23:06	1
RDX	**2.8**	**M J1**	0.23	0.22	0.056	ug/L		05/04/24 01:03	1
RDX	**1.1**	**M Q J1**	0.23	0.22	0.056	ug/L		05/04/24 23:06	1
Tetryl	0.11	U M Q	0.12	0.11	0.035	ug/L		05/04/24 23:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*97*		*83 - 119*	*05/02/24 12:39*	*05/04/24 01:03*	*1*
1,2-Dinitrobenzene	*169*	*Q*	*83 - 119*	*05/02/24 12:39*	*05/04/24 23:06*	*1*

Client Sample ID: LL1mw-084-240402-GW
Date Collected: 04/29/24 10:05
Date Received: 04/30/24 09:15

Lab Sample ID: 280-190799-4
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.21	U	0.23	0.21	0.090	ug/L		05/04/24 01:39	1
1,3-Dinitrobenzene	**0.17**	**M J1**	0.12	0.11	0.040	ug/L		05/04/24 01:39	1
1,3-Dinitrobenzene	**0.99**	**M Q J1**	0.12	0.11	0.040	ug/L		05/04/24 23:29	1
2,4,6-Trinitrotoluene	**2.0**	**M Q**	0.12	0.11	0.048	ug/L		05/04/24 23:29	1
2,4-Dinitrotoluene	**0.90**	**M Q**	0.11	0.086	0.029	ug/L		05/04/24 23:29	1
2,6-Dinitrotoluene	0.086	U Q	0.11	0.086	0.043	ug/L		05/04/24 23:29	1
2-Amino-4,6-dinitrotoluene	**6.3**	**M Q**	0.12	0.11	0.054	ug/L		05/04/24 23:29	1
2-Nitrotoluene	0.21	U Q	0.23	0.21	0.092	ug/L		05/04/24 23:29	1
3-Nitrotoluene	0.38	U Q	0.43	0.38	0.21	ug/L		05/04/24 23:29	1
4-Amino-2,6-dinitrotoluene	**17**	**M Q**	0.16	0.13	0.062	ug/L		05/04/24 23:29	1
4-Nitrotoluene	0.43	U	0.44	0.43	0.11	ug/L		05/04/24 01:39	1
HMX	**0.43**	**M J1**	0.23	0.21	0.094	ug/L		05/04/24 01:39	1
HMX	**0.72**	**M Q J1**	0.23	0.21	0.094	ug/L		05/04/24 23:29	1
Nitrobenzene	0.21	U M Q	0.23	0.21	0.098	ug/L		05/04/24 23:29	1
Nitroglycerin	2.1	U Q	2.3	2.1	0.99	ug/L		05/04/24 23:29	1
PETN	1.1	U Q	1.2	1.1	0.48	ug/L		05/04/24 23:29	1
RDX	**1.1**	**Q**	0.23	0.21	0.055	ug/L		05/04/24 23:29	1
Tetryl	0.11	U M Q	0.12	0.11	0.034	ug/L		05/04/24 23:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*101*		*83 - 119*	*05/02/24 12:39*	*05/04/24 01:39*	*1*
1,2-Dinitrobenzene	*138*	*Q*	*83 - 119*	*05/02/24 12:39*	*05/04/24 23:29*	*1*

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

Client Sample ID: LL1mw-080-240401-GW
Date Collected: 04/29/24 11:30
Date Received: 04/30/24 09:15

Lab Sample ID: 280-190799-5
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.22	U	0.23	0.22	0.091	ug/L		05/04/24 02:15	1
1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.040	ug/L		05/04/24 02:15	1
2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.049	ug/L		05/04/24 23:52	1
2,4-Dinitrotoluene	0.086	U	0.11	0.086	0.030	ug/L		05/04/24 23:52	1
2,6-Dinitrotoluene	0.086	U	0.11	0.086	0.043	ug/L		05/04/24 23:52	1
2-Amino-4,6-dinitrotoluene	**0.80**		0.12	0.11	0.055	ug/L		05/04/24 23:52	1
2-Nitrotoluene	0.22	U	0.23	0.22	0.092	ug/L		05/04/24 23:52	1
3-Nitrotoluene	0.38	U Q	0.43	0.38	0.21	ug/L		05/04/24 23:52	1
4-Amino-2,6-dinitrotoluene	**2.4**		0.16	0.13	0.062	ug/L		05/04/24 23:52	1
4-Nitrotoluene	0.43	U	0.44	0.43	0.11	ug/L		05/04/24 02:15	1
HMX	**2.0**	**M**	0.23	0.22	0.095	ug/L		05/04/24 23:52	1
Nitrobenzene	0.22	U M	0.23	0.22	0.098	ug/L		05/04/24 23:52	1
Nitroglycerin	2.2	U	2.3	2.2	1.0	ug/L		05/04/24 23:52	1
PETN	1.1	U	1.2	1.1	0.48	ug/L		05/04/24 23:52	1
RDX	**12**	**M**	0.23	0.22	0.056	ug/L		05/04/24 23:52	1
Tetryl	0.11	U M	0.12	0.11	0.034	ug/L		05/04/24 23:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*93*		*83 - 119*	*05/02/24 12:39*	*05/04/24 02:15*	*1*
1,2-Dinitrobenzene	*97*	*M*	*83 - 119*	*05/02/24 12:39*	*05/04/24 23:52*	*1*

Client Sample ID: LL1mw-087-240401-GW
Date Collected: 04/29/24 11:45
Date Received: 04/30/24 09:15

Lab Sample ID: 280-190799-6
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.21	U	0.22	0.21	0.088	ug/L		05/05/24 00:15	1
1,3-Dinitrobenzene	0.11	U M	0.12	0.11	0.039	ug/L		05/05/24 00:15	1
2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.047	ug/L		05/05/24 00:15	1
2,4-Dinitrotoluene	0.084	U	0.11	0.084	0.029	ug/L		05/05/24 00:15	1
2,6-Dinitrotoluene	0.084	U	0.11	0.084	0.042	ug/L		05/05/24 00:15	1
2-Amino-4,6-dinitrotoluene	0.11	U	0.12	0.11	0.053	ug/L		05/05/24 00:15	1
2-Nitrotoluene	0.21	U M J1	0.22	0.21	0.090	ug/L		05/05/24 00:15	1
3-Nitrotoluene	0.37	U J1 Q	0.42	0.37	0.21	ug/L		05/05/24 00:15	1
4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.061	ug/L		05/05/24 00:15	1
4-Nitrotoluene	0.42	U M J1 Q	0.43	0.42	0.11	ug/L		05/05/24 00:15	1
HMX	0.21	U	0.22	0.21	0.092	ug/L		05/05/24 00:15	1
Nitrobenzene	0.21	U	0.22	0.21	0.096	ug/L		05/05/24 00:15	1
Nitroglycerin	2.1	U	2.2	2.1	0.97	ug/L		05/05/24 00:15	1
PETN	1.1	U	1.2	1.1	0.47	ug/L		05/05/24 00:15	1
RDX	0.21	U	0.22	0.21	0.054	ug/L		05/05/24 00:15	1
Tetryl	0.11	U	0.12	0.11	0.033	ug/L		05/05/24 00:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*89*	*M*	*83 - 119*	*05/02/24 12:39*	*05/05/24 00:15*	*1*

Client Sample ID: LL1mw-087-240402-GW
Date Collected: 04/29/24 11:45
Date Received: 04/30/24 09:15

Lab Sample ID: 280-190799-7
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.21	U	0.22	0.21	0.088	ug/L		05/05/24 01:24	1

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

Client Sample ID: LL1mw-087-240402-GW
Date Collected: 04/29/24 11:45
Date Received: 04/30/24 09:15

Lab Sample ID: 280-190799-7
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3-Dinitrobenzene	0.10	U M	0.11	0.10	0.038	ug/L		05/05/24 01:24	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.047	ug/L		05/05/24 01:24	1
2,4-Dinitrotoluene	0.083	U	0.10	0.083	0.029	ug/L		05/05/24 01:24	1
2,6-Dinitrotoluene	0.083	U	0.10	0.083	0.042	ug/L		05/05/24 01:24	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.053	ug/L		05/05/24 01:24	1
2-Nitrotoluene	0.21	U M	0.22	0.21	0.089	ug/L		05/05/24 01:24	1
3-Nitrotoluene	0.36	U Q	0.42	0.36	0.20	ug/L		05/05/24 01:24	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.16	0.12	0.060	ug/L		05/05/24 01:24	1
4-Nitrotoluene	0.42	U M Q	0.43	0.42	0.10	ug/L		05/05/24 01:24	1
HMX	0.21	U	0.22	0.21	0.091	ug/L		05/05/24 01:24	1
Nitrobenzene	0.21	U	0.22	0.21	0.095	ug/L		05/05/24 01:24	1
Nitroglycerin	2.1	U	2.2	2.1	0.96	ug/L		05/05/24 01:24	1
PETN	1.0	U	1.1	1.0	0.47	ug/L		05/05/24 01:24	1
RDX	0.21	U	0.22	0.21	0.054	ug/L		05/05/24 01:24	1
Tetryl	0.10	U	0.11	0.10	0.033	ug/L		05/05/24 01:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*92*	*M*	*83 - 119*	*05/02/24 12:39*	*05/05/24 01:24*	*1*

Client Sample ID: LL1mw-086-240401-GW
Date Collected: 04/28/24 14:00
Date Received: 04/30/24 09:15

Lab Sample ID: 280-190799-8
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.21	U M	0.22	0.21	0.087	ug/L		05/05/24 01:47	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.038	ug/L		05/05/24 01:47	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.047	ug/L		05/05/24 01:47	1
2,4-Dinitrotoluene	0.083	U	0.10	0.083	0.028	ug/L		05/05/24 01:47	1
2,6-Dinitrotoluene	0.083	U	0.10	0.083	0.041	ug/L		05/05/24 01:47	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.052	ug/L		05/05/24 01:47	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.088	ug/L		05/05/24 01:47	1
3-Nitrotoluene	0.36	U Q	0.41	0.36	0.20	ug/L		05/05/24 01:47	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.16	0.12	0.060	ug/L		05/05/24 01:47	1
4-Nitrotoluene	0.41	U Q	0.42	0.41	0.10	ug/L		05/05/24 01:47	1
HMX	0.21	U M	0.22	0.21	0.091	ug/L		05/05/24 01:47	1
Nitrobenzene	0.21	U	0.22	0.21	0.094	ug/L		05/05/24 01:47	1
Nitroglycerin	2.1	U	2.2	2.1	0.95	ug/L		05/05/24 01:47	1
PETN	1.0	U	1.1	1.0	0.46	ug/L		05/05/24 01:47	1
RDX	0.21	U M	0.22	0.21	0.053	ug/L		05/05/24 01:47	1
Tetryl	0.10	U	0.11	0.10	0.033	ug/L		05/05/24 01:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*93*	*M*	*83 - 119*	*05/02/24 12:39*	*05/05/24 01:47*	*1*

Client Sample ID: FWGmw-010-240401-GW
Date Collected: 04/29/24 15:48
Date Received: 04/30/24 09:15

Lab Sample ID: 280-190799-9
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.22	U M	0.23	0.22	0.091	ug/L		05/05/24 02:33	1
1,3-Dinitrobenzene	0.11	U M	0.12	0.11	0.040	ug/L		05/05/24 02:33	1
2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.049	ug/L		05/05/24 02:33	1

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

Client Sample ID: FWGmw-010-240401-GW
Lab Sample ID: 280-190799-9
Date Collected: 04/29/24 15:48
Matrix: Water
Date Received: 04/30/24 09:15

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2,4-Dinitrotoluene	0.087	U	0.11	0.087	0.030	ug/L		05/05/24 02:33	1
2,6-Dinitrotoluene	0.087	U	0.11	0.087	0.044	ug/L		05/05/24 02:33	1
2-Amino-4,6-dinitrotoluene	0.11	U	0.12	0.11	0.055	ug/L		05/05/24 02:33	1
2-Nitrotoluene	0.22	U	0.23	0.22	0.093	ug/L		05/05/24 02:33	1
3-Nitrotoluene	0.38	U Q	0.44	0.38	0.21	ug/L		05/05/24 02:33	1
4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.063	ug/L		05/05/24 02:33	1
4-Nitrotoluene	0.44	U Q	0.45	0.44	0.11	ug/L		05/05/24 02:33	1
HMX	0.22	U	0.23	0.22	0.095	ug/L		05/05/24 02:33	1
Nitrobenzene	0.22	U	0.23	0.22	0.099	ug/L		05/05/24 02:33	1
Nitroglycerin	2.2	U	2.3	2.2	1.0	ug/L		05/05/24 02:33	1
PETN	1.1	U	1.2	1.1	0.49	ug/L		05/05/24 02:33	1
RDX	0.22	U M	0.23	0.22	0.056	ug/L		05/05/24 02:33	1
Tetryl	0.11	U	0.12	0.11	0.035	ug/L		05/05/24 02:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*94*	*M*	*83 - 119*	*05/02/24 12:39*	*05/05/24 02:33*	*1*

Default Detection Limits

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

Job ID: 280-190799-1

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: 280-190799-1

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)
280-190799-1	SCFmw-004-240401-GW	90
280-190799-2	SCFmw-004-240402-GW	94 M
280-190799-3	LL1mw-084-240401-GW	169 Q
280-190799-4	LL1mw-084-240402-GW	138 Q
280-190799-5	LL1mw-080-240401-GW	97 M
280-190799-6	LL1mw-087-240401-GW	89 M
280-190799-6 MS	LL1mw-087-240401-GW	95
280-190799-6 MSD	LL1mw-087-240401-GW	83 M
280-190799-7	LL1mw-087-240402-GW	92 M
280-190799-8	LL1mw-086-240401-GW	93 M
280-190799-9	FWGmw-010-240401-GW	94 M
LCS 280-651841/2-A	Lab Control Sample	96
LCSD 280-651841/3-A	Lab Control Sample Dup	91
MB 280-651841/1-A	Method Blank	93 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)
280-190799-3	LL1mw-084-240401-GW	97
280-190799-4	LL1mw-084-240402-GW	101
280-190799-5	LL1mw-080-240401-GW	93

Surrogate Legend

12DNB = 1,2-Dinitrobenzene

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Lab Sample ID: MB 280-651841/1-A
Matrix: Water
Analysis Batch: 652145

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 651841

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		05/04/24 18:08	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037	ug/L		05/04/24 18:08	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045	ug/L		05/04/24 18:08	1
2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.027	ug/L		05/04/24 18:08	1
2,6-Dinitrotoluene	0.080	U	0.10	0.080	0.040	ug/L		05/04/24 18:08	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051	ug/L		05/04/24 18:08	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.086	ug/L		05/04/24 18:08	1
3-Nitrotoluene	0.35	U	0.40	0.35	0.20	ug/L		05/04/24 18:08	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.058	ug/L		05/04/24 18:08	1
4-Nitrotoluene	0.40	U	0.41	0.40	0.10	ug/L		05/04/24 18:08	1
HMX	0.20	U	0.21	0.20	0.088	ug/L		05/04/24 18:08	1
Nitrobenzene	0.20	U	0.21	0.20	0.091	ug/L		05/04/24 18:08	1
Nitroglycerin	2.0	U	2.1	2.0	0.92	ug/L		05/04/24 18:08	1
PETN	1.0	U	1.1	1.0	0.45	ug/L		05/04/24 18:08	1
RDX	0.20	U M	0.21	0.20	0.052	ug/L		05/04/24 18:08	1
Tetryl	0.10	U	0.11	0.10	0.032	ug/L		05/04/24 18:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*93*	*M*	*83 - 119*	*05/02/24 12:39*	*05/04/24 18:08*	*1*

Lab Sample ID: LCS 280-651841/2-A
Matrix: Water
Analysis Batch: 652145

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 651841

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,3,5-Trinitrobenzene			2.00	2.17	M	ug/L		109	73 - 125		
1,3-Dinitrobenzene			2.00	2.10		ug/L		105	78 - 120		
2,4,6-Trinitrotoluene			2.00	2.06	M	ug/L		103	71 - 123		
2,4-Dinitrotoluene			2.00	1.99	M	ug/L		99	78 - 120		
2,6-Dinitrotoluene			2.00	2.00	M	ug/L		100	77 - 127		
2-Amino-4,6-dinitrotoluene			2.00	1.98	M	ug/L		99	79 - 120		
2-Nitrotoluene			2.00	1.44	M	ug/L		72	70 - 127		
3-Nitrotoluene			2.00	1.38	M Q	ug/L		69	73 - 125		
4-Amino-2,6-dinitrotoluene			2.00	2.05	M	ug/L		102	76 - 125		
4-Nitrotoluene			2.00	1.46	M	ug/L		73	71 - 127		
HMX			2.00	1.92		ug/L		96	65 - 135		
Nitrobenzene			2.00	1.61		ug/L		81	65 - 134		
Nitroglycerin			20.0	21.5		ug/L		108	74 - 127		
PETN			20.0	22.8		ug/L		114	73 - 127		
RDX			2.00	2.03		ug/L		102	68 - 130		
Tetryl			2.00	2.08		ug/L		104	64 - 128		

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

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

Lab Sample ID: LCSD 280-651841/3-A
Matrix: Water
Analysis Batch: 652145

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 651841

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,3,5-Trinitrobenzene			2.00	2.08	M	ug/L		104	73 - 125	4	20
1,3-Dinitrobenzene			2.00	1.99		ug/L		100	78 - 120	5	20
2,4,6-Trinitrotoluene			2.00	1.92		ug/L		96	71 - 123	7	20
2,4-Dinitrotoluene			2.00	1.89	M	ug/L		95	78 - 120	5	20
2,6-Dinitrotoluene			2.00	1.88		ug/L		94	77 - 127	6	20
2-Amino-4,6-dinitrotoluene			2.00	1.90		ug/L		95	79 - 120	4	20
2-Nitrotoluene			2.00	1.43		ug/L		71	70 - 127	1	20
3-Nitrotoluene			2.00	1.35	M Q	ug/L		68	73 - 125	2	20
4-Amino-2,6-dinitrotoluene			2.00	1.93		ug/L		97	76 - 125	6	20
4-Nitrotoluene			2.00	1.39	Q	ug/L		69	71 - 127	5	20
HMX			2.00	1.83		ug/L		91	65 - 135	5	20
Nitrobenzene			2.00	1.65		ug/L		82	65 - 134	2	20
Nitroglycerin			20.0	20.5		ug/L		102	74 - 127	5	20
PETN			20.0	21.3		ug/L		106	73 - 127	7	20
RDX			2.00	1.92		ug/L		96	68 - 130	6	20
Tetryl			2.00	1.91		ug/L		96	64 - 128	8	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dinitrobenzene	*91*		*83 - 119*

Lab Sample ID: 280-190799-6 MS
Matrix: Water
Analysis Batch: 652145

Client Sample ID: LL1mw-087-240401-GW
Prep Type: Total/NA
Prep Batch: 651841

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,3,5-Trinitrobenzene	0.21	U	2.19	2.41		ug/L		110	73 - 125		
1,3-Dinitrobenzene	0.11	U M	2.19	2.31		ug/L		105	78 - 120		
2,4,6-Trinitrotoluene	0.11	U	2.19	2.16		ug/L		99	71 - 123		
2,4-Dinitrotoluene	0.084	U	2.19	2.08		ug/L		95	78 - 120		
2,6-Dinitrotoluene	0.084	U	2.19	2.07		ug/L		95	77 - 127		
2-Amino-4,6-dinitrotoluene	0.11	U	2.19	2.09		ug/L		96	79 - 120		
2-Nitrotoluene	0.21	U M J1	2.19	1.63		ug/L		74	70 - 127		
3-Nitrotoluene	0.37	U J1 Q	2.19	1.54	M J1	ug/L		70	73 - 125		
4-Amino-2,6-dinitrotoluene	0.13	U	2.19	2.05		ug/L		94	76 - 125		
4-Nitrotoluene	0.42	U M J1 Q	2.19	1.67		ug/L		76	71 - 127		
HMX	0.21	U	2.19	1.94	M	ug/L		88	65 - 135		
Nitrobenzene	0.21	U	2.19	1.82		ug/L		83	65 - 134		
Nitroglycerin	2.1	U	21.9	22.4		ug/L		102	74 - 127		
PETN	1.1	U	21.9	23.6		ug/L		108	73 - 127		
RDX	0.21	U	2.19	1.87	M	ug/L		85	68 - 130		
Tetryl	0.11	U	2.19	2.11		ug/L		96	64 - 128		

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

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

Lab Sample ID: 280-190799-6 MSD
Matrix: Water
Analysis Batch: 652145

Client Sample ID: LL1mw-087-240401-GW
Prep Type: Total/NA
Prep Batch: 651841

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,3,5-Trinitrobenzene	0.21	U	2.14	2.13	M	ug/L		99	73 - 125	12	20
1,3-Dinitrobenzene	0.11	U M	2.14	1.96	M	ug/L		91	78 - 120	16	20
2,4,6-Trinitrotoluene	0.11	U	2.14	1.97		ug/L		92	71 - 123	9	20
2,4-Dinitrotoluene	0.084	U	2.14	1.76		ug/L		82	78 - 120	17	20
2,6-Dinitrotoluene	0.084	U	2.14	1.78		ug/L		83	77 - 127	15	20
2-Amino-4,6-dinitrotoluene	0.11	U	2.14	1.77		ug/L		83	79 - 120	17	20
2-Nitrotoluene	0.21	U M J1	2.14	1.26	J1	ug/L		59	70 - 127	26	20
3-Nitrotoluene	0.37	U J1 Q	2.14	1.15	M J1	ug/L		54	73 - 125	29	20
4-Amino-2,6-dinitrotoluene	0.13	U	2.14	1.76		ug/L		82	76 - 125	15	20
4-Nitrotoluene	0.42	U M J1 Q	2.14	1.31	J1	ug/L		61	71 - 127	24	20
HMX	0.21	U	2.14	1.90	M	ug/L		89	65 - 135	2	20
Nitrobenzene	0.21	U	2.14	1.50		ug/L		70	65 - 134	19	20
Nitroglycerin	2.1	U	21.4	21.9		ug/L		102	74 - 127	3	20
PETN	1.1	U	21.4	22.7		ug/L		106	73 - 127	4	20
RDX	0.21	U	2.14	1.82	M	ug/L		85	68 - 130	2	20
Tetryl	0.11	U	2.14	2.03		ug/L		95	64 - 128	4	20

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

HPLC/IC

Prep Batch: 651841

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-190799-1	SCFmw-004-240401-GW	Total/NA	Water	3535	
280-190799-2	SCFmw-004-240402-GW	Total/NA	Water	3535	
280-190799-3	LL1mw-084-240401-GW	Total/NA	Water	3535	
280-190799-4	LL1mw-084-240402-GW	Total/NA	Water	3535	
280-190799-5	LL1mw-080-240401-GW	Total/NA	Water	3535	
280-190799-6	LL1mw-087-240401-GW	Total/NA	Water	3535	
280-190799-7	LL1mw-087-240402-GW	Total/NA	Water	3535	
280-190799-8	LL1mw-086-240401-GW	Total/NA	Water	3535	
280-190799-9	FWGmw-010-240401-GW	Total/NA	Water	3535	
MB 280-651841/1-A	Method Blank	Total/NA	Water	3535	
LCS 280-651841/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 280-651841/3-A	Lab Control Sample Dup	Total/NA	Water	3535	
280-190799-6 MS	LL1mw-087-240401-GW	Total/NA	Water	3535	
280-190799-6 MSD	LL1mw-087-240401-GW	Total/NA	Water	3535	

Analysis Batch: 652057

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-190799-3	LL1mw-084-240401-GW	Total/NA	Water	8330B	651841
280-190799-4	LL1mw-084-240402-GW	Total/NA	Water	8330B	651841
280-190799-5	LL1mw-080-240401-GW	Total/NA	Water	8330B	651841

Analysis Batch: 652145

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-190799-1	SCFmw-004-240401-GW	Total/NA	Water	8330B	651841
280-190799-2	SCFmw-004-240402-GW	Total/NA	Water	8330B	651841
280-190799-3	LL1mw-084-240401-GW	Total/NA	Water	8330B	651841
280-190799-4	LL1mw-084-240402-GW	Total/NA	Water	8330B	651841
280-190799-5	LL1mw-080-240401-GW	Total/NA	Water	8330B	651841
280-190799-6	LL1mw-087-240401-GW	Total/NA	Water	8330B	651841
280-190799-7	LL1mw-087-240402-GW	Total/NA	Water	8330B	651841
280-190799-8	LL1mw-086-240401-GW	Total/NA	Water	8330B	651841
280-190799-9	FWGmw-010-240401-GW	Total/NA	Water	8330B	651841
MB 280-651841/1-A	Method Blank	Total/NA	Water	8330B	651841
LCS 280-651841/2-A	Lab Control Sample	Total/NA	Water	8330B	651841
LCSD 280-651841/3-A	Lab Control Sample Dup	Total/NA	Water	8330B	651841
280-190799-6 MS	LL1mw-087-240401-GW	Total/NA	Water	8330B	651841
280-190799-6 MSD	LL1mw-087-240401-GW	Total/NA	Water	8330B	651841

Lab Chronicle

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

Job ID: 280-190799-1

Client Sample ID: SCFmw-004-240401-GW
Lab Sample ID: 280-190799-1
Date Collected: 04/29/24 09:25
Matrix: Water
Date Received: 04/30/24 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			430.1 mL	5 mL	651841	05/02/24 12:39	MSJ	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	652145	05/04/24 22:20	JZ	EET DEN

Client Sample ID: SCFmw-004-240402-GW
Lab Sample ID: 280-190799-2
Date Collected: 04/29/24 09:25
Matrix: Water
Date Received: 04/30/24 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			482 mL	5 mL	651841	05/02/24 12:39	MSJ	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	652145	05/04/24 22:43	JZ	EET DEN

Client Sample ID: LL1mw-084-240401-GW
Lab Sample ID: 280-190799-3
Date Collected: 04/29/24 10:05
Matrix: Water
Date Received: 04/30/24 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			457.8 mL	5 mL	651841	05/02/24 12:39	MSJ	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	652057	05/04/24 01:03	JZ	EET DEN
Total/NA	Prep	3535			457.8 mL	5 mL	651841	05/02/24 12:39	MSJ	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	652145	05/04/24 23:06	JZ	EET DEN

Client Sample ID: LL1mw-084-240402-GW
Lab Sample ID: 280-190799-4
Date Collected: 04/29/24 10:05
Matrix: Water
Date Received: 04/30/24 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			465.9 mL	5 mL	651841	05/02/24 12:39	MSJ	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	652057	05/04/24 01:39	JZ	EET DEN
Total/NA	Prep	3535			465.9 mL	5 mL	651841	05/02/24 12:39	MSJ	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	652145	05/04/24 23:29	JZ	EET DEN

Client Sample ID: LL1mw-080-240401-GW
Lab Sample ID: 280-190799-5
Date Collected: 04/29/24 11:30
Matrix: Water
Date Received: 04/30/24 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			462.7 mL	5 mL	651841	05/02/24 12:39	MSJ	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	652057	05/04/24 02:15	JZ	EET DEN
Total/NA	Prep	3535			462.7 mL	5 mL	651841	05/02/24 12:39	MSJ	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	652145	05/04/24 23:52	JZ	EET DEN

Lab Chronicle

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

Job ID: 280-190799-1

Client Sample ID: LL1mw-087-240401-GW
Lab Sample ID: 280-190799-6
Date Collected: 04/29/24 11:45
Matrix: Water
Date Received: 04/30/24 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			475.3 mL	5 mL	651841	05/02/24 12:39	MSJ	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	652145	05/05/24 00:15	JZ	EET DEN

Client Sample ID: LL1mw-087-240402-GW
Lab Sample ID: 280-190799-7
Date Collected: 04/29/24 11:45
Matrix: Water
Date Received: 04/30/24 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			480.4 mL	5 mL	651841	05/02/24 12:39	MSJ	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	652145	05/05/24 01:24	JZ	EET DEN

Client Sample ID: LL1mw-086-240401-GW
Lab Sample ID: 280-190799-8
Date Collected: 04/28/24 14:00
Matrix: Water
Date Received: 04/30/24 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			483.6 mL	5 mL	651841	05/02/24 12:39	MSJ	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	652145	05/05/24 01:47	JZ	EET DEN

Client Sample ID: FWGmw-010-240401-GW
Lab Sample ID: 280-190799-9
Date Collected: 04/29/24 15:48
Matrix: Water
Date Received: 04/30/24 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			459.6 mL	5 mL	651841	05/02/24 12:39	MSJ	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	652145	05/05/24 02:33	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: 280-190799-1
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	10-31-24

Method Summary

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

Job ID: 280-190799-1

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: 280-190799-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-190799-1	SCFmw-004-240401-GW	Water	04/29/24 09:25	04/30/24 09:15
280-190799-2	SCFmw-004-240402-GW	Water	04/29/24 09:25	04/30/24 09:15
280-190799-3	LL1mw-084-240401-GW	Water	04/29/24 10:05	04/30/24 09:15
280-190799-4	LL1mw-084-240402-GW	Water	04/29/24 10:05	04/30/24 09:15
280-190799-5	LL1mw-080-240401-GW	Water	04/29/24 11:30	04/30/24 09:15
280-190799-6	LL1mw-087-240401-GW	Water	04/29/24 11:45	04/30/24 09:15
280-190799-7	LL1mw-087-240402-GW	Water	04/29/24 11:45	04/30/24 09:15
280-190799-8	LL1mw-086-240401-GW	Water	04/28/24 14:00	04/30/24 09:15
280-190799-9	FWGmw-010-240401-GW	Water	04/29/24 15:48	04/30/24 09:15

Eurofins Denver

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-190799-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 650851

Lab Sample ID: IC 280-650851/10 Client Sample ID:

Date Analyzed: 04/24/24 21:28 Lab File ID: 04240010.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Picric acid	8.38	Peak assignment corrected	LV5D	04/25/24 13:10
Nitroglycerin	14.88	Baseline	LV5D	04/25/24 13:10

Lab Sample ID: IC 280-650851/11 Client Sample ID:

Date Analyzed: 04/24/24 22:04 Lab File ID: 04240011.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitroglycerin	14.92	Baseline	LV5D	04/25/24 13:11
2,4,6-Trinitrotoluene	22.86	Baseline	LV5D	04/25/24 13:37

Lab Sample ID: IC 280-650851/12 Client Sample ID:

Date Analyzed: 04/24/24 22:40 Lab File ID: 04240012.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitroglycerin	14.94	Baseline	LV5D	04/25/24 13:19
2,4,6-Trinitrotoluene	22.87	Baseline	LV5D	04/25/24 13:37

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-190799-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 650851

Lab Sample ID: IC 280-650851/13 Client Sample ID:

Date Analyzed: 04/24/24 23:16 Lab File ID: 04240013.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
3,5-Dinitroaniline	14.18	Baseline	LV5D	04/25/24 13:21
1,3-Dinitrobenzene	14.47	Baseline	LV5D	04/25/24 13:21
Nitroglycerin	14.92	Baseline	LV5D	04/25/24 13:19
2-Nitrotoluene	15.51	Baseline	LV5D	04/25/24 13:21
4-Nitrotoluene	15.74	Baseline	LV5D	04/25/24 13:21
4-Amino-2,6-dinitrotoluene	16.24	Baseline	LV5D	04/25/24 13:21
3-Nitrotoluene	16.57	Baseline	LV5D	04/25/24 13:21
2-Amino-4,6-dinitrotoluene	17.05	Baseline	LV5D	04/25/24 13:21
1,3,5-Trinitrobenzene	17.27	Baseline	LV5D	04/25/24 13:21
2,6-Dinitrotoluene	18.35	Baseline	LV5D	04/25/24 13:21
2,4-Dinitrotoluene	18.81	Baseline	LV5D	04/25/24 13:21
2,4,6-Trinitrotoluene	22.87	Baseline	LV5D	04/25/24 13:37

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-190799-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 650851

Lab Sample ID: IC 280-650851/14 Client Sample ID:

Date Analyzed: 04/24/24 23:51 Lab File ID: 04240014.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
3,5-Dinitroaniline	14.19	Baseline	LV5D	04/25/24 13:21
1,3-Dinitrobenzene	14.48	Baseline	LV5D	04/25/24 13:21
Nitroglycerin	14.92	Baseline	LV5D	04/25/24 13:19
2-Nitrotoluene	15.51	Baseline	LV5D	04/25/24 13:21
4-Nitrotoluene	15.74	Baseline	LV5D	04/25/24 13:21
4-Amino-2,6-dinitrotoluene	16.25	Baseline	LV5D	04/25/24 13:21
3-Nitrotoluene	16.58	Baseline	LV5D	04/25/24 13:21
2-Amino-4,6-dinitrotoluene	17.06	Baseline	LV5D	04/25/24 13:21
1,3,5-Trinitrobenzene	17.27	Baseline	LV5D	04/25/24 13:21
2,6-Dinitrotoluene	18.37	Baseline	LV5D	04/25/24 13:21
2,4-Dinitrotoluene	18.82	Baseline	LV5D	04/25/24 13:21
2,4,6-Trinitrotoluene	22.88	Baseline	LV5D	04/25/24 13:37
PETN	24.03	Baseline	LV5D	04/25/24 13:39

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-190799-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 650851

Lab Sample ID: IC 280-650851/15 Client Sample ID:

Date Analyzed: 04/25/24 00:27 Lab File ID: 04240015.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
3,5-Dinitroaniline	14.21	Baseline	LV5D	04/25/24 13:24
1,3-Dinitrobenzene	14.49	Baseline	LV5D	04/25/24 13:21
Nitroglycerin	14.95	Baseline	LV5D	04/25/24 13:20
2-Nitrotoluene	15.53	Baseline	LV5D	04/25/24 13:24
4-Nitrotoluene	15.76	Baseline	LV5D	04/25/24 13:21
4-Amino-2,6-dinitrotoluene	16.27	Baseline	LV5D	04/25/24 13:21
3-Nitrotoluene	16.60	Baseline	LV5D	04/25/24 13:21
2-Amino-4,6-dinitrotoluene	17.08	Baseline	LV5D	04/25/24 13:21
1,3,5-Trinitrobenzene	17.29	Baseline	LV5D	04/25/24 13:24
2,6-Dinitrotoluene	18.38	Baseline	LV5D	04/25/24 13:24
2,4-Dinitrotoluene	18.84	Baseline	LV5D	04/25/24 13:21
2,4,6-Trinitrotoluene	22.91	Baseline	LV5D	04/25/24 13:36

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-190799-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 650851

Lab Sample ID: IC 280-650851/16 Client Sample ID:

Date Analyzed: 04/25/24 01:03 Lab File ID: 04240016.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.71	Baseline	LV5D	04/25/24 13:32
3,5-Dinitroaniline	14.20	Baseline	LV5D	04/25/24 13:25
1,3-Dinitrobenzene	14.50	Baseline	LV5D	04/25/24 13:25
Nitroglycerin	14.94	Baseline	LV5D	04/25/24 13:20
2-Nitrotoluene	15.52	Baseline	LV5D	04/25/24 13:25
4-Nitrotoluene	15.74	Baseline	LV5D	04/25/24 13:25
4-Amino-2,6-dinitrotoluene	16.25	Baseline	LV5D	04/25/24 13:35
3-Nitrotoluene	16.58	Baseline	LV5D	04/25/24 13:25
2-Amino-4,6-dinitrotoluene	17.06	Baseline	LV5D	04/25/24 13:25
1,3,5-Trinitrobenzene	17.28	Baseline	LV5D	04/25/24 13:25
Tetryl	22.02	Baseline	LV5D	04/25/24 13:25
2,4,6-Trinitrotoluene	22.88	Baseline	LV5D	04/25/24 13:25
PETN	24.02	Baseline	LV5D	04/25/24 13:39

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-190799-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 650851

Lab Sample ID: IC 280-650851/17 Client Sample ID:

Date Analyzed: 04/25/24 01:39 Lab File ID: 04240017.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.71	Baseline	LV5D	04/25/24 13:31
Picric acid	8.73	Baseline	LV5D	04/25/24 13:32
RDX	8.95	Baseline	LV5D	04/25/24 13:32
Nitrobenzene	11.46	Baseline	LV5D	04/25/24 13:26
1,2-Dinitrobenzene	12.39	Baseline	LV5D	04/25/24 13:26
3,5-Dinitroaniline	14.23	Baseline	LV5D	04/25/24 13:26
1,3-Dinitrobenzene	14.52	Baseline	LV5D	04/25/24 13:26
Nitroglycerin	14.98	Baseline	LV5D	04/25/24 13:20
2-Nitrotoluene	15.56	Baseline	LV5D	04/25/24 13:35
4-Nitrotoluene	15.77	Baseline	LV5D	04/25/24 13:35
4-Amino-2,6-dinitrotoluene	16.29	Baseline	LV5D	04/25/24 13:35
3-Nitrotoluene	16.62	Baseline	LV5D	04/25/24 13:35
2-Amino-4,6-dinitrotoluene	17.10	Baseline	LV5D	04/25/24 13:35
1,3,5-Trinitrobenzene	17.31	Baseline	LV5D	04/25/24 13:35
2,6-Dinitrotoluene	18.39	Baseline	LV5D	04/25/24 13:26
2,4-Dinitrotoluene	18.85	Baseline	LV5D	04/25/24 13:26
Tetryl	22.07	Baseline	LV5D	04/25/24 13:26
2,4,6-Trinitrotoluene	22.93	Baseline	LV5D	04/25/24 13:27

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-190799-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 650851

Lab Sample ID: IC 280-650851/18 Client Sample ID:

Date Analyzed: 04/25/24 02:15 Lab File ID: 04240018.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.71	Baseline	LV5D	04/25/24 13:31
Nitrobenzene	11.43	Baseline	LV5D	04/25/24 13:27
1,2-Dinitrobenzene	12.36	Baseline	LV5D	04/25/24 13:28
3,5-Dinitroaniline	14.20	Baseline	LV5D	04/25/24 13:29
1,3-Dinitrobenzene	14.49	Baseline	LV5D	04/25/24 13:28
Nitroglycerin	14.94	Baseline	LV5D	04/25/24 13:20
2-Nitrotoluene	15.53	Baseline	LV5D	04/25/24 13:29
4-Nitrotoluene	15.75	Baseline	LV5D	04/25/24 13:29
4-Amino-2,6-dinitrotoluene	16.26	Baseline	LV5D	04/25/24 13:29
3-Nitrotoluene	16.59	Baseline	LV5D	04/25/24 13:29
2-Amino-4,6-dinitrotoluene	17.09	Baseline	LV5D	04/25/24 13:29
1,3,5-Trinitrobenzene	17.29	Baseline	LV5D	04/25/24 13:29
2,6-Dinitrotoluene	18.38	Baseline	LV5D	04/25/24 13:29
2,4-Dinitrotoluene	18.83	Baseline	LV5D	04/25/24 13:29
2,4,6-Trinitrotoluene	22.90	Baseline	LV5D	04/25/24 13:38

Lab Sample ID: ICV 280-650851/19 Client Sample ID:

Date Analyzed: 04/25/24 02:51 Lab File ID: 04240019.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitroglycerin	14.93	Baseline	LV5D	04/25/24 13:30

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-190799-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 652057

Lab Sample ID: CCV 280-652057/20 Client Sample ID:

Date Analyzed: 05/03/24 23:15 Lab File ID: 05030020.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
3,5-Dinitroaniline	14.16	Baseline	LV5D	05/07/24 16:04
1,3-Dinitrobenzene	14.46	Baseline	LV5D	05/07/24 16:04
Nitroglycerin	14.93	Baseline	LV5D	05/07/24 16:04
2-Nitrotoluene	15.52	Baseline	LV5D	05/07/24 16:04
4-Nitrotoluene	15.74	Baseline	LV5D	05/07/24 16:04
4-Amino-2,6-dinitrotoluene	16.24	Baseline	LV5D	05/07/24 16:04
3-Nitrotoluene	16.58	Baseline	LV5D	05/07/24 16:04
2-Amino-4,6-dinitrotoluene	17.04	Baseline	LV5D	05/07/24 16:04
1,3,5-Trinitrobenzene	17.26	Baseline	LV5D	05/07/24 16:04
2,6-Dinitrotoluene	18.36	Baseline	LV5D	05/07/24 16:04
2,4-Dinitrotoluene	18.81	Baseline	LV5D	05/07/24 16:04
Tetryl	21.99	Baseline	LV5D	05/07/24 16:04
2,4,6-Trinitrotoluene	22.85	Baseline	LV5D	05/07/24 16:04

Lab Sample ID: 280-190799-3 Client Sample ID: LL1mw-084-240401-GW

Date Analyzed: 05/04/24 01:03 Lab File ID: 05030023.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.67	Baseline	LV5D	05/07/24 16:06
RDX	8.98	Baseline	LV5D	05/07/24 16:06
2-Nitrotoluene		Invalid Compound ID	LV5D	05/07/24 16:07
1,3-Dinitrobenzene	14.47	Baseline	LV5D	05/07/24 16:07
4-Amino-2,6-dinitrotoluene	16.24	Baseline	LV5D	05/07/24 16:07
2-Amino-4,6-dinitrotoluene	17.04	Baseline	LV5D	05/07/24 16:07

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-190799-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 652057

Lab Sample ID: 280-190799-4 Client Sample ID: LL1mw-084-240402-GW

Date Analyzed: 05/04/24 01:39 Lab File ID: 05030024.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.68	Baseline	LV5D	05/07/24 16:08
RDX	8.98	Baseline	LV5D	05/07/24 16:08
2,6-Dinitrotoluene		Invalid Compound ID	LV5D	05/07/24 16:07
1,3-Dinitrobenzene	14.47	Baseline	LV5D	05/07/24 16:08
2-Nitrotoluene	15.60	Baseline	LV5D	05/07/24 16:07
4-Amino-2,6-dinitrotoluene	16.22	Baseline	LV5D	05/07/24 16:07
2-Amino-4,6-dinitrotoluene	17.02	Baseline	LV5D	05/07/24 16:07

Lab Sample ID: 280-190799-5 Client Sample ID: LL1mw-080-240401-GW

Date Analyzed: 05/04/24 02:15 Lab File ID: 05030025.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitroglycerin		Invalid Compound ID	LV5D	05/07/24 16:22
2-Nitrotoluene	15.59	Baseline	LV5D	05/07/24 16:22
2-Amino-4,6-dinitrotoluene	17.03	Baseline	LV5D	05/07/24 16:22

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-190799-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 652057

Lab Sample ID: CCV 280-652057/31 Client Sample ID:

Date Analyzed: 05/04/24 05:51 Lab File ID: 05030031.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
3,5-Dinitroaniline	14.14	Baseline	LV5D	05/07/24 16:25
1,3-Dinitrobenzene	14.45	Baseline	LV5D	05/07/24 16:25
Nitroglycerin	14.91	Baseline	LV5D	05/07/24 16:25
2-Nitrotoluene	15.50	Baseline	LV5D	05/07/24 16:25
4-Nitrotoluene	15.73	Baseline	LV5D	05/07/24 16:25
4-Amino-2,6-dinitrotoluene	16.23	Baseline	LV5D	05/07/24 16:25
3-Nitrotoluene	16.57	Baseline	LV5D	05/07/24 16:25
2-Amino-4,6-dinitrotoluene	17.03	Baseline	LV5D	05/07/24 16:25
1,3,5-Trinitrobenzene	17.25	Baseline	LV5D	05/07/24 16:25

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-190799-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 649950

Lab Sample ID: IC 280-649950/11 Client Sample ID:

Date Analyzed: 04/17/24 20:37 Lab File ID: 04170011.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.47	Baseline	LV5D	04/18/24 11:13
HMX	6.58	Baseline	LV5D	04/18/24 11:13
DNX	6.78	Baseline	LV5D	04/18/24 11:13

Lab Sample ID: IC 280-649950/12 Client Sample ID:

Date Analyzed: 04/17/24 21:00 Lab File ID: 04170012.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.47	Baseline	LV5D	04/18/24 11:13
HMX	6.58	Baseline	LV5D	04/18/24 11:13
DNX	6.79	Baseline	LV5D	04/18/24 11:13

Lab Sample ID: IC 280-649950/13 Client Sample ID:

Date Analyzed: 04/17/24 21:23 Lab File ID: 04170013.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.48	Baseline	LV5D	04/18/24 11:13
HMX	6.58	Baseline	LV5D	04/18/24 11:13
DNX	6.79	Baseline	LV5D	04/18/24 11:13

Lab Sample ID: IC 280-649950/14 Client Sample ID:

Date Analyzed: 04/17/24 21:46 Lab File ID: 04170014.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.48	Baseline	LV5D	04/18/24 11:14
HMX	6.59	Baseline	LV5D	04/18/24 11:14
DNX	6.79	Baseline	LV5D	04/18/24 11:14

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-190799-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 649950

Lab Sample ID: IC 280-649950/15 Client Sample ID:

Date Analyzed: 04/17/24 22:09 Lab File ID: 04170015.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.48	Baseline	LV5D	04/18/24 11:15
HMX	6.58	Baseline	LV5D	04/18/24 11:15
DNX	6.79	Baseline	LV5D	04/18/24 11:15
3-Nitrotoluene	13.40	Baseline	LV5D	04/18/24 11:15

Lab Sample ID: IC 280-649950/16 Client Sample ID:

Date Analyzed: 04/17/24 22:32 Lab File ID: 04170016.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.48	Baseline	LV5D	04/18/24 11:16
HMX	6.58	Baseline	LV5D	04/18/24 11:16
DNX	6.79	Baseline	LV5D	04/18/24 11:16
PETN	14.48	Baseline	LV5D	04/18/24 11:15

Lab Sample ID: IC 280-649950/17 Client Sample ID:

Date Analyzed: 04/17/24 22:55 Lab File ID: 04170017.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.48	Baseline	LV5D	04/18/24 11:16
HMX	6.58	Baseline	LV5D	04/18/24 11:16
DNX	6.78	Baseline	LV5D	04/18/24 11:16
PETN	14.49	Baseline	LV5D	04/18/24 11:16

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-190799-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 649950

Lab Sample ID: IC 280-649950/18 Client Sample ID:

Date Analyzed: 04/17/24 23:18 Lab File ID: 04170018.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
DNX	6.79	Baseline	LV5D	04/18/24 11:17
1,2-Dinitrobenzene	8.52	Baseline	LV5D	04/18/24 11:19
1,3,5-Trinitrobenzene	8.66	Baseline	LV5D	04/18/24 11:19
3,5-Dinitroaniline	9.87	Baseline	LV5D	04/18/24 11:17
Tetryl	9.96	Baseline	LV5D	04/18/24 11:17
Nitroglycerin	10.42	Baseline	LV5D	04/18/24 11:17
PETN	14.48	Baseline	LV5D	04/18/24 11:17

Lab Sample ID: IC 280-649950/19 Client Sample ID:

Date Analyzed: 04/17/24 23:41 Lab File ID: 04170019.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.48	Baseline	LV5D	04/18/24 11:18
HMX	6.58	Baseline	LV5D	04/18/24 11:18
DNX	6.79	Baseline	LV5D	04/18/24 11:18
RDX	7.58	Baseline	LV5D	04/18/24 11:18
1,2-Dinitrobenzene	8.52	Baseline	LV5D	04/18/24 11:19
1,3,5-Trinitrobenzene	8.66	Baseline	LV5D	04/18/24 11:19
3,5-Dinitroaniline	9.87	Baseline	LV5D	04/18/24 11:18
Tetryl	9.95	Baseline	LV5D	04/18/24 11:18
Nitroglycerin	10.43	Baseline	LV5D	04/18/24 11:17
PETN	14.49	Baseline	LV5D	04/18/24 11:17

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-190799-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 649950

Lab Sample ID: ICV 280-649950/20 Client Sample ID:

Date Analyzed: 04/18/24 00:04 Lab File ID: 04170020.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.48	Baseline	LV5D	04/18/24 11:20
HMX	6.58	Baseline	LV5D	04/18/24 11:20
DNX	6.79	Baseline	LV5D	04/18/24 11:20

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-190799-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 652145

Lab Sample ID: MB 280-651841/1-A Client Sample ID:

Date Analyzed: 05/04/24 18:08 Lab File ID: 05040011.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.57	Baseline	LV5D	05/07/24 12:47
1,3,5-Trinitrobenzene		Invalid Compound ID	LV5D	05/07/24 12:47
RDX		Invalid Compound ID	LV5D	05/07/24 12:47

Lab Sample ID: LCS 280-651841/2-A Client Sample ID:

Date Analyzed: 05/04/24 18:31 Lab File ID: 05040012.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3,5-Trinitrobenzene	8.71	Baseline	LV5D	05/07/24 12:47
2,4,6-Trinitrotoluene	10.89	Baseline	LV5D	05/07/24 12:48
4-Amino-2,6-dinitrotoluene	11.07	Baseline	LV5D	05/07/24 12:48
2-Amino-4,6-dinitrotoluene	11.33	Baseline	LV5D	05/07/24 12:48
2,6-Dinitrotoluene	11.47	Baseline	LV5D	05/07/24 12:48
2,4-Dinitrotoluene	11.65	Baseline	LV5D	05/07/24 12:48
2-Nitrotoluene	12.43	Baseline	LV5D	05/07/24 12:48
4-Nitrotoluene	12.85	Baseline	LV5D	05/07/24 12:48
3-Nitrotoluene	13.40	Baseline	LV5D	05/07/24 12:48

Lab Sample ID: LCSD 280-651841/3-A Client Sample ID:

Date Analyzed: 05/04/24 18:54 Lab File ID: 05040013.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3,5-Trinitrobenzene	8.70	Baseline	LV5D	05/07/24 12:48
2,4-Dinitrotoluene	11.65	Baseline	LV5D	05/07/24 12:48
3-Nitrotoluene	13.39	Baseline	LV5D	05/07/24 12:48

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-190799-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 652145

Lab Sample ID: CCV 280-652145/21 Client Sample ID:

Date Analyzed: 05/04/24 21:57 Lab File ID: 05040021.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.60	Baseline	LV5D	05/07/24 12:53

Lab Sample ID: 280-190799-1 Client Sample ID: SCFmw-004-240401-GW

Date Analyzed: 05/04/24 22:20 Lab File ID: 05040022.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3,5-Trinitrobenzene		Invalid Compound ID	LV5D	05/07/24 12:54
1,3-Dinitrobenzene		Invalid Compound ID	LV5D	05/07/24 12:54
4-Nitrotoluene		Invalid Compound ID	LV5D	05/07/24 12:54
HMX		Invalid Compound ID	LV5D	05/07/24 12:53

Lab Sample ID: 280-190799-2 Client Sample ID: SCFmw-004-240402-GW

Date Analyzed: 05/04/24 22:43 Lab File ID: 05040023.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.56	Baseline	LV5D	05/07/24 12:54
1,3,5-Trinitrobenzene		Invalid Compound ID	LV5D	05/07/24 12:54
1,3-Dinitrobenzene		Invalid Compound ID	LV5D	05/07/24 12:54
2-Nitrotoluene		Invalid Compound ID	LV5D	05/07/24 12:54
HMX		Invalid Compound ID	LV5D	05/07/24 12:54

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-190799-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 652145

Lab Sample ID: 280-190799-3 Client Sample ID: LL1mw-084-240401-GW

Date Analyzed: 05/04/24 23:06 Lab File ID: 05040024.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.61	Baseline	LV5D	05/07/24 12:55
RDX	7.63	Baseline	LV5D	05/07/24 12:55
1,3,5-Trinitrobenzene	8.70	Baseline	LV5D	05/07/24 12:56
1,3-Dinitrobenzene		Invalid Compound ID	LV5D	05/07/24 12:56
Nitrobenzene		Invalid Compound ID	LV5D	05/07/24 12:56
Tetryl		Invalid Compound ID	LV5D	05/07/24 12:56
2,4,6-Trinitrotoluene	10.89	Baseline	LV5D	05/07/24 12:57
4-Nitrotoluene	12.83	Baseline	LV5D	05/07/24 12:56

Lab Sample ID: 280-190799-4 Client Sample ID: LL1mw-084-240402-GW

Date Analyzed: 05/04/24 23:29 Lab File ID: 05040025.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.60	Baseline	LV5D	05/07/24 13:47
1,3,5-Trinitrobenzene	8.69	Baseline	LV5D	05/07/24 13:47
1,3-Dinitrobenzene	9.28	Baseline	LV5D	05/07/24 13:47
Nitrobenzene		Invalid Compound ID	LV5D	05/07/24 13:47
Tetryl		Invalid Compound ID	LV5D	05/07/24 13:47
2,4,6-Trinitrotoluene	10.89	Baseline	LV5D	05/07/24 13:48
4-Amino-2,6-dinitrotoluene	11.07	Baseline	LV5D	05/07/24 13:38
2-Amino-4,6-dinitrotoluene	11.32	Baseline	LV5D	05/07/24 13:48
2,4-Dinitrotoluene	11.64	Baseline	LV5D	05/07/24 13:38
4-Nitrotoluene	12.83	Baseline	LV5D	05/07/24 13:48

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-190799-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 652145

Lab Sample ID: 280-190799-5 Client Sample ID: LL1mw-080-240401-GW

Date Analyzed: 05/04/24 23:52 Lab File ID: 05040026.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.60	Baseline	LV5D	05/07/24 13:48
RDX	7.63	Baseline	LV5D	05/07/24 13:48
1,2-Dinitrobenzene	8.56	Baseline	LV5D	05/07/24 13:48
1,3,5-Trinitrobenzene	8.69	Baseline	LV5D	05/07/24 13:48
1,3-Dinitrobenzene	9.29	Baseline	LV5D	05/07/24 13:49
Nitrobenzene		Invalid Compound ID	LV5D	05/07/24 13:48
Tetryl		Invalid Compound ID	LV5D	05/07/24 13:48
4-Nitrotoluene	12.84	Baseline	LV5D	05/07/24 13:49

Lab Sample ID: 280-190799-6 Client Sample ID: LL1mw-087-240401-GW

Date Analyzed: 05/05/24 00:15 Lab File ID: 05040027.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.57	Baseline	LV5D	05/07/24 13:49
1,3-Dinitrobenzene		Invalid Compound ID	LV5D	05/07/24 13:49
2-Nitrotoluene		Invalid Compound ID	LV5D	05/07/24 13:49
4-Nitrotoluene		Invalid Compound ID	LV5D	05/07/24 13:49

Lab Sample ID: 280-190799-6 MS Client Sample ID: LL1mw-087-240401-GW MS

Date Analyzed: 05/05/24 00:38 Lab File ID: 05040028.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.60	Baseline	LV5D	05/07/24 13:49
RDX	7.63	Baseline	LV5D	05/07/24 13:49
3-Nitrotoluene	13.41	Baseline	LV5D	05/07/24 13:50

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-190799-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 652145

Lab Sample ID: 280-190799-6 MSD Client Sample ID: LL1mw-087-240401-GW MSD

Date Analyzed: 05/05/24 01:01 Lab File ID: 05040029.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.60	Baseline	LV5D	05/07/24 13:50
RDX	7.62	Baseline	LV5D	05/07/24 13:50
1,2-Dinitrobenzene	8.56	Baseline	LV5D	05/07/24 13:50
1,3,5-Trinitrobenzene	8.70	Baseline	LV5D	05/07/24 13:50
1,3-Dinitrobenzene	9.32	Baseline	LV5D	05/07/24 13:50
3-Nitrotoluene	13.41	Baseline	LV5D	05/07/24 13:50

Lab Sample ID: 280-190799-7 Client Sample ID: LL1mw-087-240402-GW

Date Analyzed: 05/05/24 01:24 Lab File ID: 05040030.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.57	Baseline	LV5D	05/07/24 13:51
1,3-Dinitrobenzene		Invalid Compound ID	LV5D	05/07/24 13:50
2-Nitrotoluene		Invalid Compound ID	LV5D	05/07/24 13:50
4-Nitrotoluene		Invalid Compound ID	LV5D	05/07/24 13:50

Lab Sample ID: 280-190799-8 Client Sample ID: LL1mw-086-240401-GW

Date Analyzed: 05/05/24 01:47 Lab File ID: 05040031.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.60	Baseline	LV5D	05/07/24 13:51
1,2-Dinitrobenzene	8.57	Baseline	LV5D	05/07/24 13:51
1,3,5-Trinitrobenzene		Invalid Compound ID	LV5D	05/07/24 13:51
RDX		Invalid Compound ID	LV5D	05/07/24 13:51

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-190799-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 652145

Lab Sample ID: CCV 280-652145/32 Client Sample ID:

Date Analyzed: 05/05/24 02:10 Lab File ID: 05040032.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Nitrotoluene	12.86	Baseline	LV5D	05/07/24 13:52
3-Nitrotoluene	13.41	Baseline	LV5D	05/07/24 13:52

Lab Sample ID: 280-190799-9 Client Sample ID: FWGmw-010-240401-GW

Date Analyzed: 05/05/24 02:33 Lab File ID: 05040033.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.57	Baseline	LV5D	05/07/24 13:52
1,3,5-Trinitrobenzene		Invalid Compound ID	LV5D	05/07/24 13:52
1,3-Dinitrobenzene		Invalid Compound ID	LV5D	05/07/24 13:52
RDX		Invalid Compound ID	LV5D	05/07/24 13:52

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-190799-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
8330 DMT_00016	06/30/24	01/24/24	Acetonitrile, Lot 233799	5 mL	MNX,TNX,DNX_00092	1 mL	DNX	20.04 ug/mL
							MNX	23.38 ug/mL
							TNX	20.08 ug/mL
.MNX,TNX,DNX_00092	06/30/24		Agilent, Lot 0006744504		(Purchased Reagent)		DNX	100.2 ug/mL
							MNX	116.9 ug/mL
							TNX	100.4 ug/mL
8330 LCS_00134	08/29/24	02/29/24	Acetonitrile, Lot Acetonitrile_00086	100 mL	3,5-DNA Stock_00051	1 mL	3,5-Dinitroaniline	10 ug/mL
					8330 LCSMix2_00113	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_00145	1 mL	Nitroglycerin	100 ug/mL
					8330_NG_Stk_00147	1 mL	Nitroglycerin	100 ug/mL
					8330_PETN_Stk_00152	1 mL	PETN	100 ug/mL
					8330_PETN_Stk_00153	1 mL	PETN	100 ug/mL
					8330LCSMix1_00151	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_00122	1 mL	2,4,6-Trinitrophenol	10 ug/mL
							Ammonium Picrate	10.74 ug/mL
.3,5-DNA Stock_00051	02/28/25		Restek, Lot A0193965		(Purchased Reagent)		3,5-Dinitroaniline	1000 ug/mL
.8330 LCSMix2_00113	02/28/25		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_00145	02/28/25		Restek, Lot A0201048		(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_NG_Stk_00147	02/28/25		Restek, Lot A0201048		(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_PETN_Stk_00152	02/28/25		Restek, Lot A0198972		(Purchased Reagent)		PETN	5000 ug/mL
.8330_PETN_Stk_00153	02/28/25		Restek, Lot A0198972		(Purchased Reagent)		PETN	5000 ug/mL
.8330LCSMix1_00151	02/28/25		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

Lab Name: Eurofins Denver Job No.: 280-190799-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							RDX	1000 ug/mL
.PicricARestek_00122	02/28/25	Restek, Lot A0195778			(Purchased Reagent)		2,4,6-Trinitrophenol	1000 ug/mL
							Ammonium Picrate	1074 ug/mL
8330IntermStk_00080	05/14/24	04/17/24	Acetonitrile, Lot 223272	10 mL	8330_NG1000_00012	1 mL	Nitroglycerin	100 ug/mL
					8330_PETN1000_00016	1 mL	PETN	100 ug/mL
					833035DNAStk_00059	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_00075	1 mL	2,4,6-Trinitrophenol	10 ug/mL
.8330_NG1000_00012	04/17/25	Restek, Lot A0197032			(Purchased Reagent)		Nitroglycerin	1000 ug/mL
.8330_PETN1000_00016	04/17/25	Restek, Lot A0198747			(Purchased Reagent)		PETN	1000 ug/mL
.833035DNAStk_00059	05/14/24	Accustandard, Lot 223041214			(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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-190799-1

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	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_00173	01/23/25	AccuStandard, Lot 219051500			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330PAStkPS_00075	04/12/25	AccuStandard, Lot 223041157			(Purchased Reagent)		2,4,6-Trinitrophenol	100 ug/mL
8330Surrogate_00154	09/01/24	03/01/24	Acetonitrile, Lot Acetonitrile_00086	500 mL	8330SurrStkSS_00310	1 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00311	1 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00312	1 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00314	1 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00315	1 mL	1,2-Dinitrobenzene	10 ug/mL
.8330SurrStkSS_00310	03/01/25	Restek, Lot A0200577			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00311	03/01/25	Restek, Lot A0200577			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00312	03/01/25	Restek, Lot A0200577			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00314	03/01/25	Restek, Lot A0200577			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00315	03/01/25	Restek, Lot A0200577			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
8330Surrogate_00155	10/26/24	04/26/24	Acetonitrile, Lot Acetonitrile_00086	500 mL	8330SurrStkSS_00313	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00316	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00317	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00318	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00319	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
.8330SurrStkSS_00313	04/26/25	Restek, Lot A0200577			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00316	04/26/25	Restek, Lot A0200577			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00317	04/26/25	Restek, Lot A0200577			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00318	04/26/25	Restek, Lot A0205460			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00319	04/26/25	Restek, Lot A0205460			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL

Reagent

3,5-DNA Stock_00051

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. : 31661 **Lot No.:** A0193965

Description : 3,5-Dinitroaniline Standard

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

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

Expiration Date : August 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	3,5-Dinitroaniline	618-87-1	10311HS	99%	1,004.0 µg/mL	+/- 37.4502

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

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified 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_00134

Preliminary Report

Eurofins Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20240301-130735.b\03010011.D

Lims ID: 8330 LCS_00134 Inj. Date: 01-Mar-2024 12:30:35

Worklist ID: 280-0130735-011 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 0B_Sonc_	Limits 2 3535
4 HMX	0.5000	0.4367	87.3	66-115	65-135
8 RDX	0.5000	0.4730	94.6	69-122	68-130
9 2,4,6-Trinitrophenol	0.5000	0.5271	105.4	63-135	80-120
11 1,3,5-Trinitrobenzene	0.5000	0.5189	103.8	62-127	73-125
12 1,3-Dinitrobenzene	0.5000	0.5073	101.5	59-131	78-120
13 Nitrobenzene	0.5000	0.5288	105.8	46-144	65-134
14 3,5-Dinitroaniline	0.5000	0.5048	101.0	55-119	71-117
15 Tetryl	0.5000	0.4891	97.8	56-131	64-128
16 Nitroglycerin	5.00	5.39	107.8	70-125	74-127
17 2,4,6-Trinitrotoluene	0.5000	0.4808	96.2	46-139	71-123
18 4-Amino-2,6-dinitrotolu	0.5000	0.4971	99.4	43-120	76-125
19 2-Amino-4,6-dinitrotolu	0.5000	0.4882	97.6	46-124	79-120
20 2,6-Dinitrotoluene	0.5000	0.4971	99.4	51-130	77-127
21 2,4-Dinitrotoluene	0.5000	0.4832	96.6	53-127	78-120
22 o-Nitrotoluene	0.5000	0.5062	101.2	37-138	70-127
23 p-Nitrotoluene	0.5000	0.5029	100.6	41-137	71-127
24 m-Nitrotoluene	0.5000	0.5100	102.0	31-140	73-125
25 PETN	5.00	5.09	101.7	67-127	73-127

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

280-188024-A-1-A 280-188024-A-2-A 280-188024-A-3-A

280-188024-A-4-A 280-188024-A-5-A

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

410-161632-D-1-A 410-161632-D-2-A 410-161632-D-4-A

410-161632-D-6-A 410-161632-A-7-A 410-161632-A-8-A

Reagent

8330 LCSMix2_00113

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

Certificate of Analysis

chromatographic plus

ACCREDITED
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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. : 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.

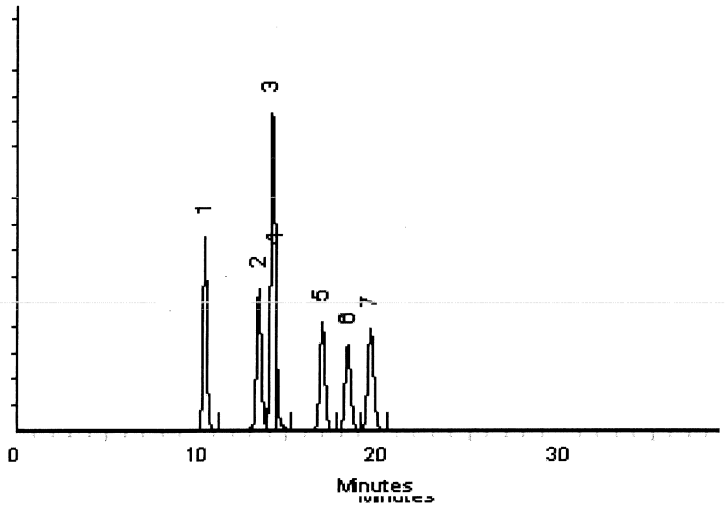
Mobile Phase A:
water:methanol (44:56 V/V)

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_NG_Stk_00145

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic

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ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

5/8/2024 6:07:23 AM

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.:** A0201048

Description : Custom Nitroglycerin Standard

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

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

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

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Nitroglycerin	55-63-0	200507JLM	99%	5,008.0 µg/mL	+/- 236.3643

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

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

Page 61 of 620

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

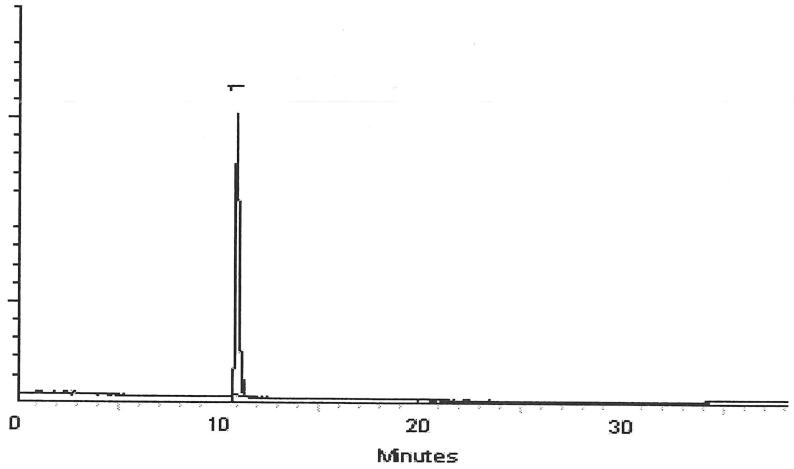
Mobile Phase A:
water:methanol (44:56 V/V)

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.

Kylie Struble - Operations Technician I

Date Mixed: 16-Aug-2023 **Balance Serial #** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 25-Aug-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_00147

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CERTIFIED REFERENCE MATERIAL

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

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6:07:23 AM

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.:** A0201048

Description : Custom Nitroglycerin Standard

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

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

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

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Nitroglycerin	55-63-0	200507JLM	99%	5,008.0 µg/mL	+/- 236.3643

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

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

Page 66 of 620

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

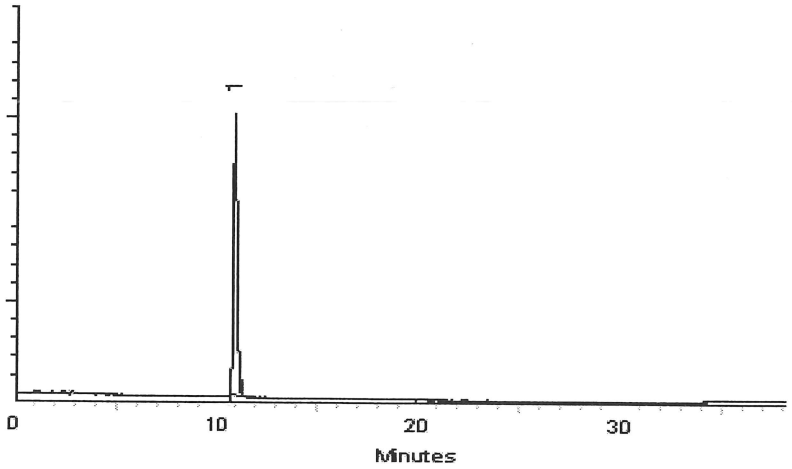
Mobile Phase A:
water:methanol (44:56 V/V)

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.

Kylie Struble - Operations Technician I

Jennifer Pollino - Operations Tech III - ARM QC

Date Mixed: 16-Aug-2023 **Balance Serial #** 1128360905

Date Passed: 25-Aug-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_NG1000_00012

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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. : 31498 **Lot No.:** A0197032

Description : Nitroglycerin Standard

Nitroglycerin Standard 1,000µg/mL, Methanol, 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	Nitroglycerin	55-63-0	200507JLM	99%	1,006.0 µg/mL	+/- 46.9317

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

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified 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_00152

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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. : 568872 **Lot No.:** A0198972

Description : Custom PETN Standard

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

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

Expiration Date : June 30, 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%	5,012.0 µg/mL	+/- 236.5531

* 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.

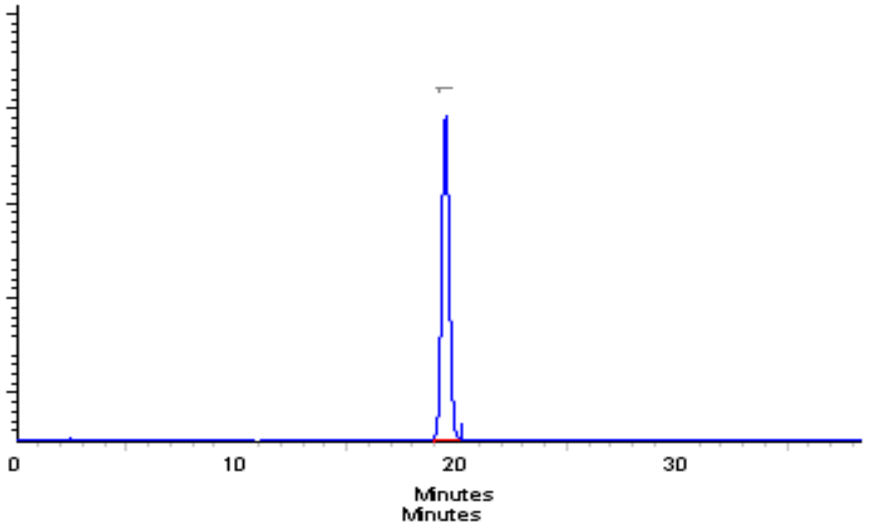
Mobile Phase A:
water:methanol (44:56 V/V)

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.

Bryan Snyder - Operations Tech I

Date Mixed: 14-Jun-2023 **Balance Serial #** 1128342314

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 16-Jun-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_PETN_Stk_00153

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110 Benner Circle
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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. : 568872 **Lot No.:** A0198972

Description : Custom PETN Standard

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

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

Expiration Date : June 30, 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%	5,012.0 µg/mL	+/- 236.5531

* 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.

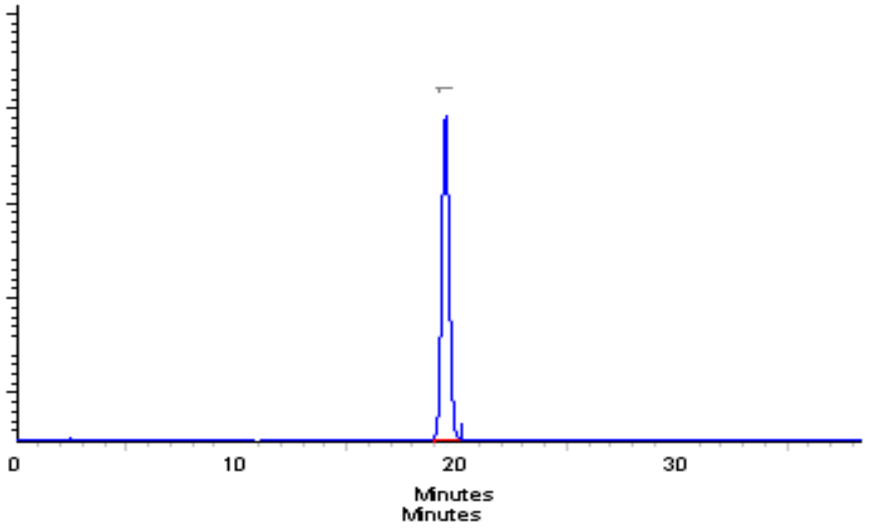
Mobile Phase A:
water:methanol (44:56 V/V)

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.

Bryan Snyder - Operations Tech I

Date Mixed: 14-Jun-2023 **Balance Serial #** 1128342314

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 16-Jun-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.
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Reagent

8330_PETN1000_00016

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

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ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

5/8/2024 6:07:23 AM

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.:** A0198747

Description : PETN Standard

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

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

Expiration Date : June 30, 2028 **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%	1,003.0 µg/mL	+/- 46.7917

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

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified 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_00059

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-ADD-4
Description: 3,5-Dinitroaniline
Lot: 223041214
Solvent: Methanol (50%)
Acetonitrile (50%)
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Apr 14, 2023
Expiration: May 14, 2024
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[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.

The information on this certificate may not be reproduced without the express permission of the manufacturer. See reverse side for additional information

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

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

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

Reagent

8330LCSMix1_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

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

Certificate of Analysis

chromatographic plus

ilac-MRA
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. : 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.

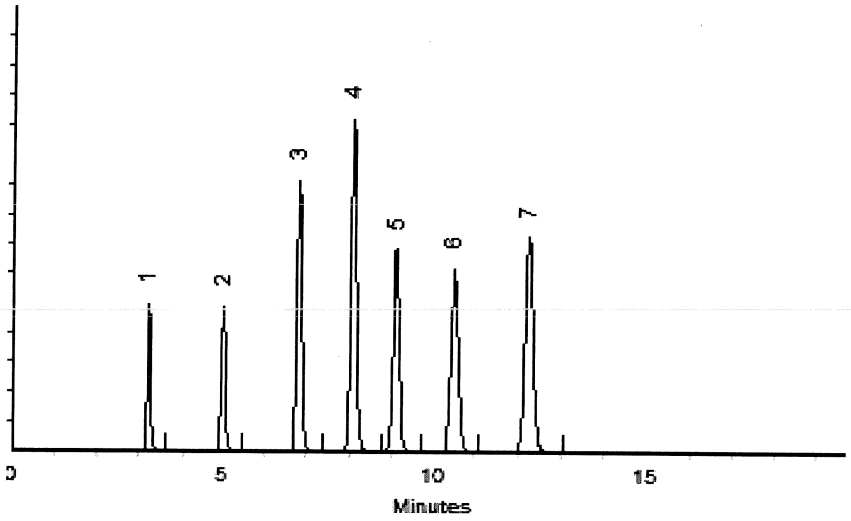
Mobile Phase A:
water:methanol (44:56 V/V)

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_00075

125 Market Street
New Haven, CT 06513
USA

AccuStandard®

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

5/8/2024
6:07:23 AM

CERTIFICATE OF ANALYSIS

Catalog No: M-8330-ADD-3
Description: Picric acid
Lot: 223041157
Solvent: Acetonitrile (50%)
Methanol (50%)
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Apr 12, 2023
Expiration: May 12, 2025
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 #	Purity³ %	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
Picric acid	88-89-1	99.1	100.3	99.4

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.

The information on this certificate may not be reproduced without the express permission of the manufacturer. See reverse side for additional information

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

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

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

Reagent

8330Surrogate_00155

Preliminary Report

Eurofins Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20240426-132709.b\8330SURR155.D

Lims ID: 8330Surr155 Inj. Date: 26-Apr-2024 15:49:11

Worklist ID: 280-0132709-056 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 3535
$ 10 1,2-Dinitrobenzene	0.5000	0.4971	99.4	83-119

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

280-190264-C-6-A	410-168708-B-13-A	410-168533-E-1-A
410-168533-D-2-A	410-168533-E-3-A	410-168533-D-4-A
410-168533-E-5-A	410-168533-D-6-A	410-168533-E-8-A
410-168533-D-9-A	410-168533-B-10-A	410-168533-C-11-A
410-168533-B-12-A	410-168533-B-13-A	410-168533-B-14-A
410-168533-C-15-A	280-190487-B-1-A	280-190487-B-2-A
280-190487-B-3-A	280-190487-B-4-A	280-190487-B-5-A
280-190487-B-6-A	280-190487-B-7-A	280-190487-B-8-A
280-190487-B-9-A	280-190487-B-10-A	280-190487-B-11-A
280-190487-B-12-A	280-190487-B-13-A	280-190487-B-14-A
280-190487-B-15-A	280-190487-B-16-A	

Reagent

8330SurrStkSS_00310

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110 Benner Circle
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

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

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

5/8/2024 6:07:23 AM

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.:** A0200577

Description : 8330 Surrogate Mix

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

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

Expiration Date : August 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	RP230428	99%	1,003.0 µg/mL	+/- 56.3574

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

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

Page 96 of 620

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

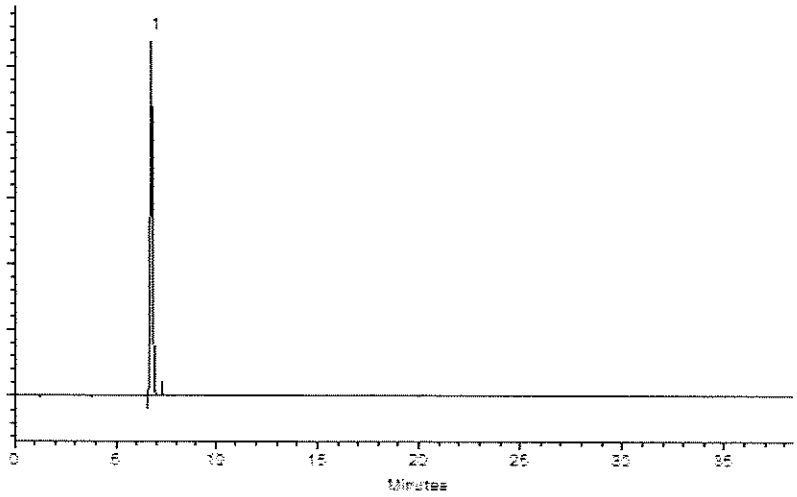
Mobile Phase A:
water:methanol (44:56 V/V)

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.

Laith Clemente - Operations Technician I **Date Mixed:** 03-Aug-2023 **Balance Serial #** B707717271

Jennifer Polino - Operations Tech III - ARM QC **Date Passed:** 21-Aug-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

8330SurrStkSS_00311

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

Certificate of Analysis

chromatographic plus

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

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

5/8/2024 6:07:23 AM

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.:** A0200577

Description : 8330 Surrogate Mix

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

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

Expiration Date : August 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	RP230428	99%	1,003.0 µg/mL	+/- 56.3574

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

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

Page 100 of 620

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

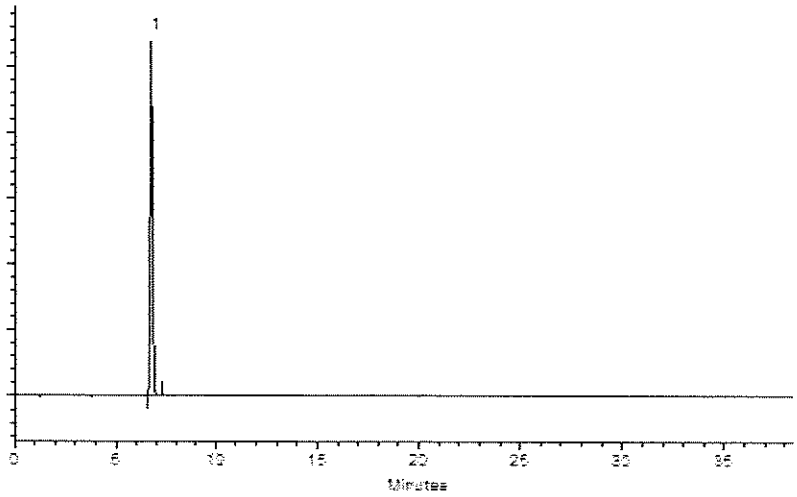
Mobile Phase A:
water:methanol (44:56 V/V)

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.

Laith Clemente - Operations Technician I **Date Mixed:** 03-Aug-2023 **Balance Serial #** B707717271

Jennifer Polino - Operations Tech III - ARM QC **Date Passed:** 21-Aug-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:

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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_00312

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

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

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

5/8/2024 6:07:23 AM

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.:** A0200577

Description : 8330 Surrogate Mix

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

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

Expiration Date : August 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	RP230428	99%	1,003.0 µg/mL	+/- 56.3574

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

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

Page 104 of 620

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

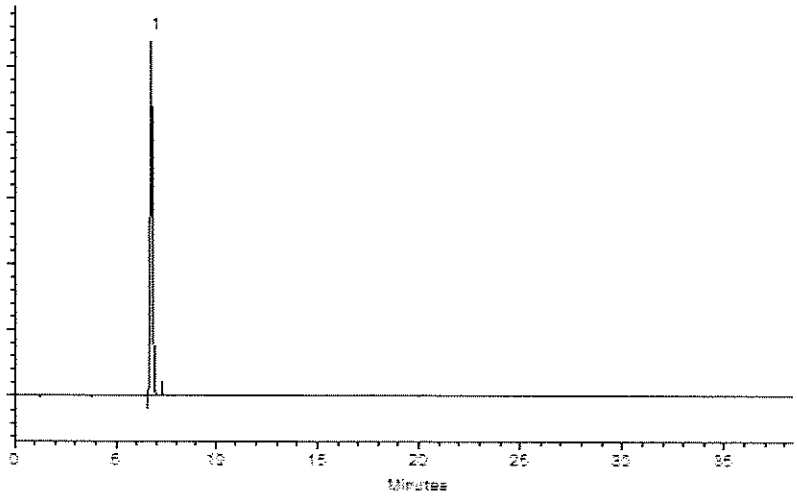
Mobile Phase A:
water:methanol (44:56 V/V)

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.

Laith Clemente - Operations Technician I **Date Mixed:** 03-Aug-2023 **Balance Serial #** B707717271

Jennifer Polino - Operations Tech III - ARM QC **Date Passed:** 21-Aug-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.
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- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified 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_00313

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

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

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

5/8/2024 6:07:23 AM

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.:** A0200577

Description : 8330 Surrogate Mix

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

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

Expiration Date : August 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	RP230428	99%	1,003.0 µg/mL	+/- 56.3574

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

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

Page 108 of 620

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

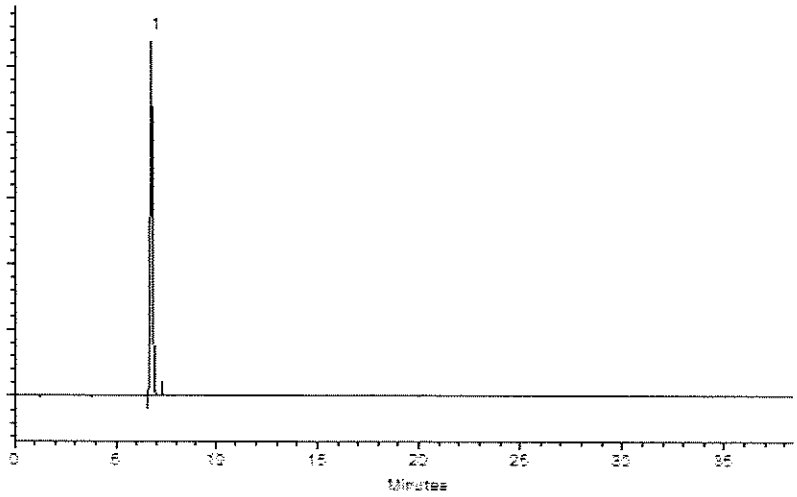
Mobile Phase A:
water:methanol (44:56 V/V)

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.

Laith Clemente - Operations Technician I **Date Mixed:** 03-Aug-2023 **Balance Serial #** B707717271

Jennifer Polino - Operations Tech III - ARM QC **Date Passed:** 21-Aug-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_00314

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

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

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

5/8/2024 6:07:23 AM

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.:** A0200577

Description : 8330 Surrogate Mix

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

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

Expiration Date : August 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	RP230428	99%	1,003.0 µg/mL	+/- 56.3574

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

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

Page 112 of 620

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

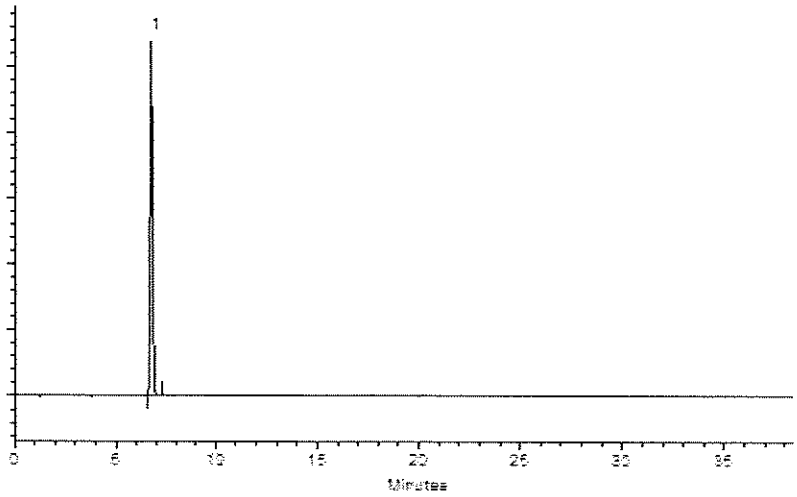
Mobile Phase A:
water:methanol (44:56 V/V)

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.

Laith Clemente - Operations Technician I **Date Mixed:** 03-Aug-2023 **Balance Serial #** B707717271

Jennifer Polino - Operations Tech III - ARM QC **Date Passed:** 21-Aug-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_00315

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

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

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

5/8/2024 6:07:23 AM

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.:** A0200577

Description : 8330 Surrogate Mix

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

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

Expiration Date : August 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	RP230428	99%	1,003.0 µg/mL	+/- 56.3574

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

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

Page 116 of 620

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

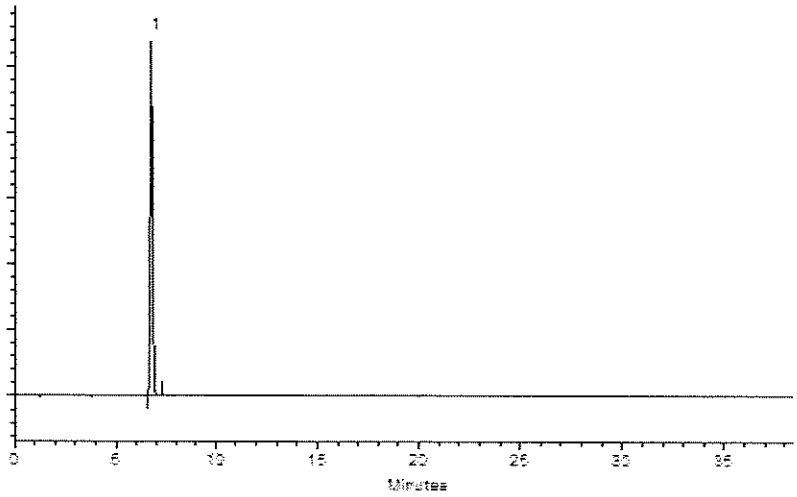
Mobile Phase A:
water:methanol (44:56 V/V)

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.

Laith Clemente - Operations Technician I **Date Mixed:** 03-Aug-2023 **Balance Serial #** B707717271

Jennifer Polino - Operations Tech III - ARM QC **Date Passed:** 21-Aug-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_00316

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

Certificate of Analysis

chromatographic plus

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

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

5/8/2024 6:07:23 AM

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.:** A0200577

Description : 8330 Surrogate Mix

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

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

Expiration Date : August 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	RP230428	99%	1,003.0 µg/mL	+/- 56.3574

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

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

Page 120 of 620

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

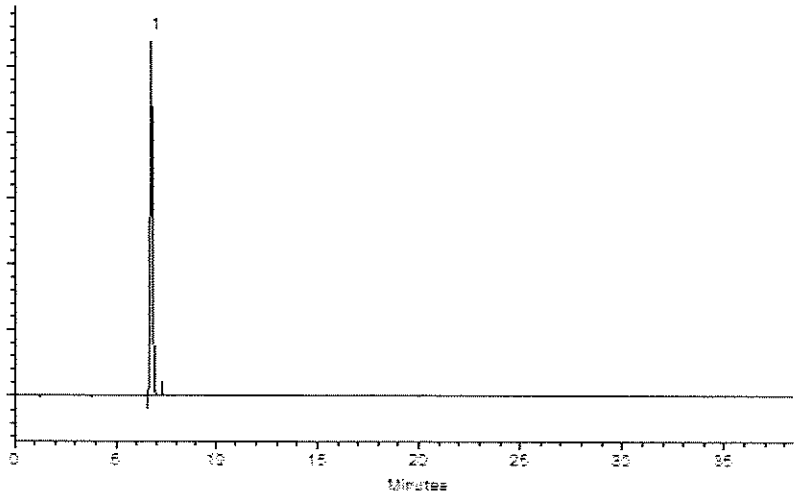
Mobile Phase A:
water:methanol (44:56 V/V)

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.

Laith Clemente - Operations Technician I **Date Mixed:** 03-Aug-2023 **Balance Serial #** B707717271

Jennifer Polino - Operations Tech III - ARM QC **Date Passed:** 21-Aug-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_00317

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

Certificate of Analysis

chromatographic plus

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

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

5/8/2024 6:07:23 AM

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.:** A0200577

Description : 8330 Surrogate Mix

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

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

Expiration Date : August 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	RP230428	99%	1,003.0 µg/mL	+/- 56.3574

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

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

Page 124 of 620

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

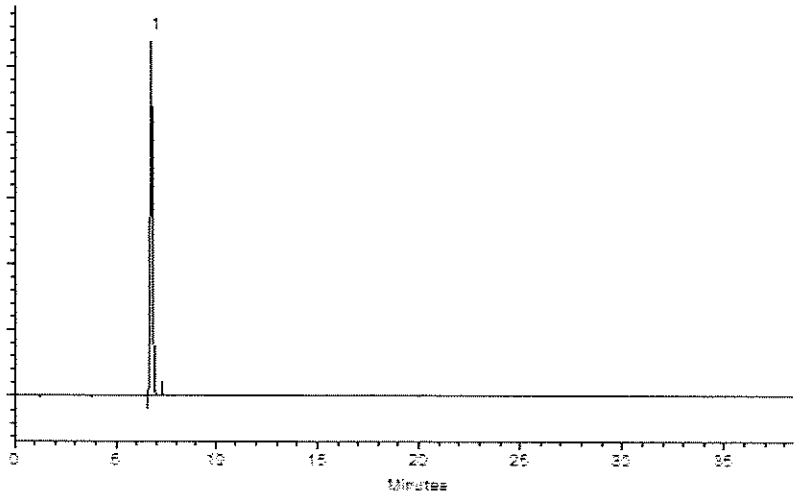
Mobile Phase A:
water:methanol (44:56 V/V)

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.

Laith Clemente - Operations Technician I **Date Mixed:** 03-Aug-2023 **Balance Serial #** B707717271

Jennifer Polino - Operations Tech III - ARM QC **Date Passed:** 21-Aug-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_00318

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

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.

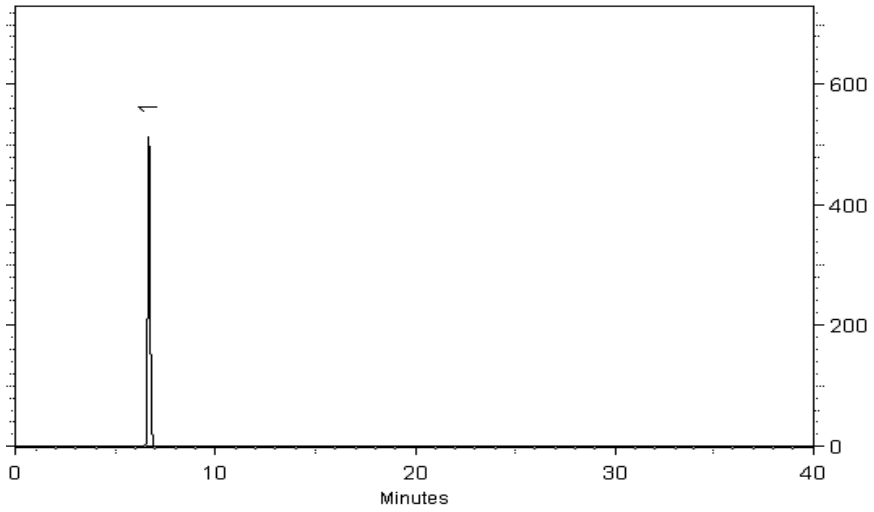
Mobile Phase A:
water:methanol (44:56 V/V)

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_00319

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.

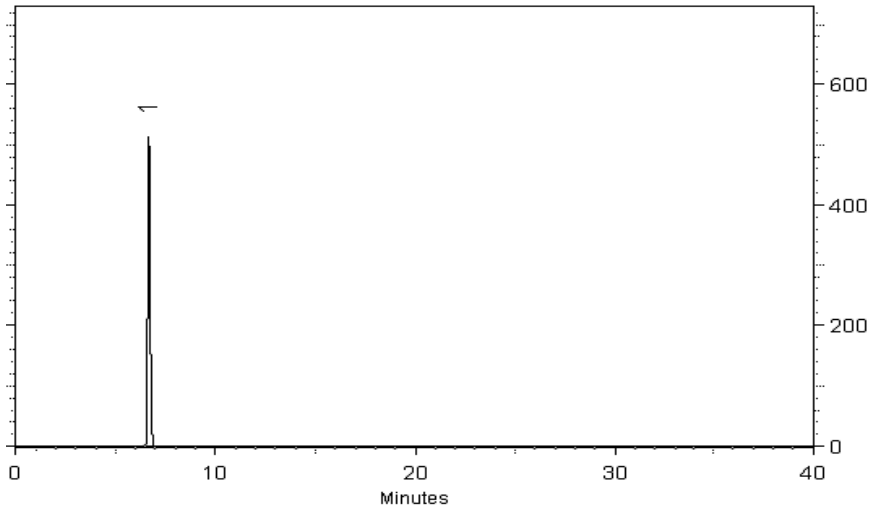
Mobile Phase A:
water:methanol (44:56 V/V)

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

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.

The information on this certificate may not be reproduced without the express permission of the manufacturer. See reverse side for additional information

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

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

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

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

QR-ORG/INO-001
Rev. 7/20

Reagent

MNX,TNX,DNX_00092

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: 0006744504
Lot Issue Date: 17-May-2023
Expiration Date: 30-Jun-2024

Component Name	Concentration		Uncertainty	CAS#	Analyte Lot
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)	100.4	±	0.5 µg/mL	N/A	RM12426
1-nitro-3,5-dinitroso-1,3,5-triazacyclohexane (DNX)	100.2	±	0.5 µg/mL	N/A	RM12428
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane (MNX)	116.9	±	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.

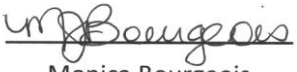
Safety:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this analytical reference material.

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.

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_00122

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.

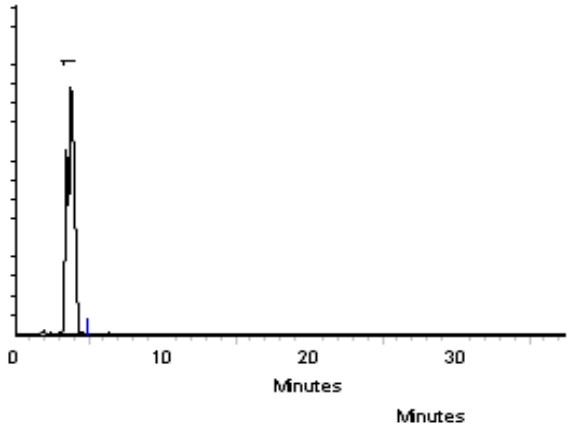
Mobile Phase A:
water:methanol (44:56 V/V)

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:

- 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.

8330B_DOD5

Nitroaromatics and Nitramines (HPLC)

FORM II
HPLC/IC SURROGATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-190799-1

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-004-240401-GW	280-190799-1	90	
SCFmw-004-240402-GW	280-190799-2	94 M	
LL1mw-084-240401-GW	280-190799-3		97
LL1mw-084-240401-GW	280-190799-3	169 Q	
LL1mw-084-240402-GW	280-190799-4		101
LL1mw-084-240402-GW	280-190799-4	138 Q	
LL1mw-080-240401-GW	280-190799-5		93
LL1mw-080-240401-GW	280-190799-5	97 M	
LL1mw-087-240401-GW	280-190799-6	89 M	
LL1mw-087-240402-GW	280-190799-7	92 M	
LL1mw-086-240401-GW	280-190799-8	93 M	
FWGmw-010-240401-GW	280-190799-9	94 M	
	MB 280-651841/1-A	93 M	
	LCS 280-651841/2-A	96	
	LCSD 280-651841/3-A	91	
LL1mw-087-240401-GW MS	280-190799-6 MS	95	
LL1mw-087-240401-GW MSD	280-190799-6 MSD	83 M	

	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.: 280-190799-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 05040012.D

Lab ID: LCS 280-651841/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.00	2.17	109	73-125	M
1,3-Dinitrobenzene	2.00	2.10	105	78-120	
2,4,6-Trinitrotoluene	2.00	2.06	103	71-123	M
2,4-Dinitrotoluene	2.00	1.99	99	78-120	M
2,6-Dinitrotoluene	2.00	2.00	100	77-127	M
2-Amino-4,6-dinitrotoluene	2.00	1.98	99	79-120	M
2-Nitrotoluene	2.00	1.44	72	70-127	M
3-Nitrotoluene	2.00	1.38	69	73-125	M Q
4-Amino-2,6-dinitrotoluene	2.00	2.05	102	76-125	M
4-Nitrotoluene	2.00	1.46	73	71-127	M
HMX	2.00	1.92	96	65-135	
Nitrobenzene	2.00	1.61	81	65-134	
Nitroglycerin	20.0	21.5	108	74-127	
PETN	20.0	22.8	114	73-127	
RDX	2.00	2.03	102	68-130	
Tetryl	2.00	2.08	104	64-128	

Column to be used to flag recovery and RPD values

FORM III 8330B

FORM III
HPLC/IC LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-190799-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 05040013.D

Lab ID: LCSD 280-651841/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.00	2.08	104	4	20	73-125	M
1,3-Dinitrobenzene	2.00	1.99	100	5	20	78-120	
2,4,6-Trinitrotoluene	2.00	1.92	96	7	20	71-123	
2,4-Dinitrotoluene	2.00	1.89	95	5	20	78-120	M
2,6-Dinitrotoluene	2.00	1.88	94	6	20	77-127	
2-Amino-4,6-dinitrotoluene	2.00	1.90	95	4	20	79-120	
2-Nitrotoluene	2.00	1.43	71	1	20	70-127	
3-Nitrotoluene	2.00	1.35	68	2	20	73-125	M Q
4-Amino-2,6-dinitrotoluene	2.00	1.93	97	6	20	76-125	
4-Nitrotoluene	2.00	1.39	69	5	20	71-127	Q
HMX	2.00	1.83	91	5	20	65-135	
Nitrobenzene	2.00	1.65	82	2	20	65-134	
Nitroglycerin	20.0	20.5	102	5	20	74-127	
PETN	20.0	21.3	106	7	20	73-127	
RDX	2.00	1.92	96	6	20	68-130	
Tetryl	2.00	1.91	96	8	20	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.: 280-190799-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 05040028.D

Lab ID: 280-190799-6 MS Client ID: LL1mw-087-240401-GW MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.19	0.21 U	2.41	110	73-125	
1,3-Dinitrobenzene	2.19	0.11 U	2.31	105	78-120	
2,4,6-Trinitrotoluene	2.19	0.11 U	2.16	99	71-123	
2,4-Dinitrotoluene	2.19	0.084 U	2.08	95	78-120	
2,6-Dinitrotoluene	2.19	0.084 U	2.07	95	77-127	
2-Amino-4,6-dinitrotoluene	2.19	0.11 U	2.09	96	79-120	
2-Nitrotoluene	2.19	0.21 U	1.63	74	70-127	
3-Nitrotoluene	2.19	0.37 U	1.54	70	73-125	M J1
4-Amino-2,6-dinitrotoluene	2.19	0.13 U	2.05	94	76-125	
4-Nitrotoluene	2.19	0.42 U	1.67	76	71-127	
HMX	2.19	0.21 U	1.94	88	65-135	M
Nitrobenzene	2.19	0.21 U	1.82	83	65-134	
Nitroglycerin	21.9	2.1 U	22.4	102	74-127	
PETN	21.9	1.1 U	23.6	108	73-127	
RDX	2.19	0.21 U	1.87	85	68-130	M
Tetryl	2.19	0.11 U	2.11	96	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.: 280-190799-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 05040029.D

Lab ID: 280-190799-6 MSD Client ID: LL1mw-087-240401-GW MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.14	2.13	99	12	20	73-125	M
1,3-Dinitrobenzene	2.14	1.96	91	16	20	78-120	M
2,4,6-Trinitrotoluene	2.14	1.97	92	9	20	71-123	
2,4-Dinitrotoluene	2.14	1.76	82	17	20	78-120	
2,6-Dinitrotoluene	2.14	1.78	83	15	20	77-127	
2-Amino-4,6-dinitrotoluene	2.14	1.77	83	17	20	79-120	
2-Nitrotoluene	2.14	1.26	59	26	20	70-127	J1
3-Nitrotoluene	2.14	1.15	54	29	20	73-125	M J1
4-Amino-2,6-dinitrotoluene	2.14	1.76	82	15	20	76-125	
4-Nitrotoluene	2.14	1.31	61	24	20	71-127	J1
HMX	2.14	1.90	89	2	20	65-135	M
Nitrobenzene	2.14	1.50	70	19	20	65-134	
Nitroglycerin	21.4	21.9	102	3	20	74-127	
PETN	21.4	22.7	106	4	20	73-127	
RDX	2.14	1.82	85	2	20	68-130	M
Tetryl	2.14	2.03	95	4	20	64-128	

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.: 280-190799-1

SDG No.:

Lab Sample ID: MB 280-651841/1-A

Matrix: Water Date Extracted: 05/02/2024 12:39

Lab File ID:(1) 05040011.D Lab File ID:(2)

Date Analyzed:(1) 05/04/2024 18:08 Date Analyzed:(2)

Instrument ID:(1) CHHPLC_X3 Instrument ID:(2) CHHPLC_G2_LUNA

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 280-651841/2-A	05/04/2024 18:31	
	LCSD 280-651841/3-A	05/04/2024 18:54	
SCFmw-004-240401-GW	280-190799-1	05/04/2024 22:20	
SCFmw-004-240402-GW	280-190799-2	05/04/2024 22:43	
LL1mw-084-240401-GW	280-190799-3	05/04/2024 23:06	05/04/2024 01:03
LL1mw-084-240402-GW	280-190799-4	05/04/2024 23:29	05/04/2024 01:39
LL1mw-080-240401-GW	280-190799-5	05/04/2024 23:52	05/04/2024 02:15
LL1mw-087-240401-GW	280-190799-6	05/05/2024 00:15	
LL1mw-087-240401-GW MS	280-190799-6 MS	05/05/2024 00:38	
LL1mw-087-240401-GW MSD	280-190799-6 MSD	05/05/2024 01:01	
LL1mw-087-240402-GW	280-190799-7	05/05/2024 01:24	
LL1mw-086-240401-GW	280-190799-8	05/05/2024 01:47	
FWGmw-010-240401-GW	280-190799-9	05/05/2024 02:33	

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-190799-1

SDG No.:

Client Sample ID: LL1mw-084-240401-GW Lab Sample ID: 280-190799-3

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_G2_LUNA

Date Analyzed (1): 05/04/2024 23:06 Date Analyzed (2): 05/04/2024 01:03

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	
HMX	1		6.61	6.46	6.76	0.79		25.1
	2		6.67	6.55	6.85	0.62		
RDX	1		7.63	7.48	7.78	1.1		88.4
	2		8.98	8.79	9.09	2.8		
2,4,6-Trinitrotoluene	1		10.89	10.80	11.00	1.9		2.3
	2		22.87	22.72	23.02	1.8		
4-Amino-2,6-dinitrotoluene	1		11.07	10.98	11.18	16		9.8
	2		16.24	16.11	16.41	18		
2-Amino-4,6-dinitrotoluene	1		11.32	11.24	11.44	6.3		5.2
	2		17.04	16.92	17.22	5.9		
2,4-Dinitrotoluene	1		11.64	11.56	11.76	0.87		17.0
	2		18.79	18.69	18.99	0.73		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-190799-1

SDG No.:

Client Sample ID: LL1mw-084-240402-GW Lab Sample ID: 280-190799-4

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_G2_LUNA

Date Analyzed (1): 05/04/2024 23:29 Date Analyzed (2): 05/04/2024 01:39

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	
HMX	1		6.60	6.46	6.76	0.72		51.4
	2		6.68	6.55	6.85	0.43		
RDX	1		7.63	7.48	7.78	1.1		18.3
	2		8.98	8.79	9.09	1.4		
1,3-Dinitrobenzene	1		9.28	9.17	9.47	0.99		142.6
	2		14.47	14.35	14.65	0.17		
2,4,6-Trinitrotoluene	1		10.89	10.80	11.00	2.0		1.8
	2		22.84	22.72	23.02	2.0		
4-Amino-2,6-dinitrotoluene	1		11.07	10.98	11.18	17		10.2
	2		16.22	16.11	16.41	19		
2-Amino-4,6-dinitrotoluene	1		11.32	11.24	11.44	6.3		0.8
	2		17.02	16.92	17.22	6.3		
2,4-Dinitrotoluene	1		11.64	11.56	11.76	0.90		11.5
	2		18.80	18.69	18.99	0.80		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-190799-1

SDG No.:

Client Sample ID: LL1mw-080-240401-GW Lab Sample ID: 280-190799-5

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_G2_LUNA

Date Analyzed (1): 05/04/2024 23:52 Date Analyzed (2): 05/04/2024 02:15

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	
HMX	1		6.60	6.46	6.76	2.0		17.0
	2		6.68	6.55	6.85	2.4		
RDX	1		7.63	7.48	7.78	12		6.4
	2		8.91	8.79	9.09	13		
4-Amino-2,6-dinitrotoluene	1		11.07	10.98	11.18	2.4		34.6
	2		16.23	16.11	16.41	3.4		
2-Amino-4,6-dinitrotoluene	1		11.32	11.24	11.44	0.80		29.3
	2		17.03	16.92	17.22	1.1		

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-190799-1

SDG No.:

Client Sample ID: SCFmw-004-240401-GW | Lab Sample ID: 280-190799-1

Matrix: Water | Lab File ID: 05040022.D

Analysis Method: 8330B | Date Collected: 04/29/2024 09:25

Extraction Method: 3535 | Date Extracted: 05/02/2024 12:39

Sample wt/vol: 430.1(mL) | Date Analyzed: 05/04/2024 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.: 652145 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.23	U M	0.24	0.23	0.098
99-65-0	1,3-Dinitrobenzene	0.12	U M	0.13	0.12	0.043
118-96-7	2,4,6-Trinitrotoluene	0.12	U	0.13	0.12	0.052
121-14-2	2,4-Dinitrotoluene	0.093	U	0.12	0.093	0.032
606-20-2	2,6-Dinitrotoluene	0.093	U	0.12	0.093	0.047
35572-78-2	2-Amino-4,6-dinitrotoluene	0.12	U	0.13	0.12	0.059
88-72-2	2-Nitrotoluene	0.23	U	0.24	0.23	0.099
99-08-1	3-Nitrotoluene	0.41	U Q	0.47	0.41	0.23
19406-51-0	4-Amino-2,6-dinitrotoluene	0.14	U	0.17	0.14	0.067
99-99-0	4-Nitrotoluene	0.47	U M Q	0.48	0.47	0.12
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	0.11
55-63-0	Nitroglycerin	2.3	U	2.4	2.3	1.1
78-11-5	PETN	1.2	U	1.3	1.2	0.52
121-82-4	RDX	0.23	U	0.24	0.23	0.060
479-45-8	Tetryl	0.12	U	0.13	0.12	0.037

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	90		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\05040022.D
Lims ID: 280-190799-A-1-A
Client ID: SCFmw-004-240401-GW
Sample Type: Client
Inject. Date: 04-May-2024 22:20:45 ALS Bottle#: 22 Worklist Smp#: 22
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-190799-A-1-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 07-May-2024 15:03:04 Calib Date: 18-Apr-2024 03:08:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\04170028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1679

First Level Reviewer: LV5D Date: 07-May-2024 12:54:37

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	4 HMX	1		6.610			ND	U
	8 RDX	1		7.630			ND	
$	10 1,2-Dinitrobenzene	1	8.561	8.576	-0.015	23718	0.1795	
	11 1,3,5-Trinitrobenzene	1		8.710			ND	U
	12 1,3-Dinitrobenzene	1		9.323			ND	U
	13 Nitrobenzene	1		9.683			ND	
	15 Tetryl	1		10.003			ND	
	16 Nitroglycerin	2		10.470			ND	
	17 2,4,6-Trinitrotoluene	1		10.903			ND	
	18 4-Amino-2,6-dinitrotoluene	1		11.083			ND	
	19 2-Amino-4,6-dinitrotoluene	1		11.336			ND	
	20 2,6-Dinitrotoluene	1		11.483			ND	
	21 2,4-Dinitrotoluene	1		11.656			ND	
	22 o-Nitrotoluene	1		12.436			ND	7
	23 p-Nitrotoluene	1		12.856			ND	U
	24 m-Nitrotoluene	1		13.403			ND	
	25 PETN	2		14.463			ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection
Review Flags
U - Marked Undetected

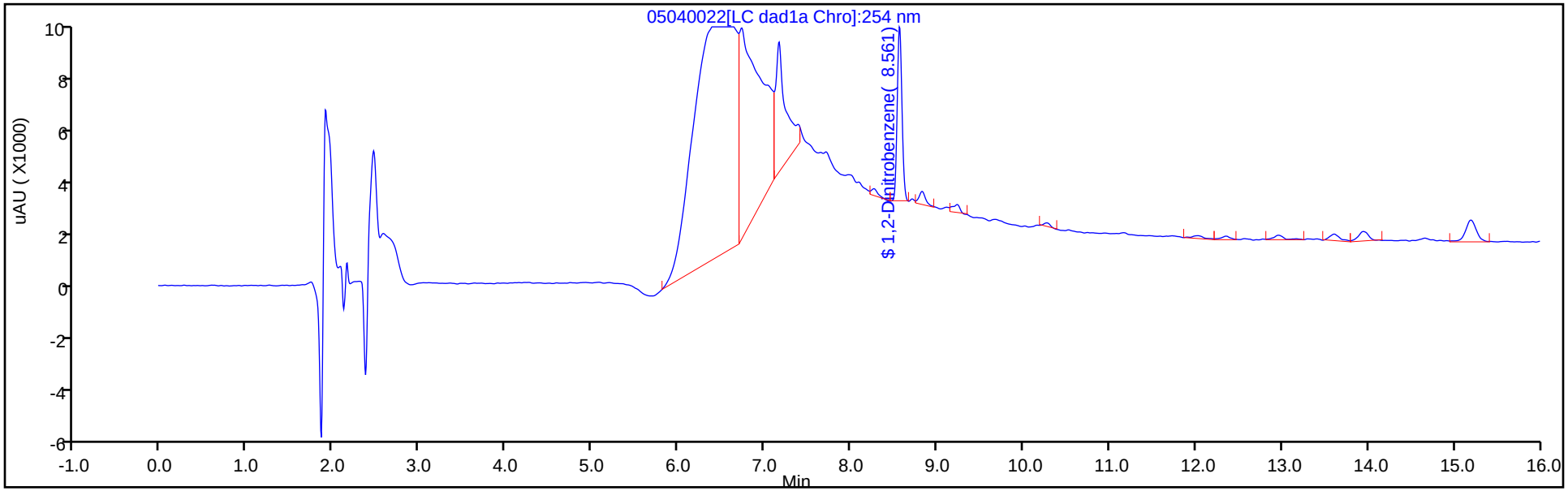
Report Date: 07-May-2024 15:03:05 Chrom Revision: 2.3 26-Apr-2024 12:18:52

Eurofins Denver

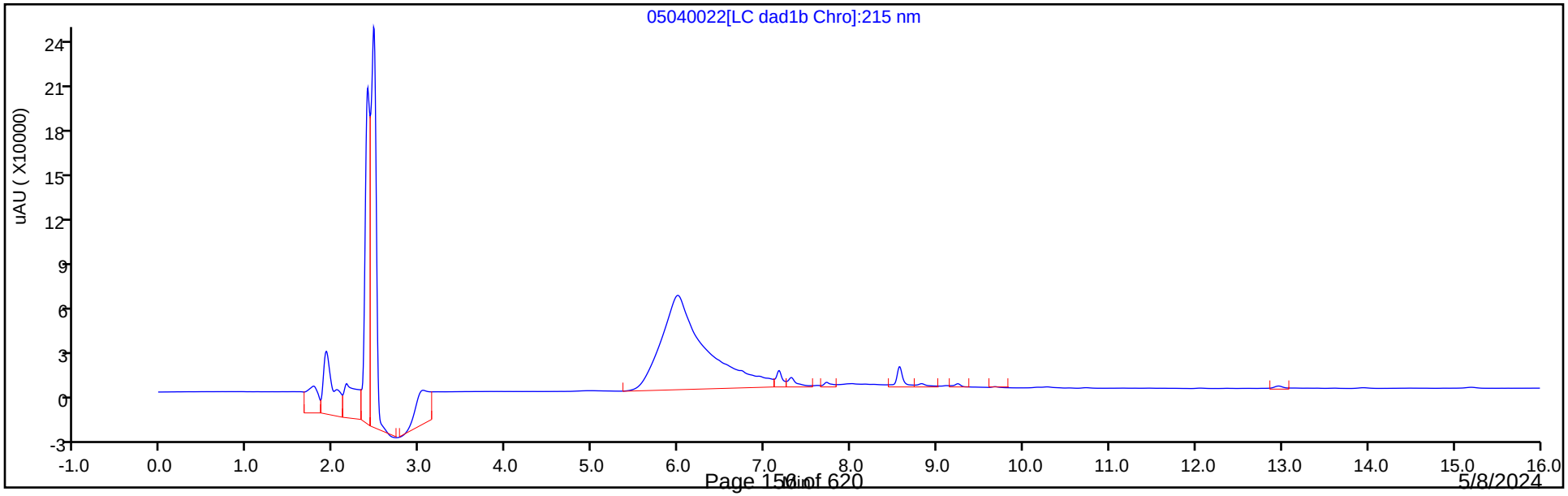
Data File: \\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040022.d

Injection Date:	04-May-2024 22:20:45	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-190799-A-1-A	Lab Sample ID:	280-190799-1	Worklist Smp#:	22
Client ID:	SCFmw-004-240401-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	22
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\20240504-133020.b\05040022.D				
Lims ID:	280-190799-A-1-A				
Client ID:	SCFmw-004-240401-GW				
Sample Type:	Client				
Inject. Date:	04-May-2024 22:20:45	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-190799-A-1-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	07-May-2024 15:03:04	Calib Date:	18-Apr-2024 03:08:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\04170028.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1679				

First Level Reviewer: LV5D Date: 07-May-2024 12:54:37

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1795	89.74

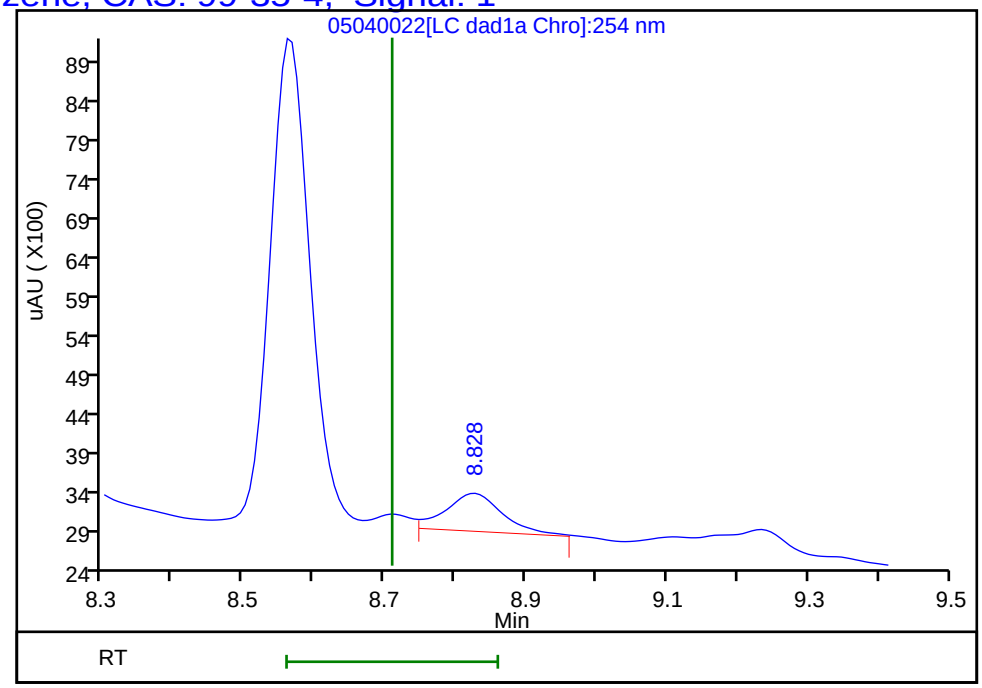
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040022.d				
Injection Date:	04-May-2024 22:20:45	Instrument ID:	CHHPLC_X3		
Lims ID:	280-190799-A-1-A	Lab Sample ID:	280-190799-1		
Client ID:	SCFmw-004-240401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

RT: 8.83
Response: 2522
Amount: 0.011317



Reviewer: LV5D, 07-May-2024 12:54:37
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

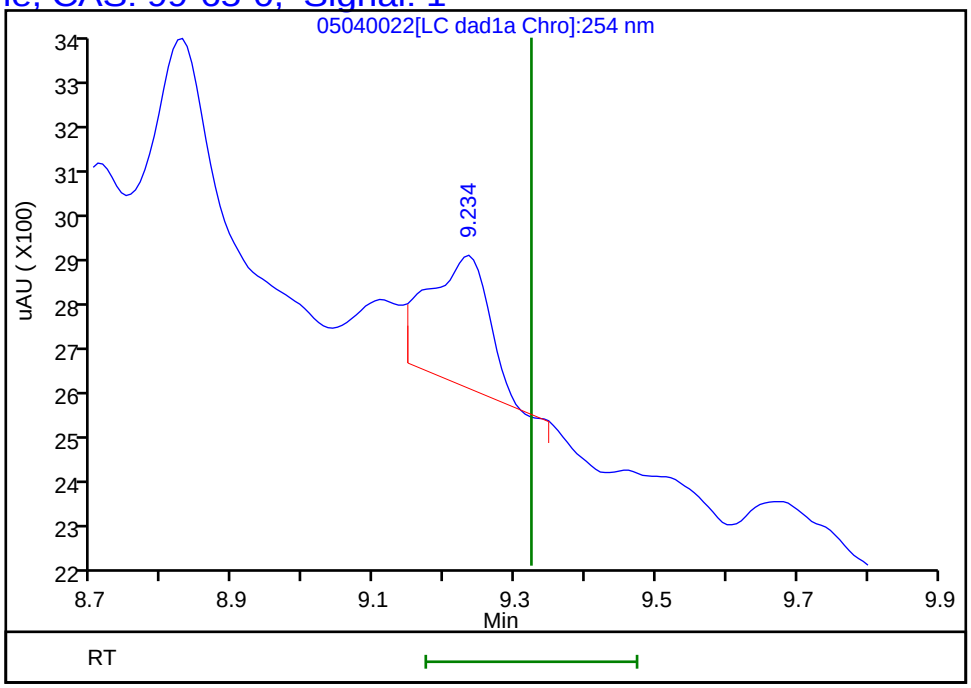
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040022.d				
Injection Date:	04-May-2024 22:20:45	Instrument ID:	CHHPLC_X3		
Lims ID:	280-190799-A-1-A	Lab Sample ID:	280-190799-1		
Client ID:	SCFmw-004-240401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

RT: 9.23
Response: 1651
Amount: 0.005514



Reviewer: LV5D, 07-May-2024 12:54:37
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

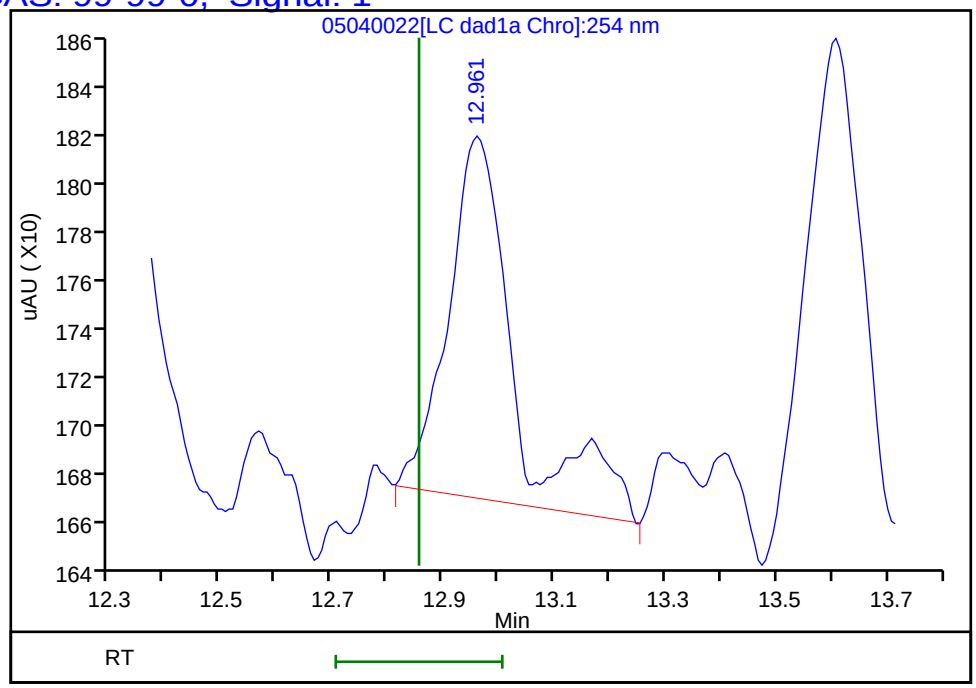
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040022.d				
Injection Date:	04-May-2024 22:20:45	Instrument ID:	CHHPLC_X3		
Lims ID:	280-190799-A-1-A	Lab Sample ID:	280-190799-1		
Client ID:	SCFmw-004-240401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

23 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 12.96
Response: 1218
Amount: 0.010798



Reviewer: LV5D, 07-May-2024 12:54:37
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

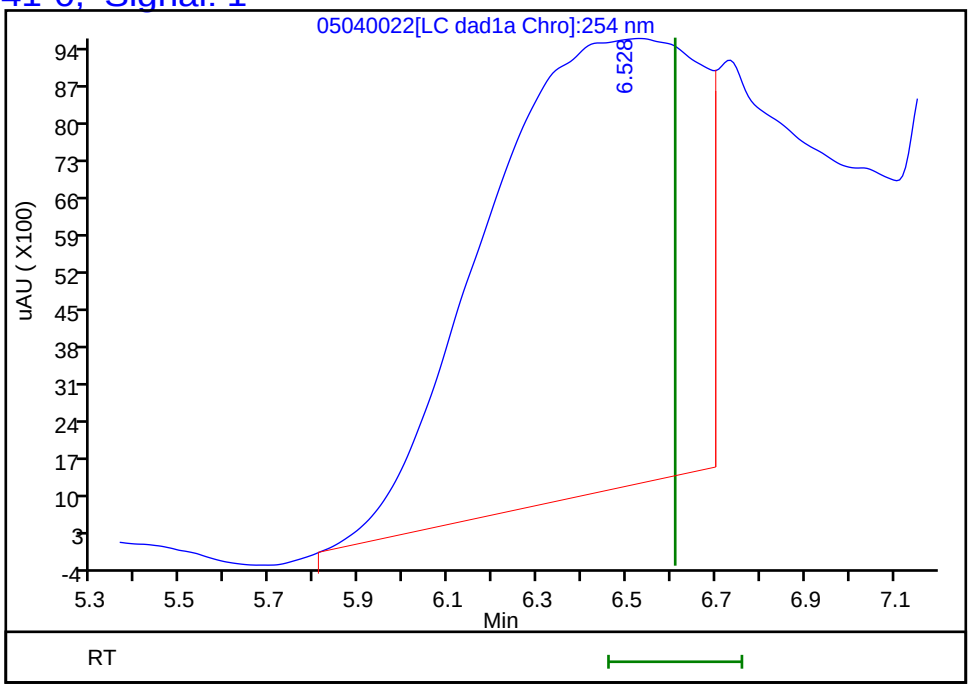
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040022.d
Injection Date: 04-May-2024 22:20:45 Instrument ID: CHHPLC_X3
Lims ID: 280-190799-A-1-A Lab Sample ID: 280-190799-1
Client ID: SCFmw-004-240401-GW
Operator ID: JZ/JG ALS Bottle#: 22 Worklist Smp#: 22
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

4 HMX, CAS: 2691-41-0, Signal: 1

RT: 6.53
Response: 282118
Amount: 2.952764



Reviewer: LV5D, 07-May-2024 12:54:37
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-190799-1

SDG No.:

Client Sample ID: SCFmw-004-240402-GW | Lab Sample ID: 280-190799-2

Matrix: Water | Lab File ID: 05040023.D

Analysis Method: 8330B | Date Collected: 04/29/2024 09:25

Extraction Method: 3535 | Date Extracted: 05/02/2024 12:39

Sample wt/vol: 482(mL) | Date Analyzed: 05/04/2024 22:43

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.: 652145 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.21	U M	0.22	0.21	0.087
99-65-0	1,3-Dinitrobenzene	0.10	U M	0.11	0.10	0.038
118-96-7	2,4,6-Trinitrotoluene	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	0.042
35572-78-2	2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.053
88-72-2	2-Nitrotoluene	0.21	U M	0.22	0.21	0.089
99-08-1	3-Nitrotoluene	0.36	U Q	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 Q	0.43	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	0.96
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\20240504-133020.b\05040023.D
Lims ID: 280-190799-A-2-A
Client ID: SCFmw-004-240402-GW
Sample Type: Client
Inject. Date: 04-May-2024 22:43:44 ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-190799-A-2-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 07-May-2024 15:03:04 Calib Date: 18-Apr-2024 03:08:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\04170028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1679

First Level Reviewer: LV5D Date: 07-May-2024 12:54:49

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	4 HMX	1		6.610			ND	U
	8 RDX	1		7.630			ND	
$	10 1,2-Dinitrobenzene	1	8.560	8.576	-0.016	24936	0.1887	M
	11 1,3,5-Trinitrobenzene	1		8.710			ND	U
	12 1,3-Dinitrobenzene	1		9.323			ND	U
	13 Nitrobenzene	1		9.683			ND	
	15 Tetryl	1		10.003			ND	
	16 Nitroglycerin	2		10.470			ND	
	17 2,4,6-Trinitrotoluene	1		10.903			ND	
	18 4-Amino-2,6-dinitrotoluene	1		11.083			ND	
	19 2-Amino-4,6-dinitrotoluene	1		11.336			ND	
	20 2,6-Dinitrotoluene	1		11.483			ND	
	21 2,4-Dinitrotoluene	1		11.656			ND	
	22 o-Nitrotoluene	1		12.436			ND	U
	23 p-Nitrotoluene	1		12.856			ND	
	24 m-Nitrotoluene	1		13.403			ND	
	25 PETN	2		14.463			ND	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

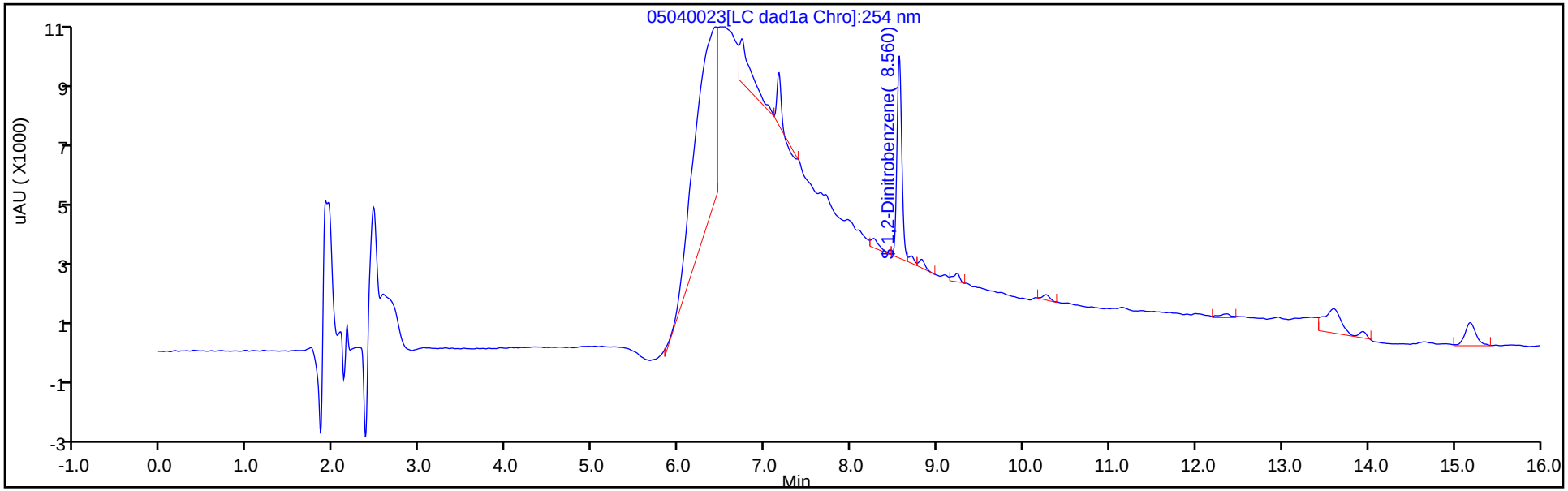
Report Date: 07-May-2024 15:03:05 Chrom Revision: 2.3 26-Apr-2024 12:18:52

Eurofins Denver

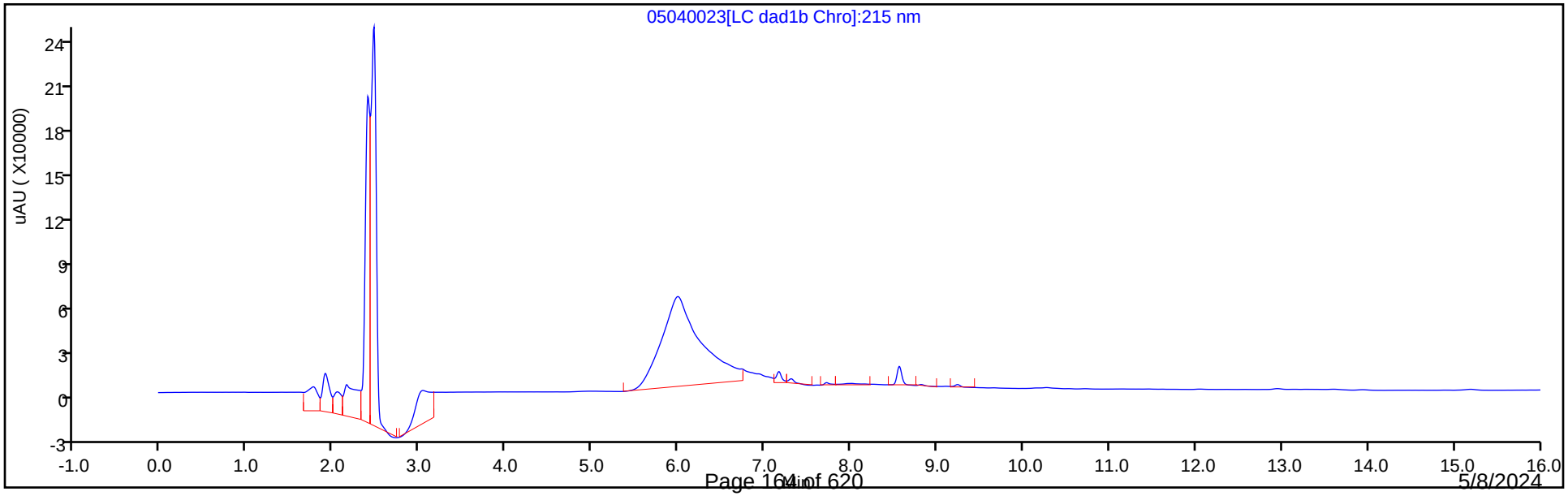
Data File: \\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040023.d

Injection Date:	04-May-2024 22:43:44	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-190799-A-2-A	Lab Sample ID:	280-190799-2	Worklist Smp#:	23
Client ID:	SCFmw-004-240402-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



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\20240504-133020.b\05040023.D				
Lims ID:	280-190799-A-2-A				
Client ID:	SCFmw-004-240402-GW				
Sample Type:	Client				
Inject. Date:	04-May-2024 22:43:44	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-190799-A-2-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	07-May-2024 15:03:04	Calib Date:	18-Apr-2024 03:08:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\04170028.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1679				
First Level Reviewer: LV5D		Date:	07-May-2024 12:54:49		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1887	94.36

Manual Integration/User Assign Peak Report

Eurofins Denver

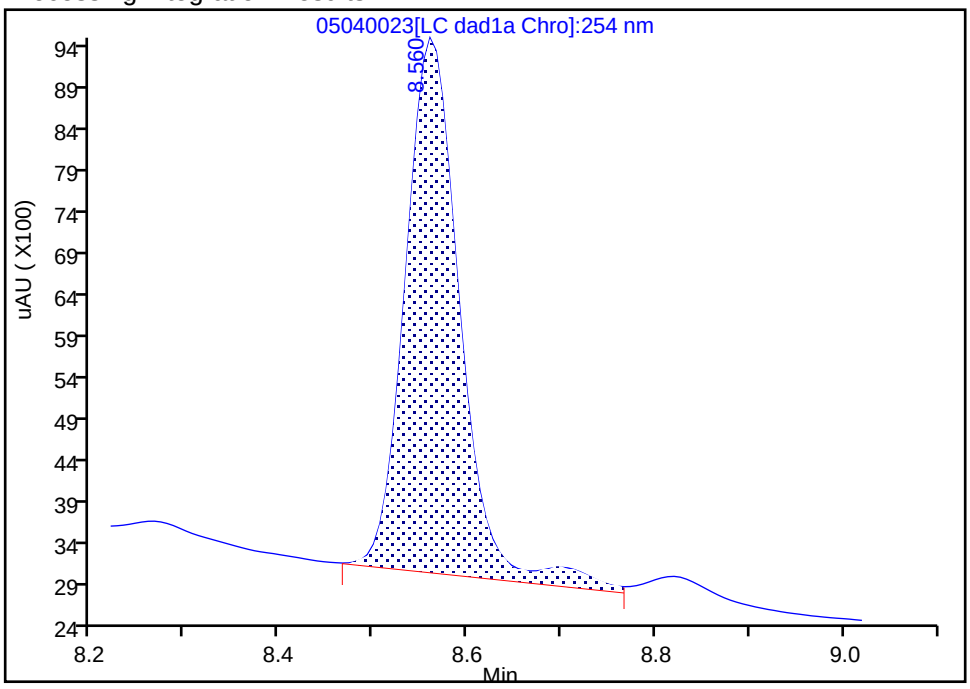
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040023.d				
Injection Date:	04-May-2024 22:43:44	Instrument ID:	CHHPLC_X3		
Lims ID:	280-190799-A-2-A	Lab Sample ID:	280-190799-2		
Client ID:	SCFmw-004-240402-GW				
Operator ID:	JZ/JG	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

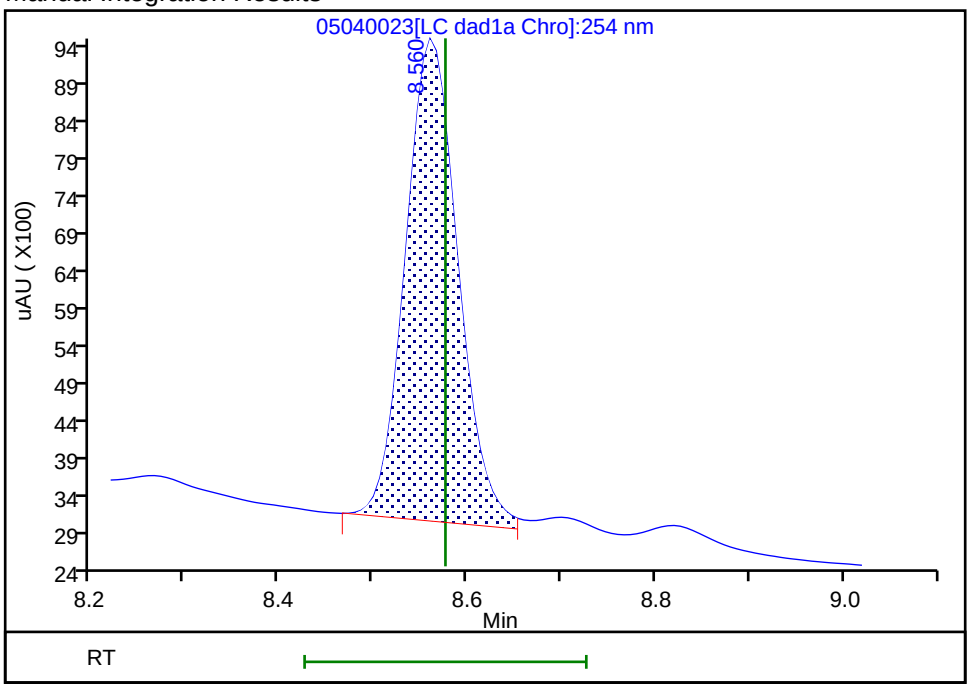
Processing Integration Results

RT: 8.56
Area: 25927
Amount: 0.196255
Amount Units: ug/mL



Manual Integration Results

RT: 8.56
Area: 24936
Amount: 0.188727
Amount Units: ug/mL



Reviewer: LV5D, 07-May-2024 12:54:48 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

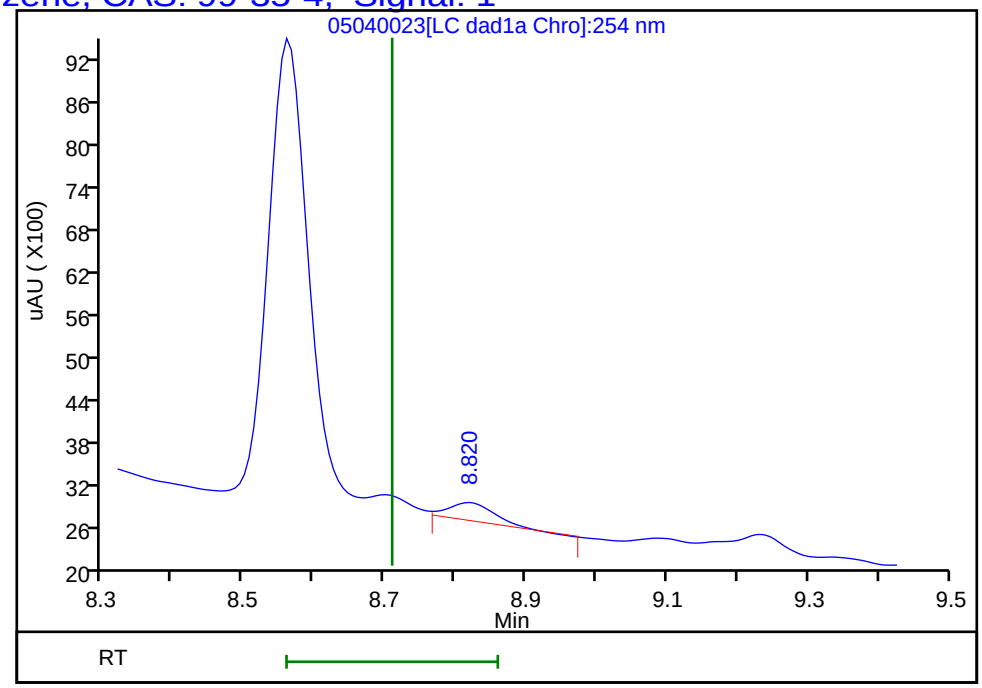
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040023.d				
Injection Date:	04-May-2024 22:43:44	Instrument ID:	CHHPLC_X3		
Lims ID:	280-190799-A-2-A	Lab Sample ID:	280-190799-2		
Client ID:	SCFmw-004-240402-GW				
Operator ID:	JZ/JG	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

RT: 8.82
Response: 1257
Amount: 0.005640



Reviewer: LV5D, 07-May-2024 12:54:49
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

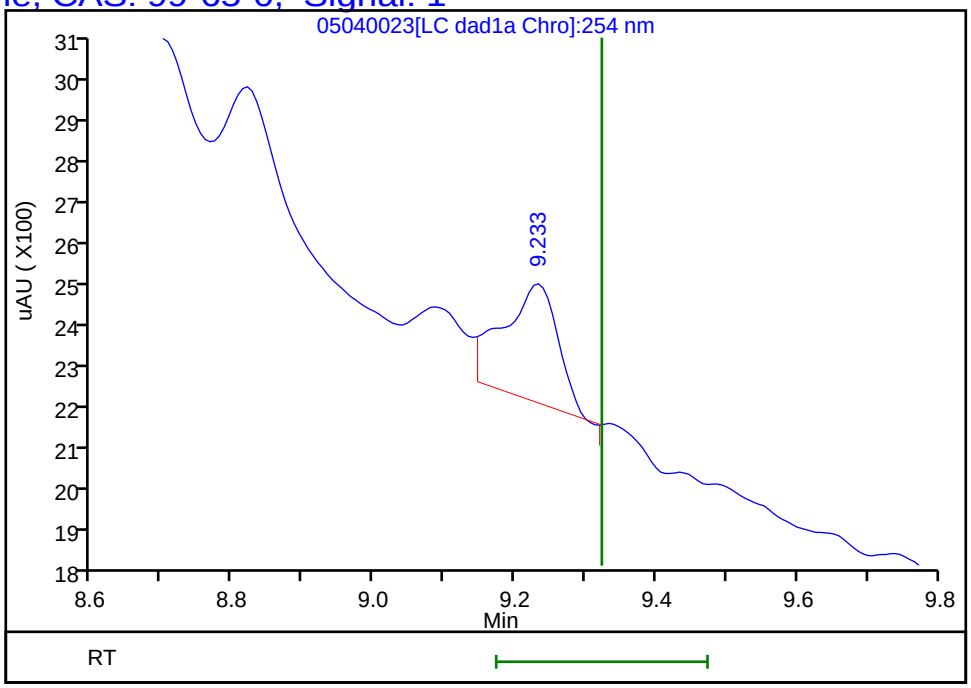
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040023.d				
Injection Date:	04-May-2024 22:43:44	Instrument ID:	CHHPLC_X3		
Lims ID:	280-190799-A-2-A	Lab Sample ID:	280-190799-2		
Client ID:	SCFmw-004-240402-GW				
Operator ID:	JZ/JG	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

RT: 9.23
Response: 1430
Amount: 0.004776



Reviewer: LV5D, 07-May-2024 12:54:49
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

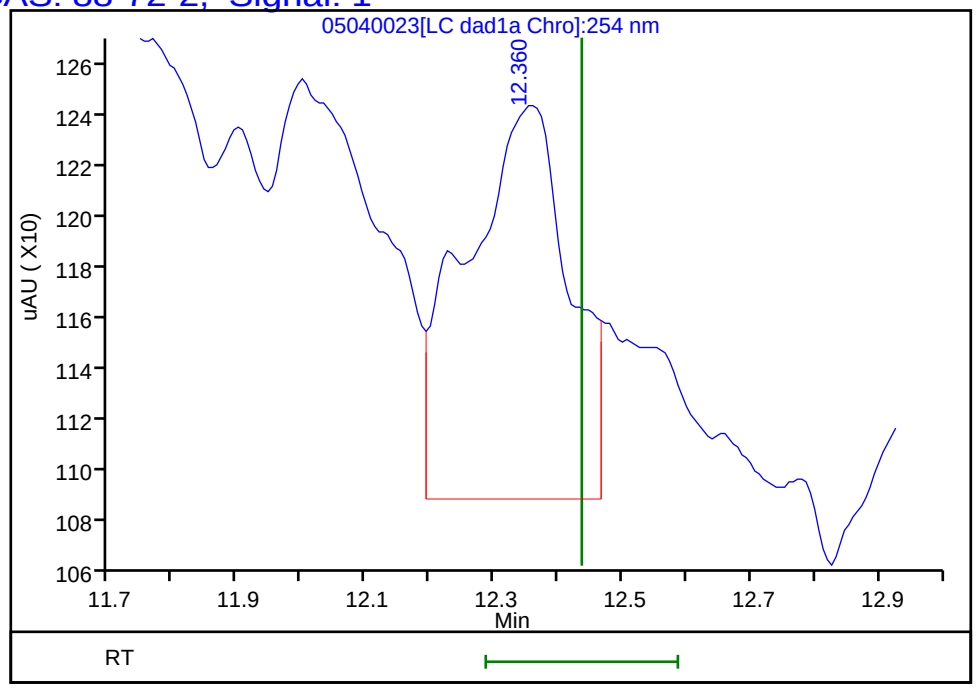
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040023.d				
Injection Date:	04-May-2024 22:43:44	Instrument ID:	CHHPLC_X3		
Lims ID:	280-190799-A-2-A	Lab Sample ID:	280-190799-2		
Client ID:	SCFmw-004-240402-GW				
Operator ID:	JZ/JG	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

22 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 12.36
Response: 1641
Amount: 0.012691



Reviewer: LV5D, 07-May-2024 12:54:49
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

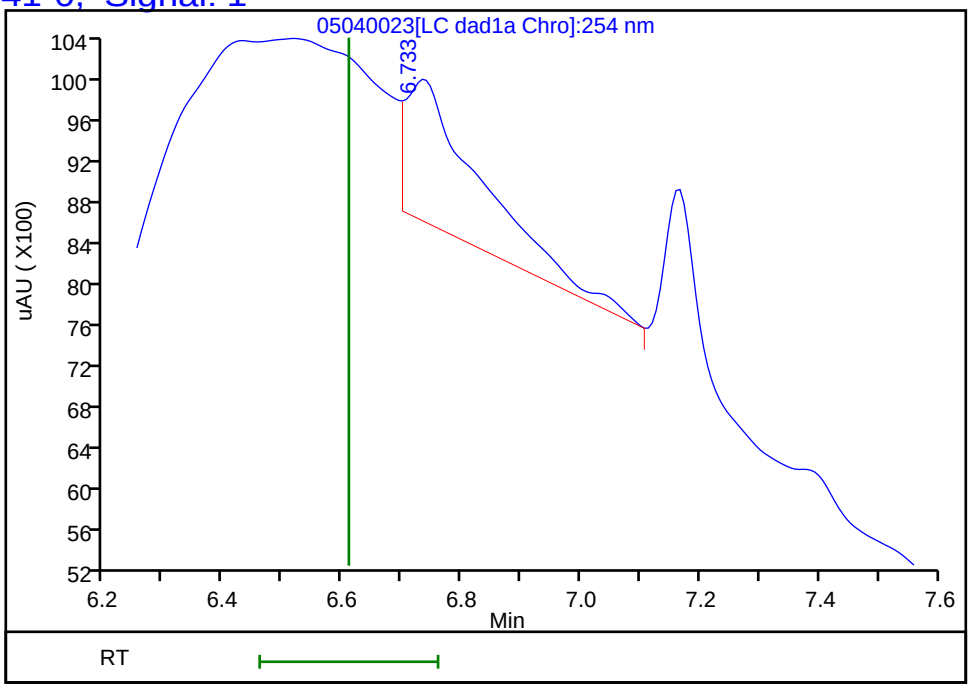
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040023.d				
Injection Date:	04-May-2024 22:43:44	Instrument ID:	CHHPLC_X3		
Lims ID:	280-190799-A-2-A	Lab Sample ID:	280-190799-2		
Client ID:	SCFmw-004-240402-GW				
Operator ID:	JZ/JG	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0, Signal: 1

RT: 6.73
Response: 12242
Amount: 0.128130



Reviewer: LV5D, 07-May-2024 12:54:49
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-190799-1

SDG No.:

Client Sample ID: LL1mw-084-240401-GW | Lab Sample ID: 280-190799-3

Matrix: Water | Lab File ID: 05030023.D

Analysis Method: 8330B | Date Collected: 04/29/2024 10:05

Extraction Method: 3535 | Date Extracted: 05/02/2024 12:39

Sample wt/vol: 457.8(mL) | Date Analyzed: 05/04/2024 01:03

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 100(uL) | GC Column: Luna-phenylhex ID: 4.6(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 652057 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.22	U	0.23	0.22	0.092
99-99-0	4-Nitrotoluene	0.44	U	0.45	0.44	0.11
121-82-4	*RDX*	*2.8*	*M J1*	*0.23*	0.22	*0.056*

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\G2_LUNA\20240503-132991.b\05030023.D
Lims ID: 280-190799-A-3-A
Client ID: LL1mw-084-240401-GW
Sample Type: Client
Inject. Date: 04-May-2024 01:03:34 ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-190799-A-3-A
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA

Method: \\chromfs\Denver\ChromData\G2_LUNA\20240503-132991.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 07-May-2024 16:26:43 Calib Date: 25-Apr-2024 07:39:21
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20240424-132624.b\04240027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1679

First Level Reviewer: LV5D Date: 07-May-2024 16:07:29

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
6 HMX	1	6.671	6.700	-0.029	9829	0.0565	M
8 RDX	1	8.978	8.940	0.038	52810	0.2542	M
9 Nitrobenzene	1		11.453			ND	7
$ 10 1,2-Dinitrobenzene	1	12.338	12.373	-0.035	50146	0.1938	
12 1,3-Dinitrobenzene	1	14.465	14.500	-0.035	8314	0.0141	M
13 Nitroglycerin	2		14.953			ND	7
14 o-Nitrotoluene	1		15.533			ND	U
15 p-Nitrotoluene	1		15.767			ND	
16 4-Amino-2,6-dinitrotoluene	1	16.238	16.260	-0.022	436558	1.62	M
17 m-Nitrotoluene	1		16.600			ND	
18 2-Amino-4,6-dinitrotoluene	1	17.038	17.073	-0.035	220605	0.5439	M
19 1,3,5-Trinitrobenzene	1		17.293			ND	
20 2,6-Dinitrotoluene	1		18.380			ND	
21 2,4-Dinitrotoluene	1	18.791	18.840	-0.049	37221	0.0671	
22 Tetryl	1		22.027			ND	
23 2,4,6-Trinitrotoluene	1	22.865	22.874	-0.009	66201	0.1656	
24 PETN	2		24.007			ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

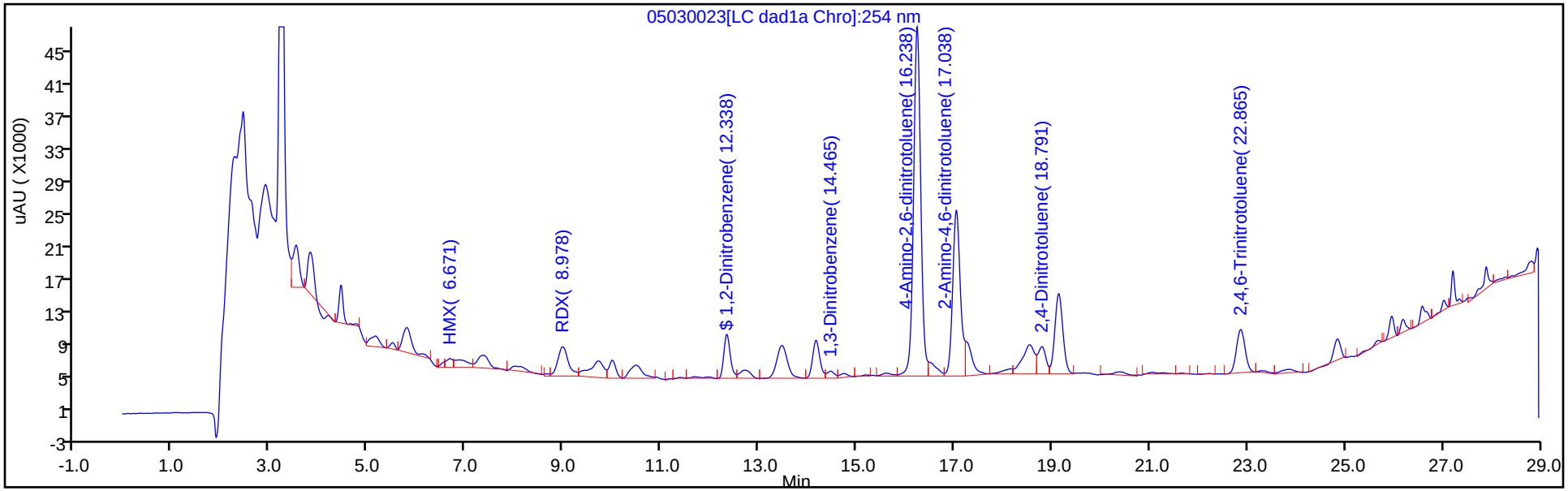
Report Date: 07-May-2024 16:26:46 Chrom Revision: 2.3 26-Apr-2024 12:18:52

Eurofins Denver

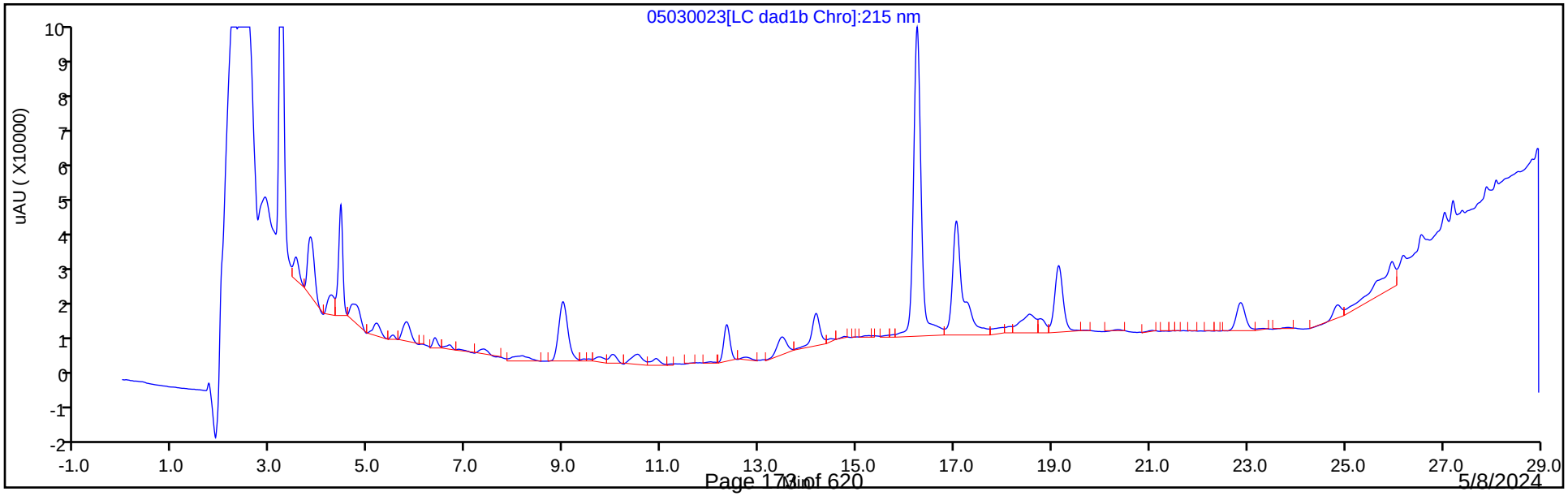
Data File: \\chromfs\denver\chromdata\g2_luna\20240503-132991.b\05030023.d

Injection Date:	04-May-2024 01:03:34	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	280-190799-A-3-A	Lab Sample ID:	280-190799-3	Worklist Smp#:	23
Client ID:	LL1mw-084-240401-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	G2_8330_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\G2_LUNA\20240503-132991.b\05030023.D				
Lims ID:	280-190799-A-3-A				
Client ID:	LL1mw-084-240401-GW				
Sample Type:	Client				
Inject. Date:	04-May-2024 01:03:34	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-190799-A-3-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_G2_LUNA		
Method:	\\chromfs\Denver\ChromData\G2_LUNA\20240503-132991.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	07-May-2024 16:26:43	Calib Date:	25-Apr-2024 07:39:21		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\G2_LUNA\20240424-132624.b\04240027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX1679				

First Level Reviewer: LV5D Date: 07-May-2024 16:07:29

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1938	96.92

Manual Integration/User Assign Peak Report

Eurofins Denver

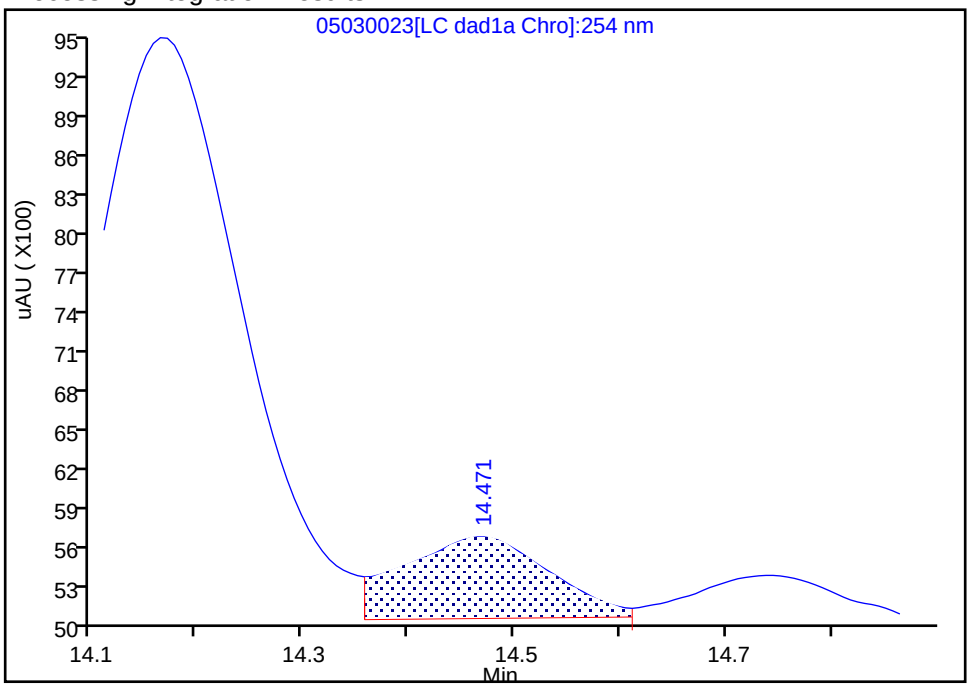
Data File:	\\chromfs\denver\chromdata\g2_luna\20240503-132991.b\05030023.d				
Injection Date:	04-May-2024 01:03:34	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-190799-A-3-A	Lab Sample ID:	280-190799-3		
Client ID:	LL1mw-084-240401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

Signal: 1

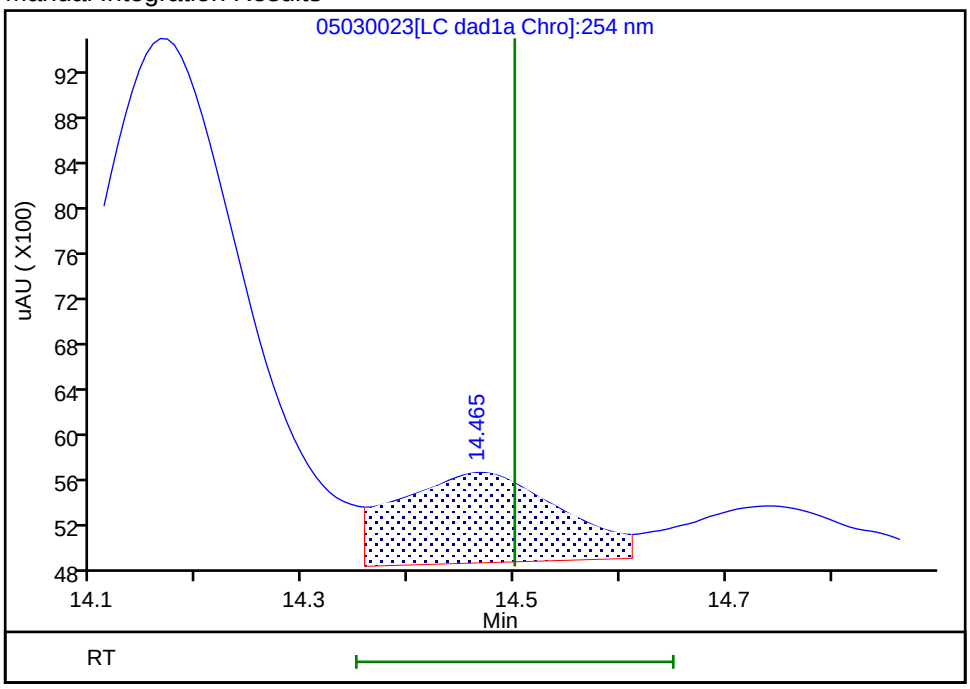
Processing Integration Results

RT: 14.47
Area: 5851
Amount: 0.009927
Amount Units: ug/ml



Manual Integration Results

RT: 14.46
Area: 8314
Amount: 0.014105
Amount Units: ug/ml



Reviewer: LV5D, 07-May-2024 16:07:10 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

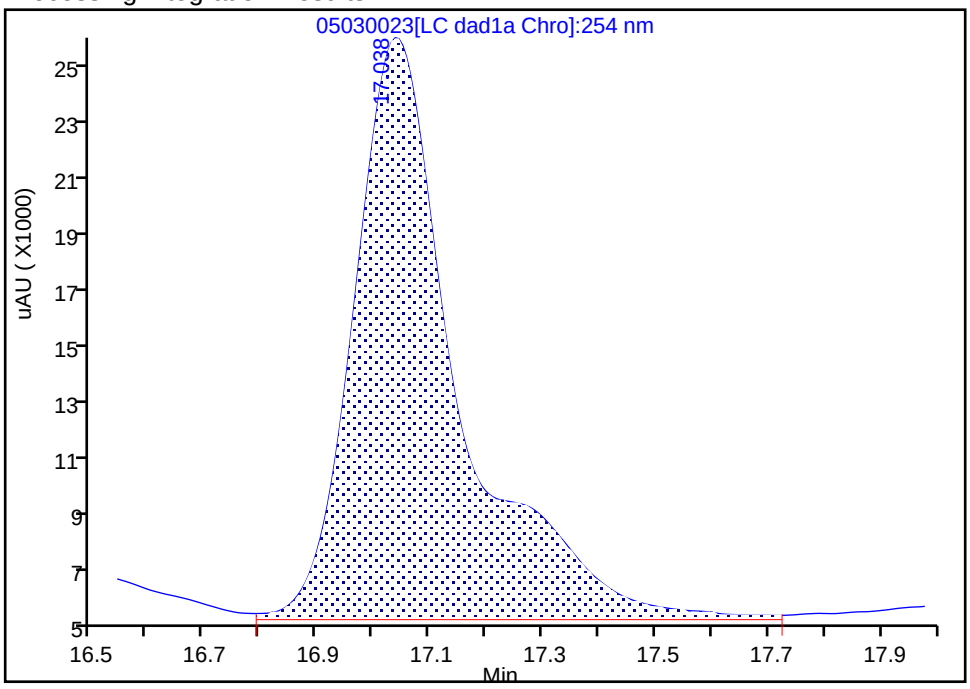
Data File:	\\chromfs\denver\chromdata\g2_luna\20240503-132991.b\05030023.d				
Injection Date:	04-May-2024 01:03:34	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-190799-A-3-A	Lab Sample ID:	280-190799-3		
Client ID:	LL1mw-084-240401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

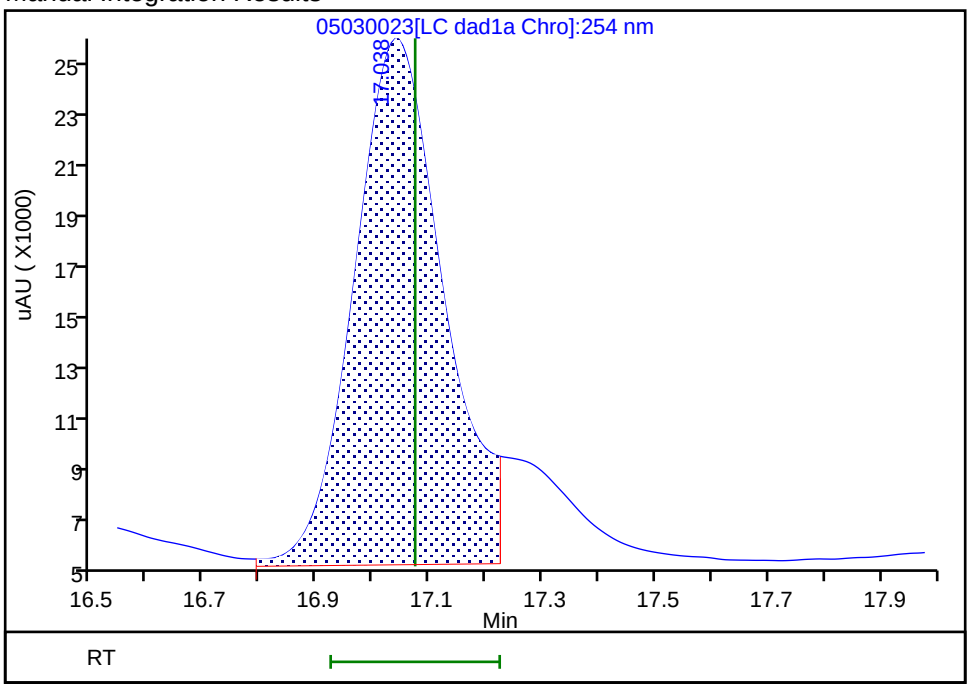
Processing Integration Results

RT: 17.04
Area: 260323
Amount: 0.641882
Amount Units: ug/ml



Manual Integration Results

RT: 17.04
Area: 220605
Amount: 0.543949
Amount Units: ug/ml



Reviewer: LV5D, 07-May-2024 16:07:25 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

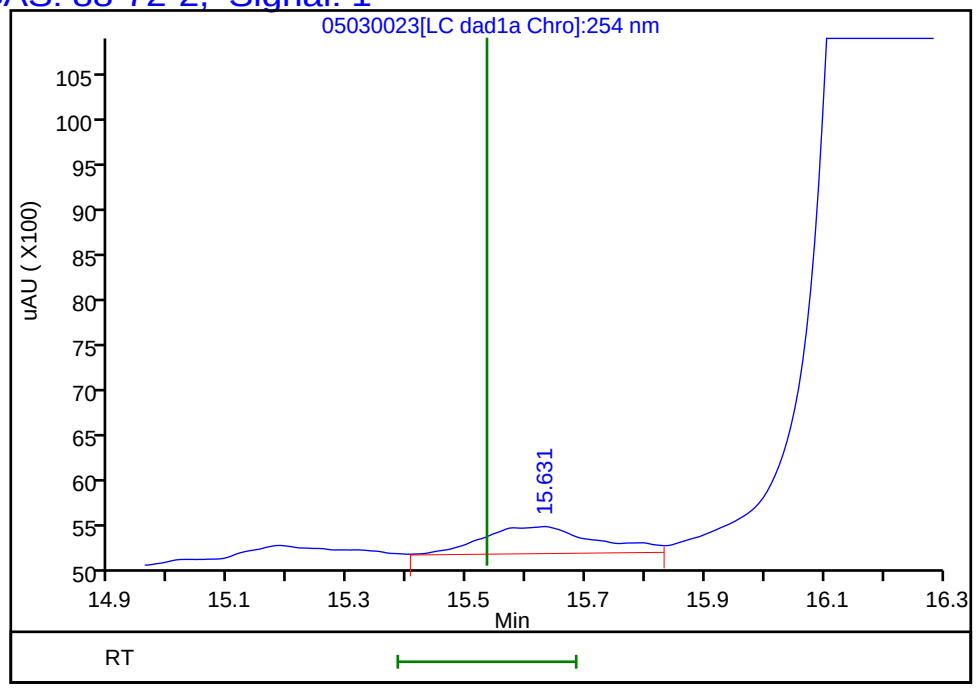
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20240503-132991.b\05030023.d				
Injection Date:	04-May-2024 01:03:34	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-190799-A-3-A	Lab Sample ID:	280-190799-3		
Client ID:	LL1mw-084-240401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

RT: 15.63
Response: 4023
Amount: 0.016448



Reviewer: LV5D, 07-May-2024 16:07:29
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

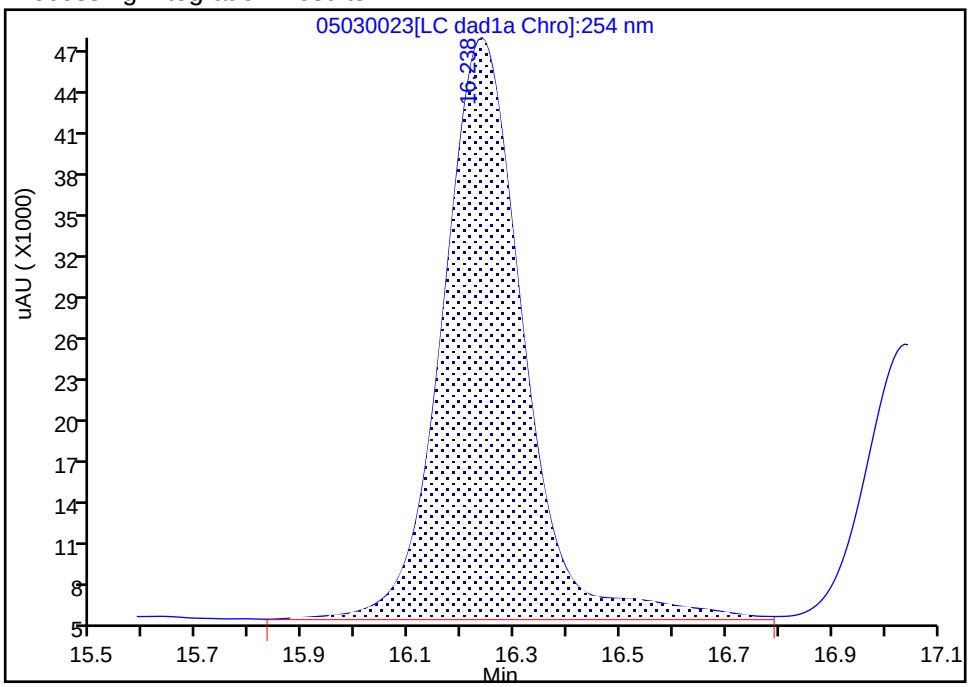
Data File:	\\chromfs\denver\chromdata\g2_luna\20240503-132991.b\05030023.d				
Injection Date:	04-May-2024 01:03:34	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-190799-A-3-A	Lab Sample ID:	280-190799-3		
Client ID:	LL1mw-084-240401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

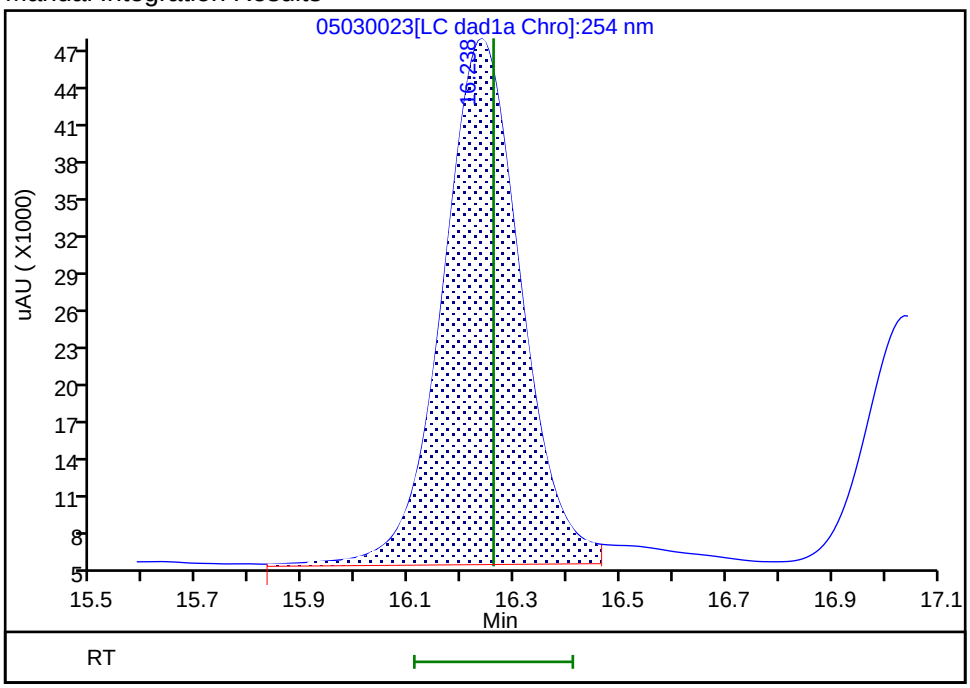
Processing Integration Results

RT: 16.24
Area: 454995
Amount: 1.685469
Amount Units: ug/ml



Manual Integration Results

RT: 16.24
Area: 436558
Amount: 1.617060
Amount Units: ug/ml



Reviewer: LV5D, 07-May-2024 16:07:28 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

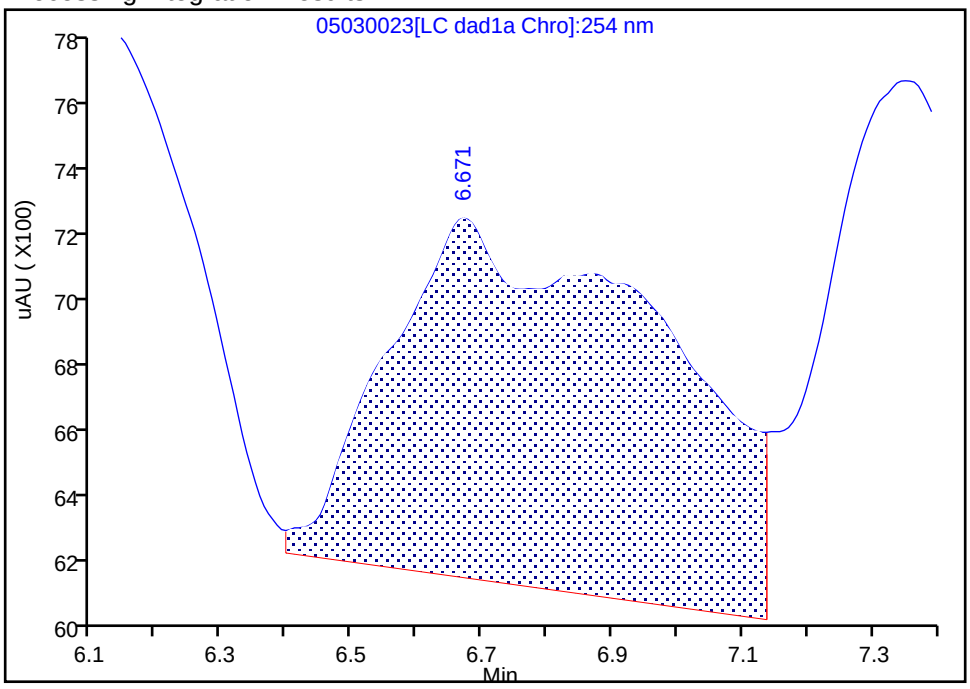
Data File:	\\chromfs\denver\chromdata\g2_luna\20240503-132991.b\05030023.d				
Injection Date:	04-May-2024 01:03:34	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-190799-A-3-A	Lab Sample ID:	280-190799-3		
Client ID:	LL1mw-084-240401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

6 HMX, CAS: 2691-41-0

Signal: 1

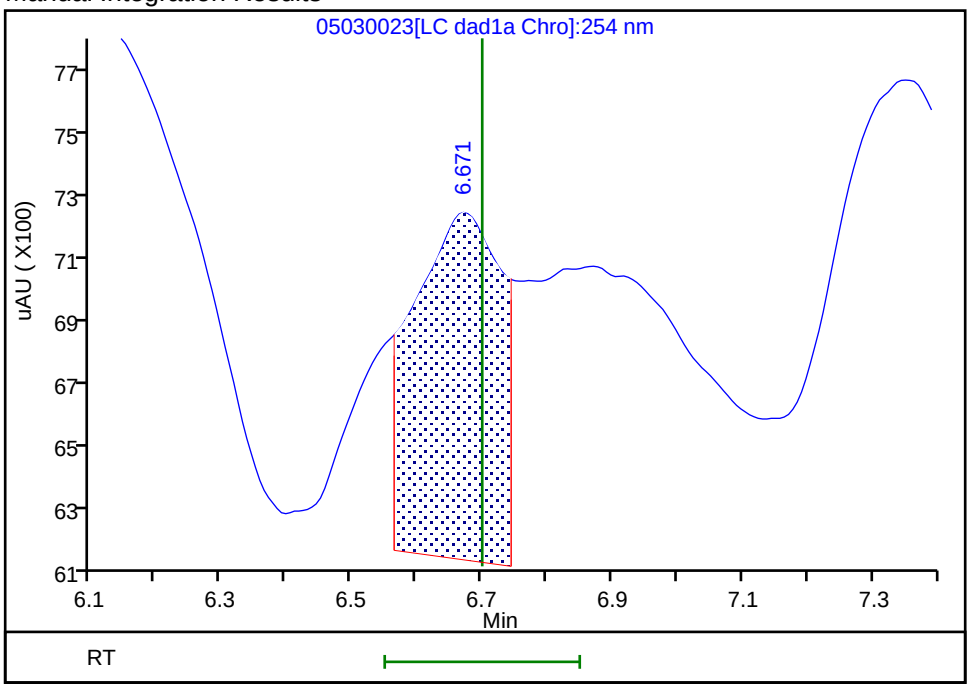
Processing Integration Results

RT: 6.67
Area: 32306
Amount: 0.185586
Amount Units: ug/ml



Manual Integration Results

RT: 6.67
Area: 9829
Amount: 0.056464
Amount Units: ug/ml



Reviewer: LV5D, 07-May-2024 16:06:49 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

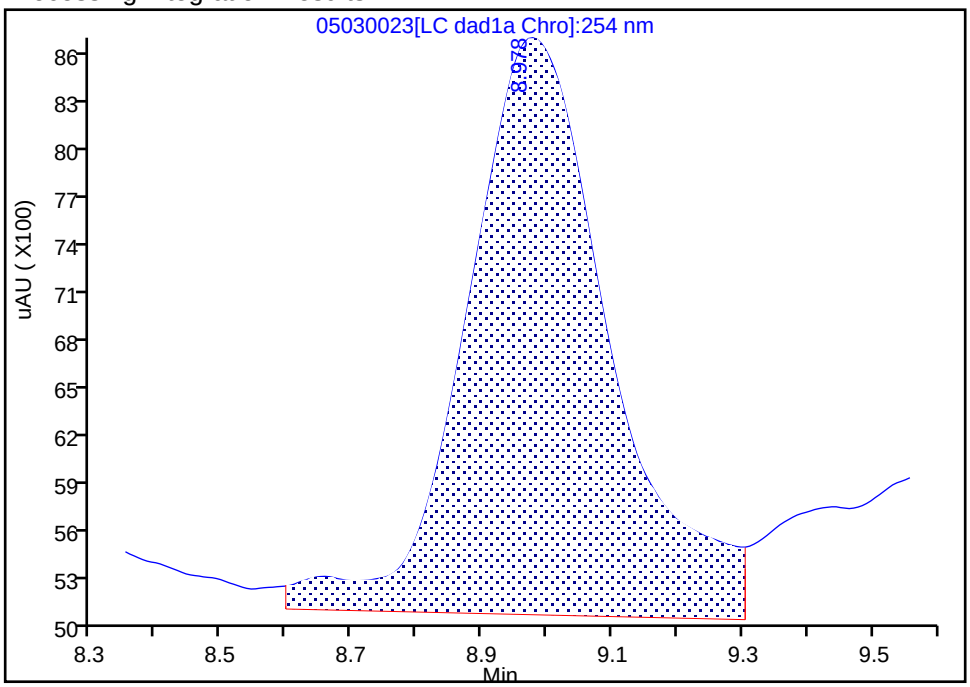
Data File:	\\chromfs\denver\chromdata\g2_luna\20240503-132991.b\05030023.d				
Injection Date:	04-May-2024 01:03:34	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-190799-A-3-A	Lab Sample ID:	280-190799-3		
Client ID:	LL1mw-084-240401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

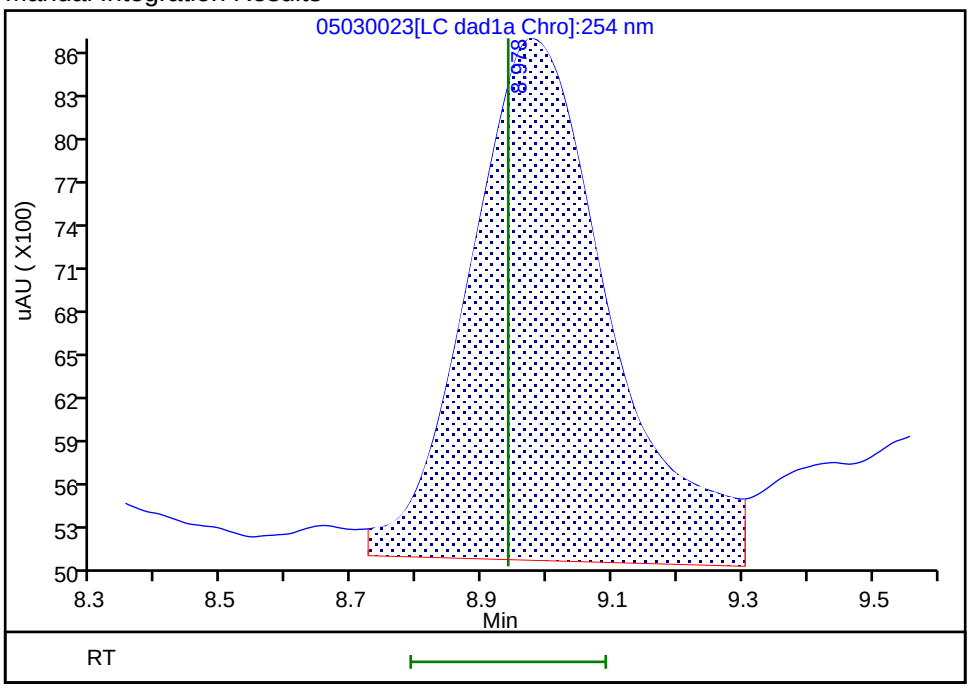
Processing Integration Results

RT: 8.98
Area: 54204
Amount: 0.260949
Amount Units: ug/ml



Manual Integration Results

RT: 8.98
Area: 52810
Amount: 0.254171
Amount Units: ug/ml



Reviewer: LV5D, 07-May-2024 16:06:57 -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.: 280-190799-1

SDG No.:

Client Sample ID: LL1mw-084-240401-GW | Lab Sample ID: 280-190799-3

Matrix: Water | Lab File ID: 05040024.D

Analysis Method: 8330B | Date Collected: 04/29/2024 10:05

Extraction Method: 3535 | Date Extracted: 05/02/2024 12:39

Sample wt/vol: 457.8(mL) | Date Analyzed: 05/04/2024 23:06

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.: 652145 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-65-0	1,3-Dinitrobenzene	0.11	U M Q	0.12	0.11	0.040
118-96-7	2,4,6-Trinitrotoluene	1.9	M Q	0.12	0.11	0.049
121-14-2	2,4-Dinitrotoluene	0.87	Q	0.11	0.087	0.030
606-20-2	2,6-Dinitrotoluene	0.087	U Q	0.11	0.087	0.044
35572-78-2	2-Amino-4,6-dinitrotoluene	6.3	Q	0.12	0.11	0.055
88-72-2	2-Nitrotoluene	0.22	U Q	0.23	0.22	0.093
99-08-1	3-Nitrotoluene	0.38	U Q	0.44	0.38	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	16	Q	0.16	0.13	0.063
2691-41-0	HMX	0.79	M Q	0.23	0.22	0.096
98-95-3	Nitrobenzene	0.22	U M Q	0.23	0.22	0.099
55-63-0	Nitroglycerin	2.2	U Q	2.3	2.2	1.0
78-11-5	PETN	1.1	U Q	1.2	1.1	0.49
121-82-4	RDX	1.1	M Q J1	0.23	0.22	0.056
479-45-8	Tetryl	0.11	U M Q	0.12	0.11	0.035

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	169	Q	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\05040024.D
Lims ID: 280-190799-A-3-A
Client ID: LL1mw-084-240401-GW
Sample Type: Client
Inject. Date: 04-May-2024 23:06:41 ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-190799-A-3-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 07-May-2024 15:03:04 Calib Date: 18-Apr-2024 03:08:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\04170028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1679

First Level Reviewer: LV5D Date: 07-May-2024 12:57:06

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	4 HMX	1	6.606	6.610	-0.004	6944	0.0727	M
	8 RDX	1	7.633	7.630	0.003	10888	0.0983	M
$	10 1,2-Dinitrobenzene	1	8.573	8.576	-0.003	44477	0.3372	
	11 1,3,5-Trinitrobenzene	1	8.699	8.710	-0.011	22240	0.0998	M
	12 1,3-Dinitrobenzene	1		9.323			ND	U
	13 Nitrobenzene	1		9.683			ND	U
	15 Tetryl	1		10.003			ND	U
	16 Nitroglycerin	2		10.470			ND	
	17 2,4,6-Trinitrotoluene	1	10.886	10.903	-0.017	36453	0.1694	M
	18 4-Amino-2,6-dinitrotoluene	1	11.066	11.083	-0.017	219919	1.47	
	19 2-Amino-4,6-dinitrotoluene	1	11.319	11.336	-0.017	114515	0.5731	
	20 2,6-Dinitrotoluene	1		11.483			ND	
	21 2,4-Dinitrotoluene	1	11.639	11.656	-0.017	23217	0.0796	
	22 o-Nitrotoluene	1		12.436			ND	7
	23 p-Nitrotoluene	1	12.833	12.856	-0.023	15909	0.1410	M
	24 m-Nitrotoluene	1		13.403			ND	
	25 PETN	2		14.463			ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

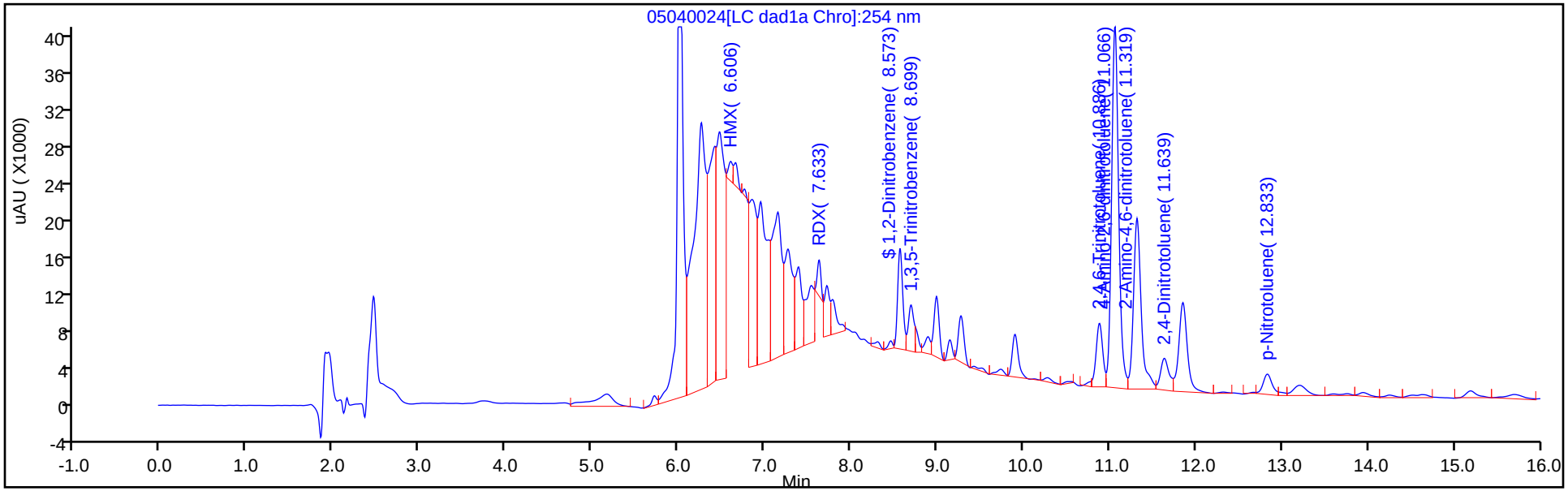
Report Date: 07-May-2024 15:03:06 Chrom Revision: 2.3 26-Apr-2024 12:18:52

Eurofins Denver

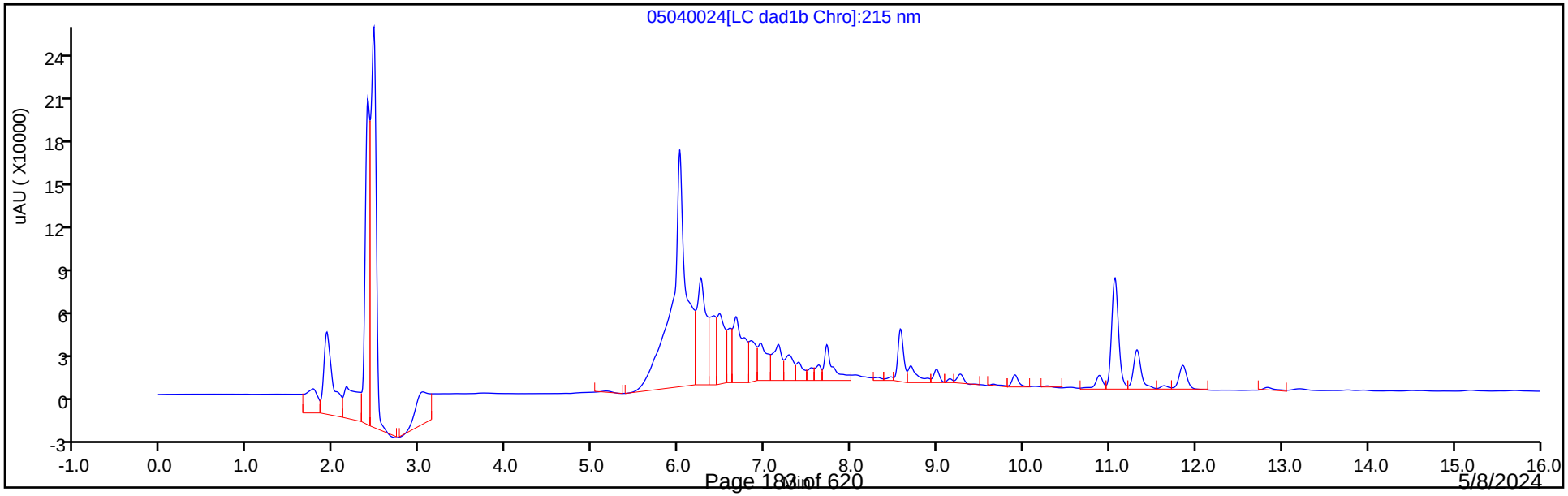
Data File: \\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040024.d

Injection Date:	04-May-2024 23:06:41	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-190799-A-3-A	Lab Sample ID:	280-190799-3	Worklist Smp#:	24
Client ID:	LL1mw-084-240401-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



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\05040024.D				
Lims ID:	280-190799-A-3-A				
Client ID:	LL1mw-084-240401-GW				
Sample Type:	Client				
Inject. Date:	04-May-2024 23:06:41	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-190799-A-3-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	07-May-2024 15:03:04	Calib Date:	18-Apr-2024 03:08:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\04170028.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1679				

First Level Reviewer: LV5D Date: 07-May-2024 12:57:06

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.3372	168.59

Manual Integration/User Assign Peak Report

Eurofins Denver

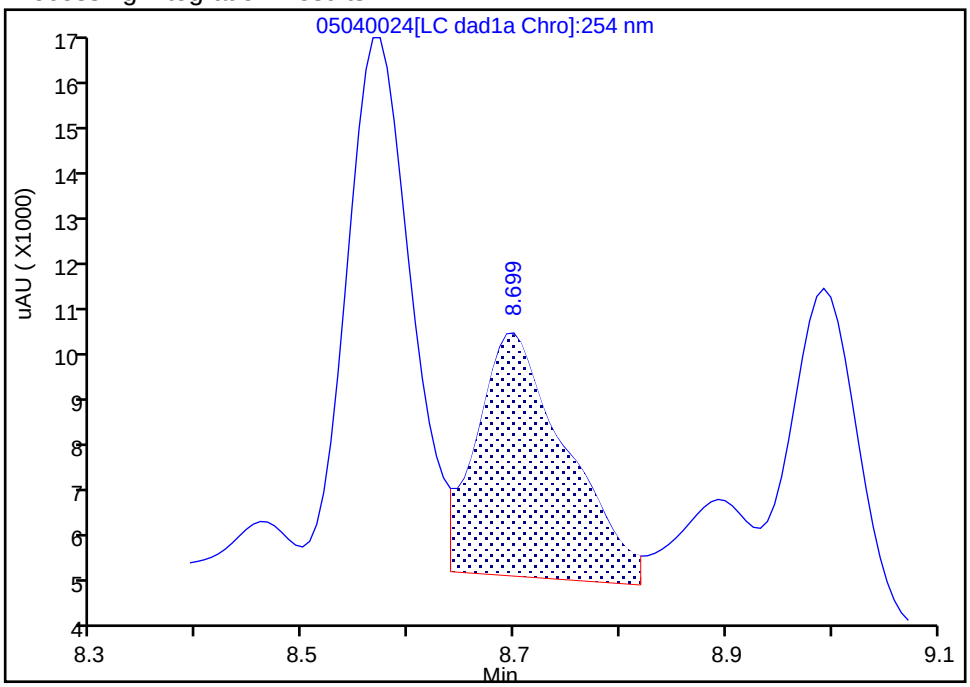
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040024.d				
Injection Date:	04-May-2024 23:06:41	Instrument ID:	CHHPLC_X3		
Lims ID:	280-190799-A-3-A	Lab Sample ID:	280-190799-3		
Client ID:	LL1mw-084-240401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	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		

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

Signal: 1

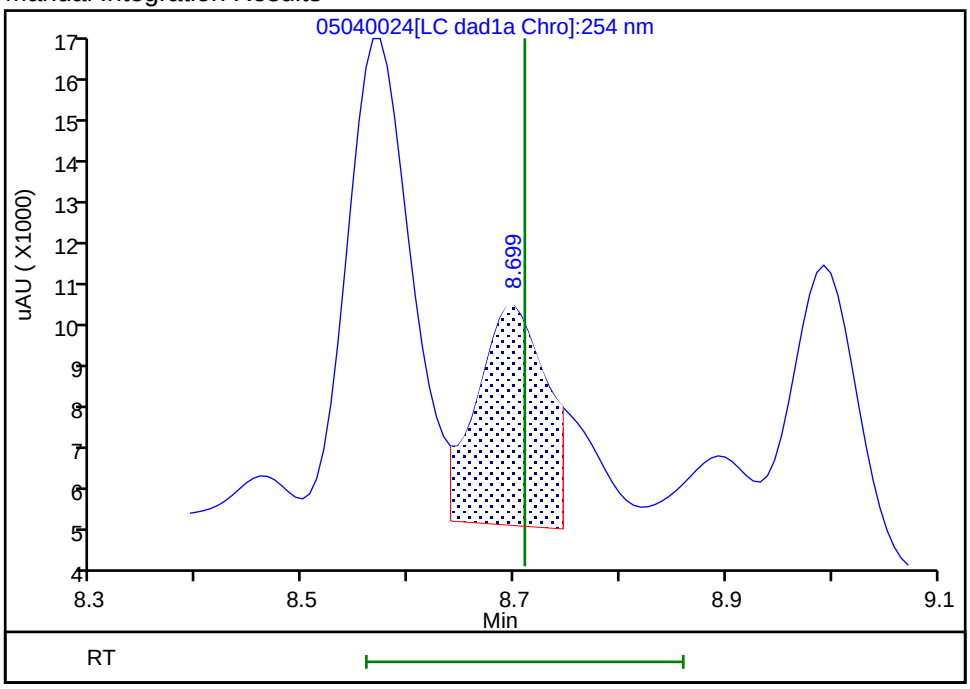
Processing Integration Results

RT: 8.70
Area: 29111
Amount: 0.130629
Amount Units: ug/mL



Manual Integration Results

RT: 8.70
Area: 22240
Amount: 0.099797
Amount Units: ug/mL



Reviewer: LV5D, 07-May-2024 12:56:43 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

User Disabled Compound Report

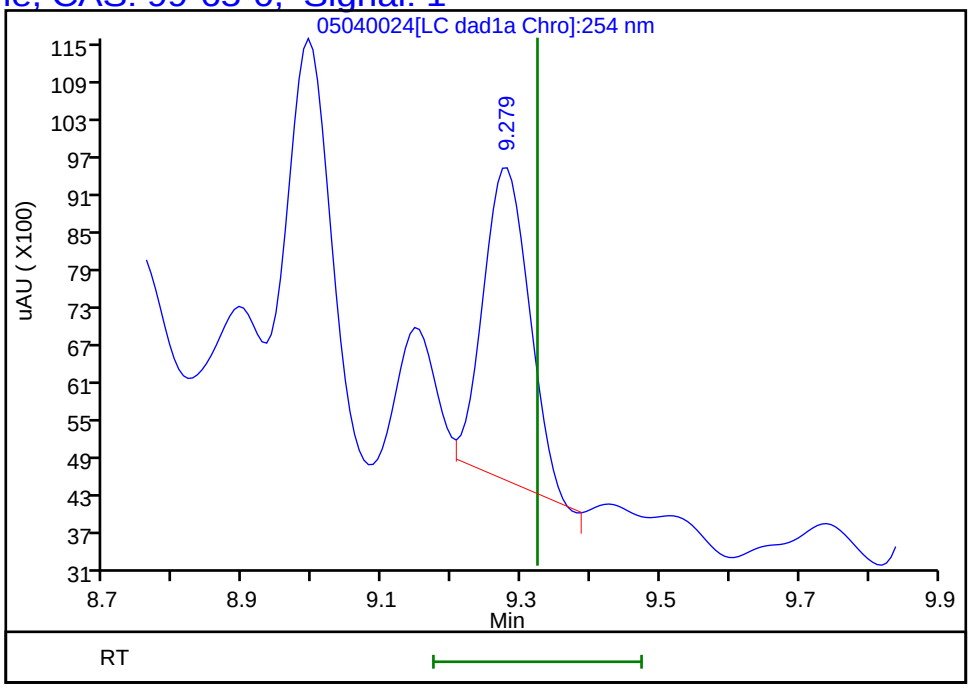
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040024.d
Injection Date: 04-May-2024 23:06:41 Instrument ID: CHHPLC_X3
Lims ID: 280-190799-A-3-A Lab Sample ID: 280-190799-3
Client ID: LL1mw-084-240401-GW
Operator ID: JZ/JG 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

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

RT: 9.28
Response: 23355
Amount: 0.077997



Reviewer: LV5D, 07-May-2024 12:57:06
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

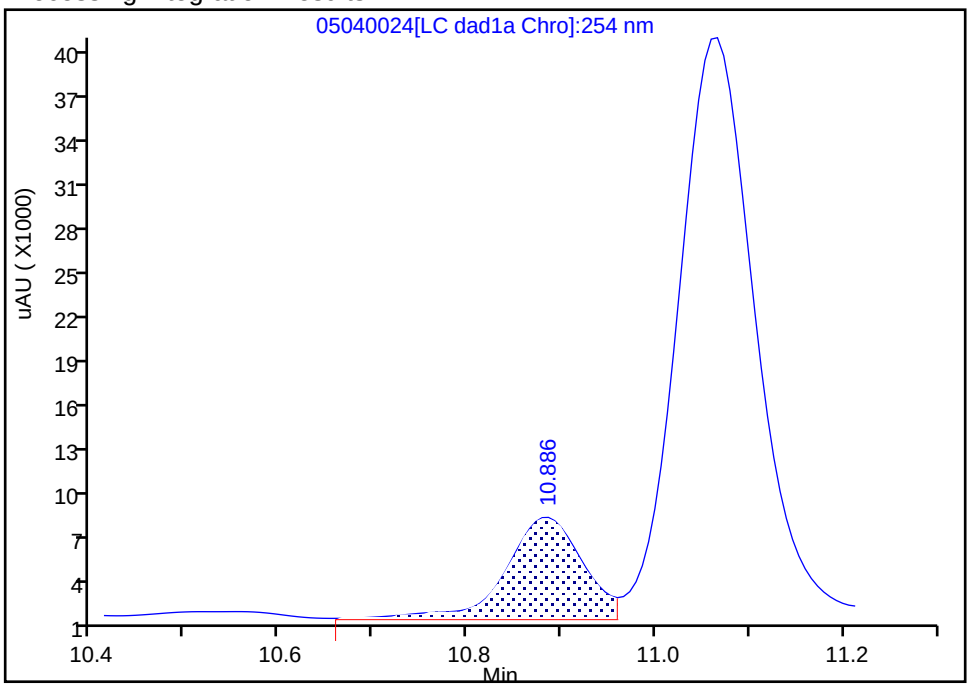
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040024.d				
Injection Date:	04-May-2024 23:06:41	Instrument ID:	CHHPLC_X3		
Lims ID:	280-190799-A-3-A	Lab Sample ID:	280-190799-3		
Client ID:	LL1mw-084-240401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	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		

17 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

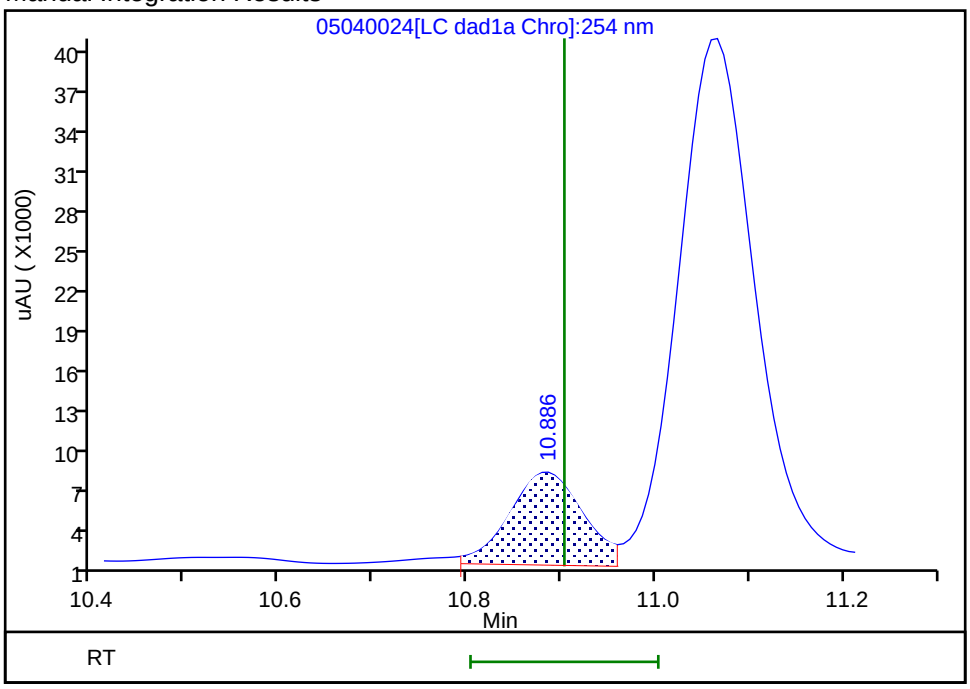
Processing Integration Results

RT: 10.89
Area: 38433
Amount: 0.178598
Amount Units: ug/mL



Manual Integration Results

RT: 10.89
Area: 36453
Amount: 0.169397
Amount Units: ug/mL



Reviewer: LV5D, 07-May-2024 12:57:04 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

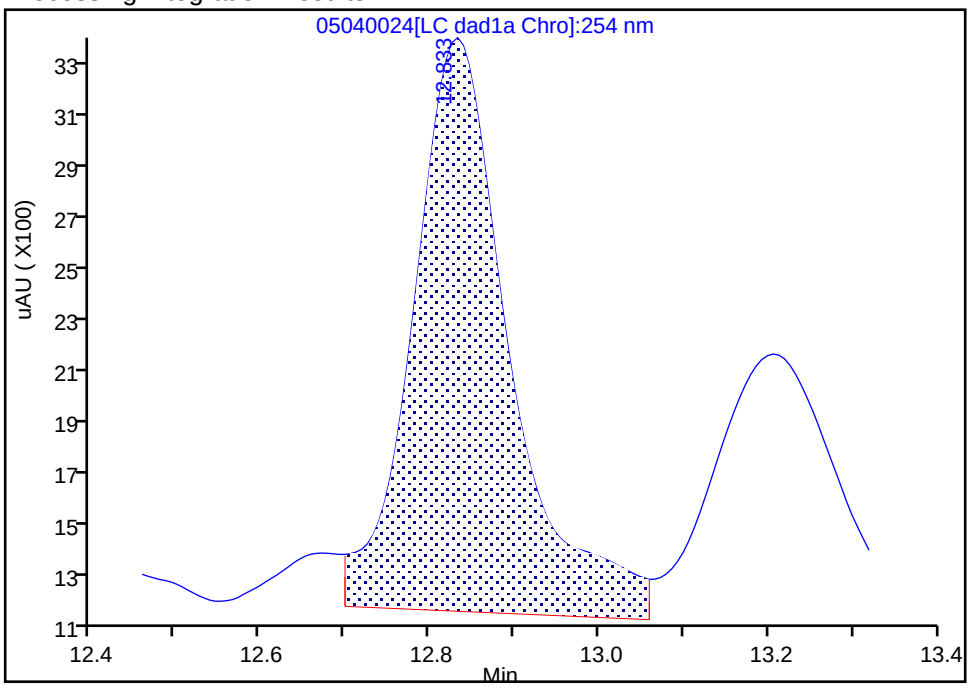
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040024.d				
Injection Date:	04-May-2024 23:06:41	Instrument ID:	CHHPLC_X3		
Lims ID:	280-190799-A-3-A	Lab Sample ID:	280-190799-3		
Client ID:	LL1mw-084-240401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	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		

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

Signal: 1

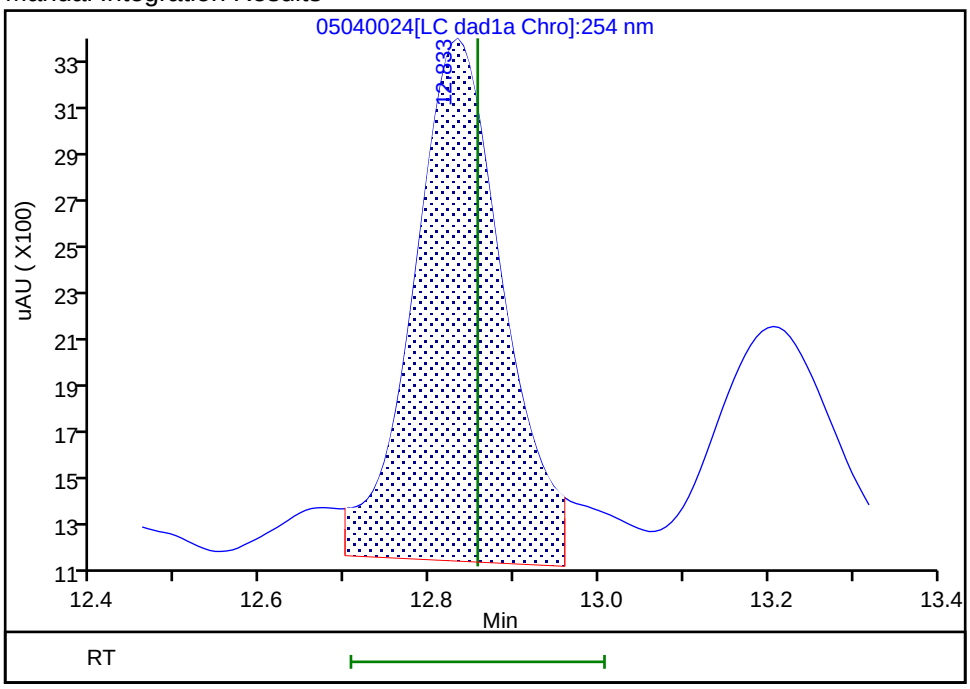
Processing Integration Results

RT: 12.83
Area: 17212
Amount: 0.152590
Amount Units: ug/mL



Manual Integration Results

RT: 12.83
Area: 15909
Amount: 0.141038
Amount Units: ug/mL



Reviewer: LV5D, 07-May-2024 12:56:57 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

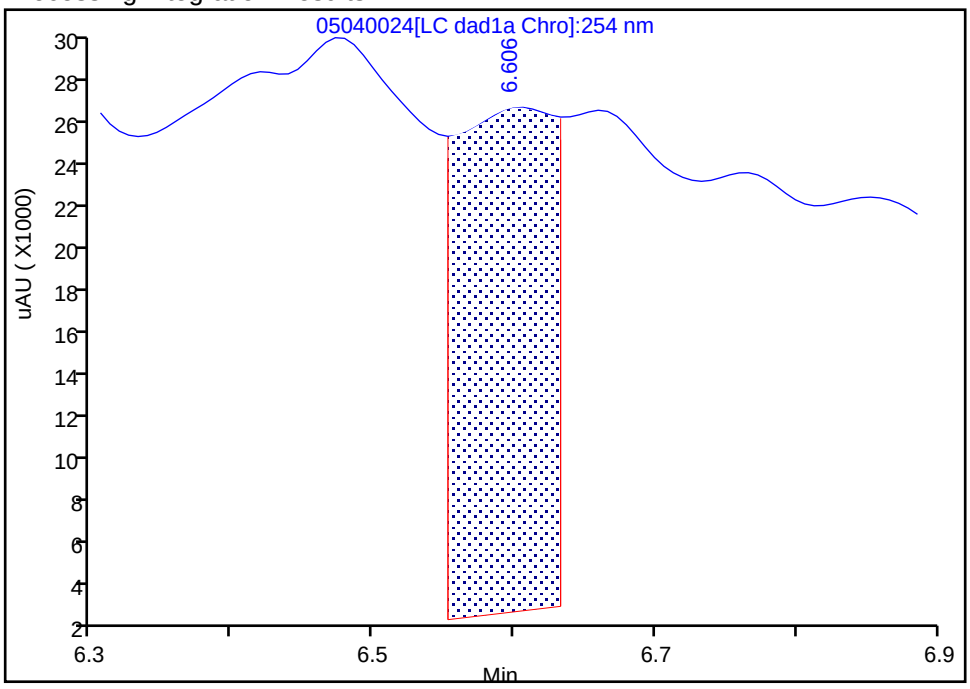
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040024.d				
Injection Date:	04-May-2024 23:06:41	Instrument ID:	CHHPLC_X3		
Lims ID:	280-190799-A-3-A	Lab Sample ID:	280-190799-3		
Client ID:	LL1mw-084-240401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	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		

4 HMX, CAS: 2691-41-0

Signal: 1

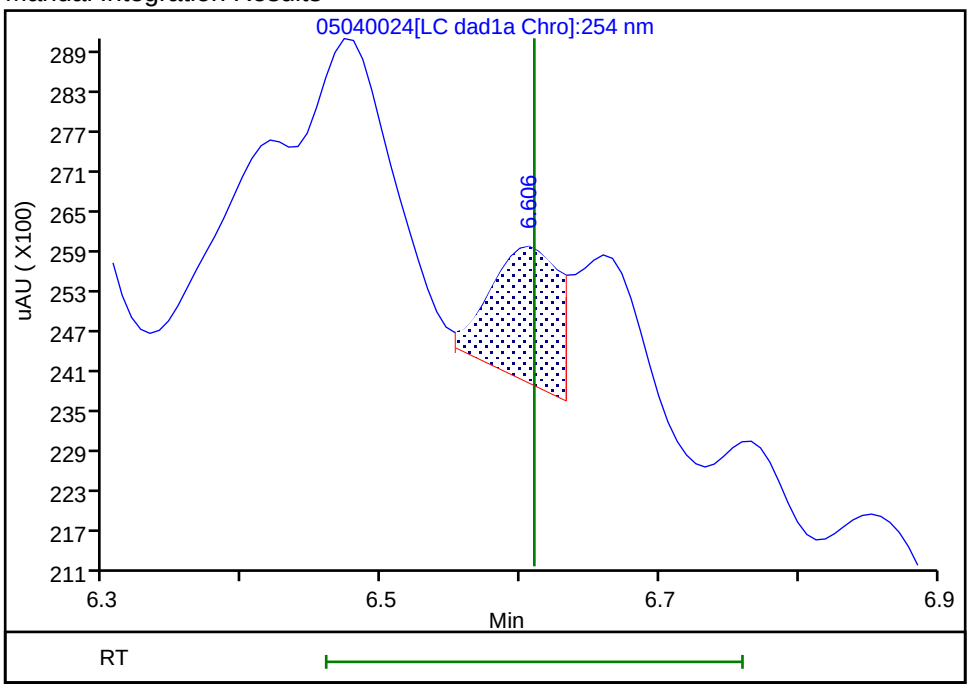
Processing Integration Results

RT: 6.61
Area: 107016
Amount: 1.120074
Amount Units: ug/mL



Manual Integration Results

RT: 6.61
Area: 6944
Amount: 0.072679
Amount Units: ug/mL



Reviewer: LV5D, 07-May-2024 12:55:19 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

User Disabled Compound Report

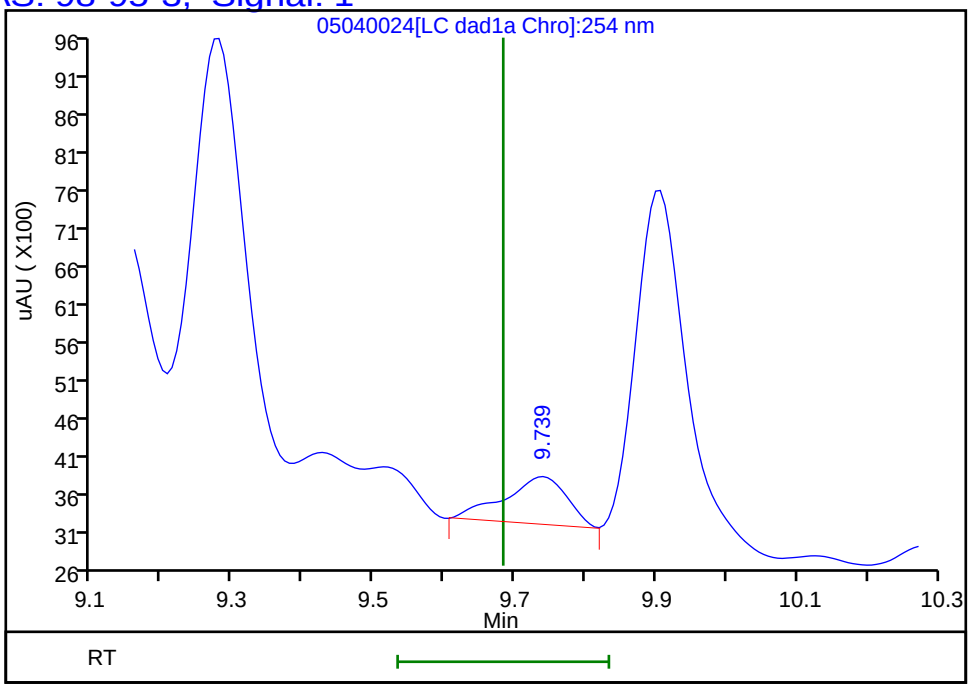
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040024.d
Injection Date: 04-May-2024 23:06:41 Instrument ID: CHHPLC_X3
Lims ID: 280-190799-A-3-A Lab Sample ID: 280-190799-3
Client ID: LL1mw-084-240401-GW
Operator ID: JZ/JG 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

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

RT: 9.74
Response: 3763
Amount: 0.019167



Reviewer: LV5D, 07-May-2024 12:57:06
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

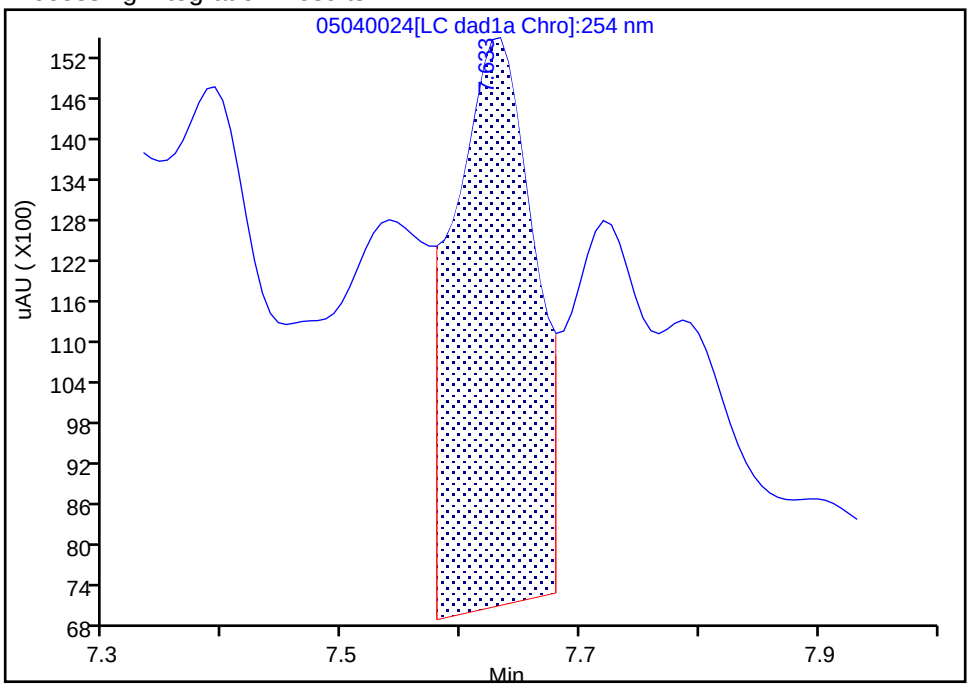
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040024.d				
Injection Date:	04-May-2024 23:06:41	Instrument ID:	CHHPLC_X3		
Lims ID:	280-190799-A-3-A	Lab Sample ID:	280-190799-3		
Client ID:	LL1mw-084-240401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	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		

8 RDX, CAS: 121-82-4

Signal: 1

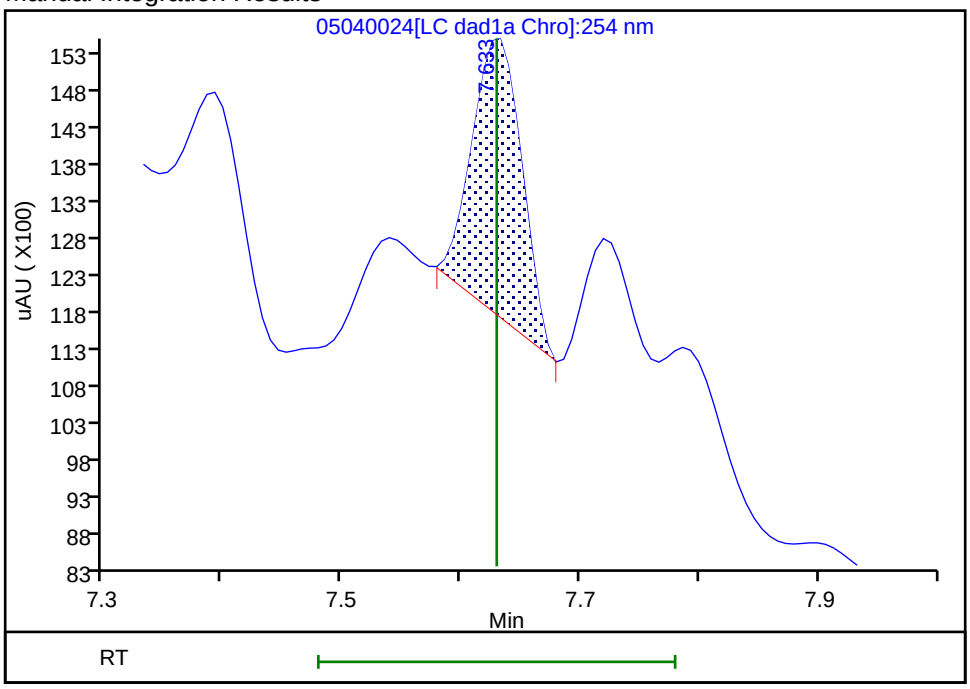
Processing Integration Results

RT: 7.63
Area: 39163
Amount: 0.353562
Amount Units: ug/mL



Manual Integration Results

RT: 7.63
Area: 10888
Amount: 0.098296
Amount Units: ug/mL



Reviewer: LV5D, 07-May-2024 12:55:24 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

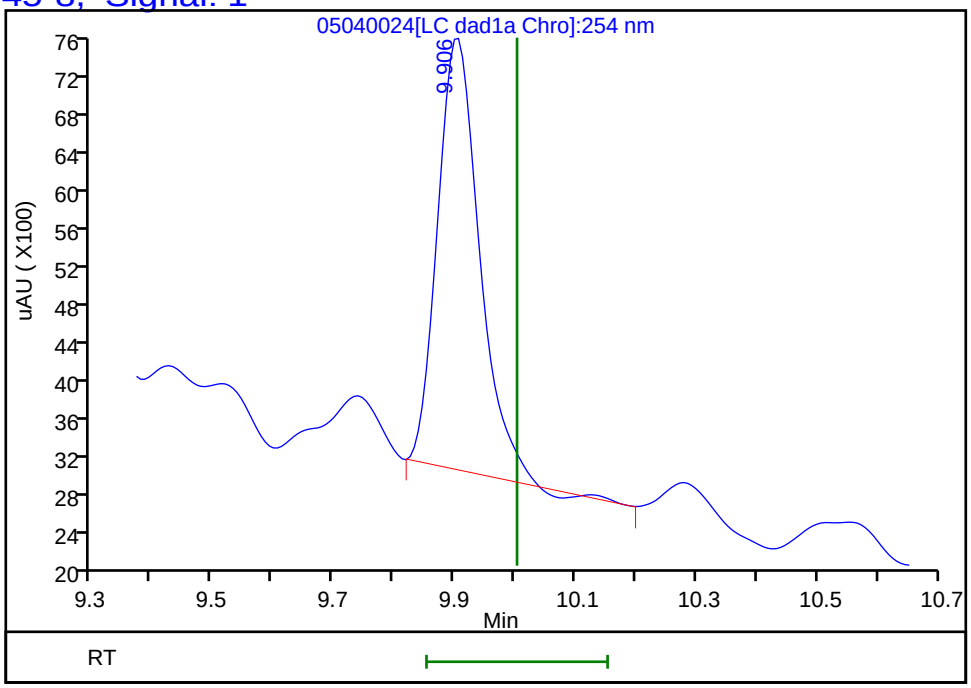
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040024.d
Injection Date: 04-May-2024 23:06:41 Instrument ID: CHHPLC_X3
Lims ID: 280-190799-A-3-A Lab Sample ID: 280-190799-3
Client ID: LL1mw-084-240401-GW
Operator ID: JZ/JG ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

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

RT: 9.91
Response: 22521
Amount: 0.124022



Reviewer: LV5D, 07-May-2024 12:57:06
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-190799-1

SDG No.:

Client Sample ID: LL1mw-084-240402-GW | Lab Sample ID: 280-190799-4

Matrix: Water | Lab File ID: 05030024.D

Analysis Method: 8330B | Date Collected: 04/29/2024 10:05

Extraction Method: 3535 | Date Extracted: 05/02/2024 12:39

Sample wt/vol: 465.9(mL) | Date Analyzed: 05/04/2024 01:39

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.: 652057 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.21	U	0.23	0.21	0.090
99-65-0	*1,3-Dinitrobenzene*	*0.17*	*M J1*	*0.12*	0.11	*0.040*
99-99-0	4-Nitrotoluene	0.43	U	0.44	0.43	0.11
2691-41-0	*HMX*	*0.43*	*M J1*	*0.23*	0.21	*0.094*

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

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20240503-132991.b\05030024.D
Lims ID: 280-190799-A-4-A
Client ID: LL1mw-084-240402-GW
Sample Type: Client
Inject. Date: 04-May-2024 01:39:29 ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-190799-A-4-A
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA

Method: \\chromfs\Denver\ChromData\G2_LUNA\20240503-132991.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 07-May-2024 16:26:43 Calib Date: 25-Apr-2024 07:39:21
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20240424-132624.b\04240027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1679

First Level Reviewer: LV5D Date: 07-May-2024 16:08:46

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
6 HMX	1	6.676	6.700	-0.024	6944	0.0399	M
8 RDX	1	8.982	8.940	0.042	26633	0.1269	M
9 Nitrobenzene	1	11.395	11.453	-0.058	2739	0.007168	
$ 10 1,2-Dinitrobenzene	1	12.342	12.373	-0.031	52300	0.2022	
12 1,3-Dinitrobenzene	1	14.469	14.500	-0.031	9094	0.0154	M
13 Nitroglycerin	2		14.953			ND	
14 o-Nitrotoluene	1	15.595	15.533	0.062	1984	0.008111	7M
15 p-Nitrotoluene	1		15.767			ND	
16 4-Amino-2,6-dinitrotoluene	1	16.222	16.260	-0.038	481961	1.79	M
17 m-Nitrotoluene	1		16.600			ND	
18 2-Amino-4,6-dinitrotoluene	1	17.022	17.073	-0.051	237856	0.5865	M
19 1,3,5-Trinitrobenzene	1		17.293			ND	
20 2,6-Dinitrotoluene	1		18.380			ND	U
21 2,4-Dinitrotoluene	1	18.795	18.840	-0.045	41266	0.0744	
22 Tetryl	1		22.027			ND	
23 2,4,6-Trinitrotoluene	1	22.842	22.874	-0.032	73276	0.1833	
24 PETN	2		24.007			ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

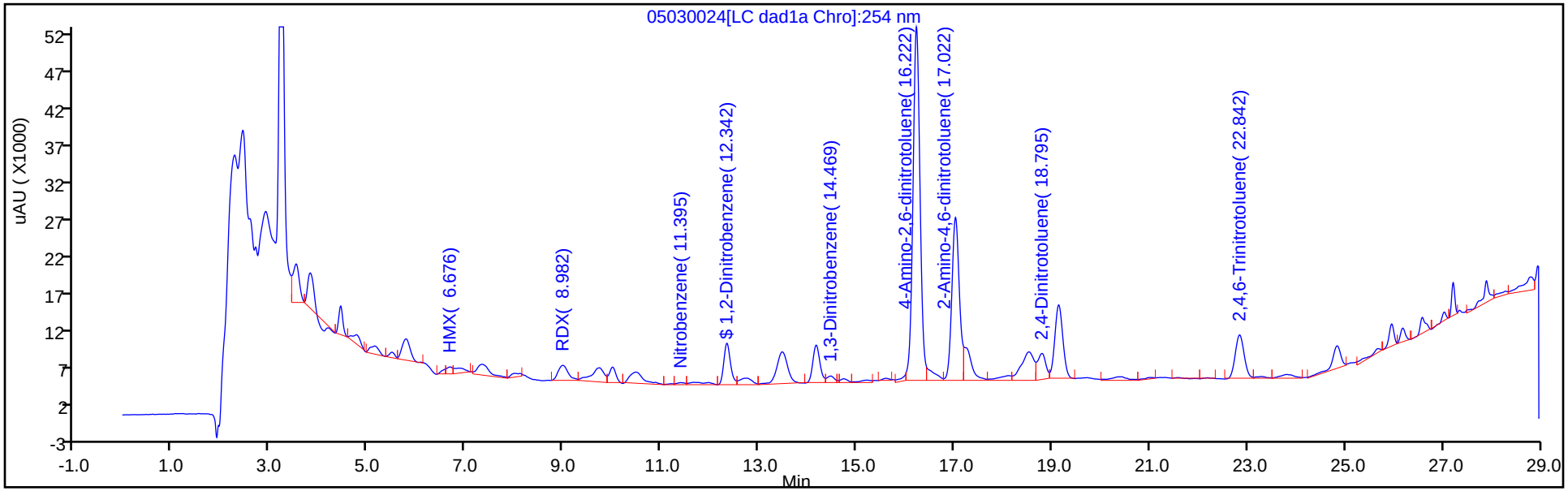
Report Date: 07-May-2024 16:26:47 Chrom Revision: 2.3 26-Apr-2024 12:18:52

Eurofins Denver

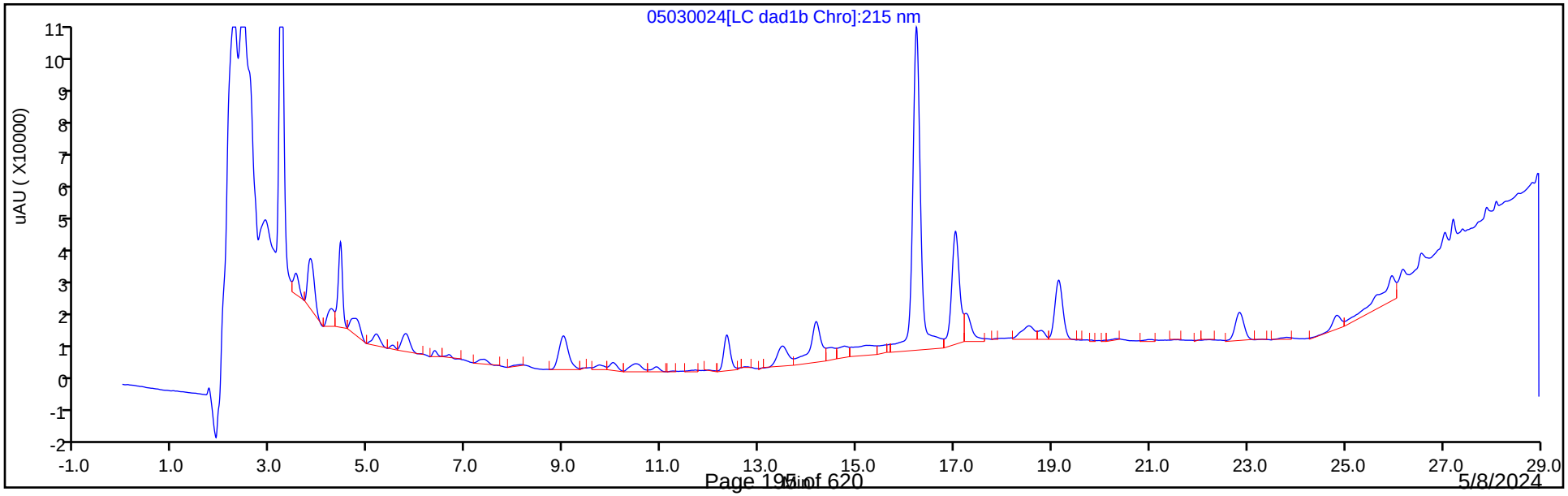
Data File: \\chromfs\denver\chromdata\g2_luna\20240503-132991.b\05030024.d

Injection Date:	04-May-2024 01:39:29	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	280-190799-A-4-A	Lab Sample ID:	280-190799-4	Worklist Smp#:	24
Client ID:	LL1mw-084-240402-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	G2_8330_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\G2_LUNA\20240503-132991.b\05030024.D				
Lims ID:	280-190799-A-4-A				
Client ID:	LL1mw-084-240402-GW				
Sample Type:	Client				
Inject. Date:	04-May-2024 01:39:29	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-190799-A-4-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_G2_LUNA		
Method:	\\chromfs\Denver\ChromData\G2_LUNA\20240503-132991.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	07-May-2024 16:26:43	Calib Date:	25-Apr-2024 07:39:21		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\G2_LUNA\20240424-132624.b\04240027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX1679				

First Level Reviewer: LV5D Date: 07-May-2024 16:08:46

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2022	101.09

Manual Integration/User Assign Peak Report

Eurofins Denver

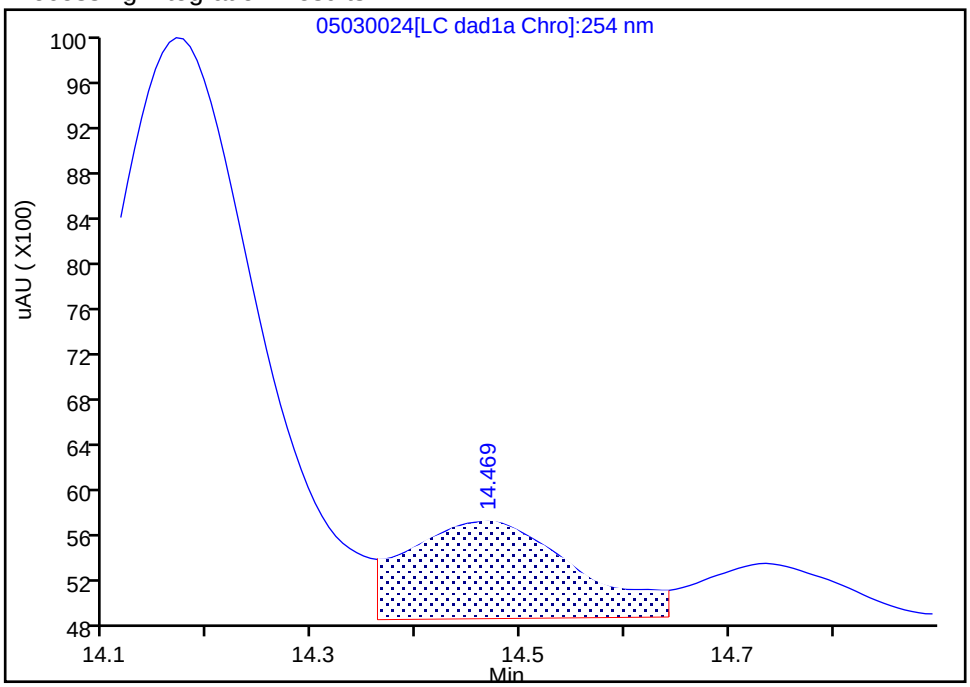
Data File:	\\chromfs\denver\chromdata\g2_luna\20240503-132991.b\05030024.d				
Injection Date:	04-May-2024 01:39:29	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-190799-A-4-A	Lab Sample ID:	280-190799-4		
Client ID:	LL1mw-084-240402-GW				
Operator ID:	JZ/JG	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

Signal: 1

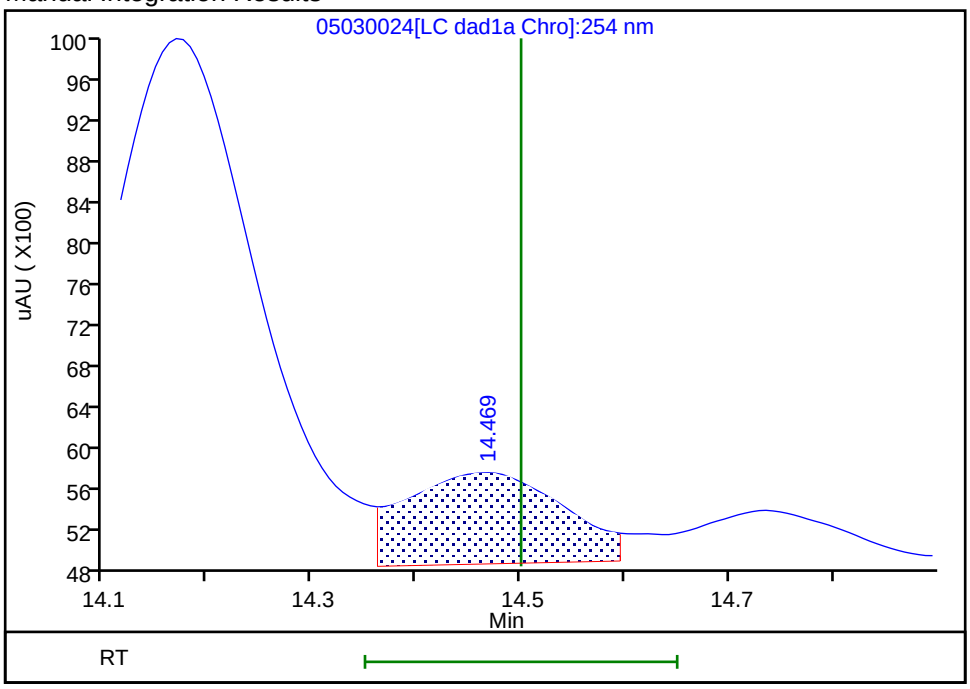
Processing Integration Results

RT: 14.47
Area: 9396
Amount: 0.015941
Amount Units: ug/ml



Manual Integration Results

RT: 14.47
Area: 9094
Amount: 0.015429
Amount Units: ug/ml



Reviewer: LV5D, 07-May-2024 16:08:37 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

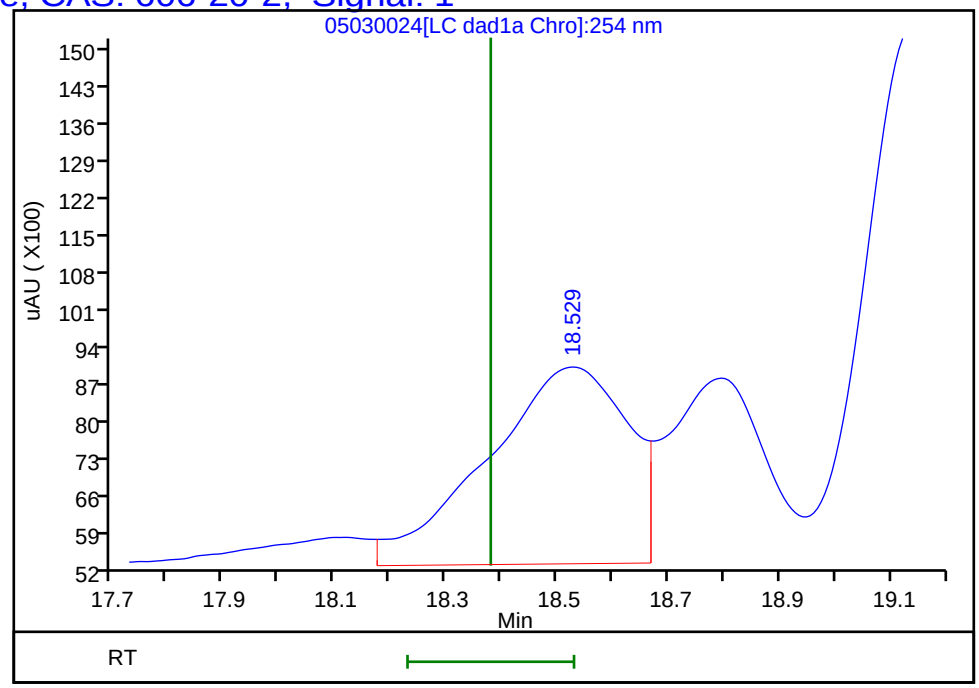
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20240503-132991.b\05030024.d				
Injection Date:	04-May-2024 01:39:29	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-190799-A-4-A	Lab Sample ID:	280-190799-4		
Client ID:	LL1mw-084-240402-GW				
Operator ID:	JZ/JG	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

20 2,6-Dinitrotoluene, CAS: 606-20-2, Signal: 1

RT: 18.53
Response: 65103
Amount: 0.234209



Reviewer: LV5D, 07-May-2024 16:08:46
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

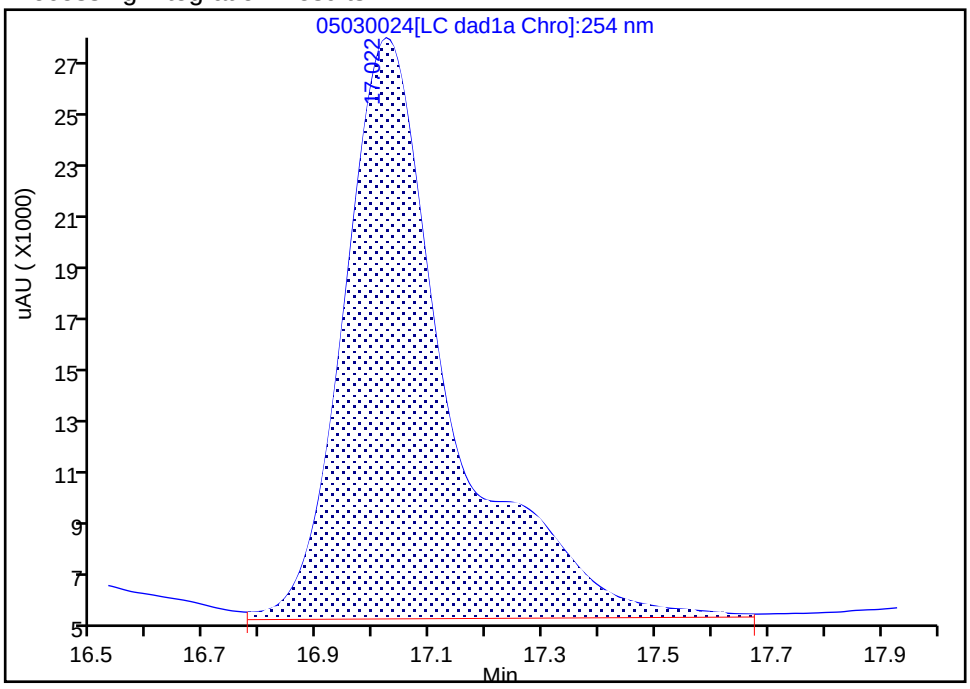
Data File:	\\chromfs\denver\chromdata\g2_luna\20240503-132991.b\05030024.d				
Injection Date:	04-May-2024 01:39:29	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-190799-A-4-A	Lab Sample ID:	280-190799-4		
Client ID:	LL1mw-084-240402-GW				
Operator ID:	JZ/JG	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

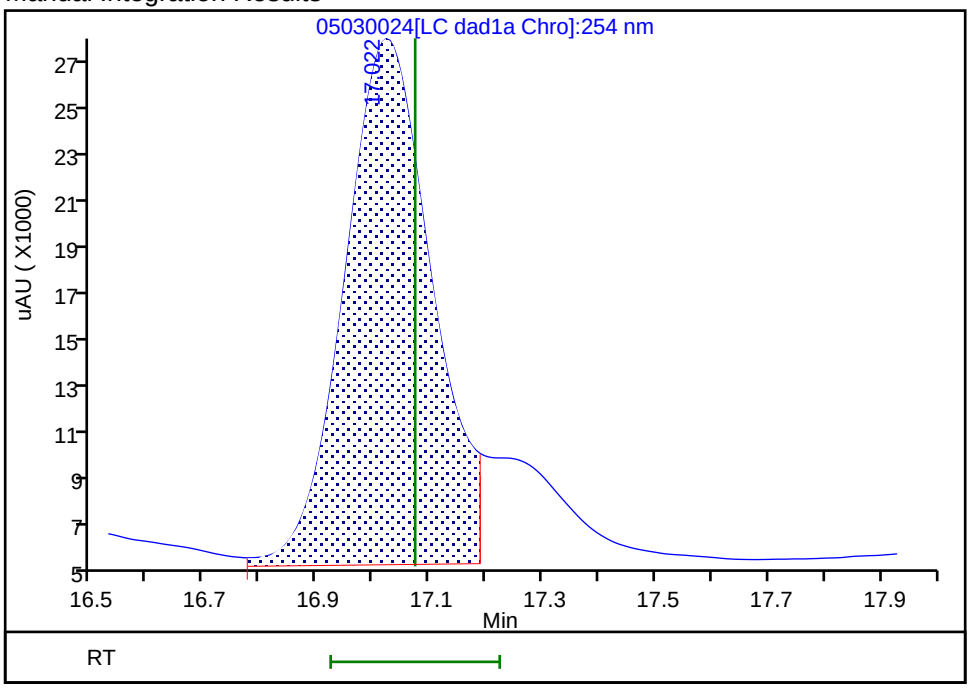
Processing Integration Results

RT: 17.02
Area: 288361
Amount: 0.711016
Amount Units: ug/ml



Manual Integration Results

RT: 17.02
Area: 237856
Amount: 0.586485
Amount Units: ug/ml



Reviewer: LV5D, 07-May-2024 16:07:42 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

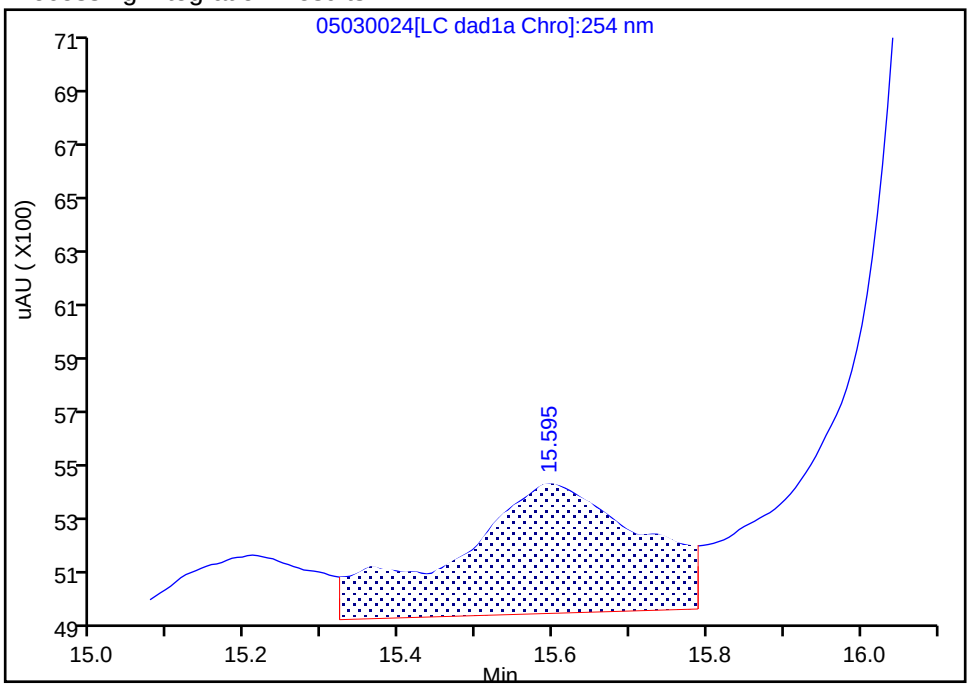
Data File:	\\chromfs\denver\chromdata\g2_luna\20240503-132991.b\05030024.d				
Injection Date:	04-May-2024 01:39:29	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-190799-A-4-A	Lab Sample ID:	280-190799-4		
Client ID:	LL1mw-084-240402-GW				
Operator ID:	JZ/JG	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

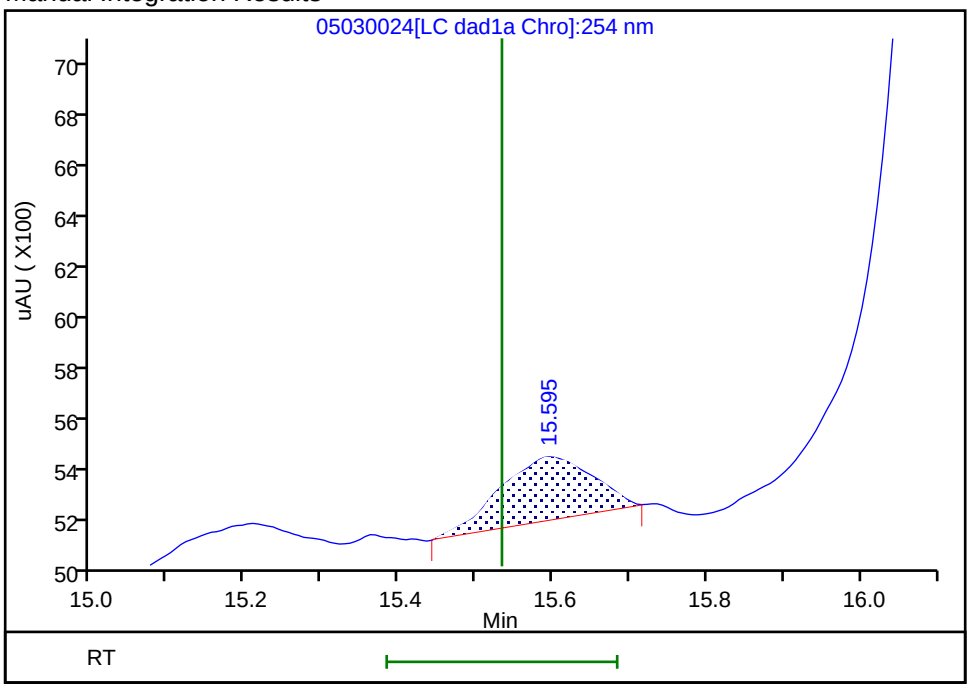
Processing Integration Results

RT: 15.60
Area: 7721
Amount: 0.031567
Amount Units: ug/ml



Manual Integration Results

RT: 15.60
Area: 1984
Amount: 0.008111
Amount Units: ug/ml



Reviewer: LV5D, 07-May-2024 16:07:56 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

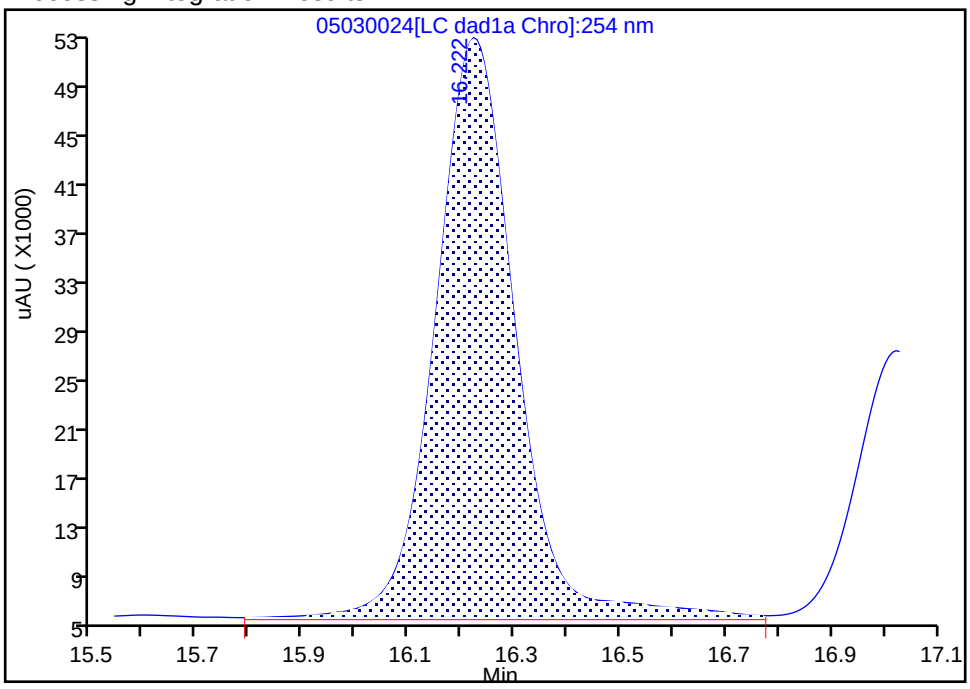
Data File:	\\chromfs\denver\chromdata\g2_luna\20240503-132991.b\05030024.d				
Injection Date:	04-May-2024 01:39:29	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-190799-A-4-A	Lab Sample ID:	280-190799-4		
Client ID:	LL1mw-084-240402-GW				
Operator ID:	JZ/JG	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

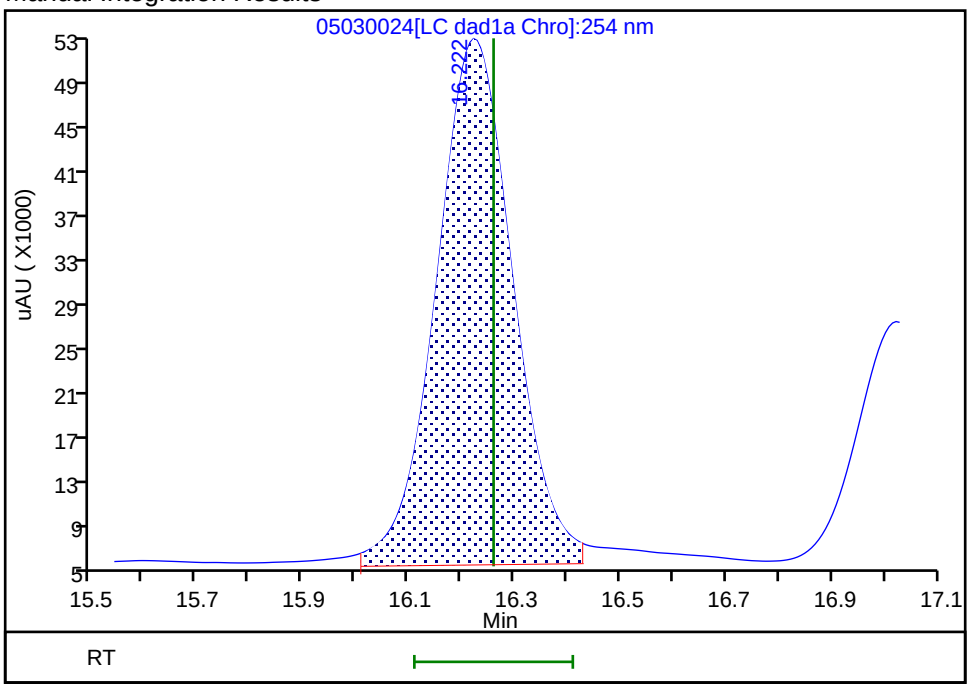
Processing Integration Results

RT: 16.22
Area: 508876
Amount: 1.885390
Amount Units: ug/ml



Manual Integration Results

RT: 16.22
Area: 481961
Amount: 1.785524
Amount Units: ug/ml



Reviewer: LV5D, 07-May-2024 16:07:46 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

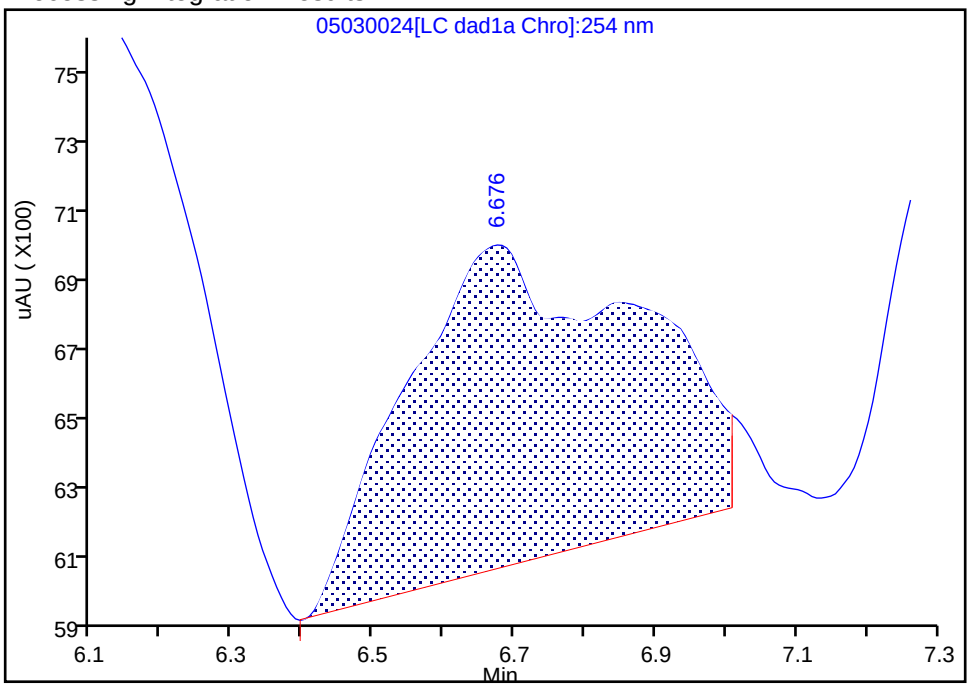
Data File:	\\chromfs\denver\chromdata\g2_luna\20240503-132991.b\05030024.d				
Injection Date:	04-May-2024 01:39:29	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-190799-A-4-A	Lab Sample ID:	280-190799-4		
Client ID:	LL1mw-084-240402-GW				
Operator ID:	JZ/JG	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

6 HMX, CAS: 2691-41-0

Signal: 1

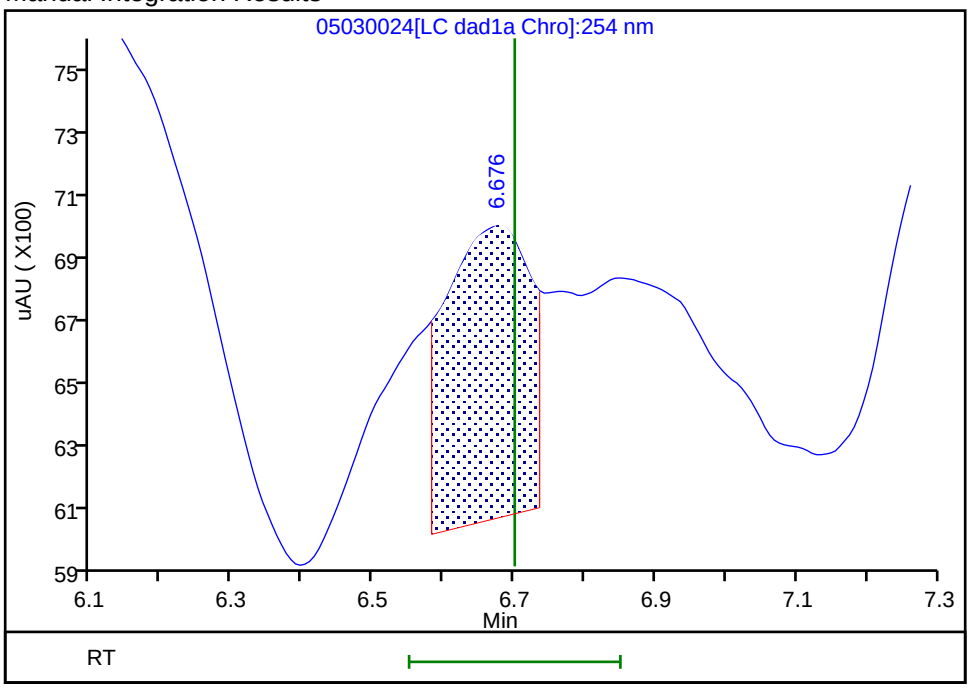
Processing Integration Results

RT: 6.68
Area: 19250
Amount: 0.110584
Amount Units: ug/ml



Manual Integration Results

RT: 6.68
Area: 6944
Amount: 0.039891
Amount Units: ug/ml



Reviewer: LV5D, 07-May-2024 16:08:12 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

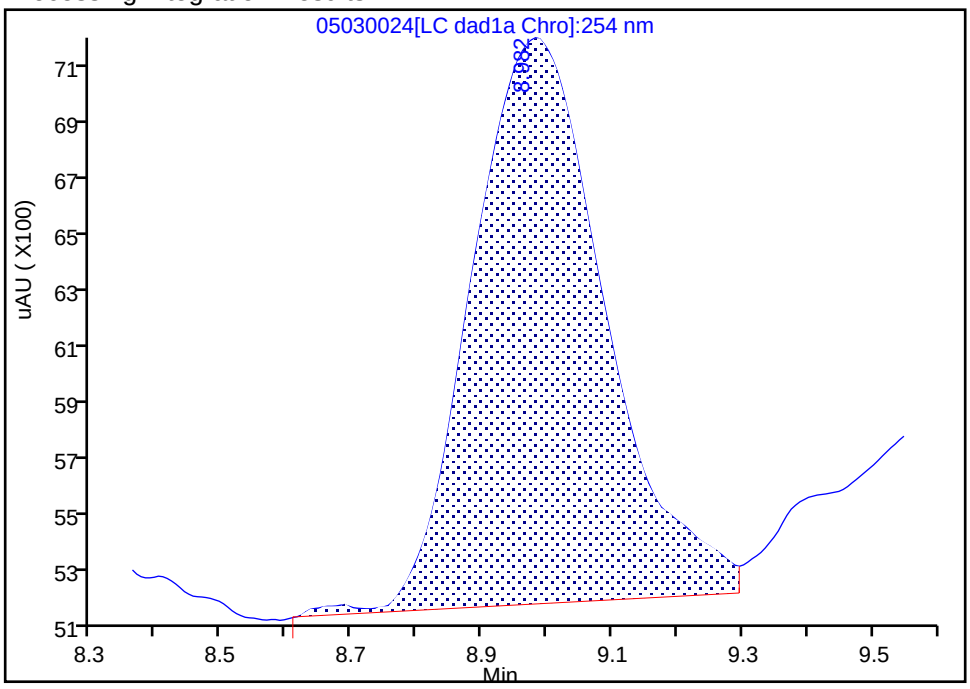
Data File:	\\chromfs\denver\chromdata\g2_luna\20240503-132991.b\05030024.d				
Injection Date:	04-May-2024 01:39:29	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-190799-A-4-A	Lab Sample ID:	280-190799-4		
Client ID:	LL1mw-084-240402-GW				
Operator ID:	JZ/JG	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

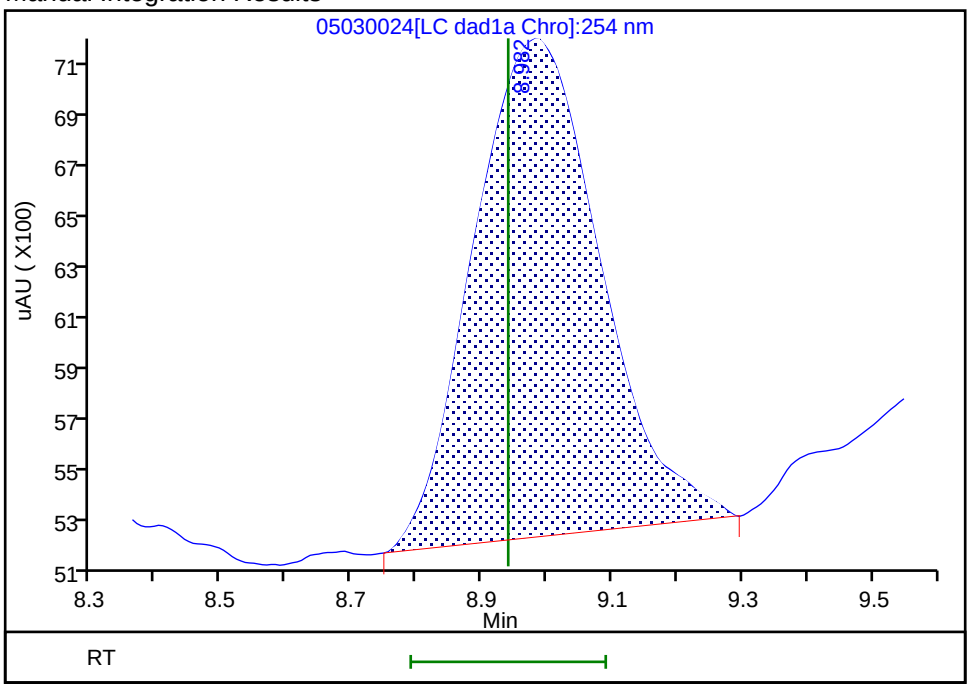
Processing Integration Results

RT: 8.98
Area: 28736
Amount: 0.137110
Amount Units: ug/ml



Manual Integration Results

RT: 8.98
Area: 26633
Amount: 0.126884
Amount Units: ug/ml



Reviewer: LV5D, 07-May-2024 16:08:18 -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.: 280-190799-1

SDG No.:

Client Sample ID: LL1mw-084-240402-GW | Lab Sample ID: 280-190799-4

Matrix: Water | Lab File ID: 05040025.D

Analysis Method: 8330B | Date Collected: 04/29/2024 10:05

Extraction Method: 3535 | Date Extracted: 05/02/2024 12:39

Sample wt/vol: 465.9(mL) | Date Analyzed: 05/04/2024 23:29

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.: 652145 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-65-0	1,3-Dinitrobenzene	0.99	M Q J1	0.12	0.11	0.040
118-96-7	2,4,6-Trinitrotoluene	2.0	M Q	0.12	0.11	0.048
121-14-2	2,4-Dinitrotoluene	0.90	M Q	0.11	0.086	0.029
606-20-2	2,6-Dinitrotoluene	0.086	U Q	0.11	0.086	0.043
35572-78-2	2-Amino-4,6-dinitrotoluene	6.3	M Q	0.12	0.11	0.054
88-72-2	2-Nitrotoluene	0.21	U Q	0.23	0.21	0.092
99-08-1	3-Nitrotoluene	0.38	U Q	0.43	0.38	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	17	M Q	0.16	0.13	0.062
2691-41-0	HMX	0.72	M Q J1	0.23	0.21	0.094
98-95-3	Nitrobenzene	0.21	U M Q	0.23	0.21	0.098
55-63-0	Nitroglycerin	2.1	U Q	2.3	2.1	0.99
78-11-5	PETN	1.1	U Q	1.2	1.1	0.48
121-82-4	RDX	1.1	Q	0.23	0.21	0.055
479-45-8	Tetryl	0.11	U M Q	0.12	0.11	0.034

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	138	Q	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\05040025.D
Lims ID: 280-190799-A-4-A
Client ID: LL1mw-084-240402-GW
Sample Type: Client
Inject. Date: 04-May-2024 23:29:38 ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-190799-A-4-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 07-May-2024 15:03:04 Calib Date: 18-Apr-2024 03:08:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\04170028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1679

First Level Reviewer: LV5D Date: 07-May-2024 13:48:13

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4	HMX	1	6.601	6.610	-0.009	6445	0.0675	M
8	RDX	1	7.627	7.630	-0.003	11695	0.1056	
$ 10	1,2-Dinitrobenzene	1	8.567	8.576	-0.009	36323	0.2752	
11	1,3,5-Trinitrobenzene	1	8.694	8.710	-0.016	21381	0.0959	M
12	1,3-Dinitrobenzene	1	9.280	9.323	-0.043	27582	0.0921	M
13	Nitrobenzene	1		9.683			ND	U
15	Tetryl	1		10.003			ND	U
16	Nitroglycerin	2		10.470			ND	
17	2,4,6-Trinitrotoluene	1	10.887	10.903	-0.016	40174	0.1867	M
18	4-Amino-2,6-dinitrotoluene	1	11.067	11.083	-0.016	241703	1.61	M
19	2-Amino-4,6-dinitrotoluene	1	11.320	11.336	-0.016	118129	0.5912	M
20	2,6-Dinitrotoluene	1		11.483			ND	
21	2,4-Dinitrotoluene	1	11.640	11.656	-0.016	24360	0.0835	M
22	o-Nitrotoluene	1		12.436			ND	7
23	p-Nitrotoluene	1	12.834	12.856	-0.022	17345	0.1538	M
24	m-Nitrotoluene	1		13.403			ND	
25	PETN	2		14.463			ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

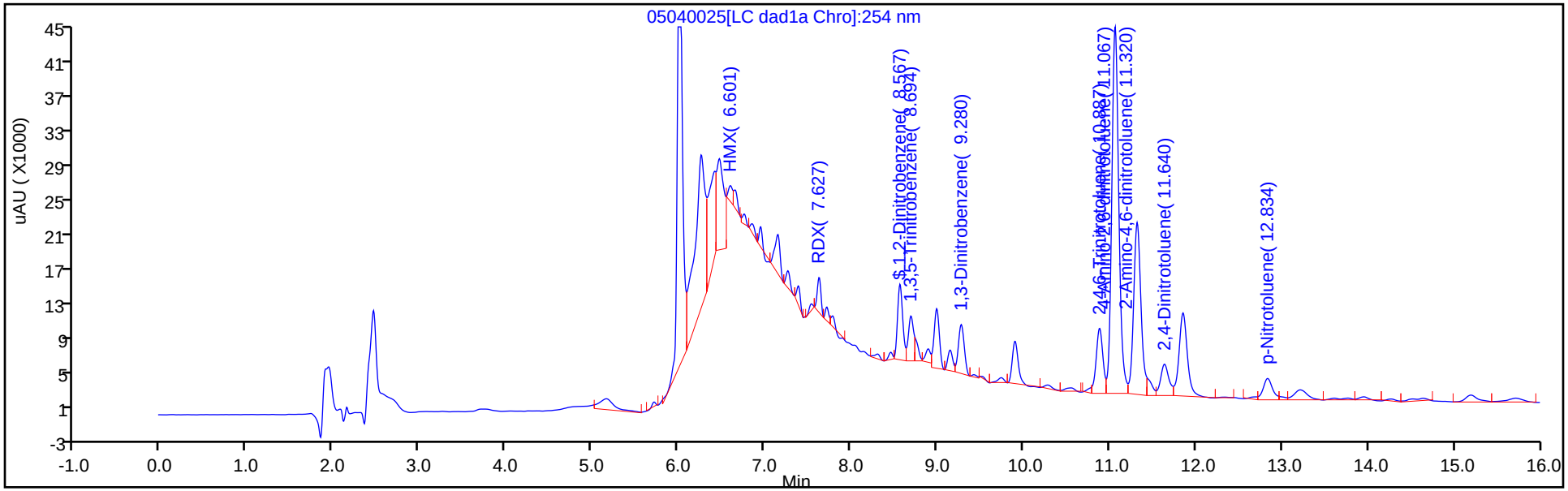
Report Date: 07-May-2024 15:03:07 Chrom Revision: 2.3 26-Apr-2024 12:18:52

Eurofins Denver

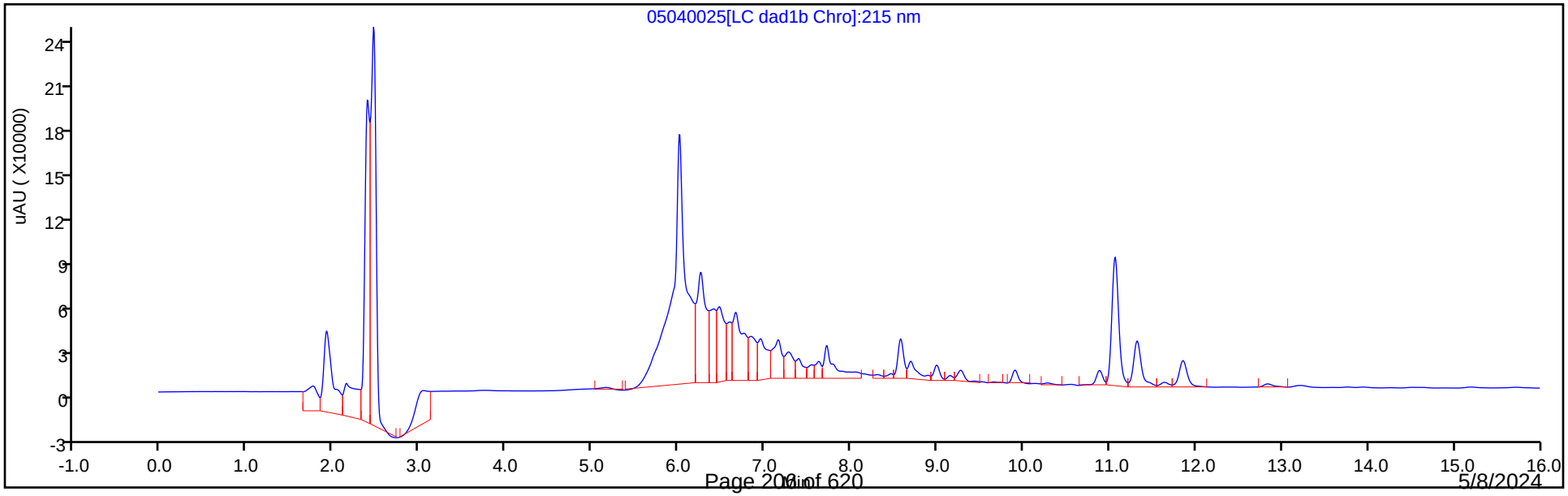
Data File: \\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040025.d

Injection Date:	04-May-2024 23:29:38	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-190799-A-4-A	Lab Sample ID:	280-190799-4	Worklist Smp#:	25
Client ID:	LL1mw-084-240402-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



5/8/2024
6:07:23 AM

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\05040025.D				
Lims ID:	280-190799-A-4-A				
Client ID:	LL1mw-084-240402-GW				
Sample Type:	Client				
Inject. Date:	04-May-2024 23:29:38	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-190799-A-4-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	07-May-2024 15:03:04	Calib Date:	18-Apr-2024 03:08:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\04170028.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1679				

First Level Reviewer: LV5D Date: 07-May-2024 13:48:13

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2752	137.62

Manual Integration/User Assign Peak Report

Eurofins Denver

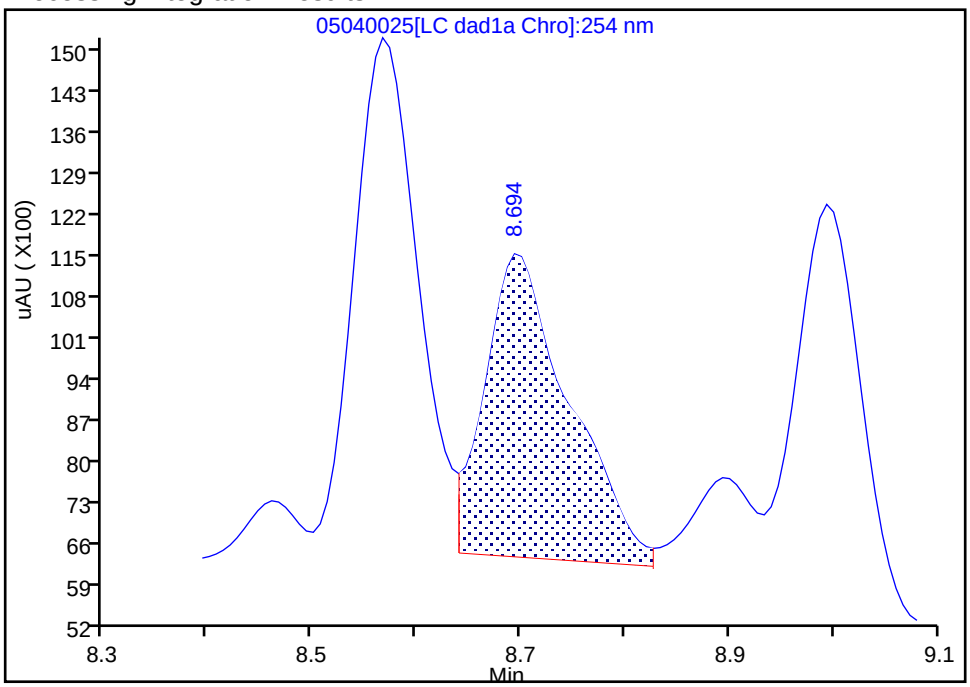
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040025.d				
Injection Date:	04-May-2024 23:29:38	Instrument ID:	CHHPLC_X3		
Lims ID:	280-190799-A-4-A	Lab Sample ID:	280-190799-4		
Client ID:	LL1mw-084-240402-GW				
Operator ID:	JZ/JG	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	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

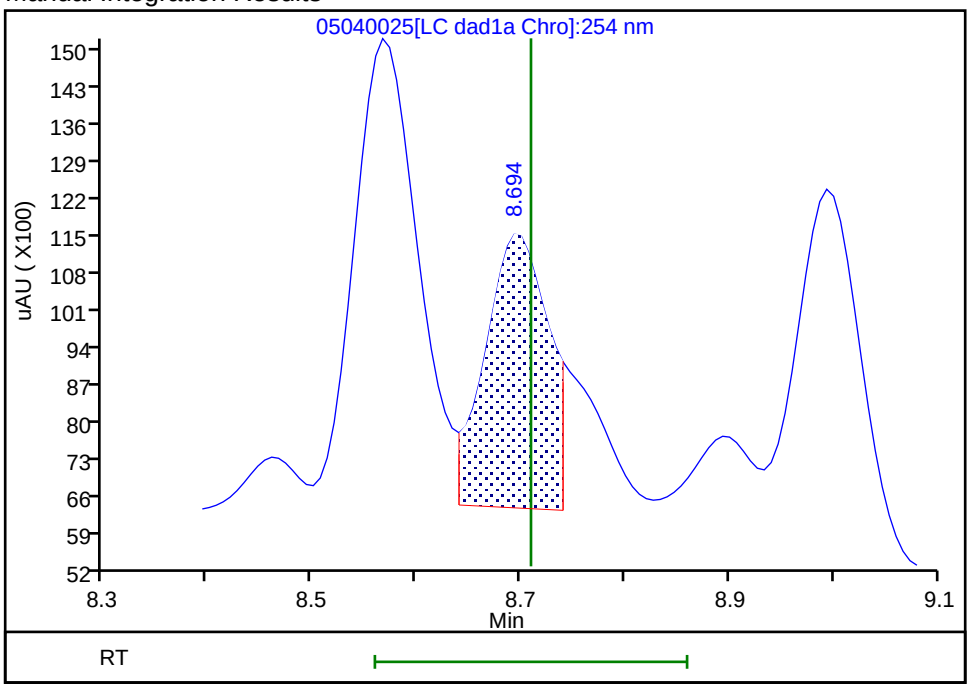
Processing Integration Results

RT: 8.69
Area: 28832
Amount: 0.129377
Amount Units: ug/mL



Manual Integration Results

RT: 8.69
Area: 21381
Amount: 0.095942
Amount Units: ug/mL



Reviewer: LV5D, 07-May-2024 13:47:40 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

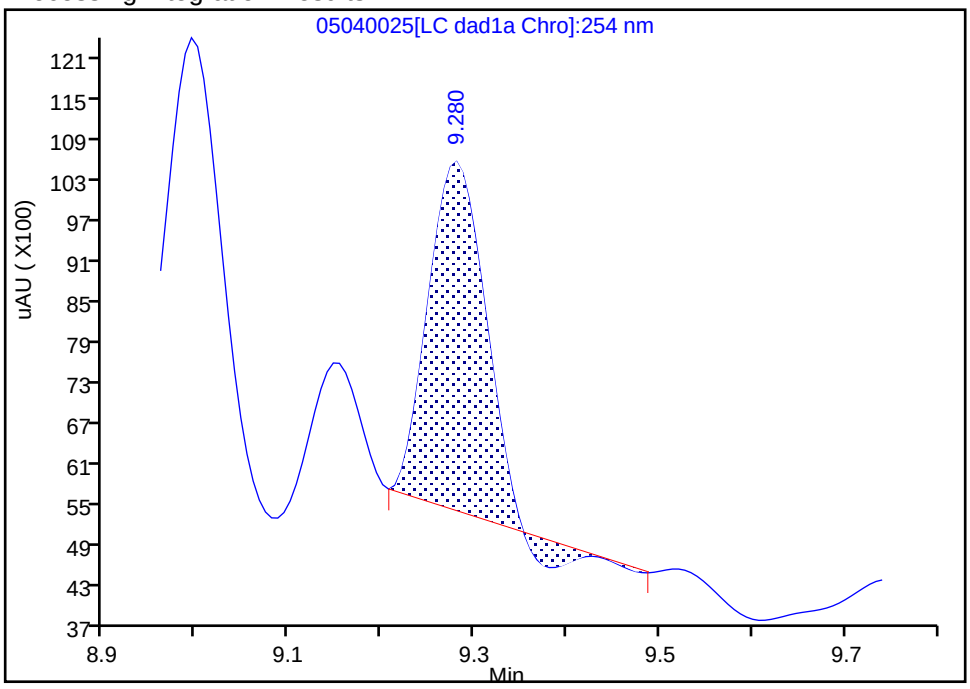
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040025.d				
Injection Date:	04-May-2024 23:29:38	Instrument ID:	CHHPLC_X3		
Lims ID:	280-190799-A-4-A	Lab Sample ID:	280-190799-4		
Client ID:	LL1mw-084-240402-GW				
Operator ID:	JZ/JG	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

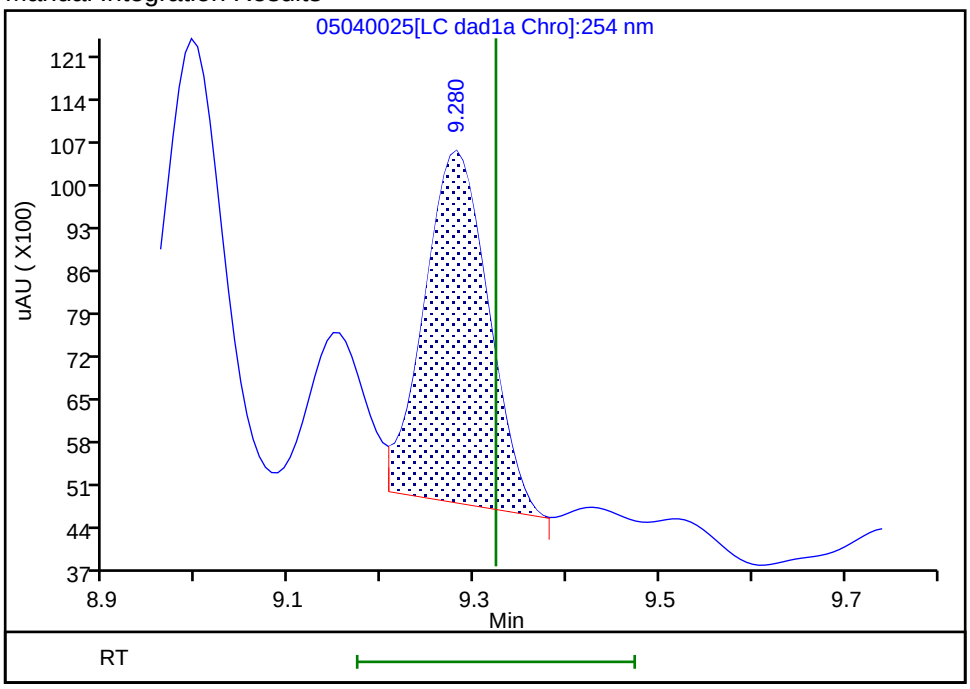
Processing Integration Results

RT: 9.28
Area: 23853
Amount: 0.079660
Amount Units: ug/mL



Manual Integration Results

RT: 9.28
Area: 27582
Amount: 0.092113
Amount Units: ug/mL



Reviewer: LV5D, 07-May-2024 13:47:54 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

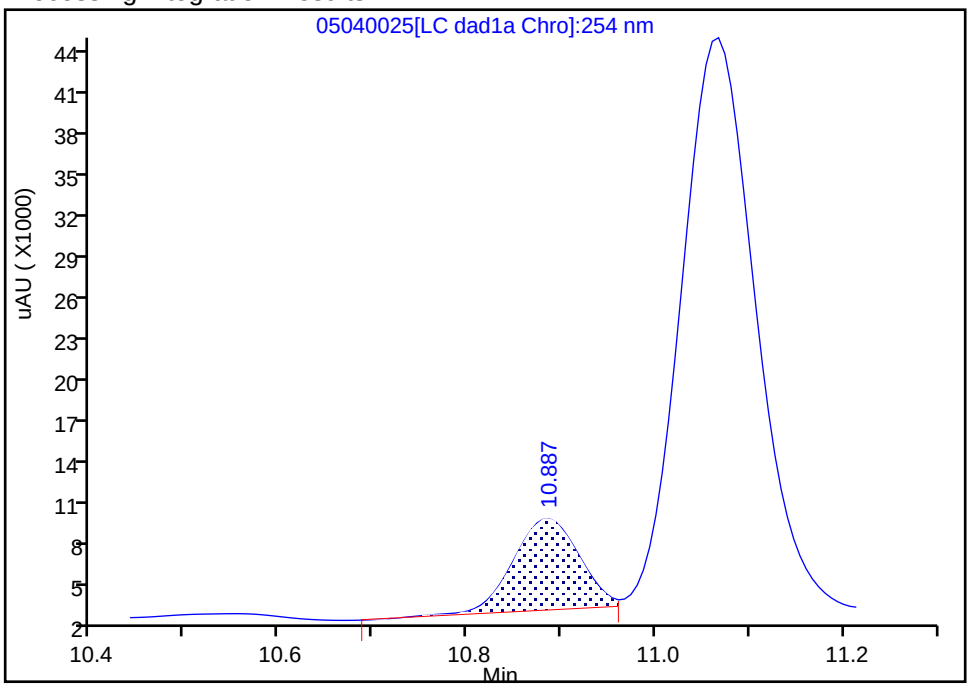
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040025.d				
Injection Date:	04-May-2024 23:29:38	Instrument ID:	CHHPLC_X3		
Lims ID:	280-190799-A-4-A	Lab Sample ID:	280-190799-4		
Client ID:	LL1mw-084-240402-GW				
Operator ID:	JZ/JG	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

17 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

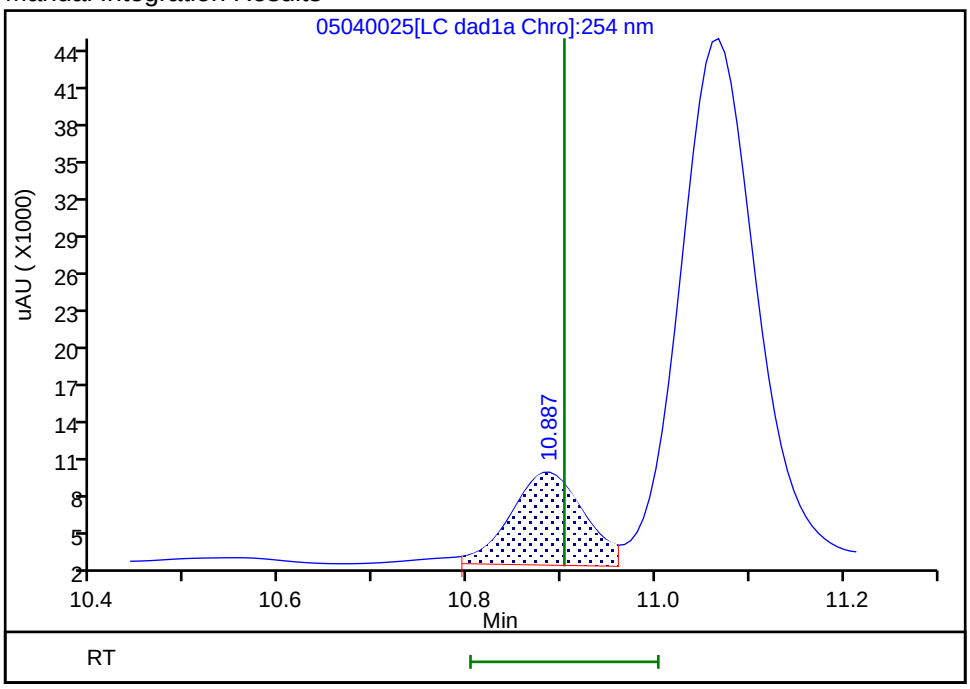
Processing Integration Results

RT: 10.89
Area: 32402
Amount: 0.150572
Amount Units: ug/mL



Manual Integration Results

RT: 10.89
Area: 40174
Amount: 0.186689
Amount Units: ug/mL



Reviewer: LV5D, 07-May-2024 13:48:11 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

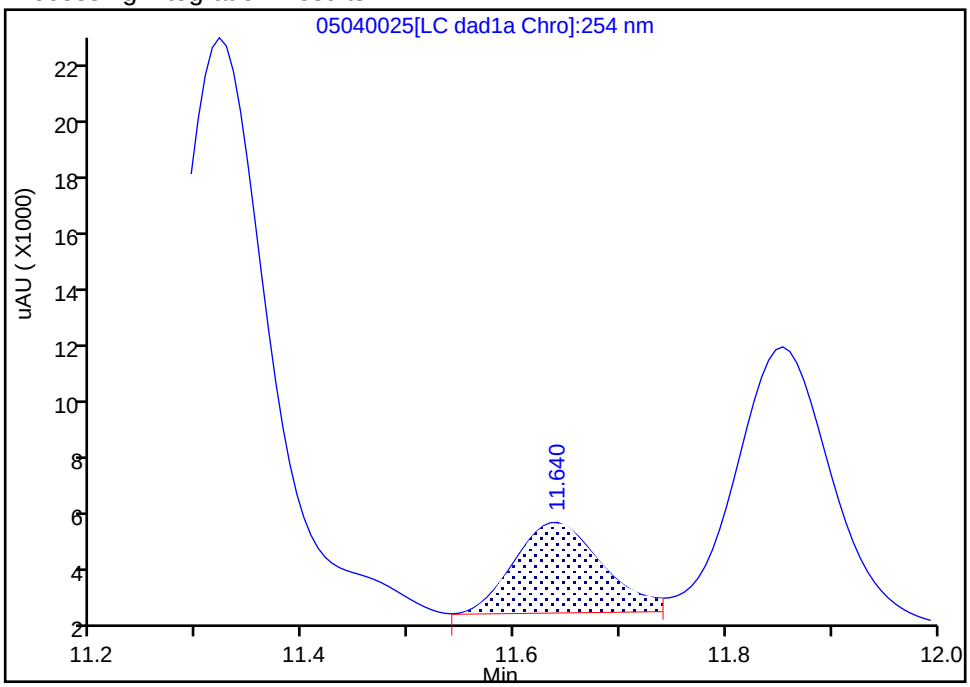
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040025.d				
Injection Date:	04-May-2024 23:29:38	Instrument ID:	CHHPLC_X3		
Lims ID:	280-190799-A-4-A	Lab Sample ID:	280-190799-4		
Client ID:	LL1mw-084-240402-GW				
Operator ID:	JZ/JG	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	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		

21 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

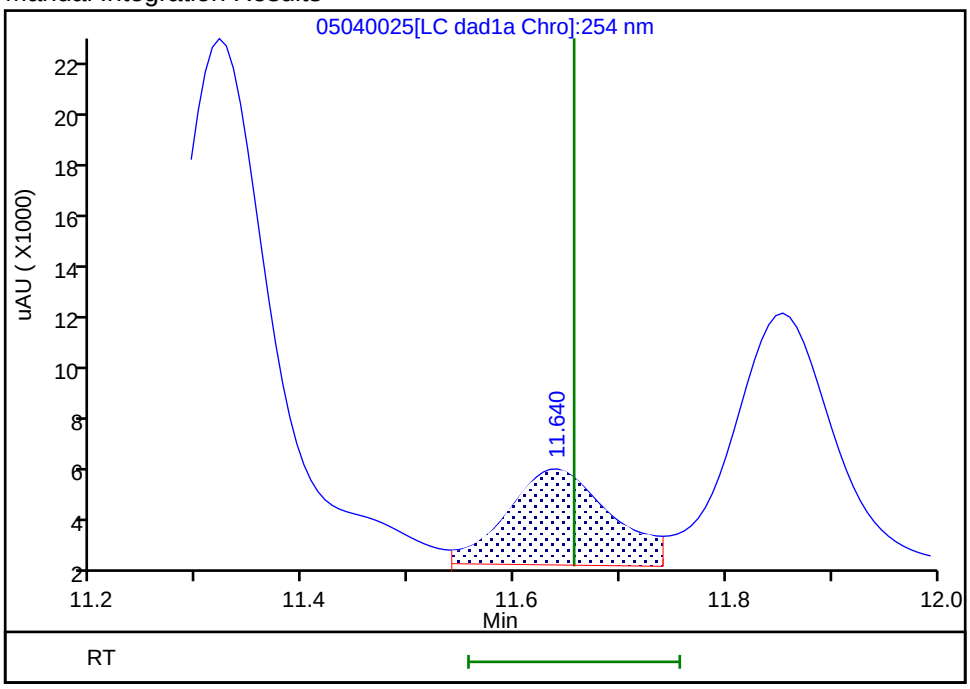
Processing Integration Results

RT: 11.64
Area: 17790
Amount: 0.060957
Amount Units: ug/mL



Manual Integration Results

RT: 11.64
Area: 24360
Amount: 0.083469
Amount Units: ug/mL



Reviewer: LV5D, 07-May-2024 13:38:53 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

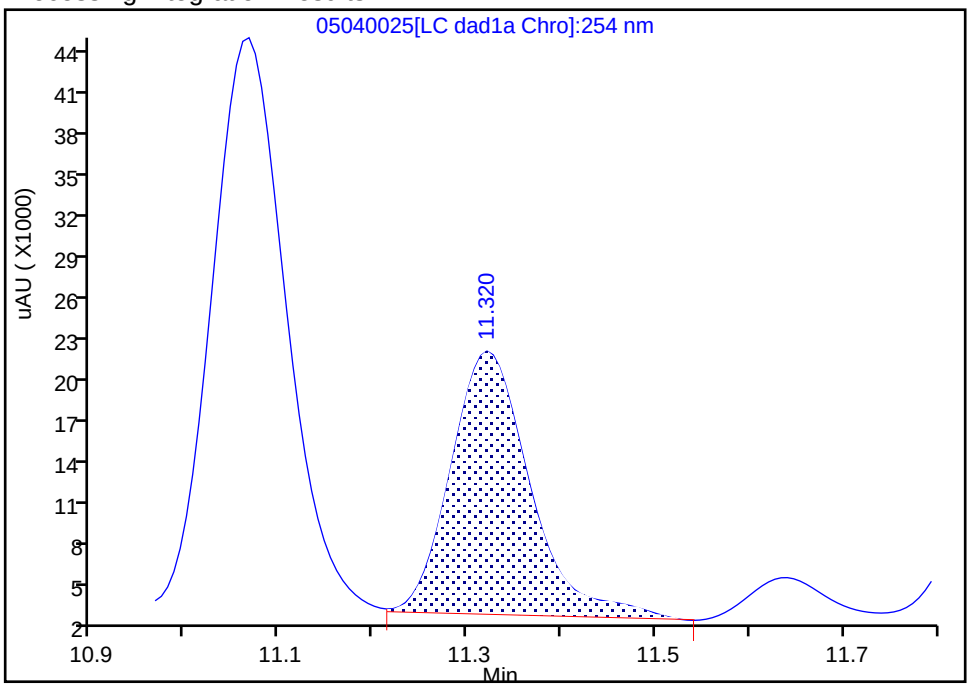
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040025.d				
Injection Date:	04-May-2024 23:29:38	Instrument ID:	CHHPLC_X3		
Lims ID:	280-190799-A-4-A	Lab Sample ID:	280-190799-4		
Client ID:	LL1mw-084-240402-GW				
Operator ID:	JZ/JG	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	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		

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

Signal: 1

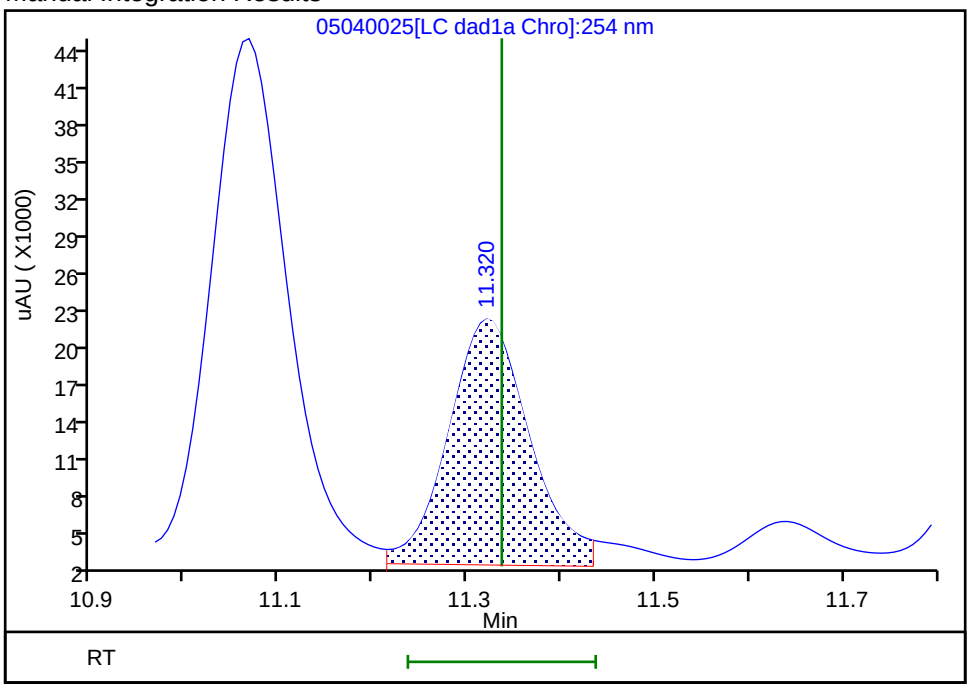
Processing Integration Results

RT: 11.32
Area: 111463
Amount: 0.557848
Amount Units: ug/mL



Manual Integration Results

RT: 11.32
Area: 118129
Amount: 0.591209
Amount Units: ug/mL



Reviewer: LV5D, 07-May-2024 13:48:12 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

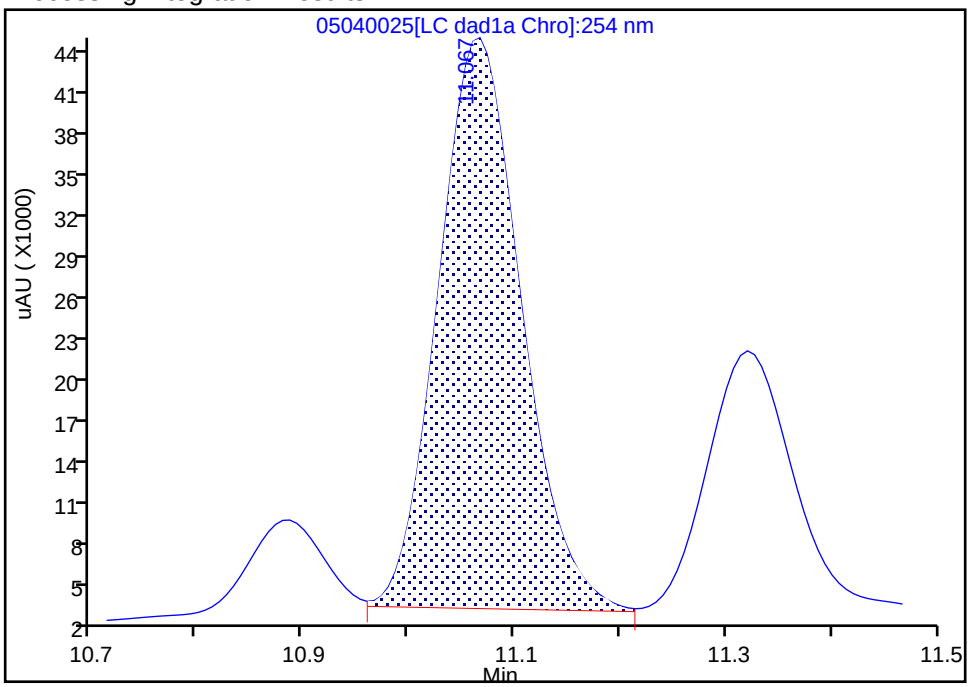
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040025.d				
Injection Date:	04-May-2024 23:29:38	Instrument ID:	CHHPLC_X3		
Lims ID:	280-190799-A-4-A	Lab Sample ID:	280-190799-4		
Client ID:	LL1mw-084-240402-GW				
Operator ID:	JZ/JG	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	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		

18 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

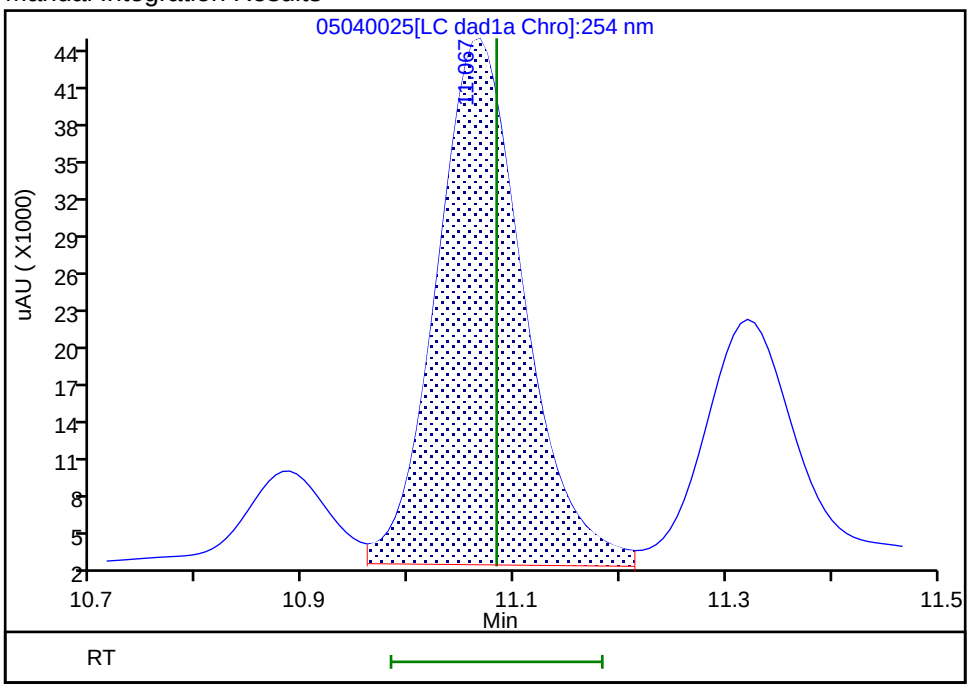
Processing Integration Results

RT: 11.07
Area: 225218
Amount: 1.501976
Amount Units: ug/mL



Manual Integration Results

RT: 11.07
Area: 241703
Amount: 1.611914
Amount Units: ug/mL



Reviewer: LV5D, 07-May-2024 13:38:53 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

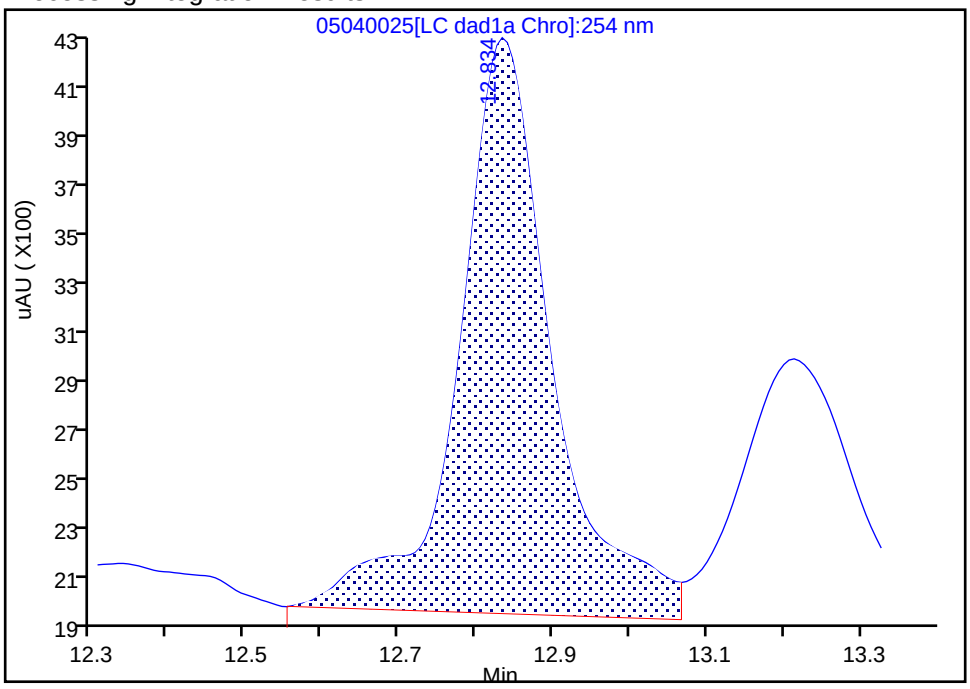
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040025.d				
Injection Date:	04-May-2024 23:29:38	Instrument ID:	CHHPLC_X3		
Lims ID:	280-190799-A-4-A	Lab Sample ID:	280-190799-4		
Client ID:	LL1mw-084-240402-GW				
Operator ID:	JZ/JG	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	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		

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

Signal: 1

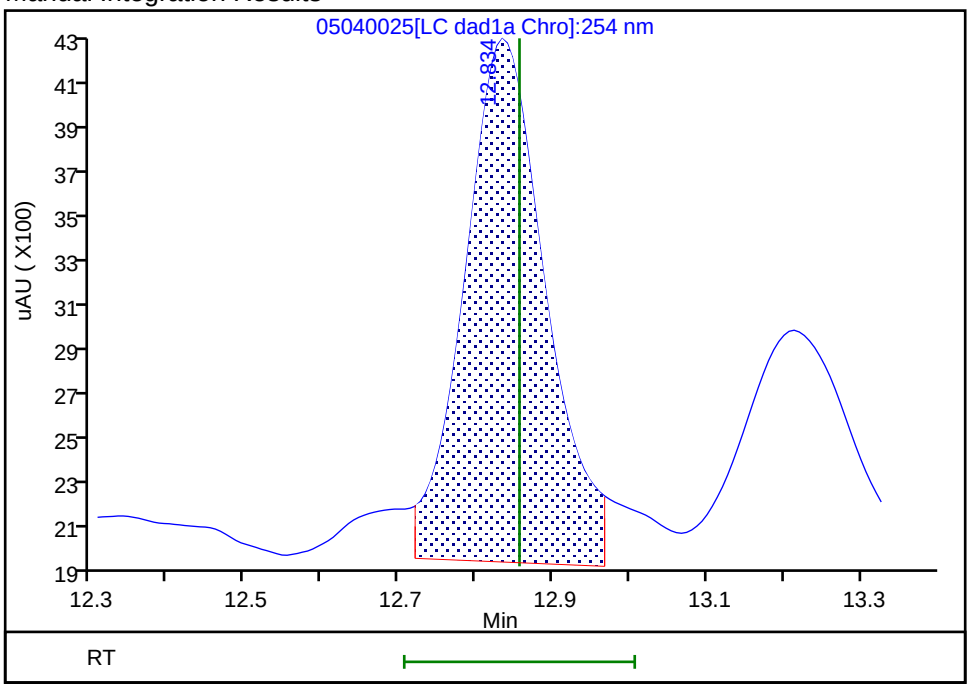
Processing Integration Results

RT: 12.83
Area: 20069
Amount: 0.177918
Amount Units: ug/mL



Manual Integration Results

RT: 12.83
Area: 17345
Amount: 0.153769
Amount Units: ug/mL



Reviewer: LV5D, 07-May-2024 13:48:07 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

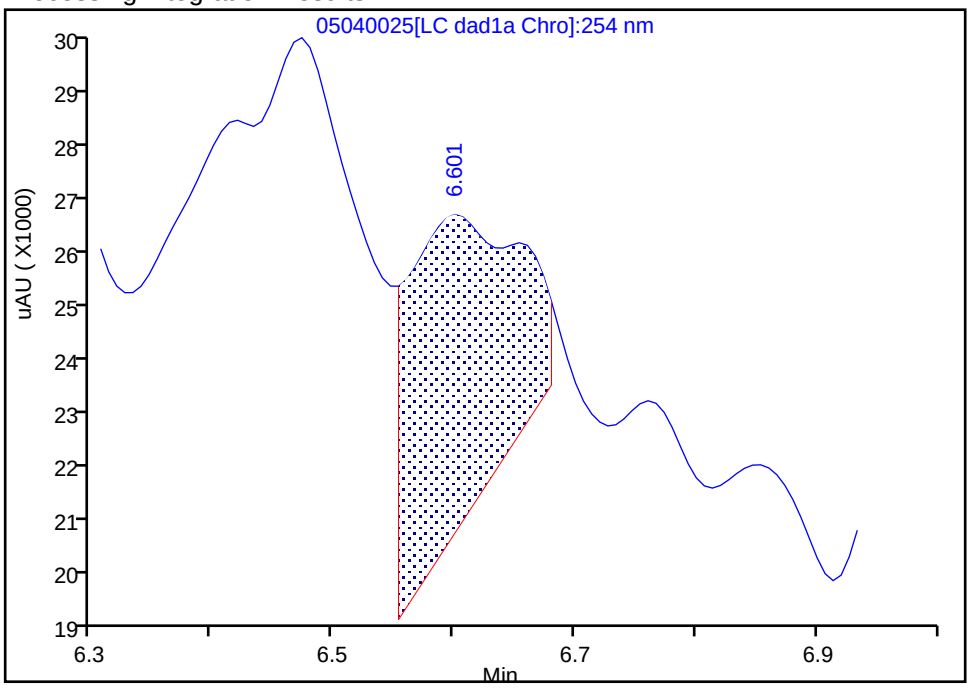
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040025.d				
Injection Date:	04-May-2024 23:29:38	Instrument ID:	CHHPLC_X3		
Lims ID:	280-190799-A-4-A	Lab Sample ID:	280-190799-4		
Client ID:	LL1mw-084-240402-GW				
Operator ID:	JZ/JG	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	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

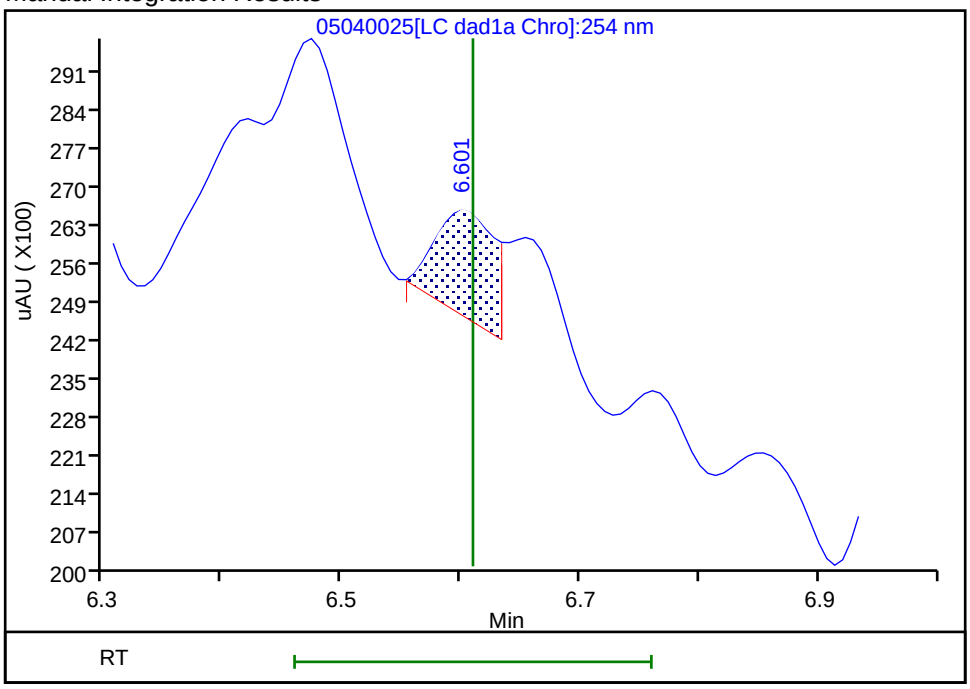
Processing Integration Results

RT: 6.60
Area: 34225
Amount: 0.358213
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 6445
Amount: 0.067456
Amount Units: ug/mL



Reviewer: LV5D, 07-May-2024 13:47:29 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

User Disabled Compound Report

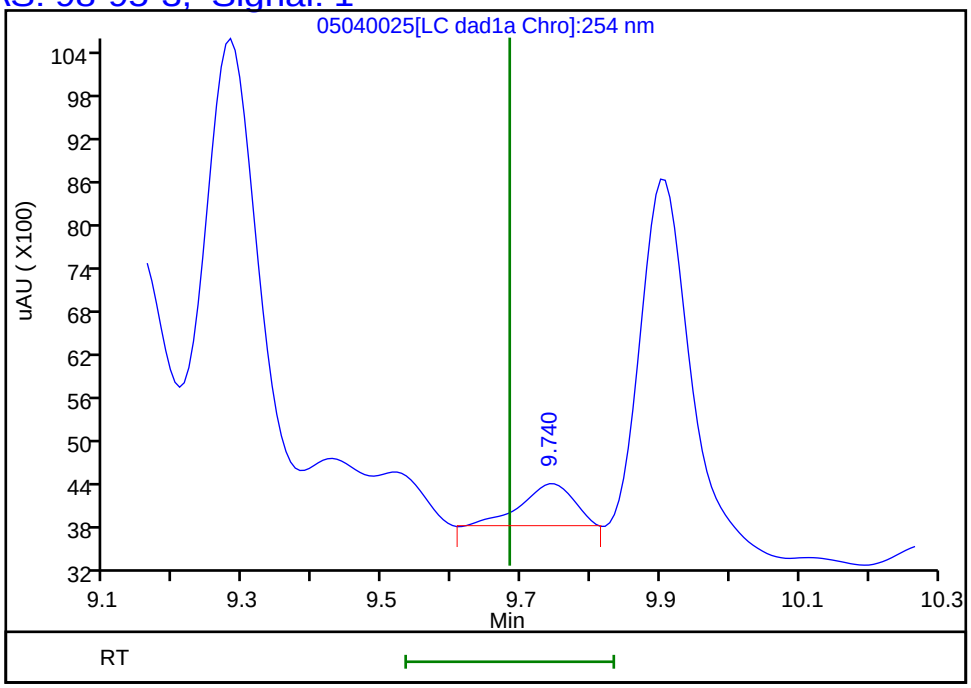
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040025.d
Injection Date: 04-May-2024 23:29:38 Instrument ID: CHHPLC_X3
Lims ID: 280-190799-A-4-A Lab Sample ID: 280-190799-4
Client ID: LL1mw-084-240402-GW
Operator ID: JZ/JG 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

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

RT: 9.74
Response: 3187
Amount: 0.016233



Reviewer: LV5D, 07-May-2024 13:48:13
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

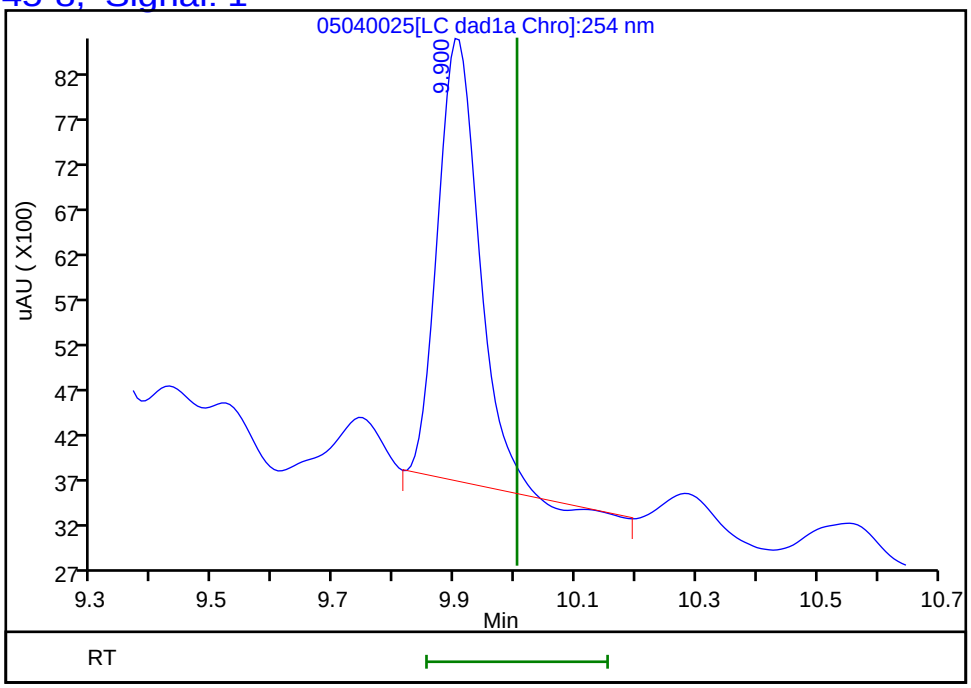
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040025.d
Injection Date: 04-May-2024 23:29:38 Instrument ID: CHHPLC_X3
Lims ID: 280-190799-A-4-A Lab Sample ID: 280-190799-4
Client ID: LL1mw-084-240402-GW
Operator ID: JZ/JG ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

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

RT: 9.90
Response: 24450
Amount: 0.134645



Reviewer: LV5D, 07-May-2024 13:48:13
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-190799-1

SDG No.:

Client Sample ID: LL1mw-080-240401-GW | Lab Sample ID: 280-190799-5

Matrix: Water | Lab File ID: 05030025.D

Analysis Method: 8330B | Date Collected: 04/29/2024 11:30

Extraction Method: 3535 | Date Extracted: 05/02/2024 12:39

Sample wt/vol: 462.7(mL) | Date Analyzed: 05/04/2024 02:15

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.: 652057 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.22	U	0.23	0.22	0.091
99-65-0	1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.040
99-99-0	4-Nitrotoluene	0.43	U	0.44	0.43	0.11

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\G2_LUNA\20240503-132991.b\05030025.D
Lims ID: 280-190799-A-5-A
Client ID: LL1mw-080-240401-GW
Sample Type: Client
Inject. Date: 04-May-2024 02:15:23 ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-190799-A-5-A
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA

Method: \\chromfs\Denver\ChromData\G2_LUNA\20240503-132991.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 07-May-2024 16:26:43 Calib Date: 25-Apr-2024 07:39:21
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20240424-132624.b\04240027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1679

First Level Reviewer: LV5D Date: 07-May-2024 16:22:55

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
6 HMX	1	6.681	6.700	-0.019	38106	0.2189	
8 RDX	1	8.908	8.940	-0.032	252105	1.22	
9 Nitrobenzene	1		11.453			ND	7
$ 10 1,2-Dinitrobenzene	1	12.341	12.373	-0.032	48072	0.1858	
12 1,3-Dinitrobenzene	1		14.500			ND	
13 Nitroglycerin	2		14.953			ND	U
14 o-Nitrotoluene	1	15.594	15.533	0.061	2389	0.009767	M
15 p-Nitrotoluene	1		15.767			ND	
16 4-Amino-2,6-dinitrotoluene	1	16.234	16.260	-0.026	84630	0.3113	
17 m-Nitrotoluene	1		16.600			ND	
18 2-Amino-4,6-dinitrotoluene	1	17.034	17.073	-0.039	40581	0.1001	M
19 1,3,5-Trinitrobenzene	1		17.293			ND	
20 2,6-Dinitrotoluene	1		18.380			ND	
21 2,4-Dinitrotoluene	1		18.840			ND	
22 Tetryl	1		22.027			ND	
23 2,4,6-Trinitrotoluene	1	22.855	22.874	-0.019	5836	0.0146	
24 PETN	2		24.007			ND	

QC Flag Legend

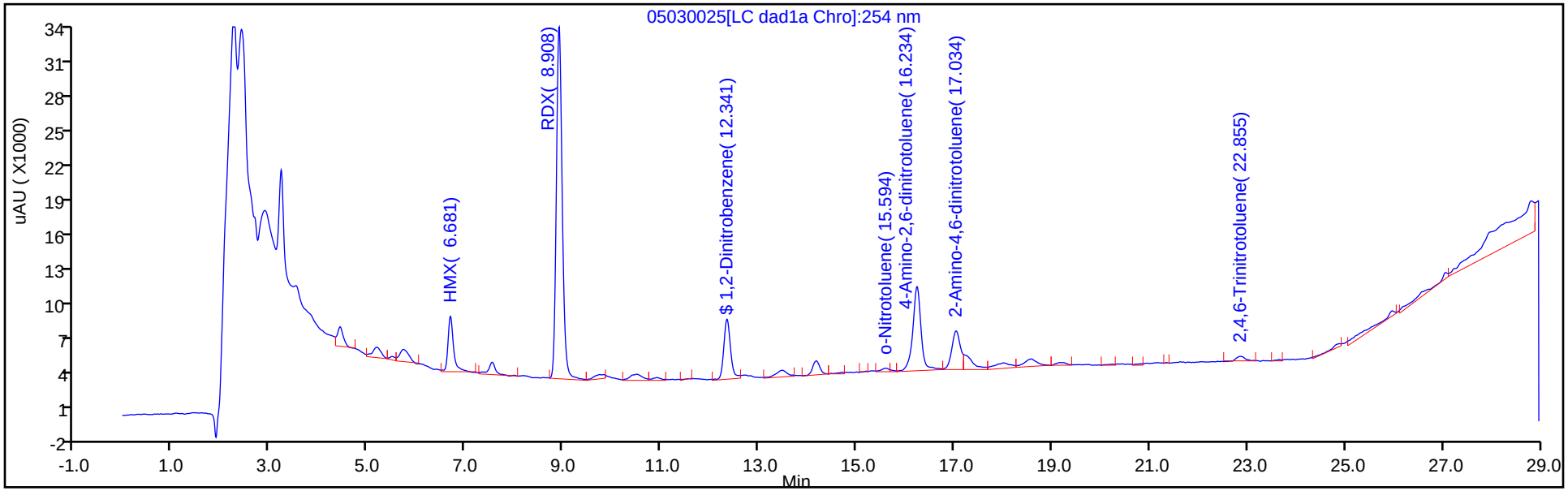
Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 07-May-2024 16:26:48 Chrom Revision: 2.3 26-Apr-2024 12:18:52

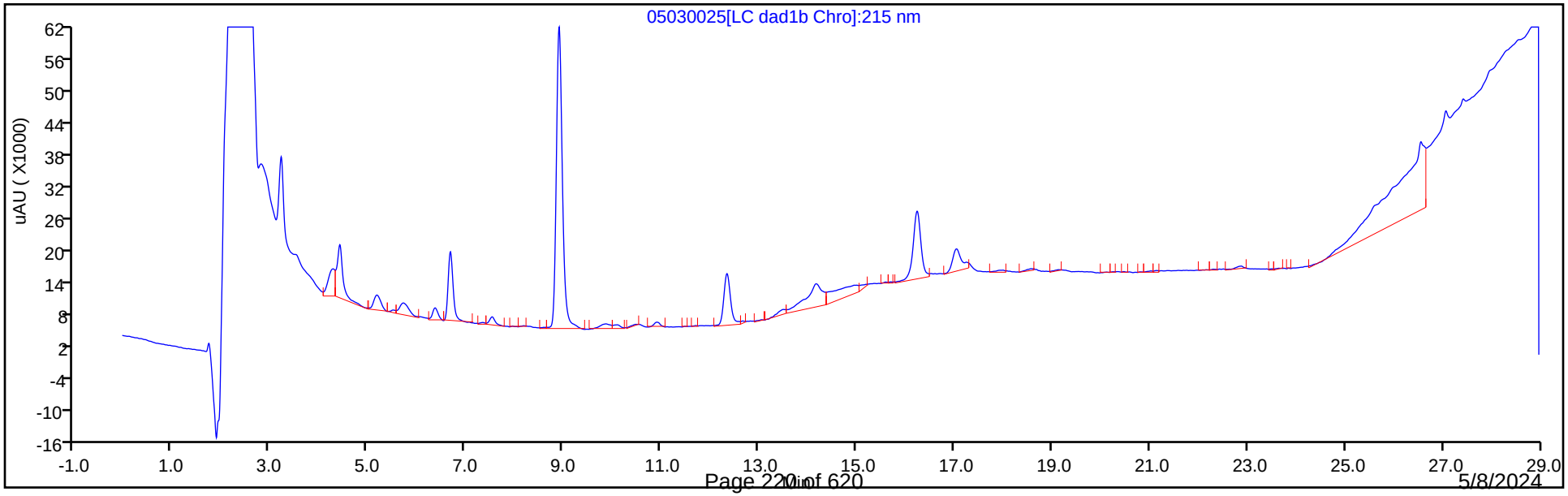
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20240503-132991.b\05030025.d				
Injection Date:	04-May-2024 02:15:23	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	280-190799-A-5-A	Lab Sample ID:	280-190799-5	Worklist Smp#:	25
Client ID:	LL1mw-080-240401-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	G2_8330_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\G2_LUNA\20240503-132991.b\05030025.D				
Lims ID:	280-190799-A-5-A				
Client ID:	LL1mw-080-240401-GW				
Sample Type:	Client				
Inject. Date:	04-May-2024 02:15:23	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-190799-A-5-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_G2_LUNA		
Method:	\\chromfs\Denver\ChromData\G2_LUNA\20240503-132991.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	07-May-2024 16:26:43	Calib Date:	25-Apr-2024 07:39:21		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\G2_LUNA\20240424-132624.b\04240027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX1679				
First Level Reviewer: LV5D		Date:	07-May-2024 16:22:55		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1858	92.91

Manual Integration/User Assign Peak Report

Eurofins Denver

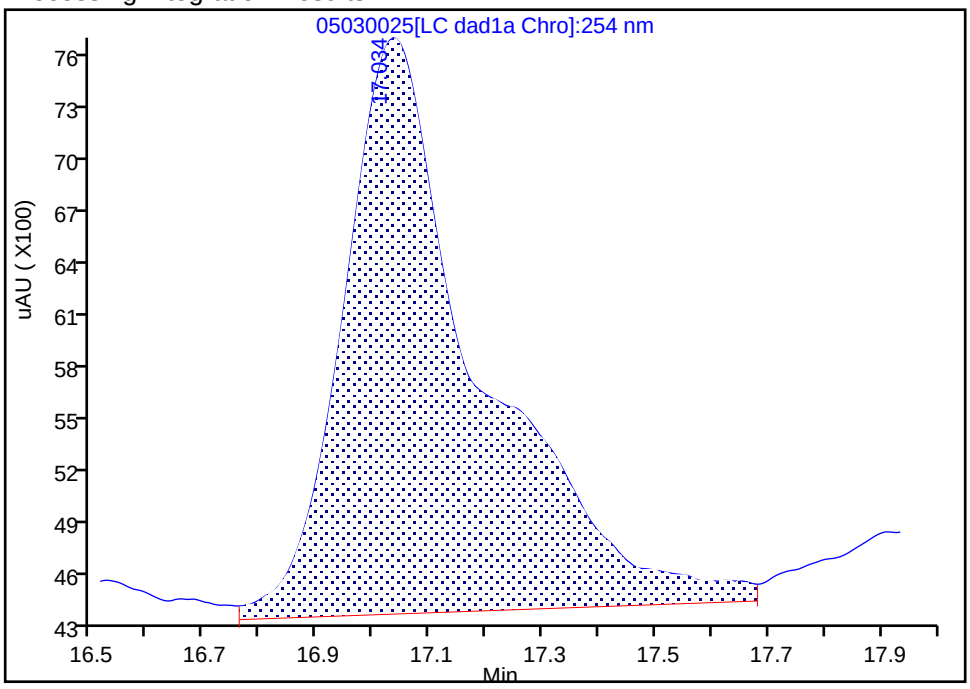
Data File:	\\chromfs\denver\chromdata\g2_luna\20240503-132991.b\05030025.d				
Injection Date:	04-May-2024 02:15:23	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-190799-A-5-A	Lab Sample ID:	280-190799-5		
Client ID:	LL1mw-080-240401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

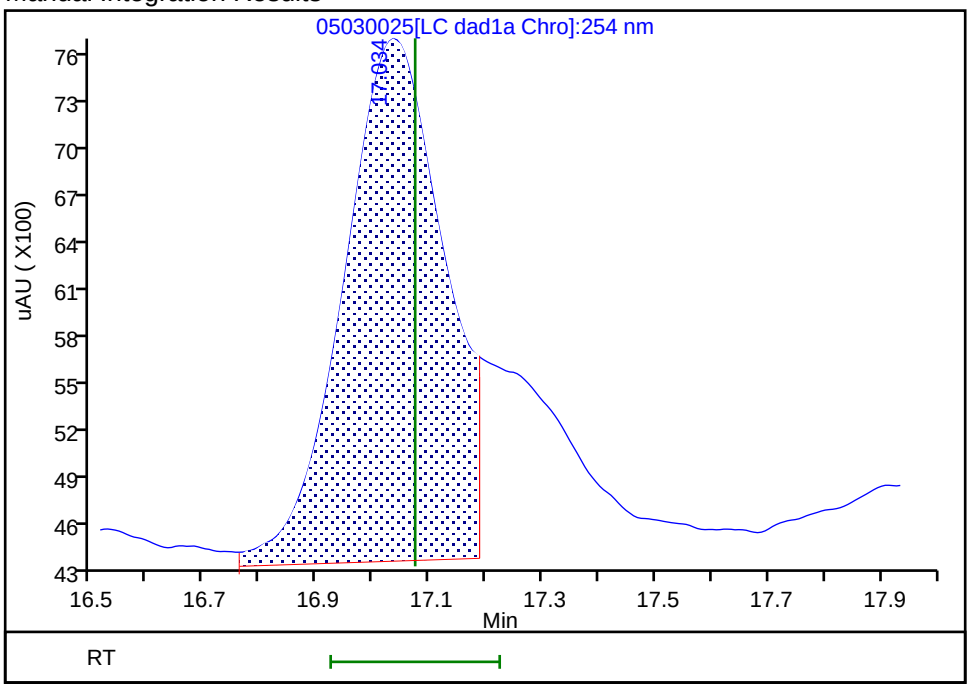
Processing Integration Results

RT: 17.03
Area: 55677
Amount: 0.137284
Amount Units: ug/ml



Manual Integration Results

RT: 17.03
Area: 40581
Amount: 0.100061
Amount Units: ug/ml



Reviewer: LV5D, 07-May-2024 16:22:51 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

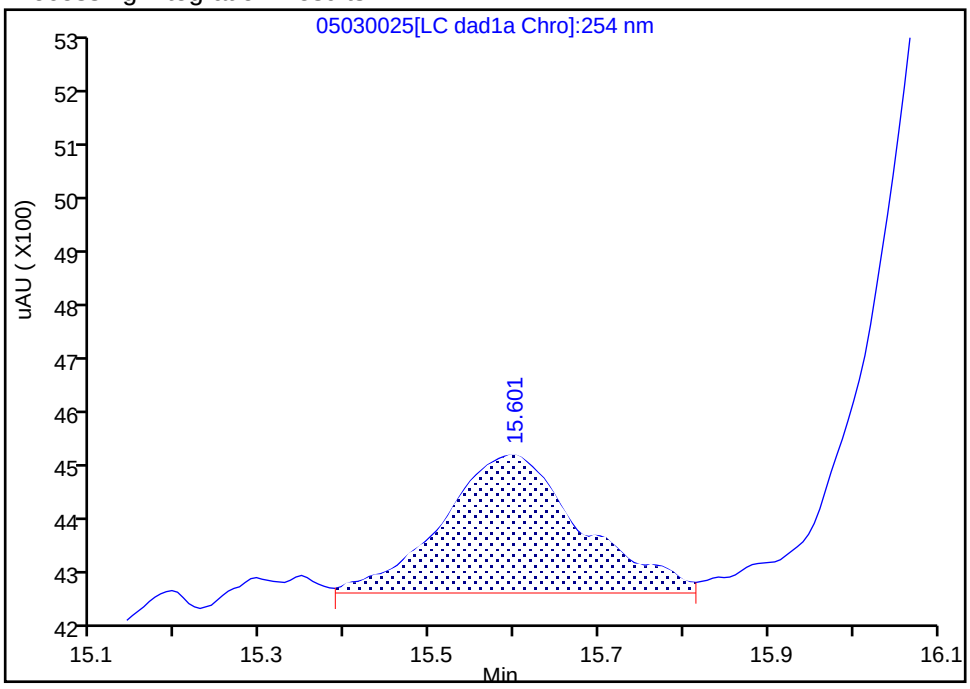
Data File:	\\chromfs\denver\chromdata\g2_luna\20240503-132991.b\05030025.d				
Injection Date:	04-May-2024 02:15:23	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-190799-A-5-A	Lab Sample ID:	280-190799-5		
Client ID:	LL1mw-080-240401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

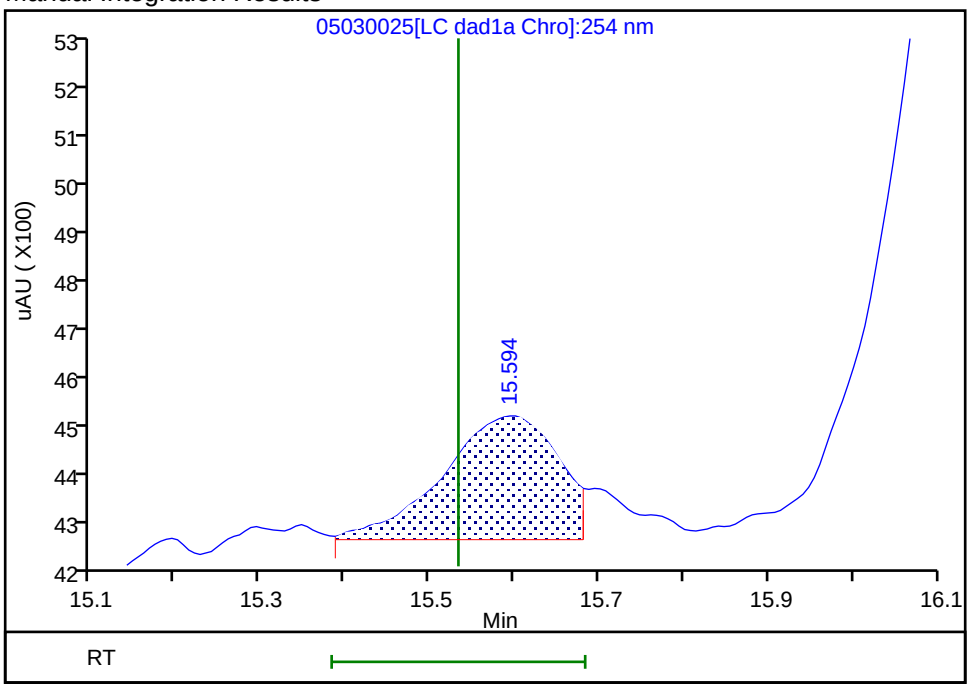
Processing Integration Results

RT: 15.60
Area: 2883
Amount: 0.011787
Amount Units: ug/ml



Manual Integration Results

RT: 15.59
Area: 2389
Amount: 0.009767
Amount Units: ug/ml



Reviewer: LV5D, 07-May-2024 16:22:45 -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.: 280-190799-1

SDG No.:

Client Sample ID: LL1mw-080-240401-GW | Lab Sample ID: 280-190799-5

Matrix: Water | Lab File ID: 05040026.D

Analysis Method: 8330B | Date Collected: 04/29/2024 11:30

Extraction Method: 3535 | Date Extracted: 05/02/2024 12:39

Sample wt/vol: 462.7(mL) | Date Analyzed: 05/04/2024 23:52

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.: 652145 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
118-96-7	2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.049
121-14-2	2,4-Dinitrotoluene	0.086	U	0.11	0.086	0.030
606-20-2	2,6-Dinitrotoluene	0.086	U	0.11	0.086	0.043
35572-78-2	2-Amino-4,6-dinitrotoluene	0.80		0.12	0.11	0.055
88-72-2	2-Nitrotoluene	0.22	U	0.23	0.22	0.092
99-08-1	3-Nitrotoluene	0.38	U Q	0.43	0.38	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	2.4		0.16	0.13	0.062
2691-41-0	HMX	2.0	M	0.23	0.22	0.095
98-95-3	Nitrobenzene	0.22	U M	0.23	0.22	0.098
55-63-0	Nitroglycerin	2.2	U	2.3	2.2	1.0
78-11-5	PETN	1.1	U	1.2	1.1	0.48
121-82-4	RDX	12	M	0.23	0.22	0.056
479-45-8	Tetryl	0.11	U M	0.12	0.11	0.034

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

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\05040026.D
Lims ID: 280-190799-A-5-A
Client ID: LL1mw-080-240401-GW
Sample Type: Client
Inject. Date: 04-May-2024 23:52:36 ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-190799-A-5-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 07-May-2024 15:03:04 Calib Date: 18-Apr-2024 03:08:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\04170028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1679

First Level Reviewer: LV5D Date: 07-May-2024 13:49:17

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4	HMX	1	6.600	6.610	-0.010	17638	0.1846	M
8	RDX	1	7.627	7.630	-0.003	127128	1.15	M
$ 10	1,2-Dinitrobenzene	1	8.560	8.576	-0.016	25549	0.1934	M
11	1,3,5-Trinitrobenzene	1	8.693	8.710	-0.017	5555	0.0249	M
12	1,3-Dinitrobenzene	1	9.286	9.323	-0.037	4985	0.0166	M
13	Nitrobenzene	1		9.683			ND	U
15	Tetryl	1		10.003			ND	U
16	Nitroglycerin	2		10.470			ND	
17	2,4,6-Trinitrotoluene	1		10.903			ND	
18	4-Amino-2,6-dinitrotoluene	1	11.066	11.083	-0.017	32904	0.2194	
19	2-Amino-4,6-dinitrotoluene	1	11.320	11.336	-0.016	14881	0.0745	
20	2,6-Dinitrotoluene	1		11.483			ND	
21	2,4-Dinitrotoluene	1		11.656			ND	
22	o-Nitrotoluene	1		12.436			ND	
23	p-Nitrotoluene	1	12.840	12.856	-0.016	1383	0.0123	M
24	m-Nitrotoluene	1		13.403			ND	
25	PETN	2		14.463			ND	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

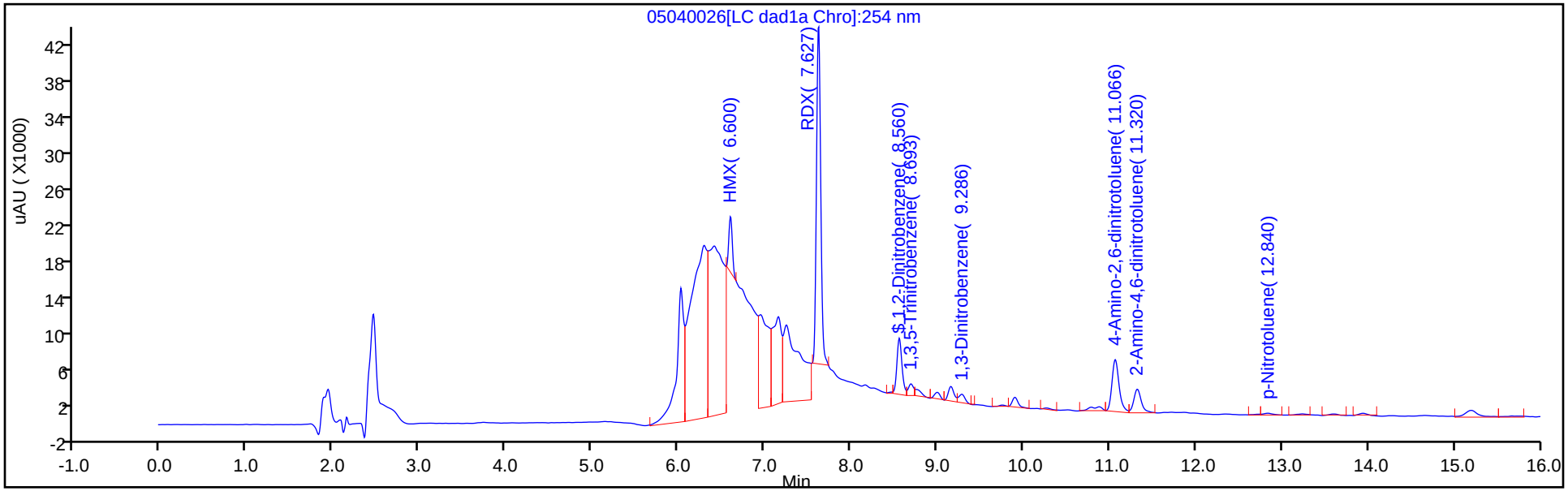
Report Date: 07-May-2024 15:03:08 Chrom Revision: 2.3 26-Apr-2024 12:18:52

Eurofins Denver

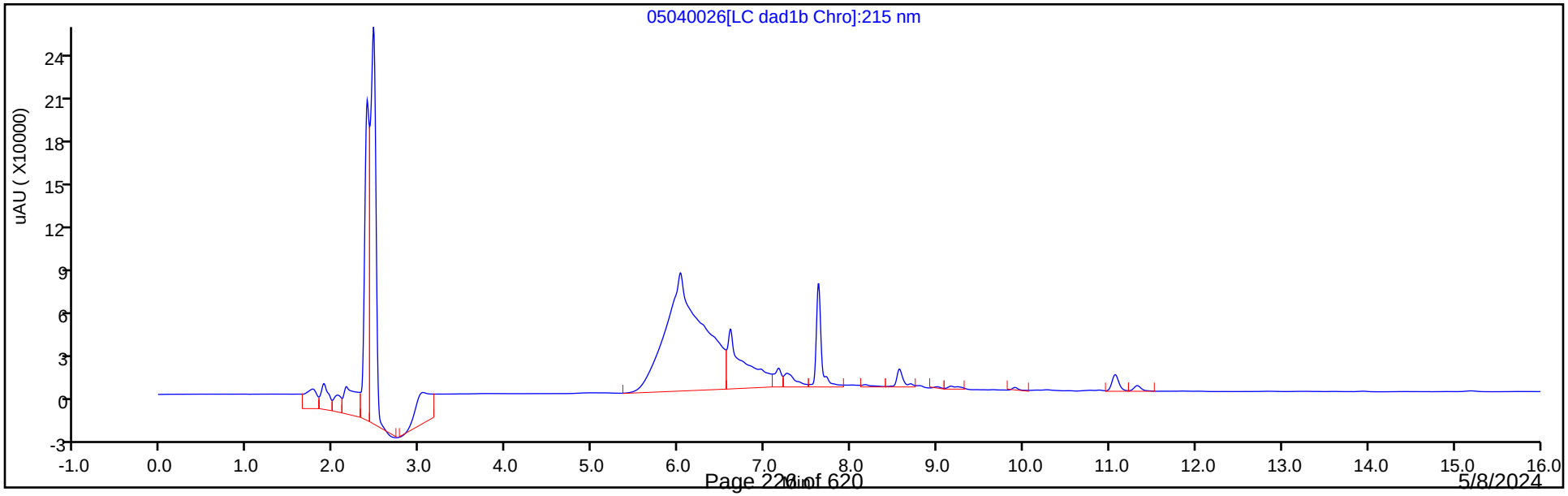
Data File: \\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040026.d

Injection Date:	04-May-2024 23:52:36	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-190799-A-5-A	Lab Sample ID:	280-190799-5	Worklist Smp#:	26
Client ID:	LL1mw-080-240401-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\20240504-133020.b\05040026.D				
Lims ID:	280-190799-A-5-A				
Client ID:	LL1mw-080-240401-GW				
Sample Type:	Client				
Inject. Date:	04-May-2024 23:52:36	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-190799-A-5-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	07-May-2024 15:03:04	Calib Date:	18-Apr-2024 03:08:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\04170028.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1679				

First Level Reviewer: LV5D Date: 07-May-2024 13:49:17

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1934	96.69

Manual Integration/User Assign Peak Report

Eurofins Denver

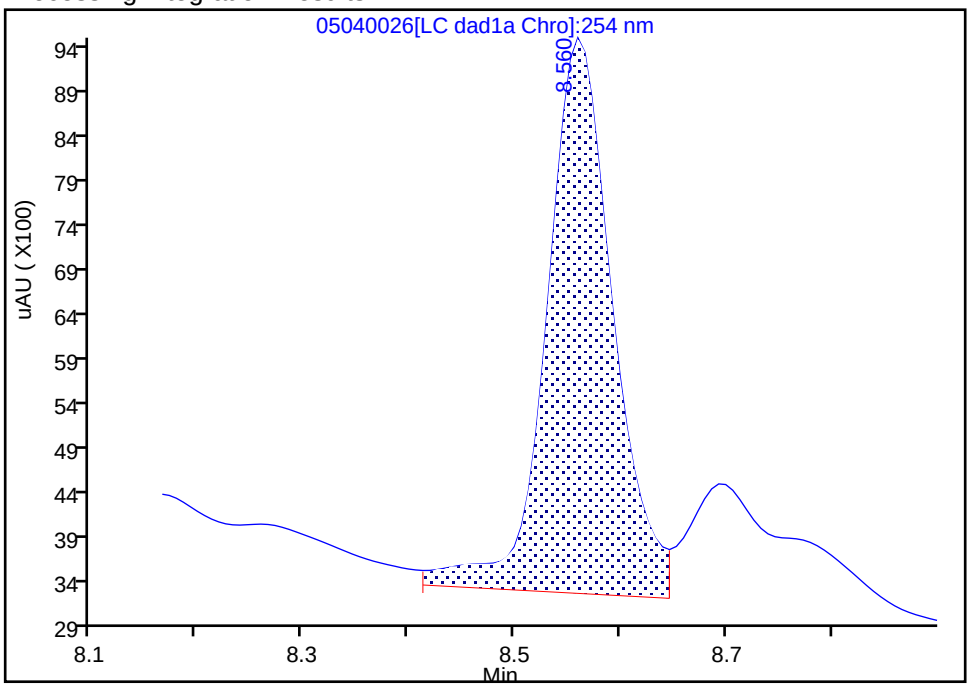
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040026.d				
Injection Date:	04-May-2024 23:52:36	Instrument ID:	CHHPLC_X3		
Lims ID:	280-190799-A-5-A	Lab Sample ID:	280-190799-5		
Client ID:	LL1mw-080-240401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

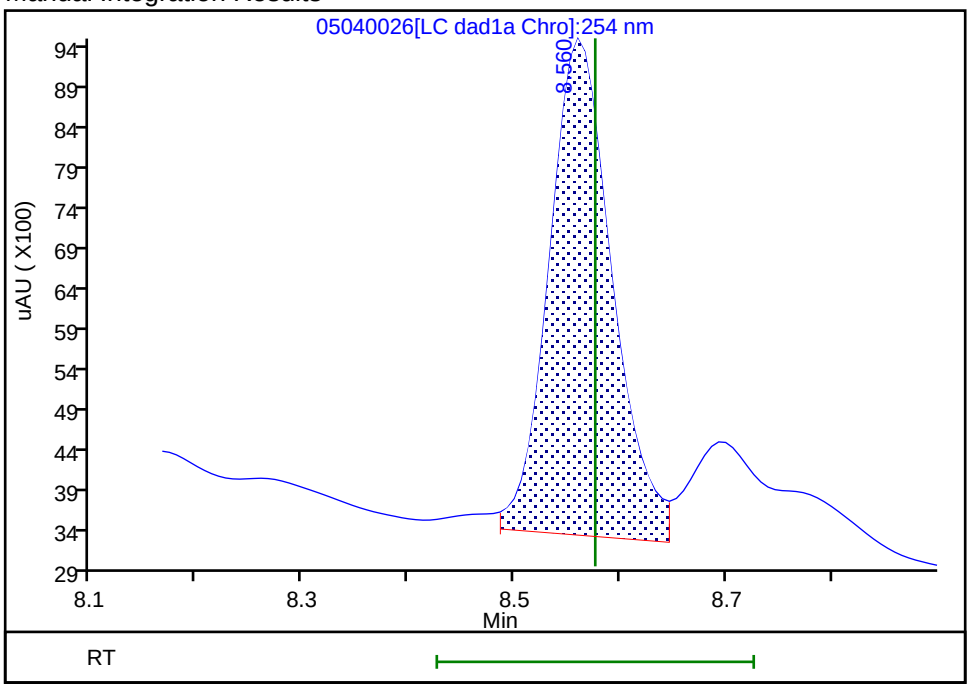
Processing Integration Results

RT: 8.56
Area: 27011
Amount: 0.204490
Amount Units: ug/mL



Manual Integration Results

RT: 8.56
Area: 25549
Amount: 0.193384
Amount Units: ug/mL



Reviewer: LV5D, 07-May-2024 13:48:47 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

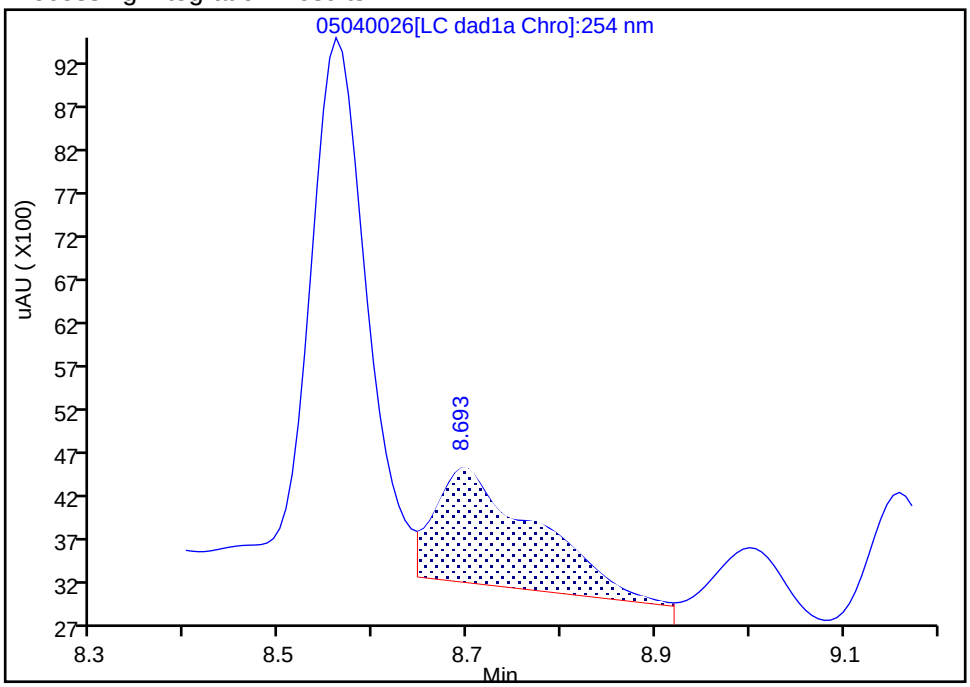
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040026.d				
Injection Date:	04-May-2024 23:52:36	Instrument ID:	CHHPLC_X3		
Lims ID:	280-190799-A-5-A	Lab Sample ID:	280-190799-5		
Client ID:	LL1mw-080-240401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	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		

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

Signal: 1

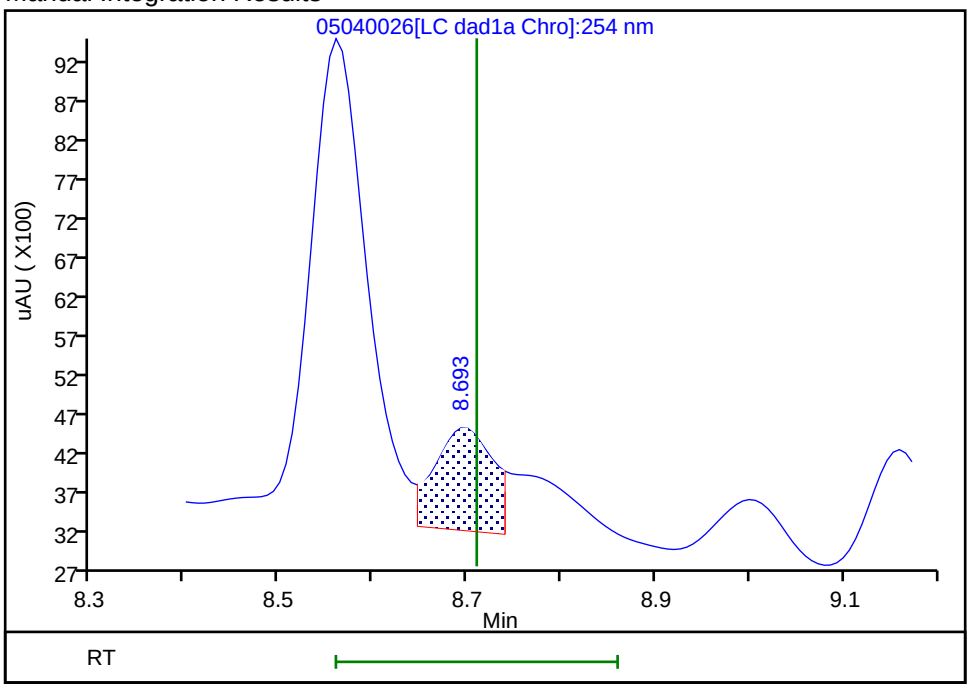
Processing Integration Results

RT: 8.69
Area: 10241
Amount: 0.045954
Amount Units: ug/mL



Manual Integration Results

RT: 8.69
Area: 5555
Amount: 0.024927
Amount Units: ug/mL



Reviewer: LV5D, 07-May-2024 13:48:49 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

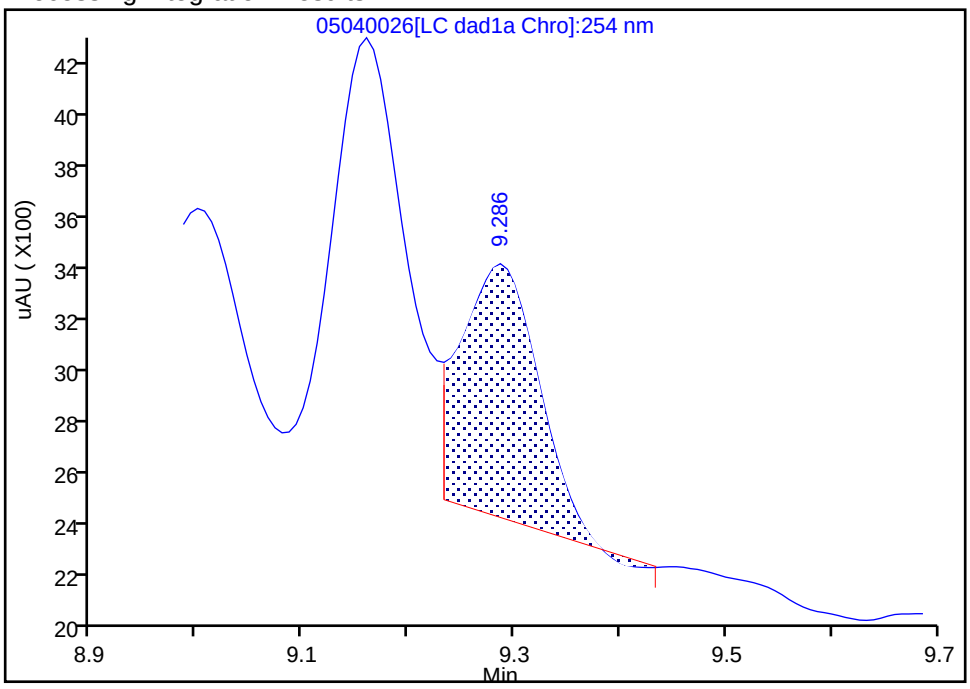
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040026.d				
Injection Date:	04-May-2024 23:52:36	Instrument ID:	CHHPLC_X3		
Lims ID:	280-190799-A-5-A	Lab Sample ID:	280-190799-5		
Client ID:	LL1mw-080-240401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

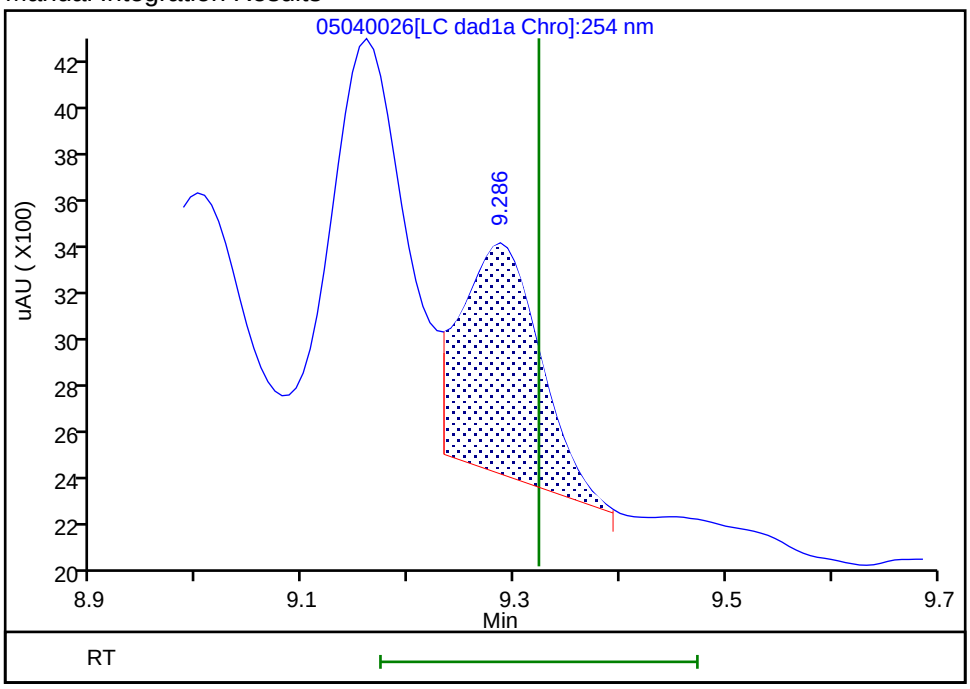
Processing Integration Results

RT: 9.29
Area: 4990
Amount: 0.016665
Amount Units: ug/mL



Manual Integration Results

RT: 9.29
Area: 4985
Amount: 0.016648
Amount Units: ug/mL



Reviewer: LV5D, 07-May-2024 13:49:02 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

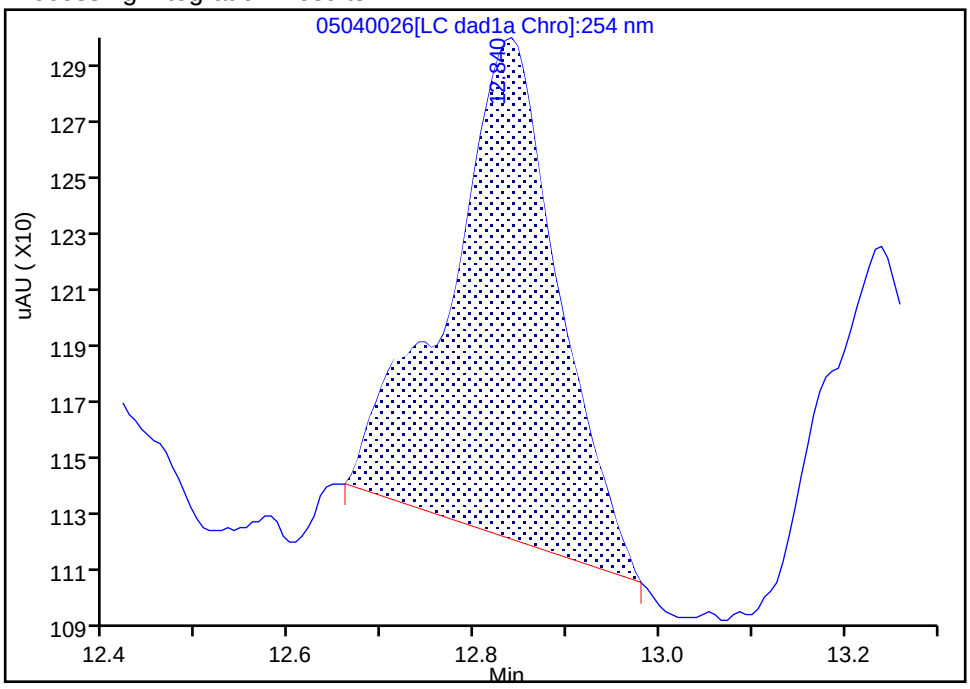
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040026.d				
Injection Date:	04-May-2024 23:52:36	Instrument ID:	CHHPLC_X3		
Lims ID:	280-190799-A-5-A	Lab Sample ID:	280-190799-5		
Client ID:	LL1mw-080-240401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	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		

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

Signal: 1

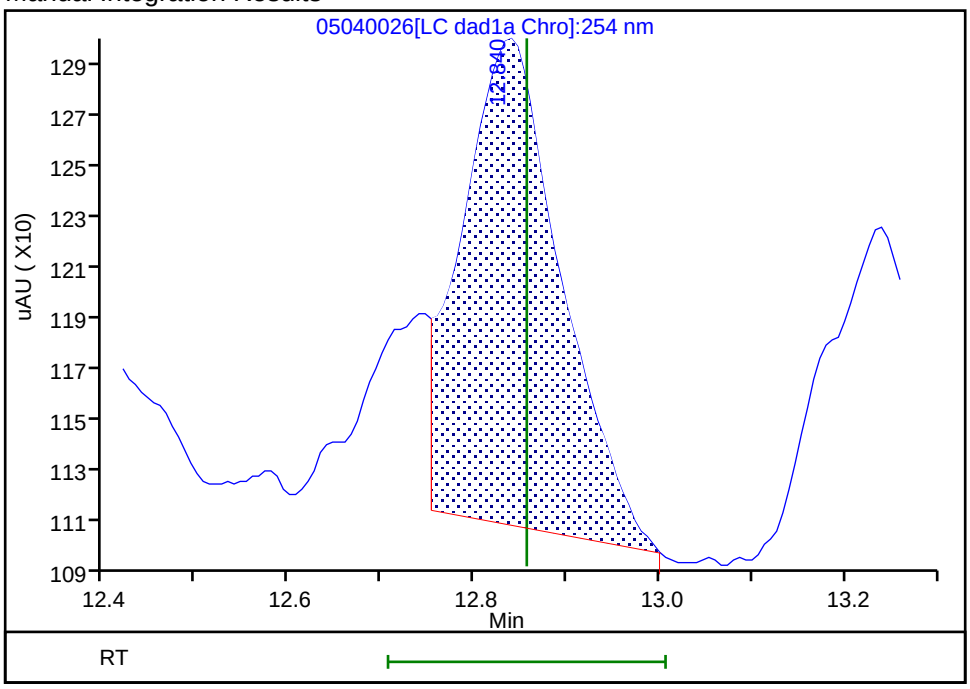
Processing Integration Results

RT: 12.84
Area: 1431
Amount: 0.012686
Amount Units: ug/mL



Manual Integration Results

RT: 12.84
Area: 1383
Amount: 0.012261
Amount Units: ug/mL



Reviewer: LV5D, 07-May-2024 13:49:16 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

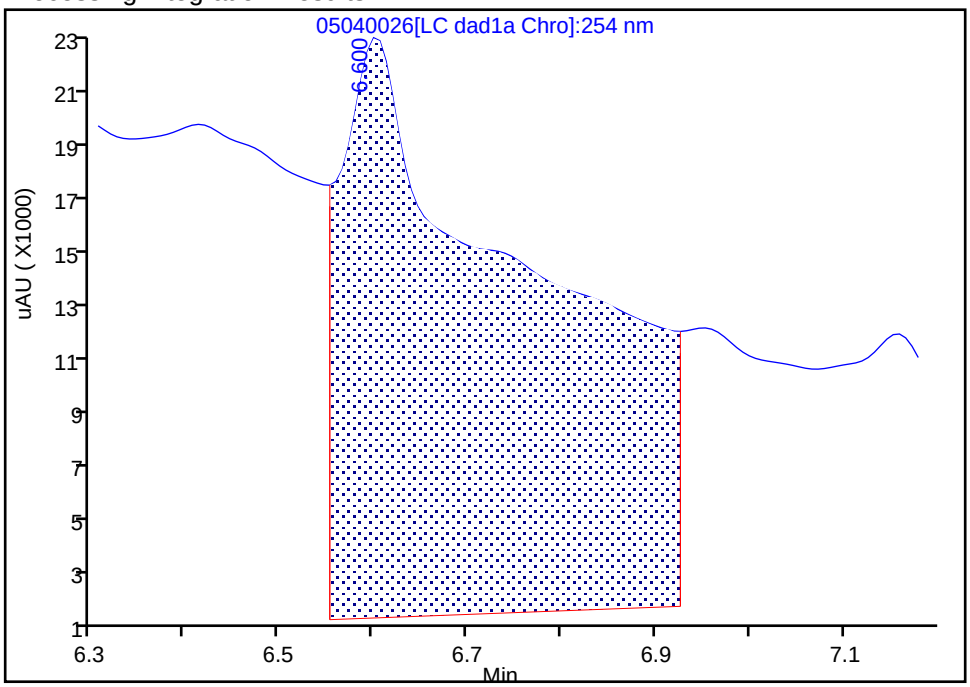
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040026.d				
Injection Date:	04-May-2024 23:52:36	Instrument ID:	CHHPLC_X3		
Lims ID:	280-190799-A-5-A	Lab Sample ID:	280-190799-5		
Client ID:	LL1mw-080-240401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	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

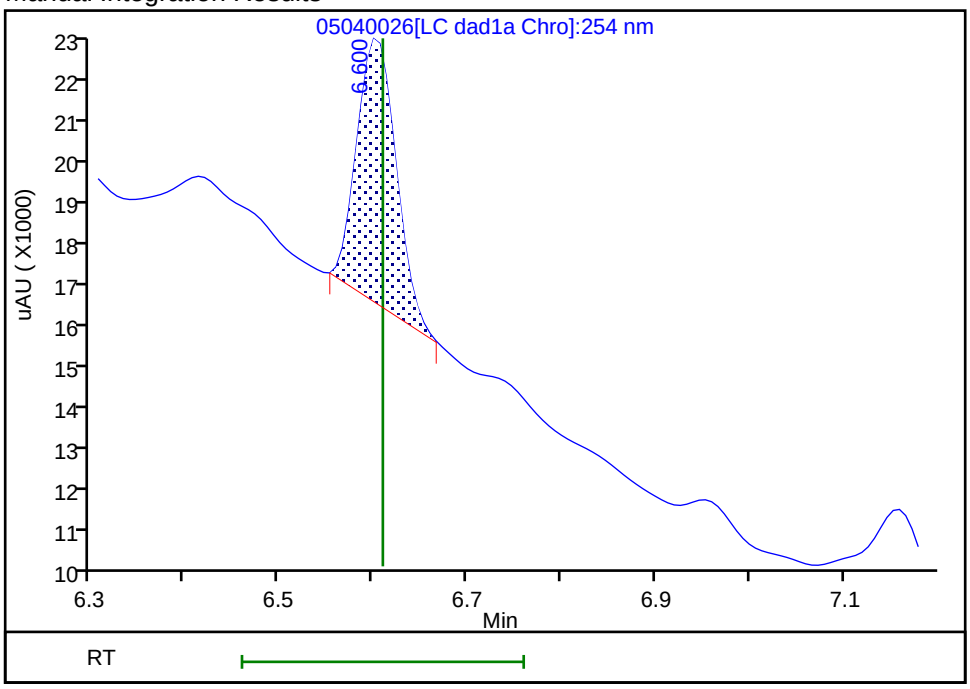
Processing Integration Results

RT: 6.60
Area: 309840
Amount: 3.242913
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 17638
Amount: 0.184607
Amount Units: ug/mL



Reviewer: LV5D, 07-May-2024 13:48:22 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

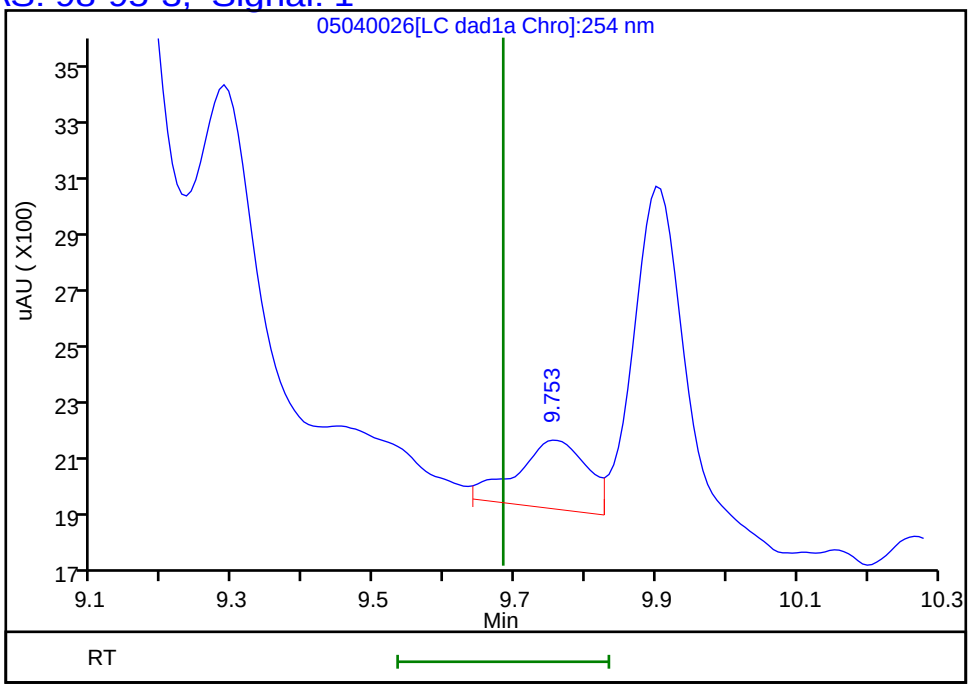
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040026.d				
Injection Date:	04-May-2024 23:52:36	Instrument ID:	CHHPLC_X3		
Lims ID:	280-190799-A-5-A	Lab Sample ID:	280-190799-5		
Client ID:	LL1mw-080-240401-GW				
Operator ID:	JZ/JG	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		

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

RT: 9.75
Response: 1577
Amount: 0.008032



Reviewer: LV5D, 07-May-2024 13:49:17
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

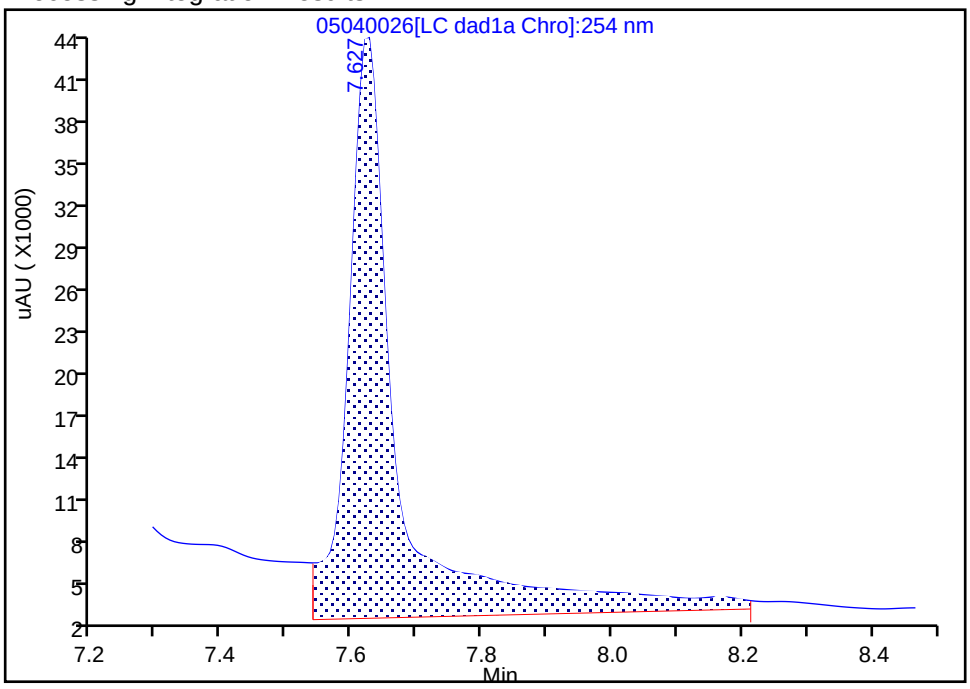
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040026.d				
Injection Date:	04-May-2024 23:52:36	Instrument ID:	CHHPLC_X3		
Lims ID:	280-190799-A-5-A	Lab Sample ID:	280-190799-5		
Client ID:	LL1mw-080-240401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	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

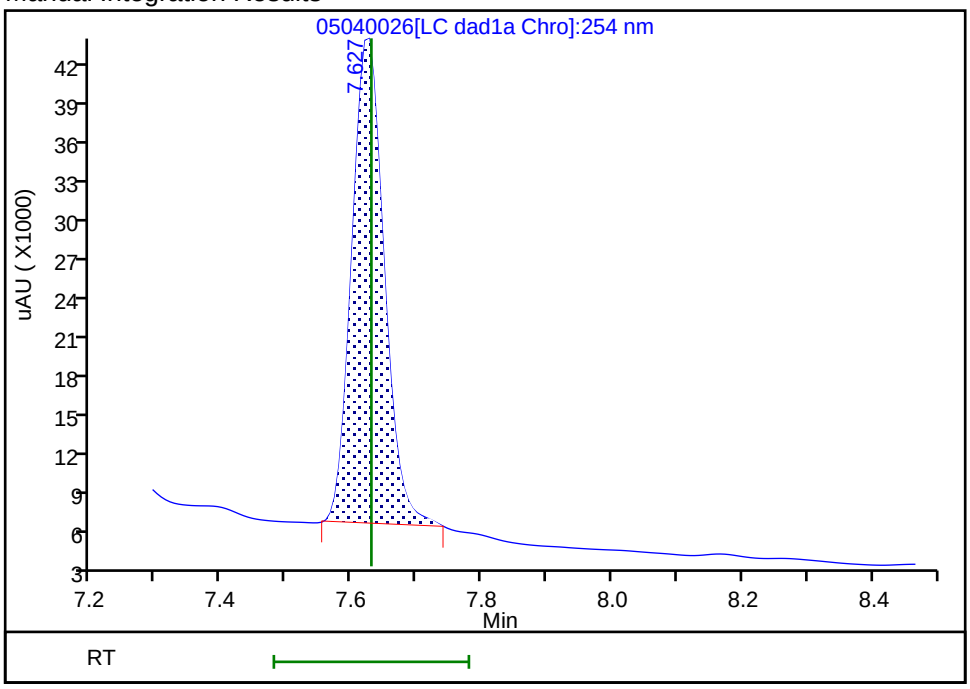
Processing Integration Results

RT: 7.63
Area: 218498
Amount: 1.972590
Amount Units: ug/mL



Manual Integration Results

RT: 7.63
Area: 127128
Amount: 1.147706
Amount Units: ug/mL



Reviewer: LV5D, 07-May-2024 13:48:25 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

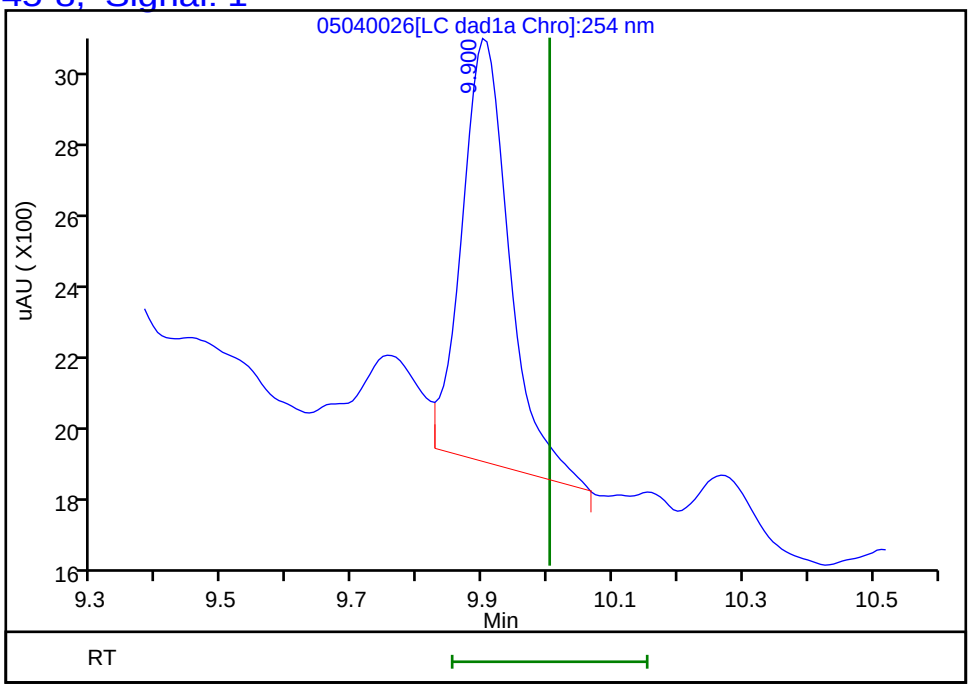
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040026.d
Injection Date: 04-May-2024 23:52:36 Instrument ID: CHHPLC_X3
Lims ID: 280-190799-A-5-A Lab Sample ID: 280-190799-5
Client ID: LL1mw-080-240401-GW
Operator ID: JZ/JG ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

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

RT: 9.90
Response: 5747
Amount: 0.031649



Reviewer: LV5D, 07-May-2024 13:49:17
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-190799-1

SDG No.:

Client Sample ID: LL1mw-087-240401-GW | Lab Sample ID: 280-190799-6

Matrix: Water | Lab File ID: 05040027.D

Analysis Method: 8330B | Date Collected: 04/29/2024 11:45

Extraction Method: 3535 | Date Extracted: 05/02/2024 12:39

Sample wt/vol: 475.3(mL) | Date Analyzed: 05/05/2024 00:15

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.: 652145 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.21	U	0.22	0.21	0.088
99-65-0	1,3-Dinitrobenzene	0.11	U M	0.12	0.11	0.039
118-96-7	2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.047
121-14-2	2,4-Dinitrotoluene	0.084	U	0.11	0.084	0.029
606-20-2	2,6-Dinitrotoluene	0.084	U	0.11	0.084	0.042
35572-78-2	2-Amino-4,6-dinitrotoluene	0.11	U	0.12	0.11	0.053
88-72-2	2-Nitrotoluene	0.21	U M J1	0.22	0.21	0.090
99-08-1	3-Nitrotoluene	0.37	U J1 Q	0.42	0.37	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.061
99-99-0	4-Nitrotoluene	0.42	U M J1 Q	0.43	0.42	0.11
2691-41-0	HMX	0.21	U	0.22	0.21	0.092
98-95-3	Nitrobenzene	0.21	U	0.22	0.21	0.096
55-63-0	Nitroglycerin	2.1	U	2.2	2.1	0.97
78-11-5	PETN	1.1	U	1.2	1.1	0.47
121-82-4	RDX	0.21	U	0.22	0.21	0.054
479-45-8	Tetryl	0.11	U	0.12	0.11	0.033

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\20240504-133020.b\05040027.D
Lims ID: 280-190799-A-6-A
Client ID: LL1mw-087-240401-GW
Sample Type: Client
Inject. Date: 05-May-2024 00:15:33 ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-190799-A-6-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 07-May-2024 15:03:04 Calib Date: 18-Apr-2024 03:08:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\04170028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1679

First Level Reviewer: LV5D Date: 07-May-2024 13:49:34

	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		6.460			ND	U
	3 TNX	1		6.505			ND	
	4 HMX	1		6.610			ND	
	5 2,4-diamino-6-nitrotoluene	1		6.633			ND	
	6 DNX	1		6.825			ND	
	7 MNX	1		7.258			ND	U
	8 RDX	1		7.630			ND	
	9 2,4,6-Trinitrophenol	1		7.876			ND	
$	10 1,2-Dinitrobenzene	1	8.565	8.576	-0.011	23634	0.1788	M
	11 1,3,5-Trinitrobenzene	1		8.710			ND	
	12 1,3-Dinitrobenzene	1		9.323			ND	U
	13 Nitrobenzene	1		9.683			ND	
	14 3,5-Dinitroaniline	1		9.923			ND	
	15 Tetryl	1		10.003			ND	
	16 Nitroglycerin	2		10.470			ND	
	17 2,4,6-Trinitrotoluene	1		10.903			ND	
	18 4-Amino-2,6-dinitrotoluene	1		11.083			ND	
	19 2-Amino-4,6-dinitrotoluene	1		11.336			ND	
	20 2,6-Dinitrotoluene	1		11.483			ND	
	21 2,4-Dinitrotoluene	1		11.656			ND	
	22 o-Nitrotoluene	1		12.436			ND	U
	23 p-Nitrotoluene	1		12.856			ND	U
	24 m-Nitrotoluene	1		13.403			ND	
	25 PETN	2		14.463			ND	
	26 Ammonium Picrate	1		0.000			ND	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
U - Marked Undetected

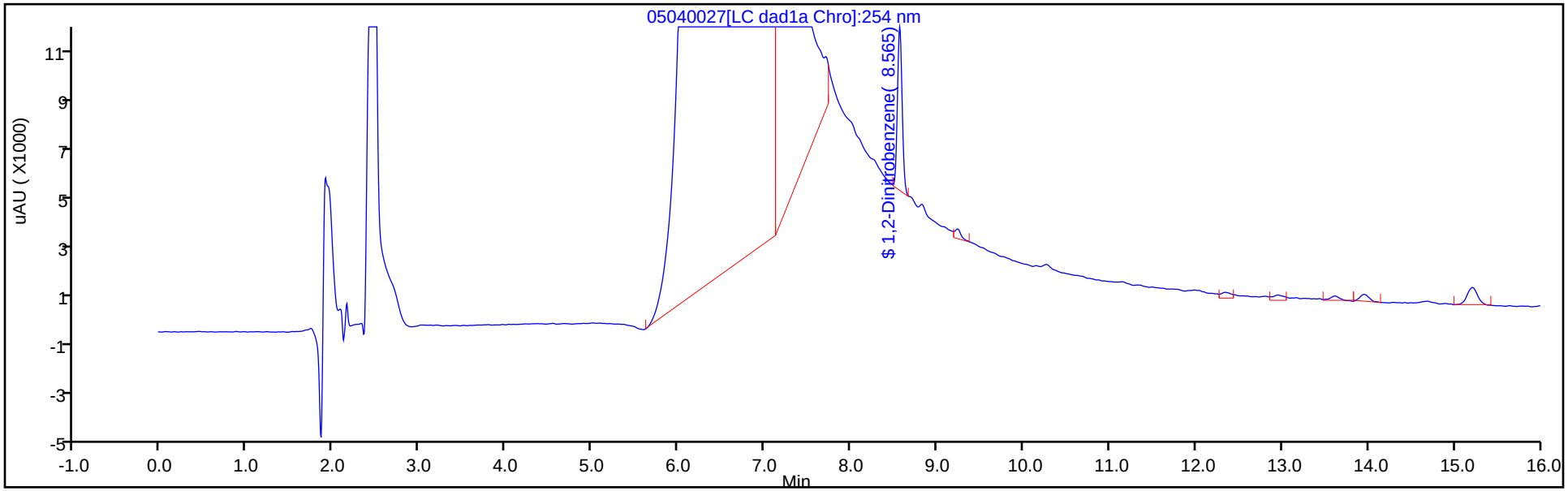
Report Date: 07-May-2024 15:03:09 Chrom Revision: 2.3 26-Apr-2024 12:18:52

Eurofins Denver

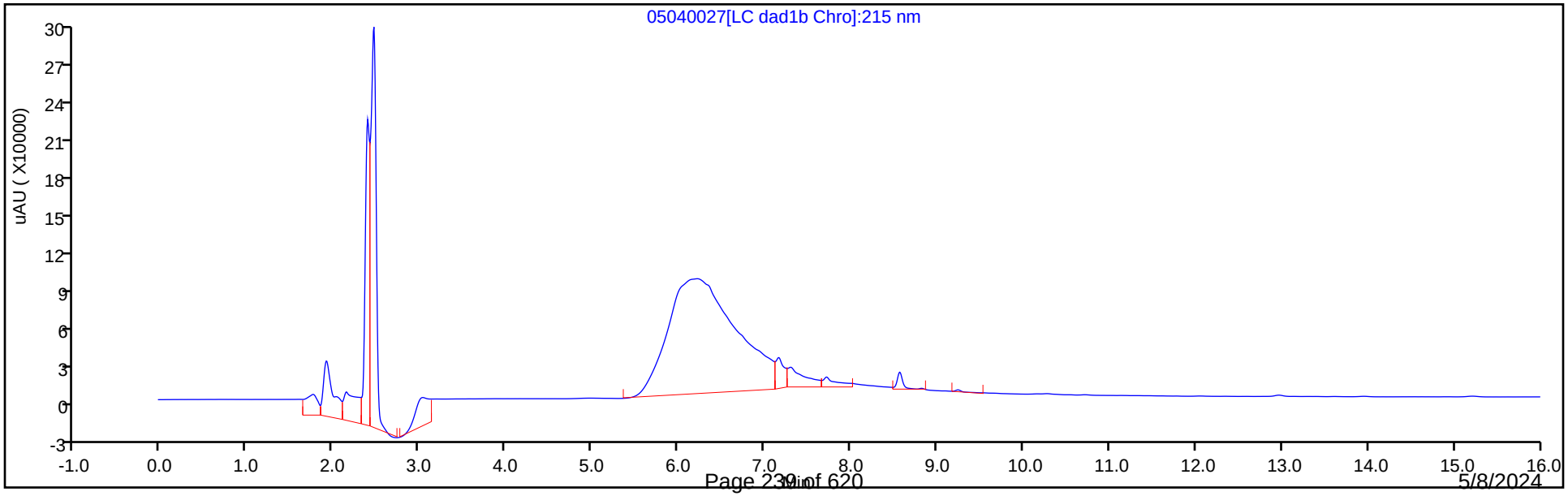
Data File: \\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040027.d

Injection Date:	05-May-2024 00:15:33	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-190799-A-6-A	Lab Sample ID:	280-190799-6	Worklist Smp#:	27
Client ID:	LL1mw-087-240401-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\20240504-133020.b\05040027.D				
Lims ID:	280-190799-A-6-A				
Client ID:	LL1mw-087-240401-GW				
Sample Type:	Client				
Inject. Date:	05-May-2024 00:15:33	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-190799-A-6-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	07-May-2024 15:03:04	Calib Date:	18-Apr-2024 03:08:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\04170028.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1679				

First Level Reviewer: LV5D Date: 07-May-2024 13:49:34

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1788	89.42

Manual Integration/User Assign Peak Report

Eurofins Denver

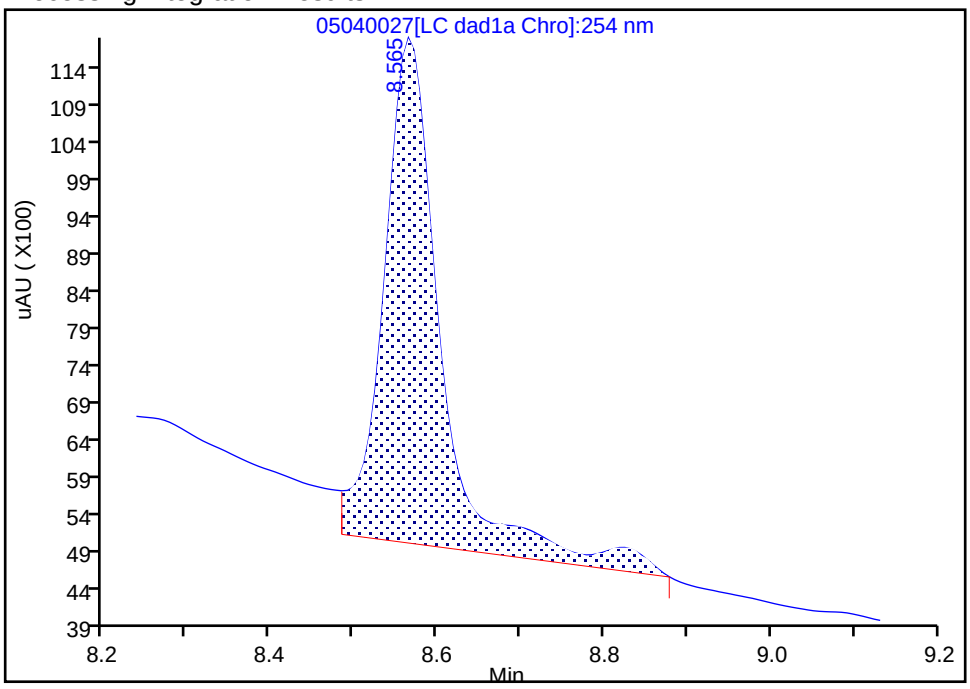
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040027.d				
Injection Date:	05-May-2024 00:15:33	Instrument ID:	CHHPLC_X3		
Lims ID:	280-190799-A-6-A	Lab Sample ID:	280-190799-6		
Client ID:	LL1mw-087-240401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	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

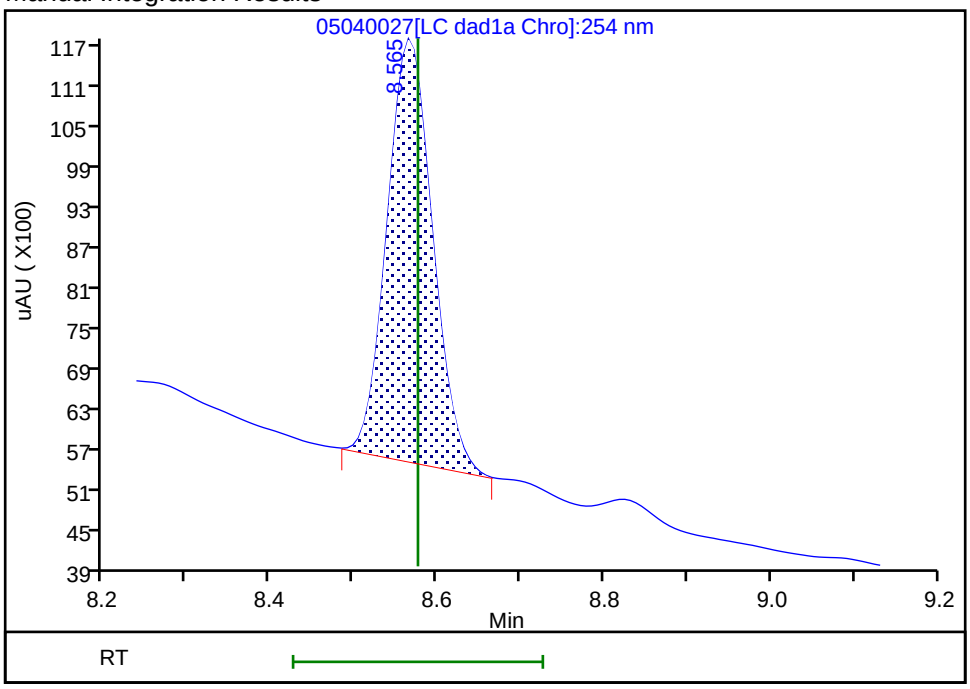
Processing Integration Results

RT: 8.56
Area: 32186
Amount: 0.243805
Amount Units: ug/mL



Manual Integration Results

RT: 8.56
Area: 23634
Amount: 0.178835
Amount Units: ug/mL



Reviewer: LV5D, 07-May-2024 13:49:33 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

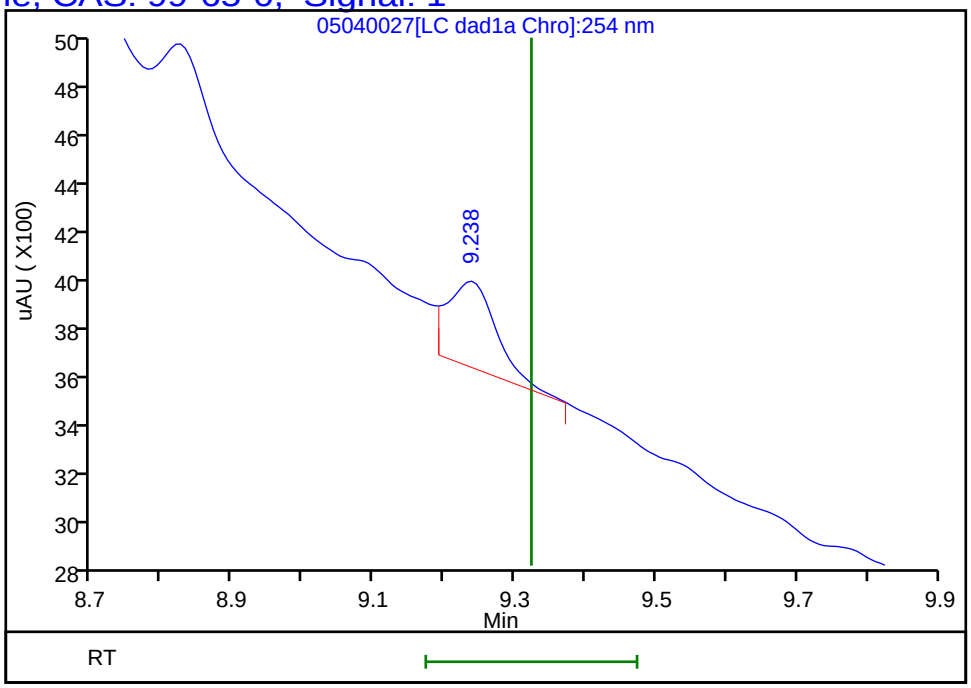
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040027.d				
Injection Date:	05-May-2024 00:15:33	Instrument ID:	CHHPLC_X3		
Lims ID:	280-190799-A-6-A	Lab Sample ID:	280-190799-6		
Client ID:	LL1mw-087-240401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

RT: 9.24
Response: 1596
Amount: 0.005330



Reviewer: LV5D, 07-May-2024 13:49:34
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

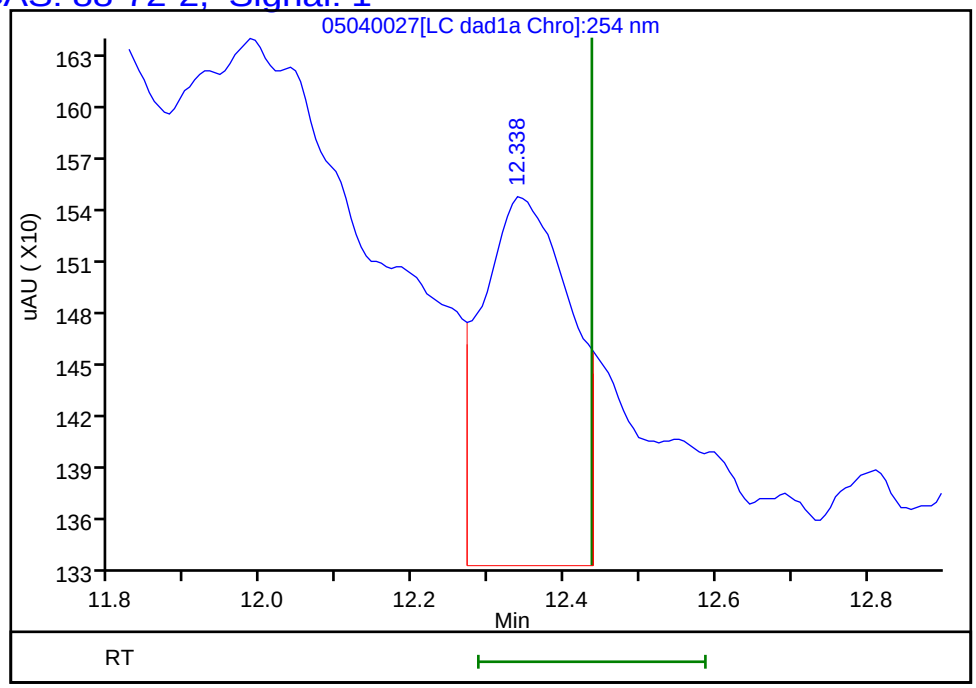
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040027.d				
Injection Date:	05-May-2024 00:15:33	Instrument ID:	CHHPLC_X3		
Lims ID:	280-190799-A-6-A	Lab Sample ID:	280-190799-6		
Client ID:	LL1mw-087-240401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

22 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 12.34
Response: 1663
Amount: 0.012861



Reviewer: LV5D, 07-May-2024 13:49:34
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

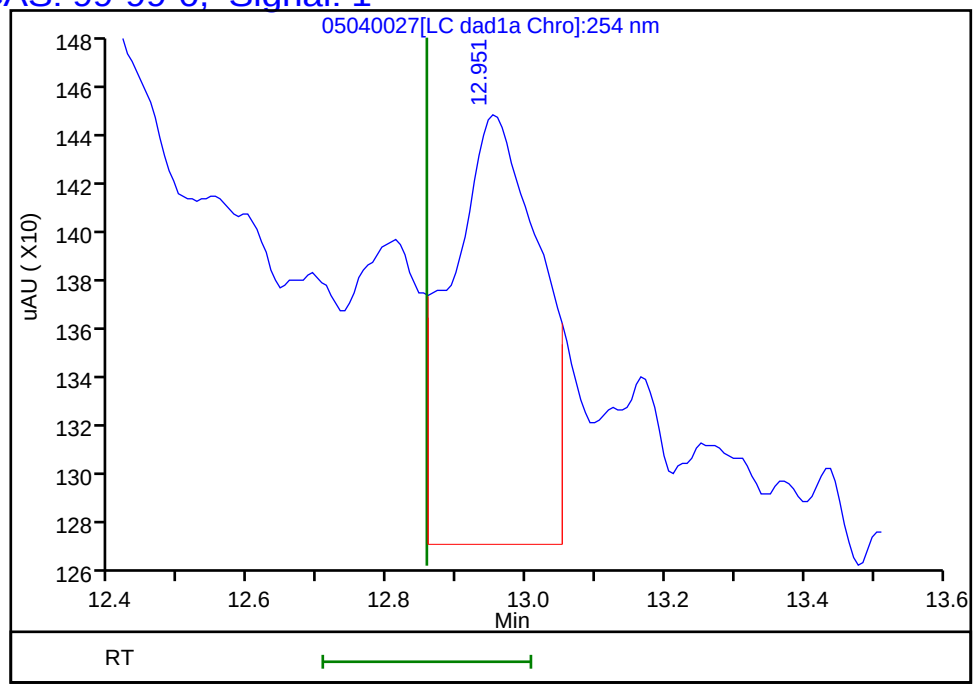
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040027.d				
Injection Date:	05-May-2024 00:15:33	Instrument ID:	CHHPLC_X3		
Lims ID:	280-190799-A-6-A	Lab Sample ID:	280-190799-6		
Client ID:	LL1mw-087-240401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

23 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 12.95
Response: 1478
Amount: 0.013103



Reviewer: LV5D, 07-May-2024 13:49:34
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-190799-1

SDG No.:

Client Sample ID: LL1mw-087-240402-GW | Lab Sample ID: 280-190799-7

Matrix: Water | Lab File ID: 05040030.D

Analysis Method: 8330B | Date Collected: 04/29/2024 11:45

Extraction Method: 3535 | Date Extracted: 05/02/2024 12:39

Sample wt/vol: 480.4(mL) | Date Analyzed: 05/05/2024 01:24

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.: 652145 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.21	U	0.22	0.21	0.088
99-65-0	1,3-Dinitrobenzene	0.10	U M	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	0.029
606-20-2	2,6-Dinitrotoluene	0.083	U	0.10	0.083	0.042
35572-78-2	2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.053
88-72-2	2-Nitrotoluene	0.21	U M	0.22	0.21	0.089
99-08-1	3-Nitrotoluene	0.36	U Q	0.42	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	0.42	U M Q	0.43	0.42	0.10
2691-41-0	HMX	0.21	U	0.22	0.21	0.091
98-95-3	Nitrobenzene	0.21	U	0.22	0.21	0.095
55-63-0	Nitroglycerin	2.1	U	2.2	2.1	0.96
78-11-5	PETN	1.0	U	1.1	1.0	0.47
121-82-4	RDX	0.21	U	0.22	0.21	0.054
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	92	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\05040030.D
Lims ID: 280-190799-A-7-A
Client ID: LL1mw-087-240402-GW
Sample Type: Client
Inject. Date: 05-May-2024 01:24:25 ALS Bottle#: 30 Worklist Smp#: 30
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-190799-A-7-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 07-May-2024 15:03:04 Calib Date: 18-Apr-2024 03:08:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\04170028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1679

First Level Reviewer: LV5D Date: 07-May-2024 13:51:02

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	4 HMX	1		6.610			ND	
	8 RDX	1		7.630			ND	
$	10 1,2-Dinitrobenzene	1	8.565	8.576	-0.011	24342	0.1842	M
	11 1,3,5-Trinitrobenzene	1		8.710			ND	
	12 1,3-Dinitrobenzene	1		9.323			ND	U
	13 Nitrobenzene	1		9.683			ND	
	15 Tetryl	1		10.003			ND	
	16 Nitroglycerin	2		10.470			ND	
	17 2,4,6-Trinitrotoluene	1		10.903			ND	
	18 4-Amino-2,6-dinitrotoluene	1		11.083			ND	
	19 2-Amino-4,6-dinitrotoluene	1		11.336			ND	
	20 2,6-Dinitrotoluene	1		11.483			ND	
	21 2,4-Dinitrotoluene	1		11.656			ND	
	22 o-Nitrotoluene	1		12.436			ND	U
	23 p-Nitrotoluene	1		12.856			ND	U
	24 m-Nitrotoluene	1		13.403			ND	
	25 PETN	2		14.463			ND	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

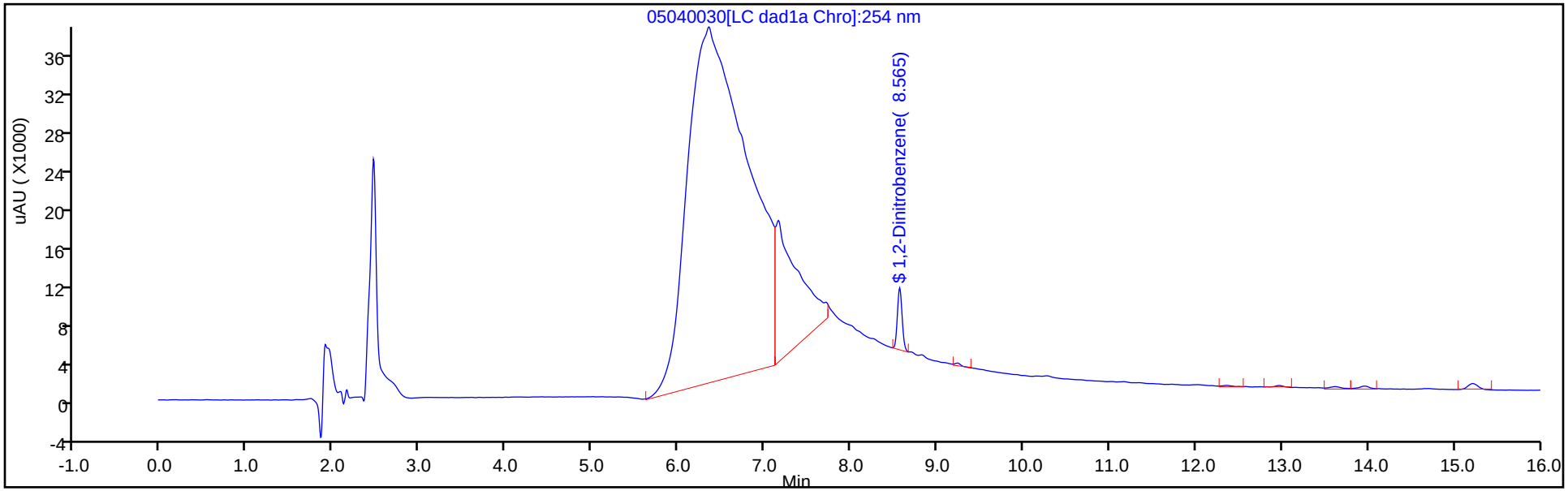
Report Date: 07-May-2024 15:03:12 Chrom Revision: 2.3 26-Apr-2024 12:18:52

Eurofins Denver

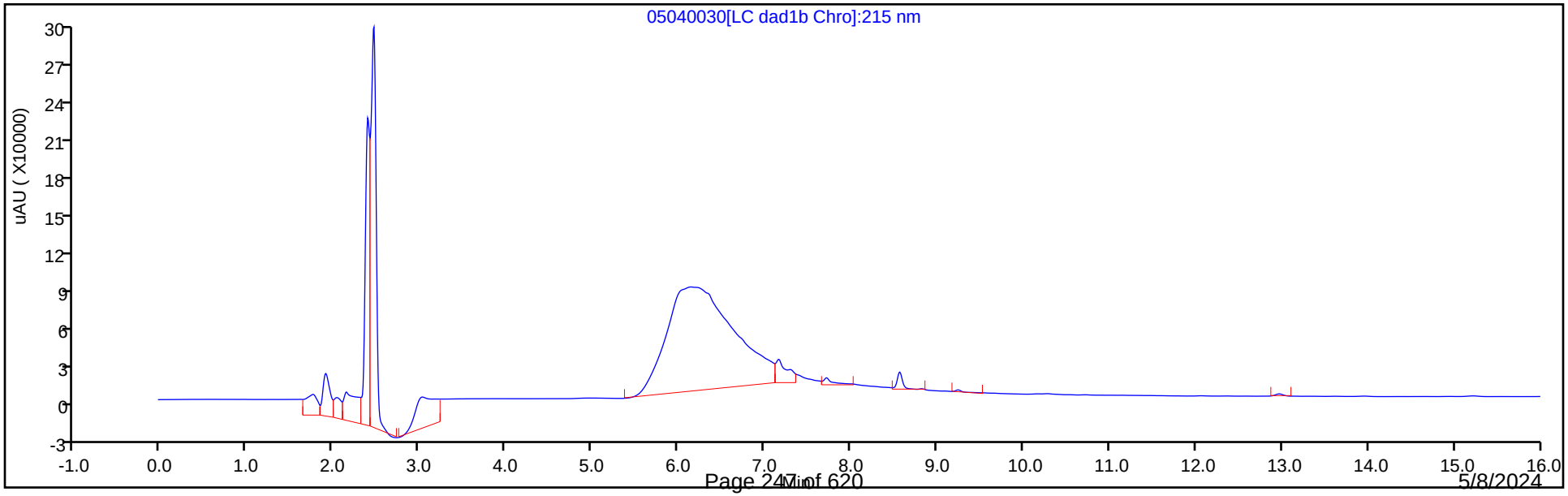
Data File: \\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040030.d

Injection Date:	05-May-2024 01:24:25	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-190799-A-7-A	Lab Sample ID:	280-190799-7	Worklist Smp#:	30
Client ID:	LL1mw-087-240402-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



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\05040030.D				
Lims ID:	280-190799-A-7-A				
Client ID:	LL1mw-087-240402-GW				
Sample Type:	Client				
Inject. Date:	05-May-2024 01:24:25	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-190799-A-7-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	07-May-2024 15:03:04	Calib Date:	18-Apr-2024 03:08:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\04170028.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1679				

First Level Reviewer: LV5D Date: 07-May-2024 13:51:02

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1842	92.11

Manual Integration/User Assign Peak Report

Eurofins Denver

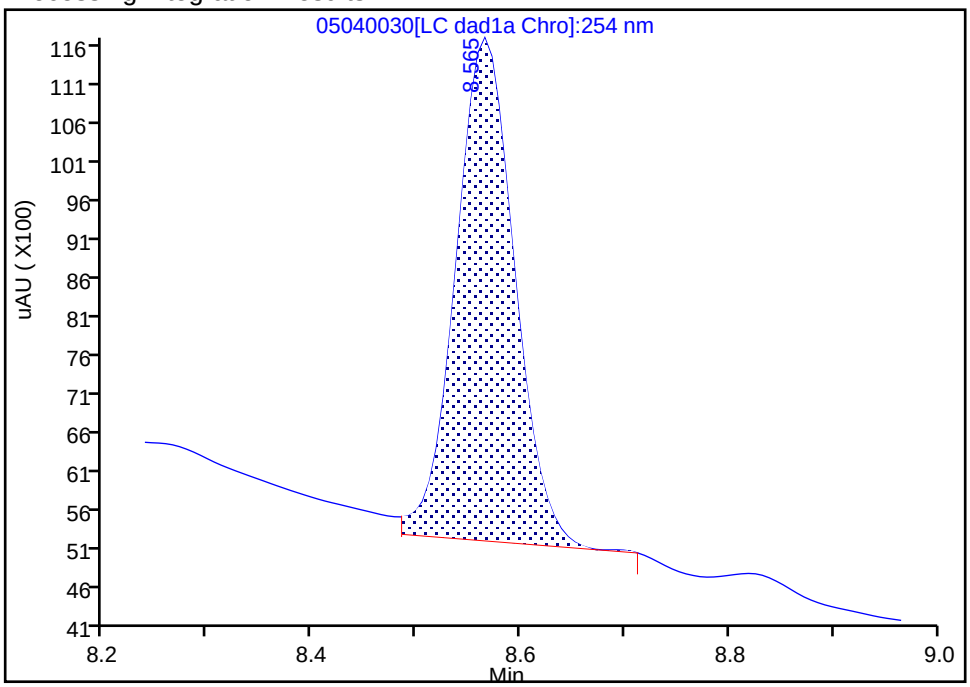
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040030.d				
Injection Date:	05-May-2024 01:24:25	Instrument ID:	CHHPLC_X3		
Lims ID:	280-190799-A-7-A	Lab Sample ID:	280-190799-7		
Client ID:	LL1mw-087-240402-GW				
Operator ID:	JZ/JG	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

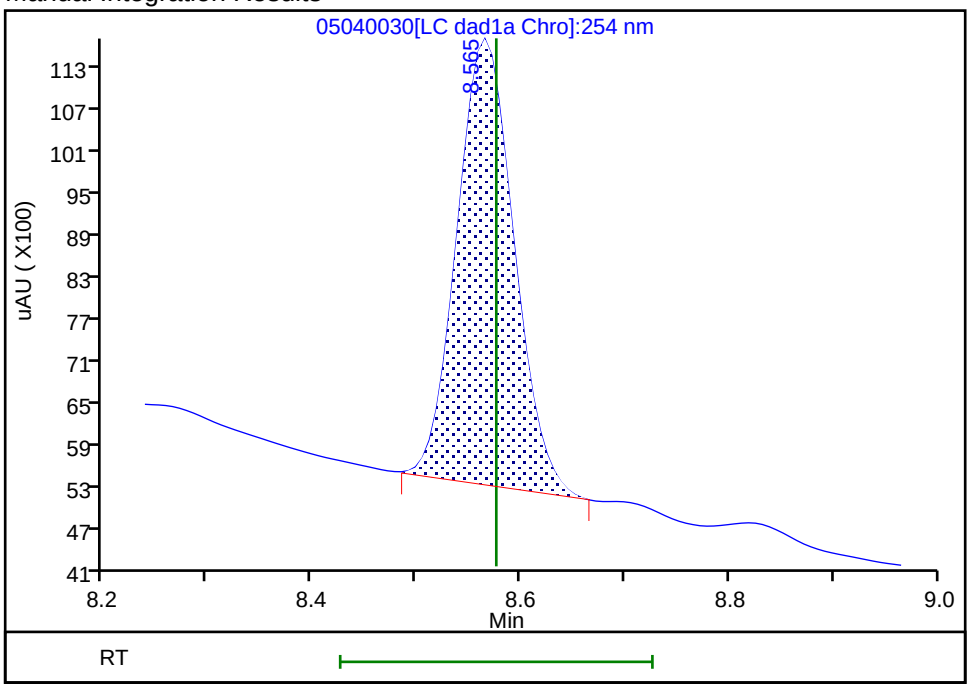
Processing Integration Results

RT: 8.57
Area: 25713
Amount: 0.194629
Amount Units: ug/mL



Manual Integration Results

RT: 8.57
Area: 24342
Amount: 0.184214
Amount Units: ug/mL



Reviewer: LV5D, 07-May-2024 13:51:01 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

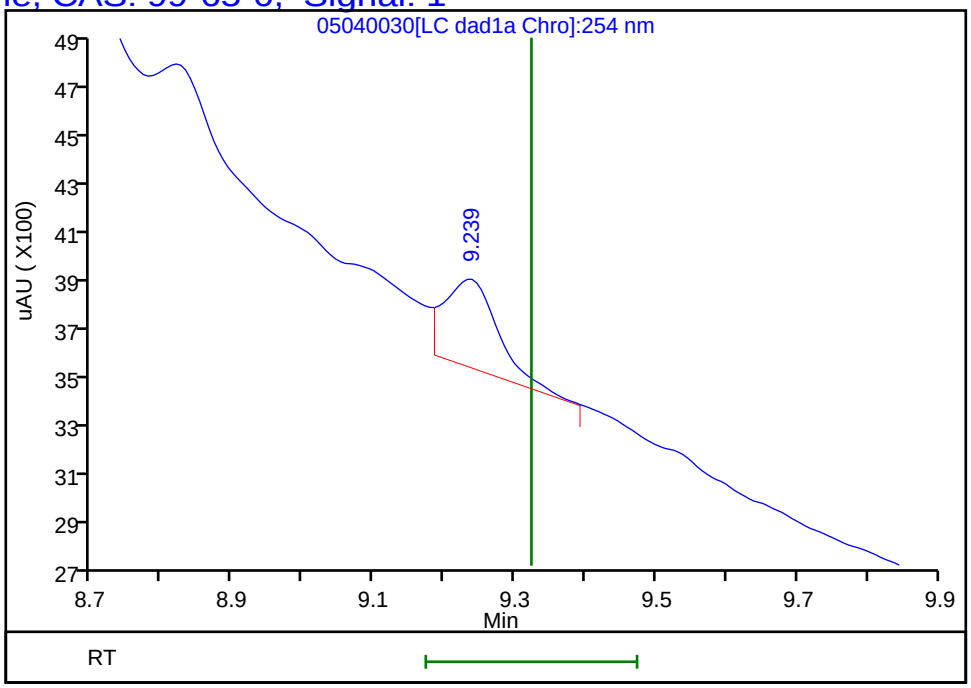
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040030.d				
Injection Date:	05-May-2024 01:24:25	Instrument ID:	CHHPLC_X3		
Lims ID:	280-190799-A-7-A	Lab Sample ID:	280-190799-7		
Client ID:	LL1mw-087-240402-GW				
Operator ID:	JZ/JG	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: 9.24
Response: 1832
Amount: 0.006118



Reviewer: LV5D, 07-May-2024 13:51:02
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

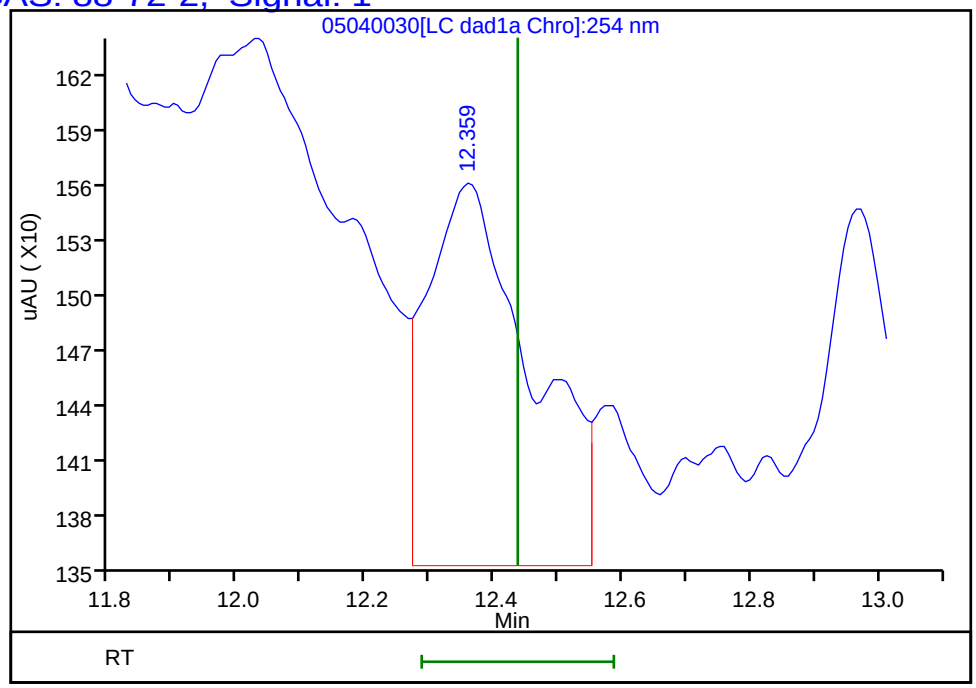
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040030.d				
Injection Date:	05-May-2024 01:24:25	Instrument ID:	CHHPLC_X3		
Lims ID:	280-190799-A-7-A	Lab Sample ID:	280-190799-7		
Client ID:	LL1mw-087-240402-GW				
Operator ID:	JZ/JG	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

22 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 12.36
Response: 2311
Amount: 0.017872



Reviewer: LV5D, 07-May-2024 13:51:02
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

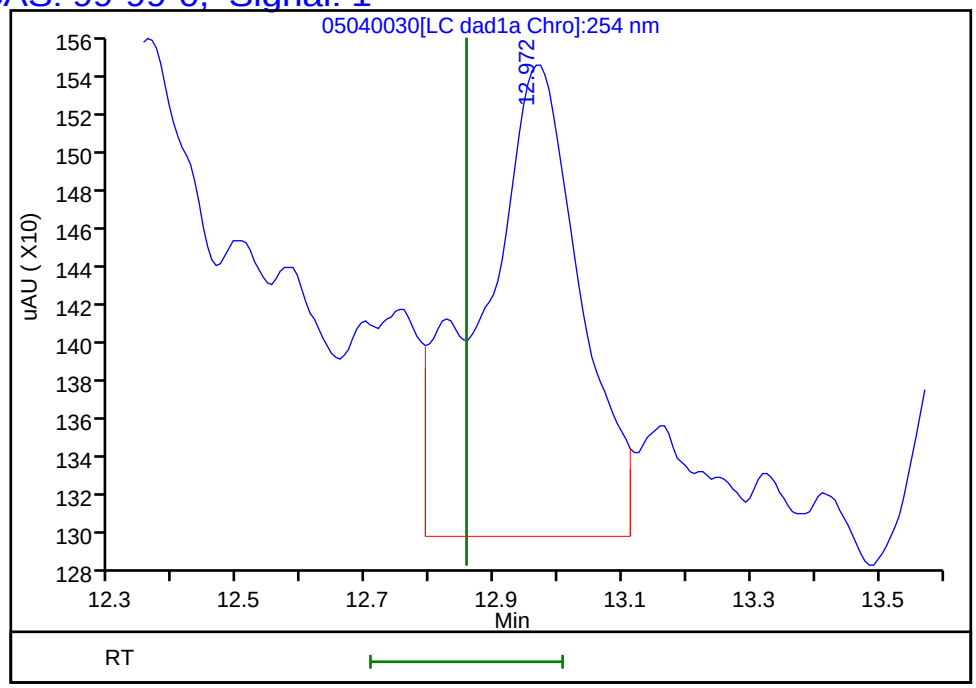
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040030.d				
Injection Date:	05-May-2024 01:24:25	Instrument ID:	CHHPLC_X3		
Lims ID:	280-190799-A-7-A	Lab Sample ID:	280-190799-7		
Client ID:	LL1mw-087-240402-GW				
Operator ID:	JZ/JG	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		

23 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 12.97
Response: 2656
Amount: 0.023546



Reviewer: LV5D, 07-May-2024 13:51:02
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-190799-1

SDG No.:

Client Sample ID: LL1mw-086-240401-GW | Lab Sample ID: 280-190799-8

Matrix: Water | Lab File ID: 05040031.D

Analysis Method: 8330B | Date Collected: 04/28/2024 14:00

Extraction Method: 3535 | Date Extracted: 05/02/2024 12:39

Sample wt/vol: 483.6(mL) | Date Analyzed: 05/05/2024 01:47

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.: 652145 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.21	U M	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 Q	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 Q	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 M	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	93	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\05040031.D
Lims ID: 280-190799-A-8-A
Client ID: LL1mw-086-240401-GW
Sample Type: Client
Inject. Date: 05-May-2024 01:47:27 ALS Bottle#: 31 Worklist Smp#: 31
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-190799-A-8-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 07-May-2024 15:03:04 Calib Date: 18-Apr-2024 03:08:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\04170028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1679

First Level Reviewer: LV5D Date: 07-May-2024 13:51:18

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	4 HMX	1	6.599	6.610	-0.011	188	0.001968	7M
	8 RDX	1		7.630			ND	U
$	10 1,2-Dinitrobenzene	1	8.566	8.576	-0.010	24689	0.1869	M
	11 1,3,5-Trinitrobenzene	1		8.710			ND	U
	12 1,3-Dinitrobenzene	1		9.323			ND	7
	13 Nitrobenzene	1		9.683			ND	
	15 Tetryl	1		10.003			ND	7
	16 Nitroglycerin	2		10.470			ND	
	17 2,4,6-Trinitrotoluene	1		10.903			ND	
	18 4-Amino-2,6-dinitrotoluene	1		11.083			ND	
	19 2-Amino-4,6-dinitrotoluene	1		11.336			ND	
	20 2,6-Dinitrotoluene	1		11.483			ND	
	21 2,4-Dinitrotoluene	1		11.656			ND	
	22 o-Nitrotoluene	1		12.436			ND	7
	23 p-Nitrotoluene	1		12.856			ND	
	24 m-Nitrotoluene	1		13.403			ND	
	25 PETN	2		14.463			ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

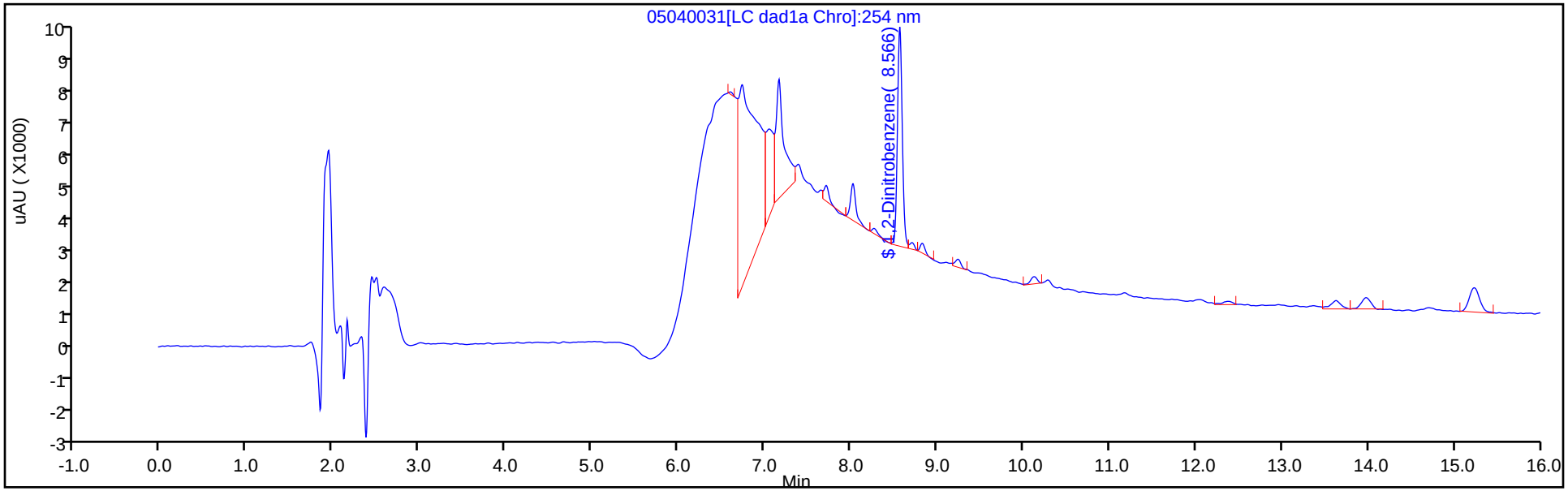
Report Date: 07-May-2024 15:03:12 Chrom Revision: 2.3 26-Apr-2024 12:18:52

Eurofins Denver

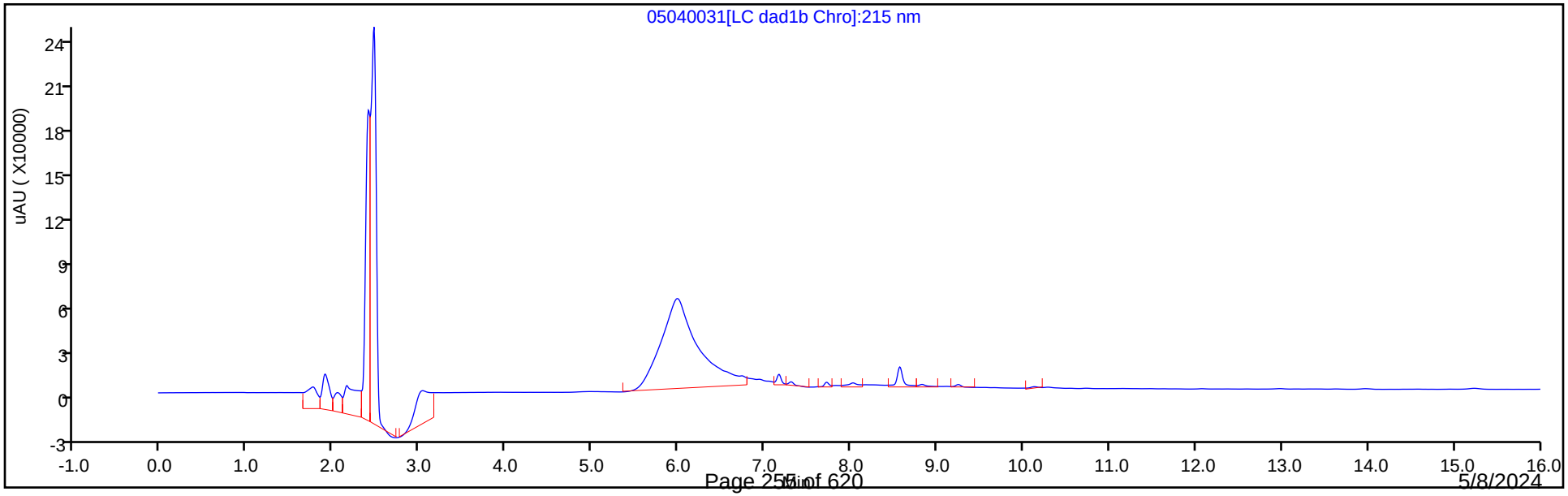
Data File: \\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040031.d

Injection Date:	05-May-2024 01:47:27	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-190799-A-8-A	Lab Sample ID:	280-190799-8	Worklist Smp#:	31
Client ID:	LL1mw-086-240401-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\20240504-133020.b\05040031.D				
Lims ID:	280-190799-A-8-A				
Client ID:	LL1mw-086-240401-GW				
Sample Type:	Client				
Inject. Date:	05-May-2024 01:47:27	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-190799-A-8-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	07-May-2024 15:03:04	Calib Date:	18-Apr-2024 03:08:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\04170028.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1679				

First Level Reviewer: LV5D Date: 07-May-2024 13:51:18

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1869	93.43

Manual Integration/User Assign Peak Report

Eurofins Denver

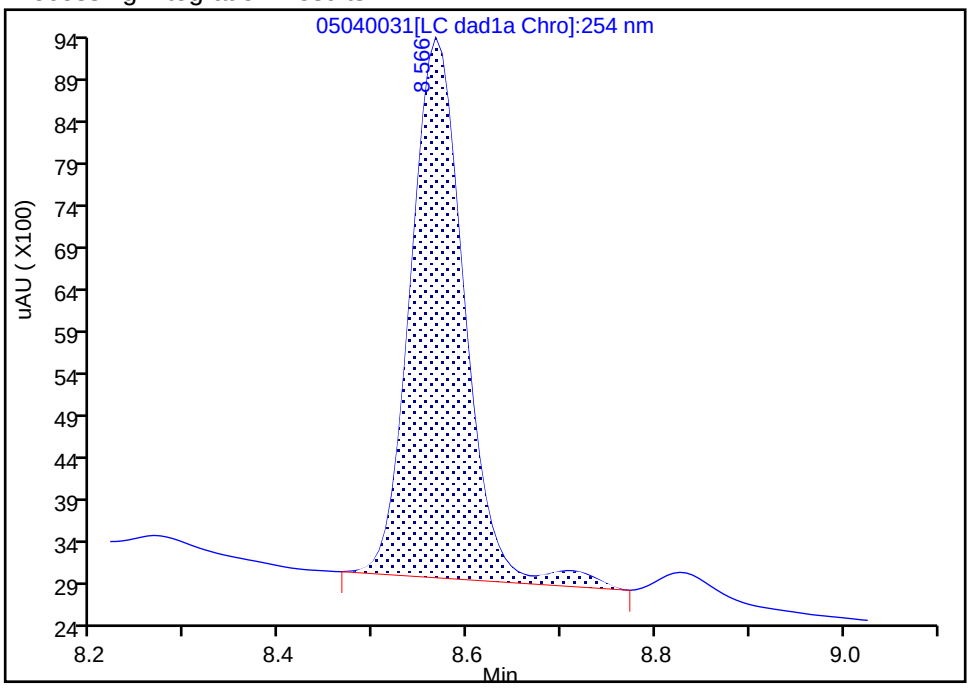
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040031.d				
Injection Date:	05-May-2024 01:47:27	Instrument ID:	CHHPLC_X3		
Lims ID:	280-190799-A-8-A	Lab Sample ID:	280-190799-8		
Client ID:	LL1mw-086-240401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

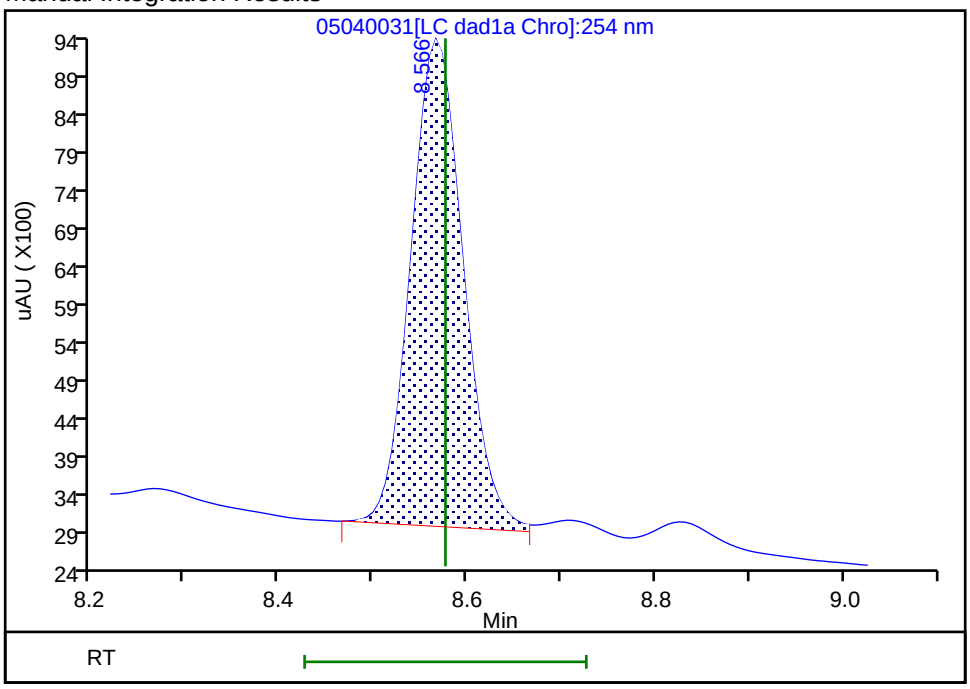
Processing Integration Results

RT: 8.57
Area: 25415
Amount: 0.192366
Amount Units: ug/mL



Manual Integration Results

RT: 8.57
Area: 24689
Amount: 0.186850
Amount Units: ug/mL



Reviewer: LV5D, 07-May-2024 13:51:08 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

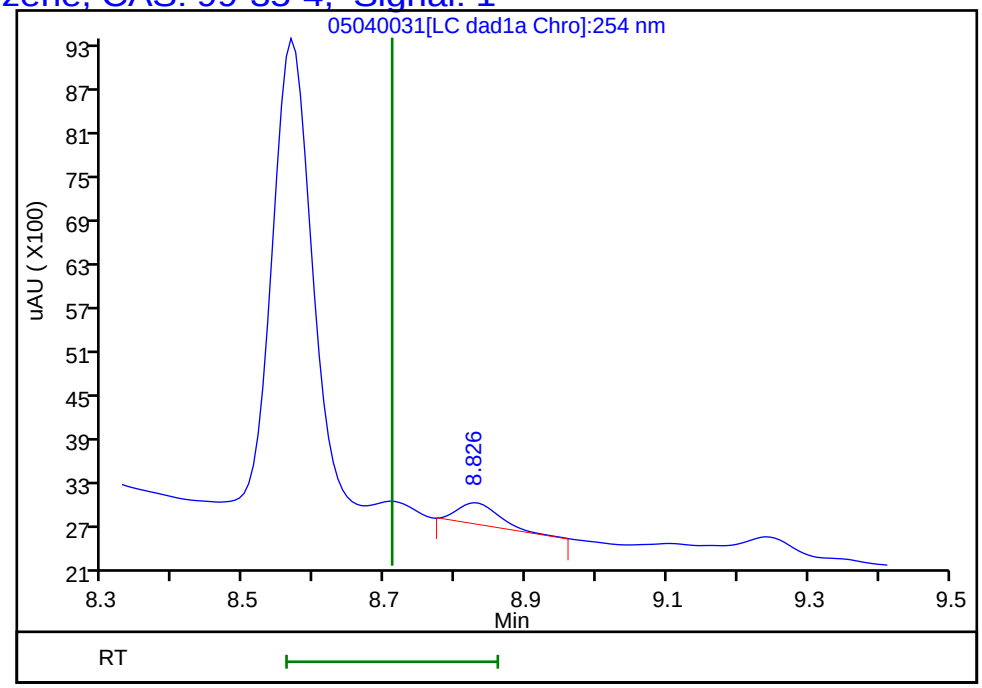
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040031.d				
Injection Date:	05-May-2024 01:47:27	Instrument ID:	CHHPLC_X3		
Lims ID:	280-190799-A-8-A	Lab Sample ID:	280-190799-8		
Client ID:	LL1mw-086-240401-GW				
Operator ID:	JZ/JG	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

RT: 8.83
Response: 1179
Amount: 0.005290



Reviewer: LV5D, 07-May-2024 13:51:18
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

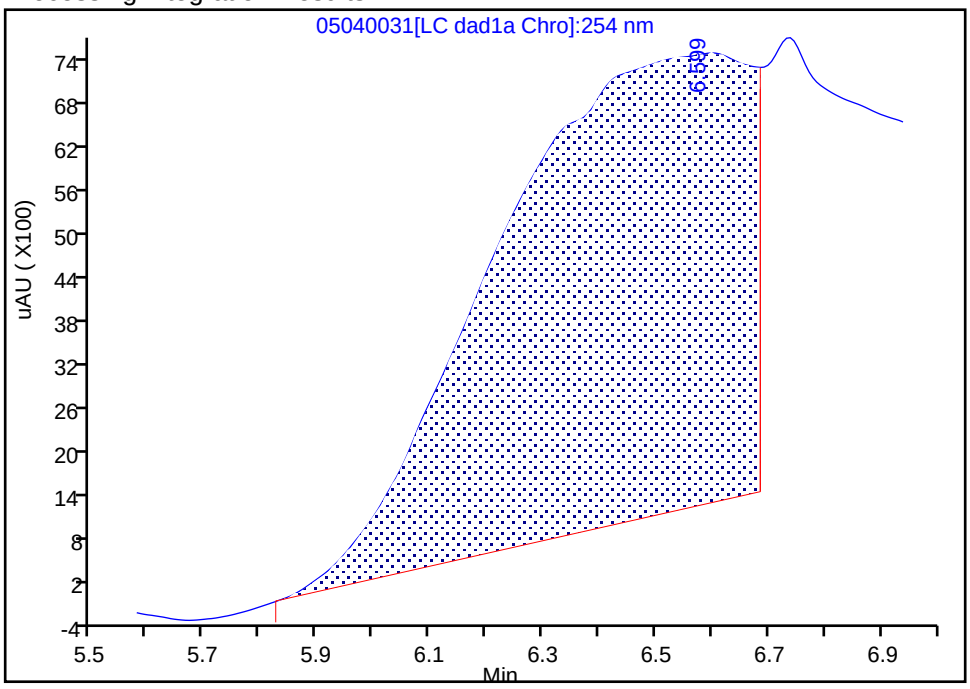
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040031.d				
Injection Date:	05-May-2024 01:47:27	Instrument ID:	CHHPLC_X3		
Lims ID:	280-190799-A-8-A	Lab Sample ID:	280-190799-8		
Client ID:	LL1mw-086-240401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	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

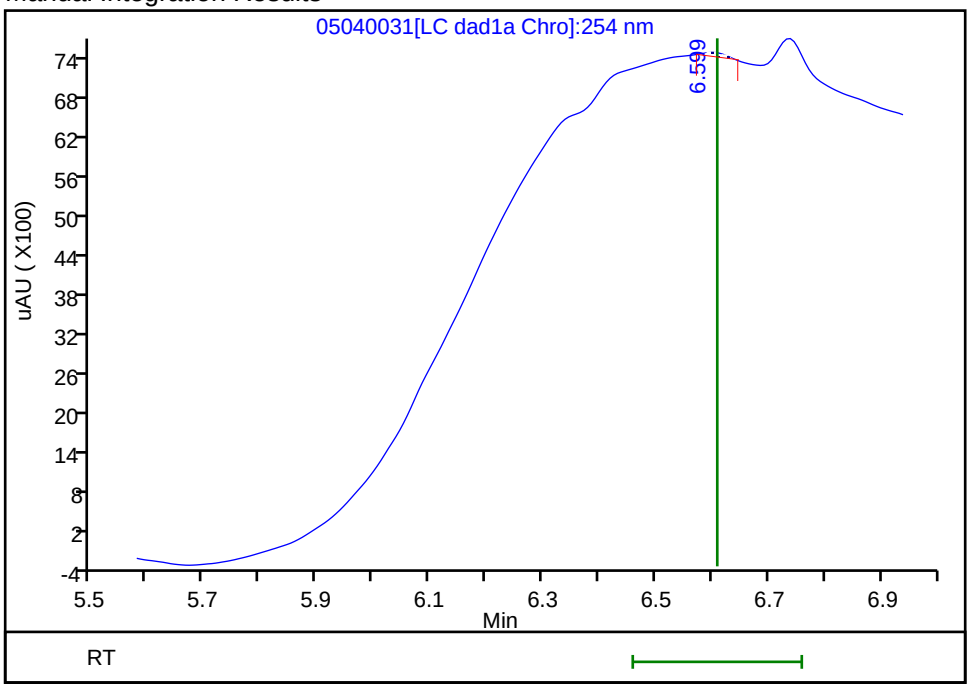
Processing Integration Results

RT: 6.60
Area: 196246
Amount: 2.053992
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 188
Amount: 0.001968
Amount Units: ug/mL



Reviewer: LV5D, 07-May-2024 13:51:16 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

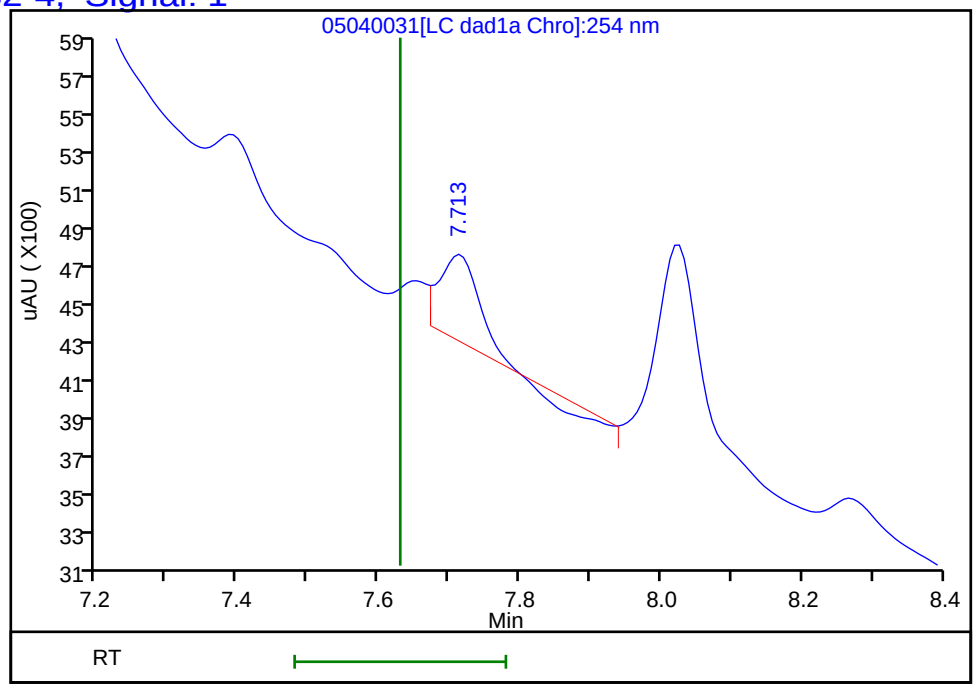
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040031.d
Injection Date: 05-May-2024 01:47:27 Instrument ID: CHHPLC_X3
Lims ID: 280-190799-A-8-A Lab Sample ID: 280-190799-8
Client ID: LL1mw-086-240401-GW
Operator ID: JZ/JG 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

RT: 7.71
Response: 2040
Amount: 0.018417



Reviewer: LV5D, 07-May-2024 13:51:18
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-190799-1

SDG No.:

Client Sample ID: FWGmw-010-240401-GW | Lab Sample ID: 280-190799-9

Matrix: Water | Lab File ID: 05040033.D

Analysis Method: 8330B | Date Collected: 04/29/2024 15:48

Extraction Method: 3535 | Date Extracted: 05/02/2024 12:39

Sample wt/vol: 459.6(mL) | Date Analyzed: 05/05/2024 02:33

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.: 652145 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.22	U M	0.23	0.22	0.091
99-65-0	1,3-Dinitrobenzene	0.11	U M	0.12	0.11	0.040
118-96-7	2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.049
121-14-2	2,4-Dinitrotoluene	0.087	U	0.11	0.087	0.030
606-20-2	2,6-Dinitrotoluene	0.087	U	0.11	0.087	0.044
35572-78-2	2-Amino-4,6-dinitrotoluene	0.11	U	0.12	0.11	0.055
88-72-2	2-Nitrotoluene	0.22	U	0.23	0.22	0.093
99-08-1	3-Nitrotoluene	0.38	U Q	0.44	0.38	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.063
99-99-0	4-Nitrotoluene	0.44	U Q	0.45	0.44	0.11
2691-41-0	HMX	0.22	U	0.23	0.22	0.095
98-95-3	Nitrobenzene	0.22	U	0.23	0.22	0.099
55-63-0	Nitroglycerin	2.2	U	2.3	2.2	1.0
78-11-5	PETN	1.1	U	1.2	1.1	0.49
121-82-4	RDX	0.22	U M	0.23	0.22	0.056
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	94	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\05040033.D
Lims ID: 280-190799-A-9-A
Client ID: FWGmw-010-240401-GW
Sample Type: Client
Inject. Date: 05-May-2024 02:33:25 ALS Bottle#: 33 Worklist Smp#: 33
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-190799-A-9-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 07-May-2024 15:03:13 Calib Date: 18-Apr-2024 03:08:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\04170028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1679

First Level Reviewer: LV5D Date: 07-May-2024 13:52:39

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	4 HMX	1		6.610			ND	
	8 RDX	1		7.630			ND	U
$	10 1,2-Dinitrobenzene	1	8.567	8.576	-0.009	24756	0.1874	M
	11 1,3,5-Trinitrobenzene	1		8.710			ND	U
	12 1,3-Dinitrobenzene	1		9.323			ND	U
	13 Nitrobenzene	1		9.683			ND	
	15 Tetryl	1		10.003			ND	
	16 Nitroglycerin	2		10.470			ND	
	17 2,4,6-Trinitrotoluene	1		10.903			ND	
	18 4-Amino-2,6-dinitrotoluene	1		11.083			ND	
	19 2-Amino-4,6-dinitrotoluene	1		11.336			ND	
	20 2,6-Dinitrotoluene	1		11.483			ND	
	21 2,4-Dinitrotoluene	1		11.656			ND	
	22 o-Nitrotoluene	1		12.436			ND	7
	23 p-Nitrotoluene	1		12.856			ND	
	24 m-Nitrotoluene	1		13.403			ND	
	25 PETN	2		14.463			ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

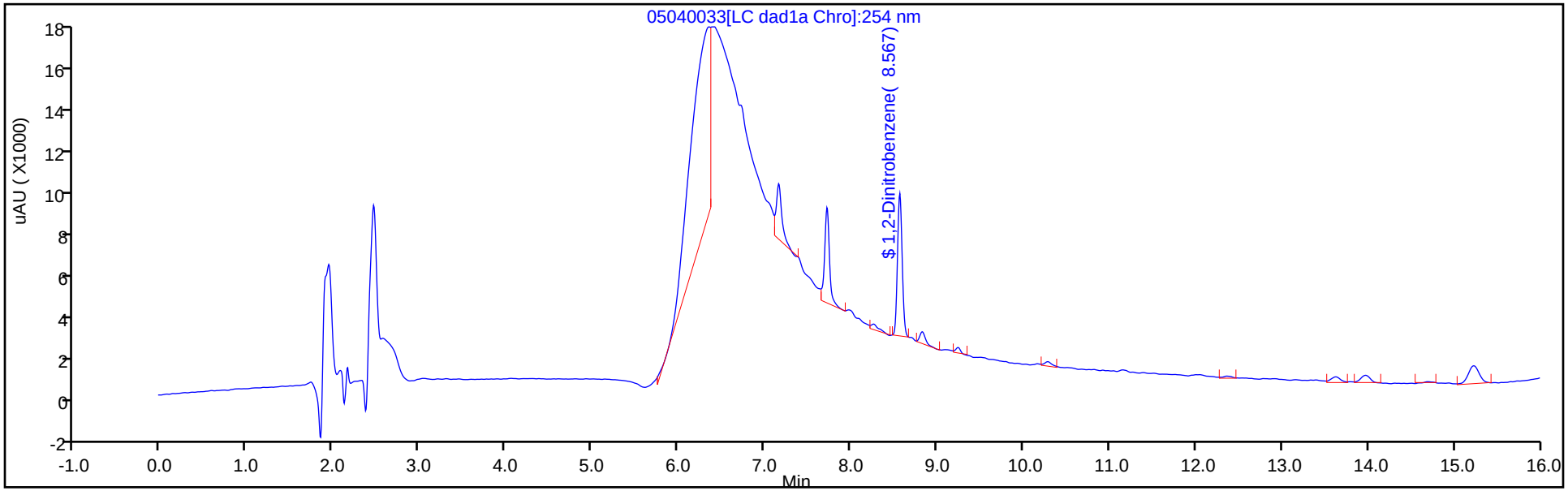
Report Date: 07-May-2024 15:03:14 Chrom Revision: 2.3 26-Apr-2024 12:18:52

Eurofins Denver

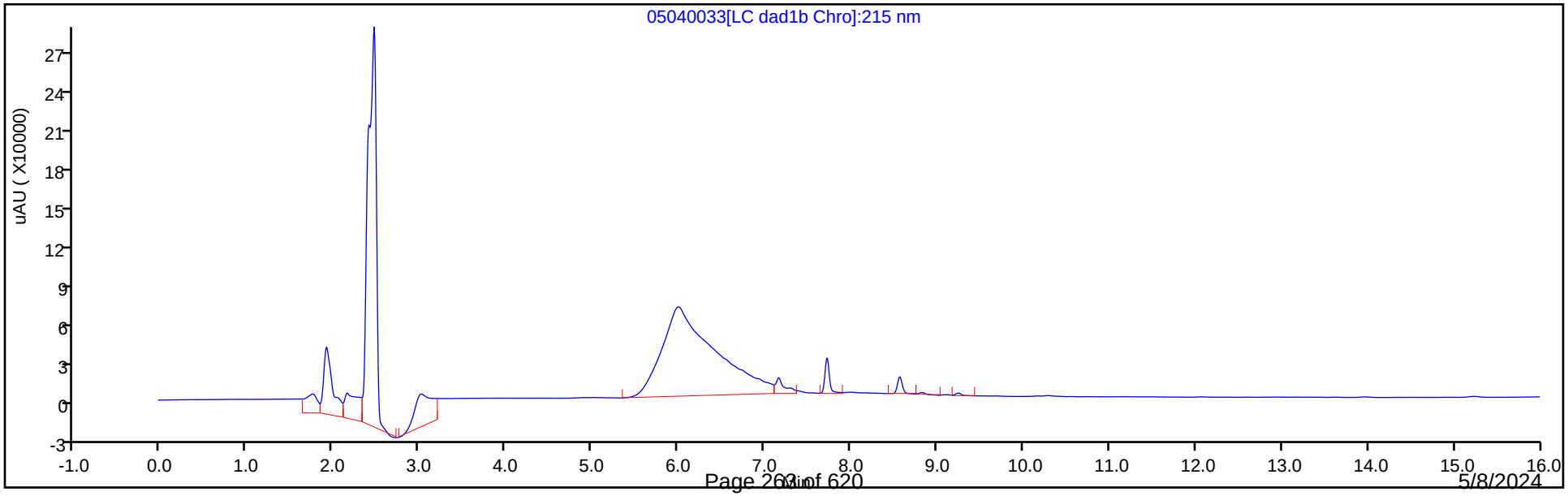
Data File: \\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040033.d

Injection Date:	05-May-2024 02:33:25	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-190799-A-9-A	Lab Sample ID:	280-190799-9	Worklist Smp#:	33
Client ID:	FWGmw-010-240401-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\20240504-133020.b\05040033.D				
Lims ID:	280-190799-A-9-A				
Client ID:	FWGmw-010-240401-GW				
Sample Type:	Client				
Inject. Date:	05-May-2024 02:33:25	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-190799-A-9-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	07-May-2024 15:03:13	Calib Date:	18-Apr-2024 03:08:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\04170028.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1679				

First Level Reviewer: LV5D Date: 07-May-2024 13:52:39

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1874	93.68

Manual Integration/User Assign Peak Report

Eurofins Denver

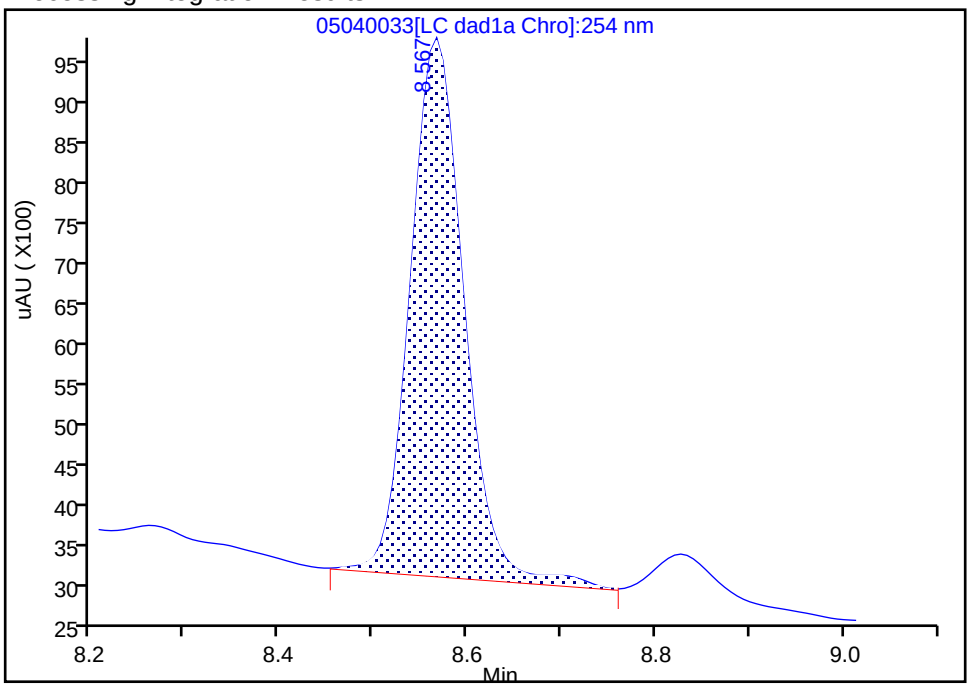
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040033.d				
Injection Date:	05-May-2024 02:33:25	Instrument ID:	CHHPLC_X3		
Lims ID:	280-190799-A-9-A	Lab Sample ID:	280-190799-9		
Client ID:	FWGmw-010-240401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	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

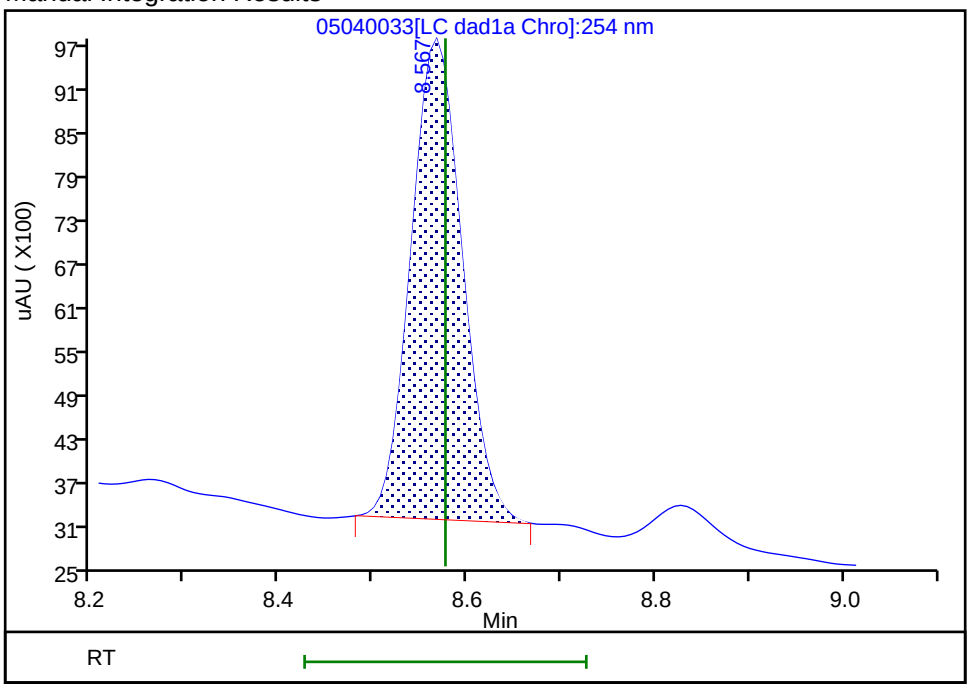
Processing Integration Results

RT: 8.57
Area: 26349
Amount: 0.199461
Amount Units: ug/mL



Manual Integration Results

RT: 8.57
Area: 24756
Amount: 0.187359
Amount Units: ug/mL



Reviewer: LV5D, 07-May-2024 13:52:38 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

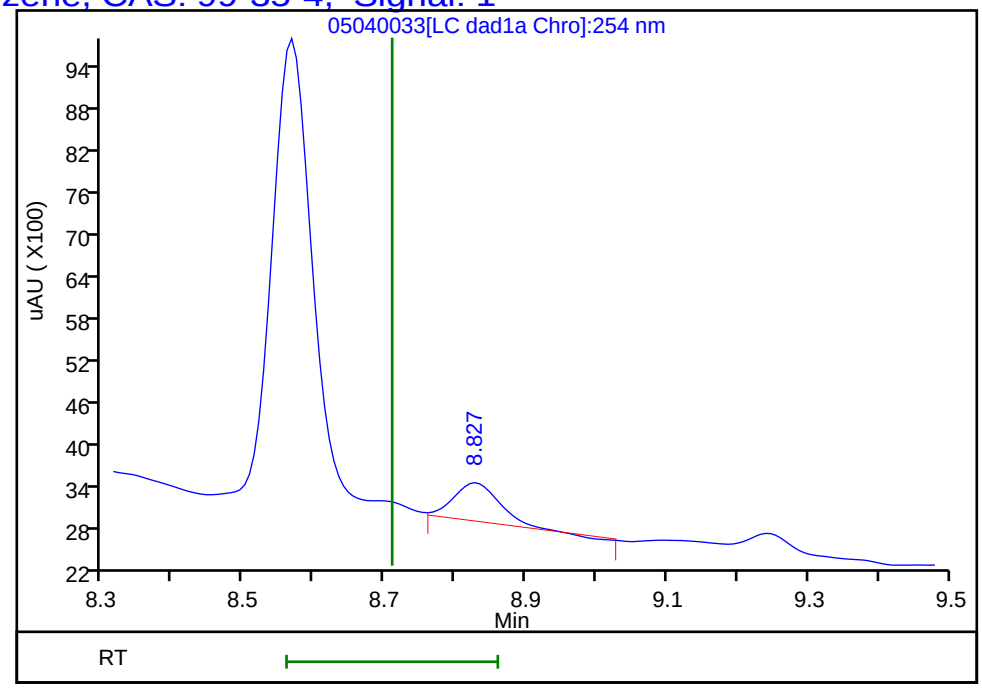
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040033.d				
Injection Date:	05-May-2024 02:33:25	Instrument ID:	CHHPLC_X3		
Lims ID:	280-190799-A-9-A	Lab Sample ID:	280-190799-9		
Client ID:	FWGmw-010-240401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

RT: 8.83
Response: 2695
Amount: 0.012093



Reviewer: LV5D, 07-May-2024 13:52:39
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

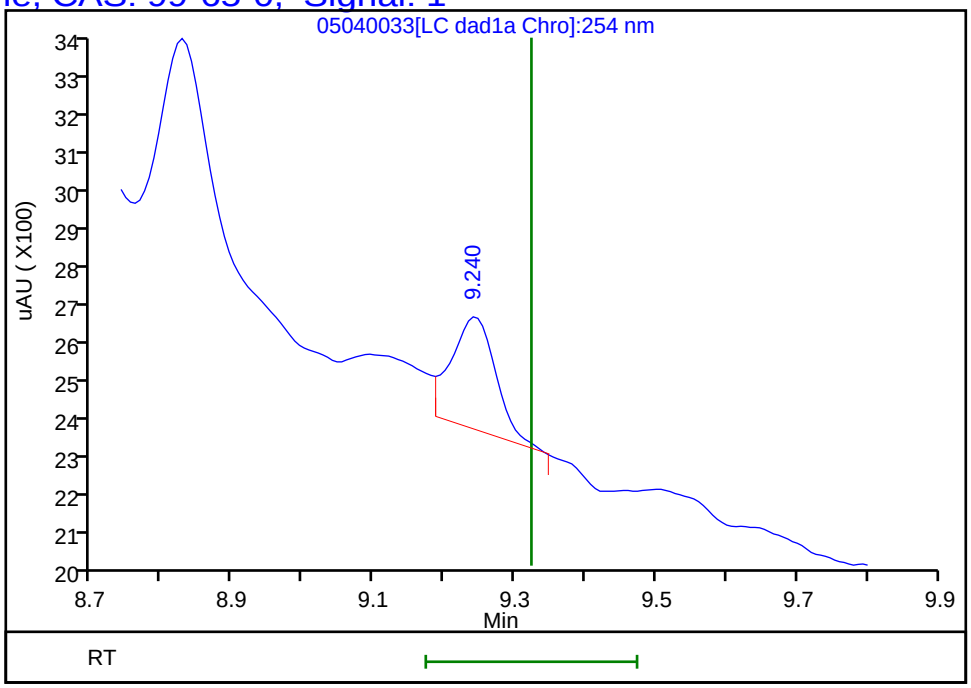
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040033.d				
Injection Date:	05-May-2024 02:33:25	Instrument ID:	CHHPLC_X3		
Lims ID:	280-190799-A-9-A	Lab Sample ID:	280-190799-9		
Client ID:	FWGmw-010-240401-GW				
Operator ID:	JZ/JG	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: 9.24
Response: 1268
Amount: 0.004235



Reviewer: LV5D, 07-May-2024 13:52:39
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

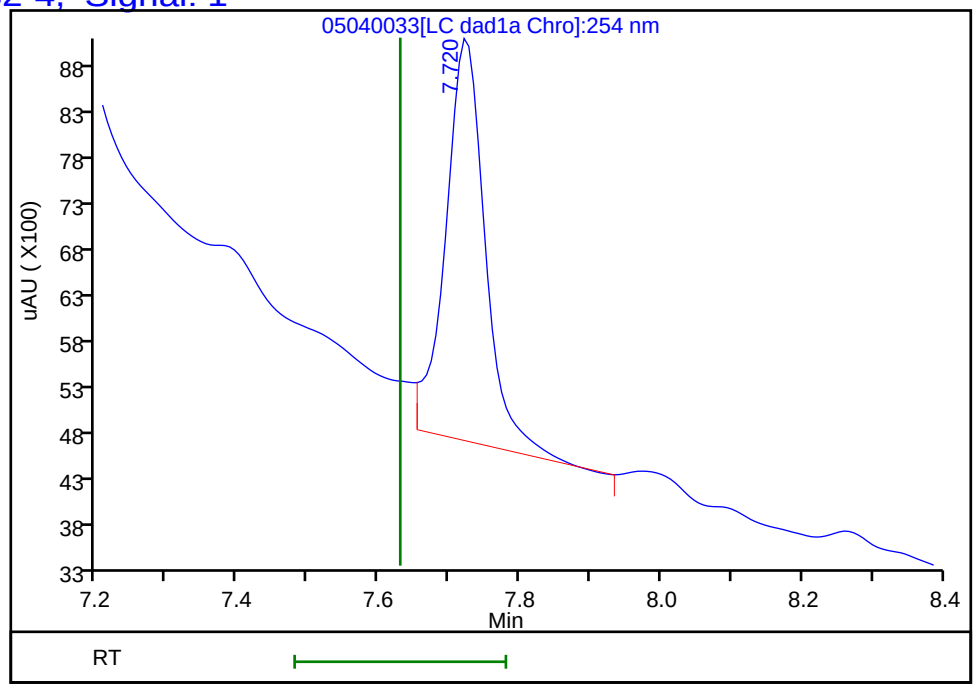
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040033.d				
Injection Date:	05-May-2024 02:33:25	Instrument ID:	CHHPLC_X3		
Lims ID:	280-190799-A-9-A	Lab Sample ID:	280-190799-9		
Client ID:	FWGmw-010-240401-GW				
Operator ID:	JZ/JG	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		

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

RT: 7.72
Response: 17139
Amount: 0.154730



Reviewer: LV5D, 07-May-2024 13:52:39
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.: 280-190799-1 | Analy Batch No.: 650851

SDG No.:

Instrument ID: CHHPLC_G2_LUNA | GC Column: Luna-phenyl ID: 4.6(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 04/24/2024 21:28 | Calibration End Date: 04/25/2024 02:15 | Calibration ID: 92631

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-650851/18	04240018.D
Level 2	IC 280-650851/17	04240017.D
Level 3	IC 280-650851/16	04240016.D
Level 4	IC 280-650851/15	04240015.D
Level 5	IC 280-650851/14	04240014.D
Level 6	IC 280-650851/13	04240013.D
Level 7	IC 280-650851/12	04240012.D
Level 8	IC 280-650851/11	04240011.D
Level 9	IC 280-650851/10	04240010.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	6.713	6.712	6.709	6.706	6.705	6.700	6.693	6.703	6.661		6.555 - 6.855	6.700
Picric acid	8.700	8.726	8.663	8.659	8.612	8.587	8.553	8.523	8.381		8.462 - 8.762	8.600
RDX	8.953	8.952	8.943	8.946	8.938	8.927	8.927	8.923	8.874		8.788 - 9.088	8.931
Nitrobenzene	11.426	11.459	11.436	11.452	11.425	11.420	11.426	11.416	11.374		11.275 - 11.575	11.426
3,5-Dinitroaniline	14.200	14.232	14.203	14.205	14.185	14.180	14.186	14.169	14.127		14.035 - 14.335	14.187
1,3-Dinitrobenzene	14.493	14.519	14.496	14.492	14.478	14.473	14.480	14.469	14.427		14.328 - 14.628	14.481
Nitroglycerin	14.940	14.979	14.943	14.945	14.918	14.920	14.940	14.916	14.880		14.768 - 15.068	14.931
2-Nitrotoluene	+++++	15.559	15.523	15.532	15.505	15.507	15.526	15.502	15.467		15.355 - 15.655	15.515
4-Nitrotoluene	+++++	15.772	15.743	15.759	15.738	15.740	15.753	15.729	15.694		15.588 - 15.888	15.741
4-Amino-2,6-dinitrotoluene	16.260	16.286	16.249	16.265	16.245	16.240	16.253	16.229	16.194		16.095 - 16.395	16.247
3-Nitrotoluene	16.586	16.619	16.583	16.599	16.578	16.573	16.586	16.569	16.527		16.428 - 16.728	16.580
2-Amino-4,6-dinitrotoluene	17.086	17.099	17.063	17.079	17.058	17.053	17.066	17.042	17.000		16.908 - 17.208	17.061
1,3,5-Trinitrobenzene	17.286	17.306	17.283	17.285	17.272	17.267	17.280	17.262	17.227		17.122 - 17.422	17.274
2,6-Dinitrotoluene	18.380	18.386	18.369	18.379	18.365	18.353	18.373	18.349	18.314		18.215 - 18.515	18.363
2,4-Dinitrotoluene	18.833	18.846	18.823	18.839	18.818	18.807	18.826	18.802	18.767		18.668 - 18.968	18.818
Tetryl	22.027	22.072	22.023	22.052	22.025	22.007	22.020	22.003	21.987		21.875 - 22.175	22.024
2,4,6-Trinitrotoluene	22.900	22.926	22.876	22.912	22.878	22.874	22.873	22.863	22.841		22.728 - 23.028	22.883
PETN	24.033	24.046	24.016	24.046	24.032	24.014	24.013	24.009	23.987		23.882 - 24.182	24.022
1,2-Dinitrobenzene	12.360	12.392	12.356	12.372	12.345	12.340	12.346	12.336	12.294		12.195 - 12.495	12.349

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

Lab Name: Eurofins Denver Job No.: 280-190799-1 Analy Batch No.: 650851

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/24/2024 21:28 Calibration End Date: 04/25/2024 02:15 Calibration ID: 92631

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-650851/18	04240018.D
Level 2	IC 280-650851/17	04240017.D
Level 3	IC 280-650851/16	04240016.D
Level 4	IC 280-650851/15	04240015.D
Level 5	IC 280-650851/14	04240014.D
Level 6	IC 280-650851/13	04240013.D
Level 7	IC 280-650851/12	04240012.D
Level 8	IC 280-650851/11	04240011.D
Level 9	IC 280-650851/10	04240010.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	167700 173948 174202	178900 175808	170180 173424	179770 172751	Ave		174075.821				2.2		20.0			
Picric acid	154900 148172 153137	165100 151088	140280 150487	148590 150820	Ave		151397.094				4.3		20.0			
RDX	256200 210828 204073	239550 207963	213080 202951	216090 202193	Lin2	539.023112	205652.806							0.9990		0.9900
Nitrobenzene	381800 372900 381987	405050 384143	363860 378609	394890 375845	Ave		382120.319				3.2		20.0			
3,5-Dinitroaniline	524500 432092 431274	473150 439350	449620 432267	436700 431522	Lin2	918.687014	430726.783							1.0000		0.9900
1,3-Dinitrobenzene	633200 572076 577399	615900 578140	611920 570583	575920 569625	Ave		589418.117				4.1		20.0			
Nitroglycerin	104310 123840 119273	119385 124108	118260 120549	126558 119260	Ave		119504.765				5.3		20.0			
2-Nitrotoluene	+++++ 235764 241788	251200 242098	264940 241561	237990 241414	Ave		244594.366				3.8		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.: 280-190799-1 Analy Batch No.: 650851

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/24/2024 21:28 Calibration End Date: 04/25/2024 02:15 Calibration ID: 92631

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	+++++ 216520 219653	263900 223335	236500 221201	225490 217154	Lin2	917.736717	217721.690							1.0000		0.9900
4-Amino-2,6-dinitrotoluene	336600 268460 268565	323700 274928	279100 270943	274490 269382	Lin2	742.452757	269511.071							0.9990		0.9900
3-Nitrotoluene	367200 274236 277226	334250 280190	298820 277211	281030 273569	Lin2	968.906840	275587.809							1.0000		0.9900
2-Amino-4,6-dinitrotoluene	502200 380328 379416	436650 390780	394700 386620	398530 380835	Ave		405562.156				9.9		20.0			
1,3,5-Trinitrobenzene	521000 404268 412363	458350 407038	387160 405177	411770 403965	Ave		423454.494				9.8		20.0			
2,6-Dinitrotoluene	301600 266156 268633	305650 268168	283940 267447	274870 265267	Ave		277970.049				5.6		20.0			
2,4-Dinitrotoluene	576400 534316 545101	600250 542238	571780 541644	542940 536407	Ave		554563.998				4.1		20.0			
Tetryl	367500 316916 314923	313400 314733	312600 312921	329200 310388	Lin2	448.108744	311971.216							0.9990		0.9900
2,4,6-Trinitrotoluene	370300 401348 408571	398450 400180	402620 398954	418610 398830	Ave		399762.610				3.2		20.0			
PETN	105310 121971 123890	112970 123201	121232 123587	121831 122809	Lin2	-1863.2605	123564.211							1.0000		0.9900
1,2-Dinitrobenzene	223700 257724 258500	273700 261405	266480 257347	273700 255644	Ave		258688.949				5.7		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.: 280-190799-1 | Analy Batch No.: 650851

SDG No.:

Instrument ID: CHHPLC_G2_LUNA | GC Column: Luna-pheny ID: 4.6(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 04/24/2024 21:28 | Calibration End Date: 04/25/2024 02:15 | Calibration ID: 92631

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-650851/18	04240018.D
Level 2	IC 280-650851/17	04240017.D
Level 3	IC 280-650851/16	04240016.D
Level 4	IC 280-650851/15	04240015.D
Level 5	IC 280-650851/14	04240014.D
Level 6	IC 280-650851/13	04240013.D
Level 7	IC 280-650851/12	04240012.D
Level 8	IC 280-650851/11	04240011.D
Level 9	IC 280-650851/10	04240010.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	1677 70323	3578 121397	8509 172751	17977 435504	43487	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Picric acid	Ave	1549 60435	3302 105341	7014 150820	14859 382843	37043	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
RDX	Lin2	2562 83185	4791 142066	10654 202193	21609 510182	52707	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Nitrobenzene	Ave	3818 153657	8101 265026	18193 375845	39489 954967	93225	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
3,5-Dinitroaniline	Lin2	5245 175740	9463 302587	22481 431522	43670 1078184	108023	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
1,3-Dinitrobenzene	Ave	6332 231256	12318 399408	30596 569625	57592 1443498	143019	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Nitroglycerin	Ave	10431 496432	23877 843844	59130 1192597	126558 2981826	309600	0.100 4.00	0.200 7.00	0.500 10.0	1.00 25.0	2.50
2-Nitrotoluene	Ave	+++++ 96839	5024 169093	13247 241414	23799 604470	58941	+++++ 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
4-Nitrotoluene	Lin2	+++++ 89334	5278 154841	11825 217154	22549 549133	54130	+++++ 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
4-Amino-2,6-dinitrotoluene	Lin2	3366 109971	6474 189660	13955 269382	27449 671412	67115	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
3-Nitrotoluene	Lin2	3672 112076	6685 194048	14941 273569	28103 693064	68559	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
2-Amino-4,6-dinitrotoluene	Ave	5022 156312	8733 270634	19735 380835	39853 948541	95082	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
1,3,5-Trinitrobenzene	Ave	5210 162815	9167 283624	19358 403965	41177 1030907	101067	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
2,6-Dinitrotoluene	Ave	3016 107267	6113 187213	14197 265267	27487 671582	66539	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
2,4-Dinitrotoluene	Ave	5764	12005	28589	54294	133579	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.: 280-190799-1 | Analy Batch No.: 650851

SDG No.:

Instrument ID: CHHPLC_G2_LUNA | GC Column: Luna-pheny ID: 4.6(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 04/24/2024 21:28 | Calibration End Date: 04/25/2024 02:15 | Calibration ID: 92631

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
		216895	379151	536407	1362753		0.400	0.700	1.00	2.50	
Tetryl	Lin2	3675 125893	6268 219045	15630 310388	32920 787307	79229	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
2,4,6-Trinitrotoluene	Ave	3703 160072	7969 279268	20131 398830	41861 1021428	100337	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
PETN	Lin2	10531 492803	22594 865110	60616 1228090	121831 3097249	304928	0.100 4.00	0.200 7.00	0.500 10.0	1.00 25.0	2.50
1,2-Dinitrobenzene	Ave	2237 104562	5474 180143	13324 255644	27370 646251	64431	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\G2_LUNA\20240424-132624.b\04240010.D
Lims ID: IC INT 9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 24-Apr-2024 21:28:13 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 9
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub16

Method: \\chromfs\Denver\ChromData\G2_LUNA\20240424-132624.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 25-Apr-2024 14:30:09 Calib Date: 25-Apr-2024 07:39:21
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20240424-132624.b\04240027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1684

First Level Reviewer: LV5D Date: 25-Apr-2024 13:10:30

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
6 HMX	1	6.661	6.705	-0.044	435504	2.50	2.50	
5 2,4,6-Trinitrophenol	1	8.381	8.612	-0.231	382843	2.50	2.53	a
8 RDX	1	8.874	8.938	-0.064	510182	2.50	2.48	
9 Nitrobenzene	1	11.374	11.425	-0.051	954967	2.50	2.50	
$ 10 1,2-Dinitrobenzene	1	12.294	12.345	-0.051	646251	2.50	2.50	
11 3,5-Dinitroaniline	1	14.127	14.185	-0.058	1078184	2.50	2.50	
12 1,3-Dinitrobenzene	1	14.427	14.478	-0.051	1443498	2.50	2.45	
13 Nitroglycerin	2	14.880	14.918	-0.038	2981826	25.0	25.0	M
14 o-Nitrotoluene	1	15.467	15.505	-0.038	604470	2.50	2.47	
15 p-Nitrotoluene	1	15.694	15.738	-0.044	549133	2.50	2.52	
16 4-Amino-2,6-dinitrotoluene	1	16.194	16.245	-0.051	671412	2.50	2.49	
17 m-Nitrotoluene	1	16.527	16.578	-0.051	693064	2.50	2.51	
18 2-Amino-4,6-dinitrotoluene	1	17.000	17.058	-0.058	948541	2.50	2.34	
19 1,3,5-Trinitrobenzene	1	17.227	17.272	-0.045	1030907	2.50	2.43	
20 2,6-Dinitrotoluene	1	18.314	18.365	-0.051	671582	2.50	2.42	
21 2,4-Dinitrotoluene	1	18.767	18.818	-0.051	1362753	2.50	2.46	
22 Tetryl	1	21.987	22.025	-0.038	787307	2.50	2.52	
23 2,4,6-Trinitrotoluene	1	22.841	22.878	-0.037	1021428	2.50	2.56	
24 PETN	2	23.987	24.032	-0.045	3097249	25.0	25.1	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

8330IntermStk_00080 Amount Added: 250.00 Units: uL

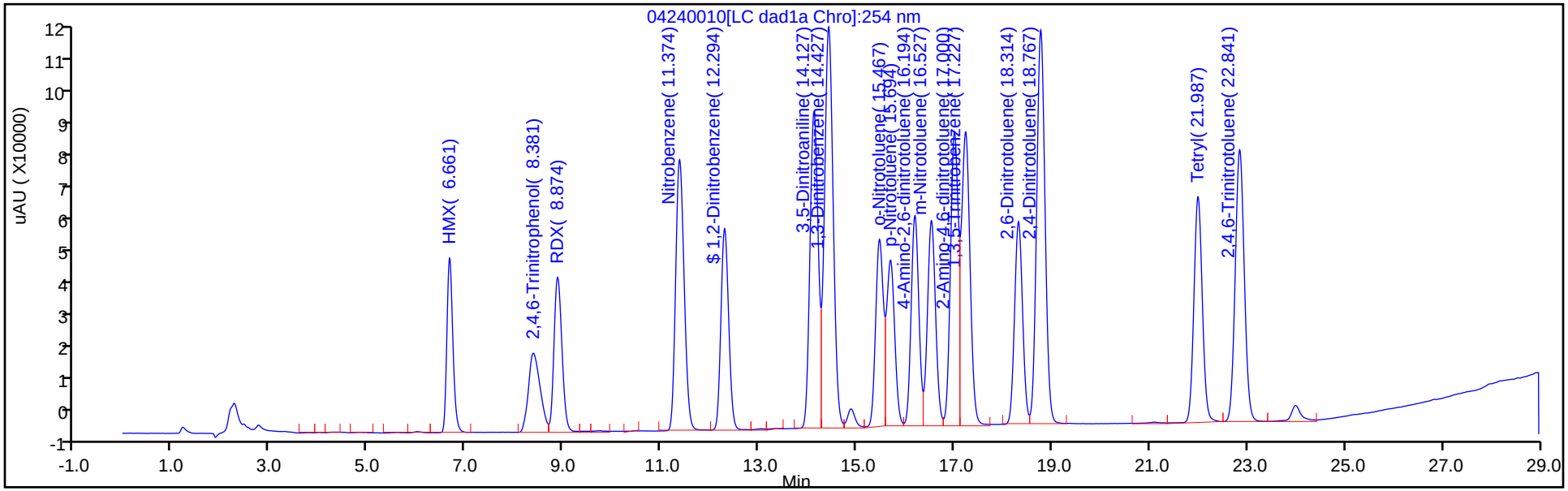
Report Date: 25-Apr-2024 14:30:09 Chrom Revision: 2.3 09-Apr-2024 17:43:44

Eurofins Denver

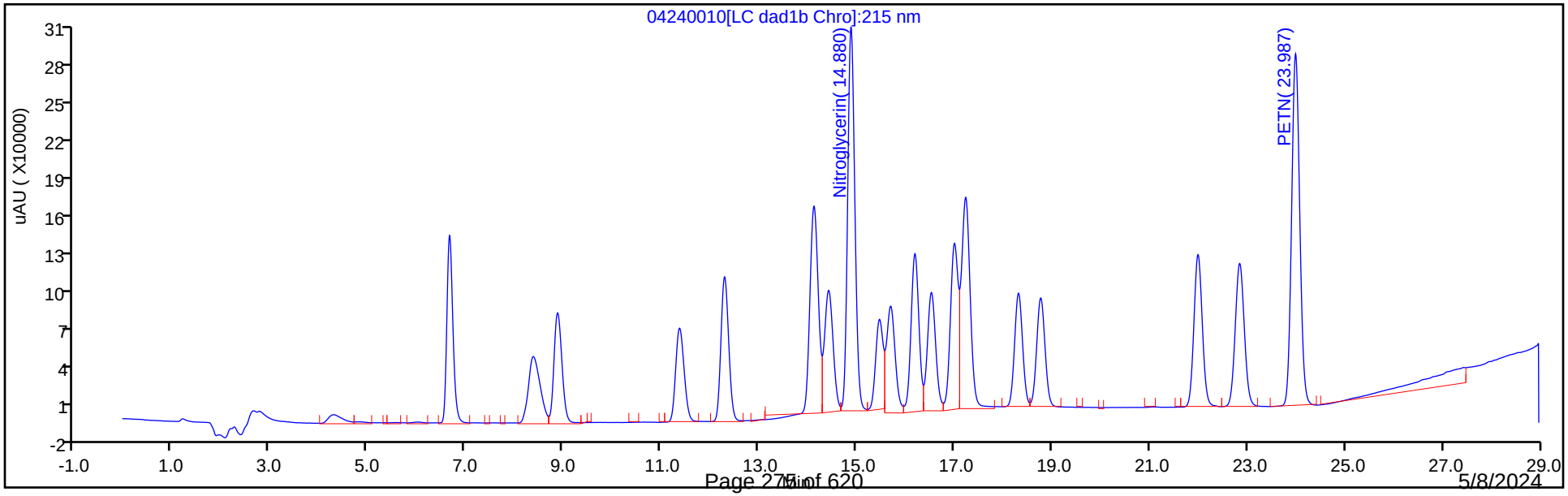
Data File: \\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240010.d

Injection Date:	24-Apr-2024 21:28:13	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	IC INT 9			Worklist Smp#:	10
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	G2_8330_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



5/8/2024
6:07:23 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

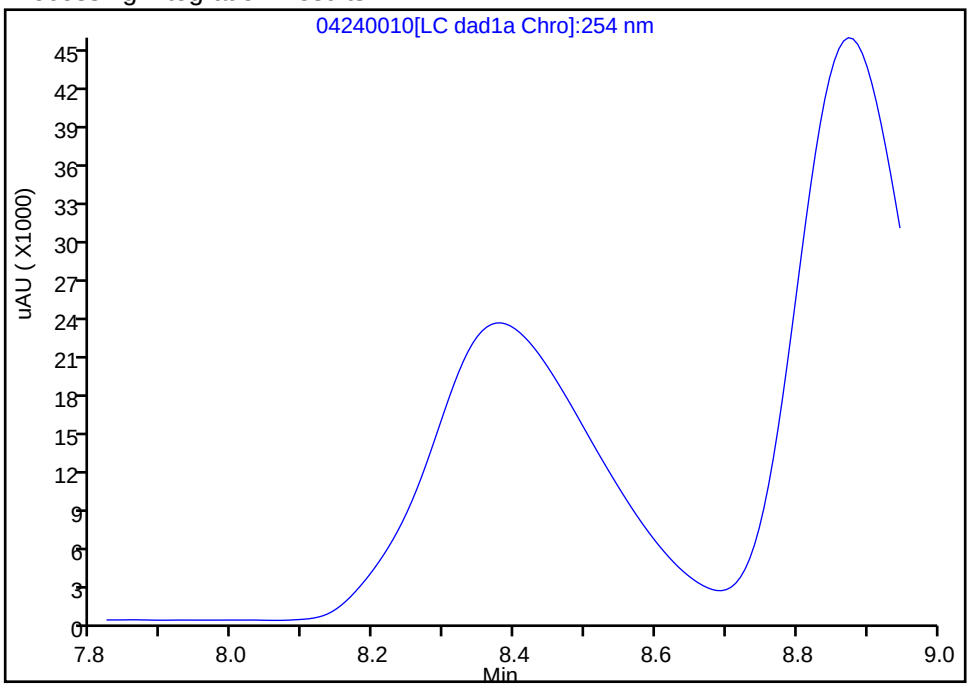
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240010.d				
Injection Date:	24-Apr-2024 21:28:13	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 9				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

5 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

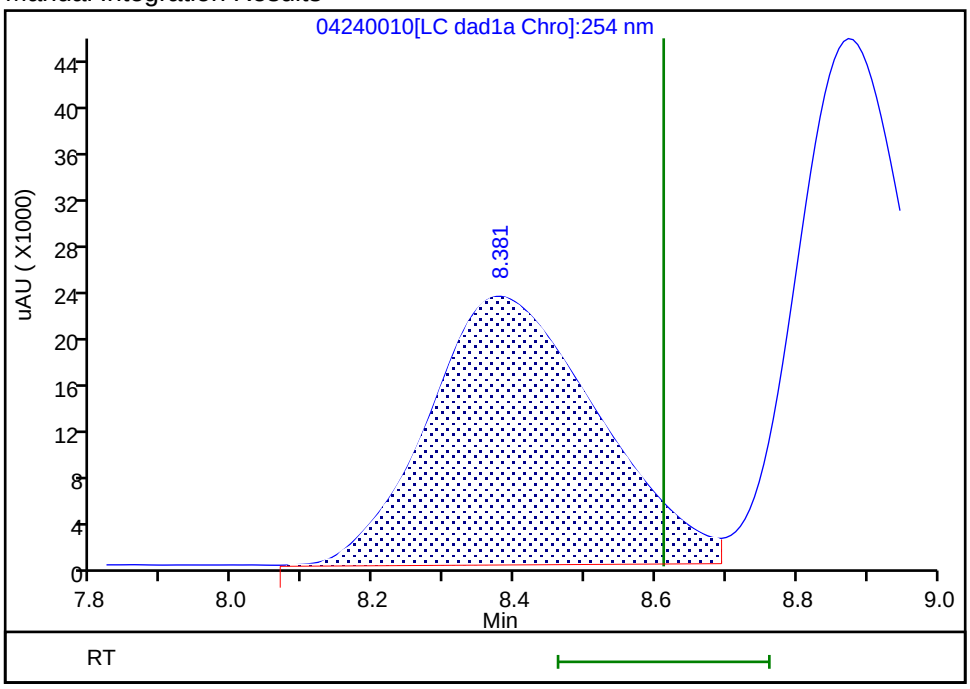
Not Detected
Expected RT: 8.61

Processing Integration Results



Manual Integration Results

RT: 8.38
Area: 382843
Amount: 2.528734
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:10:11 -06:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Denver

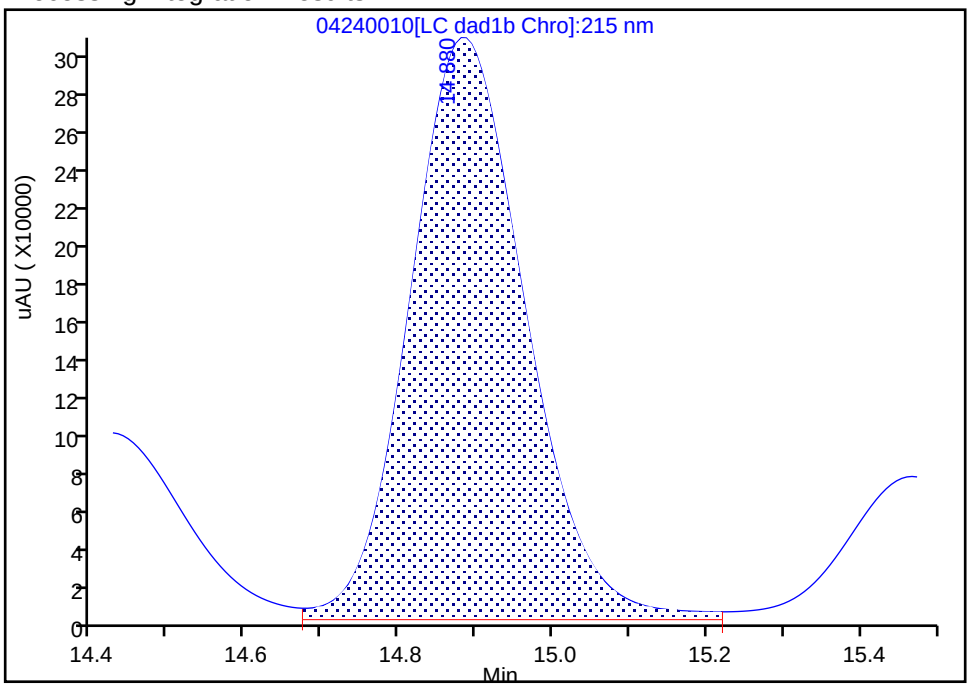
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240010.d				
Injection Date:	24-Apr-2024 21:28:13	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 9				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1B, 215 nm		

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

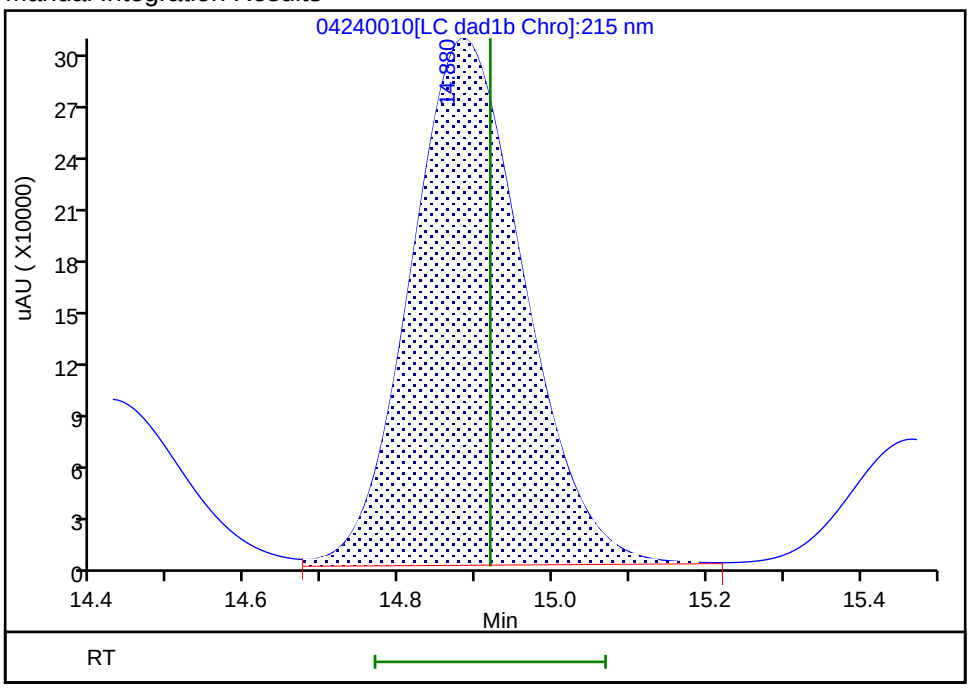
Processing Integration Results

RT: 14.88
Area: 3082817
Amount: 11.814701
Amount Units: ug/ml



Manual Integration Results

RT: 14.88
Area: 2981826
Amount: 24.951524
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:10:26 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20240424-132624.b\04240011.D
Lims ID: IC INT 8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 24-Apr-2024 22:04:12 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 8
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub16

Method: \\chromfs\Denver\ChromData\G2_LUNA\20240424-132624.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 25-Apr-2024 14:30:10 Calib Date: 25-Apr-2024 07:39:21
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20240424-132624.b\04240027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1684

First Level Reviewer: LV5D Date: 25-Apr-2024 13:18:58

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
6 HMX	1	6.703	6.705	-0.002	172751	1.00	0.99	
5 2,4,6-Trinitrophenol	1	8.523	8.612	-0.089	150820	1.00	1.00	
8 RDX	1	8.923	8.938	-0.015	202193	1.00	0.9806	
9 Nitrobenzene	1	11.416	11.425	-0.009	375845	1.00	0.9836	
$ 10 1,2-Dinitrobenzene	1	12.336	12.345	-0.009	255644	1.00	0.9882	
11 3,5-Dinitroaniline	1	14.169	14.185	-0.016	431522	1.00	1.00	
12 1,3-Dinitrobenzene	1	14.469	14.478	-0.009	569625	1.00	0.9664	
13 Nitroglycerin	2	14.916	14.918	-0.002	1192597	10.0	9.98	M
14 o-Nitrotoluene	1	15.502	15.505	-0.003	241414	1.00	0.9870	
15 p-Nitrotoluene	1	15.729	15.738	-0.009	217154	1.00	0.99	
16 4-Amino-2,6-dinitrotoluene	1	16.229	16.245	-0.016	269382	1.00	1.00	
17 m-Nitrotoluene	1	16.569	16.578	-0.009	273569	1.00	0.9892	
18 2-Amino-4,6-dinitrotoluene	1	17.042	17.058	-0.016	380835	1.00	0.9390	
19 1,3,5-Trinitrobenzene	1	17.262	17.272	-0.010	403965	1.00	0.9540	
20 2,6-Dinitrotoluene	1	18.349	18.365	-0.016	265267	1.00	0.9543	
21 2,4-Dinitrotoluene	1	18.802	18.818	-0.016	536407	1.00	0.9673	
22 Tetryl	1	22.003	22.025	-0.022	310388	1.00	0.99	
23 2,4,6-Trinitrotoluene	1	22.863	22.878	-0.015	398830	1.00	1.00	M
24 PETN	2	24.009	24.032	-0.023	1228090	10.0	9.95	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00080 Amount Added: 100.00 Units: uL

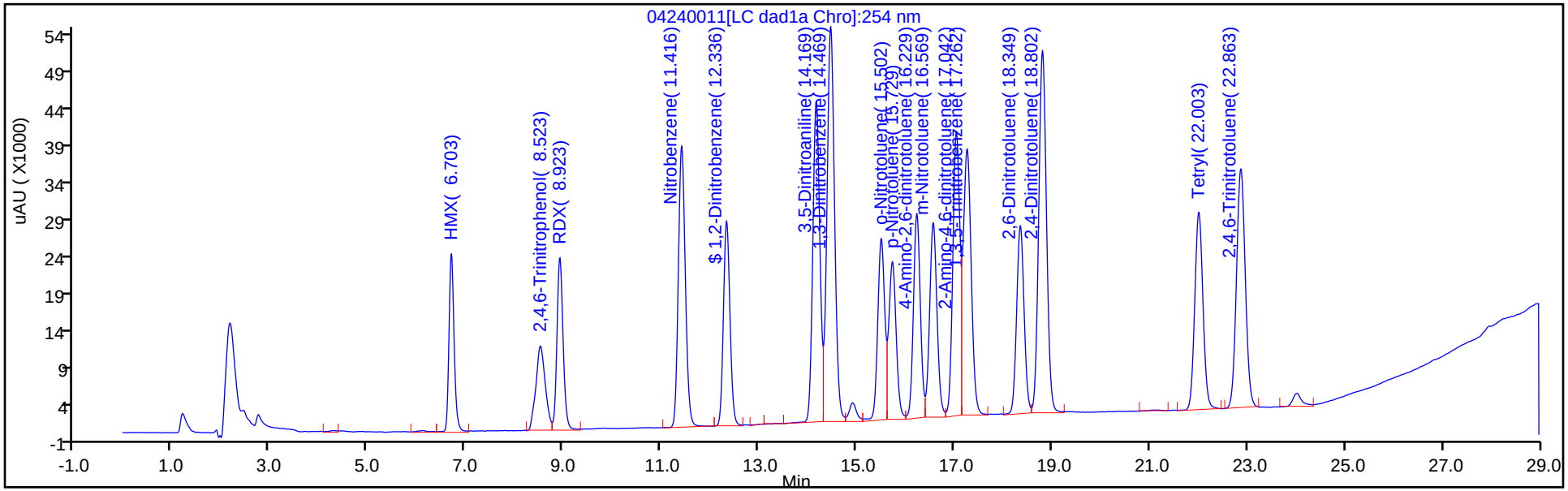
Report Date: 25-Apr-2024 14:30:10 Chrom Revision: 2.3 09-Apr-2024 17:43:44

Eurofins Denver

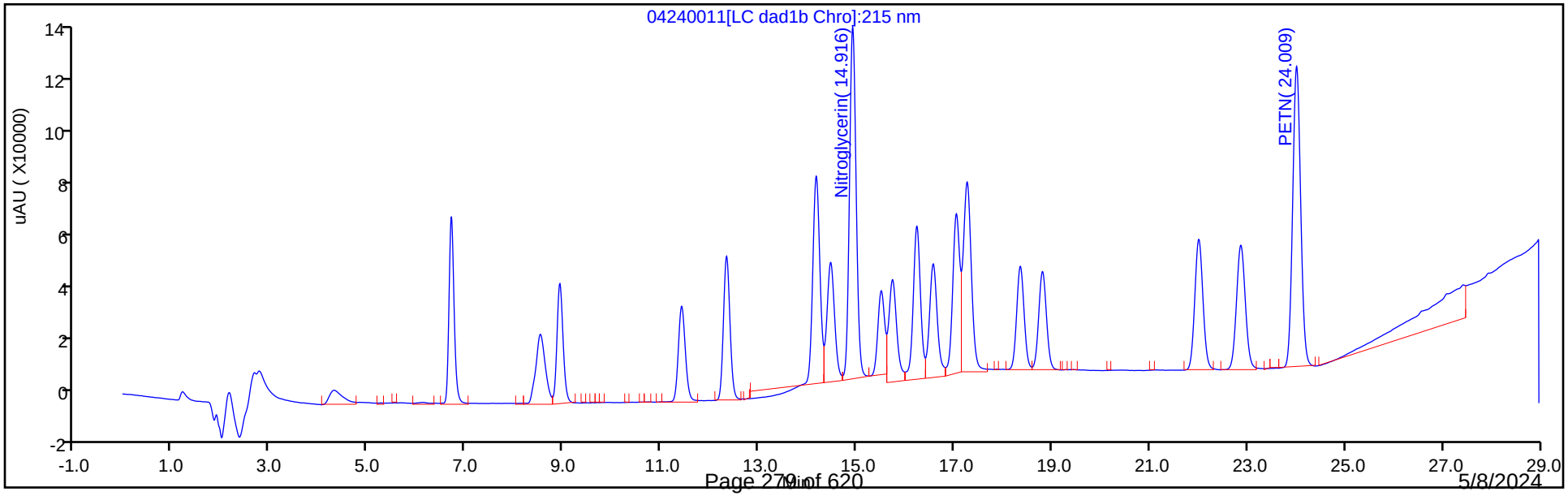
Data File: \\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240011.d

Injection Date:	24-Apr-2024 22:04:12	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	IC INT 8			Worklist Smp#:	11
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	G2_8330_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



5/8/2024
6:07:23 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

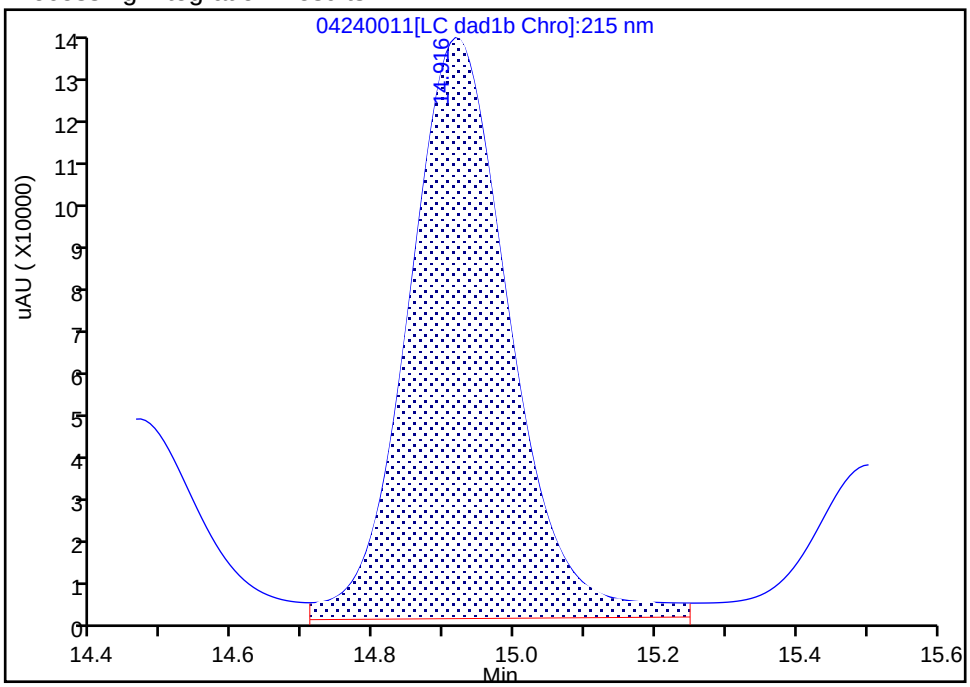
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240011.d				
Injection Date:	24-Apr-2024 22:04:12	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 8				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1B, 215 nm		

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

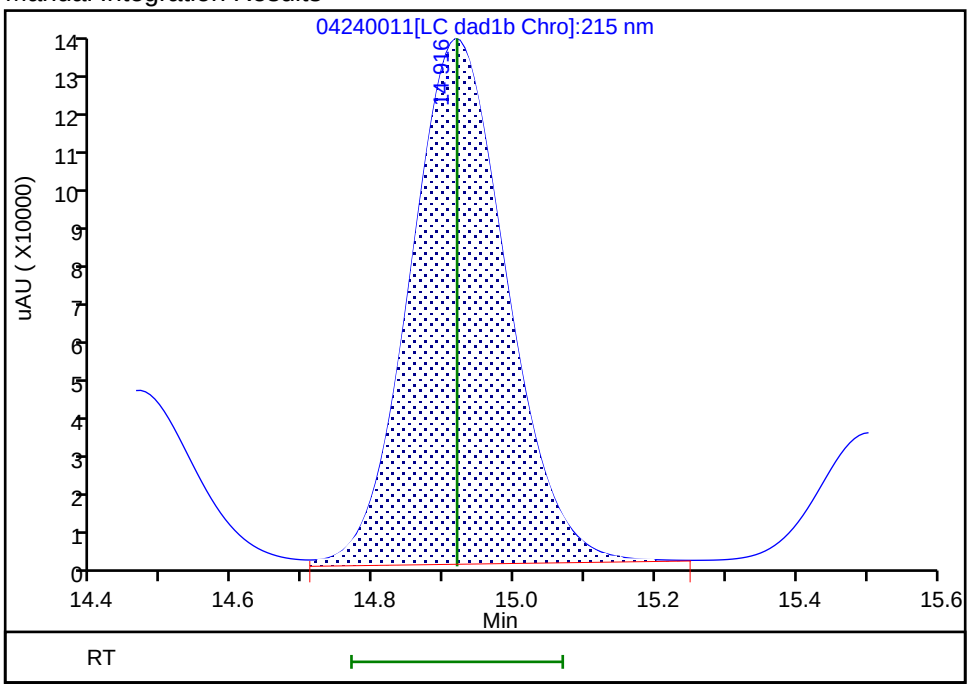
Processing Integration Results

RT: 14.92
Area: 1281389
Amount: 4.919304
Amount Units: ug/ml



Manual Integration Results

RT: 14.92
Area: 1192597
Amount: 9.979493
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:11:13 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

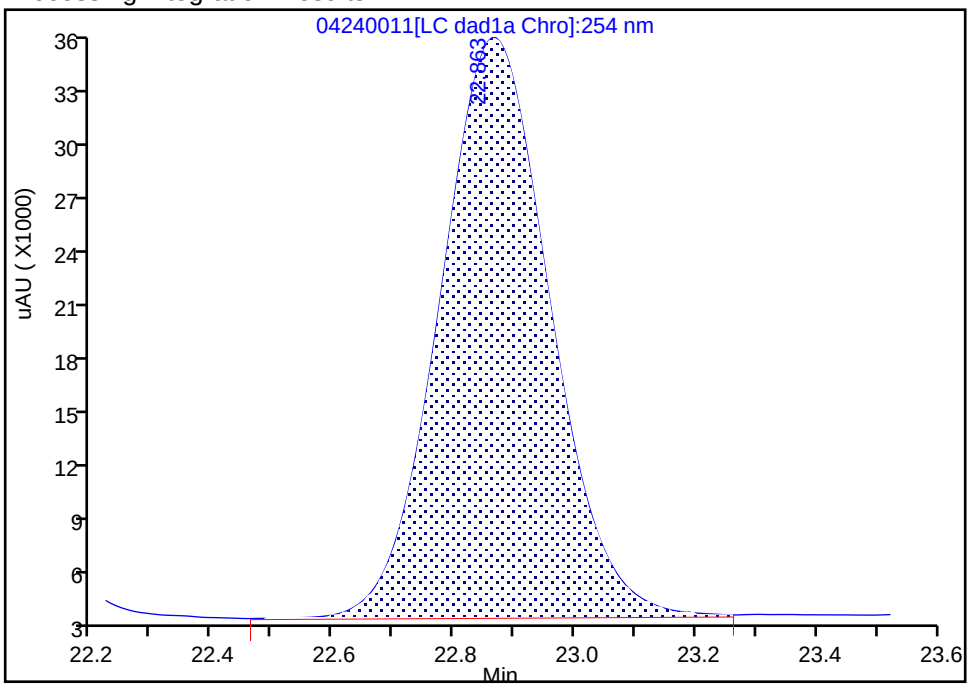
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240011.d				
Injection Date:	24-Apr-2024 22:04:12	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 8				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

23 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

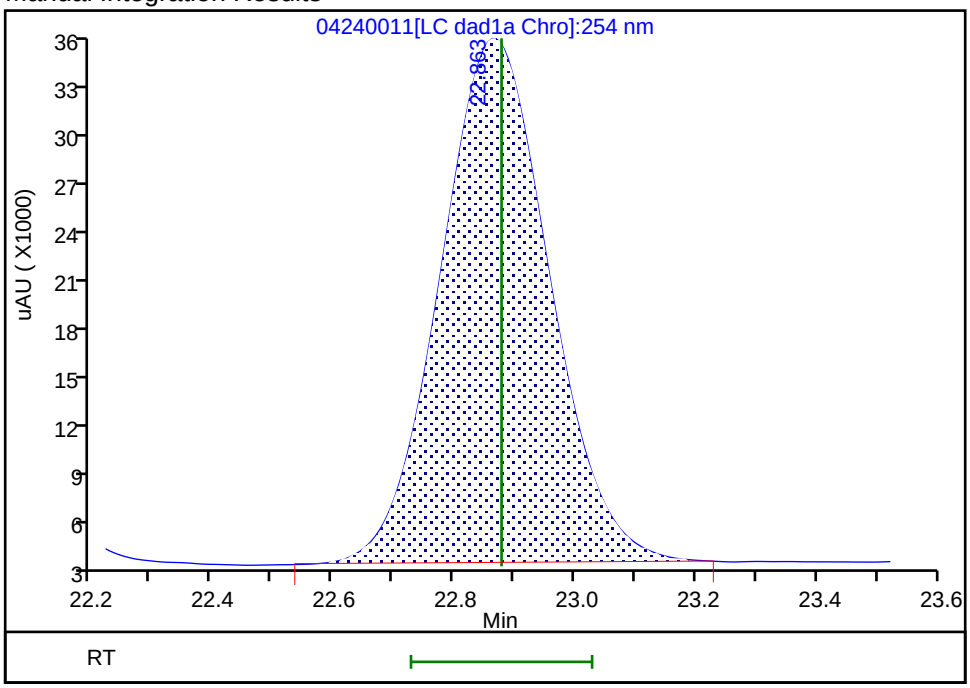
Processing Integration Results

RT: 22.86
Area: 406074
Amount: 1.007347
Amount Units: ug/ml



Manual Integration Results

RT: 22.86
Area: 398830
Amount: 0.997667
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:37:30 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20240424-132624.b\04240012.D
Lims ID: IC INT 7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 24-Apr-2024 22:40:07 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 7
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub16

Method: \\chromfs\Denver\ChromData\G2_LUNA\20240424-132624.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 25-Apr-2024 14:30:11 Calib Date: 25-Apr-2024 07:39:21
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20240424-132624.b\04240027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1684

First Level Reviewer: LV5D Date: 25-Apr-2024 13:19:19

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
6 HMX	1	6.693	6.705	-0.012	121397	0.7000	0.6974	
5 2,4,6-Trinitrophenol	1	8.553	8.612	-0.059	105341	0.7000	0.6958	
8 RDX	1	8.927	8.938	-0.011	142066	0.7000	0.6882	
9 Nitrobenzene	1	11.426	11.425	0.001	265026	0.7000	0.6936	
$ 10 1,2-Dinitrobenzene	1	12.346	12.345	0.001	180143	0.7000	0.6964	
11 3,5-Dinitroaniline	1	14.186	14.185	0.001	302587	0.7000	0.7004	
12 1,3-Dinitrobenzene	1	14.480	14.478	0.002	399408	0.7000	0.6776	
13 Nitroglycerin	2	14.940	14.918	0.022	843844	7.00	7.06	M
14 o-Nitrotoluene	1	15.526	15.505	0.021	169093	0.7000	0.6913	
15 p-Nitrotoluene	1	15.753	15.738	0.015	154841	0.7000	0.7070	
16 4-Amino-2,6-dinitrotoluene	1	16.253	16.245	0.008	189660	0.7000	0.7010	
17 m-Nitrotoluene	1	16.586	16.578	0.008	194048	0.7000	0.7006	
18 2-Amino-4,6-dinitrotoluene	1	17.066	17.058	0.008	270634	0.7000	0.6673	
19 1,3,5-Trinitrobenzene	1	17.280	17.272	0.008	283624	0.7000	0.6698	
20 2,6-Dinitrotoluene	1	18.373	18.365	0.008	187213	0.7000	0.6735	
21 2,4-Dinitrotoluene	1	18.826	18.818	0.008	379151	0.7000	0.6837	
22 Tetryl	1	22.020	22.025	-0.005	219045	0.7000	0.7007	
23 2,4,6-Trinitrotoluene	1	22.873	22.878	-0.005	279268	0.7000	0.6986	M
24 PETN	2	24.013	24.032	-0.019	865110	7.00	7.02	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

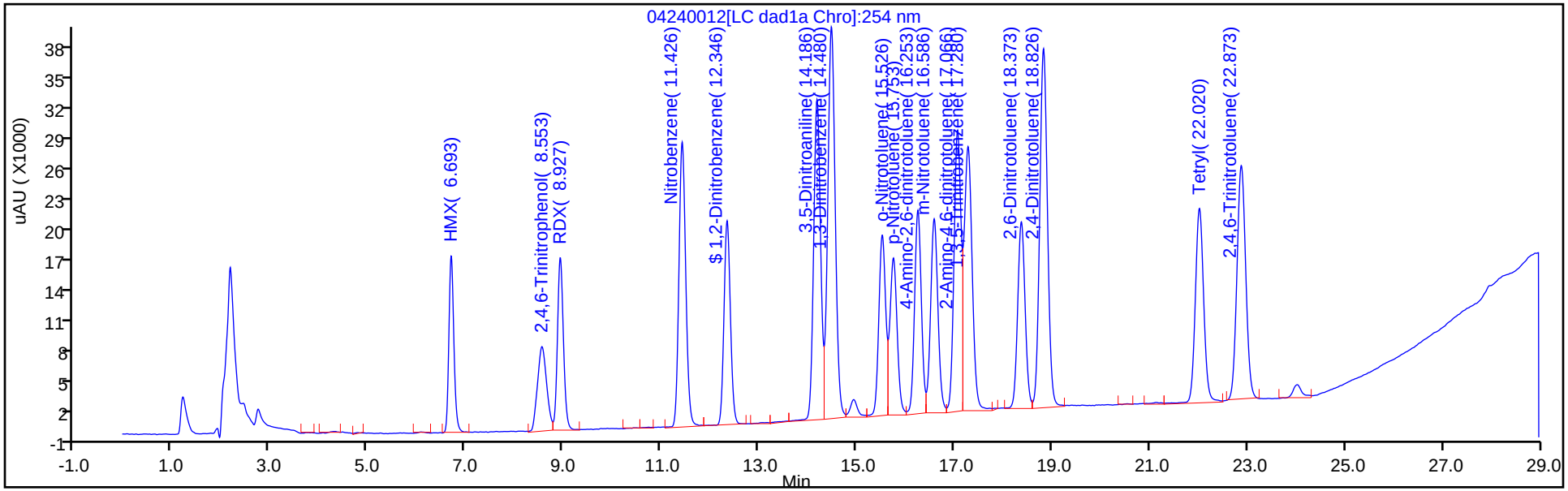
8330IntermStk_00080 Amount Added: 70.00 Units: uL

Report Date: 25-Apr-2024 14:30:11 Chrom Revision: 2.3 09-Apr-2024 17:43:44

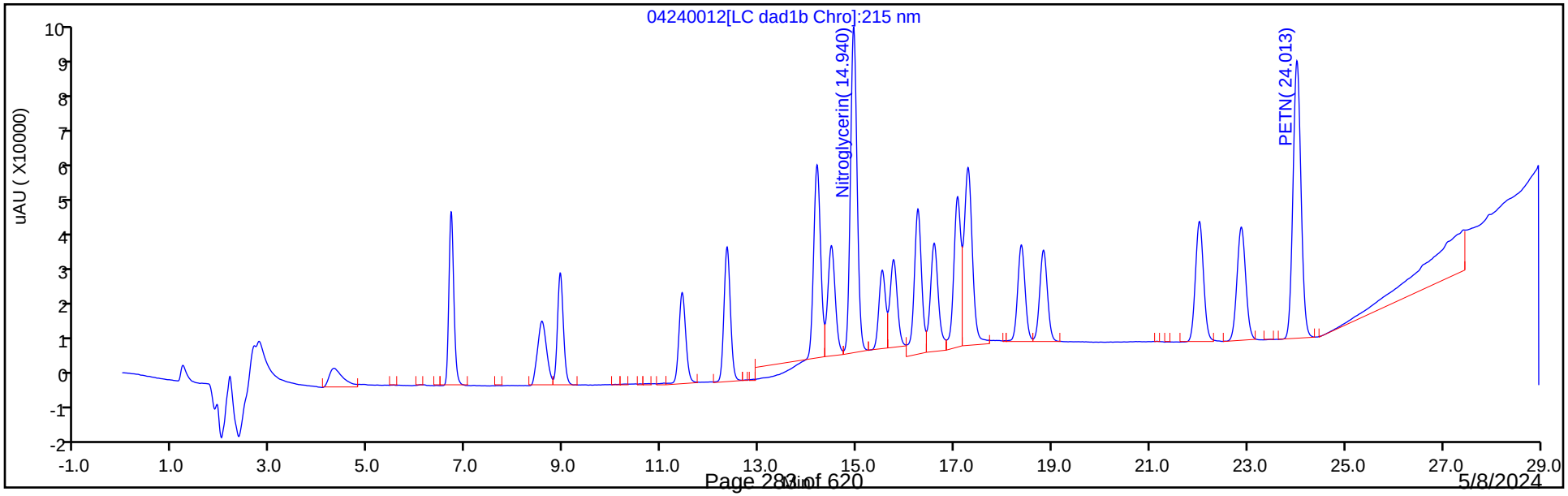
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240012.d				
Injection Date:	24-Apr-2024 22:40:07	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	IC INT 7			Worklist Smp#:	12
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	G2_8330_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



Manual Integration/User Assign Peak Report

Eurofins Denver

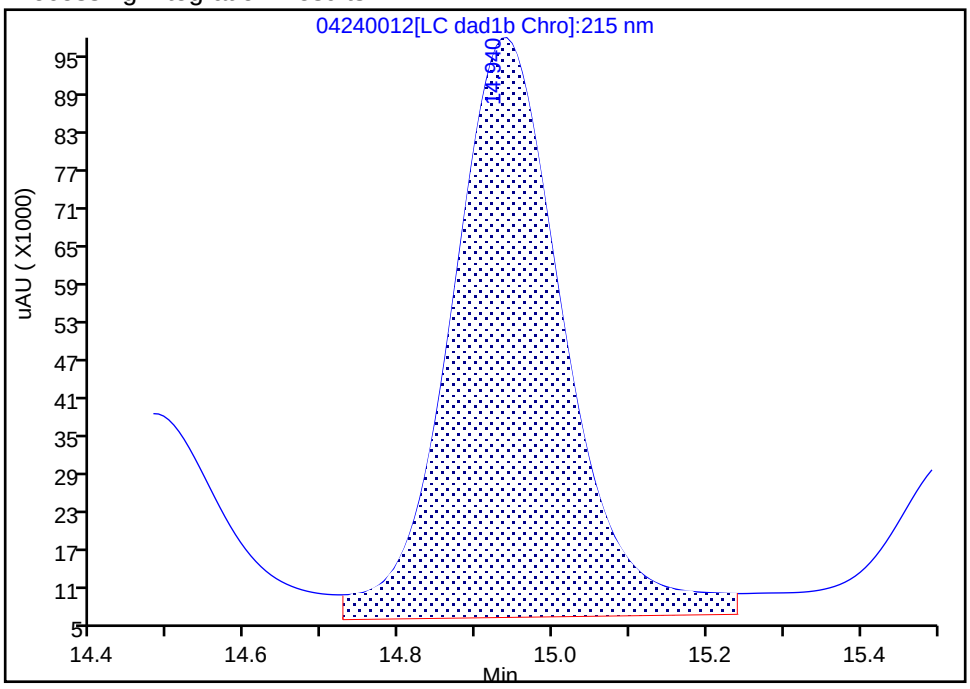
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240012.d				
Injection Date:	24-Apr-2024 22:40:07	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 7				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1B, 215 nm		

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

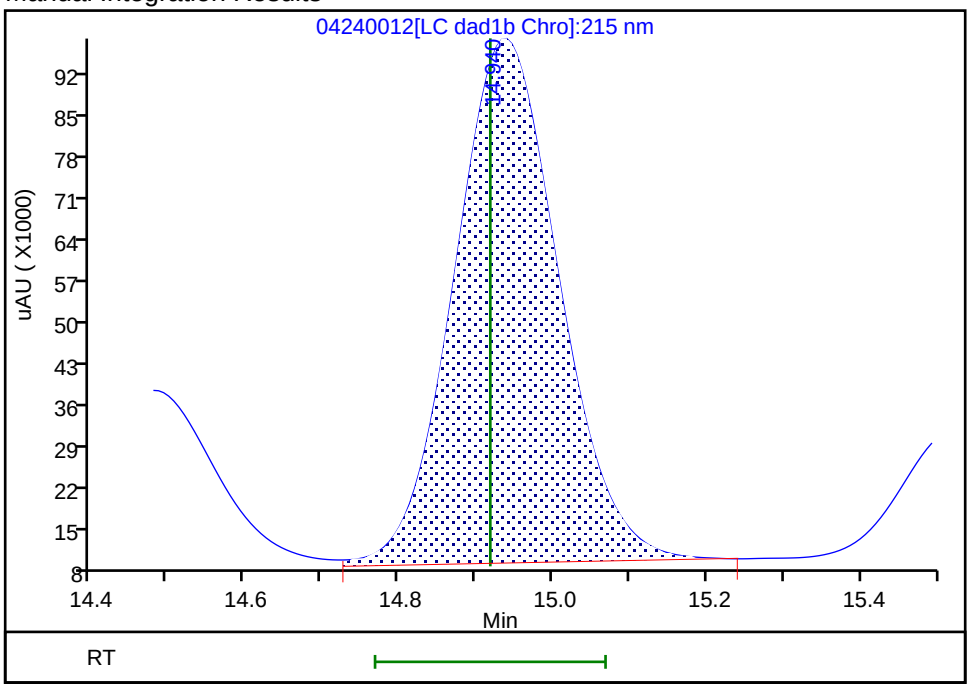
Processing Integration Results

RT: 14.94
Area: 942019
Amount: 3.630198
Amount Units: ug/ml



Manual Integration Results

RT: 14.94
Area: 843844
Amount: 7.061175
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:19:17 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

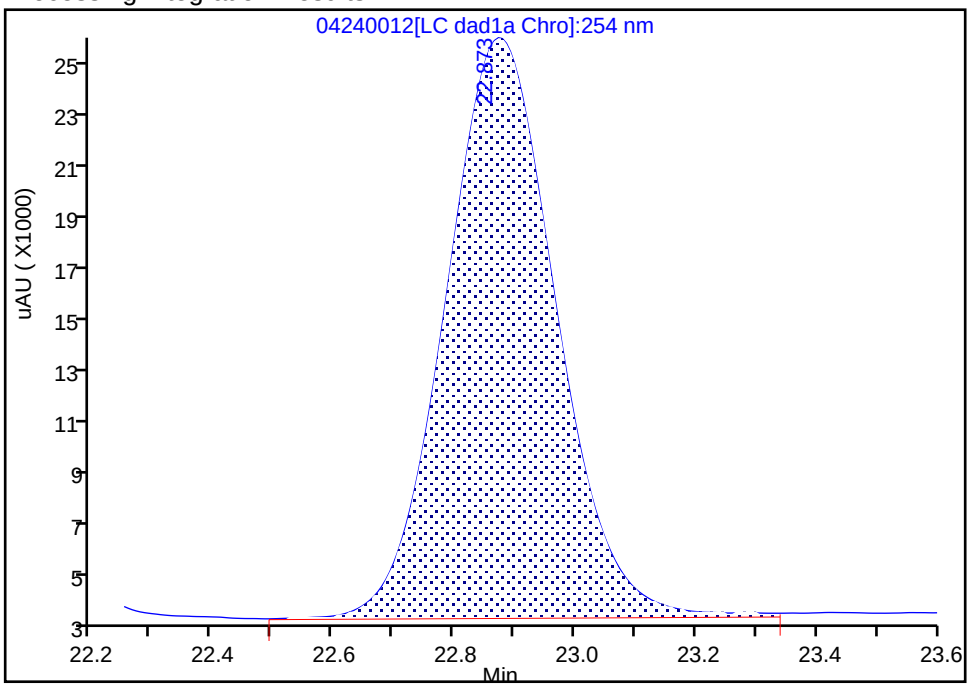
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240012.d				
Injection Date:	24-Apr-2024 22:40:07	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 7				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

23 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

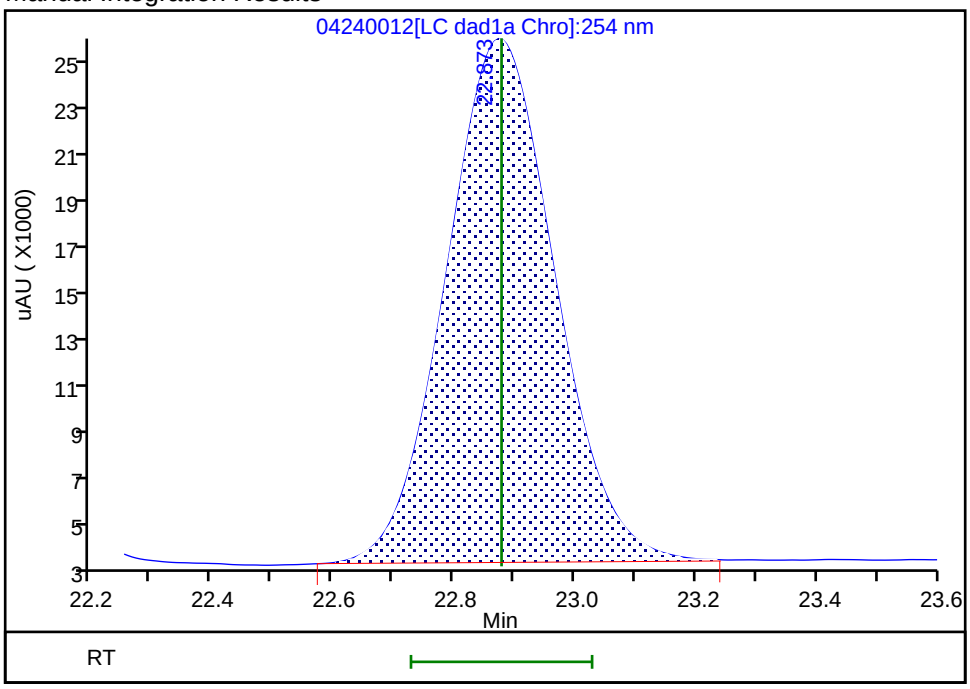
Processing Integration Results

RT: 22.87
Area: 285759
Amount: 0.707074
Amount Units: ug/ml



Manual Integration Results

RT: 22.87
Area: 279268
Amount: 0.698585
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:37:19 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20240424-132624.b\04240013.D
Lims ID: IC INT 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 24-Apr-2024 23:16:01 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 6
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub16

Method: \\chromfs\Denver\ChromData\G2_LUNA\20240424-132624.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 25-Apr-2024 14:30:12 Calib Date: 25-Apr-2024 07:39:21
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20240424-132624.b\04240027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1684

First Level Reviewer: LV5D Date: 25-Apr-2024 13:19:49

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
6 HMX	1	6.700	6.705	-0.005	70323	0.4000	0.4040	
5 2,4,6-Trinitrophenol	1	8.587	8.612	-0.025	60435	0.4000	0.3992	
8 RDX	1	8.927	8.938	-0.011	83185	0.4000	0.4019	
9 Nitrobenzene	1	11.420	11.425	-0.005	153657	0.4000	0.4021	
$ 10 1,2-Dinitrobenzene	1	12.340	12.345	-0.005	104562	0.4000	0.4042	
11 3,5-Dinitroaniline	1	14.180	14.185	-0.005	175740	0.4000	0.4059	M
12 1,3-Dinitrobenzene	1	14.473	14.478	-0.005	231256	0.4000	0.3923	M
13 Nitroglycerin	2	14.920	14.918	0.002	496432	4.00	4.15	M
14 o-Nitrotoluene	1	15.507	15.505	0.002	96839	0.4000	0.3959	M
15 p-Nitrotoluene	1	15.740	15.738	0.002	89334	0.4000	0.4061	M
16 4-Amino-2,6-dinitrotoluene	1	16.240	16.245	-0.005	109971	0.4000	0.4053	M
17 m-Nitrotoluene	1	16.573	16.578	-0.005	112076	0.4000	0.4032	M
18 2-Amino-4,6-dinitrotoluene	1	17.053	17.058	-0.005	156312	0.4000	0.3854	M
19 1,3,5-Trinitrobenzene	1	17.267	17.272	-0.005	162815	0.4000	0.3845	M
20 2,6-Dinitrotoluene	1	18.353	18.365	-0.012	107267	0.4000	0.3859	M
21 2,4-Dinitrotoluene	1	18.807	18.818	-0.011	216895	0.4000	0.3911	M
22 Tetryl	1	22.007	22.025	-0.018	125893	0.4000	0.4021	
23 2,4,6-Trinitrotoluene	1	22.874	22.878	-0.004	160072	0.4000	0.4004	M
24 PETN	2	24.014	24.032	-0.018	492803	4.00	4.00	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00080 Amount Added: 40.00 Units: uL

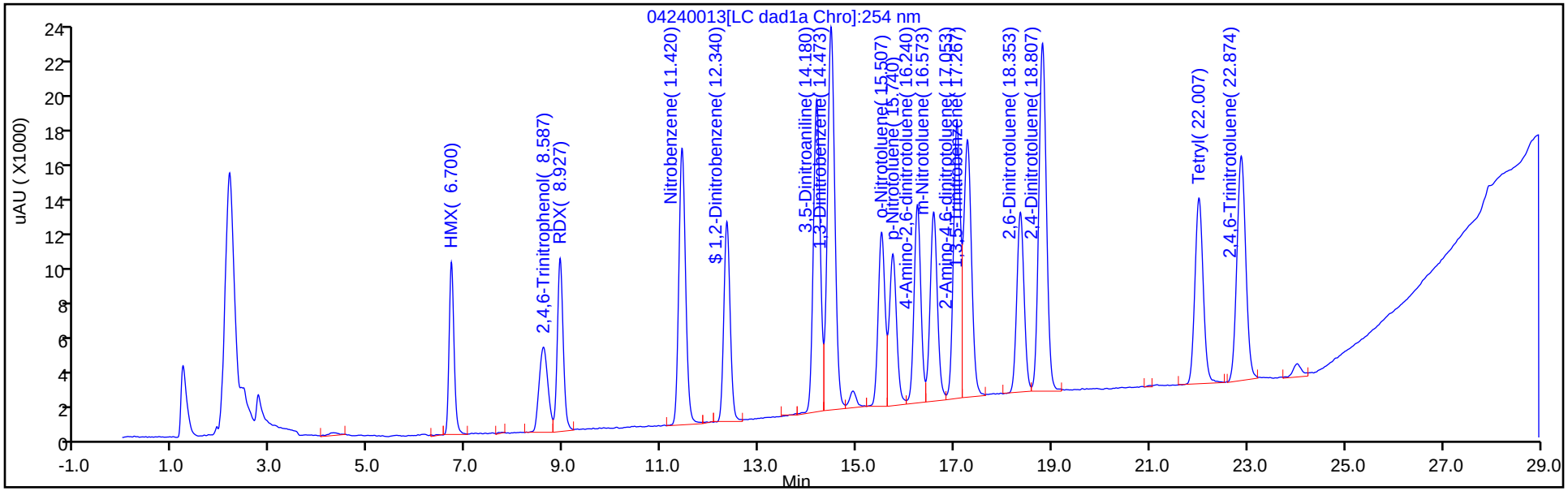
Report Date: 25-Apr-2024 14:30:12 Chrom Revision: 2.3 09-Apr-2024 17:43:44

Eurofins Denver

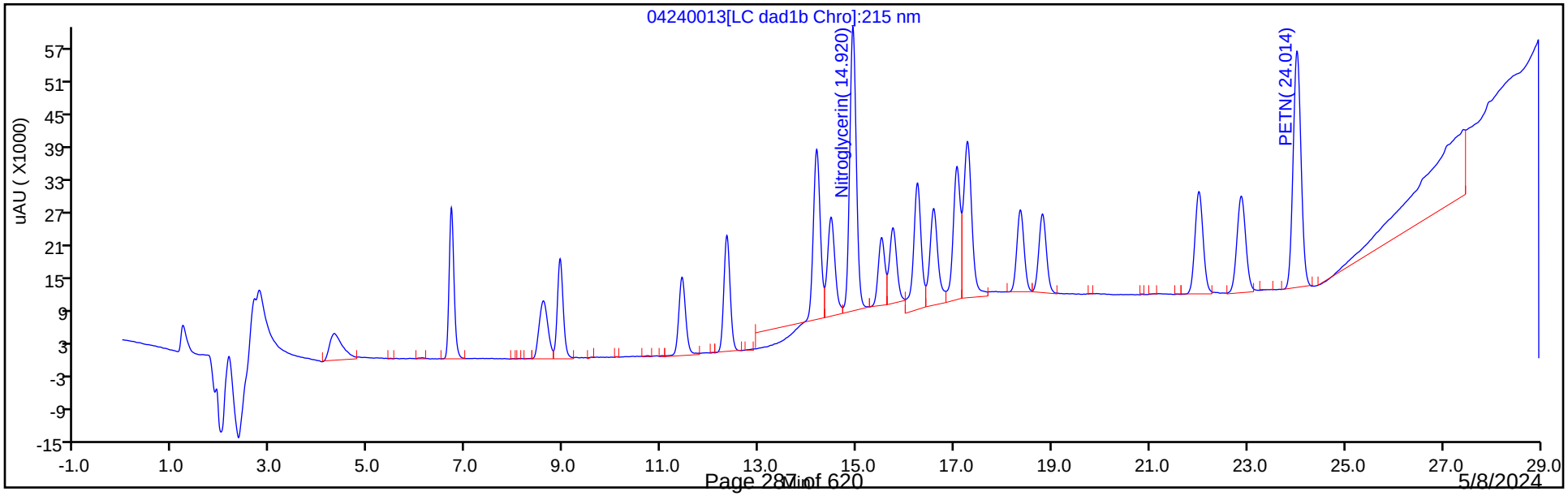
Data File: \\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240013.d

Injection Date:	24-Apr-2024 23:16:01	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	IC INT 6			Worklist Smp#:	13
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	G2_8330_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



5/8/2024
6:07:23 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

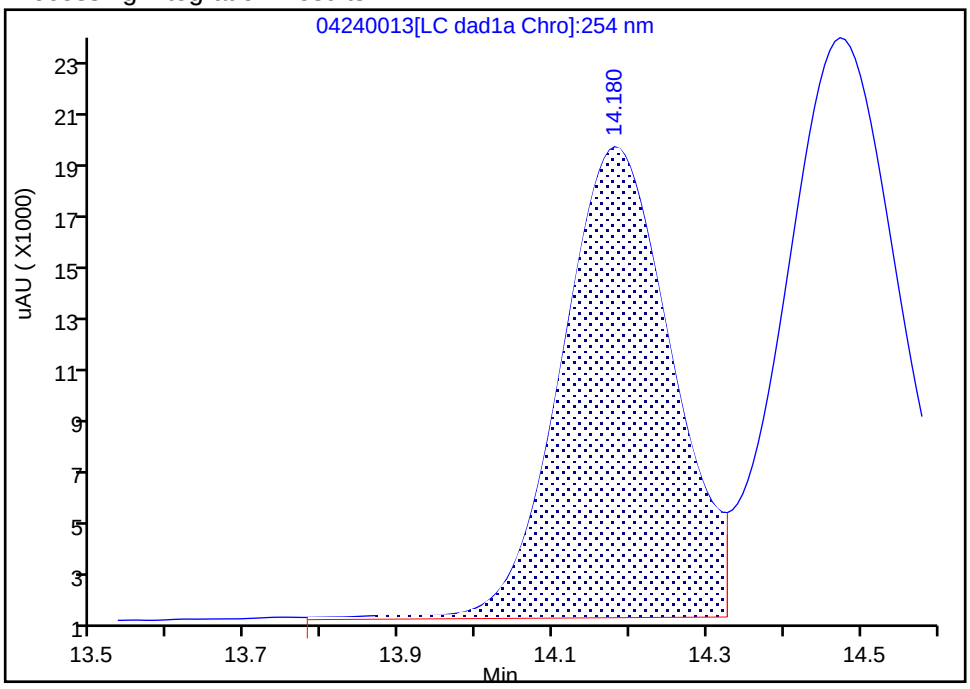
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240013.d				
Injection Date:	24-Apr-2024 23:16:01	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 6				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

11 3,5-Dinitroaniline, CAS: 618-87-1

Signal: 1

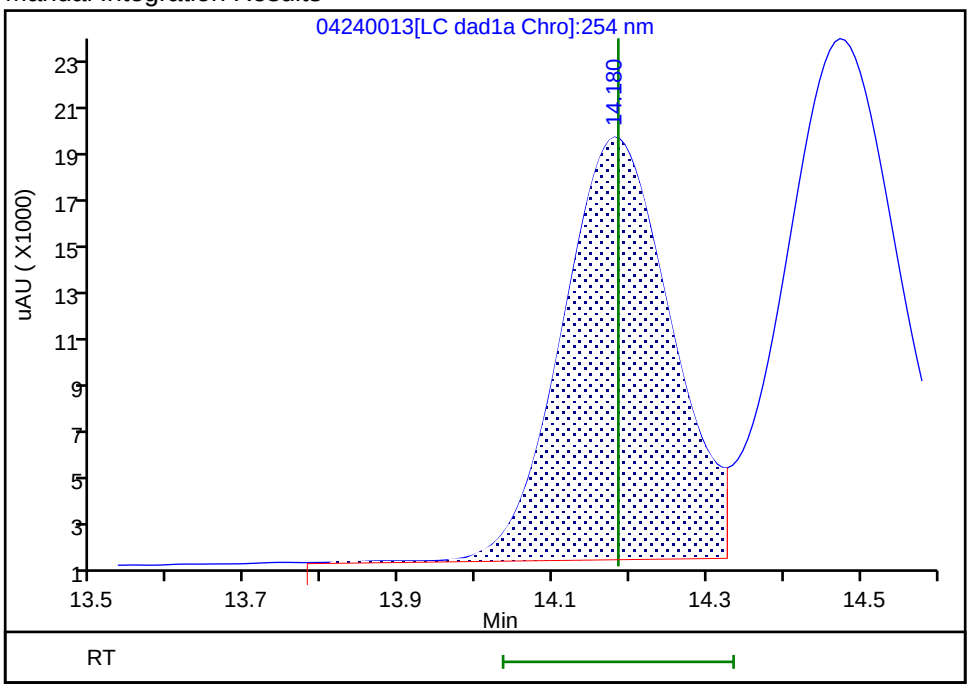
Processing Integration Results

RT: 14.18
Area: 177544
Amount: 0.403629
Amount Units: ug/ml



Manual Integration Results

RT: 14.18
Area: 175740
Amount: 0.405875
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:21:18 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

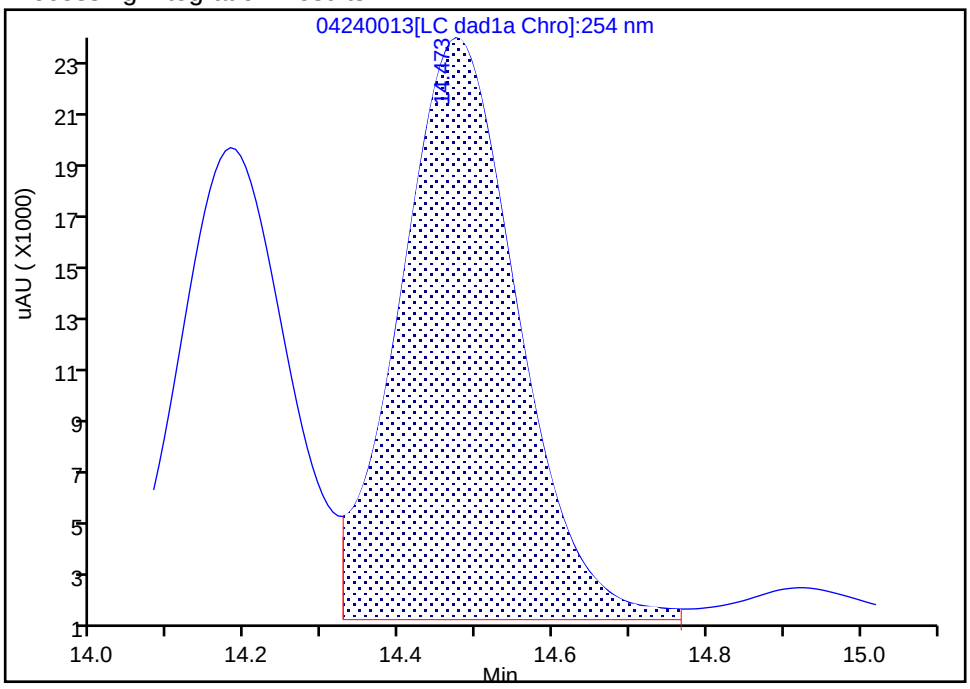
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240013.d				
Injection Date:	24-Apr-2024 23:16:01	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 6				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

Signal: 1

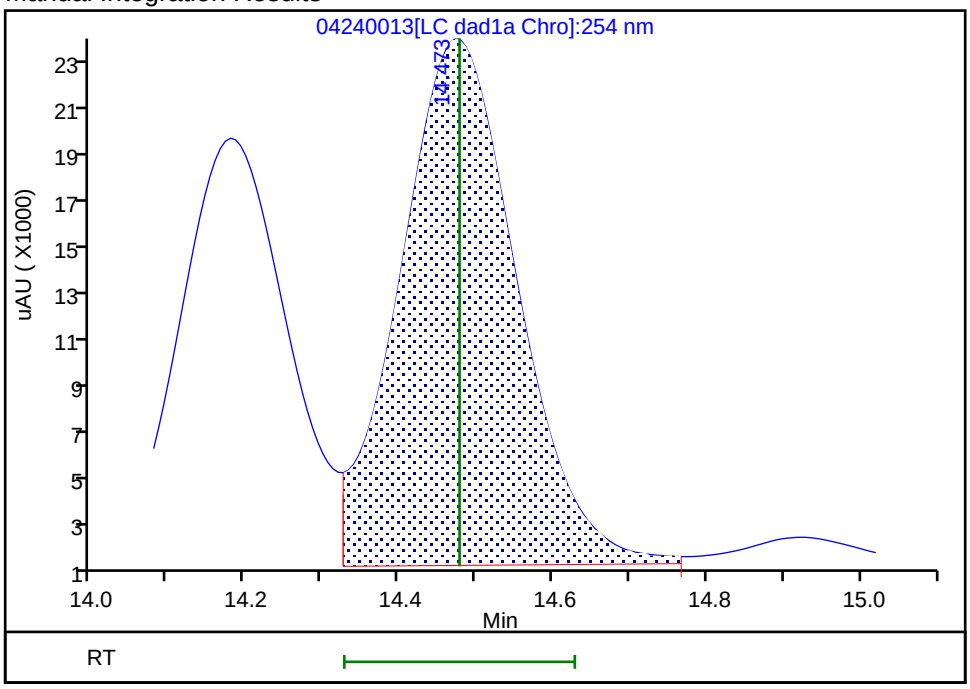
Processing Integration Results

RT: 14.47
Area: 233896
Amount: 0.368762
Amount Units: ug/ml



Manual Integration Results

RT: 14.47
Area: 231256
Amount: 0.392346
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:21:18 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

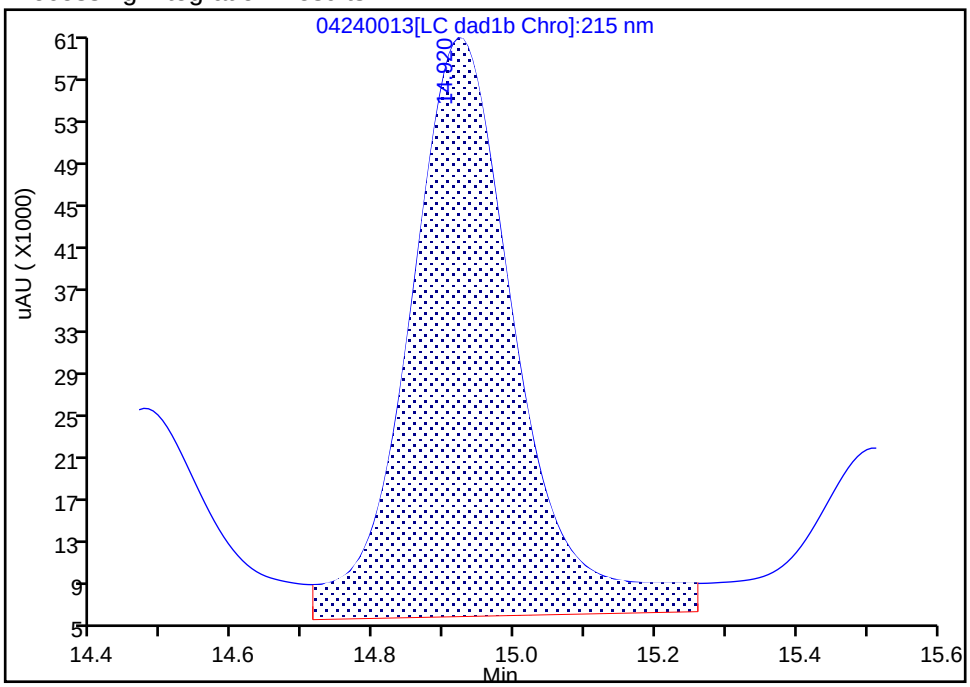
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240013.d				
Injection Date:	24-Apr-2024 23:16:01	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 6				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1B, 215 nm		

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

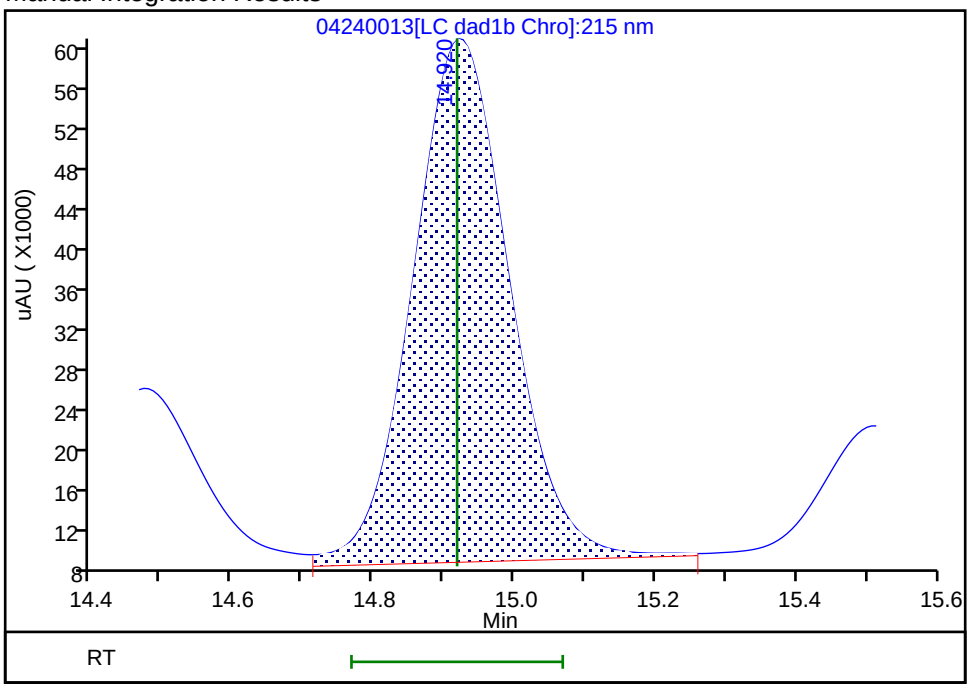
Processing Integration Results

RT: 14.92
Area: 575135
Amount: 2.229751
Amount Units: ug/ml



Manual Integration Results

RT: 14.92
Area: 496432
Amount: 4.154077
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:19:46 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

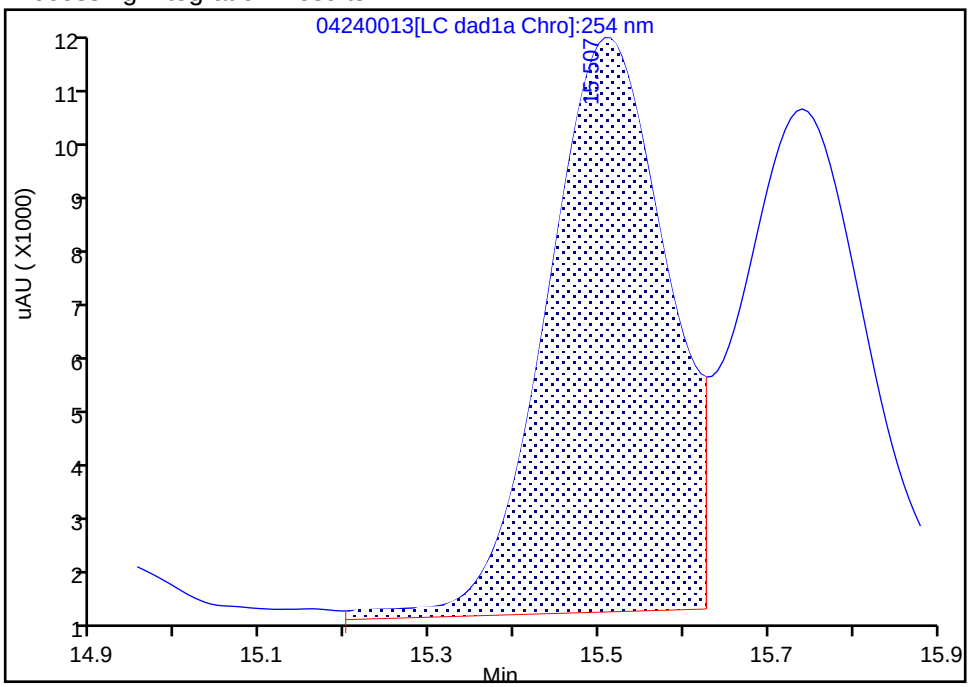
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240013.d				
Injection Date:	24-Apr-2024 23:16:01	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 6				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

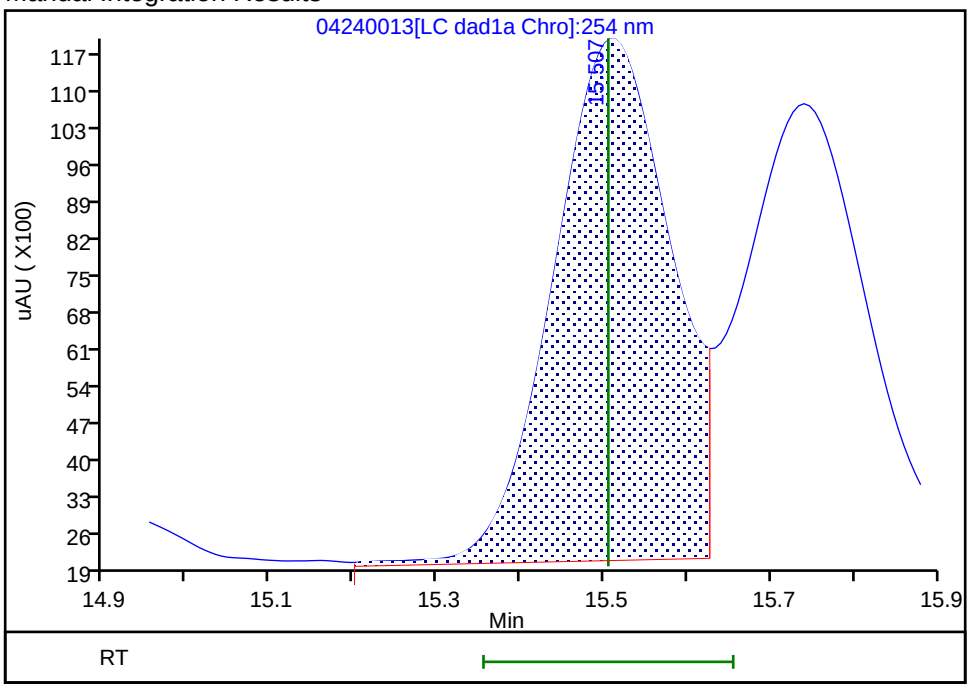
Processing Integration Results

RT: 15.51
Area: 98708
Amount: 0.357016
Amount Units: ug/ml



Manual Integration Results

RT: 15.51
Area: 96839
Amount: 0.395917
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:21:18 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

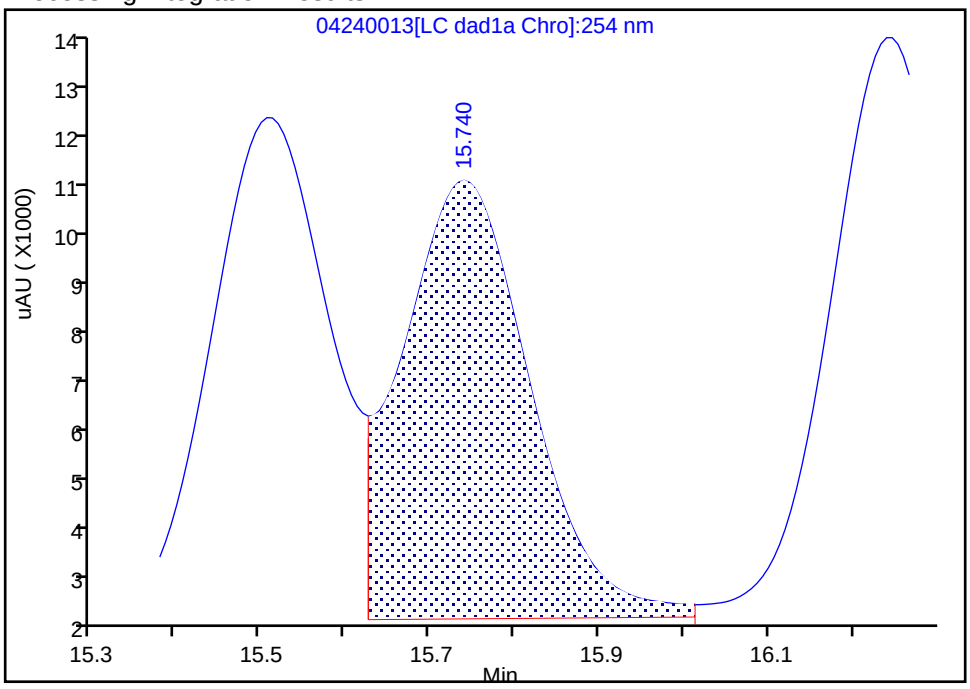
Data File: \\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240013.d
Injection Date: 24-Apr-2024 23:16:01 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT 6
Client ID:
Operator ID: JZ/JG ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

15 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

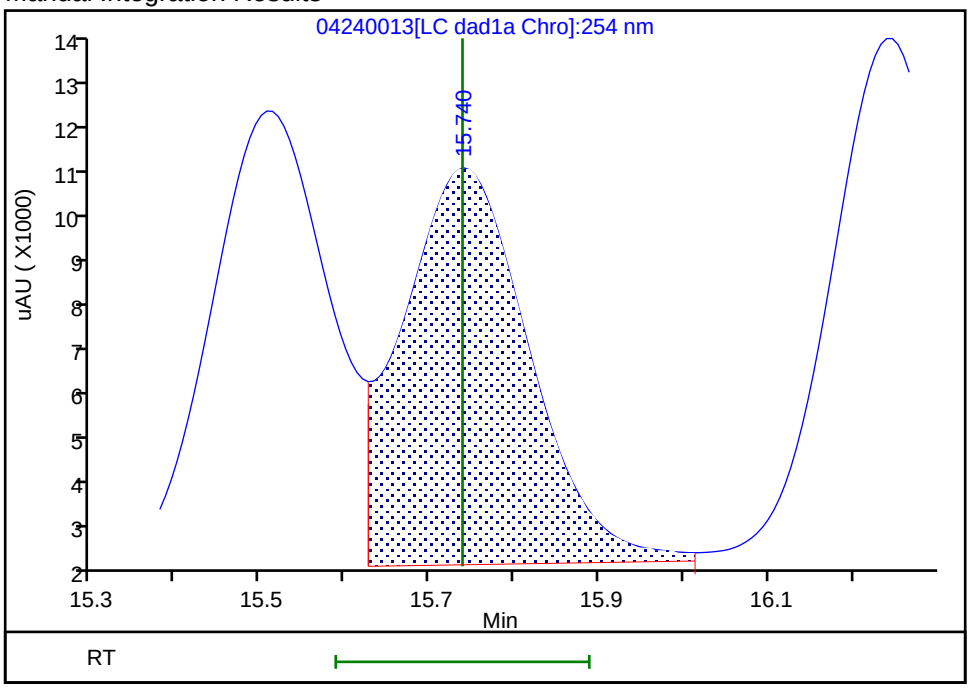
Processing Integration Results

RT: 15.74
Area: 90760
Amount: 0.406111
Amount Units: ug/ml



Manual Integration Results

RT: 15.74
Area: 89334
Amount: 0.406098
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:21:18 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

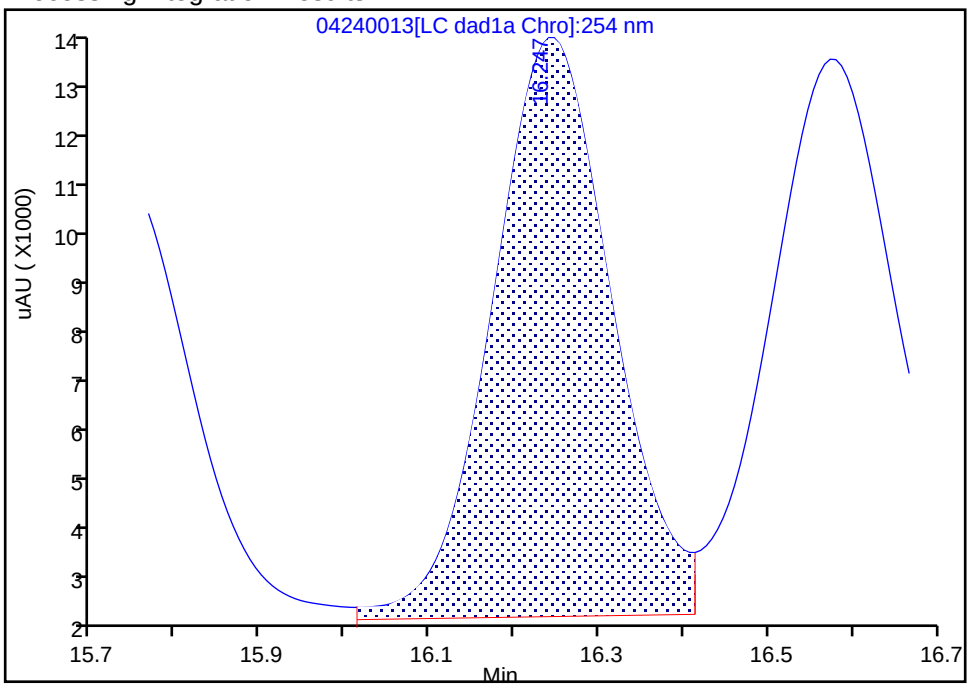
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240013.d				
Injection Date:	24-Apr-2024 23:16:01	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 6				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

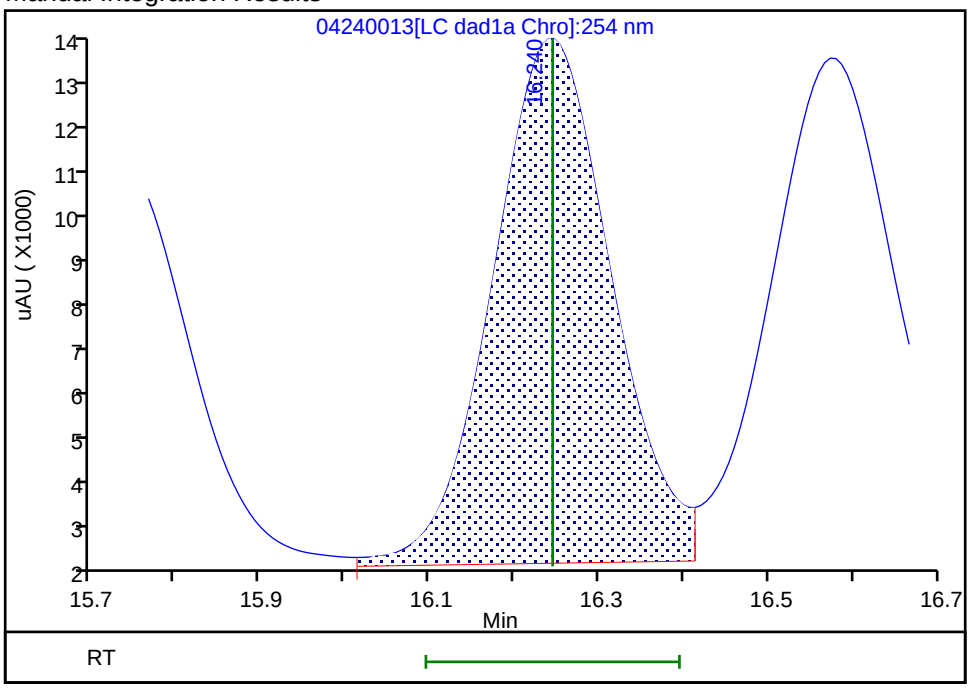
Processing Integration Results

RT: 16.25
Area: 111651
Amount: 0.405375
Amount Units: ug/ml



Manual Integration Results

RT: 16.24
Area: 109971
Amount: 0.405284
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:21:18 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

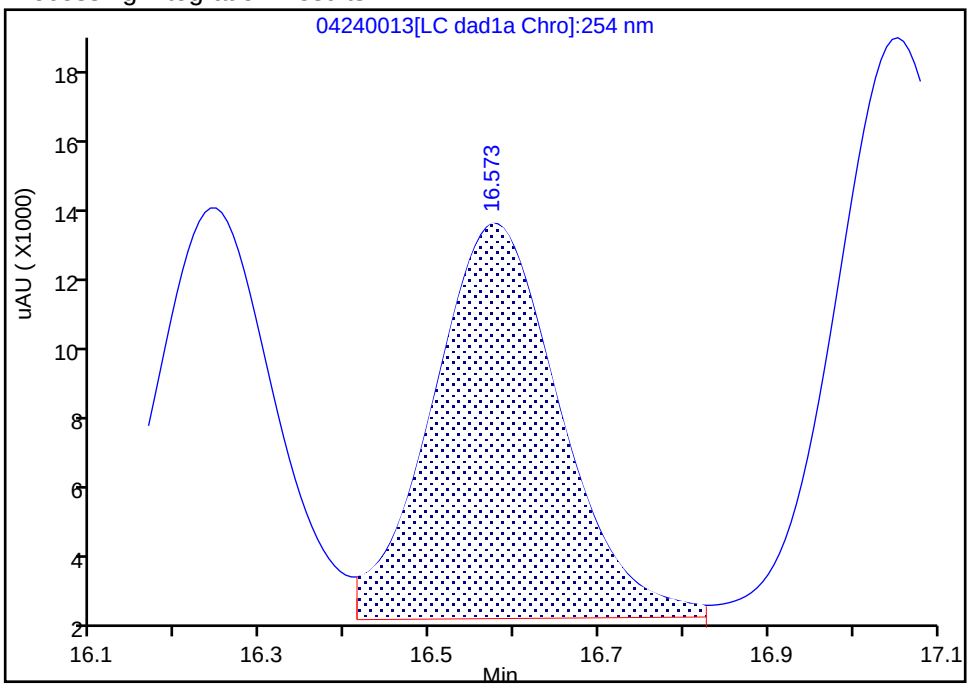
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240013.d				
Injection Date:	24-Apr-2024 23:16:01	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 6				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

17 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

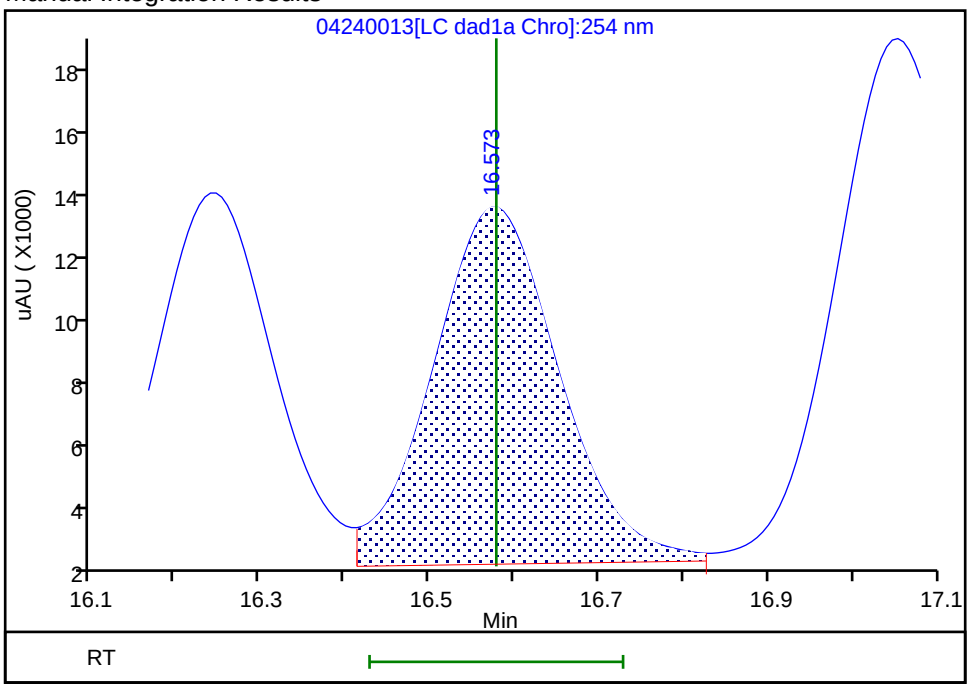
Processing Integration Results

RT: 16.57
Area: 113378
Amount: 0.394279
Amount Units: ug/ml



Manual Integration Results

RT: 16.57
Area: 112076
Amount: 0.403164
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:21:18 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

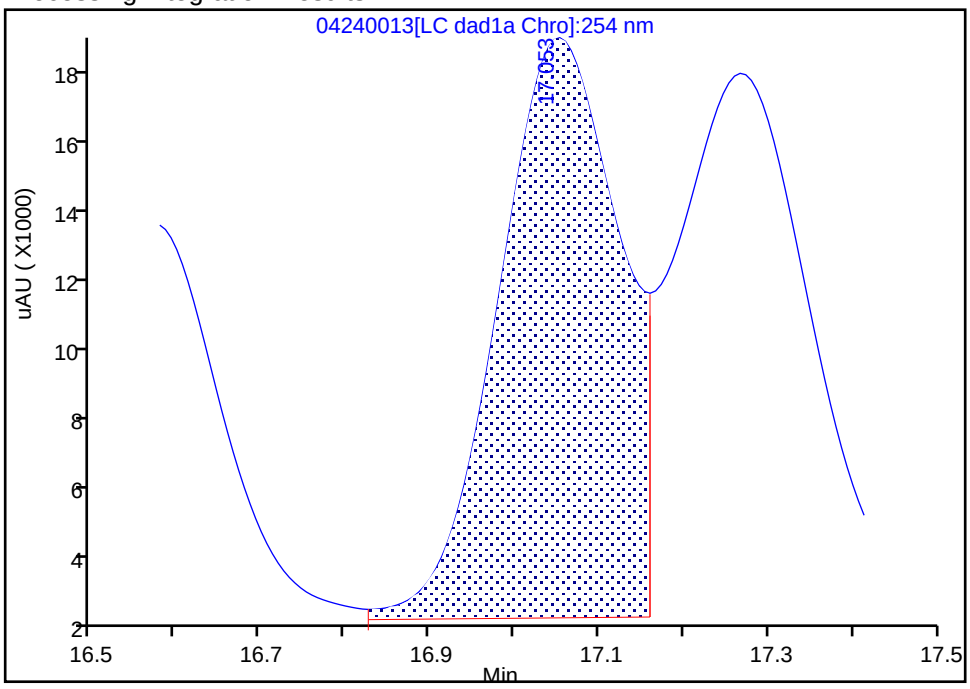
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240013.d				
Injection Date:	24-Apr-2024 23:16:01	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 6				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

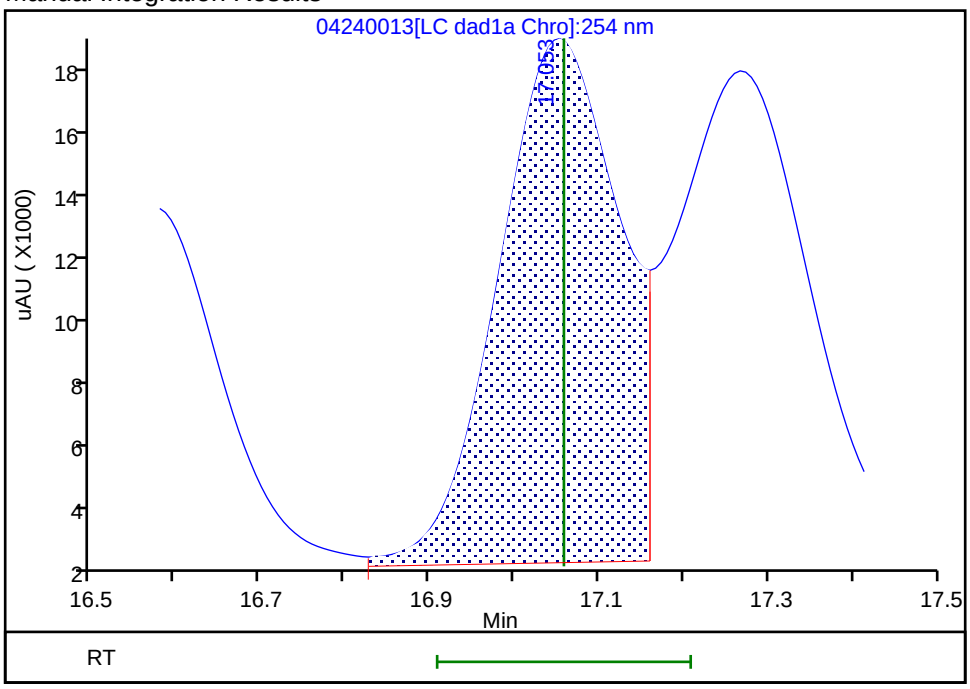
Processing Integration Results

RT: 17.05
Area: 157172
Amount: 0.405879
Amount Units: ug/ml



Manual Integration Results

RT: 17.05
Area: 156312
Amount: 0.385421
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:21:18 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

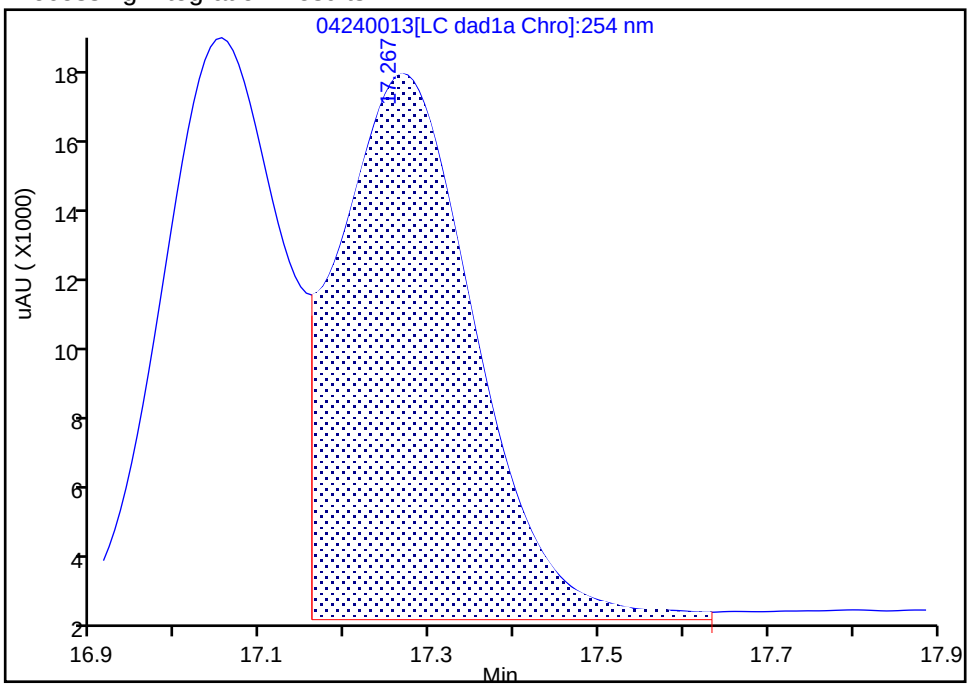
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240013.d				
Injection Date:	24-Apr-2024 23:16:01	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 6				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

19 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

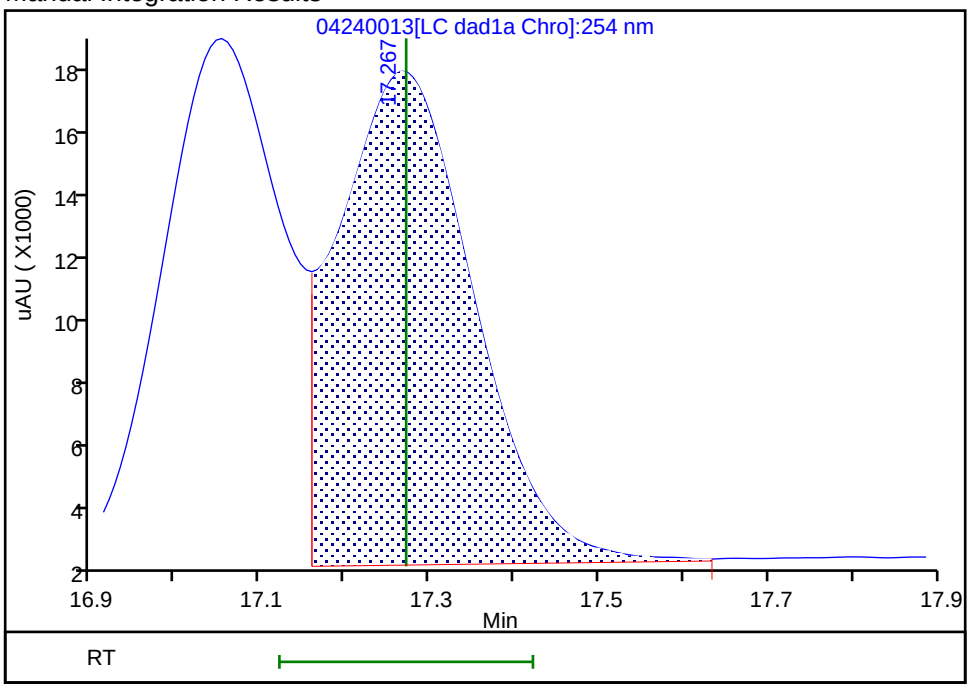
Processing Integration Results

RT: 17.27
Area: 165257
Amount: 0.352733
Amount Units: ug/ml



Manual Integration Results

RT: 17.27
Area: 162815
Amount: 0.384492
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:21:18 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

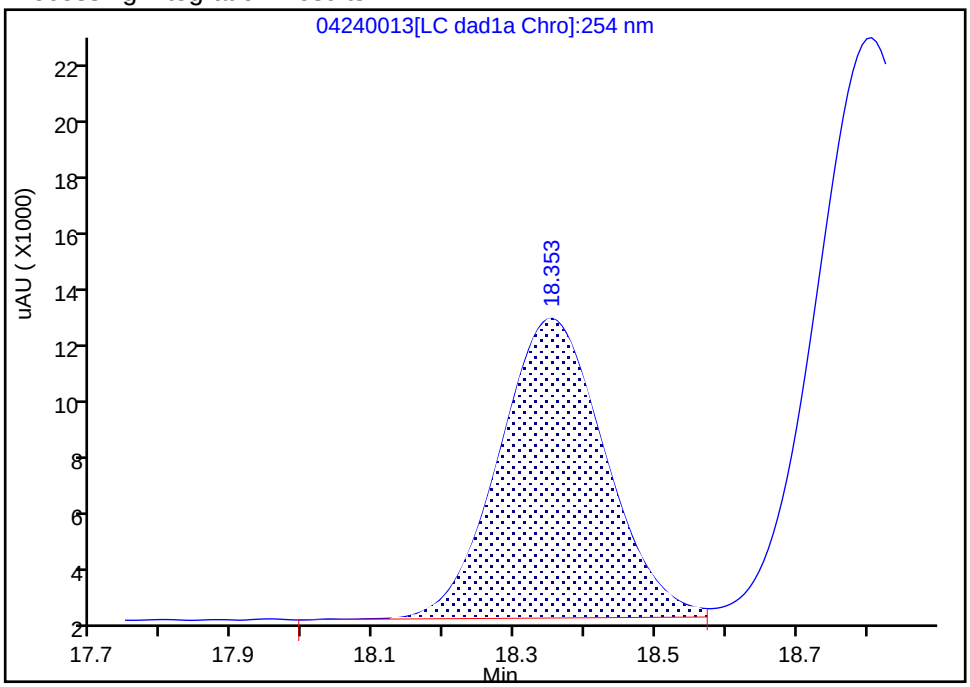
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240013.d				
Injection Date:	24-Apr-2024 23:16:01	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 6				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

20 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

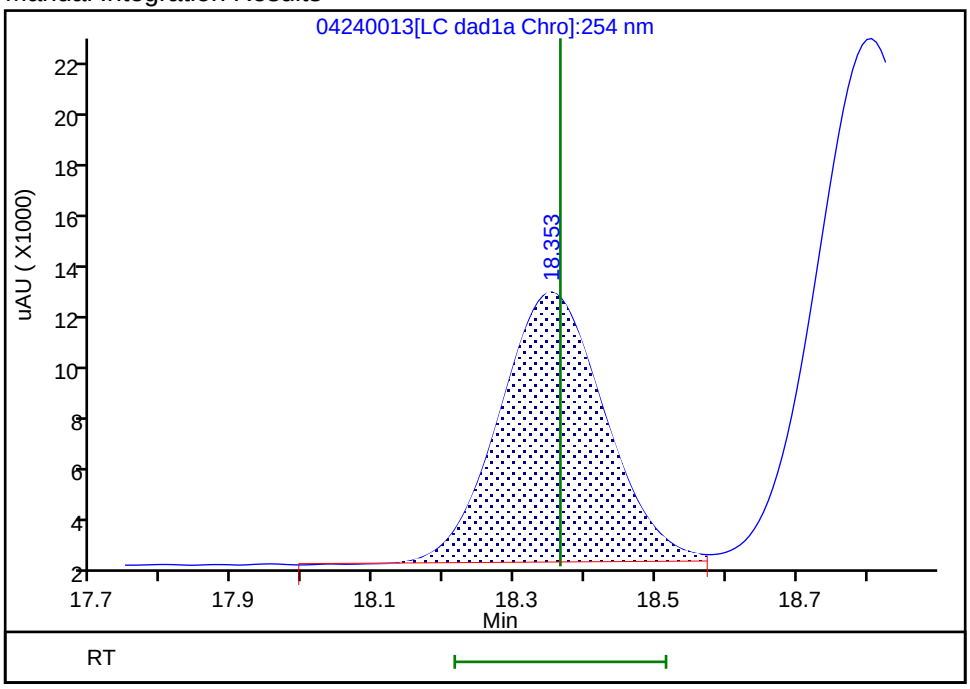
Processing Integration Results

RT: 18.35
Area: 107632
Amount: 0.396872
Amount Units: ug/ml



Manual Integration Results

RT: 18.35
Area: 107267
Amount: 0.385894
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:21:20 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

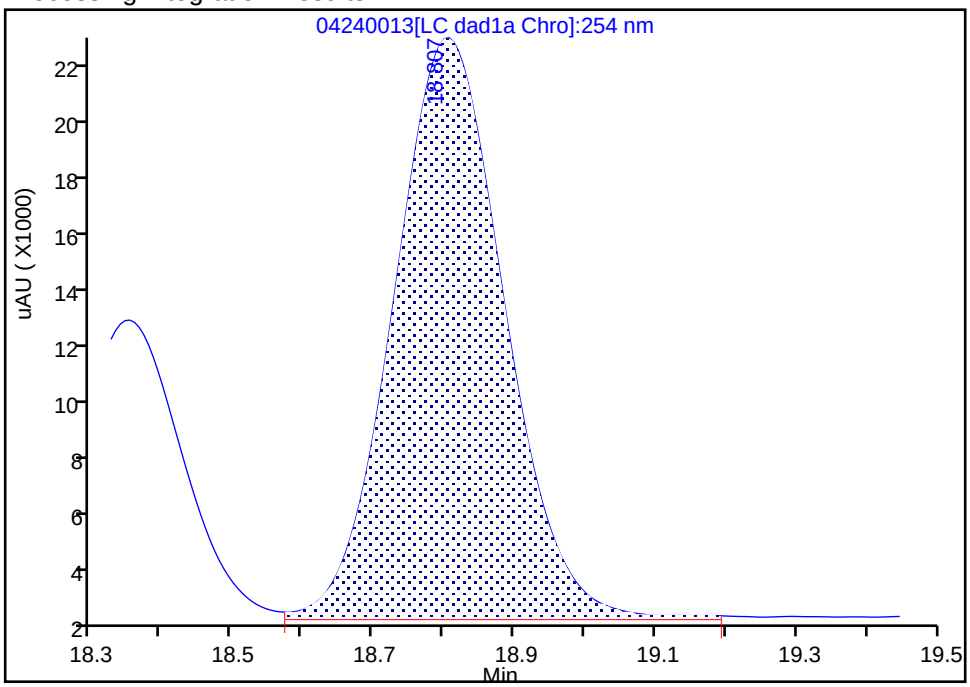
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240013.d				
Injection Date:	24-Apr-2024 23:16:01	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 6				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

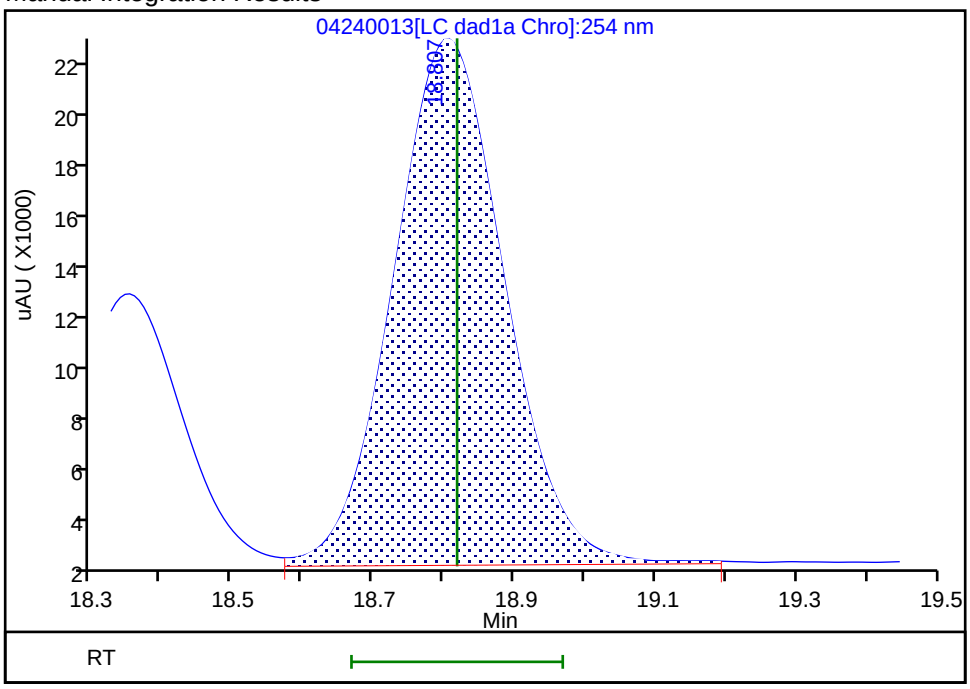
Processing Integration Results

RT: 18.81
Area: 218104
Amount: 0.366137
Amount Units: ug/ml



Manual Integration Results

RT: 18.81
Area: 216895
Amount: 0.391109
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:21:20 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

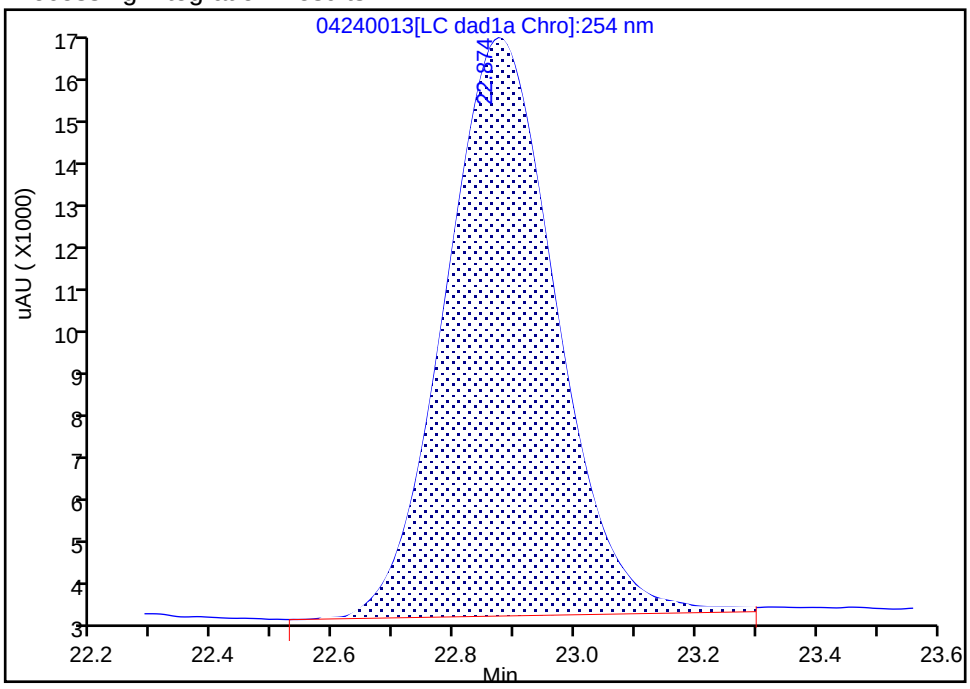
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240013.d				
Injection Date:	24-Apr-2024 23:16:01	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 6				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

23 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

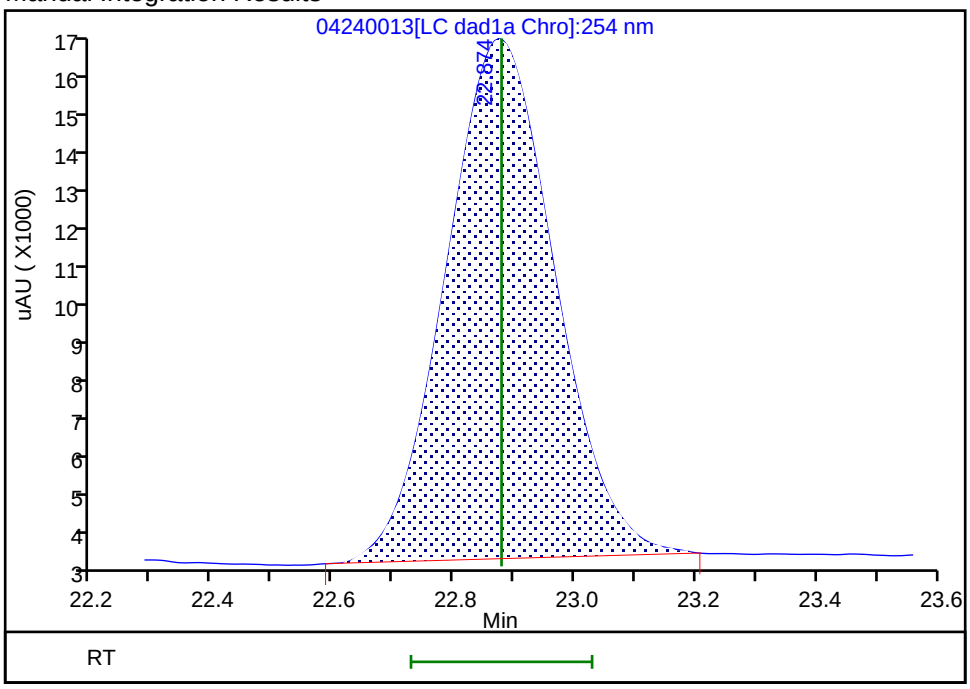
Processing Integration Results

RT: 22.87
Area: 164610
Amount: 0.409165
Amount Units: ug/ml



Manual Integration Results

RT: 22.87
Area: 160072
Amount: 0.400418
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:37:39 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20240424-132624.b\04240014.D
Lims ID: IC INT 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 24-Apr-2024 23:51:59 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 5
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub16

Method: \\chromfs\Denver\ChromData\G2_LUNA\20240424-132624.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 25-Apr-2024 14:30:13 Calib Date: 25-Apr-2024 07:39:21
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20240424-132624.b\04240027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1684

First Level Reviewer: LV5D Date: 25-Apr-2024 13:19:57

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
6 HMX	1	6.705	6.705	0.000	43487	0.2500	0.2498	
5 2,4,6-Trinitrophenol	1	8.612	8.612	0.000	37043	0.2500	0.2447	
8 RDX	1	8.938	8.938	0.000	52707	0.2500	0.2537	
9 Nitrobenzene	1	11.425	11.425	0.000	93225	0.2500	0.2440	
$ 10 1,2-Dinitrobenzene	1	12.345	12.345	0.000	64431	0.2500	0.2491	
11 3,5-Dinitroaniline	1	14.185	14.185	0.000	108023	0.2500	0.2487	M
12 1,3-Dinitrobenzene	1	14.478	14.478	0.000	143019	0.2500	0.2426	M
13 Nitroglycerin	2	14.918	14.918	0.000	309600	2.50	2.59	M
14 o-Nitrotoluene	1	15.505	15.505	0.000	58941	0.2500	0.2410	M
15 p-Nitrotoluene	1	15.738	15.738	0.000	54130	0.2500	0.2444	M
16 4-Amino-2,6-dinitrotoluene	1	16.245	16.245	0.000	67115	0.2500	0.2463	M
17 m-Nitrotoluene	1	16.578	16.578	0.000	68559	0.2500	0.2453	M
18 2-Amino-4,6-dinitrotoluene	1	17.058	17.058	0.000	95082	0.2500	0.2344	M
19 1,3,5-Trinitrobenzene	1	17.272	17.272	0.000	101067	0.2500	0.2387	M
20 2,6-Dinitrotoluene	1	18.365	18.365	0.000	66539	0.2500	0.2394	M
21 2,4-Dinitrotoluene	1	18.818	18.818	0.000	133579	0.2500	0.2409	M
22 Tetryl	1	22.025	22.025	0.000	79229	0.2500	0.2525	
23 2,4,6-Trinitrotoluene	1	22.878	22.878	0.000	100337	0.2500	0.2510	M
24 PETN	2	24.032	24.032	0.000	304928	2.50	2.48	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00080 Amount Added: 25.00 Units: uL

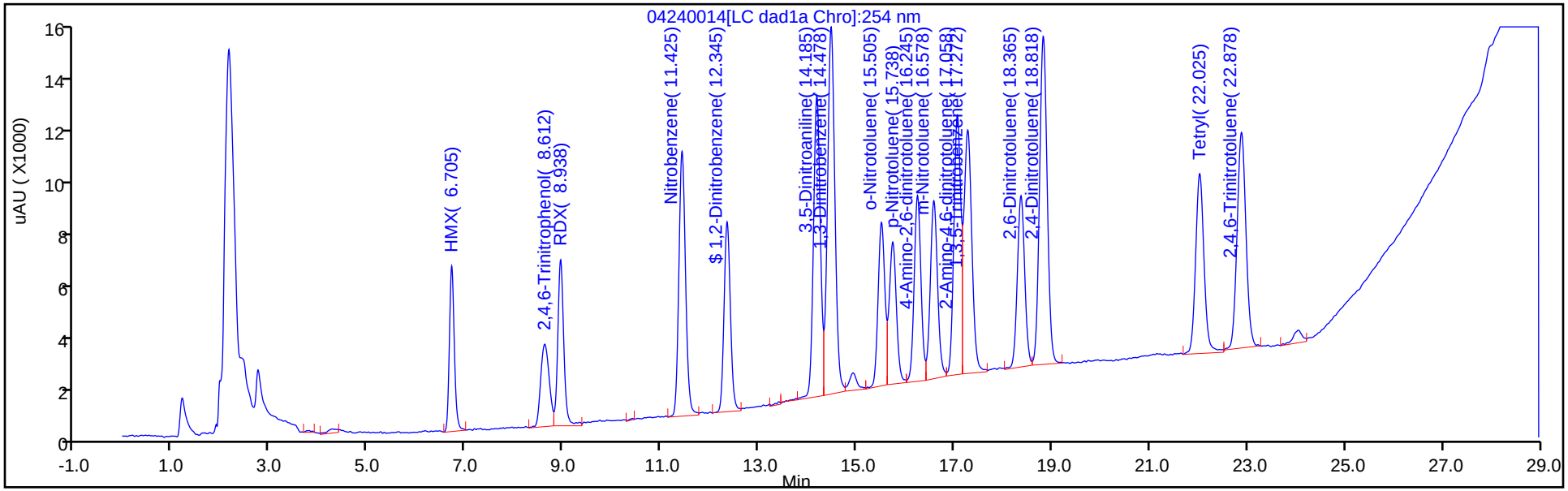
Report Date: 25-Apr-2024 14:30:13 Chrom Revision: 2.3 09-Apr-2024 17:43:44

Eurofins Denver

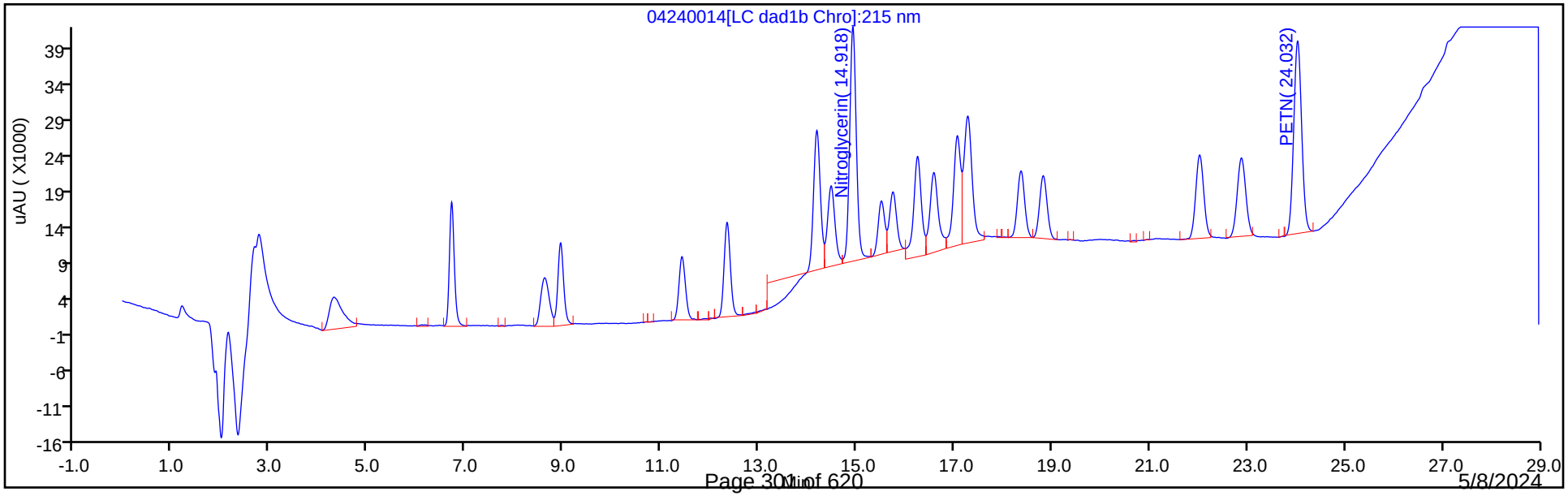
Data File: \\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240014.d

Injection Date:	24-Apr-2024 23:51:59	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	IC INT 5			Worklist Smp#:	14
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	G2_8330_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



5/8/2024
6:07:23 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

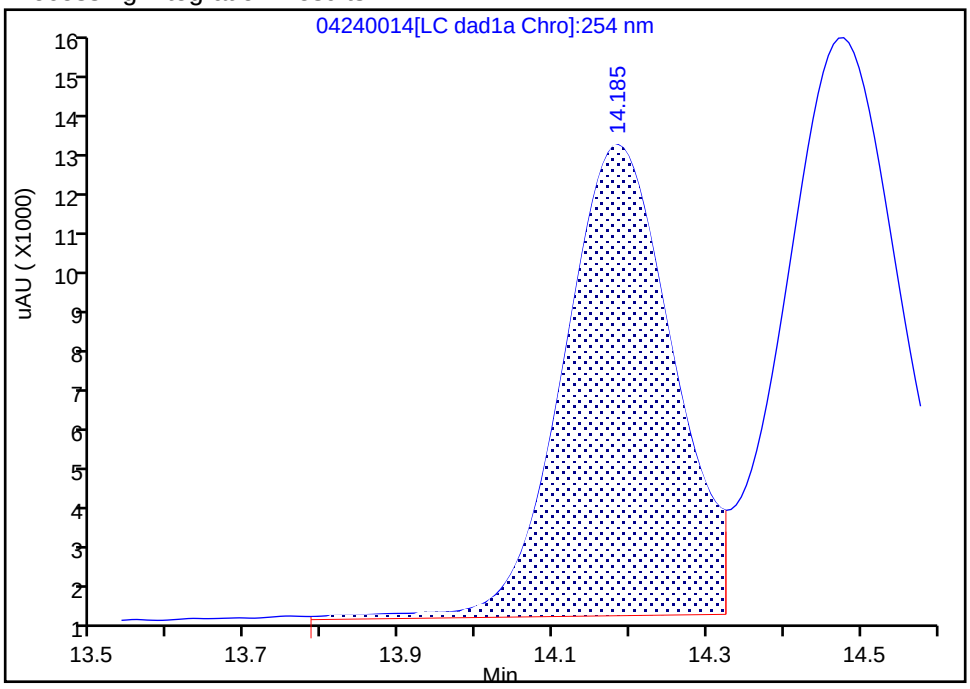
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240014.d				
Injection Date:	24-Apr-2024 23:51:59	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 5				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

11 3,5-Dinitroaniline, CAS: 618-87-1

Signal: 1

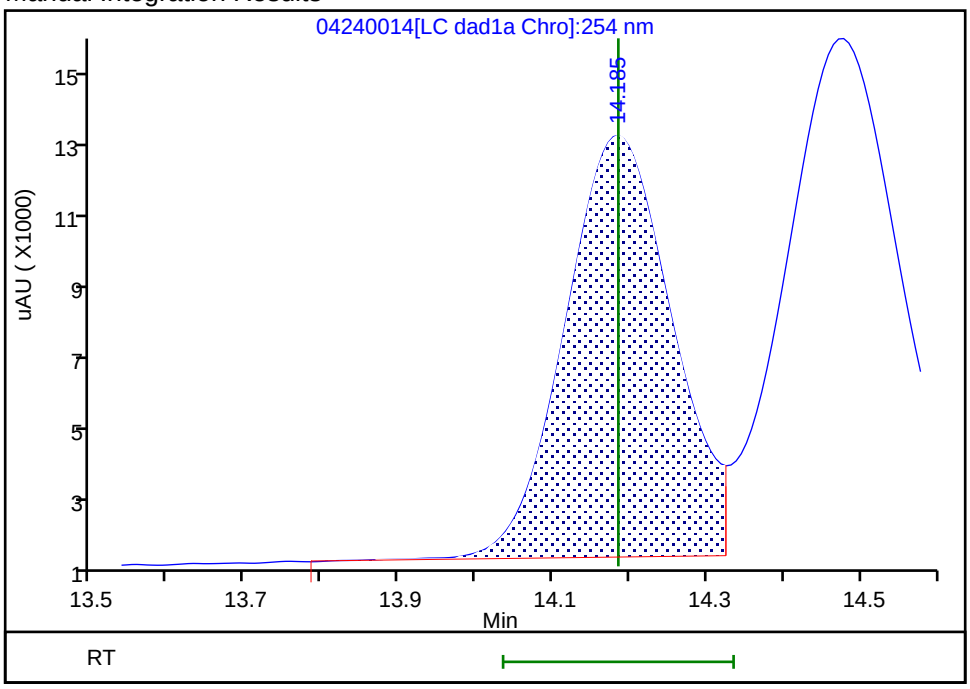
Processing Integration Results

RT: 14.18
Area: 111068
Amount: 0.250808
Amount Units: ug/ml



Manual Integration Results

RT: 14.18
Area: 108023
Amount: 0.248660
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:21:34 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

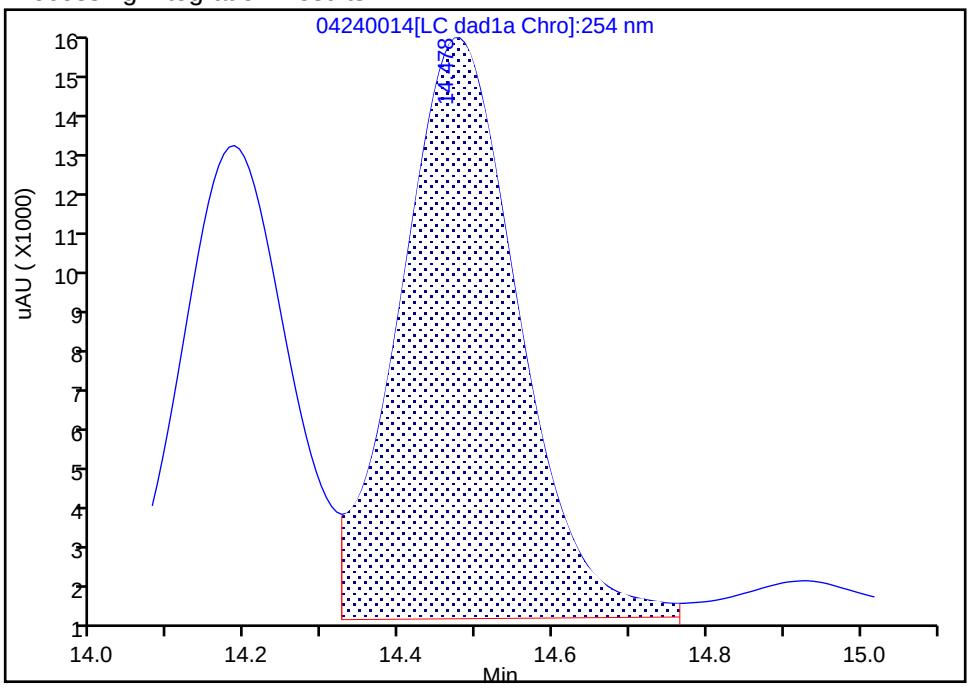
Data File: \\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240014.d
Injection Date: 24-Apr-2024 23:51:59 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT 5
Client ID:
Operator ID: JZ/JG ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

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

Signal: 1

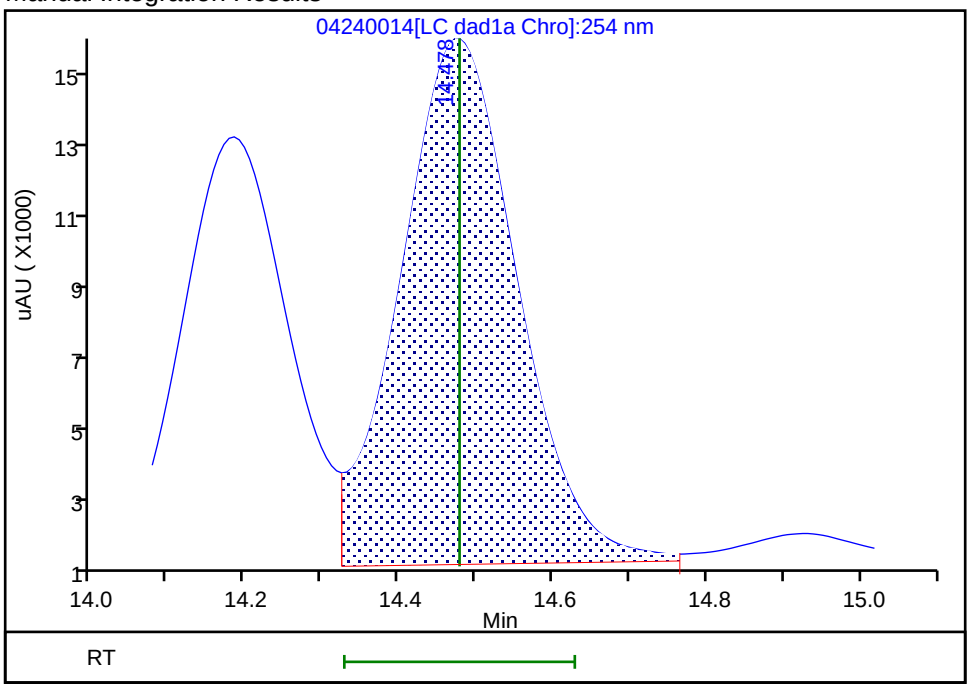
Processing Integration Results

RT: 14.48
Area: 146583
Amount: 0.231371
Amount Units: ug/ml



Manual Integration Results

RT: 14.48
Area: 143019
Amount: 0.242644
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:21:34 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

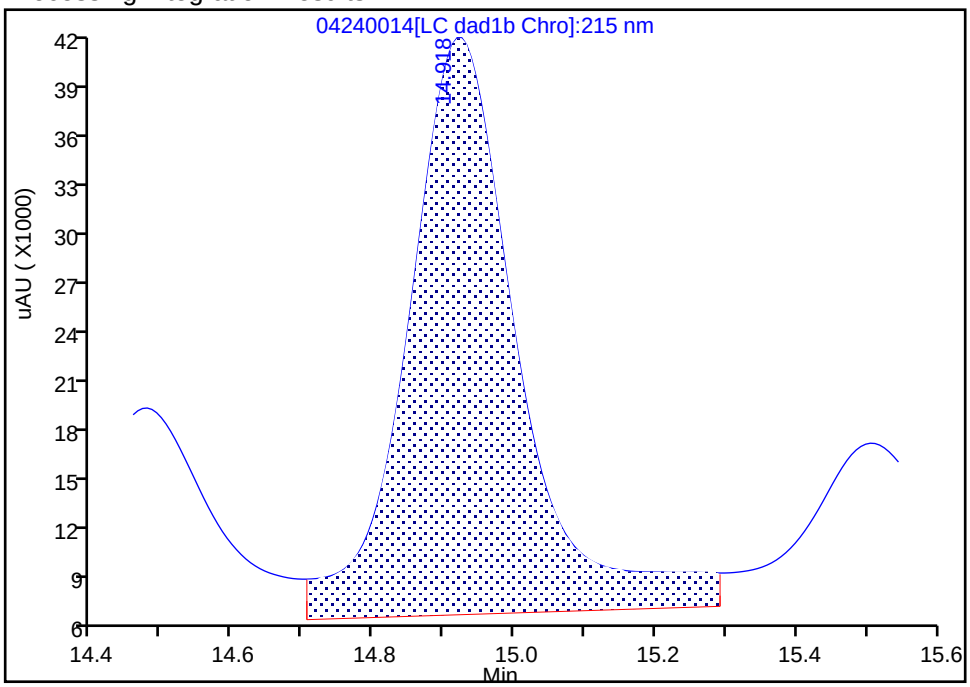
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240014.d				
Injection Date:	24-Apr-2024 23:51:59	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 5				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1B, 215 nm		

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

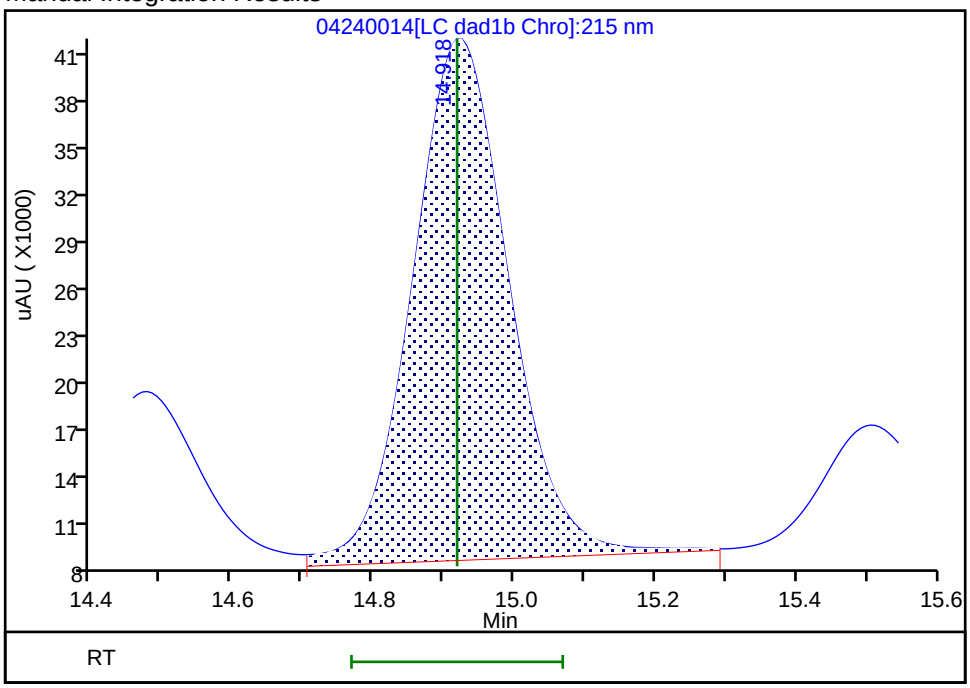
Processing Integration Results

RT: 14.92
Area: 374650
Amount: 1.464903
Amount Units: ug/ml



Manual Integration Results

RT: 14.92
Area: 309600
Amount: 2.590692
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:19:56 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

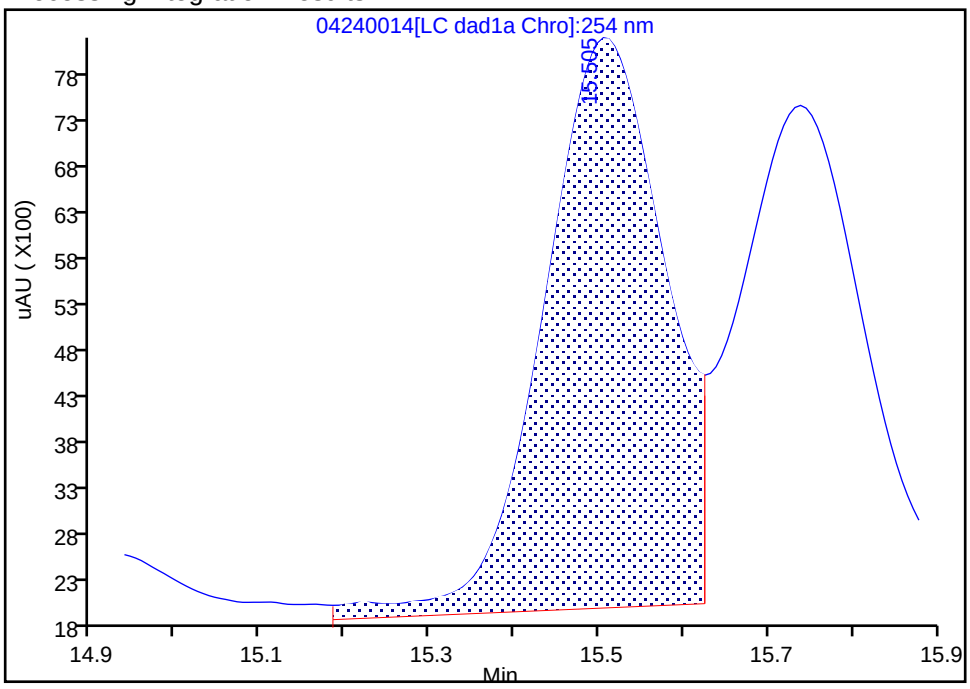
Data File: \\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240014.d
Injection Date: 24-Apr-2024 23:51:59 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT 5
Client ID:
Operator ID: JZ/JG ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

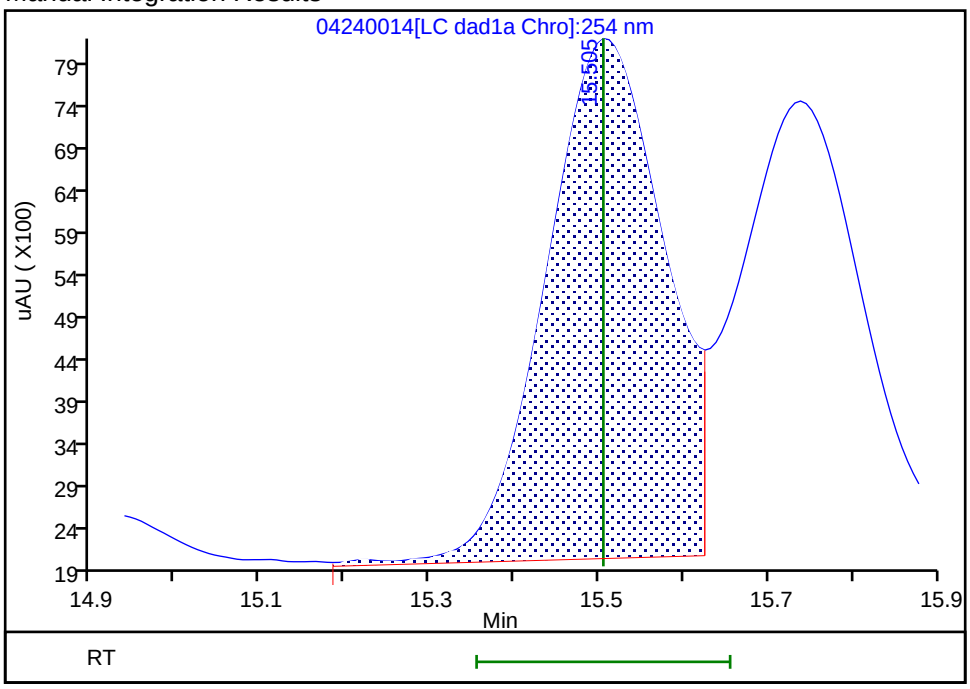
Processing Integration Results

RT: 15.50
Area: 61475
Amount: 0.222767
Amount Units: ug/ml



Manual Integration Results

RT: 15.50
Area: 58941
Amount: 0.240974
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:21:34 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

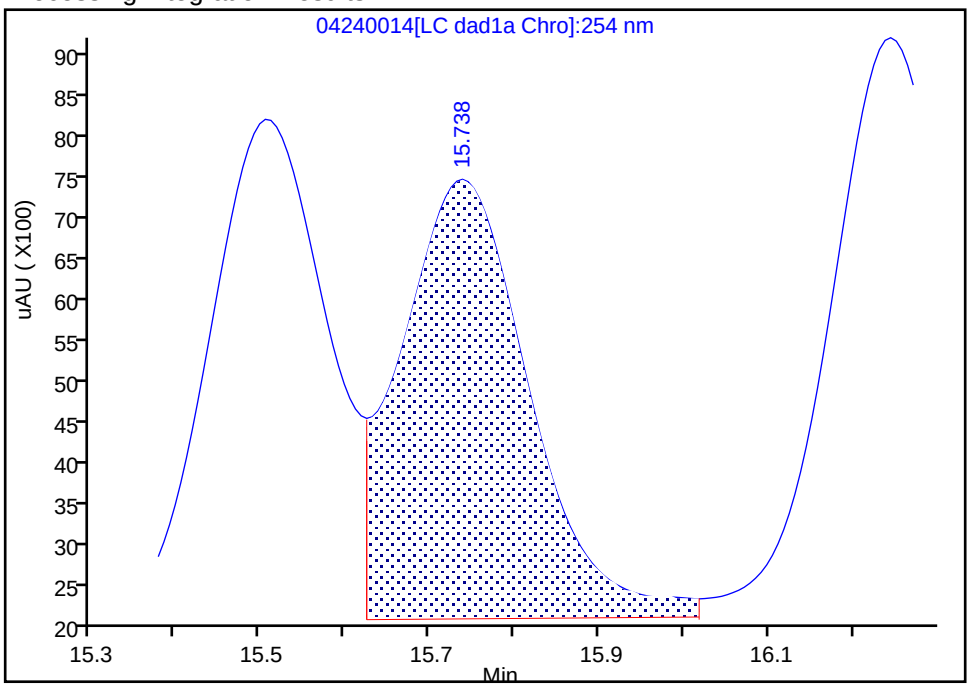
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240014.d				
Injection Date:	24-Apr-2024 23:51:59	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 5				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

15 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

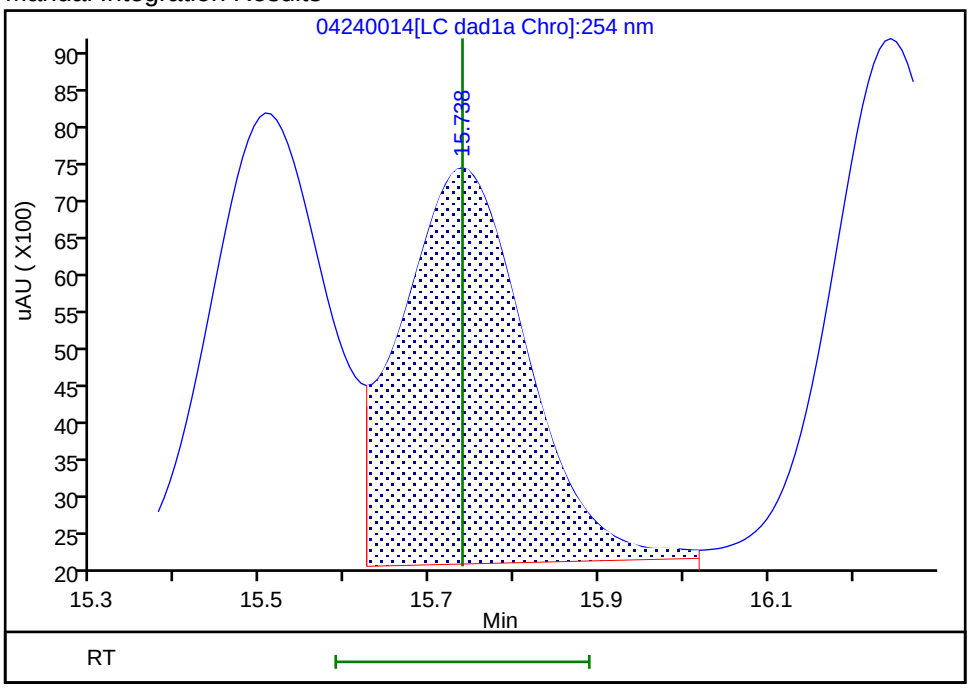
Processing Integration Results

RT: 15.74
Area: 56218
Amount: 0.248629
Amount Units: ug/ml



Manual Integration Results

RT: 15.74
Area: 54130
Amount: 0.244405
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:21:34 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

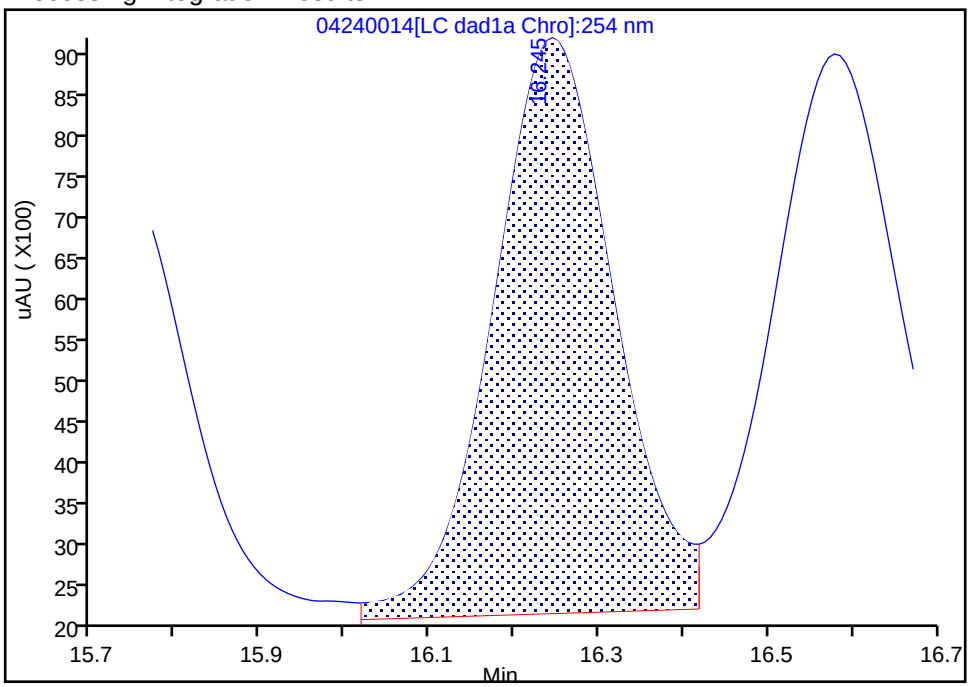
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240014.d				
Injection Date:	24-Apr-2024 23:51:59	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 5				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

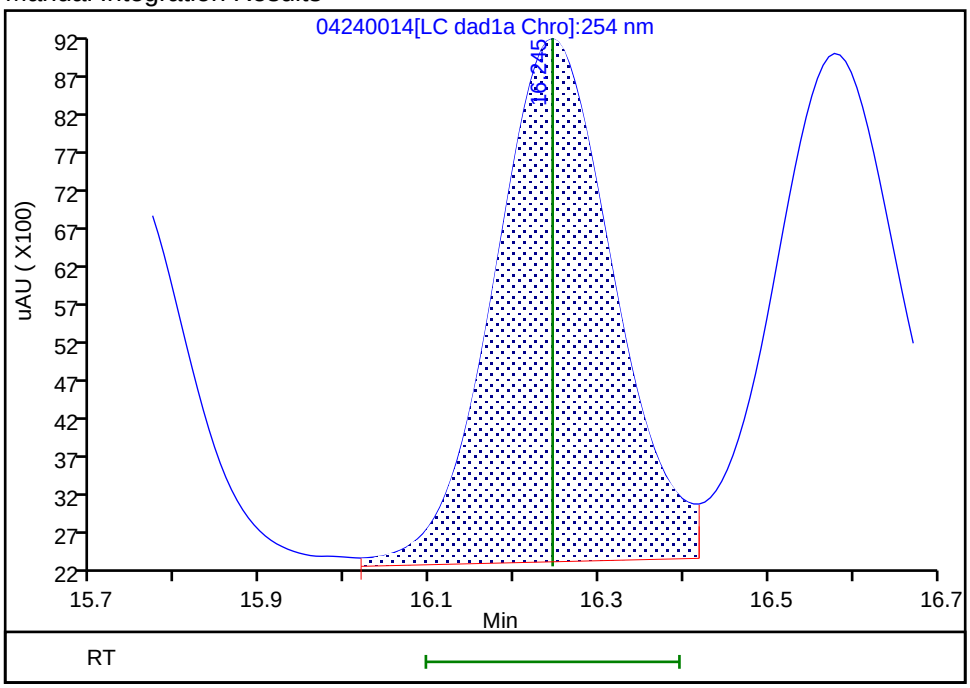
Processing Integration Results

RT: 16.24
Area: 69455
Amount: 0.247954
Amount Units: ug/ml



Manual Integration Results

RT: 16.24
Area: 67115
Amount: 0.246270
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:21:34 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

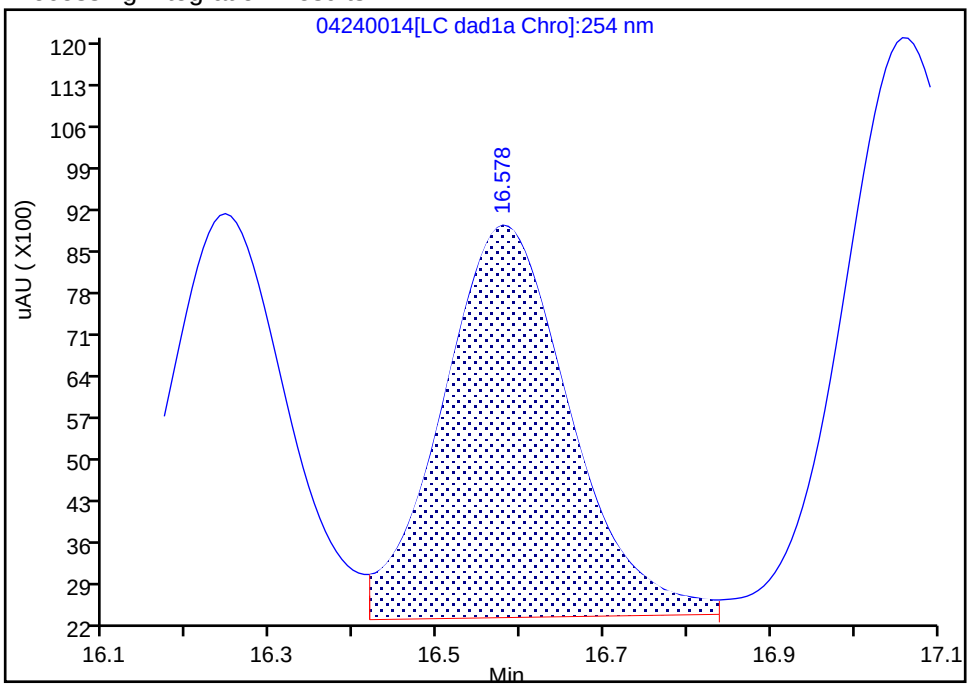
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240014.d				
Injection Date:	24-Apr-2024 23:51:59	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 5				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

17 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

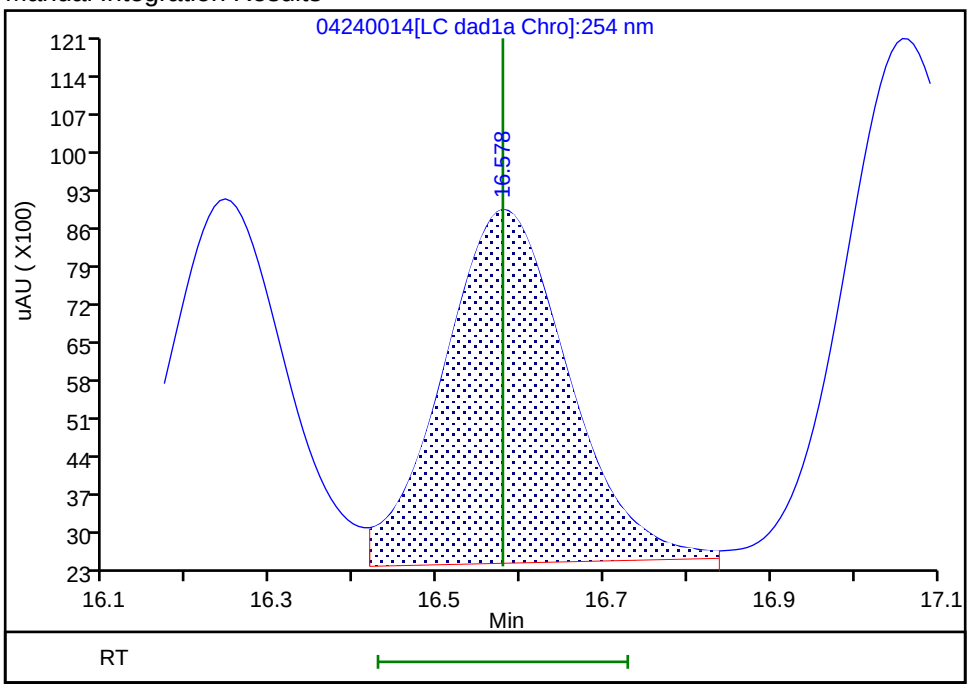
Processing Integration Results

RT: 16.58
Area: 70537
Amount: 0.242628
Amount Units: ug/ml



Manual Integration Results

RT: 16.58
Area: 68559
Amount: 0.245258
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:21:34 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

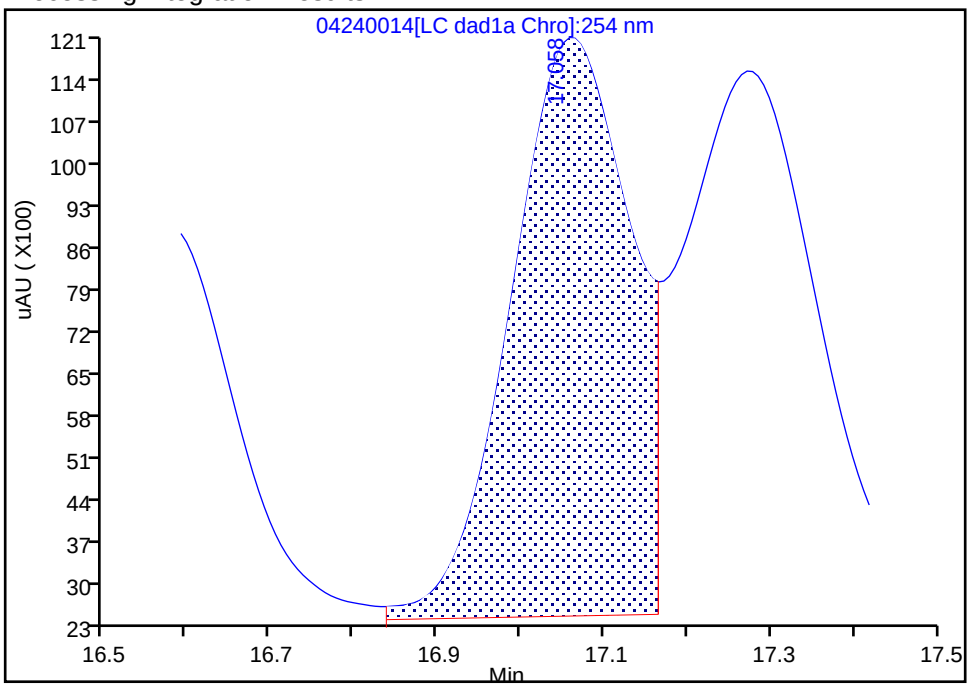
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240014.d				
Injection Date:	24-Apr-2024 23:51:59	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 5				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

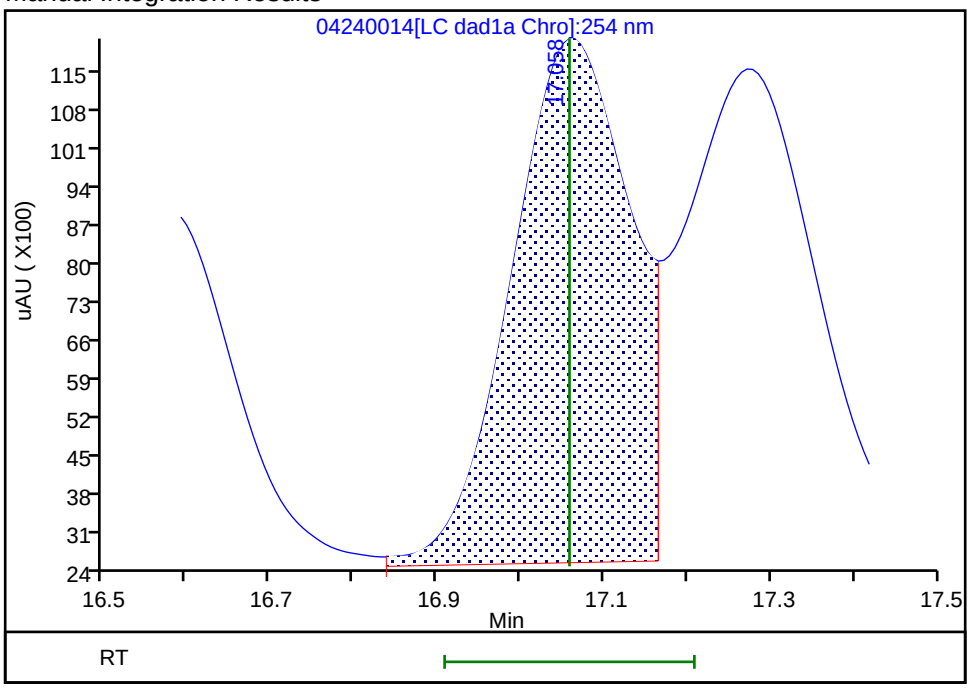
Processing Integration Results

RT: 17.06
Area: 96415
Amount: 0.246197
Amount Units: ug/ml



Manual Integration Results

RT: 17.06
Area: 95082
Amount: 0.234445
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:21:34 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

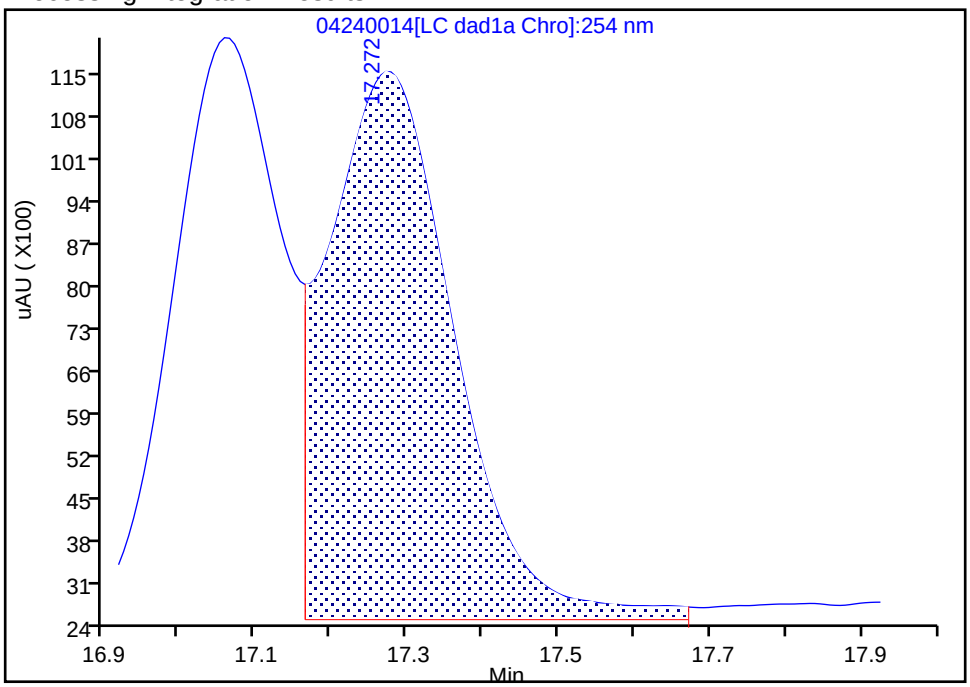
Data File: \\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240014.d
Injection Date: 24-Apr-2024 23:51:59 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT 5
Client ID:
Operator ID: JZ/JG ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

19 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

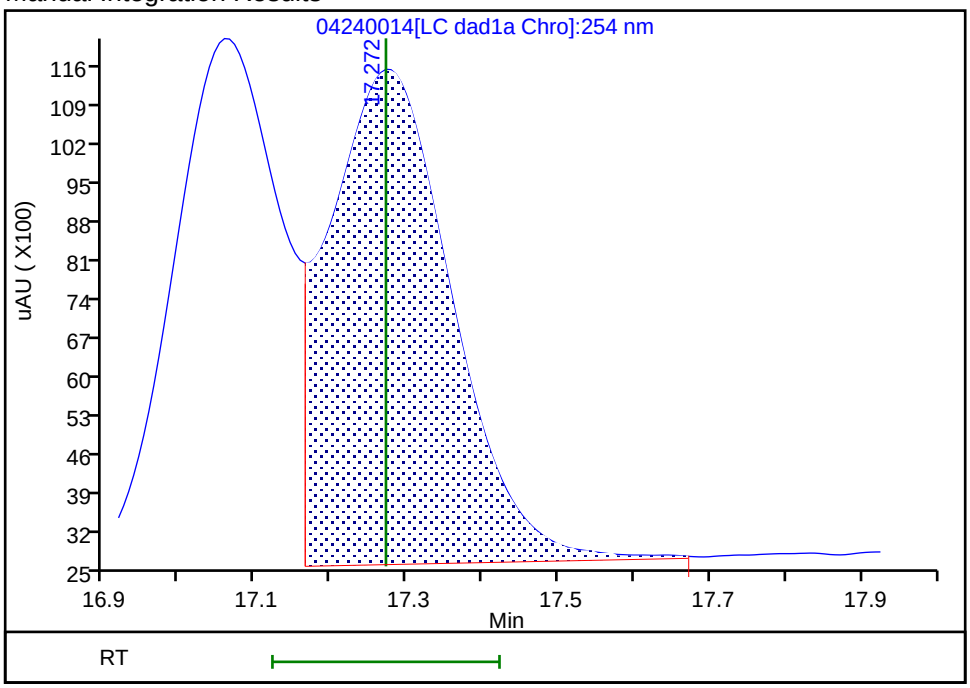
Processing Integration Results

RT: 17.27
Area: 104518
Amount: 0.223412
Amount Units: ug/ml



Manual Integration Results

RT: 17.27
Area: 101067
Amount: 0.238673
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:21:34 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

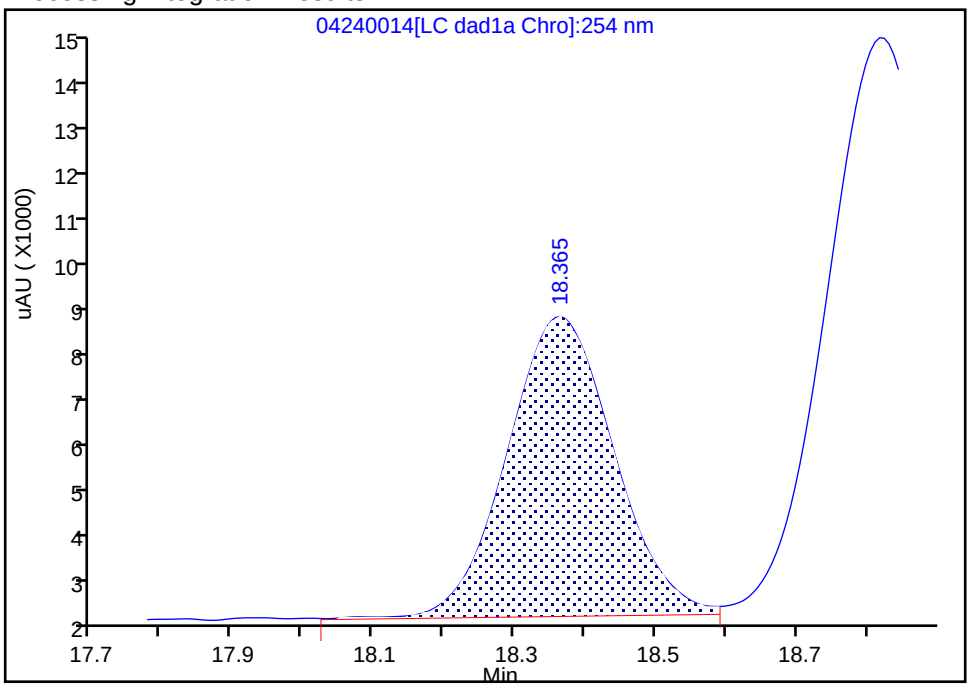
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240014.d				
Injection Date:	24-Apr-2024 23:51:59	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 5				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

20 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

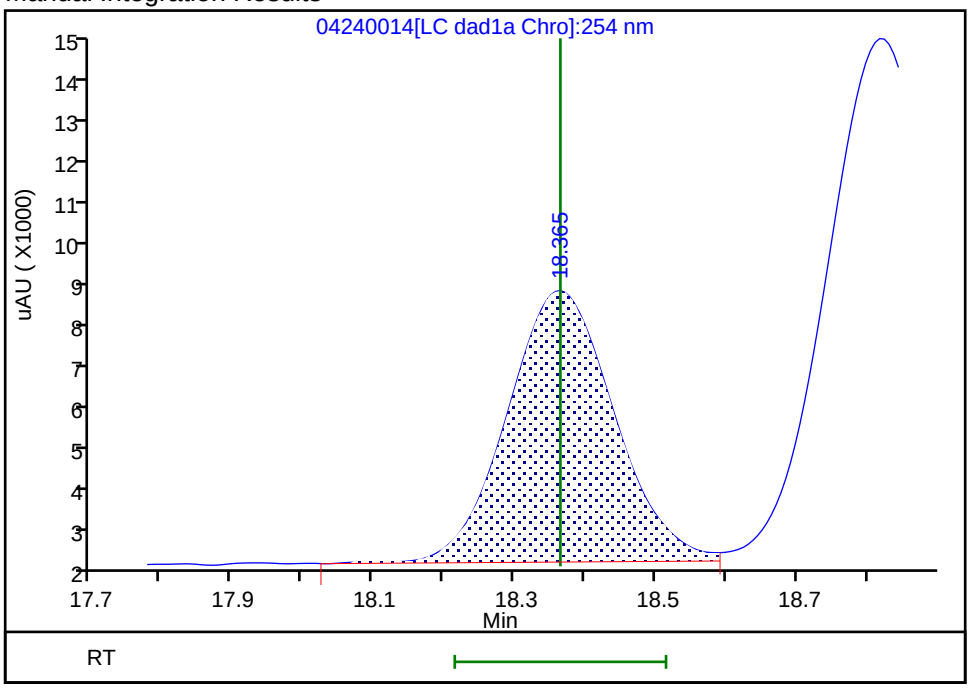
Processing Integration Results

RT: 18.36
Area: 66386
Amount: 0.242219
Amount Units: ug/ml



Manual Integration Results

RT: 18.36
Area: 66539
Amount: 0.239375
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:21:38 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Eurofins Denver

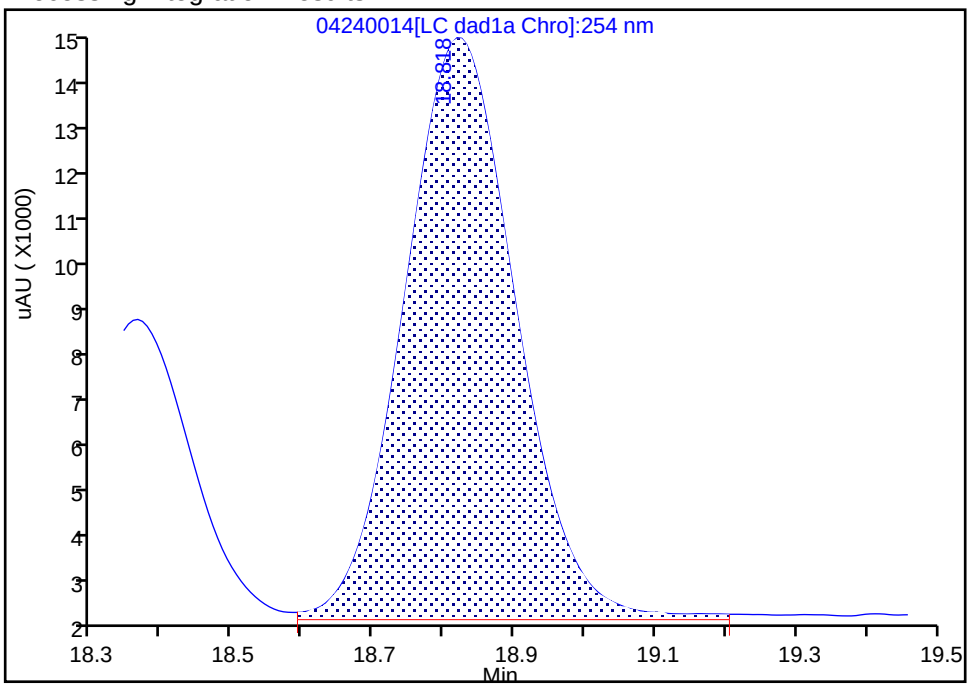
Data File: \\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240014.d
Injection Date: 24-Apr-2024 23:51:59 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT 5
Client ID:
Operator ID: JZ/JG ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

21 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

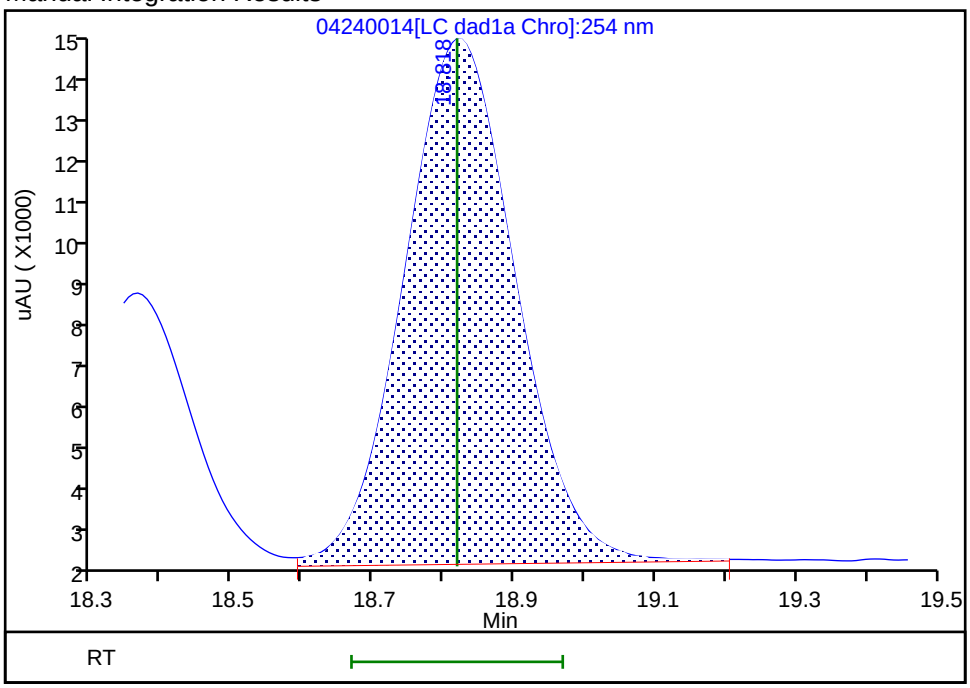
Processing Integration Results

RT: 18.82
Area: 134462
Amount: 0.225853
Amount Units: ug/ml



Manual Integration Results

RT: 18.82
Area: 133579
Amount: 0.240872
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:21:38 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

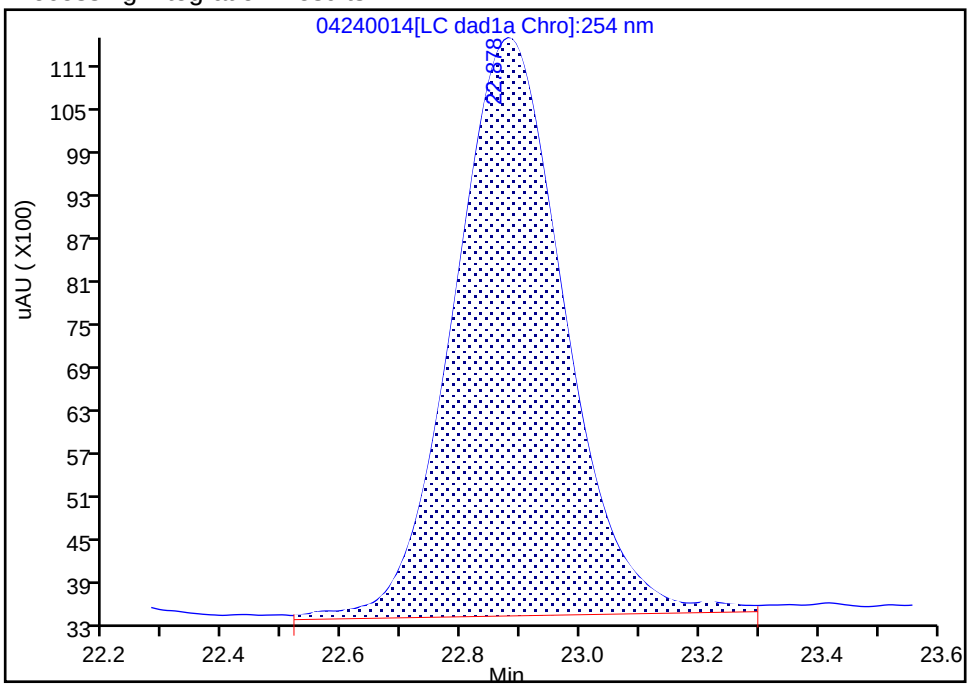
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240014.d				
Injection Date:	24-Apr-2024 23:51:59	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 5				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

23 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

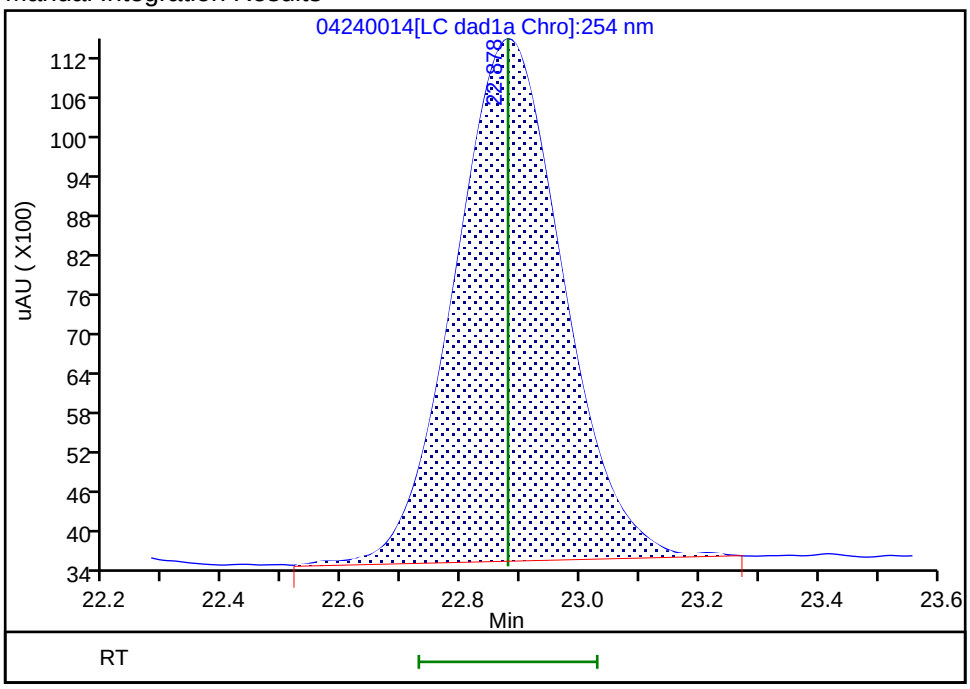
Processing Integration Results

RT: 22.88
Area: 104402
Amount: 0.260324
Amount Units: ug/ml



Manual Integration Results

RT: 22.88
Area: 100337
Amount: 0.250991
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:37:49 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

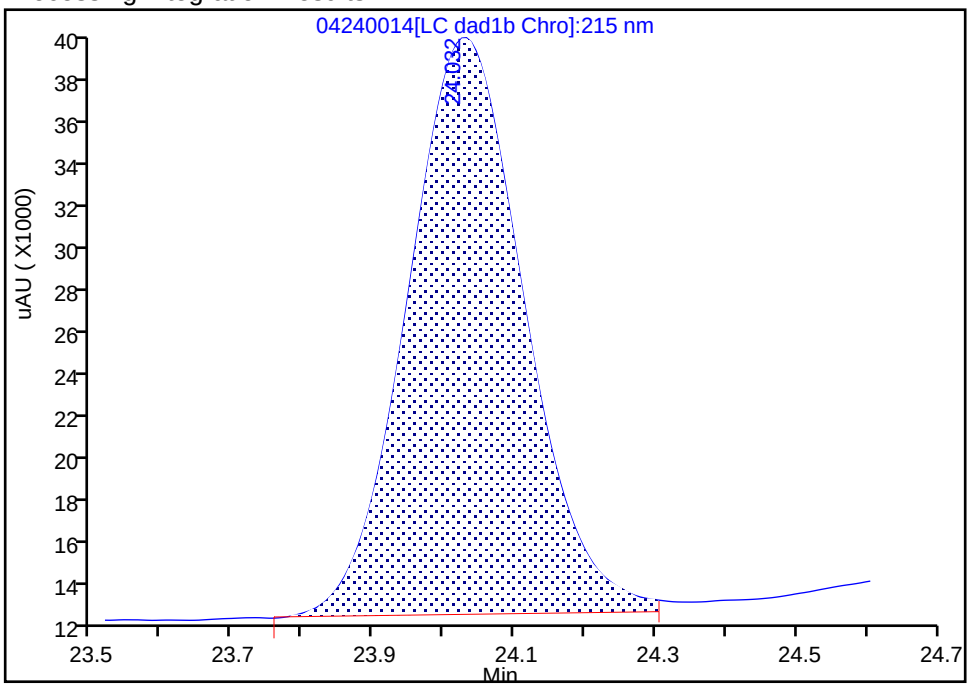
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240014.d				
Injection Date:	24-Apr-2024 23:51:59	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 5				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1B, 215 nm		

24 PETN, CAS: 78-11-5

Signal: 1

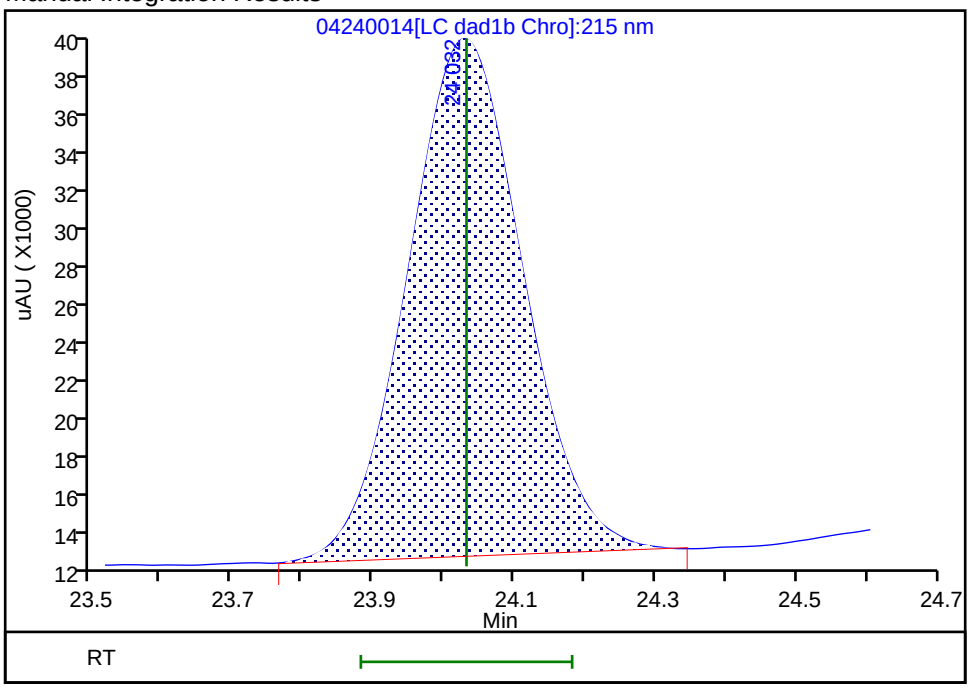
Processing Integration Results

RT: 24.03
Area: 310832
Amount: 2.589148
Amount Units: ug/ml



Manual Integration Results

RT: 24.03
Area: 304928
Amount: 2.482849
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:39:03 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20240424-132624.b\04240015.D
Lims ID: IC INT 4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 25-Apr-2024 00:27:59 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 4
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub16

Method: \\chromfs\Denver\ChromData\G2_LUNA\20240424-132624.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 25-Apr-2024 14:30:14 Calib Date: 25-Apr-2024 07:39:21
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20240424-132624.b\04240027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1684

First Level Reviewer: LV5D Date: 25-Apr-2024 13:20:06

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
6 HMX	1	6.706	6.705	0.001	17977	0.1000	0.1033	
5 2,4,6-Trinitrophenol	1	8.659	8.612	0.047	14859	0.1000	0.0981	
8 RDX	1	8.946	8.938	0.008	21609	0.1000	0.1025	
9 Nitrobenzene	1	11.452	11.425	0.027	39489	0.1000	0.1033	
$ 10 1,2-Dinitrobenzene	1	12.372	12.345	0.027	27370	0.1000	0.1058	
11 3,5-Dinitroaniline	1	14.205	14.185	0.020	43670	0.1000	0.0993	M
12 1,3-Dinitrobenzene	1	14.492	14.478	0.014	57592	0.1000	0.0977	M
13 Nitroglycerin	2	14.945	14.918	0.027	126558	1.00	1.06	M
14 o-Nitrotoluene	1	15.532	15.505	0.027	23799	0.1000	0.0973	M
15 p-Nitrotoluene	1	15.759	15.738	0.021	22549	0.1000	0.0994	M
16 4-Amino-2,6-dinitrotoluene	1	16.265	16.245	0.020	27449	0.1000	0.0991	M
17 m-Nitrotoluene	1	16.599	16.578	0.021	28103	0.1000	0.0985	M
18 2-Amino-4,6-dinitrotoluene	1	17.079	17.058	0.021	39853	0.1000	0.0983	M
19 1,3,5-Trinitrobenzene	1	17.285	17.272	0.013	41177	0.1000	0.0972	M
20 2,6-Dinitrotoluene	1	18.379	18.365	0.014	27487	0.1000	0.0989	M
21 2,4-Dinitrotoluene	1	18.839	18.818	0.021	54294	0.1000	0.0979	M
22 Tetryl	1	22.052	22.025	0.027	32920	0.1000	0.1041	
23 2,4,6-Trinitrotoluene	1	22.912	22.878	0.034	41861	0.1000	0.1047	M
24 PETN	2	24.046	24.032	0.014	121831	1.00	1.00	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00080 Amount Added: 10.00 Units: uL

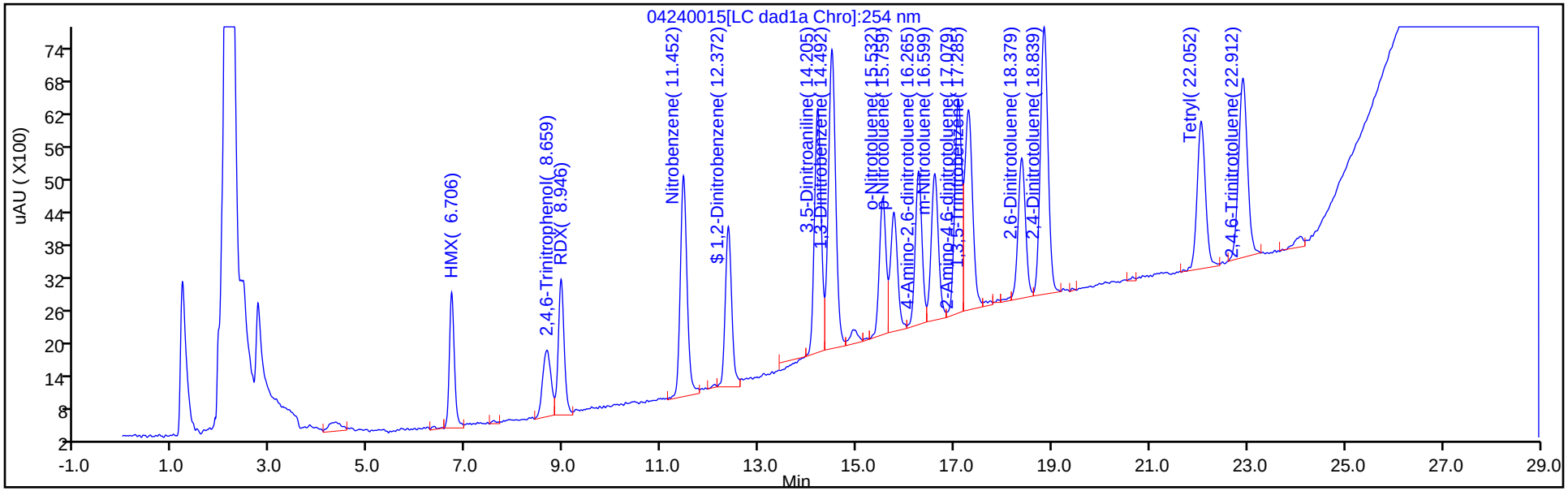
Report Date: 25-Apr-2024 14:30:15 Chrom Revision: 2.3 09-Apr-2024 17:43:44

Eurofins Denver

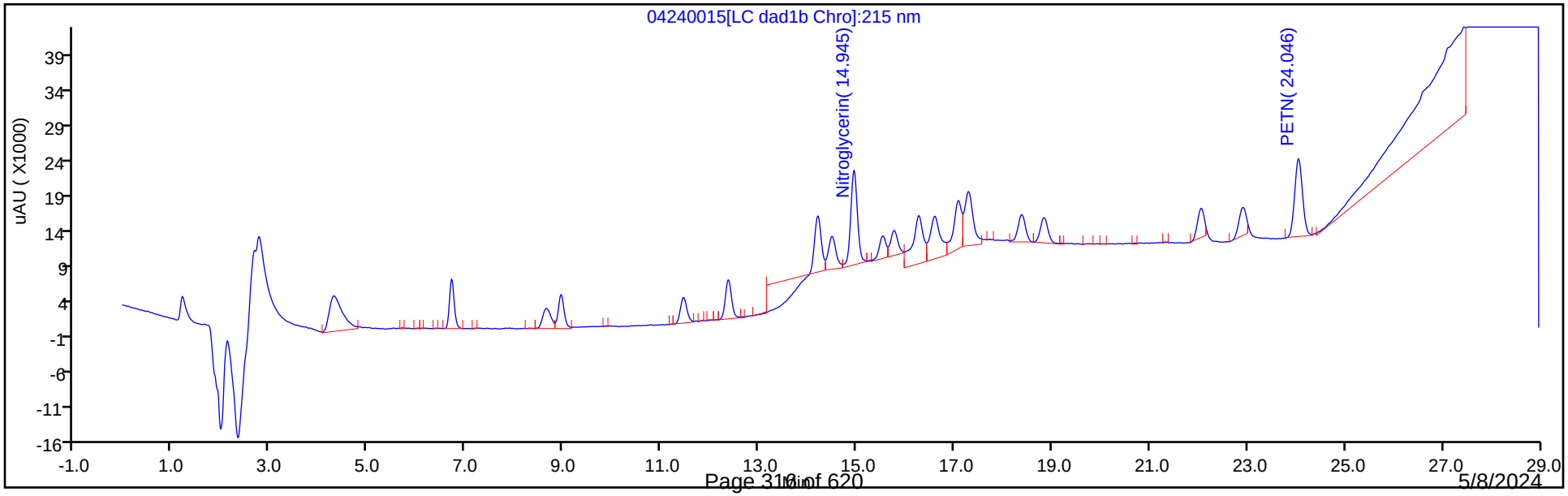
Data File: \\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240015.d

Injection Date:	25-Apr-2024 00:27:59	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	IC INT 4			Worklist Smp#:	15
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	G2_8330_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



Manual Integration/User Assign Peak Report

Eurofins Denver

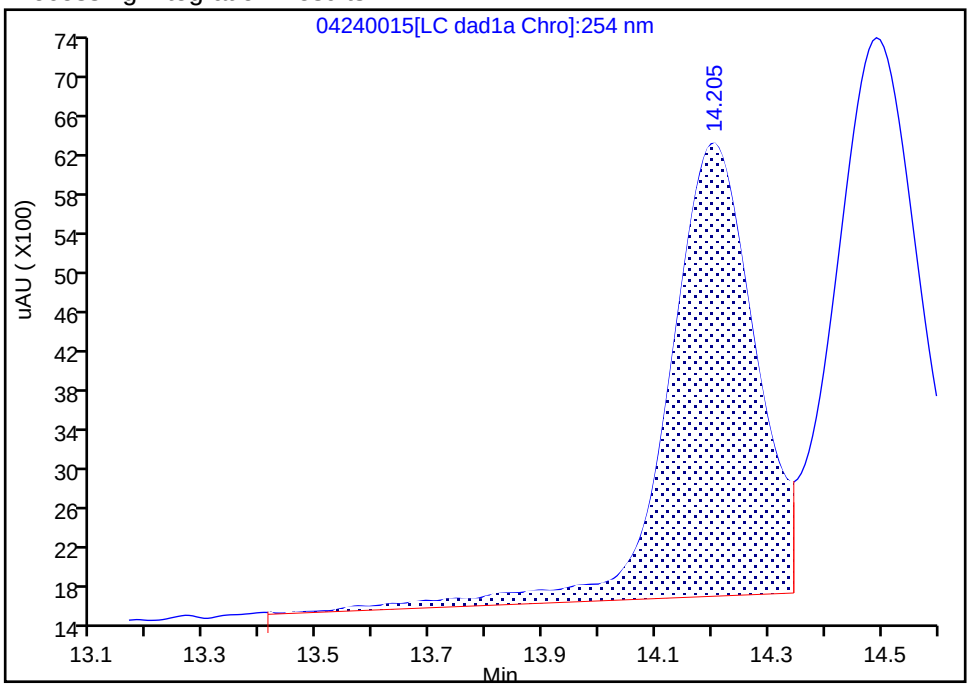
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240015.d				
Injection Date:	25-Apr-2024 00:27:59	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 4				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

11 3,5-Dinitroaniline, CAS: 618-87-1

Signal: 1

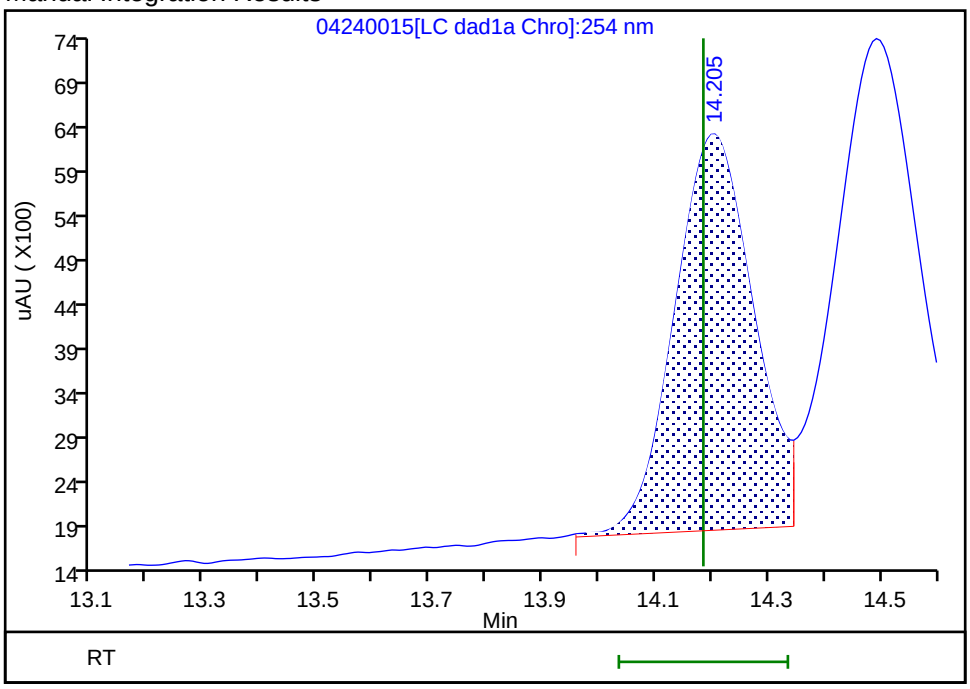
Processing Integration Results

RT: 14.21
Area: 48990
Amount: 0.107916
Amount Units: ug/ml



Manual Integration Results

RT: 14.21
Area: 43670
Amount: 0.099254
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:24:42 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

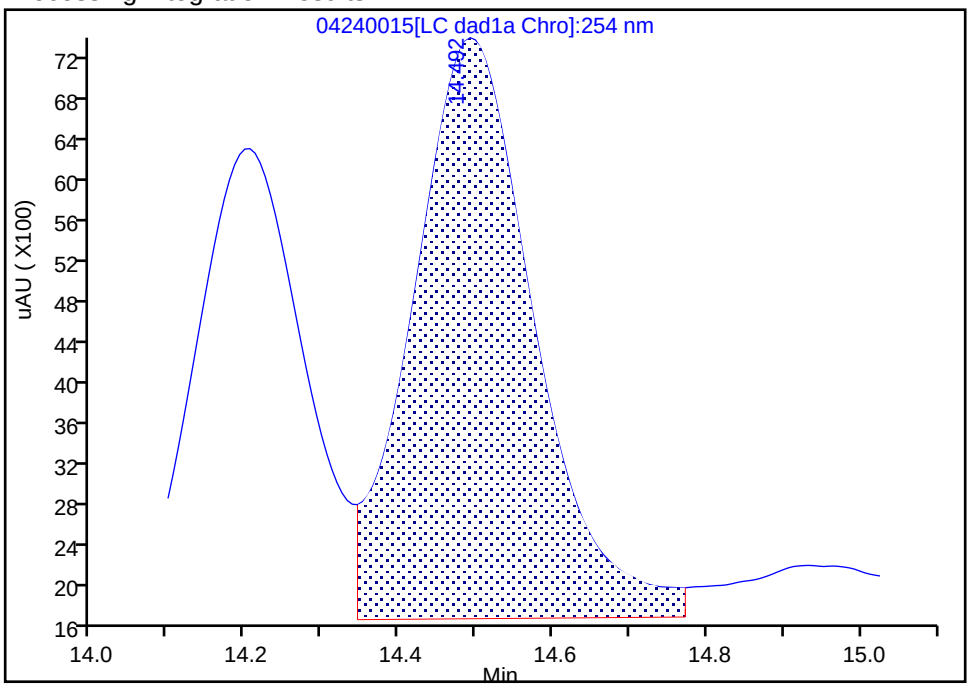
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240015.d				
Injection Date:	25-Apr-2024 00:27:59	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 4				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

Signal: 1

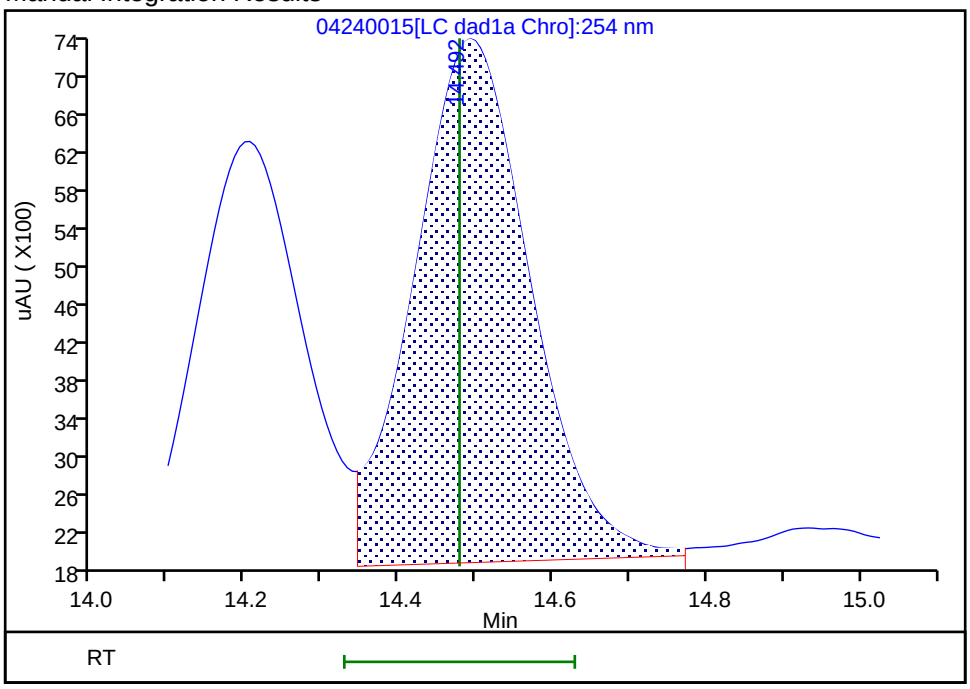
Processing Integration Results

RT: 14.49
Area: 62136
Amount: 0.098323
Amount Units: ug/ml



Manual Integration Results

RT: 14.49
Area: 57592
Amount: 0.097710
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:21:52 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

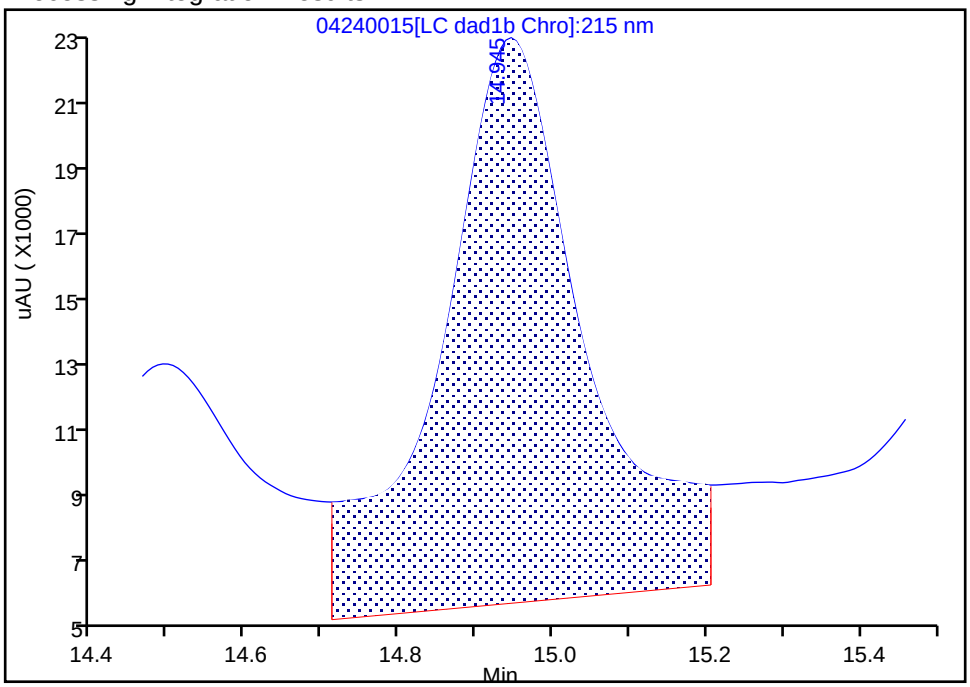
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240015.d				
Injection Date:	25-Apr-2024 00:27:59	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 4				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1B, 215 nm		

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

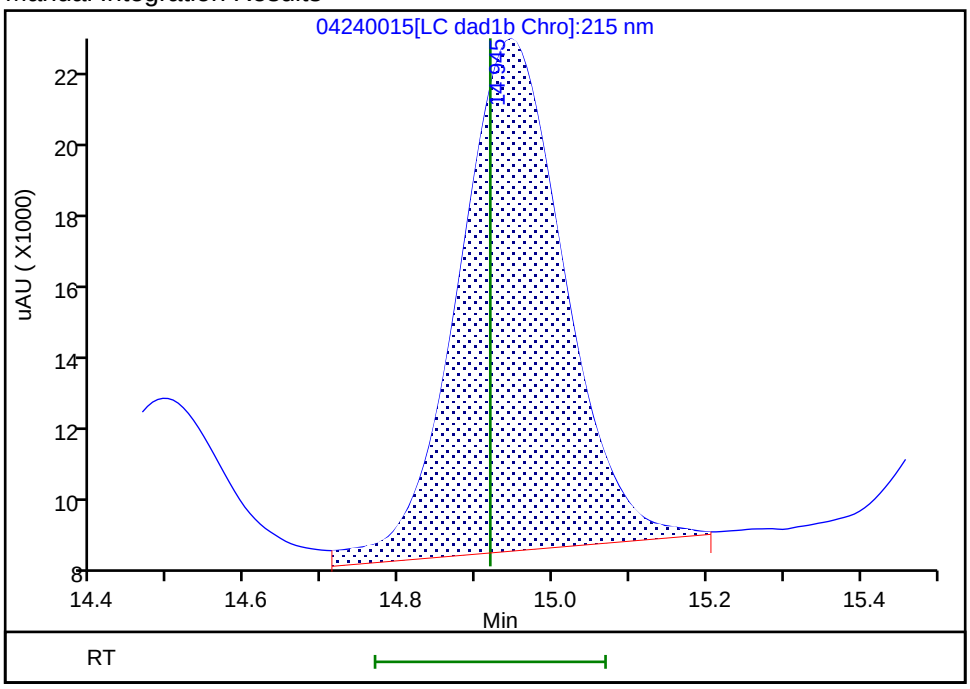
Processing Integration Results

RT: 14.95
Area: 211924
Amount: 0.838110
Amount Units: ug/ml



Manual Integration Results

RT: 14.95
Area: 126558
Amount: 1.059021
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:20:05 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

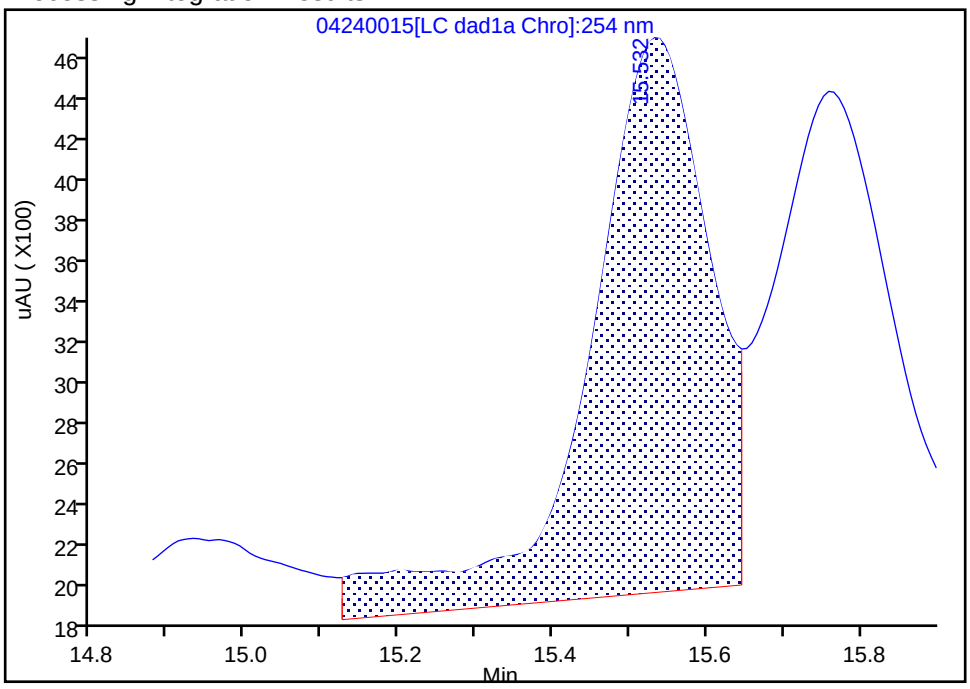
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240015.d				
Injection Date:	25-Apr-2024 00:27:59	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 4				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

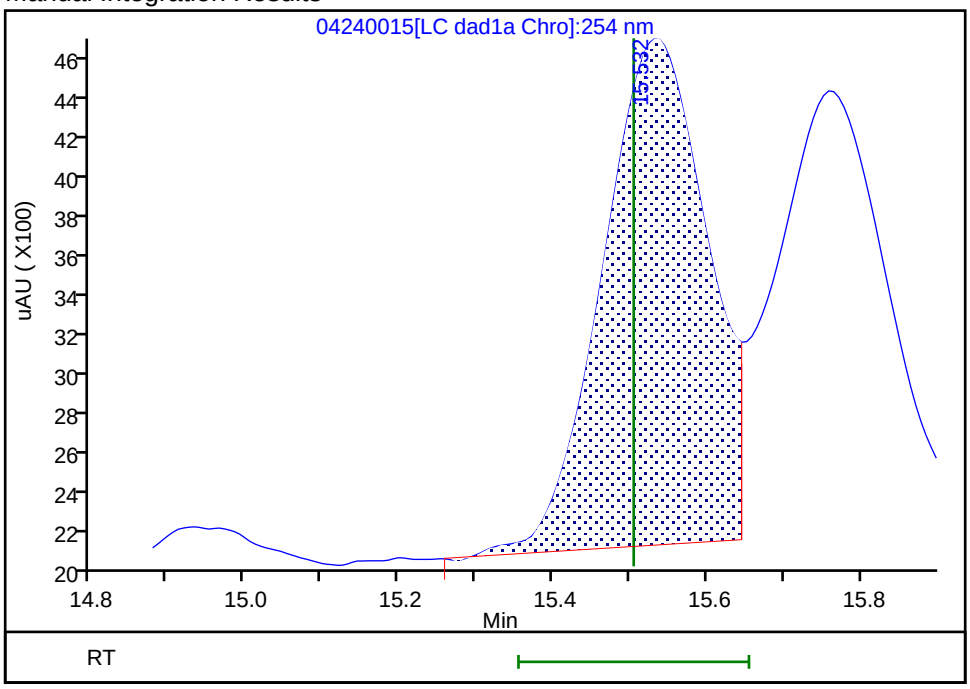
Processing Integration Results

RT: 15.53
Area: 29559
Amount: 0.107552
Amount Units: ug/ml



Manual Integration Results

RT: 15.53
Area: 23799
Amount: 0.097300
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:24:52 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

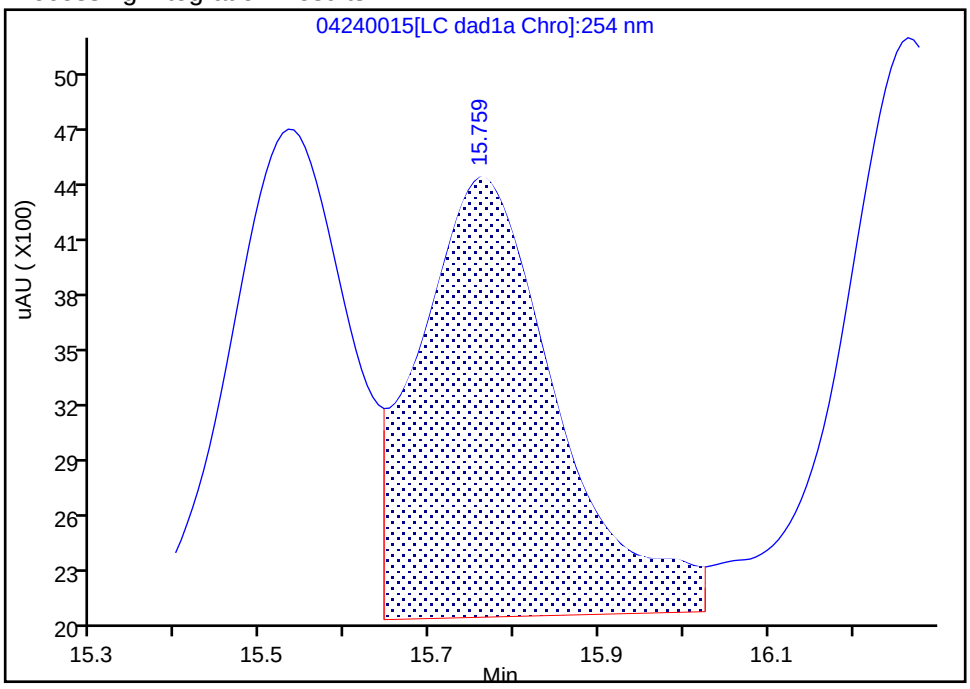
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240015.d				
Injection Date:	25-Apr-2024 00:27:59	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 4				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

15 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

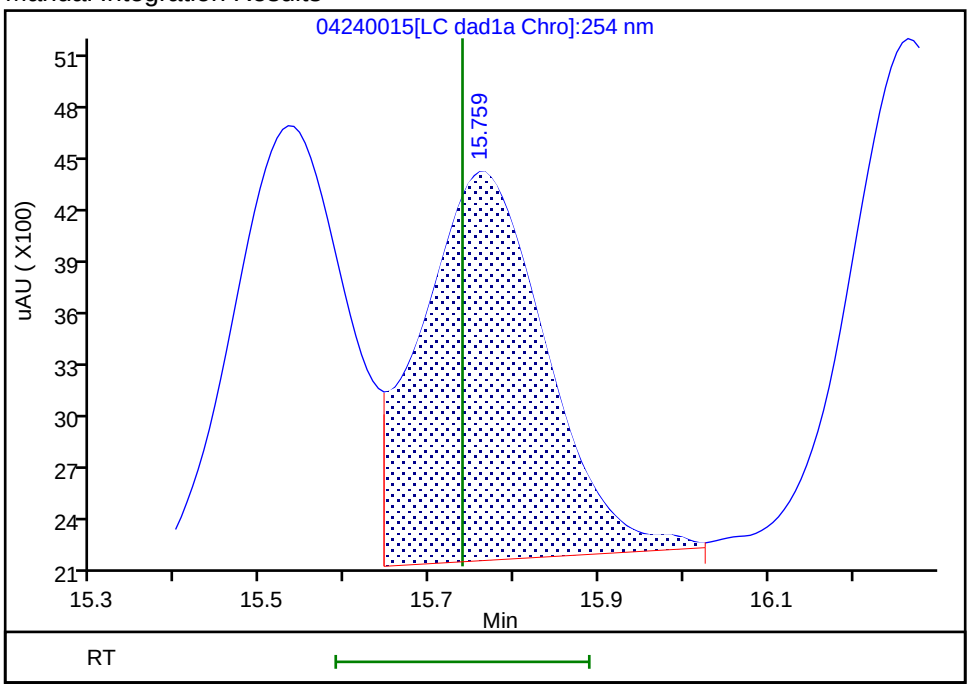
Processing Integration Results

RT: 15.76
Area: 26801
Amount: 0.114371
Amount Units: ug/ml



Manual Integration Results

RT: 15.76
Area: 22549
Amount: 0.099353
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:21:52 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

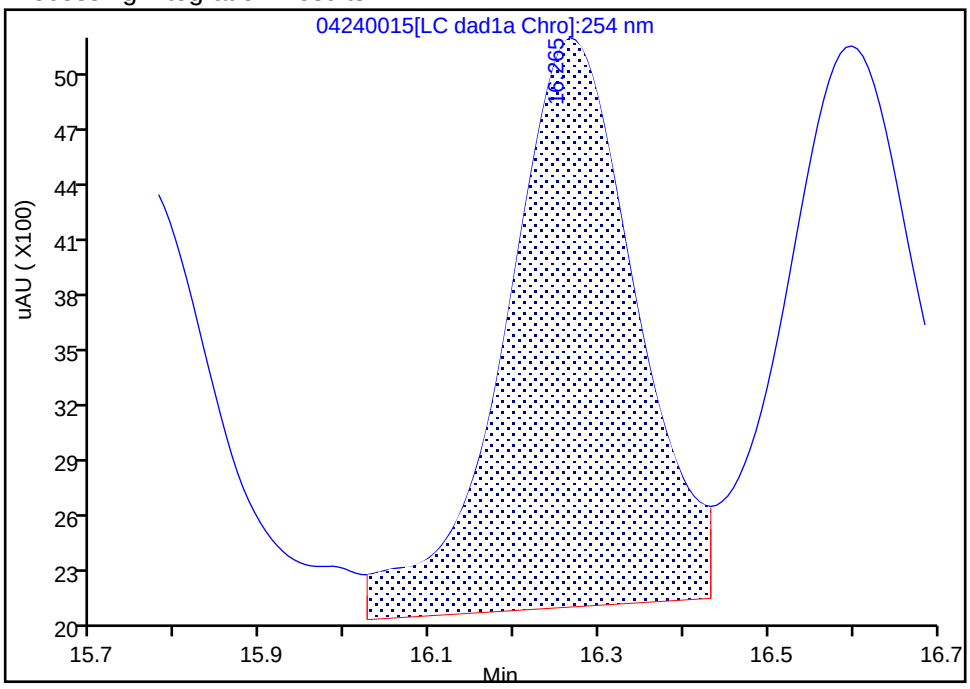
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240015.d				
Injection Date:	25-Apr-2024 00:27:59	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 4				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

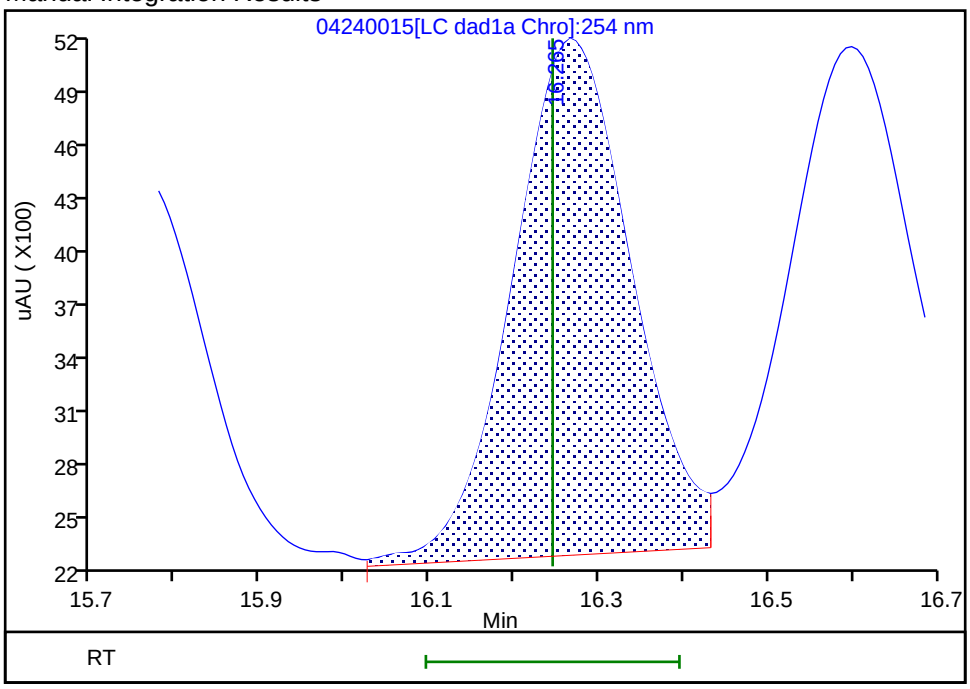
Processing Integration Results

RT: 16.27
Area: 32402
Amount: 0.109550
Amount Units: ug/ml



Manual Integration Results

RT: 16.27
Area: 27449
Amount: 0.099093
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:21:52 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

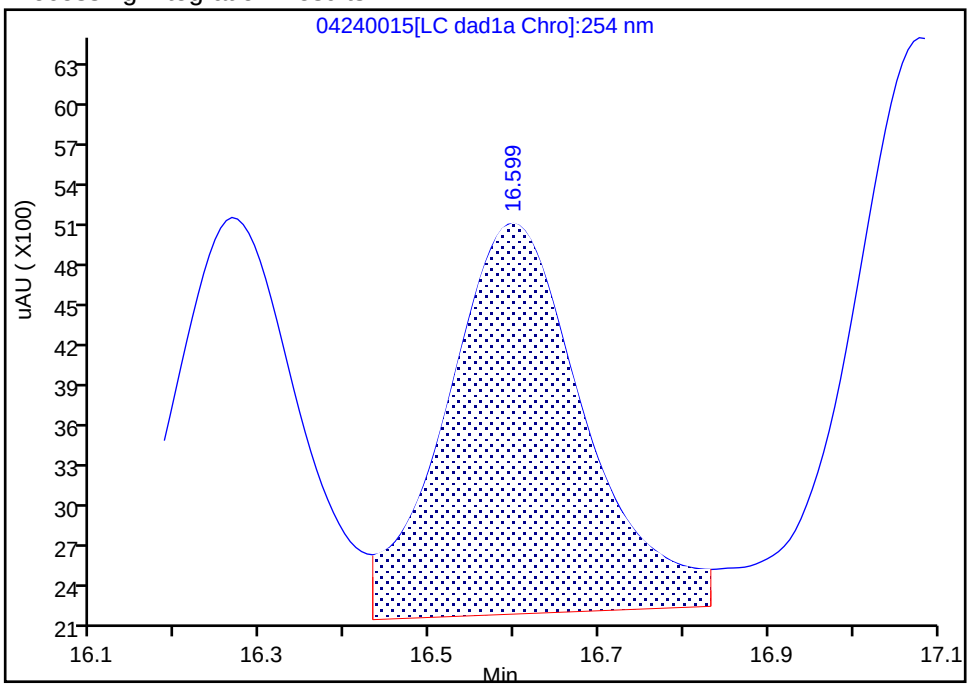
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240015.d				
Injection Date:	25-Apr-2024 00:27:59	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 4				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

17 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

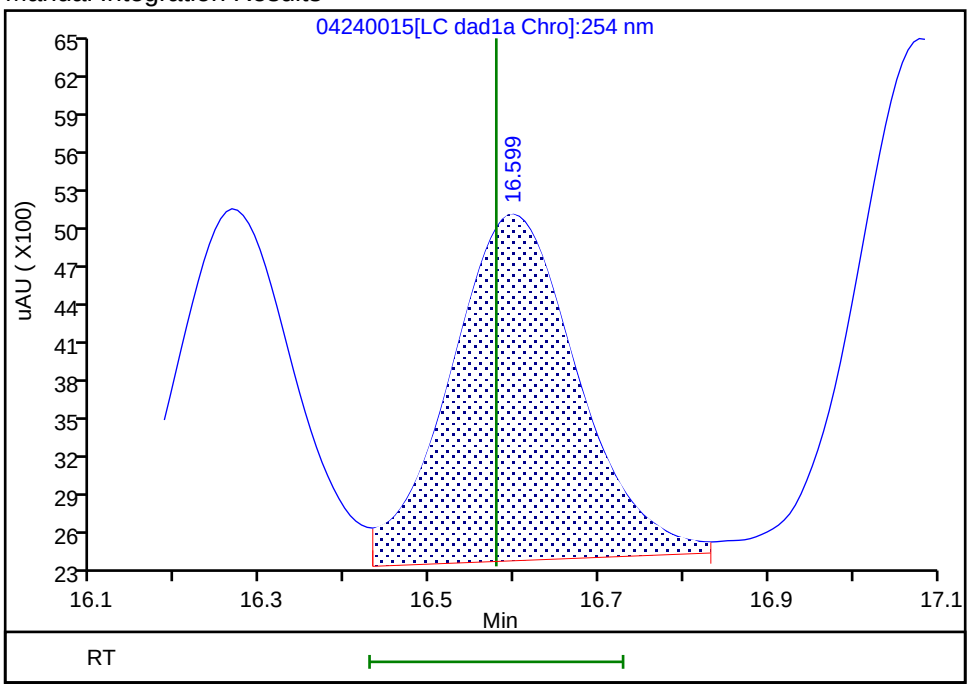
Processing Integration Results

RT: 16.60
Area: 32735
Amount: 0.108622
Amount Units: ug/ml



Manual Integration Results

RT: 16.60
Area: 28103
Amount: 0.098459
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:21:52 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

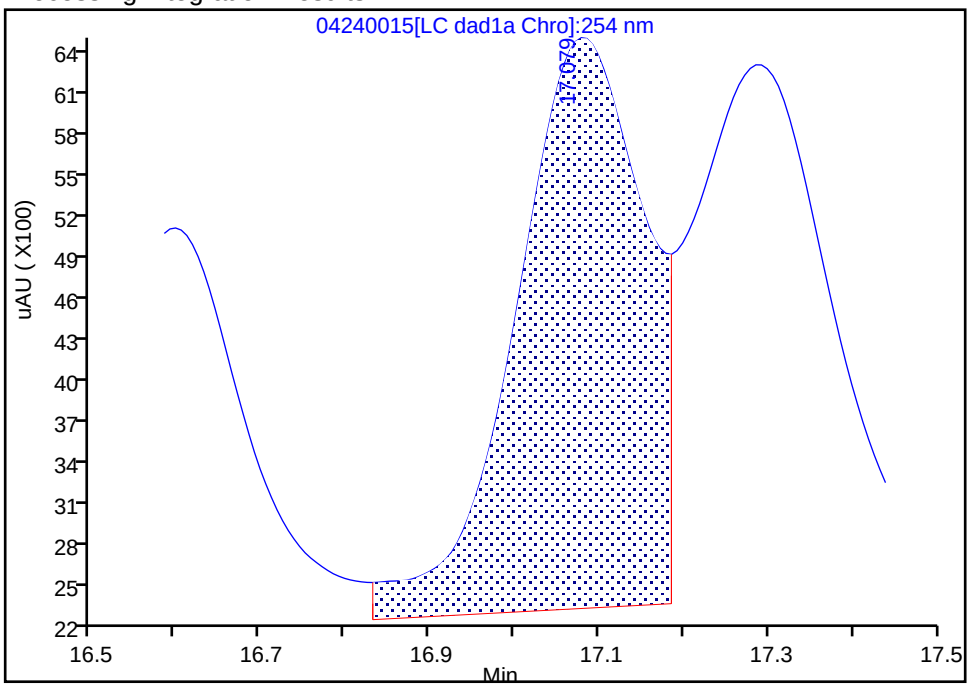
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240015.d				
Injection Date:	25-Apr-2024 00:27:59	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 4				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

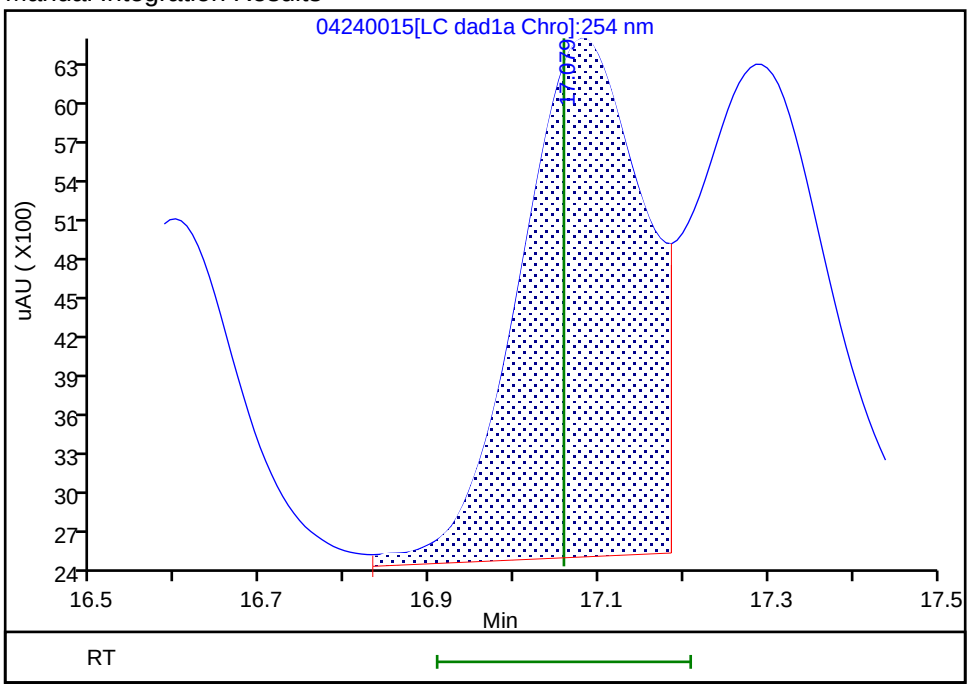
Processing Integration Results

RT: 17.08
Area: 43679
Amount: 0.107499
Amount Units: ug/ml



Manual Integration Results

RT: 17.08
Area: 39853
Amount: 0.098266
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:21:52 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

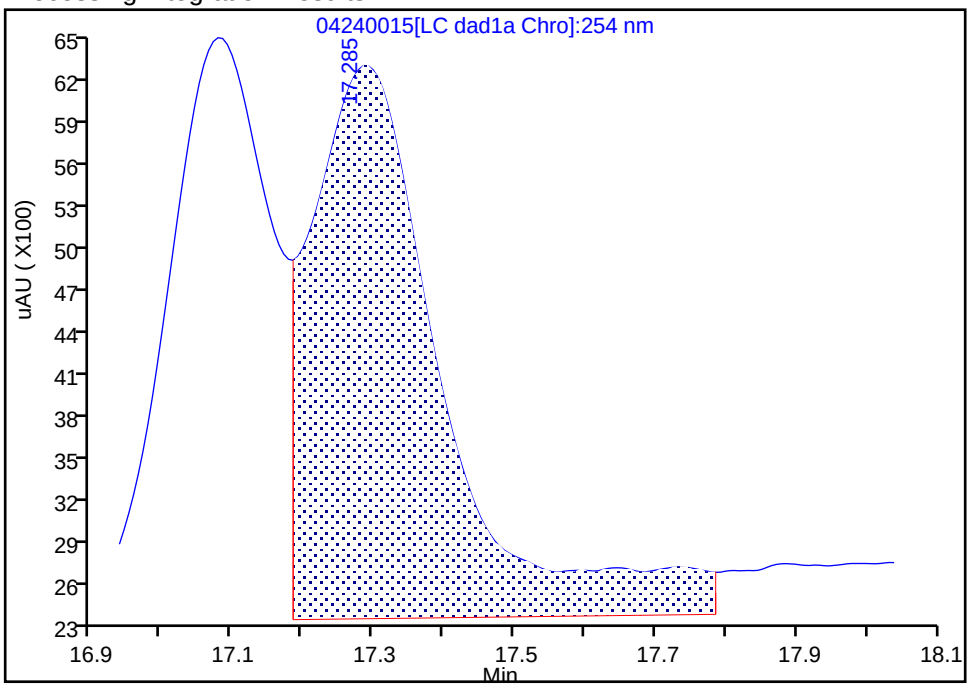
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240015.d				
Injection Date:	25-Apr-2024 00:27:59	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 4				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

19 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

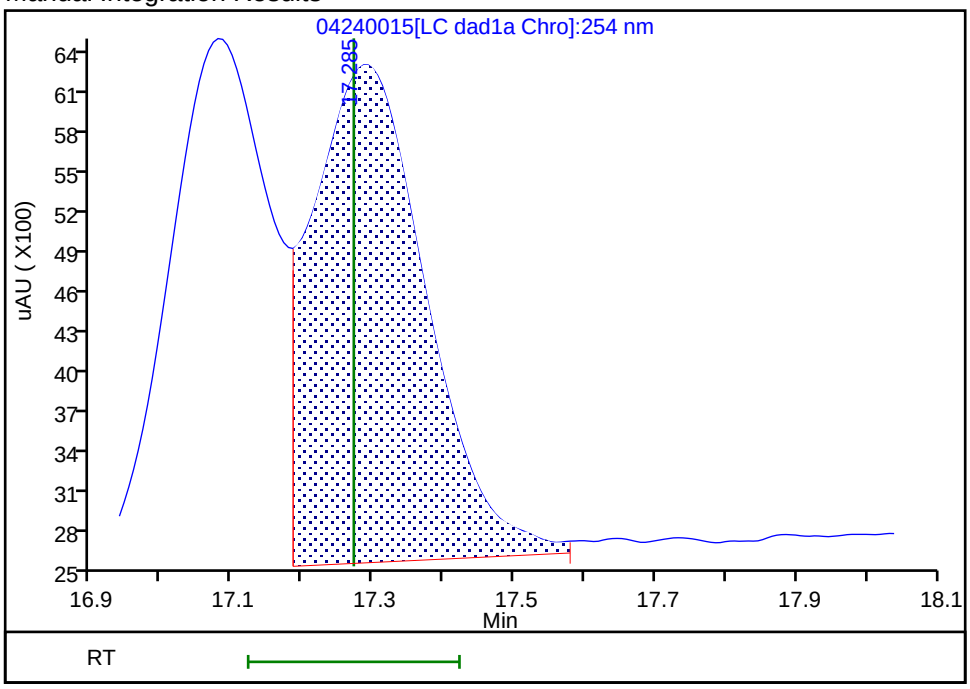
Processing Integration Results

RT: 17.29
Area: 49937
Amount: 0.107094
Amount Units: ug/ml



Manual Integration Results

RT: 17.29
Area: 41177
Amount: 0.097241
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:24:54 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

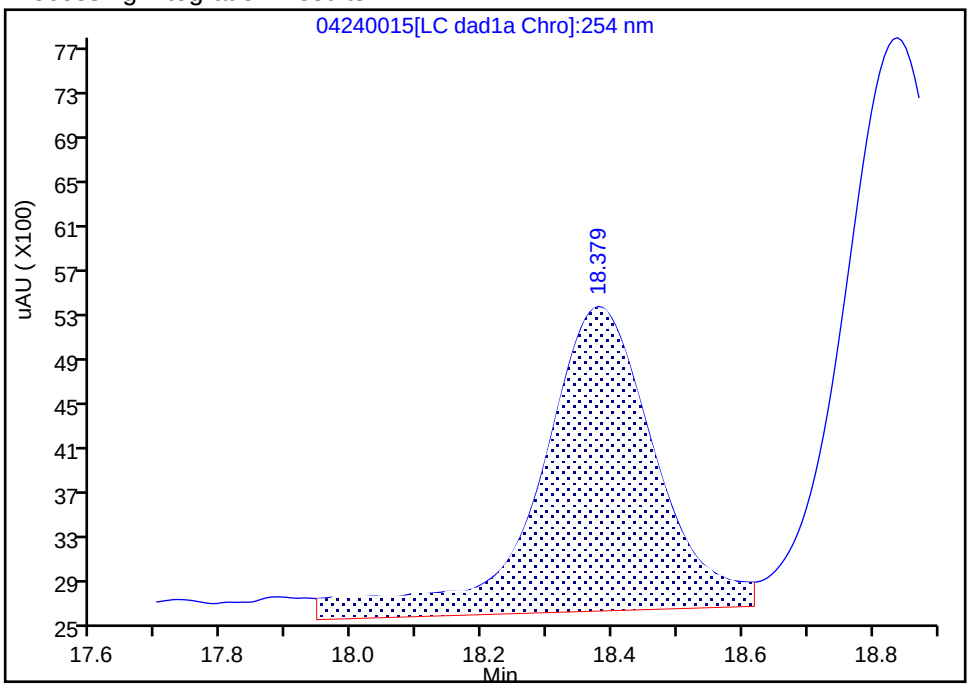
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240015.d				
Injection Date:	25-Apr-2024 00:27:59	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 4				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

20 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

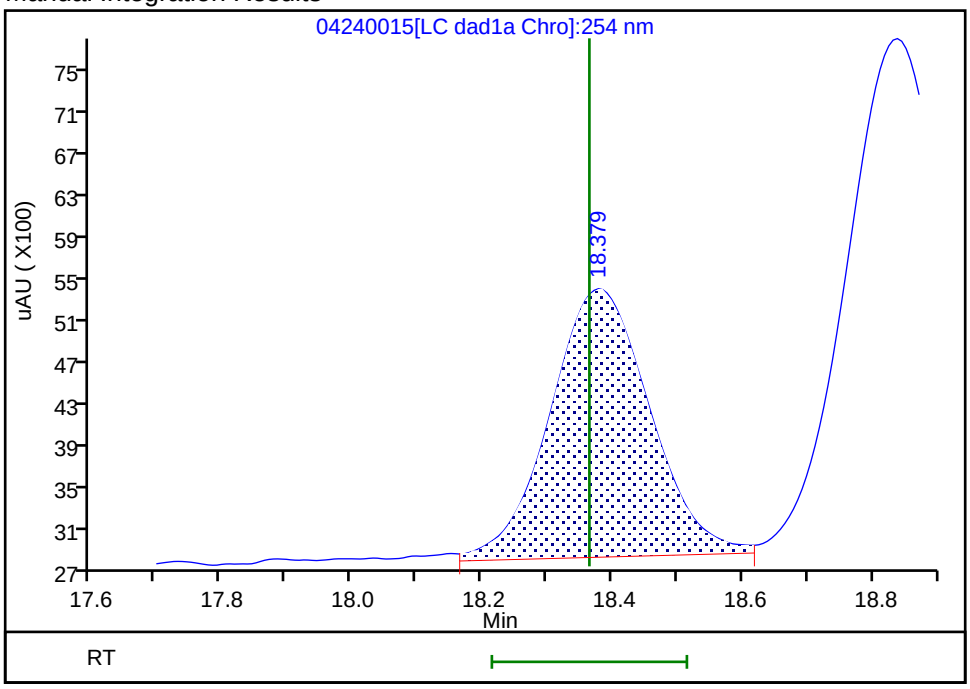
Processing Integration Results

RT: 18.38
Area: 34293
Amount: 0.121780
Amount Units: ug/ml



Manual Integration Results

RT: 18.38
Area: 27487
Amount: 0.098885
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:24:55 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

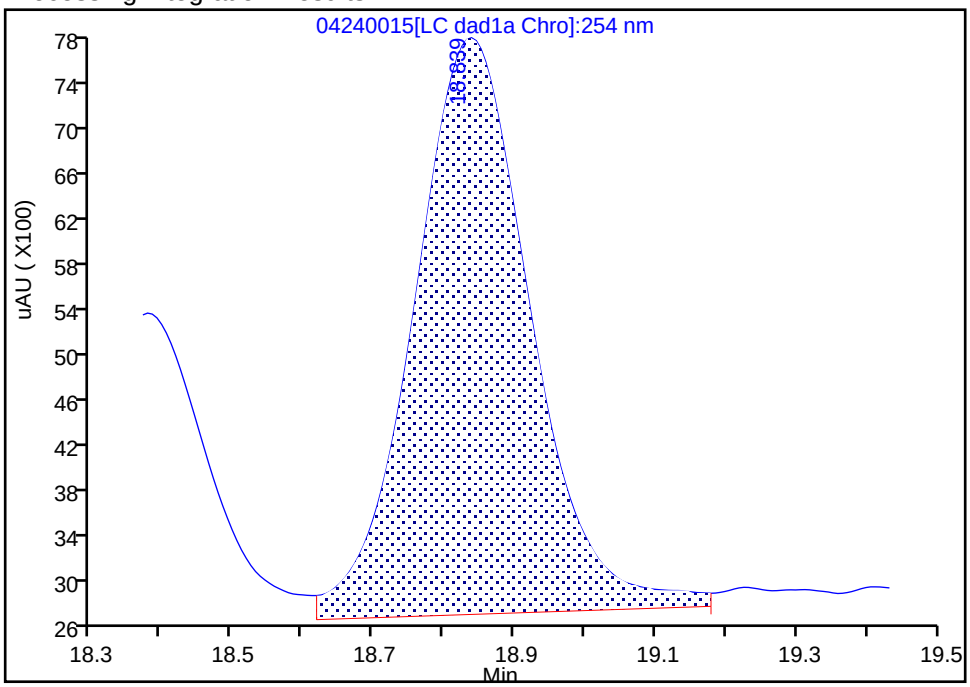
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240015.d				
Injection Date:	25-Apr-2024 00:27:59	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 4				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

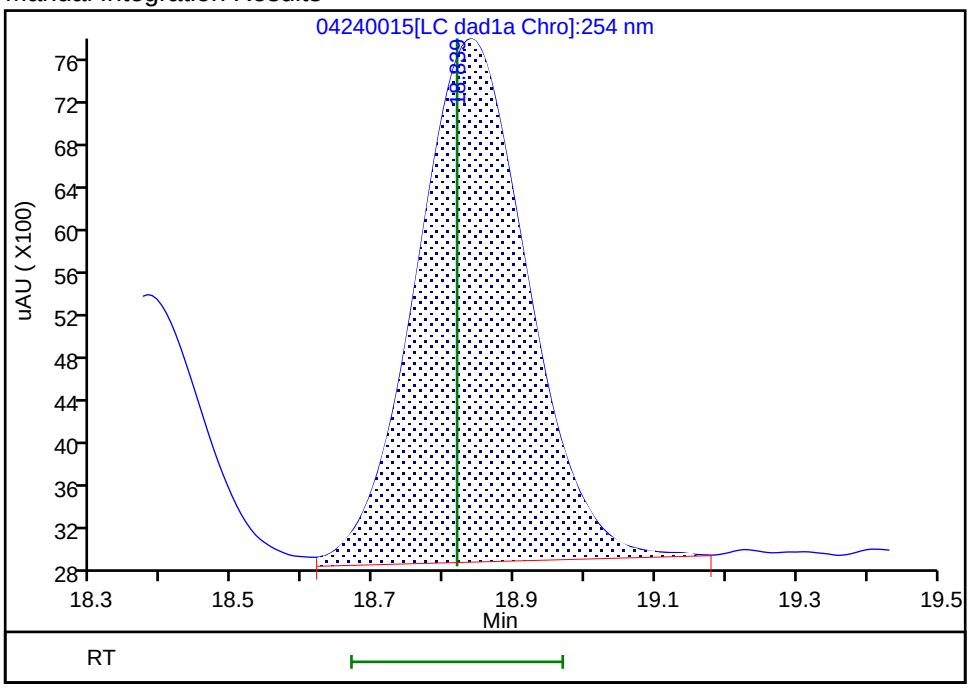
Processing Integration Results

RT: 18.84
Area: 58511
Amount: 0.098344
Amount Units: ug/ml



Manual Integration Results

RT: 18.84
Area: 54294
Amount: 0.097904
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:21:54 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

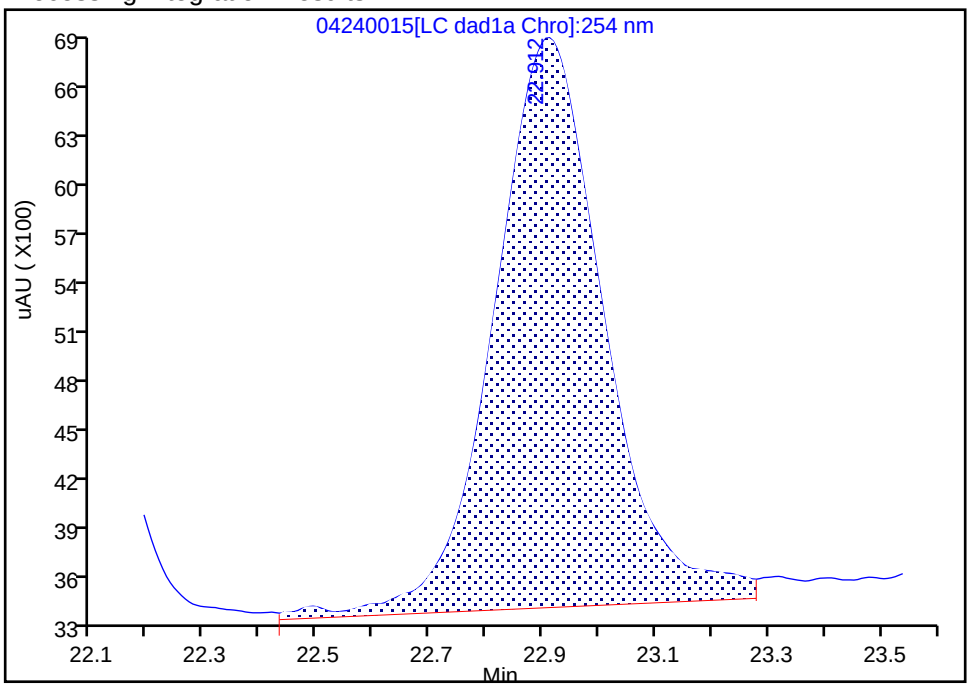
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240015.d				
Injection Date:	25-Apr-2024 00:27:59	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 4				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

23 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

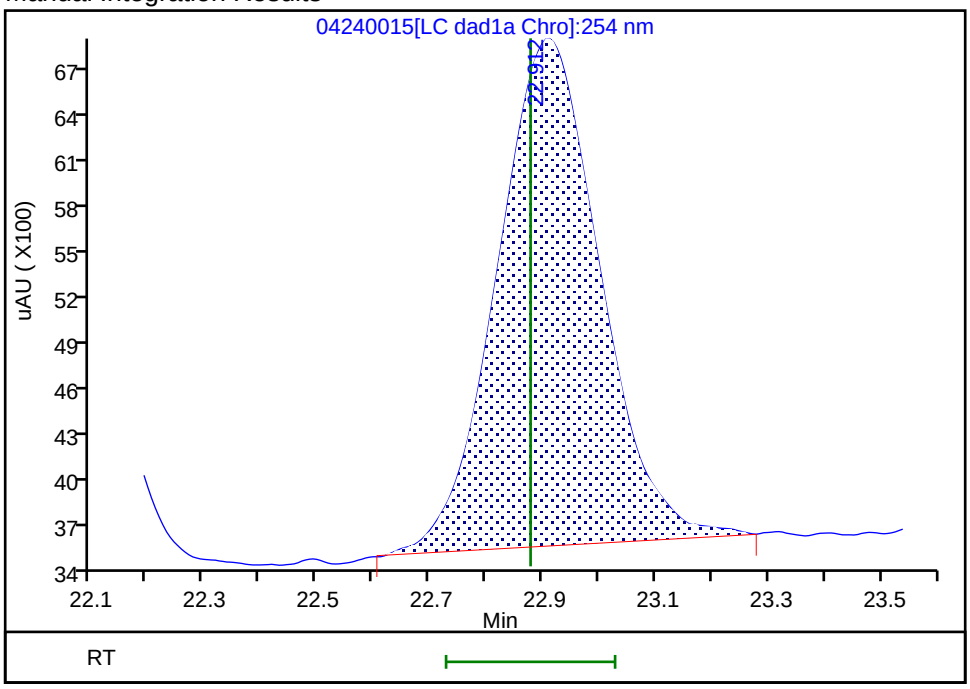
Processing Integration Results

RT: 22.91
Area: 46193
Amount: 0.112953
Amount Units: ug/ml



Manual Integration Results

RT: 22.91
Area: 41861
Amount: 0.104715
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:36:56 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20240424-132624.b\04240016.D
Lims ID: IC INT 3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 25-Apr-2024 01:03:56 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 3
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub16

Method: \\chromfs\Denver\ChromData\G2_LUNA\20240424-132624.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 25-Apr-2024 14:30:16 Calib Date: 25-Apr-2024 07:39:21
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20240424-132624.b\04240027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1684

First Level Reviewer: LV5D Date: 25-Apr-2024 13:20:15

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
6 HMX	1	6.709	6.705	0.004	8509	0.0500	0.0489	M
5 2,4,6-Trinitrophenol	1	8.663	8.612	0.051	7014	0.0500	0.0463	
8 RDX	1	8.943	8.938	0.005	10654	0.0500	0.0492	
9 Nitrobenzene	1	11.436	11.425	0.011	18193	0.0500	0.0476	
$ 10 1,2-Dinitrobenzene	1	12.356	12.345	0.011	13324	0.0500	0.0515	
11 3,5-Dinitroaniline	1	14.203	14.185	0.018	22481	0.0500	0.0501	M
12 1,3-Dinitrobenzene	1	14.496	14.478	0.018	30596	0.0500	0.0519	M
13 Nitroglycerin	2	14.943	14.918	0.025	59130	0.5000	0.4948	M
14 o-Nitrotoluene	1	15.523	15.505	0.018	13247	0.0500	0.0542	M
15 p-Nitrotoluene	1	15.743	15.738	0.005	11825	0.0500	0.0501	M
16 4-Amino-2,6-dinitrotoluene	1	16.249	16.245	0.004	13955	0.0500	0.0490	M
17 m-Nitrotoluene	1	16.583	16.578	0.005	14941	0.0500	0.0507	M
18 2-Amino-4,6-dinitrotoluene	1	17.063	17.058	0.005	19735	0.0500	0.0487	M
19 1,3,5-Trinitrobenzene	1	17.283	17.272	0.011	19358	0.0500	0.0457	M
20 2,6-Dinitrotoluene	1	18.369	18.365	0.004	14197	0.0500	0.0511	
21 2,4-Dinitrotoluene	1	18.823	18.818	0.005	28589	0.0500	0.0516	
22 Tetryl	1	22.023	22.025	-0.002	15630	0.0500	0.0487	M
23 2,4,6-Trinitrotoluene	1	22.876	22.878	-0.002	20131	0.0500	0.0504	M
24 PETN	2	24.016	24.032	-0.016	60616	0.5000	0.5056	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00080 Amount Added: 5.00 Units: uL

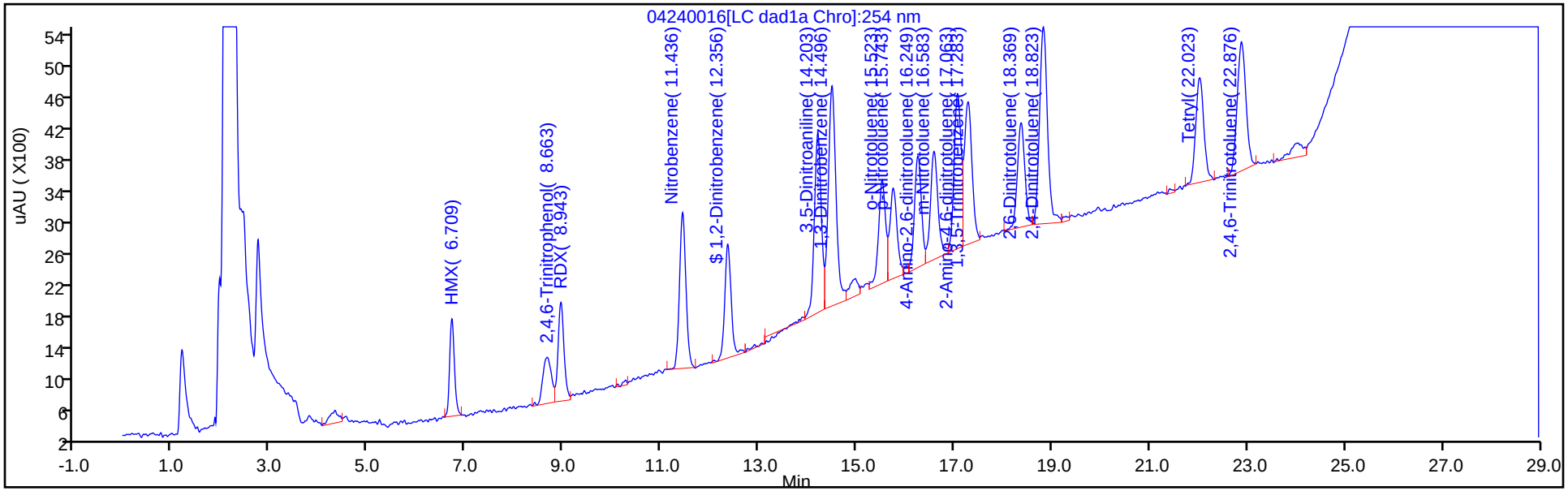
Report Date: 25-Apr-2024 14:30:16 Chrom Revision: 2.3 09-Apr-2024 17:43:44

Eurofins Denver

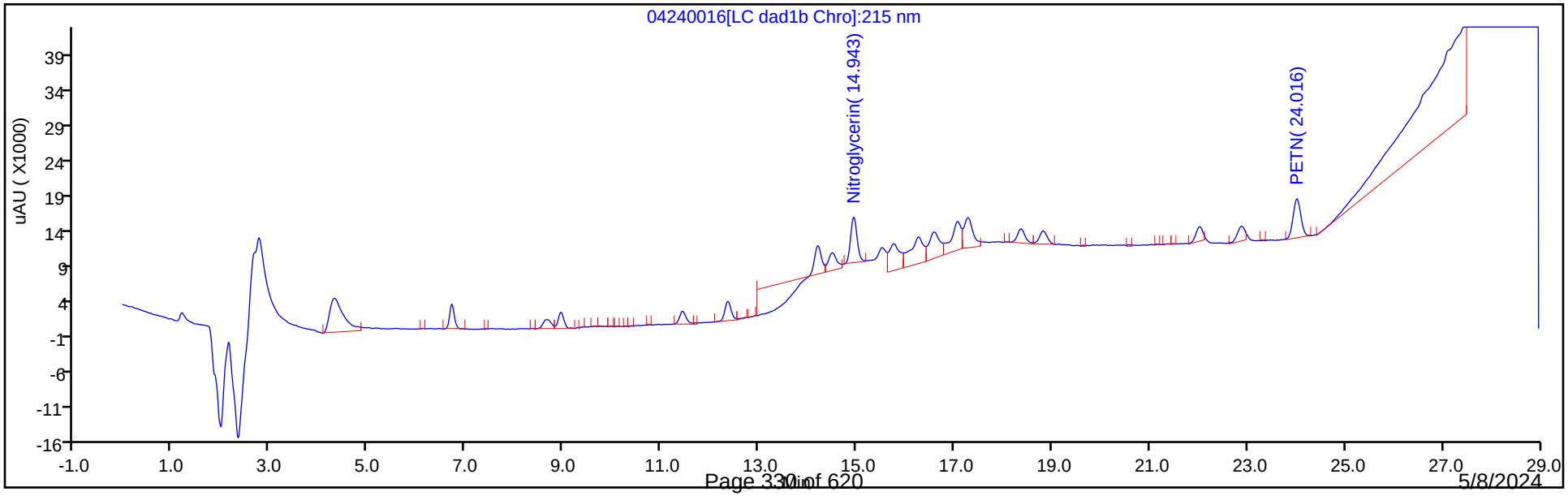
Data File: \\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240016.d

Injection Date:	25-Apr-2024 01:03:56	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	IC INT 3			Worklist Smp#:	16
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	G2_8330_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



Manual Integration/User Assign Peak Report

Eurofins Denver

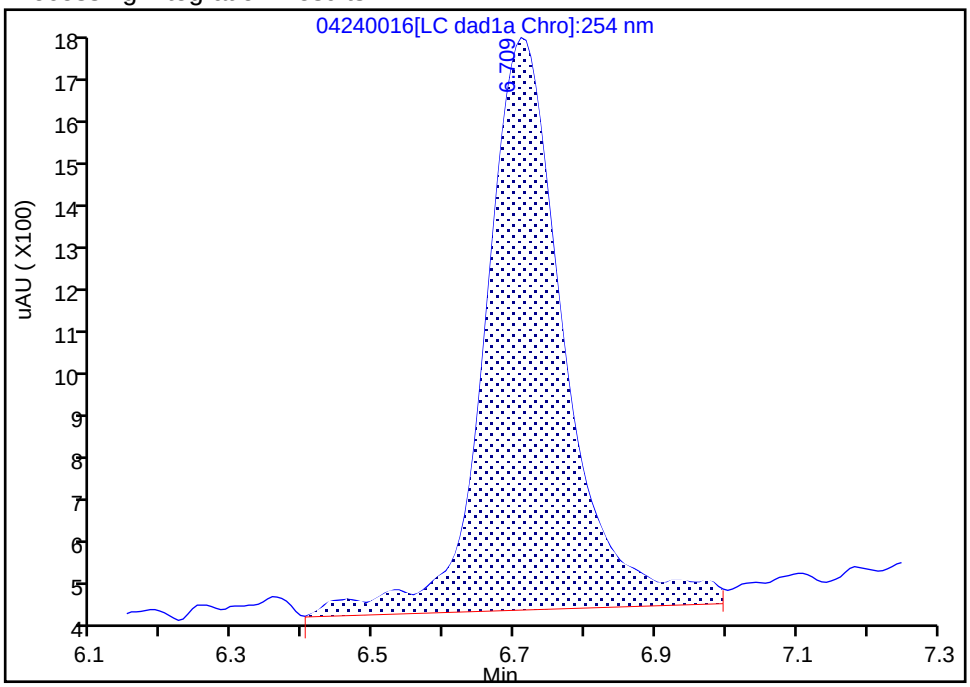
Data File: \\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240016.d
Injection Date: 25-Apr-2024 01:03:56 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT 3
Client ID:
Operator ID: JZ/JG ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

6 HMX, CAS: 2691-41-0

Signal: 1

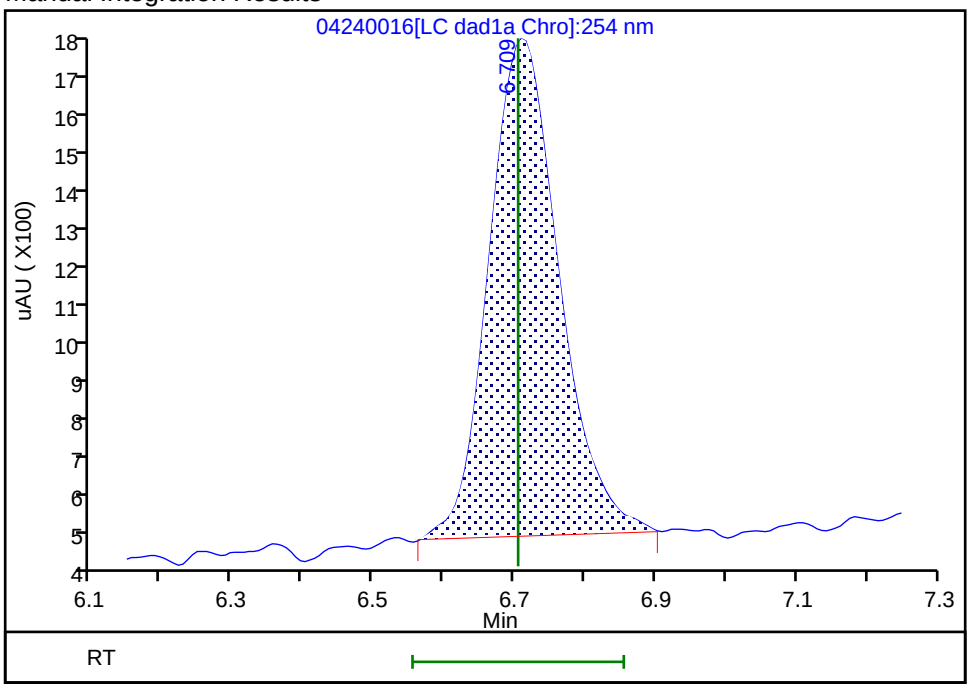
Processing Integration Results

RT: 6.71
Area: 10052
Amount: 0.056576
Amount Units: ug/ml



Manual Integration Results

RT: 6.71
Area: 8509
Amount: 0.048881
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:32:05 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

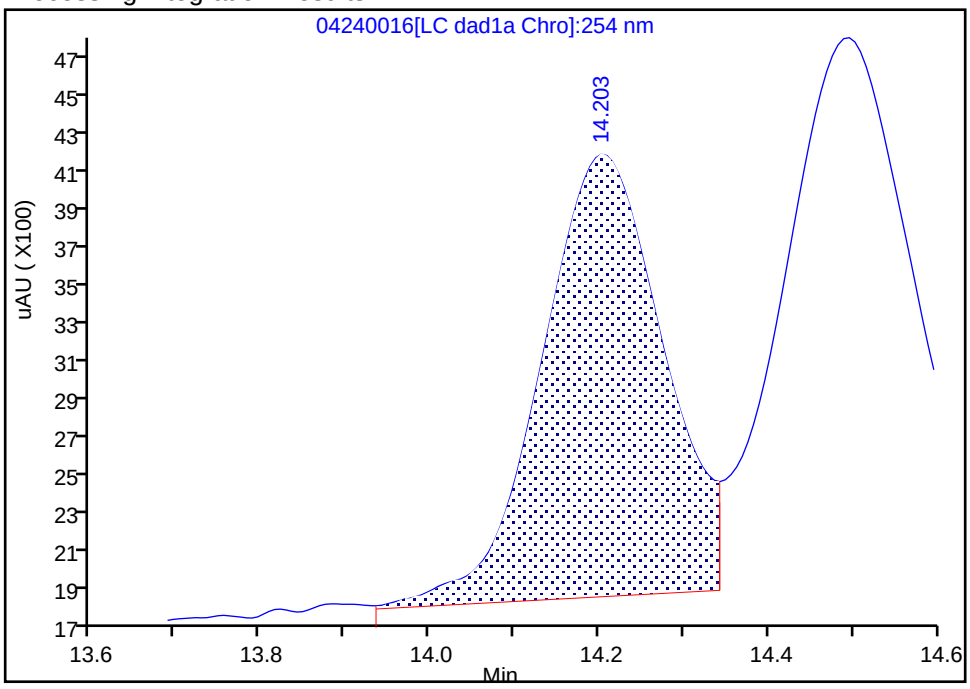
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240016.d				
Injection Date:	25-Apr-2024 01:03:56	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 3				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

11 3,5-Dinitroaniline, CAS: 618-87-1

Signal: 1

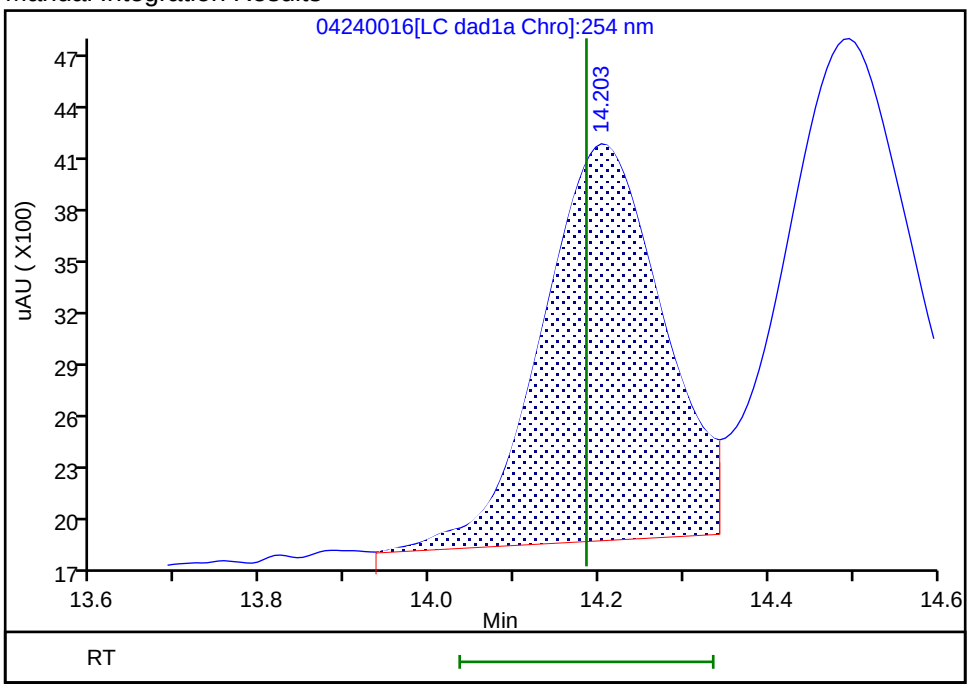
Processing Integration Results

RT: 14.20
Area: 22811
Amount: 0.047887
Amount Units: ug/ml



Manual Integration Results

RT: 14.20
Area: 22481
Amount: 0.050060
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:25:16 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

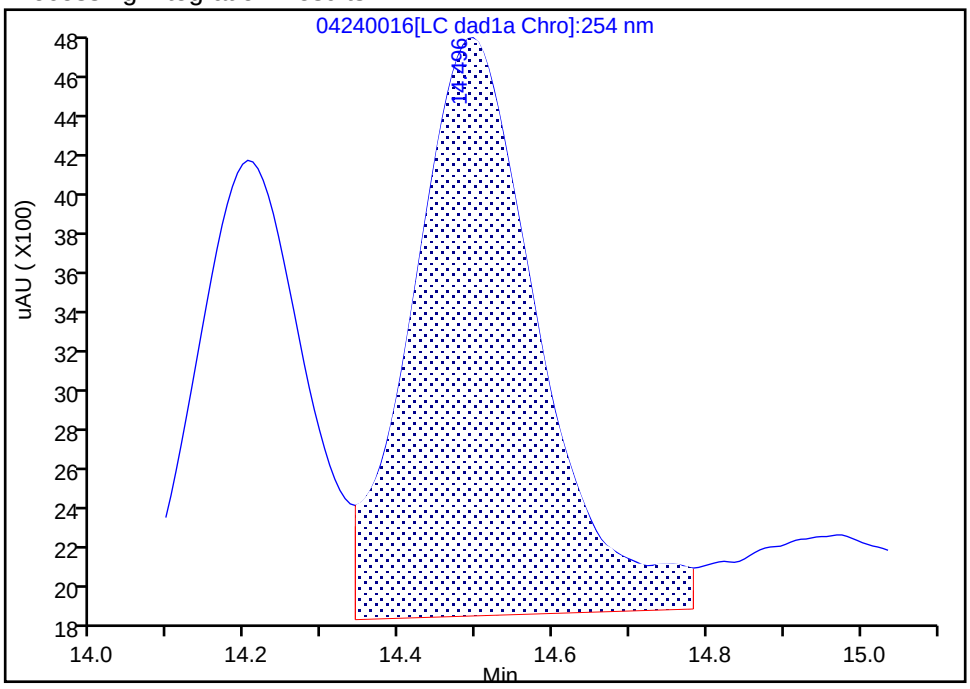
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240016.d				
Injection Date:	25-Apr-2024 01:03:56	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 3				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

Signal: 1

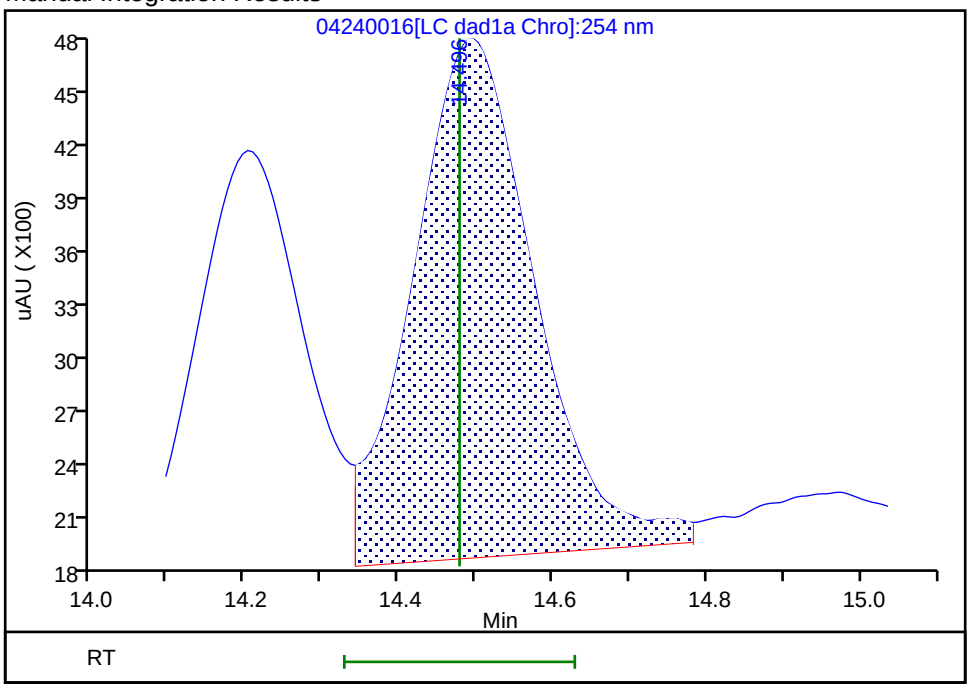
Processing Integration Results

RT: 14.50
Area: 32206
Amount: 0.051373
Amount Units: ug/ml



Manual Integration Results

RT: 14.50
Area: 30596
Amount: 0.051909
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:25:16 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

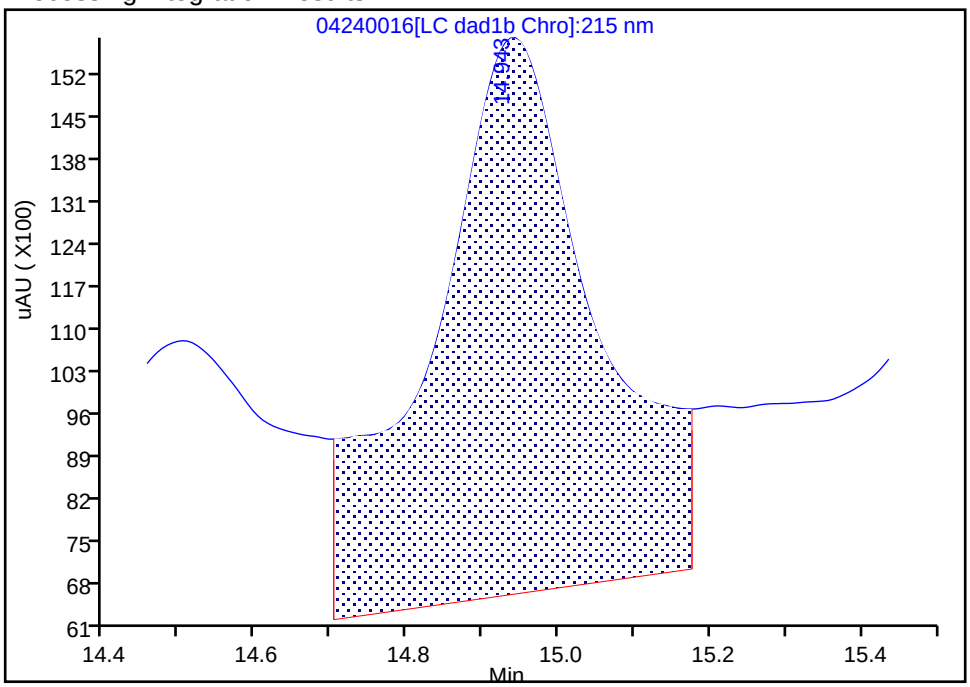
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240016.d				
Injection Date:	25-Apr-2024 01:03:56	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 3				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1B, 215 nm		

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

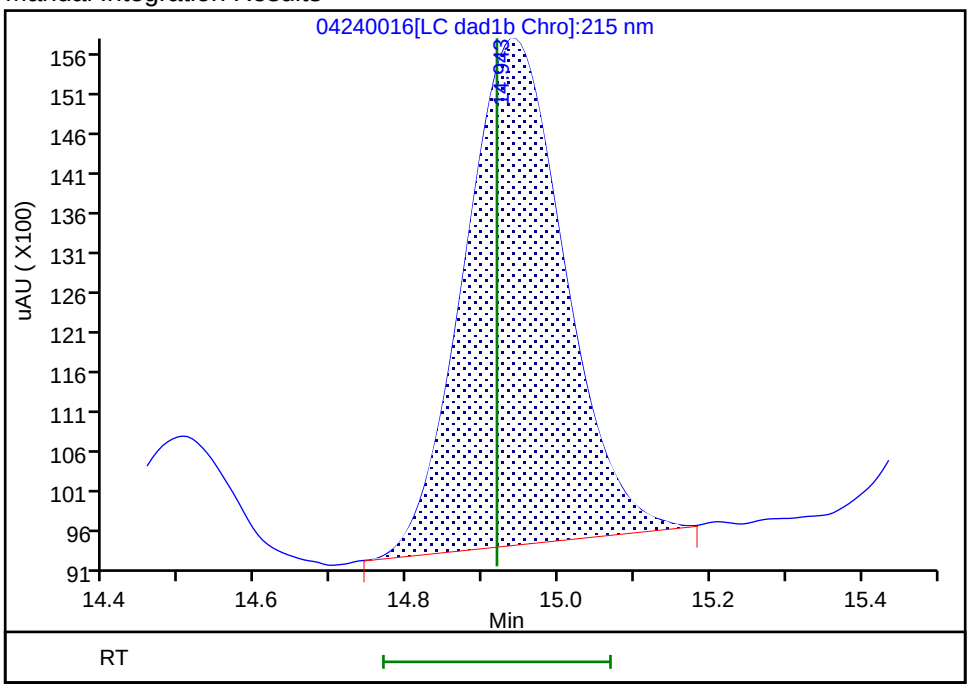
Processing Integration Results

RT: 14.94
Area: 139941
Amount: 0.575003
Amount Units: ug/ml



Manual Integration Results

RT: 14.94
Area: 59130
Amount: 0.494792
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:20:51 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

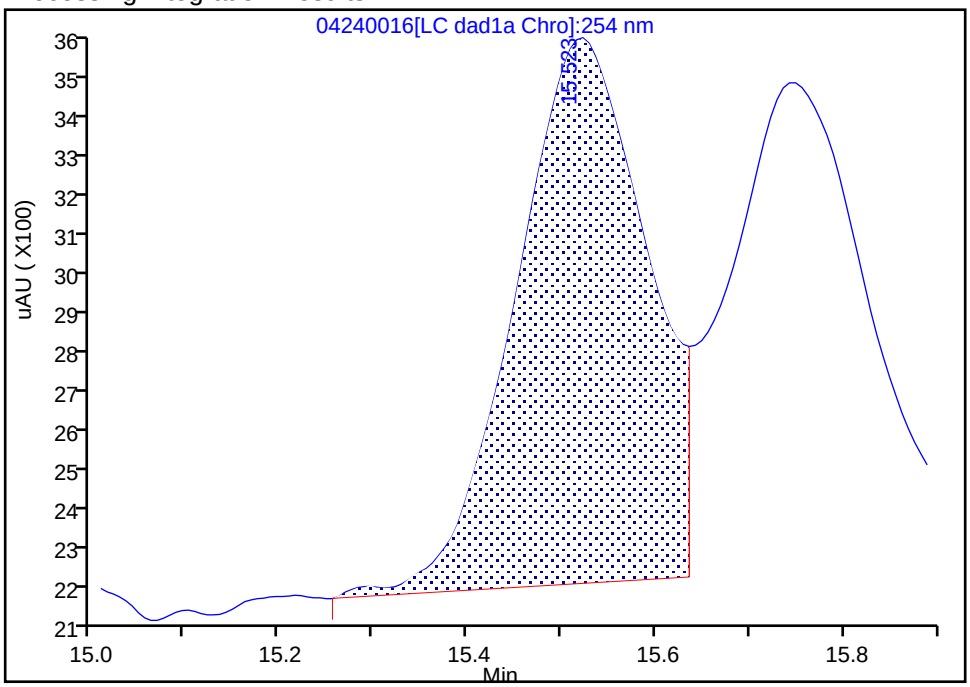
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240016.d				
Injection Date:	25-Apr-2024 01:03:56	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 3				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

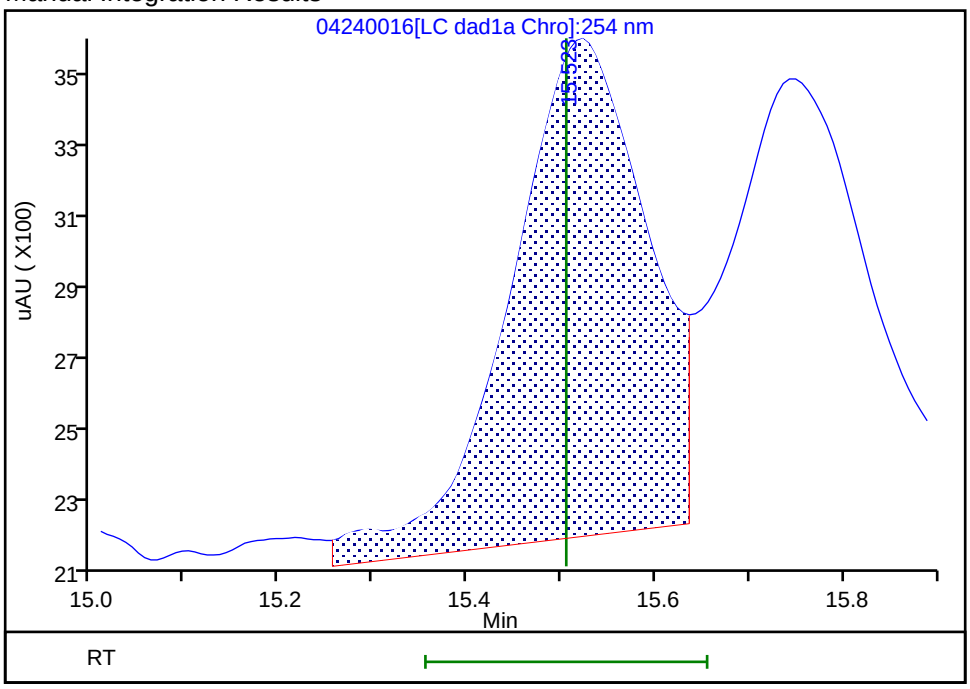
Processing Integration Results

RT: 15.52
Area: 12415
Amount: 0.046079
Amount Units: ug/ml



Manual Integration Results

RT: 15.52
Area: 13247
Amount: 0.054159
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:25:16 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

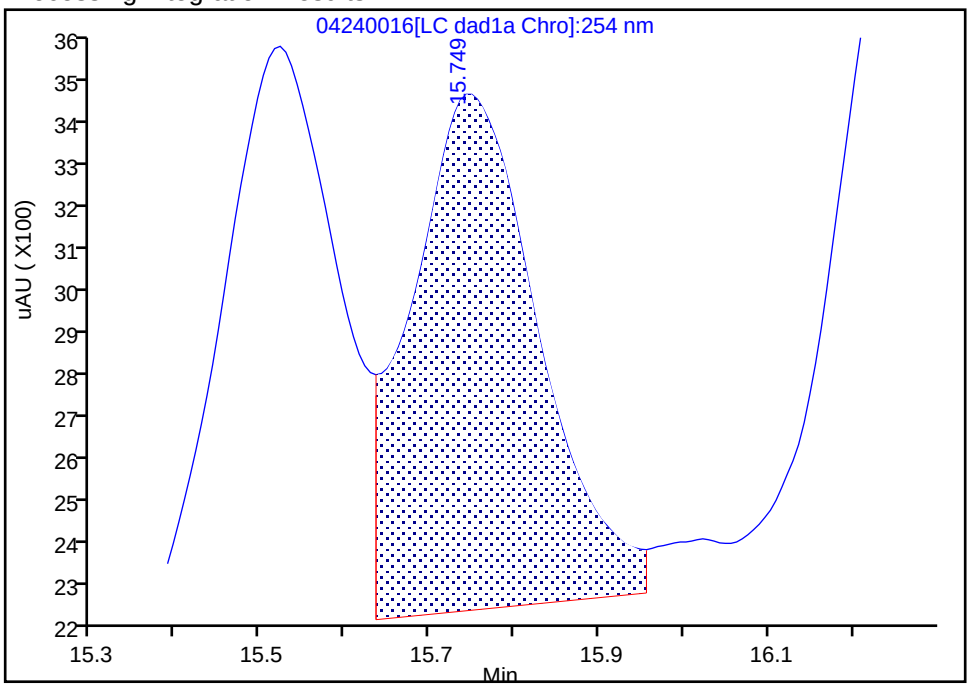
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240016.d				
Injection Date:	25-Apr-2024 01:03:56	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 3				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

15 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

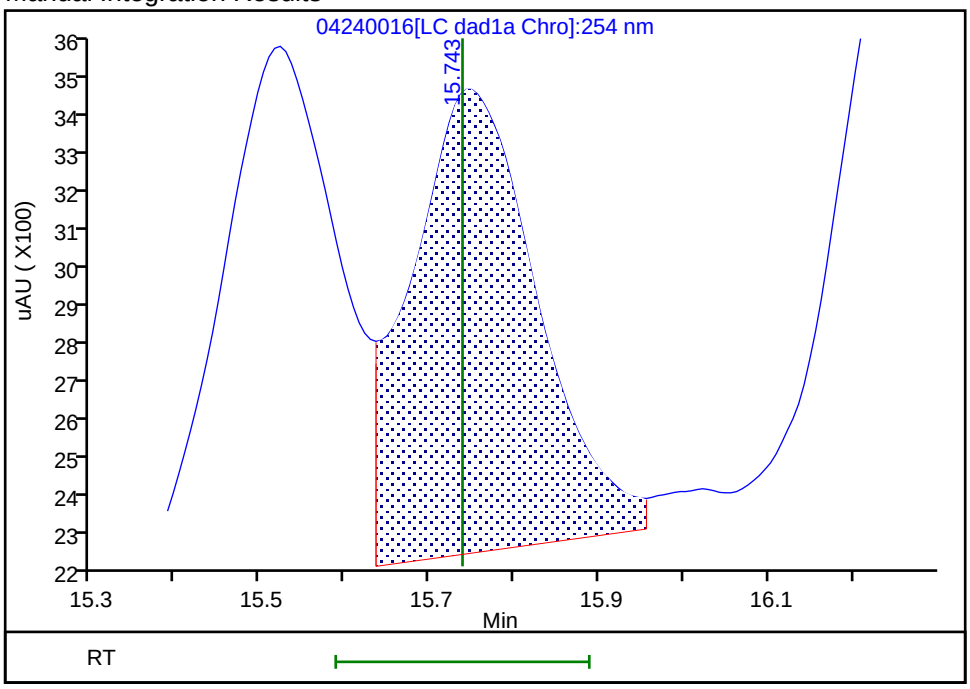
Processing Integration Results

RT: 15.75
Area: 11979
Amount: 0.047481
Amount Units: ug/ml



Manual Integration Results

RT: 15.74
Area: 11825
Amount: 0.050097
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:25:16 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

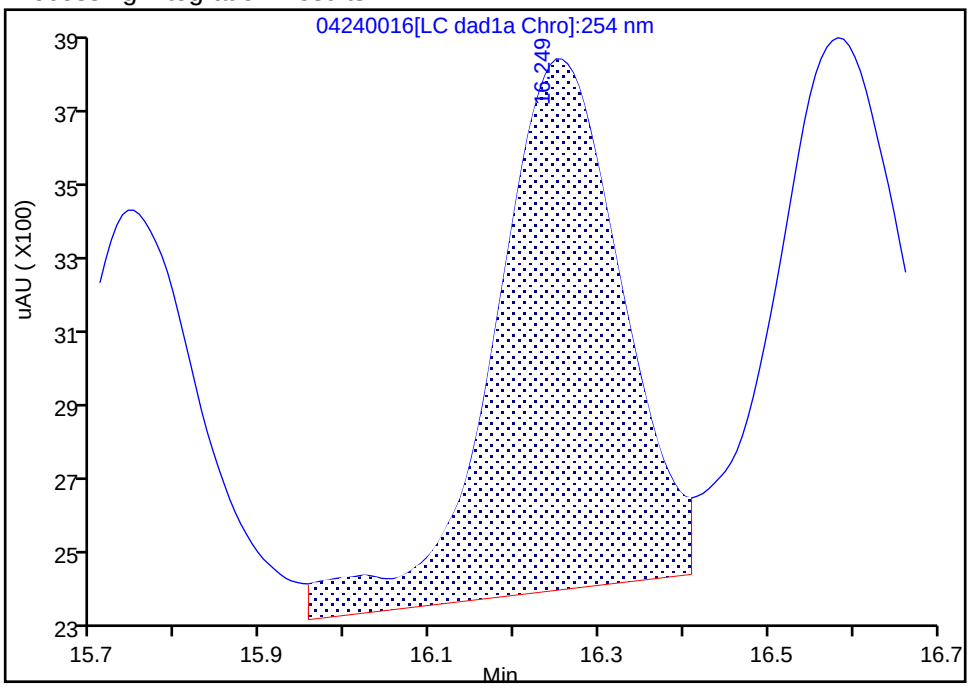
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240016.d				
Injection Date:	25-Apr-2024 01:03:56	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 3				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

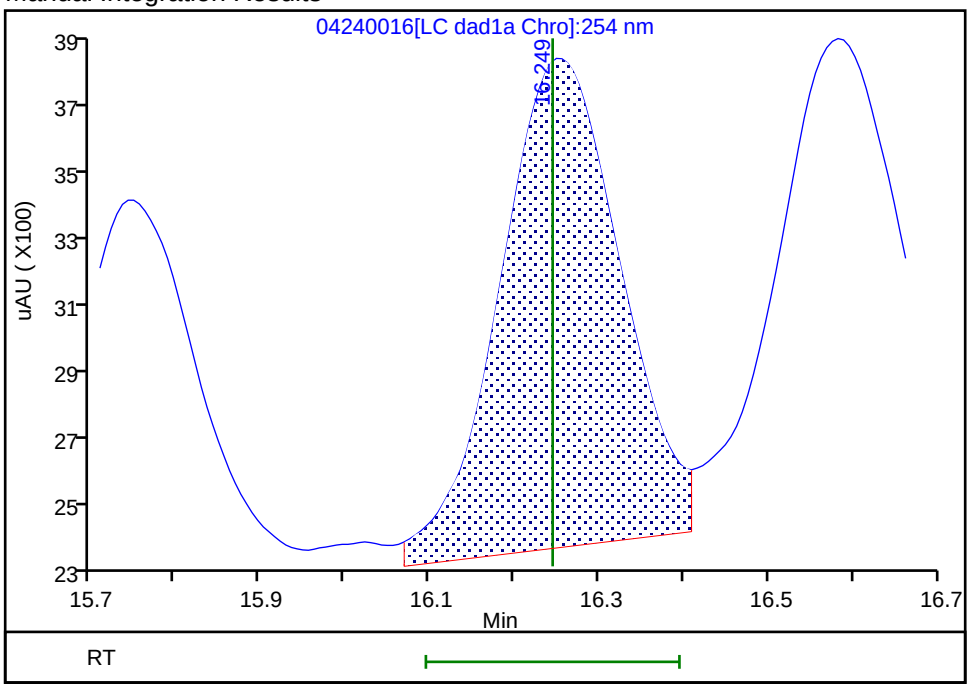
Processing Integration Results

RT: 16.25
Area: 15163
Amount: 0.045904
Amount Units: ug/ml



Manual Integration Results

RT: 16.25
Area: 13955
Amount: 0.049024
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:35:16 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

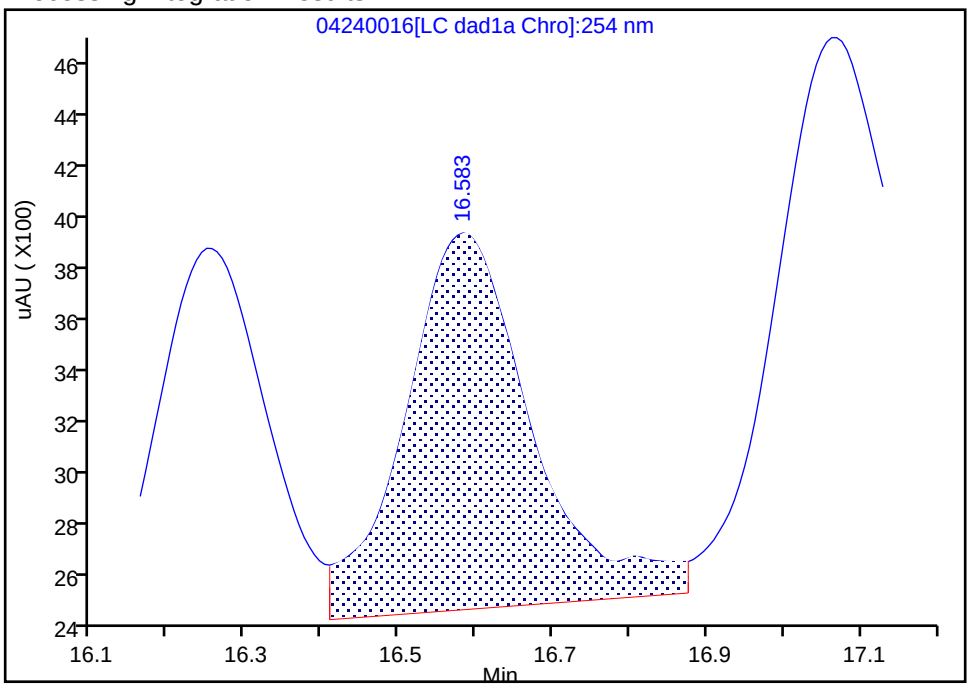
Data File: \\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240016.d
Injection Date: 25-Apr-2024 01:03:56 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT 3
Client ID:
Operator ID: JZ/JG ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

17 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

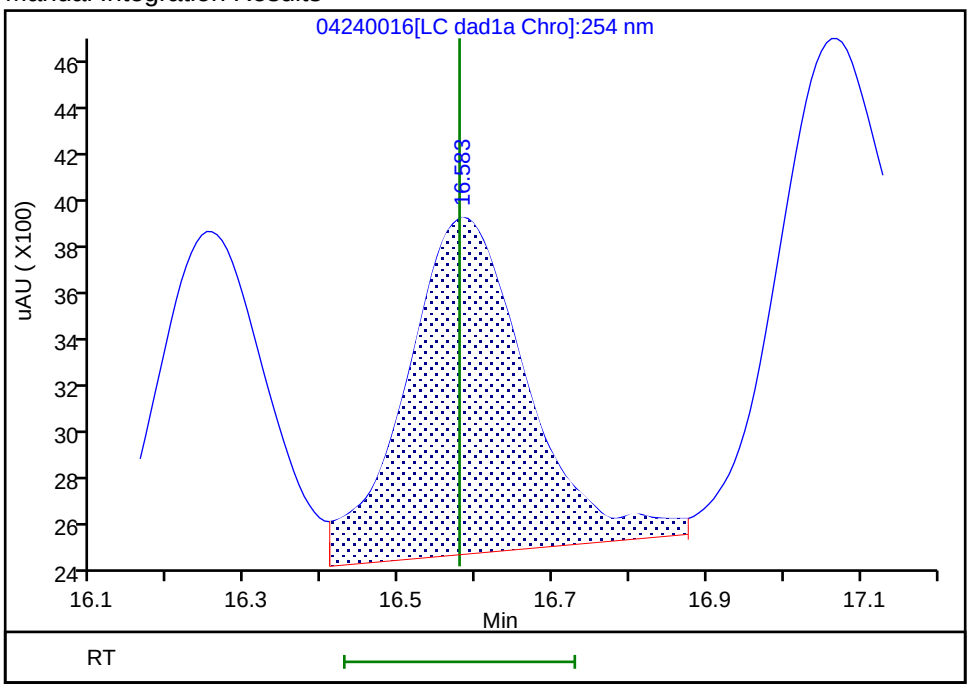
Processing Integration Results

RT: 16.58
Area: 16173
Amount: 0.050420
Amount Units: ug/ml



Manual Integration Results

RT: 16.58
Area: 14941
Amount: 0.050699
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:25:16 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

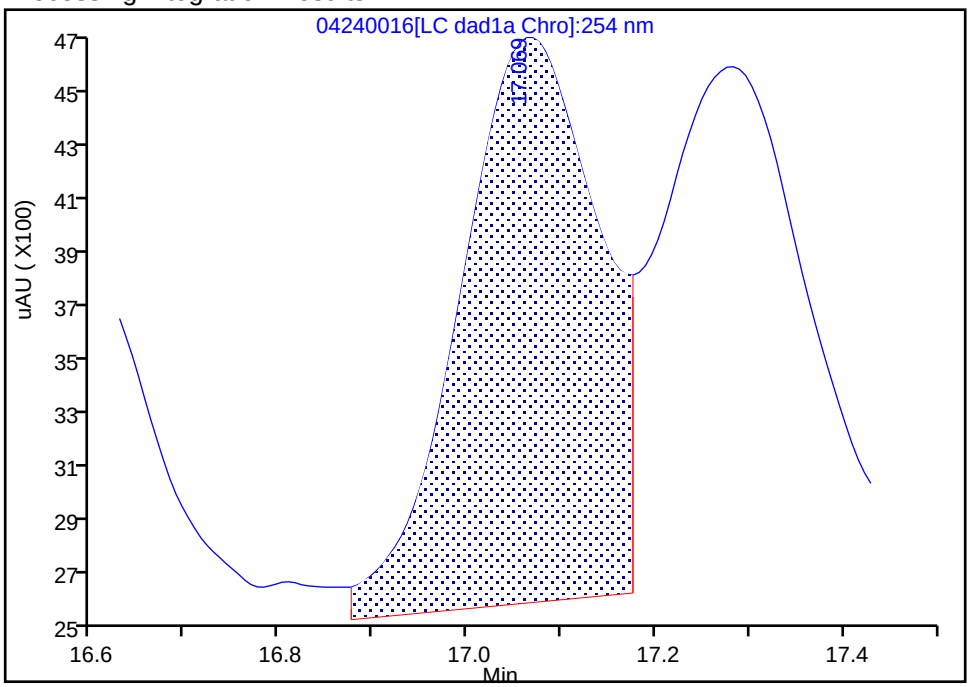
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240016.d				
Injection Date:	25-Apr-2024 01:03:56	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 3				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

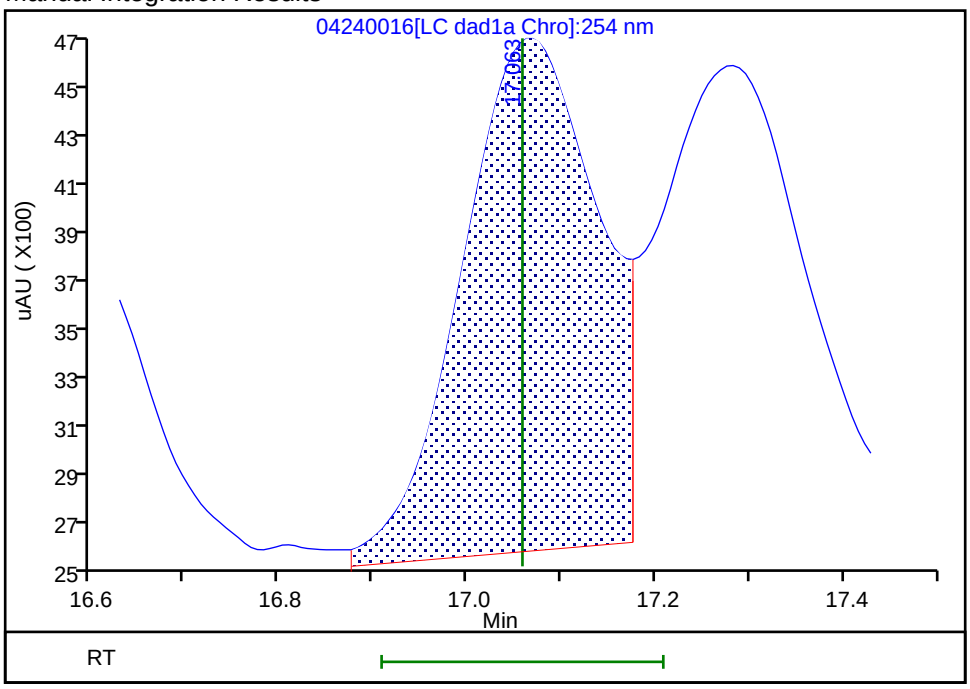
Processing Integration Results

RT: 17.07
Area: 20716
Amount: 0.047421
Amount Units: ug/ml



Manual Integration Results

RT: 17.06
Area: 19735
Amount: 0.048661
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:25:16 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

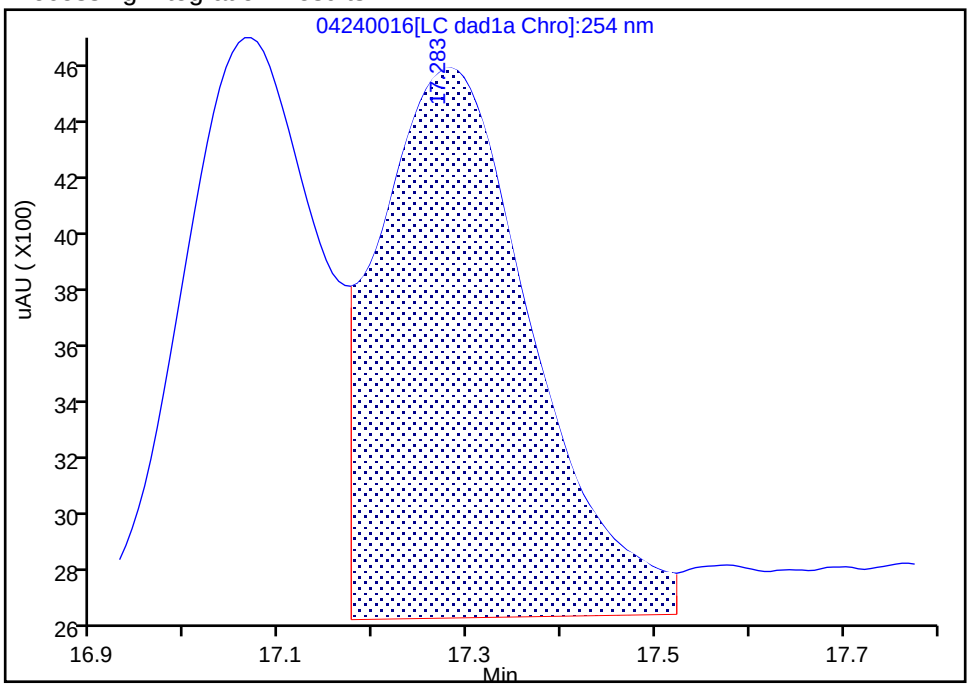
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240016.d				
Injection Date:	25-Apr-2024 01:03:56	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 3				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

19 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

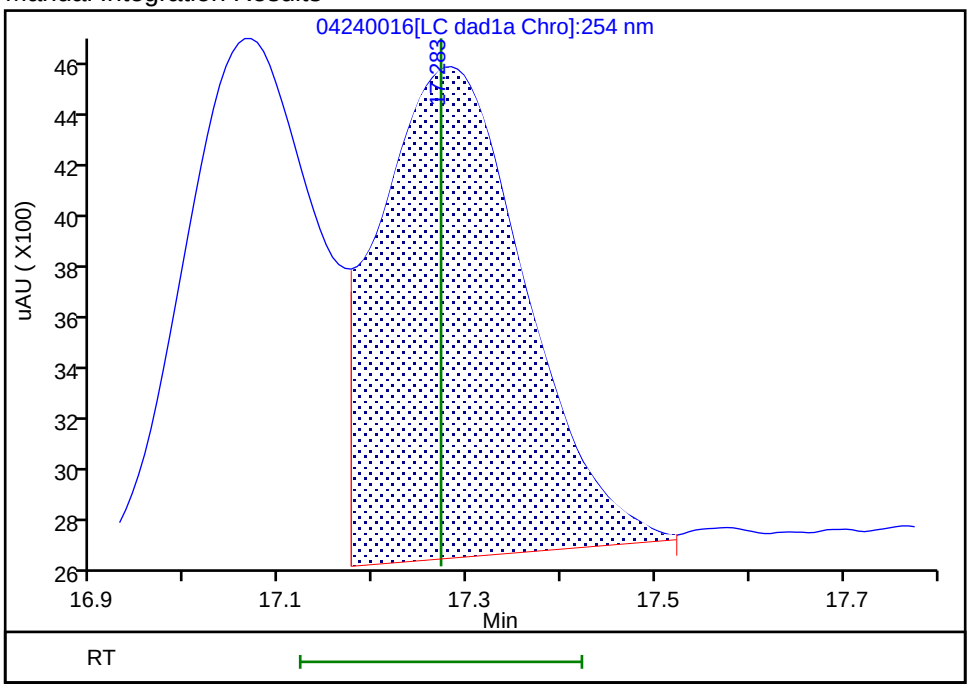
Processing Integration Results

RT: 17.28
Area: 21240
Amount: 0.046378
Amount Units: ug/ml



Manual Integration Results

RT: 17.28
Area: 19358
Amount: 0.045714
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:25:16 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

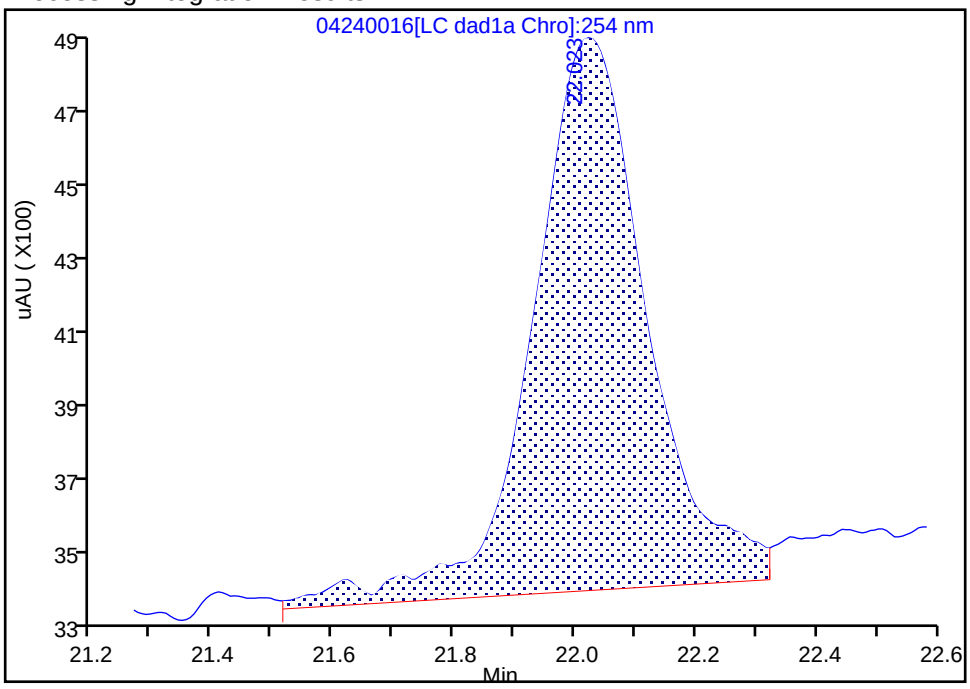
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240016.d				
Injection Date:	25-Apr-2024 01:03:56	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 3				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

22 Tetryl, CAS: 479-45-8

Signal: 1

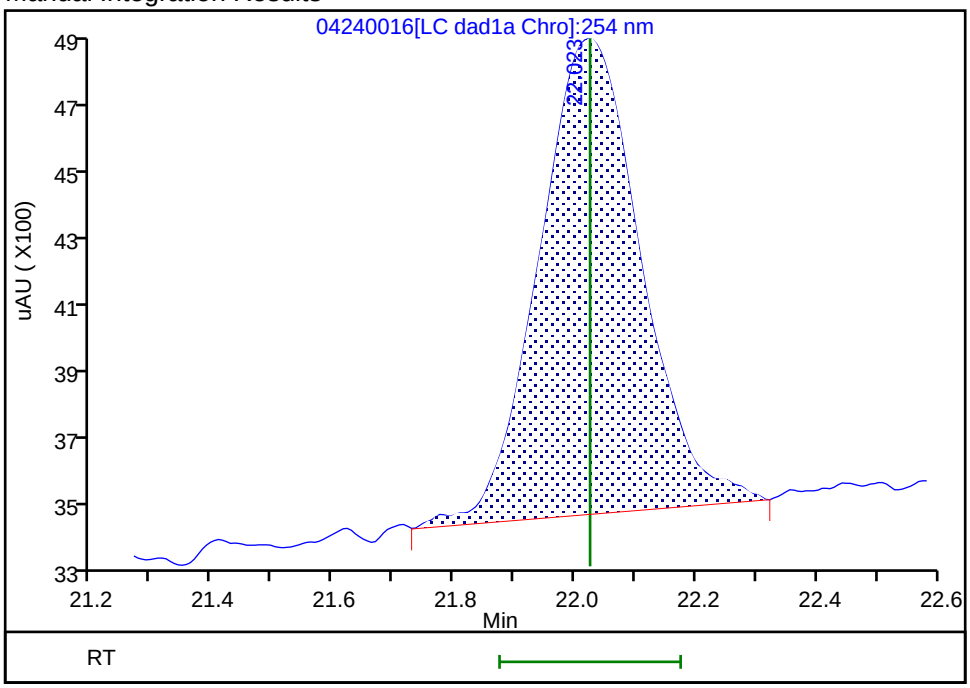
Processing Integration Results

RT: 22.02
Area: 18537
Amount: 0.055520
Amount Units: ug/ml



Manual Integration Results

RT: 22.02
Area: 15630
Amount: 0.048664
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:25:28 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

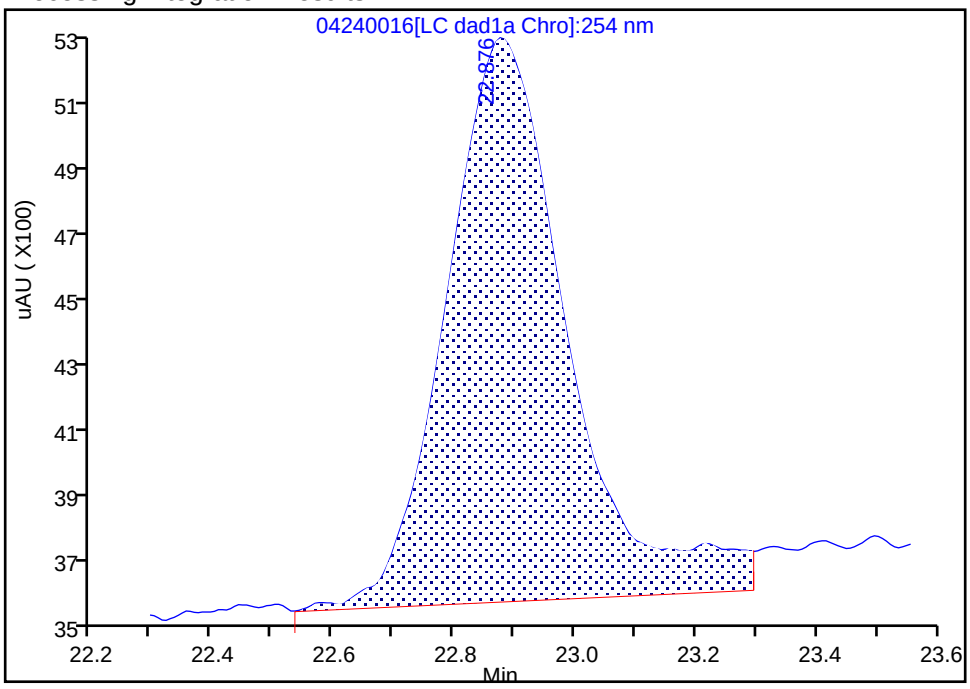
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240016.d				
Injection Date:	25-Apr-2024 01:03:56	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 3				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

23 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

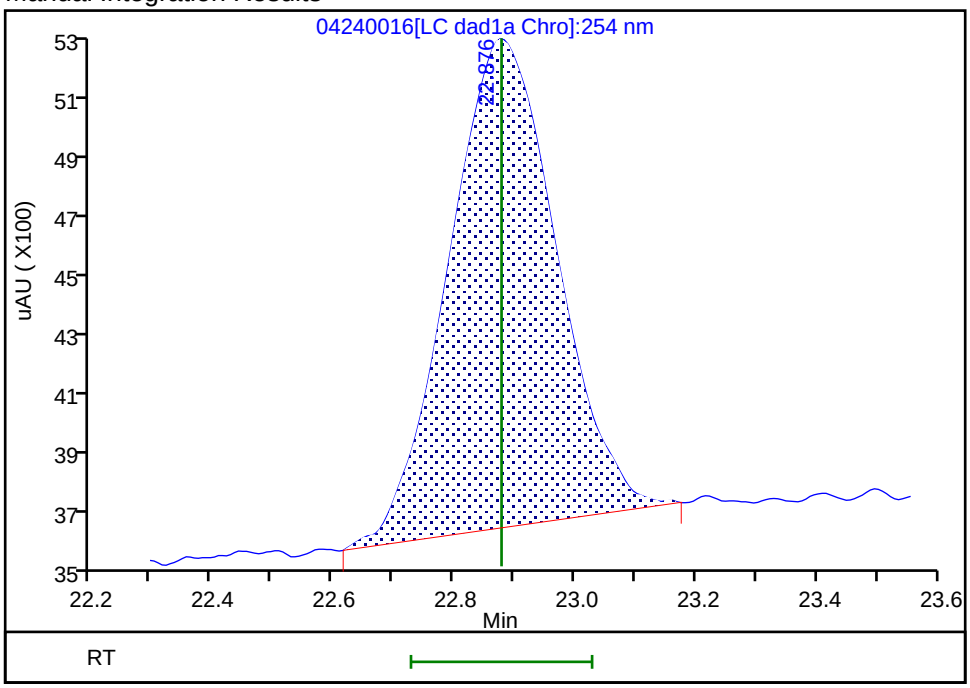
Processing Integration Results

RT: 22.88
Area: 23576
Amount: 0.051829
Amount Units: ug/ml



Manual Integration Results

RT: 22.88
Area: 20131
Amount: 0.050357
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:25:31 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

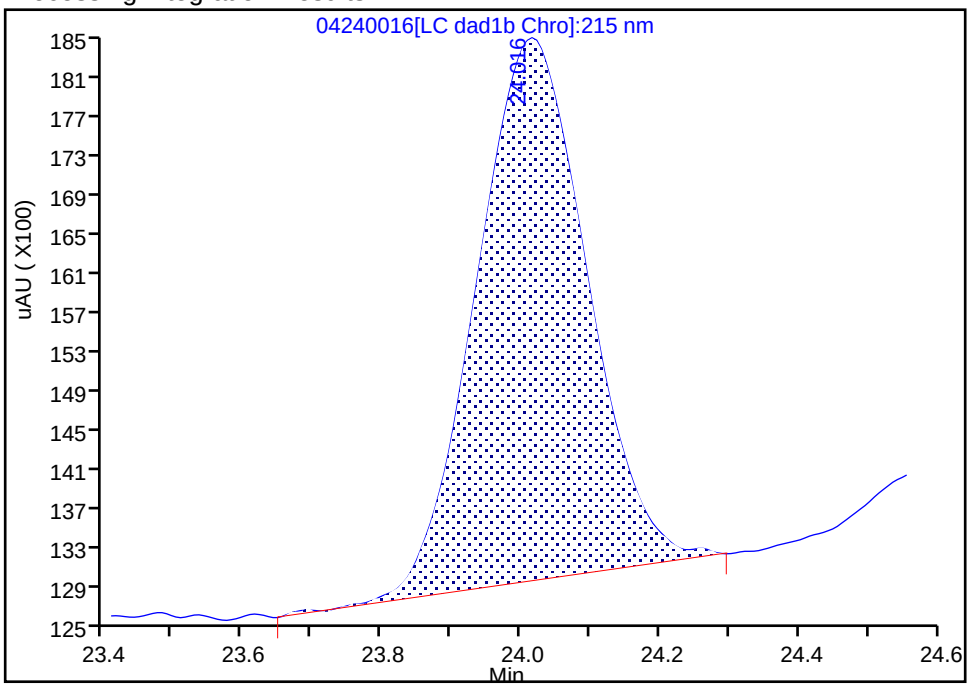
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240016.d				
Injection Date:	25-Apr-2024 01:03:56	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 3				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1B, 215 nm		

24 PETN, CAS: 78-11-5

Signal: 1

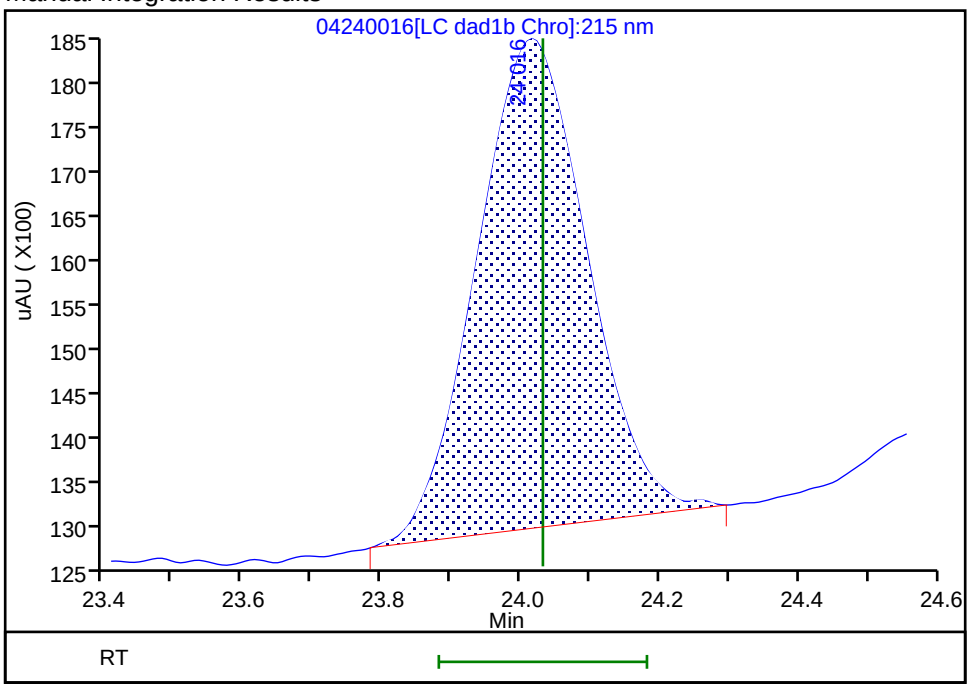
Processing Integration Results

RT: 24.02
Area: 61268
Amount: 0.511464
Amount Units: ug/ml



Manual Integration Results

RT: 24.02
Area: 60616
Amount: 0.505642
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:39:12 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20240424-132624.b\04240017.D
Lims ID: IC INT 2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 25-Apr-2024 01:39:50 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 2
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub16

Method: \\chromfs\Denver\ChromData\G2_LUNA\20240424-132624.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 25-Apr-2024 14:30:17 Calib Date: 25-Apr-2024 07:39:21
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20240424-132624.b\04240027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1684

First Level Reviewer: LV5D Date: 25-Apr-2024 13:20:24

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
6 HMX	1	6.712	6.705	0.007	3578	0.0200	0.0206	M
5 2,4,6-Trinitrophenol	1	8.726	8.612	0.114	3302	0.0200	0.0218	M
8 RDX	1	8.952	8.938	0.014	4791	0.0200	0.0207	M
9 Nitrobenzene	1	11.459	11.425	0.034	8101	0.0200	0.0212	M
$ 10 1,2-Dinitrobenzene	1	12.392	12.345	0.047	5474	0.0200	0.0212	M
11 3,5-Dinitroaniline	1	14.232	14.185	0.047	9463	0.0200	0.0198	M
12 1,3-Dinitrobenzene	1	14.519	14.478	0.041	12318	0.0200	0.0209	M
13 Nitroglycerin	2	14.979	14.918	0.061	23877	0.2000	0.1998	M
14 o-Nitrotoluene	1	15.559	15.505	0.054	5024	0.0200	0.0205	M
15 p-Nitrotoluene	1	15.772	15.738	0.034	5278	0.0200	0.0200	M
16 4-Amino-2,6-dinitrotoluene	1	16.286	16.245	0.041	6474	0.0200	0.0213	M
17 m-Nitrotoluene	1	16.619	16.578	0.041	6685	0.0200	0.0207	M
18 2-Amino-4,6-dinitrotoluene	1	17.099	17.058	0.041	8733	0.0200	0.0215	M
19 1,3,5-Trinitrobenzene	1	17.306	17.272	0.034	9167	0.0200	0.0216	M
20 2,6-Dinitrotoluene	1	18.386	18.365	0.021	6113	0.0200	0.0220	M
21 2,4-Dinitrotoluene	1	18.846	18.818	0.028	12005	0.0200	0.0216	M
22 Tetryl	1	22.072	22.025	0.047	6268	0.0200	0.0187	M
23 2,4,6-Trinitrotoluene	1	22.926	22.878	0.048	7969	0.0200	0.0199	M
24 PETN	2	24.046	24.032	0.014	22594	0.2000	0.1979	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00080 Amount Added: 2.00 Units: uL

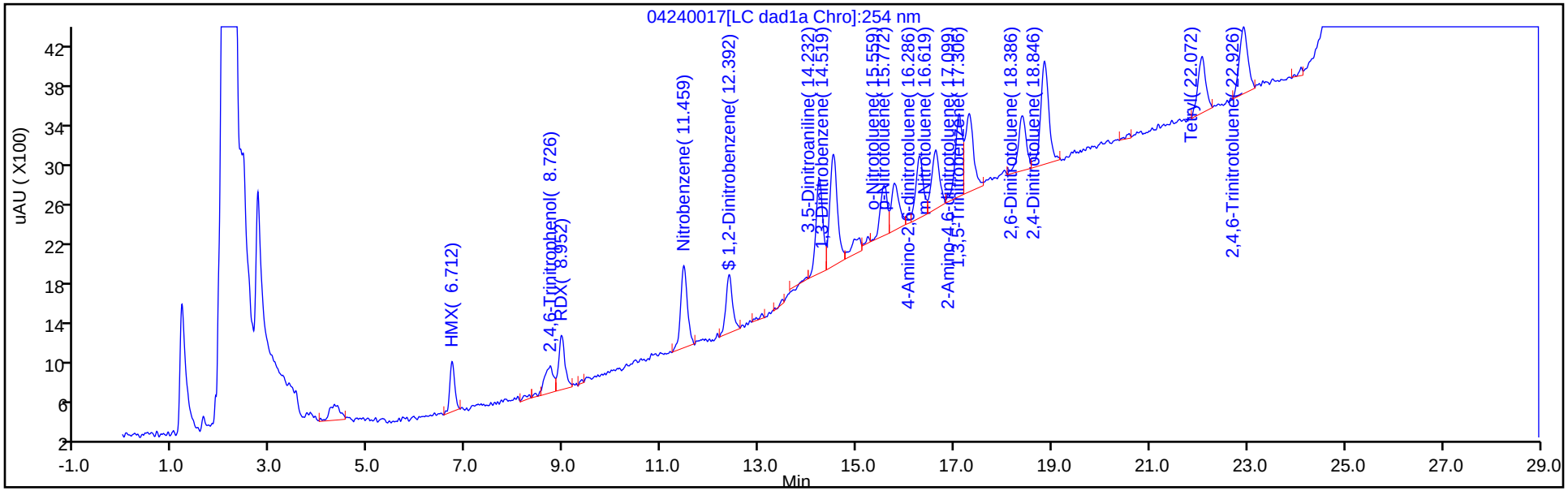
Report Date: 25-Apr-2024 14:30:17 Chrom Revision: 2.3 09-Apr-2024 17:43:44

Eurofins Denver

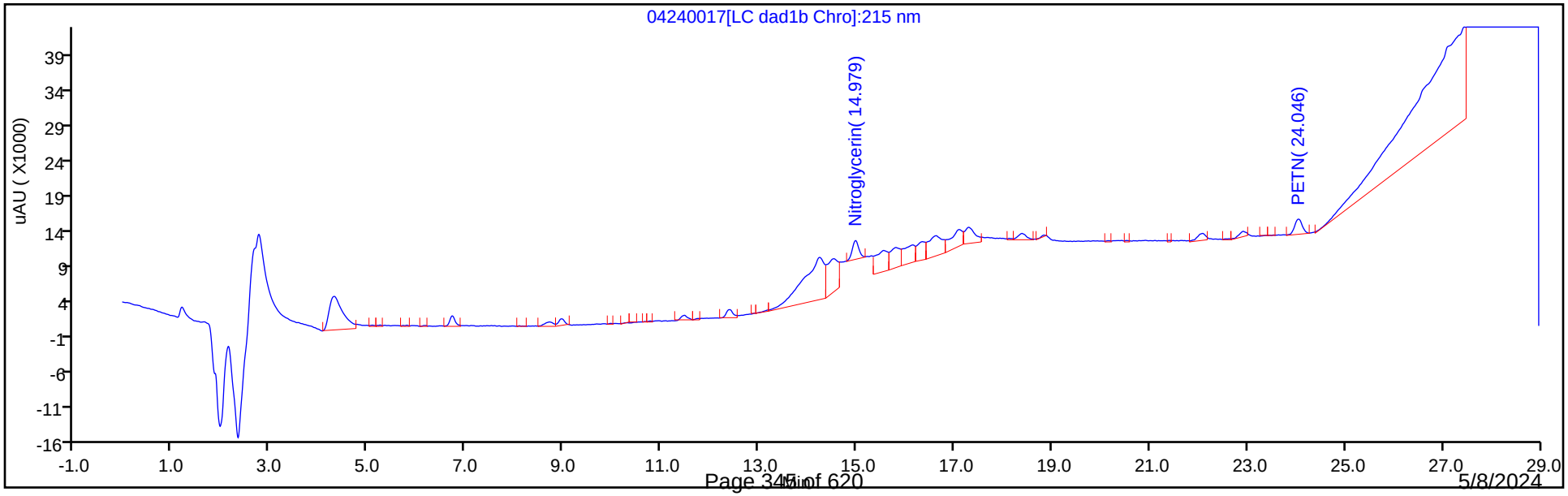
Data File: \\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240017.d

Injection Date:	25-Apr-2024 01:39:50	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	IC INT 2			Worklist Smp#:	17
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	G2_8330_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



5/8/2024
6:07:23 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

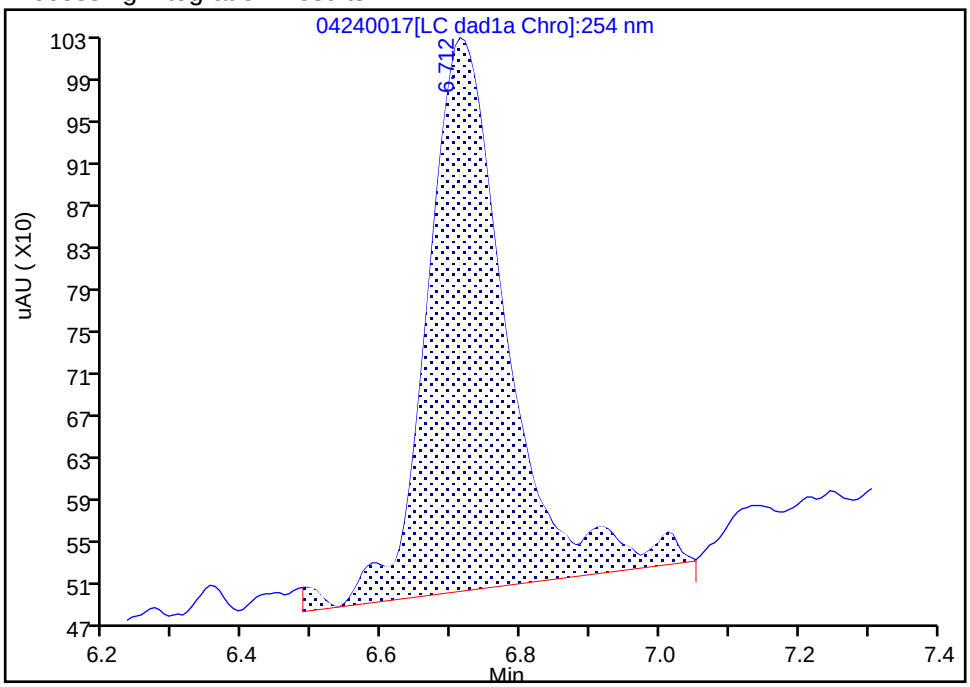
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240017.d				
Injection Date:	25-Apr-2024 01:39:50	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

6 HMX, CAS: 2691-41-0

Signal: 1

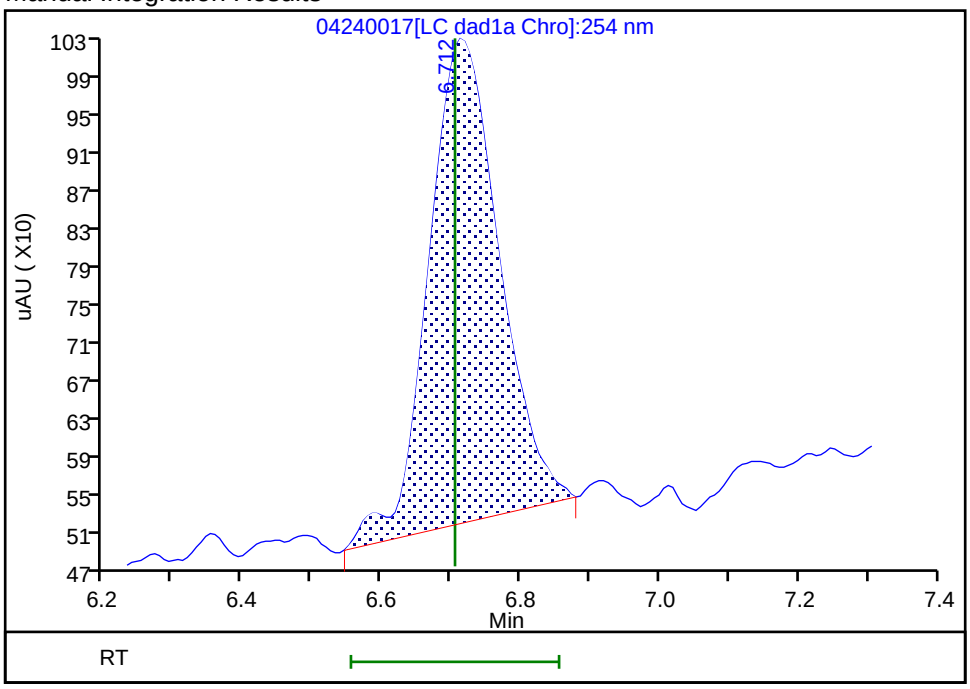
Processing Integration Results

RT: 6.71
Area: 4168
Amount: 0.022927
Amount Units: ug/ml



Manual Integration Results

RT: 6.71
Area: 3578
Amount: 0.020554
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:31:57 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

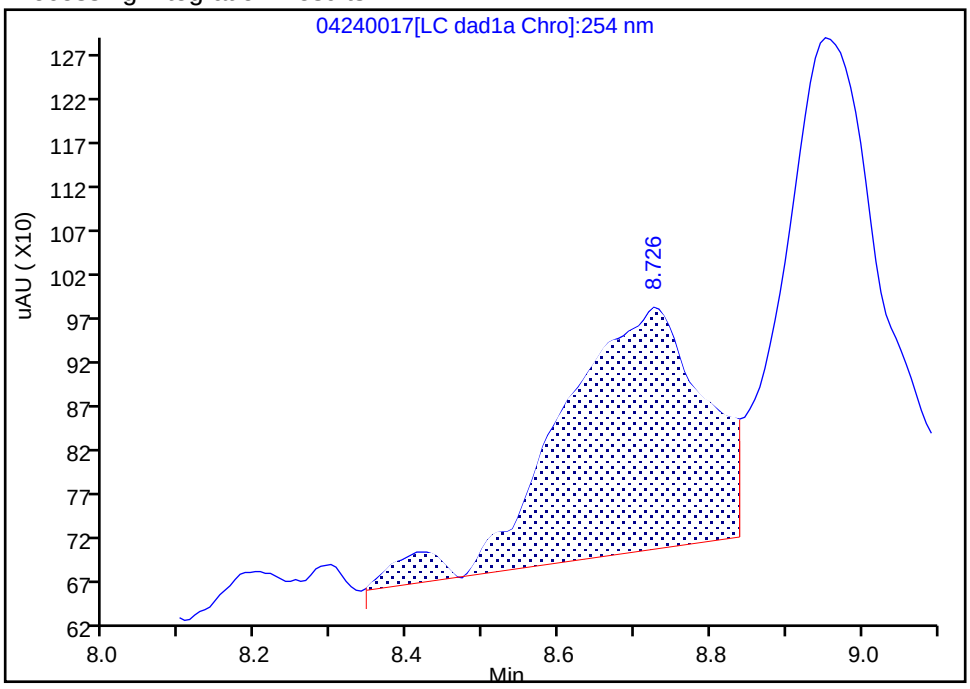
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240017.d				
Injection Date:	25-Apr-2024 01:39:50	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

5 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

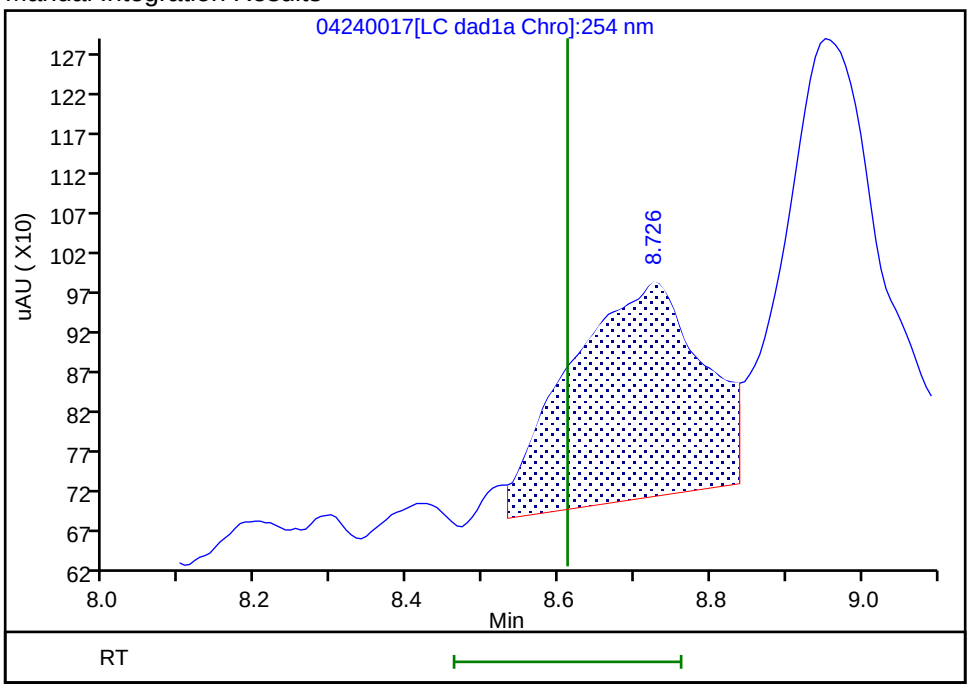
Processing Integration Results

RT: 8.73
Area: 3653
Amount: 0.023822
Amount Units: ug/ml



Manual Integration Results

RT: 8.73
Area: 3302
Amount: 0.021810
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:32:48 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

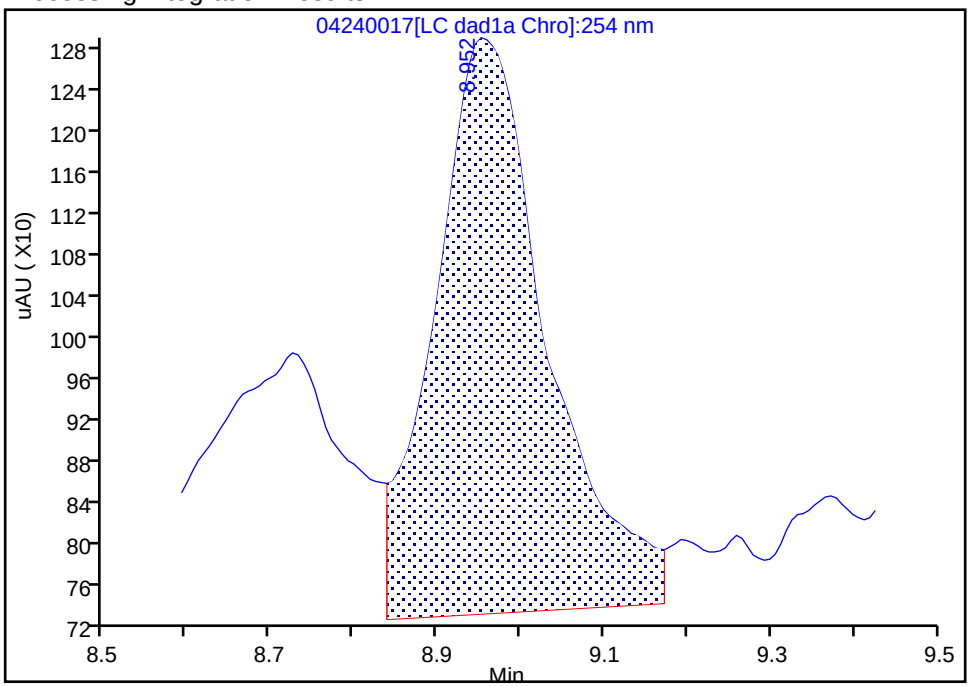
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240017.d				
Injection Date:	25-Apr-2024 01:39:50	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

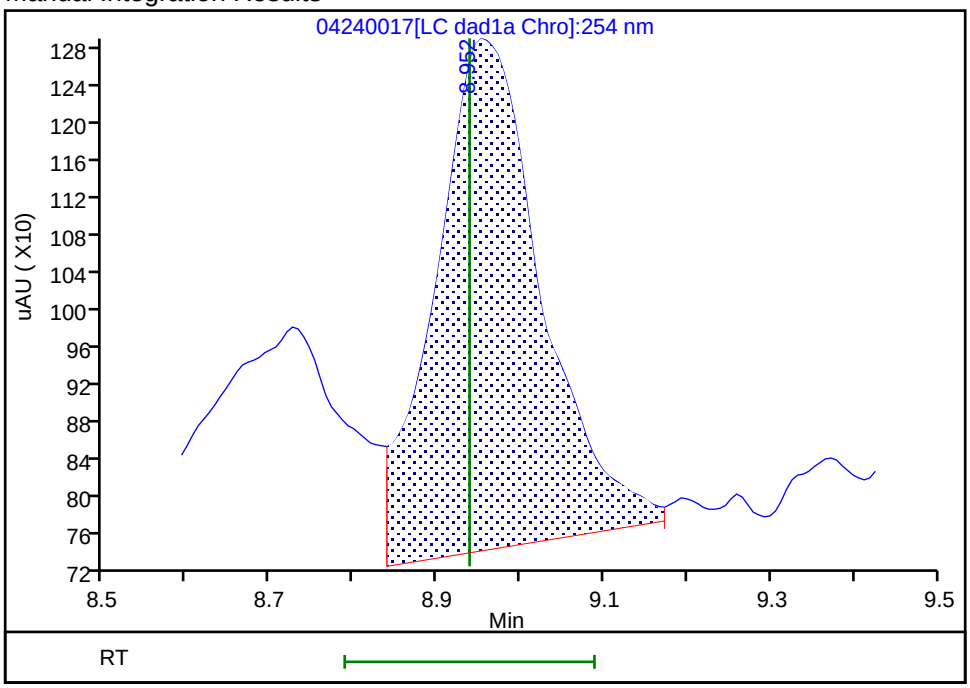
Processing Integration Results

RT: 8.95
Area: 5221
Amount: 0.023799
Amount Units: ug/ml



Manual Integration Results

RT: 8.95
Area: 4791
Amount: 0.020676
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:32:43 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

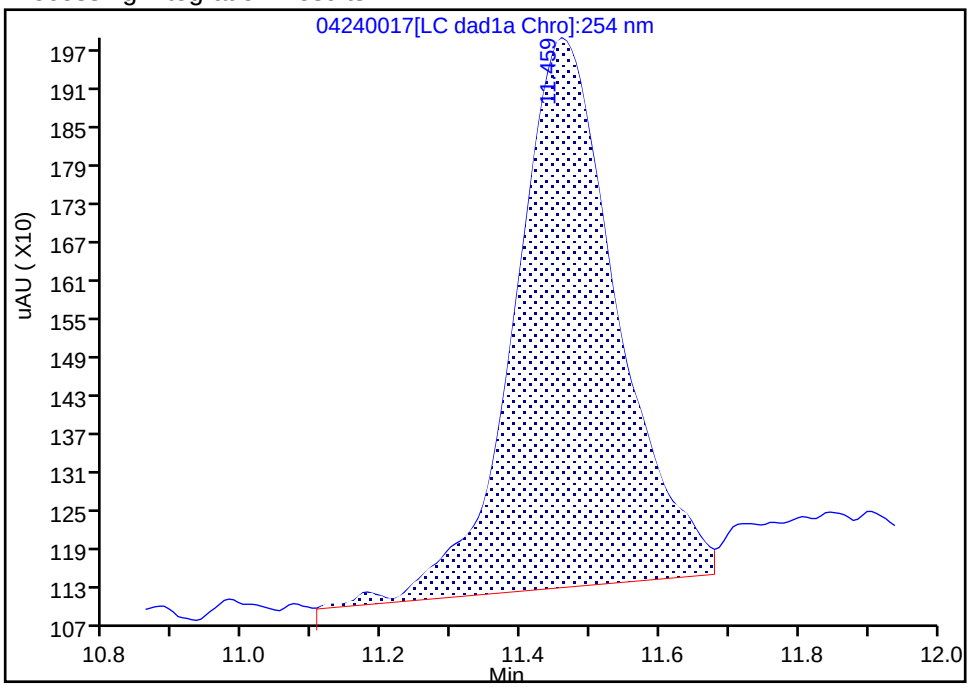
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240017.d				
Injection Date:	25-Apr-2024 01:39:50	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

9 Nitrobenzene, CAS: 98-95-3

Signal: 1

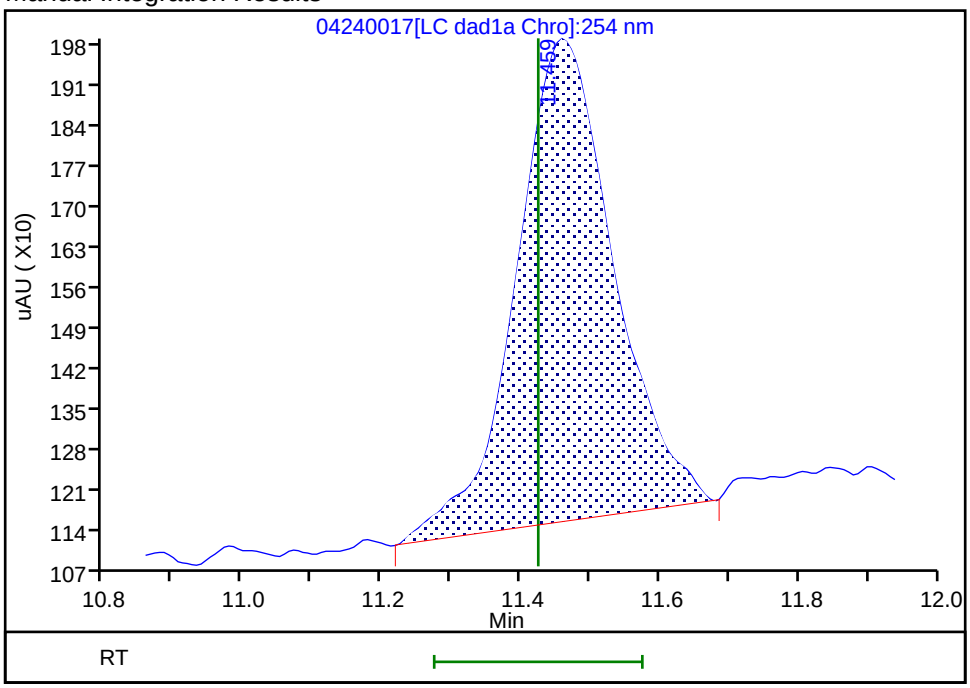
Processing Integration Results

RT: 11.46
Area: 8748
Amount: 0.022033
Amount Units: ug/ml



Manual Integration Results

RT: 11.46
Area: 8101
Amount: 0.021200
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:26:13 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

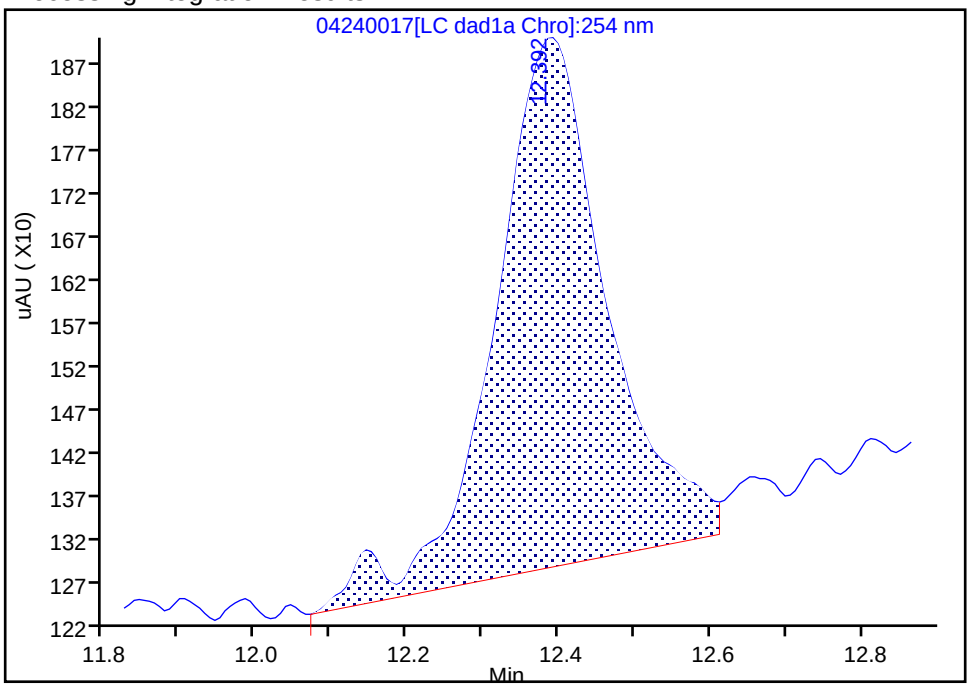
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240017.d				
Injection Date:	25-Apr-2024 01:39:50	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

Signal: 1

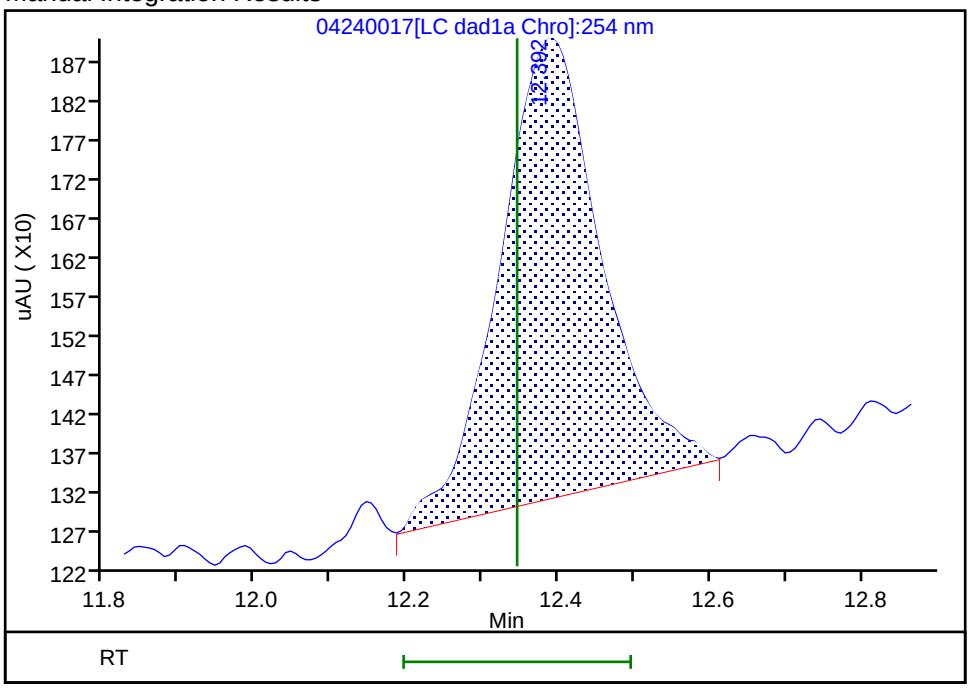
Processing Integration Results

RT: 12.39
Area: 6341
Amount: 0.022761
Amount Units: ug/ml



Manual Integration Results

RT: 12.39
Area: 5474
Amount: 0.021161
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:26:19 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

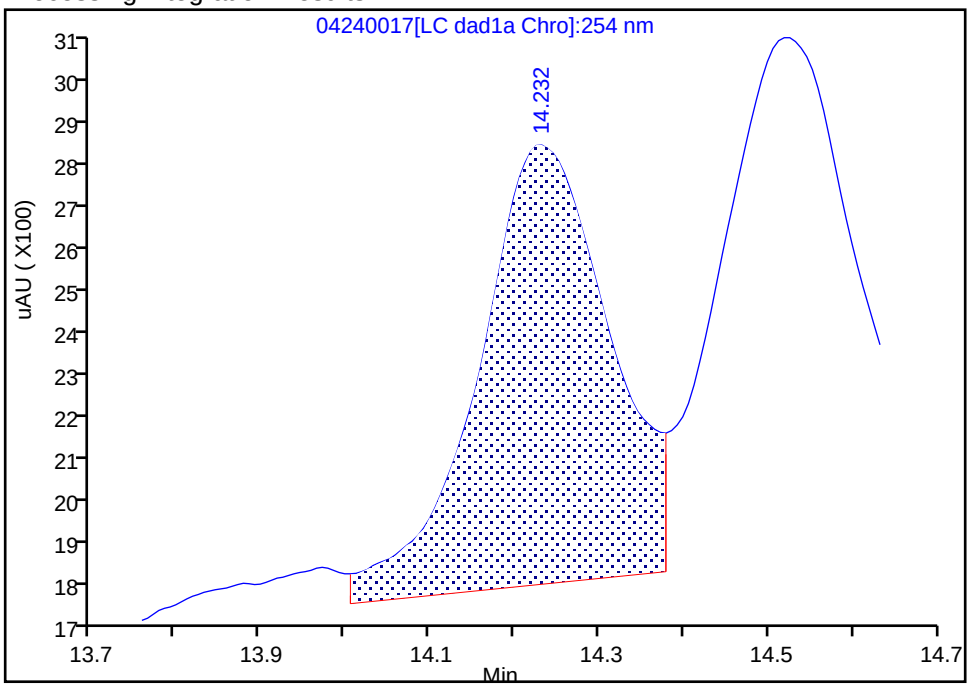
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240017.d				
Injection Date:	25-Apr-2024 01:39:50	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

11 3,5-Dinitroaniline, CAS: 618-87-1

Signal: 1

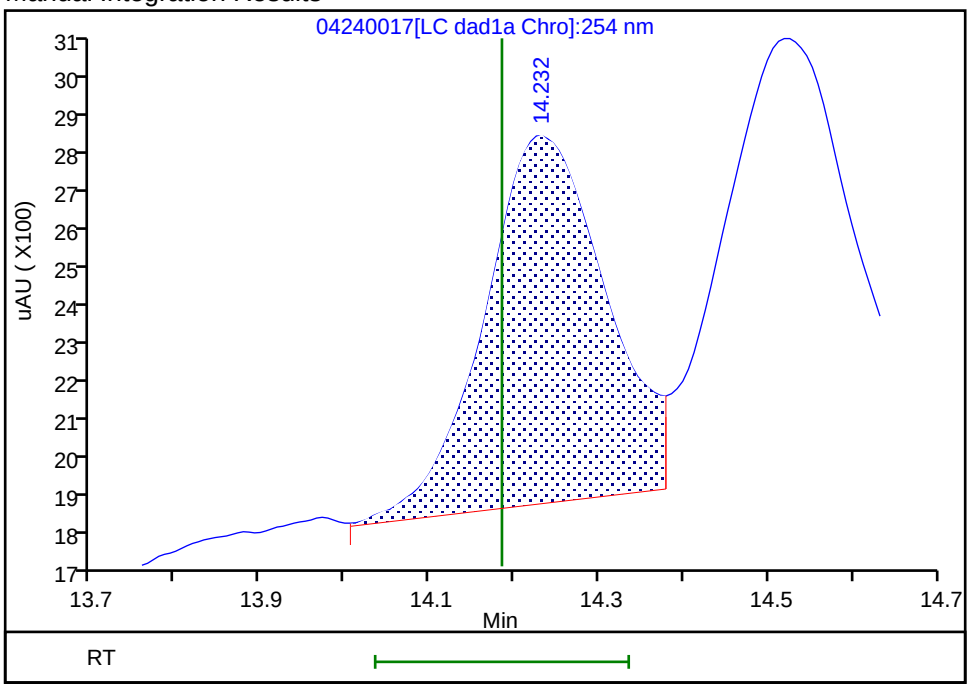
Processing Integration Results

RT: 14.23
Area: 11110
Amount: 0.020331
Amount Units: ug/ml



Manual Integration Results

RT: 14.23
Area: 9463
Amount: 0.019837
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:26:29 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

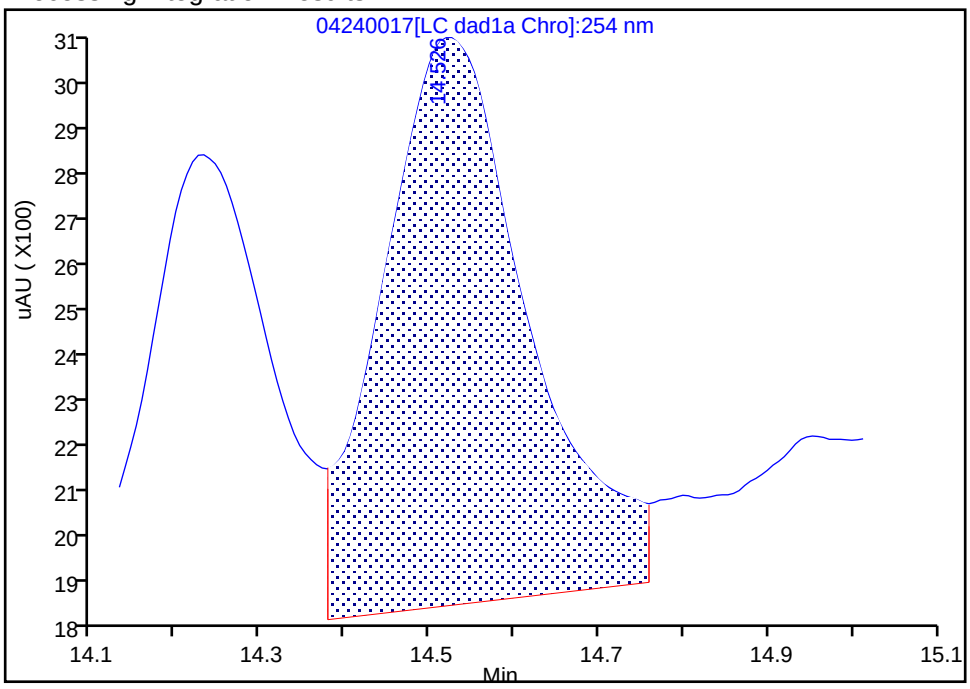
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240017.d				
Injection Date:	25-Apr-2024 01:39:50	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

Signal: 1

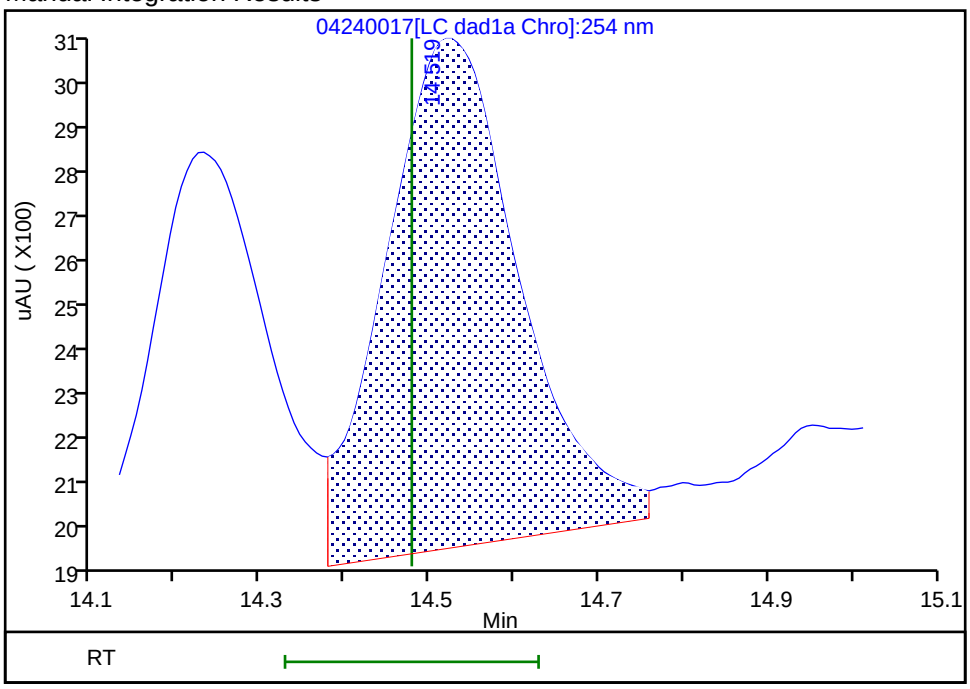
Processing Integration Results

RT: 14.53
Area: 14484
Amount: 0.023237
Amount Units: ug/ml



Manual Integration Results

RT: 14.52
Area: 12318
Amount: 0.020899
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:26:29 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

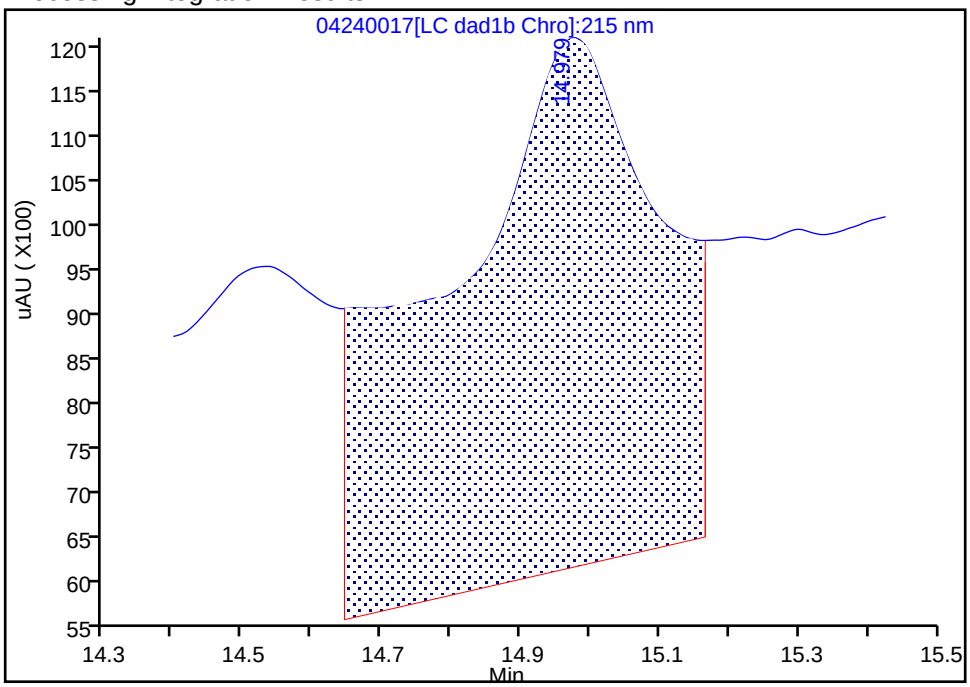
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240017.d				
Injection Date:	25-Apr-2024 01:39:50	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1B, 215 nm		

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

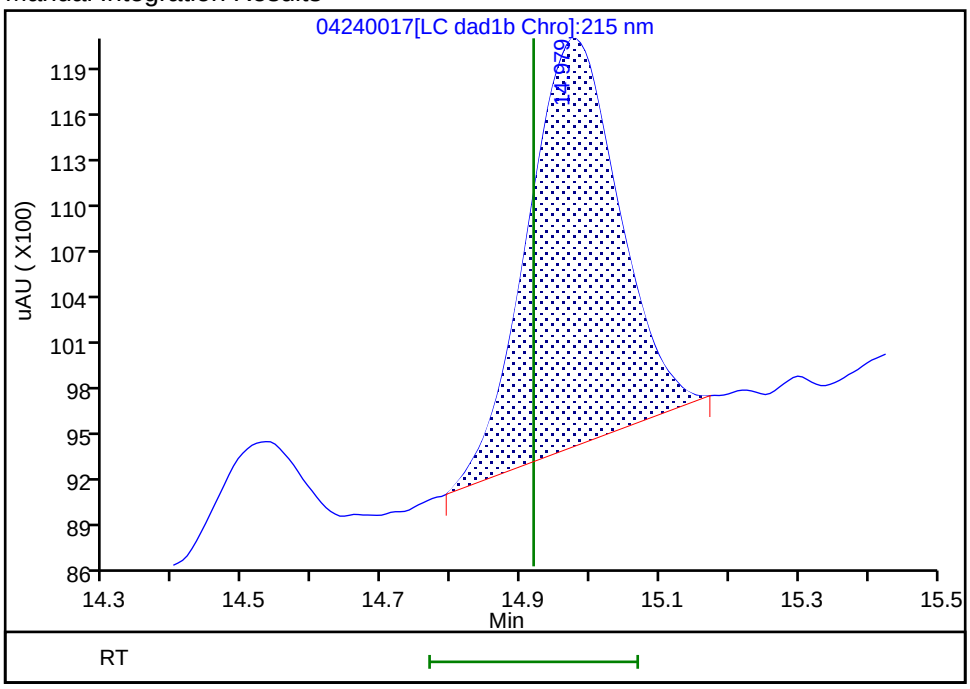
Processing Integration Results

RT: 14.98
Area: 128754
Amount: 0.566536
Amount Units: ug/ml



Manual Integration Results

RT: 14.98
Area: 23877
Amount: 0.199800
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:20:23 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

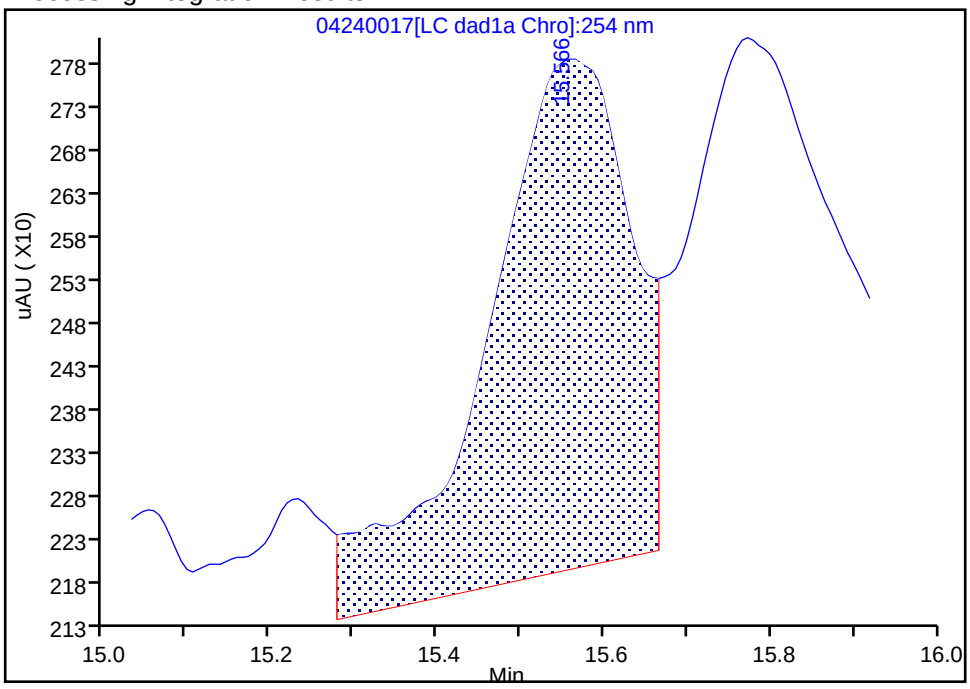
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240017.d				
Injection Date:	25-Apr-2024 01:39:50	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

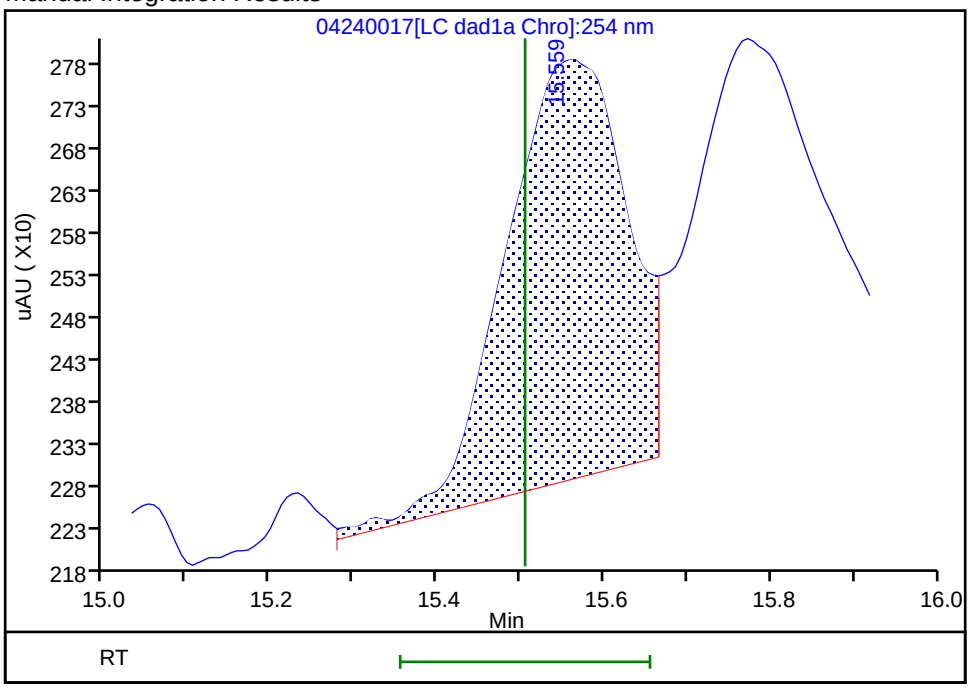
Processing Integration Results

RT: 15.57
Area: 7194
Amount: 0.026616
Amount Units: ug/ml



Manual Integration Results

RT: 15.56
Area: 5024
Amount: 0.020540
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:35:41 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

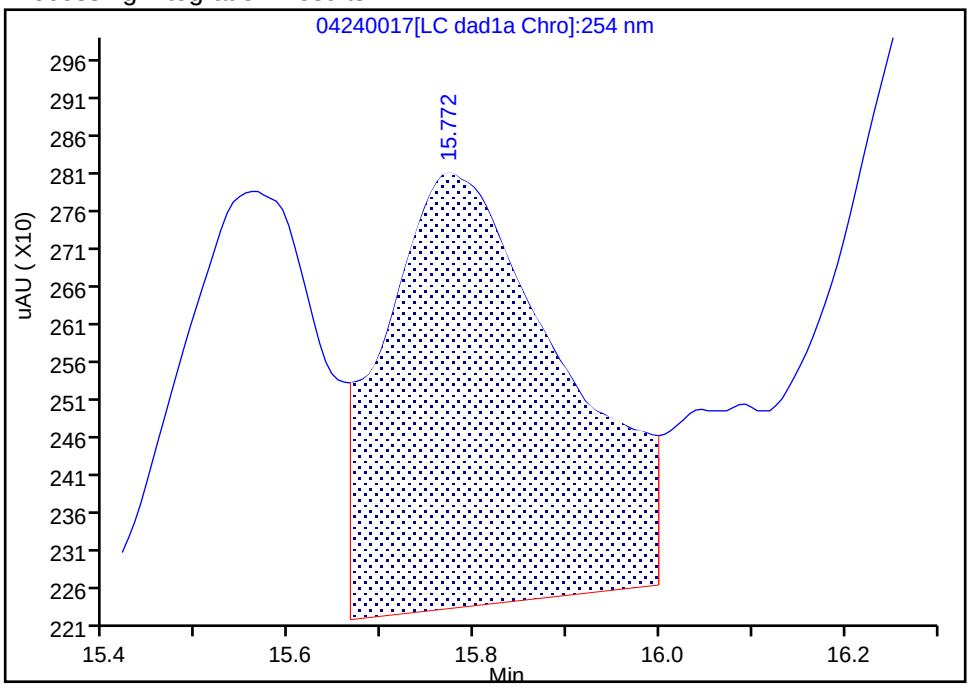
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240017.d				
Injection Date:	25-Apr-2024 01:39:50	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

15 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

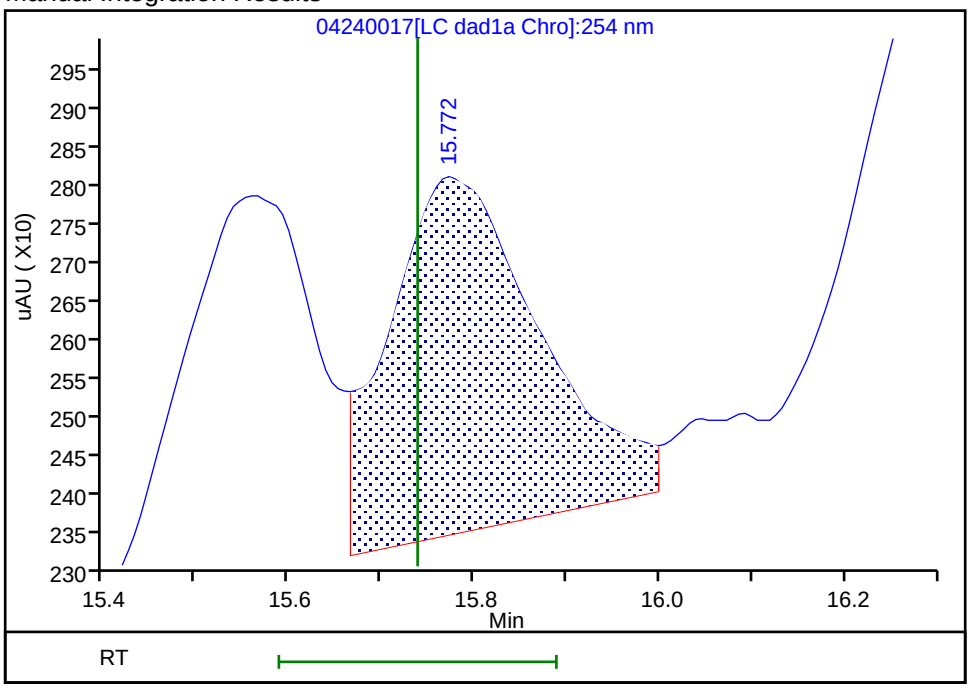
Processing Integration Results

RT: 15.77
Area: 7658
Amount: 0.027712
Amount Units: ug/ml



Manual Integration Results

RT: 15.77
Area: 5278
Amount: 0.020027
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:35:41 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

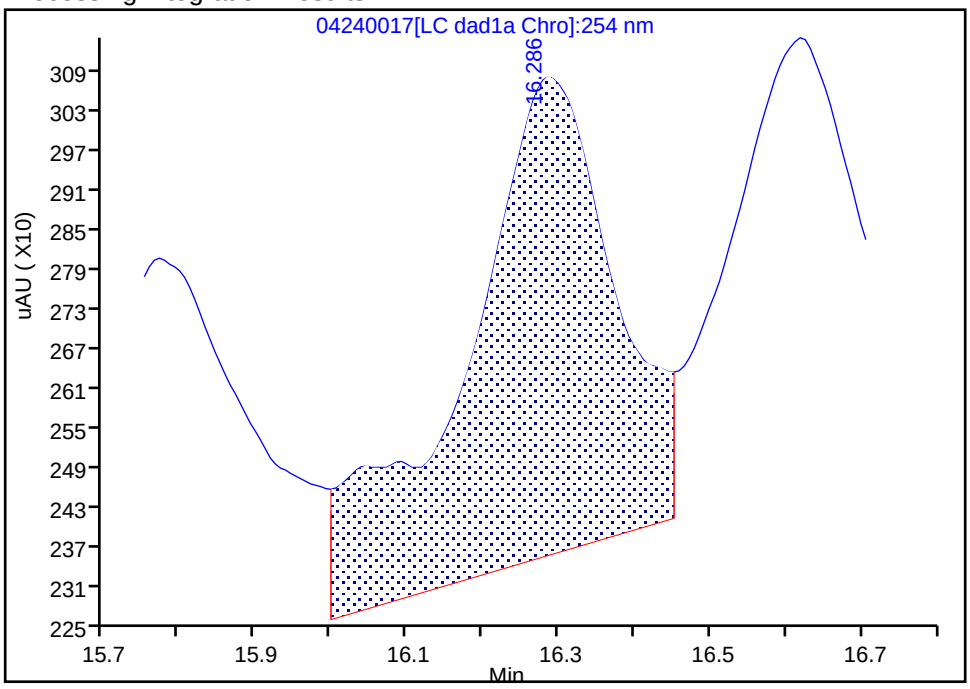
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240017.d				
Injection Date:	25-Apr-2024 01:39:50	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

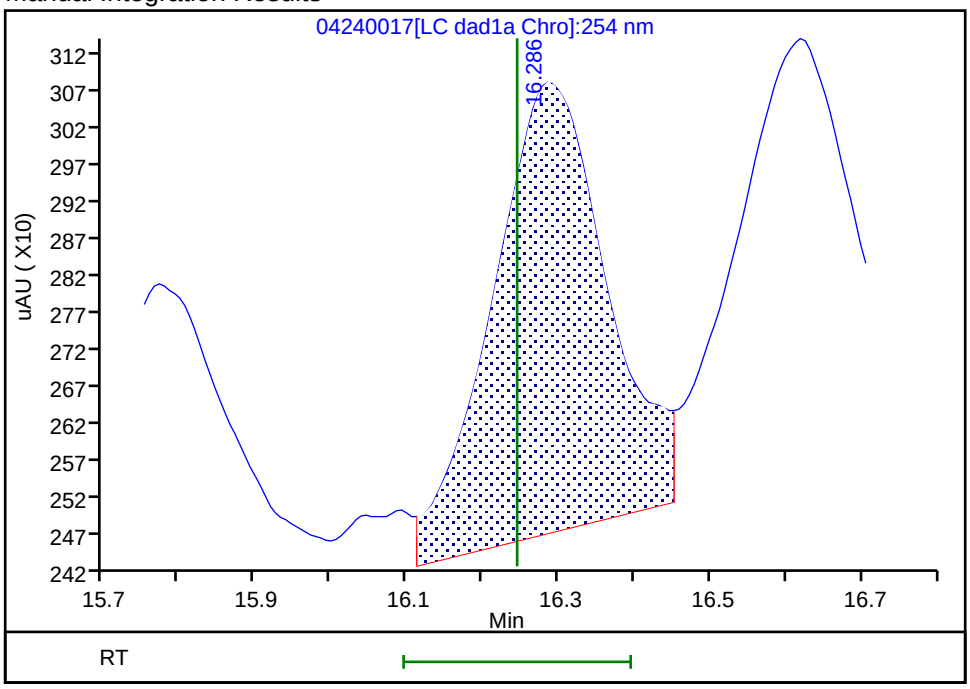
Processing Integration Results

RT: 16.29
Area: 10165
Amount: 0.027414
Amount Units: ug/ml



Manual Integration Results

RT: 16.29
Area: 6474
Amount: 0.021266
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:35:41 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

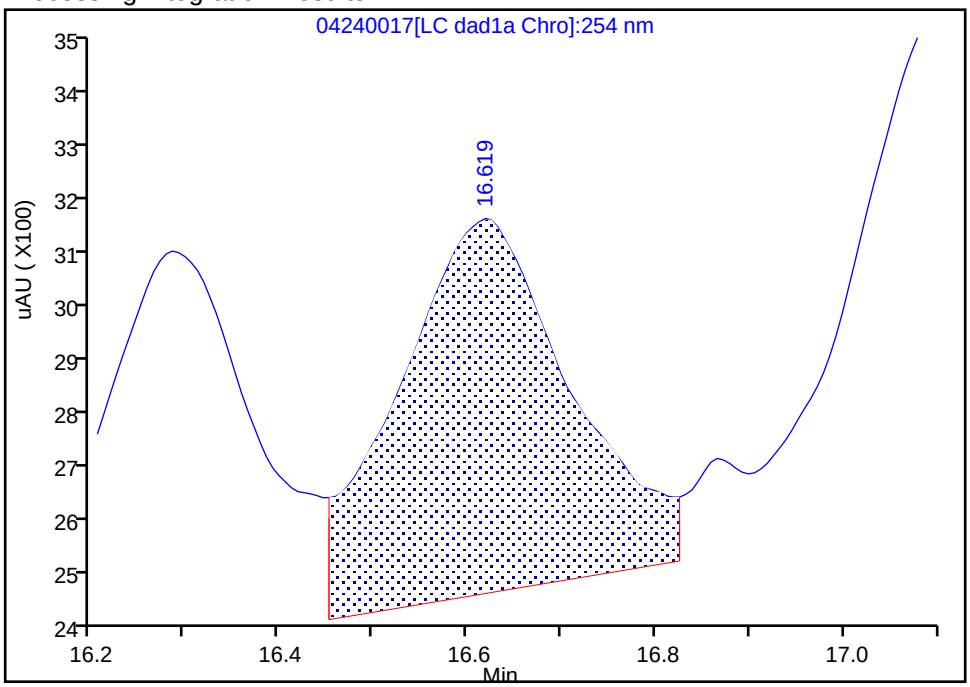
Data File: \\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240017.d
Injection Date: 25-Apr-2024 01:39:50 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT 2
Client ID:
Operator ID: JZ/JG ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

17 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

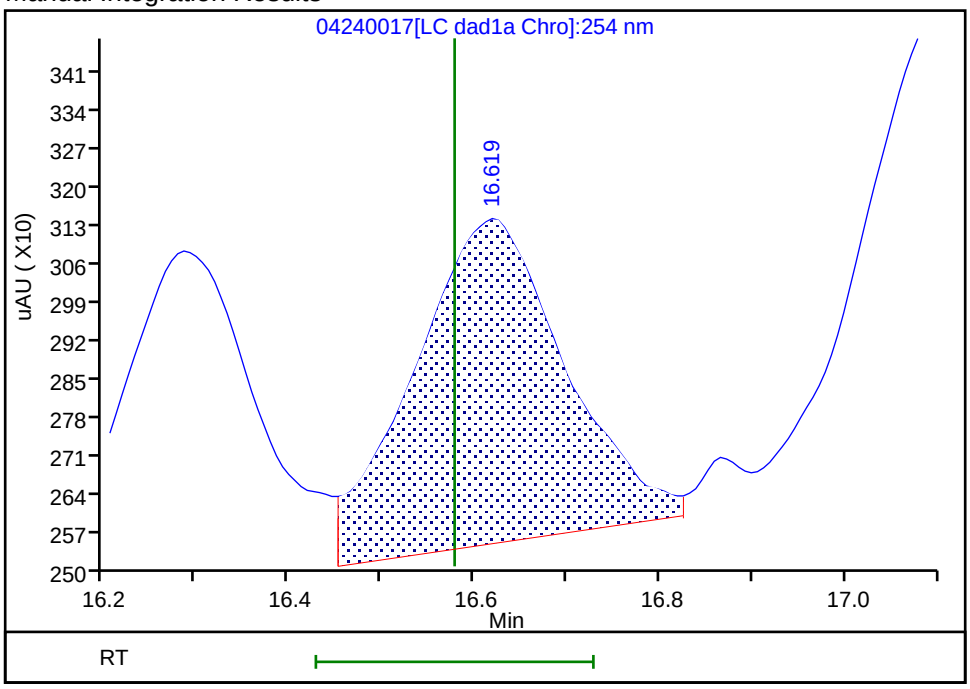
Processing Integration Results

RT: 16.62
Area: 8679
Amount: 0.023268
Amount Units: ug/ml



Manual Integration Results

RT: 16.62
Area: 6685
Amount: 0.020741
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:35:41 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

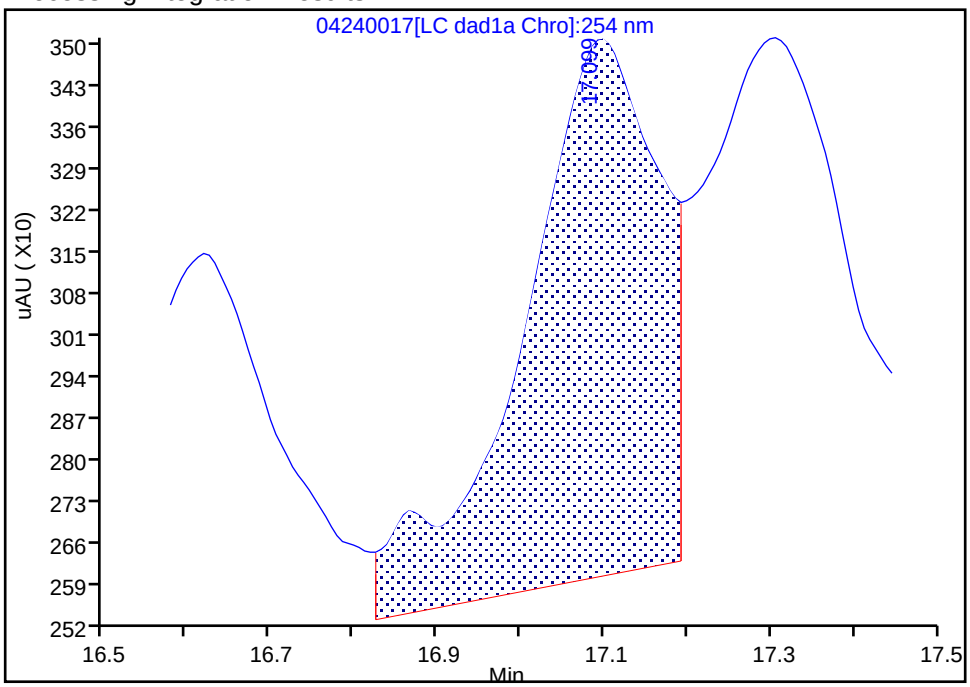
Data File: \\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240017.d
Injection Date: 25-Apr-2024 01:39:50 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT 2
Client ID:
Operator ID: JZ/JG ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

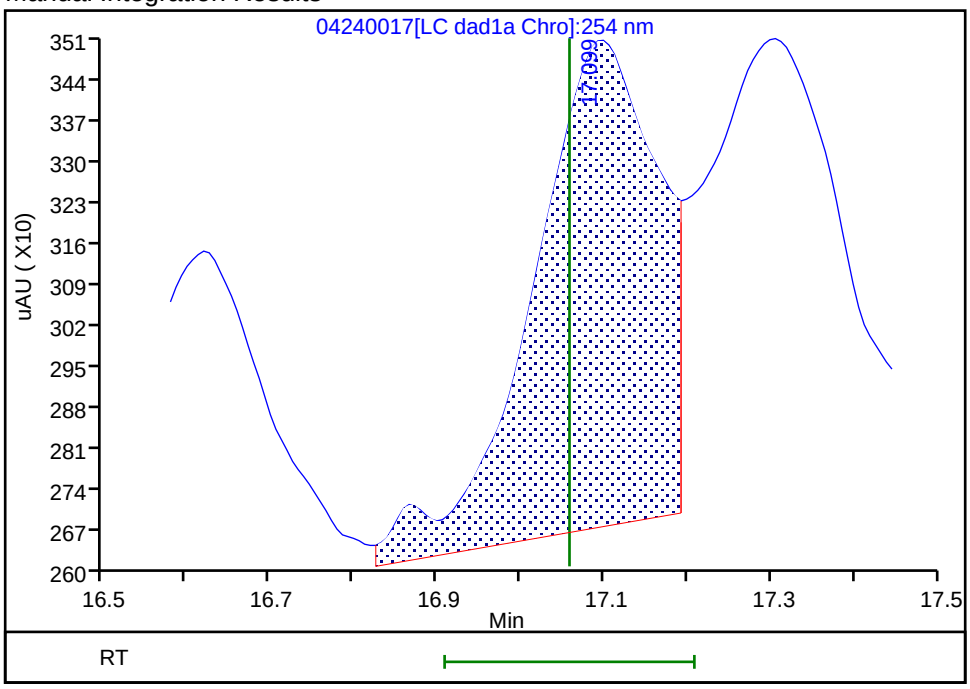
Processing Integration Results

RT: 17.10
Area: 10405
Amount: 0.019938
Amount Units: ug/ml



Manual Integration Results

RT: 17.10
Area: 8733
Amount: 0.021533
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:35:41 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

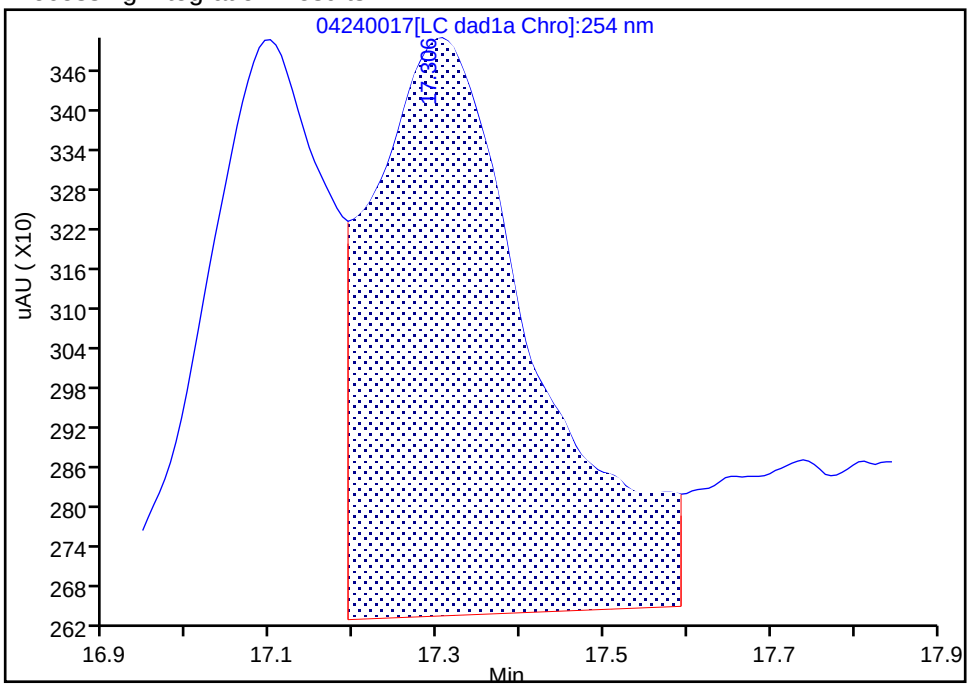
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240017.d				
Injection Date:	25-Apr-2024 01:39:50	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

19 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

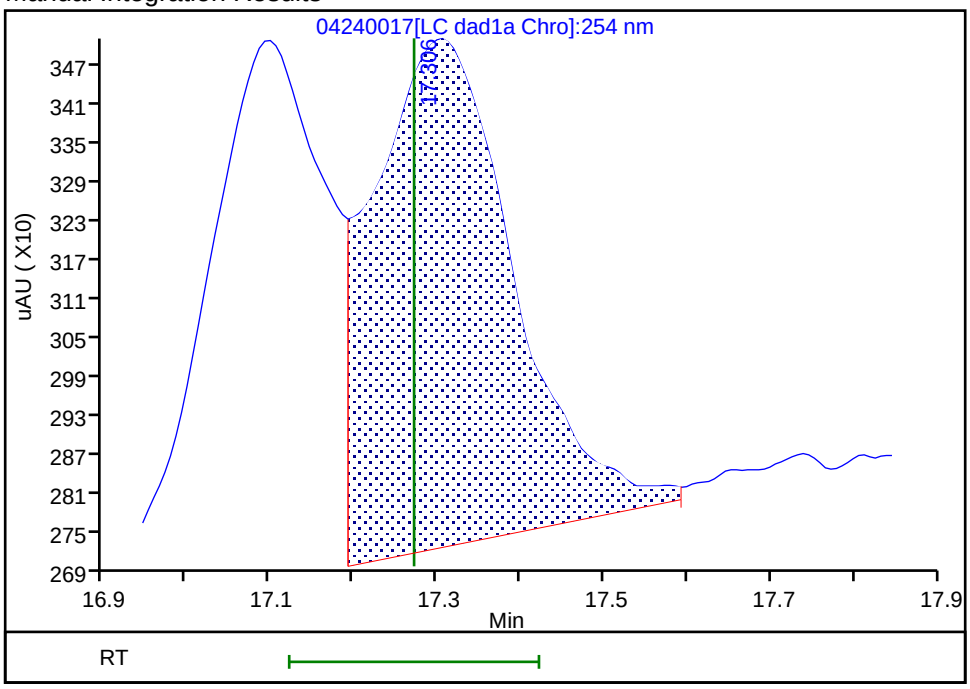
Processing Integration Results

RT: 17.31
Area: 11807
Amount: 0.023018
Amount Units: ug/ml



Manual Integration Results

RT: 17.31
Area: 9167
Amount: 0.021648
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:35:41 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

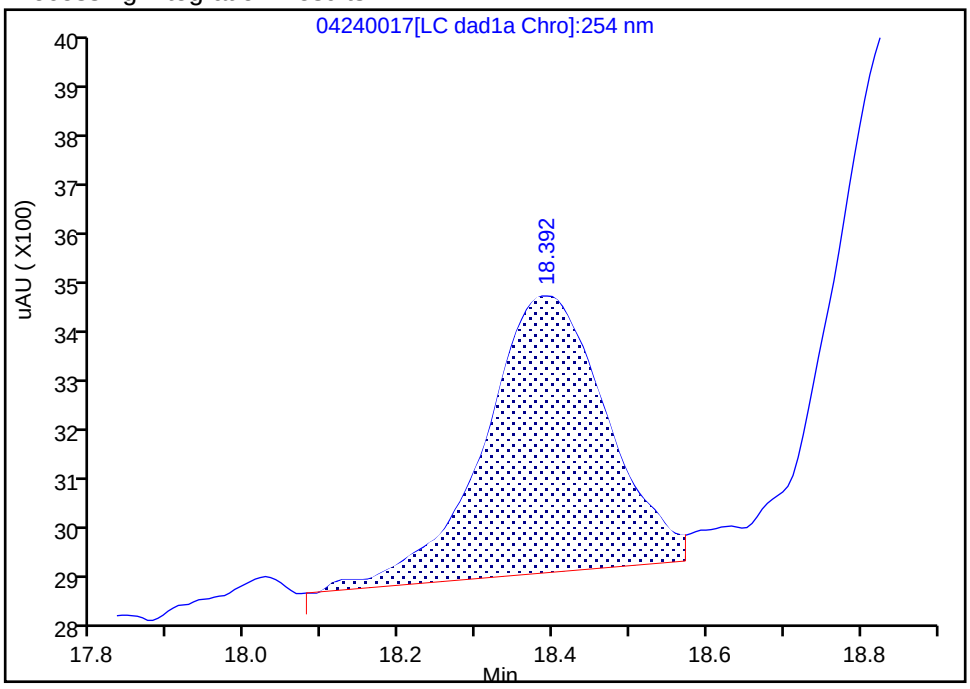
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240017.d				
Injection Date:	25-Apr-2024 01:39:50	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

20 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

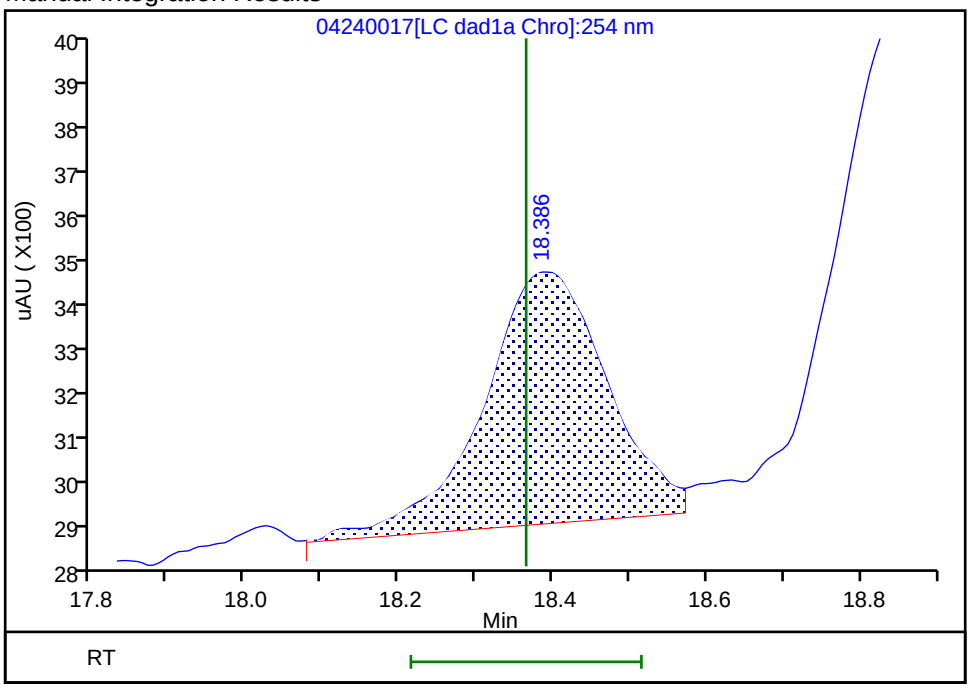
Processing Integration Results

RT: 18.39
Area: 5995
Amount: 0.016870
Amount Units: ug/ml



Manual Integration Results

RT: 18.39
Area: 6113
Amount: 0.021992
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:26:34 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

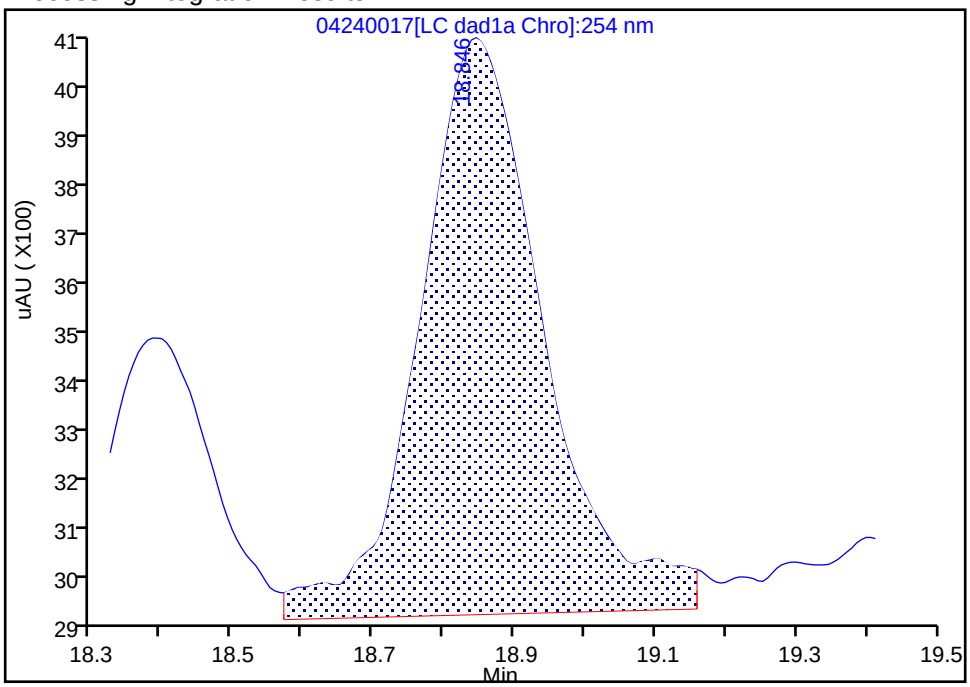
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240017.d				
Injection Date:	25-Apr-2024 01:39:50	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

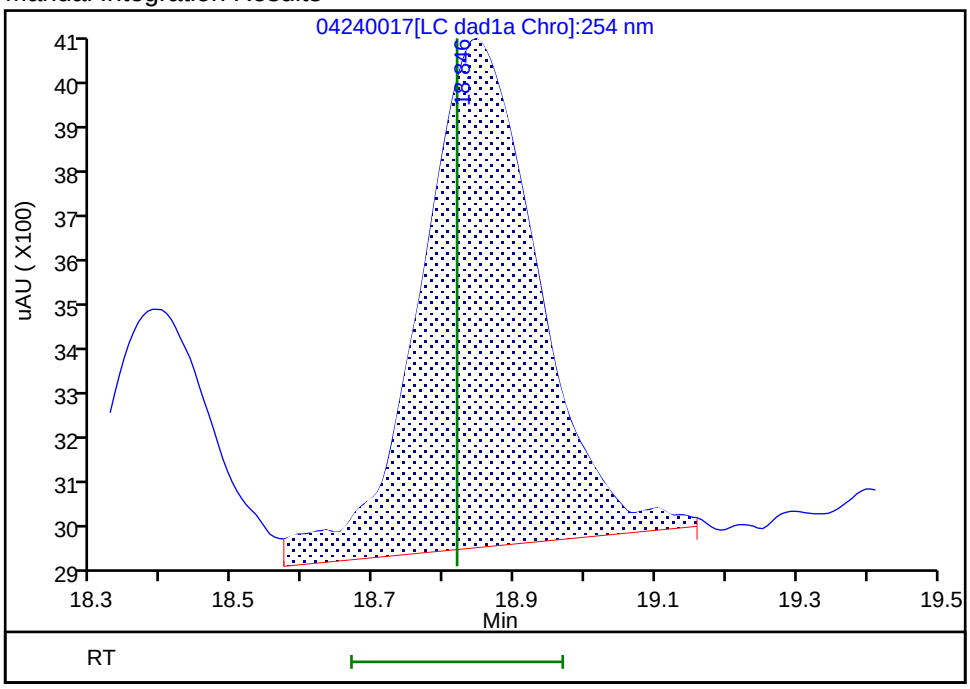
Processing Integration Results

RT: 18.85
Area: 12885
Amount: 0.021829
Amount Units: ug/ml



Manual Integration Results

RT: 18.85
Area: 12005
Amount: 0.021648
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:26:34 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

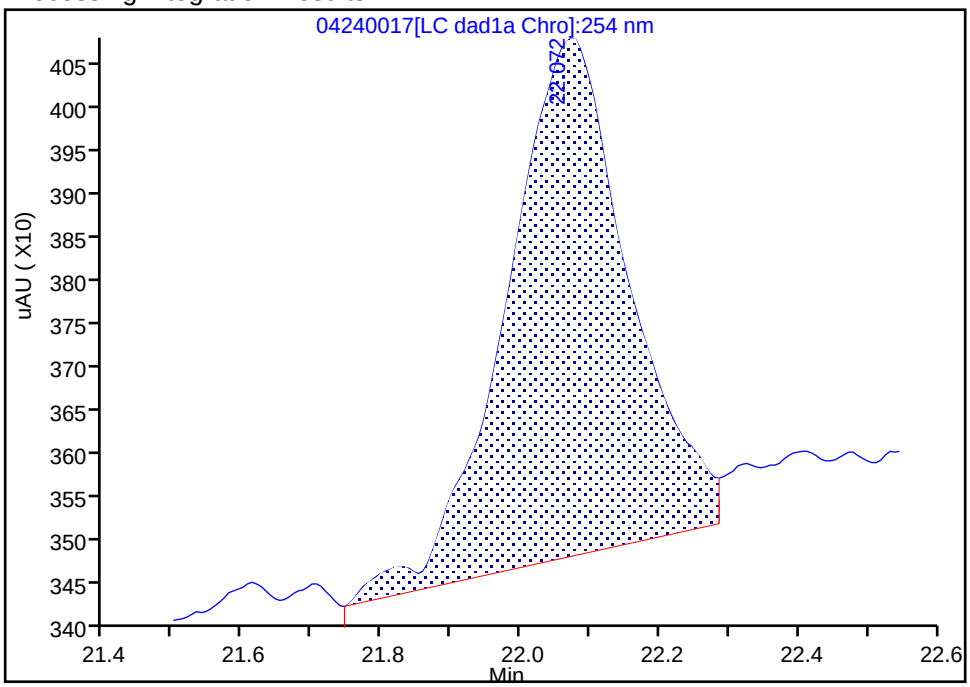
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240017.d				
Injection Date:	25-Apr-2024 01:39:50	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

22 Tetryl, CAS: 479-45-8

Signal: 1

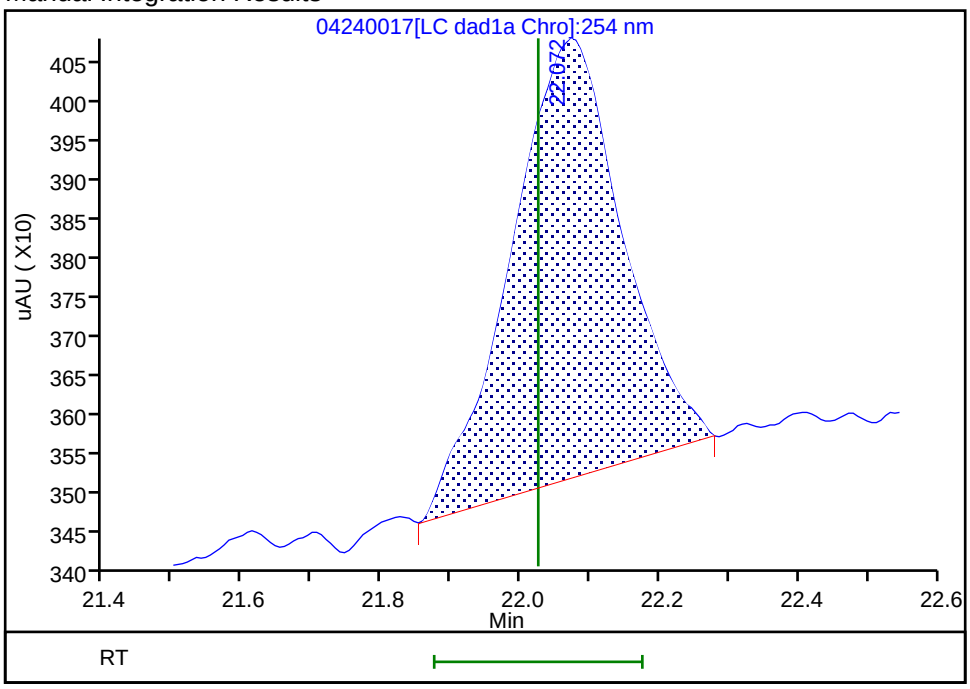
Processing Integration Results

RT: 22.07
Area: 7352
Amount: 0.022454
Amount Units: ug/ml



Manual Integration Results

RT: 22.07
Area: 6268
Amount: 0.018655
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:26:47 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

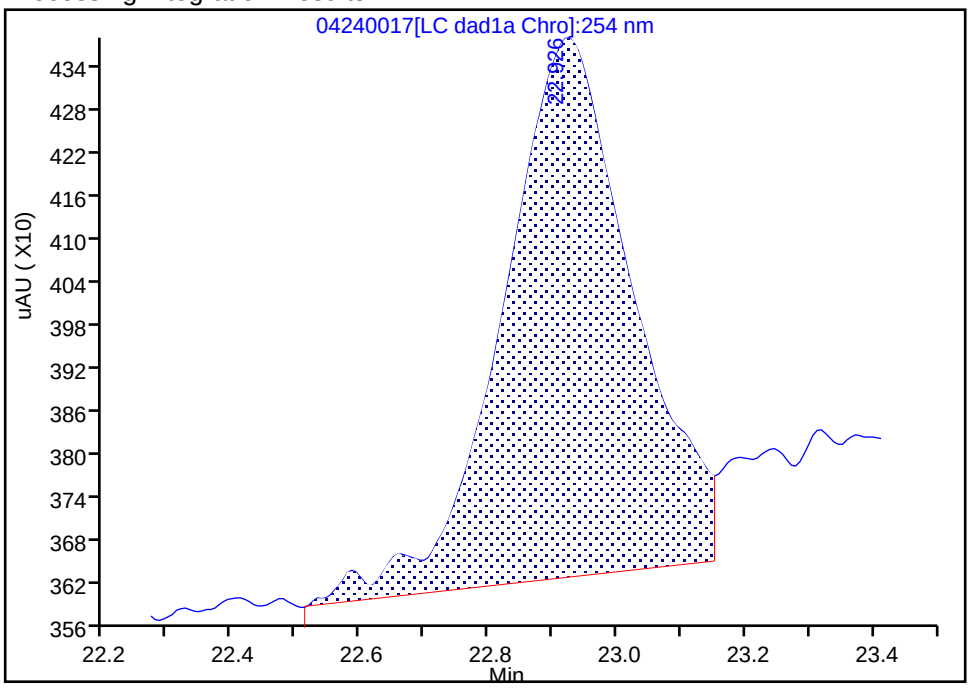
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240017.d				
Injection Date:	25-Apr-2024 01:39:50	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

23 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

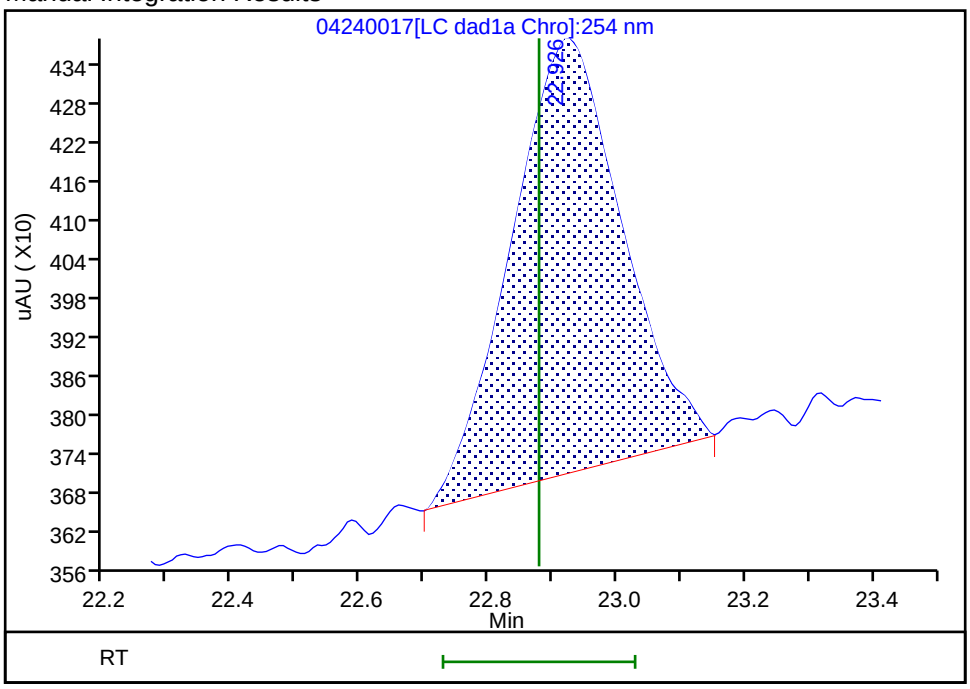
Processing Integration Results

RT: 22.93
Area: 10572
Amount: 0.023639
Amount Units: ug/ml



Manual Integration Results

RT: 22.93
Area: 7969
Amount: 0.019934
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:27:02 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20240424-132624.b\04240018.D
Lims ID: IC INT 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 25-Apr-2024 02:15:46 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 1
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub16

Method: \\chromfs\Denver\ChromData\G2_LUNA\20240424-132624.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 25-Apr-2024 14:30:19 Calib Date: 25-Apr-2024 07:39:21
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20240424-132624.b\04240027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1684

First Level Reviewer: LV5D Date: 25-Apr-2024 13:20:39

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
6 HMX	1	6.713	6.705	0.008	1677	0.0100	0.009634	M
5 2,4,6-Trinitrophenol	1	8.700	8.612	0.088	1549	0.0100	0.0102	
8 RDX	1	8.953	8.938	0.015	2562	0.0100	0.009837	
9 Nitrobenzene	1	11.426	11.425	0.001	3818	0.0100	0.0100	M
$ 10 1,2-Dinitrobenzene	1	12.360	12.345	0.015	2237	0.0100	0.008647	M
11 3,5-Dinitroaniline	1	14.200	14.185	0.015	5245	0.0100	0.0100	M
12 1,3-Dinitrobenzene	1	14.493	14.478	0.015	6332	0.0100	0.0107	M
13 Nitroglycerin	2	14.940	14.918	0.022	10431	0.1000	0.0873	M
14 o-Nitrotoluene	1	15.533	15.505	0.028	3289	0.0100	0.0134	M
15 p-Nitrotoluene	1	15.746	15.738	0.008	2223	0.0100	0.005995	M
16 4-Amino-2,6-dinitrotoluene	1	16.260	16.245	0.015	3366	0.0100	0.009734	M
17 m-Nitrotoluene	1	16.586	16.578	0.008	3672	0.0100	0.009808	M
18 2-Amino-4,6-dinitrotoluene	1	17.086	17.058	0.028	5022	0.0100	0.0124	M
19 1,3,5-Trinitrobenzene	1	17.286	17.272	0.014	5210	0.0100	0.0123	M
20 2,6-Dinitrotoluene	1	18.380	18.365	0.015	3016	0.0100	0.0109	M
21 2,4-Dinitrotoluene	1	18.833	18.818	0.015	5764	0.0100	0.0104	M
22 Tetryl	1	22.027	22.025	0.002	3675	0.0100	0.0103	
23 2,4,6-Trinitrotoluene	1	22.900	22.878	0.022	3703	0.0100	0.009263	M
24 PETN	2	24.033	24.032	0.001	10531	0.1000	0.1003	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00080 Amount Added: 1.00 Units: uL

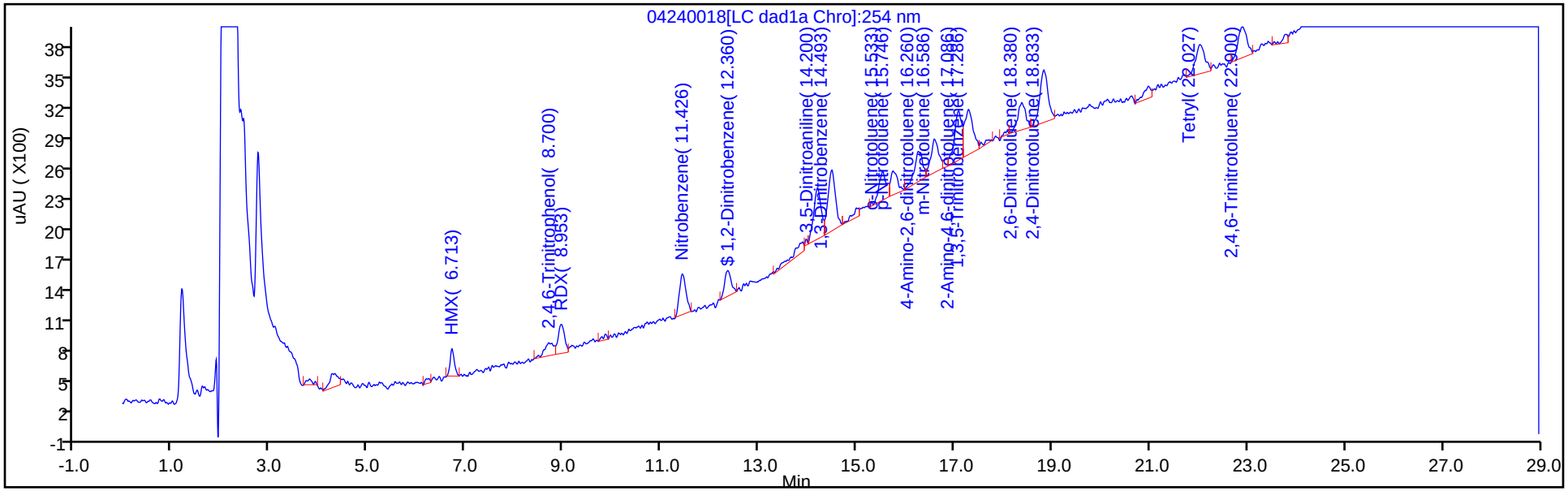
Report Date: 25-Apr-2024 14:30:19 Chrom Revision: 2.3 09-Apr-2024 17:43:44

Eurofins Denver

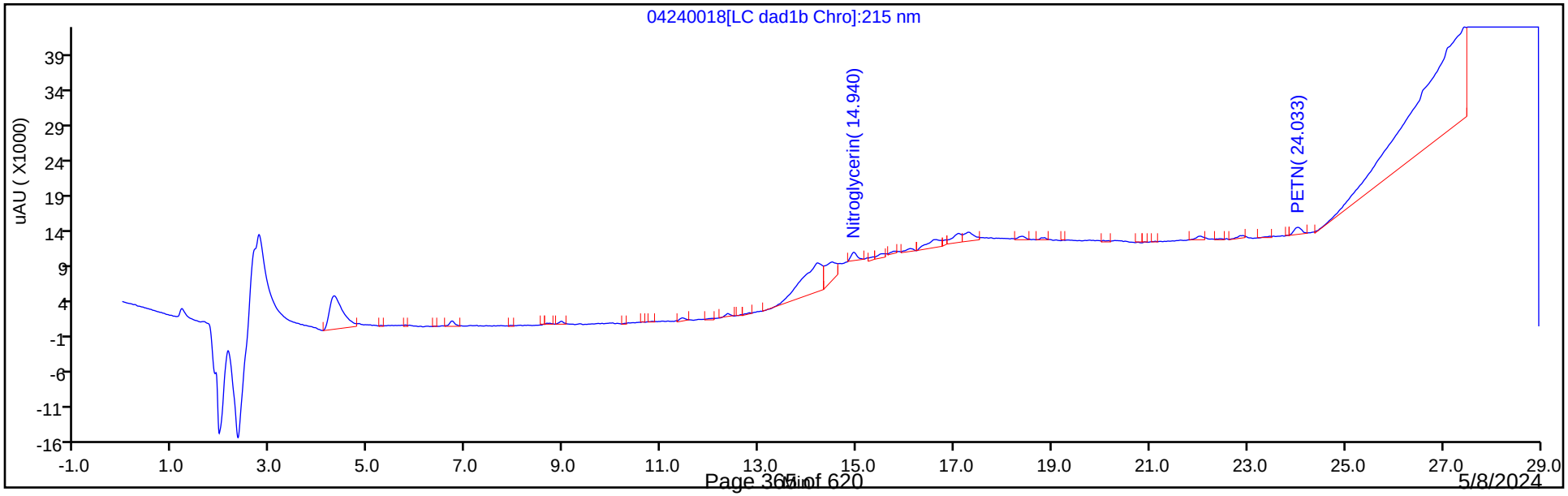
Data File: \\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240018.d

Injection Date:	25-Apr-2024 02:15:46	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	IC INT 1			Worklist Smp#:	18
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	G2_8330_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



Manual Integration/User Assign Peak Report

Eurofins Denver

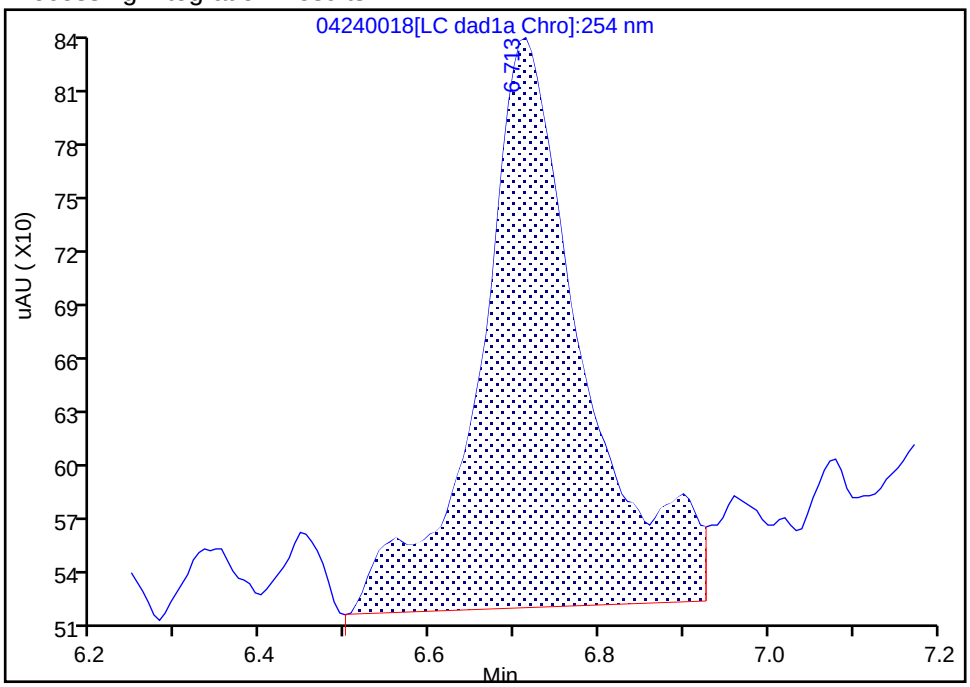
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240018.d				
Injection Date:	25-Apr-2024 02:15:46	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

6 HMX, CAS: 2691-41-0

Signal: 1

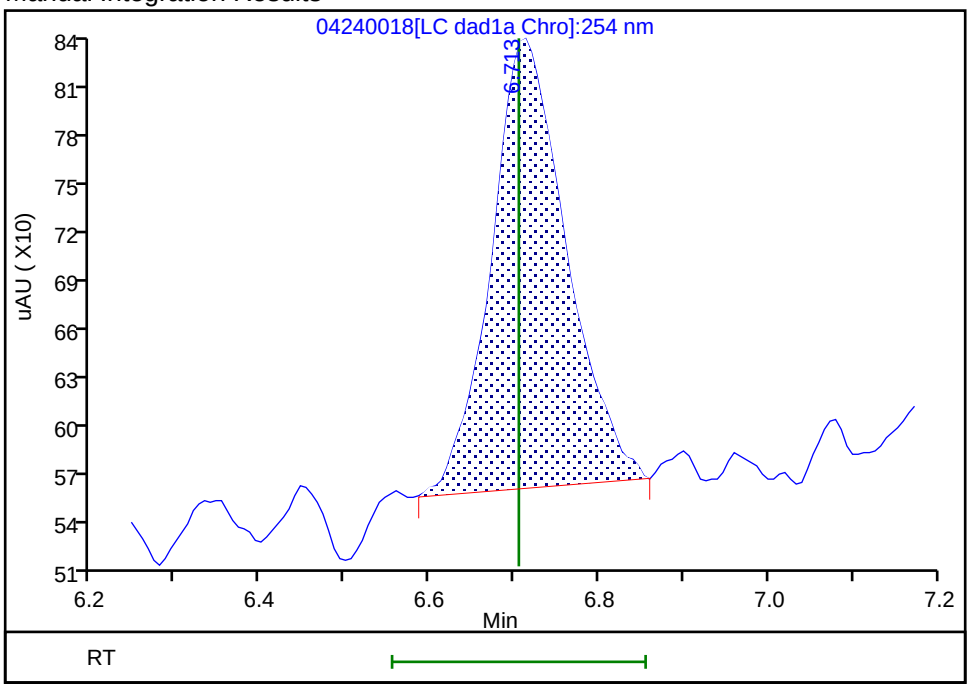
Processing Integration Results

RT: 6.71
Area: 2684
Amount: 0.010199
Amount Units: ug/ml



Manual Integration Results

RT: 6.71
Area: 1677
Amount: 0.009634
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:31:03 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

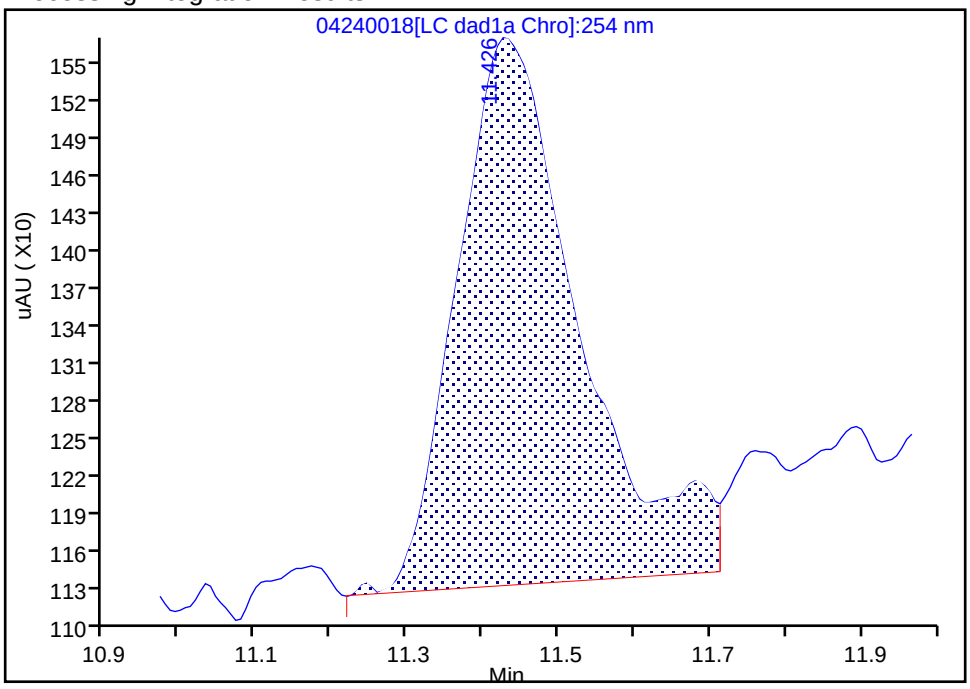
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240018.d				
Injection Date:	25-Apr-2024 02:15:46	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

9 Nitrobenzene, CAS: 98-95-3

Signal: 1

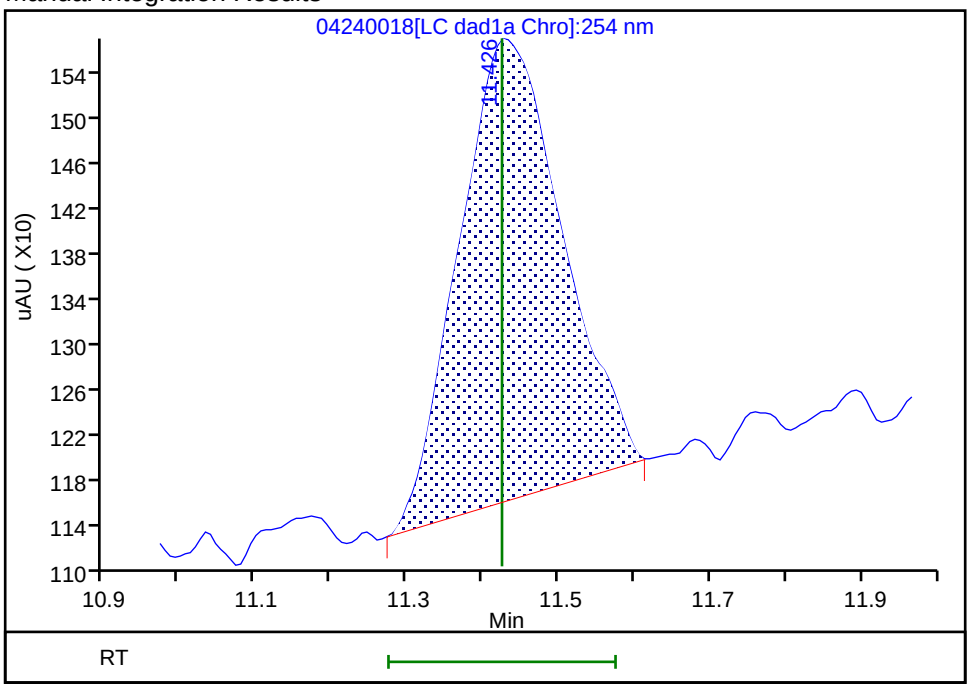
Processing Integration Results

RT: 11.43
Area: 4838
Amount: 0.012296
Amount Units: ug/ml



Manual Integration Results

RT: 11.43
Area: 3818
Amount: 0.009992
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:27:50 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

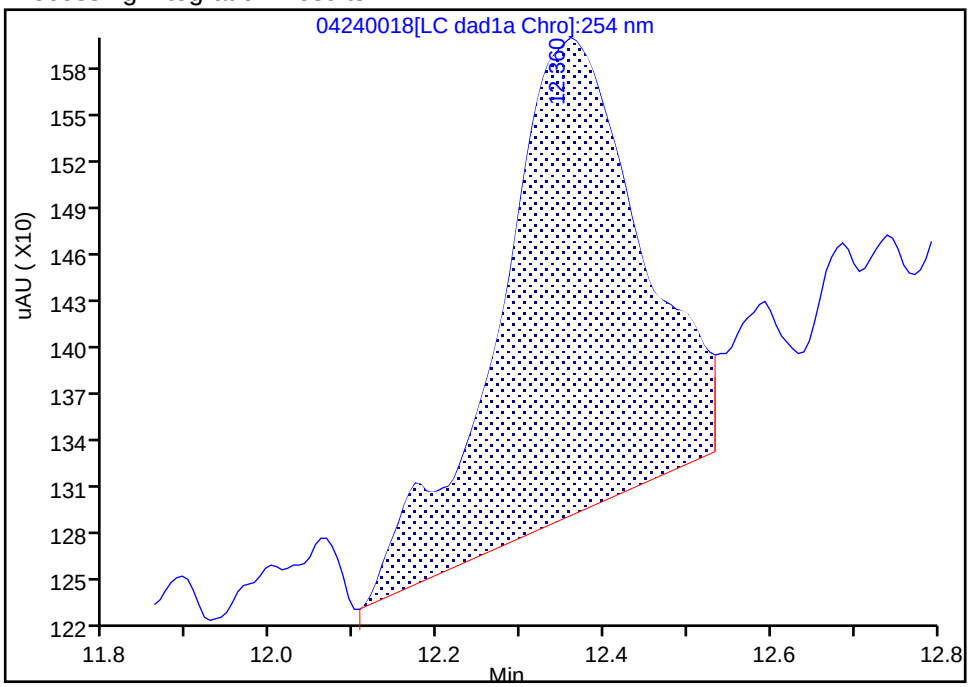
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240018.d				
Injection Date:	25-Apr-2024 02:15:46	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

Signal: 1

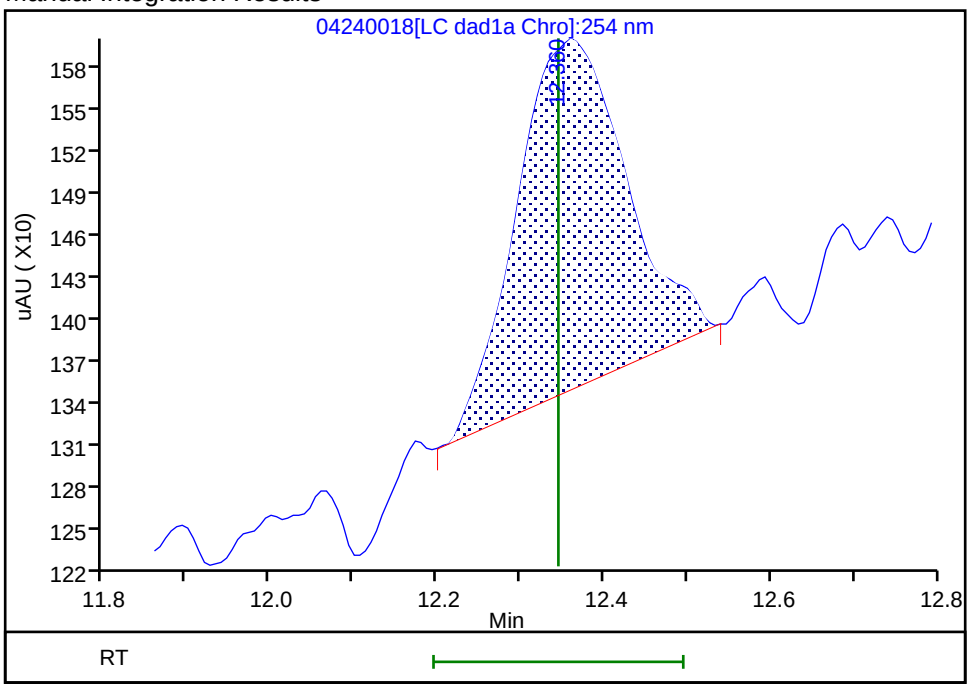
Processing Integration Results

RT: 12.36
Area: 3595
Amount: 0.013131
Amount Units: ug/ml



Manual Integration Results

RT: 12.36
Area: 2237
Amount: 0.008647
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:28:45 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

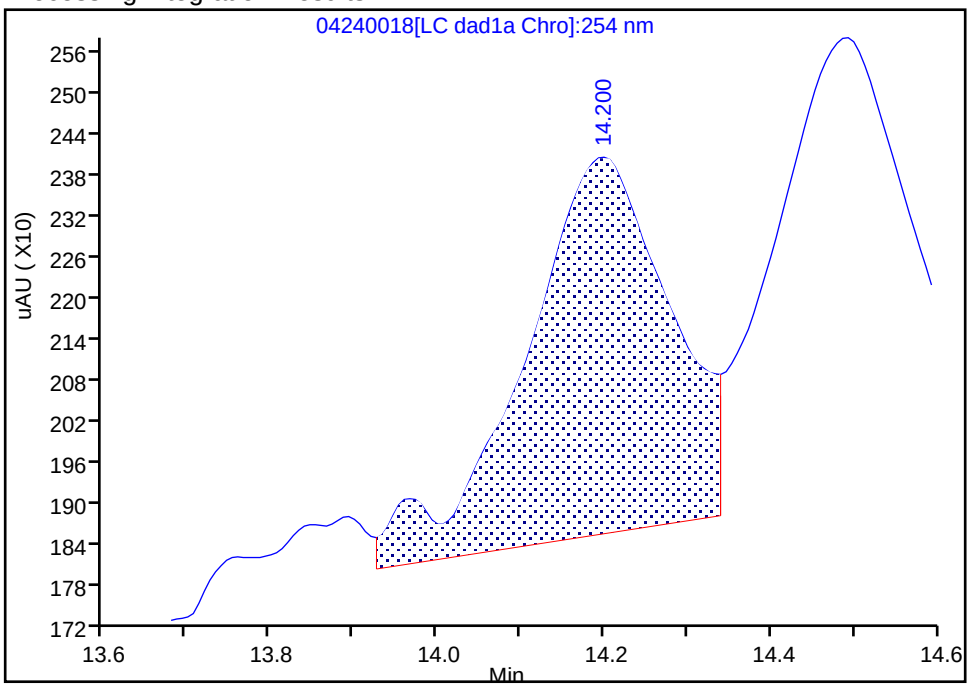
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240018.d				
Injection Date:	25-Apr-2024 02:15:46	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

11 3,5-Dinitroaniline, CAS: 618-87-1

Signal: 1

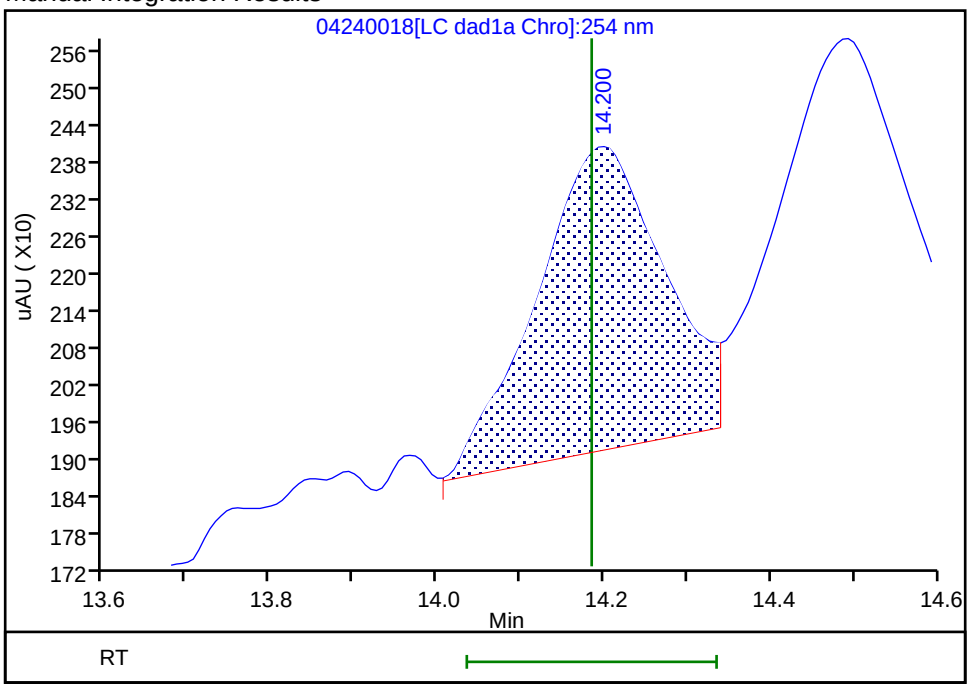
Processing Integration Results

RT: 14.20
Area: 6757
Amount: 0.010763
Amount Units: ug/ml



Manual Integration Results

RT: 14.20
Area: 5245
Amount: 0.010044
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:29:01 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

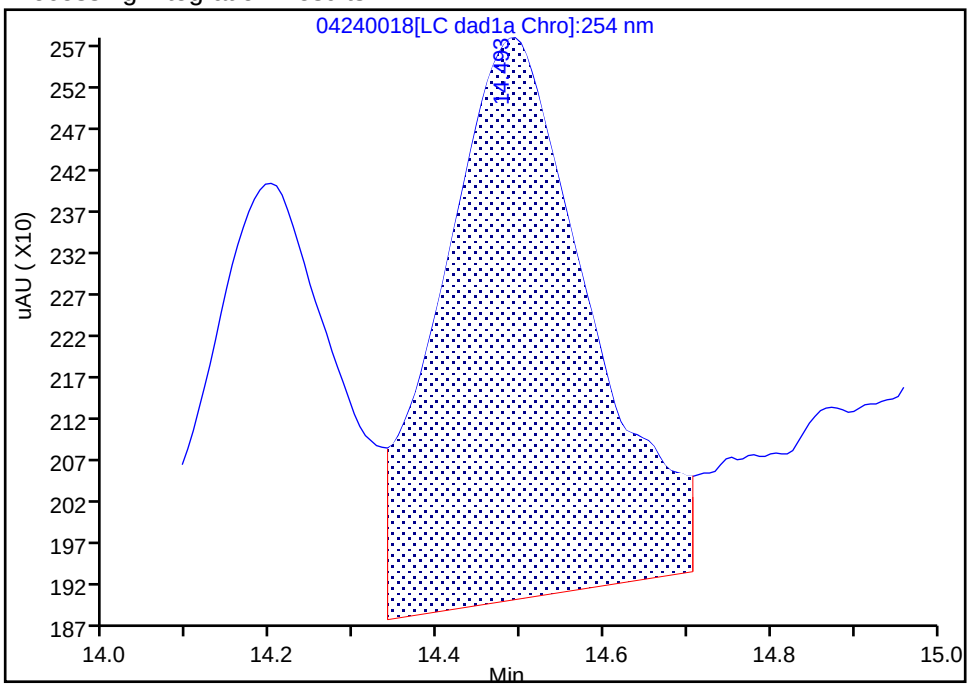
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240018.d				
Injection Date:	25-Apr-2024 02:15:46	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

Signal: 1

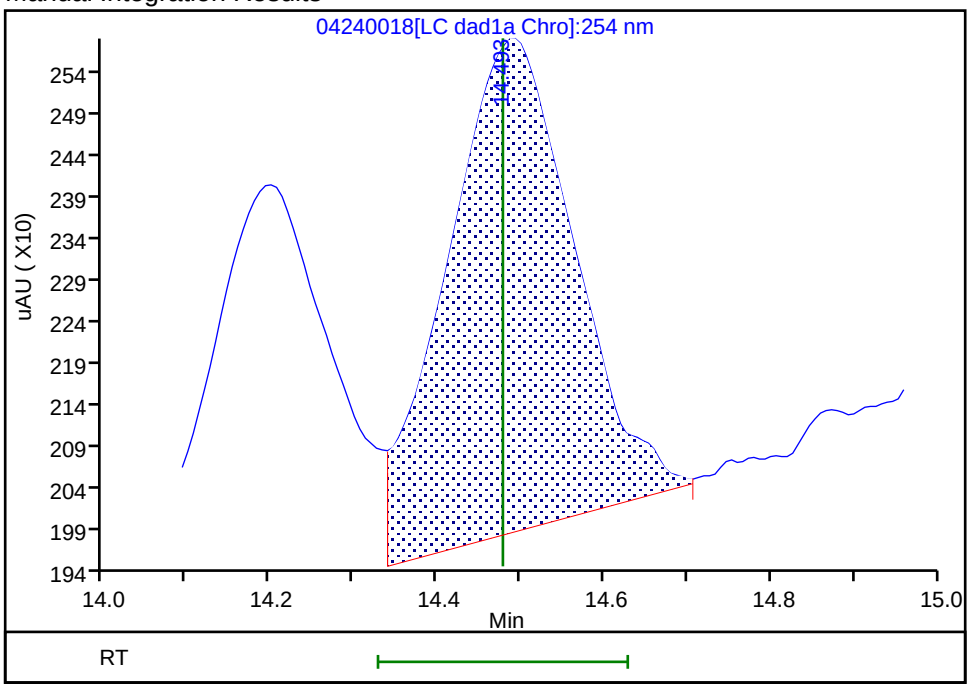
Processing Integration Results

RT: 14.49
Area: 8301
Amount: 0.013579
Amount Units: ug/ml



Manual Integration Results

RT: 14.49
Area: 6332
Amount: 0.010743
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:28:58 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

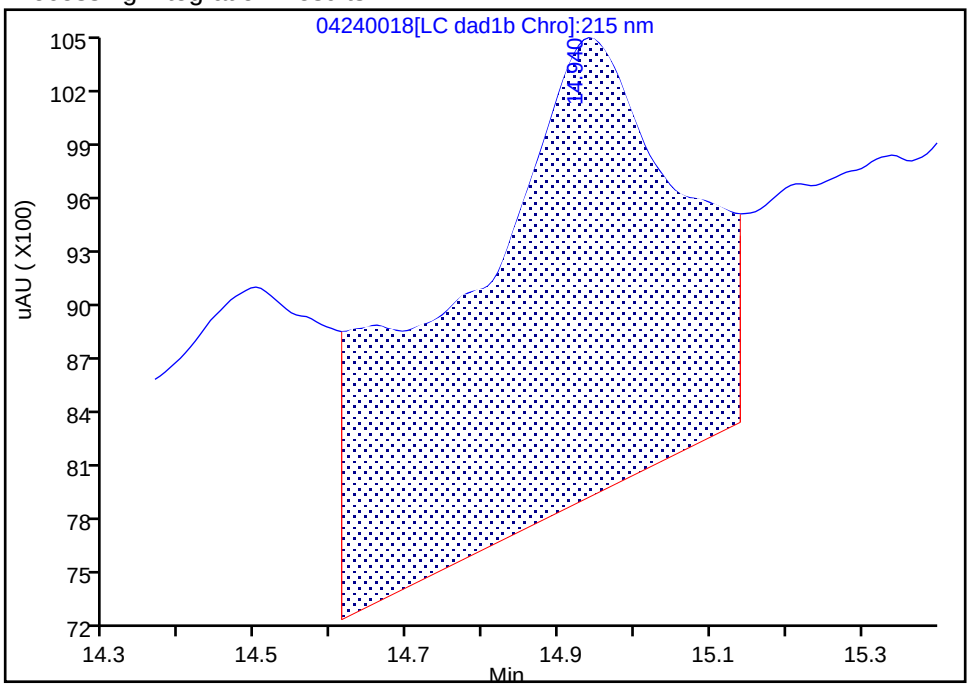
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240018.d				
Injection Date:	25-Apr-2024 02:15:46	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1B, 215 nm		

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

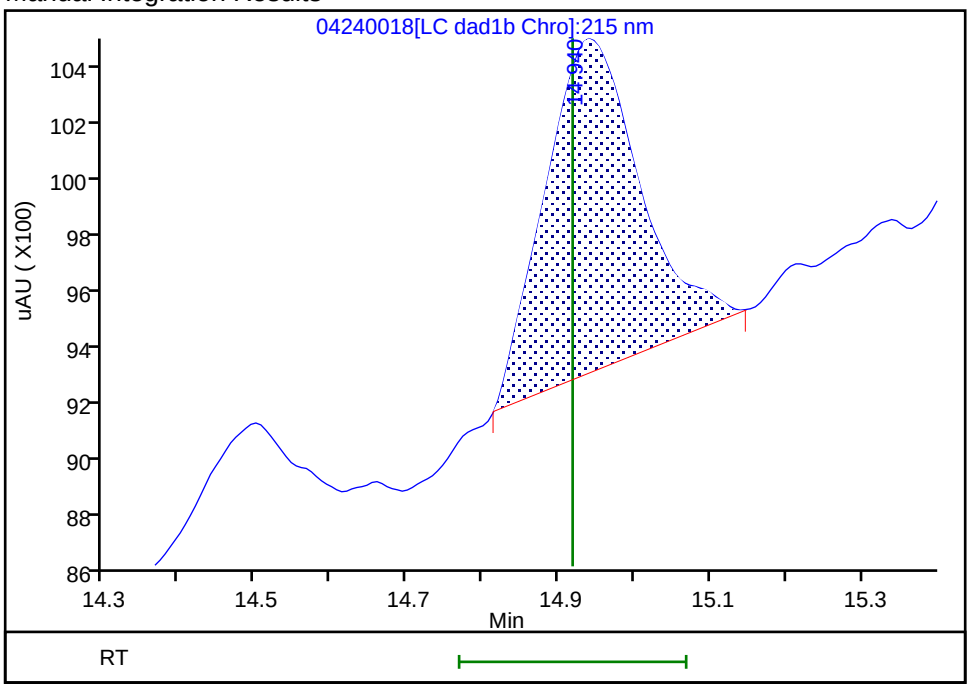
Processing Integration Results

RT: 14.94
Area: 53313
Amount: 0.315461
Amount Units: ug/ml



Manual Integration Results

RT: 14.94
Area: 10431
Amount: 0.087285
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:20:31 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

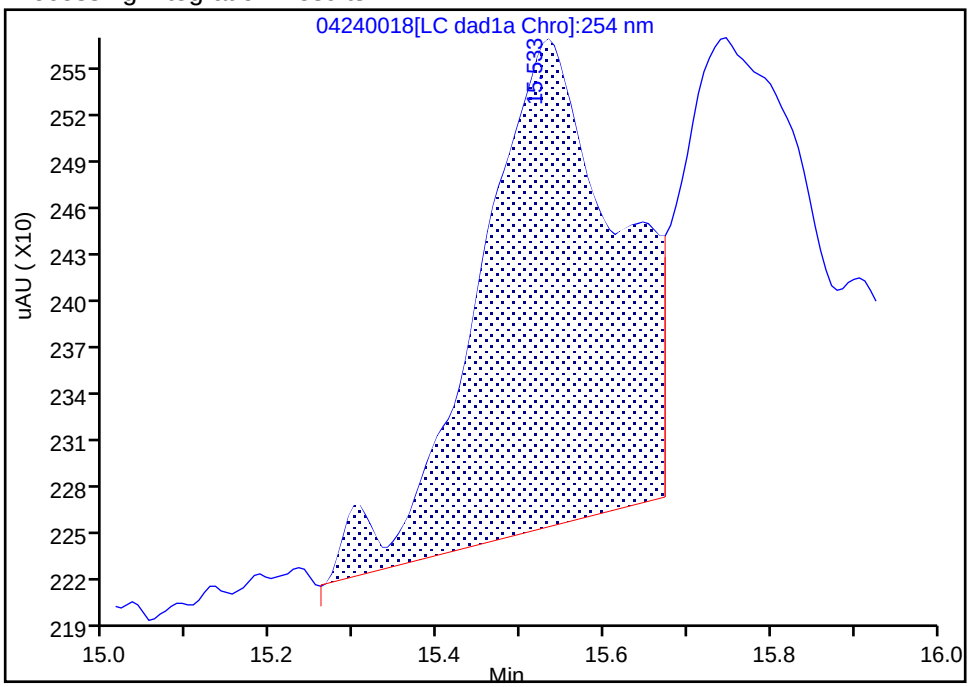
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240018.d				
Injection Date:	25-Apr-2024 02:15:46	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

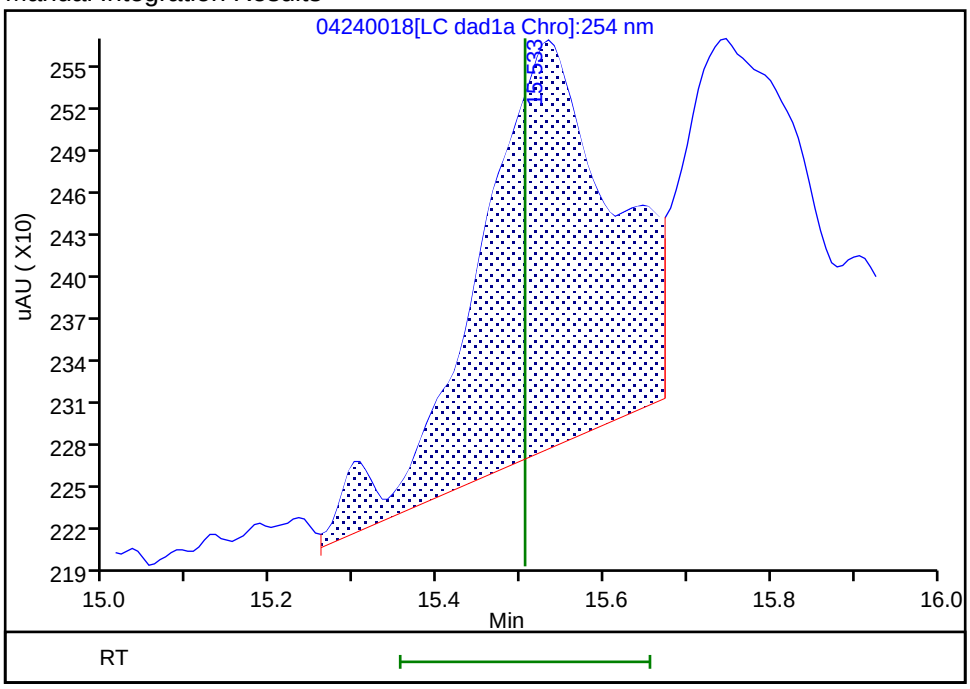
Processing Integration Results

RT: 15.53
Area: 3673
Amount: 0.013997
Amount Units: ug/ml



Manual Integration Results

RT: 15.53
Area: 3289
Amount: 0.013447
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:29:10 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

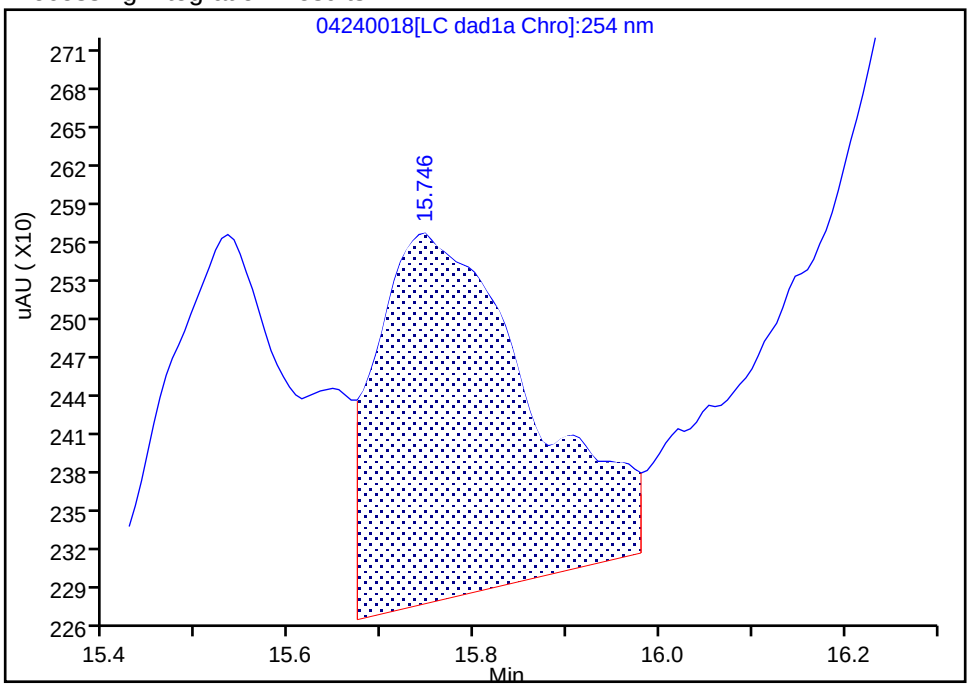
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240018.d				
Injection Date:	25-Apr-2024 02:15:46	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

15 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

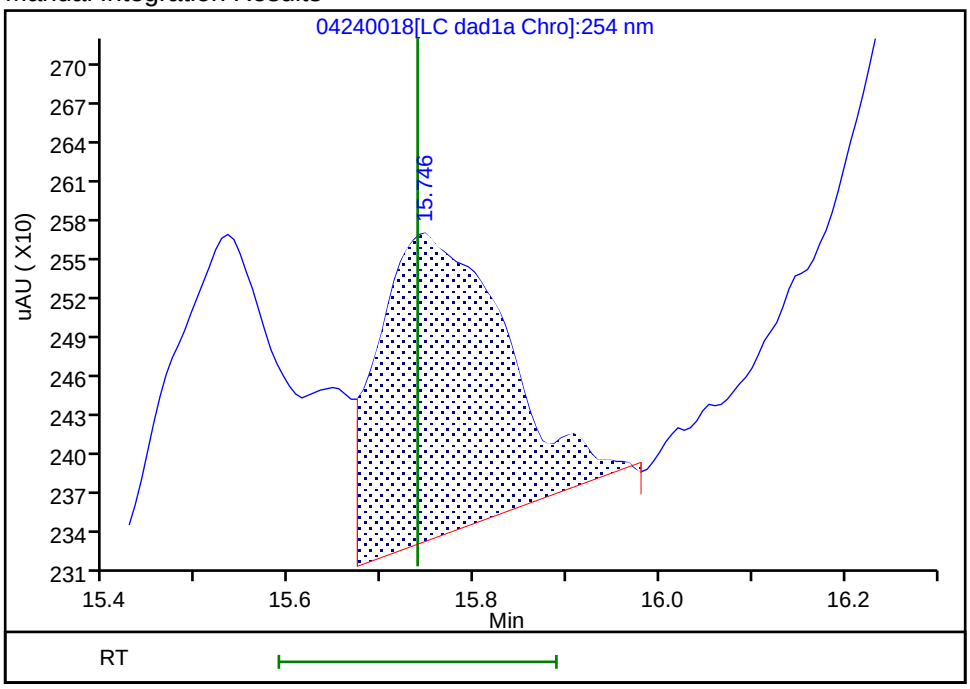
Processing Integration Results

RT: 15.75
Area: 3244
Amount: 0.013429
Amount Units: ug/ml



Manual Integration Results

RT: 15.75
Area: 2223
Amount: 0.005995
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:29:10 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

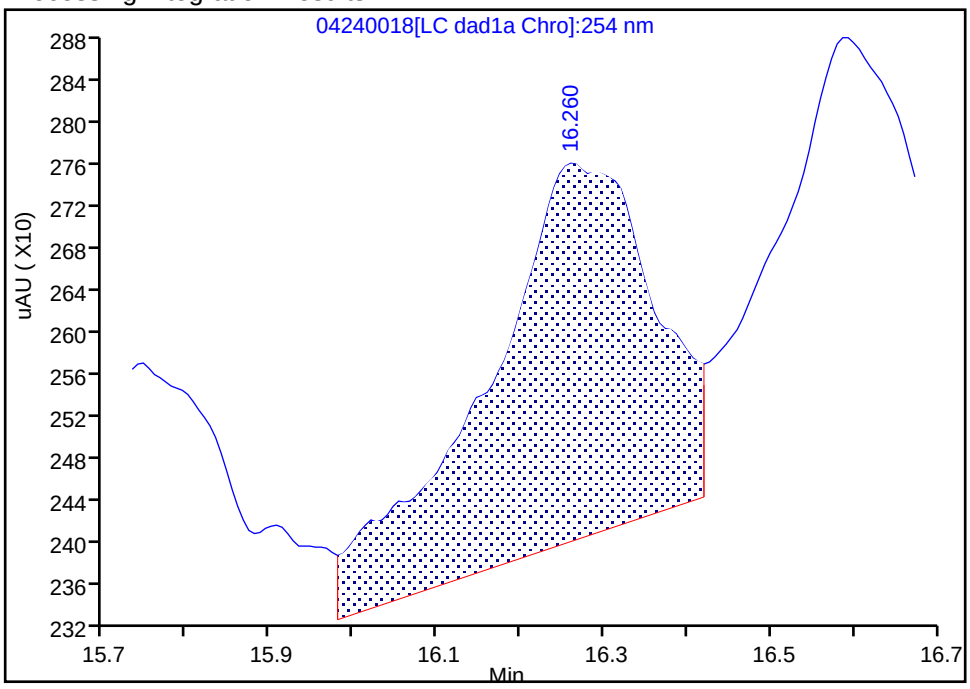
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240018.d				
Injection Date:	25-Apr-2024 02:15:46	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

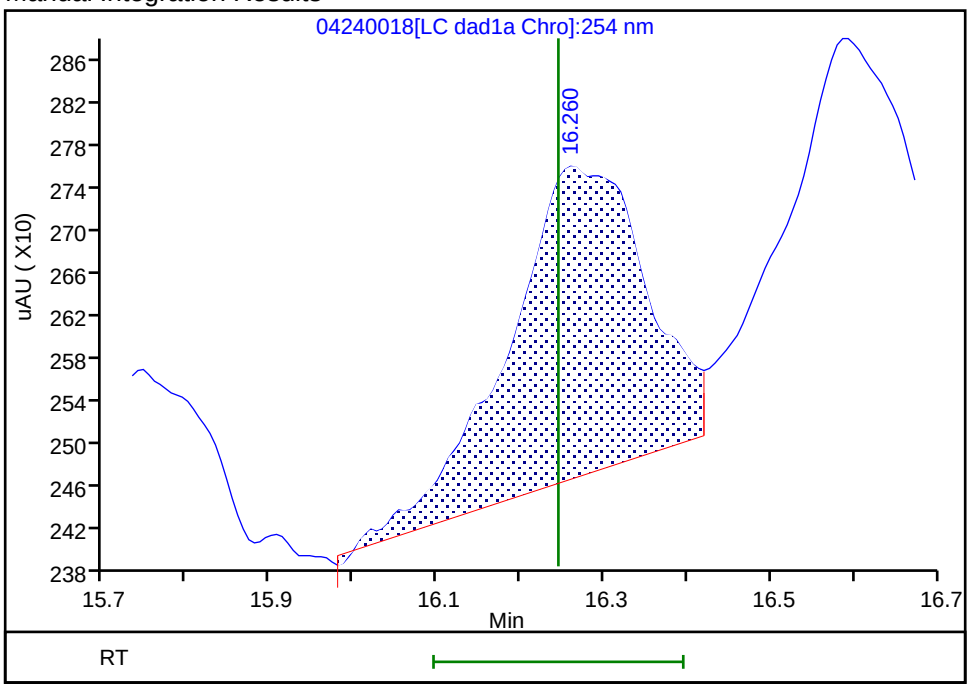
Processing Integration Results

RT: 16.26
Area: 5148
Amount: 0.010335
Amount Units: ug/ml



Manual Integration Results

RT: 16.26
Area: 3366
Amount: 0.009734
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:29:10 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

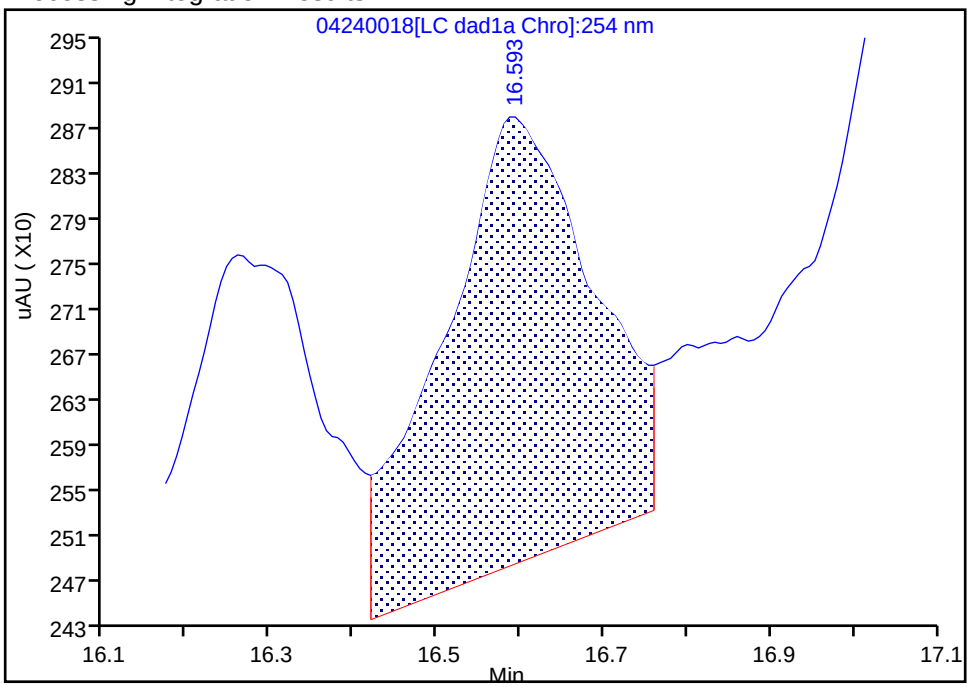
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240018.d				
Injection Date:	25-Apr-2024 02:15:46	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

17 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

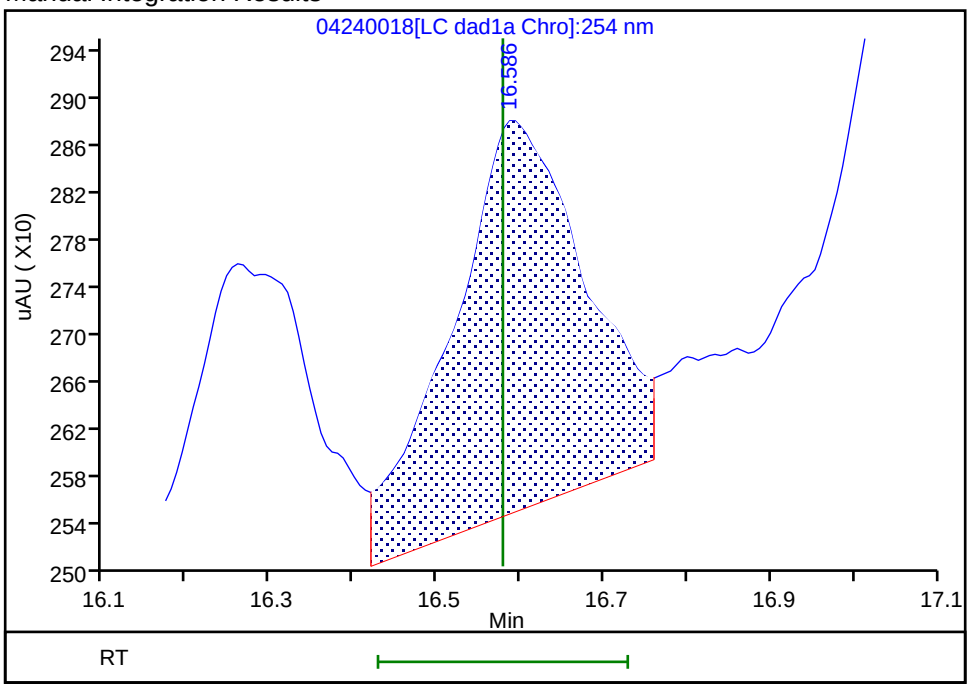
Processing Integration Results

RT: 16.59
Area: 4917
Amount: 0.010564
Amount Units: ug/ml



Manual Integration Results

RT: 16.59
Area: 3672
Amount: 0.009808
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:29:10 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

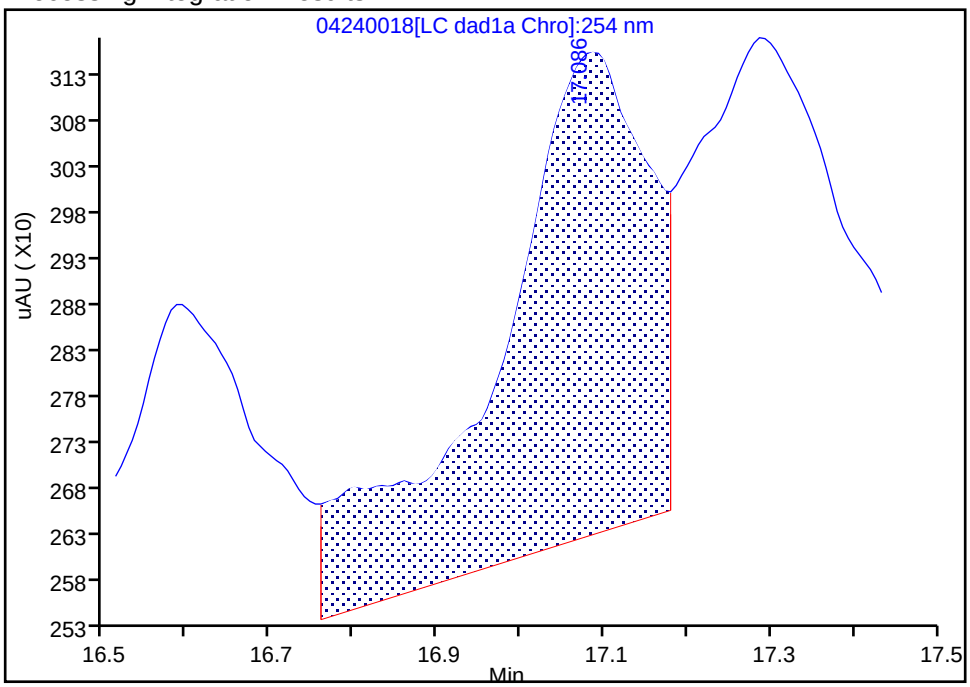
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240018.d				
Injection Date:	25-Apr-2024 02:15:46	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

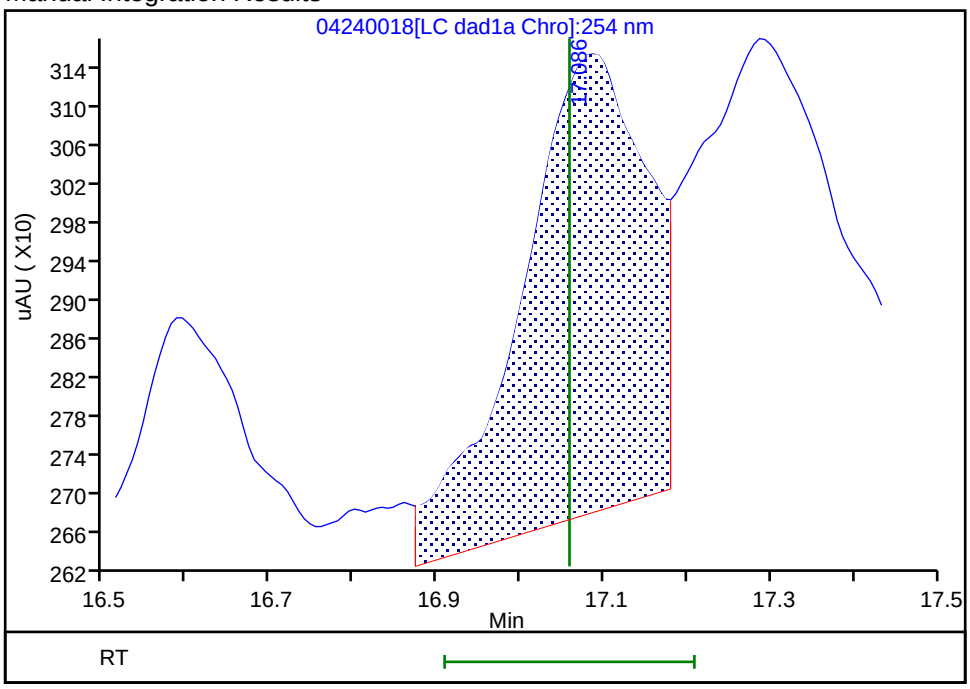
Processing Integration Results

RT: 17.09
Area: 6792
Amount: 0.011001
Amount Units: ug/ml



Manual Integration Results

RT: 17.09
Area: 5022
Amount: 0.012383
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:29:26 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

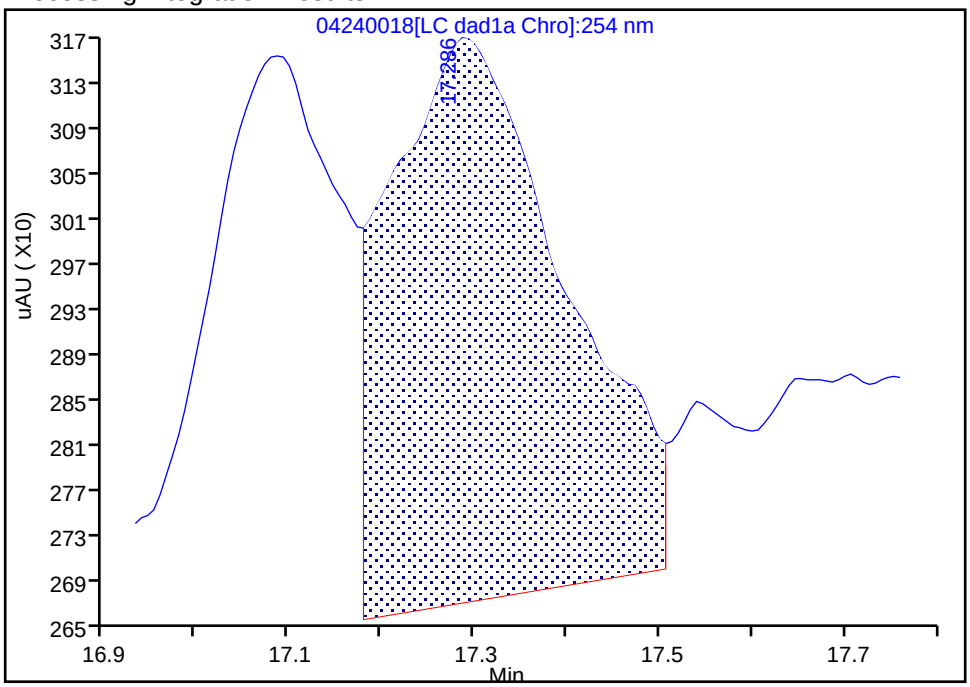
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240018.d				
Injection Date:	25-Apr-2024 02:15:46	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

19 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

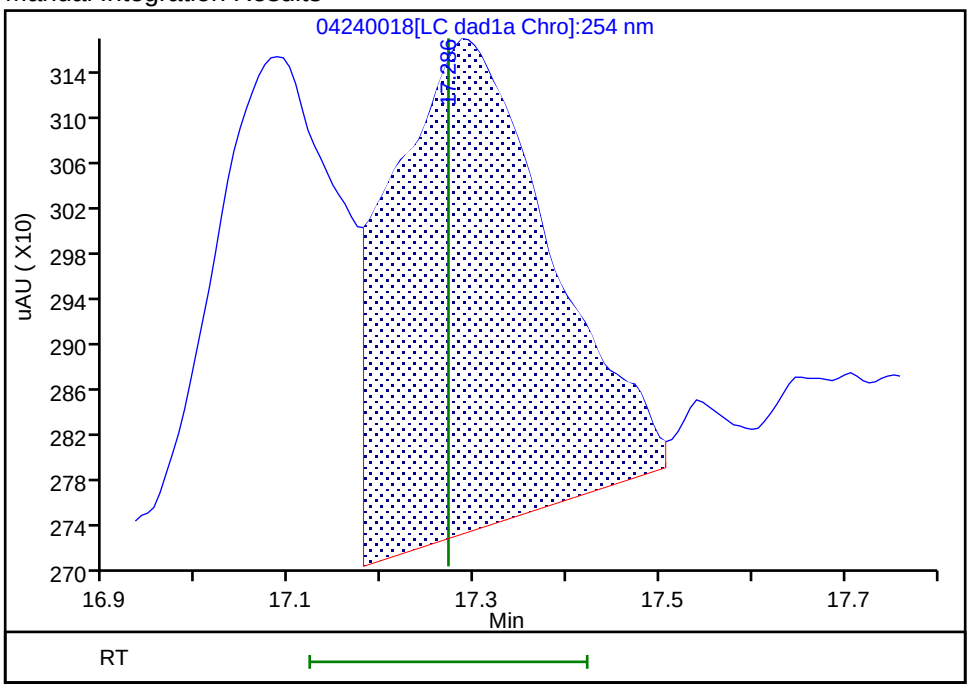
Processing Integration Results

RT: 17.29
Area: 6493
Amount: 0.014850
Amount Units: ug/ml



Manual Integration Results

RT: 17.29
Area: 5210
Amount: 0.012304
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:29:10 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

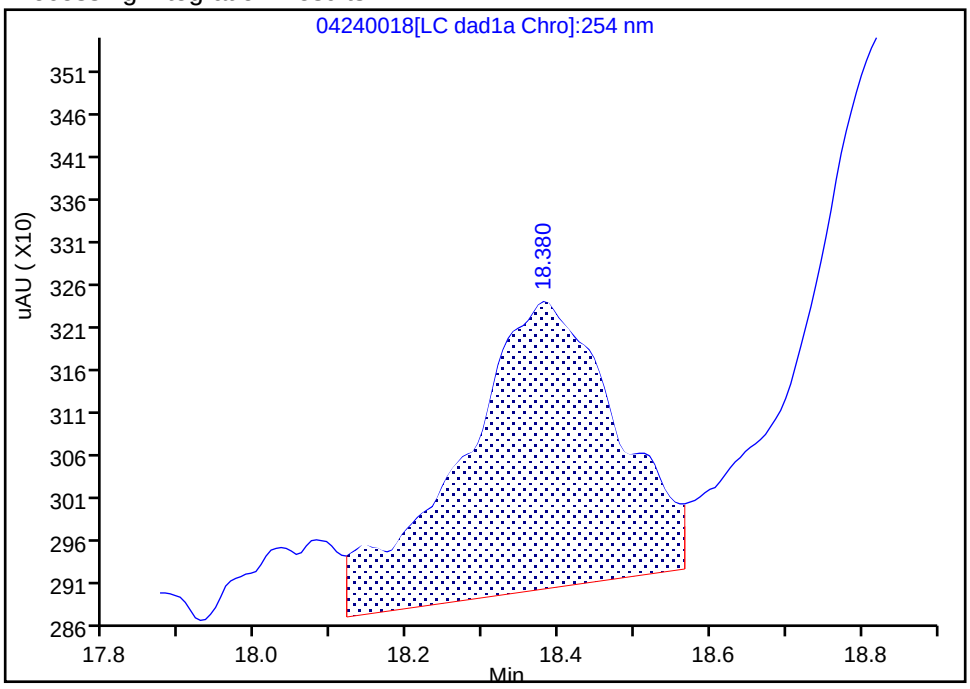
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240018.d				
Injection Date:	25-Apr-2024 02:15:46	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

20 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

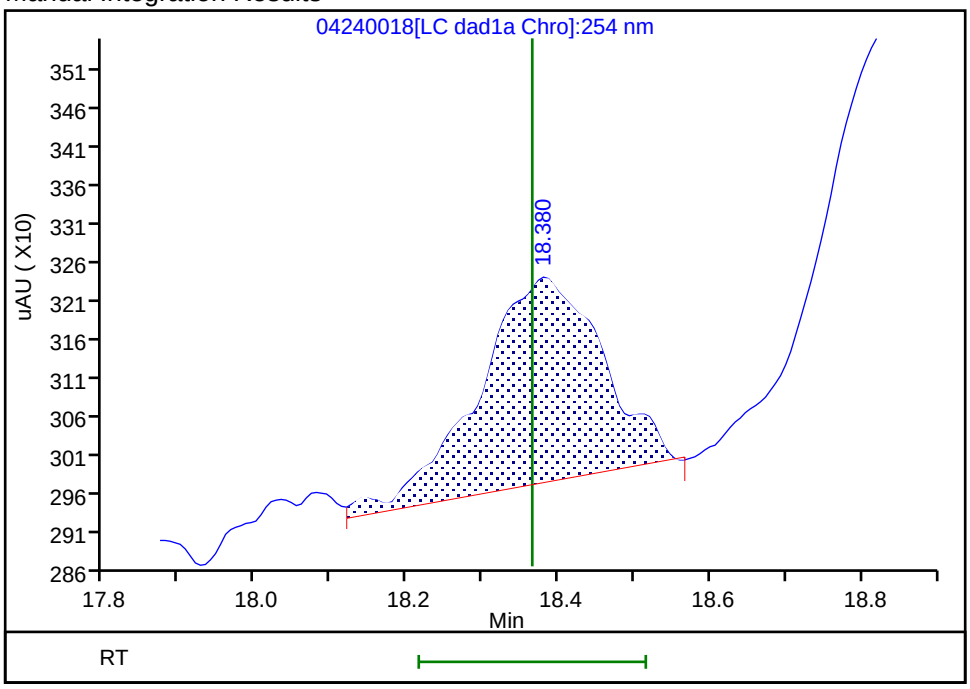
Processing Integration Results

RT: 18.38
Area: 4838
Amount: 0.011069
Amount Units: ug/ml



Manual Integration Results

RT: 18.38
Area: 3016
Amount: 0.010850
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:29:14 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

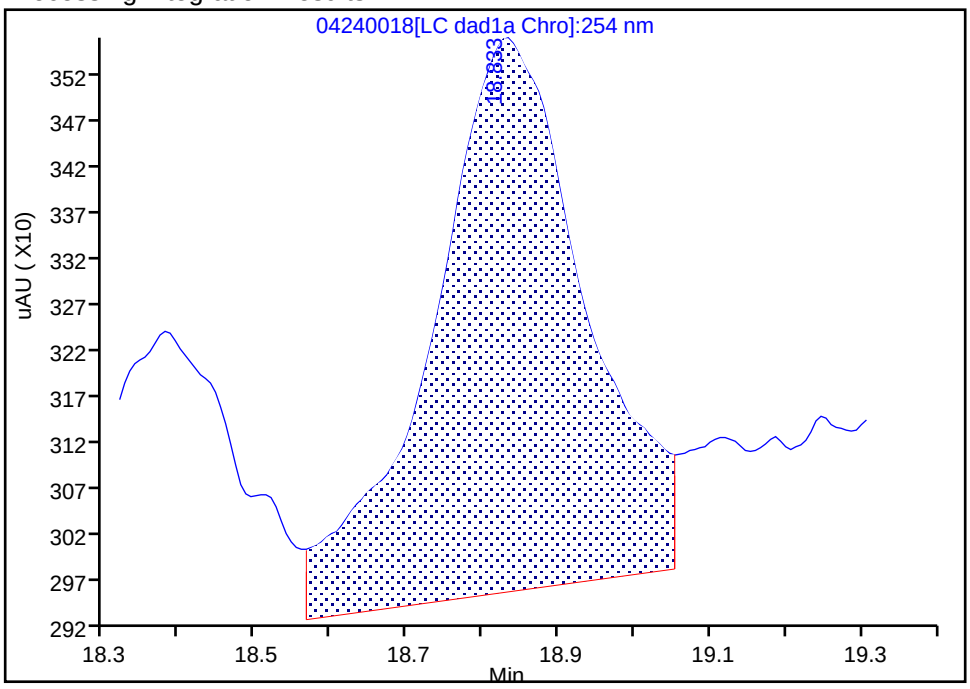
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240018.d				
Injection Date:	25-Apr-2024 02:15:46	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

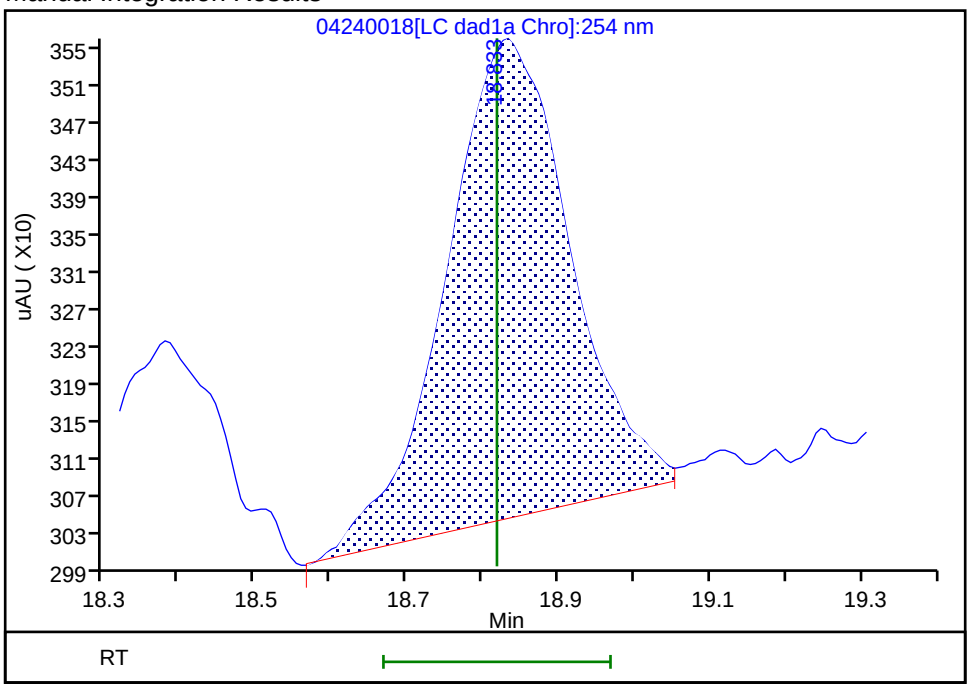
Processing Integration Results

RT: 18.83
Area: 8538
Amount: 0.014585
Amount Units: ug/ml



Manual Integration Results

RT: 18.83
Area: 5764
Amount: 0.010394
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:29:14 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

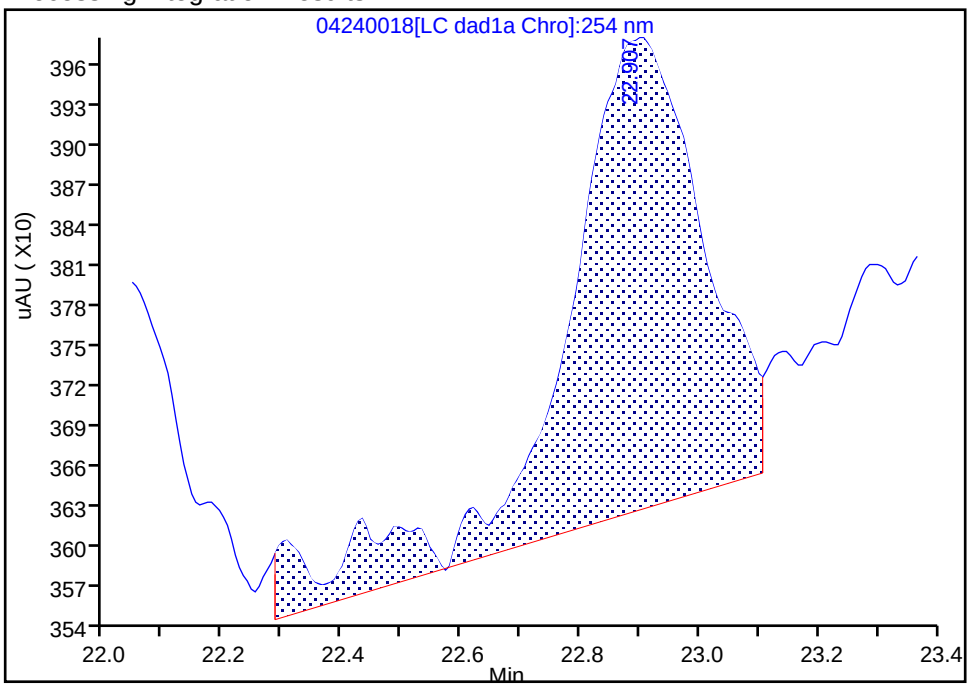
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240018.d				
Injection Date:	25-Apr-2024 02:15:46	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

23 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

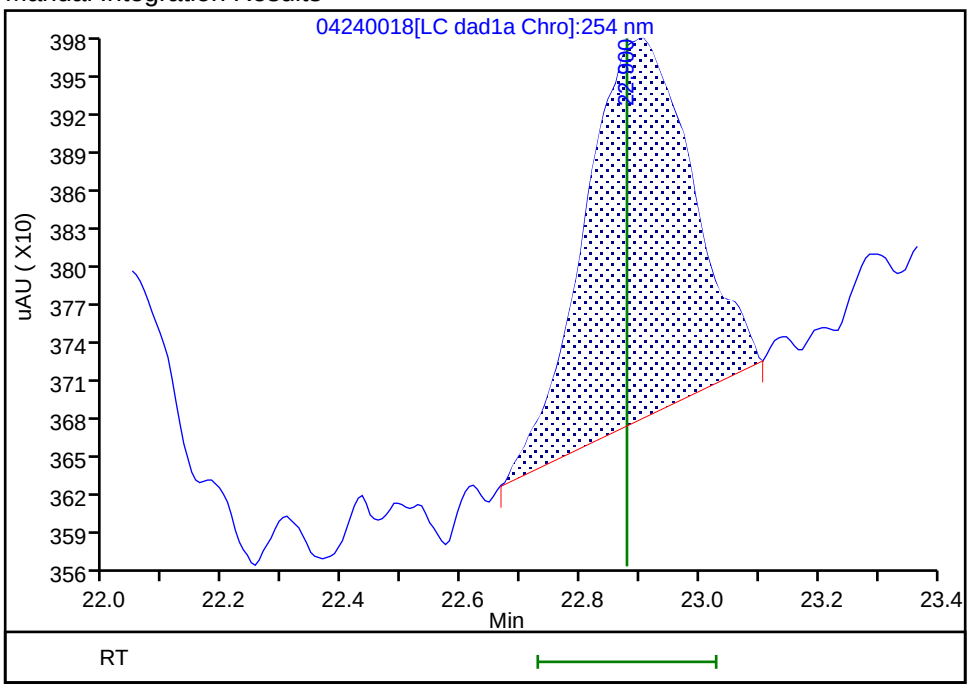
Processing Integration Results

RT: 22.91
Area: 5799
Amount: 0.013400
Amount Units: ug/ml



Manual Integration Results

RT: 22.90
Area: 3703
Amount: 0.009263
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:38:04 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Calibration / HMX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

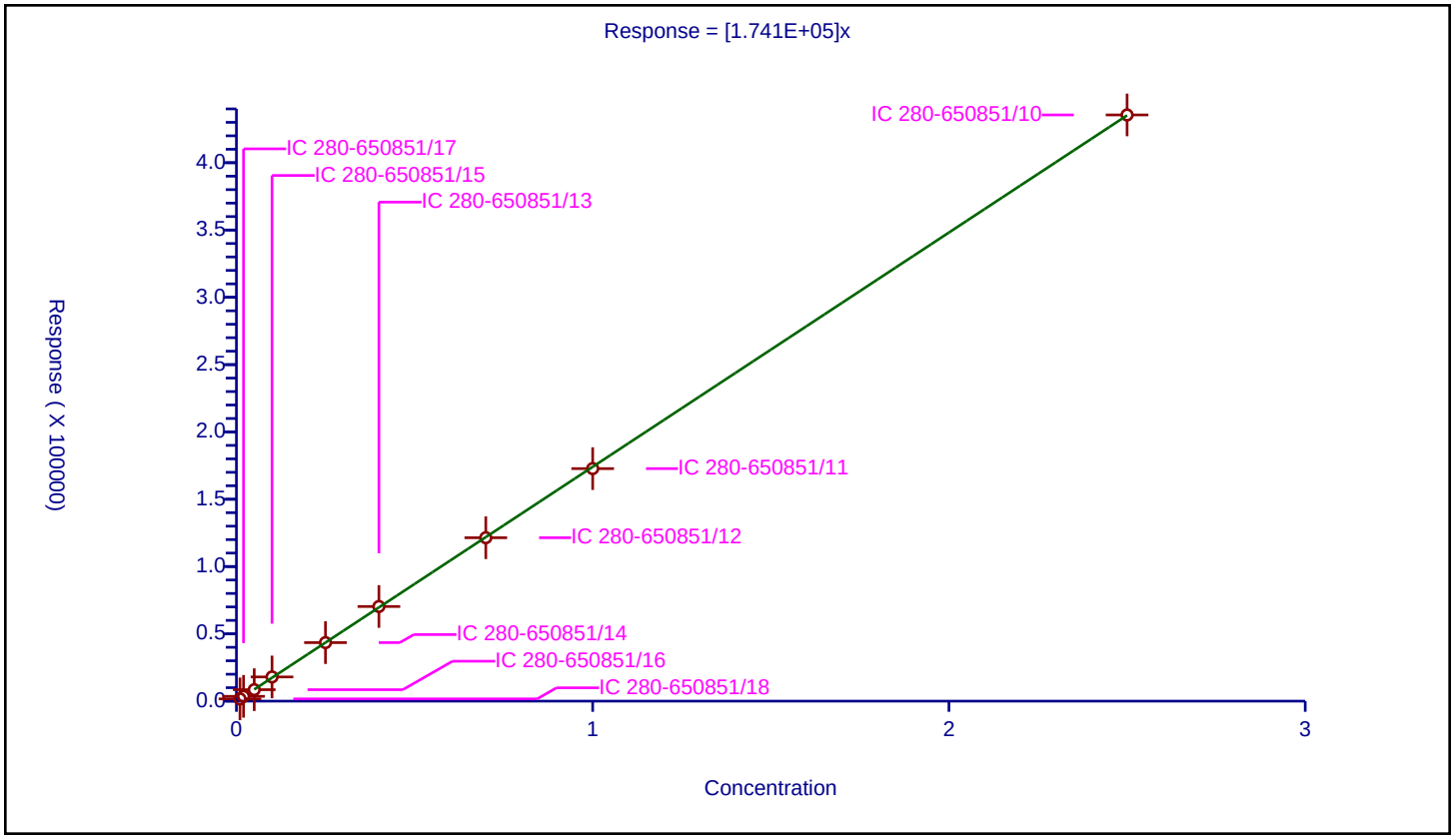
Curve Coefficients

Intercept:	0
Slope:	1.741E+05

Error Coefficients

Relative Standard Deviation:	2.2

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-650851/18	0.01	1677.0			167700.0	Y
2	IC 280-650851/17	0.02	3578.0			178900.0	Y
3	IC 280-650851/16	0.05	8509.0			170180.0	Y
4	IC 280-650851/15	0.1	17977.0			179770.0	Y
5	IC 280-650851/14	0.25	43487.0			173948.0	Y
6	IC 280-650851/13	0.4	70323.0			175807.5	Y
7	IC 280-650851/12	0.7	121397.0			173424.285714	Y
8	IC 280-650851/11	1.0	172751.0			172751.0	Y
9	IC 280-650851/10	2.5	435504.0			174201.6	Y



Calibration / 2,4,6-Trinitrophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

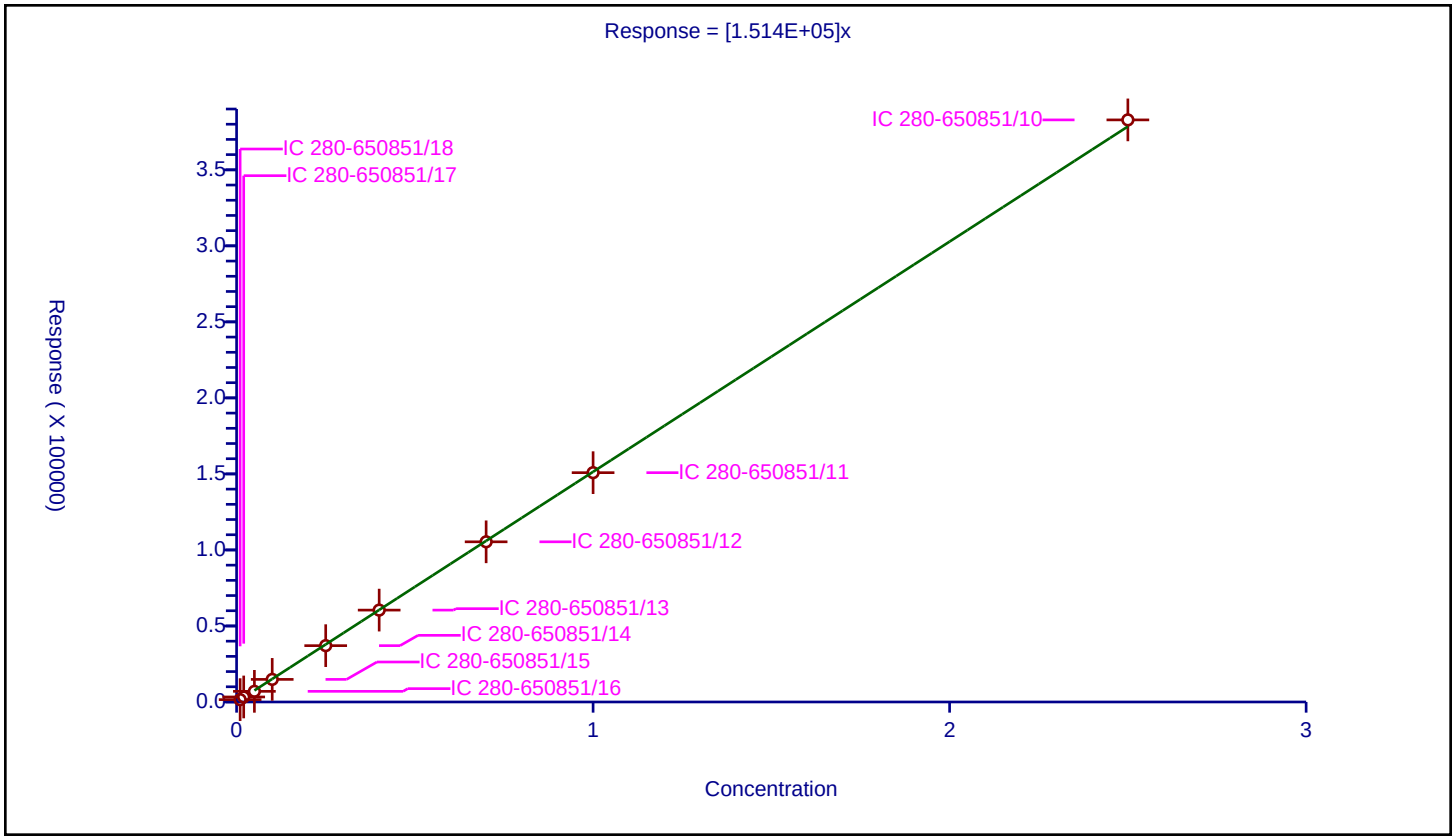
Curve Coefficients

Intercept:	0
Slope:	1.514E+05

Error Coefficients

Relative Standard Deviation:	4.3

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-650851/18	0.01	1549.0			154900.0	Y
2	IC 280-650851/17	0.02	3302.0			165100.0	Y
3	IC 280-650851/16	0.05	7014.0			140280.0	Y
4	IC 280-650851/15	0.1	14859.0			148590.0	Y
5	IC 280-650851/14	0.25	37043.0			148172.0	Y
6	IC 280-650851/13	0.4	60435.0			151087.5	Y
7	IC 280-650851/12	0.7	105341.0			150487.142857	Y
8	IC 280-650851/11	1.0	150820.0			150820.0	Y
9	IC 280-650851/10	2.5	382843.0			153137.2	Y



5/8/2024
6:07:23 AM

Calibration / RDX

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

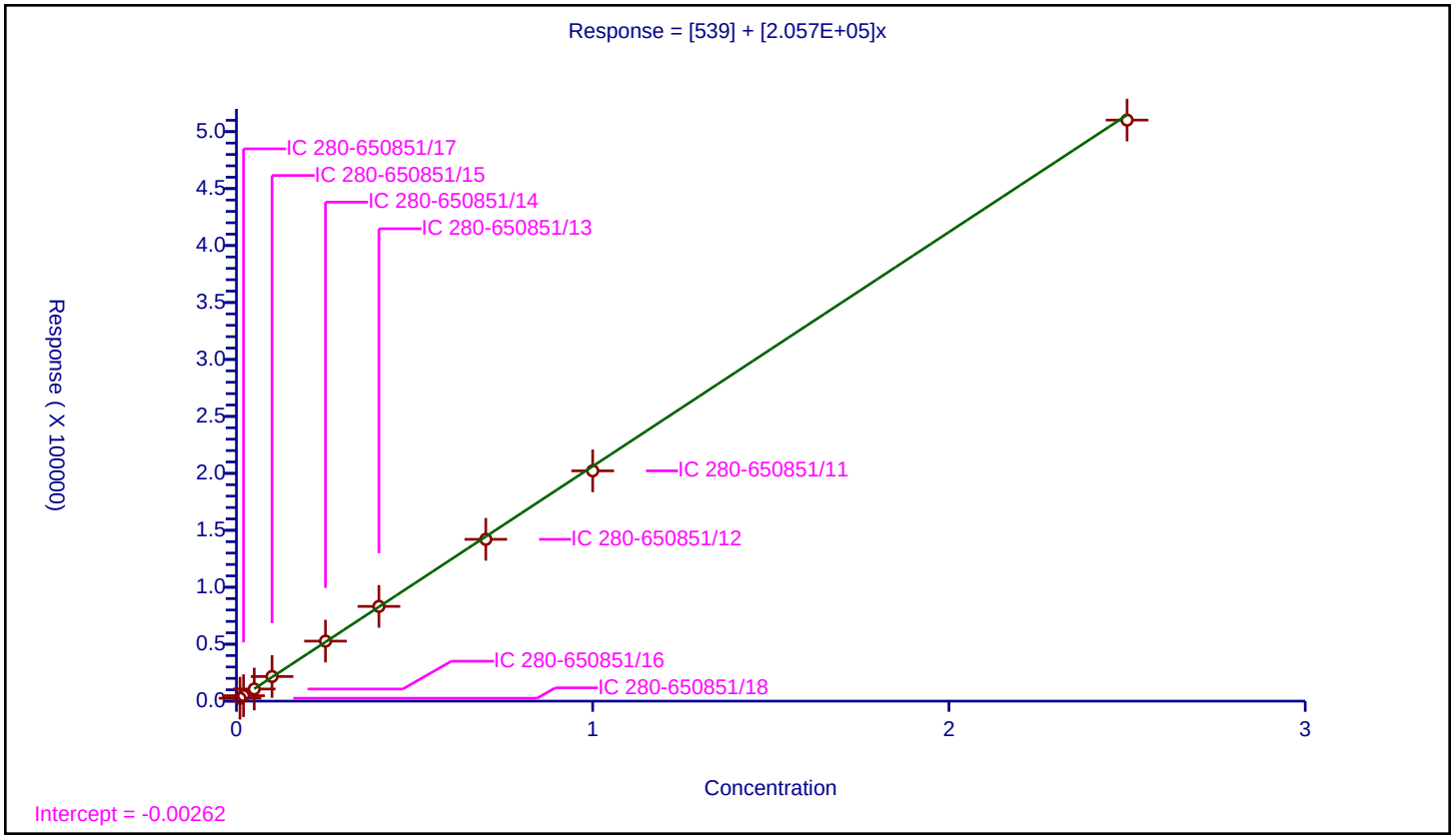
Curve Coefficients

Intercept:	539
Slope:	2.057E+05

Error Coefficients

Relative Standard Deviation:	2.2

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-650851/18	0.01	2562.0			256200.0	Y
2	IC 280-650851/17	0.02	4791.0			239550.0	Y
3	IC 280-650851/16	0.05	10654.0			213080.0	Y
4	IC 280-650851/15	0.1	21609.0			216090.0	Y
5	IC 280-650851/14	0.25	52707.0			210828.0	Y
6	IC 280-650851/13	0.4	83185.0			207962.5	Y
7	IC 280-650851/12	0.7	142066.0			202951.428571	Y
8	IC 280-650851/11	1.0	202193.0			202193.0	Y
9	IC 280-650851/10	2.5	510182.0			204072.8	Y



Calibration / Nitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

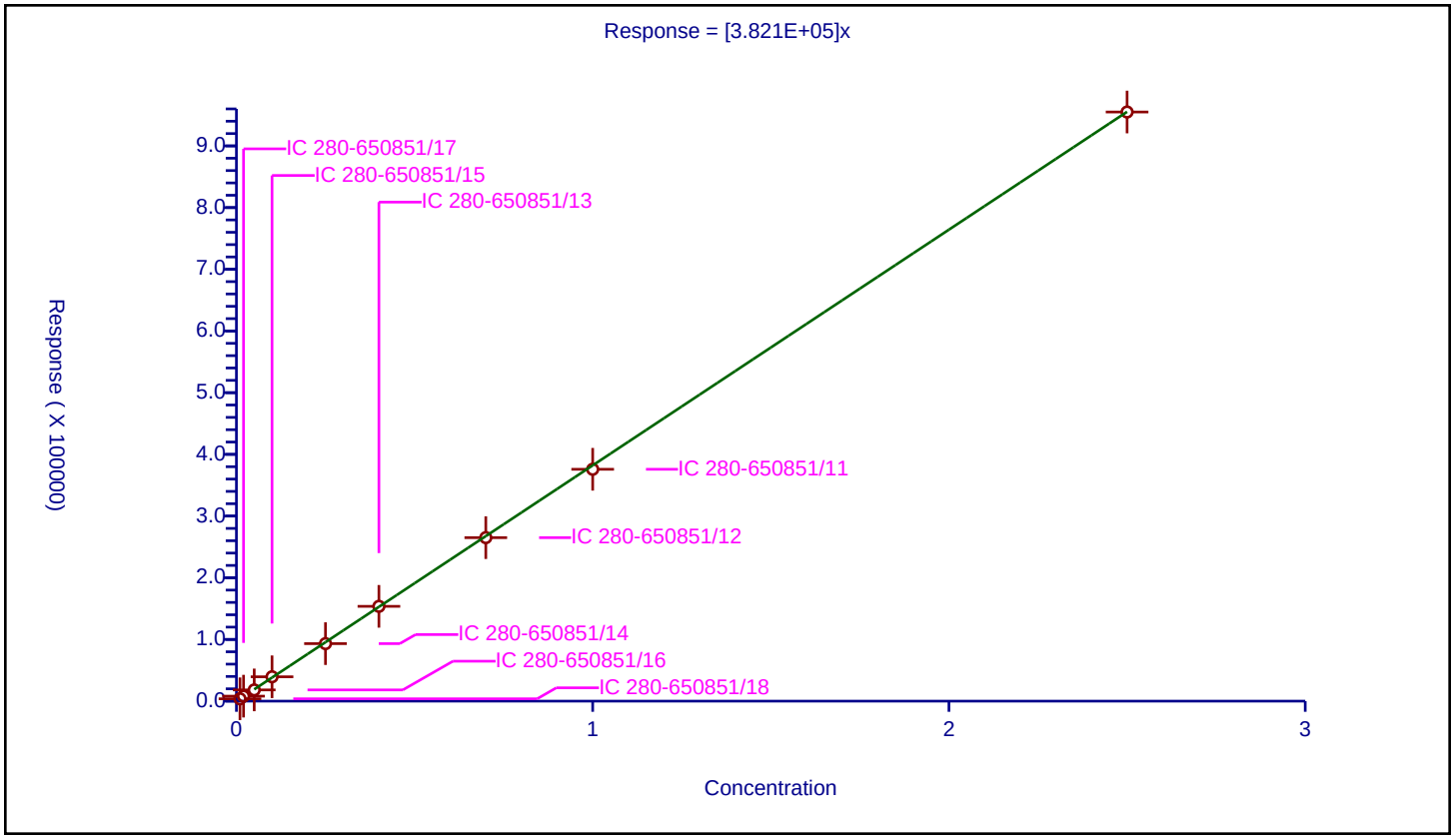
Curve Coefficients

Intercept:	0
Slope:	3.821E+05

Error Coefficients

Relative Standard Deviation:	3.2

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-650851/18	0.01	3818.0			381800.0	Y
2	IC 280-650851/17	0.02	8101.0			405050.0	Y
3	IC 280-650851/16	0.05	18193.0			363860.0	Y
4	IC 280-650851/15	0.1	39489.0			394890.0	Y
5	IC 280-650851/14	0.25	93225.0			372900.0	Y
6	IC 280-650851/13	0.4	153657.0			384142.5	Y
7	IC 280-650851/12	0.7	265026.0			378608.571429	Y
8	IC 280-650851/11	1.0	375845.0			375845.0	Y
9	IC 280-650851/10	2.5	954967.0			381986.8	Y



5/8/2024
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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

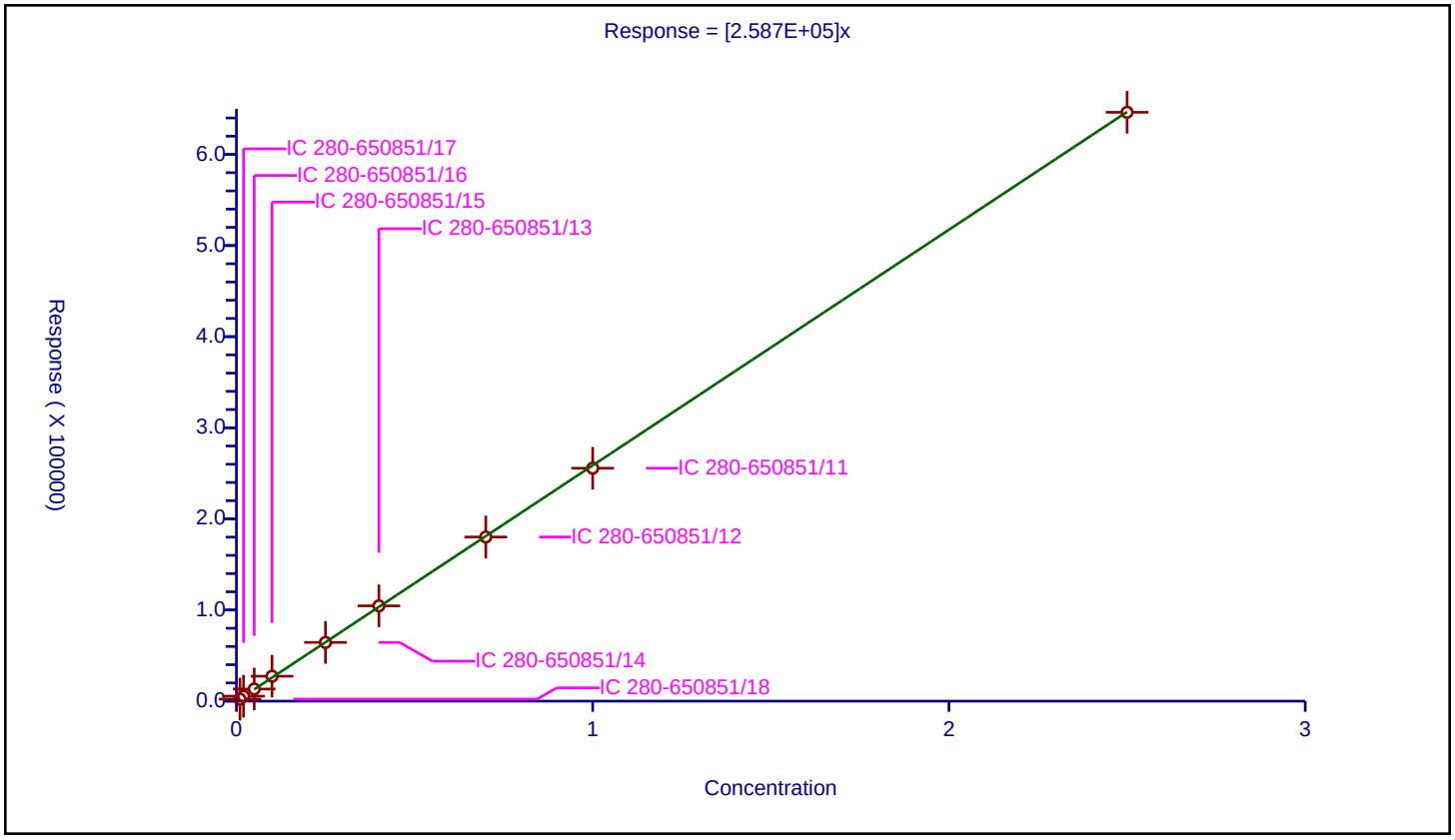
Curve Coefficients

Intercept:	0
Slope:	2.587E+05

Error Coefficients

Relative Standard Deviation:	5.7

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-650851/18	0.01	2237.0			223700.0	Y
2	IC 280-650851/17	0.02	5474.0			273700.0	Y
3	IC 280-650851/16	0.05	13324.0			266480.0	Y
4	IC 280-650851/15	0.1	27370.0			273700.0	Y
5	IC 280-650851/14	0.25	64431.0			257724.0	Y
6	IC 280-650851/13	0.4	104562.0			261405.0	Y
7	IC 280-650851/12	0.7	180143.0			257347.142857	Y
8	IC 280-650851/11	1.0	255644.0			255644.0	Y
9	IC 280-650851/10	2.5	646251.0			258500.4	Y



5/8/2024
6:07:23 AM

Calibration / 3,5-Dinitroaniline

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

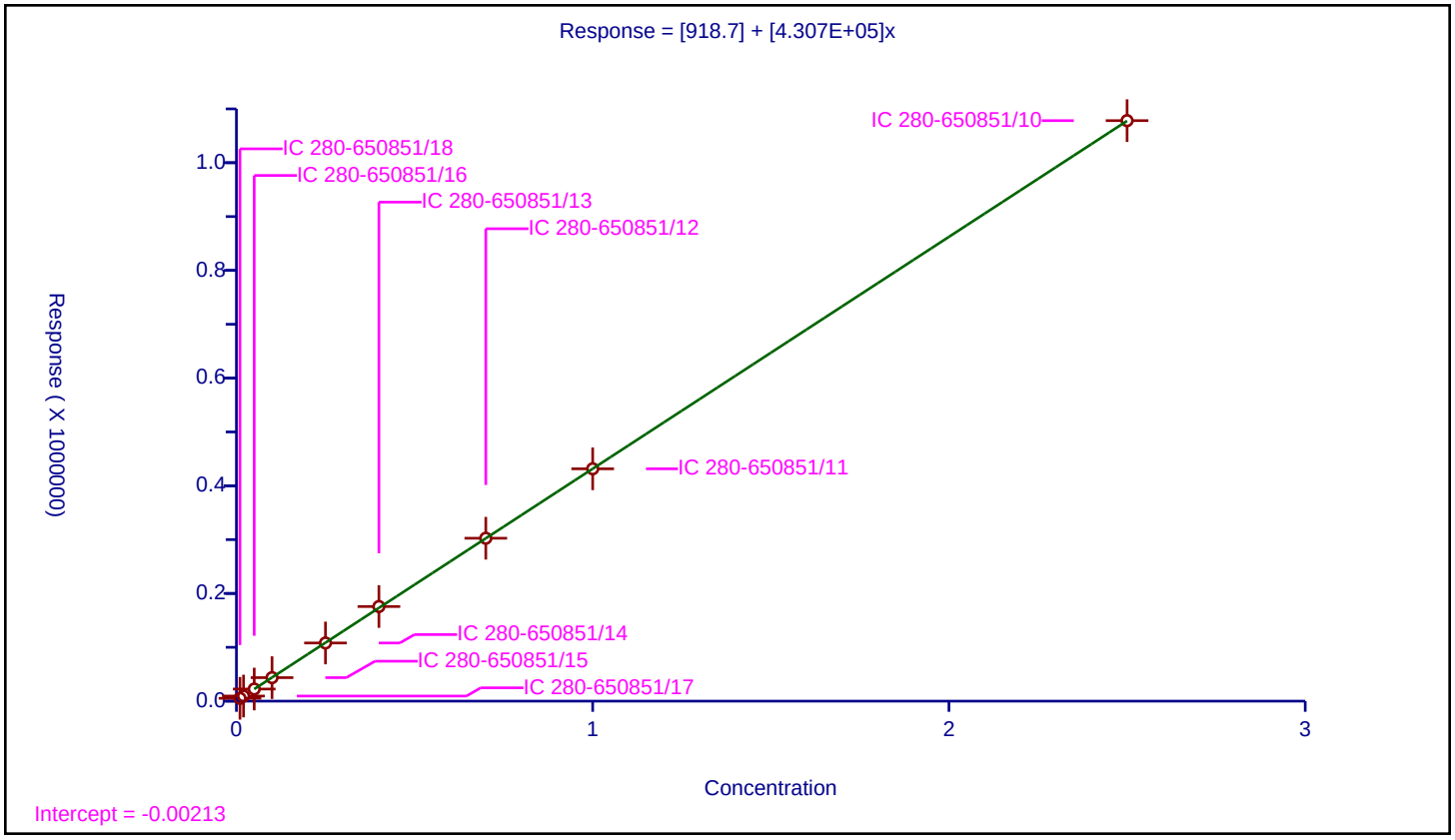
Curve Coefficients

Intercept:	918.7
Slope:	4.307E+05

Error Coefficients

Relative Standard Deviation:	0.7

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-650851/18	0.01	5245.0			524500.0	Y
2	IC 280-650851/17	0.02	9463.0			473150.0	Y
3	IC 280-650851/16	0.05	22481.0			449620.0	Y
4	IC 280-650851/15	0.1	43670.0			436700.0	Y
5	IC 280-650851/14	0.25	108023.0			432092.0	Y
6	IC 280-650851/13	0.4	175740.0			439350.0	Y
7	IC 280-650851/12	0.7	302587.0			432267.142857	Y
8	IC 280-650851/11	1.0	431522.0			431522.0	Y
9	IC 280-650851/10	2.5	1078184.0			431273.6	Y



5/8/2024
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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

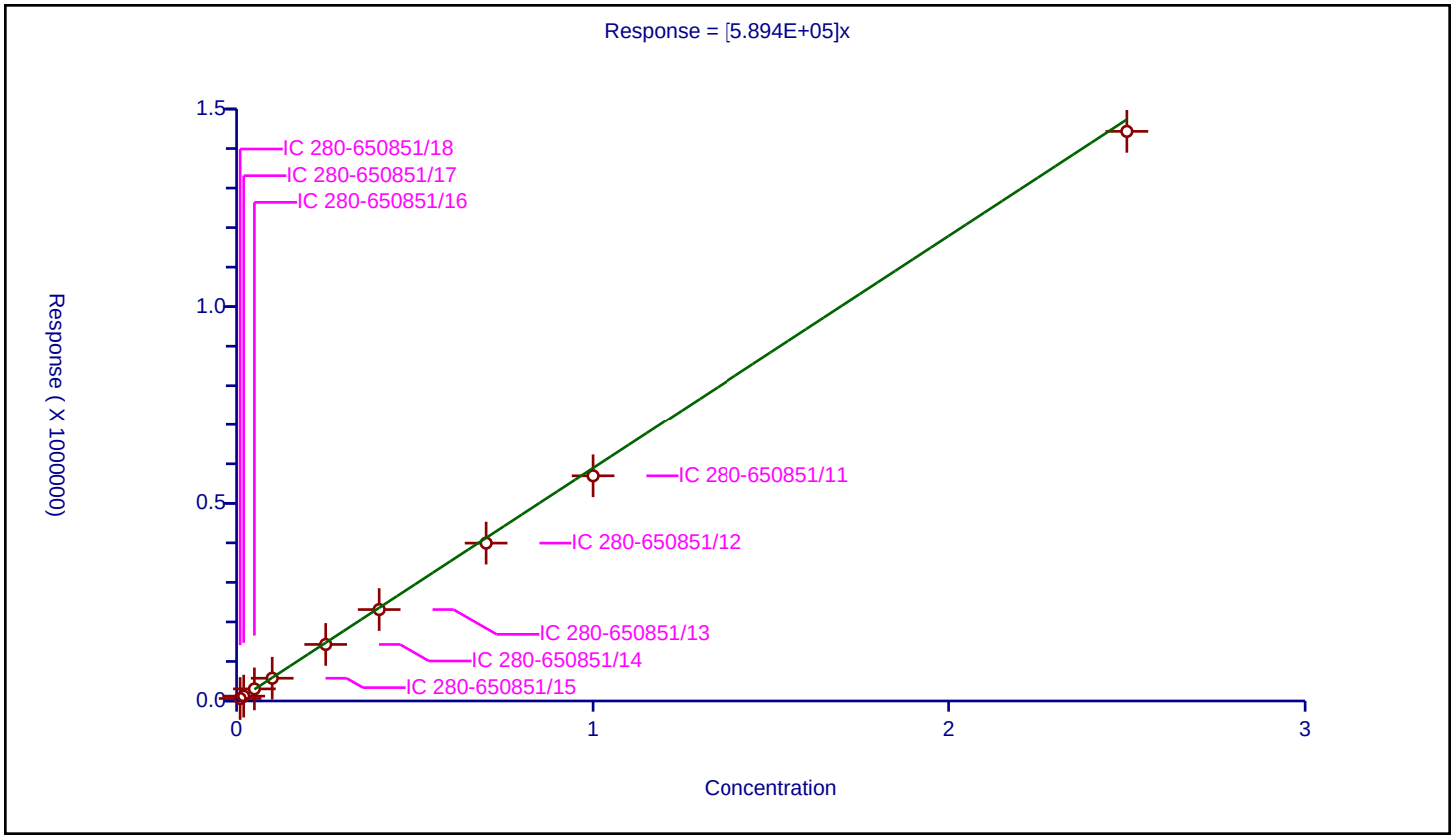
Curve Coefficients

Intercept:	0
Slope:	5.894E+05

Error Coefficients

Relative Standard Deviation:	4.1

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-650851/18	0.01	6332.0			633200.0	Y
2	IC 280-650851/17	0.02	12318.0			615900.0	Y
3	IC 280-650851/16	0.05	30596.0			611920.0	Y
4	IC 280-650851/15	0.1	57592.0			575920.0	Y
5	IC 280-650851/14	0.25	143019.0			572076.0	Y
6	IC 280-650851/13	0.4	231256.0			578140.0	Y
7	IC 280-650851/12	0.7	399408.0			570582.857143	Y
8	IC 280-650851/11	1.0	569625.0			569625.0	Y
9	IC 280-650851/10	2.5	1443498.0			577399.2	Y



Calibration / Nitroglycerin

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

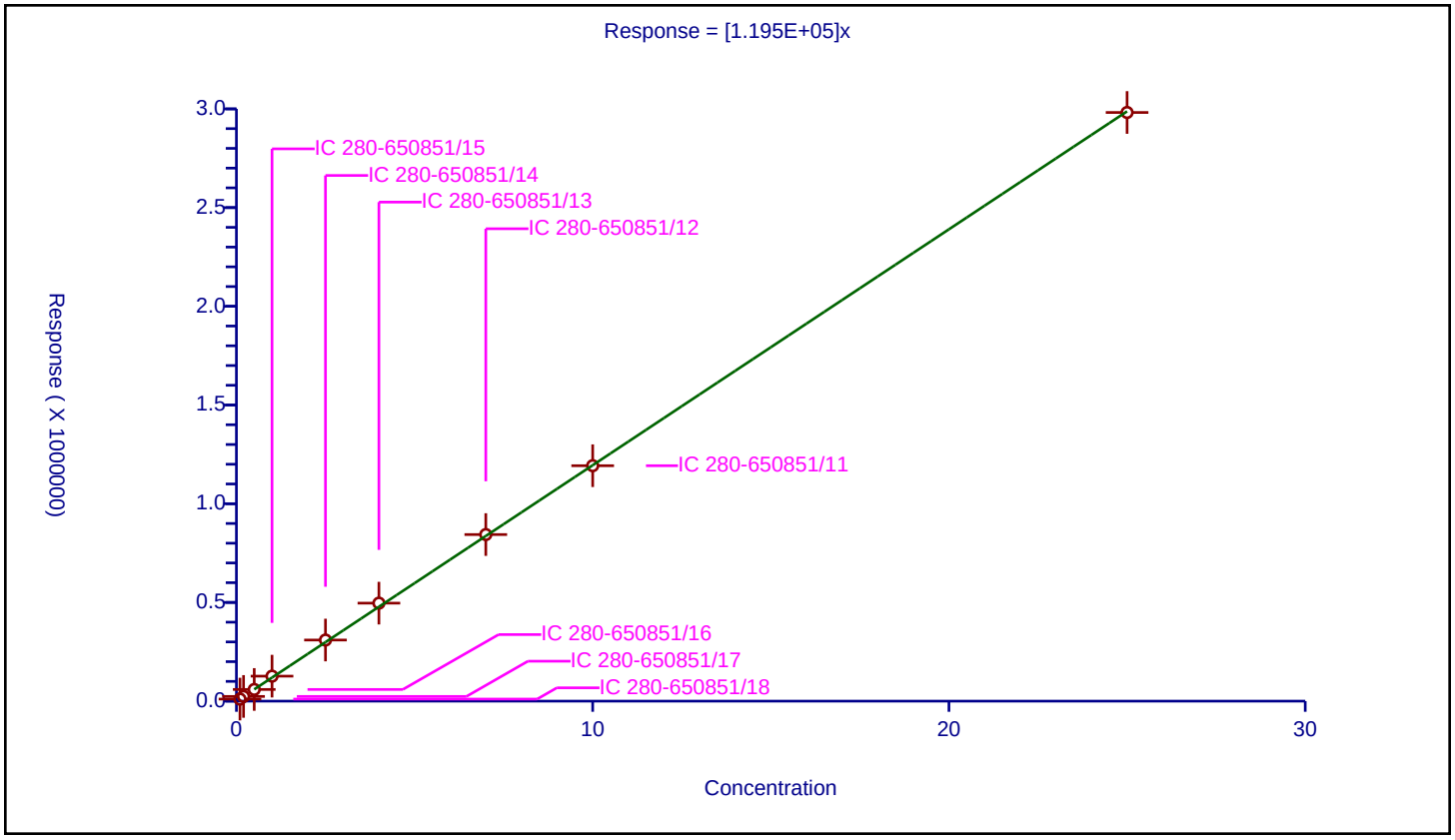
Curve Coefficients

Intercept:	0
Slope:	1.195E+05

Error Coefficients

Relative Standard Deviation:	5.3

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-650851/18	0.1	10431.0			104310.0	Y
2	IC 280-650851/17	0.2	23877.0			119385.0	Y
3	IC 280-650851/16	0.5	59130.0			118260.0	Y
4	IC 280-650851/15	1.0	126558.0			126558.0	Y
5	IC 280-650851/14	2.5	309600.0			123840.0	Y
6	IC 280-650851/13	4.0	496432.0			124108.0	Y
7	IC 280-650851/12	7.0	843844.0			120549.142857	Y
8	IC 280-650851/11	10.0	1192597.0			119259.7	Y
9	IC 280-650851/10	25.0	2981826.0			119273.04	Y



Calibration / o-Nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

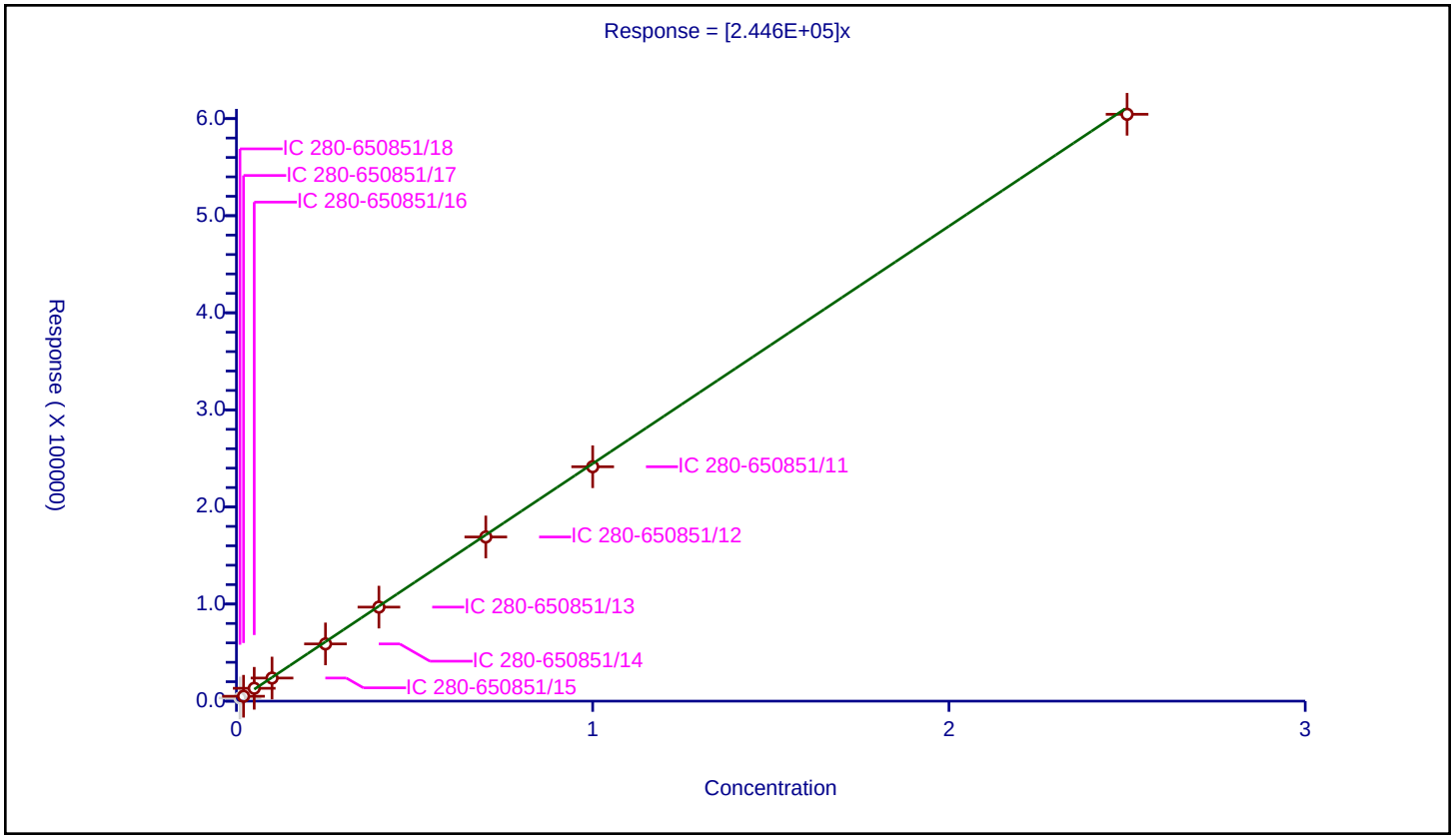
Curve Coefficients

Intercept:	0
Slope:	2.446E+05

Error Coefficients

Relative Standard Deviation:	3.8

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-650851/18	0.01	3289.0			328900.0	N
2	IC 280-650851/17	0.02	5024.0			251200.0	Y
3	IC 280-650851/16	0.05	13247.0			264940.0	Y
4	IC 280-650851/15	0.1	23799.0			237990.0	Y
5	IC 280-650851/14	0.25	58941.0			235764.0	Y
6	IC 280-650851/13	0.4	96839.0			242097.5	Y
7	IC 280-650851/12	0.7	169093.0			241561.428571	Y
8	IC 280-650851/11	1.0	241414.0			241414.0	Y
9	IC 280-650851/10	2.5	604470.0			241788.0	Y



Calibration / p-Nitrotoluene

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

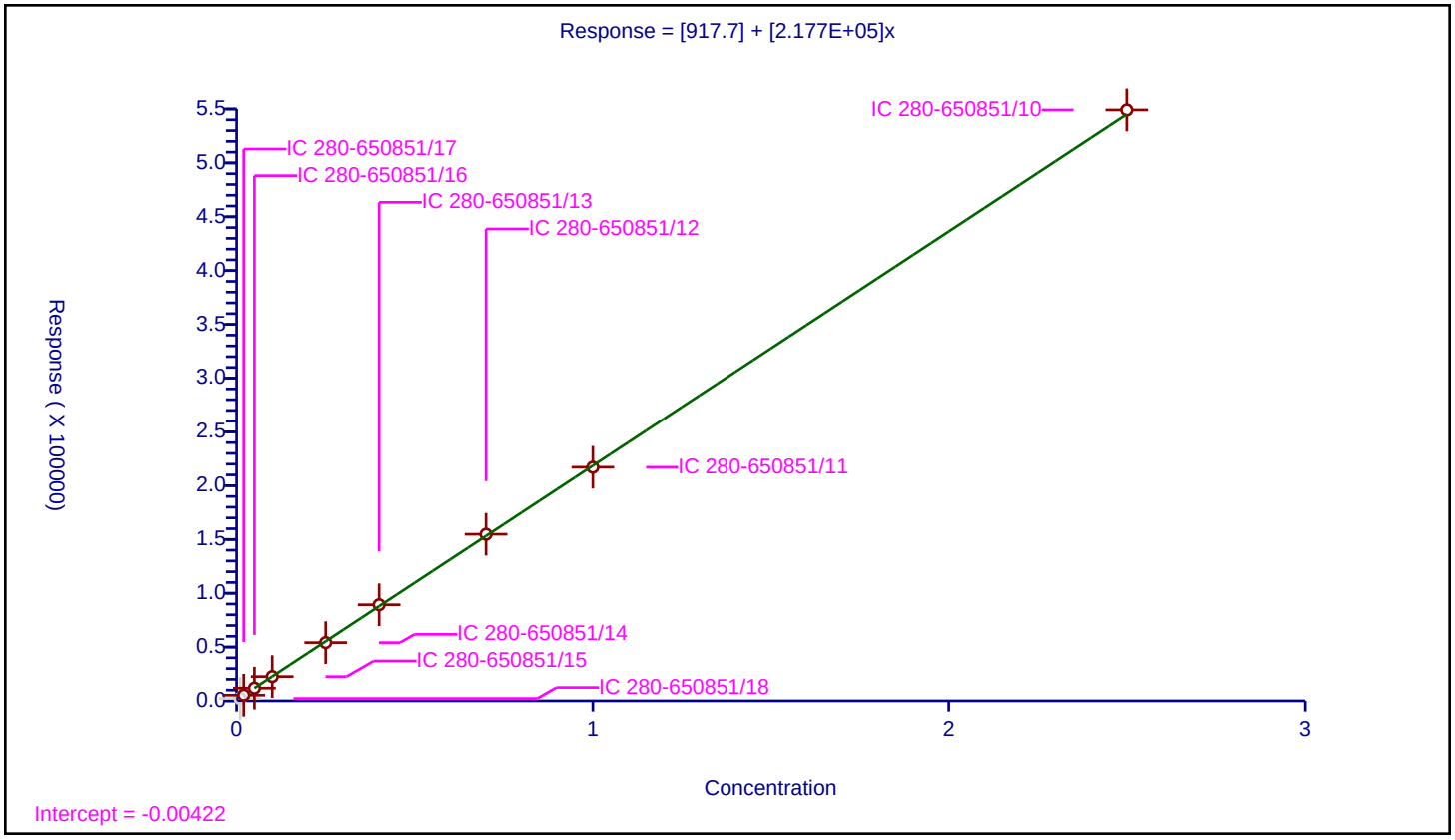
Curve Coefficients

Intercept:	917.7
Slope:	2.177E+05

Error Coefficients

Relative Standard Deviation:	1.3

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-650851/18	0.01	2223.0			222300.0	N
2	IC 280-650851/17	0.02	5278.0			263900.0	Y
3	IC 280-650851/16	0.05	11825.0			236500.0	Y
4	IC 280-650851/15	0.1	22549.0			225490.0	Y
5	IC 280-650851/14	0.25	54130.0			216520.0	Y
6	IC 280-650851/13	0.4	89334.0			223335.0	Y
7	IC 280-650851/12	0.7	154841.0			221201.428571	Y
8	IC 280-650851/11	1.0	217154.0			217154.0	Y
9	IC 280-650851/10	2.5	549133.0			219653.2	Y



5/8/2024
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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

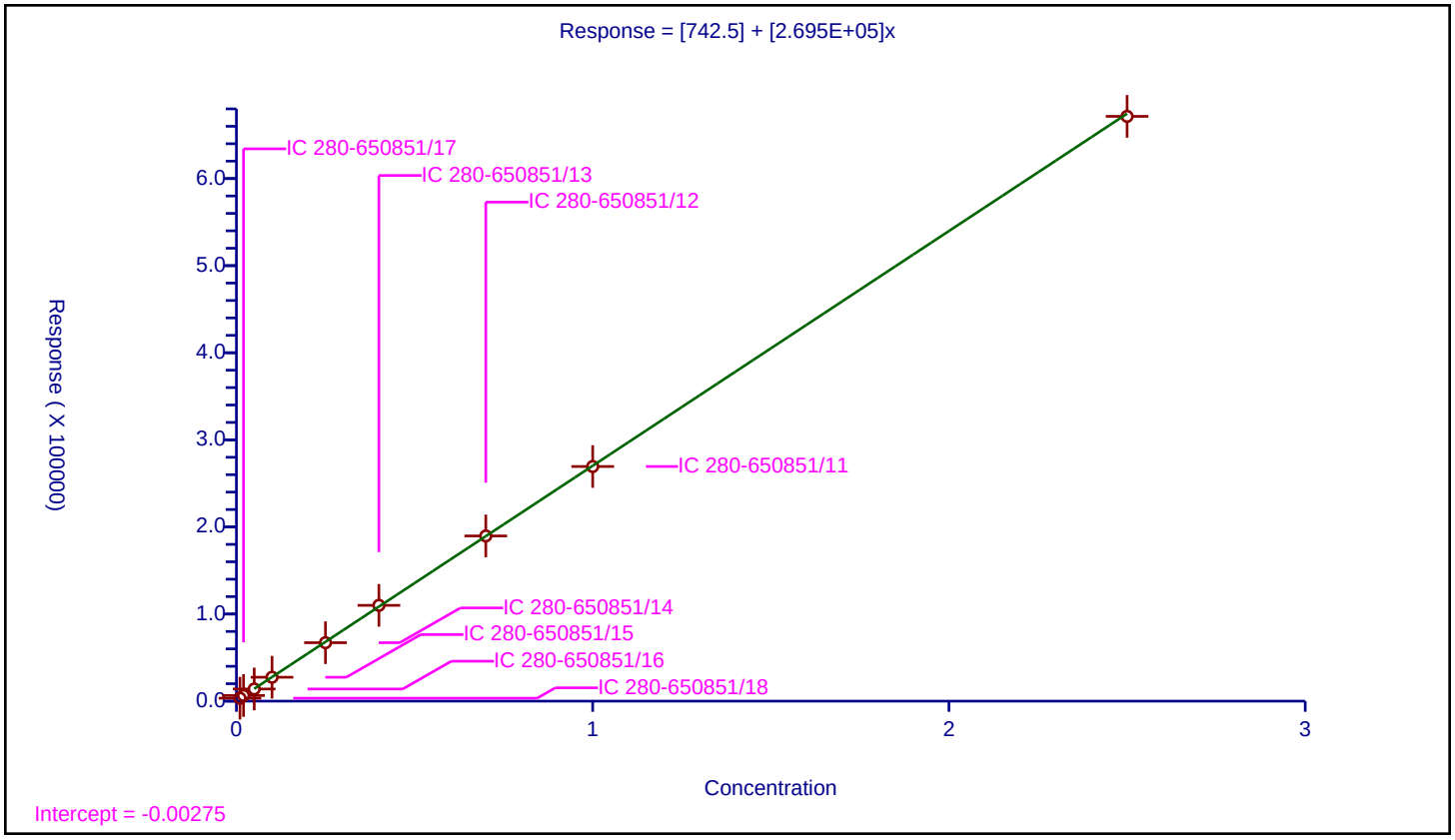
Curve Coefficients

Intercept:	742.5
Slope:	2.695E+05

Error Coefficients

Relative Standard Deviation:	2.8

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-650851/18	0.01	3366.0			336600.0	Y
2	IC 280-650851/17	0.02	6474.0			323700.0	Y
3	IC 280-650851/16	0.05	13955.0			279100.0	Y
4	IC 280-650851/15	0.1	27449.0			274490.0	Y
5	IC 280-650851/14	0.25	67115.0			268460.0	Y
6	IC 280-650851/13	0.4	109971.0			274927.5	Y
7	IC 280-650851/12	0.7	189660.0			270942.857143	Y
8	IC 280-650851/11	1.0	269382.0			269382.0	Y
9	IC 280-650851/10	2.5	671412.0			268564.8	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

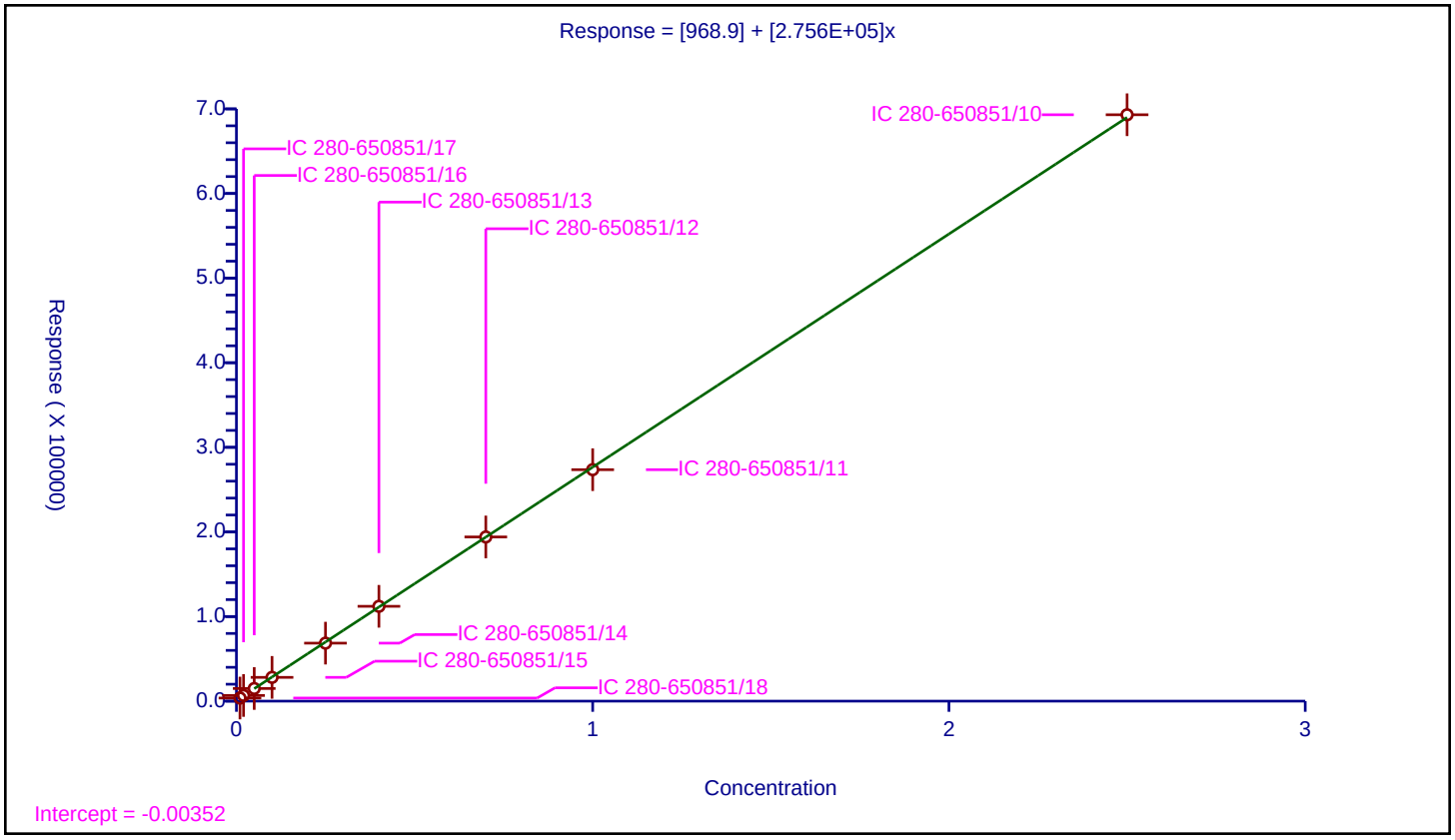
Curve Coefficients

Intercept:	968.9
Slope:	2.756E+05

Error Coefficients

Relative Standard Deviation:	2.0

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-650851/18	0.01	3672.0			367200.0	Y
2	IC 280-650851/17	0.02	6685.0			334250.0	Y
3	IC 280-650851/16	0.05	14941.0			298820.0	Y
4	IC 280-650851/15	0.1	28103.0			281030.0	Y
5	IC 280-650851/14	0.25	68559.0			274236.0	Y
6	IC 280-650851/13	0.4	112076.0			280190.0	Y
7	IC 280-650851/12	0.7	194048.0			277211.428571	Y
8	IC 280-650851/11	1.0	273569.0			273569.0	Y
9	IC 280-650851/10	2.5	693064.0			277225.6	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

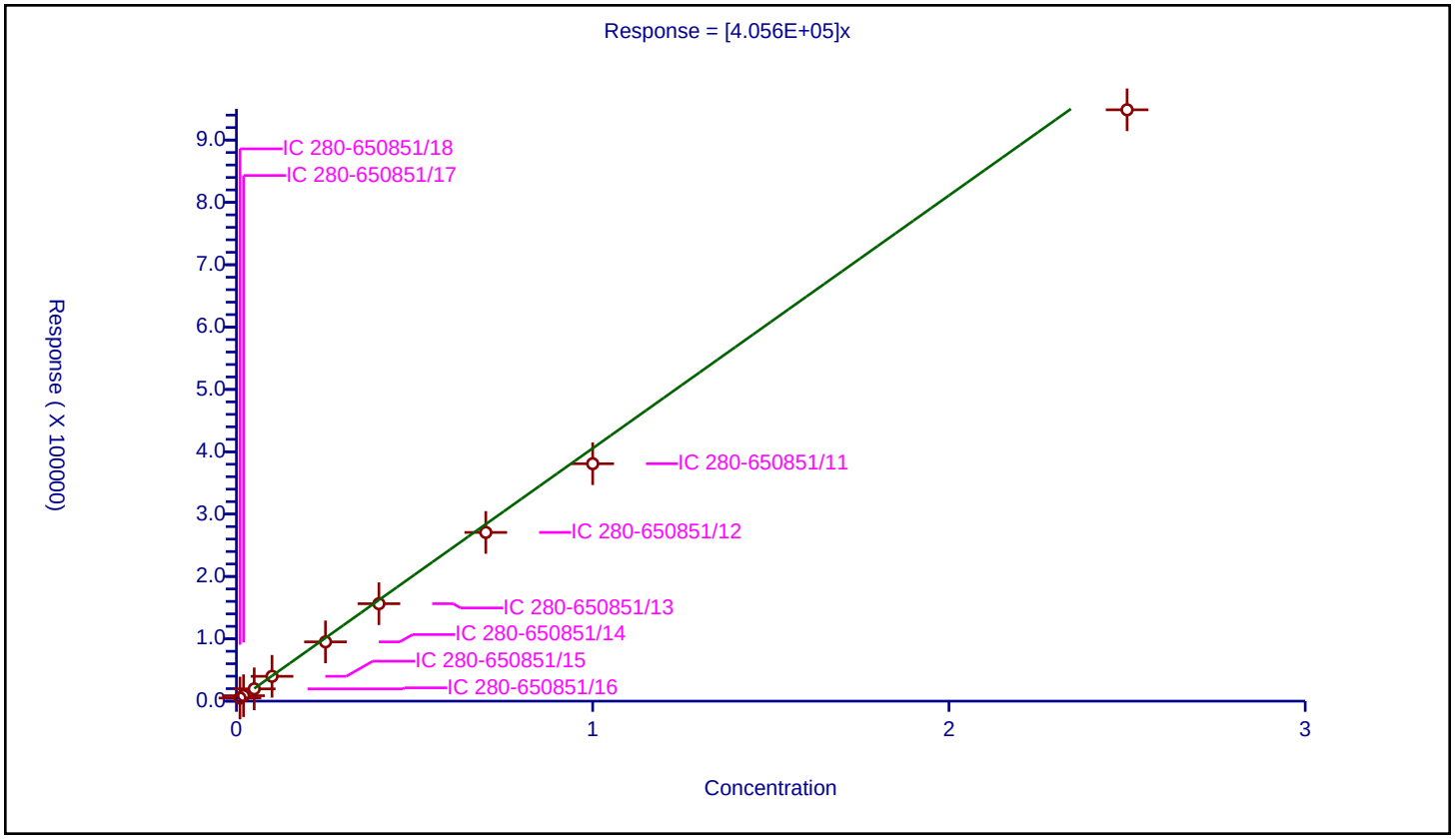
Curve Coefficients

Intercept:	0
Slope:	4.056E+05

Error Coefficients

Relative Standard Deviation:	9.9

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-650851/18	0.01	5022.0			502200.0	Y
2	IC 280-650851/17	0.02	8733.0			436650.0	Y
3	IC 280-650851/16	0.05	19735.0			394700.0	Y
4	IC 280-650851/15	0.1	39853.0			398530.0	Y
5	IC 280-650851/14	0.25	95082.0			380328.0	Y
6	IC 280-650851/13	0.4	156312.0			390780.0	Y
7	IC 280-650851/12	0.7	270634.0			386620.0	Y
8	IC 280-650851/11	1.0	380835.0			380835.0	Y
9	IC 280-650851/10	2.5	948541.0			379416.4	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

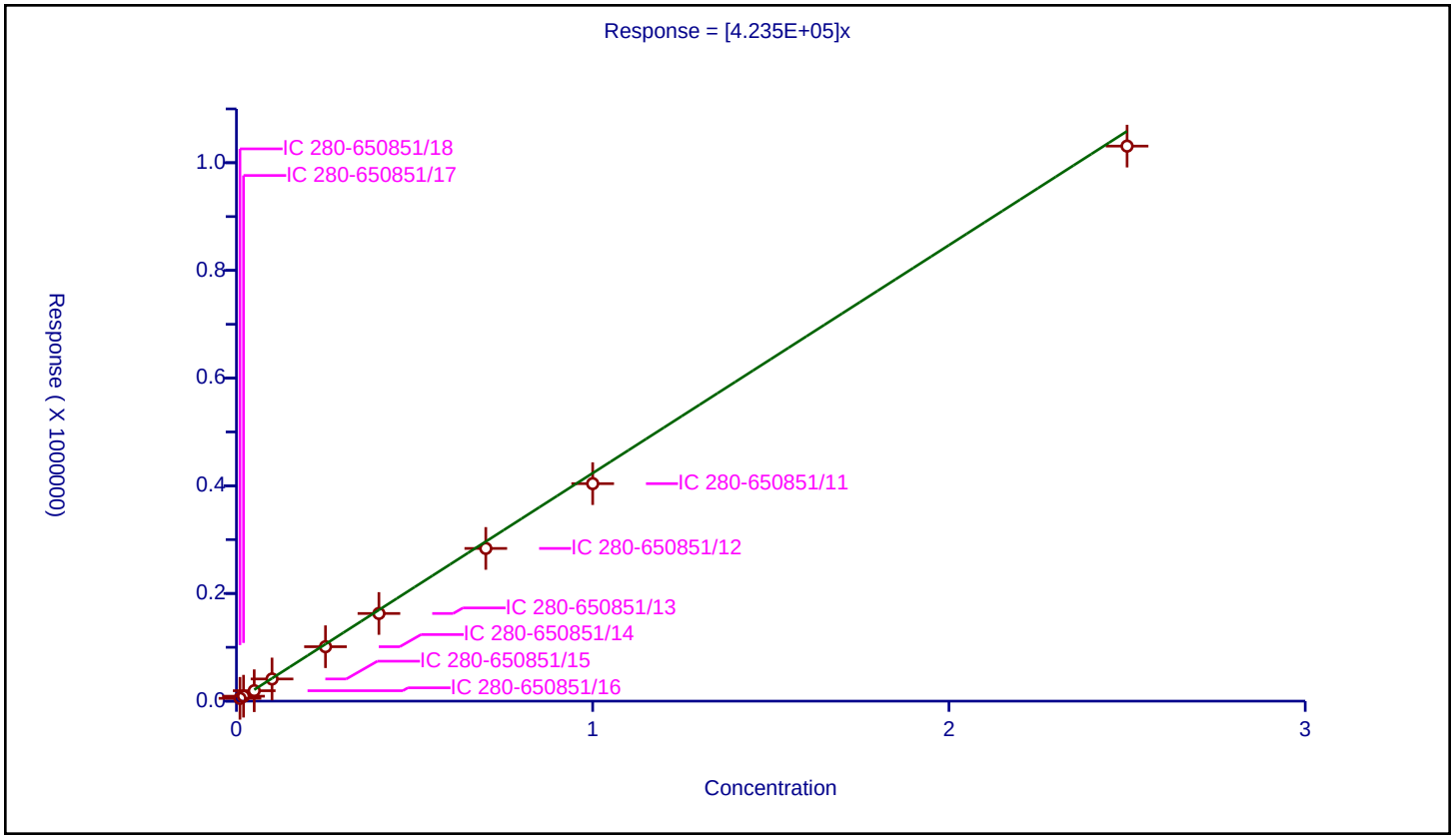
Curve Coefficients

Intercept:	0
Slope:	4.235E+05

Error Coefficients

Relative Standard Deviation:	9.8

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-650851/18	0.01	5210.0			521000.0	Y
2	IC 280-650851/17	0.02	9167.0			458350.0	Y
3	IC 280-650851/16	0.05	19358.0			387160.0	Y
4	IC 280-650851/15	0.1	41177.0			411770.0	Y
5	IC 280-650851/14	0.25	101067.0			404268.0	Y
6	IC 280-650851/13	0.4	162815.0			407037.5	Y
7	IC 280-650851/12	0.7	283624.0			405177.142857	Y
8	IC 280-650851/11	1.0	403965.0			403965.0	Y
9	IC 280-650851/10	2.5	1030907.0			412362.8	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

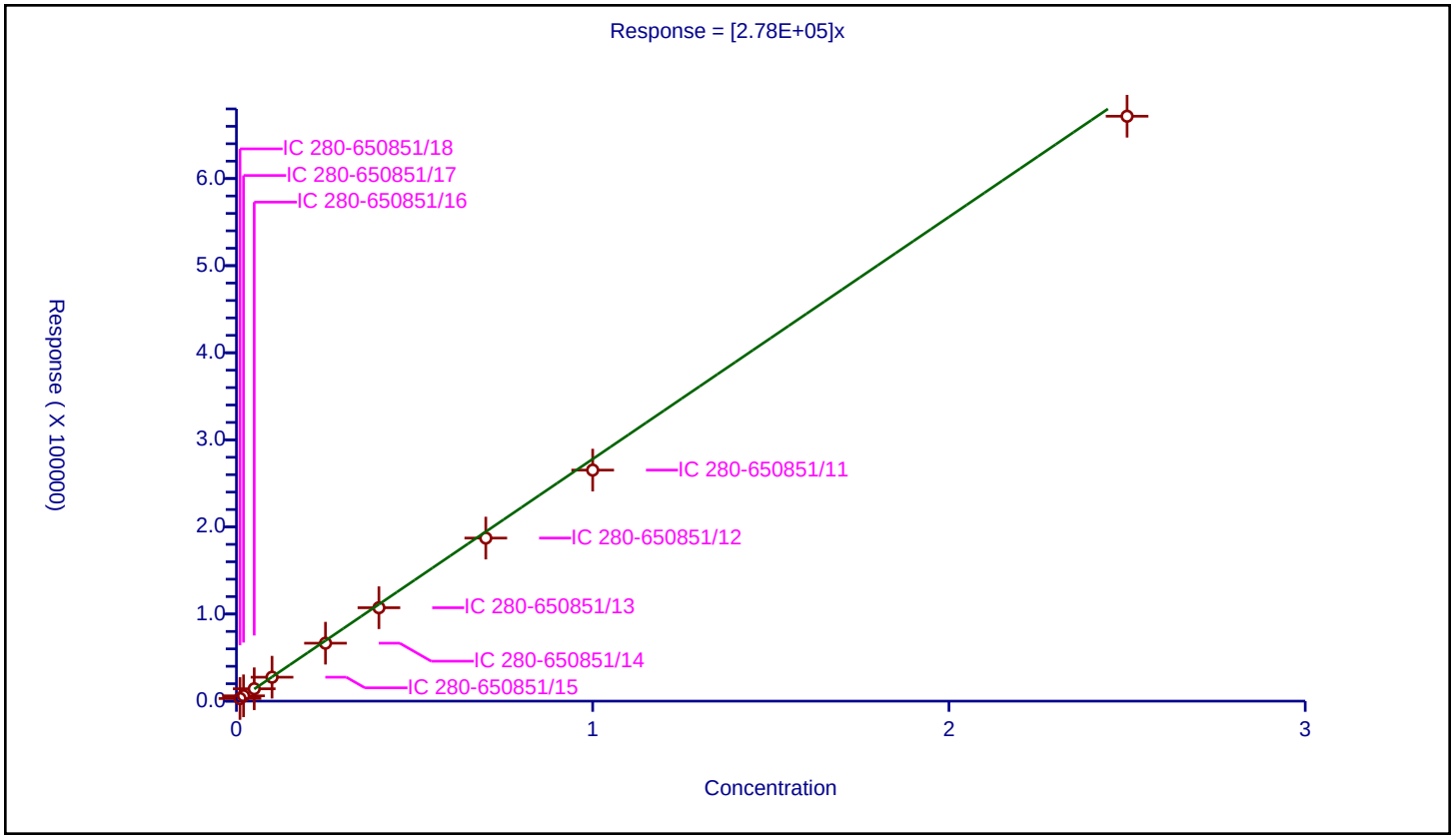
Curve Coefficients

Intercept:	0
Slope:	2.78E+05

Error Coefficients

Relative Standard Deviation:	5.6

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-650851/18	0.01	3016.0			301600.0	Y
2	IC 280-650851/17	0.02	6113.0			305650.0	Y
3	IC 280-650851/16	0.05	14197.0			283940.0	Y
4	IC 280-650851/15	0.1	27487.0			274870.0	Y
5	IC 280-650851/14	0.25	66539.0			266156.0	Y
6	IC 280-650851/13	0.4	107267.0			268167.5	Y
7	IC 280-650851/12	0.7	187213.0			267447.142857	Y
8	IC 280-650851/11	1.0	265267.0			265267.0	Y
9	IC 280-650851/10	2.5	671582.0			268632.8	Y



Calibration / 2,4-Dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

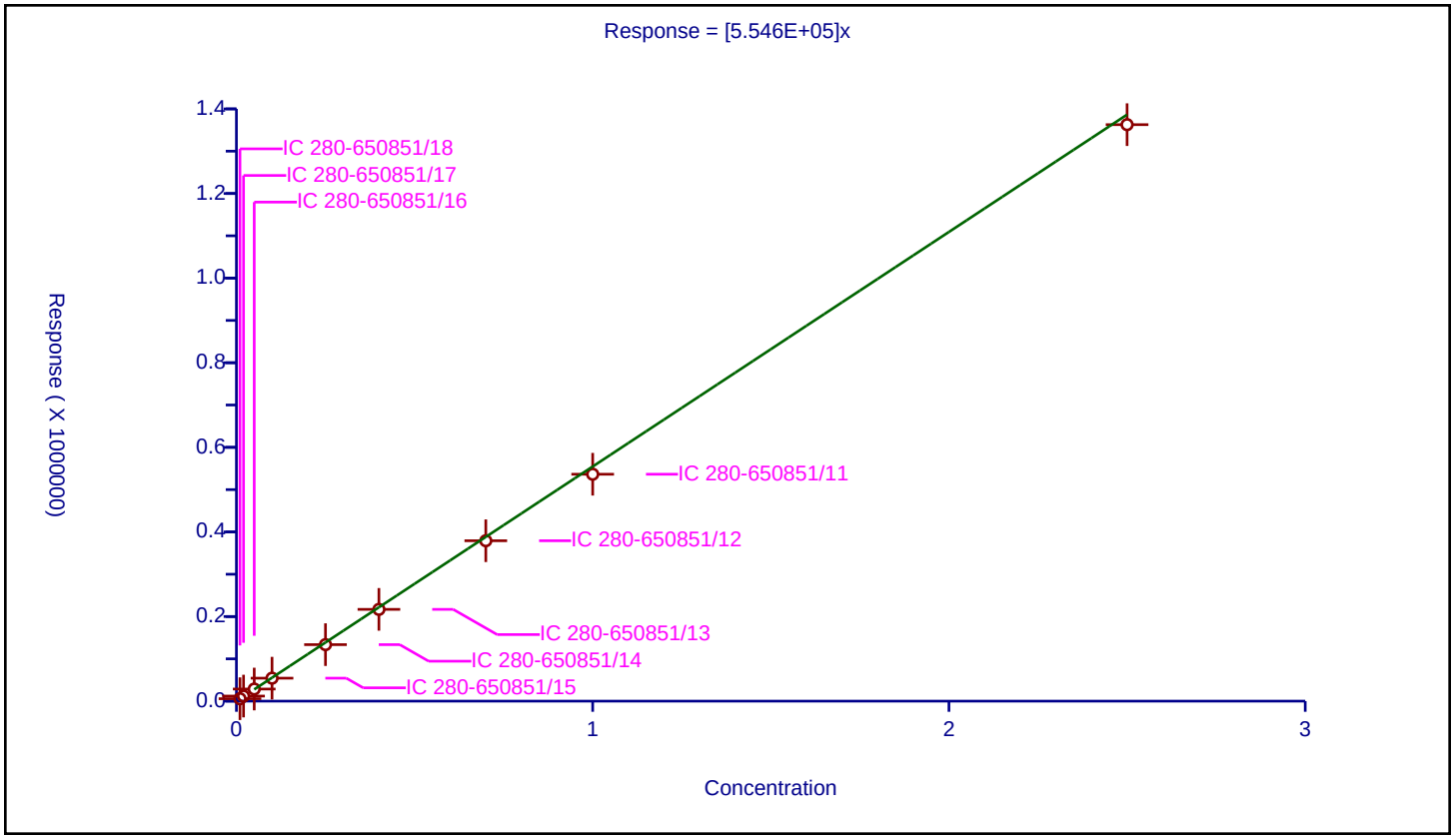
Curve Coefficients

Intercept:	0
Slope:	5.546E+05

Error Coefficients

Relative Standard Deviation:	4.1

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-650851/18	0.01	5764.0			576400.0	Y
2	IC 280-650851/17	0.02	12005.0			600250.0	Y
3	IC 280-650851/16	0.05	28589.0			571780.0	Y
4	IC 280-650851/15	0.1	54294.0			542940.0	Y
5	IC 280-650851/14	0.25	133579.0			534316.0	Y
6	IC 280-650851/13	0.4	216895.0			542237.5	Y
7	IC 280-650851/12	0.7	379151.0			541644.285714	Y
8	IC 280-650851/11	1.0	536407.0			536407.0	Y
9	IC 280-650851/10	2.5	1362753.0			545101.2	Y



Calibration / Tetryl

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

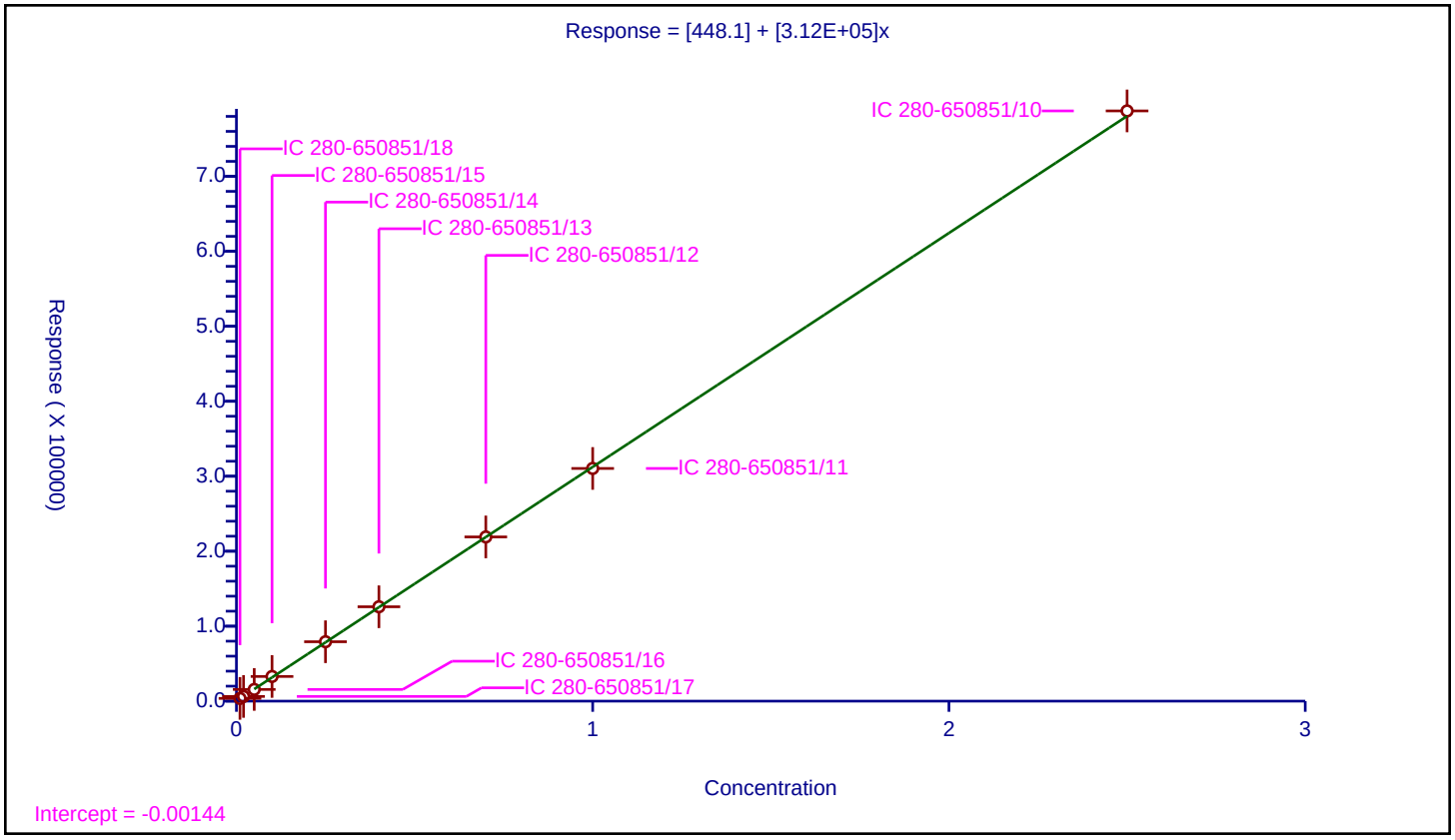
Curve Coefficients

Intercept:	448.1
Slope:	3.12E+05

Error Coefficients

Relative Standard Deviation:	3.5

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-650851/18	0.01	3675.0			367500.0	Y
2	IC 280-650851/17	0.02	6268.0			313400.0	Y
3	IC 280-650851/16	0.05	15630.0			312600.0	Y
4	IC 280-650851/15	0.1	32920.0			329200.0	Y
5	IC 280-650851/14	0.25	79229.0			316916.0	Y
6	IC 280-650851/13	0.4	125893.0			314732.5	Y
7	IC 280-650851/12	0.7	219045.0			312921.428571	Y
8	IC 280-650851/11	1.0	310388.0			310388.0	Y
9	IC 280-650851/10	2.5	787307.0			314922.8	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

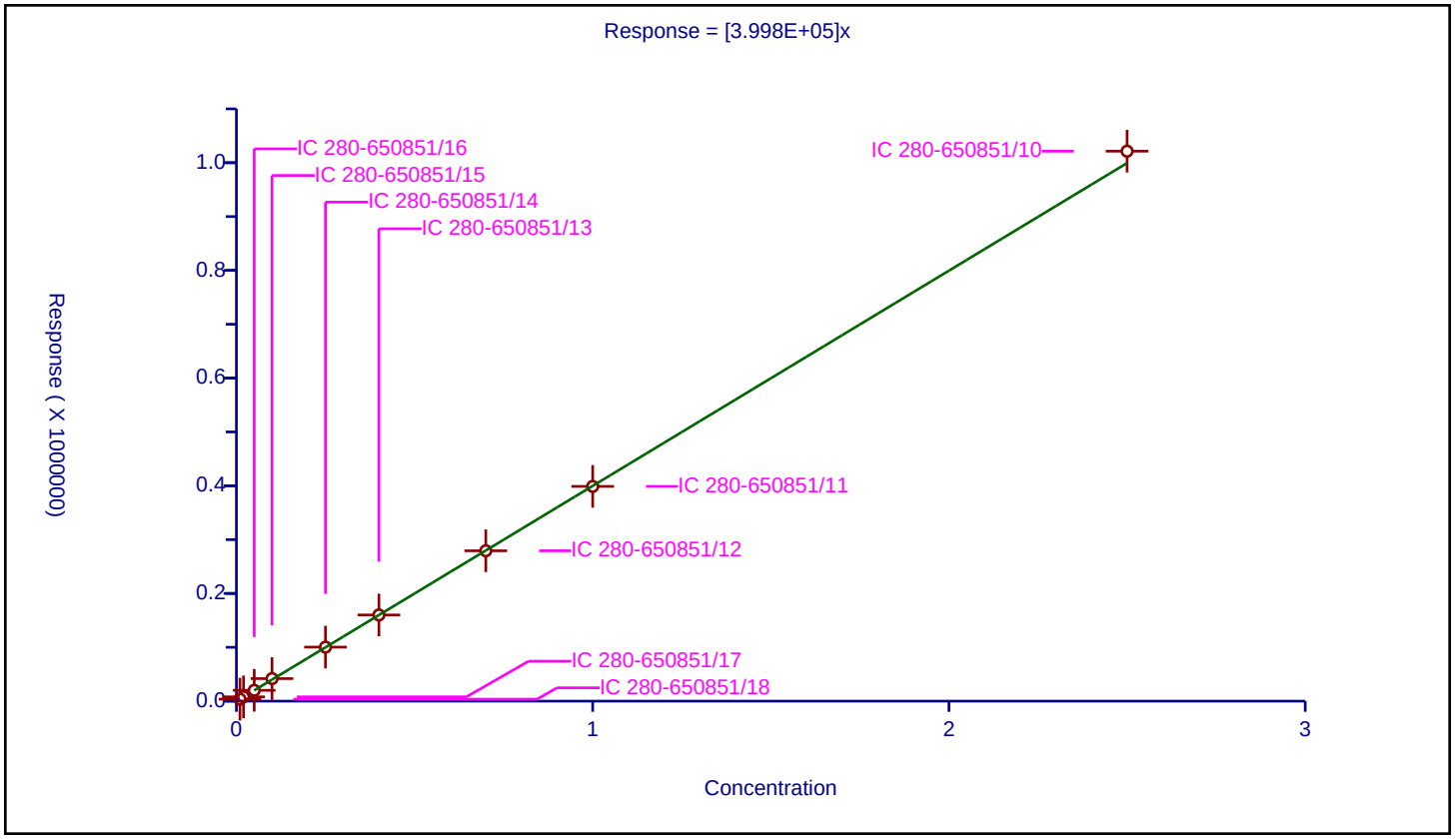
Curve Coefficients

Intercept:	0
Slope:	3.998E+05

Error Coefficients

Relative Standard Deviation:	3.2

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-650851/18	0.01	3703.0			370300.0	Y
2	IC 280-650851/17	0.02	7969.0			398450.0	Y
3	IC 280-650851/16	0.05	20131.0			402620.0	Y
4	IC 280-650851/15	0.1	41861.0			418610.0	Y
5	IC 280-650851/14	0.25	100337.0			401348.0	Y
6	IC 280-650851/13	0.4	160072.0			400180.0	Y
7	IC 280-650851/12	0.7	279268.0			398954.285714	Y
8	IC 280-650851/11	1.0	398830.0			398830.0	Y
9	IC 280-650851/10	2.5	1021428.0			408571.2	Y



5/8/2024
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Calibration / PETN

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

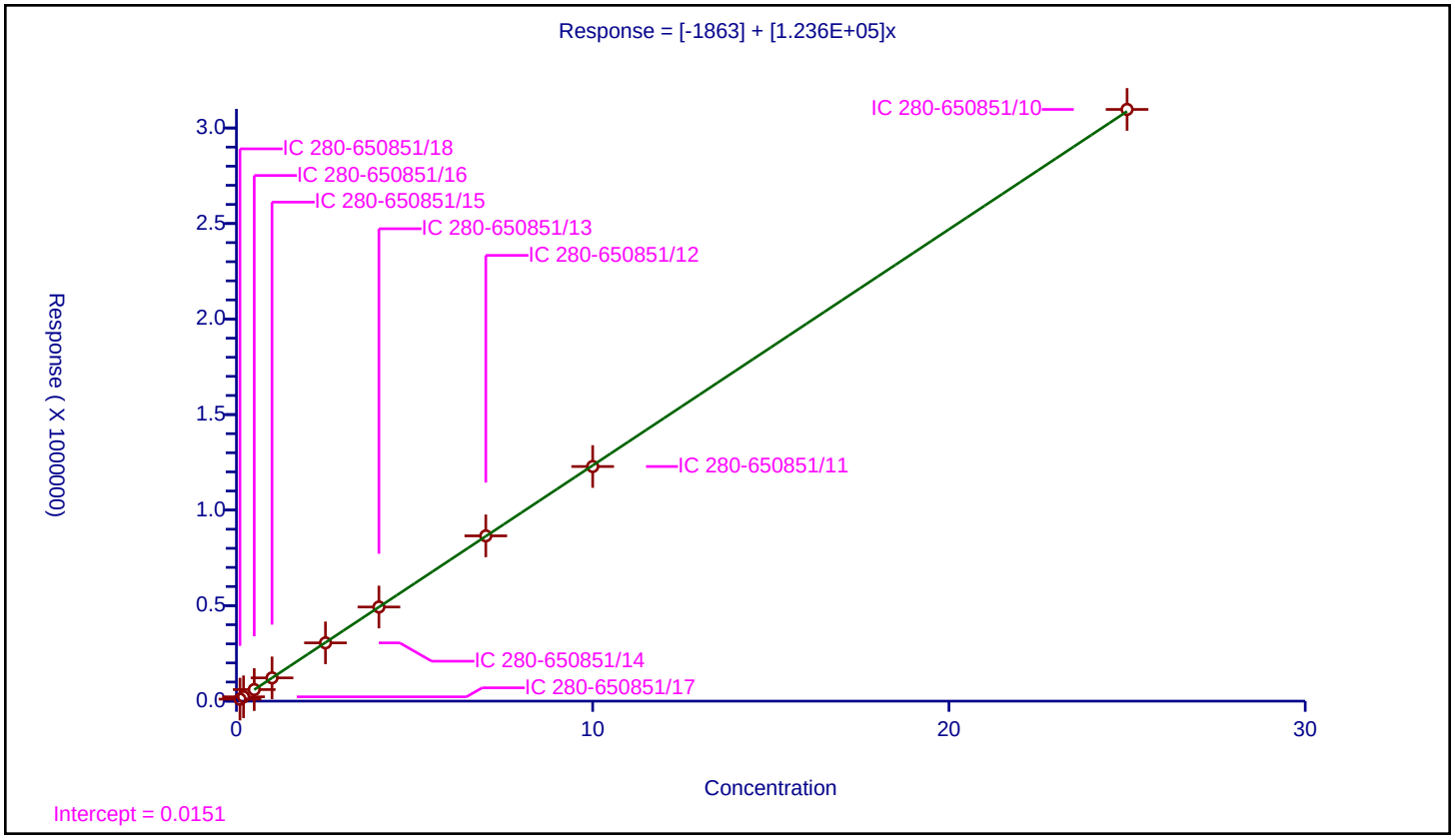
Curve Coefficients

Intercept:	-1863
Slope:	1.236E+05

Error Coefficients

Relative Standard Deviation:	0.7

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-650851/18	0.1	10531.0			105310.0	Y
2	IC 280-650851/17	0.2	22594.0			112970.0	Y
3	IC 280-650851/16	0.5	60616.0			121232.0	Y
4	IC 280-650851/15	1.0	121831.0			121831.0	Y
5	IC 280-650851/14	2.5	304928.0			121971.2	Y
6	IC 280-650851/13	4.0	492803.0			123200.75	Y
7	IC 280-650851/12	7.0	865110.0			123587.142857	Y
8	IC 280-650851/11	10.0	1228090.0			122809.0	Y
9	IC 280-650851/10	25.0	3097249.0			123889.96	Y



FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins Denver | Job No.: 280-190799-1 | Analy Batch No.: 649950

SDG No.:

Instrument ID: CHHPLC_X3 | GC Column: UltraCarb5u ID: 4.6(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 04/17/2024 20:37 | Calibration End Date: 04/17/2024 23:41 | Calibration ID: 92320

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-649950/19	04170019.D
Level 2	IC 280-649950/18	04170018.D
Level 3	IC 280-649950/17	04170017.D
Level 4	IC 280-649950/16	04170016.D
Level 5	IC 280-649950/15	04170015.D
Level 6	IC 280-649950/14	04170014.D
Level 7	IC 280-649950/13	04170013.D
Level 8	IC 280-649950/12	04170012.D
Level 9	IC 280-649950/11	04170011.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	6.480	6.475	6.478	6.476	6.476	6.479	6.476	6.474	6.469		6.376 - 6.576	6.476
HMX	6.580	6.582	6.578	6.583	6.582	6.586	6.582	6.581	6.575		6.433 - 6.733	6.581
DNX	6.786	6.788	6.784	6.789	6.789	6.786	6.789	6.788	6.782		6.689 - 6.889	6.787
MNX	7.206	7.202	7.204	7.203	7.209	7.206	7.202	7.208	7.195		7.053 - 7.353	7.204
RDX	7.580	7.582	7.584	7.583	7.582	7.586	7.582	7.581	7.575		7.433 - 7.733	7.582
Picric acid	7.820	7.822	7.818	7.816	7.809	7.806	7.789	7.781	7.742		7.666 - 7.966	7.800
1,3,5-Trinitrobenzene	8.660	8.655	8.658	8.656	8.656	8.659	8.656	8.654	8.649		8.506 - 8.806	8.656
1,3-Dinitrobenzene	9.273	9.275	9.277	9.276	9.276	9.279	9.276	9.274	9.262		9.126 - 9.426	9.274
Nitrobenzene	9.633	9.635	9.631	9.636	9.636	9.639	9.629	9.634	9.622		9.486 - 9.786	9.633
3,5-Dinitroaniline	9.873	9.868	9.871	9.876	9.876	9.872	9.869	9.868	9.855		9.726 - 10.026	9.870
Tetryl	9.953	9.955	9.957	9.963	9.962	9.959	9.956	9.954	9.948		9.813 - 10.113	9.956
Nitroglycerin	10.426	10.422	10.424	10.429	10.429	10.432	10.422	10.421	10.415		10.279 - 10.579	10.424
2,4,6-Trinitrotoluene	10.866	10.862	10.864	10.869	10.869	10.872	10.862	10.868	10.862		10.769 - 10.969	10.866
4-Amino-2,6-dinitrotoluene	11.046	11.042	11.044	11.049	11.049	11.052	11.042	11.041	11.035		10.949 - 11.149	11.044
2-Amino-4,6-dinitrotoluene	11.306	11.302	11.304	11.309	11.309	11.306	11.302	11.301	11.288		11.209 - 11.409	11.303
2,6-Dinitrotoluene	11.453	11.448	11.451	11.449	11.456	11.452	11.449	11.448	11.442		11.349 - 11.549	11.450
2,4-Dinitrotoluene	11.626	11.622	11.624	11.629	11.629	11.632	11.622	11.621	11.615		11.529 - 11.729	11.624
2-Nitrotoluene	12.419	12.415	12.424	12.423	12.422	12.426	12.416	12.421	12.408		12.273 - 12.573	12.419
4-Nitrotoluene	12.853	12.842	12.844	12.843	12.842	12.846	12.842	12.841	12.835		12.693 - 12.993	12.843
3-Nitrotoluene	13.399	13.395	13.404	13.403	13.402	13.406	13.396	13.394	13.388		13.253 - 13.553	13.399
PETN	14.486	14.482	14.491	14.483	14.489	14.492	14.482	14.481	14.482		14.333 - 14.633	14.485
1,2-Dinitrobenzene	8.520	8.522	8.518	8.516	8.522	8.519	8.516	8.521	8.509		8.366 - 8.666	8.518

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

Lab Name: Eurofins Denver Job No.: 280-190799-1 Analy Batch No.: 649950

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/17/2024 20:37 Calibration End Date: 04/17/2024 23:41 Calibration ID: 92320

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-649950/19	04170019.D
Level 2	IC 280-649950/18	04170018.D
Level 3	IC 280-649950/17	04170017.D
Level 4	IC 280-649950/16	04170016.D
Level 5	IC 280-649950/15	04170015.D
Level 6	IC 280-649950/14	04170014.D
Level 7	IC 280-649950/13	04170013.D
Level 8	IC 280-649950/12	04170012.D
Level 9	IC 280-649950/11	04170011.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	204283 196151 203061	200349 196188	191793 201100	199263 198742	Ave		198992.097				1.9		20.0			
HMX	91900 94332 96305	100850 95253	90720 96297	96450 97787	Ave		95543.7159				3.2		20.0			
DNX	151297 147194 150909	141866 146460	144870 148038	148044 146659	Ave		147259.613				2.0		20.0			
MNX	141061 136630 140394	127930 137960	134936 138920	135218 137235	Ave		136698.122				2.9		20.0			
RDX	118700 107376 107690	116700 106868	112240 106959	111620 108752	Ave		110767.075				4.0		20.0			
Picric acid	78700 78992 82062	76200 79110	76940 79906	80160 81861	Ave		79325.6794				2.5		20.0			
1,3,5-Trinitrobenzene	254900 216292 219181	217450 215905	225160 215779	221290 219723	Ave		222853.263				5.6		20.0			
1,3-Dinitrobenzene	308600 296760 301472	283900 297843	300460 298746	303590 303550	Ave		299435.579				2.3		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.: 280-190799-1 Analy Batch No.: 649950

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/17/2024 20:37 Calibration End Date: 04/17/2024 23:41 Calibration ID: 92320

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	198500 190564 198214	196600 193678	195180 195570	200350 198305	Ave		196328.944				1.5		20.0			
3,5-Dinitroaniline	197100 219364 223150	208550 215118	215620 219330	226510 219396	Lin2	-237.27823	221006.739							1.0000		0.9900
Tetryl	183500 180328 183105	168700 185315	180200 181964	182380 188801	Ave		181588.165				3.0		20.0			
Nitroglycerin	60480 66994 66784	59815 66731	71314 66745	71367 67945	Ave		66463.8886				6.1		20.0			
2,4,6-Trinitrotoluene	208100 214372 215788	220000 213738	213380 214716	219120 217516	Ave		215192.179				1.7		20.0			
4-Amino-2,6-dinitrotoluene	140600 147324 149438	163050 147888	150660 147166	153440 149965	Ave		149947.846				4.0		20.0			
2-Amino-4,6-dinitrotoluene	195100 199804 204593	199850 197140	198460 200077	200330 202927	Ave		199809.038				1.4		20.0			
2,6-Dinitrotoluene	155700 143756 144234	144000 147368	145340 143629	152180 146021	Ave		146914.119				2.9		20.0			
2,4-Dinitrotoluene	299300 289256 292258	289650 288388	288500 289931	294520 294790	Ave		291843.614				1.3		20.0			
2-Nitrotoluene	134000 124092 127714	138850 125230	130520 125813	129770 127758	Ave		129305.251				3.6		20.0			
4-Nitrotoluene	124900 107484 109658	120650 107433	112620 108510	113600 110337	Ave		112799.056				5.4		20.0			
3-Nitrotoluene	171300 135808 139988	153300 136093	141480 137194	142070 139336	Ave		144063.243				8.0		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.: 280-190799-1 Analy Batch No.: 649950

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/17/2024 20:37 Calibration End Date: 04/17/2024 23:41 Calibration ID: 92320

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	78070 70756 71221	70870 70722	70432 70837	72600 71924	Ave		71936.9690				3.3		20.0			
1,2-Dinitrobenzene	144500 131148 132647	130150 132498	130420 132159	134500 134411	Lin2	93.7809842	131630.761							0.9990		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
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver | Job No.: 280-190799-1 | Analy Batch No.: 649950

SDG No.:

Instrument ID: CHHPLC_X3 | GC Column: UltraCarb5 ID: 4.6(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 04/17/2024 20:37 | Calibration End Date: 04/17/2024 23:41 | Calibration ID: 92320

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-649950/19	04170019.D
Level 2	IC 280-649950/18	04170018.D
Level 3	IC 280-649950/17	04170017.D
Level 4	IC 280-649950/16	04170016.D
Level 5	IC 280-649950/15	04170015.D
Level 6	IC 280-649950/14	04170014.D
Level 7	IC 280-649950/13	04170013.D
Level 8	IC 280-649950/12	04170012.D
Level 9	IC 280-649950/11	04170011.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	2051 78789	4023 141333	9628 199537	20006 509682	49234	0.0100 0.402	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251
HMX	Ave	919 38101	2017 67408	4536 97787	9645 240762	23583	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
DNX	Ave	1516 58701	2843 103834	7258 146952	14834 378026	36872	0.0100 0.401	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251
MNX	Ave	1649 64510	2991 113678	7887 160428	15807 410302	39930	0.0117 0.468	0.0234 0.818	0.0585 1.17	0.117 2.92	0.292
RDX	Ave	1187 42747	2334 74871	5612 108752	11162 269224	26844	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Picric acid	Ave	787 31644	1524 55934	3847 81861	8016 205156	19748	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
1,3,5-Trinitrobenzene	Ave	2549 86362	4349 151045	11258 219723	22129 547952	54073	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
1,3-Dinitrobenzene	Ave	3086 119137	5678 209122	15023 303550	30359 753680	74190	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Nitrobenzene	Ave	1985 77471	3932 136899	9759 198305	20035 495535	47641	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
3,5-Dinitroaniline	Lin2	1971 86047	4171 153531	10781 219396	22651 557874	54841	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Tetryl	Ave	1835 74126	3374 127375	9010 188801	18238 457763	45082	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Nitroglycerin	Ave	6048 266924	11963 467214	35657 679445	71367 1669606	167486	0.100 4.00	0.200 7.00	0.500 10.0	1.00 25.0	2.50
2,4,6-Trinitrotoluene	Ave	2081 85495	4400 150301	10669 217516	21912 539471	53593	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
4-Amino-2,6-dinitrotoluene	Ave	1406 59155	3261 103016	7533 149965	15344 373596	36831	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
2-Amino-4,6-dinitrotoluene	Ave	1951	3997	9923	20033	49951	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.: 280-190799-1 | Analy Batch No.: 649950

SDG No.:

Instrument ID: CHHPLC_X3 | GC Column: UltraCarb5 ID: 4.6(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 04/17/2024 20:37 | Calibration End Date: 04/17/2024 23:41 | Calibration ID: 92320

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
		78856	140054	202927	511483		0.400	0.700	1.00	2.50	
2,6-Dinitrotoluene	Ave	1557 58947	2880 100540	7267 146021	15218 360585	35939	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
2,4-Dinitrotoluene	Ave	2993 115355	5793 202952	14425 294790	29452 730644	72314	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
2-Nitrotoluene	Ave	1340 50092	2777 88069	6526 127758	12977 319286	31023	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
4-Nitrotoluene	Ave	1249 42973	2413 75957	5631 110337	11360 274145	26871	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
3-Nitrotoluene	Ave	1713 54437	3066 96036	7074 139336	14207 349971	33952	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
PETN	Ave	7807 282889	14174 495856	35216 719241	72600 1780535	176891	0.100 4.00	0.200 7.00	0.500 10.0	1.00 25.0	2.50
1,2-Dinitrobenzene	Lin2	1445 52999	2603 92511	6521 134411	13450 331618	32787	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\20240417-132364.b\04170011.D
Lims ID: IC INT/DMT 9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 17-Apr-2024 20:37:59 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/DMT 9
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 18-Apr-2024 11:59:21 Calib Date: 18-Apr-2024 03:08:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\04170028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1675

First Level Reviewer: LV5D Date: 18-Apr-2024 11:12:45

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.469	6.476	-0.007	509682	2.51	2.56	M
4 HMX	1	6.575	6.583	-0.008	240762	2.50	2.52	M
6 DNX	1	6.782	6.789	-0.007	378026	2.51	2.57	M
7 MNX	1	7.195	7.203	-0.008	410302	2.92	3.00	
8 RDX	1	7.575	7.583	-0.008	269224	2.50	2.43	
9 2,4,6-Trinitrophenol	1	7.742	7.816	-0.074	205156	2.50	2.59	
$ 10 1,2-Dinitrobenzene	1	8.509	8.516	-0.007	331618	2.50	2.52	
11 1,3,5-Trinitrobenzene	1	8.649	8.656	-0.007	547952	2.50	2.46	
12 1,3-Dinitrobenzene	1	9.262	9.276	-0.014	753680	2.50	2.52	
13 Nitrobenzene	1	9.622	9.636	-0.014	495535	2.50	2.52	
14 3,5-Dinitroaniline	1	9.855	9.876	-0.021	557874	2.50	2.53	
15 Tetryl	1	9.948	9.963	-0.015	457763	2.50	2.52	
16 Nitroglycerin	2	10.415	10.429	-0.014	1669606	25.0	25.1	
17 2,4,6-Trinitrotoluene	1	10.862	10.869	-0.007	539471	2.50	2.51	
18 4-Amino-2,6-dinitrotoluene	1	11.035	11.049	-0.014	373596	2.50	2.49	
19 2-Amino-4,6-dinitrotoluene	1	11.288	11.309	-0.021	511483	2.50	2.56	
20 2,6-Dinitrotoluene	1	11.442	11.449	-0.007	360585	2.50	2.45	
21 2,4-Dinitrotoluene	1	11.615	11.629	-0.014	730644	2.50	2.50	
22 o-Nitrotoluene	1	12.408	12.423	-0.015	319286	2.50	2.47	
23 p-Nitrotoluene	1	12.835	12.843	-0.008	274145	2.50	2.43	
24 m-Nitrotoluene	1	13.388	13.403	-0.015	349971	2.50	2.43	
25 PETN	2	14.482	14.483	-0.001	1780535	25.0	24.8	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00080	Amount Added: 250.00	Units: uL
8330 DMT_00016	Amount Added: 125.00	Units: uL

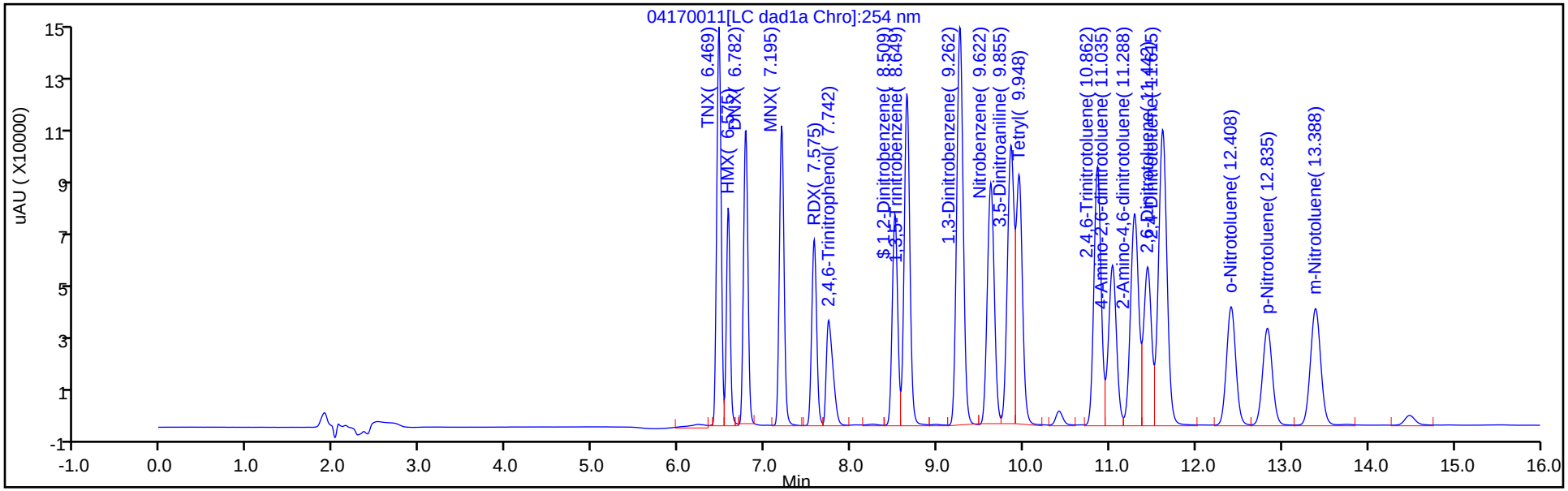
Report Date: 18-Apr-2024 11:59:21 Chrom Revision: 2.3 09-Apr-2024 17:43:44

Eurofins Denver

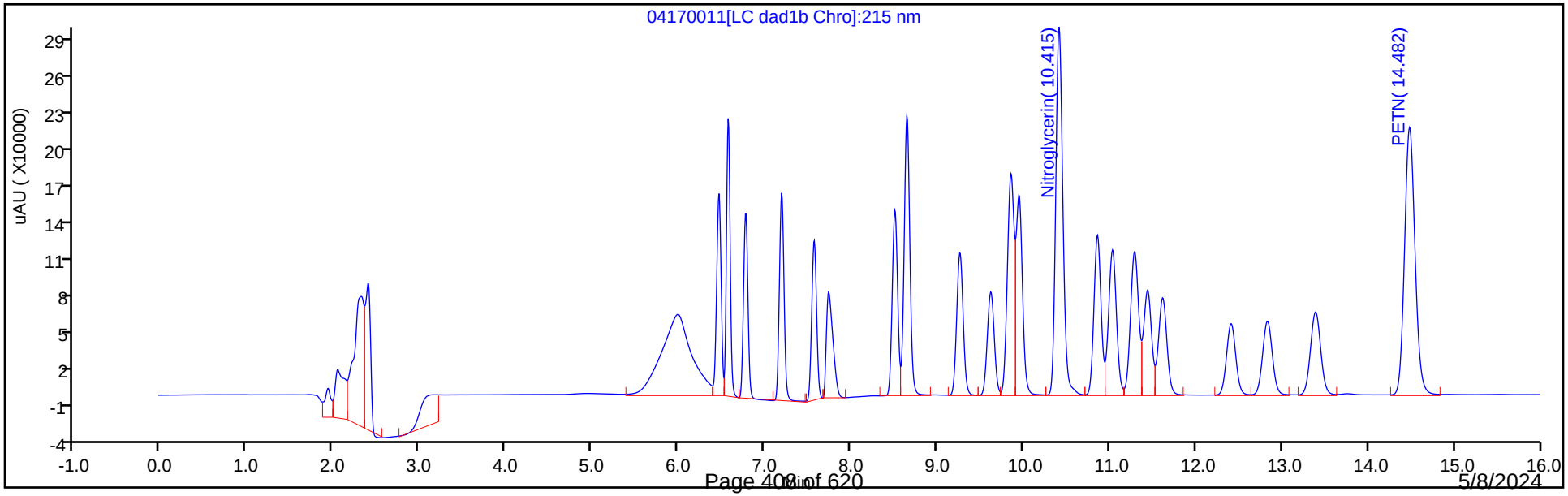
Data File: \\chromfs\denver\chromdata\chhplc_x\20240417-132364.b\04170011.d

Injection Date:	17-Apr-2024 20:37:59	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
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



5/8/2024
6:07:23 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

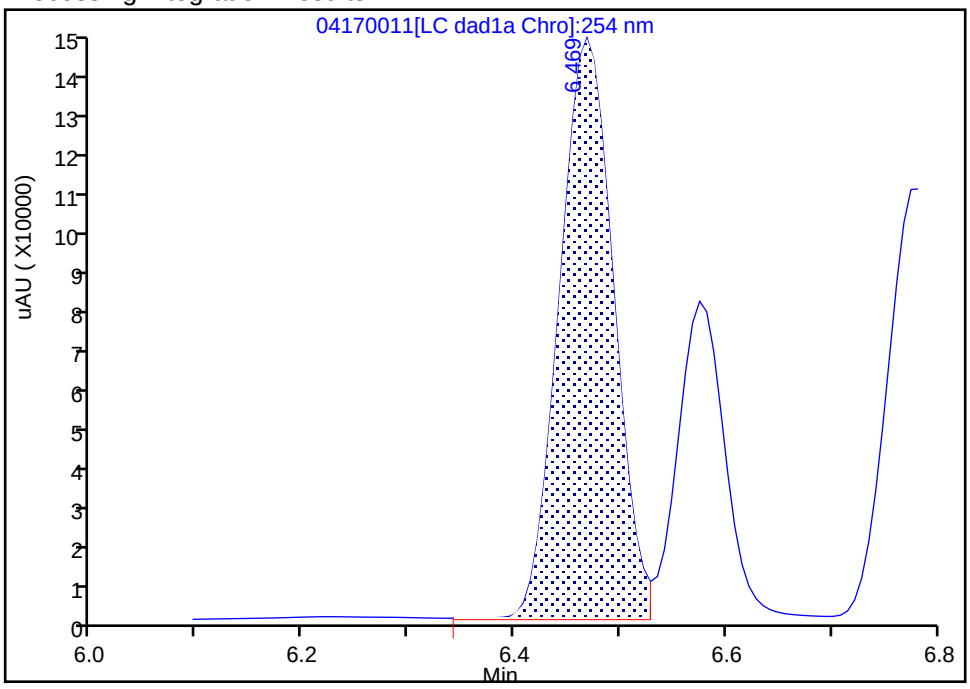
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240417-132364.b\04170011.d				
Injection Date:	17-Apr-2024 20:37:59	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 9				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

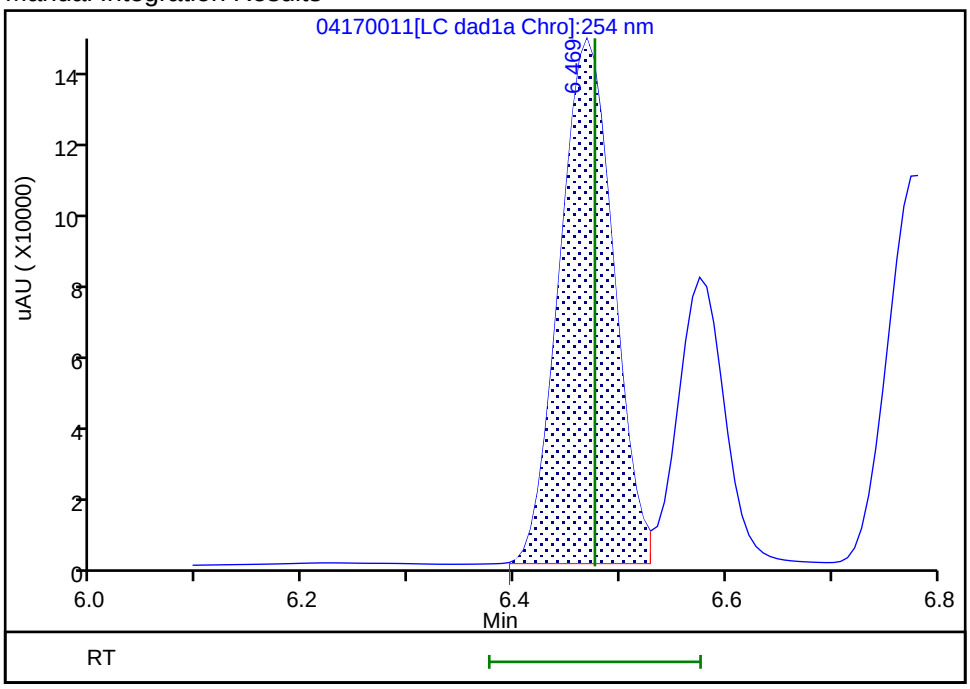
Processing Integration Results

RT: 6.47
Area: 515297
Amount: 2.475720
Amount Units: ug/mL



Manual Integration Results

RT: 6.47
Area: 509682
Amount: 2.561318
Amount Units: ug/mL



Reviewer: LV5D, 18-Apr-2024 11:13:26 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

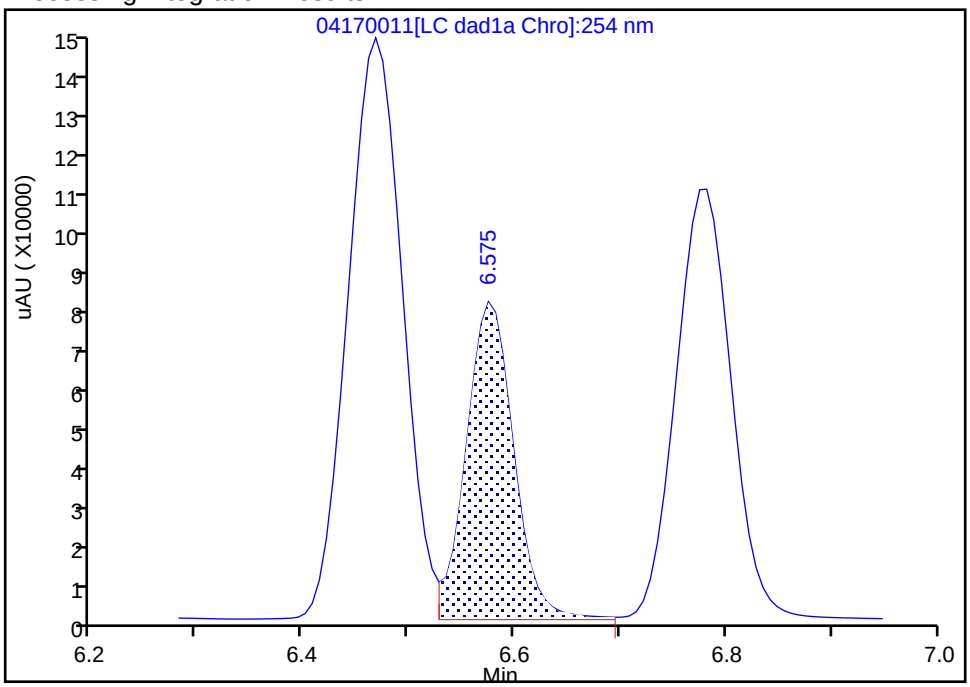
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240417-132364.b\04170011.d				
Injection Date:	17-Apr-2024 20:37:59	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 9				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

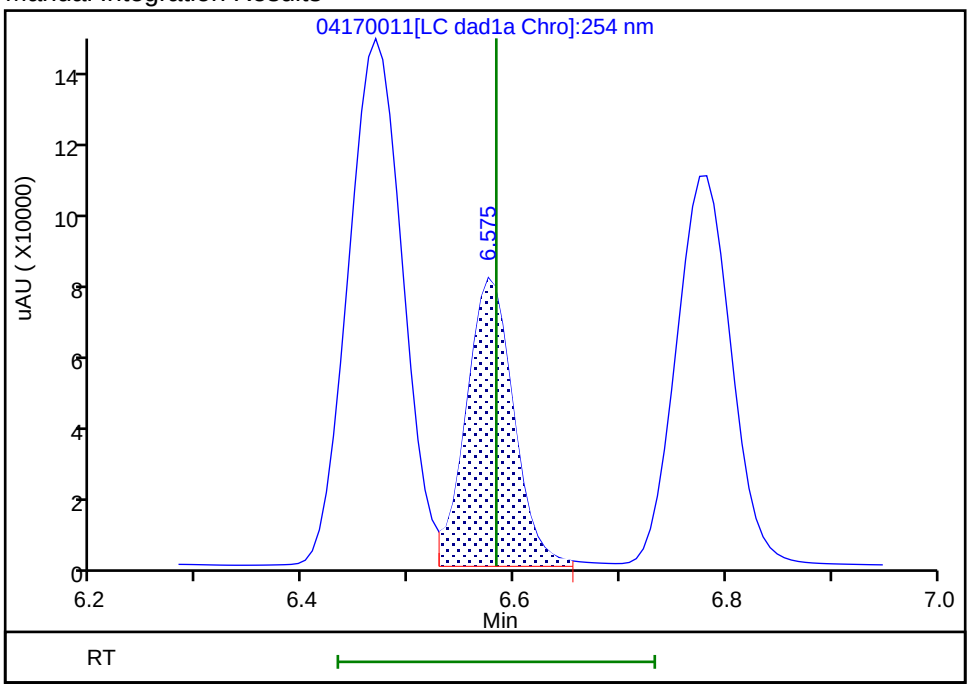
Processing Integration Results

RT: 6.58
Area: 245562
Amount: 2.343167
Amount Units: ug/mL



Manual Integration Results

RT: 6.58
Area: 240762
Amount: 2.519915
Amount Units: ug/mL



Reviewer: LV5D, 18-Apr-2024 11:13:28 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

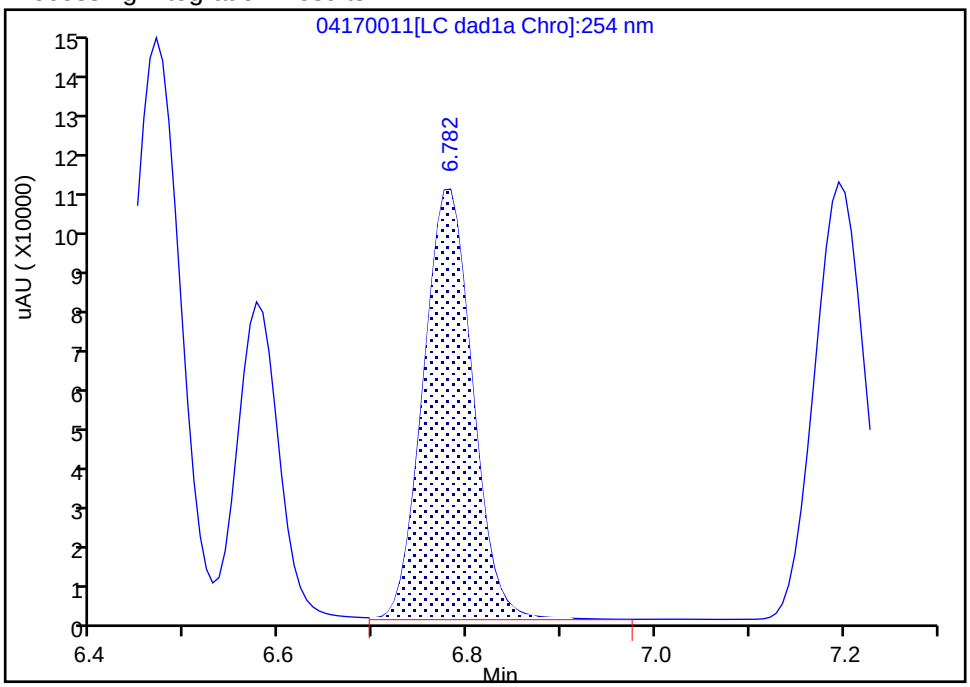
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240417-132364.b\04170011.d				
Injection Date:	17-Apr-2024 20:37:59	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 9				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

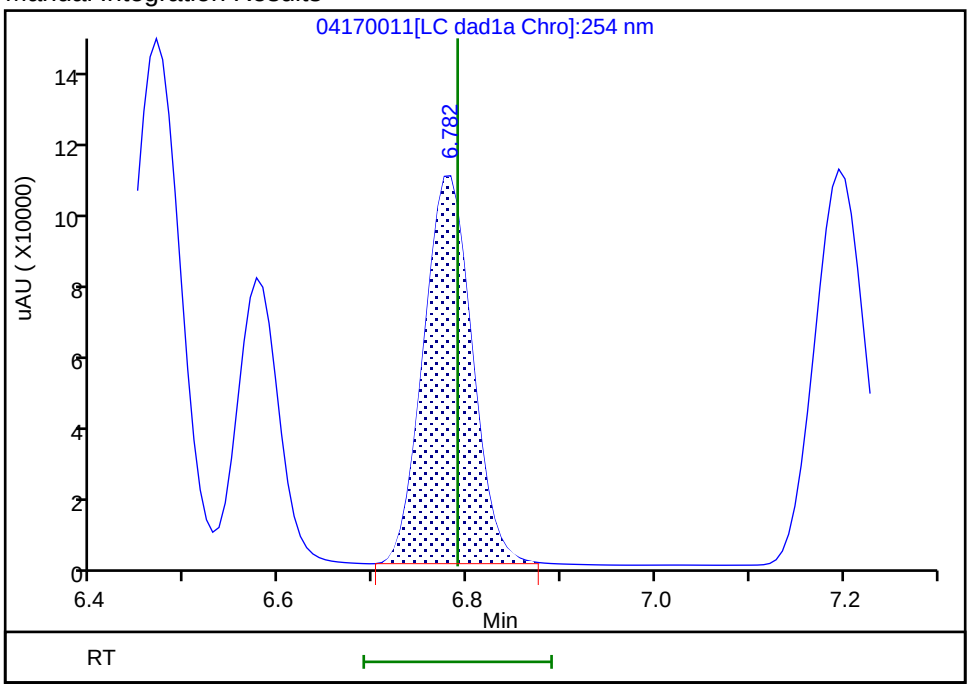
Processing Integration Results

RT: 6.78
Area: 388355
Amount: 2.530843
Amount Units: ug/mL



Manual Integration Results

RT: 6.78
Area: 378026
Amount: 2.567072
Amount Units: ug/mL



Reviewer: LV5D, 18-Apr-2024 11:13:31 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\04170012.D
Lims ID: IC INT/DMT 8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 17-Apr-2024 21:00:56 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/DMT 8
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 18-Apr-2024 11:59:23 Calib Date: 18-Apr-2024 03:08:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\04170028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1675

First Level Reviewer: LV5D Date: 18-Apr-2024 11:13:14

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.474	6.476	-0.002	199537	1.00	1.00	M
4 HMX	1	6.581	6.583	-0.002	97787	1.00	1.02	M
6 DNX	1	6.788	6.789	-0.001	146952	1.00	1.00	M
7 MNX	1	7.208	7.203	0.005	160428	1.17	1.17	
8 RDX	1	7.581	7.583	-0.002	108752	1.00	0.9818	
9 2,4,6-Trinitrophenol	1	7.781	7.816	-0.035	81861	1.00	1.03	
$ 10 1,2-Dinitrobenzene	1	8.521	8.516	0.005	134411	1.00	1.02	
11 1,3,5-Trinitrobenzene	1	8.654	8.656	-0.002	219723	1.00	0.9860	
12 1,3-Dinitrobenzene	1	9.274	9.276	-0.002	303550	1.00	1.01	
13 Nitrobenzene	1	9.634	9.636	-0.002	198305	1.00	1.01	
14 3,5-Dinitroaniline	1	9.868	9.876	-0.008	219396	1.00	0.99	
15 Tetryl	1	9.954	9.963	-0.009	188801	1.00	1.04	
16 Nitroglycerin	2	10.421	10.429	-0.008	679445	10.0	10.2	
17 2,4,6-Trinitrotoluene	1	10.868	10.869	-0.001	217516	1.00	1.01	
18 4-Amino-2,6-dinitrotoluene	1	11.041	11.049	-0.008	149965	1.00	1.00	
19 2-Amino-4,6-dinitrotoluene	1	11.301	11.309	-0.008	202927	1.00	1.02	
20 2,6-Dinitrotoluene	1	11.448	11.449	-0.001	146021	1.00	0.99	
21 2,4-Dinitrotoluene	1	11.621	11.629	-0.008	294790	1.00	1.01	
22 o-Nitrotoluene	1	12.421	12.423	-0.002	127758	1.00	0.9880	
23 p-Nitrotoluene	1	12.841	12.843	-0.002	110337	1.00	0.9782	
24 m-Nitrotoluene	1	13.394	13.403	-0.009	139336	1.00	0.9672	
25 PETN	2	14.481	14.483	-0.002	719241	10.0	10.0	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00016	Amount Added: 50.00	Units: uL
8330IntermStk_00080	Amount Added: 100.00	Units: uL

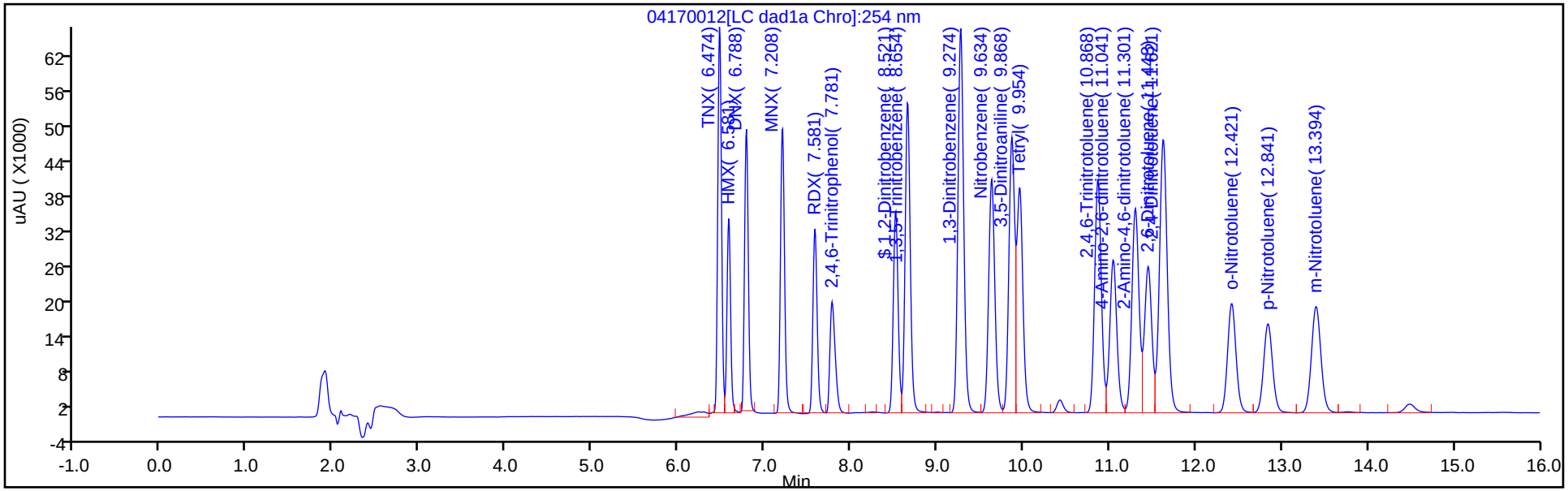
Report Date: 18-Apr-2024 11:59:23 Chrom Revision: 2.3 09-Apr-2024 17:43:44

Eurofins Denver

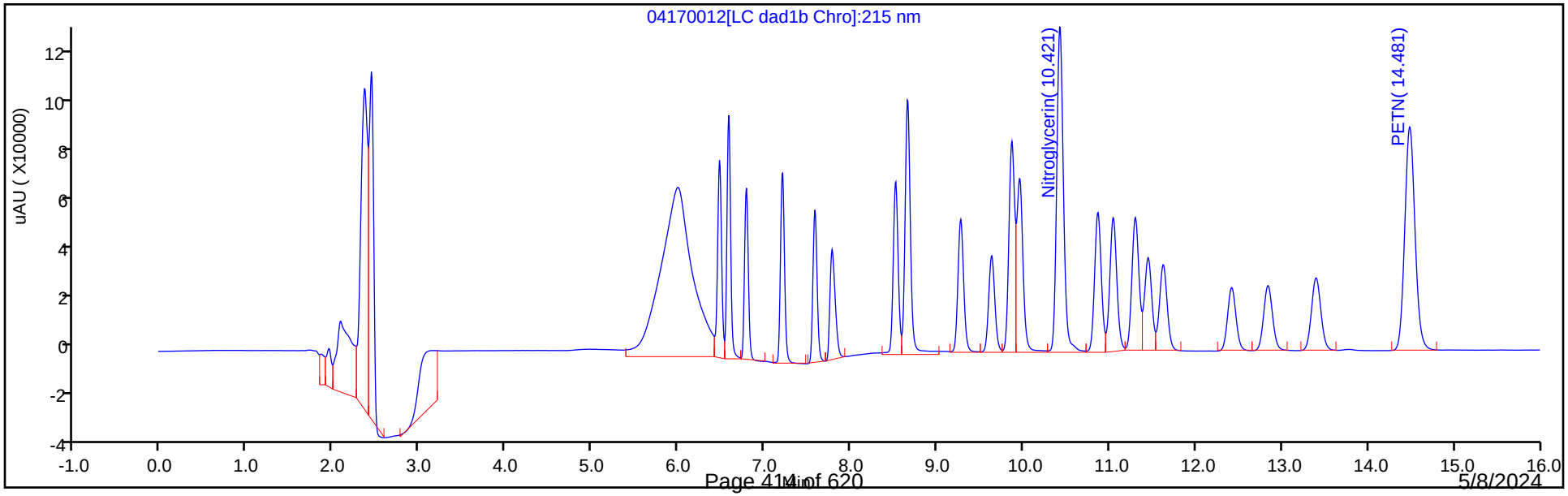
Data File: \\chromfs\denver\chromdata\chhplc_x\20240417-132364.b\04170012.d

Injection Date:	17-Apr-2024 21:00:56	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
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



5/8/2024
6:07:23 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

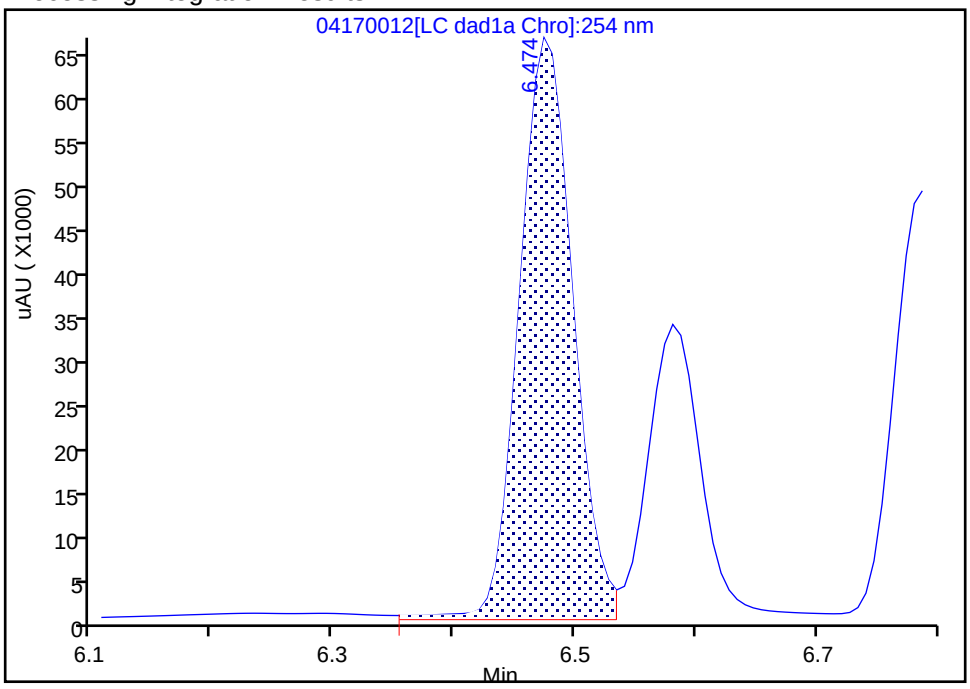
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240417-132364.b\04170012.d				
Injection Date:	17-Apr-2024 21:00:56	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 8				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

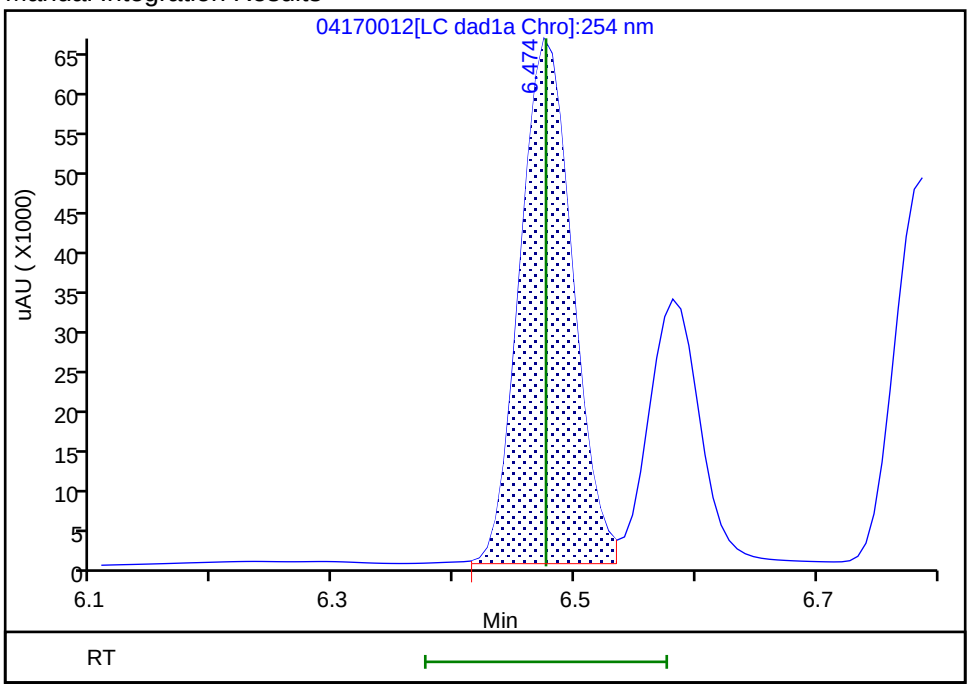
Processing Integration Results

RT: 6.47
Area: 204461
Amount: 0.979758
Amount Units: ug/mL



Manual Integration Results

RT: 6.47
Area: 199537
Amount: 1.002738
Amount Units: ug/mL



Reviewer: LV5D, 18-Apr-2024 11:13:07 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

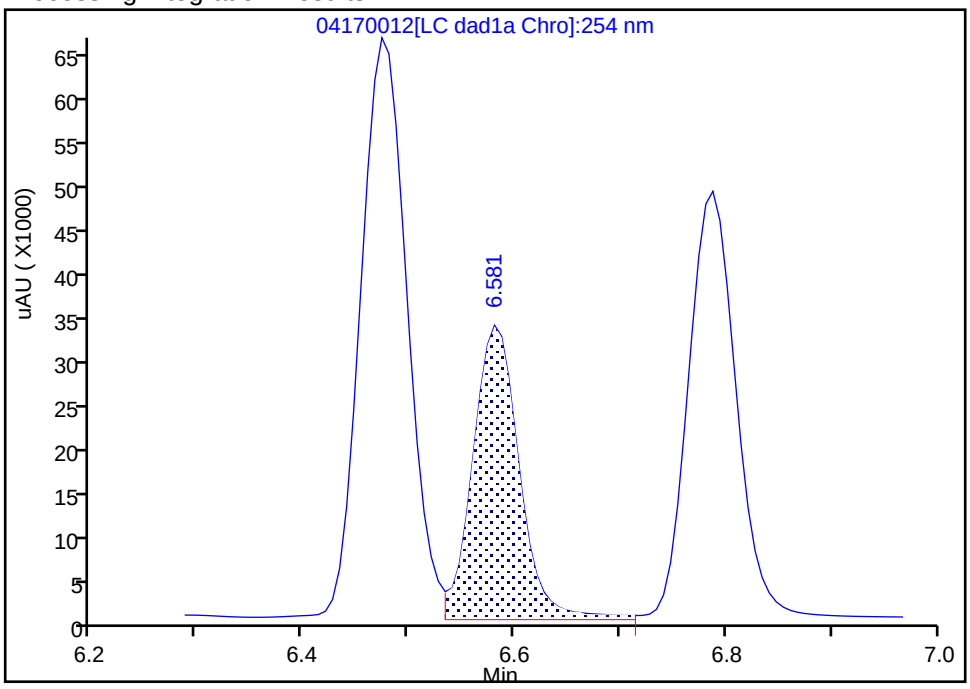
Data File: \\chromfs\denver\chromdata\chhplc_x\20240417-132364.b\04170012.d
Injection Date: 17-Apr-2024 21:00:56 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 8
Client ID:
Operator ID: JZ/JG ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

4 HMX, CAS: 2691-41-0

Signal: 1

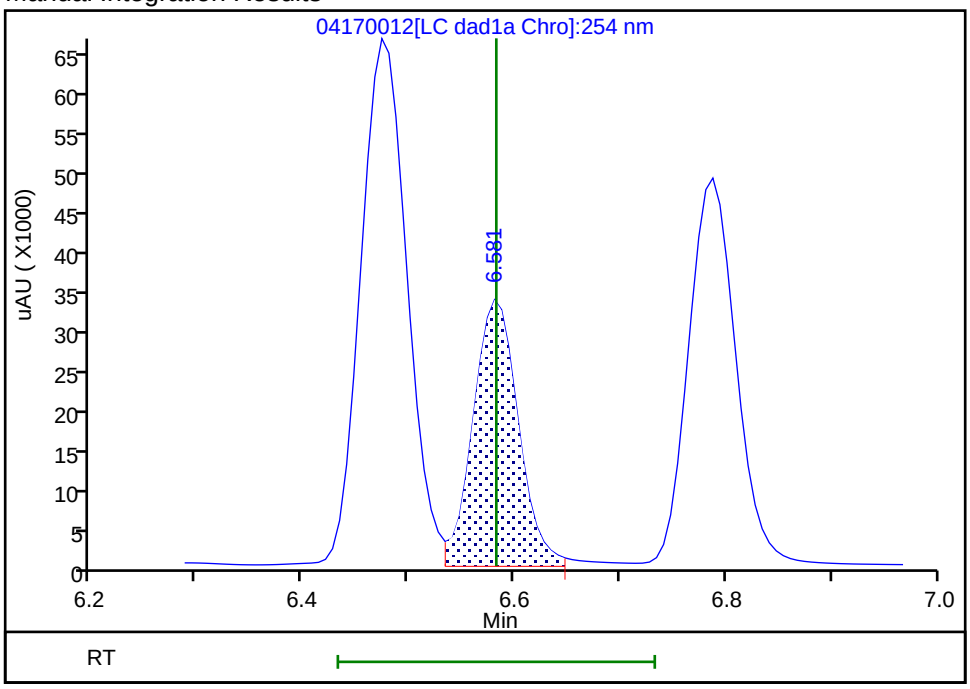
Processing Integration Results

RT: 6.58
Area: 102131
Amount: 0.970072
Amount Units: ug/mL



Manual Integration Results

RT: 6.58
Area: 97787
Amount: 1.023479
Amount Units: ug/mL



Reviewer: LV5D, 18-Apr-2024 11:13:09 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

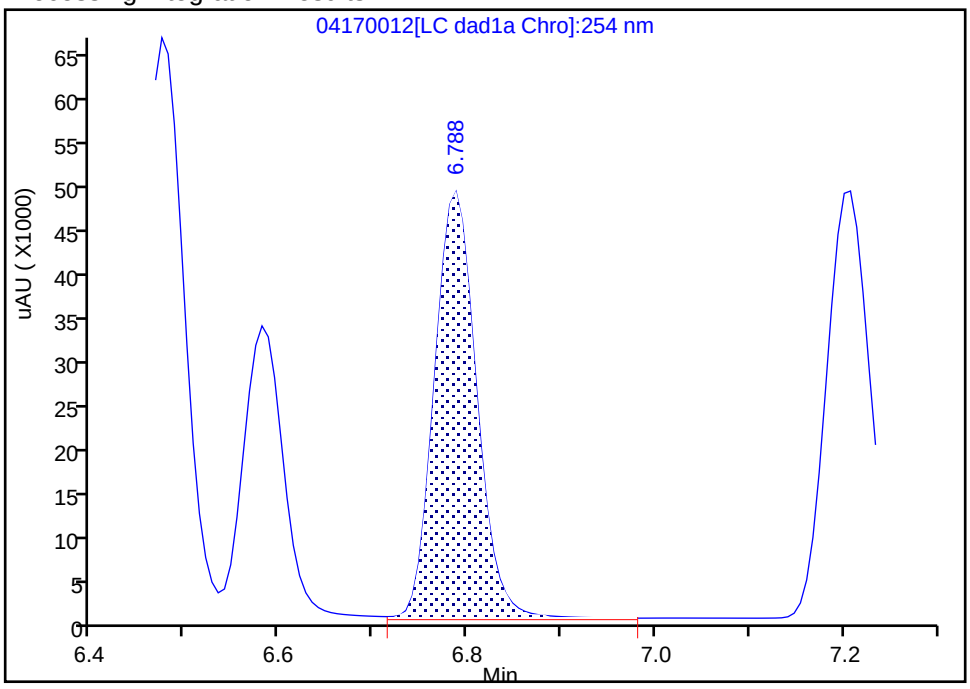
Data File: \\chromfs\denver\chromdata\chhplc_x\20240417-132364.b\04170012.d
Injection Date: 17-Apr-2024 21:00:56 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 8
Client ID:
Operator ID: JZ/JG ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

6 DNX, CAS: 80251-29-2

Signal: 1

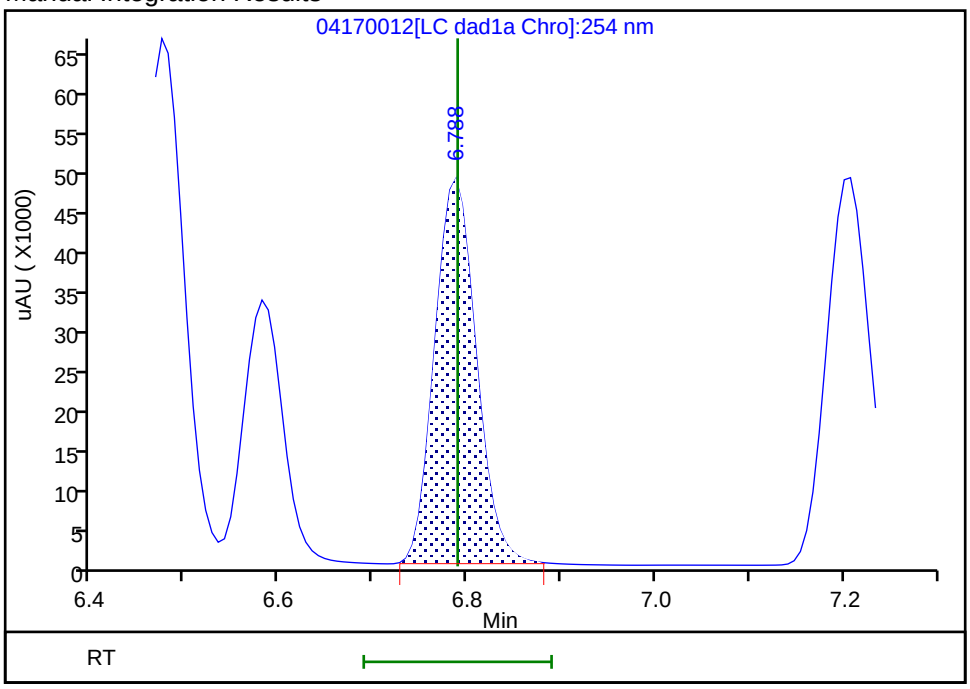
Processing Integration Results

RT: 6.79
Area: 153377
Amount: 0.990791
Amount Units: ug/mL



Manual Integration Results

RT: 6.79
Area: 146952
Amount: 0.997911
Amount Units: ug/mL



Reviewer: LV5D, 18-Apr-2024 11:13:11 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\04170013.D
Lims ID: IC INT/DMT 7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 17-Apr-2024 21:23:54 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/DMT 7
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 18-Apr-2024 11:59:24 Calib Date: 18-Apr-2024 03:08:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\04170028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1675

First Level Reviewer: LV5D Date: 18-Apr-2024 11:14:37

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.476	6.476	0.000	141333	0.7028	0.7102	M
4 HMX	1	6.582	6.583	-0.001	67408	0.7000	0.7055	M
6 DNX	1	6.789	6.789	0.000	103834	0.7014	0.7051	M
7 MNX	1	7.202	7.203	-0.001	113678	0.8183	0.8316	
8 RDX	1	7.582	7.583	-0.001	74871	0.7000	0.6759	
9 2,4,6-Trinitrophenol	1	7.789	7.816	-0.027	55934	0.7000	0.7051	
$ 10 1,2-Dinitrobenzene	1	8.516	8.516	0.000	92511	0.7000	0.7021	
11 1,3,5-Trinitrobenzene	1	8.656	8.656	0.000	151045	0.7000	0.6778	
12 1,3-Dinitrobenzene	1	9.276	9.276	0.000	209122	0.7000	0.6984	
13 Nitrobenzene	1	9.629	9.636	-0.007	136899	0.7000	0.6973	
14 3,5-Dinitroaniline	1	9.869	9.876	-0.007	153531	0.7000	0.6958	
15 Tetryl	1	9.956	9.963	-0.007	127375	0.7000	0.7014	
16 Nitroglycerin	2	10.422	10.429	-0.007	467214	7.00	7.03	
17 2,4,6-Trinitrotoluene	1	10.862	10.869	-0.007	150301	0.7000	0.6985	
18 4-Amino-2,6-dinitrotoluene	1	11.042	11.049	-0.007	103016	0.7000	0.6870	
19 2-Amino-4,6-dinitrotoluene	1	11.302	11.309	-0.007	140054	0.7000	0.7009	
20 2,6-Dinitrotoluene	1	11.449	11.449	0.000	100540	0.7000	0.6843	
21 2,4-Dinitrotoluene	1	11.622	11.629	-0.007	202952	0.7000	0.6954	
22 o-Nitrotoluene	1	12.416	12.423	-0.007	88069	0.7000	0.6811	
23 p-Nitrotoluene	1	12.842	12.843	-0.001	75957	0.7000	0.6734	
24 m-Nitrotoluene	1	13.396	13.403	-0.007	96036	0.7000	0.6666	
25 PETN	2	14.482	14.483	-0.001	495856	7.00	6.89	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00016	Amount Added:	35.00	Units: uL
8330IntermStk_00080	Amount Added:	70.00	Units: uL

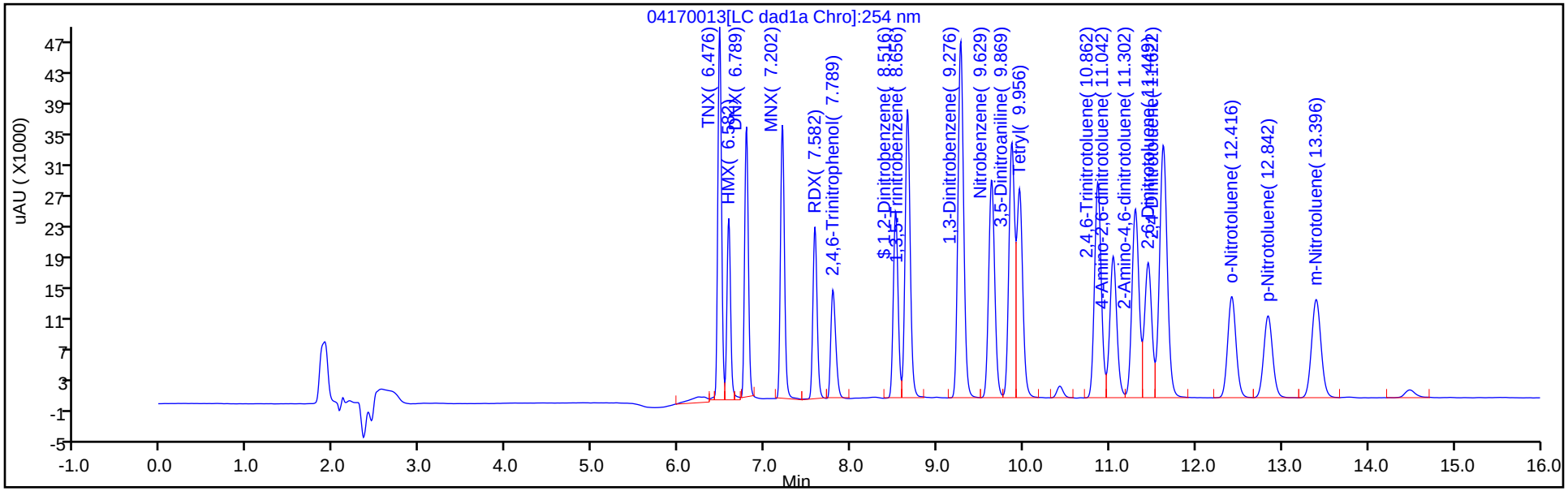
Report Date: 18-Apr-2024 11:59:24 Chrom Revision: 2.3 09-Apr-2024 17:43:44

Eurofins Denver

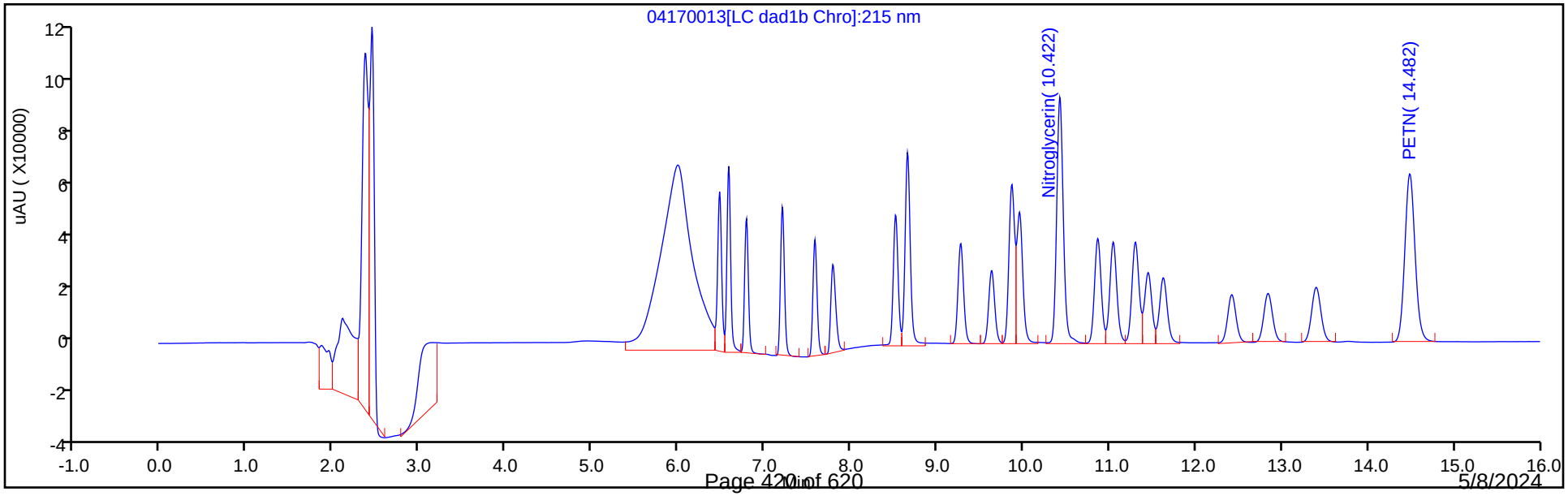
Data File: \\chromfs\denver\chromdata\chhplc_x\20240417-132364.b\04170013.d

Injection Date:	17-Apr-2024 21:23:54	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
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



5/8/2024
6:07:23 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

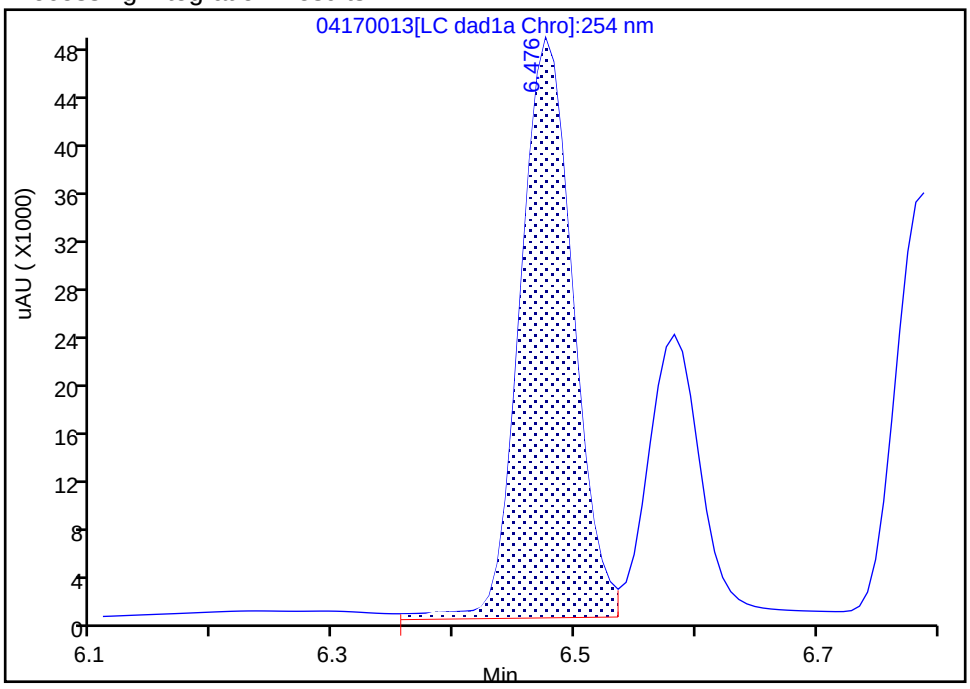
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240417-132364.b\04170013.d				
Injection Date:	17-Apr-2024 21:23:54	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 7				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

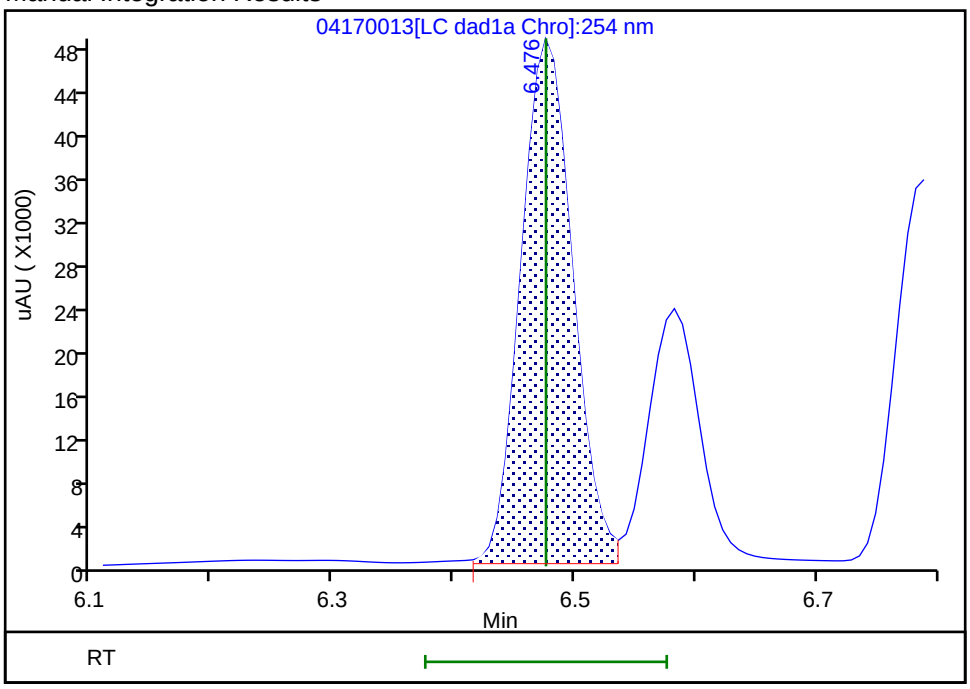
Processing Integration Results

RT: 6.48
Area: 146464
Amount: 0.704521
Amount Units: ug/mL



Manual Integration Results

RT: 6.48
Area: 141333
Amount: 0.710244
Amount Units: ug/mL



Reviewer: LV5D, 18-Apr-2024 11:13:45 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

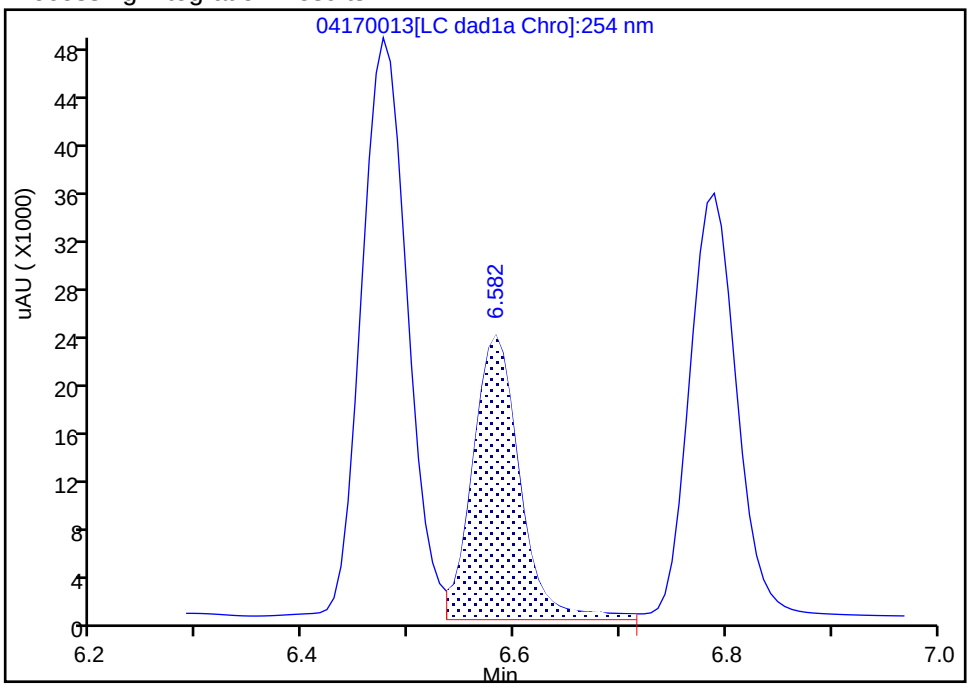
Data File: \\chromfs\denver\chromdata\chhplc_x\20240417-132364.b\04170013.d
Injection Date: 17-Apr-2024 21:23:54 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 7
Client ID:
Operator ID: JZ/JG ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

4 HMX, CAS: 2691-41-0

Signal: 1

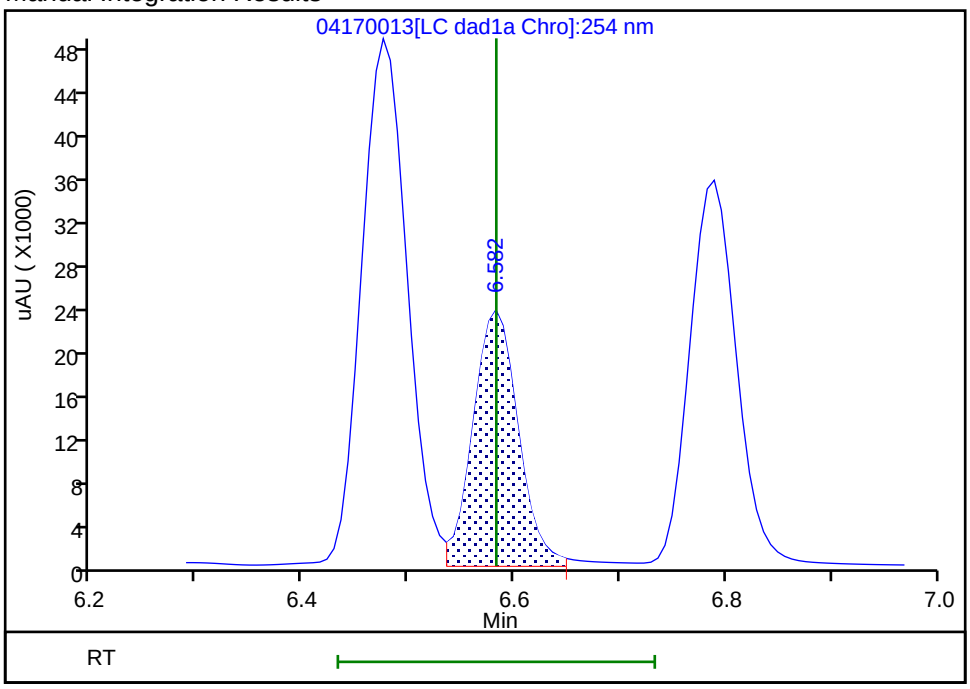
Processing Integration Results

RT: 6.58
Area: 71695
Amount: 0.685513
Amount Units: ug/mL



Manual Integration Results

RT: 6.58
Area: 67408
Amount: 0.705520
Amount Units: ug/mL



Reviewer: LV5D, 18-Apr-2024 11:13:46 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

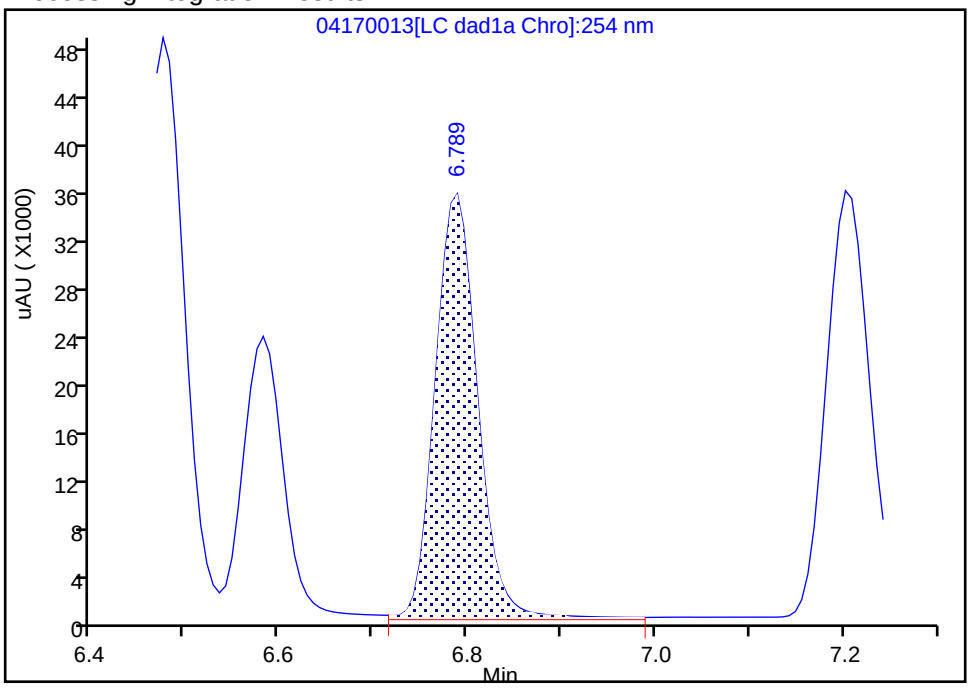
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240417-132364.b\04170013.d				
Injection Date:	17-Apr-2024 21:23:54	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 7				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

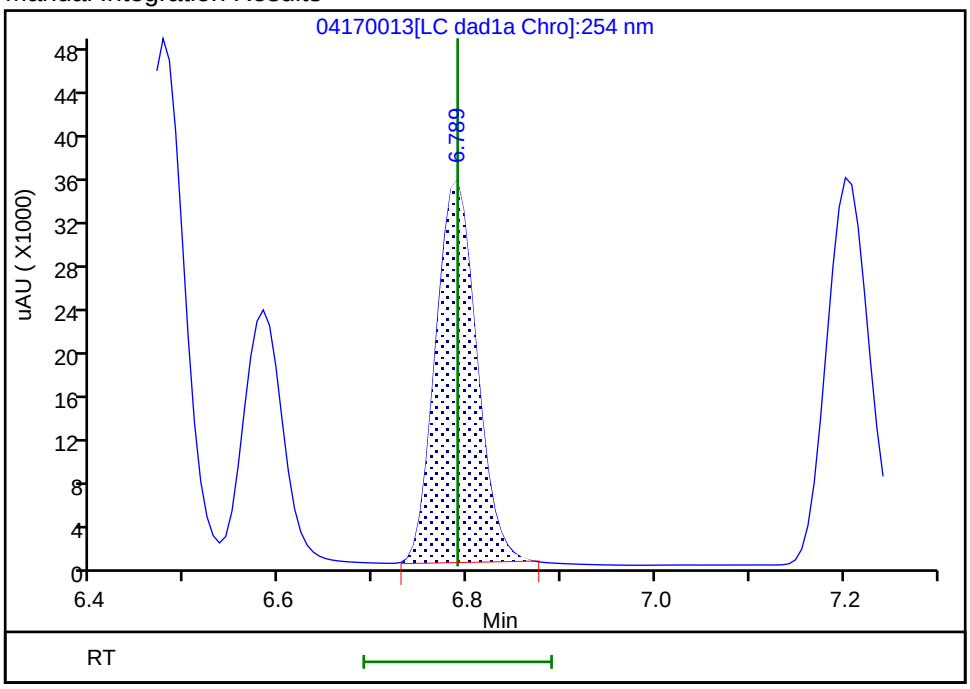
Processing Integration Results

RT: 6.79
Area: 109725
Amount: 0.724468
Amount Units: ug/mL



Manual Integration Results

RT: 6.79
Area: 103834
Amount: 0.705108
Amount Units: ug/mL



Reviewer: LV5D, 18-Apr-2024 11:13:50 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\04170014.D
Lims ID: IC INT/DMT 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 17-Apr-2024 21:46:50 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/DMT 6
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 18-Apr-2024 11:59:25 Calib Date: 18-Apr-2024 03:08:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\04170028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1675

First Level Reviewer: LV5D Date: 18-Apr-2024 11:15:01

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.479	6.476	0.003	78789	0.4016	0.3959	M
4 HMX	1	6.586	6.583	0.003	38101	0.4000	0.3988	M
6 DNX	1	6.786	6.789	-0.003	58701	0.4008	0.3986	M
7 MNX	1	7.206	7.203	0.003	64510	0.4676	0.4719	
8 RDX	1	7.586	7.583	0.003	42747	0.4000	0.3859	
9 2,4,6-Trinitrophenol	1	7.806	7.816	-0.010	31644	0.4000	0.3989	
$ 10 1,2-Dinitrobenzene	1	8.519	8.516	0.003	52999	0.4000	0.4019	
11 1,3,5-Trinitrobenzene	1	8.659	8.656	0.003	86362	0.4000	0.3875	
12 1,3-Dinitrobenzene	1	9.279	9.276	0.003	119137	0.4000	0.3979	
13 Nitrobenzene	1	9.639	9.636	0.003	77471	0.4000	0.3946	
14 3,5-Dinitroaniline	1	9.872	9.876	-0.004	86047	0.4000	0.3904	
15 Tetryl	1	9.959	9.963	-0.004	74126	0.4000	0.4082	
16 Nitroglycerin	2	10.432	10.429	0.003	266924	4.00	4.02	
17 2,4,6-Trinitrotoluene	1	10.872	10.869	0.003	85495	0.4000	0.3973	
18 4-Amino-2,6-dinitrotoluene	1	11.052	11.049	0.003	59155	0.4000	0.3945	
19 2-Amino-4,6-dinitrotoluene	1	11.306	11.309	-0.003	78856	0.4000	0.3947	
20 2,6-Dinitrotoluene	1	11.452	11.449	0.003	58947	0.4000	0.4012	
21 2,4-Dinitrotoluene	1	11.632	11.629	0.003	115355	0.4000	0.3953	
22 o-Nitrotoluene	1	12.426	12.423	0.003	50092	0.4000	0.3874	
23 p-Nitrotoluene	1	12.846	12.843	0.003	42973	0.4000	0.3810	
24 m-Nitrotoluene	1	13.406	13.403	0.003	54437	0.4000	0.3779	
25 PETN	2	14.492	14.483	0.009	282889	4.00	3.93	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00080	Amount Added:	40.00	Units: uL
8330 DMT_00016	Amount Added:	20.00	Units: uL

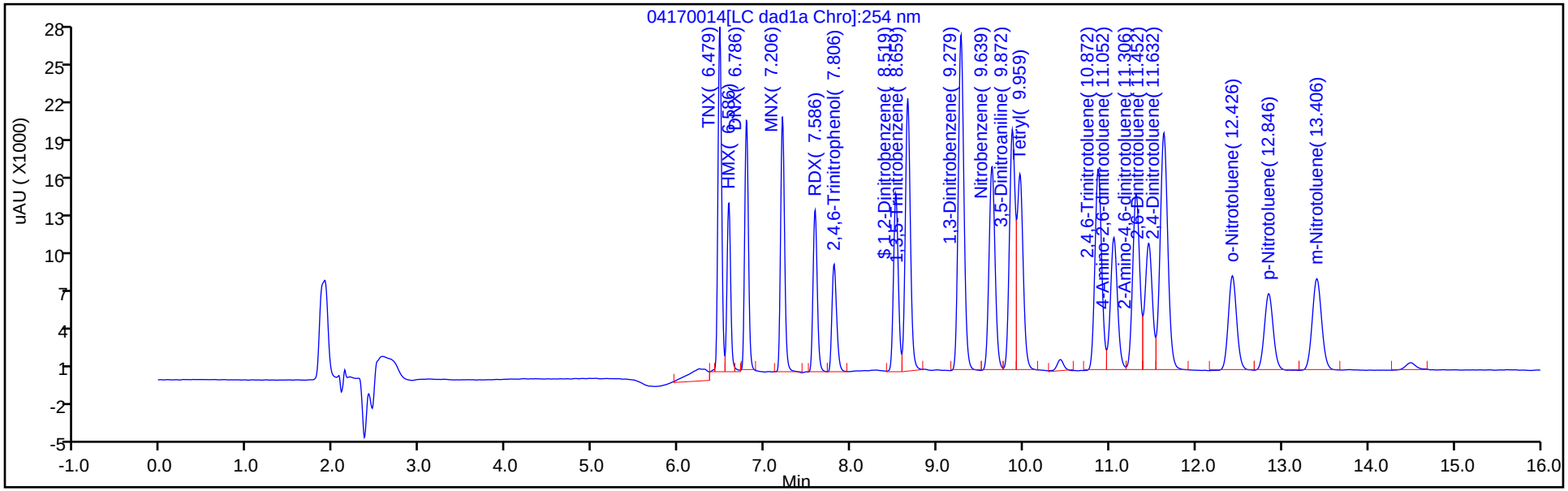
Report Date: 18-Apr-2024 11:59:25 Chrom Revision: 2.3 09-Apr-2024 17:43:44

Eurofins Denver

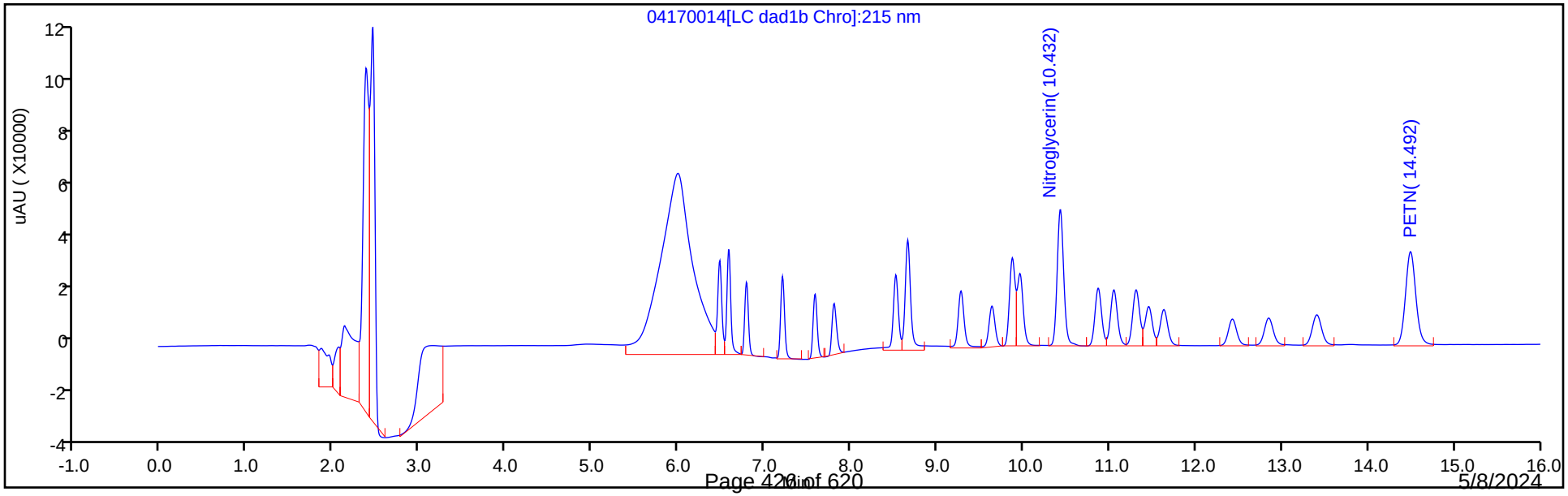
Data File: \\chromfs\denver\chromdata\chhplc_x\20240417-132364.b\04170014.d

Injection Date:	17-Apr-2024 21:46:50	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
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



5/8/2024
6:07:23 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

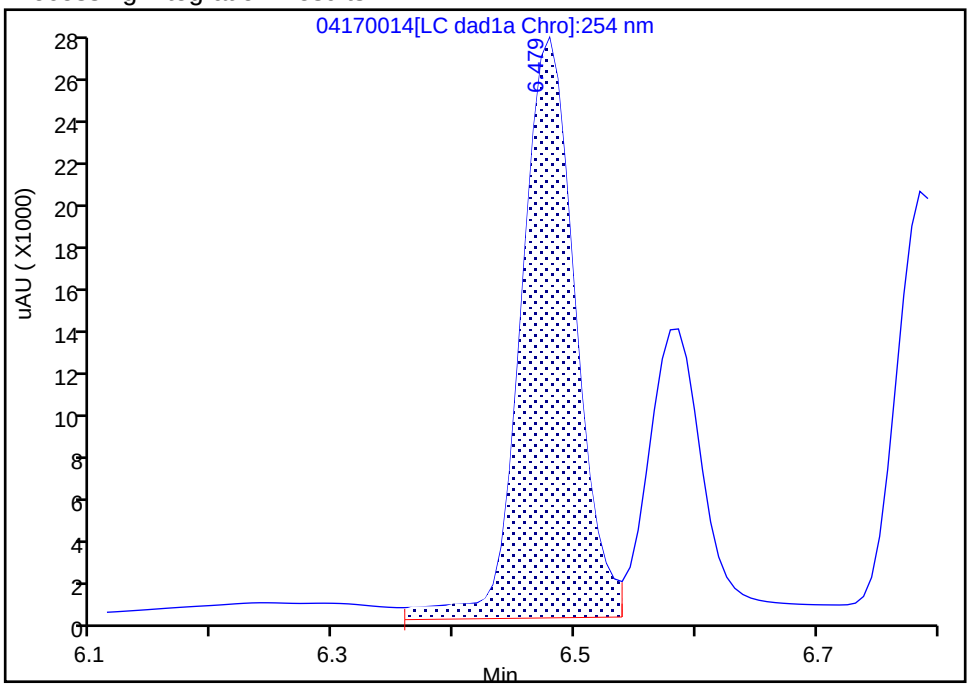
Data File: \\chromfs\denver\chromdata\chhplc_x\20240417-132364.b\04170014.d
Injection Date: 17-Apr-2024 21:46:50 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 6
Client ID:
Operator ID: JZ/JG ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 TNX, CAS: 13980-04-6

Signal: 1

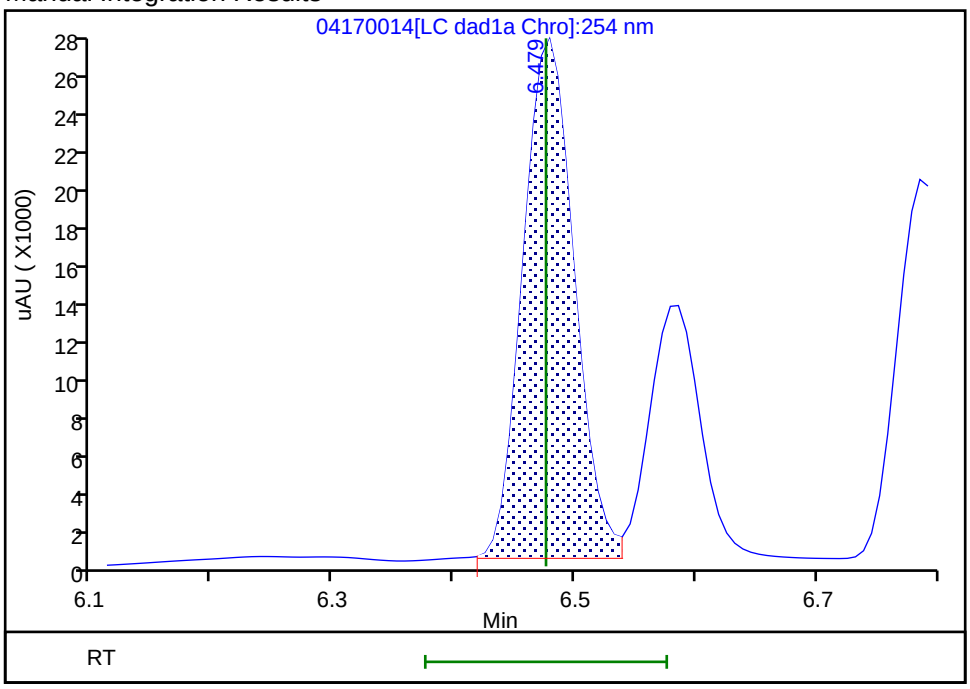
Processing Integration Results

RT: 6.48
Area: 85027
Amount: 0.410599
Amount Units: ug/mL



Manual Integration Results

RT: 6.48
Area: 78789
Amount: 0.395940
Amount Units: ug/mL



Reviewer: LV5D, 18-Apr-2024 11:14:54 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

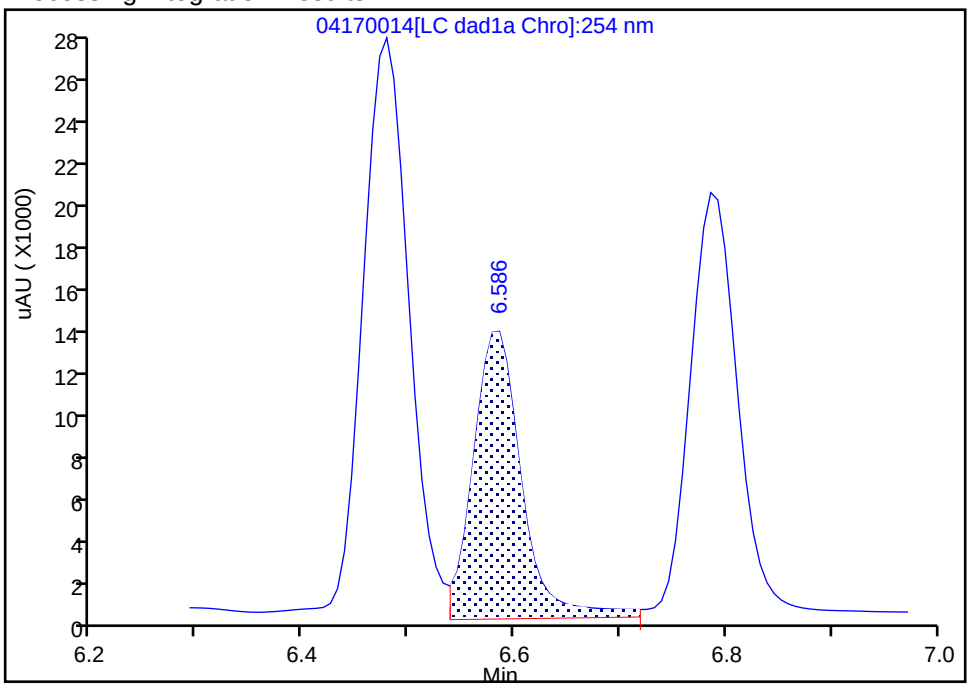
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240417-132364.b\04170014.d				
Injection Date:	17-Apr-2024 21:46:50	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 6				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

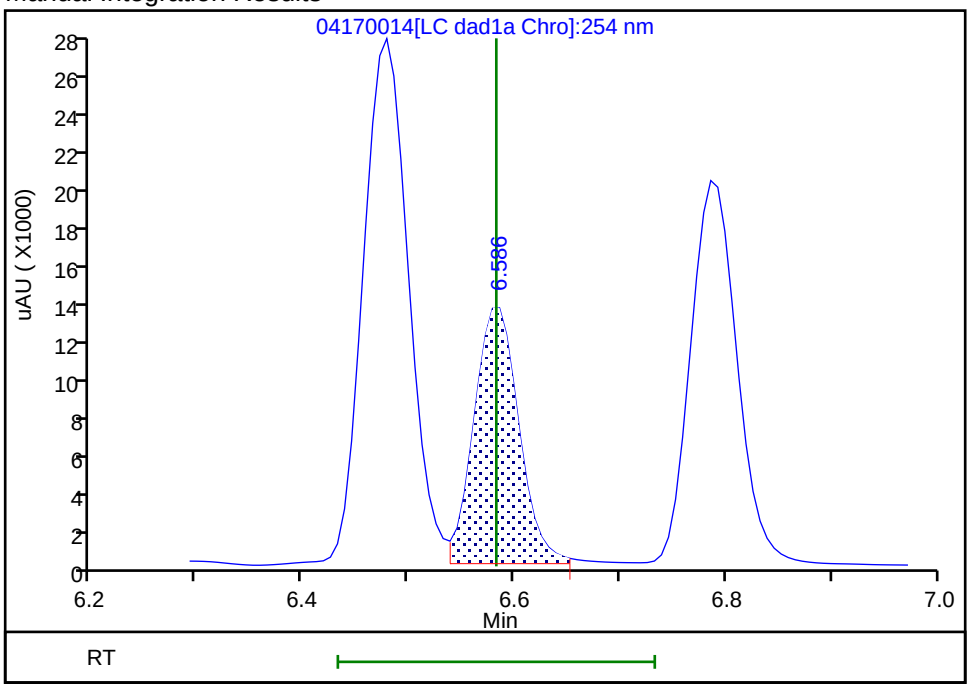
Processing Integration Results

RT: 6.59
Area: 42787
Amount: 0.411788
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 38101
Amount: 0.398781
Amount Units: ug/mL



Reviewer: LV5D, 18-Apr-2024 11:14:55 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

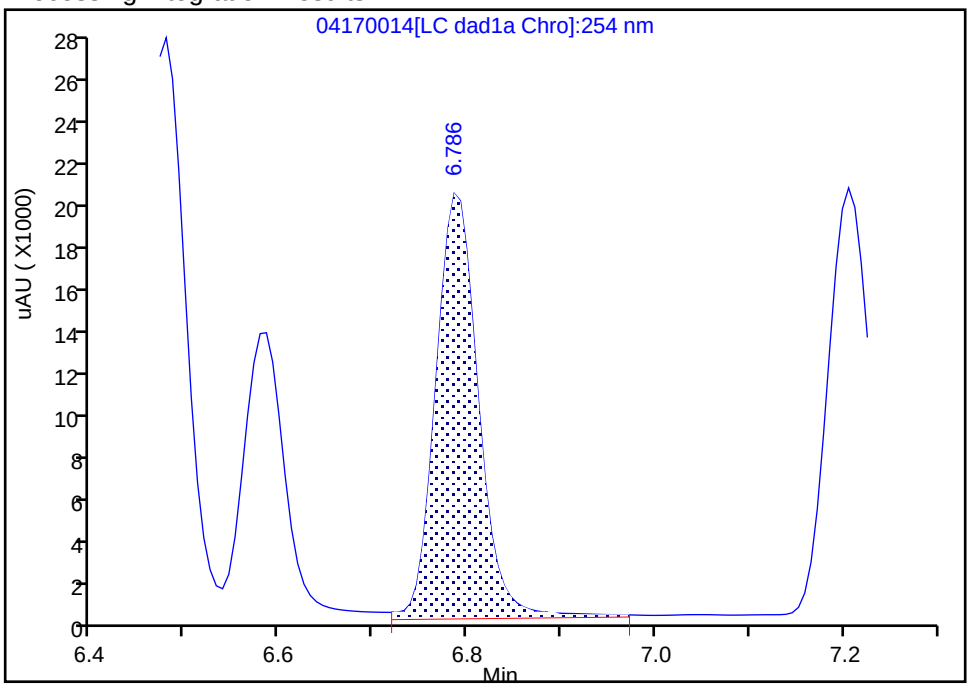
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240417-132364.b\04170014.d				
Injection Date:	17-Apr-2024 21:46:50	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 6				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

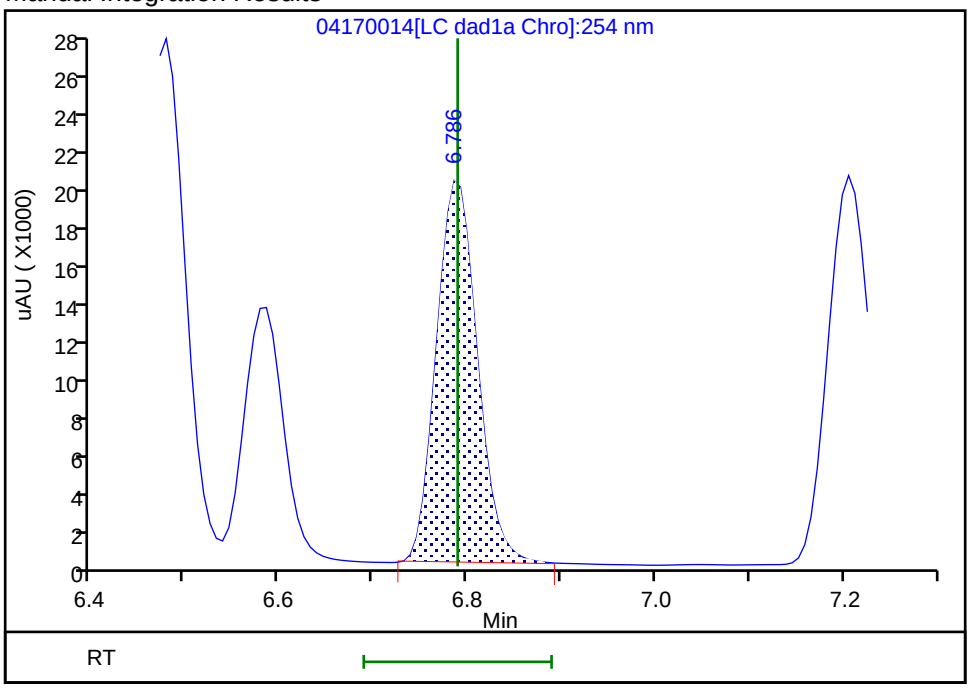
Processing Integration Results

RT: 6.79
Area: 62648
Amount: 0.406964
Amount Units: ug/mL



Manual Integration Results

RT: 6.79
Area: 58701
Amount: 0.398623
Amount Units: ug/mL



Reviewer: LV5D, 18-Apr-2024 11:14:58 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\04170015.D
Lims ID: IC INT/DMT 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 17-Apr-2024 22:09:45 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/DMT 5
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 18-Apr-2024 11:59:26 Calib Date: 18-Apr-2024 03:08:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\04170028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1675

First Level Reviewer: LV5D Date: 18-Apr-2024 11:15:36

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.476	6.476	0.000	49234	0.2510	0.2474	M
4 HMX	1	6.582	6.583	-0.001	23583	0.2500	0.2468	M
6 DNX	1	6.789	6.789	0.000	36872	0.2505	0.2504	M
7 MNX	1	7.209	7.203	0.006	39930	0.2923	0.2921	
8 RDX	1	7.582	7.583	-0.001	26844	0.2500	0.2423	
9 2,4,6-Trinitrophenol	1	7.809	7.816	-0.007	19748	0.2500	0.2489	
$ 10 1,2-Dinitrobenzene	1	8.522	8.516	0.006	32787	0.2500	0.2484	
11 1,3,5-Trinitrobenzene	1	8.656	8.656	0.000	54073	0.2500	0.2426	
12 1,3-Dinitrobenzene	1	9.276	9.276	0.000	74190	0.2500	0.2478	
13 Nitrobenzene	1	9.636	9.636	0.000	47641	0.2500	0.2427	
14 3,5-Dinitroaniline	1	9.876	9.876	0.000	54841	0.2500	0.2492	
15 Tetryl	1	9.962	9.963	-0.001	45082	0.2500	0.2483	
16 Nitroglycerin	2	10.429	10.429	0.000	167486	2.50	2.52	
17 2,4,6-Trinitrotoluene	1	10.869	10.869	0.000	53593	0.2500	0.2490	
18 4-Amino-2,6-dinitrotoluene	1	11.049	11.049	0.000	36831	0.2500	0.2456	
19 2-Amino-4,6-dinitrotoluene	1	11.309	11.309	0.000	49951	0.2500	0.2500	
20 2,6-Dinitrotoluene	1	11.456	11.449	0.007	35939	0.2500	0.2446	
21 2,4-Dinitrotoluene	1	11.629	11.629	0.000	72314	0.2500	0.2478	
22 o-Nitrotoluene	1	12.422	12.423	-0.001	31023	0.2500	0.2399	
23 p-Nitrotoluene	1	12.842	12.843	-0.001	26871	0.2500	0.2382	
24 m-Nitrotoluene	1	13.402	13.403	-0.001	33952	0.2500	0.2357	M
25 PETN	2	14.489	14.483	0.006	176891	2.50	2.46	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00080	Amount Added:	25.00	Units: uL
8330 DMT_00016	Amount Added:	12.50	Units: uL

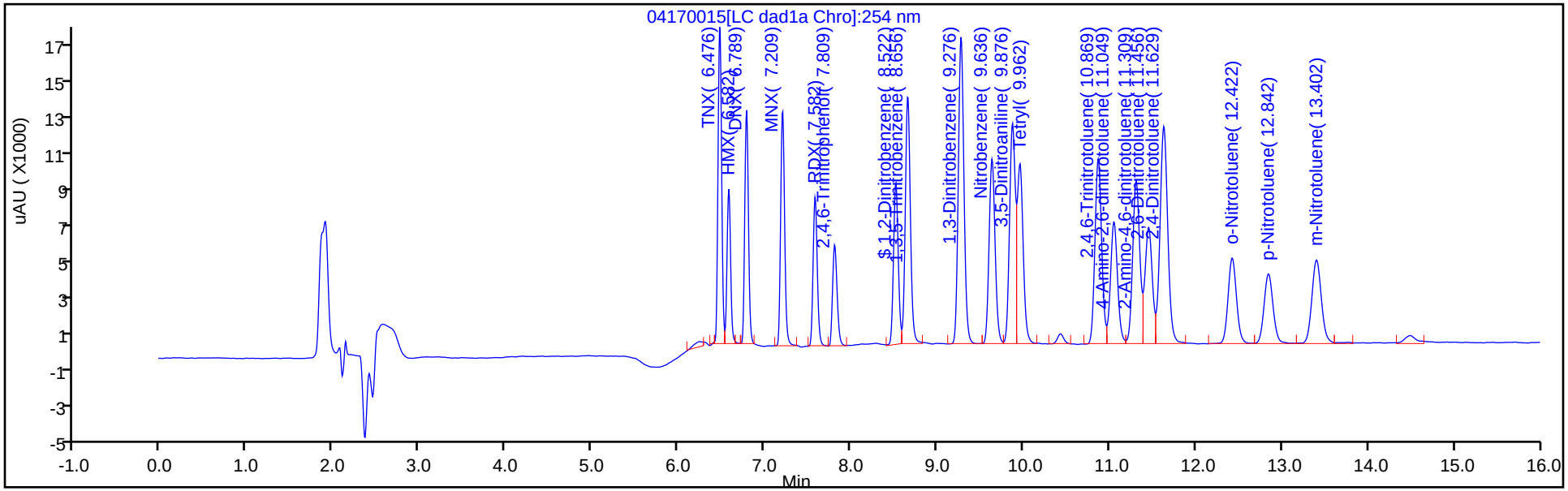
Report Date: 18-Apr-2024 11:59:26 Chrom Revision: 2.3 09-Apr-2024 17:43:44

Eurofins Denver

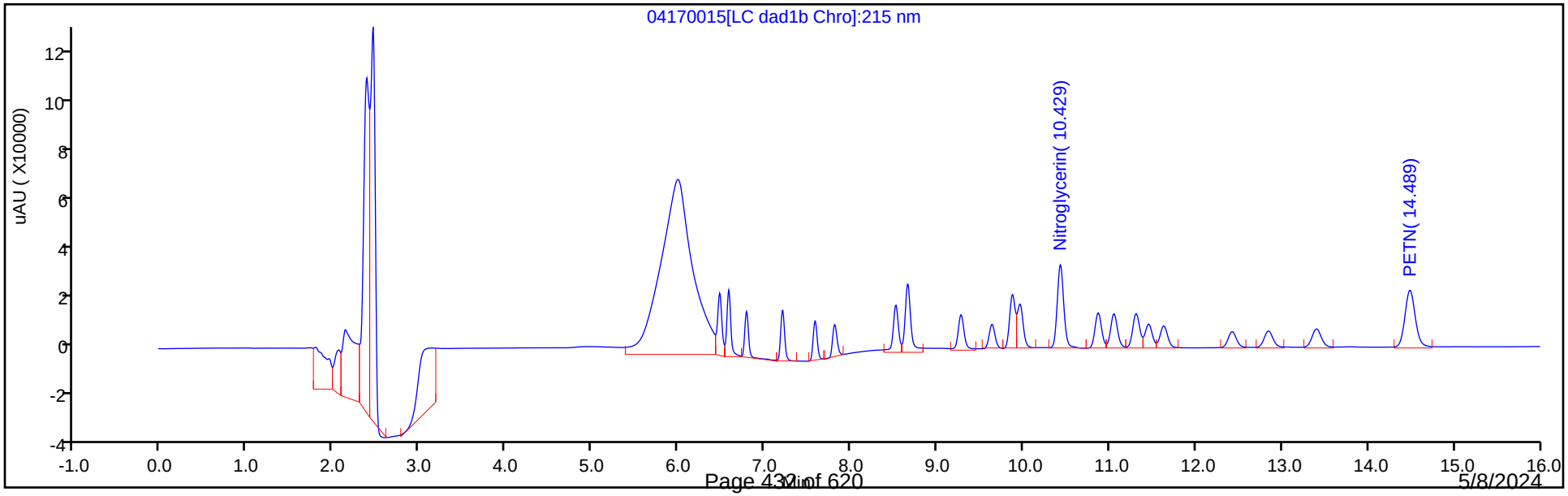
Data File: \\chromfs\denver\chromdata\chhplc_x\20240417-132364.b\04170015.d

Injection Date:	17-Apr-2024 22:09:45	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
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

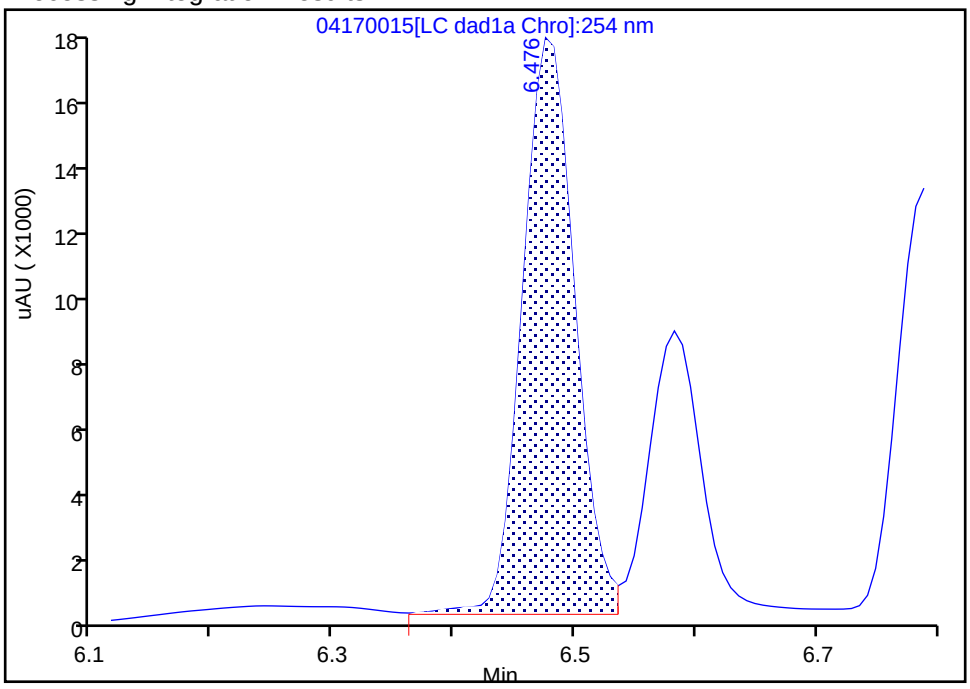
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240417-132364.b\04170015.d				
Injection Date:	17-Apr-2024 22:09:45	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 5				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

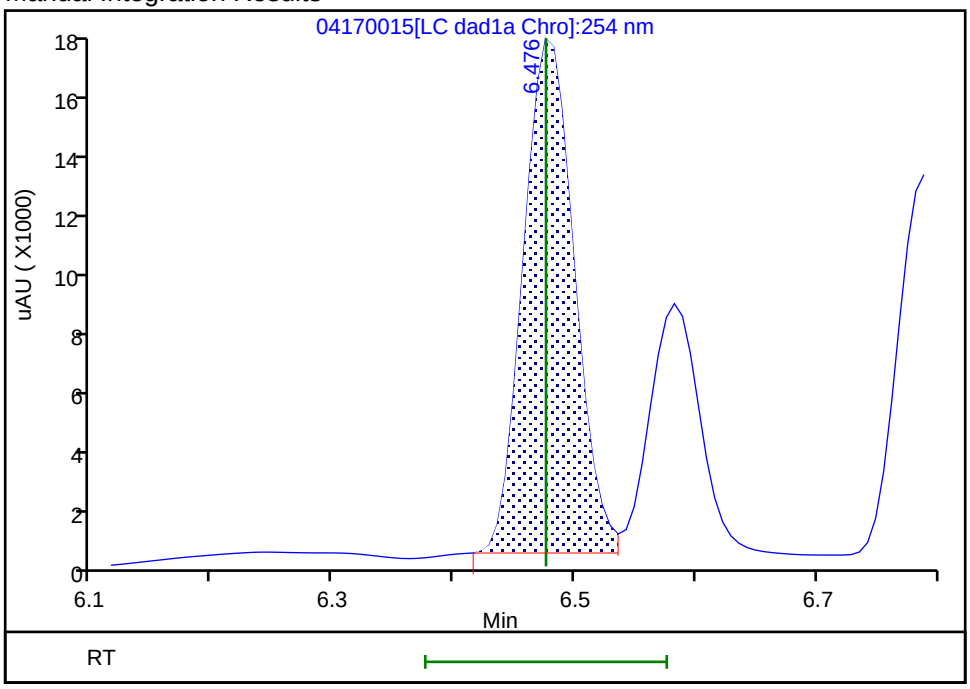
Processing Integration Results

RT: 6.48
Area: 50637
Amount: 0.246583
Amount Units: ug/mL



Manual Integration Results

RT: 6.48
Area: 49234
Amount: 0.247417
Amount Units: ug/mL



Reviewer: LV5D, 18-Apr-2024 11:15:14 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

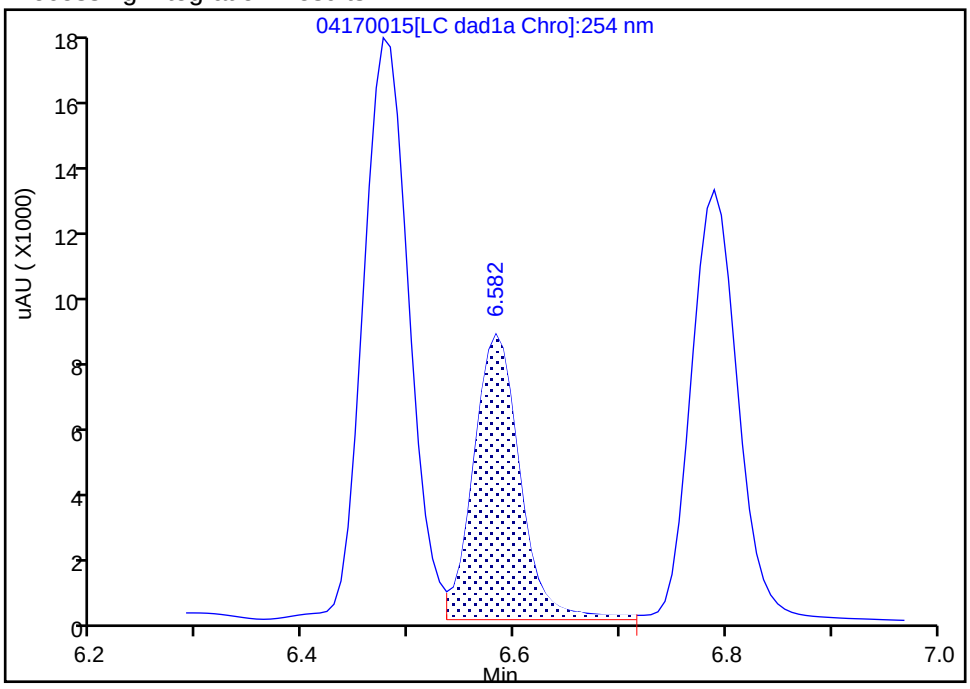
Data File: \\chromfs\denver\chromdata\chhplc_x\20240417-132364.b\04170015.d
Injection Date: 17-Apr-2024 22:09:45 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 5
Client ID:
Operator ID: JZ/JG ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

4 HMX, CAS: 2691-41-0

Signal: 1

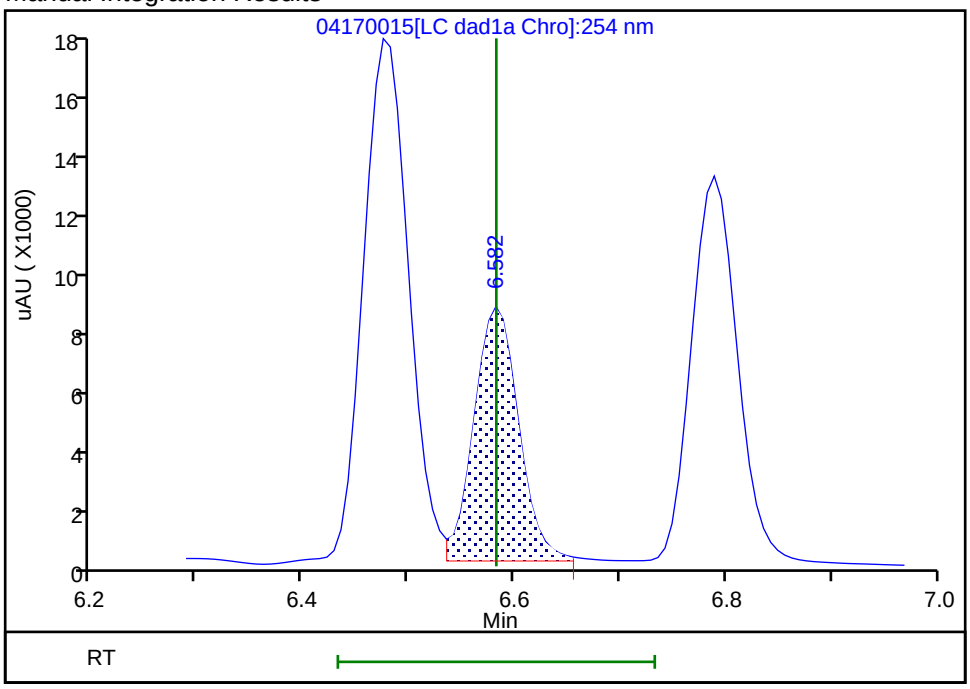
Processing Integration Results

RT: 6.58
Area: 25313
Amount: 0.246706
Amount Units: ug/mL



Manual Integration Results

RT: 6.58
Area: 23583
Amount: 0.246829
Amount Units: ug/mL



Reviewer: LV5D, 18-Apr-2024 11:15:15 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

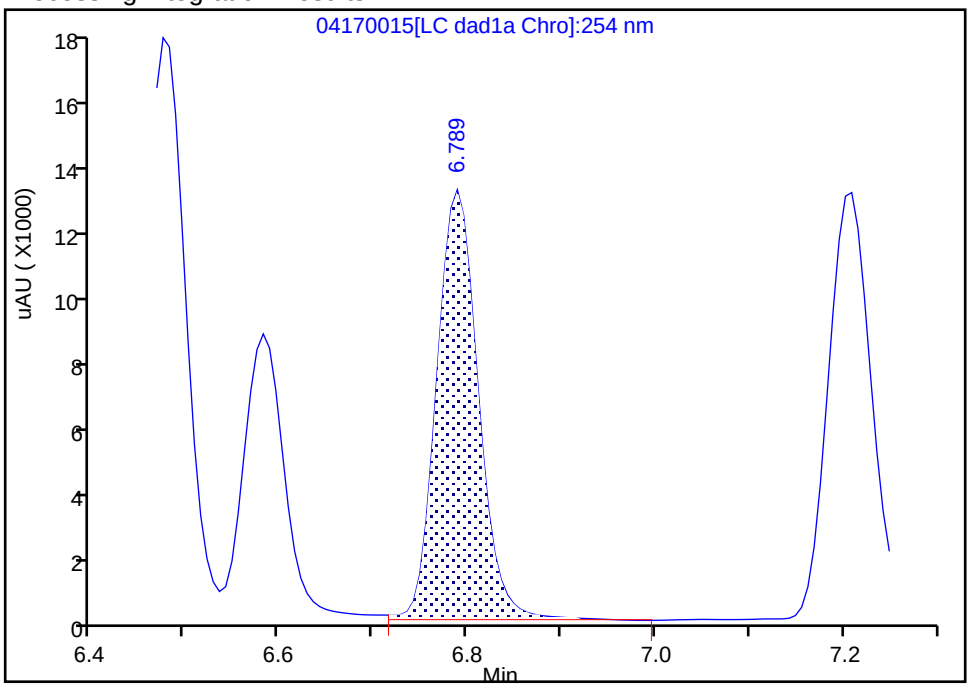
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240417-132364.b\04170015.d				
Injection Date:	17-Apr-2024 22:09:45	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 5				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

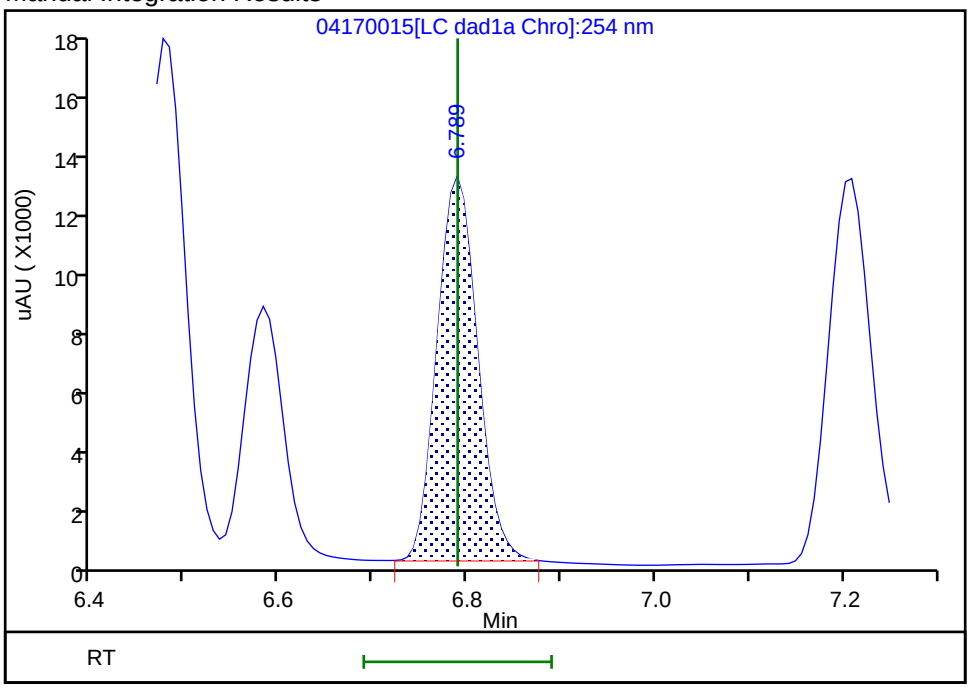
Processing Integration Results

RT: 6.79
Area: 38558
Amount: 0.252268
Amount Units: ug/mL



Manual Integration Results

RT: 6.79
Area: 36872
Amount: 0.250388
Amount Units: ug/mL



Reviewer: LV5D, 18-Apr-2024 11:15:17 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

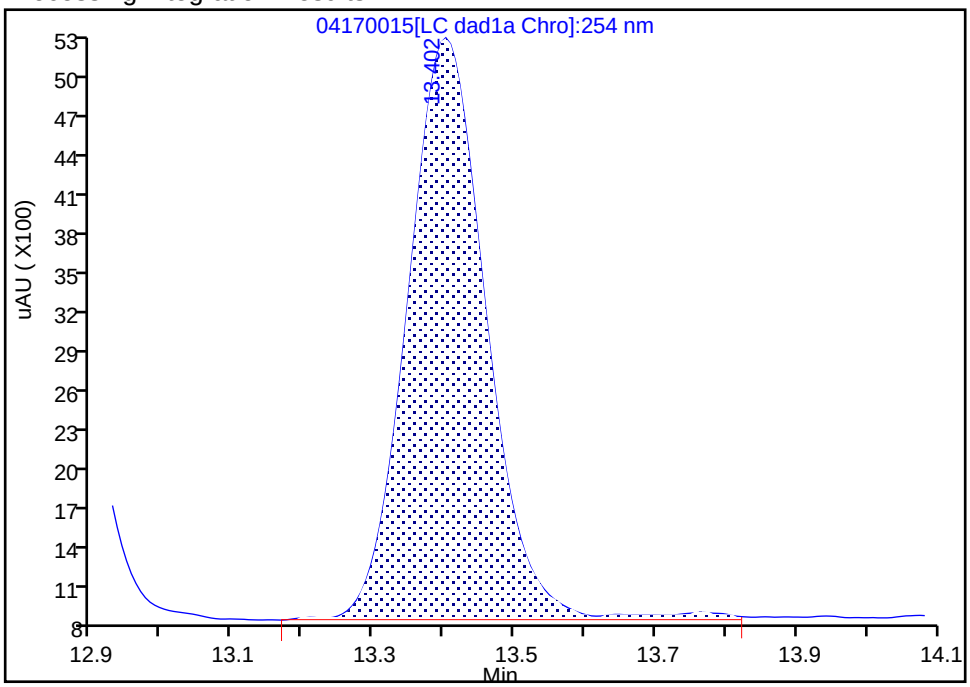
Data File: \\chromfs\denver\chromdata\chhplc_x\20240417-132364.b\04170015.d
Injection Date: 17-Apr-2024 22:09:45 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 5
Client ID:
Operator ID: JZ/JG ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

24 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

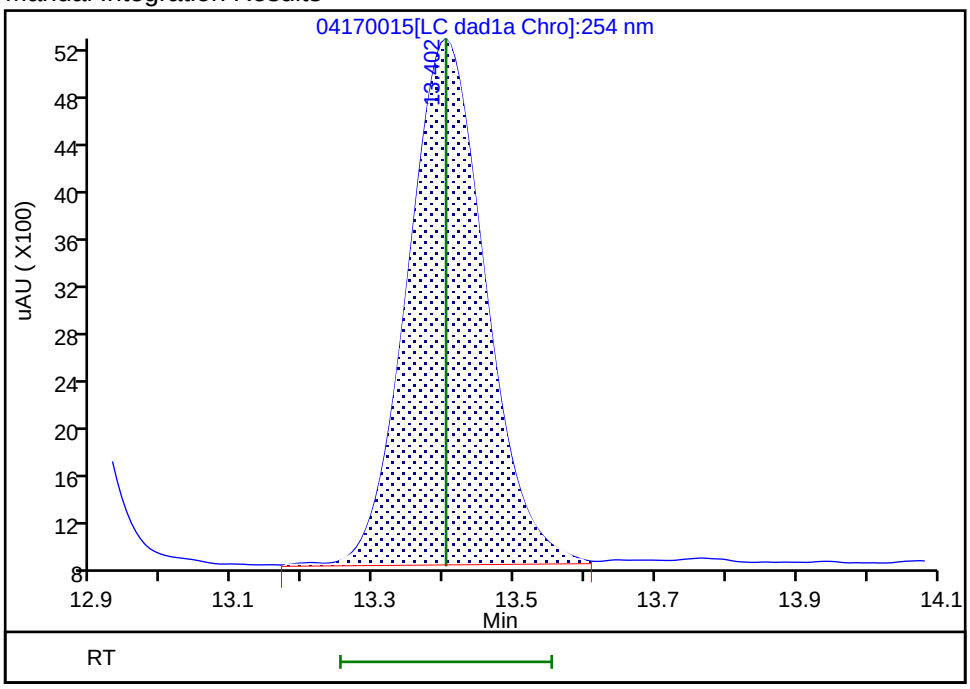
Processing Integration Results

RT: 13.40
Area: 34432
Amount: 0.238653
Amount Units: ug/mL



Manual Integration Results

RT: 13.40
Area: 33952
Amount: 0.235674
Amount Units: ug/mL



Reviewer: LV5D, 18-Apr-2024 11:15:33 -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\20240417-132364.b\04170016.D
Lims ID: IC INT/DMT 4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 17-Apr-2024 22:32:42 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/DMT 4
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 18-Apr-2024 11:59:27 Calib Date: 18-Apr-2024 03:08:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\04170028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1675

First Level Reviewer: LV5D Date: 18-Apr-2024 11:16:09

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.476	6.476	0.000	20006	0.1004	0.1005	M
4 HMX	1	6.583	6.583	0.000	9645	0.1000	0.1009	M
6 DNX	1	6.789	6.789	0.000	14834	0.1002	0.1007	M
7 MNX	1	7.203	7.203	0.000	15807	0.1169	0.1156	
8 RDX	1	7.583	7.583	0.000	11162	0.1000	0.1008	
9 2,4,6-Trinitrophenol	1	7.816	7.816	0.000	8016	0.1000	0.1011	
$ 10 1,2-Dinitrobenzene	1	8.516	8.516	0.000	13450	0.1000	0.1015	
11 1,3,5-Trinitrobenzene	1	8.656	8.656	0.000	22129	0.1000	0.0993	
12 1,3-Dinitrobenzene	1	9.276	9.276	0.000	30359	0.1000	0.1014	
13 Nitrobenzene	1	9.636	9.636	0.000	20035	0.1000	0.1020	
14 3,5-Dinitroaniline	1	9.876	9.876	0.000	22651	0.1000	0.1036	
15 Tetryl	1	9.963	9.963	0.000	18238	0.1000	0.1004	
16 Nitroglycerin	2	10.429	10.429	0.000	71367	1.00	1.07	
17 2,4,6-Trinitrotoluene	1	10.869	10.869	0.000	21912	0.1000	0.1018	
18 4-Amino-2,6-dinitrotoluene	1	11.049	11.049	0.000	15344	0.1000	0.1023	
19 2-Amino-4,6-dinitrotoluene	1	11.309	11.309	0.000	20033	0.1000	0.1003	
20 2,6-Dinitrotoluene	1	11.449	11.449	0.000	15218	0.1000	0.1036	
21 2,4-Dinitrotoluene	1	11.629	11.629	0.000	29452	0.1000	0.1009	
22 o-Nitrotoluene	1	12.423	12.423	0.000	12977	0.1000	0.1004	
23 p-Nitrotoluene	1	12.843	12.843	0.000	11360	0.1000	0.1007	
24 m-Nitrotoluene	1	13.403	13.403	0.000	14207	0.1000	0.0986	
25 PETN	2	14.483	14.483	0.000	72600	1.00	1.01	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00080	Amount Added: 10.00	Units: uL
8330 DMT_00016	Amount Added: 5.00	Units: uL

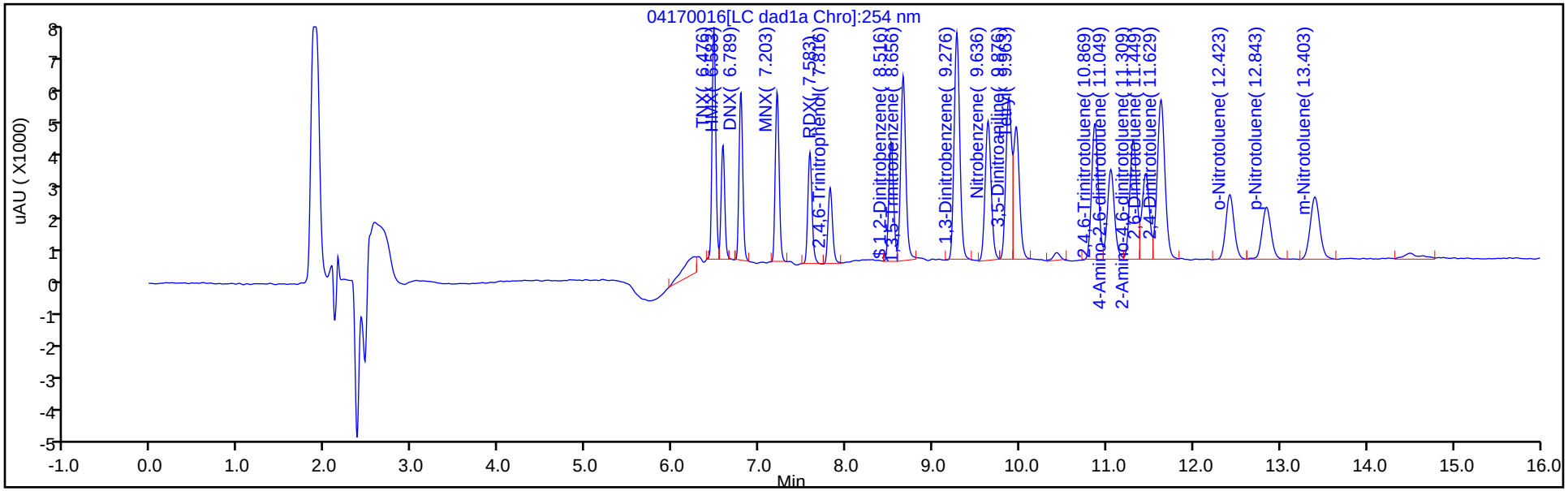
Report Date: 18-Apr-2024 11:59:27 Chrom Revision: 2.3 09-Apr-2024 17:43:44

Eurofins Denver

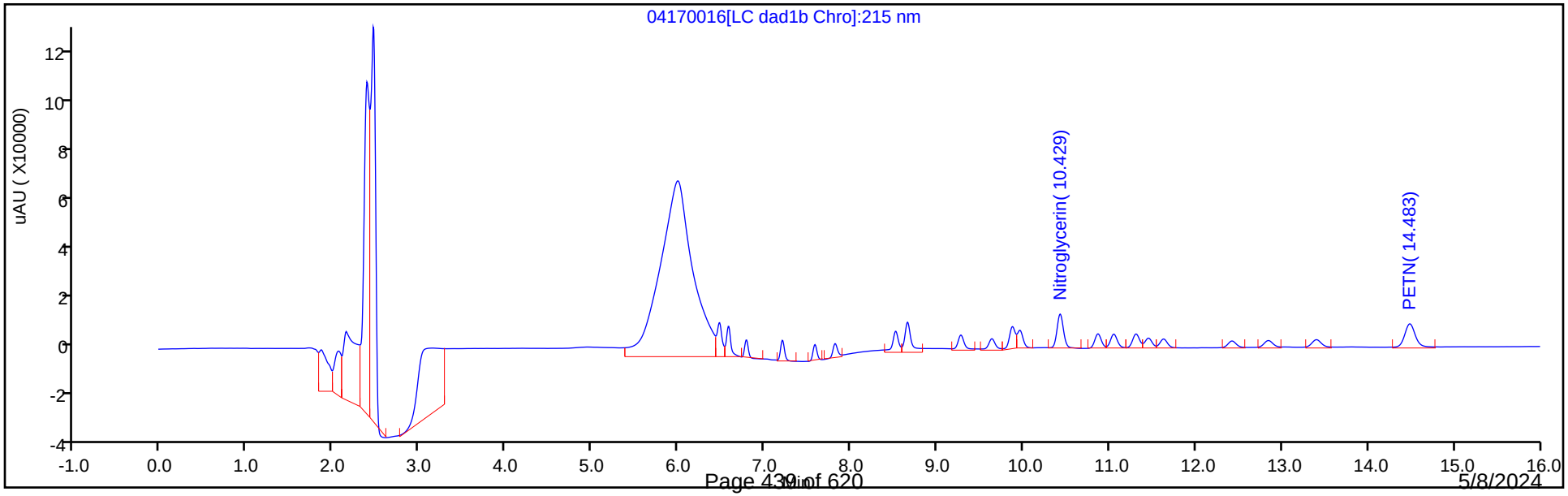
Data File: \\chromfs\denver\chromdata\chhplc_x\20240417-132364.b\04170016.d

Injection Date:	17-Apr-2024 22:32:42	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
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



5/8/2024
6:07:23 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

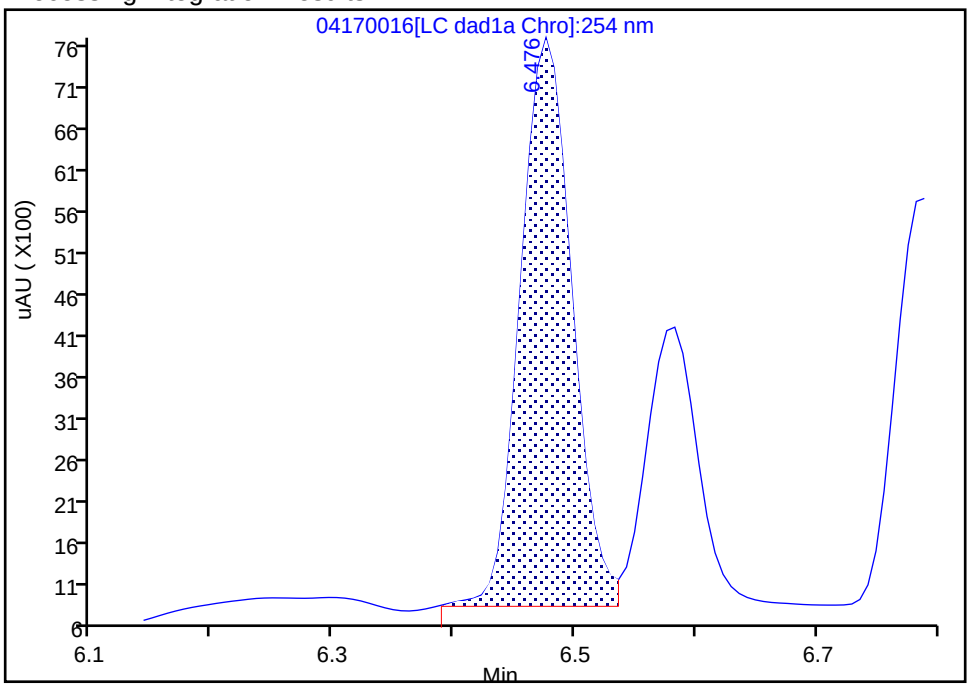
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240417-132364.b\04170016.d				
Injection Date:	17-Apr-2024 22:32:42	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 4				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

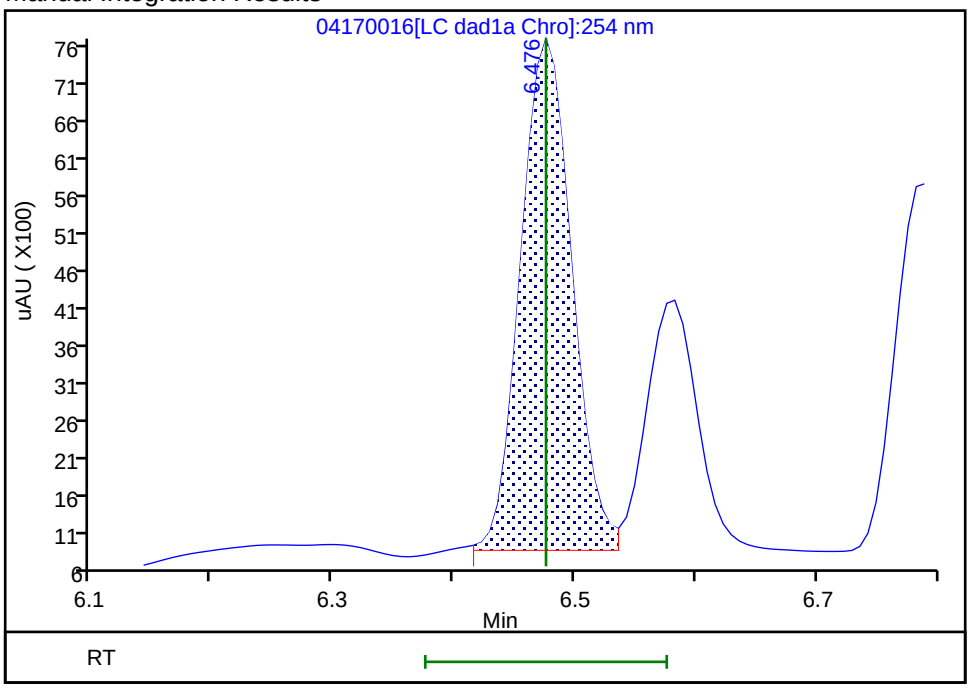
Processing Integration Results

RT: 6.48
Area: 20438
Amount: 0.099827
Amount Units: ug/mL



Manual Integration Results

RT: 6.48
Area: 20006
Amount: 0.100537
Amount Units: ug/mL



Reviewer: LV5D, 18-Apr-2024 11:16:01 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

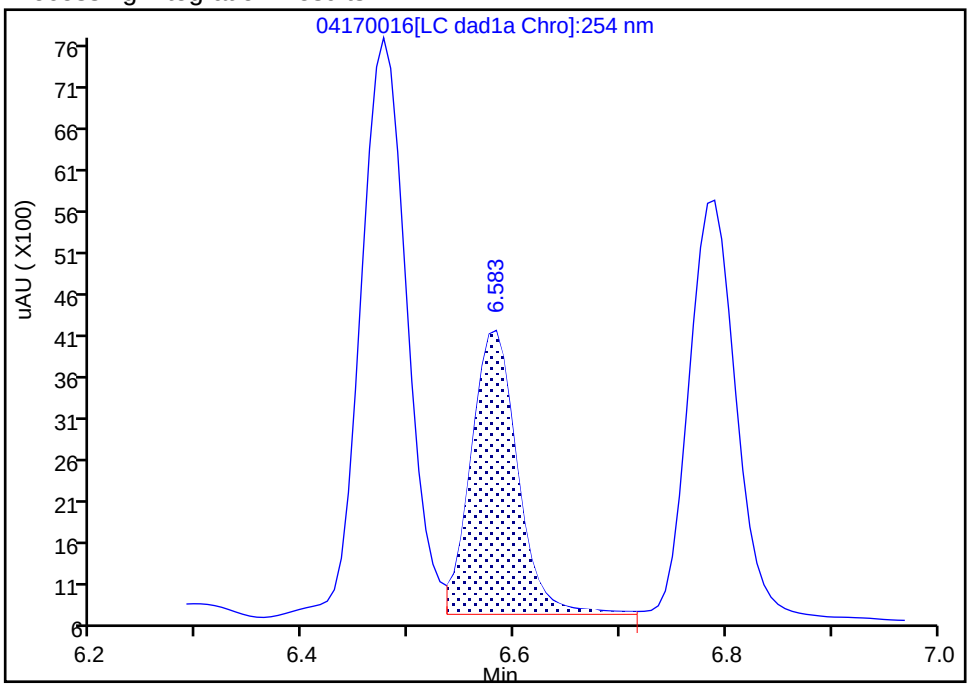
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240417-132364.b\04170016.d				
Injection Date:	17-Apr-2024 22:32:42	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 4				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

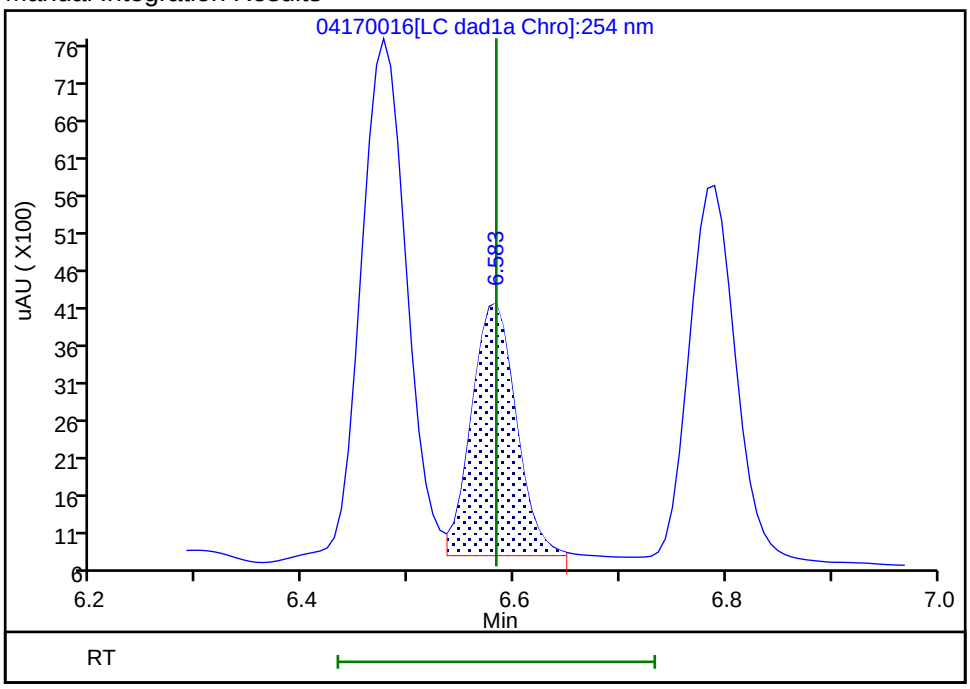
Processing Integration Results

RT: 6.58
Area: 10277
Amount: 0.100918
Amount Units: ug/mL



Manual Integration Results

RT: 6.58
Area: 9645
Amount: 0.100949
Amount Units: ug/mL



Reviewer: LV5D, 18-Apr-2024 11:16:02 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

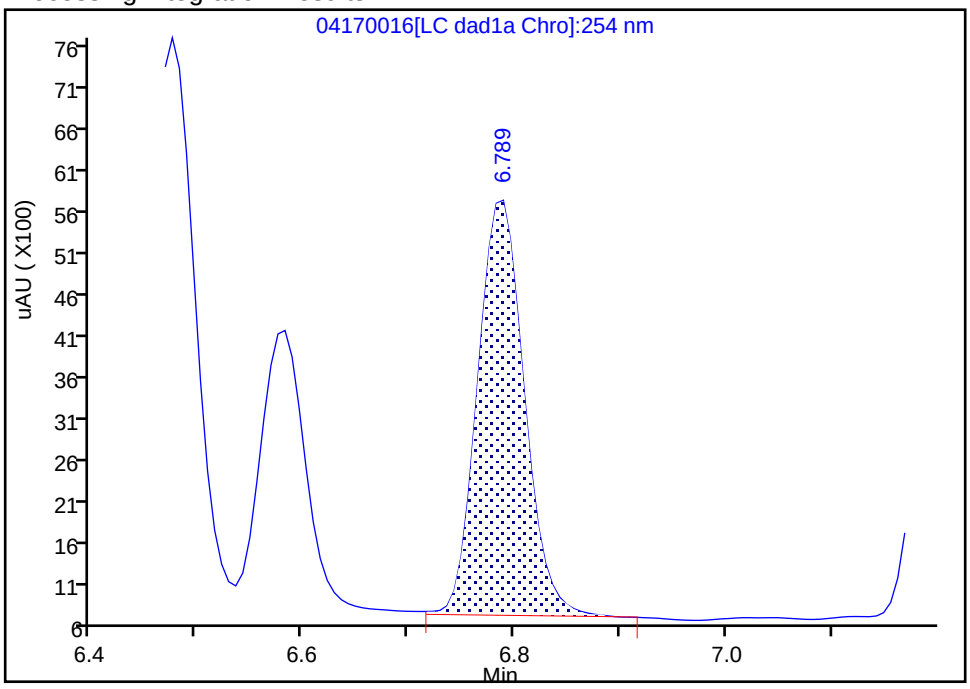
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240417-132364.b\04170016.d				
Injection Date:	17-Apr-2024 22:32:42	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 4				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

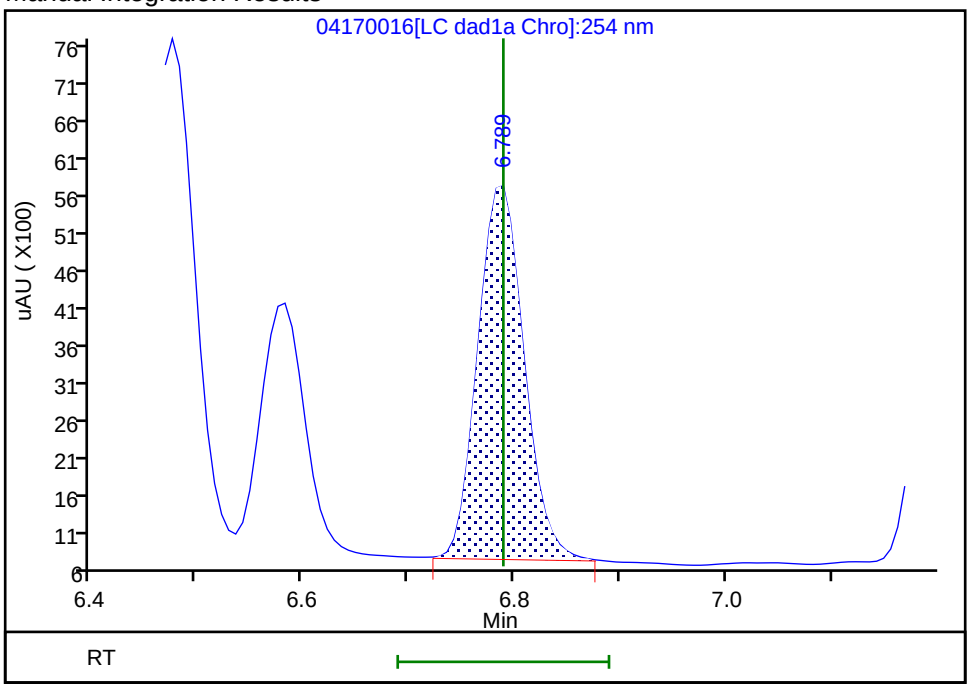
Processing Integration Results

RT: 6.79
Area: 15232
Amount: 0.100146
Amount Units: ug/mL



Manual Integration Results

RT: 6.79
Area: 14834
Amount: 0.100734
Amount Units: ug/mL



Reviewer: LV5D, 18-Apr-2024 11:16:06 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

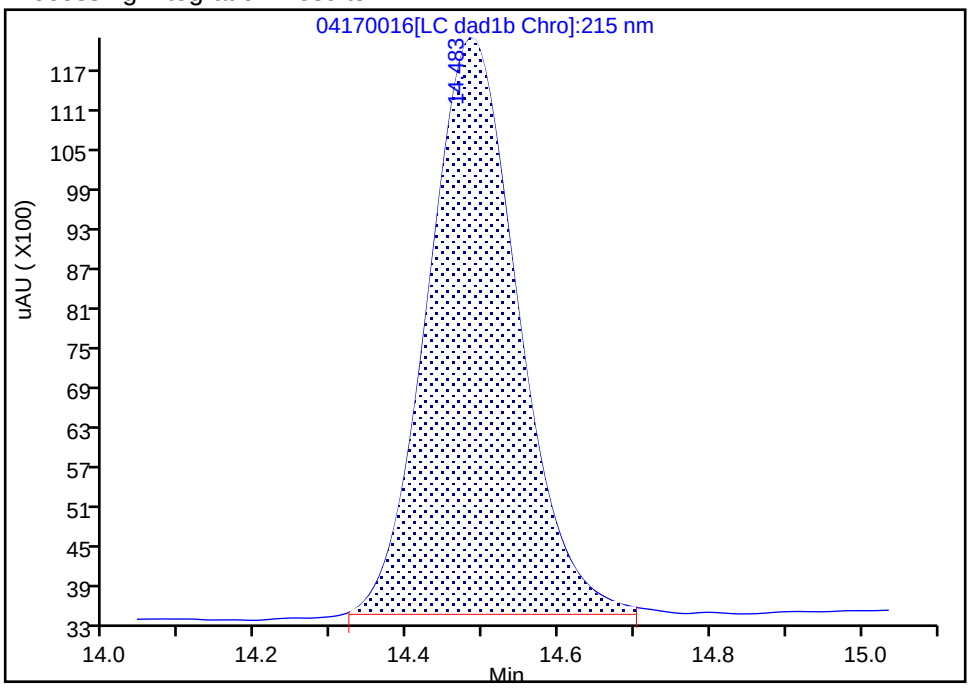
Data File: \\chromfs\denver\chromdata\chhplc_x\20240417-132364.b\04170016.d
Injection Date: 17-Apr-2024 22:32:42 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 4
Client ID:
Operator ID: JZ/JG ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1C, 215 nm

25 PETN, CAS: 78-11-5

Signal: 1

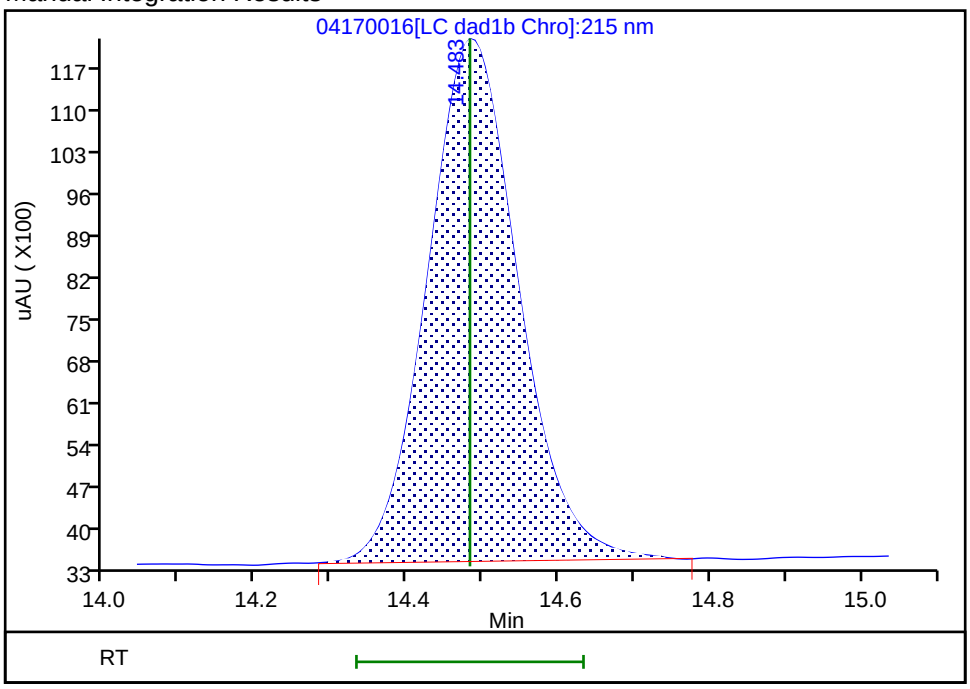
Processing Integration Results

RT: 14.48
Area: 72203
Amount: 1.039474
Amount Units: ug/mL



Manual Integration Results

RT: 14.48
Area: 72600
Amount: 1.009217
Amount Units: ug/mL



Reviewer: LV5D, 18-Apr-2024 11:15:43 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\04170017.D
Lims ID: IC INT/DMT 3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 17-Apr-2024 22:55:38 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/DMT 3
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 18-Apr-2024 11:59:28 Calib Date: 18-Apr-2024 03:08:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\04170028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1675

First Level Reviewer: LV5D Date: 18-Apr-2024 11:16:33

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.478	6.476	0.002	9628	0.0502	0.0484	M
4 HMX	1	6.578	6.583	-0.005	4536	0.0500	0.0475	M
6 DNX	1	6.784	6.789	-0.005	7258	0.0501	0.0493	M
7 MNX	1	7.204	7.203	0.001	7887	0.0585	0.0577	
8 RDX	1	7.584	7.583	0.001	5612	0.0500	0.0507	
9 2,4,6-Trinitrophenol	1	7.818	7.816	0.002	3847	0.0500	0.0485	
$ 10 1,2-Dinitrobenzene	1	8.518	8.516	0.002	6521	0.0500	0.0488	
11 1,3,5-Trinitrobenzene	1	8.658	8.656	0.002	11258	0.0500	0.0505	
12 1,3-Dinitrobenzene	1	9.277	9.276	0.001	15023	0.0500	0.0502	
13 Nitrobenzene	1	9.631	9.636	-0.005	9759	0.0500	0.0497	
14 3,5-Dinitroaniline	1	9.871	9.876	-0.005	10781	0.0500	0.0499	
15 Tetryl	1	9.957	9.963	-0.006	9010	0.0500	0.0496	
16 Nitroglycerin	2	10.424	10.429	-0.005	35657	0.5000	0.5365	
17 2,4,6-Trinitrotoluene	1	10.864	10.869	-0.005	10669	0.0500	0.0496	
18 4-Amino-2,6-dinitrotoluene	1	11.044	11.049	-0.005	7533	0.0500	0.0502	
19 2-Amino-4,6-dinitrotoluene	1	11.304	11.309	-0.005	9923	0.0500	0.0497	
20 2,6-Dinitrotoluene	1	11.451	11.449	0.002	7267	0.0500	0.0495	
21 2,4-Dinitrotoluene	1	11.624	11.629	-0.005	14425	0.0500	0.0494	
22 o-Nitrotoluene	1	12.424	12.423	0.001	6526	0.0500	0.0505	
23 p-Nitrotoluene	1	12.844	12.843	0.001	5631	0.0500	0.0499	
24 m-Nitrotoluene	1	13.404	13.403	0.001	7074	0.0500	0.0491	
25 PETN	2	14.491	14.483	0.008	35216	0.5000	0.4895	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00080	Amount Added:	5.00	Units: uL
8330 DMT_00016	Amount Added:	2.50	Units: uL

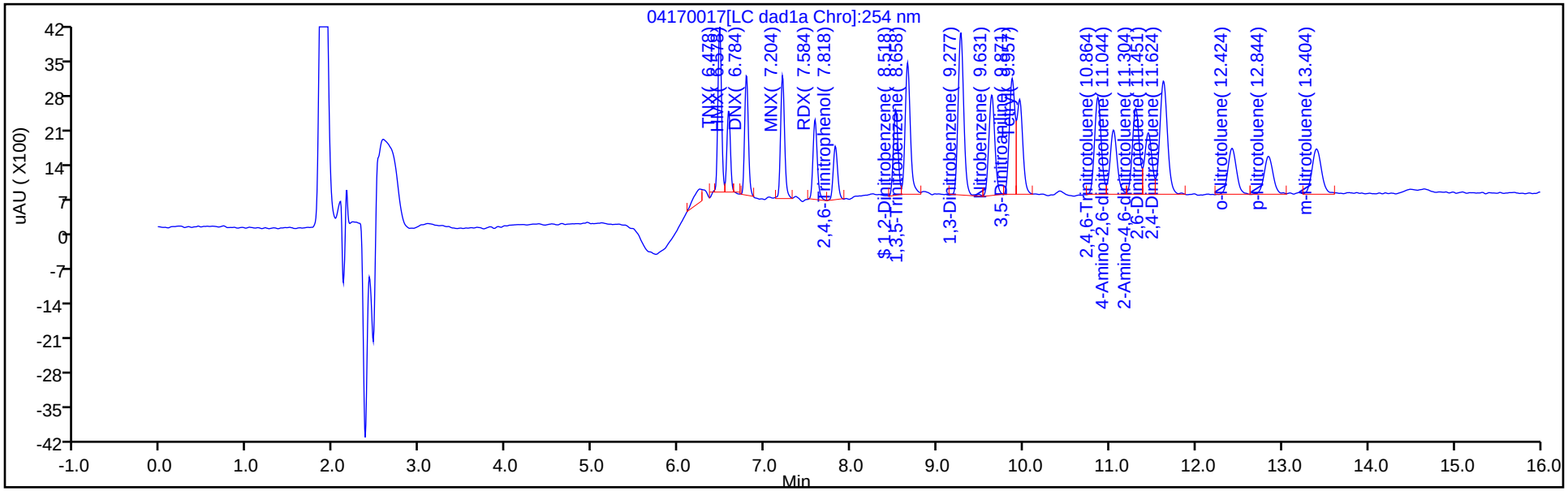
Report Date: 18-Apr-2024 11:59:28 Chrom Revision: 2.3 09-Apr-2024 17:43:44

Eurofins Denver

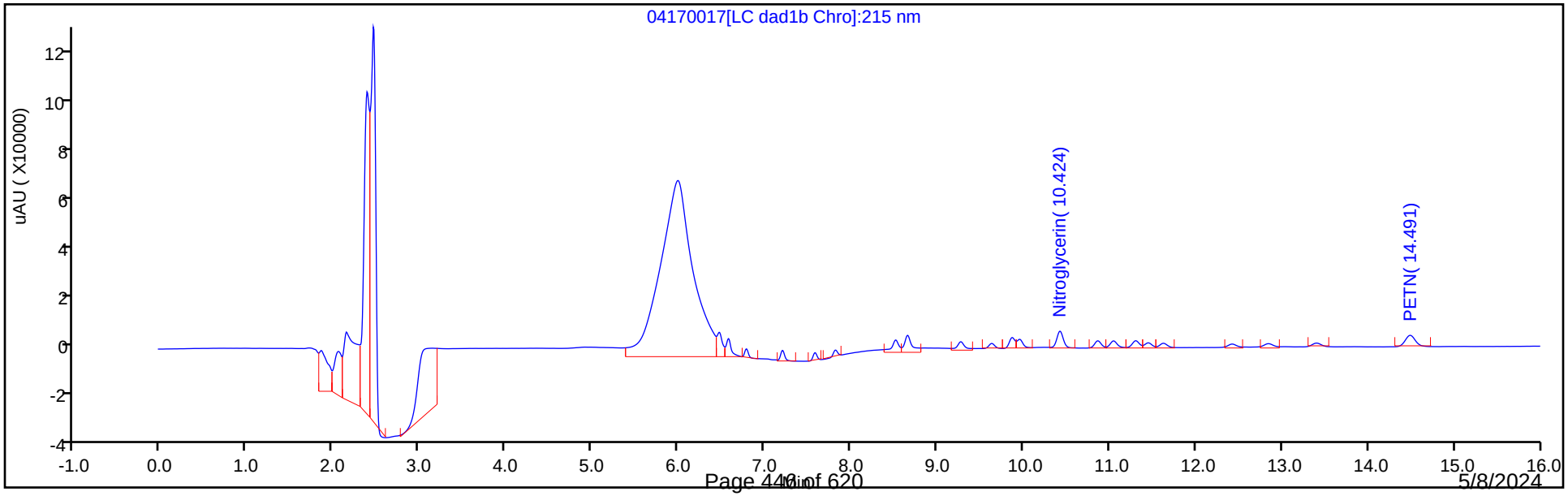
Data File: \\chromfs\denver\chromdata\chhplc_x\20240417-132364.b\04170017.d

Injection Date:	17-Apr-2024 22:55:38	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
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



5/8/2024
6:07:23 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

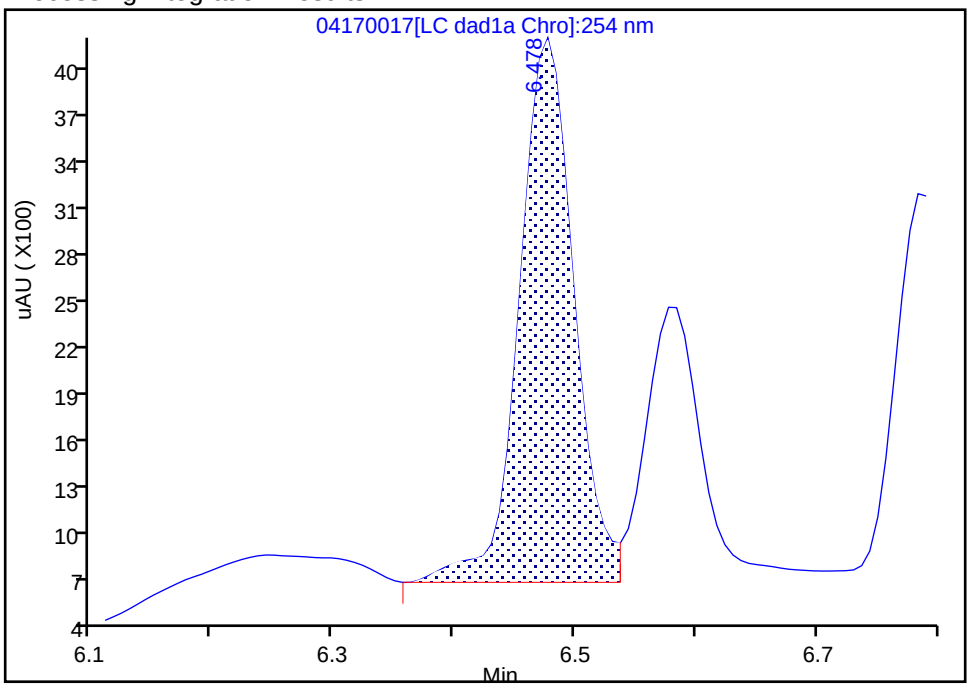
Data File: \\chromfs\denver\chromdata\chhplc_x\20240417-132364.b\04170017.d
Injection Date: 17-Apr-2024 22:55:38 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 3
Client ID:
Operator ID: JZ/JG ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 TNX, CAS: 13980-04-6

Signal: 1

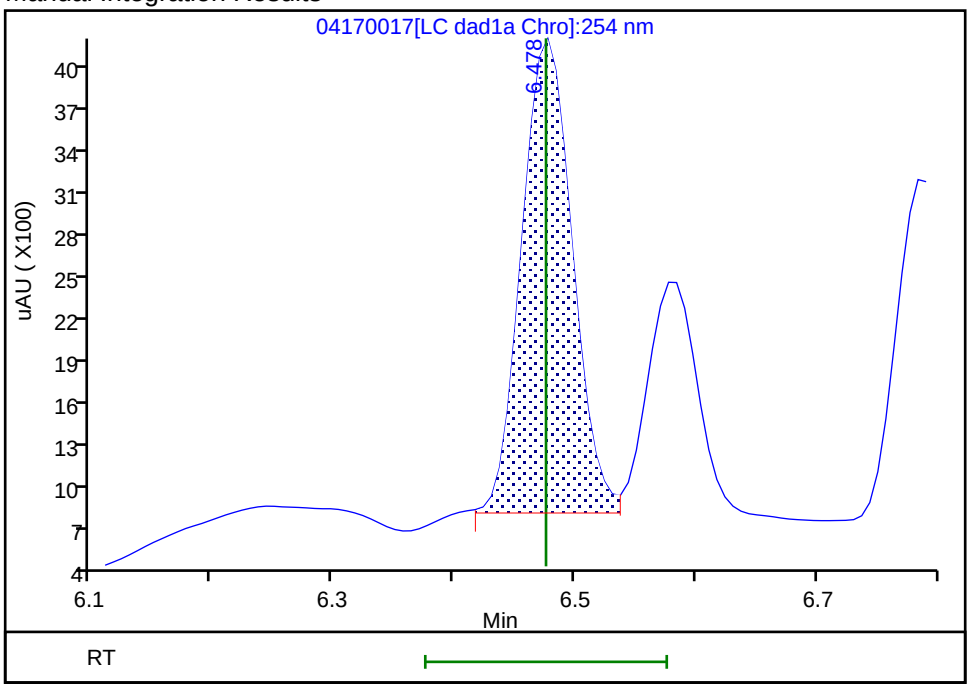
Processing Integration Results

RT: 6.48
Area: 10871
Amount: 0.053223
Amount Units: ug/mL



Manual Integration Results

RT: 6.48
Area: 9628
Amount: 0.048384
Amount Units: ug/mL



Reviewer: LV5D, 18-Apr-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

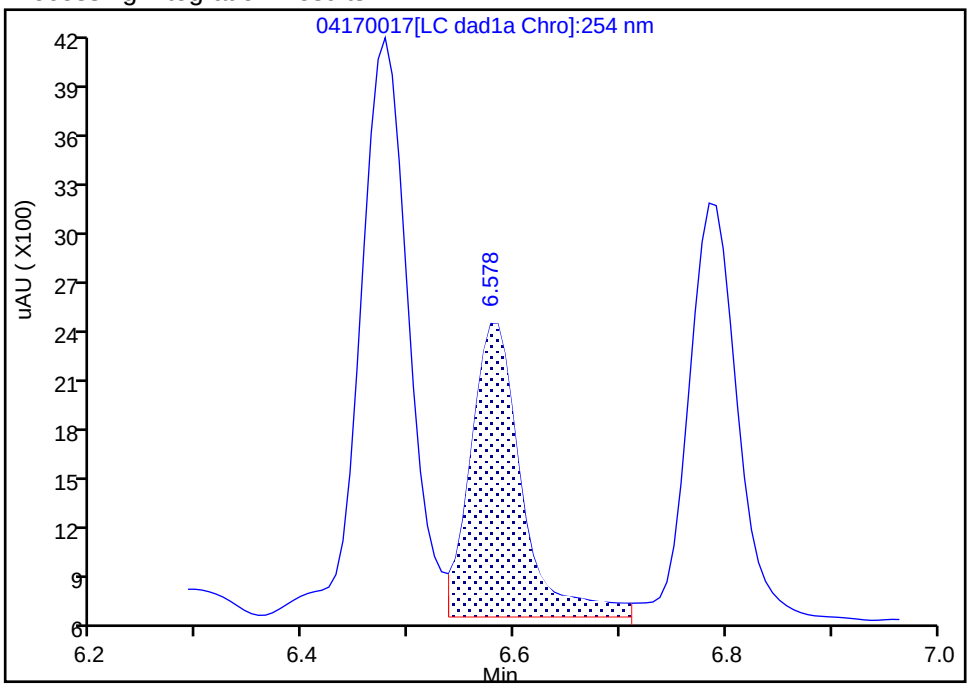
Data File: \\chromfs\denver\chromdata\chhplc_x\20240417-132364.b\04170017.d
Injection Date: 17-Apr-2024 22:55:38 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 3
Client ID:
Operator ID: JZ/JG ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

4 HMX, CAS: 2691-41-0

Signal: 1

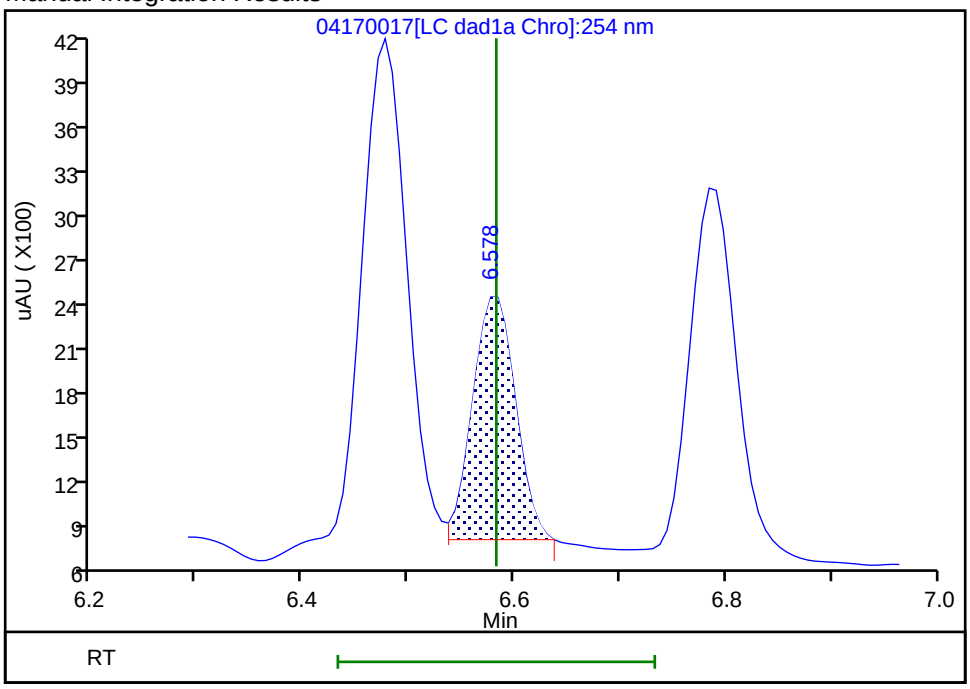
Processing Integration Results

RT: 6.58
Area: 5791
Amount: 0.057261
Amount Units: ug/mL



Manual Integration Results

RT: 6.58
Area: 4536
Amount: 0.047476
Amount Units: ug/mL



Reviewer: LV5D, 18-Apr-2024 11:16:22 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

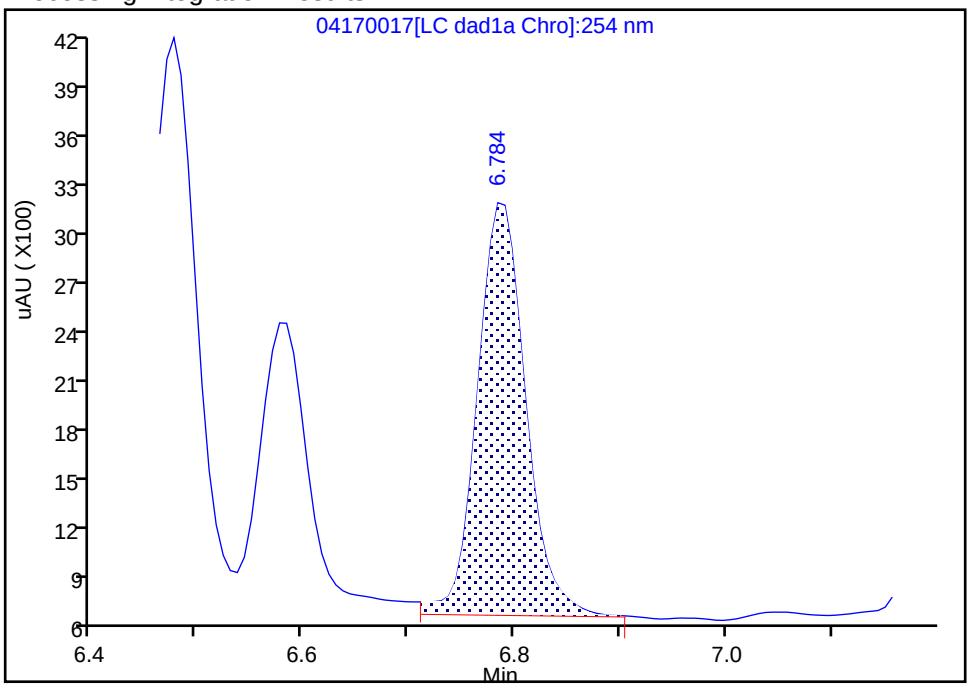
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240417-132364.b\04170017.d				
Injection Date:	17-Apr-2024 22:55:38	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 3				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

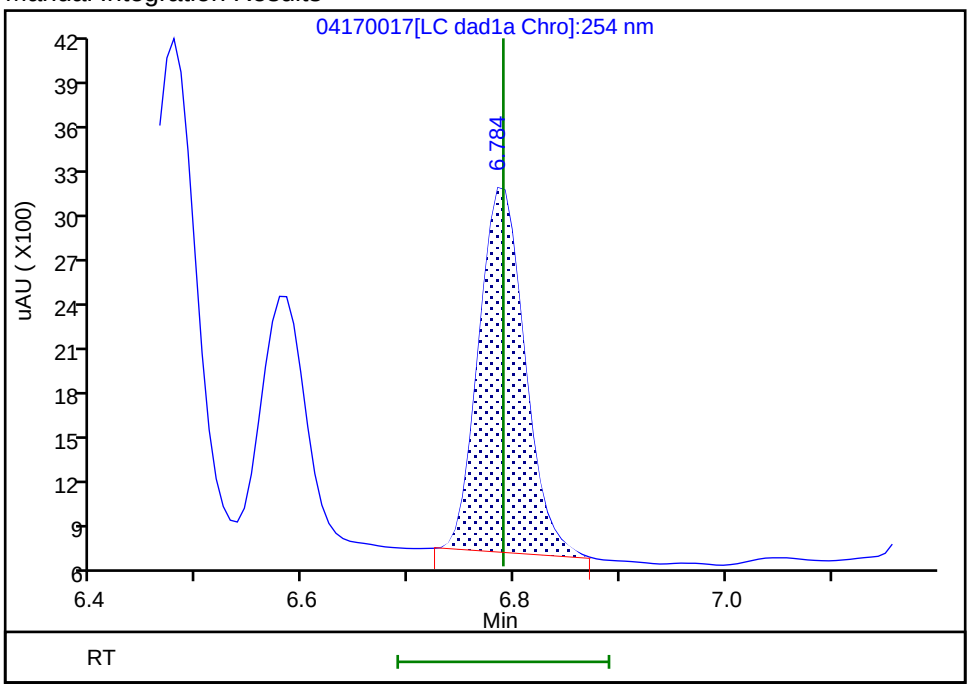
Processing Integration Results

RT: 6.78
Area: 7818
Amount: 0.051551
Amount Units: ug/mL



Manual Integration Results

RT: 6.78
Area: 7258
Amount: 0.049287
Amount Units: ug/mL



Reviewer: LV5D, 18-Apr-2024 11:16:26 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

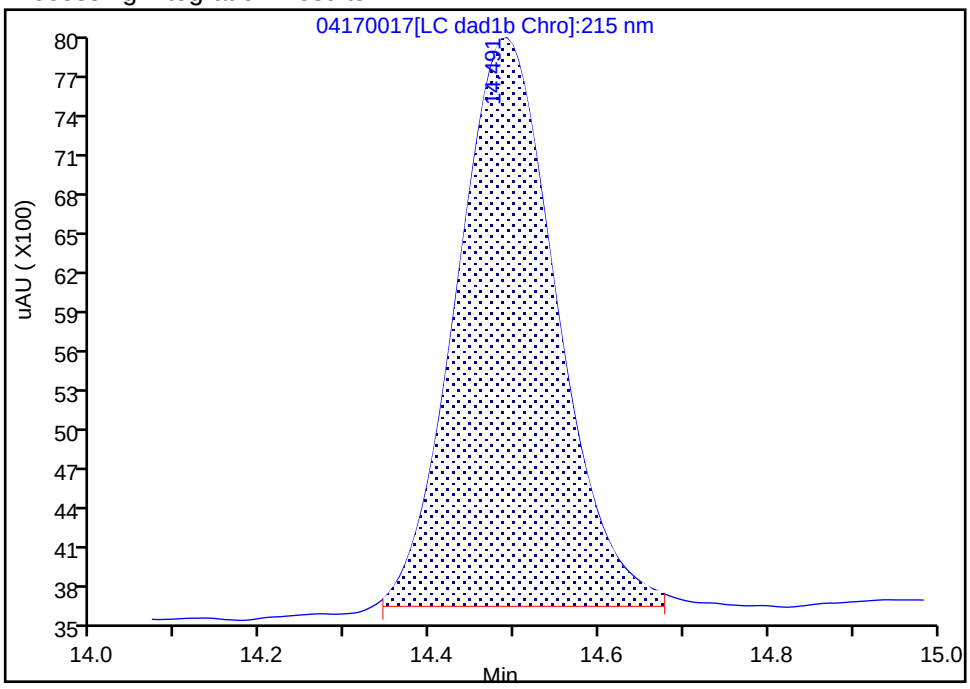
Data File: \\chromfs\denver\chromdata\chhplc_x\20240417-132364.b\04170017.d
Injection Date: 17-Apr-2024 22:55:38 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 3
Client ID:
Operator ID: JZ/JG ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1C, 215 nm

25 PETN, CAS: 78-11-5

Signal: 1

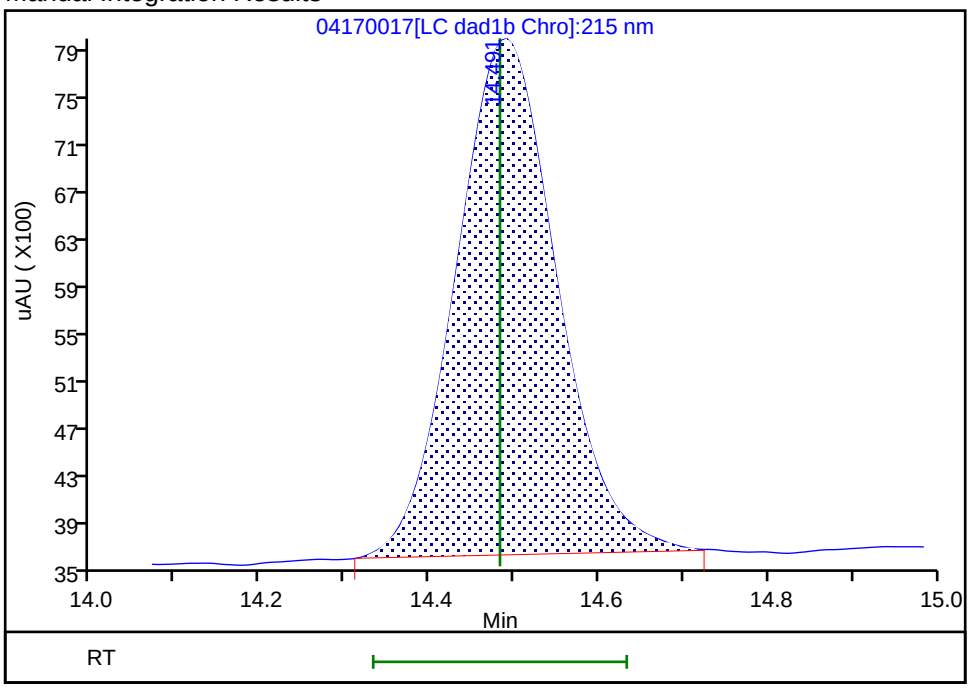
Processing Integration Results

RT: 14.49
Area: 34790
Amount: 0.500498
Amount Units: ug/mL



Manual Integration Results

RT: 14.49
Area: 35216
Amount: 0.489540
Amount Units: ug/mL



Reviewer: LV5D, 18-Apr-2024 11:16:31 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\04170018.D
Lims ID: IC INT/DMT 2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 17-Apr-2024 23:18:32 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/DMT 2
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 18-Apr-2024 11:59:29 Calib Date: 18-Apr-2024 03:08:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\04170028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1675

First Level Reviewer: LV5D Date: 18-Apr-2024 11:17:35

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.475	6.476	-0.001	4023	0.0201	0.0202	
4 HMX	1	6.582	6.583	-0.001	2017	0.0200	0.0211	
6 DNX	1	6.788	6.789	-0.001	2843	0.0200	0.0193	M
7 MNX	1	7.202	7.203	-0.001	2991	0.0234	0.0219	
8 RDX	1	7.582	7.583	-0.001	2334	0.0200	0.0211	
9 2,4,6-Trinitrophenol	1	7.822	7.816	0.006	1524	0.0200	0.0192	
$ 10 1,2-Dinitrobenzene	1	8.522	8.516	0.006	2603	0.0200	0.0191	M
11 1,3,5-Trinitrobenzene	1	8.655	8.656	-0.001	4349	0.0200	0.0195	M
12 1,3-Dinitrobenzene	1	9.275	9.276	-0.001	5678	0.0200	0.0190	
13 Nitrobenzene	1	9.635	9.636	-0.001	3932	0.0200	0.0200	
14 3,5-Dinitroaniline	1	9.868	9.876	-0.008	4171	0.0200	0.0199	M
15 Tetryl	1	9.955	9.963	-0.008	3374	0.0200	0.0186	Ma
16 Nitroglycerin	2	10.422	10.429	-0.007	11963	0.2000	0.1800	M
17 2,4,6-Trinitrotoluene	1	10.862	10.869	-0.007	4400	0.0200	0.0204	
18 4-Amino-2,6-dinitrotoluene	1	11.042	11.049	-0.007	3261	0.0200	0.0217	
19 2-Amino-4,6-dinitrotoluene	1	11.302	11.309	-0.007	3997	0.0200	0.0200	
20 2,6-Dinitrotoluene	1	11.448	11.449	-0.001	2880	0.0200	0.0196	
21 2,4-Dinitrotoluene	1	11.622	11.629	-0.007	5793	0.0200	0.0198	
22 o-Nitrotoluene	1	12.415	12.423	-0.008	2777	0.0200	0.0215	
23 p-Nitrotoluene	1	12.842	12.843	-0.001	2413	0.0200	0.0214	
24 m-Nitrotoluene	1	13.395	13.403	-0.008	3066	0.0200	0.0213	
25 PETN	2	14.482	14.483	-0.001	14174	0.2000	0.1970	M

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

8330IntermStk_00080	Amount Added:	2.00	Units: uL
8330 DMT_00016	Amount Added:	1.00	Units: uL

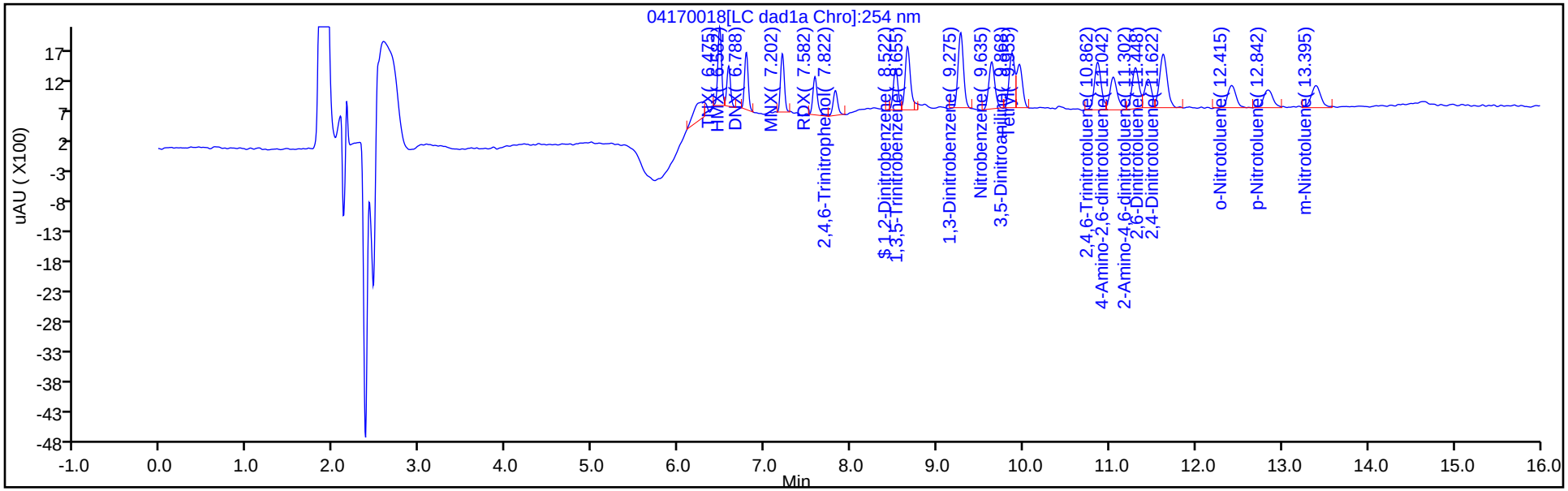
Report Date: 18-Apr-2024 11:59:29 Chrom Revision: 2.3 09-Apr-2024 17:43:44

Eurofins Denver

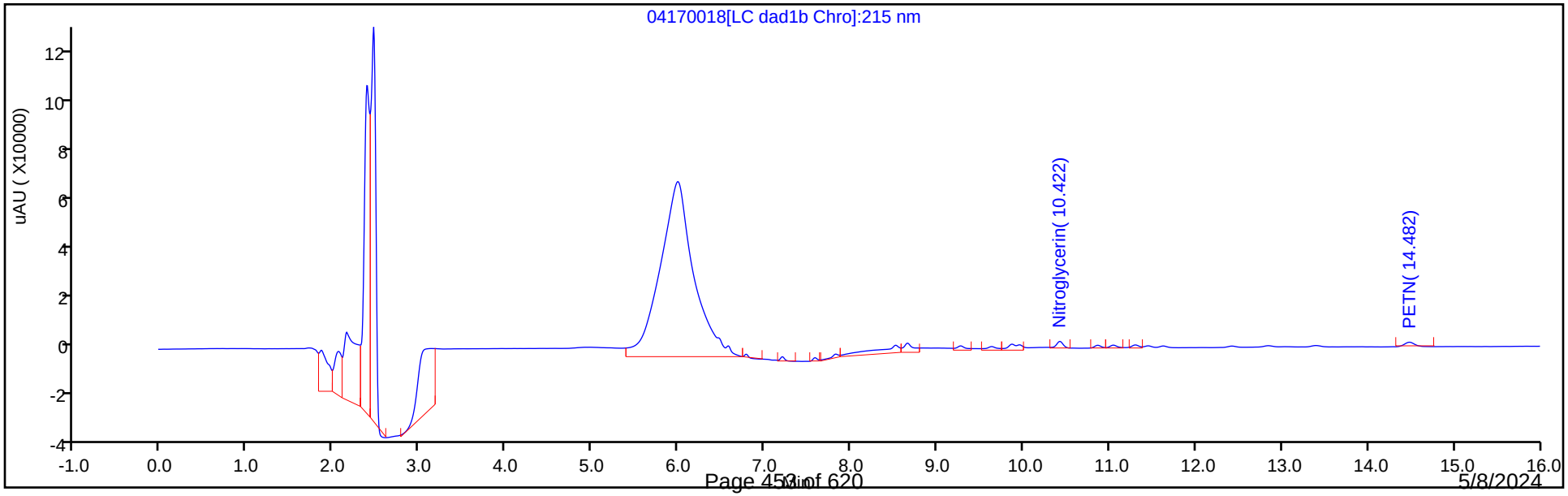
Data File: \\chromfs\denver\chromdata\chhplc_x\20240417-132364.b\04170018.d

Injection Date:	17-Apr-2024 23:18:32	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
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



5/8/2024
6:07:23 AM

Eurofins Denver

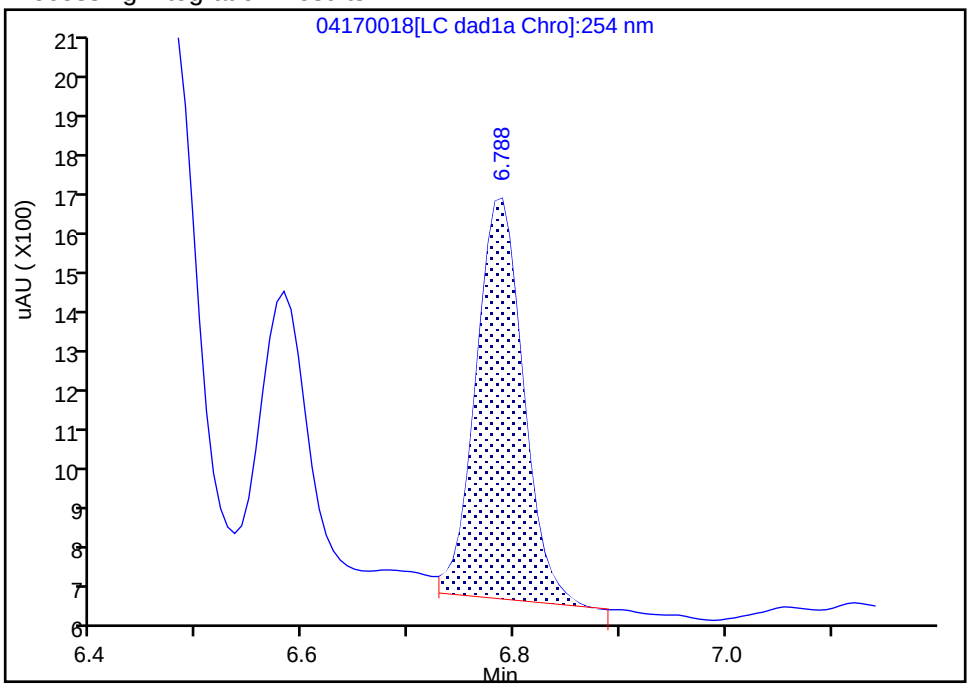
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240417-132364.b\04170018.d				
Injection Date:	17-Apr-2024 23:18:32	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

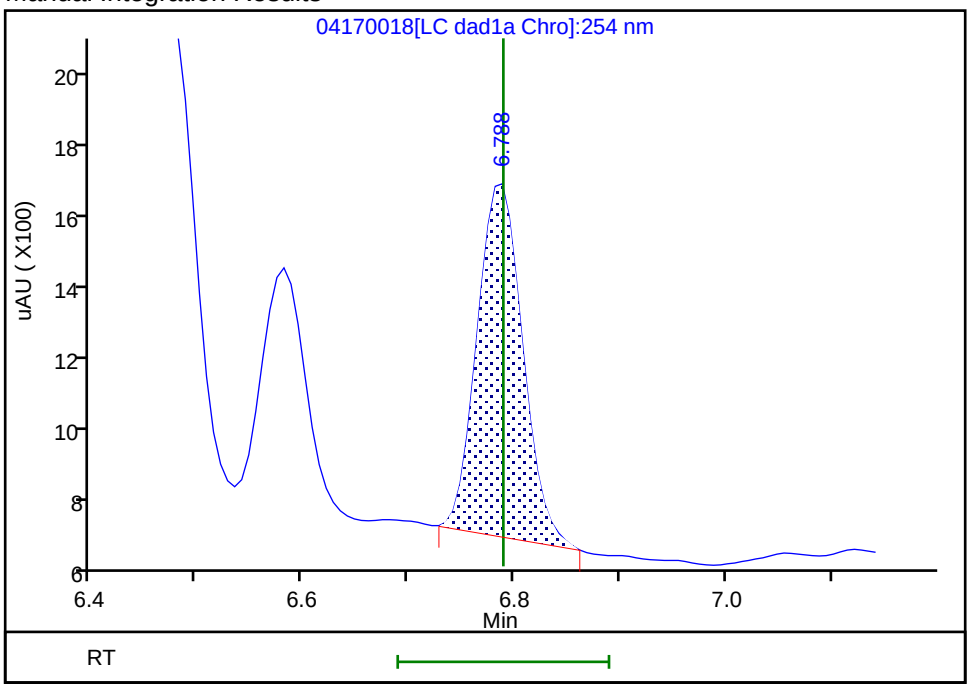
Processing Integration Results

RT: 6.79
Area: 3044
Amount: 0.020237
Amount Units: ug/mL



Manual Integration Results

RT: 6.79
Area: 2843
Amount: 0.019306
Amount Units: ug/mL



Reviewer: LV5D, 18-Apr-2024 11:17:01 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

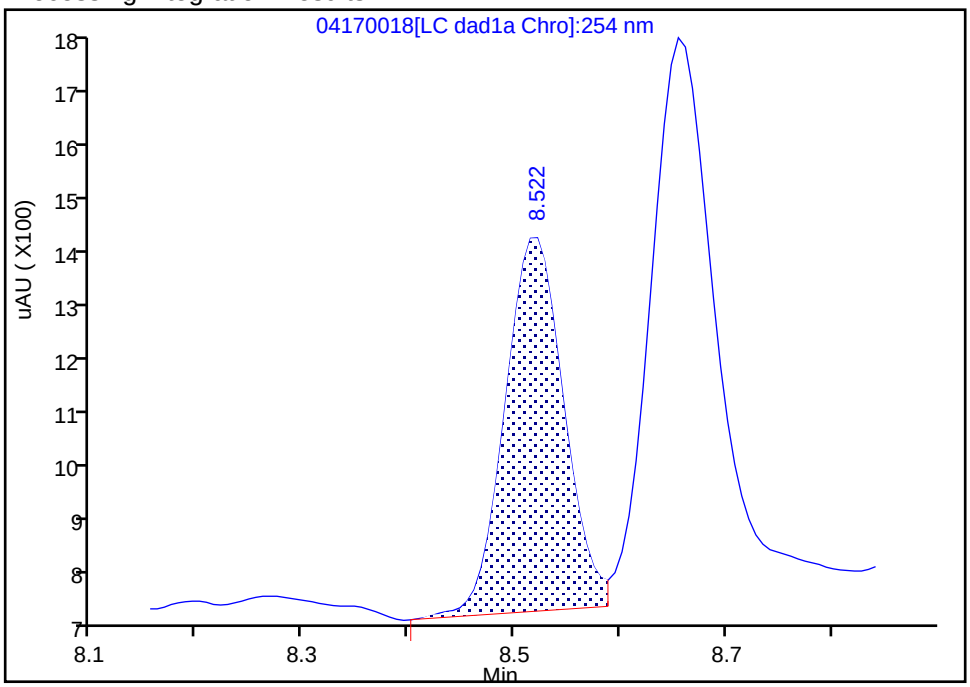
Data File: \\chromfs\denver\chromdata\chhplc_x\20240417-132364.b\04170018.d
Injection Date: 17-Apr-2024 23:18:32 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 2
Client ID:
Operator ID: JZ/JG ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

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

Signal: 1

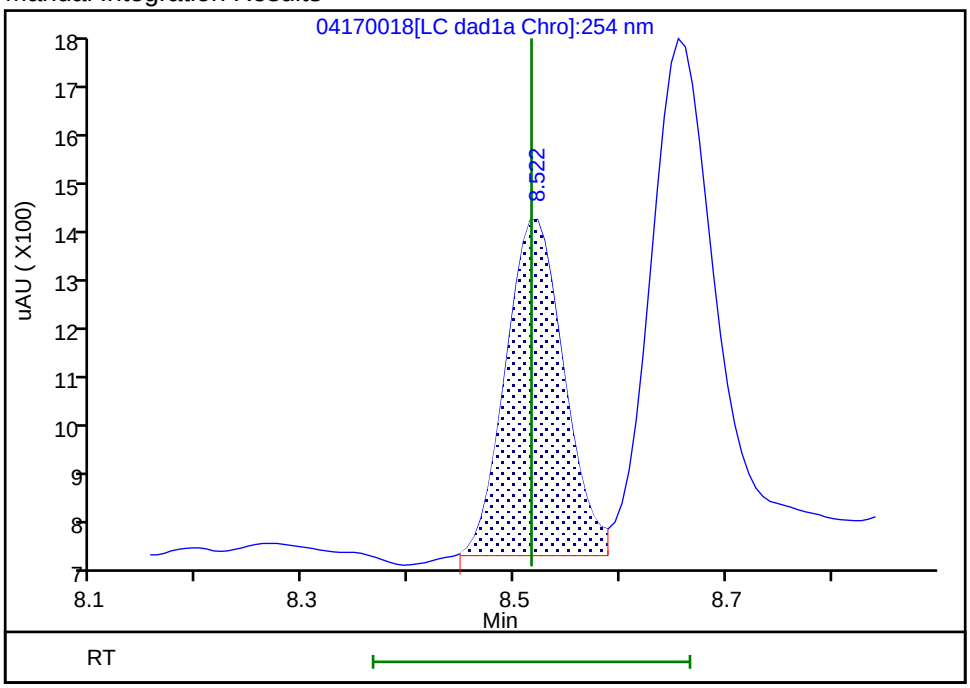
Processing Integration Results

RT: 8.52
Area: 2640
Amount: 0.019730
Amount Units: ug/mL



Manual Integration Results

RT: 8.52
Area: 2603
Amount: 0.019063
Amount Units: ug/mL



Reviewer: LV5D, 18-Apr-2024 11:19:58 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

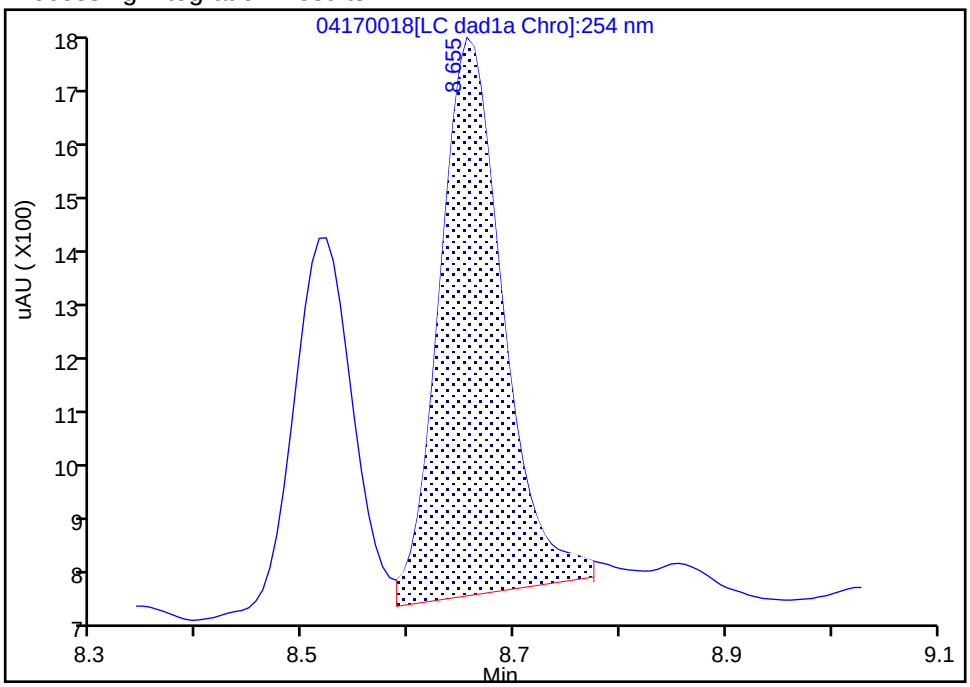
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240417-132364.b\04170018.d				
Injection Date:	17-Apr-2024 23:18:32	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

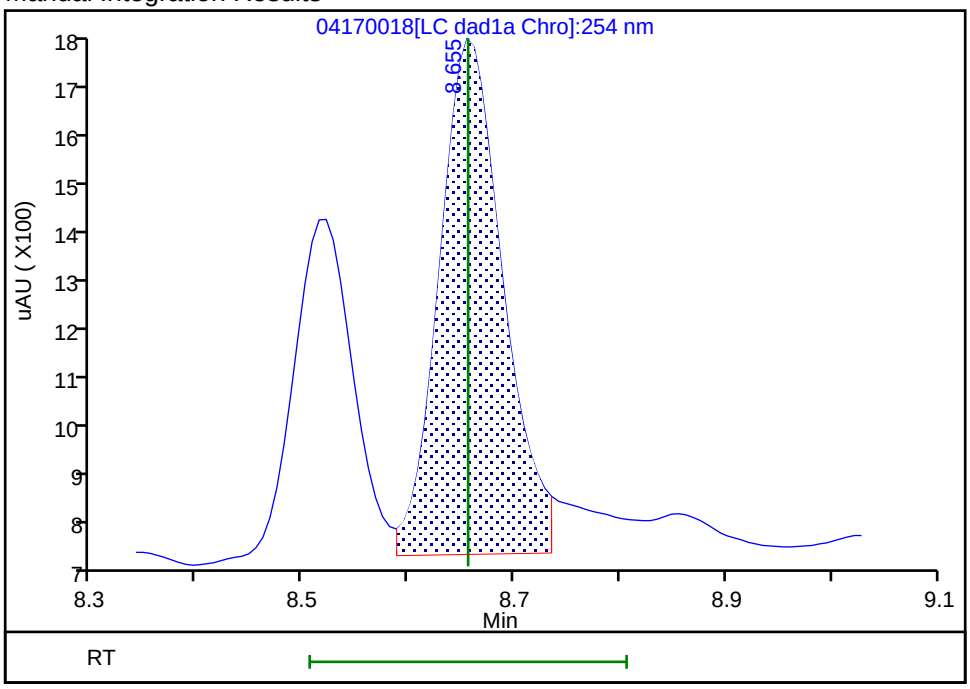
Processing Integration Results

RT: 8.66
Area: 4251
Amount: 0.019122
Amount Units: ug/mL



Manual Integration Results

RT: 8.66
Area: 4349
Amount: 0.019515
Amount Units: ug/mL



Reviewer: LV5D, 18-Apr-2024 11:19:57 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

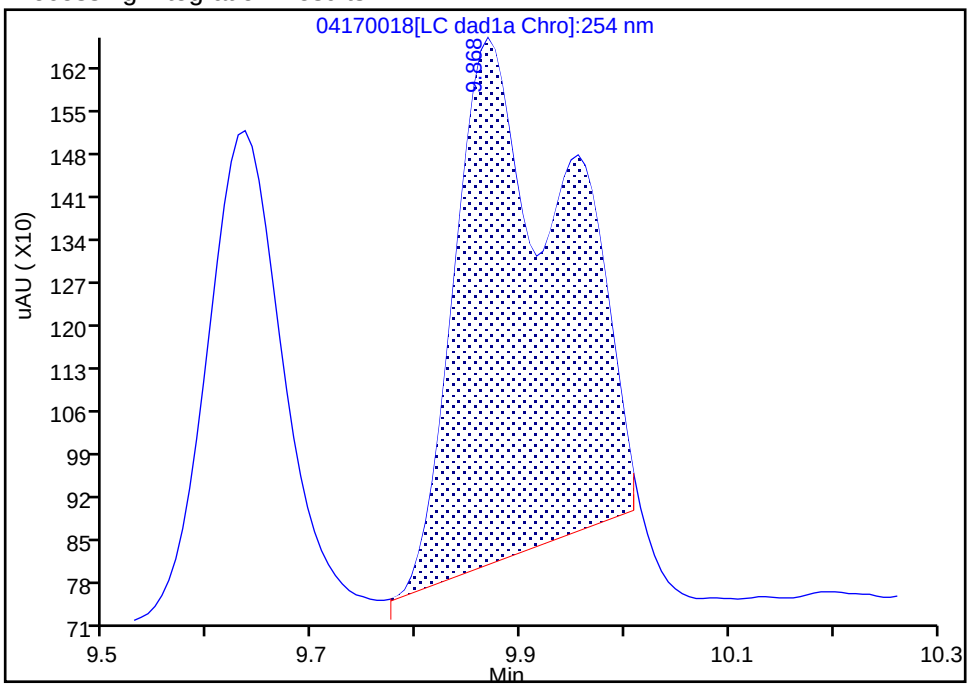
Data File: \\chromfs\denver\chromdata\chhplc_x\20240417-132364.b\04170018.d
Injection Date: 17-Apr-2024 23:18:32 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 2
Client ID:
Operator ID: JZ/JG ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

14 3,5-Dinitroaniline, CAS: 618-87-1

Signal: 1

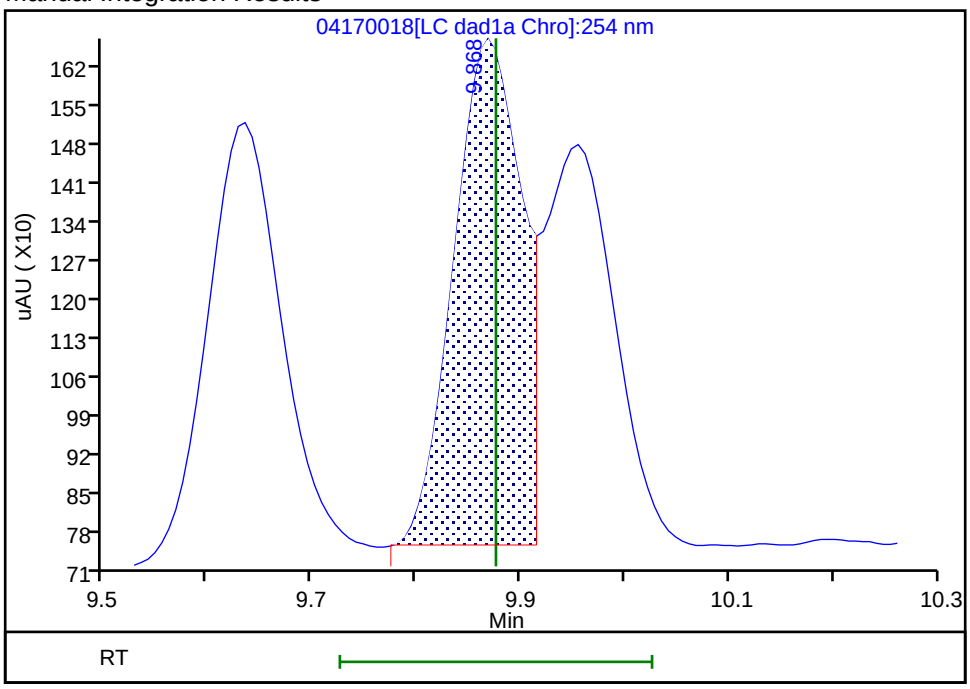
Processing Integration Results

RT: 9.87
Area: 6350
Amount: 0.025070
Amount Units: ug/mL



Manual Integration Results

RT: 9.87
Area: 4171
Amount: 0.019946
Amount Units: ug/mL



Reviewer: LV5D, 18-Apr-2024 11:17:15 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

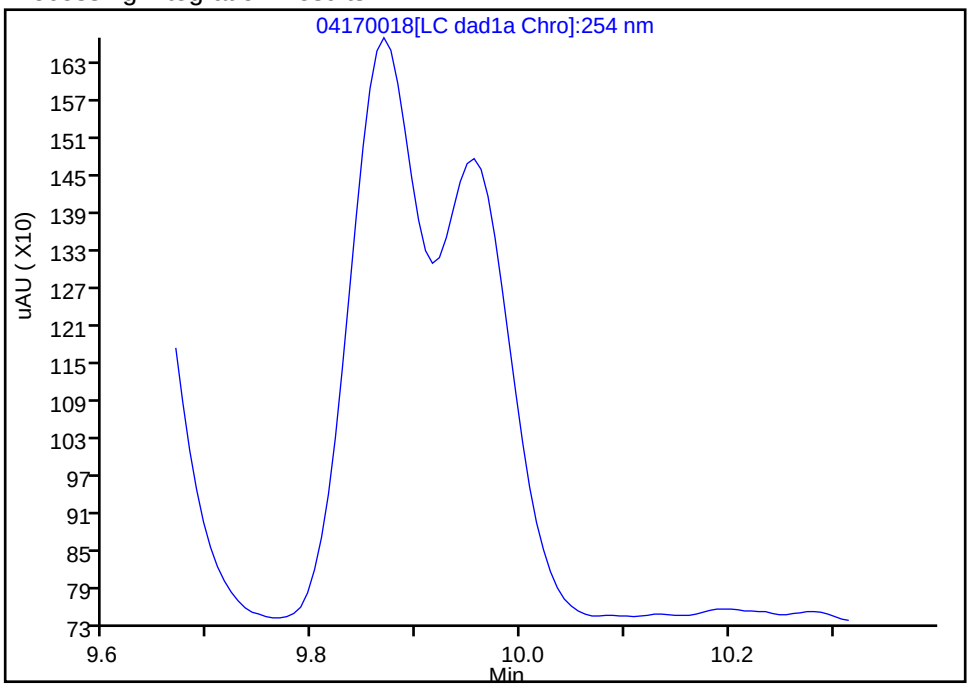
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240417-132364.b\04170018.d				
Injection Date:	17-Apr-2024 23:18:32	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

15 Tetryl, CAS: 479-45-8

Signal: 1

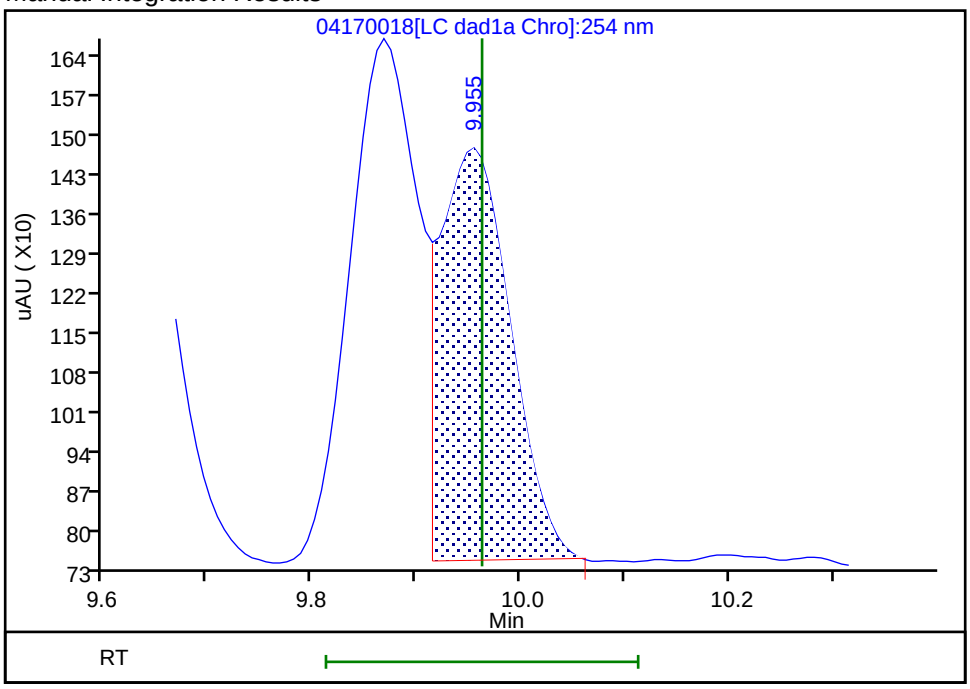
Not Detected
Expected RT: 9.96

Processing Integration Results



Manual Integration Results

RT: 9.95
Area: 3374
Amount: 0.018581
Amount Units: ug/mL



Reviewer: LV5D, 18-Apr-2024 11:17:18 -06:00:00 (UTC)
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

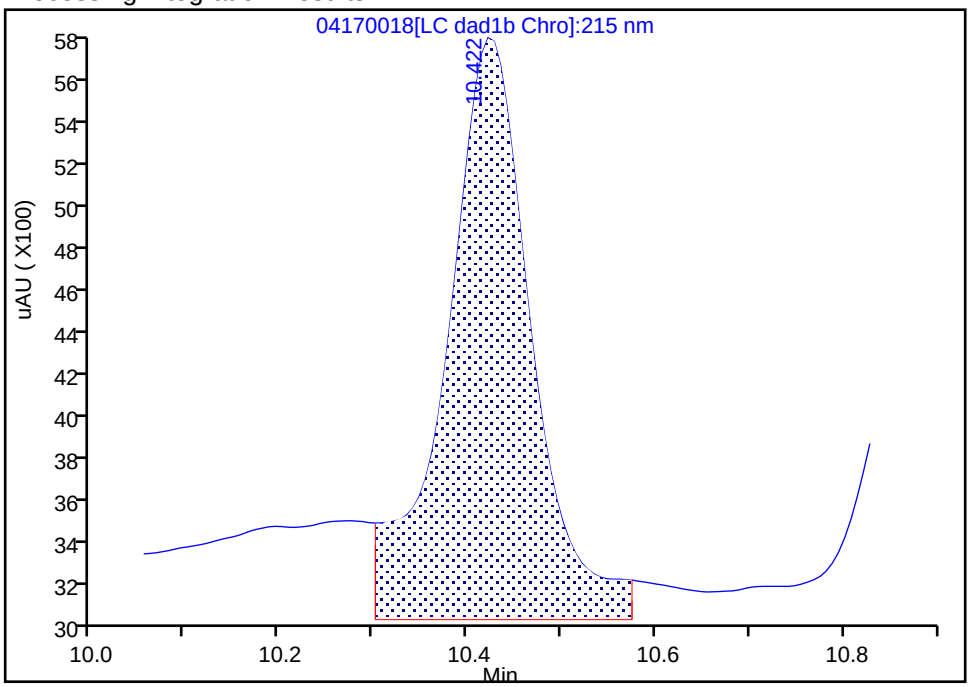
Data File: \\chromfs\denver\chromdata\chhplc_x\20240417-132364.b\04170018.d
Injection Date: 17-Apr-2024 23:18:32 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 2
Client ID:
Operator ID: JZ/JG ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1C, 215 nm

16 Nitroglycerin, CAS: 55-63-0

Signal: 1

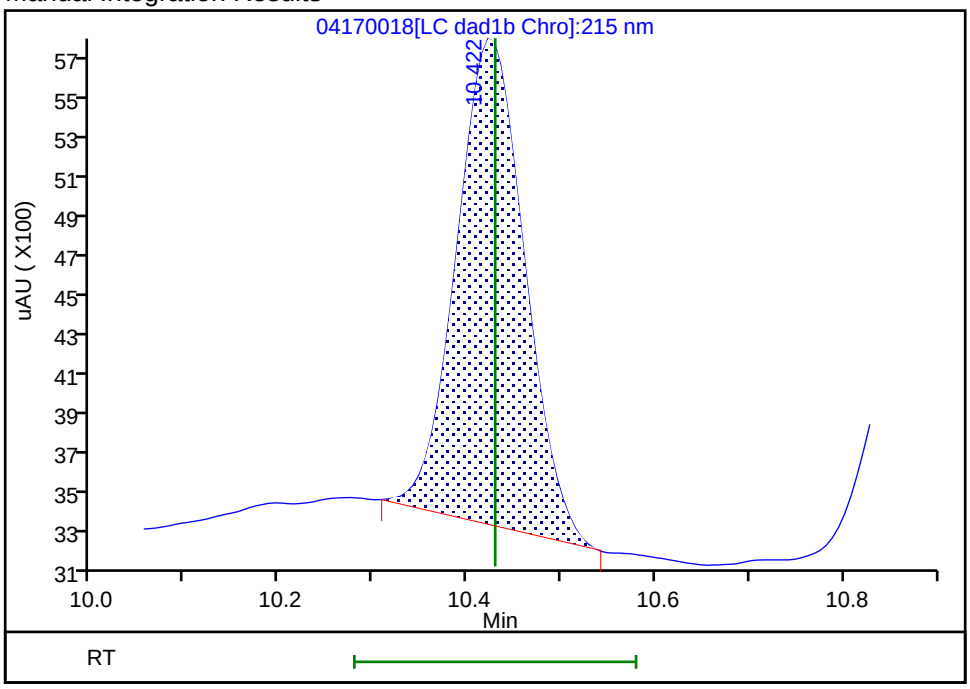
Processing Integration Results

RT: 10.42
Area: 17067
Amount: 0.169937
Amount Units: ug/mL



Manual Integration Results

RT: 10.42
Area: 11963
Amount: 0.179992
Amount Units: ug/mL



Reviewer: LV5D, 18-Apr-2024 11:17:33 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

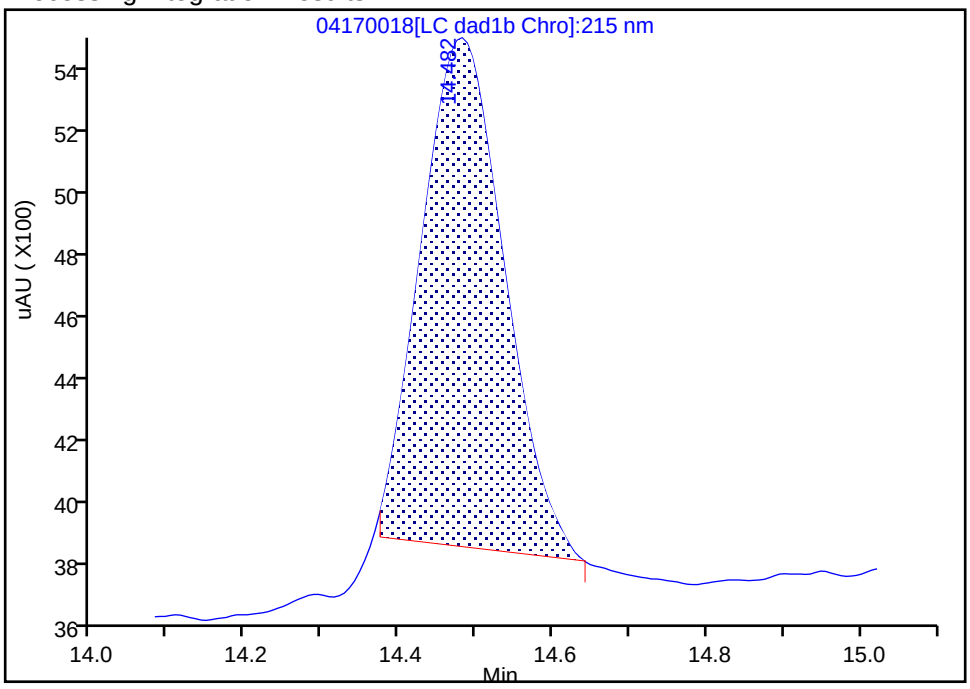
Data File: \\chromfs\denver\chromdata\chhplc_x\20240417-132364.b\04170018.d
Injection Date: 17-Apr-2024 23:18:32 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 2
Client ID:
Operator ID: JZ/JG ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1C, 215 nm

25 PETN, CAS: 78-11-5

Signal: 1

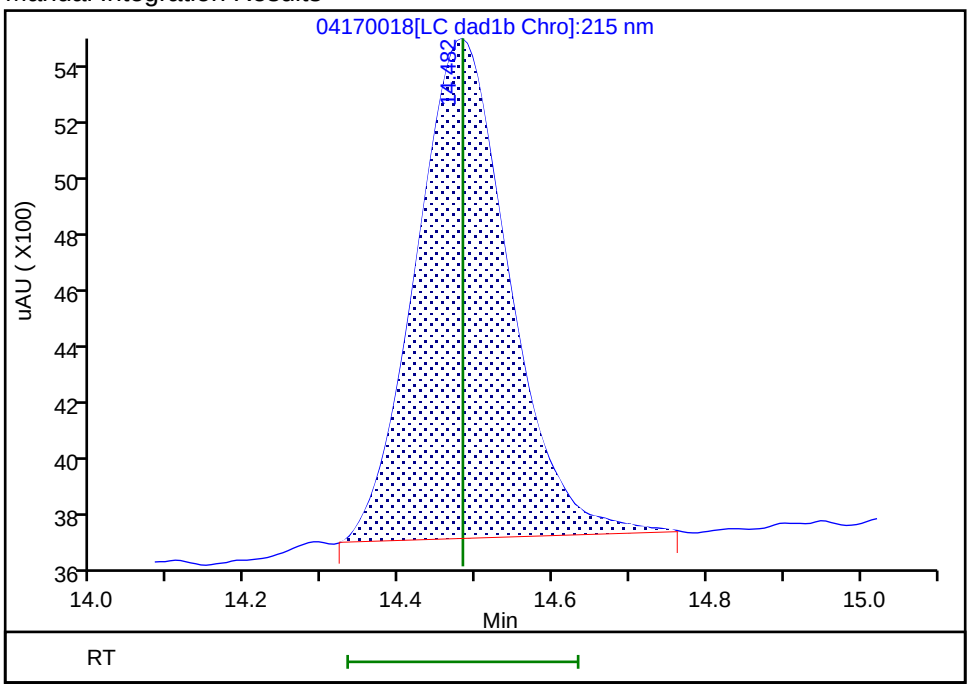
Processing Integration Results

RT: 14.48
Area: 11689
Amount: 0.167904
Amount Units: ug/mL



Manual Integration Results

RT: 14.48
Area: 14174
Amount: 0.197034
Amount Units: ug/mL



Reviewer: LV5D, 18-Apr-2024 11:17:28 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\04170019.D
Lims ID: IC INT/DMT 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 17-Apr-2024 23:41:30 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/DMT 1
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 18-Apr-2024 11:59:31 Calib Date: 18-Apr-2024 03:08:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\04170028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1675

First Level Reviewer: LV5D Date: 18-Apr-2024 11:19:45

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.480	6.476	0.004	2051	0.0100	0.0103	M
4 HMX	1	6.580	6.583	-0.003	919	0.0100	0.009619	M
6 DNX	1	6.786	6.789	-0.003	1516	0.0100	0.0103	M
7 MNX	1	7.206	7.203	0.003	1649	0.0117	0.0121	
8 RDX	1	7.580	7.583	-0.003	1187	0.0100	0.0107	M
9 2,4,6-Trinitrophenol	1	7.820	7.816	0.004	787	0.0100	0.0099	
$ 10 1,2-Dinitrobenzene	1	8.520	8.516	0.004	1445	0.0100	0.0103	M
11 1,3,5-Trinitrobenzene	1	8.660	8.656	0.004	2549	0.0100	0.0114	M
12 1,3-Dinitrobenzene	1	9.273	9.276	-0.003	3086	0.0100	0.0103	
13 Nitrobenzene	1	9.633	9.636	-0.003	1985	0.0100	0.0101	
14 3,5-Dinitroaniline	1	9.873	9.876	-0.003	1971	0.0100	0.0100	M
15 Tetryl	1	9.953	9.963	-0.010	1835	0.0100	0.0101	Ma
16 Nitroglycerin	2	10.426	10.429	-0.003	6048	0.1000	0.0910	M
17 2,4,6-Trinitrotoluene	1	10.866	10.869	-0.003	2081	0.0100	0.009670	
18 4-Amino-2,6-dinitrotoluene	1	11.046	11.049	-0.003	1406	0.0100	0.009377	
19 2-Amino-4,6-dinitrotoluene	1	11.306	11.309	-0.003	1951	0.0100	0.009764	
20 2,6-Dinitrotoluene	1	11.453	11.449	0.004	1557	0.0100	0.0106	
21 2,4-Dinitrotoluene	1	11.626	11.629	-0.003	2993	0.0100	0.0103	
22 o-Nitrotoluene	1	12.419	12.423	-0.004	1340	0.0100	0.0104	
23 p-Nitrotoluene	1	12.853	12.843	0.010	1249	0.0100	0.0111	
24 m-Nitrotoluene	1	13.399	13.403	-0.004	1713	0.0100	0.0119	
25 PETN	2	14.486	14.483	0.003	7807	0.1000	0.1085	Ma

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

8330IntermStk_00080	Amount Added:	1.00	Units: uL
8330 DMT_00016	Amount Added:	0.50	Units: uL

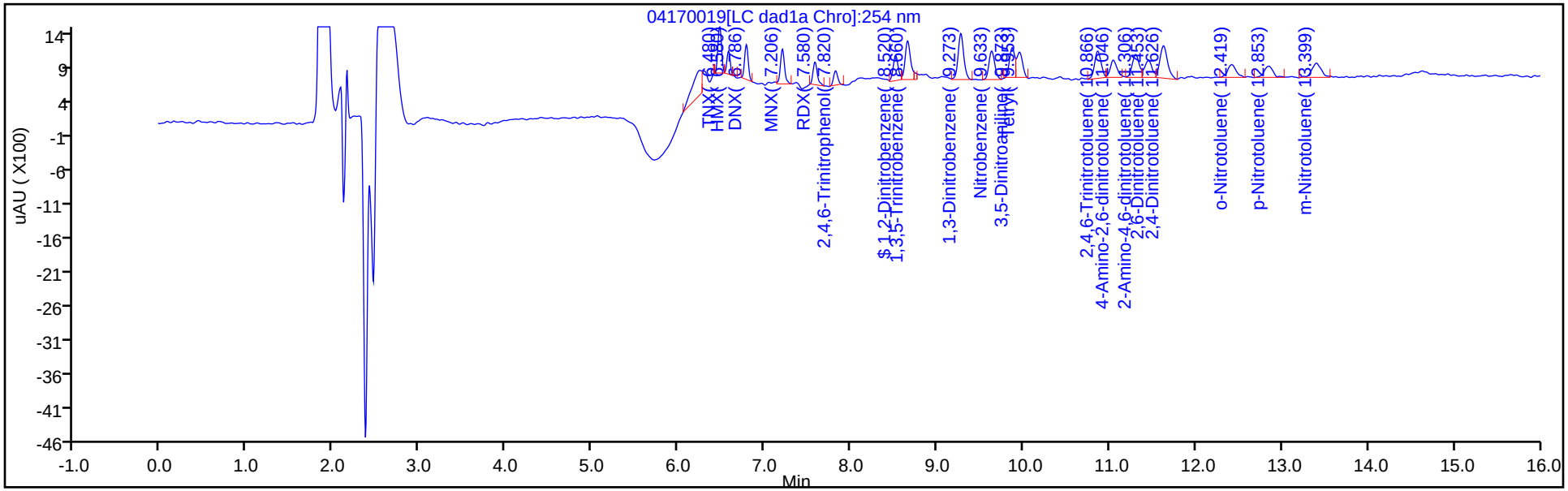
Report Date: 18-Apr-2024 11:59:31 Chrom Revision: 2.3 09-Apr-2024 17:43:44

Eurofins Denver

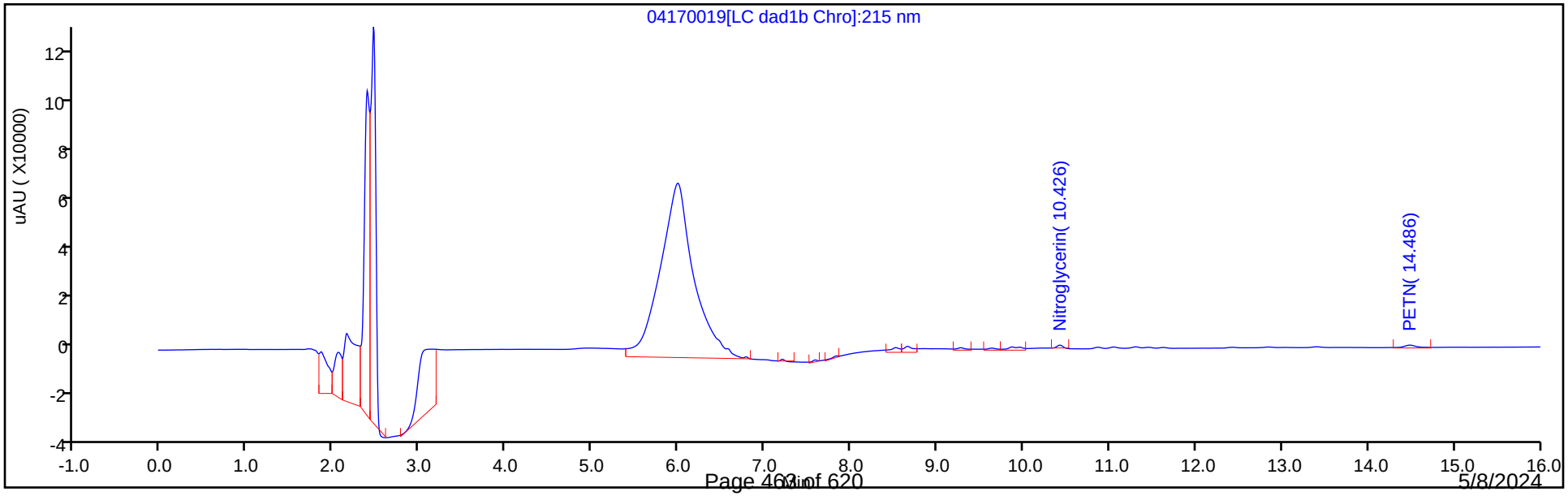
Data File: \\chromfs\denver\chromdata\chhplc_x\20240417-132364.b\04170019.d

Injection Date:	17-Apr-2024 23:41:30	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
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



5/8/2024
6:07:23 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

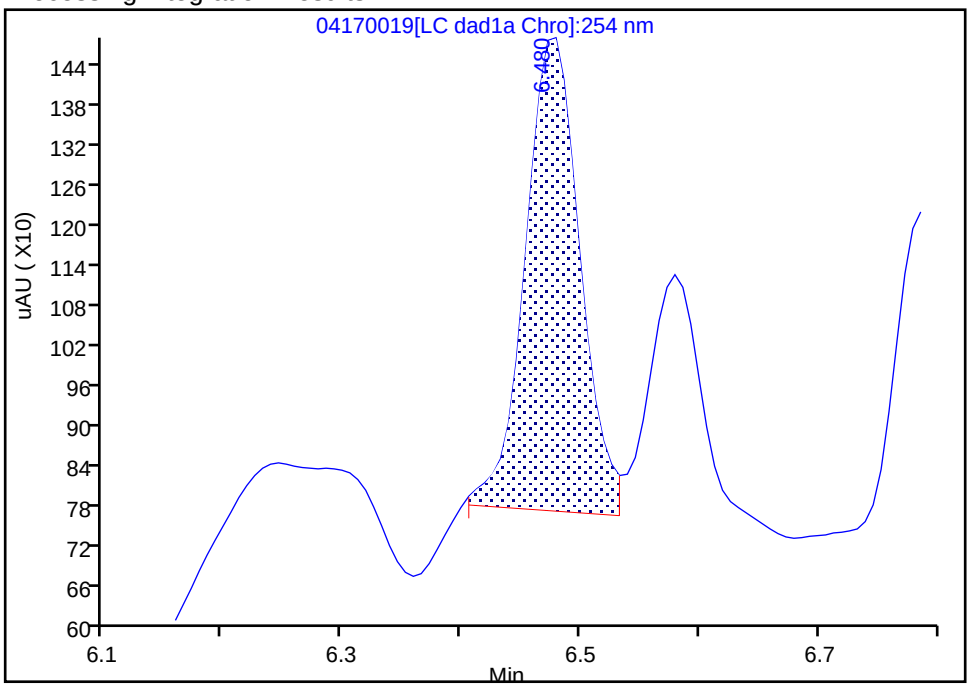
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240417-132364.b\04170019.d				
Injection Date:	17-Apr-2024 23:41:30	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 1				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

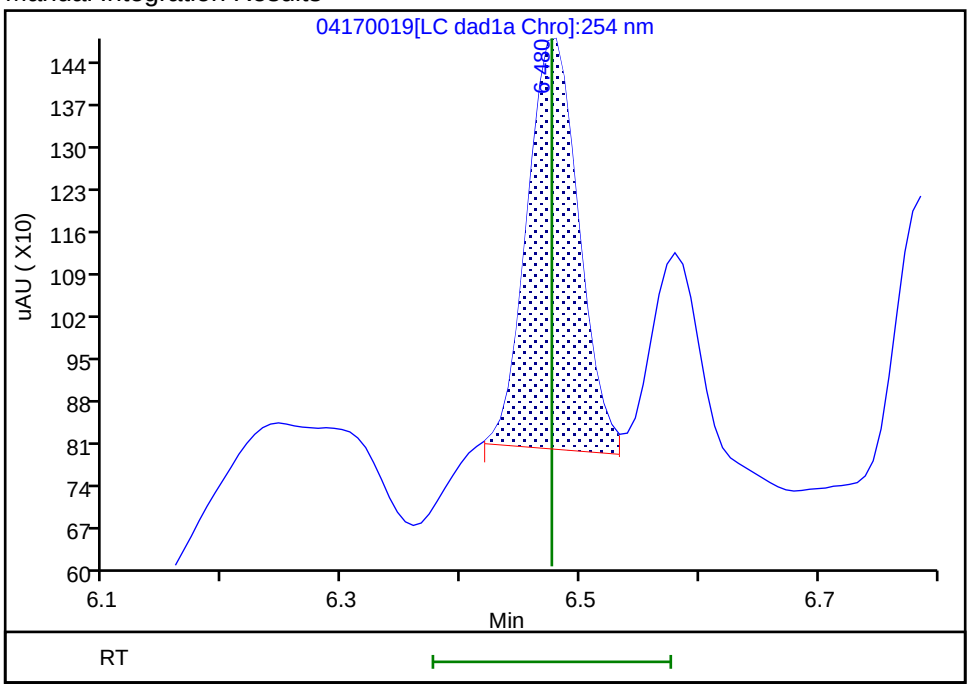
Processing Integration Results

RT: 6.48
Area: 2278
Amount: 0.011305
Amount Units: ug/mL



Manual Integration Results

RT: 6.48
Area: 2051
Amount: 0.010307
Amount Units: ug/mL



Reviewer: LV5D, 18-Apr-2024 11:18:24 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

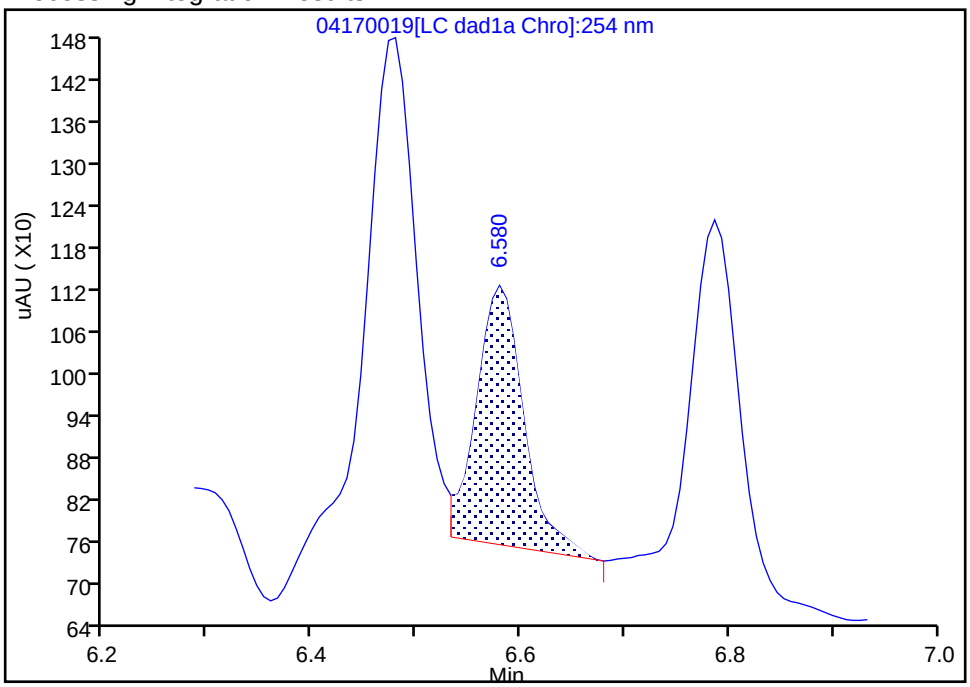
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240417-132364.b\04170019.d				
Injection Date:	17-Apr-2024 23:41:30	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 1				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

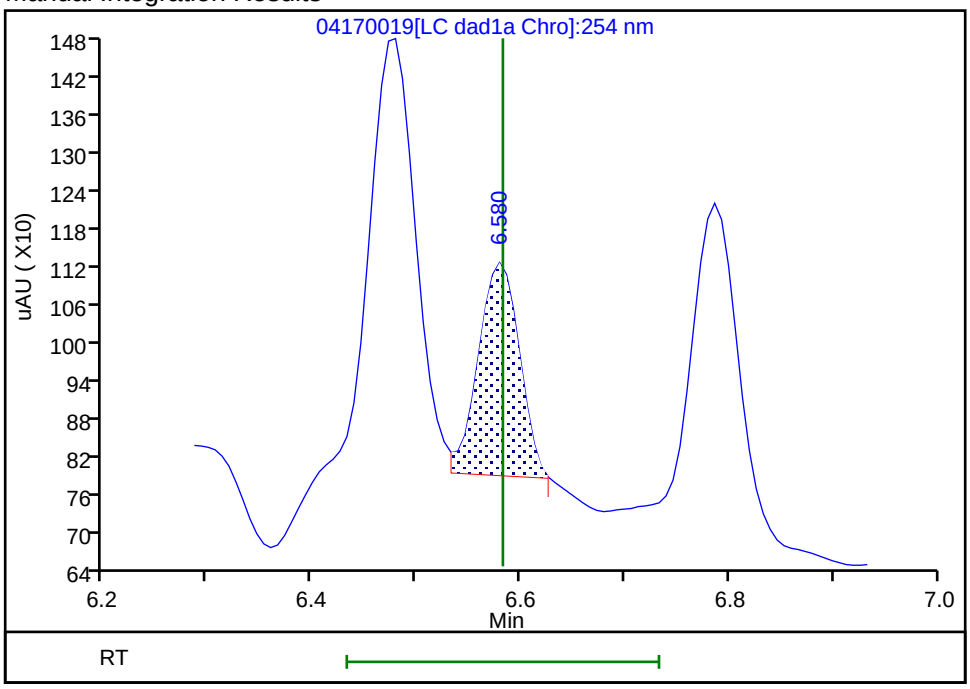
Processing Integration Results

RT: 6.58
Area: 1171
Amount: 0.011907
Amount Units: ug/mL



Manual Integration Results

RT: 6.58
Area: 919
Amount: 0.009619
Amount Units: ug/mL



Reviewer: LV5D, 18-Apr-2024 11:18:25 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

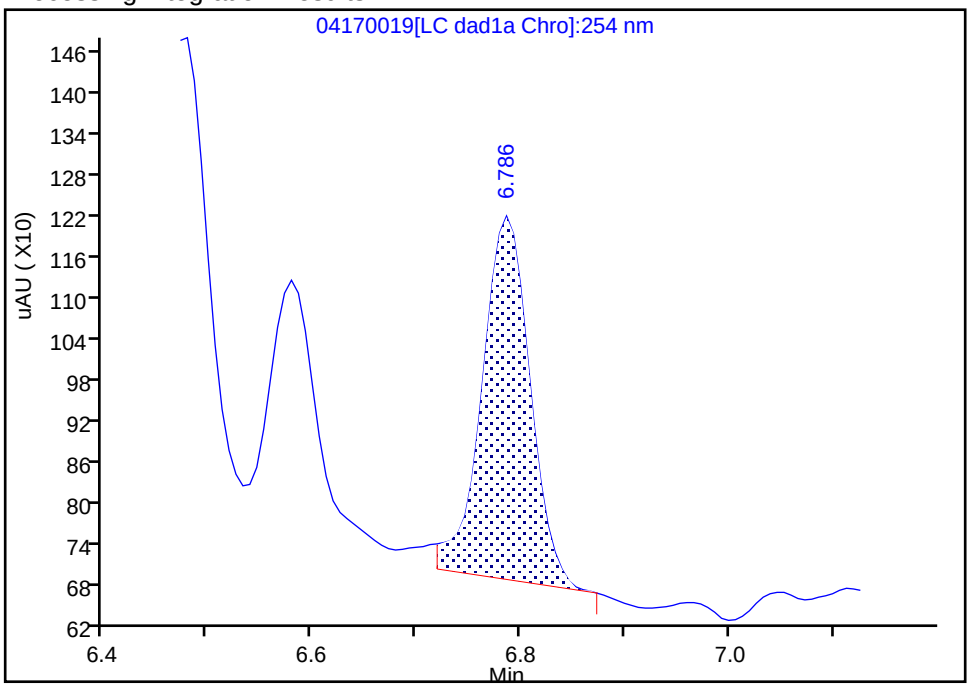
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240417-132364.b\04170019.d				
Injection Date:	17-Apr-2024 23:41:30	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 1				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

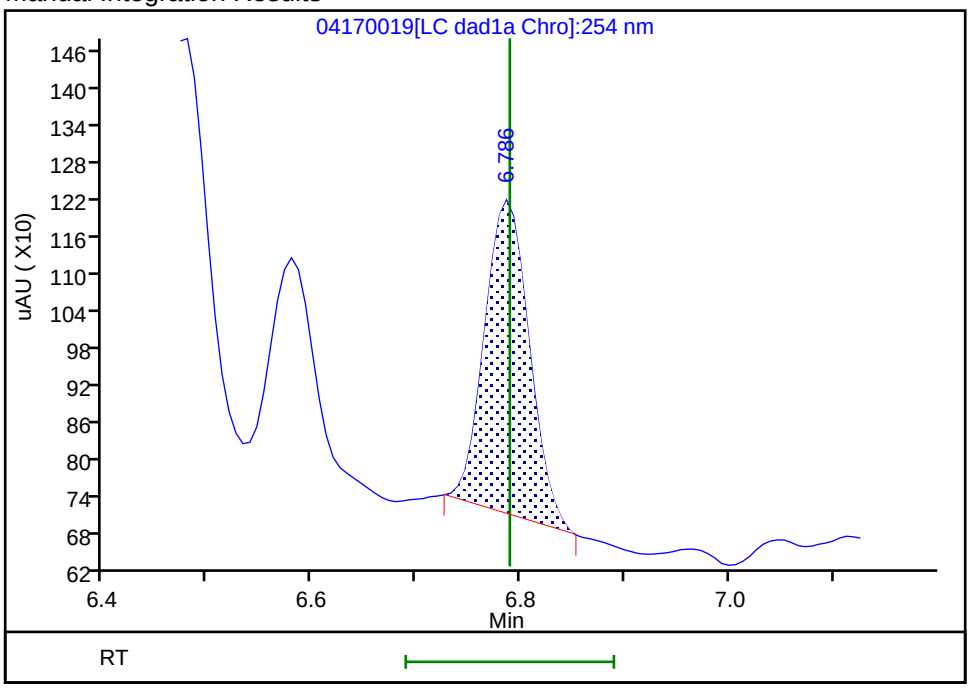
Processing Integration Results

RT: 6.79
Area: 1700
Amount: 0.011386
Amount Units: ug/mL



Manual Integration Results

RT: 6.79
Area: 1516
Amount: 0.010295
Amount Units: ug/mL



Reviewer: LV5D, 18-Apr-2024 11:18:35 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

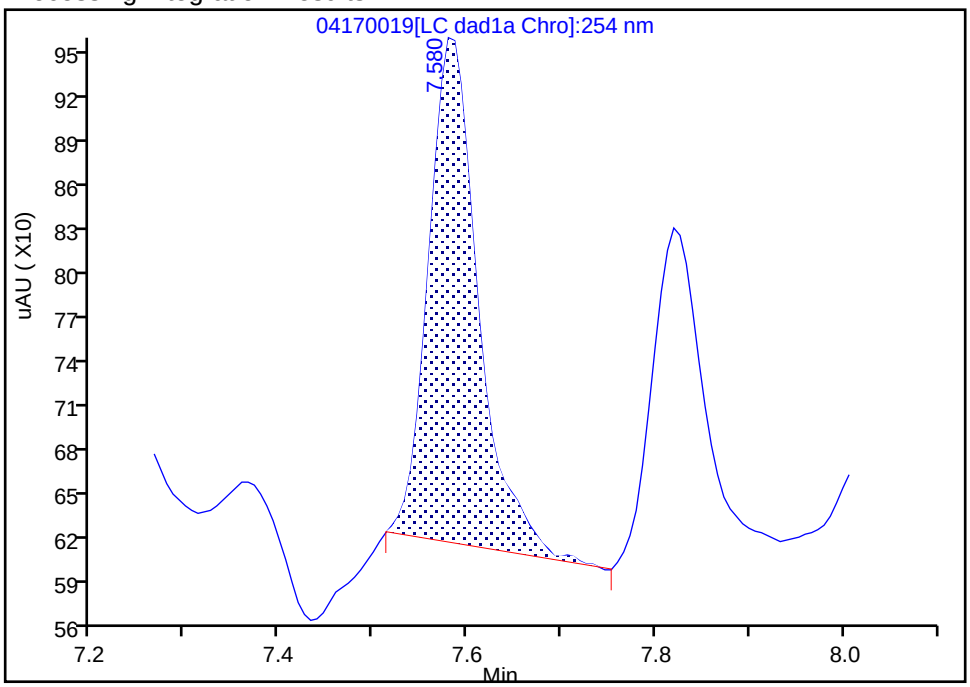
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240417-132364.b\04170019.d				
Injection Date:	17-Apr-2024 23:41:30	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 1				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

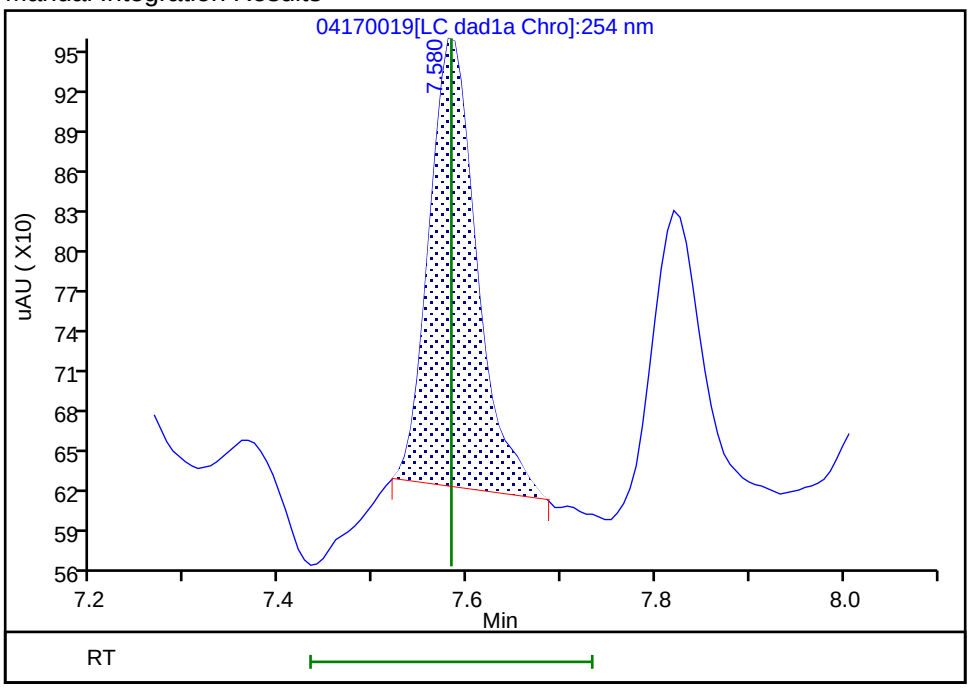
Processing Integration Results

RT: 7.58
Area: 1262
Amount: 0.011308
Amount Units: ug/mL



Manual Integration Results

RT: 7.58
Area: 1187
Amount: 0.010716
Amount Units: ug/mL



Reviewer: LV5D, 18-Apr-2024 11:18:45 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

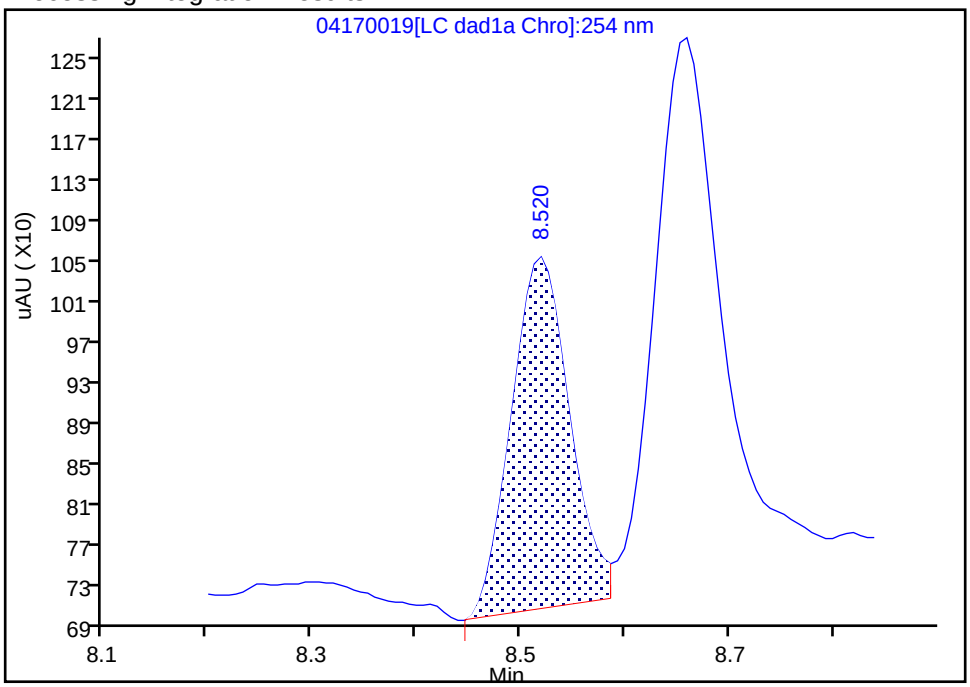
Data File: \\chromfs\denver\chromdata\chhplc_x\20240417-132364.b\04170019.d
Injection Date: 17-Apr-2024 23:41:30 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 1
Client ID:
Operator ID: JZ/JG ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

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

Signal: 1

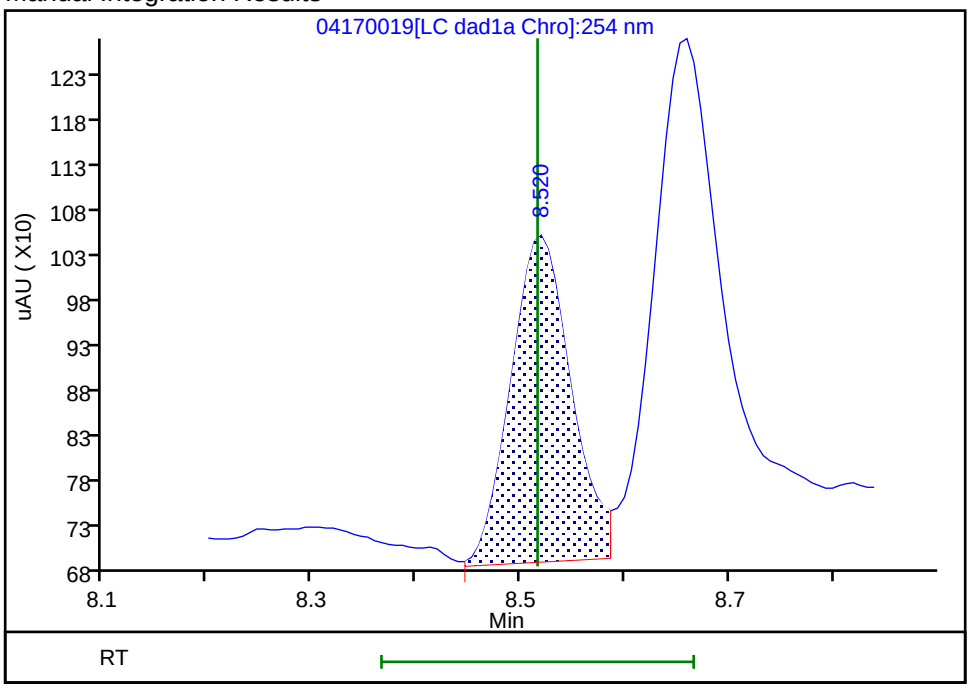
Processing Integration Results

RT: 8.52
Area: 1357
Amount: 0.010216
Amount Units: ug/mL



Manual Integration Results

RT: 8.52
Area: 1445
Amount: 0.010265
Amount Units: ug/mL



Reviewer: LV5D, 18-Apr-2024 11:19:23 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

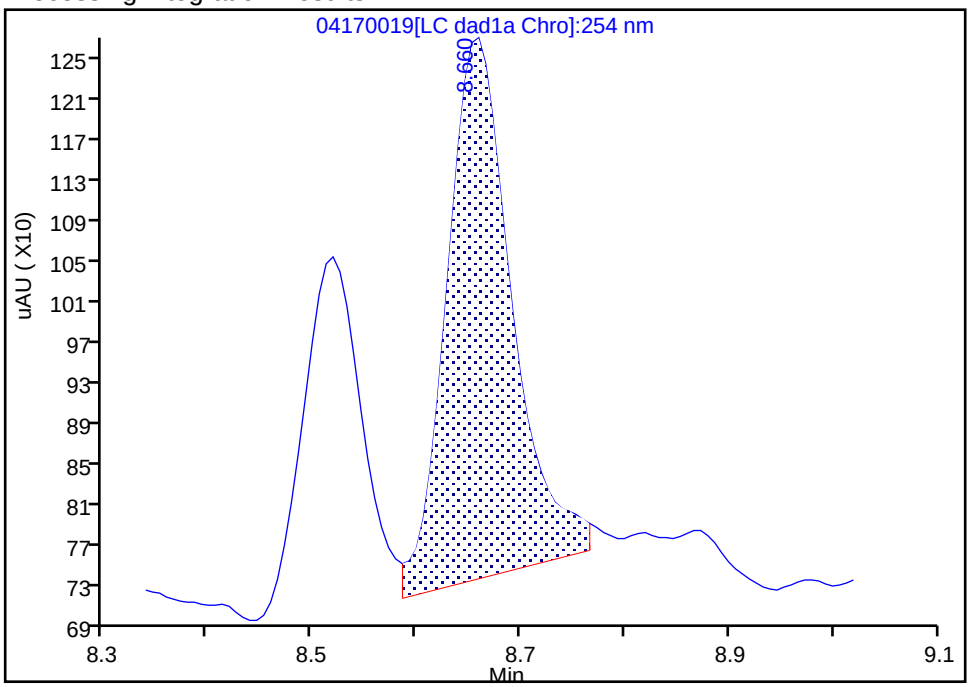
Data File: \\chromfs\denver\chromdata\chhplc_x\20240417-132364.b\04170019.d
Injection Date: 17-Apr-2024 23:41:30 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 1
Client ID:
Operator ID: JZ/JG ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

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

Signal: 1

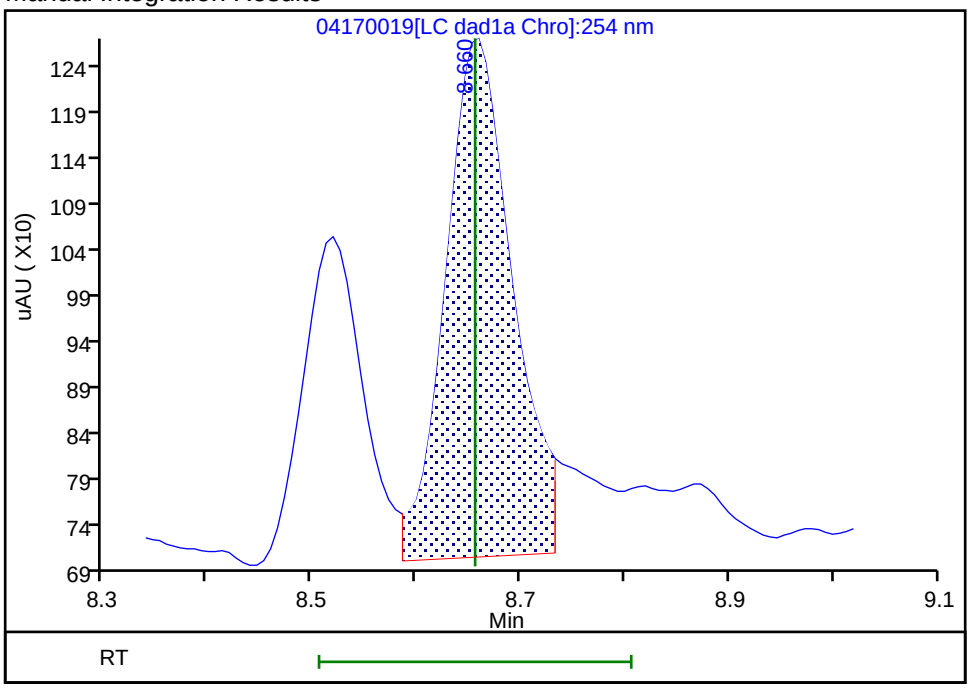
Processing Integration Results

RT: 8.66
Area: 2346
Amount: 0.010661
Amount Units: ug/mL



Manual Integration Results

RT: 8.66
Area: 2549
Amount: 0.011438
Amount Units: ug/mL



Reviewer: LV5D, 18-Apr-2024 11:19:28 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

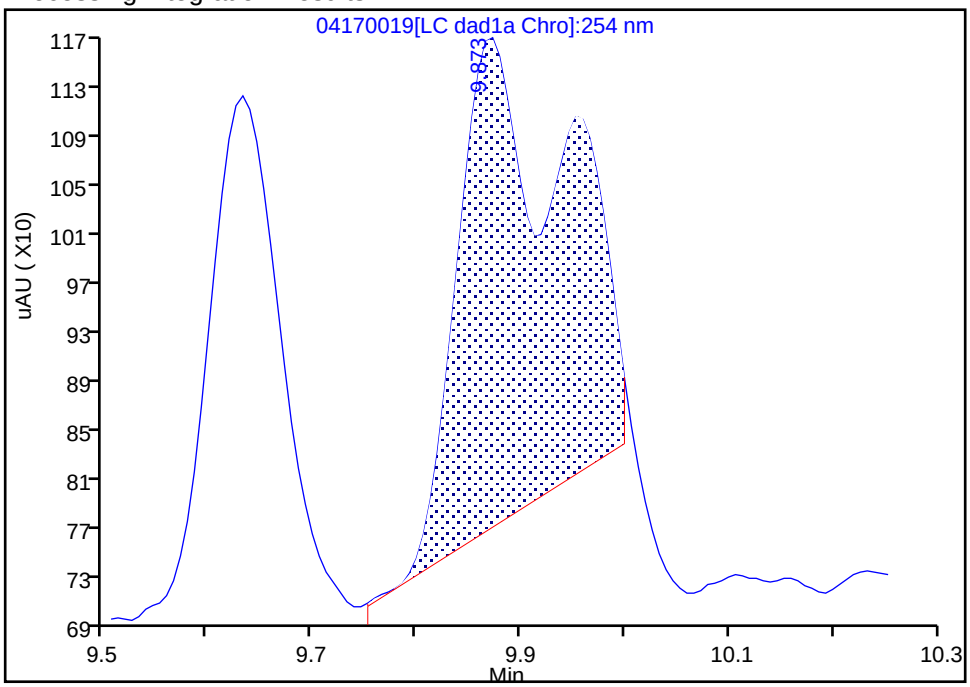
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240417-132364.b\04170019.d				
Injection Date:	17-Apr-2024 23:41:30	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 1				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

14 3,5-Dinitroaniline, CAS: 618-87-1

Signal: 1

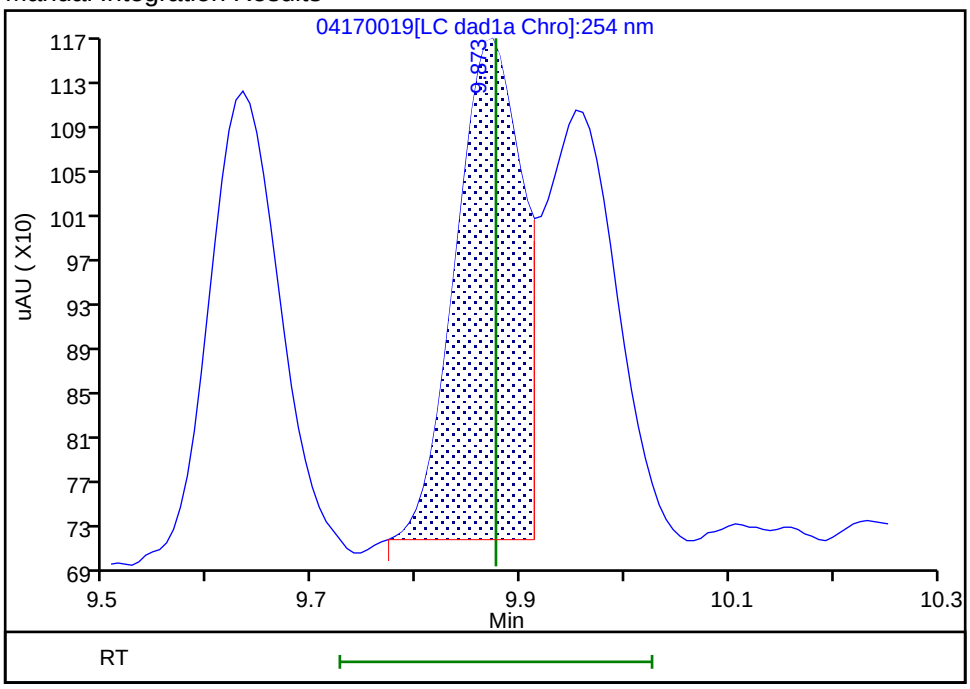
Processing Integration Results

RT: 9.87
Area: 2822
Amount: 0.010781
Amount Units: ug/mL



Manual Integration Results

RT: 9.87
Area: 1971
Amount: 0.009992
Amount Units: ug/mL



Reviewer: LV5D, 18-Apr-2024 11:18:02 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

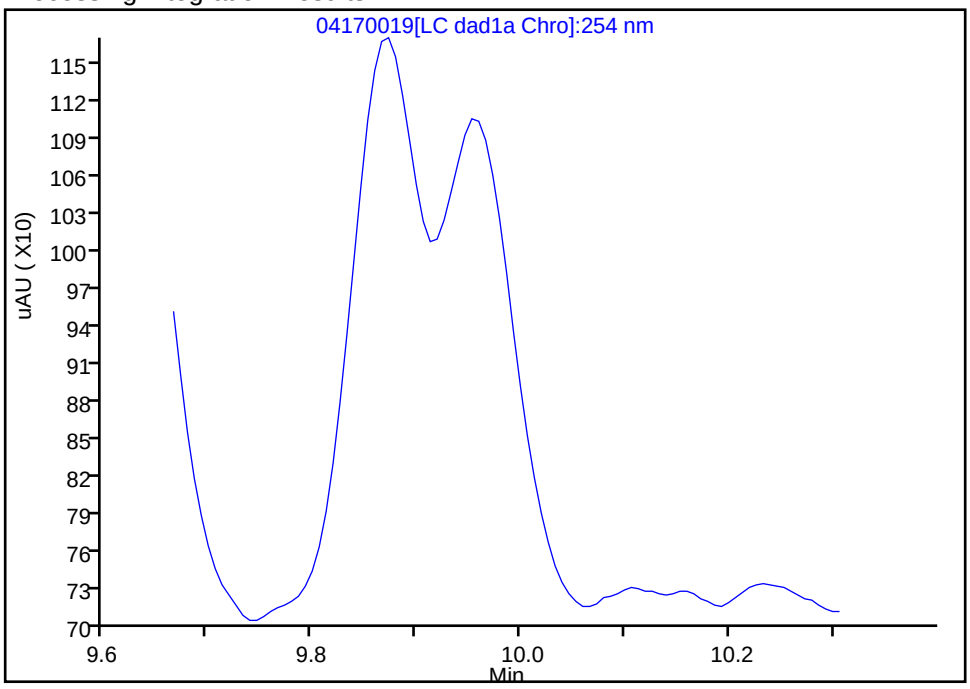
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240417-132364.b\04170019.d				
Injection Date:	17-Apr-2024 23:41:30	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 1				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

15 Tetryl, CAS: 479-45-8

Signal: 1

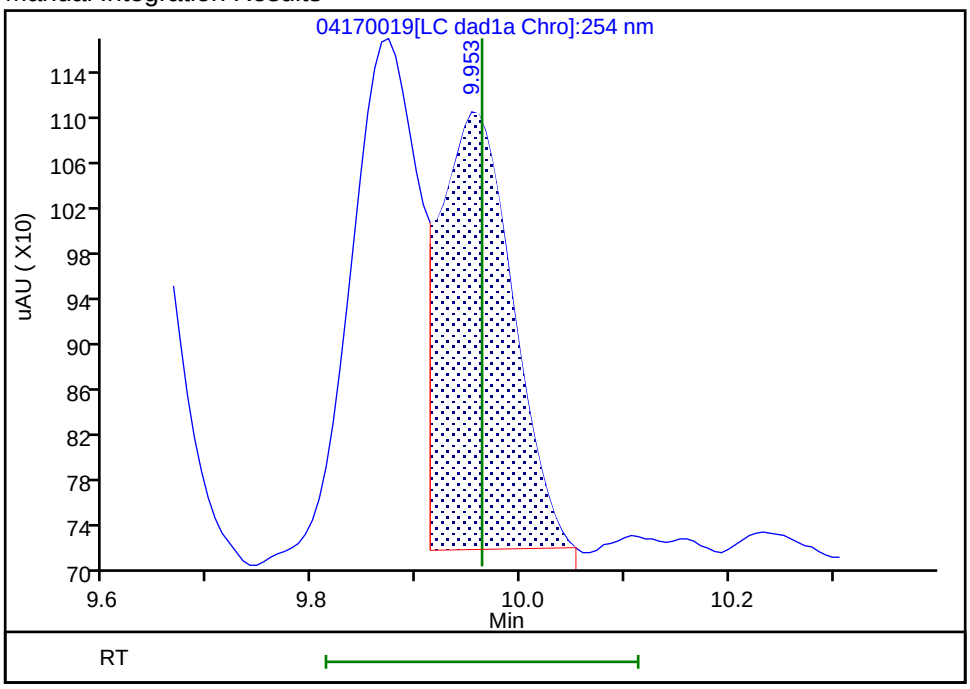
Not Detected
Expected RT: 9.96

Processing Integration Results



Manual Integration Results

RT: 9.95
Area: 1835
Amount: 0.010105
Amount Units: ug/mL



Reviewer: LV5D, 18-Apr-2024 11:18:04 -06:00:00 (UTC)
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

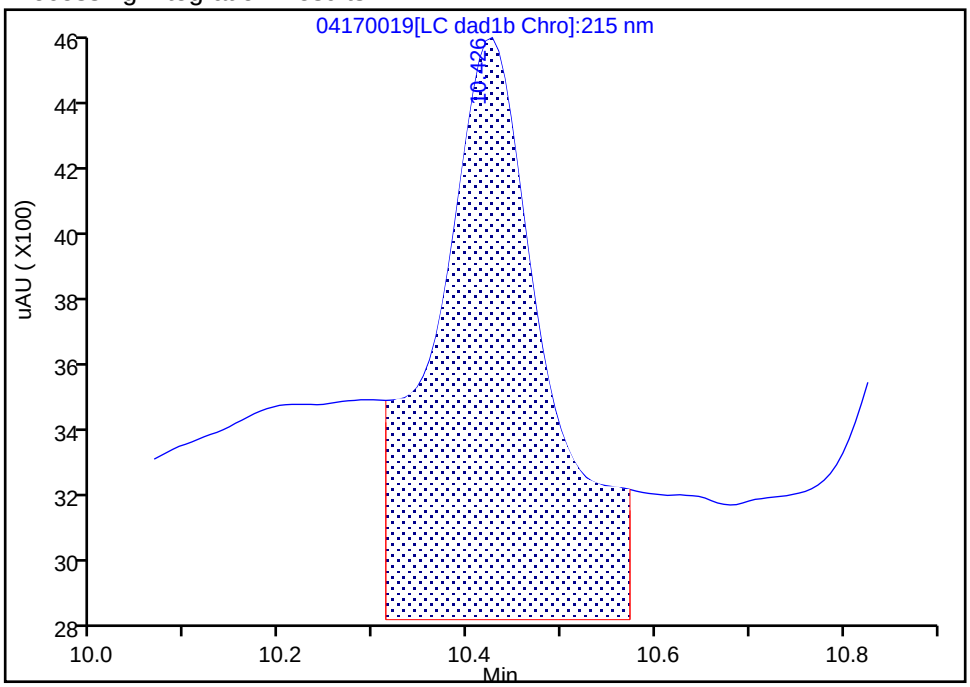
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240417-132364.b\04170019.d				
Injection Date:	17-Apr-2024 23:41:30	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 1				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1C, 215 nm		

16 Nitroglycerin, CAS: 55-63-0

Signal: 1

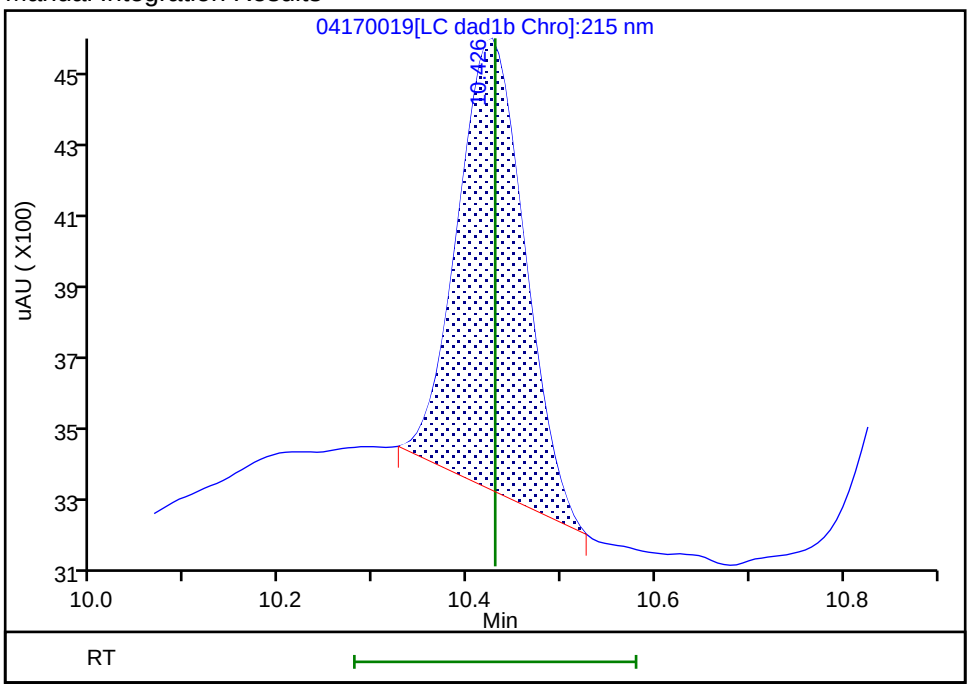
Processing Integration Results

RT: 10.43
Area: 14354
Amount: 0.189635
Amount Units: ug/mL



Manual Integration Results

RT: 10.43
Area: 6048
Amount: 0.090997
Amount Units: ug/mL



Reviewer: LV5D, 18-Apr-2024 11:17:39 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

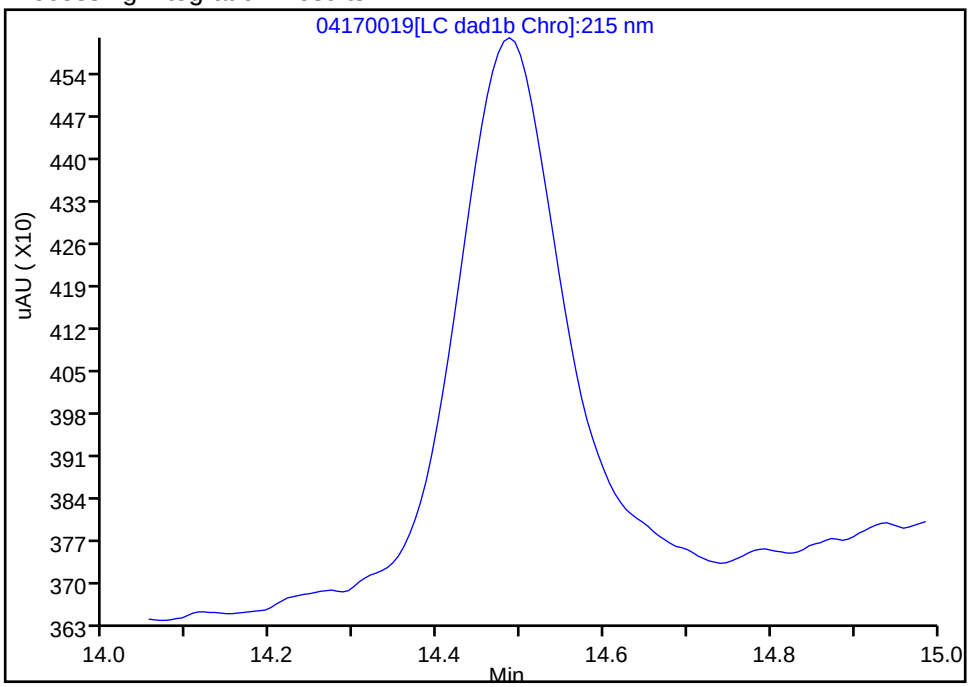
Data File: \\chromfs\denver\chromdata\chhplc_x\20240417-132364.b\04170019.d
Injection Date: 17-Apr-2024 23:41:30 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 1
Client ID:
Operator ID: JZ/JG ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1C, 215 nm

25 PETN, CAS: 78-11-5

Signal: 1

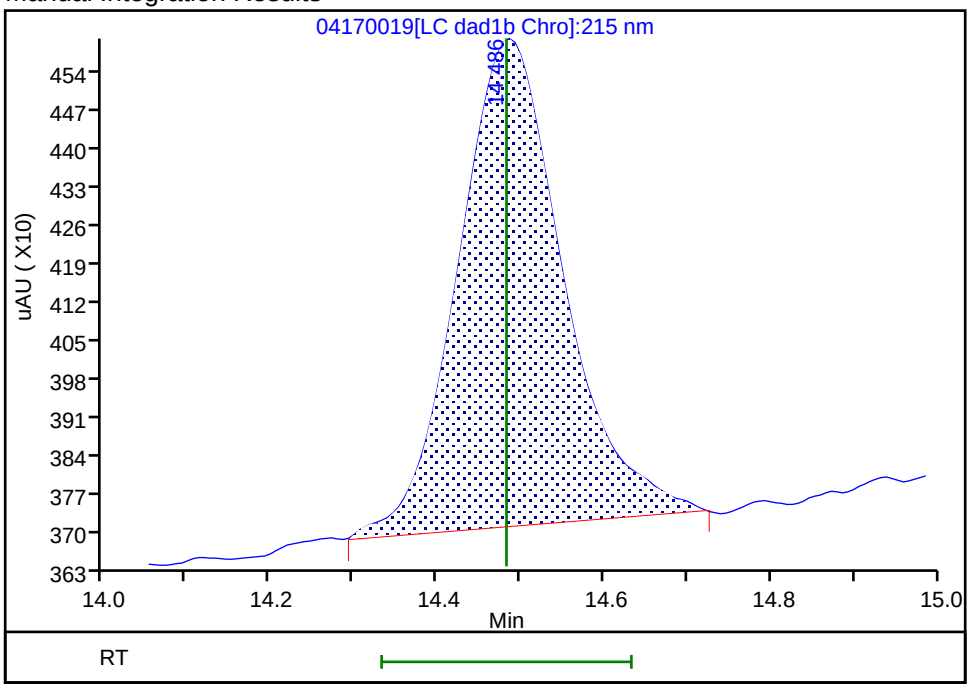
Not Detected
Expected RT: 14.48

Processing Integration Results



Manual Integration Results

RT: 14.49
Area: 7807
Amount: 0.108526
Amount Units: ug/mL



Reviewer: LV5D, 18-Apr-2024 11:17:47 -06:00:00 (UTC)
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline

Calibration / TNX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

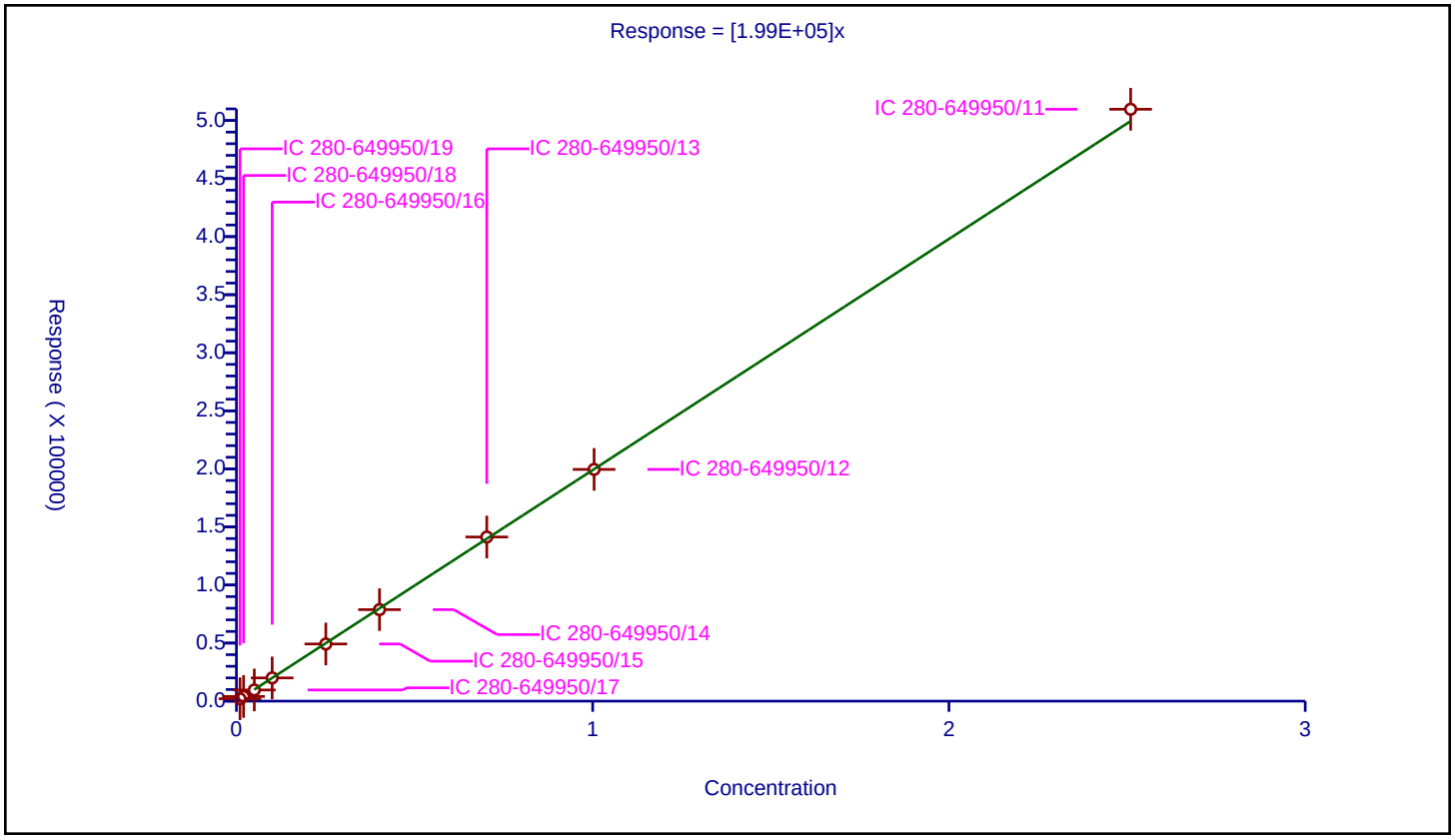
Curve Coefficients

Intercept:	0
Slope:	1.99E+05

Error Coefficients

Relative Standard Deviation:	1.9

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-649950/19	0.01004	2051.0			204282.868526	Y
2	IC 280-649950/18	0.02008	4023.0			200348.605578	Y
3	IC 280-649950/17	0.0502	9628.0			191792.828685	Y
4	IC 280-649950/16	0.1004	20006.0			199262.948207	Y
5	IC 280-649950/15	0.251	49234.0			196151.394422	Y
6	IC 280-649950/14	0.4016	78789.0			196187.749004	Y
7	IC 280-649950/13	0.7028	141333.0			201099.88617	Y
8	IC 280-649950/12	1.004	199537.0			198742.031873	Y
9	IC 280-649950/11	2.51	509682.0			203060.557769	Y



Calibration / HMX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

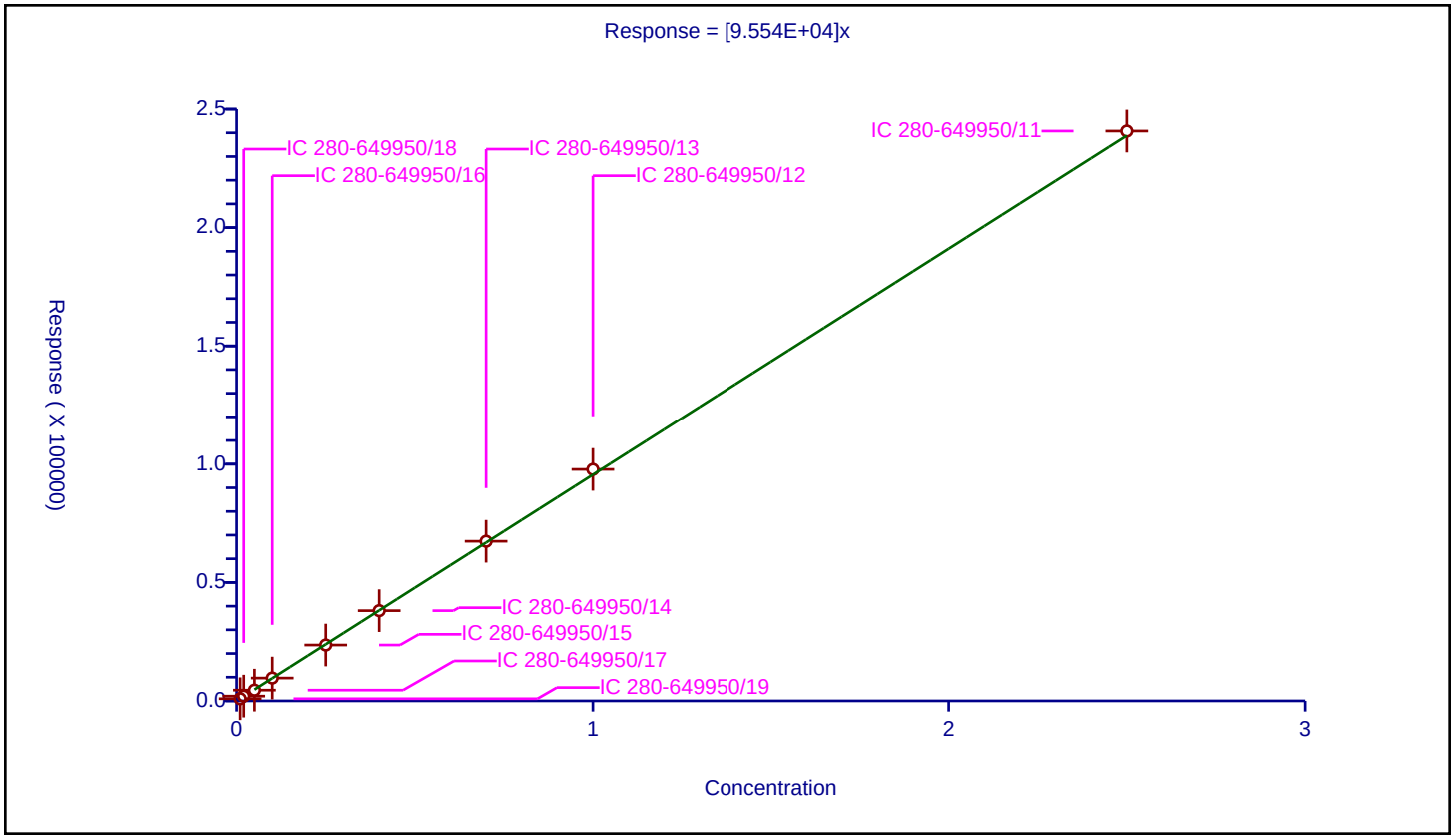
Curve Coefficients

Intercept:	0
Slope:	9.554E+04

Error Coefficients

Relative Standard Deviation:	3.2

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-649950/19	0.01	919.0			91900.0	Y
2	IC 280-649950/18	0.02	2017.0			100850.0	Y
3	IC 280-649950/17	0.05	4536.0			90720.0	Y
4	IC 280-649950/16	0.1	9645.0			96450.0	Y
5	IC 280-649950/15	0.25	23583.0			94332.0	Y
6	IC 280-649950/14	0.4	38101.0			95252.5	Y
7	IC 280-649950/13	0.7	67408.0			96297.142857	Y
8	IC 280-649950/12	1.0	97787.0			97787.0	Y
9	IC 280-649950/11	2.5	240762.0			96304.8	Y



5/8/2024
6:07:23 AM

Calibration / DNX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

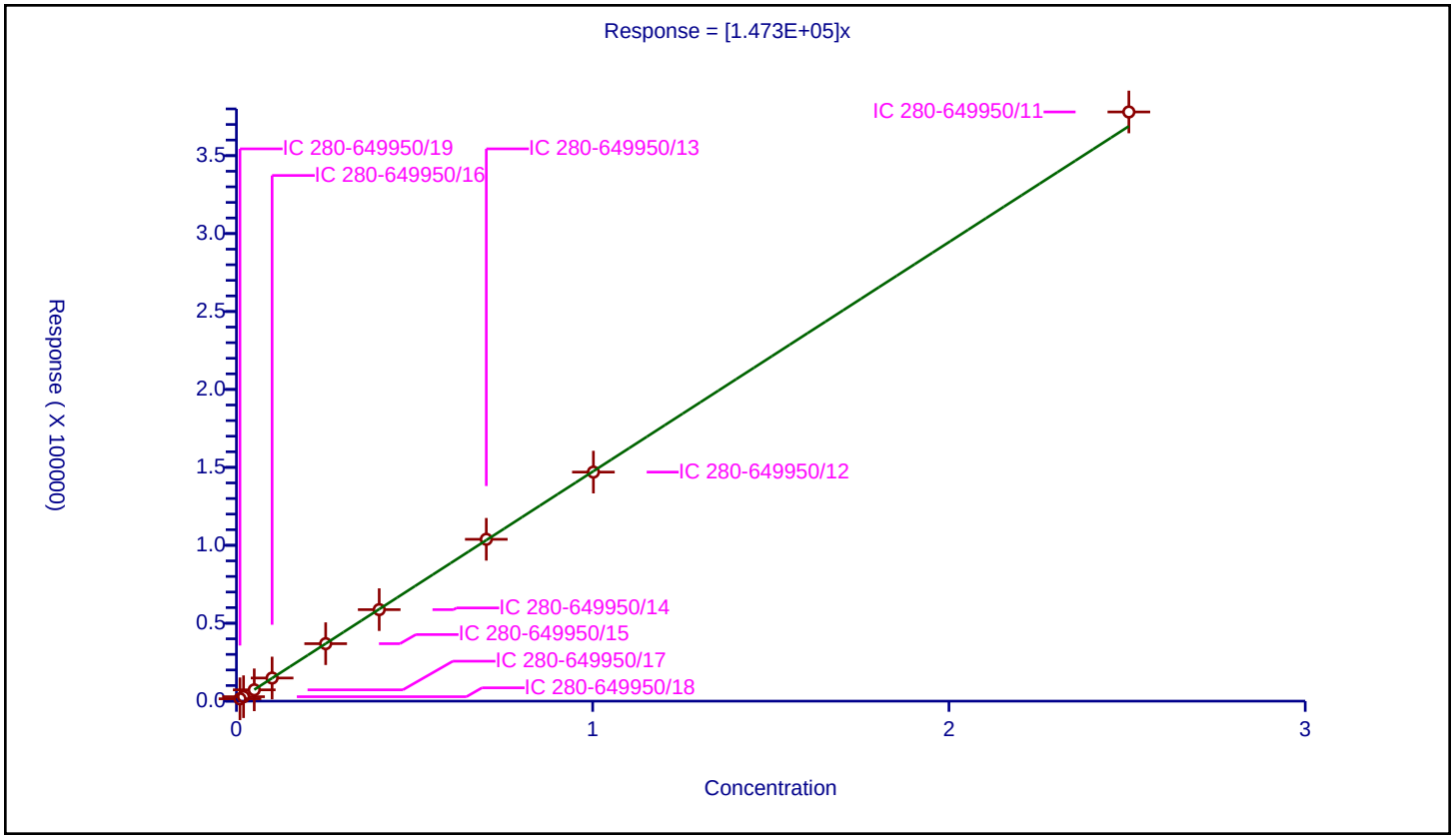
Curve Coefficients

Intercept:	0
Slope:	1.473E+05

Error Coefficients

Relative Standard Deviation:	2.0

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-649950/19	0.01002	1516.0			151297.40519	Y
2	IC 280-649950/18	0.02004	2843.0			141866.267465	Y
3	IC 280-649950/17	0.0501	7258.0			144870.259481	Y
4	IC 280-649950/16	0.1002	14834.0			148043.912176	Y
5	IC 280-649950/15	0.2505	36872.0			147193.612774	Y
6	IC 280-649950/14	0.4008	58701.0			146459.580838	Y
7	IC 280-649950/13	0.7014	103834.0			148038.209296	Y
8	IC 280-649950/12	1.002	146952.0			146658.682635	Y
9	IC 280-649950/11	2.505	378026.0			150908.582834	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

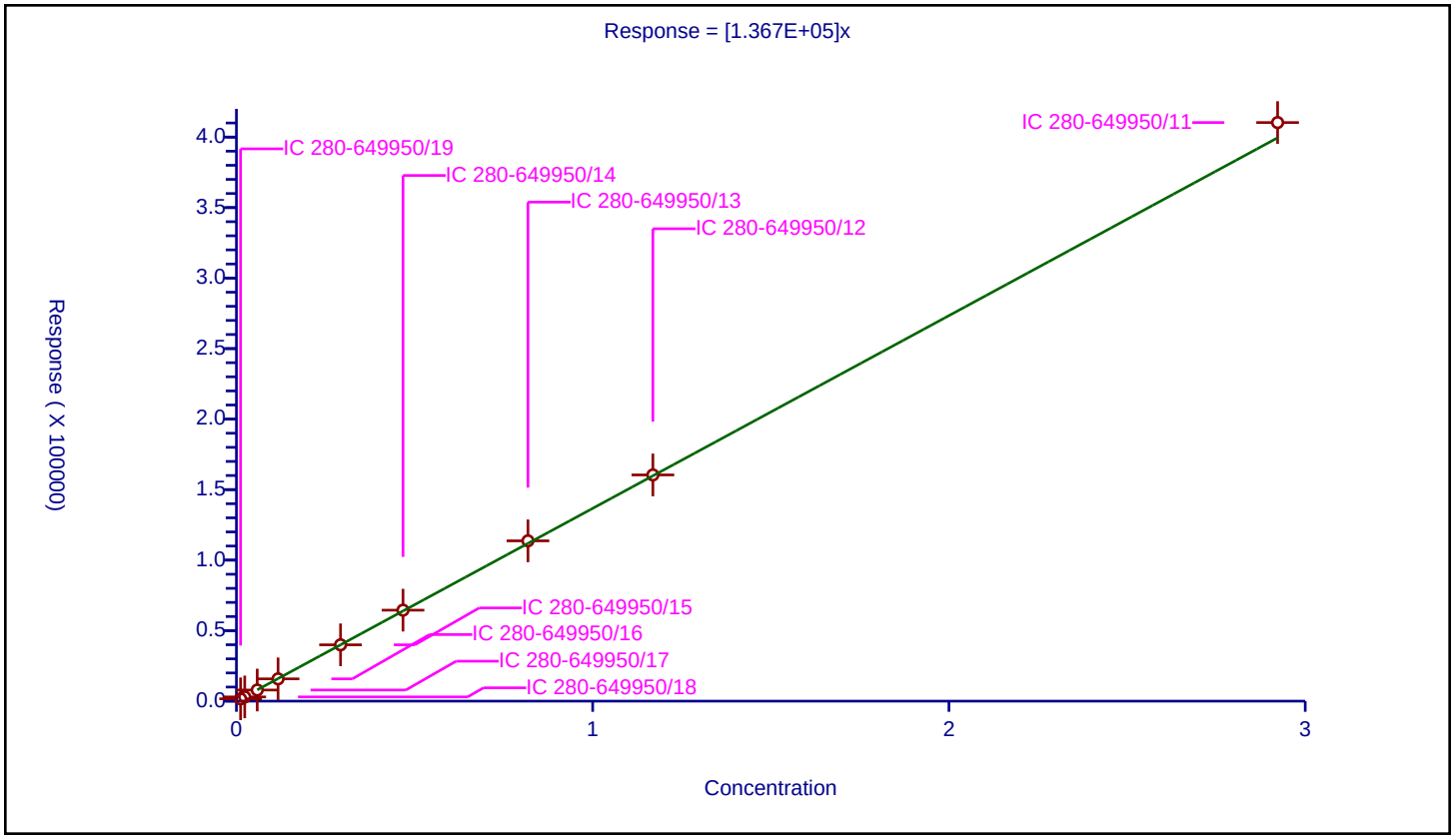
Curve Coefficients

Intercept:	0
Slope:	1.367E+05

Error Coefficients

Relative Standard Deviation:	2.9

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-649950/19	0.01169	1649.0			141060.735672	Y
2	IC 280-649950/18	0.02338	2991.0			127929.854577	Y
3	IC 280-649950/17	0.05845	7887.0			134935.842601	Y
4	IC 280-649950/16	0.1169	15807.0			135218.135158	Y
5	IC 280-649950/15	0.29225	39930.0			136629.597947	Y
6	IC 280-649950/14	0.4676	64510.0			137959.794696	Y
7	IC 280-649950/13	0.8183	113678.0			138919.711597	Y
8	IC 280-649950/12	1.169	160428.0			137235.243798	Y
9	IC 280-649950/11	2.9225	410302.0			140394.183062	Y



Calibration / RDX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

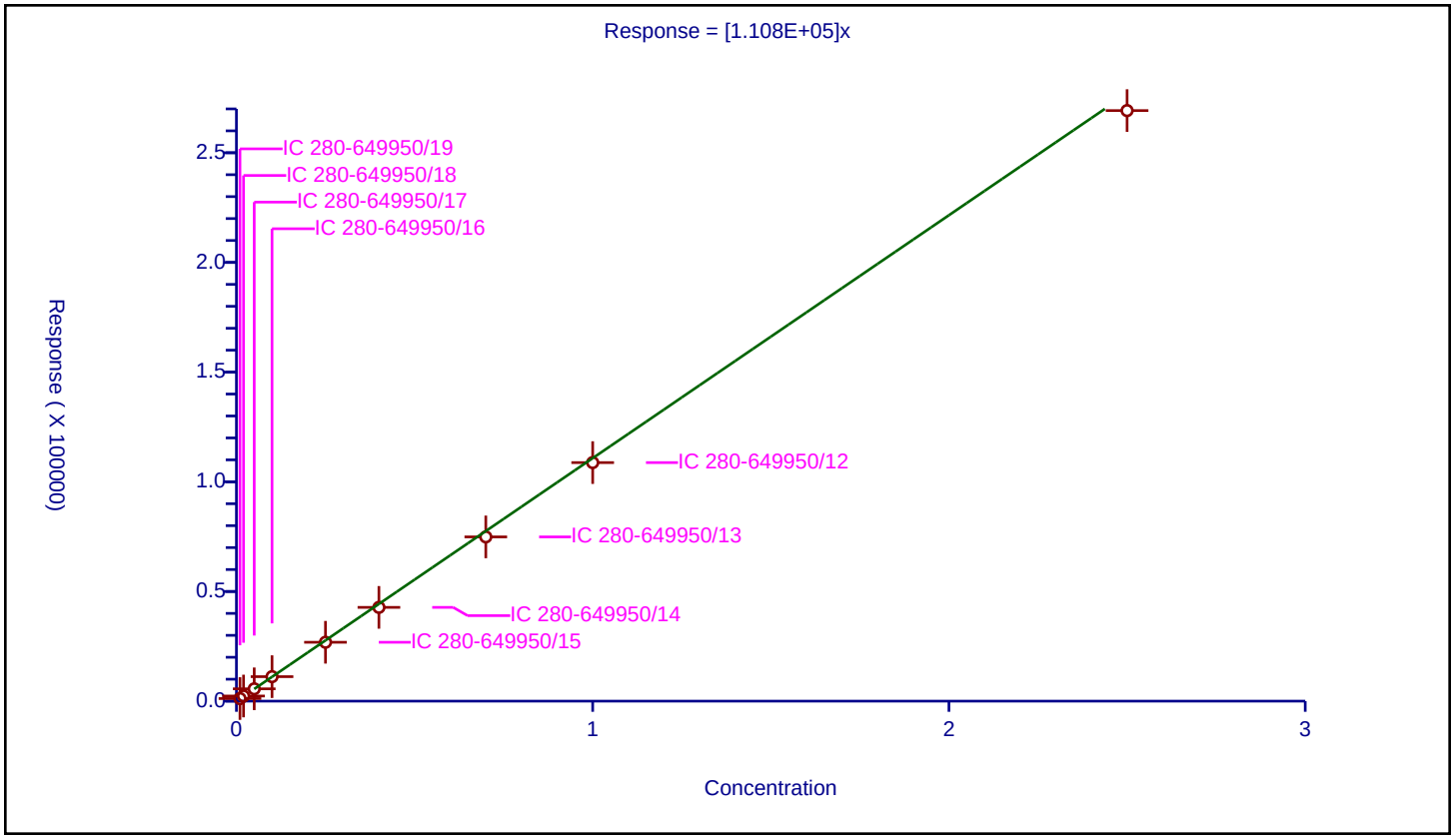
Curve Coefficients

Intercept:	0
Slope:	1.108E+05

Error Coefficients

Relative Standard Deviation:	4.0

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-649950/19	0.01	1187.0			118700.0	Y
2	IC 280-649950/18	0.02	2334.0			116700.0	Y
3	IC 280-649950/17	0.05	5612.0			112240.0	Y
4	IC 280-649950/16	0.1	11162.0			111620.0	Y
5	IC 280-649950/15	0.25	26844.0			107376.0	Y
6	IC 280-649950/14	0.4	42747.0			106867.5	Y
7	IC 280-649950/13	0.7	74871.0			106958.571429	Y
8	IC 280-649950/12	1.0	108752.0			108752.0	Y
9	IC 280-649950/11	2.5	269224.0			107689.6	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

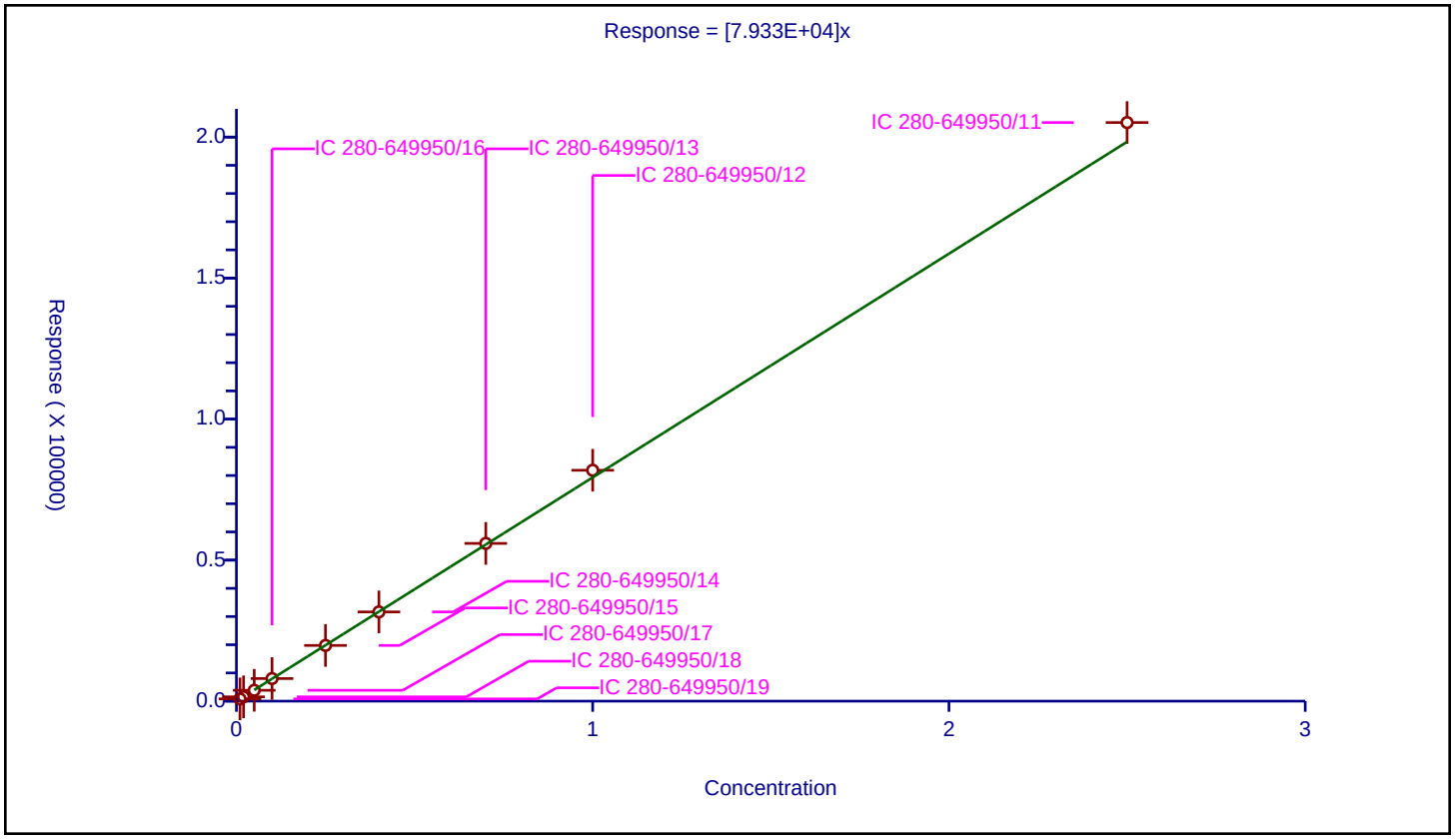
Curve Coefficients

Intercept:	0
Slope:	7.933E+04

Error Coefficients

Relative Standard Deviation:	2.5

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-649950/19	0.01	787.0			78700.0	Y
2	IC 280-649950/18	0.02	1524.0			76200.0	Y
3	IC 280-649950/17	0.05	3847.0			76940.0	Y
4	IC 280-649950/16	0.1	8016.0			80160.0	Y
5	IC 280-649950/15	0.25	19748.0			78992.0	Y
6	IC 280-649950/14	0.4	31644.0			79110.0	Y
7	IC 280-649950/13	0.7	55934.0			79905.714286	Y
8	IC 280-649950/12	1.0	81861.0			81861.0	Y
9	IC 280-649950/11	2.5	205156.0			82062.4	Y



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Calibration / 1,2-Dinitrobenzene

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

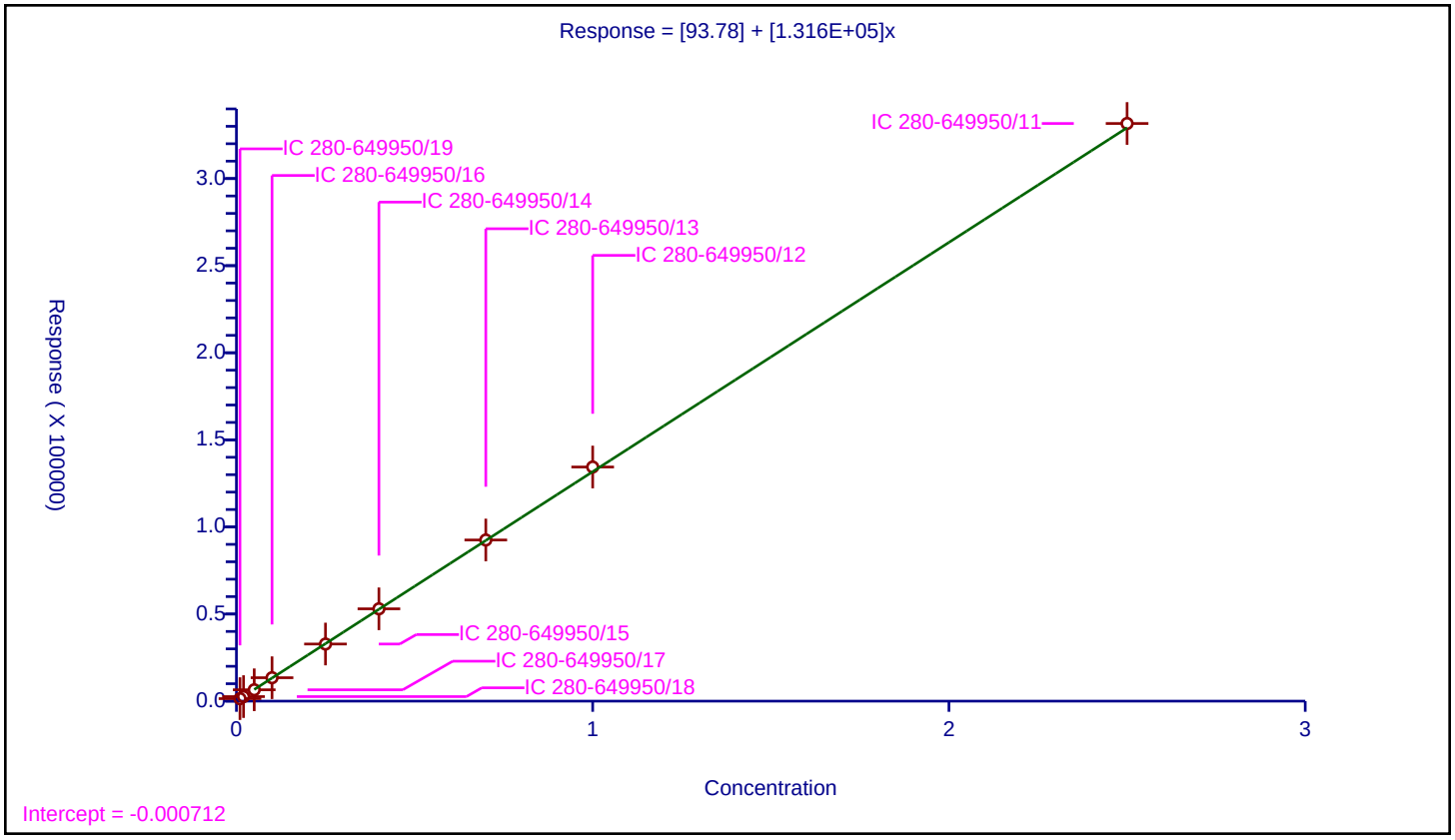
Curve Coefficients

Intercept:	93.78
Slope:	1.316E+05

Error Coefficients

Relative Standard Deviation:	2.5

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-649950/19	0.01	1445.0			144500.0	Y
2	IC 280-649950/18	0.02	2603.0			130150.0	Y
3	IC 280-649950/17	0.05	6521.0			130420.0	Y
4	IC 280-649950/16	0.1	13450.0			134500.0	Y
5	IC 280-649950/15	0.25	32787.0			131148.0	Y
6	IC 280-649950/14	0.4	52999.0			132497.5	Y
7	IC 280-649950/13	0.7	92511.0			132158.571429	Y
8	IC 280-649950/12	1.0	134411.0			134411.0	Y
9	IC 280-649950/11	2.5	331618.0			132647.2	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

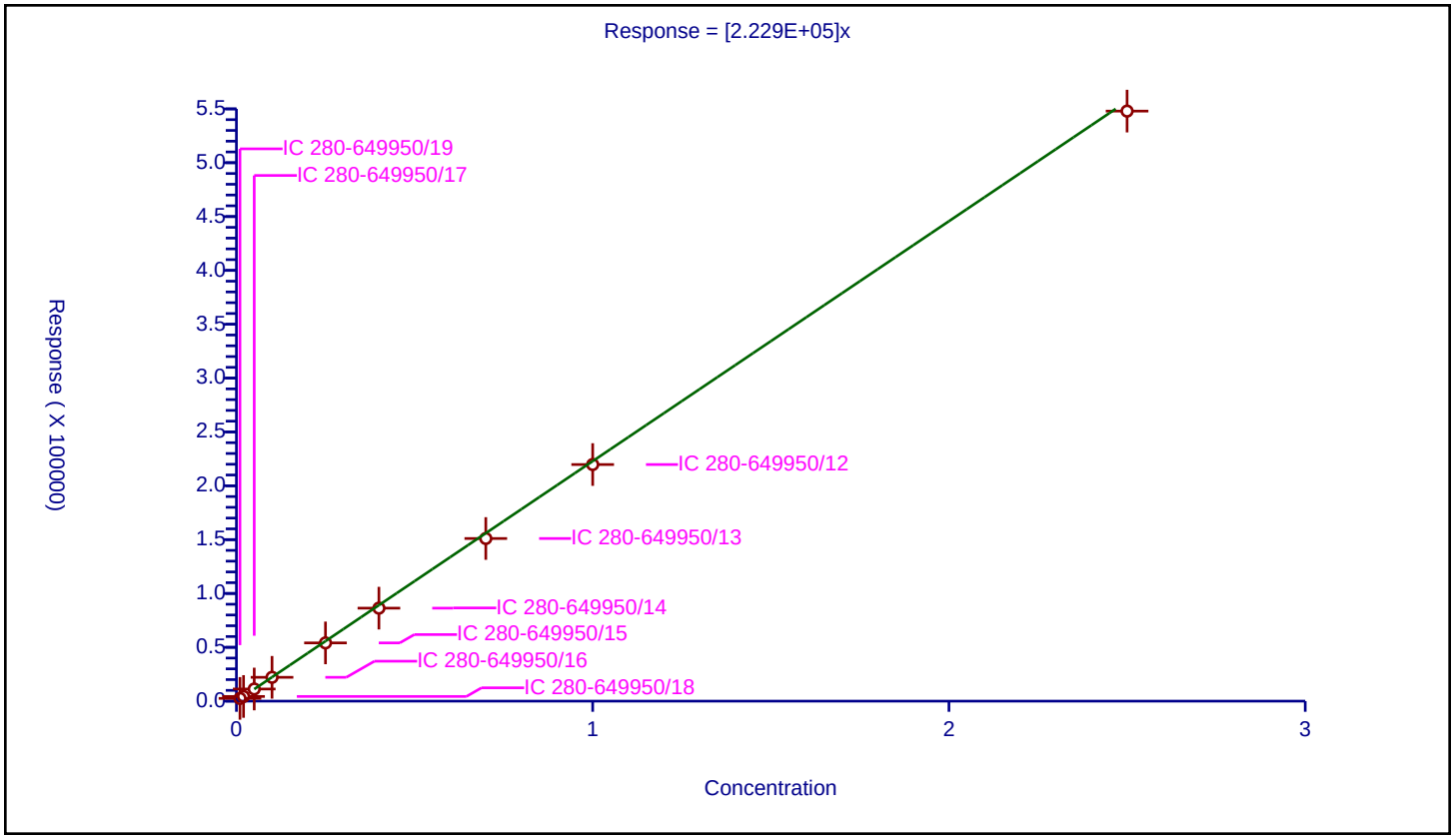
Curve Coefficients

Intercept:	0
Slope:	2.229E+05

Error Coefficients

Relative Standard Deviation:	5.6

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-649950/19	0.01	2549.0			254900.0	Y
2	IC 280-649950/18	0.02	4349.0			217450.0	Y
3	IC 280-649950/17	0.05	11258.0			225160.0	Y
4	IC 280-649950/16	0.1	22129.0			221290.0	Y
5	IC 280-649950/15	0.25	54073.0			216292.0	Y
6	IC 280-649950/14	0.4	86362.0			215905.0	Y
7	IC 280-649950/13	0.7	151045.0			215778.571429	Y
8	IC 280-649950/12	1.0	219723.0			219723.0	Y
9	IC 280-649950/11	2.5	547952.0			219180.8	Y



Calibration / 1,3-Dinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

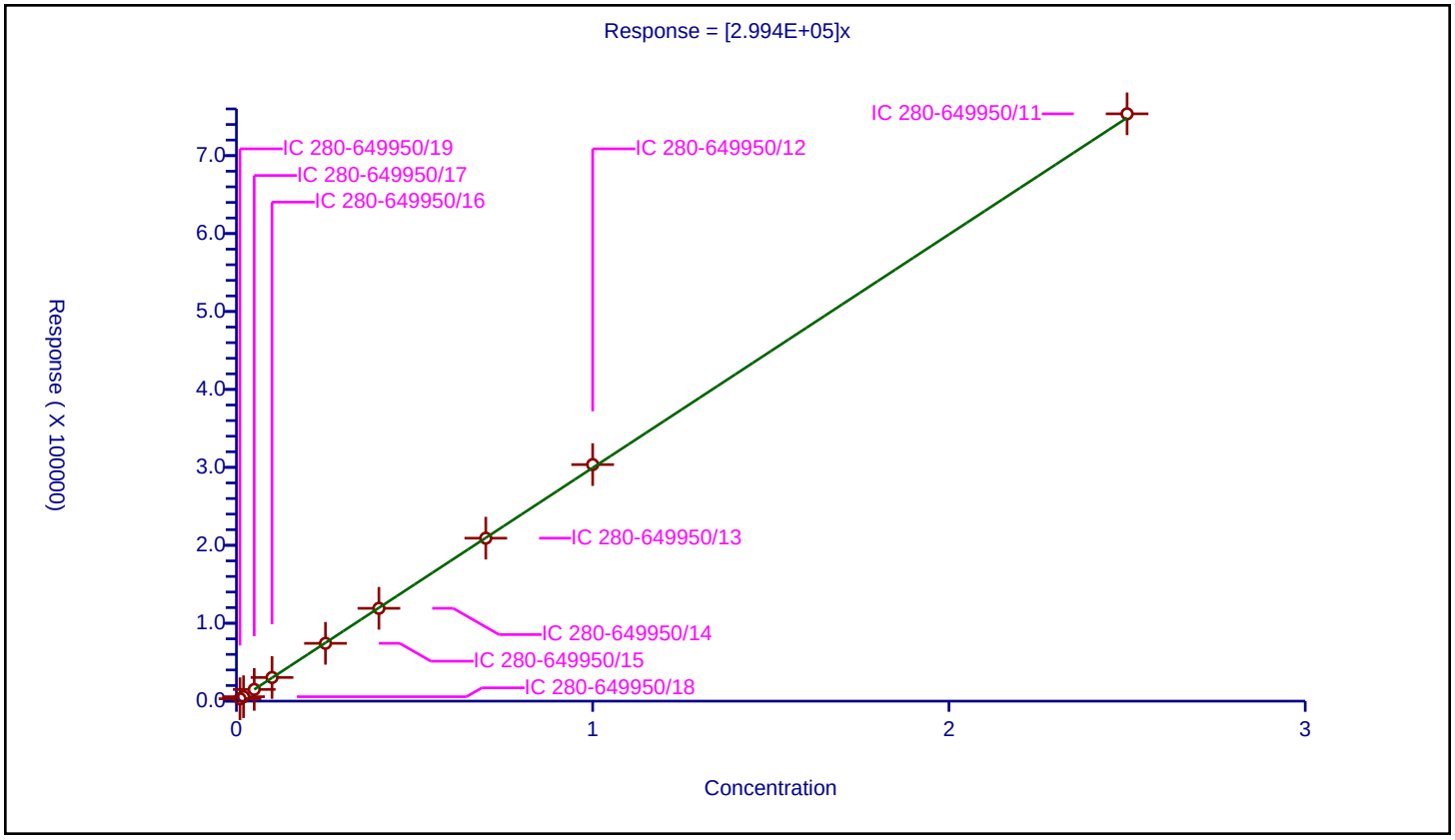
Curve Coefficients

Intercept:	0
Slope:	2.994E+05

Error Coefficients

Relative Standard Deviation:	2.3

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-649950/19	0.01	3086.0			308600.0	Y
2	IC 280-649950/18	0.02	5678.0			283900.0	Y
3	IC 280-649950/17	0.05	15023.0			300460.0	Y
4	IC 280-649950/16	0.1	30359.0			303590.0	Y
5	IC 280-649950/15	0.25	74190.0			296760.0	Y
6	IC 280-649950/14	0.4	119137.0			297842.5	Y
7	IC 280-649950/13	0.7	209122.0			298745.714286	Y
8	IC 280-649950/12	1.0	303550.0			303550.0	Y
9	IC 280-649950/11	2.5	753680.0			301472.0	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

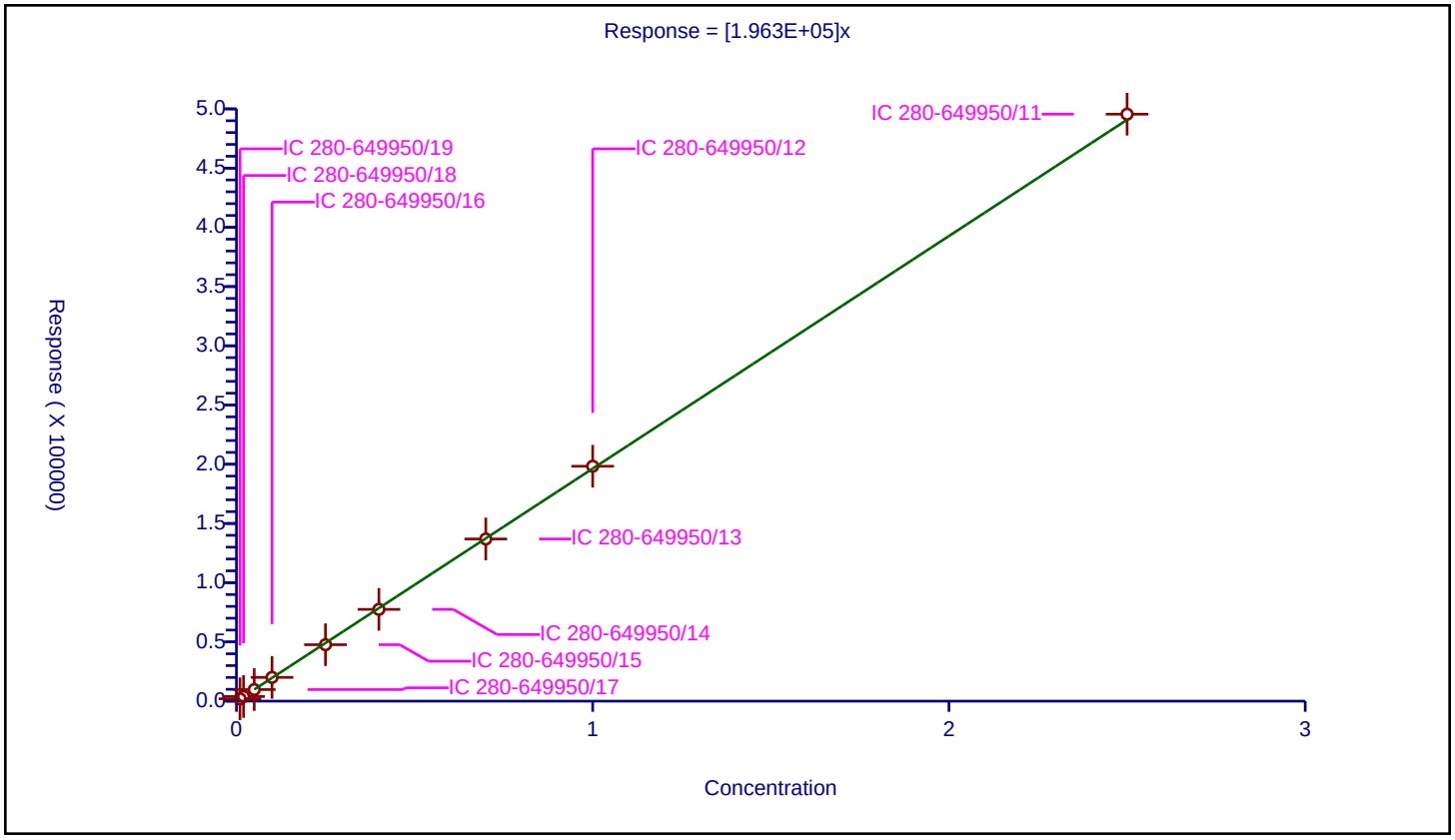
Curve Coefficients

Intercept:	0
Slope:	1.963E+05

Error Coefficients

Relative Standard Deviation:	1.5

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-649950/19	0.01	1985.0			198500.0	Y
2	IC 280-649950/18	0.02	3932.0			196600.0	Y
3	IC 280-649950/17	0.05	9759.0			195180.0	Y
4	IC 280-649950/16	0.1	20035.0			200350.0	Y
5	IC 280-649950/15	0.25	47641.0			190564.0	Y
6	IC 280-649950/14	0.4	77471.0			193677.5	Y
7	IC 280-649950/13	0.7	136899.0			195570.0	Y
8	IC 280-649950/12	1.0	198305.0			198305.0	Y
9	IC 280-649950/11	2.5	495535.0			198214.0	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

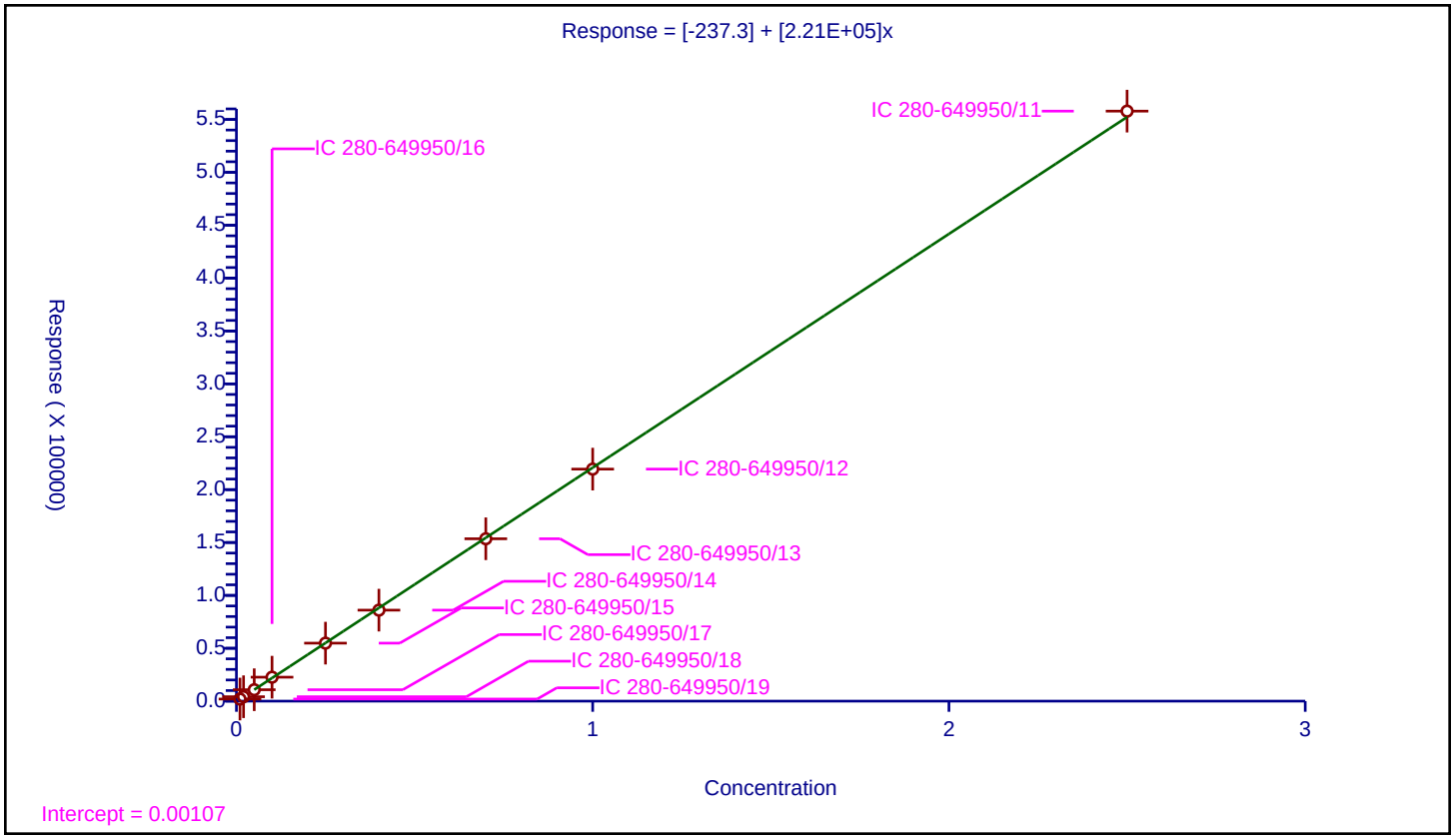
Curve Coefficients

Intercept:	-237.3
Slope:	2.21E+05

Error Coefficients

Relative Standard Deviation:	1.7

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-649950/19	0.01	1971.0			197100.0	Y
2	IC 280-649950/18	0.02	4171.0			208550.0	Y
3	IC 280-649950/17	0.05	10781.0			215620.0	Y
4	IC 280-649950/16	0.1	22651.0			226510.0	Y
5	IC 280-649950/15	0.25	54841.0			219364.0	Y
6	IC 280-649950/14	0.4	86047.0			215117.5	Y
7	IC 280-649950/13	0.7	153531.0			219330.0	Y
8	IC 280-649950/12	1.0	219396.0			219396.0	Y
9	IC 280-649950/11	2.5	557874.0			223149.6	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

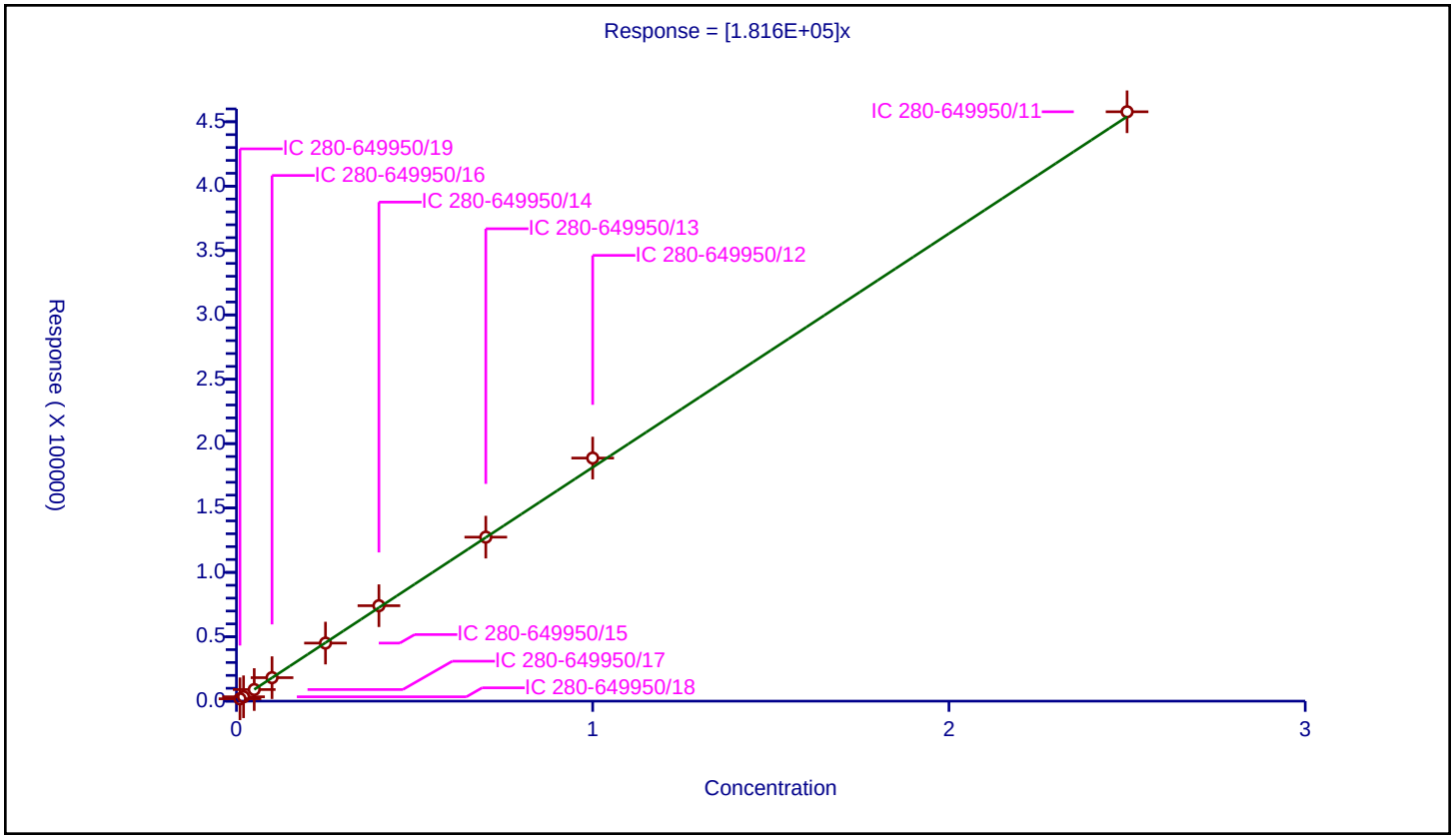
Curve Coefficients

Intercept:	0
Slope:	1.816E+05

Error Coefficients

Relative Standard Deviation:	3.0

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-649950/19	0.01	1835.0			183500.0	Y
2	IC 280-649950/18	0.02	3374.0			168700.0	Y
3	IC 280-649950/17	0.05	9010.0			180200.0	Y
4	IC 280-649950/16	0.1	18238.0			182380.0	Y
5	IC 280-649950/15	0.25	45082.0			180328.0	Y
6	IC 280-649950/14	0.4	74126.0			185315.0	Y
7	IC 280-649950/13	0.7	127375.0			181964.285714	Y
8	IC 280-649950/12	1.0	188801.0			188801.0	Y
9	IC 280-649950/11	2.5	457763.0			183105.2	Y



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Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

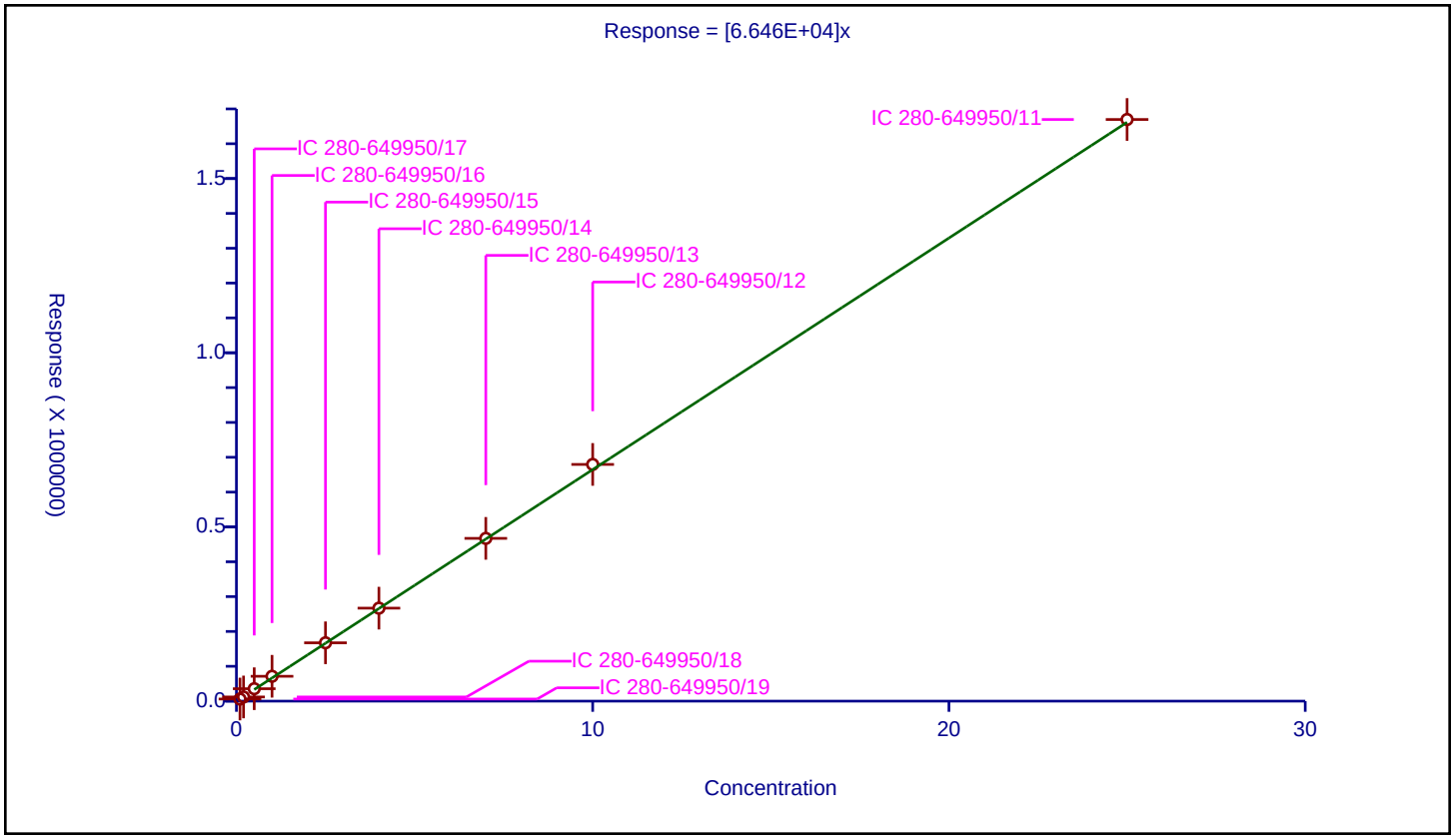
Curve Coefficients

Intercept:	0
Slope:	6.646E+04

Error Coefficients

Relative Standard Deviation:	6.1

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-649950/19	0.1	6048.0			60480.0	Y
2	IC 280-649950/18	0.2	11963.0			59815.0	Y
3	IC 280-649950/17	0.5	35657.0			71314.0	Y
4	IC 280-649950/16	1.0	71367.0			71367.0	Y
5	IC 280-649950/15	2.5	167486.0			66994.4	Y
6	IC 280-649950/14	4.0	266924.0			66731.0	Y
7	IC 280-649950/13	7.0	467214.0			66744.857143	Y
8	IC 280-649950/12	10.0	679445.0			67944.5	Y
9	IC 280-649950/11	25.0	1669606.0			66784.24	Y



Calibration / 2,4,6-Trinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

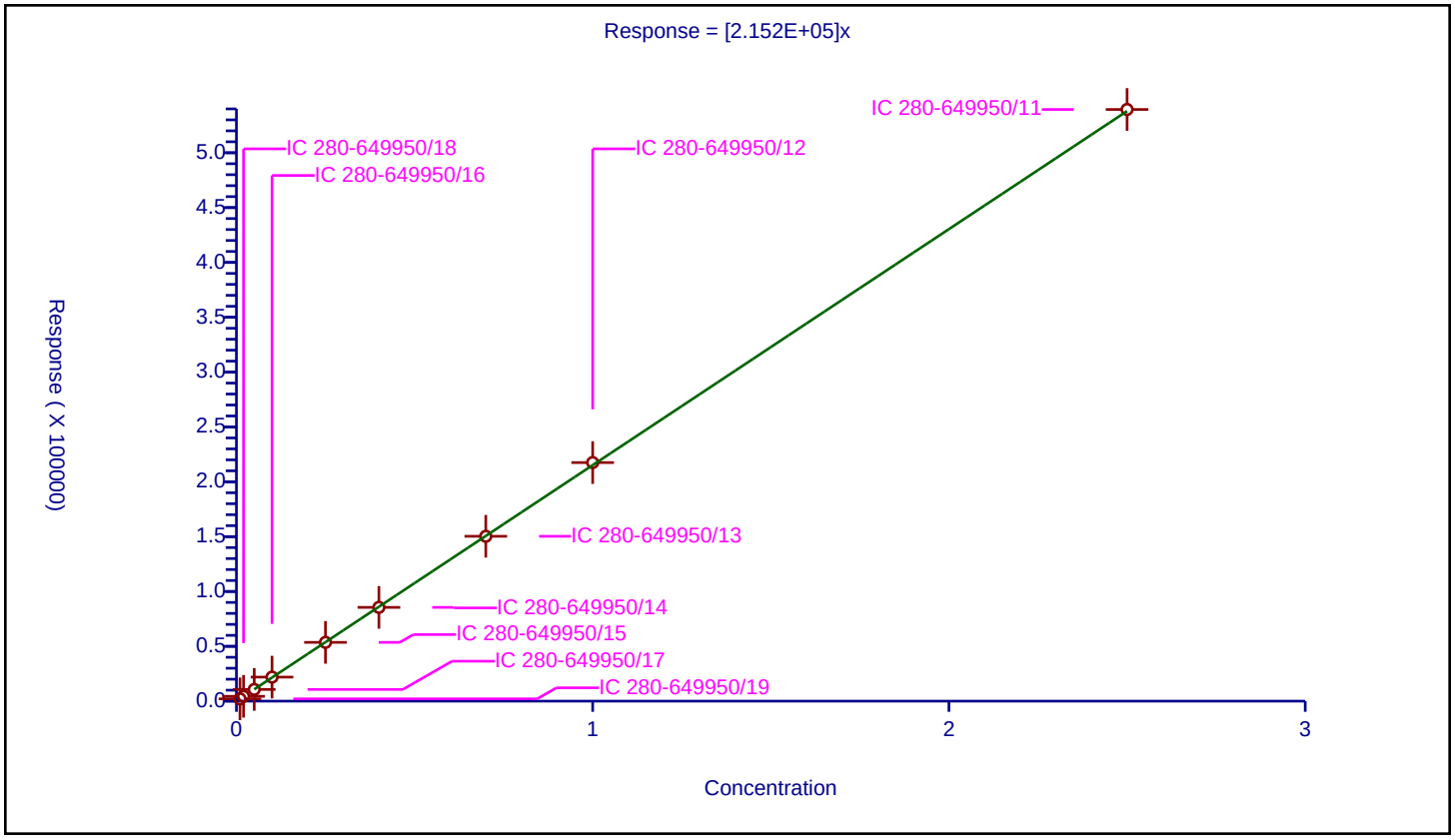
Curve Coefficients

Intercept:	0
Slope:	2.152E+05

Error Coefficients

Relative Standard Deviation:	1.7

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-649950/19	0.01	2081.0			208100.0	Y
2	IC 280-649950/18	0.02	4400.0			220000.0	Y
3	IC 280-649950/17	0.05	10669.0			213380.0	Y
4	IC 280-649950/16	0.1	21912.0			219120.0	Y
5	IC 280-649950/15	0.25	53593.0			214372.0	Y
6	IC 280-649950/14	0.4	85495.0			213737.5	Y
7	IC 280-649950/13	0.7	150301.0			214715.714286	Y
8	IC 280-649950/12	1.0	217516.0			217516.0	Y
9	IC 280-649950/11	2.5	539471.0			215788.4	Y



Calibration / 4-Amino-2,6-dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

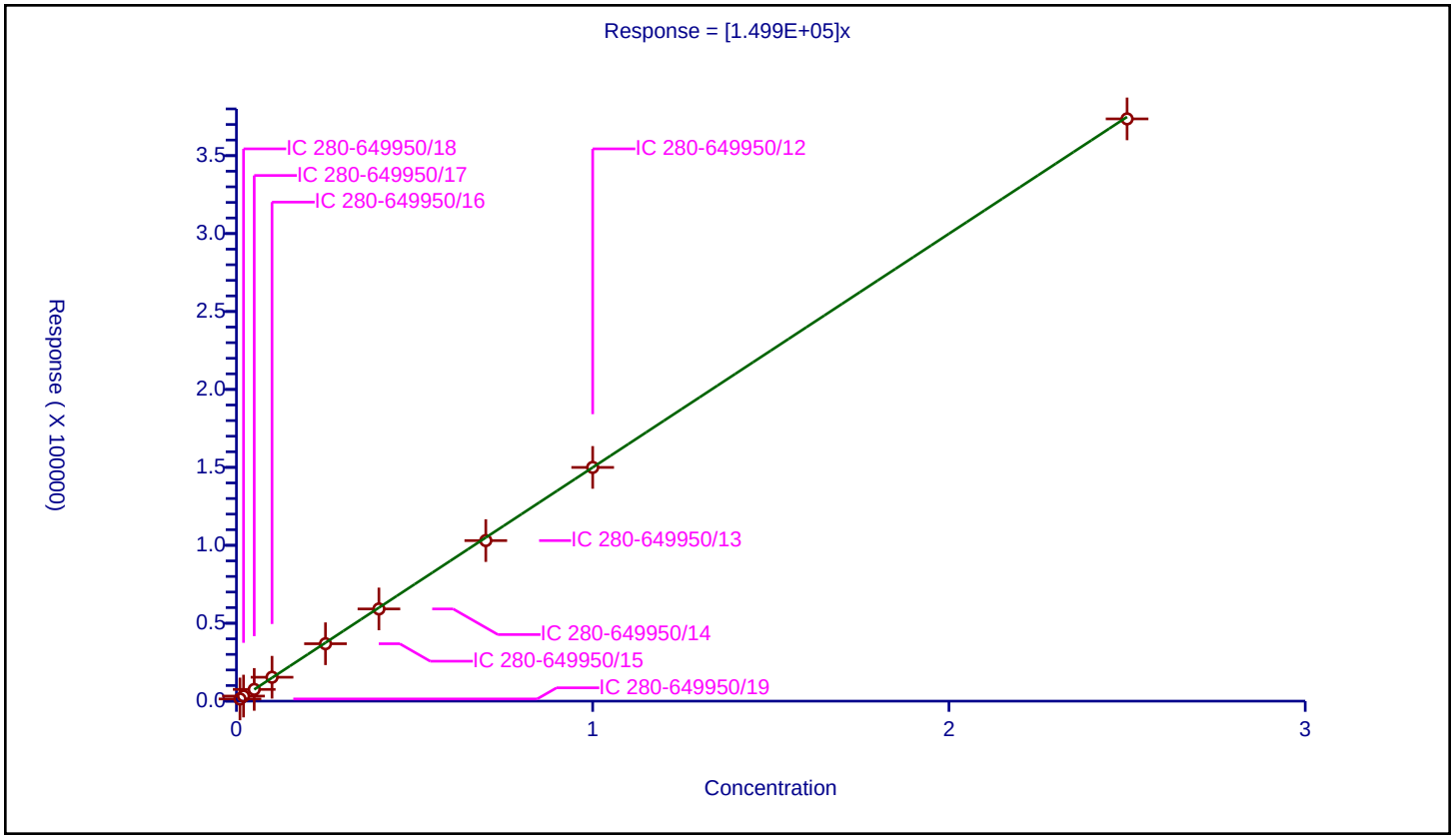
Curve Coefficients

Intercept:	0
Slope:	1.499E+05

Error Coefficients

Relative Standard Deviation:	4.0

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-649950/19	0.01	1406.0			140600.0	Y
2	IC 280-649950/18	0.02	3261.0			163050.0	Y
3	IC 280-649950/17	0.05	7533.0			150660.0	Y
4	IC 280-649950/16	0.1	15344.0			153440.0	Y
5	IC 280-649950/15	0.25	36831.0			147324.0	Y
6	IC 280-649950/14	0.4	59155.0			147887.5	Y
7	IC 280-649950/13	0.7	103016.0			147165.714286	Y
8	IC 280-649950/12	1.0	149965.0			149965.0	Y
9	IC 280-649950/11	2.5	373596.0			149438.4	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

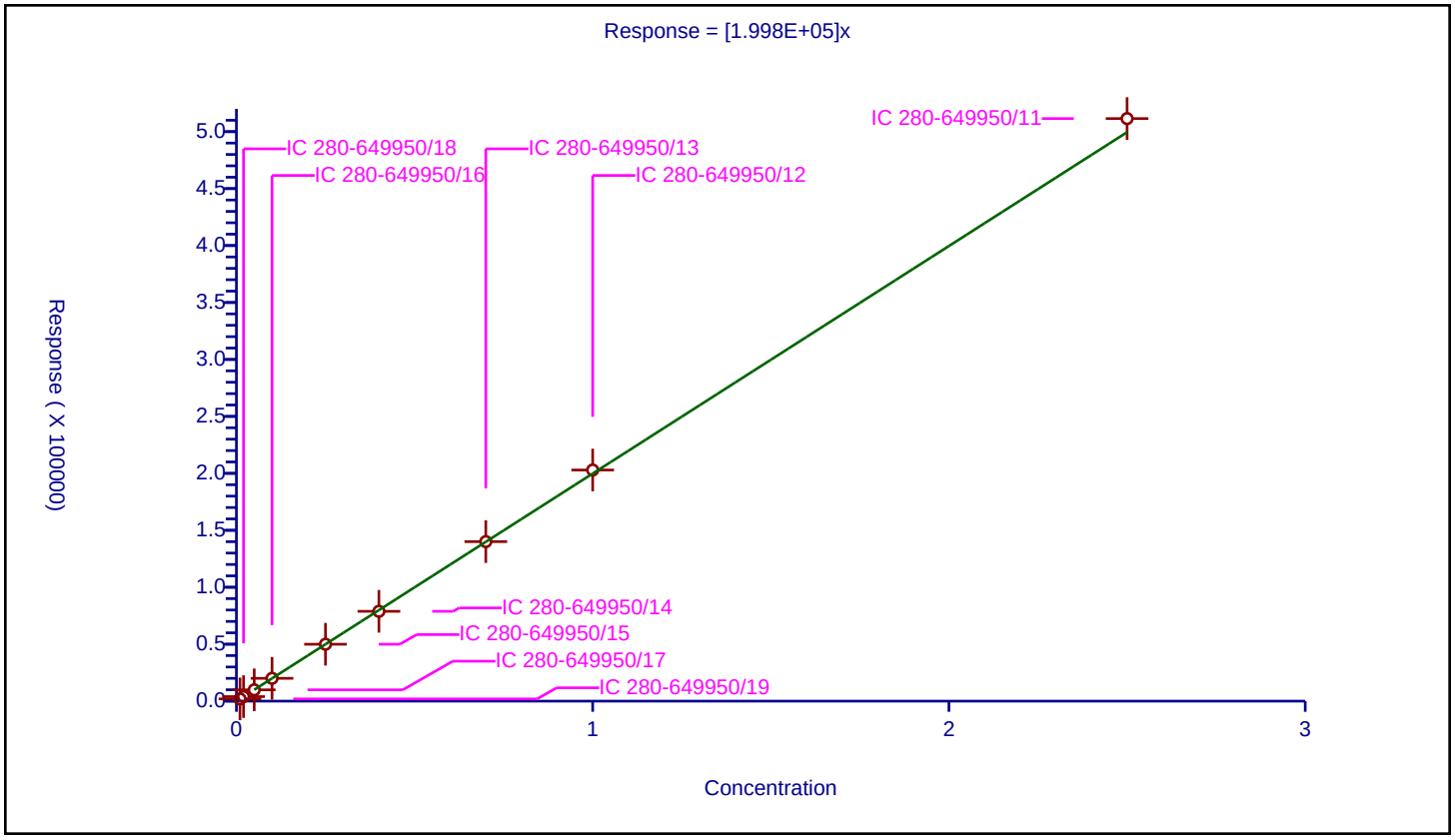
Curve Coefficients

Intercept:	0
Slope:	1.998E+05

Error Coefficients

Relative Standard Deviation:	1.4

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-649950/19	0.01	1951.0			195100.0	Y
2	IC 280-649950/18	0.02	3997.0			199850.0	Y
3	IC 280-649950/17	0.05	9923.0			198460.0	Y
4	IC 280-649950/16	0.1	20033.0			200330.0	Y
5	IC 280-649950/15	0.25	49951.0			199804.0	Y
6	IC 280-649950/14	0.4	78856.0			197140.0	Y
7	IC 280-649950/13	0.7	140054.0			200077.142857	Y
8	IC 280-649950/12	1.0	202927.0			202927.0	Y
9	IC 280-649950/11	2.5	511483.0			204593.2	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

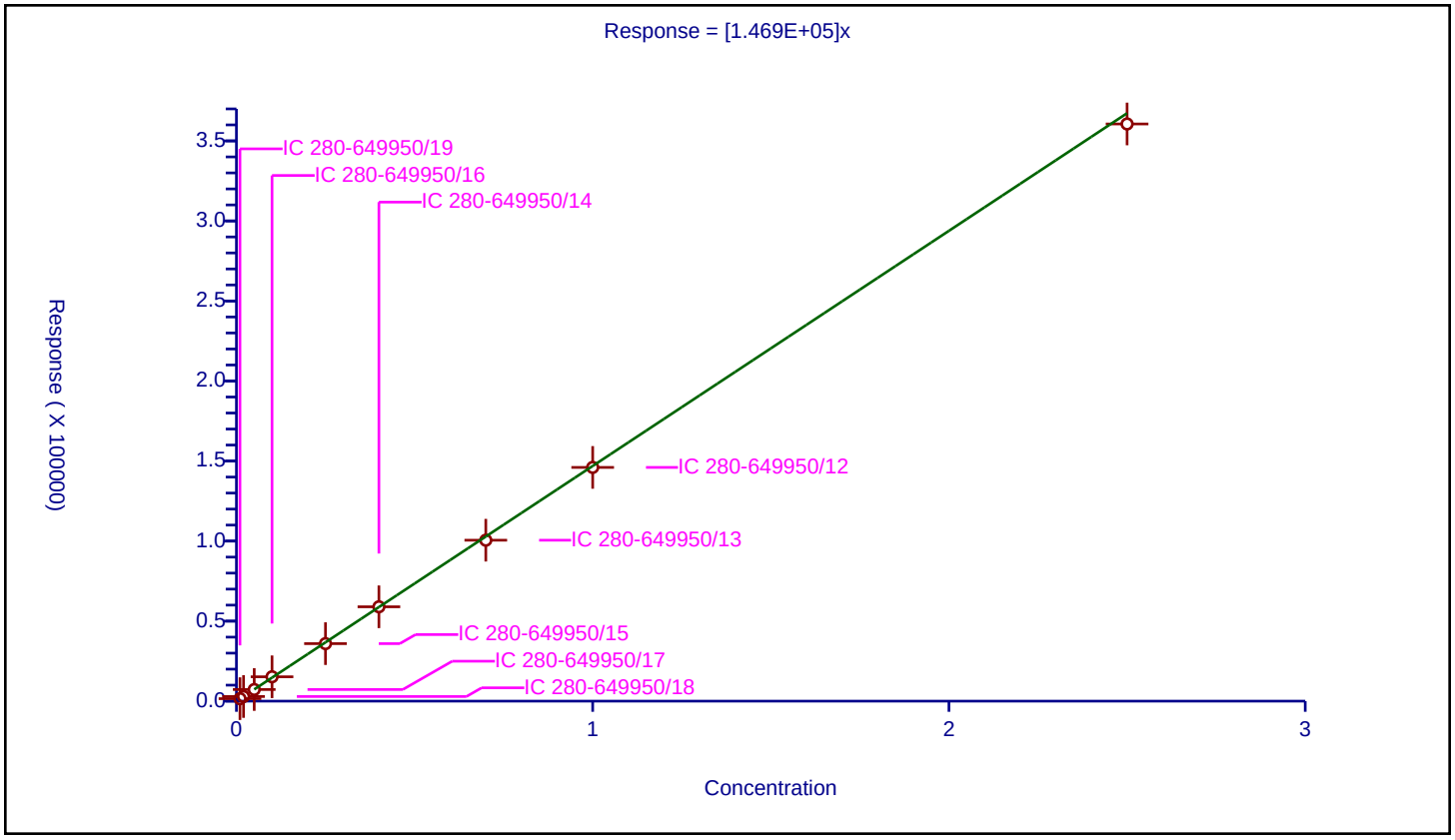
Curve Coefficients

Intercept:	0
Slope:	1.469E+05

Error Coefficients

Relative Standard Deviation:	2.9

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-649950/19	0.01	1557.0			155700.0	Y
2	IC 280-649950/18	0.02	2880.0			144000.0	Y
3	IC 280-649950/17	0.05	7267.0			145340.0	Y
4	IC 280-649950/16	0.1	15218.0			152180.0	Y
5	IC 280-649950/15	0.25	35939.0			143756.0	Y
6	IC 280-649950/14	0.4	58947.0			147367.5	Y
7	IC 280-649950/13	0.7	100540.0			143628.571429	Y
8	IC 280-649950/12	1.0	146021.0			146021.0	Y
9	IC 280-649950/11	2.5	360585.0			144234.0	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

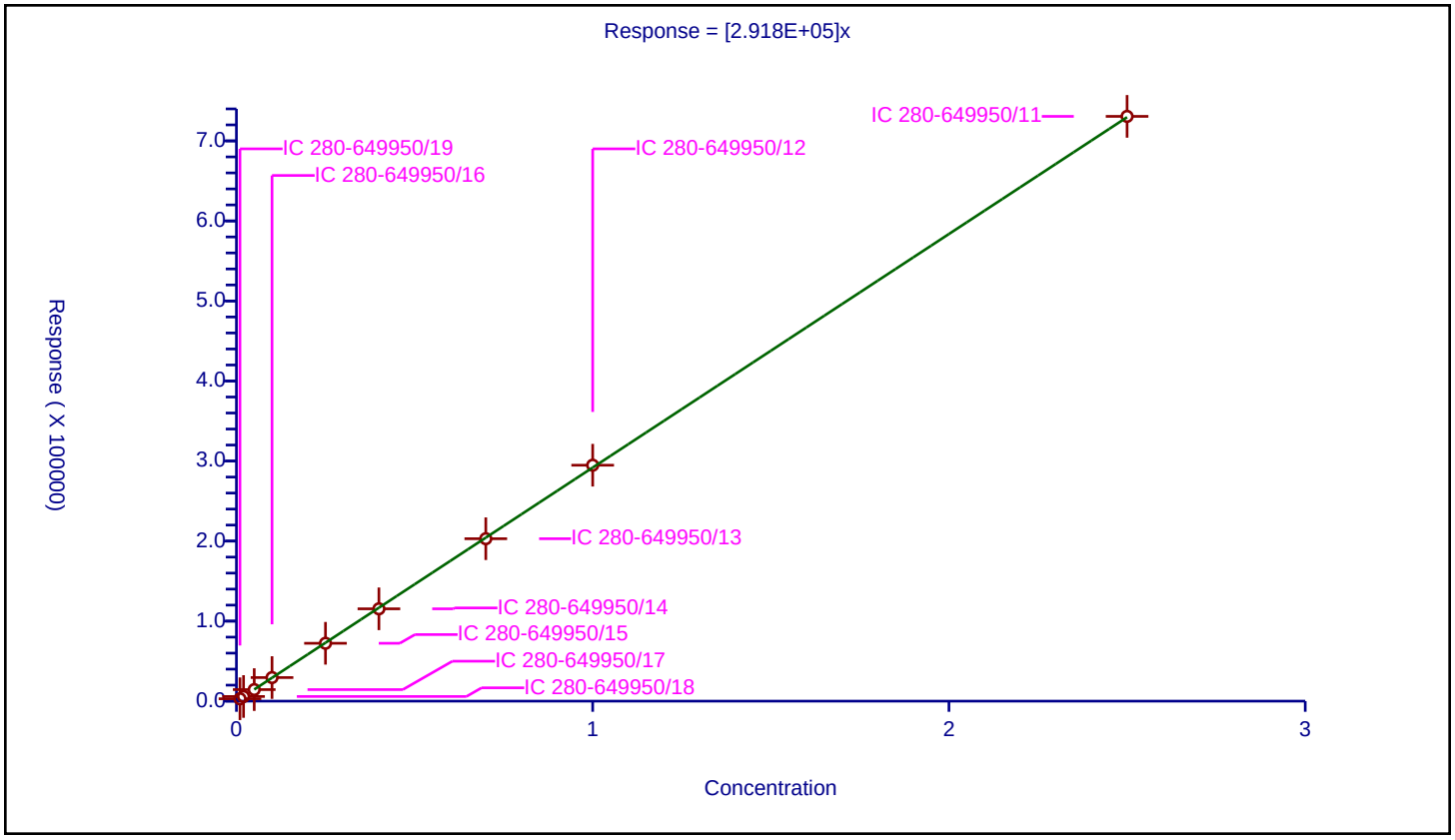
Curve Coefficients

Intercept:	0
Slope:	2.918E+05

Error Coefficients

Relative Standard Deviation:	1.3

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-649950/19	0.01	2993.0			299300.0	Y
2	IC 280-649950/18	0.02	5793.0			289650.0	Y
3	IC 280-649950/17	0.05	14425.0			288500.0	Y
4	IC 280-649950/16	0.1	29452.0			294520.0	Y
5	IC 280-649950/15	0.25	72314.0			289256.0	Y
6	IC 280-649950/14	0.4	115355.0			288387.5	Y
7	IC 280-649950/13	0.7	202952.0			289931.428571	Y
8	IC 280-649950/12	1.0	294790.0			294790.0	Y
9	IC 280-649950/11	2.5	730644.0			292257.6	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

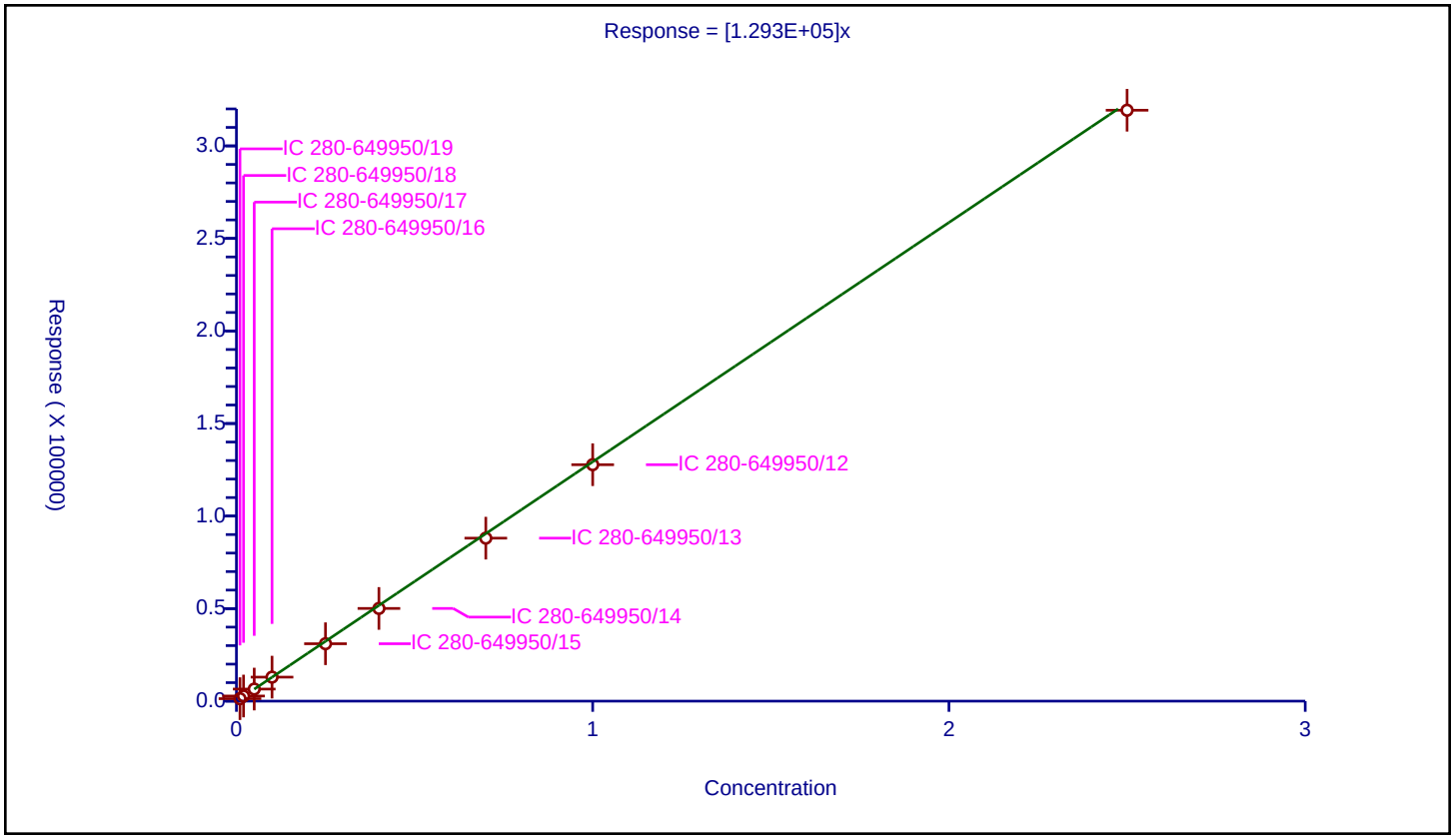
Curve Coefficients

Intercept:	0
Slope:	1.293E+05

Error Coefficients

Relative Standard Deviation:	3.6

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-649950/19	0.01	1340.0			134000.0	Y
2	IC 280-649950/18	0.02	2777.0			138850.0	Y
3	IC 280-649950/17	0.05	6526.0			130520.0	Y
4	IC 280-649950/16	0.1	12977.0			129770.0	Y
5	IC 280-649950/15	0.25	31023.0			124092.0	Y
6	IC 280-649950/14	0.4	50092.0			125230.0	Y
7	IC 280-649950/13	0.7	88069.0			125812.857143	Y
8	IC 280-649950/12	1.0	127758.0			127758.0	Y
9	IC 280-649950/11	2.5	319286.0			127714.4	Y



Calibration / p-Nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

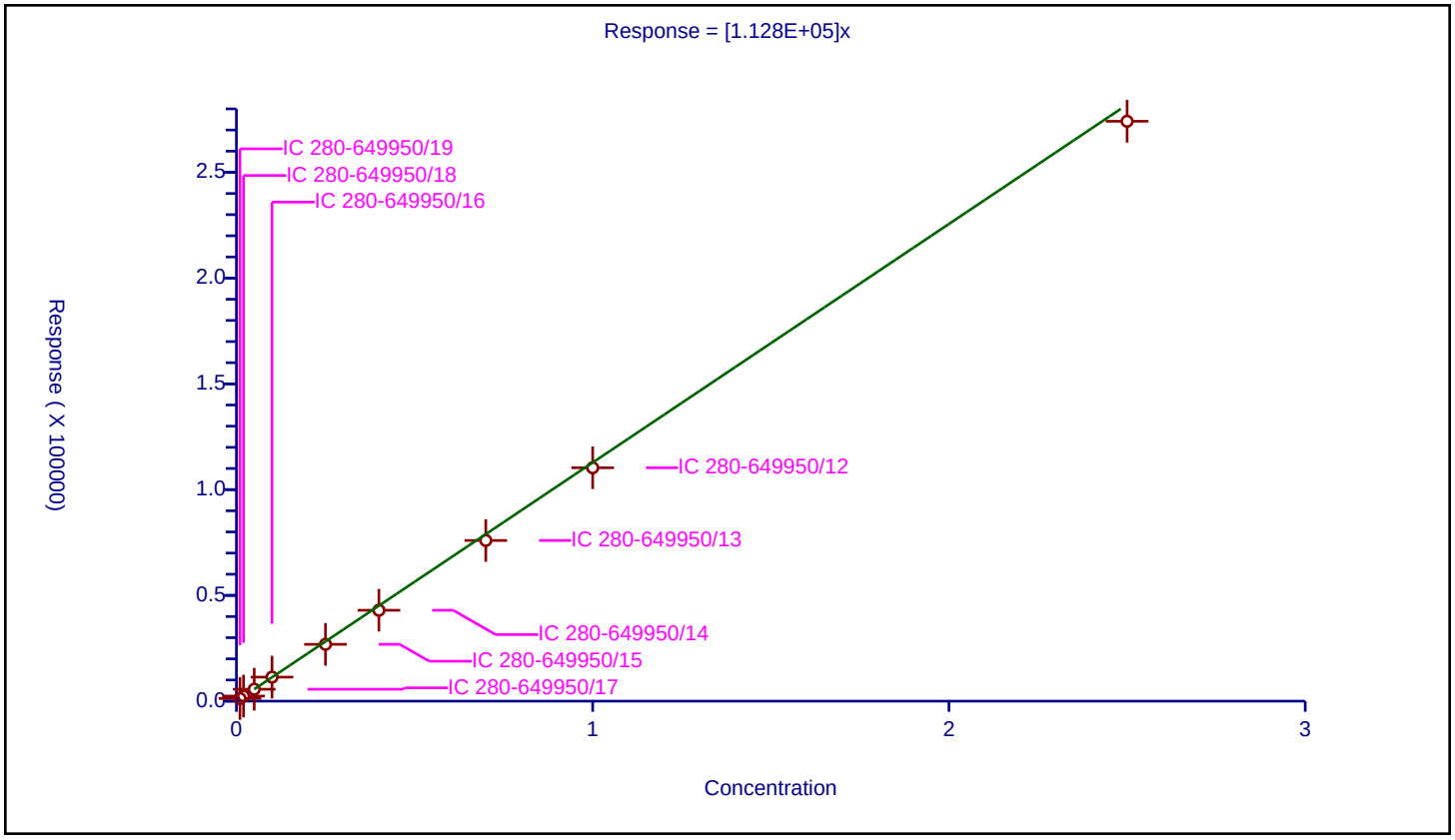
Curve Coefficients

Intercept:	0
Slope:	1.128E+05

Error Coefficients

Relative Standard Deviation:	5.4

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-649950/19	0.01	1249.0			124900.0	Y
2	IC 280-649950/18	0.02	2413.0			120650.0	Y
3	IC 280-649950/17	0.05	5631.0			112620.0	Y
4	IC 280-649950/16	0.1	11360.0			113600.0	Y
5	IC 280-649950/15	0.25	26871.0			107484.0	Y
6	IC 280-649950/14	0.4	42973.0			107432.5	Y
7	IC 280-649950/13	0.7	75957.0			108510.0	Y
8	IC 280-649950/12	1.0	110337.0			110337.0	Y
9	IC 280-649950/11	2.5	274145.0			109658.0	Y



5/8/2024
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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

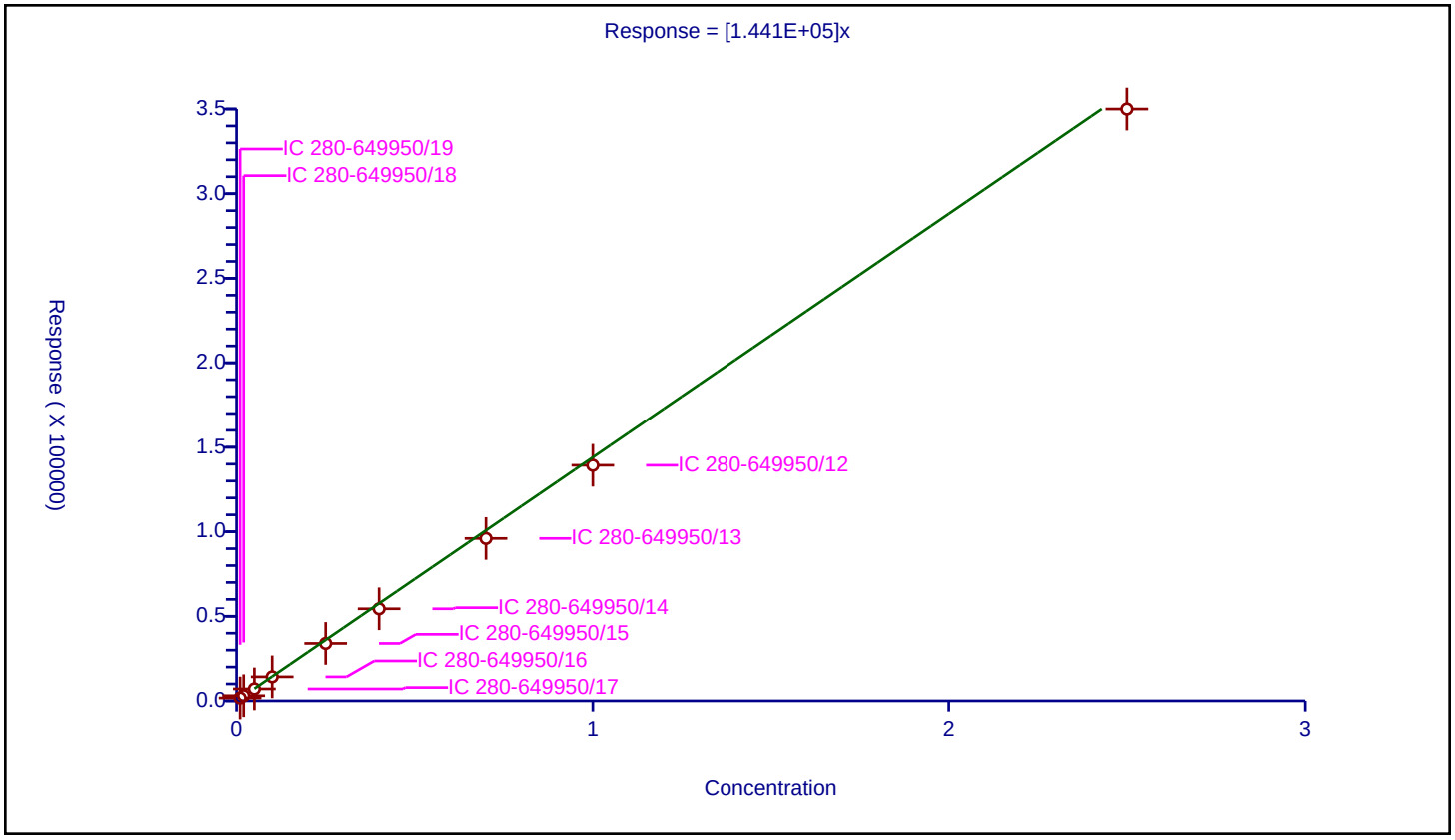
Curve Coefficients

Intercept:	0
Slope:	1.441E+05

Error Coefficients

Relative Standard Deviation:	8.0

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-649950/19	0.01	1713.0			171300.0	Y
2	IC 280-649950/18	0.02	3066.0			153300.0	Y
3	IC 280-649950/17	0.05	7074.0			141480.0	Y
4	IC 280-649950/16	0.1	14207.0			142070.0	Y
5	IC 280-649950/15	0.25	33952.0			135808.0	Y
6	IC 280-649950/14	0.4	54437.0			136092.5	Y
7	IC 280-649950/13	0.7	96036.0			137194.285714	Y
8	IC 280-649950/12	1.0	139336.0			139336.0	Y
9	IC 280-649950/11	2.5	349971.0			139988.4	Y



Calibration / PETN

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

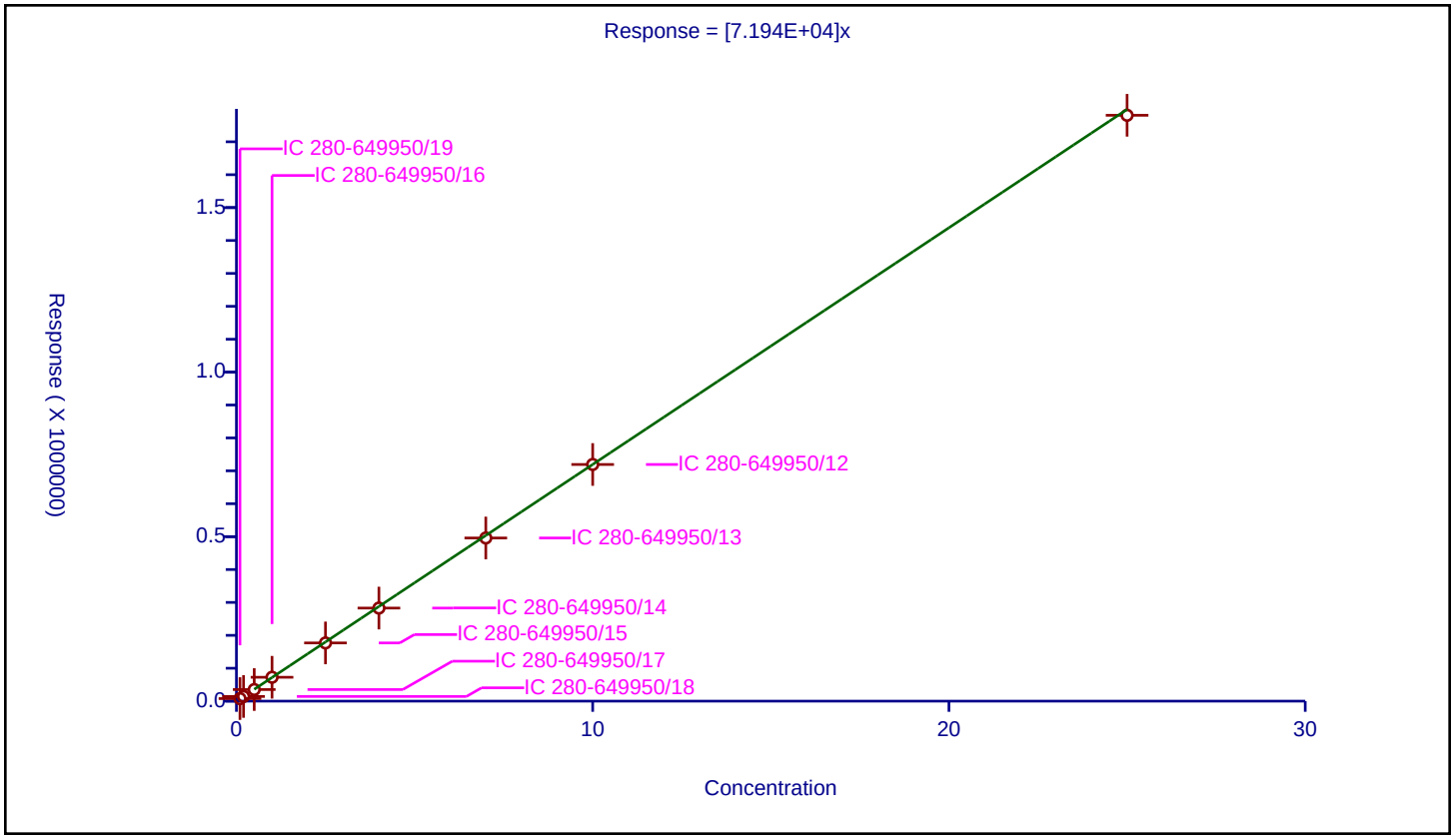
Curve Coefficients

Intercept:	0
Slope:	7.194E+04

Error Coefficients

Relative Standard Deviation:	3.3

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-649950/19	0.1	7807.0			78070.0	Y
2	IC 280-649950/18	0.2	14174.0			70870.0	Y
3	IC 280-649950/17	0.5	35216.0			70432.0	Y
4	IC 280-649950/16	1.0	72600.0			72600.0	Y
5	IC 280-649950/15	2.5	176891.0			70756.4	Y
6	IC 280-649950/14	4.0	282889.0			70722.25	Y
7	IC 280-649950/13	7.0	495856.0			70836.571429	Y
8	IC 280-649950/12	10.0	719241.0			71924.1	Y
9	IC 280-649950/11	25.0	1780535.0			71221.4	Y



5/8/2024
6:07:23 AM

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-190799-1

SDG No.:

Lab Sample ID: ICV 280-650851/19 Calibration Date: 04/25/2024 02:51

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 04/24/2024 21:28

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 04/25/2024 02:15

Lab File ID: 04240019.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	174076	166804		479	500	-4.2	20.0
Picric acid	Ave	151397	162096		535	500	7.1	20.0
RDX	Lin2		212688		514	500	2.9	20.0
Nitrobenzene	Ave	382120	410196		537	500	7.3	20.0
3,5-Dinitroaniline	Lin2		467084		540	500	8.0	20.0
1,3-Dinitrobenzene	Ave	589418	622818		528	500	5.7	20.0
Nitroglycerin	Ave	119505	129045		5400	5000	8.0	20.0
2-Nitrotoluene	Ave	244594	255606		523	500	4.5	20.0
4-Nitrotoluene	Lin2		237762		542	500	8.4	20.0
4-Amino-2,6-dinitrotoluene	Lin2		298664		551	500	10.3	20.0
3-Nitrotoluene	Lin2		294022		530	500	6.0	20.0
2-Amino-4,6-dinitrotoluene	Ave	405562	411548		507	500	1.5	20.0
1,3,5-Trinitrobenzene	Ave	423454	463460		547	500	9.4	20.0
2,6-Dinitrotoluene	Ave	277970	282262		508	500	1.5	20.0
2,4-Dinitrotoluene	Ave	554564	571064		515	500	3.0	20.0
Tetryl	Lin2		340546		544	500	8.9	20.0
2,4,6-Trinitrotoluene	Ave	399763	421604		527	500	5.5	20.0
PETN	Lin2		139356		5650	5000	13.1	20.0
1,2-Dinitrobenzene	Ave	258689	258086		499	500	-0.2	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-190799-1

SDG No.:

Lab Sample ID: ICV 280-650851/19 Calibration Date: 04/25/2024 02:51

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 04/24/2024 21:28

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 04/25/2024 02:15

Lab File ID: 04240019.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.69	6.56	6.86
Picric acid	8.58	8.46	8.76
RDX	8.92	8.79	9.09
Nitrobenzene	11.42	11.28	11.58
3,5-Dinitroaniline	14.19	14.04	14.34
1,3-Dinitrobenzene	14.48	14.33	14.63
Nitroglycerin	14.93	14.77	15.07
2-Nitrotoluene	15.51	15.36	15.66
4-Nitrotoluene	15.74	15.59	15.89
4-Amino-2,6-dinitrotoluene	16.24	16.10	16.40
3-Nitrotoluene	16.57	16.43	16.73
2-Amino-4,6-dinitrotoluene	17.05	16.91	17.21
1,3,5-Trinitrobenzene	17.26	17.12	17.42
2,6-Dinitrotoluene	18.36	18.22	18.52
2,4-Dinitrotoluene	18.81	18.67	18.97
Tetryl	22.03	21.88	22.18
2,4,6-Trinitrotoluene	22.88	22.73	23.03
PETN	24.03	23.88	24.18
1,2-Dinitrobenzene	12.35	12.20	12.50

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20240424-132624.b\04240019.D
Lims ID: ICV INT
Client ID:
Sample Type: ICV
Inject. Date: 25-Apr-2024 02:51:47 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICV INT
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist:

Method: \\chromfs\Denver\ChromData\G2_LUNA\20240424-132624.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 25-Apr-2024 14:35:18 Calib Date: 25-Apr-2024 02:15:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20240424-132624.b\04240018.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1684

First Level Reviewer: LV5D Date: 25-Apr-2024 13:30:09

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
6 HMX	1	6.690	6.705	-0.015	83402	0.5000	0.4791	
5 2,4,6-Trinitrophenol	1	8.583	8.612	-0.029	81048	0.5000	0.5353	
8 RDX	1	8.923	8.938	-0.015	106344	0.5000	0.5145	
9 Nitrobenzene	1	11.423	11.425	-0.002	205098	0.5000	0.5367	
$ 10 1,2-Dinitrobenzene	1	12.350	12.345	0.005	129043	0.5000	0.4988	
11 3,5-Dinitroaniline	1	14.190	14.185	0.005	233542	0.5000	0.5401	
12 1,3-Dinitrobenzene	1	14.477	14.478	-0.001	311409	0.5000	0.5283	
13 Nitroglycerin	2	14.930	14.918	0.012	645227	5.00	5.40	M
14 o-Nitrotoluene	1	15.510	15.505	0.005	127803	0.5000	0.5225	
15 p-Nitrotoluene	1	15.737	15.738	-0.001	118881	0.5000	0.5418	
16 4-Amino-2,6-dinitrotoluene	1	16.243	16.245	-0.002	149332	0.5000	0.5513	
17 m-Nitrotoluene	1	16.570	16.578	-0.008	147011	0.5000	0.5299	
18 2-Amino-4,6-dinitrotoluene	1	17.050	17.058	-0.008	205774	0.5000	0.5074	
19 1,3,5-Trinitrobenzene	1	17.263	17.272	-0.009	231730	0.5000	0.5472	
20 2,6-Dinitrotoluene	1	18.357	18.365	-0.008	141131	0.5000	0.5077	
21 2,4-Dinitrotoluene	1	18.810	18.818	-0.008	285532	0.5000	0.5149	
22 Tetryl	1	22.030	22.025	0.005	170273	0.5000	0.5444	
23 2,4,6-Trinitrotoluene	1	22.883	22.878	0.005	210802	0.5000	0.5273	
24 PETN	2	24.030	24.032	-0.002	696781	5.00	5.65	
25 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_00154	Amount Added:	50.00	Units: uL
8330 LCS_00134	Amount Added:	50.00	Units: uL

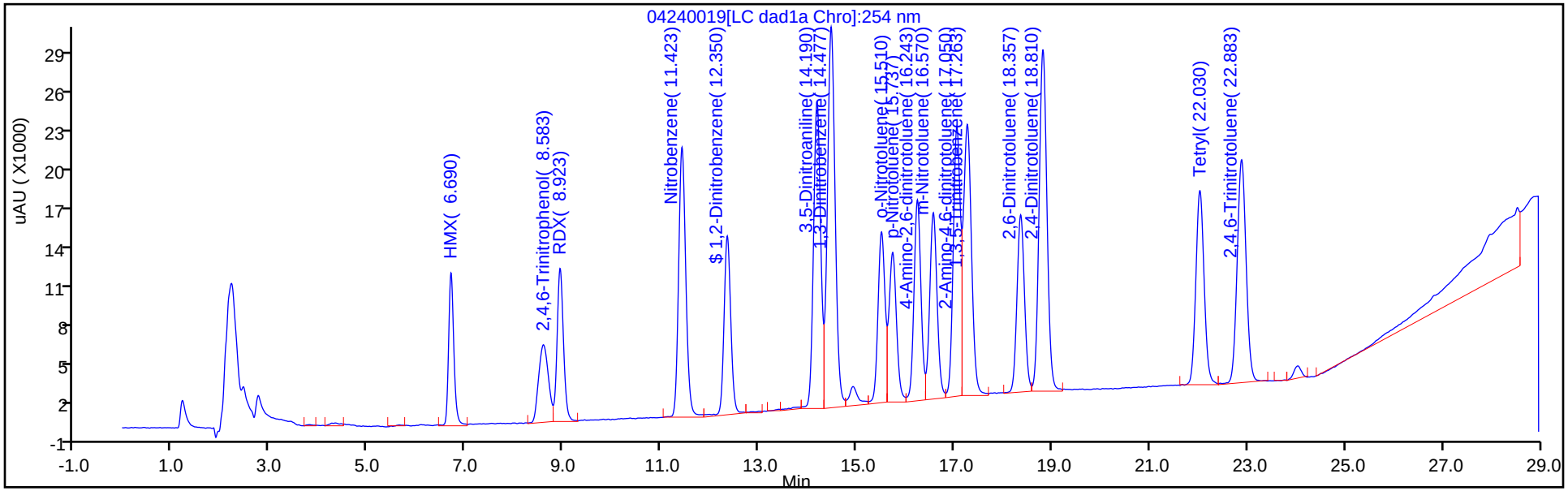
Report Date: 25-Apr-2024 14:35:28 Chrom Revision: 2.3 09-Apr-2024 17:43:44

Eurofins Denver

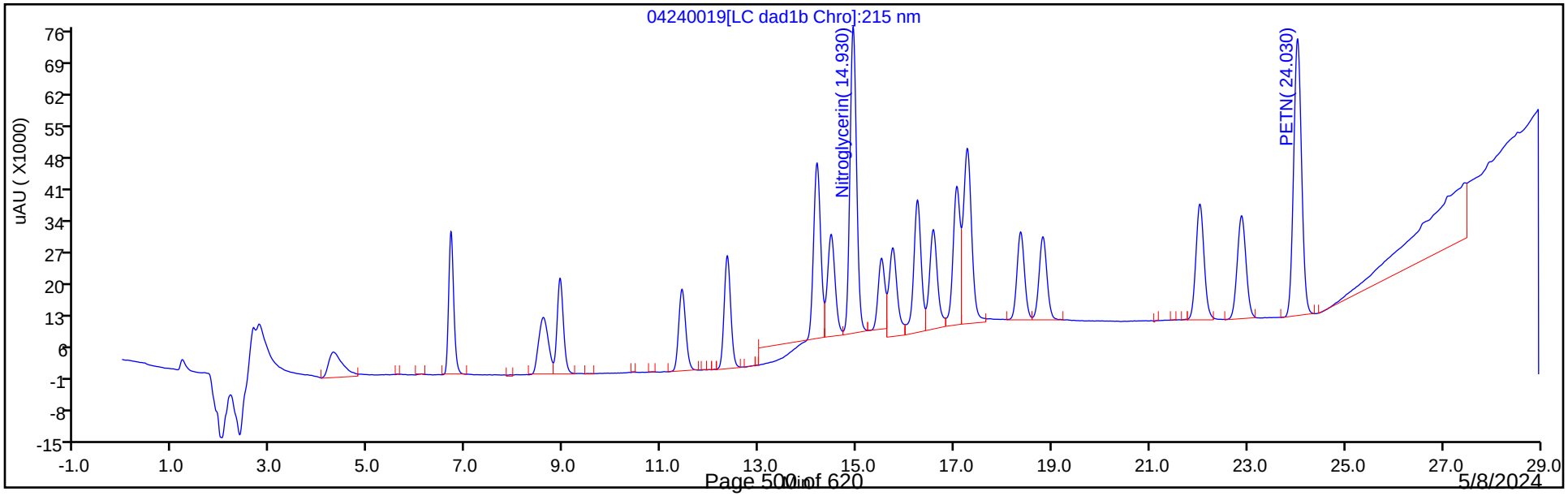
Data File: \\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240019.d

Injection Date:	25-Apr-2024 02:51:47	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	ICV INT			Worklist Smp#:	19
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	G2_8330_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



5/8/2024
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Manual Integration/User Assign Peak Report

Eurofins Denver

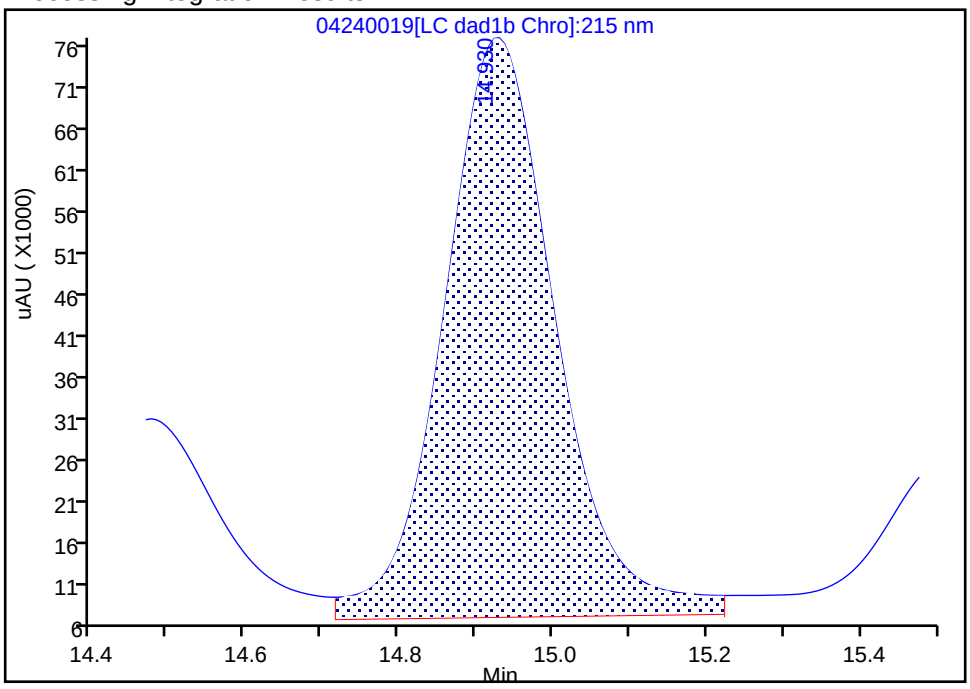
Data File:	\\chromfs\denver\chromdata\g2_luna\20240424-132624.b\04240019.d				
Injection Date:	25-Apr-2024 02:51:47	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	ICV INT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1B, 215 nm		

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

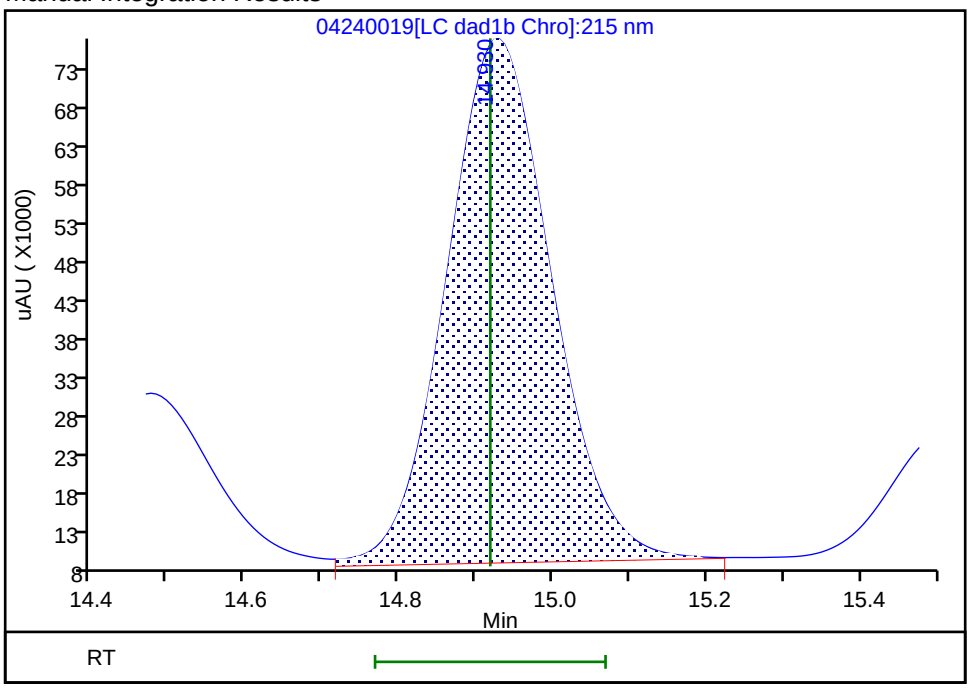
Processing Integration Results

RT: 14.93
Area: 708140
Amount: 5.925621
Amount Units: ug/ml



Manual Integration Results

RT: 14.93
Area: 645227
Amount: 5.399174
Amount Units: ug/ml



Reviewer: LV5D, 25-Apr-2024 13:30:07 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-190799-1

SDG No.:

Lab Sample ID: CCV 280-652057/20 Calibration Date: 05/03/2024 23:15

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 04/24/2024 21:28

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 04/25/2024 02:15

Lab File ID: 05030020.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	174076	182172		262	250	4.7	20.0
Picric acid	Ave	151397	156388		258	250	3.3	20.0
RDX	Lin2		210008		253	250	1.1	20.0
Nitrobenzene	Ave	382120	376164		246	250	-1.6	20.0
3,5-Dinitroaniline	Lin2		442688		255	250	1.9	20.0
1,3-Dinitrobenzene	Ave	589418	583644		248	250	-1.0	20.0
Nitroglycerin	Ave	119505	124288		2600	2500	4.0	20.0
2-Nitrotoluene	Ave	244594	240128		245	250	-1.8	20.0
4-Nitrotoluene	Lin2		219556		248	250	-0.8	20.0
4-Amino-2,6-dinitrotoluene	Lin2		273824		251	250	0.5	20.0
3-Nitrotoluene	Lin2		274564		246	250	-1.8	20.0
2-Amino-4,6-dinitrotoluene	Ave	405562	391176		241	250	-3.5	20.0
1,3,5-Trinitrobenzene	Ave	423454	417388		246	250	-1.4	20.0
2,6-Dinitrotoluene	Ave	277970	280508		252	250	0.9	20.0
2,4-Dinitrotoluene	Ave	554564	557600		251	250	0.5	20.0
Tetryl	Lin2		310640		247	250	-1.0	20.0
2,4,6-Trinitrotoluene	Ave	399763	403472		252	250	0.9	20.0
PETN	Lin2		125662		2560	2500	2.3	20.0
1,2-Dinitrobenzene	Ave	258689	269224		260	250	4.1	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-190799-1

SDG No.:

Lab Sample ID: CCV 280-652057/20 Calibration Date: 05/03/2024 23:15

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 04/24/2024 21:28

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 04/25/2024 02:15

Lab File ID: 05030020.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.68	6.55	6.85
Picric acid	8.51	8.46	8.76
RDX	8.91	8.79	9.09
Nitrobenzene	11.42	11.30	11.60
3,5-Dinitroaniline	14.16	14.06	14.36
1,3-Dinitrobenzene	14.46	14.35	14.65
Nitroglycerin	14.93	14.80	15.10
2-Nitrotoluene	15.52	15.38	15.68
4-Nitrotoluene	15.74	15.62	15.92
4-Amino-2,6-dinitrotoluene	16.24	16.11	16.41
3-Nitrotoluene	16.58	16.45	16.75
2-Amino-4,6-dinitrotoluene	17.04	16.92	17.22
1,3,5-Trinitrobenzene	17.26	17.14	17.44
2,6-Dinitrotoluene	18.36	18.23	18.53
2,4-Dinitrotoluene	18.81	18.69	18.99
Tetryl	21.99	21.88	22.18
2,4,6-Trinitrotoluene	22.85	22.72	23.02
PETN	24.02	23.86	24.16
1,2-Dinitrobenzene	12.34	12.22	12.52

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20240503-132991.b\05030020.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 03-May-2024 23:15:41 ALS Bottle#: 7 Worklist Smp#: 20
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub16

Method: \\chromfs\Denver\ChromData\G2_LUNA\20240503-132991.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 07-May-2024 16:26:43 Calib Date: 25-Apr-2024 07:39:21
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20240424-132624.b\04240027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1679

First Level Reviewer: LV5D Date: 07-May-2024 16:05:29

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
6 HMX	1	6.676	6.700	-0.024	45543	0.2500	0.2616	
5 2,4,6-Trinitrophenol	1	8.509	8.614	-0.105	39097	0.2500	0.2582	
8 RDX	1	8.909	8.940	-0.031	52502	0.2500	0.2527	
9 Nitrobenzene	1	11.422	11.453	-0.031	94041	0.2500	0.2461	
$ 10 1,2-Dinitrobenzene	1	12.335	12.373	-0.038	67306	0.2500	0.2602	
11 3,5-Dinitroaniline	1	14.162	14.207	-0.045	110672	0.2500	0.2548	M
12 1,3-Dinitrobenzene	1	14.462	14.500	-0.038	145911	0.2500	0.2476	M
13 Nitroglycerin	2	14.929	14.953	-0.024	310721	2.50	2.60	M
14 o-Nitrotoluene	1	15.515	15.533	-0.018	60032	0.2500	0.2454	M
15 p-Nitrotoluene	1	15.742	15.767	-0.025	54889	0.2500	0.2479	M
16 4-Amino-2,6-dinitrotoluene	1	16.235	16.260	-0.025	68456	0.2500	0.2512	M
17 m-Nitrotoluene	1	16.582	16.600	-0.018	68641	0.2500	0.2456	M
18 2-Amino-4,6-dinitrotoluene	1	17.042	17.073	-0.031	97794	0.2500	0.2411	M
19 1,3,5-Trinitrobenzene	1	17.262	17.293	-0.031	104347	0.2500	0.2464	M
20 2,6-Dinitrotoluene	1	18.355	18.380	-0.025	70127	0.2500	0.2523	M
21 2,4-Dinitrotoluene	1	18.809	18.840	-0.031	139400	0.2500	0.2514	M
22 Tetryl	1	21.989	22.027	-0.038	77660	0.2500	0.2475	M
23 2,4,6-Trinitrotoluene	1	22.849	22.874	-0.025	100868	0.2500	0.2523	M
24 PETN	2	24.016	24.007	0.009	314155	2.50	2.56	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00080 Amount Added: 25.00 Units: uL

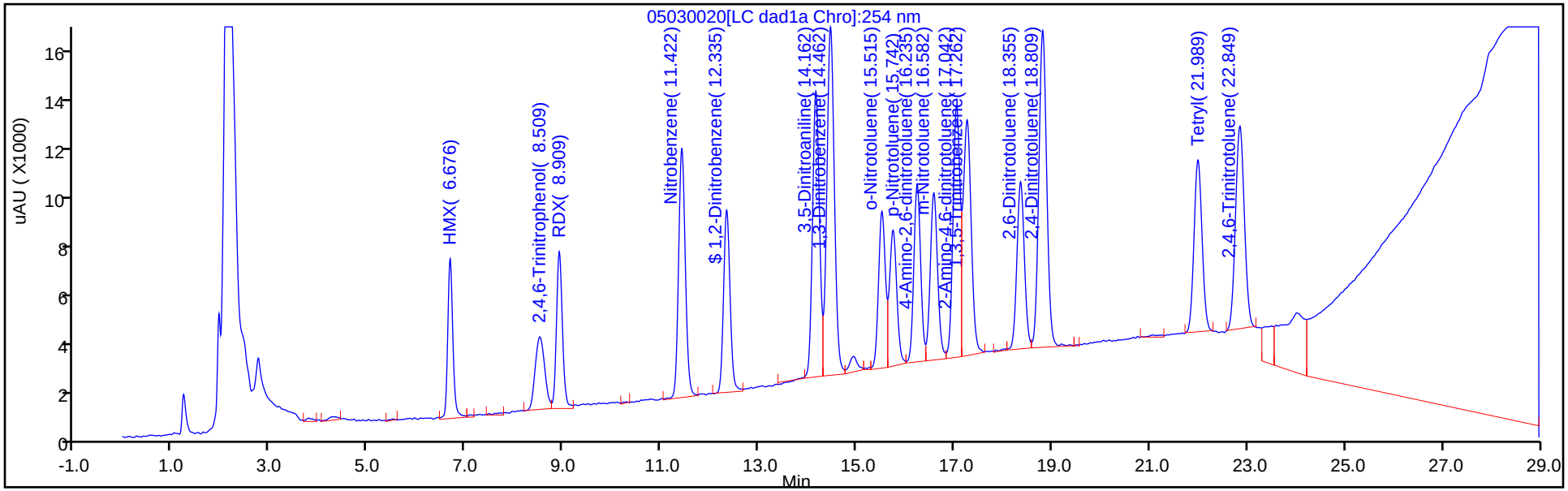
Report Date: 07-May-2024 16:26:44 Chrom Revision: 2.3 26-Apr-2024 12:18:52

Eurofins Denver

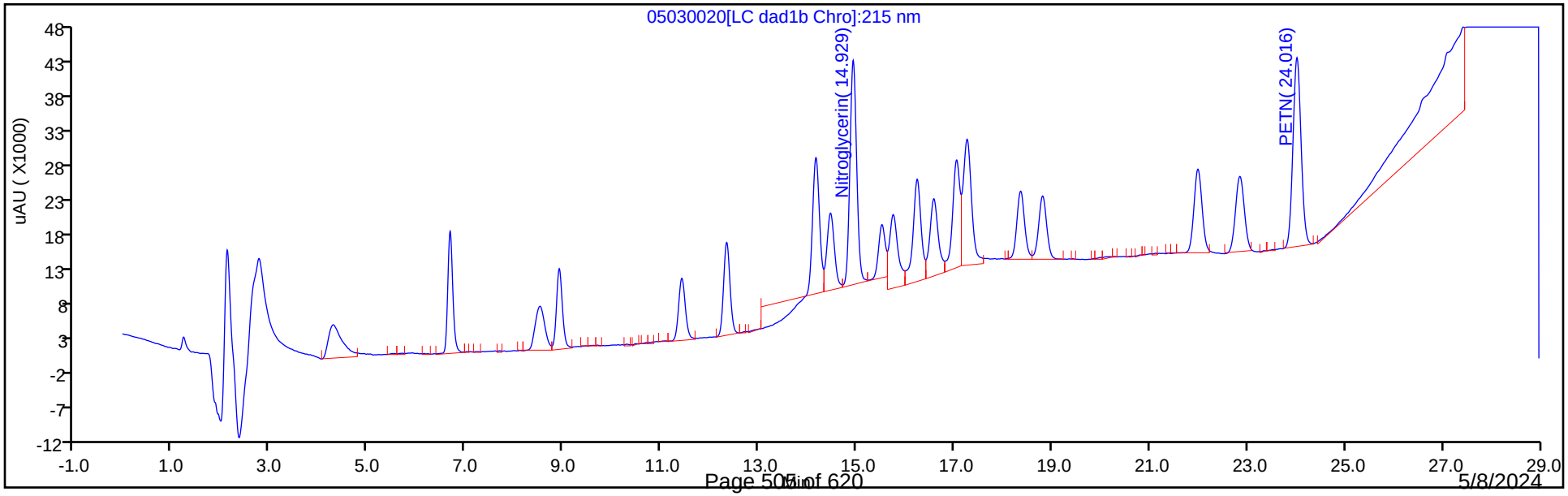
Data File: \\chromfs\denver\chromdata\g2_luna\20240503-132991.b\05030020.d

Injection Date:	03-May-2024 23:15:41	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	CCV			Worklist Smp#:	20
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	G2_8330_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



Manual Integration/User Assign Peak Report

Eurofins Denver

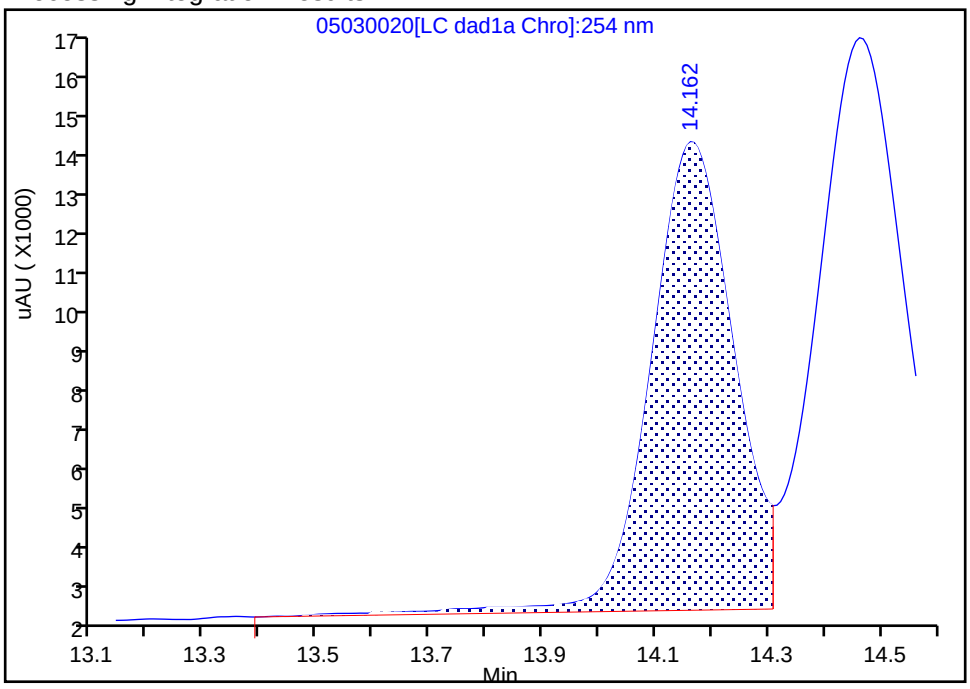
Data File: \\chromfs\denver\chromdata\g2_luna\20240503-132991.b\05030020.d
Injection Date: 03-May-2024 23:15:41 Instrument ID: CHHPLC_G2_LUNA
Lims ID: CCV
Client ID:
Operator ID: JZ/JG ALS Bottle#: 7 Worklist Smp#: 20
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

11 3,5-Dinitroaniline, CAS: 618-87-1

Signal: 1

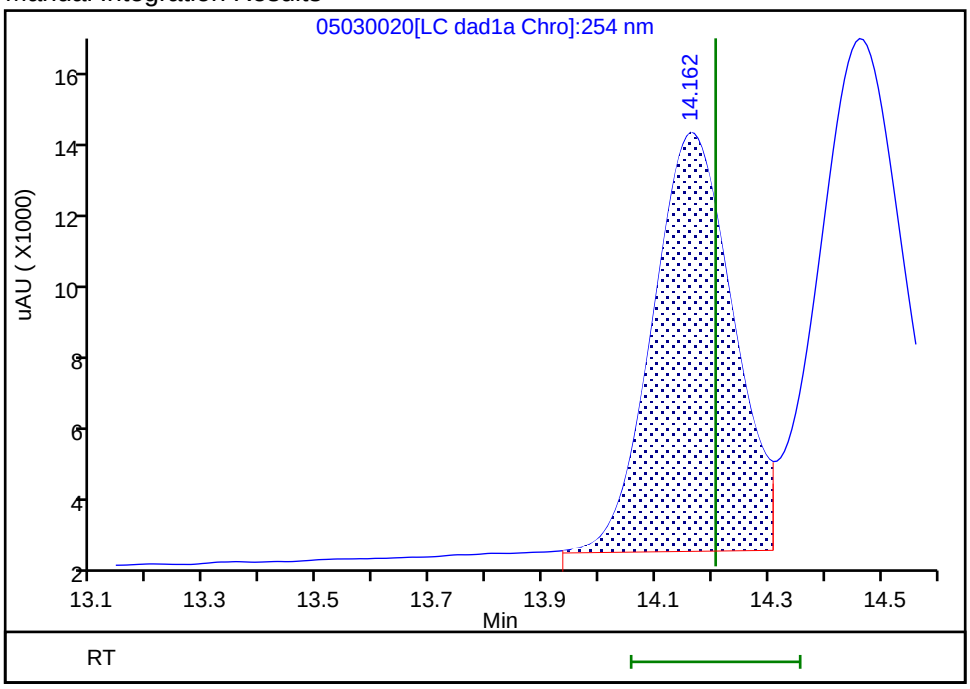
Processing Integration Results

RT: 14.16
Area: 115919
Amount: 0.266991
Amount Units: ug/ml



Manual Integration Results

RT: 14.16
Area: 110672
Amount: 0.254810
Amount Units: ug/ml



Reviewer: LV5D, 07-May-2024 16:04:47 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

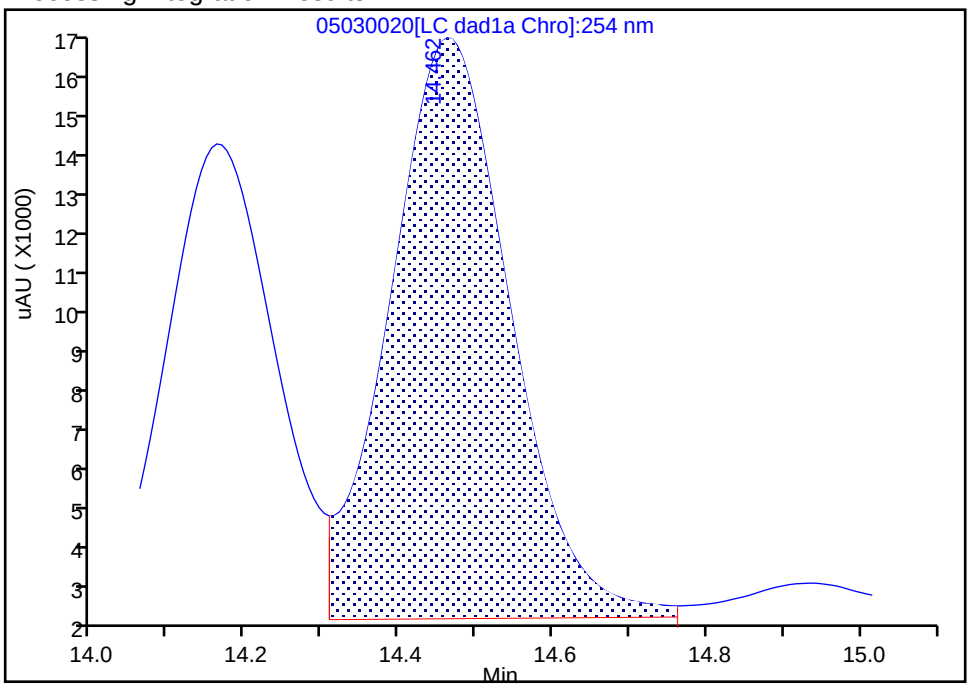
Data File:	\\chromfs\denver\chromdata\g2_luna\20240503-132991.b\05030020.d				
Injection Date:	03-May-2024 23:15:41	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

Signal: 1

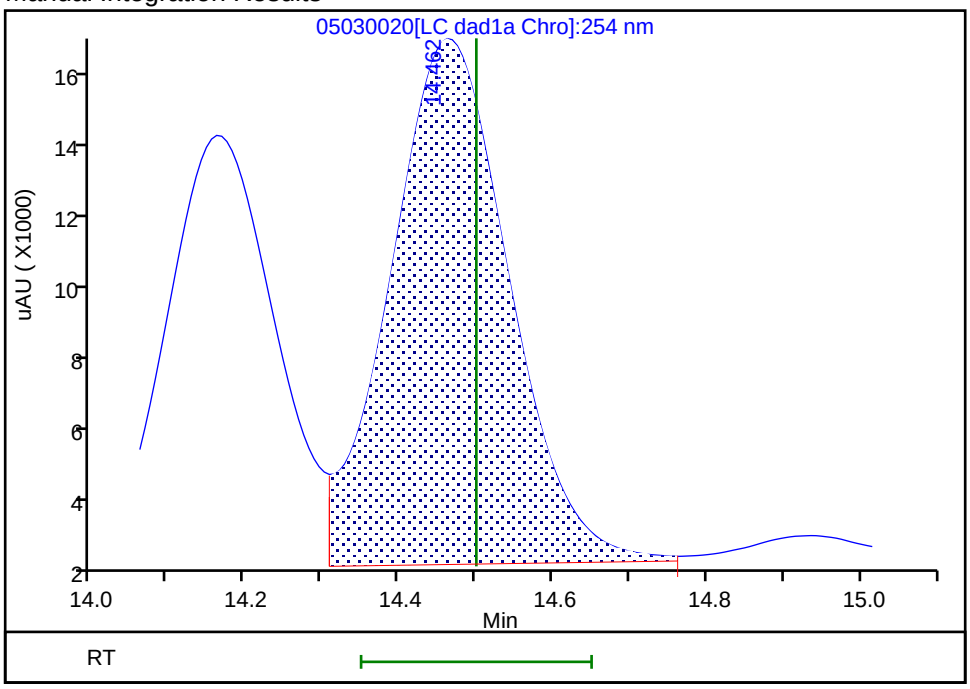
Processing Integration Results

RT: 14.46
Area: 149637
Amount: 0.253872
Amount Units: ug/ml



Manual Integration Results

RT: 14.46
Area: 145911
Amount: 0.247551
Amount Units: ug/ml



Reviewer: LV5D, 07-May-2024 16:04:43 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

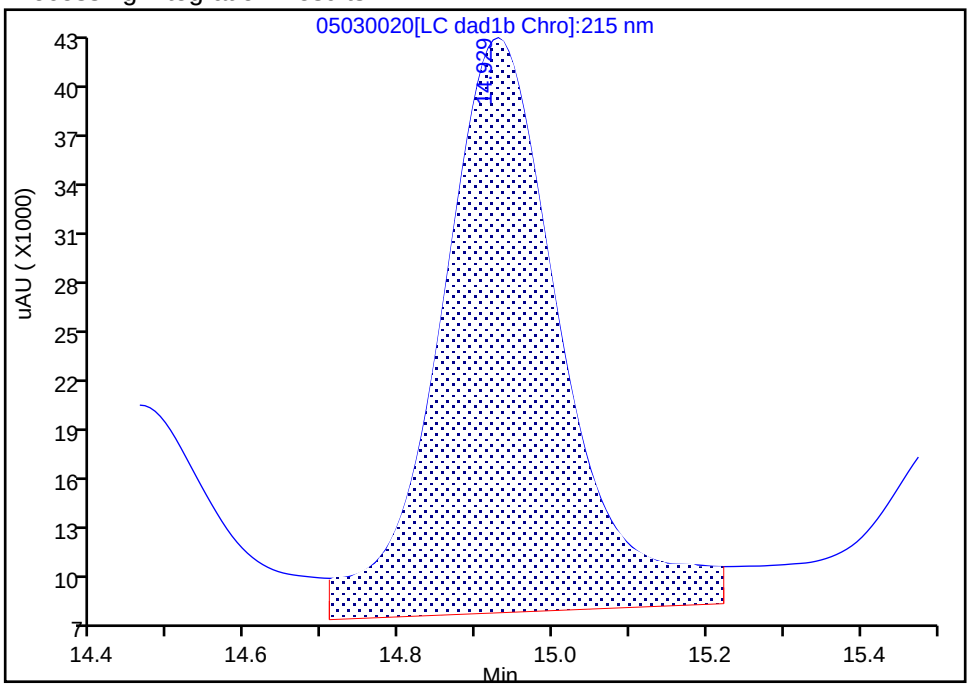
Data File:	\\chromfs\denver\chromdata\g2_luna\20240503-132991.b\05030020.d				
Injection Date:	03-May-2024 23:15:41	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1B, 215 nm		

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

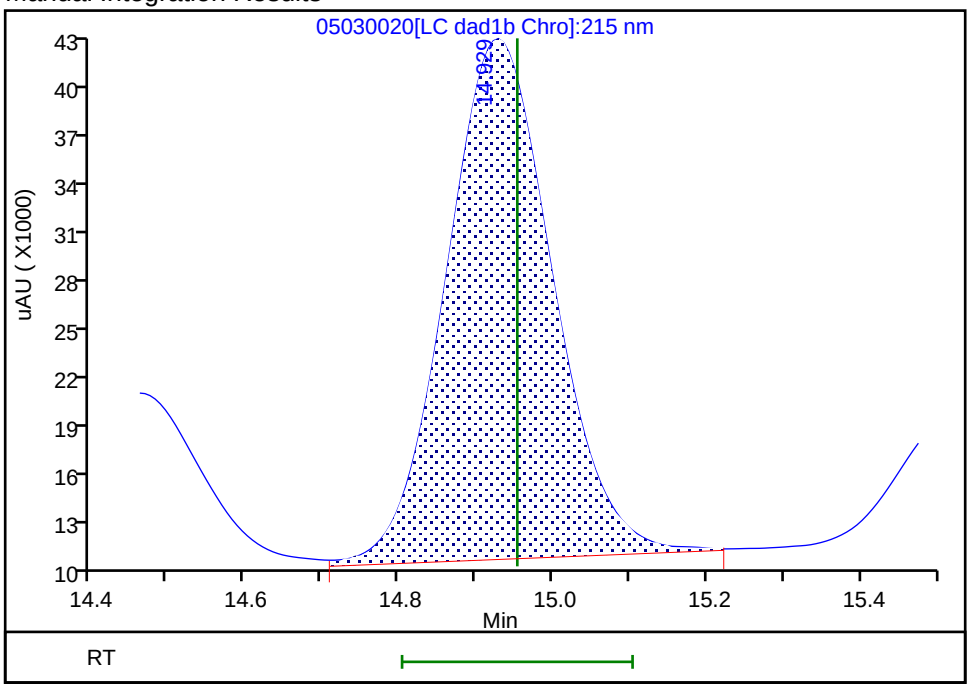
Processing Integration Results

RT: 14.93
Area: 377541
Amount: 3.159213
Amount Units: ug/ml



Manual Integration Results

RT: 14.93
Area: 310721
Amount: 2.600072
Amount Units: ug/ml



Reviewer: LV5D, 07-May-2024 16:04:30 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

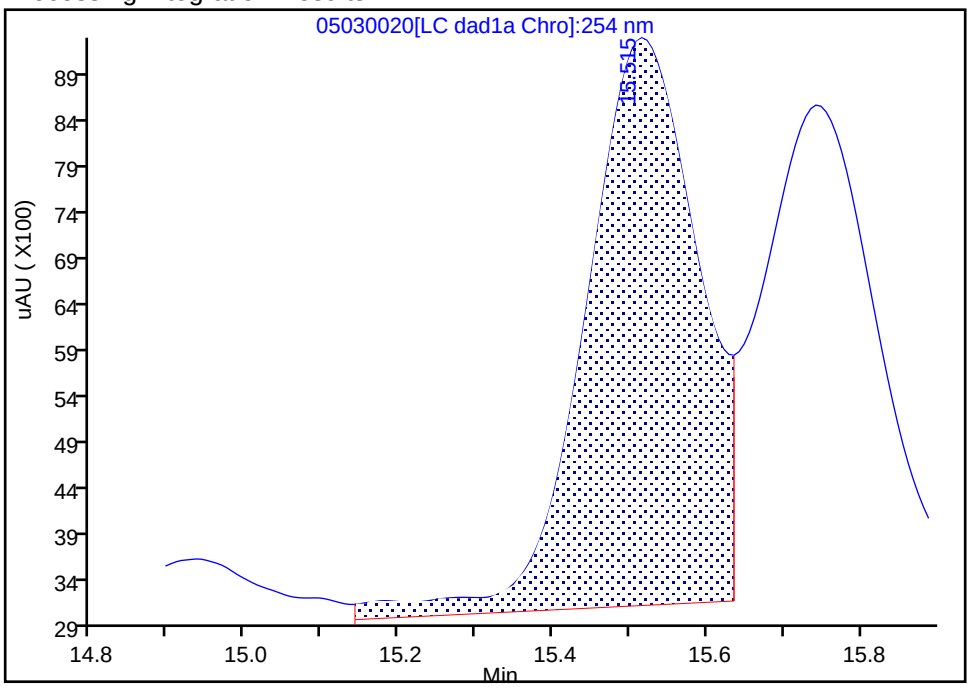
Data File:	\\chromfs\denver\chromdata\g2_luna\20240503-132991.b\05030020.d				
Injection Date:	03-May-2024 23:15:41	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

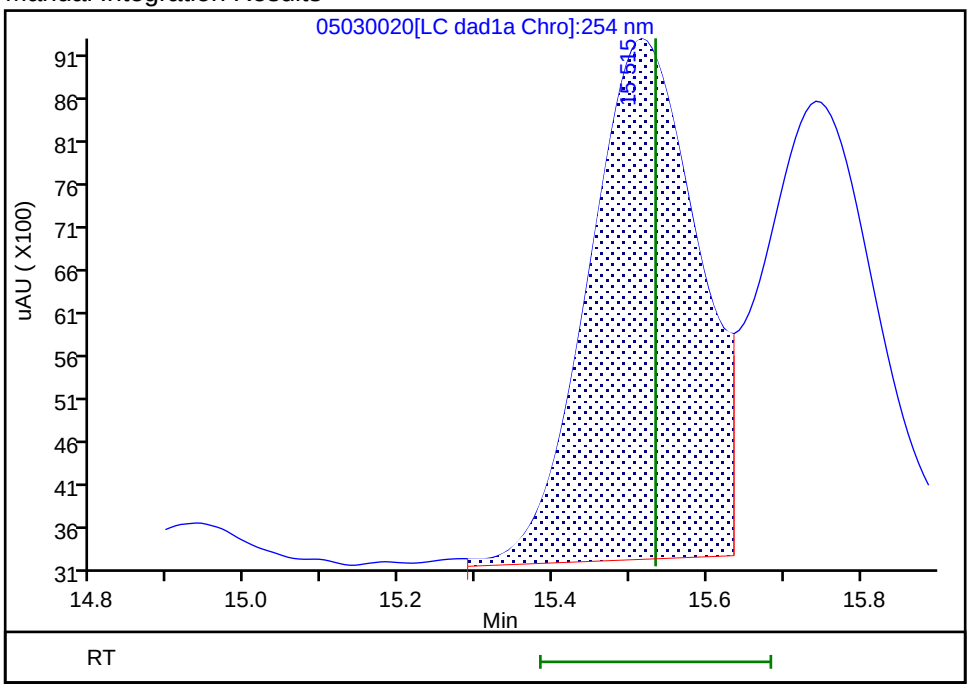
Processing Integration Results

RT: 15.52
Area: 63619
Amount: 0.260100
Amount Units: ug/ml



Manual Integration Results

RT: 15.52
Area: 60032
Amount: 0.245435
Amount Units: ug/ml



Reviewer: LV5D, 07-May-2024 16:04:46 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

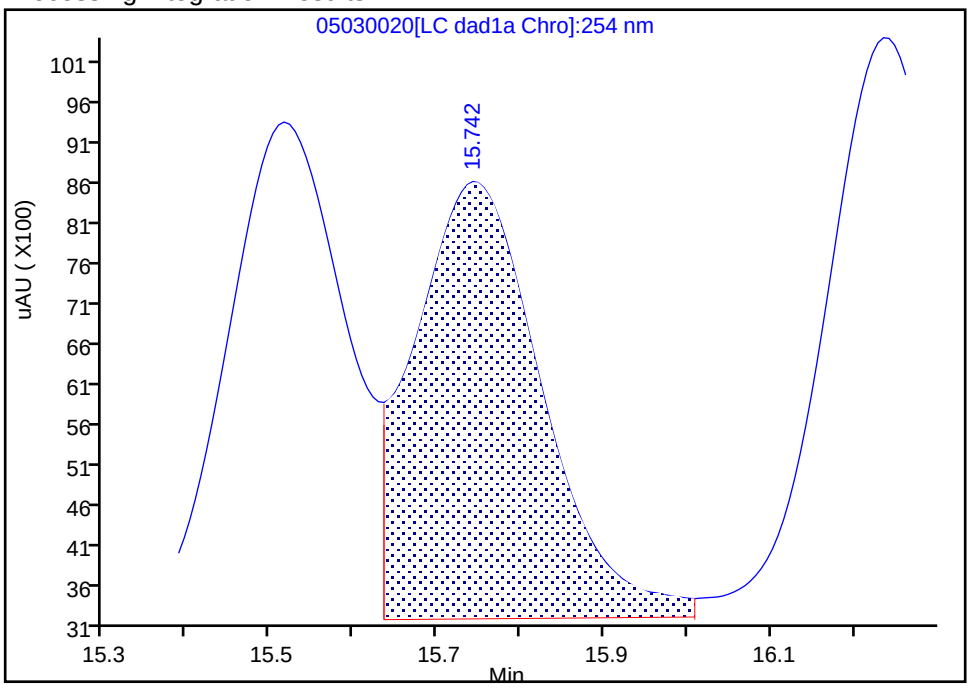
Data File:	\\chromfs\denver\chromdata\g2_luna\20240503-132991.b\05030020.d				
Injection Date:	03-May-2024 23:15:41	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

15 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

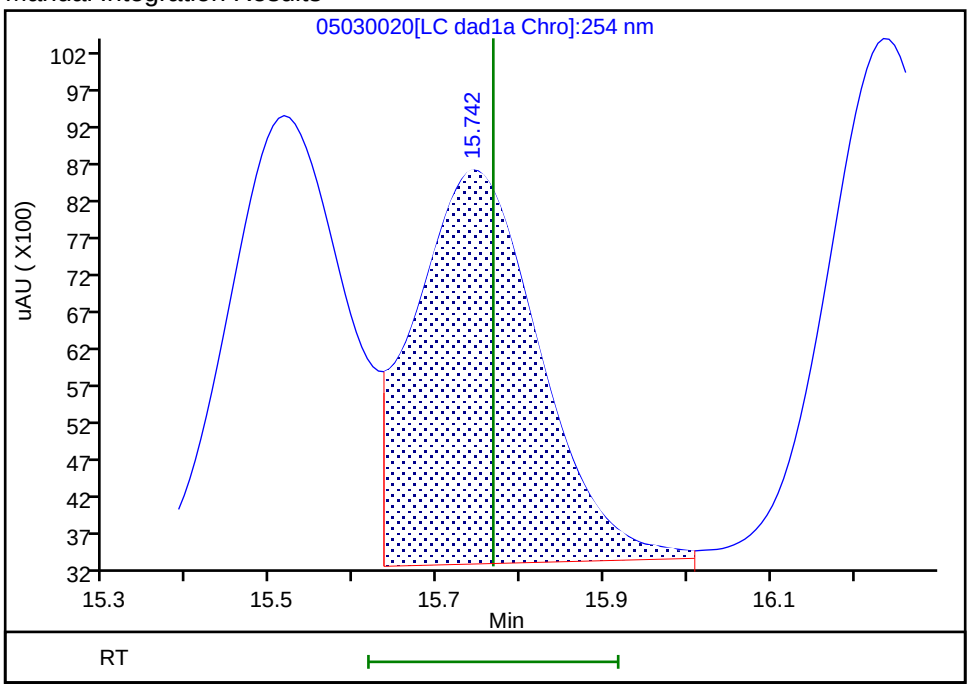
Processing Integration Results

RT: 15.74
Area: 57118
Amount: 0.258129
Amount Units: ug/ml



Manual Integration Results

RT: 15.74
Area: 54889
Amount: 0.247891
Amount Units: ug/ml



Reviewer: LV5D, 07-May-2024 16:04:43 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

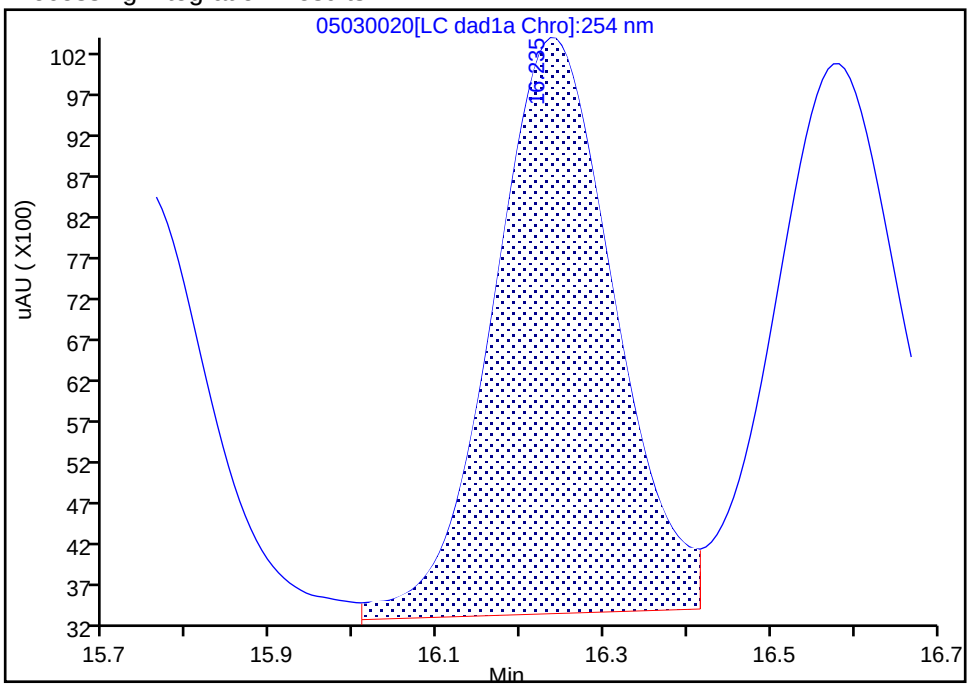
Data File:	\\chromfs\denver\chromdata\g2_luna\20240503-132991.b\05030020.d				
Injection Date:	03-May-2024 23:15:41	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

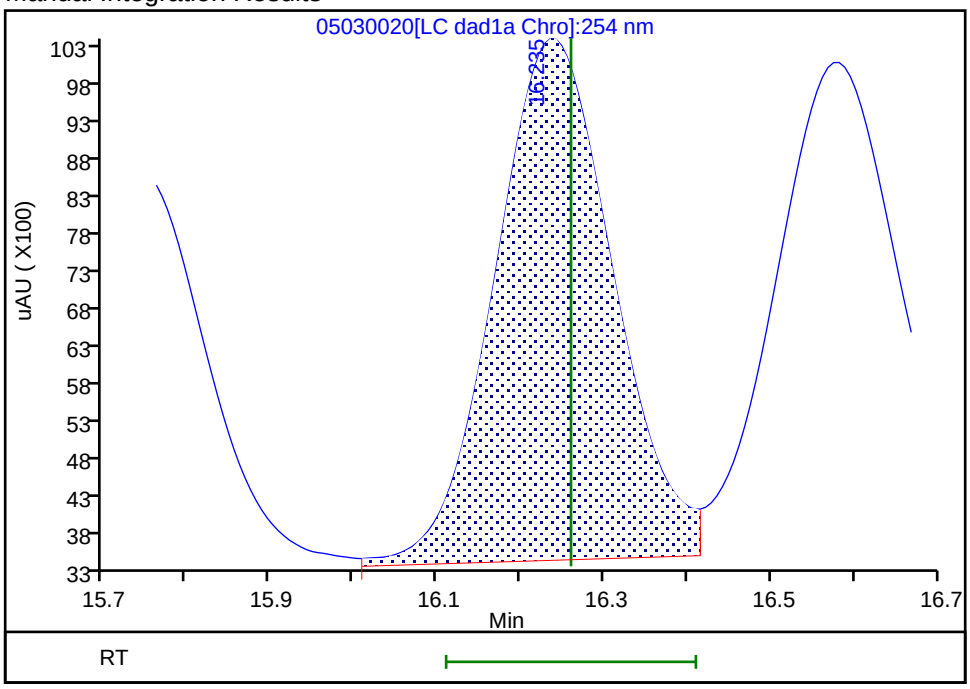
Processing Integration Results

RT: 16.24
Area: 71152
Amount: 0.261249
Amount Units: ug/ml



Manual Integration Results

RT: 16.24
Area: 68456
Amount: 0.251246
Amount Units: ug/ml



Reviewer: LV5D, 07-May-2024 16:04:43 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

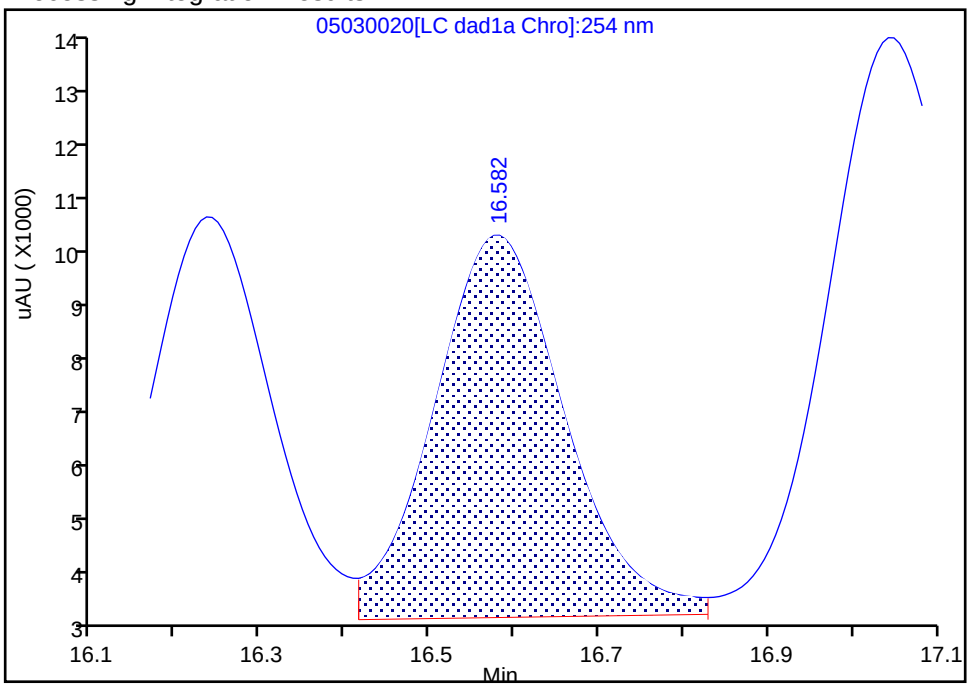
Data File:	\\chromfs\denver\chromdata\g2_luna\20240503-132991.b\05030020.d				
Injection Date:	03-May-2024 23:15:41	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

17 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

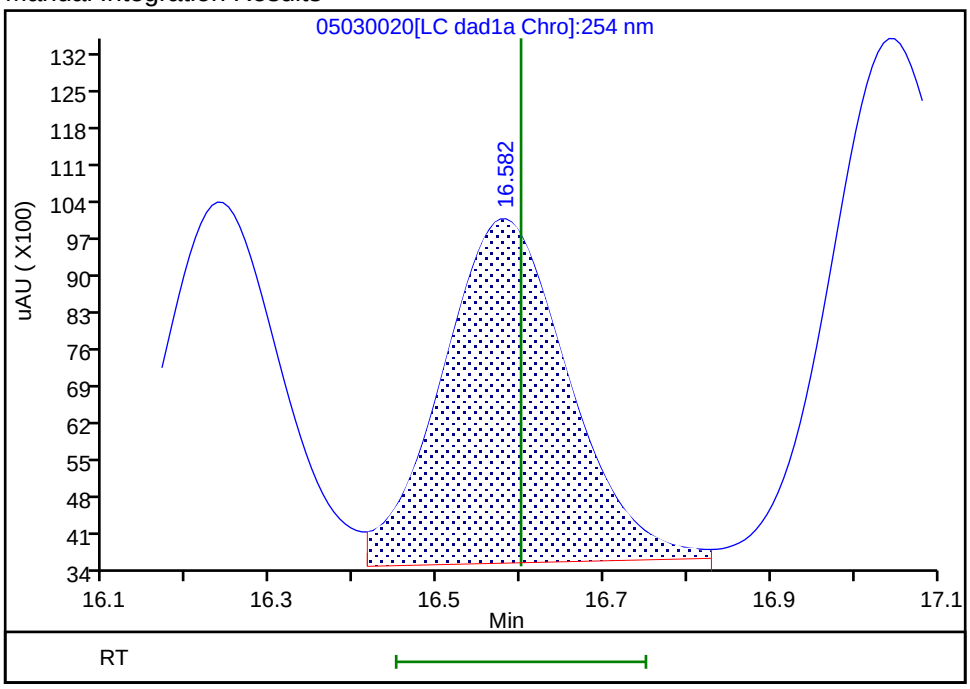
Processing Integration Results

RT: 16.58
Area: 70898
Amount: 0.253745
Amount Units: ug/ml



Manual Integration Results

RT: 16.58
Area: 68641
Amount: 0.245555
Amount Units: ug/ml



Reviewer: LV5D, 07-May-2024 16:04:43 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

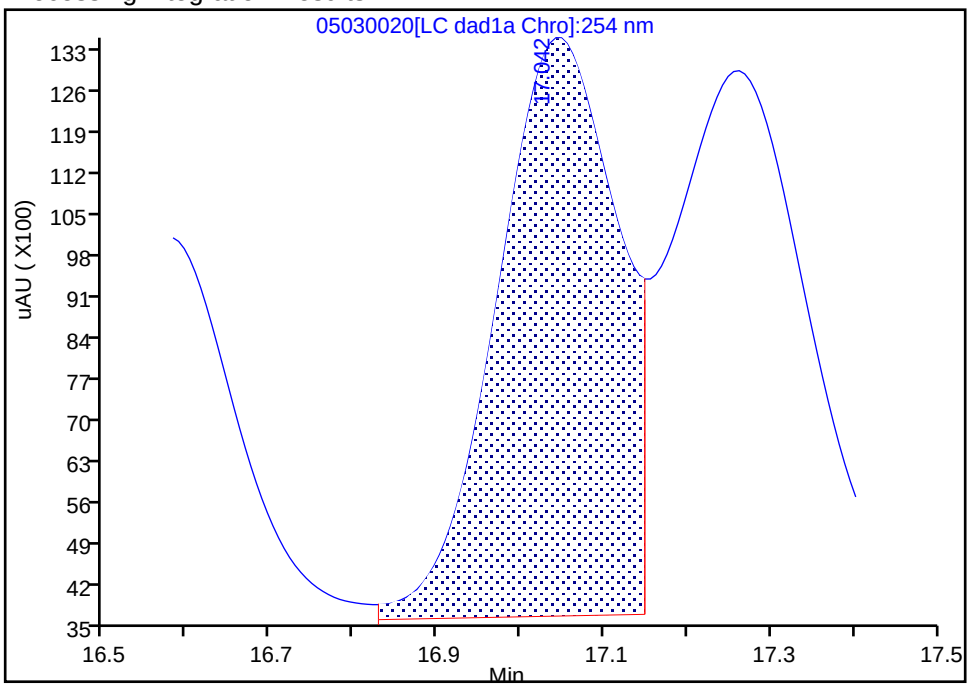
Data File:	\\chromfs\denver\chromdata\g2_luna\20240503-132991.b\05030020.d				
Injection Date:	03-May-2024 23:15:41	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

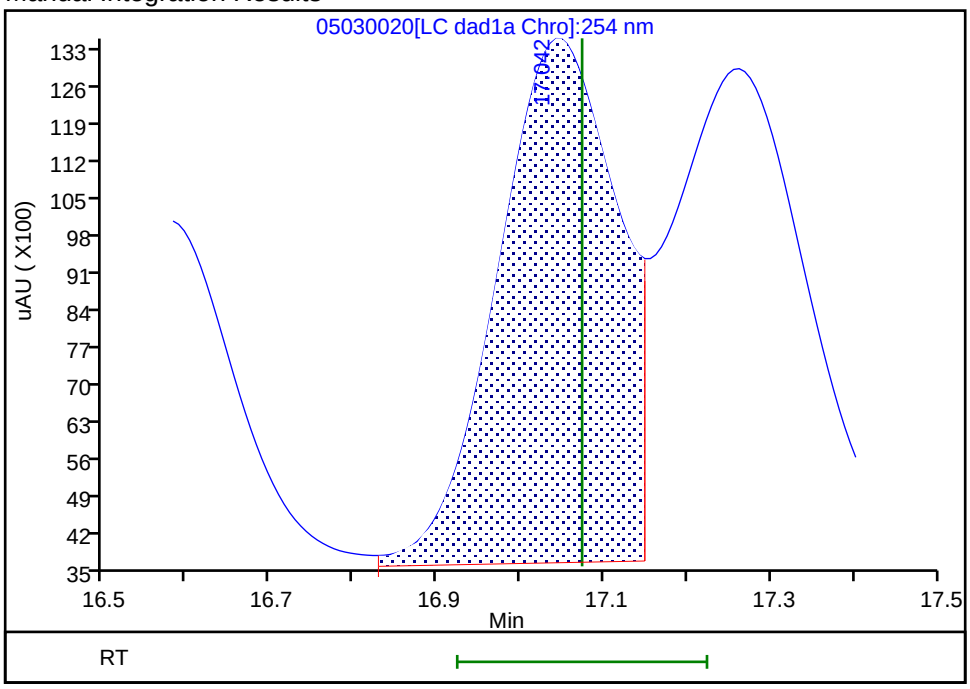
Processing Integration Results

RT: 17.04
Area: 99311
Amount: 0.244872
Amount Units: ug/ml



Manual Integration Results

RT: 17.04
Area: 97794
Amount: 0.241132
Amount Units: ug/ml



Reviewer: LV5D, 07-May-2024 16:04:43 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

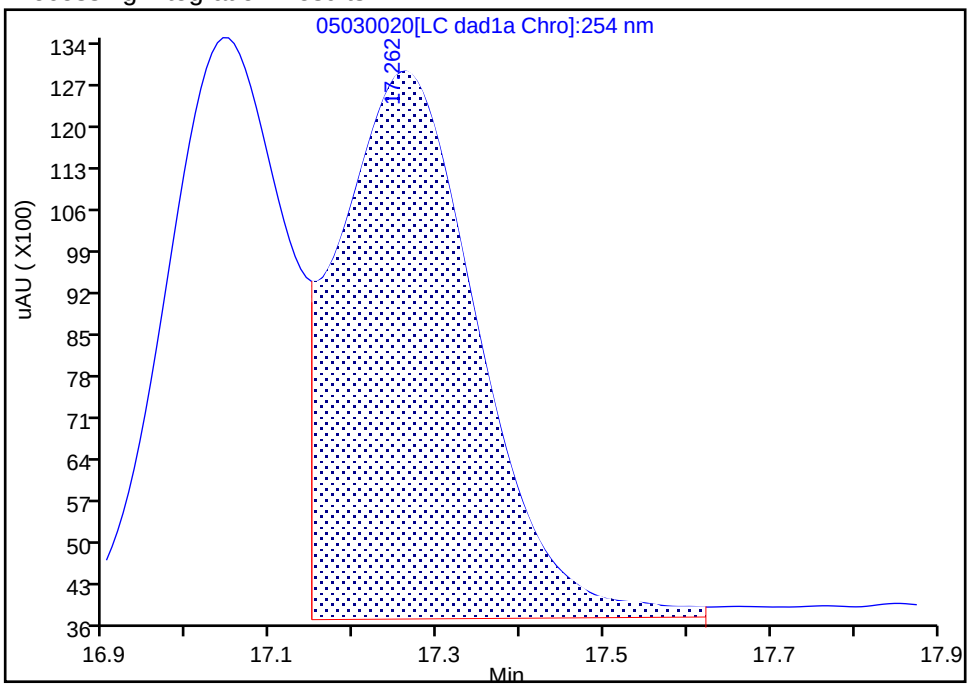
Data File:	\\chromfs\denver\chromdata\g2_luna\20240503-132991.b\05030020.d				
Injection Date:	03-May-2024 23:15:41	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

19 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

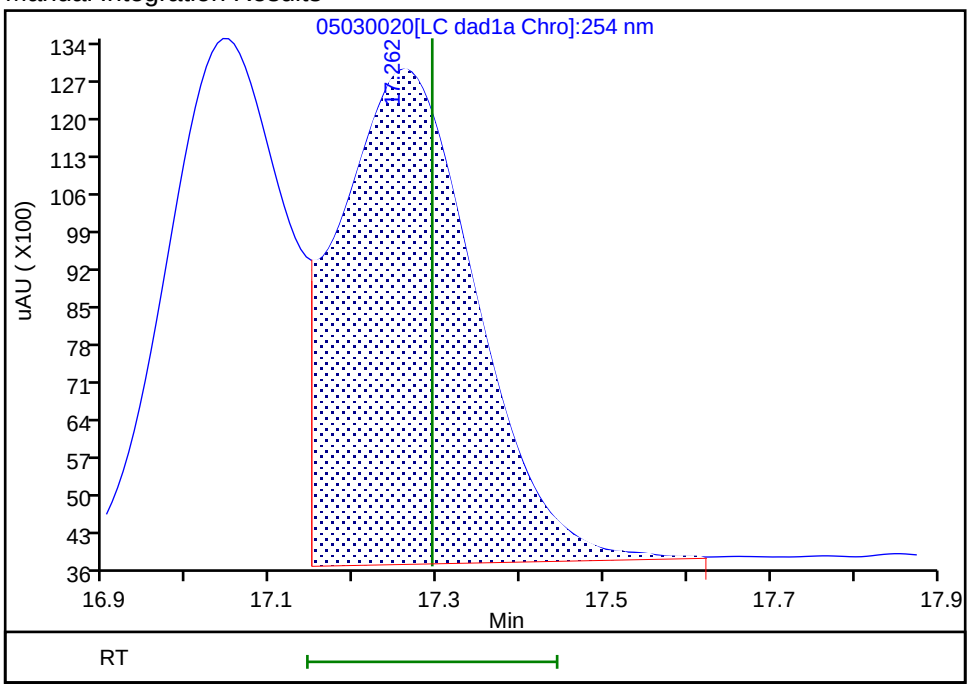
Processing Integration Results

RT: 17.26
Area: 107599
Amount: 0.254098
Amount Units: ug/ml



Manual Integration Results

RT: 17.26
Area: 104347
Amount: 0.246418
Amount Units: ug/ml



Reviewer: LV5D, 07-May-2024 16:04:43 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

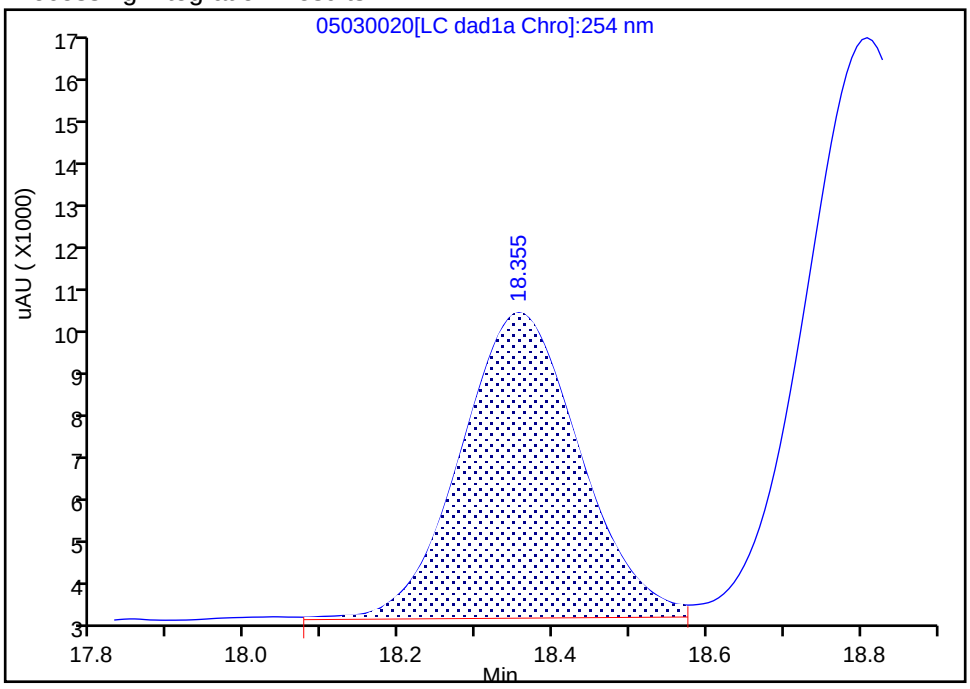
Data File:	\\chromfs\denver\chromdata\g2_luna\20240503-132991.b\05030020.d				
Injection Date:	03-May-2024 23:15:41	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

20 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

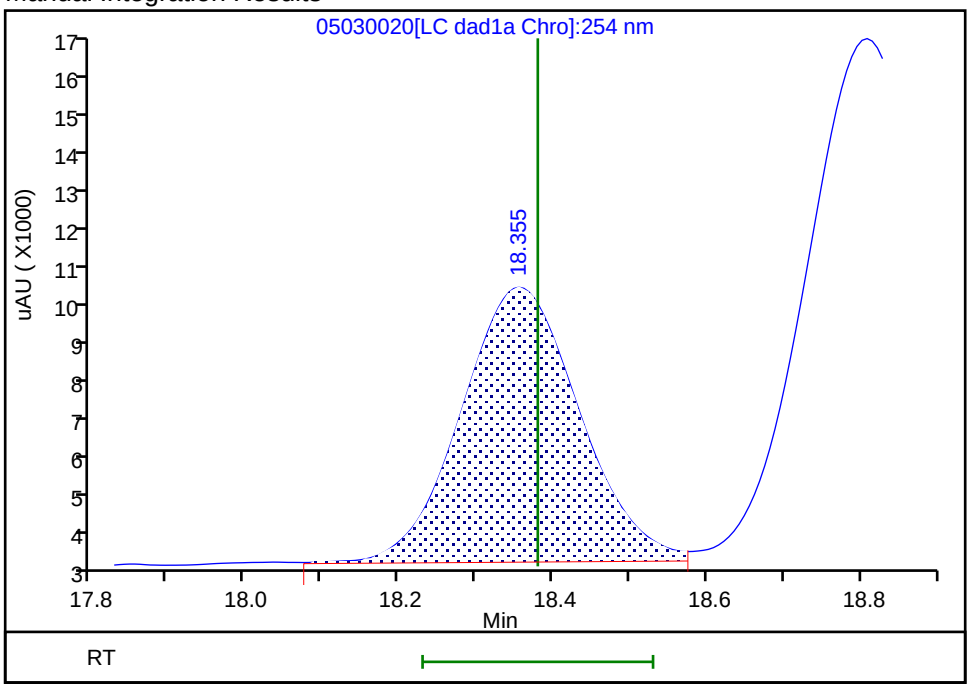
Processing Integration Results

RT: 18.36
Area: 71102
Amount: 0.255790
Amount Units: ug/ml



Manual Integration Results

RT: 18.36
Area: 70127
Amount: 0.252283
Amount Units: ug/ml



Reviewer: LV5D, 07-May-2024 16:04:39 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

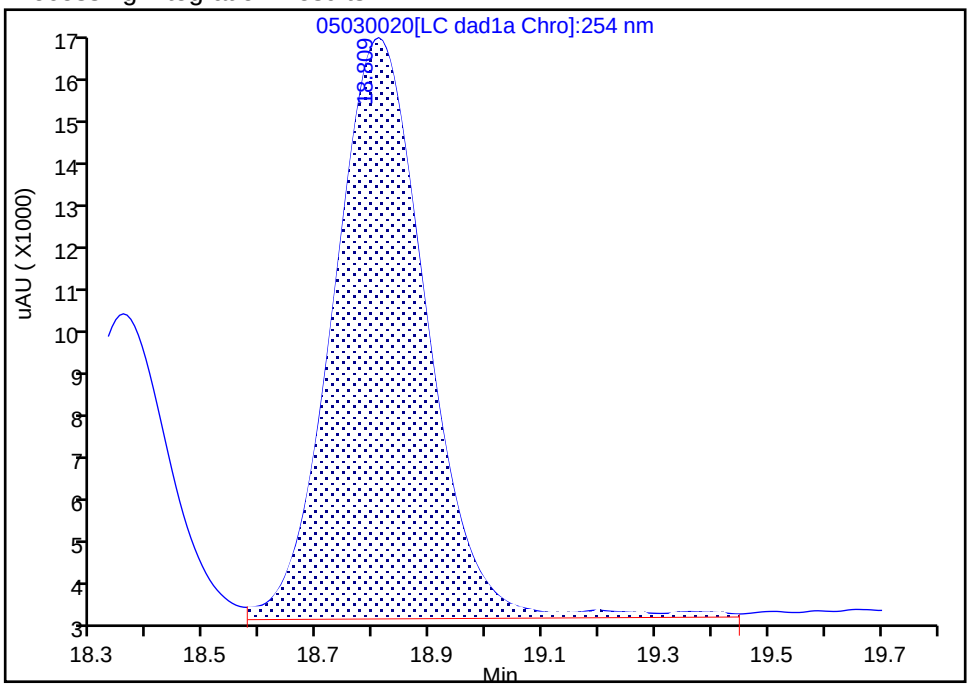
Data File:	\\chromfs\denver\chromdata\g2_luna\20240503-132991.b\05030020.d				
Injection Date:	03-May-2024 23:15:41	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

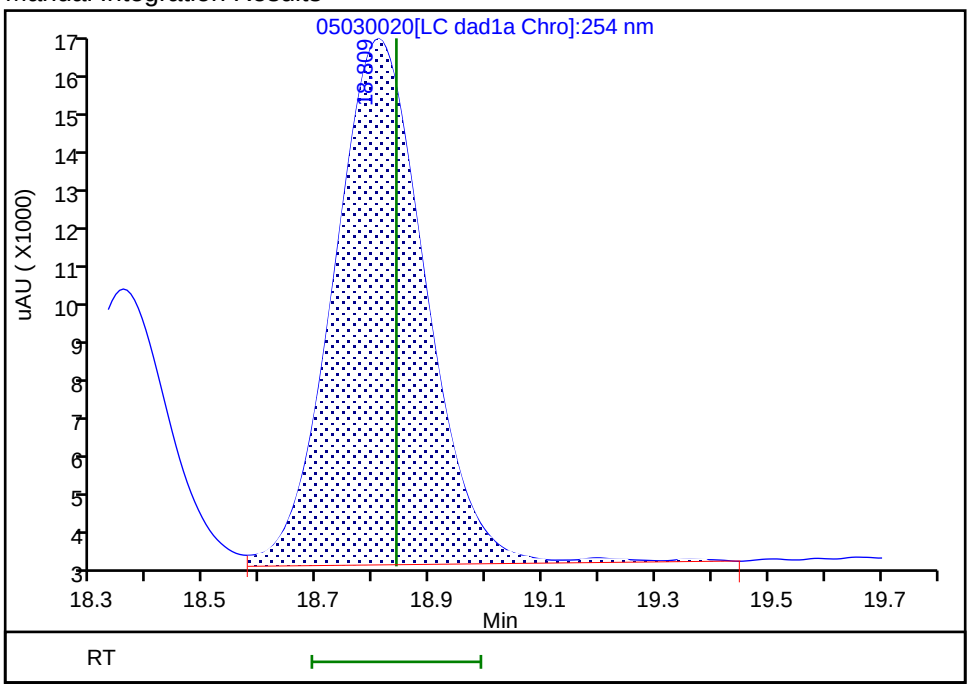
Processing Integration Results

RT: 18.81
Area: 143565
Amount: 0.258879
Amount Units: ug/ml



Manual Integration Results

RT: 18.81
Area: 139400
Amount: 0.251369
Amount Units: ug/ml



Reviewer: LV5D, 07-May-2024 16:04:39 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

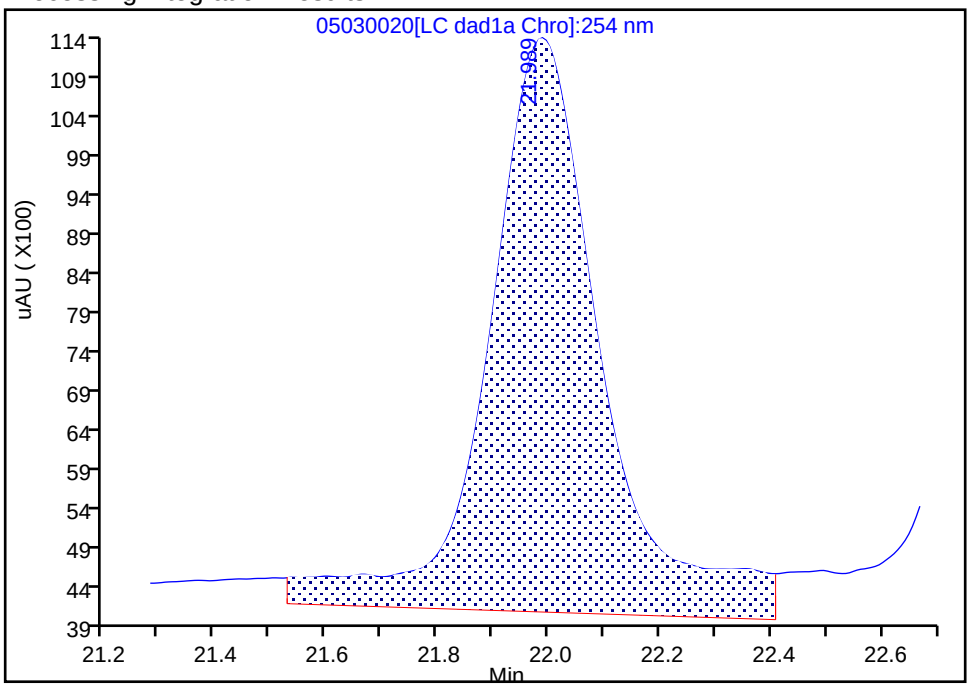
Data File:	\\chromfs\denver\chromdata\g2_luna\20240503-132991.b\05030020.d				
Injection Date:	03-May-2024 23:15:41	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

22 Tetryl, CAS: 479-45-8

Signal: 1

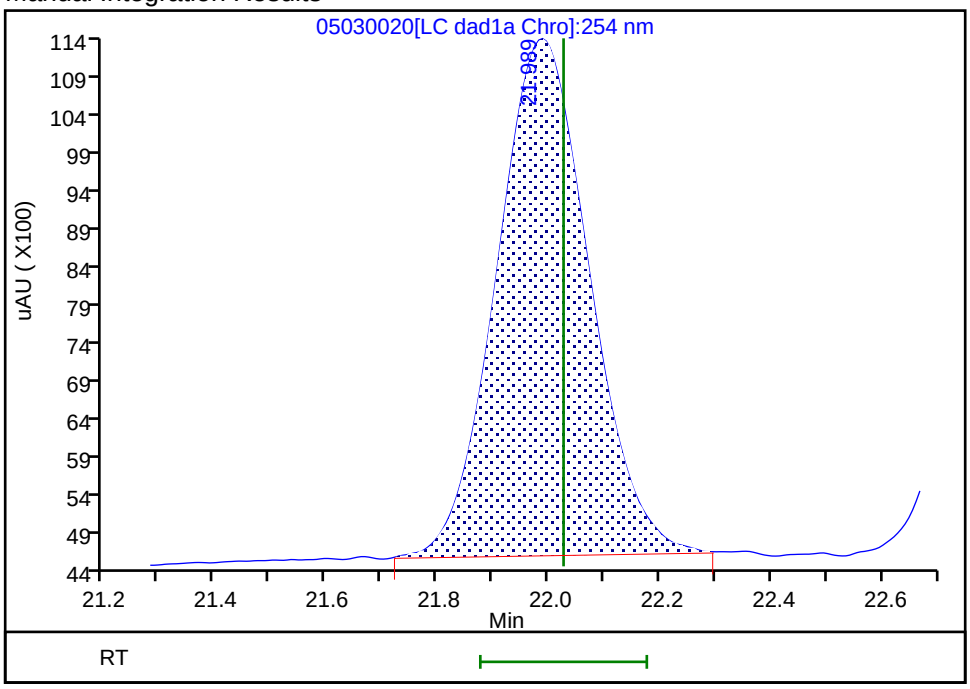
Processing Integration Results

RT: 21.99
Area: 103625
Amount: 0.330726
Amount Units: ug/ml



Manual Integration Results

RT: 21.99
Area: 77660
Amount: 0.247497
Amount Units: ug/ml



Reviewer: LV5D, 07-May-2024 16:04:54 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

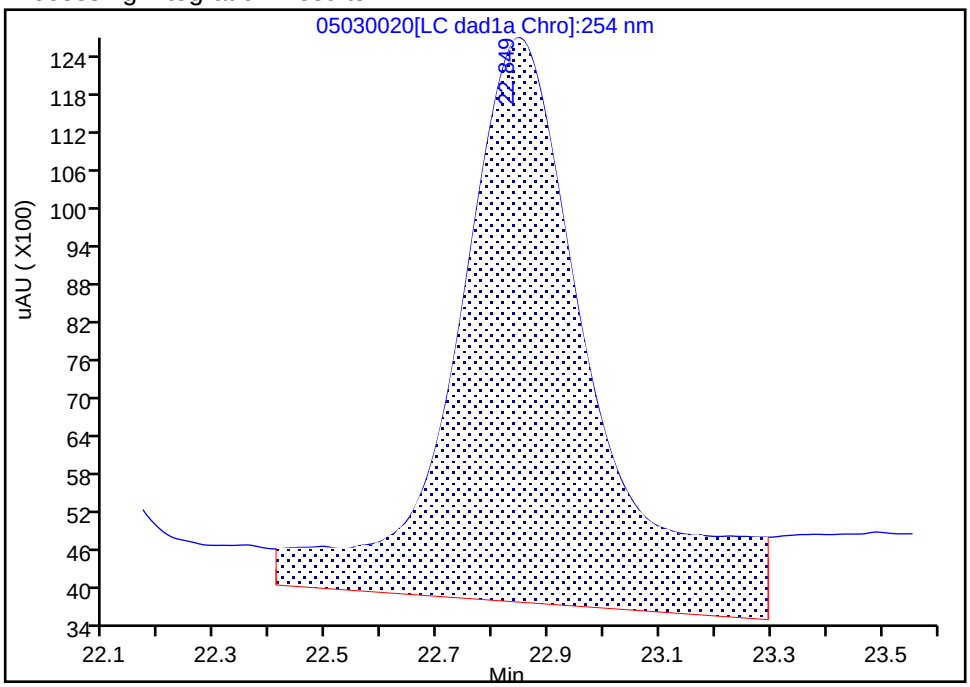
Data File:	\\chromfs\denver\chromdata\g2_luna\20240503-132991.b\05030020.d				
Injection Date:	03-May-2024 23:15:41	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

23 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

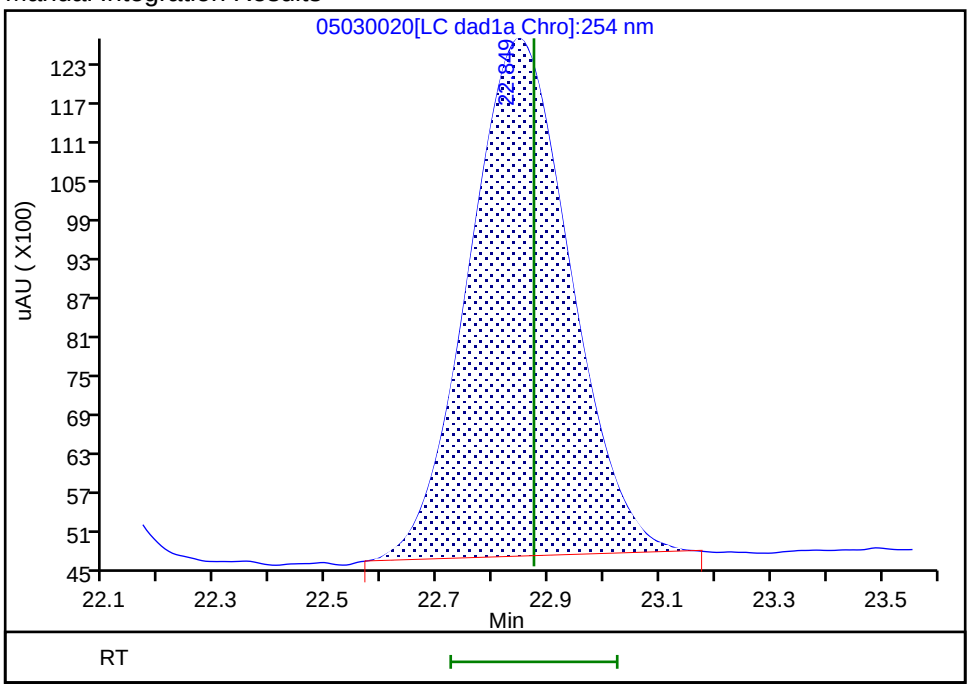
Processing Integration Results

RT: 22.85
Area: 153023
Amount: 0.382785
Amount Units: ug/ml



Manual Integration Results

RT: 22.85
Area: 100868
Amount: 0.252320
Amount Units: ug/ml



Reviewer: LV5D, 07-May-2024 16:04:58 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-190799-1

SDG No.:

Lab Sample ID: CCV 280-652057/31 Calibration Date: 05/04/2024 05:51

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 04/24/2024 21:28

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 04/25/2024 02:15

Lab File ID: 05030031.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	174076	180504		259	250	3.7	20.0
Picric acid	Ave	151397	155808		257	250	2.9	20.0
RDX	Lin2		210440		253	250	1.3	20.0
Nitrobenzene	Ave	382120	373936		245	250	-2.1	20.0
3,5-Dinitroaniline	Lin2		449640		259	250	3.5	20.0
1,3-Dinitrobenzene	Ave	589418	586312		249	250	-0.5	20.0
Nitroglycerin	Ave	119505	125895		2630	2500	5.3	20.0
2-Nitrotoluene	Ave	244594	233996		239	250	-4.3	20.0
4-Nitrotoluene	Lin2		218736		247	250	-1.2	20.0
4-Amino-2,6-dinitrotoluene	Lin2		277324		254	250	1.8	20.0
3-Nitrotoluene	Lin2		275384		246	250	-1.5	20.0
2-Amino-4,6-dinitrotoluene	Ave	405562	402592		248	250	-0.7	20.0
1,3,5-Trinitrobenzene	Ave	423454	419016		247	250	-1.0	20.0
2,6-Dinitrotoluene	Ave	277970	275400		248	250	-0.9	20.0
2,4-Dinitrotoluene	Ave	554564	560660		253	250	1.1	20.0
Tetryl	Lin2		317048		253	250	1.1	20.0
2,4,6-Trinitrotoluene	Ave	399763	428448		268	250	7.2	20.0
PETN	Lin2		125123		2550	2500	1.9	20.0
1,2-Dinitrobenzene	Ave	258689	270772		262	250	4.7	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-190799-1

SDG No.:

Lab Sample ID: CCV 280-652057/31 Calibration Date: 05/04/2024 05:51

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 04/24/2024 21:28

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 04/25/2024 02:15

Lab File ID: 05030031.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.67	6.55	6.85
Picric acid	8.44	8.46	8.76
RDX	8.88	8.79	9.09
Nitrobenzene	11.41	11.30	11.60
3,5-Dinitroaniline	14.14	14.06	14.36
1,3-Dinitrobenzene	14.45	14.35	14.65
Nitroglycerin	14.91	14.80	15.10
2-Nitrotoluene	15.50	15.38	15.68
4-Nitrotoluene	15.73	15.62	15.92
4-Amino-2,6-dinitrotoluene	16.23	16.11	16.41
3-Nitrotoluene	16.57	16.45	16.75
2-Amino-4,6-dinitrotoluene	17.03	16.92	17.22
1,3,5-Trinitrobenzene	17.25	17.14	17.44
2,6-Dinitrotoluene	18.34	18.23	18.53
2,4-Dinitrotoluene	18.79	18.69	18.99
Tetryl	21.97	21.88	22.18
2,4,6-Trinitrotoluene	22.84	22.72	23.02
PETN	24.02	23.86	24.16
1,2-Dinitrobenzene	12.32	12.22	12.52

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20240503-132991.b\05030031.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 04-May-2024 05:51:01 ALS Bottle#: 7 Worklist Smp#: 31
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub16

Method: \\chromfs\Denver\ChromData\G2_LUNA\20240503-132991.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 07-May-2024 16:26:52 Calib Date: 25-Apr-2024 07:39:21
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20240424-132624.b\04240027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1679

First Level Reviewer: LV5D Date: 07-May-2024 16:25:46

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
6 HMX	1	6.668	6.700	-0.032	45126	0.2500	0.2592	
5 2,4,6-Trinitrophenol	1	8.441	8.614	-0.173	38952	0.2500	0.2573	
8 RDX	1	8.875	8.940	-0.065	52610	0.2500	0.2532	
9 Nitrobenzene	1	11.408	11.453	-0.045	93484	0.2500	0.2446	
$ 10 1,2-Dinitrobenzene	1	12.321	12.373	-0.052	67693	0.2500	0.2617	
11 3,5-Dinitroaniline	1	14.141	14.207	-0.066	112410	0.2500	0.2588	M
12 1,3-Dinitrobenzene	1	14.448	14.500	-0.052	146578	0.2500	0.2487	M
13 Nitroglycerin	2	14.914	14.953	-0.039	314738	2.50	2.63	M
14 o-Nitrotoluene	1	15.501	15.533	-0.032	58499	0.2500	0.2392	M
15 p-Nitrotoluene	1	15.734	15.767	-0.033	54684	0.2500	0.2469	M
16 4-Amino-2,6-dinitrotoluene	1	16.228	16.260	-0.032	69331	0.2500	0.2545	M
17 m-Nitrotoluene	1	16.574	16.600	-0.026	68846	0.2500	0.2463	M
18 2-Amino-4,6-dinitrotoluene	1	17.028	17.073	-0.045	100648	0.2500	0.2482	M
19 1,3,5-Trinitrobenzene	1	17.248	17.293	-0.045	104754	0.2500	0.2474	M
20 2,6-Dinitrotoluene	1	18.341	18.380	-0.039	68850	0.2500	0.2477	
21 2,4-Dinitrotoluene	1	18.794	18.840	-0.046	140165	0.2500	0.2527	
22 Tetryl	1	21.968	22.027	-0.059	79262	0.2500	0.2526	
23 2,4,6-Trinitrotoluene	1	22.841	22.874	-0.033	107112	0.2500	0.2679	
24 PETN	2	24.021	24.007	0.014	312808	2.50	2.55	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00080 Amount Added: 25.00 Units: uL

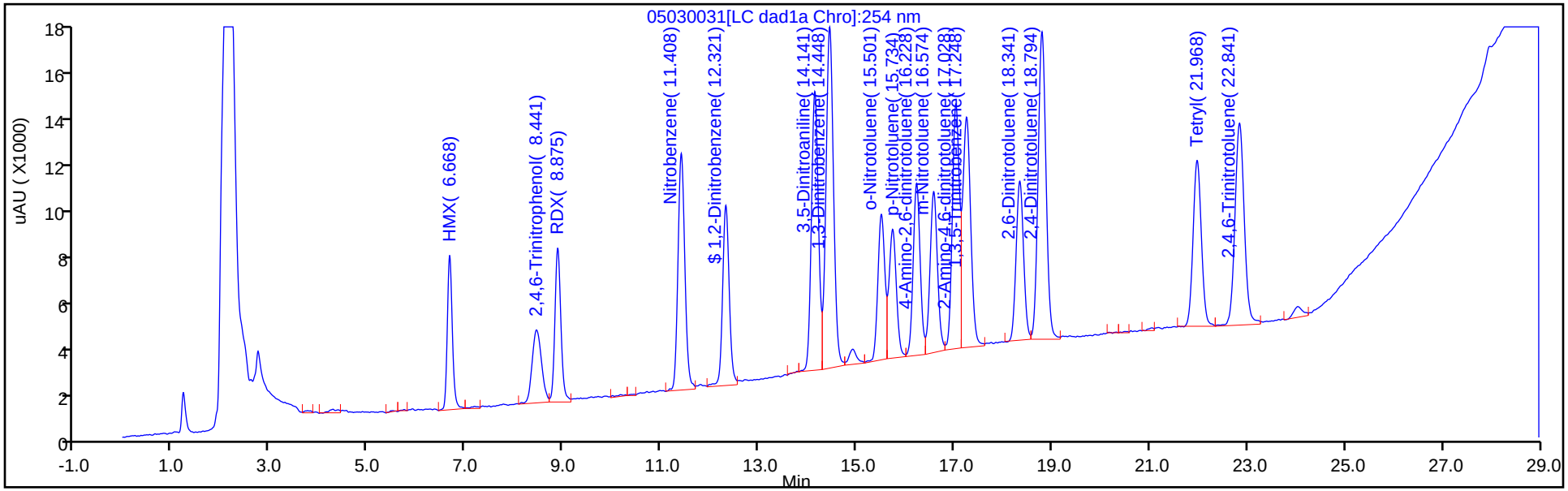
Report Date: 07-May-2024 16:26:52 Chrom Revision: 2.3 26-Apr-2024 12:18:52

Eurofins Denver

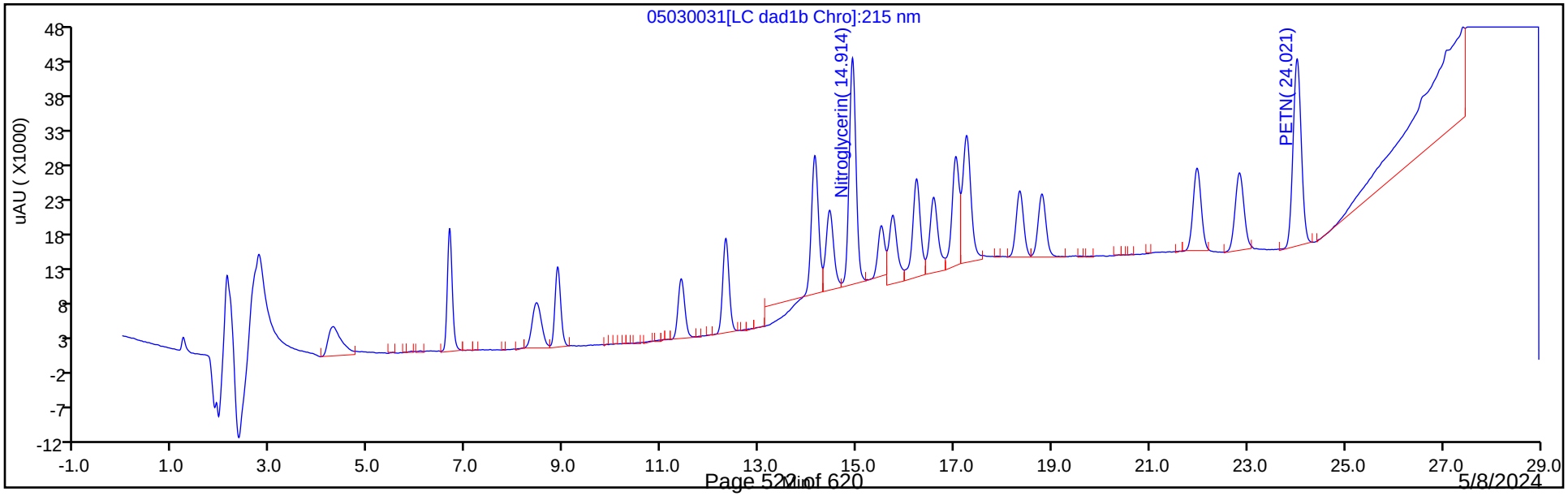
Data File: \\chromfs\denver\chromdata\g2_luna\20240503-132991.b\05030031.d

Injection Date:	04-May-2024 05:51:01	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	CCV			Worklist Smp#:	31
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	G2_8330_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



Manual Integration/User Assign Peak Report

Eurofins Denver

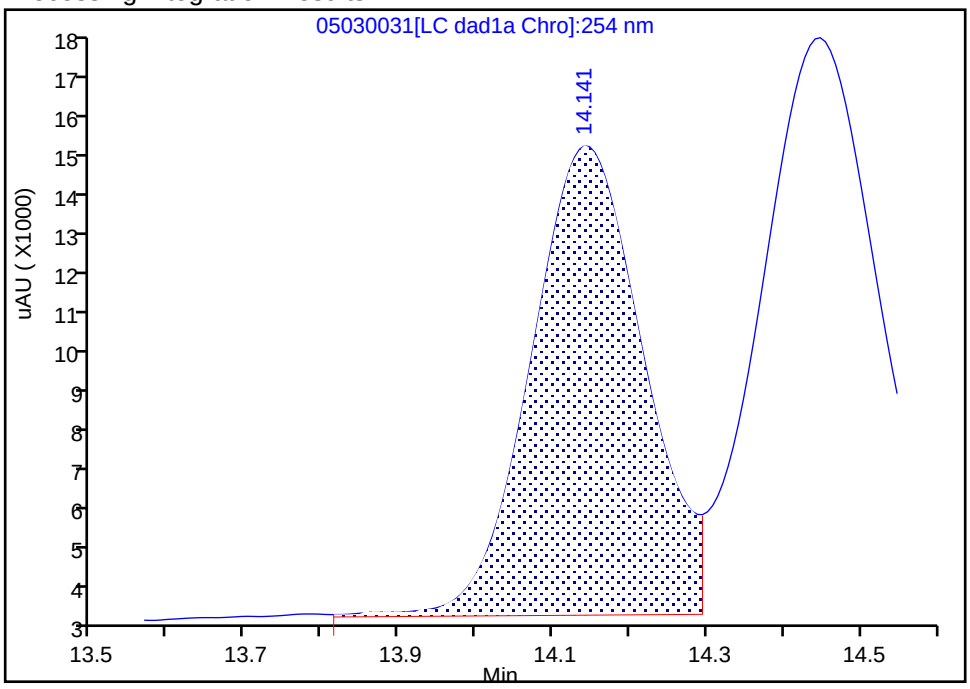
Data File:	\\chromfs\denver\chromdata\g2_luna\20240503-132991.b\05030031.d				
Injection Date:	04-May-2024 05:51:01	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

11 3,5-Dinitroaniline, CAS: 618-87-1

Signal: 1

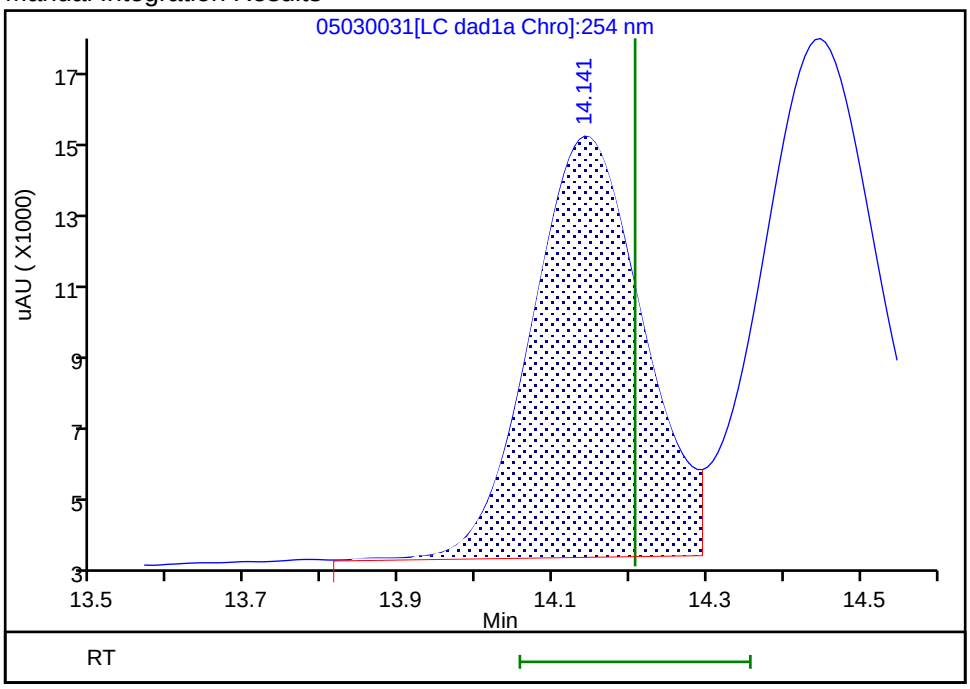
Processing Integration Results

RT: 14.14
Area: 114627
Amount: 0.263992
Amount Units: ug/ml



Manual Integration Results

RT: 14.14
Area: 112410
Amount: 0.258845
Amount Units: ug/ml



Reviewer: LV5D, 07-May-2024 16:25:42 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

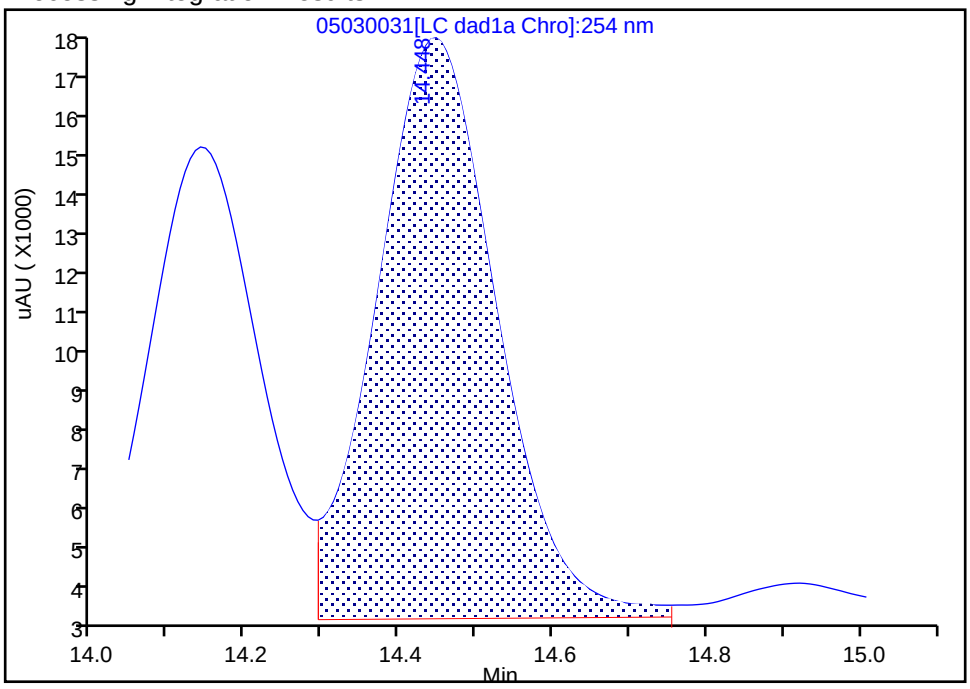
Data File:	\\chromfs\denver\chromdata\g2_luna\20240503-132991.b\05030031.d				
Injection Date:	04-May-2024 05:51:01	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

Signal: 1

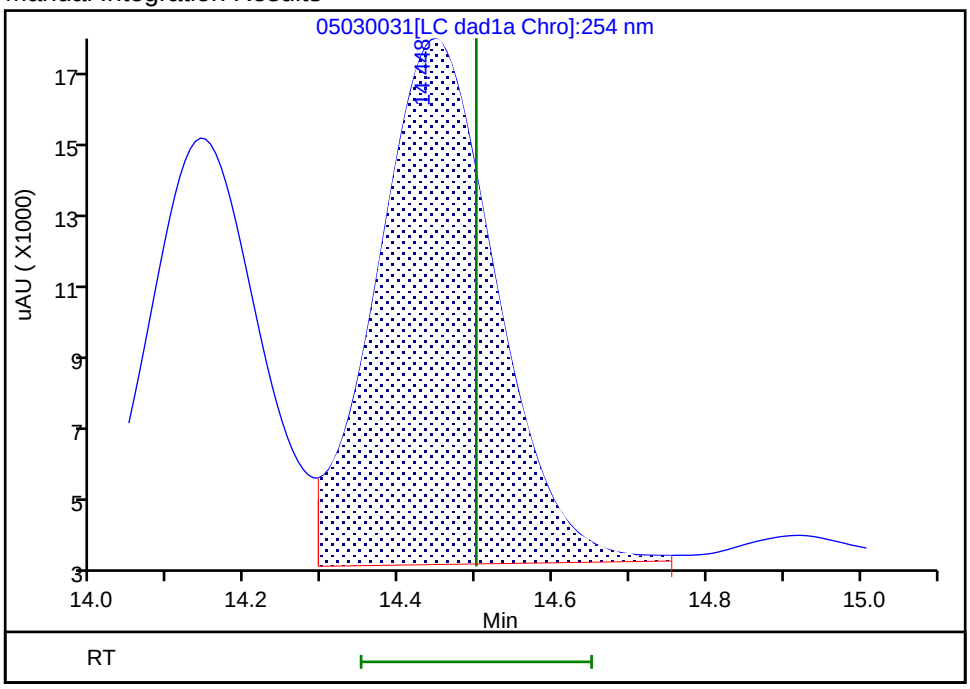
Processing Integration Results

RT: 14.45
Area: 150166
Amount: 0.254770
Amount Units: ug/ml



Manual Integration Results

RT: 14.45
Area: 146578
Amount: 0.248683
Amount Units: ug/ml



Reviewer: LV5D, 07-May-2024 16:25:42 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

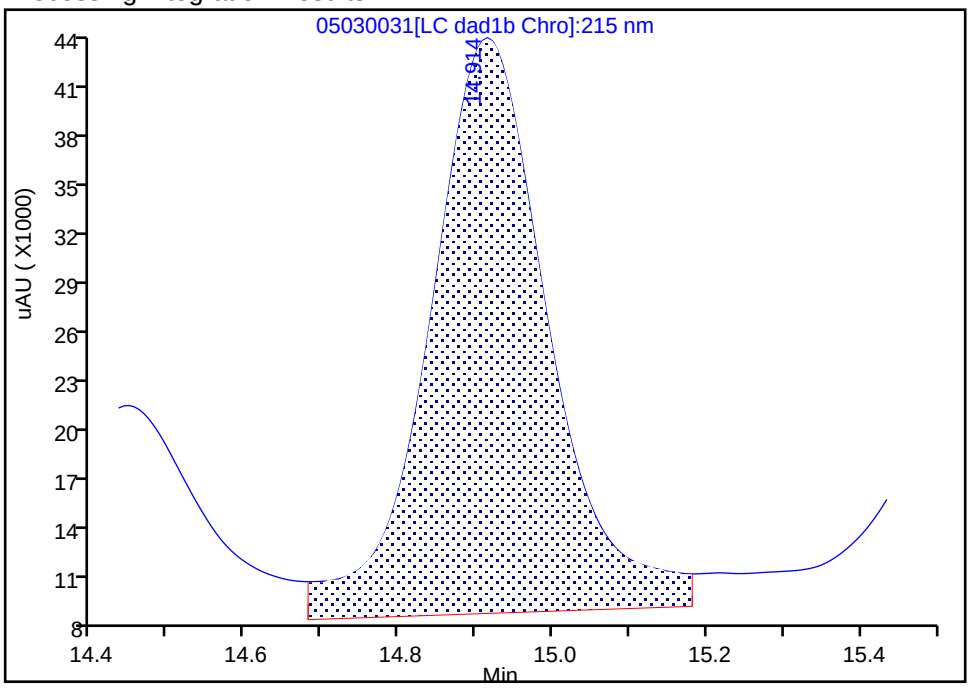
Data File:	\\chromfs\denver\chromdata\g2_luna\20240503-132991.b\05030031.d				
Injection Date:	04-May-2024 05:51:01	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1B, 215 nm		

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

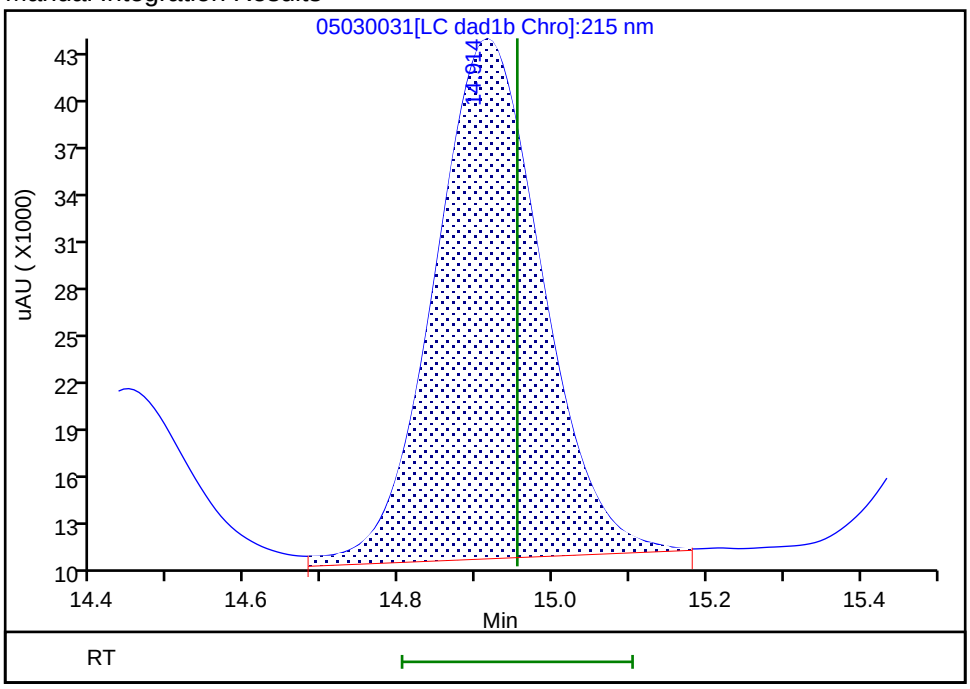
Processing Integration Results

RT: 14.91
Area: 366728
Amount: 3.068731
Amount Units: ug/ml



Manual Integration Results

RT: 14.91
Area: 314738
Amount: 2.633686
Amount Units: ug/ml



Reviewer: LV5D, 07-May-2024 16:25:38 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

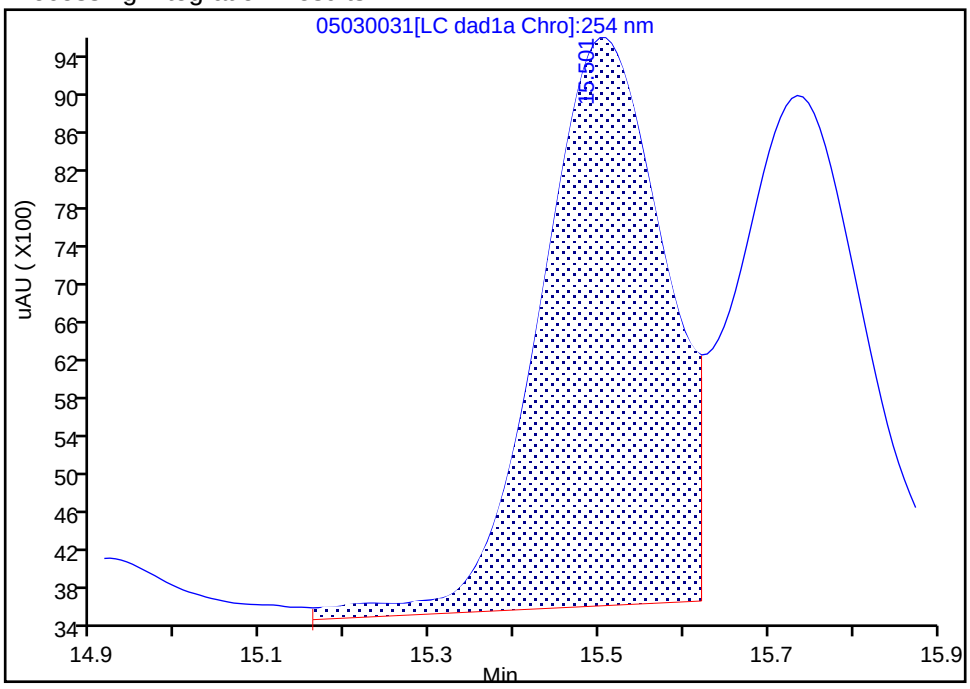
Data File:	\\chromfs\denver\chromdata\g2_luna\20240503-132991.b\05030031.d				
Injection Date:	04-May-2024 05:51:01	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

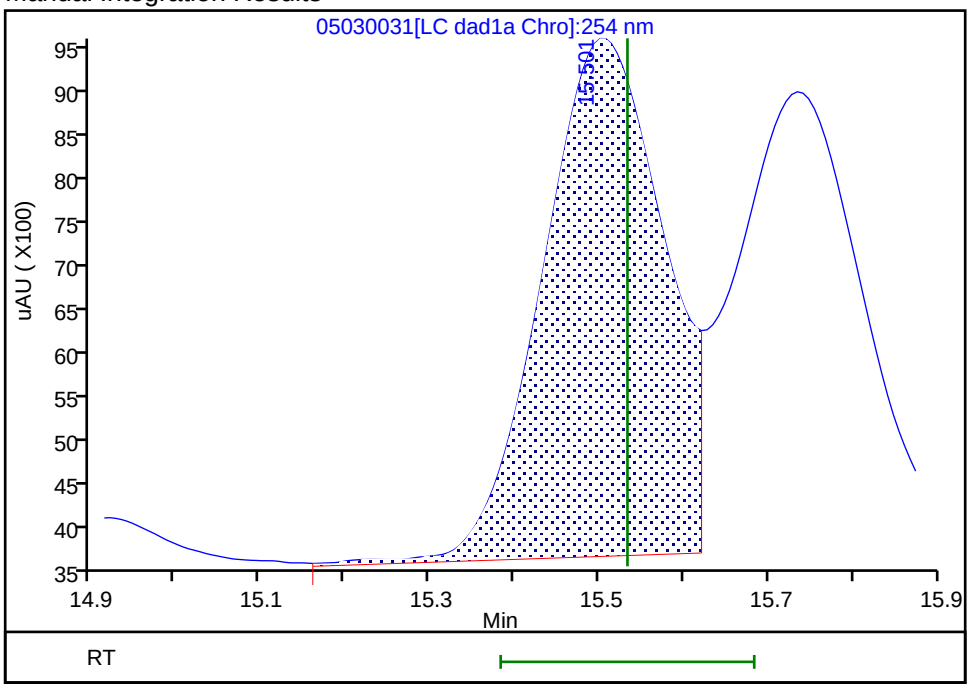
Processing Integration Results

RT: 15.50
Area: 60597
Amount: 0.247745
Amount Units: ug/ml



Manual Integration Results

RT: 15.50
Area: 58499
Amount: 0.239167
Amount Units: ug/ml



Reviewer: LV5D, 07-May-2024 16:25:42 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

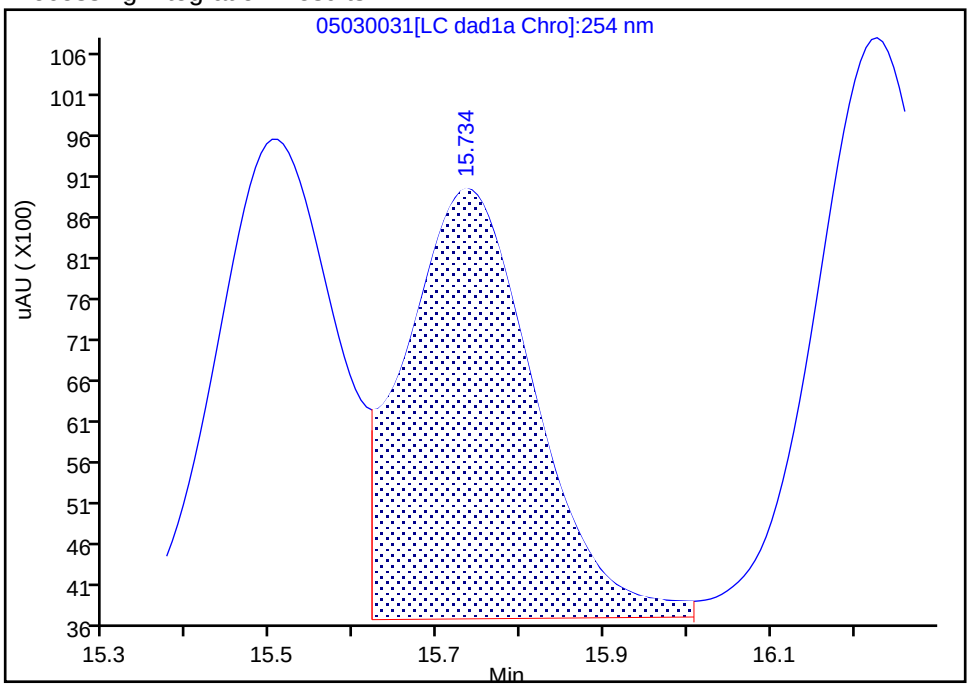
Data File:	\\chromfs\denver\chromdata\g2_luna\20240503-132991.b\05030031.d				
Injection Date:	04-May-2024 05:51:01	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

15 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

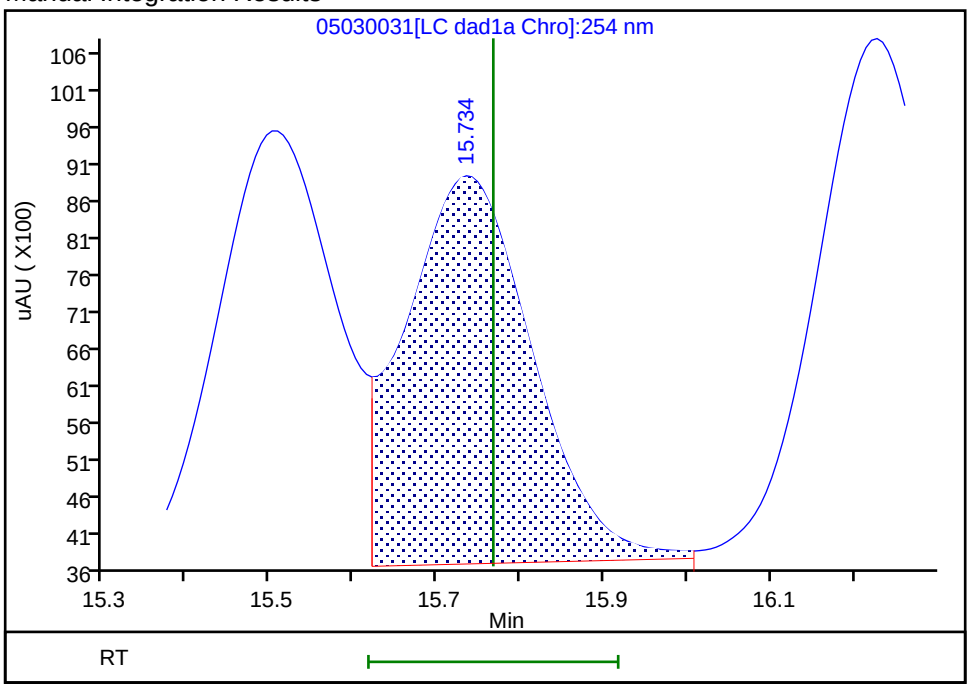
Processing Integration Results

RT: 15.73
Area: 56250
Amount: 0.254142
Amount Units: ug/ml



Manual Integration Results

RT: 15.73
Area: 54684
Amount: 0.246950
Amount Units: ug/ml



Reviewer: LV5D, 07-May-2024 16:25:42 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

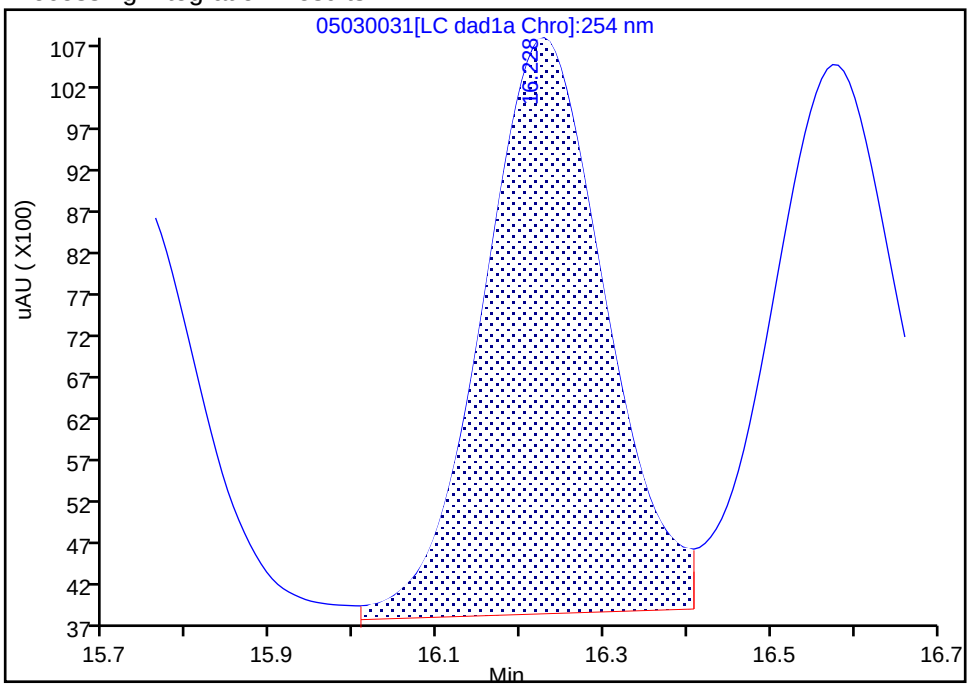
Data File:	\\chromfs\denver\chromdata\g2_luna\20240503-132991.b\05030031.d				
Injection Date:	04-May-2024 05:51:01	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

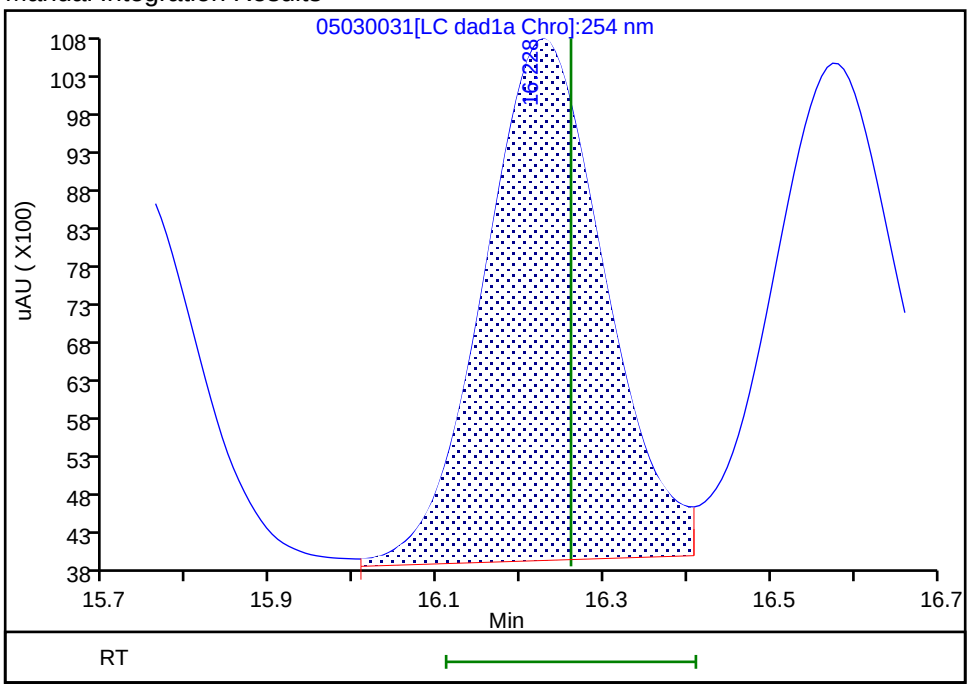
Processing Integration Results

RT: 16.23
Area: 71155
Amount: 0.261260
Amount Units: ug/ml



Manual Integration Results

RT: 16.23
Area: 69331
Amount: 0.254493
Amount Units: ug/ml



Reviewer: LV5D, 07-May-2024 16:25:42 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

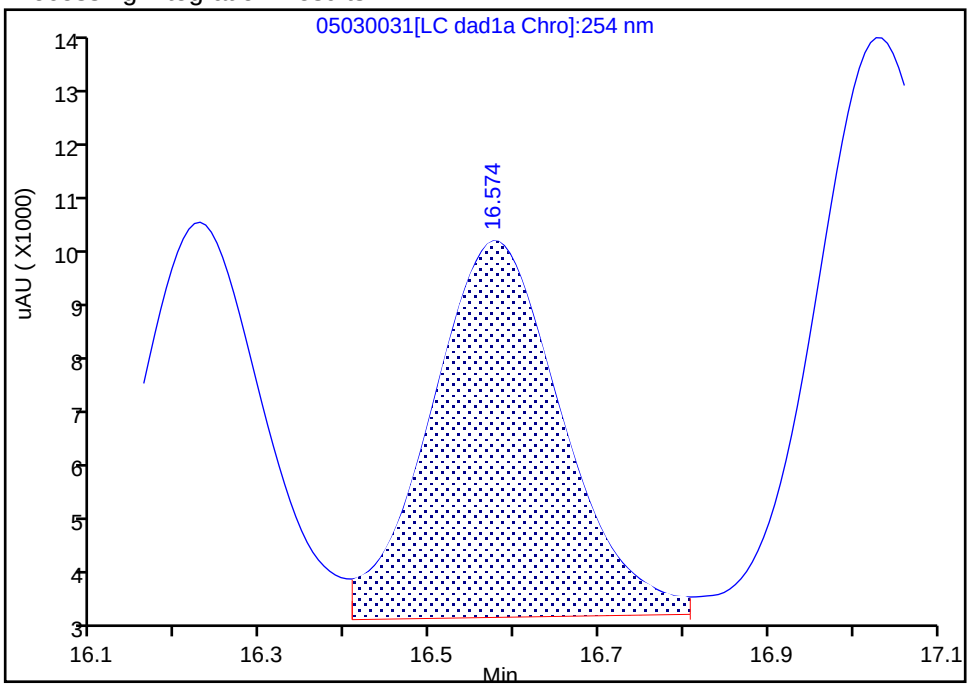
Data File:	\\chromfs\denver\chromdata\g2_luna\20240503-132991.b\05030031.d				
Injection Date:	04-May-2024 05:51:01	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

17 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

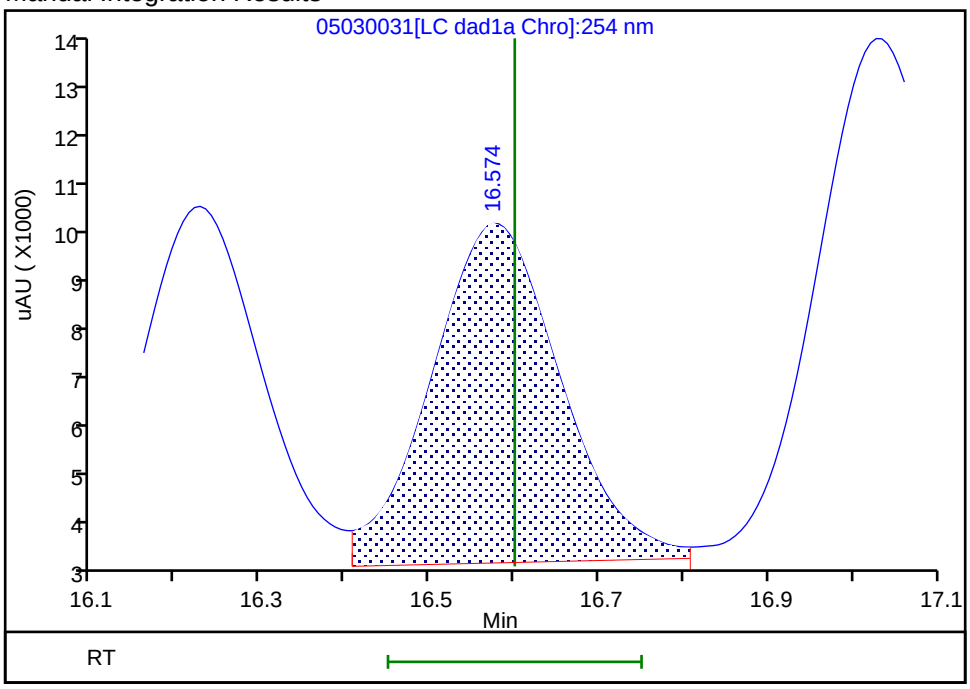
Processing Integration Results

RT: 16.57
Area: 70094
Amount: 0.250828
Amount Units: ug/ml



Manual Integration Results

RT: 16.57
Area: 68846
Amount: 0.246299
Amount Units: ug/ml



Reviewer: LV5D, 07-May-2024 16:25:42 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

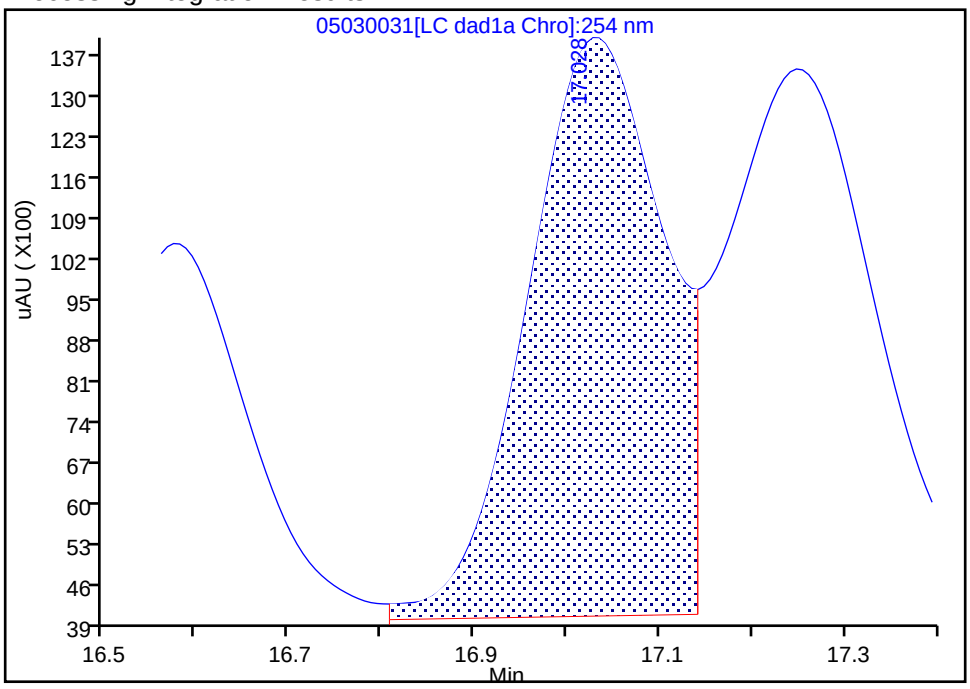
Data File:	\\chromfs\denver\chromdata\g2_luna\20240503-132991.b\05030031.d				
Injection Date:	04-May-2024 05:51:01	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

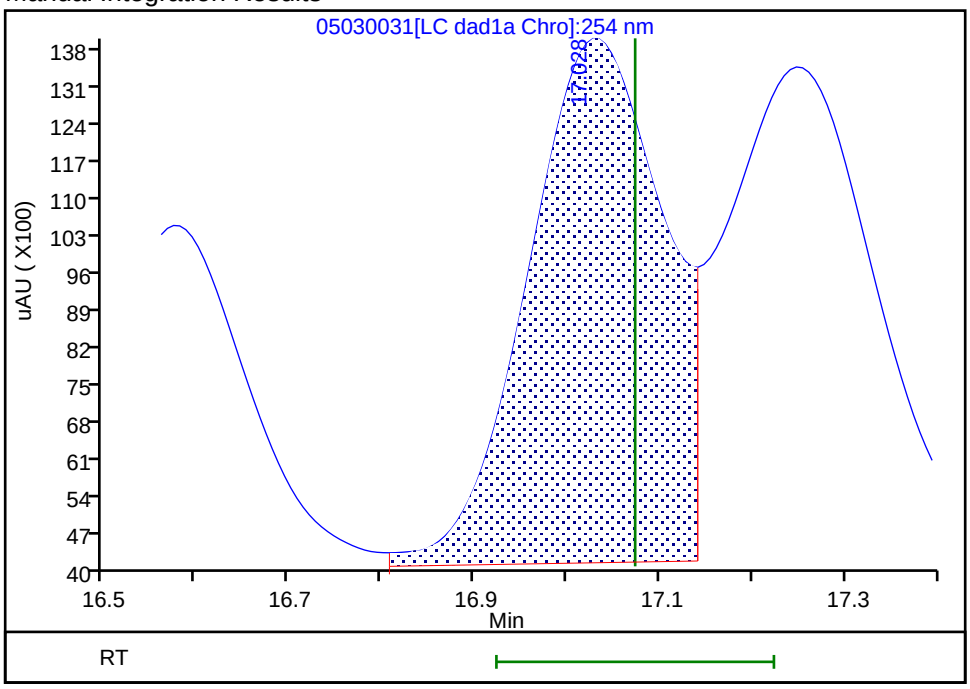
Processing Integration Results

RT: 17.03
Area: 101438
Amount: 0.250117
Amount Units: ug/ml



Manual Integration Results

RT: 17.03
Area: 100648
Amount: 0.248169
Amount Units: ug/ml



Reviewer: LV5D, 07-May-2024 16:25:42 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

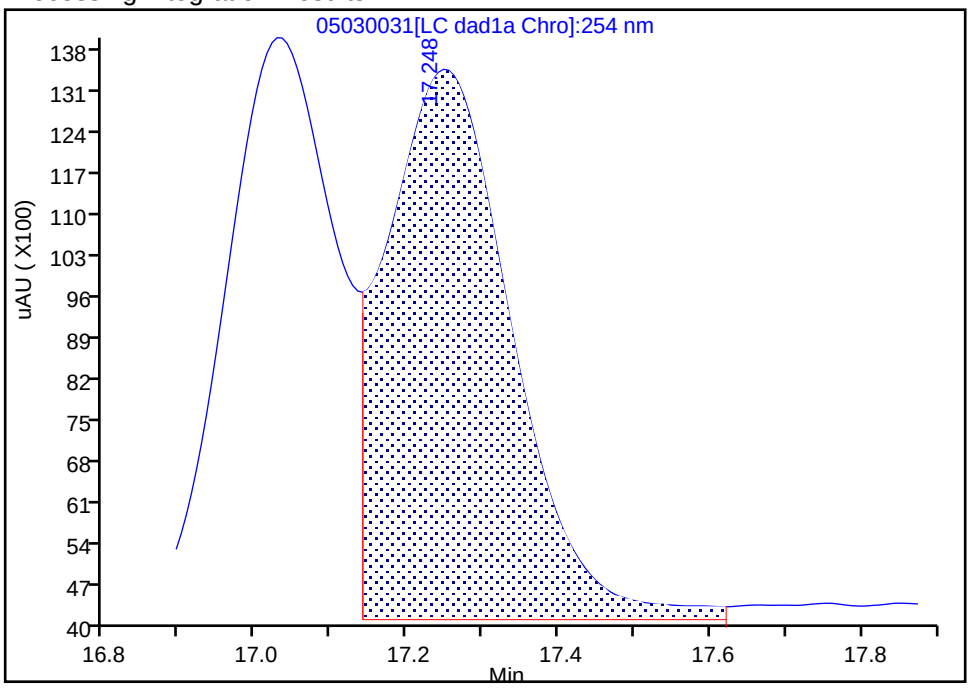
Data File:	\\chromfs\denver\chromdata\g2_luna\20240503-132991.b\05030031.d				
Injection Date:	04-May-2024 05:51:01	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

19 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

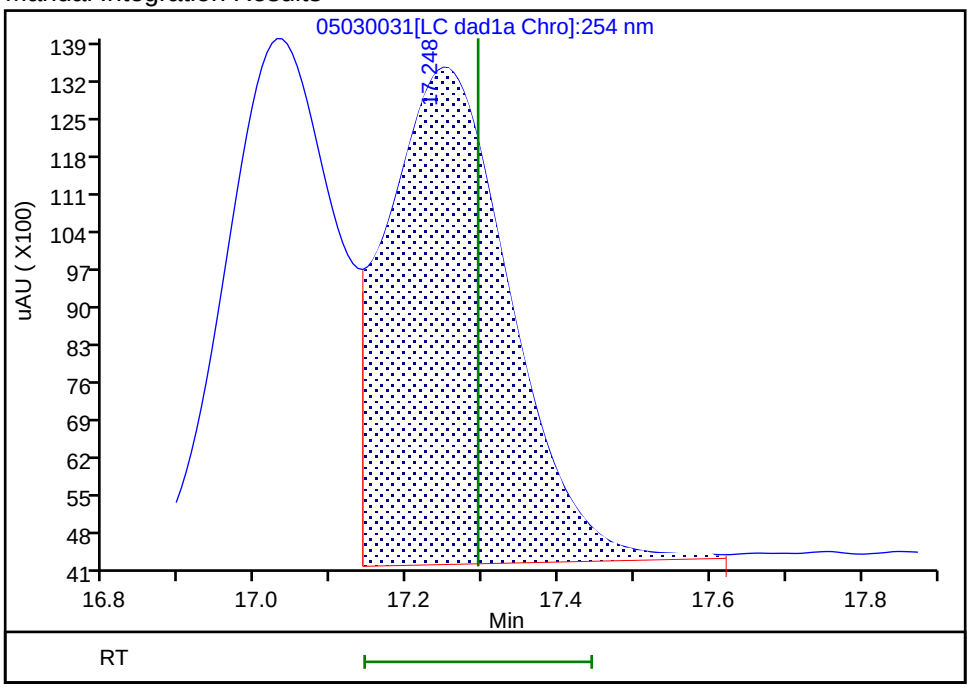
Processing Integration Results

RT: 17.25
Area: 107259
Amount: 0.253295
Amount Units: ug/ml



Manual Integration Results

RT: 17.25
Area: 104754
Amount: 0.247380
Amount Units: ug/ml



Reviewer: LV5D, 07-May-2024 16:25:42 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-190799-1

SDG No.:

Lab Sample ID: ICV 280-649950/20 | Calibration Date: 04/18/2024 00:04

Instrument ID: CHHPLC_X3 | Calib Start Date: 04/17/2024 20:37

GC Column: UltraCarb5uODS ID: 4.60(mm) | Calib End Date: 04/17/2024 23:41

Lab File ID: 04170020.D | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	198992	204787		517	502	2.9	20.0
HMX	Ave	95544	88884		465	500	-7.0	20.0
DNX	Ave	147260	152248		518	501	3.4	20.0
MNX	Ave	136698	141932		607	585	3.8	20.0
RDX	Ave	110767	107360		485	500	-3.1	20.0
Picric acid	Ave	79326	85128		537	500	7.3	20.0
1,3,5-Trinitrobenzene	Ave	222853	238232		535	500	6.9	20.0
1,3-Dinitrobenzene	Ave	299436	315400		527	500	5.3	20.0
Nitrobenzene	Ave	196329	207206		528	500	5.5	20.0
3,5-Dinitroaniline	Lin2		227972		517	500	3.4	20.0
Tetryl	Ave	181588	191842		528	500	5.6	20.0
Nitroglycerin	Ave	66464	70364		5290	5000	5.9	20.0
2,4,6-Trinitrotoluene	Ave	215192	218358		507	500	1.5	20.0
4-Amino-2,6-dinitrotoluene	Ave	149948	155448		518	500	3.7	20.0
2-Amino-4,6-dinitrotoluene	Ave	199809	208532		522	500	4.4	20.0
2,6-Dinitrotoluene	Ave	146914	147890		503	500	0.7	20.0
2,4-Dinitrotoluene	Ave	291844	298646		512	500	2.3	20.0
2-Nitrotoluene	Ave	129305	129160		499	500	-0.1	20.0
4-Nitrotoluene	Ave	112799	111300		493	500	-1.3	20.0
3-Nitrotoluene	Ave	144063	142054		493	500	-1.4	20.0
PETN	Ave	71937	78341		5450	5000	8.9	20.0
1,2-Dinitrobenzene	Lin2		127242		483	500	-3.5	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-190799-1

SDG No.:

Lab Sample ID: ICV 280-649950/20 Calibration Date: 04/18/2024 00:04

Instrument ID: CHHPLC_X3 Calib Start Date: 04/17/2024 20:37

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 04/17/2024 23:41

Lab File ID: 04170020.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.48	6.38	6.58
HMX	6.58	6.43	6.73
DNX	6.79	6.69	6.89
MNX	7.20	7.05	7.35
RDX	7.58	7.43	7.73
Picric acid	7.80	7.67	7.97
1,3,5-Trinitrobenzene	8.66	8.51	8.81
1,3-Dinitrobenzene	9.27	9.13	9.43
Nitrobenzene	9.63	9.49	9.79
3,5-Dinitroaniline	9.87	9.73	10.03
Tetryl	9.95	9.81	10.11
Nitroglycerin	10.43	10.28	10.58
2,4,6-Trinitrotoluene	10.86	10.77	10.97
4-Amino-2,6-dinitrotoluene	11.04	10.95	11.15
2-Amino-4,6-dinitrotoluene	11.30	11.21	11.41
2,6-Dinitrotoluene	11.45	11.35	11.55
2,4-Dinitrotoluene	11.62	11.53	11.73
2-Nitrotoluene	12.41	12.27	12.57
4-Nitrotoluene	12.84	12.69	12.99
3-Nitrotoluene	13.39	13.25	13.55
PETN	14.48	14.33	14.63
1,2-Dinitrobenzene	8.52	8.37	8.67

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\04170020.D
Lims ID: ICV INT/DMT
Client ID:
Sample Type: ICV
Inject. Date: 18-Apr-2024 00:04:28 ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICV INT/DMT
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist:

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 18-Apr-2024 12:06:14 Calib Date: 17-Apr-2024 23:41:30
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\04170019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1675

First Level Reviewer: LV5D Date: 18-Apr-2024 11:20:39

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 TNX	1	6.475	6.476	-0.001	102803	0.5020	0.5166	M
	4 HMX	1	6.581	6.583	-0.002	44442	0.5000	0.4651	M
	6 DNX	1	6.788	6.789	-0.001	76276	0.5010	0.5180	M
	7 MNX	1	7.201	7.203	-0.002	82959	0.5845	0.6069	
	8 RDX	1	7.581	7.583	-0.002	53680	0.5000	0.4846	
	9 2,4,6-Trinitrophenol	1	7.795	7.816	-0.021	42564	0.5000	0.5366	
$	10 1,2-Dinitrobenzene	1	8.515	8.516	-0.001	63621	0.5000	0.4826	
	11 1,3,5-Trinitrobenzene	1	8.655	8.656	-0.001	119116	0.5000	0.5345	
	12 1,3-Dinitrobenzene	1	9.274	9.276	-0.002	157700	0.5000	0.5267	
	13 Nitrobenzene	1	9.628	9.636	-0.008	103603	0.5000	0.5277	
	14 3,5-Dinitroaniline	1	9.868	9.876	-0.008	113986	0.5000	0.5168	
	15 Tetryl	1	9.954	9.963	-0.009	95921	0.5000	0.5282	
	16 Nitroglycerin	2	10.428	10.429	-0.001	351818	5.00	5.29	
	17 2,4,6-Trinitrotoluene	1	10.861	10.869	-0.008	109179	0.5000	0.5074	
	18 4-Amino-2,6-dinitrotoluene	1	11.041	11.049	-0.008	77724	0.5000	0.5183	
	19 2-Amino-4,6-dinitrotoluene	1	11.301	11.309	-0.008	104266	0.5000	0.5218	
	20 2,6-Dinitrotoluene	1	11.448	11.449	-0.001	73945	0.5000	0.5033	
	21 2,4-Dinitrotoluene	1	11.621	11.629	-0.008	149323	0.5000	0.5117	
	22 o-Nitrotoluene	1	12.414	12.423	-0.009	64580	0.5000	0.4994	
	23 p-Nitrotoluene	1	12.841	12.843	-0.002	55650	0.5000	0.4934	
	24 m-Nitrotoluene	1	13.394	13.403	-0.009	71027	0.5000	0.4930	
	25 PETN	2	14.481	14.483	-0.002	391703	5.00	5.45	
	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_00154	Amount Added:	50.00	Units: uL
8330 LCS_00134	Amount Added:	50.00	Units: uL
8330_OP_DMT_00026	Amount Added:	50.00	Units: uL

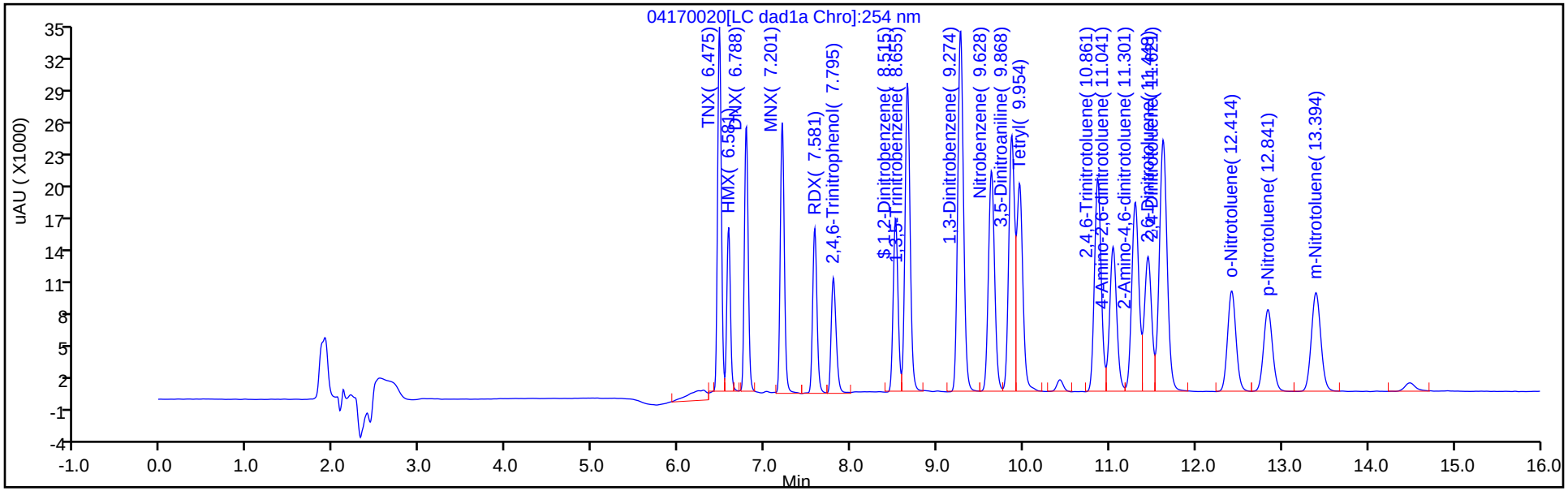
Report Date: 18-Apr-2024 12:06:16 Chrom Revision: 2.3 09-Apr-2024 17:43:44

Eurofins Denver

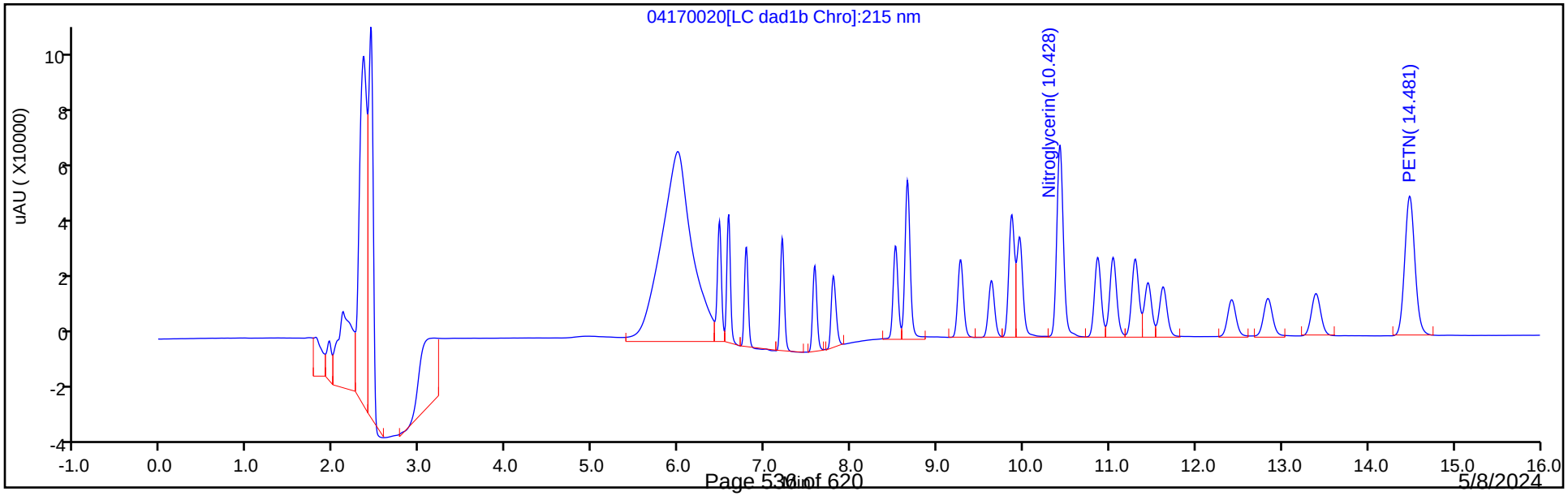
Data File: \\chromfs\denver\chromdata\chhplc_x\20240417-132364.b\04170020.d

Injection Date:	18-Apr-2024 00:04:28	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
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



5/8/2024
6:07:23 AM

Manual Integration/User Assign Peak Report

Eurofins Denver

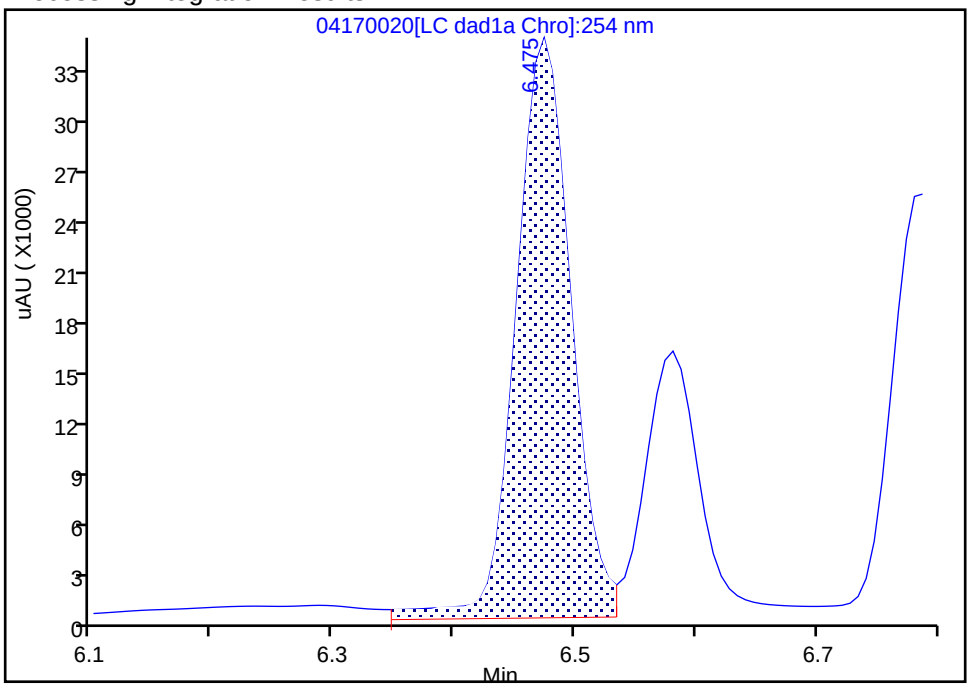
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240417-132364.b\04170020.d				
Injection Date:	18-Apr-2024 00:04:28	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV INT/DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

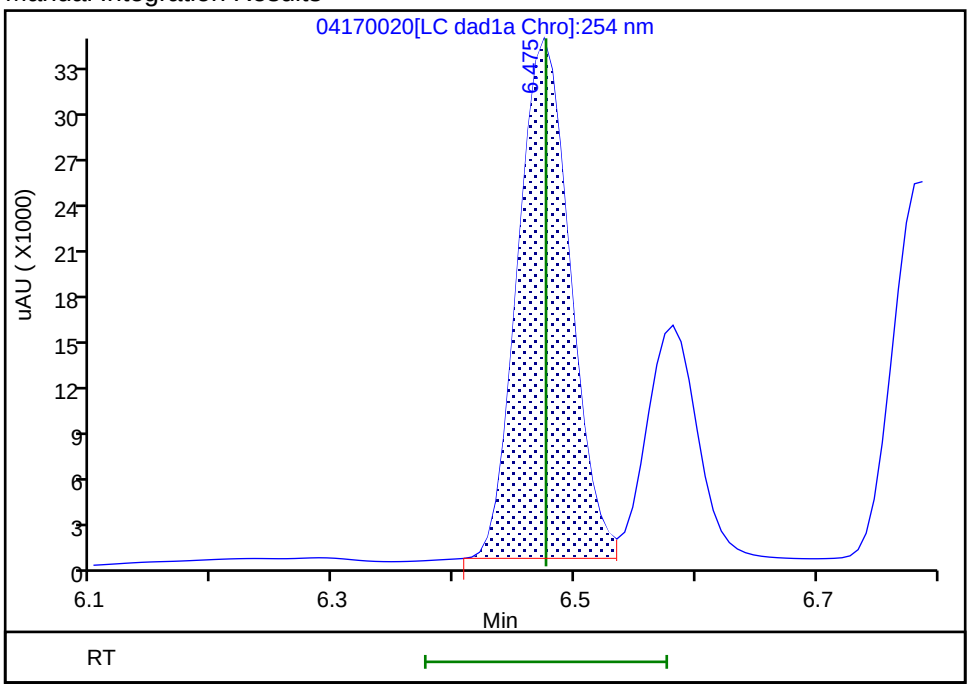
Processing Integration Results

RT: 6.47
Area: 110168
Amount: 0.553630
Amount Units: ug/mL



Manual Integration Results

RT: 6.47
Area: 102803
Amount: 0.516619
Amount Units: ug/mL



Reviewer: LV5D, 18-Apr-2024 11:20:20 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

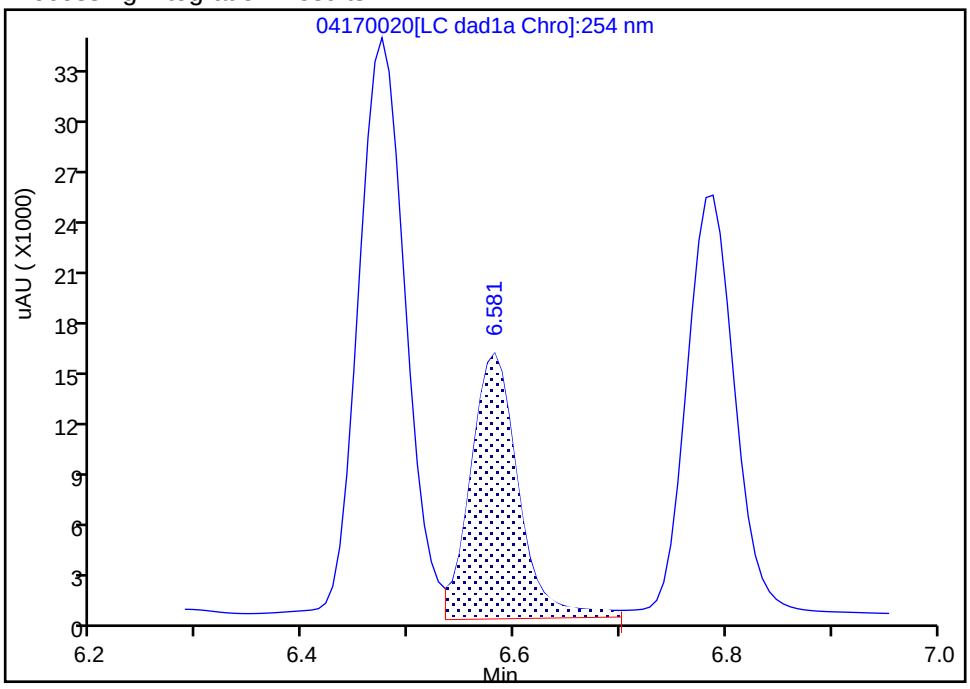
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240417-132364.b\04170020.d				
Injection Date:	18-Apr-2024 00:04:28	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV INT/DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

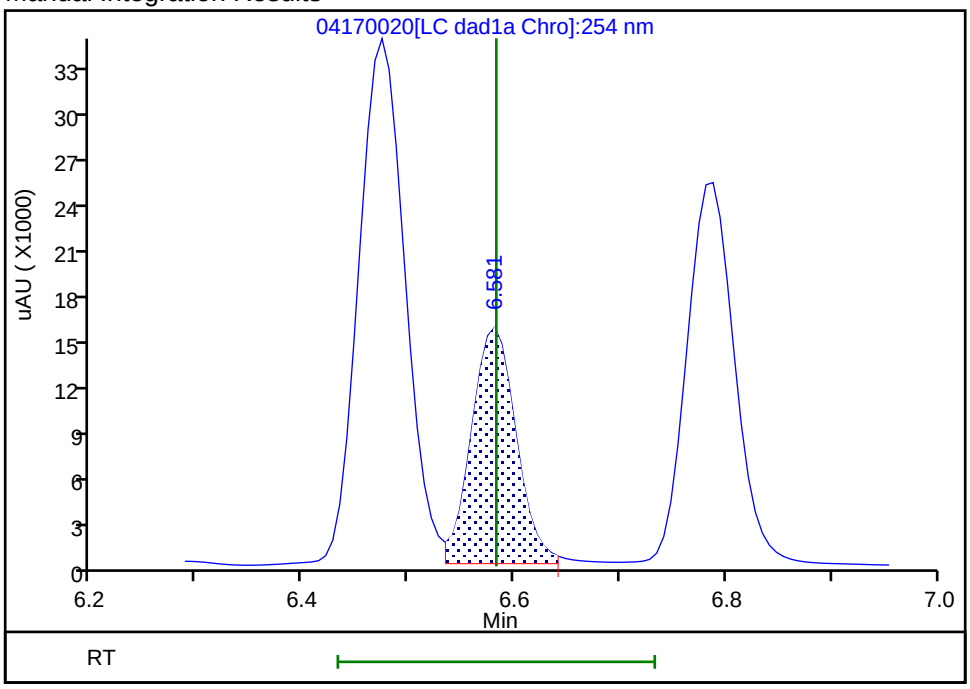
Processing Integration Results

RT: 6.58
Area: 49818
Amount: 0.521416
Amount Units: ug/mL



Manual Integration Results

RT: 6.58
Area: 44442
Amount: 0.465148
Amount Units: ug/mL



Reviewer: LV5D, 18-Apr-2024 11:20:21 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

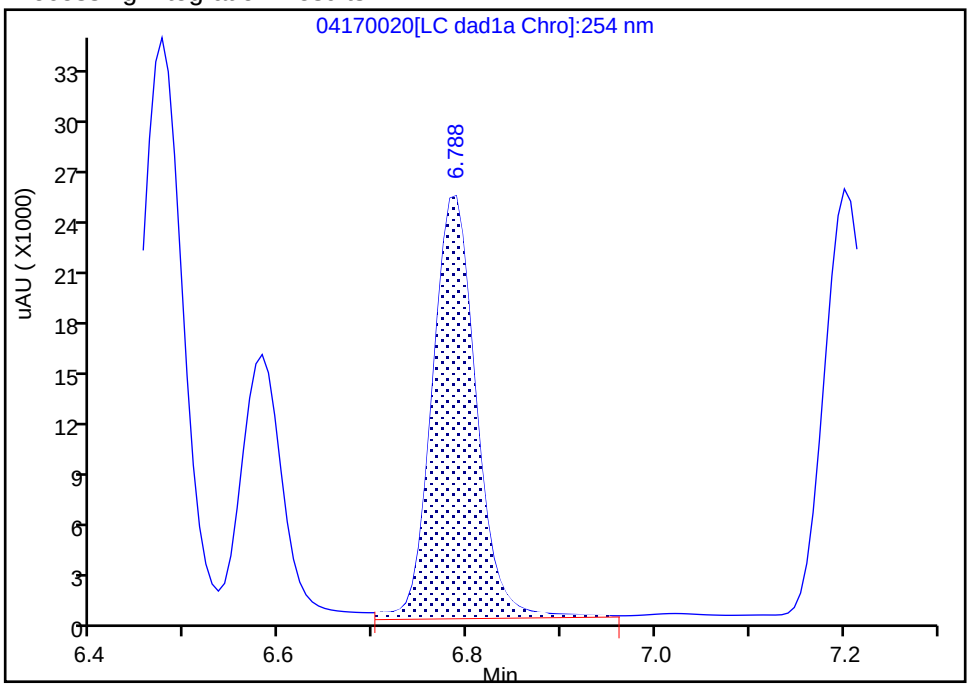
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240417-132364.b\04170020.d				
Injection Date:	18-Apr-2024 00:04:28	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV INT/DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

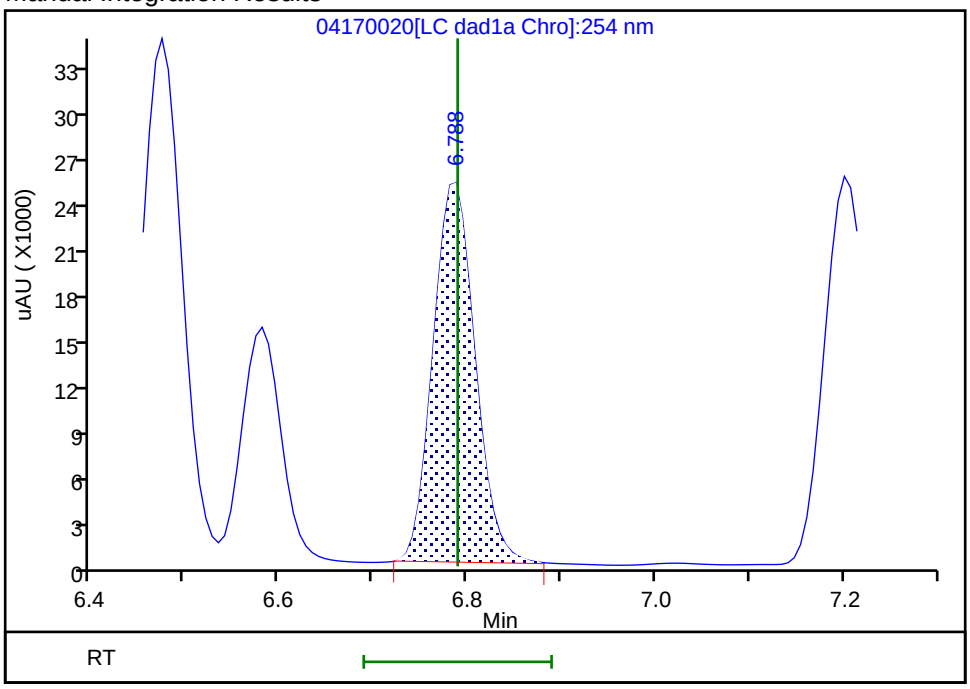
Processing Integration Results

RT: 6.79
Area: 81732
Amount: 0.555020
Amount Units: ug/mL



Manual Integration Results

RT: 6.79
Area: 76276
Amount: 0.517970
Amount Units: ug/mL



Reviewer: LV5D, 18-Apr-2024 11:20:24 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-190799-1

SDG No.:

Lab Sample ID: CCV 280-652145/7 | Calibration Date: 05/04/2024 17:45

Instrument ID: CHHPLC_X3 | Calib Start Date: 04/17/2024 20:37

GC Column: UltraCarb5uODS ID: 4.60(mm) | Calib End Date: 04/17/2024 23:41

Lab File ID: 05040007.D | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	95544	94264		247	250	-1.3	20.0
RDX	Ave	110767	108808		246	250	-1.8	20.0
Picric acid	Ave	79326	81600		257	250	2.9	20.0
1,3,5-Trinitrobenzene	Ave	222853	220008		247	250	-1.3	20.0
1,3-Dinitrobenzene	Ave	299436	304732		254	250	1.8	20.0
Nitrobenzene	Ave	196329	196496		250	250	0.0	20.0
3,5-Dinitroaniline	Lin2		222332		253	250	1.0	20.0
Tetryl	Ave	181588	177560		244	250	-2.2	20.0
Nitroglycerin	Ave	66464	67378		2530	2500	1.4	20.0
2,4,6-Trinitrotoluene	Ave	215192	215020		250	250	-0.0	20.0
4-Amino-2,6-dinitrotoluene	Ave	149948	152276		254	250	1.6	20.0
2-Amino-4,6-dinitrotoluene	Ave	199809	201364		252	250	0.8	20.0
2,6-Dinitrotoluene	Ave	146914	147864		252	250	0.6	20.0
2,4-Dinitrotoluene	Ave	291844	297168		255	250	1.8	20.0
2-Nitrotoluene	Ave	129305	128896		249	250	-0.3	20.0
4-Nitrotoluene	Ave	112799	110148		244	250	-2.4	20.0
3-Nitrotoluene	Ave	144063	138420		240	250	-3.9	20.0
PETN	Ave	71937	71882		2500	2500	-0.0	20.0
1,2-Dinitrobenzene	Lin2		132024		250	250	0.0	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-190799-1

SDG No.:

Lab Sample ID: CCV 280-652145/7 Calibration Date: 05/04/2024 17:45

Instrument ID: CHHPLC_X3 Calib Start Date: 04/17/2024 20:37

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 04/17/2024 23:41

Lab File ID: 05040007.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.61	6.46	6.76
RDX	7.63	7.48	7.78
Picric acid	7.88	7.73	8.03
1,3,5-Trinitrobenzene	8.71	8.56	8.86
1,3-Dinitrobenzene	9.32	9.17	9.47
Nitrobenzene	9.68	9.53	9.83
3,5-Dinitroaniline	9.92	9.77	10.07
Tetryl	10.00	9.85	10.15
Nitroglycerin	10.47	10.32	10.62
2,4,6-Trinitrotoluene	10.90	10.80	11.00
4-Amino-2,6-dinitrotoluene	11.08	10.98	11.18
2-Amino-4,6-dinitrotoluene	11.34	11.24	11.44
2,6-Dinitrotoluene	11.48	11.38	11.58
2,4-Dinitrotoluene	11.66	11.56	11.76
2-Nitrotoluene	12.44	12.29	12.59
4-Nitrotoluene	12.86	12.71	13.01
3-Nitrotoluene	13.40	13.25	13.55
PETN	14.46	14.31	14.61
1,2-Dinitrobenzene	8.58	8.43	8.73

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\05040007.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 04-May-2024 17:45:20 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub26

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 07-May-2024 15:02:54 Calib Date: 18-Apr-2024 03:08:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\04170028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1679

First Level Reviewer: LV5D Date: 07-May-2024 11:58:47

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.610	6.610	0.000	23566	0.2500	0.2467	
8 RDX	1	7.630	7.630	0.000	27202	0.2500	0.2456	
9 2,4,6-Trinitrophenol	1	7.876	7.876	0.000	20400	0.2500	0.2572	
$ 10 1,2-Dinitrobenzene	1	8.576	8.576	0.000	33006	0.2500	0.2500	
11 1,3,5-Trinitrobenzene	1	8.710	8.710	0.000	55002	0.2500	0.2468	
12 1,3-Dinitrobenzene	1	9.323	9.323	0.000	76183	0.2500	0.2544	
13 Nitrobenzene	1	9.683	9.683	0.000	49124	0.2500	0.2502	
14 3,5-Dinitroaniline	1	9.923	9.923	0.000	55583	0.2500	0.2526	
15 Tetryl	1	10.003	10.003	0.000	44390	0.2500	0.2445	
16 Nitroglycerin	2	10.470	10.470	0.000	168445	2.50	2.53	
17 2,4,6-Trinitrotoluene	1	10.903	10.903	0.000	53755	0.2500	0.2498	
18 4-Amino-2,6-dinitrotoluene	1	11.083	11.083	0.000	38069	0.2500	0.2539	
19 2-Amino-4,6-dinitrotoluene	1	11.336	11.336	0.000	50341	0.2500	0.2519	
20 2,6-Dinitrotoluene	1	11.483	11.483	0.000	36966	0.2500	0.2516	
21 2,4-Dinitrotoluene	1	11.656	11.656	0.000	74292	0.2500	0.2546	
22 o-Nitrotoluene	1	12.436	12.436	0.000	32224	0.2500	0.2492	
23 p-Nitrotoluene	1	12.856	12.856	0.000	27537	0.2500	0.2441	
24 m-Nitrotoluene	1	13.403	13.403	0.000	34605	0.2500	0.2402	
25 PETN	2	14.463	14.463	0.000	179705	2.50	2.50	

Reagents:

8330IntermStk_00080 Amount Added: 25.00 Units: uL

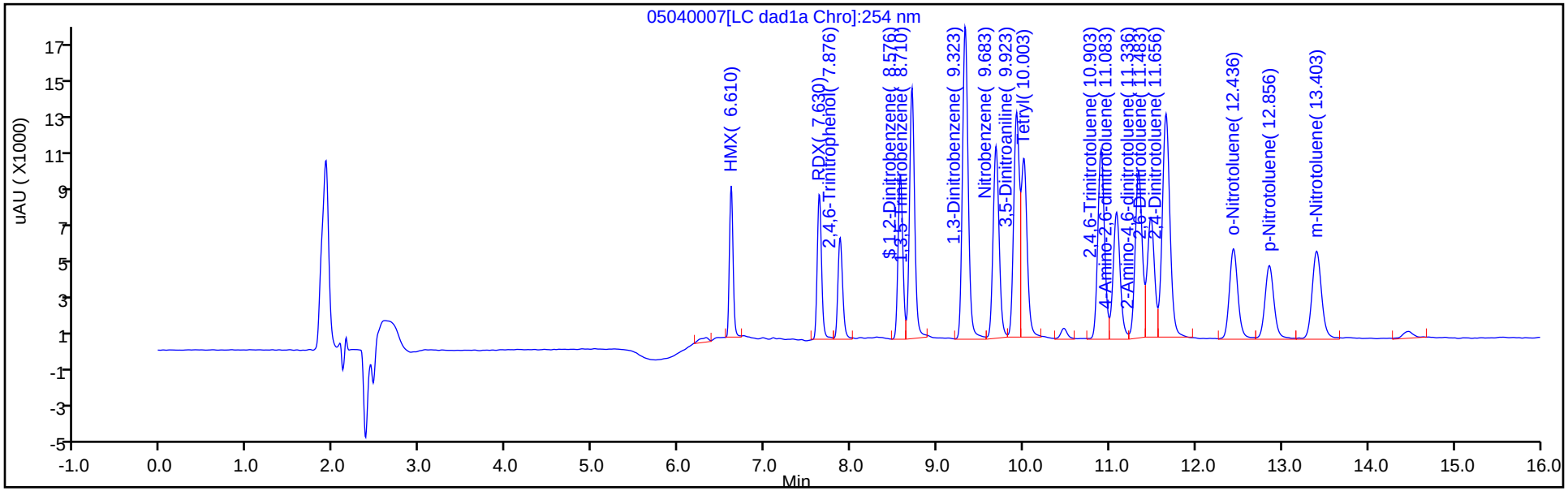
Report Date: 07-May-2024 15:02:55 Chrom Revision: 2.3 26-Apr-2024 12:18:52

Eurofins Denver

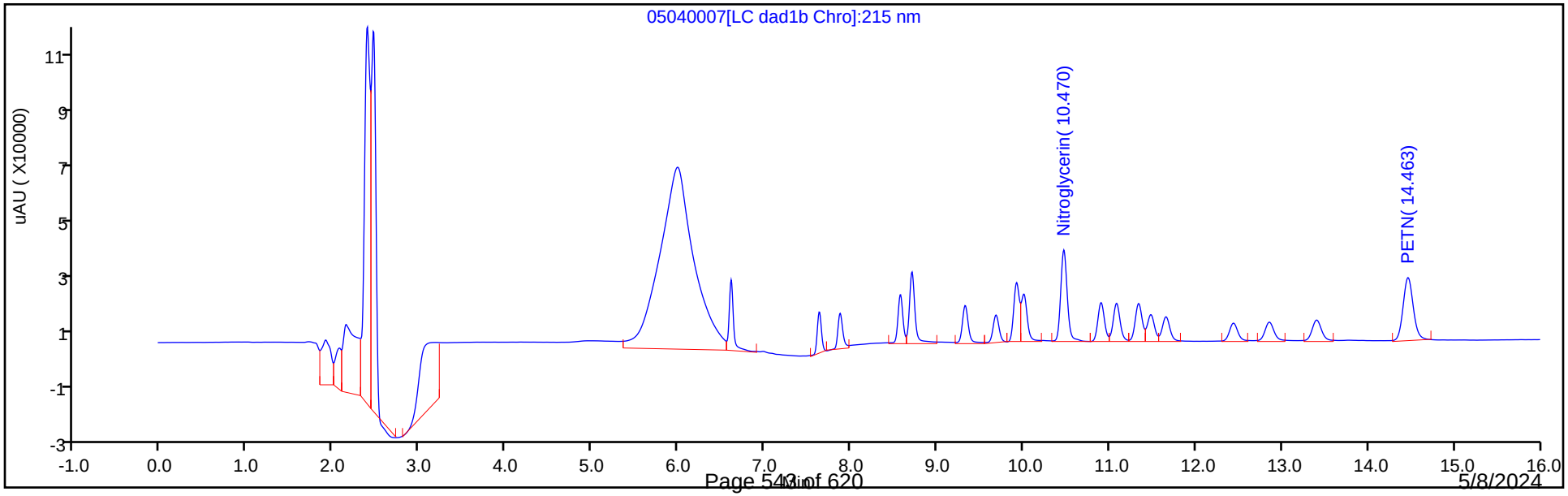
Data File: \\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040007.d

Injection Date:	04-May-2024 17:45:20	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
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



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-190799-1

SDG No.:

Lab Sample ID: CCV 280-652145/21 Calibration Date: 05/04/2024 21:57

Instrument ID: CHHPLC_X3 Calib Start Date: 04/17/2024 20:37

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 04/17/2024 23:41

Lab File ID: 05040021.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	95544	92800		243	250	-2.9	20.0
RDX	Ave	110767	108744		245	250	-1.8	20.0
Picric acid	Ave	79326	83104		262	250	4.8	20.0
1,3,5-Trinitrobenzene	Ave	222853	221608		249	250	-0.6	20.0
1,3-Dinitrobenzene	Ave	299436	304764		254	250	1.8	20.0
Nitrobenzene	Ave	196329	193280		246	250	-1.6	20.0
3,5-Dinitroaniline	Lin2		215876		245	250	-1.9	20.0
Tetryl	Ave	181588	183836		253	250	1.2	20.0
Nitroglycerin	Ave	66464	67872		2550	2500	2.1	20.0
2,4,6-Trinitrotoluene	Ave	215192	216412		251	250	0.6	20.0
4-Amino-2,6-dinitrotoluene	Ave	149948	152632		254	250	1.8	20.0
2-Amino-4,6-dinitrotoluene	Ave	199809	198728		249	250	-0.5	20.0
2,6-Dinitrotoluene	Ave	146914	150104		255	250	2.2	20.0
2,4-Dinitrotoluene	Ave	291844	299332		256	250	2.6	20.0
2-Nitrotoluene	Ave	129305	127412		246	250	-1.5	20.0
4-Nitrotoluene	Ave	112799	109508		243	250	-2.9	20.0
3-Nitrotoluene	Ave	144063	137324		238	250	-4.7	20.0
PETN	Ave	71937	72218		2510	2500	0.4	20.0
1,2-Dinitrobenzene	Lin2		133144		252	250	0.9	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-190799-1

SDG No.:

Lab Sample ID: CCV 280-652145/21 Calibration Date: 05/04/2024 21:57

Instrument ID: CHHPLC_X3 Calib Start Date: 04/17/2024 20:37

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 04/17/2024 23:41

Lab File ID: 05040021.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.60	6.46	6.76
RDX	7.62	7.48	7.78
Picric acid	7.87	7.73	8.03
1,3,5-Trinitrobenzene	8.70	8.56	8.86
1,3-Dinitrobenzene	9.32	9.17	9.47
Nitrobenzene	9.67	9.53	9.83
3,5-Dinitroaniline	9.91	9.77	10.07
Tetryl	10.00	9.85	10.15
Nitroglycerin	10.46	10.32	10.62
2,4,6-Trinitrotoluene	10.89	10.80	11.00
4-Amino-2,6-dinitrotoluene	11.08	10.98	11.18
2-Amino-4,6-dinitrotoluene	11.33	11.24	11.44
2,6-Dinitrotoluene	11.47	11.38	11.58
2,4-Dinitrotoluene	11.64	11.56	11.76
2-Nitrotoluene	12.43	12.29	12.59
4-Nitrotoluene	12.84	12.71	13.01
3-Nitrotoluene	13.40	13.25	13.55
PETN	14.46	14.31	14.61
1,2-Dinitrobenzene	8.56	8.43	8.73

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\05040021.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 04-May-2024 21:57:47 ALS Bottle#: 7 Worklist Smp#: 21
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub26

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 07-May-2024 15:03:04 Calib Date: 18-Apr-2024 03:08:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\04170028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1679

First Level Reviewer: LV5D Date: 07-May-2024 12:53:36

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.602	6.610	-0.008	23200	0.2500	0.2428	M
8 RDX	1	7.622	7.630	-0.008	27186	0.2500	0.2454	
9 2,4,6-Trinitrophenol	1	7.869	7.876	-0.007	20776	0.2500	0.2619	
$ 10 1,2-Dinitrobenzene	1	8.562	8.576	-0.014	33286	0.2500	0.2522	
11 1,3,5-Trinitrobenzene	1	8.696	8.710	-0.014	55402	0.2500	0.2486	
12 1,3-Dinitrobenzene	1	9.316	9.323	-0.007	76191	0.2500	0.2544	
13 Nitrobenzene	1	9.669	9.683	-0.014	48320	0.2500	0.2461	
14 3,5-Dinitroaniline	1	9.909	9.923	-0.014	53969	0.2500	0.2453	
15 Tetryl	1	9.996	10.003	-0.007	45959	0.2500	0.2531	
16 Nitroglycerin	2	10.462	10.470	-0.008	169679	2.50	2.55	
17 2,4,6-Trinitrotoluene	1	10.889	10.903	-0.014	54103	0.2500	0.2514	
18 4-Amino-2,6-dinitrotoluene	1	11.076	11.083	-0.007	38158	0.2500	0.2545	
19 2-Amino-4,6-dinitrotoluene	1	11.329	11.336	-0.007	49682	0.2500	0.2486	
20 2,6-Dinitrotoluene	1	11.469	11.483	-0.014	37526	0.2500	0.2554	
21 2,4-Dinitrotoluene	1	11.642	11.656	-0.014	74833	0.2500	0.2564	
22 o-Nitrotoluene	1	12.429	12.436	-0.007	31853	0.2500	0.2463	
23 p-Nitrotoluene	1	12.842	12.856	-0.014	27377	0.2500	0.2427	
24 m-Nitrotoluene	1	13.396	13.403	-0.007	34331	0.2500	0.2383	
25 PETN	2	14.462	14.463	-0.001	180544	2.50	2.51	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00080 Amount Added: 25.00 Units: uL

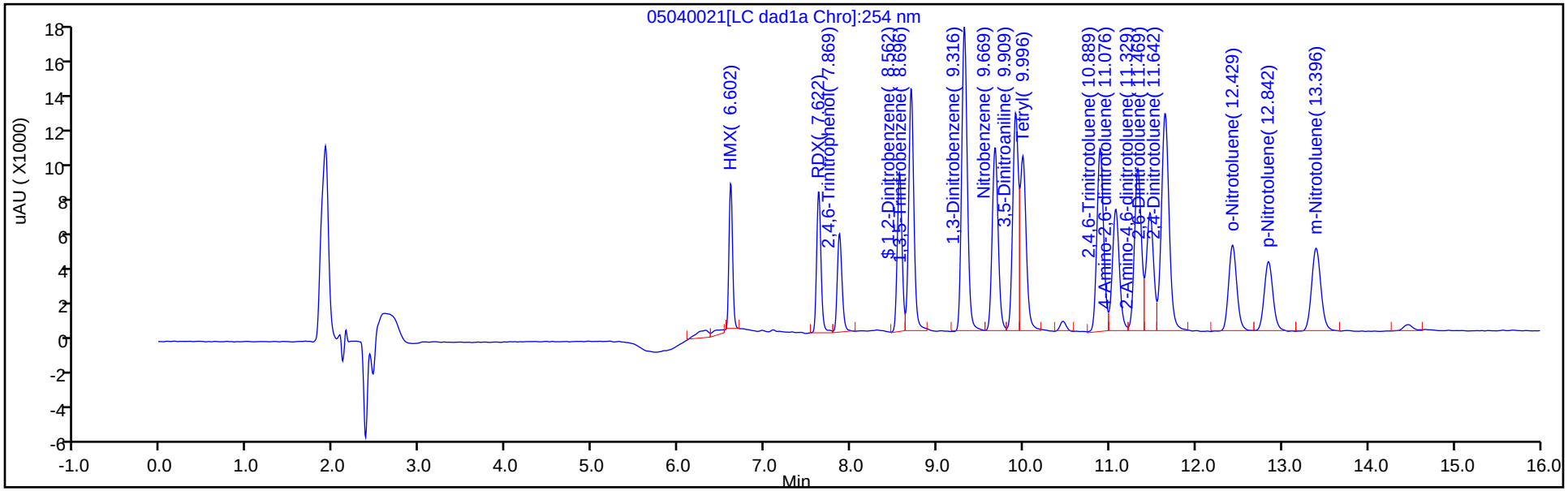
Report Date: 07-May-2024 15:03:04 Chrom Revision: 2.3 26-Apr-2024 12:18:52

Eurofins Denver

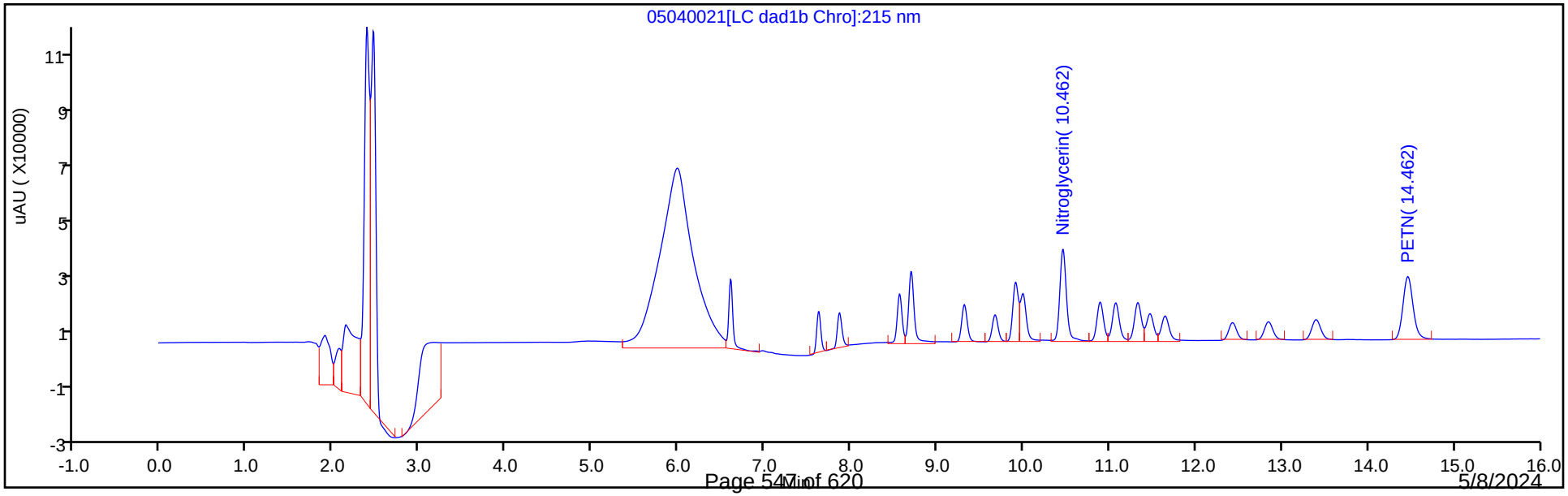
Data File: \\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040021.d

Injection Date:	04-May-2024 21:57:47	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
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



Manual Integration/User Assign Peak Report

Eurofins Denver

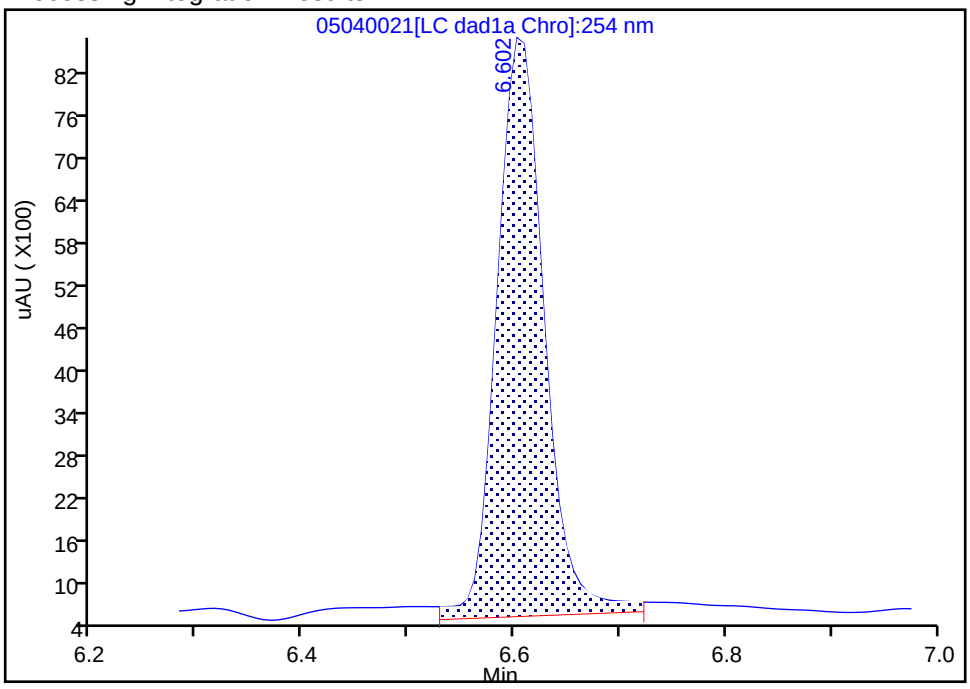
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040021.d				
Injection Date:	04-May-2024 21:57:47	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

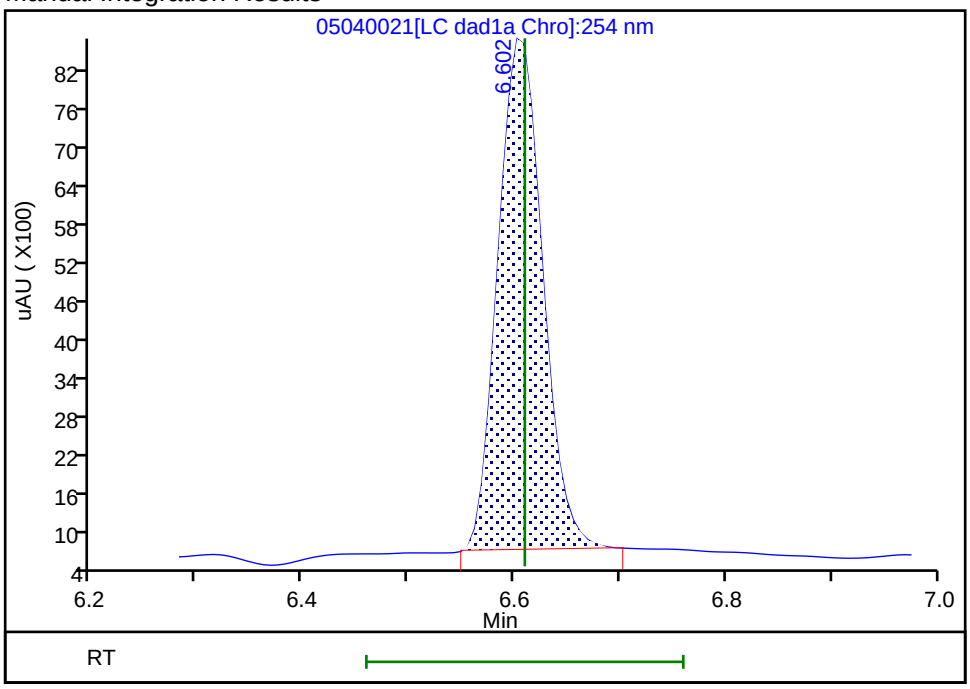
Processing Integration Results

RT: 6.60
Area: 25231
Amount: 0.264078
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 23200
Amount: 0.242821
Amount Units: ug/mL



Reviewer: LV5D, 07-May-2024 12:53:35 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-190799-1

SDG No.:

Lab Sample ID: CCV 280-652145/32 | Calibration Date: 05/05/2024 02:10

Instrument ID: CHHPLC_X3 | Calib Start Date: 04/17/2024 20:37

GC Column: UltraCarb5uODS ID: 4.60(mm) | Calib End Date: 04/17/2024 23:41

Lab File ID: 05040032.D | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	95544	93920		246	250	-1.7	20.0
RDX	Ave	110767	109328		247	250	-1.3	20.0
Picric acid	Ave	79326	81780		258	250	3.1	20.0
1,3,5-Trinitrobenzene	Ave	222853	219836		247	250	-1.4	20.0
1,3-Dinitrobenzene	Ave	299436	306060		256	250	2.2	20.0
Nitrobenzene	Ave	196329	191032		243	250	-2.7	20.0
3,5-Dinitroaniline	Lin2		223188		254	250	1.4	20.0
Tetryl	Ave	181588	176804		243	250	-2.6	20.0
Nitroglycerin	Ave	66464	67783		2550	2500	2.0	20.0
2,4,6-Trinitrotoluene	Ave	215192	216036		251	250	0.4	20.0
4-Amino-2,6-dinitrotoluene	Ave	149948	151912		253	250	1.3	20.0
2-Amino-4,6-dinitrotoluene	Ave	199809	198544		248	250	-0.6	20.0
2,6-Dinitrotoluene	Ave	146914	150256		256	250	2.3	20.0
2,4-Dinitrotoluene	Ave	291844	297576		255	250	2.0	20.0
2-Nitrotoluene	Ave	129305	122952		238	250	-4.9	20.0
4-Nitrotoluene	Ave	112799	97272		216	250	-13.8	20.0
3-Nitrotoluene	Ave	144063	133992		233	250	-7.0	20.0
PETN	Ave	71937	73166		2540	2500	1.7	20.0
1,2-Dinitrobenzene	Lin2		132440		251	250	0.3	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-190799-1

SDG No.:

Lab Sample ID: CCV 280-652145/32 Calibration Date: 05/05/2024 02:10

Instrument ID: CHHPLC_X3 Calib Start Date: 04/17/2024 20:37

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 04/17/2024 23:41

Lab File ID: 05040032.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.60	6.46	6.76
RDX	7.62	7.48	7.78
Picric acid	7.86	7.73	8.03
1,3,5-Trinitrobenzene	8.70	8.56	8.86
1,3-Dinitrobenzene	9.32	9.17	9.47
Nitrobenzene	9.67	9.53	9.83
3,5-Dinitroaniline	9.92	9.77	10.07
Tetryl	10.00	9.85	10.15
Nitroglycerin	10.46	10.32	10.62
2,4,6-Trinitrotoluene	10.90	10.80	11.00
4-Amino-2,6-dinitrotoluene	11.08	10.98	11.18
2-Amino-4,6-dinitrotoluene	11.34	11.24	11.44
2,6-Dinitrotoluene	11.48	11.38	11.58
2,4-Dinitrotoluene	11.65	11.56	11.76
2-Nitrotoluene	12.44	12.29	12.59
4-Nitrotoluene	12.86	12.71	13.01
3-Nitrotoluene	13.41	13.25	13.55
PETN	14.48	14.31	14.61
1,2-Dinitrobenzene	8.56	8.43	8.73

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\05040032.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 05-May-2024 02:10:26 ALS Bottle#: 7 Worklist Smp#: 32
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub26

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 07-May-2024 15:03:13 Calib Date: 18-Apr-2024 03:08:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\04170028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1679

First Level Reviewer: LV5D Date: 07-May-2024 13:52:26

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.598	6.610	-0.012	23480	0.2500	0.2458	
8 RDX	1	7.624	7.630	-0.006	27332	0.2500	0.2468	
9 2,4,6-Trinitrophenol	1	7.864	7.876	-0.012	20445	0.2500	0.2577	
$ 10 1,2-Dinitrobenzene	1	8.564	8.576	-0.012	33110	0.2500	0.2508	
11 1,3,5-Trinitrobenzene	1	8.698	8.710	-0.012	54959	0.2500	0.2466	
12 1,3-Dinitrobenzene	1	9.317	9.323	-0.006	76515	0.2500	0.2555	
13 Nitrobenzene	1	9.671	9.683	-0.012	47758	0.2500	0.2433	
14 3,5-Dinitroaniline	1	9.917	9.923	-0.006	55797	0.2500	0.2535	
15 Tetryl	1	9.997	10.003	-0.006	44201	0.2500	0.2434	
16 Nitroglycerin	2	10.464	10.470	-0.006	169458	2.50	2.55	
17 2,4,6-Trinitrotoluene	1	10.897	10.903	-0.006	54009	0.2500	0.2510	
18 4-Amino-2,6-dinitrotoluene	1	11.084	11.083	0.001	37978	0.2500	0.2533	
19 2-Amino-4,6-dinitrotoluene	1	11.337	11.336	0.001	49636	0.2500	0.2484	
20 2,6-Dinitrotoluene	1	11.477	11.483	-0.006	37564	0.2500	0.2557	
21 2,4-Dinitrotoluene	1	11.651	11.656	-0.005	74394	0.2500	0.2549	
22 o-Nitrotoluene	1	12.437	12.436	0.001	30738	0.2500	0.2377	
23 p-Nitrotoluene	1	12.857	12.856	0.001	24318	0.2500	0.2156	M
24 m-Nitrotoluene	1	13.411	13.403	0.008	33498	0.2500	0.2325	M
25 PETN	2	14.477	14.463	0.014	182914	2.50	2.54	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00080 Amount Added: 25.00 Units: uL

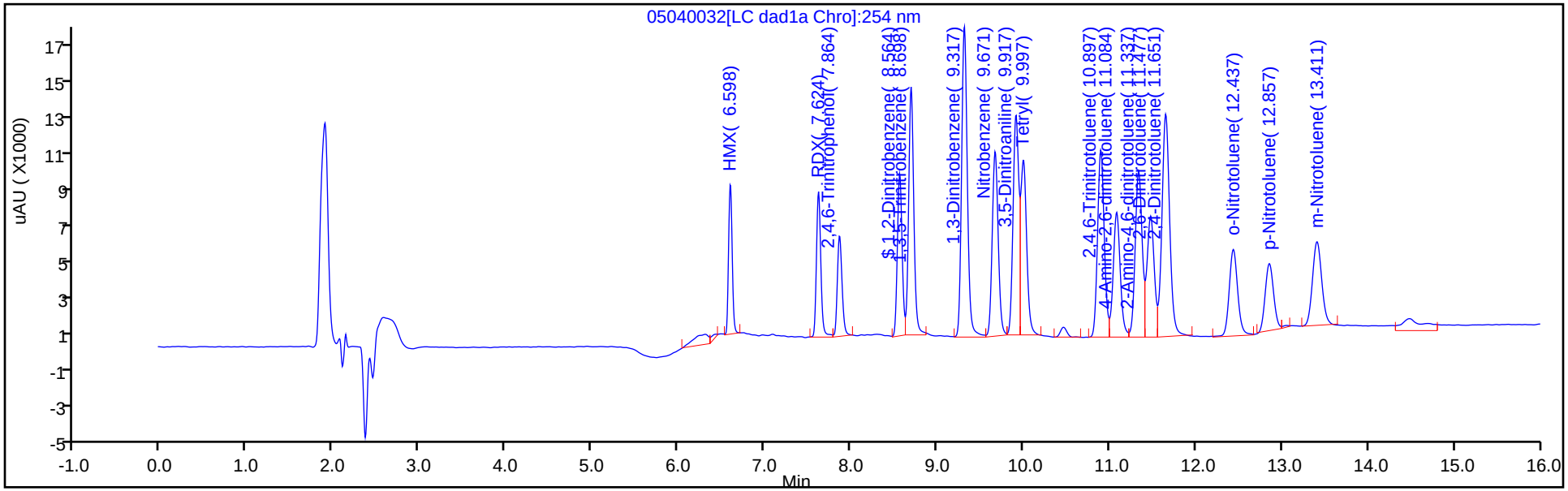
Report Date: 07-May-2024 15:03:13 Chrom Revision: 2.3 26-Apr-2024 12:18:52

Eurofins Denver

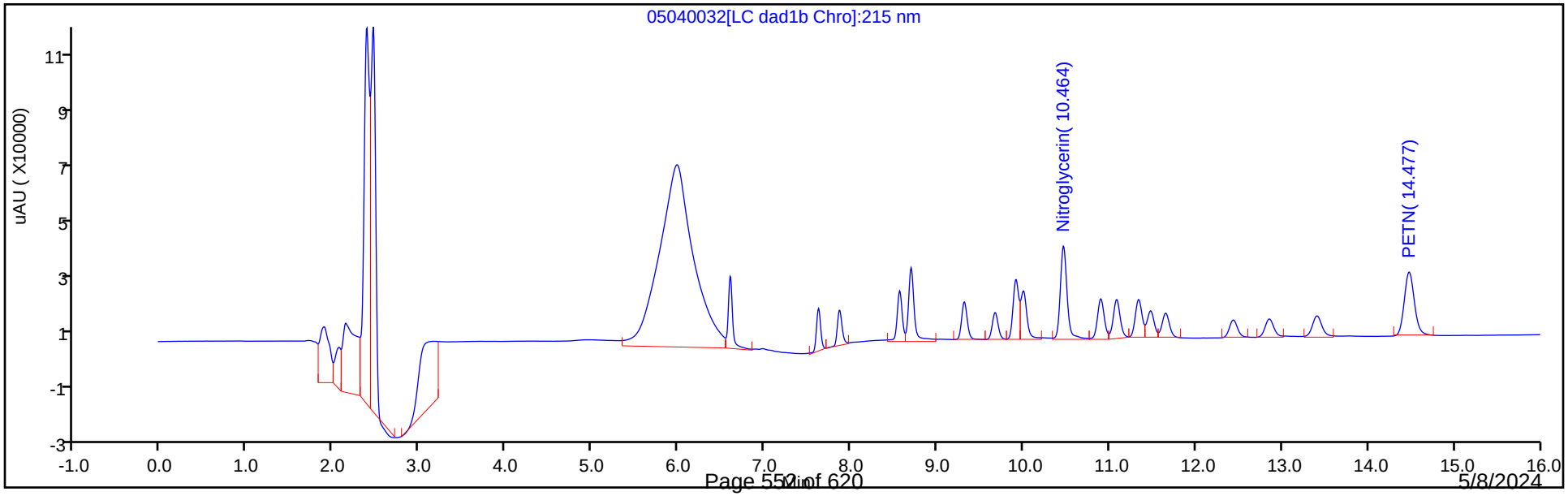
Data File: \\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040032.d

Injection Date:	05-May-2024 02:10:26	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
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



Manual Integration/User Assign Peak Report

Eurofins Denver

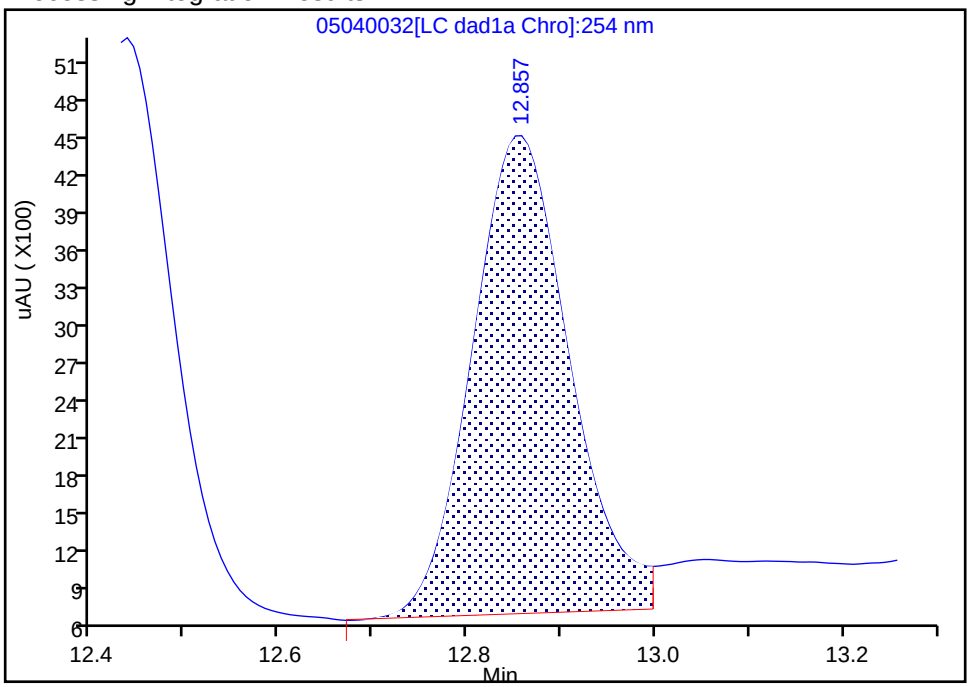
Data File: \\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040032.d
Injection Date: 05-May-2024 02:10:26 Instrument ID: CHHPLC_X3
Lims ID: CCV INT
Client ID:
Operator ID: JZ/JG ALS Bottle#: 7 Worklist Smp#: 32
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

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

Signal: 1

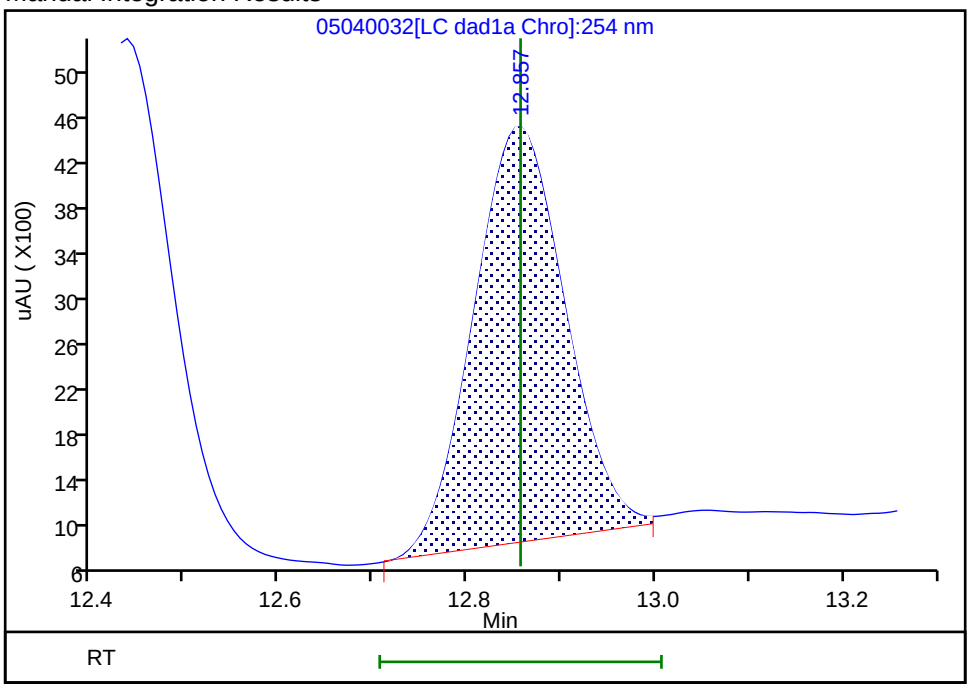
Processing Integration Results

RT: 12.86
Area: 26668
Amount: 0.236420
Amount Units: ug/mL



Manual Integration Results

RT: 12.86
Area: 24318
Amount: 0.215587
Amount Units: ug/mL



Reviewer: LV5D, 07-May-2024 13:52:24 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

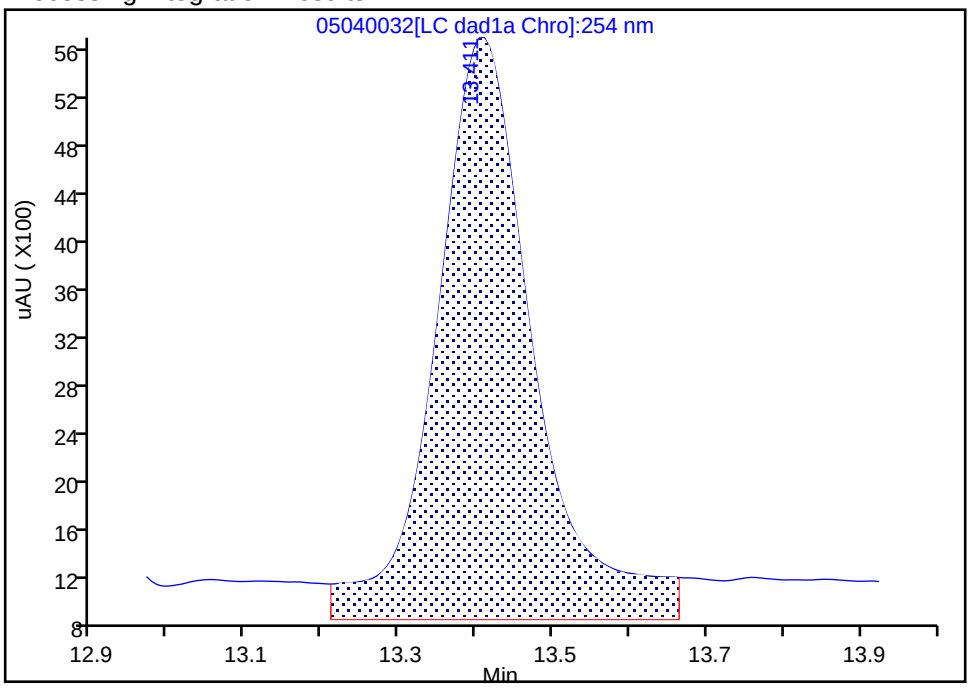
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040032.d				
Injection Date:	05-May-2024 02:10:26	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

24 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

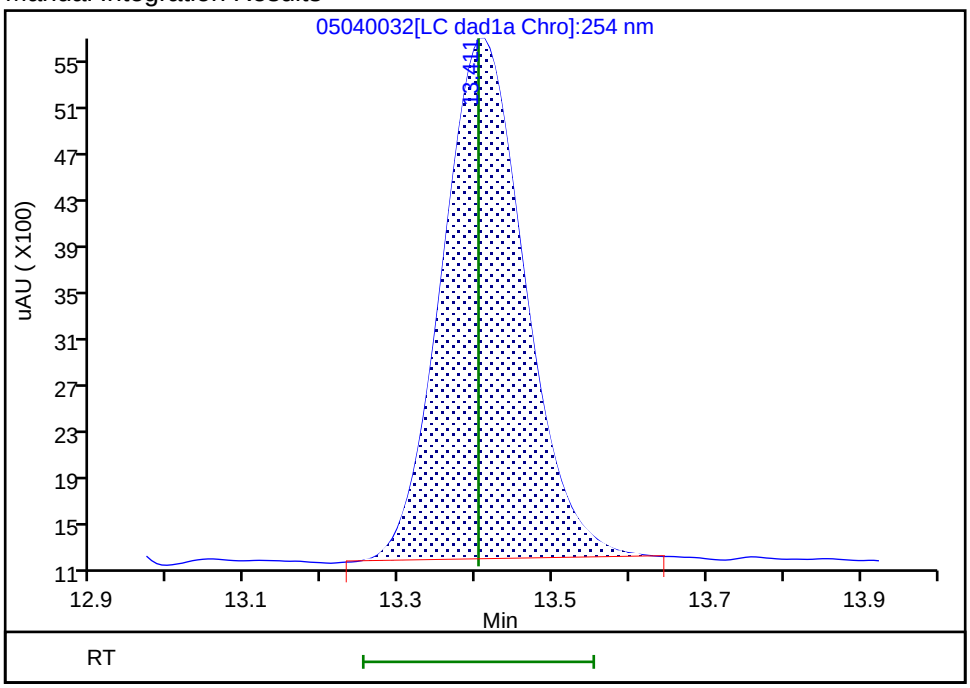
Processing Integration Results

RT: 13.41
Area: 42521
Amount: 0.295155
Amount Units: ug/mL



Manual Integration Results

RT: 13.41
Area: 33498
Amount: 0.232523
Amount Units: ug/mL



Reviewer: LV5D, 07-May-2024 13:52:12 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-190799-1

SDG No.:

Lab Sample ID: CCV 280-652145/35 Calibration Date: 05/05/2024 03:19

Instrument ID: CHHPLC_X3 Calib Start Date: 04/17/2024 20:37

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 04/17/2024 23:41

Lab File ID: 05040035.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	95544	95320		249	250	-0.2	20.0
RDX	Ave	110767	108152		244	250	-2.4	20.0
Picric acid	Ave	79326	80544		254	250	1.5	20.0
1,3,5-Trinitrobenzene	Ave	222853	220052		247	250	-1.3	20.0
1,3-Dinitrobenzene	Ave	299436	303956		254	250	1.5	20.0
Nitrobenzene	Ave	196329	189736		242	250	-3.4	20.0
3,5-Dinitroaniline	Lin2		222876		253	250	1.3	20.0
Tetryl	Ave	181588	176540		243	250	-2.8	20.0
Nitroglycerin	Ave	66464	67575		2540	2500	1.7	20.0
2,4,6-Trinitrotoluene	Ave	215192	215504		250	250	0.1	20.0
4-Amino-2,6-dinitrotoluene	Ave	149948	151920		253	250	1.3	20.0
2-Amino-4,6-dinitrotoluene	Ave	199809	197644		247	250	-1.1	20.0
2,6-Dinitrotoluene	Ave	146914	151144		257	250	2.9	20.0
2,4-Dinitrotoluene	Ave	291844	299948		257	250	2.8	20.0
2-Nitrotoluene	Ave	129305	125860		243	250	-2.7	20.0
4-Nitrotoluene	Ave	112799	109256		242	250	-3.1	20.0
3-Nitrotoluene	Ave	144063	138728		241	250	-3.7	20.0
PETN	Ave	71937	72206		2510	2500	0.4	20.0
1,2-Dinitrobenzene	Lin2		133072		252	250	0.8	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-190799-1

SDG No.:

Lab Sample ID: CCV 280-652145/35 Calibration Date: 05/05/2024 03:19

Instrument ID: CHHPLC_X3 Calib Start Date: 04/17/2024 20:37

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 04/17/2024 23:41

Lab File ID: 05040035.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.60	6.46	6.76
RDX	7.63	7.48	7.78
Picric acid	7.87	7.73	8.03
1,3,5-Trinitrobenzene	8.70	8.56	8.86
1,3-Dinitrobenzene	9.32	9.17	9.47
Nitrobenzene	9.67	9.53	9.83
3,5-Dinitroaniline	9.92	9.77	10.07
Tetryl	10.00	9.85	10.15
Nitroglycerin	10.47	10.32	10.62
2,4,6-Trinitrotoluene	10.90	10.80	11.00
4-Amino-2,6-dinitrotoluene	11.09	10.98	11.18
2-Amino-4,6-dinitrotoluene	11.34	11.24	11.44
2,6-Dinitrotoluene	11.48	11.38	11.58
2,4-Dinitrotoluene	11.65	11.56	11.76
2-Nitrotoluene	12.44	12.29	12.59
4-Nitrotoluene	12.86	12.71	13.01
3-Nitrotoluene	13.41	13.25	13.55
PETN	14.48	14.31	14.61
1,2-Dinitrobenzene	8.57	8.43	8.73

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\05040035.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 05-May-2024 03:19:22 ALS Bottle#: 7 Worklist Smp#: 35
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub26

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 07-May-2024 15:03:15 Calib Date: 18-Apr-2024 03:08:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\04170028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1679

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.598	6.610	-0.012	23830	0.2500	0.2494	
8 RDX	1	7.625	7.630	-0.005	27038	0.2500	0.2441	
9 2,4,6-Trinitrophenol	1	7.865	7.876	-0.011	20136	0.2500	0.2538	
$ 10 1,2-Dinitrobenzene	1	8.565	8.576	-0.011	33268	0.2500	0.2520	
11 1,3,5-Trinitrobenzene	1	8.698	8.710	-0.012	55013	0.2500	0.2469	
12 1,3-Dinitrobenzene	1	9.318	9.323	-0.005	75989	0.2500	0.2538	
13 Nitrobenzene	1	9.672	9.683	-0.011	47434	0.2500	0.2416	
14 3,5-Dinitroaniline	1	9.918	9.923	-0.005	55719	0.2500	0.2532	
15 Tetryl	1	9.998	10.003	-0.005	44135	0.2500	0.2430	
16 Nitroglycerin	2	10.465	10.470	-0.005	168937	2.50	2.54	
17 2,4,6-Trinitrotoluene	1	10.898	10.903	-0.005	53876	0.2500	0.2504	
18 4-Amino-2,6-dinitrotoluene	1	11.085	11.083	0.002	37980	0.2500	0.2533	
19 2-Amino-4,6-dinitrotoluene	1	11.338	11.336	0.002	49411	0.2500	0.2473	
20 2,6-Dinitrotoluene	1	11.478	11.483	-0.005	37786	0.2500	0.2572	
21 2,4-Dinitrotoluene	1	11.652	11.656	-0.004	74987	0.2500	0.2569	
22 o-Nitrotoluene	1	12.438	12.436	0.002	31465	0.2500	0.2433	
23 p-Nitrotoluene	1	12.858	12.856	0.002	27314	0.2500	0.2421	
24 m-Nitrotoluene	1	13.412	13.403	0.009	34682	0.2500	0.2407	
25 PETN	2	14.478	14.463	0.015	180514	2.50	2.51	

Reagents:

8330IntermStk_00080 Amount Added: 25.00 Units: uL

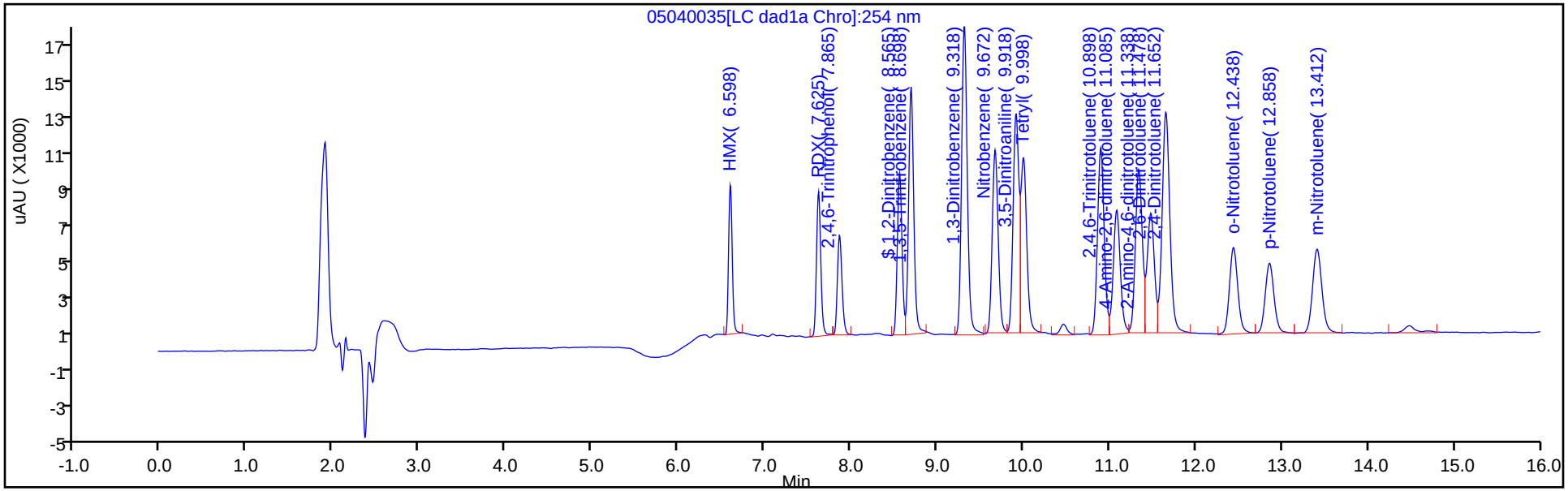
Report Date: 07-May-2024 15:03:15 Chrom Revision: 2.3 26-Apr-2024 12:18:52

Eurofins Denver

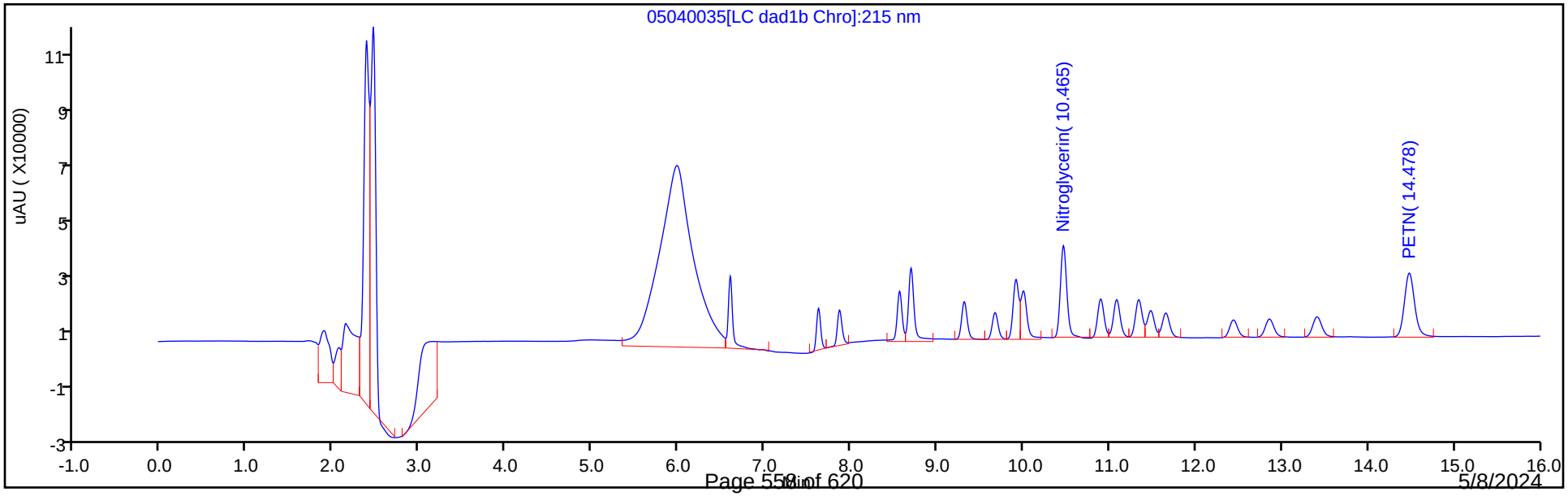
Data File: \\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040035.d

Injection Date:	05-May-2024 03:19:22	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV INT			Worklist Smp#:	35
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



5/8/2024
6:07:23 AM

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-190799-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-651841/1-A

Matrix: Water | Lab File ID: 05040011.D

Analysis Method: 8330B | Date Collected:

Extraction Method: 3535 | Date Extracted: 05/02/2024 12:39

Sample wt/vol: 500(mL) | Date Analyzed: 05/04/2024 18:08

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.: 652145 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.20	U M	0.21	0.20	0.084
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 M	0.21	0.20	0.052
479-45-8	Tetryl	0.10	U	0.11	0.10	0.032

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

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\05040011.D
Lims ID: MB 280-651841/1-A
Client ID:
Sample Type: MB
Inject. Date: 04-May-2024 18:08:21 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-651841/1-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 07-May-2024 15:02:54 Calib Date: 18-Apr-2024 03:08:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\04170028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1679

First Level Reviewer: LV5D Date: 07-May-2024 12:47:47

	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		6.460				ND	7
3	TNX	1		6.505				ND	
4	HMX	1		6.610				ND	
5	2,4-diamino-6-nitrotoluene	1		6.633				ND	
6	DNX	1		6.825				ND	U
7	MNX	1		7.258				ND	U
8	RDX	1		7.630				ND	U
9	2,4,6-Trinitrophenol	1		7.876				ND	
$ 10	1,2-Dinitrobenzene	1	8.573	8.576	-0.003	24446	0.2000	0.1850	M
11	1,3,5-Trinitrobenzene	1		8.710				ND	U
12	1,3-Dinitrobenzene	1		9.323				ND	7
13	Nitrobenzene	1		9.683				ND	
14	3,5-Dinitroaniline	1		9.923				ND	
15	Tetryl	1		10.003				ND	
16	Nitroglycerin	2		10.470				ND	
17	2,4,6-Trinitrotoluene	1		10.903				ND	
18	4-Amino-2,6-dinitrotoluene	1		11.083				ND	
19	2-Amino-4,6-dinitrotoluene	1		11.336				ND	
20	2,6-Dinitrotoluene	1		11.483				ND	
21	2,4-Dinitrotoluene	1		11.656				ND	
22	o-Nitrotoluene	1		12.436				ND	7
23	p-Nitrotoluene	1		12.856				ND	
24	m-Nitrotoluene	1		13.403				ND	
25	PETN	2		14.463				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

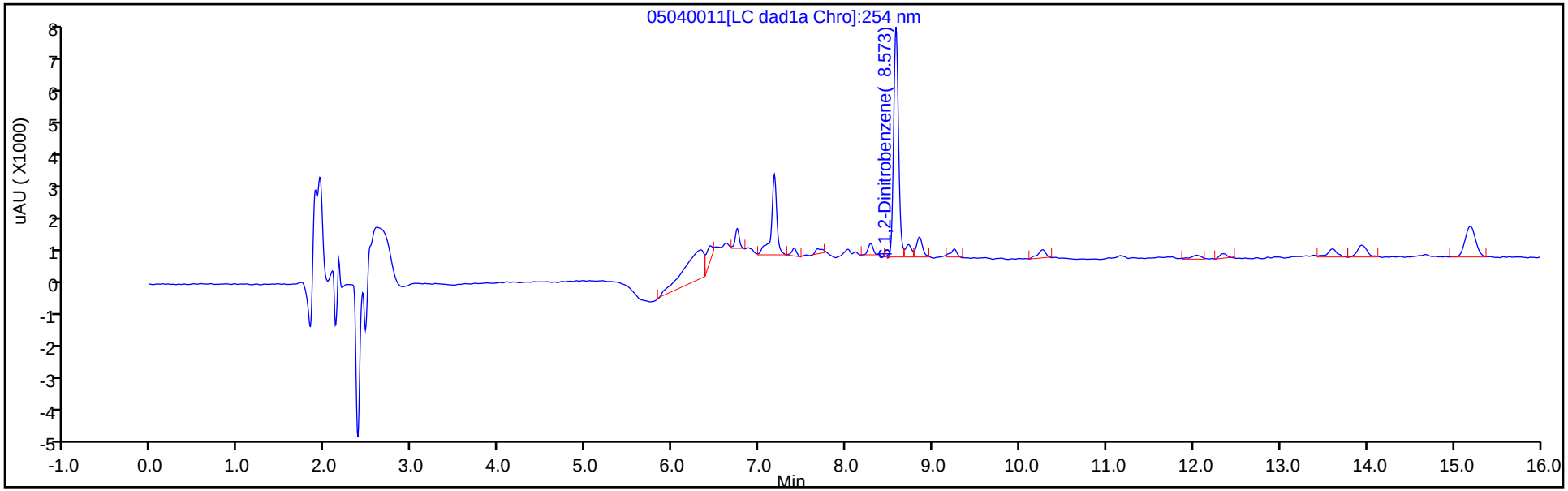
Report Date: 07-May-2024 15:02:55 Chrom Revision: 2.3 26-Apr-2024 12:18:52

Eurofins Denver

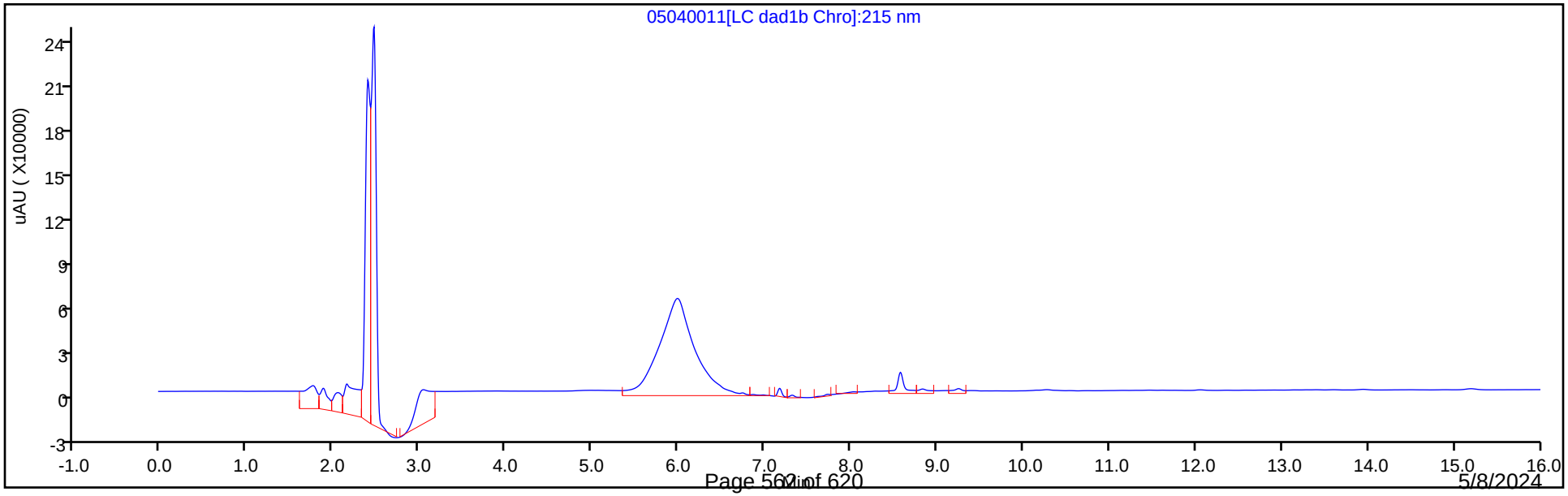
Data File: \\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040011.d

Injection Date:	04-May-2024 18:08:21	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	MB 280-651841/1-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



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\05040011.D				
Lims ID:	MB 280-651841/1-A				
Client ID:					
Sample Type:	MB				
Inject. Date:	04-May-2024 18:08:21	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	MB 280-651841/1-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	07-May-2024 15:02:54	Calib Date:	18-Apr-2024 03:08:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\04170028.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1679				
First Level Reviewer: LV5D		Date:	07-May-2024 12:47:47		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1850	92.50

Manual Integration/User Assign Peak Report

Eurofins Denver

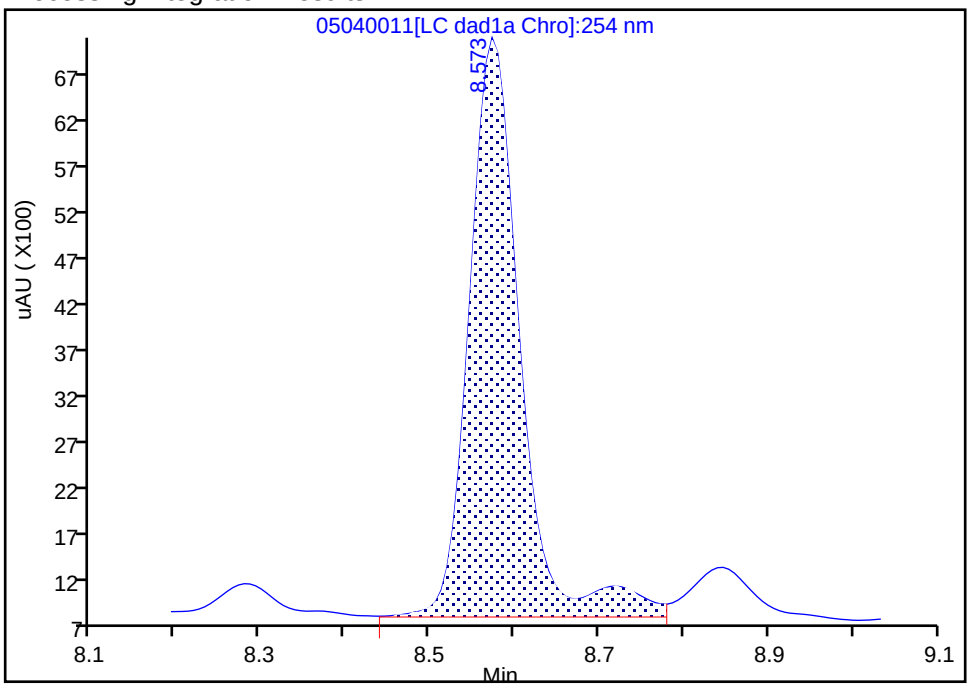
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040011.d				
Injection Date:	04-May-2024 18:08:21	Instrument ID:	CHHPLC_X3		
Lims ID:	MB 280-651841/1-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	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

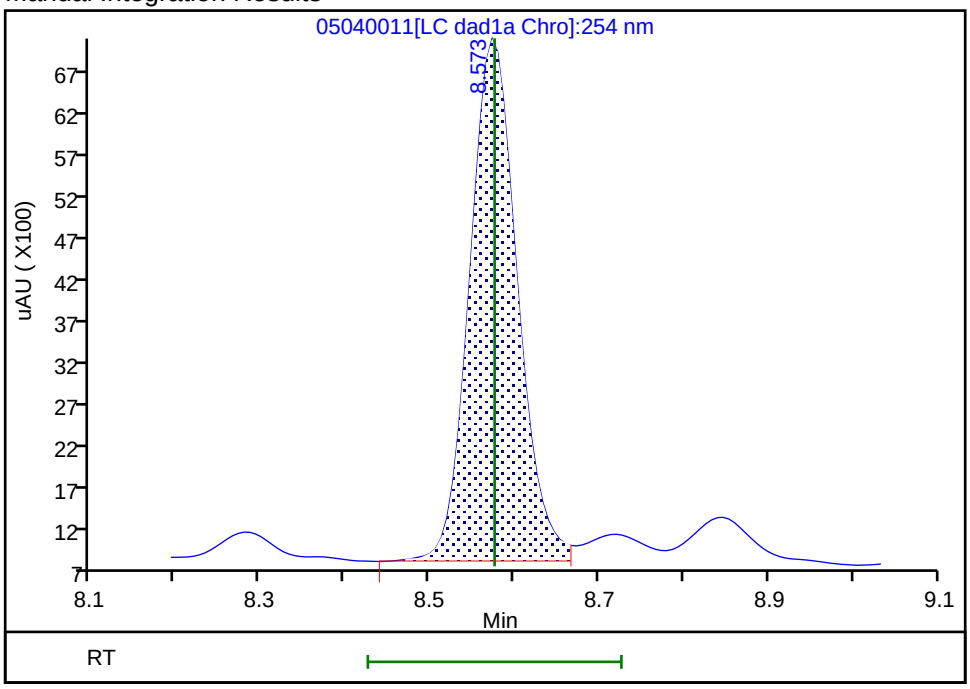
Processing Integration Results

RT: 8.57
Area: 26031
Amount: 0.197045
Amount Units: ug/mL



Manual Integration Results

RT: 8.57
Area: 24446
Amount: 0.185004
Amount Units: ug/mL



Reviewer: LV5D, 07-May-2024 12:47:46 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

User Disabled Compound Report

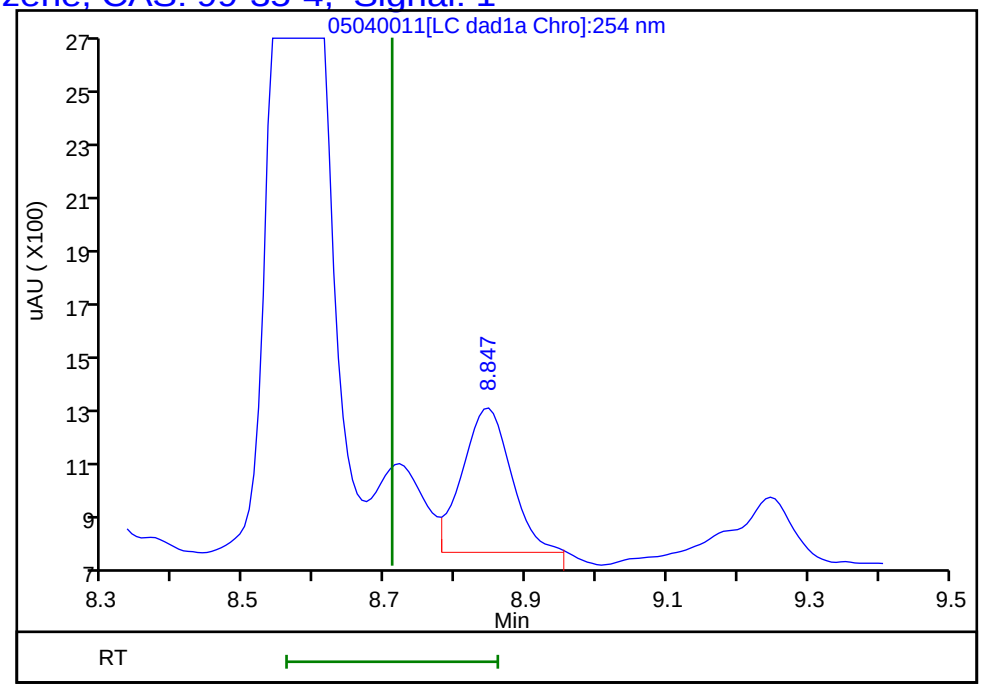
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040011.d
Injection Date: 04-May-2024 18:08:21 Instrument ID: CHHPLC_X3
Lims ID: MB 280-651841/1-A
Client ID:
Operator ID: JZ/JG 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

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

RT: 8.85
Response: 2500
Amount: 0.011218



Reviewer: LV5D, 07-May-2024 12:47:47
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

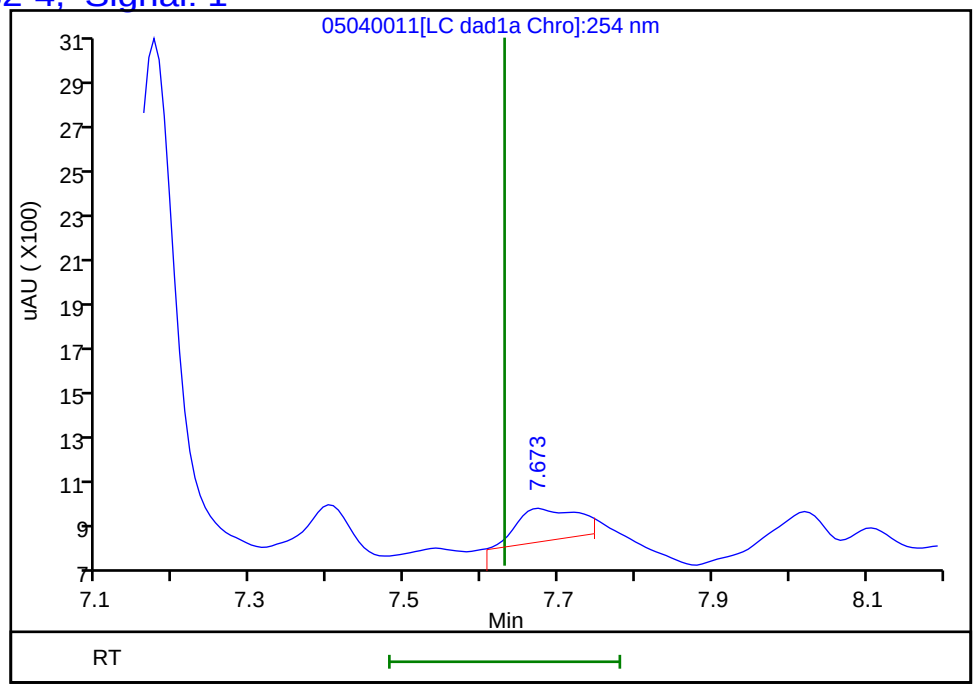
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040011.d
Injection Date: 04-May-2024 18:08:21 Instrument ID: CHHPLC_X3
Lims ID: MB 280-651841/1-A
Client ID:
Operator ID: JZ/JG 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

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

RT: 7.67
Response: 753
Amount: 0.006798



Reviewer: LV5D, 07-May-2024 12:47:47
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-190799-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-651841/2-A

Matrix: Water | Lab File ID: 05040012.D

Analysis Method: 8330B | Date Collected:

Extraction Method: 3535 | Date Extracted: 05/02/2024 12:39

Sample wt/vol: 500(mL) | Date Analyzed: 05/04/2024 18:31

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.: 652145 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.17	M	0.21	0.20	0.084
99-65-0	1,3-Dinitrobenzene	2.10		0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	2.06	M	0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	1.99	M	0.10	0.080	0.027
606-20-2	2,6-Dinitrotoluene	2.00	M	0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	1.98	M	0.11	0.10	0.051
88-72-2	2-Nitrotoluene	1.44	M	0.21	0.20	0.086
99-08-1	3-Nitrotoluene	1.38	M Q	0.40	0.35	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	2.05	M	0.15	0.12	0.058
99-99-0	4-Nitrotoluene	1.46	M	0.41	0.40	0.10
2691-41-0	HMX	1.92		0.21	0.20	0.088
98-95-3	Nitrobenzene	1.61		0.21	0.20	0.091
55-63-0	Nitroglycerin	21.5		2.1	2.0	0.92
78-11-5	PETN	22.8		1.1	1.0	0.45
121-82-4	RDX	2.03		0.21	0.20	0.052
479-45-8	Tetryl	2.08		0.11	0.10	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	96		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\05040012.D
Lims ID: LCS 280-651841/2-A
Client ID:
Sample Type: LCS
Inject. Date: 04-May-2024 18:31:17 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-651841/2-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 07-May-2024 15:02:54 Calib Date: 18-Apr-2024 03:08:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\04170028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1679

First Level Reviewer: LV5D Date: 07-May-2024 12:48:15

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.608	6.610	-0.002	18320	0.2000	0.1917	
8 RDX	1	7.635	7.630	0.005	22490	0.2000	0.2030	
9 2,4,6-Trinitrophenol	1	7.868	7.876	-0.008	16643	0.2000	0.2098	
$ 10 1,2-Dinitrobenzene	1	8.568	8.576	-0.008	25439	0.2000	0.1925	
11 1,3,5-Trinitrobenzene	1	8.708	8.710	-0.002	48390	0.2000	0.2171	M
12 1,3-Dinitrobenzene	1	9.321	9.323	-0.002	62972	0.2000	0.2103	
13 Nitrobenzene	1	9.681	9.683	-0.002	31673	0.2000	0.1613	
14 3,5-Dinitroaniline	1	9.921	9.923	-0.002	41117	0.2000	0.1871	
15 Tetryl	1	10.001	10.003	-0.002	37763	0.2000	0.2080	
16 Nitroglycerin	2	10.468	10.470	-0.002	143160	2.00	2.15	
17 2,4,6-Trinitrotoluene	1	10.894	10.903	-0.009	44308	0.2000	0.2059	M
18 4-Amino-2,6-dinitrotoluene	1	11.074	11.083	-0.009	30683	0.2000	0.2046	M
19 2-Amino-4,6-dinitrotoluene	1	11.334	11.336	-0.002	39509	0.2000	0.1977	M
20 2,6-Dinitrotoluene	1	11.474	11.483	-0.009	29331	0.2000	0.1996	M
21 2,4-Dinitrotoluene	1	11.648	11.656	-0.008	58011	0.2000	0.1988	M
22 o-Nitrotoluene	1	12.434	12.436	-0.002	18641	0.2000	0.1442	M
23 p-Nitrotoluene	1	12.848	12.856	-0.008	16443	0.2000	0.1458	M
24 m-Nitrotoluene	1	13.401	13.403	-0.002	19853	0.2000	0.1378	M
25 PETN	2	14.461	14.463	-0.002	164099	2.00	2.28	
26 Ammonium Picrate	1		0.000			ND	ND	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND
Review Flags
M - Manually Integrated

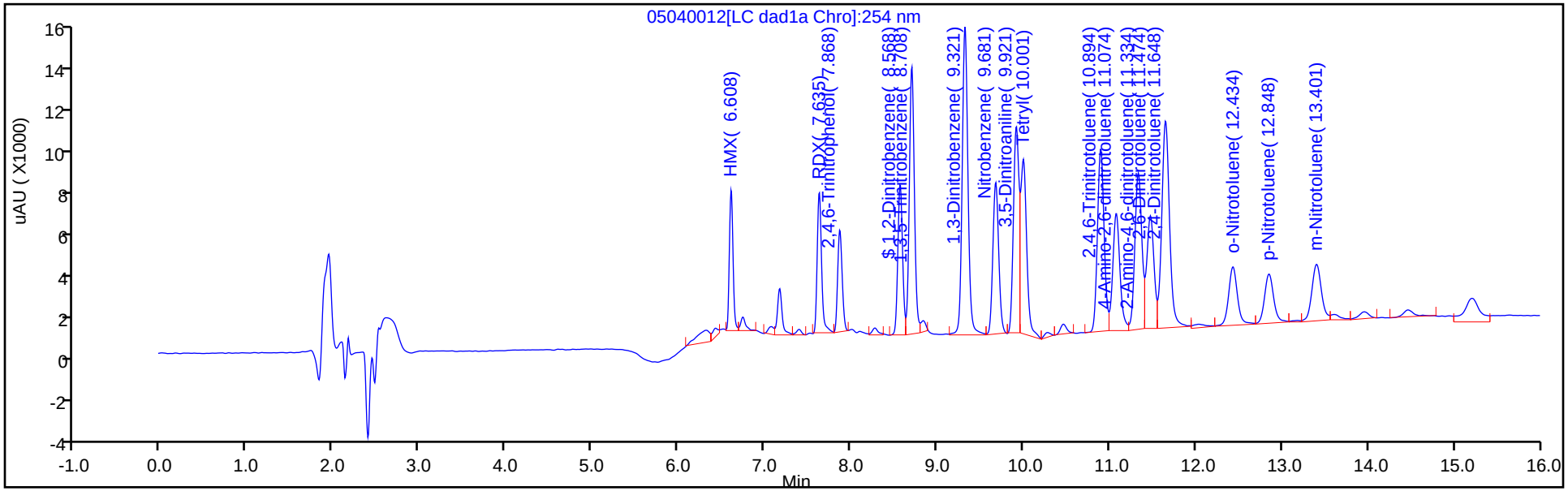
Report Date: 07-May-2024 15:02:56 Chrom Revision: 2.3 26-Apr-2024 12:18:52

Eurofins Denver

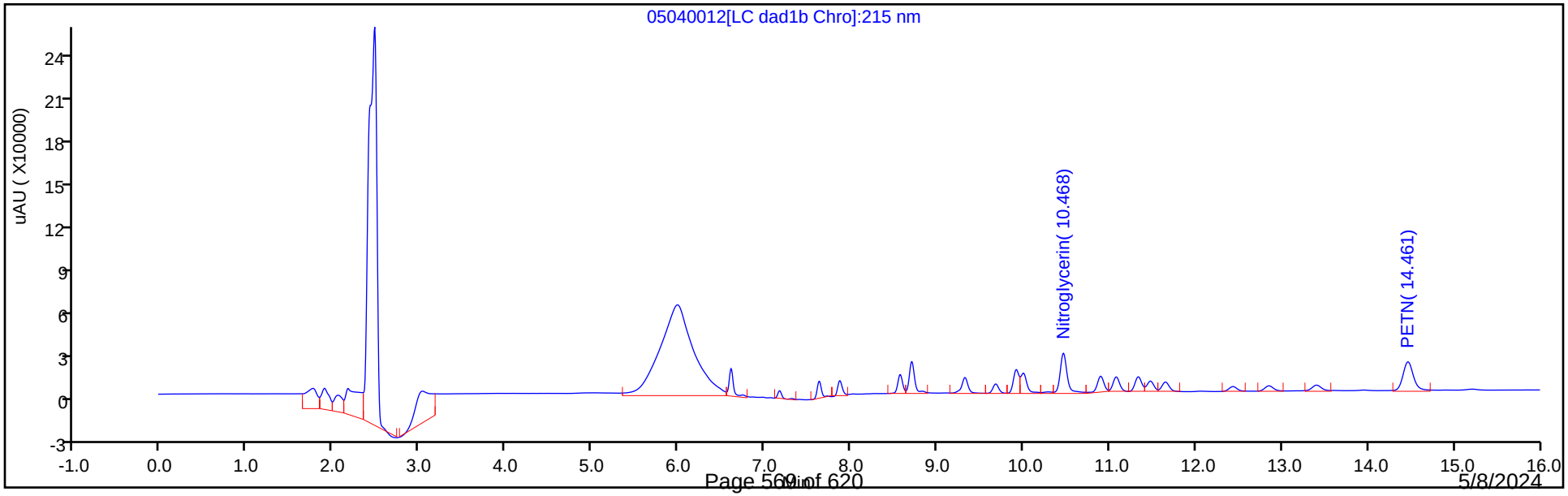
Data File: \\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040012.d

Injection Date:	04-May-2024 18:31:17	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	LCS 280-651841/2-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



5/8/2024
6:07:23 AM

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\05040012.D				
Lims ID:	LCS 280-651841/2-A				
Client ID:					
Sample Type:	LCS				
Inject. Date:	04-May-2024 18:31:17	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCS 280-651841/2-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	07-May-2024 15:02:54	Calib Date:	18-Apr-2024 03:08:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\04170028.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1679				

First Level Reviewer: LV5D Date: 07-May-2024 12:48:15

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1925	96.27

Manual Integration/User Assign Peak Report

Eurofins Denver

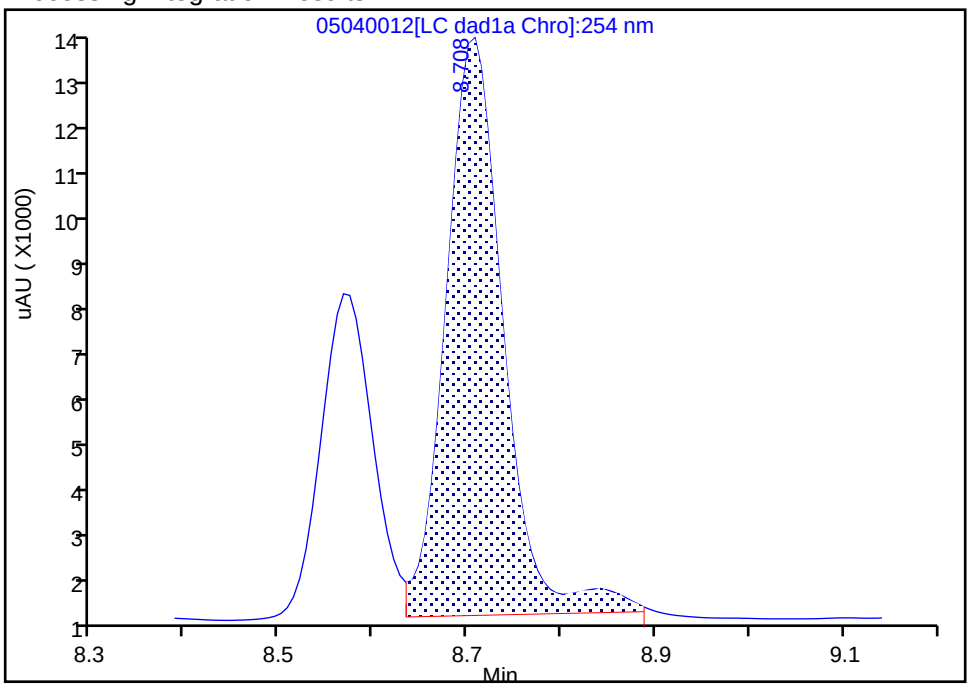
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040012.d				
Injection Date:	04-May-2024 18:31:17	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-651841/2-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

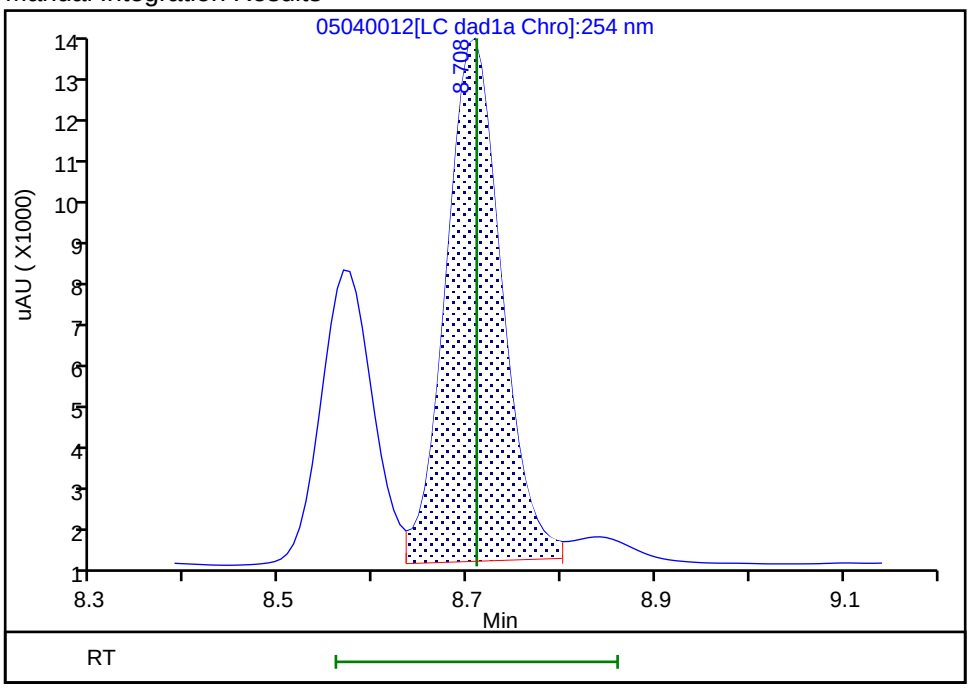
Processing Integration Results

RT: 8.71
Area: 50270
Amount: 0.225574
Amount Units: ug/mL



Manual Integration Results

RT: 8.71
Area: 48390
Amount: 0.217138
Amount Units: ug/mL



Reviewer: LV5D, 07-May-2024 12:47:56 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

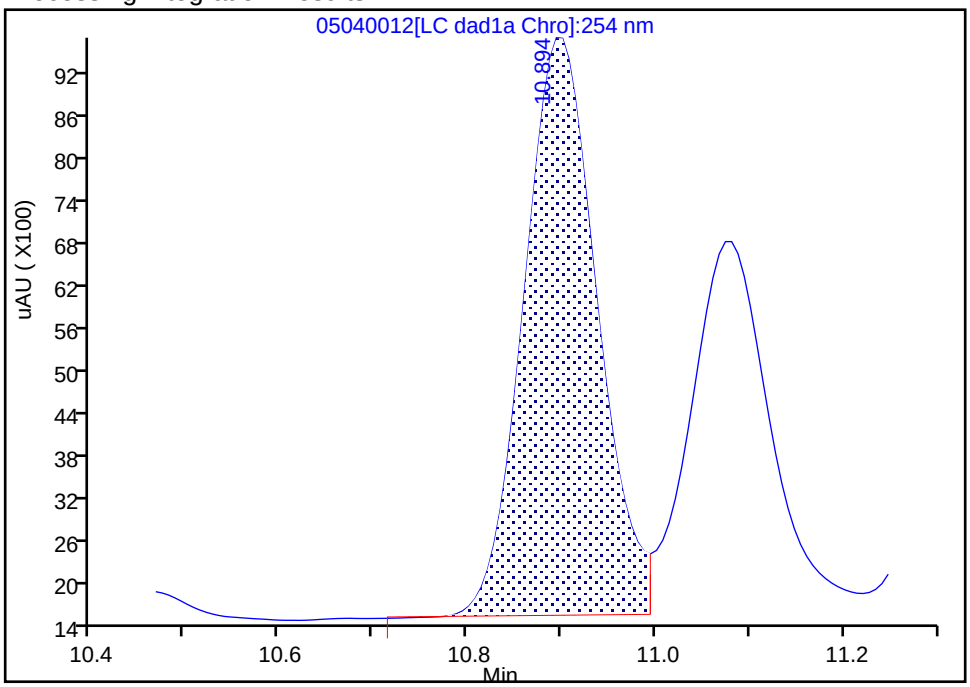
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040012.d				
Injection Date:	04-May-2024 18:31:17	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-651841/2-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

17 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

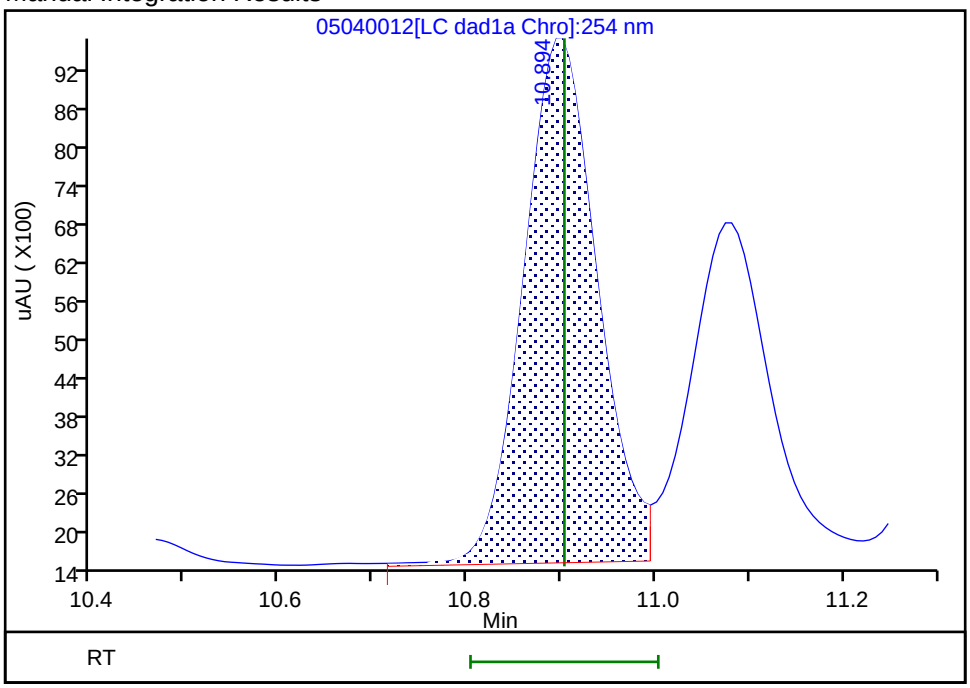
Processing Integration Results

RT: 10.89
Area: 43981
Amount: 0.204380
Amount Units: ug/mL



Manual Integration Results

RT: 10.89
Area: 44308
Amount: 0.205900
Amount Units: ug/mL



Reviewer: LV5D, 07-May-2024 12:48:02 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

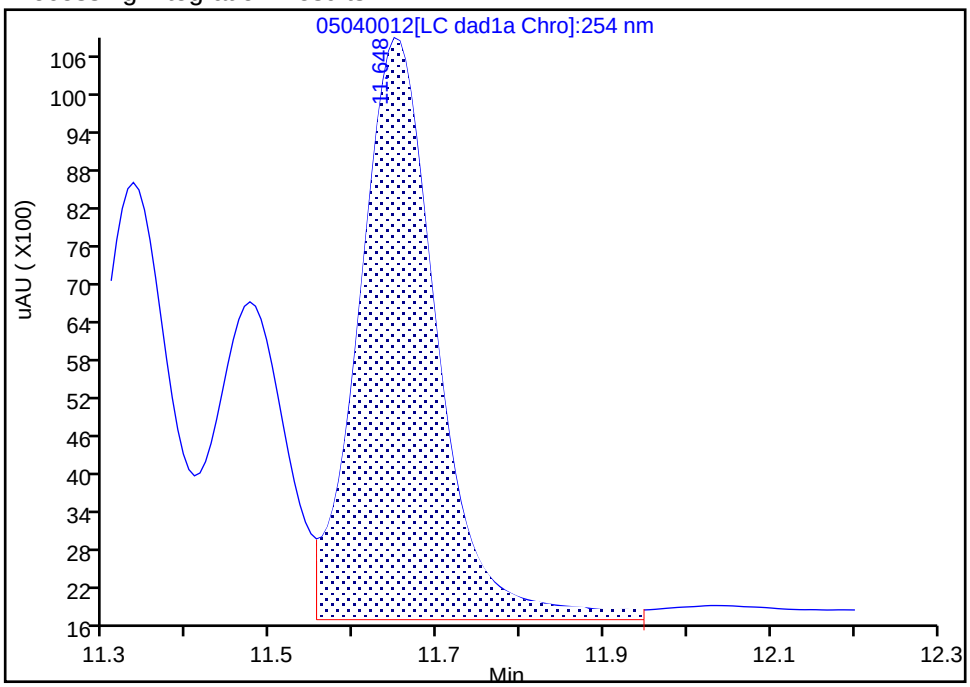
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040012.d				
Injection Date:	04-May-2024 18:31:17	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-651841/2-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

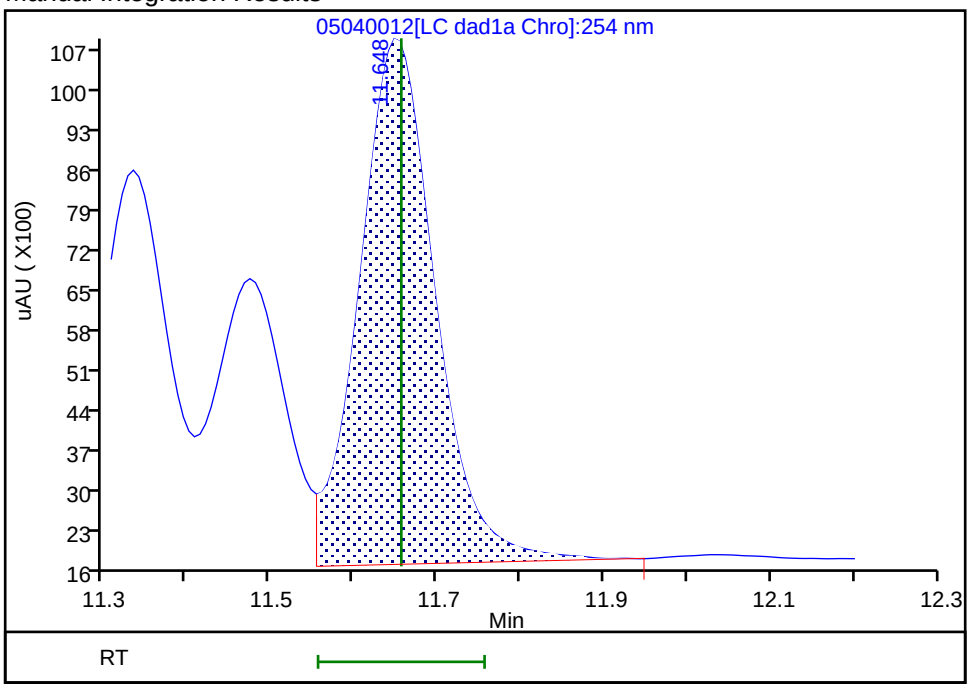
Processing Integration Results

RT: 11.65
Area: 60182
Amount: 0.206213
Amount Units: ug/mL



Manual Integration Results

RT: 11.65
Area: 58011
Amount: 0.198774
Amount Units: ug/mL



Reviewer: LV5D, 07-May-2024 12:48:02 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

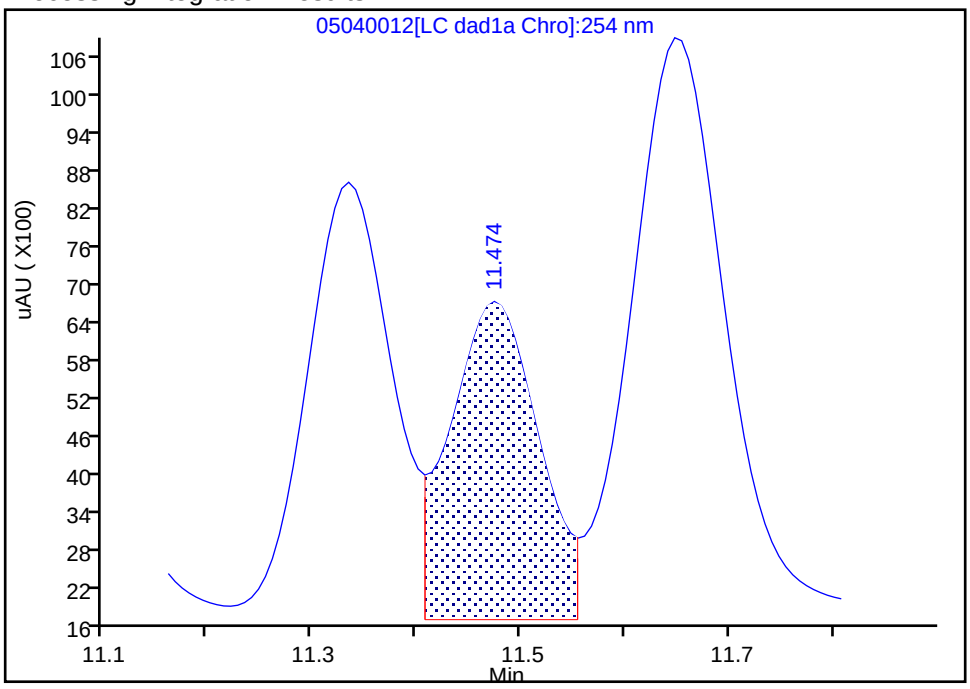
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040012.d				
Injection Date:	04-May-2024 18:31:17	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-651841/2-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

20 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

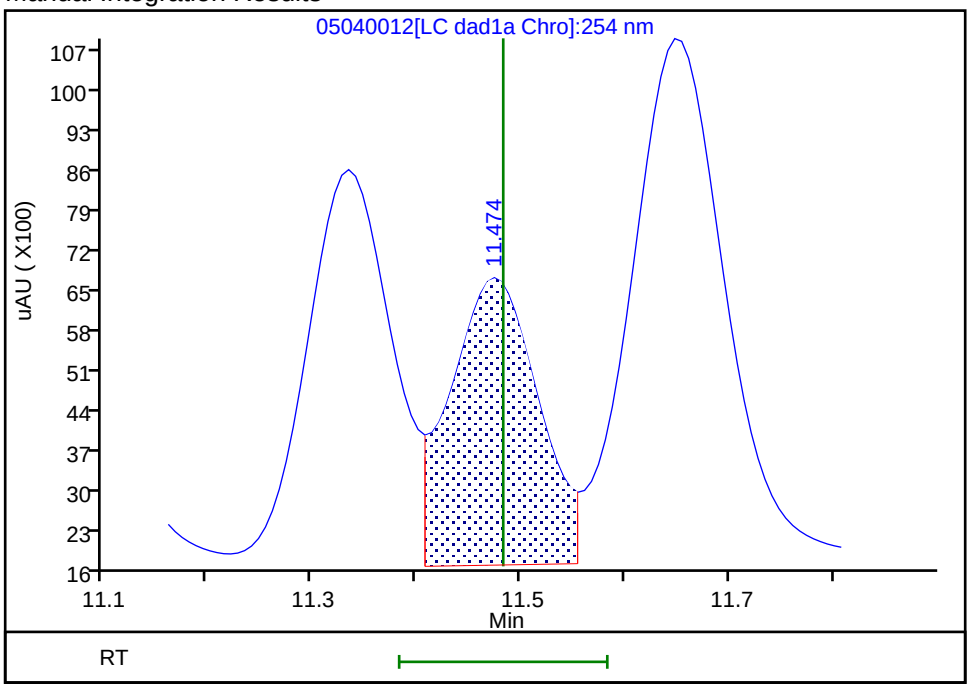
Processing Integration Results

RT: 11.47
Area: 29674
Amount: 0.201982
Amount Units: ug/mL



Manual Integration Results

RT: 11.47
Area: 29331
Amount: 0.199647
Amount Units: ug/mL



Reviewer: LV5D, 07-May-2024 12:48:02 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

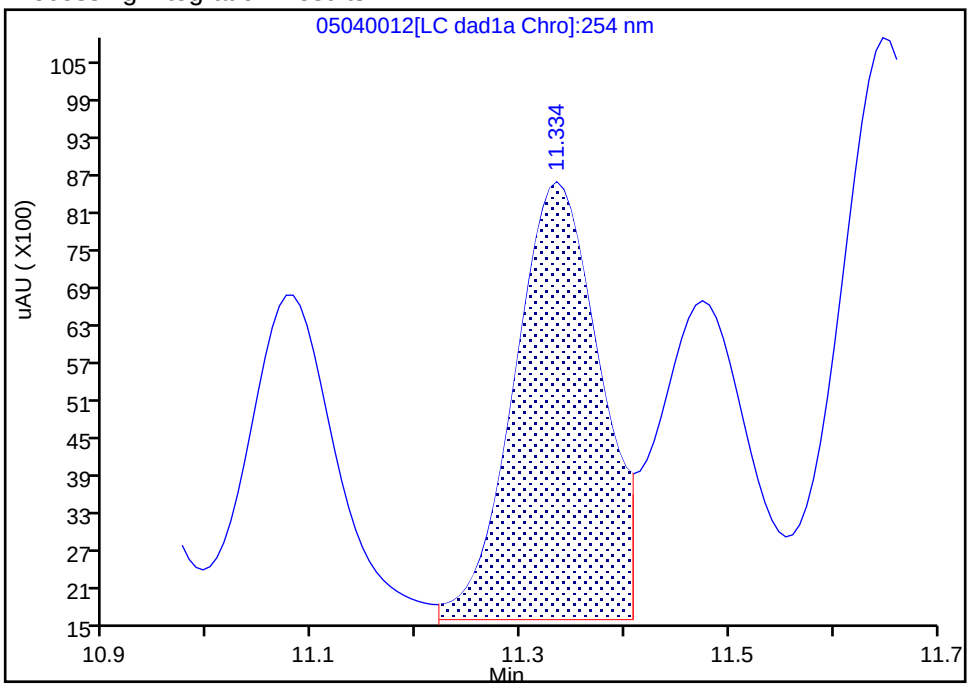
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040012.d				
Injection Date:	04-May-2024 18:31:17	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-651841/2-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

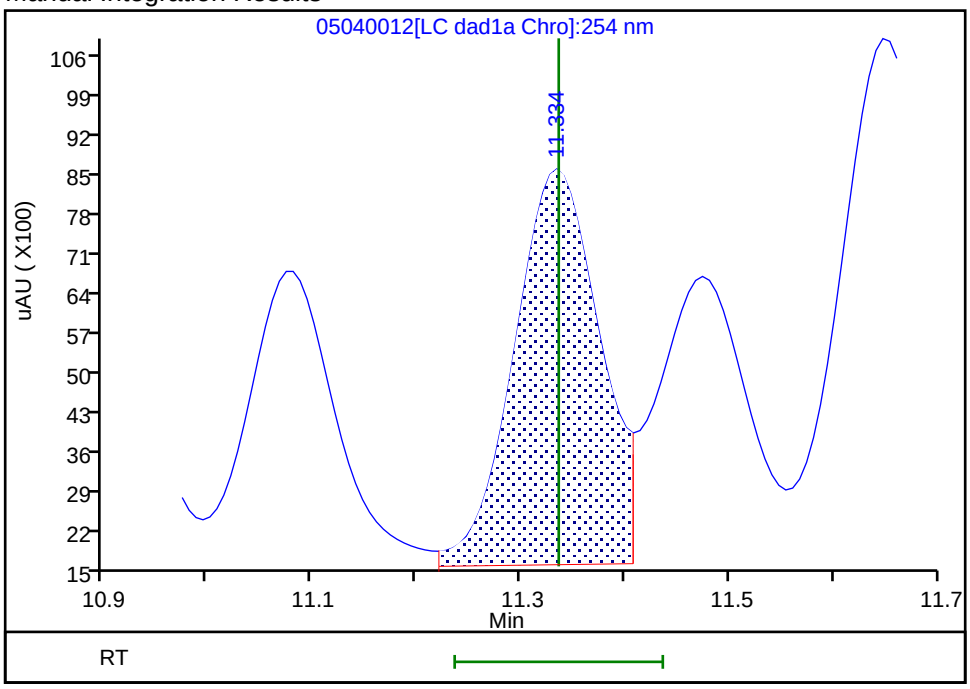
Processing Integration Results

RT: 11.33
Area: 39682
Amount: 0.198600
Amount Units: ug/mL



Manual Integration Results

RT: 11.33
Area: 39509
Amount: 0.197734
Amount Units: ug/mL



Reviewer: LV5D, 07-May-2024 12:48:02 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

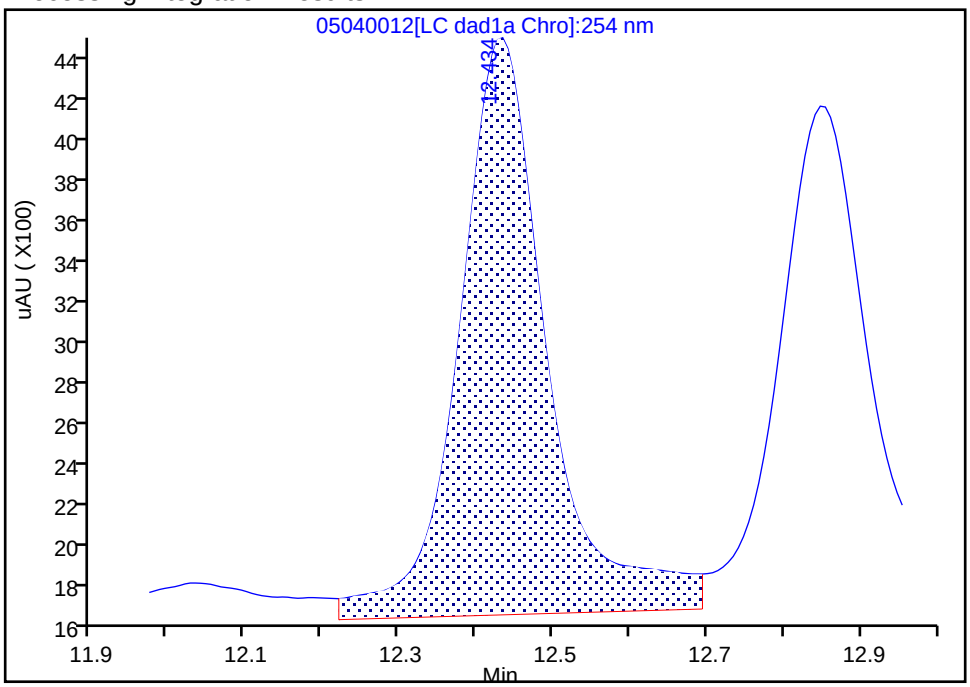
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040012.d				
Injection Date:	04-May-2024 18:31:17	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-651841/2-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

22 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

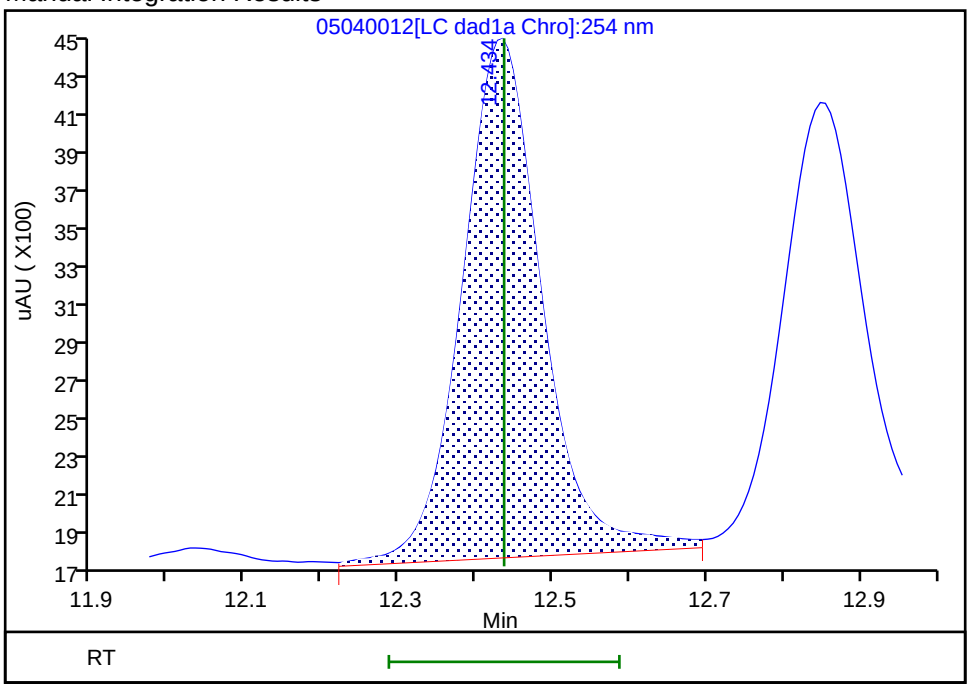
Processing Integration Results

RT: 12.43
Area: 21709
Amount: 0.167890
Amount Units: ug/mL



Manual Integration Results

RT: 12.43
Area: 18641
Amount: 0.144163
Amount Units: ug/mL



Reviewer: LV5D, 07-May-2024 12:48:05 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

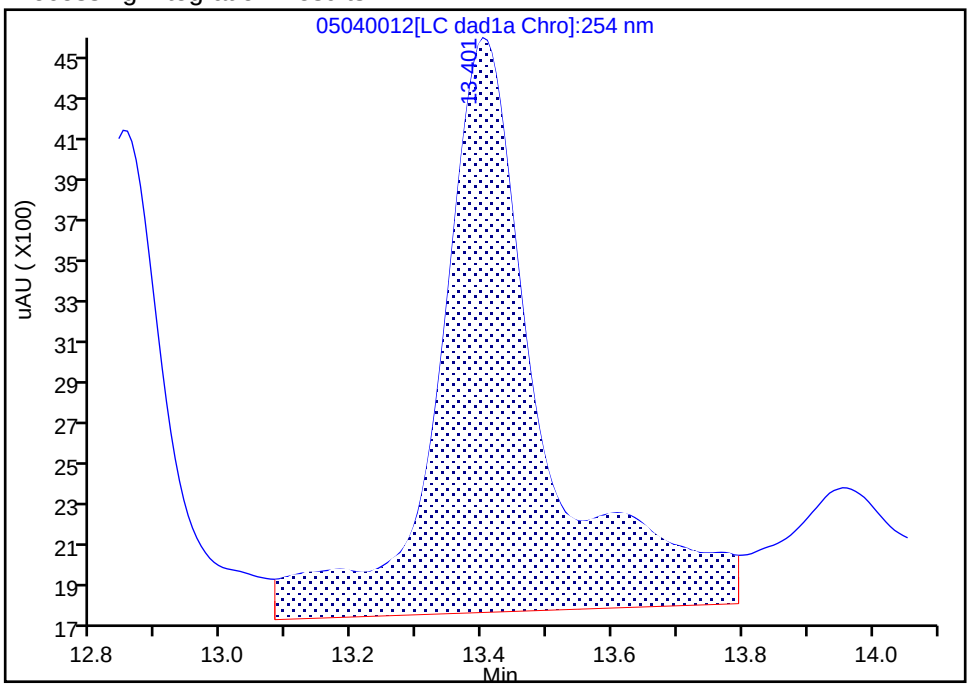
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040012.d				
Injection Date:	04-May-2024 18:31:17	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-651841/2-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

24 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

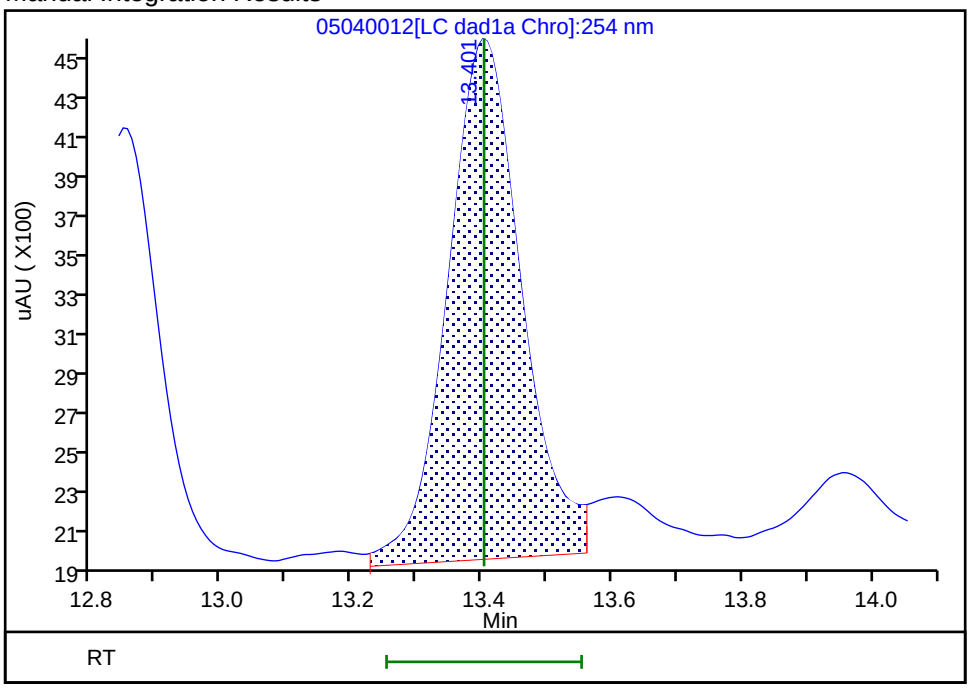
Processing Integration Results

RT: 13.40
Area: 29849
Amount: 0.207194
Amount Units: ug/mL



Manual Integration Results

RT: 13.40
Area: 19853
Amount: 0.137808
Amount Units: ug/mL



Reviewer: LV5D, 07-May-2024 12:48:14 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

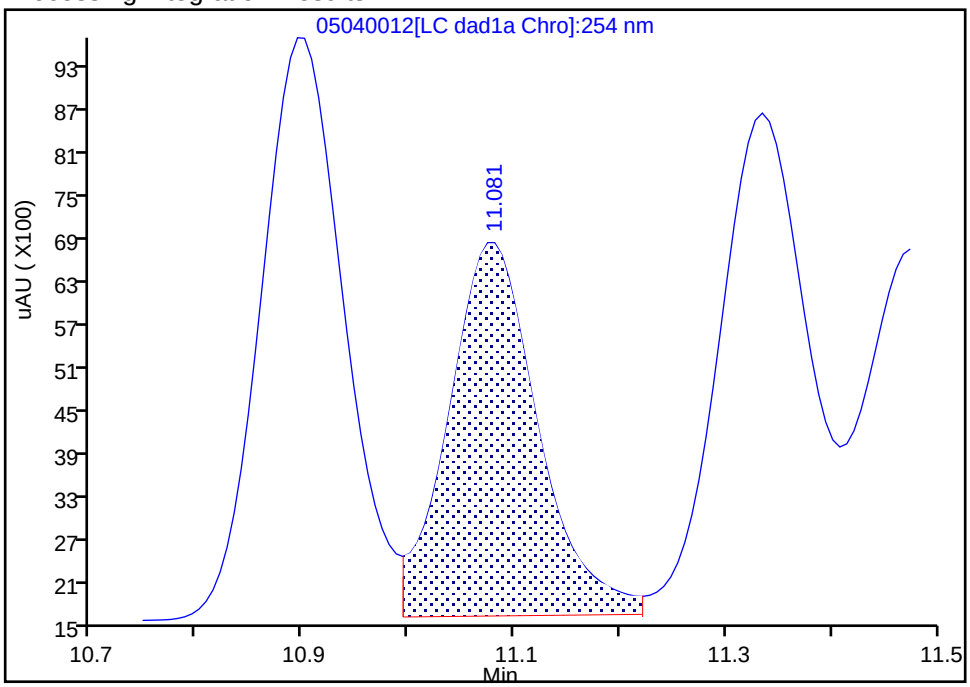
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040012.d				
Injection Date:	04-May-2024 18:31:17	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-651841/2-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

18 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

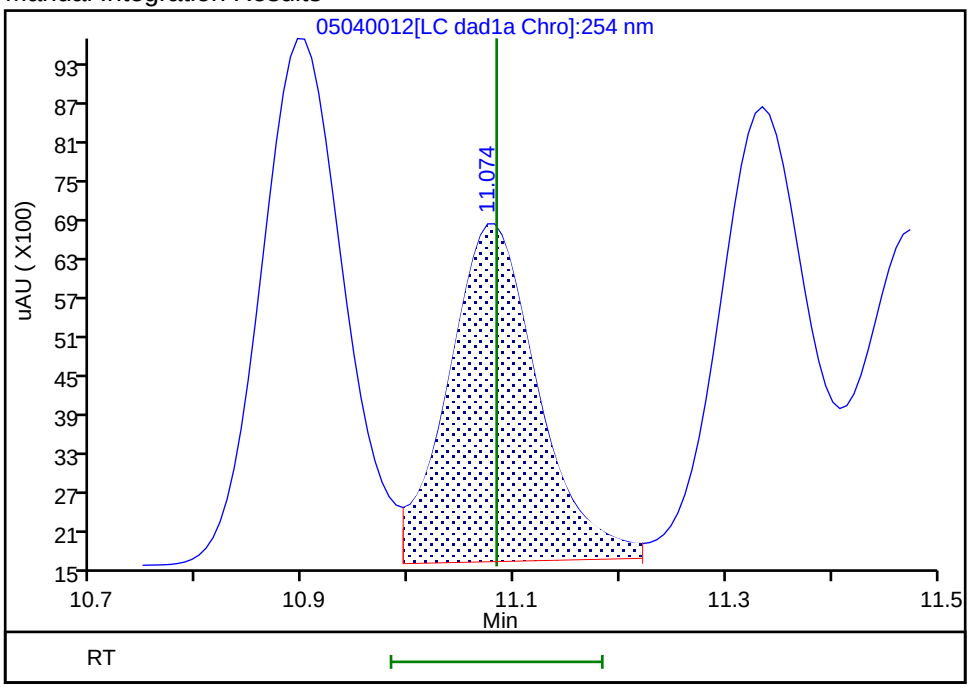
Processing Integration Results

RT: 11.08
Area: 30642
Amount: 0.204351
Amount Units: ug/mL



Manual Integration Results

RT: 11.07
Area: 30683
Amount: 0.204624
Amount Units: ug/mL



Reviewer: LV5D, 07-May-2024 12:48:02 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

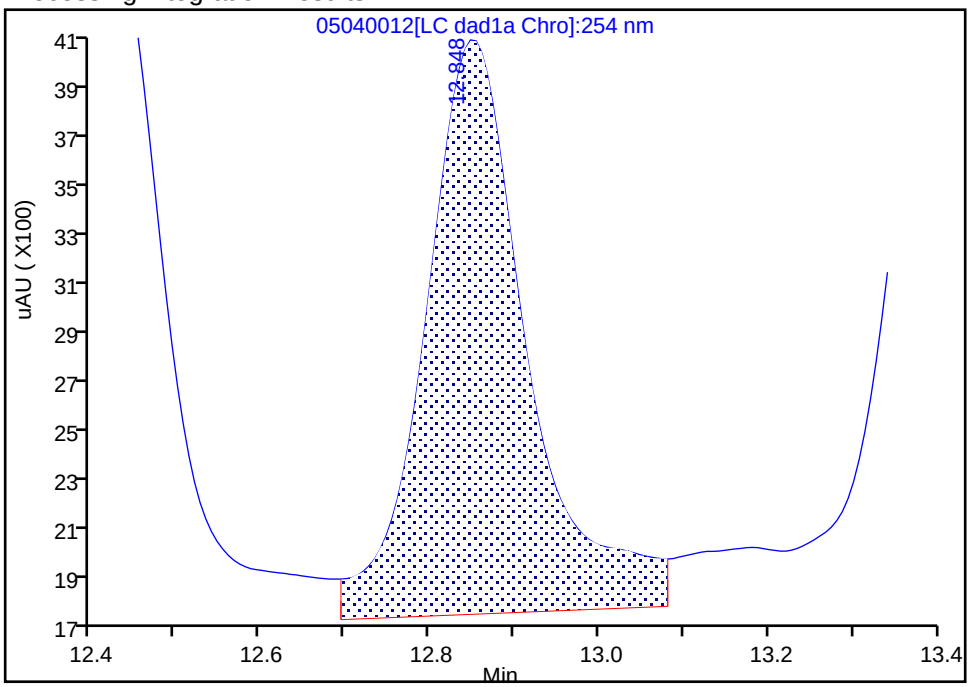
Data File: \\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040012.d
Injection Date: 04-May-2024 18:31:17 Instrument ID: CHHPLC_X3
Lims ID: LCS 280-651841/2-A
Client ID:
Operator ID: JZ/JG ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

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

Signal: 1

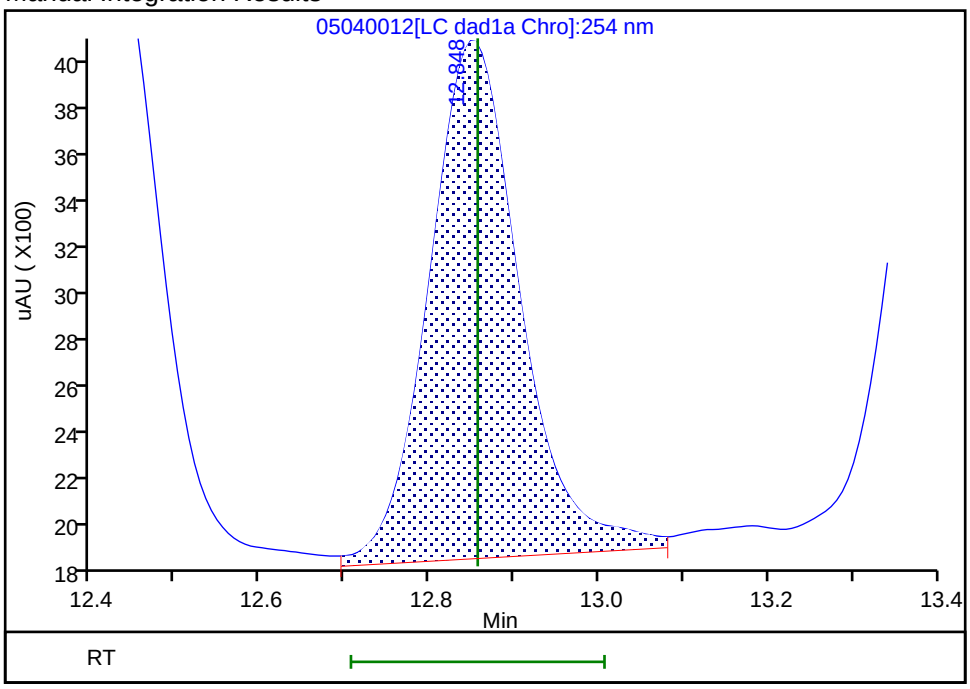
Processing Integration Results

RT: 12.85
Area: 19598
Amount: 0.173743
Amount Units: ug/mL



Manual Integration Results

RT: 12.85
Area: 16443
Amount: 0.145772
Amount Units: ug/mL



Reviewer: LV5D, 07-May-2024 12:48:05 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-190799-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 280-651841/3-A

Matrix: Water | Lab File ID: 05040013.D

Analysis Method: 8330B | Date Collected:

Extraction Method: 3535 | Date Extracted: 05/02/2024 12:39

Sample wt/vol: 500(mL) | Date Analyzed: 05/04/2024 18:54

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.: 652145 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.08	M	0.21	0.20	0.084
99-65-0	1,3-Dinitrobenzene	1.99		0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	1.92		0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	1.89	M	0.10	0.080	0.027
606-20-2	2,6-Dinitrotoluene	1.88		0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	1.90		0.11	0.10	0.051
88-72-2	2-Nitrotoluene	1.43		0.21	0.20	0.086
99-08-1	3-Nitrotoluene	1.35	M Q	0.40	0.35	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.93		0.15	0.12	0.058
99-99-0	4-Nitrotoluene	1.39	Q	0.41	0.40	0.10
2691-41-0	HMX	1.83		0.21	0.20	0.088
98-95-3	Nitrobenzene	1.65		0.21	0.20	0.091
55-63-0	Nitroglycerin	20.5		2.1	2.0	0.92
78-11-5	PETN	21.3		1.1	1.0	0.45
121-82-4	RDX	1.92		0.21	0.20	0.052
479-45-8	Tetryl	1.91		0.11	0.10	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	91		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\05040013.D
Lims ID: LCSD 280-651841/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 04-May-2024 18:54:14 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 280-651841/3-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 07-May-2024 15:02:54 Calib Date: 18-Apr-2024 03:08:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\04170028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1679

First Level Reviewer: LV5D Date: 07-May-2024 12:48:33

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.608	6.610	-0.002	17476	0.2000	0.1829	
8 RDX	1	7.628	7.630	-0.002	21253	0.2000	0.1919	
9 2,4,6-Trinitrophenol	1	7.868	7.876	-0.008	15803	0.2000	0.1992	
$ 10 1,2-Dinitrobenzene	1	8.568	8.576	-0.008	23968	0.2000	0.1814	
11 1,3,5-Trinitrobenzene	1	8.701	8.710	-0.009	46289	0.2000	0.2077	M
12 1,3-Dinitrobenzene	1	9.321	9.323	-0.002	59607	0.2000	0.1991	
13 Nitrobenzene	1	9.674	9.683	-0.009	32347	0.2000	0.1648	
14 3,5-Dinitroaniline	1	9.914	9.923	-0.009	40336	0.2000	0.1836	
15 Tetryl	1	10.001	10.003	-0.002	34753	0.2000	0.1914	
16 Nitroglycerin	2	10.461	10.470	-0.009	135921	2.00	2.05	
17 2,4,6-Trinitrotoluene	1	10.894	10.903	-0.009	41259	0.2000	0.1917	
18 4-Amino-2,6-dinitrotoluene	1	11.074	11.083	-0.009	29013	0.2000	0.1935	
19 2-Amino-4,6-dinitrotoluene	1	11.328	11.336	-0.008	37960	0.2000	0.1900	
20 2,6-Dinitrotoluene	1	11.474	11.483	-0.009	27557	0.2000	0.1876	
21 2,4-Dinitrotoluene	1	11.648	11.656	-0.008	55259	0.2000	0.1893	M
22 o-Nitrotoluene	1	12.428	12.436	-0.008	18480	0.2000	0.1429	
23 p-Nitrotoluene	1	12.848	12.856	-0.008	15641	0.2000	0.1387	
24 m-Nitrotoluene	1	13.394	13.403	-0.009	19486	0.2000	0.1353	M
25 PETN	2	14.454	14.463	-0.009	152993	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

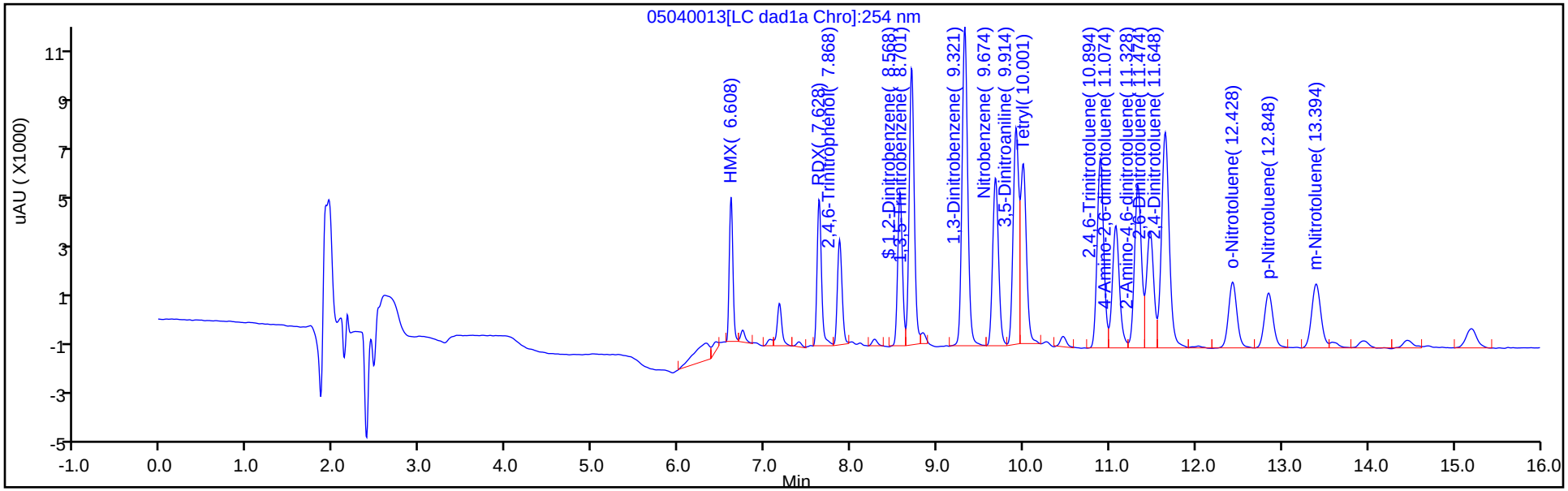
Report Date: 07-May-2024 15:02:57 Chrom Revision: 2.3 26-Apr-2024 12:18:52

Eurofins Denver

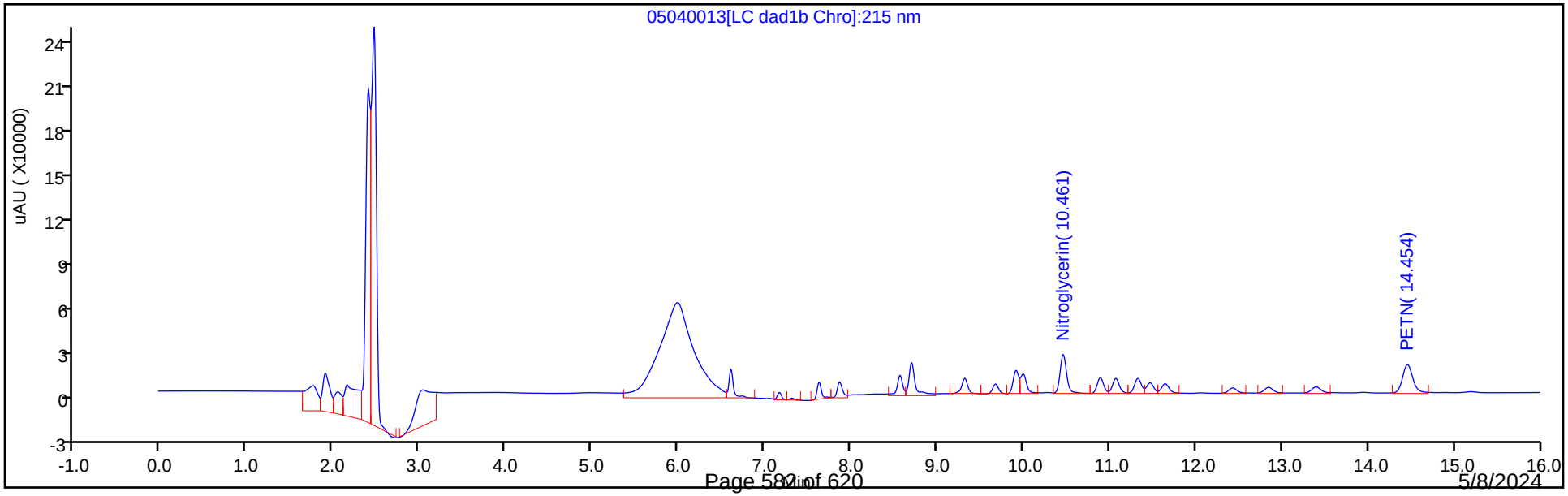
Data File: \\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040013.d

Injection Date:	04-May-2024 18:54:14	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	LCSD 280-651841/3-A			Worklist Smp#:	13
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



5/8/2024
6:07:23 AM

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\05040013.D				
Lims ID:	LCSD 280-651841/3-A				
Client ID:					
Sample Type:	LCSD				
Inject. Date:	04-May-2024 18:54:14	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCSD 280-651841/3-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	07-May-2024 15:02:54	Calib Date:	18-Apr-2024 03:08:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\04170028.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1679				

First Level Reviewer: LV5D Date: 07-May-2024 12:48:33

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1814	90.69

Manual Integration/User Assign Peak Report

Eurofins Denver

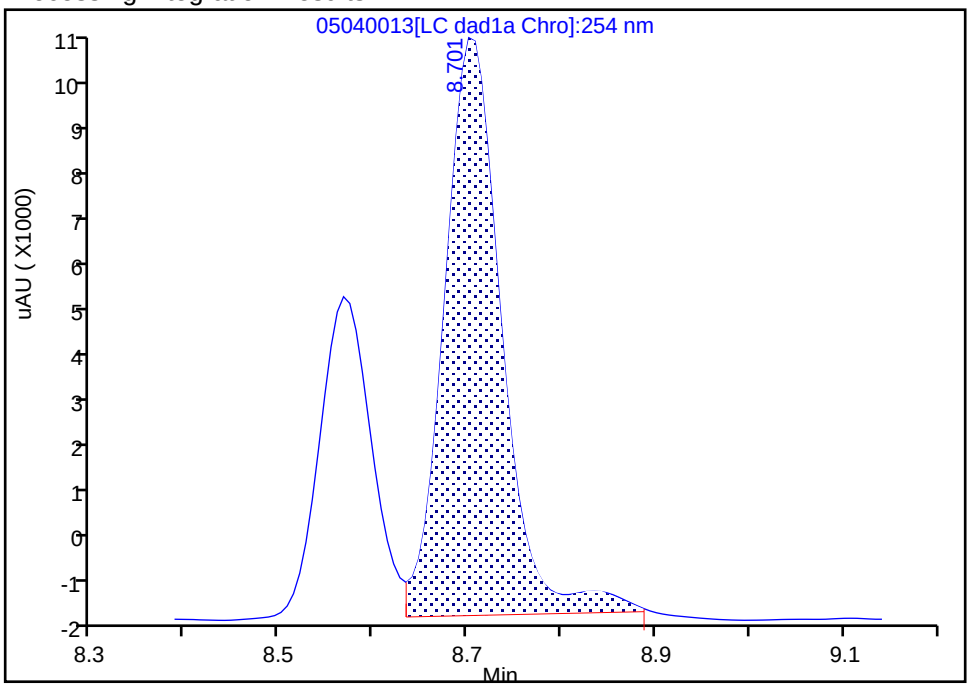
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040013.d				
Injection Date:	04-May-2024 18:54:14	Instrument ID:	CHHPLC_X3		
Lims ID:	LCSD 280-651841/3-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

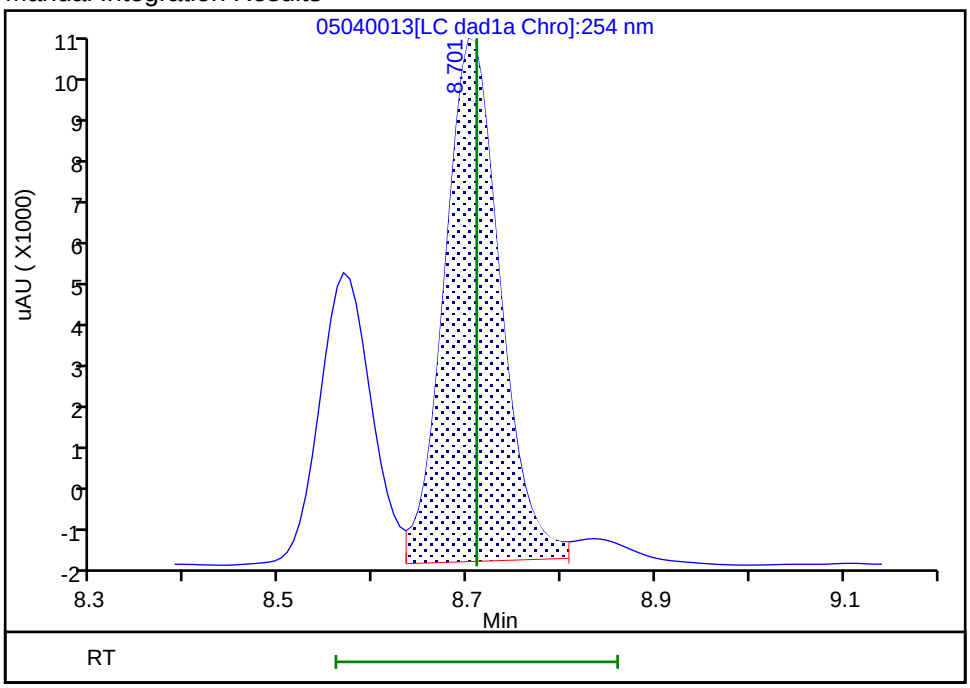
Processing Integration Results

RT: 8.70
Area: 47828
Amount: 0.214617
Amount Units: ug/mL



Manual Integration Results

RT: 8.70
Area: 46289
Amount: 0.207711
Amount Units: ug/mL



Reviewer: LV5D, 07-May-2024 12:48:32 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

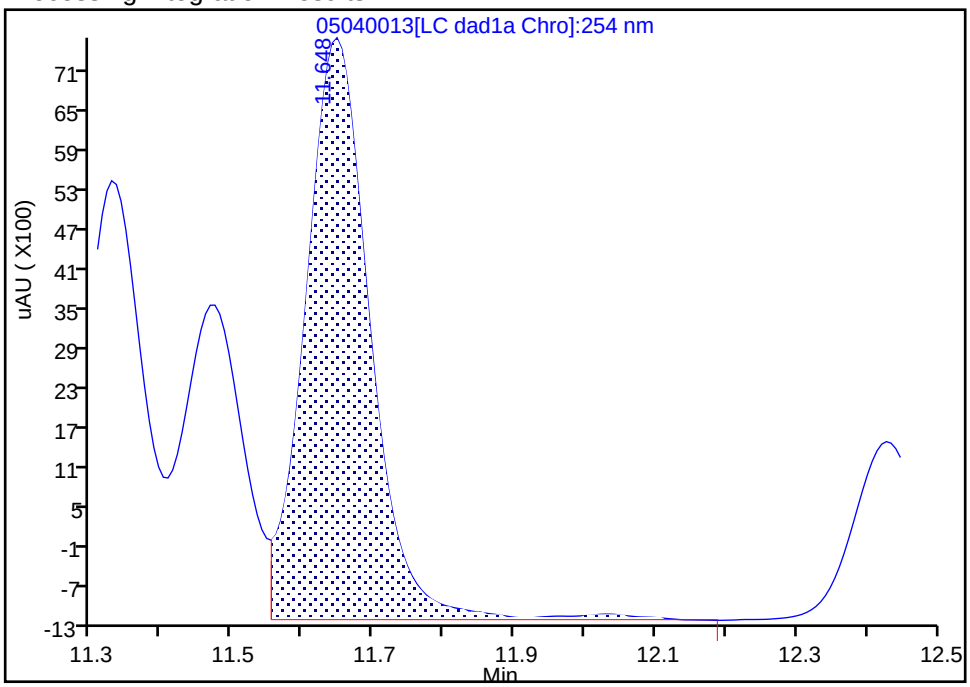
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040013.d				
Injection Date:	04-May-2024 18:54:14	Instrument ID:	CHHPLC_X3		
Lims ID:	LCSD 280-651841/3-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

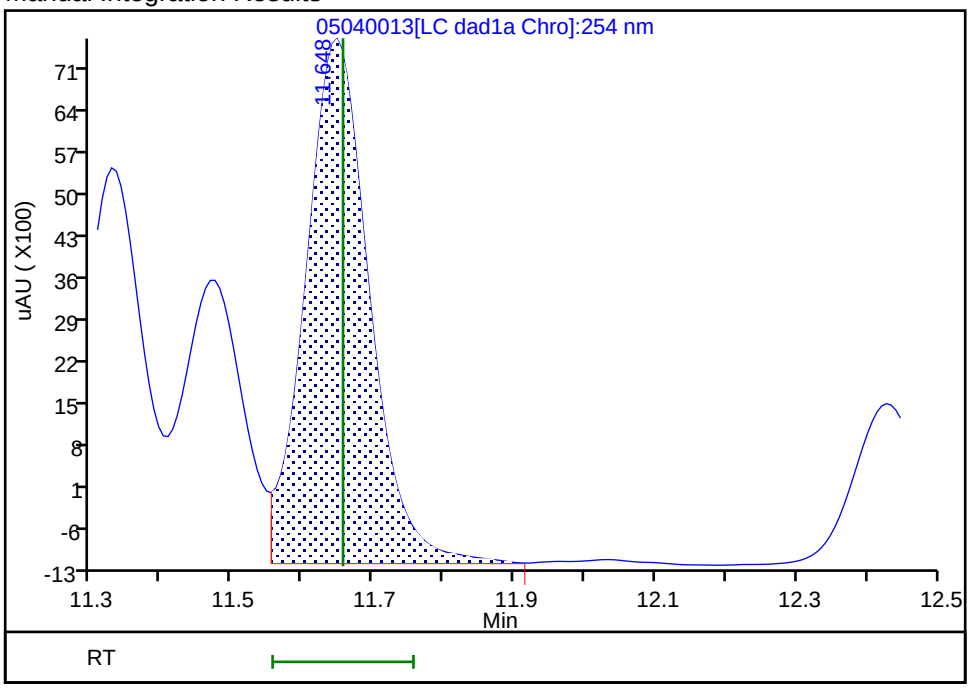
Processing Integration Results

RT: 11.65
Area: 55987
Amount: 0.191839
Amount Units: ug/mL



Manual Integration Results

RT: 11.65
Area: 55259
Amount: 0.189345
Amount Units: ug/mL



Reviewer: LV5D, 07-May-2024 12:48:28 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

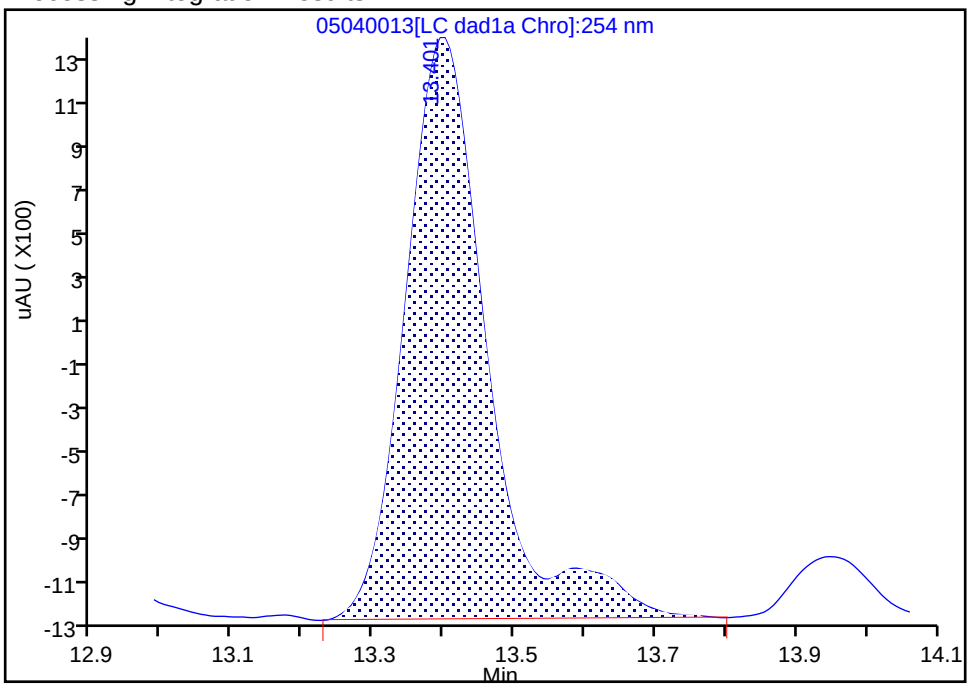
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040013.d				
Injection Date:	04-May-2024 18:54:14	Instrument ID:	CHHPLC_X3		
Lims ID:	LCSD 280-651841/3-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

24 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

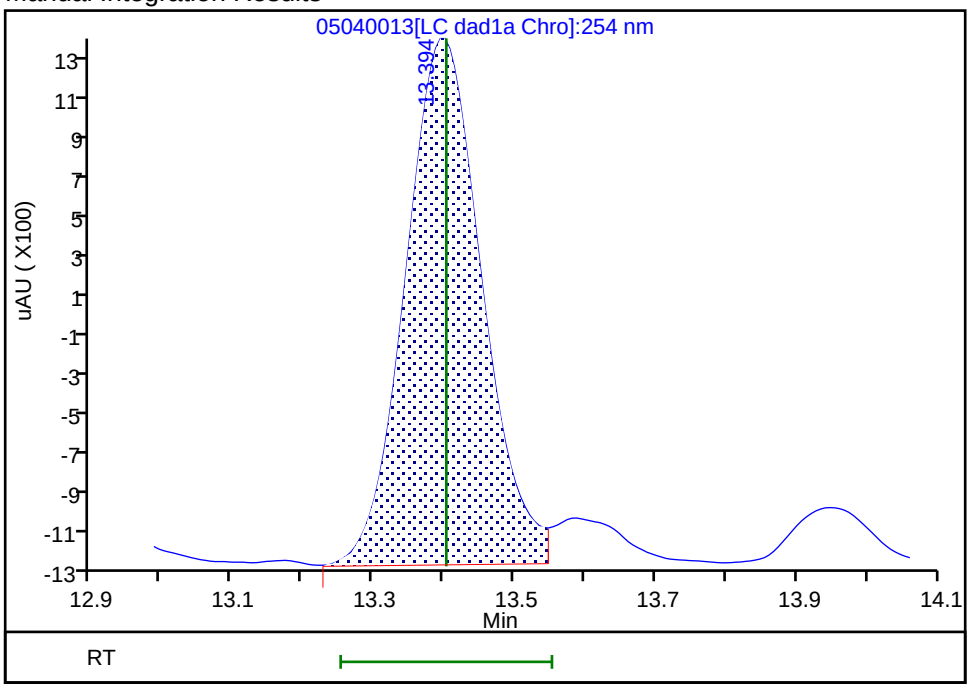
Processing Integration Results

RT: 13.40
Area: 21022
Amount: 0.145922
Amount Units: ug/mL



Manual Integration Results

RT: 13.39
Area: 19486
Amount: 0.135260
Amount Units: ug/mL



Reviewer: LV5D, 07-May-2024 12:48:23 -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.: 280-190799-1

SDG No.:

Client Sample ID: LL1mw-087-240401-GW MS | Lab Sample ID: 280-190799-6 MS

Matrix: Water | Lab File ID: 05040028.D

Analysis Method: 8330B | Date Collected: 04/29/2024 11:45

Extraction Method: 3535 | Date Extracted: 05/02/2024 12:39

Sample wt/vol: 456.7(mL) | Date Analyzed: 05/05/2024 00:38

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.: 652145 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.41		0.23	0.22	0.092
99-65-0	1,3-Dinitrobenzene	2.31		0.12	0.11	0.040
118-96-7	2,4,6-Trinitrotoluene	2.16		0.12	0.11	0.049
121-14-2	2,4-Dinitrotoluene	2.08		0.11	0.088	0.030
606-20-2	2,6-Dinitrotoluene	2.07		0.11	0.088	0.044
35572-78-2	2-Amino-4,6-dinitrotoluene	2.09		0.12	0.11	0.056
88-72-2	2-Nitrotoluene	1.63		0.23	0.22	0.094
99-08-1	3-Nitrotoluene	1.54	M J1	0.44	0.38	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	2.05		0.16	0.13	0.063
99-99-0	4-Nitrotoluene	1.67		0.45	0.44	0.11
2691-41-0	HMX	1.94	M	0.23	0.22	0.096
98-95-3	Nitrobenzene	1.82		0.23	0.22	0.10
55-63-0	Nitroglycerin	22.4		2.3	2.2	1.0
78-11-5	PETN	23.6		1.2	1.1	0.49
121-82-4	RDX	1.87	M	0.23	0.22	0.056
479-45-8	Tetryl	2.11		0.12	0.11	0.035

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	95		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\05040028.D
Lims ID: 280-190799-A-6-B MS
Client ID: LL1mw-087-240401-GW
Sample Type: MS
Inject. Date: 05-May-2024 00:38:30 ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-190799-A-6-B MS
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 07-May-2024 15:03:04 Calib Date: 18-Apr-2024 03:08:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\04170028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1679

First Level Reviewer: LV5D Date: 07-May-2024 13:49:55

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.599	6.610	-0.011	16893	0.2000	0.1768	M
8 RDX	1	7.626	7.630	-0.004	18880	0.2000	0.1704	M
9 2,4,6-Trinitrophenol	1	7.852	7.876	-0.024	15197	0.2000	0.1916	M
$ 10 1,2-Dinitrobenzene	1	8.572	8.576	-0.004	25016	0.2000	0.1893	
11 1,3,5-Trinitrobenzene	1	8.706	8.710	-0.004	48969	0.2000	0.2197	
12 1,3-Dinitrobenzene	1	9.319	9.323	-0.004	63043	0.2000	0.2105	
13 Nitrobenzene	1	9.679	9.683	-0.004	32689	0.2000	0.1665	
14 3,5-Dinitroaniline	1	9.919	9.923	-0.004	40443	0.2000	0.1841	
15 Tetryl	1	10.005	10.003	0.002	34994	0.2000	0.1927	
16 Nitroglycerin	2	10.465	10.470	-0.005	136107	2.00	2.05	
17 2,4,6-Trinitrotoluene	1	10.899	10.903	-0.004	42411	0.2000	0.1971	
18 4-Amino-2,6-dinitrotoluene	1	11.085	11.083	0.002	28136	0.2000	0.1876	
19 2-Amino-4,6-dinitrotoluene	1	11.339	11.336	0.003	38164	0.2000	0.1910	
20 2,6-Dinitrotoluene	1	11.479	11.483	-0.004	27844	0.2000	0.1895	
21 2,4-Dinitrotoluene	1	11.659	11.656	0.003	55533	0.2000	0.1903	
22 o-Nitrotoluene	1	12.445	12.436	0.009	19196	0.2000	0.1485	
23 p-Nitrotoluene	1	12.859	12.856	0.003	17228	0.2000	0.1527	
24 m-Nitrotoluene	1	13.412	13.403	0.009	20271	0.2000	0.1407	M
25 PETN	2	14.485	14.463	0.022	155035	2.00	2.16	
26 Ammonium Picrate	1		0.000			ND	ND	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND
Review Flags
M - Manually Integrated

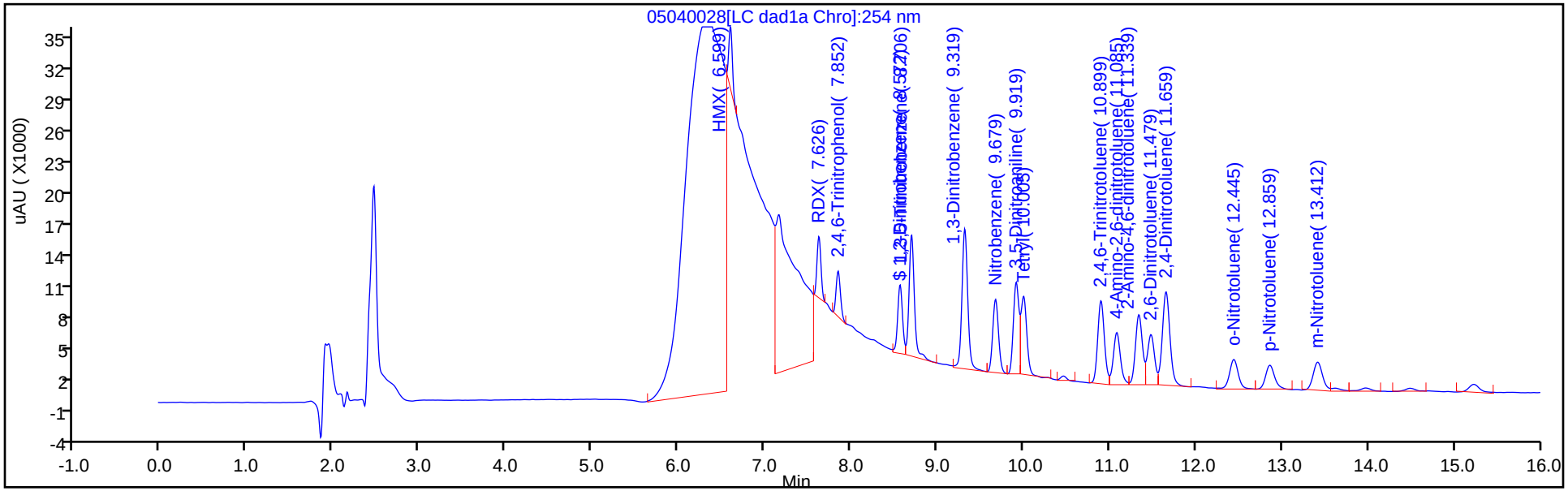
Report Date: 07-May-2024 15:03:10 Chrom Revision: 2.3 26-Apr-2024 12:18:52

Eurofins Denver

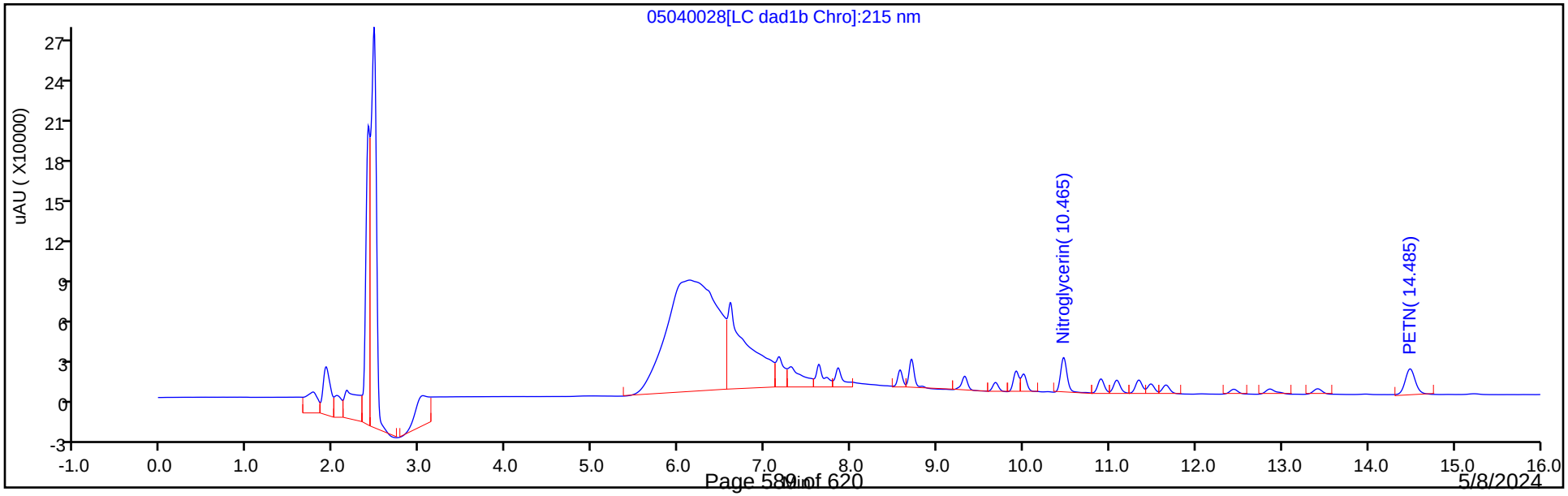
Data File: \\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040028.d

Injection Date:	05-May-2024 00:38:30	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-190799-A-6-B MS			Worklist Smp#:	28
Client ID:	LL1mw-087-240401-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



5/8/2024
6:07:23 AM

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\05040028.D				
Lims ID:	280-190799-A-6-B MS				
Client ID:	LL1mw-087-240401-GW				
Sample Type:	MS				
Inject. Date:	05-May-2024 00:38:30	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-190799-A-6-B MS				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	07-May-2024 15:03:04	Calib Date:	18-Apr-2024 03:08:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\04170028.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1679				
First Level Reviewer: LV5D		Date:	07-May-2024 13:49:55		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1893	94.67

Manual Integration/User Assign Peak Report

Eurofins Denver

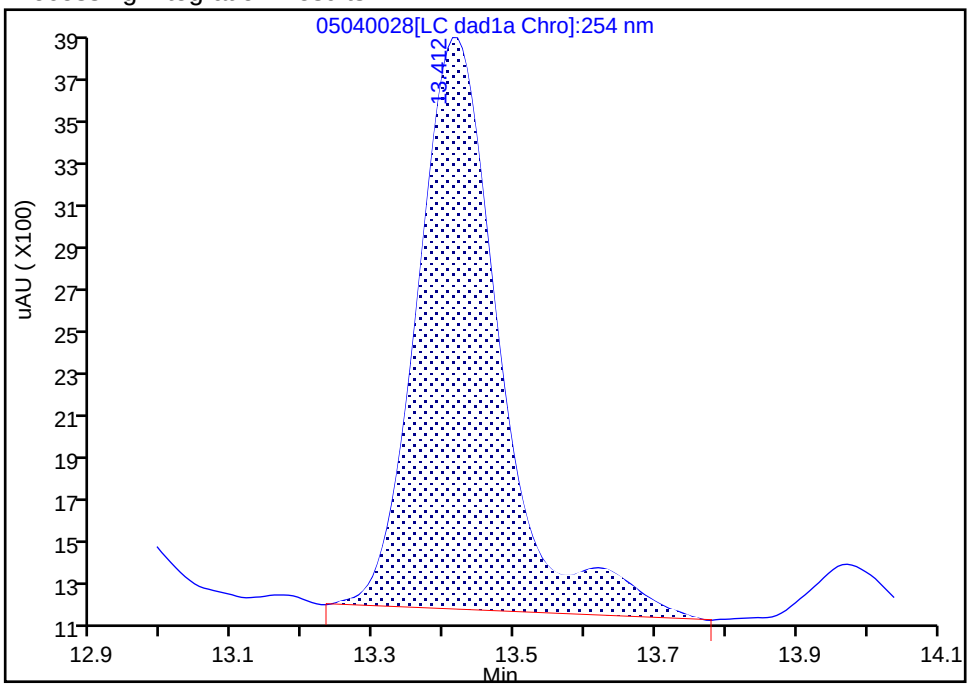
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040028.d				
Injection Date:	05-May-2024 00:38:30	Instrument ID:	CHHPLC_X3		
Lims ID:	280-190799-A-6-B MS				
Client ID:	LL1mw-087-240401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

24 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

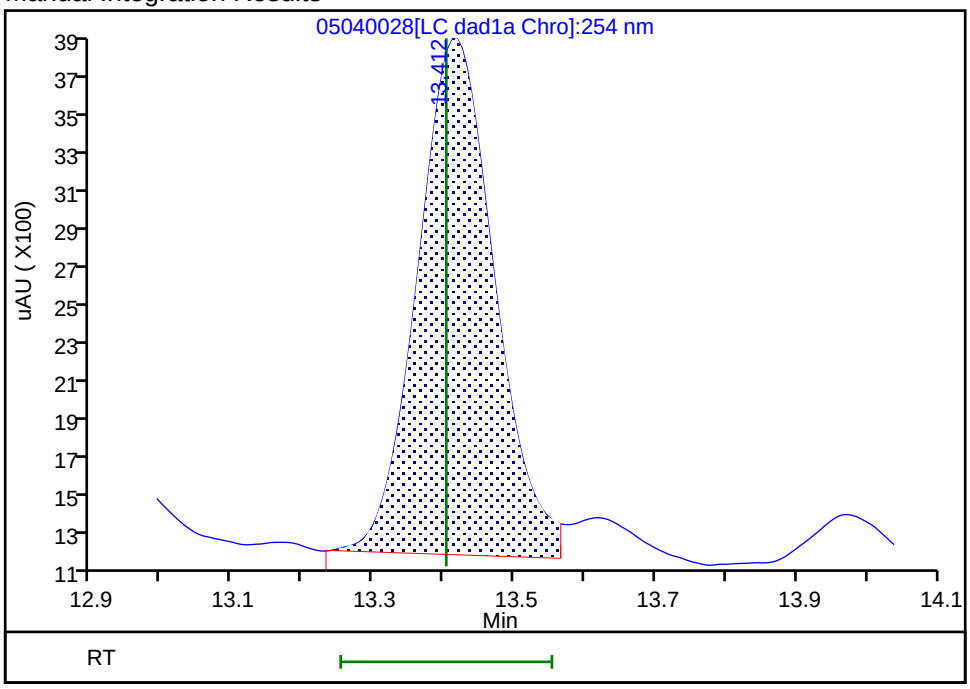
Processing Integration Results

RT: 13.41
Area: 21837
Amount: 0.151579
Amount Units: ug/mL



Manual Integration Results

RT: 13.41
Area: 20271
Amount: 0.140709
Amount Units: ug/mL



Reviewer: LV5D, 07-May-2024 13:50:49 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

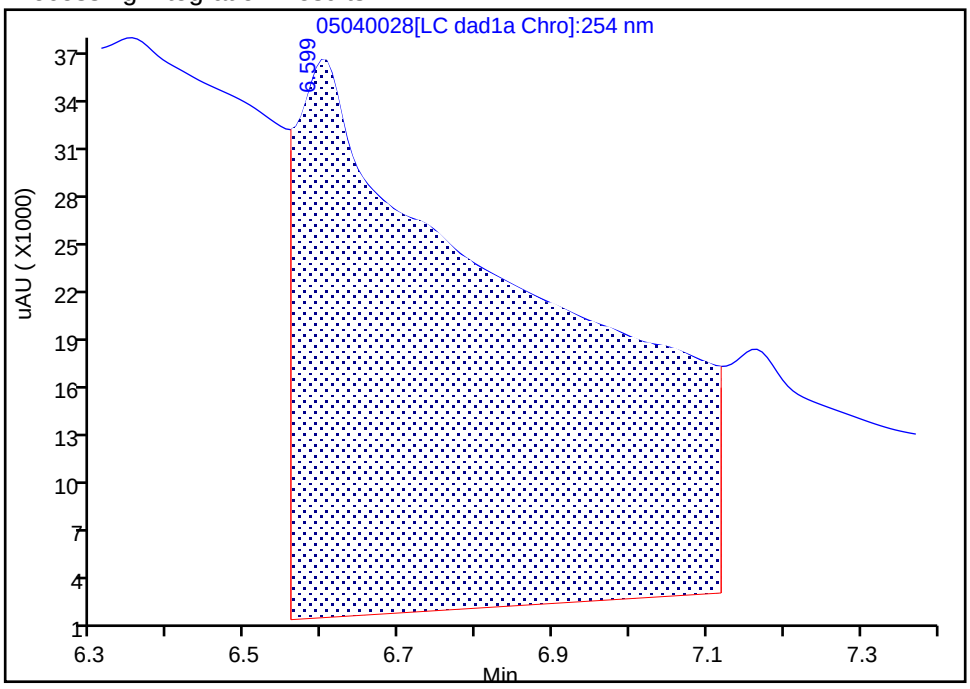
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040028.d				
Injection Date:	05-May-2024 00:38:30	Instrument ID:	CHHPLC_X3		
Lims ID:	280-190799-A-6-B MS				
Client ID:	LL1mw-087-240401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

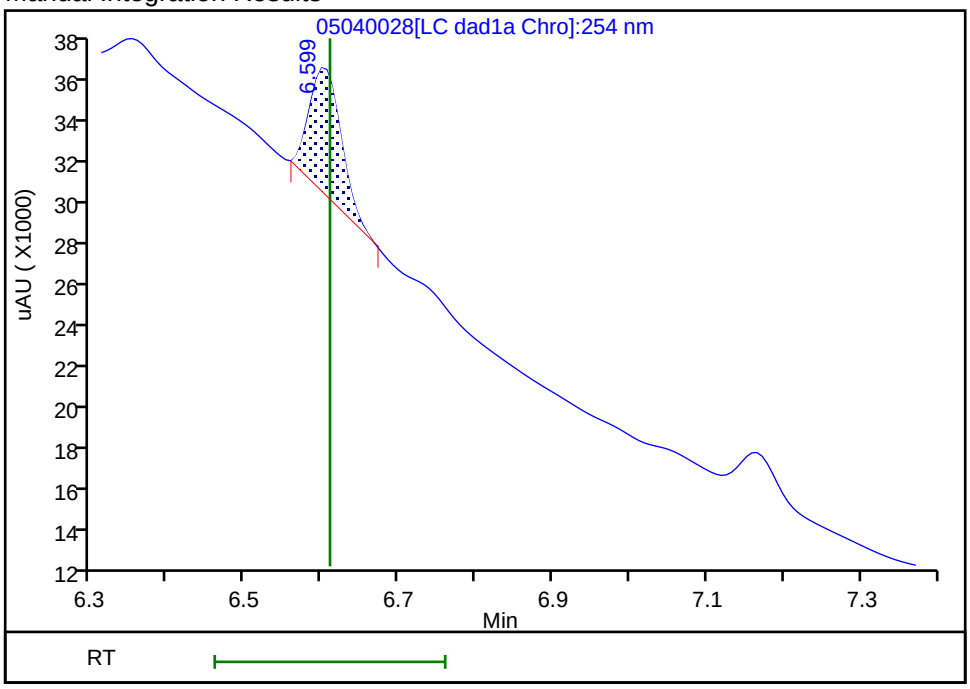
Processing Integration Results

RT: 6.60
Area: 718937
Amount: 7.524692
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 16893
Amount: 0.176809
Amount Units: ug/mL



Reviewer: LV5D, 07-May-2024 13:49:38 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

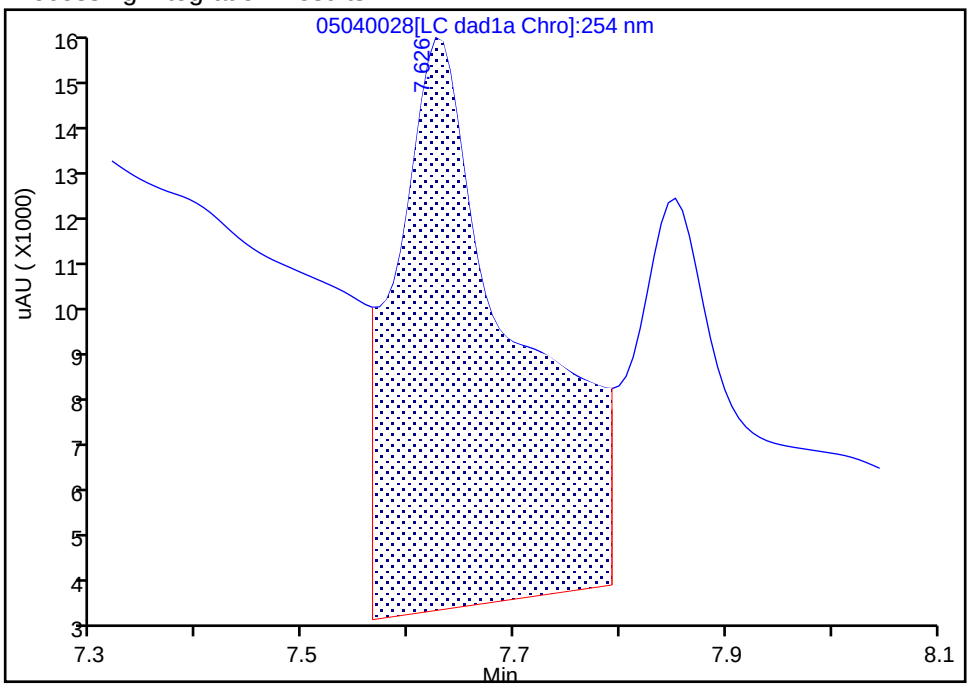
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040028.d				
Injection Date:	05-May-2024 00:38:30	Instrument ID:	CHHPLC_X3		
Lims ID:	280-190799-A-6-B MS				
Client ID:	LL1mw-087-240401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

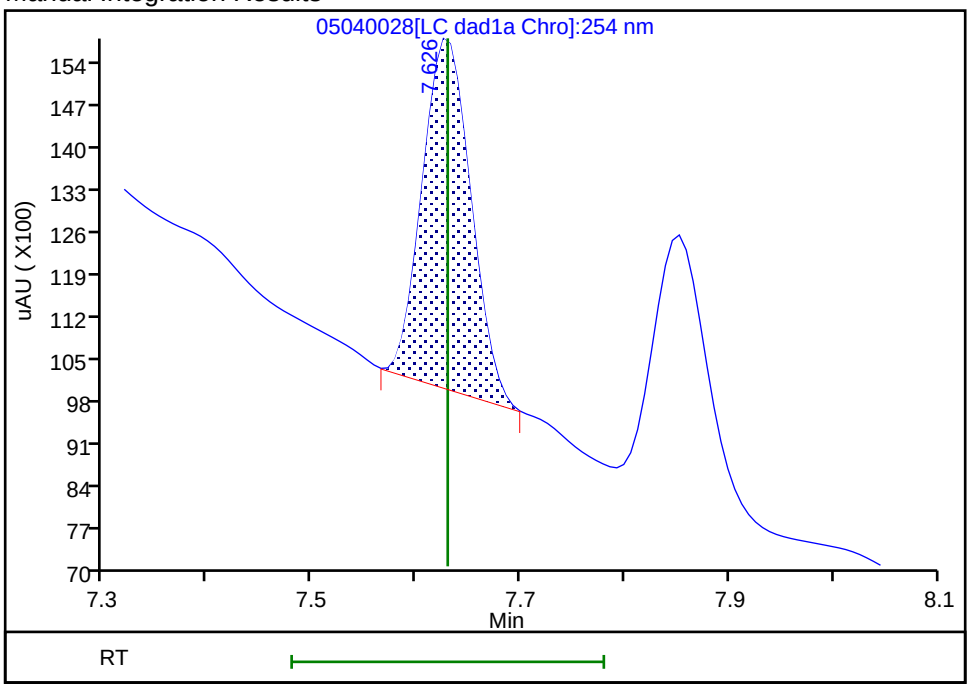
Processing Integration Results

RT: 7.63
Area: 91008
Amount: 0.821616
Amount Units: ug/mL



Manual Integration Results

RT: 7.63
Area: 18880
Amount: 0.170448
Amount Units: ug/mL



Reviewer: LV5D, 07-May-2024 13:49:41 -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.: 280-190799-1

SDG No.:

Client Sample ID: LL1mw-087-240401-GW MSD | Lab Sample ID: 280-190799-6 MSD

Matrix: Water | Lab File ID: 05040029.D

Analysis Method: 8330B | Date Collected: 04/29/2024 11:45

Extraction Method: 3535 | Date Extracted: 05/02/2024 12:39

Sample wt/vol: 466.4(mL) | Date Analyzed: 05/05/2024 01:01

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.: 652145 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.13	M	0.23	0.21	0.090
99-65-0	1,3-Dinitrobenzene	1.96	M	0.12	0.11	0.040
118-96-7	2,4,6-Trinitrotoluene	1.97		0.12	0.11	0.048
121-14-2	2,4-Dinitrotoluene	1.76		0.11	0.086	0.029
606-20-2	2,6-Dinitrotoluene	1.78		0.11	0.086	0.043
35572-78-2	2-Amino-4,6-dinitrotoluene	1.77		0.12	0.11	0.054
88-72-2	2-Nitrotoluene	1.26	J1	0.23	0.21	0.092
99-08-1	3-Nitrotoluene	1.15	M J1	0.43	0.38	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	1.76		0.16	0.13	0.062
99-99-0	4-Nitrotoluene	1.31	J1	0.44	0.43	0.11
2691-41-0	HMX	1.90	M	0.23	0.21	0.094
98-95-3	Nitrobenzene	1.50		0.23	0.21	0.098
55-63-0	Nitroglycerin	21.9		2.3	2.1	0.99
78-11-5	PETN	22.7		1.2	1.1	0.48
121-82-4	RDX	1.82	M	0.23	0.21	0.055
479-45-8	Tetryl	2.03		0.12	0.11	0.034

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

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\05040029.D
Lims ID: 280-190799-A-6-C MSD
Client ID: LL1mw-087-240401-GW
Sample Type: MSD
Inject. Date: 05-May-2024 01:01:29 ALS Bottle#: 29 Worklist Smp#: 29
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-190799-A-6-C MSD
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 07-May-2024 15:03:04 Calib Date: 18-Apr-2024 03:08:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\04170028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1679

First Level Reviewer: LV5D Date: 07-May-2024 13:50:46

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4	HMX	1	6.602	6.610	-0.008	16965	0.2000	0.1776	M
8	RDX	1	7.622	7.630	-0.008	18839	0.2000	0.1701	M
9	2,4,6-Trinitrophenol	1	7.849	7.876	-0.027	15002	0.2000	0.1891	M
$ 10	1,2-Dinitrobenzene	1	8.562	8.576	-0.014	21954	0.2000	0.1661	M
11	1,3,5-Trinitrobenzene	1	8.696	8.710	-0.014	44211	0.2000	0.1984	M
12	1,3-Dinitrobenzene	1	9.316	9.323	-0.007	54685	0.2000	0.1826	M
13	Nitrobenzene	1	9.669	9.683	-0.014	27524	0.2000	0.1402	
14	3,5-Dinitroaniline	1	9.909	9.923	-0.014	35177	0.2000	0.1602	
15	Tetryl	1	9.996	10.003	-0.007	34351	0.2000	0.1892	
16	Nitroglycerin	2	10.462	10.470	-0.008	135505	2.00	2.04	
17	2,4,6-Trinitrotoluene	1	10.896	10.903	-0.007	39458	0.2000	0.1834	
18	4-Amino-2,6-dinitrotoluene	1	11.076	11.083	-0.007	24630	0.2000	0.1643	
19	2-Amino-4,6-dinitrotoluene	1	11.336	11.336	0.000	33031	0.2000	0.1653	
20	2,6-Dinitrotoluene	1	11.476	11.483	-0.007	24370	0.2000	0.1659	
21	2,4-Dinitrotoluene	1	11.649	11.656	-0.007	48030	0.2000	0.1646	
22	o-Nitrotoluene	1	12.436	12.436	0.000	15169	0.2000	0.1173	
23	p-Nitrotoluene	1	12.856	12.856	0.000	13758	0.2000	0.1220	
24	m-Nitrotoluene	1	13.409	13.403	0.006	15499	0.2000	0.1076	M
25	PETN	2	14.476	14.463	0.013	152264	2.00	2.12	
26	Ammonium Picrate	1		0.000			ND	ND	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND
Review Flags
M - Manually Integrated

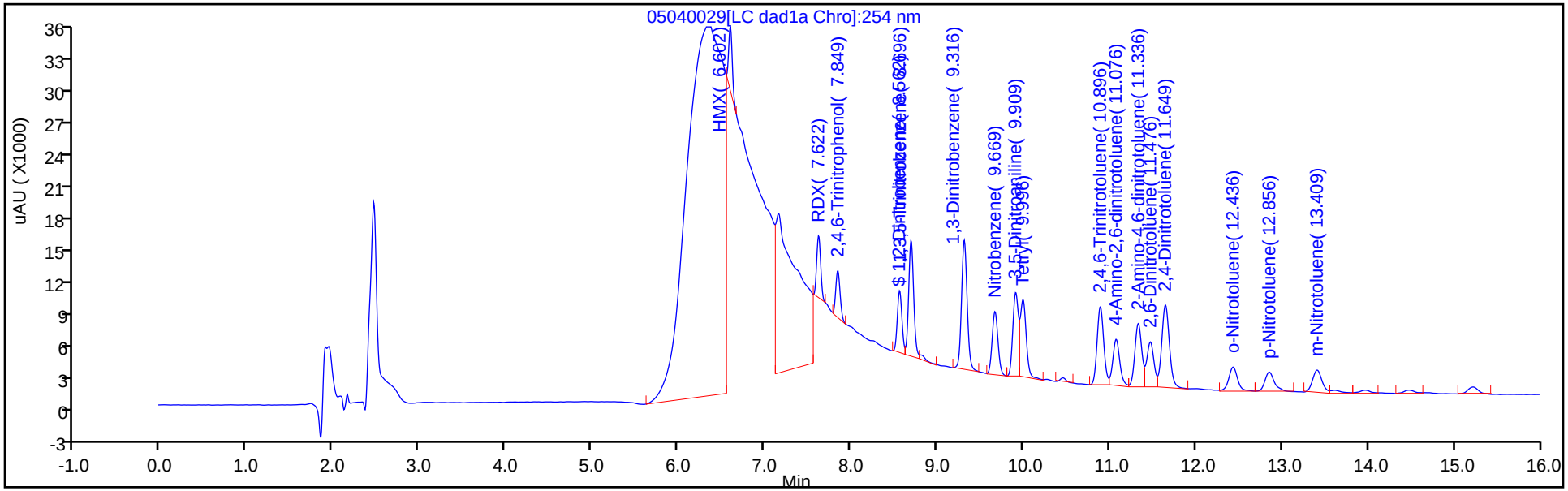
Report Date: 07-May-2024 15:03:11 Chrom Revision: 2.3 26-Apr-2024 12:18:52

Eurofins Denver

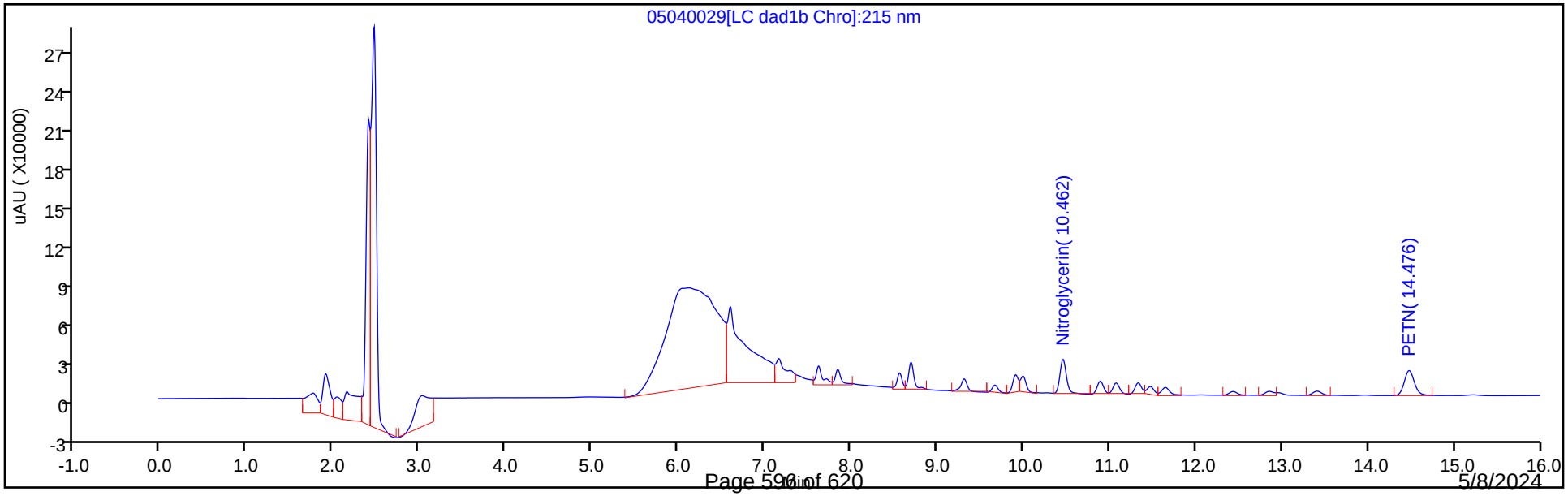
Data File: \\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040029.d

Injection Date:	05-May-2024 01:01:29	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-190799-A-6-C MSD			Worklist Smp#:	29
Client ID:	LL1mw-087-240401-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



5/8/2024
6:07:23 AM

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\05040029.D				
Lims ID:	280-190799-A-6-C MSD				
Client ID:	LL1mw-087-240401-GW				
Sample Type:	MSD				
Inject. Date:	05-May-2024 01:01:29	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-190799-A-6-C MSD				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20240504-133020.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	07-May-2024 15:03:04	Calib Date:	18-Apr-2024 03:08:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20240417-132364.b\04170028.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1679				

First Level Reviewer: LV5D Date: 07-May-2024 13:50:46

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1661	83.04

Manual Integration/User Assign Peak Report

Eurofins Denver

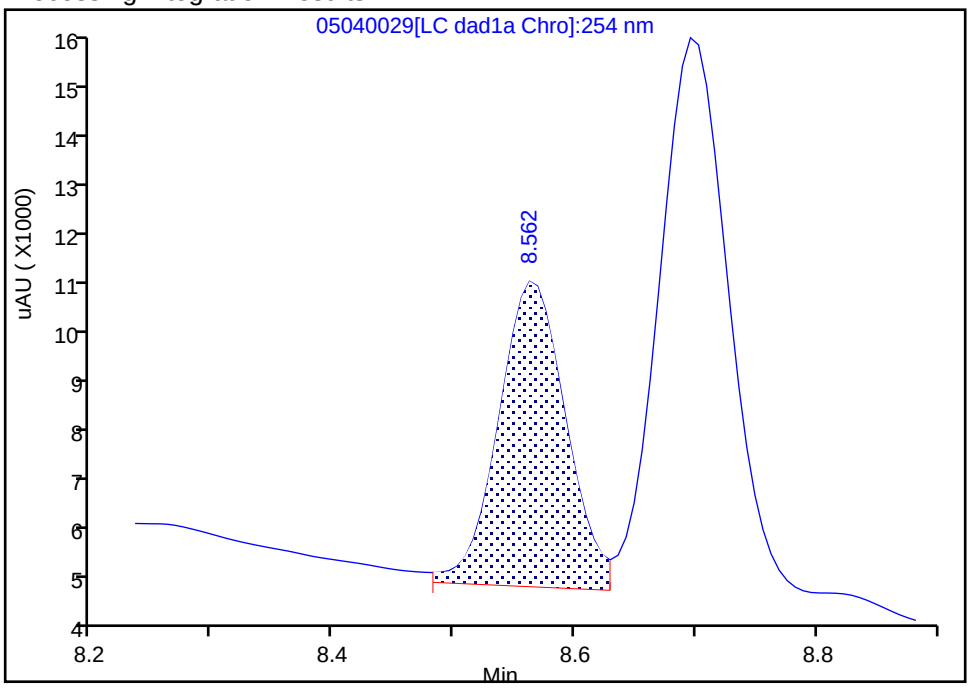
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040029.d				
Injection Date:	05-May-2024 01:01:29	Instrument ID:	CHHPLC_X3		
Lims ID:	280-190799-A-6-C MSD				
Client ID:	LL1mw-087-240401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	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

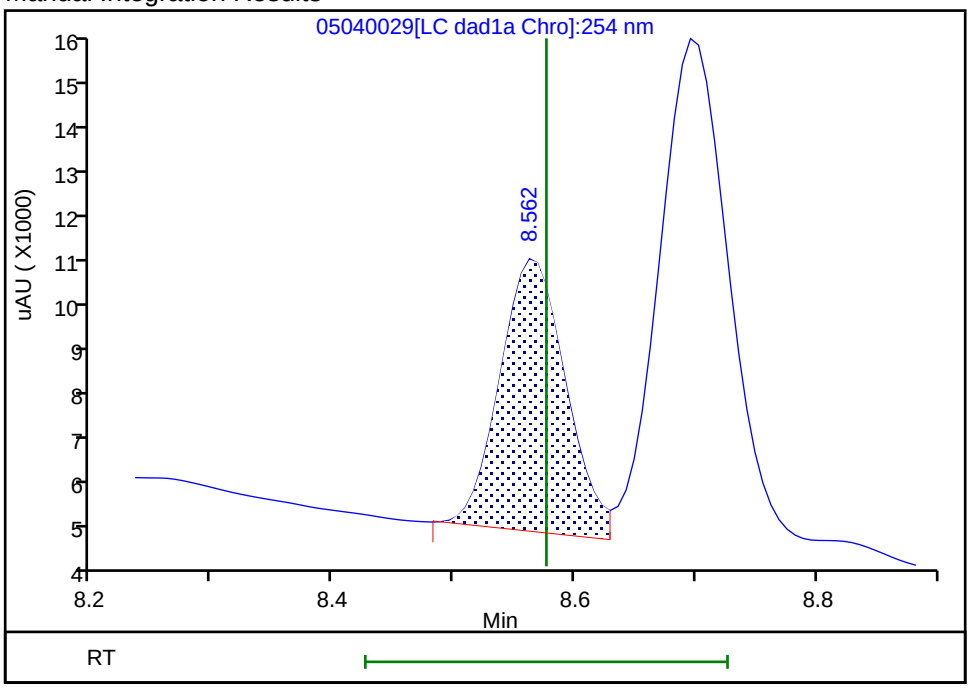
Processing Integration Results

RT: 8.56
Area: 22676
Amount: 0.171557
Amount Units: ug/mL



Manual Integration Results

RT: 8.56
Area: 21954
Amount: 0.166072
Amount Units: ug/mL



Reviewer: LV5D, 07-May-2024 13:50:24 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

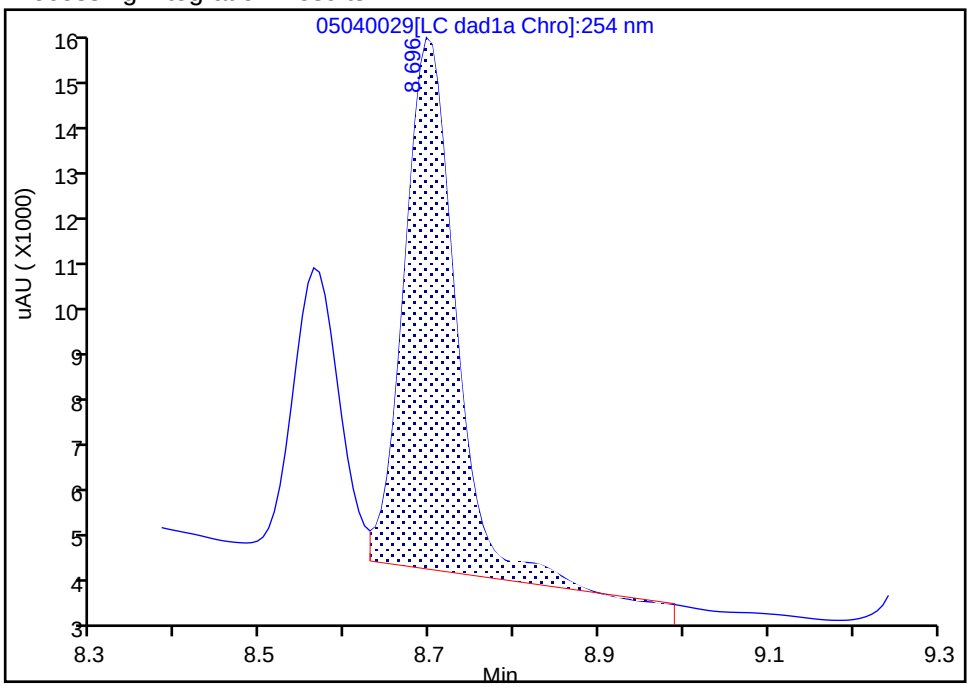
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040029.d				
Injection Date:	05-May-2024 01:01:29	Instrument ID:	CHHPLC_X3		
Lims ID:	280-190799-A-6-C MSD				
Client ID:	LL1mw-087-240401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

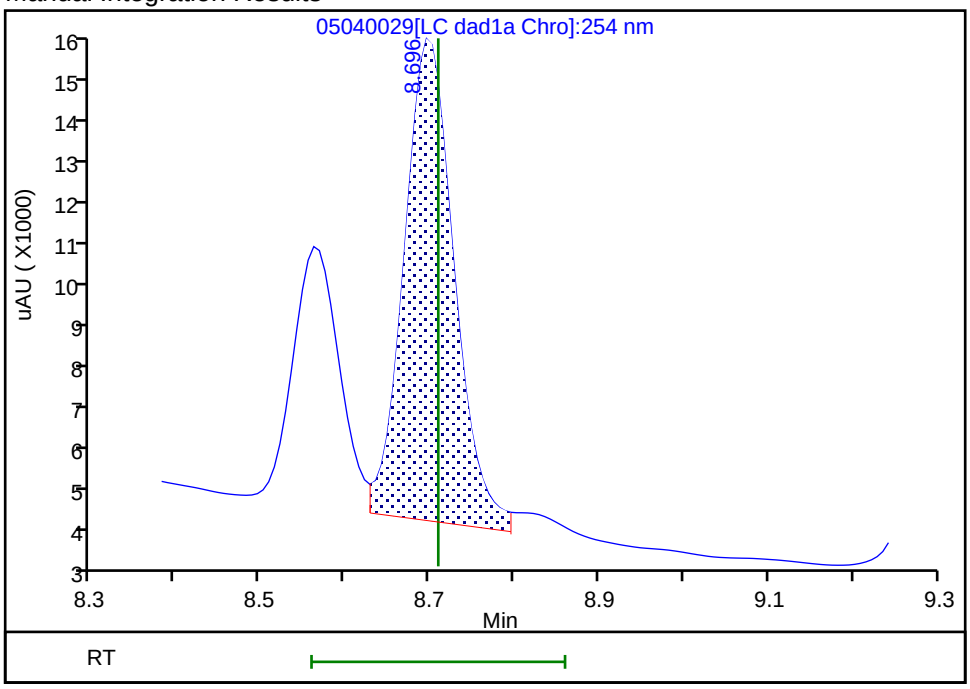
Processing Integration Results

RT: 8.70
Area: 45970
Amount: 0.206279
Amount Units: ug/mL



Manual Integration Results

RT: 8.70
Area: 44211
Amount: 0.198386
Amount Units: ug/mL



Reviewer: LV5D, 07-May-2024 13:50:26 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

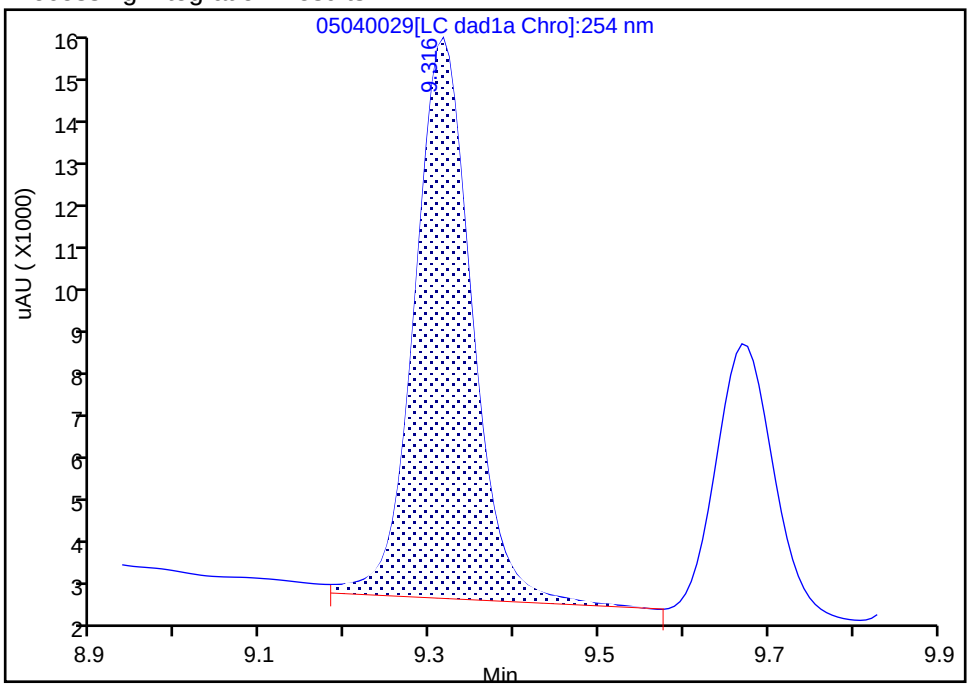
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040029.d				
Injection Date:	05-May-2024 01:01:29	Instrument ID:	CHHPLC_X3		
Lims ID:	280-190799-A-6-C MSD				
Client ID:	LL1mw-087-240401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

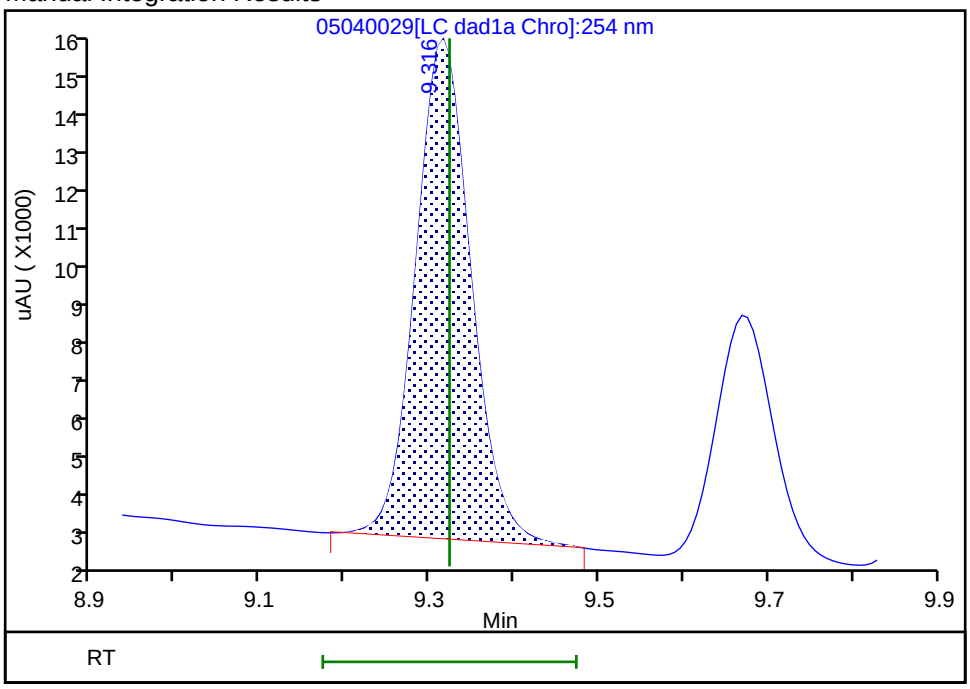
Processing Integration Results

RT: 9.32
Area: 57695
Amount: 0.192679
Amount Units: ug/mL



Manual Integration Results

RT: 9.32
Area: 54685
Amount: 0.182627
Amount Units: ug/mL



Reviewer: LV5D, 07-May-2024 13:50:35 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

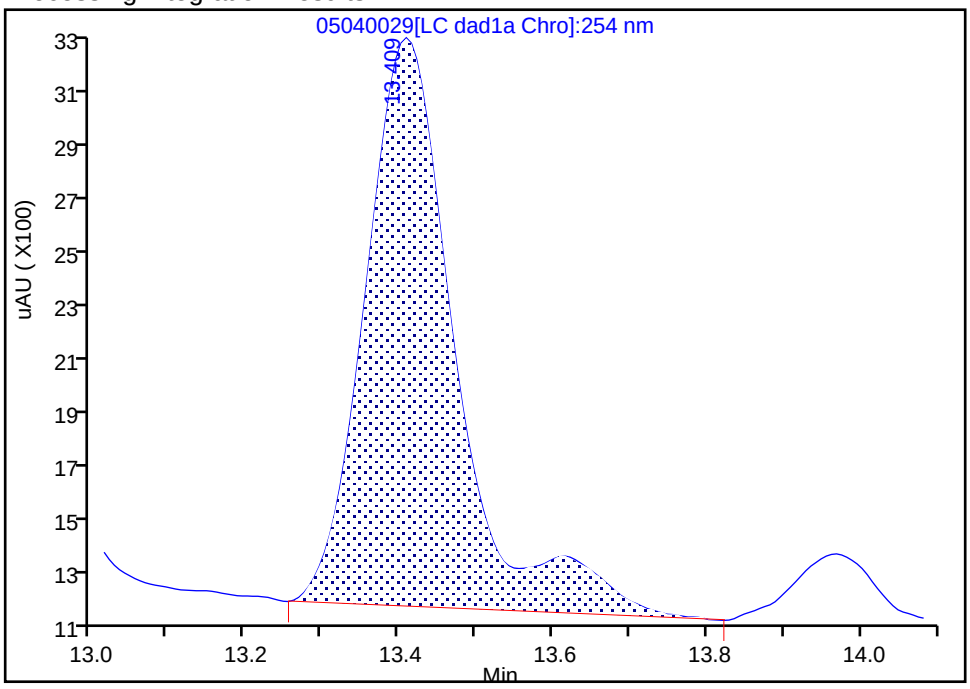
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040029.d				
Injection Date:	05-May-2024 01:01:29	Instrument ID:	CHHPLC_X3		
Lims ID:	280-190799-A-6-C MSD				
Client ID:	LL1mw-087-240401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

24 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

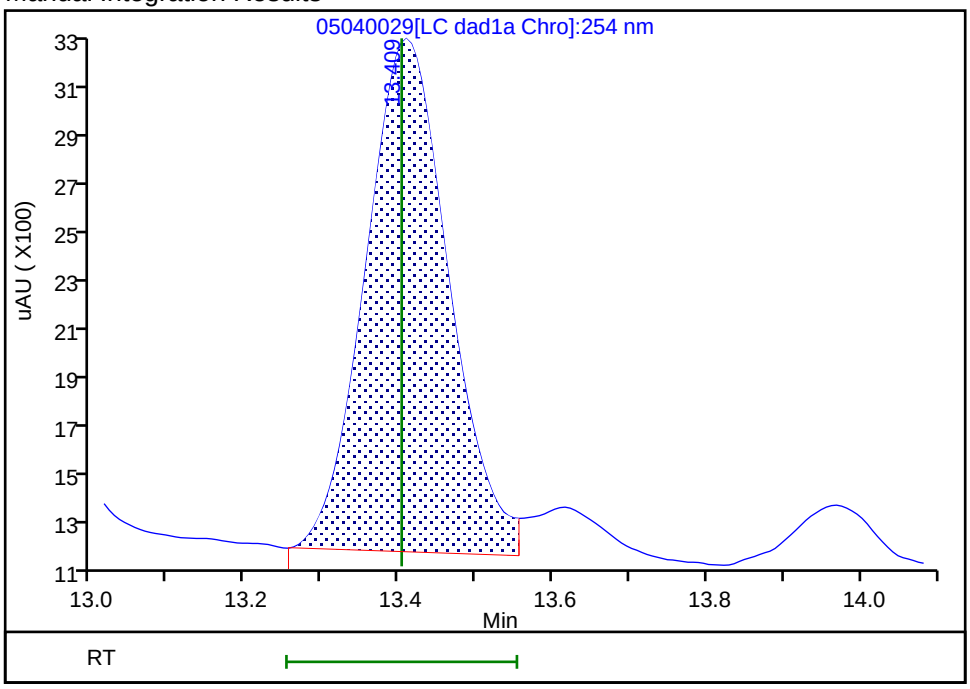
Processing Integration Results

RT: 13.41
Area: 16967
Amount: 0.117775
Amount Units: ug/mL



Manual Integration Results

RT: 13.41
Area: 15499
Amount: 0.107585
Amount Units: ug/mL



Reviewer: LV5D, 07-May-2024 13:50:45 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

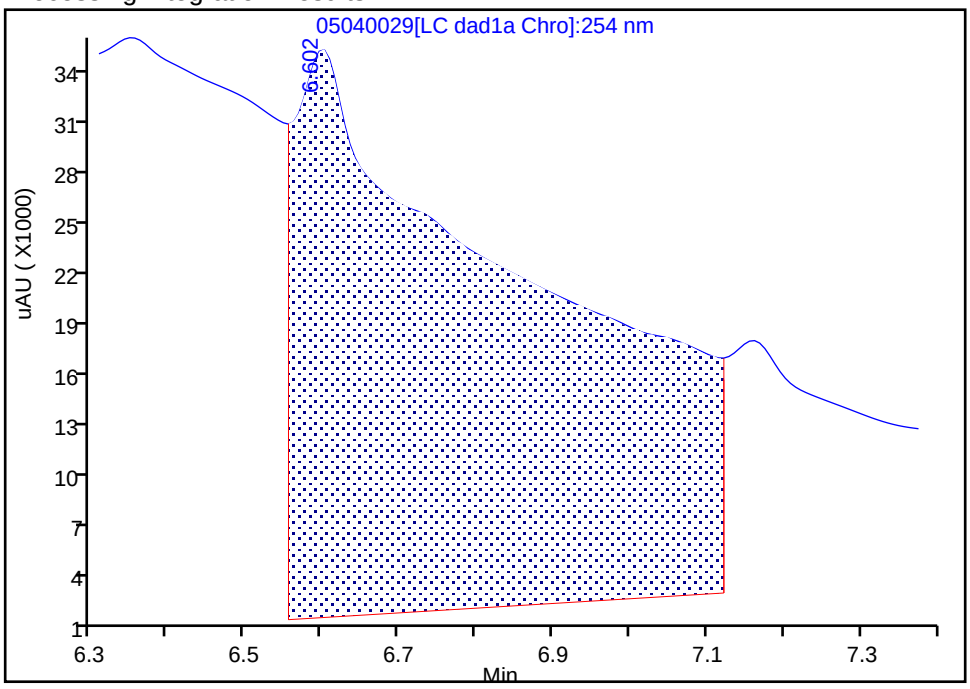
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040029.d				
Injection Date:	05-May-2024 01:01:29	Instrument ID:	CHHPLC_X3		
Lims ID:	280-190799-A-6-C MSD				
Client ID:	LL1mw-087-240401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

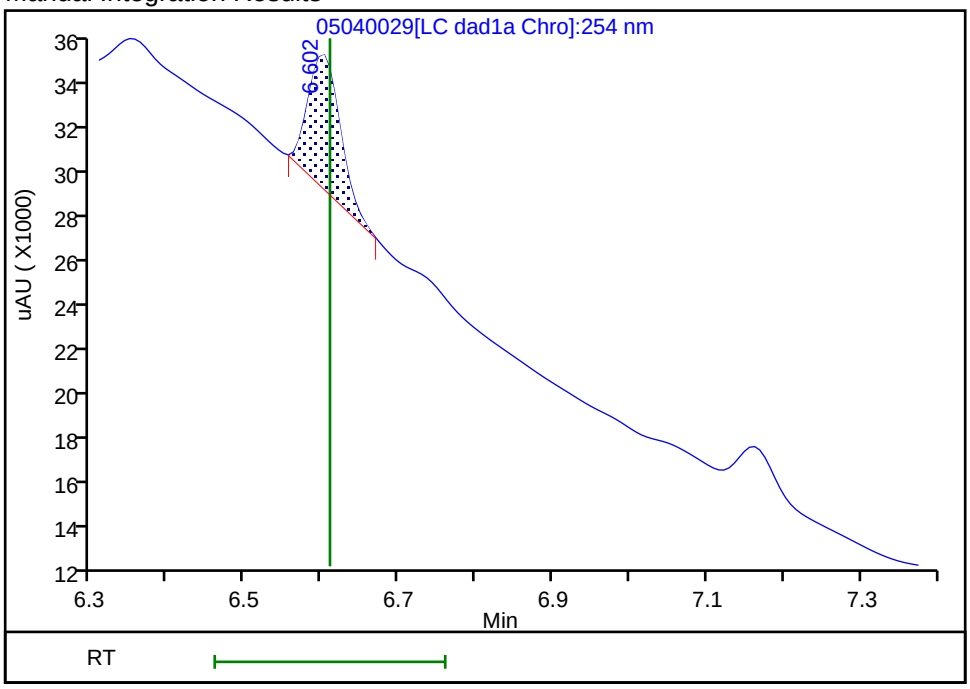
Processing Integration Results

RT: 6.60
Area: 720619
Amount: 7.542296
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 16965
Amount: 0.177563
Amount Units: ug/mL



Reviewer: LV5D, 07-May-2024 13:50:01 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

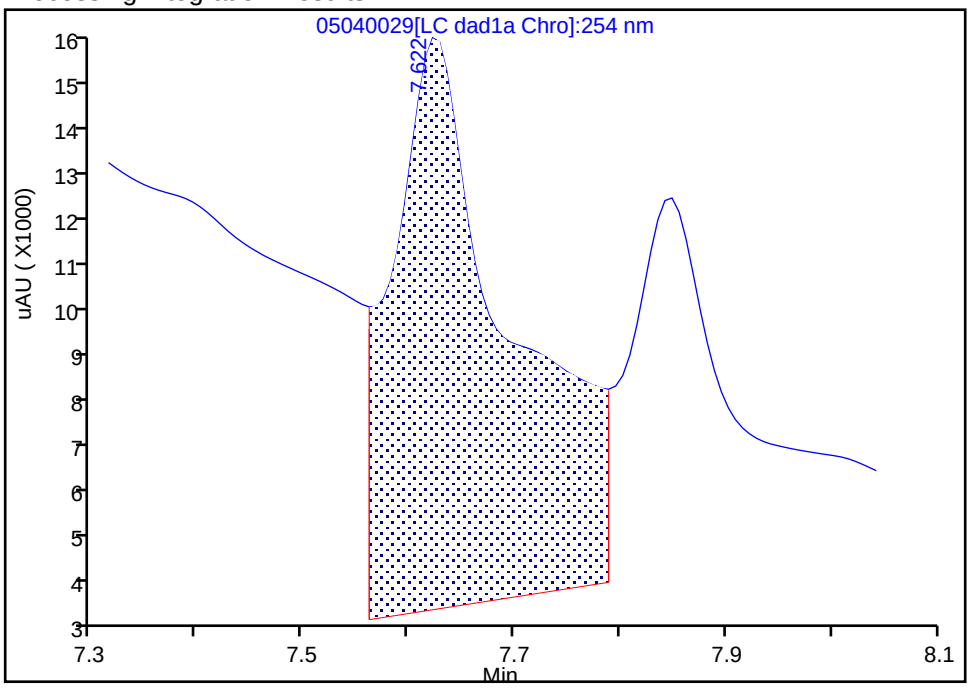
Data File:	\\chromfs\denver\chromdata\chhplc_x\20240504-133020.b\05040029.d				
Injection Date:	05-May-2024 01:01:29	Instrument ID:	CHHPLC_X3		
Lims ID:	280-190799-A-6-C MSD				
Client ID:	LL1mw-087-240401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

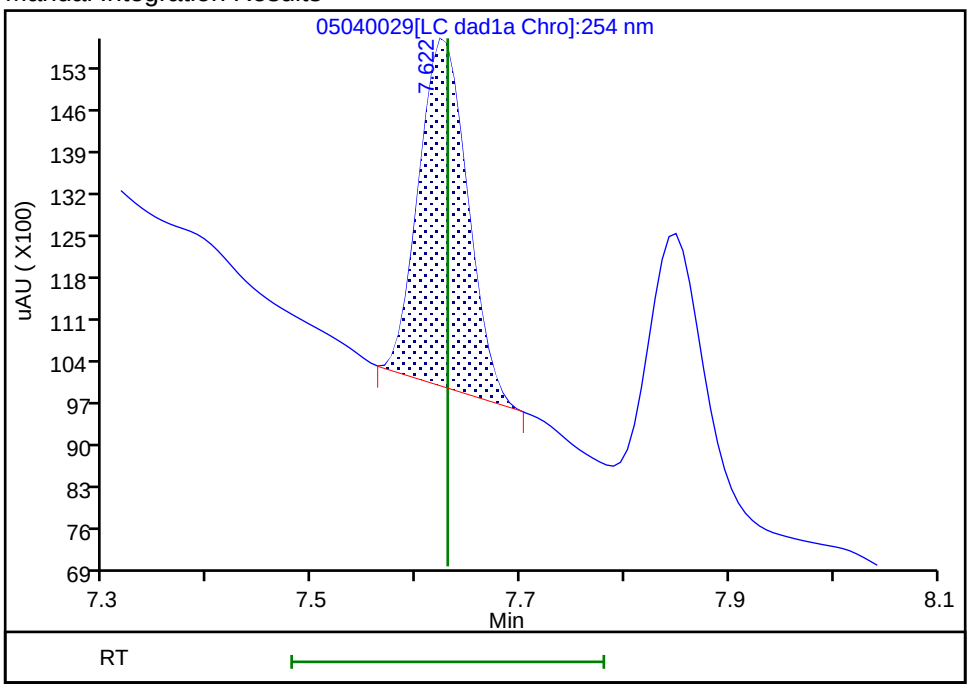
Processing Integration Results

RT: 7.62
Area: 90272
Amount: 0.814971
Amount Units: ug/mL



Manual Integration Results

RT: 7.62
Area: 18839
Amount: 0.170078
Amount Units: ug/mL



Reviewer: LV5D, 07-May-2024 13:50:07 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-190799-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 04/17/2024 20:37

Analysis Batch Number: 649950 End Date: 04/18/2024 03:30

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-649950/11		04/17/2024 20:37	1	04170011.D	UltraCarb5uODS 4.6(mm)
IC 280-649950/12		04/17/2024 21:00	1	04170012.D	UltraCarb5uODS 4.6(mm)
IC 280-649950/13		04/17/2024 21:23	1	04170013.D	UltraCarb5uODS 4.6(mm)
IC 280-649950/14		04/17/2024 21:46	1	04170014.D	UltraCarb5uODS 4.6(mm)
IC 280-649950/15		04/17/2024 22:09	1	04170015.D	UltraCarb5uODS 4.6(mm)
IC 280-649950/16		04/17/2024 22:32	1	04170016.D	UltraCarb5uODS 4.6(mm)
IC 280-649950/17		04/17/2024 22:55	1	04170017.D	UltraCarb5uODS 4.6(mm)
IC 280-649950/18		04/17/2024 23:18	1	04170018.D	UltraCarb5uODS 4.6(mm)
IC 280-649950/19		04/17/2024 23:41	1	04170019.D	UltraCarb5uODS 4.6(mm)
ICV 280-649950/20		04/18/2024 00:04	1	04170020.D	UltraCarb5uODS 4.6(mm)
IC 280-649950/21		04/18/2024 00:27	1		UltraCarb5uODS 4.6(mm)
IC 280-649950/22		04/18/2024 00:50	1		UltraCarb5uODS 4.6(mm)
IC 280-649950/23		04/18/2024 01:13	1		UltraCarb5uODS 4.6(mm)
IC 280-649950/24		04/18/2024 01:36	1		UltraCarb5uODS 4.6(mm)
IC 280-649950/25		04/18/2024 01:59	1		UltraCarb5uODS 4.6(mm)
IC 280-649950/26		04/18/2024 02:22	1		UltraCarb5uODS 4.6(mm)
IC 280-649950/27		04/18/2024 02:45	1		UltraCarb5uODS 4.6(mm)
IC 280-649950/28		04/18/2024 03:08	1		UltraCarb5uODS 4.6(mm)
ICV 280-649950/29		04/18/2024 03:30	1		UltraCarb5uODS 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-190799-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Start Date: 04/24/2024 21:28

Analysis Batch Number: 650851 End Date: 04/25/2024 08:15

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-650851/10		04/24/2024 21:28	1	04240010.D	Luna-phenylhex 4.6(mm)
IC 280-650851/11		04/24/2024 22:04	1	04240011.D	Luna-phenylhex 4.6(mm)
IC 280-650851/12		04/24/2024 22:40	1	04240012.D	Luna-phenylhex 4.6(mm)
IC 280-650851/13		04/24/2024 23:16	1	04240013.D	Luna-phenylhex 4.6(mm)
IC 280-650851/14		04/24/2024 23:51	1	04240014.D	Luna-phenylhex 4.6(mm)
IC 280-650851/15		04/25/2024 00:27	1	04240015.D	Luna-phenylhex 4.6(mm)
IC 280-650851/16		04/25/2024 01:03	1	04240016.D	Luna-phenylhex 4.6(mm)
IC 280-650851/17		04/25/2024 01:39	1	04240017.D	Luna-phenylhex 4.6(mm)
IC 280-650851/18		04/25/2024 02:15	1	04240018.D	Luna-phenylhex 4.6(mm)
ICV 280-650851/19		04/25/2024 02:51	1	04240019.D	Luna-phenylhex 4.6(mm)
IC 280-650851/20		04/25/2024 03:27	1		Luna-phenylhex 4.6(mm)
IC 280-650851/21		04/25/2024 04:03	1		Luna-phenylhex 4.6(mm)
IC 280-650851/22		04/25/2024 04:39	1		Luna-phenylhex 4.6(mm)
IC 280-650851/23		04/25/2024 05:15	1		Luna-phenylhex 4.6(mm)
IC 280-650851/24		04/25/2024 05:51	1		Luna-phenylhex 4.6(mm)
IC 280-650851/25		04/25/2024 06:27	1		Luna-phenylhex 4.6(mm)
IC 280-650851/26		04/25/2024 07:03	1		Luna-phenylhex 4.6(mm)
IC 280-650851/27		04/25/2024 07:39	1		Luna-phenylhex 4.6(mm)
ICV 280-650851/28		04/25/2024 08:15	1		Luna-phenylhex 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-190799-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Start Date: 05/03/2024 16:40

Analysis Batch Number: 652057 End Date: 05/04/2024 07:38

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-652057/7		05/03/2024 16:40	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/03/2024 17:16	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/03/2024 17:52	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/03/2024 18:28	1		Luna-phenylhex 4.6(mm)
CCV 280-652057/20		05/03/2024 23:15	1	05030020.D	Luna-phenylhex 4.6(mm)
ZZZZZ		05/03/2024 23:51	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/04/2024 00:27	1		Luna-phenylhex 4.6(mm)
280-190799-3	LL1mw-084-240401-GW	05/04/2024 01:03	1	05030023.D	Luna-phenylhex 4.6(mm)
280-190799-4	LL1mw-084-240402-GW	05/04/2024 01:39	1	05030024.D	Luna-phenylhex 4.6(mm)
280-190799-5	LL1mw-080-240401-GW	05/04/2024 02:15	1	05030025.D	Luna-phenylhex 4.6(mm)
ZZZZZ		05/04/2024 02:51	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/04/2024 03:27	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/04/2024 04:03	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/04/2024 04:39	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/04/2024 05:15	1		Luna-phenylhex 4.6(mm)
CCV 280-652057/31		05/04/2024 05:51	1	05030031.D	Luna-phenylhex 4.6(mm)
ZZZZZ		05/04/2024 06:26	1		Luna-phenylhex 4.6(mm)
CCV 280-652057/34		05/04/2024 07:38	1		Luna-phenylhex 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-190799-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 05/04/2024 17:45

Analysis Batch Number: 652145 End Date: 05/05/2024 03:19

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-652145/7		05/04/2024 17:45	1	05040007.D	UltraCarb5uODS 4.6(mm)
MB 280-651841/1-A		05/04/2024 18:08	1	05040011.D	UltraCarb5uODS 4.6(mm)
LCS 280-651841/2-A		05/04/2024 18:31	1	05040012.D	UltraCarb5uODS 4.6(mm)
LCSD 280-651841/3-A		05/04/2024 18:54	1	05040013.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		05/04/2024 19:17	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/04/2024 19:40	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/04/2024 20:03	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/04/2024 20:25	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/04/2024 20:48	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/04/2024 21:11	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/04/2024 21:34	1		UltraCarb5uODS 4.6(mm)
CCV 280-652145/21		05/04/2024 21:57	1	05040021.D	UltraCarb5uODS 4.6(mm)
280-190799-1	SCFmw-004-240401-GW	05/04/2024 22:20	1	05040022.D	UltraCarb5uODS 4.6(mm)
280-190799-2	SCFmw-004-240402-GW	05/04/2024 22:43	1	05040023.D	UltraCarb5uODS 4.6(mm)
280-190799-3	LL1mw-084-240401-GW	05/04/2024 23:06	1	05040024.D	UltraCarb5uODS 4.6(mm)
280-190799-4	LL1mw-084-240402-GW	05/04/2024 23:29	1	05040025.D	UltraCarb5uODS 4.6(mm)
280-190799-5	LL1mw-080-240401-GW	05/04/2024 23:52	1	05040026.D	UltraCarb5uODS 4.6(mm)
280-190799-6	LL1mw-087-240401-GW	05/05/2024 00:15	1	05040027.D	UltraCarb5uODS 4.6(mm)
280-190799-6 MS	LL1mw-087-240401-GW MS	05/05/2024 00:38	1	05040028.D	UltraCarb5uODS 4.6(mm)
280-190799-6 MSD	LL1mw-087-240401-GW MSD	05/05/2024 01:01	1	05040029.D	UltraCarb5uODS 4.6(mm)
280-190799-7	LL1mw-087-240402-GW	05/05/2024 01:24	1	05040030.D	UltraCarb5uODS 4.6(mm)
280-190799-8	LL1mw-086-240401-GW	05/05/2024 01:47	1	05040031.D	UltraCarb5uODS 4.6(mm)
CCV 280-652145/32		05/05/2024 02:10	1	05040032.D	UltraCarb5uODS 4.6(mm)
280-190799-9	FWGmw-010-240401-GW	05/05/2024 02:33	1	05040033.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		05/05/2024 02:56	1		UltraCarb5uODS 4.6(mm)
CCV 280-652145/35		05/05/2024 03:19	1	05040035.D	UltraCarb5uODS 4.6(mm)

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-190799-1

SDG No.:

Batch Number: 649950 Batch Start Date: 04/17/24 20:37 Batch Analyst: Zhang, Jian

Batch Method: 8330B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Matrix	Basis	FinalAmount	8330 DMT 00016	8330 LCS 00134	8330_OP_DMT 00026	8330IntermStk 00080	8330Surrogate 00154
IC 280-649950/11		8330B			1 mL	125 uL			250 uL	
IC 280-649950/12		8330B			1 mL	50 uL			100 uL	
IC 280-649950/13		8330B			1 mL	35 uL			70 uL	
IC 280-649950/14		8330B			1 mL	20 uL			40 uL	
IC 280-649950/15		8330B			1 mL	12.5 uL			25 uL	
IC 280-649950/16		8330B			1 mL	5 uL			10 uL	
IC 280-649950/17		8330B			1 mL	2.5 uL			5 uL	
IC 280-649950/18		8330B			1 mL	1 uL			2 uL	
IC 280-649950/19		8330B			1 mL	0.5 uL			1 uL	
ICV 280-649950/20		8330B			1 mL		50 uL	50 uL		50 uL

Batch Notes	
Methanol ID	233990

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.: 280-190799-1

SDG No.:

Batch Number: 650851 Batch Start Date: 04/24/24 21:28 Batch Analyst: Zhang, Jian

Batch Method: 8330B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Matrix	Basis	FinalAmount	8330 LCS 00134	8330IntermStk 00080	8330Surrogate 00154		
IC 280-650851/10		8330B			1 mL		250 uL			
IC 280-650851/11		8330B			1 mL		100 uL			
IC 280-650851/12		8330B			1 mL		70 uL			
IC 280-650851/13		8330B			1 mL		40 uL			
IC 280-650851/14		8330B			1 mL		25 uL			
IC 280-650851/15		8330B			1 mL		10 uL			
IC 280-650851/16		8330B			1 mL		5 uL			
IC 280-650851/17		8330B			1 mL		2 uL			
IC 280-650851/18		8330B			1 mL		1 uL			
ICV 280-650851/19		8330B			1 mL	50 uL		50 uL		

Batch Notes	
Methanol ID	233990

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.: 280-190799-1

SDG No.:

Batch Number: 651841 Batch Start Date: 05/02/24 12:39 Batch Analyst: Johnston, Malcolm S

Batch Method: 3535 Batch End Date: 05/02/24 16:20

Lab Sample ID	Client Sample ID	Method Chain	Matrix	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	8330 LCS 00134	8330Surrogate 00155
MB 280-651841/1		3535, 8330B					500 mL	5 mL		0.1 mL
LCS 280-651841/2		3535, 8330B					500 mL	5 mL	0.1 mL	0.1 mL
LCSD 280-651841/3		3535, 8330B					500 mL	5 mL	0.1 mL	0.1 mL
280-190799-A-1	SCFmw-004-240401-GW	3535, 8330B	Water	T	712.8 g	282.7 g	430.1 mL	5 mL		0.1 mL
280-190799-A-2	SCFmw-004-240402-GW	3535, 8330B	Water	T	765.8 g	283.8 g	482 mL	5 mL		0.1 mL
280-190799-A-3	LL1mw-084-240401-GW	3535, 8330B	Water	T	737.5 g	279.7 g	457.8 mL	5 mL		0.1 mL
280-190799-A-4	LL1mw-084-240402-GW	3535, 8330B	Water	T	745.7 g	279.8 g	465.9 mL	5 mL		0.1 mL
280-190799-A-5	LL1mw-080-240401-GW	3535, 8330B	Water	T	741.8 g	279.1 g	462.7 mL	5 mL		0.1 mL
280-190799-A-6	LL1mw-087-240401-GW	3535, 8330B	Water	T	757.8 g	282.5 g	475.3 mL	5 mL		0.1 mL
280-190799-A-6 MS	LL1mw-087-240401-GW	3535, 8330B	Water	T	737.9 g	281.2 g	456.7 mL	5 mL	0.1 mL	0.1 mL
280-190799-A-6 MSD	LL1mw-087-240401-GW	3535, 8330B	Water	T	743.7 g	277.3 g	466.4 mL	5 mL	0.1 mL	0.1 mL
280-190799-A-7	LL1mw-087-240402-GW	3535, 8330B	Water	T	763.4 g	283.0 g	480.4 mL	5 mL		0.1 mL
280-190799-A-8	LL1mw-086-240401-GW	3535, 8330B	Water	T	766.1 g	282.5 g	483.6 mL	5 mL		0.1 mL
280-190799-A-9	FWGmw-010-240401-GW	3535, 8330B	Water	T	741.8 g	282.2 g	459.6 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.: 280-190799-1

SDG No.:

Batch Number: 651841 Batch Start Date: 05/02/24 12:39 Batch Analyst: Johnston, Malcolm S

Batch Method: 3535 Batch End Date: 05/02/24 16:20

Batch Notes	
First Start time	05/02/2024 13:14
First End time	05/02/2024 15:55
SPE Cartridge Type	Sep-Pak Porapak Rdx
SPE Cartridge Lot ID	005434002A
Balance ID	24350888
Balance is Level? (Y/N)	yes
Manifold ID	Manifold: B, C
QC Bottle Lot ID	0202401I
Pipette/Syringe/Dispenser ID	Dobby/ DOD/ Pugsley
Solvent Name	CaCl2
Solvent Lot #	CaCl2_Sol_00092
Rinse Solvent Name	Acetonitrile
Rinse Solvent Lot	Acetonitrile_00087
Acid Name	0.2% AAinACN
Acid ID	0.2% AAinACN_00004
Analyst ID - Spike Analyst	MJ
Analyst ID - Spike Witness Analyst	Reviewer: AA
Batch Comment	DV-OP-0017

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

Page 1 of 6

COC No.: RVAAP-413-TA

Date: 4/29/24

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 Spring 2024
Job/P.O. No.: P010216426
Sampler (Signature) Matt Sprecher (Printed Name) Matt Frechewski

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-004-240401-GW		185'	4/29/24	0925	W	2		2	
	SCFmw-004-240402-GW		185'	4/29/24	0925	W	2		2	

Requested Parameters

CS 4/29/24

Relinquished by	Date	Received by	Date	Notes: Total Number of Containers: 4
Signature	4/29/24	Signature	4/30/24	A. Cool, 4C B. HCl, pH<2, Cool, 4C C. HNO3, pH<2, Cool, 4C D. NaOH, pH>12, Cool 4C
Charles Spurr	Time	Matthew Little	Time	1. SW 8260B Notes:
Printed Name	1800	Printed Name	0915	2. SW 8270D
Leidos		EETDEN		3. SW 8270D SIM
Company		Company		4. SW 8082A
				5. SW 8081B
Relinquished by	Date	Received by	Date	6. SW 8330
Signature		Signature		7. SW 6010/6020/7470
	Time		Time	8. SW 9012B
Printed Name		Printed Name		9. SW 9034
Company		Company		10. SW 9056/9056A
				11. SW 6860
				12. EPA 353.2
				13. SW 7196
				14. SM2320B

Shipment Method: ~~Courier~~ FedEx
8108 8165 1484
8108 8165 1473

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

T: 3.2, 0.8, 0.2, RNAGA

280-190799 Chain of Custody

5/8/2024 6:07:23 AM

Chain of Custody Record

leidos

COC No.: RVAAP-414-TA

Page 2 of 6

Date: 04/29/24

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 Spring 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)	Sulfide (9)(F)	Nitrate/Nitrite/Sulfate (10)(A)	Alkalinity (14)(A)	TOC (13)(E)	Temperature Blank	Total Number of Containers	OBSERVATIONS, COMMENTS SPECIAL INSTRUCTIONS
	LL1mw-084-240401-GW	—	—	4/29/24	1005	W	2						2	
	LL1mw-084-240402-GW	—	—	4/29/24	1005	W	2						2	

Requested Parameters

CS 4/29/24

Relinquished by	Date	Received by	Date
Signature	4/29/24	Signature	04/30/24
Printed Name: Charles Spurr	Time: 1800	Printed Name: EETDEN	Time: 09:15
Company: Leidos		Company:	
Relinquished by	Date	Received by	Date
Signature		Signature	
Printed Name	Time	Printed Name	Time
Company		Company	

Notes:
Total Number of Containers: 4
A. Cool, 4C
B. HCl, pH<2, Cool, 4C
C. HNO3, pH<2, Cool, 4C
D. NaOH, pH>12, Cool 4C
E H2SO4, pH<2, Cool, 4C
F NaOH/Zn, 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 8012B
9. SW 9034
10. SW 9056/9056A
11. SW 350.1
12. EPA 353.2
13. SW 9060A
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

leidos

Chain of Custody Record

COC No.: RVAAP-915-TA

Page 3 of 6

Date: 04/29/24

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 Spring 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)	Sulfide (9)(F)	Nitrate/Nitrite/Sulfate (10)(A)	Alkalinity (14)(A)	TOC (13)(E)	Temperature Blank	Total Number of Containers	OBSERVATIONS, COMMENTS SPECIAL INSTRUCTIONS
	LL1mw-080-240401-GW	~	—	4/29/24	1130	W	2		CS 4/29/24				2	

Requested Parameters

Relinquished by	Date	Received by	Date	Notes: Total Number of Containers: 2
Signature	4/29/24	Signature	04/30/24	A. Cool, 4C
Charles Spurr	Time	Matthew Witt	Time	B. HCl, pH<2, Cool, 4C
Printed Name	1800	Printed Name	0915	C. HNO3, pH<2, Cool, 4C
Leidos		EETDEN		D. NaOH, pH>12, Cool 4C
Company		Company		

Relinquished by	Date	Received by	Date	1. SW 8260B Notes:
Signature		Signature		2. SW 8270D
Printed Name	Time	Printed Name	Time	3. SW 8270D SIM
Company		Company		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

5/8/2024
6:07:23 AM

leidos

Chain of Custody Record

Page 4 of 6

COC No.: RVAAP-416-TA

Date: 4/29/24

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 Spring 2024
Job/P.O. No.: P010216426
Sampler (Signature) Matt Schuldy (Printed Name) Matt Rechenberg

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
	LL1mw-087-240401-GW	—	12	4/29/24	1145	W	2		2	
	LL1mw-087-240401-GWMSD	—	12	4/29/24	1145	W	4		4	extra volume for MS/MSD
	LL1mw-087-240402-GW	—	12	4/29/24	1145	W	2		2	

CS 4/29/24

Relinquished by	Date	Received by	Date	Notes: Total Number of Containers: 8	Shipment Method: ~~Courier~~
Signature:	4/29/24	Signature:	4/30/24	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: Matthew Little	Time: 0915	1. SW 8260B Notes: 2. SW 8270D 3. SW 8270D SIM 4. SW 8082A 5. SW 8081B	
Company: Leidos		Company: EETDEN			
Relinquished by	Date	Received by	Date	6. SW 8330 7. SW 6010/6020/7470 8. SW 9012B 9. SW 9034 10. SW 9056/9056A	**Temperature Blank**
Signature		Signature		11. SW 6860 12. EPA 353.2 13. SW 7196 14. SM2320B	Lab: **Leidos** 8866 Commons Drive Twinsburg, OH 44087 (330) 405-5802
Printed Name	Time	Printed Name	Time		
Company		Company			

Leidos

White: Laboratory *Pink: Project Manager* *Yellow: Project QAO* *Goldenrod: Field Project Manager*

5/8/2024 6:07:23 AM

Chain of Custody Record

leidos

Page 5 of 6

COC No.: RVAAP-417-TA

Date: 4/29/24

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 Spring 2024
Job/P.O. No.: P010216426
Sampler (Signature): [signature] (Printed Name): Trey Anderson

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-086-240401-GW	-	-	4/28/24	1400	W	2		2	
		-	-							

4/29/24

Relinquished by	Date	Received by	Date
[signature]	4/29/24	[signature]	4/30/24
Signature		Signature	
Charles Spurr	Time	Matthew Little	Time
Printed Name	1800	Printed Name	0915
Leidos		EETPEN	
Company		Company	
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

5/8/2024 6:07:23 AM

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Chain of Custody Record

Page 6 of 6

COC No.: RVAAP-418-TA

Date: 4/29/24

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 Spring 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	Requested Parameters: Explosives (6)(A)	Temperature Blank	Total Number of Containers	OBSERVATIONS, COMMENTS SPECIAL INSTRUCTIONS
	FWGmw-010-240401-GW	—	—	4/29/24	1548	W	2		2	

4/29/24

Relinquished by	Date	Received by	Date
Signature	4/29/24	Signature	4/30/24
Printed Name: Charles Spurr	Time: 1800	Printed Name: Matthew Witt / SETOEN	Time: 0915
Company: Leidos		Company	
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

5/8/2024 6:07:23 AM

ORIGIN ID:CAKA (216) 317-5726
CHARLES SPURR
LEIDOS
8866 COMMONS BLVD STE 201

TWINSBURG, OH 44087
UNITED STATES US

SHIP DATE: 29APR24
ACTWGT: 54.00 LB
CAD: 6993880/SSFE2500
DIMS: 26x14x14 IN

BILL RECIPIENT

TO

TEST AMERICA DENVER LAB
4955 YARROW ST

ARVADA CO 80002
(303) 736-0100
INV:
PO:
REF:
DEPT:

Part # 156297-XXXX-XXXX EXP 01/25

FedEx Express

J242024032601ur

1 of 2
TRK# 0200 8108 8165 1473
MASTER

TUE - 30 APR 10:30A
PRIORITY OVERNIGHT
DSR AHS
80002
CO-US DEN

NX LAAA

8415603

ORIGIN ID:CAKA (216) 317-5726
CHARLES SPURR
LEIDOS
8866 COMMONS BLVD STE 201

TWINSBURG, OH 44087
UNITED STATES US

SHIP DATE: 29APR24
ACTWGT: 58.00 LB
CAD: 6993880/SSFE2500
DIMS: 26x14x14 IN

BILL RECIPIENT

TO

TEST AMERICA DENVER LAB
4955 YARROW ST

ARVADA CO 80002
(303) 736-0100
INV:
PO:
REF:
DEPT:

Part # 156297-XXXX-XXXX EXP 01/25

FedEx Express

J242024032601ur

2 of 2
MPS# 0681 2740 2975 8950
Mstr# 8108 8165 1473

TUE - 30 APR 10:30A
PRIORITY OVERNIGHT
0200
DSR AHS
80002
CO-US DEN

NX LAAA

8415605

Login Sample Receipt Checklist

Client: Leidos, Inc.

Job Number: 280-190799-1

Login Number: 190799
List Number: 1
Creator: Roehsner, Karen P

List Source: Eurofins Denver

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	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	