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ANALYTICAL REPORT

PREPARED FOR

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JOB DESCRIPTION

RVAAP FWGW

JOB NUMBER

280-176134-1

Eurofins Denver
4955 Yarrow Street
Arvada CO 80002

See page two for job notes and contact information.

my EOL

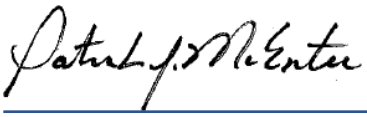
Eurofins Denver

Job Notes

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Authorization



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Qualifiers

HPLC/IC

Qualifier	Qualifier Description
J	Estimated: The analyte was positively identified; the quantitation is an estimation
J1	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
M	Manual integrated compound.
U	Undetected at the Limit of Detection.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

CASE NARRATIVE

Client: Leidos, Inc.

Project: RVAAP FWGW

Report Number: 280-176134-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 5/5/2023 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.1º C.

EXPLOSIVES (HPLC)

Samples SCFmw-004-230401-GW (280-176134-1), SCFmw-004-230402-GW (280-176134-2), LL1mw-086-230401-GW (280-176134-3), LL3mw-237-230401-GW (280-176134-4), LL1mw-089-230401-GW (280-176134-5), LL1mw-089-230402-GW (280-176134-6) and LL1mw-063-230401-GW (280-176134-7) were analyzed for Explosives (HPLC) in accordance with 8330B. The samples were prepared on 05/10/2023 and analyzed on 05/14/2023 and 05/17/2023.

MNX was detected in method blank MB 280-611915/1-A at a level that was below one half the LOQ.

The %RPD between the primary and confirmation column exceeded 40% for 2-Amino-4,6-dinitrotoluene for the following samples: LL1mw-063-230401-GW (280-176134-7) in preparation batch 280-611915 and analytical batch 280-612396. The results from both columns has been qualified and reported in accordance with the laboratory's QAS.

In preparation batch 280-611915, the following sample required filtration to reduce matrix interferences: LL1mw-086-230401-GW (280-176134-3).

In preparation batch 280-611915, the following sample went dry during the extraction for less than a second: LL1mw-089-230401-GW (280-176134-5). Water was added to the cartridge and the sample was eluted as normal.

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

Detection Summary

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

Job ID: 280-176134-1

Client Sample ID: SCFmw-004-230401-GW — Lab Sample ID: 280-176134-1

No Detections.

Client Sample ID: SCFmw-004-230402-GW — Lab Sample ID: 280-176134-2

No Detections.

Client Sample ID: LL1mw-086-230401-GW — Lab Sample ID: 280-176134-3

No Detections.

Client Sample ID: LL3mw-237-230401-GW — Lab Sample ID: 280-176134-4

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
2,4,6-Trinitrotoluene	0.11	J	0.12	0.11	0.049	ug/L	1		8330B	Total/NA
2-Amino-4,6-dinitrotoluene	1.0		0.12	0.11	0.055	ug/L	1		8330B	Total/NA
4-Amino-2,6-dinitrotoluene	2.2		0.16	0.13	0.063	ug/L	1		8330B	Total/NA

Client Sample ID: LL1mw-089-230401-GW — Lab Sample ID: 280-176134-5

No Detections.

Client Sample ID: LL1mw-089-230402-GW — Lab Sample ID: 280-176134-6

No Detections.

Client Sample ID: LL1mw-063-230401-GW — Lab Sample ID: 280-176134-7

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
2-Amino-4,6-dinitrotoluene	0.13	M J1	0.12	0.11	0.053	ug/L	1		8330B	Total/NA
2-Amino-4,6-dinitrotoluene	0.34	J1	0.12	0.11	0.053	ug/L	1		8330B	Total/NA
4-Amino-2,6-dinitrotoluene	0.32		0.16	0.13	0.061	ug/L	1		8330B	Total/NA
HMX	1.1	M	0.22	0.21	0.092	ug/L	1		8330B	Total/NA

This Detection Summary does not include radiochemical test results.

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

Client Sample ID: SCFmw-004-230401-GW
Date Collected: 05/04/23 09:31
Date Received: 05/05/23 10:00

Lab Sample ID: 280-176134-1
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		05/14/23 02:58	1
1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.039	ug/L		05/14/23 02:58	1
2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.047	ug/L		05/14/23 02:58	1
2,4-Dinitrotoluene	0.084	U	0.11	0.084	0.029	ug/L		05/14/23 02:58	1
2,6-Dinitrotoluene	0.084	U	0.11	0.084	0.042	ug/L		05/14/23 02:58	1
2-Amino-4,6-dinitrotoluene	0.11	U	0.12	0.11	0.053	ug/L		05/14/23 02:58	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.090	ug/L		05/14/23 02:58	1
3-Nitrotoluene	0.37	U	0.42	0.37	0.21	ug/L		05/14/23 02:58	1
4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.061	ug/L		05/14/23 02:58	1
4-Nitrotoluene	0.42	U M	0.43	0.42	0.11	ug/L		05/14/23 02:58	1
HMX	0.21	U M	0.22	0.21	0.092	ug/L		05/14/23 02:58	1
Nitrobenzene	0.21	U	0.22	0.21	0.096	ug/L		05/14/23 02:58	1
Nitroglycerin	2.1	U	2.2	2.1	0.97	ug/L		05/14/23 02:58	1
PETN	1.1	U	1.2	1.1	0.47	ug/L		05/14/23 02:58	1
RDX	0.21	U	0.22	0.21	0.054	ug/L		05/14/23 02:58	1
Tetryl	0.11	U	0.12	0.11	0.033	ug/L		05/14/23 02:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*109*		*83 - 119*	*05/10/23 13:48*	*05/14/23 02:58*	*1*

Client Sample ID: SCFmw-004-230402-GW
Date Collected: 05/04/23 09:31
Date Received: 05/05/23 10:00

Lab Sample ID: 280-176134-2
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.21	U	0.22	0.21	0.089	ug/L		05/14/23 03:21	1
1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.039	ug/L		05/14/23 03:21	1
2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.048	ug/L		05/14/23 03:21	1
2,4-Dinitrotoluene	0.085	U	0.11	0.085	0.029	ug/L		05/14/23 03:21	1
2,6-Dinitrotoluene	0.085	U	0.11	0.085	0.043	ug/L		05/14/23 03:21	1
2-Amino-4,6-dinitrotoluene	0.11	U	0.12	0.11	0.054	ug/L		05/14/23 03:21	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.091	ug/L		05/14/23 03:21	1
3-Nitrotoluene	0.37	U	0.42	0.37	0.21	ug/L		05/14/23 03:21	1
4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.061	ug/L		05/14/23 03:21	1
4-Nitrotoluene	0.42	U	0.43	0.42	0.11	ug/L		05/14/23 03:21	1
HMX	0.21	U M	0.22	0.21	0.093	ug/L		05/14/23 03:21	1
Nitrobenzene	0.21	U	0.22	0.21	0.097	ug/L		05/14/23 03:21	1
Nitroglycerin	2.1	U	2.2	2.1	0.98	ug/L		05/14/23 03:21	1
PETN	1.1	U	1.2	1.1	0.47	ug/L		05/14/23 03:21	1
RDX	0.21	U	0.22	0.21	0.055	ug/L		05/14/23 03:21	1
Tetryl	0.11	U	0.12	0.11	0.034	ug/L		05/14/23 03:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*110*		*83 - 119*	*05/10/23 13:48*	*05/14/23 03:21*	*1*

Client Sample ID: LL1mw-086-230401-GW
Date Collected: 05/04/23 11:25
Date Received: 05/05/23 10:00

Lab Sample ID: 280-176134-3
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.21	U	0.22	0.21	0.089	ug/L		05/14/23 04:30	1
1,3-Dinitrobenzene	0.11	U M	0.12	0.11	0.039	ug/L		05/14/23 04:30	1

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

Client Sample ID: LL1mw-086-230401-GW
Date Collected: 05/04/23 11:25
Date Received: 05/05/23 10:00

Lab Sample ID: 280-176134-3
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.048	ug/L		05/14/23 04:30	1
2,4-diamino-6-nitrotoluene	0.95	U	1.1	0.95	0.46	ug/L		05/14/23 04:30	1
2,4-Dinitrotoluene	0.085	U	0.11	0.085	0.029	ug/L		05/14/23 04:30	1
2,6-diamino-4-nitrotoluene	0.95	U	1.1	0.95	0.23	ug/L		05/14/23 04:30	1
2,6-Dinitrotoluene	0.085	U	0.11	0.085	0.042	ug/L		05/14/23 04:30	1
2-Amino-4,6-dinitrotoluene	0.11	U	0.12	0.11	0.054	ug/L		05/14/23 04:30	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.091	ug/L		05/14/23 04:30	1
3,5-Dinitroaniline	0.32	U	0.42	0.32	0.14	ug/L		05/14/23 04:30	1
3-Nitrotoluene	0.37	U	0.42	0.37	0.21	ug/L		05/14/23 04:30	1
4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.061	ug/L		05/14/23 04:30	1
4-Nitrotoluene	0.42	U	0.43	0.42	0.11	ug/L		05/14/23 04:30	1
DNX	0.26	U	0.53	0.26	0.10	ug/L		05/14/23 04:30	1
HMX	0.21	U M	0.22	0.21	0.093	ug/L		05/14/23 04:30	1
MNX	0.31	U	0.53	0.31	0.098	ug/L		05/17/23 11:13	1
Nitrobenzene	0.21	U	0.22	0.21	0.096	ug/L		05/14/23 04:30	1
Nitroglycerin	2.1	U	2.2	2.1	0.98	ug/L		05/14/23 04:30	1
PETN	1.1	U	1.2	1.1	0.47	ug/L		05/14/23 04:30	1
RDX	0.21	U	0.22	0.21	0.055	ug/L		05/14/23 04:30	1
Tetryl	0.11	U M	0.12	0.11	0.034	ug/L		05/14/23 04:30	1
TNX	0.26	U	0.53	0.26	0.084	ug/L		05/14/23 04:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*114*	*M*	*83 - 119*	*05/10/23 13:48*	*05/14/23 04:30*	*1*
1,2-Dinitrobenzene	*97*		*83 - 119*	*05/10/23 13:48*	*05/17/23 11:13*	*1*

Client Sample ID: LL3mw-237-230401-GW
Date Collected: 05/04/23 14:07
Date Received: 05/05/23 10:00

Lab Sample ID: 280-176134-4
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		05/14/23 04:53	1
1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.040	ug/L		05/17/23 12:23	1
2,4,6-Trinitrotoluene	**0.11**	**J**	0.12	0.11	0.049	ug/L		05/14/23 04:53	1
2,4-diamino-6-nitrotoluene	0.98	U	1.1	0.98	0.47	ug/L		05/14/23 04:53	1
2,4-Dinitrotoluene	0.087	U	0.11	0.087	0.030	ug/L		05/14/23 04:53	1
2,6-diamino-4-nitrotoluene	0.98	U	1.1	0.98	0.24	ug/L		05/14/23 04:53	1
2,6-Dinitrotoluene	0.087	U	0.11	0.087	0.043	ug/L		05/14/23 04:53	1
2-Amino-4,6-dinitrotoluene	**1.0**		0.12	0.11	0.055	ug/L		05/14/23 04:53	1
2-Nitrotoluene	0.22	U	0.23	0.22	0.093	ug/L		05/14/23 04:53	1
3,5-Dinitroaniline	0.33	U	0.43	0.33	0.14	ug/L		05/14/23 04:53	1
3-Nitrotoluene	0.38	U	0.43	0.38	0.21	ug/L		05/14/23 04:53	1
4-Amino-2,6-dinitrotoluene	**2.2**		0.16	0.13	0.063	ug/L		05/14/23 04:53	1
4-Nitrotoluene	0.43	U	0.44	0.43	0.11	ug/L		05/14/23 04:53	1
DNX	0.27	U	0.54	0.27	0.11	ug/L		05/14/23 04:53	1
HMX	0.22	U M	0.23	0.22	0.095	ug/L		05/14/23 04:53	1
MNX	0.31	U M	0.54	0.31	0.10	ug/L		05/14/23 04:53	1
Nitrobenzene	0.22	U M	0.23	0.22	0.099	ug/L		05/14/23 04:53	1
Nitroglycerin	2.2	U	2.3	2.2	1.0	ug/L		05/14/23 04:53	1
PETN	1.1	U	1.2	1.1	0.48	ug/L		05/14/23 04:53	1
RDX	0.22	U M	0.23	0.22	0.056	ug/L		05/14/23 04:53	1
Tetryl	0.11	U M	0.12	0.11	0.034	ug/L		05/14/23 04:53	1

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

Client Sample ID: LL3mw-237-230401-GW
Date Collected: 05/04/23 14:07
Date Received: 05/05/23 10:00

Lab Sample ID: 280-176134-4
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
TNX	0.27	U M	0.54	0.27	0.086	ug/L		05/14/23 04:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*105*	*M*	*83 - 119*	*05/10/23 13:48*	*05/14/23 04:53*	*1*
1,2-Dinitrobenzene	*94*		*83 - 119*	*05/10/23 13:48*	*05/17/23 12:23*	*1*

Client Sample ID: LL1mw-089-230401-GW
Date Collected: 05/04/23 13:45
Date Received: 05/05/23 10:00

Lab Sample ID: 280-176134-5
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		05/14/23 05:16	1
1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.040	ug/L		05/14/23 05:16	1
2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.048	ug/L		05/14/23 05:16	1
2,4-diamino-6-nitrotoluene	0.97	U	1.1	0.97	0.47	ug/L		05/14/23 05:16	1
2,4-Dinitrotoluene	0.086	U	0.11	0.086	0.029	ug/L		05/14/23 05:16	1
2,6-diamino-4-nitrotoluene	0.97	U	1.1	0.97	0.24	ug/L		05/14/23 05:16	1
2,6-Dinitrotoluene	0.086	U	0.11	0.086	0.043	ug/L		05/14/23 05:16	1
2-Amino-4,6-dinitrotoluene	0.11	U	0.12	0.11	0.055	ug/L		05/14/23 05:16	1
2-Nitrotoluene	0.22	U	0.23	0.22	0.092	ug/L		05/14/23 05:16	1
3,5-Dinitroaniline	0.32	U	0.43	0.32	0.14	ug/L		05/14/23 05:16	1
3-Nitrotoluene	0.38	U	0.43	0.38	0.21	ug/L		05/14/23 05:16	1
4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.062	ug/L		05/14/23 05:16	1
4-Nitrotoluene	0.43	U	0.44	0.43	0.11	ug/L		05/14/23 05:16	1
DNX	0.27	U	0.54	0.27	0.10	ug/L		05/14/23 05:16	1
HMX	0.22	U	0.23	0.22	0.094	ug/L		05/14/23 05:16	1
MNX	0.31	U	0.54	0.31	0.10	ug/L		05/14/23 05:16	1
Nitrobenzene	0.22	U	0.23	0.22	0.098	ug/L		05/14/23 05:16	1
Nitroglycerin	2.2	U	2.3	2.2	0.99	ug/L		05/14/23 05:16	1
PETN	1.1	U	1.2	1.1	0.48	ug/L		05/14/23 05:16	1
RDX	0.22	U	0.23	0.22	0.055	ug/L		05/14/23 05:16	1
Tetryl	0.11	U	0.12	0.11	0.034	ug/L		05/14/23 05:16	1
TNX	0.27	U M	0.54	0.27	0.085	ug/L		05/14/23 05:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*106*		*83 - 119*	*05/10/23 13:48*	*05/14/23 05:16*	*1*

Client Sample ID: LL1mw-089-230402-GW
Date Collected: 05/04/23 13:45
Date Received: 05/05/23 10:00

Lab Sample ID: 280-176134-6
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.21	U	0.22	0.21	0.090	ug/L		05/14/23 05:39	1
1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.039	ug/L		05/14/23 05:39	1
2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.048	ug/L		05/14/23 05:39	1
2,4-diamino-6-nitrotoluene	0.96	U	1.1	0.96	0.46	ug/L		05/14/23 05:39	1
2,4-Dinitrotoluene	0.086	U	0.11	0.086	0.029	ug/L		05/14/23 05:39	1
2,6-diamino-4-nitrotoluene	0.96	U	1.1	0.96	0.24	ug/L		05/14/23 05:39	1
2,6-Dinitrotoluene	0.086	U	0.11	0.086	0.043	ug/L		05/14/23 05:39	1
2-Amino-4,6-dinitrotoluene	0.11	U	0.12	0.11	0.054	ug/L		05/14/23 05:39	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.091	ug/L		05/14/23 05:39	1
3,5-Dinitroaniline	0.32	U	0.43	0.32	0.14	ug/L		05/14/23 05:39	1

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

Client Sample ID: LL1mw-089-230402-GW
Date Collected: 05/04/23 13:45
Date Received: 05/05/23 10:00

Lab Sample ID: 280-176134-6
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
3-Nitrotoluene	0.37	U	0.43	0.37	0.21	ug/L		05/14/23 05:39	1
4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.062	ug/L		05/14/23 05:39	1
4-Nitrotoluene	0.43	U	0.44	0.43	0.11	ug/L		05/14/23 05:39	1
DNX	0.27	U	0.53	0.27	0.10	ug/L		05/14/23 05:39	1
HMX	0.21	U	0.22	0.21	0.094	ug/L		05/14/23 05:39	1
MNX	0.31	U	0.53	0.31	0.099	ug/L		05/14/23 05:39	1
Nitrobenzene	0.21	U	0.22	0.21	0.097	ug/L		05/14/23 05:39	1
Nitroglycerin	2.1	U	2.2	2.1	0.99	ug/L		05/14/23 05:39	1
PETN	1.1	U	1.2	1.1	0.48	ug/L		05/14/23 05:39	1
RDX	0.21	U	0.22	0.21	0.055	ug/L		05/14/23 05:39	1
Tetryl	0.11	U	0.12	0.11	0.034	ug/L		05/14/23 05:39	1
TNX	0.27	U M	0.53	0.27	0.085	ug/L		05/14/23 05:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*105*		*83 - 119*	*05/10/23 13:48*	*05/14/23 05:39*	*1*

Client Sample ID: LL1mw-063-230401-GW
Date Collected: 05/04/23 10:32
Date Received: 05/05/23 10:00

Lab Sample ID: 280-176134-7
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.21	U	0.22	0.21	0.089	ug/L		05/14/23 06:02	1
1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.039	ug/L		05/17/23 12:58	1
2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.047	ug/L		05/14/23 06:02	1
2,4-diamino-6-nitrotoluene	0.95	U	1.1	0.95	0.46	ug/L		05/14/23 06:02	1
2,4-Dinitrotoluene	0.084	U	0.11	0.084	0.029	ug/L		05/14/23 06:02	1
2,6-diamino-4-nitrotoluene	0.95	U M	1.1	0.95	0.23	ug/L		05/14/23 06:02	1
2,6-Dinitrotoluene	0.084	U	0.11	0.084	0.042	ug/L		05/14/23 06:02	1
2-Amino-4,6-dinitrotoluene	**0.13**	**M J1**	0.12	0.11	0.053	ug/L		05/14/23 06:02	1
2-Amino-4,6-dinitrotoluene	**0.34**	**J1**	0.12	0.11	0.053	ug/L		05/17/23 12:58	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.090	ug/L		05/14/23 06:02	1
3,5-Dinitroaniline	0.32	U	0.42	0.32	0.14	ug/L		05/14/23 06:02	1
3-Nitrotoluene	0.37	U	0.42	0.37	0.21	ug/L		05/14/23 06:02	1
4-Amino-2,6-dinitrotoluene	**0.32**		0.16	0.13	0.061	ug/L		05/14/23 06:02	1
4-Nitrotoluene	0.42	U	0.43	0.42	0.11	ug/L		05/14/23 06:02	1
DNX	0.26	U	0.53	0.26	0.10	ug/L		05/14/23 06:02	1
HMX	**1.1**	**M**	0.22	0.21	0.092	ug/L		05/14/23 06:02	1
MNX	0.31	U	0.53	0.31	0.098	ug/L		05/14/23 06:02	1
Nitrobenzene	0.21	U M	0.22	0.21	0.096	ug/L		05/14/23 06:02	1
Nitroglycerin	2.1	U	2.2	2.1	0.97	ug/L		05/14/23 06:02	1
PETN	1.1	U	1.2	1.1	0.47	ug/L		05/14/23 06:02	1
RDX	0.21	U	0.22	0.21	0.054	ug/L		05/14/23 06:02	1
Tetryl	0.11	U	0.12	0.11	0.034	ug/L		05/14/23 06:02	1
TNX	0.26	U	0.53	0.26	0.083	ug/L		05/14/23 06:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*109*		*83 - 119*	*05/10/23 13:48*	*05/14/23 06:02*	*1*
1,2-Dinitrobenzene	*92*		*83 - 119*	*05/10/23 13:48*	*05/17/23 12:58*	*1*

Default Detection Limits

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

Job ID: 280-176134-1

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-diamino-6-nitrotoluene	1.0	0.43	ug/L
2,4-Dinitrotoluene	0.10	0.027	ug/L
2,6-diamino-4-nitrotoluene	1.0	0.22	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
3,5-Dinitroaniline	0.40	0.13	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
DNX	0.50	0.097	ug/L
HMX	0.21	0.088	ug/L
MNX	0.50	0.093	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
TNX	0.50	0.079	ug/L

Surrogate Summary

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

Job ID: 280-176134-1

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)								
280-176134-1	SCFmw-004-230401-GW	109								
280-176134-2	SCFmw-004-230402-GW	110								
280-176134-3	LL1mw-086-230401-GW	114 M								
280-176134-4	LL3mw-237-230401-GW	105 M								
280-176134-5	LL1mw-089-230401-GW	106								
280-176134-6	LL1mw-089-230402-GW	105								
280-176134-7	LL1mw-063-230401-GW	109								
LCS 280-611915/2-A	Lab Control Sample	100								
LCS 280-611915/4-A	Lab Control Sample	101								
LCSD 280-611915/3-A	Lab Control Sample Dup	103								
LCSD 280-611915/5-A	Lab Control Sample Dup	101								
MB 280-611915/1-A	Method Blank	114								

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)								
280-176134-3	LL1mw-086-230401-GW	97								
280-176134-4	LL3mw-237-230401-GW	94								
280-176134-7	LL1mw-063-230401-GW	92								

Surrogate Legend

12DNB = 1,2-Dinitrobenzene

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Lab Sample ID: MB 280-611915/1-A
Matrix: Water
Analysis Batch: 612396

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 611915

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.20	U	0.21	0.20	0.084	ug/L		05/13/23 20:05	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037	ug/L		05/13/23 20:05	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045	ug/L		05/13/23 20:05	1
2,4-diamino-6-nitrotoluene	0.90	U	1.0	0.90	0.43	ug/L		05/13/23 20:05	1
2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.027	ug/L		05/13/23 20:05	1
2,6-diamino-4-nitrotoluene	0.90	U	1.0	0.90	0.22	ug/L		05/13/23 20:05	1
2,6-Dinitrotoluene	0.080	U	0.10	0.080	0.040	ug/L		05/13/23 20:05	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051	ug/L		05/13/23 20:05	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.086	ug/L		05/13/23 20:05	1
3,5-Dinitroaniline	0.30	U	0.40	0.30	0.13	ug/L		05/13/23 20:05	1
3-Nitrotoluene	0.35	U	0.40	0.35	0.20	ug/L		05/13/23 20:05	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.058	ug/L		05/13/23 20:05	1
4-Nitrotoluene	0.40	U	0.41	0.40	0.10	ug/L		05/13/23 20:05	1
DNX	0.25	U	0.50	0.25	0.097	ug/L		05/13/23 20:05	1
HMX	0.20	U	0.21	0.20	0.088	ug/L		05/13/23 20:05	1
MNX	0.188	J M	0.50	0.29	0.093	ug/L		05/13/23 20:05	1
Nitrobenzene	0.20	U	0.21	0.20	0.091	ug/L		05/13/23 20:05	1
Nitroglycerin	2.0	U	2.1	2.0	0.92	ug/L		05/13/23 20:05	1
PETN	1.0	U	1.1	1.0	0.45	ug/L		05/13/23 20:05	1
RDX	0.20	U	0.21	0.20	0.052	ug/L		05/13/23 20:05	1
Tetryl	0.10	U	0.11	0.10	0.032	ug/L		05/13/23 20:05	1
TNX	0.25	U	0.50	0.25	0.079	ug/L		05/13/23 20:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*114*		*83 - 119*	*05/10/23 13:48*	*05/13/23 20:05*	*1*

Lab Sample ID: LCS 280-611915/2-A
Matrix: Water
Analysis Batch: 612396

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 611915

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,3,5-Trinitrobenzene	2.00	1.99		ug/L		99	73 - 125
1,3-Dinitrobenzene	2.00	1.93		ug/L		96	78 - 120
2,4,6-Trinitrotoluene	2.00	1.84		ug/L		92	71 - 123
2,4-Dinitrotoluene	2.00	1.85		ug/L		93	78 - 120
2,6-Dinitrotoluene	2.00	1.91		ug/L		96	77 - 127
2-Amino-4,6-dinitrotoluene	2.00	1.74		ug/L		87	79 - 120
2-Nitrotoluene	2.00	1.54		ug/L		77	70 - 127
3,5-Dinitroaniline	2.00	1.71		ug/L		85	71 - 117
3-Nitrotoluene	2.00	1.51		ug/L		76	73 - 125
4-Amino-2,6-dinitrotoluene	2.00	1.65		ug/L		82	76 - 125
4-Nitrotoluene	2.00	1.50		ug/L		75	71 - 127
DNX	2.00	2.00	M	ug/L		100	66 - 119
HMX	2.00	1.78	M	ug/L		89	65 - 135
MNX	2.33	2.56		ug/L		110	57 - 132
Nitrobenzene	2.00	1.76		ug/L		88	65 - 134
Nitroglycerin	20.0	20.0		ug/L		100	74 - 127
PETN	20.0	20.8		ug/L		104	73 - 127

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

Lab Sample ID: LCS 280-611915/2-A
Matrix: Water
Analysis Batch: 612396

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 611915

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
RDX			2.00	1.92		ug/L		96	68 - 130		
Tetryl			2.00	1.97		ug/L		98	64 - 128		
TNX			2.01	1.96	M	ug/L		98	50 - 150		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dinitrobenzene	*100*		*83 - 119*

Lab Sample ID: LCS 280-611915/4-A
Matrix: Water
Analysis Batch: 612396

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 611915

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
2,4-diamino-6-nitrotoluene			2.00	1.40	M	ug/L		70	68 - 122		
2,6-diamino-4-nitrotoluene			2.00	1.55	M	ug/L		78	72 - 122		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dinitrobenzene	*101*		*83 - 119*

Lab Sample ID: LCSD 280-611915/3-A
Matrix: Water
Analysis Batch: 612396

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 611915

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,3,5-Trinitrobenzene			2.00	2.07		ug/L		104	73 - 125	4	20
1,3-Dinitrobenzene			2.00	2.00		ug/L		100	78 - 120	4	20
2,4,6-Trinitrotoluene			2.00	1.91		ug/L		95	71 - 123	4	20
2,4-Dinitrotoluene			2.00	1.92		ug/L		96	78 - 120	3	20
2,6-Dinitrotoluene			2.00	1.99		ug/L		100	77 - 127	4	20
2-Amino-4,6-dinitrotoluene			2.00	1.85		ug/L		92	79 - 120	6	20
2-Nitrotoluene			2.00	1.61		ug/L		81	70 - 127	5	20
3,5-Dinitroaniline			2.00	1.77		ug/L		89	71 - 117	4	20
3-Nitrotoluene			2.00	1.61		ug/L		80	73 - 125	6	20
4-Amino-2,6-dinitrotoluene			2.00	1.70		ug/L		85	76 - 125	3	20
4-Nitrotoluene			2.00	1.60		ug/L		80	71 - 127	6	20
DNX			2.00	2.10	M	ug/L		105	66 - 119	5	20
HMX			2.00	1.78	M	ug/L		89	65 - 135	0	20
MNX			2.33	2.67		ug/L		114	57 - 132	4	20
Nitrobenzene			2.00	1.82		ug/L		91	65 - 134	4	20
Nitroglycerin			20.0	20.0		ug/L		100	74 - 127	0	20
PETN			20.0	21.7		ug/L		109	73 - 127	4	20
RDX			2.00	1.96		ug/L		98	68 - 130	2	20
Tetryl			2.00	2.09		ug/L		104	64 - 128	6	20
TNX			2.01	1.96	M	ug/L		98	50 - 150	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dinitrobenzene	*103*		*83 - 119*

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

Lab Sample ID: LCSD 280-611915/5-A
Client Sample ID: Lab Control Sample Dup
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 612396
Prep Batch: 611915

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4-diamino-6-nitrotoluene			2.00	1.45	M	ug/L		72	68 - 122	3	20
2,6-diamino-4-nitrotoluene			2.00	1.58	M	ug/L		79	72 - 122	2	20

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

HPLC/IC

Prep Batch: 611915

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176134-1	SCFmw-004-230401-GW	Total/NA	Water	3535	
280-176134-2	SCFmw-004-230402-GW	Total/NA	Water	3535	
280-176134-3	LL1mw-086-230401-GW	Total/NA	Water	3535	
280-176134-4	LL3mw-237-230401-GW	Total/NA	Water	3535	
280-176134-5	LL1mw-089-230401-GW	Total/NA	Water	3535	
280-176134-6	LL1mw-089-230402-GW	Total/NA	Water	3535	
280-176134-7	LL1mw-063-230401-GW	Total/NA	Water	3535	
MB 280-611915/1-A	Method Blank	Total/NA	Water	3535	
LCS 280-611915/2-A	Lab Control Sample	Total/NA	Water	3535	
LCS 280-611915/4-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 280-611915/3-A	Lab Control Sample Dup	Total/NA	Water	3535	
LCSD 280-611915/5-A	Lab Control Sample Dup	Total/NA	Water	3535	

Analysis Batch: 612396

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176134-1	SCFmw-004-230401-GW	Total/NA	Water	8330B	611915
280-176134-2	SCFmw-004-230402-GW	Total/NA	Water	8330B	611915
280-176134-3	LL1mw-086-230401-GW	Total/NA	Water	8330B	611915
280-176134-4	LL3mw-237-230401-GW	Total/NA	Water	8330B	611915
280-176134-5	LL1mw-089-230401-GW	Total/NA	Water	8330B	611915
280-176134-6	LL1mw-089-230402-GW	Total/NA	Water	8330B	611915
280-176134-7	LL1mw-063-230401-GW	Total/NA	Water	8330B	611915
MB 280-611915/1-A	Method Blank	Total/NA	Water	8330B	611915
LCS 280-611915/2-A	Lab Control Sample	Total/NA	Water	8330B	611915
LCS 280-611915/4-A	Lab Control Sample	Total/NA	Water	8330B	611915
LCSD 280-611915/3-A	Lab Control Sample Dup	Total/NA	Water	8330B	611915
LCSD 280-611915/5-A	Lab Control Sample Dup	Total/NA	Water	8330B	611915

Analysis Batch: 612692

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-176134-3	LL1mw-086-230401-GW	Total/NA	Water	8330B	611915
280-176134-4	LL3mw-237-230401-GW	Total/NA	Water	8330B	611915
280-176134-7	LL1mw-063-230401-GW	Total/NA	Water	8330B	611915

Client Sample ID: SCFmw-004-230401-GW
Lab Sample ID: 280-176134-1
Date Collected: 05/04/23 09:31
Matrix: Water
Date Received: 05/05/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			475.6 mL	5 mL	611915	05/10/23 13:48	DCL	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	612396	05/14/23 02:58	JZ	EET DEN

Client Sample ID: SCFmw-004-230402-GW
Lab Sample ID: 280-176134-2
Date Collected: 05/04/23 09:31
Matrix: Water
Date Received: 05/05/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			471.5 mL	5 mL	611915	05/10/23 13:48	DCL	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	612396	05/14/23 03:21	JZ	EET DEN

Client Sample ID: LL1mw-086-230401-GW
Lab Sample ID: 280-176134-3
Date Collected: 05/04/23 11:25
Matrix: Water
Date Received: 05/05/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			471.9 mL	5 mL	611915	05/10/23 13:48	DCL	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	612396	05/14/23 04:30	JZ	EET DEN
Total/NA	Prep	3535			471.9 mL	5 mL	611915	05/10/23 13:48	DCL	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	612692	05/17/23 11:13	JZ	EET DEN

Client Sample ID: LL3mw-237-230401-GW
Lab Sample ID: 280-176134-4
Date Collected: 05/04/23 14:07
Matrix: Water
Date Received: 05/05/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			461 mL	5 mL	611915	05/10/23 13:48	DCL	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	612396	05/14/23 04:53	JZ	EET DEN
Total/NA	Prep	3535			461 mL	5 mL	611915	05/10/23 13:48	DCL	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	612692	05/17/23 12:23	JZ	EET DEN

Client Sample ID: LL1mw-089-230401-GW
Lab Sample ID: 280-176134-5
Date Collected: 05/04/23 13:45
Matrix: Water
Date Received: 05/05/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			464.6 mL	5 mL	611915	05/10/23 13:48	DCL	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	612396	05/14/23 05:16	JZ	EET DEN

Client Sample ID: LL1mw-089-230402-GW
Lab Sample ID: 280-176134-6
Date Collected: 05/04/23 13:45
Matrix: Water
Date Received: 05/05/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			467.3 mL	5 mL	611915	05/10/23 13:48	DCL	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	612396	05/14/23 05:39	JZ	EET DEN

Lab Chronicle

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

Job ID: 280-176134-1

Client Sample ID: LL1mw-063-230401-GW

Date Collected: 05/04/23 10:32
Date Received: 05/05/23 10:00

Lab Sample ID: 280-176134-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			474.4 mL	5 mL	611915	05/10/23 13:48	DCL	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	612396	05/14/23 06:02	JZ	EET DEN
Total/NA	Prep	3535			474.4 mL	5 mL	611915	05/10/23 13:48	DCL	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	612692	05/17/23 12:58	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: 280-176134-1
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	10-31-23

Method Summary

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

Job ID: 280-176134-1

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: 280-176134-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-176134-1	SCFmw-004-230401-GW	Water	05/04/23 09:31	05/05/23 10:00
280-176134-2	SCFmw-004-230402-GW	Water	05/04/23 09:31	05/05/23 10:00
280-176134-3	LL1mw-086-230401-GW	Water	05/04/23 11:25	05/05/23 10:00
280-176134-4	LL3mw-237-230401-GW	Water	05/04/23 14:07	05/05/23 10:00
280-176134-5	LL1mw-089-230401-GW	Water	05/04/23 13:45	05/05/23 10:00
280-176134-6	LL1mw-089-230402-GW	Water	05/04/23 13:45	05/05/23 10:00
280-176134-7	LL1mw-063-230401-GW	Water	05/04/23 10:32	05/05/23 10:00

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 599427

Lab Sample ID: IC 280-599427/11 Client Sample ID:

Date Analyzed: 01/17/23 00:33 Lab File ID: 01160039.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.43	Baseline	LV5D	01/17/23 12:22
2,4-diamino-6-nitrotoluene	6.62	Baseline	LV5D	01/17/23 12:22

Lab Sample ID: IC 280-599427/12 Client Sample ID:

Date Analyzed: 01/17/23 00:56 Lab File ID: 01160040.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.46	Baseline	LV5D	01/17/23 12:23
2,4-diamino-6-nitrotoluene	6.64	Baseline	LV5D	01/17/23 12:23

Lab Sample ID: IC 280-599427/13 Client Sample ID:

Date Analyzed: 01/17/23 01:19 Lab File ID: 01160041.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.46	Baseline	LV5D	01/17/23 12:23
2,4-diamino-6-nitrotoluene	6.64	Baseline	LV5D	01/17/23 12:23

Lab Sample ID: IC 280-599427/14 Client Sample ID:

Date Analyzed: 01/17/23 01:43 Lab File ID: 01160042.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.46	Baseline	LV5D	01/17/23 12:30
2,4-diamino-6-nitrotoluene	6.64	Baseline	LV5D	01/17/23 12:30

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 599427

Lab Sample ID: IC 280-599427/15 Client Sample ID:

Date Analyzed: 01/17/23 02:06 Lab File ID: 01160043.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.46	Baseline	LV5D	01/17/23 12:31
2,4-diamino-6-nitrotoluene	6.64	Baseline	LV5D	01/17/23 12:31

Lab Sample ID: IC 280-599427/16 Client Sample ID:

Date Analyzed: 01/17/23 02:30 Lab File ID: 01160044.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.46	Baseline	LV5D	01/17/23 12:31
2,4-diamino-6-nitrotoluene	6.63	Baseline	LV5D	01/17/23 12:31

Lab Sample ID: IC 280-599427/17 Client Sample ID:

Date Analyzed: 01/17/23 02:53 Lab File ID: 01160045.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.46	Baseline	LV5D	01/17/23 12:31
2,4-diamino-6-nitrotoluene	6.64	Baseline	LV5D	01/17/23 12:31

Lab Sample ID: IC 280-599427/18 Client Sample ID:

Date Analyzed: 01/17/23 03:16 Lab File ID: 01160046.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.46	Baseline	LV5D	01/17/23 12:31
2,4-diamino-6-nitrotoluene	6.64	Baseline	LV5D	01/17/23 12:31

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 599427

Lab Sample ID: ICV 280-599427/19 Client Sample ID:

Date Analyzed: 01/17/23 03:40 Lab File ID: 01160047.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.45	Baseline	LV5D	01/17/23 12:32
2,4-diamino-6-nitrotoluene	6.63	Baseline	LV5D	01/17/23 12:32

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 601664

Lab Sample ID: IC 280-601664/11 Client Sample ID:

Date Analyzed: 02/08/23 15:38 Lab File ID: 02080011.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.55	Baseline Smoothing	LV5D	02/08/23 16:28

Lab Sample ID: IC 280-601664/12 Client Sample ID:

Date Analyzed: 02/08/23 16:01 Lab File ID: 02080012.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.55	Baseline Smoothing	LV5D	02/08/23 16:28

Lab Sample ID: IC 280-601664/13 Client Sample ID:

Date Analyzed: 02/08/23 16:24 Lab File ID: 02080013.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.54	Baseline Smoothing	LV5D	02/08/23 16:55
RDX	7.56	Baseline Smoothing	LV5D	02/08/23 19:09

Lab Sample ID: IC 280-601664/14 Client Sample ID:

Date Analyzed: 02/08/23 16:47 Lab File ID: 02080014.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.55	Baseline Smoothing	LV5D	02/08/23 17:11
RDX	7.56	Baseline Smoothing	LV5D	02/08/23 19:09

Lab Sample ID: IC 280-601664/15 Client Sample ID:

Date Analyzed: 02/08/23 17:10 Lab File ID: 02080015.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	7.57	Baseline Smoothing	LV5D	02/08/23 19:09

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 601664

Lab Sample ID: IC 280-601664/16 Client Sample ID:

Date Analyzed: 02/08/23 17:33 Lab File ID: 02080016.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	7.56	Baseline Smoothing	LV5D	02/08/23 19:09
PETN	14.55	Baseline Smoothing	LV5D	02/08/23 19:08

Lab Sample ID: IC 280-601664/17 Client Sample ID:

Date Analyzed: 02/08/23 17:56 Lab File ID: 02080017.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.55	Baseline Smoothing	LV5D	02/08/23 19:07
RDX	7.57	Baseline Smoothing	LV5D	02/08/23 19:09
PETN	14.58	Baseline Smoothing	LV5D	02/08/23 19:08

Lab Sample ID: IC 280-601664/18 Client Sample ID:

Date Analyzed: 02/08/23 18:19 Lab File ID: 02080018.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.55	Baseline Smoothing	LV5D	02/08/23 19:09
RDX	7.56	Baseline Smoothing	LV5D	02/08/23 19:09
PETN	14.59	Baseline Smoothing	LV5D	02/08/23 19:08

Lab Sample ID: IC 280-601664/19 Client Sample ID:

Date Analyzed: 02/08/23 18:42 Lab File ID: 02080019.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.55	Baseline Smoothing	LV5D	02/08/23 19:09
RDX	7.56	Baseline Smoothing	LV5D	02/08/23 19:08
PETN	14.58	Unspecified		

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 601664

Lab Sample ID: ICV 280-601664/20 Client Sample ID:

Date Analyzed: 02/08/23 19:05 Lab File ID: 02080020.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.55	Baseline Smoothing	LV5D	02/08/23 19:31
RDX	7.56	Baseline Smoothing	LV5D	02/08/23 19:32

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 603284

Lab Sample ID: IC 280-603284/11 Client Sample ID:

Date Analyzed: 02/24/23 15:00 Lab File ID: 02240011.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.44	Baseline	LV5D	02/24/23 16:41
DNX	6.76	Baseline	LV5D	02/24/23 16:41
MNX	7.19	Baseline	LV5D	02/24/23 16:41

Lab Sample ID: IC 280-603284/12 Client Sample ID:

Date Analyzed: 02/24/23 15:23 Lab File ID: 02240012.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.44	Baseline	LV5D	02/24/23 16:41
DNX	6.76	Baseline	LV5D	02/24/23 16:41
MNX	7.19	Baseline	LV5D	02/24/23 16:41

Lab Sample ID: IC 280-603284/13 Client Sample ID:

Date Analyzed: 02/24/23 15:46 Lab File ID: 02240013.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.44	Baseline	LV5D	02/24/23 16:41
DNX	6.77	Baseline	LV5D	02/24/23 16:41
MNX	7.19	Baseline	LV5D	02/24/23 16:41

Lab Sample ID: IC 280-603284/14 Client Sample ID:

Date Analyzed: 02/24/23 16:09 Lab File ID: 02240014.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.44	Baseline	LV5D	02/24/23 16:41
DNX	6.77	Baseline	LV5D	02/24/23 16:41
MNX	7.20	Baseline	LV5D	02/24/23 16:40

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 603284

Lab Sample ID: IC 280-603284/15 Client Sample ID:

Date Analyzed: 02/24/23 16:32 Lab File ID: 02240015.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.44	Baseline	LV5D	02/24/23 17:15
DNX	6.77	Baseline	LV5D	02/24/23 17:15

Lab Sample ID: IC 280-603284/16 Client Sample ID:

Date Analyzed: 02/24/23 16:55 Lab File ID: 02240016.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.45	Baseline	LV5D	02/24/23 17:30
DNX	6.77	Baseline	LV5D	02/24/23 17:30
MNX	7.20	Baseline	LV5D	02/24/23 17:30

Lab Sample ID: IC 280-603284/17 Client Sample ID:

Date Analyzed: 02/24/23 17:18 Lab File ID: 02240017.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.45	Baseline	LV5D	02/24/23 17:51
DNX	6.77	Baseline	LV5D	02/24/23 17:51

Lab Sample ID: IC 280-603284/18 Client Sample ID:

Date Analyzed: 02/24/23 17:41 Lab File ID: 02240018.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.44	Baseline	LV5D	02/24/23 18:10
DNX	6.77	Baseline	LV5D	02/24/23 18:10

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 603284

Lab Sample ID: ICV 280-603284/19 Client Sample ID:

Date Analyzed: 02/24/23 18:04 Lab File ID: 02240019.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.45	Baseline	LV5D	02/28/23 11:45
DNX	6.77	Baseline	LV5D	02/28/23 11:45

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 612396

Lab Sample ID: CCV 280-612396/21 Client Sample ID:

Date Analyzed: 05/13/23 18:33 Lab File ID: 05130021.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.43	Baseline	K8YG	05/15/23 07:36
HMX	6.55	Baseline	K8YG	05/15/23 07:36
DNX	6.76	Baseline	LV5D	05/16/23 12:16
MNX	7.19	Baseline	K8YG	05/15/23 07:37

Lab Sample ID: CCV 280-612396/22 Client Sample ID:

Date Analyzed: 05/13/23 18:56 Lab File ID: 05130022.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.43	Baseline	K8YG	05/15/23 07:42
2,4-diamino-6-nitrotoluene	6.62	Baseline	K8YG	05/15/23 07:42

Lab Sample ID: MB 280-611915/1-A Client Sample ID:

Date Analyzed: 05/13/23 20:05 Lab File ID: 05130025.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.21	Baseline	K8YG	05/15/23 07:51

Lab Sample ID: LCS 280-611915/2-A Client Sample ID:

Date Analyzed: 05/13/23 20:28 Lab File ID: 05130026.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.44	Baseline	K8YG	05/15/23 07:53
HMX	6.56	Baseline	K8YG	05/15/23 07:53
DNX	6.76	Baseline	LV5D	05/16/23 12:17

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 612396

Lab Sample ID: LCSD 280-611915/3-A Client Sample ID:

Date Analyzed: 05/13/23 20:51 Lab File ID: 05130027.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.43	Baseline	K8YG	05/15/23 07:57
HMX	6.55	Baseline	K8YG	05/15/23 07:57
DNX	6.75	Baseline	K8YG	05/15/23 07:57

Lab Sample ID: LCS 280-611915/4-A Client Sample ID:

Date Analyzed: 05/13/23 21:14 Lab File ID: 05130028.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.42	Baseline	K8YG	05/15/23 07:58
2,4-diamino-6-nitrotoluene	6.61	Baseline	K8YG	05/15/23 07:58

Lab Sample ID: LCSD 280-611915/5-A Client Sample ID:

Date Analyzed: 05/13/23 21:37 Lab File ID: 05130029.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.42	Baseline	K8YG	05/15/23 08:00
2,4-diamino-6-nitrotoluene	6.61	Baseline	K8YG	05/15/23 08:00

Lab Sample ID: CCV 280-612396/33 Client Sample ID:

Date Analyzed: 05/13/23 23:08 Lab File ID: 05130033.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.43	Baseline	K8YG	05/15/23 08:08
HMX	6.55	Baseline	K8YG	05/15/23 08:08
DNX	6.75	Baseline	K8YG	05/15/23 08:08
MNX	7.19	Baseline	K8YG	05/15/23 08:09

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 612396

Lab Sample ID: CCV 280-612396/34 Client Sample ID:

Date Analyzed: 05/13/23 23:31 Lab File ID: 05130034.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.43	Baseline	K8YG	05/15/23 08:10
2,4-diamino-6-nitrotoluene	6.61	Baseline	K8YG	05/15/23 08:10

Lab Sample ID: 280-176134-1 Client Sample ID: SCFmw-004-230401-GW

Date Analyzed: 05/14/23 02:58 Lab File ID: 05130043.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Nitrotoluene		Invalid Compound ID	K8YG	05/15/23 12:04
HMX		Invalid Compound ID	K8YG	05/15/23 12:03

Lab Sample ID: 280-176134-2 Client Sample ID: SCFmw-004-230402-GW

Date Analyzed: 05/14/23 03:21 Lab File ID: 05130044.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		Invalid Compound ID	K8YG	05/15/23 12:04

Lab Sample ID: CCV 280-612396/45 Client Sample ID:

Date Analyzed: 05/14/23 03:44 Lab File ID: 05130045.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.43	Baseline	K8YG	05/15/23 12:04
HMX	6.55	Baseline	K8YG	05/15/23 12:04
DNX	6.75	Baseline	K8YG	05/15/23 12:05

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 612396

Lab Sample ID: CCV 280-612396/46 Client Sample ID:

Date Analyzed: 05/14/23 04:07 Lab File ID: 05130046.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.43	Baseline	K8YG	05/15/23 12:06
2,4-diamino-6-nitrotoluene	6.61	Baseline	K8YG	05/15/23 12:06

Lab Sample ID: 280-176134-3 Client Sample ID: LL1mw-086-230401-GW

Date Analyzed: 05/14/23 04:30 Lab File ID: 05130047.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.18	Baseline	K8YG	05/15/23 12:07
1,2-Dinitrobenzene	8.53	Baseline	K8YG	05/15/23 12:07
1,3-Dinitrobenzene		Invalid Compound ID	K8YG	05/15/23 12:07
HMX		Invalid Compound ID	K8YG	05/15/23 12:07
Tetryl		Invalid Compound ID	K8YG	05/15/23 12:07

Lab Sample ID: 280-176134-4 Client Sample ID: LL3mw-237-230401-GW

Date Analyzed: 05/14/23 04:53 Lab File ID: 05130048.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.52	Baseline	K8YG	05/15/23 12:08
HMX		Invalid Compound ID	K8YG	05/15/23 12:07
MNX		Invalid Compound ID	K8YG	05/15/23 12:08
Nitrobenzene		Invalid Compound ID	K8YG	05/15/23 12:08
RDX		Invalid Compound ID	K8YG	05/15/23 12:08
Tetryl		Invalid Compound ID	K8YG	05/15/23 12:08
TNX		Invalid Compound ID	K8YG	05/15/23 12:07

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 612396

Lab Sample ID: 280-176134-5 Client Sample ID: LL1mw-089-230401-GW

Date Analyzed: 05/14/23 05:16 Lab File ID: 05130049.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX		Invalid Compound ID	LV5D	05/16/23 12:29

Lab Sample ID: 280-176134-6 Client Sample ID: LL1mw-089-230402-GW

Date Analyzed: 05/14/23 05:39 Lab File ID: 05130050.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX		Invalid Compound ID	K8YG	05/15/23 12:09

Lab Sample ID: 280-176134-7 Client Sample ID: LL1mw-063-230401-GW

Date Analyzed: 05/14/23 06:02 Lab File ID: 05130051.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.55	Baseline	K8YG	05/15/23 12:09
2,6-diamino-4-nitrotoluene		Invalid Compound ID	K8YG	05/15/23 12:09
Nitrobenzene		Invalid Compound ID	K8YG	05/15/23 12:09
2-Amino-4,6-dinitrotoluene	11.37	Baseline	K8YG	05/15/23 12:10

Lab Sample ID: CCV 280-612396/56 Client Sample ID:

Date Analyzed: 05/14/23 07:56 Lab File ID: 05130056.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.42	Baseline	K8YG	05/15/23 12:19
2,4-diamino-6-nitrotoluene	6.61	Baseline	K8YG	05/15/23 12:19

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 612396

Lab Sample ID: CCV 280-612396/57 Client Sample ID:

Date Analyzed: 05/14/23 08:19 Lab File ID: 05130057.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.43	Baseline	K8YG	05/15/23 12:21
HMX	6.55	Baseline	K8YG	05/15/23 12:21
DNX	6.75	Baseline	K8YG	05/15/23 12:20

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 610603

Lab Sample ID: IC 280-610603/10 Client Sample ID:

Date Analyzed: 04/28/23 18:24 Lab File ID: 04280010.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
3,5-Dinitroaniline	14.37	Baseline Smoothing	LV5D	04/28/23 19:01
1,3-Dinitrobenzene	14.53	Baseline Smoothing	LV5D	04/28/23 19:01
2-Nitrotoluene	15.66	Baseline Smoothing	LV5D	04/28/23 19:01
4-Nitrotoluene	15.83	Baseline Smoothing	LV5D	04/28/23 19:01
4-Amino-2,6-dinitrotoluene	16.44	Baseline Smoothing	LV5D	04/28/23 19:01
3-Nitrotoluene	16.73	Baseline Smoothing	LV5D	04/28/23 19:01
1,3,5-Trinitrobenzene	17.37	Baseline Smoothing	LV5D	04/28/23 19:01
2-Amino-4,6-dinitrotoluene	17.37	Baseline Smoothing	LV5D	04/28/23 19:01
2,6-Dinitrotoluene	18.56	Baseline Smoothing	LV5D	04/28/23 19:01
2,4-Dinitrotoluene	19.02	Baseline Smoothing	LV5D	04/28/23 19:01

Lab Sample ID: IC 280-610603/11 Client Sample ID:

Date Analyzed: 04/28/23 18:59 Lab File ID: 04280011.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Amino-4,6-dinitrotoluene	17.40	Baseline Smoothing	LV5D	04/28/23 20:43
1,3,5-Trinitrobenzene	17.44	Baseline Smoothing	LV5D	04/28/23 20:43

Lab Sample ID: IC 280-610603/12 Client Sample ID:

Date Analyzed: 04/28/23 19:34 Lab File ID: 04280012.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Amino-4,6-dinitrotoluene	17.33	Baseline Smoothing	LV5D	04/28/23 20:43
1,3,5-Trinitrobenzene	17.39	Baseline Smoothing	LV5D	04/28/23 20:43

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 610603

Lab Sample ID: IC 280-610603/13 Client Sample ID:

Date Analyzed: 04/28/23 20:08 Lab File ID: 04280013.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Amino-4,6-dinitrotoluene	17.35	Baseline Smoothing	LV5D	04/28/23 20:52
1,3,5-Trinitrobenzene	17.41	Baseline Smoothing	LV5D	04/28/23 20:52

Lab Sample ID: IC 280-610603/14 Client Sample ID:

Date Analyzed: 04/28/23 20:43 Lab File ID: 04280014.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Amino-4,6-dinitrotoluene	17.36	Unspecified		
1,3,5-Trinitrobenzene	17.42	Baseline Smoothing	LV5D	04/29/23 10:22

Lab Sample ID: IC 280-610603/15 Client Sample ID:

Date Analyzed: 04/28/23 21:18 Lab File ID: 04280015.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Amino-4,6-dinitrotoluene	17.37	Unspecified		
1,3,5-Trinitrobenzene	17.42	Baseline Smoothing	LV5D	04/29/23 10:22

Lab Sample ID: IC 280-610603/16 Client Sample ID:

Date Analyzed: 04/28/23 21:53 Lab File ID: 04280016.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Amino-4,6-dinitrotoluene	17.38	Unspecified		
1,3,5-Trinitrobenzene	17.43	Baseline Smoothing	LV5D	04/29/23 10:22

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 610603

Lab Sample ID: IC 280-610603/17 Client Sample ID:

Date Analyzed: 04/28/23 22:28 Lab File ID: 04280017.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Nitrotoluene	15.77	Baseline Smoothing	LV5D	04/29/23 10:23
4-Nitrotoluene	16.00	Unspecified		
4-Amino-2,6-dinitrotoluene	16.56	Baseline Smoothing	LV5D	04/29/23 10:23
3-Nitrotoluene	16.84	Baseline Smoothing	LV5D	04/29/23 10:23
2-Amino-4,6-dinitrotoluene	17.41	Unspecified		
1,3,5-Trinitrobenzene	17.46	Baseline Smoothing	LV5D	04/29/23 10:23

Lab Sample ID: IC 280-610603/18 Client Sample ID:

Date Analyzed: 04/28/23 23:03 Lab File ID: 04280018.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Nitrotoluene	15.74	Baseline Smoothing	LV5D	04/29/23 10:24
4-Nitrotoluene	15.97	Unspecified		
4-Amino-2,6-dinitrotoluene	16.53	Baseline Smoothing	LV5D	04/29/23 13:01
3-Nitrotoluene	16.84	Baseline Smoothing	LV5D	04/29/23 13:01
2-Amino-4,6-dinitrotoluene	17.37	Unspecified		
1,3,5-Trinitrobenzene	17.44	Baseline Smoothing	LV5D	04/29/23 10:24

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 610603

Lab Sample ID: ICV 280-610603/19 Client Sample ID:

Date Analyzed: 04/28/23 23:38 Lab File ID: 04280019.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
3,5-Dinitroaniline	14.32	Baseline Smoothing	LV5D	04/29/23 10:27
1,3-Dinitrobenzene	14.59	Baseline Smoothing	LV5D	04/29/23 10:27
2-Nitrotoluene	15.70	Baseline Smoothing	LV5D	04/29/23 10:27
4-Nitrotoluene	15.92	Baseline Smoothing	LV5D	04/29/23 10:27
4-Amino-2,6-dinitrotoluene	16.48	Baseline Smoothing	LV5D	04/29/23 10:27
3-Nitrotoluene	16.78	Baseline Smoothing	LV5D	04/29/23 10:27
2-Amino-4,6-dinitrotoluene	17.34	Unspecified		
1,3,5-Trinitrobenzene	17.42	Baseline Smoothing	LV5D	04/29/23 10:27

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 612692

Lab Sample ID: 280-176134-3 Client Sample ID: LL1mw-086-230401-GW

Date Analyzed: 05/17/23 11:13 Lab File ID: 05160029.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX		Invalid Compound ID	LV5D	05/17/23 11:54

Lab Sample ID: 280-176134-4 Client Sample ID: LL3mw-237-230401-GW

Date Analyzed: 05/17/23 12:23 Lab File ID: 05160031.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,4-Dinitrotoluene		Invalid Compound ID	LV5D	05/17/23 13:06
RDX		Invalid Compound ID	LV5D	05/17/23 13:06

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
3,5-DNA LCS_00042	01/25/23	11/08/22	Acetonitrile, Lot Acetonitrile_00065	100 mL	3,5-DNA Stock_00036	1 mL	3,5-Dinitroaniline	10 ug/mL
.3,5-DNA Stock_00036	04/25/23		Restek, Lot A0149736		(Purchased Reagent)		3,5-Dinitroaniline	1000 ug/mL
3,5-DNA LCS_00043	08/03/23	02/03/23	Acetonitrile, Lot Acetonitrile_00074	100 mL	3,5-DNA Stock_00038	1 mL	3,5-Dinitroaniline	10 ug/mL
.3,5-DNA Stock_00038	02/03/24		Restek, Lot A0164976		(Purchased Reagent)		3,5-Dinitroaniline	1000 ug/mL
8330 DMT_00013	08/24/23	02/24/23	Acetonitrile, Lot ACN_237	5 mL	MNX,TNX,DNX_00076	1 mL	DNX	20.02 ug/mL
							MNX	23.34 ug/mL
							TNX	20.06 ug/mL
.MNX,TNX,DNX_00076	02/29/24		Agilent, Lot 0006725091		(Purchased Reagent)		DNX	100.1 ug/mL
							MNX	116.7 ug/mL
							TNX	100.3 ug/mL
8330 LCS_00121	07/21/23	01/21/23	Acetonitrile, Lot Acetonitrile_00073	50 mL	8330_NG_Stk_00118	0.6 mL	Nitroglycerin	100 ug/mL
					8330_NG_Stk_00120	0.4 mL	Nitroglycerin	100 ug/mL
					8330_PETN_Stk_00128	1 mL	PETN	100 ug/mL
					8330LCSMix1_00136	0.5 mL	1,3,5-Trinitrobenzene	10 ug/mL
							1,3-Dinitrobenzene	10 ug/mL
							2,4,6-Trinitrotoluene	10 ug/mL
							2,4-Dinitrotoluene	10 ug/mL
							HMX	10 ug/mL
							Nitrobenzene	10 ug/mL
							RDX	10 ug/mL
					8330LCSmix2_00034	0.5 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_00118	12/24/23		Restek, Lot A0188553		(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_NG_Stk_00120	01/21/24		Restek, Lot A0188553		(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_PETN_Stk_00128	01/21/24		Restek, Lot A0187506		(Purchased Reagent)		PETN	5000 ug/mL
.8330LCSMix1_00136	10/19/23		Restek, Lot A0171502		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							2,4,6-Trinitrotoluene	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							RDX	1000 ug/mL
.8330LCSmix2_00034	01/21/24		Restek, Lot A0186475		(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

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Tetryl	1000 ug/mL
8330 LCS_00125	12/23/23	04/03/23	Acetonitrile, Lot Acetonitrile_00073	100 mL	3,5-DNA Stock_00040	1 mL	3,5-Dinitroaniline	10 ug/mL
					8330_NG_Stk_00128	1 mL	Nitroglycerin	100 ug/mL
					8330_NG_Stk_00129	1 mL	Nitroglycerin	100 ug/mL
					8330_PETN_Stk_00133	1 mL	PETN	100 ug/mL
					8330_PETN_Stk_00134	1 mL	PETN	100 ug/mL
					8330LCSMix1_00140	1 mL	1,3,5-Trinitrobenzene	10 ug/mL
							1,3-Dinitrobenzene	10 ug/mL
							2,4,6-Trinitrotoluene	10 ug/mL
							2,4-Dinitrotoluene	10 ug/mL
							HMX	10 ug/mL
							Nitrobenzene	10 ug/mL
							RDX	10 ug/mL
					8330LCSmix2_00038	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
					PicricARestek_00113	1 mL	2,4,6-Trinitrophenol	10 ug/mL
.3,5-DNA Stock_00040	04/03/24		Restek, Lot A0172723		(Purchased Reagent)		3,5-Dinitroaniline	1000 ug/mL
.8330_NG_Stk_00128	04/03/24		Restek, Lot A0194013		(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_NG_Stk_00129	04/03/24		Restek, Lot A0194013		(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_PETN_Stk_00133	04/03/24		Restek, Lot A0188550		(Purchased Reagent)		PETN	5000 ug/mL
.8330_PETN_Stk_00134	04/03/24		Restek, Lot A0188550		(Purchased Reagent)		PETN	5000 ug/mL
.8330LCSMix1_00140	04/03/24		Restek, Lot A0183848		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							2,4,6-Trinitrotoluene	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							RDX	1000 ug/mL
.8330LCSmix2_00038	04/03/24		Restek, Lot A0192237		(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
.PicricARestek_00113	04/03/24		Restek, Lot A0183202		(Purchased Reagent)		2,4,6-Trinitrophenol	1000 ug/mL
8330 LCS_00126	04/26/24	04/26/23	Acetonitrile, Lot Acetonitrile_00077	100 mL	3,5-DNA Stock_00042	1 mL	3,5-Dinitroaniline	10 ug/mL
					8330_NG_Stk_00130	1 mL	Nitroglycerin	100 ug/mL
					8330_NG_Stk_00131	1 mL	Nitroglycerin	100 ug/mL
					8330_PETN_Stk_00135	1 mL	PETN	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					8330_PETN_Stk_00136	1 mL	PETN	100 ug/mL
					8330LCSMix1_00141	1 mL	1,3,5-Trinitrobenzene	10 ug/mL
							1,3-Dinitrobenzene	10 ug/mL
							2,4,6-Trinitrotoluene	10 ug/mL
							2,4-Dinitrotoluene	10 ug/mL
							HMX	10 ug/mL
							Nitrobenzene	10 ug/mL
							RDX	10 ug/mL
					8330LCSmix2_00039	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
.3,5-DNA Stock_00042	04/26/24		Restek, Lot A0185772		(Purchased Reagent)		3,5-Dinitroaniline	1000 ug/mL
.8330_NG_Stk_00130	04/26/24		Restek, Lot A0194013		(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_NG_Stk_00131	04/26/24		Restek, Lot A0194013		(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_PETN_Stk_00135	04/26/24		Restek, Lot A0188550		(Purchased Reagent)		PETN	5000 ug/mL
.8330_PETN_Stk_00136	04/26/24		Restek, Lot A0188550		(Purchased Reagent)		PETN	5000 ug/mL
.8330LCSMix1_00141	04/26/24		Restek, Lot A0183848		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							2,4,6-Trinitrotoluene	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							RDX	1000 ug/mL
.8330LCSmix2_00039	04/26/24		Restek, Lot A0192237		(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_ADDs_00035	07/13/23	01/13/23	Acetonitrile, Lot ACN_237	5 mL	2,4Diamino6NT_00094	1 mL	2,4-diamino-6-nitrotoluene	20 ug/mL
					2,6Diamino4NT_00095	1 mL	2,6-diamino-4-nitrotoluene	20 ug/mL
					833035DNAStk_00052	1 mL	3,5-Dinitroaniline	20 ug/mL
.2,4Diamino6NT_00094	04/10/24		AccuStandard, Lot 220121267-01		(Purchased Reagent)		2,4-diamino-6-nitrotoluene	100 ug/mL
.2,6Diamino4NT_00095	06/03/24		AccuStandard, Lot 222051002		(Purchased Reagent)		2,6-diamino-4-nitrotoluene	100 ug/mL
.833035DNAStk_00052	10/06/23		Accustandard, Lot 222011692-01		(Purchased Reagent)		3,5-Dinitroaniline	100 ug/mL
8330_ADDs_00036	07/13/23	03/29/23	Acetonitrile, Lot ACN_237	5 mL	2,4Diamino6NT_00094	1 mL	2,4-diamino-6-nitrotoluene	20 ug/mL
					2,6Diamino4NT_00095	1 mL	2,6-diamino-4-nitrotoluene	20 ug/mL
.2,4Diamino6NT_00094	04/10/24		AccuStandard, Lot 220121267-01		(Purchased Reagent)		2,4-diamino-6-nitrotoluene	100 ug/mL
.2,6Diamino4NT_00095	06/03/24		AccuStandard, Lot 222051002		(Purchased Reagent)		2,6-diamino-4-nitrotoluene	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
8330_ADDs_00037	11/04/23	05/04/23	Acetonitrile, Lot ACN_237	5 mL	2,4Diamino6NT_00095	1 mL	2,4-diamino-6-nitrotoluene	20 ug/mL
					2,6Diamino4NT_00096	1 mL	2,6-diamino-4-nitrotoluene	20 ug/mL
.2,4Diamino6NT_00095	04/10/24	AccuStandard, Lot 220121267-01			(Purchased Reagent)		2,4-diamino-6-nitrotoluene	100 ug/mL
.2,6Diamino4NT_00096	05/04/24	AccuStandard, Lot 222051002			(Purchased Reagent)		2,6-diamino-4-nitrotoluene	100 ug/mL
8330_OP_DMT_00016	02/28/23	12/30/22	Acetonitrile, Lot Acetonitrile_00073	10 mL	MNX,TNX,DNX_00069	1 mL	DNX	10.04 ug/mL
							MNX	11.7 ug/mL
							TNX	10 ug/mL
.MNX,TNX,DNX_00069	02/28/23	Agilent, Lot 0006659035			(Purchased Reagent)		DNX	100.4 ug/mL
							MNX	117 ug/mL
							TNX	100 ug/mL
8330_OP_DMT_00017	08/28/23	02/28/23	Acetonitrile, Lot Acetonitrile_00073	10 mL	MNX,TNX,DNX_00077	1 mL	DNX	10.01 ug/mL
							MNX	11.67 ug/mL
							TNX	10.03 ug/mL
.MNX,TNX,DNX_00077	02/29/24	Agilent, Lot 0006725091			(Purchased Reagent)		DNX	100.1 ug/mL
							MNX	116.7 ug/mL
							TNX	100.3 ug/mL
8330DiaminLCS_00052	01/16/23	12/19/22	Acetonitrile, Lot Acetonitrile_00069	10 mL	2,4Diamino6NT_00092	1 mL	2,4-diamino-6-nitrotoluene	10 ug/mL
					2,6Diamino4NT_00099	1 mL	2,6-diamino-4-nitrotoluene	10 ug/mL
.2,4Diamino6NT_00092	01/16/23	AccuStandard, Lot 220121267			(Purchased Reagent)		2,4-diamino-6-nitrotoluene	100 ug/mL
.2,6Diamino4NT_00099	12/19/23	AccuStandard, Lot 222051002			(Purchased Reagent)		2,6-diamino-4-nitrotoluene	100 ug/mL
8330DiaminLCS_00056	01/19/24	01/27/23	Acetonitrile, Lot Acetonitrile_00074	20 mL	2,4Diamino6NT_00098	1 mL	2,4-diamino-6-nitrotoluene	10 ug/mL
					2,4Diamino6NT_00099	1 mL	2,4-diamino-6-nitrotoluene	10 ug/mL
					2,6Diamino4NT_00100	1 mL	2,6-diamino-4-nitrotoluene	10 ug/mL
					2,6Diamino4NT_00102	1 mL	2,6-diamino-4-nitrotoluene	10 ug/mL
.2,4Diamino6NT_00098	04/10/24	AccuStandard, Lot 220121267-01			(Purchased Reagent)		2,4-diamino-6-nitrotoluene	100 ug/mL
.2,4Diamino6NT_00099	04/10/24	AccuStandard, Lot 220121267-01			(Purchased Reagent)		2,4-diamino-6-nitrotoluene	100 ug/mL
.2,6Diamino4NT_00100	06/03/24	AccuStandard, Lot 222051002			(Purchased Reagent)		2,6-diamino-4-nitrotoluene	100 ug/mL
.2,6Diamino4NT_00102	06/03/24	AccuStandard, Lot 222051002			(Purchased Reagent)		2,6-diamino-4-nitrotoluene	100 ug/mL
8330IntermStk_00075	08/07/23	02/03/23	Acetonitrile, Lot ACN_238	10 mL	8330_NG1000_00007	1 mL	Nitroglycerin	100 ug/mL
					8330_PETN1000_00011	1 mL	PETN	100 ug/mL
					833035DNAStk_00053	1 mL	3,5-Dinitroaniline	10 ug/mL
					8330ICALStock_00034	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

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							HMX	10 ug/mL
							Nitrobenzene	10 ug/mL
							RDX	10 ug/mL
							Tetryl	10 ug/mL
							1,2-Dinitrobenzene	10 ug/mL
					8330PAStkPS_00070	1 mL	2,4,6-Trinitrophenol	10 ug/mL
.8330_NG1000_00007	02/03/24	Restek, Lot A0175997			(Purchased Reagent)		Nitroglycerin	1000 ug/mL
.8330_PETN1000_00011	02/03/24	Restek, Lot A0187142			(Purchased Reagent)		PETN	1000 ug/mL
.833035DNAStk_00053	10/06/23	Accustandard, Lot 222011692-01			(Purchased Reagent)		3,5-Dinitroaniline	100 ug/mL
.8330ICALStock_00034	02/03/24	02/03/23	Acetonitrile, Lot ACN_238	10 mL	8330 Stock_TS_00023	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_00172	1 mL	1,2-Dinitrobenzene	100 ug/mL
..8330 Stock_TS_00023	02/03/24	Agilent, Lot 0006684308			(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							2,4,6-Trinitrotoluene	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Amino-4,6-dinitrotoluene	1000 ug/mL
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1000 ug/mL
							4-Amino-2,6-dinitrotoluene	1000 ug/mL
							4-Nitrotoluene	1000 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							RDX	1000 ug/mL
							Tetryl	1000 ug/mL
..8330SurrStock_00172	02/03/24	AccuStandard, Lot 219051500			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330PAStkPS_00070	08/07/23	AccuStandard, Lot 218031154-03			(Purchased Reagent)		2,4,6-Trinitrophenol	100 ug/mL
8330IntermStk_00076	09/23/23	03/23/23	Acetonitrile, Lot ACN_237	10 mL	8330_NG1000_00010	1 mL	Nitroglycerin	100 ug/mL
					8330_PETN1000_00010	1 mL	PETN	100 ug/mL
					833035DNAStk_00054	1 mL	3,5-Dinitroaniline	10 ug/mL
					8330ICALStock_00034	1 mL	1,3,5-Trinitrobenzene	10 ug/mL
							1,3-Dinitrobenzene	10 ug/mL
							2,4,6-Trinitrotoluene	10 ug/mL

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4-Dinitrotoluene	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_00071	1 mL	2,4,6-Trinitrophenol	10 ug/mL
.8330_NG1000_00010	03/23/24		Restek, Lot A0187280		(Purchased Reagent)		Nitroglycerin	1000 ug/mL
.8330_PETN1000_00010	03/23/24		Restek, Lot A0187142		(Purchased Reagent)		PETN	1000 ug/mL
.833035DNAStk_00054	10/06/23		Accustandard, Lot 222011692-01		(Purchased Reagent)		3,5-Dinitroaniline	100 ug/mL
.8330ICALStock_00034	02/03/24	02/03/23	Acetonitrile, Lot ACN_238	10 mL	8330 Stock_TS_00023	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_00172	1 mL	1,2-Dinitrobenzene	100 ug/mL
..8330 Stock_TS_00023	02/03/24		Agilent, Lot 0006684308		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							2,4,6-Trinitrotoluene	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Amino-4,6-dinitrotoluene	1000 ug/mL
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1000 ug/mL
							4-Amino-2,6-dinitrotoluene	1000 ug/mL
							4-Nitrotoluene	1000 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							RDX	1000 ug/mL
							Tetryl	1000 ug/mL
..8330SurrStock_00172	02/03/24		AccuStandard, Lot 219051500		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330PAStkPS_00071	03/23/24		AccuStandard, Lot 218031154-04		(Purchased Reagent)		2,4,6-Trinitrophenol	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
8330Surrogate_00138	08/02/23	02/02/23	Acetonitrile, Lot Acetonitrile_00074	500 mL	8330SurrStkSS_00245	1 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00246	1 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00247	1 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00248	1 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00249	1 mL	1,2-Dinitrobenzene	10 ug/mL
.8330SurrStkSS_00245	02/02/24	Restek, Lot A0192220			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00246	02/02/24	Restek, Lot A0192220			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00247	02/02/24	Restek, Lot A0192220			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00248	02/02/24	Restek, Lot A0192220			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00249	02/02/24	Restek, Lot A0192220			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
8330Surrogate_00143	10/12/23	04/12/23	Acetonitrile, Lot Acetonitrile_00077	500 mL	8330SurrStkSS_00263	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00265	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00266	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00267	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00268	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
.8330SurrStkSS_00263	04/12/24	Restek, Lot A0193444			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00265	04/12/24	Restek, Lot A0193444			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00266	04/12/24	Restek, Lot A0194831			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00267	04/12/24	Restek, Lot A0194831			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00268	04/12/24	Restek, Lot A0194831			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL

Reagent

2,4Diamino6NT_00092

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CERTIFICATE OF ANALYSIS

Catalog No: M-8330-ADD-12
Description: 2,4-Diamino-6-nitrotoluene
Lot: 220121267
Solvent: Acetonitrile
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: Dec 16, 2020
Expiration: Jan 16, 2023
Sample Size: 1 mL
Components: 1
Storage Condition: Refrig (0-5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463
ANAB ACCREDITED TESTING LABORATORY AT-1339
ilac-MRA

Component	CAS #	Purity % (LCMS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
2,4-Diamino-6-nitrotoluene	6629-29-4	99.0	100.3	99.3

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

Reagent

2,4Diamino6NT_00094

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CERTIFICATE OF ANALYSIS

Catalog No: M-8330-ADD-12
Description: 2,4-Diamino-6-nitrotoluene
Lot: 220121267-01
Solvent: Acetonitrile
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: Mar 10, 2022
Expiration: Apr 10, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Refrig (0-5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (LCMS)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
2,4-Diamino-6-nitrotoluene	6629-29-4	99.0	100.3	99.3

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

2,4Diamino6NT_00095

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CERTIFICATE OF ANALYSIS

Catalog No: M-8330-ADD-12
Description: 2,4-Diamino-6-nitrotoluene
Lot: 220121267-01
Solvent: Acetonitrile
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: Mar 10, 2022
Expiration: Apr 10, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Refrig (0-5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (LCMS)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
2,4-Diamino-6-nitrotoluene	6629-29-4	99.0	100.3	99.3

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

2,4Diamino6NT_00098

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www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: M-8330-ADD-12
Description: 2,4-Diamino-6-nitrotoluene
Lot: 220121267-01
Solvent: Acetonitrile
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: Mar 10, 2022
Expiration: Apr 10, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Refrig (0-5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (LCMS)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
2,4-Diamino-6-nitrotoluene	6629-29-4	99.0	100.3	99.3

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

2,4Diamino6NT_00099

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-12
Description: 2,4-Diamino-6-nitrotoluene
Lot: 220121267-01
Solvent: Acetonitrile
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: Mar 10, 2022
Expiration: Apr 10, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Refrig (0-5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (LCMS)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
2,4-Diamino-6-nitrotoluene	6629-29-4	99.0	100.3	99.3

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

2,6Diamino4NT_00095

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New Haven, CT 06513
USA

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

CERTIFICATE OF ANALYSIS

Catalog No: M-8330-ADD-13
Description: 2,6-Diamino-4-nitrotoluene
Lot: 222051002
Solvent: Acetonitrile
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: May 3, 2022
Expiration: Jun 3, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Refrig (0-5 °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)
2,6-Diamino-4-nitrotoluene	59229-75-3	99.7	101.0	100.7

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

Reagent

2,6Diamino4NT_00096

125 Market Street
New Haven, CT 06513
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AccuStandard®

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

CERTIFICATE OF ANALYSIS

Catalog No: M-8330-ADD-13
Description: 2,6-Diamino-4-nitrotoluene
Lot: 222051002
Solvent: Acetonitrile
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: May 3, 2022
Expiration: Jun 3, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Refrig (0-5 °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)
2,6-Diamino-4-nitrotoluene	59229-75-3	99.7	101.0	100.7

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

Reagent

2,6Diamino4NT_00099

125 Market Street
New Haven, CT 06513
USA

AccuStandard®

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

CERTIFICATE OF ANALYSIS

Catalog No: M-8330-ADD-13
Description: 2,6-Diamino-4-nitrotoluene
Lot: 222051002
Solvent: Acetonitrile
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: May 3, 2022
Expiration: Jun 3, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Refrig (0-5 °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)
2,6-Diamino-4-nitrotoluene	59229-75-3	99.7	101.0	100.7

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.

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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

2,6Diamino4NT_00100

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

CERTIFICATE OF ANALYSIS

Catalog No: M-8330-ADD-13
Description: 2,6-Diamino-4-nitrotoluene
Lot: 222051002
Solvent: Acetonitrile
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: May 3, 2022
Expiration: Jun 3, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Refrig (0-5 °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)
2,6-Diamino-4-nitrotoluene	59229-75-3	99.7	101.0	100.7

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.

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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

AccuStandard

Reagent

2,6Diamino4NT_00102

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USA

AccuStandard®

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

CERTIFICATE OF ANALYSIS

Catalog No: M-8330-ADD-13
Description: 2,6-Diamino-4-nitrotoluene
Lot: 222051002
Solvent: Acetonitrile
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: May 3, 2022
Expiration: Jun 3, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Refrig (0-5 °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)
2,6-Diamino-4-nitrotoluene	59229-75-3	99.7	101.0	100.7

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.

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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.

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Reagent

3,5-DNA LCS_00042

Preliminary Report

Eurofins Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20221108-115900.b\11080002.D

Lims ID: 8330AcidH2O_00003 Inj. Date: 08-Nov-2022 14:15:10

Worklist ID: 280-0115900-002 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 3535	Limits 2 3535	Limits 3 3535
14 3,5-Dinitroaniline	0.5000	0.4857	97.1		71-117	55-119

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

570-115659-R-2-A 570-115659-R-3-A 570-115659-R-4-A
570-115659-R-5-A 570-115659-R-6-A

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

280-168716-B-1-A 280-168716-B-2-A 280-168716-B-3-A
280-168716-B-4-A 280-168716-B-5-A 280-168716-B-6-A
280-168716-B-7-A 280-168716-B-8-A 280-168716-B-9-A
680-224687-A-1-A 680-224687-A-2-A 680-224687-D-3-A
680-224687-B-4-A

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

860-36027-C-1-A

Reagent

3,5-DNA Stock_00036

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Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31661 **Lot No.:** A0149736

Description : 3,5-Dinitroaniline Standard

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

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

Expiration Date : January 31, 2024 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	3,5-Dinitroaniline	1,000.0 µg/mL	+/- 10.0737	µg/mL	Gravimetric
	CAS # 618-87-1 (Lot 10311HS)		+/- 31.3469	µg/mL	Unstressed
	Purity 99%		+/- 31.3469	µg/mL	Stressed

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

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

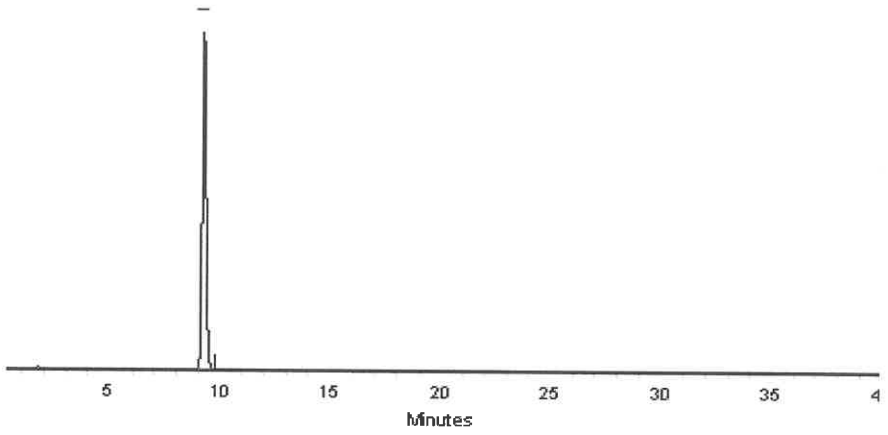
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Jessica McClenahan - Operations Technician I

Date Mixed: 03-Jun-2019 **Balance:** 1128360905

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 05-Jun-2019

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

Reagent

3,5-DNA Stock_00038

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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Reference Material Producer
Certificate #3222.01

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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.:** A0164976

Description : 3,5-Dinitroaniline Standard

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

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

Expiration Date : May 31, 2025 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	3,5-Dinitroaniline **CAS #** 618-87-1 (Lot 10311HS) **Purity** 99%	1,000.8 µg/mL	+/- 10.0818 µg/mL +/- 31.3720 µg/mL +/- 31.3720 µg/mL		Gravimetric Unstressed Stressed

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

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

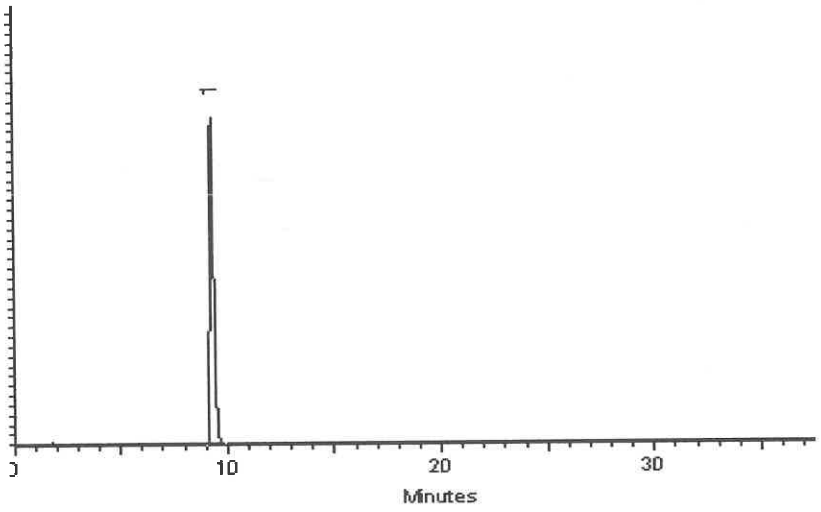
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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

Katelyn McGinnl - Operations Tech I

Date Mixed: 02-Oct-2020 **Balance:** 1128353505

Jennifer Pollino

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 06-Oct-2020

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

3,5-DNA Stock_00040

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Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31661 **Lot No.:** A0172723

Description : 3,5-Dinitroaniline Standard

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

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

Expiration Date : December 31, 2025 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	3,5-Dinitroaniline	1,000.0 µg/mL	+/- 10.0737	µg/mL	Gravimetric
	CAS # 618-87-1 (Lot 10311HS)		+/- 31.3469	µg/mL	Unstressed
	Purity 99%		+/- 31.3469	µg/mL	Stressed

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

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

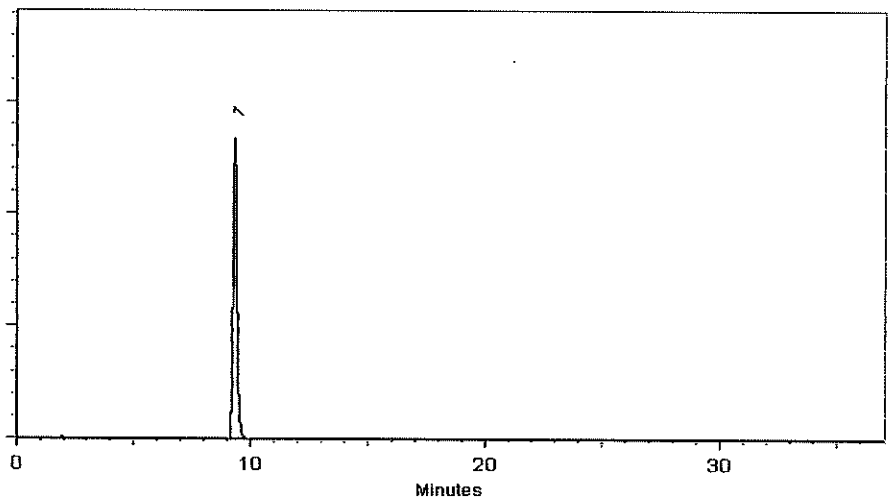
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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

Jeremy Johnson - Mfg. Supervisor

Date Mixed: 25-May-2021 **Balance:** B251644995

Marlina Cowan - Operations Tech I

Date Passed: 27-May-2021

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

3,5-DNA Stock_00042

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31661 **Lot No.:** A0185772

Description : 3,5-Dinitroaniline Standard

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

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

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

Ship: Ambient

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	3,5-Dinitroaniline	1,008.0 µg/mL	+/- 10.1543 µg/mL	Gravimetric
	CAS # 618-87-1 (Lot 10311HS)		+/- 31.5977 µg/mL	Unstressed
	Purity 99%		+/- 31.5977 µg/mL	Stressed

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

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

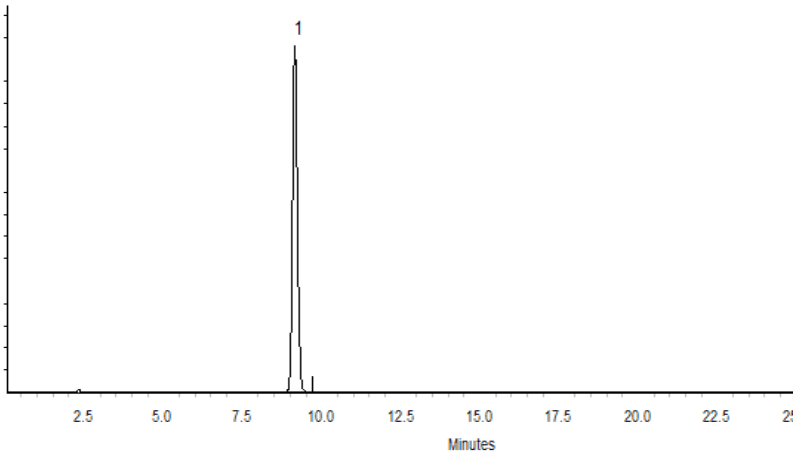
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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

Morgan Craighead - Mix Technician

Date Mixed: 27-May-2022 **Balance:** 1128353505

Marlina Cowan - Operations Tech I

Date Passed: 02-Jun-2022

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
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Reagent

8330 LCS_00121

Preliminary Report

Eurofins Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20230121-117963.b\01210012.D

Lims ID: 8330 LCS 121 Inj. Date: 21-Jan-2023 14:04:20

Worklist ID: 280-0117963-012 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 3535	Limits 2 3535	Limits 3 3535
4 HMX	0.5000	0.4694	93.9	65-135	66-115	
8 RDX	0.5000	0.4904	98.1	68-130	69-122	
9 2,4,6-Trinitrophenol	0.5000	0.5399	108.0	80-120	63-135	
11 1,3,5-Trinitrobenzene	0.5000	0.5414	108.3	73-125	62-127	
12 1,3-Dinitrobenzene	0.5000	0.5314	106.3	78-120	59-131	
13 Nitrobenzene	0.5000	0.5214	104.3	65-134	46-144	
15 Tetryl	0.5000	0.5279	105.6	64-128	56-131	
16 Nitroglycerin	5.00	5.40	107.9	74-127	70-125	
17 2,4,6-Trinitrotoluene	0.5000	0.4569	91.4	71-123	46-139	
18 4-Amino-2,6-dinitrotolu	0.5000	0.5716	114.3	76-125	43-120	
19 2-Amino-4,6-dinitrotolu	0.5000	0.4927	98.5	79-120	46-124	
20 2,6-Dinitrotoluene	0.5000	0.5185	103.7	77-127	51-130	
21 2,4-Dinitrotoluene	0.5000	0.5353	107.1	78-120	53-127	
22 o-Nitrotoluene	0.5000	0.5106	102.1	70-127	37-138	
23 p-Nitrotoluene	0.5000	0.4984	99.7	71-127	41-137	
24 m-Nitrotoluene	0.5000	0.4984	99.7	73-125	31-140	
25 PETN	5.00	5.27	105.5	73-127	67-127	

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

280-171404-A-21-A 280-171267-A-1-A 280-171267-A-2-A
280-171267-A-3-A 280-171267-A-4-A 280-171267-A-5-A
280-171267-A-6-A 280-171267-A-7-A

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

550-196288-AO-1-A 570-123967-A-1-A

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

280-171237-A-1-A 280-171237-A-2-A 280-171237-A-3-A
280-171237-A-4-A

Reagent

8330 LCS_00126

Preliminary Report

Eurofins Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20230426-120796.b\04260006.D

Lims ID: C18column:B16162 Inj. Date: 26-Apr-2023 15:04:00

Worklist ID: 280-0120796-006 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 0B_Sonc_	Limits 2 0B_Sonc_
4 HMX	0.5000	0.4359	87.2	80-120	74-124
8 RDX	0.5000	0.4718	94.4	80-124	67-129
9 2,4,6-Trinitrophenol	0.5000	0.5241	104.8	38-154	
11 1,3,5-Trinitrobenzene	0.5000	0.5064	101.3	80-120	80-116
12 1,3-Dinitrobenzene	0.5000	0.5004	100.1	80-120	73-119
13 Nitrobenzene	0.5000	0.5010	100.2	76-122	67-129
14 3,5-Dinitroaniline	0.5000	0.4725	94.5	80-120	86-118
15 Tetryl	0.5000	0.5711	114.2	80-120	68-135
16 Nitroglycerin	5.00	5.04	100.8	75-120	73-124
17 2,4,6-Trinitrotoluene	0.5000	0.4643	92.9	80-120	71-120
18 4-Amino-2,6-dinitrotolu	0.5000	0.4973	99.5	80-120	64-127
19 2-Amino-4,6-dinitrotolu	0.5000	0.4766	95.3	78-120	71-123
20 2,6-Dinitrotoluene	0.5000	0.4994	99.9	80-120	79-117
21 2,4-Dinitrotoluene	0.5000	0.4894	97.9	80-120	75-121
22 o-Nitrotoluene	0.5000	0.4896	97.9	80-124	70-124
23 p-Nitrotoluene	0.5000	0.4868	97.4	80-120	71-124
24 m-Nitrotoluene	0.5000	0.4890	97.8	80-122	67-129
25 PETN	5.00	5.34	106.9	80-120	72-128

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

280-174348-A-25-B	280-174348-A-26-B	280-174348-A-27-B
280-174348-A-28-B	280-174348-A-29-B	280-174348-A-30-D
280-174348-A-31-B	280-174348-A-16-B	280-174348-A-18-B
280-174348-A-19-B	280-174348-A-20-B	280-174348-A-22-B
280-174348-A-24-B	280-174485-A-7-B	280-174485-A-8-B
280-174485-A-9-B	280-174482-A-1-B	280-174482-A-2-B
280-174482-A-3-B	280-174482-A-4-B	280-174482-A-5-B
280-174482-A-6-B	280-174482-A-7-B	280-174482-A-8-B
280-174482-A-9-D	280-174482-A-10-B	280-174482-A-11-B
280-174482-A-12-B	280-174482-A-13-B	280-174482-A-14-B
280-174482-A-15-B	280-174482-A-16-B	280-174482-A-17-B
280-174482-A-18-B	280-174482-A-19-C	

Samples for Limit Group: 2, Lims Prep Method: 8330B_Sonc_10g

280-174408-A-1-I	280-174408-A-2-I

Reagent

8330 Stock_TS_00023

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_00118

RESTEK®
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Composition

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568871 **Lot No.:** A0188553

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, 2025 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Nitroglycerin	5,016.0 µg/mL	+/- 46.6461	µg/mL	Gravimetric
	CAS # 55-63-0 (Lot 200507JLM)		+/- 277.1256	µg/mL	Unstressed
	Purity 99%		+/- 322.4378	µg/mL	Stressed

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

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

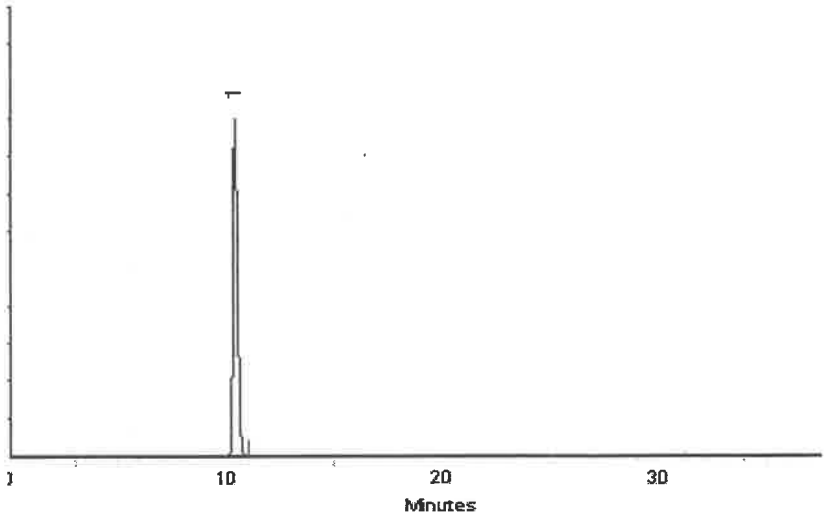
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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

Matt Fragassi - Mix Technician

Date Mixed: 15-Aug-2022 **Balance:** 1128353505

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 16-Aug-2022

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.
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Reagent

8330_NG_Stk_00120

RESTEK®
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Bellefonte, PA 16823-8812
Tel: (800)356-1688
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www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Composition

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Reference Material Producer
Certificate #3222.01

ACCREDITED
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Certificate #3222.02

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Catalog No. : 568871 **Lot No.:** A0188553

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, 2025 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
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	CAS # 55-63-0 (Lot 200507JLM)		+/- 277.1256	µg/mL	Unstressed
	Purity 99%		+/- 322.4378	µg/mL	Stressed

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

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

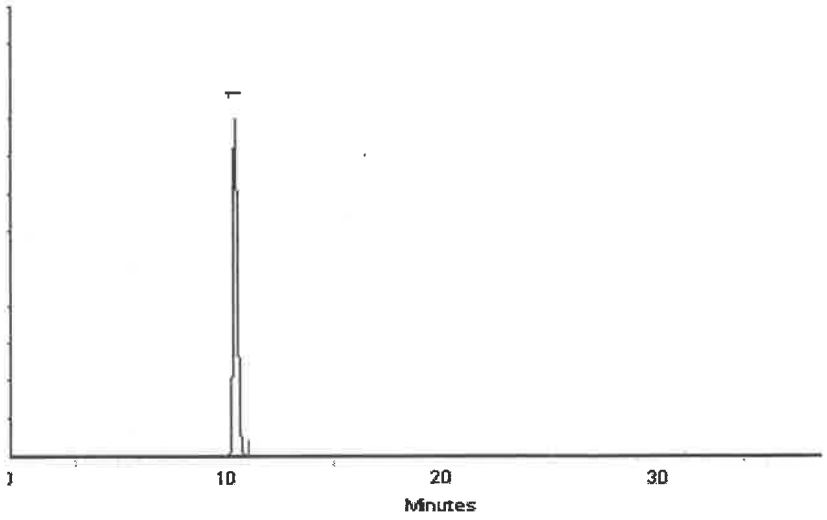
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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

Matt Fragassi - Mix Technician

Date Mixed: 15-Aug-2022 **Balance:** 1128353505

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 16-Aug-2022

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

General Certified Reference Material Notes

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

8330_NG_Stk_00128

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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. : 568871 **Lot No.:** A0194013

Description : Custom Nitroglycerin Standard

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

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

Expiration Date : January 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%	5,036.0 µg/mL	+/- 237.6858

* 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.

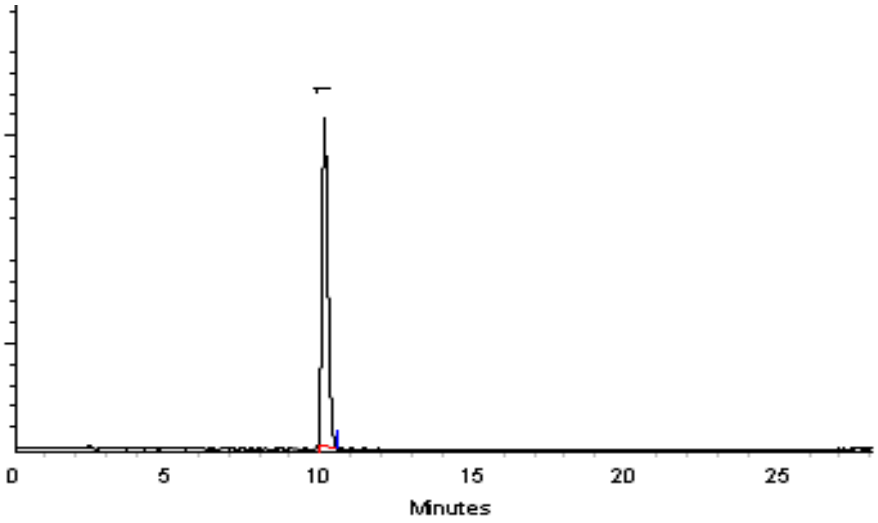
Mobile Phase A:
water:methanol (44:56 V/V)

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.

Brandon Reish - Operations Technician II

Date Mixed: 27-Jan-2023 **Balance Serial #** B251644995

Christie Mills - Operations Tech II - ARM QC

Date Passed: 31-Jan-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_00129

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ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568871 **Lot No.:** A0194013

Description : Custom Nitroglycerin Standard

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

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

Expiration Date : January 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%	5,036.0 µg/mL	+/- 237.6858

* 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.

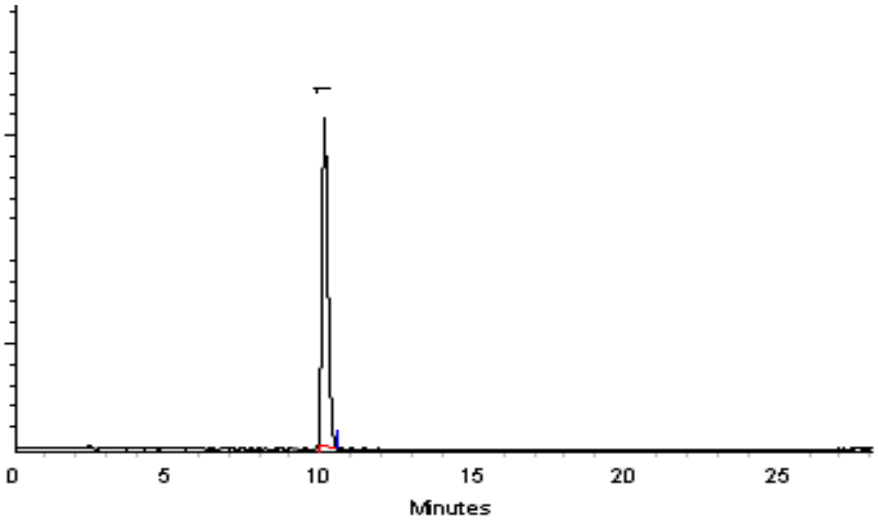
Mobile Phase A:
water:methanol (44:56 V/V)

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.

Brandon Reish - Operations Technician II

Date Mixed: 27-Jan-2023 **Balance Serial #** B251644995

Christie Mills - Operations Tech II - ARM QC

Date Passed: 31-Jan-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_00130

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ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568871 **Lot No.:** A0194013

Description : Custom Nitroglycerin Standard

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

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

Expiration Date : January 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%	5,036.0 µg/mL	+/- 237.6858

* 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.

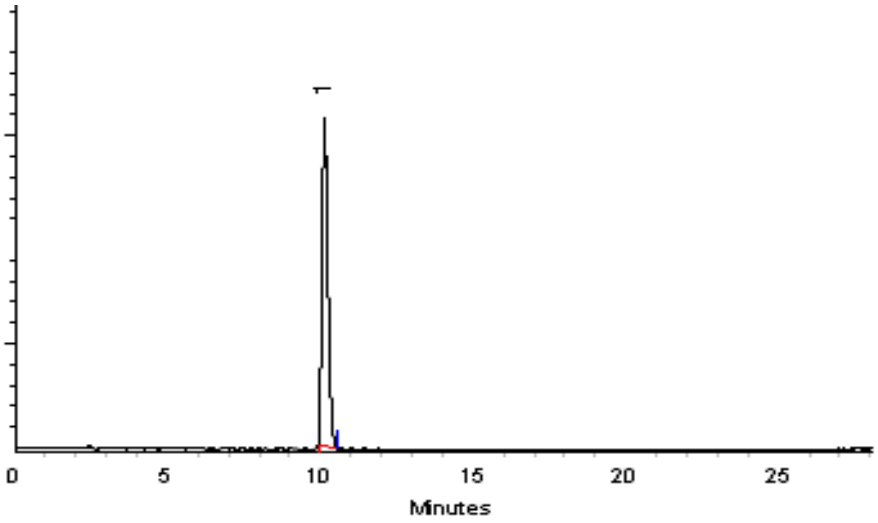
Mobile Phase A:
water:methanol (44:56 V/V)

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.

Brandon Reish - Operations Technician II

Date Mixed: 27-Jan-2023 **Balance Serial #** B251644995

Christie Mills - Operations Tech II - ARM QC

Date Passed: 31-Jan-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_00131

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Certificate of Analysis

chromatographic

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568871 **Lot No.:** A0194013

Description : Custom Nitroglycerin Standard

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

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

Expiration Date : January 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%	5,036.0 µg/mL	+/- 237.6858

* 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.

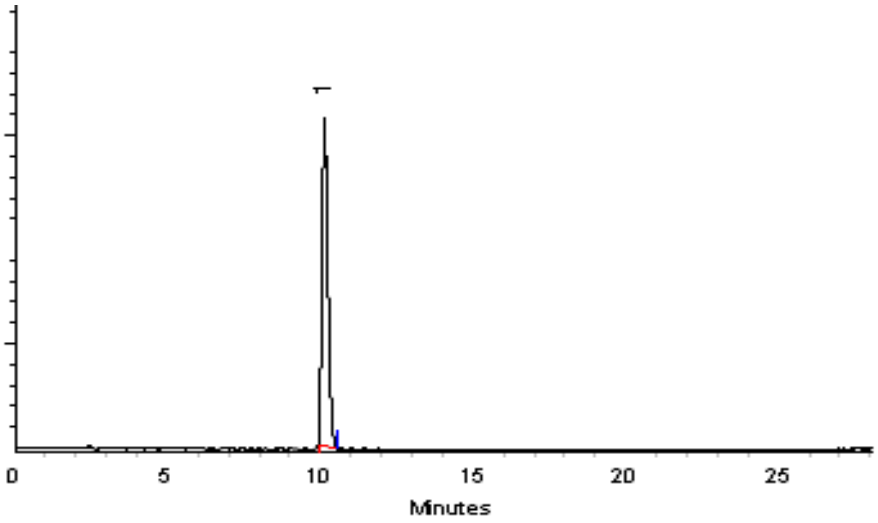
Mobile Phase A:
water:methanol (44:56 V/V)

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.

Brandon Reish - Operations Technician II

Date Mixed: 27-Jan-2023 **Balance Serial #** B251644995

Christie Mills - Operations Tech II - ARM QC

Date Passed: 31-Jan-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_00007

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Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31498 **Lot No.:** A0175997

Description : Nitroglycerin Standard

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

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

Expiration Date : September 30, 2026 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Nitroglycerin (Lot 200507JLM)	1,000.0 µg/mL	+/- 5.9397 µg/mL	Gravimetric
	CAS # 55-63-0		+/- 54.7830 µg/mL	Unstressed
	Purity 99%		+/- 63.8824 µg/mL	Stressed

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

8330_NG1000_00010

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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.:** A0187280

Description : Nitroglycerin Standard

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

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

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

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Nitroglycerin	1,004.0 µg/mL	+/- 5.9635	µg/mL	Gravimetric
	CAS # 55-63-0 (Lot 200507JLM)		+/- 55.0021	µg/mL	Unstressed
	Purity 99%		+/- 64.1379	µg/mL	Stressed

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

Reagent

8330_OP_DMT_00016

Preliminary Report

Eurofins Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20221230-117448.b\12300069.D

Lims ID: DMT LCS 16 Inj. Date: 30-Dec-2022 14:12:41

Worklist ID: 280-0117448-069 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 0B_Sonc_
3 TNX	0.5000	0.5437	108.7	50-150
6 DNX	0.5020	0.5259	104.8	50-150
7 MNX	0.5850	0.6258	107.0	50-150

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

280-170212-A-1-B 280-170212-A-2-D 280-170212-A-3-B
280-170212-A-4-B 280-170212-A-5-B 280-170212-A-6-B
280-170212-A-7-B 280-170212-A-8-B 280-170212-A-9-B
280-170212-A-10-D 280-170212-A-11-B 280-170212-A-12-C
280-170212-A-13-B 280-170212-A-14-B 280-170212-A-15-B
280-170212-A-16-B 280-170212-A-17-B 280-170212-A-18-B
280-170212-A-19-B 280-170212-A-20-B 280-170212-A-21-C
280-170212-A-22-B 280-170212-A-23-B 280-170212-A-24-F
280-170212-A-25-B 280-170212-A-26-C 280-170212-A-27-B
280-170212-A-28-B 280-170212-A-29-B 280-170212-A-30-B
280-170212-A-31-B 280-170212-A-32-B 280-170212-A-33-B
280-170212-A-34-B 280-170212-A-35-B 280-170212-A-36-C
280-170212-A-37-B 280-170212-A-38-B 280-170212-A-39-B
280-170212-A-40-B

Reagent

8330_PETN_Stk_00128

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Certificate #3222.01

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568872 **Lot No.:** A0187506

Description : Custom PETN Standard

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

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

Expiration Date : July 31, 2025 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	PETN	5,028.0 µg/mL	+/- 46.7577 µg/mL	Gravimetric
	CAS # 78-11-5 (Lot 051108JLM)		+/- 277.7886 µg/mL	Unstressed
	Purity 99%		+/- 323.2092 µg/mL	Stressed

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

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

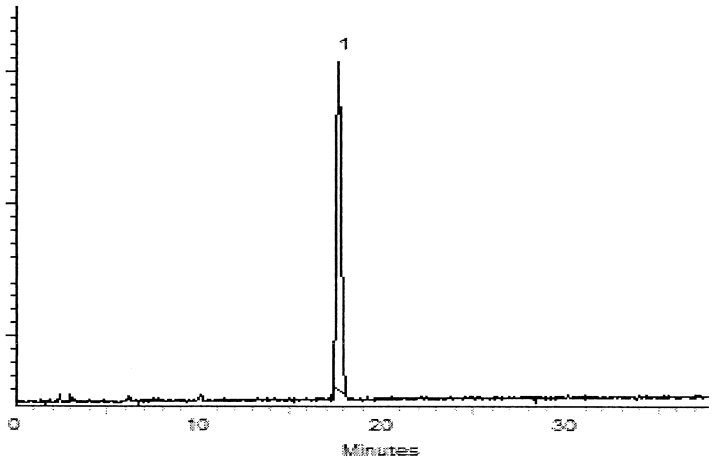
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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

Miranda Kline

Miranda Kline - Operations Technician I **Date Mixed:** 19-Jul-2022 **Balance:** B345965662

Fang-Yun Weaver - Operations Lead Tech - ARM QC **Date Passed:** 22-Jul-2022

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

8330_PETN_Stk_00133

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CERTIFIED REFERENCE MATERIAL

Certificate of Composition

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568872 **Lot No.:** A0188550

Description : Custom PETN Standard

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

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

Expiration Date : August 31, 2025 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	PETN	5,000.0 µg/mL	+/- 46.4973 µg/mL	Gravimetric
	CAS # 78-11-5 (Lot 051108JLM)		+/- 276.2417 µg/mL	Unstressed
	Purity 99%		+/- 321.4093 µg/mL	Stressed

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

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

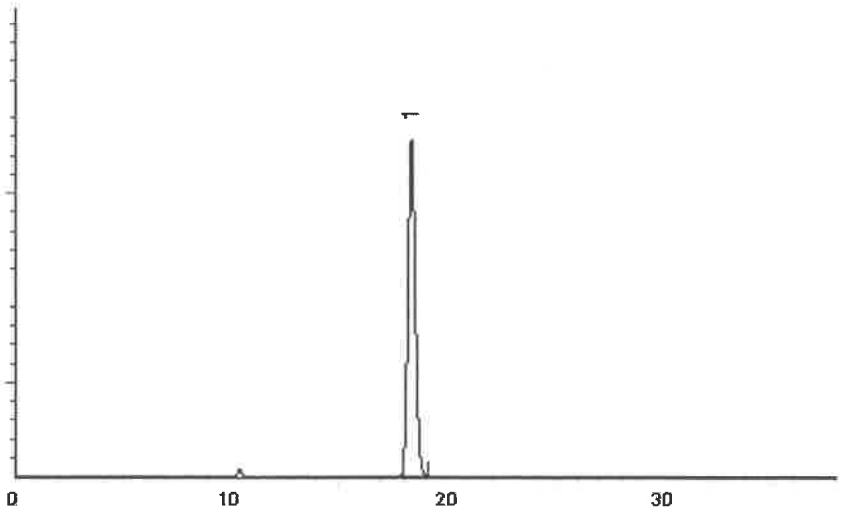
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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

Matt Fragassi - Mix Technician

Date Mixed: 15-Aug-2022 **Balance:** 1128353505

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 16-Aug-2022

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

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CERTIFIED REFERENCE MATERIAL

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568872 **Lot No.:** A0188550

Description : Custom PETN Standard

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

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

Expiration Date : August 31, 2025 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	PETN		5,000.0 µg/mL	+/- 46.4973	µg/mL	Gravimetric
	CAS # 78-11-5	(Lot 051108JLM)		+/- 276.2417	µg/mL	Unstressed
	Purity 99%			+/- 321.4093	µg/mL	Stressed

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

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

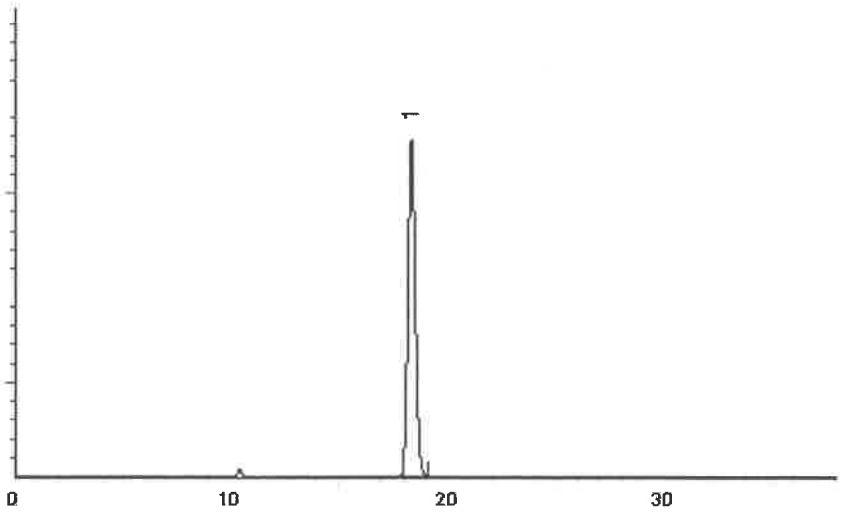
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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

Matt Fragassi - Mix Technician

Date Mixed: 15-Aug-2022 **Balance:** 1128353505

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 16-Aug-2022

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

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Certificate #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.:** A0188550

Description : Custom PETN Standard

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

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

Expiration Date : August 31, 2025 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)		
1	PETN		5,000.0	µg/mL	+/- 46.4973	µg/mL	Gravimetric
	CAS # 78-11-5	(Lot 051108JLM)			+/- 276.2417	µg/mL	Unstressed
	Purity 99%				+/- 321.4093	µg/mL	Stressed

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

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

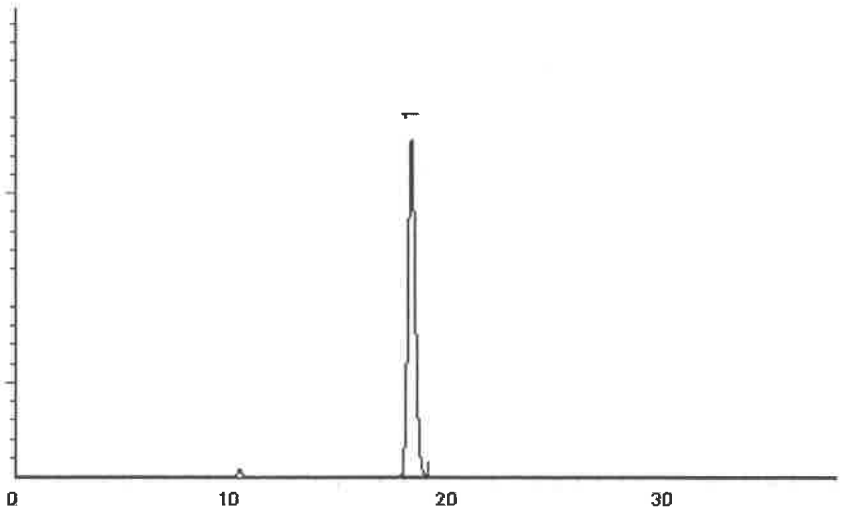
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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

Matt Fragassi - Mix Technician

Date Mixed: 15-Aug-2022 **Balance:** 1128353505

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 16-Aug-2022

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

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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.:** A0188550

Description : Custom PETN Standard

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

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

Expiration Date : August 31, 2025 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)		
1	PETN		5,000.0	µg/mL	+/- 46.4973	µg/mL	Gravimetric
	CAS # 78-11-5	(Lot 051108JLM)			+/- 276.2417	µg/mL	Unstressed
	Purity 99%				+/- 321.4093	µg/mL	Stressed

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

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

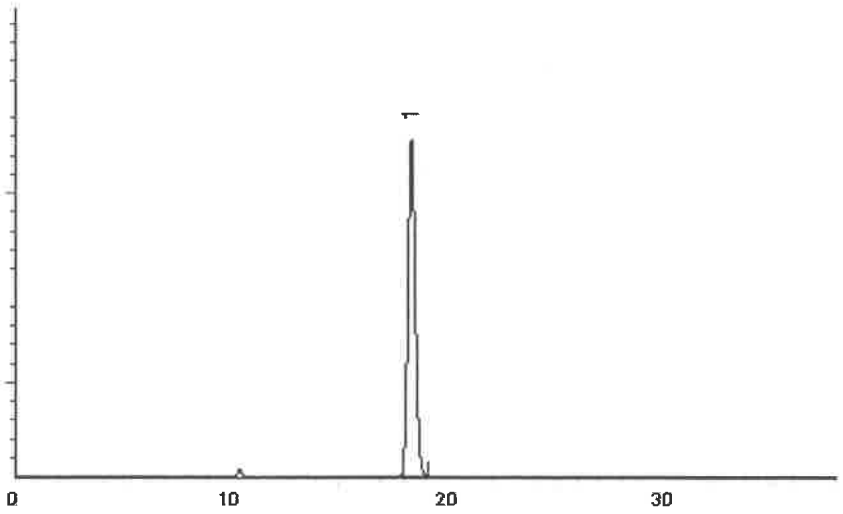
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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

Matt Fragassi - Mix Technician

Date Mixed: 15-Aug-2022 **Balance:** 1128353505

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 16-Aug-2022

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

8330_PETN1000_00010

RESTEK®
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31600 **Lot No.:** A0187142

Description : PETN Standard

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

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

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

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

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
I	PETN	1,001.0 µg/mL	+/- 5.9456 µg/mL	Gravimetric
	CAS # 78-11-5 (Lot 051108JLM)		+/- 54.8378 µg/mL	Unstressed
	Purity 99%		+/- 63.9463 µg/mL	Stressed

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

Reagent

8330_PETN1000_00011

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

Catalog No. : 31600 **Lot No.:** A0187142

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

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

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

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Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
I	PETN	1,001.0 µg/mL	+/- 5.9456 µg/mL	Gravimetric
	CAS # 78-11-5 (Lot 051108JLM)		+/- 54.8378 µg/mL	Unstressed
	Purity 99%		+/- 63.9463 µg/mL	Stressed

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

Reagent

833035DNAStk_00052

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: 222011692-01
Solvent: Methanol (50%)
Acetonitrile (50%)
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: Sep 6, 2022
Expiration: Oct 6, 2023
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/MS)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
3,5-Dinitroaniline	618-87-1	100.0	100.6	100.6

This Certified Reference Material was verified in accordance with ISO/IEC 17025

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

833035DNAStk_00053

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: 222011692-01
Solvent: Methanol (50%)
Acetonitrile (50%)
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: Sep 6, 2022
Expiration: Oct 6, 2023
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/MS)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
3,5-Dinitroaniline	618-87-1	100.0	100.6	100.6

This Certified Reference Material was verified in accordance with ISO/IEC 17025

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

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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

833035DNAStk_00054

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: 222011692-01
Solvent: Methanol (50%)
Acetonitrile (50%)
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: Sep 6, 2022
Expiration: Oct 6, 2023
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/MS)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
3,5-Dinitroaniline	618-87-1	100.0	100.6	100.6

This Certified Reference Material was verified in accordance with ISO/IEC 17025

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

8330DiaminLCS_00052

Preliminary Report

Eurofins Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20221221-117211.b\12210014.D

Lims ID: 8330Dia LCS52 Inj. Date: 21-Dec-2022 13:28:20

Worklist ID: 280-0117211-014 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 0B_Sonc_	Limits 2 3535
2 2,6-diamino-4-nitrotolu	0.5000	0.5110	102.2	10-150	
5 2,4-diamino-6-nitrotolu	0.5000	0.5040	100.8	10-150	

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

280-170073-A-48-B 280-170073-A-43-B

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

280-170078-A-20-C	280-170078-A-21-C	280-170078-A-22-C
280-170078-A-23-C	280-170078-A-24-C	280-170078-A-25-B
280-170078-A-26-B	280-170078-A-27-F	280-170078-A-28-B
280-170078-A-29-B	280-170078-A-30-B	280-170078-A-31-B
280-170078-A-32-B	280-170078-A-33-B	280-170078-E-34-B

Reagent

8330LCSMix1_00136

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31450 **Lot No.:** A0183848

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, 2027 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	HMX **CAS #** 2691-41-0 **Purity** 99%	(Lot 210324JLM)	1,008.0 µg/mL	+/- 5.9872 µg/mL +/- 55.2213 µg/mL +/- 64.3934 µg/mL		Gravimetric Unstressed Stressed
2	RDX **CAS #** 121-82-4 **Purity** 99%	(Lot 080228JLM)	1,007.0 µg/mL	+/- 5.9813 µg/mL +/- 55.1665 µg/mL +/- 64.3295 µg/mL		Gravimetric Unstressed Stressed
3	1,3,5-Trinitrobenzene **CAS #** 99-35-4 **Purity** 99%	(Lot A6TDK)	1,008.0 µg/mL	+/- 5.9872 µg/mL +/- 55.2213 µg/mL +/- 64.3934 µg/mL		Gravimetric Unstressed Stressed
4	1,3-Dinitrobenzene **CAS #** 99-65-0 **Purity** 99%	(Lot 1-DXX-24-1)	1,006.0 µg/mL	+/- 5.9753 µg/mL +/- 55.1117 µg/mL +/- 64.2657 µg/mL		Gravimetric Unstressed Stressed
5	Nitrobenzene **CAS #** 98-95-3 **Purity** 99%	(Lot 10224044)	1,007.0 µg/mL	+/- 5.9813 µg/mL +/- 55.1665 µg/mL +/- 64.3295 µg/mL		Gravimetric Unstressed Stressed
6	2,4,6-Trinitrotoluene **CAS #** 118-96-7 **Purity** 99%	(Lot D11836200)	1,002.0 µg/mL	+/- 5.9516 µg/mL +/- 54.8926 µg/mL +/- 64.0101 µg/mL		Gravimetric Unstressed Stressed
7	2,4-Dinitrotoluene **CAS #** 121-14-2 **Purity** 99%	(Lot MKAA0690V)	1,005.0 µg/mL	+/- 5.9694 µg/mL +/- 55.0569 µg/mL +/- 64.2018 µg/mL		Gravimetric Unstressed Stressed

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

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

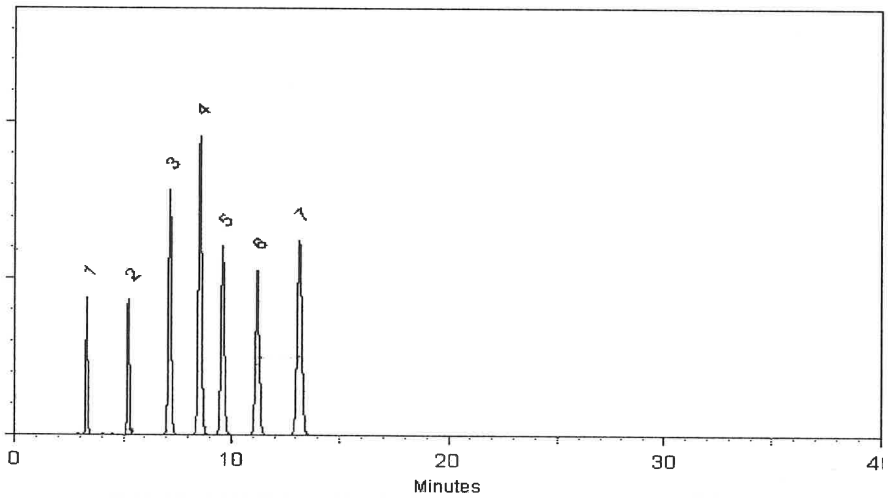
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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

Tom Suckar - Mix Technician

Date Mixed: 08-Apr-2022 **Balance:** B251644995

Feng-Yan Lo - QC Analyst

Date Passed: 13-Apr-2022

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

8330LCSMix1_00140

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Certificate #3222.01

ISO/IEC 17025 Accredited
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Certificate #3222.02

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

Catalog No. : 31450 **Lot No.:** A0183848

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, 2027 **Storage:** 10°C or colder

Ship: Ambient

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	HMX	1,008.0 µg/mL	+/- 5.9872 µg/mL	Gravimetric
	CAS # 2691-41-0 (Lot 210324JLM)		+/- 55.2213 µg/mL	Unstressed
	Purity 99%		+/- 64.3934 µg/mL	Stressed
2	RDX	1,007.0 µg/mL	+/- 5.9813 µg/mL	Gravimetric
	CAS # 121-82-4 (Lot 080228JLM)		+/- 55.1665 µg/mL	Unstressed
	Purity 99%		+/- 64.3295 µg/mL	Stressed
3	1,3,5-Trinitrobenzene	1,008.0 µg/mL	+/- 5.9872 µg/mL	Gravimetric
	CAS # 99-35-4 (Lot A6TDK)		+/- 55.2213 µg/mL	Unstressed
	Purity 99%		+/- 64.3934 µg/mL	Stressed
4	1,3-Dinitrobenzene	1,006.0 µg/mL	+/- 5.9753 µg/mL	Gravimetric
	CAS # 99-65-0 (Lot 1-DXX-24-1)		+/- 55.1117 µg/mL	Unstressed
	Purity 99%		+/- 64.2657 µg/mL	Stressed
5	Nitrobenzene	1,007.0 µg/mL	+/- 5.9813 µg/mL	Gravimetric
	CAS # 98-95-3 (Lot 10224044)		+/- 55.1665 µg/mL	Unstressed
	Purity 99%		+/- 64.3295 µg/mL	Stressed
6	2,4,6-Trinitrotoluene	1,002.0 µg/mL	+/- 5.9516 µg/mL	Gravimetric
	CAS # 118-96-7 (Lot D11836200)		+/- 54.8926 µg/mL	Unstressed
	Purity 99%		+/- 64.0101 µg/mL	Stressed
7	2,4-Dinitrotoluene	1,005.0 µg/mL	+/- 5.9694 µg/mL	Gravimetric
	CAS # 121-14-2 (Lot MKAA0690V)		+/- 55.0569 µg/mL	Unstressed
	Purity 99%		+/- 64.2018 µg/mL	Stressed

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

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

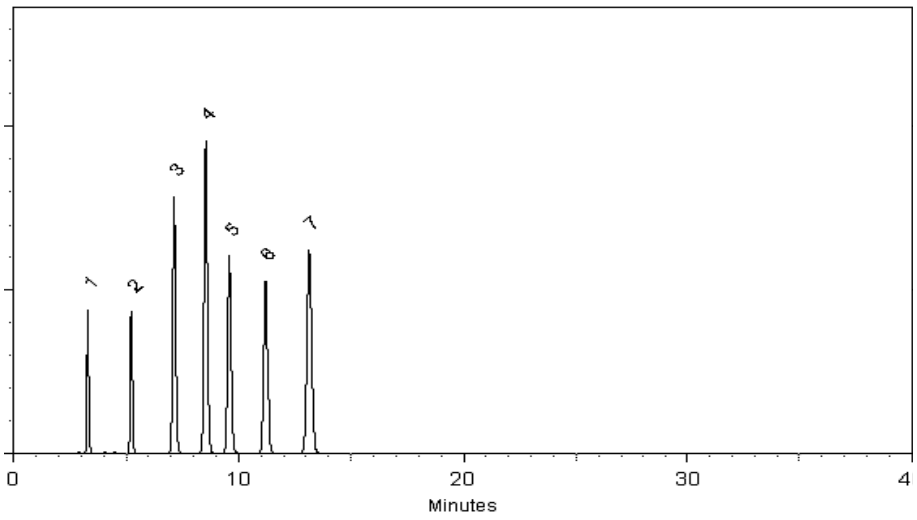
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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

Tom Suckar - Mix Technician

Date Mixed: 08-Apr-2022 **Balance:** B251644995

Fang-Yun Lo - QC Analyst

Date Passed: 13-Apr-2022

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

8330LCSMix1_00141

RESTEK®
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31450 **Lot No.:** A0183848

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, 2027 **Storage:** 10°C or colder

Ship: Ambient

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	HMX	1,008.0 µg/mL	+/- 5.9872 µg/mL	Gravimetric
	CAS # 2691-41-0 (Lot 210324JLM)		+/- 55.2213 µg/mL	Unstressed
	Purity 99%		+/- 64.3934 µg/mL	Stressed
2	RDX	1,007.0 µg/mL	+/- 5.9813 µg/mL	Gravimetric
	CAS # 121-82-4 (Lot 080228JLM)		+/- 55.1665 µg/mL	Unstressed
	Purity 99%		+/- 64.3295 µg/mL	Stressed
3	1,3,5-Trinitrobenzene	1,008.0 µg/mL	+/- 5.9872 µg/mL	Gravimetric
	CAS # 99-35-4 (Lot A6TDK)		+/- 55.2213 µg/mL	Unstressed
	Purity 99%		+/- 64.3934 µg/mL	Stressed
4	1,3-Dinitrobenzene	1,006.0 µg/mL	+/- 5.9753 µg/mL	Gravimetric
	CAS # 99-65-0 (Lot 1-DXX-24-1)		+/- 55.1117 µg/mL	Unstressed
	Purity 99%		+/- 64.2657 µg/mL	Stressed
5	Nitrobenzene	1,007.0 µg/mL	+/- 5.9813 µg/mL	Gravimetric
	CAS # 98-95-3 (Lot 10224044)		+/- 55.1665 µg/mL	Unstressed
	Purity 99%		+/- 64.3295 µg/mL	Stressed
6	2,4,6-Trinitrotoluene	1,002.0 µg/mL	+/- 5.9516 µg/mL	Gravimetric
	CAS # 118-96-7 (Lot D11836200)		+/- 54.8926 µg/mL	Unstressed
	Purity 99%		+/- 64.0101 µg/mL	Stressed
7	2,4-Dinitrotoluene	1,005.0 µg/mL	+/- 5.9694 µg/mL	Gravimetric
	CAS # 121-14-2 (Lot MKAA0690V)		+/- 55.0569 µg/mL	Unstressed
	Purity 99%		+/- 64.2018 µg/mL	Stressed

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

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

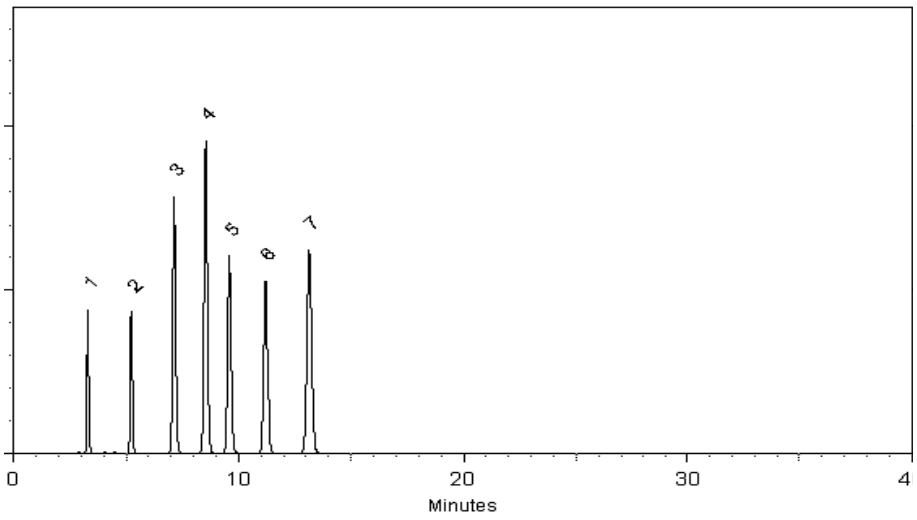
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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

Tom Suckar - Mix Technician

Date Mixed: 08-Apr-2022 **Balance:** B251644995

Fang-Yun Lo - QC Analyst

Date Passed: 13-Apr-2022

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

8330LCSmix2_00034

4

RESTEK® CERTIFIED REFERENCE MATERIAL

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Certificate of Analysis

ACCREDITED
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Reference Material Producer
Certificate #3222.01

ACCREDITED
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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31451 **Lot No.:** A0186475

Description : 8330 Calibration Mix #2

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

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

Expiration Date : June 30, 2027 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Tetryl **CAS #** 479-45-8 **Purity** 99% (Lot 211028JLM)	1,004.0 µg/mL	+/- 5.9635 µg/mL +/- 55.0021 µg/mL +/- 64.1379 µg/mL	Gravimetric Unstressed Stressed
2	4-Amino-2,6-dinitrotoluene **CAS #** 19406-51-0 **Purity** 99% (Lot ER070908-01)	1,002.0 µg/mL	+/- 5.9516 µg/mL +/- 54.8926 µg/mL +/- 64.0101 µg/mL	Gravimetric Unstressed Stressed
3	2-Amino-4,6-dinitrotoluene **CAS #** 35572-78-2 **Purity** 99% (Lot 29550-55)	1,002.0 µg/mL	+/- 5.9516 µg/mL +/- 54.8926 µg/mL +/- 64.0101 µg/mL	Gravimetric Unstressed Stressed
4	2,6-Dinitrotoluene **CAS #** 606-20-2 **Purity** 99% (Lot BCBB8606)	1,004.0 µg/mL	+/- 5.9635 µg/mL +/- 55.0021 µg/mL +/- 64.1379 µg/mL	Gravimetric Unstressed Stressed
5	2-Nitrotoluene **CAS #** 88-72-2 **Purity** 99% (Lot BCBZ7826)	1,002.0 µg/mL	+/- 5.9516 µg/mL +/- 54.8926 µg/mL +/- 64.0101 µg/mL	Gravimetric Unstressed Stressed
6	4-Nitrotoluene **CAS #** 99-99-0 **Purity** 99% (Lot BCCB0171)	1,002.0 µg/mL	+/- 5.9516 µg/mL +/- 54.8926 µg/mL +/- 64.0101 µg/mL	Gravimetric Unstressed Stressed
7	3-Nitrotoluene **CAS #** 99-08-1 **Purity** 99% (Lot FBO01)	1,000.0 µg/mL	+/- 5.9397 µg/mL +/- 54.7830 µg/mL +/- 63.8824 µg/mL	Gravimetric Unstressed Stressed

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

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

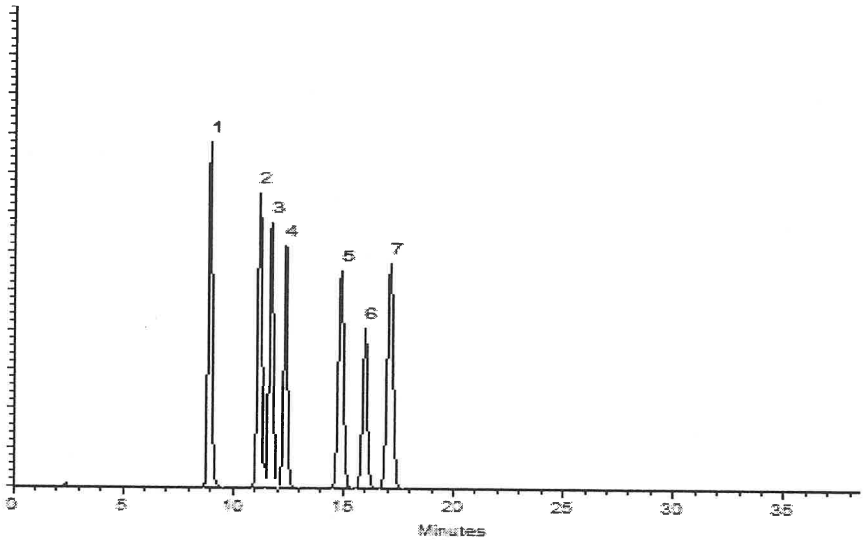
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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

Ashley Frantz - Quoting Technician

Date Mixed: 21-Jun-2022 **Balance:** 1128360905

Christie Mills - Operations Tech II - ARM QC

Date Passed: 29-Jun-2022

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

8330LCSmix2_00038

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

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31451 **Lot No.:** A0192237

Description : 8330 Calibration Mix #2

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

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

Expiration Date : December 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	Tetryl	479-45-8	211028JLM	99%	1,006.0 µg/mL	+/- 46.9317
2	4-Amino-2,6-dinitrotoluene	19406-51-0	ER070908-01	99%	1,004.0 µg/mL	+/- 46.8384
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%	1,004.0 µg/mL	+/- 46.8384
5	2-Nitrotoluene	88-72-2	BCBZ7826	99%	1,008.0 µg/mL	+/- 47.0250
6	4-Nitrotoluene	99-99-0	BCCB0171	99%	1,002.0 µg/mL	+/- 46.7451
7	3-Nitrotoluene	99-08-1	07329LG	99%	1,008.0 µg/mL	+/- 47.0250

* 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.

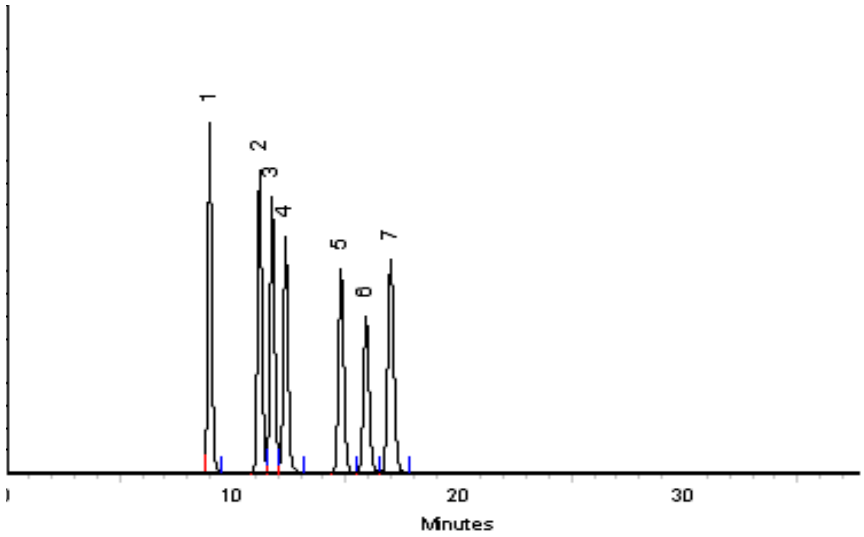
Mobile Phase A:
water:methanol (44:56 V/V)

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.

John Friedline - Operations Technician I

Date Mixed: 05-Dec-2022 **Balance Serial #** 1128342314

Christie Mills - Operations Tech II - ARM QC

Date Passed: 07-Dec-2022

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

8330LCSmix2_00039

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31451 **Lot No.:** A0192237

Description : 8330 Calibration Mix #2

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

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

Expiration Date : December 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	Tetryl	479-45-8	211028JLM	99%	1,006.0 µg/mL	+/- 46.9317
2	4-Amino-2,6-dinitrotoluene	19406-51-0	ER070908-01	99%	1,004.0 µg/mL	+/- 46.8384
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%	1,004.0 µg/mL	+/- 46.8384
5	2-Nitrotoluene	88-72-2	BCBZ7826	99%	1,008.0 µg/mL	+/- 47.0250
6	4-Nitrotoluene	99-99-0	BCCB0171	99%	1,002.0 µg/mL	+/- 46.7451
7	3-Nitrotoluene	99-08-1	07329LG	99%	1,008.0 µg/mL	+/- 47.0250

* 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.

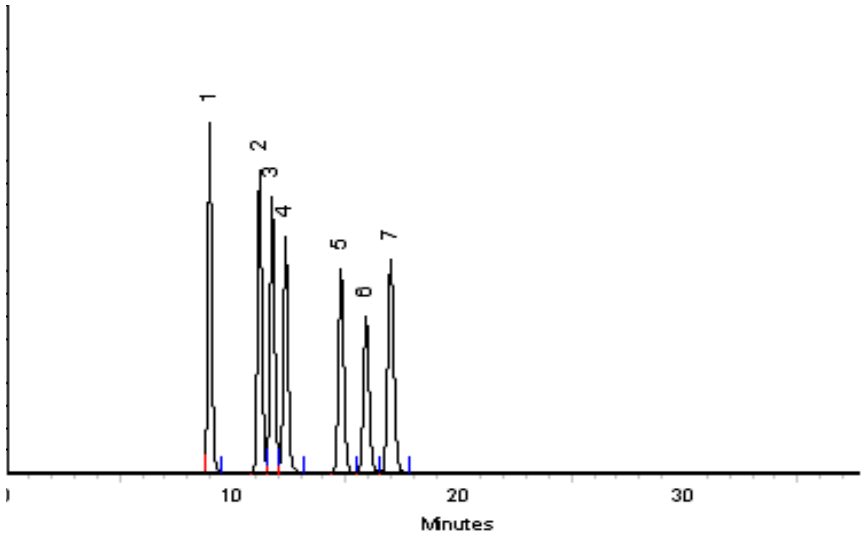
Mobile Phase A:
water:methanol (44:56 V/V)

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.

John Friedline - Operations Technician I

Date Mixed: 05-Dec-2022 **Balance Serial #** 1128342314

Christie Mills - Operations Tech II - ARM QC

Date Passed: 07-Dec-2022

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_00070

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-3
Description: Picric acid
Lot: 218031154-03
Solvent: Acetonitrile (50%)
Methanol (50%)
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: Jul 7, 2021
Expiration: Aug 7, 2023
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 % (HPLC)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
Picric acid	88-89-1	99.1	100.1	99.2

31499

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. 822-275872-11

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

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

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

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

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

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

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

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

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

Reagent

8330PAStkPS_00071

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-3
Description: Picric acid
Lot: 218031154-04
Solvent: Acetonitrile (50%)
Methanol (50%)
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: Aug 30, 2022
Expiration: Sep 30, 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 % (HPLC)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
Picric acid	88-89-1	99.1	100.1	99.2

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. 822-275872-11

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

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

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

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

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

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

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

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

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

Reagent

8330Surrogate_00138

Preliminary Report

Eurofins Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20230202-118305.b\02020011.D

Lims ID: Surr138 Inj. Date: 02-Feb-2023 19:11:17

Worklist ID: 280-0118305-011 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 0B_Sonc_
$ 10 1,2-Dinitrobenzene	0.5000	0.5112	102.2	78-119

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

280-171573-C-4-B	280-171573-C-5-B	280-171573-C-6-B
280-171573-C-7-B	280-171573-C-8-B	280-171573-C-9-D
280-171573-C-10-B	280-171573-C-11-B	280-171573-B-12-B
280-171573-B-13-B	280-171573-B-14-B	280-171573-B-15-B
280-171573-B-16-B	280-171573-C-42-B	280-171573-B-43-B
280-171586-A-1-C	280-171586-A-2-C	280-171586-A-3-C
280-171586-A-4-C	280-171586-A-5-C	280-171586-A-6-J
280-171586-A-7-C		

Reagent

8330Surrogate_00143

Preliminary Report

Eurofins Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20230413-120394.b\04130011.D

Lims ID: 8330Surr143 Inj. Date: 13-Apr-2023 17:28:02

Worklist ID: 280-0120394-011 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 0B_Sonc_	Limits 2 0B_Sonc_
$ 10 1,2-Dinitrobenzene	0.5000	0.5398	108.0	83-122	78-119

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

280-174145-A-1-E	280-174145-A-2-C	280-174145-A-3-B
280-174145-A-4-B	280-174145-A-5-B	280-174145-A-6-B
280-174145-A-7-C	280-174145-A-8-B	280-174145-A-9-B
280-174145-A-10-B	280-174145-A-11-B	280-174145-A-12-B
280-174145-A-13-B	280-174145-A-14-B	280-174145-A-15-D
280-174145-A-16-B	280-174145-A-17-B	280-174145-A-18-B
280-174145-A-19-B	280-174145-A-20-B	

Samples for Limit Group: 2, Lims Prep Method: 8330B_Sonc_10g

280-174388-A-1-C	280-174388-A-2-C	280-174388-A-3-C
280-174388-A-4-C	280-174388-A-5-C	280-174388-A-6-C
280-174388-A-7-G	280-174388-A-8-G	280-174388-A-9-C
280-174388-A-10-C	280-174388-A-11-C	280-174388-A-12-C
280-174388-A-13-C	280-174388-A-14-C	280-174388-A-15-C
280-174388-A-16-C	280-174388-A-17-C	280-174388-A-18-C
280-174388-A-19-C	280-174388-A-20-C	

Reagent

8330SurrStkSS_00245

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

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.:** A0192220

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, 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	1,2-Dinitrobenzene	528-29-0	MKCH6067	99%	1,000.0 µg/mL	+/- 56.1888

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

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

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

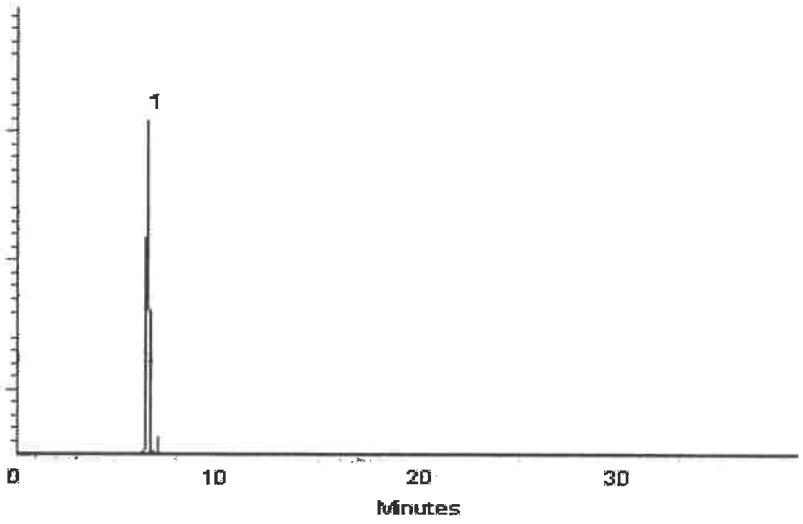
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
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:** 04-Dec-2022 **Balance Serial #** 1128353505

Jennifer Pollino - Operations Tech III - ARM QC **Date Passed:** 06-Dec-2022

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_00246

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 A2LA ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

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

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31453 **Lot No.:** A0192220

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, 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	1,2-Dinitrobenzene	528-29-0	MKCH6067	99%	1,000.0 µg/mL	+/- 56.1888

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

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

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

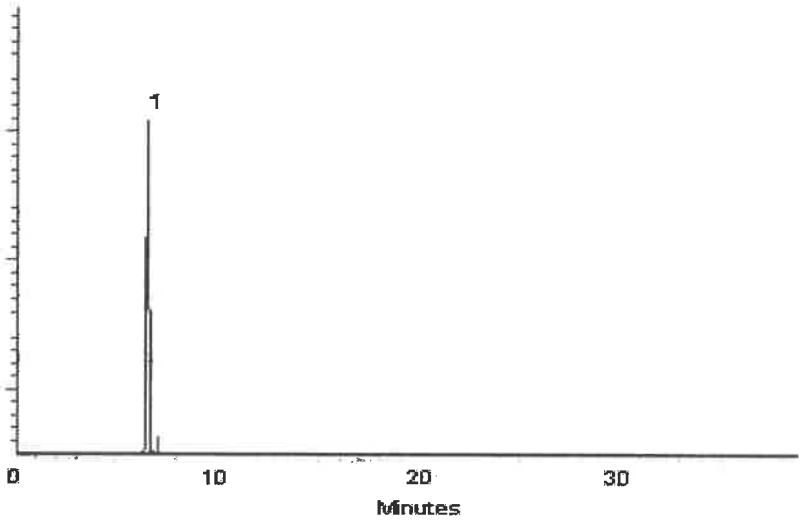
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
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:** 04-Dec-2022 **Balance Serial #** 1128353505

Jennifer Pollino - Operations Tech III - ARM QC **Date Passed:** 06-Dec-2022

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_00247

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

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.:** A0192220

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, 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	1,2-Dinitrobenzene	528-29-0	MKCH6067	99%	1,000.0 µg/mL	+/- 56.1888

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

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

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

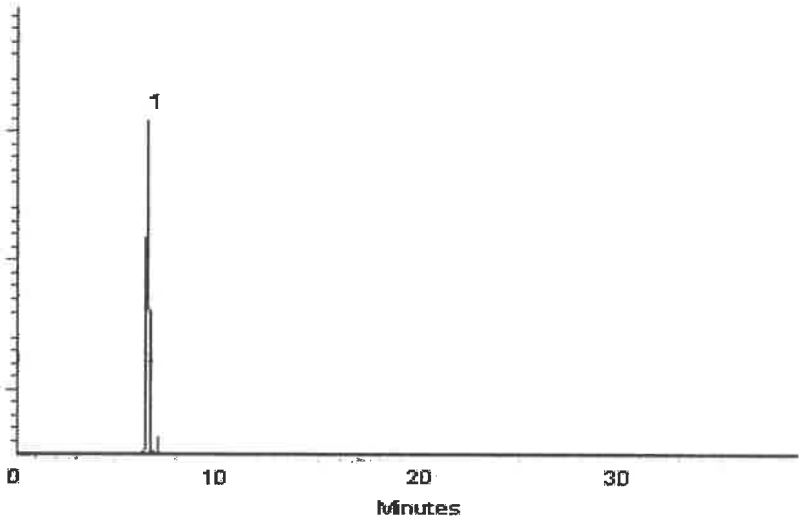
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
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:** 04-Dec-2022 **Balance Serial #** 1128353505

Jennifer Pollino - Operations Tech III - ARM QC **Date Passed:** 06-Dec-2022

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_00248

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 A2LA ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

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

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31453 **Lot No.:** A0192220

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, 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	1,2-Dinitrobenzene	528-29-0	MKCH6067	99%	1,000.0 µg/mL	+/- 56.1888

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

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

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

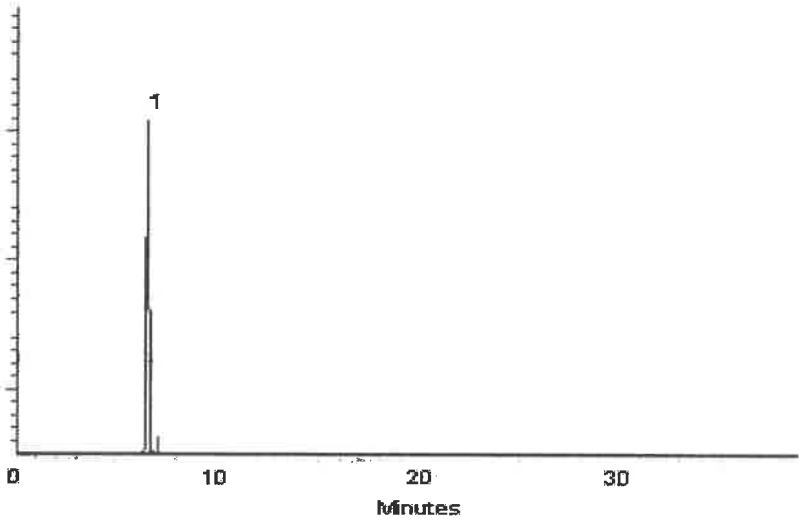
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
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:** 04-Dec-2022 **Balance Serial #** 1128353505

Jennifer Pollino - Operations Tech III - ARM QC **Date Passed:** 06-Dec-2022

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_00249

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.:** A0192220

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, 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	1,2-Dinitrobenzene	528-29-0	MKCH6067	99%	1,000.0 µg/mL	+/- 56.1888

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

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

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

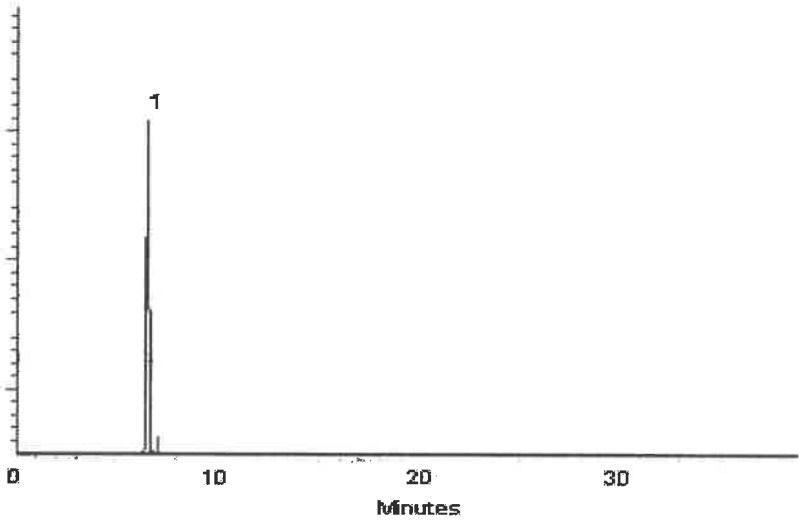
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
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:** 04-Dec-2022 **Balance Serial #** 1128353505

Jennifer Pollino - Operations Tech III - ARM QC **Date Passed:** 06-Dec-2022

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_00263

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.:** A0193444

Description : 8330 Surrogate Mix

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

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

Expiration Date : January 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	MKCH6067	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.

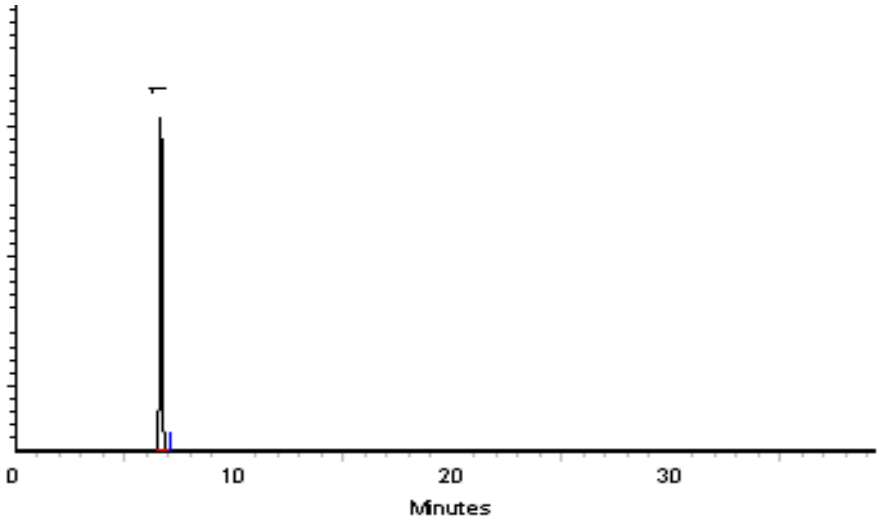
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
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.

Bryan Snyder - Operations Tech I

Date Mixed: 11-Jan-2023 **Balance Serial #** 1127510105

Christie Mills - Operations Tech II - ARM QC

Date Passed: 16-Jan-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_00265

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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Certificate #3222.01

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31453 **Lot No.:** A0193444

Description : 8330 Surrogate Mix

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

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

Expiration Date : January 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	MKCH6067	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.

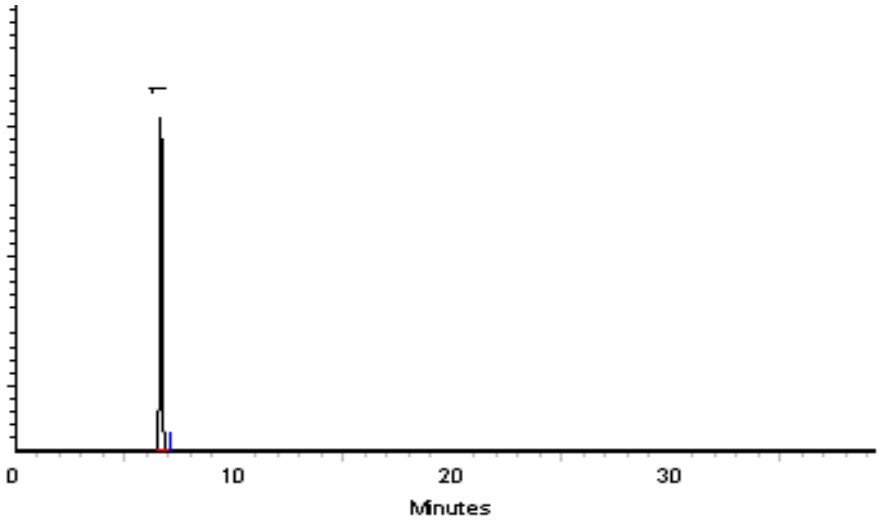
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
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.

Bryan Snyder - Operations Tech I

Date Mixed: 11-Jan-2023 **Balance Serial #** 1127510105

Christie Mills - Operations Tech II - ARM QC

Date Passed: 16-Jan-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_00266

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Certificate of Analysis

chromatographic plus

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31453 **Lot No.:** A0194831

Description : 8330 Surrogate Mix

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

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

Expiration Date : February 29, 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	MKCH6067	99%	1,004.8 µg/mL	+/- 56.4585

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

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

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

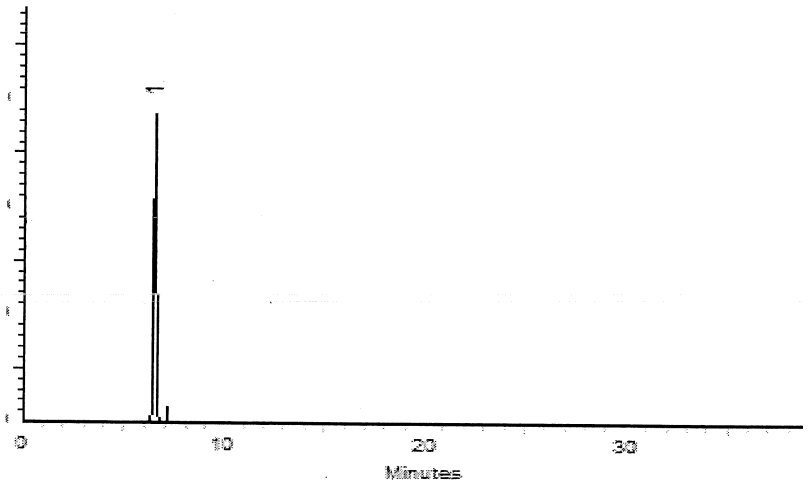
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
2µl



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

Stacey Wanner - Operations Technician I **Date Mixed:** 20-Feb-2023 **Balance Serial #** B442140311

Jennifer Pollino - Operations Tech III - ARM QC **Date Passed:** 21-Feb-2023

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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  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_00267

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

www.restek.com

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Certificate #3222.02

Certificate of Analysis

chromatographic plus

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31453 **Lot No.:** A0194831

Description : 8330 Surrogate Mix

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

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

Expiration Date : February 29, 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	MKCH6067	99%	1,004.8 µg/mL	+/- 56.4585

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

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

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

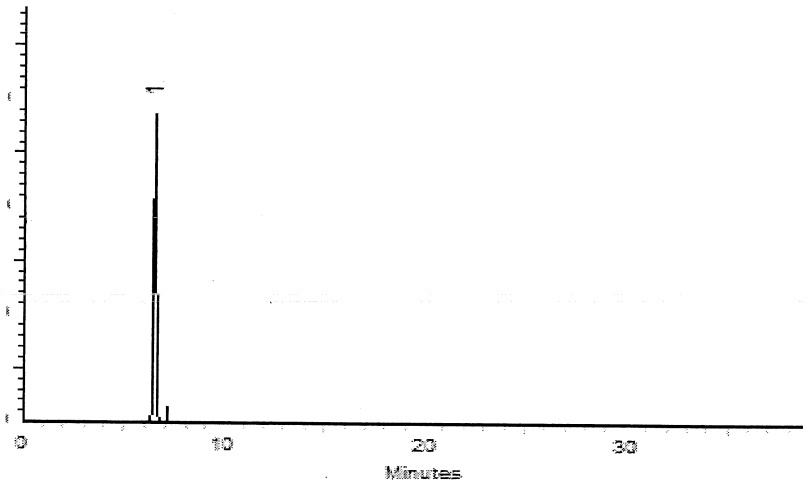
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
2µl



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

Stacey Wanner - Operations Technician I **Date Mixed:** 20-Feb-2023 **Balance Serial #** B442140311

Jennifer Pollino - Operations Tech III - ARM QC **Date Passed:** 21-Feb-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 values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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Manufacturing 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_00268

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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Reference Material Producer
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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31453 **Lot No.:** A0194831

Description : 8330 Surrogate Mix

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

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

Expiration Date : February 29, 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	MKCH6067	99%	1,004.8 µg/mL	+/- 56.4585

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

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

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

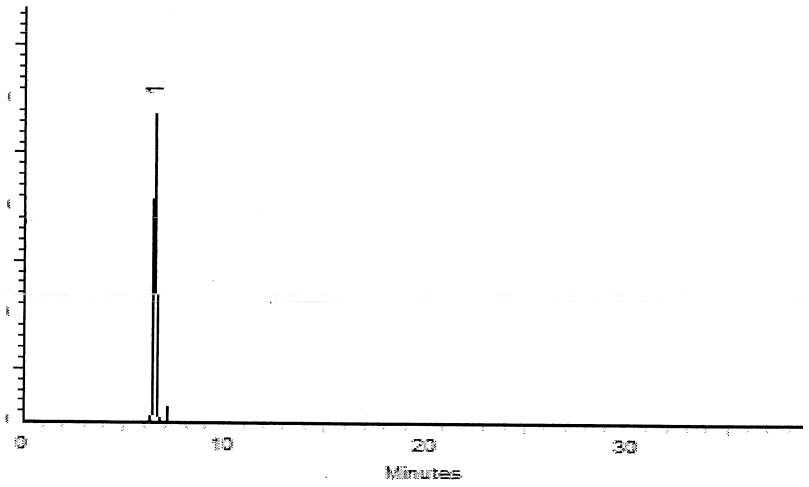
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
2µl



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Stacey Wanner - Operations Technician I **Date Mixed:** 20-Feb-2023 **Balance Serial #** B442140311

Jennifer Pollino - Operations Tech III - ARM QC **Date Passed:** 21-Feb-2023

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

General Certified Reference Material Notes

Expiration Notes:

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

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Certified Uncertainty Value Notes:

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  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
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Manufacturing Notes:

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Handling Notes:

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

Reagent

8330SurrStock_00172

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_00069

ISO 17034

Agilent
Trusted Answers

Reference Material Certificate

Product Name: Custom Standard
Product Number: CUS-23984
Storage Conditions: Store at Room Temperature (15° to 30°C).

Lot Number: 0006659035
Lot Issue Date: 11-Jan-2022
Expiration Date: 28-Feb-2023

Component Name	CERTIFIED VALUES Concentration	Expanded Uncertainty	CAS#	Analyte Lot
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)	100.4 ±	0.5 µg/mL	N/A	RM12426
1-nitro-3,5-dinitroso-1,3,5-triazacyclohexane (DNX)	100.4 ±	0.5 µg/mL	N/A	RM12428
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane (MNX)	117.0 ±	0.6 µg/mL	N/A	RM12428

Matrix: acetonitrile

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

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

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

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

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

Intended Use:
This analytical reference standard is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Expiration of Certification:

Reagent

MNX,TNX,DNX_00076

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: 0006725091
Lot Issue Date: 31-Jan-2023
Expiration Date: 29-Feb-2024

Component Name	Concentration		Uncertainty	CAS#	Analyte Lot
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)	100.3	±	0.5 µg/mL	N/A	RM12426
1-nitro-3,5-dinitroso-1,3,5-triazacyclohexane (DNX)	100.1	±	0.5 µg/mL	N/A	RM12428
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane (MNX)	116.7	±	0.6 µg/mL	N/A	RM12428

Matrix: acetonitrile

Description:
This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material (RM) 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. Purity values are taken from approved vendor raw material certificates.

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 (RM) standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

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

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

Intended Use:
This analytical reference (RM) standard is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Expiration of Certification:

Reagent

MNX,TNX,DNX_00077

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: 0006725091

Lot Issue Date: 31-Jan-2023

Expiration Date: 29-Feb-2024

Component Name	Concentration		Uncertainty	CAS#	Analyte Lot
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)	100.3	±	0.5 µg/mL	N/A	RM12426
1-nitro-3,5-dinitroso-1,3,5-triazacyclohexane (DNX)	100.1	±	0.5 µg/mL	N/A	RM12428
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane (MNX)	116.7	±	0.6 µg/mL	N/A	RM12428

Matrix: acetonitrile

Description:
This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material (RM) 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. Purity values are taken from approved vendor raw material certificates.

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 (RM) standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

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

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

Intended Use:
This analytical reference (RM) standard is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Expiration of Certification:

Reagent

PicricARestek_00113

RESTEK®
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31499 **Lot No.:** A0183202

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, 2027 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Picric Acid	1,004.0 µg/mL	+/- 5.9635	µg/mL	Gravimetric
	CAS # 88-89-1 (Lot 06130CU)		+/- 55.0021	µg/mL	Unstressed
	Purity 99%		+/- 64.1379	µg/mL	Stressed

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

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

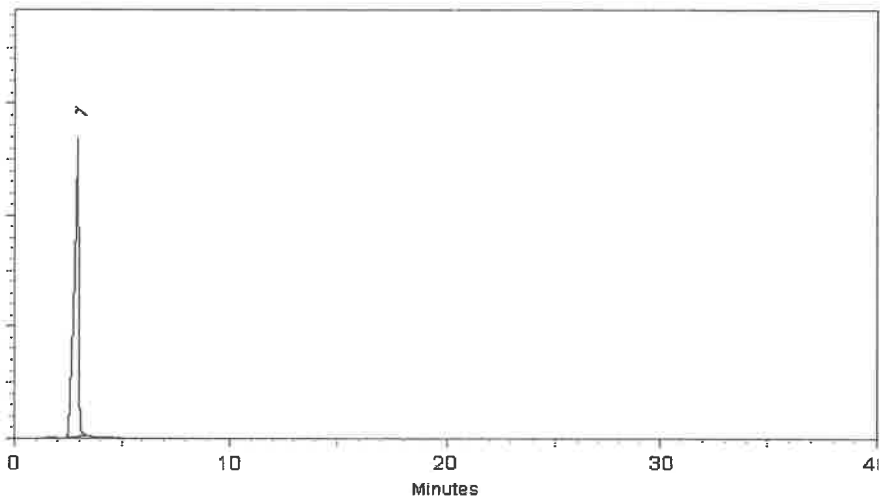
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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

Brandon Reish - Mix Technician

Date Mixed: 23-Mar-2022 **Balance:** 1128360905

Amanda Miller - Operations Tech-ARM QC

Date Passed: 28-Mar-2022

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

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

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

Manufacturing Notes:

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

Handling Notes:

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

8330B_DOD5

Nitroaromatics and Nitramines (HPLC)

FORM II
HPLC/IC SURROGATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-176134-1

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-004-230401-GW	280-176134-1	109	
SCFmw-004-230402-GW	280-176134-2	110	
LL1mw-086-230401-GW	280-176134-3	114 M	
LL1mw-086-230401-GW	280-176134-3		97
LL3mw-237-230401-GW	280-176134-4	105 M	
LL3mw-237-230401-GW	280-176134-4		94
LL1mw-089-230401-GW	280-176134-5	106	
LL1mw-089-230402-GW	280-176134-6	105	
LL1mw-063-230401-GW	280-176134-7	109	
LL1mw-063-230401-GW	280-176134-7		92
	MB 280-611915/1-A	114	
	LCS 280-611915/2-A	100	
	LCS 280-611915/4-A	101	
	LCSD 280-611915/3-A	103	
	LCSD 280-611915/5-A	101	

	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.: 280-176134-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 05130026.D

Lab ID: LCS 280-611915/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.00	1.99	99	73-125	
1,3-Dinitrobenzene	2.00	1.93	96	78-120	
2,4,6-Trinitrotoluene	2.00	1.84	92	71-123	
2,4-Dinitrotoluene	2.00	1.85	93	78-120	
2,6-Dinitrotoluene	2.00	1.91	96	77-127	
2-Amino-4,6-dinitrotoluene	2.00	1.74	87	79-120	
2-Nitrotoluene	2.00	1.54	77	70-127	
3,5-Dinitroaniline	2.00	1.71	85	71-117	
3-Nitrotoluene	2.00	1.51	76	73-125	
4-Amino-2,6-dinitrotoluene	2.00	1.65	82	76-125	
4-Nitrotoluene	2.00	1.50	75	71-127	
DNX	2.00	2.00	100	66-119	M
HMX	2.00	1.78	89	65-135	M
MNX	2.33	2.56	110	57-132	
Nitrobenzene	2.00	1.76	88	65-134	
Nitroglycerin	20.0	20.0	100	74-127	
PETN	20.0	20.8	104	73-127	
RDX	2.00	1.92	96	68-130	
Tetryl	2.00	1.97	98	64-128	
TNX	2.01	1.96	98	50-150	M

Column to be used to flag recovery and RPD values

FORM III 8330B

FORM III
HPLC/IC LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 05130028.D

Lab ID: LCS 280-611915/4-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
2,4-diamino-6-nitrotoluene	2.00	1.40	70	68-122	M
2,6-diamino-4-nitrotoluene	2.00	1.55	78	72-122	M

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.: 280-176134-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 05130027.D

Lab ID: LCSD 280-611915/3-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	2.07	104	4	20	73-125	
1,3-Dinitrobenzene	2.00	2.00	100	4	20	78-120	
2,4,6-Trinitrotoluene	2.00	1.91	95	4	20	71-123	
2,4-Dinitrotoluene	2.00	1.92	96	3	20	78-120	
2,6-Dinitrotoluene	2.00	1.99	100	4	20	77-127	
2-Amino-4,6-dinitrotoluene	2.00	1.85	92	6	20	79-120	
2-Nitrotoluene	2.00	1.61	81	5	20	70-127	
3,5-Dinitroaniline	2.00	1.77	89	4	20	71-117	
3-Nitrotoluene	2.00	1.61	80	6	20	73-125	
4-Amino-2,6-dinitrotoluene	2.00	1.70	85	3	20	76-125	
4-Nitrotoluene	2.00	1.60	80	6	20	71-127	
DNX	2.00	2.10	105	5	20	66-119	M
HMX	2.00	1.78	89	0	20	65-135	M
MNX	2.33	2.67	114	4	20	57-132	
Nitrobenzene	2.00	1.82	91	4	20	65-134	
Nitroglycerin	20.0	20.0	100	0	20	74-127	
PETN	20.0	21.7	109	4	20	73-127	
RDX	2.00	1.96	98	2	20	68-130	
Tetryl	2.00	2.09	104	6	20	64-128	
TNX	2.01	1.96	98	0	20	50-150	M

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.: 280-176134-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 05130029.D

Lab ID: LCSD 280-611915/5-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
2,4-diamino-6-nitrotoluene	2.00	1.45	72	3	20	68-122	M
2,6-diamino-4-nitrotoluene	2.00	1.58	79	2	20	72-122	M

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.: 280-176134-1

SDG No.:

Lab Sample ID: MB 280-611915/1-A

Matrix: Water Date Extracted: 05/10/2023 13:48

Lab File ID:(1) 05130025.D Lab File ID:(2)

Date Analyzed:(1) 05/13/2023 20:05 Date Analyzed:(2)

Instrument ID:(1) CHHPLC_X3 Instrument ID:(2) CHHPLC_X5

GC Column:(1) UltraCarb5uO ID: 4.6(mm) GC Column:(2) Luna-phenylh ID: 4.6(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 280-611915/2-A	05/13/2023 20:28	
	LCSD 280-611915/3-A	05/13/2023 20:51	
	LCS 280-611915/4-A	05/13/2023 21:14	
	LCSD 280-611915/5-A	05/13/2023 21:37	
SCFmw-004-230401-GW	280-176134-1	05/14/2023 02:58	
SCFmw-004-230402-GW	280-176134-2	05/14/2023 03:21	
LL1mw-086-230401-GW	280-176134-3	05/14/2023 04:30	05/17/2023 11:13
LL3mw-237-230401-GW	280-176134-4	05/14/2023 04:53	05/17/2023 12:23
LL1mw-089-230401-GW	280-176134-5	05/14/2023 05:16	
LL1mw-089-230402-GW	280-176134-6	05/14/2023 05:39	
LL1mw-063-230401-GW	280-176134-7	05/14/2023 06:02	05/17/2023 12:58

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Client Sample ID: LL3mw-237-230401-GW Lab Sample ID: 280-176134-4

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_X5

Date Analyzed (1): 05/14/2023 04:53 Date Analyzed (2): 05/17/2023 12:23

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
2,4,6-Trinitrotoluene	1		10.91	10.81	11.01	0.11		0.5
	2		21.80	21.51	21.81	0.11		
4-Amino-2,6-dinitrotoluene	1		11.12	11.01	11.21	2.2		18.0
	2		15.38	15.10	15.40	2.6		
2-Amino-4,6-dinitrotoluene	1		11.37	11.27	11.47	1.0		1.6
	2		16.20	15.93	16.23	1.0		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Client Sample ID: LL1mw-063-230401-GW Lab Sample ID: 280-176134-7

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_X5

Date Analyzed (1): 05/14/2023 06:02 Date Analyzed (2): 05/17/2023 12:58

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
HMX	1		6.55	6.40	6.70	1.1		1.6
	2		6.09	5.93	6.23	1.0		
4-Amino-2,6-dinitrotoluene	1		11.11	11.01	11.21	0.32		17.1
	2		15.28	15.10	15.40	0.39		
2-Amino-4,6-dinitrotoluene	1		11.37	11.27	11.47	0.13		91.7
	2		16.10	15.93	16.23	0.34		

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-176134-1

SDG No.:

Client Sample ID: SCFmw-004-230401-GW | Lab Sample ID: 280-176134-1

Matrix: Water | Lab File ID: 05130043.D

Analysis Method: 8330B | Date Collected: 05/04/2023 09:31

Extraction Method: 3535 | Date Extracted: 05/10/2023 13:48

Sample wt/vol: 475.6(mL) | Date Analyzed: 05/14/2023 02:58

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

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

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

Cleanup Factor:

Analysis Batch No.: 612396 | 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	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	0.22	0.21	0.090
99-08-1	3-Nitrotoluene	0.37	U	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	0.43	0.42	0.11
2691-41-0	HMX	0.21	U M	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	109		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130043.D
Lims ID: 280-176134-B-1-A
Client ID: SCFmw-004-230401-GW
Sample Type: Client
Inject. Date: 14-May-2023 02:58:28 ALS Bottle#: 43 Worklist Smp#: 43
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-176134-B-1-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-May-2023 12:37:22 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: K8YG Date: 15-May-2023 12:04:05

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	4 HMX	1		6.547			ND	U
	8 RDX	1		7.574			ND	
$	10 1,2-Dinitrobenzene	1	8.527	8.521	0.006	27413	0.2170	
	11 1,3,5-Trinitrobenzene	1		8.647			ND	
	12 1,3-Dinitrobenzene	1		9.274			ND	
	13 Nitrobenzene	1		9.647			ND	
	15 Tetryl	1		10.014			ND	
	16 Nitroglycerin	2		10.467			ND	
	17 2,4,6-Trinitrotoluene	1		10.914			ND	
	18 4-Amino-2,6-dinitrotoluene	1		11.114			ND	
	19 2-Amino-4,6-dinitrotoluene	1		11.367			ND	
	20 2,6-Dinitrotoluene	1		11.514			ND	
	21 2,4-Dinitrotoluene	1		11.687			ND	
	22 o-Nitrotoluene	1		12.514			ND	
	23 p-Nitrotoluene	1		12.940			ND	U
	24 m-Nitrotoluene	1		13.514			ND	
	25 PETN	2		14.694			ND	

QC Flag Legend

Processing Flags
Review Flags
U - Marked Undetected

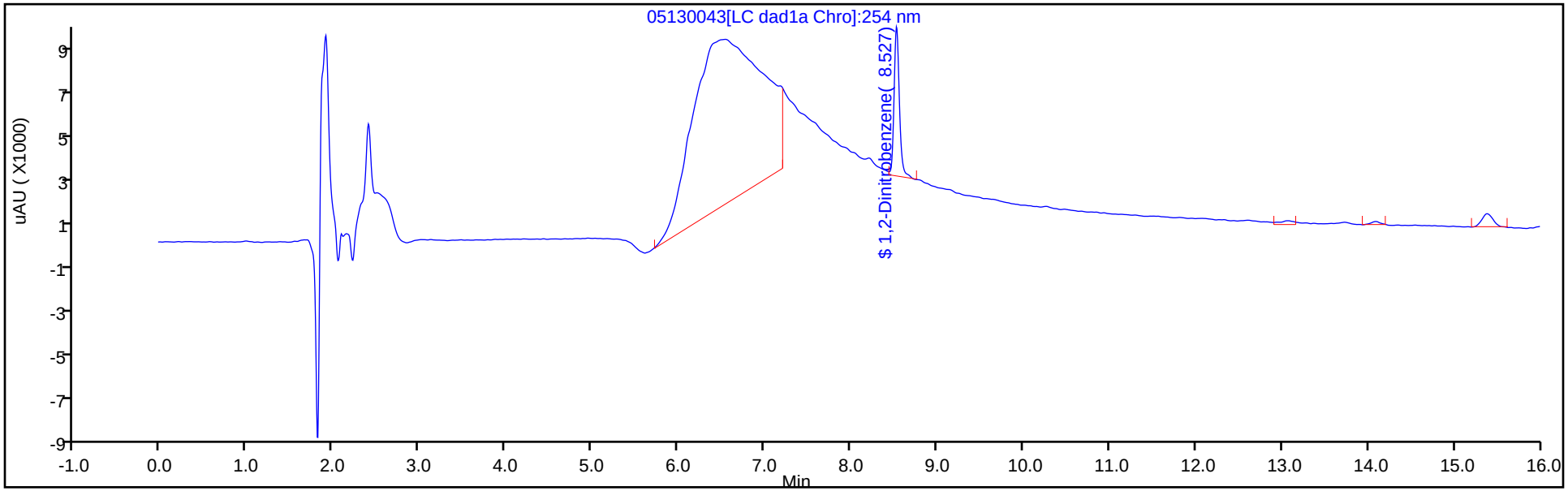
Report Date: 16-May-2023 12:37:29 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

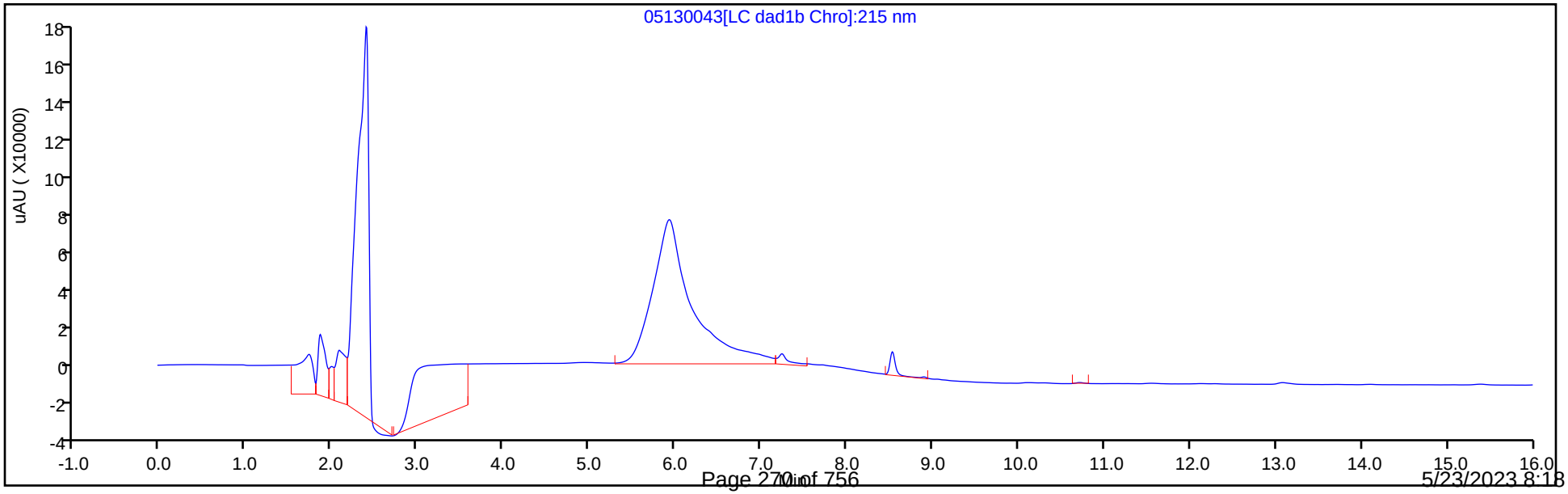
Data File: \\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130043.d

Injection Date:	14-May-2023 02:58:28	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-176134-B-1-A	Lab Sample ID:	280-176134-1	Worklist Smp#:	43
Client ID:	SCFmw-004-230401-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	43
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130043.D				
Lims ID:	280-176134-B-1-A				
Client ID:	SCFmw-004-230401-GW				
Sample Type:	Client				
Inject. Date:	14-May-2023 02:58:28	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-176134-B-1-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	16-May-2023 12:37:22	Calib Date:	24-Feb-2023 17:41:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1672				

First Level Reviewer: K8YG Date: 15-May-2023 12:04:05

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2170	108.52

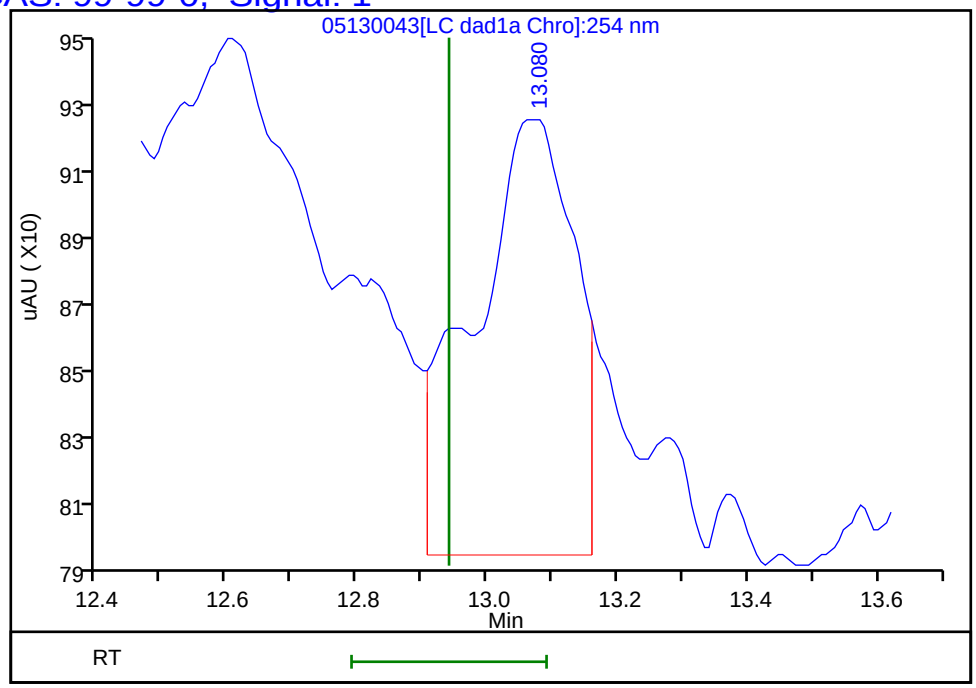
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130043.d				
Injection Date:	14-May-2023 02:58:28	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176134-B-1-A	Lab Sample ID:	280-176134-1		
Client ID:	SCFmw-004-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

RT: 13.08
Response: 1316
Amount: 0.011763



Reviewer: K8YG, 15-May-2023 12:04:05
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

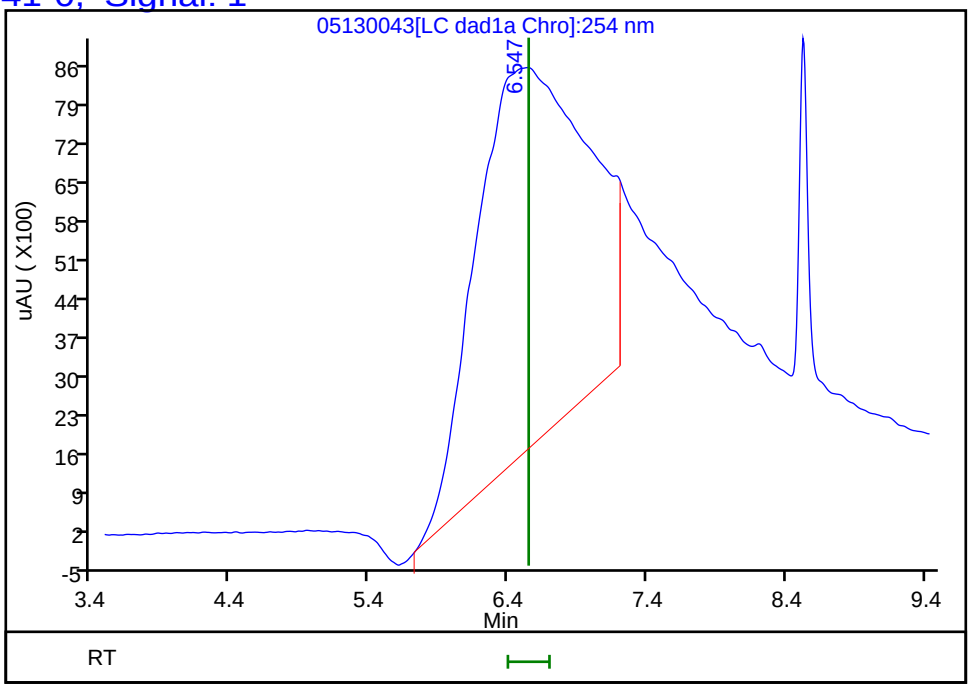
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130043.d
Injection Date: 14-May-2023 02:58:28 Instrument ID: CHHPLC_X3
Lims ID: 280-176134-B-1-A Lab Sample ID: 280-176134-1
Client ID: SCFmw-004-230401-GW
Operator ID: JZ/JG ALS Bottle#: 43 Worklist Smp#: 43
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

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

RT: 6.55
Response: 386586
Amount: 4.133365



Reviewer: K8YG, 15-May-2023 12:04:05
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-176134-1

SDG No.:

Client Sample ID: SCFmw-004-230402-GW | Lab Sample ID: 280-176134-2

Matrix: Water | Lab File ID: 05130044.D

Analysis Method: 8330B | Date Collected: 05/04/2023 09:31

Extraction Method: 3535 | Date Extracted: 05/10/2023 13:48

Sample wt/vol: 471.5(mL) | Date Analyzed: 05/14/2023 03:21

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

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

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

Cleanup Factor:

Analysis Batch No.: 612396 | 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	0.089
99-65-0	1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.039
118-96-7	2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.048
121-14-2	2,4-Dinitrotoluene	0.085	U	0.11	0.085	0.029
606-20-2	2,6-Dinitrotoluene	0.085	U	0.11	0.085	0.043
35572-78-2	2-Amino-4,6-dinitrotoluene	0.11	U	0.12	0.11	0.054
88-72-2	2-Nitrotoluene	0.21	U	0.22	0.21	0.091
99-08-1	3-Nitrotoluene	0.37	U	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	0.43	0.42	0.11
2691-41-0	HMX	0.21	U M	0.22	0.21	0.093
98-95-3	Nitrobenzene	0.21	U	0.22	0.21	0.097
55-63-0	Nitroglycerin	2.1	U	2.2	2.1	0.98
78-11-5	PETN	1.1	U	1.2	1.1	0.47
121-82-4	RDX	0.21	U	0.22	0.21	0.055
479-45-8	Tetryl	0.11	U	0.12	0.11	0.034

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	110		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130044.D
Lims ID: 280-176134-B-2-A
Client ID: SCFmw-004-230402-GW
Sample Type: Client
Inject. Date: 14-May-2023 03:21:22 ALS Bottle#: 44 Worklist Smp#: 44
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-176134-B-2-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-May-2023 12:37:22 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: K8YG Date: 15-May-2023 12:04:24

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.547			ND	U
8 RDX	1		7.574			ND	
$ 10 1,2-Dinitrobenzene	1	8.519	8.521	-0.002	27826	0.2203	
11 1,3,5-Trinitrobenzene	1		8.647			ND	
12 1,3-Dinitrobenzene	1		9.274			ND	
13 Nitrobenzene	1		9.647			ND	
15 Tetryl	1		10.014			ND	
16 Nitroglycerin	2		10.467			ND	
17 2,4,6-Trinitrotoluene	1		10.914			ND	
18 4-Amino-2,6-dinitrotoluene	1		11.114			ND	
19 2-Amino-4,6-dinitrotoluene	1		11.367			ND	
20 2,6-Dinitrotoluene	1		11.514			ND	
21 2,4-Dinitrotoluene	1		11.687			ND	
22 o-Nitrotoluene	1		12.514			ND	
23 p-Nitrotoluene	1		12.940			ND	
24 m-Nitrotoluene	1		13.514			ND	
25 PETN	2		14.694			ND	

QC Flag Legend

Processing Flags
Review Flags
U - Marked Undetected

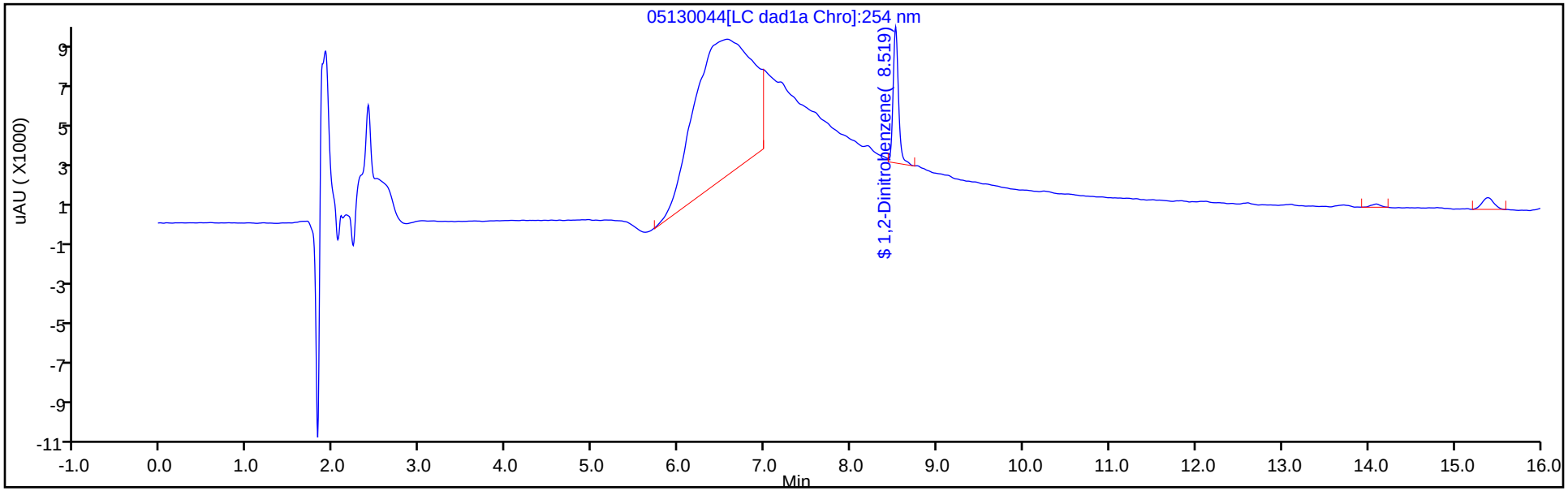
Report Date: 16-May-2023 12:37:30 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

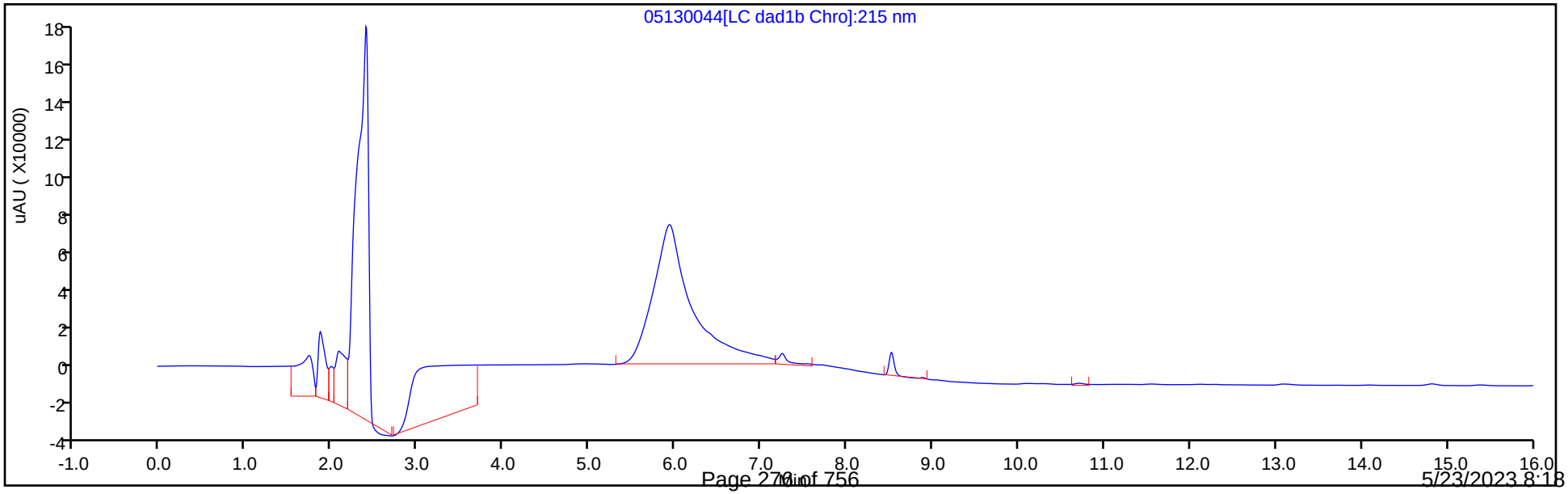
Data File: \\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130044.d

Injection Date:	14-May-2023 03:21:22	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-176134-B-2-A	Lab Sample ID:	280-176134-2	Worklist Smp#:	44
Client ID:	SCFmw-004-230402-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	44
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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\20230513-121427.b\05130044.D				
Lims ID:	280-176134-B-2-A				
Client ID:	SCFmw-004-230402-GW				
Sample Type:	Client				
Inject. Date:	14-May-2023 03:21:22	ALS Bottle#:	44	Worklist Smp#:	44
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-176134-B-2-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	16-May-2023 12:37:22	Calib Date:	24-Feb-2023 17:41:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1672				

First Level Reviewer: K8YG Date: 15-May-2023 12:04:24

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2203	110.15

User Disabled Compound Report

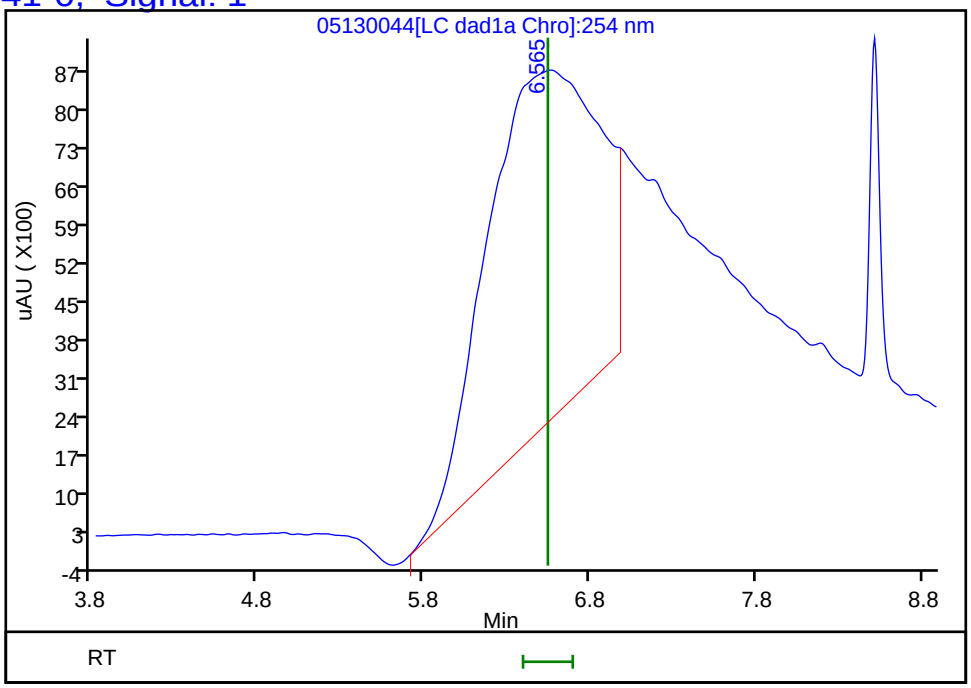
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130044.d

Injection Date:	14-May-2023 03:21:22	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176134-B-2-A	Lab Sample ID:	280-176134-2		
Client ID:	SCFmw-004-230402-GW				
Operator ID:	JZ/JG	ALS Bottle#:	44	Worklist Smp#:	44
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

RT: 6.57
Response: 306051
Amount: 3.272288



Reviewer: K8YG, 15-May-2023 12:04:24
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-176134-1

SDG No.:

Client Sample ID: LL1mw-086-230401-GW | Lab Sample ID: 280-176134-3

Matrix: Water | Lab File ID: 05130047.D

Analysis Method: 8330B | Date Collected: 05/04/2023 11:25

Extraction Method: 3535 | Date Extracted: 05/10/2023 13:48

Sample wt/vol: 471.9(mL) | Date Analyzed: 05/14/2023 04:30

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

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

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

Cleanup Factor:

Analysis Batch No.: 612396 | 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	0.089
99-65-0	1,3-Dinitrobenzene	0.11	U M	0.12	0.11	0.039
118-96-7	2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.048
6629-29-4	2,4-diamino-6-nitrotoluene	0.95	U	1.1	0.95	0.46
121-14-2	2,4-Dinitrotoluene	0.085	U	0.11	0.085	0.029
59229-75-3	2,6-diamino-4-nitrotoluene	0.95	U	1.1	0.95	0.23
606-20-2	2,6-Dinitrotoluene	0.085	U	0.11	0.085	0.042
35572-78-2	2-Amino-4,6-dinitrotoluene	0.11	U	0.12	0.11	0.054
88-72-2	2-Nitrotoluene	0.21	U	0.22	0.21	0.091
618-87-1	3,5-Dinitroaniline	0.32	U	0.42	0.32	0.14
99-08-1	3-Nitrotoluene	0.37	U	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	0.43	0.42	0.11
80251-29-2	DNX	0.26	U	0.53	0.26	0.10
2691-41-0	HMX	0.21	U M	0.22	0.21	0.093
98-95-3	Nitrobenzene	0.21	U	0.22	0.21	0.096
55-63-0	Nitroglycerin	2.1	U	2.2	2.1	0.98
78-11-5	PETN	1.1	U	1.2	1.1	0.47
121-82-4	RDX	0.21	U	0.22	0.21	0.055
479-45-8	Tetryl	0.11	U M	0.12	0.11	0.034
13980-04-6	TNX	0.26	U	0.53	0.26	0.084

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	114	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130047.D
Lims ID: 280-176134-A-3-A
Client ID: LL1mw-086-230401-GW
Sample Type: Client
Inject. Date: 14-May-2023 04:30:18 ALS Bottle#: 47 Worklist Smp#: 47
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-176134-A-3-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-May-2023 12:37:31 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: K8YG Date: 15-May-2023 12:07:51

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	2 2,6-diamino-4-nitrotoluene	1		6.426			ND	
	3 TNX	1		6.427			ND	
	4 HMX	1		6.547			ND	U
	5 2,4-diamino-6-nitrotoluene	1		6.620			ND	
	6 DNX	1		6.754			ND	
	7 MNX	1	7.184	7.187	-0.003	1556	0.0119	M
	8 RDX	1		7.574			ND	
$	10 1,2-Dinitrobenzene	1	8.531	8.521	0.010	28847	0.2284	M
	11 1,3,5-Trinitrobenzene	1		8.647			ND	
	12 1,3-Dinitrobenzene	1		9.274			ND	U
	13 Nitrobenzene	1		9.647			ND	
	14 3,5-Dinitroaniline	1		9.887			ND	
	15 Tetryl	1		10.014			ND	U
	16 Nitroglycerin	2		10.467			ND	
	17 2,4,6-Trinitrotoluene	1		10.914			ND	
	18 4-Amino-2,6-dinitrotoluene	1		11.114			ND	
	19 2-Amino-4,6-dinitrotoluene	1		11.367			ND	
	20 2,6-Dinitrotoluene	1		11.514			ND	
	21 2,4-Dinitrotoluene	1		11.687			ND	
	22 o-Nitrotoluene	1		12.514			ND	
	23 p-Nitrotoluene	1		12.940			ND	
	24 m-Nitrotoluene	1		13.514			ND	
	25 PETN	2		14.694			ND	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
U - Marked Undetected

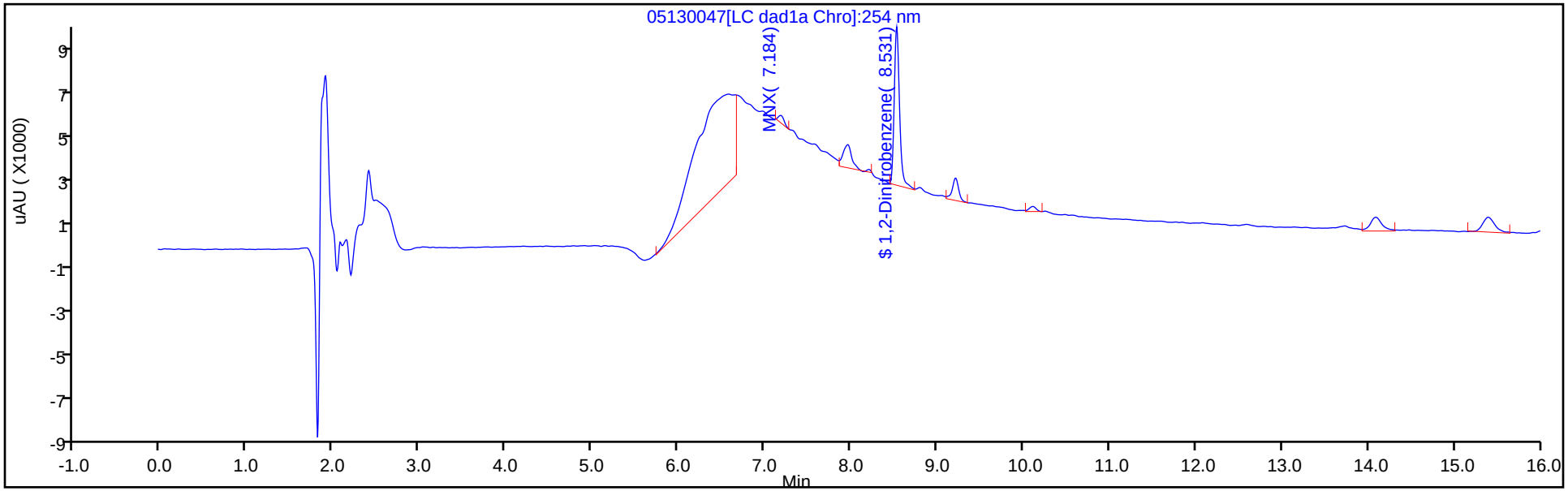
Report Date: 16-May-2023 12:37:32 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

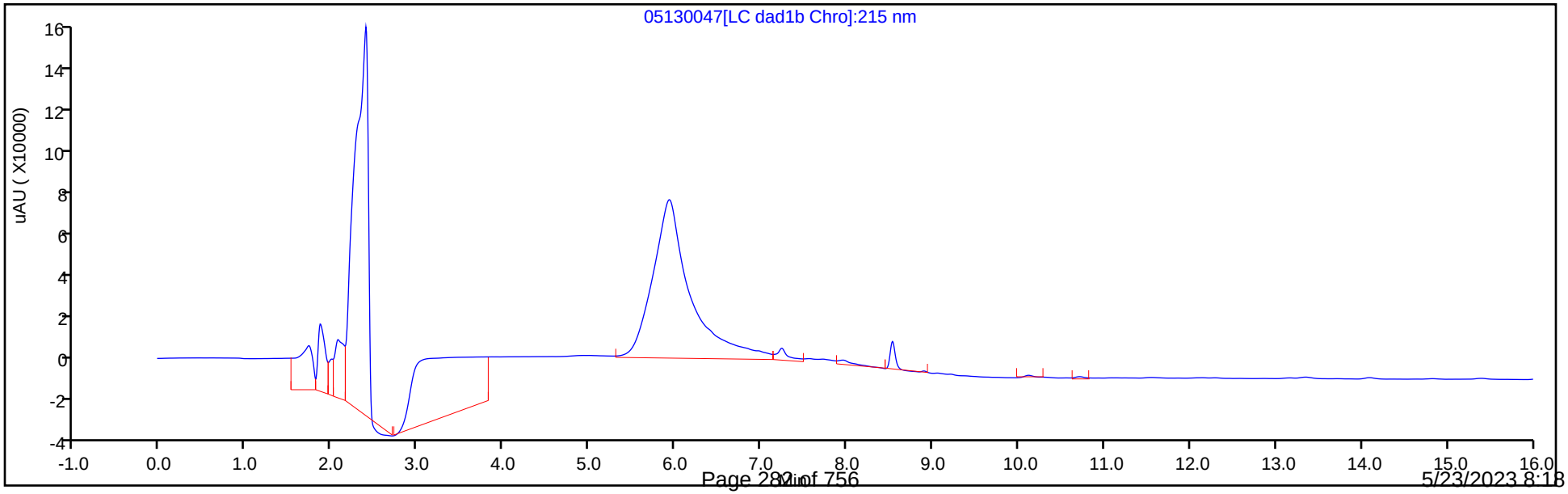
Data File: \\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130047.d

Injection Date:	14-May-2023 04:30:18	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-176134-A-3-A	Lab Sample ID:	280-176134-3	Worklist Smp#:	47
Client ID:	LL1mw-086-230401-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	47
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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\20230513-121427.b\05130047.D				
Lims ID:	280-176134-A-3-A				
Client ID:	LL1mw-086-230401-GW				
Sample Type:	Client				
Inject. Date:	14-May-2023 04:30:18	ALS Bottle#:	47	Worklist Smp#:	47
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-176134-A-3-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	16-May-2023 12:37:31	Calib Date:	24-Feb-2023 17:41:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1672				

First Level Reviewer: K8YG Date: 15-May-2023 12:07:51

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2284	114.19

Manual Integration/User Assign Peak Report

Eurofins Denver

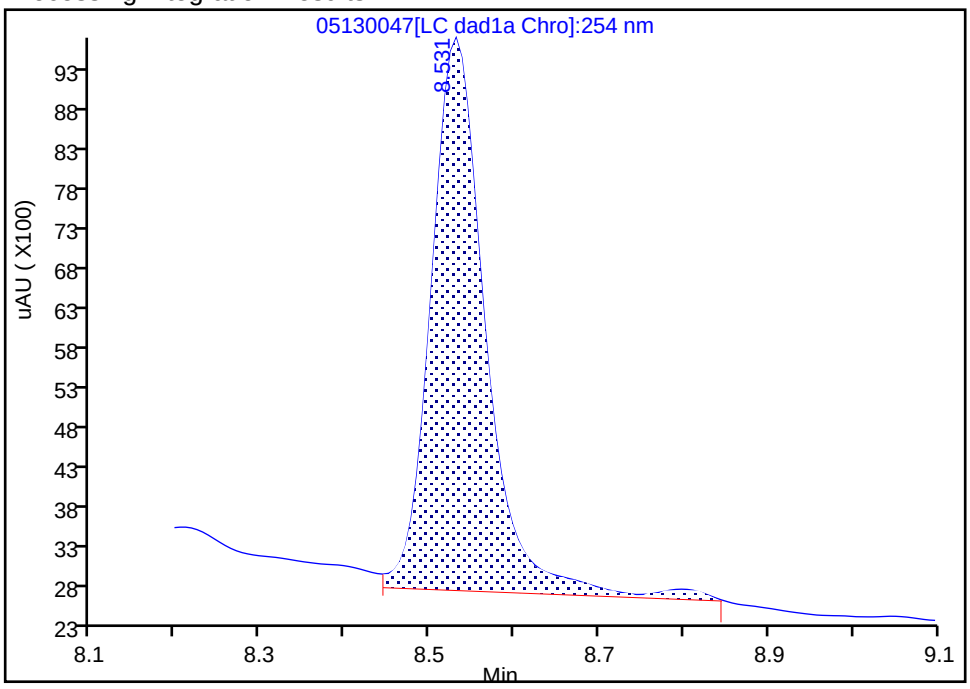
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130047.d				
Injection Date:	14-May-2023 04:30:18	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176134-A-3-A	Lab Sample ID:	280-176134-3		
Client ID:	LL1mw-086-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	47	Worklist Smp#:	47
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

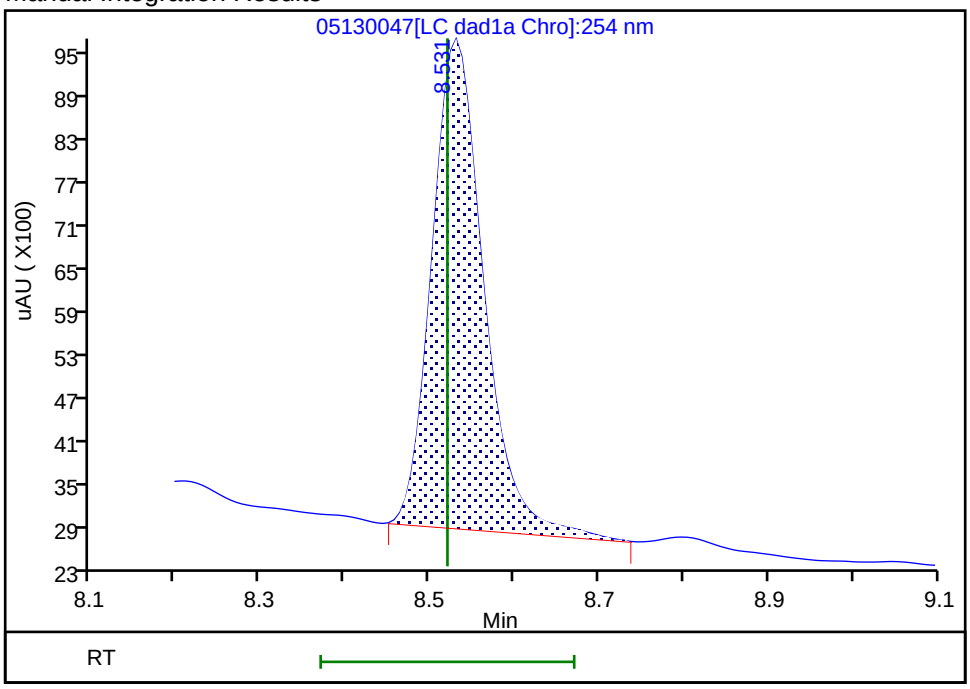
Processing Integration Results

RT: 8.53
Area: 31084
Amount: 0.246095
Amount Units: ug/mL



Manual Integration Results

RT: 8.53
Area: 28847
Amount: 0.228385
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 12:07:34

Audit Action: Manually Integrated Audit Reason: Baseline

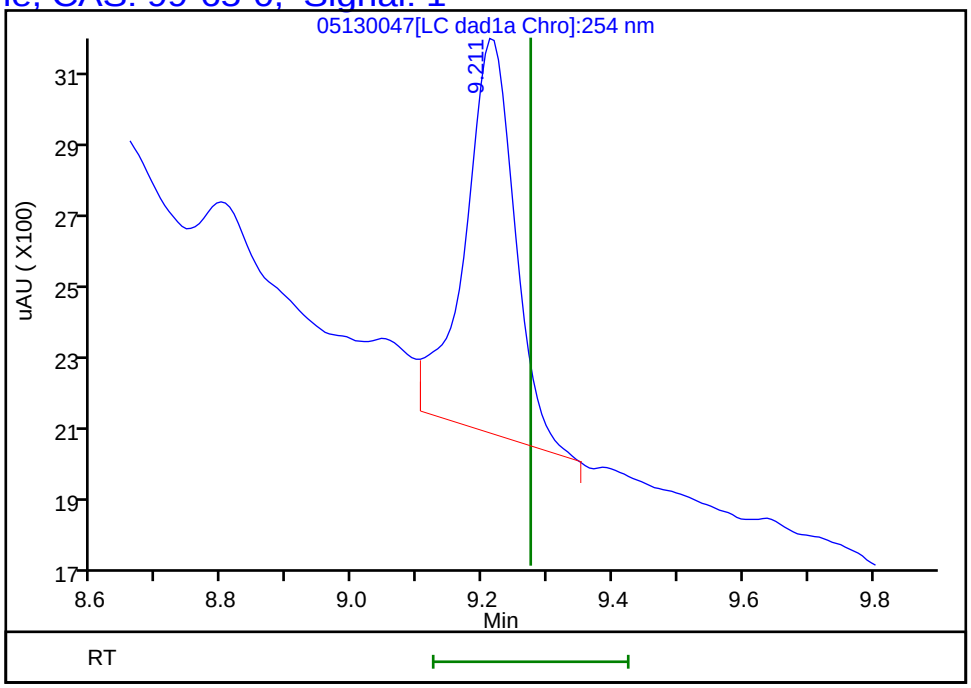
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130047.d				
Injection Date:	14-May-2023 04:30:18	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176134-A-3-A	Lab Sample ID:	280-176134-3		
Client ID:	LL1mw-086-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	47	Worklist Smp#:	47
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

RT: 9.21
Response: 5290
Amount: 0.017969



Reviewer: K8YG, 15-May-2023 12:07:51
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

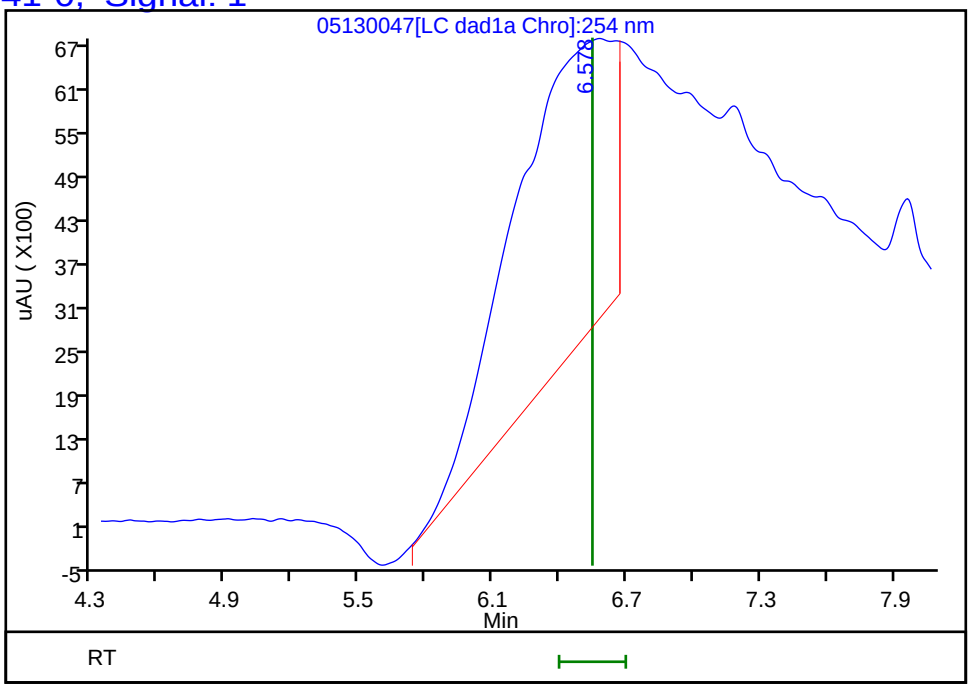
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130047.d

Injection Date:	14-May-2023 04:30:18	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176134-A-3-A	Lab Sample ID:	280-176134-3		
Client ID:	LL1mw-086-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	47	Worklist Smp#:	47
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

RT: 6.58
Response: 132843
Amount: 1.420353



Reviewer: K8YG, 15-May-2023 12:07:51

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

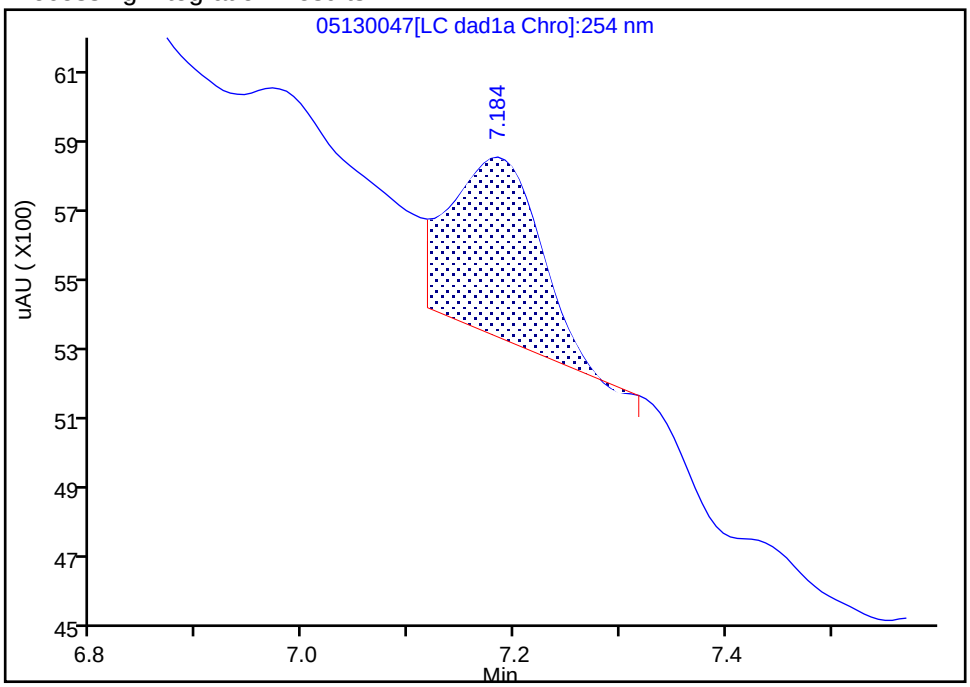
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Injection Date:	14-May-2023 04:30:18	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176134-A-3-A	Lab Sample ID:	280-176134-3		
Client ID:	LL1mw-086-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	47	Worklist Smp#:	47
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

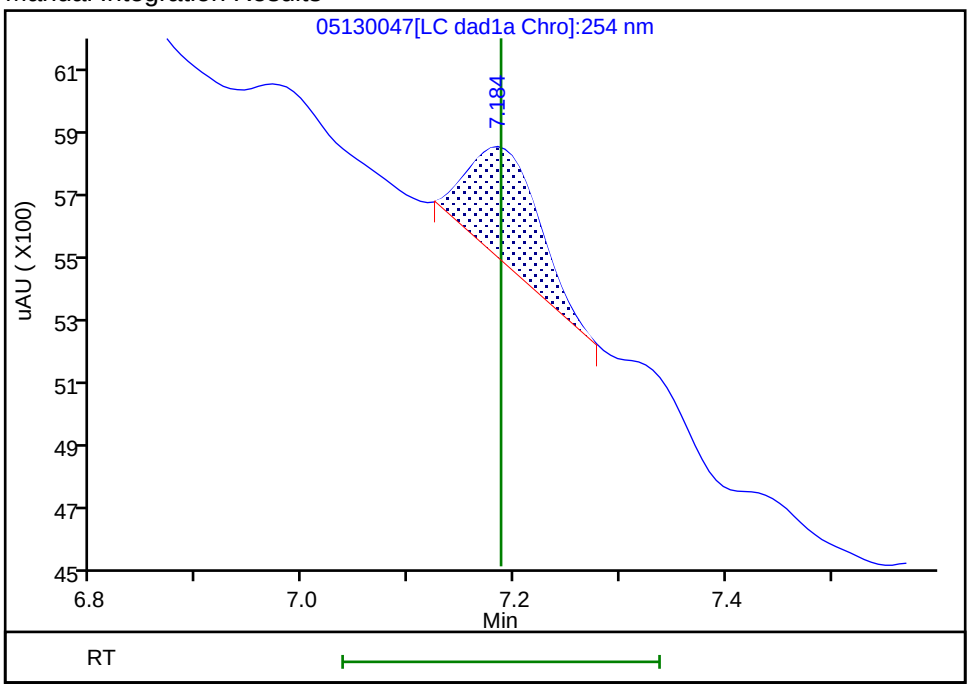
Processing Integration Results

RT: 7.18
Area: 2890
Amount: 0.022032
Amount Units: ug/mL



Manual Integration Results

RT: 7.18
Area: 1556
Amount: 0.011862
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 12:07:24

Audit Action: Manually Integrated Audit Reason: Baseline

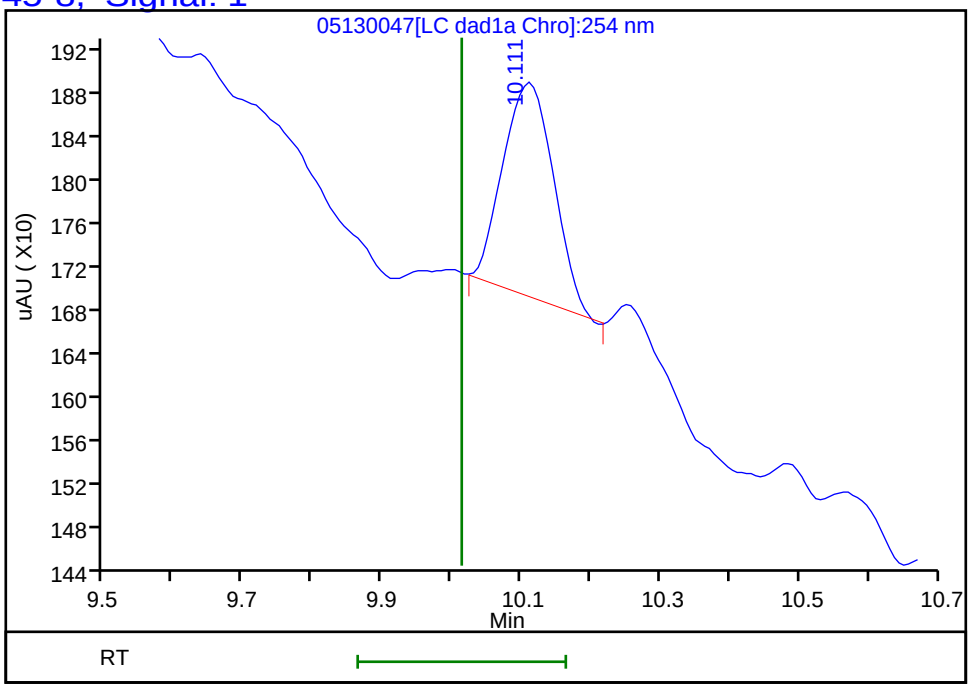
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130047.d				
Injection Date:	14-May-2023 04:30:18	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176134-A-3-A	Lab Sample ID:	280-176134-3		
Client ID:	LL1mw-086-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	47	Worklist Smp#:	47
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

RT: 10.11
Response: 1001
Amount: 0.006099



Reviewer: K8YG, 15-May-2023 12:07:51
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-176134-1

SDG No.:

Client Sample ID: LL1mw-086-230401-GW | Lab Sample ID: 280-176134-3

Matrix: Water | Lab File ID: 05160029.D

Analysis Method: 8330B | Date Collected: 05/04/2023 11:25

Extraction Method: 3535 | Date Extracted: 05/10/2023 13:48

Sample wt/vol: 471.9(mL) | Date Analyzed: 05/17/2023 11:13

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

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

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

Cleanup Factor:

Analysis Batch No.: 612692 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
5755-27-1	MNX	0.31	U	0.53	0.31	0.098

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

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\05160029.D
Lims ID: 280-176134-A-3-A
Client ID: LL1mw-086-230401-GW
Sample Type: Client
Inject. Date: 17-May-2023 11:13:39 ALS Bottle#: 29 Worklist Smp#: 29
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-176134-A-3-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 17-May-2023 16:34:14 Calib Date: 29-Apr-2023 04:18:01
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1653

First Level Reviewer: LV5D Date: 17-May-2023 11:54:24

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1		3.896			ND	
2 2,4-diamino-6-nitrotoluene	1		4.342			ND	
3 TNX	1		4.822			ND	
4 DNX	1		5.549			ND	
5 HMX	1		6.082			ND	
6 MNX	1		6.922			ND	
8 RDX	1		8.222			ND	U
9 Nitrobenzene	1		10.602			ND	
$ 10 1,2-Dinitrobenzene	1	11.448	11.435	0.013	54477	0.1941	
11 3,5-Dinitroaniline	1		13.275			ND	
12 1,3-Dinitrobenzene	1		13.609			ND	
13 Nitroglycerin	2		13.982			ND	
14 o-Nitrotoluene	1	14.508	14.522	-0.014	2462	0.0100	
16 p-Nitrotoluene	1		14.749			ND	
17 4-Amino-2,6-dinitrotoluene	1		15.249			ND	
18 m-Nitrotoluene	1		15.582			ND	
19 2-Amino-4,6-dinitrotoluene	1		16.075			ND	
20 1,3,5-Trinitrobenzene	1		16.375			ND	
21 2,6-Dinitrotoluene	1		17.342			ND	
22 2,4-Dinitrotoluene	1		17.809			ND	
23 Tetryl	1		20.816			ND	
24 2,4,6-Trinitrotoluene	1		21.662			ND	
25 PETN	2		22.669			ND	

QC Flag Legend

Processing Flags
Review Flags
U - Marked Undetected

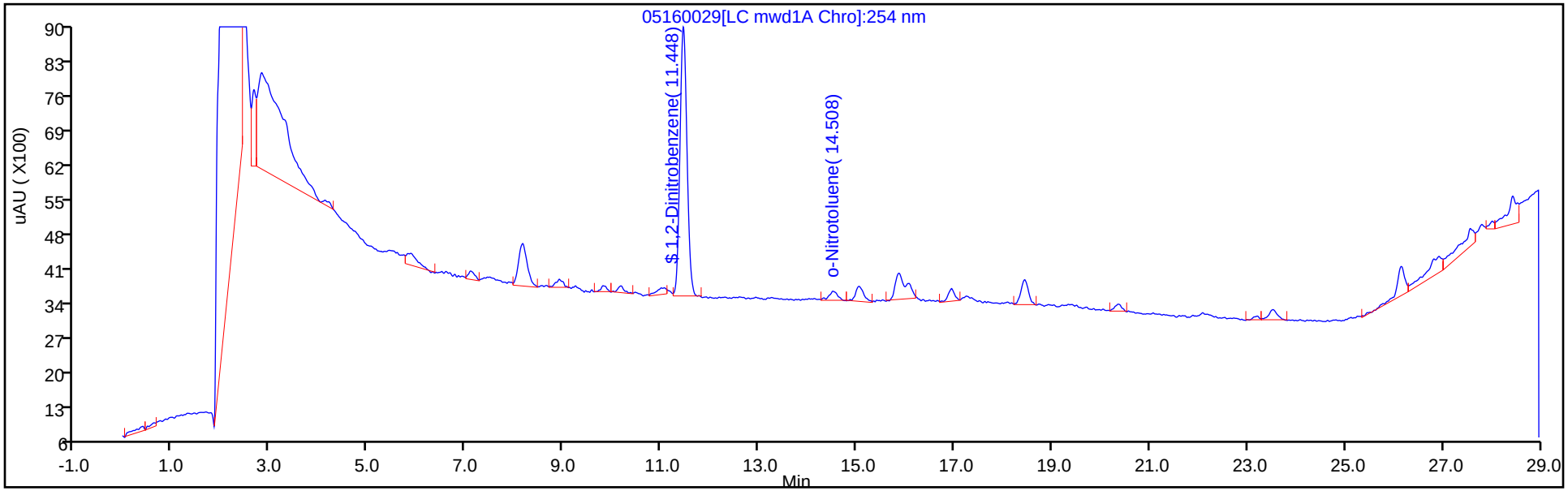
Report Date: 17-May-2023 16:34:22 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

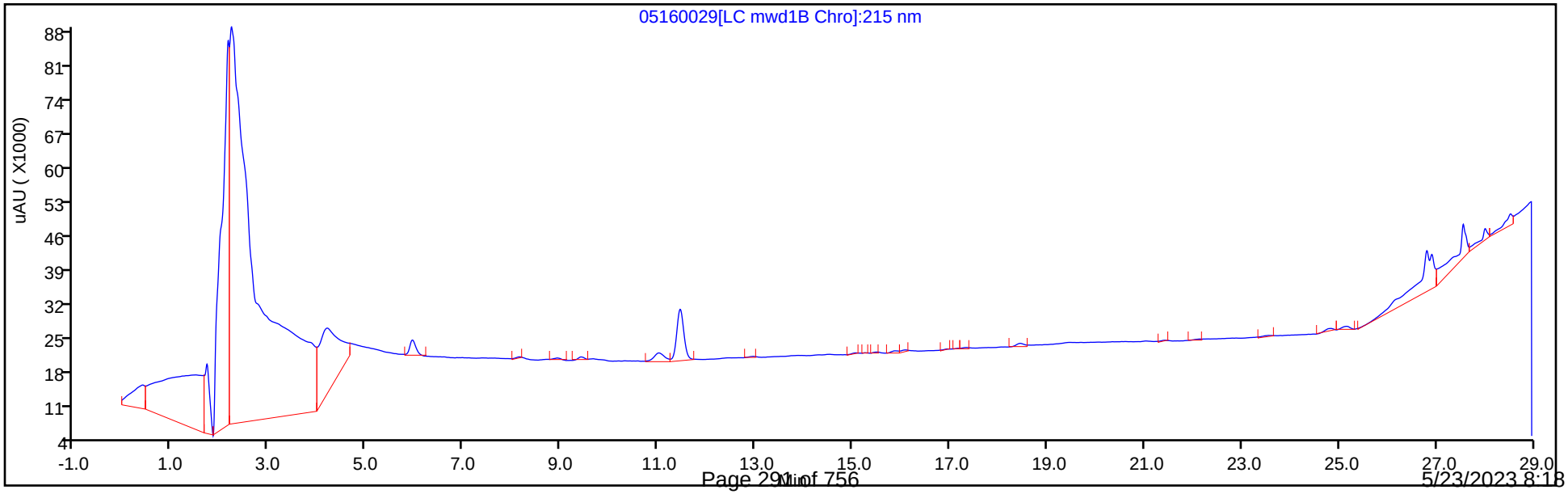
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\05160029.D

Injection Date:	17-May-2023 11:13:39	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	280-176134-A-3-A	Lab Sample ID:	280-176134-3	Worklist Smp#:	29
Client ID:	LL1mw-086-230401-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\05160029.D				
Lims ID:	280-176134-A-3-A				
Client ID:	LL1mw-086-230401-GW				
Sample Type:	Client				
Inject. Date:	17-May-2023 11:13:39	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-176134-A-3-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	17-May-2023 16:34:14	Calib Date:	29-Apr-2023 04:18:01		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1653				
First Level Reviewer: LV5D		Date:	17-May-2023 11:54:24		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1941	97.04

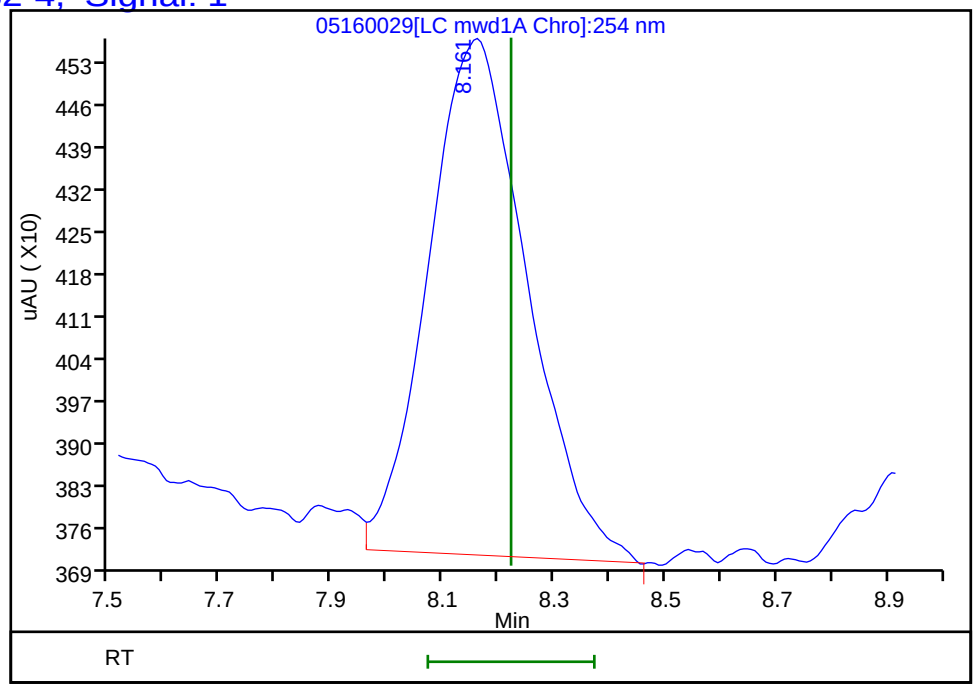
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\05160029.D				
Injection Date:	17-May-2023 11:13:39	Instrument ID:	CHHPLC_X5		
Lims ID:	280-176134-A-3-A	Lab Sample ID:	280-176134-3		
Client ID:	LL1mw-086-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

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

RT: 8.16
Response: 10592
Amount: 0.046000



Reviewer: LV5D, 17-May-2023 11:54:24
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-176134-1

SDG No.:

Client Sample ID: LL3mw-237-230401-GW | Lab Sample ID: 280-176134-4

Matrix: Water | Lab File ID: 05130048.D

Analysis Method: 8330B | Date Collected: 05/04/2023 14:07

Extraction Method: 3535 | Date Extracted: 05/10/2023 13:48

Sample wt/vol: 461(mL) | Date Analyzed: 05/14/2023 04:53

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

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

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

Cleanup Factor:

Analysis Batch No.: 612396 | 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
118-96-7	2,4,6-Trinitrotoluene	0.11	J	0.12	0.11	0.049
6629-29-4	2,4-diamino-6-nitrotoluene	0.98	U	1.1	0.98	0.47
121-14-2	2,4-Dinitrotoluene	0.087	U	0.11	0.087	0.030
59229-75-3	2,6-diamino-4-nitrotoluene	0.98	U	1.1	0.98	0.24
606-20-2	2,6-Dinitrotoluene	0.087	U	0.11	0.087	0.043
35572-78-2	2-Amino-4,6-dinitrotoluene	1.0		0.12	0.11	0.055
88-72-2	2-Nitrotoluene	0.22	U	0.23	0.22	0.093
618-87-1	3,5-Dinitroaniline	0.33	U	0.43	0.33	0.14
99-08-1	3-Nitrotoluene	0.38	U	0.43	0.38	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	2.2		0.16	0.13	0.063
99-99-0	4-Nitrotoluene	0.43	U	0.44	0.43	0.11
80251-29-2	DNX	0.27	U	0.54	0.27	0.11
2691-41-0	HMX	0.22	U M	0.23	0.22	0.095
5755-27-1	MNX	0.31	U M	0.54	0.31	0.10
98-95-3	Nitrobenzene	0.22	U M	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	0.48
121-82-4	RDX	0.22	U M	0.23	0.22	0.056
479-45-8	Tetryl	0.11	U M	0.12	0.11	0.034
13980-04-6	TNX	0.27	U M	0.54	0.27	0.086

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	105	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130048.D
Lims ID: 280-176134-A-4-A
Client ID: LL3mw-237-230401-GW
Sample Type: Client
Inject. Date: 14-May-2023 04:53:14 ALS Bottle#: 48 Worklist Smp#: 48
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-176134-A-4-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-May-2023 12:37:31 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: K8YG Date: 15-May-2023 12:08:33

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	2 2,6-diamino-4-nitrotoluene	1		6.426			ND	
	3 TNX	1		6.427			ND	U
	4 HMX	1		6.547			ND	U
	5 2,4-diamino-6-nitrotoluene	1		6.620			ND	
	6 DNX	1		6.754			ND	
	7 MNX	1		7.187			ND	U
	8 RDX	1		7.574			ND	U
$	10 1,2-Dinitrobenzene	1	8.515	8.521	-0.006	26437	0.2093	M
	11 1,3,5-Trinitrobenzene	1		8.647			ND	
	12 1,3-Dinitrobenzene	1	9.261	9.274	-0.013	7887	0.0268	
	13 Nitrobenzene	1		9.647			ND	U
	14 3,5-Dinitroaniline	1	9.881	9.887	-0.006	2328	0.0108	
	15 Tetryl	1		10.014			ND	U
	16 Nitroglycerin	2		10.467			ND	
	17 2,4,6-Trinitrotoluene	1	10.908	10.914	-0.006	2071	0.009813	
	18 4-Amino-2,6-dinitrotoluene	1	11.115	11.114	0.001	31167	0.2012	
	19 2-Amino-4,6-dinitrotoluene	1	11.368	11.367	0.001	19171	0.0952	
	20 2,6-Dinitrotoluene	1		11.514			ND	
	21 2,4-Dinitrotoluene	1		11.687			ND	7
	22 o-Nitrotoluene	1		12.514			ND	
	23 p-Nitrotoluene	1		12.940			ND	
	24 m-Nitrotoluene	1		13.514			ND	
	25 PETN	2		14.694			ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Review Flags
M - Manually Integrated
U - Marked Undetected

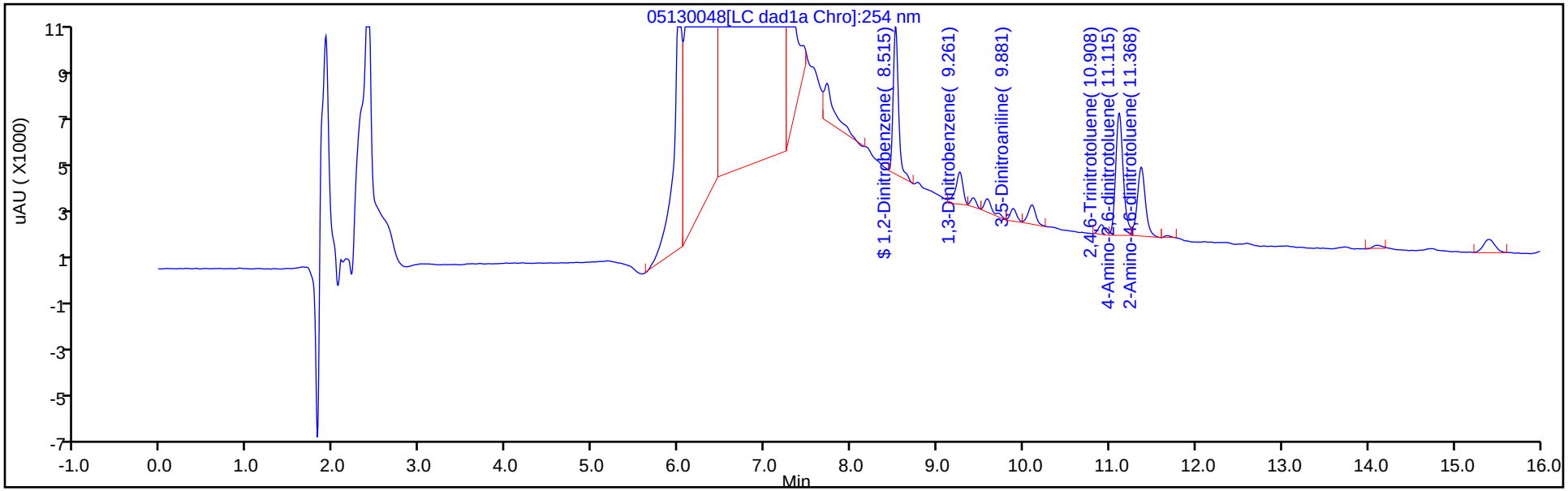
Report Date: 16-May-2023 12:37:32 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

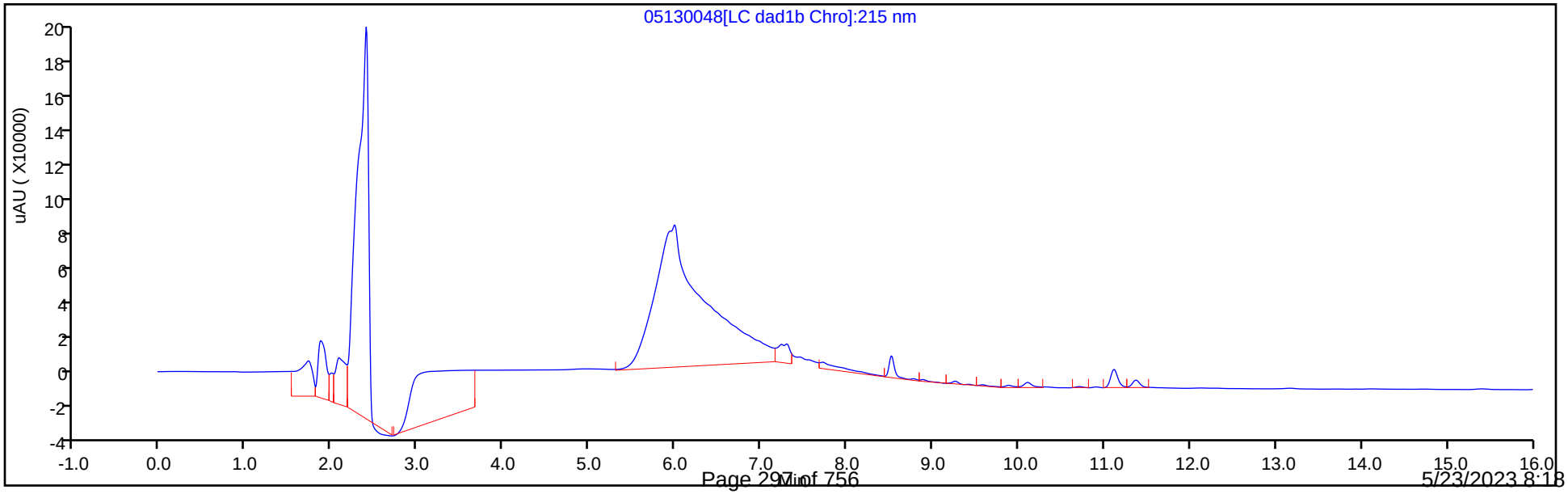
Data File: \\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130048.d

Injection Date:	14-May-2023 04:53:14	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-176134-A-4-A	Lab Sample ID:	280-176134-4	Worklist Smp#:	48
Client ID:	LL3mw-237-230401-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	48
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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\20230513-121427.b\05130048.D				
Lims ID:	280-176134-A-4-A				
Client ID:	LL3mw-237-230401-GW				
Sample Type:	Client				
Inject. Date:	14-May-2023 04:53:14	ALS Bottle#:	48	Worklist Smp#:	48
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-176134-A-4-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	16-May-2023 12:37:31	Calib Date:	24-Feb-2023 17:41:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1672				

First Level Reviewer: K8YG Date: 15-May-2023 12:08:33

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2093	104.65

Manual Integration/User Assign Peak Report

Eurofins Denver

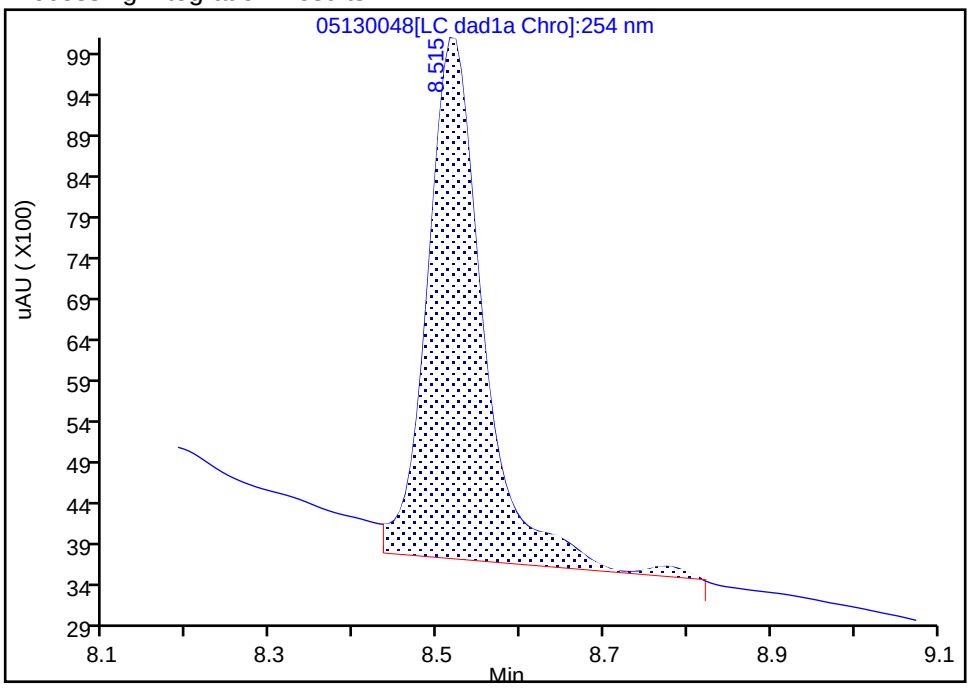
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Injection Date:	14-May-2023 04:53:14	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176134-A-4-A	Lab Sample ID:	280-176134-4		
Client ID:	LL3mw-237-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	48	Worklist Smp#:	48
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

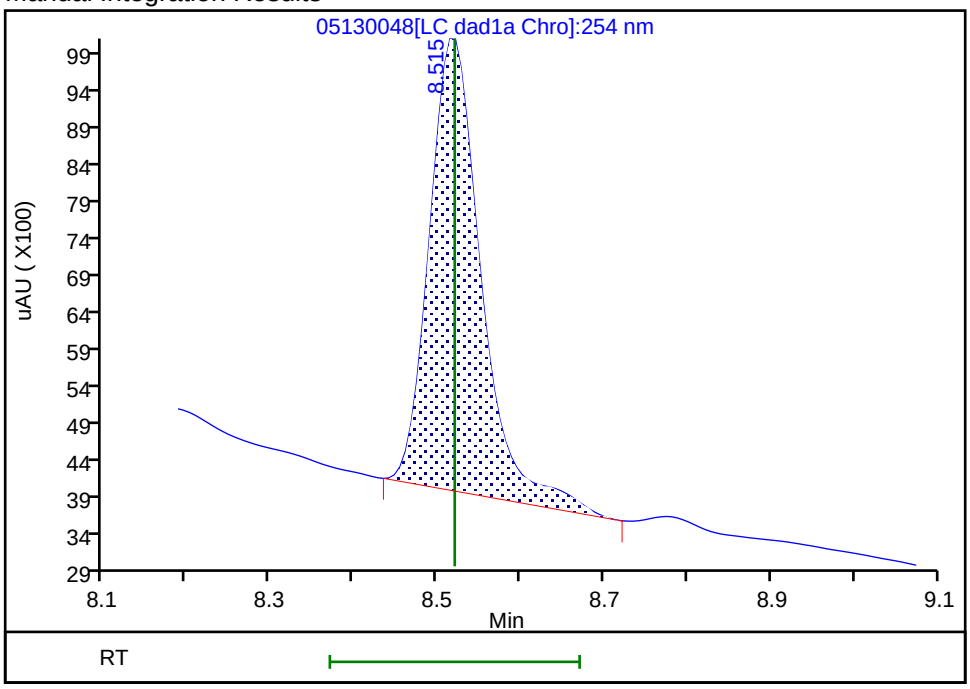
Processing Integration Results

RT: 8.51
Area: 30145
Amount: 0.238661
Amount Units: ug/mL



Manual Integration Results

RT: 8.51
Area: 26437
Amount: 0.209305
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 12:08:15

Audit Action: Manually Integrated Audit Reason: Baseline

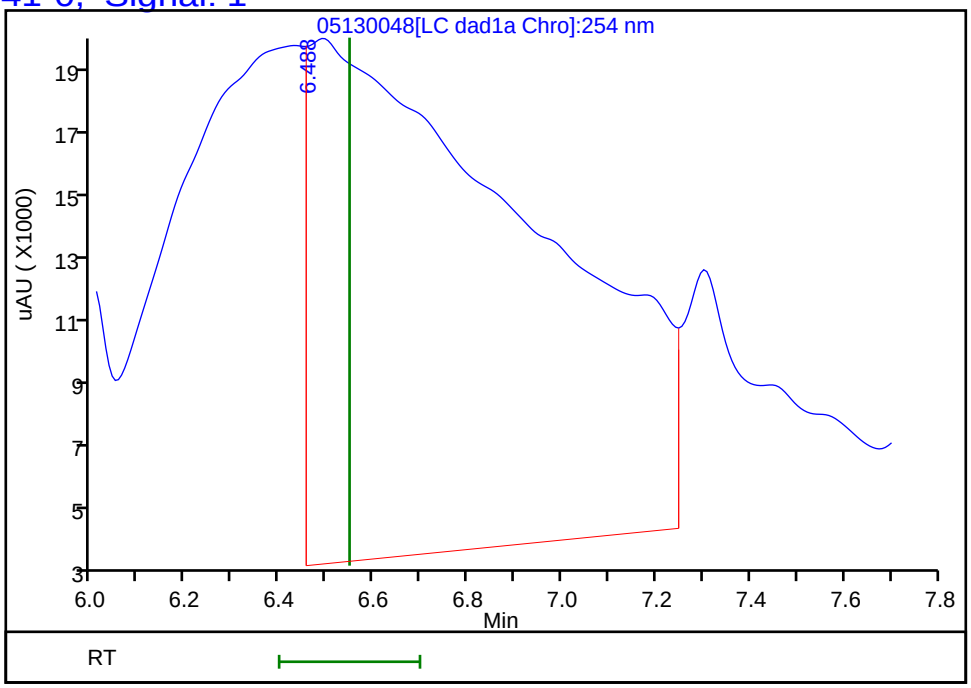
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130048.d				
Injection Date:	14-May-2023 04:53:14	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176134-A-4-A	Lab Sample ID:	280-176134-4		
Client ID:	LL3mw-237-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	48	Worklist Smp#:	48
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

RT: 6.49
Response: 520961
Amount: 5.570098



Reviewer: K8YG, 15-May-2023 12:08:33
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

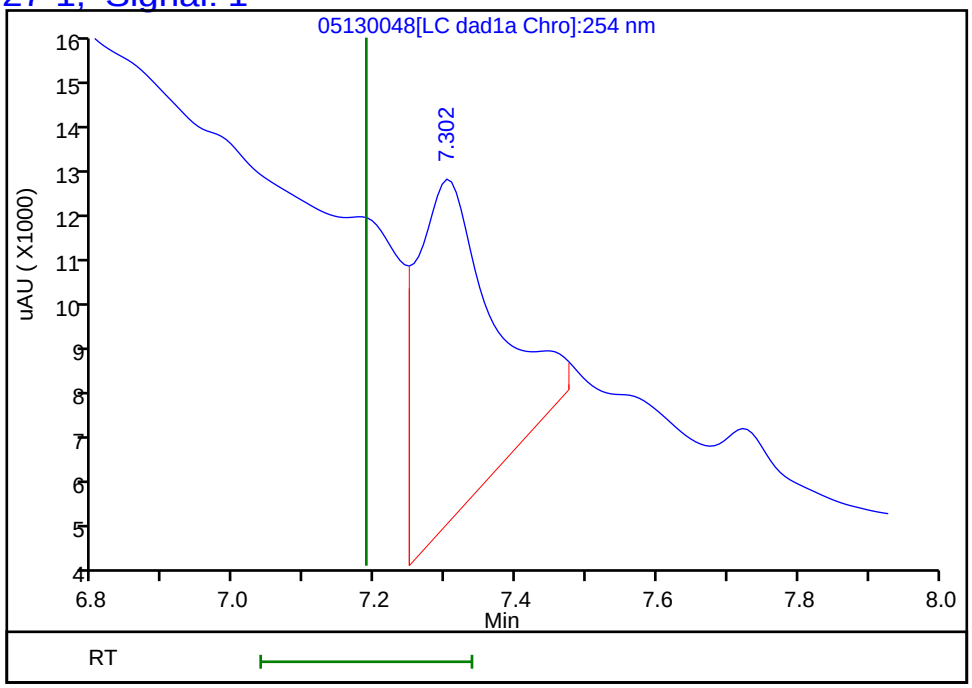
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130048.d				
Injection Date:	14-May-2023 04:53:14	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176134-A-4-A	Lab Sample ID:	280-176134-4		
Client ID:	LL3mw-237-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	48	Worklist Smp#:	48
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

RT: 7.30
Response: 51565
Amount: 0.393111



Reviewer: K8YG, 15-May-2023 12:08:33
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

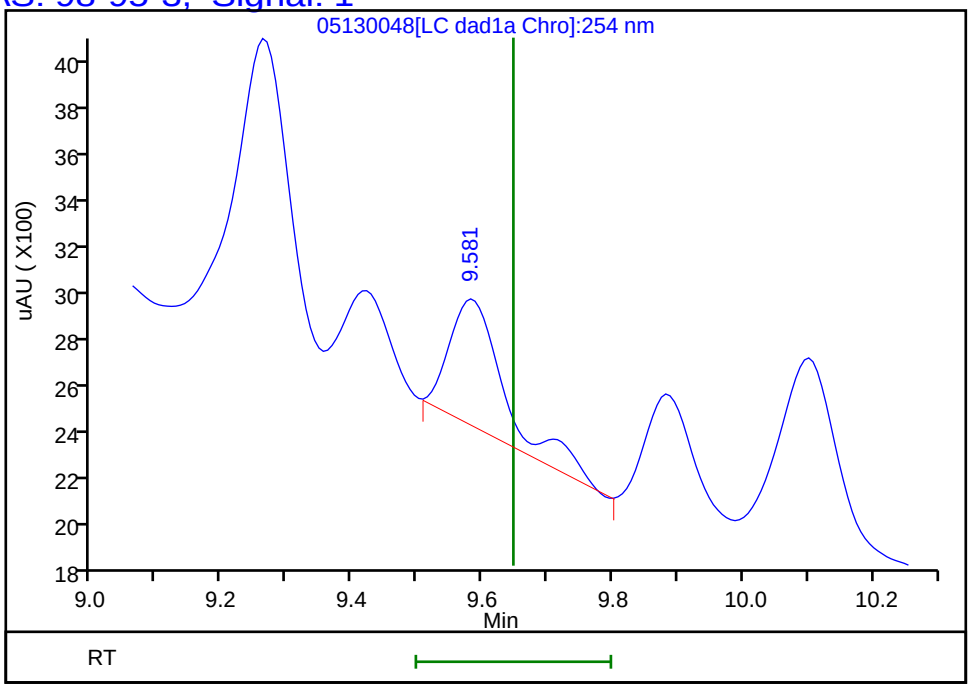
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130048.d				
Injection Date:	14-May-2023 04:53:14	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176134-A-4-A	Lab Sample ID:	280-176134-4		
Client ID:	LL3mw-237-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	48	Worklist Smp#:	48
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

RT: 9.58
Response: 3294
Amount: 0.017224



Reviewer: K8YG, 15-May-2023 12:08:33
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

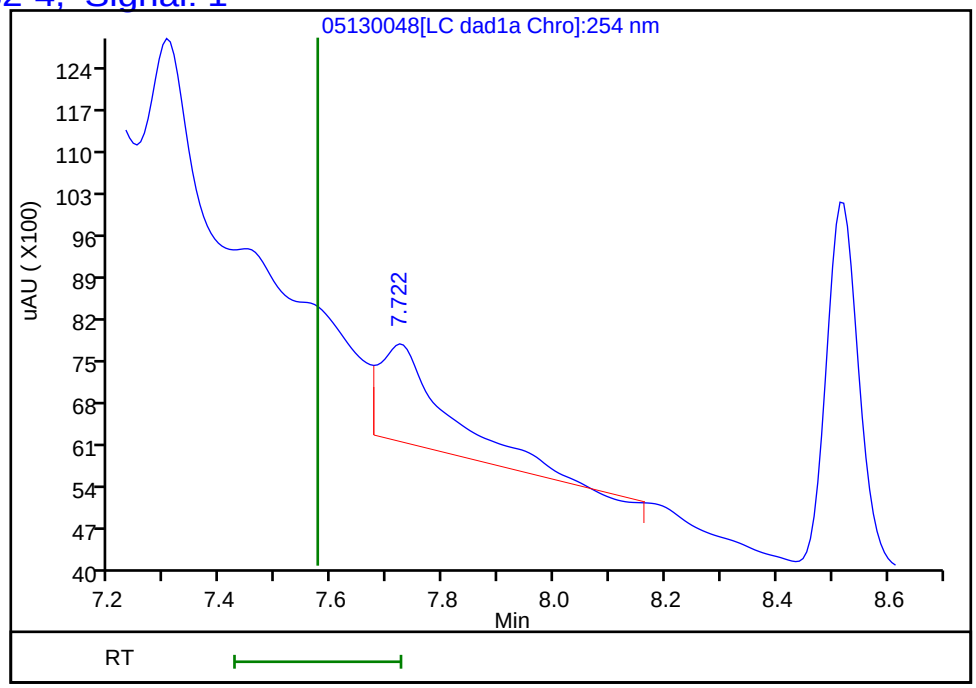
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130048.d				
Injection Date:	14-May-2023 04:53:14	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176134-A-4-A	Lab Sample ID:	280-176134-4		
Client ID:	LL3mw-237-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	48	Worklist Smp#:	48
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

RT: 7.72
Response: 14983
Amount: 0.140844



Reviewer: K8YG, 15-May-2023 12:08:33
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

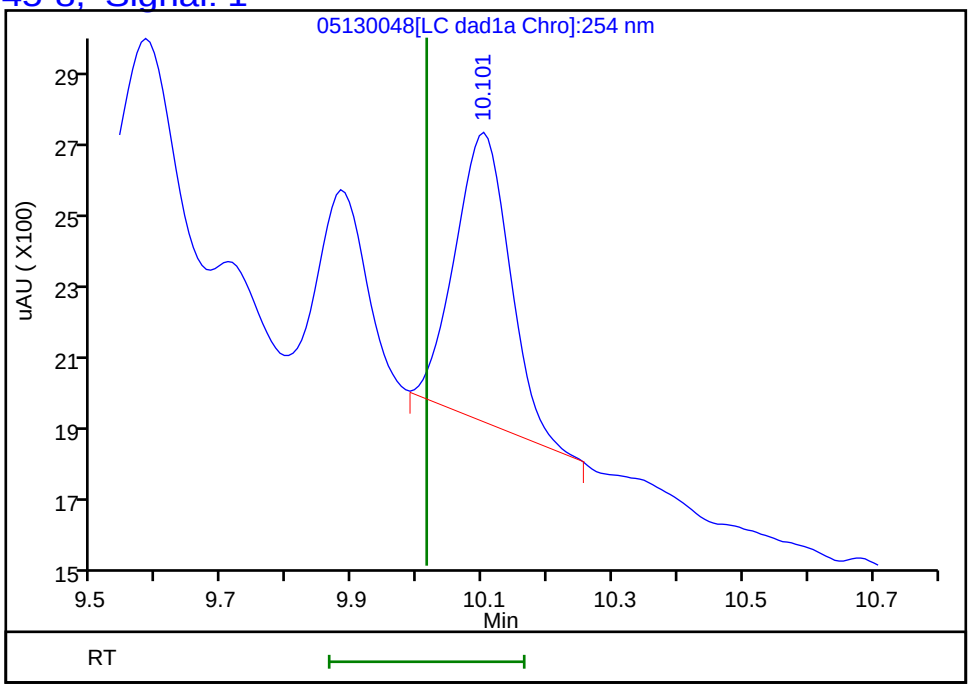
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130048.d				
Injection Date:	14-May-2023 04:53:14	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176134-A-4-A	Lab Sample ID:	280-176134-4		
Client ID:	LL3mw-237-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	48	Worklist Smp#:	48
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

RT: 10.10
Response: 4547
Amount: 0.027705



Reviewer: K8YG, 15-May-2023 12:08:33
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

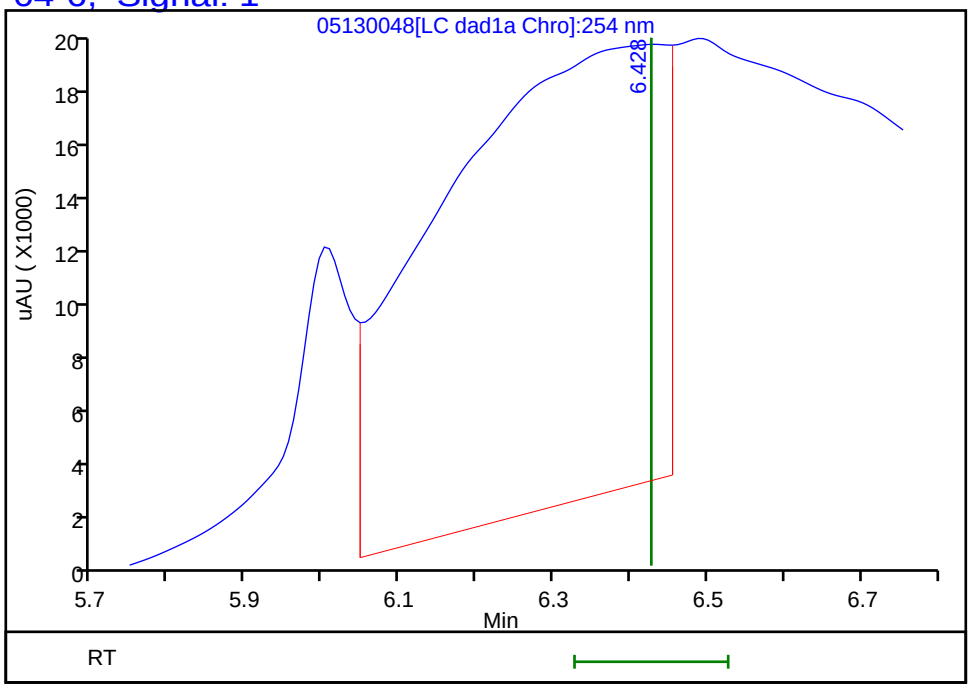
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130048.d				
Injection Date:	14-May-2023 04:53:14	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176134-A-4-A	Lab Sample ID:	280-176134-4		
Client ID:	LL3mw-237-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	48	Worklist Smp#:	48
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6, Signal: 1

RT: 6.43
Response: 336011
Amount: 1.699709



Reviewer: K8YG, 15-May-2023 12:08:33
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-176134-1

SDG No.:

Client Sample ID: LL3mw-237-230401-GW | Lab Sample ID: 280-176134-4

Matrix: Water | Lab File ID: 05160031.D

Analysis Method: 8330B | Date Collected: 05/04/2023 14:07

Extraction Method: 3535 | Date Extracted: 05/10/2023 13:48

Sample wt/vol: 461(mL) | Date Analyzed: 05/17/2023 12:23

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.: 612692 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-65-0	1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.040

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

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\05160031.D
Lims ID: 280-176134-A-4-A
Client ID: LL3mw-237-230401-GW
Sample Type: Client
Inject. Date: 17-May-2023 12:23:39 ALS Bottle#: 31 Worklist Smp#: 31
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-176134-A-4-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 17-May-2023 16:34:23 Calib Date: 29-Apr-2023 04:18:01
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1653

First Level Reviewer: LV5D Date: 17-May-2023 13:06:12

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	1 2,6-diamino-4-nitrotoluene	1		3.896			ND	
	2 2,4-diamino-6-nitrotoluene	1		4.342			ND	
	3 TNX	1		4.822			ND	
	4 DNX	1		5.549			ND	
	5 HMX	1		6.082			ND	
	6 MNX	1		6.922			ND	
	8 RDX	1		8.222			ND	U
	9 Nitrobenzene	1		10.602			ND	
$	10 1,2-Dinitrobenzene	1	11.556	11.435	0.121	52963	0.1887	
	11 3,5-Dinitroaniline	1	13.389	13.275	0.114	5960	0.0120	
	12 1,3-Dinitrobenzene	1		13.609			ND	
	13 Nitroglycerin	2		13.982			ND	
	14 o-Nitrotoluene	1		14.522			ND	
	16 p-Nitrotoluene	1		14.749			ND	7
	17 4-Amino-2,6-dinitrotoluene	1	15.376	15.249	0.127	70889	0.2409	
	18 m-Nitrotoluene	1		15.582			ND	
	19 2-Amino-4,6-dinitrotoluene	1	16.196	16.075	0.121	41380	0.0967	
	20 1,3,5-Trinitrobenzene	1		16.375			ND	
	21 2,6-Dinitrotoluene	1		17.342			ND	
	22 2,4-Dinitrotoluene	1		17.809			ND	U
	23 Tetryl	1		20.816			ND	
	24 2,4,6-Trinitrotoluene	1	21.796	21.662	0.134	4284	0.009761	
	25 PETN	2		22.669			ND	

QC Flag Legend

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

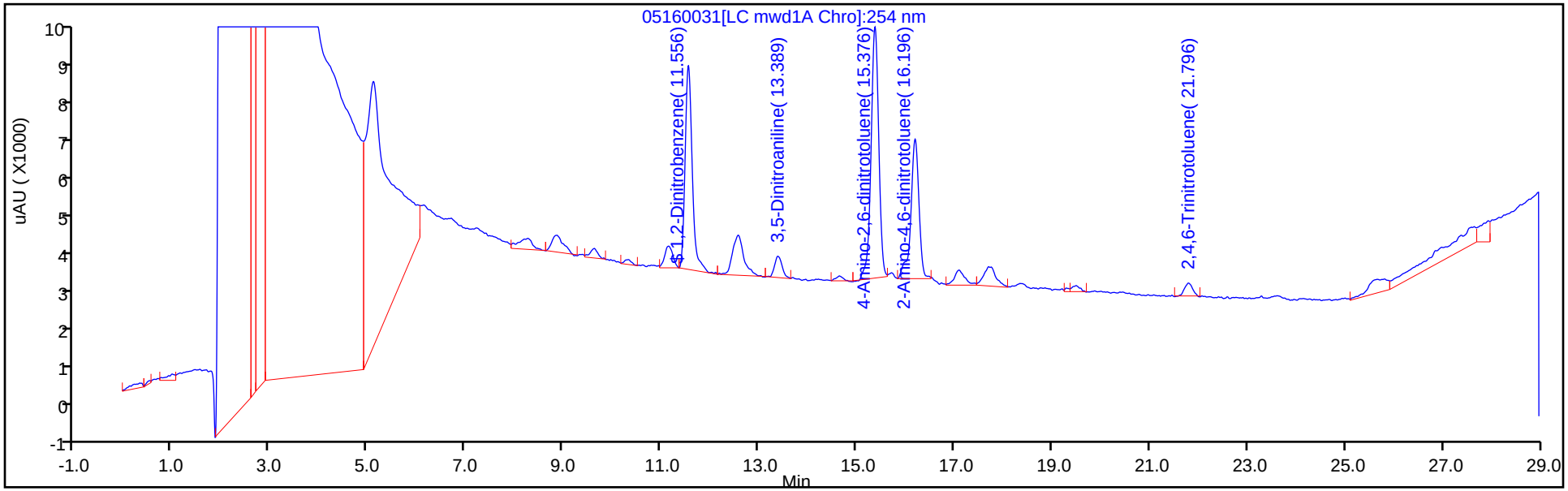
Report Date: 17-May-2023 16:34:23 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

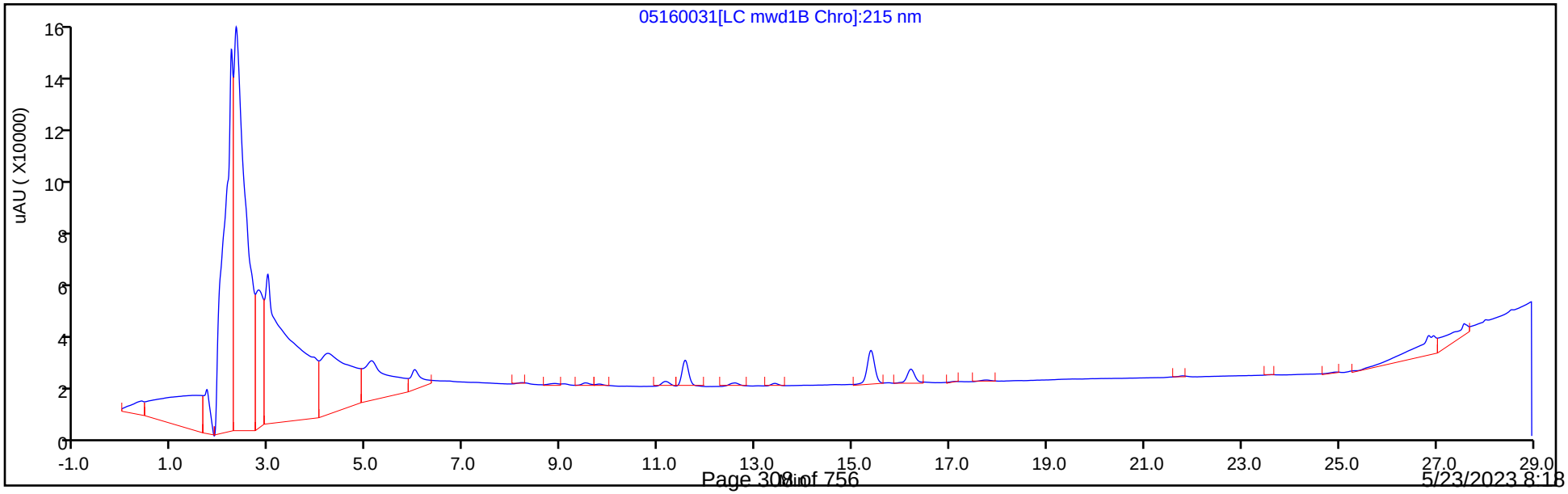
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Injection Date:	17-May-2023 12:23:39	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	280-176134-A-4-A	Lab Sample ID:	280-176134-4	Worklist Smp#:	31
Client ID:	LL3mw-237-230401-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\05160031.D				
Lims ID:	280-176134-A-4-A				
Client ID:	LL3mw-237-230401-GW				
Sample Type:	Client				
Inject. Date:	17-May-2023 12:23:39	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-176134-A-4-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	17-May-2023 16:34:23	Calib Date:	29-Apr-2023 04:18:01		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1653				
First Level Reviewer: LV5D		Date:	17-May-2023 13:06:12		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1887	94.34

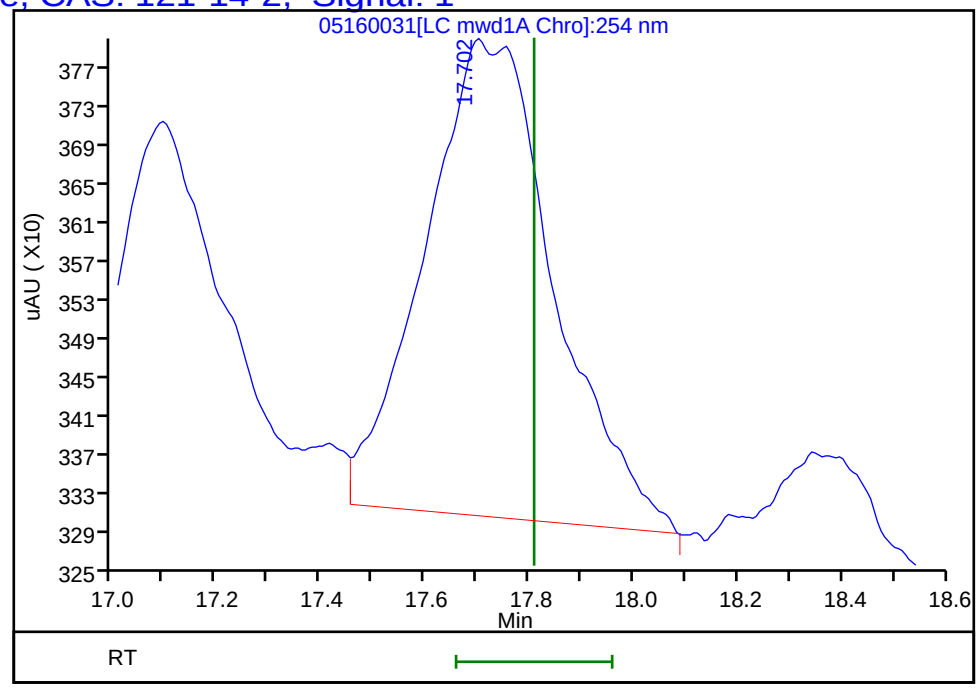
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\05160031.D				
Injection Date:	17-May-2023 12:23:39	Instrument ID:	CHHPLC_X5		
Lims ID:	280-176134-A-4-A	Lab Sample ID:	280-176134-4		
Client ID:	LL3mw-237-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

22 2,4-Dinitrotoluene, CAS: 121-14-2, Signal: 1

RT: 17.70
Response: 8548
Amount: 0.014625



Reviewer: LV5D, 17-May-2023 13:06:12
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

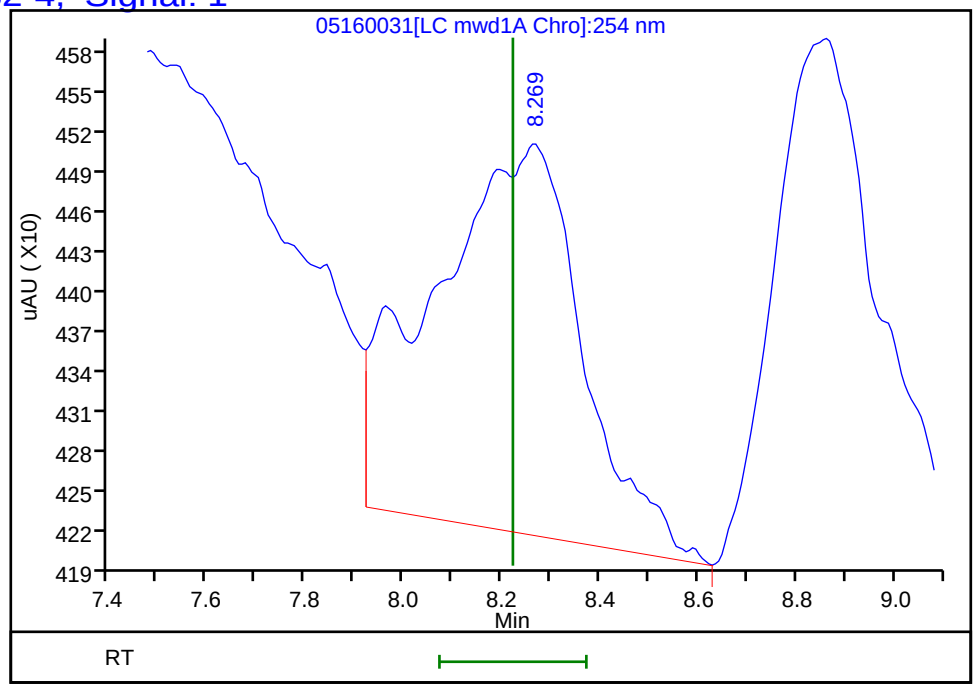
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\05160031.D				
Injection Date:	17-May-2023 12:23:39	Instrument ID:	CHHPLC_X5		
Lims ID:	280-176134-A-4-A	Lab Sample ID:	280-176134-4		
Client ID:	LL3mw-237-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

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

RT: 8.27
Response: 6200
Amount: 0.025633



Reviewer: LV5D, 17-May-2023 13:06:12
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-176134-1

SDG No.:

Client Sample ID: LL1mw-089-230401-GW | Lab Sample ID: 280-176134-5

Matrix: Water | Lab File ID: 05130049.D

Analysis Method: 8330B | Date Collected: 05/04/2023 13:45

Extraction Method: 3535 | Date Extracted: 05/10/2023 13:48

Sample wt/vol: 464.6(mL) | Date Analyzed: 05/14/2023 05:16

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

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

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

Cleanup Factor:

Analysis Batch No.: 612396 | 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
118-96-7	2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.048
6629-29-4	2,4-diamino-6-nitrotoluene	0.97	U	1.1	0.97	0.47
121-14-2	2,4-Dinitrotoluene	0.086	U	0.11	0.086	0.029
59229-75-3	2,6-diamino-4-nitrotoluene	0.97	U	1.1	0.97	0.24
606-20-2	2,6-Dinitrotoluene	0.086	U	0.11	0.086	0.043
35572-78-2	2-Amino-4,6-dinitrotoluene	0.11	U	0.12	0.11	0.055
88-72-2	2-Nitrotoluene	0.22	U	0.23	0.22	0.092
618-87-1	3,5-Dinitroaniline	0.32	U	0.43	0.32	0.14
99-08-1	3-Nitrotoluene	0.38	U	0.43	0.38	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.062
99-99-0	4-Nitrotoluene	0.43	U	0.44	0.43	0.11
80251-29-2	DNX	0.27	U	0.54	0.27	0.10
2691-41-0	HMX	0.22	U	0.23	0.22	0.094
5755-27-1	MNX	0.31	U	0.54	0.31	0.10
98-95-3	Nitrobenzene	0.22	U	0.23	0.22	0.098
55-63-0	Nitroglycerin	2.2	U	2.3	2.2	0.99
78-11-5	PETN	1.1	U	1.2	1.1	0.48
121-82-4	RDX	0.22	U	0.23	0.22	0.055
479-45-8	Tetryl	0.11	U	0.12	0.11	0.034
13980-04-6	TNX	0.27	U M	0.54	0.27	0.085

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

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130049.D
Lims ID: 280-176134-A-5-A
Client ID: LL1mw-089-230401-GW
Sample Type: Client
Inject. Date: 14-May-2023 05:16:14 ALS Bottle#: 49 Worklist Smp#: 49
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-176134-A-5-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-May-2023 12:37:31 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: K8YG Date: 15-May-2023 12:08:56

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	2 2,6-diamino-4-nitrotoluene	1		6.426			ND	
	3 TNX	1		6.427			ND	U
	4 HMX	1		6.547			ND	
	5 2,4-diamino-6-nitrotoluene	1		6.620			ND	
	6 DNX	1		6.754			ND	
	7 MNX	1		7.187			ND	
	8 RDX	1		7.574			ND	
$	10 1,2-Dinitrobenzene	1	8.528	8.521	0.007	26784	0.2121	
	11 1,3,5-Trinitrobenzene	1		8.647			ND	
	12 1,3-Dinitrobenzene	1		9.274			ND	
	13 Nitrobenzene	1		9.647			ND	
	14 3,5-Dinitroaniline	1		9.887			ND	
	15 Tetryl	1		10.014			ND	
	16 Nitroglycerin	2		10.467			ND	
	17 2,4,6-Trinitrotoluene	1		10.914			ND	
	18 4-Amino-2,6-dinitrotoluene	1		11.114			ND	
	19 2-Amino-4,6-dinitrotoluene	1		11.367			ND	
	20 2,6-Dinitrotoluene	1		11.514			ND	
	21 2,4-Dinitrotoluene	1		11.687			ND	
	22 o-Nitrotoluene	1		12.514			ND	
	23 p-Nitrotoluene	1		12.940			ND	
	24 m-Nitrotoluene	1		13.514			ND	
	25 PETN	2		14.694			ND	

QC Flag Legend

Processing Flags
Review Flags
U - Marked Undetected

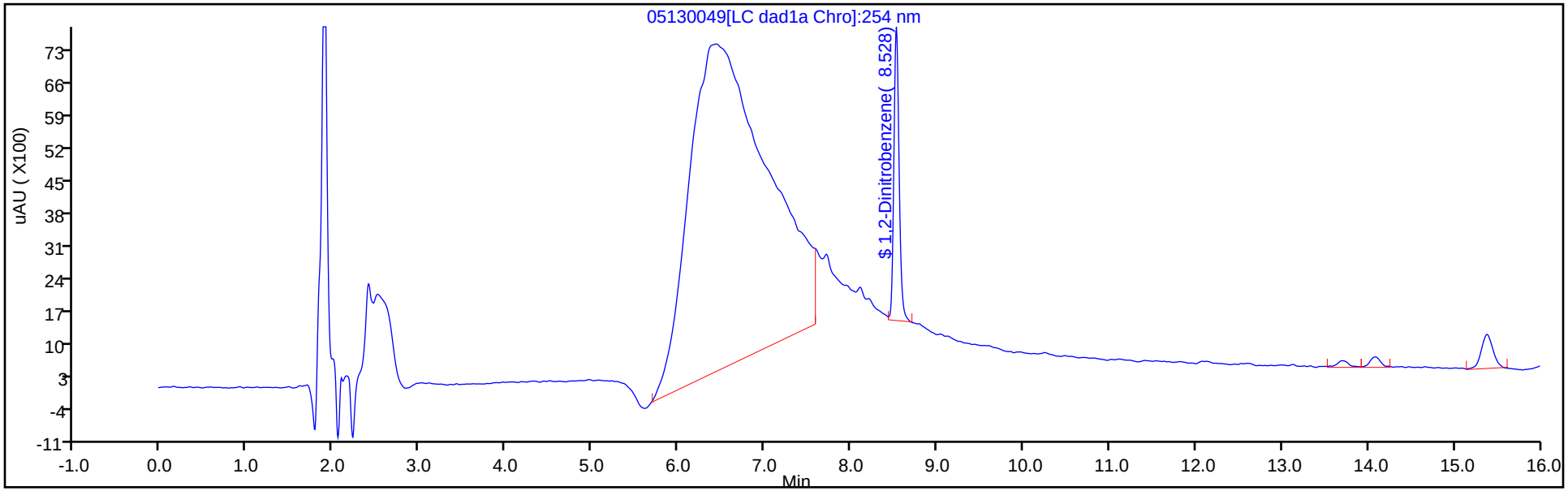
Report Date: 16-May-2023 12:37:33 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

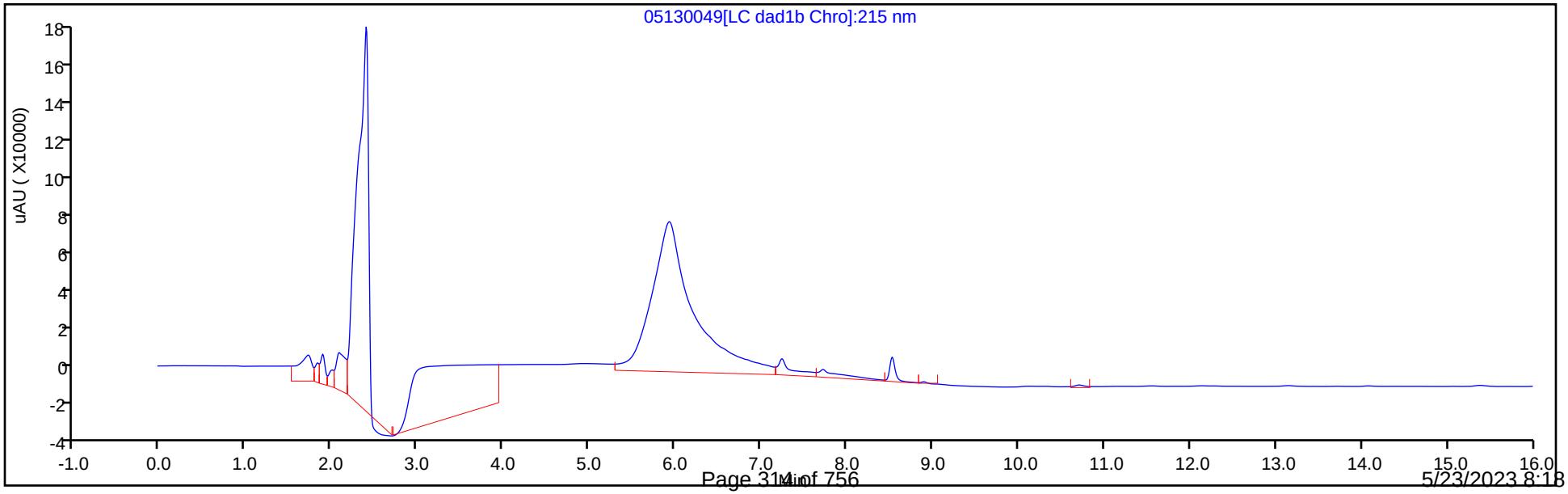
Data File: \\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130049.d

Injection Date:	14-May-2023 05:16:14	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-176134-A-5-A	Lab Sample ID:	280-176134-5	Worklist Smp#:	49
Client ID:	LL1mw-089-230401-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	49
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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\20230513-121427.b\05130049.D				
Lims ID:	280-176134-A-5-A				
Client ID:	LL1mw-089-230401-GW				
Sample Type:	Client				
Inject. Date:	14-May-2023 05:16:14	ALS Bottle#:	49	Worklist Smp#:	49
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-176134-A-5-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	16-May-2023 12:37:31	Calib Date:	24-Feb-2023 17:41:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1672				

First Level Reviewer: K8YG Date: 15-May-2023 12:08:56

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2121	106.03

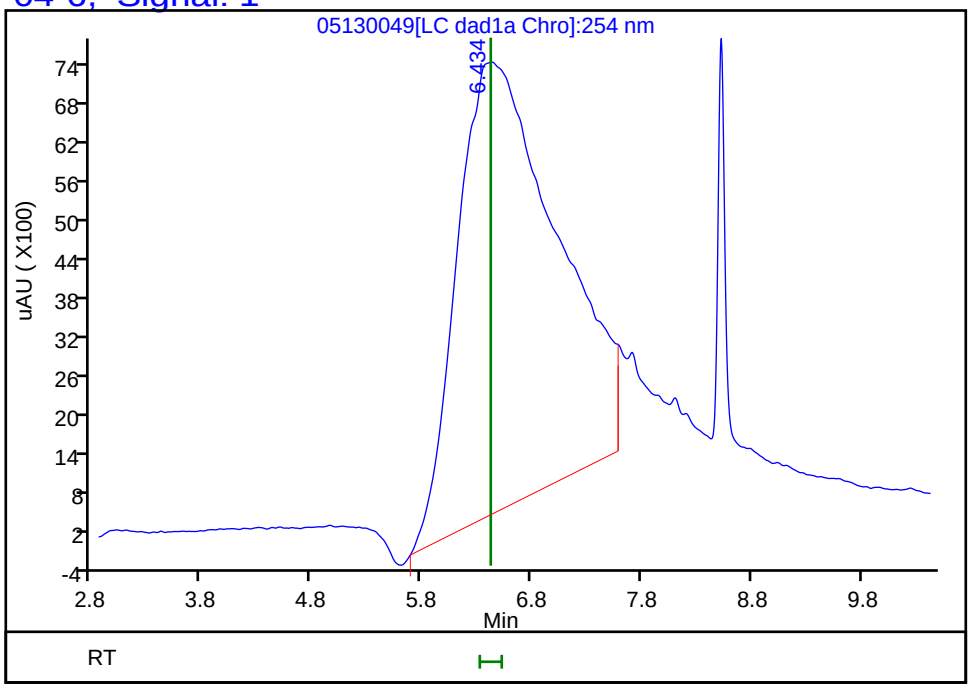
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130049.d				
Injection Date:	14-May-2023 05:16:14	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176134-A-5-A	Lab Sample ID:	280-176134-5		
Client ID:	LL1mw-089-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	49	Worklist Smp#:	49
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6, Signal: 1

RT: 6.43
Response: 439326
Amount: 2.222328



Reviewer: LV5D, 16-May-2023 12:29:34
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-176134-1

SDG No.:

Client Sample ID: LL1mw-089-230402-GW | Lab Sample ID: 280-176134-6

Matrix: Water | Lab File ID: 05130050.D

Analysis Method: 8330B | Date Collected: 05/04/2023 13:45

Extraction Method: 3535 | Date Extracted: 05/10/2023 13:48

Sample wt/vol: 467.3(mL) | Date Analyzed: 05/14/2023 05:39

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.: 612396 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.21	U	0.22	0.21	0.090
99-65-0	1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.039
118-96-7	2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.048
6629-29-4	2,4-diamino-6-nitrotoluene	0.96	U	1.1	0.96	0.46
121-14-2	2,4-Dinitrotoluene	0.086	U	0.11	0.086	0.029
59229-75-3	2,6-diamino-4-nitrotoluene	0.96	U	1.1	0.96	0.24
606-20-2	2,6-Dinitrotoluene	0.086	U	0.11	0.086	0.043
35572-78-2	2-Amino-4,6-dinitrotoluene	0.11	U	0.12	0.11	0.054
88-72-2	2-Nitrotoluene	0.21	U	0.22	0.21	0.091
618-87-1	3,5-Dinitroaniline	0.32	U	0.43	0.32	0.14
99-08-1	3-Nitrotoluene	0.37	U	0.43	0.37	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.062
99-99-0	4-Nitrotoluene	0.43	U	0.44	0.43	0.11
80251-29-2	DNX	0.27	U	0.53	0.27	0.10
2691-41-0	HMX	0.21	U	0.22	0.21	0.094
5755-27-1	MNX	0.31	U	0.53	0.31	0.099
98-95-3	Nitrobenzene	0.21	U	0.22	0.21	0.097
55-63-0	Nitroglycerin	2.1	U	2.2	2.1	0.99
78-11-5	PETN	1.1	U	1.2	1.1	0.48
121-82-4	RDX	0.21	U	0.22	0.21	0.055
479-45-8	Tetryl	0.11	U	0.12	0.11	0.034
13980-04-6	TNX	0.27	U M	0.53	0.27	0.085

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	105		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130050.D
Lims ID: 280-176134-A-6-A
Client ID: LL1mw-089-230402-GW
Sample Type: Client
Inject. Date: 14-May-2023 05:39:15 ALS Bottle#: 50 Worklist Smp#: 50
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-176134-A-6-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-May-2023 12:37:31 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: K8YG Date: 15-May-2023 12:09:28

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
2 2,6-diamino-4-nitrotoluene	1		6.426			ND	
3 TNX	1		6.427			ND	U
4 HMX	1		6.547			ND	
5 2,4-diamino-6-nitrotoluene	1		6.620			ND	
6 DNX	1		6.754			ND	
7 MNX	1		7.187			ND	
8 RDX	1		7.574			ND	
$ 10 1,2-Dinitrobenzene	1	8.522	8.521	0.001	26462	0.2095	
11 1,3,5-Trinitrobenzene	1		8.647			ND	
12 1,3-Dinitrobenzene	1		9.274			ND	
13 Nitrobenzene	1		9.647			ND	
14 3,5-Dinitroaniline	1		9.887			ND	
15 Tetryl	1		10.014			ND	
16 Nitroglycerin	2		10.467			ND	
17 2,4,6-Trinitrotoluene	1		10.914			ND	
18 4-Amino-2,6-dinitrotoluene	1		11.114			ND	
19 2-Amino-4,6-dinitrotoluene	1		11.367			ND	
20 2,6-Dinitrotoluene	1		11.514			ND	
21 2,4-Dinitrotoluene	1		11.687			ND	
22 o-Nitrotoluene	1		12.514			ND	
23 p-Nitrotoluene	1		12.940			ND	
24 m-Nitrotoluene	1		13.514			ND	
25 PETN	2		14.694			ND	

QC Flag Legend

Processing Flags
Review Flags
U - Marked Undetected

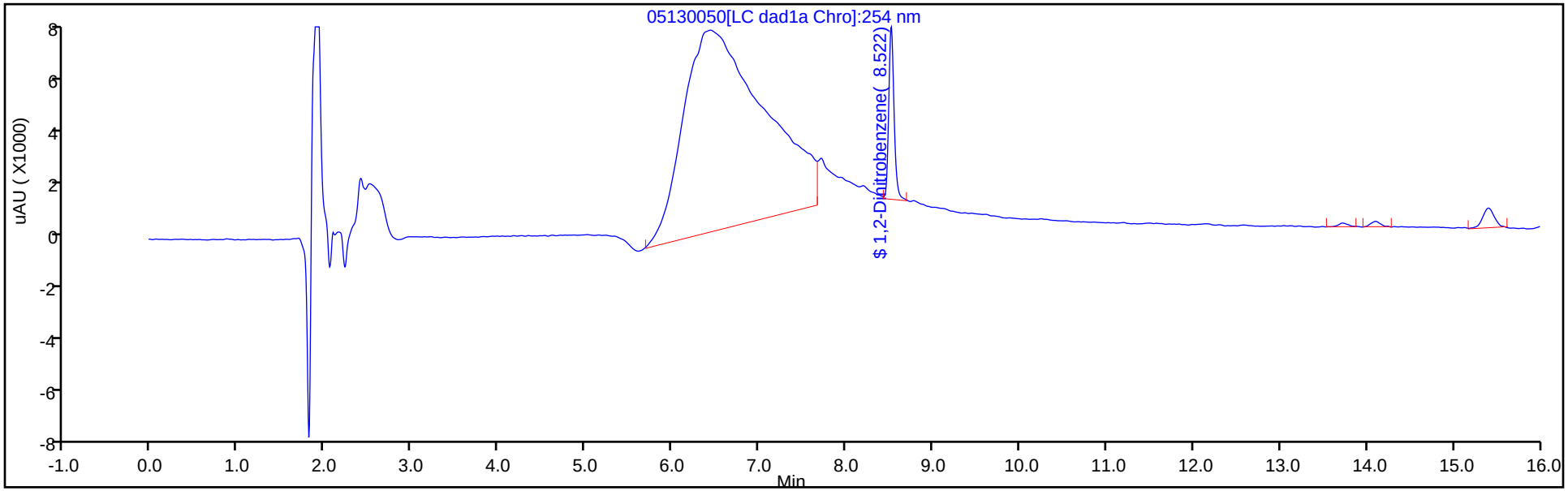
Report Date: 16-May-2023 12:37:34 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

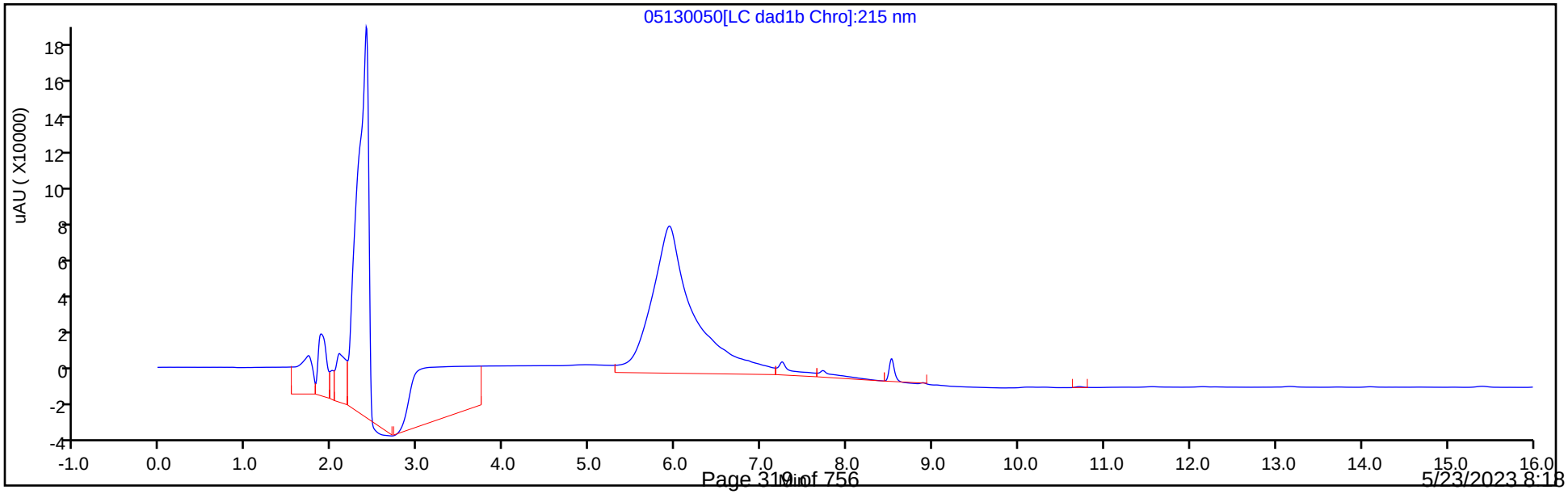
Data File: \\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130050.d

Injection Date:	14-May-2023 05:39:15	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-176134-A-6-A	Lab Sample ID:	280-176134-6	Worklist Smp#:	50
Client ID:	LL1mw-089-230402-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	50
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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\20230513-121427.b\05130050.D				
Lims ID:	280-176134-A-6-A				
Client ID:	LL1mw-089-230402-GW				
Sample Type:	Client				
Inject. Date:	14-May-2023 05:39:15	ALS Bottle#:	50	Worklist Smp#:	50
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-176134-A-6-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	16-May-2023 12:37:31	Calib Date:	24-Feb-2023 17:41:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1672				

First Level Reviewer: K8YG Date: 15-May-2023 12:09:28

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2095	104.75

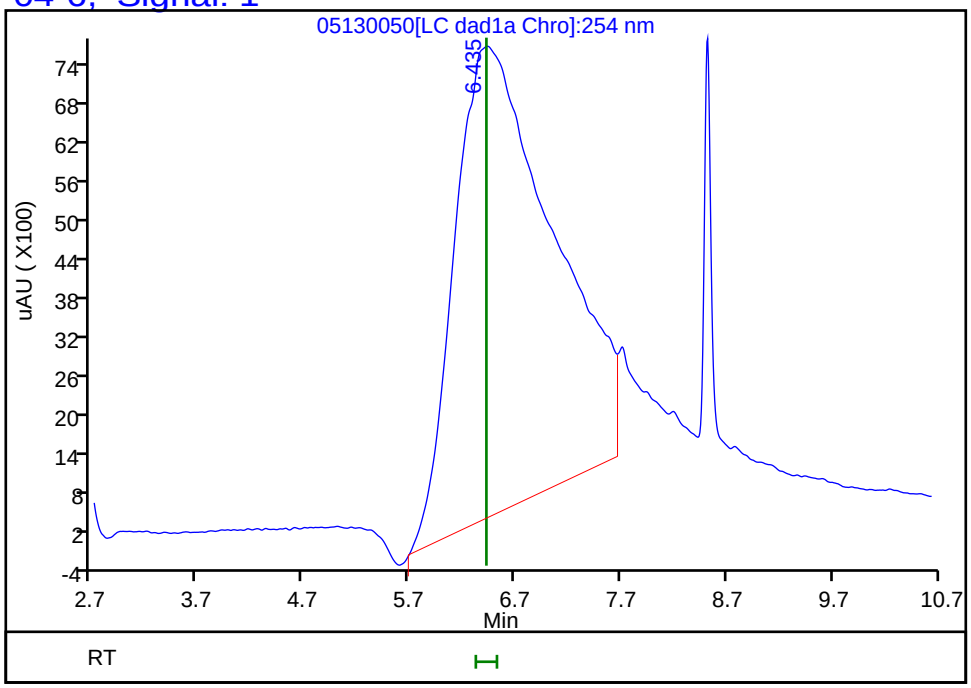
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130050.d				
Injection Date:	14-May-2023 05:39:15	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176134-A-6-A	Lab Sample ID:	280-176134-6		
Client ID:	LL1mw-089-230402-GW				
Operator ID:	JZ/JG	ALS Bottle#:	50	Worklist Smp#:	50
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6, Signal: 1

RT: 6.43
Response: 464615
Amount: 2.350252



Reviewer: K8YG, 15-May-2023 12:09:28
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-176134-1

SDG No.:

Client Sample ID: LL1mw-063-230401-GW | Lab Sample ID: 280-176134-7

Matrix: Water | Lab File ID: 05130051.D

Analysis Method: 8330B | Date Collected: 05/04/2023 10:32

Extraction Method: 3535 | Date Extracted: 05/10/2023 13:48

Sample wt/vol: 474.4(mL) | Date Analyzed: 05/14/2023 06:02

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.: 612396 | 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	0.089
118-96-7	2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.047
6629-29-4	2,4-diamino-6-nitrotoluene	0.95	U	1.1	0.95	0.46
121-14-2	2,4-Dinitrotoluene	0.084	U	0.11	0.084	0.029
59229-75-3	2,6-diamino-4-nitrotoluene	0.95	U M	1.1	0.95	0.23
606-20-2	2,6-Dinitrotoluene	0.084	U	0.11	0.084	0.042
35572-78-2	2-Amino-4,6-dinitrotoluene	0.13	M J1	0.12	0.11	0.053
88-72-2	2-Nitrotoluene	0.21	U	0.22	0.21	0.090
618-87-1	3,5-Dinitroaniline	0.32	U	0.42	0.32	0.14
99-08-1	3-Nitrotoluene	0.37	U	0.42	0.37	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	0.32		0.16	0.13	0.061
99-99-0	4-Nitrotoluene	0.42	U	0.43	0.42	0.11
80251-29-2	DNX	0.26	U	0.53	0.26	0.10
2691-41-0	HMX	1.1	M	0.22	0.21	0.092
5755-27-1	MNX	0.31	U	0.53	0.31	0.098
98-95-3	Nitrobenzene	0.21	U M	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	0.034
13980-04-6	TNX	0.26	U	0.53	0.26	0.083

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	109		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130051.D
Lims ID: 280-176134-B-7-A
Client ID: LL1mw-063-230401-GW
Sample Type: Client
Inject. Date: 14-May-2023 06:02:13 ALS Bottle#: 51 Worklist Smp#: 51
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-176134-B-7-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-May-2023 12:37:31 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: K8YG Date: 15-May-2023 12:10:30

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	2 2,6-diamino-4-nitrotoluene	1		6.426			ND	U
	3 TNX	1		6.427			ND	
	4 HMX	1	6.546	6.547	-0.001	9392	0.1004	M
	5 2,4-diamino-6-nitrotoluene	1		6.620			ND	
	6 DNX	1		6.754			ND	
	7 MNX	1		7.187			ND	
	8 RDX	1		7.574			ND	
$	10 1,2-Dinitrobenzene	1	8.526	8.521	0.005	27609	0.2186	
	11 1,3,5-Trinitrobenzene	1		8.647			ND	
	12 1,3-Dinitrobenzene	1	9.285	9.274	0.011	2373	0.008061	
	13 Nitrobenzene	1		9.647			ND	U
	14 3,5-Dinitroaniline	1	9.892	9.887	0.005	969	0.004901	
	15 Tetryl	1		10.014			ND	
	16 Nitroglycerin	2		10.467			ND	
	17 2,4,6-Trinitrotoluene	1		10.914			ND	
	18 4-Amino-2,6-dinitrotoluene	1	11.112	11.114	-0.002	4774	0.0308	
	19 2-Amino-4,6-dinitrotoluene	1	11.365	11.367	-0.002	2432	0.0121	M
	20 2,6-Dinitrotoluene	1		11.514			ND	
	21 2,4-Dinitrotoluene	1		11.687			ND	7
	22 o-Nitrotoluene	1		12.514			ND	
	23 p-Nitrotoluene	1		12.940			ND	
	24 m-Nitrotoluene	1		13.514			ND	
	25 PETN	2		14.694			ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Review Flags
M - Manually Integrated
U - Marked Undetected

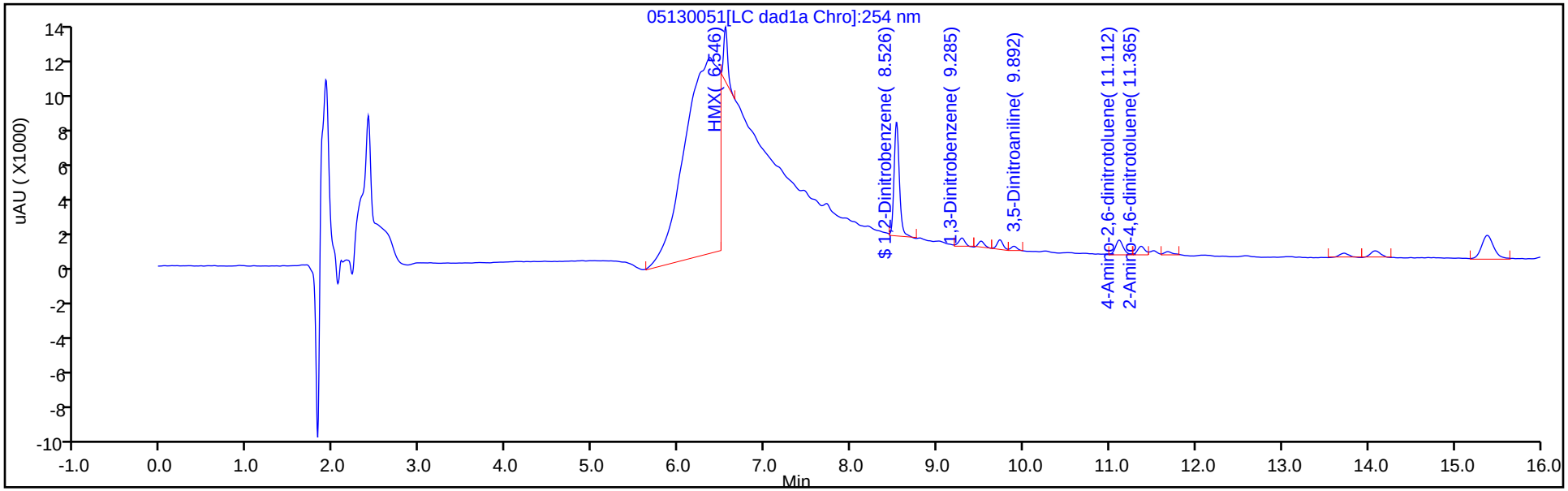
Report Date: 16-May-2023 12:37:35 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

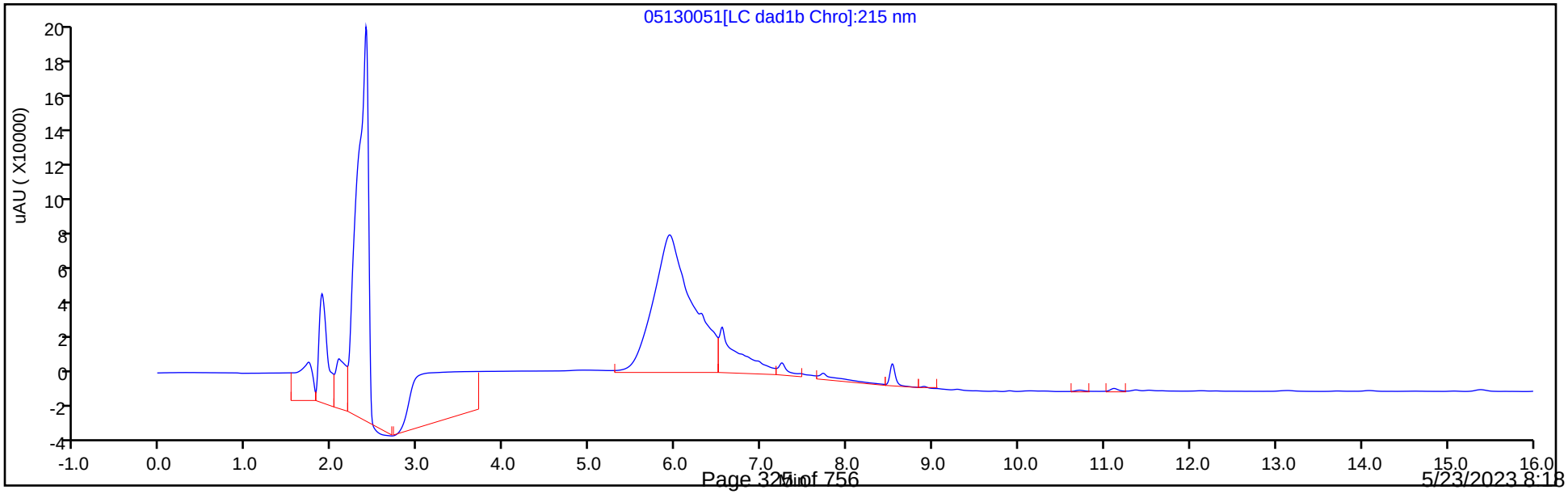
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Injection Date:	14-May-2023 06:02:13	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-176134-B-7-A	Lab Sample ID:	280-176134-7	Worklist Smp#:	51
Client ID:	LL1mw-063-230401-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	51
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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\20230513-121427.b\05130051.D				
Lims ID:	280-176134-B-7-A				
Client ID:	LL1mw-063-230401-GW				
Sample Type:	Client				
Inject. Date:	14-May-2023 06:02:13	ALS Bottle#:	51	Worklist Smp#:	51
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-176134-B-7-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	16-May-2023 12:37:31	Calib Date:	24-Feb-2023 17:41:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1672				

First Level Reviewer: K8YG Date: 15-May-2023 12:10:30

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2186	109.29

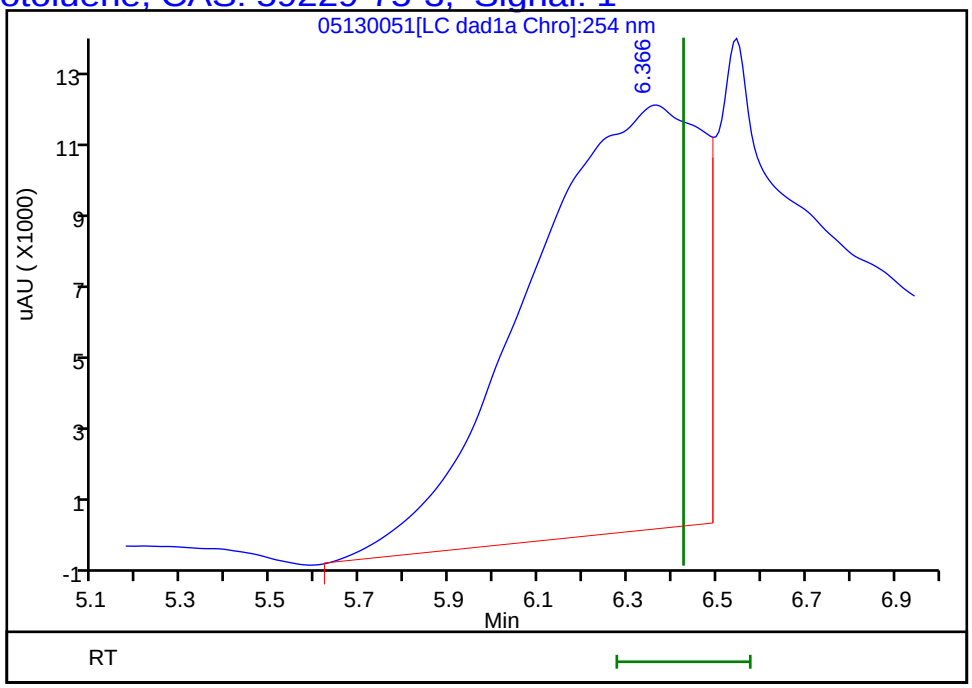
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130051.d				
Injection Date:	14-May-2023 06:02:13	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176134-B-7-A	Lab Sample ID:	280-176134-7		
Client ID:	LL1mw-063-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	51	Worklist Smp#:	51
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3, Signal: 1

RT: 6.37
Response: 294767
Amount: 1.279547



Reviewer: K8YG, 15-May-2023 12:10:30
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins Denver

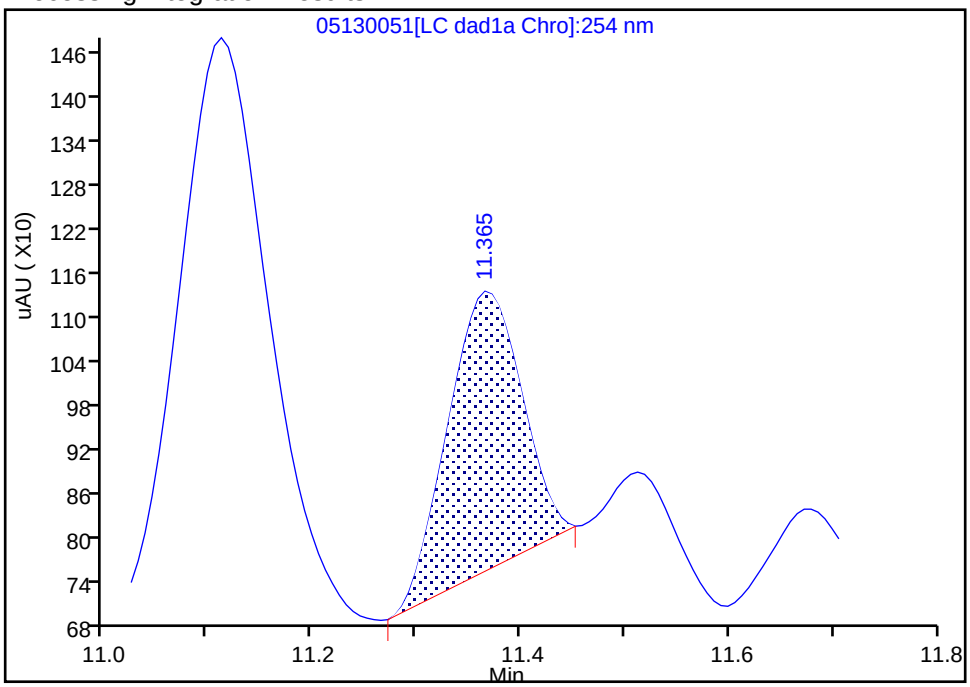
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Injection Date:	14-May-2023 06:02:13	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176134-B-7-A	Lab Sample ID:	280-176134-7		
Client ID:	LL1mw-063-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	51	Worklist Smp#:	51
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

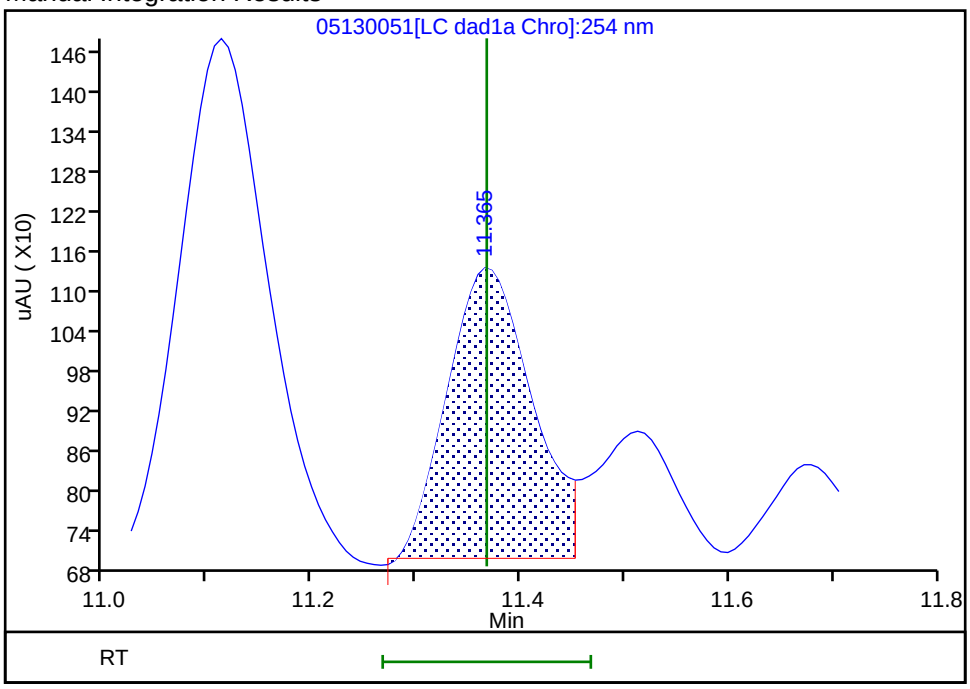
Processing Integration Results

RT: 11.37
Area: 1865
Amount: 0.009260
Amount Units: ug/mL



Manual Integration Results

RT: 11.37
Area: 2432
Amount: 0.012075
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 12:10:23
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

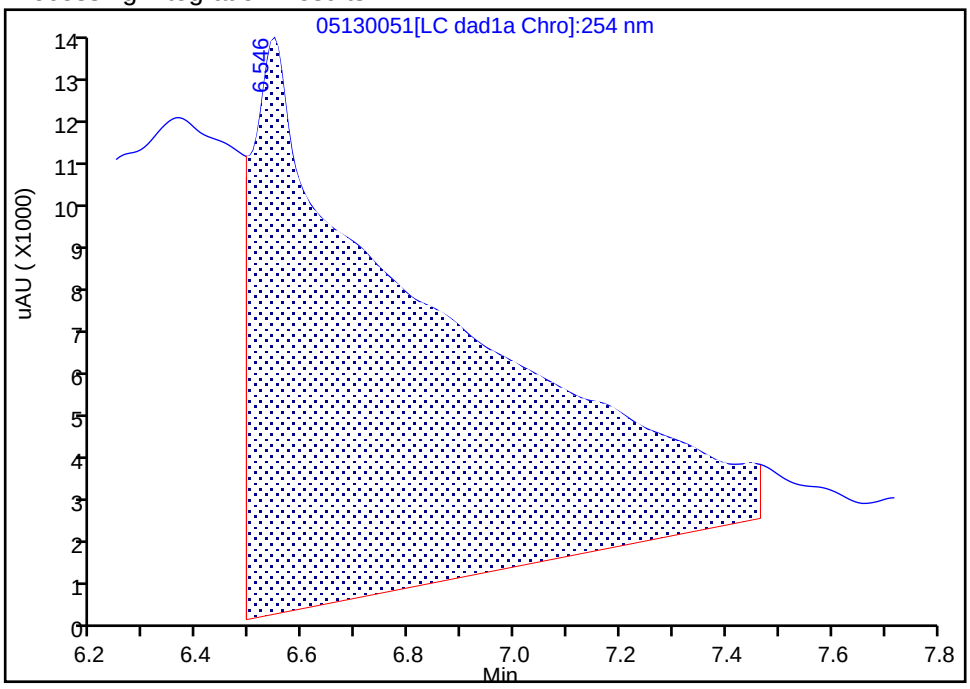
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Injection Date:	14-May-2023 06:02:13	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176134-B-7-A	Lab Sample ID:	280-176134-7		
Client ID:	LL1mw-063-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	51	Worklist Smp#:	51
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

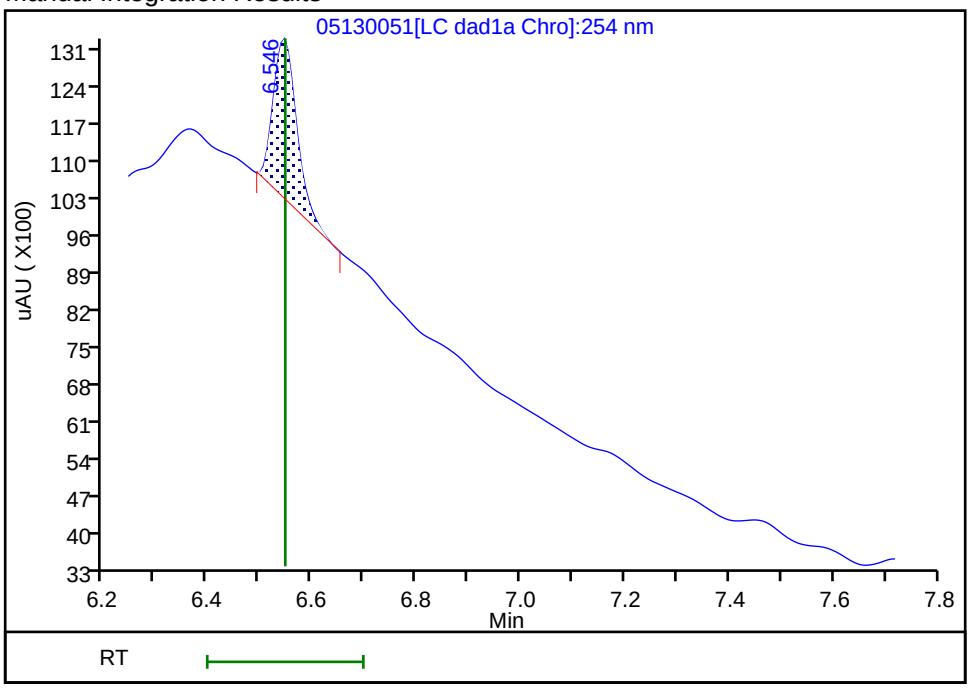
Processing Integration Results

RT: 6.55
Area: 292881
Amount: 3.131474
Amount Units: ug/mL



Manual Integration Results

RT: 6.55
Area: 9392
Amount: 0.100419
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 12:09:41
Audit Action: Manually Integrated Audit Reason: Baseline

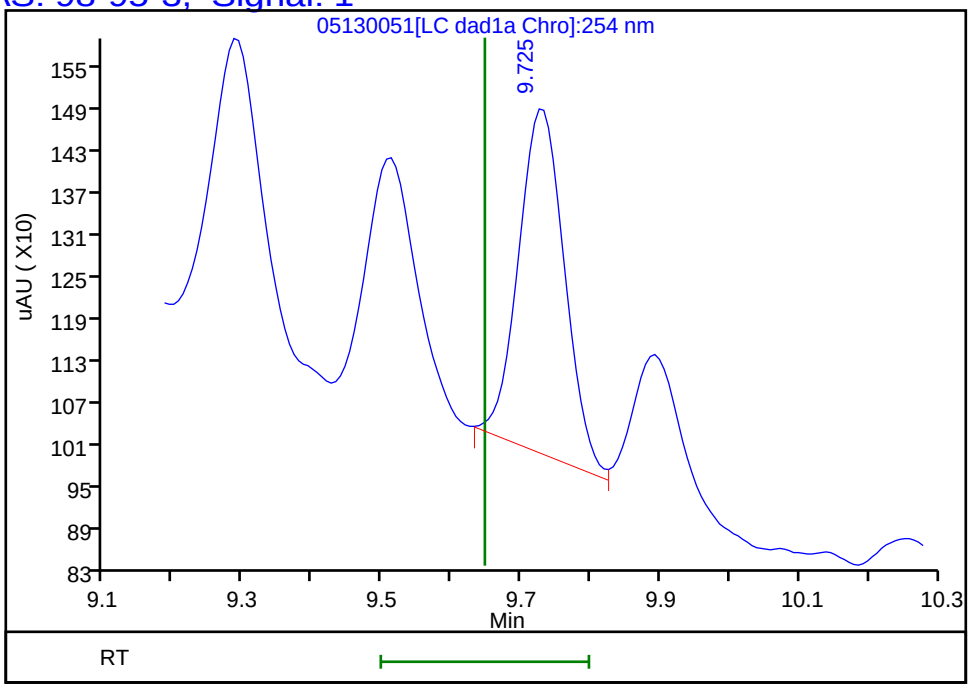
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130051.d				
Injection Date:	14-May-2023 06:02:13	Instrument ID:	CHHPLC_X3		
Lims ID:	280-176134-B-7-A	Lab Sample ID:	280-176134-7		
Client ID:	LL1mw-063-230401-GW				
Operator ID:	JZ/JG	ALS Bottle#:	51	Worklist Smp#:	51
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

RT: 9.73
Response: 2281
Amount: 0.011927



Reviewer: K8YG, 15-May-2023 12:10:30
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-176134-1

SDG No.:

Client Sample ID: LL1mw-063-230401-GW | Lab Sample ID: 280-176134-7

Matrix: Water | Lab File ID: 05160032.D

Analysis Method: 8330B | Date Collected: 05/04/2023 10:32

Extraction Method: 3535 | Date Extracted: 05/10/2023 13:48

Sample wt/vol: 474.4(mL) | Date Analyzed: 05/17/2023 12:58

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.: 612692 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-65-0	1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.039
35572-78-2	*2-Amino-4,6-dinitrotoluene*	*0.34*	*J1*	*0.12*	0.11	*0.053*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	92		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\05160032.D
Lims ID: 280-176134-B-7-A
Client ID: LL1mw-063-230401-GW
Sample Type: Client
Inject. Date: 17-May-2023 12:58:33 ALS Bottle#: 32 Worklist Smp#: 32
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-176134-B-7-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 17-May-2023 16:34:23 Calib Date: 29-Apr-2023 04:18:01
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1653

First Level Reviewer: LV5D Date: 17-May-2023 13:36:30

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	1 2,6-diamino-4-nitrotoluene	1		3.896			ND	
	2 2,4-diamino-6-nitrotoluene	1		4.342			ND	
	3 TNX	1		4.822			ND	
	4 DNX	1		5.549			ND	
	5 HMX	1	6.089	6.082	0.007	19154	0.0988	
	6 MNX	1		6.922			ND	
	8 RDX	1		8.222			ND	
	9 Nitrobenzene	1		10.602			ND	
$	10 1,2-Dinitrobenzene	1	11.462	11.435	0.027	51377	0.1830	
	11 3,5-Dinitroaniline	1	13.309	13.275	0.034	2752	0.004824	
	12 1,3-Dinitrobenzene	1		13.609			ND	
	13 Nitroglycerin	2		13.982			ND	7
	14 o-Nitrotoluene	1	14.569	14.522	0.047	4280	0.0173	
	16 p-Nitrotoluene	1		14.749			ND	
	17 4-Amino-2,6-dinitrotoluene	1	15.282	15.249	0.033	10758	0.0366	
	18 m-Nitrotoluene	1		15.582			ND	
	19 2-Amino-4,6-dinitrotoluene	1	16.096	16.075	0.021	13923	0.0325	
	20 1,3,5-Trinitrobenzene	1		16.375			ND	
	21 2,6-Dinitrotoluene	1	17.369	17.342	0.027	3984	0.0137	
	22 2,4-Dinitrotoluene	1	17.836	17.809	0.027	3602	0.006163	
	23 Tetryl	1		20.816			ND	
	24 2,4,6-Trinitrotoluene	1		21.662			ND	
	25 PETN	2		22.669			ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

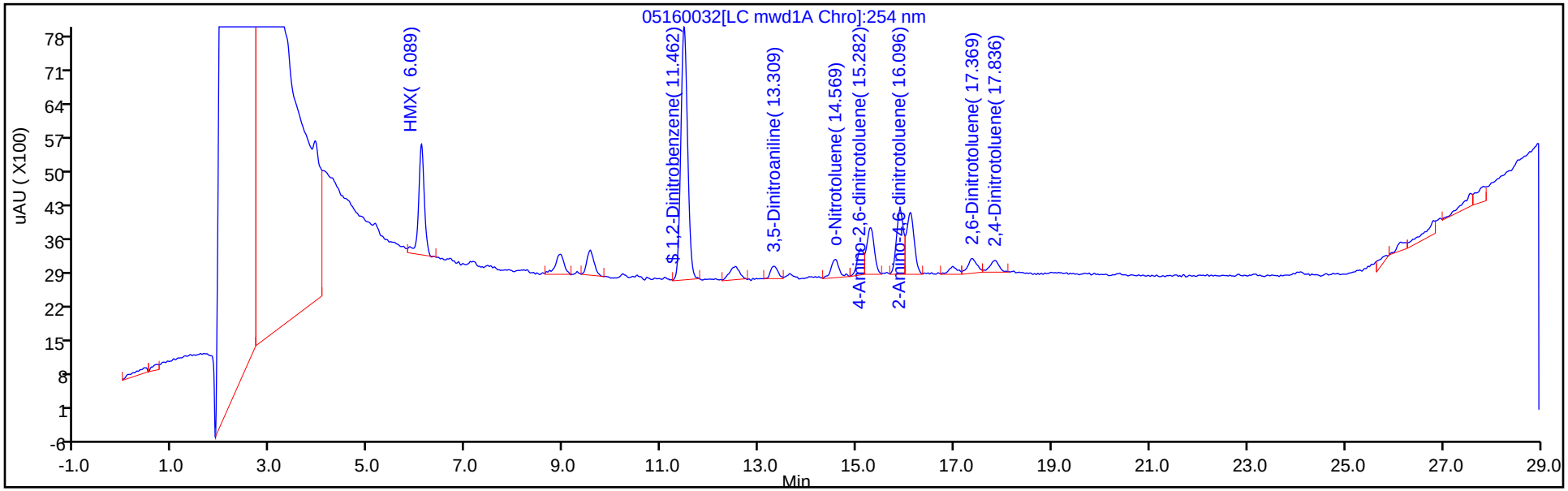
Report Date: 17-May-2023 16:34:24 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

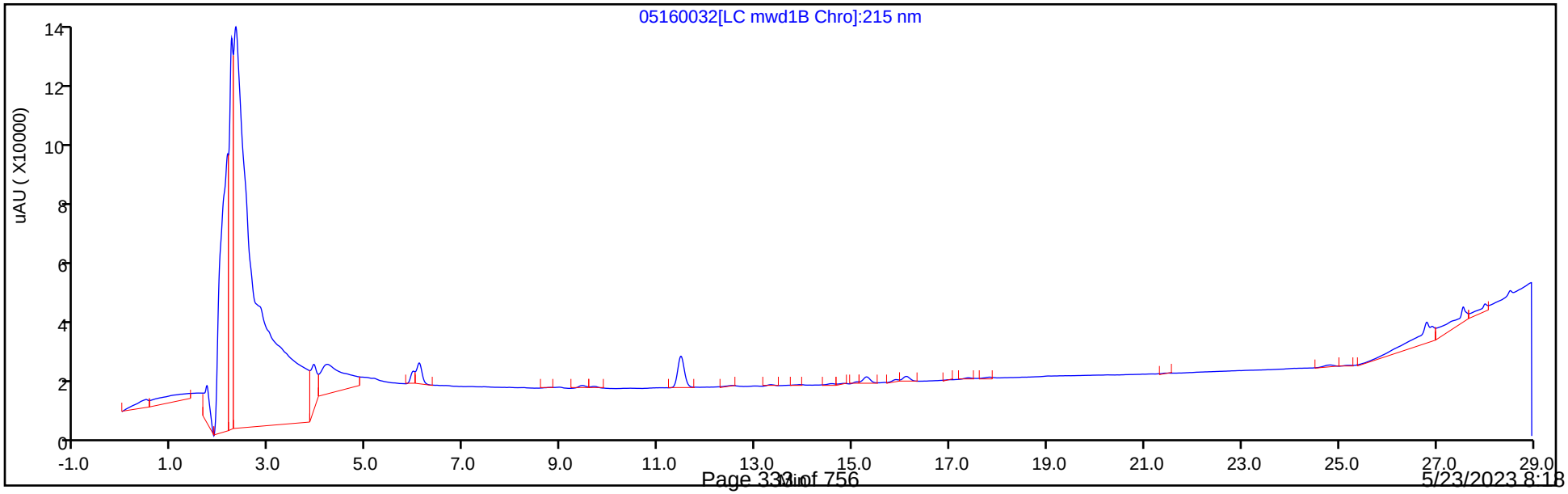
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\05160032.D

Injection Date:	17-May-2023 12:58:33	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	280-176134-B-7-A	Lab Sample ID:	280-176134-7	Worklist Smp#:	32
Client ID:	LL1mw-063-230401-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	32
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\05160032.D				
Lims ID:	280-176134-B-7-A				
Client ID:	LL1mw-063-230401-GW				
Sample Type:	Client				
Inject. Date:	17-May-2023 12:58:33	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-176134-B-7-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	17-May-2023 16:34:23	Calib Date:	29-Apr-2023 04:18:01		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1653				
First Level Reviewer: LV5D		Date:	17-May-2023 13:36:30		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1830	91.52

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176134-1 Analy Batch No.: 599427

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/17/2023 00:33 Calibration End Date: 01/17/2023 03:16 Calibration ID: 75939

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-599427/18	01160046.D
Level 2	IC 280-599427/17	01160045.D
Level 3	IC 280-599427/16	01160044.D
Level 4	IC 280-599427/15	01160043.D
Level 5	IC 280-599427/14	01160042.D
Level 6	IC 280-599427/13	01160041.D
Level 7	IC 280-599427/12	01160040.D
Level 8	IC 280-599427/11	01160039.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
2,6-diamino-4-nitrotoluene	6.459	6.459	6.459	6.460	6.459	6.460	6.457	6.432			6.305 - 6.605	6.456
2,4-diamino-6-nitrotoluene	6.639	6.639	6.632	6.640	6.639	6.640	6.637	6.618			6.619 - 6.919	6.636
3,5-Dinitroaniline	9.805	9.798	9.812	9.800	9.806	9.800	9.804	9.798			9.650 - 9.950	9.803

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

Lab Name: Eurofins Denver Job No.: 280-176134-1 Analy Batch No.: 599427

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/17/2023 00:33 Calibration End Date: 01/17/2023 03:16 Calibration ID: 75939

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-599427/18	01160046.D
Level 2	IC 280-599427/17	01160045.D
Level 3	IC 280-599427/16	01160044.D
Level 4	IC 280-599427/15	01160043.D
Level 5	IC 280-599427/14	01160042.D
Level 6	IC 280-599427/13	01160041.D
Level 7	IC 280-599427/12	01160040.D
Level 8	IC 280-599427/11	01160039.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 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
2,6-diamino-4-nitrotoluene	266300 235998	260780 221767	247020 234891	225236 222744	Lin2	864.132254	229692.993							0.9980		0.9900
2,4-diamino-6-nitrotoluene	152100 147503	163500 136319	149080 148050	138680 136546	Ave		146472.134				6.3		20.0			
3,5-Dinitroaniline	219850 241580	252000 241484	246040 245164	237836 244381	Lin2	-392.42757	245423.810							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.: 280-176134-1 | Analy Batch No.: 599427

SDG No.:

Instrument ID: CHHPLC_X3 | GC Column: UltraCarb5u ID: 4.6(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 01/17/2023 00:33 | Calibration End Date: 01/17/2023 03:16 | Calibration ID: 75939

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-599427/18	01160046.D
Level 2	IC 280-599427/17	01160045.D
Level 3	IC 280-599427/16	01160044.D
Level 4	IC 280-599427/15	01160043.D
Level 5	IC 280-599427/14	01160042.D
Level 6	IC 280-599427/13	01160041.D
Level 7	IC 280-599427/12	01160040.D
Level 8	IC 280-599427/11	01160039.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
2,6-diamino-4-nitrotoluene	Lin2	5326 155237	13039 234891	24702 556860	56309	94399	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400
2,4-diamino-6-nitrotoluene	Ave	3042 95423	8175 148050	14908 341365	34670	59001	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400
3,5-Dinitroaniline	Lin2	4397 169039	12600 245164	24604 610953	59459	96632	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400

Curve Type Legend

Ave = Average
Lin2 = Linear 1/conc^2

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160039.D
Lims ID: IC ADD 8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 17-Jan-2023 00:33:01 ALS Bottle#: 42 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICADD8
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub10

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 17-Jan-2023 12:50:38 Calib Date: 17-Jan-2023 06:47:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160055.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: NQH7 Date: 17-Jan-2023 08:20:12

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 2,6-diamino-4-nitrotoluene	1	6.432	6.455	-0.023	556860	2.50	2.42	M
5 2,4-diamino-6-nitrotoluene	1	6.618	6.769	-0.151	341365	2.50	2.33	M
14 3,5-Dinitroaniline	1	9.798	9.800	-0.002	610953	2.50	2.49	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330_ADDs_00035 Amount Added: 125.00 Units: uL

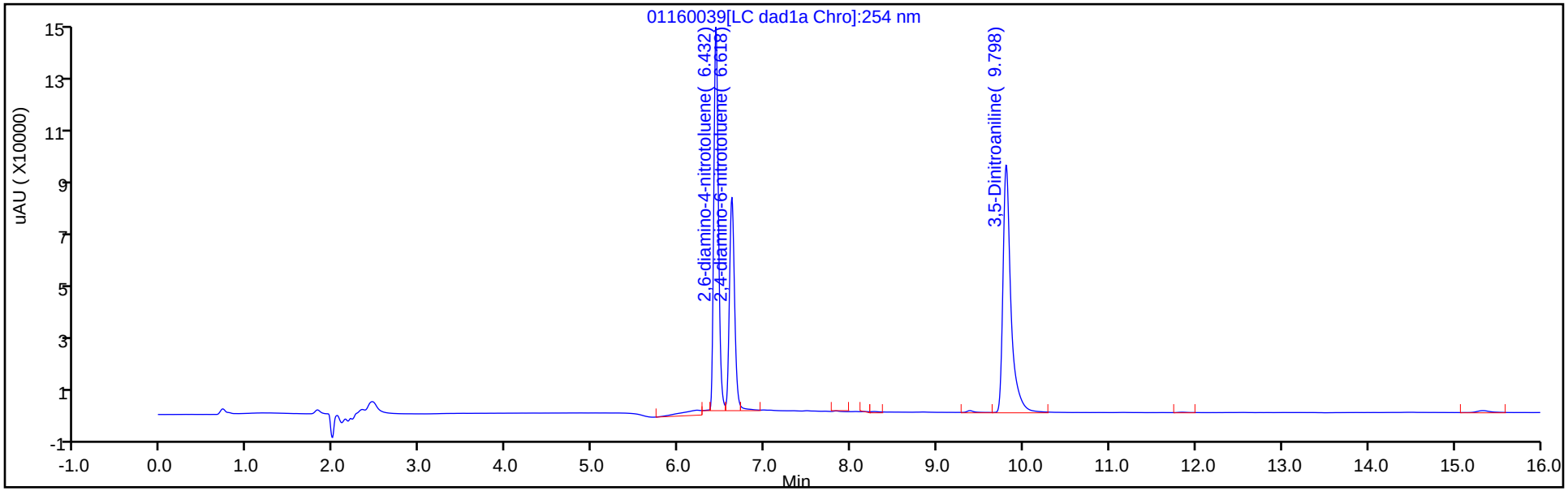
Report Date: 17-Jan-2023 12:50:38 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Denver

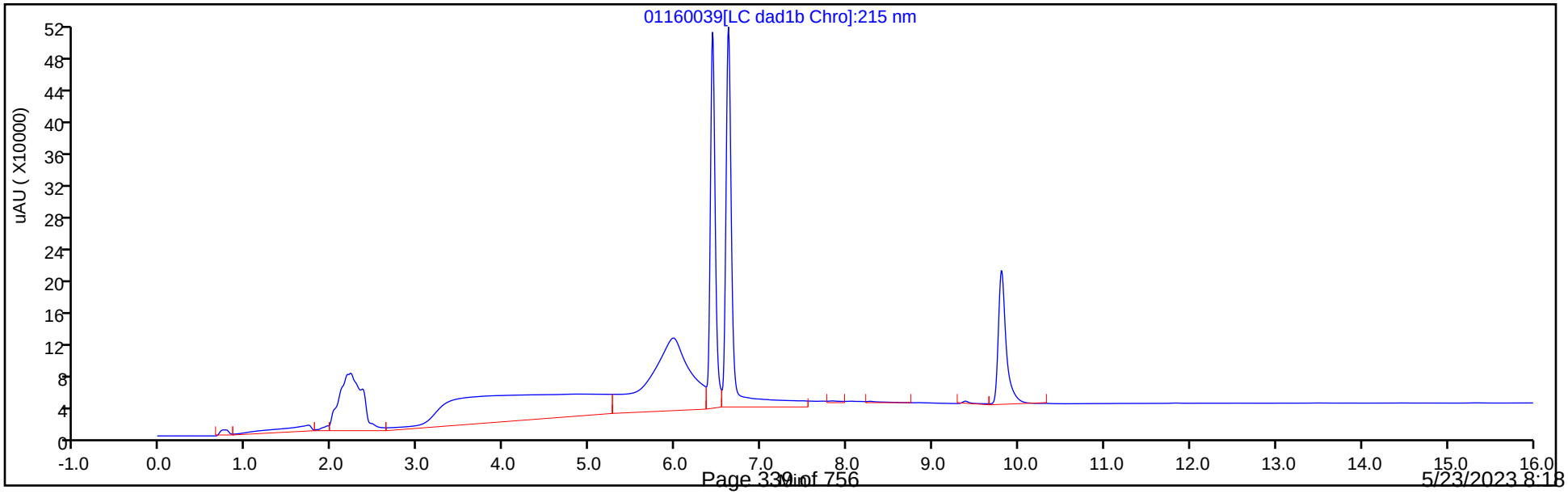
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160039.d

Injection Date:	17-Jan-2023 00:33:01	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC ADD 8			Worklist Smp#:	11
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	42
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Manual Integration/User Assign Peak Report

Eurofins Denver

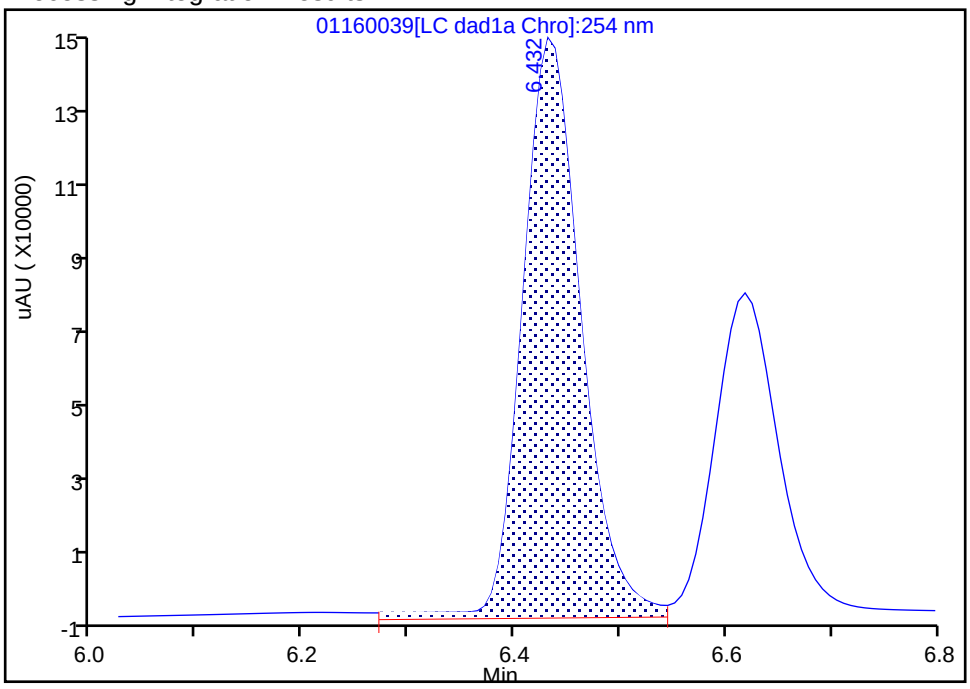
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160039.d
Injection Date: 17-Jan-2023 00:33:01 Instrument ID: CHHPLC_X3
Lims ID: IC ADD 8
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 42 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

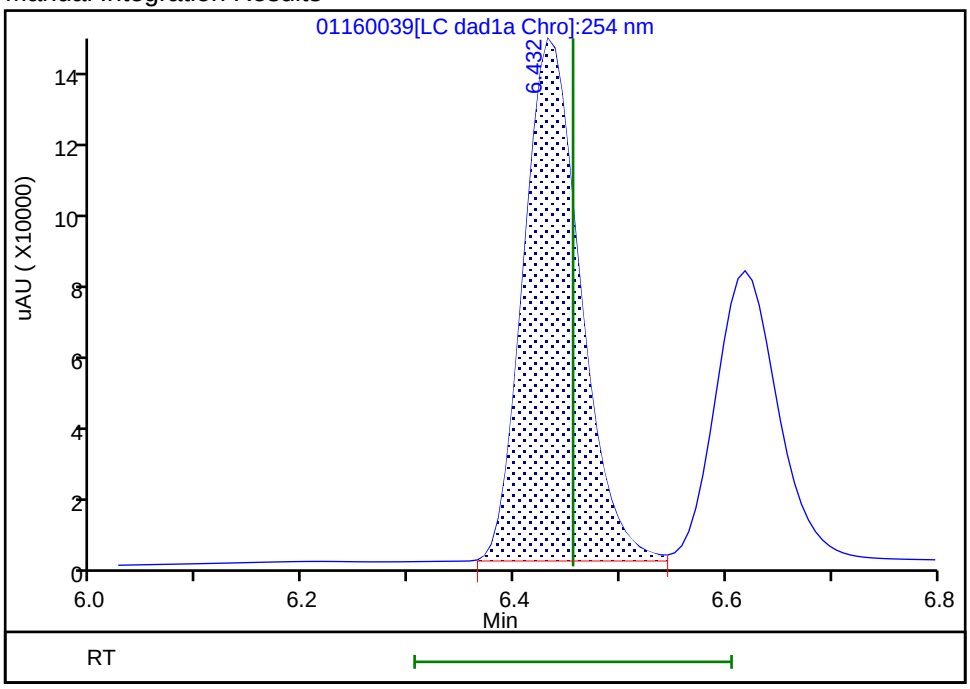
Processing Integration Results

RT: 6.43
Area: 581780
Amount: 2.370843
Amount Units: ug/mL



Manual Integration Results

RT: 6.43
Area: 556860
Amount: 2.420604
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:22:46
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

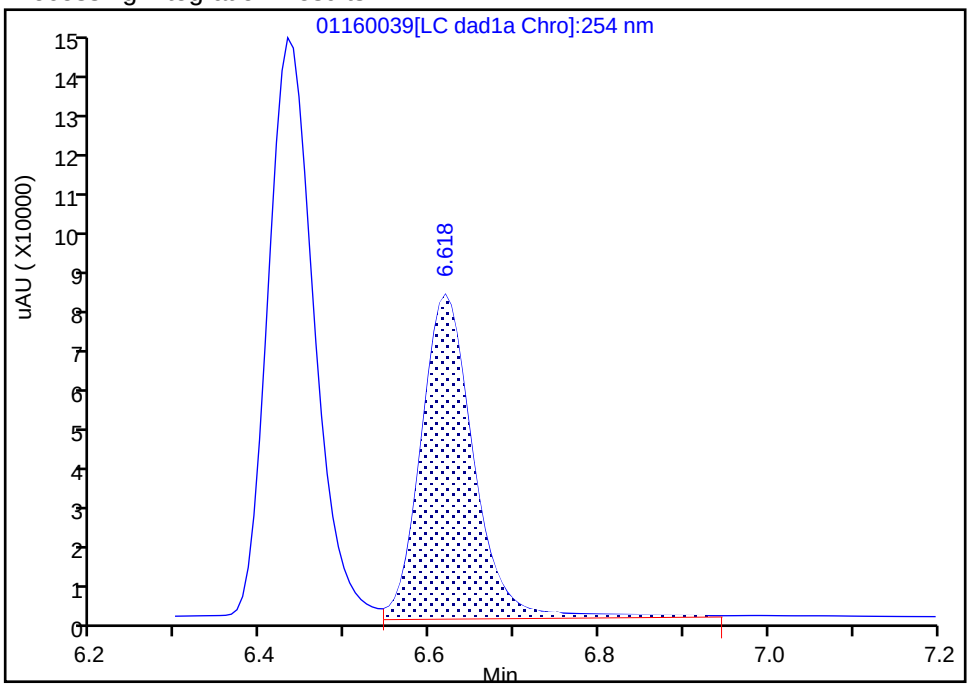
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160039.d				
Injection Date:	17-Jan-2023 00:33:01	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 8				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	42	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

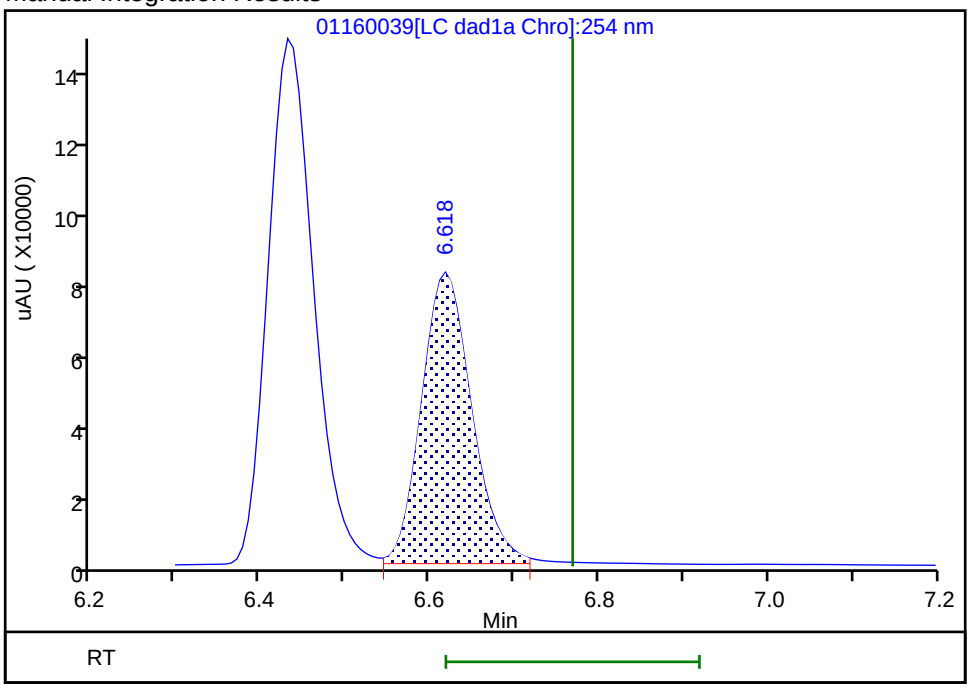
Processing Integration Results

RT: 6.62
Area: 364706
Amount: 2.146312
Amount Units: ug/mL



Manual Integration Results

RT: 6.62
Area: 341365
Amount: 2.330580
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:22:47
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160040.D
Lims ID: IC ADD 7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 17-Jan-2023 00:56:21 ALS Bottle#: 43 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICADD7
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub10

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 17-Jan-2023 12:50:39 Calib Date: 17-Jan-2023 06:47:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160055.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: LV5D Date: 17-Jan-2023 12:23:10

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 2,6-diamino-4-nitrotoluene	1	6.457	6.455	0.002	234891	1.00	1.02	M
5 2,4-diamino-6-nitrotoluene	1	6.637	6.769	-0.132	148050	1.00	1.01	M
14 3,5-Dinitroaniline	1	9.804	9.800	0.004	245164	1.00	1.00	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

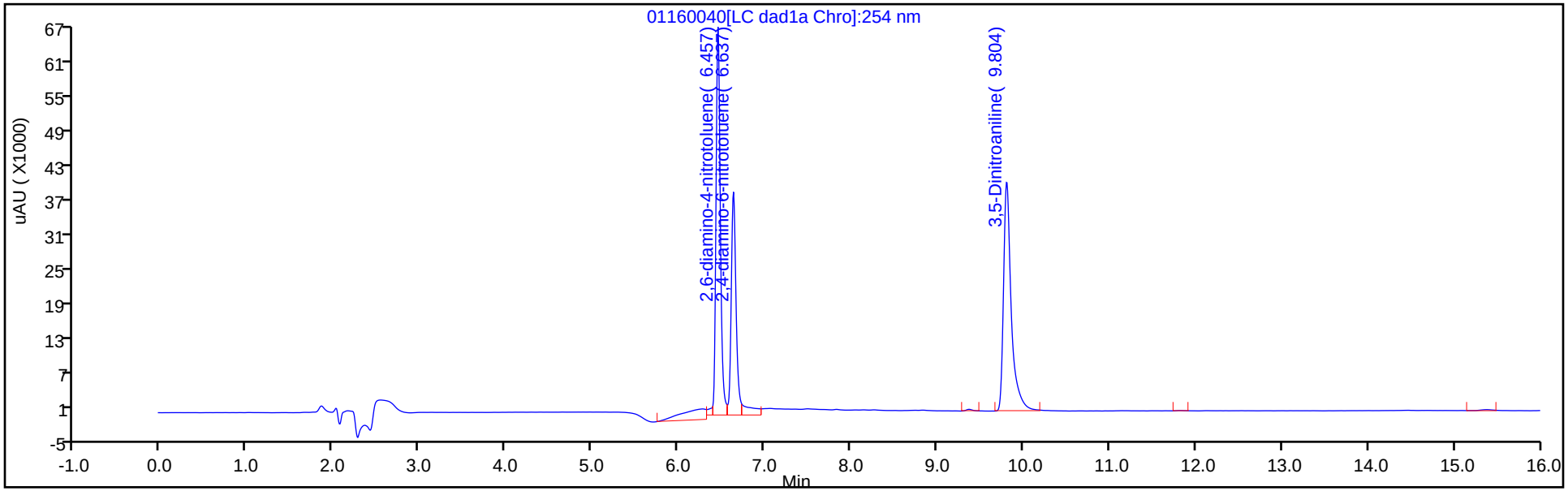
8330_ADDs_00035 Amount Added: 50.00 Units: uL

Report Date: 17-Jan-2023 12:50:39 Chrom Revision: 2.3 20-Dec-2022 14:14:06

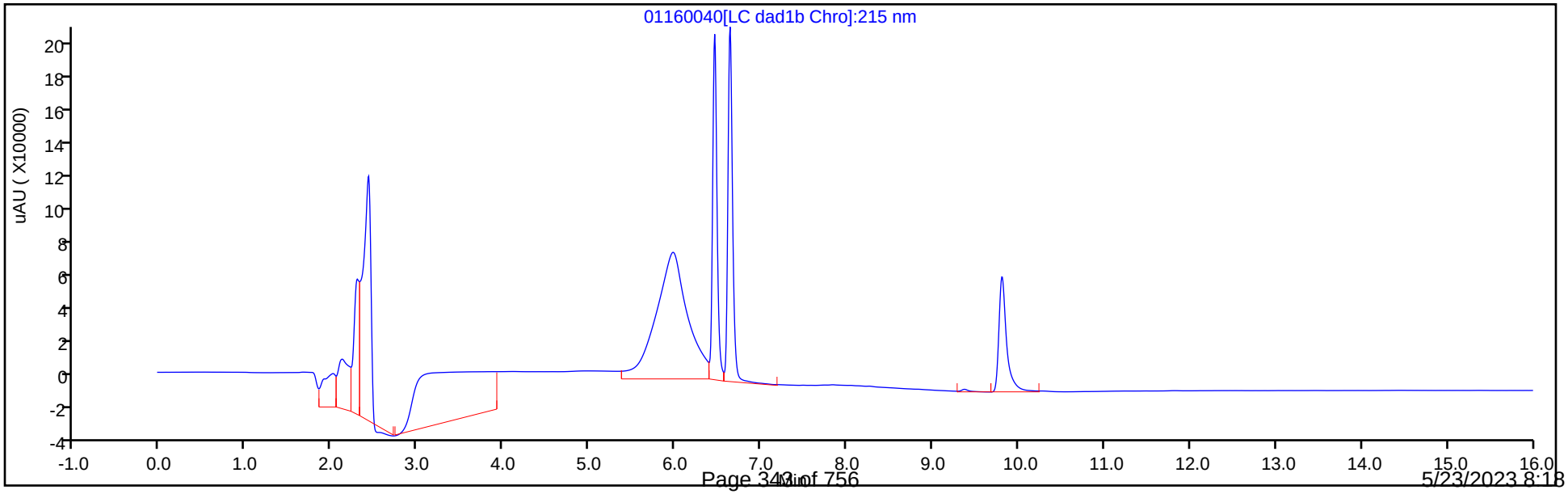
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160040.d				
Injection Date:	17-Jan-2023 00:56:21	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC ADD 7			Worklist Smp#:	12
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	43
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Manual Integration/User Assign Peak Report

Eurofins Denver

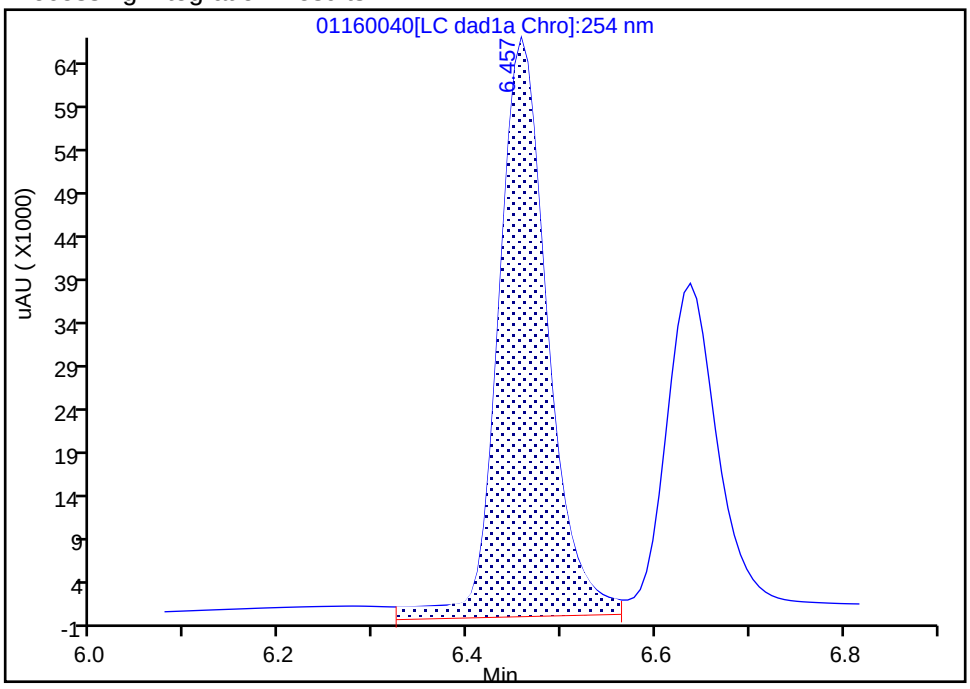
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160040.d
Injection Date: 17-Jan-2023 00:56:21 Instrument ID: CHHPLC_X3
Lims ID: IC ADD 7
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 43 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

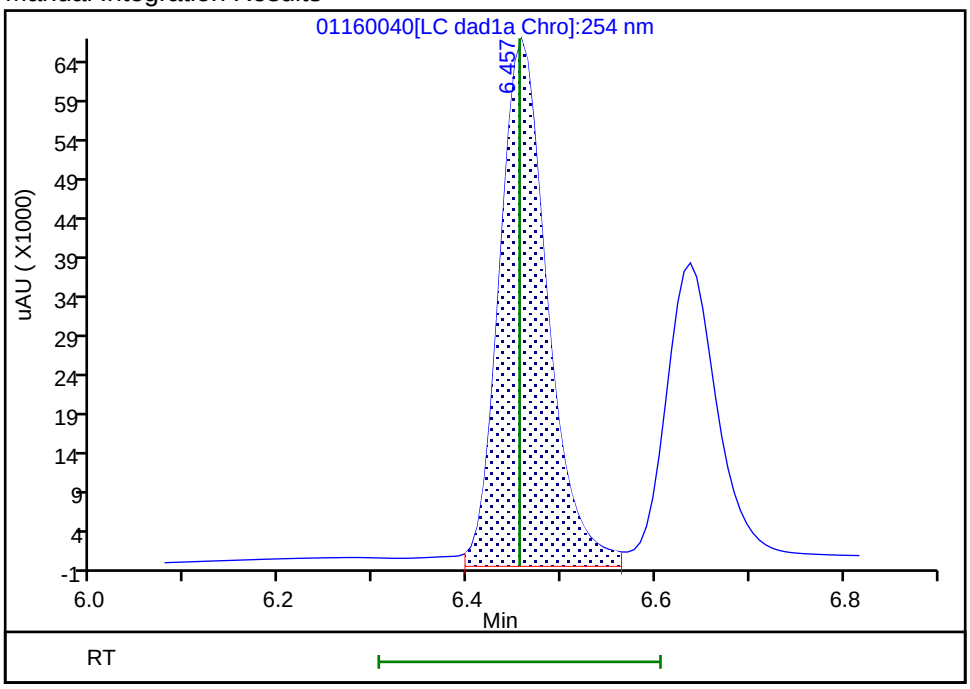
Processing Integration Results

RT: 6.46
Area: 243731
Amount: 0.963471
Amount Units: ug/mL



Manual Integration Results

RT: 6.46
Area: 234891
Amount: 1.018868
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:23:08
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

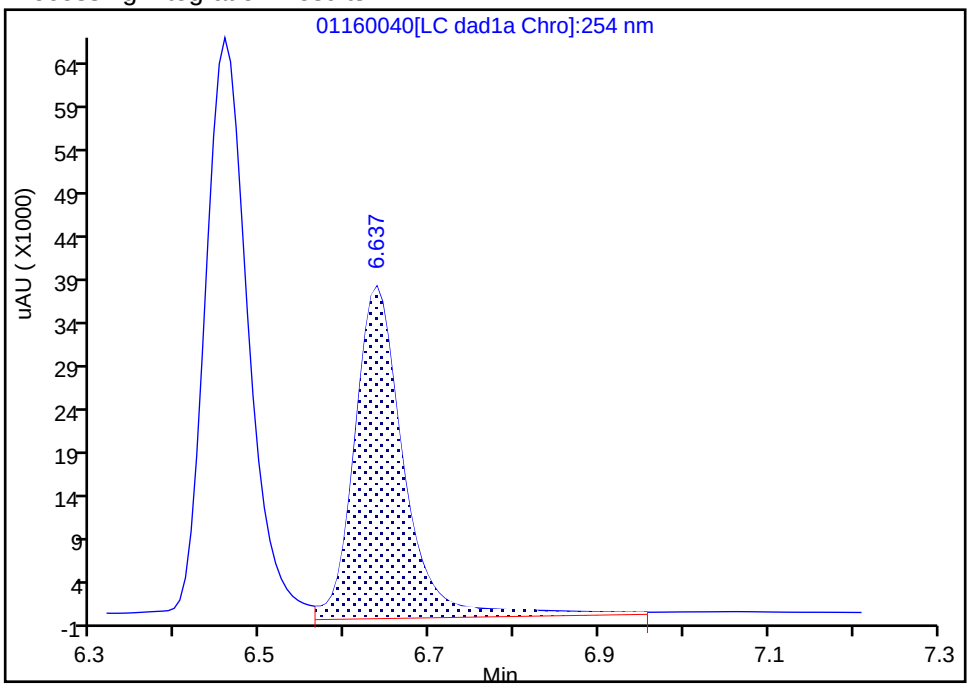
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160040.d				
Injection Date:	17-Jan-2023 00:56:21	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 7				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	43	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

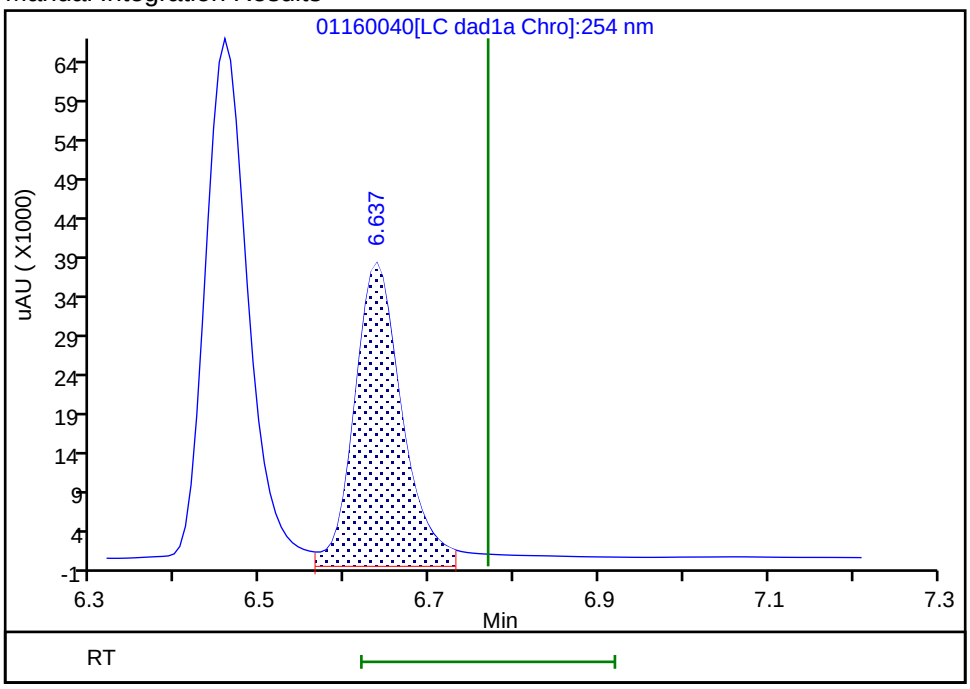
Processing Integration Results

RT: 6.64
Area: 156243
Amount: 0.928768
Amount Units: ug/mL



Manual Integration Results

RT: 6.64
Area: 148050
Amount: 1.010772
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:23:09
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160041.D
Lims ID: IC ADD 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 17-Jan-2023 01:19:43 ALS Bottle#: 44 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICADD6
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub10

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 17-Jan-2023 12:50:39 Calib Date: 17-Jan-2023 06:47:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160055.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: LV5D Date: 17-Jan-2023 12:23:22

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 2,6-diamino-4-nitrotoluene	1	6.460	6.455	0.005	155237	0.7000	0.6721	M
5 2,4-diamino-6-nitrotoluene	1	6.640	6.769	-0.129	95423	0.7000	0.6515	M
14 3,5-Dinitroaniline	1	9.800	9.800	0.000	169039	0.7000	0.6904	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330_ADDs_00035 Amount Added: 35.00 Units: uL

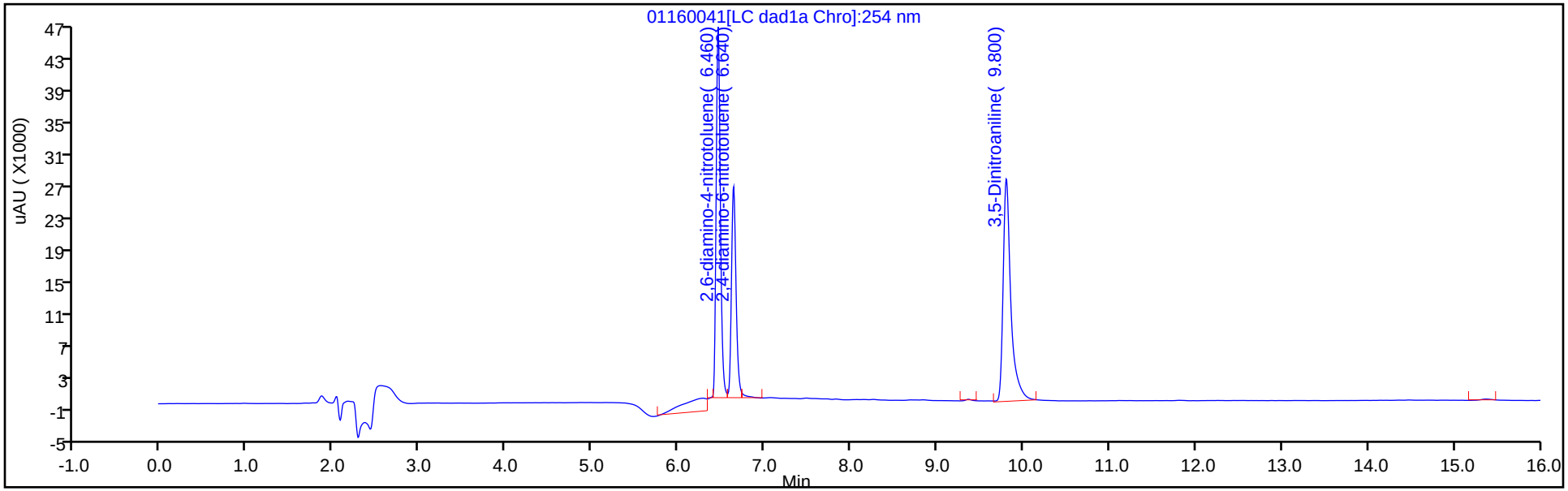
Report Date: 17-Jan-2023 12:50:39 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Denver

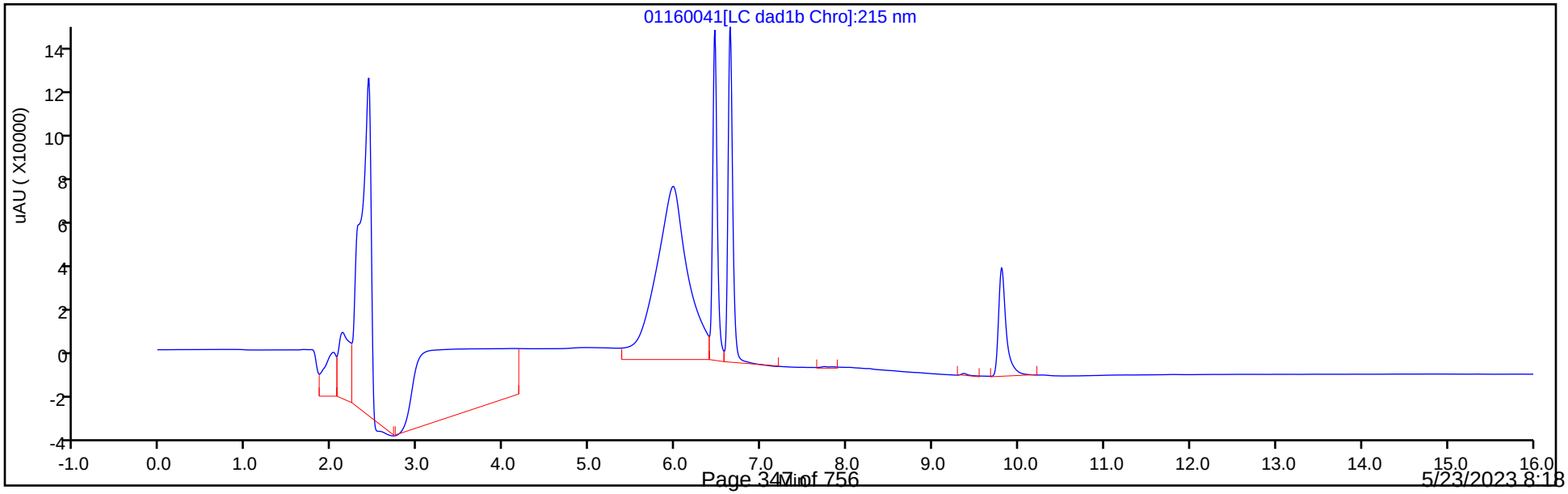
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160041.d

Injection Date:	17-Jan-2023 01:19:43	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC ADD 6			Worklist Smp#:	13
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	44
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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

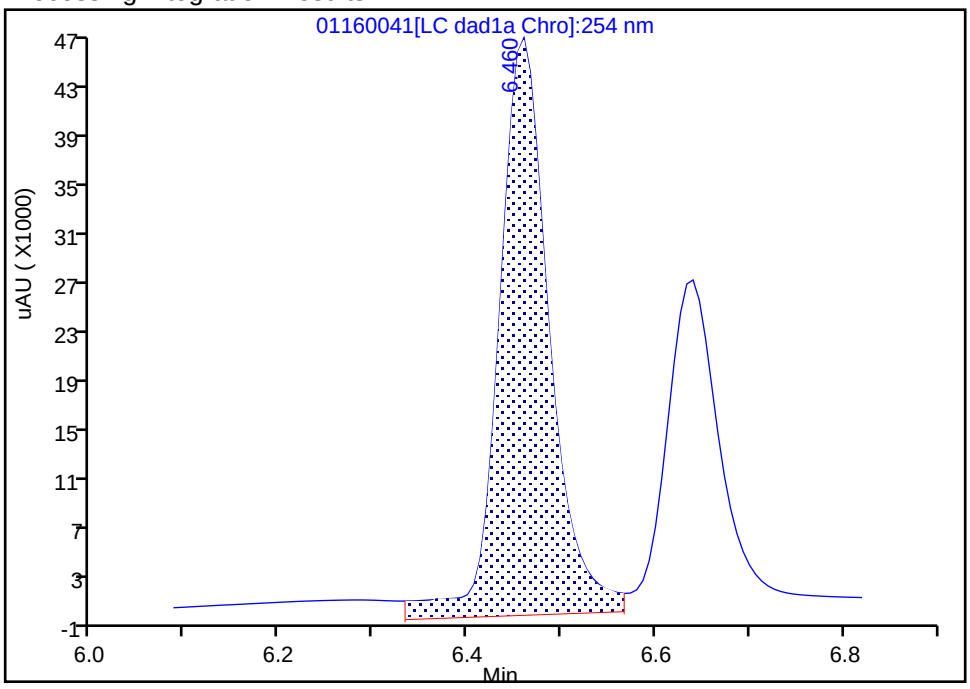
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160041.d
Injection Date: 17-Jan-2023 01:19:43 Instrument ID: CHHPLC_X3
Lims ID: IC ADD 6
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 44 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

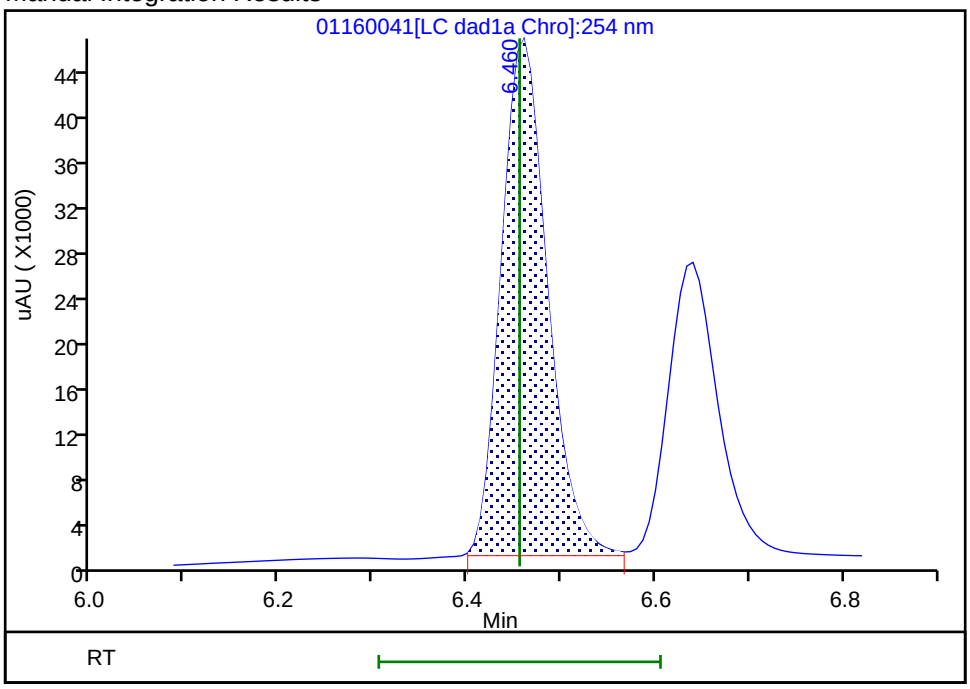
Processing Integration Results

RT: 6.46
Area: 174539
Amount: 0.677131
Amount Units: ug/mL



Manual Integration Results

RT: 6.46
Area: 155237
Amount: 0.672083
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:23:20
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

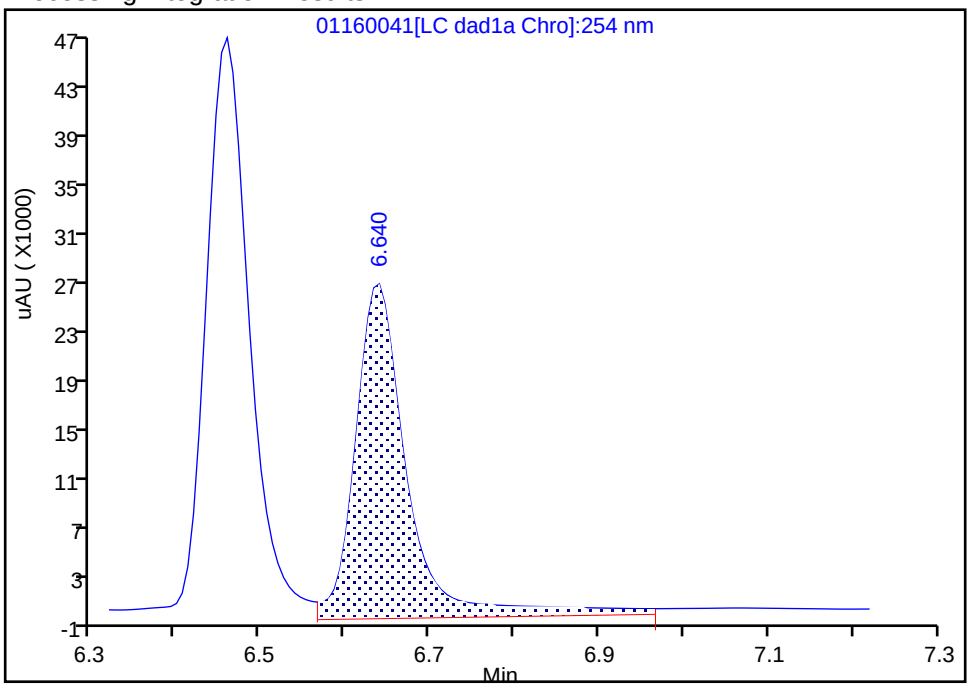
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160041.d				
Injection Date:	17-Jan-2023 01:19:43	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 6				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	44	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

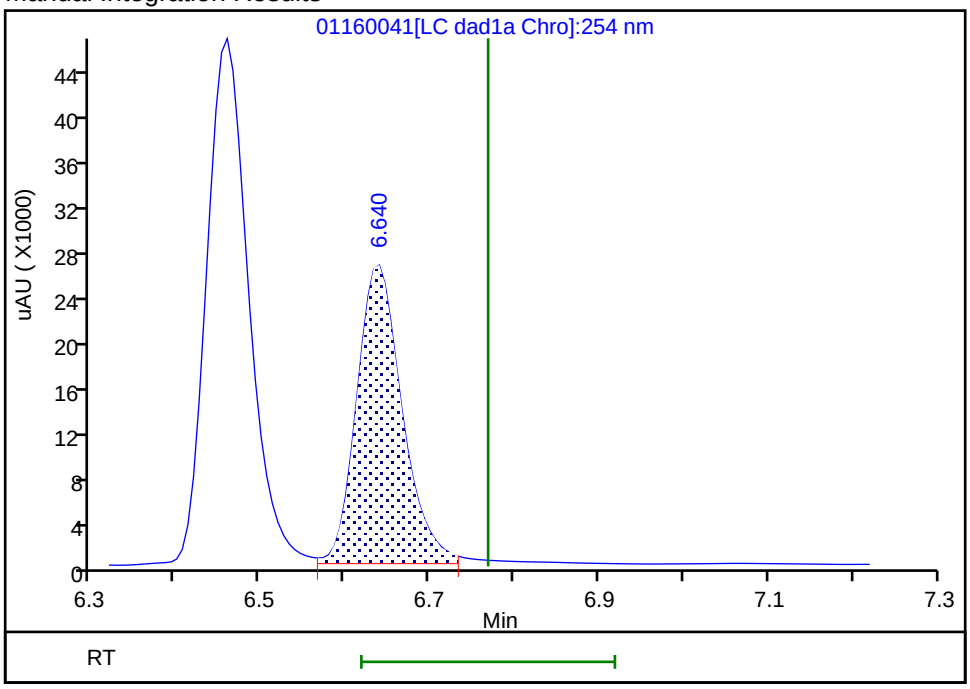
Processing Integration Results

RT: 6.64
Area: 114251
Amount: 0.682909
Amount Units: ug/mL



Manual Integration Results

RT: 6.64
Area: 95423
Amount: 0.651475
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:23:21
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160042.D
Lims ID: IC ADD 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 17-Jan-2023 01:43:11 ALS Bottle#: 45 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICADD5
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub10

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 17-Jan-2023 12:50:40 Calib Date: 17-Jan-2023 06:47:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160055.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: LV5D Date: 17-Jan-2023 12:30:57

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 2,6-diamino-4-nitrotoluene	1	6.459	6.455	0.004	94399	0.4000	0.4072	M
5 2,4-diamino-6-nitrotoluene	1	6.639	6.769	-0.130	59001	0.4000	0.4028	M
14 3,5-Dinitroaniline	1	9.806	9.800	0.006	96632	0.4000	0.3953	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330_ADDs_00035 Amount Added: 20.00 Units: uL

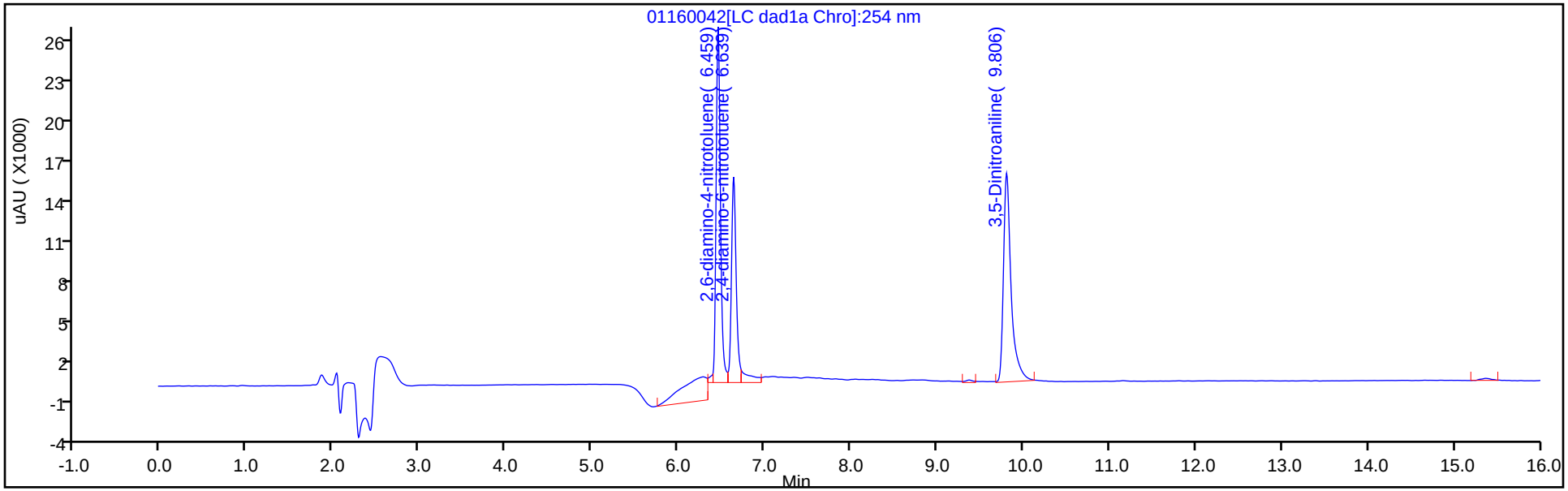
Report Date: 17-Jan-2023 12:50:40 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Denver

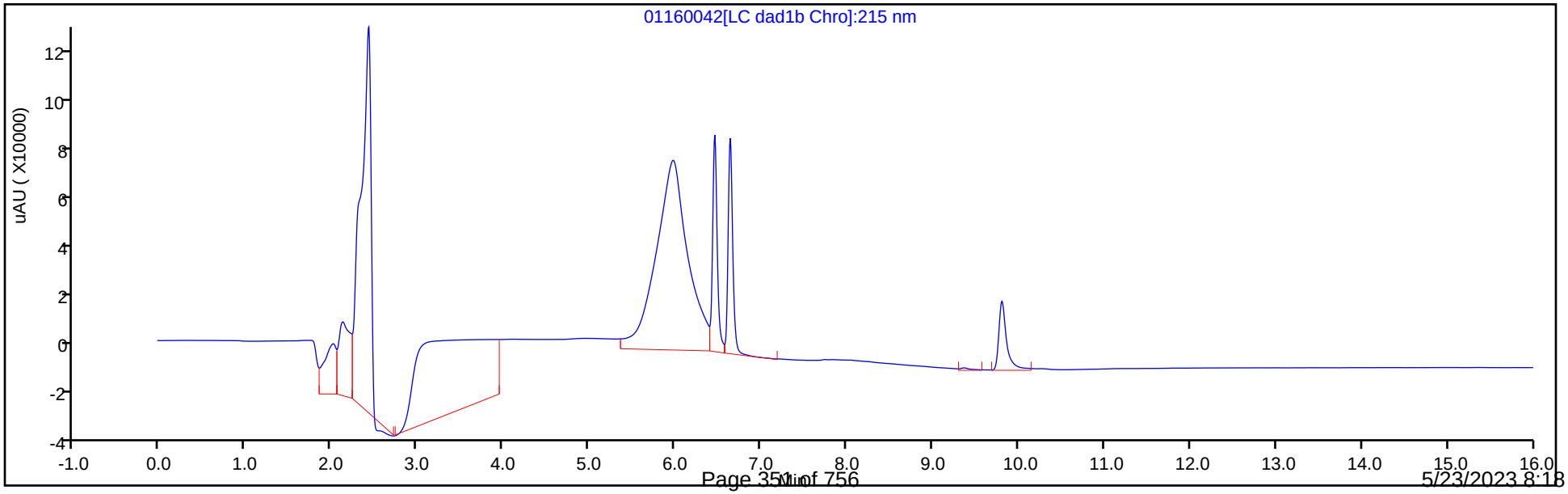
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160042.d

Injection Date:	17-Jan-2023 01:43:11	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC ADD 5			Worklist Smp#:	14
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	45
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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

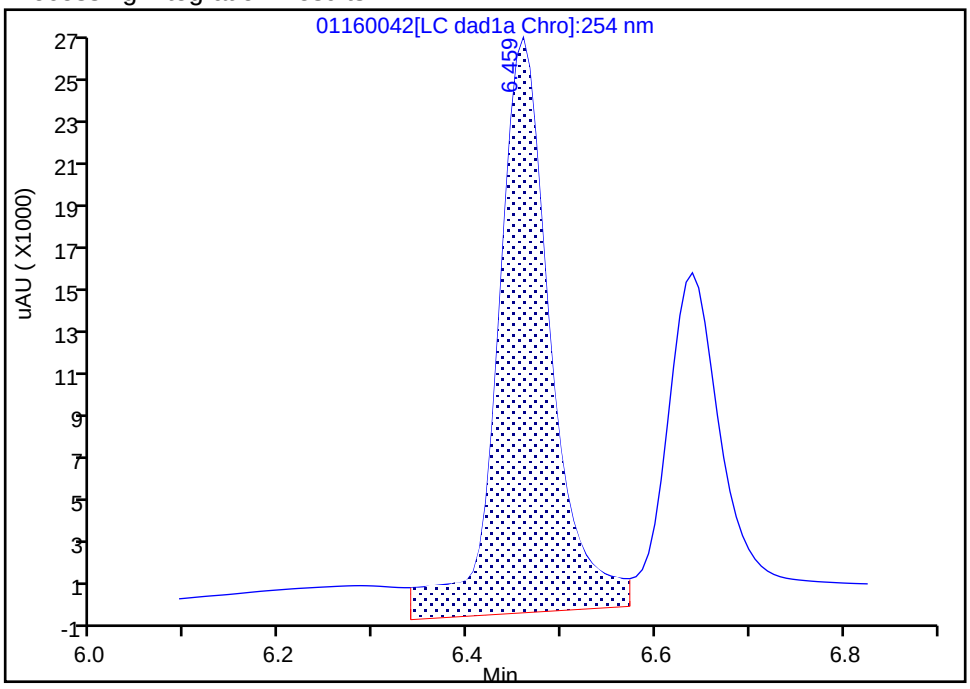
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160042.d				
Injection Date:	17-Jan-2023 01:43:11	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 5				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	45	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

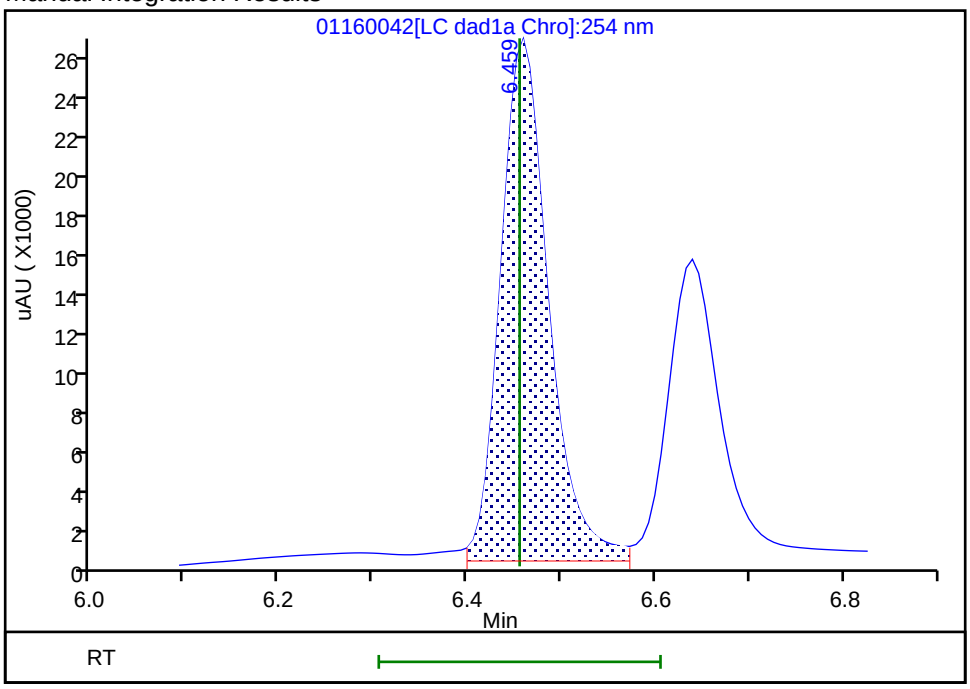
Processing Integration Results

RT: 6.46
Area: 108476
Amount: 0.410648
Amount Units: ug/mL



Manual Integration Results

RT: 6.46
Area: 94399
Amount: 0.407217
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:30:54
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

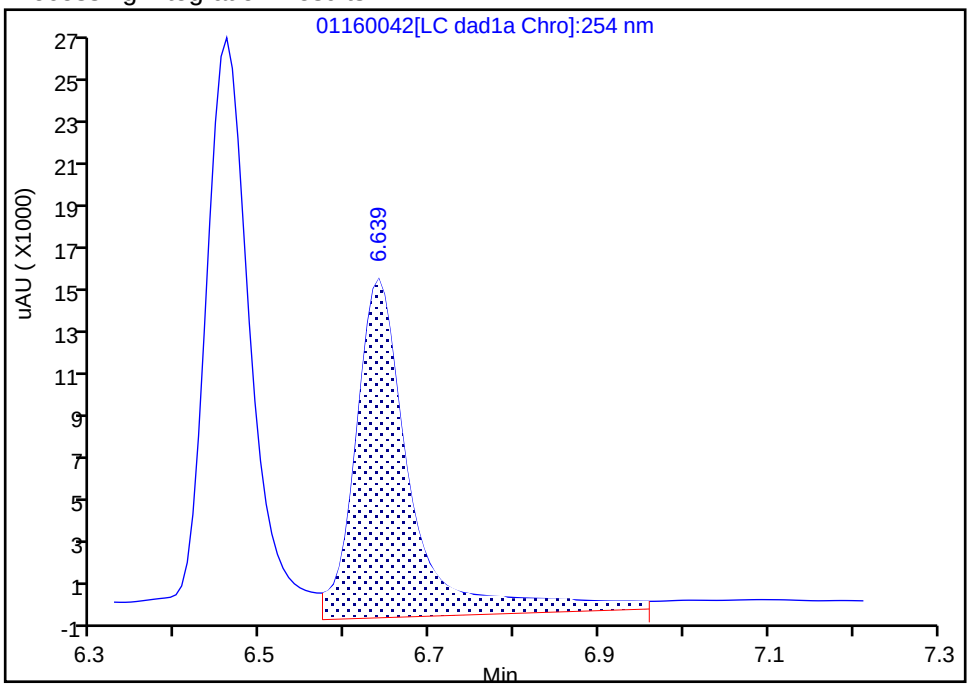
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160042.d				
Injection Date:	17-Jan-2023 01:43:11	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 5				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	45	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

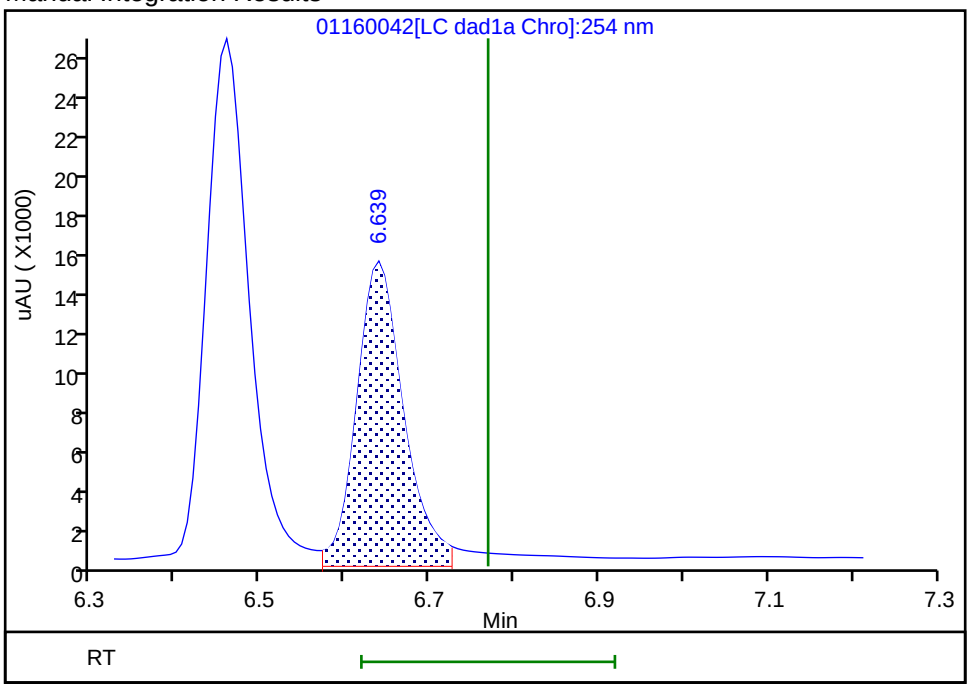
Processing Integration Results

RT: 6.64
Area: 71991
Amount: 0.437489
Amount Units: ug/mL



Manual Integration Results

RT: 6.64
Area: 59001
Amount: 0.402814
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:30:55
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160043.D
Lims ID: IC ADD 4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 17-Jan-2023 02:06:34 ALS Bottle#: 46 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICADD4
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub10

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 17-Jan-2023 12:50:41 Calib Date: 17-Jan-2023 06:47:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160055.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: LV5D Date: 17-Jan-2023 12:31:13

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 2,6-diamino-4-nitrotoluene	1	6.460	6.455	0.005	56309	0.2500	0.2414	M
5 2,4-diamino-6-nitrotoluene	1	6.640	6.769	-0.129	34670	0.2500	0.2367	M
14 3,5-Dinitroaniline	1	9.800	9.800	0.000	59459	0.2500	0.2439	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330_ADDs_00035 Amount Added: 12.50 Units: uL

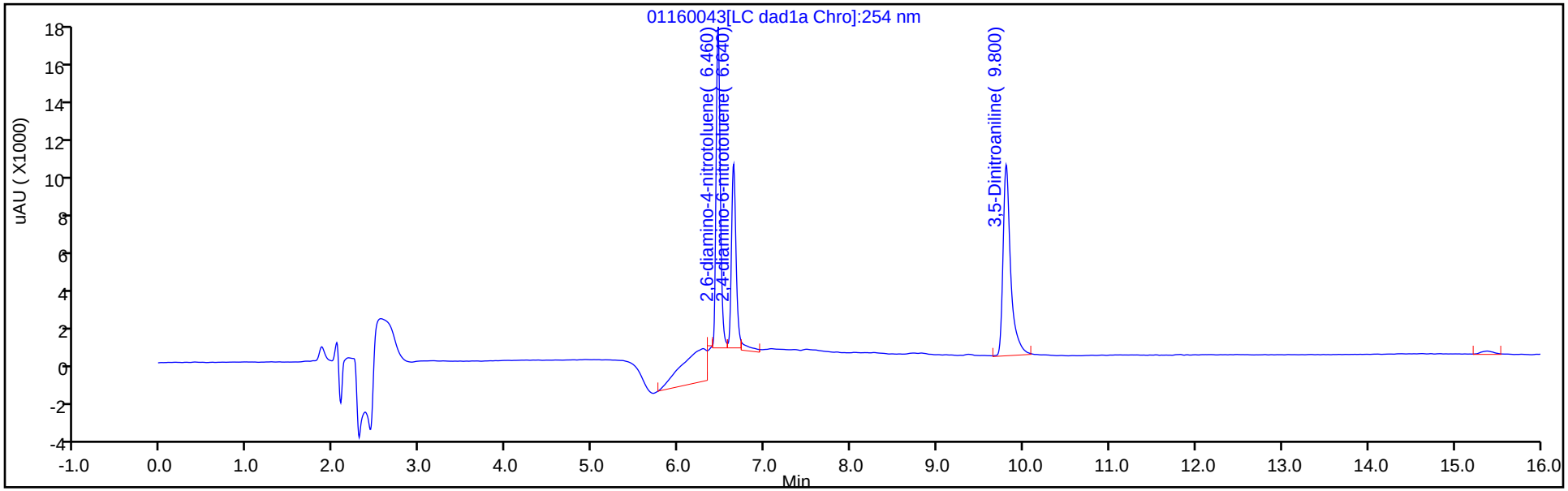
Report Date: 17-Jan-2023 12:50:41 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Denver

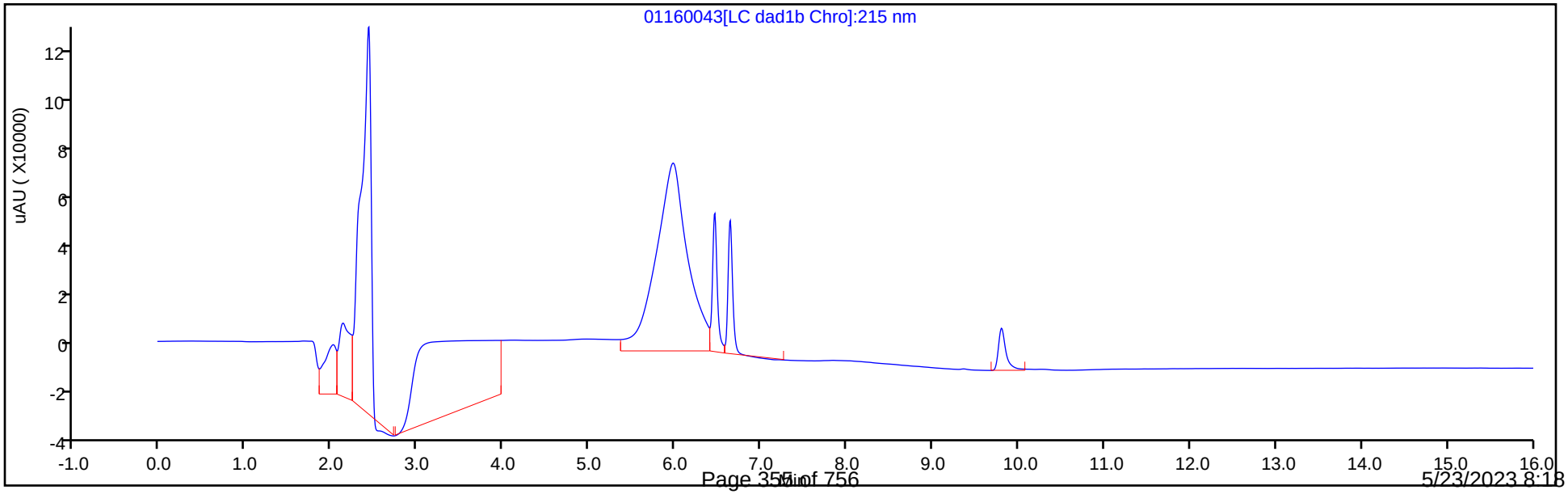
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160043.d

Injection Date:	17-Jan-2023 02:06:34	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC ADD 4			Worklist Smp#:	15
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	46
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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

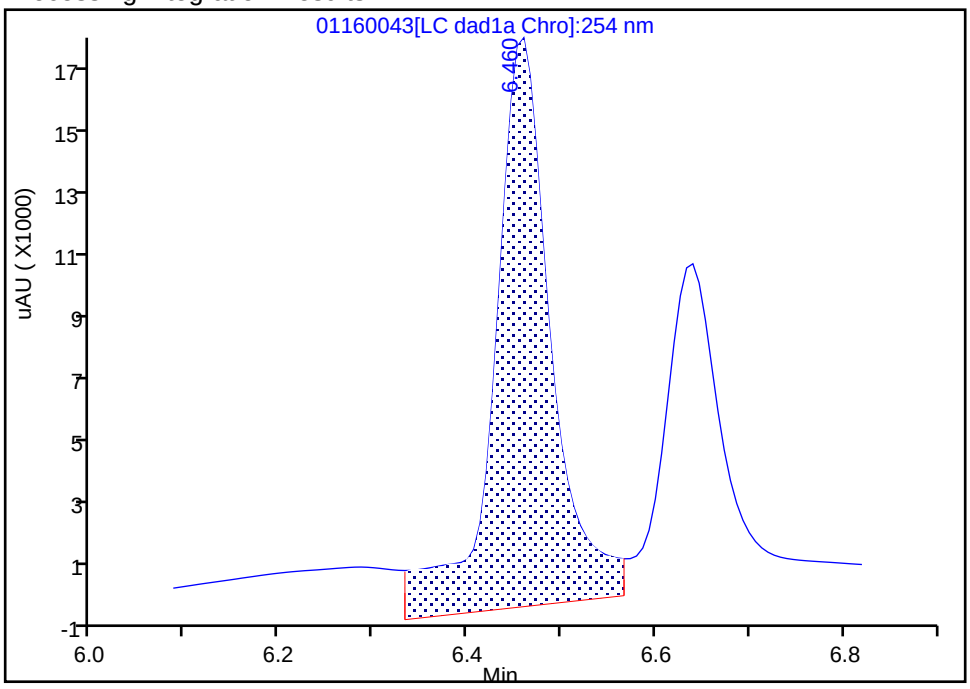
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160043.d
Injection Date: 17-Jan-2023 02:06:34 Instrument ID: CHHPLC_X3
Lims ID: IC ADD 4
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 46 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

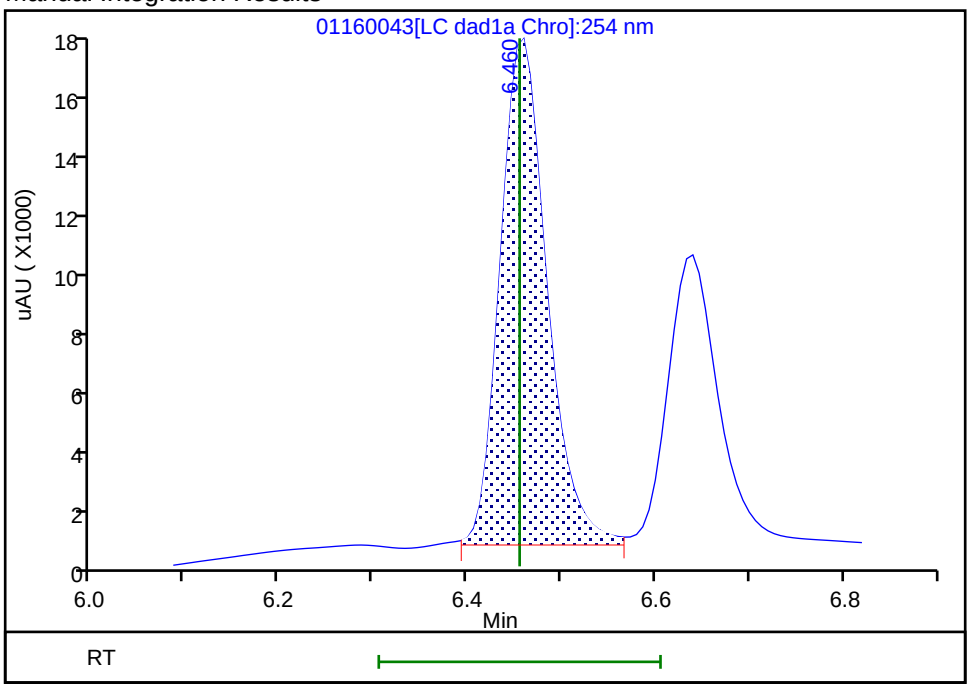
Processing Integration Results

RT: 6.46
Area: 74424
Amount: 0.275328
Amount Units: ug/mL



Manual Integration Results

RT: 6.46
Area: 56309
Amount: 0.241387
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:31:11
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

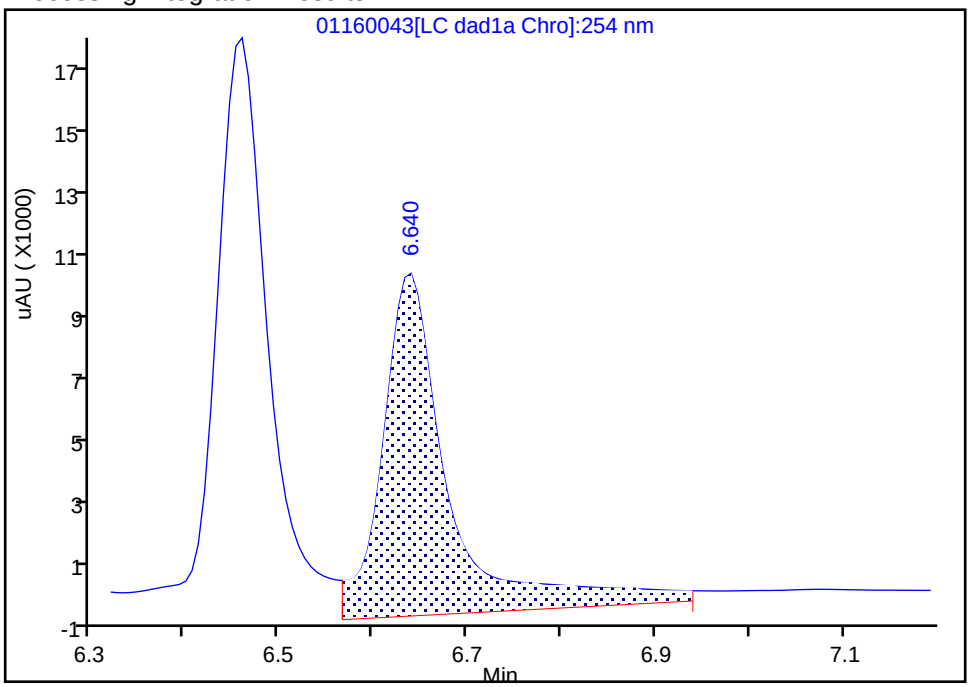
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160043.d				
Injection Date:	17-Jan-2023 02:06:34	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 4				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	46	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

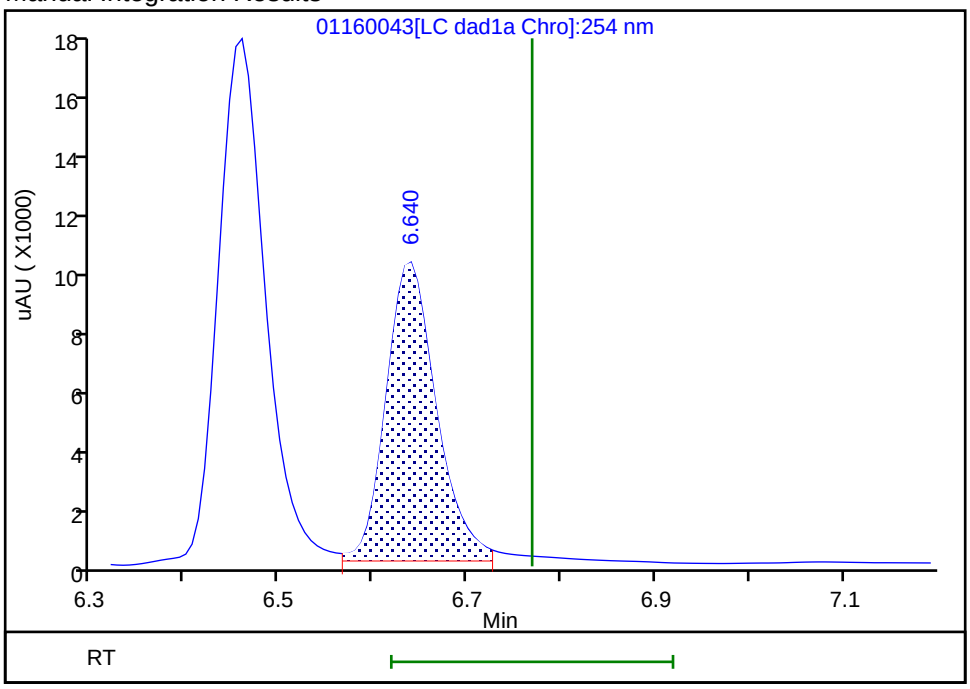
Processing Integration Results

RT: 6.64
Area: 50478
Amount: 0.310727
Amount Units: ug/mL



Manual Integration Results

RT: 6.64
Area: 34670
Amount: 0.236700
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:31:11
Audit Action: Assigned New Baseline Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160044.D
Lims ID: IC ADD 3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 17-Jan-2023 02:30:00 ALS Bottle#: 47 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICADD3
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub10

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 17-Jan-2023 12:50:41 Calib Date: 17-Jan-2023 06:47:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160055.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: LV5D Date: 17-Jan-2023 12:31:24

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 2,6-diamino-4-nitrotoluene	1	6.459	6.455	0.004	24702	0.1000	0.1038	M
5 2,4-diamino-6-nitrotoluene	1	6.632	6.769	-0.137	14908	0.1000	0.1018	M
14 3,5-Dinitroaniline	1	9.812	9.800	0.012	24604	0.1000	0.1019	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330_ADDs_00035 Amount Added: 5.00 Units: uL

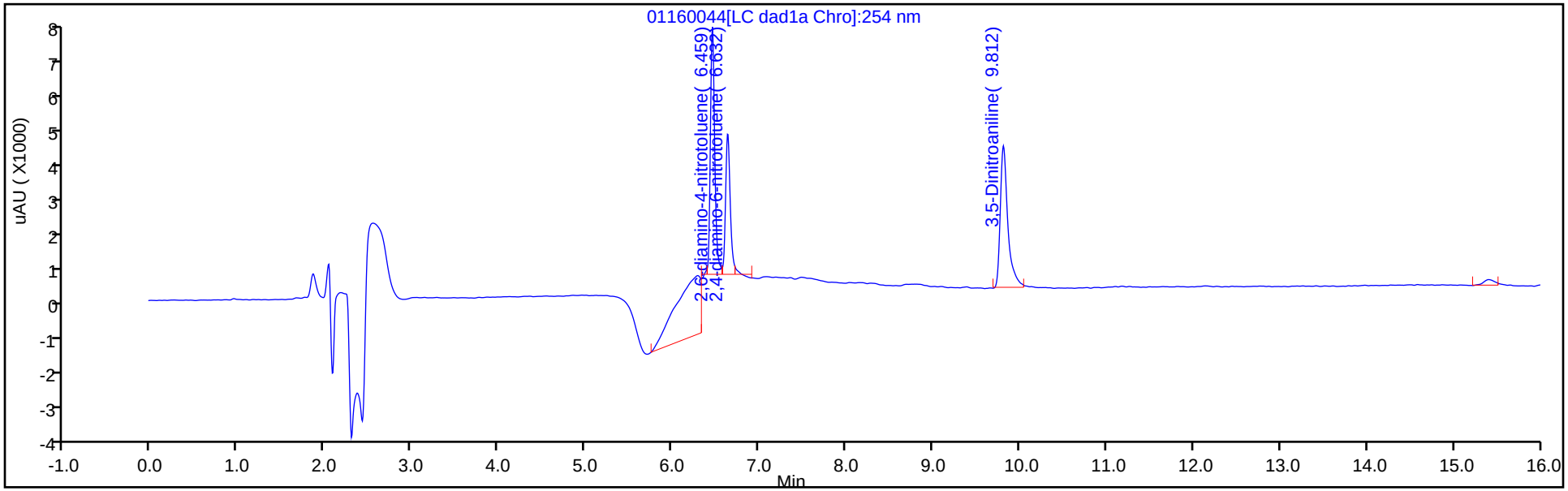
Report Date: 17-Jan-2023 12:50:41 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Denver

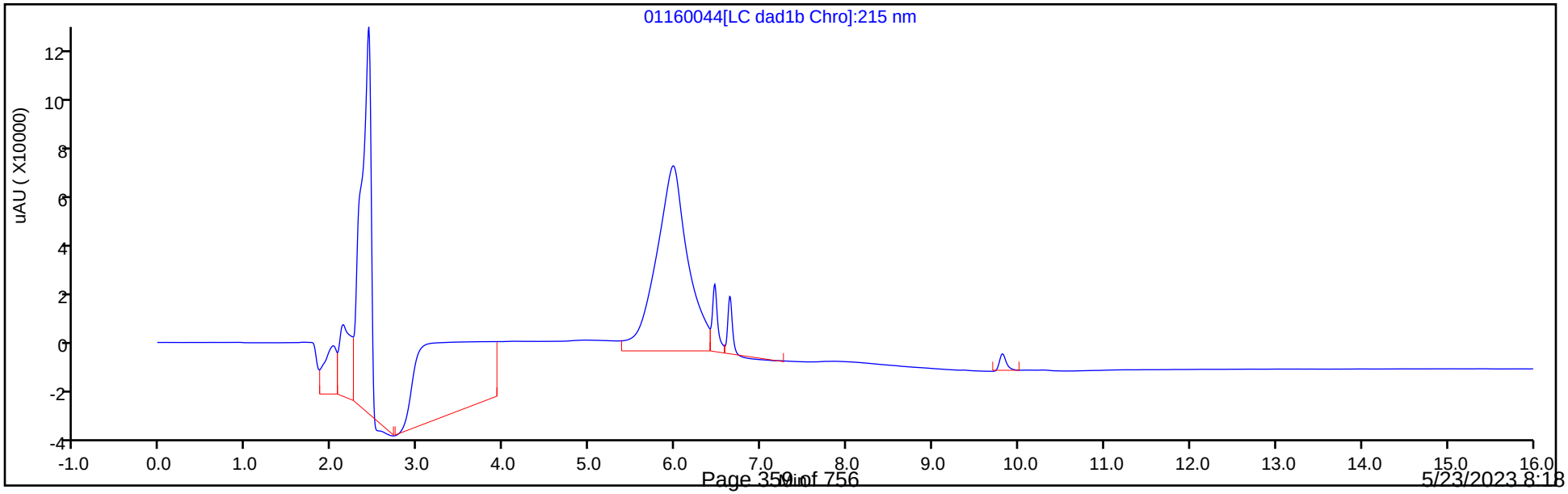
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160044.d

Injection Date:	17-Jan-2023 02:30:00	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC ADD 3			Worklist Smp#:	16
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	47
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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

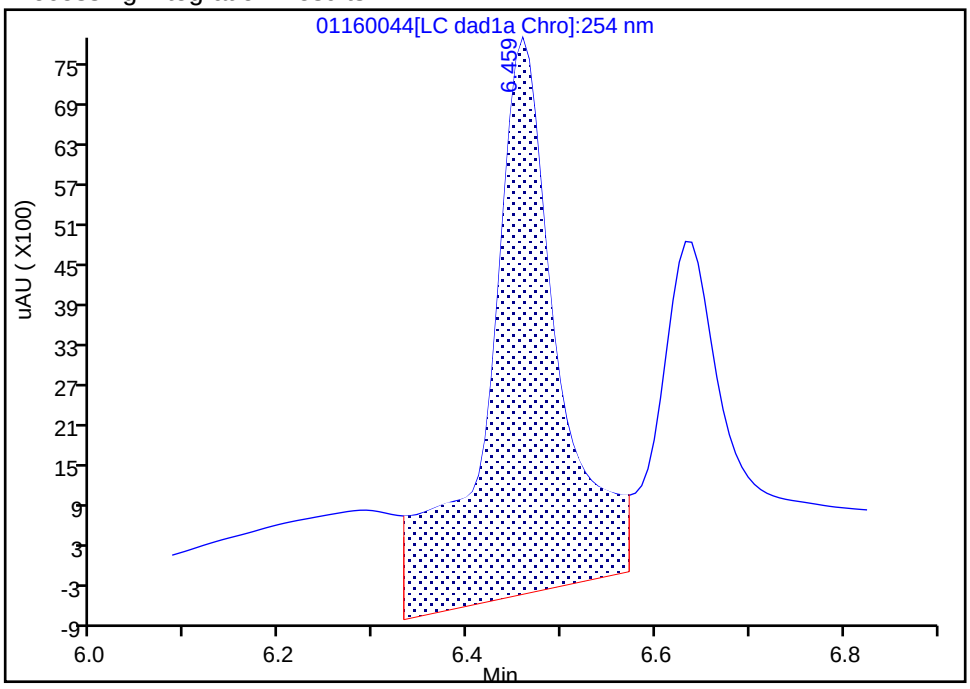
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160044.d
Injection Date: 17-Jan-2023 02:30:00 Instrument ID: CHHPLC_X3
Lims ID: IC ADD 3
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 47 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

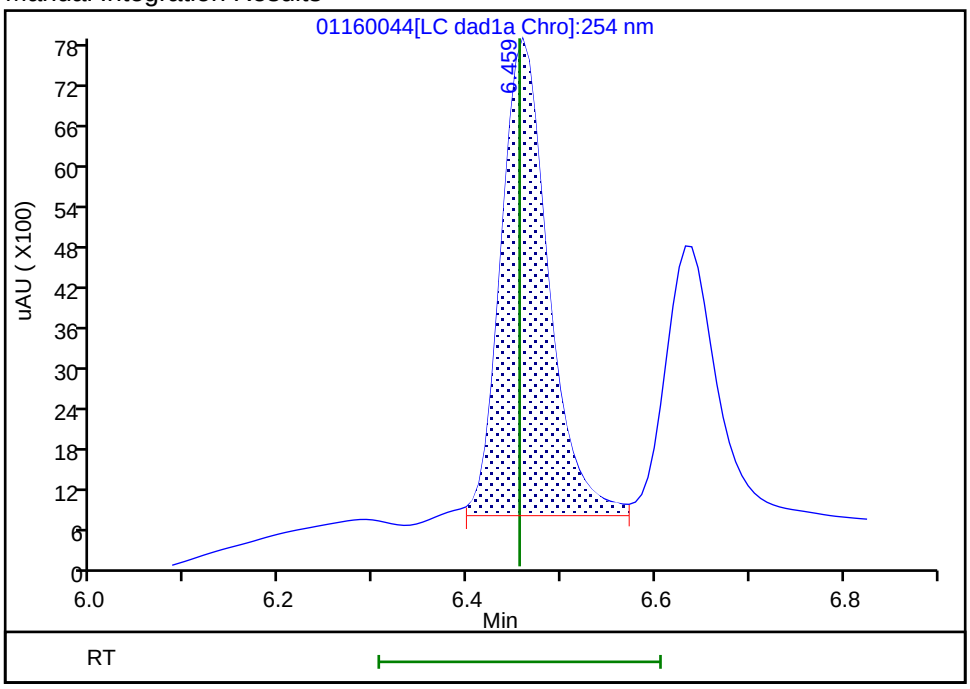
Processing Integration Results

RT: 6.46
Area: 43811
Amount: 0.142153
Amount Units: ug/mL



Manual Integration Results

RT: 6.46
Area: 24702
Amount: 0.103781
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:31:22
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

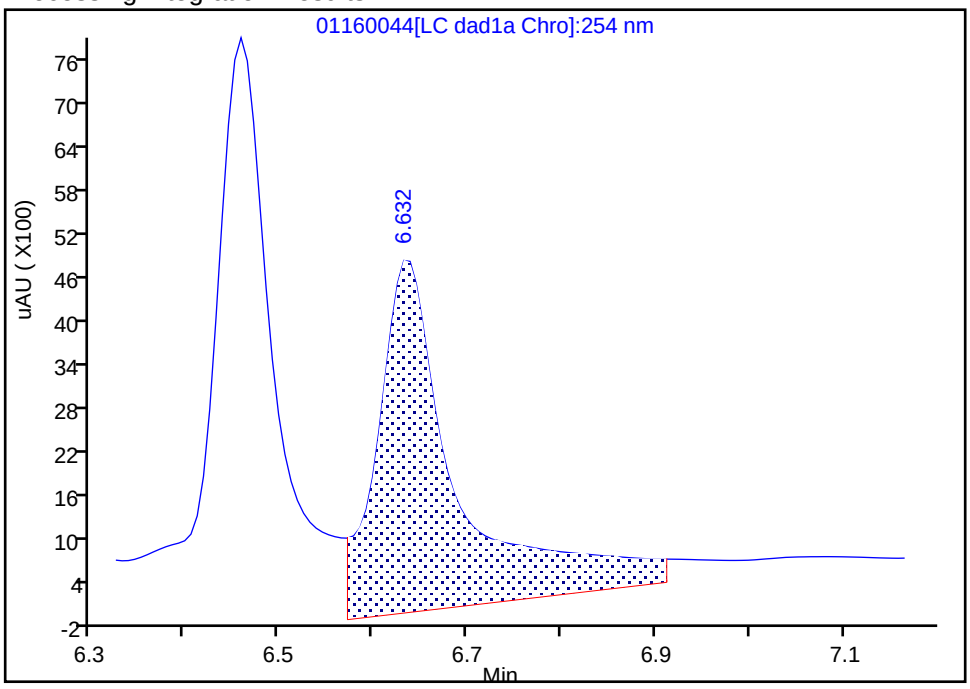
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160044.d
Injection Date: 17-Jan-2023 02:30:00 Instrument ID: CHHPLC_X3
Lims ID: IC ADD 3
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 47 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

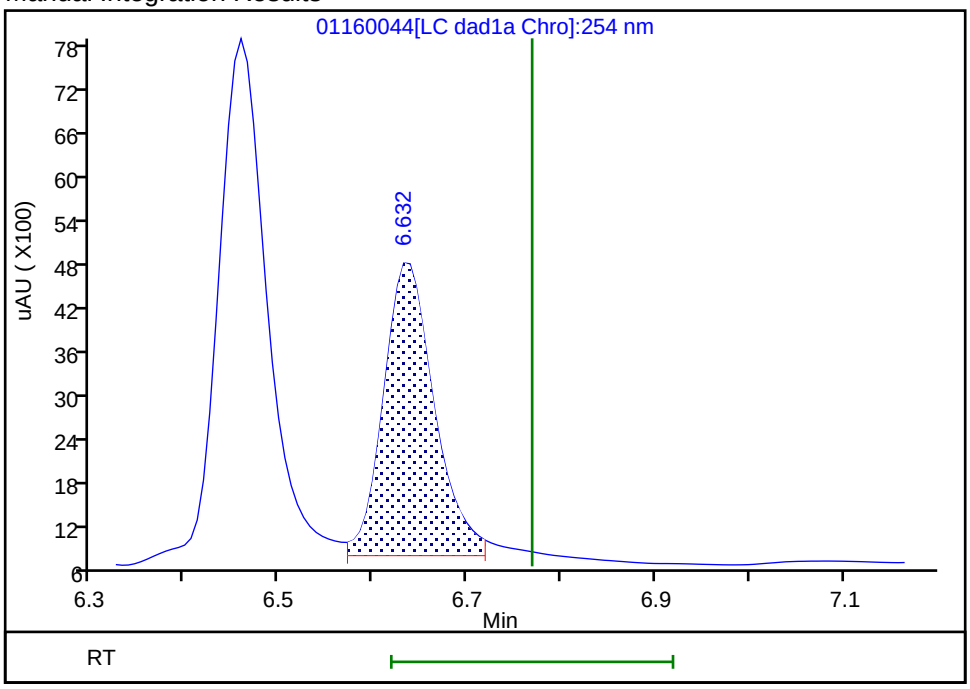
Processing Integration Results

RT: 6.63
Area: 28852
Amount: 0.169920
Amount Units: ug/mL



Manual Integration Results

RT: 6.63
Area: 14908
Amount: 0.101780
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:31:22
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160045.D
Lims ID: IC ADD 2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 17-Jan-2023 02:53:21 ALS Bottle#: 48 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICADD2
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub10

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 17-Jan-2023 12:50:42 Calib Date: 17-Jan-2023 06:47:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160055.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: LV5D Date: 17-Jan-2023 12:31:36

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 2,6-diamino-4-nitrotoluene	1	6.459	6.455	0.004	13039	0.0500	0.0530	M
5 2,4-diamino-6-nitrotoluene	1	6.639	6.769	-0.130	8175	0.0500	0.0558	M
14 3,5-Dinitroaniline	1	9.798	9.800	-0.002	12600	0.0500	0.0529	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330_ADDs_00035 Amount Added: 2.50 Units: uL

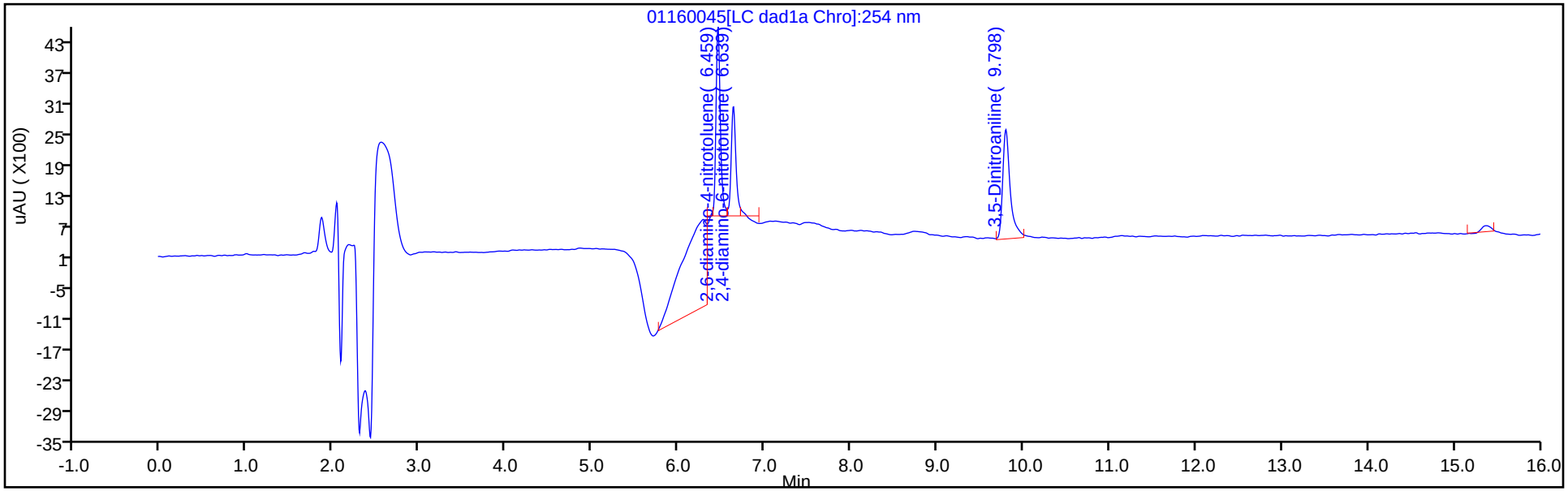
Report Date: 17-Jan-2023 12:50:42 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Denver

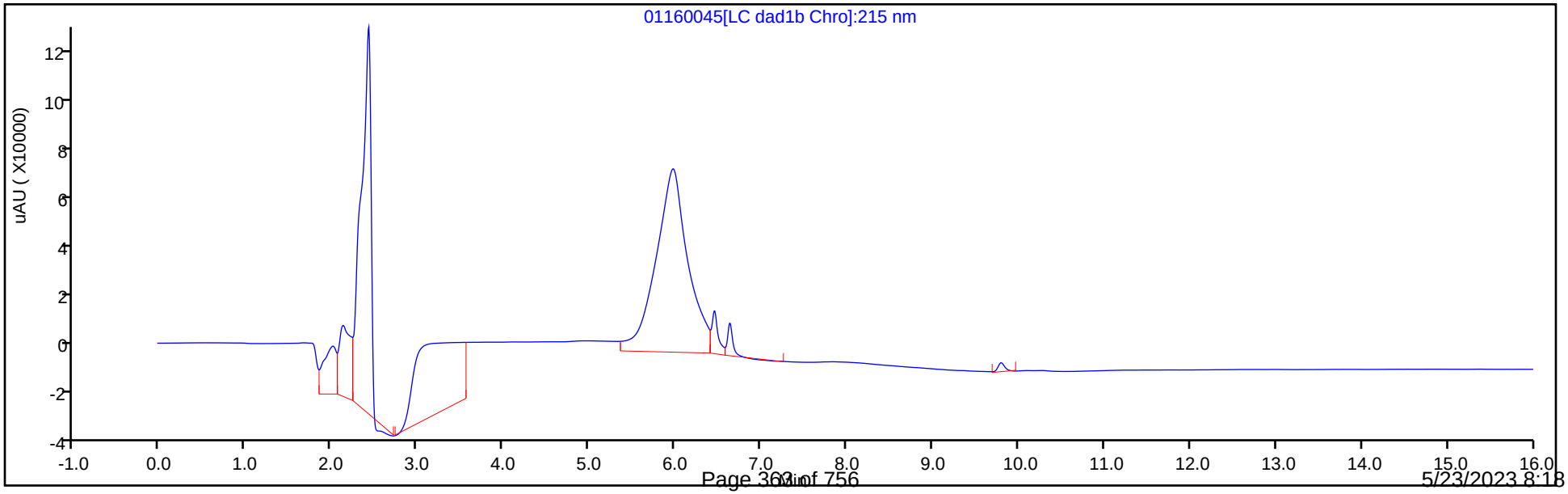
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160045.d

Injection Date:	17-Jan-2023 02:53:21	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC ADD 2			Worklist Smp#:	17
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	48
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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

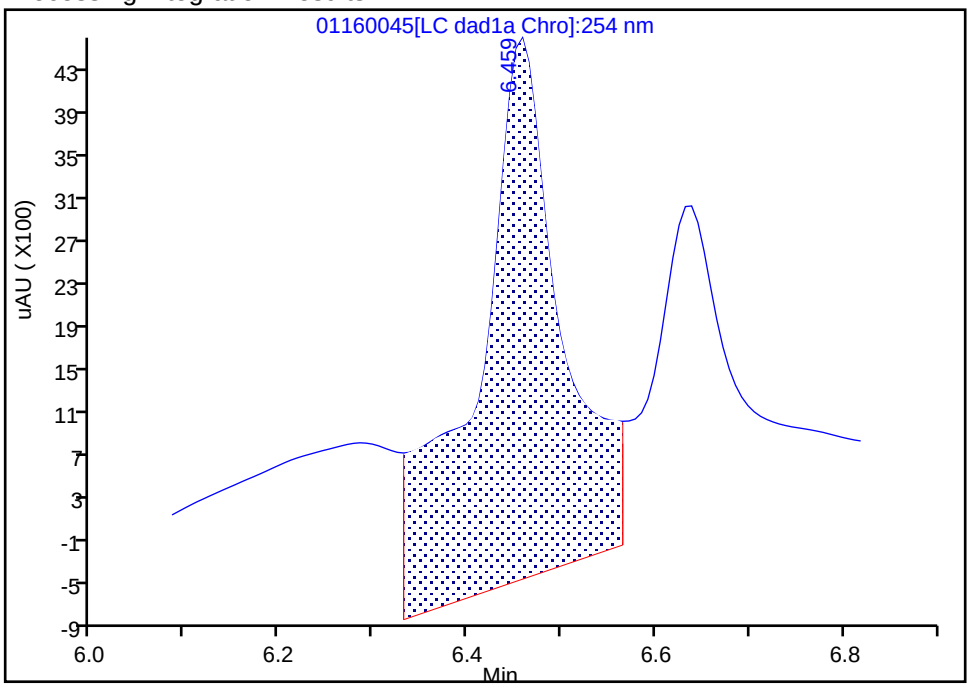
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160045.d				
Injection Date:	17-Jan-2023 02:53:21	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 2				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	48	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

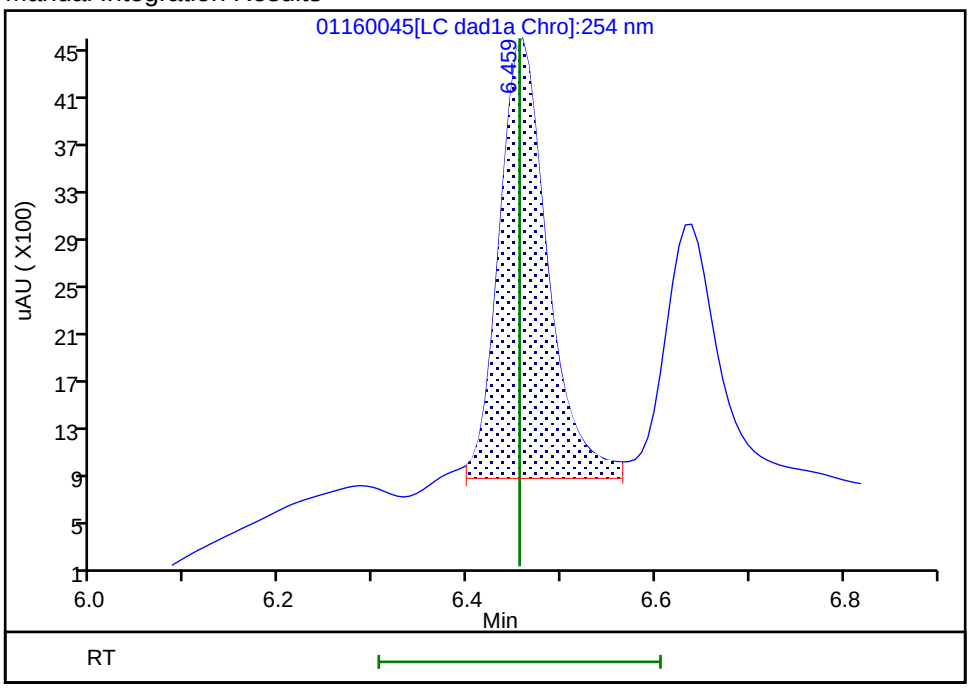
Processing Integration Results

RT: 6.46
Area: 31801
Amount: 0.089109
Amount Units: ug/mL



Manual Integration Results

RT: 6.46
Area: 13039
Amount: 0.053005
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:31:33
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

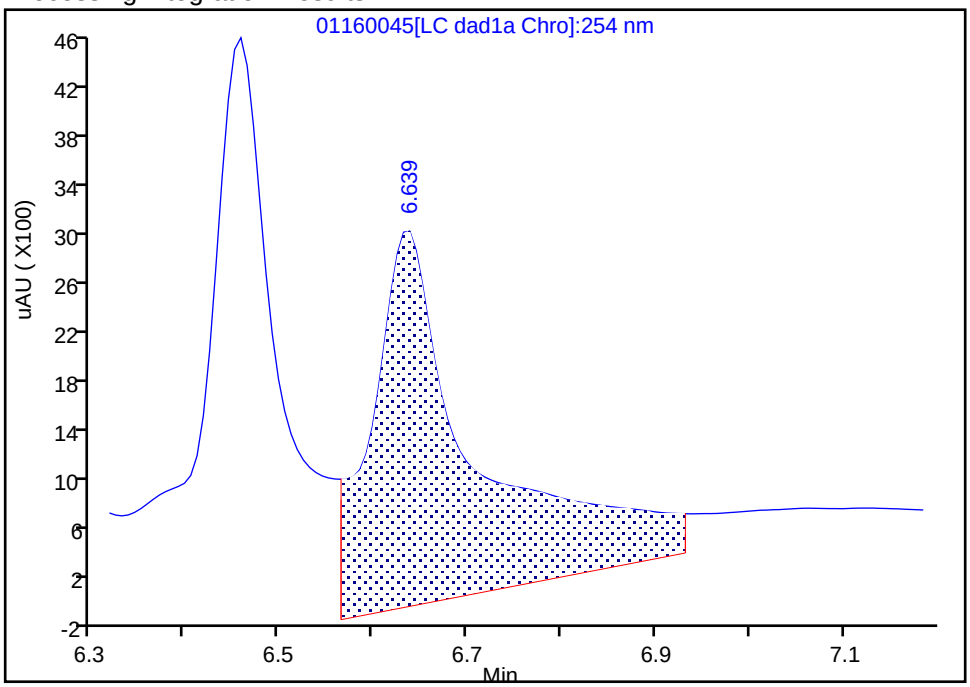
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160045.d				
Injection Date:	17-Jan-2023 02:53:21	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 2				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	48	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

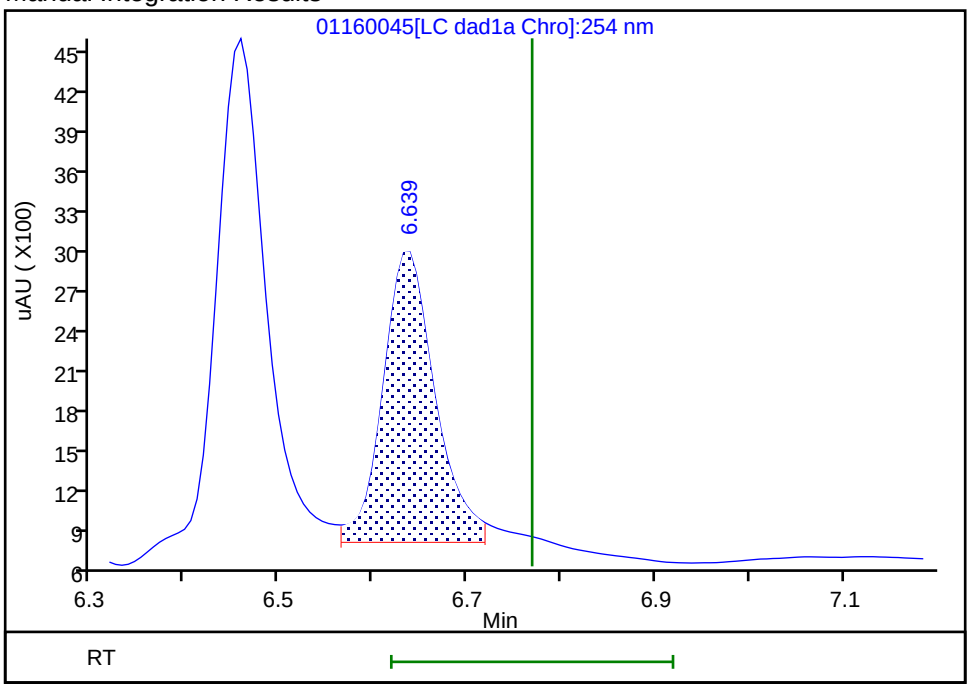
Processing Integration Results

RT: 6.64
Area: 23838
Amount: 0.125460
Amount Units: ug/mL



Manual Integration Results

RT: 6.64
Area: 8175
Amount: 0.055813
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:31:34
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160046.D
Lims ID: IC ADD 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 17-Jan-2023 03:16:44 ALS Bottle#: 49 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICADD1
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub10

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 17-Jan-2023 12:50:42 Calib Date: 17-Jan-2023 06:47:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160055.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: LV5D Date: 17-Jan-2023 12:31:50

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 2,6-diamino-4-nitrotoluene	1	6.459	6.455	0.004	5326	0.0200	0.0194	M
5 2,4-diamino-6-nitrotoluene	1	6.639	6.769	-0.130	3042	0.0200	0.0208	M
14 3,5-Dinitroaniline	1	9.805	9.800	0.005	4397	0.0200	0.0195	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330_ADDs_00035 Amount Added: 1.00 Units: uL

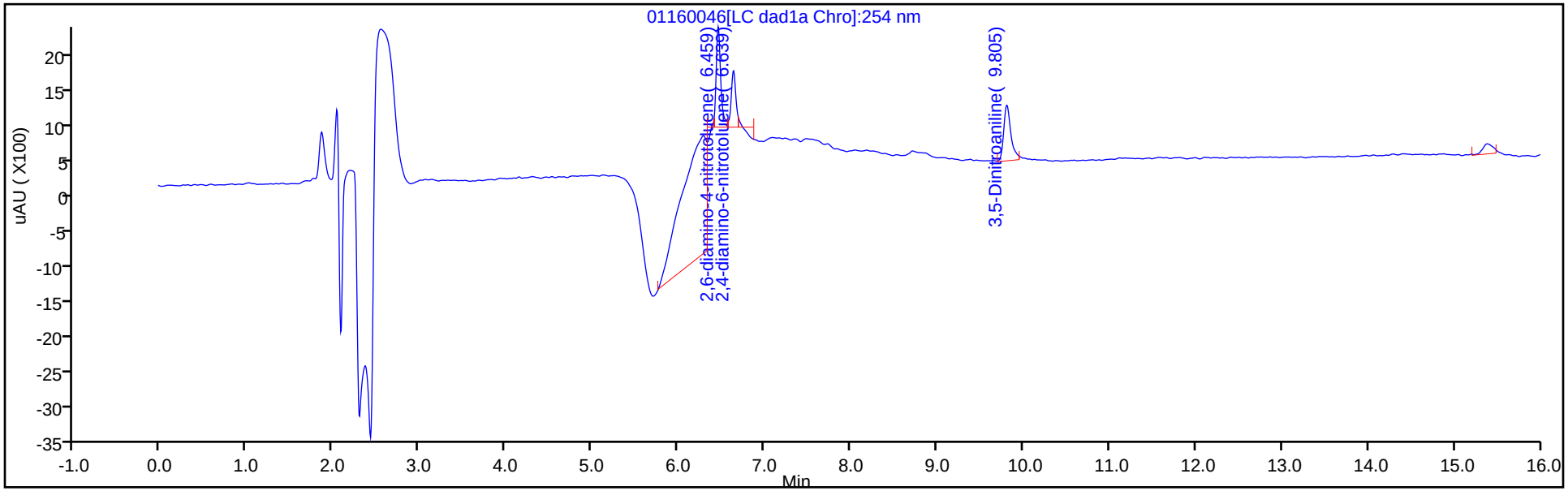
Report Date: 17-Jan-2023 12:50:42 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Denver

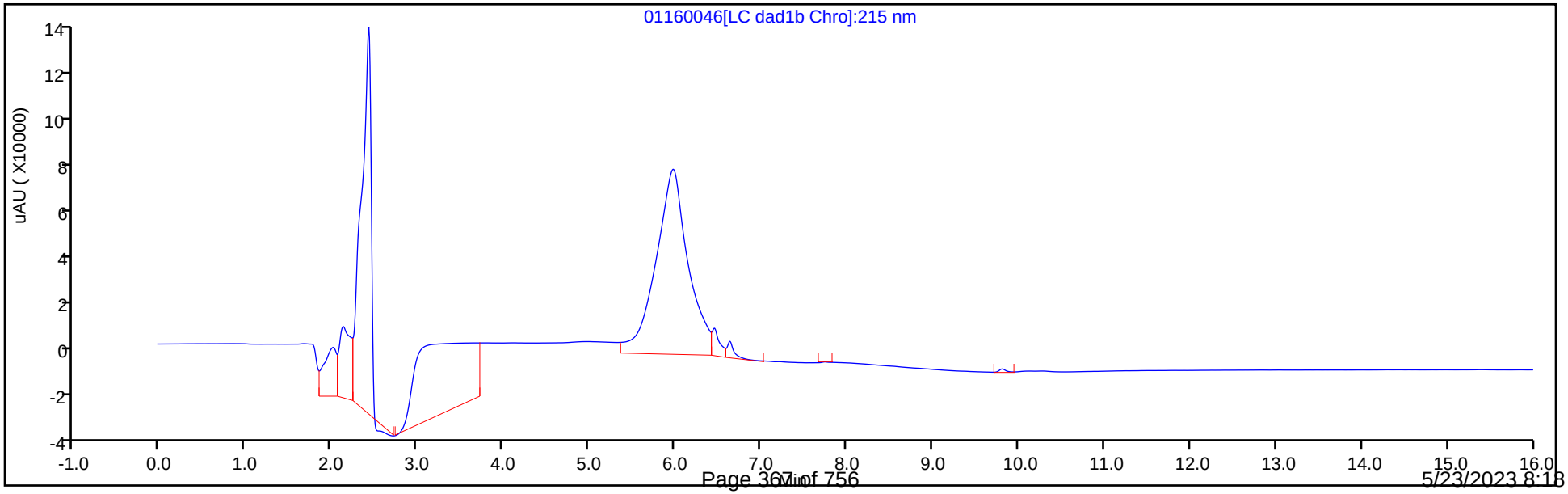
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160046.d

Injection Date:	17-Jan-2023 03:16:44	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC ADD 1			Worklist Smp#:	18
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	49
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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

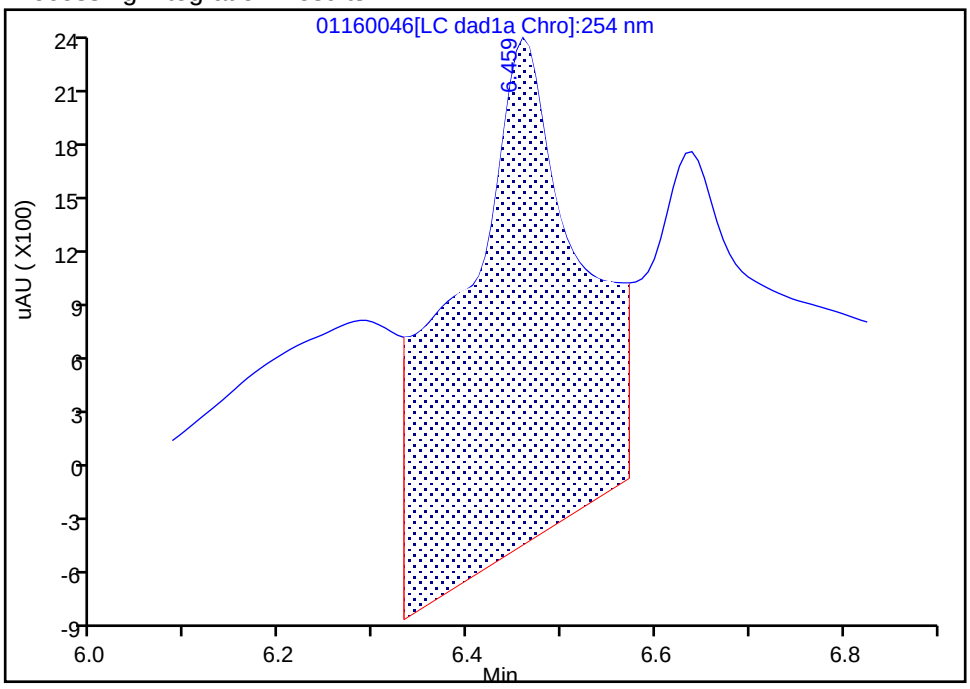
Data File: \\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160046.d
Injection Date: 17-Jan-2023 03:16:44 Instrument ID: CHHPLC_X3
Lims ID: IC ADD 1
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 49 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

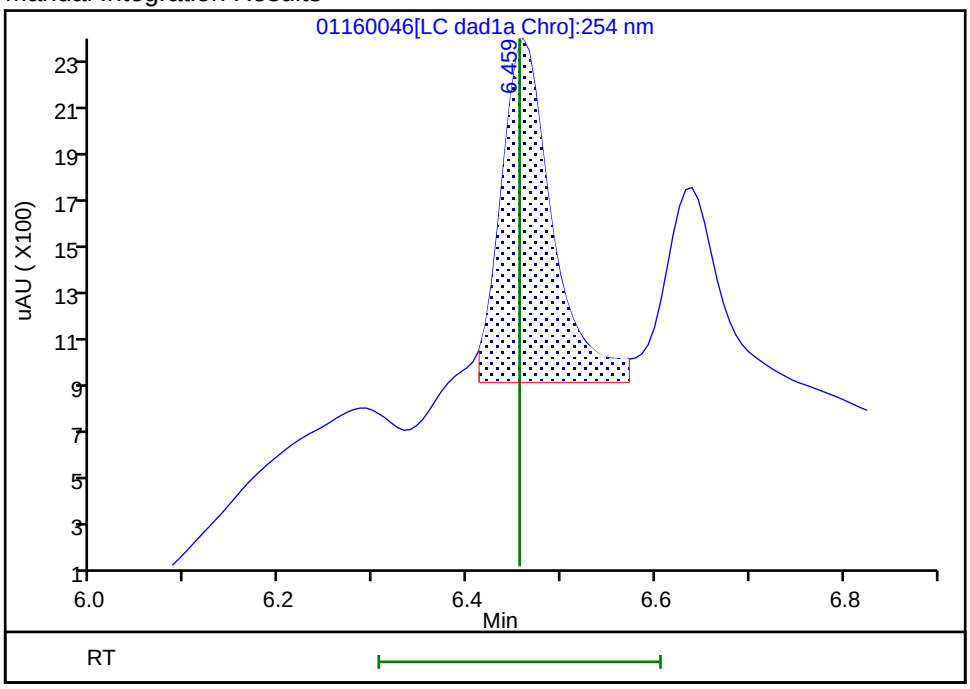
Processing Integration Results

RT: 6.46
Area: 24501
Amount: 0.068213
Amount Units: ug/mL



Manual Integration Results

RT: 6.46
Area: 5326
Amount: 0.019425
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:31:46
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

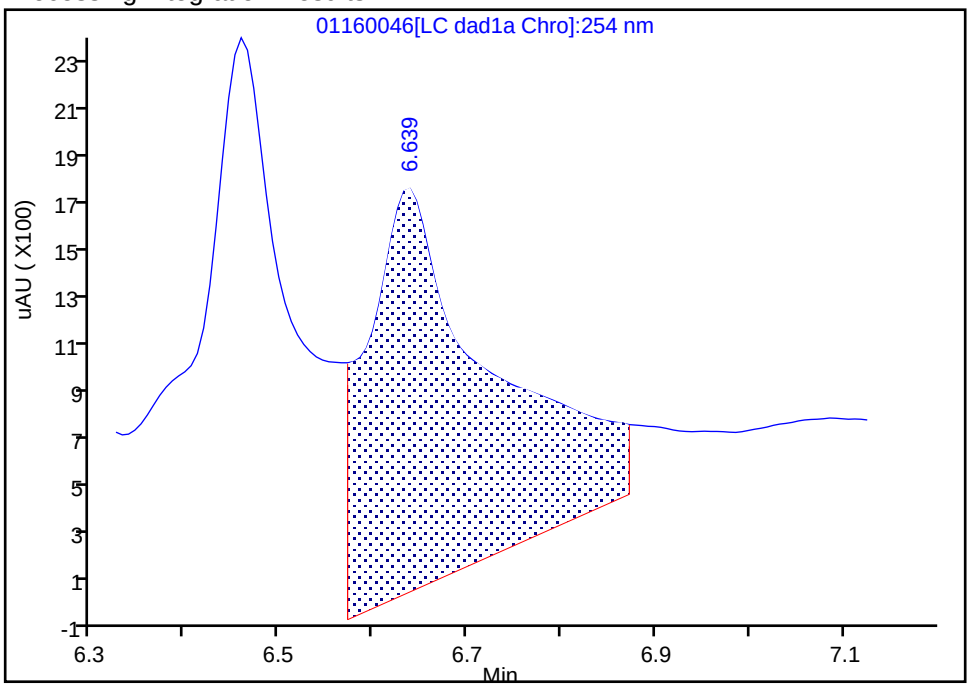
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160046.d				
Injection Date:	17-Jan-2023 03:16:44	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 1				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	49	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

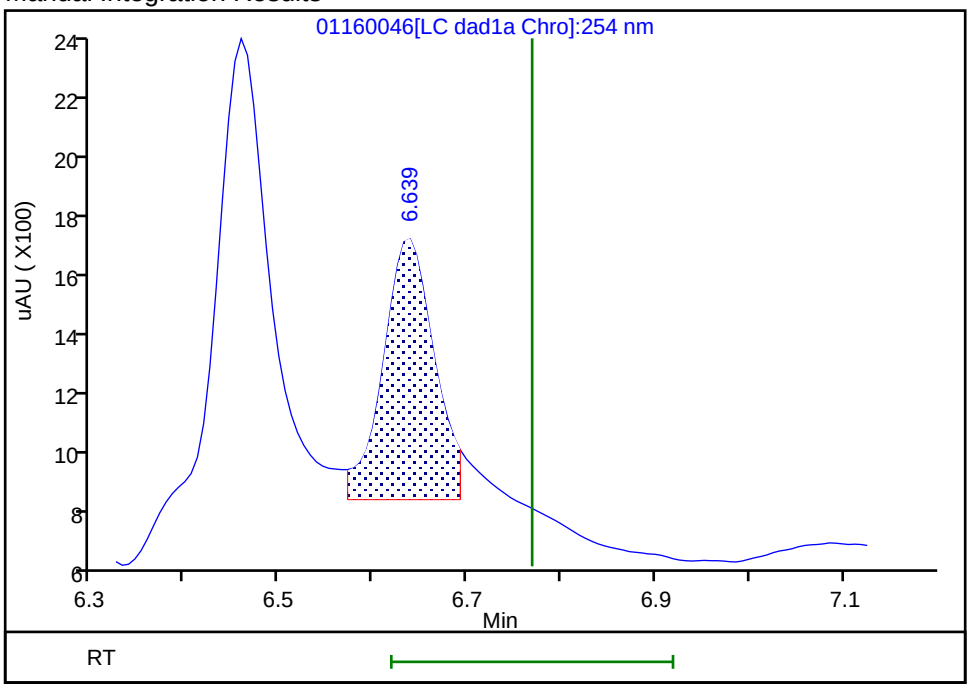
Processing Integration Results

RT: 6.64
Area: 15283
Amount: 0.068540
Amount Units: ug/mL



Manual Integration Results

RT: 6.64
Area: 3042
Amount: 0.020768
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:31:48
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Calibration / 2,6-diamino-4-nitrotoluene

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

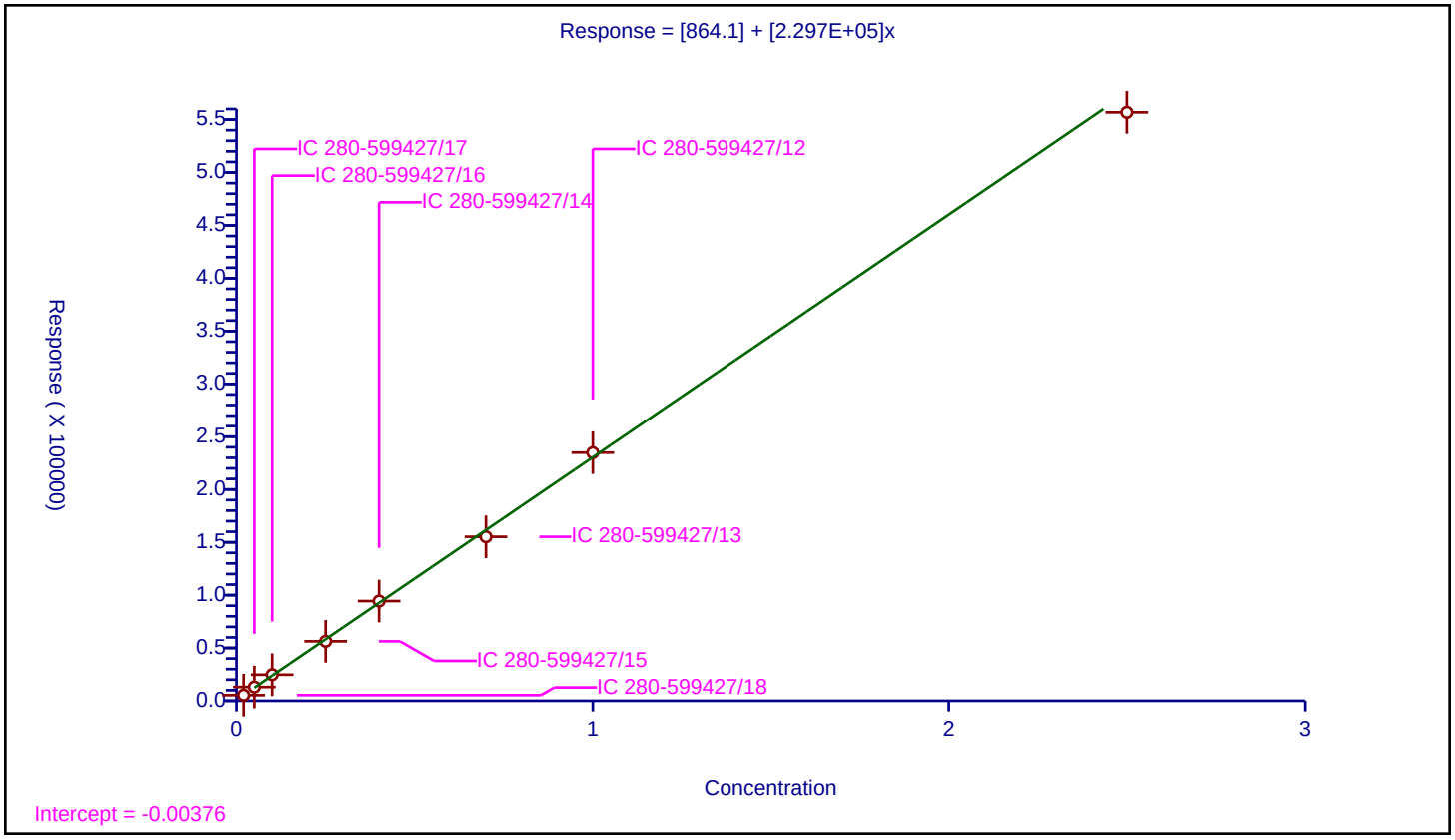
Curve Coefficients

Intercept:	864.1
Slope:	2.297E+05

Error Coefficients

Standard Error:	8170
Relative Standard Error:	4.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-599427/18	0.02	5326.0			266300.0	Y
2	IC 280-599427/17	0.05	13039.0			260780.0	Y
3	IC 280-599427/16	0.1	24702.0			247020.0	Y
4	IC 280-599427/15	0.25	56309.0			225236.0	Y
5	IC 280-599427/14	0.4	94399.0			235997.5	Y
6	IC 280-599427/13	0.7	155237.0			221767.142857	Y
7	IC 280-599427/12	1.0	234891.0			234891.0	Y
8	IC 280-599427/11	2.5	556860.0			222744.0	Y



Calibration / 2,4-diamino-6-nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

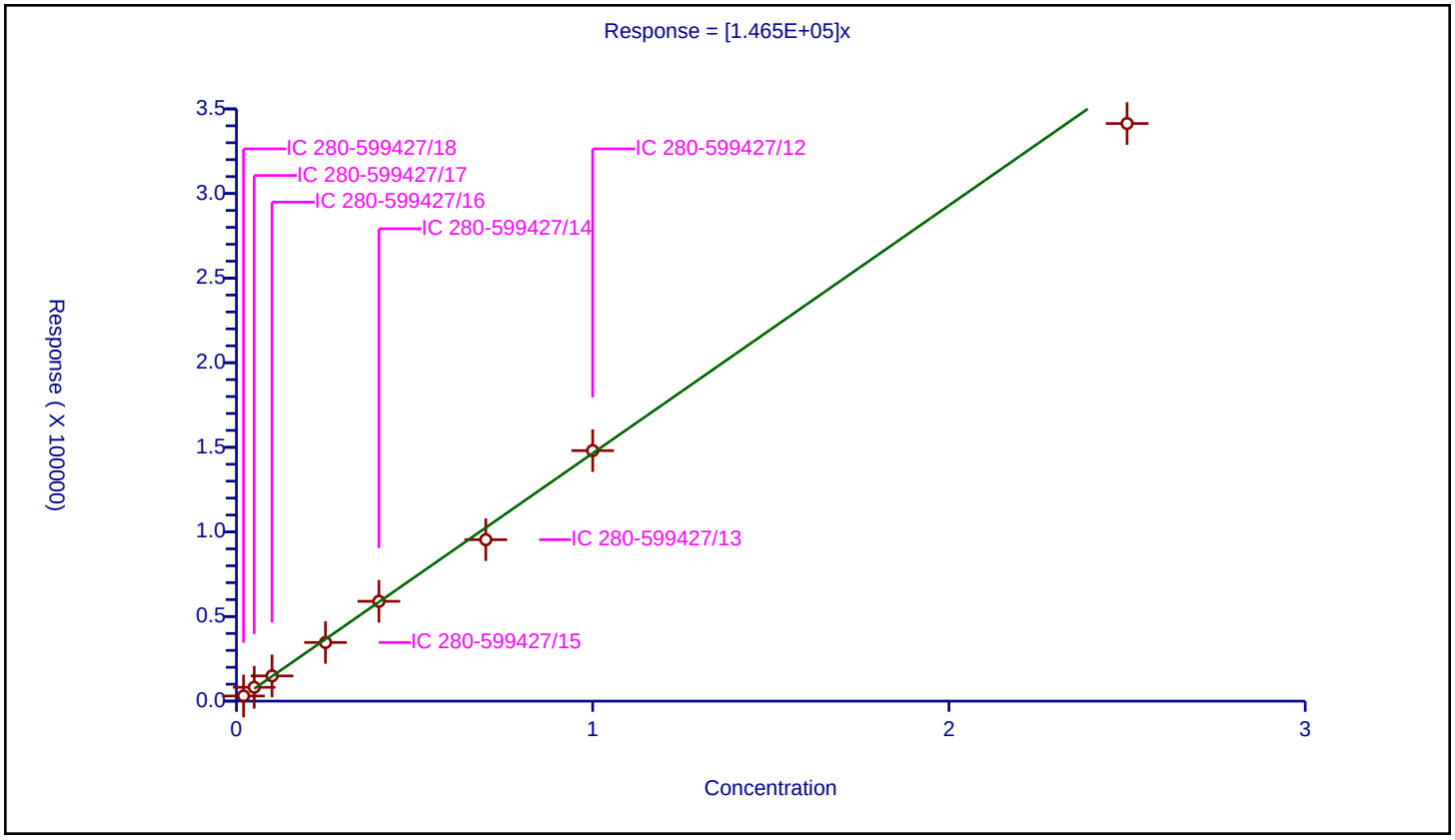
Curve Coefficients

Intercept:	0
Slope:	1.465E+05

Error Coefficients

Standard Error:	9810
Relative Standard Error:	6.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-599427/18	0.02	3042.0			152100.0	Y
2	IC 280-599427/17	0.05	8175.0			163500.0	Y
3	IC 280-599427/16	0.1	14908.0			149080.0	Y
4	IC 280-599427/15	0.25	34670.0			138680.0	Y
5	IC 280-599427/14	0.4	59001.0			147502.5	Y
6	IC 280-599427/13	0.7	95423.0			136318.571429	Y
7	IC 280-599427/12	1.0	148050.0			148050.0	Y
8	IC 280-599427/11	2.5	341365.0			136546.0	Y



Calibration / 3,5-Dinitroaniline

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

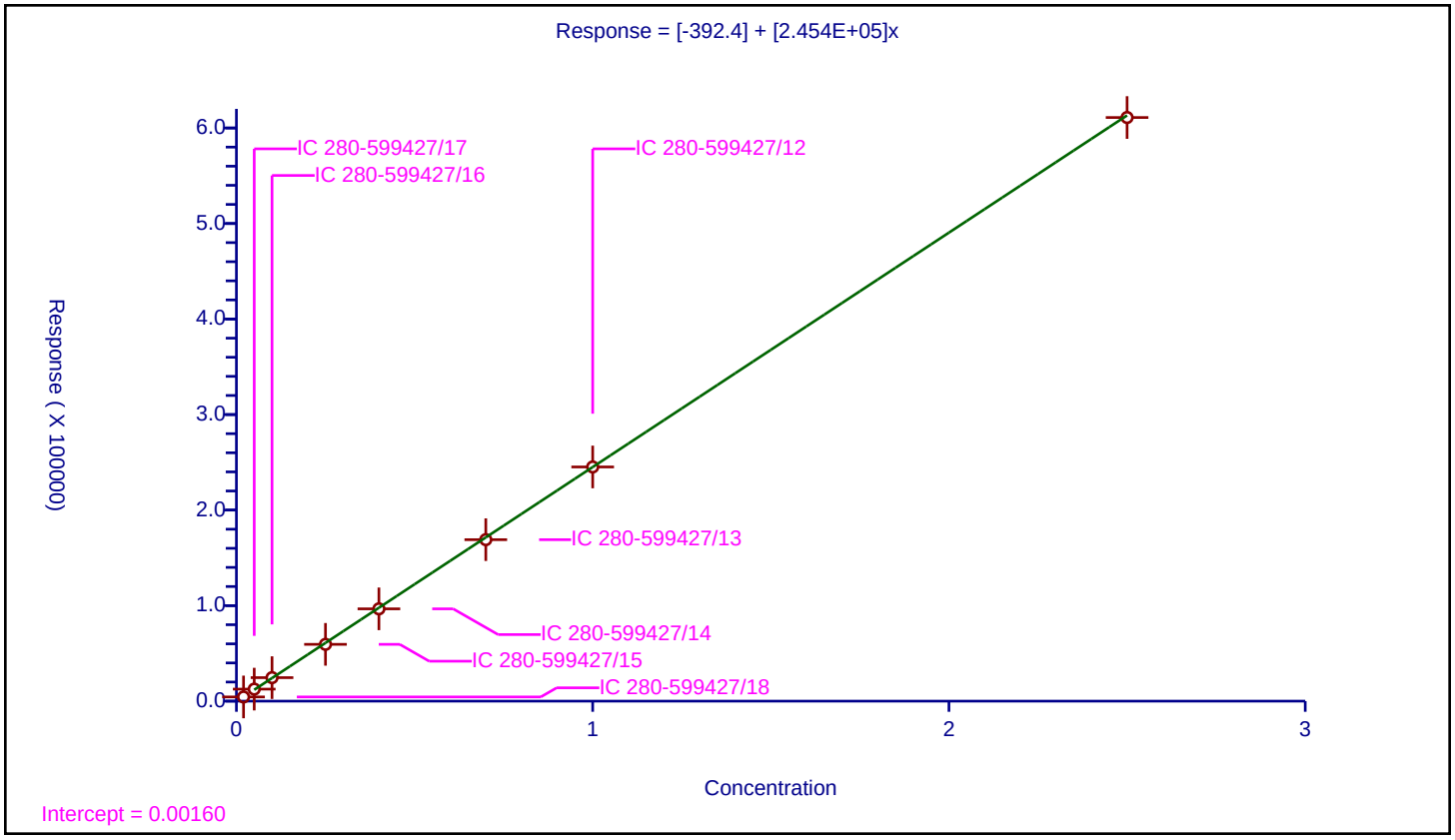
Curve Coefficients

Intercept:	-392.4
Slope:	2.454E+05

Error Coefficients

Standard Error:	1570
Relative Standard Error:	3.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-599427/18	0.02	4397.0			219850.0	Y
2	IC 280-599427/17	0.05	12600.0			252000.0	Y
3	IC 280-599427/16	0.1	24604.0			246040.0	Y
4	IC 280-599427/15	0.25	59459.0			237836.0	Y
5	IC 280-599427/14	0.4	96632.0			241580.0	Y
6	IC 280-599427/13	0.7	169039.0			241484.285714	Y
7	IC 280-599427/12	1.0	245164.0			245164.0	Y
8	IC 280-599427/11	2.5	610953.0			244381.2	Y



FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176134-1 Analy Batch No.: 601664

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/08/2023 15:38 Calibration End Date: 02/08/2023 18:42 Calibration ID: 76877

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-601664/19	02080019.D
Level 2	IC 280-601664/18	02080018.D
Level 3	IC 280-601664/17	02080017.D
Level 4	IC 280-601664/16	02080016.D
Level 5	IC 280-601664/15	02080015.D
Level 6	IC 280-601664/14	02080014.D
Level 7	IC 280-601664/13	02080013.D
Level 8	IC 280-601664/12	02080012.D
Level 9	IC 280-601664/11	02080011.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	6.550	6.549	6.547	6.544	6.548	6.548	6.544	6.547	6.546		6.394 - 6.694	6.547
RDX	7.563	7.563	7.567	7.564	7.568	7.562	7.564	7.567	7.559		7.414 - 7.714	7.564
Picric acid	8.050	8.049	8.047	8.044	8.041	8.028	8.018	8.014	7.966		7.894 - 8.194	8.029
1,3,5-Trinitrobenzene	8.643	8.643	8.647	8.644	8.641	8.642	8.638	8.647	8.639		8.494 - 8.794	8.643
1,3-Dinitrobenzene	9.263	9.256	9.260	9.257	9.255	9.255	9.251	9.260	9.246		9.107 - 9.407	9.256
Nitrobenzene	9.636	9.636	9.633	9.631	9.628	9.628	9.624	9.634	9.619		9.481 - 9.781	9.630
3,5-Dinitroaniline	9.836	9.836	9.840	9.831	9.828	9.828	9.824	9.840	9.819		9.681 - 9.981	9.831
Tetryl	9.983	9.982	9.987	9.977	9.975	9.968	9.971	9.987	9.966		9.827 - 10.127	9.977
Nitroglycerin	10.450	10.449	10.453	10.437	10.441	10.435	10.437	10.454	10.426		10.287 - 10.587	10.442
2,4,6-Trinitrotoluene	10.876	10.876	10.880	10.864	10.868	10.868	10.864	10.880	10.859		10.764 - 10.964	10.871
4-Amino-2,6-dinitrotoluene	11.043	11.042	11.040	11.031	11.028	11.022	11.024	11.040	11.013		10.931 - 11.131	11.031
2-Amino-4,6-dinitrotoluene	11.296	11.289	11.293	11.277	11.275	11.275	11.271	11.287	11.259		11.177 - 11.377	11.280
2,6-Dinitrotoluene	11.470	11.469	11.467	11.451	11.455	11.448	11.451	11.467	11.439		11.351 - 11.551	11.457
2,4-Dinitrotoluene	11.636	11.636	11.633	11.617	11.621	11.615	11.617	11.634	11.606		11.517 - 11.717	11.624
2-Nitrotoluene	12.456	12.456	12.453	12.437	12.441	12.435	12.431	12.447	12.426		12.287 - 12.587	12.442
4-Nitrotoluene	12.863	12.869	12.867	12.844	12.848	12.842	12.844	12.860	12.833		12.694 - 12.994	12.852
3-Nitrotoluene	13.430	13.442	13.433	13.411	13.415	13.408	13.404	13.420	13.399		13.261 - 13.561	13.418
PETN	14.583	14.589	14.580	14.551	14.555	14.548	14.544	14.567	14.539		14.401 - 14.701	14.562
1,2-Dinitrobenzene	8.517	8.516	8.520	8.517	8.515	8.515	8.511	8.521	8.506		8.367 - 8.667	8.515

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

Lab Name: Eurofins Denver Job No.: 280-176134-1 Analy Batch No.: 601664

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/08/2023 15:38 Calibration End Date: 02/08/2023 18:42 Calibration ID: 76877

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-601664/19	02080019.D
Level 2	IC 280-601664/18	02080018.D
Level 3	IC 280-601664/17	02080017.D
Level 4	IC 280-601664/16	02080016.D
Level 5	IC 280-601664/15	02080015.D
Level 6	IC 280-601664/14	02080014.D
Level 7	IC 280-601664/13	02080013.D
Level 8	IC 280-601664/12	02080012.D
Level 9	IC 280-601664/11	02080011.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	96200 93960 91737	98050 92130	92960 91317	93870 91529	Ave		93528.1492				2.5		20.0			
RDX	120300 102168 106491	109800 103248	104720 102589	101120 106983	Ave		106379.808				5.5		20.0			
Picric acid	67300 77436 78734	74600 77483	75360 77481	76400 77676	Ave		75829.9476				4.5		20.0			
1,3,5-Trinitrobenzene	219600 217528 217838	215650 218445	213580 218654	213990 219038	Ave		217147.032				1.0		20.0			
1,3-Dinitrobenzene	290200 296196 297242	292450 296278	293280 294821	292490 296615	Ave		294396.925				0.8		20.0			
Nitrobenzene	190500 190360 192956	190800 192660	192100 189984	190190 191651	Ave		191244.543				0.6		20.0			
3,5-Dinitroaniline	214700 228212 230510	218850 227498	228520 228160	227230 229927	Lin2	-154.28261	229201.890							1.0000		0.9900
Tetryl	161100 165680 166480	153650 171658	163060 165663	164380 165416	Ave		164120.706				3.0		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.: 280-176134-1 Analy Batch No.: 601664

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/08/2023 15:38 Calibration End Date: 02/08/2023 18:42 Calibration ID: 76877

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								
Nitroglycerin	61590 64985 65842	59395 66398	63298 66047	63170 65903	Ave		64069.9243				3.7		20.0			
2,4,6-Trinitrotoluene	216700 210476 209648	213100 208335	214160 208960	207870 210110	Ave		211039.889				1.4		20.0			
4-Amino-2,6-dinitrotoluene	167000 152884 152878	155300 152868	157500 150916	154070 150980	Ave		154932.802				3.2		20.0			
2-Amino-4,6-dinitrotoluene	221400 198056 200205	201050 198963	201440 196574	197650 197356	Ave		201410.398				3.8		20.0			
2,6-Dinitrotoluene	148600 143452 140114	145550 140035	142180 142239	139670 142869	Ave		142745.397				2.0		20.0			
2,4-Dinitrotoluene	314100 293052 294340	299250 294023	297440 290757	295390 291656	Ave		296667.471				2.4		20.0			
2-Nitrotoluene	137700 124752 126235	130550 125108	132460 124116	125480 124668	Ave		127896.490				3.7		20.0			
4-Nitrotoluene	126300 108612 108849	119650 108228	111680 107359	108570 107671	Ave		111879.808				5.9		20.0			
3-Nitrotoluene	147300 137292 138526	153100 136790	141920 136640	136660 136203	Ave		140492.289				4.2		20.0			
PETN	72730 68498 68809	67310 68653	68114 68586	68161 68748	Ave		68845.4251				2.2		20.0			
1,2-Dinitrobenzene	118800 127432 129675	124550 128775	125560 126837	127270 127879	Ave		126308.705				2.5		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.: 280-176134-1 Analy Batch No.: 601664

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/08/2023 15:38 Calibration End Date: 02/08/2023 18:42 Calibration ID: 76877

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-601664/19	02080019.D
Level 2	IC 280-601664/18	02080018.D
Level 3	IC 280-601664/17	02080017.D
Level 4	IC 280-601664/16	02080016.D
Level 5	IC 280-601664/15	02080015.D
Level 6	IC 280-601664/14	02080014.D
Level 7	IC 280-601664/13	02080013.D
Level 8	IC 280-601664/12	02080012.D
Level 9	IC 280-601664/11	02080011.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	962 36852	1961 63922	4648 91529	9387 229343	23490	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
RDX	Ave	1203 41299	2196 71812	5236 106983	10112 266228	25542	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Picric acid	Ave	673 30993	1492 54237	3768 77676	7640 196834	19359	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
1,3,5-Trinitrobenzene	Ave	2196 87378	4313 153058	10679 219038	21399 544595	54382	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
1,3-Dinitrobenzene	Ave	2902 118511	5849 206375	14664 296615	29249 743106	74049	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Nitrobenzene	Ave	1905 77064	3816 132989	9605 191651	19019 482389	47590	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
3,5-Dinitroaniline	Lin2	2147 90999	4377 159712	11426 229927	22723 576276	57053	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Tetryl	Ave	1611 68663	3073 115964	8153 165416	16438 416200	41420	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Nitroglycerin	Ave	6159 265593	11879 462332	31649 659032	63170 1646056	162463	0.100 4.00	0.200 7.00	0.500 10.0	1.00 25.0	2.50
2,4,6-Trinitrotoluene	Ave	2167 83334	4262 146272	10708 210110	20787 524120	52619	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
4-Amino-2,6-dinitrotoluene	Ave	1670 61147	3106 105641	7875 150980	15407 382195	38221	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
2-Amino-4,6-dinitrotoluene	Ave	2214 79585	4021 137602	10072 197356	19765 500512	49514	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
2,6-Dinitrotoluene	Ave	1486	2911	7109	13967	35863	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.: 280-176134-1 Analy Batch No.: 601664

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/08/2023 15:38 Calibration End Date: 02/08/2023 18:42 Calibration ID: 76877

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
		56014	99567	142869	350285		0.400	0.700	1.00	2.50	
2,4-Dinitrotoluene	Ave	3141 117609	5985 203530	14872 291656	29539 735849	73263	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
2-Nitrotoluene	Ave	1377 50043	2611 86881	6623 124668	12548 315588	31188	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
4-Nitrotoluene	Ave	1263 43291	2393 75151	5584 107671	10857 272123	27153	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
3-Nitrotoluene	Ave	1473 54716	3062 95648	7096 136203	13666 346314	34323	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
PETN	Ave	7273 274612	13462 480104	34057 687477	68161 1720221	171245	0.100 4.00	0.200 7.00	0.500 10.0	1.00 25.0	2.50
1,2-Dinitrobenzene	Ave	1188 51510	2491 88786	6278 127879	12727 324188	31858	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\20230208-118465.b\02080011.D
Lims ID: IC INT 9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 08-Feb-2023 15:38:53 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 9
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub26

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Feb-2023 12:48:02 Calib Date: 08-Feb-2023 18:42:13
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1604

First Level Reviewer: LV5D Date: 08-Feb-2023 16:28:55

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.546	6.544	0.002	229343	2.50	2.45	M
8 RDX	1	7.559	7.564	-0.005	266228	2.50	2.50	
9 2,4,6-Trinitrophenol	1	7.966	8.044	-0.078	196834	2.50	2.60	
$ 10 1,2-Dinitrobenzene	1	8.506	8.517	-0.011	324188	2.50	2.57	
11 1,3,5-Trinitrobenzene	1	8.639	8.644	-0.005	544595	2.50	2.51	
12 1,3-Dinitrobenzene	1	9.246	9.257	-0.011	743106	2.50	2.52	
13 Nitrobenzene	1	9.619	9.631	-0.012	482389	2.50	2.52	
14 3,5-Dinitroaniline	1	9.819	9.831	-0.012	576276	2.50	2.51	
15 Tetryl	1	9.966	9.977	-0.011	416200	2.50	2.54	
16 Nitroglycerin	2	10.426	10.437	-0.011	1646056	25.0	25.7	
17 2,4,6-Trinitrotoluene	1	10.859	10.864	-0.005	524120	2.50	2.48	
18 4-Amino-2,6-dinitrotoluene	1	11.013	11.031	-0.018	382195	2.50	2.47	
19 2-Amino-4,6-dinitrotoluene	1	11.259	11.277	-0.018	500512	2.50	2.49	
20 2,6-Dinitrotoluene	1	11.439	11.451	-0.012	350285	2.50	2.45	
21 2,4-Dinitrotoluene	1	11.606	11.617	-0.011	735849	2.50	2.48	
22 o-Nitrotoluene	1	12.426	12.437	-0.011	315588	2.50	2.47	
23 p-Nitrotoluene	1	12.833	12.844	-0.011	272123	2.50	2.43	
24 m-Nitrotoluene	1	13.399	13.411	-0.012	346314	2.50	2.47	
25 PETN	2	14.539	14.551	-0.012	1720221	25.0	25.0	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00075 Amount Added: 250.00 Units: uL

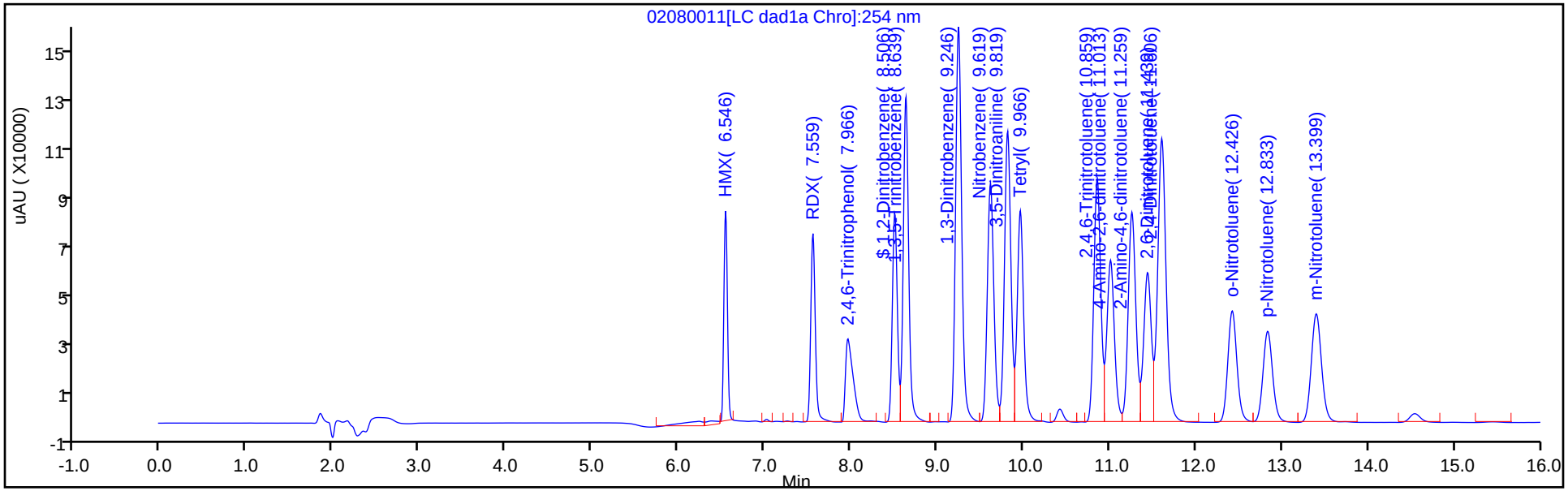
Report Date: 09-Feb-2023 12:48:02 Chrom Revision: 2.3 01-Feb-2023 13:23:06

Eurofins Denver

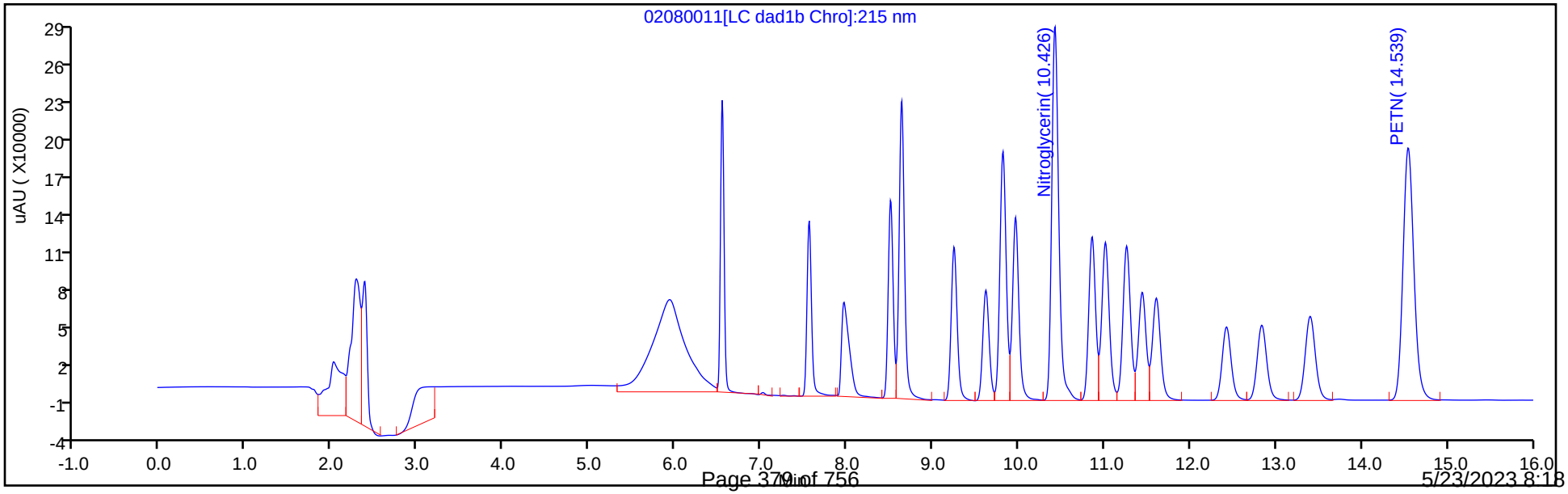
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Injection Date:	08-Feb-2023 15:38:53	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC INT 9			Worklist Smp#:	11
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



5/23/2023 8:18 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

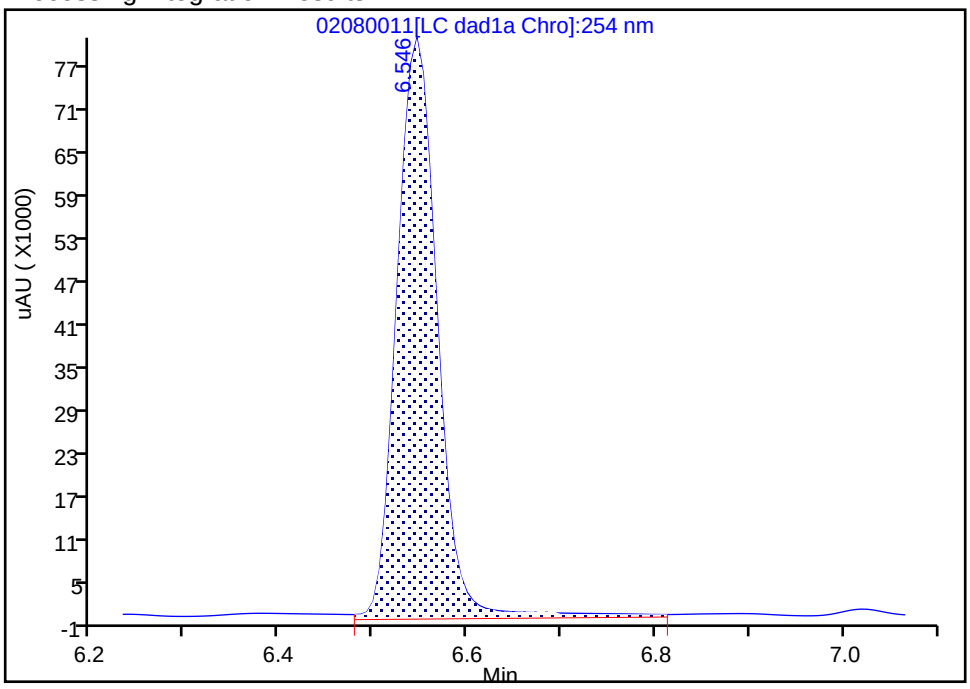
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Injection Date:	08-Feb-2023 15:38:53	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 9				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

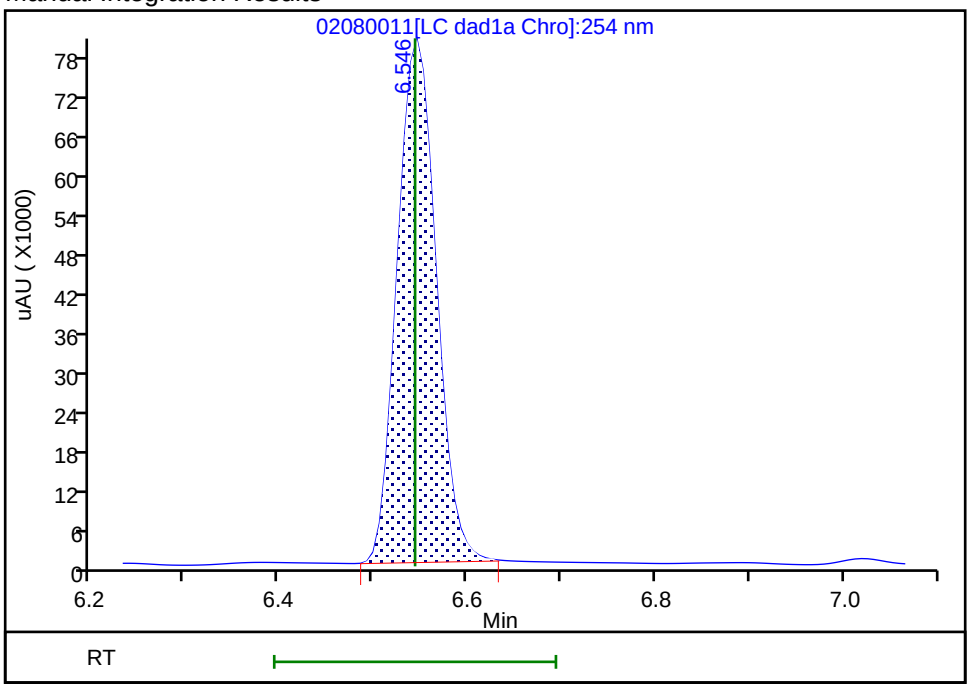
Processing Integration Results

RT: 6.55
Area: 245170
Amount: 2.586222
Amount Units: ug/mL



Manual Integration Results

RT: 6.55
Area: 229343
Amount: 2.452128
Amount Units: ug/mL



Reviewer: LV5D, 08-Feb-2023 16:28:37
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080012.D
Lims ID: IC INT 8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 08-Feb-2023 16:01:51 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 8
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub26

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Feb-2023 12:48:03 Calib Date: 08-Feb-2023 18:42:13
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1604

First Level Reviewer: LV5D Date: 08-Feb-2023 16:28:33

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.547	6.544	0.003	91529	1.00	0.9786	M
8 RDX	1	7.567	7.564	0.003	106983	1.00	1.01	
9 2,4,6-Trinitrophenol	1	8.014	8.044	-0.030	77676	1.00	1.02	
$ 10 1,2-Dinitrobenzene	1	8.521	8.517	0.004	127879	1.00	1.01	
11 1,3,5-Trinitrobenzene	1	8.647	8.644	0.003	219038	1.00	1.01	
12 1,3-Dinitrobenzene	1	9.260	9.257	0.003	296615	1.00	1.01	
13 Nitrobenzene	1	9.634	9.631	0.003	191651	1.00	1.00	
14 3,5-Dinitroaniline	1	9.840	9.831	0.009	229927	1.00	1.00	
15 Tetryl	1	9.987	9.977	0.010	165416	1.00	1.01	
16 Nitroglycerin	2	10.454	10.437	0.017	659032	10.0	10.3	
17 2,4,6-Trinitrotoluene	1	10.880	10.864	0.016	210110	1.00	1.00	
18 4-Amino-2,6-dinitrotoluene	1	11.040	11.031	0.009	150980	1.00	0.9745	
19 2-Amino-4,6-dinitrotoluene	1	11.287	11.277	0.010	197356	1.00	0.9799	
20 2,6-Dinitrotoluene	1	11.467	11.451	0.016	142869	1.00	1.00	
21 2,4-Dinitrotoluene	1	11.634	11.617	0.017	291656	1.00	0.9831	
22 o-Nitrotoluene	1	12.447	12.437	0.010	124668	1.00	0.9748	
23 p-Nitrotoluene	1	12.860	12.844	0.016	107671	1.00	0.9624	
24 m-Nitrotoluene	1	13.420	13.411	0.009	136203	1.00	0.9695	
25 PETN	2	14.567	14.551	0.016	687477	10.0	9.99	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00075 Amount Added: 100.00 Units: uL

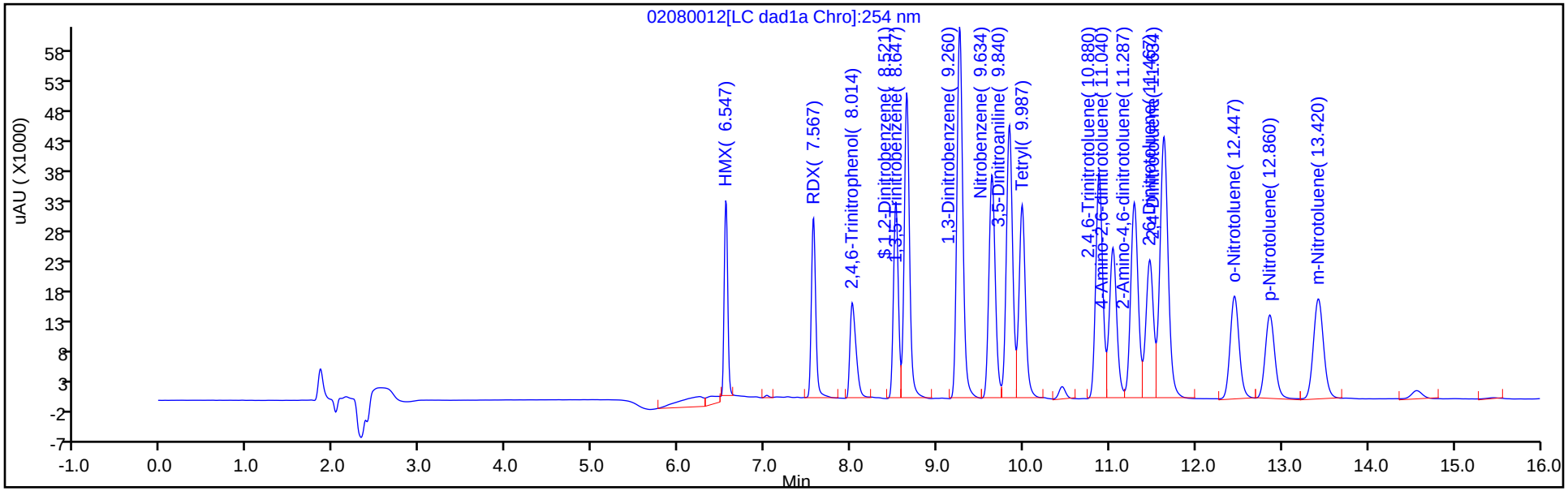
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Eurofins Denver

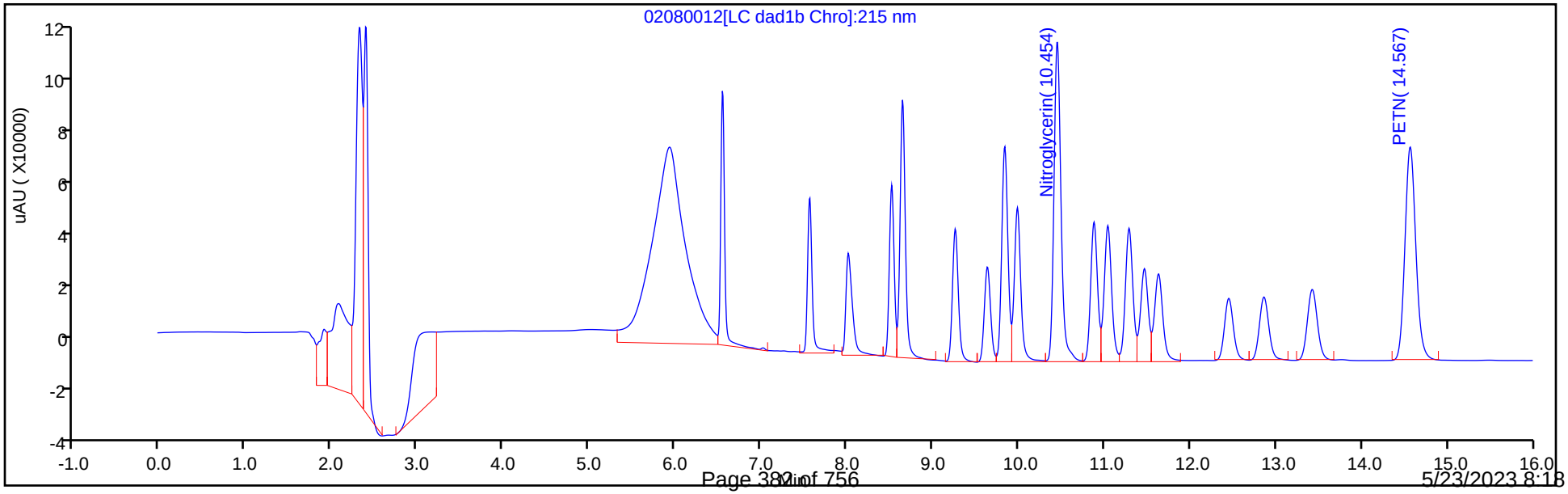
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Injection Date:	08-Feb-2023 16:01:51	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC INT 8			Worklist Smp#:	12
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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

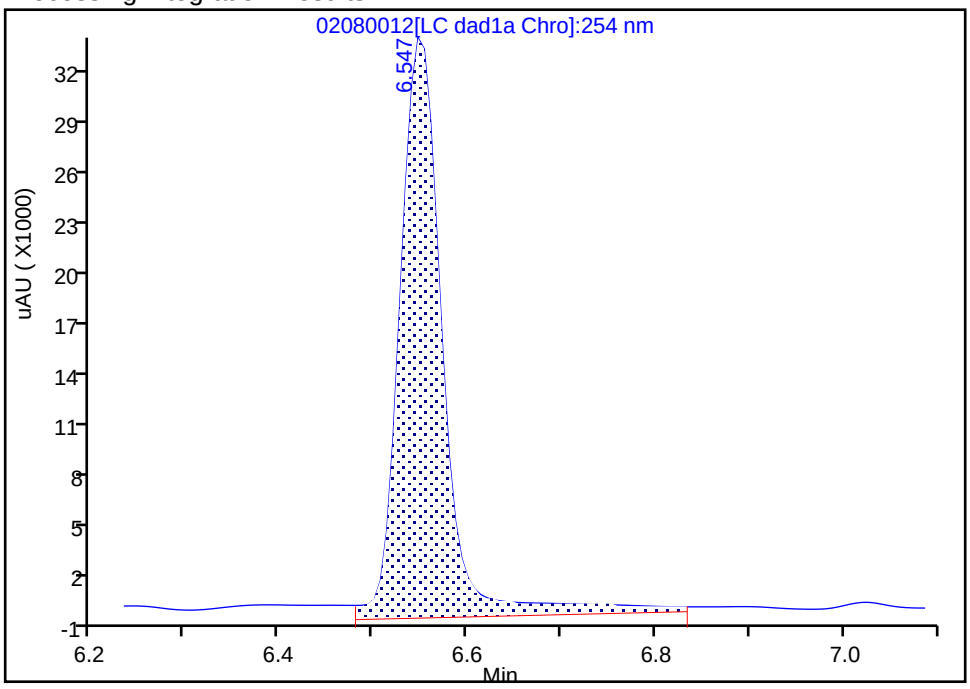
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Injection Date:	08-Feb-2023 16:01:51	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 8				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

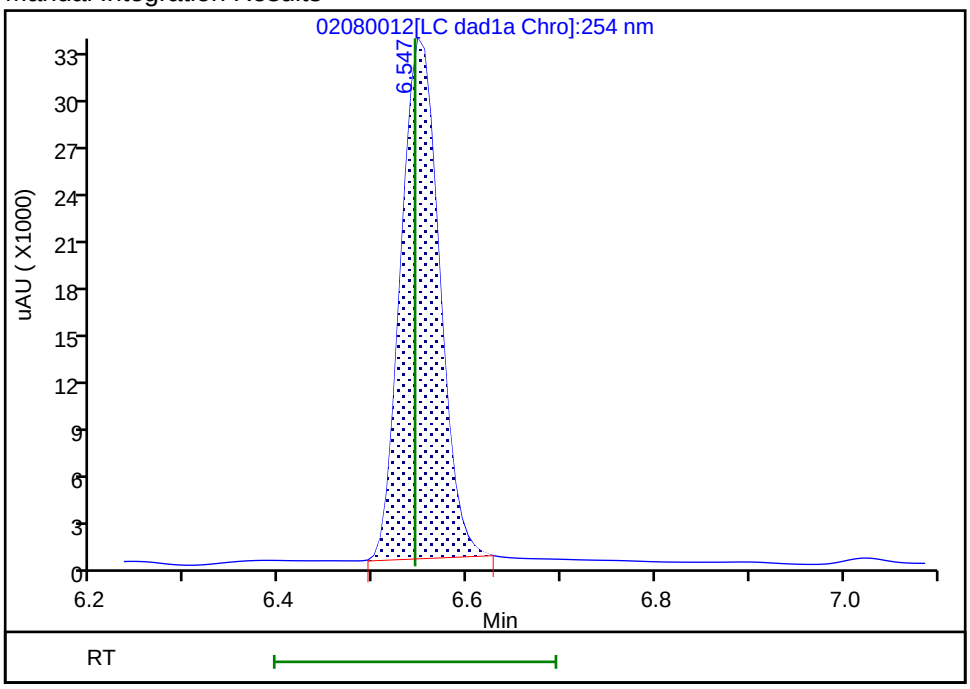
Processing Integration Results

RT: 6.55
Area: 107005
Amount: 1.043580
Amount Units: ug/mL



Manual Integration Results

RT: 6.55
Area: 91529
Amount: 0.978625
Amount Units: ug/mL



Reviewer: LV5D, 08-Feb-2023 16:28:16
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080013.D
Lims ID: IC INT 7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 08-Feb-2023 16:24:45 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 7
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub26

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Feb-2023 12:48:04 Calib Date: 08-Feb-2023 18:42:13
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1604

First Level Reviewer: LV5D Date: 08-Feb-2023 16:55:38

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.544	6.544	0.000	63922	0.7000	0.6835	M
8 RDX	1	7.564	7.564	0.000	71812	0.7000	0.6751	M
9 2,4,6-Trinitrophenol	1	8.018	8.044	-0.026	54237	0.7000	0.7152	
$ 10 1,2-Dinitrobenzene	1	8.511	8.517	-0.006	88786	0.7000	0.7029	
11 1,3,5-Trinitrobenzene	1	8.638	8.644	-0.006	153058	0.7000	0.7049	
12 1,3-Dinitrobenzene	1	9.251	9.257	-0.006	206375	0.7000	0.7010	
13 Nitrobenzene	1	9.624	9.631	-0.007	132989	0.7000	0.6954	
14 3,5-Dinitroaniline	1	9.824	9.831	-0.007	159712	0.7000	0.6975	
15 Tetryl	1	9.971	9.977	-0.006	115964	0.7000	0.7066	
16 Nitroglycerin	2	10.437	10.437	0.000	462332	7.00	7.22	
17 2,4,6-Trinitrotoluene	1	10.864	10.864	0.000	146272	0.7000	0.6931	
18 4-Amino-2,6-dinitrotoluene	1	11.024	11.031	-0.007	105641	0.7000	0.6819	
19 2-Amino-4,6-dinitrotoluene	1	11.271	11.277	-0.006	137602	0.7000	0.6832	
20 2,6-Dinitrotoluene	1	11.451	11.451	0.000	99567	0.7000	0.6975	
21 2,4-Dinitrotoluene	1	11.617	11.617	0.000	203530	0.7000	0.6861	
22 o-Nitrotoluene	1	12.431	12.437	-0.006	86881	0.7000	0.6793	
23 p-Nitrotoluene	1	12.844	12.844	0.000	75151	0.7000	0.6717	
24 m-Nitrotoluene	1	13.404	13.411	-0.007	95648	0.7000	0.6808	
25 PETN	2	14.544	14.551	-0.007	480104	7.00	6.97	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00075 Amount Added: 70.00 Units: uL

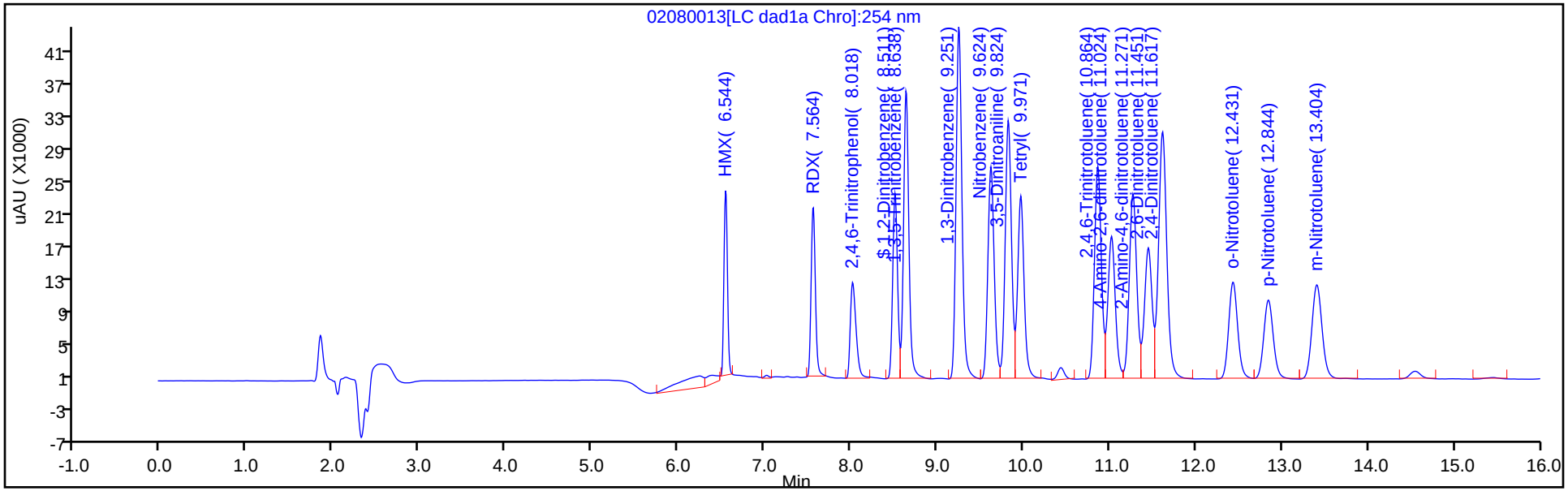
Report Date: 09-Feb-2023 12:48:04 Chrom Revision: 2.3 01-Feb-2023 13:23:06

Eurofins Denver

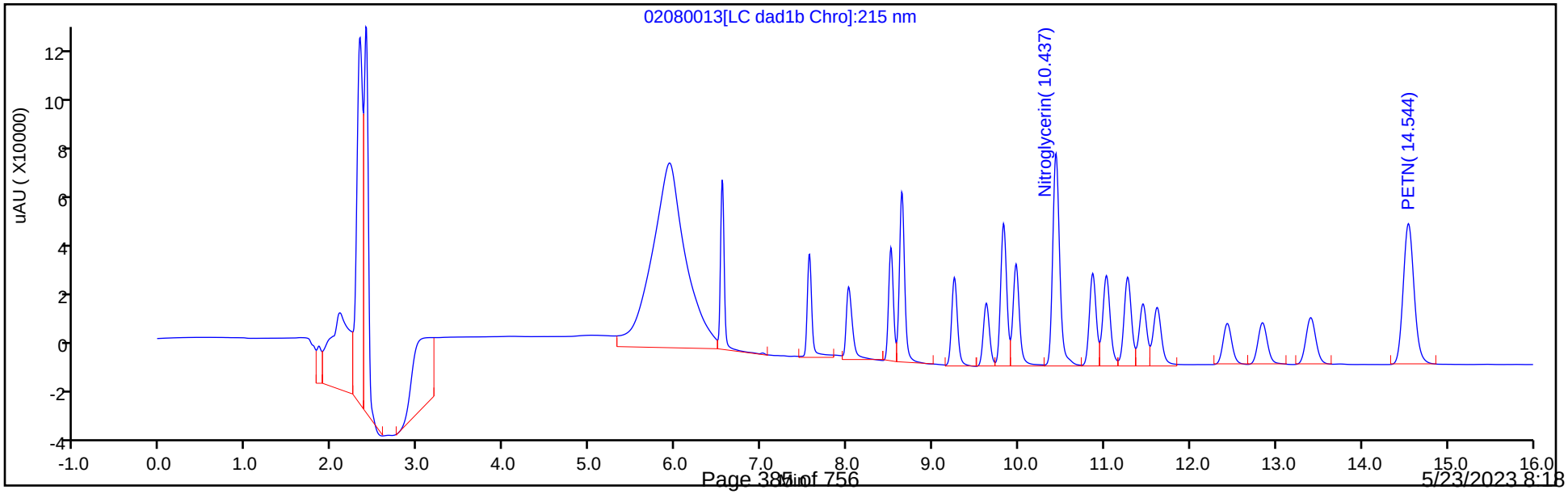
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Injection Date:	08-Feb-2023 16:24:45	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC INT 7			Worklist Smp#:	13
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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

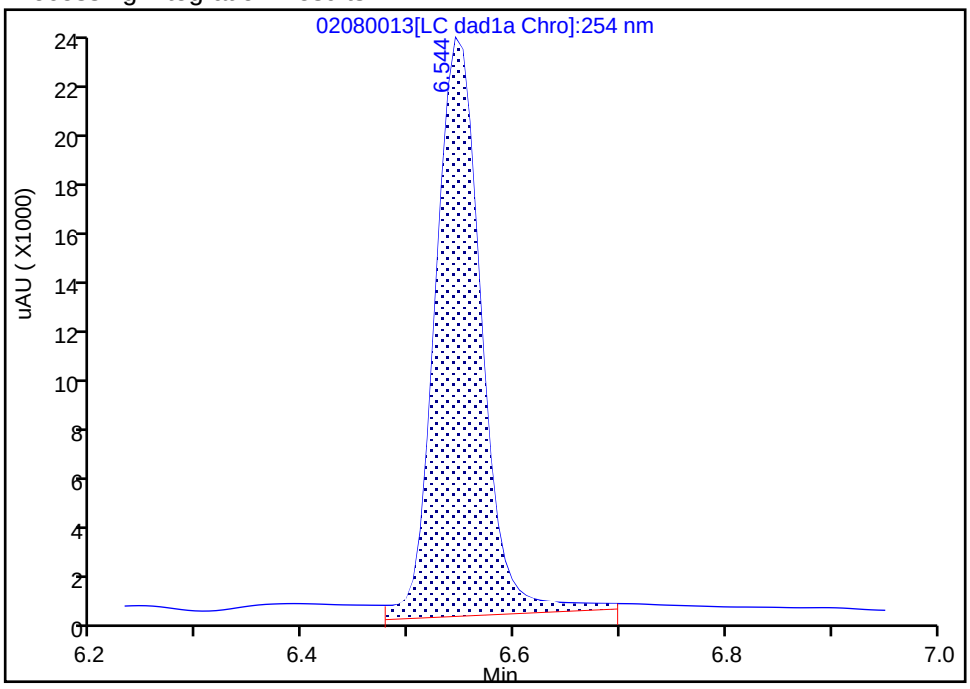
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080013.d				
Injection Date:	08-Feb-2023 16:24:45	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 7				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

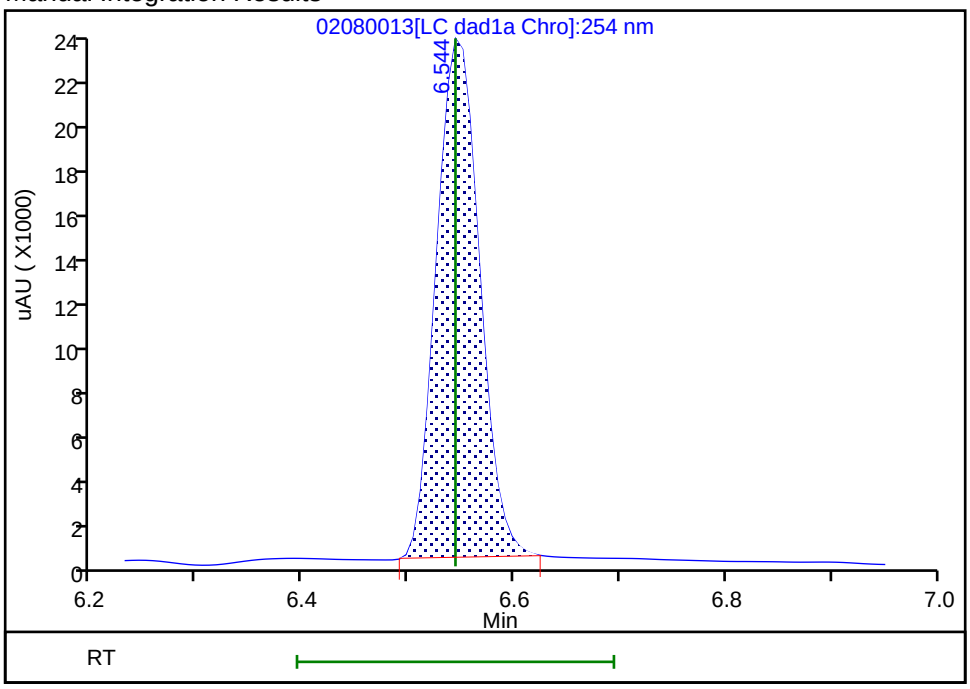
Processing Integration Results

RT: 6.54
Area: 70424
Amount: 0.744251
Amount Units: ug/mL



Manual Integration Results

RT: 6.54
Area: 63922
Amount: 0.683452
Amount Units: ug/mL



Reviewer: LV5D, 08-Feb-2023 16:55:19

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

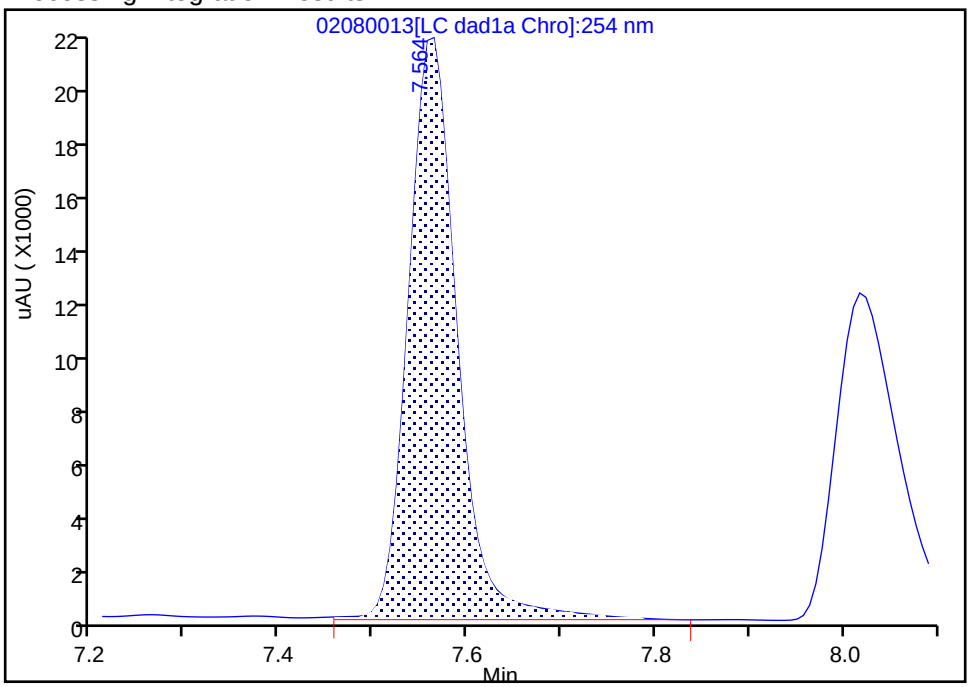
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080013.d				
Injection Date:	08-Feb-2023 16:24:45	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 7				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

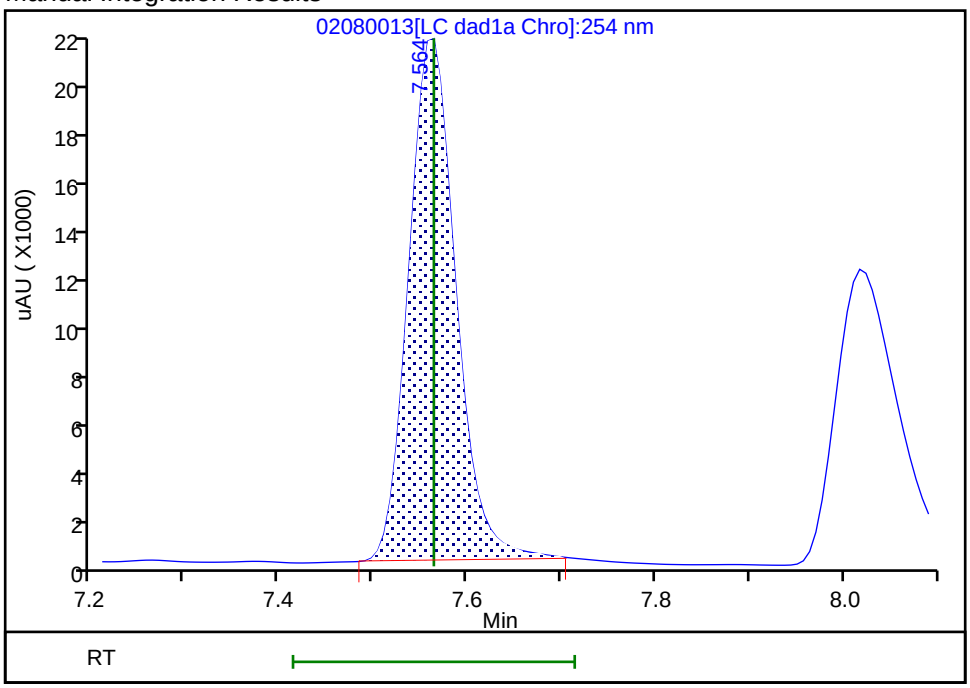
Processing Integration Results

RT: 7.56
Area: 75013
Amount: 0.701791
Amount Units: ug/mL



Manual Integration Results

RT: 7.56
Area: 71812
Amount: 0.675053
Amount Units: ug/mL



Reviewer: LV5D, 08-Feb-2023 19:09:56
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080014.D
Lims ID: IC INT 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 08-Feb-2023 16:47:39 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 6
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub26

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Feb-2023 12:48:05 Calib Date: 08-Feb-2023 18:42:13
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1604

First Level Reviewer: LV5D Date: 08-Feb-2023 17:11:22

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.548	6.544	0.004	36852	0.4000	0.3940	M
8 RDX	1	7.562	7.564	-0.002	41299	0.4000	0.3882	M
9 2,4,6-Trinitrophenol	1	8.028	8.044	-0.016	30993	0.4000	0.4087	
$ 10 1,2-Dinitrobenzene	1	8.515	8.517	-0.002	51510	0.4000	0.4078	
11 1,3,5-Trinitrobenzene	1	8.642	8.644	-0.002	87378	0.4000	0.4024	
12 1,3-Dinitrobenzene	1	9.255	9.257	-0.002	118511	0.4000	0.4026	
13 Nitrobenzene	1	9.628	9.631	-0.003	77064	0.4000	0.4030	
14 3,5-Dinitroaniline	1	9.828	9.831	-0.003	90999	0.4000	0.3977	
15 Tetryl	1	9.968	9.977	-0.009	68663	0.4000	0.4184	
16 Nitroglycerin	2	10.435	10.437	-0.002	265593	4.00	4.15	
17 2,4,6-Trinitrotoluene	1	10.868	10.864	0.004	83334	0.4000	0.3949	
18 4-Amino-2,6-dinitrotoluene	1	11.022	11.031	-0.009	61147	0.4000	0.3947	
19 2-Amino-4,6-dinitrotoluene	1	11.275	11.277	-0.002	79585	0.4000	0.3951	
20 2,6-Dinitrotoluene	1	11.448	11.451	-0.003	56014	0.4000	0.3924	
21 2,4-Dinitrotoluene	1	11.615	11.617	-0.002	117609	0.4000	0.3964	
22 o-Nitrotoluene	1	12.435	12.437	-0.002	50043	0.4000	0.3913	
23 p-Nitrotoluene	1	12.842	12.844	-0.002	43291	0.4000	0.3869	
24 m-Nitrotoluene	1	13.408	13.411	-0.003	54716	0.4000	0.3895	
25 PETN	2	14.548	14.551	-0.003	274612	4.00	3.99	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00075 Amount Added: 40.00 Units: uL

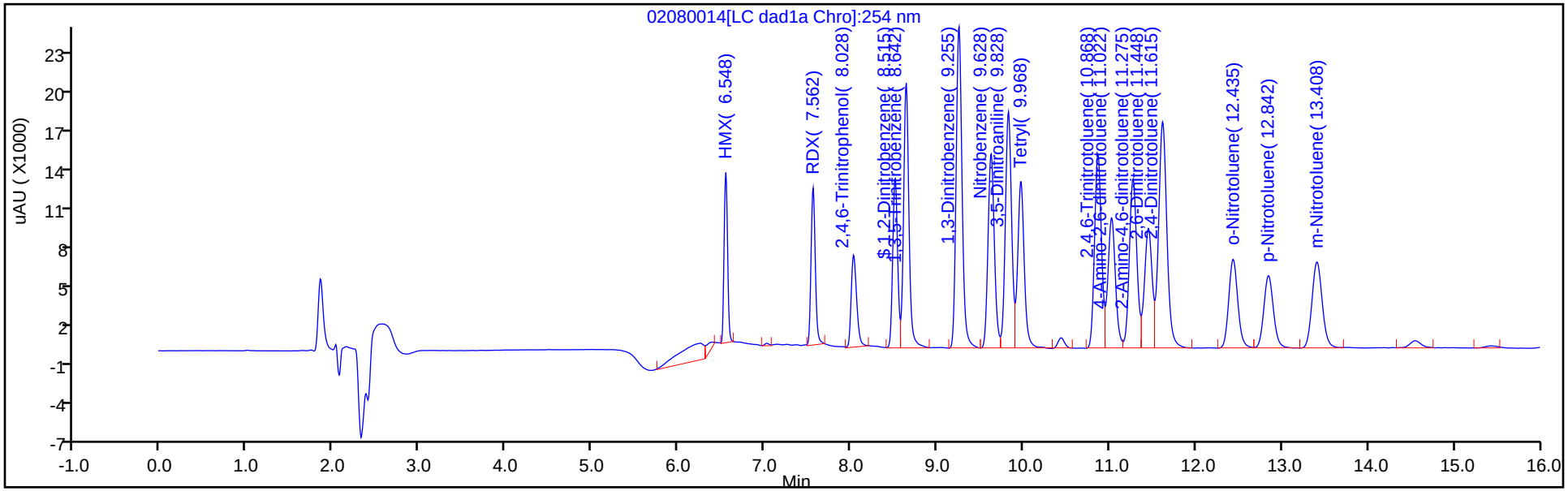
Report Date: 09-Feb-2023 12:48:05 Chrom Revision: 2.3 01-Feb-2023 13:23:06

Eurofins Denver

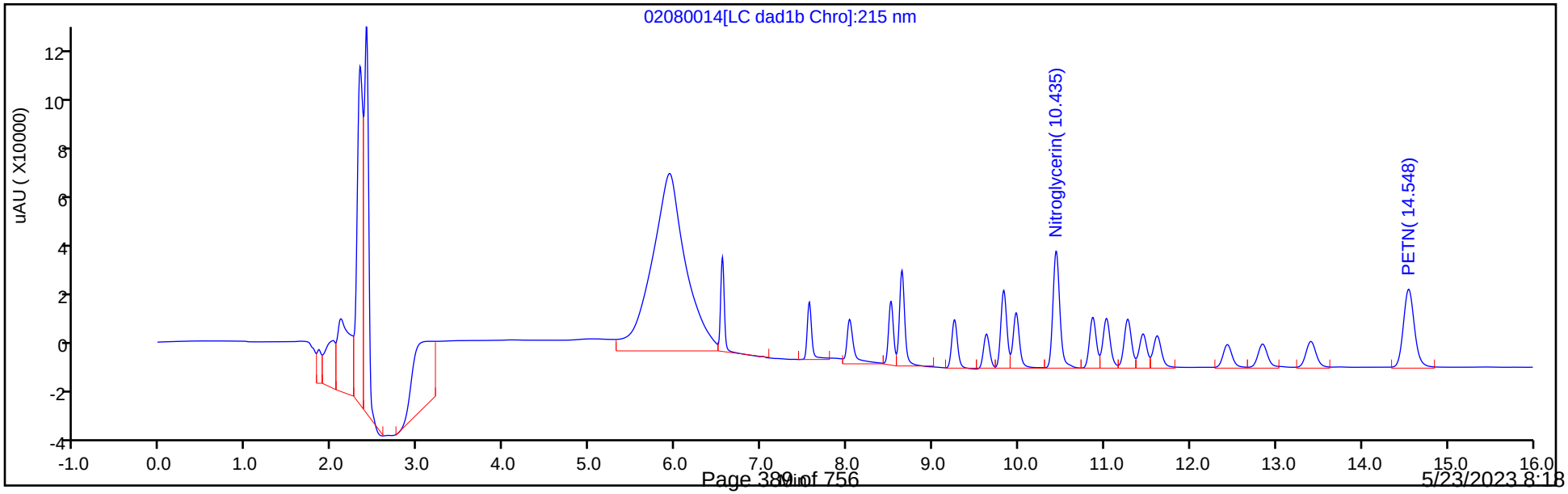
Data File: \\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080014.d

Injection Date:	08-Feb-2023 16:47:39	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC INT 6			Worklist Smp#:	14
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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

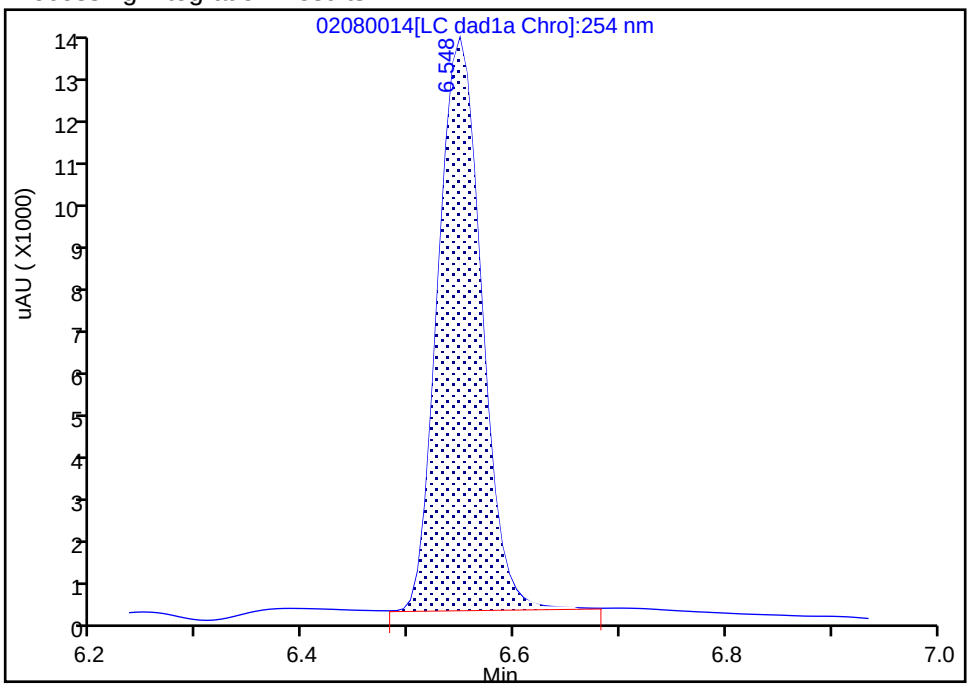
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Injection Date:	08-Feb-2023 16:47:39	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 6				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

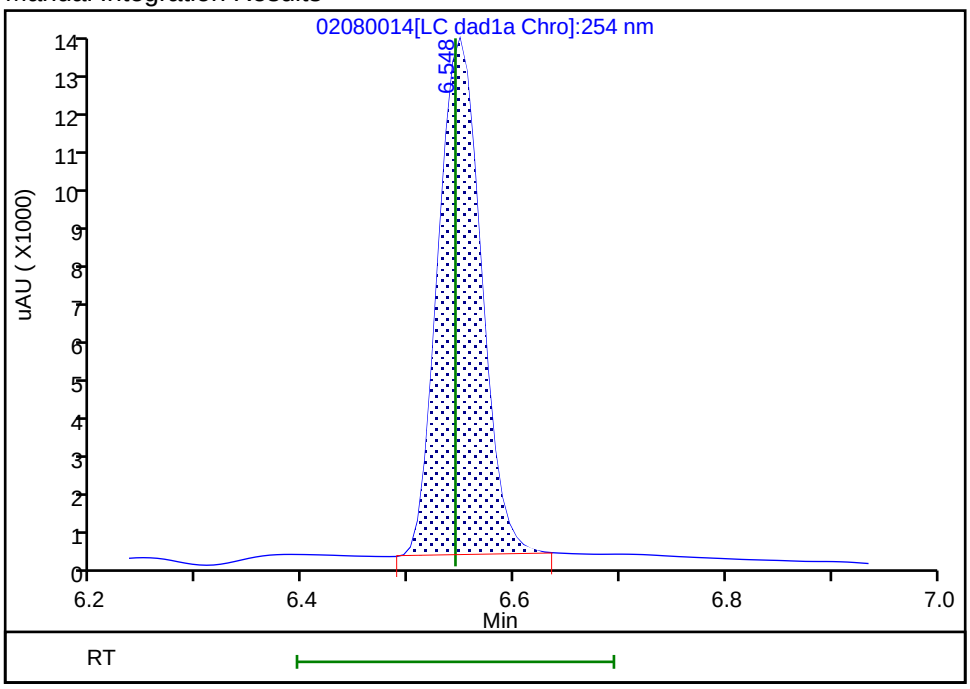
Processing Integration Results

RT: 6.55
Area: 37332
Amount: 0.405878
Amount Units: ug/mL



Manual Integration Results

RT: 6.55
Area: 36852
Amount: 0.394020
Amount Units: ug/mL



Reviewer: LV5D, 08-Feb-2023 17:11:10
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

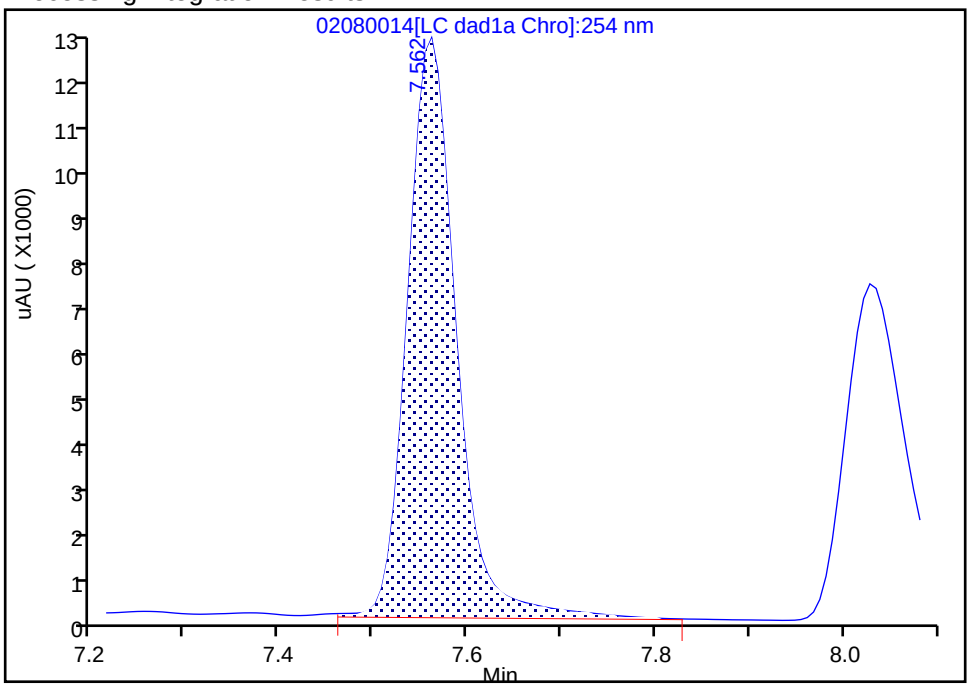
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080014.d				
Injection Date:	08-Feb-2023 16:47:39	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 6				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

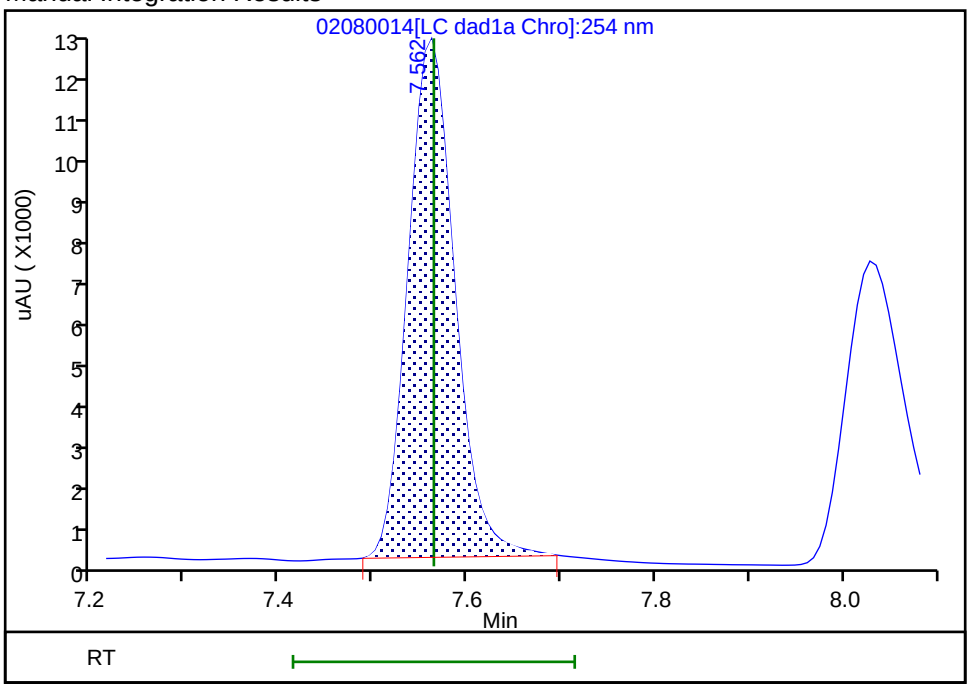
Processing Integration Results

RT: 7.56
Area: 43581
Amount: 0.405322
Amount Units: ug/mL



Manual Integration Results

RT: 7.56
Area: 41299
Amount: 0.388222
Amount Units: ug/mL



Reviewer: LV5D, 08-Feb-2023 19:09:51
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080015.D
Lims ID: IC INT 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 08-Feb-2023 17:10:30 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 5
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub26

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Feb-2023 12:48:05 Calib Date: 08-Feb-2023 18:42:13
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1604

First Level Reviewer: LV5D Date: 08-Feb-2023 17:44:54

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.548	6.544	0.004	23490	0.2500	0.2512	
8 RDX	1	7.568	7.564	0.004	25542	0.2500	0.2401	M
9 2,4,6-Trinitrophenol	1	8.041	8.044	-0.003	19359	0.2500	0.2553	
$ 10 1,2-Dinitrobenzene	1	8.515	8.517	-0.002	31858	0.2500	0.2522	
11 1,3,5-Trinitrobenzene	1	8.641	8.644	-0.003	54382	0.2500	0.2504	
12 1,3-Dinitrobenzene	1	9.255	9.257	-0.002	74049	0.2500	0.2515	
13 Nitrobenzene	1	9.628	9.631	-0.003	47590	0.2500	0.2488	
14 3,5-Dinitroaniline	1	9.828	9.831	-0.003	57053	0.2500	0.2496	
15 Tetryl	1	9.975	9.977	-0.002	41420	0.2500	0.2524	
16 Nitroglycerin	2	10.441	10.437	0.004	162463	2.50	2.54	
17 2,4,6-Trinitrotoluene	1	10.868	10.864	0.004	52619	0.2500	0.2493	
18 4-Amino-2,6-dinitrotoluene	1	11.028	11.031	-0.003	38221	0.2500	0.2467	
19 2-Amino-4,6-dinitrotoluene	1	11.275	11.277	-0.002	49514	0.2500	0.2458	
20 2,6-Dinitrotoluene	1	11.455	11.451	0.004	35863	0.2500	0.2512	
21 2,4-Dinitrotoluene	1	11.621	11.617	0.004	73263	0.2500	0.2470	
22 o-Nitrotoluene	1	12.441	12.437	0.004	31188	0.2500	0.2439	
23 p-Nitrotoluene	1	12.848	12.844	0.004	27153	0.2500	0.2427	
24 m-Nitrotoluene	1	13.415	13.411	0.004	34323	0.2500	0.2443	
25 PETN	2	14.555	14.551	0.004	171245	2.50	2.49	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00075 Amount Added: 25.00 Units: uL

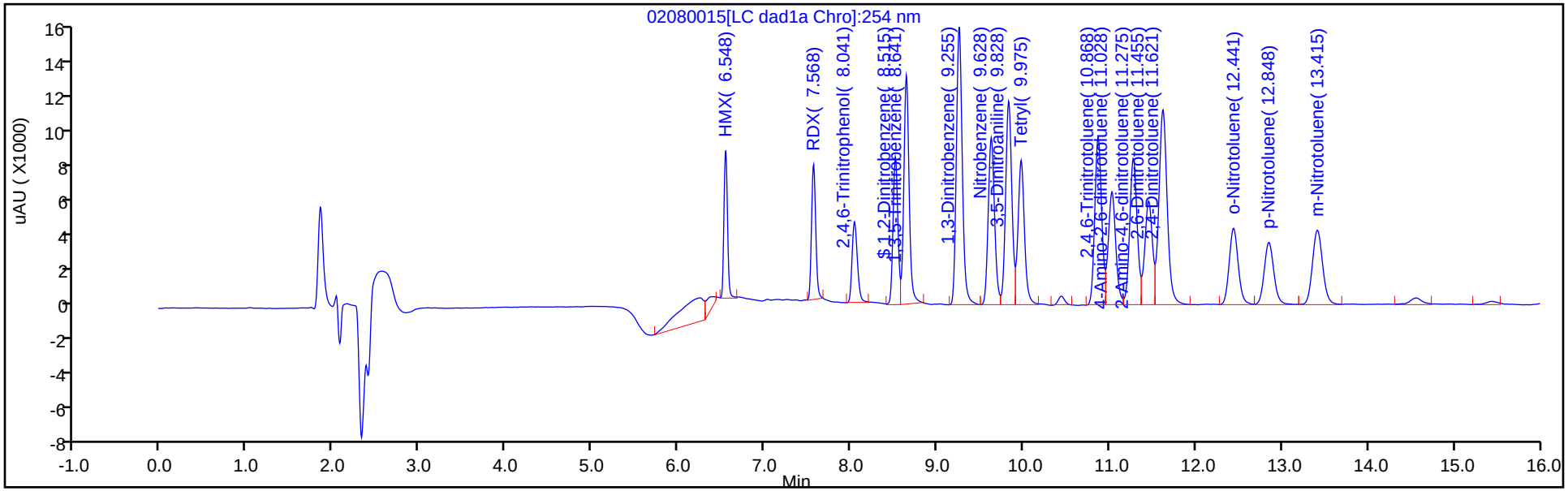
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Eurofins Denver

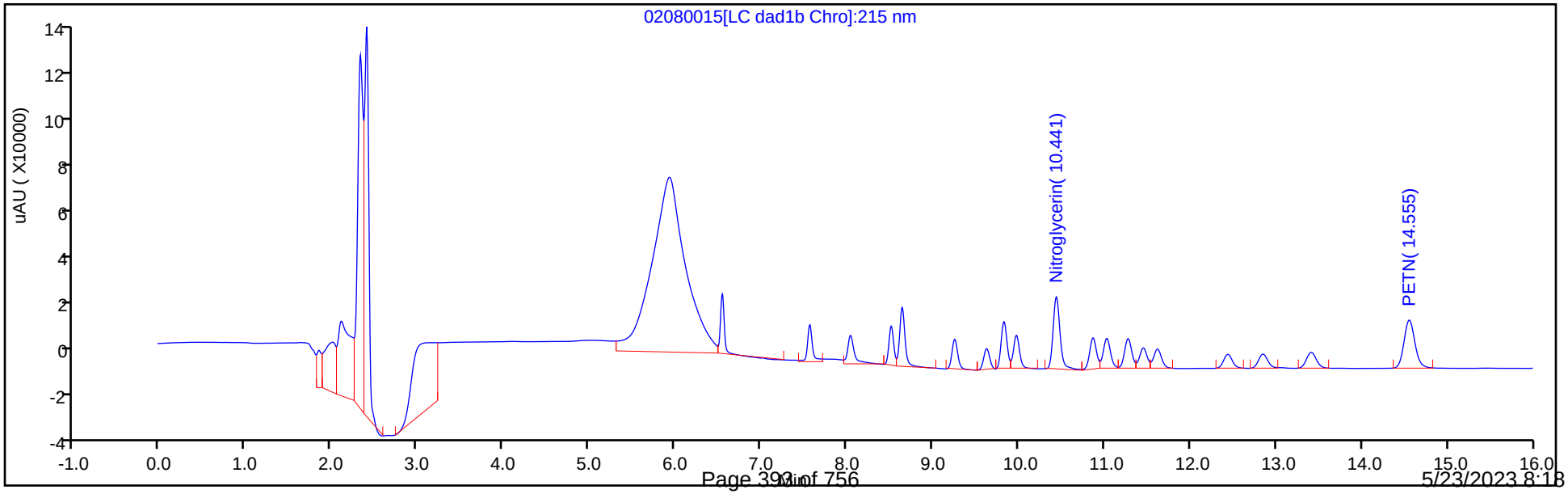
Data File: \\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080015.d

Injection Date:	08-Feb-2023 17:10:30	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC INT 5			Worklist Smp#:	15
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



5/23/2023 8:18 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

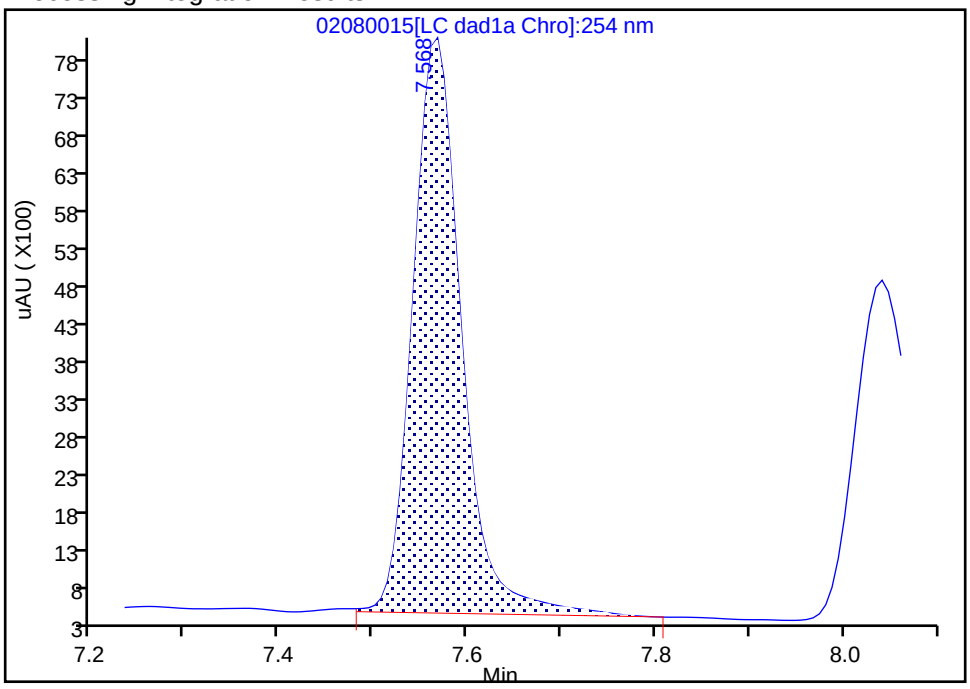
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080015.d				
Injection Date:	08-Feb-2023 17:10:30	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 5				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

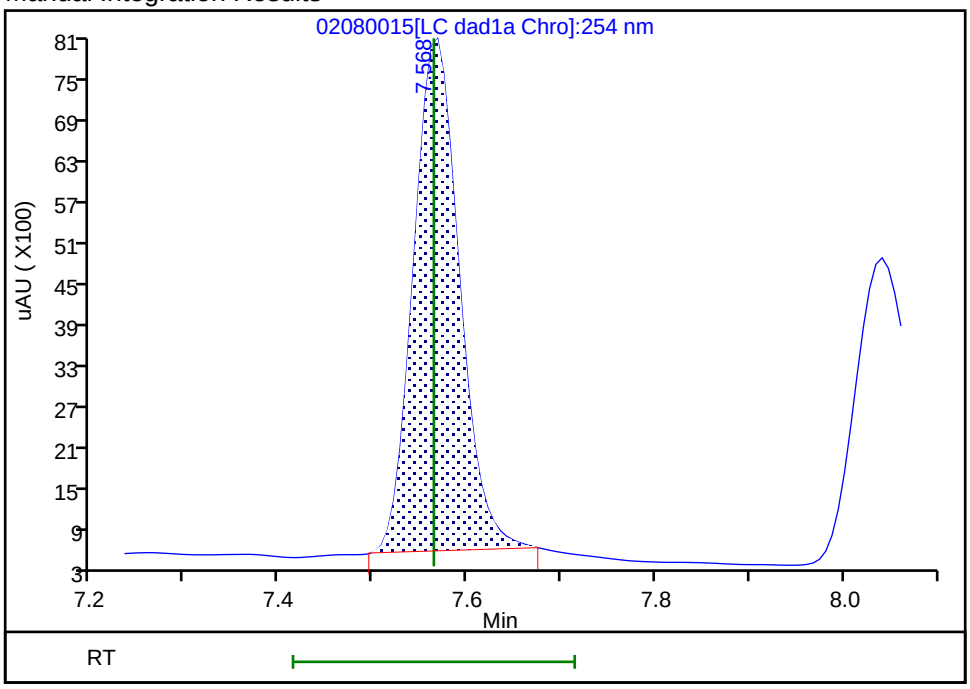
Processing Integration Results

RT: 7.57
Area: 27559
Amount: 0.254192
Amount Units: ug/mL



Manual Integration Results

RT: 7.57
Area: 25542
Amount: 0.240102
Amount Units: ug/mL



Reviewer: LV5D, 08-Feb-2023 19:09:46
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080016.D
Lims ID: IC INT 4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 08-Feb-2023 17:33:25 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 4
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub26

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Feb-2023 12:48:06 Calib Date: 08-Feb-2023 18:42:13
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1604

First Level Reviewer: LV5D Date: 08-Feb-2023 18:05:31

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.544	6.544	0.000	9387	0.1000	0.1004	
8 RDX	1	7.564	7.564	0.000	10112	0.1000	0.0951	M
9 2,4,6-Trinitrophenol	1	8.044	8.044	0.000	7640	0.1000	0.1008	
$ 10 1,2-Dinitrobenzene	1	8.517	8.517	0.000	12727	0.1000	0.1008	
11 1,3,5-Trinitrobenzene	1	8.644	8.644	0.000	21399	0.1000	0.0985	
12 1,3-Dinitrobenzene	1	9.257	9.257	0.000	29249	0.1000	0.0994	
13 Nitrobenzene	1	9.631	9.631	0.000	19019	0.1000	0.0994	
14 3,5-Dinitroaniline	1	9.831	9.831	0.000	22723	0.1000	0.0998	
15 Tetryl	1	9.977	9.977	0.000	16438	0.1000	0.1002	
16 Nitroglycerin	2	10.437	10.437	0.000	63170	1.00	0.9860	
17 2,4,6-Trinitrotoluene	1	10.864	10.864	0.000	20787	0.1000	0.0985	
18 4-Amino-2,6-dinitrotoluene	1	11.031	11.031	0.000	15407	0.1000	0.0994	
19 2-Amino-4,6-dinitrotoluene	1	11.277	11.277	0.000	19765	0.1000	0.0981	
20 2,6-Dinitrotoluene	1	11.451	11.451	0.000	13967	0.1000	0.0978	
21 2,4-Dinitrotoluene	1	11.617	11.617	0.000	29539	0.1000	0.0996	
22 o-Nitrotoluene	1	12.437	12.437	0.000	12548	0.1000	0.0981	
23 p-Nitrotoluene	1	12.844	12.844	0.000	10857	0.1000	0.0970	
24 m-Nitrotoluene	1	13.411	13.411	0.000	13666	0.1000	0.0973	
25 PETN	2	14.551	14.551	0.000	68161	1.00	0.99	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

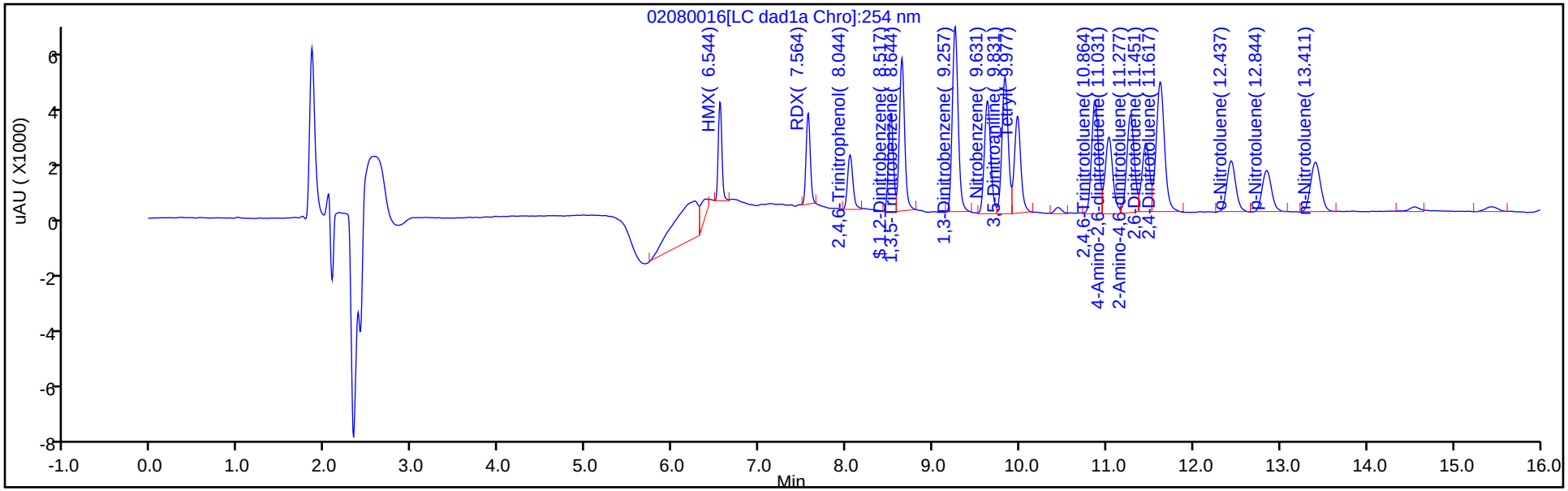
8330IntermStk_00075 Amount Added: 10.00 Units: uL

Report Date: 09-Feb-2023 12:48:06 Chrom Revision: 2.3 01-Feb-2023 13:23:06

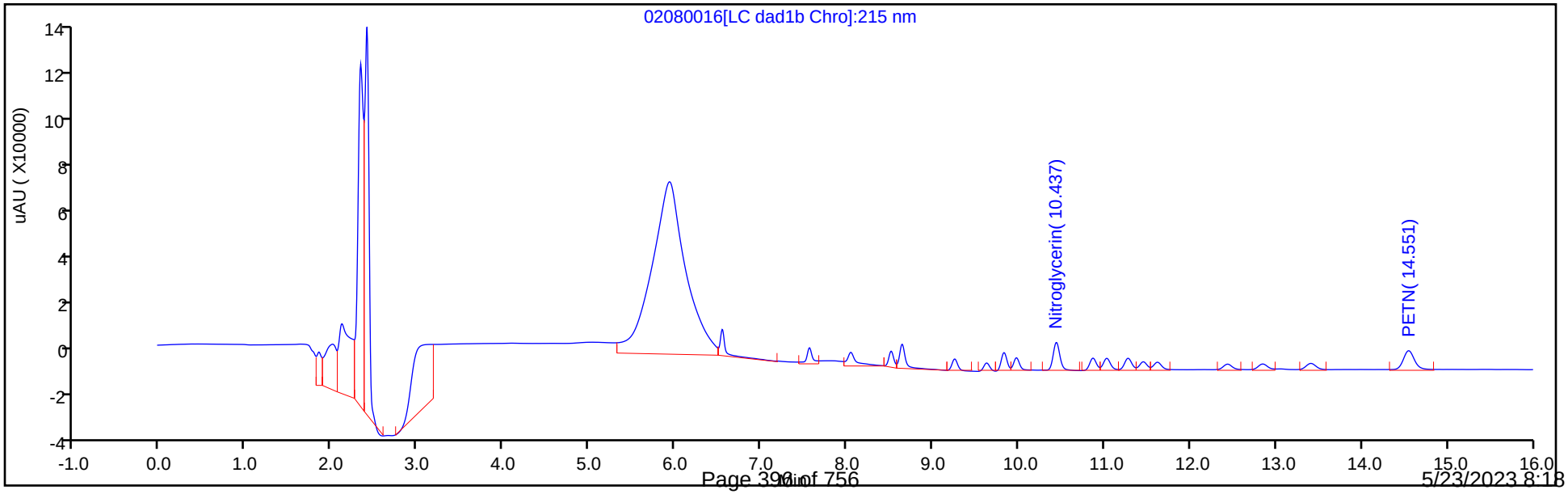
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080016.d				
Injection Date:	08-Feb-2023 17:33:25	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC INT 4			Worklist Smp#:	16
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



5/23/2023 8:18 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

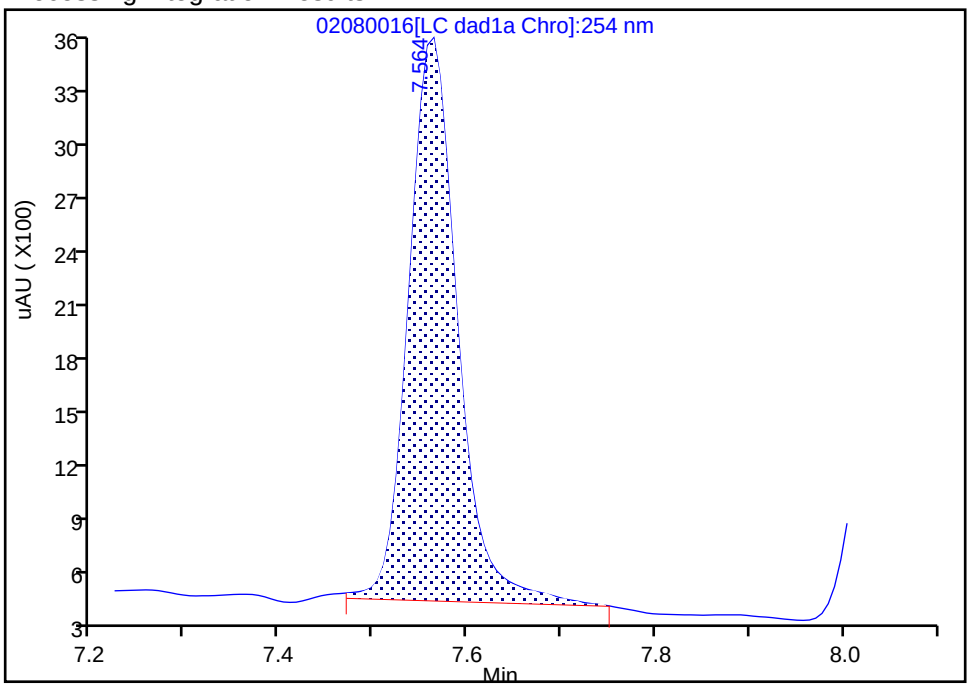
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Injection Date:	08-Feb-2023 17:33:25	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 4				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

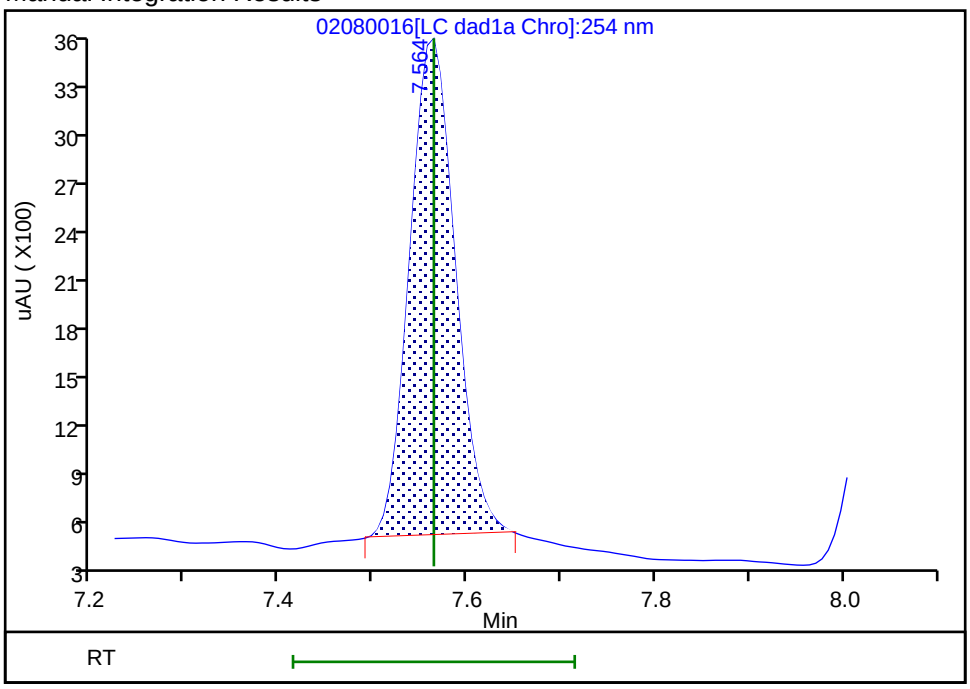
Processing Integration Results

RT: 7.56
Area: 11152
Amount: 0.101776
Amount Units: ug/mL



Manual Integration Results

RT: 7.56
Area: 10112
Amount: 0.095056
Amount Units: ug/mL



Reviewer: LV5D, 08-Feb-2023 19:09:38
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

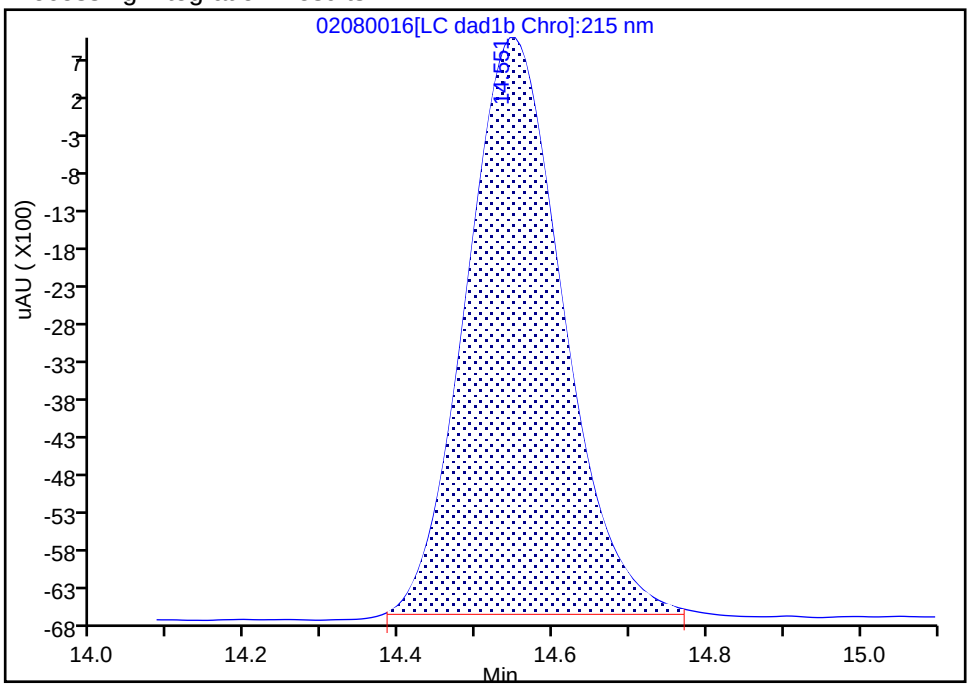
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080016.d				
Injection Date:	08-Feb-2023 17:33:25	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 4				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1C, 215 nm		

25 PETN, CAS: 78-11-5

Signal: 1

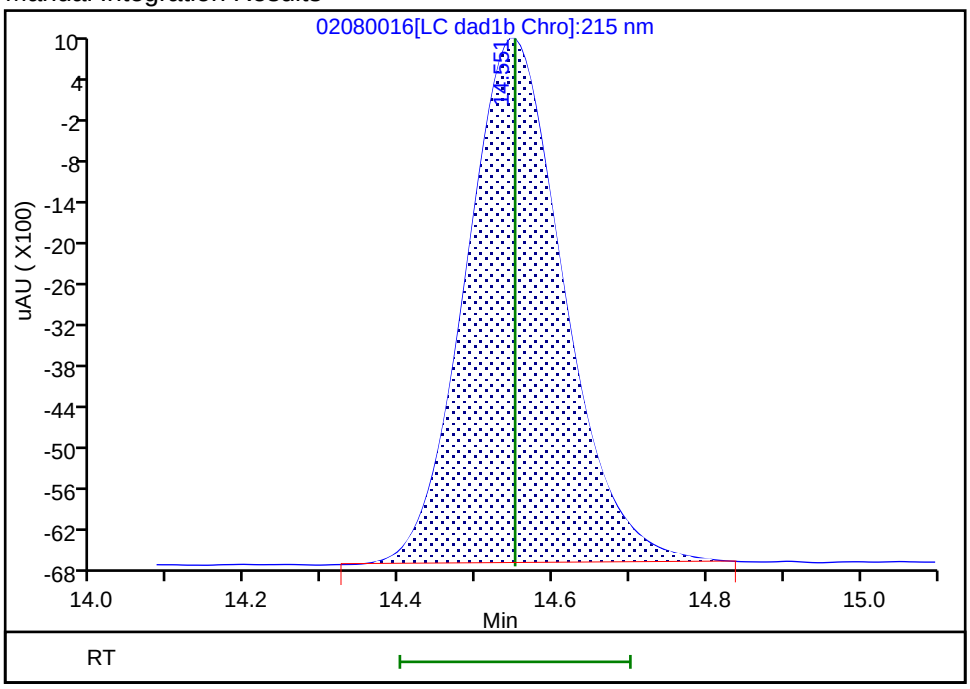
Processing Integration Results

RT: 14.55
Area: 66752
Amount: 0.971802
Amount Units: ug/mL



Manual Integration Results

RT: 14.55
Area: 68161
Amount: 0.990059
Amount Units: ug/mL



Reviewer: LV5D, 08-Feb-2023 19:08:31
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080017.D
Lims ID: IC INT 3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 08-Feb-2023 17:56:21 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 3
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub26

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Feb-2023 12:48:07 Calib Date: 08-Feb-2023 18:42:13
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1604

First Level Reviewer: LV5D Date: 08-Feb-2023 19:07:50

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.547	6.544	0.003	4648	0.0500	0.0497	M
8 RDX	1	7.567	7.564	0.003	5236	0.0500	0.0492	M
9 2,4,6-Trinitrophenol	1	8.047	8.044	0.003	3768	0.0500	0.0497	
$ 10 1,2-Dinitrobenzene	1	8.520	8.517	0.003	6278	0.0500	0.0497	
11 1,3,5-Trinitrobenzene	1	8.647	8.644	0.003	10679	0.0500	0.0492	
12 1,3-Dinitrobenzene	1	9.260	9.257	0.003	14664	0.0500	0.0498	
13 Nitrobenzene	1	9.633	9.631	0.002	9605	0.0500	0.0502	
14 3,5-Dinitroaniline	1	9.840	9.831	0.009	11426	0.0500	0.0505	
15 Tetryl	1	9.987	9.977	0.010	8153	0.0500	0.0497	
16 Nitroglycerin	2	10.453	10.437	0.016	31649	0.5000	0.4940	
17 2,4,6-Trinitrotoluene	1	10.880	10.864	0.016	10708	0.0500	0.0507	
18 4-Amino-2,6-dinitrotoluene	1	11.040	11.031	0.009	7875	0.0500	0.0508	
19 2-Amino-4,6-dinitrotoluene	1	11.293	11.277	0.016	10072	0.0500	0.0500	
20 2,6-Dinitrotoluene	1	11.467	11.451	0.016	7109	0.0500	0.0498	
21 2,4-Dinitrotoluene	1	11.633	11.617	0.016	14872	0.0500	0.0501	
22 o-Nitrotoluene	1	12.453	12.437	0.016	6623	0.0500	0.0518	
23 p-Nitrotoluene	1	12.867	12.844	0.023	5584	0.0500	0.0499	
24 m-Nitrotoluene	1	13.433	13.411	0.022	7096	0.0500	0.0505	
25 PETN	2	14.580	14.551	0.029	34057	0.5000	0.4947	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00075 Amount Added: 5.00 Units: uL

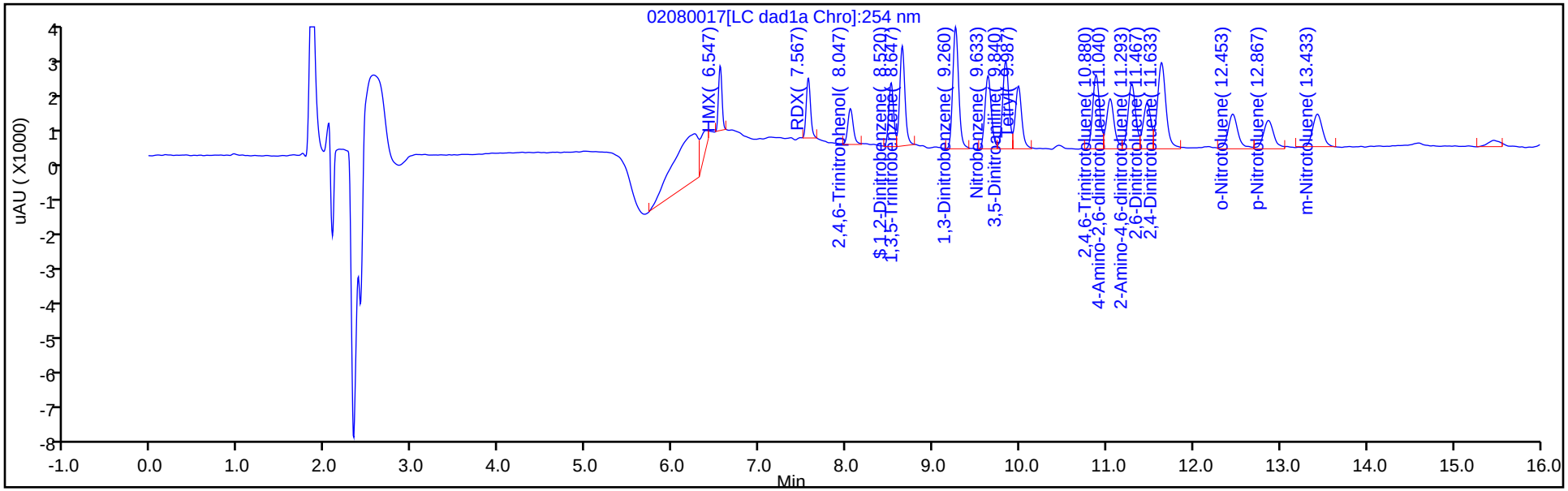
Report Date: 09-Feb-2023 12:48:07 Chrom Revision: 2.3 01-Feb-2023 13:23:06

Eurofins Denver

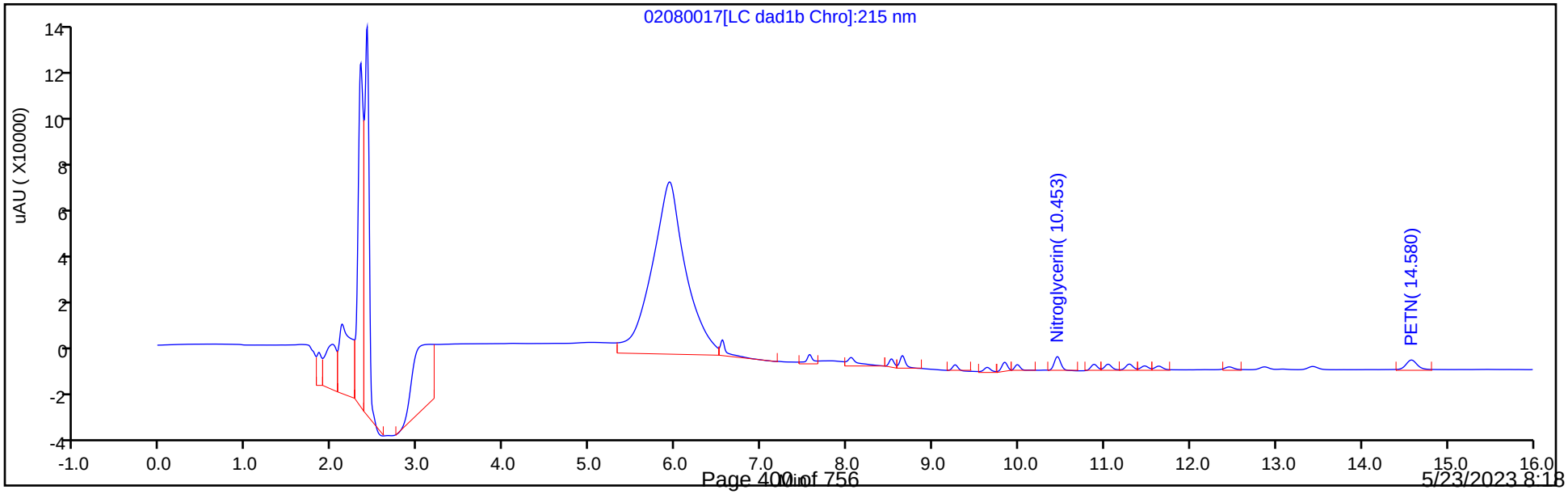
Data File: \\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080017.d

Injection Date:	08-Feb-2023 17:56:21	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC INT 3			Worklist Smp#:	17
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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

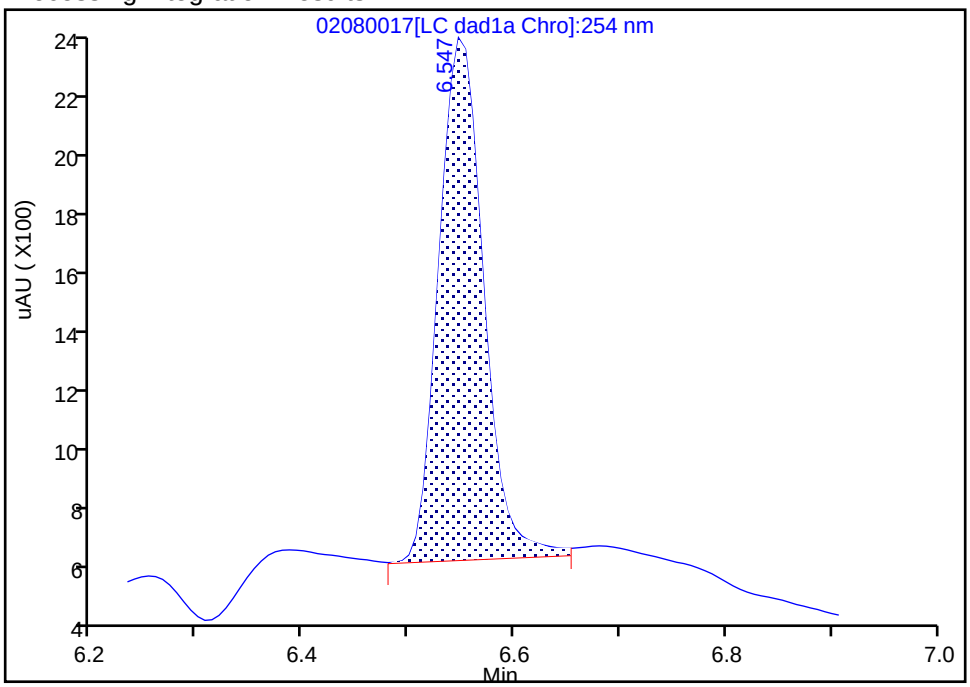
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080017.d				
Injection Date:	08-Feb-2023 17:56:21	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 3				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

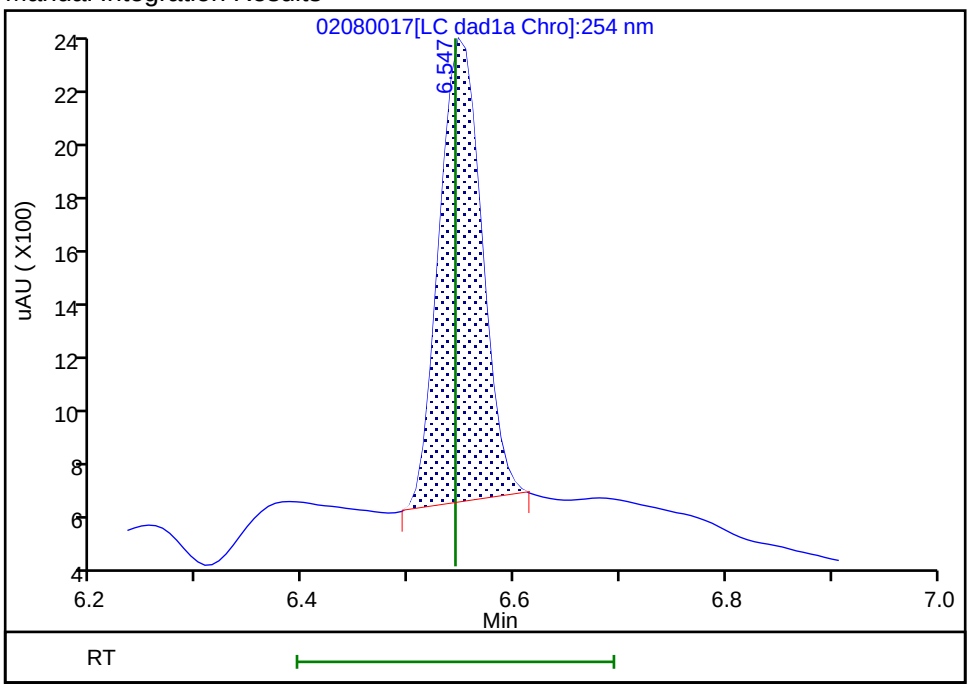
Processing Integration Results

RT: 6.55
Area: 4942
Amount: 0.050700
Amount Units: ug/mL



Manual Integration Results

RT: 6.55
Area: 4648
Amount: 0.049696
Amount Units: ug/mL



Reviewer: LV5D, 08-Feb-2023 19:07:46

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

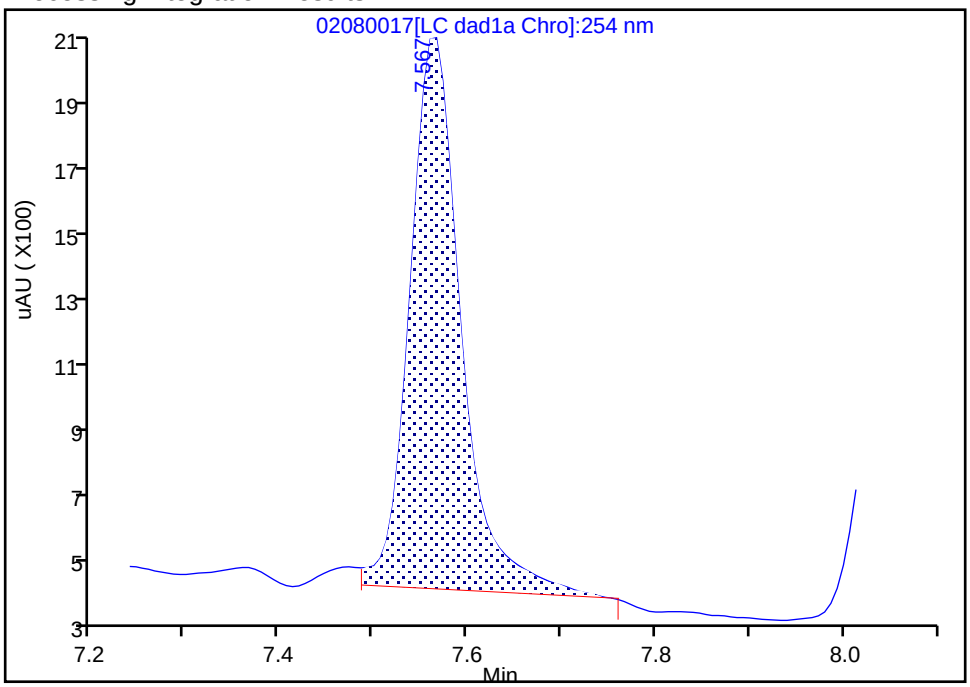
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080017.d				
Injection Date:	08-Feb-2023 17:56:21	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 3				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

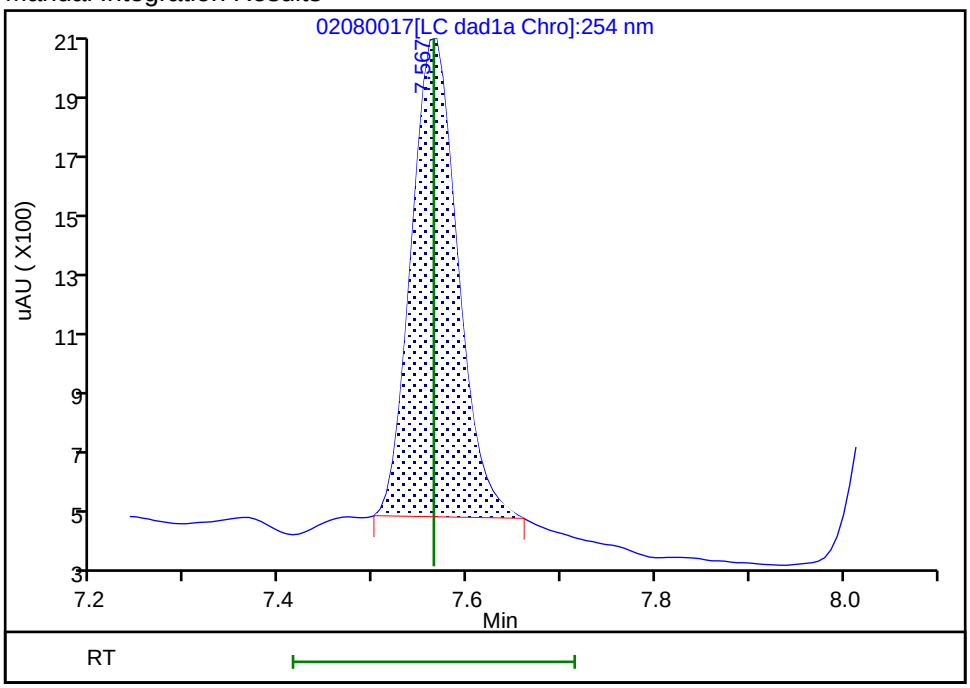
Processing Integration Results

RT: 7.57
Area: 6041
Amount: 0.054246
Amount Units: ug/mL



Manual Integration Results

RT: 7.57
Area: 5236
Amount: 0.049220
Amount Units: ug/mL



Reviewer: LV5D, 08-Feb-2023 19:09:26
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

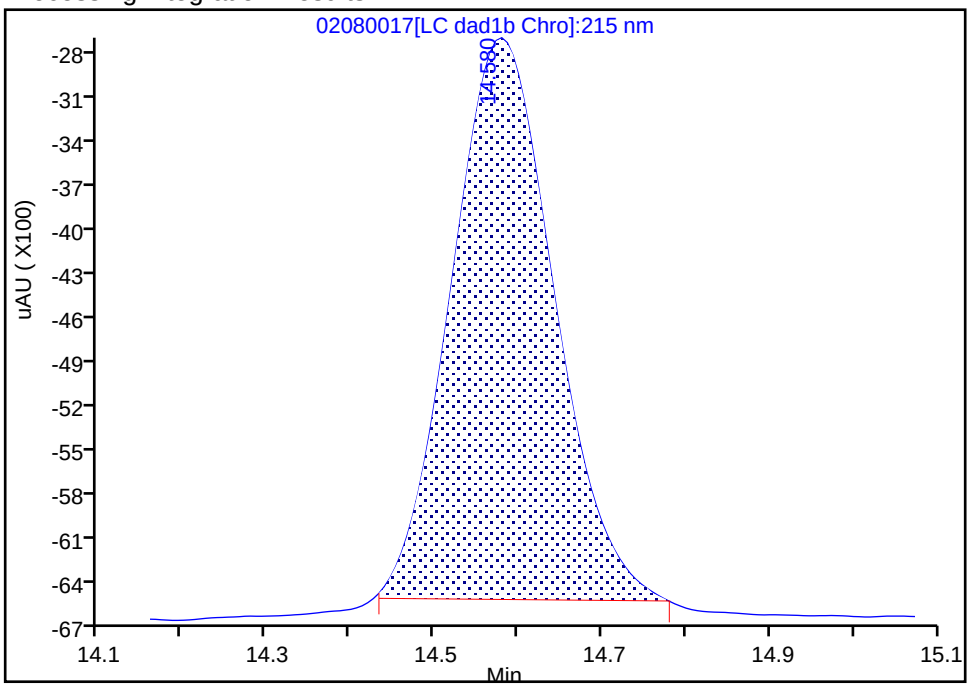
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080017.d				
Injection Date:	08-Feb-2023 17:56:21	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 3				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1C, 215 nm		

25 PETN, CAS: 78-11-5

Signal: 1

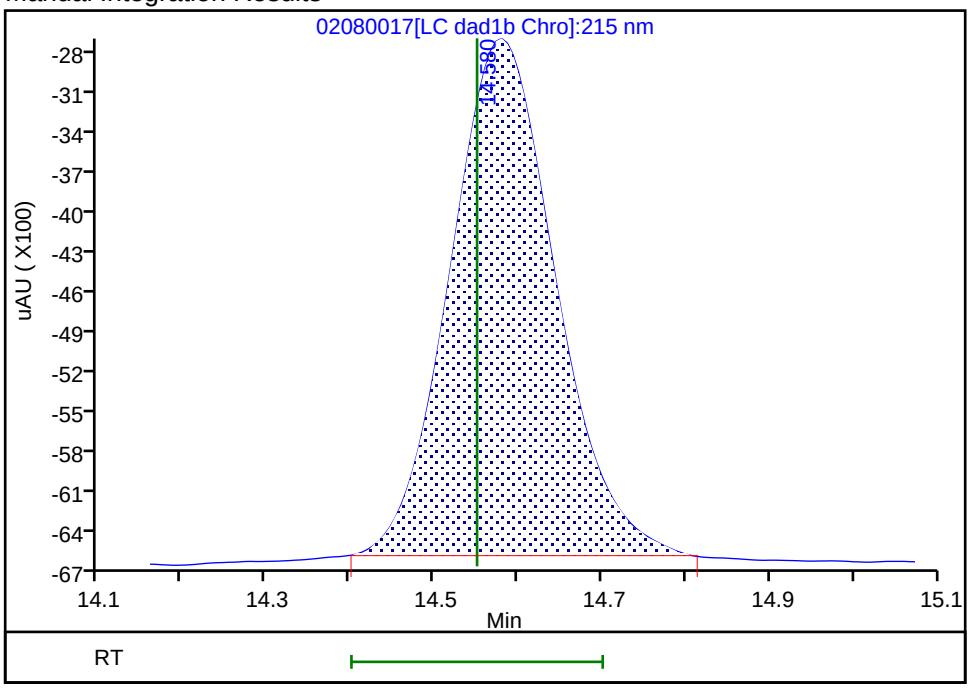
Processing Integration Results

RT: 14.58
Area: 32403
Amount: 0.474274
Amount Units: ug/mL



Manual Integration Results

RT: 14.58
Area: 34057
Amount: 0.494688
Amount Units: ug/mL



Reviewer: LV5D, 08-Feb-2023 19:08:23

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080018.D
Lims ID: IC INT 2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 08-Feb-2023 18:19:14 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 2
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub26

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Feb-2023 12:48:08 Calib Date: 08-Feb-2023 18:42:13
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1604

First Level Reviewer: LV5D Date: 08-Feb-2023 19:08:08

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.549	6.544	0.005	1961	0.0200	0.0210	M
8 RDX	1	7.563	7.564	-0.001	2196	0.0200	0.0206	M
9 2,4,6-Trinitrophenol	1	8.049	8.044	0.005	1492	0.0200	0.0197	
$ 10 1,2-Dinitrobenzene	1	8.516	8.517	-0.001	2491	0.0200	0.0197	
11 1,3,5-Trinitrobenzene	1	8.643	8.644	-0.001	4313	0.0200	0.0199	
12 1,3-Dinitrobenzene	1	9.256	9.257	-0.001	5849	0.0200	0.0199	
13 Nitrobenzene	1	9.636	9.631	0.005	3816	0.0200	0.0200	
14 3,5-Dinitroaniline	1	9.836	9.831	0.005	4377	0.0200	0.0198	
15 Tetryl	1	9.982	9.977	0.005	3073	0.0200	0.0187	
16 Nitroglycerin	2	10.449	10.437	0.012	11879	0.2000	0.1854	
17 2,4,6-Trinitrotoluene	1	10.876	10.864	0.012	4262	0.0200	0.0202	
18 4-Amino-2,6-dinitrotoluene	1	11.042	11.031	0.011	3106	0.0200	0.0200	
19 2-Amino-4,6-dinitrotoluene	1	11.289	11.277	0.012	4021	0.0200	0.0200	
20 2,6-Dinitrotoluene	1	11.469	11.451	0.018	2911	0.0200	0.0204	
21 2,4-Dinitrotoluene	1	11.636	11.617	0.019	5985	0.0200	0.0202	
22 o-Nitrotoluene	1	12.456	12.437	0.019	2611	0.0200	0.0204	
23 p-Nitrotoluene	1	12.869	12.844	0.025	2393	0.0200	0.0214	
24 m-Nitrotoluene	1	13.442	13.411	0.031	3062	0.0200	0.0218	
25 PETN	2	14.589	14.551	0.038	13462	0.2000	0.1955	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00075 Amount Added: 2.00 Units: uL

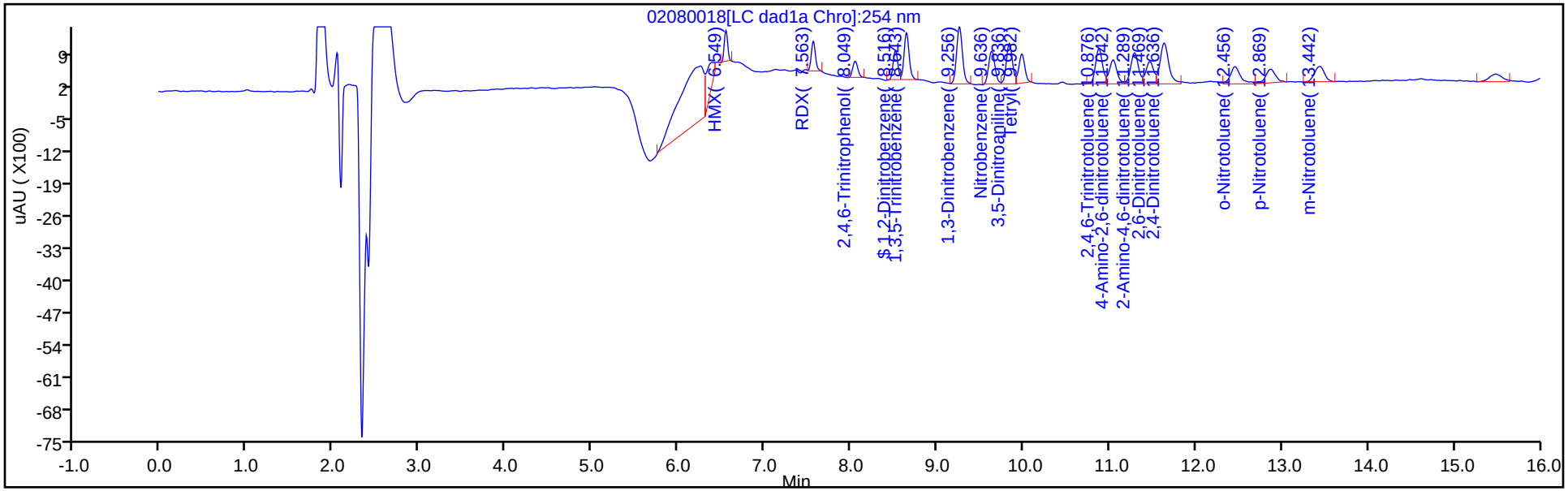
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Eurofins Denver

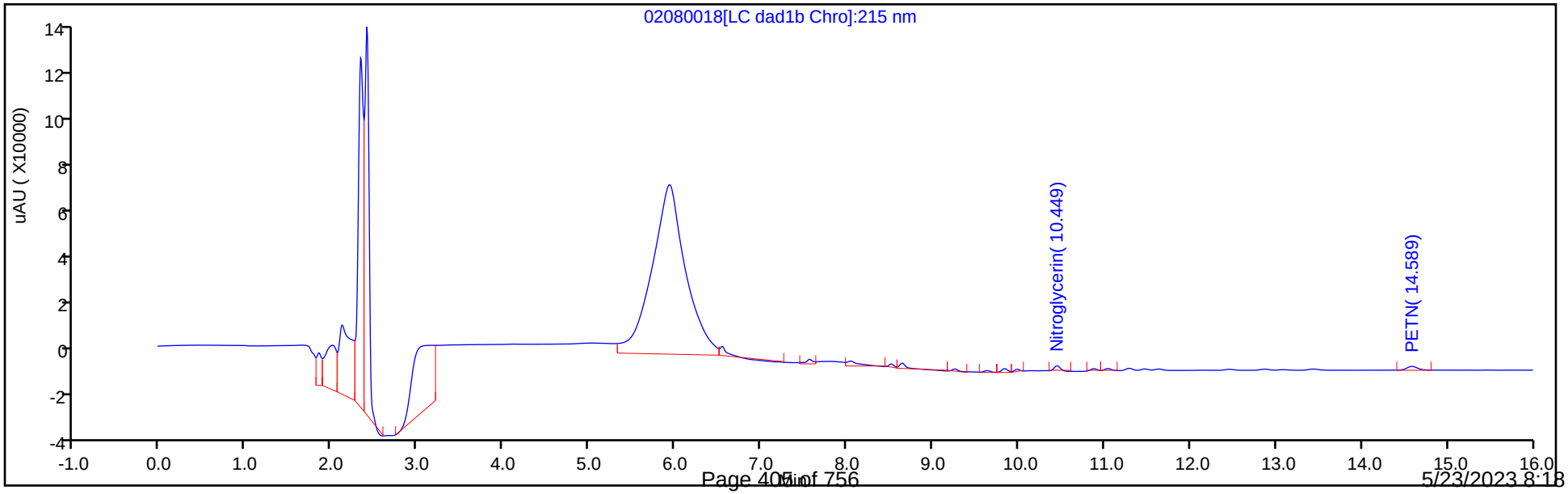
Data File: \\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080018.d

Injection Date:	08-Feb-2023 18:19:14	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC INT 2			Worklist Smp#:	18
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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

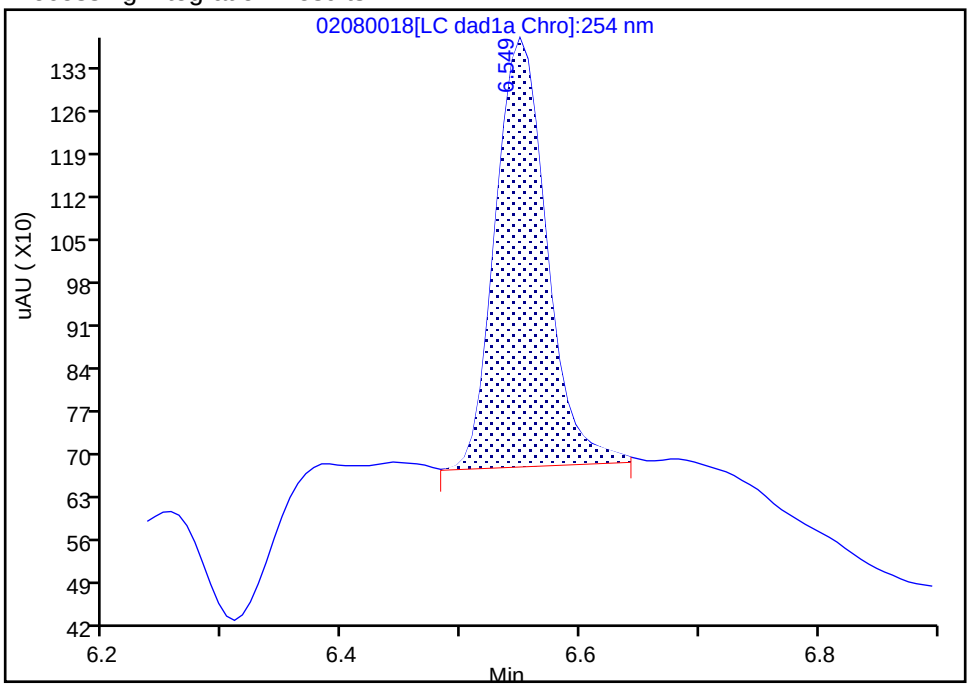
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Injection Date:	08-Feb-2023 18:19:14	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

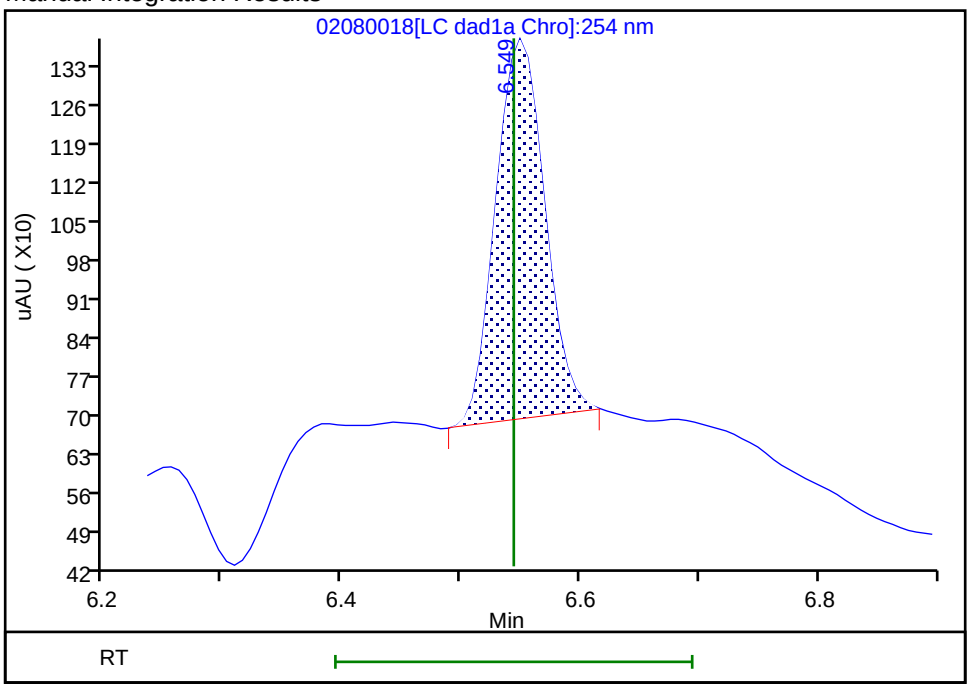
Processing Integration Results

RT: 6.55
Area: 2102
Amount: 0.022288
Amount Units: ug/mL



Manual Integration Results

RT: 6.55
Area: 1961
Amount: 0.020967
Amount Units: ug/mL



Reviewer: LV5D, 08-Feb-2023 19:09:07
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

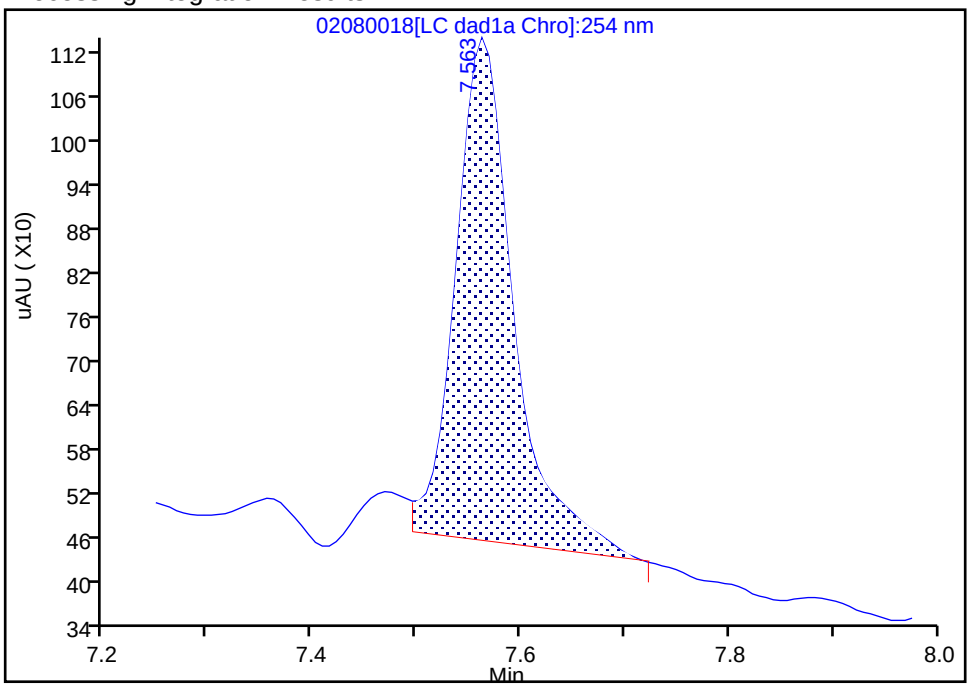
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080018.d				
Injection Date:	08-Feb-2023 18:19:14	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

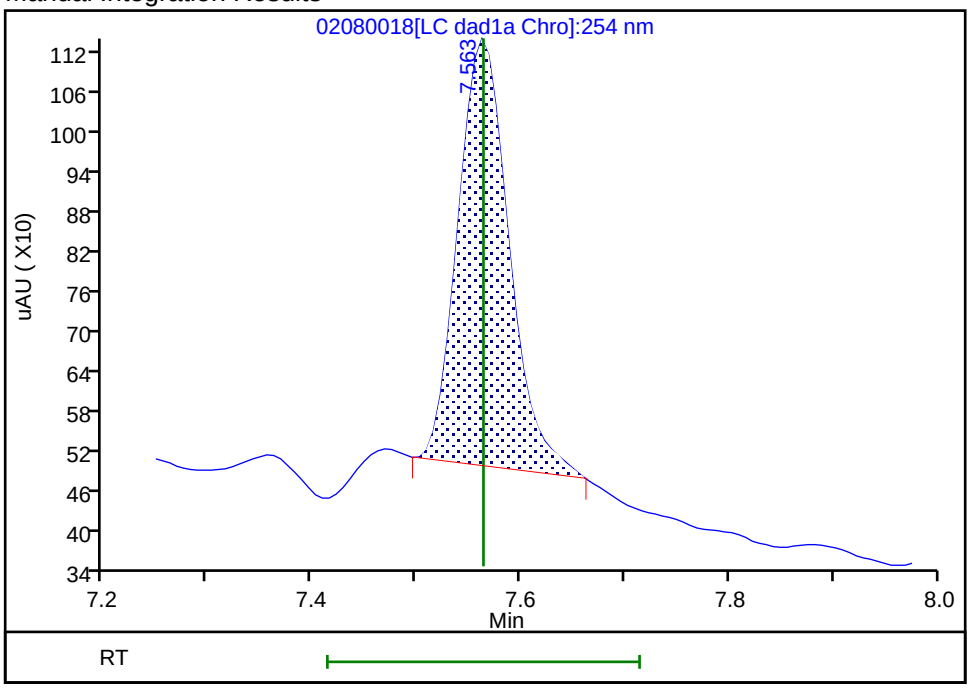
Processing Integration Results

RT: 7.56
Area: 2668
Amount: 0.023407
Amount Units: ug/mL



Manual Integration Results

RT: 7.56
Area: 2196
Amount: 0.020643
Amount Units: ug/mL



Reviewer: LV5D, 08-Feb-2023 19:09:19
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

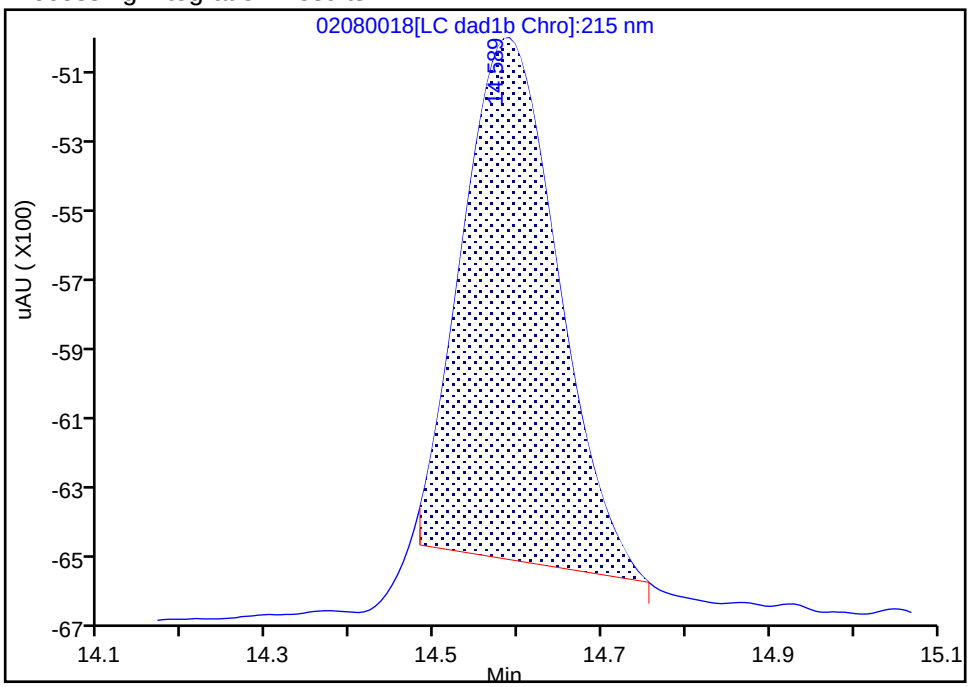
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080018.d				
Injection Date:	08-Feb-2023 18:19:14	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1C, 215 nm		

25 PETN, CAS: 78-11-5

Signal: 1

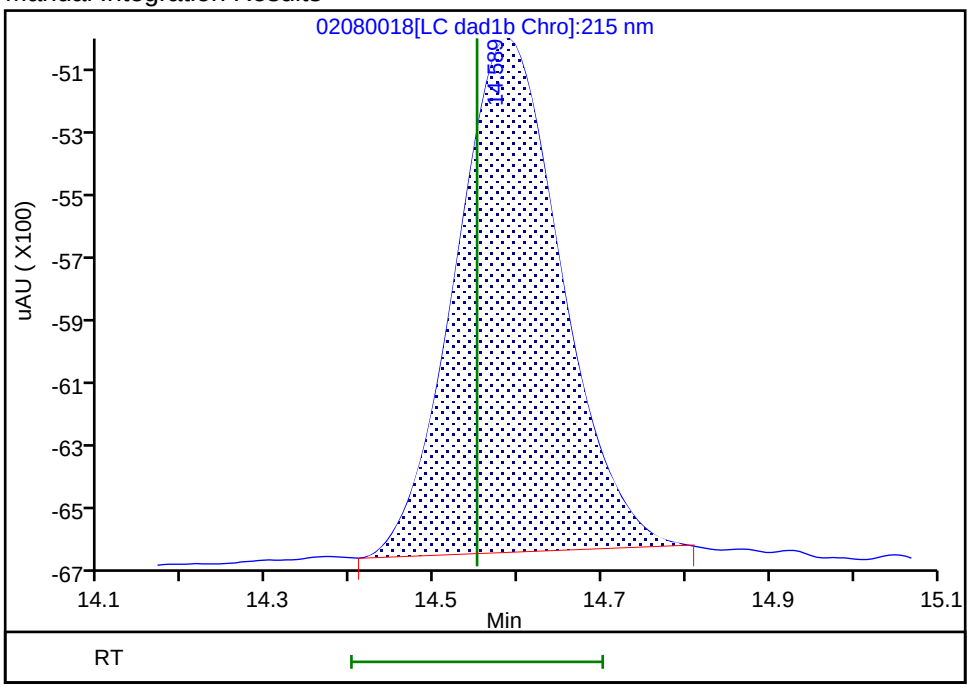
Processing Integration Results

RT: 14.59
Area: 11186
Amount: 0.166814
Amount Units: ug/mL



Manual Integration Results

RT: 14.59
Area: 13462
Amount: 0.195540
Amount Units: ug/mL



Reviewer: LV5D, 08-Feb-2023 19:08:19
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080019.D
Lims ID: IC INT 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 08-Feb-2023 18:42:13 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 1
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub26

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Feb-2023 12:48:08 Calib Date: 08-Feb-2023 18:42:13
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1604

First Level Reviewer: LV5D Date: 08-Feb-2023 19:08:17

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.550	6.544	0.006	962	0.0100	0.0103	M
8 RDX	1	7.563	7.564	-0.001	1203	0.0100	0.0113	M
9 2,4,6-Trinitrophenol	1	8.050	8.044	0.006	673	0.0100	0.008875	
$ 10 1,2-Dinitrobenzene	1	8.517	8.517	0.000	1188	0.0100	0.009406	
11 1,3,5-Trinitrobenzene	1	8.643	8.644	-0.001	2196	0.0100	0.0101	
12 1,3-Dinitrobenzene	1	9.263	9.257	0.006	2902	0.0100	0.009857	
13 Nitrobenzene	1	9.636	9.631	0.005	1905	0.0100	0.0100	
14 3,5-Dinitroaniline	1	9.836	9.831	0.005	2147	0.0100	0.0100	
15 Tetryl	1	9.983	9.977	0.006	1611	0.0100	0.009816	
16 Nitroglycerin	2	10.450	10.437	0.013	6159	0.1000	0.0961	
17 2,4,6-Trinitrotoluene	1	10.876	10.864	0.012	2167	0.0100	0.0103	
18 4-Amino-2,6-dinitrotoluene	1	11.043	11.031	0.012	1670	0.0100	0.0108	
19 2-Amino-4,6-dinitrotoluene	1	11.296	11.277	0.019	2214	0.0100	0.0110	
20 2,6-Dinitrotoluene	1	11.470	11.451	0.019	1486	0.0100	0.0104	
21 2,4-Dinitrotoluene	1	11.636	11.617	0.019	3141	0.0100	0.0106	
22 o-Nitrotoluene	1	12.456	12.437	0.019	1377	0.0100	0.0108	
23 p-Nitrotoluene	1	12.863	12.844	0.019	1263	0.0100	0.0113	
24 m-Nitrotoluene	1	13.430	13.411	0.019	1473	0.0100	0.0105	
25 PETN	2	14.583	14.551	0.032	7273	0.1000	0.1056	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00075 Amount Added: 1.00 Units: uL

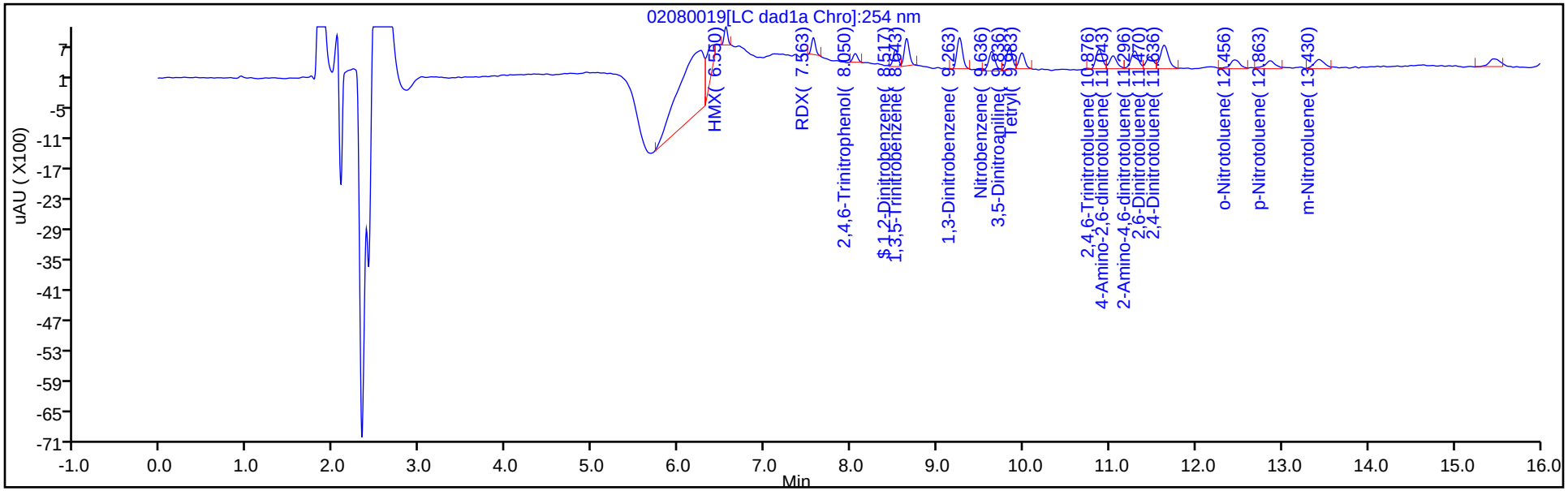
Report Date: 09-Feb-2023 12:48:08 Chrom Revision: 2.3 01-Feb-2023 13:23:06

Eurofins Denver

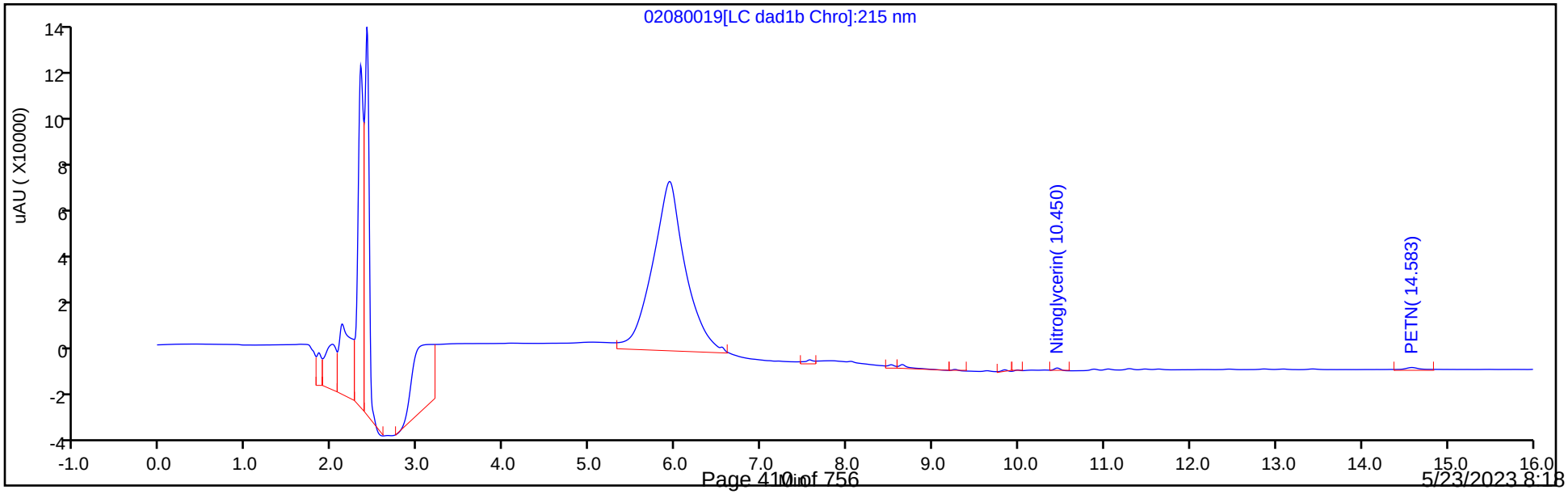
Data File: \\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080019.d

Injection Date:	08-Feb-2023 18:42:13	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC INT 1			Worklist Smp#:	19
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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

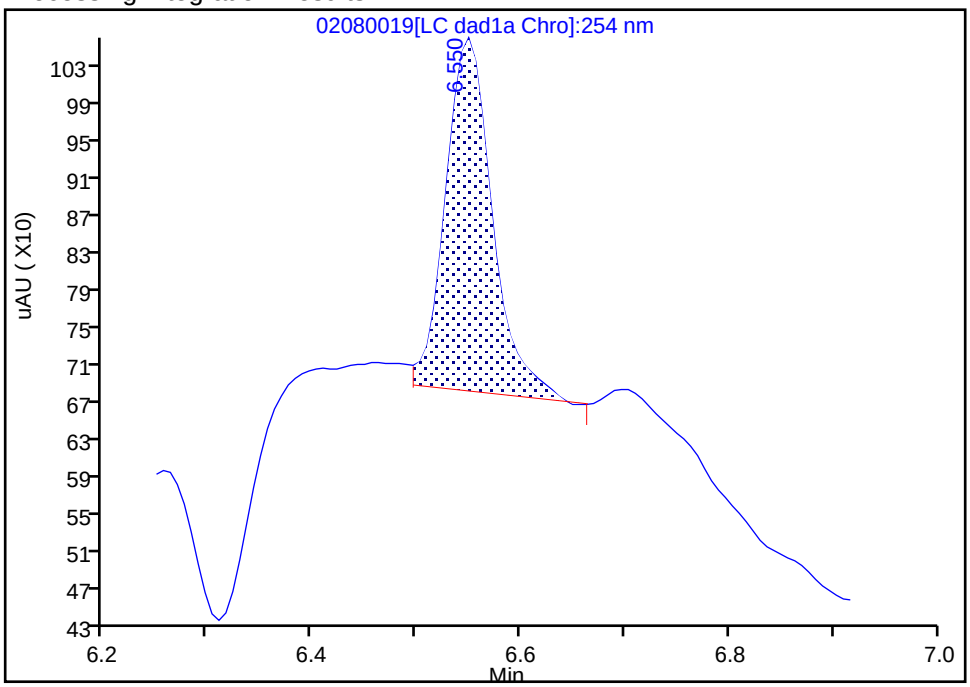
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080019.d				
Injection Date:	08-Feb-2023 18:42:13	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

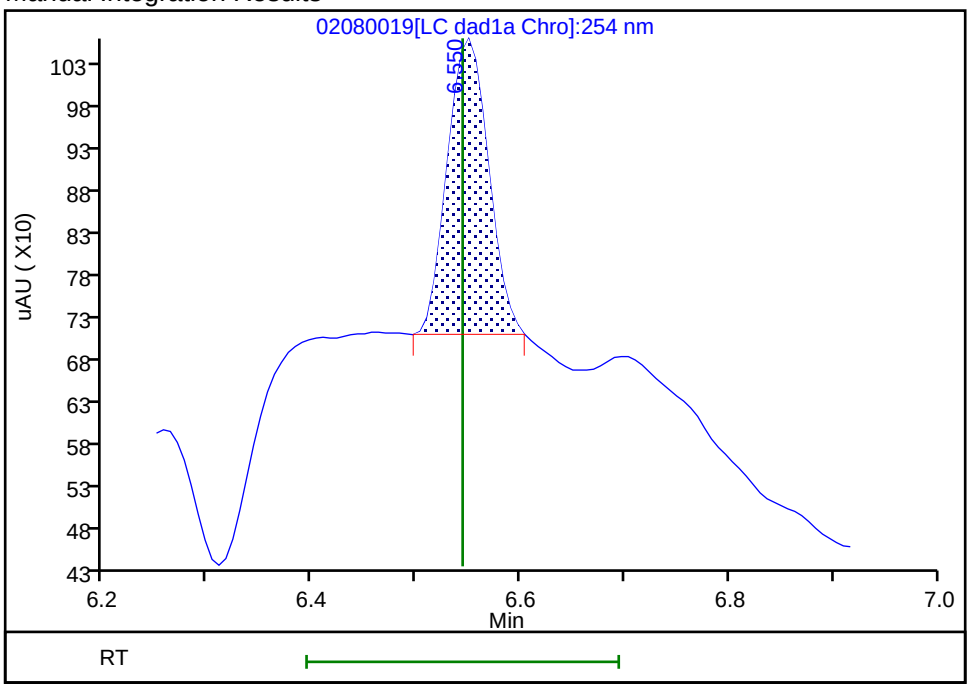
Processing Integration Results

RT: 6.55
Area: 1188
Amount: 0.012270
Amount Units: ug/mL



Manual Integration Results

RT: 6.55
Area: 962
Amount: 0.010286
Amount Units: ug/mL



Reviewer: LV5D, 08-Feb-2023 19:09:00
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

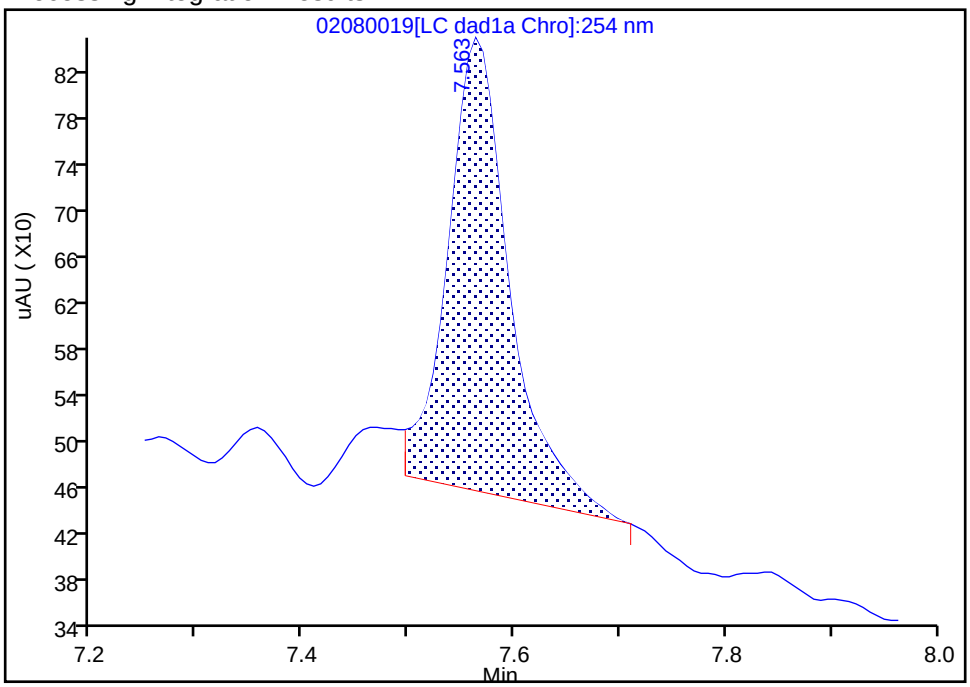
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080019.d				
Injection Date:	08-Feb-2023 18:42:13	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

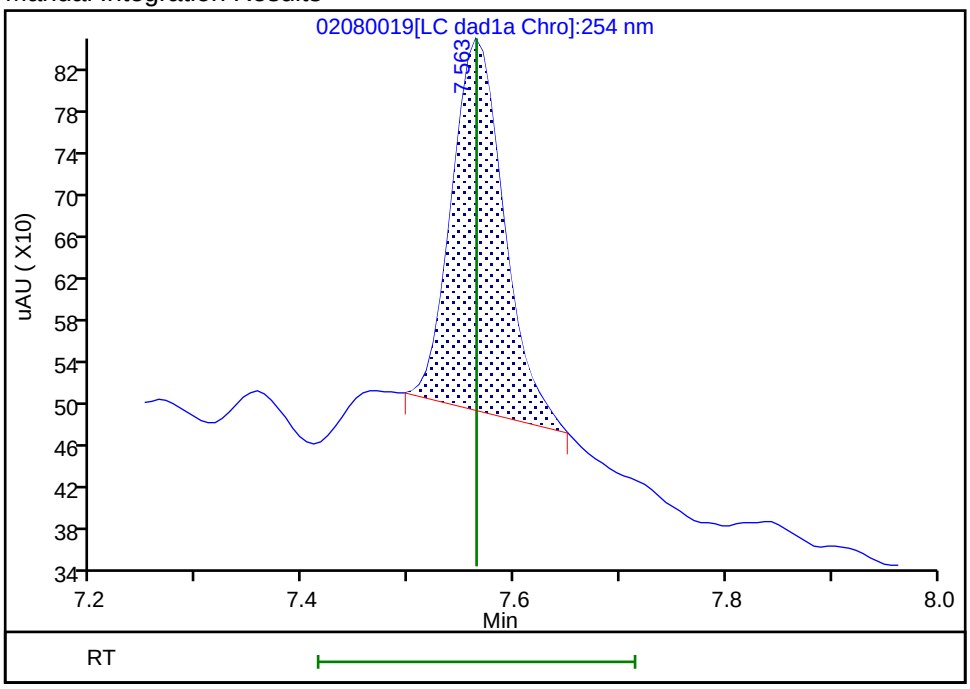
Processing Integration Results

RT: 7.56
Area: 1576
Amount: 0.013341
Amount Units: ug/mL



Manual Integration Results

RT: 7.56
Area: 1203
Amount: 0.011309
Amount Units: ug/mL



Reviewer: LV5D, 08-Feb-2023 19:08:52
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176134-1 Analy Batch No.: 603284

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/24/2023 15:00 Calibration End Date: 02/24/2023 17:41 Calibration ID: 77558

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-603284/18	02240018.D
Level 2	IC 280-603284/17	02240017.D
Level 3	IC 280-603284/16	02240016.D
Level 4	IC 280-603284/15	02240015.D
Level 5	IC 280-603284/14	02240014.D
Level 6	IC 280-603284/13	02240013.D
Level 7	IC 280-603284/12	02240012.D
Level 8	IC 280-603284/11	02240011.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
TNX	6.444	6.448	6.446	6.443	6.442	6.441	6.439	6.442			6.343 - 6.543	6.443
DNX	6.771	6.768	6.766	6.770	6.769	6.767	6.759	6.762			6.670 - 6.870	6.767
MNX	7.197	7.195	7.199	7.196	7.195	7.194	7.192	7.189			7.046 - 7.346	7.195

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

Lab Name: Eurofins Denver Job No.: 280-176134-1 Analy Batch No.: 603284

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/24/2023 15:00 Calibration End Date: 02/24/2023 17:41 Calibration ID: 77558

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-603284/18	02240018.D
Level 2	IC 280-603284/17	02240017.D
Level 3	IC 280-603284/16	02240016.D
Level 4	IC 280-603284/15	02240015.D
Level 5	IC 280-603284/14	02240014.D
Level 6	IC 280-603284/13	02240013.D
Level 7	IC 280-603284/12	02240012.D
Level 8	IC 280-603284/11	02240011.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 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
TNX	187089 192298	197747 202669	198325 203463	196782 203127	Ave		197687.331				2.9		20.0			
DNX	139760 138674	146613 146977	145554 146290	145335 146496	Ave		144462.486				2.3		20.0			
MNX	127763 125139	130334 133592	131602 134086	134629 132227	Ave		131171.565				2.5		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.: 280-176134-1 Analy Batch No.: 603284

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/24/2023 15:00 Calibration End Date: 02/24/2023 17:41 Calibration ID: 77558

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-603284/18	02240018.D
Level 2	IC 280-603284/17	02240017.D
Level 3	IC 280-603284/16	02240016.D
Level 4	IC 280-603284/15	02240015.D
Level 5	IC 280-603284/14	02240014.D
Level 6	IC 280-603284/13	02240013.D
Level 7	IC 280-603284/12	02240012.D
Level 8	IC 280-603284/11	02240011.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
TNX	Ave	3753 142294	9917 204073	19892 509340	49343	77150	0.0201 0.702	0.0502 1.00	0.100 2.51	0.251	0.401
DNX	Ave	2798 102987	7338 146436	14570 366607	36370	55525	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
MNX	Ave	2982 109131	7605 156478	15358 385772	39278	58415	0.0233 0.817	0.0584 1.17	0.117 2.92	0.292	0.467

Curve Type Legend
Ave = Average

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240011.D
Lims ID: IC DMT 8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 24-Feb-2023 15:00:10 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT 8
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 28-Feb-2023 13:17:25 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1602

First Level Reviewer: LV5D Date: 24-Feb-2023 15:28:35

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.442	6.443	-0.001	509340	2.51	2.58	M
6 DNX	1	6.762	6.770	-0.008	366607	2.50	2.54	M
7 MNX	1	7.189	7.196	-0.007	385772	2.92	2.94	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00013 Amount Added: 125.00 Units: uL

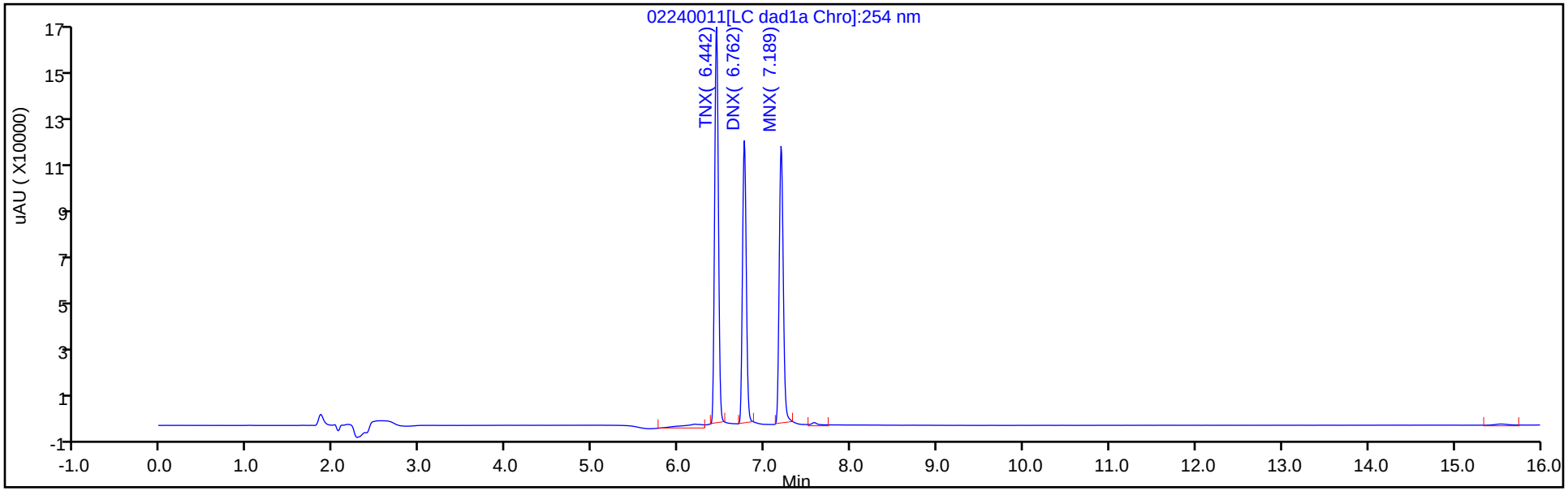
Report Date: 28-Feb-2023 13:17:26 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Denver

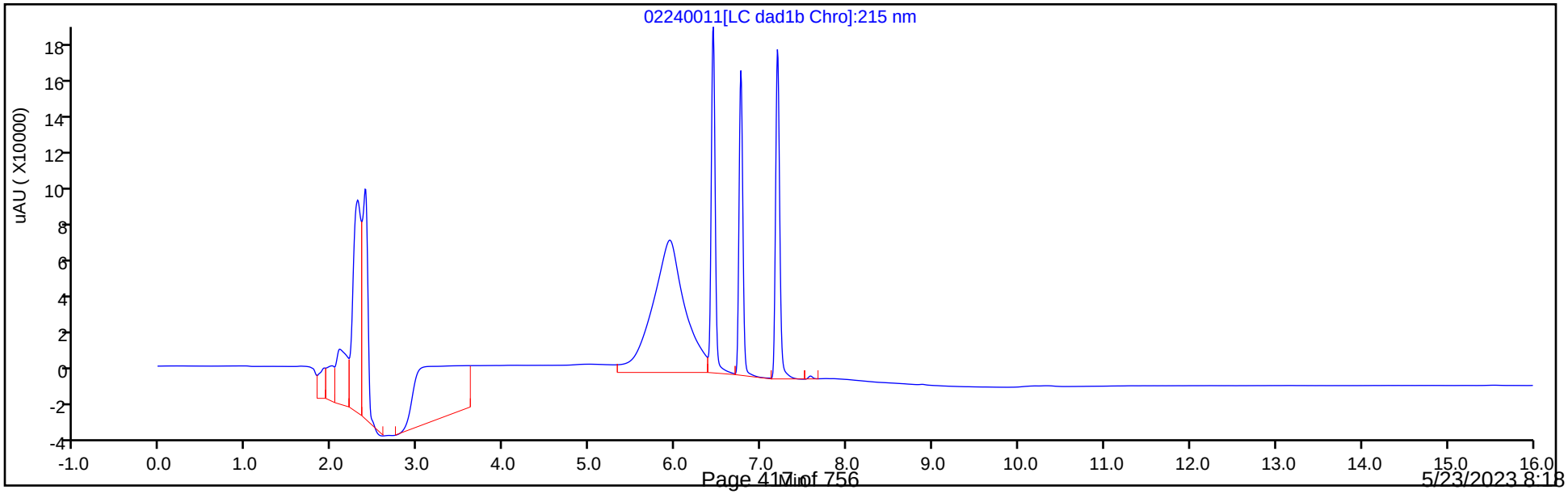
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240011.d

Injection Date:	24-Feb-2023 15:00:10	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC DMT 8			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



Manual Integration/User Assign Peak Report

Eurofins Denver

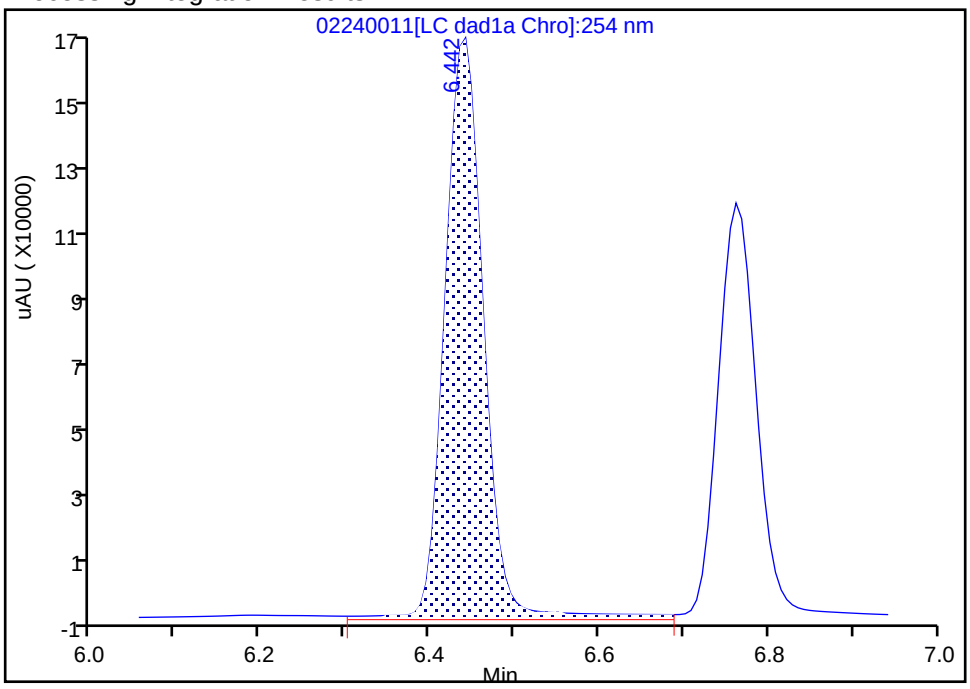
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240011.d
Injection Date: 24-Feb-2023 15:00:10 Instrument ID: CHHPLC_X3
Lims ID: IC DMT 8
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 TNX, CAS: 13980-04-6

Signal: 1

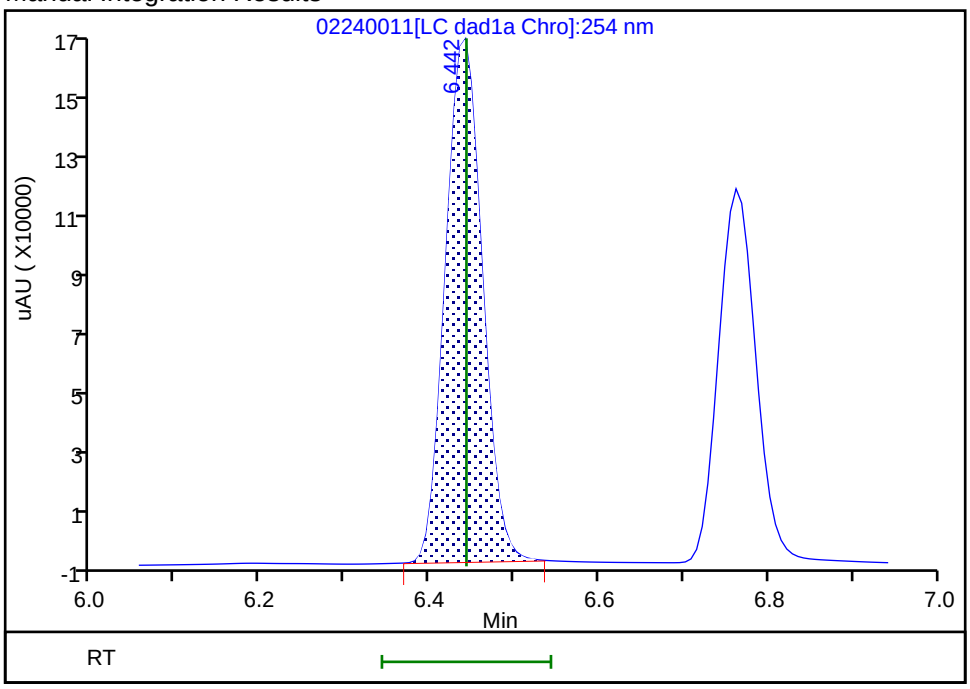
Processing Integration Results

RT: 6.44
Area: 548148
Amount: 2.507500
Amount Units: ug/mL



Manual Integration Results

RT: 6.44
Area: 509340
Amount: 2.576493
Amount Units: ug/mL



Reviewer: LV5D, 24-Feb-2023 16:41:21
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

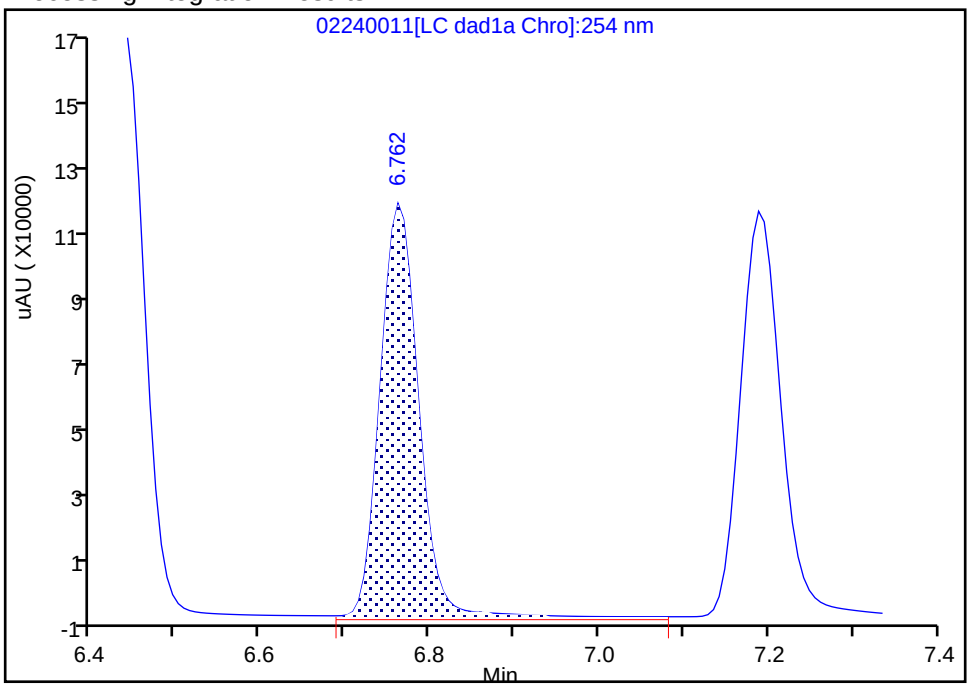
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240011.d				
Injection Date:	24-Feb-2023 15:00:10	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 8				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

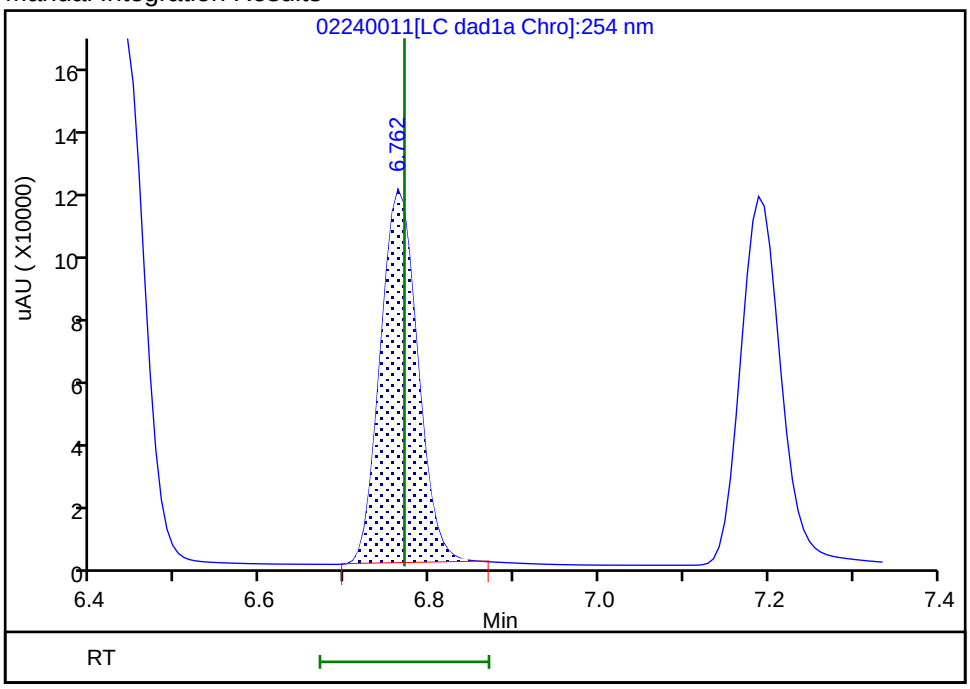
Processing Integration Results

RT: 6.76
Area: 399339
Amount: 2.502500
Amount Units: ug/mL



Manual Integration Results

RT: 6.76
Area: 366607
Amount: 2.537731
Amount Units: ug/mL



Reviewer: LV5D, 24-Feb-2023 16:41:24
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

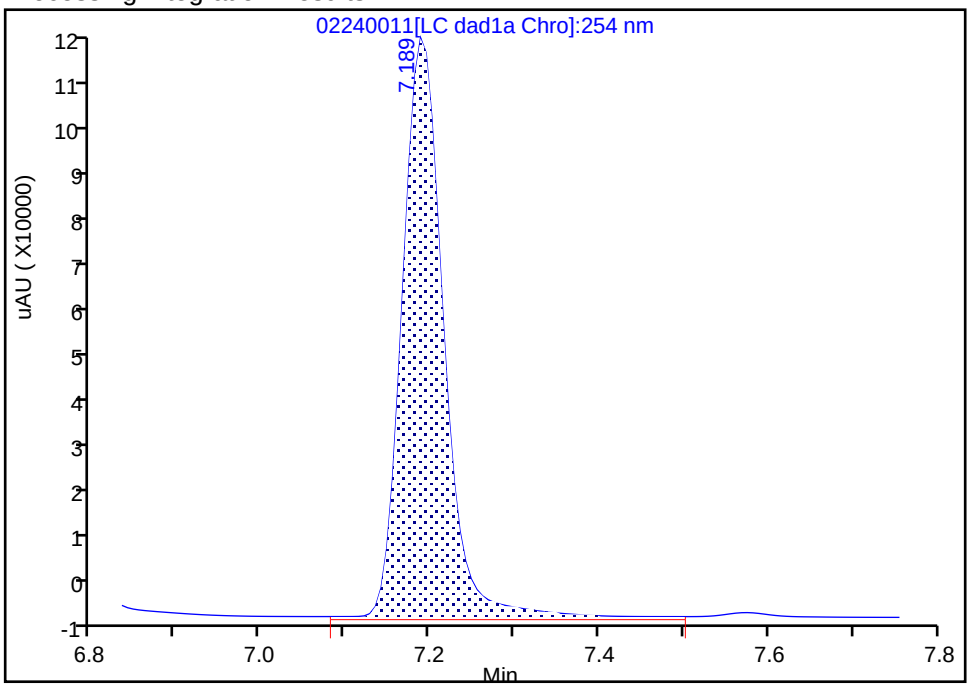
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240011.d
Injection Date: 24-Feb-2023 15:00:10 Instrument ID: CHHPLC_X3
Lims ID: IC DMT 8
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

7 MNX, CAS: 5755-27-1

Signal: 1

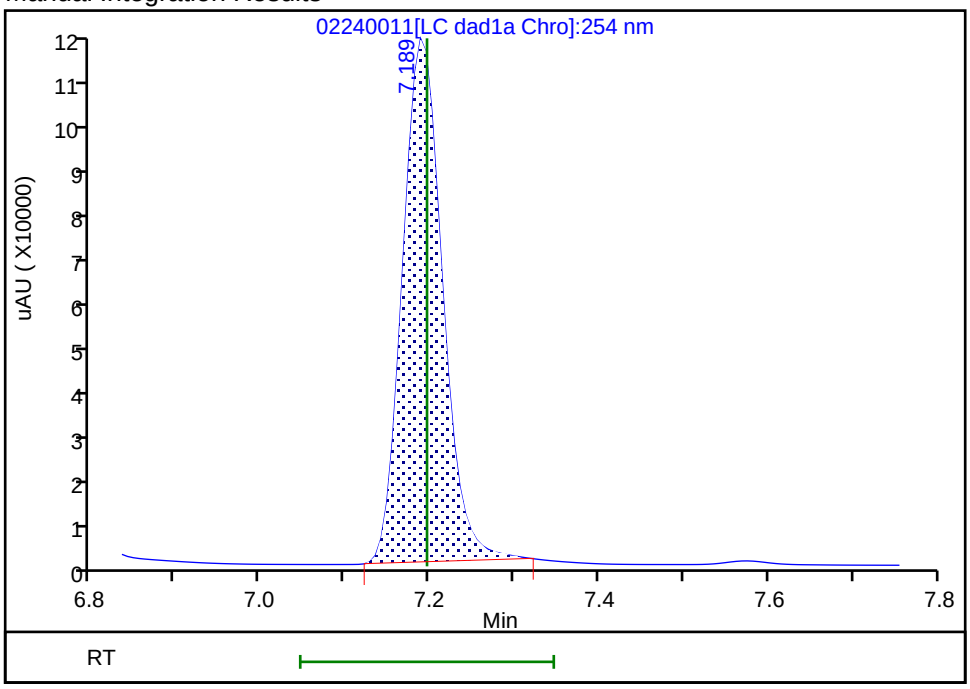
Processing Integration Results

RT: 7.19
Area: 413424
Amount: 2.917500
Amount Units: ug/mL



Manual Integration Results

RT: 7.19
Area: 385772
Amount: 2.940973
Amount Units: ug/mL



Reviewer: LV5D, 24-Feb-2023 16:41:14
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240012.D
Lims ID: IC DMT 7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 24-Feb-2023 15:23:08 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT 7
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 28-Feb-2023 13:17:26 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1602

First Level Reviewer: LV5D Date: 24-Feb-2023 16:07:37

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.439	6.443	-0.004	204073	1.00	1.03	M
6 DNX	1	6.759	6.770	-0.011	146436	1.00	1.01	M
7 MNX	1	7.192	7.196	-0.004	156478	1.17	1.19	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00013 Amount Added: 50.00 Units: uL

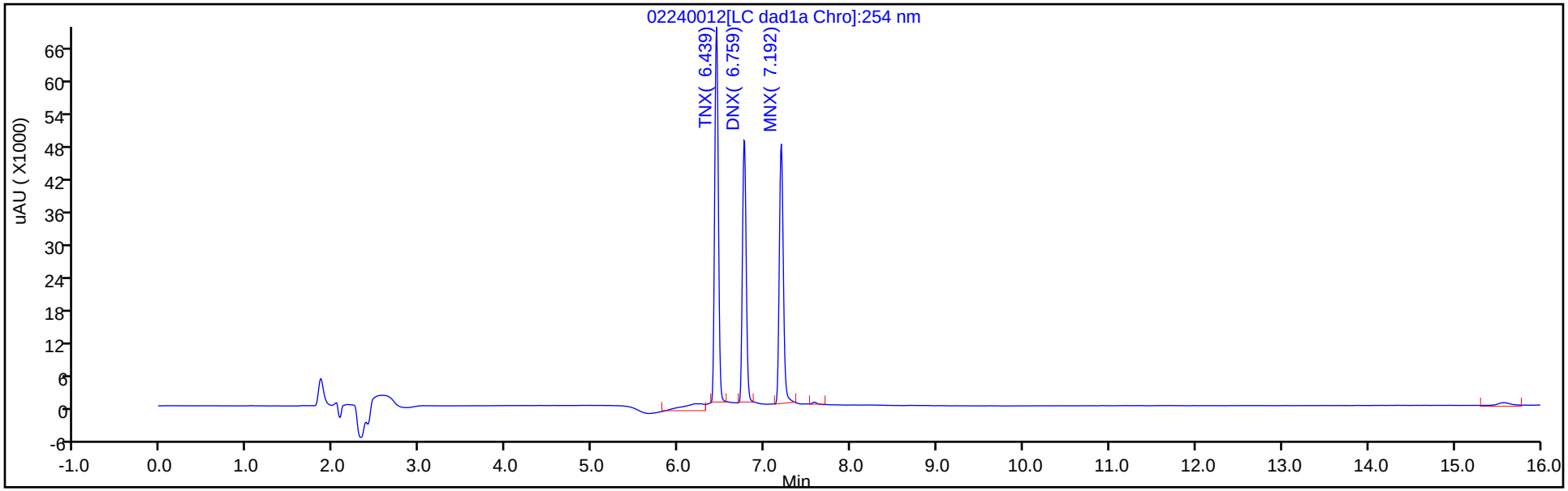
Report Date: 28-Feb-2023 13:17:26 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Denver

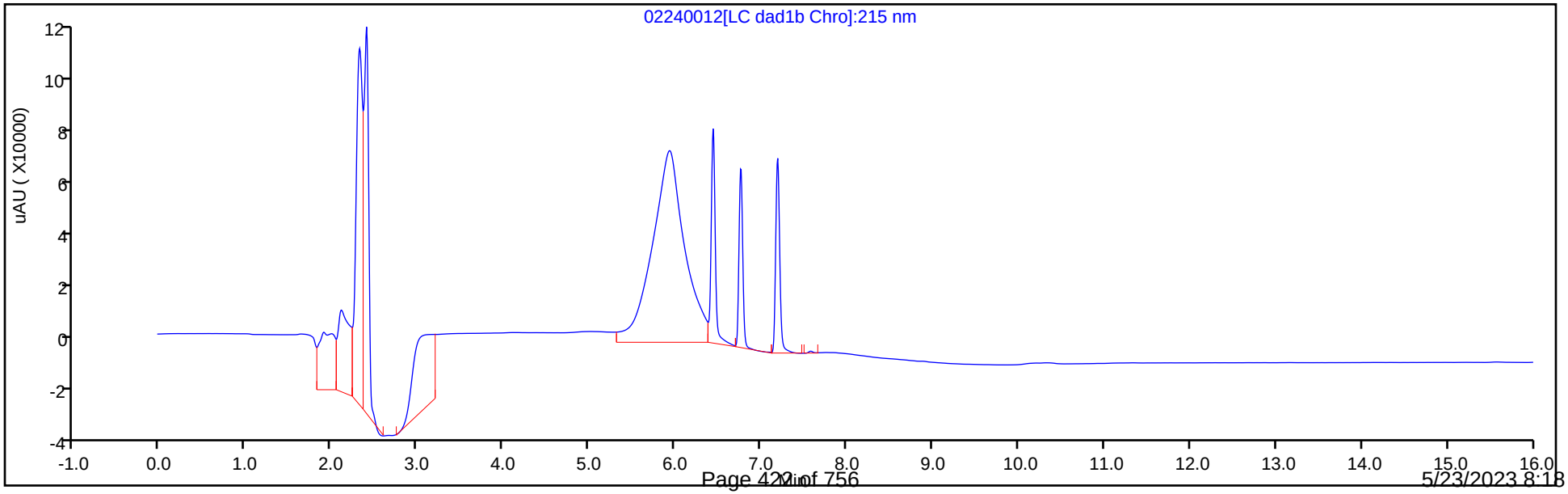
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240012.d

Injection Date:	24-Feb-2023 15:23:08	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC DMT 7			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



Manual Integration/User Assign Peak Report

Eurofins Denver

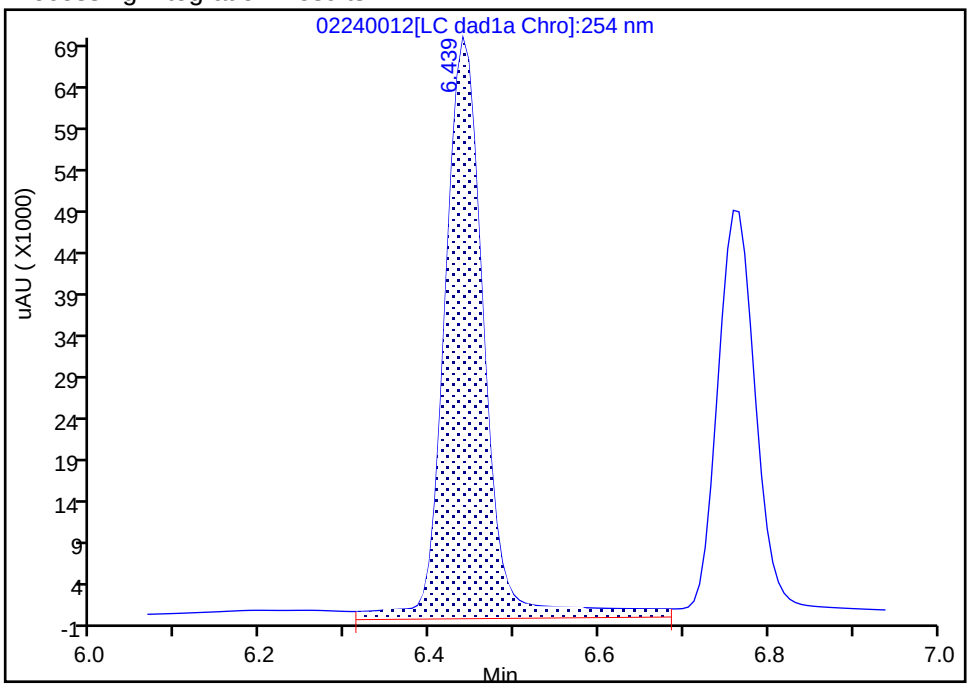
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240012.d				
Injection Date:	24-Feb-2023 15:23:08	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 7				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

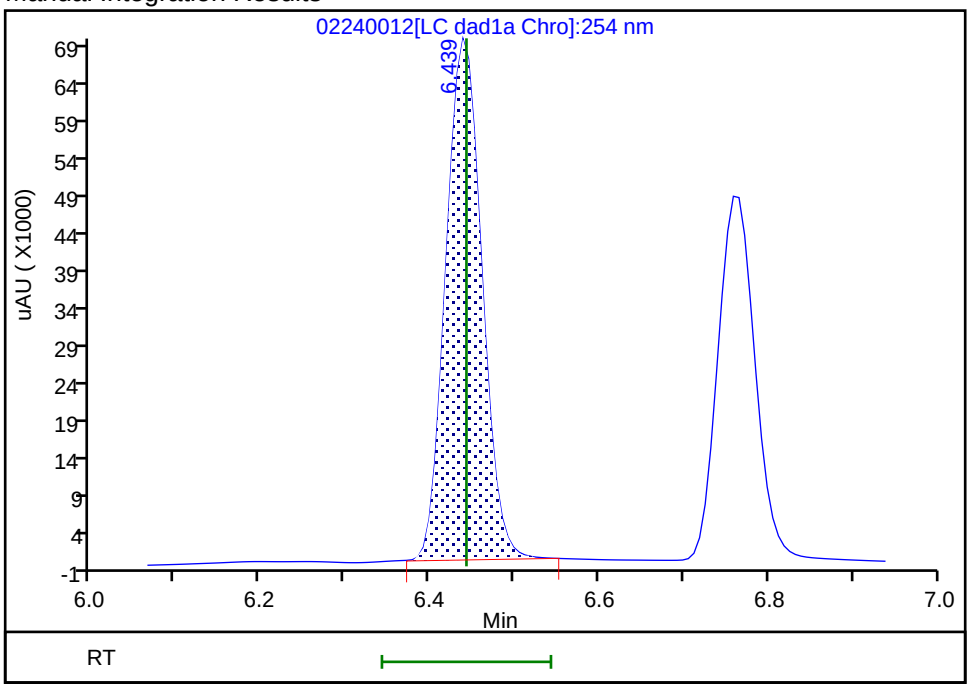
Processing Integration Results

RT: 6.44
Area: 232230
Amount: 1.069897
Amount Units: ug/mL



Manual Integration Results

RT: 6.44
Area: 204073
Amount: 1.032302
Amount Units: ug/mL



Reviewer: LV5D, 24-Feb-2023 16:41:30
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

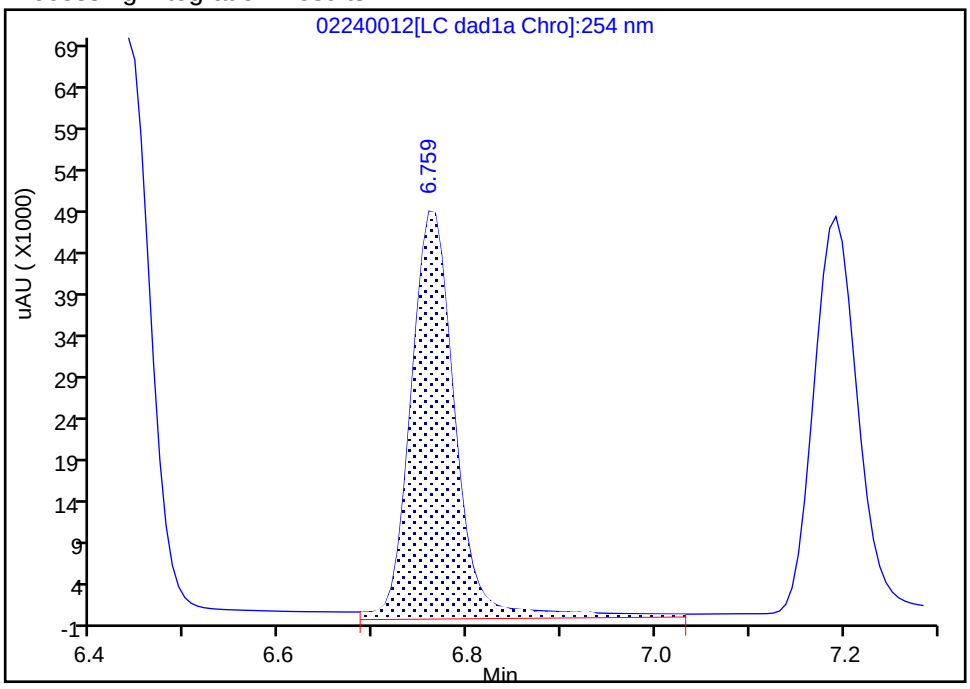
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240012.d
Injection Date: 24-Feb-2023 15:23:08 Instrument ID: CHHPLC_X3
Lims ID: IC DMT 7
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

6 DNX, CAS: 80251-29-2

Signal: 1

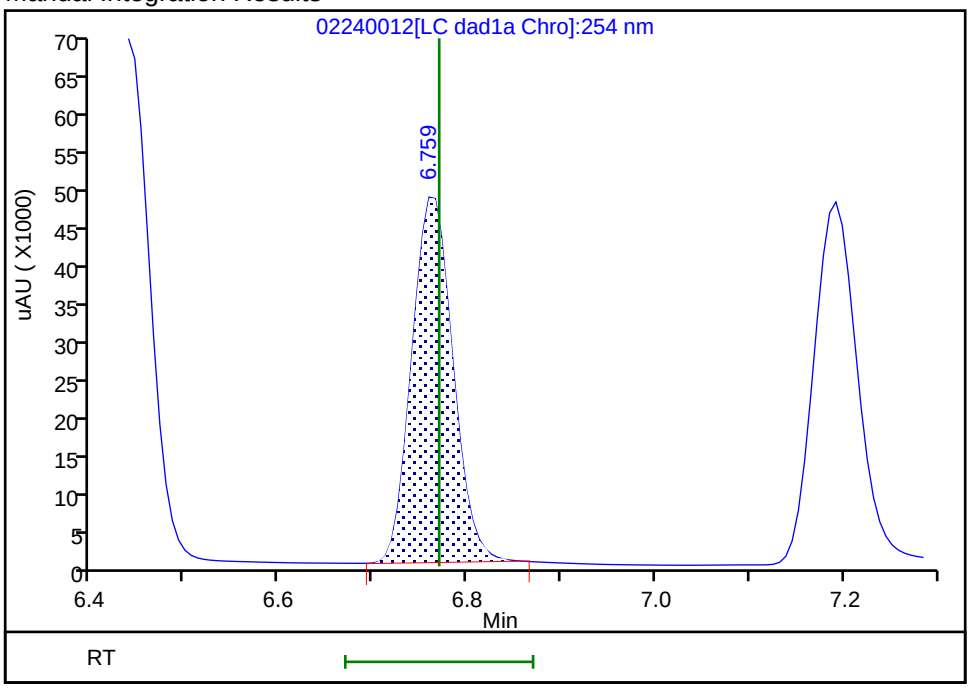
Processing Integration Results

RT: 6.76
Area: 164380
Amount: 1.059050
Amount Units: ug/mL



Manual Integration Results

RT: 6.76
Area: 146436
Amount: 1.013661
Amount Units: ug/mL



Reviewer: LV5D, 24-Feb-2023 16:41:34
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

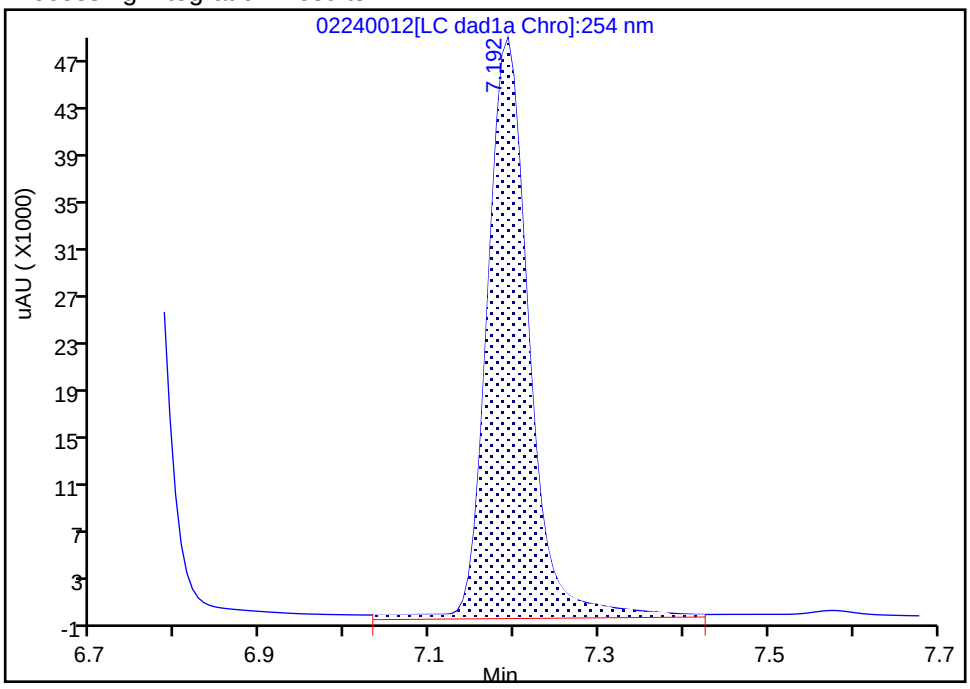
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240012.d
Injection Date: 24-Feb-2023 15:23:08 Instrument ID: CHHPLC_X3
Lims ID: IC DMT 7
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

7 MNX, CAS: 5755-27-1

Signal: 1

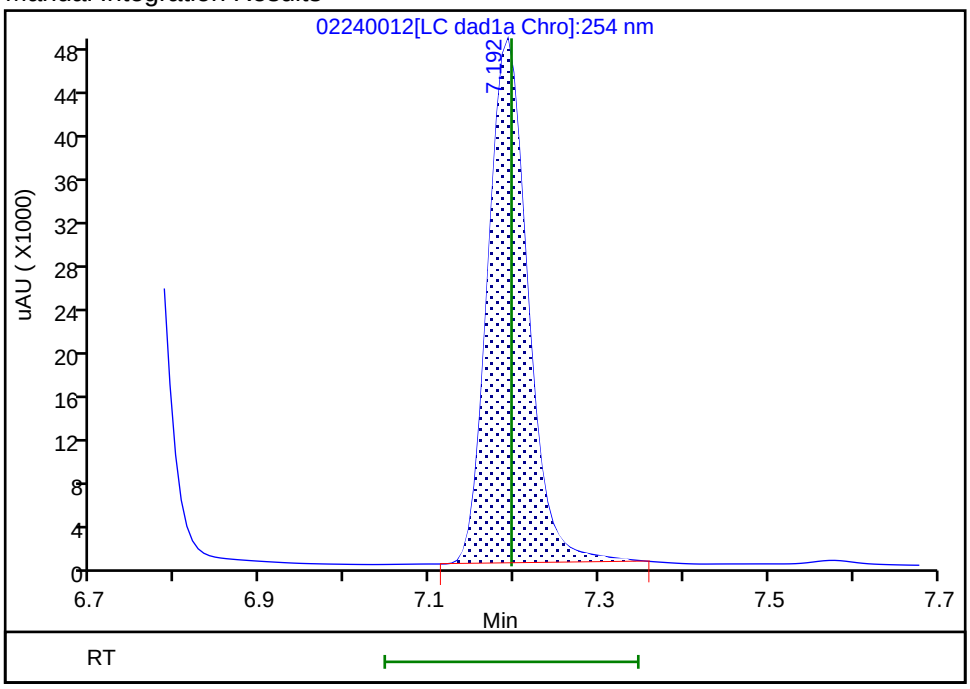
Processing Integration Results

RT: 7.19
Area: 166389
Amount: 1.221740
Amount Units: ug/mL



Manual Integration Results

RT: 7.19
Area: 156478
Amount: 1.192926
Amount Units: ug/mL



Reviewer: LV5D, 24-Feb-2023 16:41:38
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240013.D
Lims ID: IC DMT 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 24-Feb-2023 15:46:11 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT 6
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 28-Feb-2023 13:17:27 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1602

First Level Reviewer: LV5D Date: 24-Feb-2023 16:40:45

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.441	6.443	-0.002	142294	0.7021	0.7198	M
6 DNX	1	6.767	6.770	-0.003	102987	0.7007	0.7129	M
7 MNX	1	7.194	7.196	-0.002	109131	0.8169	0.8320	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00013 Amount Added: 35.00 Units: uL

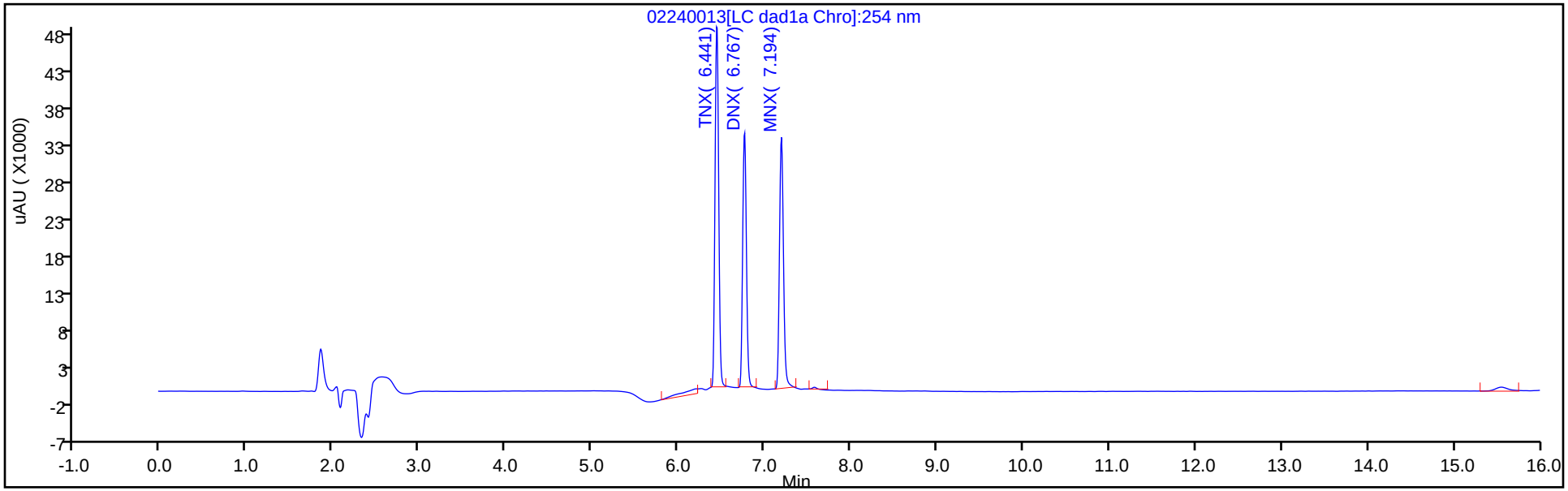
Report Date: 28-Feb-2023 13:17:27 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Denver

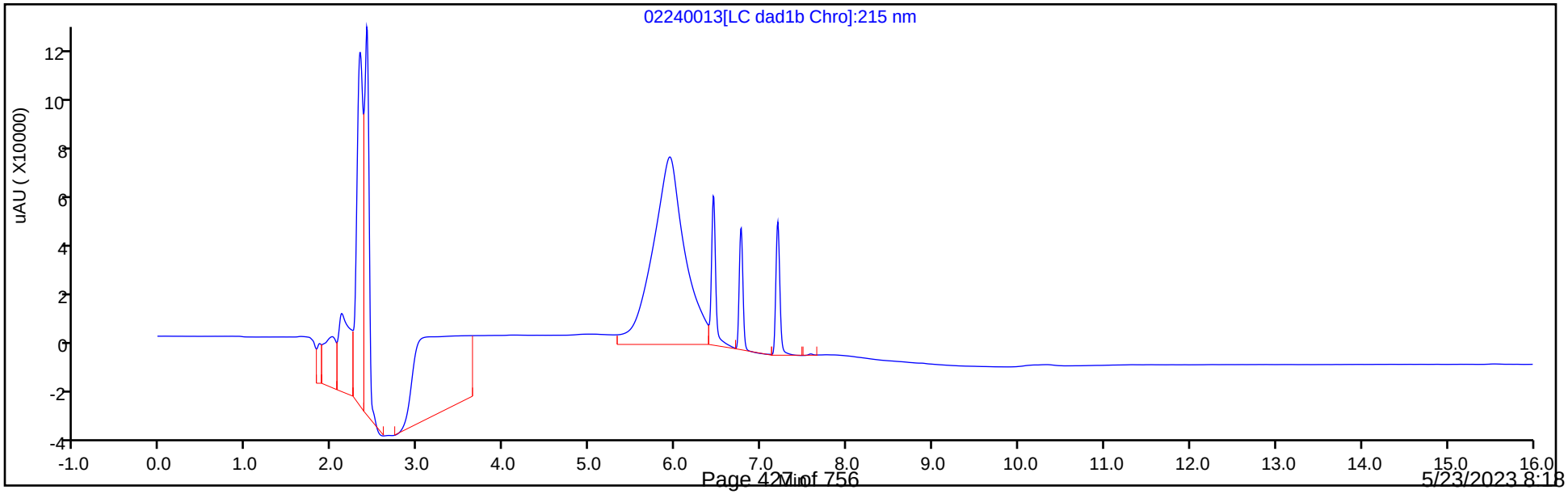
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240013.d

Injection Date:	24-Feb-2023 15:46:11	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC DMT 6			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



Manual Integration/User Assign Peak Report

Eurofins Denver

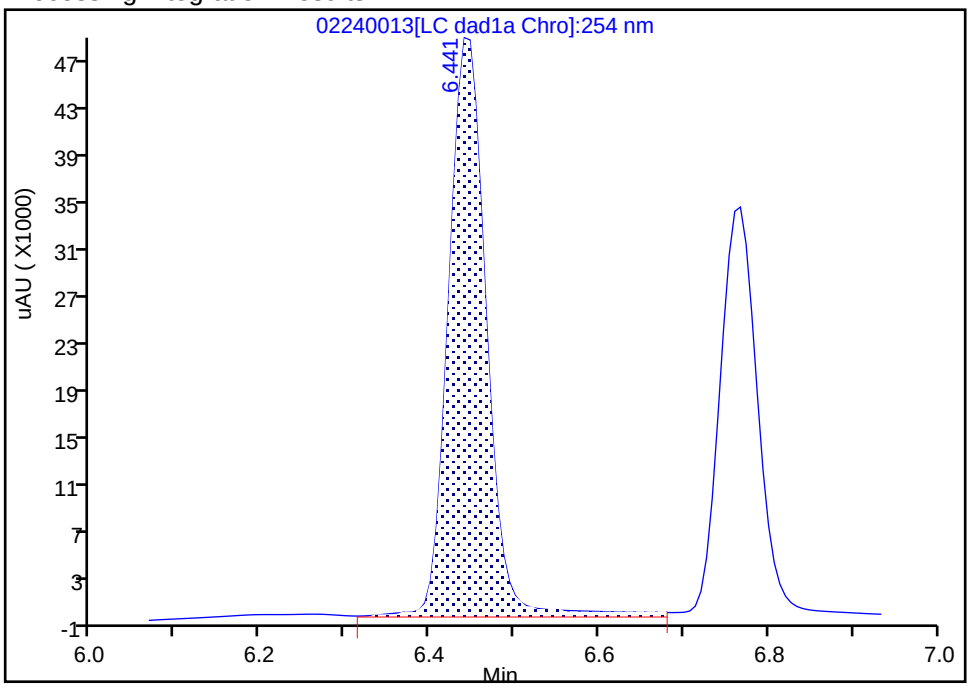
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240013.d
Injection Date: 24-Feb-2023 15:46:11 Instrument ID: CHHPLC_X3
Lims ID: IC DMT 6
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 TNX, CAS: 13980-04-6

Signal: 1

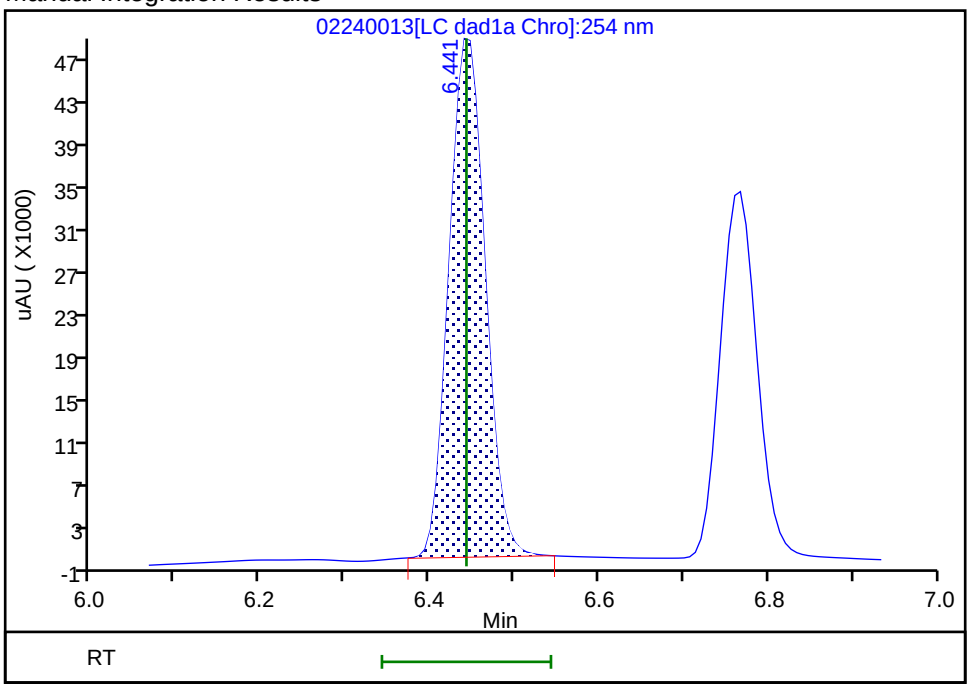
Processing Integration Results

RT: 6.44
Area: 149855
Amount: 0.731638
Amount Units: ug/mL



Manual Integration Results

RT: 6.44
Area: 142294
Amount: 0.719793
Amount Units: ug/mL



Reviewer: LV5D, 24-Feb-2023 16:41:49
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

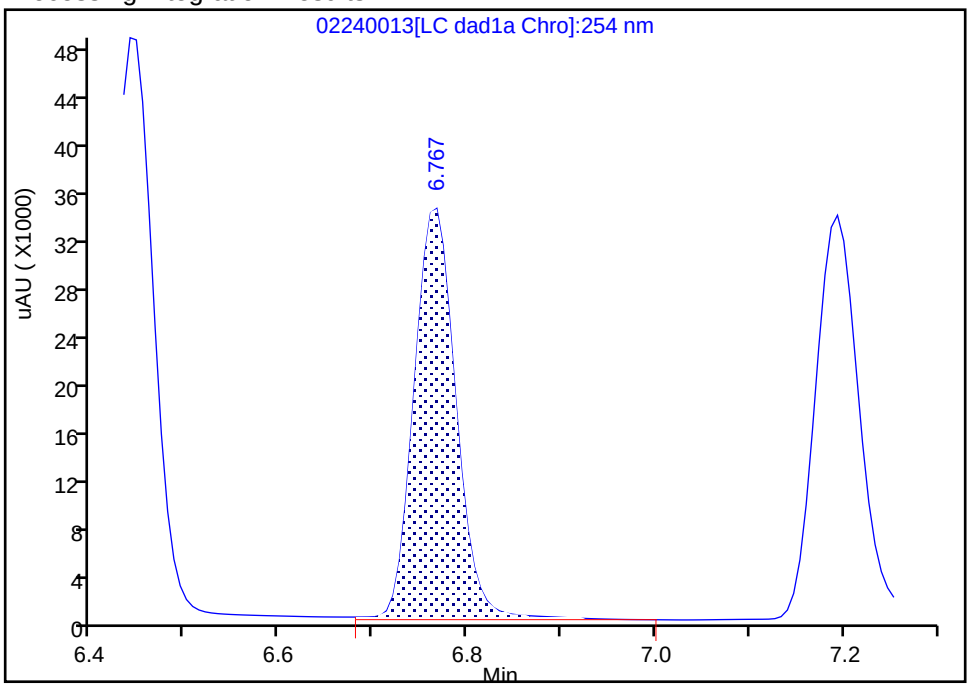
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240013.d				
Injection Date:	24-Feb-2023 15:46:11	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 6				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

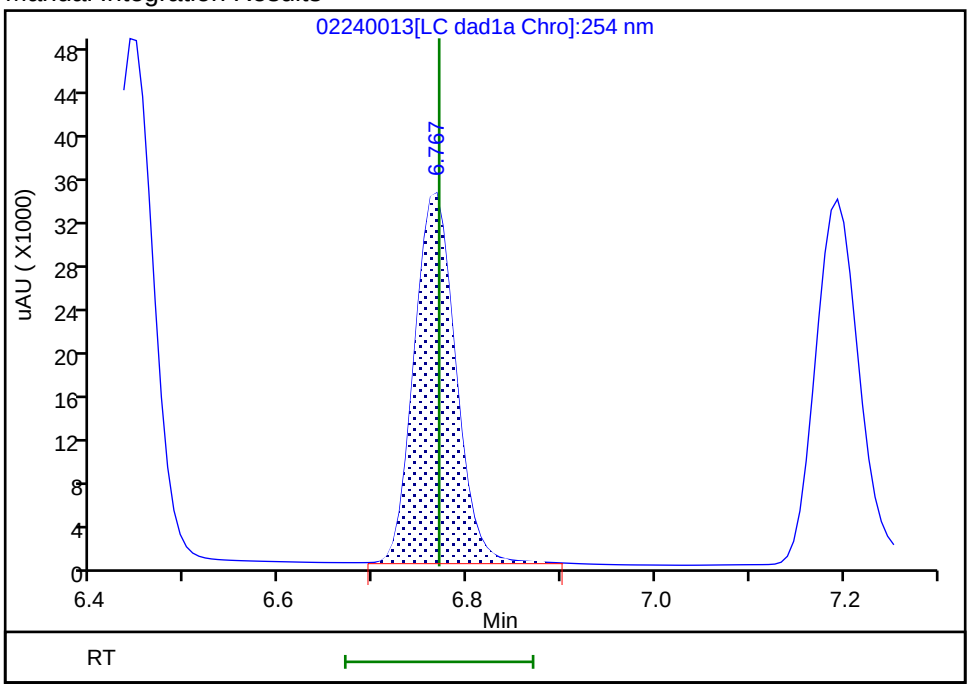
Processing Integration Results

RT: 6.77
Area: 106819
Amount: 0.729190
Amount Units: ug/mL



Manual Integration Results

RT: 6.77
Area: 102987
Amount: 0.712898
Amount Units: ug/mL



Reviewer: LV5D, 24-Feb-2023 16:41:44
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

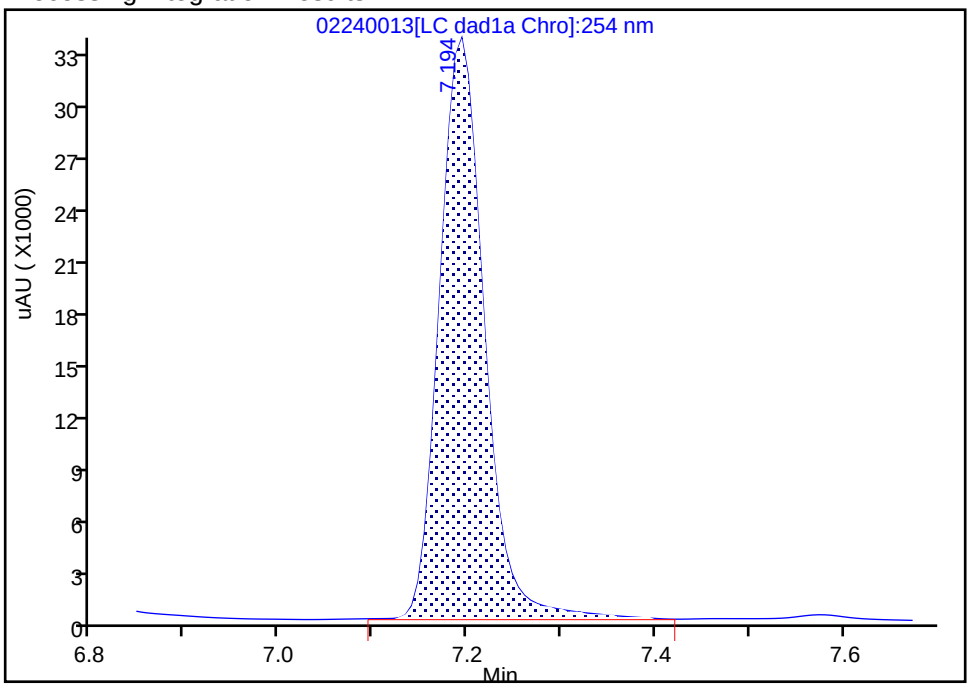
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240013.d				
Injection Date:	24-Feb-2023 15:46:11	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 6				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

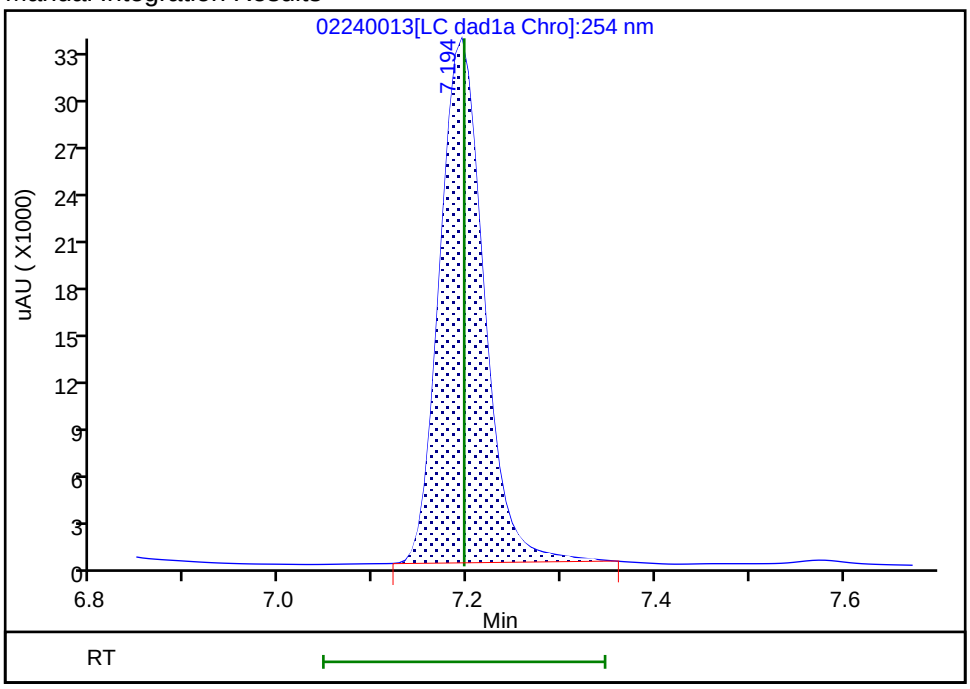
Processing Integration Results

RT: 7.19
Area: 110998
Amount: 0.844687
Amount Units: ug/mL



Manual Integration Results

RT: 7.19
Area: 109131
Amount: 0.831971
Amount Units: ug/mL



Reviewer: LV5D, 24-Feb-2023 16:41:46
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240014.D
Lims ID: IC DMT 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 24-Feb-2023 16:09:13 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT 5
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 28-Feb-2023 13:17:27 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1602

First Level Reviewer: LV5D Date: 24-Feb-2023 16:41:09

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.442	6.443	-0.001	77150	0.4012	0.3903	M
6 DNX	1	6.769	6.770	-0.001	55525	0.4004	0.3844	M
7 MNX	1	7.195	7.196	-0.001	58415	0.4668	0.4453	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00013 Amount Added: 20.00 Units: uL

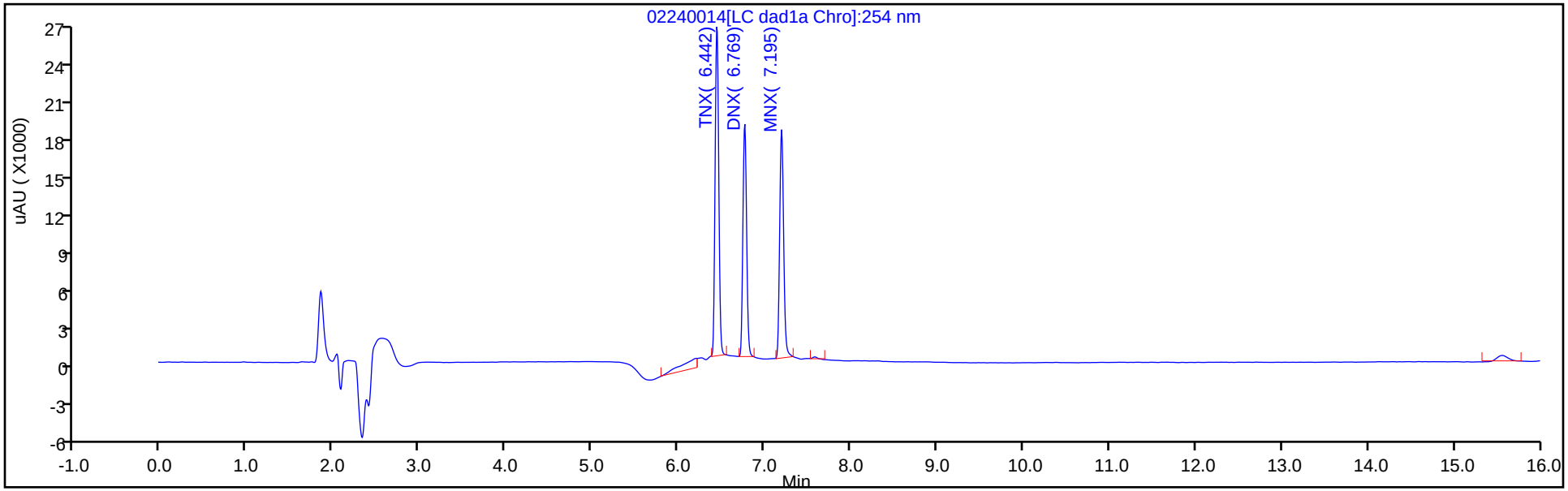
Report Date: 28-Feb-2023 13:17:27 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Denver

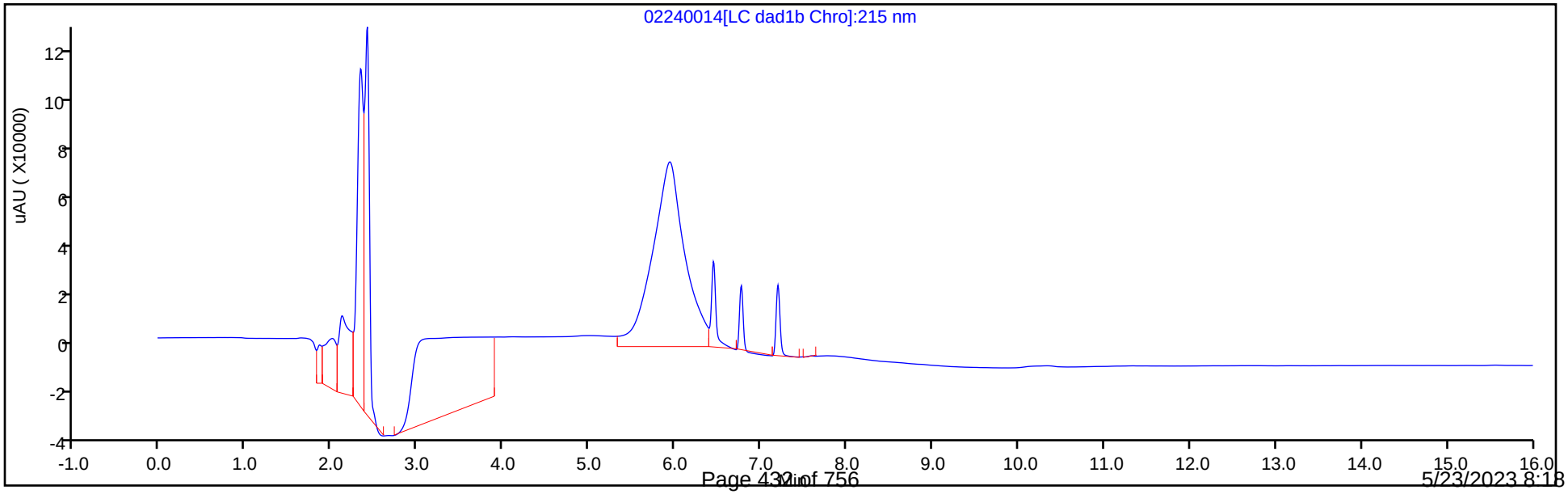
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240014.d

Injection Date:	24-Feb-2023 16:09:13	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC DMT 5			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



Manual Integration/User Assign Peak Report

Eurofins Denver

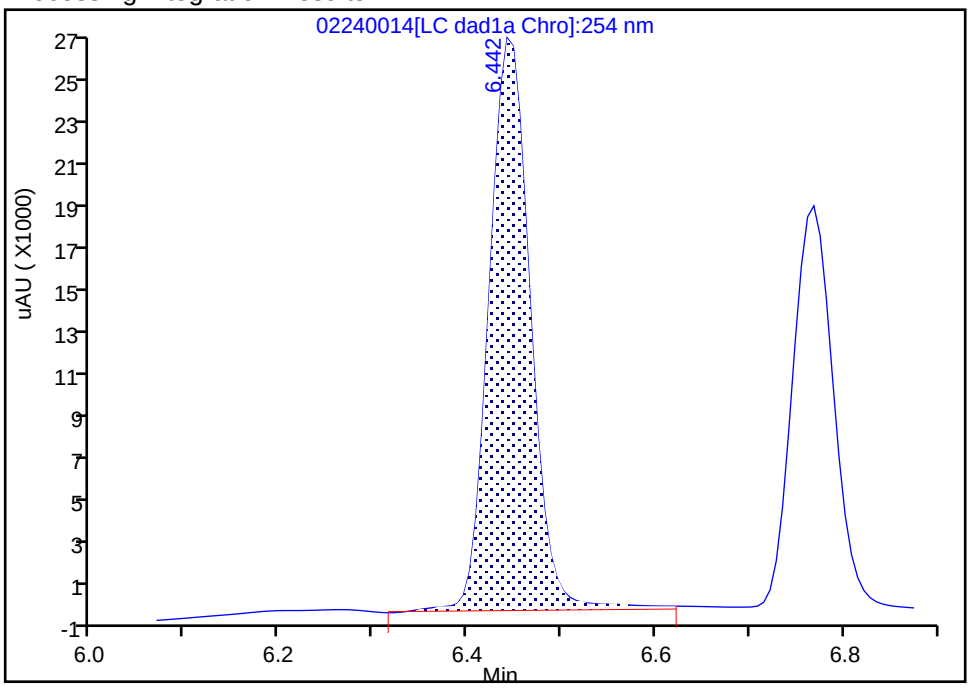
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240014.d				
Injection Date:	24-Feb-2023 16:09:13	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 5				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

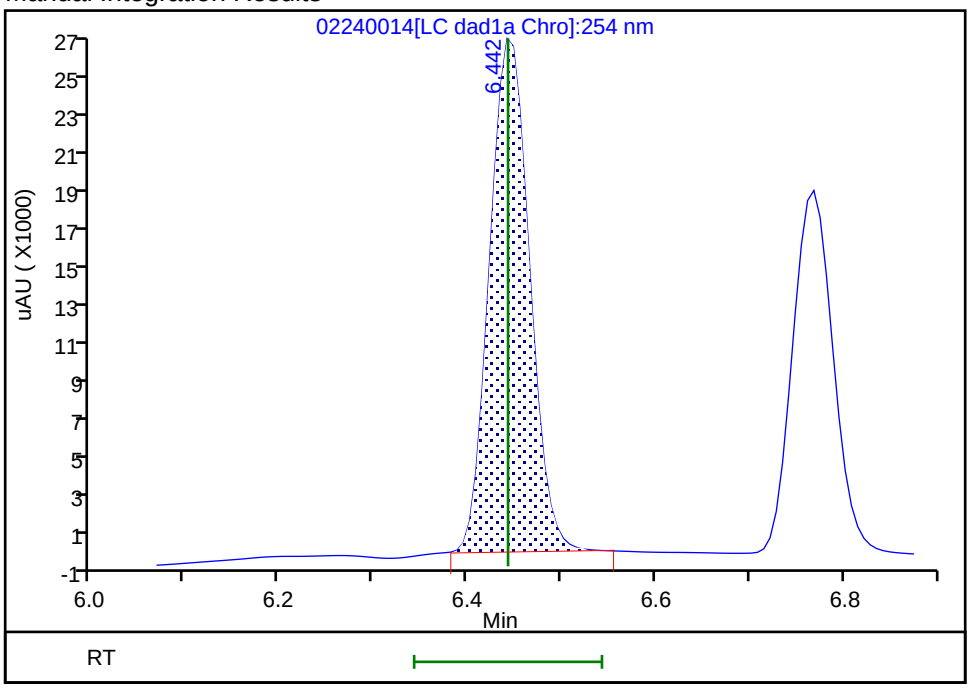
Processing Integration Results

RT: 6.44
Area: 81283
Amount: 0.403064
Amount Units: ug/mL



Manual Integration Results

RT: 6.44
Area: 77150
Amount: 0.390263
Amount Units: ug/mL



Reviewer: LV5D, 24-Feb-2023 16:41:55
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

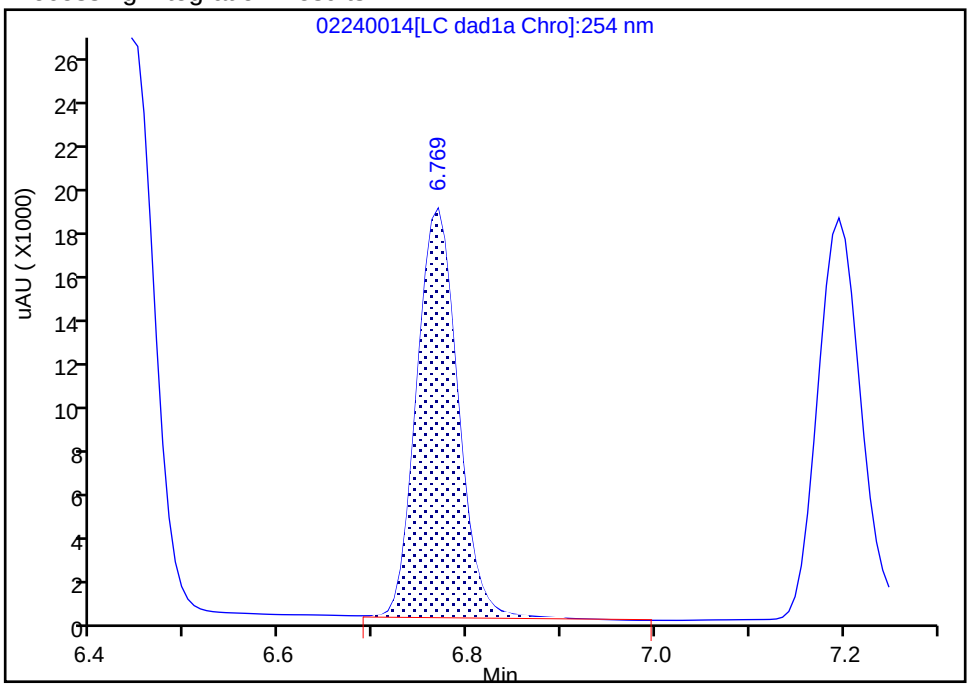
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240014.d				
Injection Date:	24-Feb-2023 16:09:13	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 5				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

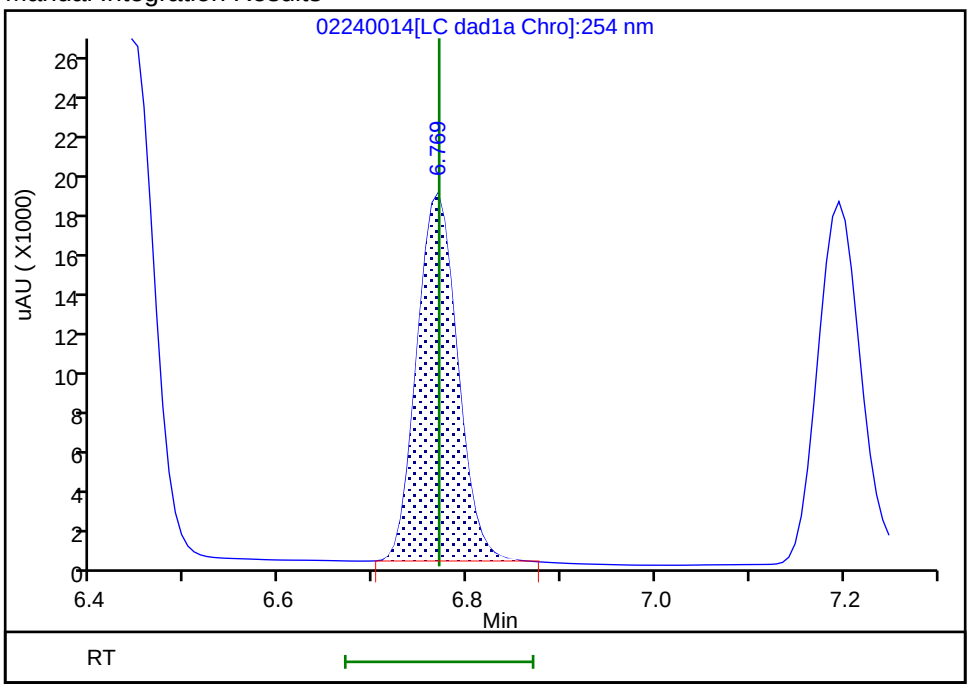
Processing Integration Results

RT: 6.77
Area: 57199
Amount: 0.395371
Amount Units: ug/mL



Manual Integration Results

RT: 6.77
Area: 55525
Amount: 0.384356
Amount Units: ug/mL



Reviewer: LV5D, 24-Feb-2023 16:41:57
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

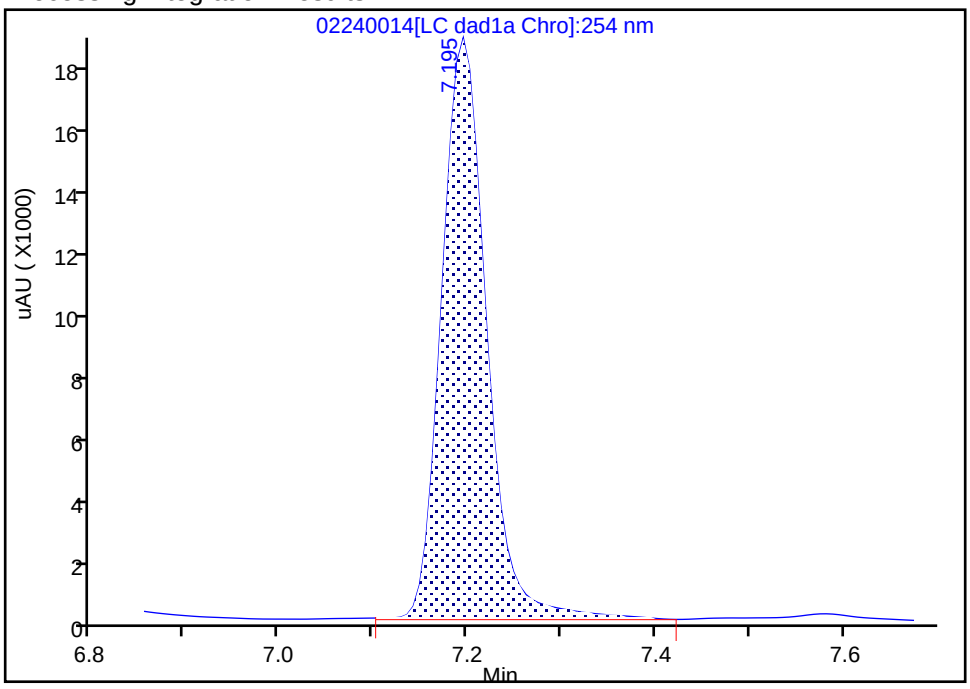
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240014.d
Injection Date: 24-Feb-2023 16:09:13 Instrument ID: CHHPLC_X3
Lims ID: IC DMT 5
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

7 MNX, CAS: 5755-27-1

Signal: 1

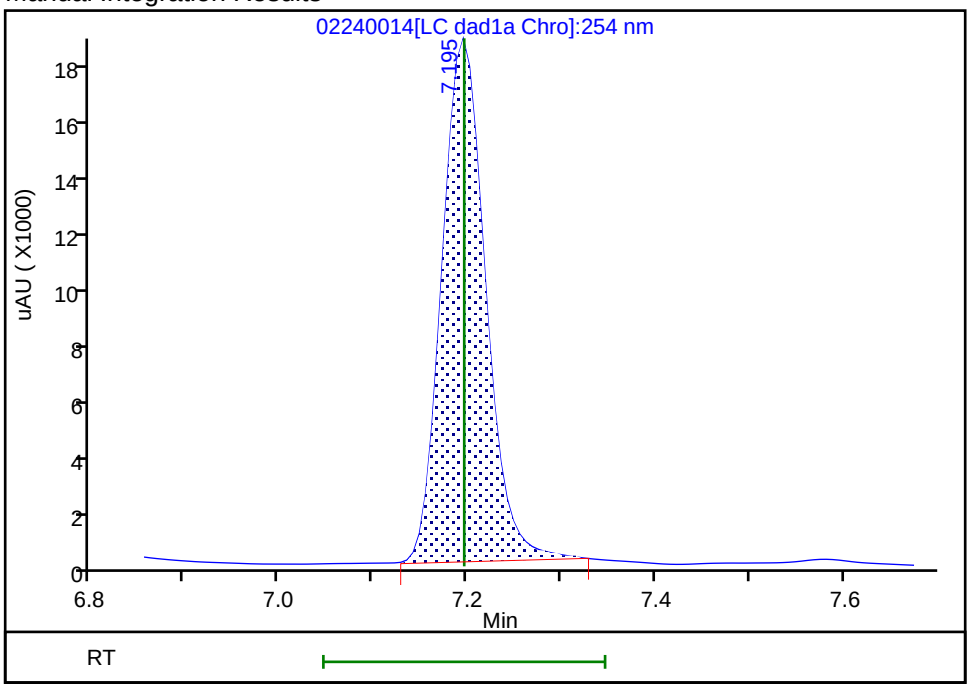
Processing Integration Results

RT: 7.20
Area: 60440
Amount: 0.462241
Amount Units: ug/mL



Manual Integration Results

RT: 7.20
Area: 58415
Amount: 0.445333
Amount Units: ug/mL



Reviewer: LV5D, 24-Feb-2023 16:40:59
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240015.D				
Lims ID:	IC DMT 4				
Client ID:					
Sample Type:	IC	Calib Level:	4		
Inject. Date:	24-Feb-2023 16:32:12	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 4				
Operator ID:	JZ/MAR	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	28-Feb-2023 13:17:28	Calib Date:	24-Feb-2023 17:41:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1602				
First Level Reviewer: LV5D		Date:	24-Feb-2023 17:15:42		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.443	6.443	0.000	49343	0.2508	0.2496	M
6 DNX	1	6.770	6.770	0.000	36370	0.2503	0.2518	M
7 MNX	1	7.196	7.196	0.000	39278	0.2918	0.2994	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

8330 DMT_00013 Amount Added: 12.50 Units: uL

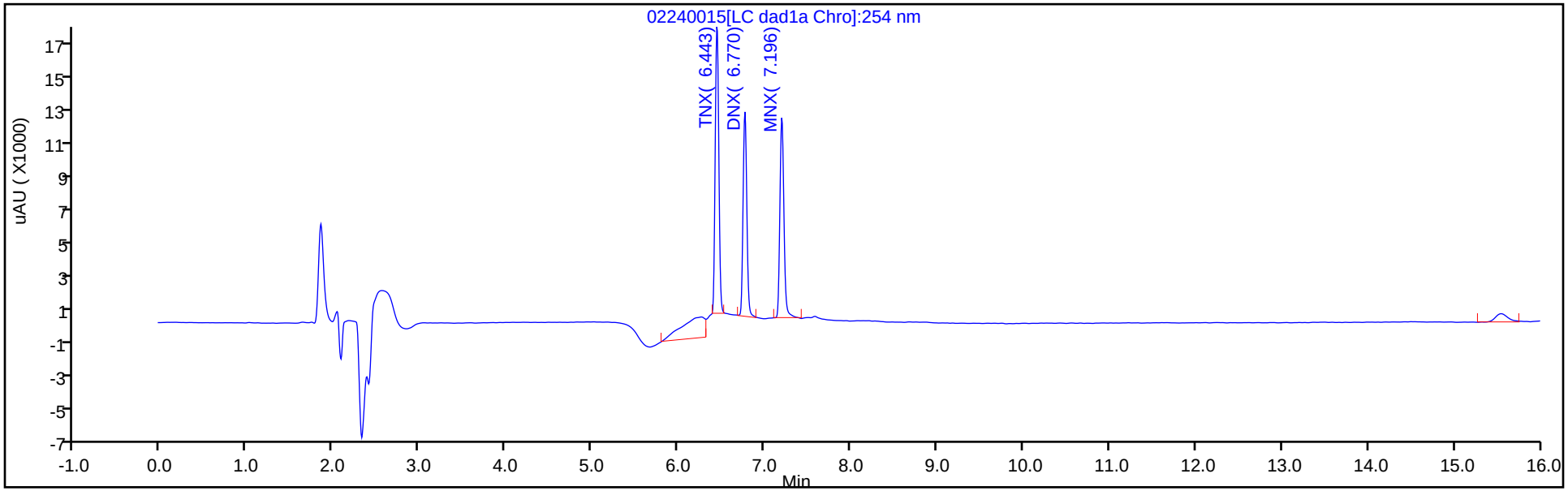
Report Date: 28-Feb-2023 13:17:28 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Denver

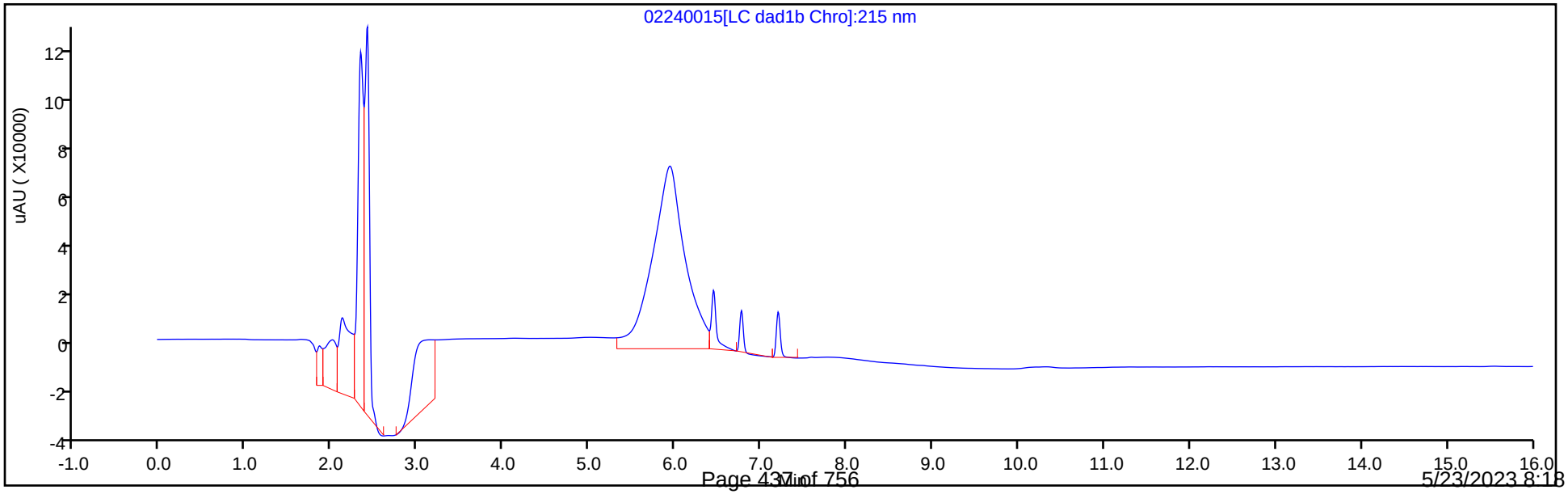
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240015.d

Injection Date:	24-Feb-2023 16:32:12	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC DMT 4			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

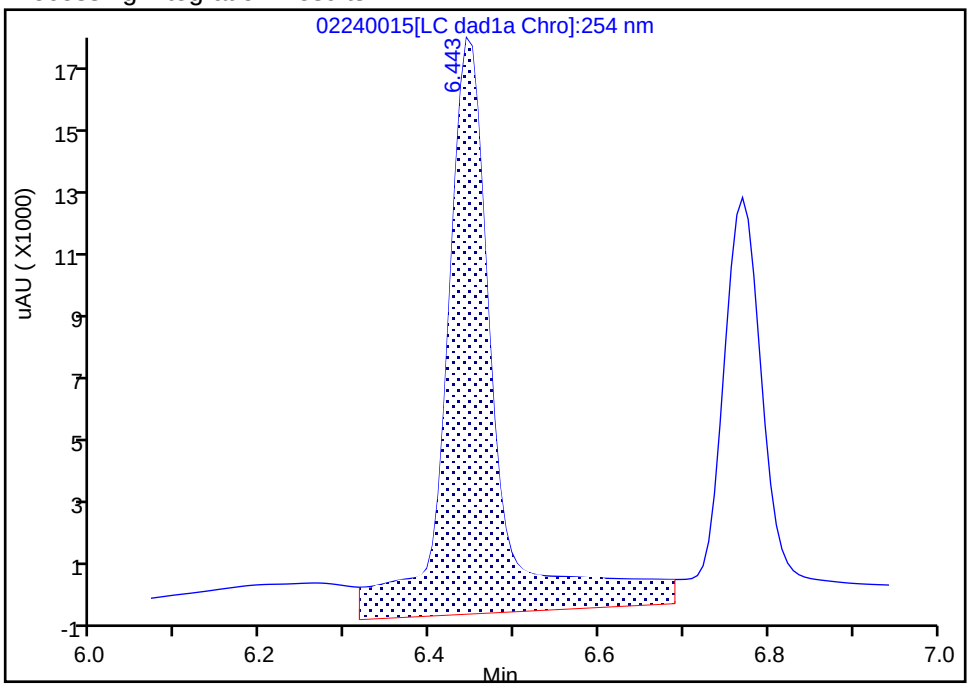
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240015.d
Injection Date: 24-Feb-2023 16:32:12 Instrument ID: CHHPLC_X3
Lims ID: IC DMT 4
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 TNX, CAS: 13980-04-6

Signal: 1

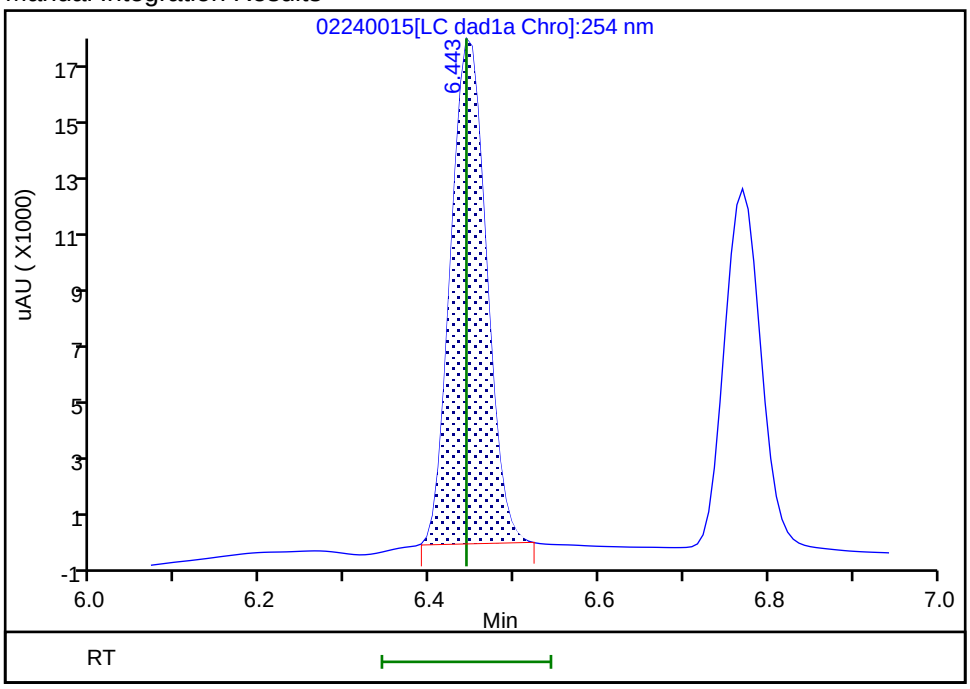
Processing Integration Results

RT: 6.44
Area: 73619
Amount: 0.336113
Amount Units: ug/mL



Manual Integration Results

RT: 6.44
Area: 49343
Amount: 0.249601
Amount Units: ug/mL



Reviewer: LV5D, 24-Feb-2023 17:15:24
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

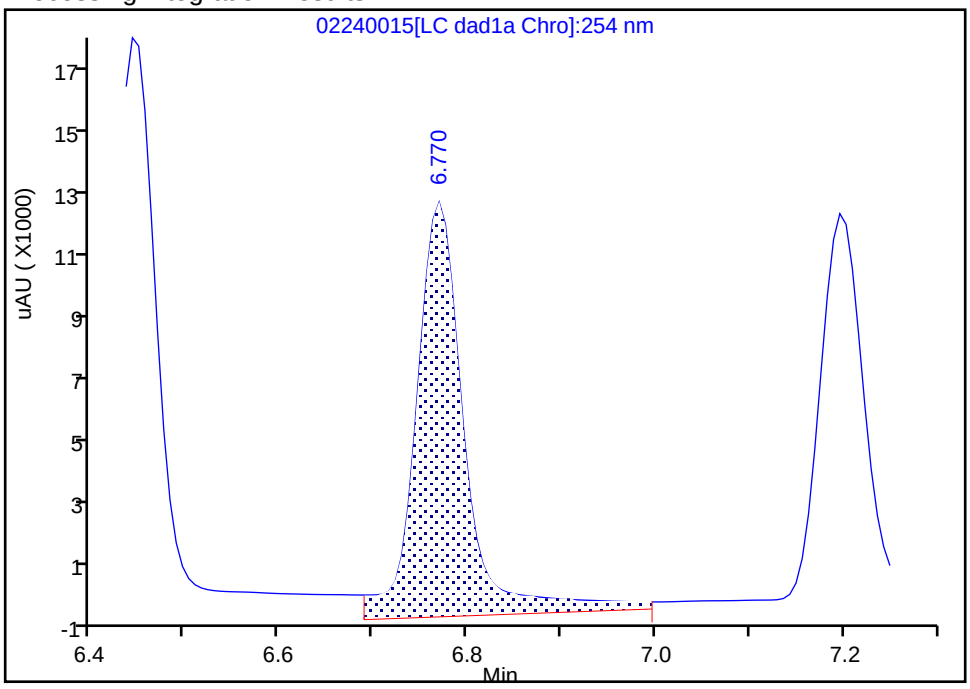
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240015.d				
Injection Date:	24-Feb-2023 16:32:12	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 4				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

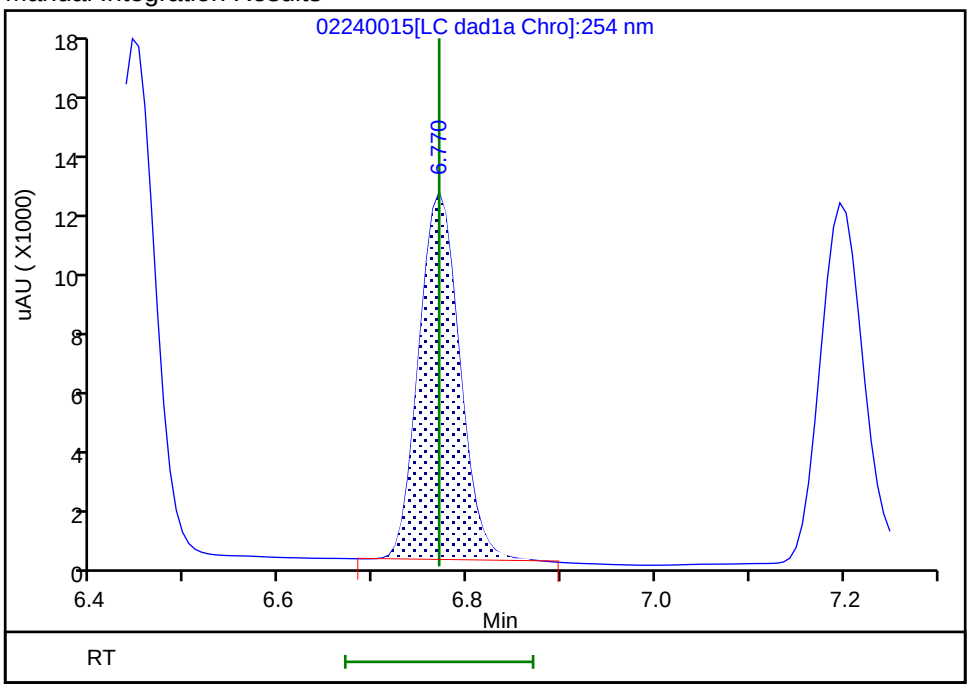
Processing Integration Results

RT: 6.77
Area: 45251
Amount: 0.297994
Amount Units: ug/mL



Manual Integration Results

RT: 6.77
Area: 36370
Amount: 0.251761
Amount Units: ug/mL



Reviewer: LV5D, 24-Feb-2023 17:15:28
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240016.D				
Lims ID:	IC DMT 3				
Client ID:					
Sample Type:	IC	Calib Level:	3		
Inject. Date:	24-Feb-2023 16:55:16	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 3				
Operator ID:	JZ/MAR	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	28-Feb-2023 13:17:28	Calib Date:	24-Feb-2023 17:41:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1602				
First Level Reviewer: LV5D		Date:	24-Feb-2023 17:30:15		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.446	6.443	0.003	19892	0.1003	0.1006	M
6 DNX	1	6.766	6.770	-0.004	14570	0.1001	0.1009	M
7 MNX	1	7.199	7.196	0.003	15358	0.1167	0.1171	M

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

8330 DMT_00013 Amount Added: 5.00 Units: uL

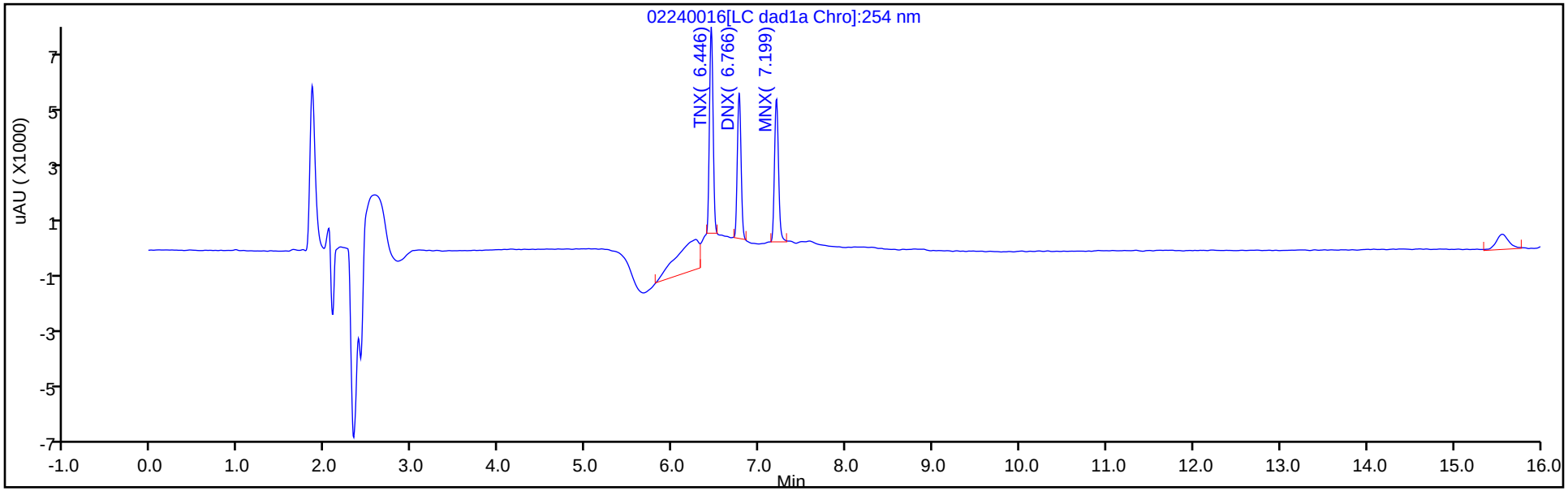
Report Date: 28-Feb-2023 13:17:28 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Denver

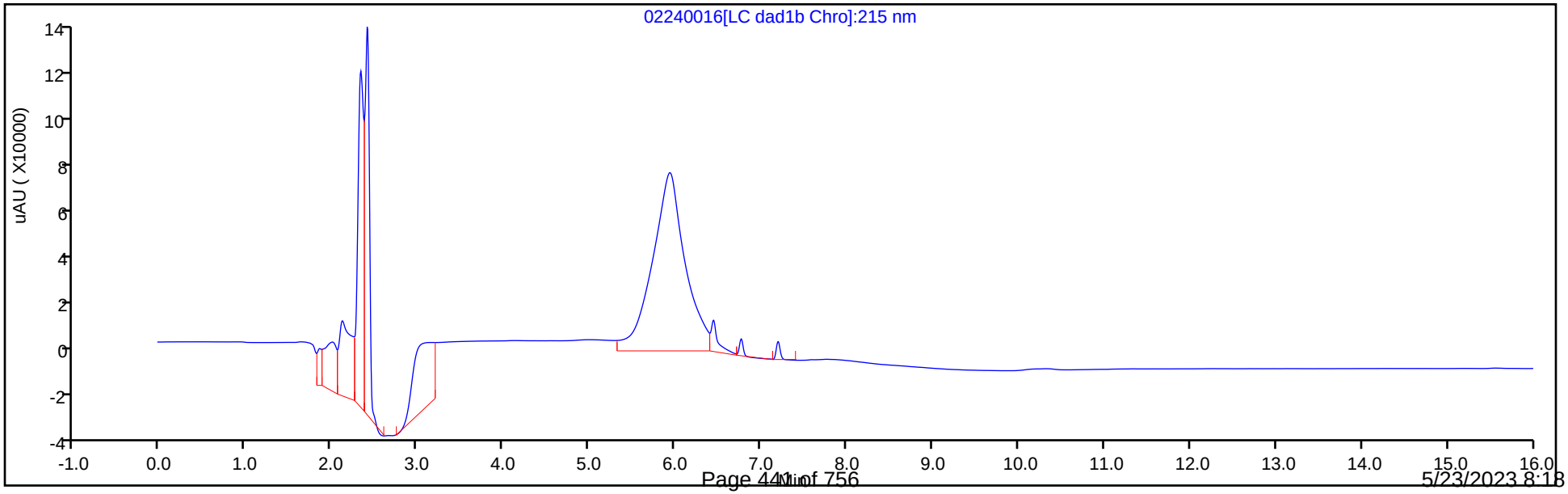
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240016.d

Injection Date:	24-Feb-2023 16:55:16	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC DMT 3			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



Manual Integration/User Assign Peak Report

Eurofins Denver

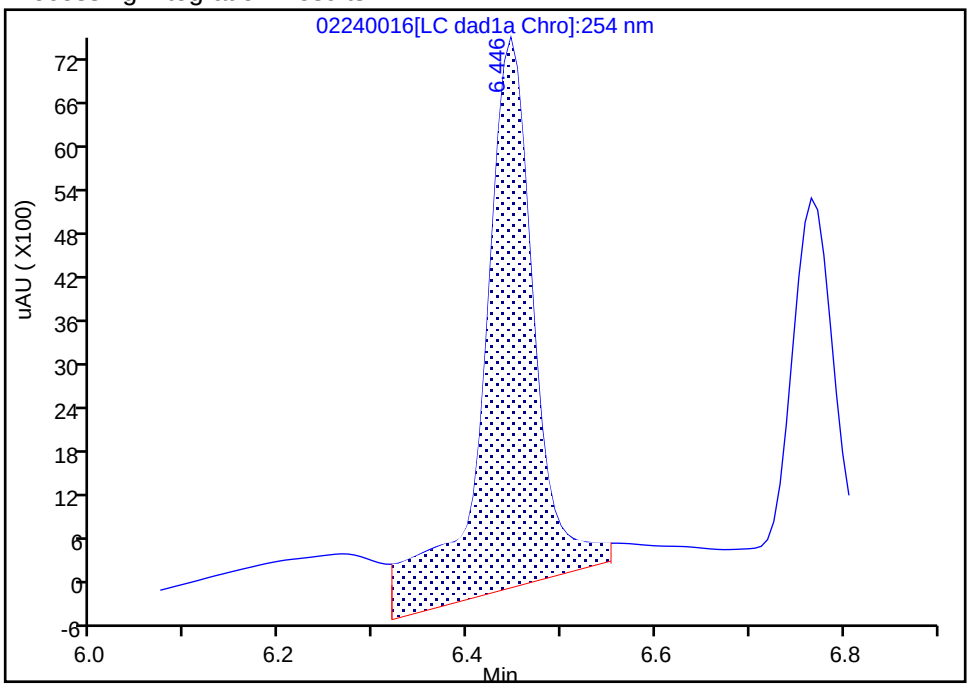
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240016.d				
Injection Date:	24-Feb-2023 16:55:16	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 3				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

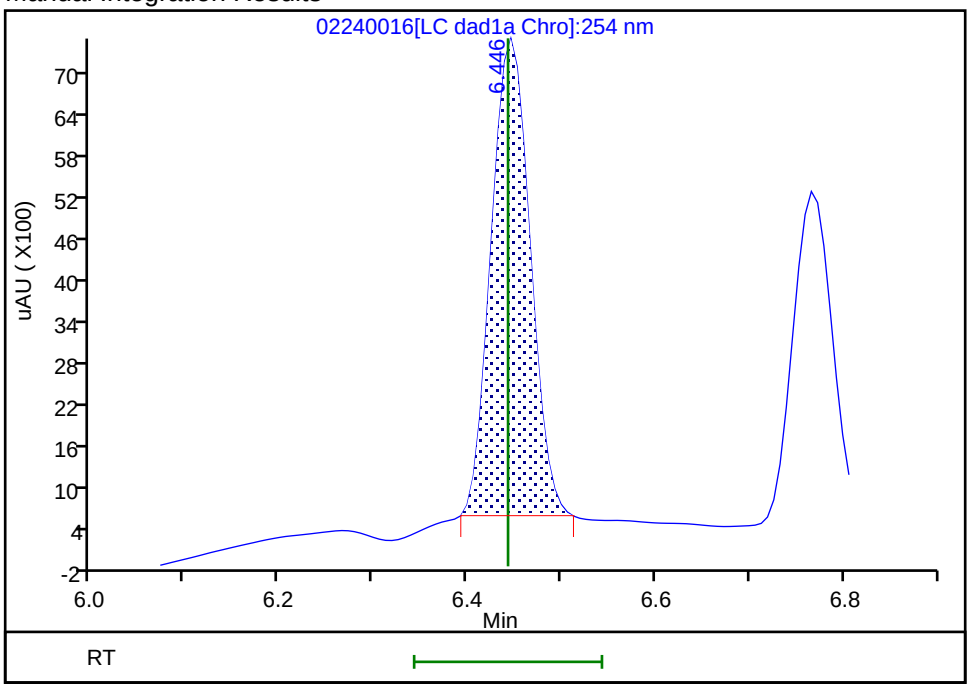
Processing Integration Results

RT: 6.45
Area: 29096
Amount: 0.135495
Amount Units: ug/mL



Manual Integration Results

RT: 6.45
Area: 19892
Amount: 0.100624
Amount Units: ug/mL



Reviewer: LV5D, 24-Feb-2023 17:30:03
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

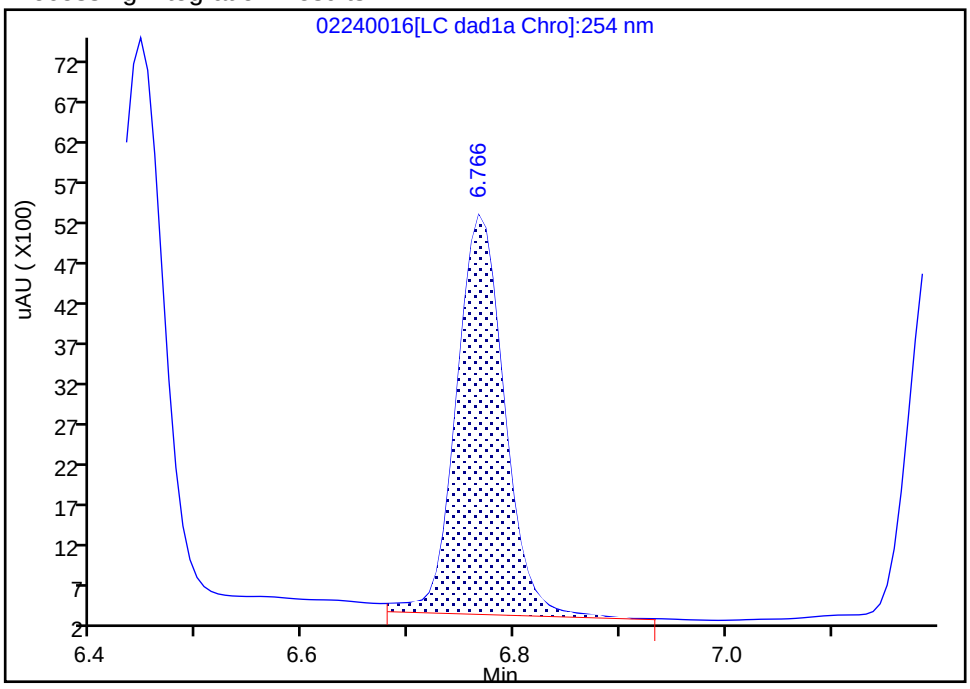
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240016.d				
Injection Date:	24-Feb-2023 16:55:16	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 3				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

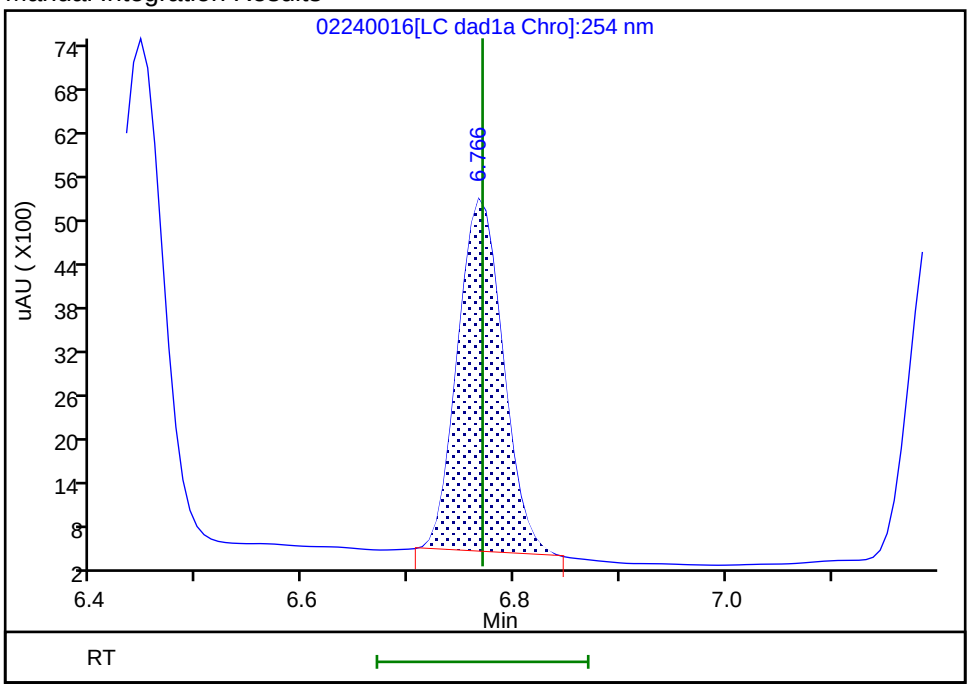
Processing Integration Results

RT: 6.77
Area: 15665
Amount: 0.106775
Amount Units: ug/mL



Manual Integration Results

RT: 6.77
Area: 14570
Amount: 0.100857
Amount Units: ug/mL



Reviewer: LV5D, 24-Feb-2023 17:30:07

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

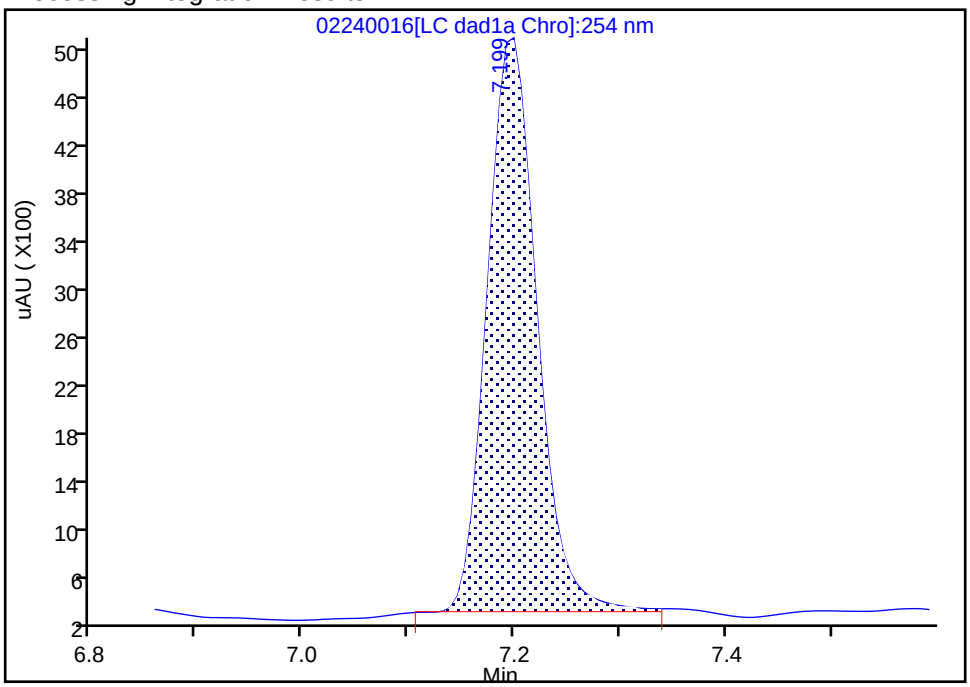
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240016.d
Injection Date: 24-Feb-2023 16:55:16 Instrument ID: CHHPLC_X3
Lims ID: IC DMT 3
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

7 MNX, CAS: 5755-27-1

Signal: 1

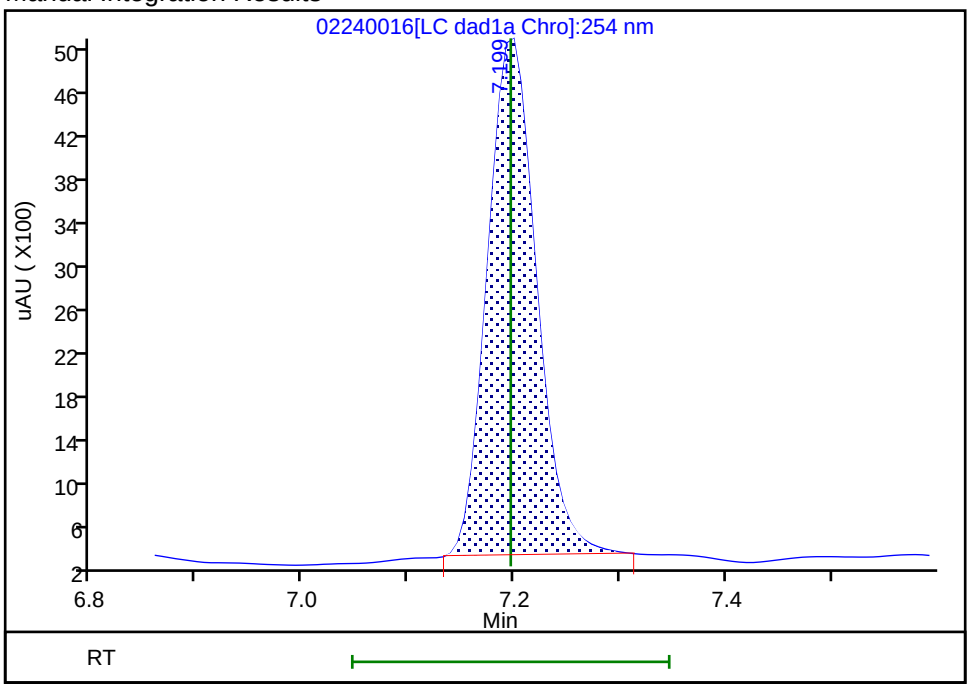
Processing Integration Results

RT: 7.20
Area: 15598
Amount: 0.117968
Amount Units: ug/mL



Manual Integration Results

RT: 7.20
Area: 15358
Amount: 0.117083
Amount Units: ug/mL



Reviewer: LV5D, 24-Feb-2023 17:30:11
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240017.D				
Lims ID:	IC DMT 2				
Client ID:					
Sample Type:	IC	Calib Level:	2		
Inject. Date:	24-Feb-2023 17:18:19	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 2				
Operator ID:	JZ/MAR	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	28-Feb-2023 13:17:29	Calib Date:	24-Feb-2023 17:41:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1602				
First Level Reviewer: LV5D		Date:	24-Feb-2023 17:51:38		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.448	6.443	0.005	9917	0.0502	0.0502	M
6 DNX	1	6.768	6.770	-0.002	7338	0.0501	0.0508	M
7 MNX	1	7.195	7.196	-0.001	7605	0.0584	0.0580	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

8330 DMT_00013 Amount Added: 2.50 Units: uL

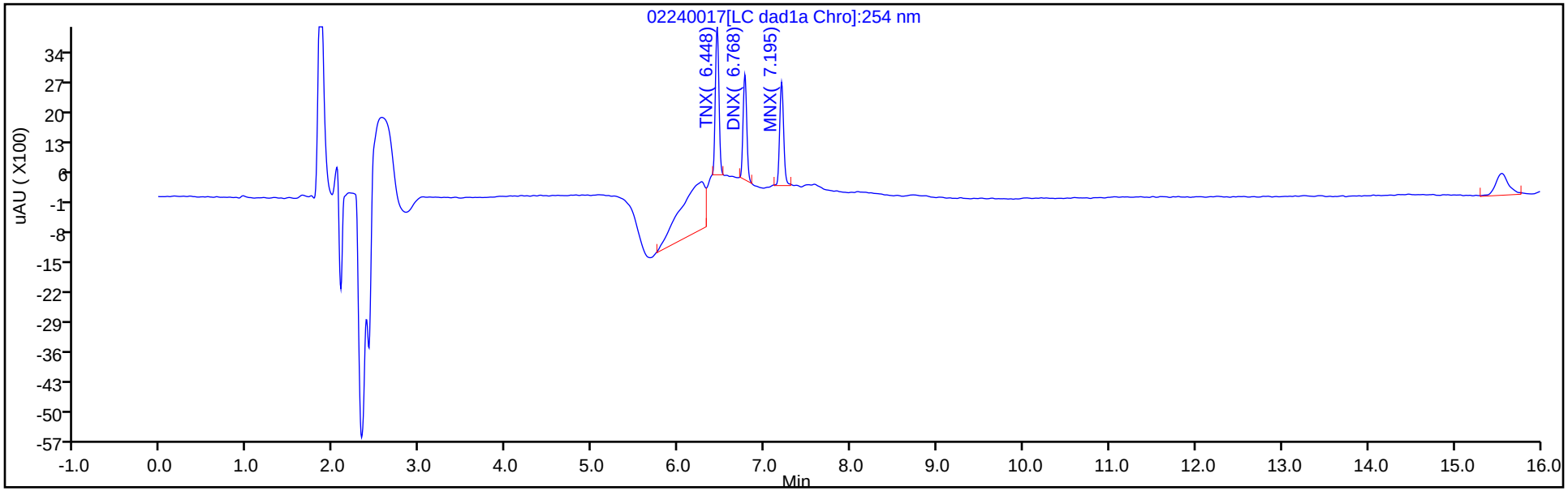
Report Date: 28-Feb-2023 13:17:29 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Denver

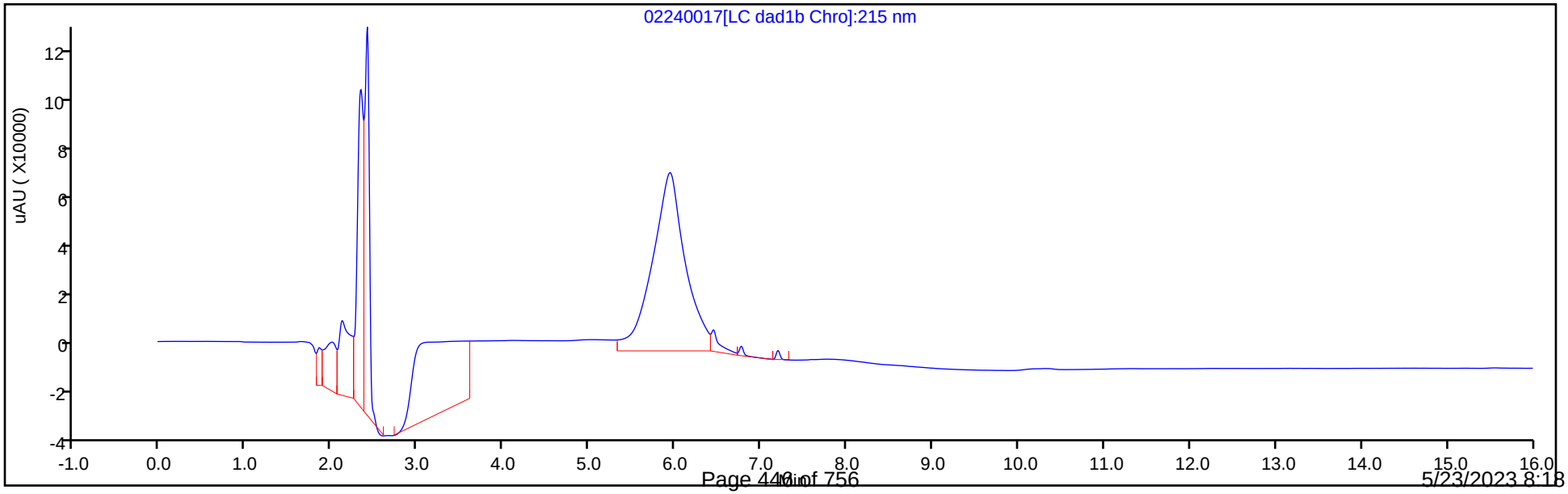
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240017.d

Injection Date:	24-Feb-2023 17:18:19	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC DMT 2			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



Manual Integration/User Assign Peak Report

Eurofins Denver

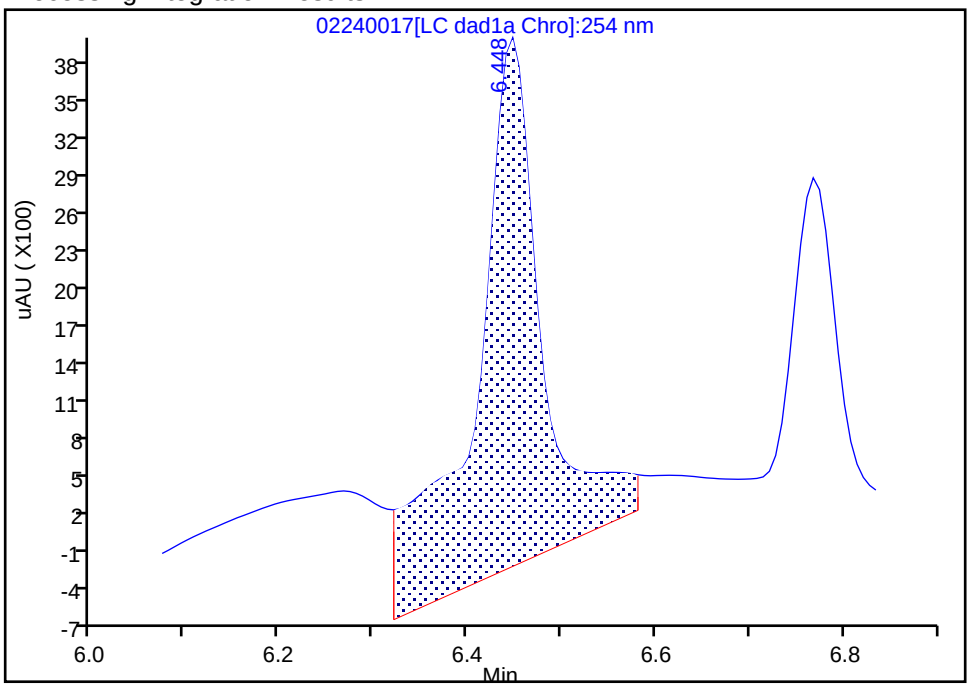
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240017.d				
Injection Date:	24-Feb-2023 17:18:19	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 2				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

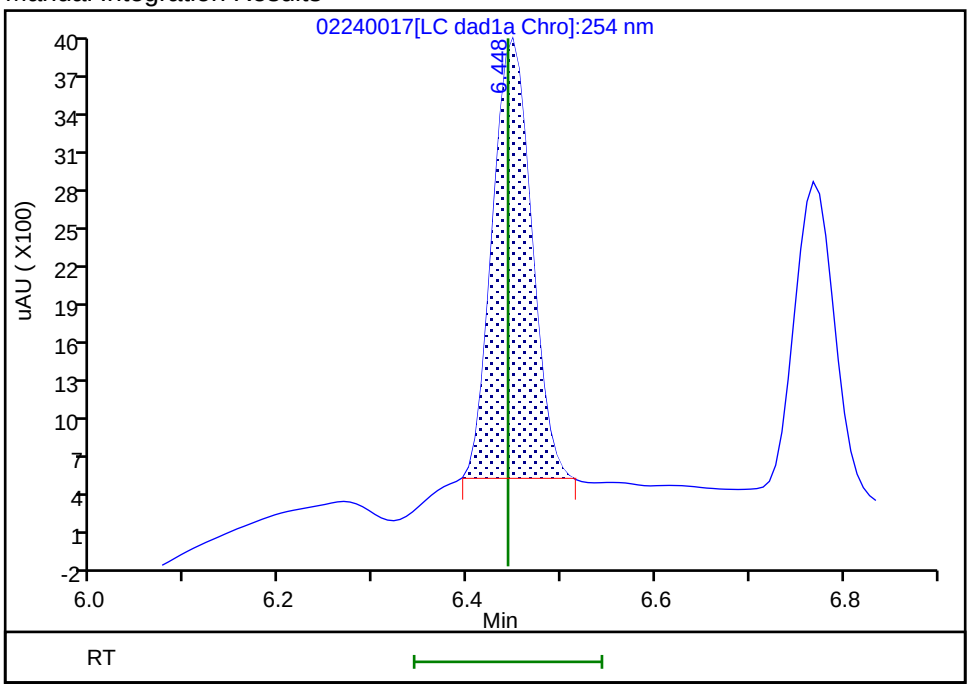
Processing Integration Results

RT: 6.45
Area: 21070
Amount: 0.091223
Amount Units: ug/mL



Manual Integration Results

RT: 6.45
Area: 9917
Amount: 0.050165
Amount Units: ug/mL



Reviewer: LV5D, 24-Feb-2023 17:51:28
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

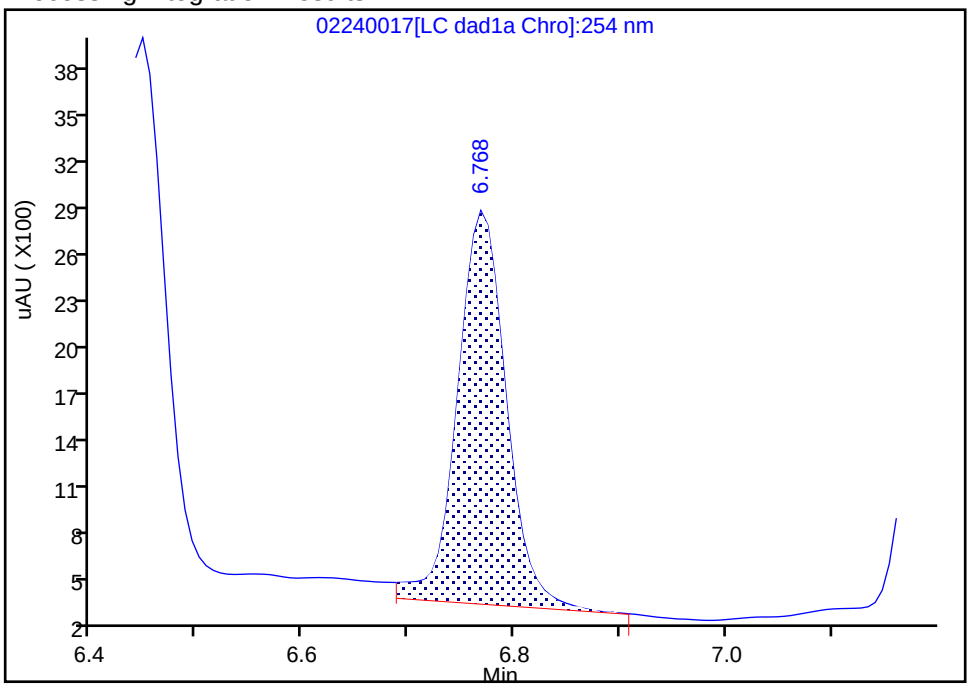
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240017.d				
Injection Date:	24-Feb-2023 17:18:19	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 2				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

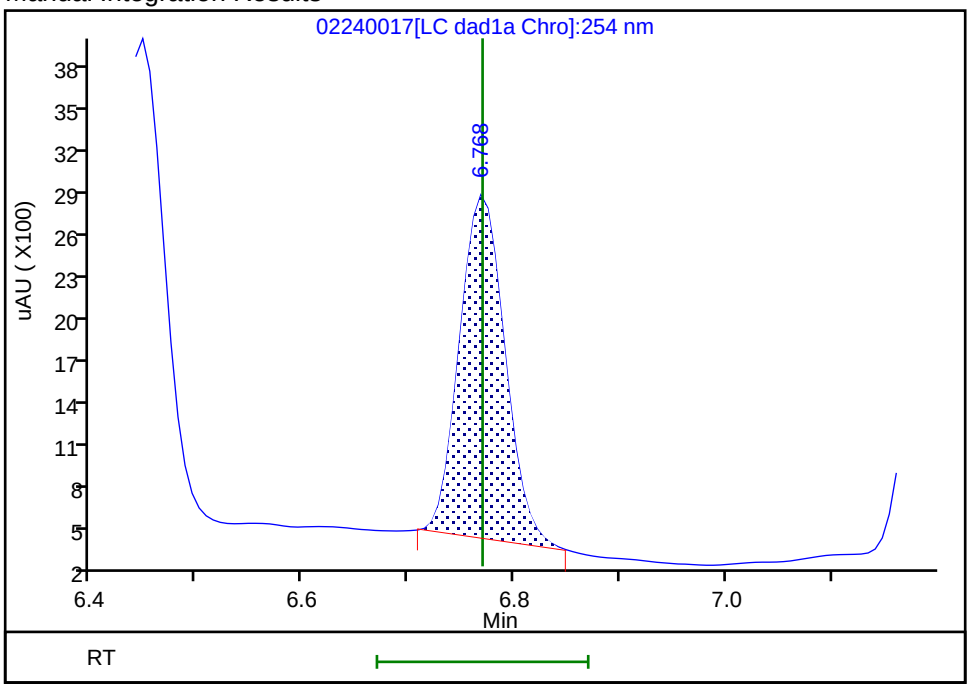
Processing Integration Results

RT: 6.77
Area: 8177
Amount: 0.055426
Amount Units: ug/mL



Manual Integration Results

RT: 6.77
Area: 7338
Amount: 0.050795
Amount Units: ug/mL



Reviewer: LV5D, 24-Feb-2023 17:51:32

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D
Lims ID: IC DMT 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 24-Feb-2023 17:41:20 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT 1
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 28-Feb-2023 13:17:30 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1602

First Level Reviewer: LV5D Date: 24-Feb-2023 18:10:19

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.444	6.443	0.001	3753	0.0201	0.0190	M
6 DNX	1	6.771	6.770	0.001	2798	0.0200	0.0194	M
7 MNX	1	7.197	7.196	0.001	2982	0.0233	0.0227	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00013 Amount Added: 1.00 Units: uL

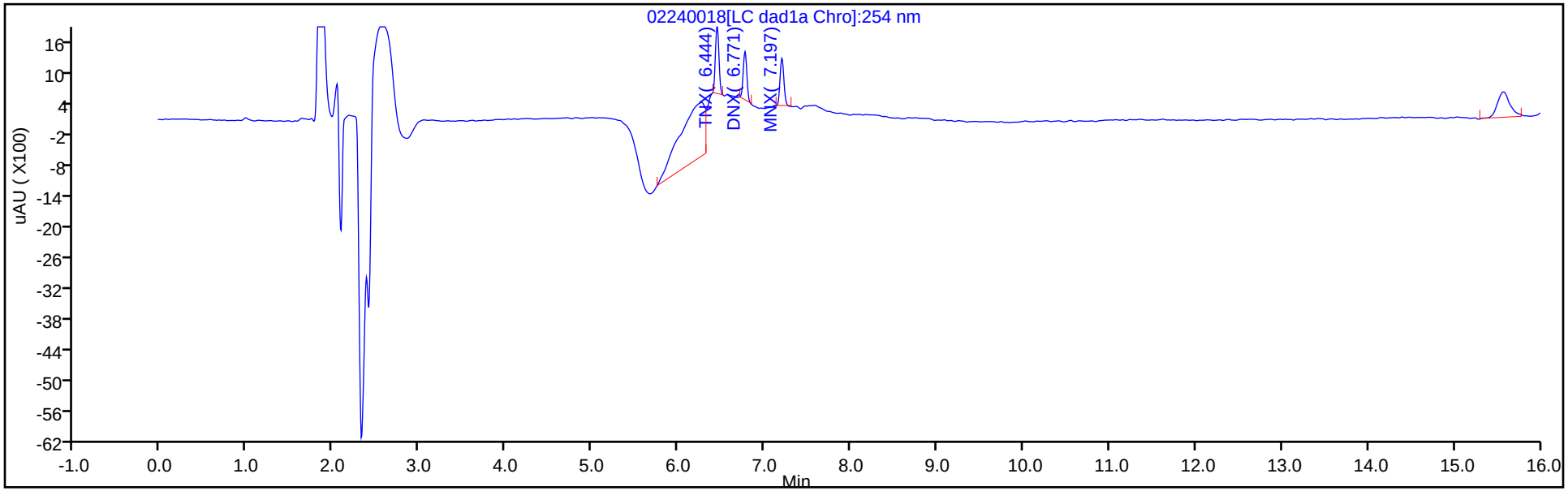
Report Date: 28-Feb-2023 13:17:30 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Denver

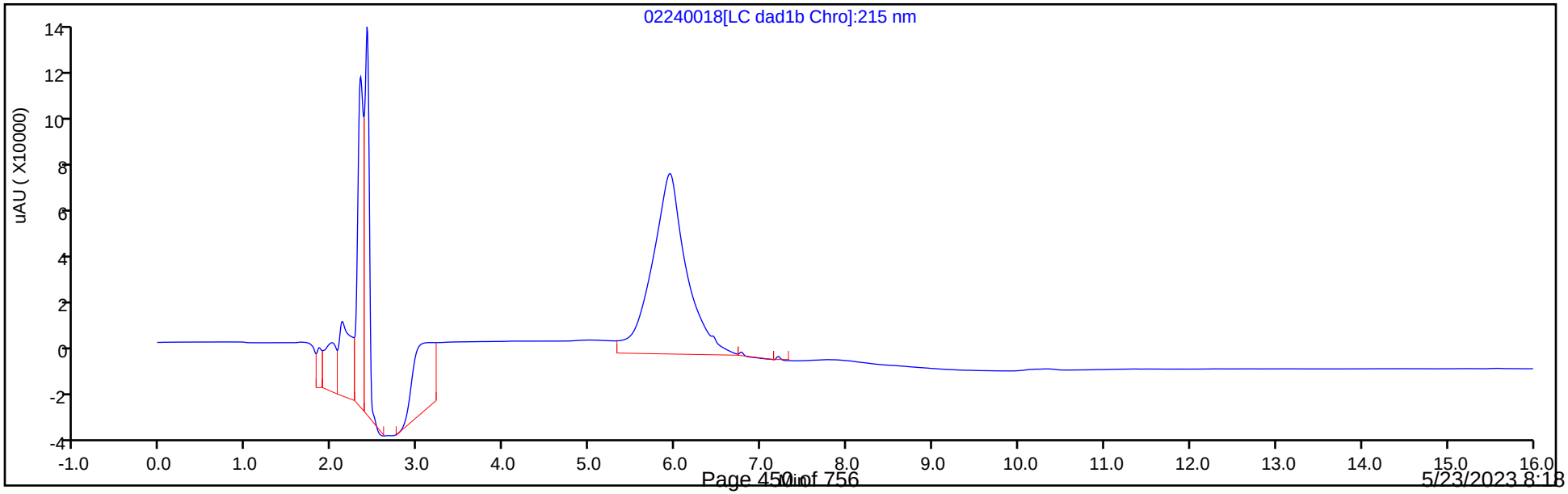
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240018.d

Injection Date:	24-Feb-2023 17:41:20	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	IC DMT 1			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



Manual Integration/User Assign Peak Report

Eurofins Denver

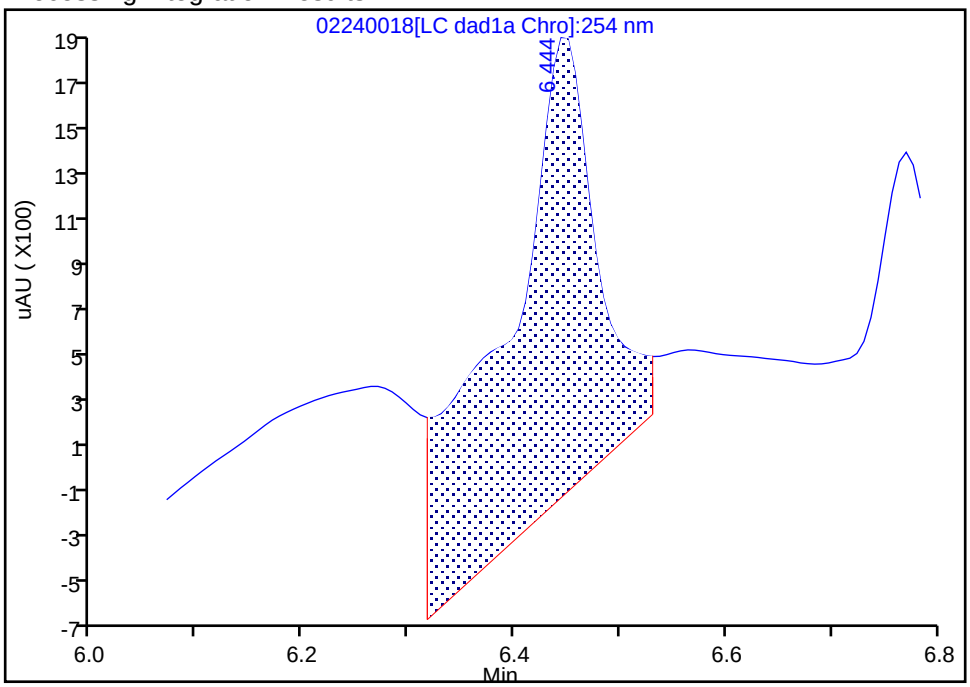
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240018.d
Injection Date: 24-Feb-2023 17:41:20 Instrument ID: CHHPLC_X3
Lims ID: IC DMT 1
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 TNX, CAS: 13980-04-6

Signal: 1

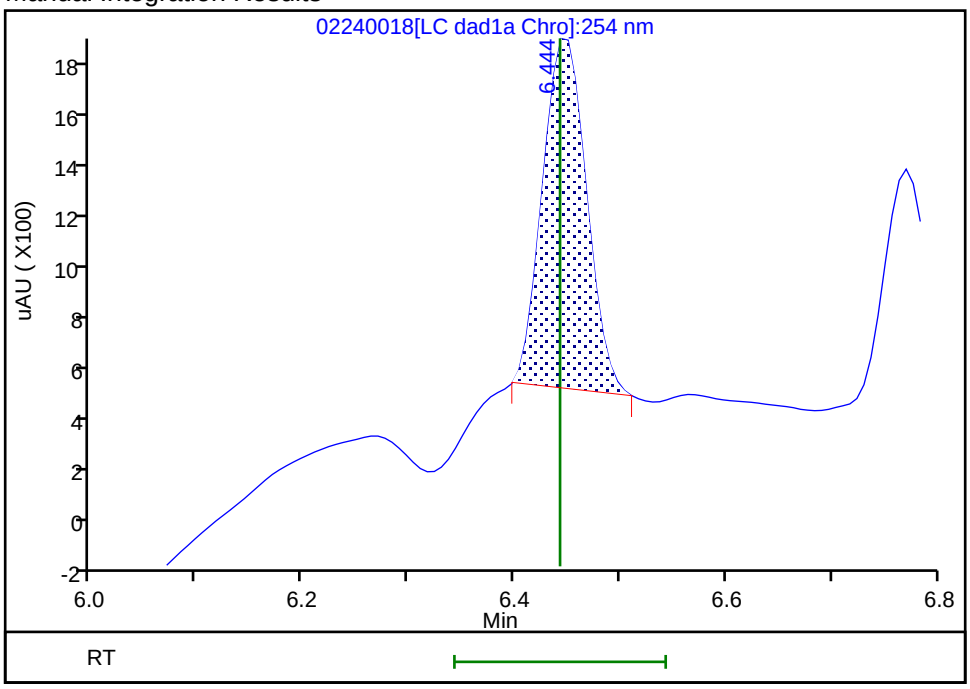
Processing Integration Results

RT: 6.44
Area: 12281
Amount: 0.048962
Amount Units: ug/mL



Manual Integration Results

RT: 6.44
Area: 3753
Amount: 0.018985
Amount Units: ug/mL



Reviewer: LV5D, 24-Feb-2023 18:10:04
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

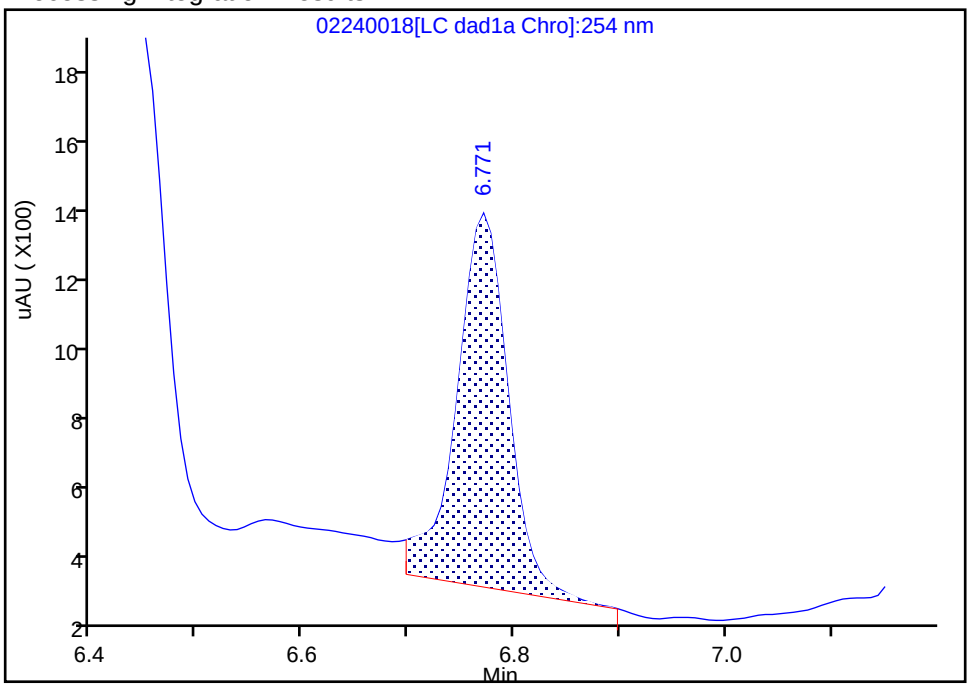
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240018.d				
Injection Date:	24-Feb-2023 17:41:20	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 1				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

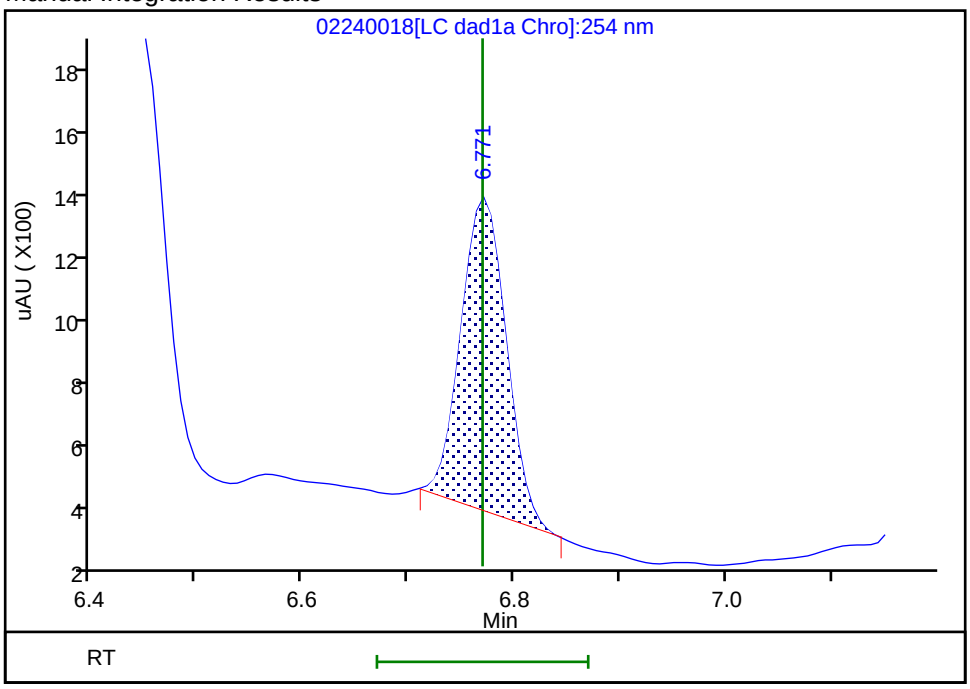
Processing Integration Results

RT: 6.77
Area: 3465
Amount: 0.023313
Amount Units: ug/mL



Manual Integration Results

RT: 6.77
Area: 2798
Amount: 0.019368
Amount Units: ug/mL



Reviewer: LV5D, 24-Feb-2023 18:10:11
Audit Action: Manually Integrated Audit Reason: Baseline

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

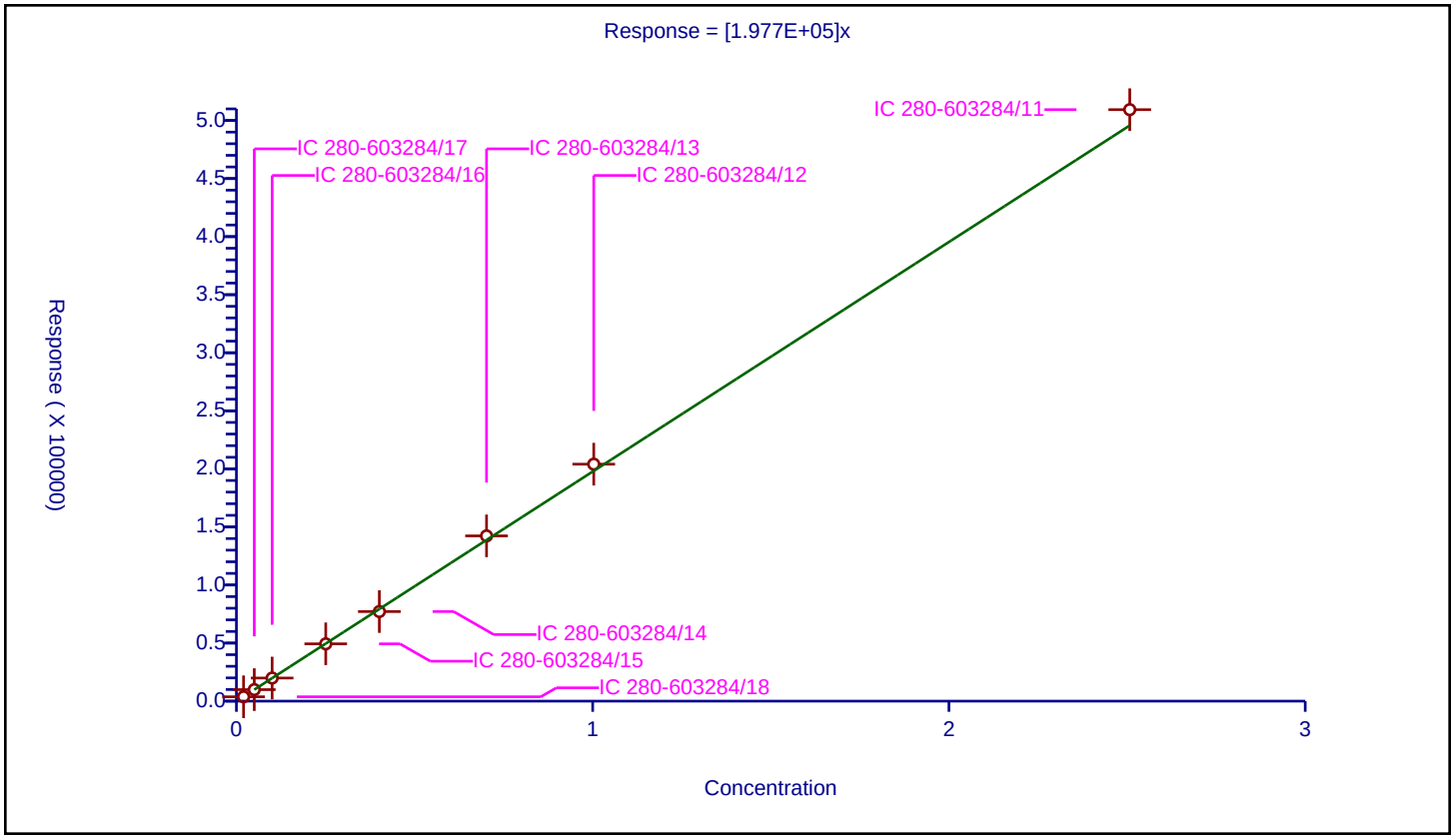
Curve Coefficients

Intercept:	0
Slope:	1.977E+05

Error Coefficients

Standard Error:	5810
Relative Standard Error:	2.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-603284/18	0.02006	3753.0			187088.733799	Y
2	IC 280-603284/17	0.05015	9917.0			197746.759721	Y
3	IC 280-603284/16	0.1003	19892.0			198325.024925	Y
4	IC 280-603284/15	0.25075	49343.0			196781.655035	Y
5	IC 280-603284/14	0.4012	77150.0			192298.105683	Y
6	IC 280-603284/13	0.7021	142294.0			202669.135451	Y
7	IC 280-603284/12	1.003	204073.0			203462.612164	Y
8	IC 280-603284/11	2.5075	509340.0			203126.62014	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

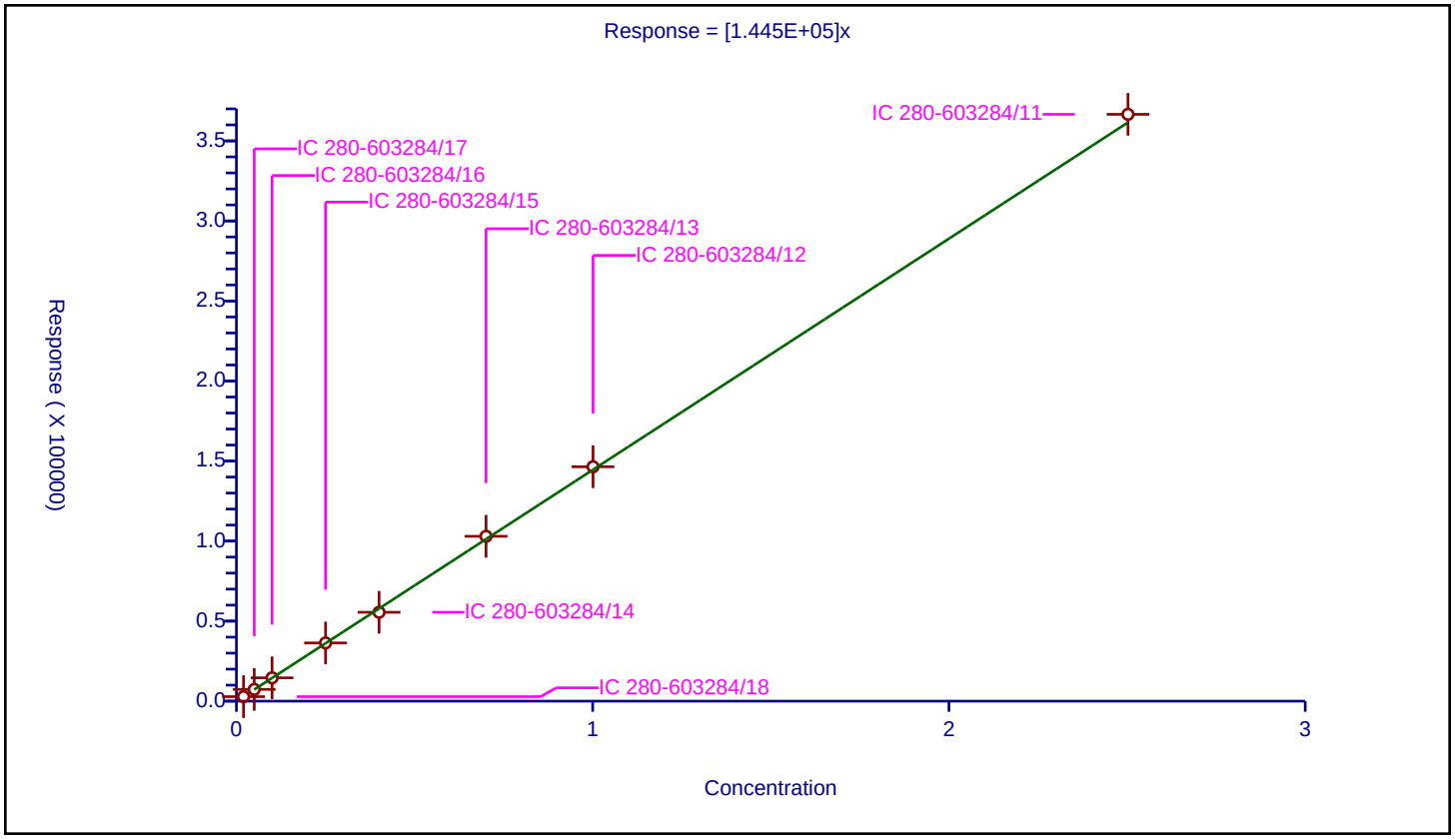
Curve Coefficients

Intercept:	0
Slope:	1.445E+05

Error Coefficients

Standard Error:	2320
Relative Standard Error:	2.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-603284/18	0.02002	2798.0			139760.23976	Y
2	IC 280-603284/17	0.05005	7338.0			146613.386613	Y
3	IC 280-603284/16	0.1001	14570.0			145554.445554	Y
4	IC 280-603284/15	0.25025	36370.0			145334.665335	Y
5	IC 280-603284/14	0.4004	55525.0			138673.826174	Y
6	IC 280-603284/13	0.7007	102987.0			146977.308406	Y
7	IC 280-603284/12	1.001	146436.0			146289.71029	Y
8	IC 280-603284/11	2.5025	366607.0			146496.303696	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

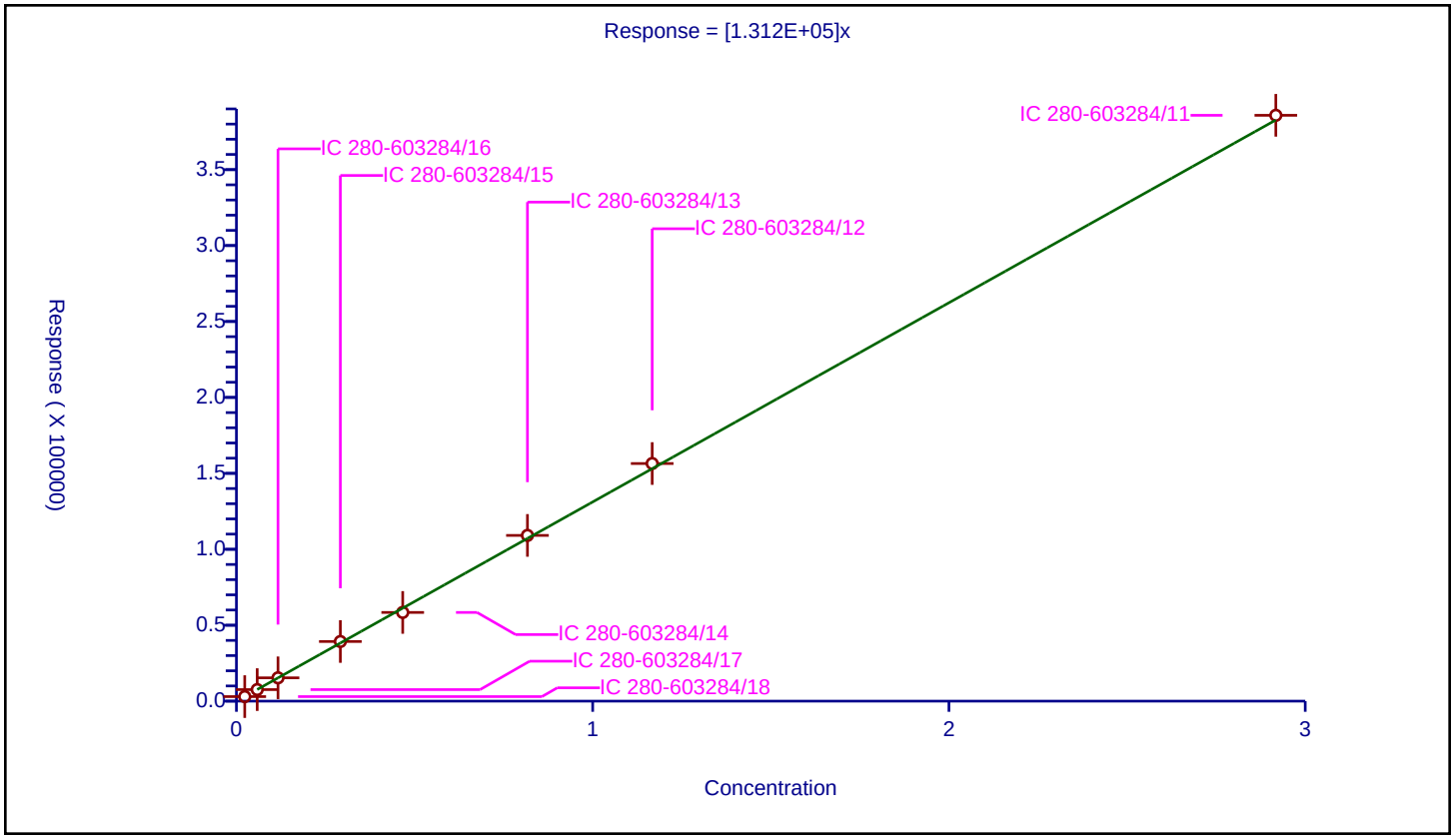
Curve Coefficients

Intercept:	0
Slope:	1.312E+05

Error Coefficients

Standard Error:	2200
Relative Standard Error:	2.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-603284/18	0.02334	2982.0			127763.496144	Y
2	IC 280-603284/17	0.05835	7605.0			130334.190231	Y
3	IC 280-603284/16	0.1167	15358.0			131602.399314	Y
4	IC 280-603284/15	0.29175	39278.0			134628.963153	Y
5	IC 280-603284/14	0.4668	58415.0			125139.24593	Y
6	IC 280-603284/13	0.8169	109131.0			133591.626882	Y
7	IC 280-603284/12	1.167	156478.0			134085.689803	Y
8	IC 280-603284/11	2.9175	385772.0			132226.906598	Y



FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176134-1 Analy Batch No.: 610603

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/28/2023 18:24 Calibration End Date: 04/28/2023 23:03 Calibration ID: 79725

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-610603/18	04280018.D
Level 2	IC 280-610603/17	04280017.D
Level 3	IC 280-610603/16	04280016.D
Level 4	IC 280-610603/15	04280015.D
Level 5	IC 280-610603/14	04280014.D
Level 6	IC 280-610603/13	04280013.D
Level 7	IC 280-610603/12	04280012.D
Level 8	IC 280-610603/11	04280011.D
Level 9	IC 280-610603/10	04280010.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	5.116	5.136	5.116	5.116	5.115	5.108	5.096	5.095	5.014		4.965 - 5.265	5.101
DNX	5.963	5.983	5.969	5.963	5.955	5.954	5.943	5.942	5.854		5.805 - 6.105	5.947
HMX	+++++	6.630	6.603	6.603	6.595	6.594	6.589	6.588	6.521		6.445 - 6.745	6.590
MNX	7.496	7.523	7.503	7.496	7.489	7.488	7.476	7.475	7.387		7.339 - 7.639	7.481
Picric acid	8.063	8.116	8.076	8.056	8.029	8.008	7.956	7.935	+++++		7.879 - 8.179	8.030
RDX	8.923	8.956	8.929	8.923	8.915	8.908	8.903	8.902	8.814		8.765 - 9.065	8.908
Nitrobenzene	11.489	11.523	11.489	11.483	11.482	11.461	11.462	11.462	11.374		11.332 - 11.632	11.469
3,5-Dinitroaniline	14.376	14.410	14.369	14.363	14.355	14.334	14.329	14.355	14.367		14.205 - 14.505	14.362
1,3-Dinitrobenzene	14.636	14.663	14.629	14.623	14.622	14.601	14.596	14.615	14.527		14.472 - 14.772	14.612
Nitroglycerin	15.196	15.216	15.176	15.176	15.182	15.154	15.149	15.175	15.121		15.032 - 15.332	15.172
2-Nitrotoluene	15.736	15.770	15.723	15.730	15.729	15.708	15.696	15.722	15.661		15.579 - 15.879	15.719
4-Nitrotoluene	15.969	15.996	15.956	15.956	15.955	15.934	15.922	15.948	15.834		15.805 - 16.105	15.941
4-Amino-2,6-dinitrotoluene	16.529	16.556	16.523	16.523	16.515	16.501	16.482	16.528	16.441		16.365 - 16.665	16.511
3-Nitrotoluene	16.843	16.843	16.816	16.816	16.815	16.801	16.782	16.828	16.734		16.665 - 16.965	16.809
2-Amino-4,6-dinitrotoluene	17.369	17.410	17.376	17.370	17.362	17.354	17.329	17.402	17.367		17.212 - 17.512	17.371
1,3,5-Trinitrobenzene	17.443	17.456	17.429	17.423	17.422	17.414	17.389	17.442	17.367		17.272 - 17.572	17.421
2,6-Dinitrotoluene	18.643	18.670	18.643	18.636	18.629	18.628	18.622	18.675	18.561		18.479 - 18.779	18.634
2,4-Dinitrotoluene	19.096	19.123	19.096	19.090	19.082	19.081	19.076	19.128	19.021		18.932 - 19.232	19.088
Tetryl	22.363	22.396	22.369	22.363	22.389	22.361	22.389	22.442	22.341		22.239 - 22.539	22.379
2,4,6-Trinitrotoluene	23.176	23.196	23.163	23.156	23.182	23.154	23.183	23.228	23.134		23.032 - 23.332	23.175
PETN	24.430	24.450	24.423	24.416	24.475	24.428	24.469	24.508	24.421		24.325 - 24.625	24.447
1,2-Dinitrobenzene	12.483	12.516	12.476	12.470	12.469	12.448	12.442	12.455	12.374		12.319 - 12.619	12.459

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

Lab Name: Eurofins Denver Job No.: 280-176134-1 Analy Batch No.: 610603

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/28/2023 18:24 Calibration End Date: 04/28/2023 23:03 Calibration ID: 79725

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-610603/18	04280018.D
Level 2	IC 280-610603/17	04280017.D
Level 3	IC 280-610603/16	04280016.D
Level 4	IC 280-610603/15	04280015.D
Level 5	IC 280-610603/14	04280014.D
Level 6	IC 280-610603/13	04280013.D
Level 7	IC 280-610603/12	04280012.D
Level 8	IC 280-610603/11	04280011.D
Level 9	IC 280-610603/10	04280010.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	453838 343462 370331	407727 368303	404407 394444	416291 390186	Ave		394332.075				8.1		20.0			
DNX	280120 247976 265367	286114 268282	294366 283929	286124 281374	Ave		277072.290				5.1		20.0			
HMX	+++++ 184440 193632	222450 169983	215220 187240	195730 189027	Lin2	831.975634	185425.338							0.9970		0.9900
MNX	312425 228103 265422	263710 245259	268963 258928	261611 255982	Ave		262267.073				8.6		20.0			
Picric acid	219700 160808 +++++	172650 149730	179000 163827	170600 165319	Lin2	546.111079	159807.270							0.9960		0.9900
RDX	285200 214572 225981	243150 197783	232420 219114	228270 221588	Lin2	672.503491	215639.318							0.9980		0.9900
Nitrobenzene	426900 386724 401056	393550 354198	417660 395110	415850 398454	Ave		398833.544				5.3		20.0			
3,5-Dinitroaniline	505300 452216 407228	461050 414810	483520 461404	469800 460771	Lin2	607.261331	444569.707							0.9970		0.9900

Note: The M1 coefficient is the same as Ave CF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

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

Lab Name: Eurofins Denver Job No.: 280-176134-1 Analy Batch No.: 610603

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/28/2023 18:24 Calibration End Date: 04/28/2023 23:03 Calibration ID: 79725

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								
1,3-Dinitrobenzene	694600 610632 687042	615350 554495	629180 616069	625960 630835	Ave		629351.397				6.6		20.0			
Nitroglycerin	146030 130878 134334	137045 120030	142168 132805	134661 134666	Ave		134735.154				5.4		20.0			
2-Nitrotoluene	233600 242696 244772	264050 225665	259020 249076	252900 250892	Ave		246963.368				4.8		20.0			
4-Nitrotoluene	220600 226220 241286	223300 203570	243580 227886	230020 230951	Ave		227490.302				5.2		20.0			
4-Amino-2,6-dinitrotoluene	327500 286712 289176	303200 260730	305300 288184	294720 292369	Ave		294210.143				6.1		20.0			
3-Nitrotoluene	326900 284164 298841	291150 260845	310920 290920	295690 292277	Ave		294634.089				6.1		20.0			
2-Amino-4,6-dinitrotoluene	391200 434020 467007	412850 397298	463240 420357	439480 426004	Ave		427939.494				6.1		20.0			
1,3,5-Trinitrobenzene	443800 392672 378606	389950 354488	441180 413963	419460 417113	Ave		405692.417				7.2		20.0			
2,6-Dinitrotoluene	309300 283472 290190	285800 257870	317520 287934	302600 290390	Ave		291675.187				5.9		20.0			
2,4-Dinitrotoluene	598700 572392 588866	612050 519843	608140 580639	594330 585209	Ave		584463.075				4.7		20.0			
Tetryl	328200 273308 283850	317400 246538	284660 274789	275340 278494	Ave		284730.941				8.6		20.0			
2,4,6-Trinitrotoluene	491900 418244 436729	496250 380470	443680 421144	431360 430103	Ave		438875.565				8.2		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

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

Lab Name: Eurofins Denver Job No.: 280-176134-1 Analy Batch No.: 610603

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/28/2023 18:24 Calibration End Date: 04/28/2023 23:03 Calibration ID: 79725

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	163440 140765 142965	144025 128148	145886 141788	146450 141973	Ave		143937.770				6.3		20.0			
1,2-Dinitrobenzene	316900 269384 276674	301900 245698	287580 273104	278930 276103	Ave		280697.021				7.2		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

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

Lab Name: Eurofins Denver Job No.: 280-176134-1 Analy Batch No.: 610603

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/28/2023 18:24 Calibration End Date: 04/28/2023 23:03 Calibration ID: 79725

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-610603/18	04280018.D
Level 2	IC 280-610603/17	04280017.D
Level 3	IC 280-610603/16	04280016.D
Level 4	IC 280-610603/15	04280015.D
Level 5	IC 280-610603/14	04280014.D
Level 6	IC 280-610603/13	04280013.D
Level 7	IC 280-610603/12	04280012.D
Level 8	IC 280-610603/11	04280011.D
Level 9	IC 280-610603/10	04280010.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	4552 147763	8179 276939	20281 391357	41754 928605	86123	0.0100 0.401	0.0201 0.702	0.0502 1.00	0.100 2.51	0.251
DNX	Ave	2804 107420	5728 198949	14733 281655	28641 664081	62056	0.0100 0.400	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250
HMX	Lin2	+++++ 67993	4449 131068	10761 189027	19573 484081	46110	+++++ 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
MNX	Ave	3646 114487	6155 211518	15694 298731	30530 774370	66549	0.0117 0.467	0.0233 0.817	0.0584 1.17	0.117 2.92	0.292
Picric acid	Lin2	2197 59892	3453 114679	8950 165319	17060 +++++	40202	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 +++++	0.250
RDX	Lin2	2852 79113	4863 153380	11621 221588	22827 564953	53643	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Nitrobenzene	Ave	4269 141679	7871 276577	20883 398454	41585 1002641	96681	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
3,5-Dinitroaniline	Lin2	5053 165924	9221 322983	24176 460771	46980 1018070	113054	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
1,3-Dinitrobenzene	Ave	6946 221798	12307 431248	31459 630835	62596 1717605	152658	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Nitroglycerin	Ave	14603 480119	27409 929634	71084 1346659	134661 3358347	327195	0.100 4.00	0.200 7.00	0.500 10.0	1.00 25.0	2.50
2-Nitrotoluene	Ave	2336 90266	5281 174353	12951 250892	25290 611929	60674	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
4-Nitrotoluene	Ave	2206 81428	4466 159520	12179 230951	23002 603215	56555	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
4-Amino-2,6-dinitrotoluene	Ave	3275	6064	15265	29472	71678	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.: 280-176134-1 Analy Batch No.: 610603

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/28/2023 18:24 Calibration End Date: 04/28/2023 23:03 Calibration ID: 79725

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
		104292	201729	292369	722940		0.400	0.700	1.00	2.50	
3-Nitrotoluene	Ave	3269	5823	15546	29569	71041	0.0100	0.0200	0.0500	0.100	0.250
		104338	203644	292277	747102		0.400	0.700	1.00	2.50	
2-Amino-4,6-dinitrotoluene	Ave	3912	8257	23162	43948	108505	0.0100	0.0200	0.0500	0.100	0.250
		158919	294250	426004	1167517		0.400	0.700	1.00	2.50	
1,3,5-Trinitrobenzene	Ave	4438	7799	22059	41946	98168	0.0100	0.0200	0.0500	0.100	0.250
		141795	289774	417113	946516		0.400	0.700	1.00	2.50	
2,6-Dinitrotoluene	Ave	3093	5716	15876	30260	70868	0.0100	0.0200	0.0500	0.100	0.250
		103148	201554	290390	725476		0.400	0.700	1.00	2.50	
2,4-Dinitrotoluene	Ave	5987	12241	30407	59433	143098	0.0100	0.0200	0.0500	0.100	0.250
		207937	406447	585209	1472164		0.400	0.700	1.00	2.50	
Tetryl	Ave	3282	6348	14233	27534	68327	0.0100	0.0200	0.0500	0.100	0.250
		98615	192352	278494	709626		0.400	0.700	1.00	2.50	
2,4,6-Trinitrotoluene	Ave	4919	9925	22184	43136	104561	0.0100	0.0200	0.0500	0.100	0.250
		152188	294801	430103	1091822		0.400	0.700	1.00	2.50	
PETN	Ave	16344	28805	72943	146450	351913	0.100	0.200	0.500	1.00	2.50
		512590	992519	1419730	3574120		4.00	7.00	10.0	25.0	
1,2-Dinitrobenzene	Ave	3169	6038	14379	27893	67346	0.0100	0.0200	0.0500	0.100	0.250
		98279	191173	276103	691686		0.400	0.700	1.00	2.50	

Curve Type Legend
Ave = Average
Lin2 = Linear 1/conc^2

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280010.D
Lims ID: IC INT 9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 28-Apr-2023 18:24:11 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_X5
Sublist: chrom-8330_X5_Luna*sub6

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 29-Apr-2023 13:04:16 Calib Date: 29-Apr-2023 04:18:01
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1621

First Level Reviewer: LV5D Date: 29-Apr-2023 13:01:46

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.014	5.115	-0.101	928605	2.51	2.35	
4 DNX	1	5.854	5.955	-0.101	664081	2.50	2.40	
5 HMX	1	6.521	6.595	-0.074	484081	2.50	2.61	
6 MNX	1	7.387	7.489	-0.102	774370	2.92	2.95	
7 2,4,6-Trinitrophenol	1	7.867	8.029	-0.162	285146	2.50	1.78	
8 RDX	1	8.814	8.915	-0.101	564953	2.50	2.62	
9 Nitrobenzene	1	11.374	11.482	-0.108	1002641	2.50	2.51	
$ 10 1,2-Dinitrobenzene	1	12.374	12.469	-0.095	691686	2.50	2.46	
11 3,5-Dinitroaniline	1	14.367	14.355	0.012	1018070	2.50	2.29	Ma
12 1,3-Dinitrobenzene	1	14.527	14.622	-0.095	1717605	2.50	2.73	M
13 Nitroglycerin	2	15.121	15.182	-0.061	3358347	25.0	24.9	
14 o-Nitrotoluene	1	15.661	15.729	-0.068	611929	2.50	2.48	M
16 p-Nitrotoluene	1	15.834	15.955	-0.121	603215	2.50	2.65	M
17 4-Amino-2,6-dinitrotoluene	1	16.441	16.515	-0.074	722940	2.50	2.46	M
18 m-Nitrotoluene	1	16.734	16.815	-0.081	747102	2.50	2.54	M
19 2-Amino-4,6-dinitrotoluene	1	17.367	17.362	0.005	1167517	2.50	2.73	M
20 1,3,5-Trinitrobenzene	1	17.367	17.422	-0.055	946516	2.50	2.33	M
21 2,6-Dinitrotoluene	1	18.561	18.629	-0.068	725476	2.50	2.49	M
22 2,4-Dinitrotoluene	1	19.021	19.082	-0.061	1472164	2.50	2.52	M
23 Tetryl	1	22.341	22.389	-0.048	709626	2.50	2.49	
24 2,4,6-Trinitrotoluene	1	23.134	23.182	-0.048	1091822	2.50	2.49	
25 PETN	2	24.421	24.475	-0.054	3574120	25.0	24.8	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

8330IntermStk_00076	Amount Added: 250.00	Units: uL
8330 DMT_00013	Amount Added: 125.00	Units: uL

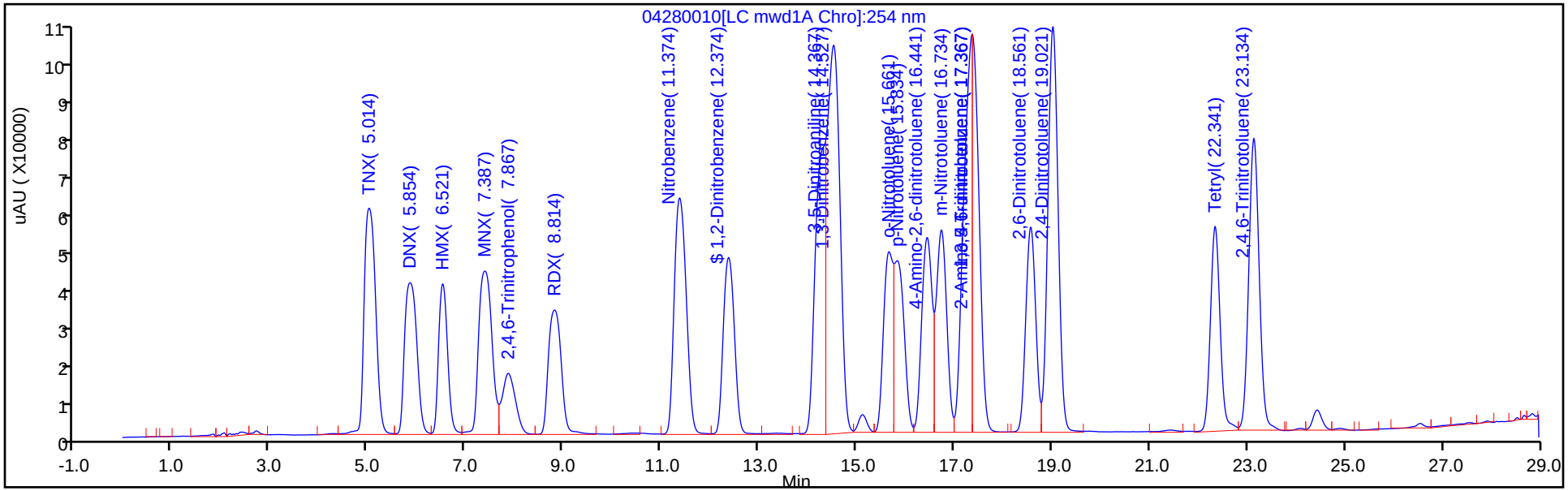
Report Date: 29-Apr-2023 13:04:16 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

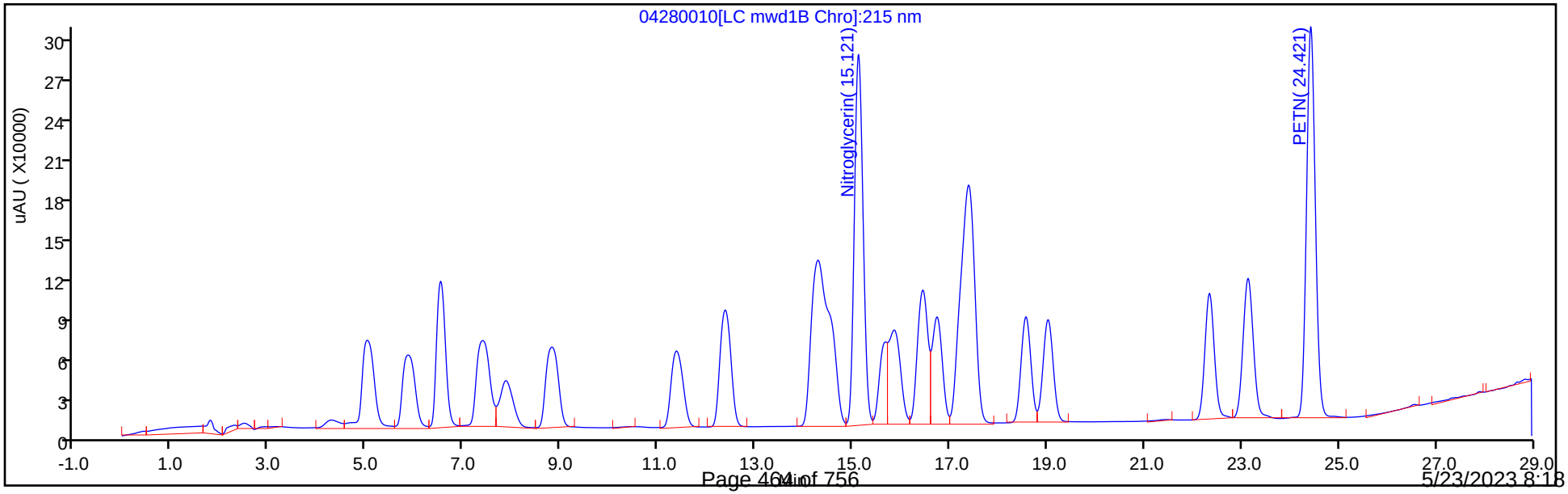
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Injection Date:	28-Apr-2023 18:24:11	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	IC INT 9			Worklist Smp#:	10
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

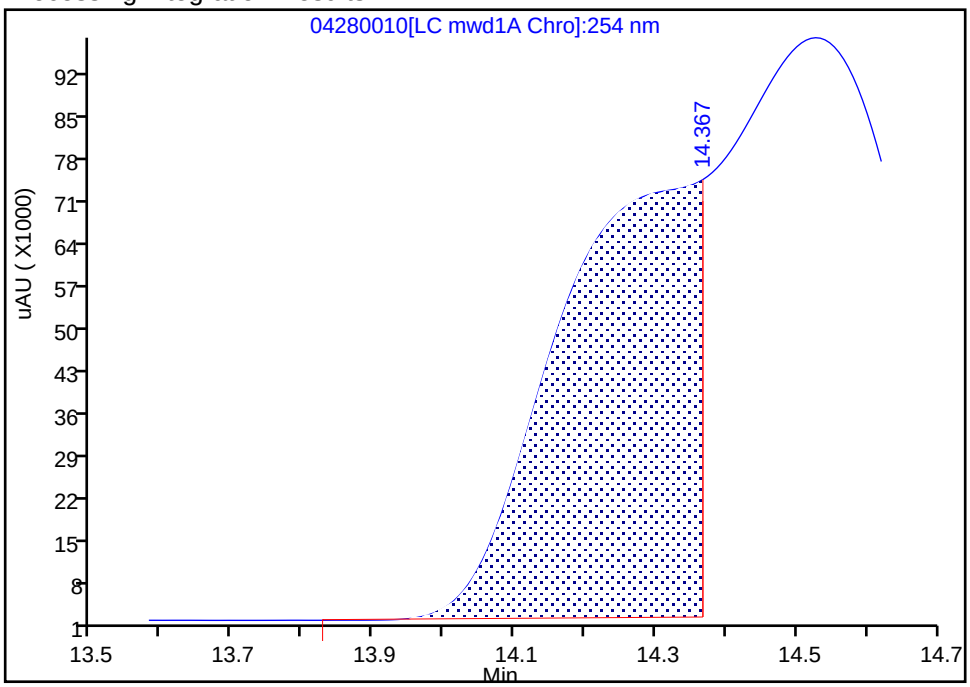
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Injection Date:	28-Apr-2023 18:24:11	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 9				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

11 3,5-Dinitroaniline, CAS: 618-87-1

Signal: 1

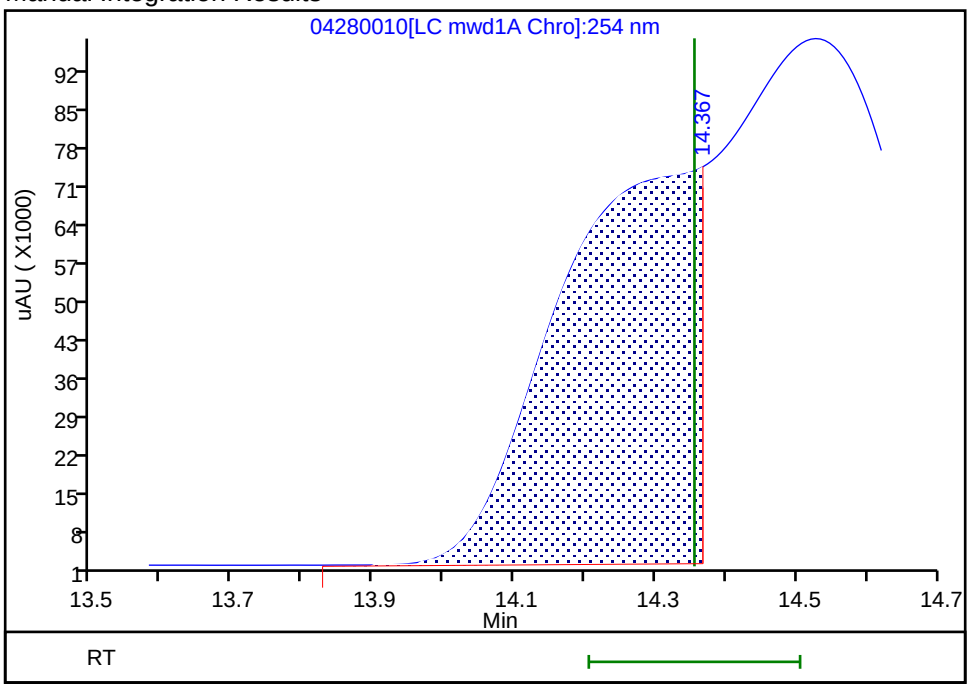
Processing Integration Results

RT: 14.37
Area: 1013469
Amount: 2.724745
Amount Units: ug/ml



Manual Integration Results

RT: 14.37
Area: 1018070
Amount: 2.288646
Amount Units: ug/ml



Reviewer: LV5D, 28-Apr-2023 19:01:40
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

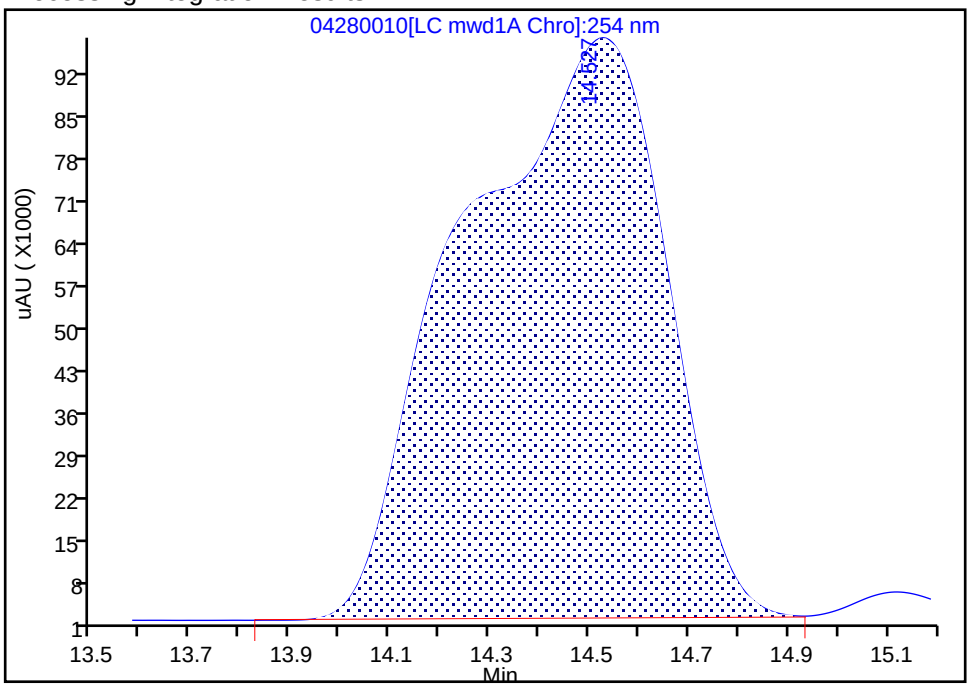
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Injection Date:	28-Apr-2023 18:24:11	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 9				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

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

Signal: 1

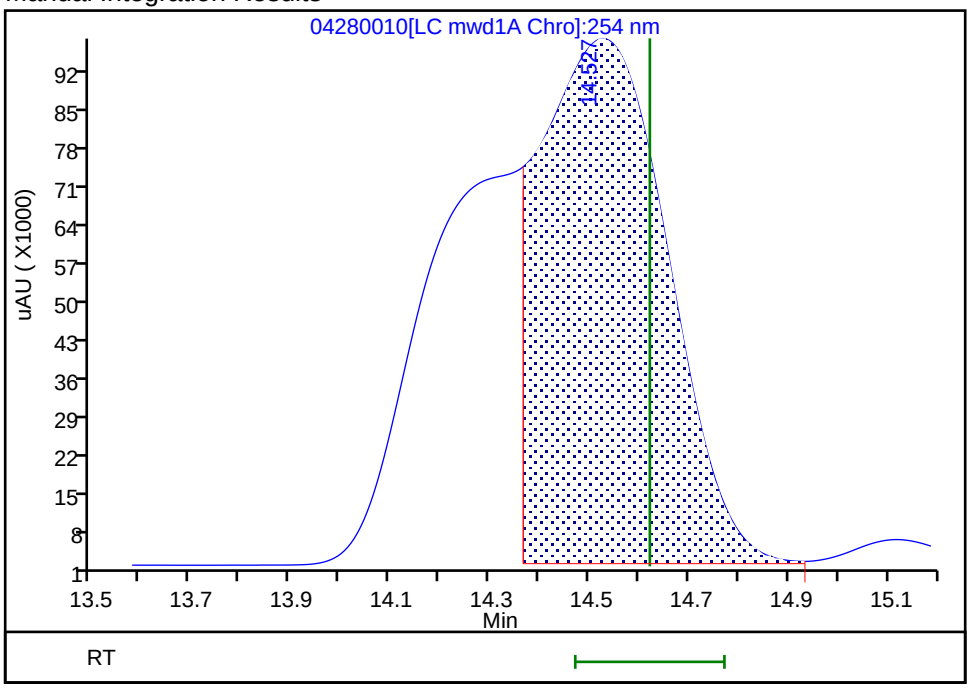
Processing Integration Results

RT: 14.53
Area: 2715993
Amount: 3.616571
Amount Units: ug/ml



Manual Integration Results

RT: 14.53
Area: 1717605
Amount: 2.729167
Amount Units: ug/ml



Reviewer: LV5D, 28-Apr-2023 19:01:40

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

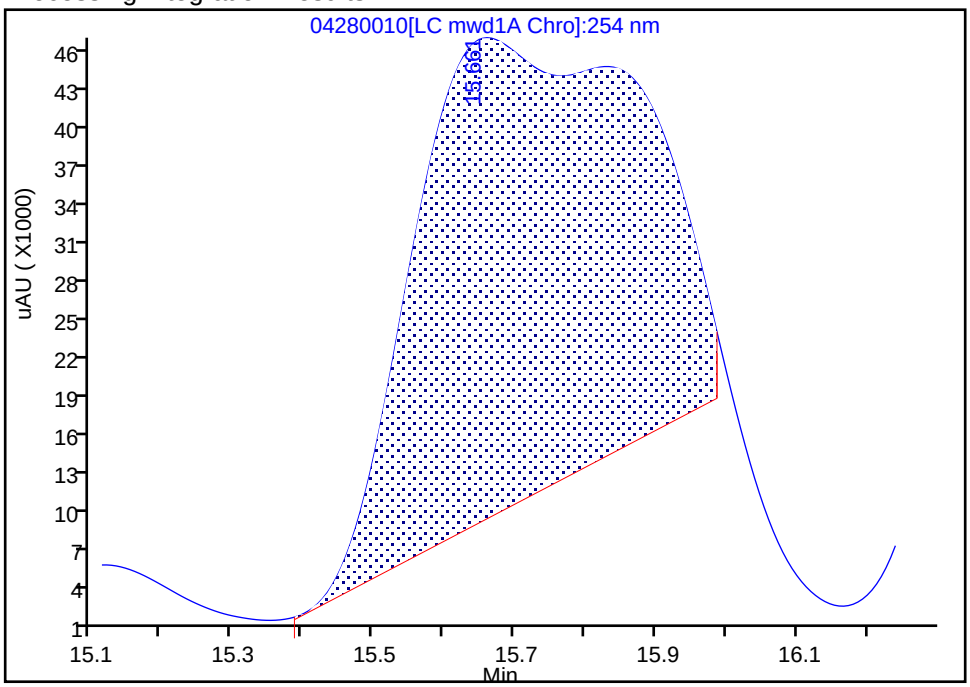
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Lims ID:	IC INT 9				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

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

Signal: 1

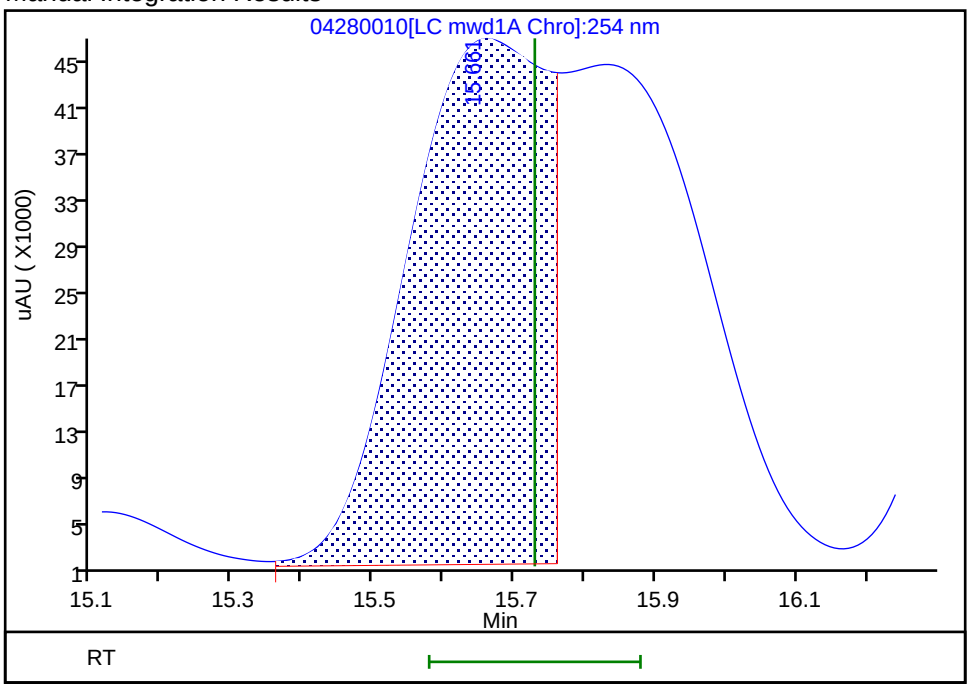
Processing Integration Results

RT: 15.66
Area: 811716
Amount: 3.605542
Amount Units: ug/ml



Manual Integration Results

RT: 15.66
Area: 611929
Amount: 2.477813
Amount Units: ug/ml



Reviewer: LV5D, 28-Apr-2023 19:01:40
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

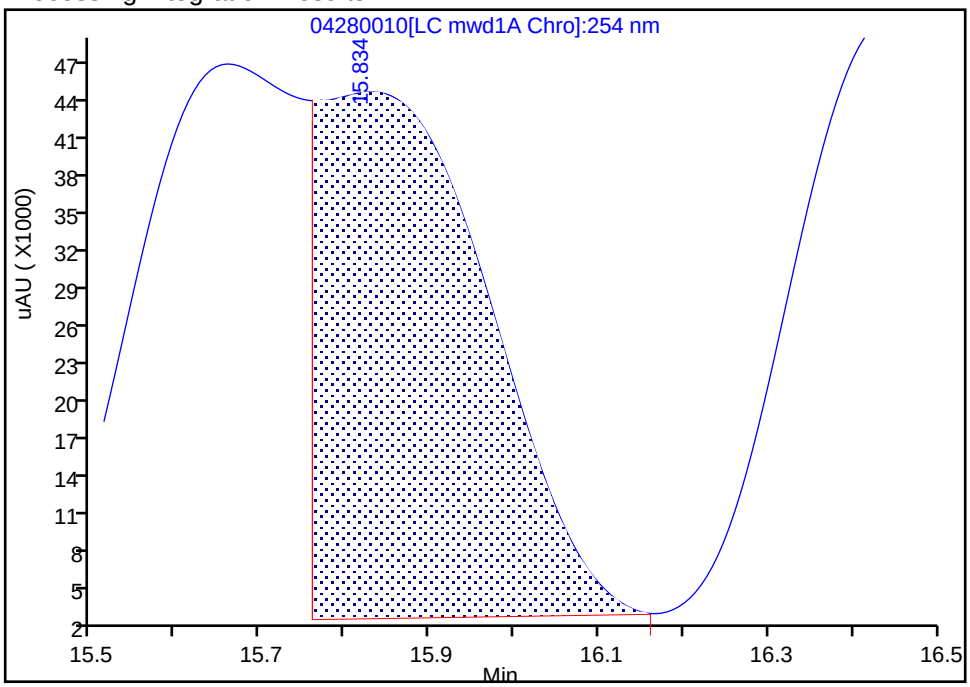
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Lims ID:	IC INT 9				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

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

Signal: 1

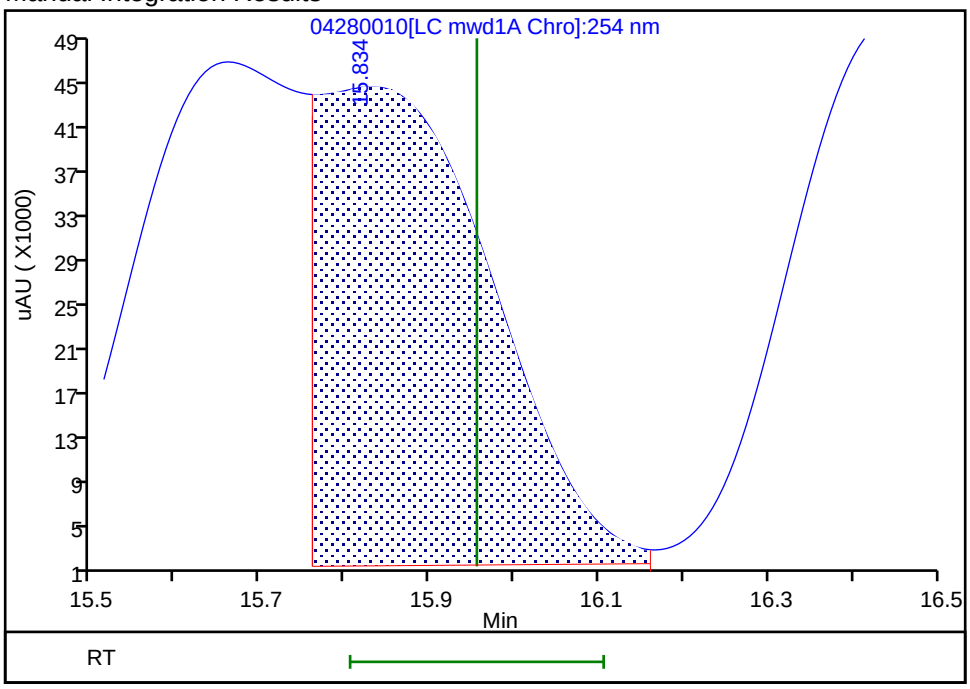
Processing Integration Results

RT: 15.83
Area: 577007
Amount: 2.272934
Amount Units: ug/ml



Manual Integration Results

RT: 15.83
Area: 603215
Amount: 2.651608
Amount Units: ug/ml



Reviewer: LV5D, 28-Apr-2023 19:01:40
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

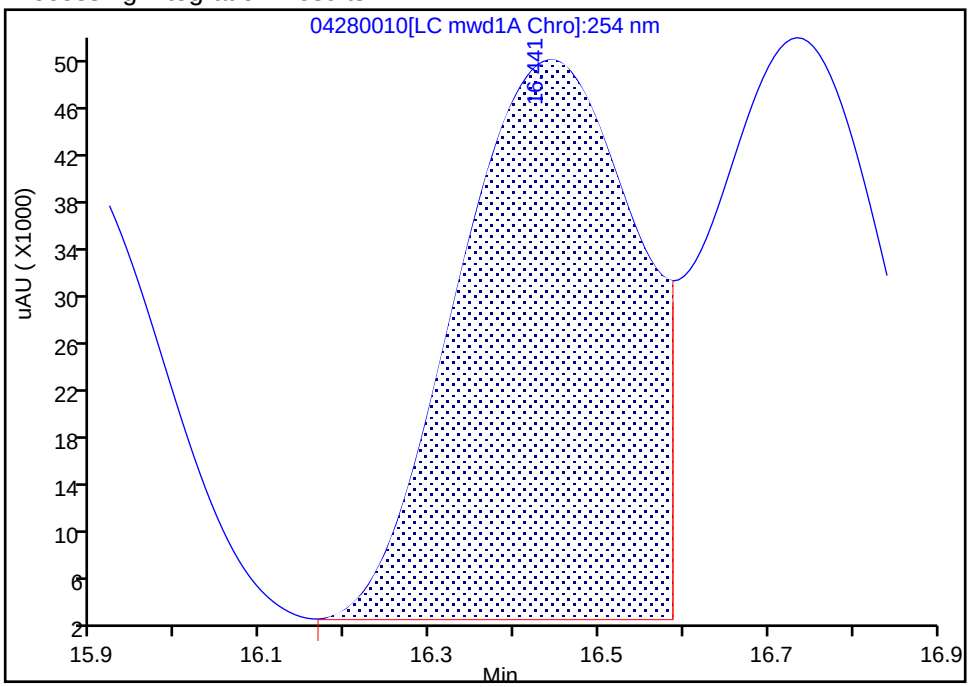
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Injection Date: 28-Apr-2023 18:24:11 Instrument ID: CHHPLC_X5
Lims ID: IC INT 9
Client ID:
Operator ID: JZ/JG ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC mwd1A, 254 nm

17 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

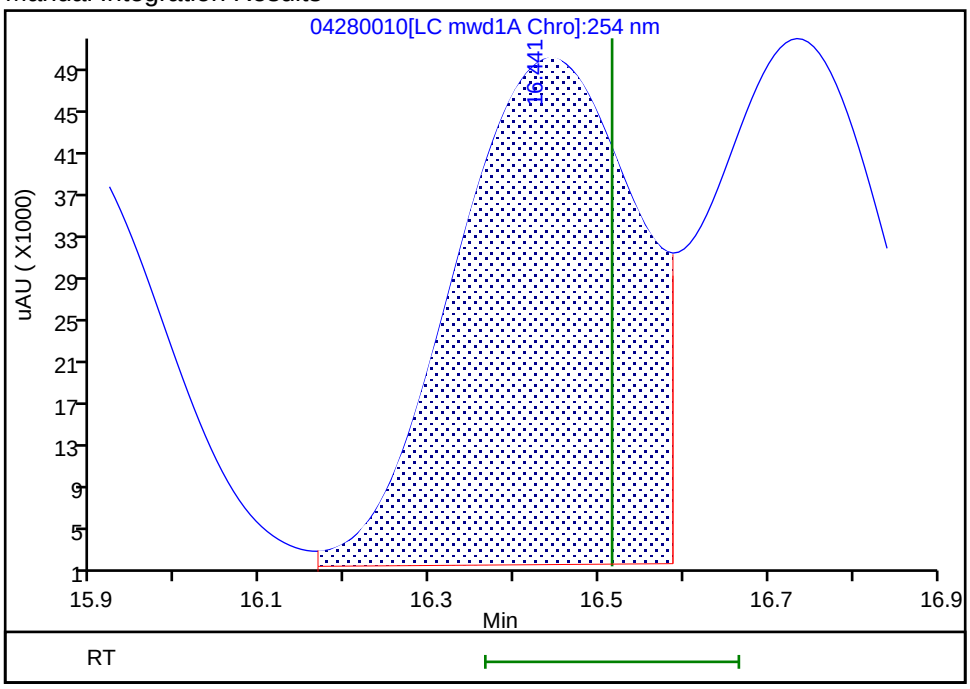
Processing Integration Results

RT: 16.44
Area: 691163
Amount: 2.645631
Amount Units: ug/ml



Manual Integration Results

RT: 16.44
Area: 722940
Amount: 2.457223
Amount Units: ug/ml



Reviewer: LV5D, 28-Apr-2023 19:01:40
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

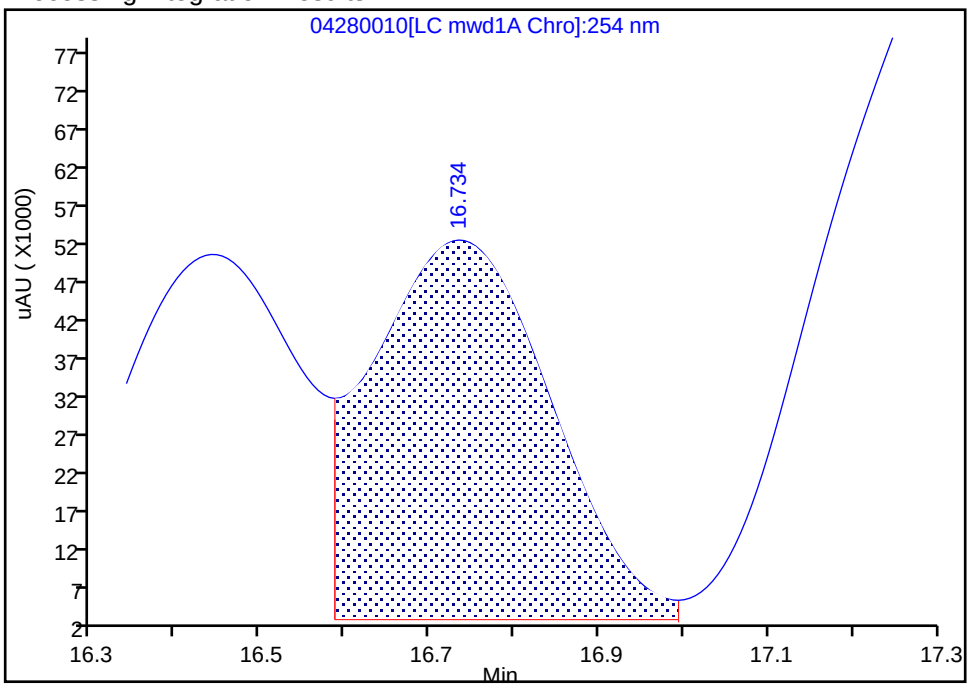
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Injection Date:	28-Apr-2023 18:24:11	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 9				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

18 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

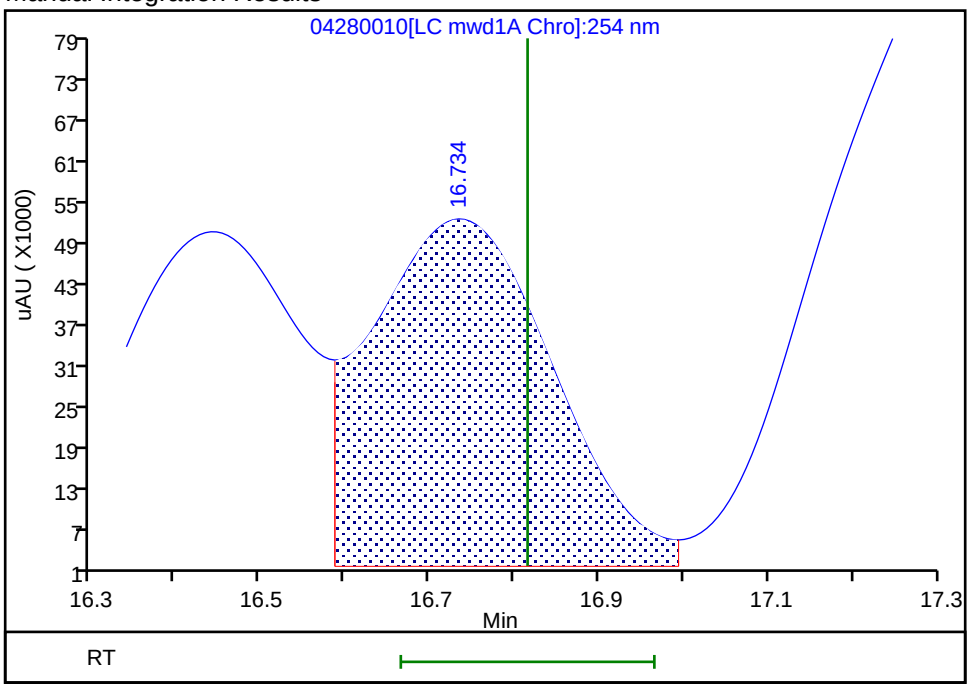
Processing Integration Results

RT: 16.73
Area: 719908
Amount: 2.277668
Amount Units: ug/ml



Manual Integration Results

RT: 16.73
Area: 747102
Amount: 2.535694
Amount Units: ug/ml



Reviewer: LV5D, 28-Apr-2023 19:01:40
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

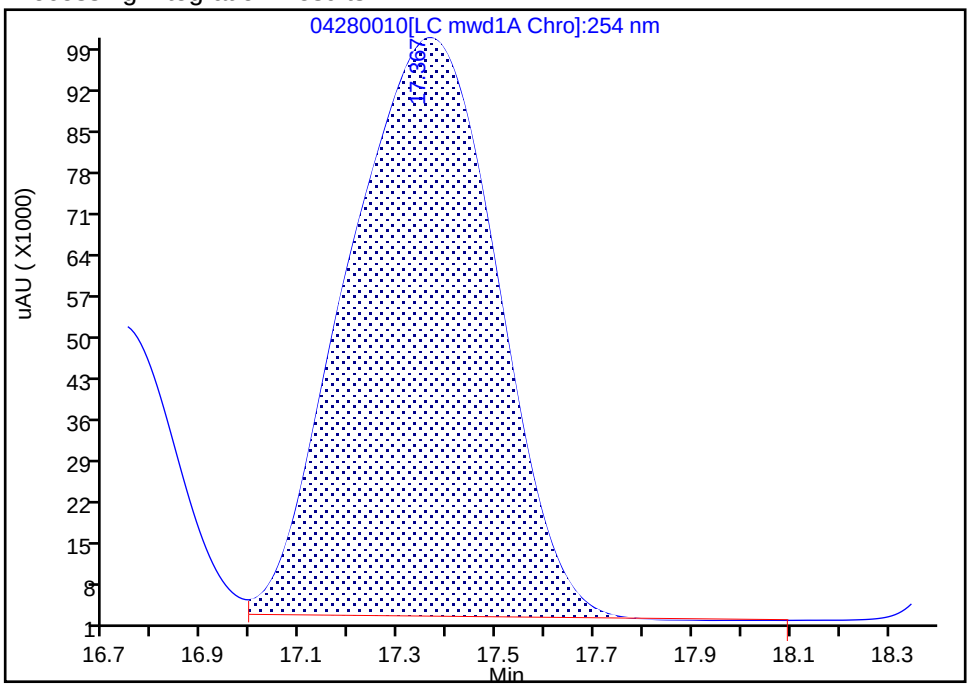
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280010.D				
Injection Date:	28-Apr-2023 18:24:11	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 9				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

20 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

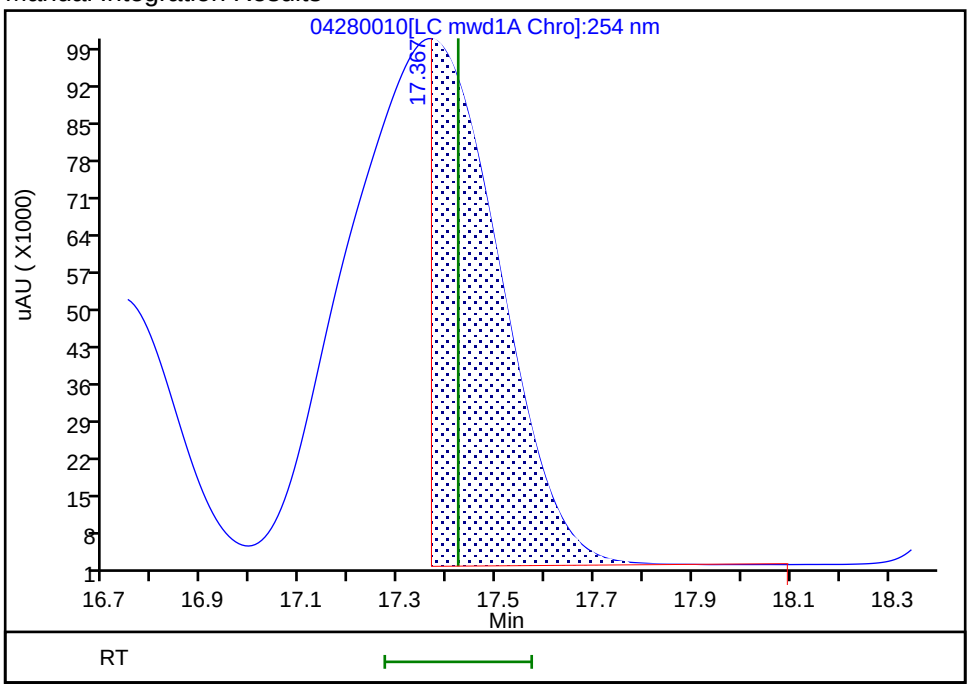
Processing Integration Results

RT: 17.37
Area: 2081660
Amount: 3.645357
Amount Units: ug/ml



Manual Integration Results

RT: 17.37
Area: 946516
Amount: 2.333088
Amount Units: ug/ml



Reviewer: LV5D, 28-Apr-2023 19:01:40

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

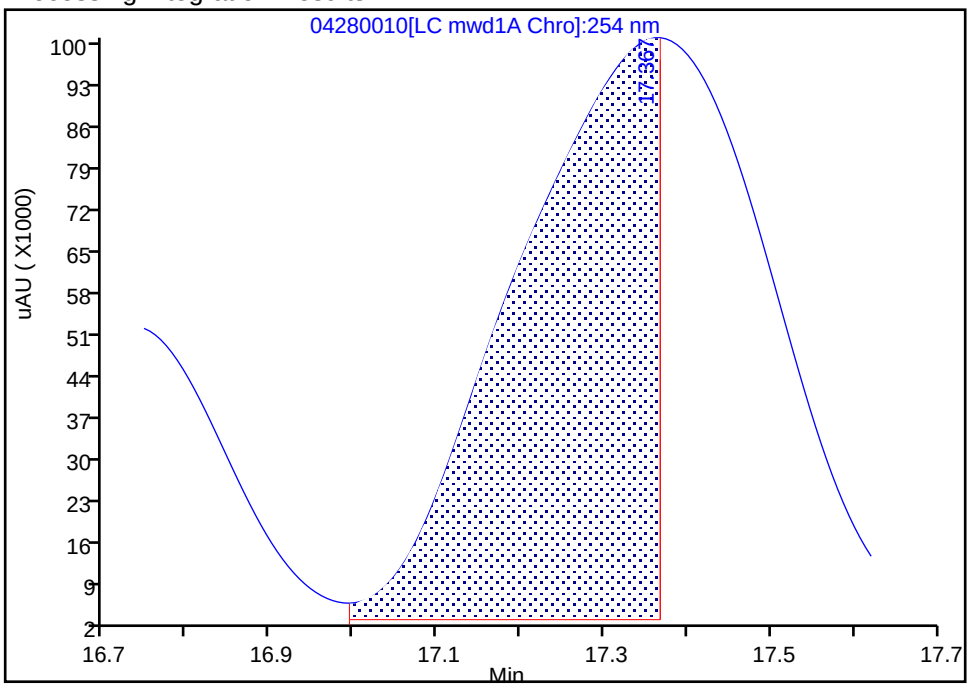
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280010.D				
Injection Date:	28-Apr-2023 18:24:11	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 9				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

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

Signal: 1

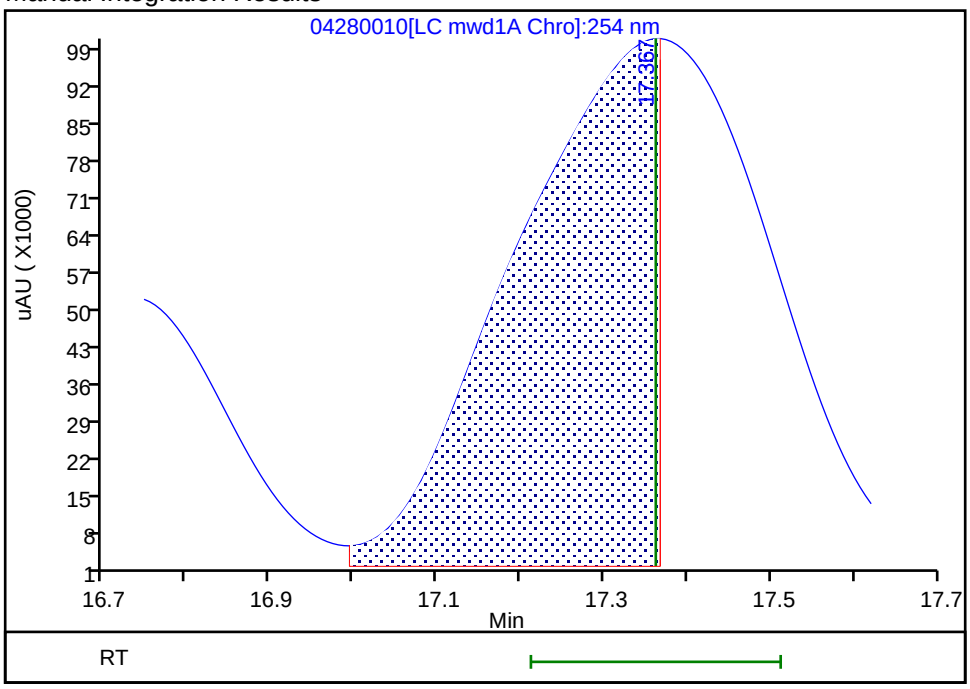
Processing Integration Results

RT: 17.37
Area: 1147839
Amount: 3.846971
Amount Units: ug/ml



Manual Integration Results

RT: 17.37
Area: 1167517
Amount: 2.728229
Amount Units: ug/ml



Reviewer: LV5D, 28-Apr-2023 19:01:40
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

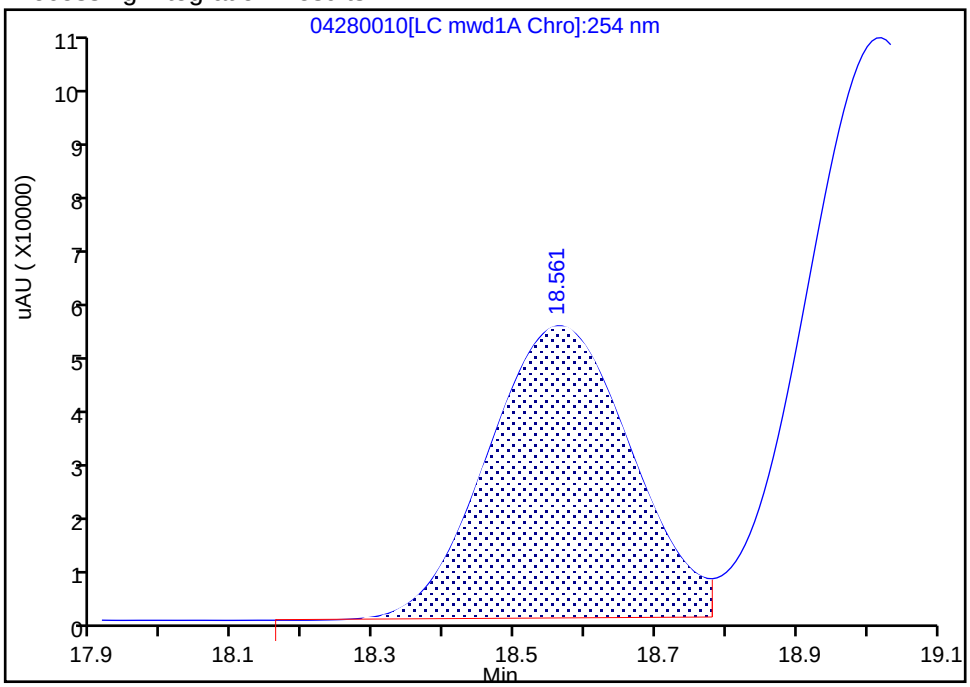
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Injection Date:	28-Apr-2023 18:24:11	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 9				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

21 2,6-Dinitrotoluene, CAS: 606-20-2

Signal: 1

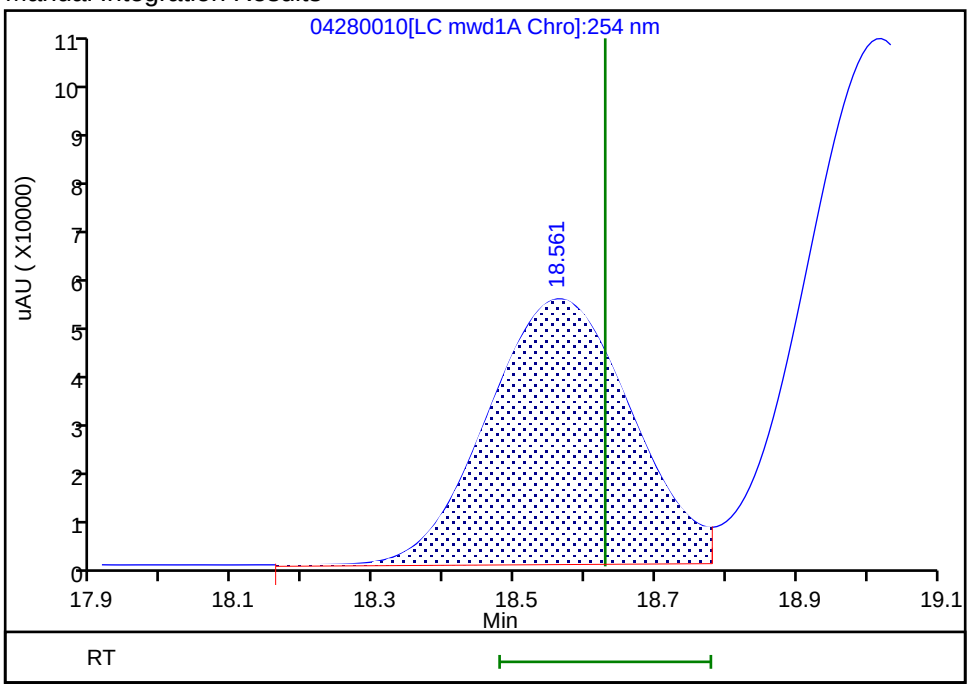
Processing Integration Results

RT: 18.56
Area: 716752
Amount: 2.903314
Amount Units: ug/ml



Manual Integration Results

RT: 18.56
Area: 725476
Amount: 2.487274
Amount Units: ug/ml



Reviewer: LV5D, 28-Apr-2023 19:01:40
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

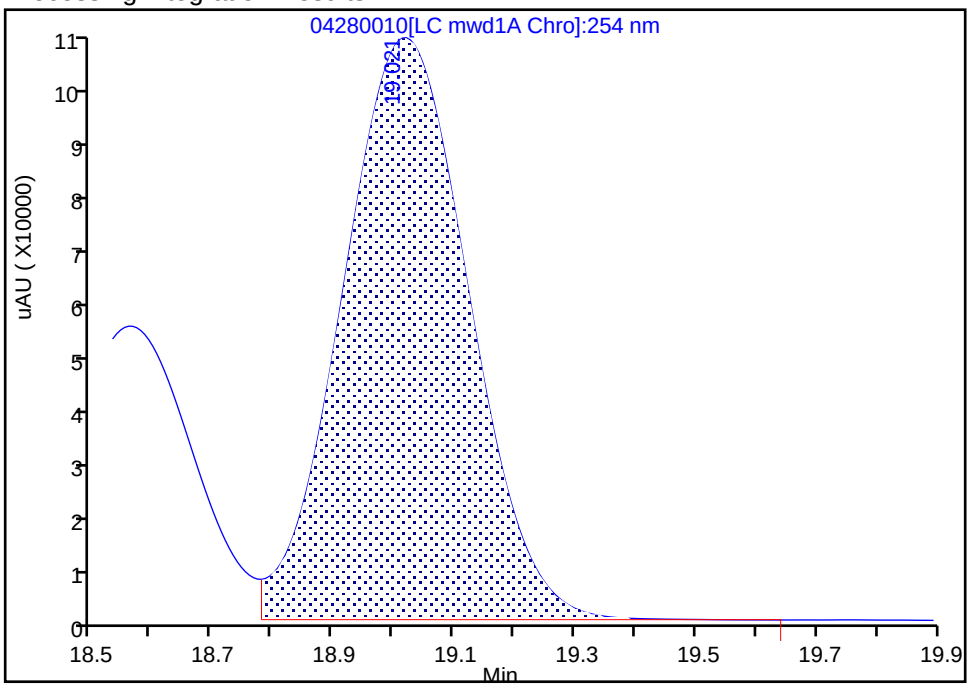
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280010.D				
Injection Date:	28-Apr-2023 18:24:11	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 9				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

22 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

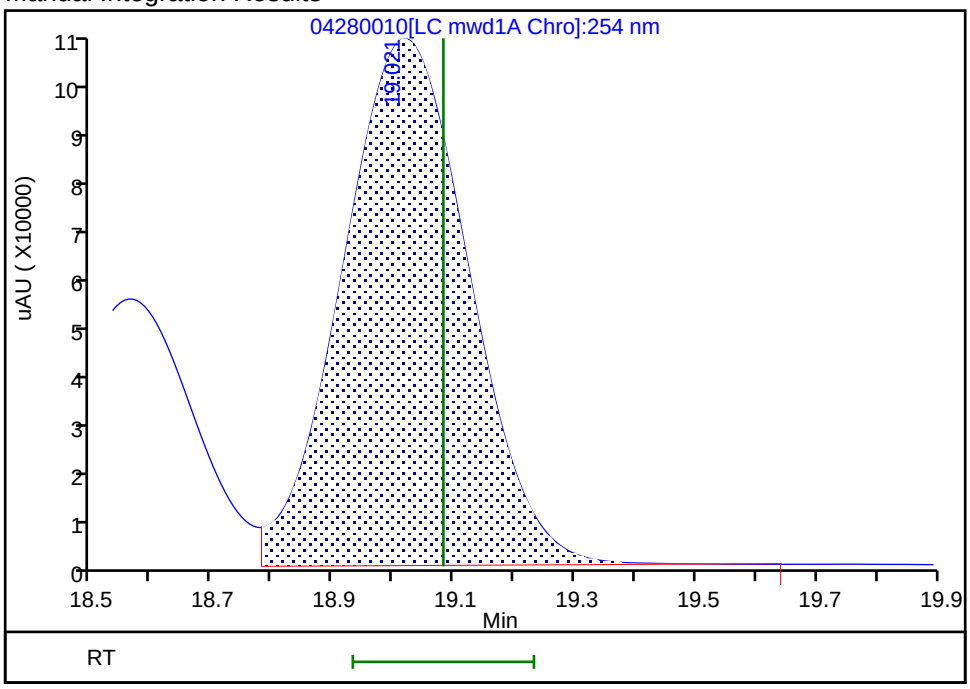
Processing Integration Results

RT: 19.02
Area: 1458826
Amount: 2.601930
Amount Units: ug/ml



Manual Integration Results

RT: 19.02
Area: 1472164
Amount: 2.518831
Amount Units: ug/ml



Reviewer: LV5D, 28-Apr-2023 19:01:40
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280011.D
Lims ID: IC INT 8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 28-Apr-2023 18:59:07 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_X5
Sublist: chrom-8330_X5_Luna*sub6

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 29-Apr-2023 13:04:17 Calib Date: 29-Apr-2023 04:18:01
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1621

First Level Reviewer: LV5D Date: 28-Apr-2023 20:43:46

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.095	5.115	-0.020	391357	1.00	0.99	
4 DNX	1	5.942	5.955	-0.013	281655	1.00	1.02	
5 HMX	1	6.588	6.595	-0.007	189027	1.00	1.01	
6 MNX	1	7.475	7.489	-0.014	298731	1.17	1.14	
7 2,4,6-Trinitrophenol	1	7.935	8.029	-0.094	165319	1.00	1.03	
8 RDX	1	8.902	8.915	-0.013	221588	1.00	1.02	
9 Nitrobenzene	1	11.462	11.482	-0.020	398454	1.00	1.00	
$ 10 1,2-Dinitrobenzene	1	12.455	12.469	-0.014	276103	1.00	0.9836	
11 3,5-Dinitroaniline	1	14.355	14.355	0.000	460771	1.00	1.04	
12 1,3-Dinitrobenzene	1	14.615	14.622	-0.007	630835	1.00	1.00	
13 Nitroglycerin	2	15.175	15.182	-0.007	1346659	10.0	10.0	
14 o-Nitrotoluene	1	15.722	15.729	-0.007	250892	1.00	1.02	
16 p-Nitrotoluene	1	15.948	15.955	-0.007	230951	1.00	1.02	
17 4-Amino-2,6-dinitrotoluene	1	16.528	16.515	0.013	292369	1.00	0.99	
18 m-Nitrotoluene	1	16.828	16.815	0.013	292277	1.00	0.99	
19 2-Amino-4,6-dinitrotoluene	1	17.402	17.362	0.040	426004	1.00	1.00	Ma
20 1,3,5-Trinitrobenzene	1	17.442	17.422	0.020	417113	1.00	1.03	M
21 2,6-Dinitrotoluene	1	18.675	18.629	0.046	290390	1.00	1.00	
22 2,4-Dinitrotoluene	1	19.128	19.082	0.046	585209	1.00	1.00	
23 Tetryl	1	22.442	22.389	0.053	278494	1.00	0.9781	
24 2,4,6-Trinitrotoluene	1	23.228	23.182	0.046	430103	1.00	0.9800	
25 PETN	2	24.508	24.475	0.033	1419730	10.0	9.86	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

8330IntermStk_00076	Amount Added: 100.00	Units: uL
8330 DMT_00013	Amount Added: 50.00	Units: uL

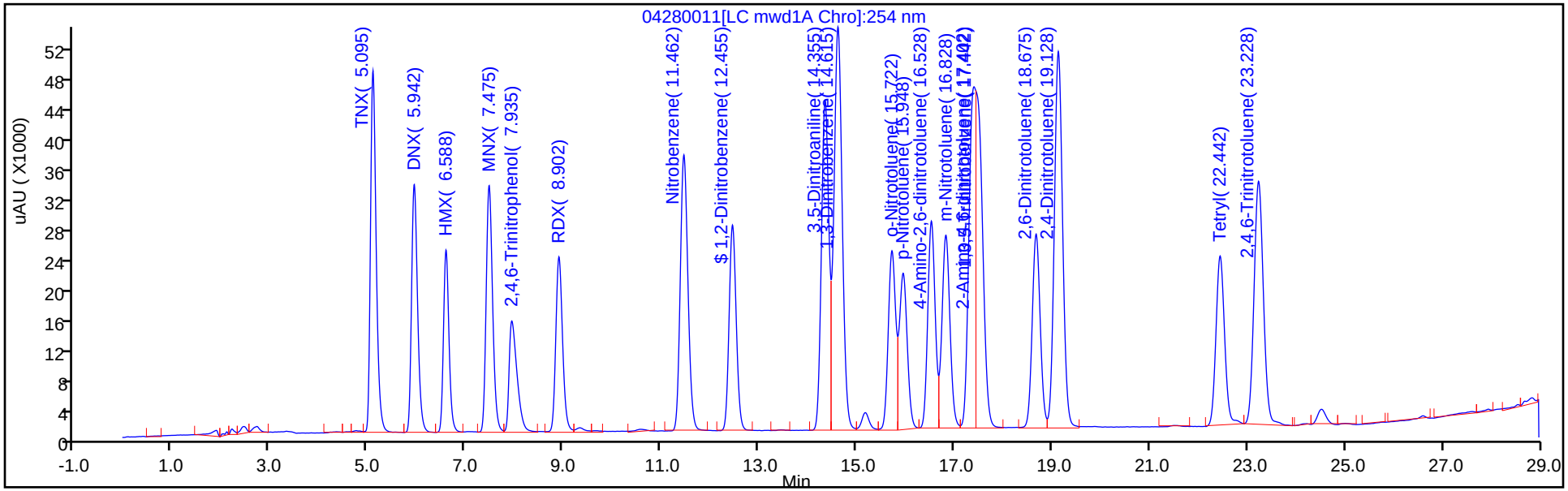
Report Date: 29-Apr-2023 13:04:17 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

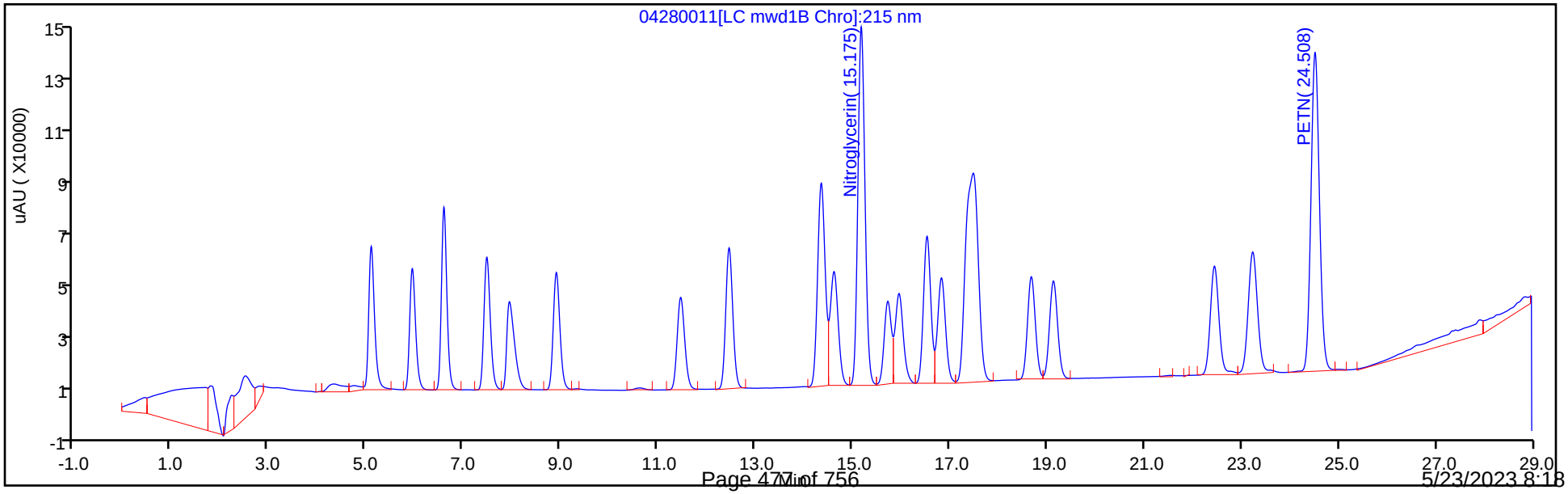
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280011.D

Injection Date:	28-Apr-2023 18:59:07	Instrument ID:	CHHPLC_X5	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:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

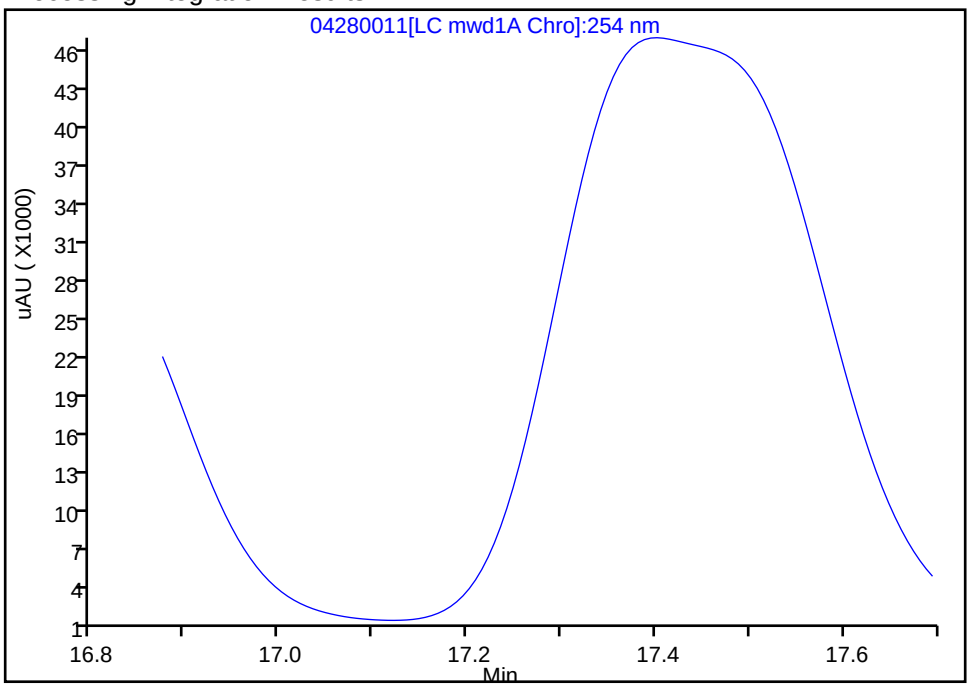
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280011.D				
Injection Date:	28-Apr-2023 18:59:07	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 8				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

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

Signal: 1

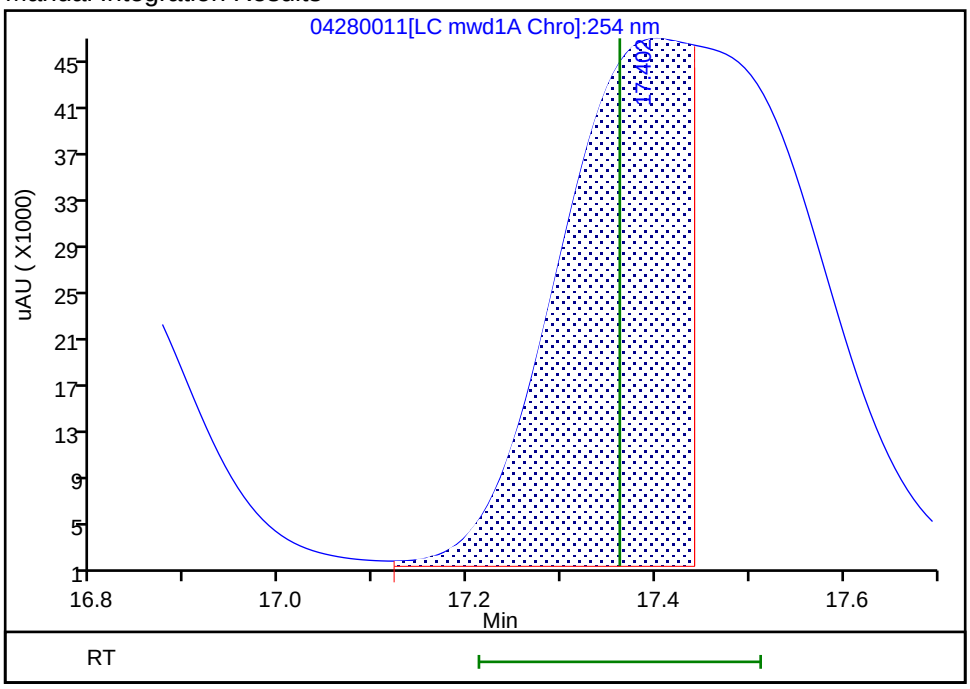
Not Detected
Expected RT: 17.36

Processing Integration Results



Manual Integration Results

RT: 17.40
Area: 426004
Amount: 0.995477
Amount Units: ug/ml



Reviewer: LV5D, 28-Apr-2023 20:43:43
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

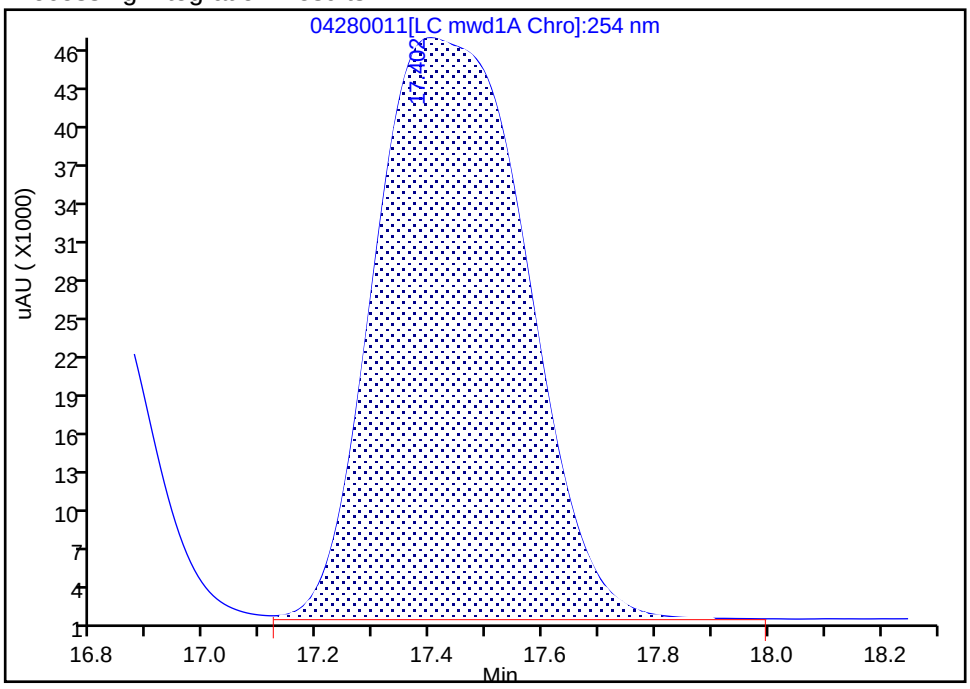
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280011.D				
Injection Date:	28-Apr-2023 18:59:07	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 8				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

20 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

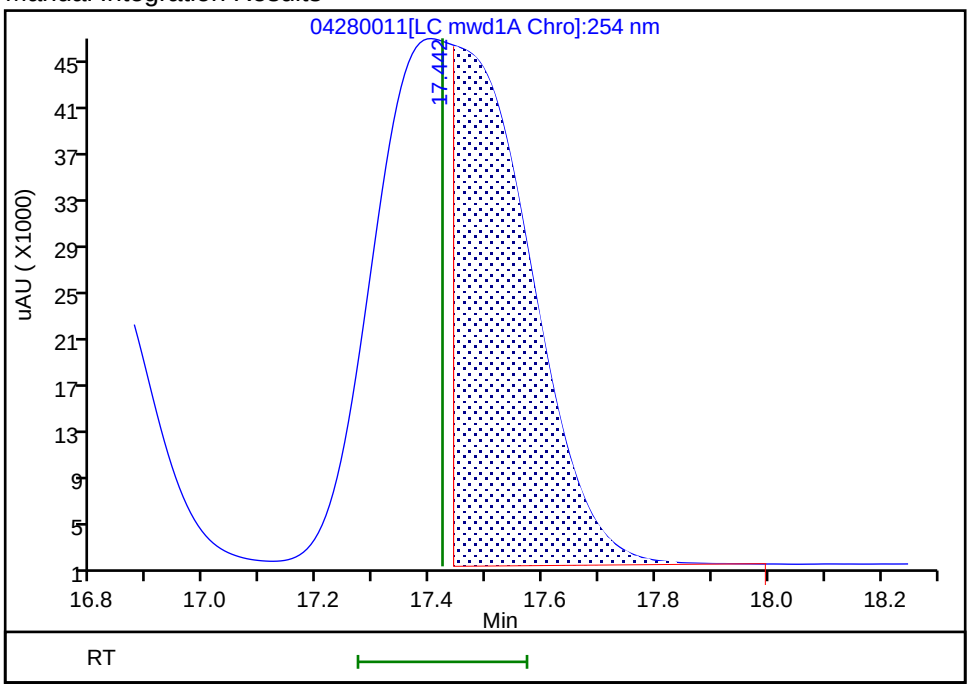
Processing Integration Results

RT: 17.40
Area: 843108
Amount: 1.537916
Amount Units: ug/ml



Manual Integration Results

RT: 17.44
Area: 417113
Amount: 1.028151
Amount Units: ug/ml



Reviewer: LV5D, 28-Apr-2023 20:43:40

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280012.D
Lims ID: IC INT 7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 28-Apr-2023 19:34:01 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_X5
Sublist: chrom-8330_X5_Luna*sub6

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 29-Apr-2023 13:04:17 Calib Date: 29-Apr-2023 04:18:01
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1621

First Level Reviewer: LV5D Date: 28-Apr-2023 20:44:11

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.096	5.115	-0.019	276939	0.7021	0.7023	
4 DNX	1	5.943	5.955	-0.012	198949	0.7007	0.7180	
5 HMX	1	6.589	6.595	-0.006	131068	0.7000	0.7024	
6 MNX	1	7.476	7.489	-0.013	211518	0.8169	0.8065	
7 2,4,6-Trinitrophenol	1	7.956	8.029	-0.073	114679	0.7000	0.7142	
8 RDX	1	8.903	8.915	-0.012	153380	0.7000	0.7082	
9 Nitrobenzene	1	11.462	11.482	-0.020	276577	0.7000	0.6935	
$ 10 1,2-Dinitrobenzene	1	12.442	12.469	-0.027	191173	0.7000	0.6811	
11 3,5-Dinitroaniline	1	14.329	14.355	-0.026	322983	0.7000	0.7251	
12 1,3-Dinitrobenzene	1	14.596	14.622	-0.026	431248	0.7000	0.6852	
13 Nitroglycerin	2	15.149	15.182	-0.033	929634	7.00	6.90	
14 o-Nitrotoluene	1	15.696	15.729	-0.033	174353	0.7000	0.7060	
16 p-Nitrotoluene	1	15.922	15.955	-0.033	159520	0.7000	0.7012	
17 4-Amino-2,6-dinitrotoluene	1	16.482	16.515	-0.033	201729	0.7000	0.6857	
18 m-Nitrotoluene	1	16.782	16.815	-0.033	203644	0.7000	0.6912	
19 2-Amino-4,6-dinitrotoluene	1	17.329	17.362	-0.033	294250	0.7000	0.6876	M
20 1,3,5-Trinitrobenzene	1	17.389	17.422	-0.033	289774	0.7000	0.7143	Ma
21 2,6-Dinitrotoluene	1	18.622	18.629	-0.007	201554	0.7000	0.6910	
22 2,4-Dinitrotoluene	1	19.076	19.082	-0.006	406447	0.7000	0.6954	
23 Tetryl	1	22.389	22.389	0.000	192352	0.7000	0.6756	
24 2,4,6-Trinitrotoluene	1	23.183	23.182	0.001	294801	0.7000	0.6717	
25 PETN	2	24.469	24.475	-0.006	992519	7.00	6.90	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

8330IntermStk_00076	Amount Added:	70.00	Units: uL
8330 DMT_00013	Amount Added:	35.00	Units: uL

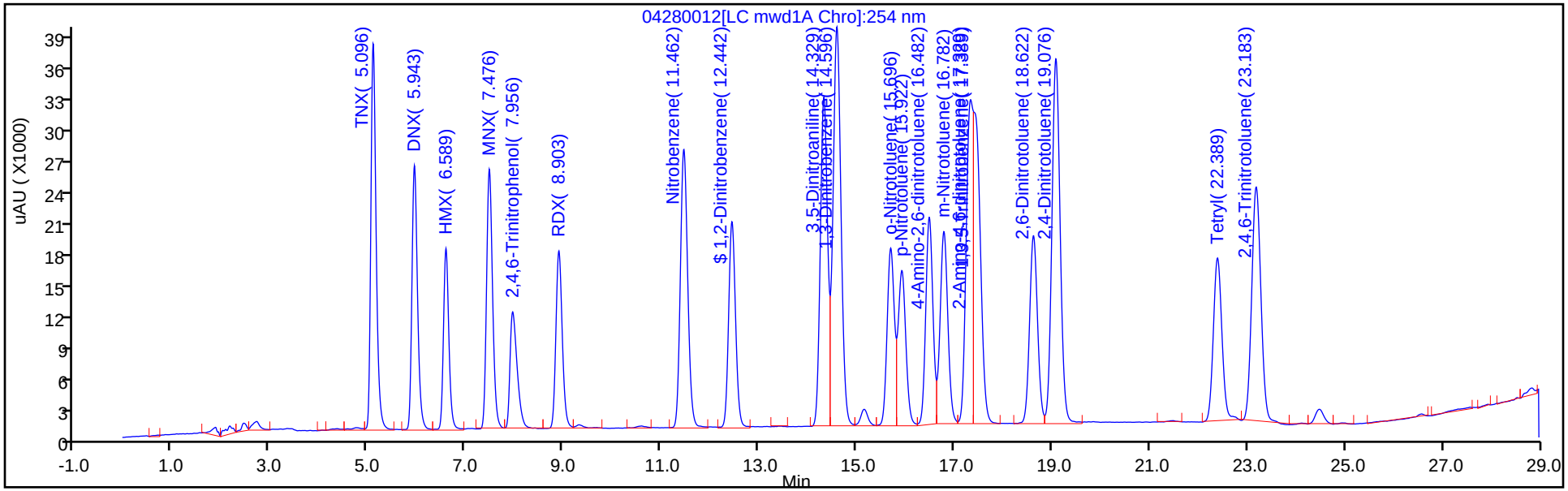
Report Date: 29-Apr-2023 13:04:17 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

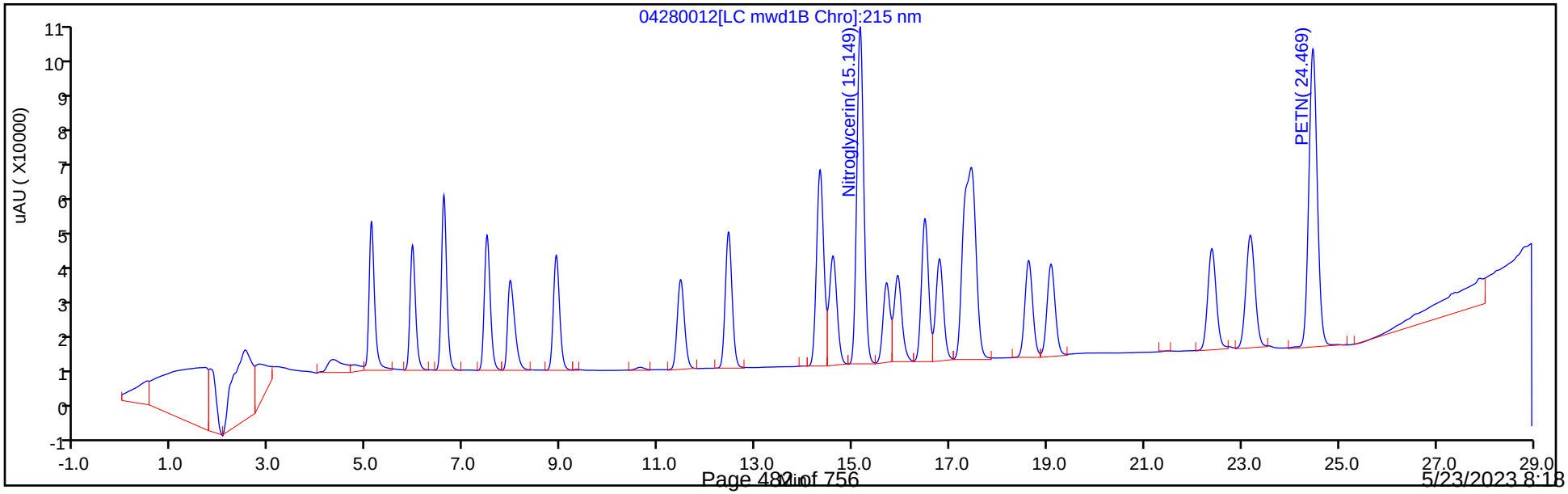
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280012.D

Injection Date:	28-Apr-2023 19:34:01	Instrument ID:	CHHPLC_X5	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:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

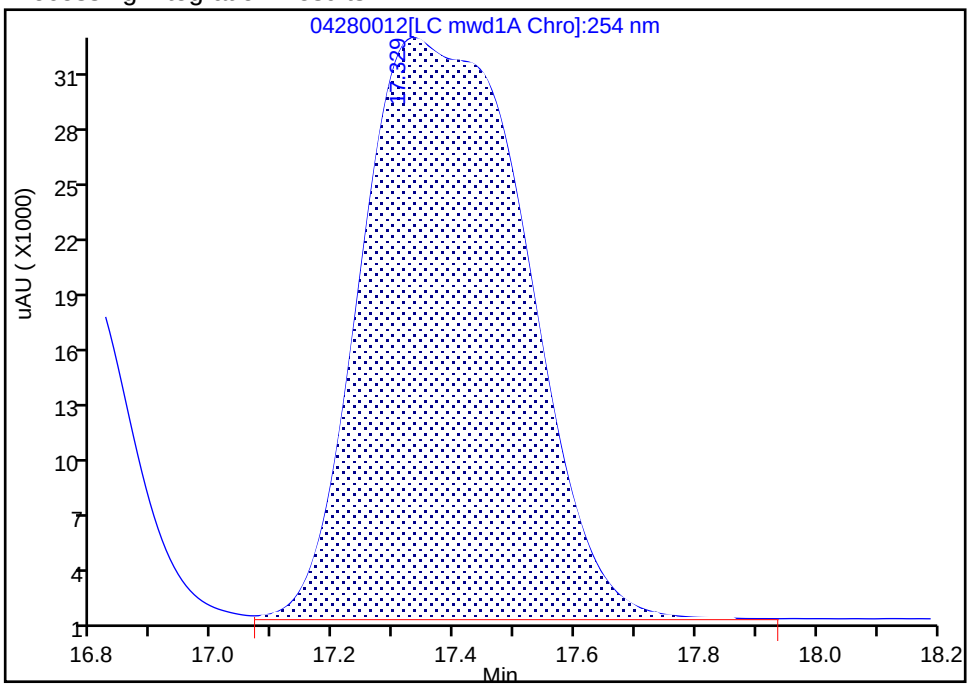
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280012.D				
Injection Date:	28-Apr-2023 19:34:01	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 7				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

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

Signal: 1

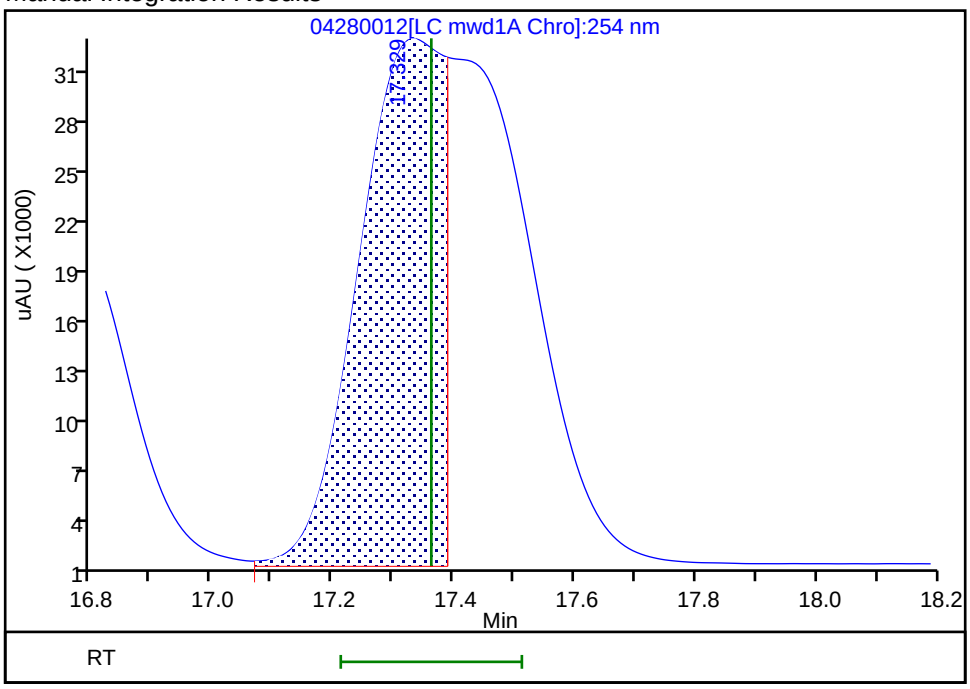
Processing Integration Results

RT: 17.33
Area: 584005
Amount: 1.540308
Amount Units: ug/ml



Manual Integration Results

RT: 17.33
Area: 294250
Amount: 0.687597
Amount Units: ug/ml



Reviewer: LV5D, 28-Apr-2023 20:43:51

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

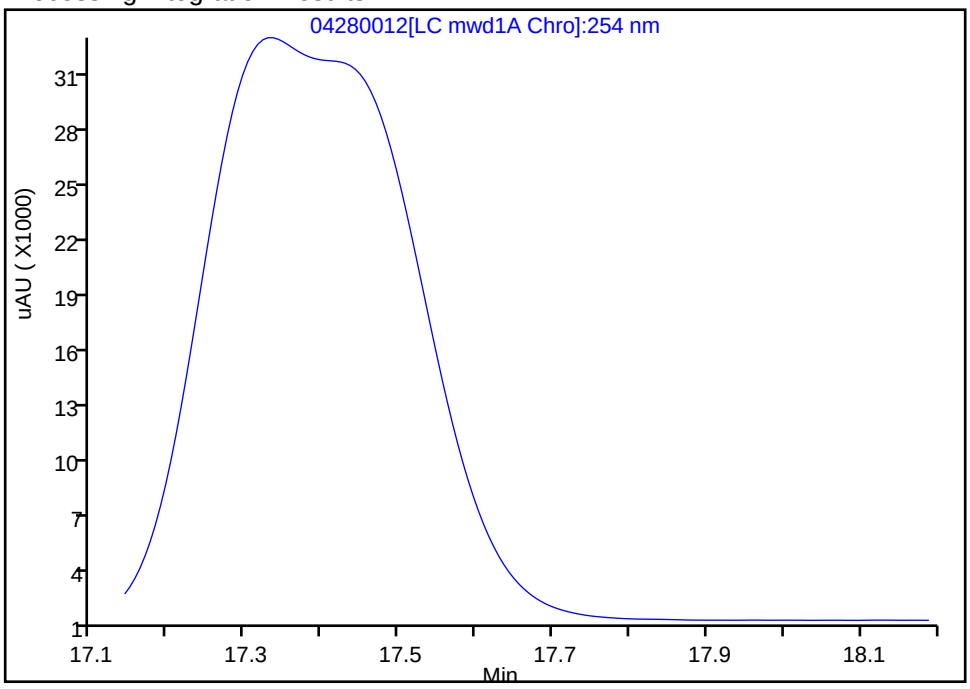
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280012.D				
Injection Date:	28-Apr-2023 19:34:01	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 7				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

20 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

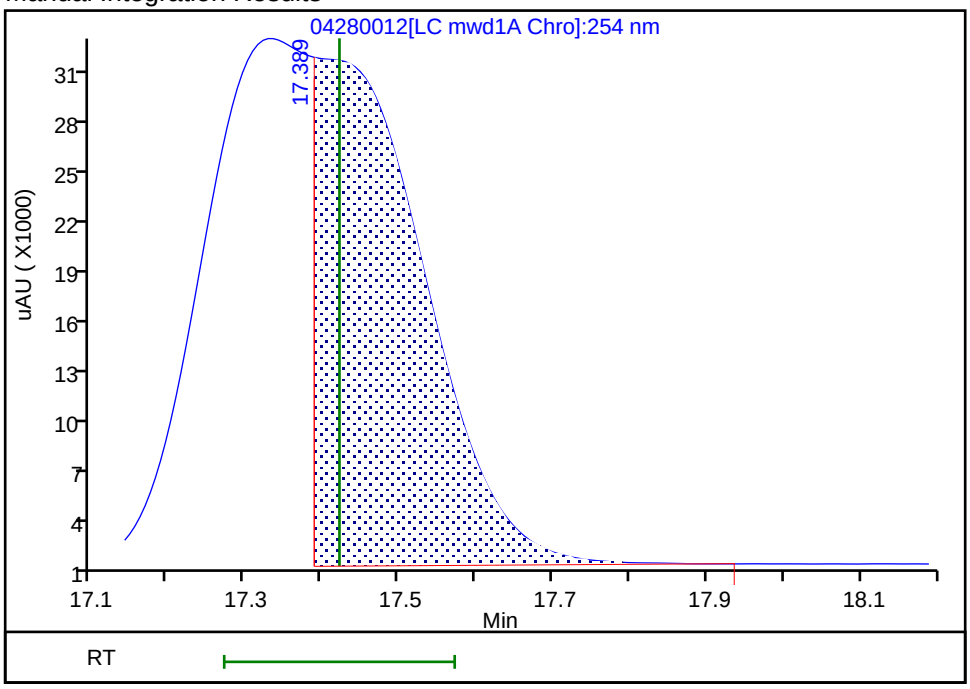
Not Detected
Expected RT: 17.42

Processing Integration Results



Manual Integration Results

RT: 17.39
Area: 289774
Amount: 0.714270
Amount Units: ug/ml



Reviewer: LV5D, 28-Apr-2023 20:43:53
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280013.D
Lims ID: IC INT 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 28-Apr-2023 20:08:59 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_X5
Sublist: chrom-8330_X5_Luna*sub6

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 29-Apr-2023 13:04:18 Calib Date: 29-Apr-2023 04:18:01
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1621

First Level Reviewer: LV5D Date: 28-Apr-2023 20:52:44

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.108	5.115	-0.007	147763	0.4012	0.3747	
4 DNX	1	5.954	5.955	-0.001	107420	0.4004	0.3877	
5 HMX	1	6.594	6.595	-0.001	67993	0.4000	0.3622	
6 MNX	1	7.488	7.489	-0.001	114487	0.4668	0.4365	
7 2,4,6-Trinitrophenol	1	8.008	8.029	-0.021	59892	0.4000	0.3714	
8 RDX	1	8.908	8.915	-0.007	79113	0.4000	0.3638	
9 Nitrobenzene	1	11.461	11.482	-0.021	141679	0.4000	0.3552	
$ 10 1,2-Dinitrobenzene	1	12.448	12.469	-0.021	98279	0.4000	0.3501	
11 3,5-Dinitroaniline	1	14.334	14.355	-0.021	165924	0.4000	0.3719	
12 1,3-Dinitrobenzene	1	14.601	14.622	-0.021	221798	0.4000	0.3524	
13 Nitroglycerin	2	15.154	15.182	-0.028	480119	4.00	3.56	
14 o-Nitrotoluene	1	15.708	15.729	-0.021	90266	0.4000	0.3655	
16 p-Nitrotoluene	1	15.934	15.955	-0.021	81428	0.4000	0.3579	
17 4-Amino-2,6-dinitrotoluene	1	16.501	16.515	-0.014	104292	0.4000	0.3545	
18 m-Nitrotoluene	1	16.801	16.815	-0.014	104338	0.4000	0.3541	
19 2-Amino-4,6-dinitrotoluene	1	17.354	17.362	-0.008	158919	0.4000	0.3714	Ma
20 1,3,5-Trinitrobenzene	1	17.414	17.422	-0.008	141795	0.4000	0.3495	Ma
21 2,6-Dinitrotoluene	1	18.628	18.629	-0.001	103148	0.4000	0.3536	
22 2,4-Dinitrotoluene	1	19.081	19.082	-0.001	207937	0.4000	0.3558	
23 Tetryl	1	22.361	22.389	-0.028	98615	0.4000	0.3463	
24 2,4,6-Trinitrotoluene	1	23.154	23.182	-0.028	152188	0.4000	0.3468	
25 PETN	2	24.428	24.475	-0.047	512590	4.00	3.56	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

8330IntermStk_00076	Amount Added:	40.00	Units: uL
8330 DMT_00013	Amount Added:	20.00	Units: uL

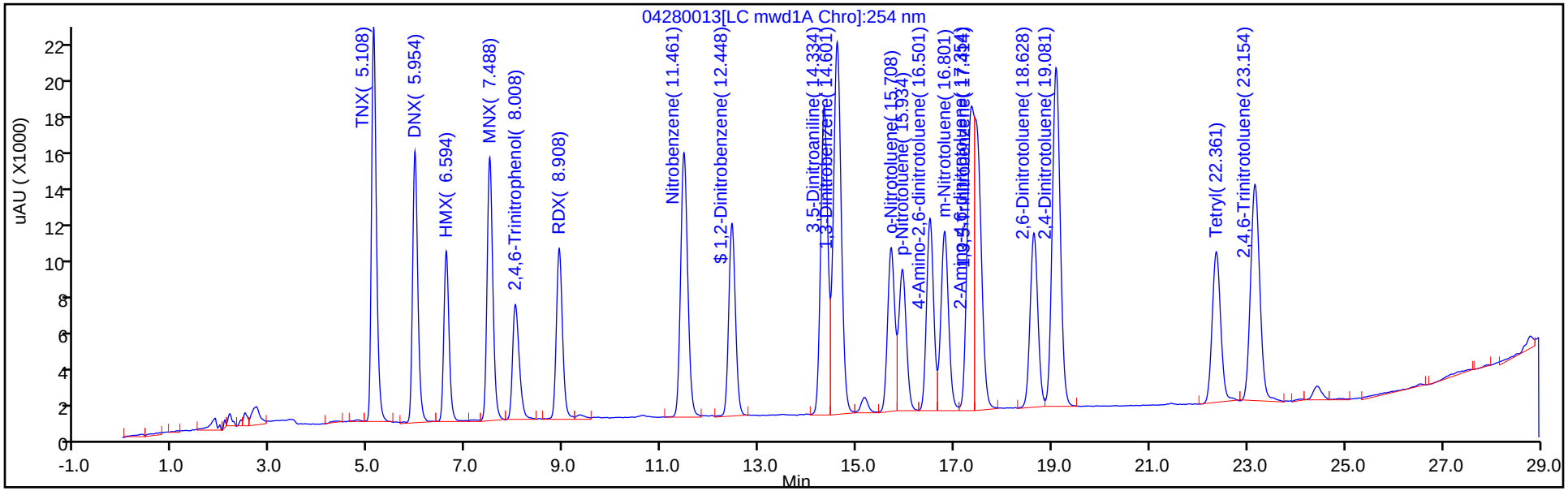
Report Date: 29-Apr-2023 13:04:18 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

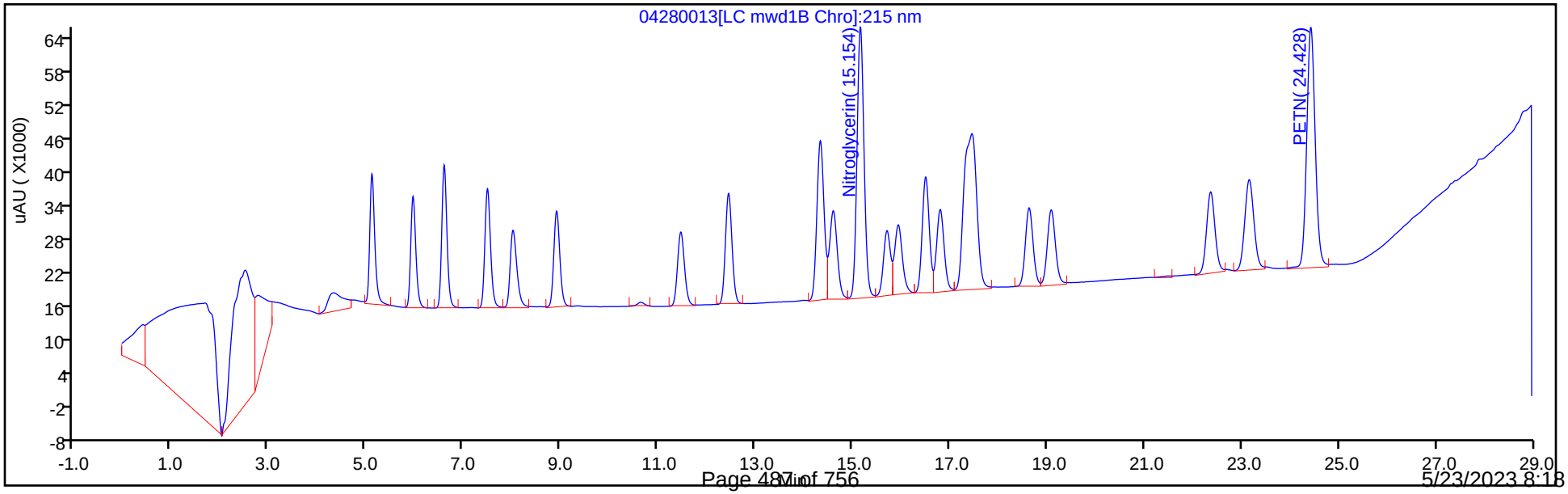
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Injection Date:	28-Apr-2023 20:08:59	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	IC INT 6			Worklist Smp#:	13
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



5/23/2023 8:18 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

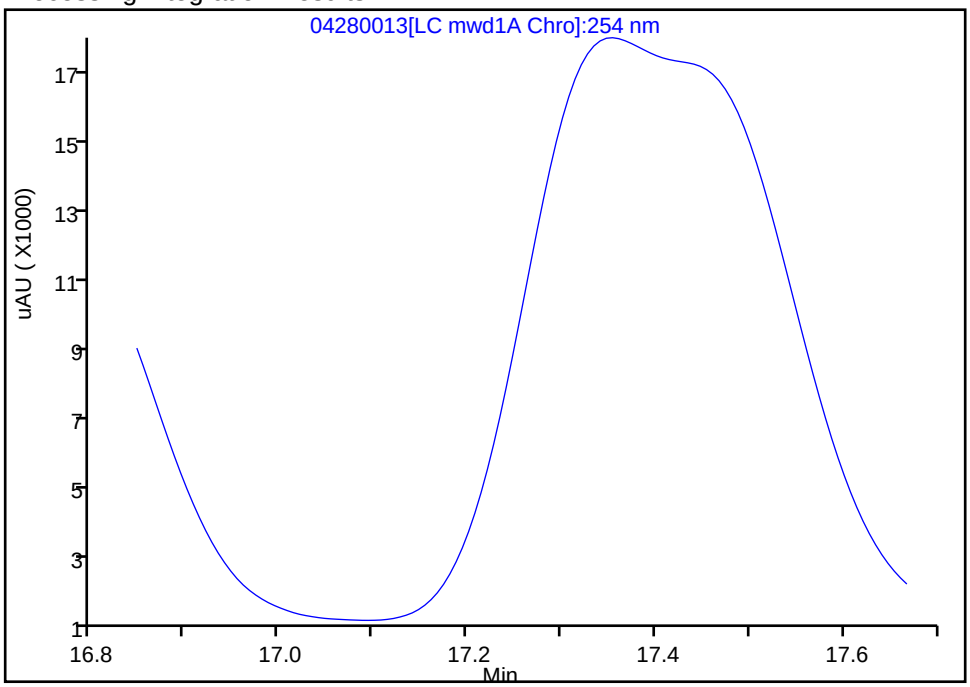
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Injection Date:	28-Apr-2023 20:08:59	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 6				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

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

Signal: 1

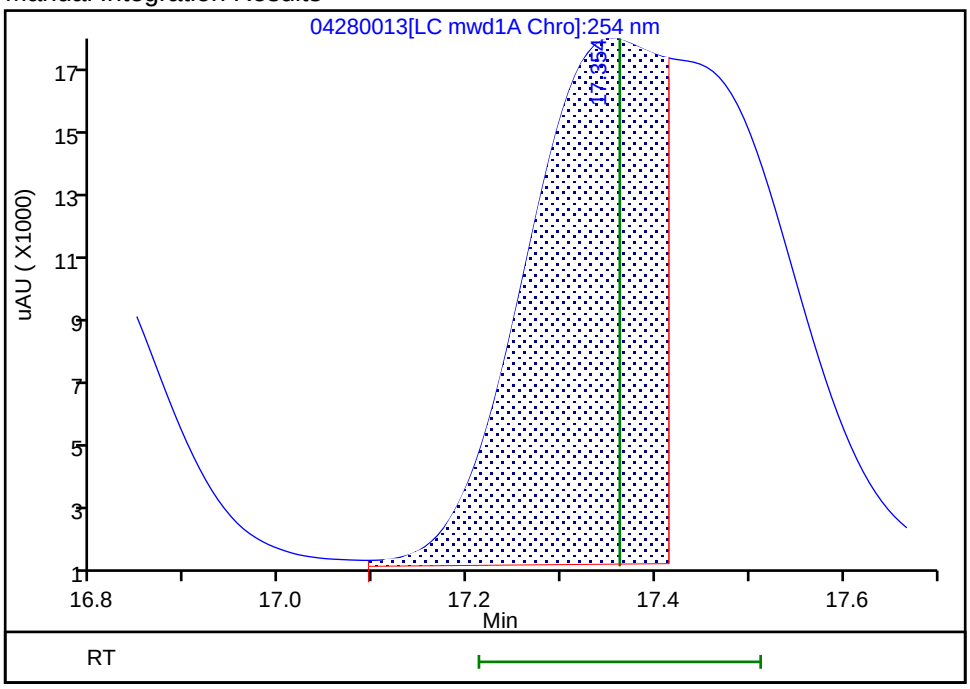
Not Detected
Expected RT: 17.36

Processing Integration Results



Manual Integration Results

RT: 17.35
Area: 158919
Amount: 0.371359
Amount Units: ug/ml



Reviewer: LV5D, 28-Apr-2023 20:52:42
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

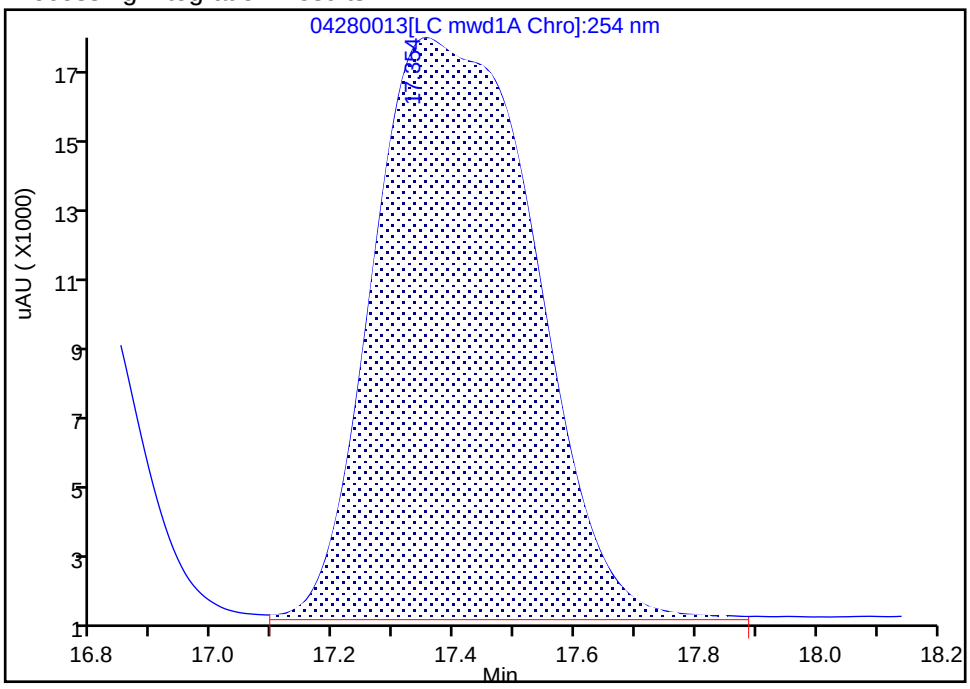
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Injection Date:	28-Apr-2023 20:08:59	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 6				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

20 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

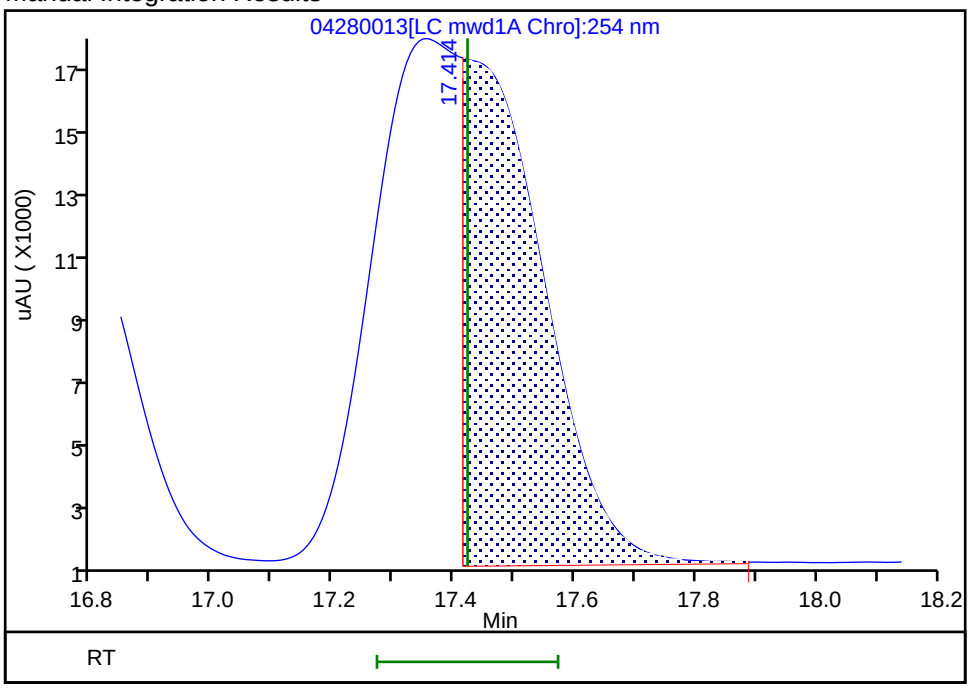
Processing Integration Results

RT: 17.35
Area: 300702
Amount: 0.613228
Amount Units: ug/ml



Manual Integration Results

RT: 17.41
Area: 141795
Amount: 0.349514
Amount Units: ug/ml



Reviewer: LV5D, 28-Apr-2023 20:52:40

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280014.D
Lims ID: IC INT 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 28-Apr-2023 20:43:54 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_X5
Sublist: chrom-8330_X5_Luna*sub6

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 29-Apr-2023 13:04:18 Calib Date: 29-Apr-2023 04:18:01
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1621

First Level Reviewer: LV5D Date: 29-Apr-2023 10:22:21

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.115	5.115	0.000	86123	0.2508	0.2184	
4 DNX	1	5.955	5.955	0.000	62056	0.2503	0.2240	
5 HMX	1	6.595	6.595	0.000	46110	0.2500	0.2442	
6 MNX	1	7.489	7.489	0.000	66549	0.2918	0.2537	
7 2,4,6-Trinitrophenol	1	8.029	8.029	0.000	40202	0.2500	0.2481	
8 RDX	1	8.915	8.915	0.000	53643	0.2500	0.2456	
9 Nitrobenzene	1	11.482	11.482	0.000	96681	0.2500	0.2424	
$ 10 1,2-Dinitrobenzene	1	12.469	12.469	0.000	67346	0.2500	0.2399	
11 3,5-Dinitroaniline	1	14.355	14.355	0.000	113054	0.2500	0.2529	
12 1,3-Dinitrobenzene	1	14.622	14.622	0.000	152658	0.2500	0.2426	
13 Nitroglycerin	2	15.182	15.182	0.000	327195	2.50	2.43	
14 o-Nitrotoluene	1	15.729	15.729	0.000	60674	0.2500	0.2457	
16 p-Nitrotoluene	1	15.955	15.955	0.000	56555	0.2500	0.2486	
17 4-Amino-2,6-dinitrotoluene	1	16.515	16.515	0.000	71678	0.2500	0.2436	
18 m-Nitrotoluene	1	16.815	16.815	0.000	71041	0.2500	0.2411	
19 2-Amino-4,6-dinitrotoluene	1	17.362	17.362	0.000	108505	0.2500	0.2536	M
20 1,3,5-Trinitrobenzene	1	17.422	17.422	0.000	98168	0.2500	0.2420	M
21 2,6-Dinitrotoluene	1	18.629	18.629	0.000	70868	0.2500	0.2430	
22 2,4-Dinitrotoluene	1	19.082	19.082	0.000	143098	0.2500	0.2448	
23 Tetryl	1	22.389	22.389	0.000	68327	0.2500	0.2400	
24 2,4,6-Trinitrotoluene	1	23.182	23.182	0.000	104561	0.2500	0.2382	
25 PETN	2	24.475	24.475	0.000	351913	2.50	2.44	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00076	Amount Added:	25.00	Units: uL
8330 DMT_00013	Amount Added:	12.50	Units: uL

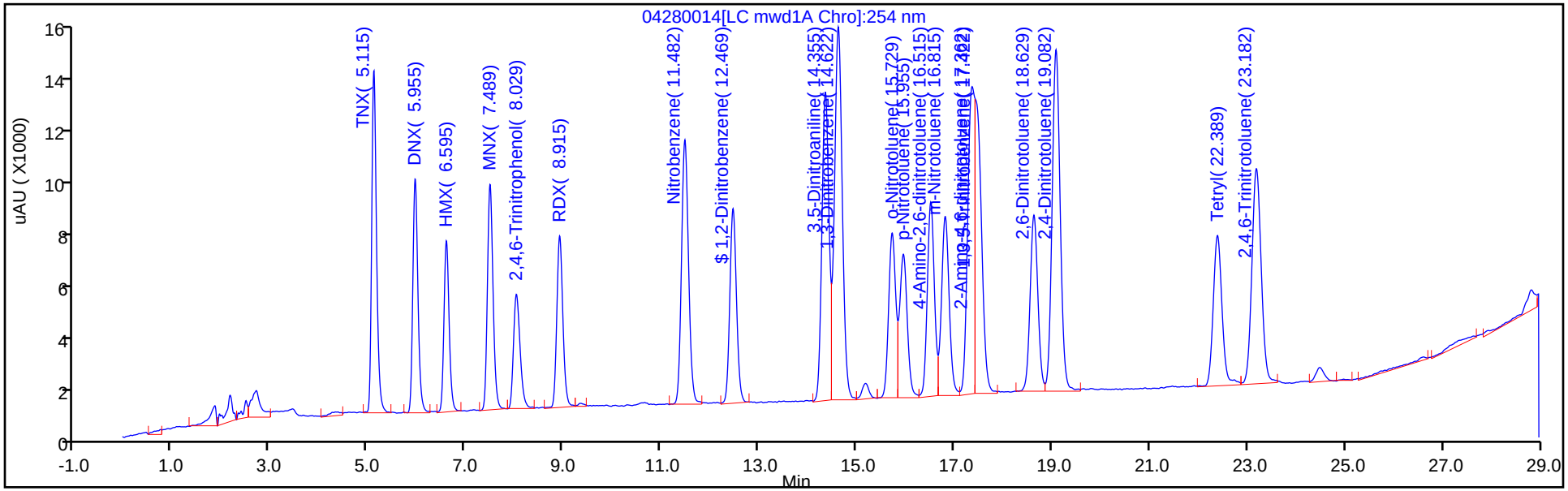
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Eurofins Denver

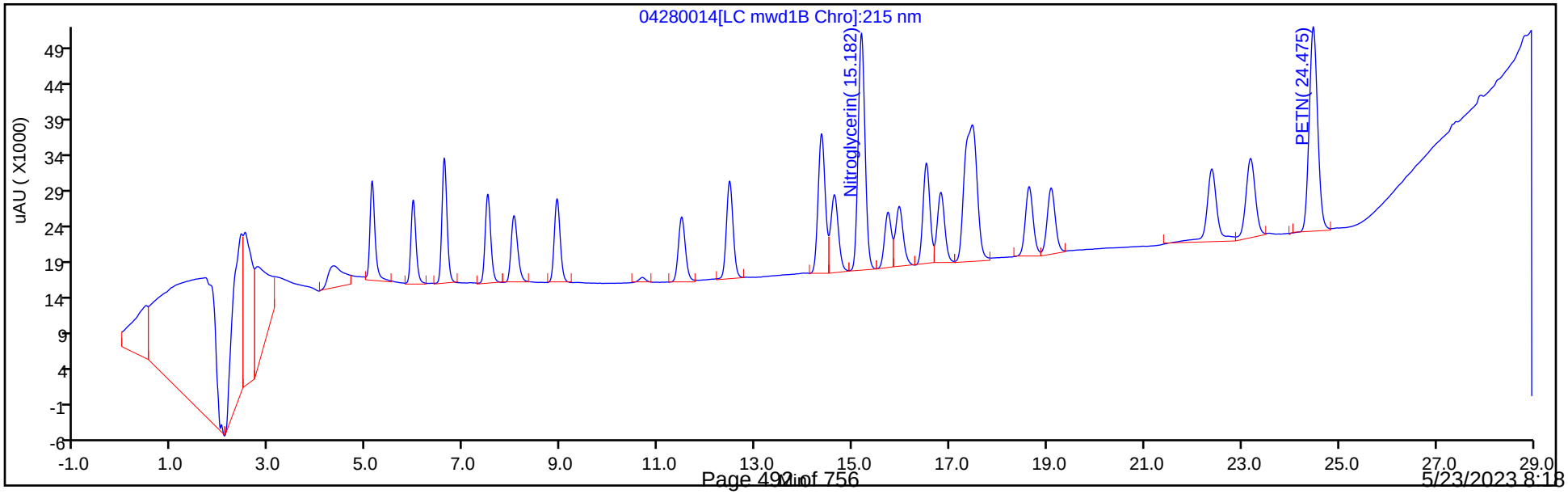
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280014.D

Injection Date:	28-Apr-2023 20:43:54	Instrument ID:	CHHPLC_X5	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:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



5/23/2023 8:18 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

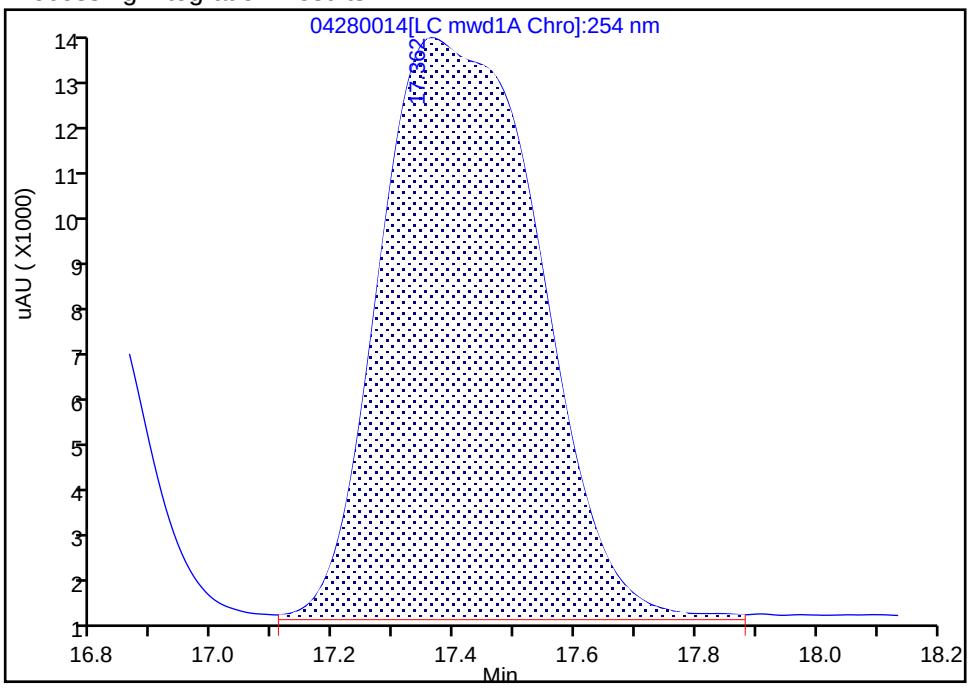
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Injection Date:	28-Apr-2023 20:43:54	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 5				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

20 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

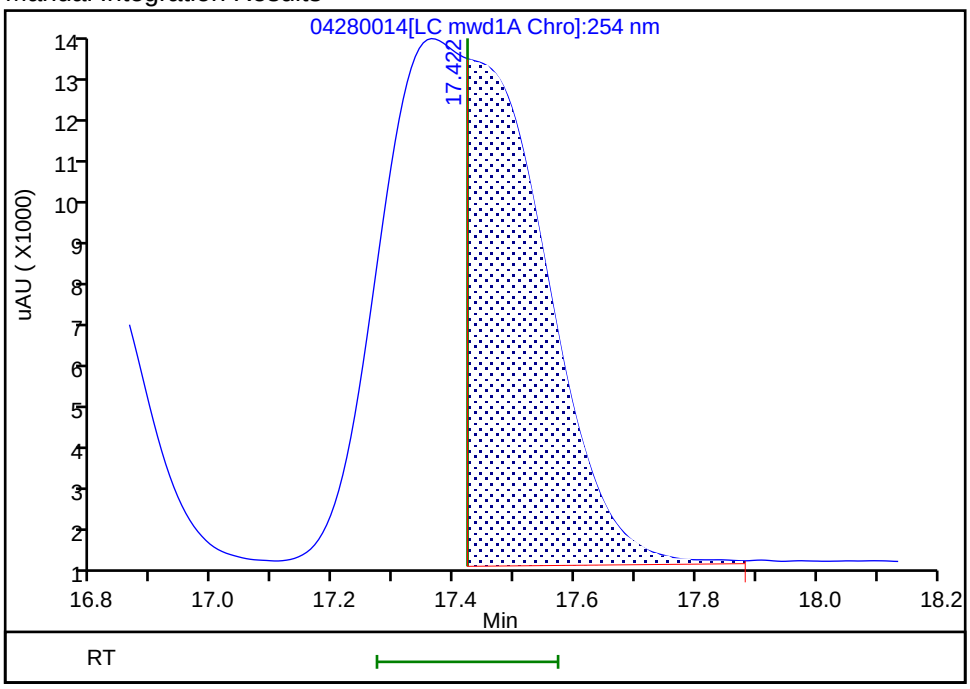
Processing Integration Results

RT: 17.36
Area: 206659
Amount: 0.382644
Amount Units: ug/ml



Manual Integration Results

RT: 17.42
Area: 98168
Amount: 0.241976
Amount Units: ug/ml



Reviewer: LV5D, 29-Apr-2023 10:22:17

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280015.D
Lims ID: IC INT 4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 28-Apr-2023 21:18:48 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_X5
Sublist: chrom-8330_X5_Luna*sub6

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 29-Apr-2023 13:04:19 Calib Date: 29-Apr-2023 04:18:01
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1621

First Level Reviewer: LV5D Date: 29-Apr-2023 10:22:33

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.116	5.115	0.001	41754	0.1003	0.1059	
4 DNX	1	5.963	5.955	0.008	28641	0.1001	0.1034	
5 HMX	1	6.603	6.595	0.008	19573	0.1000	0.1011	
6 MNX	1	7.496	7.489	0.007	30530	0.1167	0.1164	
7 2,4,6-Trinitrophenol	1	8.056	8.029	0.027	17060	0.1000	0.1033	
8 RDX	1	8.923	8.915	0.008	22827	0.1000	0.1027	
9 Nitrobenzene	1	11.483	11.482	0.001	41585	0.1000	0.1043	
$ 10 1,2-Dinitrobenzene	1	12.470	12.469	0.001	27893	0.1000	0.0994	
11 3,5-Dinitroaniline	1	14.363	14.355	0.008	46980	0.1000	0.1043	
12 1,3-Dinitrobenzene	1	14.623	14.622	0.001	62596	0.1000	0.0995	
13 Nitroglycerin	2	15.176	15.182	-0.006	134661	1.00	1.00	
14 o-Nitrotoluene	1	15.730	15.729	0.001	25290	0.1000	0.1024	
16 p-Nitrotoluene	1	15.956	15.955	0.001	23002	0.1000	0.1011	
17 4-Amino-2,6-dinitrotoluene	1	16.523	16.515	0.008	29472	0.1000	0.1002	
18 m-Nitrotoluene	1	16.816	16.815	0.001	29569	0.1000	0.1004	
19 2-Amino-4,6-dinitrotoluene	1	17.370	17.362	0.008	43948	0.1000	0.1027	M
20 1,3,5-Trinitrobenzene	1	17.423	17.422	0.001	41946	0.1000	0.1034	M
21 2,6-Dinitrotoluene	1	18.636	18.629	0.007	30260	0.1000	0.1037	
22 2,4-Dinitrotoluene	1	19.090	19.082	0.008	59433	0.1000	0.1017	
23 Tetryl	1	22.363	22.389	-0.026	27534	0.1000	0.0967	
24 2,4,6-Trinitrotoluene	1	23.156	23.182	-0.026	43136	0.1000	0.0983	
25 PETN	2	24.416	24.475	-0.059	146450	1.00	1.02	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00076	Amount Added:	10.00	Units: uL
8330 DMT_00013	Amount Added:	5.00	Units: uL

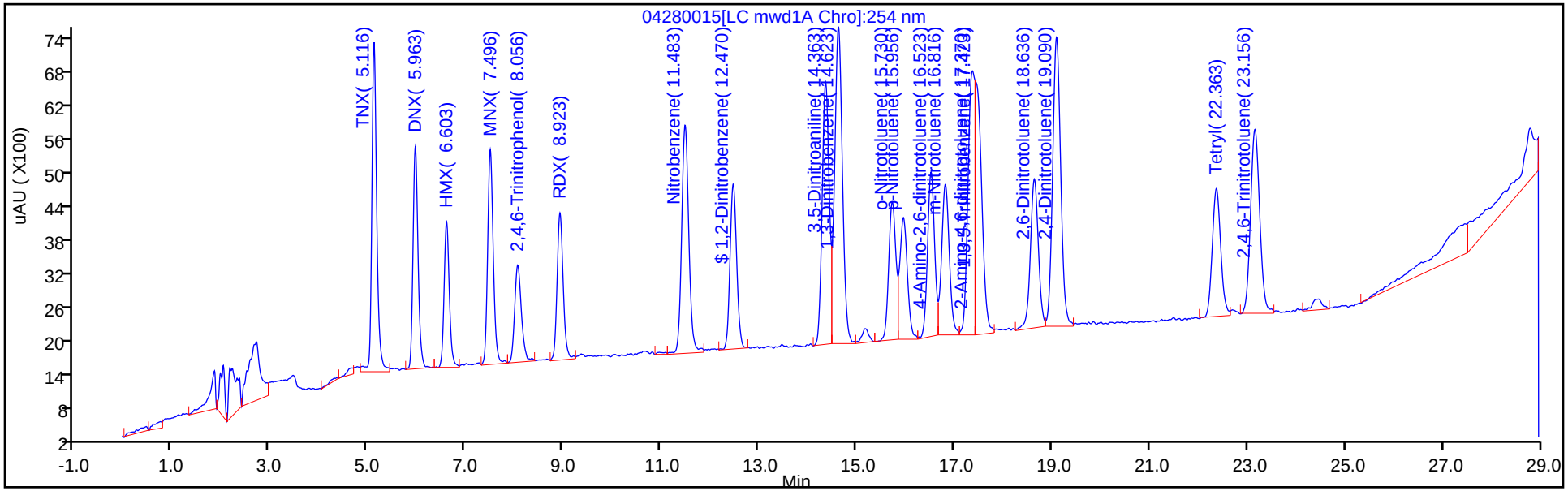
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Eurofins Denver

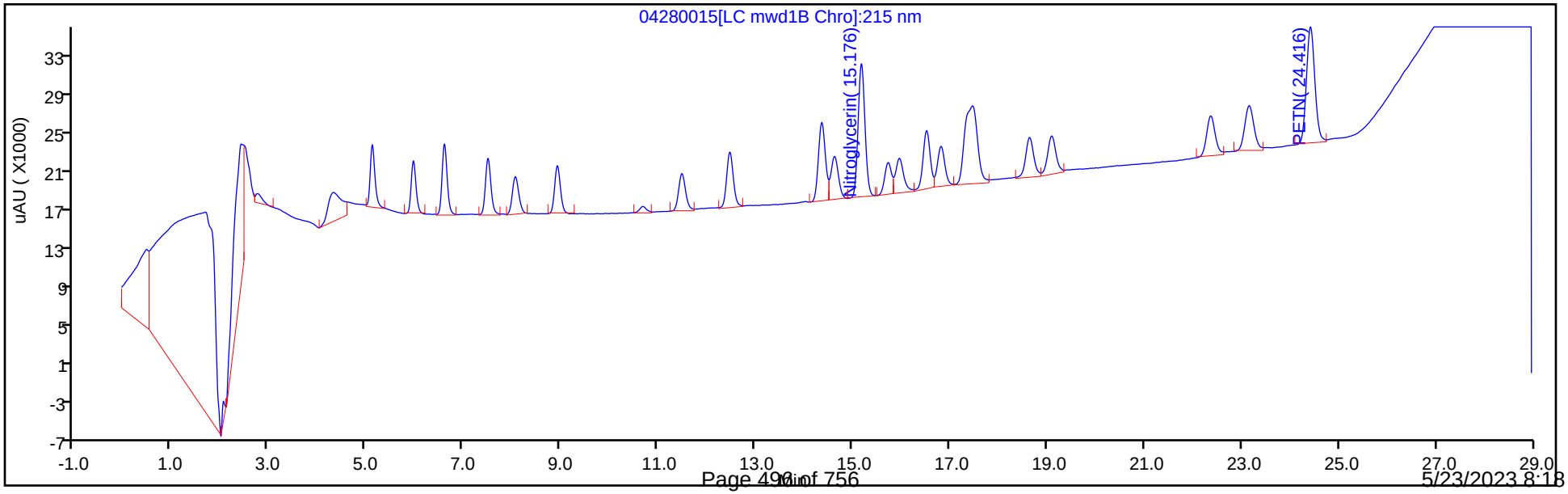
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Injection Date:	28-Apr-2023 21:18:48	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	IC INT 4			Worklist Smp#:	15
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



5/23/2023 8:18 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

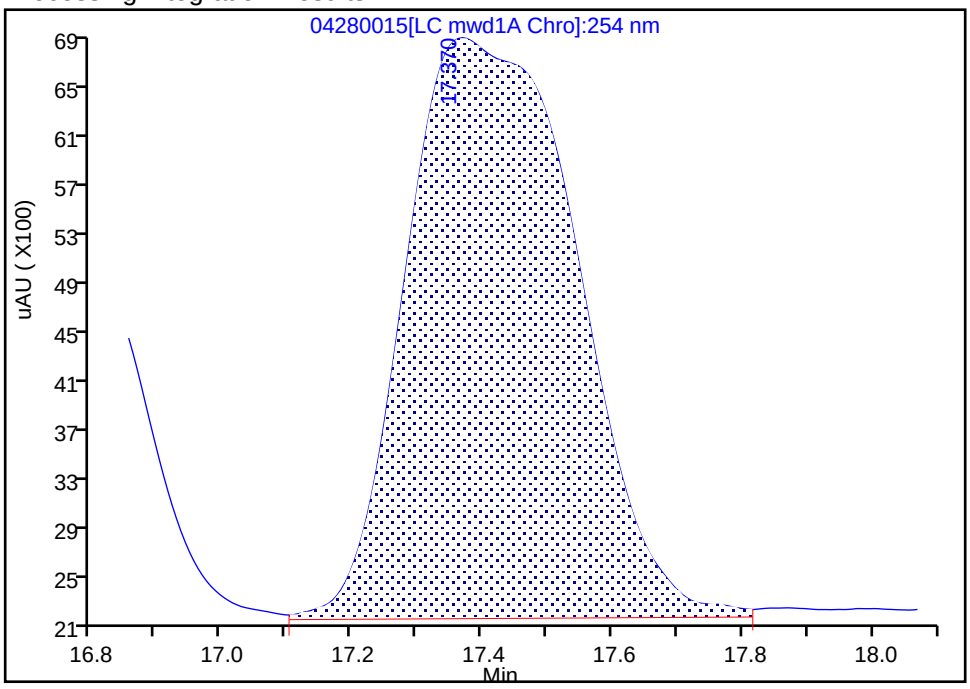
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Injection Date:	28-Apr-2023 21:18:48	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 4				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

20 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

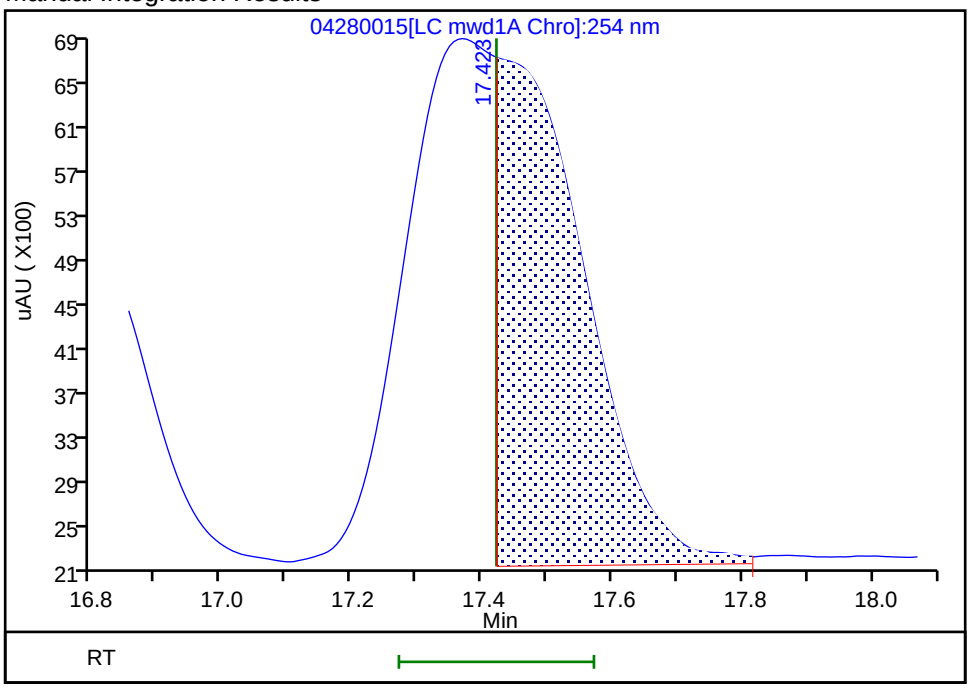
Processing Integration Results

RT: 17.37
Area: 85885
Amount: 0.174611
Amount Units: ug/ml



Manual Integration Results

RT: 17.42
Area: 41946
Amount: 0.103394
Amount Units: ug/ml



Reviewer: LV5D, 29-Apr-2023 10:22:30

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280016.D
Lims ID: IC INT 3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 28-Apr-2023 21:53:46 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_X5
Sublist: chrom-8330_X5_Luna*sub6

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 29-Apr-2023 13:04:19 Calib Date: 29-Apr-2023 04:18:01
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1621

First Level Reviewer: LV5D Date: 29-Apr-2023 10:22:43

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.116	5.115	0.001	20281	0.0502	0.0514	
4 DNX	1	5.969	5.955	0.014	14733	0.0501	0.0532	
5 HMX	1	6.603	6.595	0.008	10761	0.0500	0.0535	
6 MNX	1	7.503	7.489	0.014	15694	0.0584	0.0598	
7 2,4,6-Trinitrophenol	1	8.076	8.029	0.047	8950	0.0500	0.0526	
8 RDX	1	8.929	8.915	0.014	11621	0.0500	0.0508	
9 Nitrobenzene	1	11.489	11.482	0.007	20883	0.0500	0.0524	
$ 10 1,2-Dinitrobenzene	1	12.476	12.469	0.007	14379	0.0500	0.0512	
11 3,5-Dinitroaniline	1	14.369	14.355	0.014	24176	0.0500	0.0530	
12 1,3-Dinitrobenzene	1	14.629	14.622	0.007	31459	0.0500	0.0500	
13 Nitroglycerin	2	15.176	15.182	-0.006	71084	0.5000	0.5276	
14 o-Nitrotoluene	1	15.723	15.729	-0.006	12951	0.0500	0.0524	
16 p-Nitrotoluene	1	15.956	15.955	0.001	12179	0.0500	0.0535	
17 4-Amino-2,6-dinitrotoluene	1	16.523	16.515	0.008	15265	0.0500	0.0519	
18 m-Nitrotoluene	1	16.816	16.815	0.001	15546	0.0500	0.0528	
19 2-Amino-4,6-dinitrotoluene	1	17.376	17.362	0.014	23162	0.0500	0.0541	M
20 1,3,5-Trinitrobenzene	1	17.429	17.422	0.007	22059	0.0500	0.0544	M
21 2,6-Dinitrotoluene	1	18.643	18.629	0.014	15876	0.0500	0.0544	
22 2,4-Dinitrotoluene	1	19.096	19.082	0.014	30407	0.0500	0.0520	
23 Tetryl	1	22.369	22.389	-0.020	14233	0.0500	0.0500	
24 2,4,6-Trinitrotoluene	1	23.163	23.182	-0.019	22184	0.0500	0.0505	
25 PETN	2	24.423	24.475	-0.052	72943	0.5000	0.5068	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00076	Amount Added:	5.00	Units: uL
8330 DMT_00013	Amount Added:	2.50	Units: uL

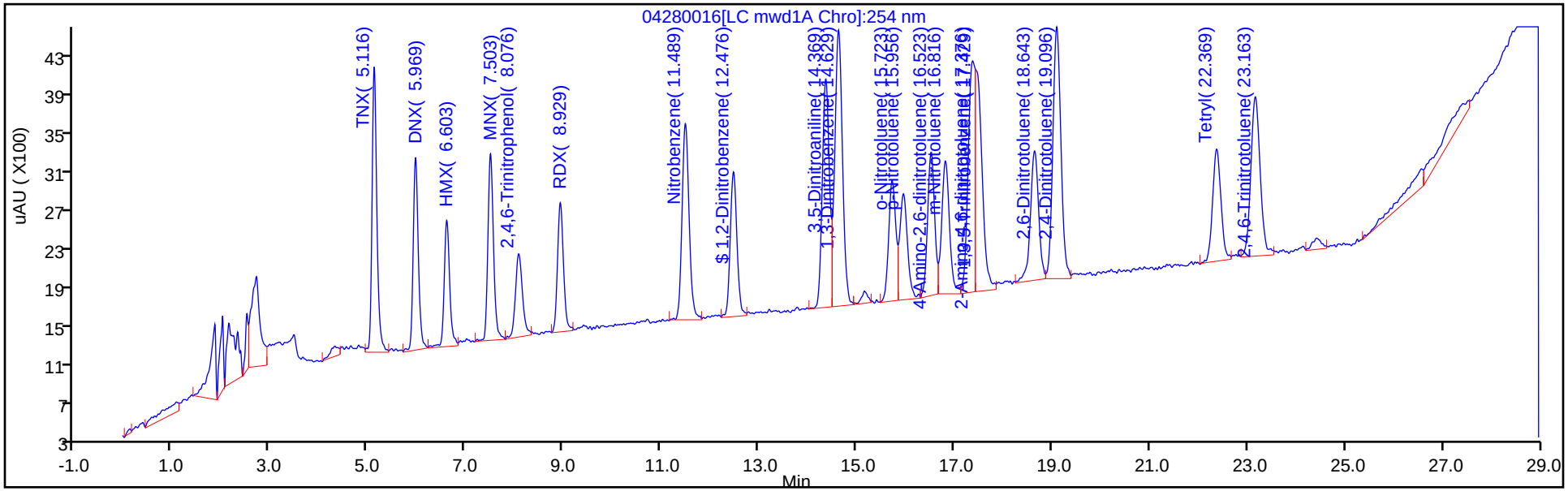
Report Date: 29-Apr-2023 13:04:19 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

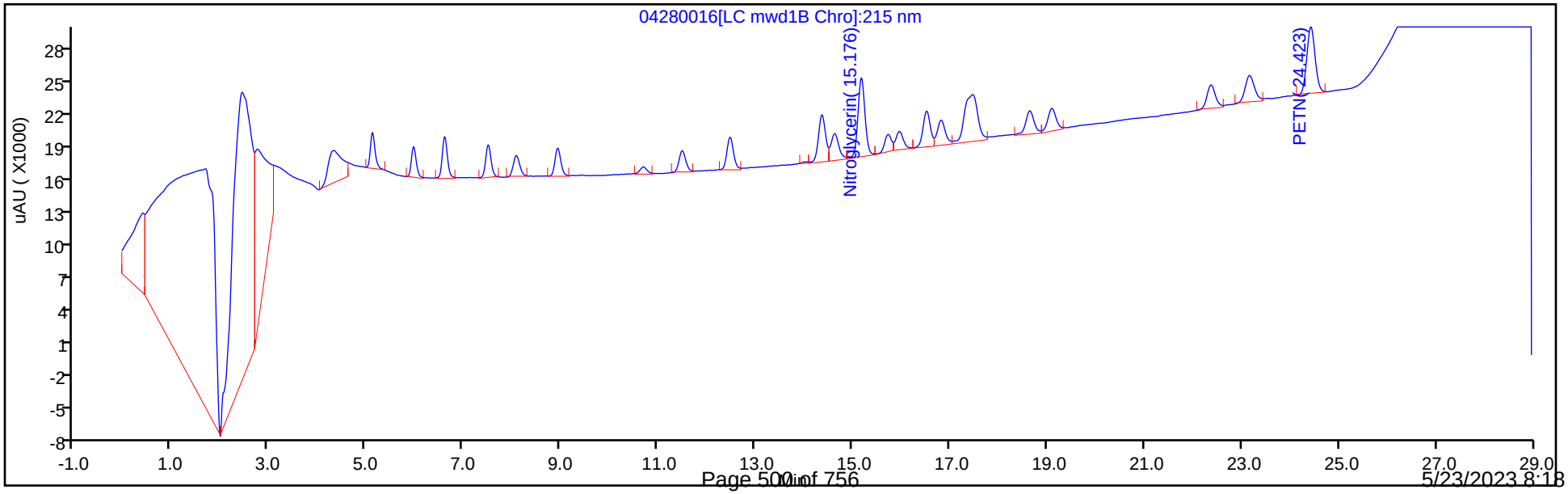
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280016.D

Injection Date:	28-Apr-2023 21:53:46	Instrument ID:	CHHPLC_X5	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:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



5/23/2023 8:18 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

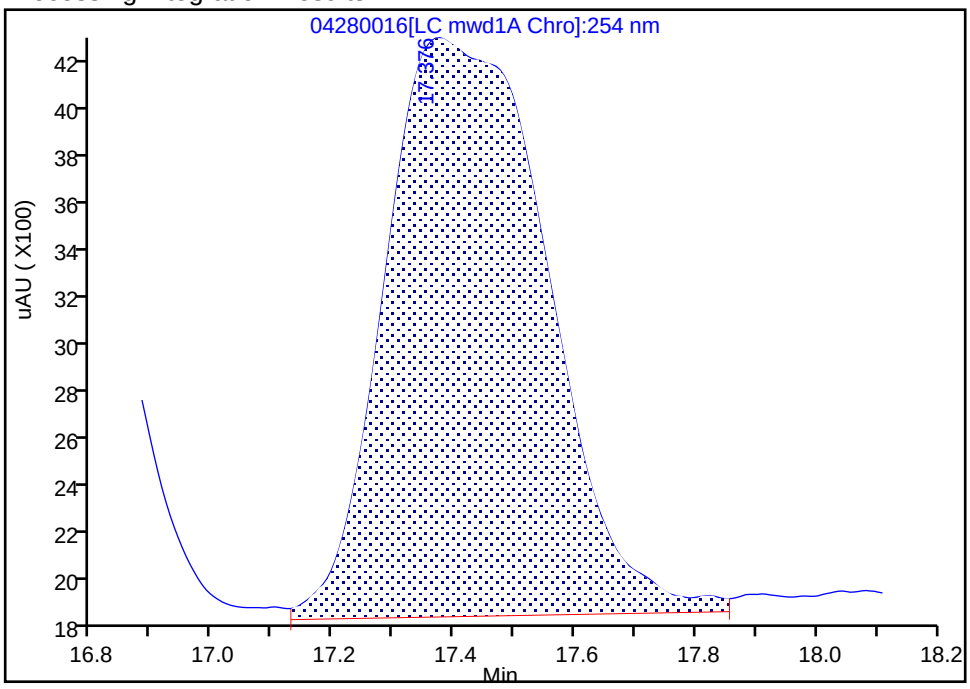
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280016.D				
Injection Date:	28-Apr-2023 21:53:46	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 3				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

20 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

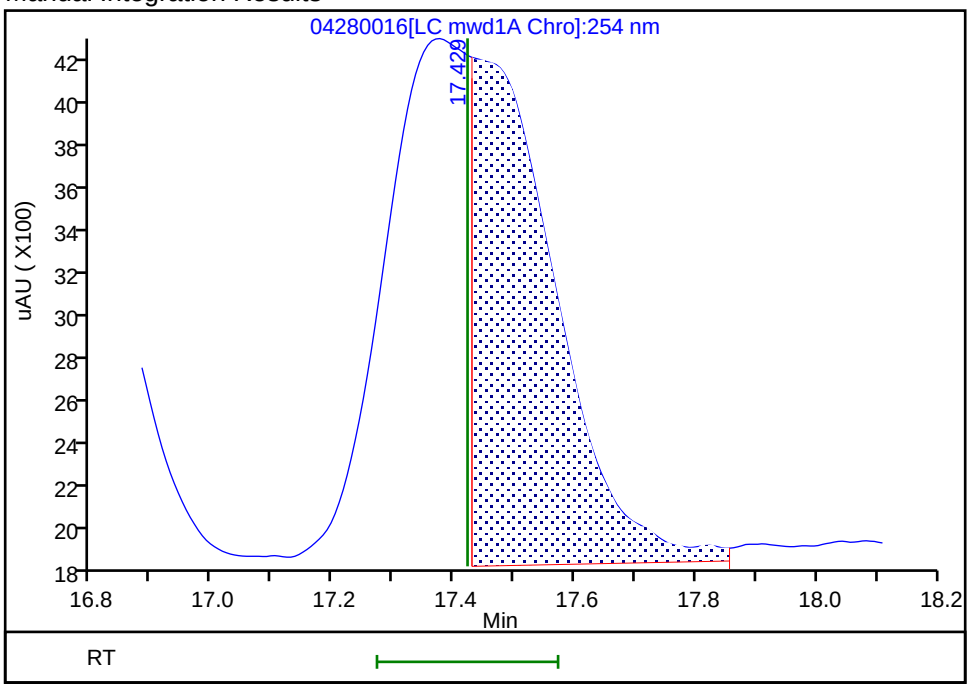
Processing Integration Results

RT: 17.38
Area: 45204
Amount: 0.102031
Amount Units: ug/ml



Manual Integration Results

RT: 17.43
Area: 22059
Amount: 0.054374
Amount Units: ug/ml



Reviewer: LV5D, 29-Apr-2023 10:22:40

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280017.D
Lims ID: IC INT 2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 28-Apr-2023 22:28:39 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_X5
Sublist: chrom-8330_X5_Luna*sub6

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 29-Apr-2023 13:04:20 Calib Date: 29-Apr-2023 04:18:01
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1621

First Level Reviewer: LV5D Date: 29-Apr-2023 10:23:35

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.136	5.115	0.021	8179	0.0201	0.0207	
4 DNX	1	5.983	5.955	0.028	5728	0.0200	0.0207	
5 HMX	1	6.630	6.595	0.035	4449	0.0200	0.0195	
6 MNX	1	7.523	7.489	0.034	6155	0.0233	0.0235	
7 2,4,6-Trinitrophenol	1	8.116	8.029	0.087	3453	0.0200	0.0182	
8 RDX	1	8.956	8.915	0.041	4863	0.0200	0.0194	
9 Nitrobenzene	1	11.523	11.482	0.041	7871	0.0200	0.0197	
$ 10 1,2-Dinitrobenzene	1	12.516	12.469	0.047	6038	0.0200	0.0215	
11 3,5-Dinitroaniline	1	14.410	14.355	0.055	9221	0.0200	0.0194	
12 1,3-Dinitrobenzene	1	14.663	14.622	0.041	12307	0.0200	0.0196	
13 Nitroglycerin	2	15.216	15.182	0.034	27409	0.2000	0.2034	
14 o-Nitrotoluene	1	15.770	15.729	0.041	5281	0.0200	0.0214	M
16 p-Nitrotoluene	1	15.996	15.955	0.041	4466	0.0200	0.0196	M
17 4-Amino-2,6-dinitrotoluene	1	16.556	16.515	0.041	6064	0.0200	0.0206	M
18 m-Nitrotoluene	1	16.843	16.815	0.028	5823	0.0200	0.0198	M
19 2-Amino-4,6-dinitrotoluene	1	17.410	17.362	0.048	8257	0.0200	0.0193	M
20 1,3,5-Trinitrobenzene	1	17.456	17.422	0.034	7799	0.0200	0.0192	M
21 2,6-Dinitrotoluene	1	18.670	18.629	0.041	5716	0.0200	0.0196	
22 2,4-Dinitrotoluene	1	19.123	19.082	0.041	12241	0.0200	0.0209	
23 Tetryl	1	22.396	22.389	0.007	6348	0.0200	0.0223	
24 2,4,6-Trinitrotoluene	1	23.196	23.182	0.014	9925	0.0200	0.0226	
25 PETN	2	24.450	24.475	-0.025	28805	0.2000	0.2001	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

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8330 DMT_00013	Amount Added:	1.00	Units: uL

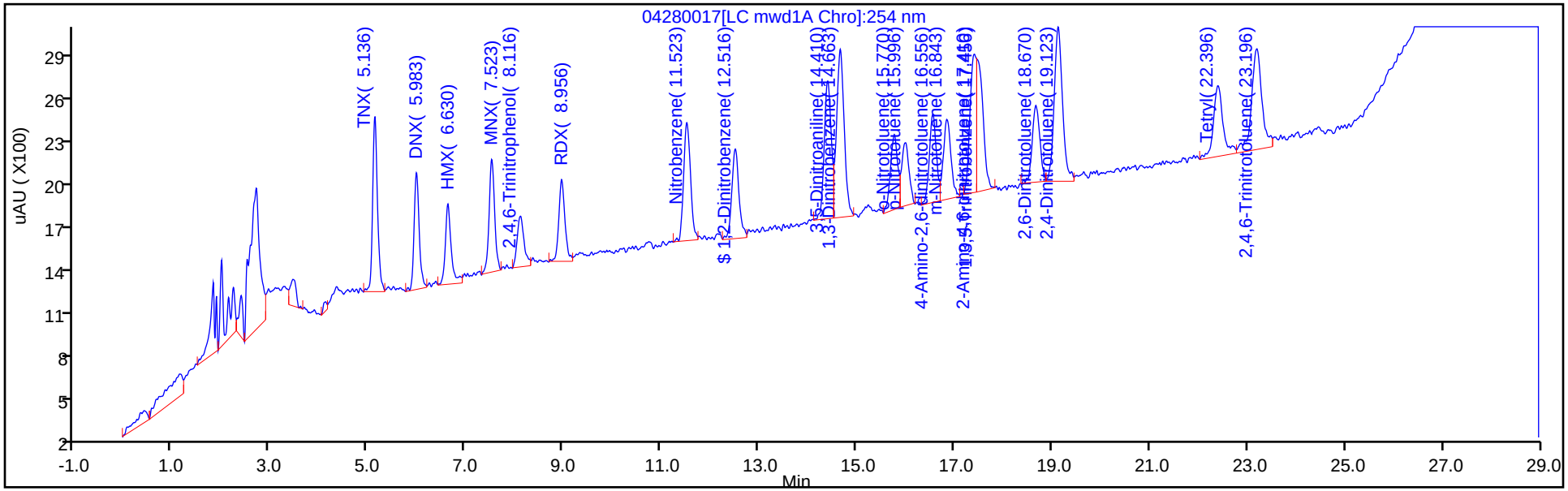
Report Date: 29-Apr-2023 13:04:20 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

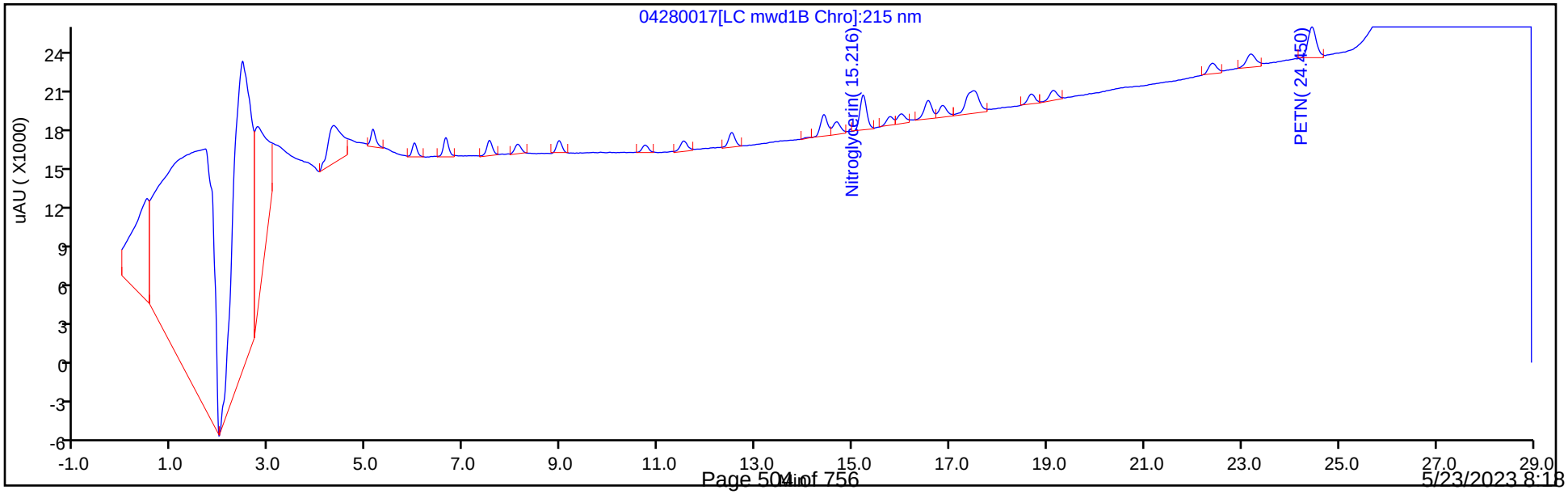
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Injection Date:	28-Apr-2023 22:28:39	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	IC INT 2			Worklist Smp#:	17
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

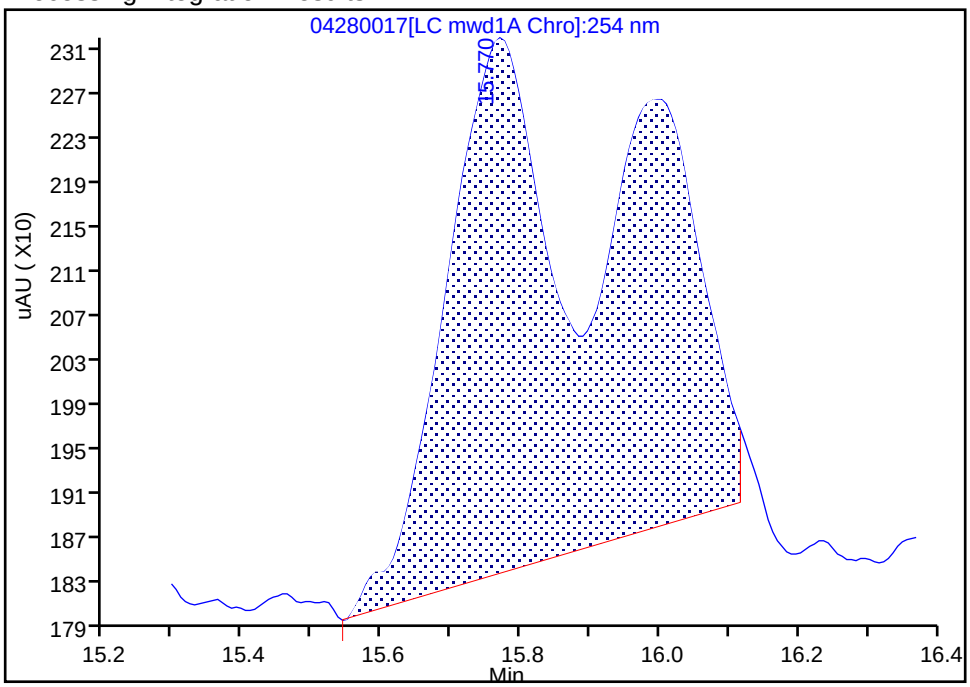
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Injection Date:	28-Apr-2023 22:28:39	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

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

Signal: 1

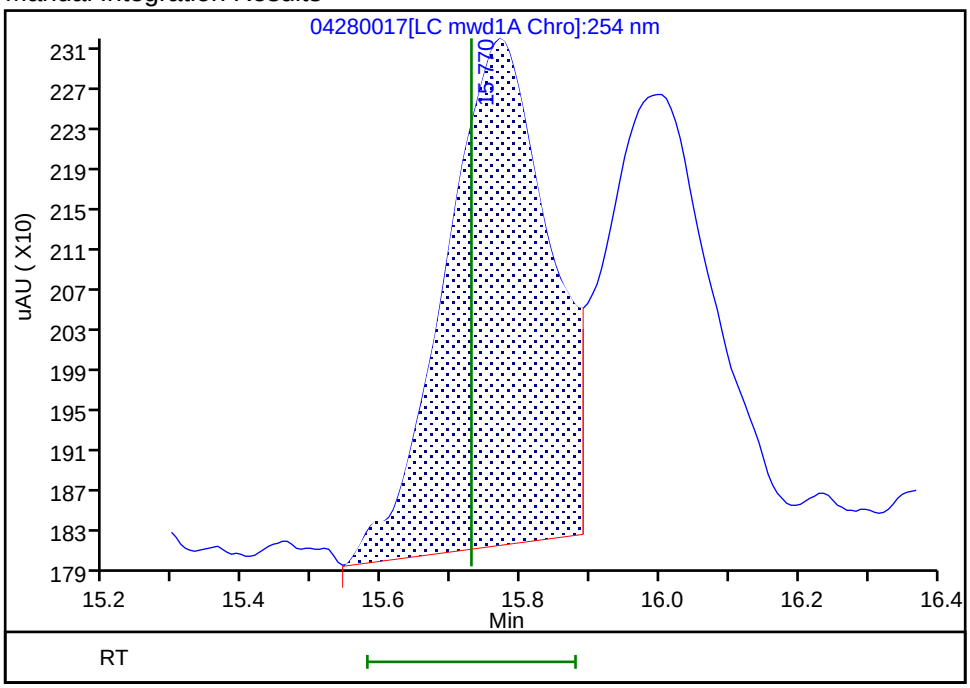
Processing Integration Results

RT: 15.77
Area: 8594
Amount: 0.026168
Amount Units: ug/ml



Manual Integration Results

RT: 15.77
Area: 5281
Amount: 0.021384
Amount Units: ug/ml



Reviewer: LV5D, 29-Apr-2023 10:23:05

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

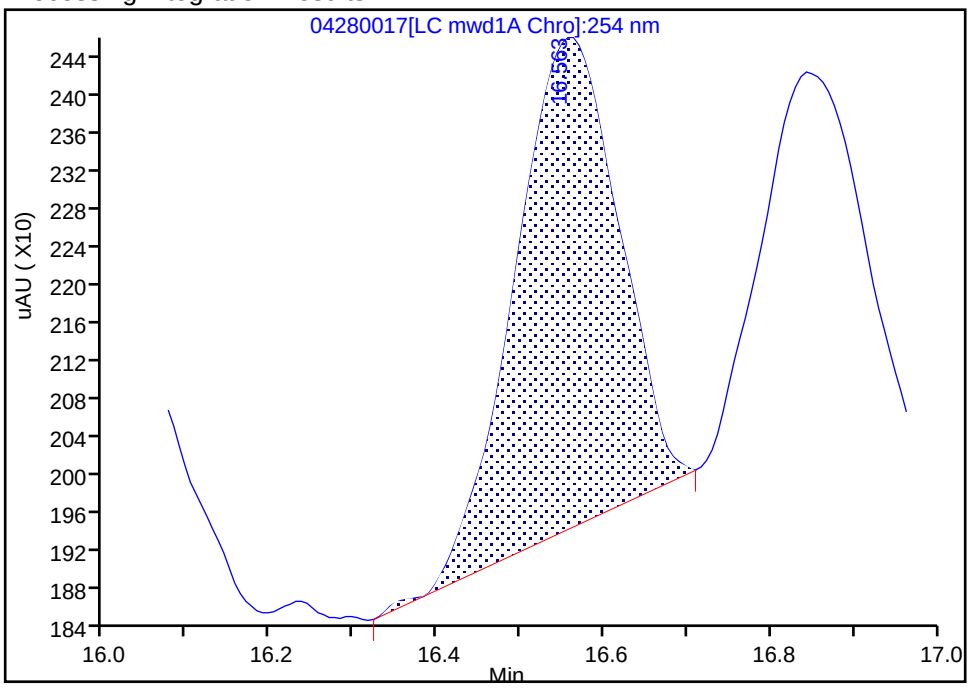
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Injection Date:	28-Apr-2023 22:28:39	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

17 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

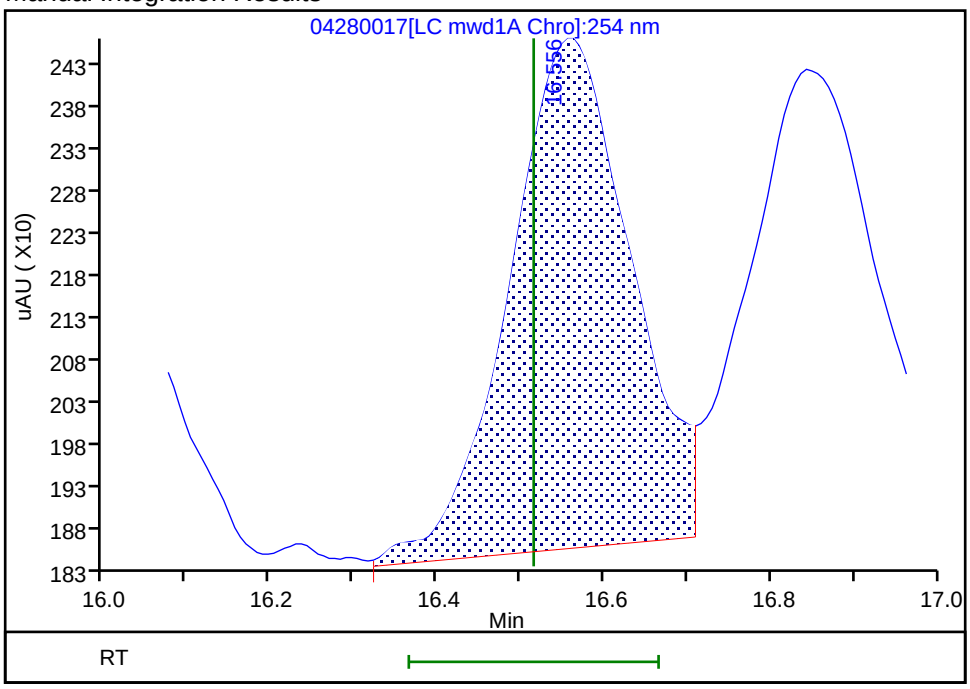
Processing Integration Results

RT: 16.56
Area: 4498
Amount: 0.016304
Amount Units: ug/ml



Manual Integration Results

RT: 16.56
Area: 6064
Amount: 0.020611
Amount Units: ug/ml



Reviewer: LV5D, 29-Apr-2023 10:23:33

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

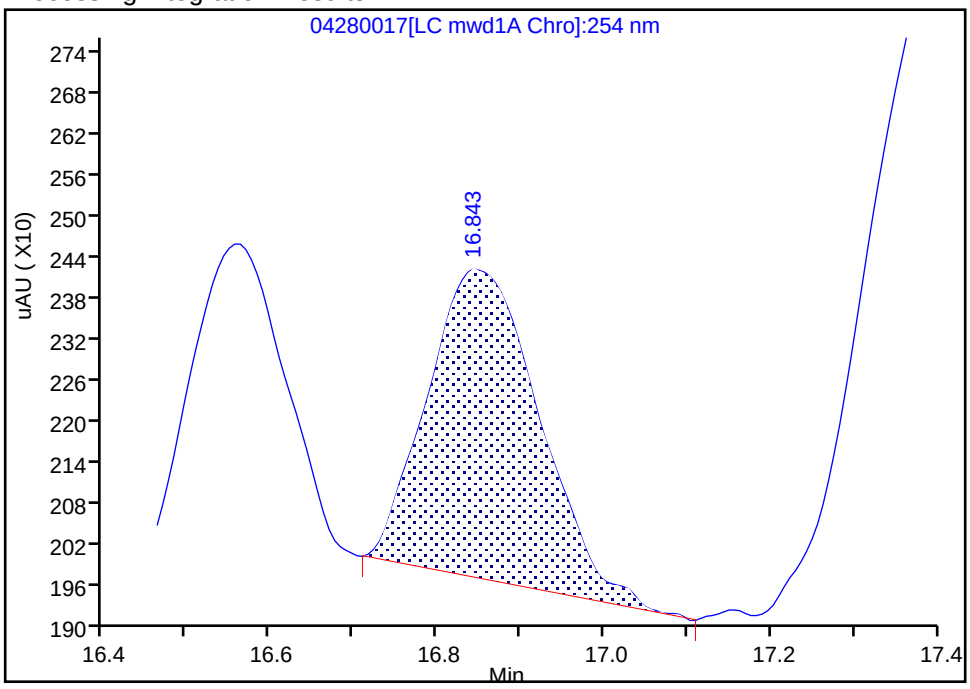
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Injection Date:	28-Apr-2023 22:28:39	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

18 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

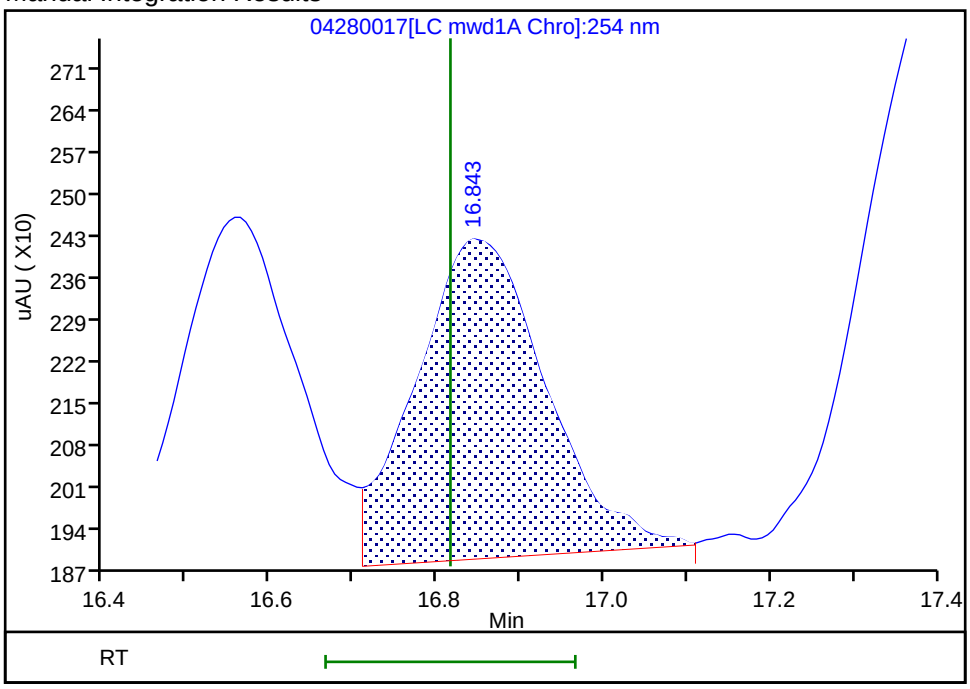
Processing Integration Results

RT: 16.84
Area: 4234
Amount: 0.015427
Amount Units: ug/ml



Manual Integration Results

RT: 16.84
Area: 5823
Amount: 0.019763
Amount Units: ug/ml



Reviewer: LV5D, 29-Apr-2023 10:23:33
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

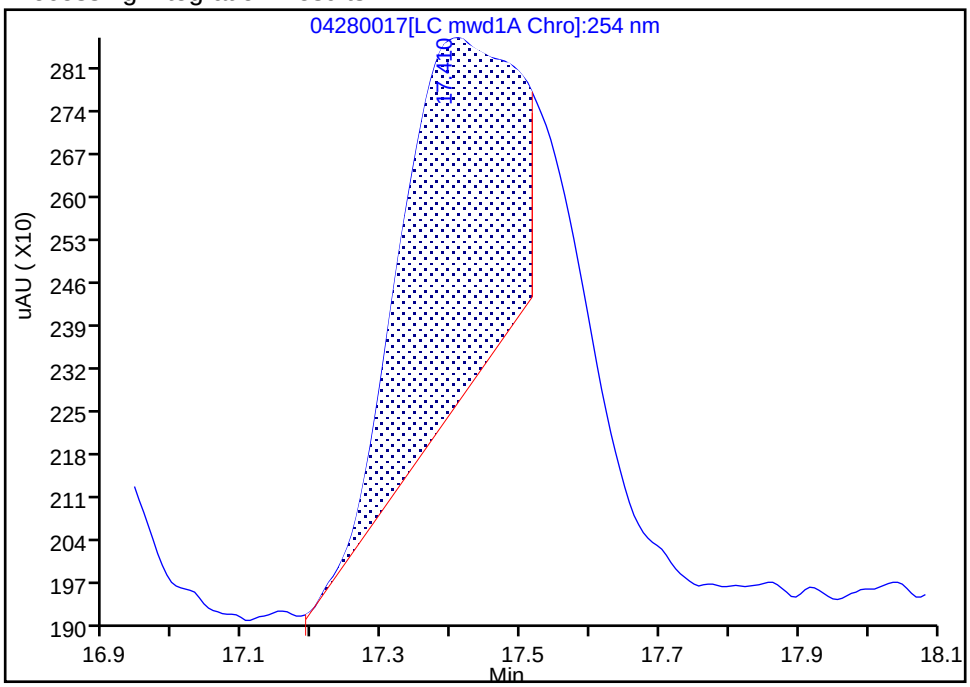
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Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

20 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

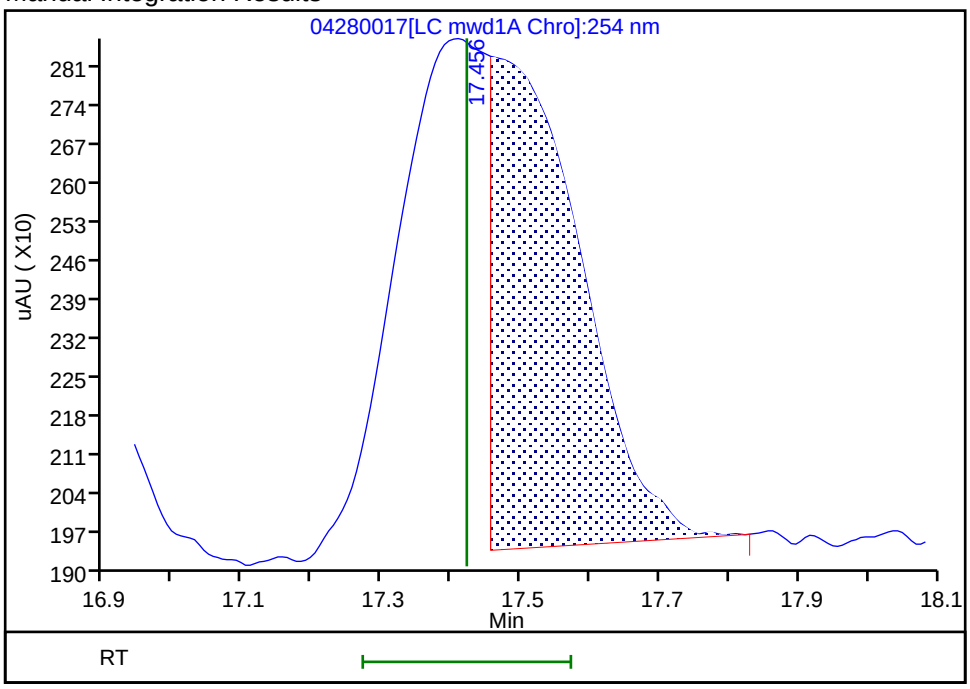
Processing Integration Results

RT: 17.41
Area: 6616
Amount: 0.016894
Amount Units: ug/ml



Manual Integration Results

RT: 17.46
Area: 7799
Amount: 0.019224
Amount Units: ug/ml



Reviewer: LV5D, 29-Apr-2023 10:23:23

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280018.D
Lims ID: IC INT 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 28-Apr-2023 23:03:35 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_X5
Sublist: chrom-8330_X5_Luna*sub6

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 29-Apr-2023 13:04:20 Calib Date: 29-Apr-2023 04:18:01
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1621

First Level Reviewer: LV5D Date: 29-Apr-2023 10:24:45

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.116	5.115	0.001	4552	0.0100	0.0115	
4 DNX	1	5.963	5.955	0.008	2804	0.0100	0.0101	
5 HMX	1	6.596	6.595	0.001	2178	0.0100	0.007259	
6 MNX	1	7.496	7.489	0.007	3646	0.0117	0.0139	
7 2,4,6-Trinitrophenol	1	8.063	8.029	0.034	2197	0.0100	0.0103	
8 RDX	1	8.923	8.915	0.008	2852	0.0100	0.0101	
9 Nitrobenzene	1	11.489	11.482	0.007	4269	0.0100	0.0107	
$ 10 1,2-Dinitrobenzene	1	12.483	12.469	0.014	3169	0.0100	0.0113	
11 3,5-Dinitroaniline	1	14.376	14.355	0.021	5053	0.0100	0.0100	
12 1,3-Dinitrobenzene	1	14.636	14.622	0.014	6946	0.0100	0.0110	
13 Nitroglycerin	2	15.196	15.182	0.014	14603	0.1000	0.1084	
14 o-Nitrotoluene	1	15.736	15.729	0.007	2336	0.0100	0.009459	M
16 p-Nitrotoluene	1	15.969	15.955	0.014	2206	0.0100	0.009697	M
17 4-Amino-2,6-dinitrotoluene	1	16.529	16.515	0.014	3275	0.0100	0.0111	M
18 m-Nitrotoluene	1	16.843	16.815	0.028	3269	0.0100	0.0111	M
19 2-Amino-4,6-dinitrotoluene	1	17.369	17.362	0.007	3912	0.0100	0.009141	M
20 1,3,5-Trinitrobenzene	1	17.443	17.422	0.021	4438	0.0100	0.0109	M
21 2,6-Dinitrotoluene	1	18.643	18.629	0.014	3093	0.0100	0.0106	
22 2,4-Dinitrotoluene	1	19.096	19.082	0.014	5987	0.0100	0.0102	
23 Tetryl	1	22.363	22.389	-0.026	3282	0.0100	0.0115	
24 2,4,6-Trinitrotoluene	1	23.176	23.182	-0.006	4919	0.0100	0.0112	
25 PETN	2	24.430	24.475	-0.045	16344	0.1000	0.1135	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

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8330 DMT_00013	Amount Added:	0.50	Units: uL

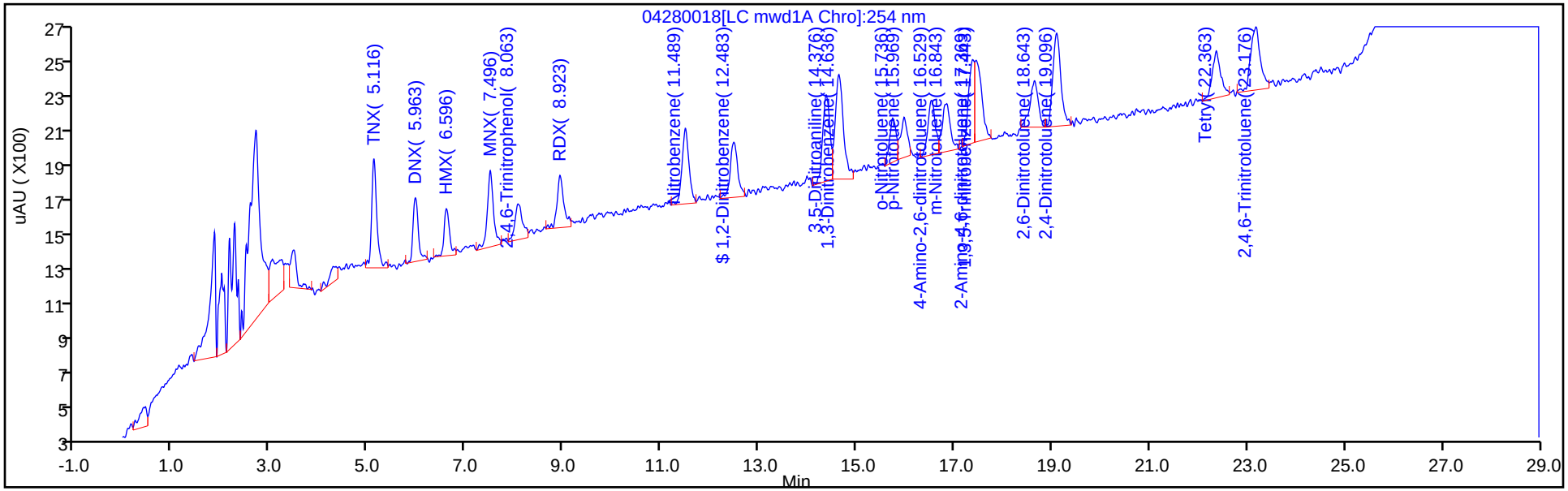
Report Date: 29-Apr-2023 13:04:20 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

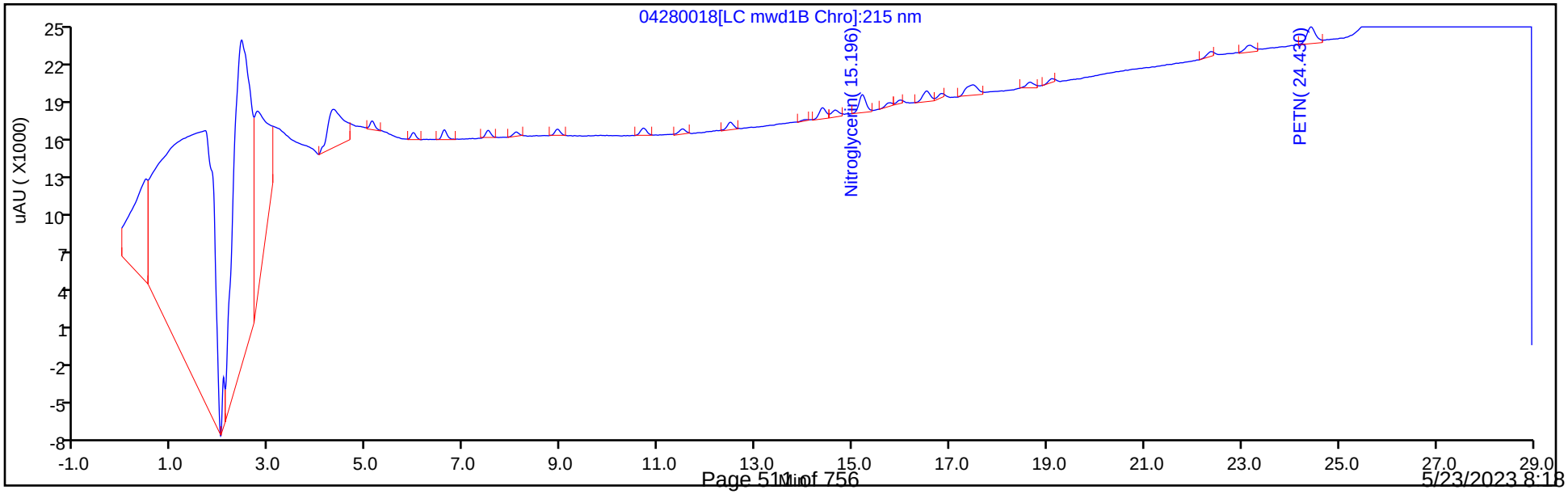
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280018.D

Injection Date:	28-Apr-2023 23:03:35	Instrument ID:	CHHPLC_X5	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:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

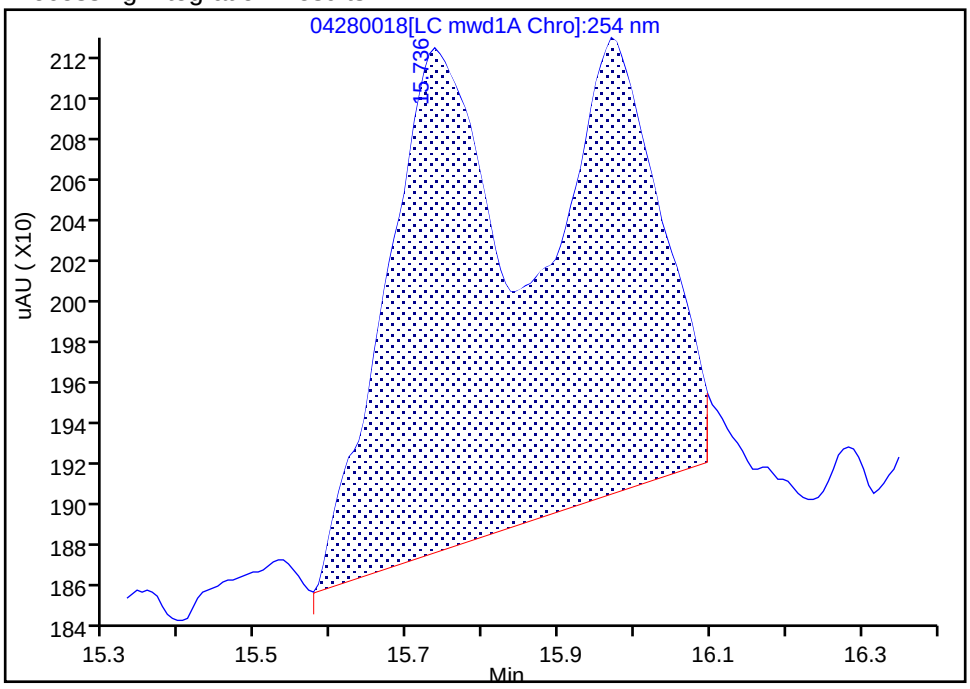
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Injection Date:	28-Apr-2023 23:03:35	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

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

Signal: 1

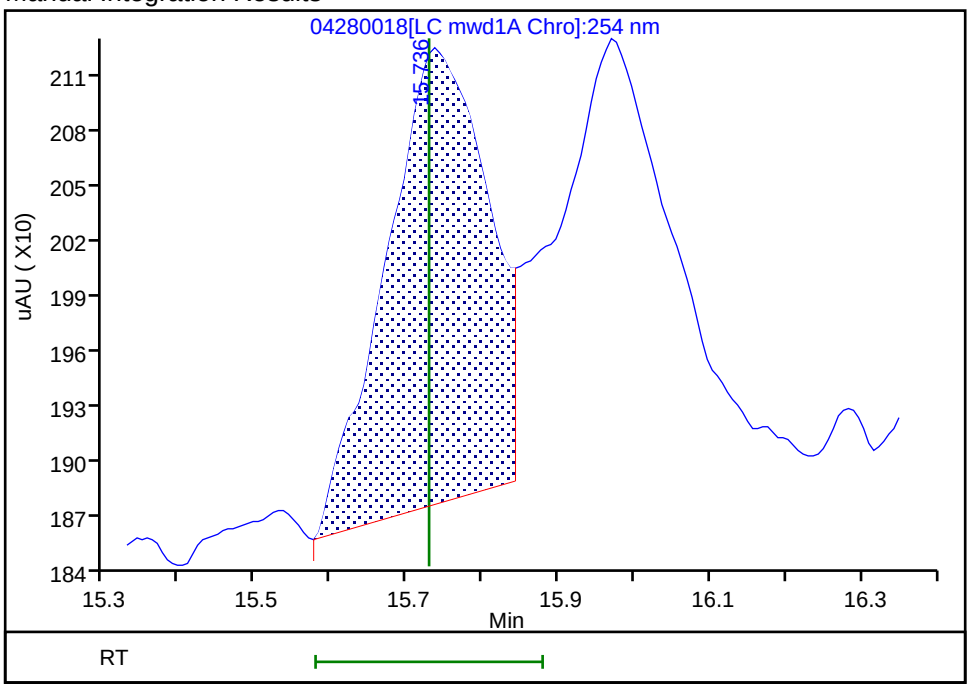
Processing Integration Results

RT: 15.74
Area: 4530
Amount: 0.013152
Amount Units: ug/ml



Manual Integration Results

RT: 15.74
Area: 2336
Amount: 0.009459
Amount Units: ug/ml



Reviewer: LV5D, 29-Apr-2023 10:24:06

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

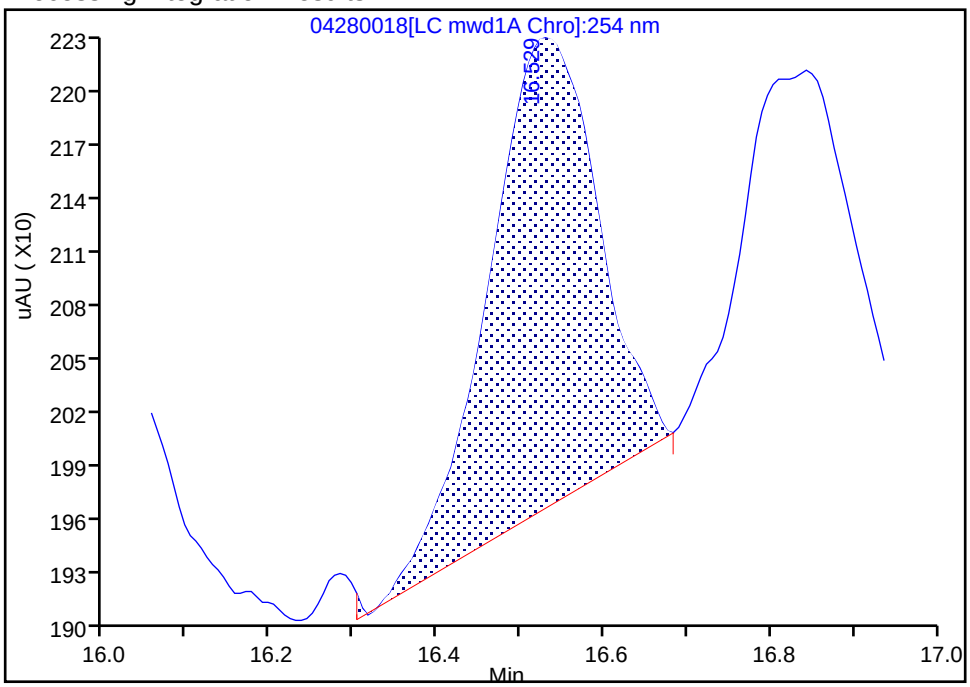
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Injection Date:	28-Apr-2023 23:03:35	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

17 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

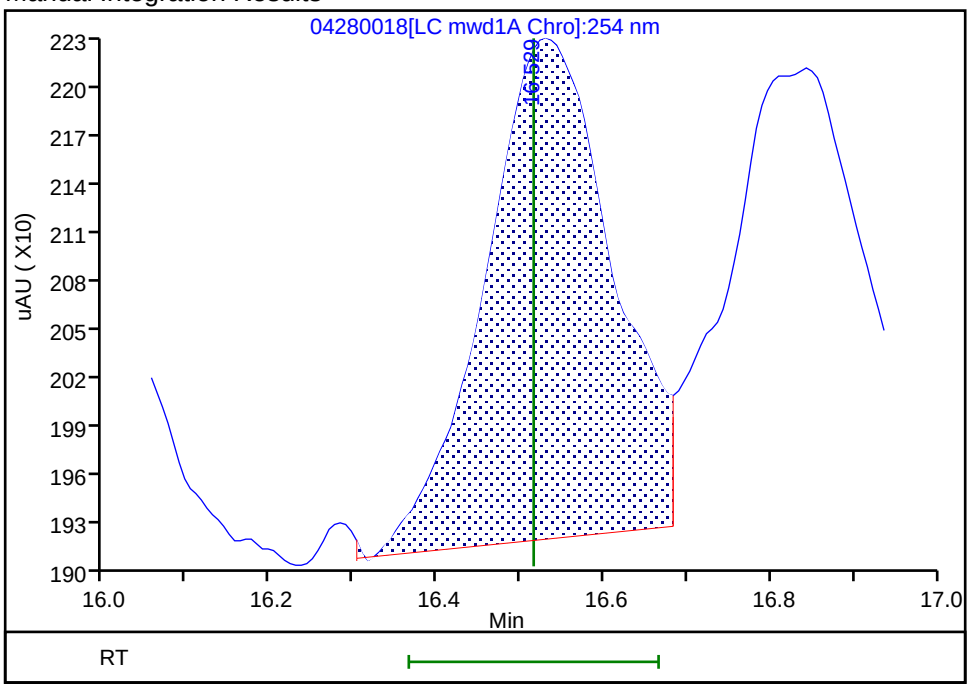
Processing Integration Results

RT: 16.53
Area: 2409
Amount: 0.008465
Amount Units: ug/ml



Manual Integration Results

RT: 16.53
Area: 3275
Amount: 0.011131
Amount Units: ug/ml



Reviewer: LV5D, 29-Apr-2023 13:01:58
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

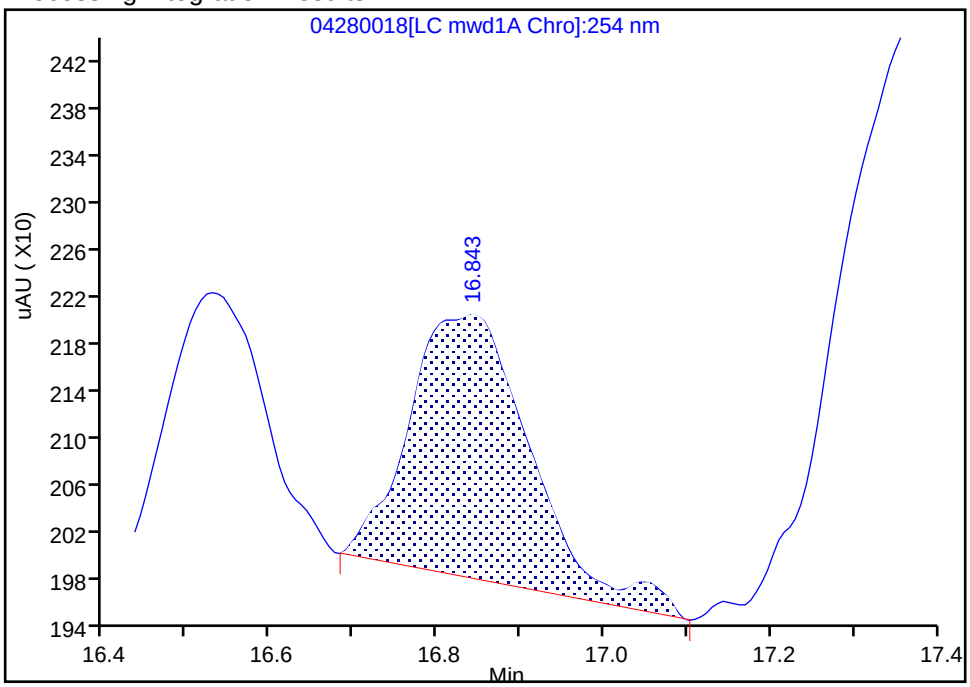
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Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

18 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

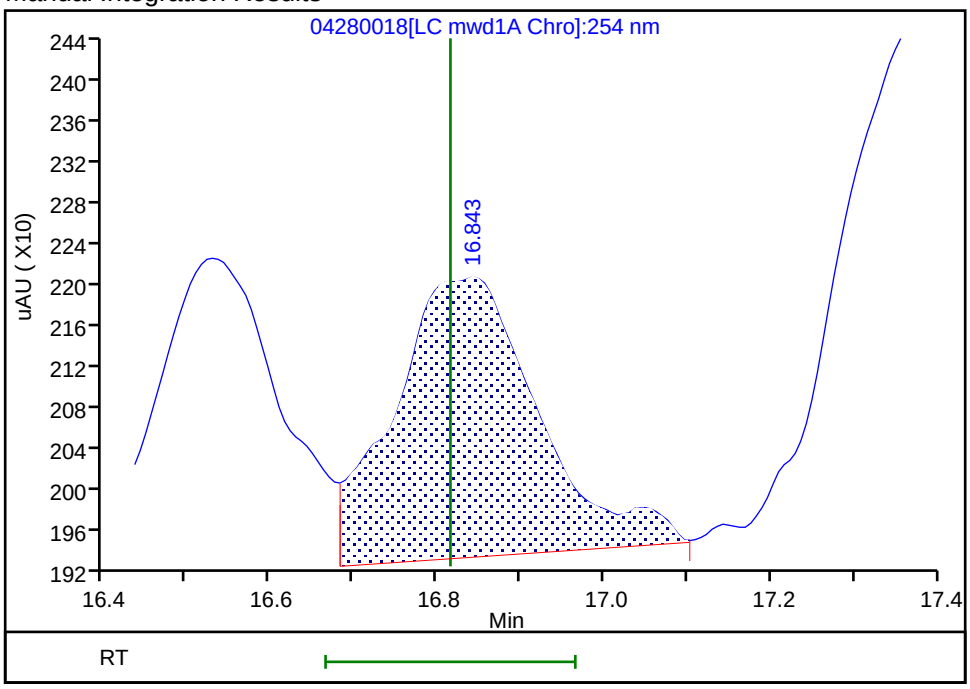
Processing Integration Results

RT: 16.84
Area: 2248
Amount: 0.007935
Amount Units: ug/ml



Manual Integration Results

RT: 16.84
Area: 3269
Amount: 0.011095
Amount Units: ug/ml



Reviewer: LV5D, 29-Apr-2023 13:01:58
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

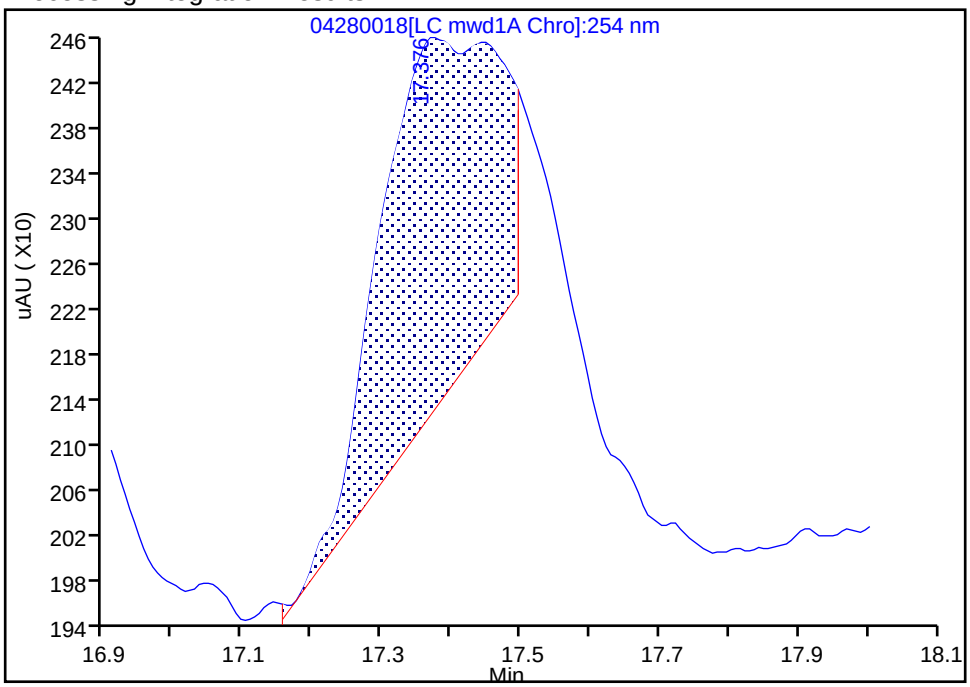
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Injection Date:	28-Apr-2023 23:03:35	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

20 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

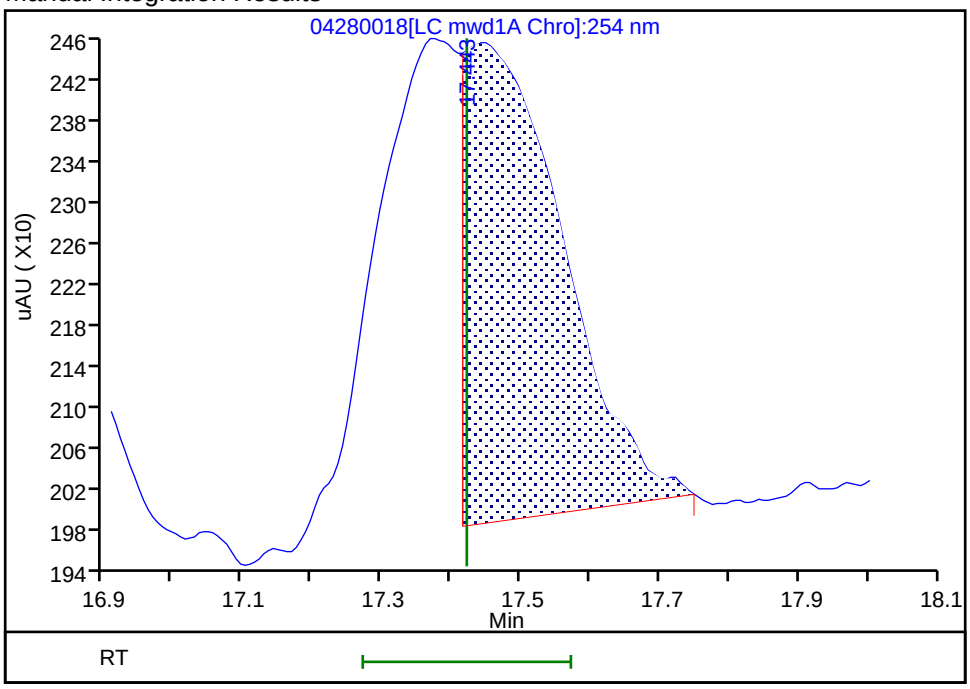
Processing Integration Results

RT: 17.38
Area: 3762
Amount: 0.009448
Amount Units: ug/ml



Manual Integration Results

RT: 17.44
Area: 4438
Amount: 0.010939
Amount Units: ug/ml



Reviewer: LV5D, 29-Apr-2023 10:24:15

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Calibration / TNX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

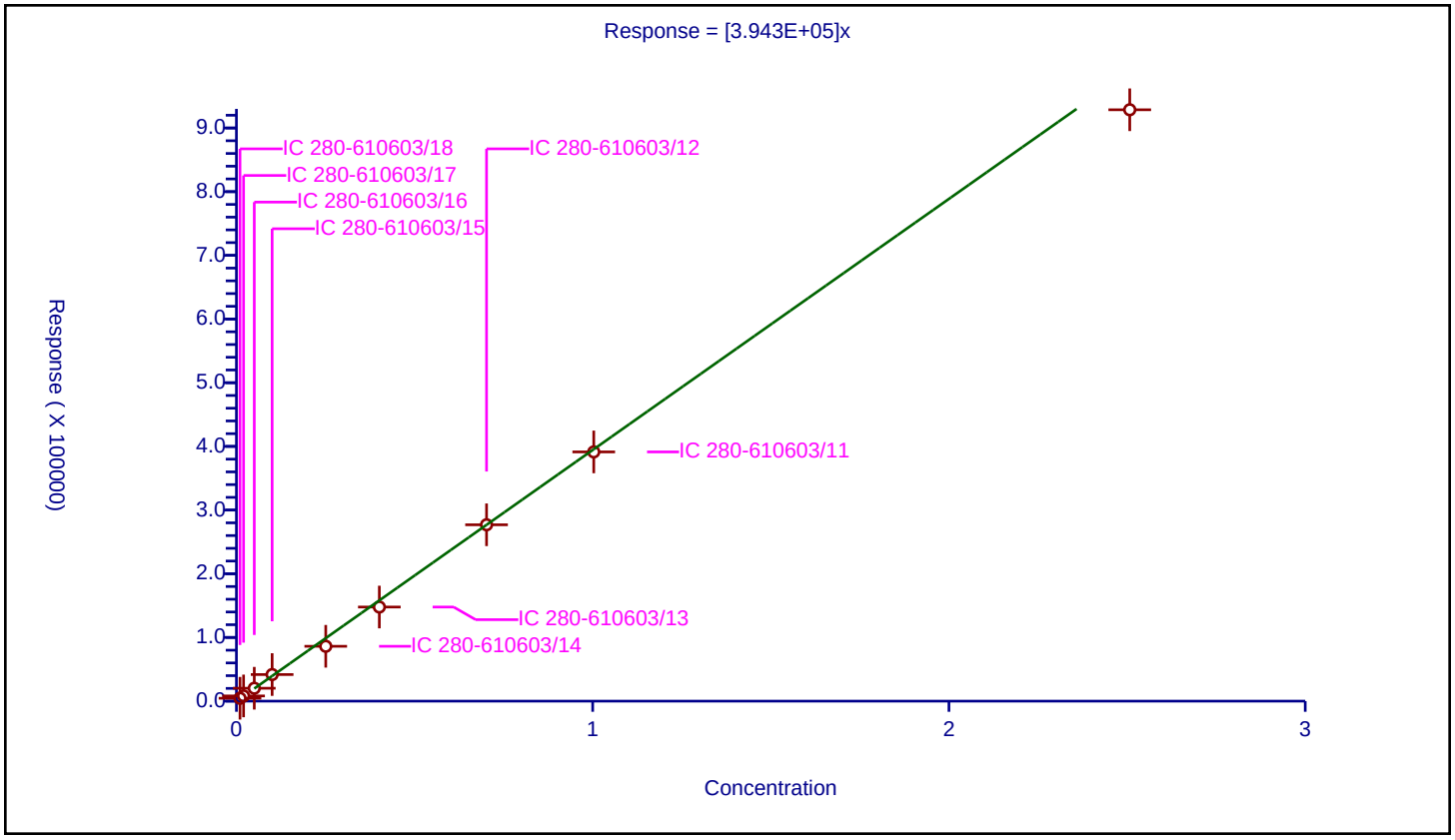
Curve Coefficients

Intercept:	0
Slope:	3.943E+05

Error Coefficients

Standard Error:	22100
Relative Standard Error:	8.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-610603/18	0.01003	4552.0			453838.484546	Y
2	IC 280-610603/17	0.02006	8179.0			407726.819541	Y
3	IC 280-610603/16	0.05015	20281.0			404406.779661	Y
4	IC 280-610603/15	0.1003	41754.0			416291.12662	Y
5	IC 280-610603/14	0.25075	86123.0			343461.615155	Y
6	IC 280-610603/13	0.4012	147763.0			368302.592223	Y
7	IC 280-610603/12	0.7021	276939.0			394443.811423	Y
8	IC 280-610603/11	1.003	391357.0			390186.440678	Y
9	IC 280-610603/10	2.5075	928605.0			370331.006979	Y



Calibration / DNX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

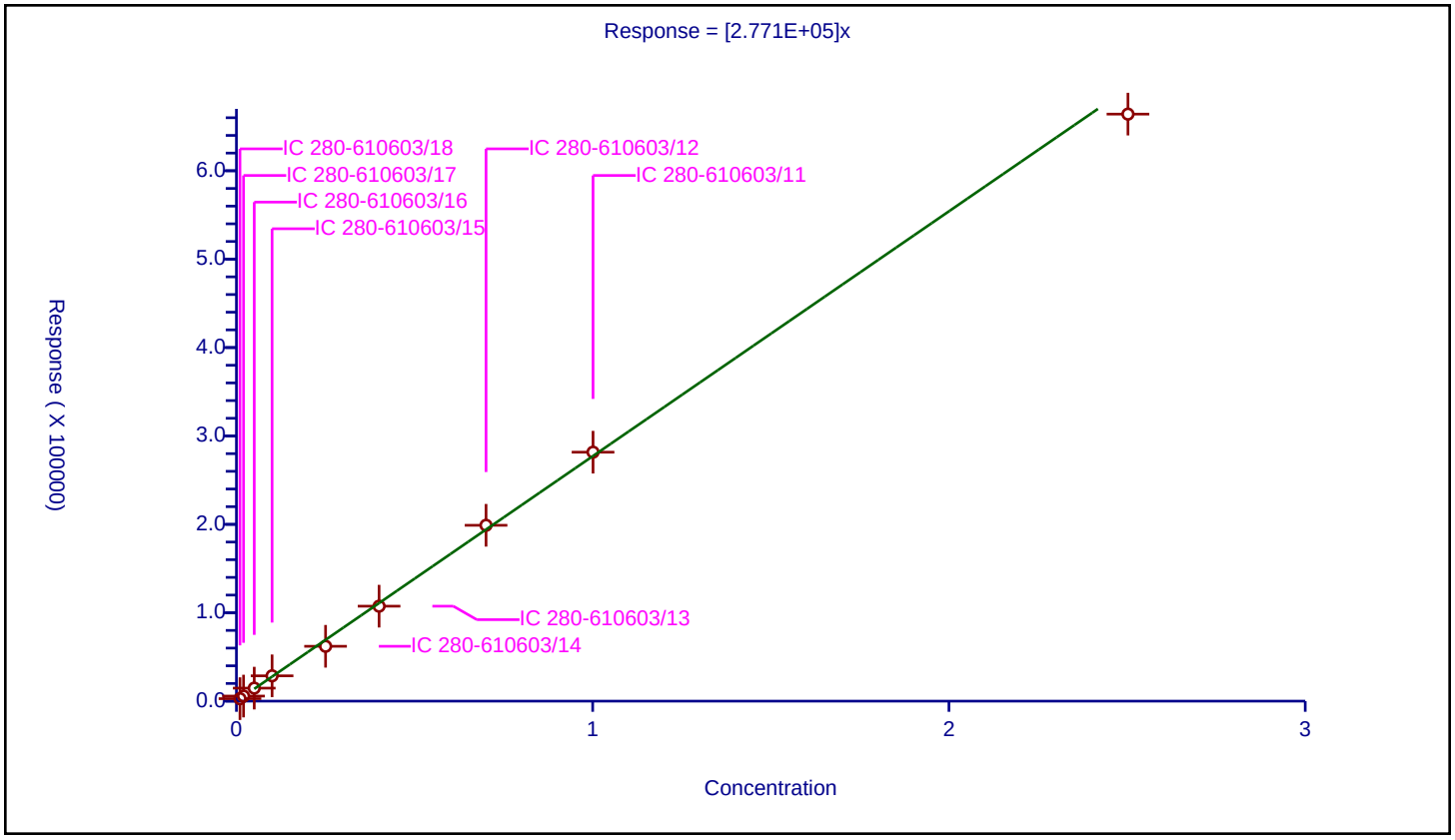
Curve Coefficients

Intercept:	0
Slope:	2.771E+05

Error Coefficients

Standard Error:	11000
Relative Standard Error:	5.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-610603/18	0.01001	2804.0			280119.88012	Y
2	IC 280-610603/17	0.02002	5728.0			286113.886114	Y
3	IC 280-610603/16	0.05005	14733.0			294365.634366	Y
4	IC 280-610603/15	0.1001	28641.0			286123.876124	Y
5	IC 280-610603/14	0.25025	62056.0			247976.023976	Y
6	IC 280-610603/13	0.4004	107420.0			268281.718282	Y
7	IC 280-610603/12	0.7007	198949.0			283928.928215	Y
8	IC 280-610603/11	1.001	281655.0			281373.626374	Y
9	IC 280-610603/10	2.5025	664081.0			265367.032967	Y



Calibration / HMX

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

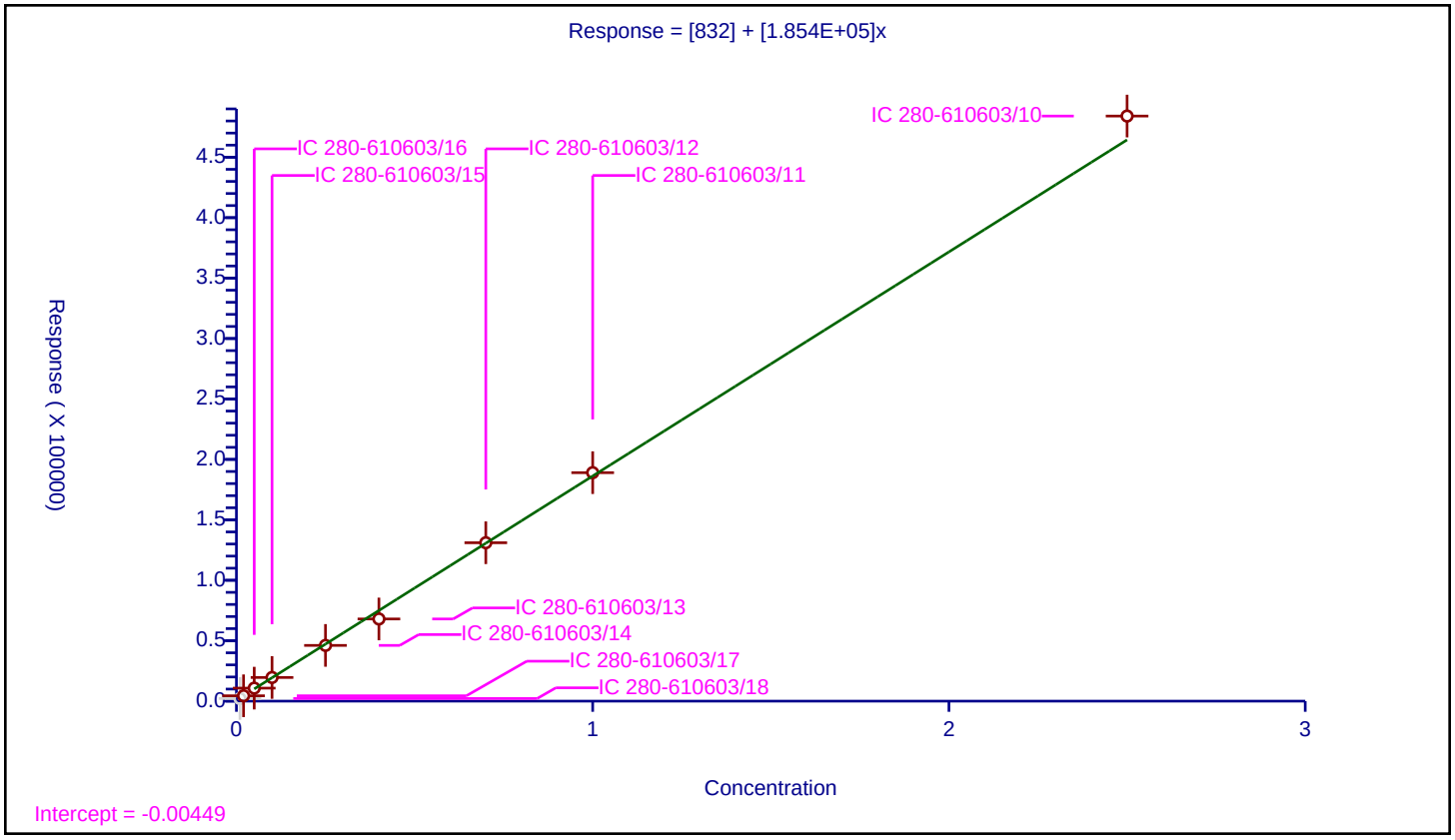
Curve Coefficients

Intercept:	832
Slope:	1.854E+05

Error Coefficients

Standard Error:	8620
Relative Standard Error:	5.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-610603/18	0.01	2178.0			217800.0	N
2	IC 280-610603/17	0.02	4449.0			222450.0	Y
3	IC 280-610603/16	0.05	10761.0			215220.0	Y
4	IC 280-610603/15	0.1	19573.0			195730.0	Y
5	IC 280-610603/14	0.25	46110.0			184440.0	Y
6	IC 280-610603/13	0.4	67993.0			169982.5	Y
7	IC 280-610603/12	0.7	131068.0			187240.0	Y
8	IC 280-610603/11	1.0	189027.0			189027.0	Y
9	IC 280-610603/10	2.5	484081.0			193632.4	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

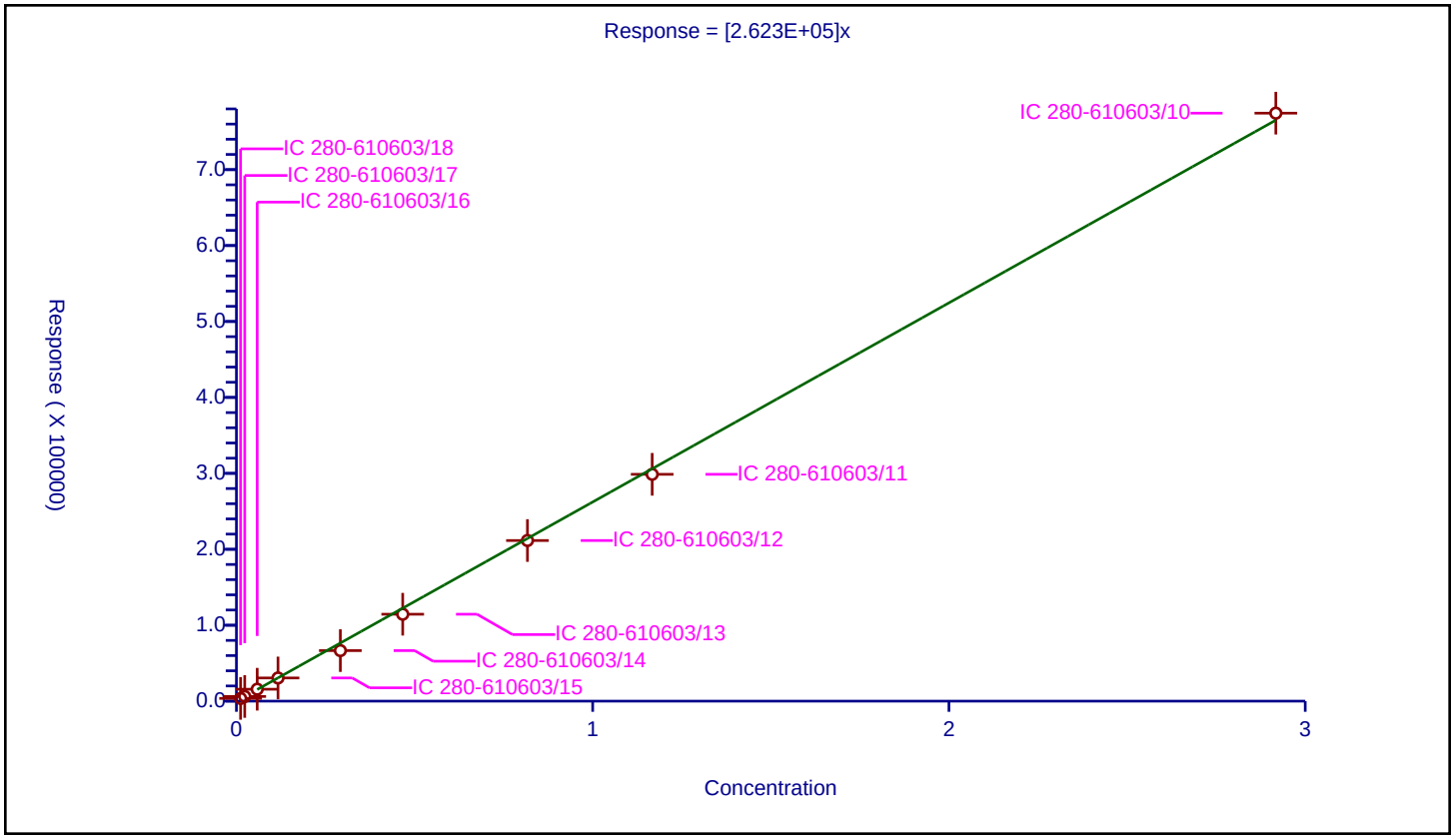
Curve Coefficients

Intercept:	0
Slope:	2.623E+05

Error Coefficients

Standard Error:	6210
Relative Standard Error:	8.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-610603/18	0.01167	3646.0			312425.021422	Y
2	IC 280-610603/17	0.02334	6155.0			263710.368466	Y
3	IC 280-610603/16	0.05835	15694.0			268963.153385	Y
4	IC 280-610603/15	0.1167	30530.0			261610.968295	Y
5	IC 280-610603/14	0.29175	66549.0			228102.827763	Y
6	IC 280-610603/13	0.4668	114487.0			245259.211654	Y
7	IC 280-610603/12	0.8169	211518.0			258927.653324	Y
8	IC 280-610603/11	1.167	298731.0			255982.005141	Y
9	IC 280-610603/10	2.9175	774370.0			265422.450728	Y



Calibration / 2,4,6-Trinitrophenol

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

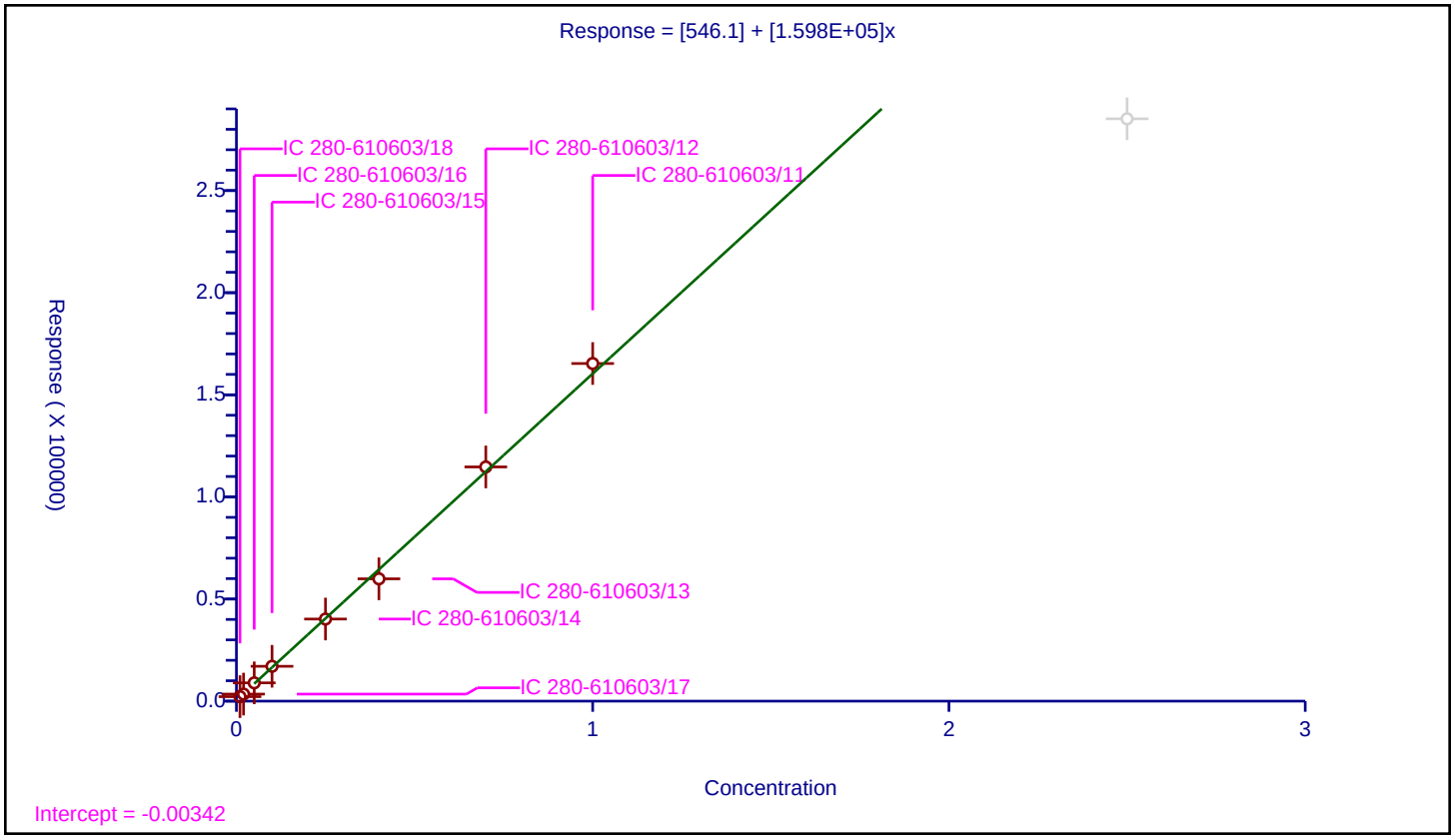
Curve Coefficients

Intercept:	546.1
Slope:	1.598E+05

Error Coefficients

Standard Error:	2930
Relative Standard Error:	5.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-610603/18	0.01	2197.0			219700.0	Y
2	IC 280-610603/17	0.02	3453.0			172650.0	Y
3	IC 280-610603/16	0.05	8950.0			179000.0	Y
4	IC 280-610603/15	0.1	17060.0			170600.0	Y
5	IC 280-610603/14	0.25	40202.0			160808.0	Y
6	IC 280-610603/13	0.4	59892.0			149730.0	Y
7	IC 280-610603/12	0.7	114679.0			163827.142857	Y
8	IC 280-610603/11	1.0	165319.0			165319.0	Y
9	IC 280-610603/10	2.5	285146.0			114058.4	N



Calibration / RDX

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

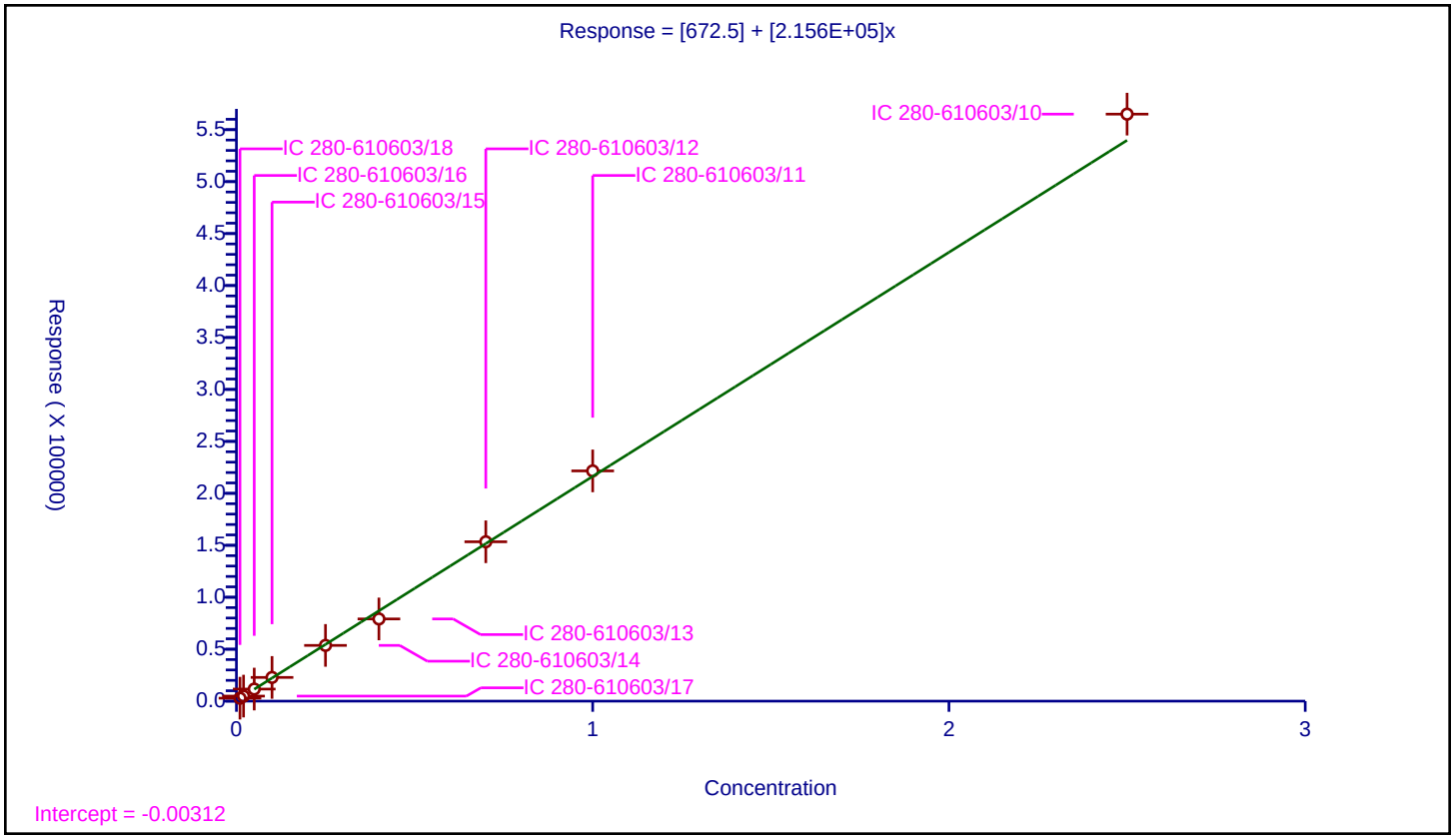
Curve Coefficients

Intercept:	672.5
Slope:	2.156E+05

Error Coefficients

Standard Error:	10200
Relative Standard Error:	4.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-610603/18	0.01	2852.0			285200.0	Y
2	IC 280-610603/17	0.02	4863.0			243150.0	Y
3	IC 280-610603/16	0.05	11621.0			232420.0	Y
4	IC 280-610603/15	0.1	22827.0			228270.0	Y
5	IC 280-610603/14	0.25	53643.0			214572.0	Y
6	IC 280-610603/13	0.4	79113.0			197782.5	Y
7	IC 280-610603/12	0.7	153380.0			219114.285714	Y
8	IC 280-610603/11	1.0	221588.0			221588.0	Y
9	IC 280-610603/10	2.5	564953.0			225981.2	Y



Calibration / Nitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

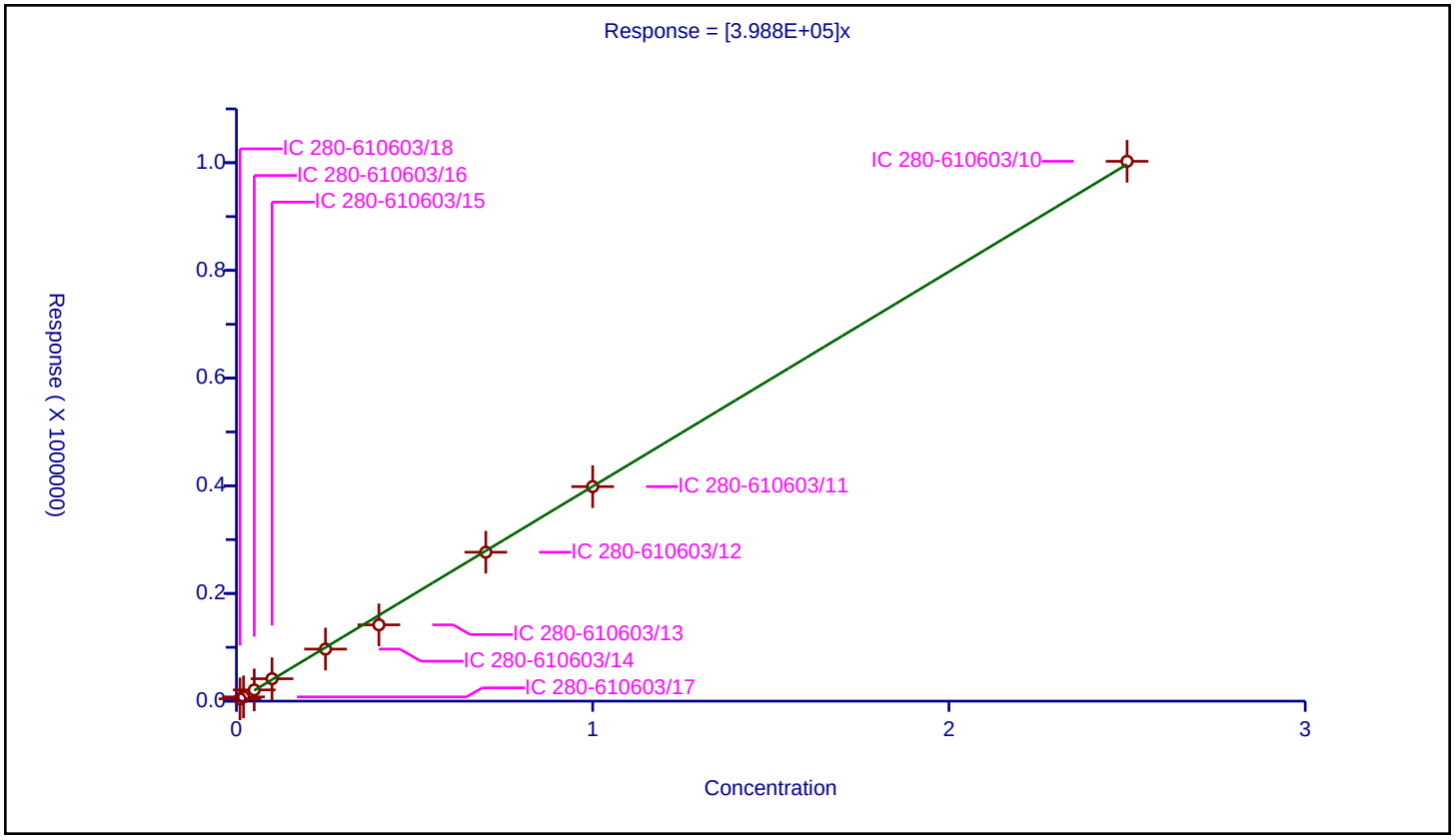
Curve Coefficients

Intercept:	0
Slope:	3.988E+05

Error Coefficients

Standard Error:	6800
Relative Standard Error:	5.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-610603/18	0.01	4269.0			426900.0	Y
2	IC 280-610603/17	0.02	7871.0			393550.0	Y
3	IC 280-610603/16	0.05	20883.0			417660.0	Y
4	IC 280-610603/15	0.1	41585.0			415850.0	Y
5	IC 280-610603/14	0.25	96681.0			386724.0	Y
6	IC 280-610603/13	0.4	141679.0			354197.5	Y
7	IC 280-610603/12	0.7	276577.0			395110.0	Y
8	IC 280-610603/11	1.0	398454.0			398454.0	Y
9	IC 280-610603/10	2.5	1002641.0			401056.4	Y



Calibration / 1,2-Dinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

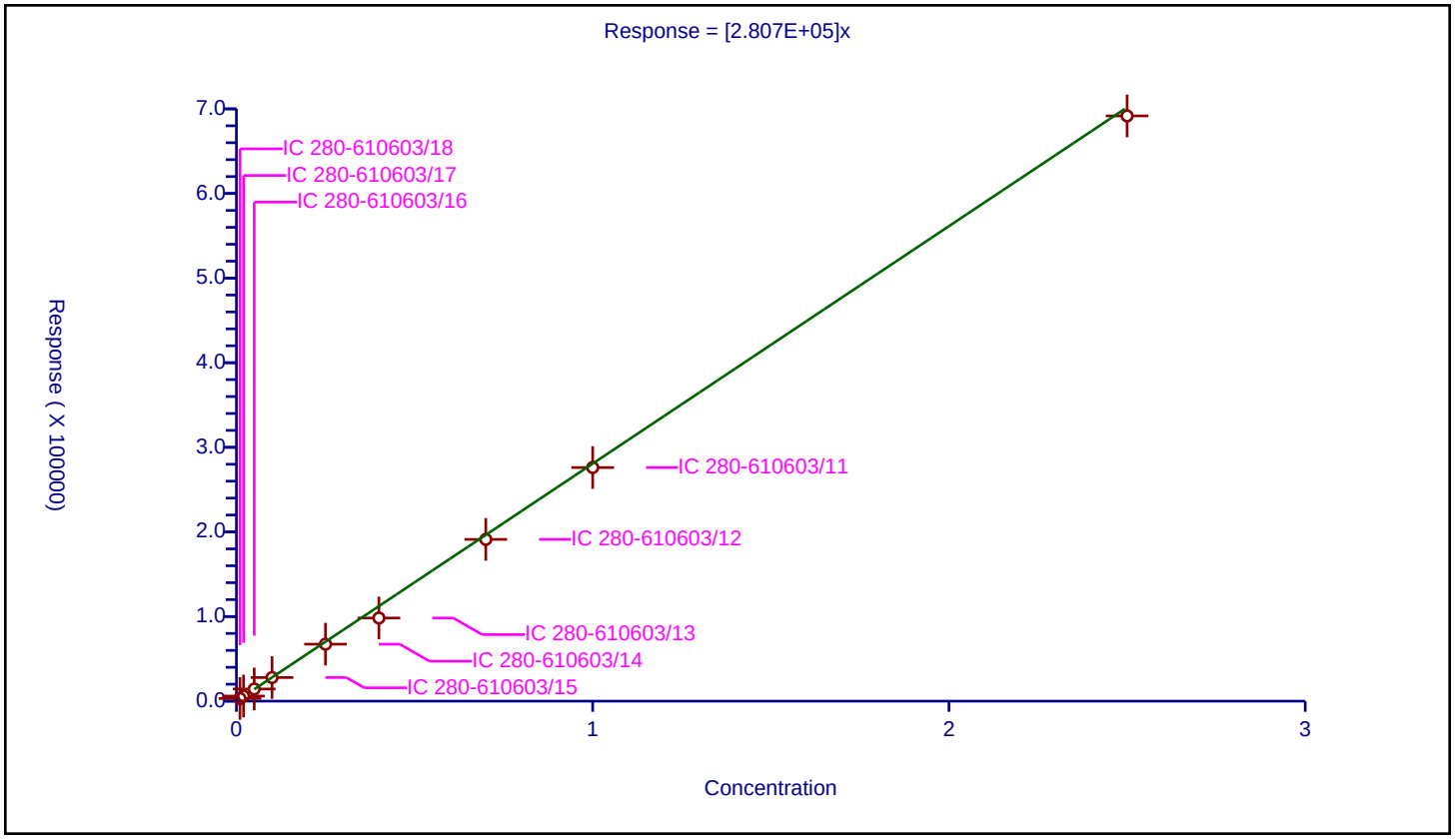
Curve Coefficients

Intercept:	0
Slope:	2.807E+05

Error Coefficients

Standard Error:	6660
Relative Standard Error:	7.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-610603/18	0.01	3169.0			316900.0	Y
2	IC 280-610603/17	0.02	6038.0			301900.0	Y
3	IC 280-610603/16	0.05	14379.0			287580.0	Y
4	IC 280-610603/15	0.1	27893.0			278930.0	Y
5	IC 280-610603/14	0.25	67346.0			269384.0	Y
6	IC 280-610603/13	0.4	98279.0			245697.5	Y
7	IC 280-610603/12	0.7	191173.0			273104.285714	Y
8	IC 280-610603/11	1.0	276103.0			276103.0	Y
9	IC 280-610603/10	2.5	691686.0			276674.4	Y



Calibration / 3,5-Dinitroaniline

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

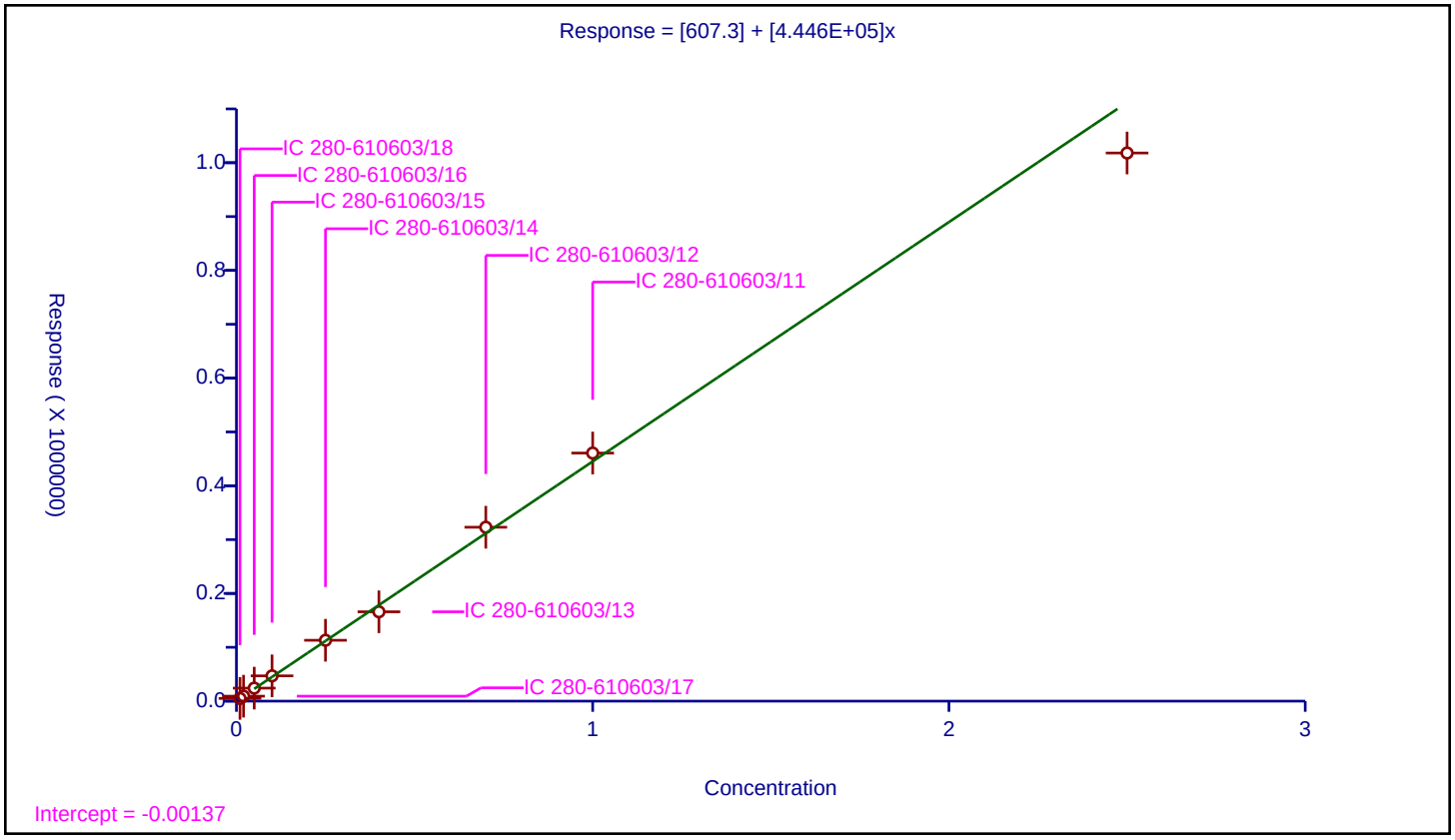
Curve Coefficients

Intercept:	607.3
Slope:	4.446E+05

Error Coefficients

Standard Error:	36600
Relative Standard Error:	5.5
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-610603/18	0.01	5053.0			505300.0	Y
2	IC 280-610603/17	0.02	9221.0			461050.0	Y
3	IC 280-610603/16	0.05	24176.0			483520.0	Y
4	IC 280-610603/15	0.1	46980.0			469800.0	Y
5	IC 280-610603/14	0.25	113054.0			452216.0	Y
6	IC 280-610603/13	0.4	165924.0			414810.0	Y
7	IC 280-610603/12	0.7	322983.0			461404.285714	Y
8	IC 280-610603/11	1.0	460771.0			460771.0	Y
9	IC 280-610603/10	2.5	1018070.0			407228.0	Y



Calibration / 1,3-Dinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

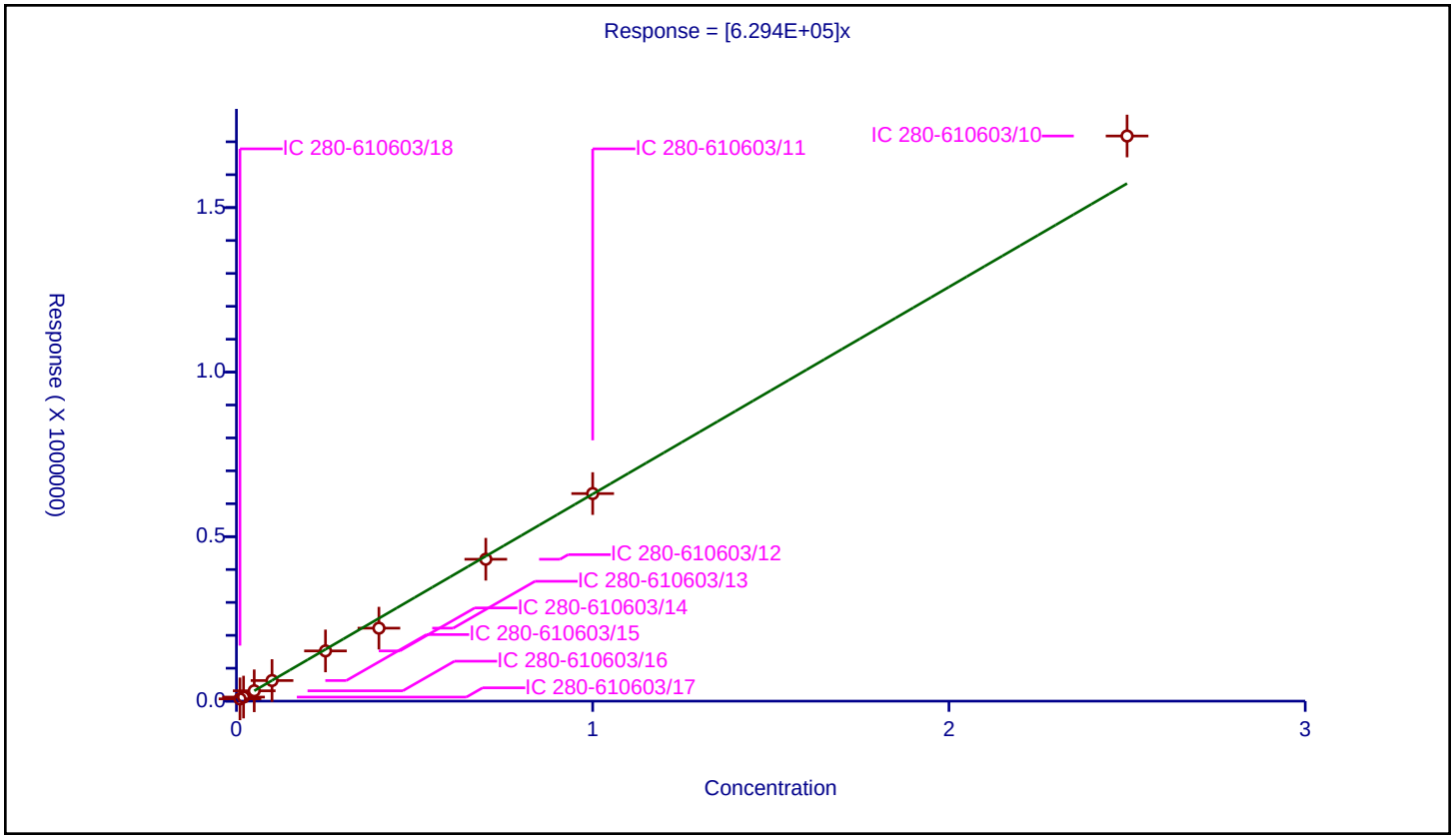
Curve Coefficients

Intercept:	0
Slope:	6.294E+05

Error Coefficients

Standard Error:	52200
Relative Standard Error:	6.6
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-610603/18	0.01	6946.0			694600.0	Y
2	IC 280-610603/17	0.02	12307.0			615350.0	Y
3	IC 280-610603/16	0.05	31459.0			629180.0	Y
4	IC 280-610603/15	0.1	62596.0			625960.0	Y
5	IC 280-610603/14	0.25	152658.0			610632.0	Y
6	IC 280-610603/13	0.4	221798.0			554495.0	Y
7	IC 280-610603/12	0.7	431248.0			616068.571429	Y
8	IC 280-610603/11	1.0	630835.0			630835.0	Y
9	IC 280-610603/10	2.5	1717605.0			687042.0	Y



Calibration / Nitroglycerin

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

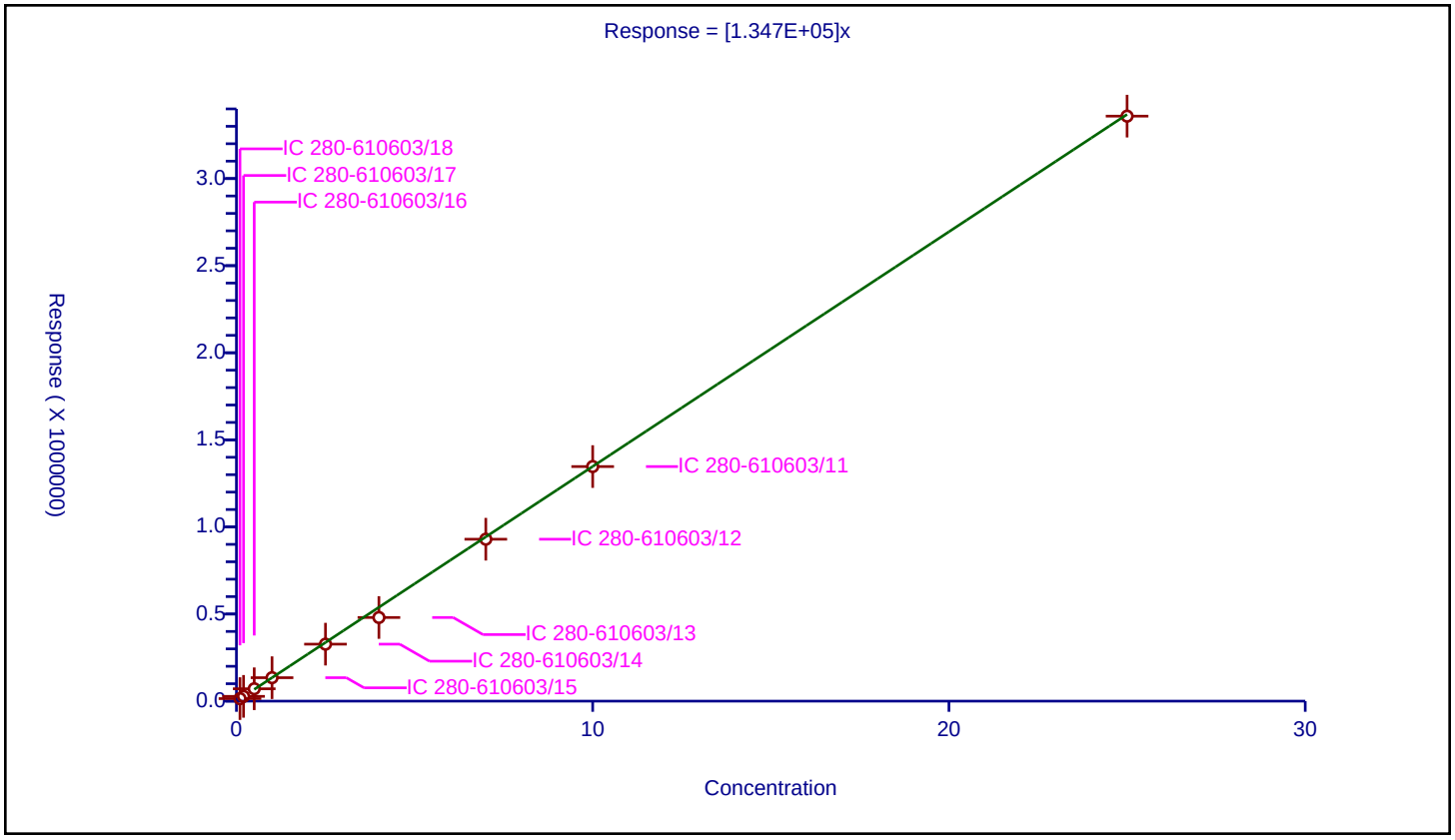
Curve Coefficients

Intercept:	0
Slope:	1.347E+05

Error Coefficients

Standard Error:	21900
Relative Standard Error:	5.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-610603/18	0.1	14603.0			146030.0	Y
2	IC 280-610603/17	0.2	27409.0			137045.0	Y
3	IC 280-610603/16	0.5	71084.0			142168.0	Y
4	IC 280-610603/15	1.0	134661.0			134661.0	Y
5	IC 280-610603/14	2.5	327195.0			130878.0	Y
6	IC 280-610603/13	4.0	480119.0			120029.75	Y
7	IC 280-610603/12	7.0	929634.0			132804.857143	Y
8	IC 280-610603/11	10.0	1346659.0			134665.9	Y
9	IC 280-610603/10	25.0	3358347.0			134333.88	Y



Calibration / o-Nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

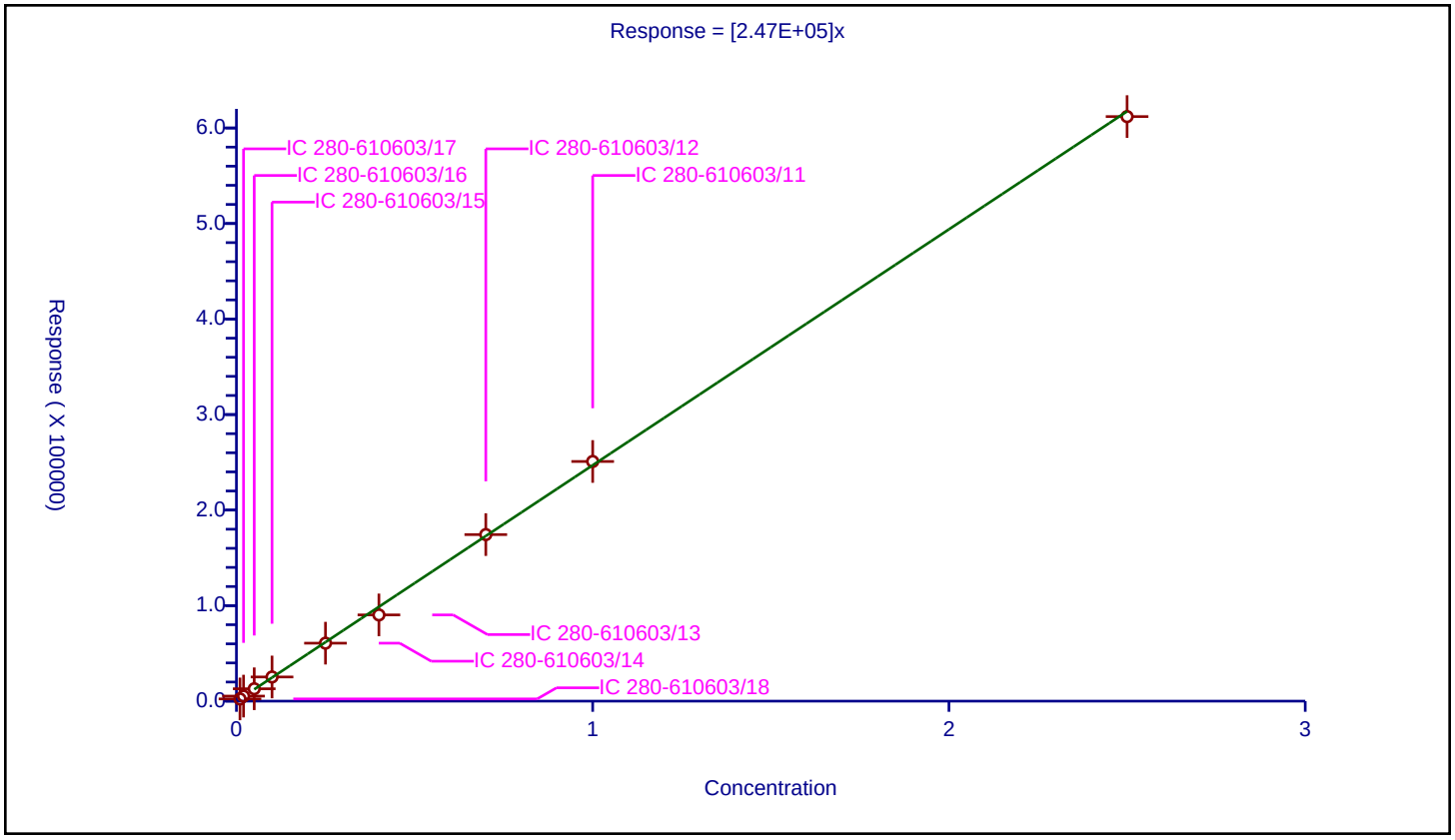
Curve Coefficients

Intercept:	0
Slope:	2.47E+05

Error Coefficients

Standard Error:	3910
Relative Standard Error:	4.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-610603/18	0.01	2336.0			233600.0	Y
2	IC 280-610603/17	0.02	5281.0			264050.0	Y
3	IC 280-610603/16	0.05	12951.0			259020.0	Y
4	IC 280-610603/15	0.1	25290.0			252900.0	Y
5	IC 280-610603/14	0.25	60674.0			242696.0	Y
6	IC 280-610603/13	0.4	90266.0			225665.0	Y
7	IC 280-610603/12	0.7	174353.0			249075.714286	Y
8	IC 280-610603/11	1.0	250892.0			250892.0	Y
9	IC 280-610603/10	2.5	611929.0			244771.6	Y



Calibration / p-Nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

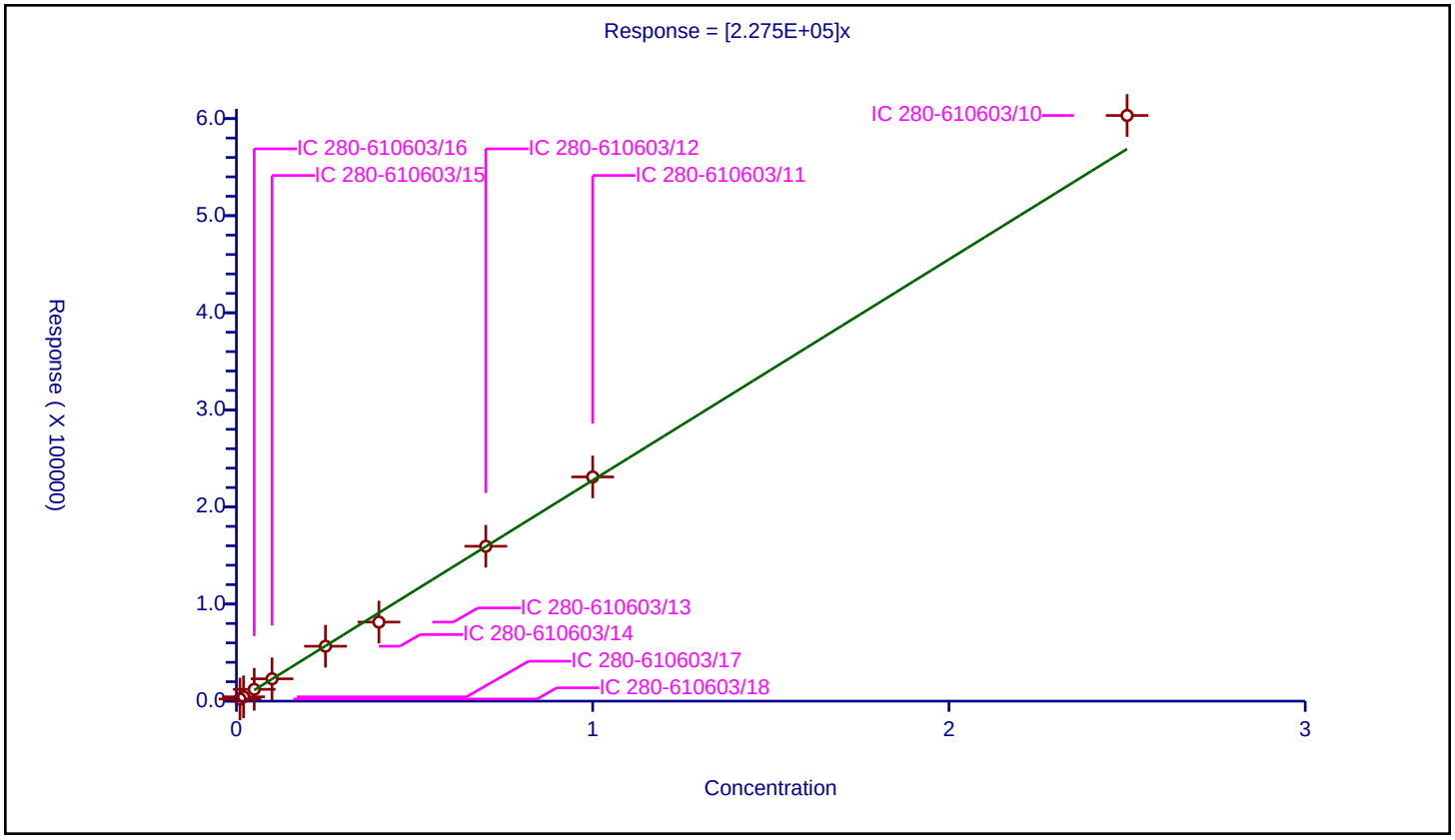
Curve Coefficients

Intercept:	0
Slope:	2.275E+05

Error Coefficients

Standard Error:	12700
Relative Standard Error:	5.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-610603/18	0.01	2206.0			220600.0	Y
2	IC 280-610603/17	0.02	4466.0			223300.0	Y
3	IC 280-610603/16	0.05	12179.0			243580.0	Y
4	IC 280-610603/15	0.1	23002.0			230020.0	Y
5	IC 280-610603/14	0.25	56555.0			226220.0	Y
6	IC 280-610603/13	0.4	81428.0			203570.0	Y
7	IC 280-610603/12	0.7	159520.0			227885.714286	Y
8	IC 280-610603/11	1.0	230951.0			230951.0	Y
9	IC 280-610603/10	2.5	603215.0			241286.0	Y



Calibration / 4-Amino-2,6-dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

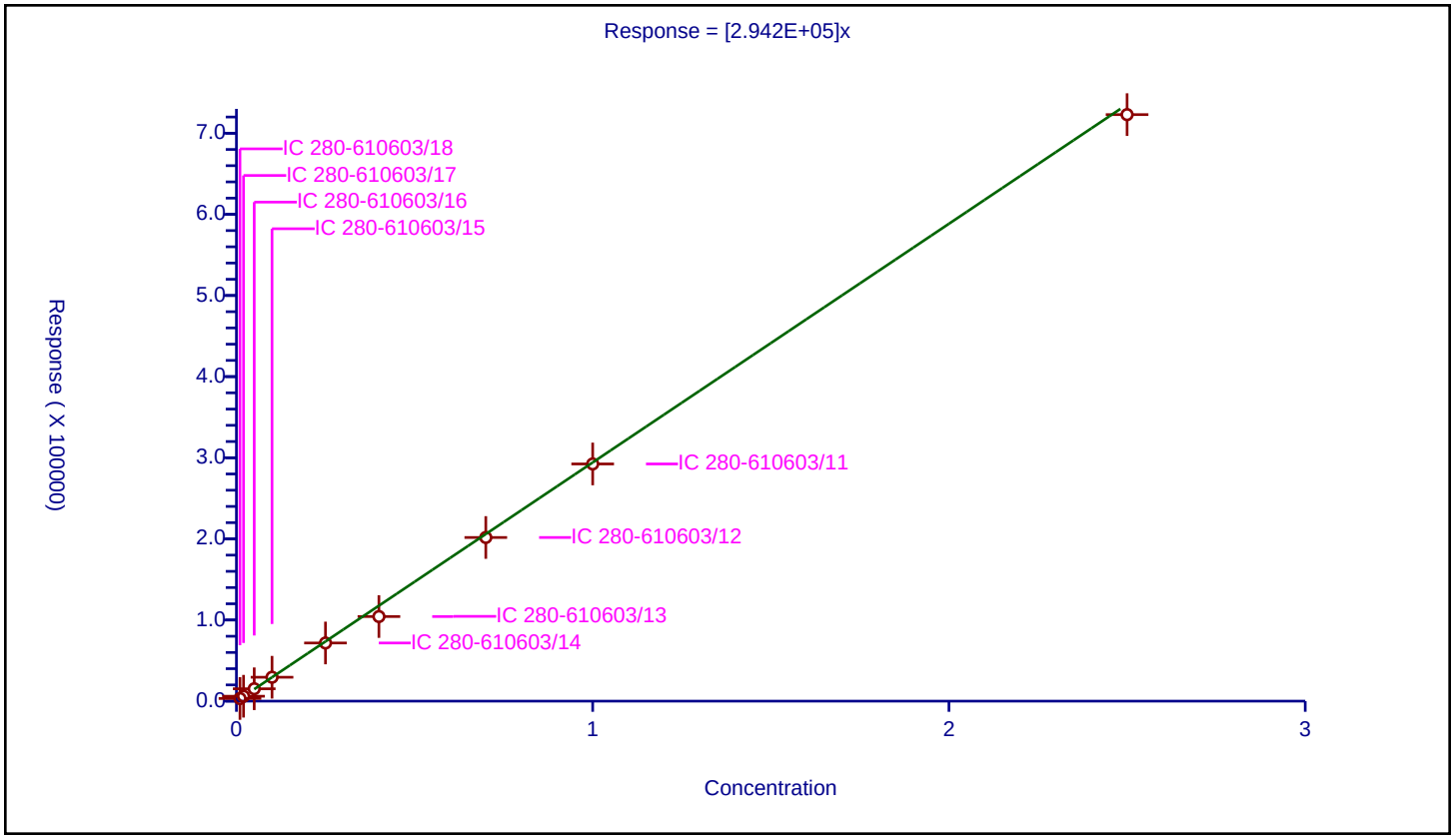
Curve Coefficients

Intercept:	0
Slope:	2.942E+05

Error Coefficients

Standard Error:	6740
Relative Standard Error:	6.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-610603/18	0.01	3275.0			327500.0	Y
2	IC 280-610603/17	0.02	6064.0			303200.0	Y
3	IC 280-610603/16	0.05	15265.0			305300.0	Y
4	IC 280-610603/15	0.1	29472.0			294720.0	Y
5	IC 280-610603/14	0.25	71678.0			286712.0	Y
6	IC 280-610603/13	0.4	104292.0			260730.0	Y
7	IC 280-610603/12	0.7	201729.0			288184.285714	Y
8	IC 280-610603/11	1.0	292369.0			292369.0	Y
9	IC 280-610603/10	2.5	722940.0			289176.0	Y



Calibration / m-Nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

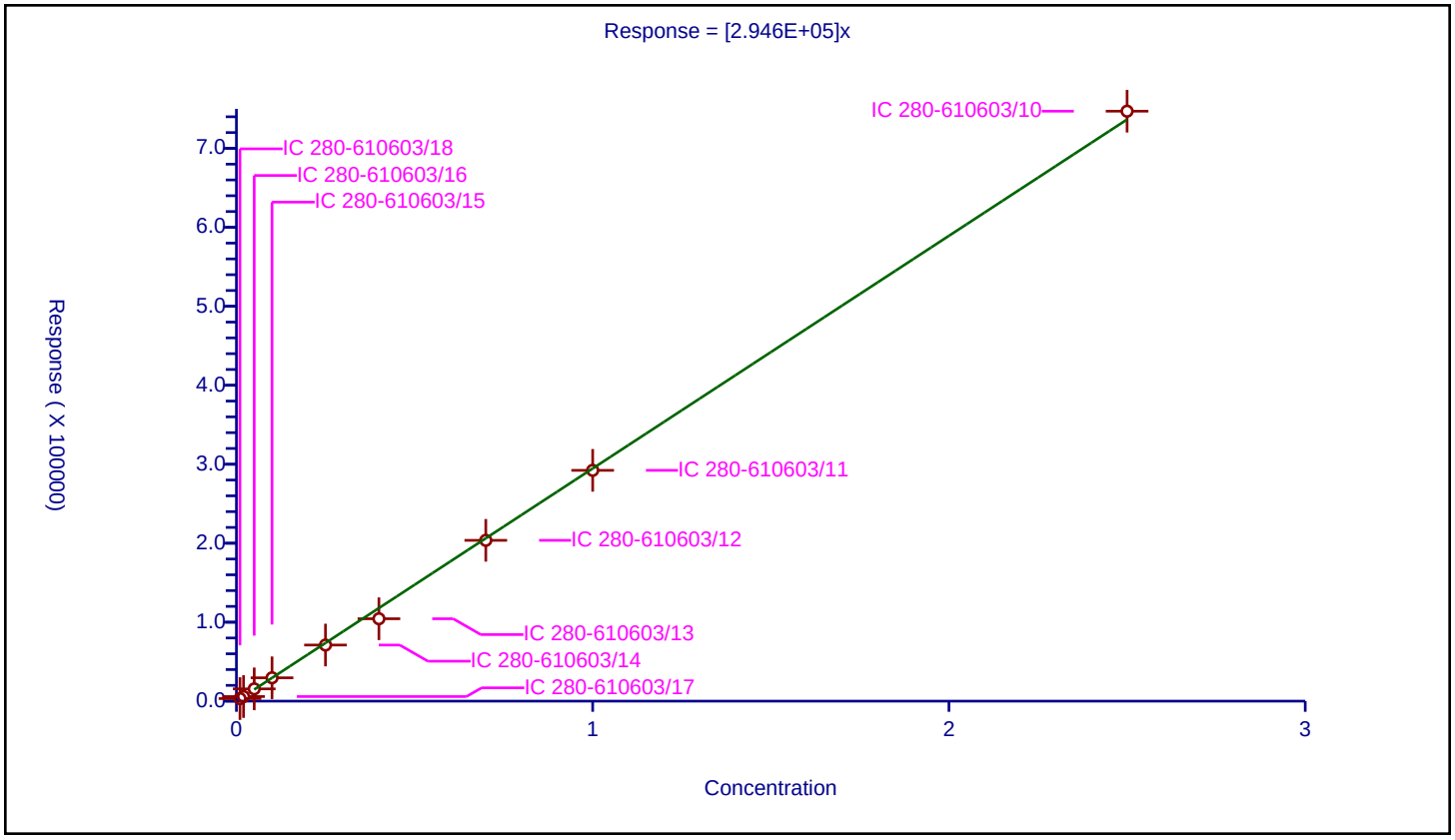
Curve Coefficients

Intercept:	0
Slope:	2.946E+05

Error Coefficients

Standard Error:	6260
Relative Standard Error:	6.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-610603/18	0.01	3269.0			326900.0	Y
2	IC 280-610603/17	0.02	5823.0			291150.0	Y
3	IC 280-610603/16	0.05	15546.0			310920.0	Y
4	IC 280-610603/15	0.1	29569.0			295690.0	Y
5	IC 280-610603/14	0.25	71041.0			284164.0	Y
6	IC 280-610603/13	0.4	104338.0			260845.0	Y
7	IC 280-610603/12	0.7	203644.0			290920.0	Y
8	IC 280-610603/11	1.0	292277.0			292277.0	Y
9	IC 280-610603/10	2.5	747102.0			298840.8	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

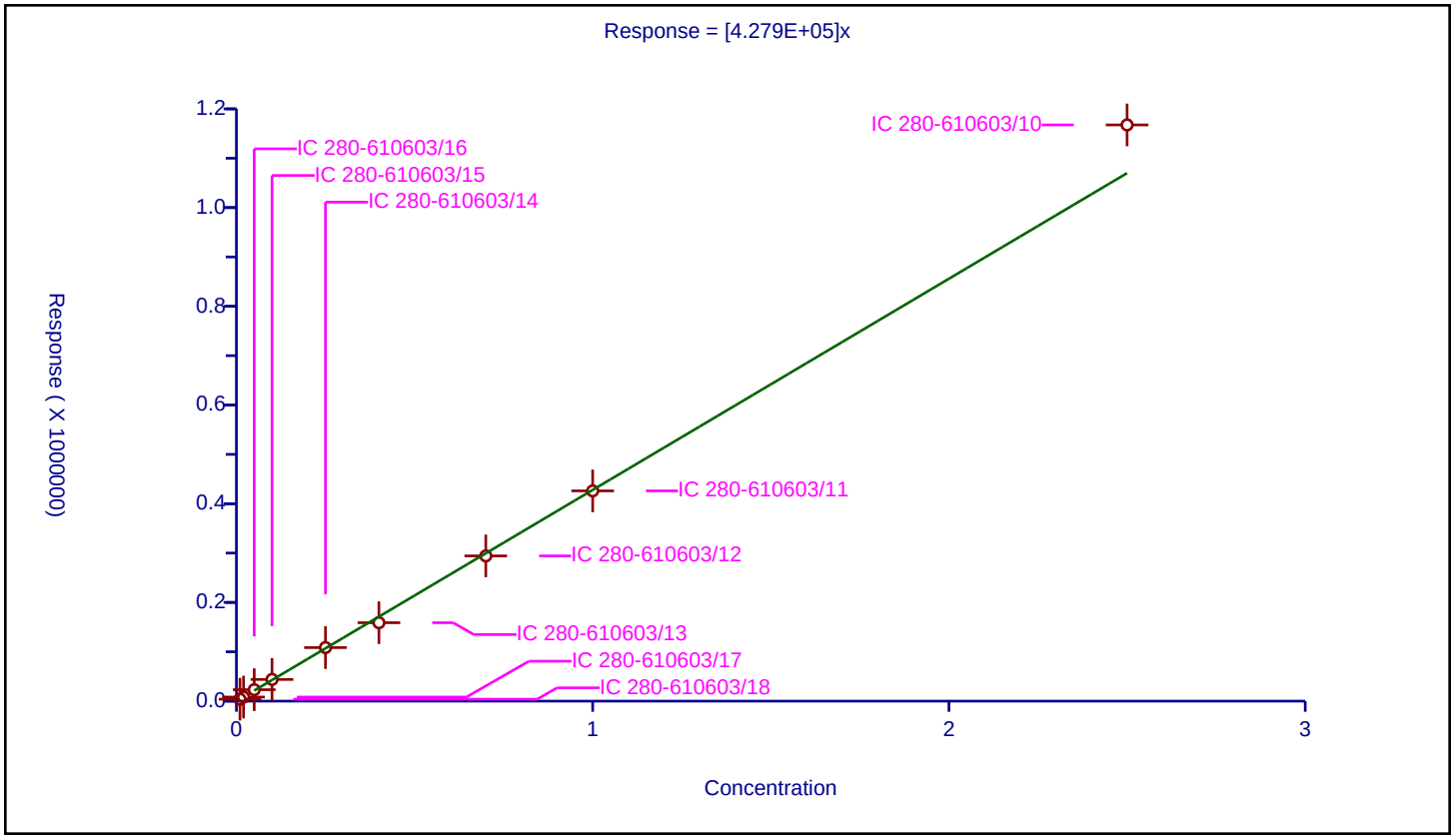
Curve Coefficients

Intercept:	0
Slope:	4.279E+05

Error Coefficients

Standard Error:	34900
Relative Standard Error:	6.1
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-610603/18	0.01	3912.0			391200.0	Y
2	IC 280-610603/17	0.02	8257.0			412850.0	Y
3	IC 280-610603/16	0.05	23162.0			463240.0	Y
4	IC 280-610603/15	0.1	43948.0			439480.0	Y
5	IC 280-610603/14	0.25	108505.0			434020.0	Y
6	IC 280-610603/13	0.4	158919.0			397297.5	Y
7	IC 280-610603/12	0.7	294250.0			420357.142857	Y
8	IC 280-610603/11	1.0	426004.0			426004.0	Y
9	IC 280-610603/10	2.5	1167517.0			467006.8	Y



Calibration / 1,3,5-Trinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

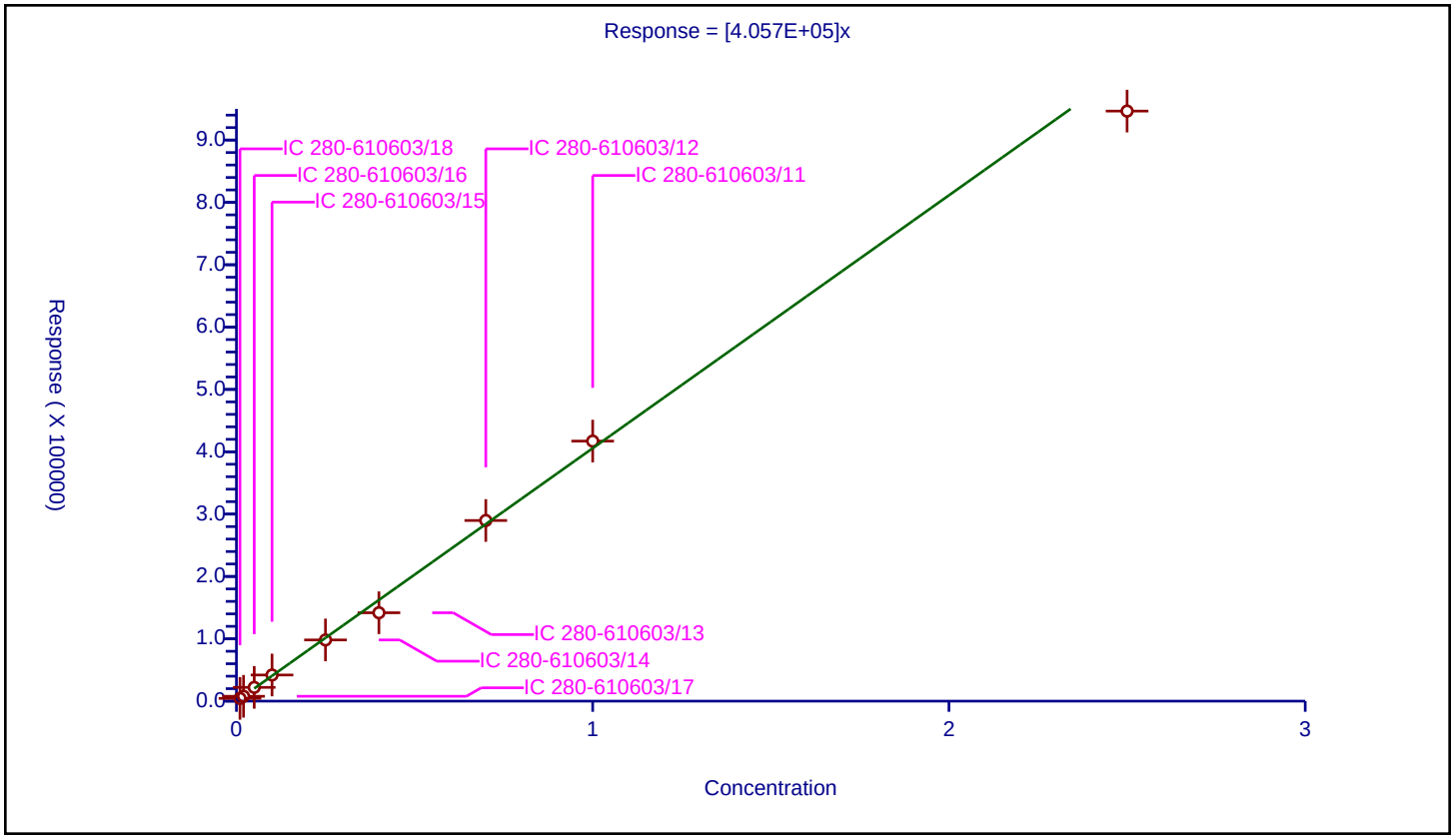
Curve Coefficients

Intercept:	0
Slope:	4.057E+05

Error Coefficients

Standard Error:	25500
Relative Standard Error:	7.2
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-610603/18	0.01	4438.0			443800.0	Y
2	IC 280-610603/17	0.02	7799.0			389950.0	Y
3	IC 280-610603/16	0.05	22059.0			441180.0	Y
4	IC 280-610603/15	0.1	41946.0			419460.0	Y
5	IC 280-610603/14	0.25	98168.0			392672.0	Y
6	IC 280-610603/13	0.4	141795.0			354487.5	Y
7	IC 280-610603/12	0.7	289774.0			413962.857143	Y
8	IC 280-610603/11	1.0	417113.0			417113.0	Y
9	IC 280-610603/10	2.5	946516.0			378606.4	Y



Calibration / 2,6-Dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

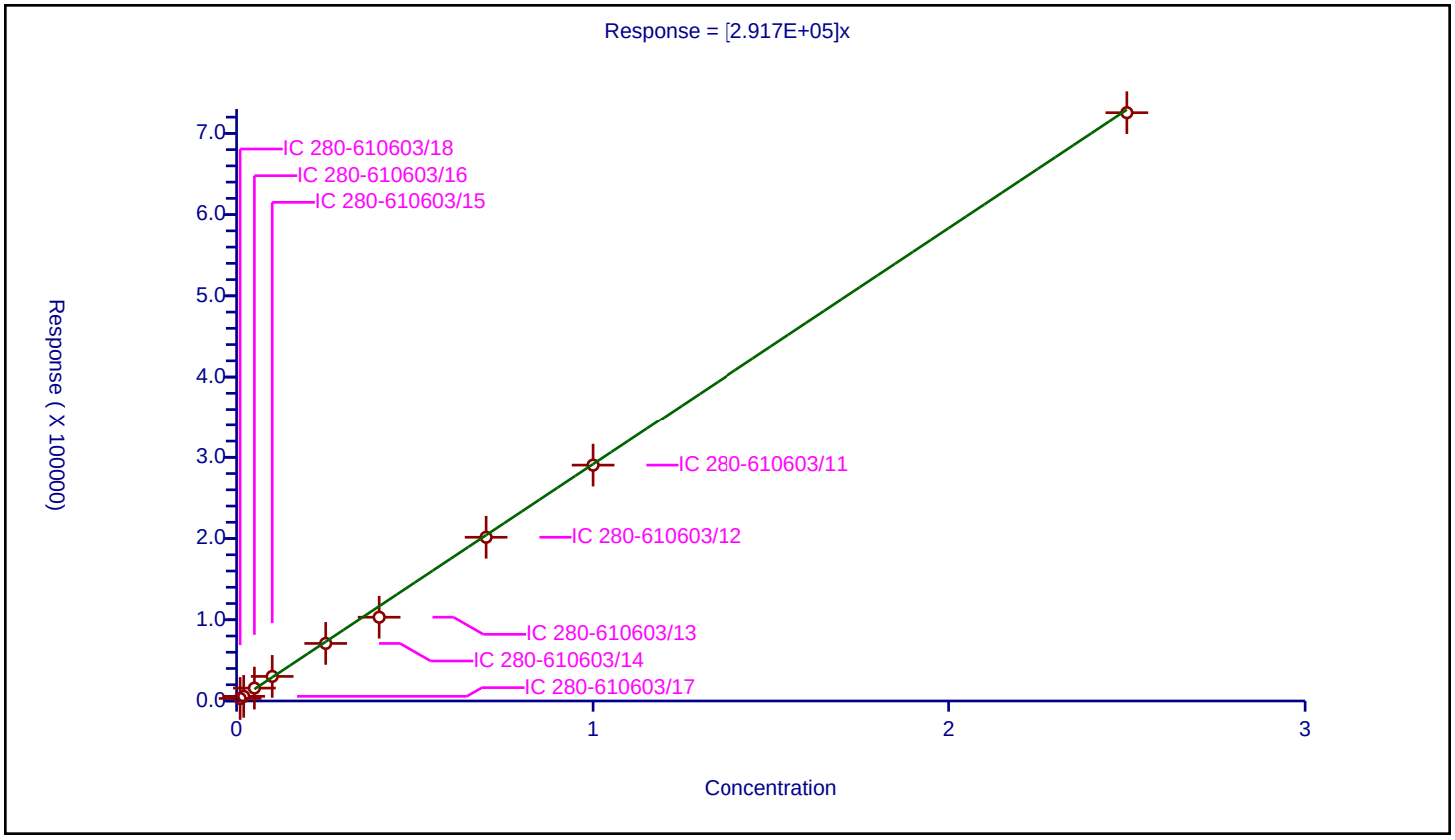
Curve Coefficients

Intercept:	0
Slope:	2.917E+05

Error Coefficients

Standard Error:	5150
Relative Standard Error:	5.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-610603/18	0.01	3093.0			309300.0	Y
2	IC 280-610603/17	0.02	5716.0			285800.0	Y
3	IC 280-610603/16	0.05	15876.0			317520.0	Y
4	IC 280-610603/15	0.1	30260.0			302600.0	Y
5	IC 280-610603/14	0.25	70868.0			283472.0	Y
6	IC 280-610603/13	0.4	103148.0			257870.0	Y
7	IC 280-610603/12	0.7	201554.0			287934.285714	Y
8	IC 280-610603/11	1.0	290390.0			290390.0	Y
9	IC 280-610603/10	2.5	725476.0			290190.4	Y



Calibration / 2,4-Dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

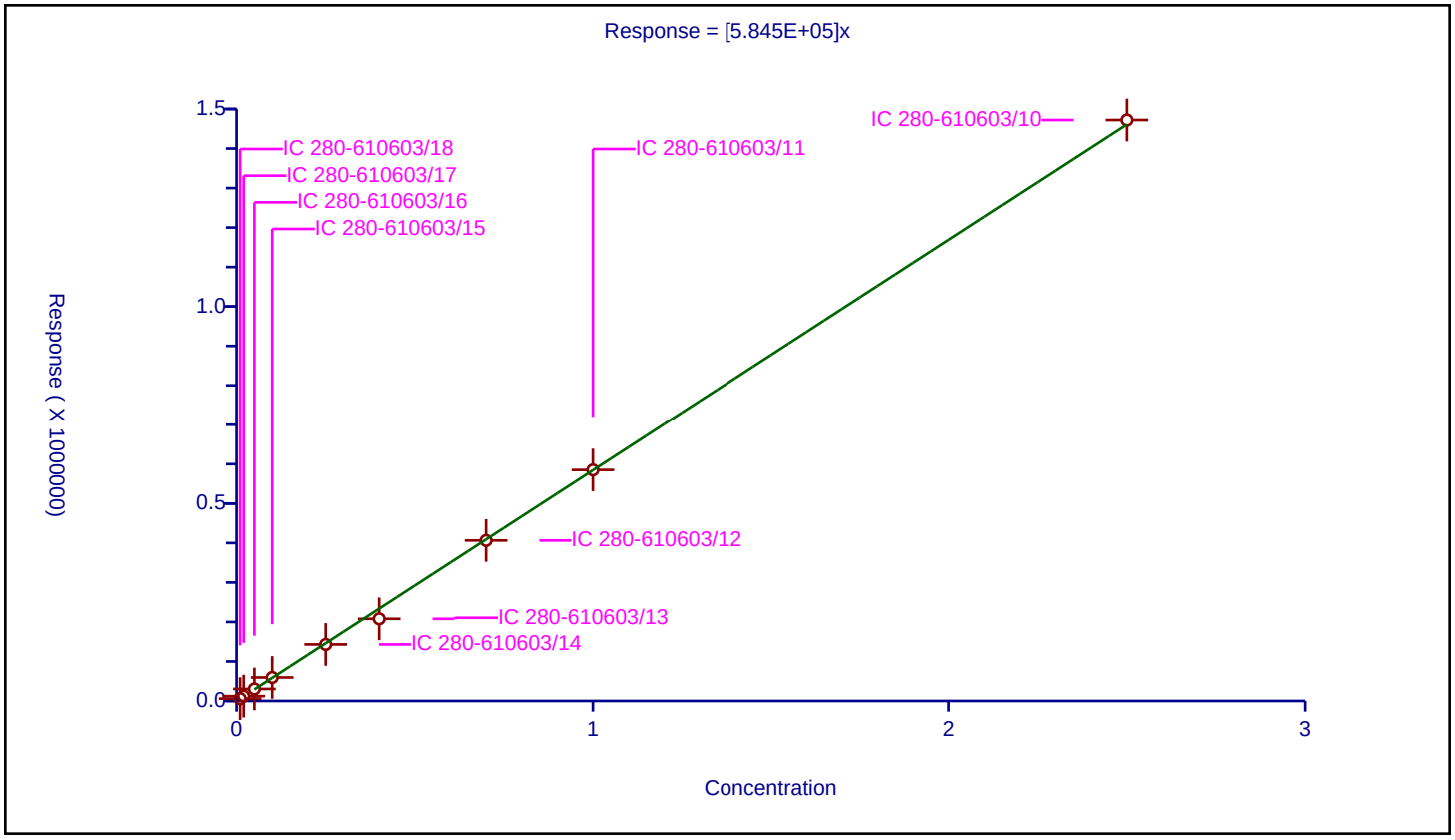
Curve Coefficients

Intercept:	0
Slope:	5.845E+05

Error Coefficients

Standard Error:	10100
Relative Standard Error:	4.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-610603/18	0.01	5987.0			598700.0	Y
2	IC 280-610603/17	0.02	12241.0			612050.0	Y
3	IC 280-610603/16	0.05	30407.0			608140.0	Y
4	IC 280-610603/15	0.1	59433.0			594330.0	Y
5	IC 280-610603/14	0.25	143098.0			572392.0	Y
6	IC 280-610603/13	0.4	207937.0			519842.5	Y
7	IC 280-610603/12	0.7	406447.0			580638.571429	Y
8	IC 280-610603/11	1.0	585209.0			585209.0	Y
9	IC 280-610603/10	2.5	1472164.0			588865.6	Y



Calibration / Tetryl

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

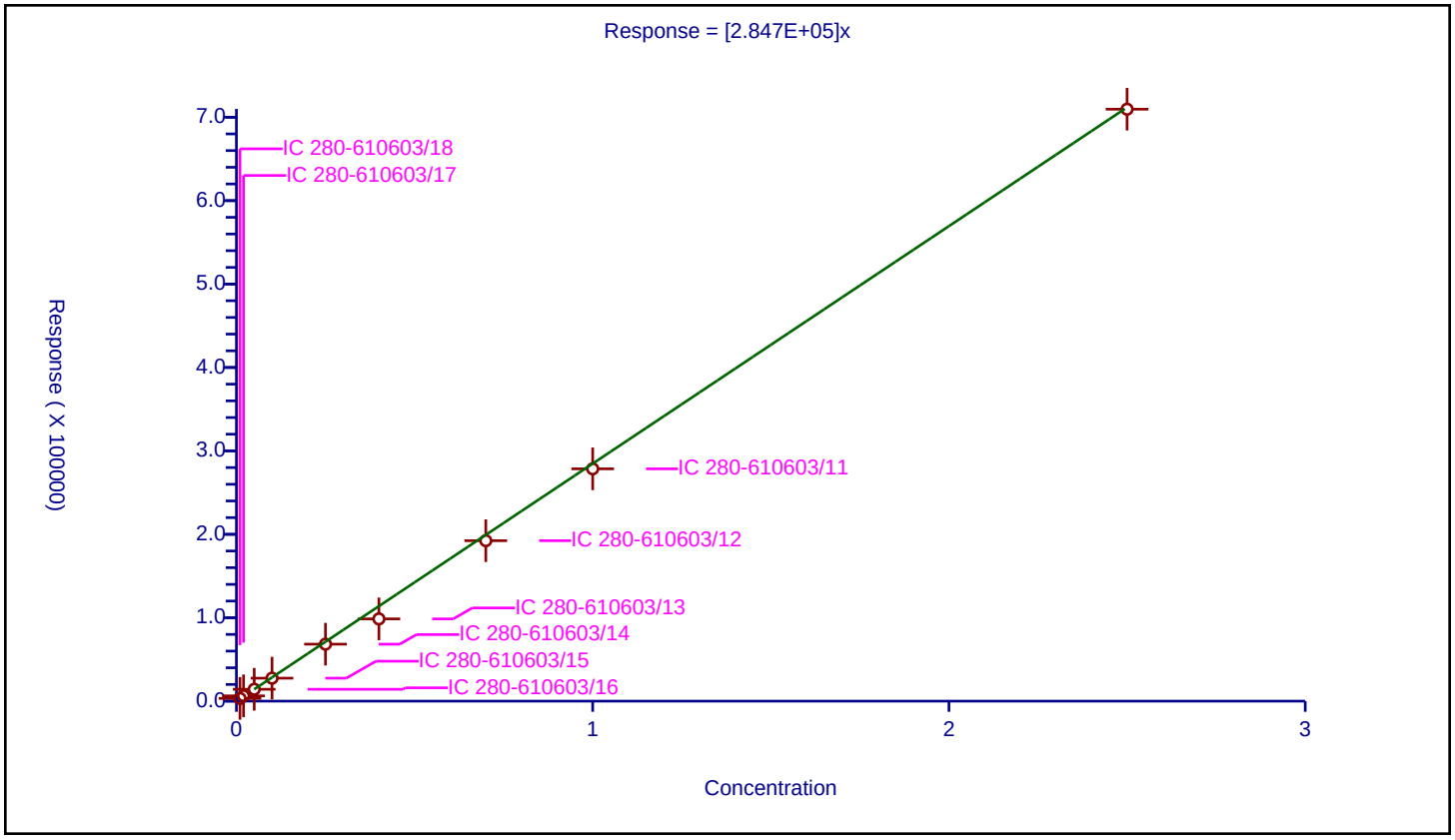
Curve Coefficients

Intercept:	0
Slope:	2.847E+05

Error Coefficients

Standard Error:	6470
Relative Standard Error:	8.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-610603/18	0.01	3282.0			328200.0	Y
2	IC 280-610603/17	0.02	6348.0			317400.0	Y
3	IC 280-610603/16	0.05	14233.0			284660.0	Y
4	IC 280-610603/15	0.1	27534.0			275340.0	Y
5	IC 280-610603/14	0.25	68327.0			273308.0	Y
6	IC 280-610603/13	0.4	98615.0			246537.5	Y
7	IC 280-610603/12	0.7	192352.0			274788.571429	Y
8	IC 280-610603/11	1.0	278494.0			278494.0	Y
9	IC 280-610603/10	2.5	709626.0			283850.4	Y



Calibration / 2,4,6-Trinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

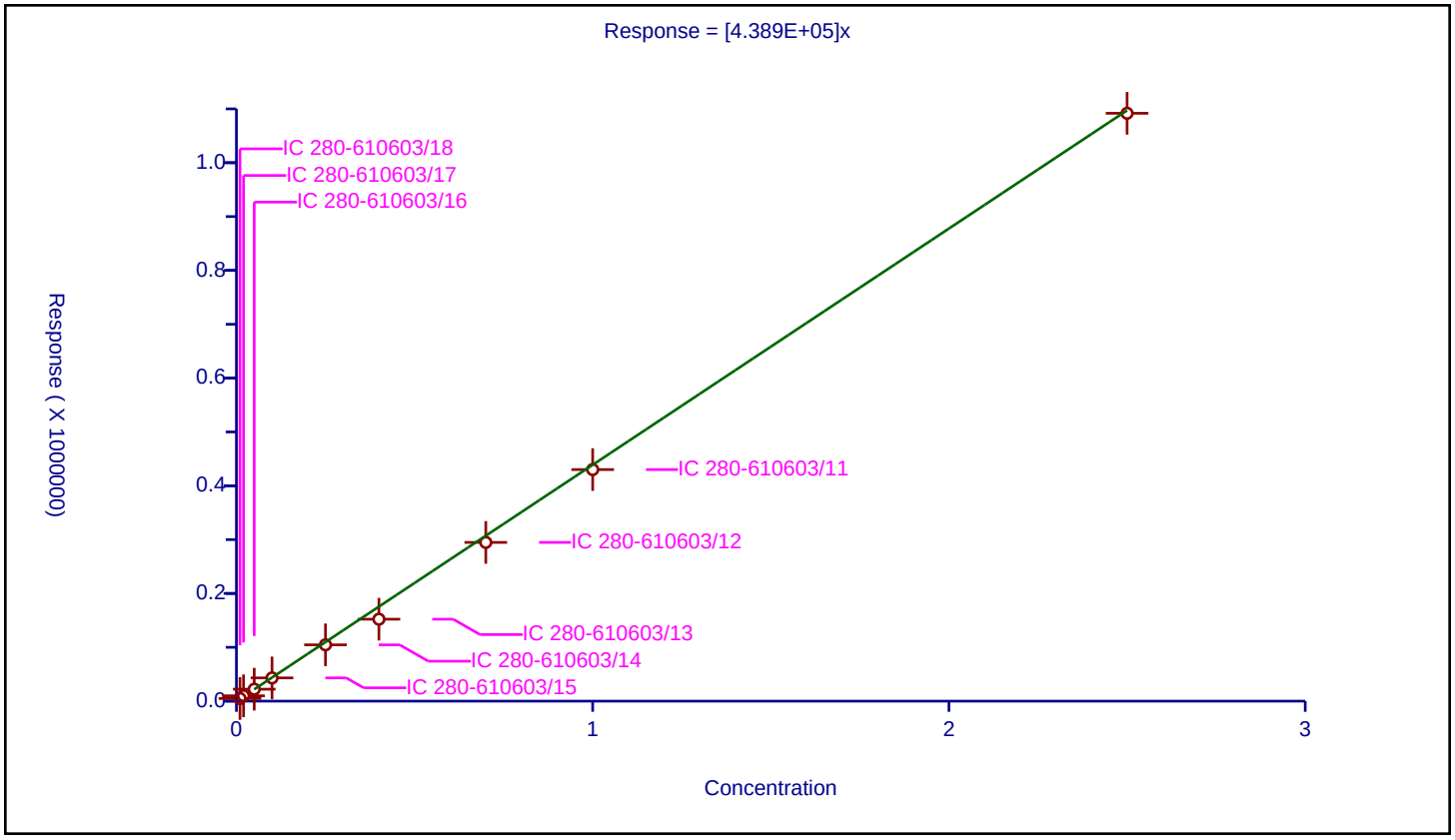
Curve Coefficients

Intercept:	0
Slope:	4.389E+05

Error Coefficients

Standard Error:	10200
Relative Standard Error:	8.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-610603/18	0.01	4919.0			491900.0	Y
2	IC 280-610603/17	0.02	9925.0			496250.0	Y
3	IC 280-610603/16	0.05	22184.0			443680.0	Y
4	IC 280-610603/15	0.1	43136.0			431360.0	Y
5	IC 280-610603/14	0.25	104561.0			418244.0	Y
6	IC 280-610603/13	0.4	152188.0			380470.0	Y
7	IC 280-610603/12	0.7	294801.0			421144.285714	Y
8	IC 280-610603/11	1.0	430103.0			430103.0	Y
9	IC 280-610603/10	2.5	1091822.0			436728.8	Y



Calibration / PETN

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

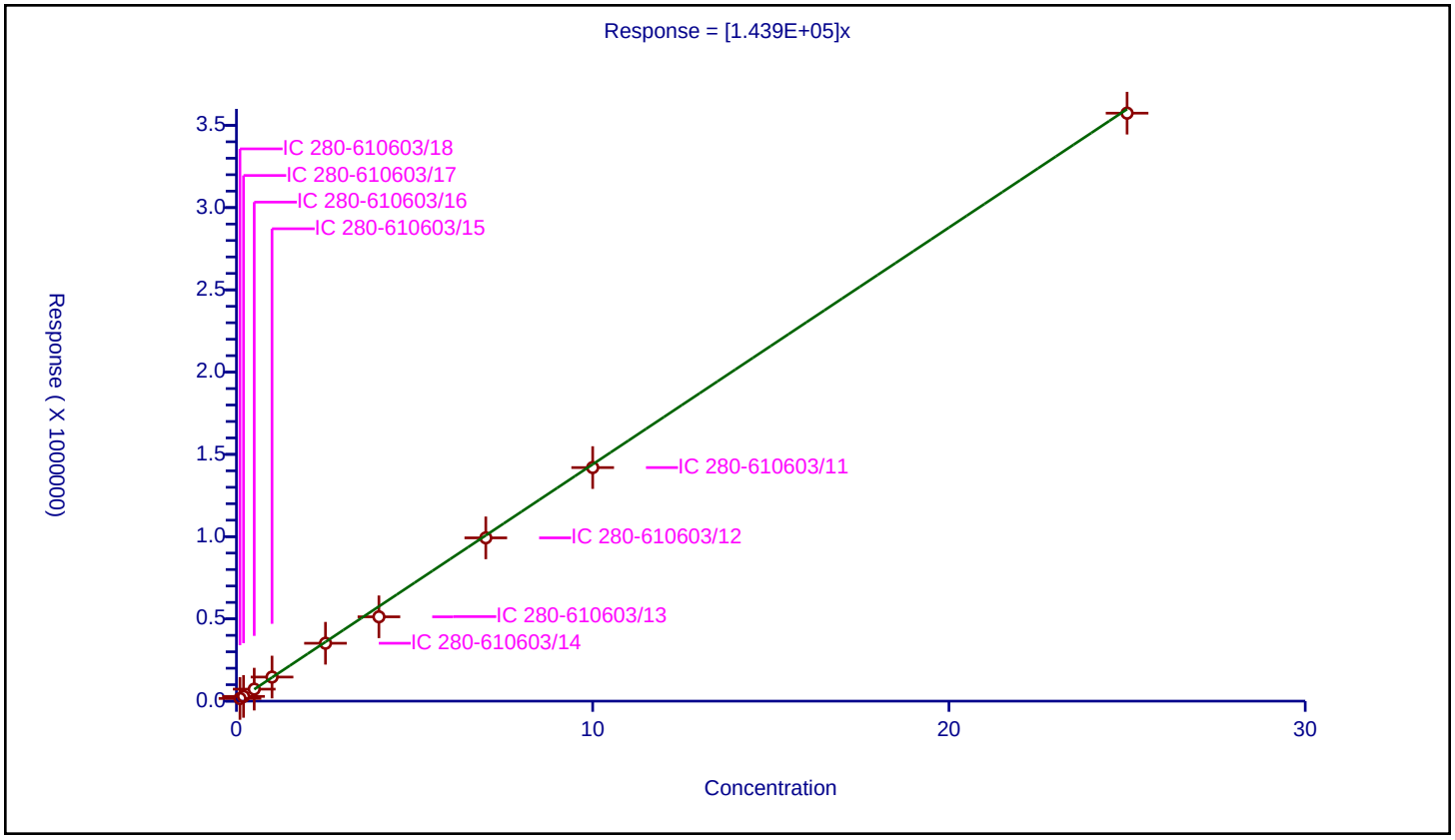
Curve Coefficients

Intercept:	0
Slope:	1.439E+05

Error Coefficients

Standard Error:	25700
Relative Standard Error:	6.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-610603/18	0.1	16344.0			163440.0	Y
2	IC 280-610603/17	0.2	28805.0			144025.0	Y
3	IC 280-610603/16	0.5	72943.0			145886.0	Y
4	IC 280-610603/15	1.0	146450.0			146450.0	Y
5	IC 280-610603/14	2.5	351913.0			140765.2	Y
6	IC 280-610603/13	4.0	512590.0			128147.5	Y
7	IC 280-610603/12	7.0	992519.0			141788.428571	Y
8	IC 280-610603/11	10.0	1419730.0			141973.0	Y
9	IC 280-610603/10	25.0	3574120.0			142964.8	Y



FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176134-1 Analy Batch No.: 610603

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/29/2023 00:13 Calibration End Date: 04/29/2023 04:18 Calibration ID: 79726

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-610603/27	04280027.D
Level 2	IC 280-610603/26	04280026.D
Level 3	IC 280-610603/25	04280025.D
Level 4	IC 280-610603/24	04280024.D
Level 5	IC 280-610603/23	04280023.D
Level 6	IC 280-610603/22	04280022.D
Level 7	IC 280-610603/21	04280021.D
Level 8	IC 280-610603/20	04280020.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
2,6-diamino-4-nitrotoluene	+++++	+++++	4.112	4.109	4.113	4.111	4.105	4.080			3.963 - 4.263	4.105
2,4-diamino-6-nitrotoluene	+++++	+++++	4.652	4.643	4.653	4.651	4.638	4.620			4.503 - 4.803	4.643

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

Lab Name: Eurofins Denver Job No.: 280-176134-1 Analy Batch No.: 610603

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/29/2023 00:13 Calibration End Date: 04/29/2023 04:18 Calibration ID: 79726

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-610603/27	04280027.D
Level 2	IC 280-610603/26	04280026.D
Level 3	IC 280-610603/25	04280025.D
Level 4	IC 280-610603/24	04280024.D
Level 5	IC 280-610603/23	04280023.D
Level 6	IC 280-610603/22	04280022.D
Level 7	IC 280-610603/21	04280021.D
Level 8	IC 280-610603/20	04280020.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 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
2,6-diamino-4-nitrotoluene	+++++ 404133	+++++ 405346	414510 402965	401736 391111	Ave		403300.002				1.9		20.0			
2,4-diamino-6-nitrotoluene	+++++ 219290	+++++ 221550	230940 222678	231676 225549	Ave		225280.533				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
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver Job No.: 280-176134-1 Analy Batch No.: 610603

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/29/2023 00:13 Calibration End Date: 04/29/2023 04:18 Calibration ID: 79726

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-610603/27	04280027.D
Level 2	IC 280-610603/26	04280026.D
Level 3	IC 280-610603/25	04280025.D
Level 4	IC 280-610603/24	04280024.D
Level 5	IC 280-610603/23	04280023.D
Level 6	IC 280-610603/22	04280022.D
Level 7	IC 280-610603/21	04280021.D
Level 8	IC 280-610603/20	04280020.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
2,6-diamino-4-nitrotoluene	Ave	+++++ 283742	+++++ 402965	41451 977777	100434	161653	+++++ 0.700	+++++ 1.00	0.100 2.50	0.250	0.400
2,4-diamino-6-nitrotoluene	Ave	+++++ 155085	+++++ 222678	23094 563873	57919	87716	+++++ 0.700	+++++ 1.00	0.100 2.50	0.250	0.400

Curve Type Legend
Ave = Average

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280020.D				
Lims ID:	IC ADD 8				
Client ID:					
Sample Type:	IC	Calib Level:	8		
Inject. Date:	29-Apr-2023 00:13:27	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC ADD 8				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X5		
Sublist:	chrom-8330_X5_Luna*sub10				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	29-Apr-2023 13:04:21	Calib Date:	29-Apr-2023 04:18:01		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1621				
First Level Reviewer: LV5D		Date:	29-Apr-2023 10:25:00		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.080	4.113	-0.033	977777	2.50	2.42	
2 2,4-diamino-6-nitrotoluene	1	4.620	4.653	-0.033	563873	2.50	2.50	

QC Flag Legend

Processing Flags

Reagents:

8330_ADDs_00036 Amount Added: 125.00 Units: uL

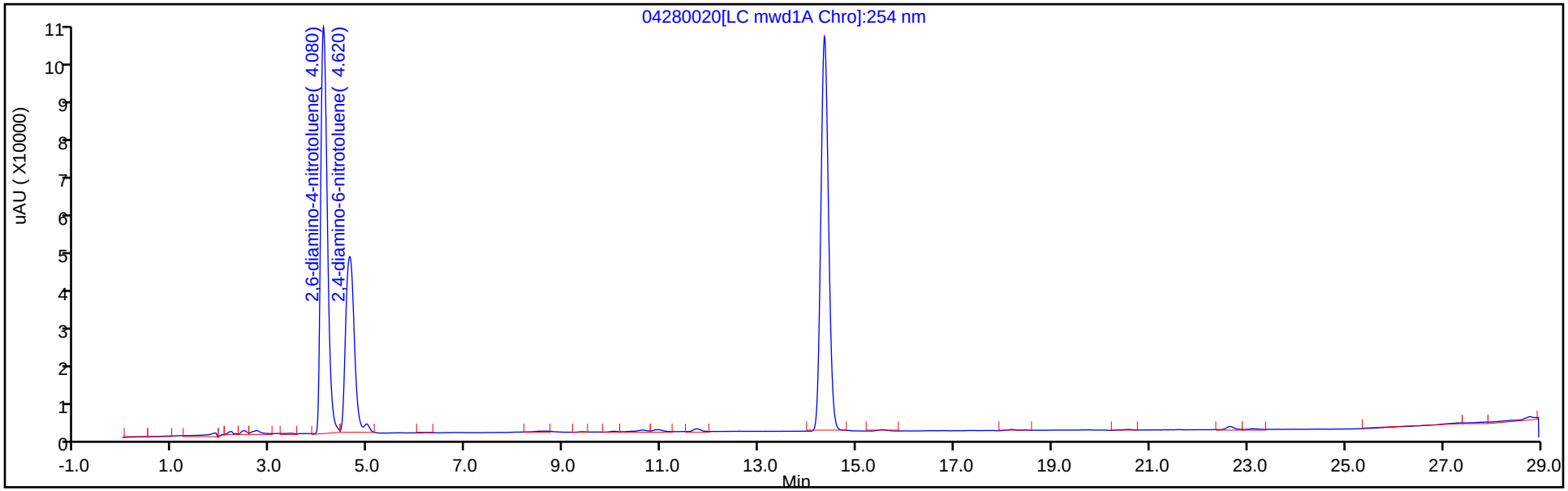
Report Date: 29-Apr-2023 13:04:21 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

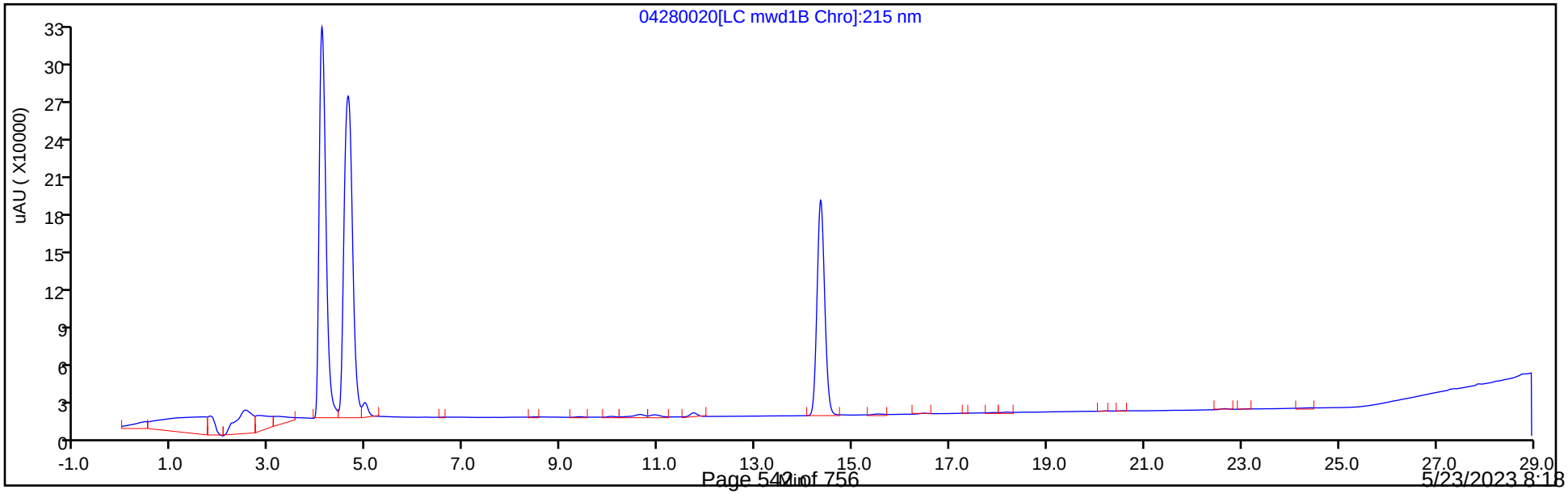
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280020.D

Injection Date:	29-Apr-2023 00:13:27	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	IC ADD 8			Worklist Smp#:	20
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280021.D				
Lims ID:	IC ADD 7				
Client ID:					
Sample Type:	IC	Calib Level:	7		
Inject. Date:	29-Apr-2023 00:48:26	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC ADD 7				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X5		
Sublist:	chrom-8330_X5_Luna*sub10				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	29-Apr-2023 13:04:21	Calib Date:	29-Apr-2023 04:18:01		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1621				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.105	4.113	-0.008	402965	1.00	1.00	
2 2,4-diamino-6-nitrotoluene	1	4.638	4.653	-0.015	222678	1.00	0.9884	

Reagents:

8330_ADDs_00036 Amount Added: 50.00 Units: uL

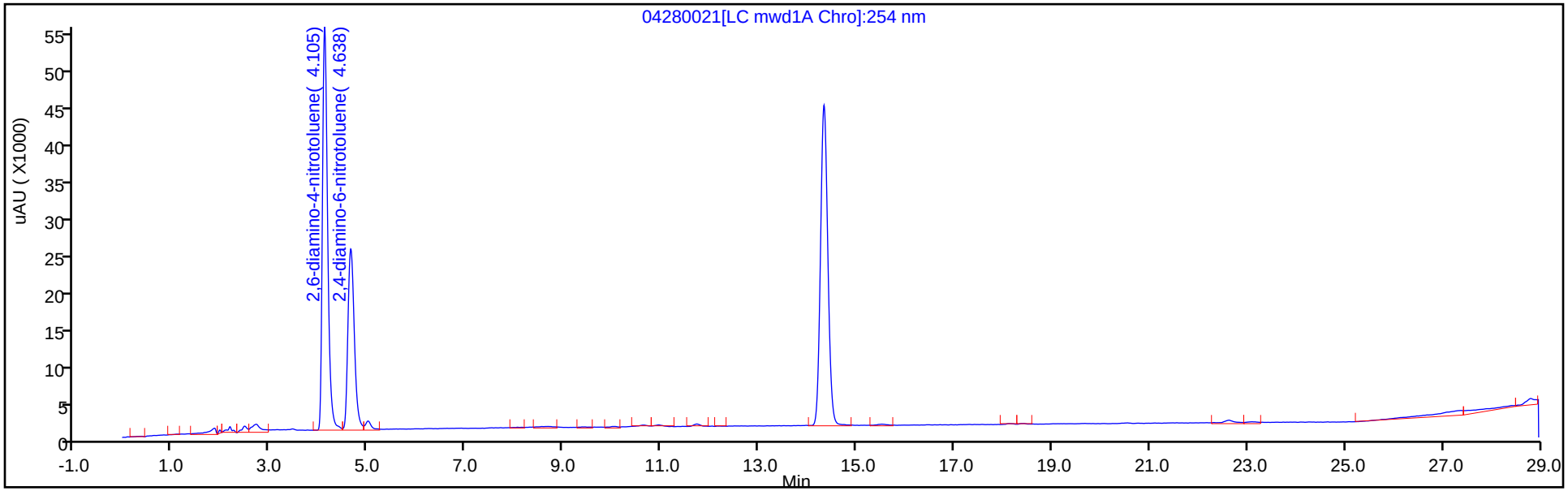
Report Date: 29-Apr-2023 13:04:21 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

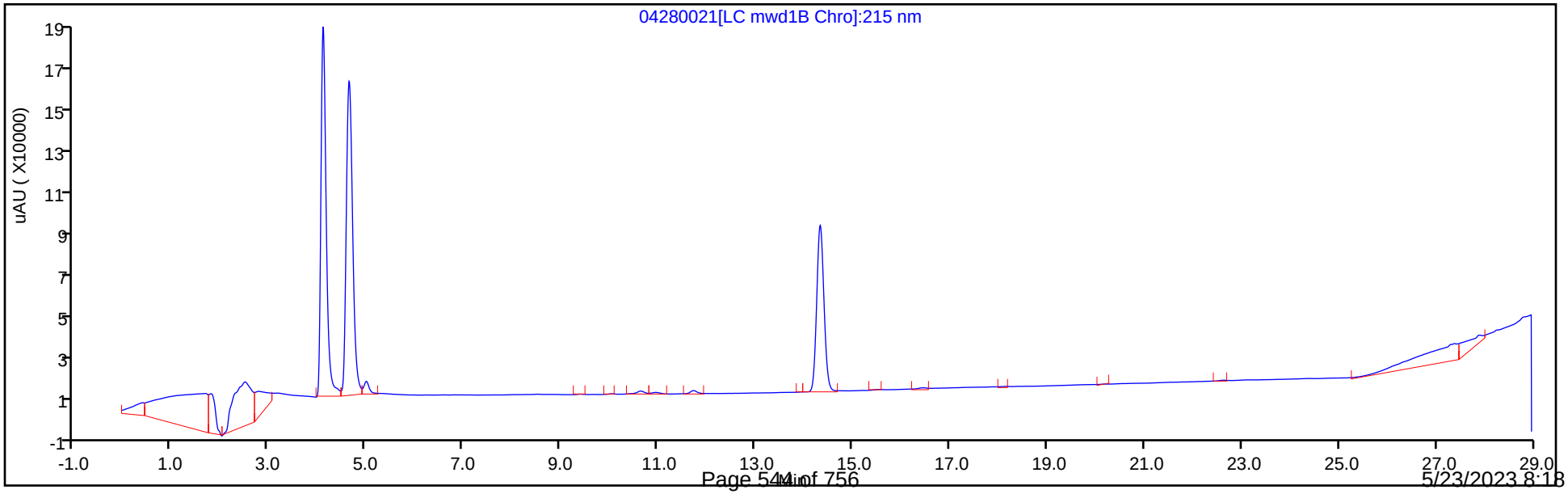
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280021.D

Injection Date:	29-Apr-2023 00:48:26	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	IC ADD 7			Worklist Smp#:	21
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280022.D
Lims ID: IC ADD 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 29-Apr-2023 01:23:20 ALS Bottle#: 22 Worklist Smp#: 22
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC ADD 6
Operator ID: JZ/JG Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub10

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 29-Apr-2023 13:04:22 Calib Date: 29-Apr-2023 04:18:01
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1621

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.111	4.113	-0.002	283742	0.7000	0.7036	
2 2,4-diamino-6-nitrotoluene	1	4.651	4.653	-0.002	155085	0.7000	0.6884	

Reagents:

8330_ADDs_00036 Amount Added: 35.00 Units: uL

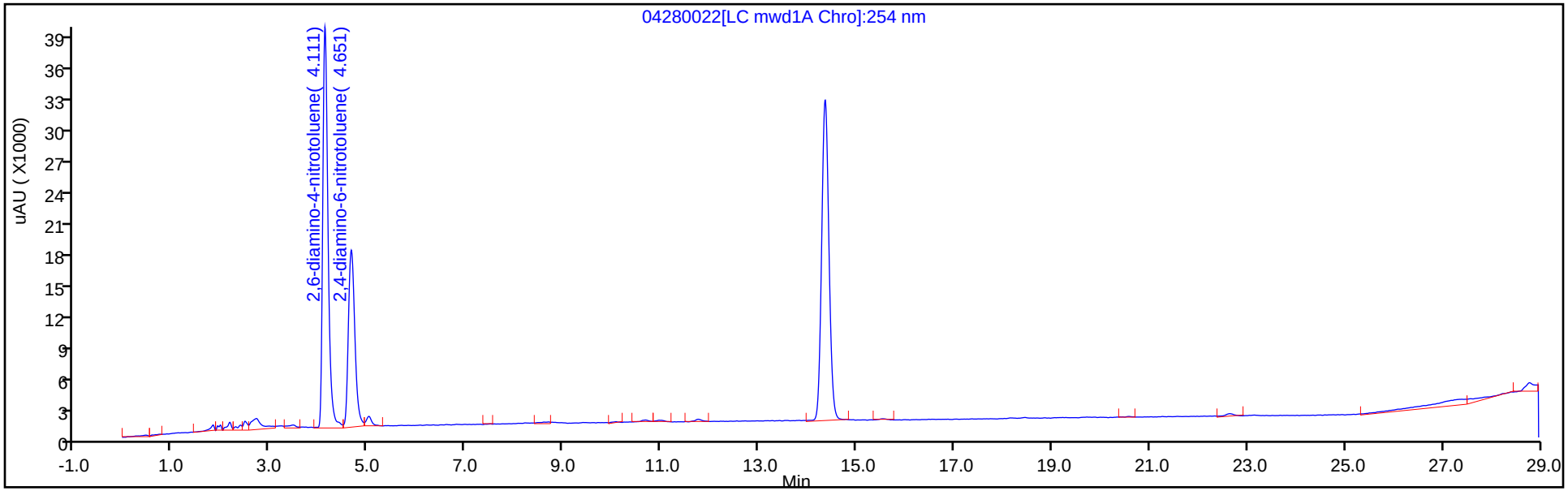
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Eurofins Denver

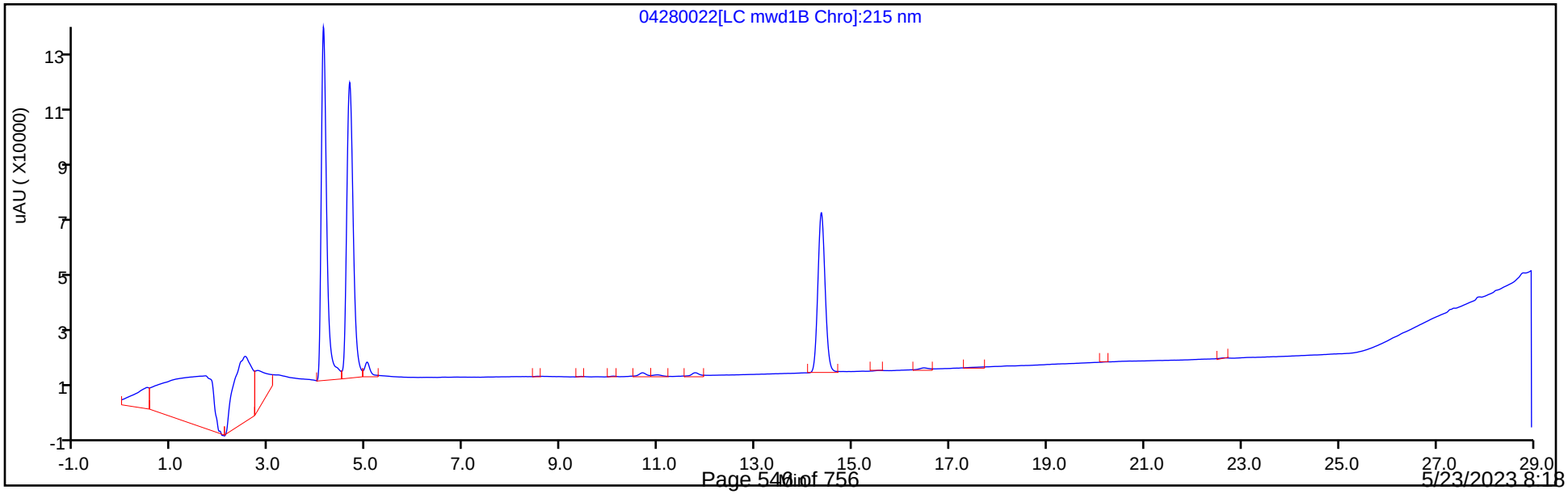
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280022.D

Injection Date:	29-Apr-2023 01:23:20	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	IC ADD 6			Worklist Smp#:	22
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280023.D				
Lims ID:	IC ADD 5				
Client ID:					
Sample Type:	IC	Calib Level:	5		
Inject. Date:	29-Apr-2023 01:58:17	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC ADD 5				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X5		
Sublist:	chrom-8330_X5_Luna*sub10				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	29-Apr-2023 13:04:22	Calib Date:	29-Apr-2023 04:18:01		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1621				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.113	4.113	0.000	161653	0.4000	0.4008	
2 2,4-diamino-6-nitrotoluene	1	4.653	4.653	0.000	87716	0.4000	0.3894	

Reagents:

8330_ADDs_00036 Amount Added: 20.00 Units: uL

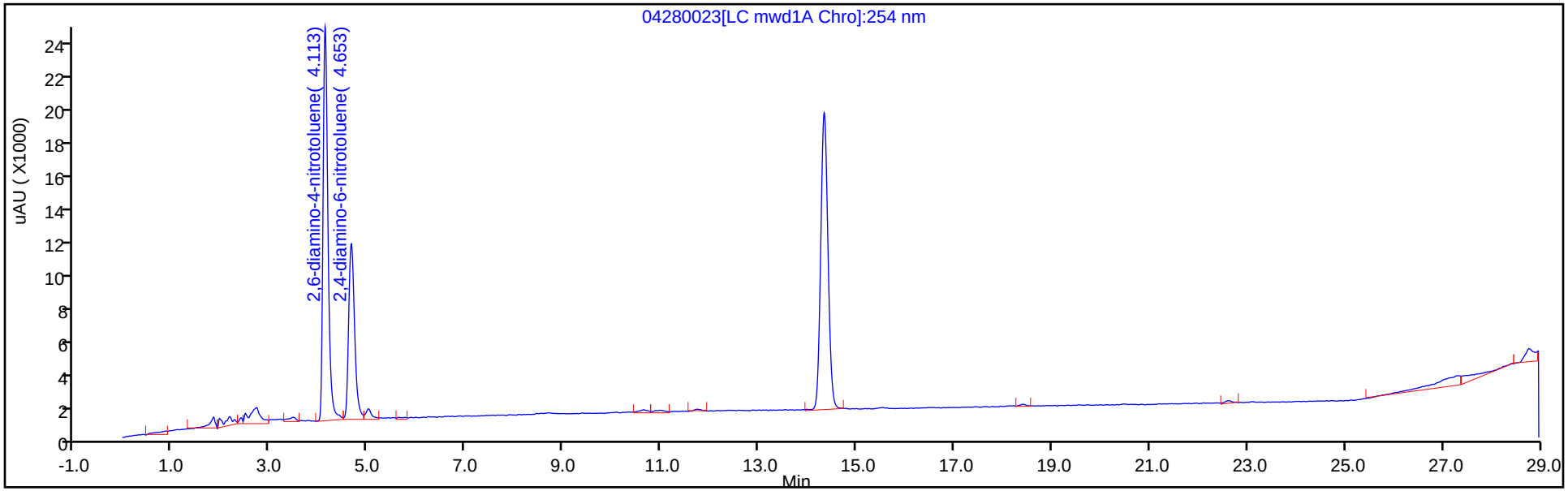
Report Date: 29-Apr-2023 13:04:22 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

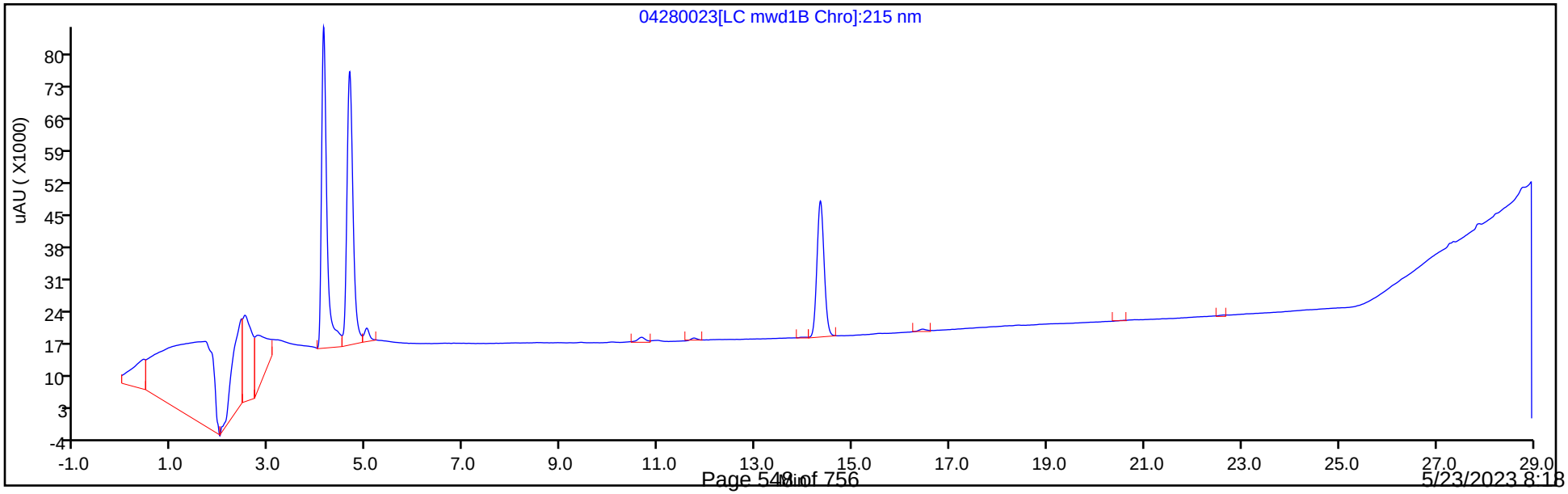
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280023.D

Injection Date:	29-Apr-2023 01:58:17	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	IC ADD 5			Worklist Smp#:	23
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280024.D				
Lims ID:	IC ADD 4				
Client ID:					
Sample Type:	IC	Calib Level:	4		
Inject. Date:	29-Apr-2023 02:33:12	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC ADD 4				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X5		
Sublist:	chrom-8330_X5_Luna*sub10				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	29-Apr-2023 13:04:22	Calib Date:	29-Apr-2023 04:18:01		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1621				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.109	4.113	-0.004	100434	0.2500	0.2490	
2 2,4-diamino-6-nitrotoluene	1	4.643	4.653	-0.010	57919	0.2500	0.2571	

Reagents:

8330_ADDs_00036 Amount Added: 12.50 Units: uL

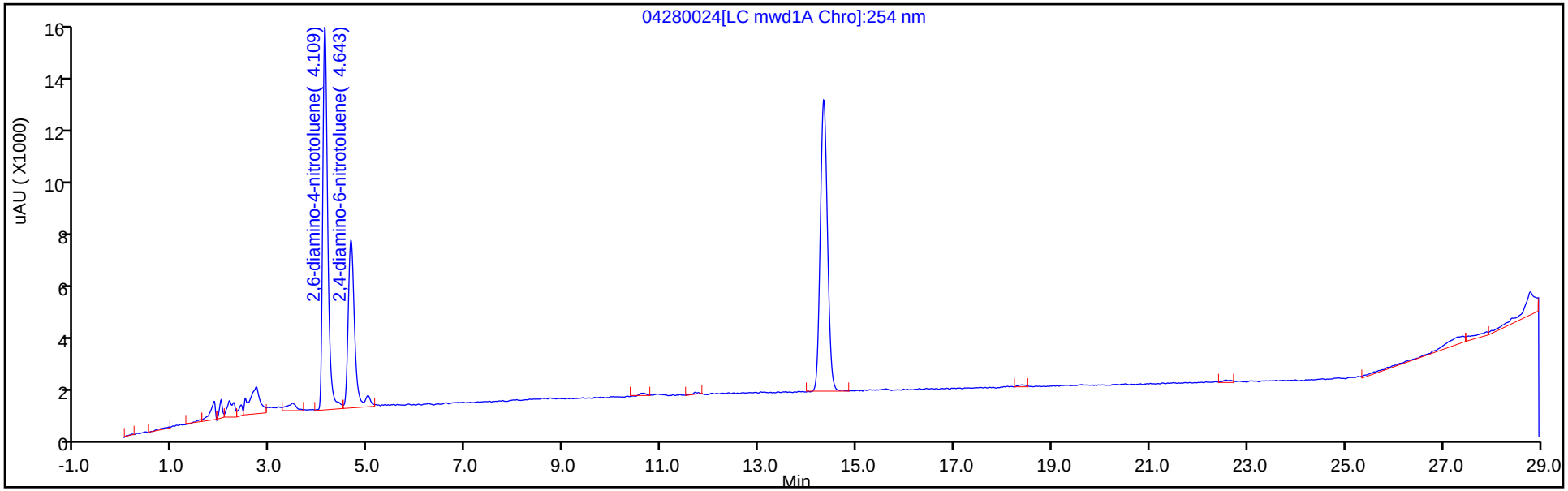
Report Date: 29-Apr-2023 13:04:22 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

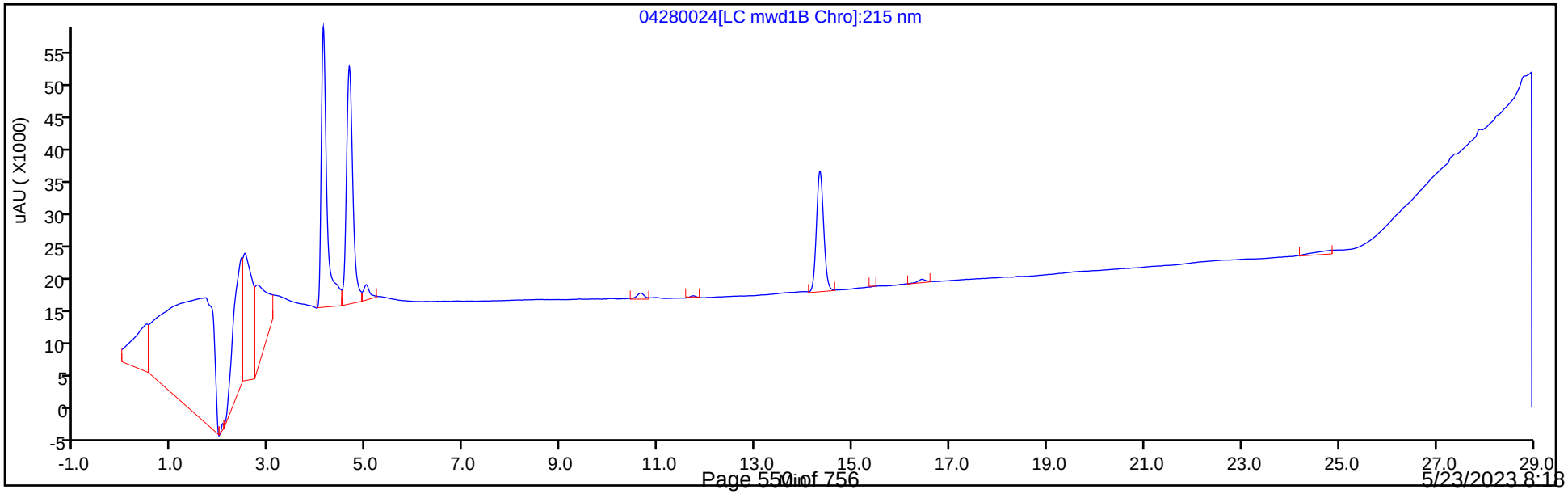
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280024.D

Injection Date:	29-Apr-2023 02:33:12	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	IC ADD 4			Worklist Smp#:	24
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280025.D				
Lims ID:	IC ADD 3				
Client ID:					
Sample Type:	IC	Calib Level:	3		
Inject. Date:	29-Apr-2023 03:08:08	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC ADD 3				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X5		
Sublist:	chrom-8330_X5_Luna*sub10				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	29-Apr-2023 13:04:23	Calib Date:	29-Apr-2023 04:18:01		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1621				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.112	4.113	-0.001	41451	0.1000	0.1028	
2 2,4-diamino-6-nitrotoluene	1	4.652	4.653	-0.001	23094	0.1000	0.1025	

Reagents:

8330_ADDs_00036 Amount Added: 5.00 Units: uL

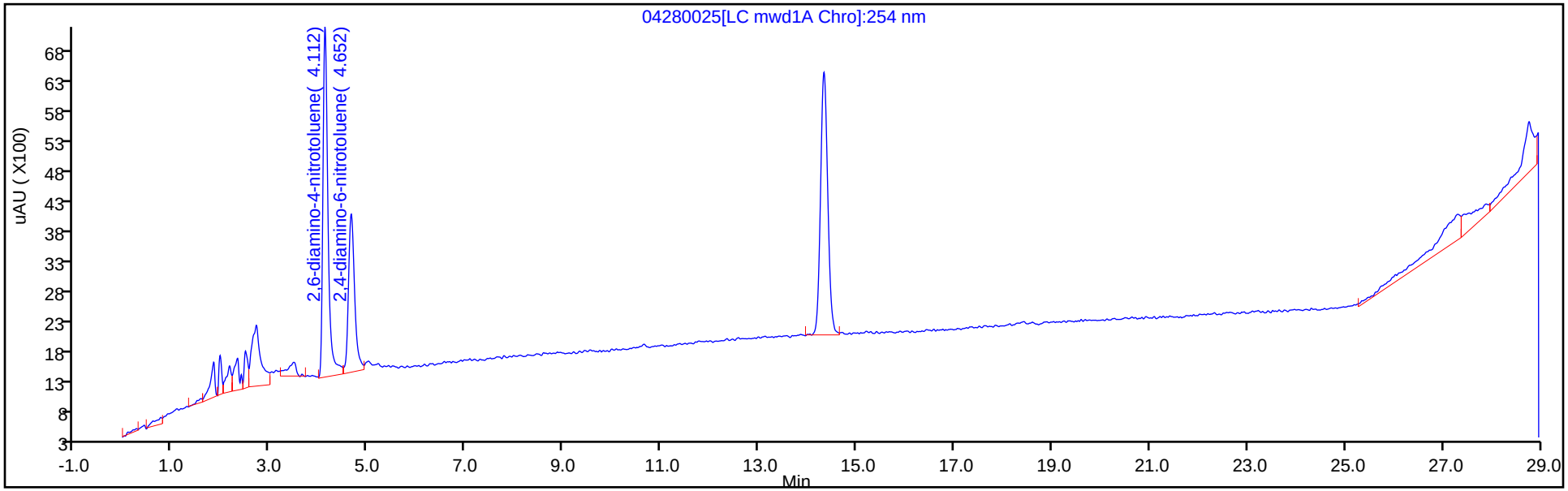
Report Date: 29-Apr-2023 13:04:23 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

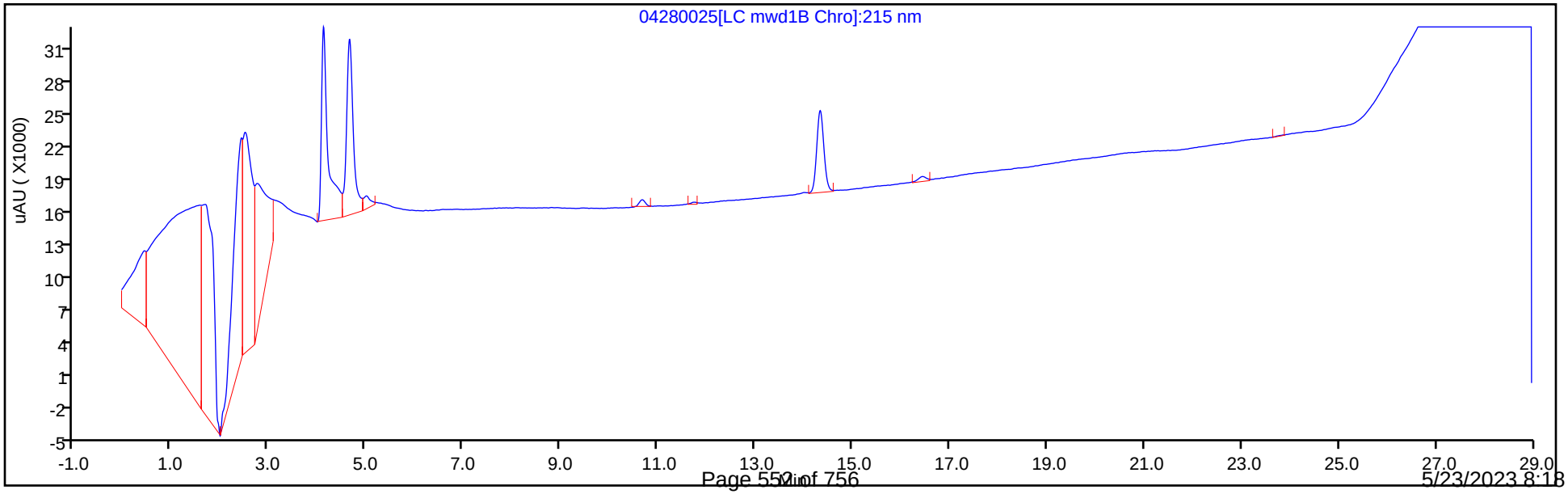
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Injection Date:	29-Apr-2023 03:08:08	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	IC ADD 3			Worklist Smp#:	25
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280026.D				
Lims ID:	IC ADD 2				
Client ID:					
Sample Type:	IC	Calib Level:	2		
Inject. Date:	29-Apr-2023 03:43:02	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC ADD 2				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X5		
Sublist:	chrom-8330_X5_Luna*sub10				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	29-Apr-2023 13:04:23	Calib Date:	29-Apr-2023 04:18:01		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1621				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.113	4.113	0.000	21691	0.0400	0.0538	
2 2,4-diamino-6-nitrotoluene	1	4.653	4.653	0.000	12626	0.0400	0.0560	

Reagents:

8330_ADDs_00036 Amount Added: 2.00 Units: uL

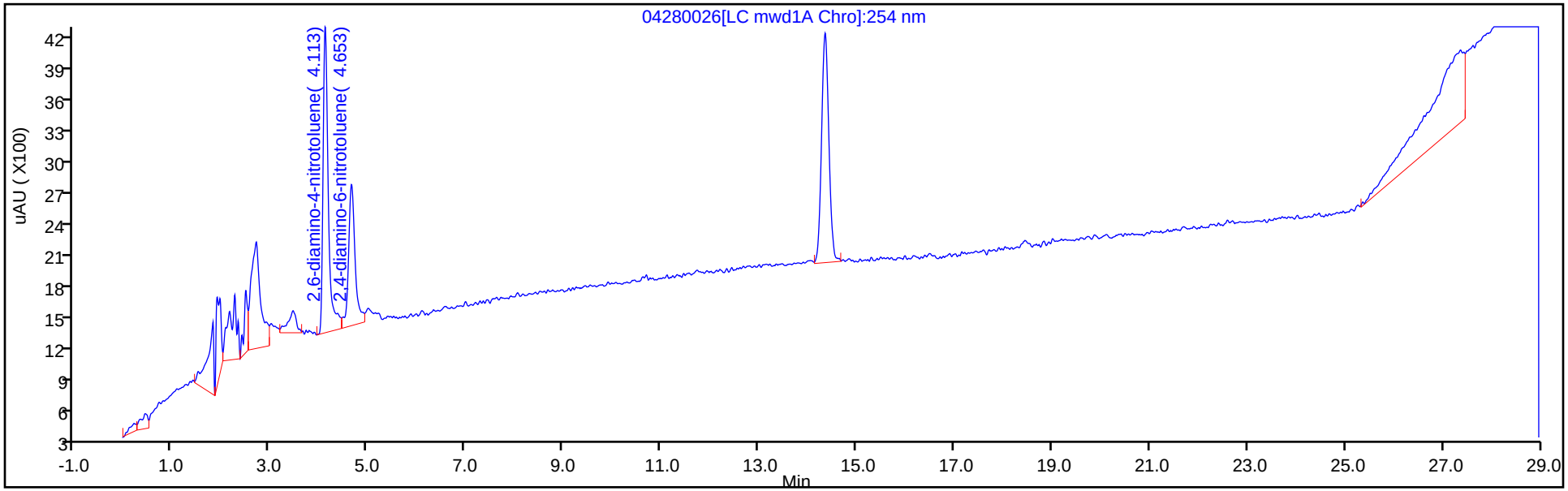
Report Date: 29-Apr-2023 13:04:23 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

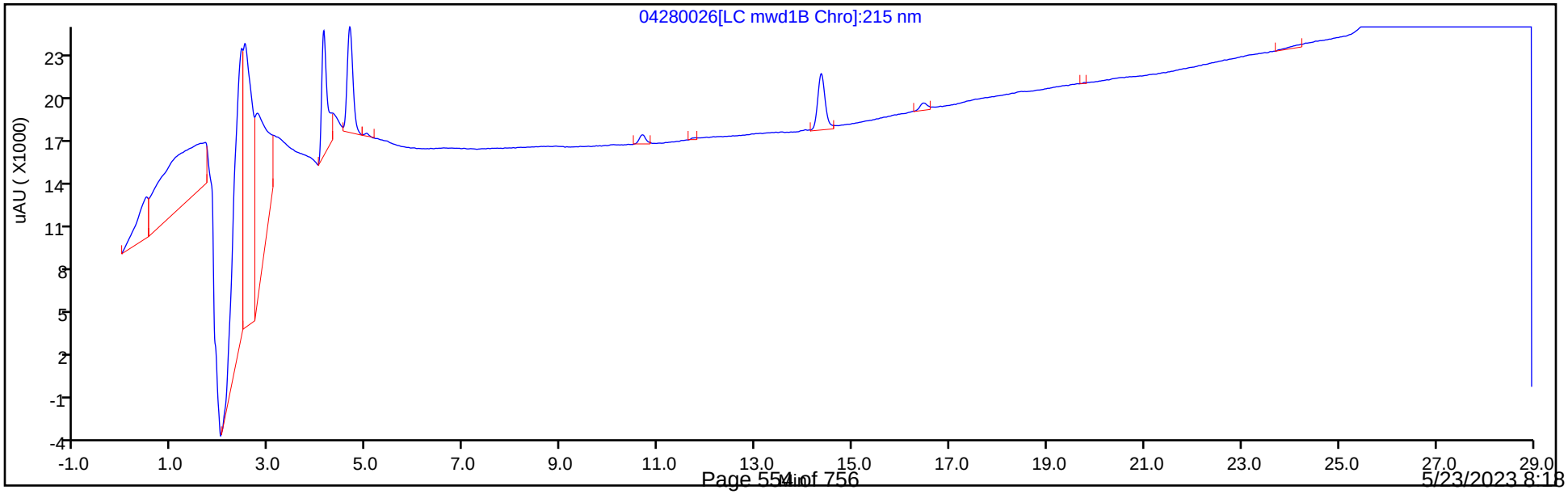
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280026.D

Injection Date:	29-Apr-2023 03:43:02	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	IC ADD 2			Worklist Smp#:	26
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D				
Lims ID:	IC ADD 1				
Client ID:					
Sample Type:	IC	Calib Level:	1		
Inject. Date:	29-Apr-2023 04:18:01	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC ADD 1				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X5		
Sublist:	chrom-8330_X5_Luna*sub10				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	29-Apr-2023 13:04:23	Calib Date:	29-Apr-2023 04:18:01		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1621				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.113	4.113	0.000	8084	0.0200	0.0200	
2 2,4-diamino-6-nitrotoluene	1	4.653	4.653	0.000	5388	0.0200	0.0239	

Reagents:

8330_ADDs_00036 Amount Added: 1.00 Units: uL

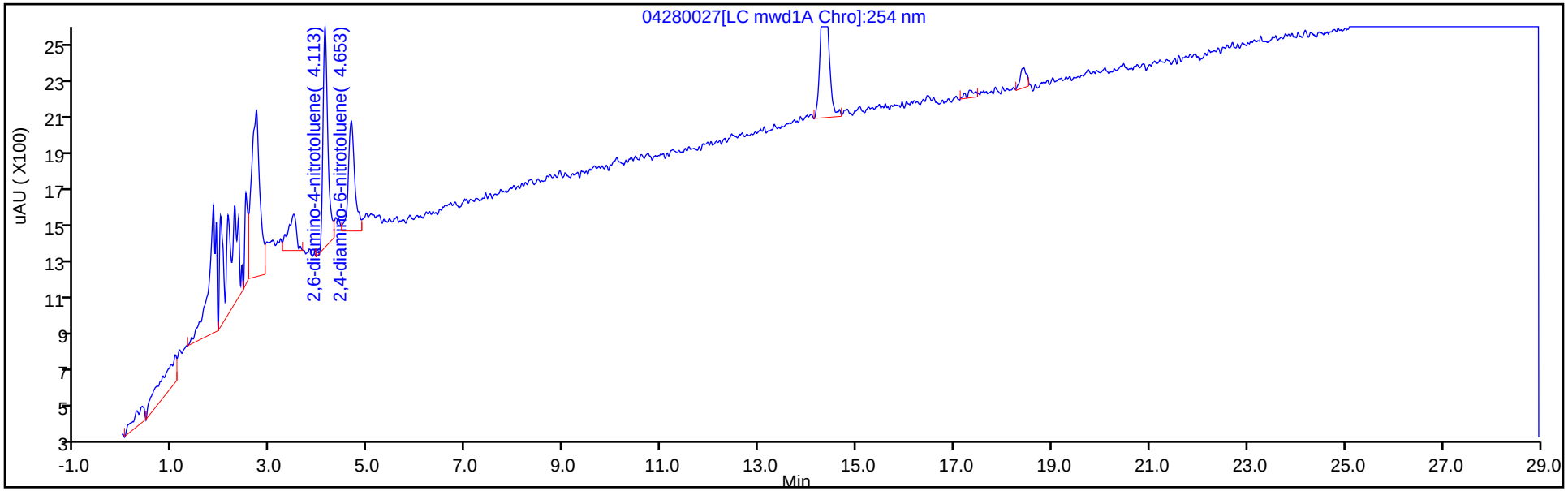
Report Date: 29-Apr-2023 13:04:24 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

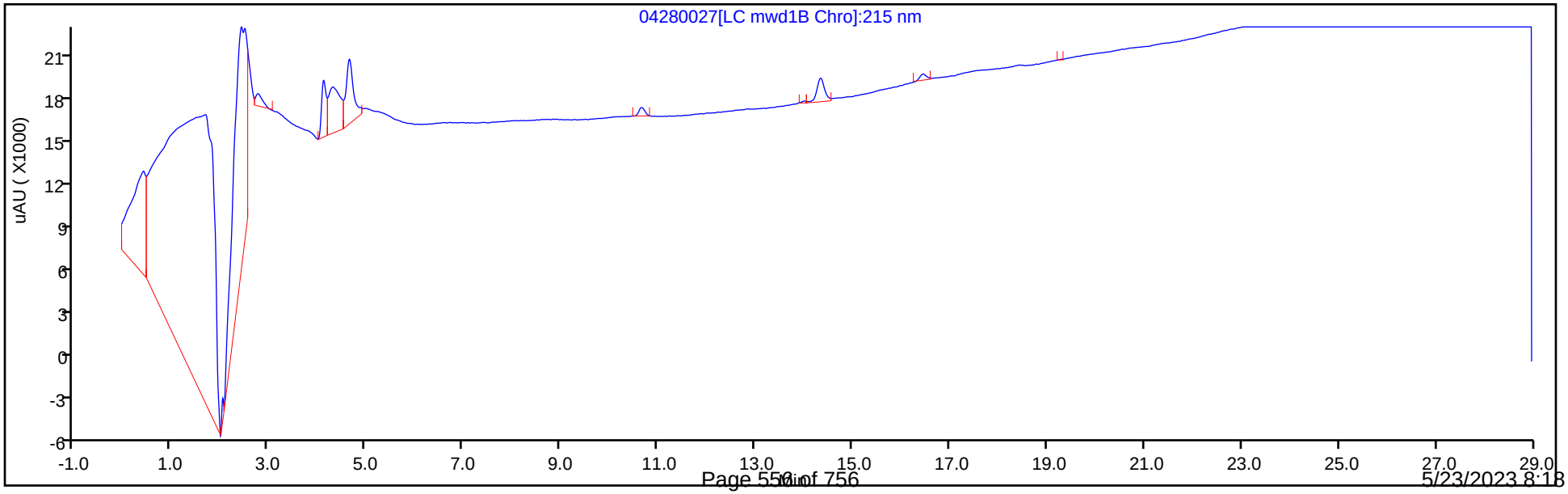
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D

Injection Date:	29-Apr-2023 04:18:01	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	IC ADD 1			Worklist Smp#:	27
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Calibration / 2,6-diamino-4-nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

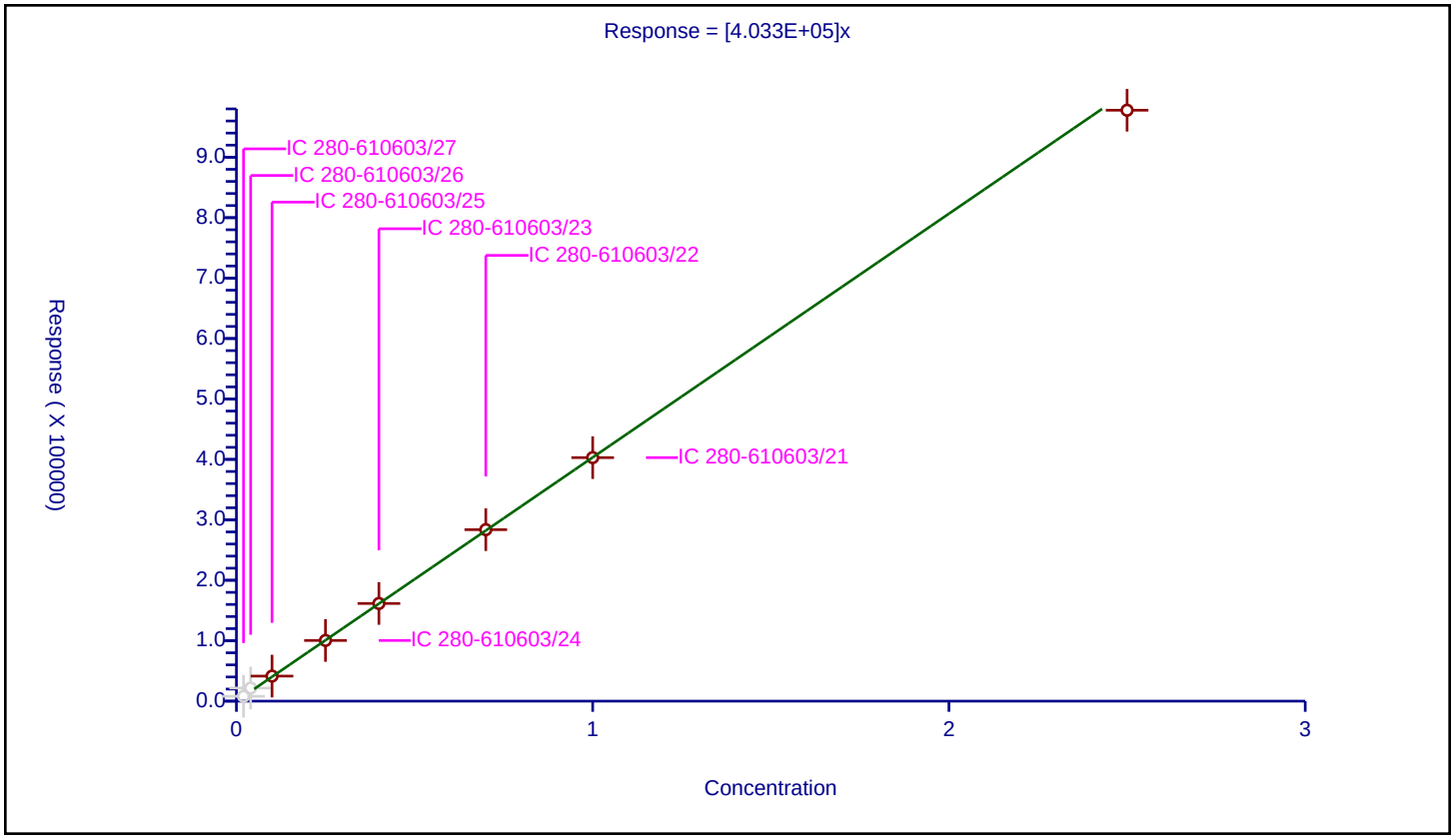
Curve Coefficients

Intercept:	0
Slope:	4.033E+05

Error Coefficients

Standard Error:	13700
Relative Standard Error:	1.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-610603/27	0.02	8084.0			404200.0	N
2	IC 280-610603/26	0.04	21691.0			542275.0	N
3	IC 280-610603/25	0.1	41451.0			414510.0	Y
4	IC 280-610603/24	0.25	100434.0			401736.0	Y
5	IC 280-610603/23	0.4	161653.0			404132.5	Y
6	IC 280-610603/22	0.7	283742.0			405345.714286	Y
7	IC 280-610603/21	1.0	402965.0			402965.0	Y
8	IC 280-610603/20	2.5	977777.0			391110.8	Y



Calibration / 2,4-diamino-6-nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

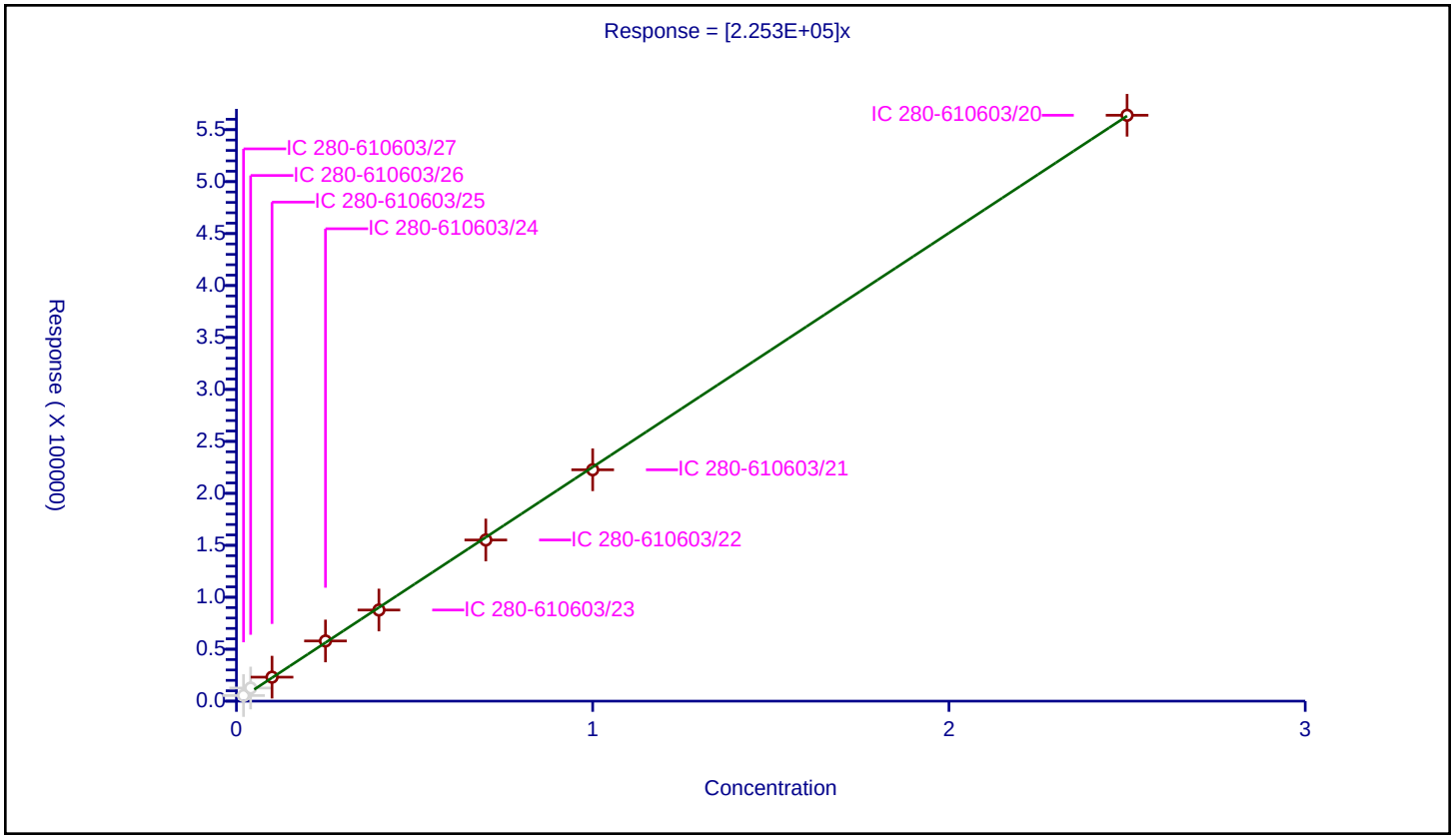
Curve Coefficients

Intercept:	0
Slope:	2.253E+05

Error Coefficients

Standard Error:	2130
Relative Standard Error:	2.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-610603/27	0.02	5388.0			269400.0	N
2	IC 280-610603/26	0.04	12626.0			315650.0	N
3	IC 280-610603/25	0.1	23094.0			230940.0	Y
4	IC 280-610603/24	0.25	57919.0			231676.0	Y
5	IC 280-610603/23	0.4	87716.0			219290.0	Y
6	IC 280-610603/22	0.7	155085.0			221550.0	Y
7	IC 280-610603/21	1.0	222678.0			222678.0	Y
8	IC 280-610603/20	2.5	563873.0			225549.2	Y



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Lab Sample ID: ICV 280-599427/19 Calibration Date: 01/17/2023 03:40

Instrument ID: CHHPLC_X3 Calib Start Date: 01/17/2023 00:33

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/17/2023 03:16

Lab File ID: 01160047.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,6-diamino-4-nitrotoluene	Lin2		224434		485	500	-3.0	20.0
2,4-diamino-6-nitrotoluene	Ave	146472	141938		485	500	-3.1	20.0
3,5-Dinitroaniline	Lin2		235360		481	500	-3.8	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Lab Sample ID: ICV 280-599427/19 Calibration Date: 01/17/2023 03:40

Instrument ID: CHHPLC_X3 Calib Start Date: 01/17/2023 00:33

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/17/2023 03:16

Lab File ID: 01160047.D

Analyte	RT	RT WINDOW	
		FROM	TO
2,6-diamino-4-nitrotoluene	6.45	6.31	6.61
2,4-diamino-6-nitrotoluene	6.63	6.62	6.92
3,5-Dinitroaniline	9.80	9.65	9.95

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160047.D
Lims ID: ICV ADD
Client ID:
Sample Type: ICV
Inject. Date: 17-Jan-2023 03:40:08 ALS Bottle#: 50 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICVADD
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist:

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 17-Jan-2023 12:54:36 Calib Date: 17-Jan-2023 03:16:44
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230114-117775.b\01160046.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: LV5D Date: 17-Jan-2023 12:32:06

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 2,6-diamino-4-nitrotoluene	1	6.454	6.455	-0.001	112217	0.5000	0.4848	M
5 2,4-diamino-6-nitrotoluene	1	6.634	6.769	-0.135	70969	0.5000	0.4845	M
14 3,5-Dinitroaniline	1	9.801	9.800	0.001	117680	0.5000	0.4811	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330DiaminLCS_00052 Amount Added: 50.00 Units: uL
3,5-DNA LCS_00042 Amount Added: 50.00 Units: uL

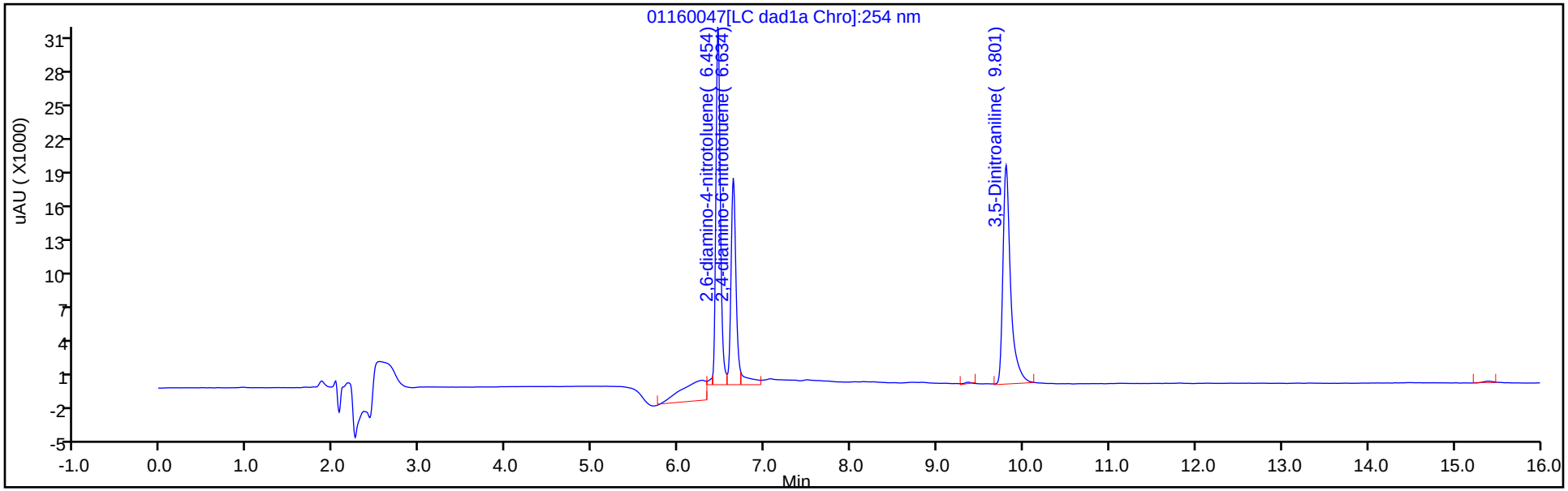
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Eurofins Denver

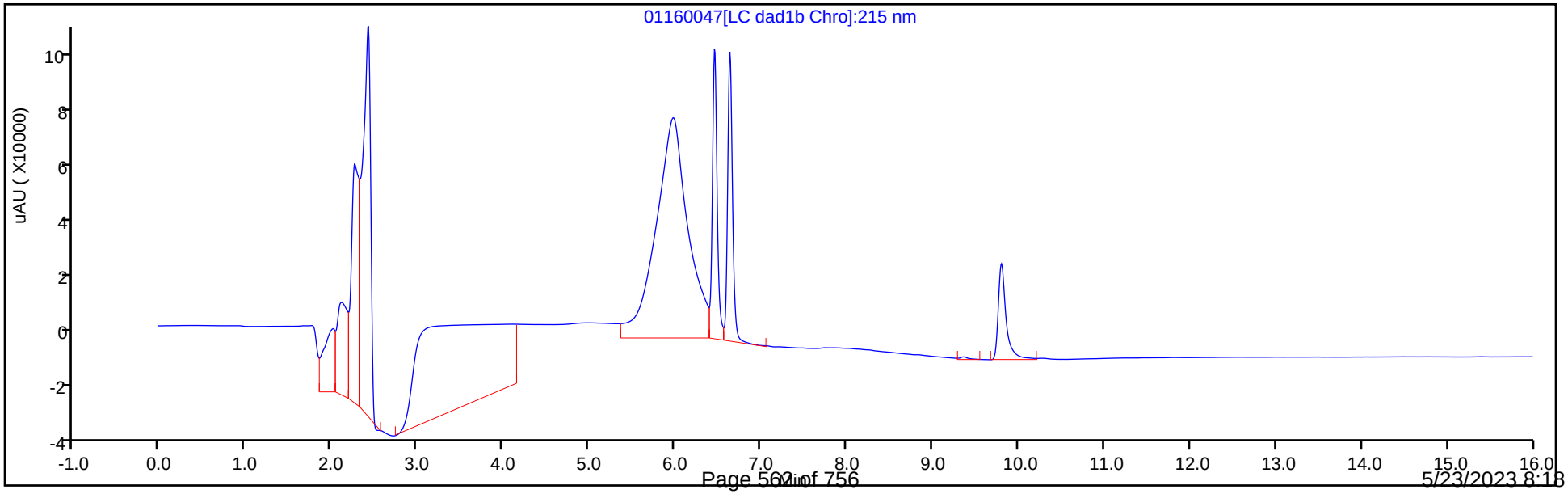
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Injection Date:	17-Jan-2023 03:40:08	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	ICV ADD			Worklist Smp#:	19
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	50
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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

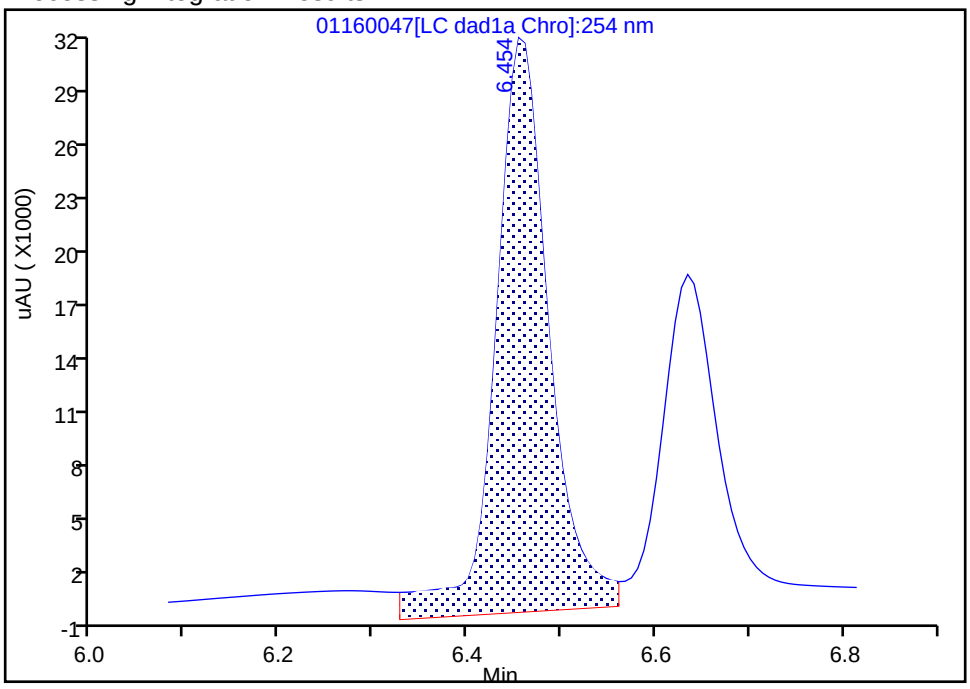
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160047.d				
Injection Date:	17-Jan-2023 03:40:08	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV ADD				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	50	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

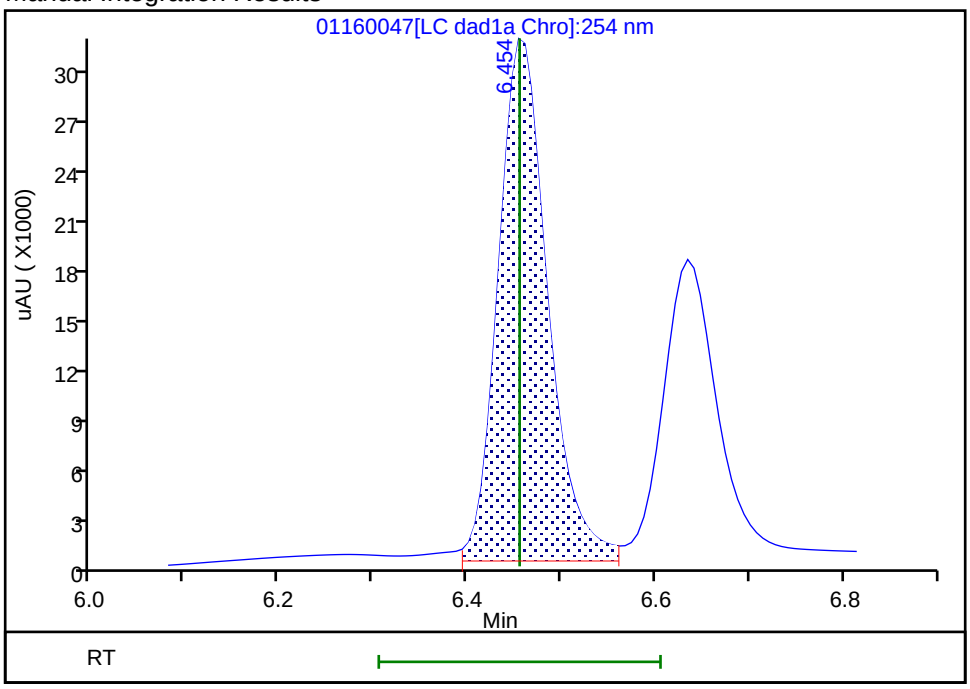
Processing Integration Results

RT: 6.45
Area: 126714
Amount: 0.529427
Amount Units: ug/mL



Manual Integration Results

RT: 6.45
Area: 112217
Amount: 0.484790
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:32:03
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

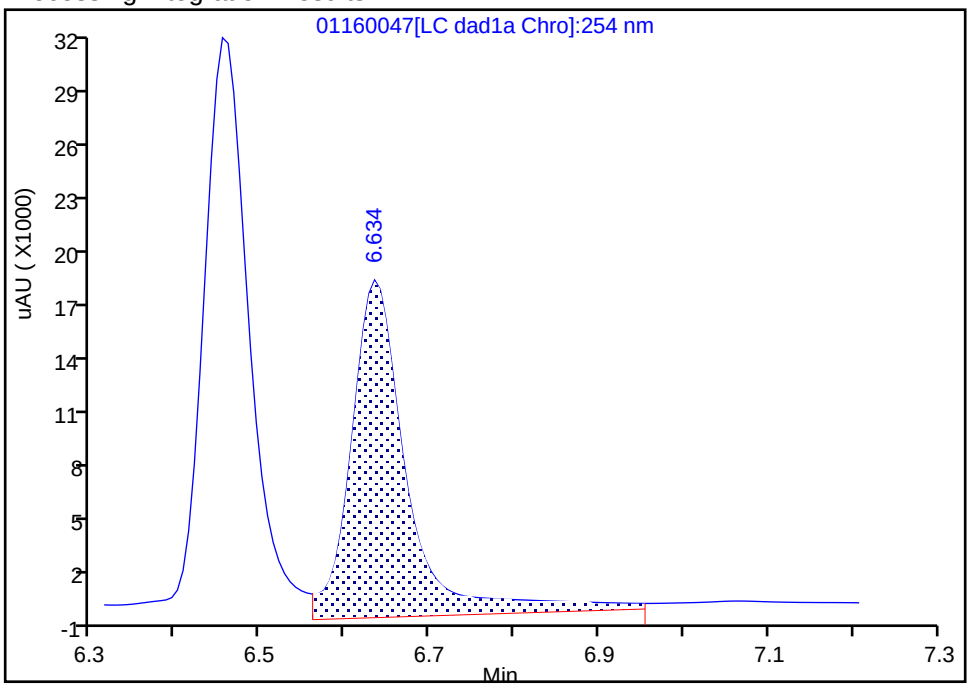
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230114-117775.b\01160047.d				
Injection Date:	17-Jan-2023 03:40:08	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV ADD				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	50	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

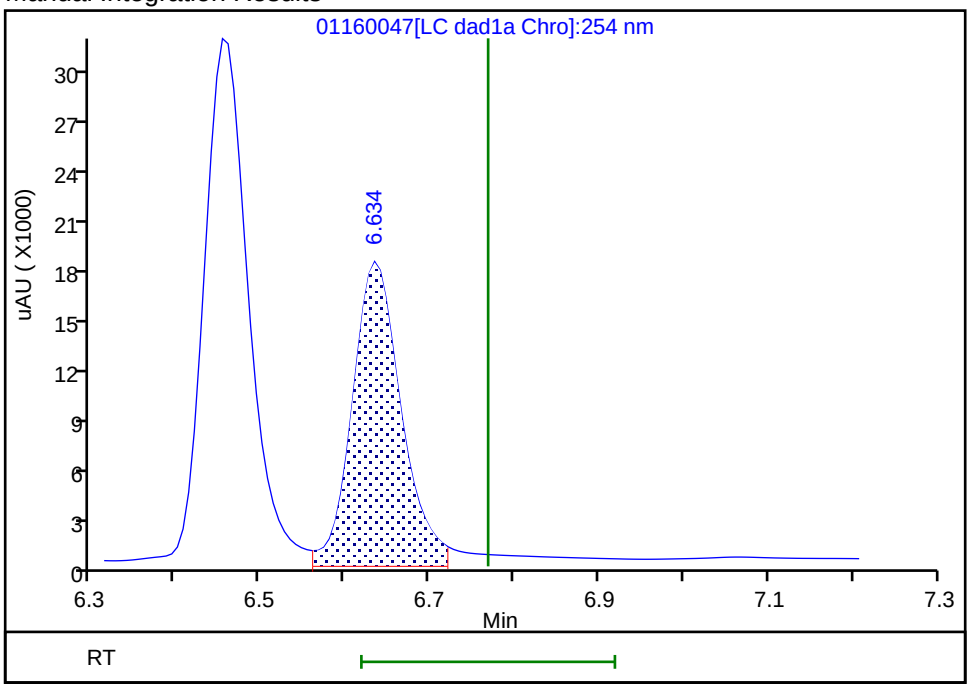
Processing Integration Results

RT: 6.63
Area: 84952
Amount: 0.579987
Amount Units: ug/mL



Manual Integration Results

RT: 6.63
Area: 70969
Amount: 0.484522
Amount Units: ug/mL



Reviewer: LV5D, 17-Jan-2023 12:32:04
Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Lab Sample ID: ICV 280-601664/20 Calibration Date: 02/08/2023 19:05

Instrument ID: CHHPLC_X3 Calib Start Date: 02/08/2023 15:38

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 02/08/2023 18:42

Lab File ID: 02080020.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	93528	88148		471	500	-5.8	20.0
RDX	Ave	106380	105642		497	500	-0.7	20.0
Picric acid	Ave	75830	83408		550	500	10.0	20.0
1,3,5-Trinitrobenzene	Ave	217147	243558		561	500	12.2	20.0
1,3-Dinitrobenzene	Ave	294397	317476		539	500	7.8	20.0
Nitrobenzene	Ave	191245	205682		538	500	7.5	20.0
3,5-Dinitroaniline	Lin2		223846		489	500	-2.2	20.0
Tetryl	Ave	164121	182414		556	500	11.1	20.0
Nitroglycerin	Ave	64070	67923		5300	5000	6.0	20.0
2,4,6-Trinitrotoluene	Ave	211040	213428		506	500	1.1	20.0
4-Amino-2,6-dinitrotoluene	Ave	154933	158824		513	500	2.5	20.0
2-Amino-4,6-dinitrotoluene	Ave	201410	204888		509	500	1.7	20.0
2,6-Dinitrotoluene	Ave	142745	147024		515	500	3.0	20.0
2,4-Dinitrotoluene	Ave	296667	301684		508	500	1.7	20.0
2-Nitrotoluene	Ave	127896	128960		504	500	0.8	20.0
4-Nitrotoluene	Ave	111880	111646		499	500	-0.2	20.0
3-Nitrotoluene	Ave	140492	138998		495	500	-1.1	20.0
PETN	Ave	68845	76520		5560	5000	11.1	20.0
1,2-Dinitrobenzene	Ave	126309	125412		496	500	-0.7	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Lab Sample ID: ICV 280-601664/20 Calibration Date: 02/08/2023 19:05

Instrument ID: CHHPLC_X3 Calib Start Date: 02/08/2023 15:38

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 02/08/2023 18:42

Lab File ID: 02080020.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.55	6.39	6.69
RDX	7.56	7.41	7.71
Picric acid	8.02	7.89	8.19
1,3,5-Trinitrobenzene	8.65	8.49	8.79
1,3-Dinitrobenzene	9.26	9.11	9.41
Nitrobenzene	9.64	9.48	9.78
3,5-Dinitroaniline	9.84	9.68	9.98
Tetryl	9.99	9.83	10.13
Nitroglycerin	10.46	10.29	10.59
2,4,6-Trinitrotoluene	10.88	10.76	10.96
4-Amino-2,6-dinitrotoluene	11.05	10.93	11.13
2-Amino-4,6-dinitrotoluene	11.30	11.18	11.38
2,6-Dinitrotoluene	11.48	11.35	11.55
2,4-Dinitrotoluene	11.64	11.52	11.72
2-Nitrotoluene	12.46	12.29	12.59
4-Nitrotoluene	12.88	12.69	12.99
3-Nitrotoluene	13.44	13.26	13.56
PETN	14.60	14.40	14.70
1,2-Dinitrobenzene	8.52	8.37	8.67

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080020.D
Lims ID: ICV INT
Client ID:
Sample Type: ICV
Inject. Date: 08-Feb-2023 19:05:10 ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICV INT
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist:

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Feb-2023 13:03:49 Calib Date: 08-Feb-2023 18:42:13
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230208-118465.b\02080019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1604

First Level Reviewer: LV5D Date: 08-Feb-2023 19:31:36

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.549	6.544	0.005	44074	0.5000	0.4712	M
8 RDX	1	7.563	7.564	-0.001	52821	0.5000	0.4965	M
9 2,4,6-Trinitrophenol	1	8.023	8.044	-0.021	41704	0.5000	0.5500	
$ 10 1,2-Dinitrobenzene	1	8.523	8.517	0.006	62706	0.5000	0.4965	
11 1,3,5-Trinitrobenzene	1	8.649	8.644	0.005	121779	0.5000	0.5608	
12 1,3-Dinitrobenzene	1	9.263	9.257	0.006	158738	0.5000	0.5392	
13 Nitrobenzene	1	9.636	9.631	0.005	102841	0.5000	0.5377	
14 3,5-Dinitroaniline	1	9.843	9.831	0.012	111923	0.5000	0.4890	
15 Tetryl	1	9.989	9.977	0.012	91207	0.5000	0.5557	
16 Nitroglycerin	2	10.456	10.437	0.019	339614	5.00	5.30	
17 2,4,6-Trinitrotoluene	1	10.883	10.864	0.019	106714	0.5000	0.5057	
18 4-Amino-2,6-dinitrotoluene	1	11.049	11.031	0.018	79412	0.5000	0.5126	
19 2-Amino-4,6-dinitrotoluene	1	11.296	11.277	0.019	102444	0.5000	0.5086	
20 2,6-Dinitrotoluene	1	11.476	11.451	0.025	73512	0.5000	0.5150	
21 2,4-Dinitrotoluene	1	11.643	11.617	0.026	150842	0.5000	0.5085	
22 o-Nitrotoluene	1	12.463	12.437	0.026	64480	0.5000	0.5042	
23 p-Nitrotoluene	1	12.876	12.844	0.032	55823	0.5000	0.4990	
24 m-Nitrotoluene	1	13.443	13.411	0.032	69499	0.5000	0.4947	
25 PETN	2	14.596	14.551	0.045	382602	5.00	5.56	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330Surrogate_00138	Amount Added:	50.00	Units: uL
8330 LCS_00121	Amount Added:	50.00	Units: uL
3,5-DNA LCS_00043	Amount Added:	50.00	Units: uL

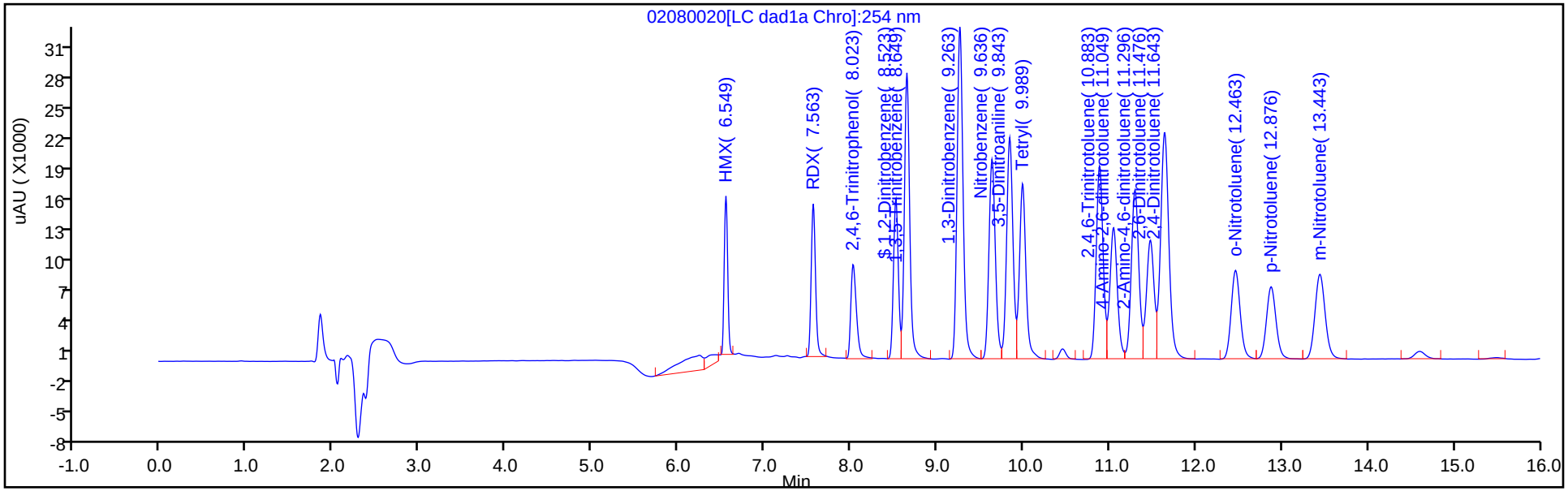
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Eurofins Denver

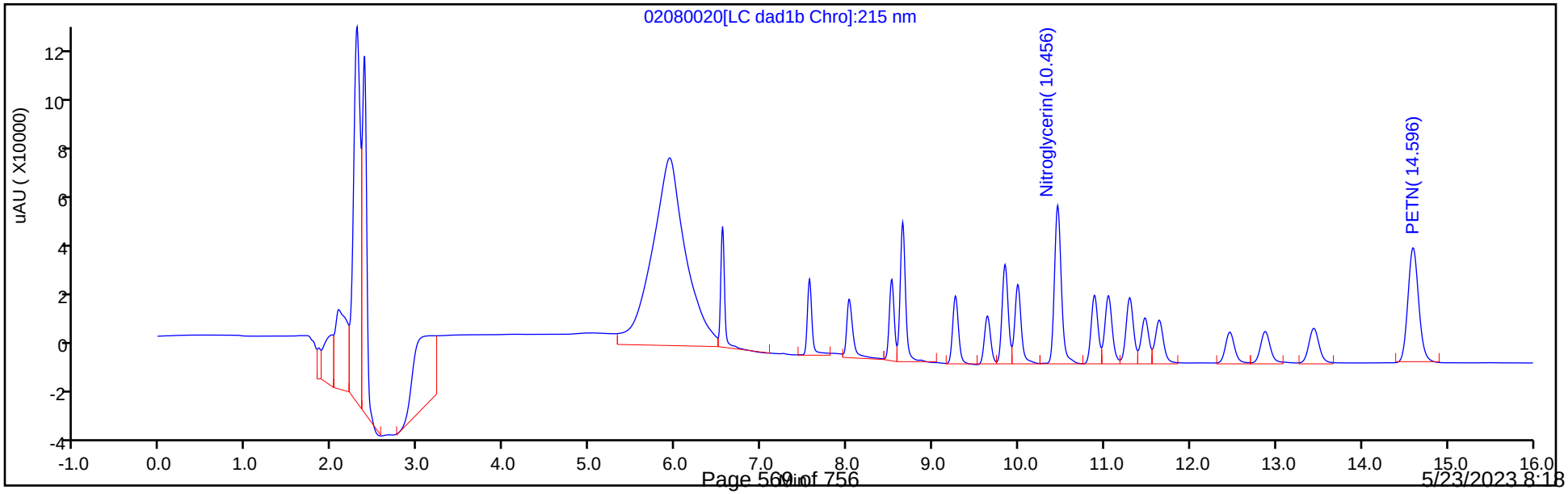
Data File: \\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080020.d

Injection Date:	08-Feb-2023 19:05:10	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	ICV INT			Worklist Smp#:	20
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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

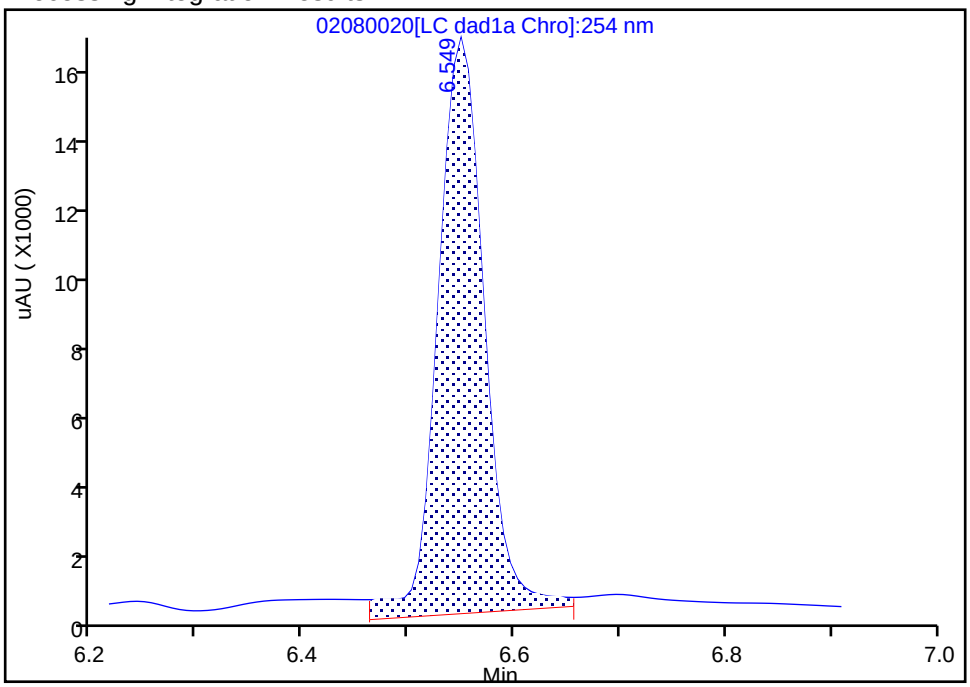
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Lims ID:	ICV INT				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

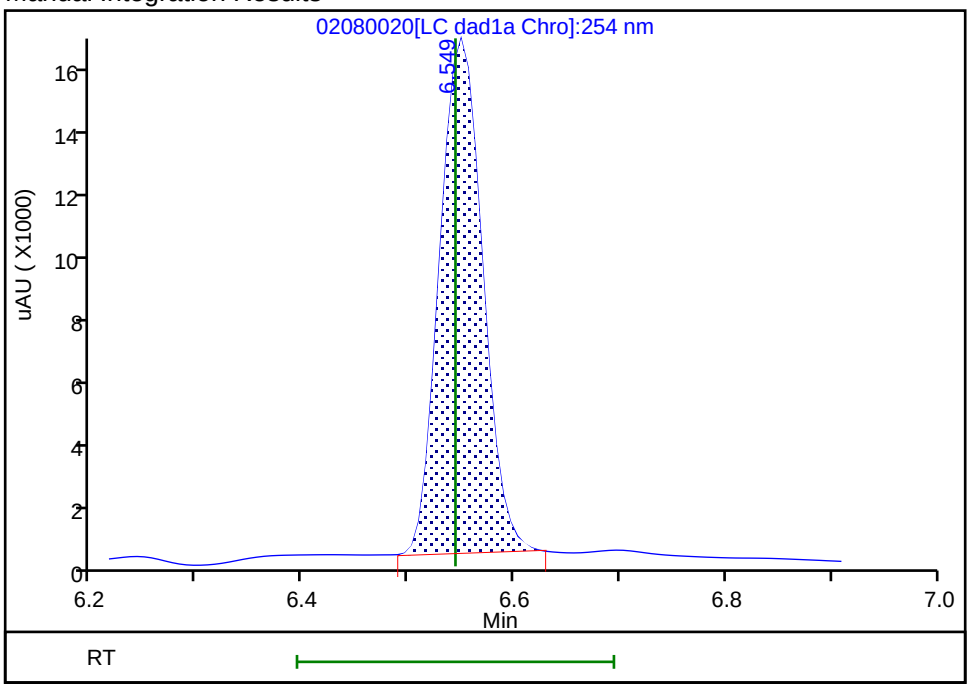
Processing Integration Results

RT: 6.55
Area: 49010
Amount: 0.524013
Amount Units: ug/mL



Manual Integration Results

RT: 6.55
Area: 44074
Amount: 0.471238
Amount Units: ug/mL



Reviewer: LV5D, 08-Feb-2023 19:31:27
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

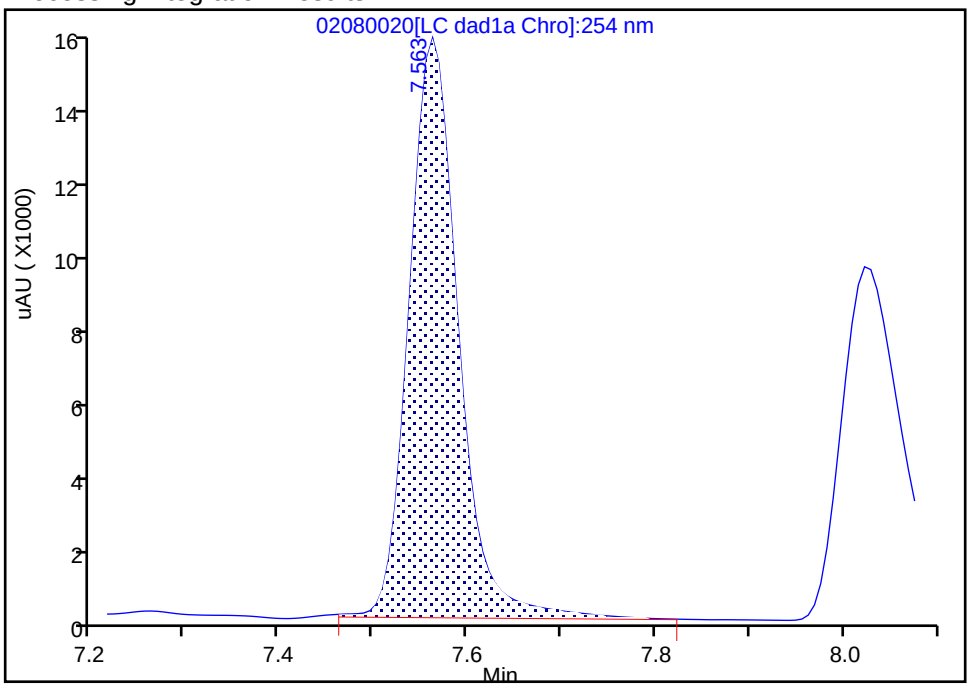
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230208-118465.b\02080020.d				
Injection Date:	08-Feb-2023 19:05:10	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV INT				
Client ID:					
Operator ID:	JZ/MAR	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

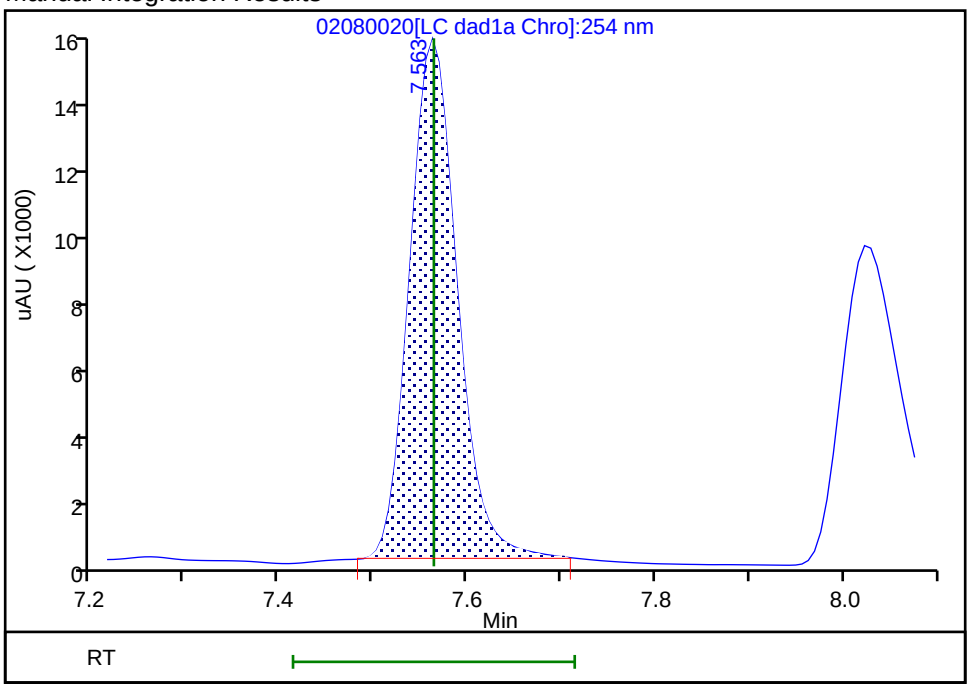
Processing Integration Results

RT: 7.56
Area: 54996
Amount: 0.516978
Amount Units: ug/mL



Manual Integration Results

RT: 7.56
Area: 52821
Amount: 0.496532
Amount Units: ug/mL



Reviewer: LV5D, 08-Feb-2023 19:32:23
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Lab Sample ID: ICV 280-603284/19 Calibration Date: 02/24/2023 18:04

Instrument ID: CHHPLC_X3 Calib Start Date: 02/24/2023 15:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 02/24/2023 17:41

Lab File ID: 02240019.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	197687	197288		499	500	-0.2	20.0
DNX	Ave	144462	141211		491	502	-2.3	20.0
MNX	Ave	131172	134903		602	585	2.8	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Lab Sample ID: ICV 280-603284/19 Calibration Date: 02/24/2023 18:04

Instrument ID: CHHPLC_X3 Calib Start Date: 02/24/2023 15:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 02/24/2023 17:41

Lab File ID: 02240019.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.45	6.34	6.54
DNX	6.77	6.67	6.87
MNX	7.20	7.05	7.35

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240019.D
Lims ID: ICV DMT
Client ID:
Sample Type: ICV
Inject. Date: 24-Feb-2023 18:04:21 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICV DMT
Operator ID: JZ/MAR Instrument ID: CHHPLC_X3
Sublist:

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 28-Feb-2023 13:33:34 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1602

First Level Reviewer: LV5D Date: 28-Feb-2023 11:45:18

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.446	6.443	0.003	98644	0.5000	0.4990	M
6 DNX	1	6.772	6.770	0.002	70888	0.5020	0.4907	M
7 MNX	1	7.199	7.196	0.003	78918	0.5850	0.6016	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330_OP_DMT_00016 Amount Added: 50.00 Units: uL

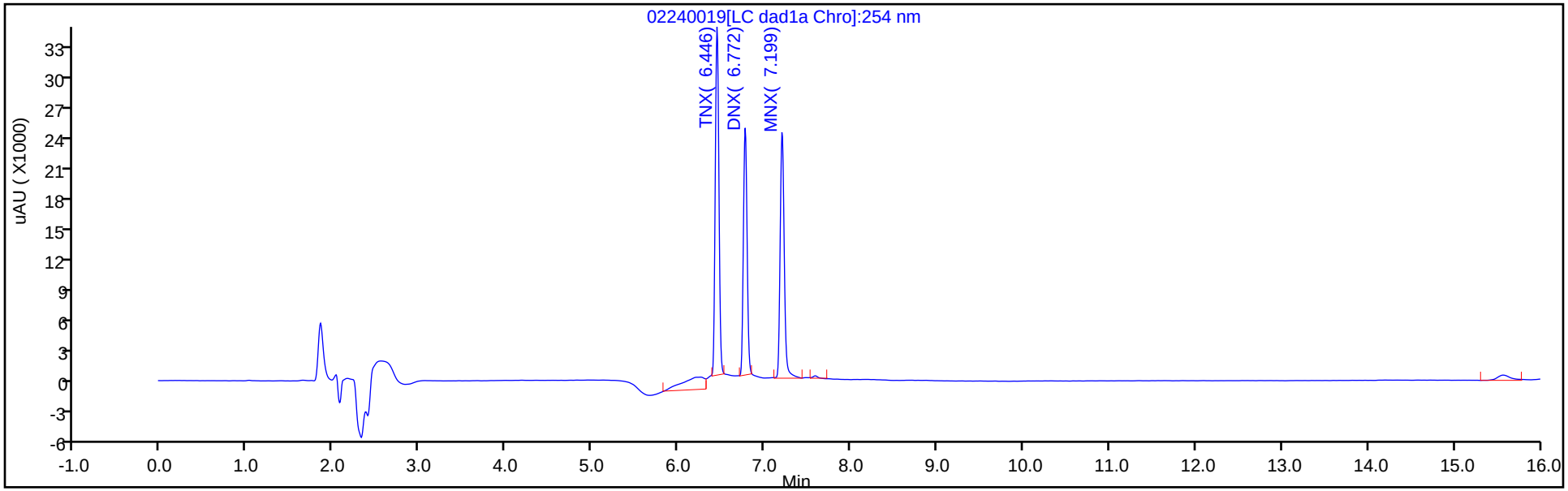
Report Date: 28-Feb-2023 13:33:59 Chrom Revision: 2.3 15-Feb-2023 20:44:50

Eurofins Denver

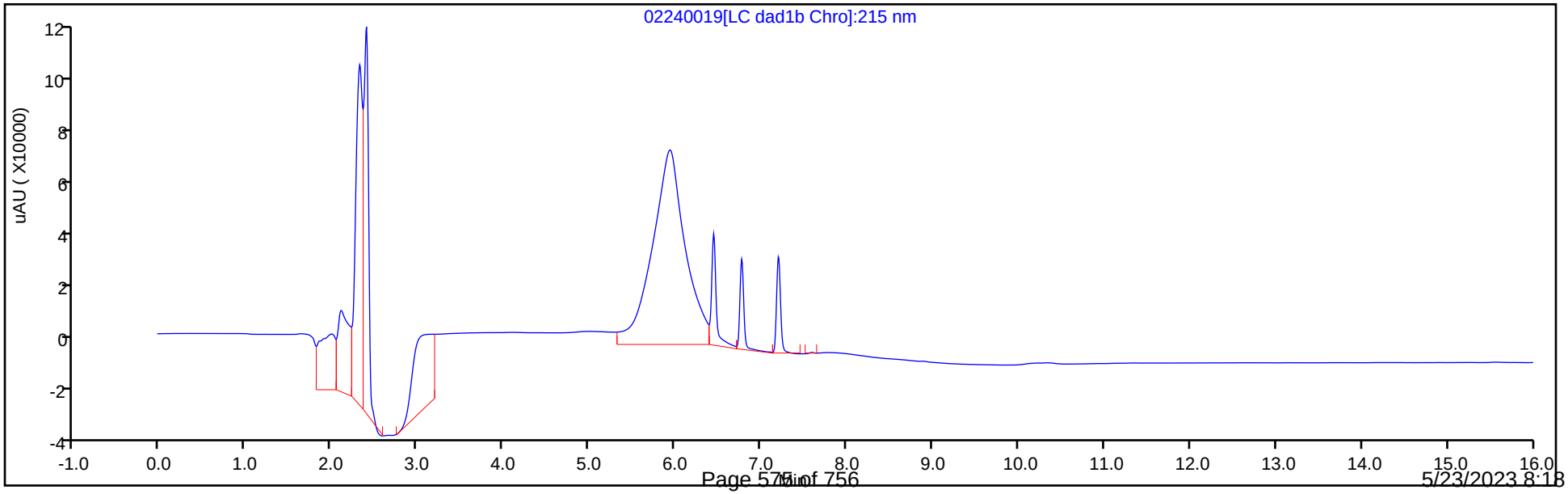
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240019.d

Injection Date:	24-Feb-2023 18:04:21	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/MAR
Lims ID:	ICV DMT			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



Manual Integration/User Assign Peak Report

Eurofins Denver

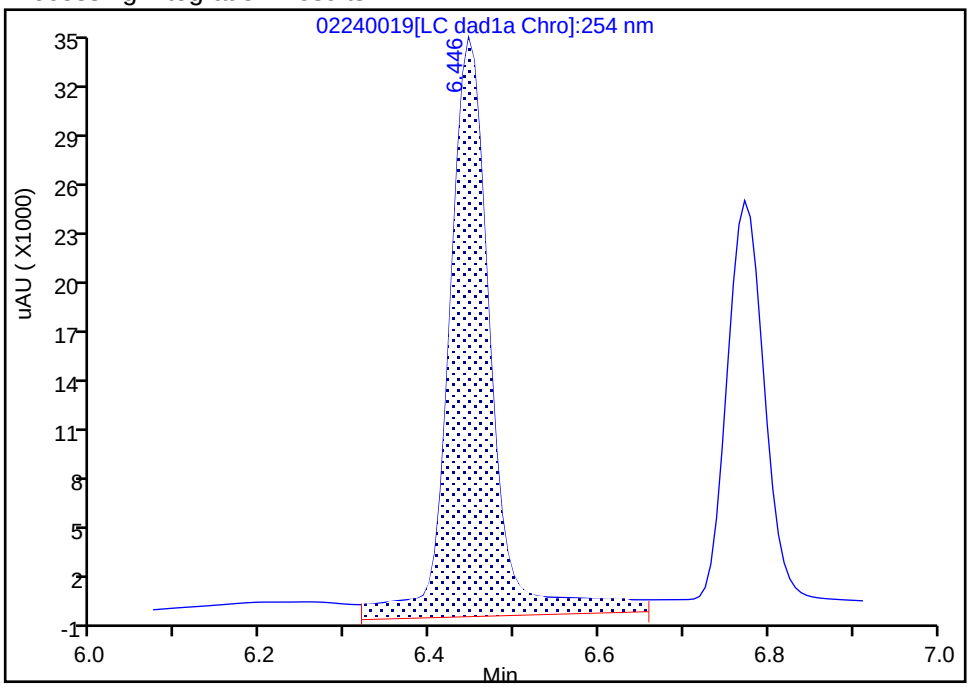
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240019.d
Injection Date: 24-Feb-2023 18:04:21 Instrument ID: CHHPLC_X3
Lims ID: ICV DMT
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 TNX, CAS: 13980-04-6

Signal: 1

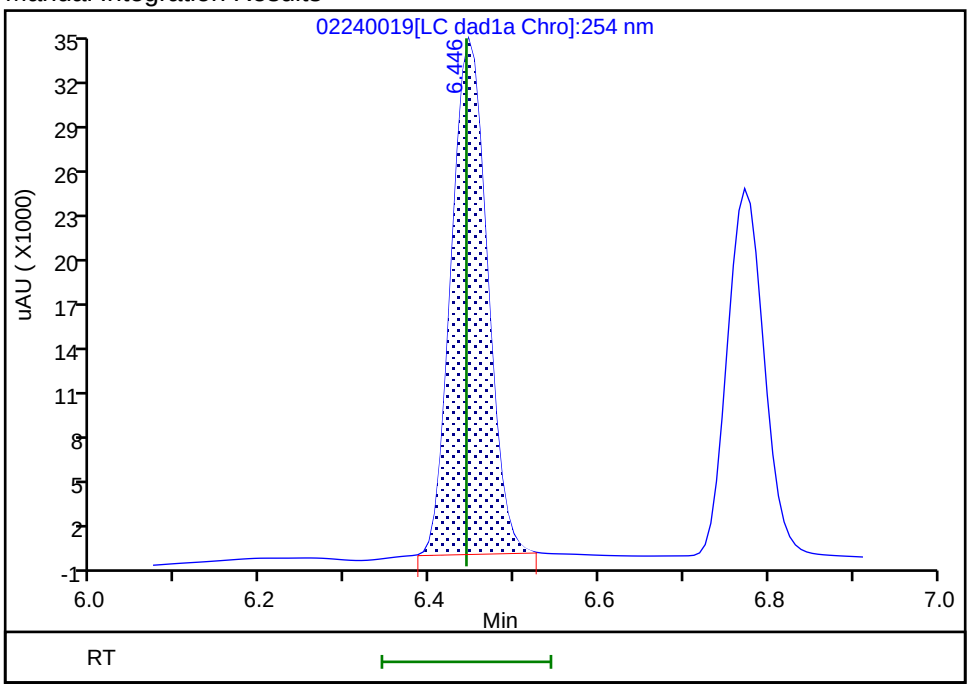
Processing Integration Results

RT: 6.45
Area: 120613
Amount: 0.610120
Amount Units: ug/mL



Manual Integration Results

RT: 6.45
Area: 98644
Amount: 0.498990
Amount Units: ug/mL



Reviewer: LV5D, 28-Feb-2023 11:45:12
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

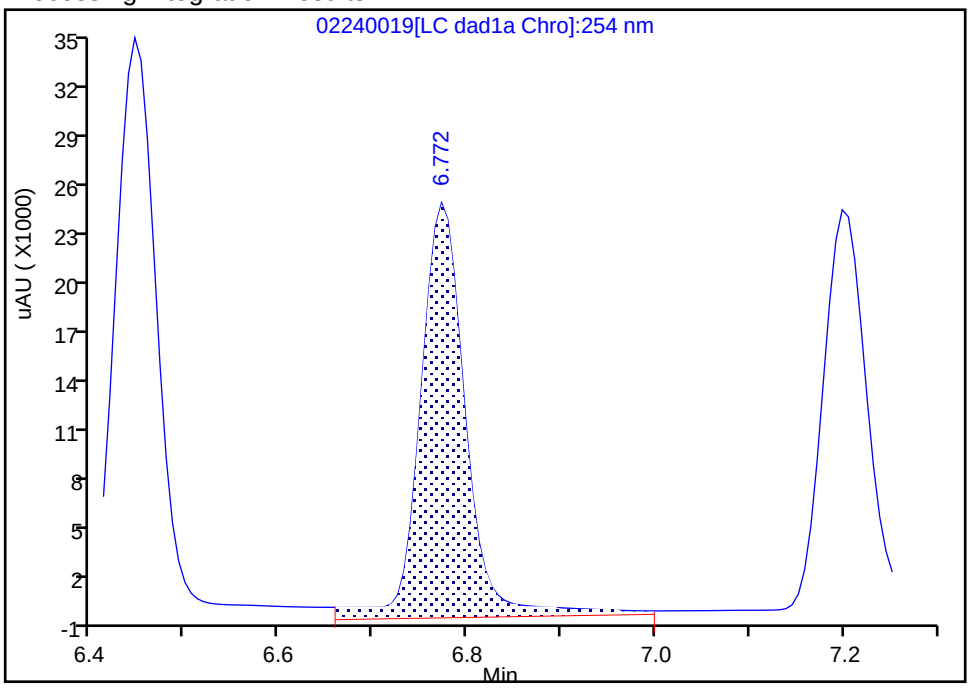
Data File: \\chromfs\denver\chromdata\chhplc_x\20230224-118952.b\02240019.d
Injection Date: 24-Feb-2023 18:04:21 Instrument ID: CHHPLC_X3
Lims ID: ICV DMT
Client ID:
Operator ID: JZ/MAR ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

6 DNX, CAS: 80251-29-2

Signal: 1

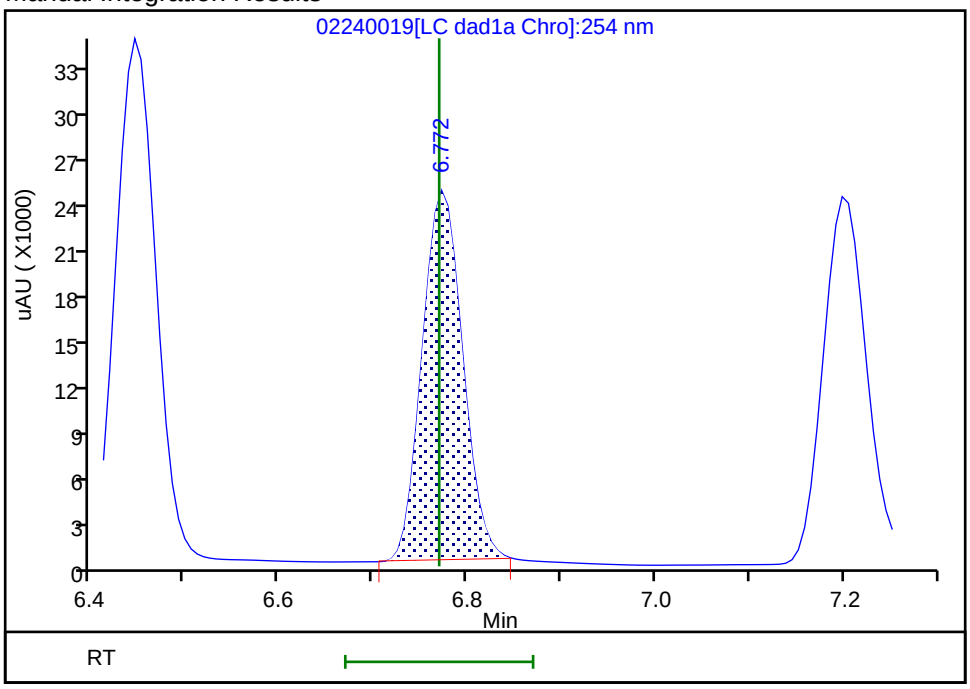
Processing Integration Results

RT: 6.77
Area: 83407
Amount: 0.577361
Amount Units: ug/mL



Manual Integration Results

RT: 6.77
Area: 70888
Amount: 0.490702
Amount Units: ug/mL



Reviewer: LV5D, 28-Feb-2023 11:45:16
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Lab Sample ID: CCV 280-612396/21 Calibration Date: 05/13/2023 18:33

Instrument ID: CHHPLC_X3 Calib Start Date: 02/08/2023 15:38

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 02/08/2023 18:42

Lab File ID: 05130021.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	93528	100076		268	250	7.0	20.0
RDX	Ave	106380	115876		272	250	8.9	20.0
Picric acid	Ave	75830	84112		277	250	10.9	20.0
1,3,5-Trinitrobenzene	Ave	217147	232544		268	250	7.1	20.0
1,3-Dinitrobenzene	Ave	294397	315648		268	250	7.2	20.0
Nitrobenzene	Ave	191245	199952		261	250	4.6	20.0
3,5-Dinitroaniline	Lin2		239196		262	250	4.6	20.0
Tetryl	Ave	164121	152296		232	250	-7.2	20.0
Nitroglycerin	Ave	64070	68671		2680	2500	7.2	20.0
2,4,6-Trinitrotoluene	Ave	211040	218208		258	250	3.4	20.0
4-Amino-2,6-dinitrotoluene	Ave	154933	160728		259	250	3.7	20.0
2-Amino-4,6-dinitrotoluene	Ave	201410	205756		255	250	2.2	20.0
2,6-Dinitrotoluene	Ave	142745	155876		273	250	9.2	20.0
2,4-Dinitrotoluene	Ave	296667	317384		267	250	7.0	20.0
2-Nitrotoluene	Ave	127896	129404		253	250	1.2	20.0
4-Nitrotoluene	Ave	111880	110232		246	250	-1.5	20.0
3-Nitrotoluene	Ave	140492	141756		252	250	0.9	20.0
PETN	Ave	68845	74366		2700	2500	8.0	20.0
1,2-Dinitrobenzene	Ave	126309	139472		276	250	10.4	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Lab Sample ID: CCV 280-612396/21 Calibration Date: 05/13/2023 18:33

Instrument ID: CHHPLC_X3 Calib Start Date: 02/08/2023 15:38

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 02/08/2023 18:42

Lab File ID: 05130021.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.55	6.40	6.70
RDX	7.58	7.42	7.72
Picric acid	7.98	7.82	8.12
1,3,5-Trinitrobenzene	8.66	8.50	8.80
1,3-Dinitrobenzene	9.28	9.12	9.42
Nitrobenzene	9.65	9.50	9.80
3,5-Dinitroaniline	9.88	9.74	10.04
Tetryl	10.02	9.86	10.16
Nitroglycerin	10.47	10.32	10.62
2,4,6-Trinitrotoluene	10.91	10.81	11.01
4-Amino-2,6-dinitrotoluene	11.10	11.01	11.21
2-Amino-4,6-dinitrotoluene	11.36	11.27	11.47
2,6-Dinitrotoluene	11.51	11.41	11.61
2,4-Dinitrotoluene	11.68	11.59	11.79
2-Nitrotoluene	12.50	12.36	12.66
4-Nitrotoluene	12.92	12.79	13.09
3-Nitrotoluene	13.50	13.36	13.66
PETN	14.66	14.54	14.84
1,2-Dinitrobenzene	8.53	8.37	8.67

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130021.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 13-May-2023 18:33:40 ALS Bottle#: 7 Worklist Smp#: 21
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-May-2023 12:37:11 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: K8YG Date: 15-May-2023 07:41:38

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.428	6.427	0.001	50995	0.2508	0.2580	M
4 HMX	1	6.548	6.547	0.001	25019	0.2500	0.2675	M
6 DNX	1	6.755	6.754	0.001	36975	0.2503	0.2559	M
7 MNX	1	7.188	7.187	0.001	39998	0.2918	0.3049	M
8 RDX	1	7.575	7.574	0.001	28969	0.2500	0.2723	
9 2,4,6-Trinitrophenol	1	7.981	7.974	0.007	21028	0.2500	0.2773	
$ 10 1,2-Dinitrobenzene	1	8.528	8.521	0.007	34868	0.2500	0.2761	
11 1,3,5-Trinitrobenzene	1	8.655	8.647	0.008	58136	0.2500	0.2677	
12 1,3-Dinitrobenzene	1	9.275	9.274	0.001	78912	0.2500	0.2680	
13 Nitrobenzene	1	9.648	9.647	0.001	49988	0.2500	0.2614	
14 3,5-Dinitroaniline	1	9.881	9.887	-0.006	59799	0.2500	0.2616	
15 Tetryl	1	10.015	10.014	0.001	38074	0.2500	0.2320	
16 Nitroglycerin	2	10.468	10.467	0.001	171677	2.50	2.68	
17 2,4,6-Trinitrotoluene	1	10.908	10.914	-0.006	54552	0.2500	0.2585	
18 4-Amino-2,6-dinitrotoluene	1	11.101	11.114	-0.013	40182	0.2500	0.2594	
19 2-Amino-4,6-dinitrotoluene	1	11.355	11.367	-0.012	51439	0.2500	0.2554	
20 2,6-Dinitrotoluene	1	11.508	11.514	-0.006	38969	0.2500	0.2730	
21 2,4-Dinitrotoluene	1	11.675	11.687	-0.012	79346	0.2500	0.2675	
22 o-Nitrotoluene	1	12.501	12.514	-0.013	32351	0.2500	0.2529	
23 p-Nitrotoluene	1	12.921	12.940	-0.019	27558	0.2500	0.2463	
24 m-Nitrotoluene	1	13.495	13.514	-0.019	35439	0.2500	0.2522	
25 PETN	2	14.661	14.694	-0.033	185914	2.50	2.70	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00013	Amount Added:	12.50	Units: uL
8330IntermStk_00075	Amount Added:	25.00	Units: uL

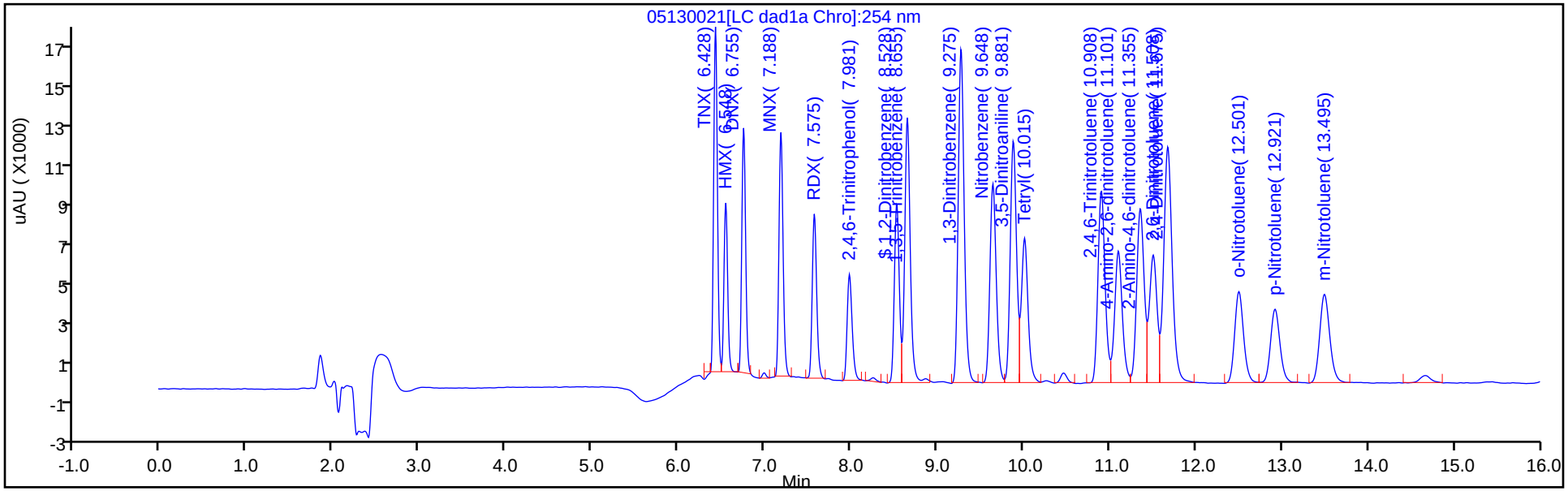
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Eurofins Denver

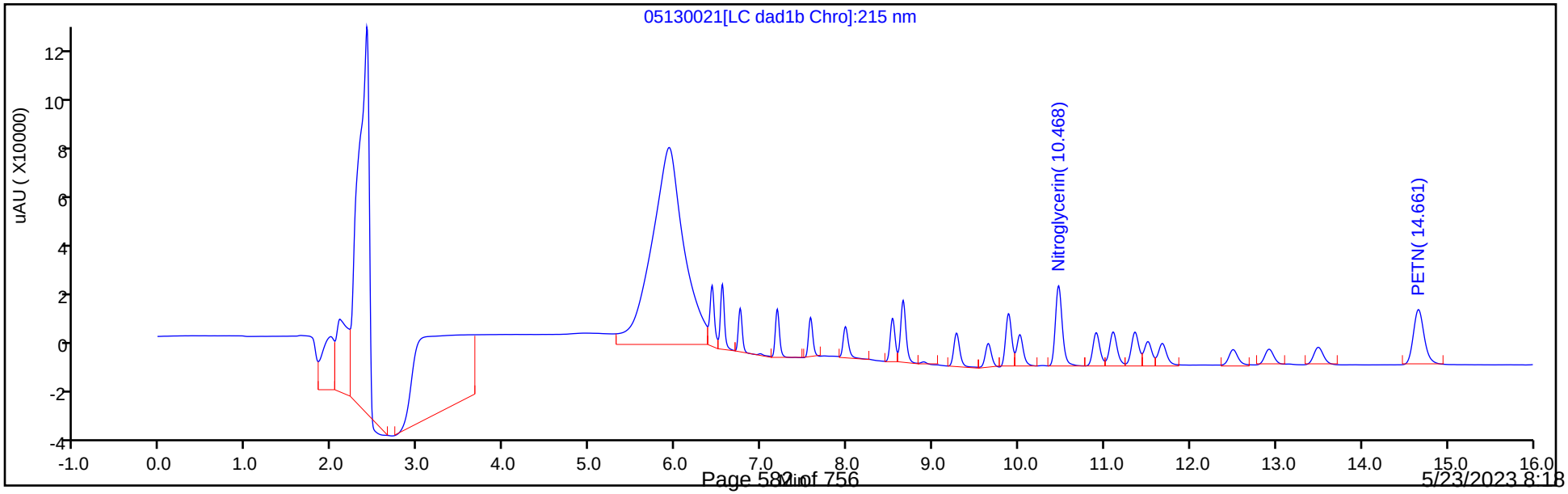
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Injection Date:	13-May-2023 18:33:40	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV DMT			Worklist Smp#:	21
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Manual Integration/User Assign Peak Report

Eurofins Denver

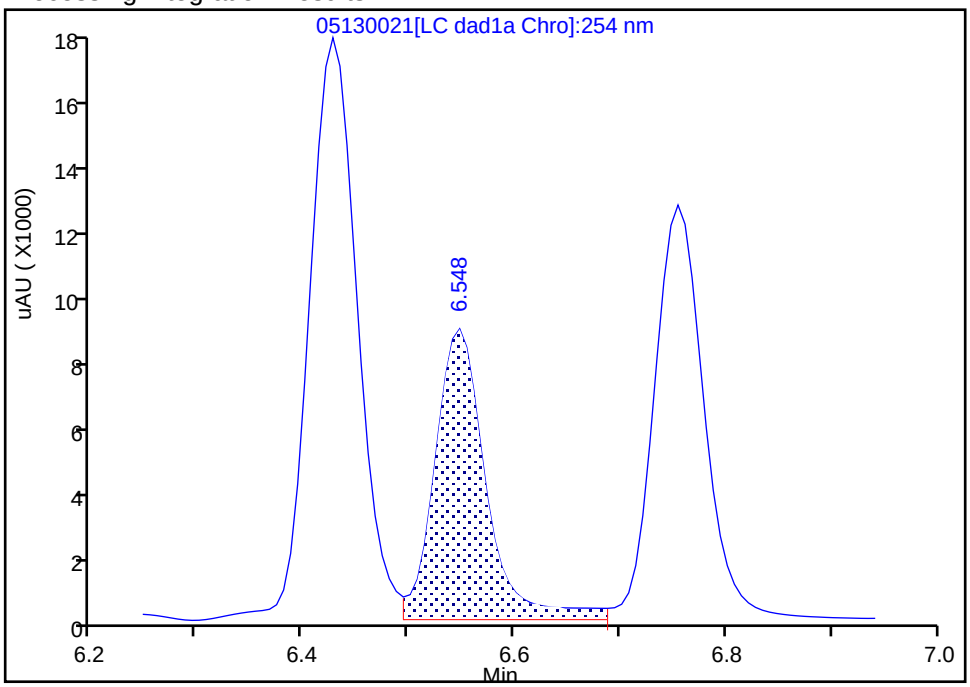
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130021.d				
Injection Date:	13-May-2023 18:33:40	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

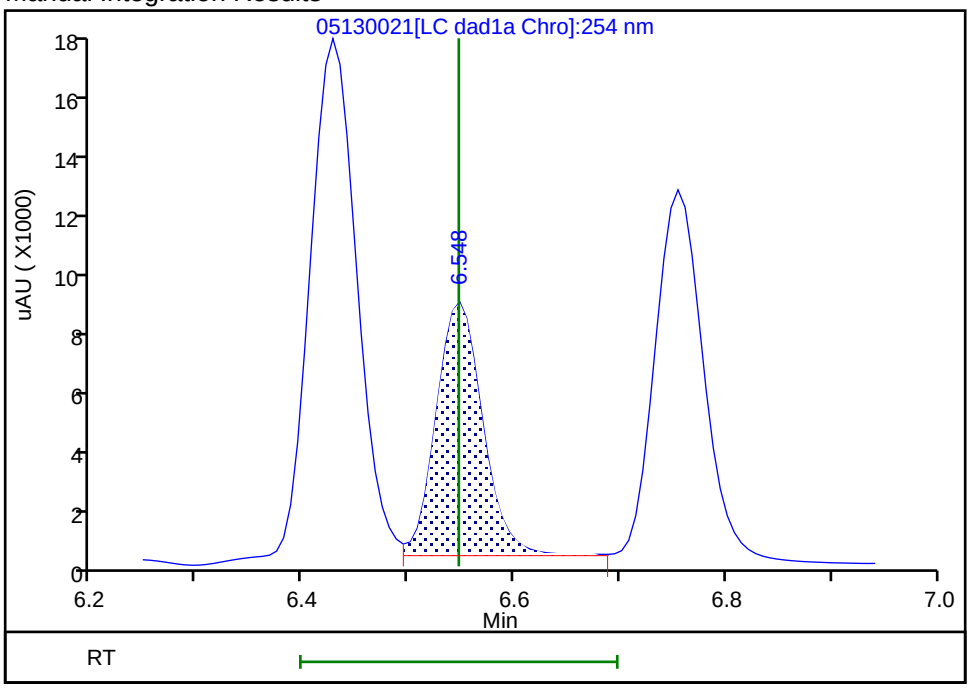
Processing Integration Results

RT: 6.55
Area: 28818
Amount: 0.308121
Amount Units: ug/mL



Manual Integration Results

RT: 6.55
Area: 25019
Amount: 0.267502
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 07:36:44
Audit Action: Assigned New Baseline Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Lab Sample ID: CCV 280-612396/21 Calibration Date: 05/13/2023 18:33

Instrument ID: CHHPLC_X3 Calib Start Date: 02/24/2023 15:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 02/24/2023 17:41

Lab File ID: 05130021.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	197687	203370		258	251	2.9	20.0
DNX	Ave	144462	147752		256	250	2.3	20.0
MNX	Ave	131172	137097		305	292	4.5	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Lab Sample ID: CCV 280-612396/21 Calibration Date: 05/13/2023 18:33

Instrument ID: CHHPLC_X3 Calib Start Date: 02/24/2023 15:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 02/24/2023 17:41

Lab File ID: 05130021.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.43	6.33	6.53
DNX	6.76	6.65	6.85
MNX	7.19	7.04	7.34

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130021.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 13-May-2023 18:33:40 ALS Bottle#: 7 Worklist Smp#: 21
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-May-2023 12:37:11 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: K8YG Date: 15-May-2023 07:41:38

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3	TNX	1	6.428	6.427	0.001	50995	0.2508	0.2580	M
4	HMX	1	6.548	6.547	0.001	25019	0.2500	0.2675	M
6	DNX	1	6.755	6.754	0.001	36975	0.2503	0.2559	M
7	MNX	1	7.188	7.187	0.001	39998	0.2918	0.3049	M
8	RDX	1	7.575	7.574	0.001	28969	0.2500	0.2723	
9	2,4,6-Trinitrophenol	1	7.981	7.974	0.007	21028	0.2500	0.2773	
$ 10	1,2-Dinitrobenzene	1	8.528	8.521	0.007	34868	0.2500	0.2761	
11	1,3,5-Trinitrobenzene	1	8.655	8.647	0.008	58136	0.2500	0.2677	
12	1,3-Dinitrobenzene	1	9.275	9.274	0.001	78912	0.2500	0.2680	
13	Nitrobenzene	1	9.648	9.647	0.001	49988	0.2500	0.2614	
14	3,5-Dinitroaniline	1	9.881	9.887	-0.006	59799	0.2500	0.2616	
15	Tetryl	1	10.015	10.014	0.001	38074	0.2500	0.2320	
16	Nitroglycerin	2	10.468	10.467	0.001	171677	2.50	2.68	
17	2,4,6-Trinitrotoluene	1	10.908	10.914	-0.006	54552	0.2500	0.2585	
18	4-Amino-2,6-dinitrotoluene	1	11.101	11.114	-0.013	40182	0.2500	0.2594	
19	2-Amino-4,6-dinitrotoluene	1	11.355	11.367	-0.012	51439	0.2500	0.2554	
20	2,6-Dinitrotoluene	1	11.508	11.514	-0.006	38969	0.2500	0.2730	
21	2,4-Dinitrotoluene	1	11.675	11.687	-0.012	79346	0.2500	0.2675	
22	o-Nitrotoluene	1	12.501	12.514	-0.013	32351	0.2500	0.2529	
23	p-Nitrotoluene	1	12.921	12.940	-0.019	27558	0.2500	0.2463	
24	m-Nitrotoluene	1	13.495	13.514	-0.019	35439	0.2500	0.2522	
25	PETN	2	14.661	14.694	-0.033	185914	2.50	2.70	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00013	Amount Added:	12.50	Units: uL
8330IntermStk_00075	Amount Added:	25.00	Units: uL

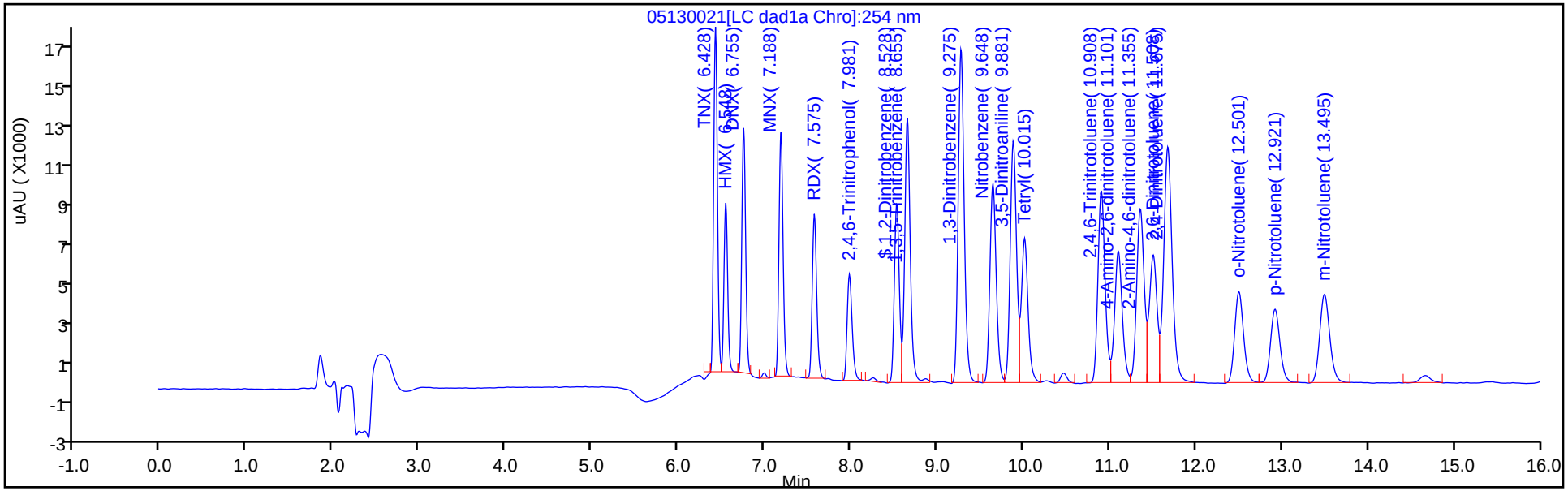
Report Date: 16-May-2023 12:37:12 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

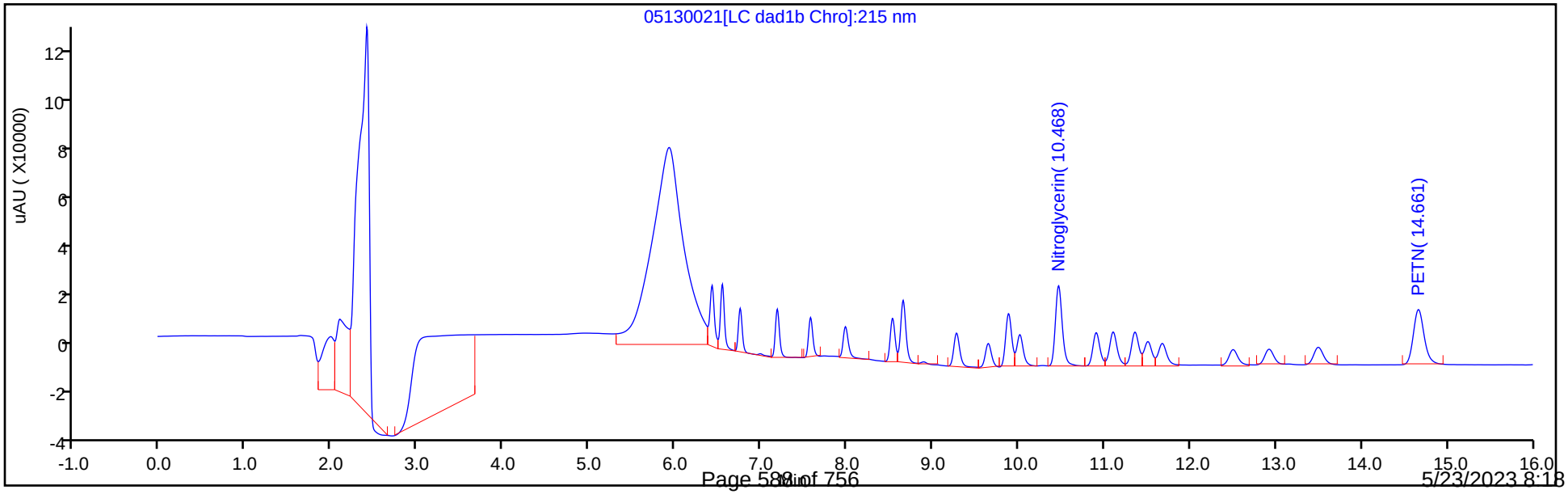
Data File: \\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130021.d

Injection Date:	13-May-2023 18:33:40	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV DMT			Worklist Smp#:	21
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Manual Integration/User Assign Peak Report

Eurofins Denver

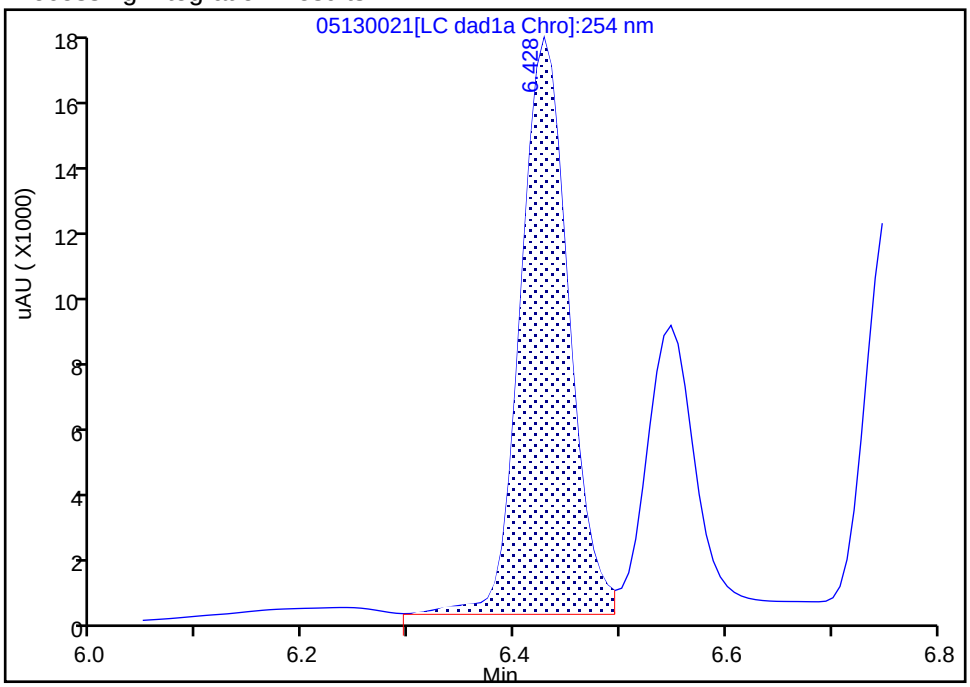
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Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

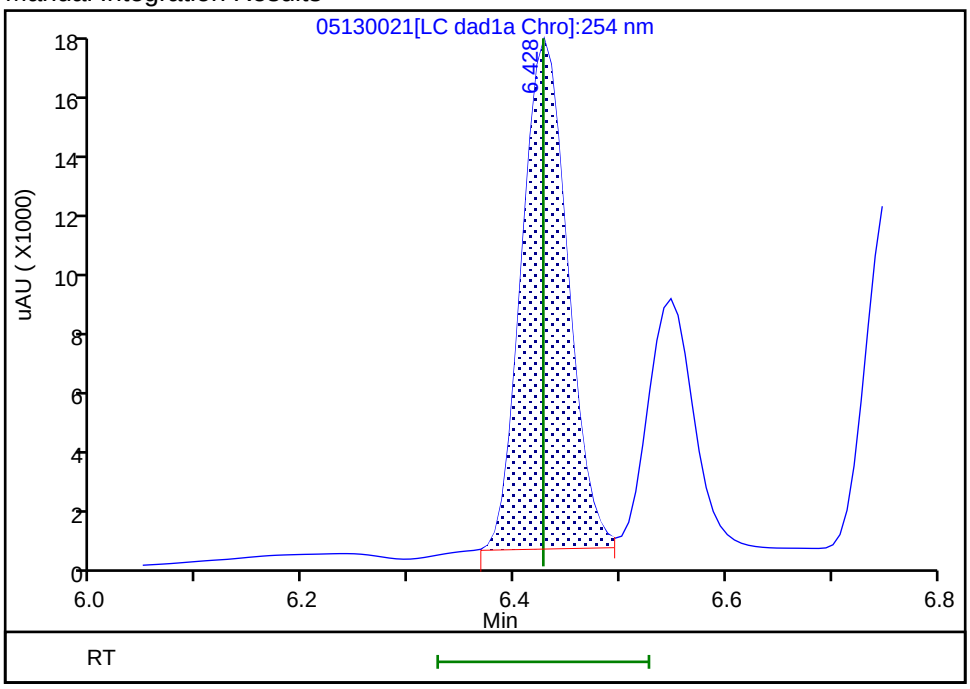
Processing Integration Results

RT: 6.43
Area: 54181
Amount: 0.274074
Amount Units: ug/mL



Manual Integration Results

RT: 6.43
Area: 50995
Amount: 0.257958
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 07:36:55
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

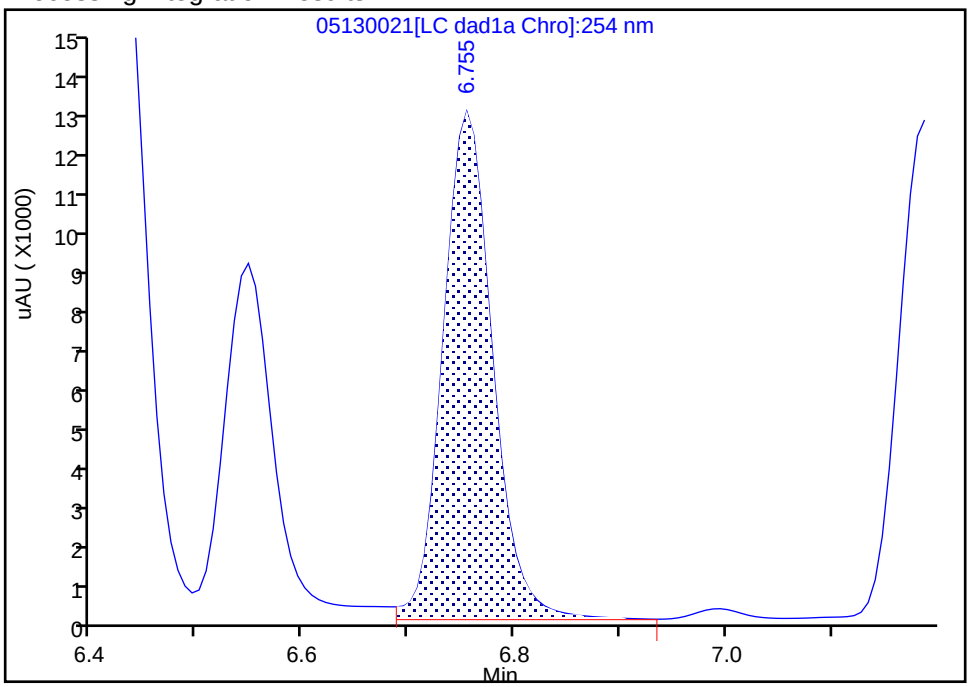
Data File: \\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130021.d
Injection Date: 13-May-2023 18:33:40 Instrument ID: CHHPLC_X3
Lims ID: CCV DMT
Client ID:
Operator ID: JZ/JG ALS Bottle#: 7 Worklist Smp#: 21
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

6 DNX, CAS: 80251-29-2

Signal: 1

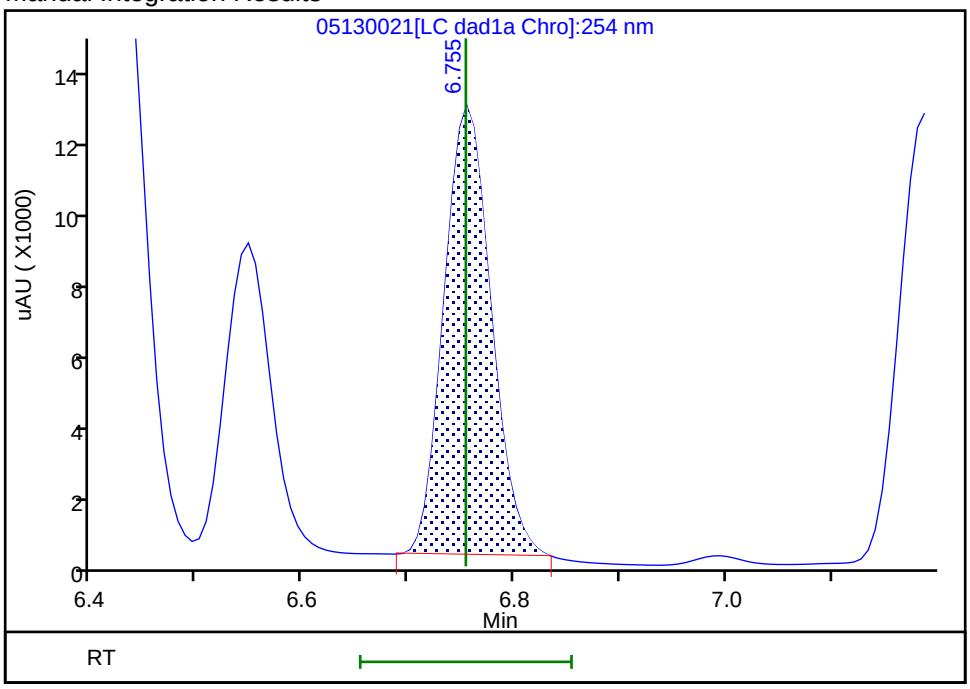
Processing Integration Results

RT: 6.75
Area: 39984
Amount: 0.276778
Amount Units: ug/mL



Manual Integration Results

RT: 6.75
Area: 36975
Amount: 0.255949
Amount Units: ug/mL



Reviewer: LV5D, 16-May-2023 12:16:47
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

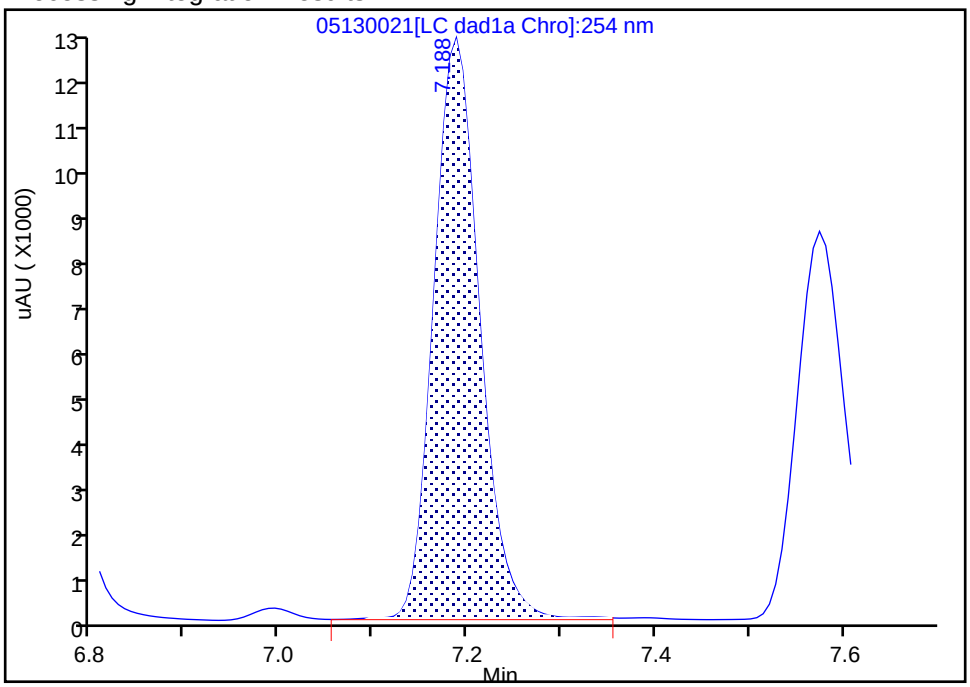
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130021.d				
Injection Date:	13-May-2023 18:33:40	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

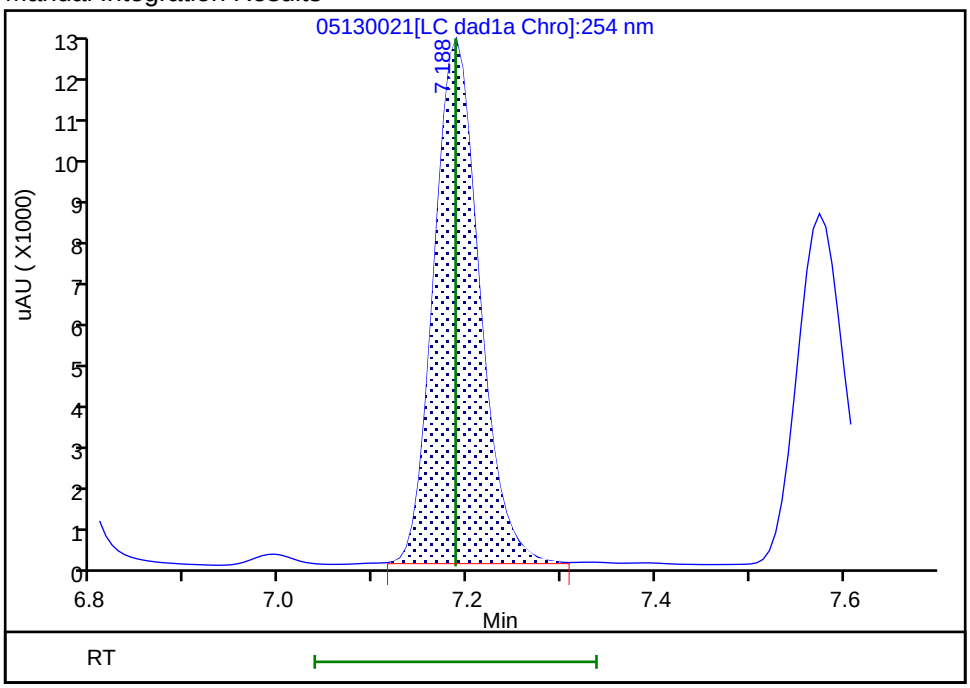
Processing Integration Results

RT: 7.19
Area: 40601
Amount: 0.309526
Amount Units: ug/mL



Manual Integration Results

RT: 7.19
Area: 39998
Amount: 0.304929
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 07:37:12

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Lab Sample ID: CCV 280-612396/22 Calibration Date: 05/13/2023 18:56

Instrument ID: CHHPLC_X3 Calib Start Date: 01/17/2023 00:33

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/17/2023 03:16

Lab File ID: 05130022.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,6-diamino-4-nitrotoluene	Lin2		206504		221	250	-11.6	20.0
2,4-diamino-6-nitrotoluene	Ave	146472	124436		212	250	-15.0	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Lab Sample ID: CCV 280-612396/22 Calibration Date: 05/13/2023 18:56

Instrument ID: CHHPLC_X3 Calib Start Date: 01/17/2023 00:33

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/17/2023 03:16

Lab File ID: 05130022.D

Analyte	RT	RT WINDOW	
		FROM	TO
2,6-diamino-4-nitrotoluene	6.43	6.28	6.58
2,4-diamino-6-nitrotoluene	6.62	6.47	6.77

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130022.D
Lims ID: CCV ADD
Client ID:
Sample Type: CCV
Inject. Date: 13-May-2023 18:56:38 ALS Bottle#: 8 Worklist Smp#: 22
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV ADD
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub28

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-May-2023 12:37:13 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: K8YG Date: 15-May-2023 07:42:47

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 2,6-diamino-4-nitrotoluene	1	6.425	6.426	-0.001	51626	0.2500	0.2210	M
5 2,4-diamino-6-nitrotoluene	1	6.619	6.620	-0.001	31109	0.2500	0.2124	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330_ADDs_00037 Amount Added: 12.50 Units: uL

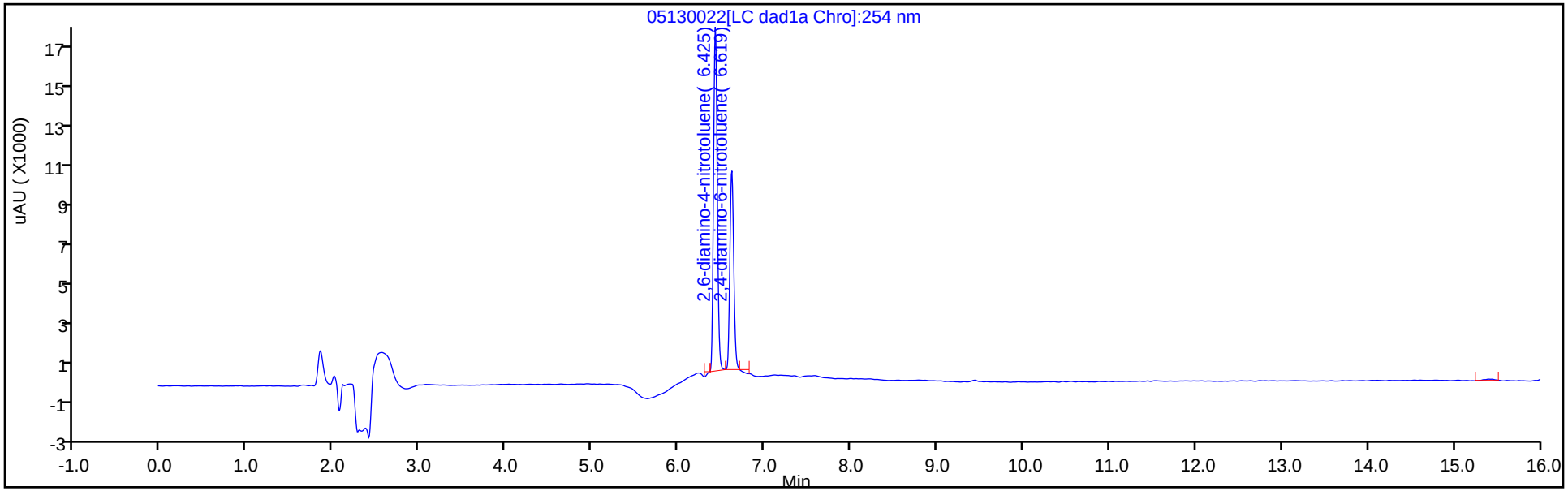
Report Date: 16-May-2023 12:37:13 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

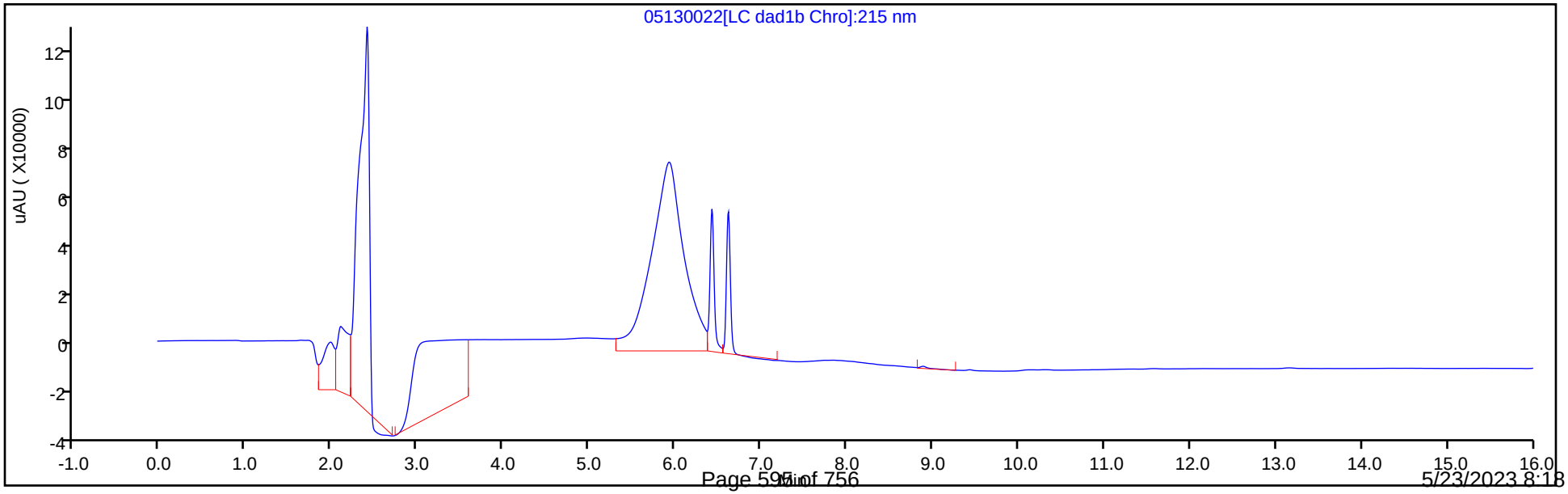
Data File: \\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130022.d

Injection Date:	13-May-2023 18:56:38	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV ADD			Worklist Smp#:	22
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
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

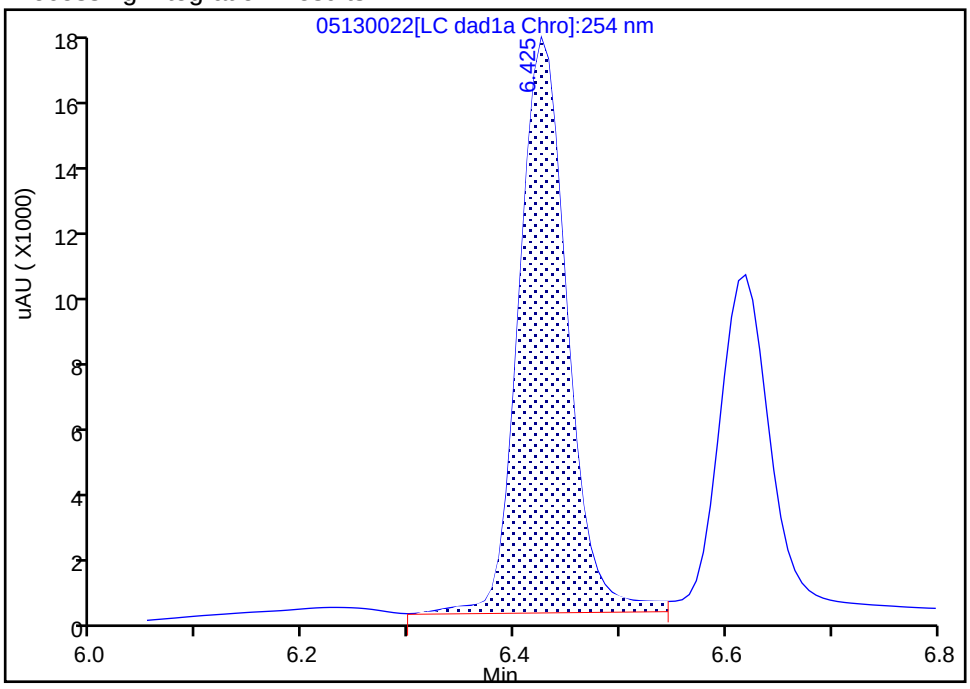
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130022.d				
Injection Date:	13-May-2023 18:56:38	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	8	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

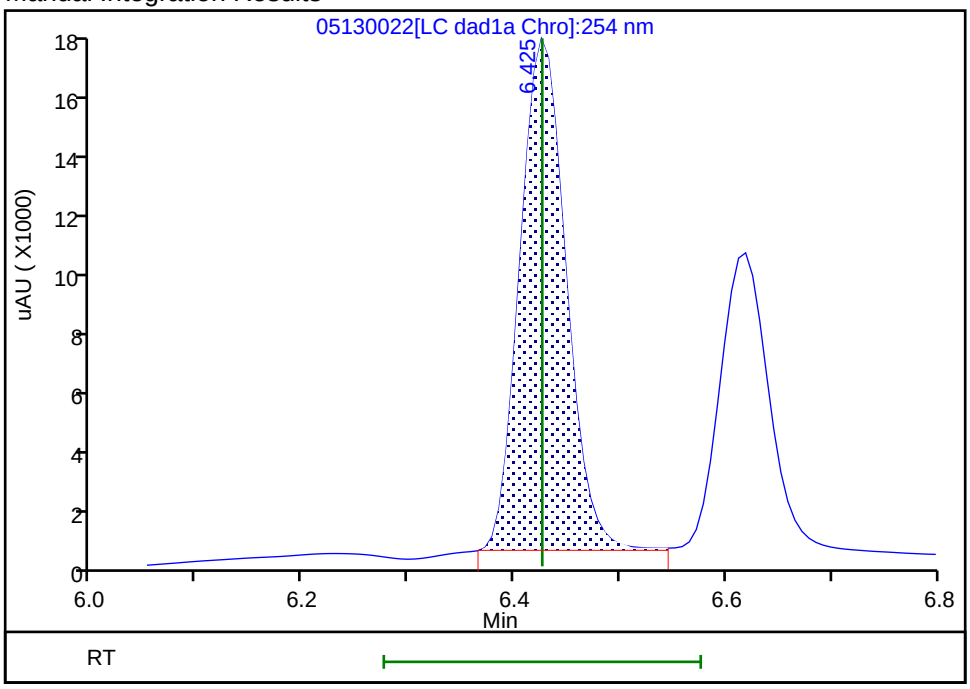
Processing Integration Results

RT: 6.43
Area: 55178
Amount: 0.236463
Amount Units: ug/mL



Manual Integration Results

RT: 6.43
Area: 51626
Amount: 0.220999
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 07:42:42

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

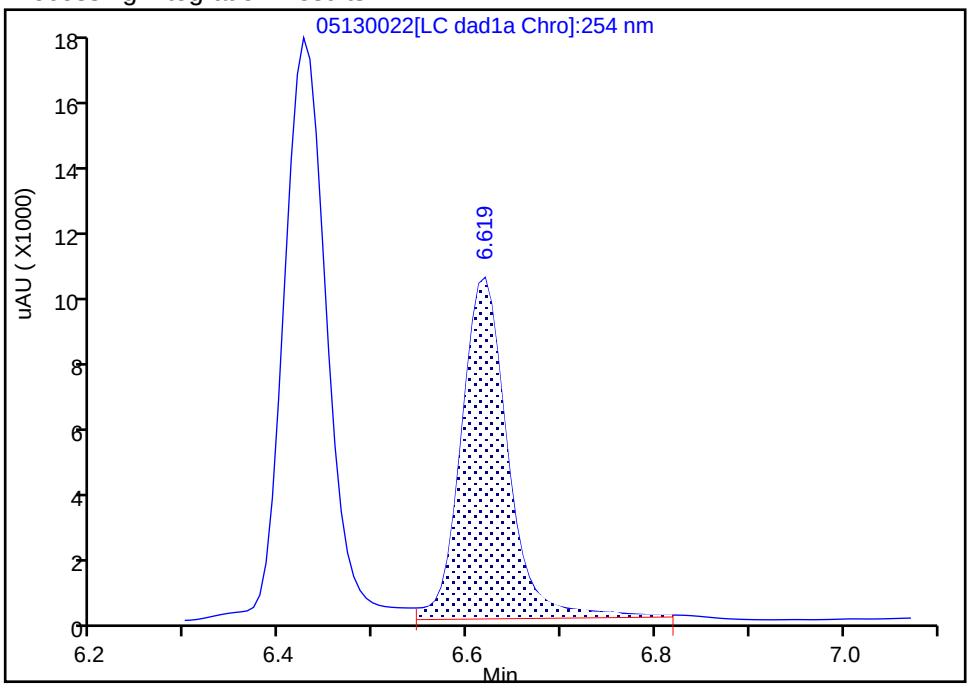
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Injection Date:	13-May-2023 18:56:38	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	8	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

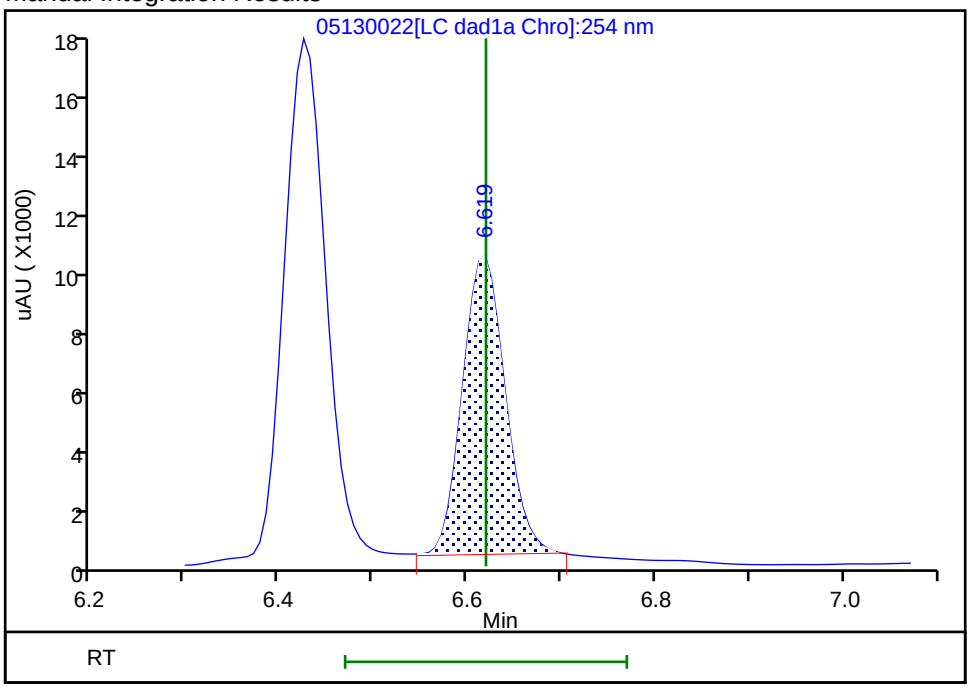
Processing Integration Results

RT: 6.62
Area: 34751
Amount: 0.237253
Amount Units: ug/mL



Manual Integration Results

RT: 6.62
Area: 31109
Amount: 0.212389
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 07:42:39
Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Lab Sample ID: CCV 280-612396/33 Calibration Date: 05/13/2023 23:08

Instrument ID: CHHPLC_X3 Calib Start Date: 02/08/2023 15:38

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 02/08/2023 18:42

Lab File ID: 05130033.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	93528	98060		262	250	4.8	20.0
RDX	Ave	106380	116660		274	250	9.7	20.0
Picric acid	Ave	75830	85960		283	250	13.4	20.0
1,3,5-Trinitrobenzene	Ave	217147	229216		264	250	5.6	20.0
1,3-Dinitrobenzene	Ave	294397	318348		270	250	8.1	20.0
Nitrobenzene	Ave	191245	198760		260	250	3.9	20.0
3,5-Dinitroaniline	Lin2		243856		267	250	6.7	20.0
Tetryl	Ave	164121	148276		226	250	-9.7	20.0
Nitroglycerin	Ave	64070	68846		2690	2500	7.5	20.0
2,4,6-Trinitrotoluene	Ave	211040	219440		260	250	4.0	20.0
4-Amino-2,6-dinitrotoluene	Ave	154933	160896		260	250	3.8	20.0
2-Amino-4,6-dinitrotoluene	Ave	201410	208272		259	250	3.4	20.0
2,6-Dinitrotoluene	Ave	142745	157092		275	250	10.1	20.0
2,4-Dinitrotoluene	Ave	296667	314648		265	250	6.1	20.0
2-Nitrotoluene	Ave	127896	127804		250	250	-0.0	20.0
4-Nitrotoluene	Ave	111880	109696		245	250	-2.0	20.0
3-Nitrotoluene	Ave	140492	139436		248	250	-0.8	20.0
PETN	Ave	68845	74801		2720	2500	8.7	20.0
1,2-Dinitrobenzene	Ave	126309	141668		280	250	12.2	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Lab Sample ID: CCV 280-612396/33 Calibration Date: 05/13/2023 23:08

Instrument ID: CHHPLC_X3 Calib Start Date: 02/08/2023 15:38

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 02/08/2023 18:42

Lab File ID: 05130033.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.55	6.40	6.70
RDX	7.57	7.42	7.72
Picric acid	7.98	7.82	8.12
1,3,5-Trinitrobenzene	8.65	8.50	8.80
1,3-Dinitrobenzene	9.28	9.12	9.42
Nitrobenzene	9.65	9.50	9.80
3,5-Dinitroaniline	9.89	9.74	10.04
Tetryl	10.02	9.86	10.16
Nitroglycerin	10.47	10.32	10.62
2,4,6-Trinitrotoluene	10.91	10.81	11.01
4-Amino-2,6-dinitrotoluene	11.11	11.01	11.21
2-Amino-4,6-dinitrotoluene	11.36	11.27	11.47
2,6-Dinitrotoluene	11.51	11.41	11.61
2,4-Dinitrotoluene	11.67	11.59	11.79
2-Nitrotoluene	12.49	12.36	12.66
4-Nitrotoluene	12.91	12.79	13.09
3-Nitrotoluene	13.49	13.36	13.66
PETN	14.65	14.54	14.84
1,2-Dinitrobenzene	8.53	8.37	8.67

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130033.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 13-May-2023 23:08:57 ALS Bottle#: 7 Worklist Smp#: 33
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-May-2023 12:37:21 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: K8YG Date: 15-May-2023 08:09:20

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.425	6.427	-0.002	50523	0.2508	0.2556	M
4 HMX	1	6.545	6.547	-0.002	24515	0.2500	0.2621	M
6 DNX	1	6.752	6.754	-0.002	37985	0.2503	0.2629	M
7 MNX	1	7.185	7.187	-0.002	40140	0.2918	0.3060	M
8 RDX	1	7.572	7.574	-0.002	29165	0.2500	0.2742	
9 2,4,6-Trinitrophenol	1	7.979	7.974	0.005	21490	0.2500	0.2834	
$ 10 1,2-Dinitrobenzene	1	8.532	8.521	0.011	35417	0.2500	0.2804	
11 1,3,5-Trinitrobenzene	1	8.652	8.647	0.005	57304	0.2500	0.2639	
12 1,3-Dinitrobenzene	1	9.279	9.274	0.005	79587	0.2500	0.2703	
13 Nitrobenzene	1	9.652	9.647	0.005	49690	0.2500	0.2598	
14 3,5-Dinitroaniline	1	9.885	9.887	-0.002	60964	0.2500	0.2667	
15 Tetryl	1	10.019	10.014	0.005	37069	0.2500	0.2259	
16 Nitroglycerin	2	10.472	10.467	0.005	172116	2.50	2.69	
17 2,4,6-Trinitrotoluene	1	10.905	10.914	-0.009	54860	0.2500	0.2600	
18 4-Amino-2,6-dinitrotoluene	1	11.105	11.114	-0.009	40224	0.2500	0.2596	
19 2-Amino-4,6-dinitrotoluene	1	11.359	11.367	-0.008	52068	0.2500	0.2585	
20 2,6-Dinitrotoluene	1	11.505	11.514	-0.009	39273	0.2500	0.2751	
21 2,4-Dinitrotoluene	1	11.672	11.687	-0.015	78662	0.2500	0.2652	
22 o-Nitrotoluene	1	12.492	12.514	-0.022	31951	0.2500	0.2498	
23 p-Nitrotoluene	1	12.912	12.940	-0.028	27424	0.2500	0.2451	
24 m-Nitrotoluene	1	13.485	13.514	-0.029	34859	0.2500	0.2481	
25 PETN	2	14.645	14.694	-0.049	187003	2.50	2.72	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00013	Amount Added:	12.50	Units: uL
8330IntermStk_00075	Amount Added:	25.00	Units: uL

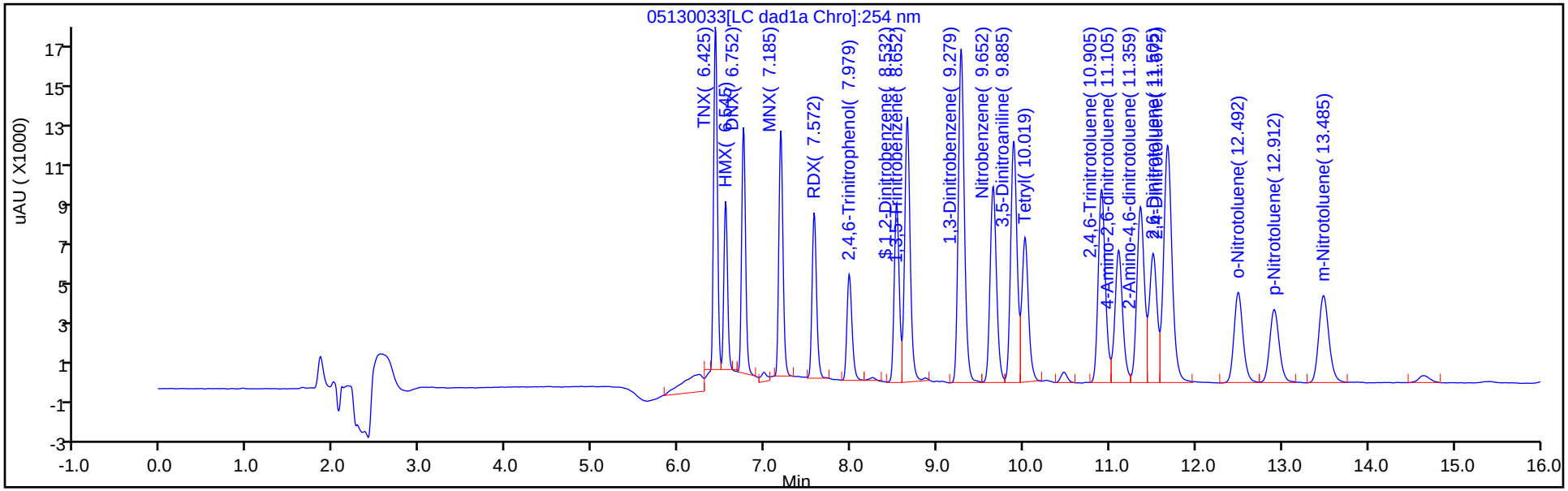
Report Date: 16-May-2023 12:37:21 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

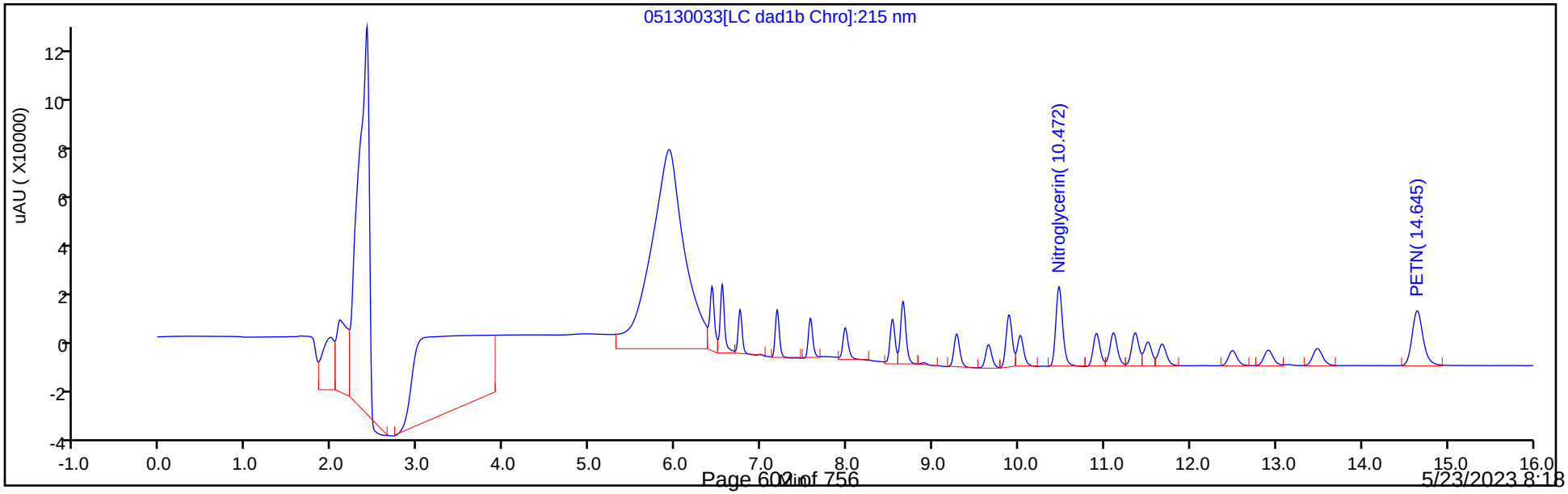
Data File: \\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130033.d

Injection Date:	13-May-2023 23:08:57	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV DMT			Worklist Smp#:	33
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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

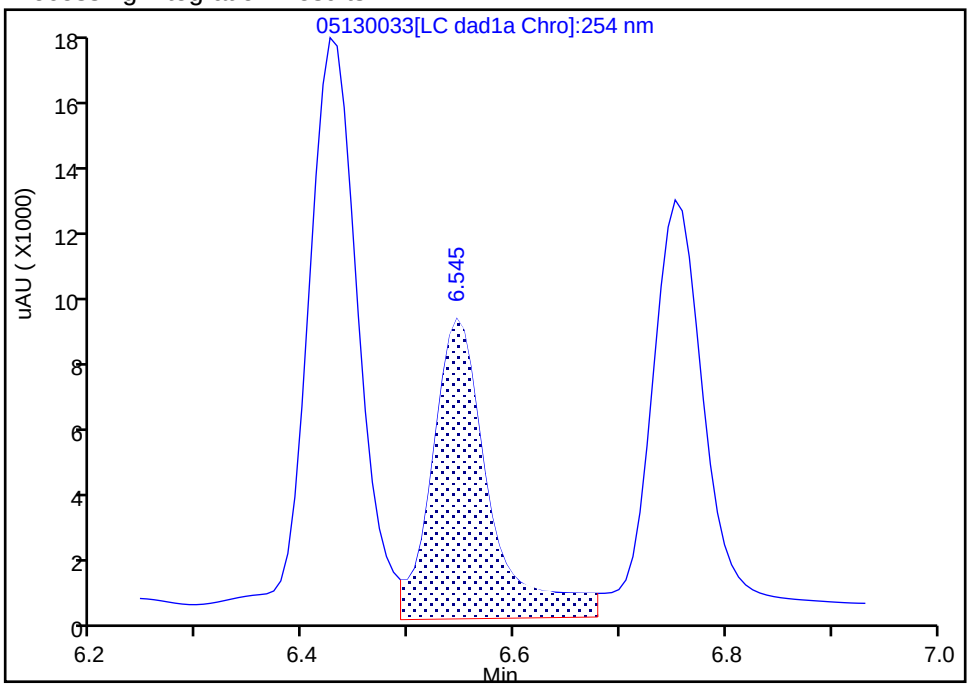
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Injection Date:	13-May-2023 23:08:57	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

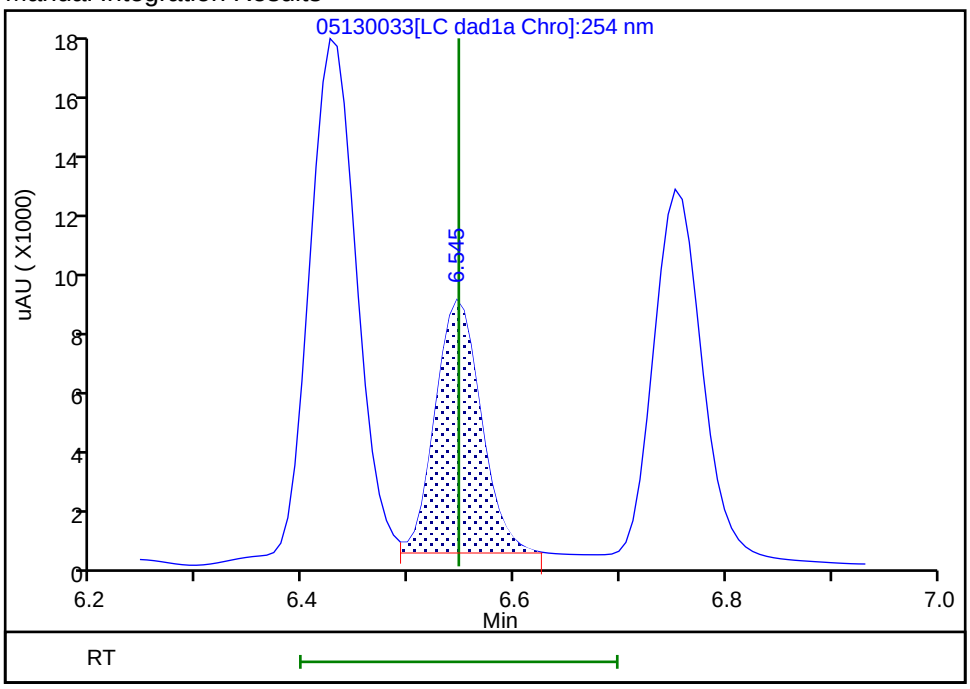
Processing Integration Results

RT: 6.55
Area: 33687
Amount: 0.360180
Amount Units: ug/mL



Manual Integration Results

RT: 6.55
Area: 24515
Amount: 0.262114
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 08:08:37
Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Lab Sample ID: CCV 280-612396/33 Calibration Date: 05/13/2023 23:08

Instrument ID: CHHPLC_X3 Calib Start Date: 02/24/2023 15:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 02/24/2023 17:41

Lab File ID: 05130033.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	197687	201488		256	251	1.9	20.0
DNX	Ave	144462	151788		263	250	5.1	20.0
MNX	Ave	131172	137584		306	292	4.9	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Lab Sample ID: CCV 280-612396/33 Calibration Date: 05/13/2023 23:08

Instrument ID: CHHPLC_X3 Calib Start Date: 02/24/2023 15:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 02/24/2023 17:41

Lab File ID: 05130033.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.43	6.33	6.53
DNX	6.75	6.65	6.85
MNX	7.19	7.04	7.34

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130033.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 13-May-2023 23:08:57 ALS Bottle#: 7 Worklist Smp#: 33
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-May-2023 12:37:21 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: K8YG Date: 15-May-2023 08:09:20

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.425	6.427	-0.002	50523	0.2508	0.2556	M
4 HMX	1	6.545	6.547	-0.002	24515	0.2500	0.2621	M
6 DNX	1	6.752	6.754	-0.002	37985	0.2503	0.2629	M
7 MNX	1	7.185	7.187	-0.002	40140	0.2918	0.3060	M
8 RDX	1	7.572	7.574	-0.002	29165	0.2500	0.2742	
9 2,4,6-Trinitrophenol	1	7.979	7.974	0.005	21490	0.2500	0.2834	
$ 10 1,2-Dinitrobenzene	1	8.532	8.521	0.011	35417	0.2500	0.2804	
11 1,3,5-Trinitrobenzene	1	8.652	8.647	0.005	57304	0.2500	0.2639	
12 1,3-Dinitrobenzene	1	9.279	9.274	0.005	79587	0.2500	0.2703	
13 Nitrobenzene	1	9.652	9.647	0.005	49690	0.2500	0.2598	
14 3,5-Dinitroaniline	1	9.885	9.887	-0.002	60964	0.2500	0.2667	
15 Tetryl	1	10.019	10.014	0.005	37069	0.2500	0.2259	
16 Nitroglycerin	2	10.472	10.467	0.005	172116	2.50	2.69	
17 2,4,6-Trinitrotoluene	1	10.905	10.914	-0.009	54860	0.2500	0.2600	
18 4-Amino-2,6-dinitrotoluene	1	11.105	11.114	-0.009	40224	0.2500	0.2596	
19 2-Amino-4,6-dinitrotoluene	1	11.359	11.367	-0.008	52068	0.2500	0.2585	
20 2,6-Dinitrotoluene	1	11.505	11.514	-0.009	39273	0.2500	0.2751	
21 2,4-Dinitrotoluene	1	11.672	11.687	-0.015	78662	0.2500	0.2652	
22 o-Nitrotoluene	1	12.492	12.514	-0.022	31951	0.2500	0.2498	
23 p-Nitrotoluene	1	12.912	12.940	-0.028	27424	0.2500	0.2451	
24 m-Nitrotoluene	1	13.485	13.514	-0.029	34859	0.2500	0.2481	
25 PETN	2	14.645	14.694	-0.049	187003	2.50	2.72	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00013	Amount Added:	12.50	Units: uL
8330IntermStk_00075	Amount Added:	25.00	Units: uL

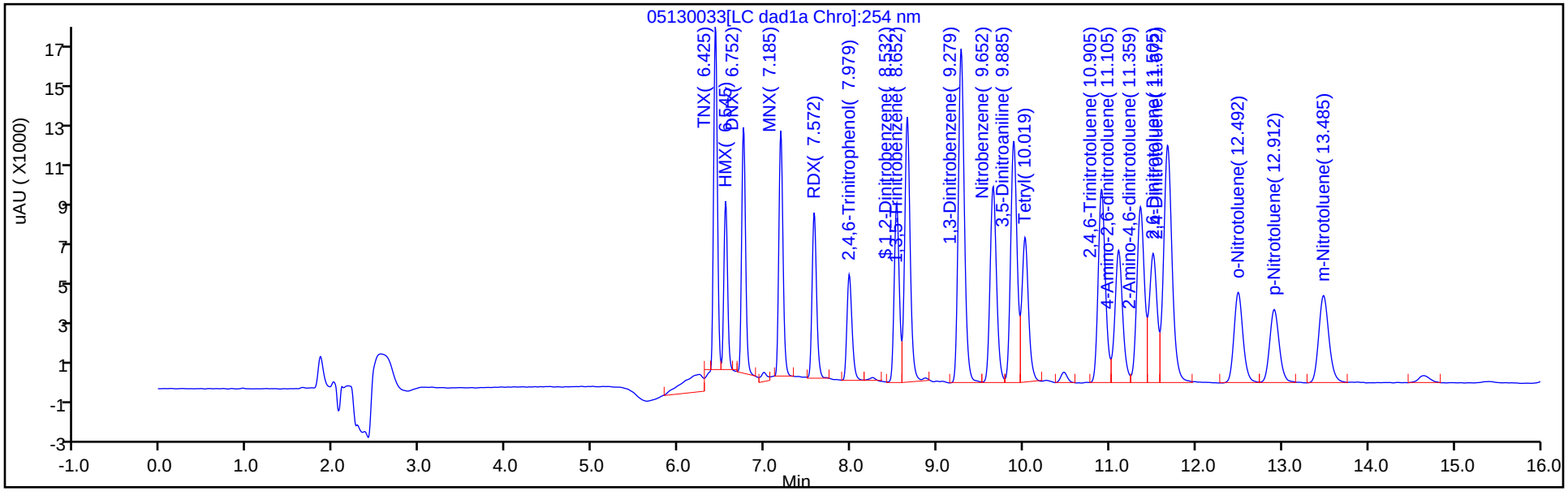
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Eurofins Denver

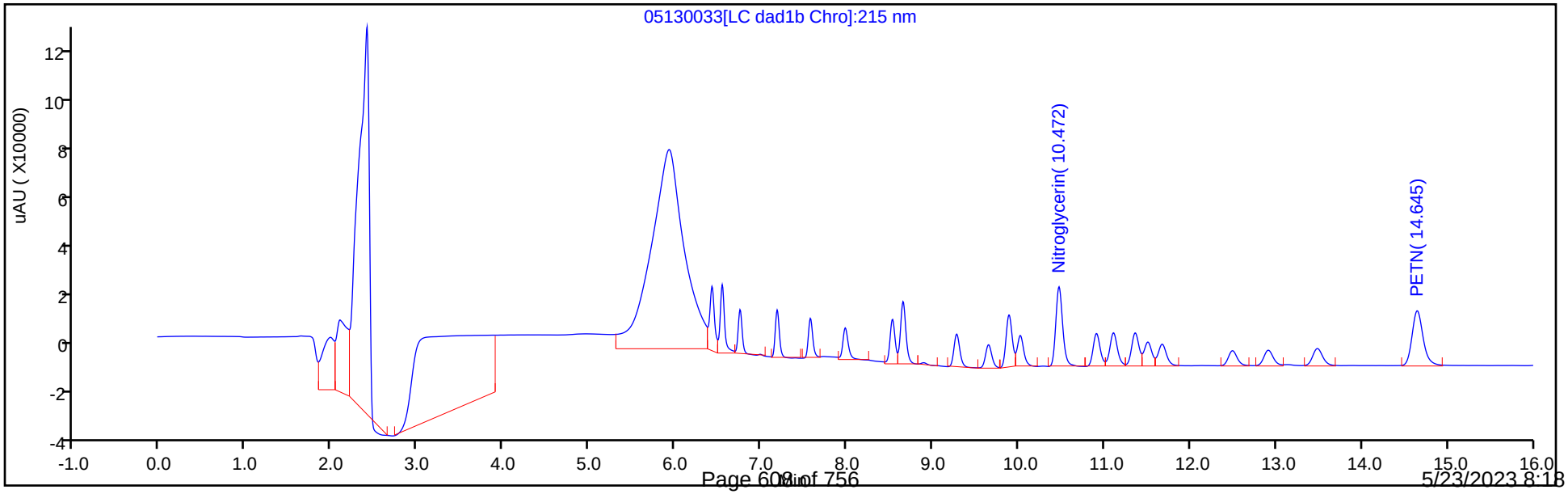
Data File: \\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130033.d

Injection Date:	13-May-2023 23:08:57	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV DMT			Worklist Smp#:	33
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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

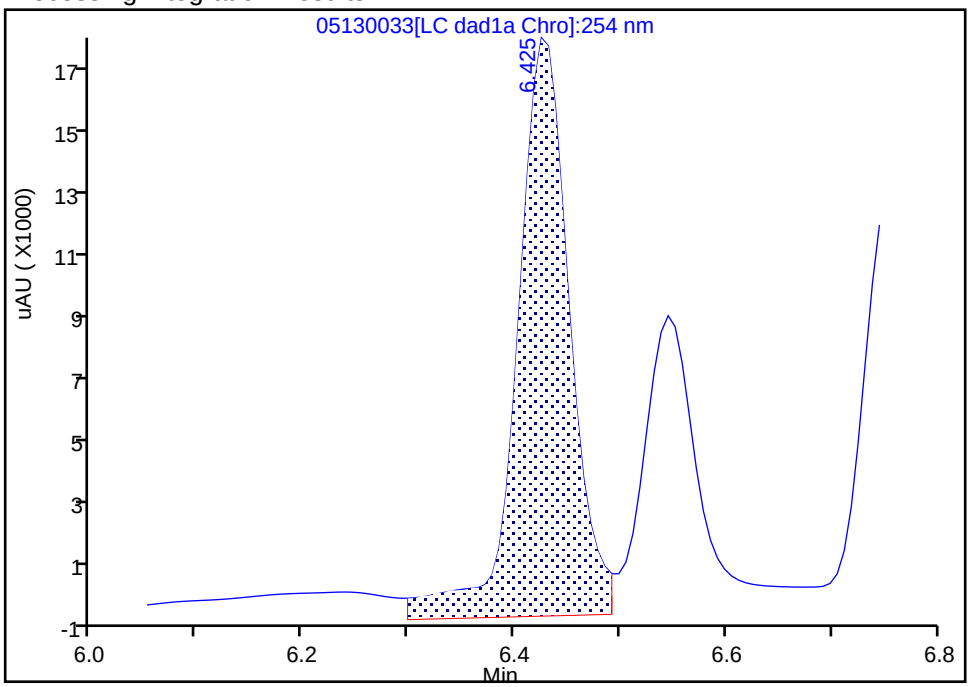
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Injection Date:	13-May-2023 23:08:57	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

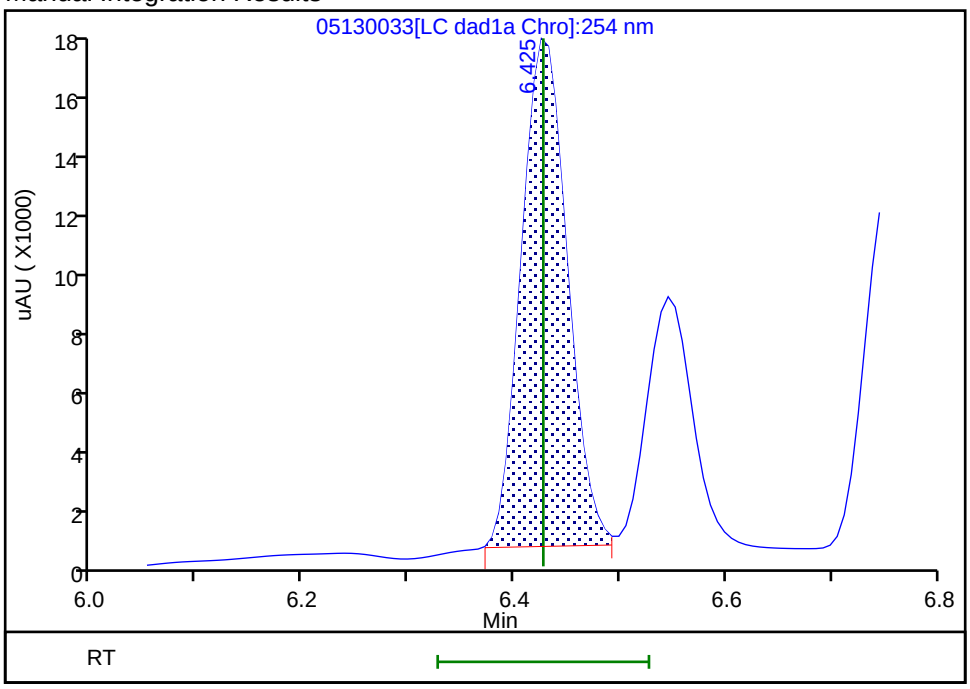
Processing Integration Results

RT: 6.43
Area: 60941
Amount: 0.308270
Amount Units: ug/mL



Manual Integration Results

RT: 6.43
Area: 50523
Amount: 0.255570
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 08:08:39

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

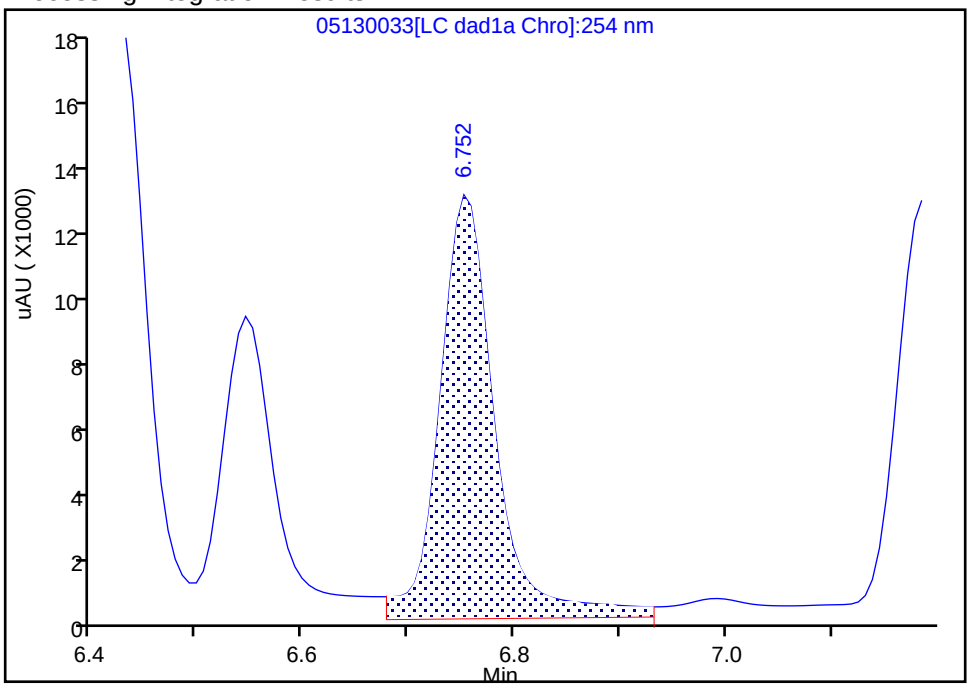
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Injection Date:	13-May-2023 23:08:57	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

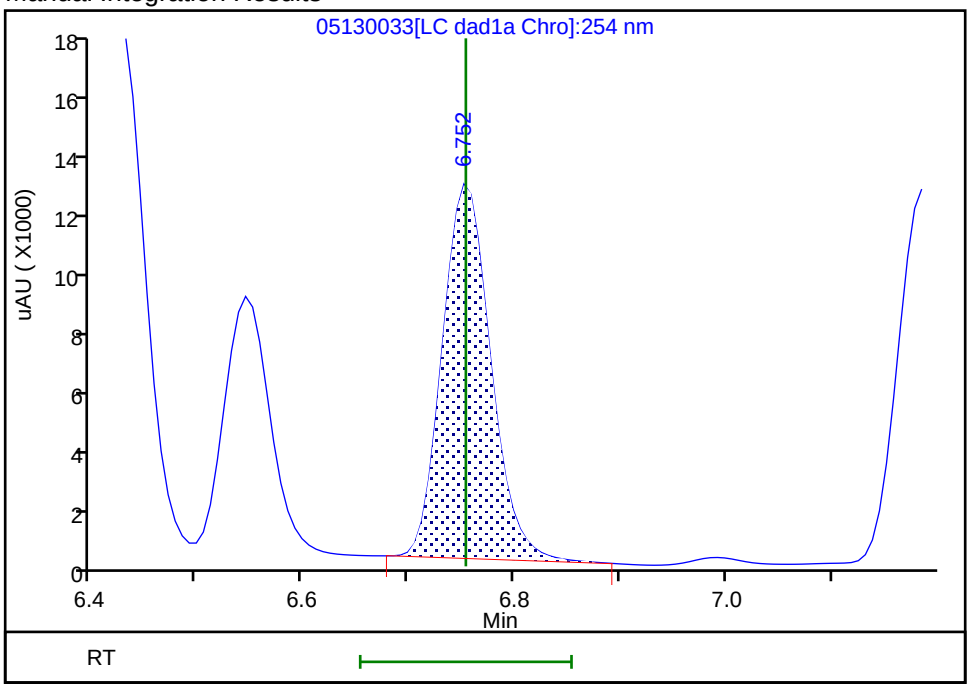
Processing Integration Results

RT: 6.75
Area: 45355
Amount: 0.313957
Amount Units: ug/mL



Manual Integration Results

RT: 6.75
Area: 37985
Amount: 0.262940
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 08:08:47

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

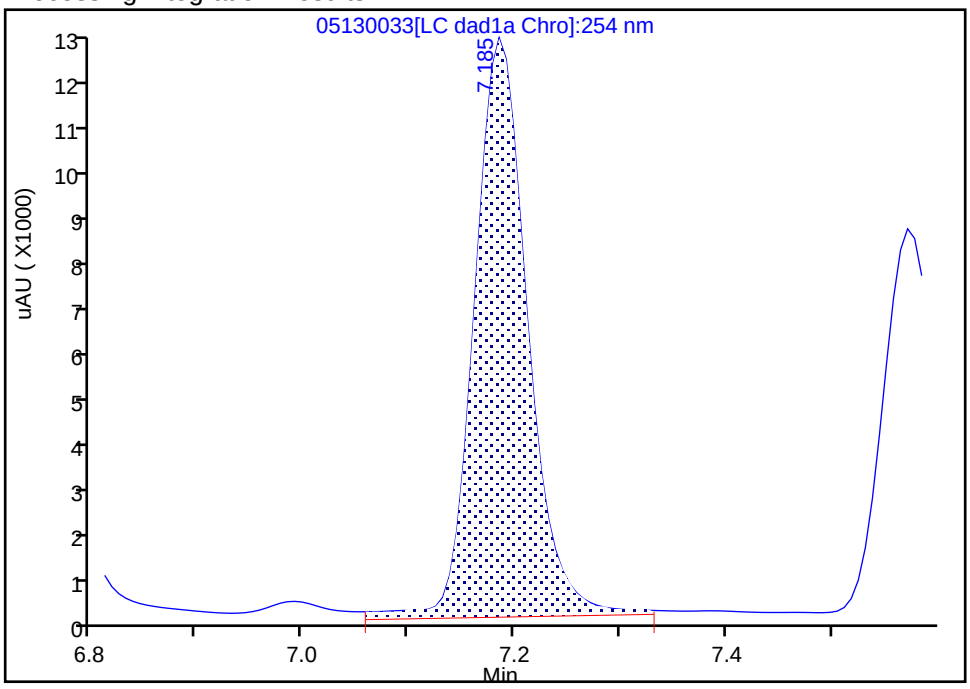
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130033.d				
Injection Date:	13-May-2023 23:08:57	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

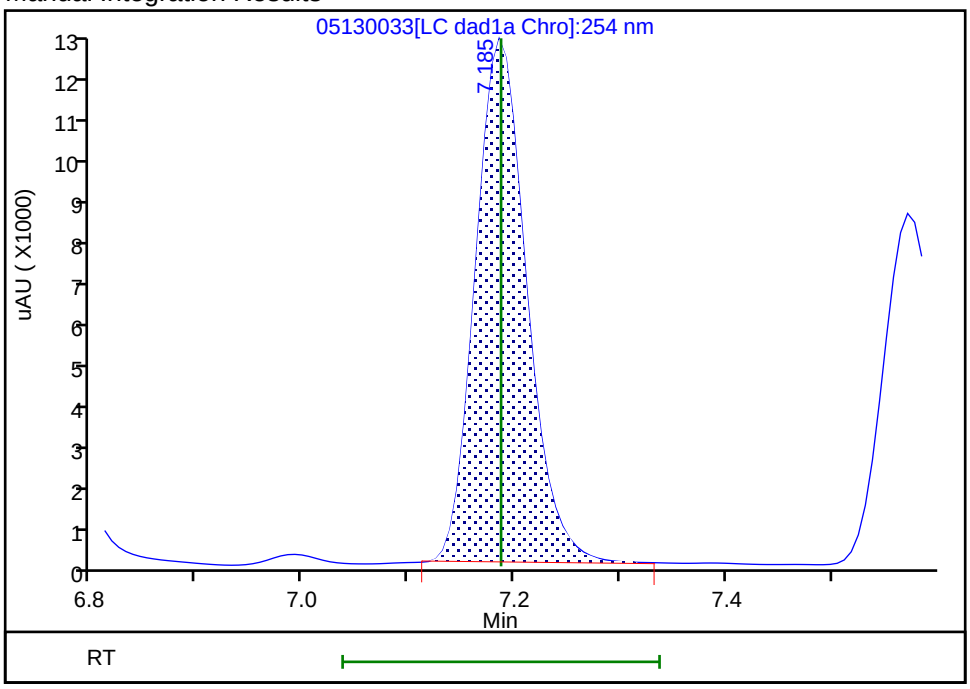
Processing Integration Results

RT: 7.19
Area: 42561
Amount: 0.324468
Amount Units: ug/mL



Manual Integration Results

RT: 7.19
Area: 40140
Amount: 0.306011
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 08:09:36

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Lab Sample ID: CCV 280-612396/34 Calibration Date: 05/13/2023 23:31

Instrument ID: CHHPLC_X3 Calib Start Date: 01/17/2023 00:33

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/17/2023 03:16

Lab File ID: 05130034.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,6-diamino-4-nitrotoluene	Lin2		208096		223	250	-10.9	20.0
2,4-diamino-6-nitrotoluene	Ave	146472	126496		216	250	-13.6	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Lab Sample ID: CCV 280-612396/34 Calibration Date: 05/13/2023 23:31

Instrument ID: CHHPLC_X3 Calib Start Date: 01/17/2023 00:33

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/17/2023 03:16

Lab File ID: 05130034.D

Analyte	RT	RT WINDOW	
		FROM	TO
2,6-diamino-4-nitrotoluene	6.43	6.28	6.58
2,4-diamino-6-nitrotoluene	6.61	6.47	6.77

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130034.D
Lims ID: CCV ADD
Client ID:
Sample Type: CCV
Inject. Date: 13-May-2023 23:31:55 ALS Bottle#: 8 Worklist Smp#: 34
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV ADD
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub28

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-May-2023 12:37:22 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: K8YG Date: 15-May-2023 08:10:17

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 2,6-diamino-4-nitrotoluene	1	6.428	6.426	0.002	52024	0.2500	0.2227	M
5 2,4-diamino-6-nitrotoluene	1	6.614	6.620	-0.006	31624	0.2500	0.2159	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330_ADDs_00037 Amount Added: 12.50 Units: uL

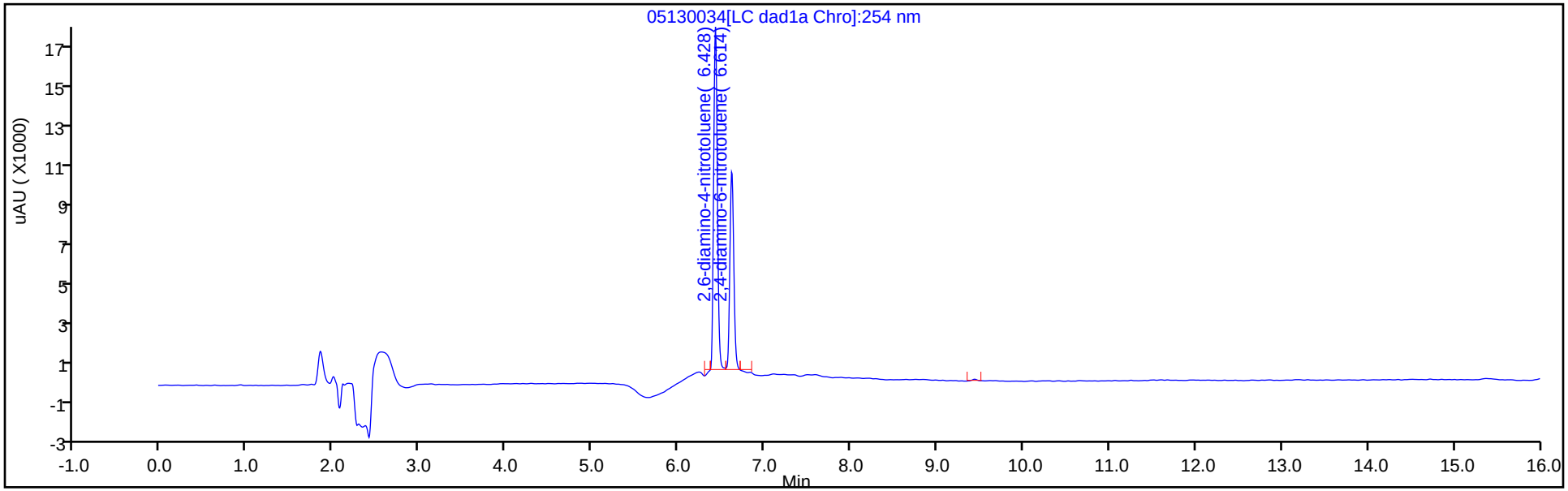
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Eurofins Denver

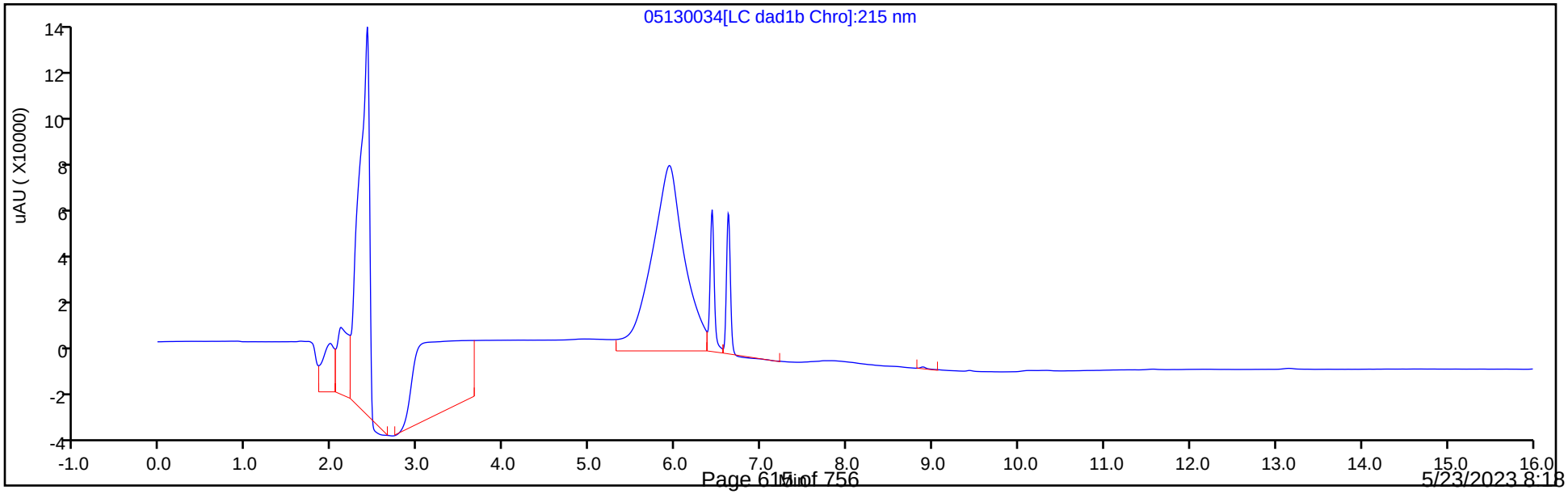
Data File: \\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130034.d

Injection Date:	13-May-2023 23:31:55	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV ADD			Worklist Smp#:	34
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
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

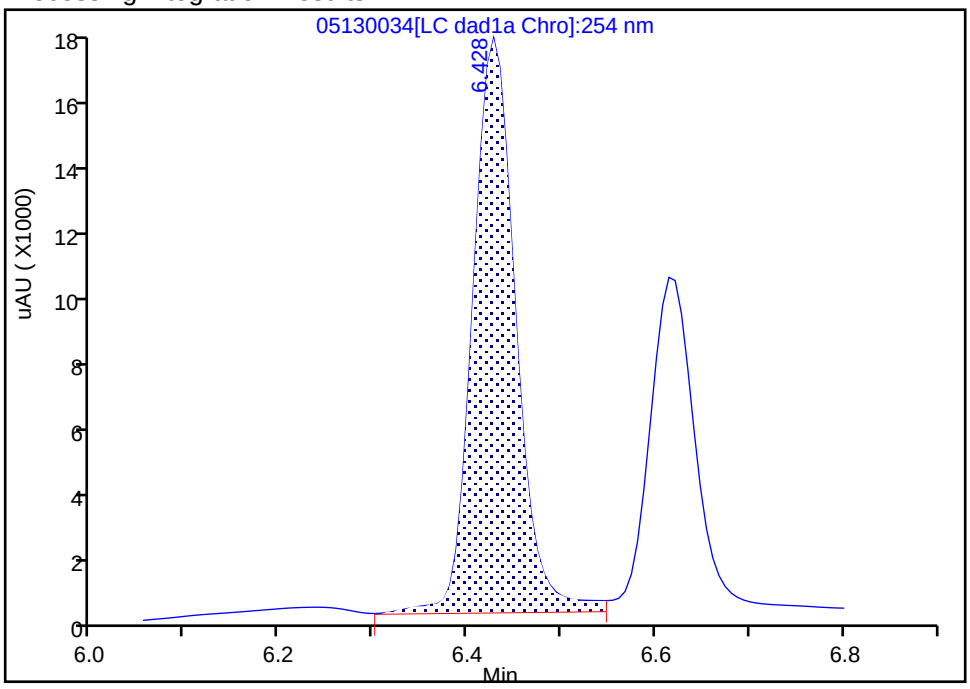
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130034.d				
Injection Date:	13-May-2023 23:31:55	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	8	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

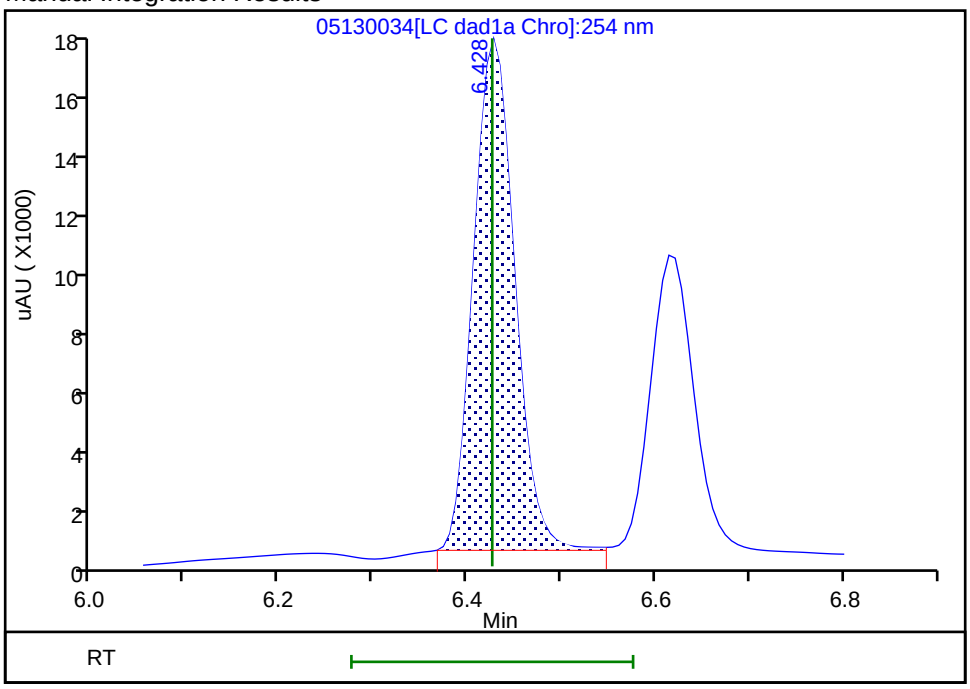
Processing Integration Results

RT: 6.43
Area: 55617
Amount: 0.238374
Amount Units: ug/mL



Manual Integration Results

RT: 6.43
Area: 52024
Amount: 0.222732
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 08:10:08
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

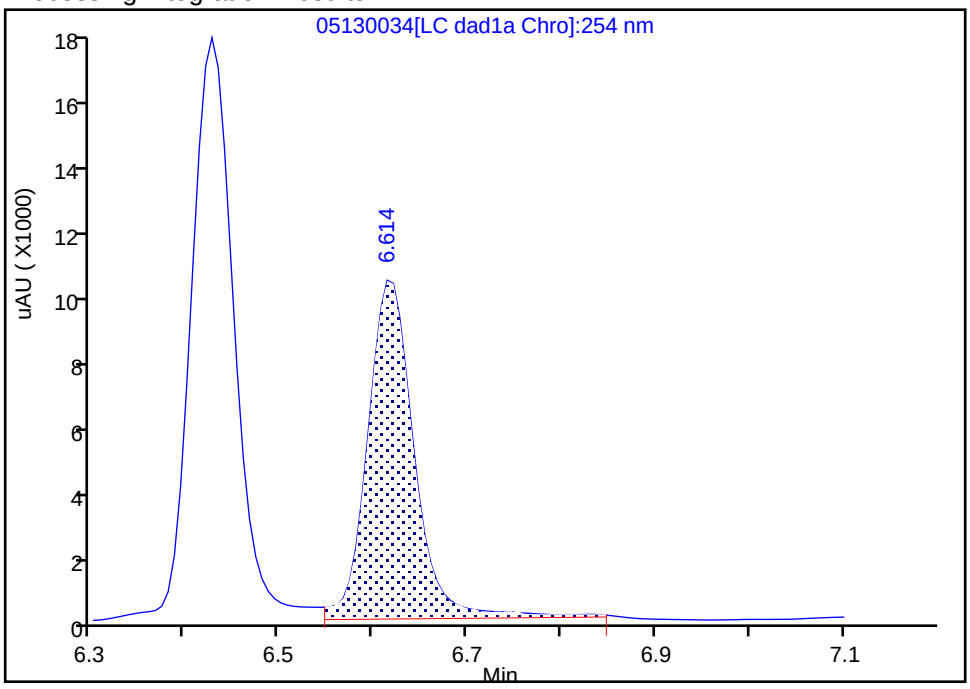
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Injection Date:	13-May-2023 23:31:55	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	8	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

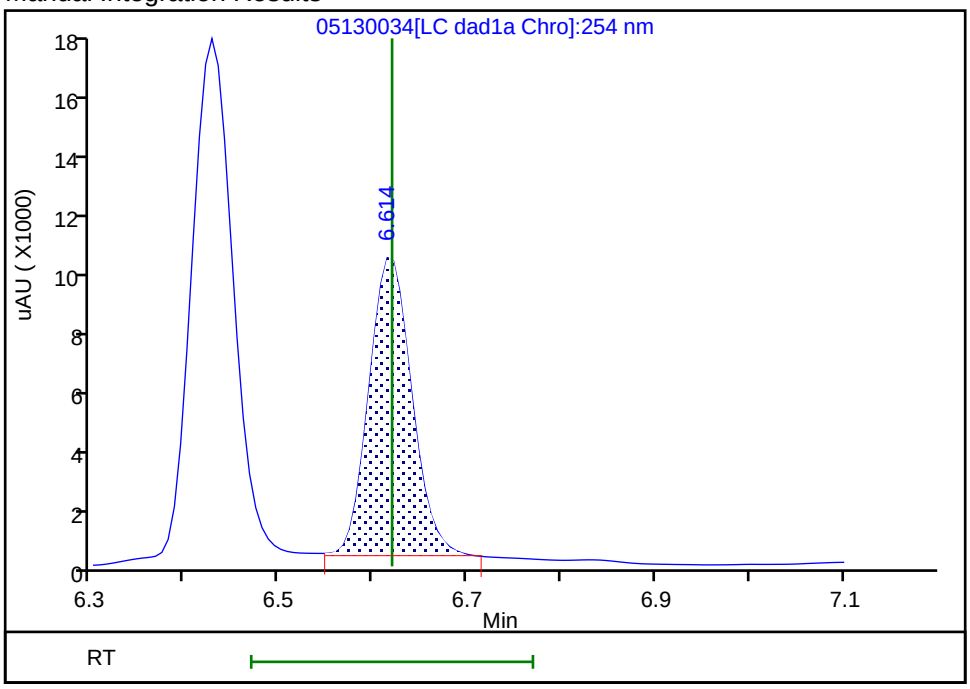
Processing Integration Results

RT: 6.61
Area: 34838
Amount: 0.237847
Amount Units: ug/mL



Manual Integration Results

RT: 6.61
Area: 31624
Amount: 0.215905
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 08:10:11
Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Lab Sample ID: CCV 280-612396/45 Calibration Date: 05/14/2023 03:44

Instrument ID: CHHPLC_X3 Calib Start Date: 02/08/2023 15:38

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 02/08/2023 18:42

Lab File ID: 05130045.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	93528	101912		272	250	9.0	20.0
RDX	Ave	106380	116324		273	250	9.3	20.0
Picric acid	Ave	75830	84736		279	250	11.7	20.0
1,3,5-Trinitrobenzene	Ave	217147	228096		263	250	5.0	20.0
1,3-Dinitrobenzene	Ave	294397	317104		269	250	7.7	20.0
Nitrobenzene	Ave	191245	195016		255	250	2.0	20.0
3,5-Dinitroaniline	Lin2		242828		266	250	6.2	20.0
Tetryl	Ave	164121	150212		229	250	-8.5	20.0
Nitroglycerin	Ave	64070	69342		2710	2500	8.2	20.0
2,4,6-Trinitrotoluene	Ave	211040	220252		261	250	4.4	20.0
4-Amino-2,6-dinitrotoluene	Ave	154933	161928		261	250	4.5	20.0
2-Amino-4,6-dinitrotoluene	Ave	201410	209352		260	250	3.9	20.0
2,6-Dinitrotoluene	Ave	142745	154376		270	250	8.1	20.0
2,4-Dinitrotoluene	Ave	296667	317860		268	250	7.1	20.0
2-Nitrotoluene	Ave	127896	124956		244	250	-2.3	20.0
4-Nitrotoluene	Ave	111880	107944		241	250	-3.5	20.0
3-Nitrotoluene	Ave	140492	138008		246	250	-1.8	20.0
PETN	Ave	68845	74740		2710	2500	8.6	20.0
1,2-Dinitrobenzene	Ave	126309	141308		280	250	11.9	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Lab Sample ID: CCV 280-612396/45 Calibration Date: 05/14/2023 03:44

Instrument ID: CHHPLC_X3 Calib Start Date: 02/08/2023 15:38

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 02/08/2023 18:42

Lab File ID: 05130045.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.55	6.40	6.70
RDX	7.57	7.42	7.72
Picric acid	7.98	7.82	8.12
1,3,5-Trinitrobenzene	8.65	8.50	8.80
1,3-Dinitrobenzene	9.28	9.12	9.42
Nitrobenzene	9.65	9.50	9.80
3,5-Dinitroaniline	9.89	9.74	10.04
Tetryl	10.02	9.86	10.16
Nitroglycerin	10.47	10.32	10.62
2,4,6-Trinitrotoluene	10.91	10.81	11.01
4-Amino-2,6-dinitrotoluene	11.11	11.01	11.21
2-Amino-4,6-dinitrotoluene	11.37	11.27	11.47
2,6-Dinitrotoluene	11.51	11.41	11.61
2,4-Dinitrotoluene	11.68	11.59	11.79
2-Nitrotoluene	12.50	12.36	12.66
4-Nitrotoluene	12.92	12.79	13.09
3-Nitrotoluene	13.49	13.36	13.66
PETN	14.66	14.54	14.84
1,2-Dinitrobenzene	8.53	8.37	8.67

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130045.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 14-May-2023 03:44:17 ALS Bottle#: 7 Worklist Smp#: 45
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-May-2023 12:37:30 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: K8YG Date: 15-May-2023 12:05:39

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.428	6.427	0.001	51314	0.2508	0.2596	M
4 HMX	1	6.548	6.547	0.001	25478	0.2500	0.2724	M
6 DNX	1	6.754	6.754	0.000	37981	0.2503	0.2629	M
7 MNX	1	7.181	7.187	-0.006	40892	0.2918	0.3117	
8 RDX	1	7.568	7.574	-0.006	29081	0.2500	0.2734	
9 2,4,6-Trinitrophenol	1	7.981	7.974	0.007	21184	0.2500	0.2794	
$ 10 1,2-Dinitrobenzene	1	8.528	8.521	0.007	35327	0.2500	0.2797	
11 1,3,5-Trinitrobenzene	1	8.648	8.647	0.001	57024	0.2500	0.2626	
12 1,3-Dinitrobenzene	1	9.281	9.274	0.007	79276	0.2500	0.2693	
13 Nitrobenzene	1	9.648	9.647	0.001	48754	0.2500	0.2549	
14 3,5-Dinitroaniline	1	9.894	9.887	0.007	60707	0.2500	0.2655	
15 Tetryl	1	10.021	10.014	0.007	37553	0.2500	0.2288	
16 Nitroglycerin	2	10.474	10.467	0.007	173355	2.50	2.71	
17 2,4,6-Trinitrotoluene	1	10.908	10.914	-0.006	55063	0.2500	0.2609	
18 4-Amino-2,6-dinitrotoluene	1	11.114	11.114	0.000	40482	0.2500	0.2613	
19 2-Amino-4,6-dinitrotoluene	1	11.368	11.367	0.001	52338	0.2500	0.2599	
20 2,6-Dinitrotoluene	1	11.514	11.514	0.000	38594	0.2500	0.2704	
21 2,4-Dinitrotoluene	1	11.681	11.687	-0.006	79465	0.2500	0.2679	
22 o-Nitrotoluene	1	12.501	12.514	-0.013	31239	0.2500	0.2443	
23 p-Nitrotoluene	1	12.921	12.940	-0.019	26986	0.2500	0.2412	
24 m-Nitrotoluene	1	13.494	13.514	-0.020	34502	0.2500	0.2456	
25 PETN	2	14.661	14.694	-0.033	186850	2.50	2.71	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00013	Amount Added:	12.50	Units: uL
8330IntermStk_00075	Amount Added:	25.00	Units: uL

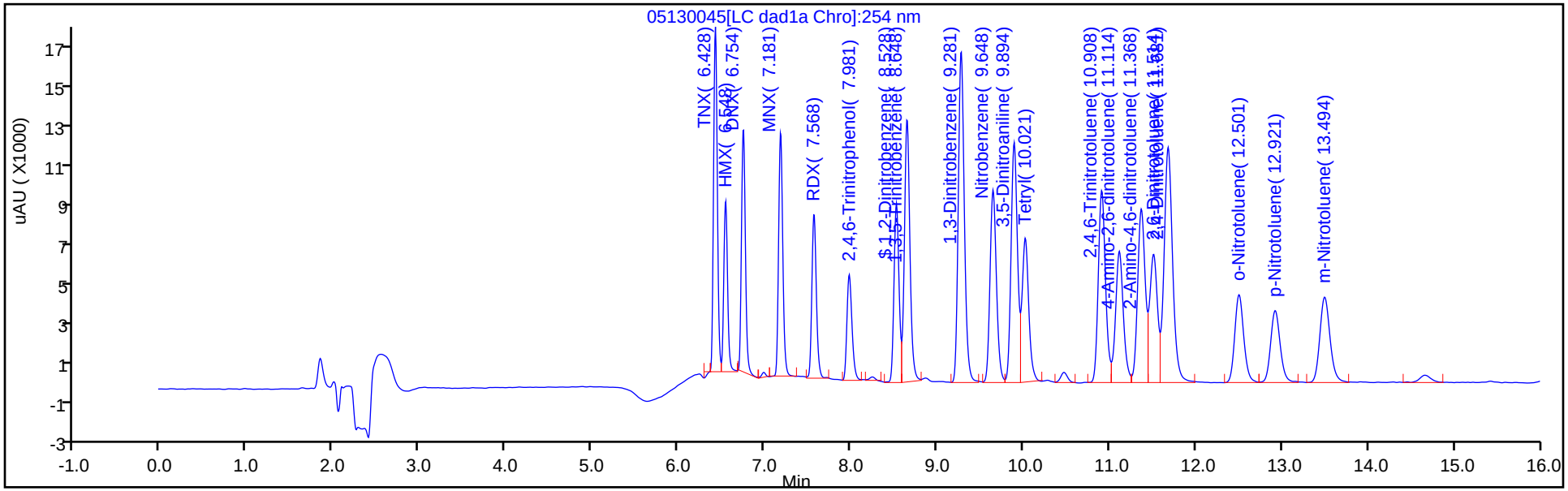
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Eurofins Denver

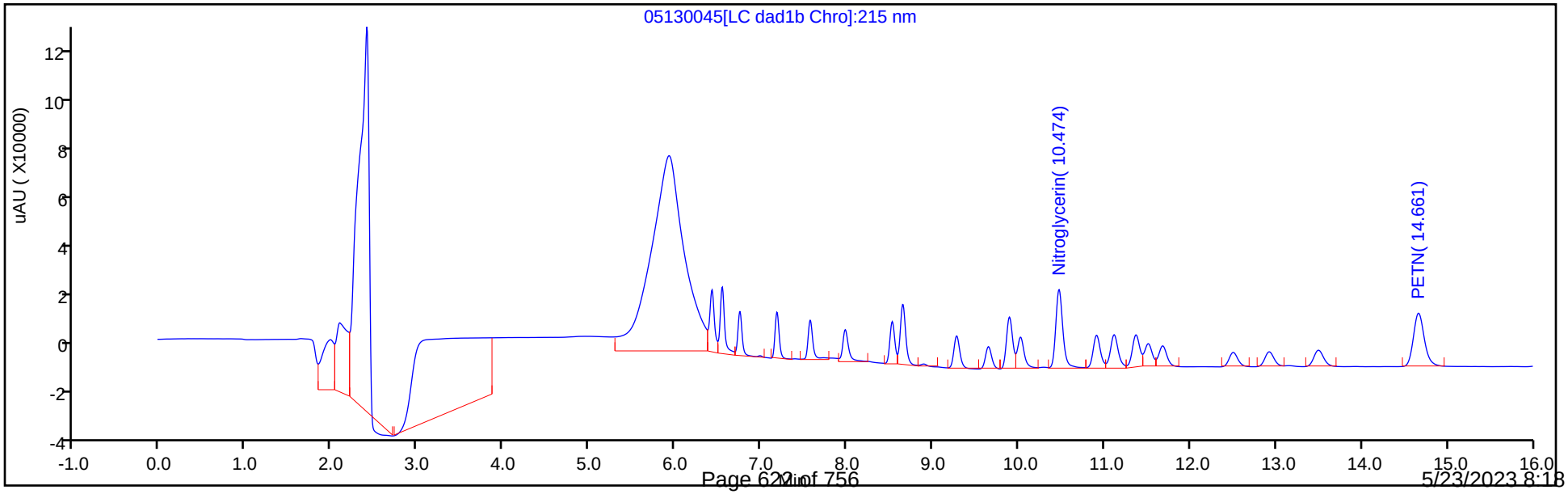
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Injection Date:	14-May-2023 03:44:17	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV DMT			Worklist Smp#:	45
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

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

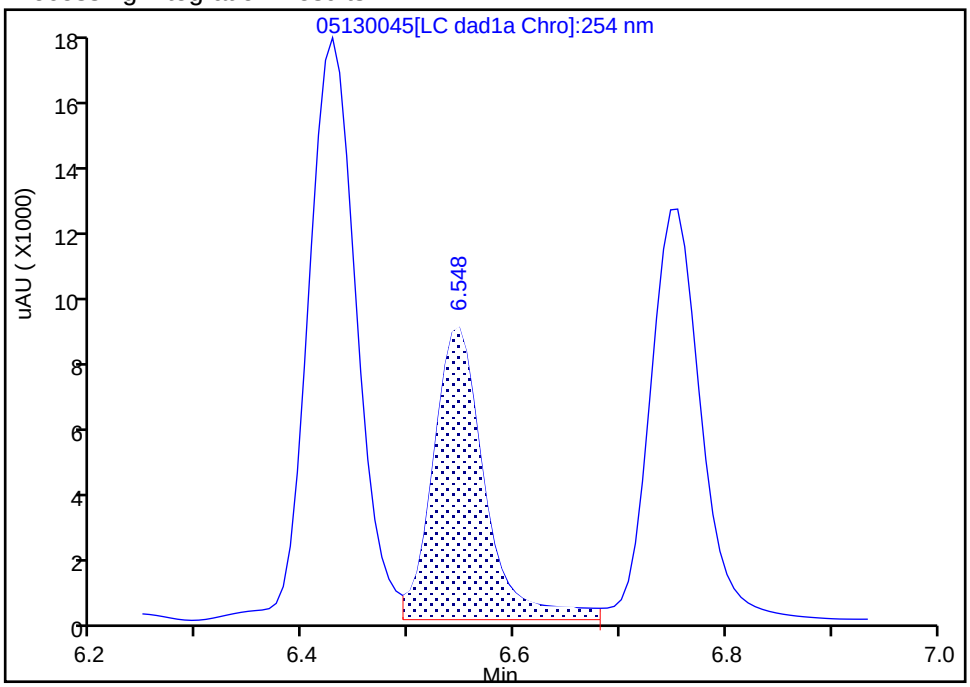
Data File: \\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130045.d
Injection Date: 14-May-2023 03:44:17 Instrument ID: CHHPLC_X3
Lims ID: CCV DMT
Client ID:
Operator ID: JZ/JG ALS Bottle#: 7 Worklist Smp#: 45
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

4 HMX, CAS: 2691-41-0

Signal: 1

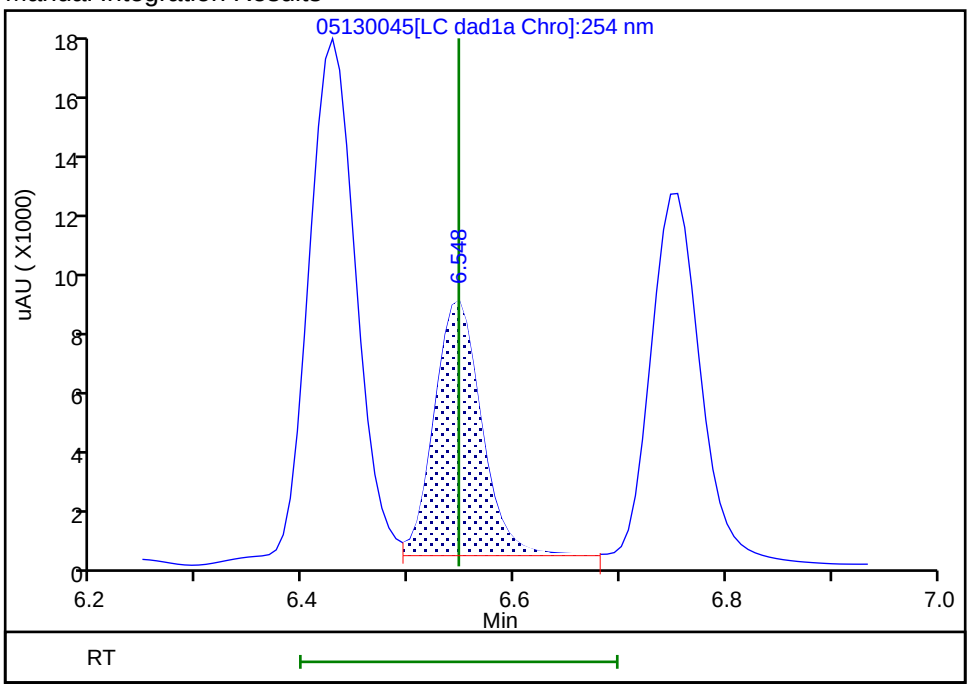
Processing Integration Results

RT: 6.55
Area: 29235
Amount: 0.312580
Amount Units: ug/mL



Manual Integration Results

RT: 6.55
Area: 25478
Amount: 0.272410
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 12:04:51
Audit Action: Assigned New Baseline Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Lab Sample ID: CCV 280-612396/45 Calibration Date: 05/14/2023 03:44

Instrument ID: CHHPLC_X3 Calib Start Date: 02/24/2023 15:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 02/24/2023 17:41

Lab File ID: 05130045.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	197687	204642		260	251	3.5	20.0
DNX	Ave	144462	151772		263	250	5.1	20.0
MNX	Ave	131172	140161		312	292	6.9	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Lab Sample ID: CCV 280-612396/45 Calibration Date: 05/14/2023 03:44

Instrument ID: CHHPLC_X3 Calib Start Date: 02/24/2023 15:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 02/24/2023 17:41

Lab File ID: 05130045.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.43	6.33	6.53
DNX	6.75	6.65	6.85
MNX	7.18	7.04	7.34

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130045.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 14-May-2023 03:44:17 ALS Bottle#: 7 Worklist Smp#: 45
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-May-2023 12:37:30 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: K8YG Date: 15-May-2023 12:05:39

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.428	6.427	0.001	51314	0.2508	0.2596	M
4 HMX	1	6.548	6.547	0.001	25478	0.2500	0.2724	M
6 DNX	1	6.754	6.754	0.000	37981	0.2503	0.2629	M
7 MNX	1	7.181	7.187	-0.006	40892	0.2918	0.3117	
8 RDX	1	7.568	7.574	-0.006	29081	0.2500	0.2734	
9 2,4,6-Trinitrophenol	1	7.981	7.974	0.007	21184	0.2500	0.2794	
$ 10 1,2-Dinitrobenzene	1	8.528	8.521	0.007	35327	0.2500	0.2797	
11 1,3,5-Trinitrobenzene	1	8.648	8.647	0.001	57024	0.2500	0.2626	
12 1,3-Dinitrobenzene	1	9.281	9.274	0.007	79276	0.2500	0.2693	
13 Nitrobenzene	1	9.648	9.647	0.001	48754	0.2500	0.2549	
14 3,5-Dinitroaniline	1	9.894	9.887	0.007	60707	0.2500	0.2655	
15 Tetryl	1	10.021	10.014	0.007	37553	0.2500	0.2288	
16 Nitroglycerin	2	10.474	10.467	0.007	173355	2.50	2.71	
17 2,4,6-Trinitrotoluene	1	10.908	10.914	-0.006	55063	0.2500	0.2609	
18 4-Amino-2,6-dinitrotoluene	1	11.114	11.114	0.000	40482	0.2500	0.2613	
19 2-Amino-4,6-dinitrotoluene	1	11.368	11.367	0.001	52338	0.2500	0.2599	
20 2,6-Dinitrotoluene	1	11.514	11.514	0.000	38594	0.2500	0.2704	
21 2,4-Dinitrotoluene	1	11.681	11.687	-0.006	79465	0.2500	0.2679	
22 o-Nitrotoluene	1	12.501	12.514	-0.013	31239	0.2500	0.2443	
23 p-Nitrotoluene	1	12.921	12.940	-0.019	26986	0.2500	0.2412	
24 m-Nitrotoluene	1	13.494	13.514	-0.020	34502	0.2500	0.2456	
25 PETN	2	14.661	14.694	-0.033	186850	2.50	2.71	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00013	Amount Added:	12.50	Units: uL
8330IntermStk_00075	Amount Added:	25.00	Units: uL

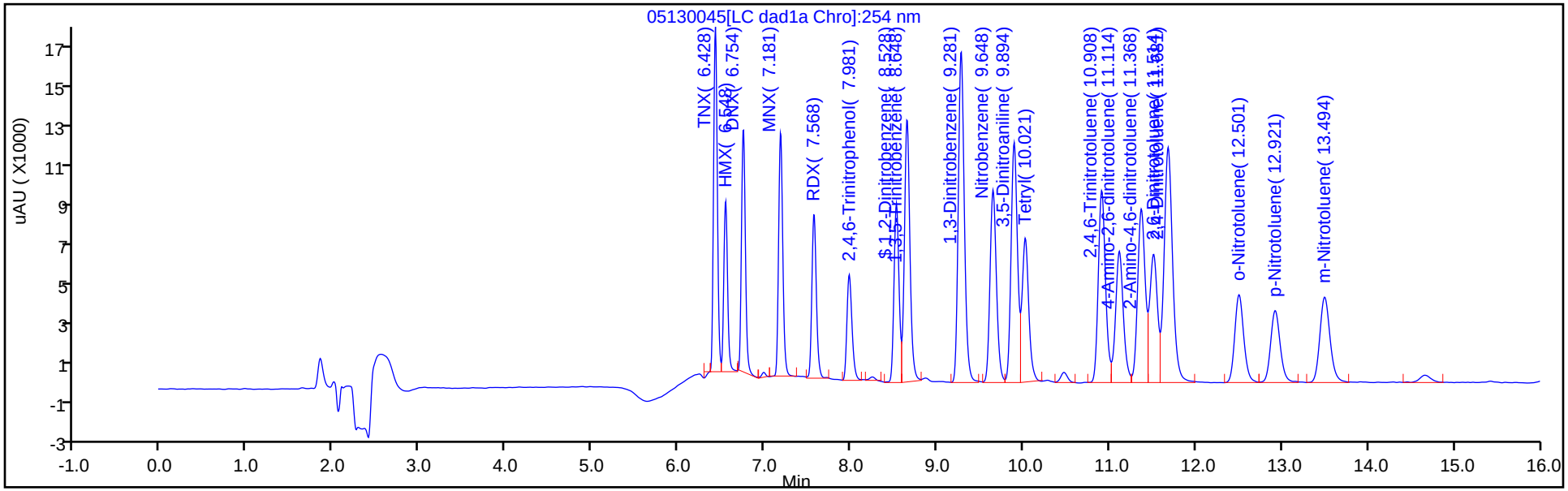
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Eurofins Denver

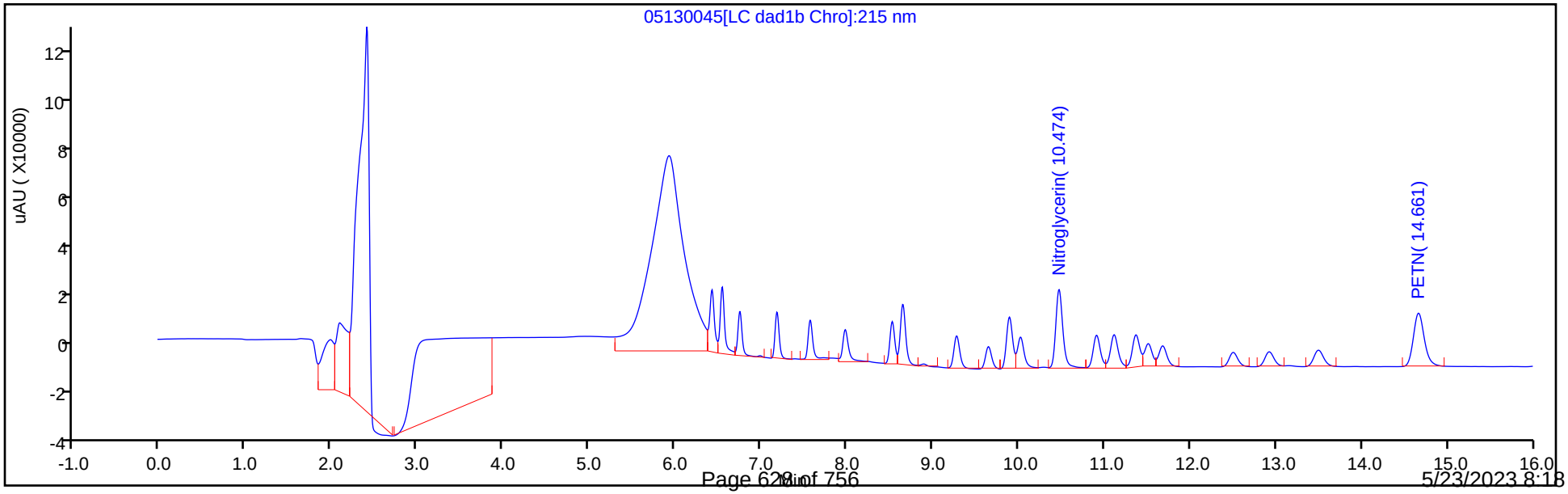
Data File: \\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130045.d

Injection Date:	14-May-2023 03:44:17	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV DMT			Worklist Smp#:	45
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

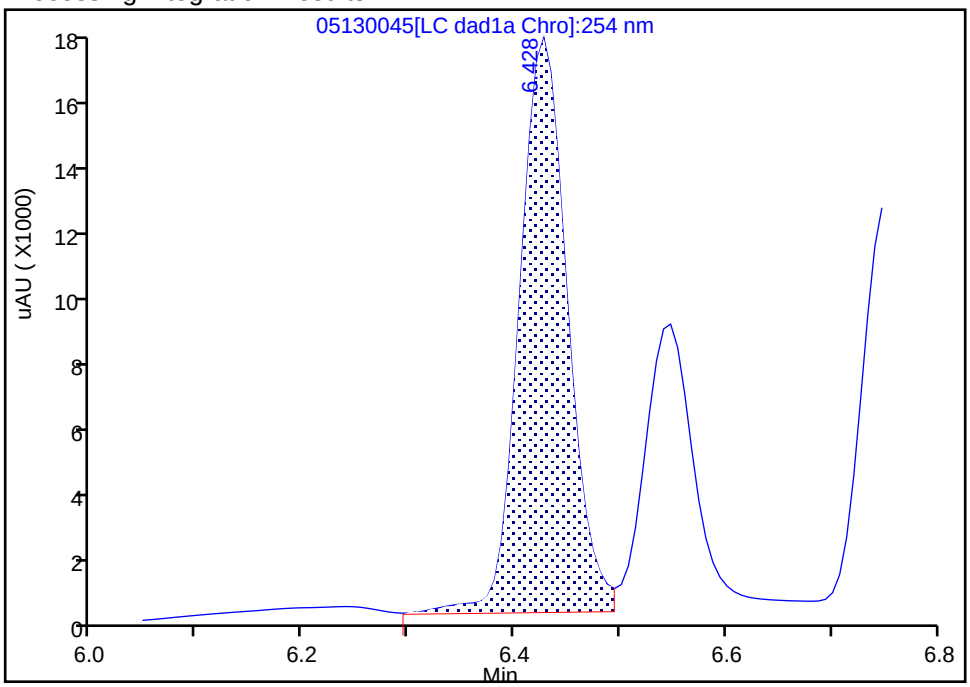
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Injection Date:	14-May-2023 03:44:17	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	45
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

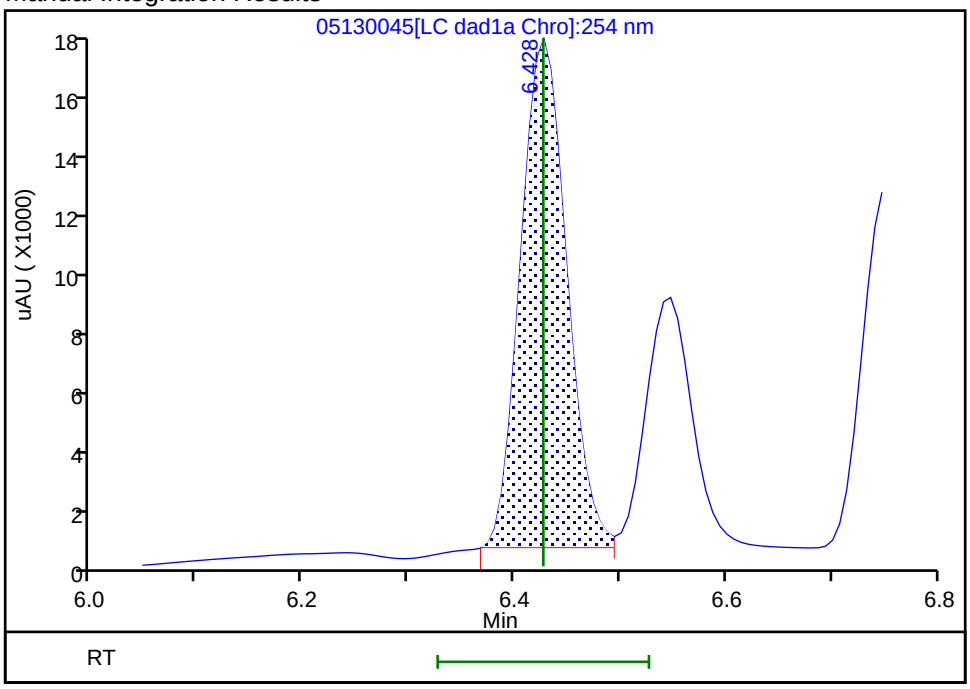
Processing Integration Results

RT: 6.43
Area: 54591
Amount: 0.276148
Amount Units: ug/mL



Manual Integration Results

RT: 6.43
Area: 51314
Amount: 0.259572
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 12:04:58
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

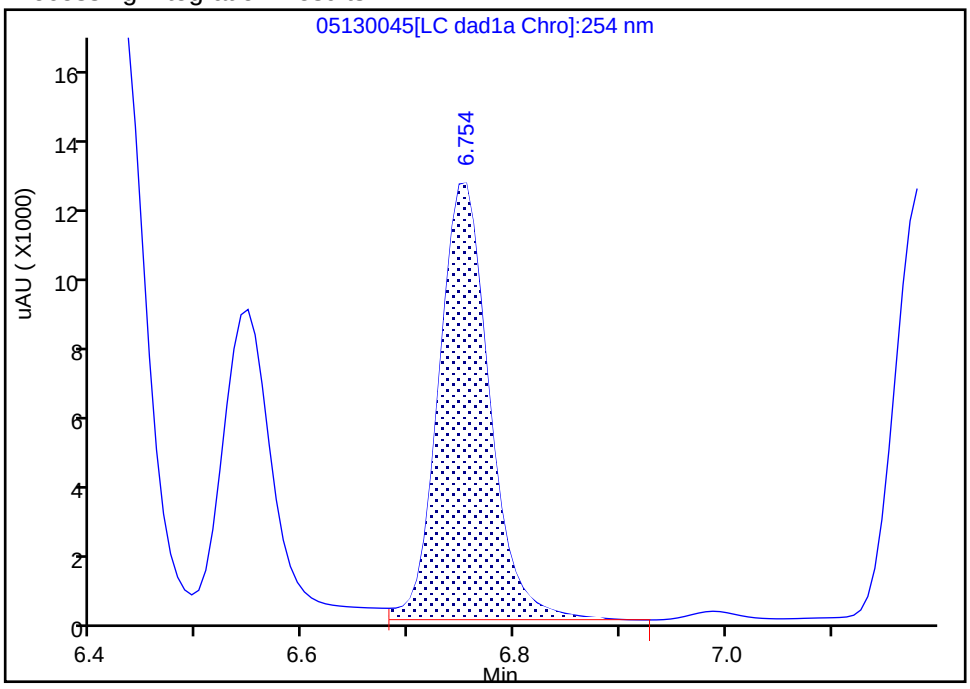
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130045.d				
Injection Date:	14-May-2023 03:44:17	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	45
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

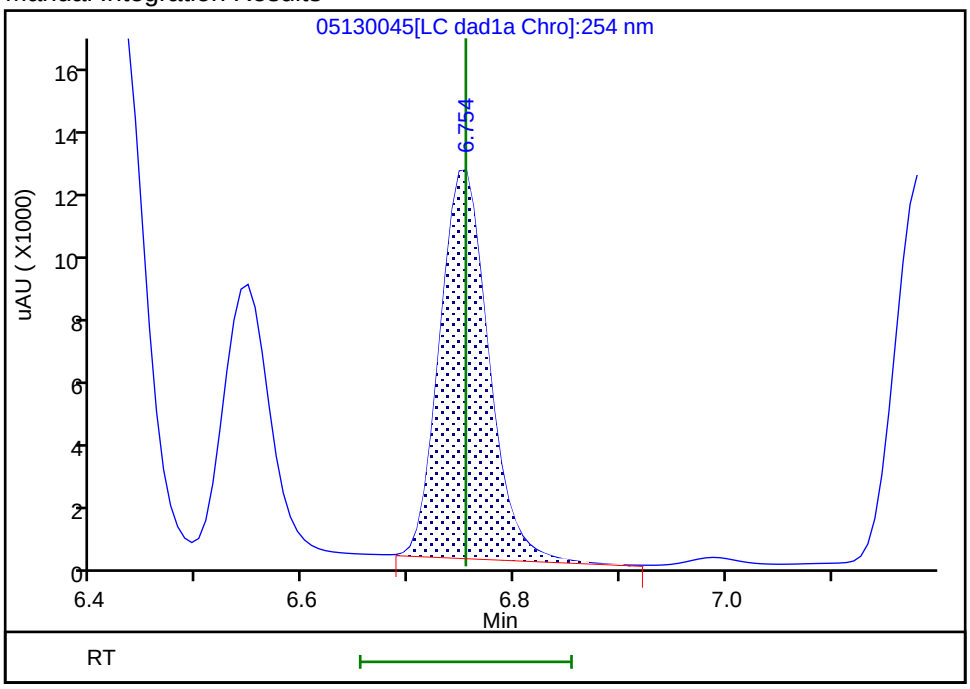
Processing Integration Results

RT: 6.75
Area: 40511
Amount: 0.280426
Amount Units: ug/mL



Manual Integration Results

RT: 6.75
Area: 37981
Amount: 0.262913
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 12:05:16
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Lab Sample ID: CCV 280-612396/46 Calibration Date: 05/14/2023 04:07

Instrument ID: CHHPLC_X3 Calib Start Date: 01/17/2023 00:33

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/17/2023 03:16

Lab File ID: 05130046.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,6-diamino-4-nitrotoluene	Lin2		209156		224	250	-10.4	20.0
2,4-diamino-6-nitrotoluene	Ave	146472	128500		219	250	-12.3	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Lab Sample ID: CCV 280-612396/46 Calibration Date: 05/14/2023 04:07

Instrument ID: CHHPLC_X3 Calib Start Date: 01/17/2023 00:33

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/17/2023 03:16

Lab File ID: 05130046.D

Analyte	RT	RT WINDOW	
		FROM	TO
2,6-diamino-4-nitrotoluene	6.43	6.28	6.58
2,4-diamino-6-nitrotoluene	6.61	6.47	6.77

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130046.D
Lims ID: CCV ADD
Client ID:
Sample Type: CCV
Inject. Date: 14-May-2023 04:07:22 ALS Bottle#: 8 Worklist Smp#: 46
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV ADD
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub28

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-May-2023 12:37:31 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: K8YG Date: 15-May-2023 12:07:00

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 2,6-diamino-4-nitrotoluene	1	6.427	6.426	0.001	52289	0.2500	0.2239	M
5 2,4-diamino-6-nitrotoluene	1	6.613	6.620	-0.007	32125	0.2500	0.2193	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330_ADDs_00037 Amount Added: 12.50 Units: uL

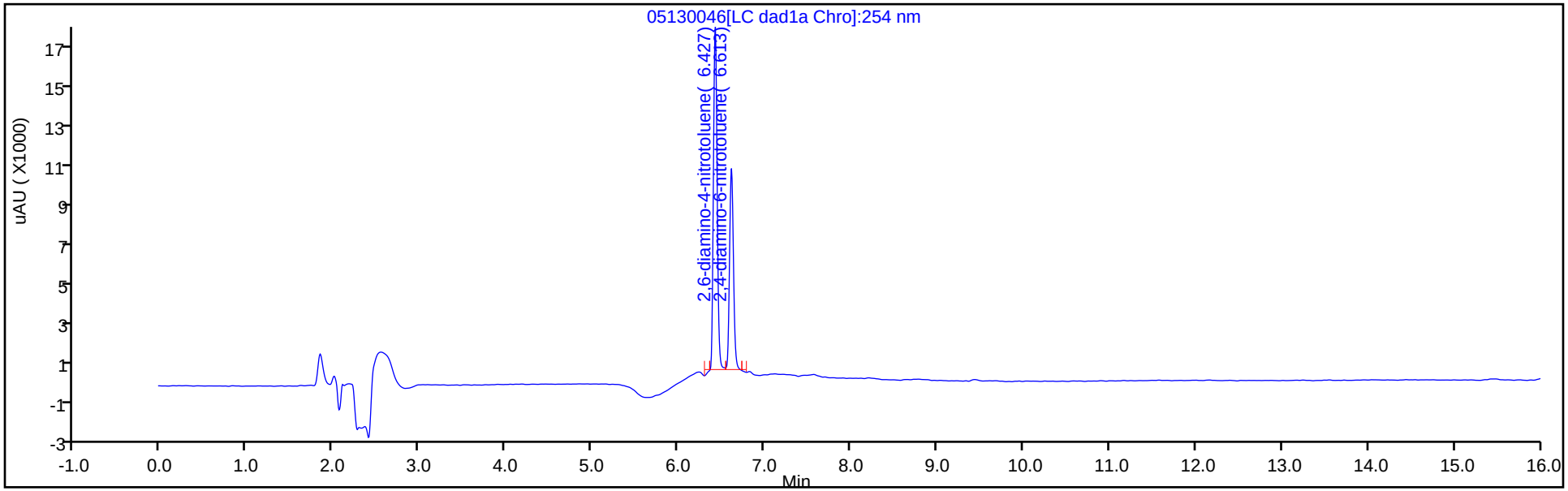
Report Date: 16-May-2023 12:37:31 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

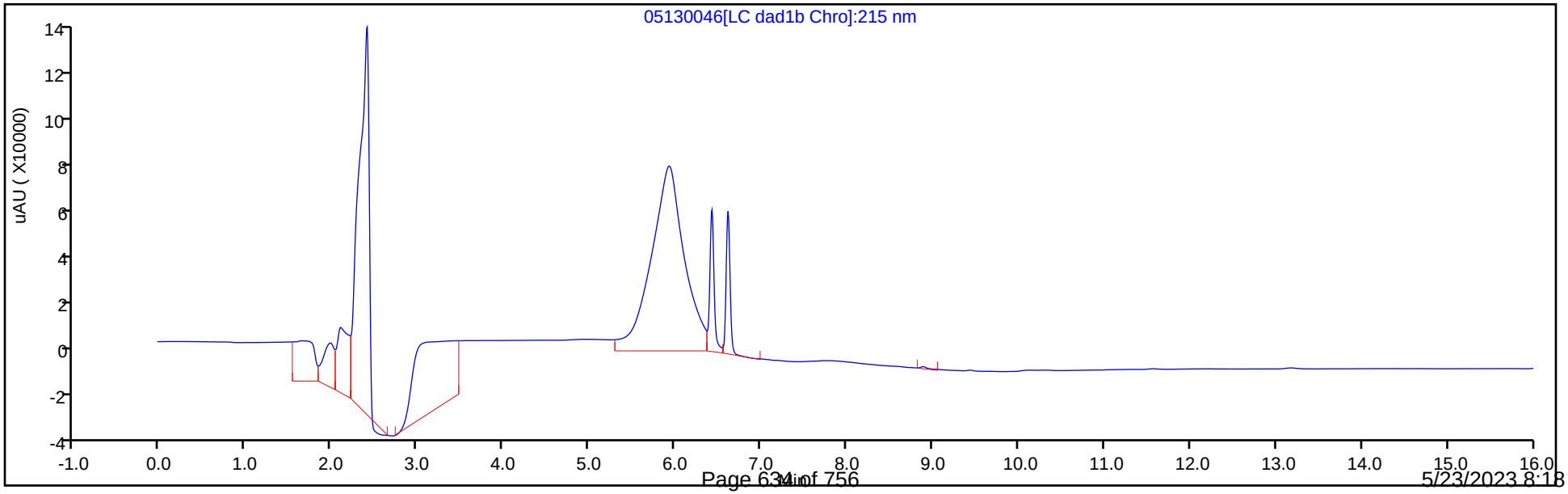
Data File: \\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130046.d

Injection Date:	14-May-2023 04:07:22	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV ADD			Worklist Smp#:	46
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
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

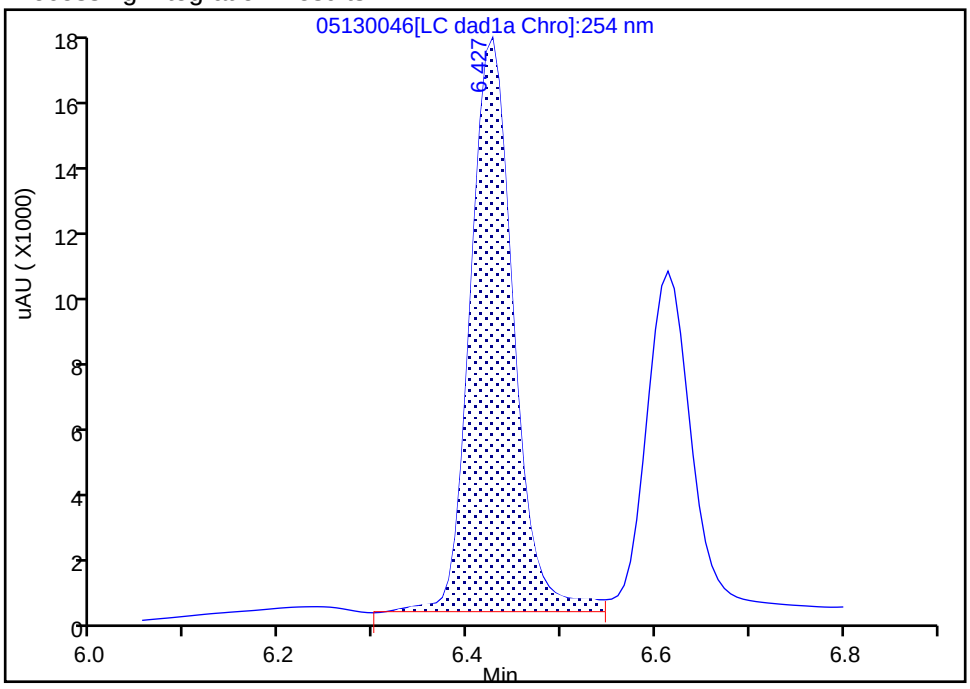
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130046.d				
Injection Date:	14-May-2023 04:07:22	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	8	Worklist Smp#:	46
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

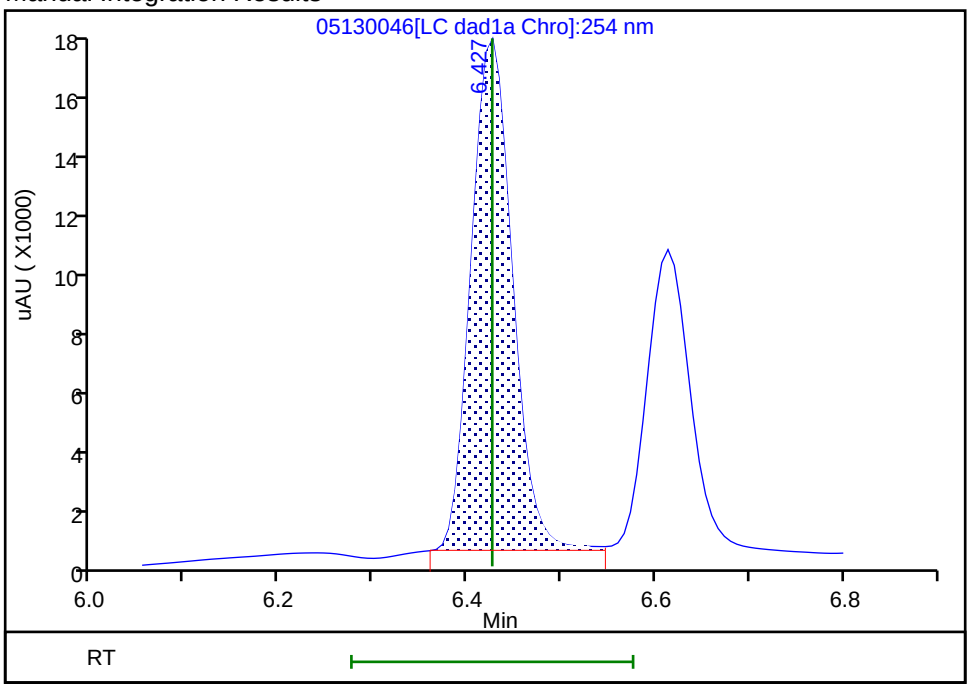
Processing Integration Results

RT: 6.43
Area: 55350
Amount: 0.237212
Amount Units: ug/mL



Manual Integration Results

RT: 6.43
Area: 52289
Amount: 0.223885
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 12:06:39

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

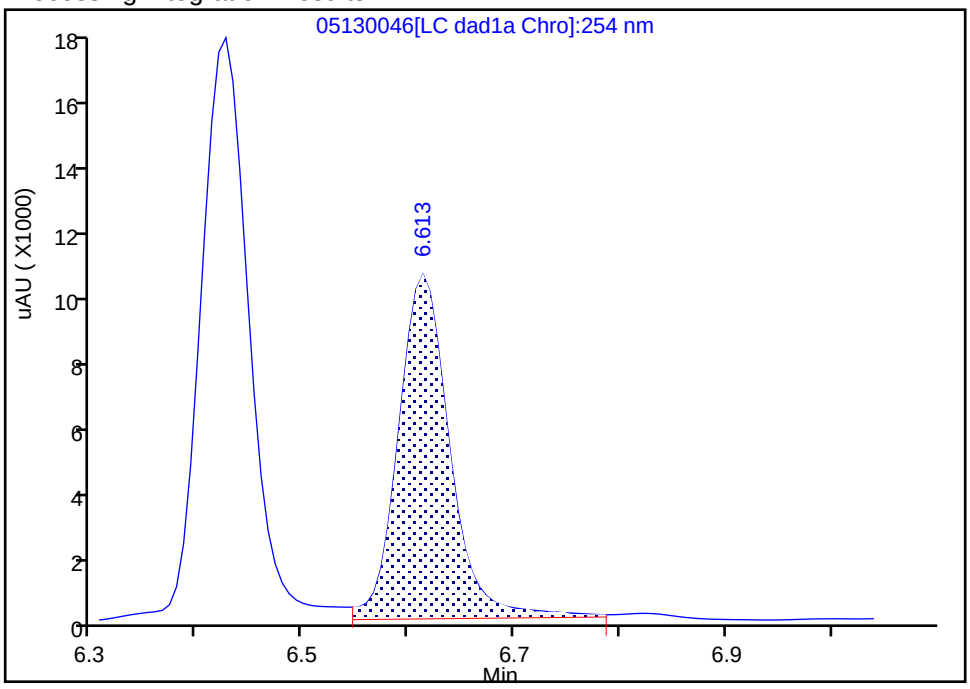
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130046.d				
Injection Date:	14-May-2023 04:07:22	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	8	Worklist Smp#:	46
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

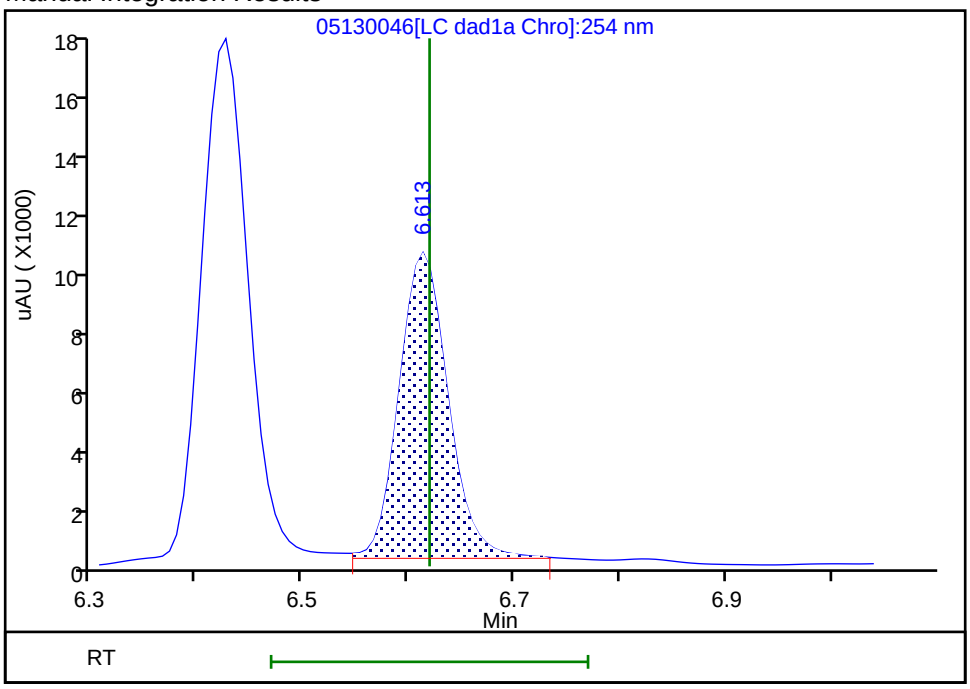
Processing Integration Results

RT: 6.61
Area: 34486
Amount: 0.235444
Amount Units: ug/mL



Manual Integration Results

RT: 6.61
Area: 32125
Amount: 0.219325
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 12:06:45
Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-176134-1

SDG No.:

Lab Sample ID: CCV 280-612396/56 | Calibration Date: 05/14/2023 07:56

Instrument ID: CHHPLC_X3 | Calib Start Date: 01/17/2023 00:33

GC Column: UltraCarb5uODS ID: 4.60(mm) | Calib End Date: 01/17/2023 03:16

Lab File ID: 05130056.D | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,6-diamino-4-nitrotoluene	Lin2		207272		222	250	-11.3	20.0
2,4-diamino-6-nitrotoluene	Ave	146472	127168		217	250	-13.2	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Lab Sample ID: CCV 280-612396/56 Calibration Date: 05/14/2023 07:56

Instrument ID: CHHPLC_X3 Calib Start Date: 01/17/2023 00:33

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/17/2023 03:16

Lab File ID: 05130056.D

Analyte	RT	RT WINDOW	
		FROM	TO
2,6-diamino-4-nitrotoluene	6.42	6.28	6.58
2,4-diamino-6-nitrotoluene	6.61	6.47	6.77

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130056.D
Lims ID: CCV ADD
Client ID:
Sample Type: CCV
Inject. Date: 14-May-2023 07:56:57 ALS Bottle#: 8 Worklist Smp#: 56
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV ADD
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub28

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-May-2023 12:37:37 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: K8YG Date: 15-May-2023 12:19:42

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 2,6-diamino-4-nitrotoluene	1	6.422	6.426	-0.004	51818	0.2500	0.2218	M
5 2,4-diamino-6-nitrotoluene	1	6.609	6.620	-0.011	31792	0.2500	0.2171	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330_ADDs_00037 Amount Added: 12.50 Units: uL

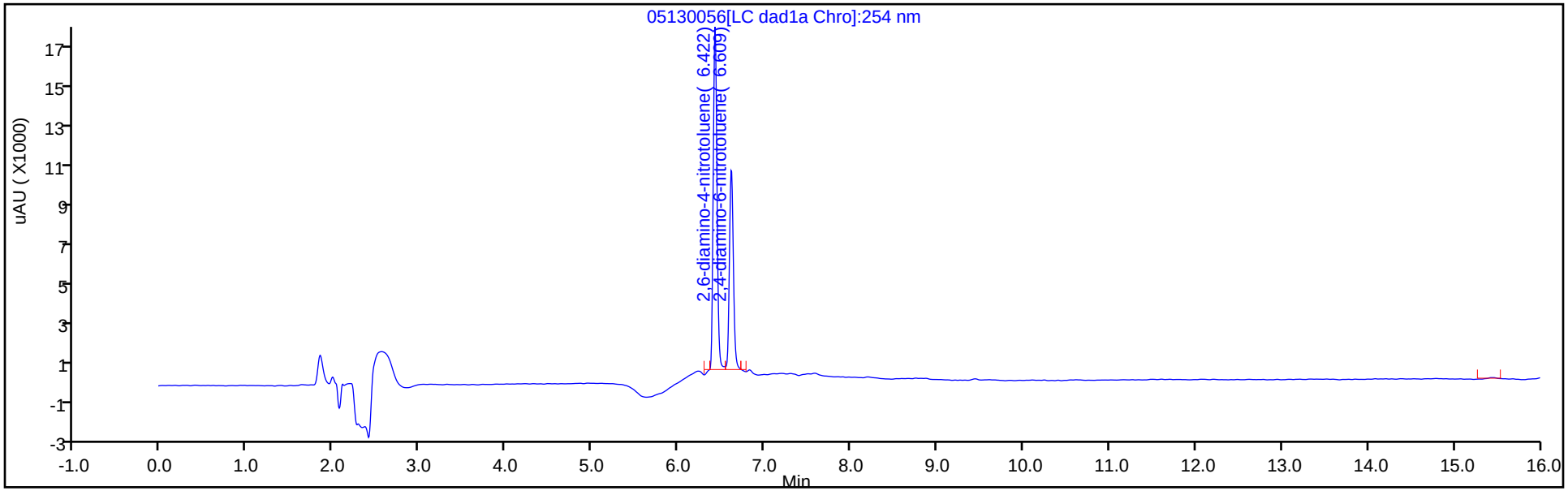
Report Date: 16-May-2023 12:37:38 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

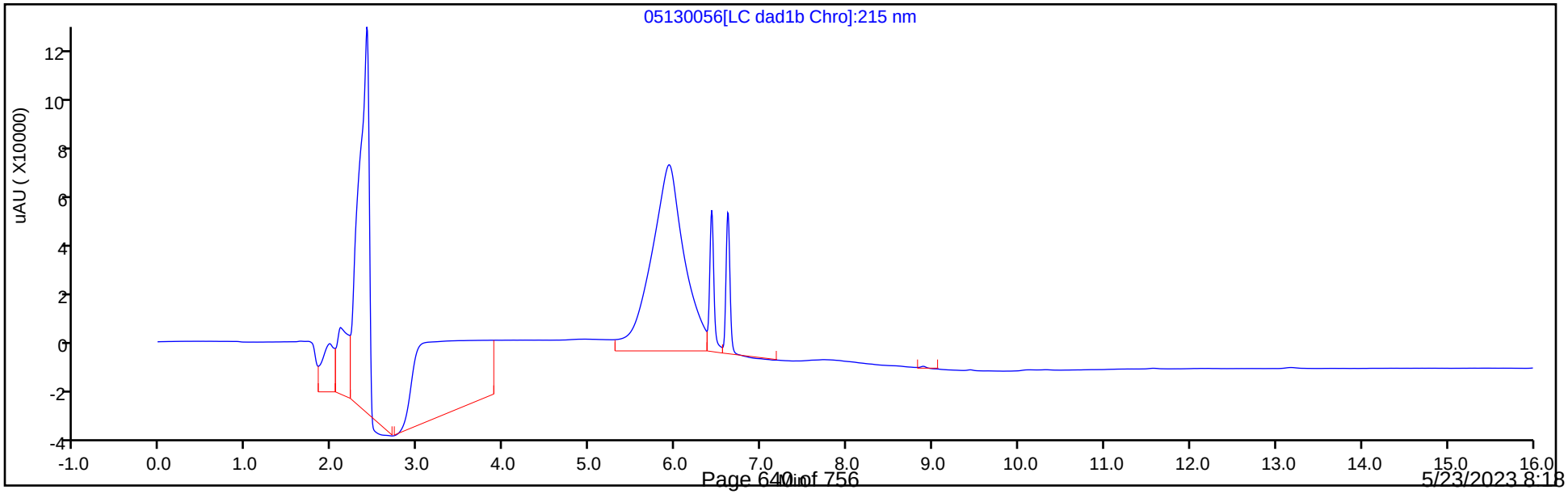
Data File: \\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130056.d

Injection Date:	14-May-2023 07:56:57	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV ADD			Worklist Smp#:	56
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
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

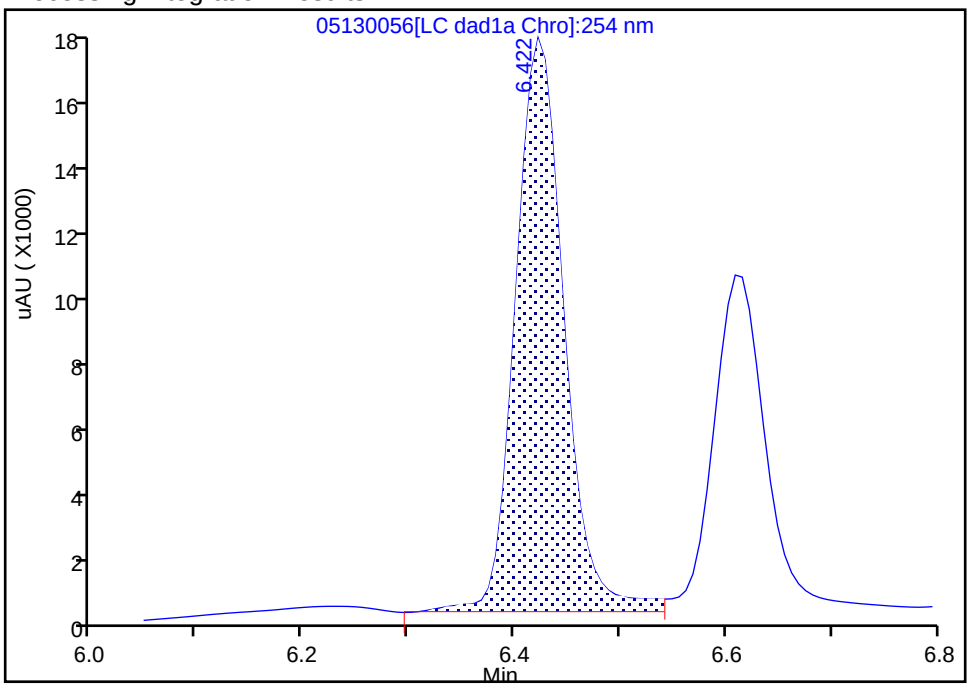
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130056.d				
Injection Date:	14-May-2023 07:56:57	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	8	Worklist Smp#:	56
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

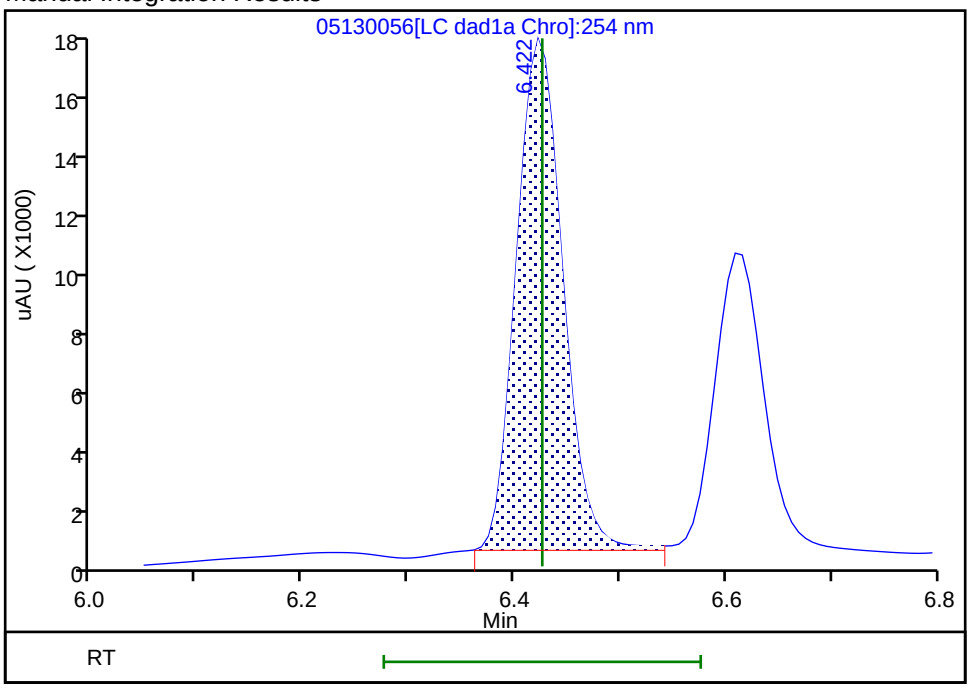
Processing Integration Results

RT: 6.42
Area: 55028
Amount: 0.235810
Amount Units: ug/mL



Manual Integration Results

RT: 6.42
Area: 51818
Amount: 0.221835
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 12:19:34
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

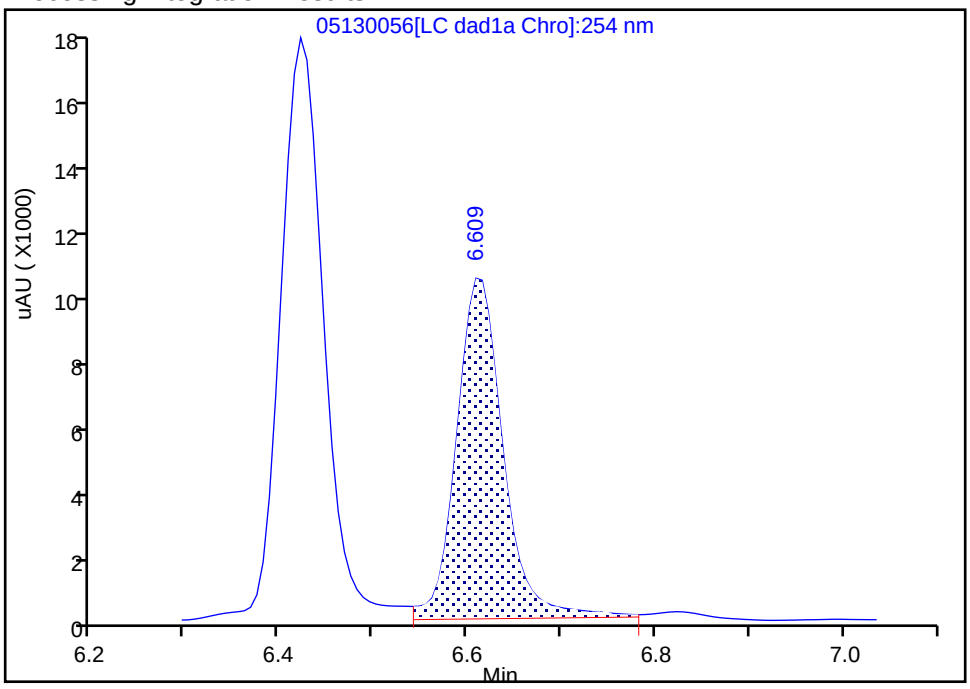
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130056.d				
Injection Date:	14-May-2023 07:56:57	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	8	Worklist Smp#:	56
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

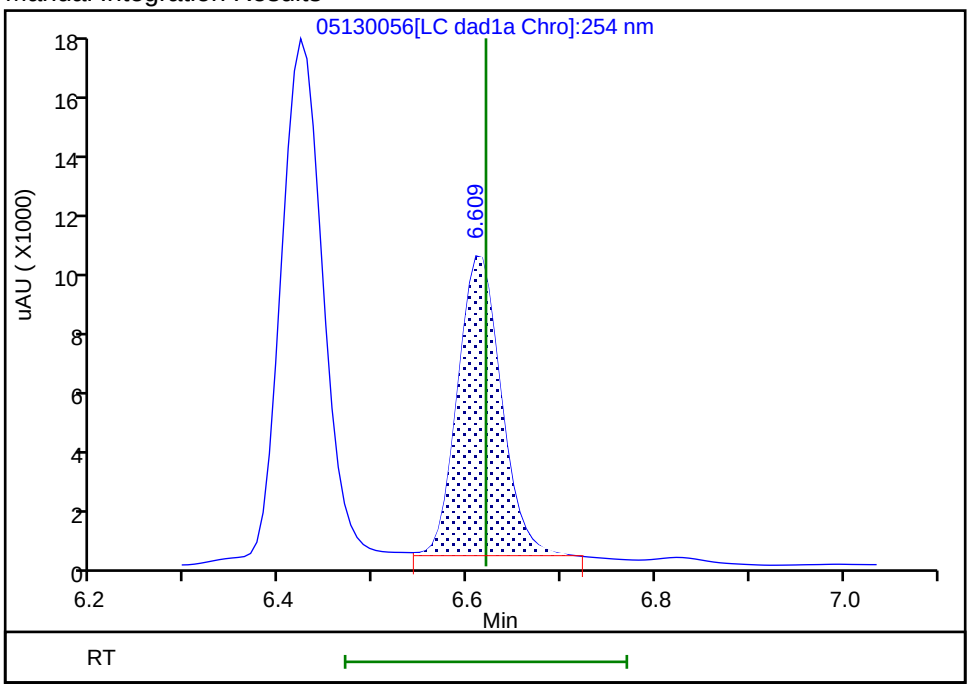
Processing Integration Results

RT: 6.61
Area: 34408
Amount: 0.234912
Amount Units: ug/mL



Manual Integration Results

RT: 6.61
Area: 31792
Amount: 0.217052
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 12:19:36
Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Lab Sample ID: CCV 280-612396/57 Calibration Date: 05/14/2023 08:19

Instrument ID: CHHPLC_X3 Calib Start Date: 02/08/2023 15:38

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 02/08/2023 18:42

Lab File ID: 05130057.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	93528	102640		274	250	9.7	20.0
RDX	Ave	106380	116892		275	250	9.9	20.0
Picric acid	Ave	75830	84604		279	250	11.6	20.0
1,3,5-Trinitrobenzene	Ave	217147	232948		268	250	7.3	20.0
1,3-Dinitrobenzene	Ave	294397	318216		270	250	8.1	20.0
Nitrobenzene	Ave	191245	192844		252	250	0.8	20.0
3,5-Dinitroaniline	Lin2		242864		266	250	6.2	20.0
Tetryl	Ave	164121	150132		229	250	-8.5	20.0
Nitroglycerin	Ave	64070	69257		2700	2500	8.1	20.0
2,4,6-Trinitrotoluene	Ave	211040	221544		262	250	5.0	20.0
4-Amino-2,6-dinitrotoluene	Ave	154933	162292		262	250	4.7	20.0
2-Amino-4,6-dinitrotoluene	Ave	201410	210804		262	250	4.7	20.0
2,6-Dinitrotoluene	Ave	142745	155396		272	250	8.9	20.0
2,4-Dinitrotoluene	Ave	296667	319840		270	250	7.8	20.0
2-Nitrotoluene	Ave	127896	124412		243	250	-2.7	20.0
4-Nitrotoluene	Ave	111880	107868		241	250	-3.6	20.0
3-Nitrotoluene	Ave	140492	137240		244	250	-2.3	20.0
PETN	Ave	68845	74893		2720	2500	8.8	20.0
1,2-Dinitrobenzene	Ave	126309	140196		277	250	11.0	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Lab Sample ID: CCV 280-612396/57 Calibration Date: 05/14/2023 08:19

Instrument ID: CHHPLC_X3 Calib Start Date: 02/08/2023 15:38

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 02/08/2023 18:42

Lab File ID: 05130057.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.55	6.40	6.70
RDX	7.57	7.42	7.72
Picric acid	7.98	7.82	8.12
1,3,5-Trinitrobenzene	8.65	8.50	8.80
1,3-Dinitrobenzene	9.28	9.12	9.42
Nitrobenzene	9.65	9.50	9.80
3,5-Dinitroaniline	9.89	9.74	10.04
Tetryl	10.02	9.86	10.16
Nitroglycerin	10.47	10.32	10.62
2,4,6-Trinitrotoluene	10.91	10.81	11.01
4-Amino-2,6-dinitrotoluene	11.11	11.01	11.21
2-Amino-4,6-dinitrotoluene	11.37	11.27	11.47
2,6-Dinitrotoluene	11.51	11.41	11.61
2,4-Dinitrotoluene	11.68	11.59	11.79
2-Nitrotoluene	12.50	12.36	12.66
4-Nitrotoluene	12.93	12.79	13.09
3-Nitrotoluene	13.50	13.36	13.66
PETN	14.67	14.54	14.84
1,2-Dinitrobenzene	8.53	8.37	8.67

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130057.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 14-May-2023 08:19:52 ALS Bottle#: 7 Worklist Smp#: 57
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-May-2023 12:37:38 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: K8YG Date: 15-May-2023 12:22:02

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.425	6.427	-0.002	51276	0.2508	0.2594	M
4 HMX	1	6.545	6.547	-0.002	25660	0.2500	0.2744	M
6 DNX	1	6.752	6.754	-0.002	38426	0.2503	0.2660	M
7 MNX	1	7.185	7.187	-0.002	40582	0.2918	0.3094	
8 RDX	1	7.572	7.574	-0.002	29223	0.2500	0.2747	
9 2,4,6-Trinitrophenol	1	7.979	7.974	0.005	21151	0.2500	0.2789	
$ 10 1,2-Dinitrobenzene	1	8.525	8.521	0.004	35049	0.2500	0.2775	
11 1,3,5-Trinitrobenzene	1	8.652	8.647	0.005	58237	0.2500	0.2682	
12 1,3-Dinitrobenzene	1	9.278	9.274	0.004	79554	0.2500	0.2702	
13 Nitrobenzene	1	9.645	9.647	-0.002	48211	0.2500	0.2521	
14 3,5-Dinitroaniline	1	9.892	9.887	0.005	60716	0.2500	0.2656	
15 Tetryl	1	10.018	10.014	0.004	37533	0.2500	0.2287	
16 Nitroglycerin	2	10.465	10.467	-0.002	173143	2.50	2.70	
17 2,4,6-Trinitrotoluene	1	10.905	10.914	-0.009	55386	0.2500	0.2624	
18 4-Amino-2,6-dinitrotoluene	1	11.112	11.114	-0.002	40573	0.2500	0.2619	
19 2-Amino-4,6-dinitrotoluene	1	11.365	11.367	-0.002	52701	0.2500	0.2617	
20 2,6-Dinitrotoluene	1	11.505	11.514	-0.009	38849	0.2500	0.2722	
21 2,4-Dinitrotoluene	1	11.678	11.687	-0.009	79960	0.2500	0.2695	
22 o-Nitrotoluene	1	12.498	12.514	-0.016	31103	0.2500	0.2432	
23 p-Nitrotoluene	1	12.925	12.940	-0.015	26967	0.2500	0.2410	
24 m-Nitrotoluene	1	13.498	13.514	-0.016	34310	0.2500	0.2442	
25 PETN	2	14.665	14.694	-0.029	187232	2.50	2.72	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00013	Amount Added:	12.50	Units: uL
8330IntermStk_00075	Amount Added:	25.00	Units: uL

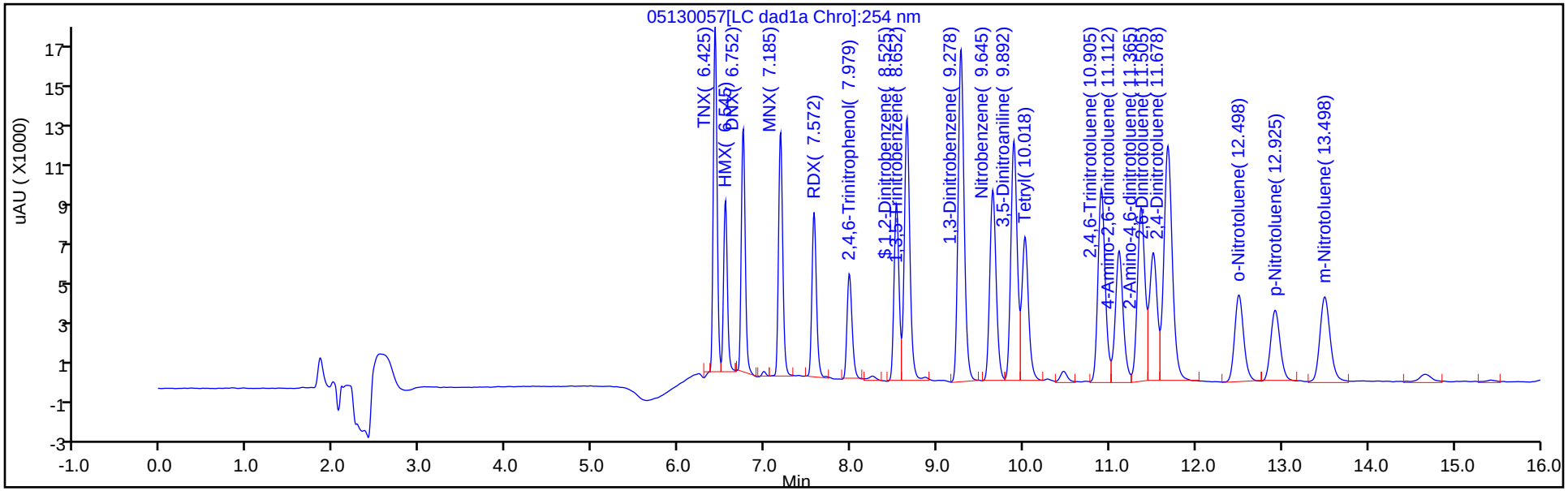
Report Date: 16-May-2023 12:37:38 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

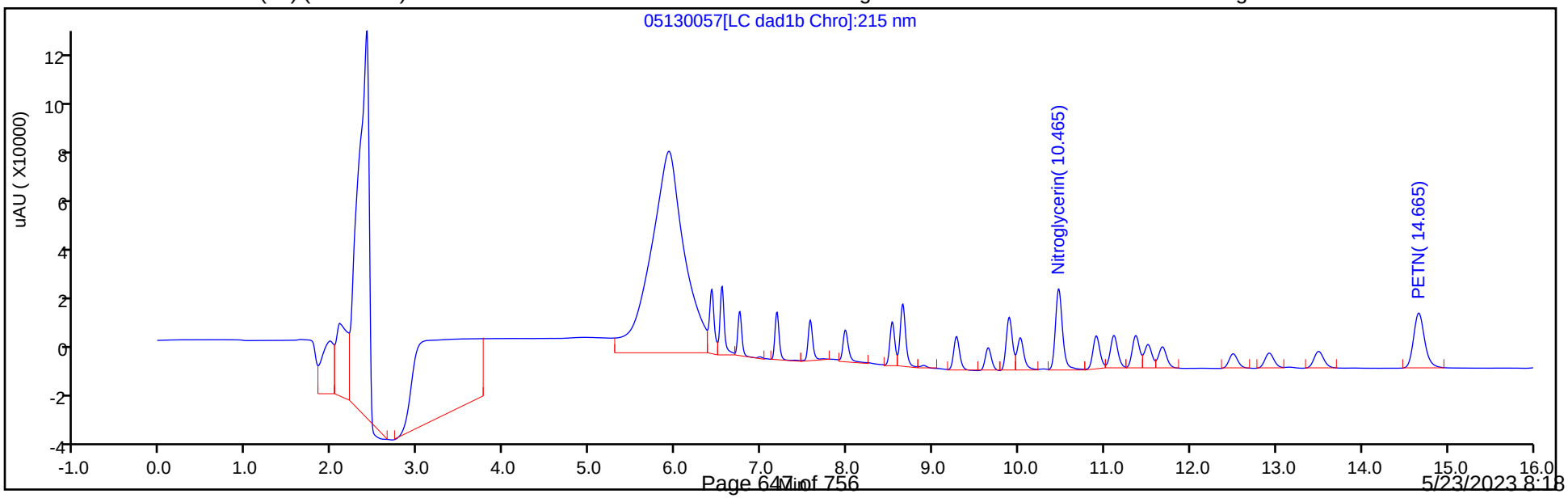
Data File: \\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130057.d

Injection Date:	14-May-2023 08:19:52	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV DMT			Worklist Smp#:	57
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

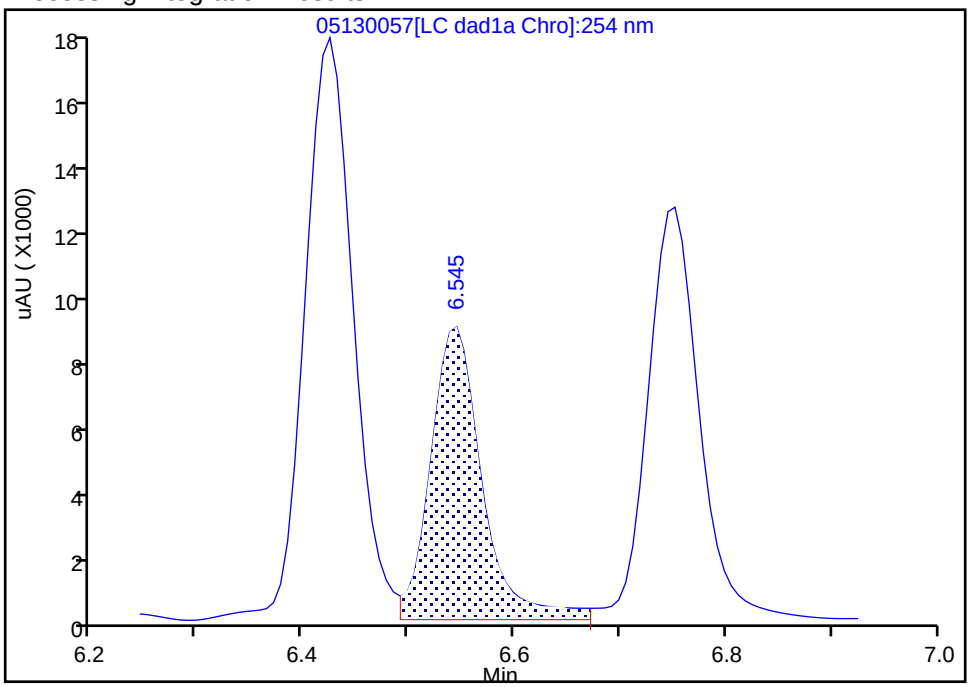
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Injection Date:	14-May-2023 08:19:52	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	57
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

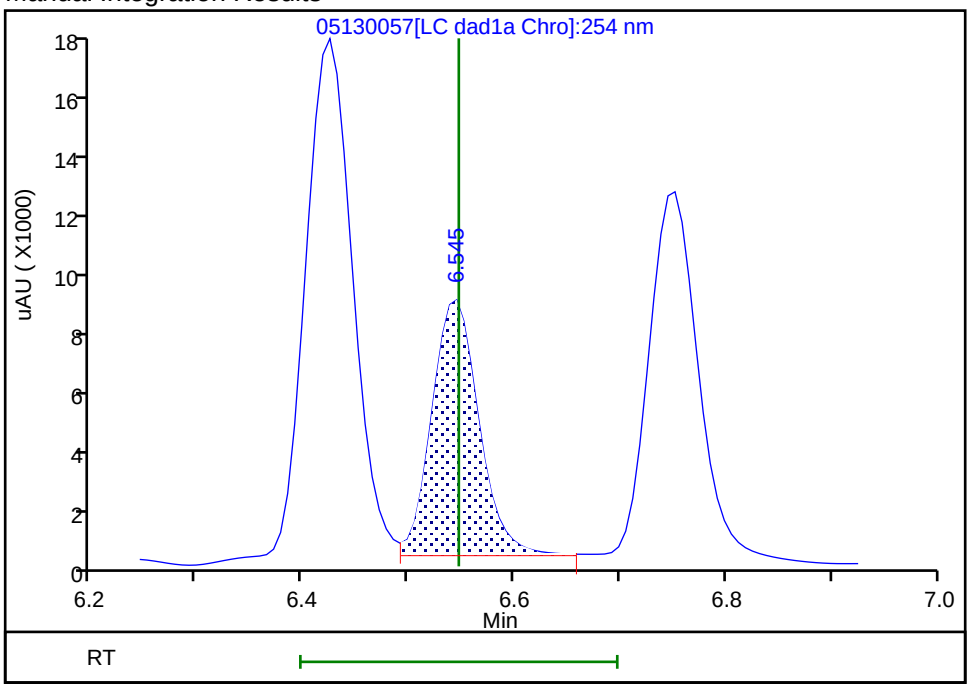
Processing Integration Results

RT: 6.55
Area: 28977
Amount: 0.309821
Amount Units: ug/mL



Manual Integration Results

RT: 6.55
Area: 25660
Amount: 0.274356
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 12:21:19
Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Lab Sample ID: CCV 280-612396/57 Calibration Date: 05/14/2023 08:19

Instrument ID: CHHPLC_X3 Calib Start Date: 02/24/2023 15:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 02/24/2023 17:41

Lab File ID: 05130057.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	197687	204491		259	251	3.4	20.0
DNX	Ave	144462	153550		266	250	6.3	20.0
MNX	Ave	131172	139099		309	292	6.0	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Lab Sample ID: CCV 280-612396/57 Calibration Date: 05/14/2023 08:19

Instrument ID: CHHPLC_X3 Calib Start Date: 02/24/2023 15:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 02/24/2023 17:41

Lab File ID: 05130057.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.43	6.33	6.53
DNX	6.75	6.65	6.85
MNX	7.19	7.04	7.34

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130057.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 14-May-2023 08:19:52 ALS Bottle#: 7 Worklist Smp#: 57
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-May-2023 12:37:38 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: K8YG Date: 15-May-2023 12:22:02

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.425	6.427	-0.002	51276	0.2508	0.2594	M
4 HMX	1	6.545	6.547	-0.002	25660	0.2500	0.2744	M
6 DNX	1	6.752	6.754	-0.002	38426	0.2503	0.2660	M
7 MNX	1	7.185	7.187	-0.002	40582	0.2918	0.3094	
8 RDX	1	7.572	7.574	-0.002	29223	0.2500	0.2747	
9 2,4,6-Trinitrophenol	1	7.979	7.974	0.005	21151	0.2500	0.2789	
$ 10 1,2-Dinitrobenzene	1	8.525	8.521	0.004	35049	0.2500	0.2775	
11 1,3,5-Trinitrobenzene	1	8.652	8.647	0.005	58237	0.2500	0.2682	
12 1,3-Dinitrobenzene	1	9.278	9.274	0.004	79554	0.2500	0.2702	
13 Nitrobenzene	1	9.645	9.647	-0.002	48211	0.2500	0.2521	
14 3,5-Dinitroaniline	1	9.892	9.887	0.005	60716	0.2500	0.2656	
15 Tetryl	1	10.018	10.014	0.004	37533	0.2500	0.2287	
16 Nitroglycerin	2	10.465	10.467	-0.002	173143	2.50	2.70	
17 2,4,6-Trinitrotoluene	1	10.905	10.914	-0.009	55386	0.2500	0.2624	
18 4-Amino-2,6-dinitrotoluene	1	11.112	11.114	-0.002	40573	0.2500	0.2619	
19 2-Amino-4,6-dinitrotoluene	1	11.365	11.367	-0.002	52701	0.2500	0.2617	
20 2,6-Dinitrotoluene	1	11.505	11.514	-0.009	38849	0.2500	0.2722	
21 2,4-Dinitrotoluene	1	11.678	11.687	-0.009	79960	0.2500	0.2695	
22 o-Nitrotoluene	1	12.498	12.514	-0.016	31103	0.2500	0.2432	
23 p-Nitrotoluene	1	12.925	12.940	-0.015	26967	0.2500	0.2410	
24 m-Nitrotoluene	1	13.498	13.514	-0.016	34310	0.2500	0.2442	
25 PETN	2	14.665	14.694	-0.029	187232	2.50	2.72	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00013	Amount Added:	12.50	Units: uL
8330IntermStk_00075	Amount Added:	25.00	Units: uL

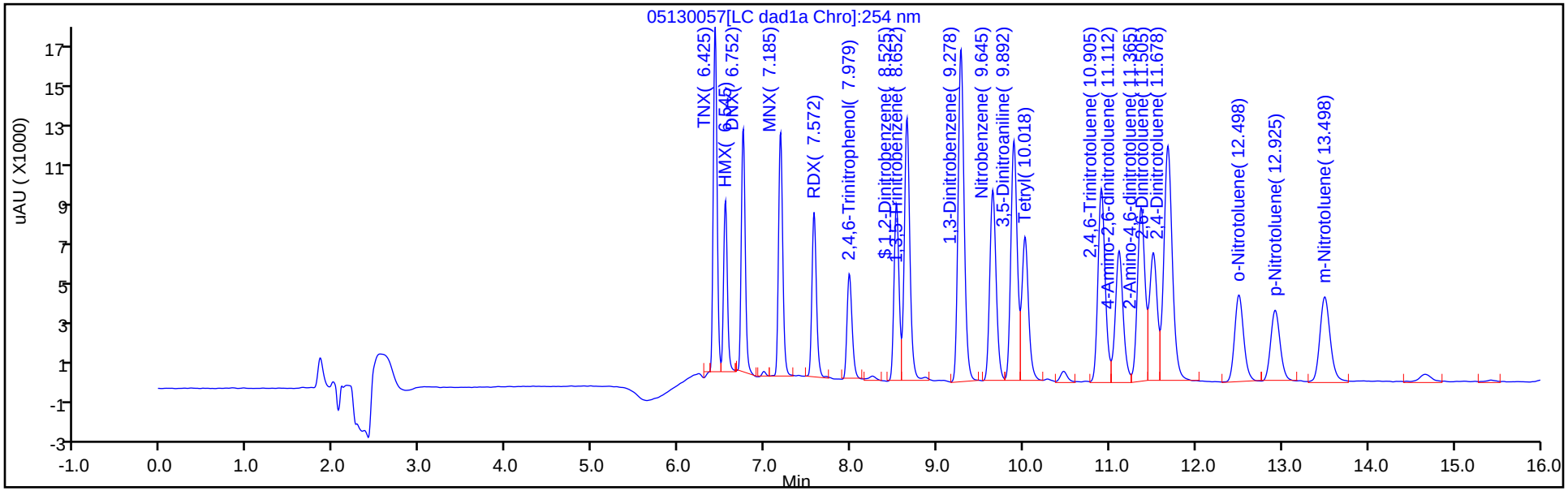
Report Date: 16-May-2023 12:37:38 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

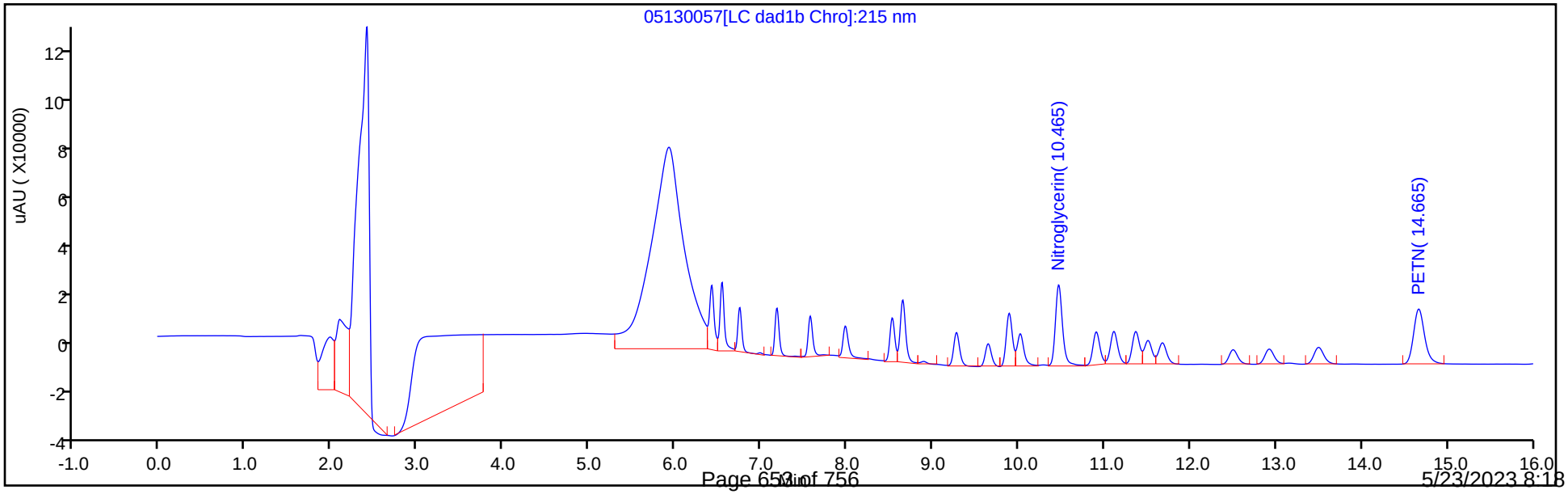
Data File: \\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130057.d

Injection Date:	14-May-2023 08:19:52	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV DMT			Worklist Smp#:	57
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

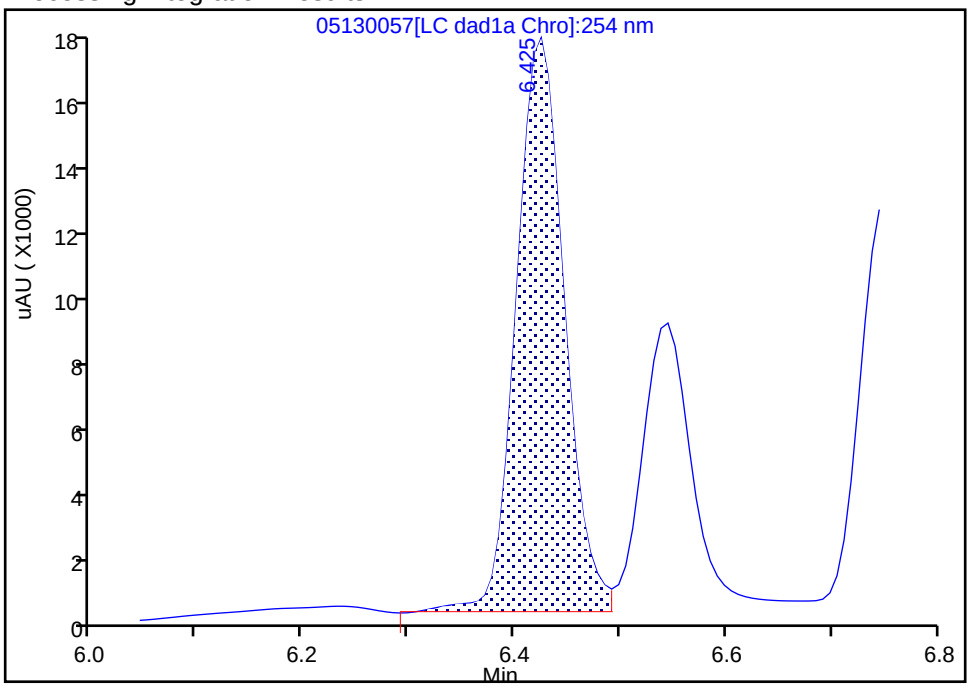
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130057.d				
Injection Date:	14-May-2023 08:19:52	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	57
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

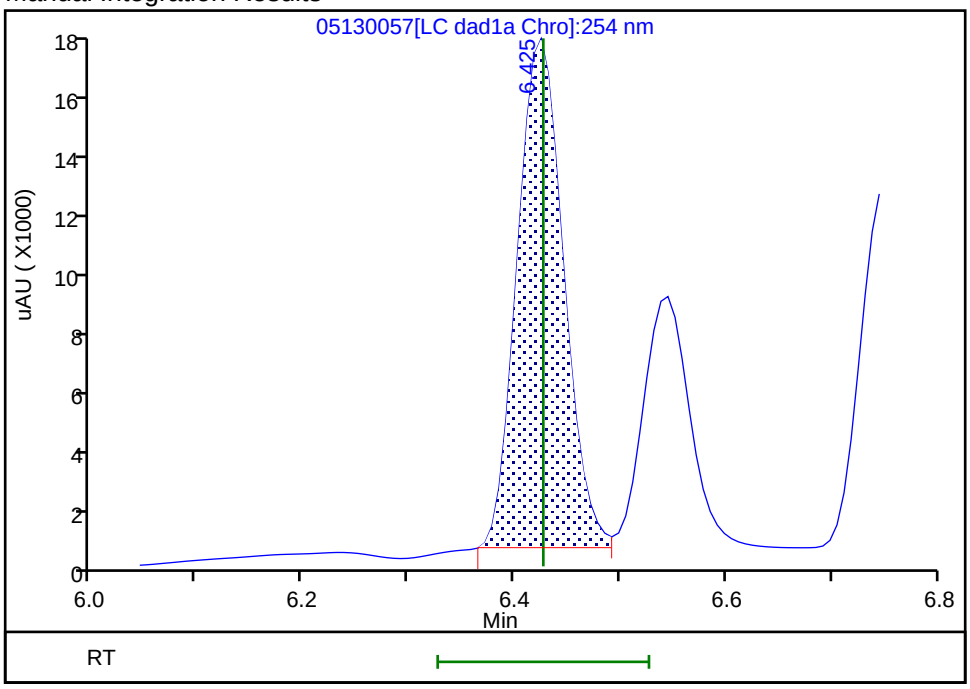
Processing Integration Results

RT: 6.43
Area: 54420
Amount: 0.275283
Amount Units: ug/mL



Manual Integration Results

RT: 6.43
Area: 51276
Amount: 0.259379
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 12:21:01

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

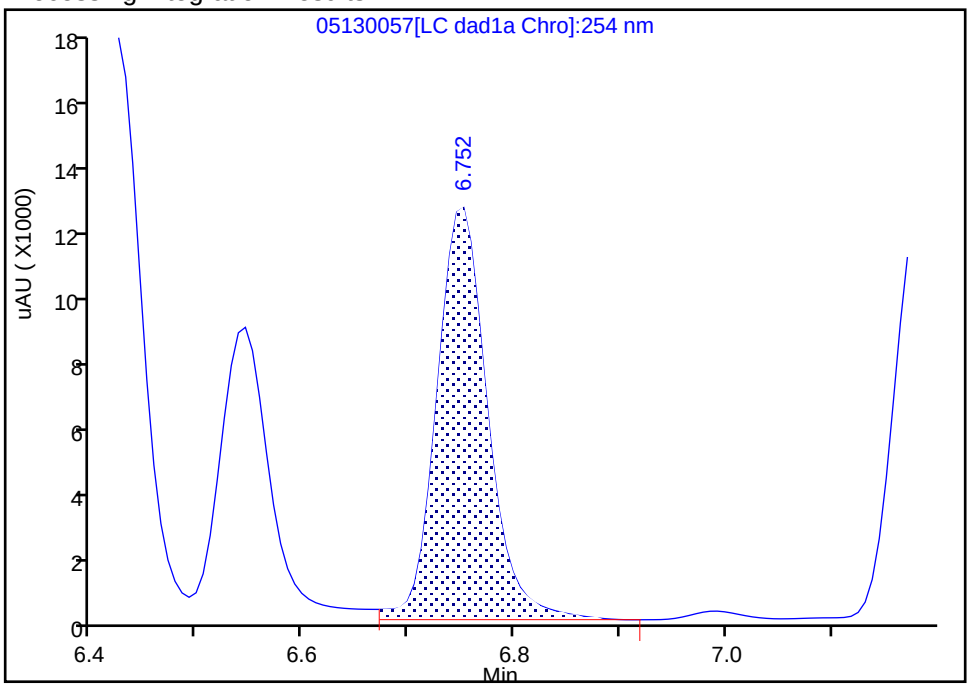
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130057.d				
Injection Date:	14-May-2023 08:19:52	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	57
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

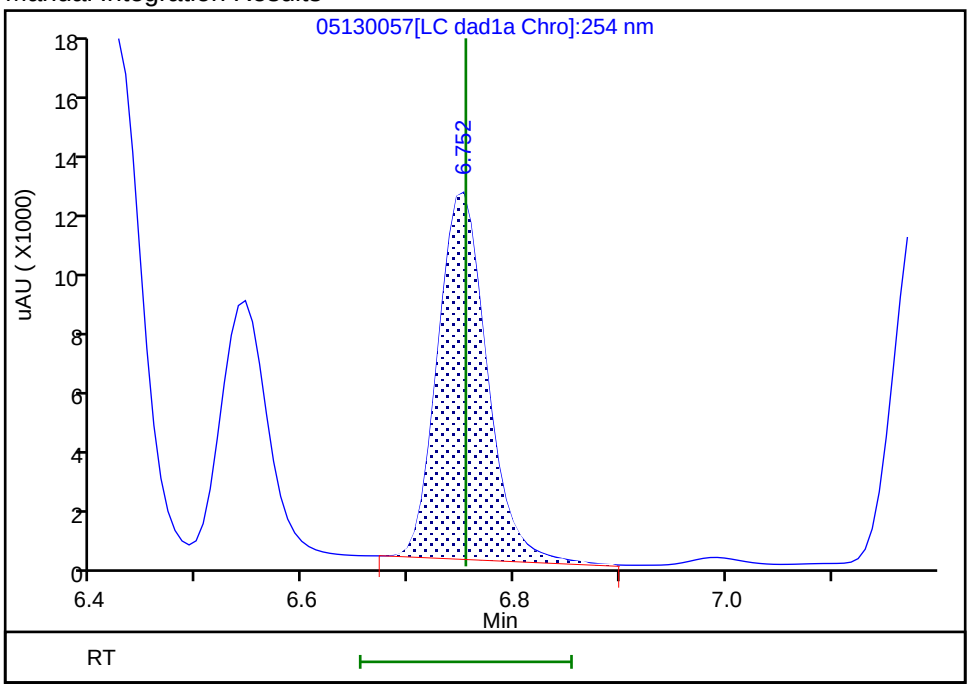
Processing Integration Results

RT: 6.75
Area: 40676
Amount: 0.281568
Amount Units: ug/mL



Manual Integration Results

RT: 6.75
Area: 38426
Amount: 0.265993
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 12:20:49
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Lab Sample ID: ICV 280-610603/19 Calibration Date: 04/28/2023 23:38

Instrument ID: CHHPLC_X5 Calib Start Date: 04/28/2023 18:24

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 04/28/2023 23:03

Lab File ID: 04280019.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	394332	392929		500	502	-0.4	20.0
DNX	Ave	277072	289930		524	501	4.6	20.0
HMX	Lin2		156404		417	500	-16.5	20.0
MNX	Ave	262267	264334		588	584	0.8	20.0
Picric acid	Lin2		156686		487	500	-2.6	20.0
RDX	Lin2		195166		449	500	-10.1	20.0
Nitrobenzene	Ave	398834	373736		469	500	-6.3	20.0
3,5-Dinitroaniline	Lin2		425372		477	500	-4.6	20.0
1,3-Dinitrobenzene	Ave	629351	577162		459	500	-8.3	20.0
Nitroglycerin	Ave	134735	124537		4620	5000	-7.6	20.0
2-Nitrotoluene	Ave	246963	231686		469	500	-6.2	20.0
4-Nitrotoluene	Ave	227490	217326		478	500	-4.5	20.0
4-Amino-2,6-dinitrotoluene	Ave	294210	272862		464	500	-7.3	20.0
3-Nitrotoluene	Ave	294634	265188		450	500	-10.0	20.0
2-Amino-4,6-dinitrotoluene	Ave	427939	400432		468	500	-6.4	20.0
1,3,5-Trinitrobenzene	Ave	405692	392558		484	500	-3.2	20.0
2,6-Dinitrotoluene	Ave	291675	264938		454	500	-9.2	20.0
2,4-Dinitrotoluene	Ave	584463	526892		451	500	-9.9	20.0
Tetryl	Ave	284731	322214		566	500	13.2	20.0
2,4,6-Trinitrotoluene	Ave	438876	392624		447	500	-10.5	20.0
PETN	Ave	143938	138644		4820	5000	-3.7	20.0
1,2-Dinitrobenzene	Ave	280697	261152		465	500	-7.0	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Lab Sample ID: ICV 280-610603/19 Calibration Date: 04/28/2023 23:38

Instrument ID: CHHPLC_X5 Calib Start Date: 04/28/2023 18:24

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 04/28/2023 23:03

Lab File ID: 04280019.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.08	4.97	5.27
DNX	5.92	5.81	6.11
HMX	6.58	6.45	6.75
MNX	7.46	7.34	7.64
Picric acid	7.94	7.88	8.18
RDX	8.88	8.77	9.07
Nitrobenzene	11.45	11.33	11.63
3,5-Dinitroaniline	14.32	14.21	14.51
1,3-Dinitrobenzene	14.59	14.47	14.77
Nitroglycerin	15.16	15.03	15.33
2-Nitrotoluene	15.70	15.58	15.88
4-Nitrotoluene	15.92	15.81	16.11
4-Amino-2,6-dinitrotoluene	16.48	16.37	16.67
3-Nitrotoluene	16.78	16.67	16.97
2-Amino-4,6-dinitrotoluene	17.34	17.21	17.51
1,3,5-Trinitrobenzene	17.42	17.27	17.57
2,6-Dinitrotoluene	18.60	18.48	18.78
2,4-Dinitrotoluene	19.06	18.93	19.23
Tetryl	22.33	22.24	22.54
2,4,6-Trinitrotoluene	23.12	23.03	23.33
PETN	24.39	24.33	24.63
1,2-Dinitrobenzene	12.44	12.32	12.62

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280019.D
Lims ID: ICV INT
Client ID:
Sample Type: ICV
Inject. Date: 28-Apr-2023 23:38:32 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_X5
Sublist:

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 29-Apr-2023 13:04:23 Calib Date: 28-Apr-2023 23:03:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280018.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1621

First Level Reviewer: LV5D Date: 29-Apr-2023 10:26:41

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.082	5.115	-0.033	197054	0.5015	0.4997	
4 DNX	1	5.922	5.955	-0.033	145110	0.5005	0.5237	
5 HMX	1	6.576	6.595	-0.019	78202	0.5000	0.4173	
6 MNX	1	7.456	7.489	-0.033	154239	0.5835	0.5881	
7 2,4,6-Trinitrophenol	1	7.936	8.029	-0.093	78343	0.5000	0.4868	
8 RDX	1	8.882	8.915	-0.033	97583	0.5000	0.4494	
9 Nitrobenzene	1	11.449	11.482	-0.033	186868	0.5000	0.4685	
$ 10 1,2-Dinitrobenzene	1	12.436	12.469	-0.033	130576	0.5000	0.4652	
11 3,5-Dinitroaniline	1	14.322	14.355	-0.033	212686	0.5000	0.4770	M
12 1,3-Dinitrobenzene	1	14.589	14.622	-0.033	288581	0.5000	0.4585	M
13 Nitroglycerin	2	15.156	15.182	-0.026	622685	5.00	4.62	
14 o-Nitrotoluene	1	15.696	15.729	-0.033	115843	0.5000	0.4691	M
16 p-Nitrotoluene	1	15.922	15.955	-0.033	108663	0.5000	0.4777	M
17 4-Amino-2,6-dinitrotoluene	1	16.482	16.515	-0.033	136431	0.5000	0.4637	M
18 m-Nitrotoluene	1	16.782	16.815	-0.033	132594	0.5000	0.4500	M
19 2-Amino-4,6-dinitrotoluene	1	17.342	17.362	-0.020	200216	0.5000	0.4679	M
20 1,3,5-Trinitrobenzene	1	17.422	17.422	0.000	196279	0.5000	0.4838	M
21 2,6-Dinitrotoluene	1	18.602	18.629	-0.027	132469	0.5000	0.4542	
22 2,4-Dinitrotoluene	1	19.056	19.082	-0.026	263446	0.5000	0.4507	
23 Tetryl	1	22.329	22.389	-0.060	161107	0.5000	0.5658	
24 2,4,6-Trinitrotoluene	1	23.122	23.182	-0.060	196312	0.5000	0.4473	
25 PETN	2	24.389	24.475	-0.086	693219	5.00	4.82	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330Surrogate_00143	Amount Added:	50.00	Units: uL
8330_OP_DMT_00017	Amount Added:	50.00	Units: uL
8330 LCS_00126	Amount Added:	50.00	Units: uL

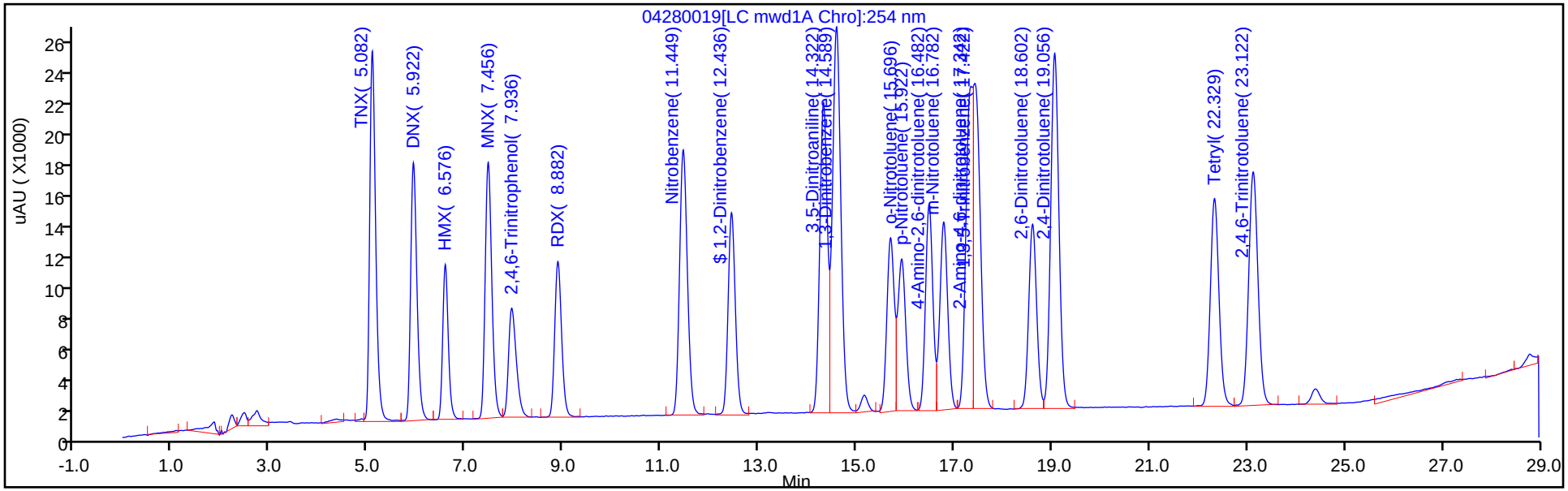
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Eurofins Denver

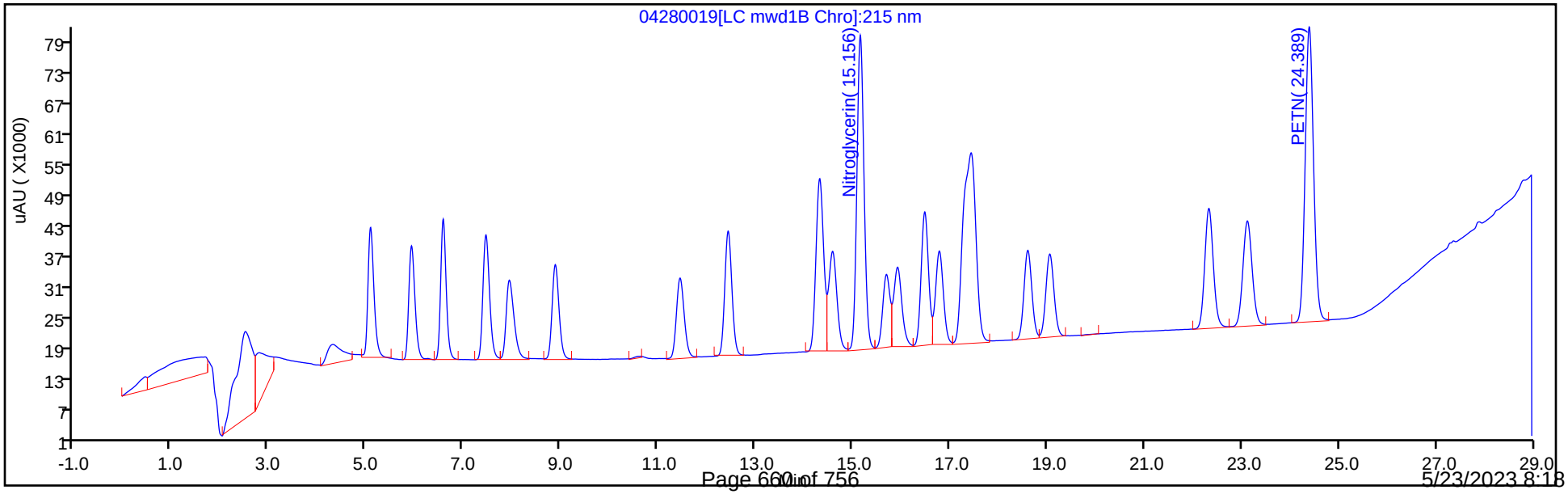
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Injection Date:	28-Apr-2023 23:38:32	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	ICV INT			Worklist Smp#:	19
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

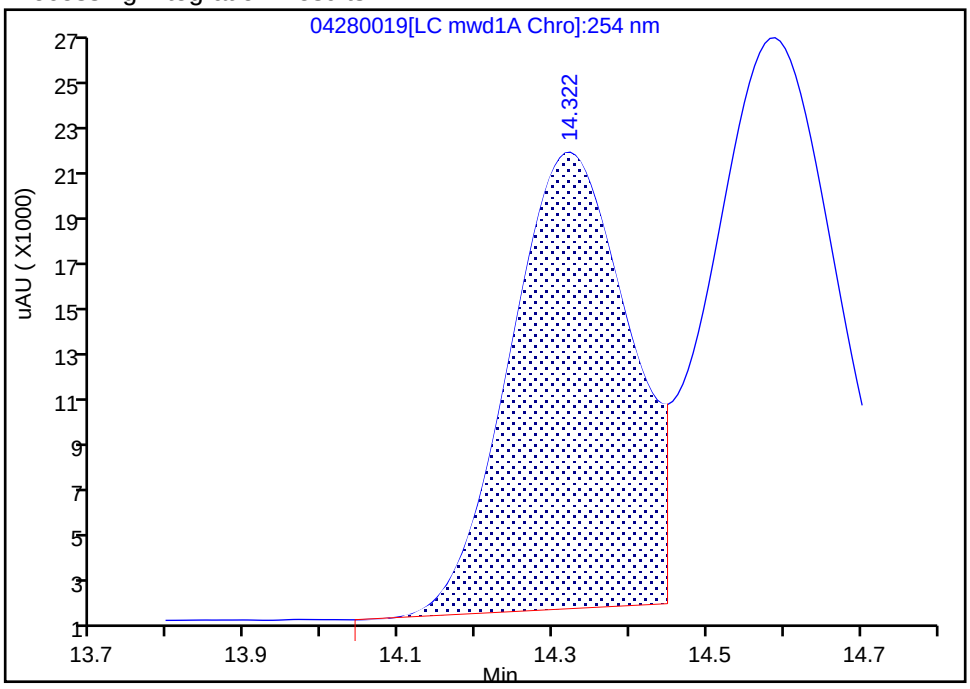
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Lims ID:	ICV INT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

11 3,5-Dinitroaniline, CAS: 618-87-1

Signal: 1

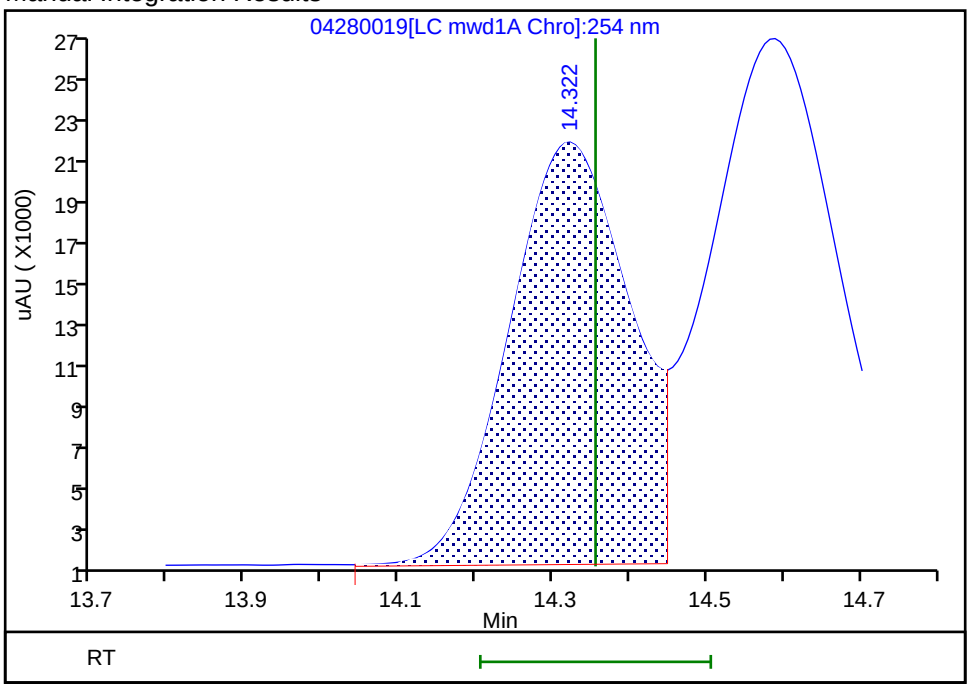
Processing Integration Results

RT: 14.32
Area: 204903
Amount: 0.459536
Amount Units: ug/ml



Manual Integration Results

RT: 14.32
Area: 212686
Amount: 0.477043
Amount Units: ug/ml



Reviewer: LV5D, 29-Apr-2023 10:27:10
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

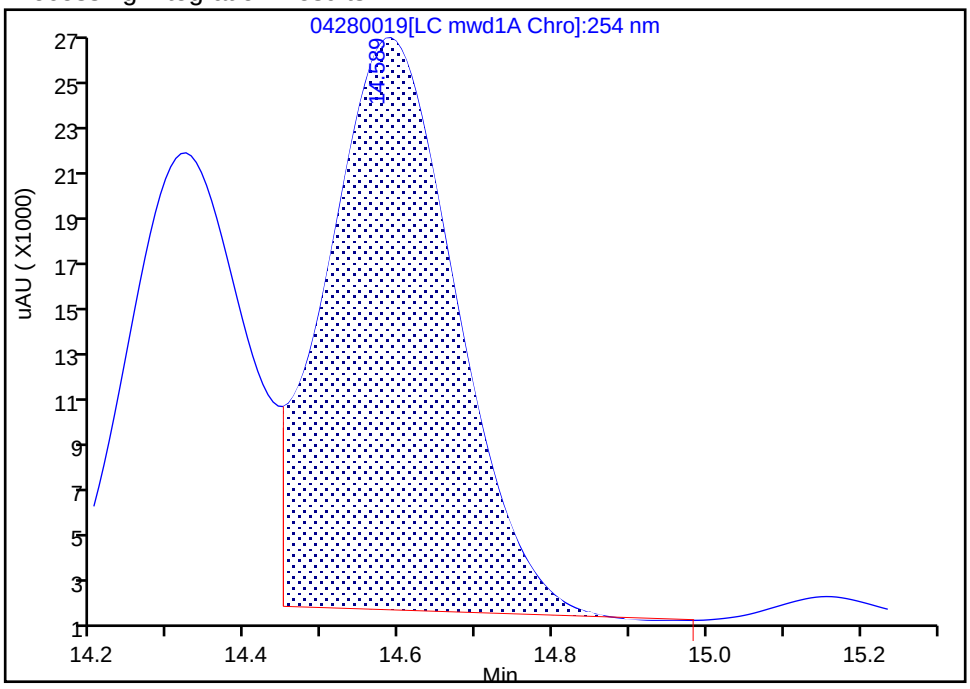
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Injection Date: 28-Apr-2023 23:38:32 Instrument ID: CHHPLC_X5
Lims ID: ICV INT
Client ID:
Operator ID: JZ/JG ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC mwd1A, 254 nm

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

Signal: 1

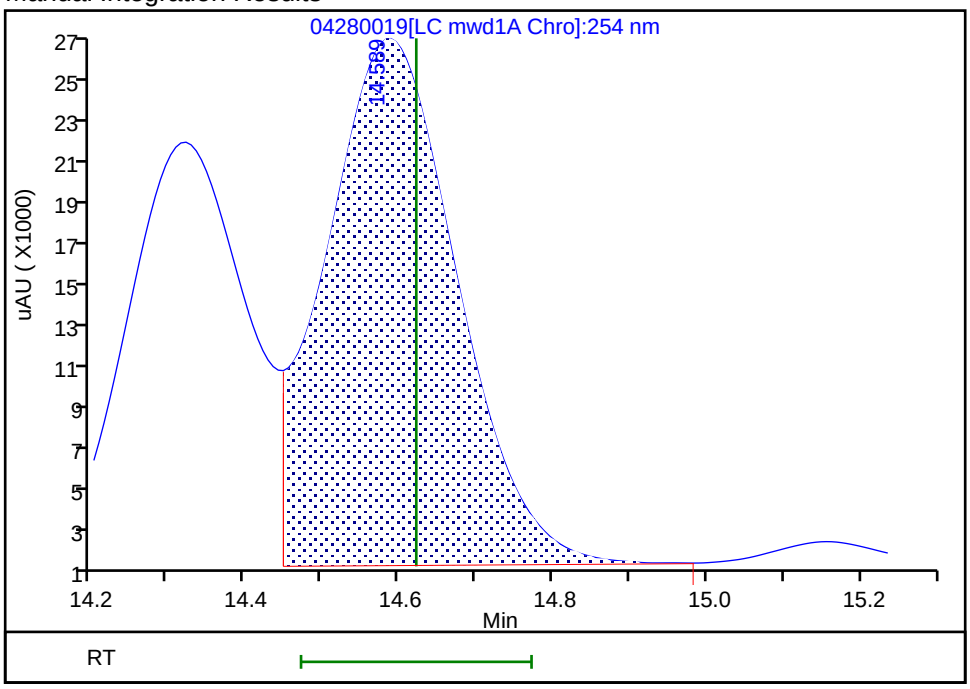
Processing Integration Results

RT: 14.59
Area: 278067
Amount: 0.441831
Amount Units: ug/ml



Manual Integration Results

RT: 14.59
Area: 288581
Amount: 0.458537
Amount Units: ug/ml



Reviewer: LV5D, 29-Apr-2023 10:27:10
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

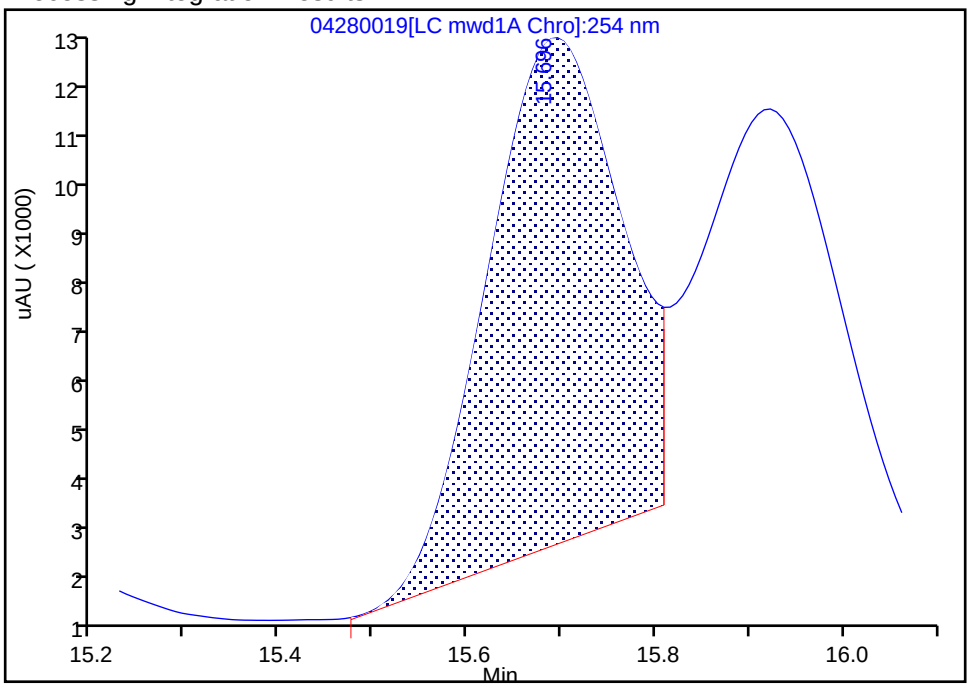
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Injection Date: 28-Apr-2023 23:38:32 Instrument ID: CHHPLC_X5
Lims ID: ICV INT
Client ID:
Operator ID: JZ/JG ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC mwd1A, 254 nm

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

Signal: 1

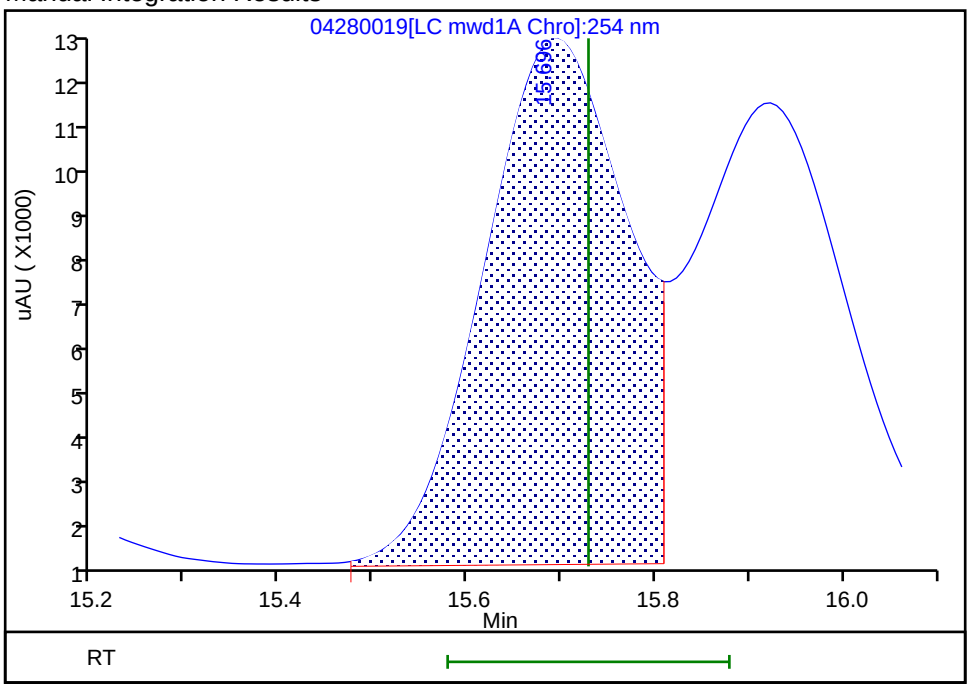
Processing Integration Results

RT: 15.70
Area: 94233
Amount: 0.381567
Amount Units: ug/ml



Manual Integration Results

RT: 15.70
Area: 115843
Amount: 0.469070
Amount Units: ug/ml



Reviewer: LV5D, 29-Apr-2023 10:27:13
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

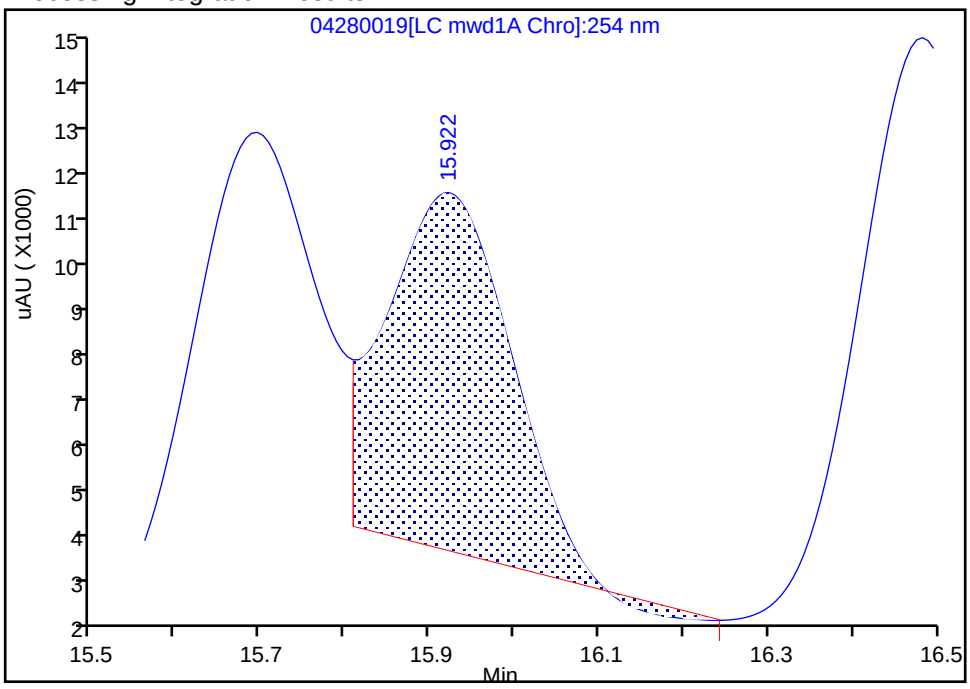
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Injection Date:	28-Apr-2023 23:38:32	Instrument ID:	CHHPLC_X5		
Lims ID:	ICV INT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

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

Signal: 1

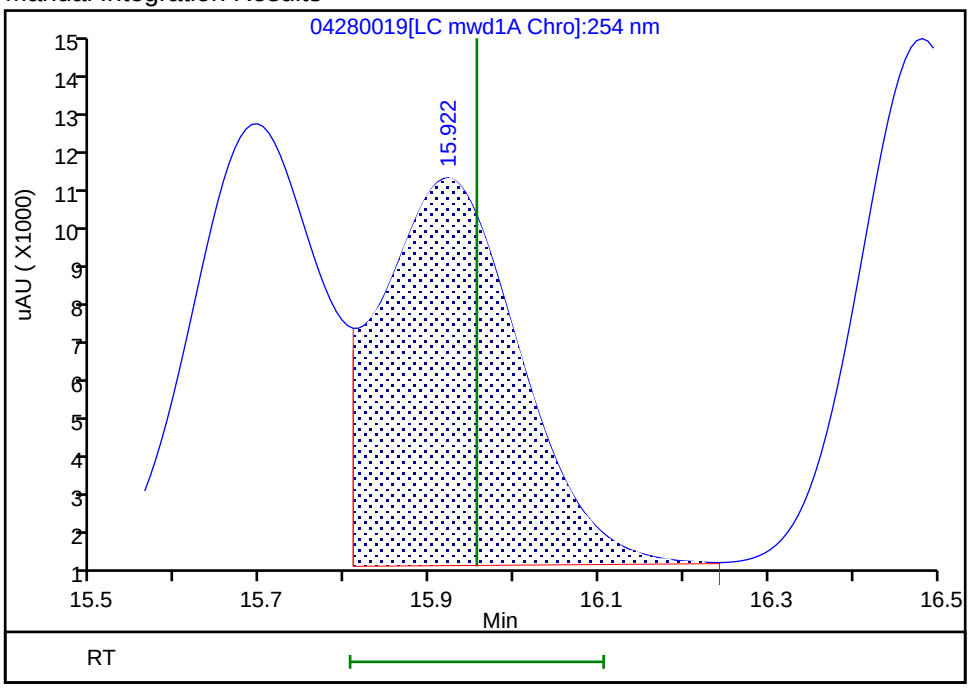
Processing Integration Results

RT: 15.92
Area: 83952
Amount: 0.369036
Amount Units: ug/ml



Manual Integration Results

RT: 15.92
Area: 108663
Amount: 0.477660
Amount Units: ug/ml



Reviewer: LV5D, 29-Apr-2023 10:27:13
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

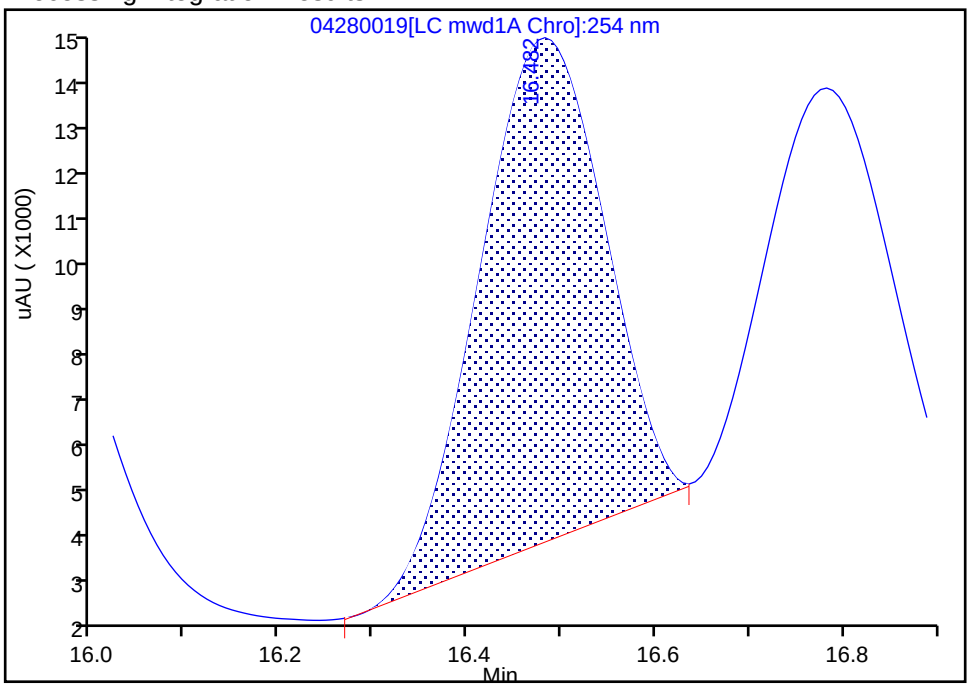
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Injection Date:	28-Apr-2023 23:38:32	Instrument ID:	CHHPLC_X5		
Lims ID:	ICV INT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

17 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

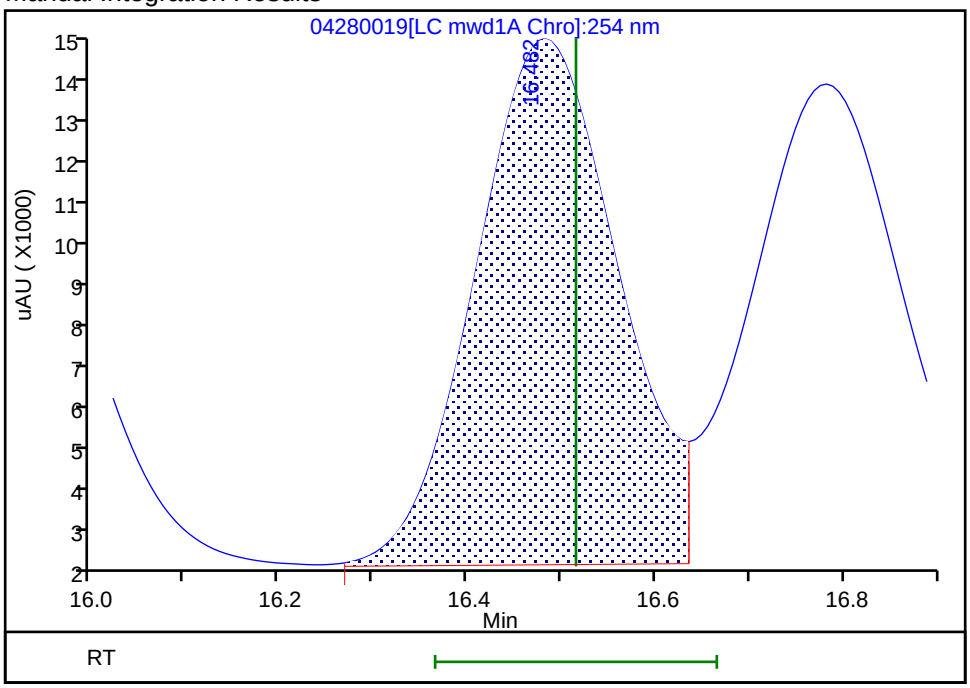
Processing Integration Results

RT: 16.48
Area: 103981
Amount: 0.365374
Amount Units: ug/ml



Manual Integration Results

RT: 16.48
Area: 136431
Amount: 0.463720
Amount Units: ug/ml



Reviewer: LV5D, 29-Apr-2023 10:27:13
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

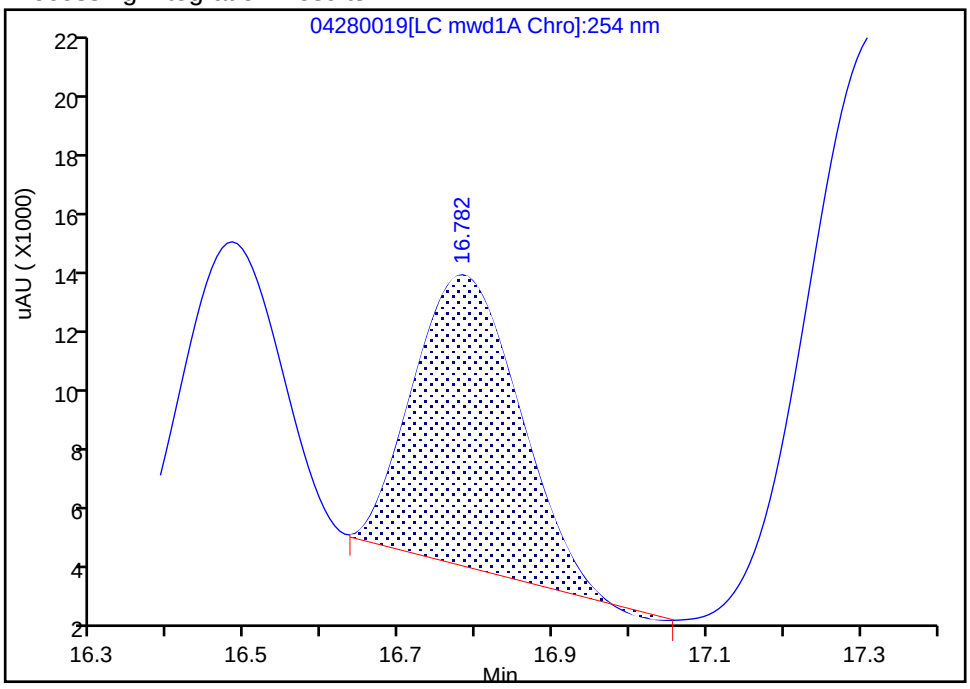
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Injection Date:	28-Apr-2023 23:38:32	Instrument ID:	CHHPLC_X5		
Lims ID:	ICV INT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

18 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

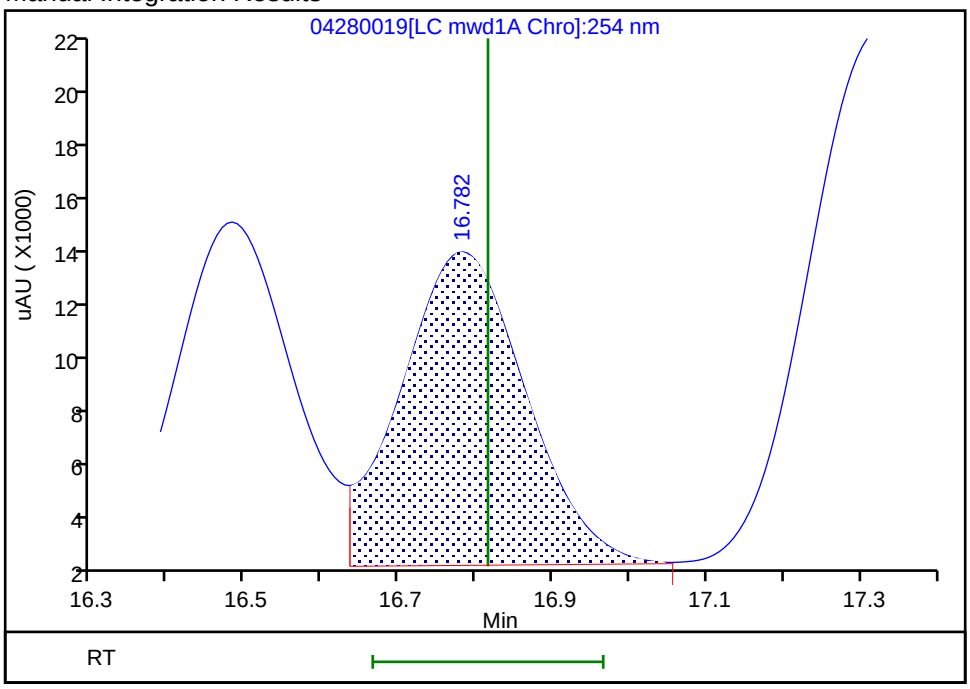
Processing Integration Results

RT: 16.78
Area: 97090
Amount: 0.342723
Amount Units: ug/ml



Manual Integration Results

RT: 16.78
Area: 132594
Amount: 0.450029
Amount Units: ug/ml



Reviewer: LV5D, 29-Apr-2023 10:27:13
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

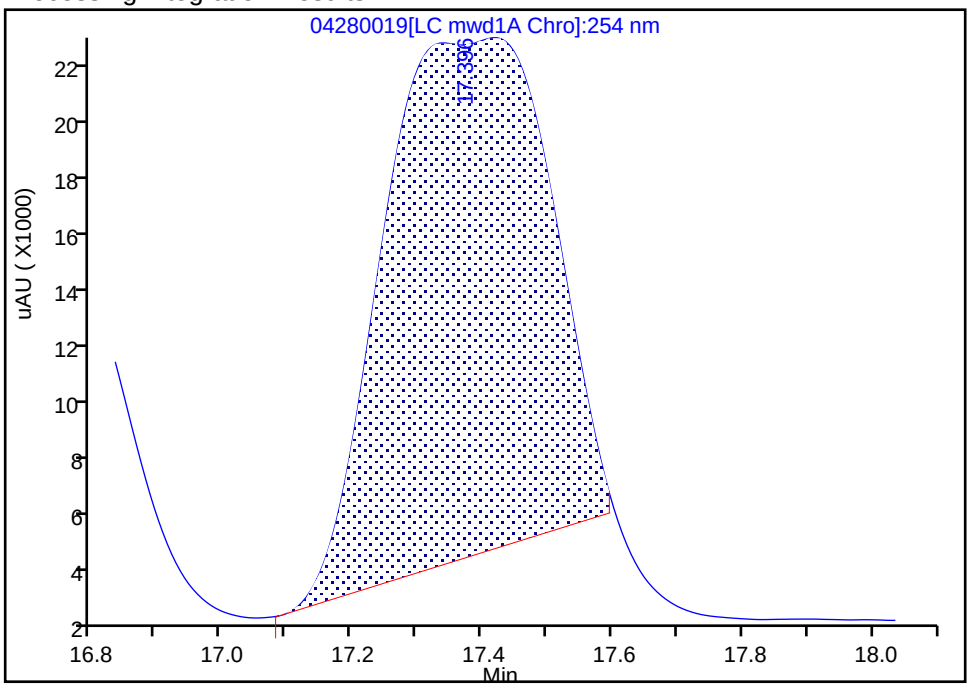
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280019.D				
Injection Date:	28-Apr-2023 23:38:32	Instrument ID:	CHHPLC_X5		
Lims ID:	ICV INT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

20 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

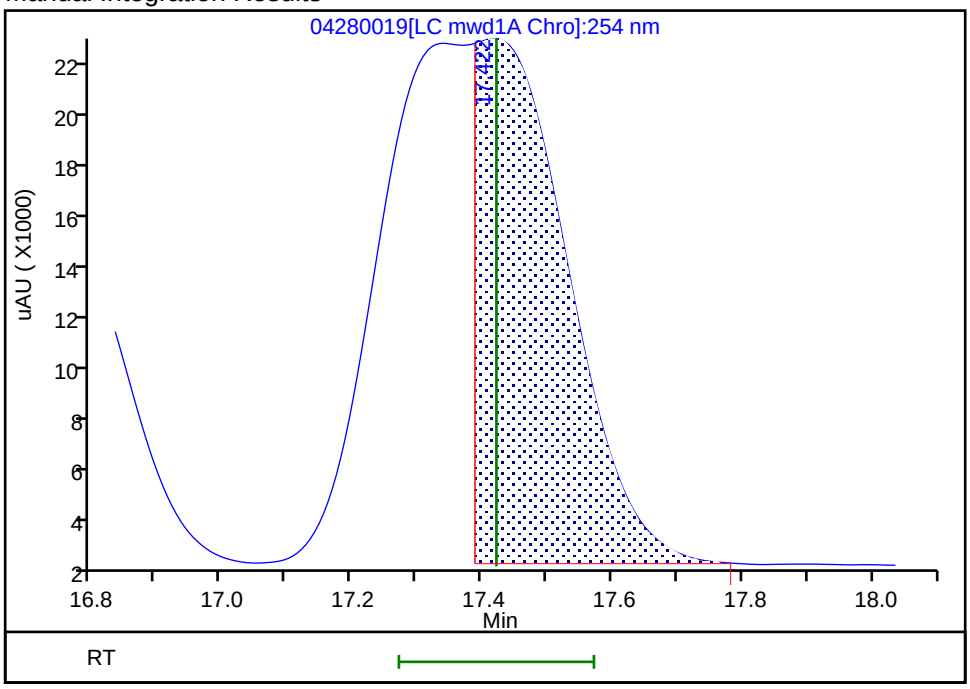
Processing Integration Results

RT: 17.40
Area: 328214
Amount: 0.809022
Amount Units: ug/ml



Manual Integration Results

RT: 17.42
Area: 196279
Amount: 0.483812
Amount Units: ug/ml



Reviewer: LV5D, 29-Apr-2023 10:27:01

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-176134-1

SDG No.:

Lab Sample ID: ICV 280-610603/28 | Calibration Date: 04/29/2023 04:52

Instrument ID: CHHPLC_X5 | Calib Start Date: 04/29/2023 00:13

GC Column: Luna-phenylhex ID: 4.60(mm) | Calib End Date: 04/29/2023 04:18

Lab File ID: 04280028.D | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,6-diamino-4-nitrotoluene	Ave	403300	412518		511	500	2.3	20.0
2,4-diamino-6-nitrotoluene	Ave	225281	220158		489	500	-2.3	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Lab Sample ID: ICV 280-610603/28 Calibration Date: 04/29/2023 04:52

Instrument ID: CHHPLC_X5 Calib Start Date: 04/29/2023 00:13

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 04/29/2023 04:18

Lab File ID: 04280028.D

Analyte	RT	RT WINDOW	
		FROM	TO
2,6-diamino-4-nitrotoluene	4.10	3.96	4.26
2,4-diamino-6-nitrotoluene	4.64	4.50	4.80

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280028.D
Lims ID: ICV ADD
Client ID:
Sample Type: ICV
Inject. Date: 29-Apr-2023 04:52:55 ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICV ADD
Operator ID: JZ/JG Instrument ID: CHHPLC_X5
Sublist:

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 29-Apr-2023 13:04:23 Calib Date: 29-Apr-2023 04:18:01
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1621

First Level Reviewer: LV5D Date: 29-Apr-2023 10:31:01

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.102	4.113	-0.011	206259	0.5000	0.5114	
2 2,4-diamino-6-nitrotoluene	1	4.635	4.653	-0.018	110079	0.5000	0.4886	

QC Flag Legend

Processing Flags

Reagents:

8330DiaminLCS_00056 Amount Added: 50.00 Units: uL

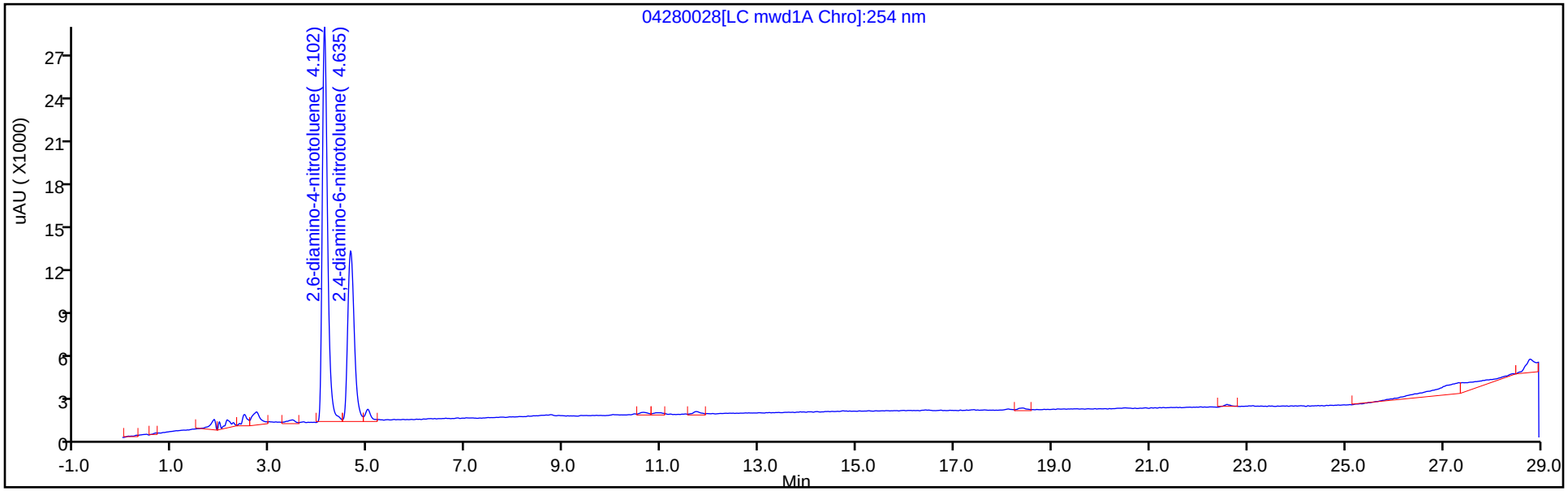
Report Date: 29-Apr-2023 13:06:04 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

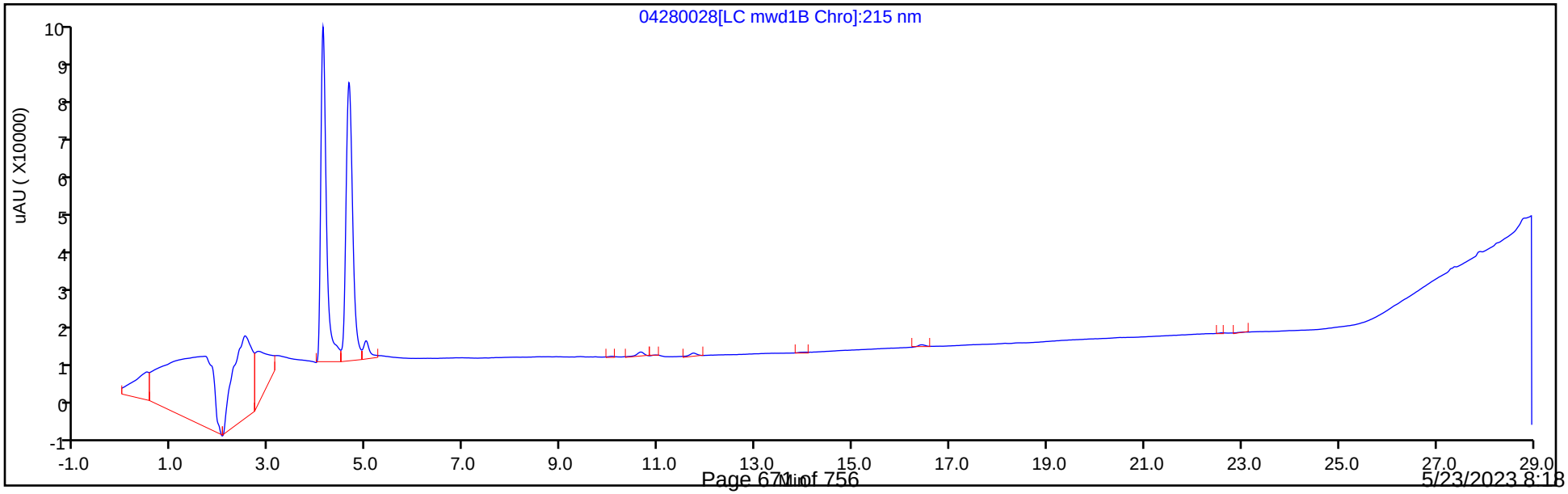
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Injection Date:	29-Apr-2023 04:52:55	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	ICV ADD			Worklist Smp#:	28
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-176134-1

SDG No.:

Lab Sample ID: CCV 280-612692/19 | Calibration Date: 05/17/2023 05:24

Instrument ID: CHHPLC_X5 | Calib Start Date: 04/28/2023 18:24

GC Column: Luna-phenylhex ID: 4.60(mm) | Calib End Date: 04/28/2023 23:03

Lab File ID: 05160019.D | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	394332	400187		254	251	1.5	20.0
DNX	Ave	277072	286741		259	250	3.5	20.0
HMX	Lin2		191452		254	250	1.5	20.0
MNX	Ave	262267	259503		289	292	-1.1	20.0
Picric acid	Lin2		167516		259	250	3.5	20.0
RDX	Lin2		232700		267	250	6.7	20.0
Nitrobenzene	Ave	398834	378624		237	250	-5.1	20.0
3,5-Dinitroaniline	Lin2		470976		263	250	5.4	20.0
1,3-Dinitrobenzene	Ave	629351	603036		240	250	-4.2	20.0
Nitroglycerin	Ave	134735	132661		2460	2500	-1.5	20.0
2-Nitrotoluene	Ave	246963	243532		247	250	-1.4	20.0
4-Nitrotoluene	Ave	227490	226156		249	250	-0.6	20.0
4-Amino-2,6-dinitrotoluene	Ave	294210	297348		253	250	1.1	20.0
3-Nitrotoluene	Ave	294634	285436		242	250	-3.1	20.0
2-Amino-4,6-dinitrotoluene	Ave	427939	415592		243	250	-2.9	20.0
1,3,5-Trinitrobenzene	Ave	405692	427972		264	250	5.5	20.0
2,6-Dinitrotoluene	Ave	291675	290980		249	250	-0.2	20.0
2,4-Dinitrotoluene	Ave	584463	578836		248	250	-1.0	20.0
Tetryl	Ave	284731	279596		245	250	-1.8	20.0
2,4,6-Trinitrotoluene	Ave	438876	426148		243	250	-2.9	20.0
PETN	Ave	143938	141435		2460	2500	-1.7	20.0
1,2-Dinitrobenzene	Ave	280697	273808		244	250	-2.5	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Lab Sample ID: CCV 280-612692/19 Calibration Date: 05/17/2023 05:24

Instrument ID: CHHPLC_X5 Calib Start Date: 04/28/2023 18:24

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 04/28/2023 23:03

Lab File ID: 05160019.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	4.82	4.67	4.97
DNX	5.55	5.40	5.70
HMX	6.08	5.93	6.23
MNX	6.92	6.77	7.07
Picric acid	7.44	7.29	7.59
RDX	8.22	8.07	8.37
Nitrobenzene	10.60	10.45	10.75
3,5-Dinitroaniline	13.28	13.13	13.43
1,3-Dinitrobenzene	13.61	13.46	13.76
Nitroglycerin	13.98	13.83	14.13
2-Nitrotoluene	14.52	14.37	14.67
4-Nitrotoluene	14.75	14.60	14.90
4-Amino-2,6-dinitrotoluene	15.25	15.10	15.40
3-Nitrotoluene	15.58	15.43	15.73
2-Amino-4,6-dinitrotoluene	16.08	15.93	16.23
1,3,5-Trinitrobenzene	16.38	16.23	16.53
2,6-Dinitrotoluene	17.34	17.19	17.49
2,4-Dinitrotoluene	17.81	17.66	17.96
Tetryl	20.82	20.67	20.97
2,4,6-Trinitrotoluene	21.66	21.51	21.81
PETN	22.67	22.52	22.82
1,2-Dinitrobenzene	11.44	11.29	11.59

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\05160019.D
Lims ID: CCV ADD
Client ID:
Sample Type: CCV
Inject. Date: 17-May-2023 05:24:23 ALS Bottle#: 7 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV ADD
Operator ID: JZ/JG Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub11

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 17-May-2023 16:34:14 Calib Date: 29-Apr-2023 04:18:01
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1653

First Level Reviewer: LV5D Date: 17-May-2023 11:14:34

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 2,6-diamino-4-nitrotoluene	1	3.896	3.896	0.000	91220	0.2500	0.2262	
	2 2,4-diamino-6-nitrotoluene	1	4.342	4.342	0.000	55517	0.2500	0.2464	
	3 TNX	1	4.822	4.822	0.000	100347	0.2508	0.2545	
	4 DNX	1	5.549	5.549	0.000	71757	0.2503	0.2590	
	5 HMX	1	6.082	6.082	0.000	47863	0.2500	0.2536	
	6 MNX	1	6.922	6.922	0.000	75710	0.2918	0.2887	
	7 2,4,6-Trinitrophenol	1	7.436	7.436	0.000	41879	0.2500	0.2586	
	8 RDX	1	8.222	8.222	0.000	58175	0.2500	0.2667	
	9 Nitrobenzene	1	10.602	10.602	0.000	94656	0.2500	0.2373	
$	10 1,2-Dinitrobenzene	1	11.435	11.435	0.000	68452	0.2500	0.2439	
	11 3,5-Dinitroaniline	1	13.275	13.275	0.000	117744	0.2500	0.2635	
	12 1,3-Dinitrobenzene	1	13.609	13.609	0.000	150759	0.2500	0.2395	
	13 Nitroglycerin	2	13.982	13.982	0.000	331652	2.50	2.46	
	14 o-Nitrotoluene	1	14.522	14.522	0.000	60883	0.2500	0.2465	
	16 p-Nitrotoluene	1	14.749	14.749	0.000	56539	0.2500	0.2485	
	17 4-Amino-2,6-dinitrotoluene	1	15.249	15.249	0.000	74337	0.2500	0.2527	
	18 m-Nitrotoluene	1	15.582	15.582	0.000	71359	0.2500	0.2422	
	19 2-Amino-4,6-dinitrotoluene	1	16.075	16.075	0.000	103898	0.2500	0.2428	
	20 1,3,5-Trinitrobenzene	1	16.375	16.375	0.000	106993	0.2500	0.2637	
	21 2,6-Dinitrotoluene	1	17.342	17.342	0.000	72745	0.2500	0.2494	
	22 2,4-Dinitrotoluene	1	17.809	17.809	0.000	144709	0.2500	0.2476	
	23 Tetryl	1	20.816	20.816	0.000	69899	0.2500	0.2455	
	24 2,4,6-Trinitrotoluene	1	21.662	21.662	0.000	106537	0.2500	0.2427	
	25 PETN	2	22.669	22.669	0.000	353587	2.50	2.46	

QC Flag Legend
Processing Flags

Reagents:

8330 DMT_00013	Amount Added:	12.50	Units: uL
8330IntermStk_00076	Amount Added:	25.00	Units: uL
8330_ADDs_00037	Amount Added:	12.50	Units: uL

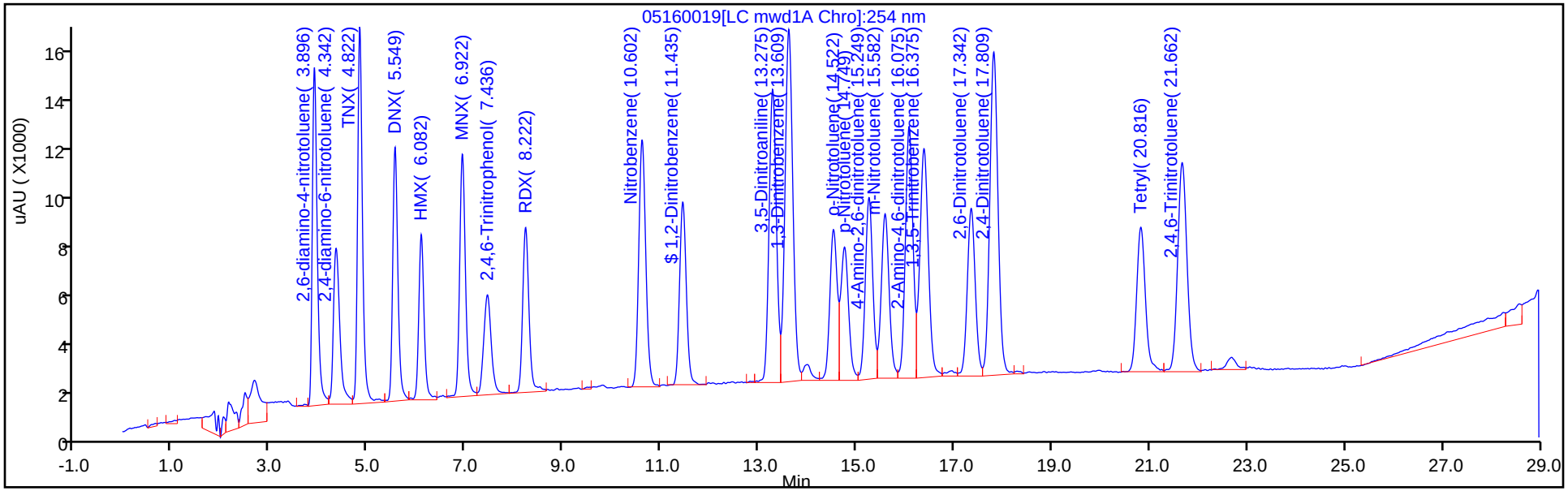
Report Date: 17-May-2023 16:34:14 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

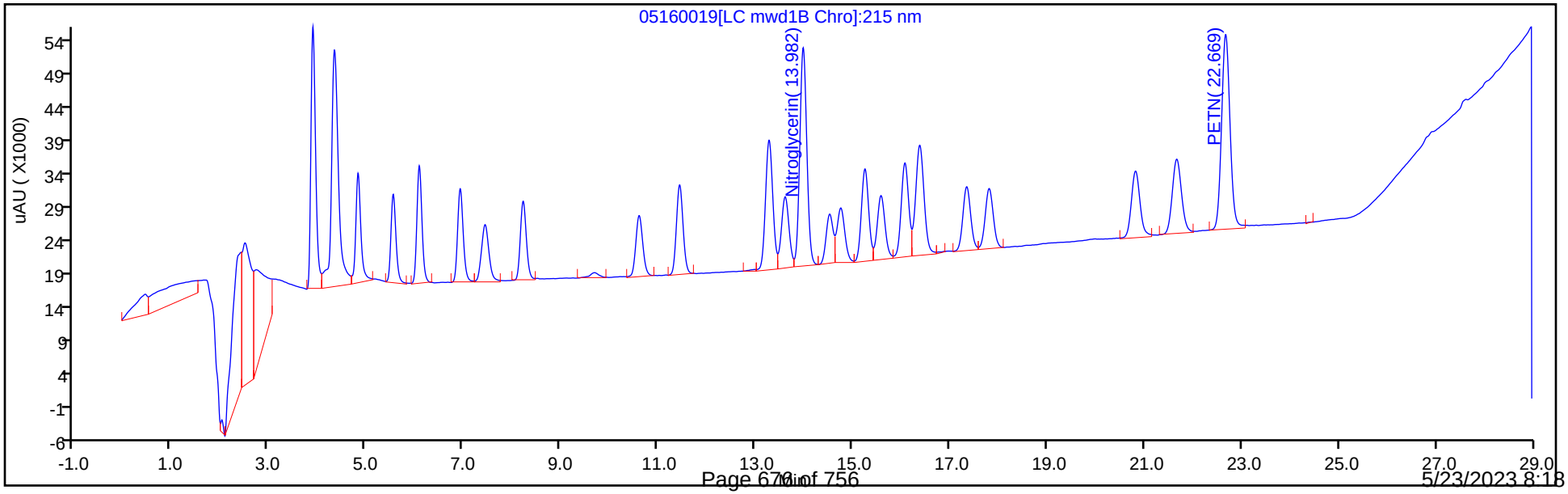
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Injection Date:	17-May-2023 05:24:23	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	CCV ADD			Worklist Smp#:	19
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Lab Sample ID: CCV 280-612692/19 Calibration Date: 05/17/2023 05:24

Instrument ID: CHHPLC_X5 Calib Start Date: 04/29/2023 00:13

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 04/29/2023 04:18

Lab File ID: 05160019.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,6-diamino-4-nitrotoluene	Ave	403300	364880		226	250	-9.5	20.0
2,4-diamino-6-nitrotoluene	Ave	225281	222068		246	250	-1.4	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Lab Sample ID: CCV 280-612692/19 Calibration Date: 05/17/2023 05:24

Instrument ID: CHHPLC_X5 Calib Start Date: 04/29/2023 00:13

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 04/29/2023 04:18

Lab File ID: 05160019.D

Analyte	RT	RT WINDOW	
		FROM	TO
2,6-diamino-4-nitrotoluene	3.90	3.75	4.05
2,4-diamino-6-nitrotoluene	4.34	4.19	4.49

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\05160019.D
Lims ID: CCV ADD
Client ID:
Sample Type: CCV
Inject. Date: 17-May-2023 05:24:23 ALS Bottle#: 7 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV ADD
Operator ID: JZ/JG Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub11

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 17-May-2023 16:34:14 Calib Date: 29-Apr-2023 04:18:01
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1653

First Level Reviewer: LV5D Date: 17-May-2023 11:14:34

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 2,6-diamino-4-nitrotoluene	1	3.896	3.896	0.000	91220	0.2500	0.2262	
	2 2,4-diamino-6-nitrotoluene	1	4.342	4.342	0.000	55517	0.2500	0.2464	
	3 TNX	1	4.822	4.822	0.000	100347	0.2508	0.2545	
	4 DNX	1	5.549	5.549	0.000	71757	0.2503	0.2590	
	5 HMX	1	6.082	6.082	0.000	47863	0.2500	0.2536	
	6 MNX	1	6.922	6.922	0.000	75710	0.2918	0.2887	
	7 2,4,6-Trinitrophenol	1	7.436	7.436	0.000	41879	0.2500	0.2586	
	8 RDX	1	8.222	8.222	0.000	58175	0.2500	0.2667	
	9 Nitrobenzene	1	10.602	10.602	0.000	94656	0.2500	0.2373	
$	10 1,2-Dinitrobenzene	1	11.435	11.435	0.000	68452	0.2500	0.2439	
	11 3,5-Dinitroaniline	1	13.275	13.275	0.000	117744	0.2500	0.2635	
	12 1,3-Dinitrobenzene	1	13.609	13.609	0.000	150759	0.2500	0.2395	
	13 Nitroglycerin	2	13.982	13.982	0.000	331652	2.50	2.46	
	14 o-Nitrotoluene	1	14.522	14.522	0.000	60883	0.2500	0.2465	
	16 p-Nitrotoluene	1	14.749	14.749	0.000	56539	0.2500	0.2485	
	17 4-Amino-2,6-dinitrotoluene	1	15.249	15.249	0.000	74337	0.2500	0.2527	
	18 m-Nitrotoluene	1	15.582	15.582	0.000	71359	0.2500	0.2422	
	19 2-Amino-4,6-dinitrotoluene	1	16.075	16.075	0.000	103898	0.2500	0.2428	
	20 1,3,5-Trinitrobenzene	1	16.375	16.375	0.000	106993	0.2500	0.2637	
	21 2,6-Dinitrotoluene	1	17.342	17.342	0.000	72745	0.2500	0.2494	
	22 2,4-Dinitrotoluene	1	17.809	17.809	0.000	144709	0.2500	0.2476	
	23 Tetryl	1	20.816	20.816	0.000	69899	0.2500	0.2455	
	24 2,4,6-Trinitrotoluene	1	21.662	21.662	0.000	106537	0.2500	0.2427	
	25 PETN	2	22.669	22.669	0.000	353587	2.50	2.46	

QC Flag Legend
Processing Flags

Reagents:

8330 DMT_00013	Amount Added:	12.50	Units: uL
8330IntermStk_00076	Amount Added:	25.00	Units: uL
8330_ADDs_00037	Amount Added:	12.50	Units: uL

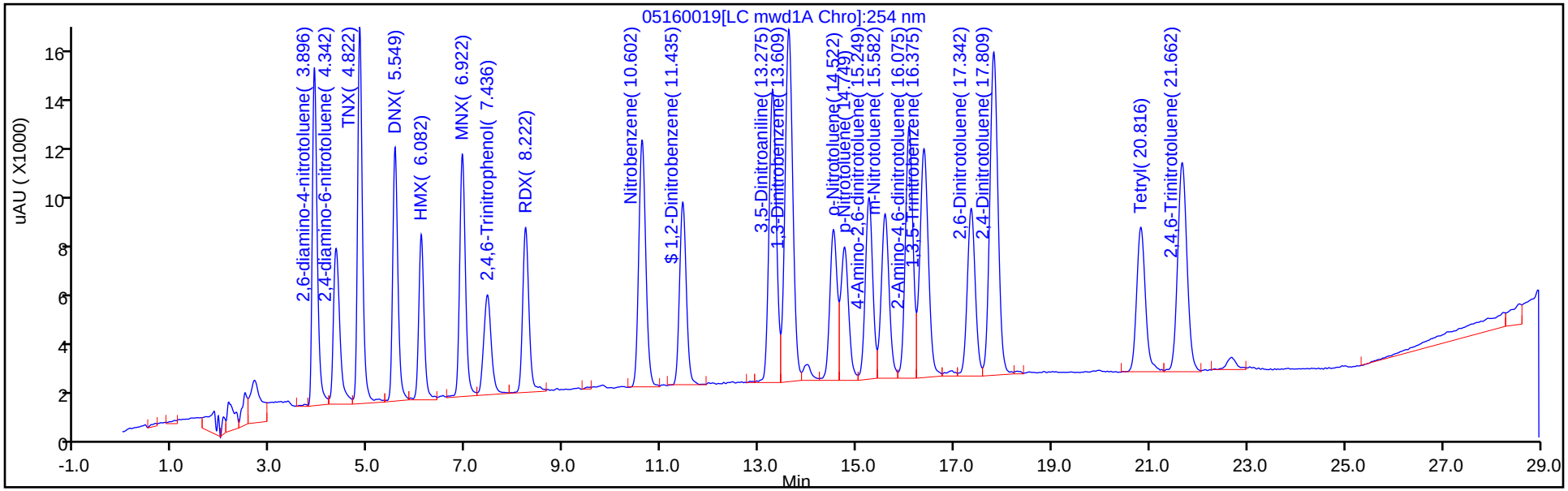
Report Date: 17-May-2023 16:34:14 Chrom Revision: 2.3 16-May-2023 16:37:30

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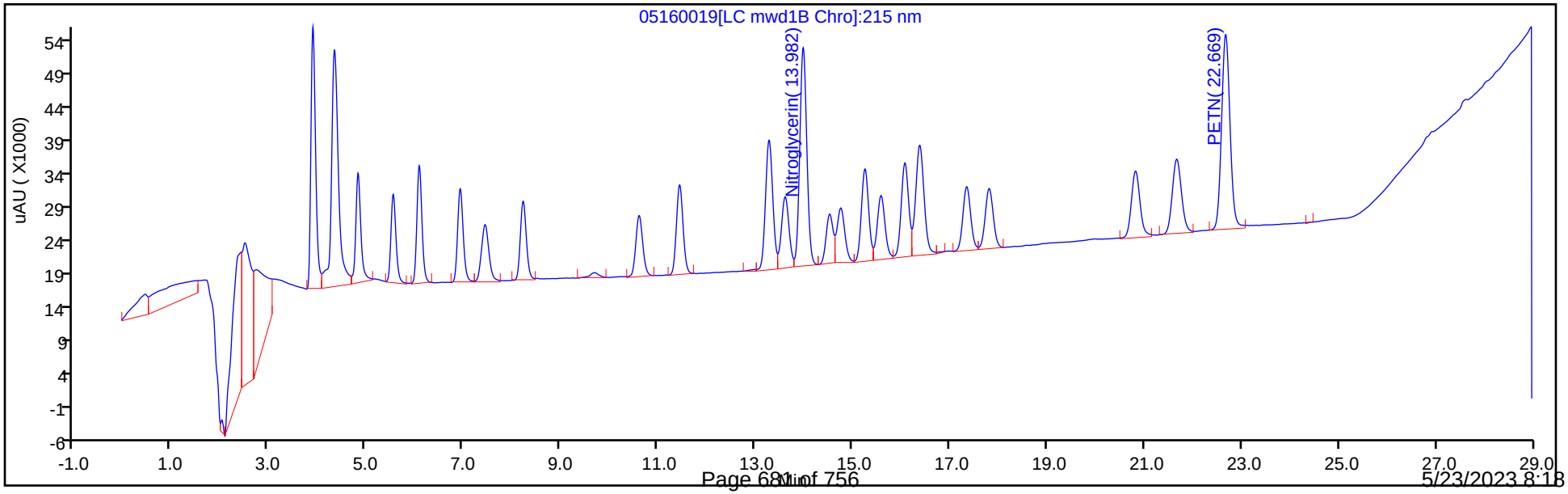
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\05160019.D

Injection Date:	17-May-2023 05:24:23	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	CCV ADD			Worklist Smp#:	19
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Lab Sample ID: CCV 280-612692/30 Calibration Date: 05/17/2023 11:48

Instrument ID: CHHPLC_X5 Calib Start Date: 04/28/2023 18:24

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 04/28/2023 23:03

Lab File ID: 05160030.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	394332	390835		249	251	-0.9	20.0
DNX	Ave	277072	283481		256	250	2.3	20.0
HMX	Lin2		193224		256	250	2.4	20.0
MNX	Ave	262267	259225		288	292	-1.2	20.0
Picric acid	Lin2		164220		253	250	1.4	20.0
RDX	Lin2		222696		255	250	2.0	20.0
Nitrobenzene	Ave	398834	375656		235	250	-5.8	20.0
3,5-Dinitroaniline	Lin2		468004		262	250	4.7	20.0
1,3-Dinitrobenzene	Ave	629351	601488		239	250	-4.4	20.0
Nitroglycerin	Ave	134735	132198		2450	2500	-1.9	20.0
2-Nitrotoluene	Ave	246963	235840		239	250	-4.5	20.0
4-Nitrotoluene	Ave	227490	222248		244	250	-2.3	20.0
4-Amino-2,6-dinitrotoluene	Ave	294210	293456		249	250	-0.3	20.0
3-Nitrotoluene	Ave	294634	279412		237	250	-5.2	20.0
2-Amino-4,6-dinitrotoluene	Ave	427939	416528		243	250	-2.7	20.0
1,3,5-Trinitrobenzene	Ave	405692	420412		259	250	3.6	20.0
2,6-Dinitrotoluene	Ave	291675	284848		244	250	-2.3	20.0
2,4-Dinitrotoluene	Ave	584463	572588		245	250	-2.0	20.0
Tetryl	Ave	284731	278604		245	250	-2.2	20.0
2,4,6-Trinitrotoluene	Ave	438876	426428		243	250	-2.8	20.0
PETN	Ave	143938	142854		2480	2500	-0.8	20.0
1,2-Dinitrobenzene	Ave	280697	277672		247	250	-1.1	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Lab Sample ID: CCV 280-612692/30 Calibration Date: 05/17/2023 11:48

Instrument ID: CHHPLC_X5 Calib Start Date: 04/28/2023 18:24

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 04/28/2023 23:03

Lab File ID: 05160030.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	4.83	4.67	4.97
DNX	5.55	5.40	5.70
HMX	6.08	5.93	6.23
MNX	6.92	6.77	7.07
Picric acid	7.43	7.29	7.59
RDX	8.21	8.07	8.37
Nitrobenzene	10.61	10.45	10.75
3,5-Dinitroaniline	13.29	13.13	13.43
1,3-Dinitrobenzene	13.62	13.46	13.76
Nitroglycerin	13.99	13.83	14.13
2-Nitrotoluene	14.53	14.37	14.67
4-Nitrotoluene	14.76	14.60	14.90
4-Amino-2,6-dinitrotoluene	15.25	15.10	15.40
3-Nitrotoluene	15.59	15.43	15.73
2-Amino-4,6-dinitrotoluene	16.07	15.93	16.23
1,3,5-Trinitrobenzene	16.39	16.23	16.53
2,6-Dinitrotoluene	17.35	17.19	17.49
2,4-Dinitrotoluene	17.81	17.66	17.96
Tetryl	20.82	20.67	20.97
2,4,6-Trinitrotoluene	21.67	21.51	21.81
PETN	22.67	22.52	22.82
1,2-Dinitrobenzene	11.45	11.29	11.59

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\05160030.D
Lims ID: CCV ADD
Client ID:
Sample Type: CCV
Inject. Date: 17-May-2023 11:48:38 ALS Bottle#: 7 Worklist Smp#: 30
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV ADD
Operator ID: JZ/JG Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub11

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 17-May-2023 16:34:23 Calib Date: 29-Apr-2023 04:18:01
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1653

First Level Reviewer: LV5D Date: 17-May-2023 12:28:30

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 2,6-diamino-4-nitrotoluene	1	3.898	3.896	0.002	91479	0.2500	0.2268	
	2 2,4-diamino-6-nitrotoluene	1	4.338	4.342	-0.004	54397	0.2500	0.2415	
	3 TNX	1	4.825	4.822	0.003	98002	0.2508	0.2485	
	4 DNX	1	5.545	5.549	-0.004	70941	0.2503	0.2560	
	5 HMX	1	6.078	6.082	-0.004	48306	0.2500	0.2560	
	6 MNX	1	6.918	6.922	-0.004	75629	0.2918	0.2884	
	7 2,4,6-Trinitrophenol	1	7.432	7.436	-0.004	41055	0.2500	0.2535	
	8 RDX	1	8.212	8.222	-0.010	55674	0.2500	0.2551	
	9 Nitrobenzene	1	10.611	10.602	0.009	93914	0.2500	0.2355	
$	10 1,2-Dinitrobenzene	1	11.445	11.435	0.010	69418	0.2500	0.2473	
	11 3,5-Dinitroaniline	1	13.285	13.275	0.010	117001	0.2500	0.2618	
	12 1,3-Dinitrobenzene	1	13.618	13.609	0.009	150372	0.2500	0.2389	
	13 Nitroglycerin	2	13.985	13.982	0.003	330495	2.50	2.45	
	14 o-Nitrotoluene	1	14.531	14.522	0.009	58960	0.2500	0.2387	
	16 p-Nitrotoluene	1	14.758	14.749	0.009	55562	0.2500	0.2442	
	17 4-Amino-2,6-dinitrotoluene	1	15.251	15.249	0.002	73364	0.2500	0.2494	
	18 m-Nitrotoluene	1	15.585	15.582	0.003	69853	0.2500	0.2371	
	19 2-Amino-4,6-dinitrotoluene	1	16.071	16.075	-0.004	104132	0.2500	0.2433	
	20 1,3,5-Trinitrobenzene	1	16.385	16.375	0.010	105103	0.2500	0.2591	
	21 2,6-Dinitrotoluene	1	17.345	17.342	0.003	71212	0.2500	0.2441	
	22 2,4-Dinitrotoluene	1	17.805	17.809	-0.004	143147	0.2500	0.2449	
	23 Tetryl	1	20.818	20.816	0.002	69651	0.2500	0.2446	
	24 2,4,6-Trinitrotoluene	1	21.665	21.662	0.003	106607	0.2500	0.2429	
	25 PETN	2	22.665	22.669	-0.004	357136	2.50	2.48	

QC Flag Legend
Processing Flags

Reagents:

8330 DMT_00013	Amount Added:	12.50	Units: uL
8330IntermStk_00076	Amount Added:	25.00	Units: uL
8330_ADDs_00037	Amount Added:	12.50	Units: uL

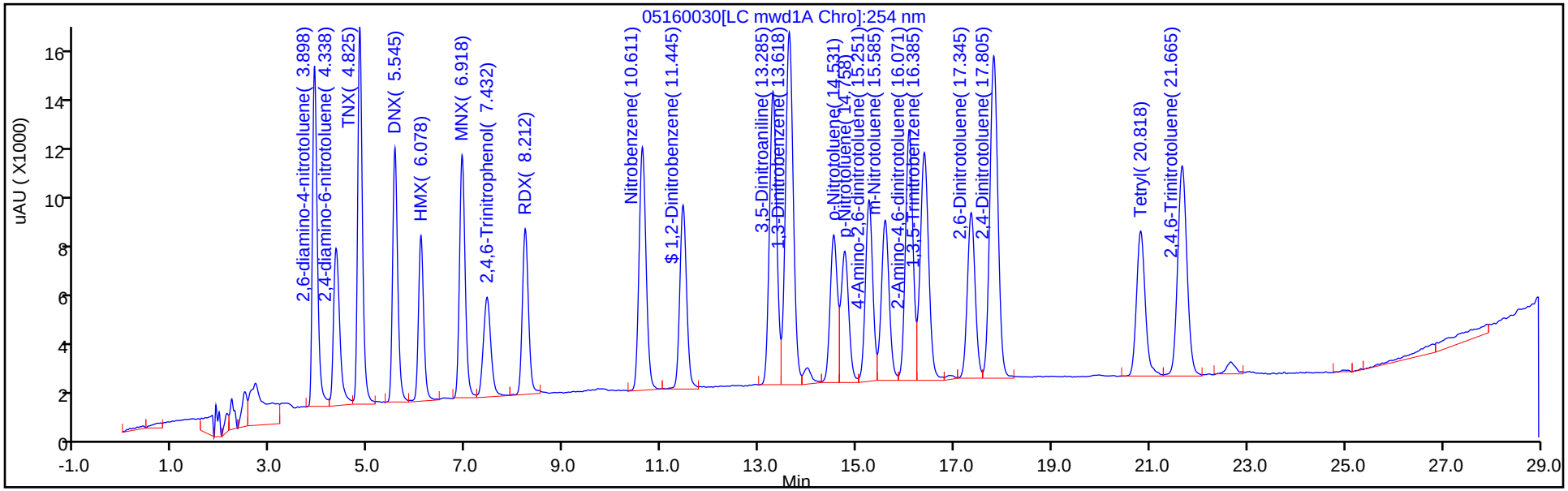
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Eurofins Denver

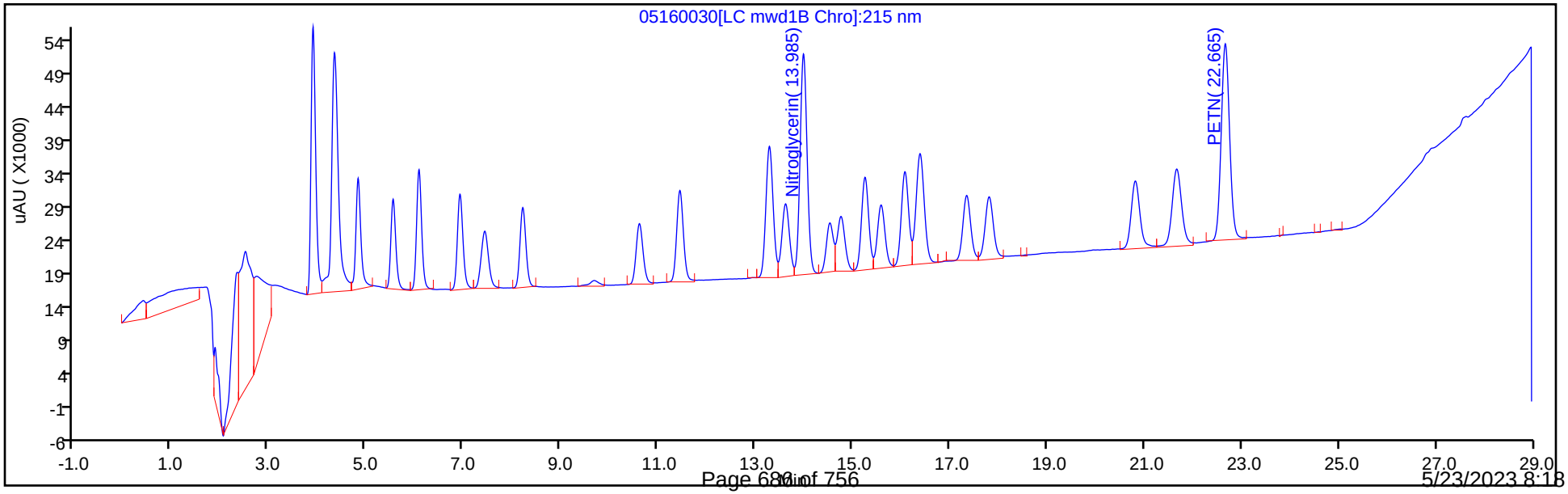
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\05160030.D

Injection Date:	17-May-2023 11:48:38	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	CCV ADD			Worklist Smp#:	30
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Lab Sample ID: CCV 280-612692/30 Calibration Date: 05/17/2023 11:48

Instrument ID: CHHPLC_X5 Calib Start Date: 04/29/2023 00:13

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 04/29/2023 04:18

Lab File ID: 05160030.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,6-diamino-4-nitrotoluene	Ave	403300	365916		227	250	-9.3	20.0
2,4-diamino-6-nitrotoluene	Ave	225281	217588		241	250	-3.4	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Lab Sample ID: CCV 280-612692/30 Calibration Date: 05/17/2023 11:48

Instrument ID: CHHPLC_X5 Calib Start Date: 04/29/2023 00:13

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 04/29/2023 04:18

Lab File ID: 05160030.D

Analyte	RT	RT WINDOW	
		FROM	TO
2,6-diamino-4-nitrotoluene	3.90	3.75	4.05
2,4-diamino-6-nitrotoluene	4.34	4.19	4.49

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\05160030.D
Lims ID: CCV ADD
Client ID:
Sample Type: CCV
Inject. Date: 17-May-2023 11:48:38 ALS Bottle#: 7 Worklist Smp#: 30
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV ADD
Operator ID: JZ/JG Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub11

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 17-May-2023 16:34:23 Calib Date: 29-Apr-2023 04:18:01
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1653

First Level Reviewer: LV5D Date: 17-May-2023 12:28:30

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 2,6-diamino-4-nitrotoluene	1	3.898	3.896	0.002	91479	0.2500	0.2268	
	2 2,4-diamino-6-nitrotoluene	1	4.338	4.342	-0.004	54397	0.2500	0.2415	
	3 TNX	1	4.825	4.822	0.003	98002	0.2508	0.2485	
	4 DNX	1	5.545	5.549	-0.004	70941	0.2503	0.2560	
	5 HMX	1	6.078	6.082	-0.004	48306	0.2500	0.2560	
	6 MNX	1	6.918	6.922	-0.004	75629	0.2918	0.2884	
	7 2,4,6-Trinitrophenol	1	7.432	7.436	-0.004	41055	0.2500	0.2535	
	8 RDX	1	8.212	8.222	-0.010	55674	0.2500	0.2551	
	9 Nitrobenzene	1	10.611	10.602	0.009	93914	0.2500	0.2355	
$	10 1,2-Dinitrobenzene	1	11.445	11.435	0.010	69418	0.2500	0.2473	
	11 3,5-Dinitroaniline	1	13.285	13.275	0.010	117001	0.2500	0.2618	
	12 1,3-Dinitrobenzene	1	13.618	13.609	0.009	150372	0.2500	0.2389	
	13 Nitroglycerin	2	13.985	13.982	0.003	330495	2.50	2.45	
	14 o-Nitrotoluene	1	14.531	14.522	0.009	58960	0.2500	0.2387	
	16 p-Nitrotoluene	1	14.758	14.749	0.009	55562	0.2500	0.2442	
	17 4-Amino-2,6-dinitrotoluene	1	15.251	15.249	0.002	73364	0.2500	0.2494	
	18 m-Nitrotoluene	1	15.585	15.582	0.003	69853	0.2500	0.2371	
	19 2-Amino-4,6-dinitrotoluene	1	16.071	16.075	-0.004	104132	0.2500	0.2433	
	20 1,3,5-Trinitrobenzene	1	16.385	16.375	0.010	105103	0.2500	0.2591	
	21 2,6-Dinitrotoluene	1	17.345	17.342	0.003	71212	0.2500	0.2441	
	22 2,4-Dinitrotoluene	1	17.805	17.809	-0.004	143147	0.2500	0.2449	
	23 Tetryl	1	20.818	20.816	0.002	69651	0.2500	0.2446	
	24 2,4,6-Trinitrotoluene	1	21.665	21.662	0.003	106607	0.2500	0.2429	
	25 PETN	2	22.665	22.669	-0.004	357136	2.50	2.48	

QC Flag Legend
Processing Flags

Reagents:

8330 DMT_00013	Amount Added:	12.50	Units: uL
8330IntermStk_00076	Amount Added:	25.00	Units: uL
8330_ADDs_00037	Amount Added:	12.50	Units: uL

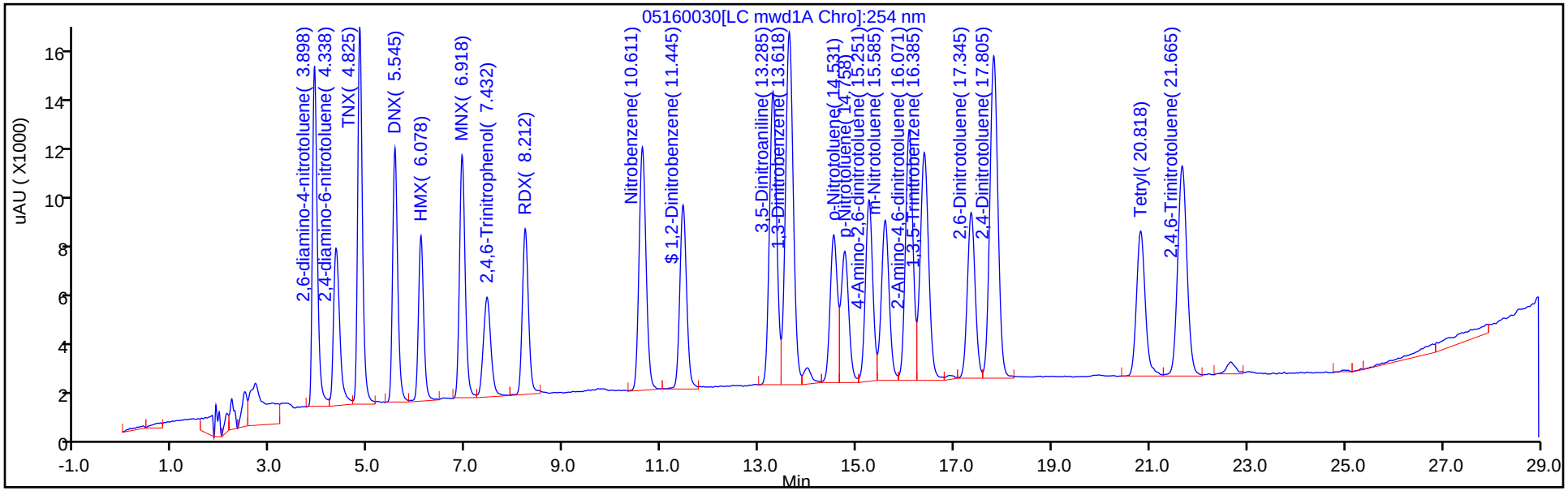
Report Date: 17-May-2023 16:34:23 Chrom Revision: 2.3 16-May-2023 16:37:30

Eurofins Denver

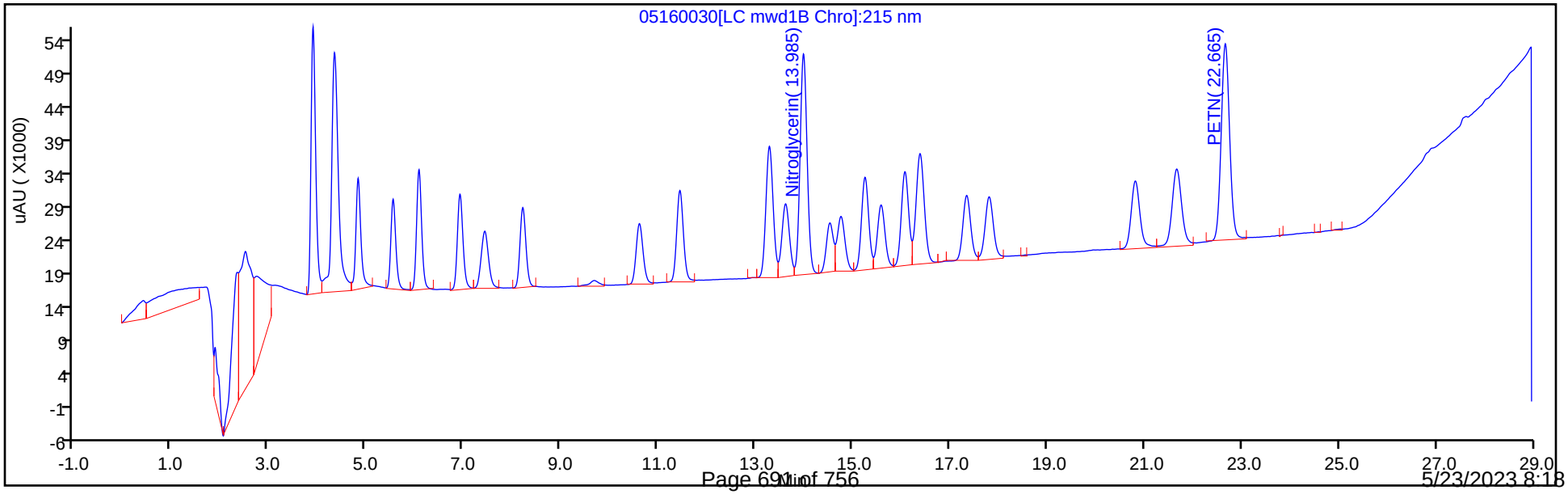
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Injection Date:	17-May-2023 11:48:38	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	CCV ADD			Worklist Smp#:	30
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-176134-1

SDG No.:

Lab Sample ID: CCV 280-612692/37 | Calibration Date: 05/17/2023 15:53

Instrument ID: CHHPLC_X5 | Calib Start Date: 04/28/2023 18:24

GC Column: Luna-phenylhex ID: 4.60(mm) | Calib End Date: 04/28/2023 23:03

Lab File ID: 05160037.D | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	394332	390855		249	251	-0.9	20.0
DNX	Ave	277072	284835		257	250	2.8	20.0
HMX	Lin2		192724		255	250	2.1	20.0
MNX	Ave	262267	260079		289	292	-0.8	20.0
Picric acid	Lin2		165416		255	250	2.1	20.0
RDX	Lin2		228552		262	250	4.7	20.0
Nitrobenzene	Ave	398834	379032		238	250	-5.0	20.0
3,5-Dinitroaniline	Lin2		475996		266	250	6.5	20.0
1,3-Dinitrobenzene	Ave	629351	608564		242	250	-3.3	20.0
Nitroglycerin	Ave	134735	135165		2510	2500	0.3	20.0
2-Nitrotoluene	Ave	246963	242140		245	250	-2.0	20.0
4-Nitrotoluene	Ave	227490	218184		240	250	-4.1	20.0
4-Amino-2,6-dinitrotoluene	Ave	294210	293712		250	250	-0.2	20.0
3-Nitrotoluene	Ave	294634	271304		230	250	-7.9	20.0
2-Amino-4,6-dinitrotoluene	Ave	427939	414284		242	250	-3.2	20.0
1,3,5-Trinitrobenzene	Ave	405692	416744		257	250	2.7	20.0
2,6-Dinitrotoluene	Ave	291675	285876		245	250	-2.0	20.0
2,4-Dinitrotoluene	Ave	584463	575940		246	250	-1.5	20.0
Tetryl	Ave	284731	281416		247	250	-1.2	20.0
2,4,6-Trinitrotoluene	Ave	438876	427852		244	250	-2.5	20.0
PETN	Ave	143938	141345		2450	2500	-1.8	20.0
1,2-Dinitrobenzene	Ave	280697	281200		250	250	0.2	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Lab Sample ID: CCV 280-612692/37 Calibration Date: 05/17/2023 15:53

Instrument ID: CHHPLC_X5 Calib Start Date: 04/28/2023 18:24

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 04/28/2023 23:03

Lab File ID: 05160037.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	4.82	4.67	4.97
DNX	5.54	5.40	5.70
HMX	6.07	5.93	6.23
MNX	6.91	6.77	7.07
Picric acid	7.40	7.29	7.59
RDX	8.20	8.07	8.37
Nitrobenzene	10.62	10.45	10.75
3,5-Dinitroaniline	13.30	13.13	13.43
1,3-Dinitrobenzene	13.63	13.46	13.76
Nitroglycerin	13.99	13.83	14.13
2-Nitrotoluene	14.51	14.37	14.67
4-Nitrotoluene	14.72	14.60	14.90
4-Amino-2,6-dinitrotoluene	15.20	15.10	15.40
3-Nitrotoluene	15.53	15.43	15.73
2-Amino-4,6-dinitrotoluene	16.02	15.93	16.23
1,3,5-Trinitrobenzene	16.34	16.23	16.53
2,6-Dinitrotoluene	17.29	17.19	17.49
2,4-Dinitrotoluene	17.74	17.66	17.96
Tetryl	20.74	20.67	20.97
2,4,6-Trinitrotoluene	21.60	21.51	21.81
PETN	22.59	22.52	22.82
1,2-Dinitrobenzene	11.46	11.29	11.59

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\05160037.D
Lims ID: CCV ADD
Client ID:
Sample Type: CCV
Inject. Date: 17-May-2023 15:53:15 ALS Bottle#: 7 Worklist Smp#: 37
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV ADD
Operator ID: JZ/JG Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub11

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 17-May-2023 16:34:26 Calib Date: 29-Apr-2023 04:18:01
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1653

First Level Reviewer: LV5D Date: 17-May-2023 16:31:16

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 2,6-diamino-4-nitrotoluene	1	3.895	3.896	-0.001	92003	0.2500	0.2281	
	2 2,4-diamino-6-nitrotoluene	1	4.335	4.342	-0.007	55209	0.2500	0.2451	
	3 TNX	1	4.822	4.822	0.000	98007	0.2508	0.2485	
	4 DNX	1	5.542	5.549	-0.007	71280	0.2503	0.2573	
	5 HMX	1	6.068	6.082	-0.014	48181	0.2500	0.2554	
	6 MNX	1	6.908	6.922	-0.014	75878	0.2918	0.2893	
	7 2,4,6-Trinitrophenol	1	7.395	7.436	-0.041	41354	0.2500	0.2554	
	8 RDX	1	8.202	8.222	-0.020	57138	0.2500	0.2619	
	9 Nitrobenzene	1	10.615	10.602	0.013	94758	0.2500	0.2376	
$	10 1,2-Dinitrobenzene	1	11.455	11.435	0.020	70300	0.2500	0.2504	
	11 3,5-Dinitroaniline	1	13.295	13.275	0.020	118999	0.2500	0.2663	
	12 1,3-Dinitrobenzene	1	13.628	13.609	0.019	152141	0.2500	0.2417	
	13 Nitroglycerin	2	13.988	13.982	0.006	337913	2.50	2.51	
	14 o-Nitrotoluene	1	14.508	14.522	-0.014	60535	0.2500	0.2451	
	16 p-Nitrotoluene	1	14.715	14.749	-0.034	54546	0.2500	0.2398	
	17 4-Amino-2,6-dinitrotoluene	1	15.195	15.249	-0.054	73428	0.2500	0.2496	
	18 m-Nitrotoluene	1	15.528	15.582	-0.054	67826	0.2500	0.2302	
	19 2-Amino-4,6-dinitrotoluene	1	16.015	16.075	-0.060	103571	0.2500	0.2420	
	20 1,3,5-Trinitrobenzene	1	16.342	16.375	-0.033	104186	0.2500	0.2568	
	21 2,6-Dinitrotoluene	1	17.288	17.342	-0.054	71469	0.2500	0.2450	
	22 2,4-Dinitrotoluene	1	17.742	17.809	-0.067	143985	0.2500	0.2464	
	23 Tetryl	1	20.735	20.816	-0.081	70354	0.2500	0.2471	
	24 2,4,6-Trinitrotoluene	1	21.602	21.662	-0.060	106963	0.2500	0.2437	
	25 PETN	2	22.588	22.669	-0.081	353362	2.50	2.45	

QC Flag Legend
Processing Flags

Reagents:

8330 DMT_00013	Amount Added:	12.50	Units: uL
8330IntermStk_00076	Amount Added:	25.00	Units: uL
8330_ADDs_00037	Amount Added:	12.50	Units: uL

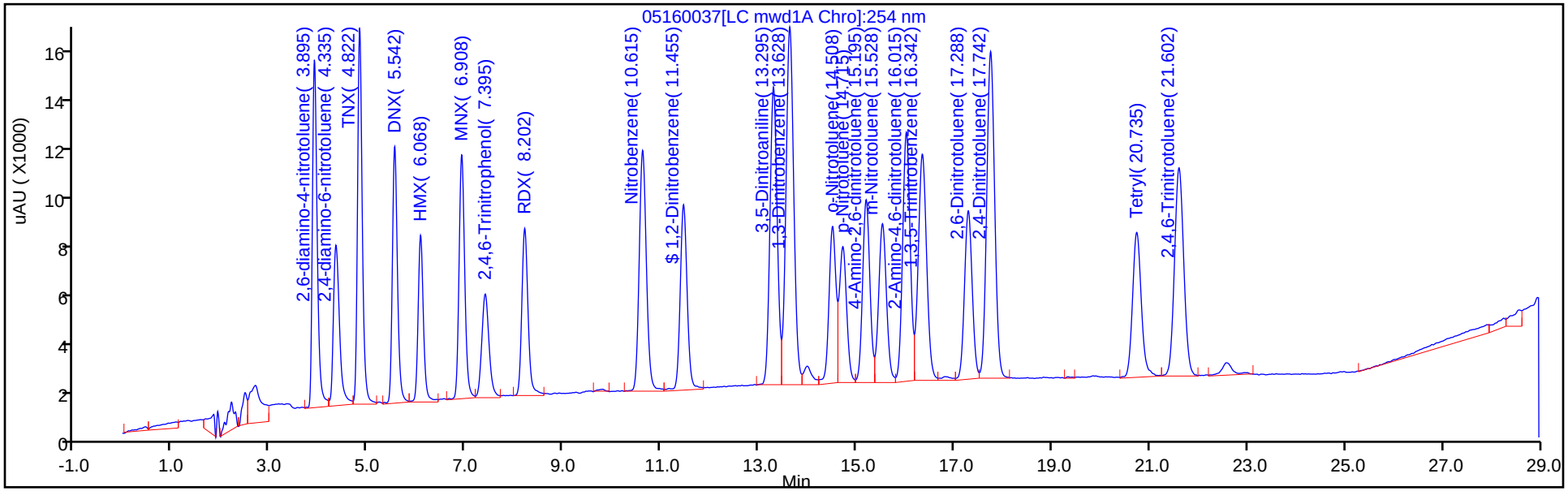
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Eurofins Denver

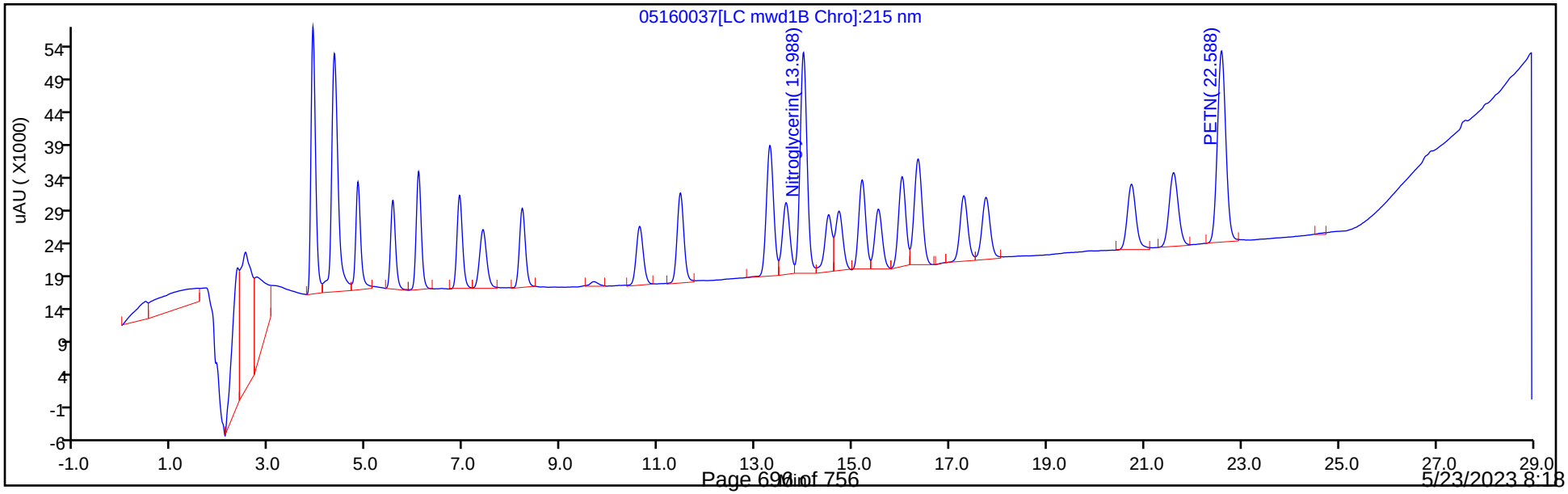
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Injection Date:	17-May-2023 15:53:15	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	CCV ADD			Worklist Smp#:	37
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



5/23/2023 8:18 PM

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-176134-1

SDG No.:

Lab Sample ID: CCV 280-612692/37 | Calibration Date: 05/17/2023 15:53

Instrument ID: CHHPLC_X5 | Calib Start Date: 04/29/2023 00:13

GC Column: Luna-phenylhex ID: 4.60(mm) | Calib End Date: 04/29/2023 04:18

Lab File ID: 05160037.D | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,6-diamino-4-nitrotoluene	Ave	403300	368012		228	250	-8.7	20.0
2,4-diamino-6-nitrotoluene	Ave	225281	220836		245	250	-2.0	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Lab Sample ID: CCV 280-612692/37 Calibration Date: 05/17/2023 15:53

Instrument ID: CHHPLC_X5 Calib Start Date: 04/29/2023 00:13

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 04/29/2023 04:18

Lab File ID: 05160037.D

Analyte	RT	RT WINDOW	
		FROM	TO
2,6-diamino-4-nitrotoluene	3.90	3.75	4.05
2,4-diamino-6-nitrotoluene	4.34	4.19	4.49

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\05160037.D
Lims ID: CCV ADD
Client ID:
Sample Type: CCV
Inject. Date: 17-May-2023 15:53:15 ALS Bottle#: 7 Worklist Smp#: 37
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV ADD
Operator ID: JZ/JG Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub11

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20230516-121514.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 17-May-2023 16:34:26 Calib Date: 29-Apr-2023 04:18:01
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20230428-120896.b\04280027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1653

First Level Reviewer: LV5D Date: 17-May-2023 16:31:16

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 2,6-diamino-4-nitrotoluene	1	3.895	3.896	-0.001	92003	0.2500	0.2281	
	2 2,4-diamino-6-nitrotoluene	1	4.335	4.342	-0.007	55209	0.2500	0.2451	
	3 TNX	1	4.822	4.822	0.000	98007	0.2508	0.2485	
	4 DNX	1	5.542	5.549	-0.007	71280	0.2503	0.2573	
	5 HMX	1	6.068	6.082	-0.014	48181	0.2500	0.2554	
	6 MNX	1	6.908	6.922	-0.014	75878	0.2918	0.2893	
	7 2,4,6-Trinitrophenol	1	7.395	7.436	-0.041	41354	0.2500	0.2554	
	8 RDX	1	8.202	8.222	-0.020	57138	0.2500	0.2619	
	9 Nitrobenzene	1	10.615	10.602	0.013	94758	0.2500	0.2376	
$	10 1,2-Dinitrobenzene	1	11.455	11.435	0.020	70300	0.2500	0.2504	
	11 3,5-Dinitroaniline	1	13.295	13.275	0.020	118999	0.2500	0.2663	
	12 1,3-Dinitrobenzene	1	13.628	13.609	0.019	152141	0.2500	0.2417	
	13 Nitroglycerin	2	13.988	13.982	0.006	337913	2.50	2.51	
	14 o-Nitrotoluene	1	14.508	14.522	-0.014	60535	0.2500	0.2451	
	16 p-Nitrotoluene	1	14.715	14.749	-0.034	54546	0.2500	0.2398	
	17 4-Amino-2,6-dinitrotoluene	1	15.195	15.249	-0.054	73428	0.2500	0.2496	
	18 m-Nitrotoluene	1	15.528	15.582	-0.054	67826	0.2500	0.2302	
	19 2-Amino-4,6-dinitrotoluene	1	16.015	16.075	-0.060	103571	0.2500	0.2420	
	20 1,3,5-Trinitrobenzene	1	16.342	16.375	-0.033	104186	0.2500	0.2568	
	21 2,6-Dinitrotoluene	1	17.288	17.342	-0.054	71469	0.2500	0.2450	
	22 2,4-Dinitrotoluene	1	17.742	17.809	-0.067	143985	0.2500	0.2464	
	23 Tetryl	1	20.735	20.816	-0.081	70354	0.2500	0.2471	
	24 2,4,6-Trinitrotoluene	1	21.602	21.662	-0.060	106963	0.2500	0.2437	
	25 PETN	2	22.588	22.669	-0.081	353362	2.50	2.45	

QC Flag Legend
Processing Flags

Reagents:

8330 DMT_00013	Amount Added:	12.50	Units: uL
8330IntermStk_00076	Amount Added:	25.00	Units: uL
8330_ADDs_00037	Amount Added:	12.50	Units: uL

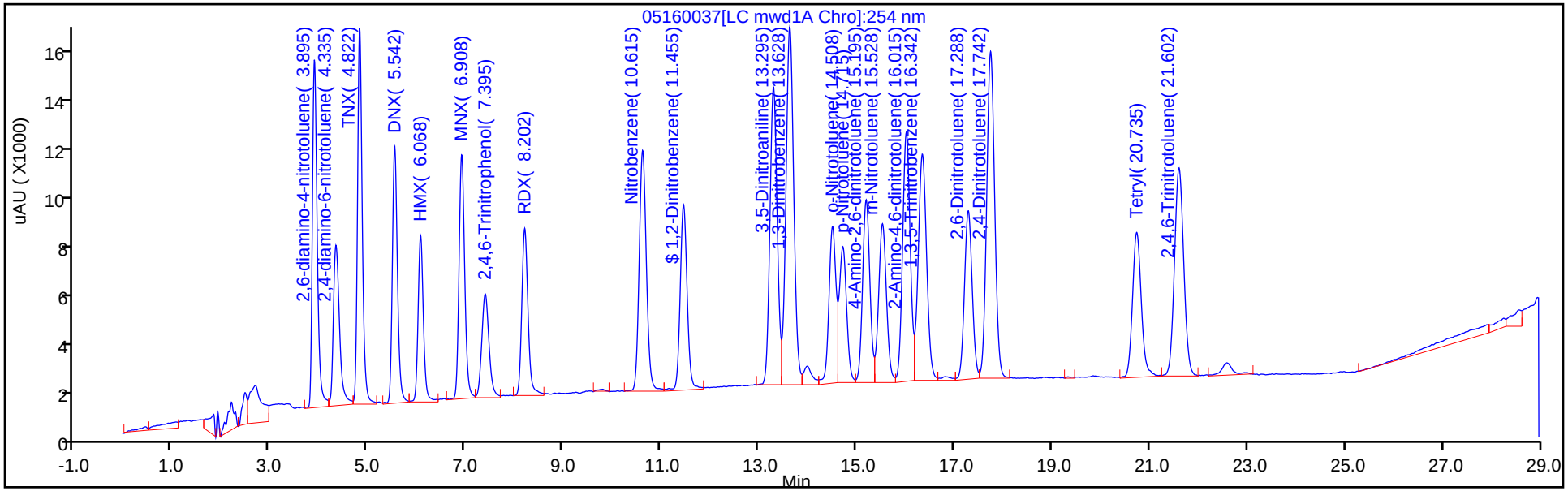
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Eurofins Denver

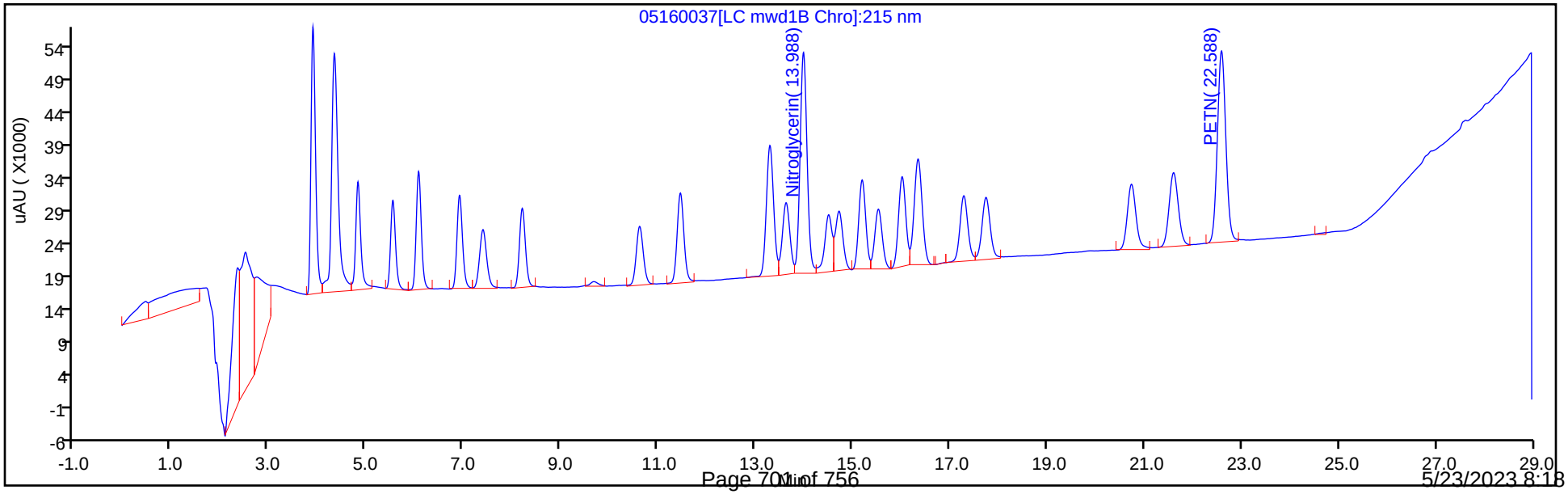
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Injection Date:	17-May-2023 15:53:15	Instrument ID:	CHHPLC_X5	Operator ID:	JZ/JG
Lims ID:	CCV ADD			Worklist Smp#:	37
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



5/23/2023 8:18 PM

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-176134-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-611915/1-A

Matrix: Water | Lab File ID: 05130025.D

Analysis Method: 8330B | Date Collected:

Extraction Method: 3535 | Date Extracted: 05/10/2023 13:48

Sample wt/vol: 500(mL) | Date Analyzed: 05/13/2023 20:05

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.: 612396 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.20	U	0.21	0.20	0.084
99-65-0	1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045
6629-29-4	2,4-diamino-6-nitrotoluene	0.90	U	1.0	0.90	0.43
121-14-2	2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.027
59229-75-3	2,6-diamino-4-nitrotoluene	0.90	U	1.0	0.90	0.22
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
618-87-1	3,5-Dinitroaniline	0.30	U	0.40	0.30	0.13
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
80251-29-2	DNX	0.25	U	0.50	0.25	0.097
2691-41-0	HMX	0.20	U	0.21	0.20	0.088
5755-27-1	MNX	0.188	J M	0.50	0.29	0.093
98-95-3	Nitrobenzene	0.20	U	0.21	0.20	0.091
55-63-0	Nitroglycerin	2.0	U	2.1	2.0	0.92
78-11-5	PETN	1.0	U	1.1	1.0	0.45
121-82-4	RDX	0.20	U	0.21	0.20	0.052
479-45-8	Tetryl	0.10	U	0.11	0.10	0.032
13980-04-6	TNX	0.25	U	0.50	0.25	0.079

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	114		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130025.D
Lims ID: MB 280-611915/1-A
Client ID:
Sample Type: MB
Inject. Date: 13-May-2023 20:05:20 ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-611915/1-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-May-2023 12:37:13 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: K8YG Date: 15-May-2023 07:51:27

	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		6.426				ND	7
3	TNX	1		6.427				ND	
4	HMX	1		6.547				ND	
5	2,4-diamino-6-nitrotoluene	1		6.620				ND	
6	DNX	1		6.754				ND	
7	MNX	1	7.205	7.187	0.018	2463		0.0188	M
8	RDX	1		7.574				ND	
9	2,4,6-Trinitrophenol	1		7.974				ND	
$ 10	1,2-Dinitrobenzene	1	8.525	8.521	0.004	28854	0.2000	0.2284	
11	1,3,5-Trinitrobenzene	1		8.647				ND	7
12	1,3-Dinitrobenzene	1		9.274				ND	
13	Nitrobenzene	1		9.647				ND	
14	3,5-Dinitroaniline	1		9.887				ND	
15	Tetryl	1		10.014				ND	
16	Nitroglycerin	2		10.467				ND	
17	2,4,6-Trinitrotoluene	1		10.914				ND	
18	4-Amino-2,6-dinitrotoluene	1		11.114				ND	
19	2-Amino-4,6-dinitrotoluene	1		11.367				ND	
20	2,6-Dinitrotoluene	1		11.514				ND	
21	2,4-Dinitrotoluene	1		11.687				ND	
22	o-Nitrotoluene	1		12.514				ND	7
23	p-Nitrotoluene	1		12.940				ND	
24	m-Nitrotoluene	1		13.514				ND	
25	PETN	2		14.694				ND	
26	Ammonium Picrate	1		0.000				ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Review Flags
M - Manually Integrated

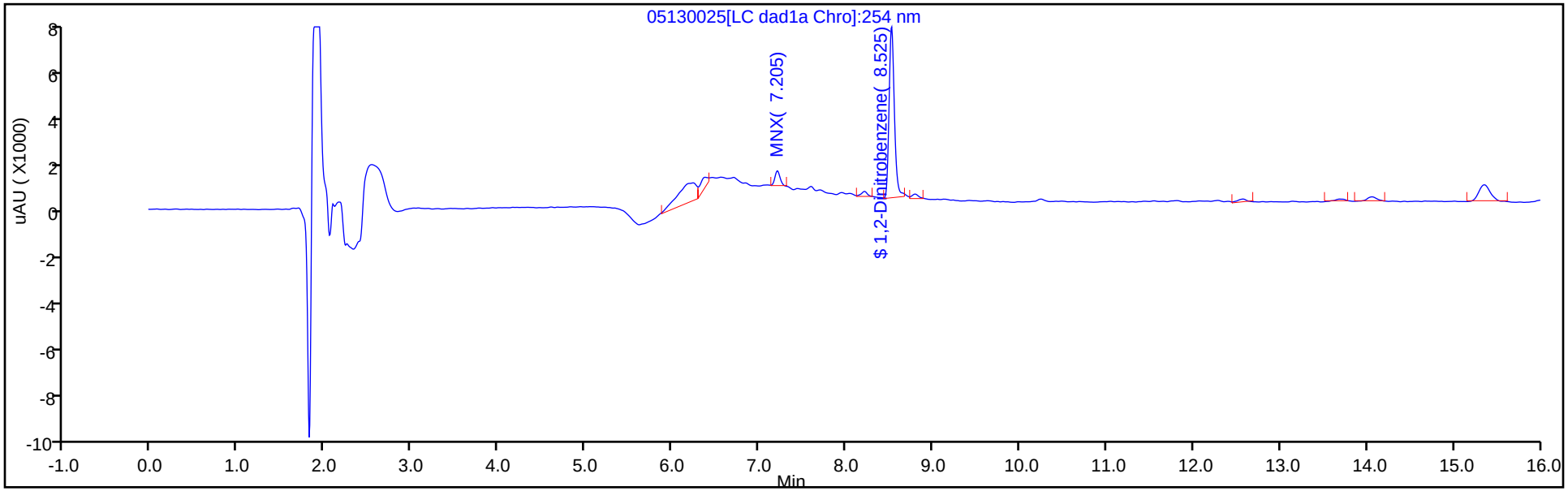
Report Date: 16-May-2023 12:37:15 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

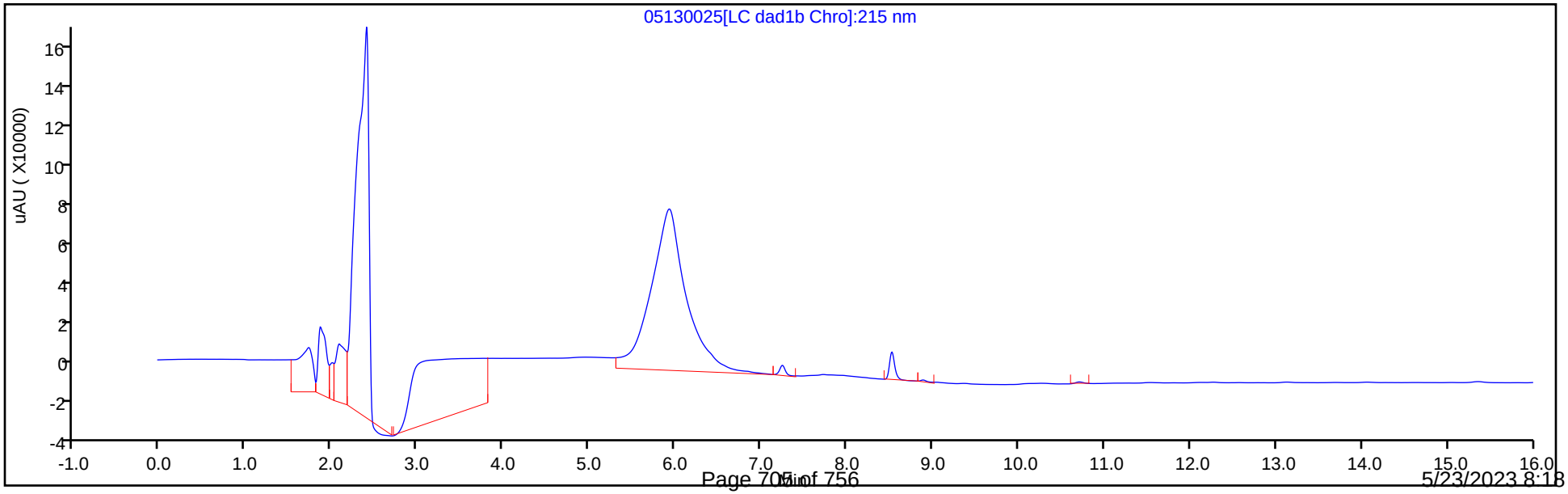
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Injection Date:	13-May-2023 20:05:20	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	MB 280-611915/1-A			Worklist Smp#:	25
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130025.D
Lims ID: MB 280-611915/1-A
Client ID:
Sample Type: MB
Inject. Date: 13-May-2023 20:05:20 ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-611915/1-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-May-2023 12:37:13 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: K8YG Date: 15-May-2023 07:51:27

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2284	114.22

Manual Integration/User Assign Peak Report

Eurofins Denver

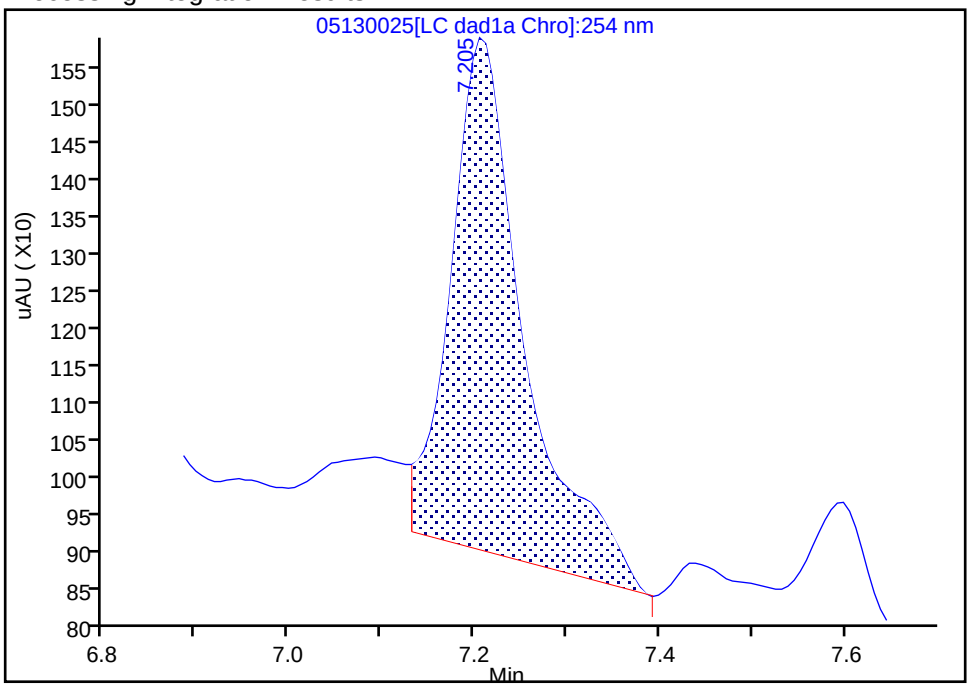
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Injection Date:	13-May-2023 20:05:20	Instrument ID:	CHHPLC_X3		
Lims ID:	MB 280-611915/1-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

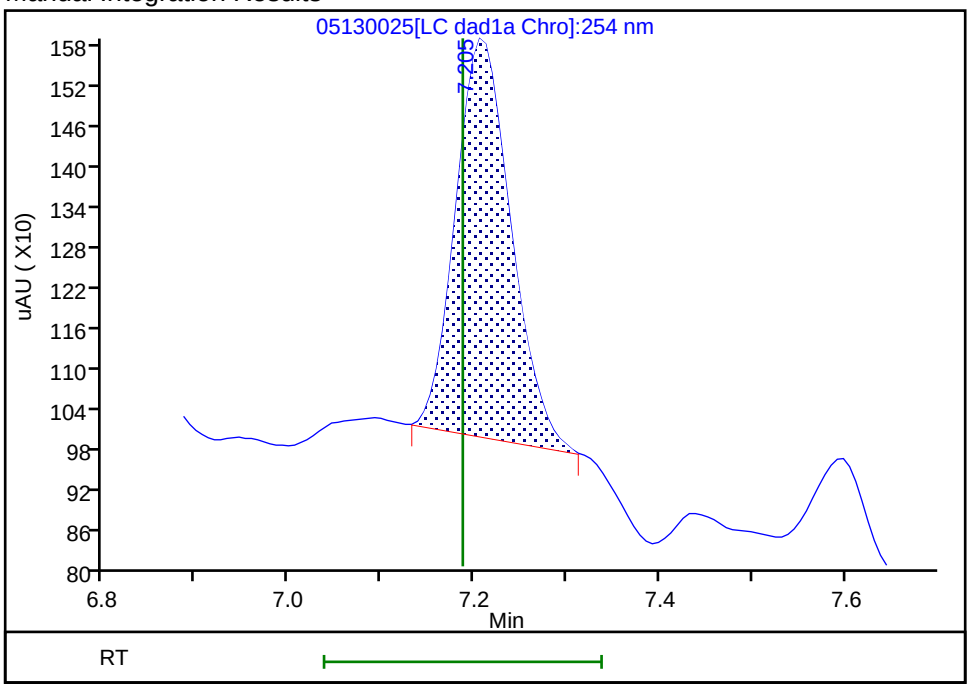
Processing Integration Results

RT: 7.21
Area: 3802
Amount: 0.028985
Amount Units: ug/mL



Manual Integration Results

RT: 7.21
Area: 2463
Amount: 0.018777
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 07:51:14

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-176134-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-611915/2-A

Matrix: Water | Lab File ID: 05130026.D

Analysis Method: 8330B | Date Collected:

Extraction Method: 3535 | Date Extracted: 05/10/2023 13:48

Sample wt/vol: 500(mL) | Date Analyzed: 05/13/2023 20:28

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

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

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

Cleanup Factor:

Analysis Batch No.: 612396 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	1.99		0.21	0.20	0.084
99-65-0	1,3-Dinitrobenzene	1.93		0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	1.84		0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	1.85		0.10	0.080	0.027
606-20-2	2,6-Dinitrotoluene	1.91		0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	1.74		0.11	0.10	0.051
88-72-2	2-Nitrotoluene	1.54		0.21	0.20	0.086
618-87-1	3,5-Dinitroaniline	1.71		0.40	0.30	0.13
99-08-1	3-Nitrotoluene	1.51		0.40	0.35	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.65		0.15	0.12	0.058
99-99-0	4-Nitrotoluene	1.50		0.41	0.40	0.10
80251-29-2	DNX	2.00	M	0.50	0.25	0.097
2691-41-0	HMX	1.78	M	0.21	0.20	0.088
5755-27-1	MNX	2.56		0.50	0.29	0.093
98-95-3	Nitrobenzene	1.76		0.21	0.20	0.091
55-63-0	Nitroglycerin	20.0		2.1	2.0	0.92
78-11-5	PETN	20.8		1.1	1.0	0.45
121-82-4	RDX	1.92		0.21	0.20	0.052
479-45-8	Tetryl	1.97		0.11	0.10	0.032
13980-04-6	TNX	1.96	M	0.50	0.25	0.079

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	100		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130026.D
Lims ID: LCS 280-611915/2-A
Client ID:
Sample Type: LCS
Inject. Date: 13-May-2023 20:28:14 ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-611915/2-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-May-2023 12:37:13 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: K8YG Date: 15-May-2023 07:53:32

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.435	6.427	0.008	38722	0.2006	0.1959	M
4 HMX	1	6.555	6.547	0.008	16658	0.2000	0.1781	M
6 DNX	1	6.762	6.754	0.008	28858	0.2002	0.1998	M
7 MNX	1	7.189	7.187	0.002	33621	0.2334	0.2563	
8 RDX	1	7.575	7.574	0.001	20372	0.2000	0.1915	
9 2,4,6-Trinitrophenol	1	7.969	7.974	-0.005	17416	0.2000	0.2297	
$ 10 1,2-Dinitrobenzene	1	8.522	8.521	0.001	25221	0.2000	0.1997	
11 1,3,5-Trinitrobenzene	1	8.649	8.647	0.002	43153	0.2000	0.1987	
12 1,3-Dinitrobenzene	1	9.268	9.274	-0.006	56803	0.2000	0.1929	
13 Nitrobenzene	1	9.642	9.647	-0.005	33588	0.2000	0.1756	
14 3,5-Dinitroaniline	1	9.875	9.887	-0.012	39015	0.2000	0.1709	
15 Tetryl	1	10.008	10.014	-0.006	32318	0.2000	0.1969	
16 Nitroglycerin	2	10.462	10.467	-0.005	128443	2.00	2.00	
17 2,4,6-Trinitrotoluene	1	10.902	10.914	-0.012	38841	0.2000	0.1840	
18 4-Amino-2,6-dinitrotoluene	1	11.095	11.114	-0.019	25506	0.2000	0.1646	
19 2-Amino-4,6-dinitrotoluene	1	11.348	11.367	-0.019	35005	0.2000	0.1738	
20 2,6-Dinitrotoluene	1	11.502	11.514	-0.012	27275	0.2000	0.1911	
21 2,4-Dinitrotoluene	1	11.668	11.687	-0.019	54956	0.2000	0.1852	
22 o-Nitrotoluene	1	12.495	12.514	-0.019	19699	0.2000	0.1540	
23 p-Nitrotoluene	1	12.915	12.940	-0.025	16778	0.2000	0.1500	
24 m-Nitrotoluene	1	13.488	13.514	-0.026	21228	0.2000	0.1511	
25 PETN	2	14.648	14.694	-0.046	143103	2.00	2.08	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

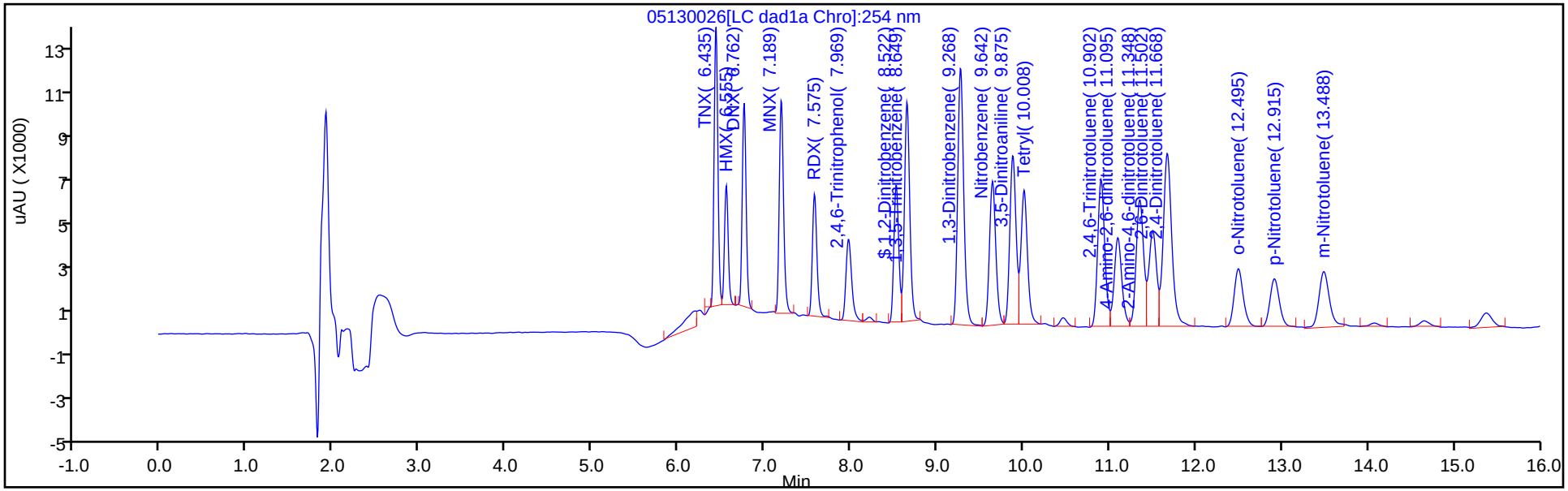
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Eurofins Denver

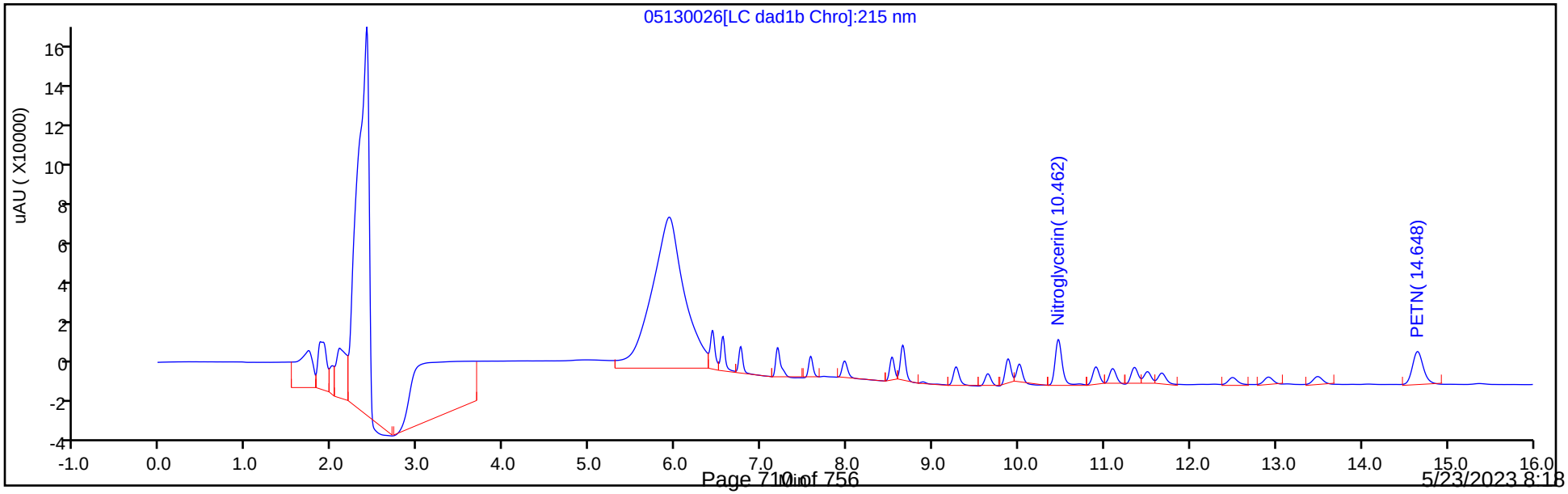
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Injection Date:	13-May-2023 20:28:14	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	LCS 280-611915/2-A			Worklist Smp#:	26
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



5/23/2023 8:18 PM

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130026.D				
Lims ID:	LCS 280-611915/2-A				
Client ID:					
Sample Type:	LCS				
Inject. Date:	13-May-2023 20:28:14	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCS 280-611915/2-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	16-May-2023 12:37:13	Calib Date:	24-Feb-2023 17:41:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1672				

First Level Reviewer: K8YG Date: 15-May-2023 07:53:32

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1997	99.84

Manual Integration/User Assign Peak Report

Eurofins Denver

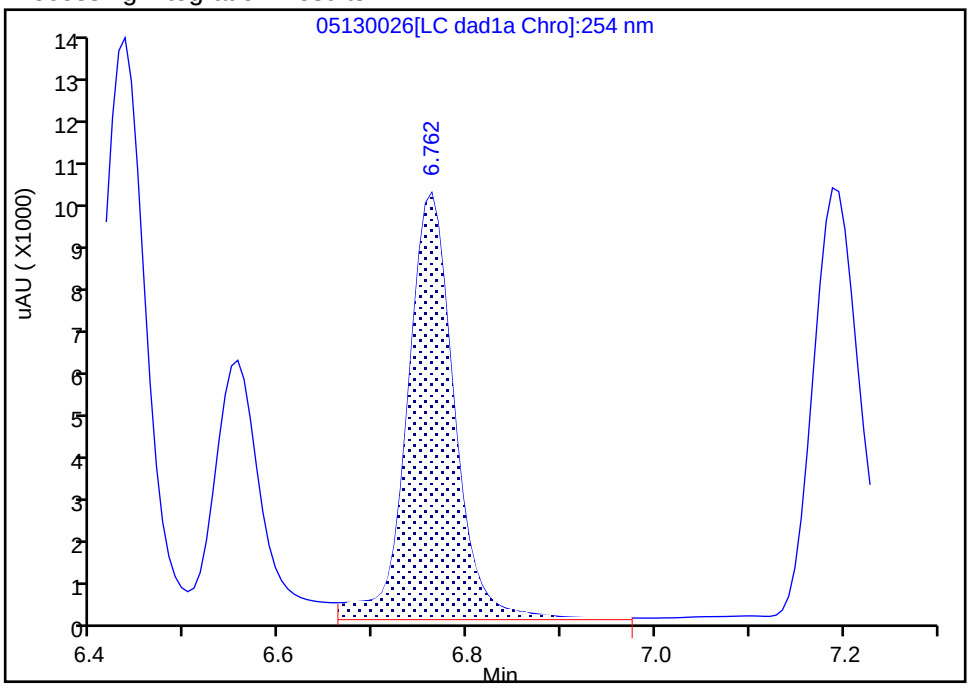
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Injection Date:	13-May-2023 20:28:14	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-611915/2-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

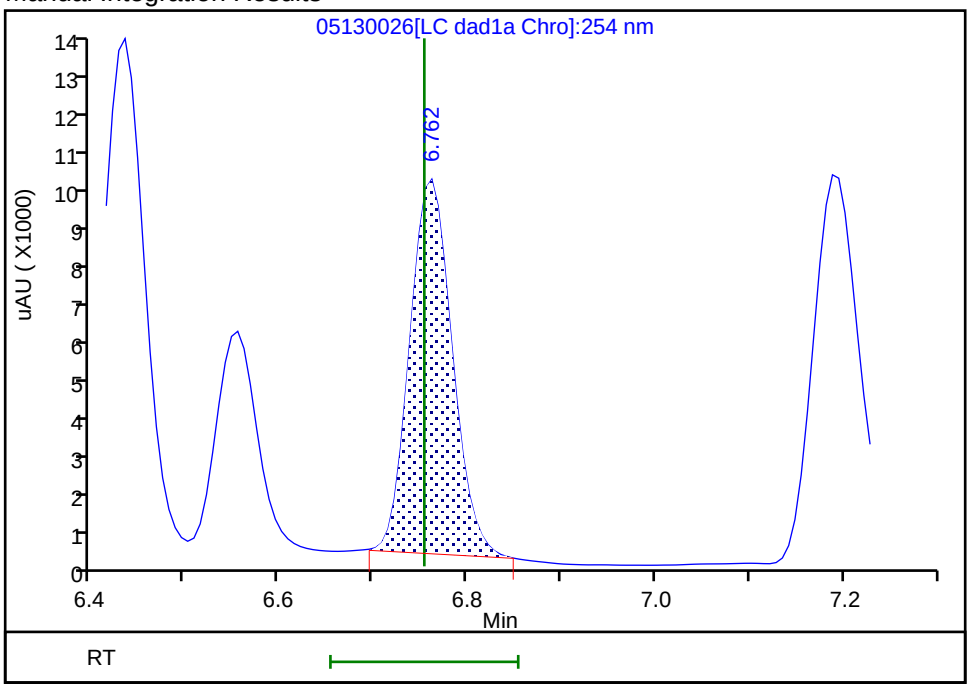
Processing Integration Results

RT: 6.76
Area: 33227
Amount: 0.230004
Amount Units: ug/mL



Manual Integration Results

RT: 6.76
Area: 28858
Amount: 0.199761
Amount Units: ug/mL



Reviewer: LV5D, 16-May-2023 12:17:19
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

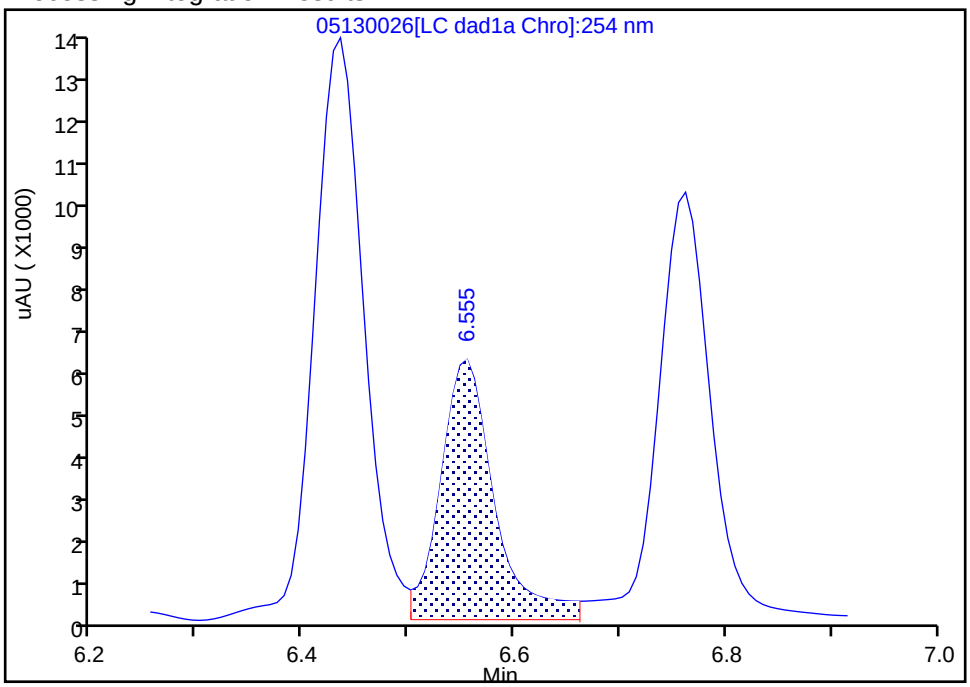
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130026.d				
Injection Date:	13-May-2023 20:28:14	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-611915/2-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

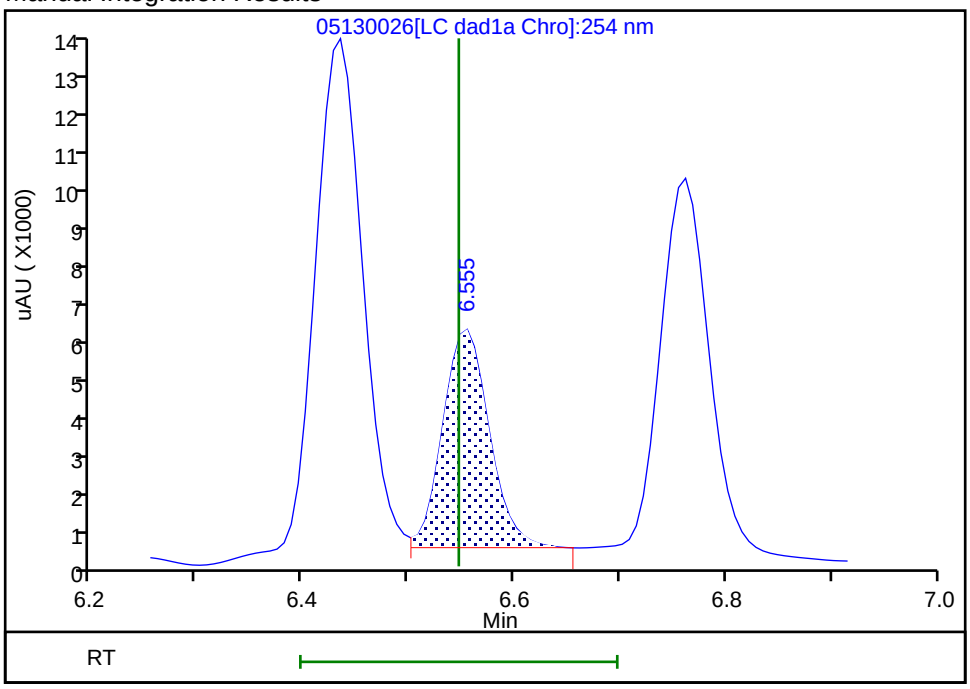
Processing Integration Results

RT: 6.56
Area: 20491
Amount: 0.219089
Amount Units: ug/mL



Manual Integration Results

RT: 6.56
Area: 16658
Amount: 0.178107
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 07:53:10
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

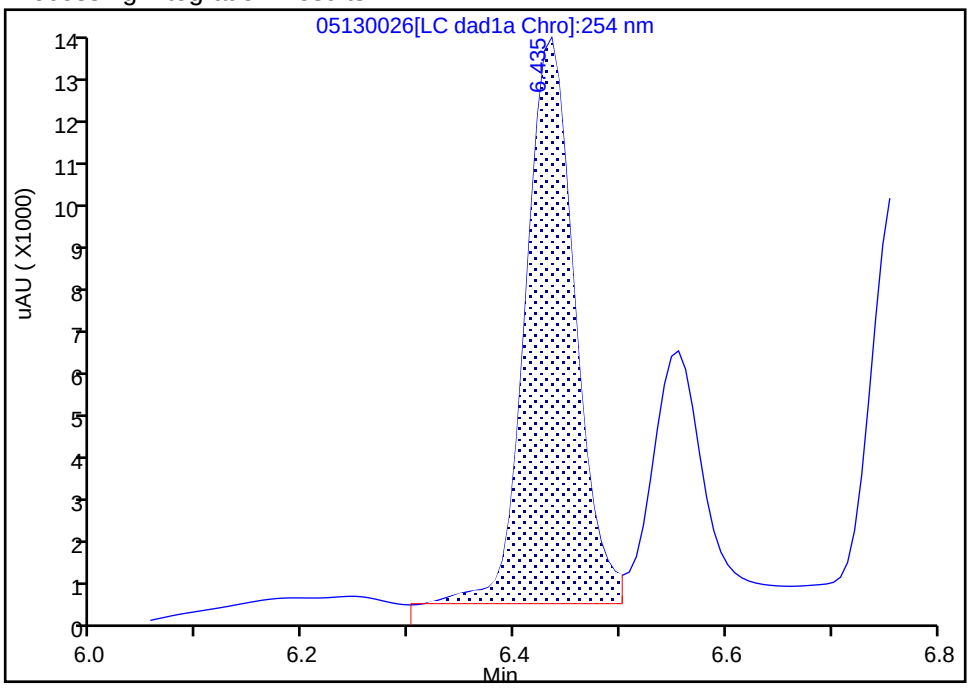
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130026.d				
Injection Date:	13-May-2023 20:28:14	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-611915/2-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

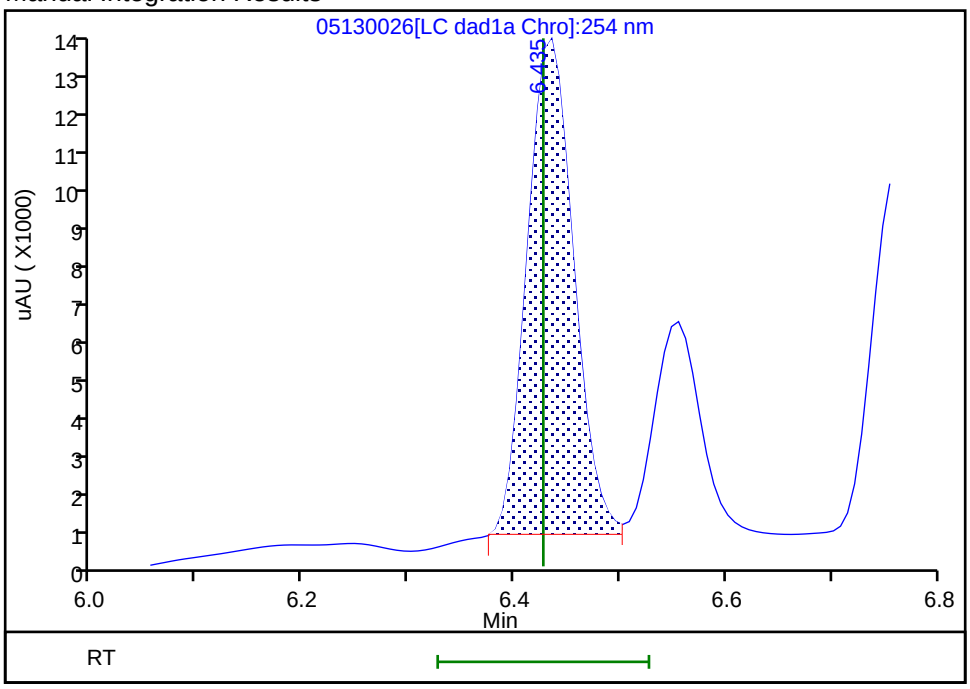
Processing Integration Results

RT: 6.44
Area: 42560
Amount: 0.215289
Amount Units: ug/mL



Manual Integration Results

RT: 6.44
Area: 38722
Amount: 0.195875
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 07:53:06
Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-176134-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-611915/4-A

Matrix: Water | Lab File ID: 05130028.D

Analysis Method: 8330B | Date Collected:

Extraction Method: 3535 | Date Extracted: 05/10/2023 13:48

Sample wt/vol: 500(mL) | Date Analyzed: 05/13/2023 21:14

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.: 612396 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
6629-29-4	2,4-diamino-6-nitrotoluene	1.40	M	1.0	0.90	0.43
59229-75-3	2,6-diamino-4-nitrotoluene	1.55	M	1.0	0.90	0.22

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

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130028.D
Lims ID: LCS 280-611915/4-A
Client ID:
Sample Type: LCS
Inject. Date: 13-May-2023 21:14:09 ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-611915/4-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-May-2023 12:37:13 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: K8YG Date: 15-May-2023 07:58:32

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	2 2,6-diamino-4-nitrotoluene	1	6.420	6.426	-0.006	36495	0.2000	0.1551	M
	5 2,4-diamino-6-nitrotoluene	1	6.613	6.620	-0.007	20520	0.2000	0.1401	M
$	10 1,2-Dinitrobenzene	1	8.527	8.521	0.006	25509	0.2000	0.2020	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

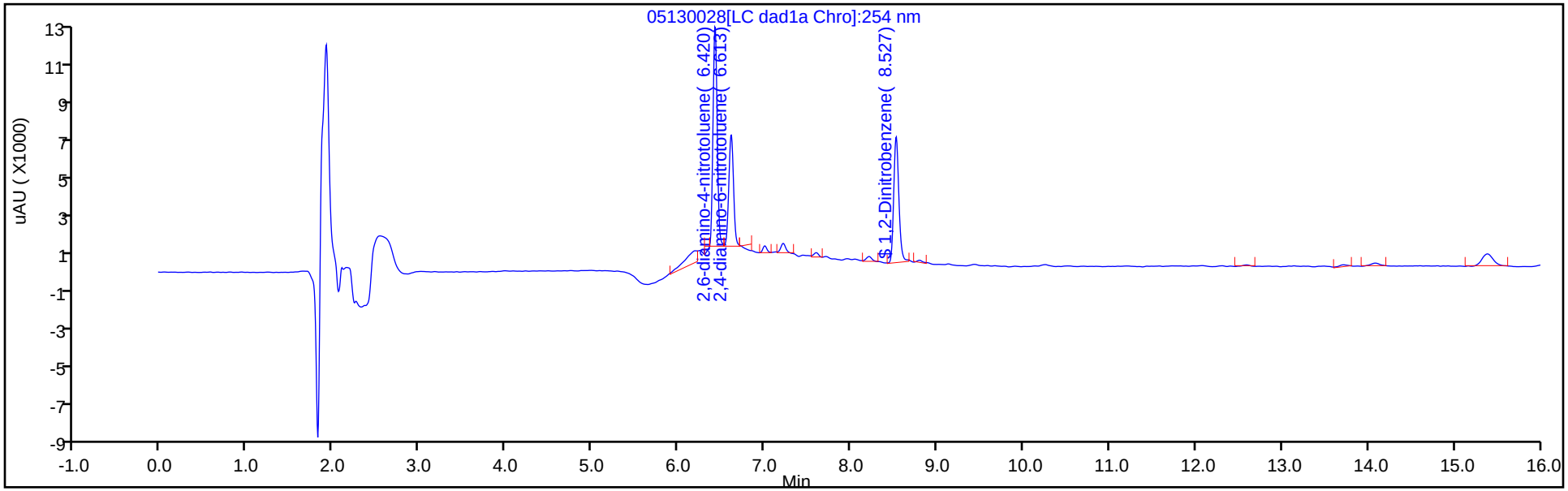
Report Date: 16-May-2023 12:37:17 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

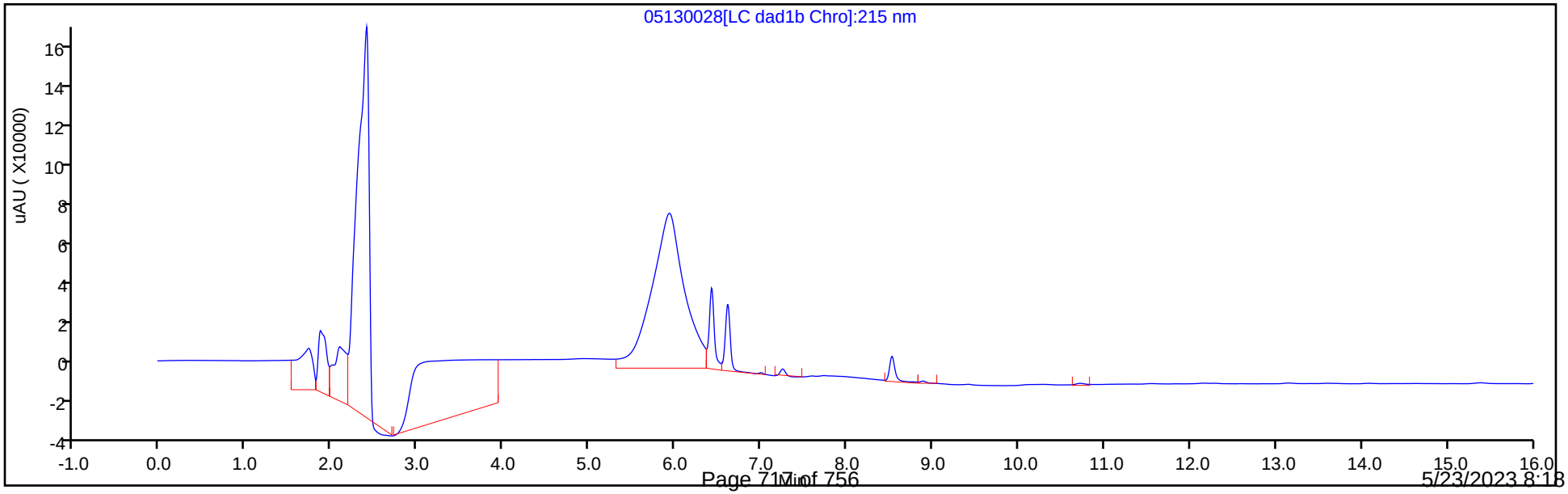
Data File: \\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130028.d

Injection Date:	13-May-2023 21:14:09	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	LCS 280-611915/4-A			Worklist Smp#:	28
Client ID:					
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



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130028.D				
Lims ID:	LCS 280-611915/4-A				
Client ID:					
Sample Type:	LCS				
Inject. Date:	13-May-2023 21:14:09	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCS 280-611915/4-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	16-May-2023 12:37:13	Calib Date:	24-Feb-2023 17:41:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1672				

First Level Reviewer: K8YG Date: 15-May-2023 07:58:32

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2020	100.98

Manual Integration/User Assign Peak Report

Eurofins Denver

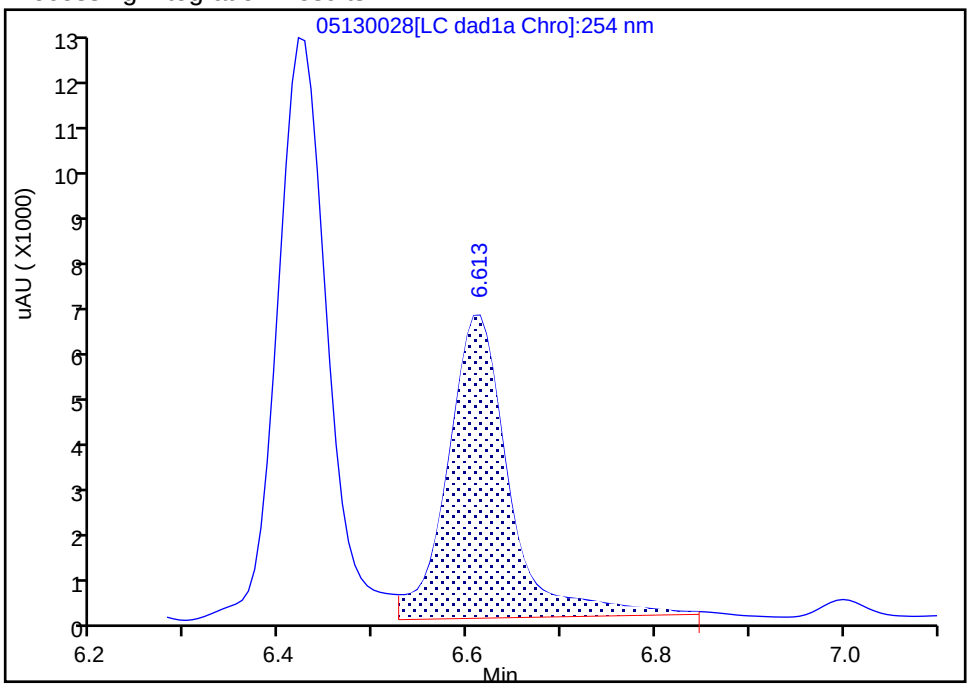
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Injection Date:	13-May-2023 21:14:09	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-611915/4-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

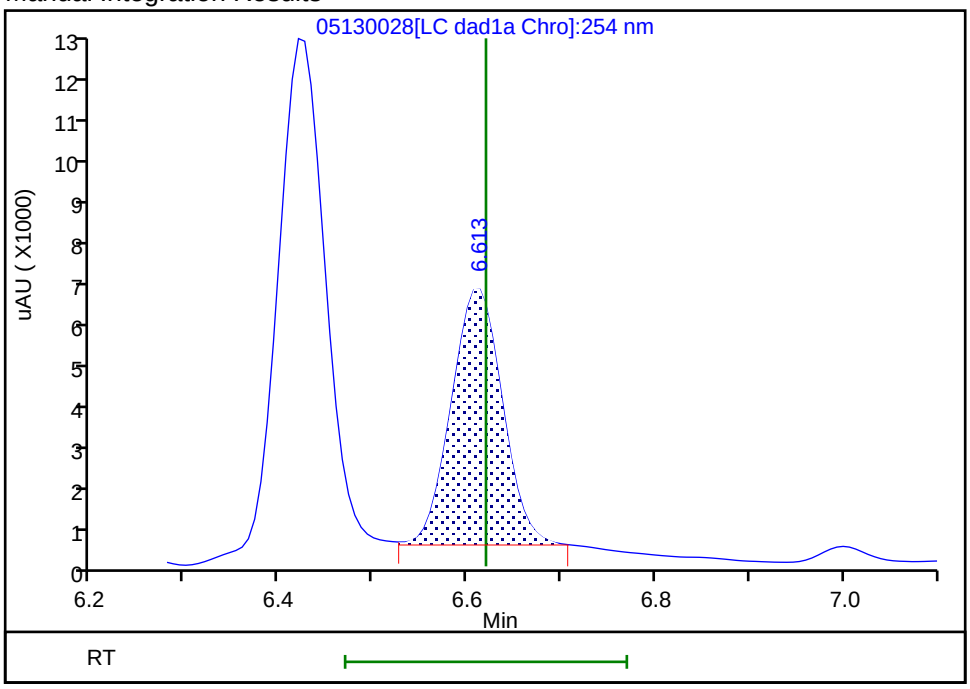
Processing Integration Results

RT: 6.61
Area: 25866
Amount: 0.176593
Amount Units: ug/mL



Manual Integration Results

RT: 6.61
Area: 20520
Amount: 0.140095
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 07:58:25
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

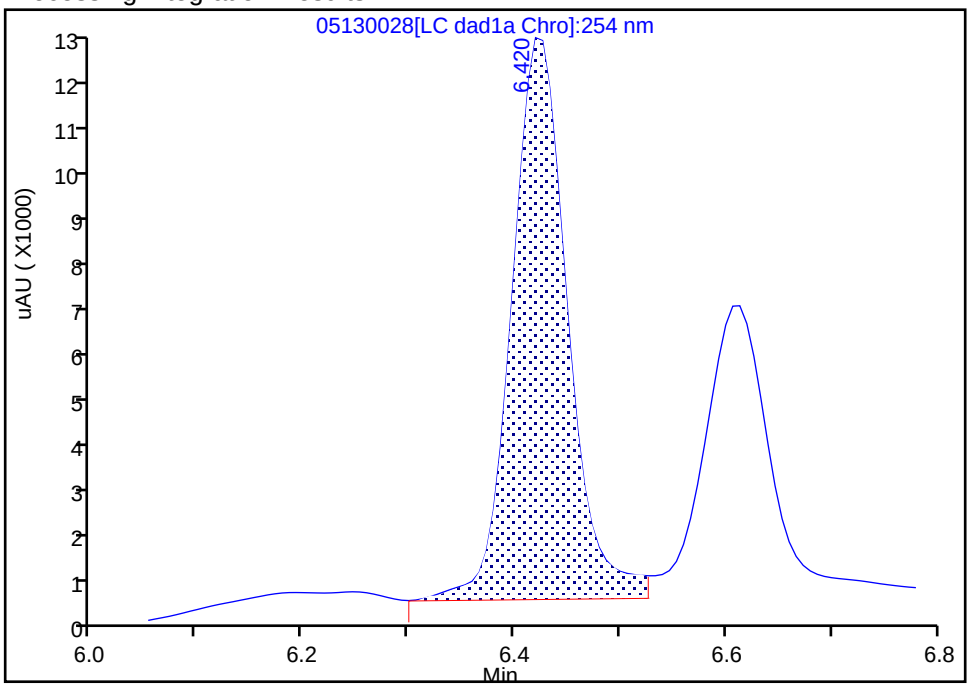
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130028.d				
Injection Date:	13-May-2023 21:14:09	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-611915/4-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

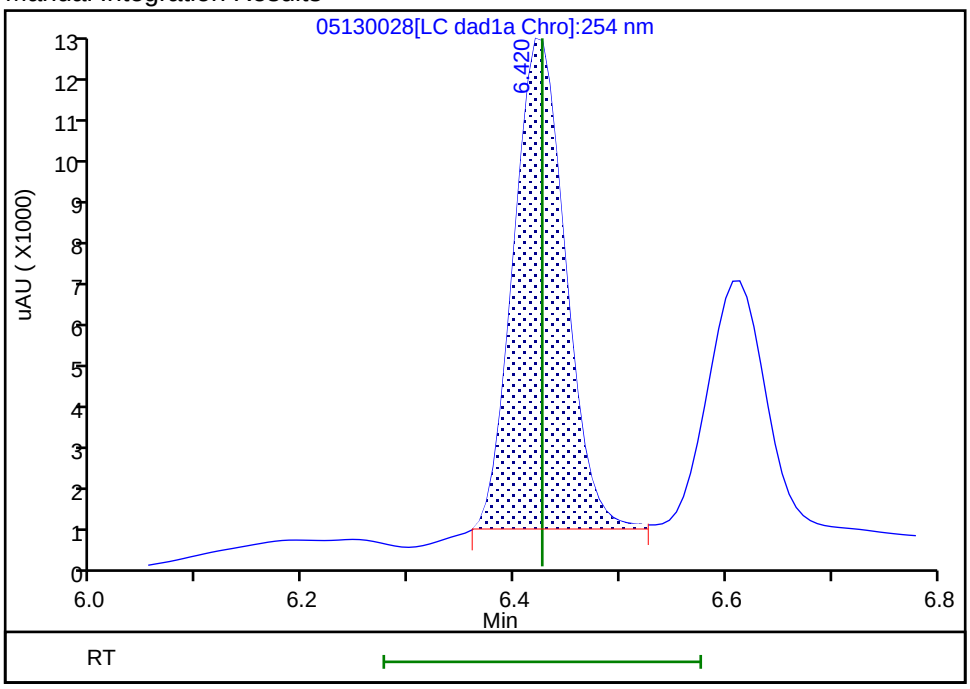
Processing Integration Results

RT: 6.42
Area: 40746
Amount: 0.173631
Amount Units: ug/mL



Manual Integration Results

RT: 6.42
Area: 36495
Amount: 0.155124
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 07:58:23

Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-176134-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 280-611915/3-A

Matrix: Water | Lab File ID: 05130027.D

Analysis Method: 8330B | Date Collected:

Extraction Method: 3535 | Date Extracted: 05/10/2023 13:48

Sample wt/vol: 500(mL) | Date Analyzed: 05/13/2023 20:51

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

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

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

Cleanup Factor:

Analysis Batch No.: 612396 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.07		0.21	0.20	0.084
99-65-0	1,3-Dinitrobenzene	2.00		0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	1.91		0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	1.92		0.10	0.080	0.027
606-20-2	2,6-Dinitrotoluene	1.99		0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	1.85		0.11	0.10	0.051
88-72-2	2-Nitrotoluene	1.61		0.21	0.20	0.086
618-87-1	3,5-Dinitroaniline	1.77		0.40	0.30	0.13
99-08-1	3-Nitrotoluene	1.61		0.40	0.35	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.70		0.15	0.12	0.058
99-99-0	4-Nitrotoluene	1.60		0.41	0.40	0.10
80251-29-2	DNX	2.10	M	0.50	0.25	0.097
2691-41-0	HMX	1.78	M	0.21	0.20	0.088
5755-27-1	MNX	2.67		0.50	0.29	0.093
98-95-3	Nitrobenzene	1.82		0.21	0.20	0.091
55-63-0	Nitroglycerin	20.0		2.1	2.0	0.92
78-11-5	PETN	21.7		1.1	1.0	0.45
121-82-4	RDX	1.96		0.21	0.20	0.052
479-45-8	Tetryl	2.09		0.11	0.10	0.032
13980-04-6	TNX	1.96	M	0.50	0.25	0.079

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	103		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130027.D
Lims ID: LCSD 280-611915/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 13-May-2023 20:51:12 ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 280-611915/3-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-May-2023 12:37:13 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: K8YG Date: 15-May-2023 07:58:00

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.427	6.427	0.000	38703	0.2006	0.1958	M
4 HMX	1	6.547	6.547	0.000	16693	0.2000	0.1785	M
6 DNX	1	6.754	6.754	0.000	30271	0.2002	0.2095	M
7 MNX	1	7.187	7.187	0.000	34972	0.2334	0.2666	
8 RDX	1	7.574	7.574	0.000	20862	0.2000	0.1961	
9 2,4,6-Trinitrophenol	1	7.974	7.974	0.000	17687	0.2000	0.2332	
$ 10 1,2-Dinitrobenzene	1	8.534	8.521	0.013	25942	0.2000	0.2054	
11 1,3,5-Trinitrobenzene	1	8.654	8.647	0.007	44997	0.2000	0.2072	
12 1,3-Dinitrobenzene	1	9.280	9.274	0.006	58840	0.2000	0.1999	
13 Nitrobenzene	1	9.647	9.647	0.000	34868	0.2000	0.1823	
14 3,5-Dinitroaniline	1	9.887	9.887	0.000	40486	0.2000	0.1773	
15 Tetryl	1	10.014	10.014	0.000	34237	0.2000	0.2086	
16 Nitroglycerin	2	10.467	10.467	0.000	128160	2.00	2.00	
17 2,4,6-Trinitrotoluene	1	10.907	10.914	-0.007	40267	0.2000	0.1908	
18 4-Amino-2,6-dinitrotoluene	1	11.107	11.114	-0.007	26315	0.2000	0.1698	
19 2-Amino-4,6-dinitrotoluene	1	11.360	11.367	-0.007	37195	0.2000	0.1847	
20 2,6-Dinitrotoluene	1	11.507	11.514	-0.007	28411	0.2000	0.1990	
21 2,4-Dinitrotoluene	1	11.680	11.687	-0.007	56868	0.2000	0.1917	
22 o-Nitrotoluene	1	12.500	12.514	-0.014	20620	0.2000	0.1612	
23 p-Nitrotoluene	1	12.920	12.940	-0.020	17900	0.2000	0.1600	
24 m-Nitrotoluene	1	13.494	13.514	-0.020	22561	0.2000	0.1606	
25 PETN	2	14.660	14.694	-0.034	149491	2.00	2.17	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

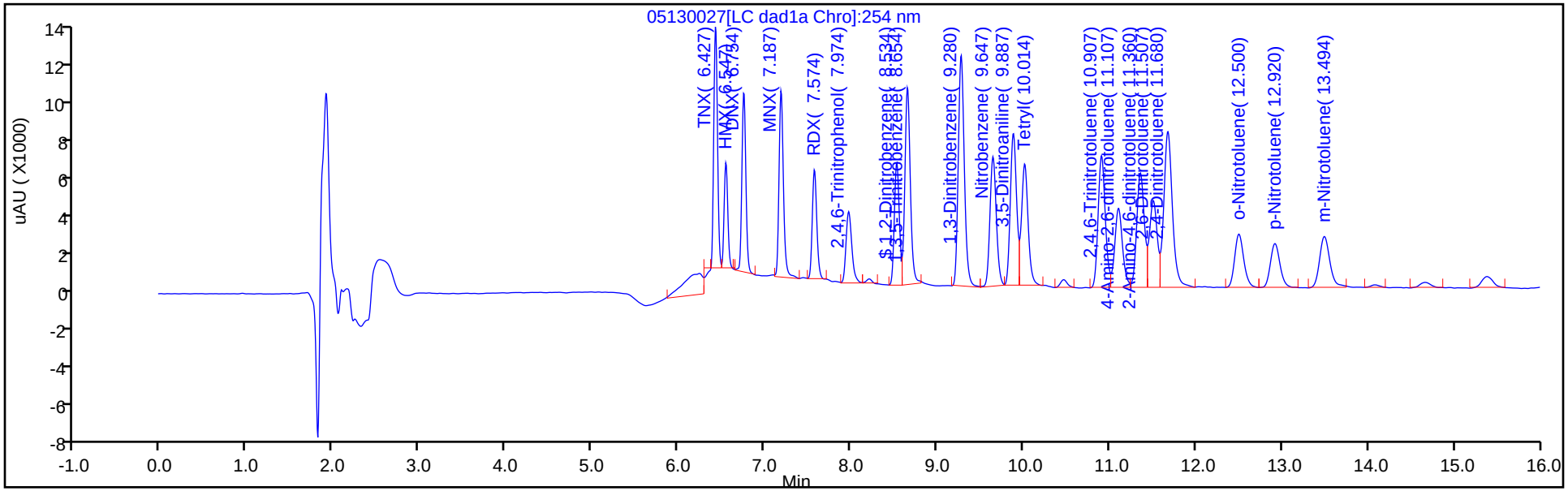
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Eurofins Denver

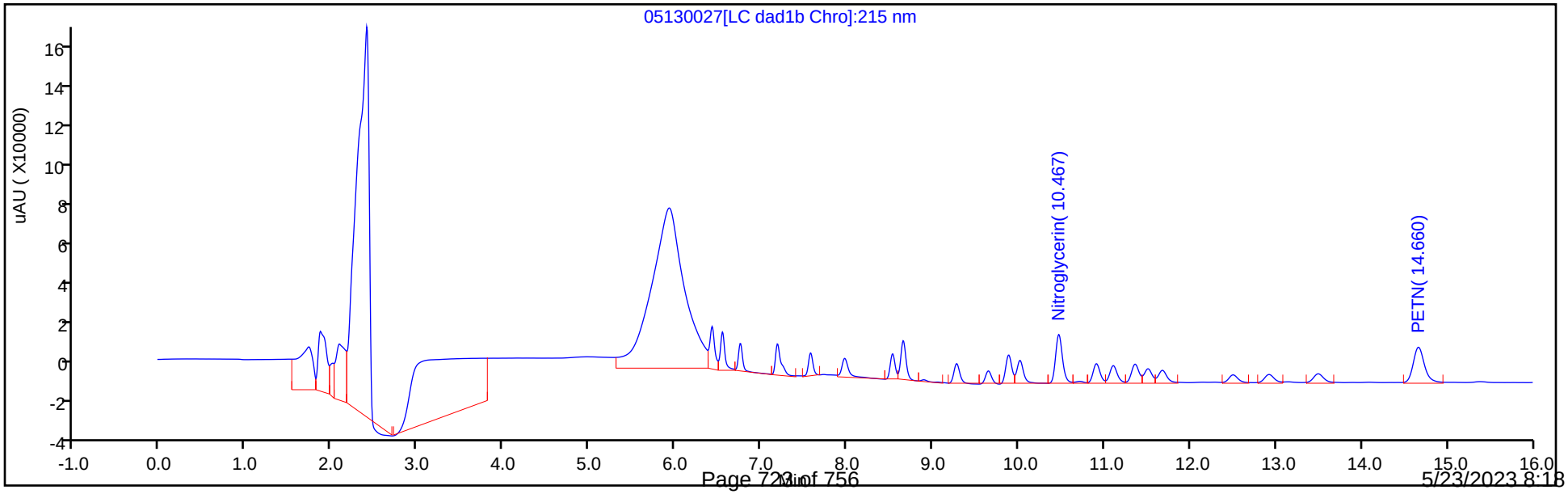
Data File: \\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130027.d

Injection Date:	13-May-2023 20:51:12	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	LCSD 280-611915/3-A			Worklist Smp#:	27
Client ID:					
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\20230513-121427.b\05130027.D
Lims ID: LCSD 280-611915/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 13-May-2023 20:51:12 ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 280-611915/3-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-May-2023 12:37:13 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: K8YG Date: 15-May-2023 07:58:00

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2054	102.69

Manual Integration/User Assign Peak Report

Eurofins Denver

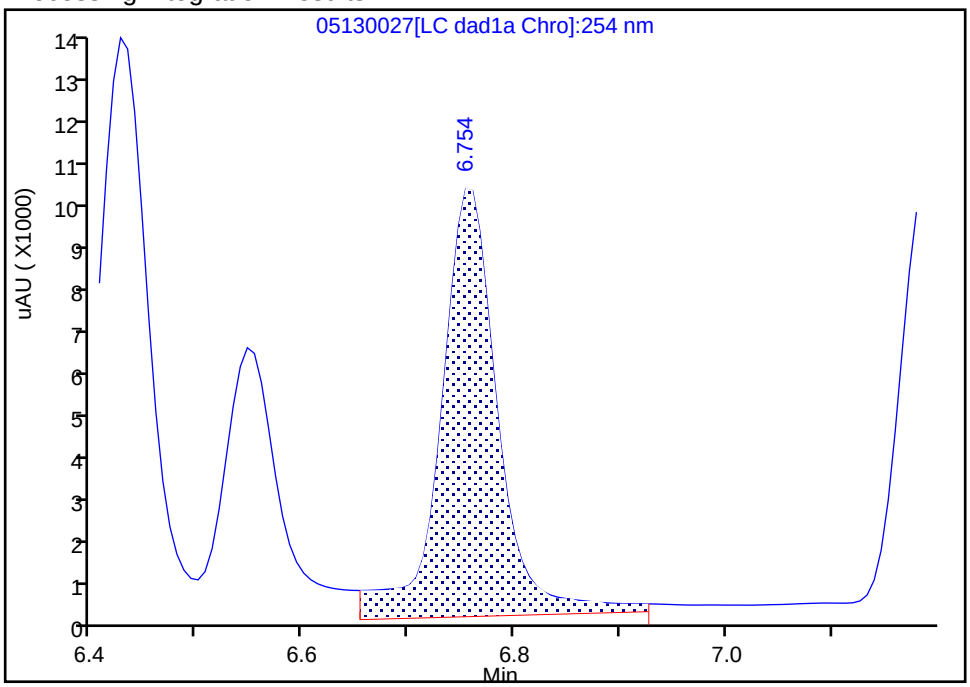
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130027.d				
Injection Date:	13-May-2023 20:51:12	Instrument ID:	CHHPLC_X3		
Lims ID:	LCSD 280-611915/3-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

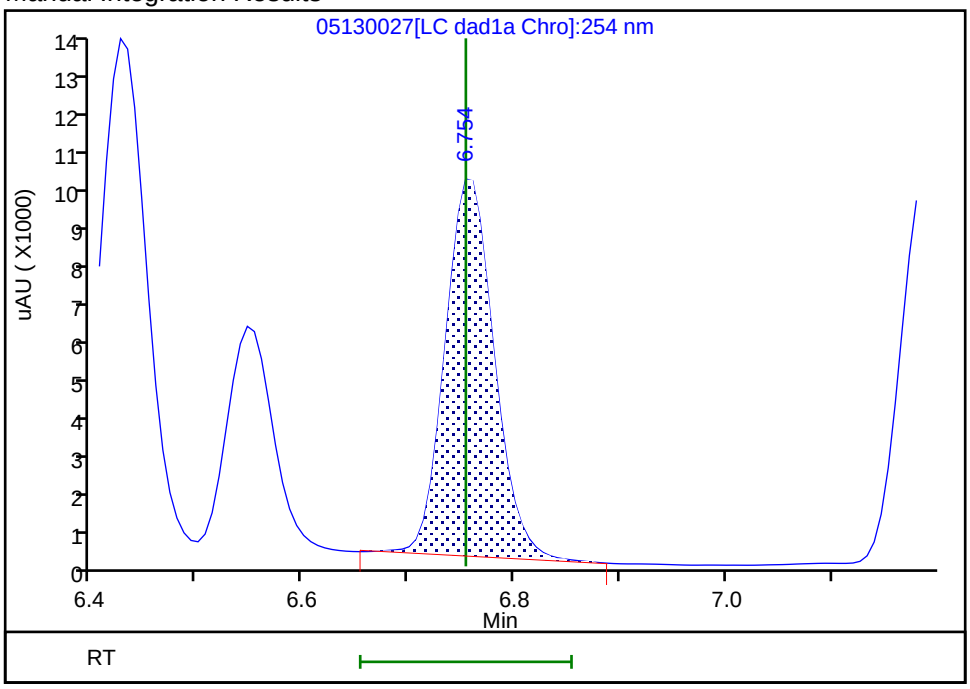
Processing Integration Results

RT: 6.75
Area: 36911
Amount: 0.255506
Amount Units: ug/mL



Manual Integration Results

RT: 6.75
Area: 30271
Amount: 0.209542
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 07:57:48
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

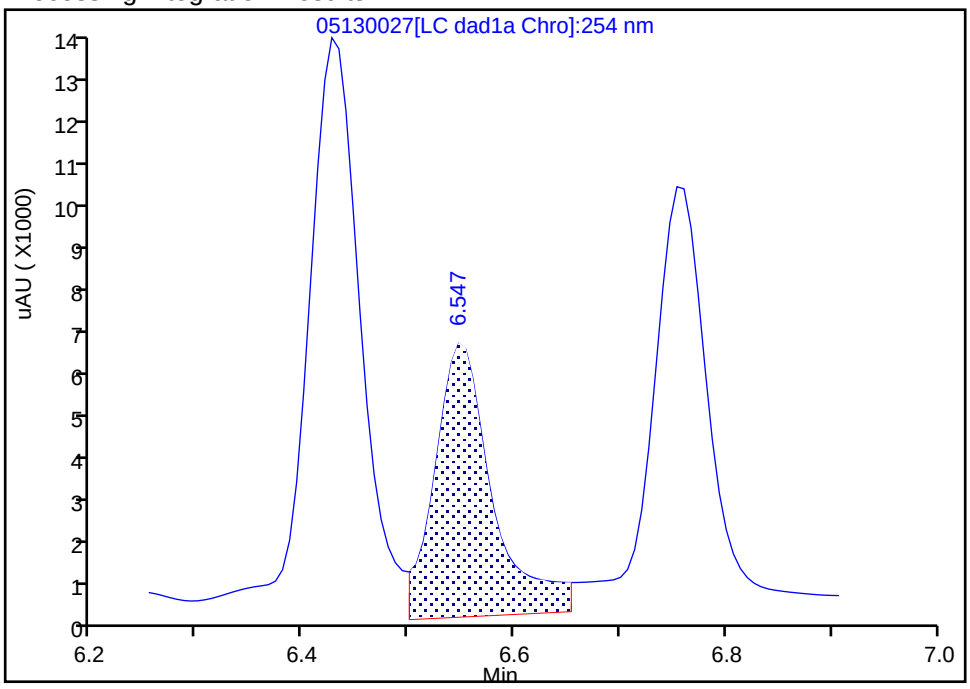
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Injection Date:	13-May-2023 20:51:12	Instrument ID:	CHHPLC_X3		
Lims ID:	LCSD 280-611915/3-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

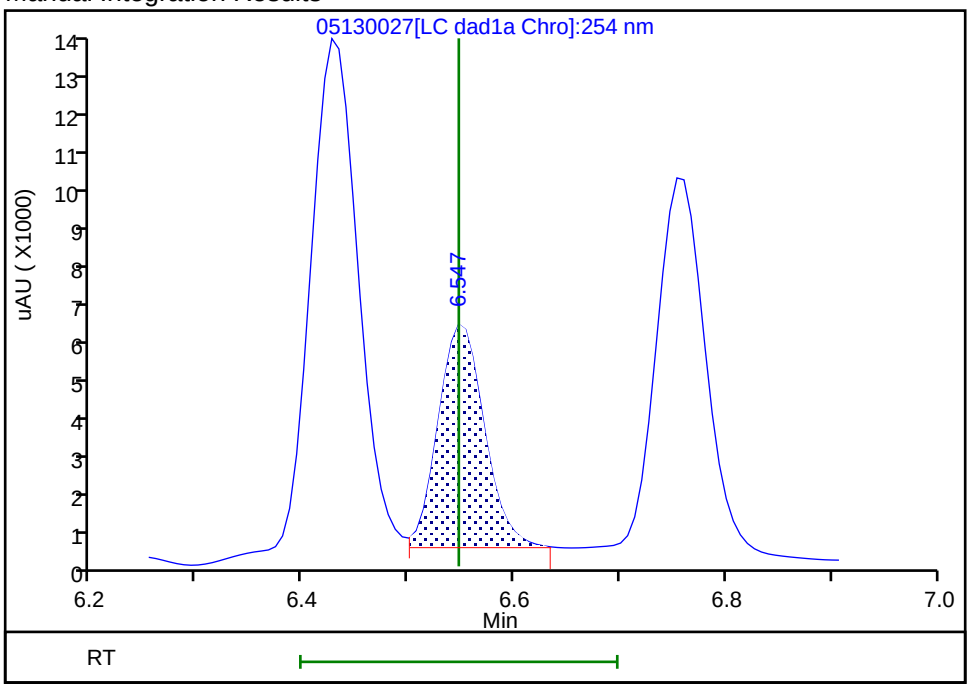
Processing Integration Results

RT: 6.55
Area: 24144
Amount: 0.258147
Amount Units: ug/mL



Manual Integration Results

RT: 6.55
Area: 16693
Amount: 0.178481
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 07:57:22
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

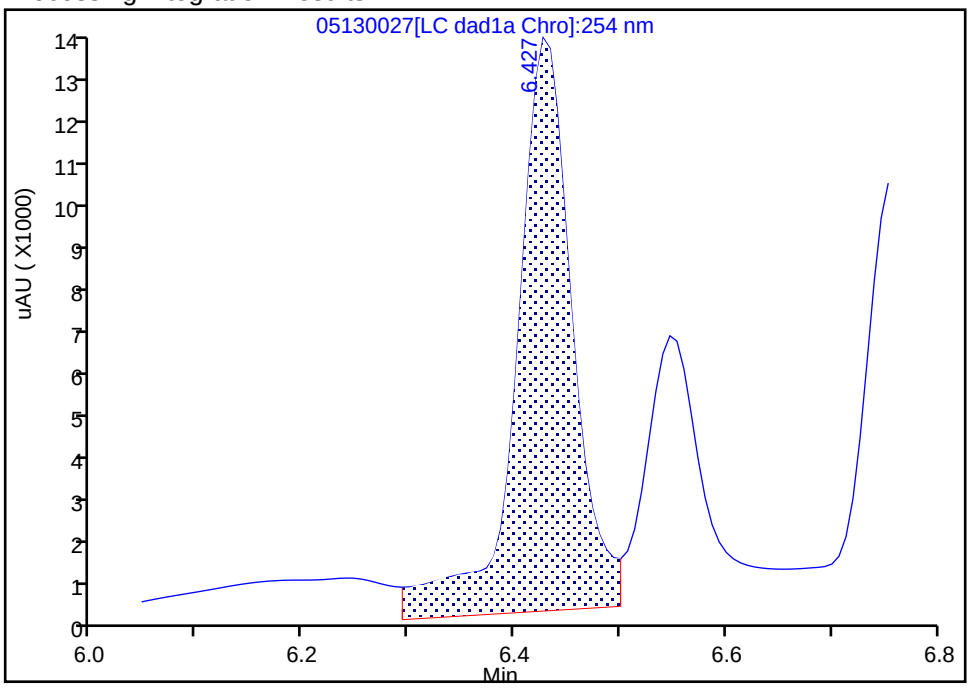
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130027.d				
Injection Date:	13-May-2023 20:51:12	Instrument ID:	CHHPLC_X3		
Lims ID:	LCSD 280-611915/3-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

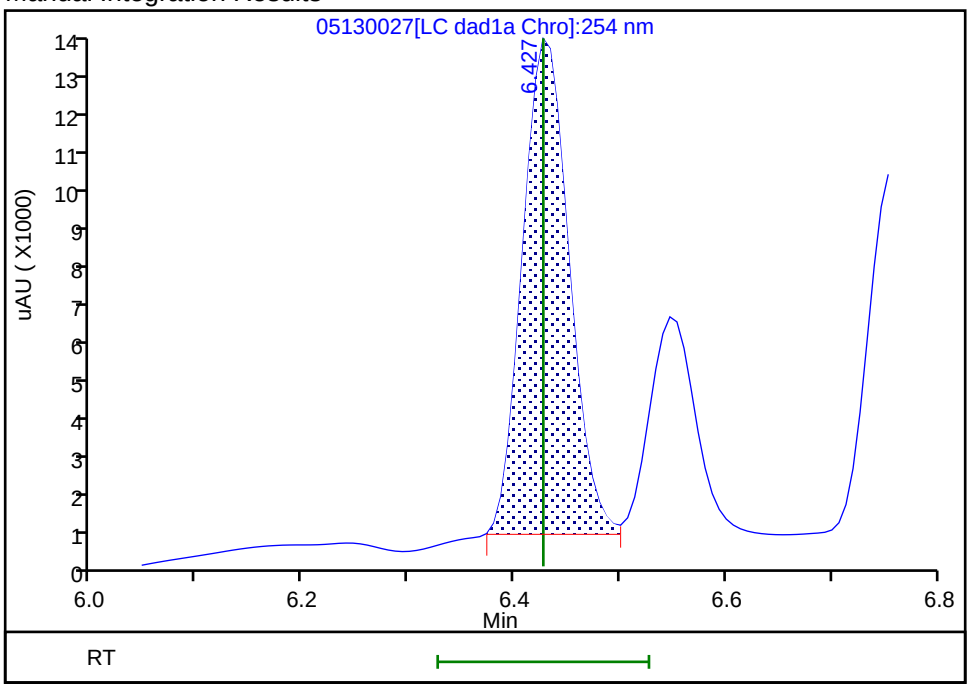
Processing Integration Results

RT: 6.43
Area: 50873
Amount: 0.257341
Amount Units: ug/mL



Manual Integration Results

RT: 6.43
Area: 38703
Amount: 0.195779
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 07:57:18
Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-176134-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 280-611915/5-A

Matrix: Water | Lab File ID: 05130029.D

Analysis Method: 8330B | Date Collected:

Extraction Method: 3535 | Date Extracted: 05/10/2023 13:48

Sample wt/vol: 500(mL) | Date Analyzed: 05/13/2023 21:37

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

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

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

Cleanup Factor:

Analysis Batch No.: 612396 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
6629-29-4	2,4-diamino-6-nitrotoluene	1.45	M	1.0	0.90	0.43
59229-75-3	2,6-diamino-4-nitrotoluene	1.58	M	1.0	0.90	0.22

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

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\05130029.D
Lims ID: LCSD 280-611915/5-A
Client ID:
Sample Type: LCSD
Inject. Date: 13-May-2023 21:37:09 ALS Bottle#: 29 Worklist Smp#: 29
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 280-611915/5-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 16-May-2023 12:37:13 Calib Date: 24-Feb-2023 17:41:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1672

First Level Reviewer: K8YG Date: 15-May-2023 08:00:35

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2	2,6-diamino-4-nitrotoluene	1	6.420	6.426	-0.006	37256	0.2000	0.1584	M
5	2,4-diamino-6-nitrotoluene	1	6.607	6.620	-0.013	21185	0.2000	0.1446	M
$ 10	1,2-Dinitrobenzene	1	8.534	8.521	0.013	25625	0.2000	0.2029	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

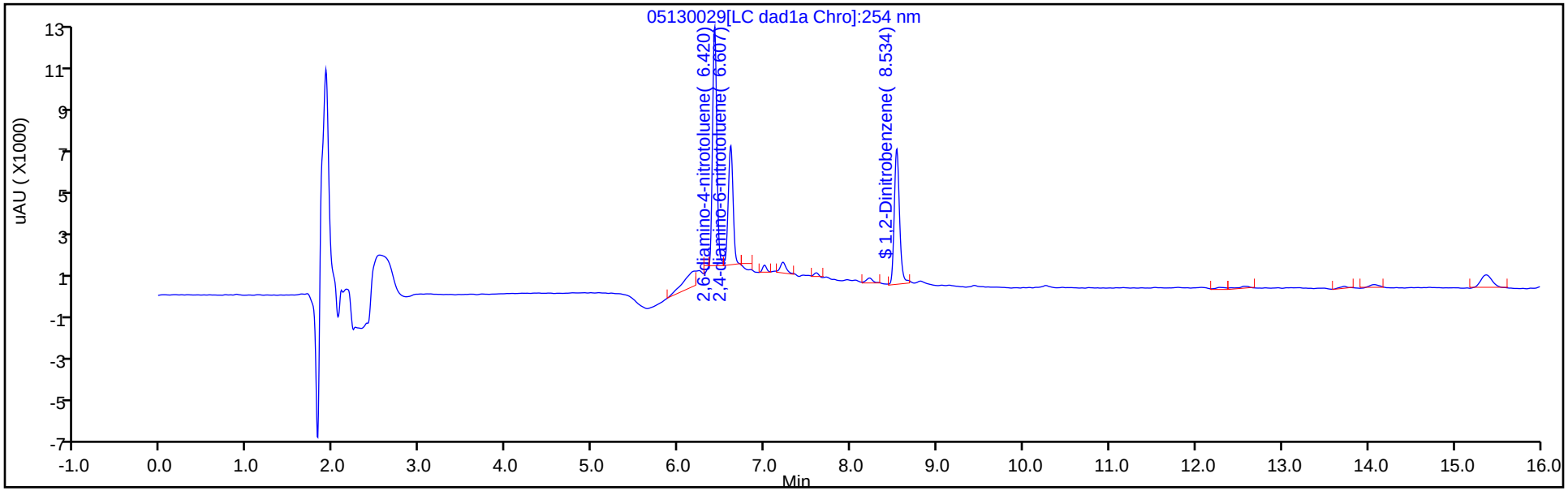
Report Date: 16-May-2023 12:37:18 Chrom Revision: 2.3 29-Mar-2023 18:39:10

Eurofins Denver

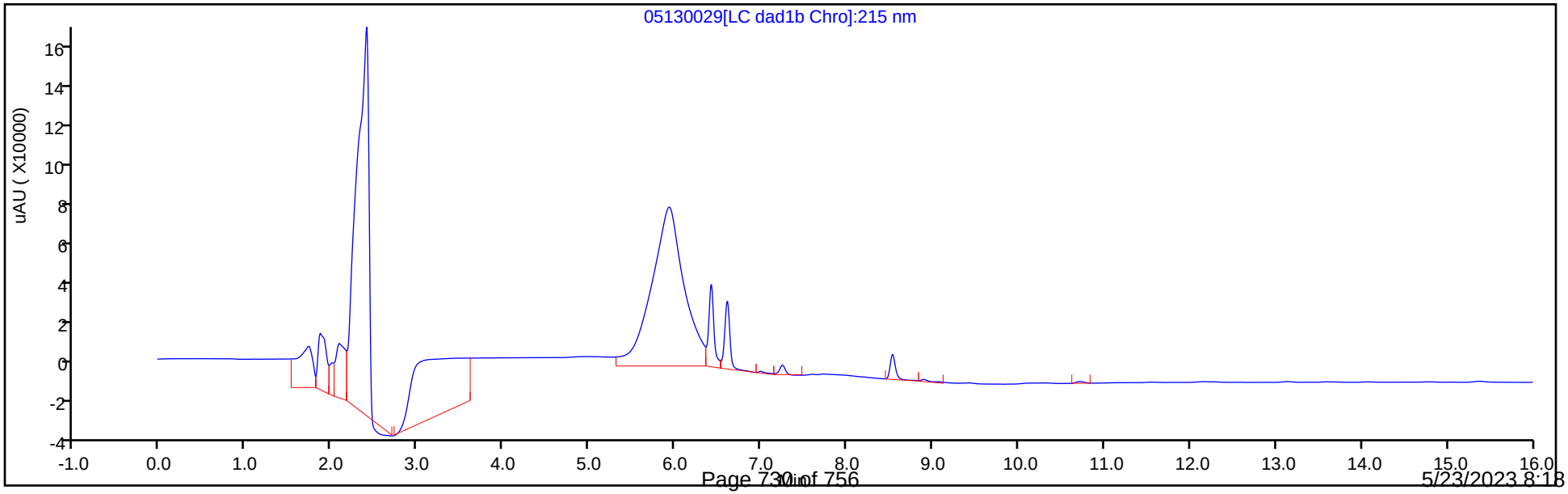
Data File: \\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130029.d

Injection Date:	13-May-2023 21:37:09	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	LCSD 280-611915/5-A			Worklist Smp#:	29
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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\20230513-121427.b\05130029.D				
Lims ID:	LCSD 280-611915/5-A				
Client ID:					
Sample Type:	LCSD				
Inject. Date:	13-May-2023 21:37:09	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCSD 280-611915/5-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20230513-121427.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	16-May-2023 12:37:13	Calib Date:	24-Feb-2023 17:41:20		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230224-118952.b\02240018.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1672				

First Level Reviewer: K8YG Date: 15-May-2023 08:00:35

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2029	101.44

Manual Integration/User Assign Peak Report

Eurofins Denver

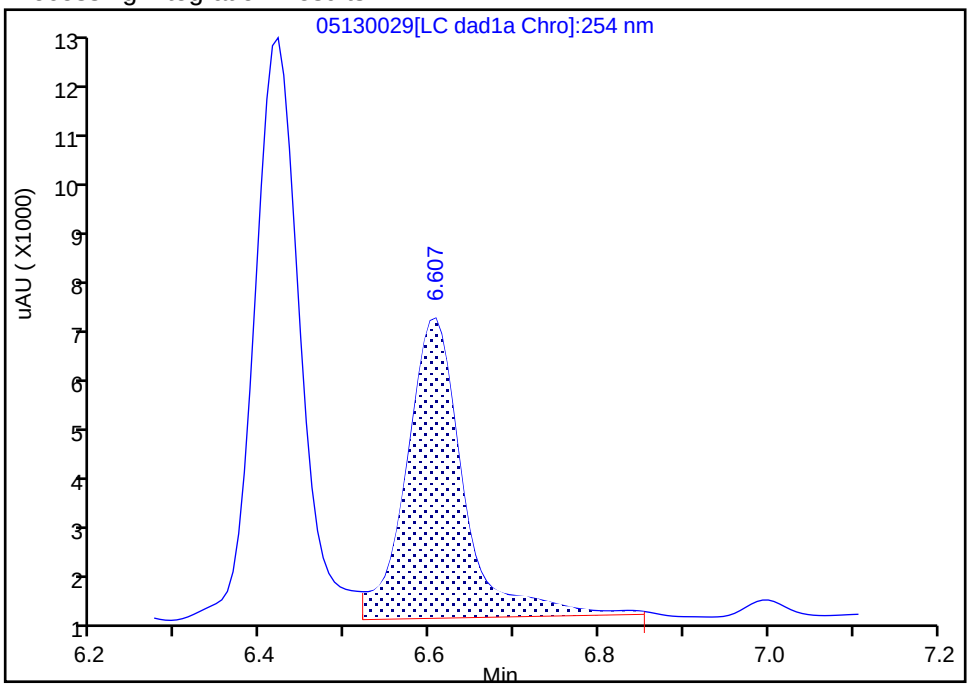
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130029.d				
Injection Date:	13-May-2023 21:37:09	Instrument ID:	CHHPLC_X3		
Lims ID:	LCSD 280-611915/5-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

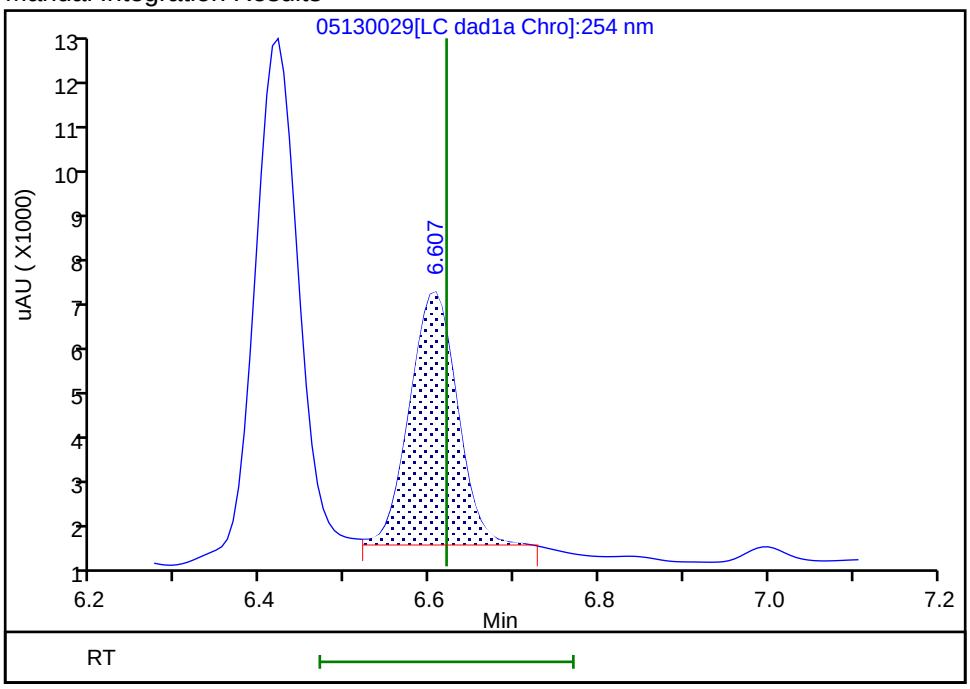
Processing Integration Results

RT: 6.61
Area: 26609
Amount: 0.181666
Amount Units: ug/mL



Manual Integration Results

RT: 6.61
Area: 21185
Amount: 0.144635
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 08:00:26
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

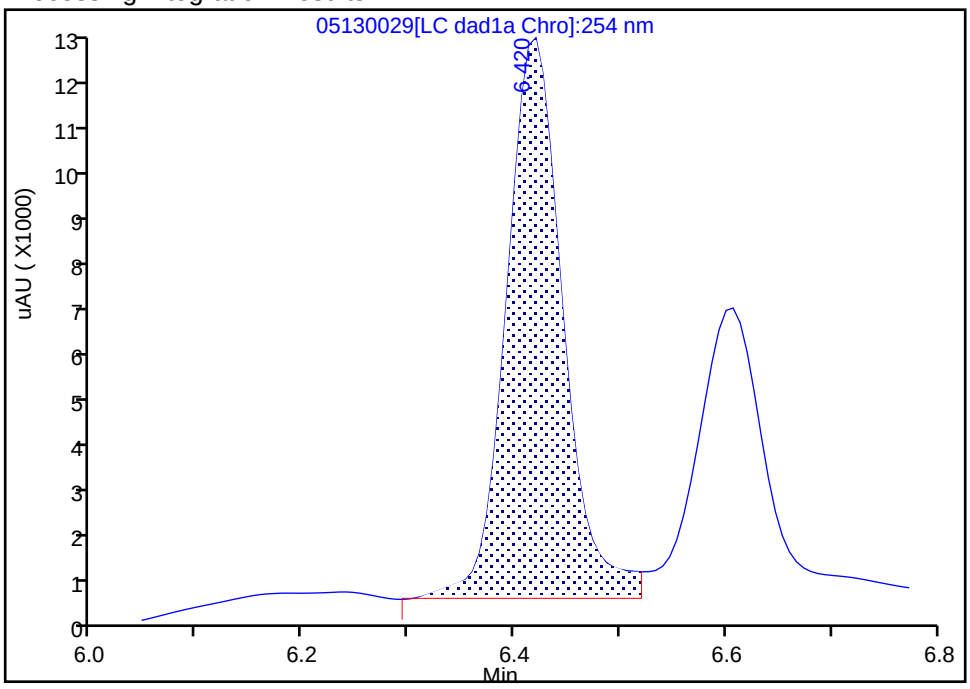
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230513-121427.b\05130029.d				
Injection Date:	13-May-2023 21:37:09	Instrument ID:	CHHPLC_X3		
Lims ID:	LCSD 280-611915/5-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

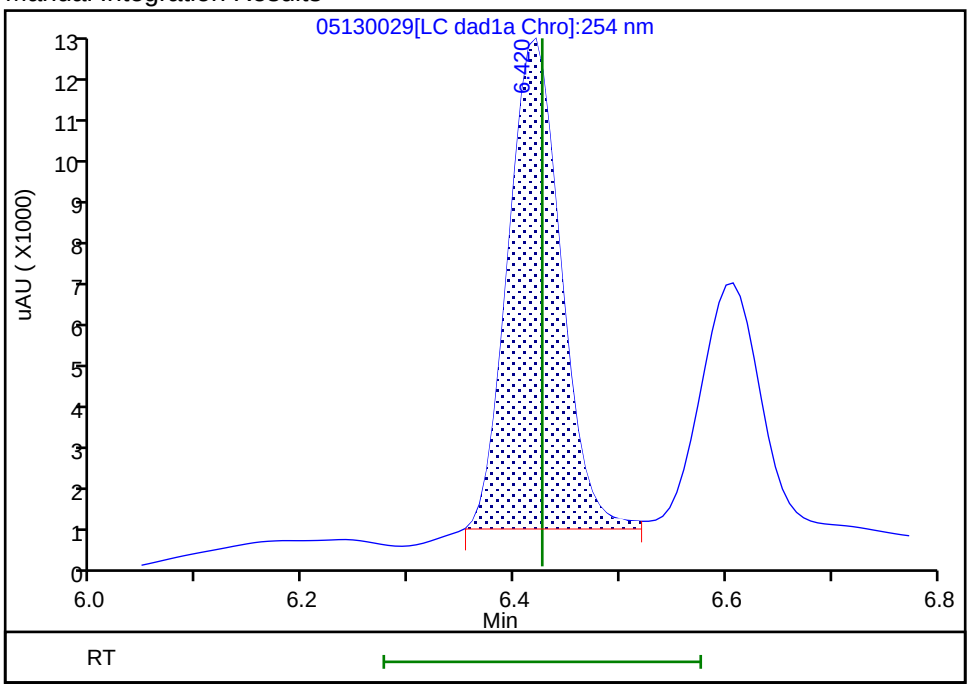
Processing Integration Results

RT: 6.42
Area: 41577
Amount: 0.177249
Amount Units: ug/mL



Manual Integration Results

RT: 6.42
Area: 37256
Amount: 0.158437
Amount Units: ug/mL



Reviewer: K8YG, 15-May-2023 08:00:22
Audit Action: Split an Integrated Peak Audit Reason: Baseline

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 01/17/2023 00:33

Analysis Batch Number: 599427 End Date: 01/17/2023 07:10

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-599427/11		01/17/2023 00:33	1	01160039.D	UltraCarb5uODS 4.6(mm)
IC 280-599427/12		01/17/2023 00:56	1	01160040.D	UltraCarb5uODS 4.6(mm)
IC 280-599427/13		01/17/2023 01:19	1	01160041.D	UltraCarb5uODS 4.6(mm)
IC 280-599427/14		01/17/2023 01:43	1	01160042.D	UltraCarb5uODS 4.6(mm)
IC 280-599427/15		01/17/2023 02:06	1	01160043.D	UltraCarb5uODS 4.6(mm)
IC 280-599427/16		01/17/2023 02:30	1	01160044.D	UltraCarb5uODS 4.6(mm)
IC 280-599427/17		01/17/2023 02:53	1	01160045.D	UltraCarb5uODS 4.6(mm)
IC 280-599427/18		01/17/2023 03:16	1	01160046.D	UltraCarb5uODS 4.6(mm)
ICV 280-599427/19		01/17/2023 03:40	1	01160047.D	UltraCarb5uODS 4.6(mm)
IC 280-599427/20		01/17/2023 04:03	1		UltraCarb5uODS 4.6(mm)
IC 280-599427/21		01/17/2023 04:27	1		UltraCarb5uODS 4.6(mm)
IC 280-599427/22		01/17/2023 04:50	1		UltraCarb5uODS 4.6(mm)
IC 280-599427/23		01/17/2023 05:13	1		UltraCarb5uODS 4.6(mm)
IC 280-599427/24		01/17/2023 05:37	1		UltraCarb5uODS 4.6(mm)
IC 280-599427/25		01/17/2023 06:00	1		UltraCarb5uODS 4.6(mm)
IC 280-599427/26		01/17/2023 06:24	1		UltraCarb5uODS 4.6(mm)
IC 280-599427/27		01/17/2023 06:47	1		UltraCarb5uODS 4.6(mm)
ICV 280-599427/28		01/17/2023 07:10	1		UltraCarb5uODS 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 02/08/2023 15:38

Analysis Batch Number: 601664 End Date: 02/08/2023 19:05

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-601664/11		02/08/2023 15:38	1	02080011.D	UltraCarb5uODS 4.6(mm)
IC 280-601664/12		02/08/2023 16:01	1	02080012.D	UltraCarb5uODS 4.6(mm)
IC 280-601664/13		02/08/2023 16:24	1	02080013.D	UltraCarb5uODS 4.6(mm)
IC 280-601664/14		02/08/2023 16:47	1	02080014.D	UltraCarb5uODS 4.6(mm)
IC 280-601664/15		02/08/2023 17:10	1	02080015.D	UltraCarb5uODS 4.6(mm)
IC 280-601664/16		02/08/2023 17:33	1	02080016.D	UltraCarb5uODS 4.6(mm)
IC 280-601664/17		02/08/2023 17:56	1	02080017.D	UltraCarb5uODS 4.6(mm)
IC 280-601664/18		02/08/2023 18:19	1	02080018.D	UltraCarb5uODS 4.6(mm)
IC 280-601664/19		02/08/2023 18:42	1	02080019.D	UltraCarb5uODS 4.6(mm)
ICV 280-601664/20		02/08/2023 19:05	1	02080020.D	UltraCarb5uODS 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 02/24/2023 15:00

Analysis Batch Number: 603284 End Date: 02/24/2023 18:04

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-603284/11		02/24/2023 15:00	1	02240011.D	UltraCarb5uODS 4.6(mm)
IC 280-603284/12		02/24/2023 15:23	1	02240012.D	UltraCarb5uODS 4.6(mm)
IC 280-603284/13		02/24/2023 15:46	1	02240013.D	UltraCarb5uODS 4.6(mm)
IC 280-603284/14		02/24/2023 16:09	1	02240014.D	UltraCarb5uODS 4.6(mm)
IC 280-603284/15		02/24/2023 16:32	1	02240015.D	UltraCarb5uODS 4.6(mm)
IC 280-603284/16		02/24/2023 16:55	1	02240016.D	UltraCarb5uODS 4.6(mm)
IC 280-603284/17		02/24/2023 17:18	1	02240017.D	UltraCarb5uODS 4.6(mm)
IC 280-603284/18		02/24/2023 17:41	1	02240018.D	UltraCarb5uODS 4.6(mm)
ICV 280-603284/19		02/24/2023 18:04	1	02240019.D	UltraCarb5uODS 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Instrument ID: CHHPLC_X5 Start Date: 04/28/2023 18:24

Analysis Batch Number: 610603 End Date: 04/29/2023 04:52

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-610603/10		04/28/2023 18:24	1	04280010.D	Luna-phenylhex 4.6(mm)
IC 280-610603/11		04/28/2023 18:59	1	04280011.D	Luna-phenylhex 4.6(mm)
IC 280-610603/12		04/28/2023 19:34	1	04280012.D	Luna-phenylhex 4.6(mm)
IC 280-610603/13		04/28/2023 20:08	1	04280013.D	Luna-phenylhex 4.6(mm)
IC 280-610603/14		04/28/2023 20:43	1	04280014.D	Luna-phenylhex 4.6(mm)
IC 280-610603/15		04/28/2023 21:18	1	04280015.D	Luna-phenylhex 4.6(mm)
IC 280-610603/16		04/28/2023 21:53	1	04280016.D	Luna-phenylhex 4.6(mm)
IC 280-610603/17		04/28/2023 22:28	1	04280017.D	Luna-phenylhex 4.6(mm)
IC 280-610603/18		04/28/2023 23:03	1	04280018.D	Luna-phenylhex 4.6(mm)
ICV 280-610603/19		04/28/2023 23:38	1	04280019.D	Luna-phenylhex 4.6(mm)
IC 280-610603/20		04/29/2023 00:13	1	04280020.D	Luna-phenylhex 4.6(mm)
IC 280-610603/21		04/29/2023 00:48	1	04280021.D	Luna-phenylhex 4.6(mm)
IC 280-610603/22		04/29/2023 01:23	1	04280022.D	Luna-phenylhex 4.6(mm)
IC 280-610603/23		04/29/2023 01:58	1	04280023.D	Luna-phenylhex 4.6(mm)
IC 280-610603/24		04/29/2023 02:33	1	04280024.D	Luna-phenylhex 4.6(mm)
IC 280-610603/25		04/29/2023 03:08	1	04280025.D	Luna-phenylhex 4.6(mm)
IC 280-610603/26		04/29/2023 03:43	1	04280026.D	Luna-phenylhex 4.6(mm)
IC 280-610603/27		04/29/2023 04:18	1	04280027.D	Luna-phenylhex 4.6(mm)
ICV 280-610603/28		04/29/2023 04:52	1	04280028.D	Luna-phenylhex 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 05/13/2023 13:58

Analysis Batch Number: 612396 End Date: 05/14/2023 08:19

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-612396/8		05/13/2023 13:58	1		UltraCarb5uODS 4.6(mm)
CCV 280-612396/9		05/13/2023 14:21	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/13/2023 14:44	5		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/13/2023 15:07	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/13/2023 15:30	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/13/2023 15:53	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/13/2023 16:16	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/13/2023 16:39	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/13/2023 17:02	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/13/2023 17:24	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/13/2023 17:47	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/13/2023 18:10	1		UltraCarb5uODS 4.6(mm)
CCV 280-612396/21		05/13/2023 18:33	1	05130021.D	UltraCarb5uODS 4.6(mm)
CCV 280-612396/22		05/13/2023 18:56	1	05130022.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		05/13/2023 19:19	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/13/2023 19:42	1		UltraCarb5uODS 4.6(mm)
MB 280-611915/1-A		05/13/2023 20:05	1	05130025.D	UltraCarb5uODS 4.6(mm)
LCS 280-611915/2-A		05/13/2023 20:28	1	05130026.D	UltraCarb5uODS 4.6(mm)
LCSD 280-611915/3-A		05/13/2023 20:51	1	05130027.D	UltraCarb5uODS 4.6(mm)
LCS 280-611915/4-A		05/13/2023 21:14	1	05130028.D	UltraCarb5uODS 4.6(mm)
LCSD 280-611915/5-A		05/13/2023 21:37	1	05130029.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		05/13/2023 22:00	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/13/2023 22:23	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/13/2023 22:46	1		UltraCarb5uODS 4.6(mm)
CCV 280-612396/33		05/13/2023 23:08	1	05130033.D	UltraCarb5uODS 4.6(mm)
CCV 280-612396/34		05/13/2023 23:31	1	05130034.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		05/13/2023 23:54	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/14/2023 00:17	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/14/2023 00:40	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/14/2023 01:03	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/14/2023 01:26	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/14/2023 01:49	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/14/2023 02:12	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/14/2023 02:35	1		UltraCarb5uODS 4.6(mm)
280-176134-1	SCFmw-004-230401-GW	05/14/2023 02:58	1	05130043.D	UltraCarb5uODS 4.6(mm)
280-176134-2	SCFmw-004-230402-GW	05/14/2023 03:21	1	05130044.D	UltraCarb5uODS 4.6(mm)
CCV 280-612396/45		05/14/2023 03:44	1	05130045.D	UltraCarb5uODS 4.6(mm)
CCV 280-612396/46		05/14/2023 04:07	1	05130046.D	UltraCarb5uODS 4.6(mm)
280-176134-3	LL1mw-086-230401-GW	05/14/2023 04:30	1	05130047.D	UltraCarb5uODS 4.6(mm)
280-176134-4	LL3mw-237-230401-GW	05/14/2023 04:53	1	05130048.D	UltraCarb5uODS 4.6(mm)
280-176134-5	LL1mw-089-230401-GW	05/14/2023 05:16	1	05130049.D	UltraCarb5uODS 4.6(mm)
280-176134-6	LL1mw-089-230402-GW	05/14/2023 05:39	1	05130050.D	UltraCarb5uODS 4.6(mm)
280-176134-7	LL1mw-063-230401-GW	05/14/2023 06:02	1	05130051.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		05/14/2023 06:25	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/14/2023 06:48	1		UltraCarb5uODS 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 05/13/2023 13:58

Analysis Batch Number: 612396 End Date: 05/14/2023 08:19

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		05/14/2023 07:11	500		UltraCarb5uODS 4.6(mm)
ZZZZZ		05/14/2023 07:33	200		UltraCarb5uODS 4.6(mm)
CCV 280-612396/56		05/14/2023 07:56	1	05130056.D	UltraCarb5uODS 4.6(mm)
CCV 280-612396/57		05/14/2023 08:19	1	05130057.D	UltraCarb5uODS 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Instrument ID: CHHPLC_X5 Start Date: 05/17/2023 05:24

Analysis Batch Number: 612692 End Date: 05/17/2023 15:53

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-612692/19		05/17/2023 05:24	1	05160019.D	Luna-phenylhex 4.6(mm)
ZZZZZ		05/17/2023 05:59	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/17/2023 06:34	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/17/2023 07:09	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/17/2023 07:44	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/17/2023 08:19	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/17/2023 08:53	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/17/2023 09:28	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/17/2023 10:03	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/17/2023 10:38	1		Luna-phenylhex 4.6(mm)
280-176134-3	LL1mw-086-230401-GW	05/17/2023 11:13	1	05160029.D	Luna-phenylhex 4.6(mm)
CCV 280-612692/30		05/17/2023 11:48	1	05160030.D	Luna-phenylhex 4.6(mm)
280-176134-4	LL3mw-237-230401-GW	05/17/2023 12:23	1	05160031.D	Luna-phenylhex 4.6(mm)
280-176134-7	LL1mw-063-230401-GW	05/17/2023 12:58	1	05160032.D	Luna-phenylhex 4.6(mm)
ZZZZZ		05/17/2023 13:33	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/17/2023 14:08	1		Luna-phenylhex 4.6(mm)
ZZZZZ		05/17/2023 14:43	500		Luna-phenylhex 4.6(mm)
CCV 280-612692/37		05/17/2023 15:53	1	05160037.D	Luna-phenylhex 4.6(mm)

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Batch Number: 599427 Batch Start Date: 01/17/23 00:33 Batch Analyst: Zhang, Jian

Batch Method: 8330B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	3,5-DNA LCS 00042	8330_ADDs 00035	8330DiaminLCS 00052		
IC 280-599427/11		8330B		1 mL		125 uL			
IC 280-599427/12		8330B		1 mL		50 uL			
IC 280-599427/13		8330B		1 mL		35 uL			
IC 280-599427/14		8330B		1 mL		20 uL			
IC 280-599427/15		8330B		1 mL		12.5 uL			
IC 280-599427/16		8330B		1 mL		5 uL			
IC 280-599427/17		8330B		1 mL		2.5 uL			
IC 280-599427/18		8330B		1 mL		1 uL			
ICV 280-599427/19		8330B		1 mL	50 uL		50 uL		

Batch Notes	
Methanol ID	221054

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.: 280-176134-1

SDG No.:

Batch Number: 601664 Batch Start Date: 02/08/23 15:38 Batch Analyst: Zhang, Jian

Batch Method: 8330B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	3,5-DNA LCS 00043	8330 LCS 00121	8330IntermStk 00075	8330Surrogate 00138	
IC 280-601664/11		8330B		1 mL			250 uL		
IC 280-601664/12		8330B		1 mL			100 uL		
IC 280-601664/13		8330B		1 mL			70 uL		
IC 280-601664/14		8330B		1 mL			40 uL		
IC 280-601664/15		8330B		1 mL			25 uL		
IC 280-601664/16		8330B		1 mL			10 uL		
IC 280-601664/17		8330B		1 mL			5 uL		
IC 280-601664/18		8330B		1 mL			2 uL		
IC 280-601664/19		8330B		1 mL			1 uL		
ICV 280-601664/20		8330B		1 mL	50 uL	50 uL		50 uL	

Batch Notes	
Methanol ID	221054

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.: 280-176134-1

SDG No.:

Batch Number: 603284 Batch Start Date: 02/24/23 15:00 Batch Analyst: Zhang, Jian

Batch Method: 8330B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	8330 DMT 00013	8330_OP_DMT 00016			
IC 280-603284/11		8330B		1 mL	125 uL				
IC 280-603284/12		8330B		1 mL	50 uL				
IC 280-603284/13		8330B		1 mL	35 uL				
IC 280-603284/14		8330B		1 mL	20 uL				
IC 280-603284/15		8330B		1 mL	12.5 uL				
IC 280-603284/16		8330B		1 mL	5 uL				
IC 280-603284/17		8330B		1 mL	2.5 uL				
IC 280-603284/18		8330B		1 mL	1 uL				
ICV 280-603284/19		8330B		1 mL		50 uL			

Batch Notes	
Methanol ID	221054

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.: 280-176134-1

SDG No.:

Batch Number: 610603 Batch Start Date: 04/28/23 18:24 Batch Analyst: Zhang, Jian

Batch Method: 8330B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	8330 DMT 00013	8330 LCS 00126	8330_ADDs 00036	8330_OP_DMT 00017	8330DiaminLCS 00056
IC 280-610603/10		8330B		1 mL	125 uL				
IC 280-610603/11		8330B		1 mL	50 uL				
IC 280-610603/12		8330B		1 mL	35 uL				
IC 280-610603/13		8330B		1 mL	20 uL				
IC 280-610603/14		8330B		1 mL	12.5 uL				
IC 280-610603/15		8330B		1 mL	5 uL				
IC 280-610603/16		8330B		1 mL	2.5 uL				
IC 280-610603/17		8330B		1 mL	1 uL				
IC 280-610603/18		8330B		1 mL	0.5 uL				
ICV 280-610603/19		8330B		1 mL		50 uL		50 uL	
IC 280-610603/20		8330B		1 mL			125 uL		
IC 280-610603/21		8330B		1 mL			50 uL		
IC 280-610603/22		8330B		1 mL			35 uL		
IC 280-610603/23		8330B		1 mL			20 uL		
IC 280-610603/24		8330B		1 mL			12.5 uL		
IC 280-610603/25		8330B		1 mL			5 uL		
IC 280-610603/26		8330B		1 mL			2 uL		
IC 280-610603/27		8330B		1 mL			1 uL		
ICV 280-610603/28		8330B		1 mL					50 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330IntermStk 00076	8330Surrogate 00143				

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.: 280-176134-1

SDG No.:

Batch Number: 610603 Batch Start Date: 04/28/23 18:24 Batch Analyst: Zhang, Jian

Batch Method: 8330B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330IntermStk 00076	8330Surrogate 00143				
IC 280-610603/10		8330B		250 uL					
IC 280-610603/11		8330B		100 uL					
IC 280-610603/12		8330B		70 uL					
IC 280-610603/13		8330B		40 uL					
IC 280-610603/14		8330B		25 uL					
IC 280-610603/15		8330B		10 uL					
IC 280-610603/16		8330B		5 uL					
IC 280-610603/17		8330B		2 uL					
IC 280-610603/18		8330B		1 uL					
ICV 280-610603/19		8330B			50 uL				
IC 280-610603/20		8330B							
IC 280-610603/21		8330B							
IC 280-610603/22		8330B							
IC 280-610603/23		8330B							
IC 280-610603/24		8330B							
IC 280-610603/25		8330B							
IC 280-610603/26		8330B							
IC 280-610603/27		8330B							
ICV 280-610603/28		8330B							

Batch Notes	
Methanol ID	221056

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.: 280-176134-1

SDG No.:

Batch Number: 610603 Batch Start Date: 04/28/23 18:24 Batch Analyst: Zhang, Jian

Batch Method: 8330B Batch End Date:

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Batch Number: 611915 Batch Start Date: 05/10/23 13:48 Batch Analyst: Lee, David C

Batch Method: 3535 Batch End Date: 05/10/23 16:59

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	8330 LCS 00125	8330_OP_DMT 00017
MB 280-611915/1		3535, 8330B				500 mL	5 mL		
LCS 280-611915/2		3535, 8330B				500 mL	5 mL	0.1 mL	0.1 mL
LCSD 280-611915/3		3535, 8330B				500 mL	5 mL	0.1 mL	0.1 mL
LCS 280-611915/4		3535, 8330B				500 mL	5 mL		
LCSD 280-611915/5		3535, 8330B				500 mL	5 mL		
280-176134-B-1	SCFmw-004-230401-GW	3535, 8330B	T	761.5 g	285.9 g	475.6 mL	5 mL		
280-176134-B-2	SCFmw-004-230402-GW	3535, 8330B	T	755.1 g	283.6 g	471.5 mL	5 mL		
280-176134-A-3	LL1mw-086-230401-GW	3535, 8330B	T	758.8 g	286.9 g	471.9 mL	5 mL		
280-176134-A-4	LL3mw-237-230401-GW	3535, 8330B	T	746.6 g	285.6 g	461 mL	5 mL		
280-176134-A-5	LL1mw-089-230401-GW	3535, 8330B	T	750.8 g	286.2 g	464.6 mL	5 mL		
280-176134-A-6	LL1mw-089-230402-GW	3535, 8330B	T	749.5 g	282.2 g	467.3 mL	5 mL		
280-176134-B-7	LL1mw-063-230401-GW	3535, 8330B	T	760.9 g	286.5 g	474.4 mL	5 mL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330DiaminLCS 00056	8330Surrogate 00143	AnalysisComment			
MB 280-611915/1		3535, 8330B			0.1 mL				
LCS 280-611915/2		3535, 8330B			0.1 mL	DMT			
LCSD 280-611915/3		3535, 8330B			0.1 mL	DMT			
LCS 280-611915/4		3535, 8330B		0.1 mL	0.1 mL	Diamino			
LCSD 280-611915/5		3535, 8330B		0.1 mL	0.1 mL	Diamino			
280-176134-B-1	SCFmw-004-230401-GW	3535, 8330B	T		0.1 mL				
280-176134-B-2	SCFmw-004-230402-GW	3535, 8330B	T		0.1 mL				
280-176134-A-3	LL1mw-086-230401-GW	3535, 8330B	T		0.1 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-176134-1

SDG No.:

Batch Number: 611915 Batch Start Date: 05/10/23 13:48 Batch Analyst: Lee, David C

Batch Method: 3535 Batch End Date: 05/10/23 16:59

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330DiaminLCS 00056	8330Surrogate 00143	AnalysisComment			
280-176134-A-4	LL3mw-237-230401 -GW	3535, 8330B	T		0.1 mL				
280-176134-A-5	LL1mw-089-230401 -GW	3535, 8330B	T		0.1 mL				
280-176134-A-6	LL1mw-089-230402 -GW	3535, 8330B	T		0.1 mL				
280-176134-B-7	LL1mw-063-230401 -GW	3535, 8330B	T		0.1 mL				

Batch Notes	
First Start time	05/10/2023 14:06
First End time	05/10/2023 16:34
SPE Cartridge Type	Sep-Pak Porapak Rdx
SPE Cartridge Lot ID	005332286A
Balance ID	24350888
Manifold ID	Manifold: A, B
QC Bottle Lot ID	02024011
Pipette/Syringe/Dispenser ID	Dobby/DOD/Pugsley
Solvent Name	CaCl2
Solvent Lot #	CaCl2_Sol_00084
Rinse Solvent Name	Acetonotrile
Rinse Solvent Lot	Acetonitrile_00078
Acid Name	0.1% AAinACN
Acid ID	0.1% AAinACN_00207
Analyst ID - Spike Analyst	DL
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 1

COC No.: RVAAP-305-TA

Date: 5/4/23

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 2023
Job/P.O. No.: P010216426
Sampler (Signature) Melissa Rego (Printed Name) Melissa Rego

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-004-230401-GW	NA	NA	5/4/23	0931	W	2		2	
	SCFmw-004-230402-GW	NA	NA	5/4/23	0931	W	2		2	

MR 5/4/23

Requested Parameters

Relinquished by	Date	Received by	Date	Time
Signature: Ryan Lawler	5/4/2023	Signature: Matt Mc	5.5.23	1000
Printed Name: Leidos	Time: 1700	Printed Name		
Company		Company		
Relinquished by	Date	Received by	Date	
Signature		Signature		
Printed Name	Time	Printed Name	Time	
Company		Company		

Notes:
A. Cool, 4C
B. HCl, pH<2, Cool, 4C
C. HNO3, pH<2, Cool, 4C
D. NaOH, pH>12, Cool 4C

Total Number of Containers: 4

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

8178 1968 1578

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

280-176134 Chain of Custody

5/23/2023 8:18 PM

leidos

Chain of Custody Record

Page 1 of 1

COC No.: RVAAP-507-TA

Date: 5/4/23

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 2023
Job/P.O. No.: P010216426
Sampler (Signature) Clee (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: Expanded Explosives (6)(A)	Temperature Blank	Total Number of Containers	OBSERVATIONS, COMMENTS SPECIAL INSTRUCTIONS
	LL1mw-086-230401-GW	NA	NA	5/4/23	1125	W	2		2	
										extra volume for MS/MSD

KL 5/4/2023

Relinquished by	Date	Received by	Date	Notes: Total Number of Containers: 2	Shipment Method: Courier
Signature: KL	5/4/2023	Signature:	5-5-23	A. Cool, 4C B. HCl, pH<2, Cool, 4C C. HNO3, pH<2, Cool, 4C D. NaOH, pH>12, Cool 4C	
Printed Name: Leidos	Time: 1700	Printed Name: Matt Lutt	Time: 1000	1. SW 8260B Notes: 2. SW 8270D 3. SW 8270D SIM 4. SW 8082A 5. SW 8081B 6. SW 8330 7. SW 6010/6020/7470 8. SW 9012B 9. SW 9034 10. SW 9056/9056A 11. SW 6860 12. EPA 353.2 13. SW 7196 14. SM2320B	8178 1968 1578
Company		Company			
Relinquished by	Date	Received by	Date		
Signature		Signature			
Printed Name	Time	Printed Name	Time		
Company		Company			

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

Chain of Custody Record

leidos

Page 1 of 1

COC No.: RVAAP-309-TA
Date: 5/4/23

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 2023
Job/P.O. No.: P010216426
Sampler (Signature) Melissa Reyes (Printed Name) Melissa Reyes

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	Expanded Explosives (6)(A)	Temperature Blank	Total Number of Containers	OBSERVATIONS, COMMENTS SPECIAL INSTRUCTIONS
	LL3mw-237-230401-GW	NA	NA	5/4/23	1407	W	2		2	

Requested Parameters

MR 05/04/23

Relinquished by: Signature / Printed Name: Leidos / Company — Date: 5/4/2023 — Time: 1700
Received by: Signature / Printed Name / Company — Date: 5-5-23 — Time: 1000

Relinquished by: Signature / Printed Name / Company — Date / Time
Received by: Signature / Printed Name / Company — Date / Time

Notes: Total Number of Containers: 2

A. Cool, 4C
B. HCl, pH<2, Cool, 4C
C. HNO3, pH<2, Cool, 4C
D. NaOH, pH>12, Cool 4C

1. SW 8260B
2. SW 8270D
3. SW 8270D SIM
4. SW 8082A
5. SW 8081B
6. SW 8330
7. SW 6010/6020/7470
8. SW 9012B
9. SW 9034
10. SW 9056/9056A
11. SW 6860
12. EPA 353.2
13. SW 7196
14. SM2320B

Notes:

Shipment Method: Courier

8178 1968 1578

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

5/23/2023 8:18 PM

leidos

Chain of Custody Record

Page 1 of 1

COC No.: RVAAP-308-TA

Date: 5/4/23

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 2023
Job/P.O. No.: P010216426
Sampler (Signature) Clee (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: Expanded Explosives (6)(A)	Temperature Blank	Total Number of Containers	OBSERVATIONS, COMMENTS SPECIAL INSTRUCTIONS
	LL1mw-089-230401-GW	NA	NA	5/4/23	1345	W	2		2	
	LL1mw-089-230402-GW	↓	↓	5/4/23	1345	W	2		2	

Relinquished by
Signature: Ryan Lavanchy
Printed Name: Leidos
Company
Date: 5/4/2023
Time: 1700

Received by
Signature: matt White
Printed Name
Company
Date: 5-5-23
Time: 1000

Relinquished by
Signature
Printed Name
Company
Date
Time

Received by
Signature
Printed Name
Company
Date
Time

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

1. SW 8260B
2. SW 8270D
3. SW 8270D SIM
4. SW 8082A
5. SW 8081B
6. SW 8330
7. SW 6010/6020/7470
8. SW 9012B
9. SW 9034
10. SW 9056/9056A
11. SW 6860
12. EPA 353.2
13. SW 7196
14. SM2320B

Notes:

Shipment Method: Courier

8178 1968 1578

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

Page 1 of 1

COC No.: RVAAP-306-TA

Date: 5/4/23

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 2023
Job/P.O. No.: P010216426
Sampler (Signature) Melissa Rego (Printed Name) Melissa Rego

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: Expanded Explosives (6)(A)	Temperature Blank	Total Number of Containers	OBSERVATIONS, COMMENTS SPECIAL INSTRUCTIONS
	LL1mw-063-230401-GW	NA	NA	5/4/23	1032	W	2		2	

M.R 5/4/23

Relinquished by	Date	Received by	Date
Signature	5/4/2023	Signature	5/5/23
Printed Name	Time	Printed Name	Time
Leidos	1700		1000
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

1. SW 8260B
2. SW 8270D
3. SW 8270D SIM
4. SW 8082A
5. SW 8081B
6. SW 8330
7. SW 6010/6020/7470
8. SW 9012B
9. SW 9034
10. SW 9056/9056A
11. SW 6860
12. EPA 353.2
13. SW 7196
14. SM2320B

Notes:

Shipment Method: Courier

8178 1968 1578

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

5/23/2023 8:18 PM

...using this tag.



280-176134 Waybill

ORIGIN ID:SKYA (330) 998-4246

TESTAMERICA DENVER LAB
4955 YARROW ST

ARVADA, CO 80002
UNITED STATES US

SHIP DATE: 04MAY23
ACTWGT: 51.35 LB
CAD: 6991624/SSF02420
DIMS: 24x14x14 IN

BILL THIRD PARTY

TO

TESTAMERICA DENVER LAB
4955 YARROW ST

ARVADA CO 80002
(330) 998-4246
INV:
PO:
REF:
DEPT:

Part # 156297-433A/SAM855EXP

RT 640
FZ
10:30
374
05.05

Fed
Expre

TRK# 0201 3978 8913 3745

FRI - 05 MAY 10:30A
PRIORITY OVERNIGHT

NX LAAA

AHS
80002
CO-US DEN

SIGNATURE
DATE 5

Custody Seal

eurofins | Environment Testing
TestAmerica

2171245

Login Sample Receipt Checklist

Client: Leidos, Inc.

Job Number: 280-176134-1

Login Number: 176134
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	