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ANALYTICAL REPORT

PREPARED FOR

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Generated 10/20/2023 4:00 PM

JOB DESCRIPTION

RVAAP FWGW

JOB NUMBER

280-182239-1

Eurofins Denver
4955 Yarrow Street
Arvada CO 80002

See page two for job notes and contact information.

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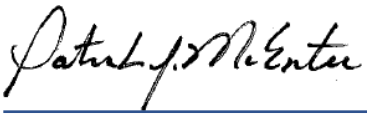
Eurofins Denver

Job Notes

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

Authorization



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Qualifiers

HPLC/IC

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

General Chemistry

Qualifier	Qualifier Description
D	The reported value is from a dilution.
J	Estimated: The analyte was positively identified; the quantitation is an estimation
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: 280-182239-1

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 10/3/2023 9:35 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.2º C and 1.6º C.

Receipt Exceptions

The Chain-of-Custody (COC) was incomplete as received. The COC says there are supposed to be 2 sample containers for sample SCFmw-004-230901-GW (280-182239-1), but we only received 1.

The Chain-of-Custody (COC) was incomplete as received. The COC says there are supposed to be 2 sample containers for sample SCFmw-004-230902-GW (280-182239-2), but we received 3.

EXPLOSIVES (HPLC)

Samples SCFmw-004-230901-GW (280-182239-1), SCFmw-004-230902-GW (280-182239-2), LL3mw-237-230901-GW (280-182239-3), LL3mw-241-230901-GW (280-182239-4), LL3mw-241-230902-GW (280-182239-5), LL1mw-093-230901-GW (280-182239-6), LL1mw-092-230901-GW (280-182239-7), LL3mw-248-230901-GW (280-182239-8), LL1mw-091-230901-GW (280-182239-9) and LL3mw-247-230901-GW (280-182239-12) were analyzed for Explosives (HPLC) in accordance with 8330B. The samples were prepared on 10/04/2023 and analyzed on 10/10/2023, 10/11/2023 and 10/12/2023.

MNX was detected in method blank MB 280-628393/1-A at a level that was below one half the LOQ.

1,2-Dinitrobenzene failed the surrogate recovery criteria low for LL3mw-241-230901-GWMS (280-182239-4MS).

Surrogate recovery for the following sample in preparation batch 280-628393 and analytical batch 280-628987 was outside the lower control limits: LL1mw-093-230901-GW (280-182239-6) and LL1mw-092-230901-GW (280-182239-7). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Surrogate recovery for the following sample in preparation batch 280-628393 and analytical batch 280-628987 was outside the lower control limits: LL3mw-248-230901-GW (280-182239-8). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed. Surrogate recovered within control limit in the confirmation instrument.

The laboratory control sample (LCS) for preparation batch 280-628393 and analytical batch 280-628987 recovered outside the lower control limits for the following analytes in the primary instrument: 4-Amino-2,6-dinitrotoluene(76-125%R) at 69%R . The LCS recovered within control limit in the confirmation instrument. 4-Amino-2,6-dinitrotoluene is ND in both primary and confirmation instrument or the dual column %RPD is within 40% between primary and confirmation. The associated samples are impacted: SCFmw-004-230901-GW (280-182239-1), SCFmw-004-230902-GW (280-182239-2), LL3mw-237-230901-GW (280-182239-3), LL3mw-241-230901-GW (280-182239-4), LL3mw-241-230901-GW (280-182239-4[MS]), LL3mw-241-230901-GW (280-182239-4[MSD]), LL3mw-241-230902-GW (280-182239-5), LL1mw-093-230901-GW (280-182239-6), LL1mw-092-230901-GW (280-182239-7), LL3mw-248-230901-GW (280-182239-8), LL1mw-091-230901-GW (280-182239-9), LL3mw-247-230901-GW (280-182239-12), (LCS 280-628393/2-A), (LCSD 280-628393/3-A) and (MB 280-628393/1-A).

Surrogate recovery for the following sample in preparation batch 280-628393 and analytical batch 280-629372 was outside the lower control limits: LL1mw-093-230901-GW (280-182239-6) and LL1mw-092-230901-GW (280-182239-7). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Surrogate recovery for the following sample was outside control limits: LL3mw-241-230901-GW (280-182239-4[MS]). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

The %RPD between the primary and confirmation column exceeded 40% for 2-Amino-4,6-dinitrotoluene for the following sample: LL3mw-237-230901-GW (280-182239-3). Both lower and higher values have been reported and qualified in accordance with the laboratory's SOP.

The %RPD between the primary and confirmation column exceeded 40% for HMX for the following sample: LL3mw-241-230901-GW (280-182239-4). Both lower and higher values have been reported and qualified in accordance with the laboratory's SOP.

The %RPD between the primary and confirmation column exceeded 40% for HMX for the following sample: LL3mw-241-230902-GW (280-182239-5). Both lower and higher values have been reported and qualified in accordance with the laboratory's SOP.

The %RPD between the primary and confirmation column exceeded 40% for RDX for the following sample: LL1mw-093-230901-GW (280-182239-6). Both lower and higher values have been reported and qualified in accordance with the laboratory's SOP.

The %RPD between the primary and confirmation column exceeded 40% for RDX for the following sample: LL1mw-092-230901-GW (280-182239-7). Both lower and higher values have been reported and qualified in accordance with the laboratory's SOP.

The %RPD between the primary and confirmation column exceeded 40% for RDX for the following sample: LL3mw-247-230901-GW (280-182239-12). Both lower and higher values have been reported and qualified in accordance with the laboratory's SOP.

In preparation batch 280-628393, the following sample required filtration to reduce matrix interferences: LL1mw-091-230901-GW (280-182239-9).

In preparation batch 280-628393, the following samples: SCFmw-004-230901-GW (280-182239-1), LL3mw-237-230901-GW (280-182239-3), LL1mw-092-230901-GW (280-182239-7) and LL3mw-248-230901-GW (280-182239-8) was decanted prior to preparation as sample bottles contained insufficient headspace for the addition of sodium chloride.

2,4-diamino-6-nitrotoluene and 2,6-diamino-4-nitrotoluene failed the recovery criteria low for the MS of sample LL3mw-241-230901-GWMS (280-182239-4) in batch 280-629372. 2-Amino-4,6-dinitrotoluene failed the recovery criteria high. For the MSD of sample LL3mw-241-230901-GWMSD (280-182239-4) in batch 280-629372, 3-Nitrotoluene and 4-Amino-2,6-dinitrotoluene failed the recovery criteria low. 2-Amino-4,6-dinitrotoluene failed the recovery criteria high. Also, 2,4-diamino-6-nitrotoluene and 2,6-diamino-4-nitrotoluene exceeded the RPD limit.

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

AMMONIA

Samples LL12mw-185-230901-GW (280-182239-10) and LL12mw-185-230902-GW (280-182239-11) were analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 10/19/2023.

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

ANIONS, ION CHROMATOGRAPHY

Samples LL12mw-185-230901-GW (280-182239-10) and LL12mw-185-230902-GW (280-182239-11) were analyzed for Anions, Ion Chromatography in accordance with 9056A (48 Hours). The samples were analyzed on 10/03/2023.

Samples LL12mw-185-230901-GW (280-182239-10)[10X] and LL12mw-185-230902-GW (280-182239-11)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

Detection Summary

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

Job ID: 280-182239-1

Client Sample ID: SCFmw-004-230901-GW — Lab Sample ID: 280-182239-1

No Detections.

Client Sample ID: SCFmw-004-230902-GW — Lab Sample ID: 280-182239-2

No Detections.

Client Sample ID: LL3mw-237-230901-GW — Lab Sample ID: 280-182239-3

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
2-Amino-4,6-dinitrotoluene	0.11	J1	0.11	0.10	0.052	ug/L	1		8330B	Total/NA
2-Amino-4,6-dinitrotoluene	0.24	M J1	0.11	0.10	0.052	ug/L	1		8330B	Total/NA
4-Amino-2,6-dinitrotoluene	0.19	Q	0.15	0.12	0.059	ug/L	1		8330B	Total/NA

Client Sample ID: LL3mw-241-230901-GW — Lab Sample ID: 280-182239-4

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
1,3,5-Trinitrobenzene	1.7		0.22	0.21	0.086	ug/L	1		8330B	Total/NA
2,4,6-Trinitrotoluene	0.89		0.11	0.10	0.046	ug/L	1		8330B	Total/NA
3,5-Dinitroaniline	0.37	J	0.41	0.31	0.13	ug/L	1		8330B	Total/NA
4-Amino-2,6-dinitrotoluene	1.1	Q J1	0.15	0.12	0.059	ug/L	1		8330B	Total/NA
HMX	0.11	J M J1	0.22	0.21	0.090	ug/L	1		8330B	Total/NA
HMX	0.19	J J1	0.22	0.21	0.090	ug/L	1		8330B	Total/NA
RDX	0.58		0.22	0.21	0.053	ug/L	1		8330B	Total/NA

Client Sample ID: LL3mw-241-230902-GW — Lab Sample ID: 280-182239-5

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
1,3,5-Trinitrobenzene	1.8		0.21	0.20	0.084	ug/L	1		8330B	Total/NA
2,4,6-Trinitrotoluene	0.89		0.11	0.10	0.045	ug/L	1		8330B	Total/NA
2-Amino-4,6-dinitrotoluene	1.1		0.11	0.10	0.051	ug/L	1		8330B	Total/NA
3,5-Dinitroaniline	0.37	J	0.40	0.30	0.13	ug/L	1		8330B	Total/NA
4-Amino-2,6-dinitrotoluene	0.86	Q	0.15	0.12	0.058	ug/L	1		8330B	Total/NA
HMX	0.11	J M J1	0.21	0.20	0.088	ug/L	1		8330B	Total/NA
HMX	0.17	J J1	0.21	0.20	0.088	ug/L	1		8330B	Total/NA
RDX	0.60		0.21	0.20	0.052	ug/L	1		8330B	Total/NA

Client Sample ID: LL1mw-093-230901-GW — Lab Sample ID: 280-182239-6

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
RDX	0.82	Q M J1	0.21	0.20	0.051	ug/L	1		8330B	Total/NA
RDX	0.082	J Q J1	0.21	0.20	0.051	ug/L	1		8330B	Total/NA

Client Sample ID: LL1mw-092-230901-GW — Lab Sample ID: 280-182239-7

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
RDX	1.0	Q M J1	0.22	0.21	0.054	ug/L	1		8330B	Total/NA
RDX	0.097	J Q J1	0.22	0.21	0.054	ug/L	1		8330B	Total/NA

Client Sample ID: LL3mw-248-230901-GW — Lab Sample ID: 280-182239-8

No Detections.

This Detection Summary does not include radiochemical test results.

Detection Summary

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

Job ID: 280-182239-1

Client Sample ID: LL1mw-091-230901-GW — Lab Sample ID: 280-182239-9

No Detections.

Client Sample ID: LL12mw-185-230901-GW — Lab Sample ID: 280-182239-10

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Ammonia as N	0.097	J	0.10	0.050	0.029	mg/L	1		350.1	Total/NA
Nitrate as N	56	D	5.0	2.0	0.90	mg/L	10		9056	Total/NA

Client Sample ID: LL12mw-185-230902-GW — Lab Sample ID: 280-182239-11

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Ammonia as N	0.11		0.10	0.050	0.029	mg/L	1		350.1	Total/NA
Nitrate as N	54	D	5.0	2.0	0.90	mg/L	10		9056	Total/NA

Client Sample ID: LL3mw-247-230901-GW — Lab Sample ID: 280-182239-12

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
RDX	1.9	M J1	0.21	0.20	0.052	ug/L	1		8330B	Total/NA
RDX	0.23	J1	0.21	0.20	0.052	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-004-230901-GW
Date Collected: 10/02/23 09:15
Date Received: 10/03/23 09:35

Lab Sample ID: 280-182239-1
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.21	U	0.22	0.21	0.087	ug/L		10/10/23 00:33	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.038	ug/L		10/10/23 00:33	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.047	ug/L		10/10/23 00:33	1
2,4-Dinitrotoluene	0.083	U	0.10	0.083	0.028	ug/L		10/10/23 00:33	1
2,6-Dinitrotoluene	0.083	U	0.10	0.083	0.042	ug/L		10/10/23 00:33	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.053	ug/L		10/10/23 00:33	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.089	ug/L		10/10/23 00:33	1
3-Nitrotoluene	0.36	U	0.41	0.36	0.20	ug/L		10/10/23 00:33	1
4-Amino-2,6-dinitrotoluene	0.12	U Q	0.16	0.12	0.060	ug/L		10/10/23 00:33	1
4-Nitrotoluene	0.41	U	0.42	0.41	0.10	ug/L		10/10/23 00:33	1
HMX	0.21	U	0.22	0.21	0.091	ug/L		10/11/23 20:48	1
Nitrobenzene	0.21	U	0.22	0.21	0.094	ug/L		10/10/23 00:33	1
Nitroglycerin	2.1	U	2.2	2.1	0.95	ug/L		10/10/23 00:33	1
PETN	1.0	U	1.1	1.0	0.46	ug/L		10/10/23 00:33	1
RDX	0.21	U	0.22	0.21	0.053	ug/L		10/10/23 00:33	1
Tetryl	0.10	U	0.11	0.10	0.033	ug/L		10/10/23 00:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*102*	*M*	*83 - 119*	*10/04/23 13:30*	*10/10/23 00:33*	*1*
1,2-Dinitrobenzene	*95*		*83 - 119*	*10/04/23 13:30*	*10/11/23 20:48*	*1*

Client Sample ID: SCFmw-004-230902-GW
Date Collected: 10/02/23 09:15
Date Received: 10/03/23 09:35

Lab Sample ID: 280-182239-2
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.20	U	0.21	0.20	0.086	ug/L		10/10/23 00:56	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.038	ug/L		10/10/23 00:56	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.046	ug/L		10/10/23 00:56	1
2,4-Dinitrotoluene	0.082	U	0.10	0.082	0.028	ug/L		10/10/23 00:56	1
2,6-Dinitrotoluene	0.082	U	0.10	0.082	0.041	ug/L		10/10/23 00:56	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.052	ug/L		10/10/23 00:56	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.087	ug/L		10/10/23 00:56	1
3-Nitrotoluene	0.36	U	0.41	0.36	0.20	ug/L		10/10/23 00:56	1
4-Amino-2,6-dinitrotoluene	0.12	U Q	0.15	0.12	0.059	ug/L		10/10/23 00:56	1
4-Nitrotoluene	0.41	U	0.42	0.41	0.10	ug/L		10/10/23 00:56	1
HMX	0.20	U M	0.21	0.20	0.089	ug/L		10/10/23 00:56	1
Nitrobenzene	0.20	U	0.21	0.20	0.093	ug/L		10/10/23 00:56	1
Nitroglycerin	2.0	U	2.1	2.0	0.94	ug/L		10/10/23 00:56	1
PETN	1.0	U	1.1	1.0	0.46	ug/L		10/10/23 00:56	1
RDX	0.20	U	0.21	0.20	0.053	ug/L		10/10/23 00:56	1
Tetryl	0.10	U	0.11	0.10	0.032	ug/L		10/10/23 00:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*97*	*M*	*83 - 119*	*10/04/23 13:30*	*10/10/23 00:56*	*1*
1,2-Dinitrobenzene	*92*		*83 - 119*	*10/04/23 13:30*	*10/12/23 05:12*	*1*

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

Client Sample ID: LL3mw-237-230901-GW
Date Collected: 10/02/23 09:50
Date Received: 10/03/23 09:35

Lab Sample ID: 280-182239-3
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.21	U	0.22	0.21	0.086	ug/L		10/10/23 01:19	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.038	ug/L		10/10/23 01:19	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.046	ug/L		10/10/23 01:19	1
2,4-diamino-6-nitrotoluene	0.92	U	1.0	0.92	0.45	ug/L		10/10/23 01:19	1
2,4-Dinitrotoluene	0.082	U	0.10	0.082	0.028	ug/L		10/10/23 01:19	1
2,6-diamino-4-nitrotoluene	0.92	U	1.0	0.92	0.23	ug/L		10/10/23 01:19	1
2,6-Dinitrotoluene	0.082	U	0.10	0.082	0.041	ug/L		10/10/23 01:19	1
2-Amino-4,6-dinitrotoluene	**0.11**	**J1**	0.11	0.10	0.052	ug/L		10/10/23 01:19	1
2-Amino-4,6-dinitrotoluene	**0.24**	**M J1**	0.11	0.10	0.052	ug/L		10/11/23 21:24	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.088	ug/L		10/10/23 01:19	1
3,5-Dinitroaniline	0.31	U	0.41	0.31	0.13	ug/L		10/10/23 01:19	1
3-Nitrotoluene	0.36	U	0.41	0.36	0.20	ug/L		10/10/23 01:19	1
4-Amino-2,6-dinitrotoluene	**0.19**	**Q**	0.15	0.12	0.059	ug/L		10/10/23 01:19	1
4-Nitrotoluene	0.41	U	0.42	0.41	0.10	ug/L		10/10/23 01:19	1
DNX	0.26	U	0.51	0.26	0.10	ug/L		10/10/23 01:19	1
HMX	0.21	U	0.22	0.21	0.090	ug/L		10/10/23 01:19	1
MNX	0.30	U	0.51	0.30	0.095	ug/L		10/10/23 01:19	1
Nitrobenzene	0.21	U	0.22	0.21	0.093	ug/L		10/10/23 01:19	1
Nitroglycerin	2.1	U	2.2	2.1	0.94	ug/L		10/10/23 01:19	1
PETN	1.0	U	1.1	1.0	0.46	ug/L		10/10/23 01:19	1
RDX	0.21	U	0.22	0.21	0.053	ug/L		10/10/23 01:19	1
Tetryl	0.10	U M	0.11	0.10	0.033	ug/L		10/10/23 01:19	1
TNX	0.26	U M	0.51	0.26	0.081	ug/L		10/10/23 01:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*116*		*83 - 119*	*10/04/23 13:30*	*10/10/23 01:19*	*1*
1,2-Dinitrobenzene	*92*	*M*	*83 - 119*	*10/04/23 13:30*	*10/11/23 21:24*	*1*

Client Sample ID: LL3mw-241-230901-GW
Date Collected: 10/02/23 10:37
Date Received: 10/03/23 09:35

Lab Sample ID: 280-182239-4
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	**1.7**		0.22	0.21	0.086	ug/L		10/10/23 01:42	1
1,3-Dinitrobenzene	0.10	U M	0.11	0.10	0.038	ug/L		10/10/23 01:42	1
2,4,6-Trinitrotoluene	**0.89**		0.11	0.10	0.046	ug/L		10/10/23 01:42	1
2,4-diamino-6-nitrotoluene	0.92	U J1	1.0	0.92	0.44	ug/L		10/10/23 01:42	1
2,4-Dinitrotoluene	0.082	U	0.10	0.082	0.028	ug/L		10/10/23 01:42	1
2,6-diamino-4-nitrotoluene	0.92	U J1	1.0	0.92	0.23	ug/L		10/10/23 01:42	1
2,6-Dinitrotoluene	0.082	U	0.10	0.082	0.041	ug/L		10/10/23 01:42	1
2-Amino-4,6-dinitrotoluene	0.10	U J1	0.11	0.10	0.052	ug/L		10/11/23 22:00	1
2-Nitrotoluene	0.21	U M	0.22	0.21	0.088	ug/L		10/10/23 01:42	1
3,5-Dinitroaniline	**0.37**	**J**	0.41	0.31	0.13	ug/L		10/10/23 01:42	1
3-Nitrotoluene	0.36	U J1	0.41	0.36	0.20	ug/L		10/10/23 01:42	1
4-Amino-2,6-dinitrotoluene	**1.1**	**Q J1**	0.15	0.12	0.059	ug/L		10/10/23 01:42	1
4-Nitrotoluene	0.41	U	0.42	0.41	0.10	ug/L		10/10/23 01:42	1
DNX	0.26	U	0.51	0.26	0.10	ug/L		10/10/23 01:42	1
HMX	**0.11**	**J M J1**	0.22	0.21	0.090	ug/L		10/10/23 01:42	1
HMX	**0.19**	**J J1**	0.22	0.21	0.090	ug/L		10/11/23 22:00	1
MNX	0.30	U M	0.51	0.30	0.095	ug/L		10/10/23 01:42	1
Nitrobenzene	0.21	U	0.22	0.21	0.093	ug/L		10/10/23 01:42	1

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

Client Sample ID: LL3mw-241-230901-GW
Date Collected: 10/02/23 10:37
Date Received: 10/03/23 09:35

Lab Sample ID: 280-182239-4
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitroglycerin	2.1	U	2.2	2.1	0.94	ug/L		10/10/23 01:42	1
PETN	1.0	U	1.1	1.0	0.46	ug/L		10/10/23 01:42	1
RDX	**0.58**		0.22	0.21	0.053	ug/L		10/10/23 01:42	1
Tetryl	0.10	U	0.11	0.10	0.033	ug/L		10/10/23 01:42	1
TNX	0.26	U M	0.51	0.26	0.081	ug/L		10/10/23 01:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*94*		*83 - 119*	*10/04/23 13:30*	*10/10/23 01:42*	*1*
1,2-Dinitrobenzene	*93*		*83 - 119*	*10/04/23 13:30*	*10/11/23 22:00*	*1*

Client Sample ID: LL3mw-241-230902-GW
Date Collected: 10/02/23 10:37
Date Received: 10/03/23 09:35

Lab Sample ID: 280-182239-5
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	**1.8**		0.21	0.20	0.084	ug/L		10/10/23 04:22	1
1,3-Dinitrobenzene	0.10	U M	0.11	0.10	0.037	ug/L		10/10/23 04:22	1
2,4,6-Trinitrotoluene	**0.89**		0.11	0.10	0.045	ug/L		10/10/23 04:22	1
2,4-diamino-6-nitrotoluene	0.90	U	1.0	0.90	0.44	ug/L		10/10/23 04:22	1
2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.028	ug/L		10/10/23 04:22	1
2,6-diamino-4-nitrotoluene	0.90	U	1.0	0.90	0.22	ug/L		10/10/23 04:22	1
2,6-Dinitrotoluene	0.080	U	0.10	0.080	0.040	ug/L		10/10/23 04:22	1
2-Amino-4,6-dinitrotoluene	**1.1**		0.11	0.10	0.051	ug/L		10/10/23 04:22	1
2-Nitrotoluene	0.20	U M	0.21	0.20	0.086	ug/L		10/10/23 04:22	1
3,5-Dinitroaniline	**0.37**	**J**	0.40	0.30	0.13	ug/L		10/10/23 04:22	1
3-Nitrotoluene	0.35	U	0.40	0.35	0.20	ug/L		10/10/23 04:22	1
4-Amino-2,6-dinitrotoluene	**0.86**	**Q**	0.15	0.12	0.058	ug/L		10/10/23 04:22	1
4-Nitrotoluene	0.40	U M	0.41	0.40	0.10	ug/L		10/10/23 04:22	1
DNX	0.25	U	0.50	0.25	0.098	ug/L		10/10/23 04:22	1
HMX	**0.11**	**J M J1**	0.21	0.20	0.088	ug/L		10/10/23 04:22	1
HMX	**0.17**	**J J1**	0.21	0.20	0.088	ug/L		10/12/23 01:36	1
MNX	0.29	U M	0.50	0.29	0.093	ug/L		10/10/23 04:22	1
Nitrobenzene	0.20	U	0.21	0.20	0.091	ug/L		10/10/23 04:22	1
Nitroglycerin	2.0	U	2.1	2.0	0.92	ug/L		10/10/23 04:22	1
PETN	1.0	U	1.1	1.0	0.45	ug/L		10/10/23 04:22	1
RDX	**0.60**		0.21	0.20	0.052	ug/L		10/10/23 04:22	1
Tetryl	0.10	U	0.11	0.10	0.032	ug/L		10/10/23 04:22	1
TNX	0.25	U M	0.50	0.25	0.080	ug/L		10/10/23 04:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*99*		*83 - 119*	*10/04/23 13:30*	*10/10/23 04:22*	*1*
1,2-Dinitrobenzene	*95*		*83 - 119*	*10/04/23 13:30*	*10/12/23 01:36*	*1*

Client Sample ID: LL1mw-093-230901-GW
Date Collected: 10/02/23 11:30
Date Received: 10/03/23 09:35

Lab Sample ID: 280-182239-6
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.20	U Q	0.21	0.20	0.083	ug/L		10/10/23 04:45	1
1,3-Dinitrobenzene	0.099	U Q M	0.11	0.099	0.036	ug/L		10/10/23 04:45	1
2,4,6-Trinitrotoluene	0.099	U Q	0.11	0.099	0.044	ug/L		10/10/23 04:45	1
2,4-Dinitrotoluene	0.079	U Q	0.099	0.079	0.027	ug/L		10/10/23 04:45	1

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

Client Sample ID: LL1mw-093-230901-GW
Date Collected: 10/02/23 11:30
Date Received: 10/03/23 09:35

Lab Sample ID: 280-182239-6
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2,6-Dinitrotoluene	0.079	U Q	0.099	0.079	0.040	ug/L		10/10/23 04:45	1
2-Amino-4,6-dinitrotoluene	0.099	U Q	0.11	0.099	0.050	ug/L		10/10/23 04:45	1
2-Nitrotoluene	0.20	U Q M	0.21	0.20	0.085	ug/L		10/10/23 04:45	1
3-Nitrotoluene	0.35	U Q	0.40	0.35	0.19	ug/L		10/10/23 04:45	1
4-Amino-2,6-dinitrotoluene	0.12	U Q	0.15	0.12	0.057	ug/L		10/10/23 04:45	1
4-Nitrotoluene	0.40	U Q	0.41	0.40	0.099	ug/L		10/10/23 04:45	1
HMX	0.20	U M Q	0.21	0.20	0.087	ug/L		10/12/23 02:12	1
Nitrobenzene	0.20	U Q	0.21	0.20	0.090	ug/L		10/10/23 04:45	1
Nitroglycerin	2.0	U Q	2.1	2.0	0.91	ug/L		10/10/23 04:45	1
PETN	0.99	U Q	1.1	0.99	0.44	ug/L		10/10/23 04:45	1
RDX	**0.82**	**Q M J1**	0.21	0.20	0.051	ug/L		10/10/23 04:45	1
RDX	**0.082**	**J Q J1**	0.21	0.20	0.051	ug/L		10/12/23 02:12	1
Tetryl	0.099	U Q M	0.11	0.099	0.031	ug/L		10/10/23 04:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*72*	*Q M*	*83 - 119*	*10/04/23 13:30*	*10/10/23 04:45*	*1*
1,2-Dinitrobenzene	*76*	*Q*	*83 - 119*	*10/04/23 13:30*	*10/12/23 02:12*	*1*

Client Sample ID: LL1mw-092-230901-GW
Date Collected: 10/02/23 11:40
Date Received: 10/03/23 09:35

Lab Sample ID: 280-182239-7
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.21	U Q	0.22	0.21	0.088	ug/L		10/10/23 05:08	1
1,3-Dinitrobenzene	0.10	U Q	0.11	0.10	0.038	ug/L		10/10/23 05:08	1
2,4,6-Trinitrotoluene	0.10	U Q	0.11	0.10	0.047	ug/L		10/10/23 05:08	1
2,4-Dinitrotoluene	0.083	U Q	0.10	0.083	0.029	ug/L		10/10/23 05:08	1
2,6-Dinitrotoluene	0.083	U Q	0.10	0.083	0.042	ug/L		10/10/23 05:08	1
2-Amino-4,6-dinitrotoluene	0.10	U Q	0.11	0.10	0.053	ug/L		10/10/23 05:08	1
2-Nitrotoluene	0.21	U Q M	0.22	0.21	0.089	ug/L		10/10/23 05:08	1
3-Nitrotoluene	0.36	U Q	0.42	0.36	0.20	ug/L		10/10/23 05:08	1
4-Amino-2,6-dinitrotoluene	0.12	U Q	0.16	0.12	0.060	ug/L		10/10/23 05:08	1
4-Nitrotoluene	0.42	U Q	0.43	0.42	0.10	ug/L		10/10/23 05:08	1
HMX	0.21	U Q	0.22	0.21	0.091	ug/L		10/12/23 02:49	1
Nitrobenzene	0.21	U Q	0.22	0.21	0.095	ug/L		10/10/23 05:08	1
Nitroglycerin	2.1	U Q	2.2	2.1	0.96	ug/L		10/10/23 05:08	1
PETN	1.0	U Q	1.1	1.0	0.47	ug/L		10/10/23 05:08	1
RDX	**1.0**	**Q M J1**	0.22	0.21	0.054	ug/L		10/10/23 05:08	1
RDX	**0.097**	**J Q J1**	0.22	0.21	0.054	ug/L		10/12/23 02:49	1
Tetryl	0.10	U Q	0.11	0.10	0.033	ug/L		10/10/23 05:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*68*	*Q M*	*83 - 119*	*10/04/23 13:30*	*10/10/23 05:08*	*1*
1,2-Dinitrobenzene	*72*	*Q*	*83 - 119*	*10/04/23 13:30*	*10/12/23 02:49*	*1*

Client Sample ID: LL3mw-248-230901-GW
Date Collected: 10/02/23 12:12
Date Received: 10/03/23 09:35

Lab Sample ID: 280-182239-8
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.20	U Q M	0.22	0.20	0.086	ug/L		10/10/23 05:31	1
1,3-Dinitrobenzene	0.10	U Q M	0.11	0.10	0.038	ug/L		10/10/23 05:31	1

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

Client Sample ID: LL3mw-248-230901-GW
Date Collected: 10/02/23 12:12
Date Received: 10/03/23 09:35

Lab Sample ID: 280-182239-8
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2,4,6-Trinitrotoluene	0.10	U Q	0.11	0.10	0.046	ug/L		10/10/23 05:31	1
2,4-Dinitrotoluene	0.082	U Q	0.10	0.082	0.028	ug/L		10/10/23 05:31	1
2,6-Dinitrotoluene	0.082	U Q	0.10	0.082	0.041	ug/L		10/10/23 05:31	1
2-Amino-4,6-dinitrotoluene	0.10	U Q	0.11	0.10	0.052	ug/L		10/10/23 05:31	1
2-Nitrotoluene	0.20	U Q M	0.22	0.20	0.088	ug/L		10/10/23 05:31	1
3-Nitrotoluene	0.36	U Q	0.41	0.36	0.20	ug/L		10/10/23 05:31	1
4-Amino-2,6-dinitrotoluene	0.12	U Q	0.15	0.12	0.059	ug/L		10/10/23 05:31	1
4-Nitrotoluene	0.41	U Q	0.42	0.41	0.10	ug/L		10/10/23 05:31	1
HMX	0.20	U M	0.22	0.20	0.090	ug/L		10/12/23 03:24	1
Nitrobenzene	0.20	U Q	0.22	0.20	0.093	ug/L		10/10/23 05:31	1
Nitroglycerin	2.0	U Q	2.2	2.0	0.94	ug/L		10/10/23 05:31	1
PETN	1.0	U Q	1.1	1.0	0.46	ug/L		10/10/23 05:31	1
RDX	0.20	U M	0.22	0.20	0.053	ug/L		10/12/23 03:24	1
Tetryl	0.10	U Q	0.11	0.10	0.033	ug/L		10/10/23 05:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*80*	*Q M*	*83 - 119*	*10/04/23 13:30*	*10/10/23 05:31*	*1*
1,2-Dinitrobenzene	*86*		*83 - 119*	*10/04/23 13:30*	*10/12/23 03:24*	*1*

Client Sample ID: LL1mw-091-230901-GW
Date Collected: 10/02/23 12:30
Date Received: 10/03/23 09:35

Lab Sample ID: 280-182239-9
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.21	U M	0.22	0.21	0.086	ug/L		10/10/23 05:54	1
1,3-Dinitrobenzene	0.10	U M	0.11	0.10	0.038	ug/L		10/10/23 05:54	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.046	ug/L		10/10/23 05:54	1
2,4-Dinitrotoluene	0.082	U	0.10	0.082	0.028	ug/L		10/10/23 05:54	1
2,6-Dinitrotoluene	0.082	U	0.10	0.082	0.041	ug/L		10/10/23 05:54	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.052	ug/L		10/10/23 05:54	1
2-Nitrotoluene	0.21	U M	0.22	0.21	0.088	ug/L		10/10/23 05:54	1
3-Nitrotoluene	0.36	U	0.41	0.36	0.20	ug/L		10/10/23 05:54	1
4-Amino-2,6-dinitrotoluene	0.12	U Q	0.15	0.12	0.059	ug/L		10/10/23 05:54	1
4-Nitrotoluene	0.41	U	0.42	0.41	0.10	ug/L		10/10/23 05:54	1
HMX	0.21	U	0.22	0.21	0.090	ug/L		10/12/23 04:00	1
Nitrobenzene	0.21	U	0.22	0.21	0.094	ug/L		10/10/23 05:54	1
Nitroglycerin	2.1	U	2.2	2.1	0.95	ug/L		10/10/23 05:54	1
PETN	1.0	U	1.1	1.0	0.46	ug/L		10/10/23 05:54	1
RDX	0.21	U M	0.22	0.21	0.053	ug/L		10/12/23 04:00	1
Tetryl	0.10	U	0.11	0.10	0.033	ug/L		10/10/23 05:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*100*	*M*	*83 - 119*	*10/04/23 13:30*	*10/10/23 05:54*	*1*
1,2-Dinitrobenzene	*96*		*83 - 119*	*10/04/23 13:30*	*10/12/23 04:00*	*1*

Client Sample ID: LL3mw-247-230901-GW
Date Collected: 10/02/23 14:32
Date Received: 10/03/23 09:35

Lab Sample ID: 280-182239-12
Matrix: Water

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.20	U M	0.21	0.20	0.085	ug/L		10/10/23 06:17	1
1,3-Dinitrobenzene	0.10	U M	0.11	0.10	0.037	ug/L		10/10/23 06:17	1

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

Client Sample ID: LL3mw-247-230901-GW — **Lab Sample ID: 280-182239-12**
Date Collected: 10/02/23 14:32 — **Matrix: Water**
Date Received: 10/03/23 09:35

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045	ug/L		10/10/23 06:17	1
2,4-Dinitrotoluene	0.081	U	0.10	0.081	0.028	ug/L		10/10/23 06:17	1
2,6-Dinitrotoluene	0.081	U	0.10	0.081	0.041	ug/L		10/10/23 06:17	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051	ug/L		10/10/23 06:17	1
2-Nitrotoluene	0.20	U M	0.21	0.20	0.086	ug/L		10/10/23 06:17	1
3-Nitrotoluene	0.35	U	0.40	0.35	0.20	ug/L		10/10/23 06:17	1
4-Amino-2,6-dinitrotoluene	0.12	U Q	0.15	0.12	0.058	ug/L		10/10/23 06:17	1
4-Nitrotoluene	0.40	U	0.41	0.40	0.10	ug/L		10/10/23 06:17	1
HMX	0.20	U	0.21	0.20	0.089	ug/L		10/12/23 04:36	1
Nitrobenzene	0.20	U	0.21	0.20	0.092	ug/L		10/10/23 06:17	1
Nitroglycerin	2.0	U	2.1	2.0	0.93	ug/L		10/10/23 06:17	1
PETN	1.0	U	1.1	1.0	0.45	ug/L		10/10/23 06:17	1
RDX	**1.9**	**M J1**	0.21	0.20	0.052	ug/L		10/10/23 06:17	1
RDX	**0.23**	**J1**	0.21	0.20	0.052	ug/L		10/12/23 04:36	1
Tetryl	0.10	U	0.11	0.10	0.032	ug/L		10/10/23 06:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*88*		*83 - 119*	*10/04/23 13:30*	*10/10/23 06:17*	*1*
1,2-Dinitrobenzene	*92*		*83 - 119*	*10/04/23 13:30*	*10/12/23 04:36*	*1*

General Chemistry

Client Sample ID: LL12mw-185-230901-GW — **Lab Sample ID: 280-182239-10**
Date Collected: 10/02/23 14:25 — **Matrix: Water**
Date Received: 10/03/23 09:35

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia as N (EPA 350.1)	**0.097**	**J**	0.10	0.050	0.029	mg/L		10/19/23 13:58	1
Nitrate as N (SW846 9056)	**56**	**D**	5.0	2.0	0.90	mg/L		10/03/23 16:13	10

Client Sample ID: LL12mw-185-230902-GW — **Lab Sample ID: 280-182239-11**
Date Collected: 10/02/23 14:25 — **Matrix: Water**
Date Received: 10/03/23 09:35

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia as N (EPA 350.1)	**0.11**		0.10	0.050	0.029	mg/L		10/19/23 14:06	1
Nitrate as N (SW846 9056)	**54**	**D**	5.0	2.0	0.90	mg/L		10/03/23 16:28	10

Default Detection Limits

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

Job ID: 280-182239-1

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

General Chemistry

Analyte	LOQ	DL	Units
Ammonia as N	0.10	0.029	mg/L
Nitrate as N	0.50	0.090	mg/L

Surrogate Summary

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

Job ID: 280-182239-1

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)								
280-182239-1	SCFmw-004-230901-GW	102 M								
280-182239-2	SCFmw-004-230902-GW	97 M								
280-182239-3	LL3mw-237-230901-GW	116								
280-182239-4	LL3mw-241-230901-GW	94								
280-182239-4 MS	LL3mw-241-230901-GW	93								
280-182239-4 MS	LL3mw-241-230901-GW	82 Q								
280-182239-4 MSD	LL3mw-241-230901-GW	91								
280-182239-4 MSD	LL3mw-241-230901-GW	88								
280-182239-5	LL3mw-241-230902-GW	99								
280-182239-6	LL1mw-093-230901-GW	72 Q M								
280-182239-7	LL1mw-092-230901-GW	68 Q M								
280-182239-8	LL3mw-248-230901-GW	80 Q M								
280-182239-9	LL1mw-091-230901-GW	100 M								
280-182239-12	LL3mw-247-230901-GW	88								
LCS 280-628393/2-A	Lab Control Sample	96								
LCS 280-628393/4-A	Lab Control Sample	102								
LCSD 280-628393/3-A	Lab Control Sample Dup	98								
LCSD 280-628393/5-A	Lab Control Sample Dup	98								
MB 280-628393/1-A	Method Blank	99 M								

Surrogate Legend

12DNB = 1,2-Dinitrobenzene

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)								
Lab Sample ID	Client Sample ID	12DNB2 (83-119)								
280-182239-1	SCFmw-004-230901-GW	95								
280-182239-2	SCFmw-004-230902-GW	92								
280-182239-3	LL3mw-237-230901-GW	92 M								
280-182239-4	LL3mw-241-230901-GW	93								
280-182239-4 MS	LL3mw-241-230901-GW	95 M								
280-182239-4 MSD	LL3mw-241-230901-GW	94								
280-182239-5	LL3mw-241-230902-GW	95								
280-182239-6	LL1mw-093-230901-GW	76 Q								
280-182239-7	LL1mw-092-230901-GW	72 Q								
280-182239-8	LL3mw-248-230901-GW	86								
280-182239-9	LL1mw-091-230901-GW	96								
280-182239-12	LL3mw-247-230901-GW	92								

Surrogate Legend

12DNB = 1,2-Dinitrobenzene

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Lab Sample ID: MB 280-628393/1-A
Matrix: Water
Analysis Batch: 628987

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 628393

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.20	U	0.21	0.20	0.084	ug/L		10/09/23 22:38	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037	ug/L		10/09/23 22:38	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045	ug/L		10/09/23 22:38	1
2,4-diamino-6-nitrotoluene	0.90	U	1.0	0.90	0.43	ug/L		10/09/23 22:38	1
2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.027	ug/L		10/09/23 22:38	1
2,6-diamino-4-nitrotoluene	0.90	U	1.0	0.90	0.22	ug/L		10/09/23 22:38	1
2,6-Dinitrotoluene	0.080	U	0.10	0.080	0.040	ug/L		10/09/23 22:38	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051	ug/L		10/09/23 22:38	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.086	ug/L		10/09/23 22:38	1
3,5-Dinitroaniline	0.30	U	0.40	0.30	0.13	ug/L		10/09/23 22:38	1
3-Nitrotoluene	0.35	U	0.40	0.35	0.20	ug/L		10/09/23 22:38	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.058	ug/L		10/09/23 22:38	1
4-Nitrotoluene	0.40	U	0.41	0.40	0.10	ug/L		10/09/23 22:38	1
DNX	0.25	U	0.50	0.25	0.097	ug/L		10/09/23 22:38	1
HMX	0.20	U	0.21	0.20	0.088	ug/L		10/09/23 22:38	1
MNX	0.103	J M	0.50	0.29	0.093	ug/L		10/09/23 22:38	1
Nitrobenzene	0.20	U	0.21	0.20	0.091	ug/L		10/09/23 22:38	1
Nitroglycerin	2.0	U	2.1	2.0	0.92	ug/L		10/09/23 22:38	1
PETN	1.0	U	1.1	1.0	0.45	ug/L		10/09/23 22:38	1
RDX	0.20	U	0.21	0.20	0.052	ug/L		10/09/23 22:38	1
Tetryl	0.10	U	0.11	0.10	0.032	ug/L		10/09/23 22:38	1
TNX	0.25	U	0.50	0.25	0.079	ug/L		10/09/23 22:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*99*	*M*	*83 - 119*	*10/04/23 13:30*	*10/09/23 22:38*	*1*

Lab Sample ID: LCS 280-628393/2-A
Matrix: Water
Analysis Batch: 628987

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 628393

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,3,5-Trinitrobenzene	2.00	2.10		ug/L		105	73 - 125
1,3-Dinitrobenzene	2.00	1.95		ug/L		98	78 - 120
2,4,6-Trinitrotoluene	2.00	1.91		ug/L		95	71 - 123
2,4-Dinitrotoluene	2.00	1.92		ug/L		96	78 - 120
2,6-Dinitrotoluene	2.00	1.87		ug/L		93	77 - 127
2-Amino-4,6-dinitrotoluene	2.00	1.75		ug/L		88	79 - 120
2-Nitrotoluene	2.00	1.59		ug/L		79	70 - 127
3,5-Dinitroaniline	2.00	1.61		ug/L		81	71 - 117
3-Nitrotoluene	2.00	1.55		ug/L		78	73 - 125
4-Amino-2,6-dinitrotoluene	2.00	1.39	Q	ug/L		69	76 - 125
4-Nitrotoluene	2.00	1.53		ug/L		77	71 - 127
DNX	2.01	2.00	M	ug/L		99	66 - 119
HMX	2.00	1.74	M	ug/L		87	65 - 135
MNX	2.34	2.27		ug/L		97	57 - 132
Nitrobenzene	2.00	1.72		ug/L		86	65 - 134
Nitroglycerin	20.0	20.0		ug/L		100	74 - 127
PETN	20.0	20.2		ug/L		101	73 - 127

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

Lab Sample ID: LCS 280-628393/2-A
Matrix: Water
Analysis Batch: 628987

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 628393

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
RDX	2.00	1.87		ug/L		93	68 - 130
Tetryl	2.00	2.03		ug/L		102	64 - 128
TNX	2.00	1.76	M	ug/L		88	50 - 150

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

Lab Sample ID: LCS 280-628393/4-A
Matrix: Water
Analysis Batch: 628987

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 628393

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4-diamino-6-nitrotoluene	2.00	1.78	M	ug/L		89	68 - 122
2,6-diamino-4-nitrotoluene	2.00	1.86	M	ug/L		93	72 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dinitrobenzene	*102*		*83 - 119*

Lab Sample ID: LCSD 280-628393/3-A
Matrix: Water
Analysis Batch: 628987

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 628393

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,3,5-Trinitrobenzene	2.00	2.14		ug/L		107	73 - 125	2	20
1,3-Dinitrobenzene	2.00	2.03		ug/L		101	78 - 120	4	20
2,4,6-Trinitrotoluene	2.00	1.96		ug/L		98	71 - 123	3	20
2,4-Dinitrotoluene	2.00	1.97		ug/L		98	78 - 120	3	20
2,6-Dinitrotoluene	2.00	1.96		ug/L		98	77 - 127	5	20
2-Amino-4,6-dinitrotoluene	2.00	1.87		ug/L		93	79 - 120	6	20
2-Nitrotoluene	2.00	1.65		ug/L		83	70 - 127	4	20
3,5-Dinitroaniline	2.00	1.75		ug/L		88	71 - 117	8	20
3-Nitrotoluene	2.00	1.67		ug/L		84	73 - 125	7	20
4-Amino-2,6-dinitrotoluene	2.00	1.61		ug/L		80	76 - 125	15	20
4-Nitrotoluene	2.00	1.62		ug/L		81	71 - 127	6	20
DNX	2.01	1.99	M	ug/L		99	66 - 119	1	20
HMX	2.00	1.78	M	ug/L		89	65 - 135	2	20
MNX	2.34	2.30		ug/L		98	57 - 132	1	20
Nitrobenzene	2.00	1.77		ug/L		88	65 - 134	3	20
Nitroglycerin	20.0	20.4		ug/L		102	74 - 127	2	20
PETN	20.0	20.7		ug/L		104	73 - 127	3	20
RDX	2.00	1.99		ug/L		100	68 - 130	6	20
Tetryl	2.00	2.02		ug/L		101	64 - 128	0	20
TNX	2.00	1.72	M	ug/L		86	50 - 150	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dinitrobenzene	*98*		*83 - 119*

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

Lab Sample ID: LCSD 280-628393/5-A
Matrix: Water
Analysis Batch: 628987

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 628393

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4-diamino-6-nitrotoluene			2.00	1.48	M	ug/L		74	68 - 122	19	20
2,6-diamino-4-nitrotoluene			2.00	1.62	M	ug/L		81	72 - 122	14	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dinitrobenzene	*98*		*83 - 119*

Lab Sample ID: 280-182239-4 MS
Matrix: Water
Analysis Batch: 628987

Client Sample ID: LL3mw-241-230901-GW
Prep Type: Total/NA
Prep Batch: 628393

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,3,5-Trinitrobenzene	1.7		2.03	3.64		ug/L		97	73 - 125
1,3-Dinitrobenzene	0.10	U M	2.03	2.23	M	ug/L		110	78 - 120
2,4,6-Trinitrotoluene	0.89		2.03	2.84		ug/L		96	71 - 123
2,4-Dinitrotoluene	0.082	U	2.03	2.08		ug/L		102	78 - 120
2,6-Dinitrotoluene	0.082	U	2.03	2.10		ug/L		103	77 - 127
2-Nitrotoluene	0.21	U M	2.03	1.77		ug/L		87	70 - 127
3,5-Dinitroaniline	0.37	J	2.03	2.20		ug/L		90	71 - 117
3-Nitrotoluene	0.36	U J1	2.03	1.52		ug/L		75	73 - 125
4-Amino-2,6-dinitrotoluene	1.1	Q J1	2.03	2.87		ug/L		89	76 - 125
4-Nitrotoluene	0.41	U	2.03	1.67		ug/L		82	71 - 127
DNX	0.26	U	2.04	1.88	M	ug/L		92	66 - 119
HMX	0.11	M J1	2.03	1.80	M	ug/L		83	65 - 135
MNX	0.30	U M	2.38	2.33	M	ug/L		98	57 - 132
Nitrobenzene	0.21	U	2.03	1.80		ug/L		88	65 - 134
Nitroglycerin	2.1	U	20.3	19.7		ug/L		97	74 - 127
PETN	1.0	U	20.3	21.0		ug/L		103	73 - 127
RDX	0.58		2.03	2.41	M	ug/L		90	68 - 130
Tetryl	0.10	U	2.03	2.36		ug/L		116	64 - 128
TNX	0.26	U M	2.04	1.75	M	ug/L		86	50 - 150

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

Lab Sample ID: 280-182239-4 MS
Matrix: Water
Analysis Batch: 628987

Client Sample ID: LL3mw-241-230901-GW
Prep Type: Total/NA
Prep Batch: 628393

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
2,4-diamino-6-nitrotoluene	0.92	U J1	2.01	0.977	J M J1	ug/L		49	68 - 122
2,6-diamino-4-nitrotoluene	0.92	U J1	2.01	1.31	M J1	ug/L		65	72 - 122

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dinitrobenzene	*82*	*Q*	*83 - 119*

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

Lab Sample ID: 280-182239-4 MS
Matrix: Water
Analysis Batch: 629372

Client Sample ID: LL3mw-241-230901-GW
Prep Type: Total/NA
Prep Batch: 628393

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
2-Amino-4,6-dinitrotoluene	0.10	U J1	2.03	3.49	J1	ug/L		172	79 - 120		
HMX	0.19	J1	2.03	1.99	M	ug/L		88	65 - 135		

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

Lab Sample ID: 280-182239-4 MSD
Matrix: Water
Analysis Batch: 628987

Client Sample ID: LL3mw-241-230901-GW
Prep Type: Total/NA
Prep Batch: 628393

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,3,5-Trinitrobenzene	1.7		2.02	3.64		ug/L		98	73 - 125	0	20
1,3-Dinitrobenzene	0.10	U M	2.02	2.16	M	ug/L		107	78 - 120	3	20
2,4,6-Trinitrotoluene	0.89		2.02	2.83		ug/L		96	71 - 123	0	20
2,4-Dinitrotoluene	0.082	U	2.02	2.05		ug/L		102	78 - 120	1	20
2,6-Dinitrotoluene	0.082	U	2.02	1.94		ug/L		96	77 - 127	8	20
2-Nitrotoluene	0.21	U M	2.02	1.67		ug/L		83	70 - 127	6	20
3,5-Dinitroaniline	0.37	J	2.02	2.07		ug/L		84	71 - 117	6	20
3-Nitrotoluene	0.36	U J1	2.02	1.43	J1	ug/L		71	73 - 125	6	20
4-Amino-2,6-dinitrotoluene	1.1	Q J1	2.02	2.52	J1	ug/L		73	76 - 125	13	20
4-Nitrotoluene	0.41	U	2.02	1.60		ug/L		80	71 - 127	4	20
DNX	0.26	U	2.02	1.84	M	ug/L		91	66 - 119	2	20
HMX	0.11	M J1	2.02	1.81	M	ug/L		84	65 - 135	1	20
MNX	0.30	U M	2.36	2.25	M	ug/L		95	57 - 132	3	20
Nitrobenzene	0.21	U	2.02	1.70		ug/L		84	65 - 134	6	20
Nitroglycerin	2.1	U	20.2	19.6		ug/L		97	74 - 127	0	20
PETN	1.0	U	20.2	20.8		ug/L		103	73 - 127	1	20
RDX	0.58		2.02	2.41	M	ug/L		91	68 - 130	0	20
Tetryl	0.10	U	2.02	2.32		ug/L		115	64 - 128	2	20
TNX	0.26	U M	2.02	1.74	M	ug/L		86	50 - 150	0	20

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

Lab Sample ID: 280-182239-4 MSD
Matrix: Water
Analysis Batch: 628987

Client Sample ID: LL3mw-241-230901-GW
Prep Type: Total/NA
Prep Batch: 628393

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4-diamino-6-nitrotoluene	0.92	U J1	2.11	1.51	M J1	ug/L		71	68 - 122	43	20
2,6-diamino-4-nitrotoluene	0.92	U J1	2.11	1.78	M J1	ug/L		84	72 - 122	30	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dinitrobenzene	*88*		*83 - 119*

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

Lab Sample ID: 280-182239-4 MSD
Matrix: Water
Analysis Batch: 629372

Client Sample ID: LL3mw-241-230901-GW
Prep Type: Total/NA
Prep Batch: 628393

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2-Amino-4,6-dinitrotoluene	0.10	U J1	2.02	3.29	J1	ug/L		163	79 - 120	6	20
HMX	0.19	J1	2.02	1.99		ug/L		89	65 - 135	0	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dinitrobenzene	*94*		*83 - 119*

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-630439/51
Matrix: Water
Analysis Batch: 630439

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia as N	0.050	U	0.10	0.050	0.029	mg/L		10/19/23 12:43	1

Lab Sample ID: LCS 280-630439/52
Matrix: Water
Analysis Batch: 630439

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

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

Lab Sample ID: LCSD 280-630439/53
Matrix: Water
Analysis Batch: 630439

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ammonia as N	2.50	2.52		mg/L		101	90 - 110	1	10

Lab Sample ID: 280-182239-10 MS
Matrix: Water
Analysis Batch: 630439

Client Sample ID: LL12mw-185-230901-GW
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia as N	0.097	J	1.00	1.10		mg/L		100	90 - 110

Lab Sample ID: 280-182239-10 MSD
Matrix: Water
Analysis Batch: 630439

Client Sample ID: LL12mw-185-230901-GW
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ammonia as N	0.097	J	1.00	1.13		mg/L		103	90 - 110	3	10

Method: 9056 - Anions, Ion Chromatography

Lab Sample ID: MB 280-628268/6
Matrix: Water
Analysis Batch: 628268

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate as N	0.20	U	0.50	0.20	0.090	mg/L		10/03/23 13:44	1

Lab Sample ID: LCS 280-628268/4
Matrix: Water
Analysis Batch: 628268

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Nitrate as N			5.00	4.63		mg/L		93	88 - 111		

Lab Sample ID: LCSD 280-628268/5
Matrix: Water
Analysis Batch: 628268

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate as N			5.00	4.62		mg/L		92	88 - 111	0	10

Lab Sample ID: MRL 280-628268/3
Matrix: Water
Analysis Batch: 628268

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

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
Nitrate as N			0.500	0.404	J	mg/L		81	50 - 150		

HPLC/IC

Prep Batch: 628393

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-182239-1	SCFmw-004-230901-GW	Total/NA	Water	3535	
280-182239-2	SCFmw-004-230902-GW	Total/NA	Water	3535	
280-182239-3	LL3mw-237-230901-GW	Total/NA	Water	3535	
280-182239-4	LL3mw-241-230901-GW	Total/NA	Water	3535	
280-182239-5	LL3mw-241-230902-GW	Total/NA	Water	3535	
280-182239-6	LL1mw-093-230901-GW	Total/NA	Water	3535	
280-182239-7	LL1mw-092-230901-GW	Total/NA	Water	3535	
280-182239-8	LL3mw-248-230901-GW	Total/NA	Water	3535	
280-182239-9	LL1mw-091-230901-GW	Total/NA	Water	3535	
280-182239-12	LL3mw-247-230901-GW	Total/NA	Water	3535	
MB 280-628393/1-A	Method Blank	Total/NA	Water	3535	
LCS 280-628393/2-A	Lab Control Sample	Total/NA	Water	3535	
LCS 280-628393/4-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 280-628393/3-A	Lab Control Sample Dup	Total/NA	Water	3535	
LCSD 280-628393/5-A	Lab Control Sample Dup	Total/NA	Water	3535	
280-182239-4 MS	LL3mw-241-230901-GW	Total/NA	Water	3535	
280-182239-4 MS	LL3mw-241-230901-GW	Total/NA	Water	3535	
280-182239-4 MSD	LL3mw-241-230901-GW	Total/NA	Water	3535	
280-182239-4 MSD	LL3mw-241-230901-GW	Total/NA	Water	3535	

Analysis Batch: 628987

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-182239-1	SCFmw-004-230901-GW	Total/NA	Water	8330B	628393
280-182239-2	SCFmw-004-230902-GW	Total/NA	Water	8330B	628393
280-182239-3	LL3mw-237-230901-GW	Total/NA	Water	8330B	628393
280-182239-4	LL3mw-241-230901-GW	Total/NA	Water	8330B	628393
280-182239-5	LL3mw-241-230902-GW	Total/NA	Water	8330B	628393
280-182239-6	LL1mw-093-230901-GW	Total/NA	Water	8330B	628393
280-182239-7	LL1mw-092-230901-GW	Total/NA	Water	8330B	628393
280-182239-8	LL3mw-248-230901-GW	Total/NA	Water	8330B	628393
280-182239-9	LL1mw-091-230901-GW	Total/NA	Water	8330B	628393
280-182239-12	LL3mw-247-230901-GW	Total/NA	Water	8330B	628393
MB 280-628393/1-A	Method Blank	Total/NA	Water	8330B	628393
LCS 280-628393/2-A	Lab Control Sample	Total/NA	Water	8330B	628393
LCS 280-628393/4-A	Lab Control Sample	Total/NA	Water	8330B	628393
LCSD 280-628393/3-A	Lab Control Sample Dup	Total/NA	Water	8330B	628393
LCSD 280-628393/5-A	Lab Control Sample Dup	Total/NA	Water	8330B	628393
280-182239-4 MS	LL3mw-241-230901-GW	Total/NA	Water	8330B	628393
280-182239-4 MS	LL3mw-241-230901-GW	Total/NA	Water	8330B	628393
280-182239-4 MSD	LL3mw-241-230901-GW	Total/NA	Water	8330B	628393
280-182239-4 MSD	LL3mw-241-230901-GW	Total/NA	Water	8330B	628393

Analysis Batch: 629372

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-182239-1	SCFmw-004-230901-GW	Total/NA	Water	8330B	628393
280-182239-2	SCFmw-004-230902-GW	Total/NA	Water	8330B	628393
280-182239-3	LL3mw-237-230901-GW	Total/NA	Water	8330B	628393
280-182239-4	LL3mw-241-230901-GW	Total/NA	Water	8330B	628393
280-182239-5	LL3mw-241-230902-GW	Total/NA	Water	8330B	628393
280-182239-6	LL1mw-093-230901-GW	Total/NA	Water	8330B	628393
280-182239-7	LL1mw-092-230901-GW	Total/NA	Water	8330B	628393

HPLC/IC (Continued)

Analysis Batch: 629372 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-182239-8	LL3mw-248-230901-GW	Total/NA	Water	8330B	628393
280-182239-9	LL1mw-091-230901-GW	Total/NA	Water	8330B	628393
280-182239-12	LL3mw-247-230901-GW	Total/NA	Water	8330B	628393
280-182239-4 MS	LL3mw-241-230901-GW	Total/NA	Water	8330B	628393
280-182239-4 MSD	LL3mw-241-230901-GW	Total/NA	Water	8330B	628393

General Chemistry

Analysis Batch: 628268

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-182239-10	LL12mw-185-230901-GW	Total/NA	Water	9056	
280-182239-11	LL12mw-185-230902-GW	Total/NA	Water	9056	
MB 280-628268/6	Method Blank	Total/NA	Water	9056	
LCS 280-628268/4	Lab Control Sample	Total/NA	Water	9056	
LCSD 280-628268/5	Lab Control Sample Dup	Total/NA	Water	9056	
MRL 280-628268/3	Lab Control Sample	Total/NA	Water	9056	

Analysis Batch: 630439

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-182239-10	LL12mw-185-230901-GW	Total/NA	Water	350.1	
280-182239-11	LL12mw-185-230902-GW	Total/NA	Water	350.1	
MB 280-630439/51	Method Blank	Total/NA	Water	350.1	
LCS 280-630439/52	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-630439/53	Lab Control Sample Dup	Total/NA	Water	350.1	
280-182239-10 MS	LL12mw-185-230901-GW	Total/NA	Water	350.1	
280-182239-10 MSD	LL12mw-185-230901-GW	Total/NA	Water	350.1	

Client Sample ID: SCFmw-004-230901-GW
Lab Sample ID: 280-182239-1
Date Collected: 10/02/23 09:15
Matrix: Water
Date Received: 10/03/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			482.8 mL	5 mL	628393	10/04/23 13:30	EH	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	629372	10/11/23 20:48	JPG	EET DEN
Total/NA	Prep	3535			482.8 mL	5 mL	628393	10/04/23 13:30	EH	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	628987	10/10/23 00:33	JPG	EET DEN

Client Sample ID: SCFmw-004-230902-GW
Lab Sample ID: 280-182239-2
Date Collected: 10/02/23 09:15
Matrix: Water
Date Received: 10/03/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			489.7 mL	5 mL	628393	10/04/23 13:30	EH	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	629372	10/12/23 05:12	JPG	EET DEN
Total/NA	Prep	3535			489.7 mL	5 mL	628393	10/04/23 13:30	EH	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	628987	10/10/23 00:56	JPG	EET DEN

Client Sample ID: LL3mw-237-230901-GW
Lab Sample ID: 280-182239-3
Date Collected: 10/02/23 09:50
Matrix: Water
Date Received: 10/03/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			487.5 mL	5 mL	628393	10/04/23 13:30	EH	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	629372	10/11/23 21:24	JPG	EET DEN
Total/NA	Prep	3535			487.5 mL	5 mL	628393	10/04/23 13:30	EH	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	628987	10/10/23 01:19	JPG	EET DEN

Client Sample ID: LL3mw-241-230901-GW
Lab Sample ID: 280-182239-4
Date Collected: 10/02/23 10:37
Matrix: Water
Date Received: 10/03/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			487.8 mL	5 mL	628393	10/04/23 13:30	EH	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	629372	10/11/23 22:00	JPG	EET DEN
Total/NA	Prep	3535			487.8 mL	5 mL	628393	10/04/23 13:30	EH	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	628987	10/10/23 01:42	JPG	EET DEN

Client Sample ID: LL3mw-241-230902-GW
Lab Sample ID: 280-182239-5
Date Collected: 10/02/23 10:37
Matrix: Water
Date Received: 10/03/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			498.1 mL	5 mL	628393	10/04/23 13:30	EH	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	629372	10/12/23 01:36	JPG	EET DEN
Total/NA	Prep	3535			498.1 mL	5 mL	628393	10/04/23 13:30	EH	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	628987	10/10/23 04:22	JPG	EET DEN

Client Sample ID: LL1mw-093-230901-GW
Lab Sample ID: 280-182239-6
Date Collected: 10/02/23 11:30
Matrix: Water
Date Received: 10/03/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			505.8 mL	5 mL	628393	10/04/23 13:30	EH	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	629372	10/12/23 02:12	JPG	EET DEN
Total/NA	Prep	3535			505.8 mL	5 mL	628393	10/04/23 13:30	EH	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	628987	10/10/23 04:45	JPG	EET DEN

Client Sample ID: LL1mw-092-230901-GW
Lab Sample ID: 280-182239-7
Date Collected: 10/02/23 11:40
Matrix: Water
Date Received: 10/03/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			480.2 mL	5 mL	628393	10/04/23 13:30	EH	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	629372	10/12/23 02:49	JPG	EET DEN
Total/NA	Prep	3535			480.2 mL	5 mL	628393	10/04/23 13:30	EH	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	628987	10/10/23 05:08	JPG	EET DEN

Client Sample ID: LL3mw-248-230901-GW
Lab Sample ID: 280-182239-8
Date Collected: 10/02/23 12:12
Matrix: Water
Date Received: 10/03/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			487.9 mL	5 mL	628393	10/04/23 13:30	EH	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	629372	10/12/23 03:24	JPG	EET DEN
Total/NA	Prep	3535			487.9 mL	5 mL	628393	10/04/23 13:30	EH	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	628987	10/10/23 05:31	JPG	EET DEN

Client Sample ID: LL1mw-091-230901-GW
Lab Sample ID: 280-182239-9
Date Collected: 10/02/23 12:30
Matrix: Water
Date Received: 10/03/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			486.5 mL	5 mL	628393	10/04/23 13:30	EH	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	629372	10/12/23 04:00	JPG	EET DEN
Total/NA	Prep	3535			486.5 mL	5 mL	628393	10/04/23 13:30	EH	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	628987	10/10/23 05:54	JPG	EET DEN

Client Sample ID: LL12mw-185-230901-GW
Lab Sample ID: 280-182239-10
Date Collected: 10/02/23 14:25
Matrix: Water
Date Received: 10/03/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	350.1		1	10 mL	10 mL	630439	10/19/23 13:58	MMP	EET DEN
Total/NA	Analysis	9056		10	10 mL	10 mL	628268	10/03/23 16:13	MEC	EET DEN

Lab Chronicle

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

Job ID: 280-182239-1

Client Sample ID: LL12mw-185-230902-GW

Lab Sample ID: 280-182239-11

Date Collected: 10/02/23 14:25

Matrix: Water

Date Received: 10/03/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	350.1		1	10 mL	10 mL	630439	10/19/23 14:06	MMP	EET DEN
Total/NA	Analysis	9056		10	10 mL	10 mL	628268	10/03/23 16:28	MEC	EET DEN

Client Sample ID: LL3mw-247-230901-GW

Lab Sample ID: 280-182239-12

Date Collected: 10/02/23 14:32

Matrix: Water

Date Received: 10/03/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			494.9 mL	5 mL	628393	10/04/23 13:30	EH	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	629372	10/12/23 04:36	JPG	EET DEN
Total/NA	Prep	3535			494.9 mL	5 mL	628393	10/04/23 13:30	EH	EET DEN
Total/NA	Analysis	8330B		1	1 mL	1 mL	628987	10/10/23 06:17	JPG	EET DEN

Laboratory References:

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

Accreditation/Certification Summary

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

Job ID: 280-182239-1

Laboratory: Eurofins Denver

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

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

Method Summary

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

Job ID: 280-182239-1

Method	Method Description	Protocol	Laboratory
8330B	Nitroaromatics and Nitramines (HPLC)	EPA	EET DEN
350.1	Nitrogen, Ammonia	EPA	EET DEN
9056	Anions, Ion Chromatography	SW846	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: 280-182239-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-182239-1	SCFmw-004-230901-GW	Water	10/02/23 09:15	10/03/23 09:35
280-182239-2	SCFmw-004-230902-GW	Water	10/02/23 09:15	10/03/23 09:35
280-182239-3	LL3mw-237-230901-GW	Water	10/02/23 09:50	10/03/23 09:35
280-182239-4	LL3mw-241-230901-GW	Water	10/02/23 10:37	10/03/23 09:35
280-182239-5	LL3mw-241-230902-GW	Water	10/02/23 10:37	10/03/23 09:35
280-182239-6	LL1mw-093-230901-GW	Water	10/02/23 11:30	10/03/23 09:35
280-182239-7	LL1mw-092-230901-GW	Water	10/02/23 11:40	10/03/23 09:35
280-182239-8	LL3mw-248-230901-GW	Water	10/02/23 12:12	10/03/23 09:35
280-182239-9	LL1mw-091-230901-GW	Water	10/02/23 12:30	10/03/23 09:35
280-182239-10	LL12mw-185-230901-GW	Water	10/02/23 14:25	10/03/23 09:35
280-182239-11	LL12mw-185-230902-GW	Water	10/02/23 14:25	10/03/23 09:35
280-182239-12	LL3mw-247-230901-GW	Water	10/02/23 14:32	10/03/23 09:35

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 627290

Lab Sample ID: IC 280-627290/10 Client Sample ID:

Date Analyzed: 09/25/23 18:42 Lab File ID: 09250010.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Nitrotoluene	15.65	Baseline	LV5D	09/26/23 13:59
4-Nitrotoluene	15.73	Baseline	LV5D	09/26/23 13:59

Lab Sample ID: IC 280-627290/14 Client Sample ID:

Date Analyzed: 09/25/23 21:05 Lab File ID: 09250014.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PETN	24.21	Baseline	LV5D	09/26/23 14:02

Lab Sample ID: IC 280-627290/15 Client Sample ID:

Date Analyzed: 09/25/23 21:42 Lab File ID: 09250015.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
DNX	6.13	Baseline	LV5D	09/26/23 14:00
HMX	6.77	Baseline	LV5D	09/26/23 14:00
MNX	7.62	Baseline	LV5D	09/26/23 14:00
Picric acid	8.65	Baseline	LV5D	09/26/23 14:00
RDX	9.00	Baseline	LV5D	09/26/23 14:00
PETN	24.23	Baseline	LV5D	09/26/23 14:02

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 627290

Lab Sample ID: IC 280-627290/16 Client Sample ID:

Date Analyzed: 09/25/23 22:18 Lab File ID: 09250016.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
DNX	6.14	Baseline	LV5D	09/26/23 14:00
HMX	6.78	Baseline	LV5D	09/26/23 14:00
MNX	7.63	Baseline	LV5D	09/26/23 14:00
Picric acid	8.69	Baseline	LV5D	09/26/23 14:00
RDX	9.02	Baseline	LV5D	09/26/23 14:00
PETN	24.22	Baseline	LV5D	09/26/23 14:02

Lab Sample ID: IC 280-627290/17 Client Sample ID:

Date Analyzed: 09/25/23 22:54 Lab File ID: 09250017.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.77	Baseline	LV5D	09/26/23 14:01
MNX	7.62	Baseline	LV5D	09/26/23 14:01
Picric acid	8.68	Baseline	LV5D	09/26/23 14:01
RDX	9.01	Baseline	LV5D	09/26/23 14:01
Nitrobenzene	11.55	Baseline	LV5D	09/26/23 14:01
1,2-Dinitrobenzene	12.48	Baseline	LV5D	09/26/23 14:01
3,5-Dinitroaniline	14.34	Baseline	LV5D	09/26/23 14:01
1,3-Dinitrobenzene	14.64	Baseline	LV5D	09/26/23 14:01
2-Nitrotoluene	15.68	Baseline	LV5D	09/26/23 14:02
4-Nitrotoluene	15.91	Unspecified		
4-Amino-2,6-dinitrotoluene	16.42	Baseline	LV5D	09/26/23 14:01
3-Nitrotoluene	16.74	Baseline	LV5D	09/26/23 14:01
2-Amino-4,6-dinitrotoluene	17.22	Baseline	LV5D	09/26/23 14:01
1,3,5-Trinitrobenzene	17.44	Baseline	LV5D	09/26/23 14:01
2,6-Dinitrotoluene	18.52	Baseline	LV5D	09/26/23 14:01
2,4-Dinitrotoluene	18.98	Baseline	LV5D	09/26/23 14:01
PETN	24.17	Baseline	LV5D	09/26/23 14:02

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 627290

Lab Sample ID: IC 280-627290/18 Client Sample ID:

Date Analyzed: 09/25/23 23:30 Lab File ID: 09250018.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.77	Baseline	LV5D	09/26/23 14:03
MNX	7.62	Baseline	LV5D	09/26/23 14:03
Picric acid	8.70	Baseline	LV5D	09/26/23 14:03
RDX	9.01	Baseline	LV5D	09/26/23 14:03
Nitrobenzene	11.55	Baseline	LV5D	09/26/23 14:03
1,2-Dinitrobenzene	12.49	Baseline	LV5D	09/26/23 14:03
3,5-Dinitroaniline	14.36	Baseline	LV5D	09/26/23 14:04
1,3-Dinitrobenzene	14.66	Baseline	LV5D	09/26/23 14:04
2-Nitrotoluene	15.70	Baseline	LV5D	09/26/23 14:04
4-Nitrotoluene	15.93	Baseline	LV5D	09/26/23 14:04
4-Amino-2,6-dinitrotoluene	16.44	Baseline	LV5D	09/26/23 14:04
3-Nitrotoluene	16.75	Baseline	LV5D	09/26/23 14:04
2-Amino-4,6-dinitrotoluene	17.24	Baseline	LV5D	09/26/23 14:04
1,3,5-Trinitrobenzene	17.45	Baseline	LV5D	09/26/23 14:04
2,6-Dinitrotoluene	18.56	Baseline	LV5D	09/26/23 14:04
2,4-Dinitrotoluene	19.02	Baseline	LV5D	09/26/23 14:04
PETN	24.18	Baseline	LV5D	09/26/23 14:02

Lab Sample ID: IC 280-627290/20 Client Sample ID:

Date Analyzed: 09/26/23 00:42 Lab File ID: 09250020.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	4.20	Peak assignment corrected	LV5D	09/26/23 14:14

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 627290

Lab Sample ID: IC 280-627290/21 Client Sample ID:

Date Analyzed: 09/26/23 01:18 Lab File ID: 09250021.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	4.21	Peak assignment corrected	LV5D	09/26/23 14:14

Lab Sample ID: IC 280-627290/22 Client Sample ID:

Date Analyzed: 09/26/23 01:54 Lab File ID: 09250022.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	4.22	Peak assignment corrected	LV5D	09/26/23 14:14

Lab Sample ID: IC 280-627290/23 Client Sample ID:

Date Analyzed: 09/26/23 02:30 Lab File ID: 09250023.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	4.23	Peak assignment corrected	LV5D	09/26/23 14:14

Lab Sample ID: IC 280-627290/24 Client Sample ID:

Date Analyzed: 09/26/23 03:06 Lab File ID: 09250024.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	4.22	Peak assignment corrected	LV5D	09/26/23 14:14

Lab Sample ID: IC 280-627290/25 Client Sample ID:

Date Analyzed: 09/26/23 03:42 Lab File ID: 09250025.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	4.23	Peak assignment corrected	LV5D	09/26/23 14:14

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 627290

Lab Sample ID: IC 280-627290/26 Client Sample ID:

Date Analyzed: 09/26/23 04:18 Lab File ID: 09250026.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	4.23	Peak assignment corrected	LV5D	09/26/23 14:14

Lab Sample ID: IC 280-627290/27 Client Sample ID:

Date Analyzed: 09/26/23 04:54 Lab File ID: 09250027.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	4.23	Peak assignment corrected	LV5D	09/26/23 14:14

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 629372

Lab Sample ID: 280-182239-1 Client Sample ID: SCFmw-004-230901-GW

Date Analyzed: 10/11/23 20:48 Lab File ID: 10110015.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Amino-2,6-dinitrotoluene		Invalid Compound ID	K8YG	10/12/23 12:33
4-Nitrotoluene		Invalid Compound ID	K8YG	10/12/23 12:33
Nitroglycerin		Invalid Compound ID	K8YG	10/12/23 12:33
2-Amino-4,6-dinitrotoluene	17.36	Baseline	K8YG	10/12/23 12:33

Lab Sample ID: 280-182239-3 Client Sample ID: LL3mw-237-230901-GW

Date Analyzed: 10/11/23 21:24 Lab File ID: 10110016.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	12.67	Baseline	K8YG	10/12/23 12:34
2-Amino-4,6-dinitrotoluene	17.40	Baseline	K8YG	10/12/23 12:34

Lab Sample ID: 280-182239-4 Client Sample ID: LL3mw-241-230901-GW

Date Analyzed: 10/11/23 22:00 Lab File ID: 10110017.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Nitrotoluene		Invalid Compound ID	K8YG	10/12/23 12:34
3,5-Dinitroaniline	14.49	Baseline	K8YG	10/12/23 12:34
4-Amino-2,6-dinitrotoluene	16.64	Baseline	K8YG	10/12/23 12:35

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 629372

Lab Sample ID: 280-182239-4 MS Client Sample ID: LL3mw-241-230901-GW MS

Date Analyzed: 10/11/23 22:36 Lab File ID: 10110018.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
DNX	6.17	Baseline	K8YG	10/12/23 12:35
HMX	6.83	Baseline	K8YG	10/12/23 12:36
MNX	7.69	Baseline	K8YG	10/12/23 12:36
Nitrobenzene	11.70	Baseline	K8YG	10/12/23 12:36
1,2-Dinitrobenzene	12.66	Baseline	K8YG	10/12/23 12:36
2,4-Dinitrotoluene	19.19	Baseline	K8YG	10/12/23 12:36
2,4,6-Trinitrotoluene	23.31	Baseline	K8YG	10/12/23 12:36

Lab Sample ID: 280-182239-4 MSD Client Sample ID: LL3mw-241-230901-GW MSD

Date Analyzed: 10/11/23 23:12 Lab File ID: 10110019.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,4-Dinitrotoluene	19.13	Baseline	K8YG	10/12/23 12:37

Lab Sample ID: CCV 280-629372/20 Client Sample ID:

Date Analyzed: 10/11/23 23:49 Lab File ID: 10110020.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3,5-Trinitrobenzene	17.56	Baseline	K8YG	10/12/23 12:38

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 629372

Lab Sample ID: 280-182239-5 Client Sample ID: LL3mw-241-230902-GW

Date Analyzed: 10/12/23 01:36 Lab File ID: 10110023.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	9.05	Baseline	K8YG	10/12/23 12:39
3,5-Dinitroaniline	14.45	Baseline	K8YG	10/12/23 12:40
4-Amino-2,6-dinitrotoluene	16.57	Baseline	K8YG	10/12/23 12:40
1,3,5-Trinitrobenzene	17.57	Baseline	K8YG	10/12/23 12:40
2,4,6-Trinitrotoluene	23.22	Baseline	K8YG	10/12/23 12:41

Lab Sample ID: 280-182239-6 Client Sample ID: LL1mw-093-230901-GW

Date Analyzed: 10/12/23 02:12 Lab File ID: 10110024.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3,5-Trinitrobenzene		Invalid Compound ID	K8YG	10/12/23 12:47
1,3-Dinitrobenzene		Invalid Compound ID	K8YG	10/12/23 12:46
2-Amino-4,6-dinitrotoluene		Invalid Compound ID	K8YG	10/12/23 12:47
4-Amino-2,6-dinitrotoluene		Invalid Compound ID	K8YG	10/12/23 12:46
4-Nitrotoluene		Invalid Compound ID	K8YG	10/12/23 12:46
HMX		Invalid Compound ID	K8YG	10/12/23 12:46

Lab Sample ID: 280-182239-7 Client Sample ID: LL1mw-092-230901-GW

Date Analyzed: 10/12/23 02:49 Lab File ID: 10110025.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Amino-4,6-dinitrotoluene		Invalid Compound ID	K8YG	10/12/23 12:47
2-Nitrotoluene		Invalid Compound ID	K8YG	10/12/23 12:47
4-Amino-2,6-dinitrotoluene		Invalid Compound ID	K8YG	10/12/23 12:47

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 629372

Lab Sample ID: 280-182239-8 Client Sample ID: LL3mw-248-230901-GW

Date Analyzed: 10/12/23 03:24 Lab File ID: 10110026.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3,5-Trinitrobenzene		Invalid Compound ID	K8YG	10/12/23 12:48
1,3-Dinitrobenzene		Invalid Compound ID	K8YG	10/12/23 12:48
2-Amino-4,6-dinitrotoluene		Invalid Compound ID	K8YG	10/12/23 12:48
4-Amino-2,6-dinitrotoluene		Invalid Compound ID	K8YG	10/12/23 12:48
4-Nitrotoluene		Invalid Compound ID	K8YG	10/12/23 12:48
HMX		Invalid Compound ID	K8YG	10/12/23 12:48
RDX		Invalid Compound ID	K8YG	10/12/23 12:48

Lab Sample ID: 280-182239-9 Client Sample ID: LL1mw-091-230901-GW

Date Analyzed: 10/12/23 04:00 Lab File ID: 10110027.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Amino-4,6-dinitrotoluene		Invalid Compound ID	K8YG	10/12/23 12:49
2-Nitrotoluene		Invalid Compound ID	K8YG	10/12/23 12:48
4-Amino-2,6-dinitrotoluene		Invalid Compound ID	K8YG	10/12/23 12:48
RDX		Invalid Compound ID	K8YG	10/12/23 12:48

Lab Sample ID: 280-182239-12 Client Sample ID: LL3mw-247-230901-GW

Date Analyzed: 10/12/23 04:36 Lab File ID: 10110028.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3-Dinitrobenzene		Invalid Compound ID	K8YG	10/12/23 12:49
4-Amino-2,6-dinitrotoluene		Invalid Compound ID	K8YG	10/12/23 12:49
4-Nitrotoluene		Invalid Compound ID	K8YG	10/12/23 12:49

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 629372

Lab Sample ID: 280-182239-2 Client Sample ID: SCFmw-004-230902-GW

Date Analyzed: 10/12/23 05:12 Lab File ID: 10110030.D GC Column: Luna-phenylh ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Amino-4,6-dinitrotoluene		Invalid Compound ID	K8YG	10/12/23 12:50
4-Amino-2,6-dinitrotoluene		Invalid Compound ID	K8YG	10/12/23 12:50

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 617295

Lab Sample ID: IC 280-617295/11 Client Sample ID:

Date Analyzed: 06/23/23 17:53 Lab File ID: 06230011.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.46	Baseline	LV5D	06/23/23 18:20
HMX	6.59	Baseline	LV5D	06/23/23 18:20
DNX	6.80	Baseline	LV5D	06/23/23 18:19
MNX	7.22	Baseline	LV5D	06/23/23 18:20

Lab Sample ID: IC 280-617295/12 Client Sample ID:

Date Analyzed: 06/23/23 18:16 Lab File ID: 06230012.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.47	Baseline	LV5D	06/23/23 18:54
HMX	6.60	Baseline	LV5D	06/23/23 18:54
DNX	6.80	Baseline	LV5D	06/23/23 18:54

Lab Sample ID: IC 280-617295/13 Client Sample ID:

Date Analyzed: 06/23/23 18:39 Lab File ID: 06230013.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.47	Baseline	LV5D	06/23/23 19:10
HMX	6.59	Baseline	LV5D	06/23/23 19:10
DNX	6.80	Baseline	LV5D	06/23/23 19:10

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 617295

Lab Sample ID: IC 280-617295/14 Client Sample ID:

Date Analyzed: 06/23/23 19:02 Lab File ID: 06230014.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.47	Baseline	LV5D	06/23/23 19:38
HMX	6.60	Baseline	LV5D	06/23/23 19:38
DNX	6.81	Baseline	LV5D	06/23/23 19:38

Lab Sample ID: IC 280-617295/15 Client Sample ID:

Date Analyzed: 06/23/23 19:25 Lab File ID: 06230015.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.48	Baseline	LV5D	06/23/23 20:05
HMX	6.60	Baseline	LV5D	06/23/23 20:05
DNX	6.81	Baseline	LV5D	06/23/23 20:05

Lab Sample ID: IC 280-617295/16 Client Sample ID:

Date Analyzed: 06/23/23 19:48 Lab File ID: 06230016.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.47	Baseline	LV5D	06/23/23 20:36
HMX	6.60	Baseline	LV5D	06/23/23 20:36
DNX	6.80	Baseline	LV5D	06/23/23 20:36

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 617295

Lab Sample ID: IC 280-617295/17 Client Sample ID:

Date Analyzed: 06/23/23 20:11 Lab File ID: 06230017.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.47	Baseline	LV5D	06/23/23 20:36
HMX	6.60	Baseline	LV5D	06/23/23 20:36
DNX	6.80	Baseline	LV5D	06/23/23 20:36
PETN	14.75	Baseline	LV5D	06/23/23 20:36

Lab Sample ID: IC 280-617295/18 Client Sample ID:

Date Analyzed: 06/23/23 20:34 Lab File ID: 06230018.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.47	Baseline	LV5D	06/23/23 21:02
HMX	6.59	Baseline	LV5D	06/23/23 21:02
DNX	6.80	Baseline	LV5D	06/23/23 21:02
PETN	14.72	Baseline	LV5D	06/23/23 21:02

Lab Sample ID: IC 280-617295/19 Client Sample ID:

Date Analyzed: 06/23/23 20:57 Lab File ID: 06230019.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.47	Baseline	LV5D	06/23/23 21:21
HMX	6.60	Baseline	LV5D	06/23/23 21:21
DNX	6.80	Baseline	LV5D	06/23/23 21:21
PETN	14.72	Unspecified		

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 617295

Lab Sample ID: ICV 280-617295/20 Client Sample ID:

Date Analyzed: 06/23/23 21:20 Lab File ID: 06230020.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.47	Baseline	LV5D	06/23/23 21:43
HMX	6.60	Baseline	LV5D	06/23/23 21:43
DNX	6.80	Baseline	LV5D	06/23/23 21:43

Lab Sample ID: IC 280-617295/21 Client Sample ID:

Date Analyzed: 06/23/23 21:43 Lab File ID: 06230021.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.47	Baseline	LV5D	06/24/23 10:41
2,4-diamino-6-nitrotoluene	6.66	Baseline	LV5D	06/24/23 10:41

Lab Sample ID: IC 280-617295/22 Client Sample ID:

Date Analyzed: 06/23/23 22:06 Lab File ID: 06230022.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.47	Baseline	LV5D	06/24/23 10:41
2,4-diamino-6-nitrotoluene	6.66	Baseline	LV5D	06/24/23 10:41

Lab Sample ID: IC 280-617295/23 Client Sample ID:

Date Analyzed: 06/23/23 22:29 Lab File ID: 06230023.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.47	Baseline	LV5D	06/24/23 10:42
2,4-diamino-6-nitrotoluene	6.67	Baseline	LV5D	06/24/23 10:42

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 617295

Lab Sample ID: IC 280-617295/24 Client Sample ID:

Date Analyzed: 06/23/23 22:52 Lab File ID: 06230024.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.47	Baseline	LV5D	06/24/23 10:42
2,4-diamino-6-nitrotoluene	6.67	Baseline	LV5D	06/24/23 10:42

Lab Sample ID: IC 280-617295/25 Client Sample ID:

Date Analyzed: 06/23/23 23:14 Lab File ID: 06230025.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.48	Baseline	LV5D	06/24/23 10:42
2,4-diamino-6-nitrotoluene	6.67	Baseline	LV5D	06/24/23 10:42

Lab Sample ID: IC 280-617295/26 Client Sample ID:

Date Analyzed: 06/23/23 23:37 Lab File ID: 06230026.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.47	Baseline	LV5D	06/24/23 10:42
2,4-diamino-6-nitrotoluene	6.66	Baseline	LV5D	06/24/23 10:42

Lab Sample ID: IC 280-617295/27 Client Sample ID:

Date Analyzed: 06/24/23 00:00 Lab File ID: 06230027.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.48	Baseline	LV5D	06/24/23 12:55
2,4-diamino-6-nitrotoluene	6.67	Baseline	LV5D	06/24/23 12:55

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 617295

Lab Sample ID: IC 280-617295/28 Client Sample ID:

Date Analyzed: 06/24/23 00:23 Lab File ID: 06230028.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.47	Baseline	LV5D	06/24/23 10:43
2,4-diamino-6-nitrotoluene	6.66	Baseline	LV5D	06/24/23 10:43

Lab Sample ID: ICV 280-617295/29 Client Sample ID:

Date Analyzed: 06/24/23 00:46 Lab File ID: 06230029.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.47	Baseline	LV5D	06/24/23 10:43
2,4-diamino-6-nitrotoluene	6.66	Baseline	LV5D	06/24/23 10:43

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 628987

Lab Sample ID: CCV 280-628987/37 Client Sample ID:

Date Analyzed: 10/09/23 21:52 Lab File ID: 10090037.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.45	Baseline	K8YG	10/10/23 11:24
HMX	6.58	Baseline	K8YG	10/10/23 11:24
DNX	6.78	Baseline	K8YG	10/10/23 11:24

Lab Sample ID: CCV 280-628987/38 Client Sample ID:

Date Analyzed: 10/09/23 22:15 Lab File ID: 10090038.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.45	Baseline	K8YG	10/10/23 11:25
2,4-diamino-6-nitrotoluene	6.63	Baseline	K8YG	10/10/23 11:25

Lab Sample ID: MB 280-628393/1-A Client Sample ID:

Date Analyzed: 10/09/23 22:38 Lab File ID: 10090039.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.22	Baseline	K8YG	10/10/23 11:25
1,2-Dinitrobenzene	8.53	Baseline	K8YG	10/10/23 11:25

Lab Sample ID: LCS 280-628393/2-A Client Sample ID:

Date Analyzed: 10/09/23 23:01 Lab File ID: 10090040.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.45	Baseline	K8YG	10/10/23 11:26
HMX	6.58	Baseline	K8YG	10/10/23 11:26
DNX	6.78	Baseline	K8YG	10/10/23 11:26

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 628987

Lab Sample ID: LCSD 280-628393/3-A Client Sample ID:

Date Analyzed: 10/09/23 23:24 Lab File ID: 10090041.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.45	Baseline	K8YG	10/10/23 11:26
HMX	6.58	Baseline	K8YG	10/10/23 11:26
DNX	6.78	Baseline	K8YG	10/10/23 11:26

Lab Sample ID: LCS 280-628393/4-A Client Sample ID:

Date Analyzed: 10/09/23 23:47 Lab File ID: 10090042.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.45	Baseline	LV5D	10/10/23 15:10
2,4-diamino-6-nitrotoluene	6.63	Baseline	LV5D	10/10/23 15:10

Lab Sample ID: LCSD 280-628393/5-A Client Sample ID:

Date Analyzed: 10/10/23 00:10 Lab File ID: 10090043.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.45	Baseline	LV5D	10/10/23 15:10
2,4-diamino-6-nitrotoluene	6.64	Baseline	LV5D	10/10/23 15:10

Lab Sample ID: 280-182239-1 Client Sample ID: SCFmw-004-230901-GW

Date Analyzed: 10/10/23 00:33 Lab File ID: 10090044.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.58	Baseline	K8YG	10/10/23 09:41
1,2-Dinitrobenzene	8.53	Baseline	K8YG	10/10/23 11:28

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 628987

Lab Sample ID: 280-182239-2 Client Sample ID: SCFmw-004-230902-GW

Date Analyzed: 10/10/23 00:56 Lab File ID: 10090045.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.54	Baseline	K8YG	10/10/23 11:29
HMX		Invalid Compound ID	K8YG	10/10/23 09:41

Lab Sample ID: 280-182239-3 Client Sample ID: LL3mw-237-230901-GW

Date Analyzed: 10/10/23 01:19 Lab File ID: 10090046.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetryl		Invalid Compound ID	K8YG	10/10/23 11:29
TNX		Invalid Compound ID	K8YG	10/10/23 11:29

Lab Sample ID: 280-182239-4 Client Sample ID: LL3mw-241-230901-GW

Date Analyzed: 10/10/23 01:42 Lab File ID: 10090047.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.58	Baseline	K8YG	10/10/23 11:30
1,3-Dinitrobenzene		Invalid Compound ID	K8YG	10/10/23 11:31
2-Nitrotoluene		Invalid Compound ID	K8YG	10/10/23 11:31
MNX		Invalid Compound ID	K8YG	10/10/23 11:30
TNX		Invalid Compound ID	K8YG	10/10/23 11:30

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 628987

Lab Sample ID: 280-182239-4 MS Client Sample ID: LL3mw-241-230901-GW MS

Date Analyzed: 10/10/23 02:04 Lab File ID: 10090048.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.45	Baseline	K8YG	10/10/23 12:43
HMX	6.57	Baseline	K8YG	10/10/23 12:43
DNX	6.78	Baseline	K8YG	10/10/23 12:43
MNX	7.20	Baseline	K8YG	10/10/23 12:43
RDX	7.59	Baseline	K8YG	10/10/23 12:43
1,3-Dinitrobenzene	9.27	Baseline	K8YG	10/10/23 12:44

Lab Sample ID: CCV 280-628987/49 Client Sample ID:

Date Analyzed: 10/10/23 02:27 Lab File ID: 10090049.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.45	Baseline	K8YG	10/10/23 11:35
HMX	6.58	Baseline	K8YG	10/10/23 11:35
DNX	6.78	Baseline	K8YG	10/10/23 11:35
MNX	7.20	Baseline	K8YG	10/10/23 11:35

Lab Sample ID: CCV 280-628987/50 Client Sample ID:

Date Analyzed: 10/10/23 02:50 Lab File ID: 10090050.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.45	Baseline	K8YG	10/10/23 11:35
2,4-diamino-6-nitrotoluene	6.63	Baseline	K8YG	10/10/23 11:35

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 628987

Lab Sample ID: 280-182239-4 MSD Client Sample ID: LL3mw-241-230901-GW MSD

Date Analyzed: 10/10/23 03:13 Lab File ID: 10090051.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.45	Baseline	K8YG	10/10/23 12:44
HMX	6.58	Baseline	K8YG	10/10/23 12:45
DNX	6.78	Baseline	K8YG	10/10/23 12:45
MNX	7.20	Baseline	K8YG	10/10/23 12:45
RDX	7.58	Baseline	K8YG	10/10/23 12:45
1,3-Dinitrobenzene	9.27	Baseline	K8YG	10/10/23 12:45

Lab Sample ID: 280-182239-4 MS Client Sample ID: LL3mw-241-230901-GW MS

Date Analyzed: 10/10/23 03:36 Lab File ID: 10090052.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.45	Baseline	K8YG	10/10/23 12:46
2,4-diamino-6-nitrotoluene	6.64	Baseline	K8YG	10/10/23 12:46

Lab Sample ID: 280-182239-4 MSD Client Sample ID: LL3mw-241-230901-GW MSD

Date Analyzed: 10/10/23 03:59 Lab File ID: 10090053.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.45	Baseline	K8YG	10/10/23 12:46
2,4-diamino-6-nitrotoluene	6.63	Baseline	K8YG	10/10/23 12:46

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 628987

Lab Sample ID: 280-182239-5 Client Sample ID: LL3mw-241-230902-GW

Date Analyzed: 10/10/23 04:22 Lab File ID: 10090054.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.57	Baseline	K8YG	10/10/23 11:38
1,3-Dinitrobenzene		Invalid Compound ID	K8YG	10/10/23 11:38
2-Nitrotoluene		Invalid Compound ID	K8YG	10/10/23 11:38
4-Nitrotoluene		Invalid Compound ID	K8YG	10/10/23 11:38
MNX		Invalid Compound ID	K8YG	10/10/23 11:38
TNX		Invalid Compound ID	K8YG	10/10/23 11:38

Lab Sample ID: 280-182239-6 Client Sample ID: LL1mw-093-230901-GW

Date Analyzed: 10/10/23 04:45 Lab File ID: 10090055.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.59	Baseline	K8YG	10/10/23 11:39
RDX	7.60	Baseline	K8YG	10/10/23 11:39
1,2-Dinitrobenzene	8.52	Baseline	K8YG	10/10/23 11:39
1,3-Dinitrobenzene		Invalid Compound ID	K8YG	10/10/23 11:39
2-Nitrotoluene		Invalid Compound ID	K8YG	10/10/23 11:39
Tetryl		Invalid Compound ID	K8YG	10/10/23 11:39

Lab Sample ID: 280-182239-7 Client Sample ID: LL1mw-092-230901-GW

Date Analyzed: 10/10/23 05:08 Lab File ID: 10090056.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.59	Baseline	K8YG	10/10/23 11:40
RDX	7.61	Baseline	K8YG	10/10/23 11:39
1,2-Dinitrobenzene	8.53	Baseline	K8YG	10/10/23 11:39
2-Nitrotoluene		Invalid Compound ID	K8YG	10/10/23 11:40

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 628987

Lab Sample ID: 280-182239-8 Client Sample ID: LL3mw-248-230901-GW

Date Analyzed: 10/10/23 05:31 Lab File ID: 10090057.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.59	Baseline	K8YG	10/10/23 11:40
RDX	7.61	Baseline	K8YG	10/10/23 11:40
1,2-Dinitrobenzene	8.53	Baseline	K8YG	10/10/23 11:40
1,3,5-Trinitrobenzene		Invalid Compound ID	K8YG	10/10/23 11:40
1,3-Dinitrobenzene		Invalid Compound ID	K8YG	10/10/23 11:40
2-Nitrotoluene		Invalid Compound ID	K8YG	10/10/23 11:40

Lab Sample ID: 280-182239-9 Client Sample ID: LL1mw-091-230901-GW

Date Analyzed: 10/10/23 05:54 Lab File ID: 10090058.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.59	Baseline	K8YG	10/10/23 11:41
RDX	7.61	Baseline	K8YG	10/10/23 11:41
1,2-Dinitrobenzene	8.53	Baseline	K8YG	10/10/23 11:41
1,3,5-Trinitrobenzene		Baseline	K8YG	10/10/23 11:41
1,3-Dinitrobenzene		Invalid Compound ID	K8YG	10/10/23 11:41
2-Nitrotoluene		Invalid Compound ID	K8YG	10/10/23 11:41

Lab Sample ID: 280-182239-12 Client Sample ID: LL3mw-247-230901-GW

Date Analyzed: 10/10/23 06:17 Lab File ID: 10090059.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.59	Baseline	K8YG	10/10/23 11:41
RDX	7.61	Baseline	K8YG	10/10/23 11:41
1,3,5-Trinitrobenzene		Invalid Compound ID	K8YG	10/10/23 11:42
1,3-Dinitrobenzene		Invalid Compound ID	K8YG	10/10/23 11:42
2-Nitrotoluene		Invalid Compound ID	K8YG	10/10/23 11:42

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 628987

Lab Sample ID: CCV 280-628987/60 Client Sample ID:

Date Analyzed: 10/10/23 06:40 Lab File ID: 10090060.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.45	Baseline	K8YG	10/10/23 11:42
HMX	6.57	Baseline	K8YG	10/10/23 11:42
DNX	6.77	Baseline	K8YG	10/10/23 11:42
MNX	7.20	Baseline	K8YG	10/10/23 11:42

Lab Sample ID: CCV 280-628987/61 Client Sample ID:

Date Analyzed: 10/10/23 07:03 Lab File ID: 10090061.D GC Column: UltraCarb5uO ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,6-diamino-4-nitrotoluene	6.44	Baseline	K8YG	10/10/23 11:42
2,4-diamino-6-nitrotoluene	6.63	Baseline	K8YG	10/10/23 11:42

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Batch Number: 623067

Lab Sample ID: STD1 280-623067/1 IC Client Sample ID:

Date Analyzed: 08/16/23 08:23 Lab File ID: Info 2_DENPC179_Anions_2 GC Column: Metrosepp A ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Orthophosphate as P	8.59	Baseline Smoothing	LVW8	08/16/23 10:42

Lab Sample ID: STD2 280-623067/2 IC Client Sample ID:

Date Analyzed: 08/16/23 08:38 Lab File ID: Info 2_DENPC179_Anions_2 GC Column: Metrosepp A ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Orthophosphate as P	8.58	Baseline Smoothing	LVW8	08/16/23 10:36

Lab Sample ID: STD3 280-623067/3 IC Client Sample ID:

Date Analyzed: 08/16/23 08:54 Lab File ID: Info 2_DENPC179_Anions_2 GC Column: Metrosepp A ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Orthophosphate as P	8.57	Baseline Smoothing	LVW8	08/16/23 10:27

Lab Sample ID: STD4 280-623067/4 IC Client Sample ID:

Date Analyzed: 08/16/23 09:09 Lab File ID: Info 2_DENPC179_Anions_2 GC Column: Metrosepp A ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Orthophosphate as P	8.54	Baseline Smoothing	LVW8	08/16/23 10:28

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
350.1 cal_00601	10/26/23	10/19/23	Di Water, Lot na	100 mL	NH3 CAL STD_00035	10 mL	Ammonia as N	100 mg/L
.NH3 CAL STD_00035	01/31/24		Ricca, Lot 4208D17		(Purchased Reagent)		Ammonia as N	1000 mg/L
350.1 ICV_00582	10/26/23	10/19/23	na, Lot na	100 mL	NH3 ICV STD_00034	10 mL	Ammonia as N	100.2 mg/L
.NH3 ICV STD_00034	01/25/25		Inorganic Ventures, Lot S2-NH700817		(Purchased Reagent)		Ammonia as N	1002 mg/L
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 DMT_00015	01/20/24	07/20/23	Acetonitrile, Lot 222063	5 mL	MNX,TNX,DNX_00080	1 mL	DNX	20.02 ug/mL
							MNX	23.34 ug/mL
							TNX	20.06 ug/mL
.MNX,TNX,DNX_00080	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_00127	11/30/23	05/31/23	Acetonitrile, Lot Acetonitrile_00079	100 mL	3,5-DNA Stock_00043	1 mL	3,5-Dinitroaniline	10 ug/mL
					8330_NG_Stk_00132	1 mL	Nitroglycerin	100 ug/mL
					8330_NG_Stk_00133	1 mL	Nitroglycerin	100 ug/mL
					8330_PETN_Stk_00137	1 mL	PETN	100 ug/mL
					8330_PETN_Stk_00138	1 mL	PETN	100 ug/mL
					8330LCSMix1_00142	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_00041	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_00043	08/31/27		Restek, Lot A0193965		(Purchased Reagent)		3,5-Dinitroaniline	1000 ug/mL
.8330_NG_Stk_00132	02/17/26		Restek, Lot A0194930		(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_NG_Stk_00133	02/17/26		Restek, Lot A0194930		(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_PETN_Stk_00137	08/31/25		Restek, Lot A0188550		(Purchased Reagent)		PETN	5000 ug/mL
.8330_PETN_Stk_00138	08/31/25		Restek, Lot A0188550		(Purchased Reagent)		PETN	5000 ug/mL
.8330LCSMix1_00142	04/30/27		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

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4-Dinitrotoluene	1000 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							RDX	1000 ug/mL
.8330LCSmix2_00041	12/31/27		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 LCS_00130	01/01/24	08/09/23	Acetonitrile, Lot Acetonitrile_00080	100 mL	3,5-DNA Stock_00046	1 mL	3,5-Dinitroaniline	10 ug/mL
					8330_NG_Stk_00137	1.2 mL	Nitroglycerin	100 ug/mL
					8330_NG_Stk_00138	0.8 mL	Nitroglycerin	100 ug/mL
					8330_PETN_Stk_00141	0.4 mL	PETN	100 ug/mL
					8330_PETN_Stk_00144	1.4 mL	PETN	100 ug/mL
					8330_PETN_Stk_00145	0.2 mL	PETN	100 ug/mL
					8330LCSMix1_00145	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_00043	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_00046	08/09/24		Restek, Lot A0193965		(Purchased Reagent)		3,5-Dinitroaniline	1000 ug/mL
.8330_NG_Stk_00137	08/09/24		Restek, Lot A0194930		(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_NG_Stk_00138	08/09/24		Restek, Lot A0194930		(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_PETN_Stk_00141	07/01/24		Restek, Lot A0197735		(Purchased Reagent)		PETN	5000 ug/mL
.8330_PETN_Stk_00144	08/09/24		Restek, Lot A0197735		(Purchased Reagent)		PETN	5000 ug/mL
.8330_PETN_Stk_00145	08/09/24		Restek, Lot A0198972		(Purchased Reagent)		PETN	5000 ug/mL
.8330LCSMix1_00145	08/09/24		Restek, Lot A0163590		(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_00043	08/09/24		Restek, Lot A0192237		(Purchased Reagent)		2,6-Dinitrotoluene	1000 ug/mL
							2-Amino-4,6-dinitrotoluene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1000 ug/mL
							4-Amino-2,6-dinitrotoluene	1000 ug/mL
							4-Nitrotoluene	1000 ug/mL
							Tetryl	1000 ug/mL
8330 LCS_00131	03/22/24	09/22/23	Acetonitrile, Lot Acetonitrile_00080	100 mL	3,5-DNA Stock_00047	1 mL	3,5-Dinitroaniline	10 ug/mL
					8330_NG_Stk_00139	1 mL	Nitroglycerin	100 ug/mL
					8330_NG_Stk_00140	1 mL	Nitroglycerin	100 ug/mL
					8330_PETN_Stk_00145	1 mL	PETN	100 ug/mL
					8330_PETN_Stk_00146	1 mL	PETN	100 ug/mL
					8330LCSMix1_00146	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_00044	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_00119	1 mL	2,4,6-Trinitrophenol	10 ug/mL
.3,5-DNA Stock_00047	09/22/24		Restek, Lot A0193965		(Purchased Reagent)		3,5-Dinitroaniline	1000 ug/mL
.8330_NG_Stk_00139	09/22/24		Restek, Lot A0194930		(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_NG_Stk_00140	09/22/24		Restek, Lot A0200560		(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_PETN_Stk_00145	08/09/24		Restek, Lot A0198972		(Purchased Reagent)		PETN	5000 ug/mL
.8330_PETN_Stk_00146	09/22/24		Restek, Lot A0198972		(Purchased Reagent)		PETN	5000 ug/mL
.8330LCSMix1_00146	09/22/24		Restek, Lot A0163590		(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_00044	09/22/24		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_00119	09/22/24		Restek, Lot A0183202		(Purchased Reagent)		2,4,6-Trinitrophenol	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182239-1

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_00021	02/29/24	06/21/23	Acetonitrile, Lot Acetonitrile_00077	10 mL	MNX,TNX,DNX_00078	1 mL	DNX	10.01 ug/mL
							MNX	11.67 ug/mL
							TNX	10.03 ug/mL
.MNX,TNX,DNX_00078	02/29/24	Agilent, Lot 0006725091			(Purchased Reagent)		DNX	100.1 ug/mL
							MNX	116.7 ug/mL
							TNX	100.3 ug/mL
8330_OP_DMT_00022	03/31/24	08/31/23	Acetonitrile, Lot Acetonitrile_00080	10 mL	MNX,TNX,DNX_00081	1 mL	DNX	10.04 ug/mL
							MNX	11.71 ug/mL
							TNX	10.01 ug/mL
.MNX,TNX,DNX_00081	03/31/24	Agilent, Lot 0006731787			(Purchased Reagent)		DNX	100.4 ug/mL
							MNX	117.1 ug/mL
							TNX	100.1 ug/mL
8330_OP_DMT_00023	03/31/24	10/02/23	Acetonitrile, Lot Acetonitrile_00080	10 mL	MNX,TNX,DNX_00082	1 mL	DNX	10.04 ug/mL
							MNX	11.71 ug/mL
							TNX	10.01 ug/mL
.MNX,TNX,DNX_00082	03/31/24	Agilent, Lot 0006731787			(Purchased Reagent)		DNX	100.4 ug/mL
							MNX	117.1 ug/mL
							TNX	100.1 ug/mL
8330DiaminLCS_00058	04/10/24	06/08/23	Acetonitrile, Lot Acetonitrile_00077	25 mL	2,4Diamino6NT_00103	1 mL	2,4-diamino-6-nitrotoluene	10 ug/mL
					2,4Diamino6NT_00104	1 mL	2,4-diamino-6-nitrotoluene	10 ug/mL
					2,4Diamino6NT_00105	0.5 mL	2,4-diamino-6-nitrotoluene	10 ug/mL
					2,6Diamino4NT_00106	1 mL	2,6-diamino-4-nitrotoluene	10 ug/mL
					2,6Diamino4NT_00107	1 mL	2,6-diamino-4-nitrotoluene	10 ug/mL
					2,6Diamino4NT_00108	0.5 mL	2,6-diamino-4-nitrotoluene	10 ug/mL
.2,4Diamino6NT_00103	04/10/24	AccuStandard, Lot 220121267-01			(Purchased Reagent)		2,4-diamino-6-nitrotoluene	100 ug/mL
.2,4Diamino6NT_00104	04/10/24	AccuStandard, Lot 220121267-01			(Purchased Reagent)		2,4-diamino-6-nitrotoluene	100 ug/mL
.2,4Diamino6NT_00105	04/10/24	AccuStandard, Lot 220121267-01			(Purchased Reagent)		2,4-diamino-6-nitrotoluene	100 ug/mL
.2,6Diamino4NT_00106	06/03/24	AccuStandard, Lot 222051002			(Purchased Reagent)		2,6-diamino-4-nitrotoluene	100 ug/mL
.2,6Diamino4NT_00107	06/03/24	AccuStandard, Lot 222051002			(Purchased Reagent)		2,6-diamino-4-nitrotoluene	100 ug/mL
.2,6Diamino4NT_00108	06/03/24	AccuStandard, Lot 222051002			(Purchased Reagent)		2,6-diamino-4-nitrotoluene	100 ug/mL
8330DiaminLCS_00060	04/10/24	07/26/23	Acetonitrile, Lot Acetonitrile_00080	10 mL	2,4Diamino6NT_00110	1 mL	2,4-diamino-6-nitrotoluene	20 ug/mL
					2,4Diamino6NT_00111	1 mL	2,4-diamino-6-nitrotoluene	20 ug/mL
					2,6Diamino4NT_00113	1 mL	2,6-diamino-4-nitrotoluene	20 ug/mL
					2,6Diamino4NT_00114	1 mL	2,6-diamino-4-nitrotoluene	20 ug/mL
.2,4Diamino6NT_00110	04/10/24	AccuStandard, Lot 220121267-01			(Purchased Reagent)		2,4-diamino-6-nitrotoluene	100 ug/mL
.2,4Diamino6NT_00111	04/10/24	AccuStandard, Lot 220121267-01			(Purchased Reagent)		2,4-diamino-6-nitrotoluene	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.2,6Diamino4NT_00113	06/03/24	AccuStandard, Lot 222051002			(Purchased Reagent)		2,6-diamino-4-nitrotoluene	100 ug/mL
.2,6Diamino4NT_00114	06/03/24	AccuStandard, Lot 222051002			(Purchased Reagent)		2,6-diamino-4-nitrotoluene	100 ug/mL
8330IntermStk_00077	10/06/23	06/22/23	Acetonitrile, Lot ACN_239	10 mL	8330_NG_AUX_00006	1 mL	Nitroglycerin	100 ug/mL
					8330_PETN1000_00012	1 mL	PETN	100 ug/mL
					833035DNAStk_00055	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
							HMX	10 ug/mL
							Nitrobenzene	10 ug/mL
							RDX	10 ug/mL
							Tetryl	10 ug/mL
							1,2-Dinitrobenzene	10 ug/mL
					8330PAStkPS_00072	1 mL	2,4,6-Trinitrophenol	10 ug/mL
.8330_NG_AUX_00006	06/22/24	Restek, Lot A0192092			(Purchased Reagent)		Nitroglycerin	1000 ug/mL
.8330_PETN1000_00012	06/22/24	Restek, Lot A0194158			(Purchased Reagent)		PETN	1000 ug/mL
.833035DNAStk_00055	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

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00072	06/22/24	AccuStandard, Lot 218031154-04			(Purchased Reagent)		2,4,6-Trinitrophenol	100 ug/mL
8330IntermStk_00078	02/03/24	09/20/23	Acetonitrile, Lot ACN_239	10 mL	8330_NG_AUX_00007	1 mL	Nitroglycerin	100 ug/mL
					8330_PETN1000_00013	1 mL	PETN	100 ug/mL
					833035DNAStk_00056	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
							HMX	10 ug/mL
							Nitrobenzene	10 ug/mL
							RDX	10 ug/mL
							Tetryl	10 ug/mL
							1,2-Dinitrobenzene	10 ug/mL
					8330PAStkPS_00073	1 mL	2,4,6-Trinitrophenol	10 ug/mL
.8330_NG_AUX_00007	09/20/24	Restek, Lot A0192092			(Purchased Reagent)		Nitroglycerin	1000 ug/mL
.8330_PETN1000_00013	09/20/24	Restek, Lot A0194158			(Purchased Reagent)		PETN	1000 ug/mL
.833035DNAStk_00056	05/14/24	Accustandard, Lot 223041214			(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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00073	09/20/24		AccuStandard, Lot 223031306		(Purchased Reagent)		2,4,6-Trinitrophenol	100 ug/mL
8330Surrogate_00146	12/09/23	06/21/23	Acetonitrile, Lot Acetonitrile_00077	200 mL	8330SurrStkSS_00279	1 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00280	1 mL	1,2-Dinitrobenzene	10 ug/mL
.8330SurrStkSS_00279	06/21/24		Restek, Lot A0194831		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00280	06/21/24		Restek, Lot A0194831		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
8330Surrogate_00150	02/22/24	08/22/23	Acetonitrile, Lot Acetonitrile_00080	500 mL	8330SurrStkSS_00285	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00293	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00294	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00295	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00296	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
.8330SurrStkSS_00285	08/22/24		Restek, Lot A0197062		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00293	08/22/24		Restek, Lot A0198799		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00294	08/22/24		Restek, Lot A0198799		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00295	08/22/24		Restek, Lot A0198799		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00296	08/22/24		Restek, Lot A0198799		(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
IC Cal low_00722	08/16/23	08/09/23	Di Water, Lot NA	100 mL	IC N03 cal_00028	5 mL	Nitrate as N	50 mg/L
					IC P04 cal_00030	5 mL	Orthophosphate as P	50 mg/L
					NO2 ICV Std_00039	5 mL	Nitrite as N	50 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.IC N03 cal_00028	11/30/23		Ricca, Lot 2205B73		(Purchased Reagent)		Nitrate as N	1000 mg/L
.IC P04 cal_00030	07/31/24		RICCA, Lot 4208152		(Purchased Reagent)		Orthophosphate as P	1000 mg/L
.NO2 ICV Std_00039	10/31/23		Ricca, Lot 4304L74		(Purchased Reagent)		Nitrite as N	1000 mg/L
IC Cal low_00731	10/04/23	09/27/23	Di Water, Lot NA	100 mL	IC N03 cal_00028	5 mL	Nitrate as N	50 mg/L
.IC N03 cal_00028	11/30/23		Ricca, Lot 2205B73		(Purchased Reagent)		Nitrate as N	1000 mg/L
IC ICV 5_00413	08/16/23	08/09/23	Di Water, Lot na	100 mL	IC NO3 ICV_00019	5 mL	Nitrate as N	50 mg/L
.IC NO3 ICV_00019	12/01/23		ERA, Lot 011221m		(Purchased Reagent)		Nitrate as N	1000 mg/L
IC LCS_01980	10/04/23	09/27/23	Di Water, Lot 27	200 mL	IC Cal low_00731	20 mL	Nitrate as N	5 mg/L
.IC Cal low_00731	10/04/23	09/27/23	Di Water, Lot NA	100 mL	IC N03 cal_00028	5 mL	Nitrate as N	50 mg/L
..IC N03 cal_00028	11/30/23		Ricca, Lot 2205B73		(Purchased Reagent)		Nitrate as N	1000 mg/L

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_00103

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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.

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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

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Reagent

2,4Diamino6NT_00104

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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.

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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

2,4Diamino6NT_00105

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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.

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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

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Rev. 7/20

Reagent

2,4Diamino6NT_00110

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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 ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463

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

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.

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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. 5/18

1. **Quality Standards:**

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

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

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

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

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

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

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

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

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

Reagent

2,4Diamino6NT_00111

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USA

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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 ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463

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

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. 5/18

1. **Quality Standards:**

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

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

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

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

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

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

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

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

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

Reagent

2,6Diamino4NT_00096

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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

Reagent

2,6Diamino4NT_00106

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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.

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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

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Rev. 7/20

Reagent

2,6Diamino4NT_00107

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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.

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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_00108

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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.

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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_00113

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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 ISO 17034 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

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

1. **Quality Standards:**

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

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

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

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

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

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

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

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

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

Reagent

2,6Diamino4NT_00114

125 Market Street
New Haven, CT 06513
USA

AccuStandard® Inc.

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

CERTIFICATE OF ANALYSIS

Catalog No: M-8330-ADD-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 ISO 17034 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

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

1. **Quality Standards:**

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

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

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

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

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

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

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

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

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

Reagent

3,5-DNA Stock_00043

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : 3,5-Dinitroaniline Standard

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

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

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

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	3,5-Dinitroaniline	618-87-1	10311HS	99%	1,004.0 µg/mL	+/- 37.4502

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

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

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

Reagent

3,5-DNA Stock_00046

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : 3,5-Dinitroaniline Standard

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

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

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

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	3,5-Dinitroaniline	618-87-1	10311HS	99%	1,004.0 µg/mL	+/- 37.4502

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

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

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

Reagent

3,5-DNA Stock_00047

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : 3,5-Dinitroaniline Standard

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

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

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

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	3,5-Dinitroaniline	618-87-1	10311HS	99%	1,004.0 µg/mL	+/- 37.4502

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

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

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

Reagent

8330 LCS_00127

Preliminary Report

Eurofins Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20230531-122014.b\05310006.D

Lims ID: C18column:B16162 Inj. Date: 31-May-2023 17:22:45

Worklist ID: 280-0122014-006 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 3535	Limits 2 0B_Sonc_
4 HMX	0.5000	0.4329	86.6	65-135	66-115
8 RDX	0.5000	0.4671	93.4	68-130	69-122
9 2,4,6-Trinitrophenol	0.5000	0.5329	106.6	80-120	63-135
11 1,3,5-Trinitrobenzene	0.5000	0.5033	100.7	73-125	62-127
12 1,3-Dinitrobenzene	0.5000	0.4985	99.7	78-120	59-131
13 Nitrobenzene	0.5000	0.5038	100.8	65-134	46-144
14 3,5-Dinitroaniline	0.5000	0.4774	95.5	71-117	
15 Tetryl	0.5000	0.5414	108.3	64-128	56-131
16 Nitroglycerin	5.00	5.05	101.0	74-127	70-125
17 2,4,6-Trinitrotoluene	0.5000	0.4730	94.6	71-123	46-139
18 4-Amino-2,6-dinitrotolu	0.5000	0.4839	96.8	76-125	43-120
19 2-Amino-4,6-dinitrotolu	0.5000	0.4728	94.6	79-120	46-124
20 2,6-Dinitrotoluene	0.5000	0.5046	100.9	77-127	51-130
21 2,4-Dinitrotoluene	0.5000	0.4810	96.2	78-120	53-127
22 o-Nitrotoluene	0.5000	0.4856	97.1	70-127	37-138
23 p-Nitrotoluene	0.5000	0.4749	95.0	71-127	41-137
24 m-Nitrotoluene	0.5000	0.4840	96.8	73-125	31-140
25 PETN	5.00	5.33	106.7	73-127	67-127

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

280-176937-A-4-A 280-176990-A-1-A 280-176990-A-2-A
280-176990-A-3-A 280-176990-A-4-A 280-176990-A-5-A
280-176990-A-6-A 280-176990-A-7-A 280-176990-A-8-A
280-176990-A-9-A 280-176990-A-10-A 280-176990-A-11-A
280-176990-A-12-A 280-176990-A-13-A

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

860-49847-E-4-A 280-176985-G-1-A

Reagent

8330 LCS_00130

Preliminary Report

Eurofins Denver
LCS, Lab Control Sample Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230809-124337.b\08090005.D
Lims ID: CH3CHOOH=acetic acid 0145
Client ID:
Sample Type: LCS
Inject. Date: 09-Aug-2023 11:47:26 ALS Bottle#: 71 Worklist Smp#: 5
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 130
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230809-124337.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 09-Aug-2023 12:27:15 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1654

Compound	Amount Added	Amount Recovered	%Rec
4 HMX	0.2500	0.2135	85.38
8 RDX	0.2500	0.2274	90.98
9 2,4,6-Trinitrophenol	0.2500	0.2458	98.32
11 1,3,5-Trinitrobenzene	0.2500	0.2537	101.48
12 1,3-Dinitrobenzene	0.2500	0.2513	100.51
13 Nitrobenzene	0.2500	0.2478	99.11
14 3,5-Dinitroaniline	0.2500	0.2394	95.77
15 Tetryl	0.2500	0.2615	104.58
16 Nitroglycerin	2.50	2.53	101.11
17 2,4,6-Trinitrotoluene	0.2500	0.2454	98.16
18 4-Amino-2,6-dinitrotoluene	0.2500	0.2490	99.59
19 2-Amino-4,6-dinitrotoluene	0.2500	0.2500	100.02
20 2,6-Dinitrotoluene	0.2500	0.2352	94.08
21 2,4-Dinitrotoluene	0.2500	0.2450	98.00
22 o-Nitrotoluene	0.2500	0.2446	97.84
23 p-Nitrotoluene	0.2500	0.2395	95.81
24 m-Nitrotoluene	0.2500	0.2452	98.08
25 PETN	2.50	2.57	102.99

Reagent

8330 LCS_00131

Preliminary Report

Eurofins Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20230923-125749.b\09230002.D

Lims ID: 8330AcidH2O_00003 Inj. Date: 23-Sep-2023 13:53:25

Worklist ID: 280-0125749-002 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 0B_Sonc_	Limits 2 3535	Limits 3 3535
4 HMX	0.5000	0.4292	85.8	66-115	65-135	
8 RDX	0.5000	0.4561	91.2	69-122	68-130	
9 2,4,6-Trinitrophenol	0.5000	0.5243	104.9	63-135	80-120	
11 1,3,5-Trinitrobenzene	0.5000	0.5169	103.4	62-127	73-125	
12 1,3-Dinitrobenzene	0.5000	0.5082	101.6	59-131	78-120	
13 Nitrobenzene	0.5000	0.5026	100.5	46-144	65-134	
14 3,5-Dinitroaniline	0.5000	0.4673	93.5	55-119	71-117	
15 Tetryl	0.5000	0.5859	117.2	56-131	64-128	
16 Nitroglycerin	5.00	5.08	101.5	70-125	74-127	
17 2,4,6-Trinitrotoluene	0.5000	0.4859	97.2	46-139	71-123	
18 4-Amino-2,6-dinitrotolu	0.5000	0.5082	101.6	43-120	76-125	
19 2-Amino-4,6-dinitrotolu	0.5000	0.4868	97.4	46-124	79-120	
20 2,6-Dinitrotoluene	0.5000	0.4973	99.5	51-130	77-127	
21 2,4-Dinitrotoluene	0.5000	0.5110	102.2	53-127	78-120	
22 o-Nitrotoluene	0.5000	0.4963	99.3	37-138	70-127	
23 p-Nitrotoluene	0.5000	0.4957	99.1	41-137	71-127	
24 m-Nitrotoluene	0.5000	0.5005	100.1	31-140	73-125	
25 PETN	5.00	5.13	102.6	67-127	73-127	

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

380-63263-B-1-A	570-153096-S-1-A	570-153096-R-2-A
570-153096-S-3-A	570-153096-S-4-A	570-153096-S-5-A

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

380-63150-C-1-A	380-63150-C-4-A	380-63150-C-6-A
380-63178-C-1-A	380-63178-D-3-A	380-63226-C-1-A
380-63226-C-2-A	380-63227-D-1-A	380-63227-C-3-A
380-63227-D-5-A	380-63227-C-7-A	

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

280-181304-A-1-A	280-181304-A-2-A	280-181304-A-3-A

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_AUX_00006

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

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

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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.:** A0192092

Description : Nitroglycerin Standard

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

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

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

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Nitroglycerin	55-63-0	200507JLM	99%	1,005.0 µg/mL	+/- 46.8850

* 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.

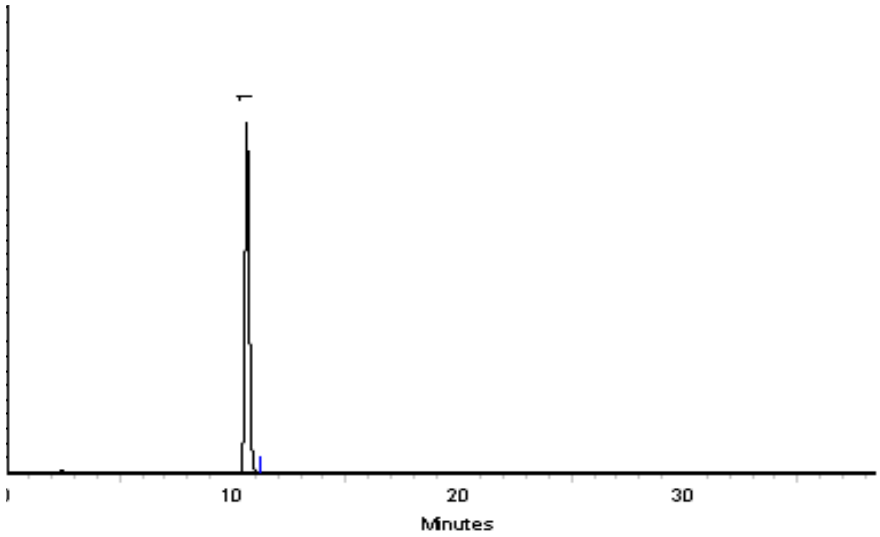
Mobile Phase A:
water:methanol (44:56 V/V)

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.

Brittany Federinko - Operations Tech I

Date Mixed: 30-Nov-2022 **Balance Serial #** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 05-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

8330_NG_AUX_00007

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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. : 31498 **Lot No.:** A0192092

Description : Nitroglycerin Standard

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

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

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

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Nitroglycerin	55-63-0	200507JLM	99%	1,005.0 µg/mL	+/- 46.8850

* 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.

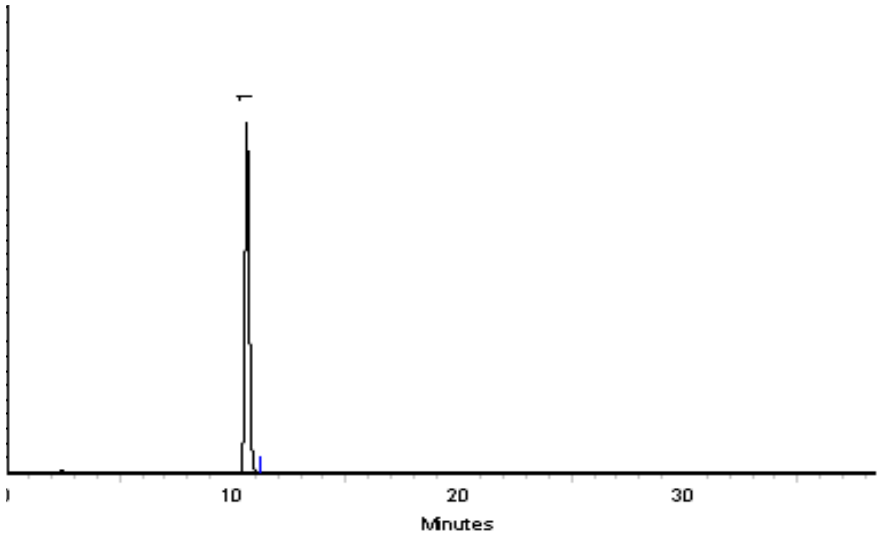
Mobile Phase A:
water:methanol (44:56 V/V)

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.

Brittany Federinko - Operations Tech I

Date Mixed: 30-Nov-2022 **Balance Serial #** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 05-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

8330_NG_Stk_00132

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3223.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3223.02

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.:** A0194930

Description : Custom Nitroglycerin Standard

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

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

Expiration Date : February 28, 2026 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

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

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

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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- 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

8330_NG_Stk_00133

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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ilac-MRA A2LA ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3223.01

ilac-MRA A2LA ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3223.02

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.:** A0194930

Description : Custom Nitroglycerin Standard

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

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

Expiration Date : February 28, 2026 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

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

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

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

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

8330_NG_Stk_00137

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3223.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3223.02

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.:** A0194930

Description : Custom Nitroglycerin Standard

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

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

Expiration Date : February 28, 2026 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

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

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

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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Manufacturing Notes:

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Reagent

8330_NG_Stk_00138

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3223.01

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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. : 568871 **Lot No.:** A0194930

Description : Custom Nitroglycerin Standard

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

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

Expiration Date : February 28, 2026 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

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

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

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

General Certified Reference Material Notes

Expiration Notes:

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Purity Notes:

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Reagent

8330_NG_Stk_00139

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic

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ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3223.02

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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. : 568871 **Lot No.:** A0194930

Description : Custom Nitroglycerin Standard

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

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

Expiration Date : February 28, 2026 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

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

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

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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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_00140

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568871 **Lot No.:** A0200560

Description : Custom Nitroglycerin Standard

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

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

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

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Nitroglycerin	55-63-0	200507JLM	99%	5,037.2 µg/mL	+/- 237.7424

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

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

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

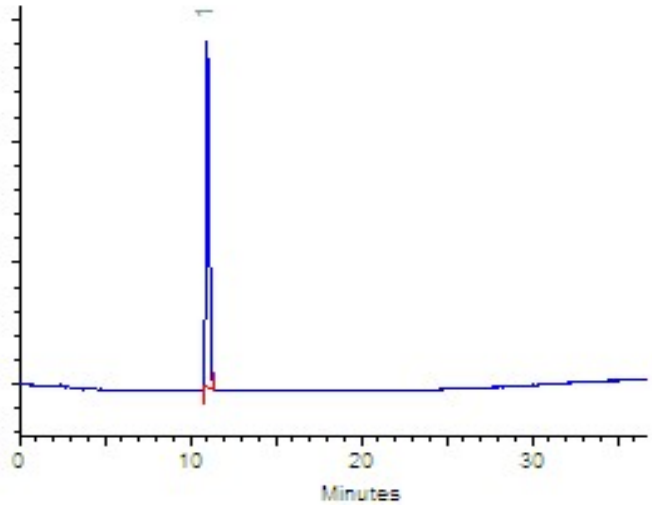
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
2µl



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

Bryan Snyder - Operations Tech I

Date Mixed: 02-Aug-2023 **Balance Serial #** B251644995

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 04-Aug-2023

REVIEWED

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

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

Reagent

8330_OP_DMT_00021

Preliminary Report

Eurofins Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20230622-122822.b\06220012.D

Lims ID: OPDMT21 Inj. Date: 22-Jun-2023 18:40:06

Worklist ID: 280-0122822-012 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 3535	Limits 2 3535
3 TNX	0.5015	0.5101	101.7	50-150	
6 DNX	0.5005	0.5209	104.1	50-150	66-119
7 MNX	0.5835	0.6124	104.9	68-123	57-132

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

400-239200-B-1-A 400-239200-B-3-A 400-239200-B-6-A
400-239201-I-1-A 400-239201-H-2-A 400-239201-H-3-A
400-239201-H-4-A 400-239202-F-1-A 400-239202-F-2-A
400-239202-F-3-A 400-239202-F-4-A

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

280-178007-B-7-A 280-178007-B-8-A 280-178007-A-10-A
280-178007-B-11-A 280-178018-B-1-A 280-178018-A-2-A
280-178018-A-3-A 280-178018-B-4-A 280-178018-B-5-A
380-50652-K-1-A 380-50805-U-1-A

Reagent

8330_OP_DMT_00022

Preliminary Report

Eurofins Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20230901-125089.b\09010011.D

Lims ID: DMT LCS22 Inj. Date: 01-Sep-2023 14:17:47

Worklist ID: 280-0125089-011 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 3535
3 TNX	0.5005	0.4715	94.2	50-150
6 DNX	0.5020	0.4910	97.8	66-119
7 MNX	0.5855	0.5579	95.3	57-132

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

280-180213-A-1-A 280-180213-A-2-A 280-180213-A-3-A

280-180213-A-4-A 280-180213-A-5-A 280-180213-A-6-A

280-180213-A-7-A 280-180213-A-8-A 280-180213-A-9-A

280-180213-A-10-A 280-180213-A-11-A

Reagent

8330_OP_DMT_00023

Preliminary Report

Eurofins Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X5\20231004-126147.b\10040010.D

Lims ID: 8330 DMT 23 Inj. Date: 04-Oct-2023 16:05:28

Worklist ID: 280-0126147-010 Instrument: CHHPLC_X5

Method: 8330_X5_Luna

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 0B_Sonc_
3 TNX	0.5005	0.4698	93.9	50-150
4 DNX	0.5020	0.4884	97.3	50-150
6 MNX	0.5855	0.5691	97.2	50-150

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

280-182112-A-2-D 280-182112-A-3-B 280-182112-A-4-B

280-182114-A-6-B

Reagent

8330_PETN_Stk_00137

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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. : 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)

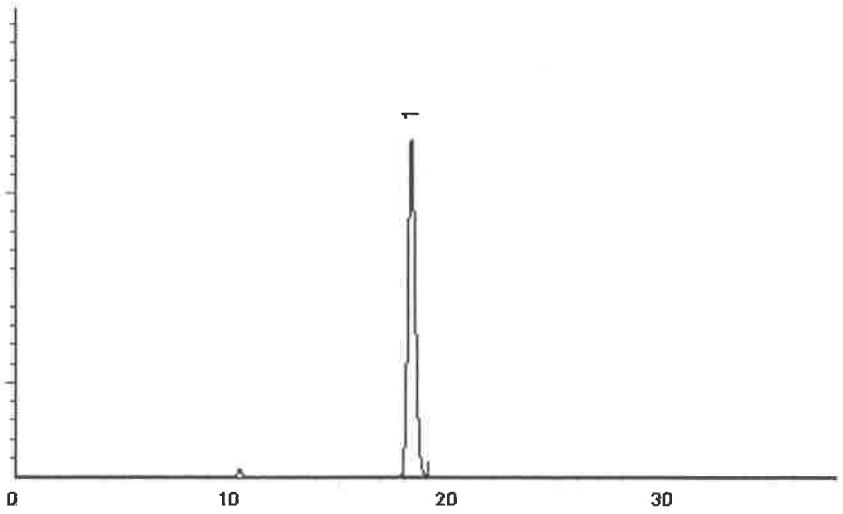
Flow Rate:
1.0 ml/min.

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_PETN_Stk_00138

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Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Composition

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. : 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)

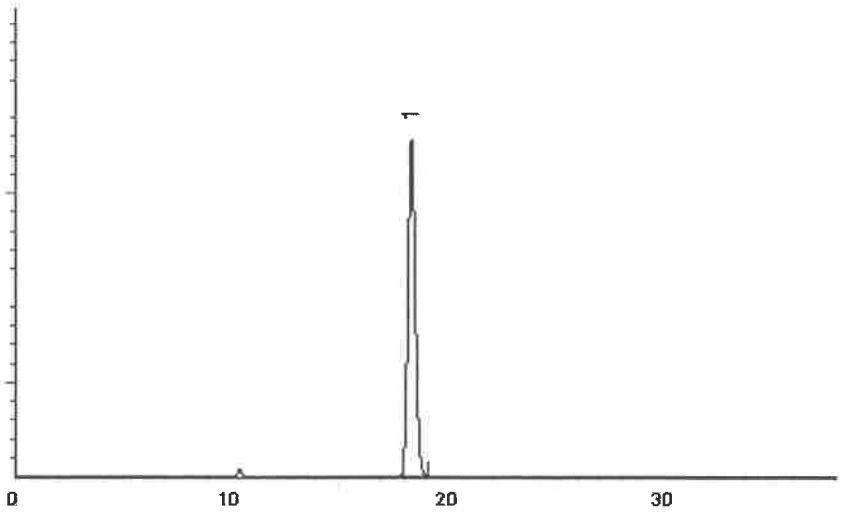
Flow Rate:
1.0 ml/min.

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_PETN_Stk_00141

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

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568872 **Lot No.:** A0197735

Description : Custom PETN Standard

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

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

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

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	PETN	78-11-5	051108JLM	99%	5,020.0 µg/mL	+/- 236.9306

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

Solvent: Acetonitrile

CAS # 75-05-8

Purity 99%

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

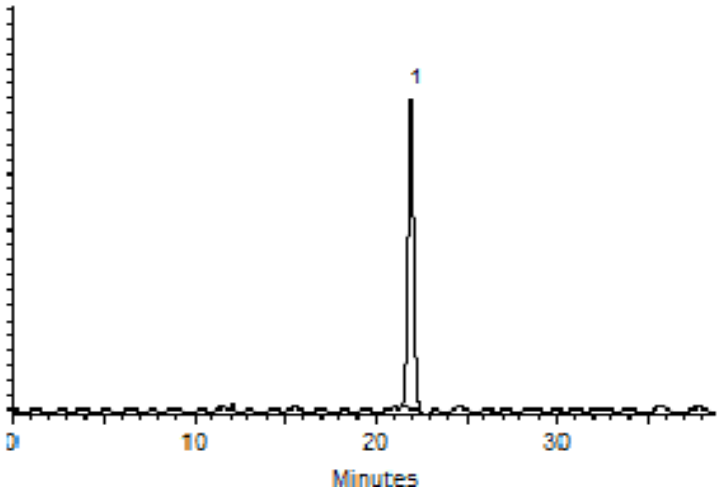
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
1µl



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

John Friedline - Operations Technician I

Date Mixed: 04-May-2023 **Balance Serial #** 1127510105

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 10-May-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%.
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Manufacturing Notes:

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Handling Notes:

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

Reagent

8330_PETN_Stk_00144

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

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568872 **Lot No.:** A0197735

Description : Custom PETN Standard

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

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

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

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	PETN	78-11-5	051108JLM	99%	5,020.0 µg/mL	+/- 236.9306

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

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

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

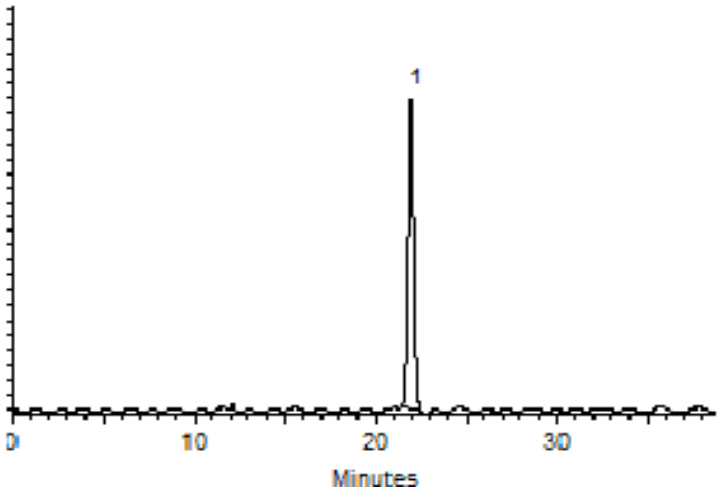
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
1µl



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

John Friedline - Operations Technician I

Date Mixed: 04-May-2023 **Balance Serial #** 1127510105

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 10-May-2023

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

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

Reagent

8330_PETN_Stk_00145

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : Custom PETN Standard

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

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

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

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	PETN	78-11-5	051108JLM	99%	5,012.0 µg/mL	+/- 236.5531

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

Solvent: Acetonitrile

CAS # 75-05-8

Purity 99%

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

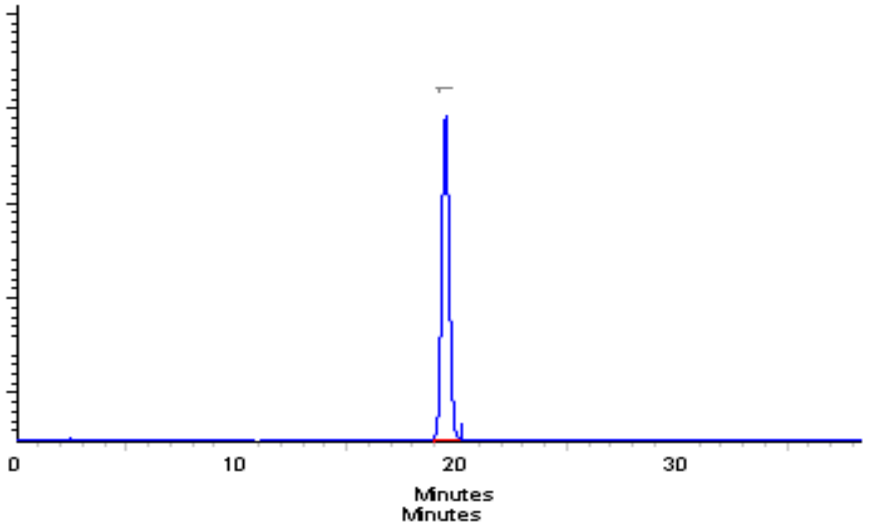
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
1µl



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

Bryan Snyder - Operations Tech I

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

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 16-Jun-2023

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

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

Reagent

8330_PETN_Stk_00146

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : Custom PETN Standard

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

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

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

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	PETN	78-11-5	051108JLM	99%	5,012.0 µg/mL	+/- 236.5531

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

Solvent: Acetonitrile

CAS # 75-05-8

Purity 99%

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

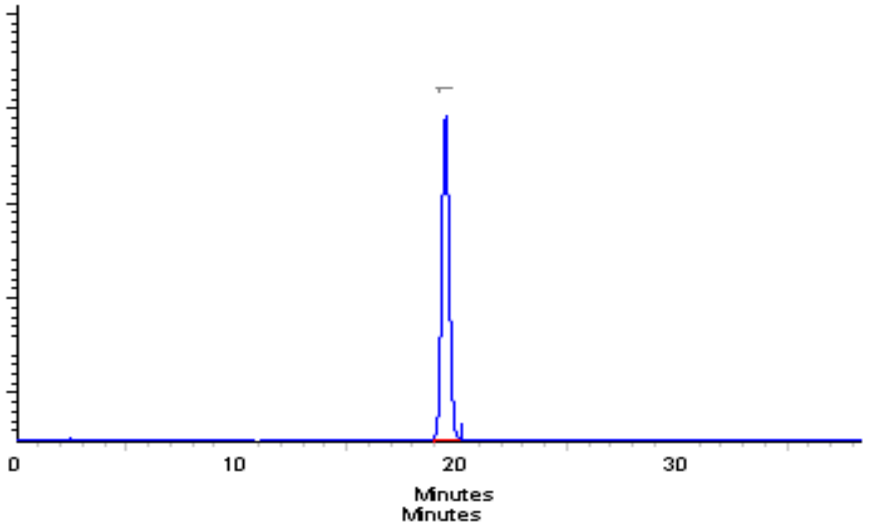
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
1µl



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

Bryan Snyder - Operations Tech I

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

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 16-Jun-2023

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

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

Reagent

8330_PETN1000_00012

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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. : 31600 **Lot No.:** A0194158

Description : PETN Standard

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

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

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

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

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L., K=2)
1	PETN	78-11-5	051108JLM	99%	1,009.0 µg/mL	+/- 47.0716

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

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

8330_PETN1000_00013

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. : 31600 **Lot No.:** A0194158

Description : PETN Standard

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

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

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

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

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L., K=2)
1	PETN	78-11-5	051108JLM	99%	1,009.0 µg/mL	+/- 47.0716

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

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

833035DNAStk_00055

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.

Reagent

833035DNAStk_00056

125 Market Street
New Haven, CT 06513
USA

AccuStandard®

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

CERTIFICATE OF ANALYSIS

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



Signal Word: Danger

Date Certified: Apr 14, 2023
Expiration: May 14, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED AR-1463

ilac-MRA

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

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

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

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

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

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

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

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

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

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

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

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

Reagent

8330DiaminLCS_00058

Preliminary Report

Eurofins Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20230608-122323.b\0608DIA58.D

Lims ID: DiaminoLCS58 Inj. Date: 08-Jun-2023 15:03:39

Worklist ID: 280-0122323-061 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 0B_Sonc_
2 2,6-diamino-4-nitrotolu	0.5000	0.4653	93.1	10-150
5 2,4-diamino-6-nitrotolu	0.5000	0.4588	91.8	10-150

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

280-177189-A-2-B
280-177189-A-5-B
280-177189-A-8-B
280-177189-A-11-B
280-177191-A-1-B
280-177191-A-2-B
280-177191-A-3-B
280-177191-A-4-B
280-177191-A-5-B
280-177191-A-6-B
280-177191-A-7-B
280-177191-A-8-D
280-177191-A-9-B
280-177191-A-10-B
280-177191-A-11-B
280-177191-A-12-B
280-177191-A-13-B
280-177191-A-14-B
280-177191-A-15-C

Reagent

8330DiaminLCS_00060

Preliminary Report

Eurofins Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20230728-123981.b\07280011.D

Lims ID: 8330DiaLCS60 Inj. Date: 28-Jul-2023 16:13:22

Worklist ID: 280-0123981-011 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 0B_Sonc_
2 2,6-diamino-4-nitrotolu	0.5000	0.4808	96.2	10-150
5 2,4-diamino-6-nitrotolu	0.5000	0.4712	94.2	10-150

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

280-179122-A-3-F
680-237803-D-8-B
680-237803-G-9-B
680-237803-G-10-B
680-237803-G-11-B
680-237803-G-12-B
680-237803-G-13-B
680-237803-C-14-B
680-237803-F-15-B
680-237803-G-16-B
680-237803-G-17-B
680-237803-G-18-B
680-237803-G-19-B
680-237803-G-20-D
680-237803-C-21-B
680-237803-F-22-B
680-237803-F-23-B
680-237803-F-24-B
680-237803-F-25-B
680-237803-F-26-B
680-237803-F-27-B
680-237800-D-1-B
680-237800-G-2-B
680-237800-G-3-F
680-237800-G-4-B

Reagent

8330LCSMix1_00142

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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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)

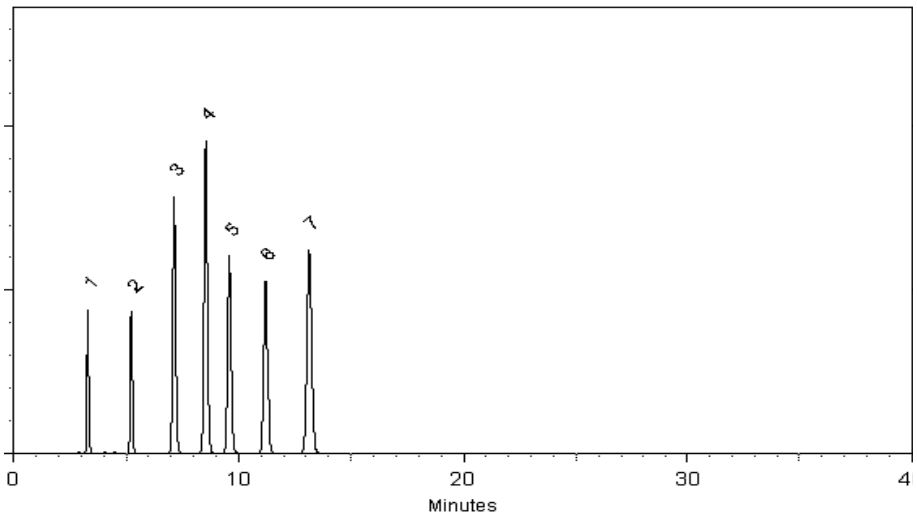
Flow Rate:
1.0 ml/min.

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

8330LCSMix1_00145

4 vials Rec. 10/6/20
8330 Cali mix 1

RESTEK CERTIFIED REFERENCE MATERIAL

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

www.restek.com

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ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31450 **Lot No.:** A0163590

Description : 8330 Calibration Mix #1

8330 Calibration Std #1 1000µg/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	HMX		1,002.5 µg/mL	+/- 5.9548	µg/mL	Gravimetric
	CAS # 2691-41-0	(Lot 191003JLM)		+/- 54.9222	µg/mL	Unstressed
	Purity 98%			+/- 64.0446	µg/mL	Stressed
2	RDX		1,005.0 µg/mL	+/- 5.9694	µg/mL	Gravimetric
	CAS # 121-82-4	(Lot 080228JLM)		+/- 55.0569	µg/mL	Unstressed
	Purity 99%			+/- 64.2018	µg/mL	Stressed
3	1,3,5-Trinitrobenzene		1,005.0 µg/mL	+/- 5.9694	µg/mL	Gravimetric
	CAS # 99-35-4	(Lot A6TDK)		+/- 55.0569	µg/mL	Unstressed
	Purity 99%			+/- 64.2018	µg/mL	Stressed
4	1,3-Dinitrobenzene		1,007.0 µg/mL	+/- 5.9813	µg/mL	Gravimetric
	CAS # 99-65-0	(Lot BCBN4329V)		+/- 55.1665	µg/mL	Unstressed
	Purity 99%			+/- 64.3295	µg/mL	Stressed
5	Nitrobenzene		1,000.0 µg/mL	+/- 5.9397	µg/mL	Gravimetric
	CAS # 98-95-3	(Lot SHBJ3622)		+/- 54.7830	µg/mL	Unstressed
	Purity 99%			+/- 63.8824	µg/mL	Stressed
6	2,4,6-Trinitrotoluene		1,006.0 µg/mL	+/- 5.9753	µg/mL	Gravimetric
	CAS # 118-96-7	(Lot 5737200)		+/- 55.1117	µg/mL	Unstressed
	Purity 99%			+/- 64.2657	µg/mL	Stressed
7	2,4-Dinitrotoluene		1,009.0 µg/mL	+/- 5.9932	µg/mL	Gravimetric
	CAS # 121-14-2	(Lot MKAA0690V)		+/- 55.2761	µg/mL	Unstressed
	Purity 99%			+/- 64.4573	µg/mL	Stressed

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

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

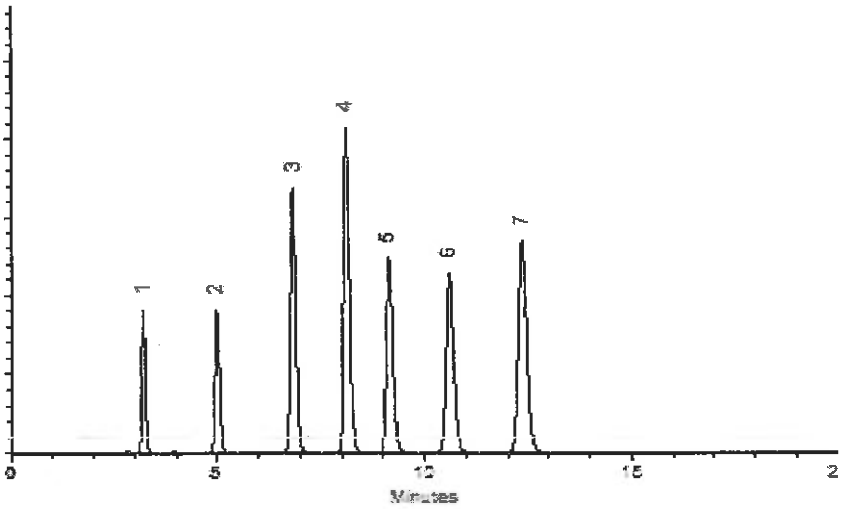
Flow Rate:
1.0 ml/min.

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.

Dalton Stover - Operations Technician I

Date Mixed: 17-Aug-2020 **Balance:** 1128353505

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 19-Aug-2020

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

Reagent

8330LCSMix1_00146

4 vials Rec. 10/6/20
8330 Cali mix 1

RESTEK CERTIFIED REFERENCE MATERIAL

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Bellefonte, PA 16823-8812
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Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31450 **Lot No.:** A0163590

Description : 8330 Calibration Mix #1

8330 Calibration Std #1 1000µg/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	HMX		1,002.5 µg/mL	+/- 5.9548	µg/mL	Gravimetric
	CAS # 2691-41-0	(Lot 191003JLM)		+/- 54.9222	µg/mL	Unstressed
	Purity 98%			+/- 64.0446	µg/mL	Stressed
2	RDX		1,005.0 µg/mL	+/- 5.9694	µg/mL	Gravimetric
	CAS # 121-82-4	(Lot 080228JLM)		+/- 55.0569	µg/mL	Unstressed
	Purity 99%			+/- 64.2018	µg/mL	Stressed
3	1,3,5-Trinitrobenzene		1,005.0 µg/mL	+/- 5.9694	µg/mL	Gravimetric
	CAS # 99-35-4	(Lot A6TDK)		+/- 55.0569	µg/mL	Unstressed
	Purity 99%			+/- 64.2018	µg/mL	Stressed
4	1,3-Dinitrobenzene		1,007.0 µg/mL	+/- 5.9813	µg/mL	Gravimetric
	CAS # 99-65-0	(Lot BCBN4329V)		+/- 55.1665	µg/mL	Unstressed
	Purity 99%			+/- 64.3295	µg/mL	Stressed
5	Nitrobenzene		1,000.0 µg/mL	+/- 5.9397	µg/mL	Gravimetric
	CAS # 98-95-3	(Lot SHBJ3622)		+/- 54.7830	µg/mL	Unstressed
	Purity 99%			+/- 63.8824	µg/mL	Stressed
6	2,4,6-Trinitrotoluene		1,006.0 µg/mL	+/- 5.9753	µg/mL	Gravimetric
	CAS # 118-96-7	(Lot 5737200)		+/- 55.1117	µg/mL	Unstressed
	Purity 99%			+/- 64.2657	µg/mL	Stressed
7	2,4-Dinitrotoluene		1,009.0 µg/mL	+/- 5.9932	µg/mL	Gravimetric
	CAS # 121-14-2	(Lot MKAA0690V)		+/- 55.2761	µg/mL	Unstressed
	Purity 99%			+/- 64.4573	µg/mL	Stressed

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

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

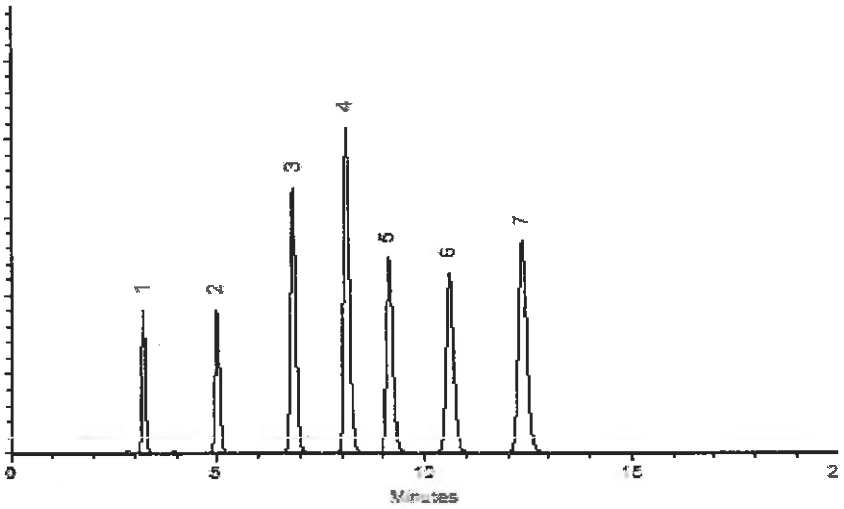
Flow Rate:
1.0 ml/min.

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.

Dalton Stover - Operations Technician I

Date Mixed: 17-Aug-2020 **Balance:** 1128353505

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 19-Aug-2020

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

Reagent

8330LCSmix2_00041

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.

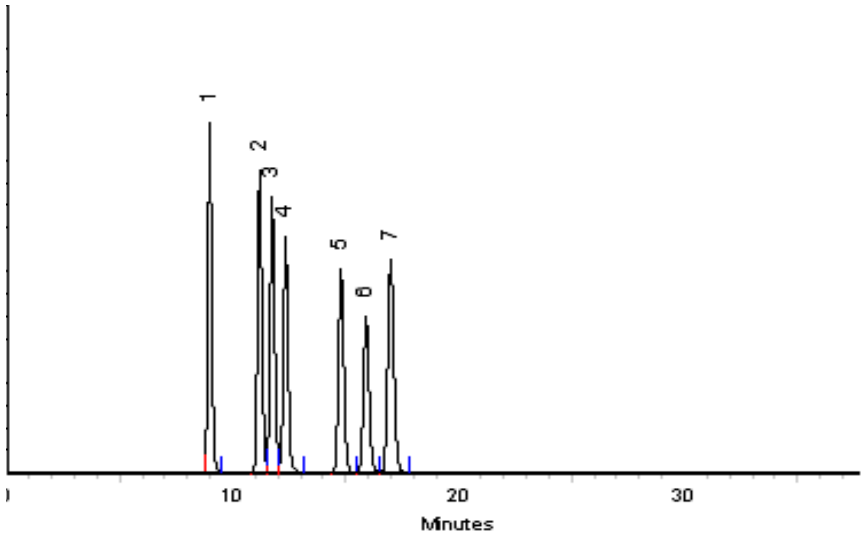
Mobile Phase A:
water:methanol (44:56 V/V)

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

8330LCSmix2_00043

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.

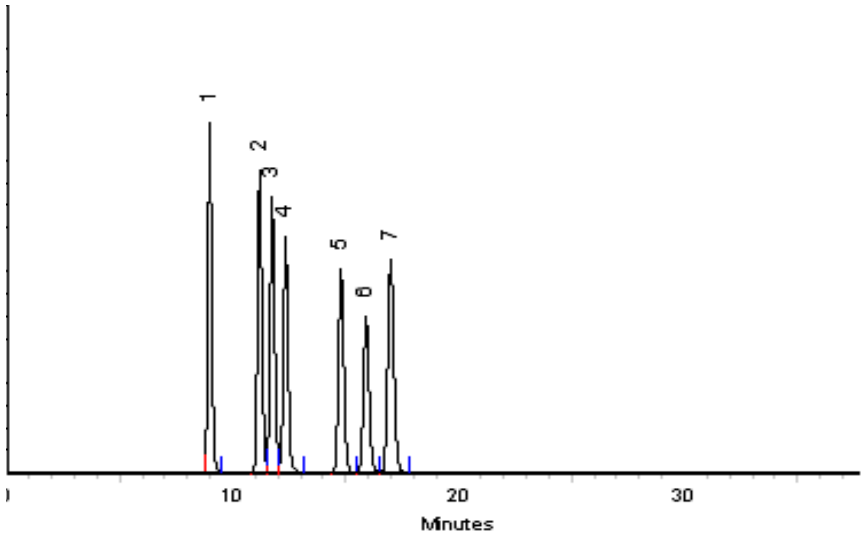
Mobile Phase A:
water:methanol (44:56 V/V)

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

8330LCSmix2_00044

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.

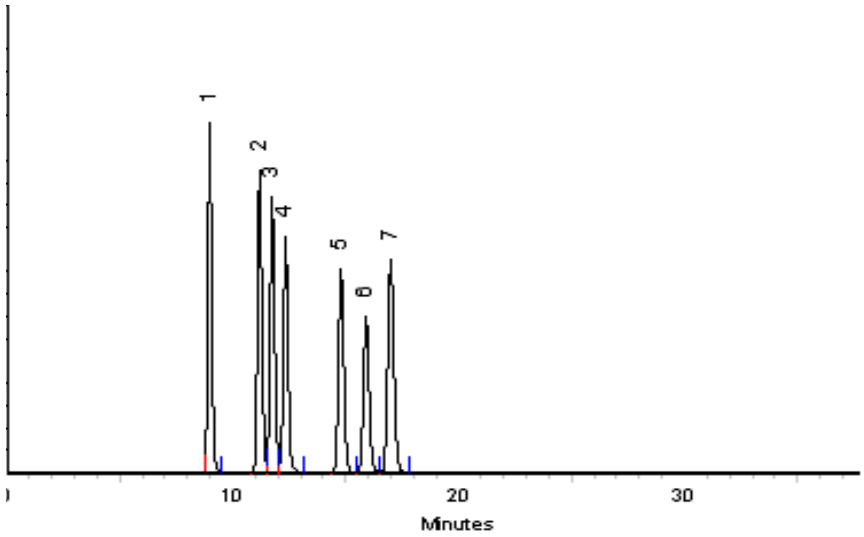
Mobile Phase A:
water:methanol (44:56 V/V)

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_00072

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.

Reagent

8330PAStkPS_00073

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: 223031306
Solvent: Acetonitrile (50%)
Methanol (50%)
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: Mar 23, 2023
Expiration: Apr 23, 2025
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

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

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

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

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

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

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

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

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

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

8330Surrogate_00146

Preliminary Report

Eurofins Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20230622-122822.b\06220011.D

Lims ID: 8330Surr146 Inj. Date: 22-Jun-2023 18:17:12

Worklist ID: 280-0122822-011 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 3535	Limits 2 3535
$ 10 1,2-Dinitrobenzene	0.5000	0.5234	104.7	63-127	83-119

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

400-239200-B-1-A	400-239200-B-3-A	400-239200-B-6-A
400-239201-I-1-A	400-239201-H-2-A	400-239201-H-3-A
400-239201-H-4-A	400-239202-F-1-A	400-239202-F-2-A
400-239202-F-3-A	400-239202-F-4-A	

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

280-178007-B-7-A	280-178007-B-8-A	280-178007-A-10-A
280-178007-B-11-A	280-178018-B-1-A	280-178018-A-2-A
280-178018-A-3-A	280-178018-B-4-A	280-178018-B-5-A
380-50652-K-1-A	380-50805-U-1-A	

Reagent

8330Surrogate_00150

Preliminary Report

Eurofins Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20230822-124734.b\08220011.D

Lims ID: Surr150 Inj. Date: 22-Aug-2023 20:04:51

Worklist ID: 280-0124734-011 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 0B_Sonc_	Limits 2 0B_Sonc_
$ 10 1,2-Dinitrobenzene	0.2500	0.2372	94.9	78-119	83-122

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

680-238231-F-10-B

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

280-179677-A-20-B 280-179677-A-23-B

Reagent

8330SurrStkSS_00279

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

Certificate of Analysis

chromatographic plus

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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.

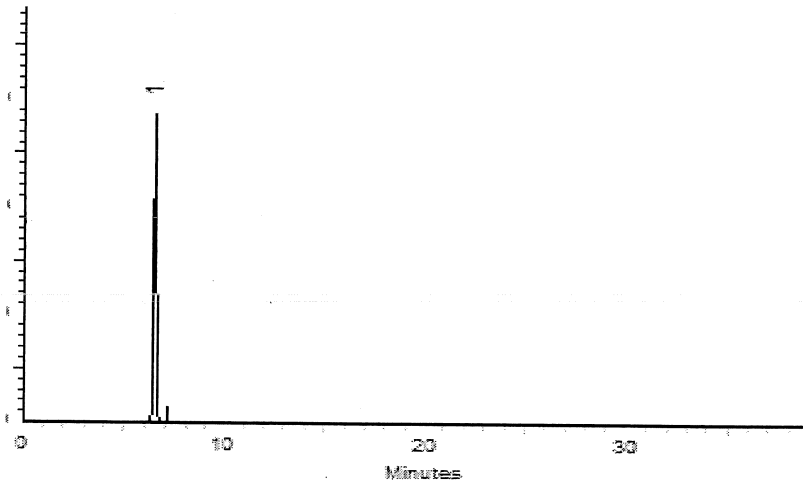
Mobile Phase A:
water:methanol (44:56 V/V)

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:

- 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_00280

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

Certificate of Analysis

chromatographic plus

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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.

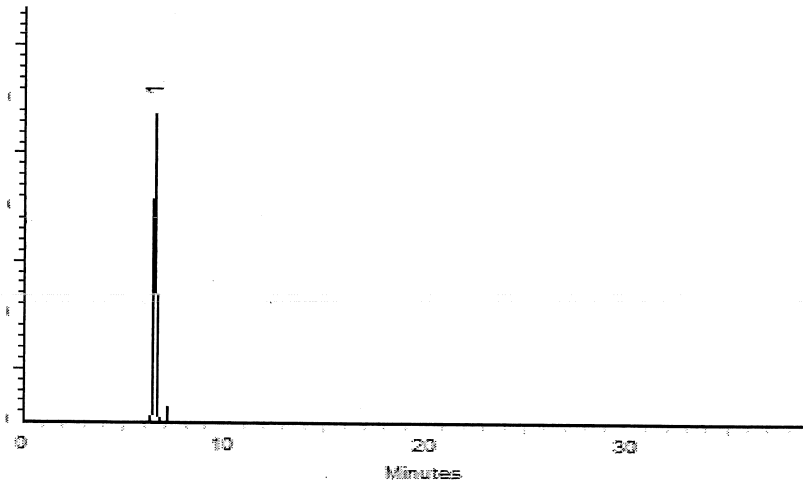
Mobile Phase A:
water:methanol (44:56 V/V)

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:

- 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_00285

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.:** A0197062

Description : 8330 Surrogate Mix

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

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

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

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2-Dinitrobenzene	528-29-0	STBK9056	99%	1,001.6 µg/mL	+/- 56.2801

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

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

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

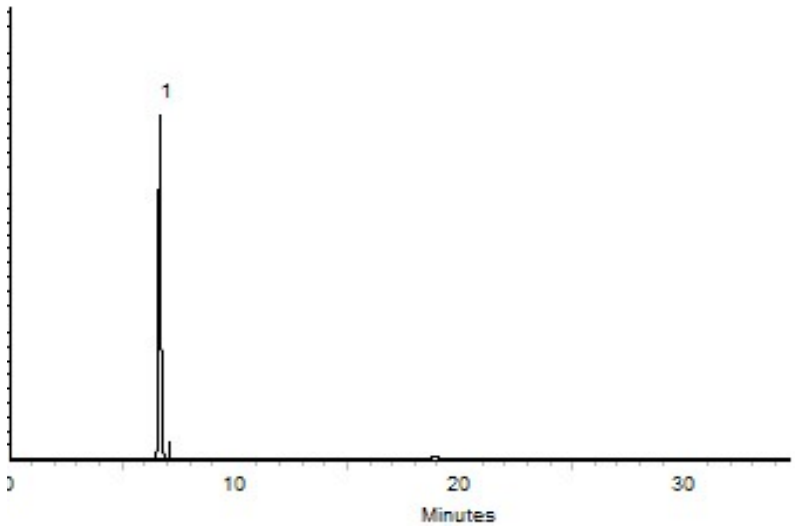
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
2.0µl



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

Penelope Riglin - Operations Tech I

Jennifer Pollino - Operations Tech III - ARM QC

Date Mixed: 17-Apr-2023 **Balance Serial #** 1128360905

Date Passed: 19-Apr-2023

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

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

Reagent

8330SurrStkSS_00293

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.:** A0198799

Description : 8330 Surrogate Mix

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

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

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

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2-Dinitrobenzene	528-29-0	RP230428	99%	1,002.0 µg/mL	+/- 56.3012

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

Solvent: Methanol

CAS # 67-56-1

Purity 99%

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

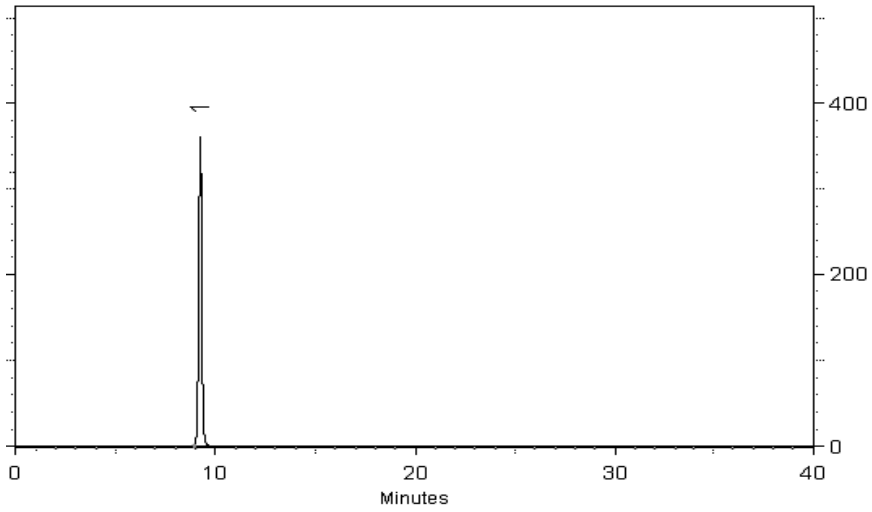
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
2.0µl



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

Laith Clemente - Operations Technician I

Date Mixed: 08-Jun-2023 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 14-Jun-2023

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

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

Reagent

8330SurrStkSS_00294

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.:** A0198799

Description : 8330 Surrogate Mix

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

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

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

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2-Dinitrobenzene	528-29-0	RP230428	99%	1,002.0 µg/mL	+/- 56.3012

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

Solvent: Methanol

CAS # 67-56-1

Purity 99%

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

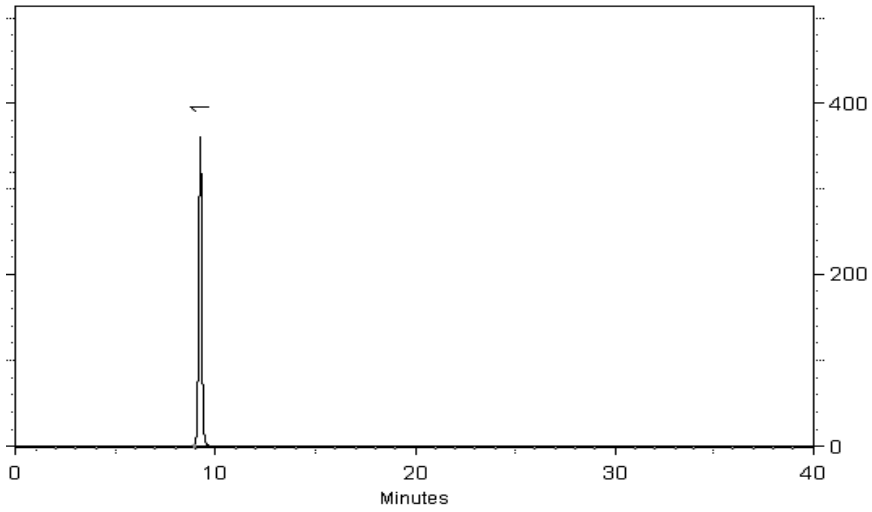
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
2.0µl



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

Laith Clemente - Operations Technician I

Date Mixed: 08-Jun-2023 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 14-Jun-2023

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

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

8330SurrStkSS_00295

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

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Catalog No. : 31453 **Lot No.:** A0198799

Description : 8330 Surrogate Mix

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

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

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

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2-Dinitrobenzene	528-29-0	RP230428	99%	1,002.0 µg/mL	+/- 56.3012

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

Solvent: Methanol

CAS # 67-56-1

Purity 99%

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

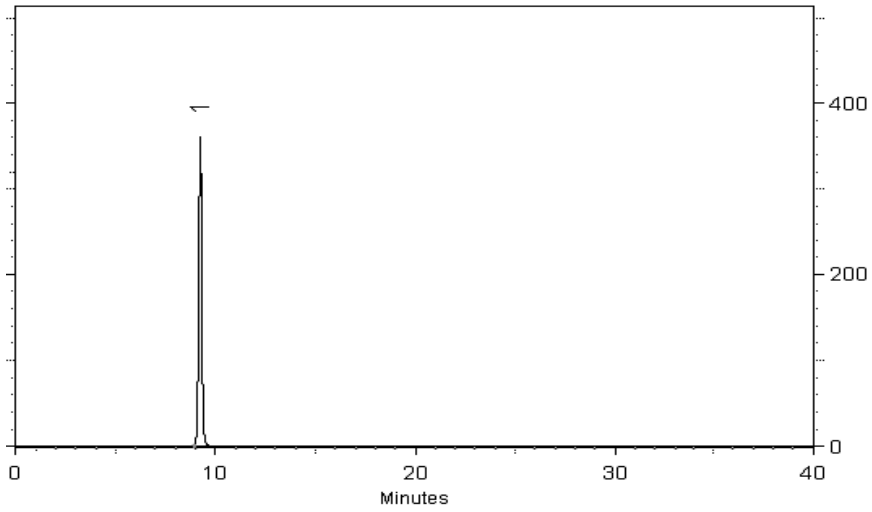
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
2.0µl



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Laith Clemente - Operations Technician I

Date Mixed: 08-Jun-2023 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 14-Jun-2023

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

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Expiration Notes:

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Manufacturing Notes:

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Handling Notes:

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Reagent

8330SurrStkSS_00296

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

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

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
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* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methanol

CAS # 67-56-1

Purity 99%

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Column:
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Ultra C18 (cat.# 9174575)

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1.0 ml/min.

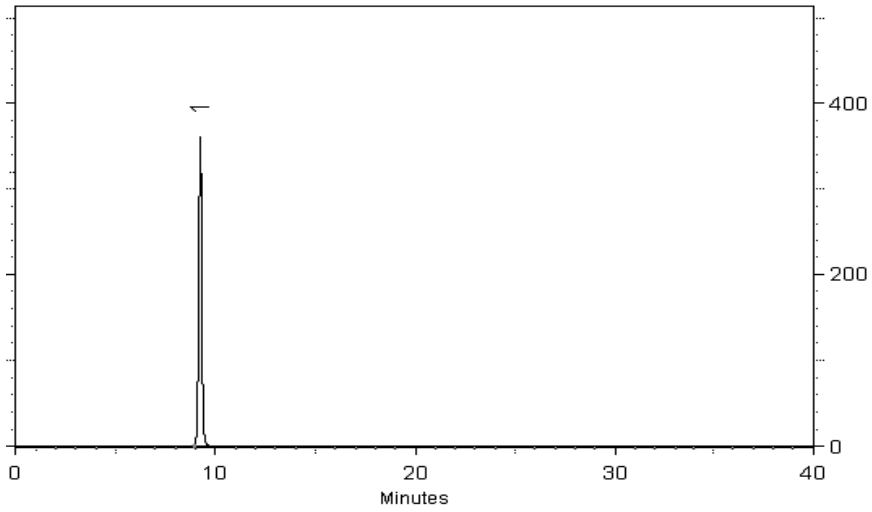
Mobile Phase A:
water:methanol (44:56 V/V)

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm

Inj. Vol
2.0µl



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Laith Clemente - Operations Technician I

Date Mixed: 08-Jun-2023 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 14-Jun-2023

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

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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

IC N03 cal_00028

RICCA CHEMICAL COMPANY®

1841 Broad Street
Pocomoke City, MD 21851
http://www.riccachemical.com
1-888-GO-RICCA
customerservice@riccachemical.com

Certificate of Analysis

Nitrate Nitrogen Standard, 1000 ppm N (4427 ppm NO_3^-)

Lot Number: 2205B73 **Product Number:** 5459

Manufacture Date: MAY 11, 2022
Expiration Date: NOV 2023

The certified value reported is the prepared value based upon the method of preparation of the material. The uncertainty in the prepared value is based upon the volumetric method of preparation.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Potassium Nitrate	7757-79-1	High Purity
Chloroform	67-66-3	

Test	Specification	Result
Appearance	Colorless liquid	Passed
Nitrogen (N)	995-1005 ppm	1000 ppm

Specification	Reference
Nitrate Solution, Stock (1.0 mL = 1.0 mg NO3-N)	ASTM (D 3867 A)
Nitrate Solution, Stock (1.0 mL = 1.0 mg NO3-N)	ASTM (D 3867 B)
Stock Nitrate Solution: 1 mL = 1.0 mg NO3-N	EPA (353.2)
Stock Nitrate Solution: 1.0 mL = 1.00 mg NO3-N	EPA (353.3)

Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
5459-16	500 mL natural poly	18 months

Recommended Storage: 15°C - 30°C (59°F - 86°F)



Myrlande Gilles (05/11/2022)
Quality Control

This Certificate of Analysis is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

This test report shall not be reproduced, except in full, without the written approval of Ricca Chemical Company.

Reagent

IC NO3 ICV_00019

ERA
A Waters Company

Certified Reference Material

▪ Certificate of Analysis ▪

Product:	1000 mg/L Nitrate as N (NO_3-N)
Catalog Number:	052-125mL, 991-500mL
Lot No.	011221m
Starting Material:	Potassium Nitrate (KNO_3)
Matrix:	18 megohm deionized water
Density:	1.0029 ± 0.0005 g/mL 20.2 °C and 749 mm Hg
Verification Method:	Ion Chromatography
Certificate Issue Date:	December 21, 2021
Expiration Date:	December 1, 2023
Revision Number:	Original

CERTIFICATION

Parameter	Certified Value[1]	Uncertainty[2]	NIST Traceability	
	mg/L	%	SRM Number[3]	Recovery %
Nitrate as N (NO_3-N)	1000	1.57	3185	101

16341 Table Mountain Pkwy ▪ Golden, CO 80403 ▪ 800.372.0122 ▪ 303.431.8454 ▪ fax 303.421.0159 ▪ www.eraqc.com

1. The **Certified Value** is the actual gravimetric/volumetric "made-to" concentration confirmed by ERA analytical verification. The certified value is monitored and the purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.

2. The **Uncertainty** represents an expanded uncertainty and approximates a 95% confidence interval. The uncertainty is based on the characterization, homogeneity and stability characteristics of the product, multiplied by a coverage factor (k=2). The uncertainty applies to the product as supplied and does not take into account any required or optional dilution and/or preparations the laboratory may perform while using this product. The formula used to calculate the expanded uncertainty is:
$U_{expanded} = k * SQRT((U_{char}^2) + (U_{homogen}^2) + (U_{LTS}^2) + (U_{STS}^2) + (U_{RSS}^2))$

Where:

$U_{expanded}$ = Expanded uncertainty.
k = Coverage factor.
U_{char} = Combined standard uncertainty of the manufacturing and/or analytical verification assessment.
$U_{homogen}$ = Standard uncertainty of the homogeneity assessment.
U_{LTS} = Standard uncertainty associated with long-term stability.
U_{STS} = Standard uncertainty associated with short-term (transport) stability.
U_{RSS} = Standard uncertainty associated with repeated sampling of the product (where permitted by product use instructions).

3. Where NIST Standard Reference Materials (SRMs) are available, each analyte has been analytically traced to the NIST SRM listed. **Analytical Traceability Recovery (%)** = [(% recovery ERA certified reference material)/(% recovery NIST SRM)]*100
The traceability data shown were compiled by analyzing this ERA certified reference material and/or it's associated stock solution(s) against the applicable NIST SRMs.

4. **Metrological Traceability.** This certified reference material is metrologically traceable to NIST mass reference materials through an unbroken chain of comparisons.

5. **Storage**: 20-25°C

6. **Intended Use**: This standard is intended to be used to calibrate your analytical process and/or as a quality control check of the entire process for the analytes/matrix included in the standard.

7. **Minimum Sample Size**: ERA suggests that when subsampling this product prior to analysis, you use a minimum sample size of at least 1 mL. Using a smaller sample size may invalidate the assigned value and/or uncertainty shown.

8. **Repeat Sampling**: Repeated Sampling of this product is permitted, provided minimum sample sizes and storage instructions are adhered to.

9. **Safety**: ERA products may be hazardous and are intended for use by professional laboratory personnel trained in the competent handling of such materials. Responsibility for the safe use of these products rests entirely with the buyer and/or user. Safety Data Sheets (SDS) for all ERA products are available through our website: www.eraqc.com

If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.

Certifying Officer
Brian Miller

Brian Miller

Quality Officer
Matthew Seebeck

ISO 17034:2016 ACCREDITED Reference Material Producer CERT #1529.03

ISO/IEC 17025:2017 ACCREDITED Chemical Testing Laboratory CERT #1539.02

16341 Table Mountain Pkwy ▪ Golden, CO 80403 ▪ 800.372.0122 ▪ 303.431.8454 ▪ fax 303.421.0159 ▪ www.eraqc.com

Reagent

IC P04 cal_00030

RICCA CHEMICAL COMPANY®

1490 Lammers Pike
Batesville, IN 47006
http://www.riccachemical.com
1-888-GO-RICCA
customerservice@riccachemical.com

Certificate of Analysis

Phosphorus AA Standard, 1000 ppm P in H_2O

Lot Number: 4208152 **Product Number:** AP1KW

Manufacture Date: AUG 02, 2022
Expiration Date: JUL 2024

This is a single element solution that was prepared volumetrically to contain the certified value reported. The uncertainty associated with the certified value is the sum of the estimated errors due to the purity of the raw material, the volumetric preparation of the solution, and transpiration of the solution through the container wall.
The final solution concentration is confirmed by AA, ICP, or ICP-MS, and is traceable to NIST Standard Reference Material 3139.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Ammonium Dihydrogen Phosphate	7722-76-1	High Purity

Test	Specification	Result	NIST SRM#
Appearance	Colorless liquid	Passed	
Phosphorus (P)	995-1005 ppm	1000 ppm	3139

Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
AP1KW-500	500 mL natural poly	24 months

Recommended Storage: 15°C - 30°C (59°F - 86°F)

Paul Brandon (08/02/2022)
Production Manager
This Certificate of Analysis is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

This test report shall not be reproduced, except in full, without the written approval of Ricca Chemical Company.

Reagent

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_00078

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:
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Homogeneity:
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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_00080

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_00081

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: 0006731787
Lot Issue Date: 28-Feb-2023
Expiration Date: 31-Mar-2024

Component Name	Concentration		Uncertainty	CAS#	Analyte Lot
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)	100.1	±	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)	117.1	±	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:

Agilent
Trusted Answers

The certification of this analytical reference standard (RM) is valid until the expiration date specified above, provided the material is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the material is damaged, contaminated, or otherwise modified.

Maintenance of Certification:
If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

Monica Bourgeois
QMS Representative

ANAB
ANSI National Accreditation Board
ACCREDITED
ISO 17034
REFERENCE MATERIAL PRODUCER

ISO 17034 Cert
No. AR-1936

RM was produced in accordance with the TUV/SUD registered ISO 9001:2015 Quality Management System. Cert# 951215321

www.agilent.com/quality/
CSD-QA-015.1

ISO 17025

Reagent

MNX,TNX,DNX_00082

10/20/2023
4:00 PM

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: 0006731787
Lot Issue Date: 28-Feb-2023
Expiration Date: 31-Mar-2024

Component Name	Concentration		Uncertainty	CAS#	Analyte Lot
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)	100.1	±	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)	117.1	±	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:

Page 262 of 1033

Agilent
Trusted Answers

The certification of this analytical reference standard (RM) is valid until the expiration date specified above, provided the material is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the material is damaged, contaminated, or otherwise modified.

Maintenance of Certification:
If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

Monica Bourgeois
QMS Representative

ANAB
ANSI National Accreditation Board
ACCREDITED
ISO 17034
REFERENCE MATERIAL PRODUCER

ISO 17034 Cert
No. AR-1936

ISO 17025

Reagent

NH3 CAL STD_00035

RICCA CHEMICAL COMPANY®

1490 Lammers Pike
Batesville, IN 47006
http://www.riccachemical.com
1-888-GO-RICCA
customerservice@riccachemical.com

Certificate of Analysis

Ammonia Nitrogen Standard, 1000 ppm N (1216 ppm NH_3)

Lot Number: 4208D17 **Product Number:** 5455

Manufacture Date: AUG 05, 2022
Expiration Date: JAN 2024

The certified value reported is the prepared value based upon the method of preparation of the material. The uncertainty in the prepared value is based upon the volumetric method of preparation.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Ammonium Chloride	12125-02-9	High Purity

Test	Specification	Result
Appearance	Colorless liquid	Passed
Nitrogen (N)	995-1005 ppm	1000 ppm

Specification	Reference
Ammonia Solution, Stock (1.0 mL = 1.0 mg ammonia nitrogen)	ASTM (D 3590 A)
Ammonia Solution, Stock (1.0 mL = 1.0 mg ammonium nitrogen)	ASTM (D 3590 B)
Stock Ammonium Chloride Solution	APHA (4500-CN- L)
Stock Ammonium Solution	APHA (4500-NH3 C)
Stock Ammonium chloride Solution	APHA (4500-NH3 D)
Stock Ammonium Solution	APHA (4500-NH3 F)
Ammonium Chloride, Stock Solution, 1.0 mL = 1.0 mg NH3-N	EPA (351.2)
Ammonium Chloride, Stock Solution, 1.0 mL = 1.0 mg NH3-N	EPA (350.2)
Ammonium Chloride, Stock Solution, 1.0 mL = 1.0 mg NH3-N	EPA (350.3)
Ammonium Chloride, Stock Solution, 1.0 mL = 1.0 mg NH3-N	EPA (351.4)
Stock Solution, 1.0 mL = 1.0 mg NH3-N	EPA (350.1)
Ammonium Chloride, Stock Solution, 1.0 mL = 1.0 mg NH3-N	EPA (351.3)

Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
5455-16	500 mL natural poly	18 months

Recommended Storage: 15°C - 30°C (59°F - 86°F)



Paul Brandon (08/05/2022)
Production Manager
This Certificate of Analysis is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

This test report shall not be reproduced, except in full, without the written approval of Ricca Chemical Company.

Reagent

NH3 ICV STD_00034

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Ion Chromatography Solution
Catalog Number:	ICNNH41
Lot Number:	S2-NH700817
Matrix:	H2O
Value / Analyte(s):	1 000 µg/mL ea: Ammonium as N
Starting Material:	Ammonium chloride
Starting Material Lot#:	1736
Starting Material Purity:	99.8500%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 999 ± 4 µg/mL

Density: 0.999 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **995 ± 4 µg/mL**
Fajans NIST SRM 999c Lot Number: 999c

Assay Method #2 **1002 ± 4 µg/mL**
IC Assay NIST SRM 194a Lot Number: 194a

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

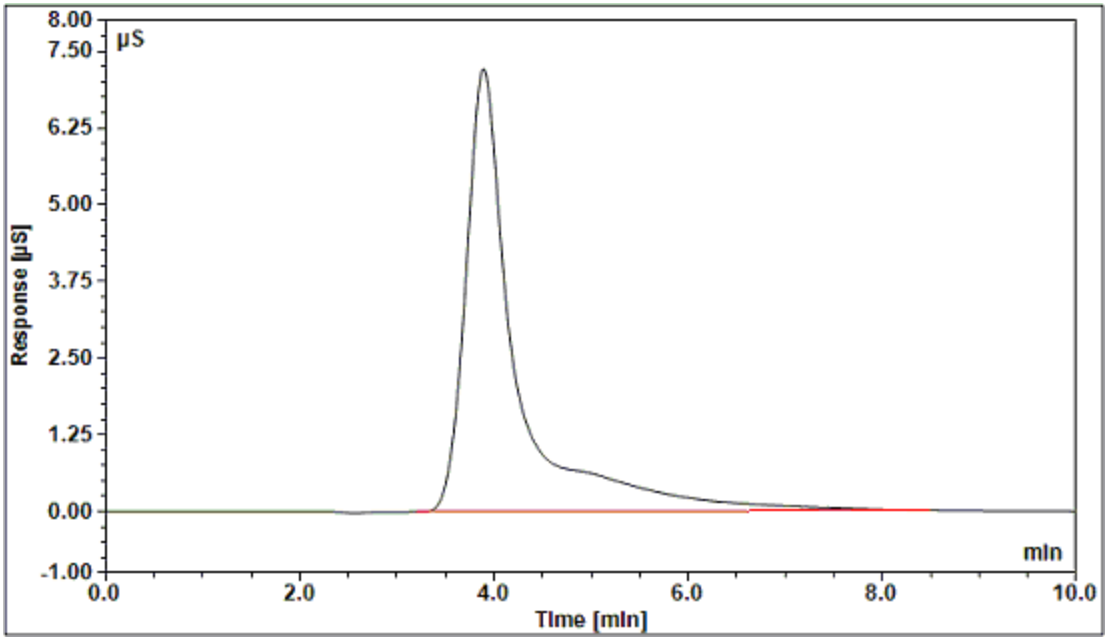
4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 CHROMATOGRAM



Dionex ICS-2000 Ion Chromatograph

Analytical Column:	IonPac CS18 2 x 250 mm	**Eluent:**	10 mM MSA
Guard Column:	IonPac CG18 2 x 50 mm	**Eluent Flow Rate:**	0.25 mL/min
Anion Self Regen Suppressor/ Chemical Suppression:	N/A	**Column Temp:**	30°C
		Cell Temp:	35°C
		Scale X-Axis:	minutes
Cation Self Regen Suppressor/ Chemical Suppression:	CERS 500 2mm	**Scale Y-Axis:**	8 µS/cm
		Concentration:	10 µg/g
Suppressor Current/ Chemical Suppressant:	8 mA		

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

January 25, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **January 25, 2025**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation



Certificate Approved By:

Michael Booth
Director, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



Reagent

NO2 ICV Std_00039

RICCA CHEMICAL COMPANY®

1490 Lammers Pike
Batesville, IN 47006
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customerservice@riccachemical.com

Certificate of Analysis

Nitrite Nitrogen Standard, 1000 ppm N (3285 ppm NO_2^-)

Lot Number: 4304L74 **Product Number:** 5461

Manufacture Date: APR 25, 2023
Expiration Date: OCT 2023

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Potassium Nitrite	7758-09-0	ACS
Chloroform	67-66-3	

Test	Specification	Result	NIST SRM#
Appearance	Colorless liquid	Passed	
Assay (vs. Potassium Permanganate)	995-1005 ppm N	1000 ppm N	8040

Specification	Reference
Nitrite Solution, Stock (1.0 mL = 1.0 mg NO2-N)	ASTM (D 3867 A)
Nitrite Solution, Stock (1.0 mL = 1.0 mg NO2-N)	ASTM (D 3867 B)
Stock Nitrite Solution: 1 mL = 1.0 mg NO2-N	EPA (353.2)
Stock Nitrite Solution: 1.0 mL = 1.00 mg NO2-N	EPA (353.3)

Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
5461-16	500 mL natural poly	6 months

Recommended Storage: 2°C - 8°C (36°F - 46°F)

Paul Brandon (04/25/2023)
Production Manager
This document is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

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Reagent

PicricARestek_00119

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)

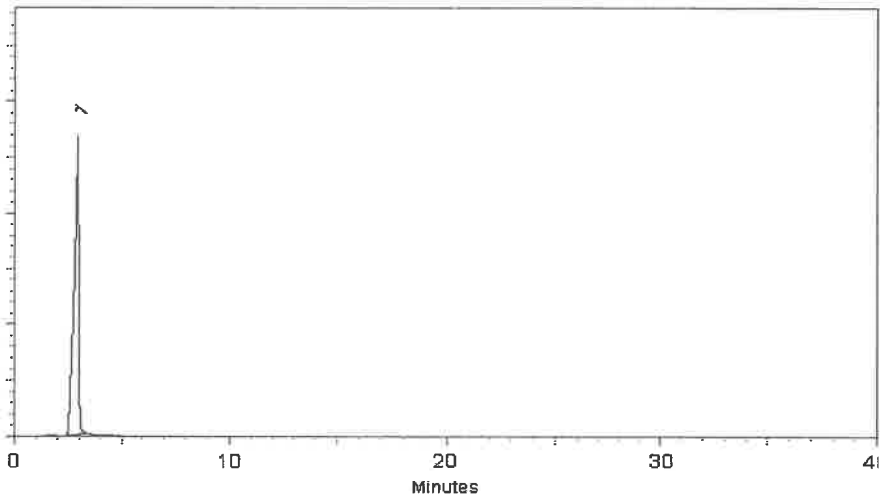
Flow Rate:
1.0 ml/min.

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.: 280-182239-1

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-004-230901-GW	280-182239-1		95
SCFmw-004-230901-GW	280-182239-1	102 M	
SCFmw-004-230902-GW	280-182239-2		92
SCFmw-004-230902-GW	280-182239-2	97 M	
LL3mw-237-230901-GW	280-182239-3		92 M
LL3mw-237-230901-GW	280-182239-3	116	
LL3mw-241-230901-GW	280-182239-4		93
LL3mw-241-230901-GW	280-182239-4	94	
LL3mw-241-230902-GW	280-182239-5		95
LL3mw-241-230902-GW	280-182239-5	99	
LL1mw-093-230901-GW	280-182239-6		76 Q
LL1mw-093-230901-GW	280-182239-6	72 Q M	
LL1mw-092-230901-GW	280-182239-7		72 Q
LL1mw-092-230901-GW	280-182239-7	68 Q M	
LL3mw-248-230901-GW	280-182239-8		86
LL3mw-248-230901-GW	280-182239-8	80 Q M	
LL1mw-091-230901-GW	280-182239-9		96
LL1mw-091-230901-GW	280-182239-9	100 M	
LL3mw-247-230901-GW	280-182239-12		92
LL3mw-247-230901-GW	280-182239-12	88	
	MB 280-628393/1-A	99 M	
	LCS 280-628393/2-A	96	
	LCS 280-628393/4-A	102	
	LCSD 280-628393/3-A	98	

	QC LIMITS
12DNB = 1,2-Dinitrobenzene	83-119

Column to be used to flag recovery values

FORM II 8330B

FORM II
HPLC/IC SURROGATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-182239-1

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 #
	LCSD 280-628393/5-A	98	
LL3mw-241-230901-GW MS	280-182239-4 MS		95 M
LL3mw-241-230901-GW MS	280-182239-4 MS	93	
LL3mw-241-230901-GW MS	280-182239-4 MS	82 Q	
LL3mw-241-230901-GW MSD	280-182239-4 MSD		94
LL3mw-241-230901-GW MSD	280-182239-4 MSD	91	
LL3mw-241-230901-GW MSD	280-182239-4 MSD	88	

	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.: 280-182239-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 10090040.D

Lab ID: LCS 280-628393/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.00	2.10	105	73-125	
1,3-Dinitrobenzene	2.00	1.95	98	78-120	
2,4,6-Trinitrotoluene	2.00	1.91	95	71-123	
2,4-Dinitrotoluene	2.00	1.92	96	78-120	
2,6-Dinitrotoluene	2.00	1.87	93	77-127	
2-Amino-4,6-dinitrotoluene	2.00	1.75	88	79-120	
2-Nitrotoluene	2.00	1.59	79	70-127	
3,5-Dinitroaniline	2.00	1.61	81	71-117	
3-Nitrotoluene	2.00	1.55	78	73-125	
4-Amino-2,6-dinitrotoluene	2.00	1.39	69	76-125	Q
4-Nitrotoluene	2.00	1.53	77	71-127	
DNX	2.01	2.00	99	66-119	M
HMX	2.00	1.74	87	65-135	M
MNX	2.34	2.27	97	57-132	
Nitrobenzene	2.00	1.72	86	65-134	
Nitroglycerin	20.0	20.0	100	74-127	
PETN	20.0	20.2	101	73-127	
RDX	2.00	1.87	93	68-130	
Tetryl	2.00	2.03	102	64-128	
TNX	2.00	1.76	88	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.: 280-182239-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 10090042.D

Lab ID: LCS 280-628393/4-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
2,4-diamino-6-nitrotoluene	2.00	1.78	89	68-122	M
2,6-diamino-4-nitrotoluene	2.00	1.86	93	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.: 280-182239-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 10090041.D

Lab ID: LCSD 280-628393/3-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	2.14	107	2	20	73-125	
1,3-Dinitrobenzene	2.00	2.03	101	4	20	78-120	
2,4,6-Trinitrotoluene	2.00	1.96	98	3	20	71-123	
2,4-Dinitrotoluene	2.00	1.97	98	3	20	78-120	
2,6-Dinitrotoluene	2.00	1.96	98	5	20	77-127	
2-Amino-4,6-dinitrotoluene	2.00	1.87	93	6	20	79-120	
2-Nitrotoluene	2.00	1.65	83	4	20	70-127	
3,5-Dinitroaniline	2.00	1.75	88	8	20	71-117	
3-Nitrotoluene	2.00	1.67	84	7	20	73-125	
4-Amino-2,6-dinitrotoluene	2.00	1.61	80	15	20	76-125	
4-Nitrotoluene	2.00	1.62	81	6	20	71-127	
DNX	2.01	1.99	99	1	20	66-119	M
HMX	2.00	1.78	89	2	20	65-135	M
MNX	2.34	2.30	98	1	20	57-132	
Nitrobenzene	2.00	1.77	88	3	20	65-134	
Nitroglycerin	20.0	20.4	102	2	20	74-127	
PETN	20.0	20.7	104	3	20	73-127	
RDX	2.00	1.99	100	6	20	68-130	
Tetryl	2.00	2.02	101	0	20	64-128	
TNX	2.00	1.72	86	2	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.: 280-182239-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 10090043.D

Lab ID: LCSD 280-628393/5-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	1.48	74	19	20	68-122	M
2,6-diamino-4-nitrotoluene	2.00	1.62	81	14	20	72-122	M

Column to be used to flag recovery and RPD values

FORM III 8330B

FORM III
HPLC/IC MATRIX SPIKE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 10090048.D

Lab ID: 280-182239-4 MS Client ID: LL3mw-241-230901-GW MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.03	1.7	3.64	97	73-125	
1,3-Dinitrobenzene	2.03	0.10 U	2.23	110	78-120	M
2,4,6-Trinitrotoluene	2.03	0.89	2.84	96	71-123	
2,4-Dinitrotoluene	2.03	0.082 U	2.08	102	78-120	
2,6-Dinitrotoluene	2.03	0.082 U	2.10	103	77-127	
2-Nitrotoluene	2.03	0.21 U	1.77	87	70-127	
3,5-Dinitroaniline	2.03	0.37 J	2.20	90	71-117	
3-Nitrotoluene	2.03	0.36 U	1.52	75	73-125	
4-Amino-2,6-dinitrotoluene	2.03	1.1	2.87	89	76-125	
4-Nitrotoluene	2.03	0.41 U	1.67	82	71-127	
DNX	2.04	0.26 U	1.88	92	66-119	M
HMX	2.03	0.11 J	1.80	83	65-135	M
MNX	2.38	0.30 U	2.33	98	57-132	M
Nitrobenzene	2.03	0.21 U	1.80	88	65-134	
Nitroglycerin	20.3	2.1 U	19.7	97	74-127	
PETN	20.3	1.0 U	21.0	103	73-127	
RDX	2.03	0.58	2.41	90	68-130	M
Tetryl	2.03	0.10 U	2.36	116	64-128	
TNX	2.04	0.26 U	1.75	86	50-150	M

Column to be used to flag recovery and RPD values

FORM III 8330B

FORM III
HPLC/IC MATRIX SPIKE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 10090052.D

Lab ID: 280-182239-4 MS Client ID: LL3mw-241-230901-GW MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
2,4-diamino-6-nitrotoluene	2.01	0.92 U	0.977 J	49	68-122	M J1
2,6-diamino-4-nitrotoluene	2.01	0.92 U	1.31	65	72-122	M J1

Column to be used to flag recovery and RPD values

FORM III 8330B

FORM III
HPLC/IC MATRIX SPIKE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 10110018.D

Lab ID: 280-182239-4 MS Client ID: LL3mw-241-230901-GW MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
2-Amino-4,6-dinitrotoluene	2.03	0.10 U	3.49	172	79-120	J1
HMX	2.03	0.19 J	1.99	88	65-135	M

Column to be used to flag recovery and RPD values

FORM III 8330B

FORM III
HPLC/IC MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 10090051.D

Lab ID: 280-182239-4 MSD Client ID: LL3mw-241-230901-GW MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.02	3.64	98	0	20	73-125	
1,3-Dinitrobenzene	2.02	2.16	107	3	20	78-120	M
2,4,6-Trinitrotoluene	2.02	2.83	96	0	20	71-123	
2,4-Dinitrotoluene	2.02	2.05	102	1	20	78-120	
2,6-Dinitrotoluene	2.02	1.94	96	8	20	77-127	
2-Nitrotoluene	2.02	1.67	83	6	20	70-127	
3,5-Dinitroaniline	2.02	2.07	84	6	20	71-117	
3-Nitrotoluene	2.02	1.43	71	6	20	73-125	J1
4-Amino-2,6-dinitrotoluene	2.02	2.52	73	13	20	76-125	J1
4-Nitrotoluene	2.02	1.60	80	4	20	71-127	
DNX	2.02	1.84	91	2	20	66-119	M
HMX	2.02	1.81	84	1	20	65-135	M
MNX	2.36	2.25	95	3	20	57-132	M
Nitrobenzene	2.02	1.70	84	6	20	65-134	
Nitroglycerin	20.2	19.6	97	0	20	74-127	
PETN	20.2	20.8	103	1	20	73-127	
RDX	2.02	2.41	91	0	20	68-130	M
Tetryl	2.02	2.32	115	2	20	64-128	
TNX	2.02	1.74	86	0	20	50-150	M

Column to be used to flag recovery and RPD values

FORM III 8330B

FORM III
HPLC/IC MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 10090053.D

Lab ID: 280-182239-4 MSD Client ID: LL3mw-241-230901-GW MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
2,4-diamino-6-nitrotoluene	2.11	1.51	71	43	20	68-122	M J1
2,6-diamino-4-nitrotoluene	2.11	1.78	84	30	20	72-122	M J1

Column to be used to flag recovery and RPD values

FORM III 8330B

FORM III
HPLC/IC MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 10110019.D

Lab ID: 280-182239-4 MSD Client ID: LL3mw-241-230901-GW MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
2-Amino-4,6-dinitrotoluene	2.02	3.29	163	6	20	79-120	J1
HMX	2.02	1.99	89	0	20	65-135	

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.: 280-182239-1

SDG No.:

Lab Sample ID: MB 280-628393/1-A

Matrix: Water Date Extracted: 10/04/2023 13:30

Lab File ID:(1) 10090039.D Lab File ID:(2)

Date Analyzed:(1) 10/09/2023 22:38 Date Analyzed:(2)

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

GC Column:(1) UltraCarb5uO ID: 4.6(mm) GC Column:(2) Luna-phenylh ID: 4.6(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 280-628393/2-A	10/09/2023 23:01	
	LCSD 280-628393/3-A	10/09/2023 23:24	
	LCS 280-628393/4-A	10/09/2023 23:47	
	LCSD 280-628393/5-A	10/10/2023 00:10	
SCFmw-004-230901-GW	280-182239-1	10/10/2023 00:33	10/11/2023 20:48
SCFmw-004-230902-GW	280-182239-2	10/10/2023 00:56	10/12/2023 05:12
LL3mw-237-230901-GW	280-182239-3	10/10/2023 01:19	10/11/2023 21:24
LL3mw-241-230901-GW	280-182239-4	10/10/2023 01:42	10/11/2023 22:00
LL3mw-241-230901-GW MS	280-182239-4 MS	10/10/2023 02:04	10/11/2023 22:36
LL3mw-241-230901-GW MSD	280-182239-4 MSD	10/10/2023 03:13	10/11/2023 23:12
LL3mw-241-230901-GW MS	280-182239-4 MS	10/10/2023 03:36	
LL3mw-241-230901-GW MSD	280-182239-4 MSD	10/10/2023 03:59	
LL3mw-241-230902-GW	280-182239-5	10/10/2023 04:22	10/12/2023 01:36
LL1mw-093-230901-GW	280-182239-6	10/10/2023 04:45	10/12/2023 02:12
LL1mw-092-230901-GW	280-182239-7	10/10/2023 05:08	10/12/2023 02:49
LL3mw-248-230901-GW	280-182239-8	10/10/2023 05:31	10/12/2023 03:24
LL1mw-091-230901-GW	280-182239-9	10/10/2023 05:54	10/12/2023 04:00
LL3mw-247-230901-GW	280-182239-12	10/10/2023 06:17	10/12/2023 04:36

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Client Sample ID: LL3mw-237-230901-GW Lab Sample ID: 280-182239-3

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

Date Analyzed (1): 10/10/2023 01:19 Date Analyzed (2): 10/11/2023 21:24

GC Column (1): UltraCarb5uODS ID: 4.6(mm) GC Column (2): Luna-phenylh ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
4-Amino-2,6-dinitrotoluene	1		11.06	10.93	11.13	0.19		28.3
	2		16.64	16.38	16.68	0.26		
2-Amino-4,6-dinitrotoluene	1		11.30	11.18	11.38	0.11		75.2
	2		17.40	17.19	17.49	0.24		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Client Sample ID: LL3mw-241-230901-GW Lab Sample ID: 280-182239-4

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

Date Analyzed (1): 10/10/2023 01:42 Date Analyzed (2): 10/11/2023 22:00

GC Column (1): UltraCarb5uODS ID: 4.6(mm) GC Column (2): Luna-phenylh ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
HMX	1		6.58	6.42	6.72	0.11		55.4
	2		6.85	6.66	6.96	0.19		
RDX	1		7.59	7.42	7.72	0.58		16.4
	2		9.10	8.90	9.20	0.49		
1,3,5-Trinitrobenzene	1		8.65	8.50	8.80	1.7		2.9
	2		17.62	17.38	17.68	1.6		
3,5-Dinitroaniline	1		9.85	9.69	9.99	0.37		11.7
	2		14.49	14.26	14.56	0.41		
2,4,6-Trinitrotoluene	1		10.87	10.76	10.96	0.89		8.1
	2		23.31	23.05	23.35	0.97		
4-Amino-2,6-dinitrotoluene	1		11.05	10.93	11.13	1.1		17.5
	2		16.64	16.38	16.68	1.3		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Client Sample ID: LL3mw-241-230901-GW MS Lab Sample ID: 280-182239-4 MS

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

Date Analyzed (1): 10/10/2023 02:04 Date Analyzed (2): 10/11/2023 22:36

GC Column (1): UltraCarb5uODS ID: 4.6(mm) GC Column (2): Luna-phenylh ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
TNX	1		6.45	6.34	6.54	1.75		4.9
	2		5.32	5.14	5.44	1.83		
HMX	1		6.57	6.42	6.72	1.80		9.9
	2		6.83	6.66	6.96	1.99		
DNX	1		6.78	6.67	6.87	1.88		7.9
	2		6.17	6.00	6.30	2.03		
MNX	1		7.20	7.04	7.34	2.33		4.5
	2		7.69	7.51	7.81	2.23		
RDX	1		7.59	7.42	7.72	2.41		0.6
	2		9.11	8.90	9.20	2.39		
1,3,5-Trinitrobenzene	1		8.65	8.50	8.80	3.64		7.6
	2		17.60	17.38	17.68	3.38		
1,3-Dinitrobenzene	1		9.27	9.10	9.40	2.23		13.1
	2		14.77	14.55	14.85	1.96		
Nitrobenzene	1		9.63	9.47	9.77	1.80		3.5
	2		11.70	11.48	11.78	1.86		
3,5-Dinitroaniline	1		9.86	9.69	9.99	2.20		7.5
	2		14.49	14.26	14.56	2.37		
Tetryl	1		9.99	9.82	10.12	2.36		14.5
	2		22.44	22.19	22.49	2.04		
Nitroglycerin	1		10.44	10.27	10.57	19.7		4.4
	2		15.23	15.02	15.32	20.6		
2,4,6-Trinitrotoluene	1		10.88	10.76	10.96	2.84		4.0
	2		23.31	23.05	23.35	2.95		
4-Amino-2,6-dinitrotoluene	1		11.06	10.93	11.13	2.87		3.4
	2		16.59	16.38	16.68	2.97		
2-Amino-4,6-dinitrotoluene	1		11.31	11.18	11.38	3.39		2.8
	2		17.41	17.19	17.49	3.49		
2,6-Dinitrotoluene	1		11.46	11.34	11.54	2.10		6.1
	2		18.74	18.51	18.81	1.97		
2,4-Dinitrotoluene	1		11.63	11.51	11.71	2.08		5.6
	2		19.19	18.97	19.27	1.97		
2-Nitrotoluene	1		12.44	12.27	12.57	1.77		4.9
	2		15.85	15.64	15.94	1.69		
4-Nitrotoluene	1		12.85	12.68	12.98	1.67		9.1
	2		16.07	15.86	16.16	1.52		
3-Nitrotoluene	1		13.41	13.24	13.54	1.52		23.7
	2		16.92	16.71	17.01	1.93		
PETN	1		14.55	14.36	14.66	21.0		1.2
	2		24.47	24.20	24.50	21.3		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Client Sample ID: LL3mw-241-230901-GW MSD Lab Sample ID: 280-182239-4 MSD

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

Date Analyzed (1): 10/10/2023 03:13 Date Analyzed (2): 10/11/2023 23:12

GC Column (1): UltraCarb5uODS ID: 4.6(mm) GC Column (2): Luna-phenylh ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
TNX	1		6.45	6.34	6.54	1.74		6.1
	2		5.31	5.14	5.44	1.86		
HMX	1		6.58	6.42	6.72	1.81		9.6
	2		6.83	6.66	6.96	1.99		
DNX	1		6.78	6.67	6.87	1.84		13.1
	2		6.16	6.00	6.30	2.10		
MNX	1		7.20	7.04	7.34	2.25		1.6
	2		7.70	7.51	7.81	2.22		
RDX	1		7.58	7.42	7.72	2.41		0.2
	2		9.11	8.90	9.20	2.41		
1,3,5-Trinitrobenzene	1		8.66	8.50	8.80	3.64		0.8
	2		17.57	17.38	17.68	3.62		
1,3-Dinitrobenzene	1		9.27	9.10	9.40	2.16		12.2
	2		14.76	14.55	14.85	1.91		
Nitrobenzene	1		9.64	9.47	9.77	1.70		5.9
	2		11.69	11.48	11.78	1.81		
3,5-Dinitroaniline	1		9.86	9.69	9.99	2.07		9.4
	2		14.47	14.26	14.56	2.27		
Tetryl	1		9.99	9.82	10.12	2.32		14.0
	2		22.35	22.19	22.49	2.01		
Nitroglycerin	1		10.44	10.27	10.57	19.6		1.6
	2		15.21	15.02	15.32	19.9		
2,4,6-Trinitrotoluene	1		10.88	10.76	10.96	2.83		4.3
	2		23.21	23.05	23.35	2.96		
4-Amino-2,6-dinitrotoluene	1		11.06	10.93	11.13	2.52		11.5
	2		16.58	16.38	16.68	2.82		
2-Amino-4,6-dinitrotoluene	1		11.30	11.18	11.38	3.28		0.3
	2		17.38	17.19	17.49	3.29		
2,6-Dinitrotoluene	1		11.46	11.34	11.54	1.94		0.6
	2		18.69	18.51	18.81	1.93		
2,4-Dinitrotoluene	1		11.63	11.51	11.71	2.05		8.4
	2		19.13	18.97	19.27	1.89		
2-Nitrotoluene	1		12.44	12.27	12.57	1.67		4.7
	2		15.85	15.64	15.94	1.60		
4-Nitrotoluene	1		12.85	12.68	12.98	1.60		4.9
	2		16.07	15.86	16.16	1.53		
3-Nitrotoluene	1		13.41	13.24	13.54	1.43		29.0
	2		16.89	16.71	17.01	1.92		
PETN	1		14.55	14.36	14.66	20.8		2.1
	2		24.35	24.20	24.50	21.2		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Client Sample ID: LL3mw-241-230902-GW Lab Sample ID: 280-182239-5

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

Date Analyzed (1): 10/10/2023 04:22 Date Analyzed (2): 10/12/2023 01:36

GC Column (1): UltraCarb5uODS ID: 4.6(mm) GC Column (2): Luna-phenylh ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
HMX	1		6.57	6.42	6.72	0.11		42.2
	2		6.82	6.66	6.96	0.17		
RDX	1		7.58	7.42	7.72	0.60		21.8
	2		9.05	8.90	9.20	0.48		
1,3,5-Trinitrobenzene	1		8.65	8.50	8.80	1.8		0.3
	2		17.57	17.38	17.68	1.8		
3,5-Dinitroaniline	1		9.85	9.69	9.99	0.37		16.6
	2		14.45	14.26	14.56	0.44		
2,4,6-Trinitrotoluene	1		10.87	10.76	10.96	0.89		8.5
	2		23.22	23.05	23.35	0.97		
4-Amino-2,6-dinitrotoluene	1		11.04	10.93	11.13	0.86		22.5
	2		16.57	16.38	16.68	1.1		
2-Amino-4,6-dinitrotoluene	1		11.29	11.18	11.38	1.1		7.8
	2		17.38	17.19	17.49	0.98		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Client Sample ID: LL1mw-093-230901-GW Lab Sample ID: 280-182239-6

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

Date Analyzed (1): 10/10/2023 04:45 Date Analyzed (2): 10/12/2023 02:12

GC Column (1): UltraCarb5uODS ID: 4.6(mm) GC Column (2): Luna-phenylh ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
RDX	1		7.60	7.42	7.72	0.82		163.4
	2		9.15	8.90	9.20	0.082		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Client Sample ID: LL1mw-092-230901-GW Lab Sample ID: 280-182239-7

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

Date Analyzed (1): 10/10/2023 05:08 Date Analyzed (2): 10/12/2023 02:49

GC Column (1): UltraCarb5uODS ID: 4.6(mm) GC Column (2): Luna-phenylh ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
RDX	1		7.61	7.42	7.72	1.0		164.4
	2		9.12	8.90	9.20	0.097		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Client Sample ID: LL3mw-247-230901-GW Lab Sample ID: 280-182239-12

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

Date Analyzed (1): 10/10/2023 06:17 Date Analyzed (2): 10/12/2023 04:36

GC Column (1): UltraCarb5uODS ID: 4.6(mm) GC Column (2): Luna-phenylh ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
RDX	1		7.61	7.42	7.72	1.9		158.6
	2		9.15	8.90	9.20	0.23		

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182239-1

SDG No.:

Client Sample ID: SCFmw-004-230901-GW | Lab Sample ID: 280-182239-1

Matrix: Water | Lab File ID: 10090044.D

Analysis Method: 8330B | Date Collected: 10/02/2023 09:15

Extraction Method: 3535 | Date Extracted: 10/04/2023 13:30

Sample wt/vol: 482.8(mL) | Date Analyzed: 10/10/2023 00:33

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

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

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

Cleanup Factor:

Analysis Batch No.: 628987 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.21	U	0.22	0.21	0.087
99-65-0	1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.038
118-96-7	2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.047
121-14-2	2,4-Dinitrotoluene	0.083	U	0.10	0.083	0.028
606-20-2	2,6-Dinitrotoluene	0.083	U	0.10	0.083	0.042
35572-78-2	2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.053
88-72-2	2-Nitrotoluene	0.21	U	0.22	0.21	0.089
99-08-1	3-Nitrotoluene	0.36	U	0.41	0.36	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U Q	0.16	0.12	0.060
99-99-0	4-Nitrotoluene	0.41	U	0.42	0.41	0.10
98-95-3	Nitrobenzene	0.21	U	0.22	0.21	0.094
55-63-0	Nitroglycerin	2.1	U	2.2	2.1	0.95
78-11-5	PETN	1.0	U	1.1	1.0	0.46
121-82-4	RDX	0.21	U	0.22	0.21	0.053
479-45-8	Tetryl	0.10	U	0.11	0.10	0.033

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	102	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\10090044.D
Lims ID: 280-182239-A-1-A
Client ID: SCFmw-004-230901-GW
Sample Type: Client
Inject. Date: 10-Oct-2023 00:33:12 ALS Bottle#: 44 Worklist Smp#: 44
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-182239-A-1-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 10-Oct-2023 11:59:33 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1622

First Level Reviewer: K8YG Date: 10-Oct-2023 09:41:39

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4	HMX	1	6.578	6.568	0.010	2389	0.0253	M
8	RDX	1		7.574			ND	
$ 10	1,2-Dinitrobenzene	1	8.531	8.521	0.010	25307	0.2042	M
11	1,3,5-Trinitrobenzene	1		8.648			ND	
12	1,3-Dinitrobenzene	1		9.254			ND	
13	Nitrobenzene	1		9.621			ND	
15	Tetryl	1		9.974			ND	
16	Nitroglycerin	2		10.421			ND	
17	2,4,6-Trinitrotoluene	1		10.861			ND	
18	4-Amino-2,6-dinitrotoluene	1		11.034			ND	
19	2-Amino-4,6-dinitrotoluene	1		11.281			ND	
20	2,6-Dinitrotoluene	1		11.441			ND	
21	2,4-Dinitrotoluene	1		11.607			ND	
22	o-Nitrotoluene	1		12.421			ND	
23	p-Nitrotoluene	1		12.827			ND	
24	m-Nitrotoluene	1		13.387			ND	
25	PETN	2		14.514			ND	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

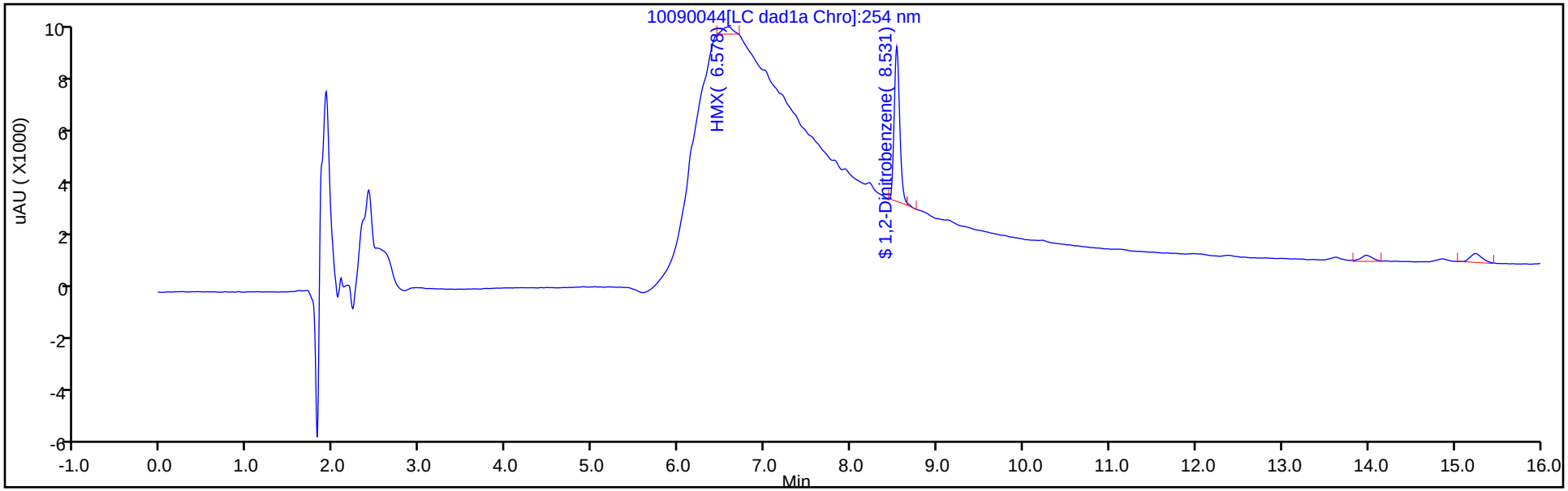
Report Date: 10-Oct-2023 11:59:38 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

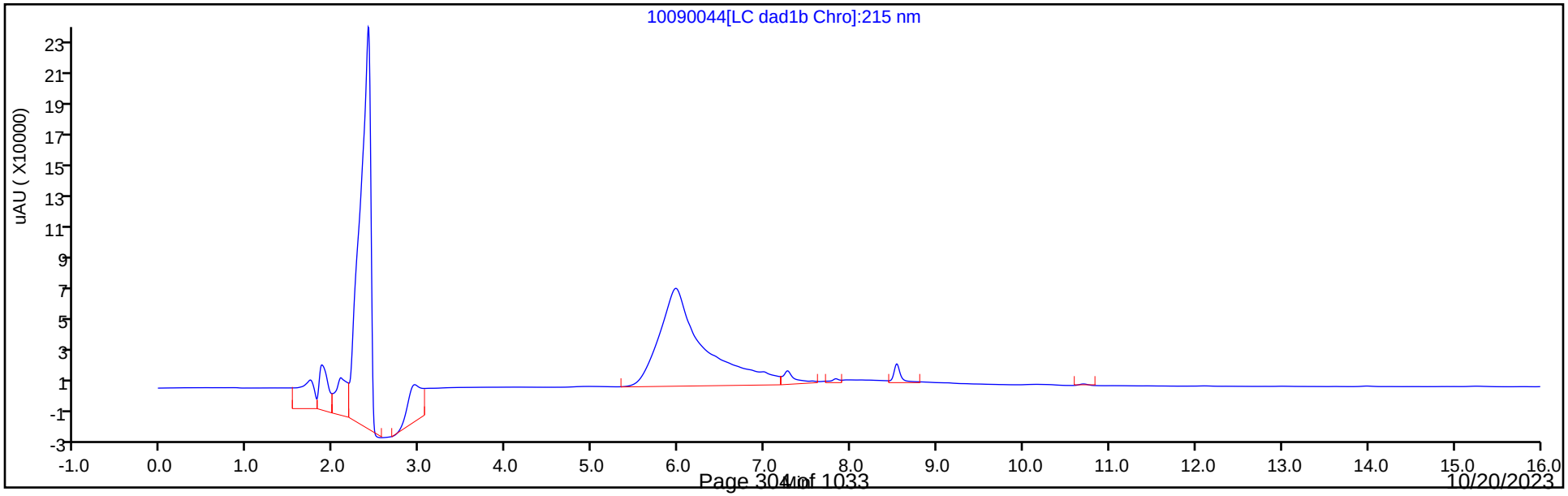
Data File: \\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090044.d

Injection Date:	10-Oct-2023 00:33:12	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-182239-A-1-A	Lab Sample ID:	280-182239-1	Worklist Smp#:	44
Client ID:	SCFmw-004-230901-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\20231009-126302.b\10090044.D				
Lims ID:	280-182239-A-1-A				
Client ID:	SCFmw-004-230901-GW				
Sample Type:	Client				
Inject. Date:	10-Oct-2023 00:33:12	ALS Bottle#:	44	Worklist Smp#:	44
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-182239-A-1-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	10-Oct-2023 11:59:33	Calib Date:	24-Jun-2023 00:23:49		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1622				

First Level Reviewer: K8YG Date: 10-Oct-2023 09:41:39

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2042	102.12

Manual Integration/User Assign Peak Report

Eurofins Denver

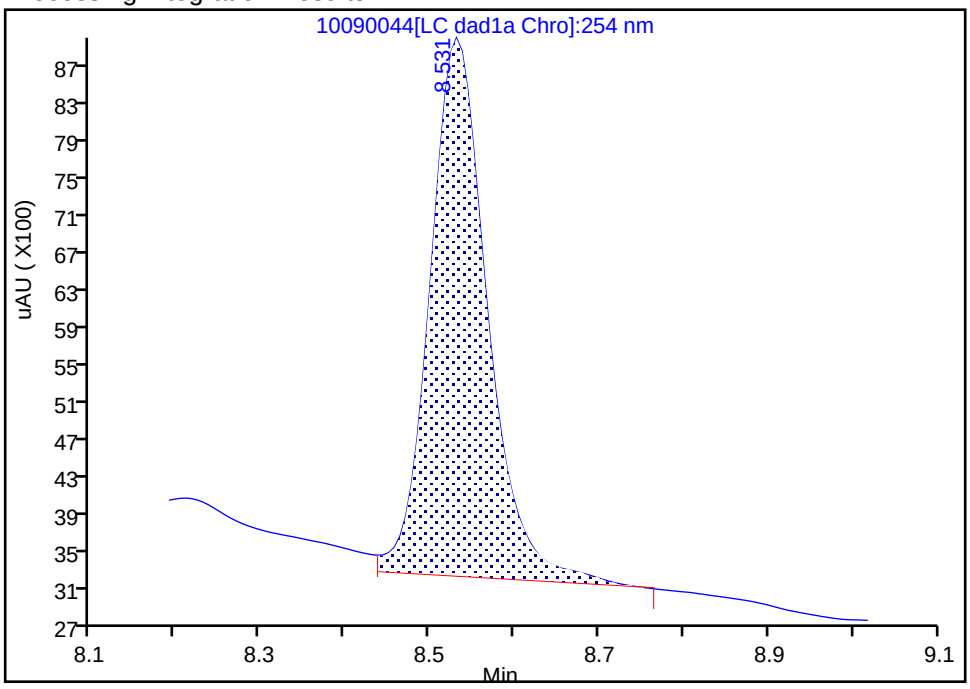
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Injection Date:	10-Oct-2023 00:33:12	Instrument ID:	CHHPLC_X3		
Lims ID:	280-182239-A-1-A	Lab Sample ID:	280-182239-1		
Client ID:	SCFmw-004-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	44	Worklist Smp#:	44
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

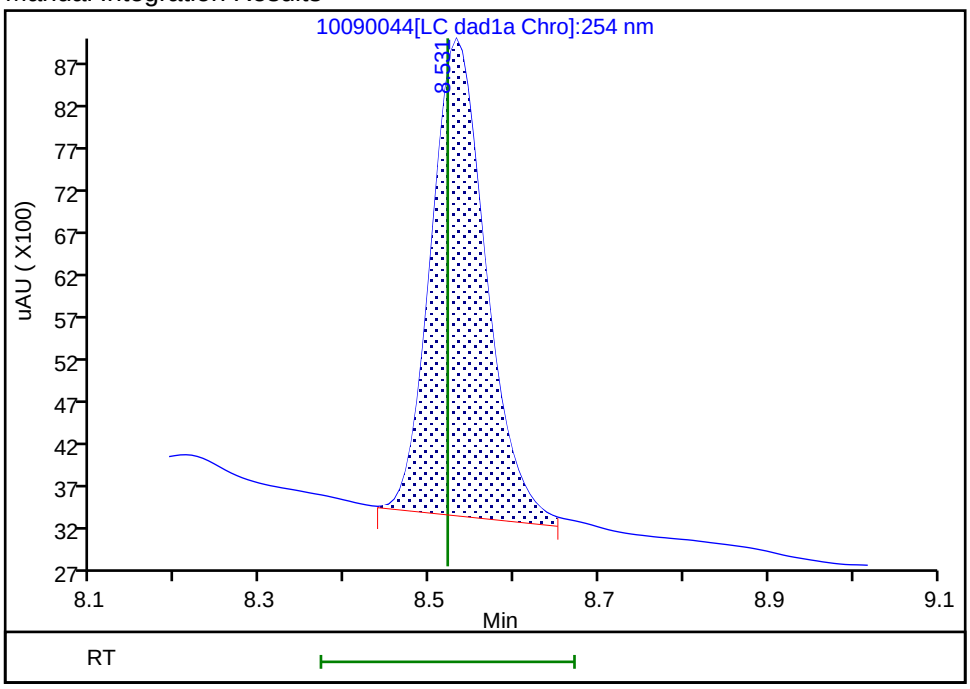
Processing Integration Results

RT: 8.53
Area: 27342
Amount: 0.220659
Amount Units: ug/mL



Manual Integration Results

RT: 8.53
Area: 25307
Amount: 0.204235
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 11:28:55 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

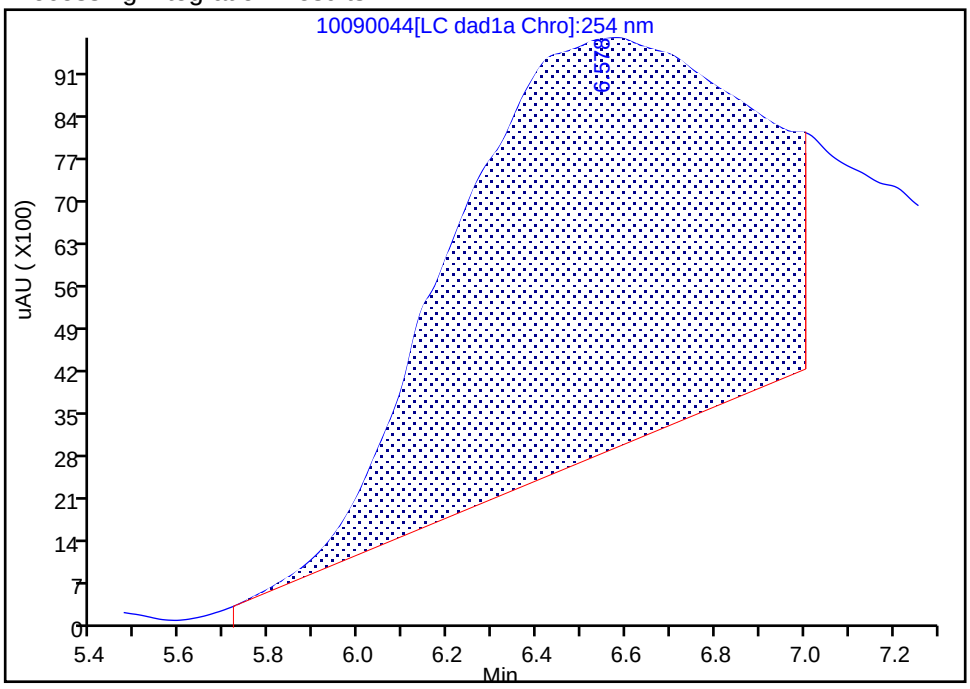
Data File:	\\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090044.d				
Injection Date:	10-Oct-2023 00:33:12	Instrument ID:	CHHPLC_X3		
Lims ID:	280-182239-A-1-A	Lab Sample ID:	280-182239-1		
Client ID:	SCFmw-004-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	44	Worklist Smp#:	44
Injection Vol:	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

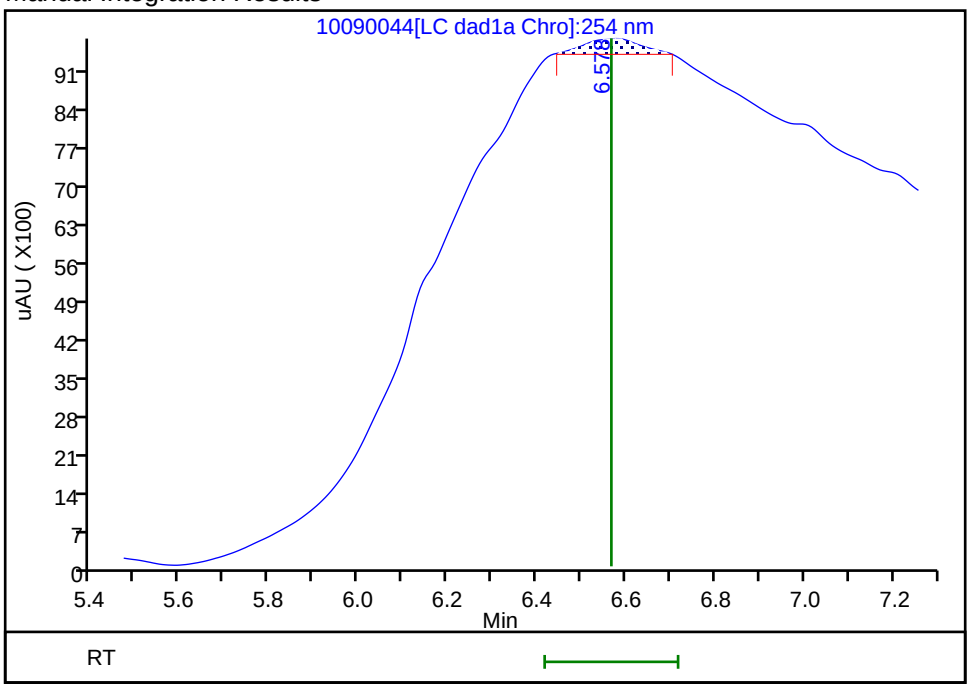
Processing Integration Results

RT: 6.58
Area: 313506
Amount: 3.326135
Amount Units: ug/mL



Manual Integration Results

RT: 6.58
Area: 2389
Amount: 0.025346
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 09:41:37 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182239-1

SDG No.:

Client Sample ID: SCFmw-004-230901-GW | Lab Sample ID: 280-182239-1

Matrix: Water | Lab File ID: 10110015.D

Analysis Method: 8330B | Date Collected: 10/02/2023 09:15

Extraction Method: 3535 | Date Extracted: 10/04/2023 13:30

Sample wt/vol: 482.8(mL) | Date Analyzed: 10/11/2023 20:48

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.: 629372 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
2691-41-0	HMX	0.21	U	0.22	0.21	0.091

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	95		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\10110015.D
Lims ID: 280-182239-A-1-A
Client ID: SCFmw-004-230901-GW
Sample Type: Client
Inject. Date: 11-Oct-2023 20:48:59 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-182239-A-1-A
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA

Method: \\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 12-Oct-2023 12:50:27 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1633

First Level Reviewer: K8YG Date: 12-Oct-2023 12:33:51

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	6 HMX	1		6.805			ND	
	8 RDX	1		9.052			ND	
	9 Nitrobenzene	1		11.625			ND	
$	10 1,2-Dinitrobenzene	1	12.663	12.572	0.091	48716	0.1897	
	12 1,3-Dinitrobenzene	1		14.698			ND	
	13 Nitroglycerin	2		15.165			ND	U
	14 o-Nitrotoluene	1		15.785			ND	
	15 p-Nitrotoluene	1		16.012			ND	U
	16 4-Amino-2,6-dinitrotoluene	1		16.525			ND	U
	17 m-Nitrotoluene	1		16.858			ND	
	18 2-Amino-4,6-dinitrotoluene	1	17.363	17.338	0.025	5441	0.0107	M
	19 1,3,5-Trinitrobenzene	1		17.532			ND	
	20 2,6-Dinitrotoluene	1		18.658			ND	
	21 2,4-Dinitrotoluene	1		19.118			ND	
	22 Tetryl	1		22.339			ND	
	23 2,4,6-Trinitrotoluene	1		23.199			ND	
	24 PETN	2		24.352			ND	

QC Flag Legend

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

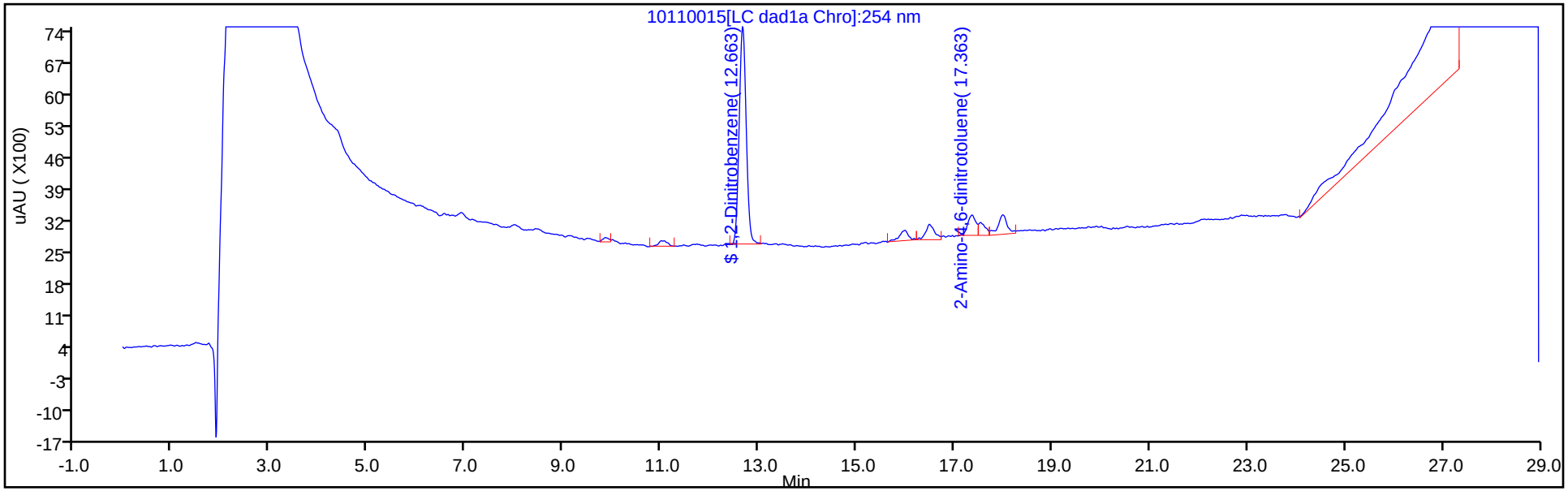
Report Date: 12-Oct-2023 12:50:33 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

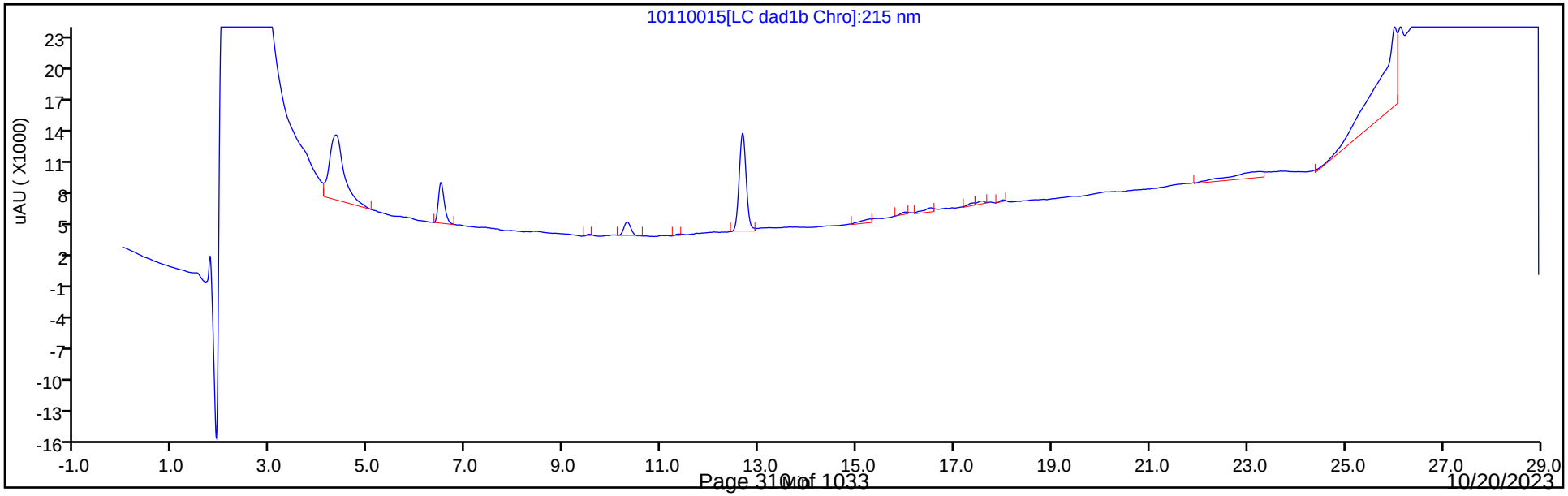
Data File: \\chromfs\denver\chromdata\g2_luna\20231011-126415.b\10110015.d

Injection Date:	11-Oct-2023 20:48:59	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	280-182239-A-1-A	Lab Sample ID:	280-182239-1	Worklist Smp#:	15
Client ID:	SCFmw-004-230901-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\10110015.D				
Lims ID:	280-182239-A-1-A				
Client ID:	SCFmw-004-230901-GW				
Sample Type:	Client				
Inject. Date:	11-Oct-2023 20:48:59	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-182239-A-1-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_G2_LUNA		
Method:	\\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	12-Oct-2023 12:50:27	Calib Date:	26-Sep-2023 04:54:46		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX1633				

First Level Reviewer: K8YG Date: 12-Oct-2023 12:33:51

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1897	94.86

Manual Integration/User Assign Peak Report

Eurofins Denver

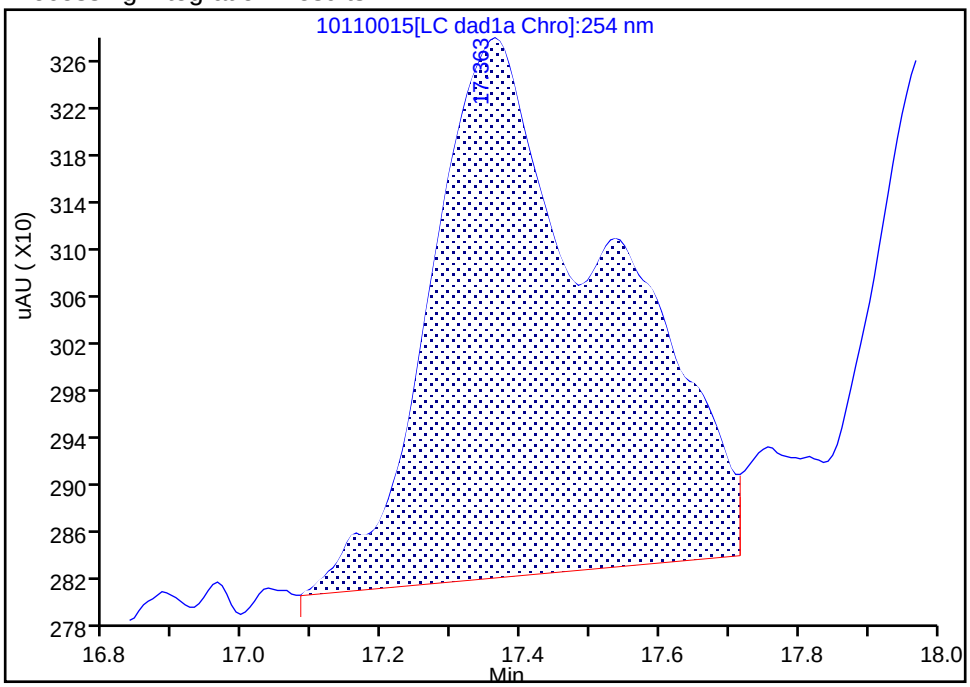
Data File:	\\chromfs\denver\chromdata\g2_luna\20231011-126415.b\10110015.d				
Injection Date:	11-Oct-2023 20:48:59	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-182239-A-1-A	Lab Sample ID:	280-182239-1		
Client ID:	SCFmw-004-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

Signal: 1

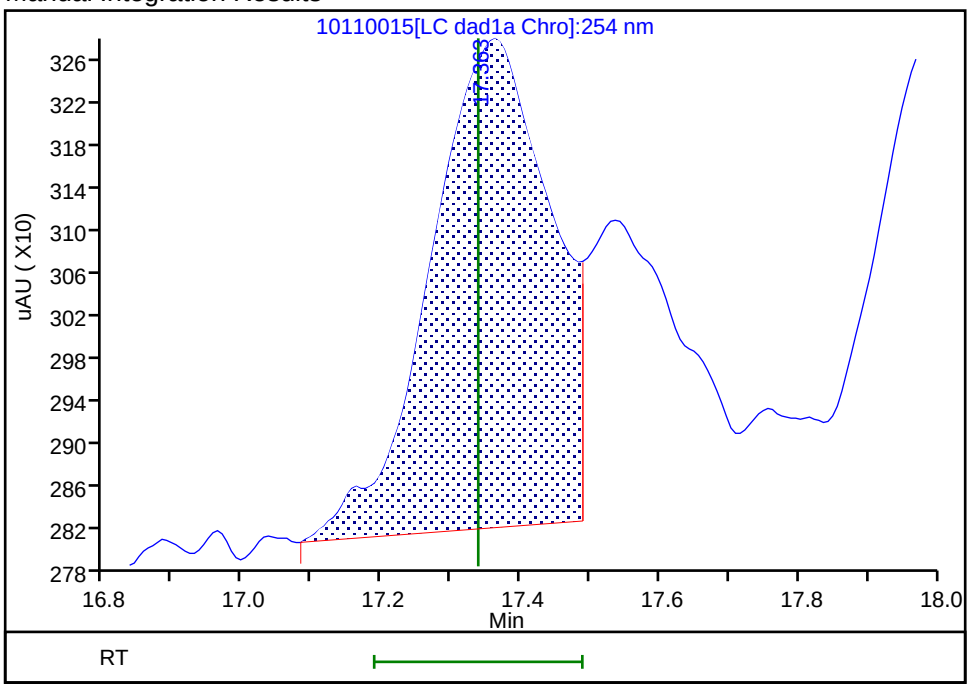
Processing Integration Results

RT: 17.36
Area: 8053
Amount: 0.017620
Amount Units: ug/ml



Manual Integration Results

RT: 17.36
Area: 5441
Amount: 0.010678
Amount Units: ug/ml



Reviewer: K8YG, 12-Oct-2023 12:33:48 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

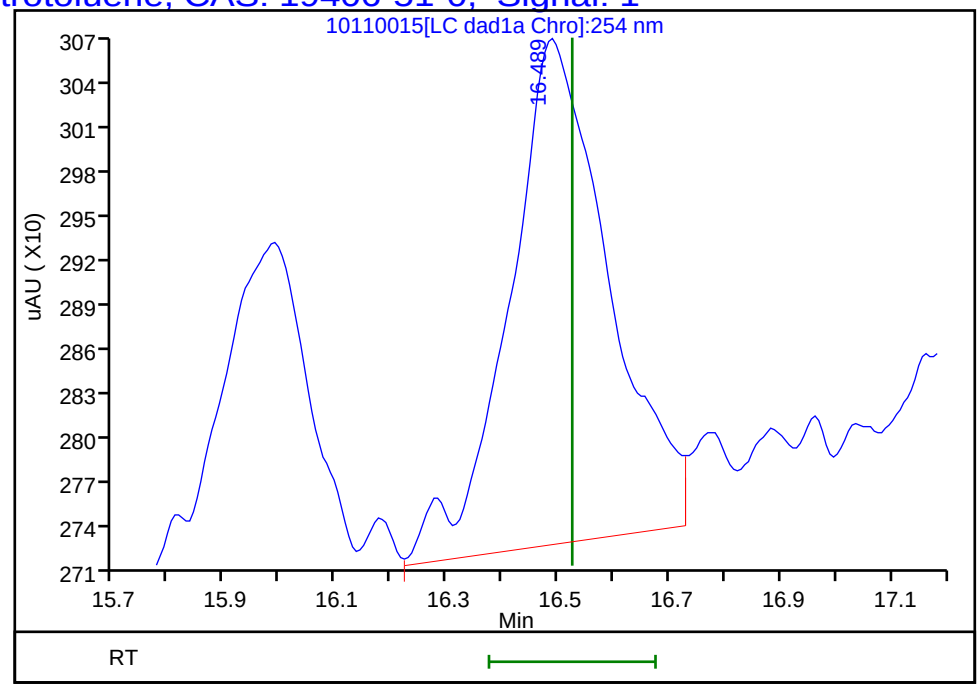
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20231011-126415.b\10110015.d				
Injection Date:	11-Oct-2023 20:48:59	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-182239-A-1-A	Lab Sample ID:	280-182239-1		
Client ID:	SCFmw-004-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0, Signal: 1

RT: 16.49
Response: 4143
Amount: 0.010361



Reviewer: K8YG, 12-Oct-2023 12:33:51
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

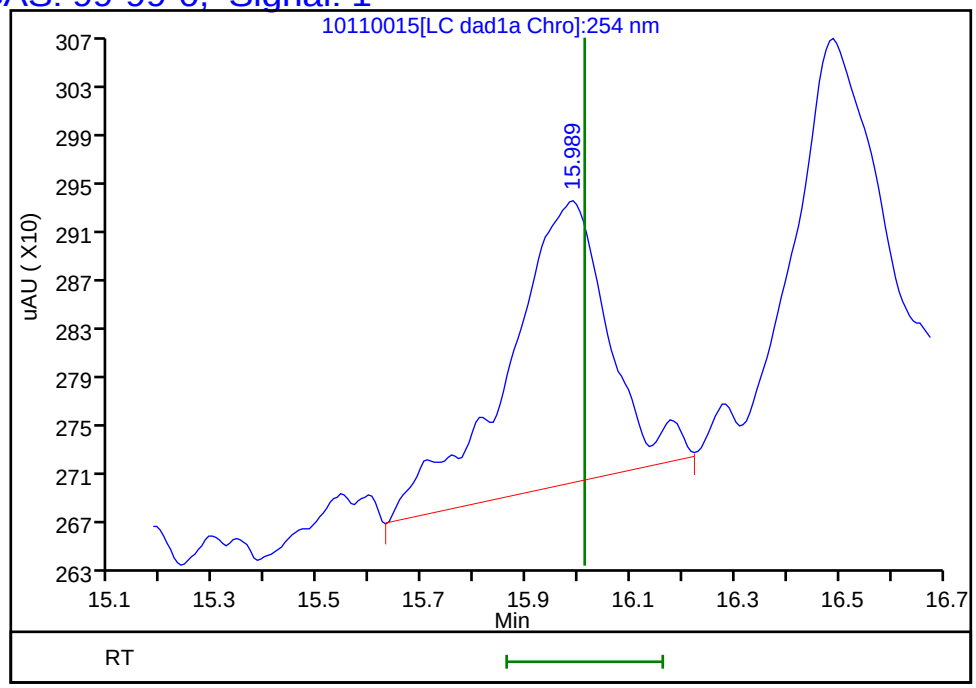
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20231011-126415.b\10110015.d				
Injection Date:	11-Oct-2023 20:48:59	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-182239-A-1-A	Lab Sample ID:	280-182239-1		
Client ID:	SCFmw-004-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

RT: 15.99
Response: 3186
Amount: 0.011354



Reviewer: K8YG, 12-Oct-2023 12:33:51
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182239-1

SDG No.:

Client Sample ID: SCFmw-004-230902-GW | Lab Sample ID: 280-182239-2

Matrix: Water | Lab File ID: 10090045.D

Analysis Method: 8330B | Date Collected: 10/02/2023 09:15

Extraction Method: 3535 | Date Extracted: 10/04/2023 13:30

Sample wt/vol: 489.7(mL) | Date Analyzed: 10/10/2023 00:56

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

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

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

Cleanup Factor:

Analysis Batch No.: 628987 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.20	U	0.21	0.20	0.086
99-65-0	1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.038
118-96-7	2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.046
121-14-2	2,4-Dinitrotoluene	0.082	U	0.10	0.082	0.028
606-20-2	2,6-Dinitrotoluene	0.082	U	0.10	0.082	0.041
35572-78-2	2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.052
88-72-2	2-Nitrotoluene	0.20	U	0.21	0.20	0.087
99-08-1	3-Nitrotoluene	0.36	U	0.41	0.36	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U Q	0.15	0.12	0.059
99-99-0	4-Nitrotoluene	0.41	U	0.42	0.41	0.10
2691-41-0	HMX	0.20	U M	0.21	0.20	0.089
98-95-3	Nitrobenzene	0.20	U	0.21	0.20	0.093
55-63-0	Nitroglycerin	2.0	U	2.1	2.0	0.94
78-11-5	PETN	1.0	U	1.1	1.0	0.46
121-82-4	RDX	0.20	U	0.21	0.20	0.053
479-45-8	Tetryl	0.10	U	0.11	0.10	0.032

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

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\10090045.D
Lims ID: 280-182239-B-2-A
Client ID: SCFmw-004-230902-GW
Sample Type: Client
Inject. Date: 10-Oct-2023 00:56:10 ALS Bottle#: 45 Worklist Smp#: 45
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-182239-B-2-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 10-Oct-2023 11:59:33 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1622

First Level Reviewer: K8YG Date: 10-Oct-2023 09:26:31

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	4 HMX	1		6.568			ND	U
	8 RDX	1		7.574			ND	
$	10 1,2-Dinitrobenzene	1	8.535	8.521	0.014	23920	0.1930	M
	11 1,3,5-Trinitrobenzene	1		8.648			ND	
	12 1,3-Dinitrobenzene	1		9.254			ND	
	13 Nitrobenzene	1		9.621			ND	
	15 Tetryl	1		9.974			ND	
	16 Nitroglycerin	2		10.421			ND	
	17 2,4,6-Trinitrotoluene	1		10.861			ND	
	18 4-Amino-2,6-dinitrotoluene	1		11.034			ND	
	19 2-Amino-4,6-dinitrotoluene	1		11.281			ND	
	20 2,6-Dinitrotoluene	1		11.441			ND	
	21 2,4-Dinitrotoluene	1		11.607			ND	
	22 o-Nitrotoluene	1		12.421			ND	
	23 p-Nitrotoluene	1		12.827			ND	
	24 m-Nitrotoluene	1		13.387			ND	
	25 PETN	2		14.514			ND	

QC Flag Legend

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

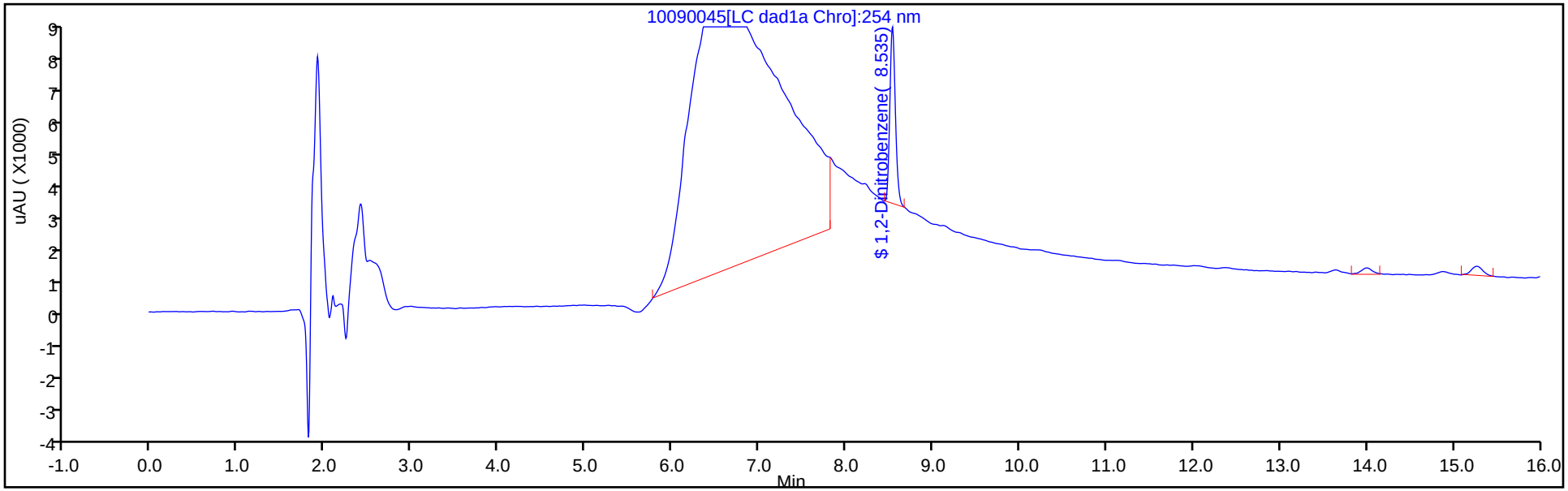
Report Date: 10-Oct-2023 11:59:39 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

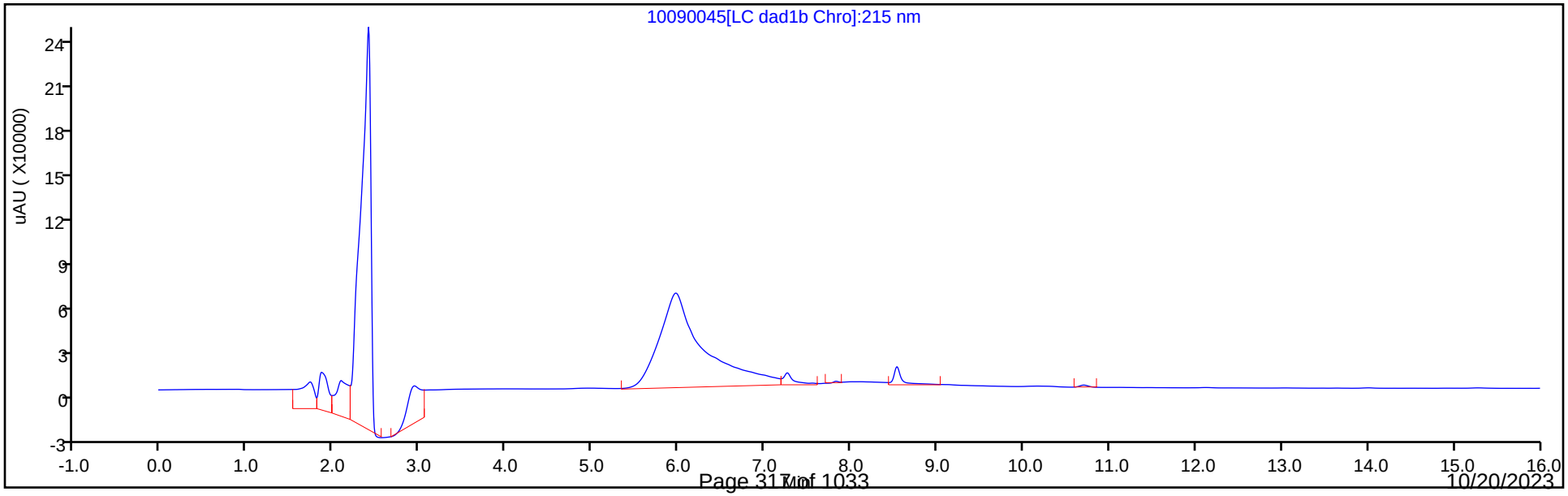
Data File: \\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090045.d

Injection Date:	10-Oct-2023 00:56:10	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-182239-B-2-A	Lab Sample ID:	280-182239-2	Worklist Smp#:	45
Client ID:	SCFmw-004-230902-GW				
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



Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\10090045.D
Lims ID: 280-182239-B-2-A
Client ID: SCFmw-004-230902-GW
Sample Type: Client
Inject. Date: 10-Oct-2023 00:56:10 ALS Bottle#: 45 Worklist Smp#: 45
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-182239-B-2-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 10-Oct-2023 11:59:33 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1622

First Level Reviewer: K8YG Date: 10-Oct-2023 09:26:31

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1930	96.52

Manual Integration/User Assign Peak Report

Eurofins Denver

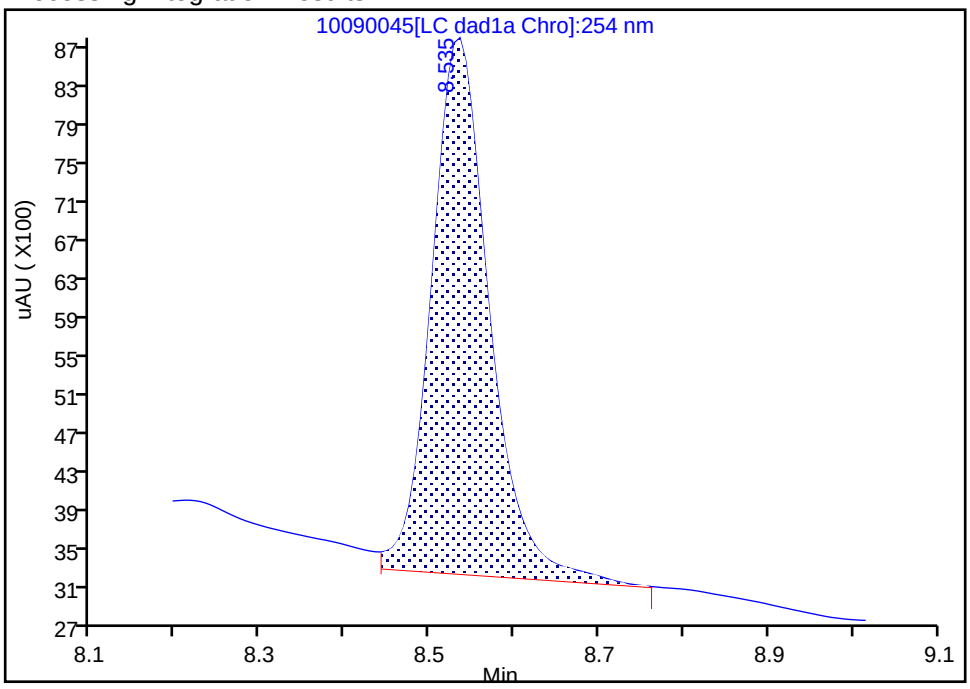
Data File:	\\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090045.d				
Injection Date:	10-Oct-2023 00:56:10	Instrument ID:	CHHPLC_X3		
Lims ID:	280-182239-B-2-A	Lab Sample ID:	280-182239-2		
Client ID:	SCFmw-004-230902-GW				
Operator ID:	JZ/JG	ALS Bottle#:	45	Worklist Smp#:	45
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

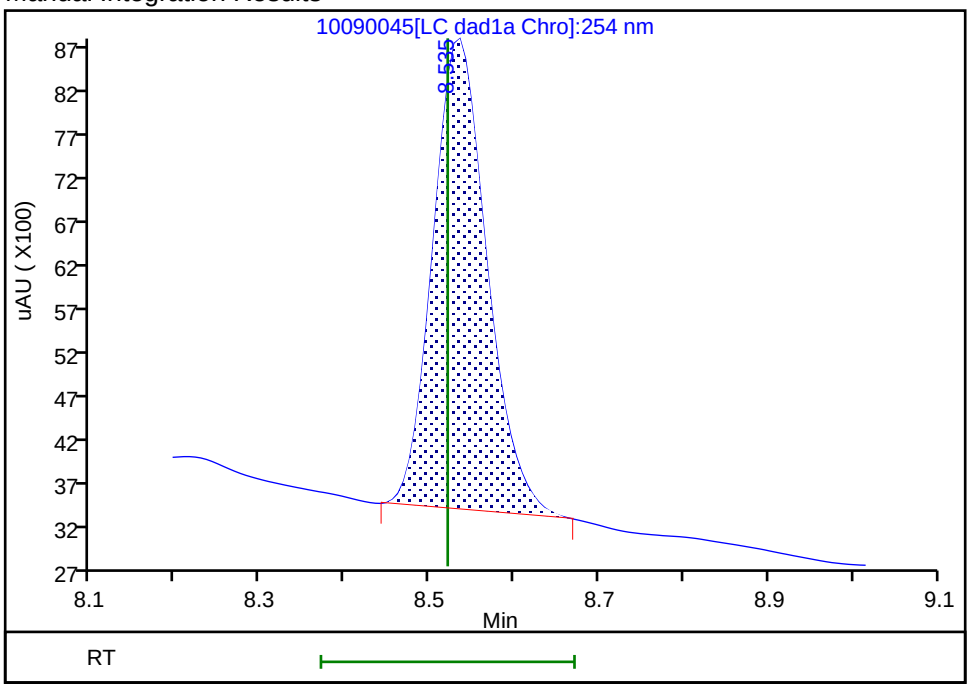
Processing Integration Results

RT: 8.54
Area: 26285
Amount: 0.212128
Amount Units: ug/mL



Manual Integration Results

RT: 8.54
Area: 23920
Amount: 0.193042
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 11:29:21 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

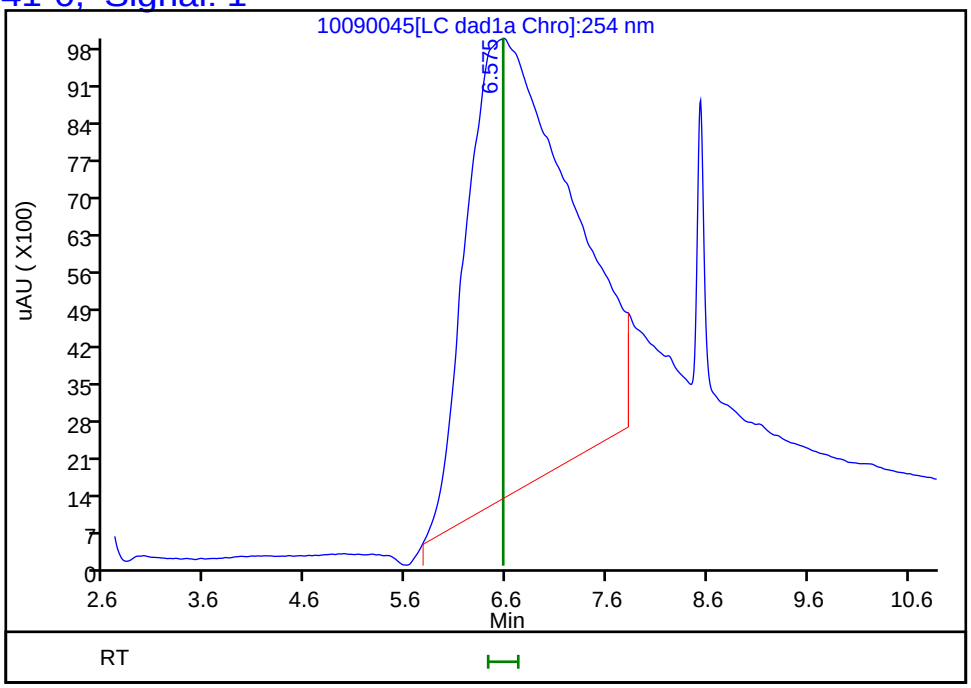
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090045.d				
Injection Date:	10-Oct-2023 00:56:10	Instrument ID:	CHHPLC_X3		
Lims ID:	280-182239-B-2-A	Lab Sample ID:	280-182239-2		
Client ID:	SCFmw-004-230902-GW				
Operator ID:	JZ/JG	ALS Bottle#:	45	Worklist Smp#:	45
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

RT: 6.58
Response: 610397
Amount: 6.475993



Reviewer: K8YG, 10-Oct-2023 09:41:45
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182239-1

SDG No.:

Client Sample ID: SCFmw-004-230902-GW | Lab Sample ID: 280-182239-2

Matrix: Water | Lab File ID: 10110030.D

Analysis Method: 8330B | Date Collected: 10/02/2023 09:15

Extraction Method: 3535 | Date Extracted: 10/04/2023 13:30

Sample wt/vol: 489.7(mL) | Date Analyzed: 10/12/2023 05:12

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.: 629372 | Units: ug/L

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\G2_LUNA\20231011-126415.b\10110030.D
Lims ID: 280-182239-B-2-A
Client ID: SCFmw-004-230902-GW
Sample Type: Client
Inject. Date: 12-Oct-2023 05:12:51 ALS Bottle#: 30 Worklist Smp#: 30
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-182239-B-2-A
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA

Method: \\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 12-Oct-2023 12:50:38 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1633

First Level Reviewer: K8YG Date: 12-Oct-2023 12:50:14

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	6 HMX	1		6.805			ND	
	8 RDX	1		9.052			ND	
	9 Nitrobenzene	1		11.625			ND	
$	10 1,2-Dinitrobenzene	1	12.650	12.572	0.078	47249	0.1840	
	12 1,3-Dinitrobenzene	1		14.698			ND	
	13 Nitroglycerin	2		15.165			ND	
	14 o-Nitrotoluene	1		15.785			ND	
	15 p-Nitrotoluene	1		16.012			ND	7
	16 4-Amino-2,6-dinitrotoluene	1		16.525			ND	U
	17 m-Nitrotoluene	1		16.858			ND	
	18 2-Amino-4,6-dinitrotoluene	1		17.338			ND	U
	19 1,3,5-Trinitrobenzene	1		17.532			ND	
	20 2,6-Dinitrotoluene	1		18.658			ND	
	21 2,4-Dinitrotoluene	1		19.118			ND	
	22 Tetryl	1		22.339			ND	
	23 2,4,6-Trinitrotoluene	1		23.199			ND	
	24 PETN	2		24.352			ND	

QC Flag Legend

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

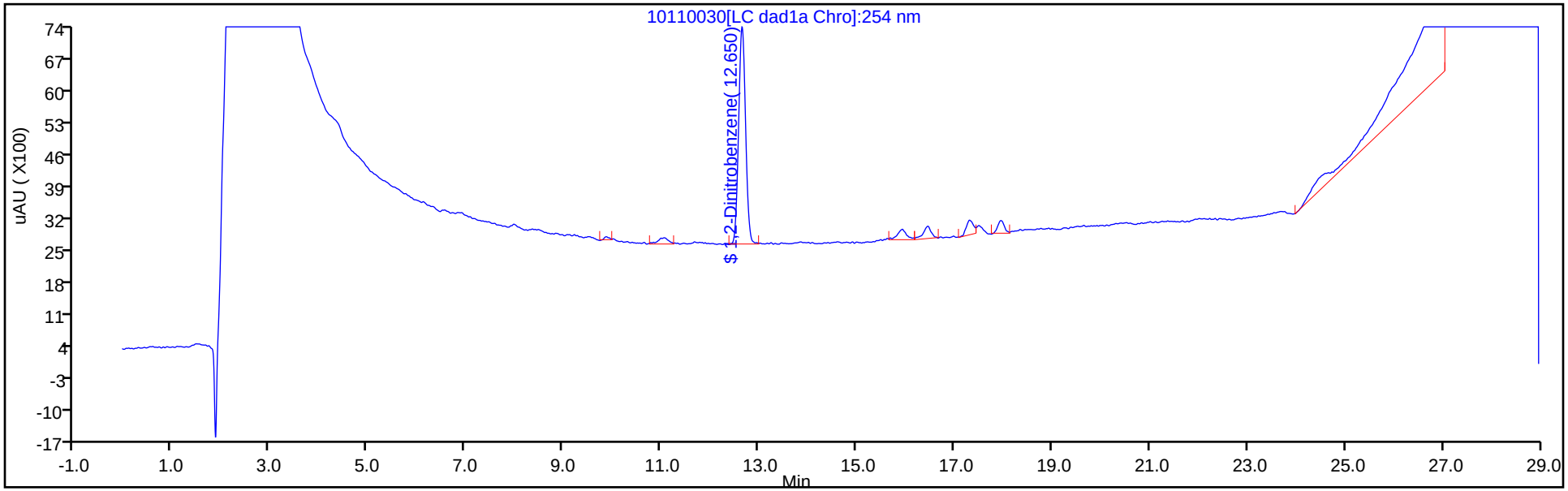
Report Date: 12-Oct-2023 12:50:46 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

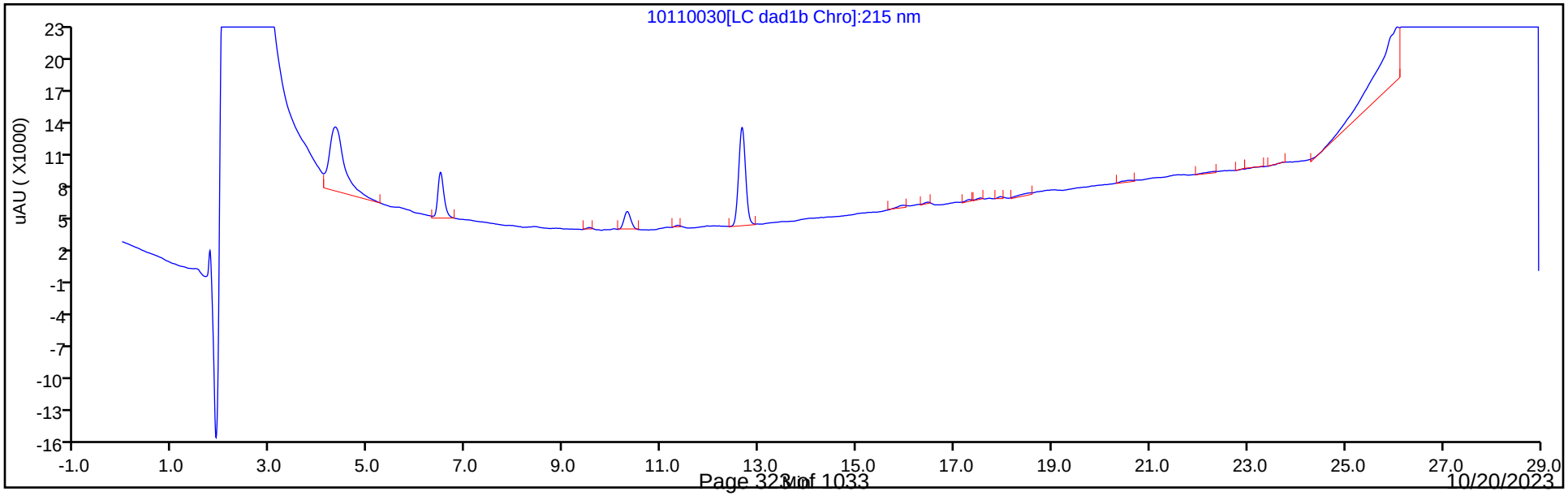
Data File: \\chromfs\denver\chromdata\g2_luna\20231011-126415.b\10110030.d

Injection Date:	12-Oct-2023 05:12:51	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	280-182239-B-2-A	Lab Sample ID:	280-182239-2	Worklist Smp#:	30
Client ID:	SCFmw-004-230902-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	30
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\10110030.D
Lims ID: 280-182239-B-2-A
Client ID: SCFmw-004-230902-GW
Sample Type: Client
Inject. Date: 12-Oct-2023 05:12:51 ALS Bottle#: 30 Worklist Smp#: 30
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-182239-B-2-A
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA

Method: \\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 12-Oct-2023 12:50:38 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1633

First Level Reviewer: K8YG Date: 12-Oct-2023 12:50:14

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1840	92.01

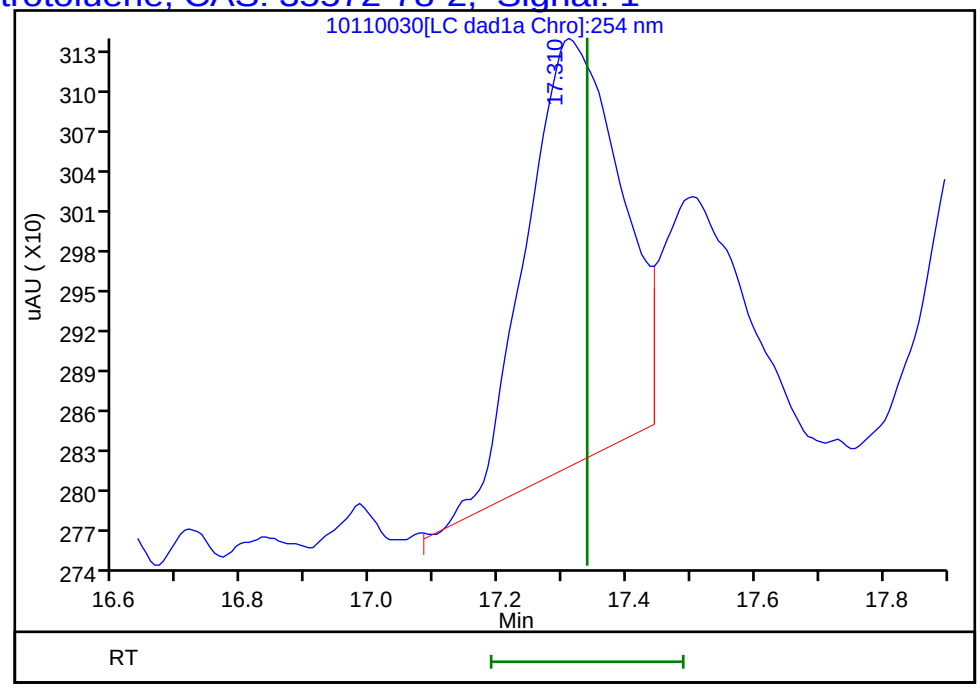
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20231011-126415.b\10110030.d				
Injection Date:	12-Oct-2023 05:12:51	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-182239-B-2-A	Lab Sample ID:	280-182239-2		
Client ID:	SCFmw-004-230902-GW				
Operator ID:	JZ/JG	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2, Signal: 1

RT: 17.31
Response: 3276
Amount: 0.004924



Reviewer: K8YG, 12-Oct-2023 12:50:14
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

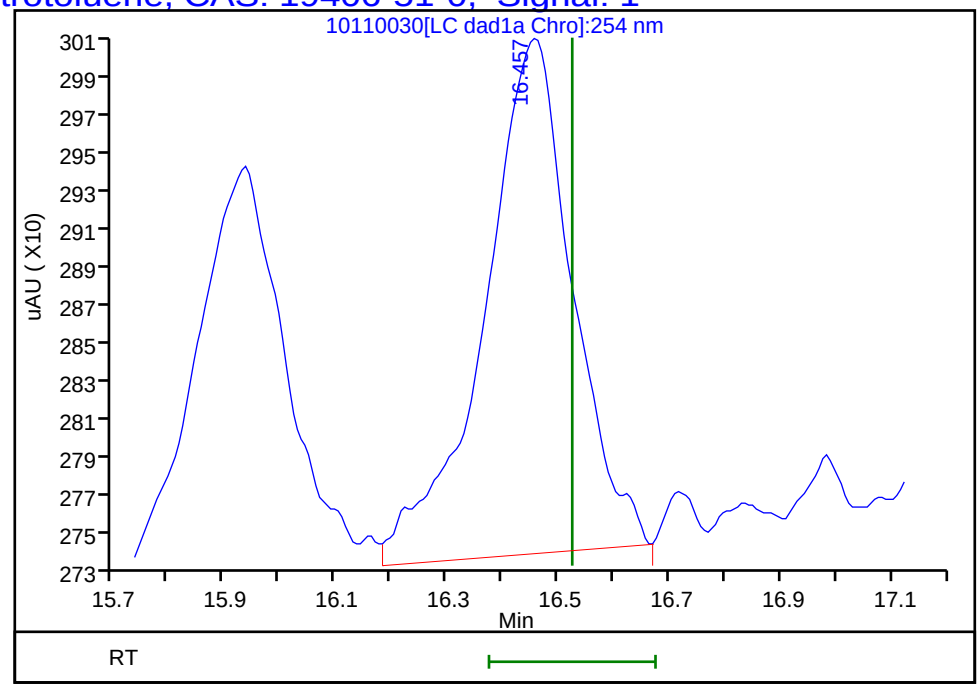
Eurofins Denver

Data File: \\chromfs\denver\chromdata\g2_luna\20231011-126415.b\10110030.d
Injection Date: 12-Oct-2023 05:12:51 Instrument ID: CHHPLC_G2_LUNA
Lims ID: 280-182239-B-2-A Lab Sample ID: 280-182239-2
Client ID: SCFmw-004-230902-GW
Operator ID: JZ/JG ALS Bottle#: 30 Worklist Smp#: 30
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0, Signal: 1

RT: 16.46
Response: 2933
Amount: 0.005869



Reviewer: K8YG, 12-Oct-2023 12:50:14
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182239-1

SDG No.:

Client Sample ID: LL3mw-237-230901-GW | Lab Sample ID: 280-182239-3

Matrix: Water | Lab File ID: 10090046.D

Analysis Method: 8330B | Date Collected: 10/02/2023 09:50

Extraction Method: 3535 | Date Extracted: 10/04/2023 13:30

Sample wt/vol: 487.5(mL) | Date Analyzed: 10/10/2023 01:19

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.: 628987 | 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	0.086
99-65-0	1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.038
118-96-7	2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.046
6629-29-4	2,4-diamino-6-nitrotoluene	0.92	U	1.0	0.92	0.45
121-14-2	2,4-Dinitrotoluene	0.082	U	0.10	0.082	0.028
59229-75-3	2,6-diamino-4-nitrotoluene	0.92	U	1.0	0.92	0.23
606-20-2	2,6-Dinitrotoluene	0.082	U	0.10	0.082	0.041
35572-78-2	2-Amino-4,6-dinitrotoluene	0.11	J1	0.11	0.10	0.052
88-72-2	2-Nitrotoluene	0.21	U	0.22	0.21	0.088
618-87-1	3,5-Dinitroaniline	0.31	U	0.41	0.31	0.13
99-08-1	3-Nitrotoluene	0.36	U	0.41	0.36	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.19	Q	0.15	0.12	0.059
99-99-0	4-Nitrotoluene	0.41	U	0.42	0.41	0.10
80251-29-2	DNX	0.26	U	0.51	0.26	0.10
2691-41-0	HMX	0.21	U	0.22	0.21	0.090
5755-27-1	MNX	0.30	U	0.51	0.30	0.095
98-95-3	Nitrobenzene	0.21	U	0.22	0.21	0.093
55-63-0	Nitroglycerin	2.1	U	2.2	2.1	0.94
78-11-5	PETN	1.0	U	1.1	1.0	0.46
121-82-4	RDX	0.21	U	0.22	0.21	0.053
479-45-8	Tetryl	0.10	U M	0.11	0.10	0.033
13980-04-6	TNX	0.26	U M	0.51	0.26	0.081

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	116		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\10090046.D
Lims ID: 280-182239-B-3-A
Client ID: LL3mw-237-230901-GW
Sample Type: Client
Inject. Date: 10-Oct-2023 01:19:06 ALS Bottle#: 46 Worklist Smp#: 46
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-182239-B-3-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 10-Oct-2023 11:59:33 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1622

First Level Reviewer: K8YG Date: 10-Oct-2023 11:29:41

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	2 2,6-diamino-4-nitrotoluene	1		6.438			ND	
	3 TNX	1		6.441			ND	U
	4 HMX	1		6.568			ND	
	5 2,4-diamino-6-nitrotoluene	1		6.625			ND	
	6 DNX	1		6.768			ND	
	7 MNX	1		7.194			ND	
	8 RDX	1		7.574			ND	
$	10 1,2-Dinitrobenzene	1	8.530	8.521	0.009	28691	0.2315	
	11 1,3,5-Trinitrobenzene	1		8.648			ND	
	12 1,3-Dinitrobenzene	1		9.254			ND	
	13 Nitrobenzene	1		9.621			ND	7
	14 3,5-Dinitroaniline	1		9.841			ND	
	15 Tetryl	1		9.974			ND	U
	16 Nitroglycerin	2		10.421			ND	
	17 2,4,6-Trinitrotoluene	1		10.861			ND	
	18 4-Amino-2,6-dinitrotoluene	1	11.057	11.034	0.023	2824	0.0189	
	19 2-Amino-4,6-dinitrotoluene	1	11.304	11.281	0.023	2099	0.0108	
	20 2,6-Dinitrotoluene	1		11.441			ND	
	21 2,4-Dinitrotoluene	1		11.607			ND	
	22 o-Nitrotoluene	1		12.421			ND	
	23 p-Nitrotoluene	1		12.827			ND	
	24 m-Nitrotoluene	1		13.387			ND	
	25 PETN	2		14.514			ND	

QC Flag Legend

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

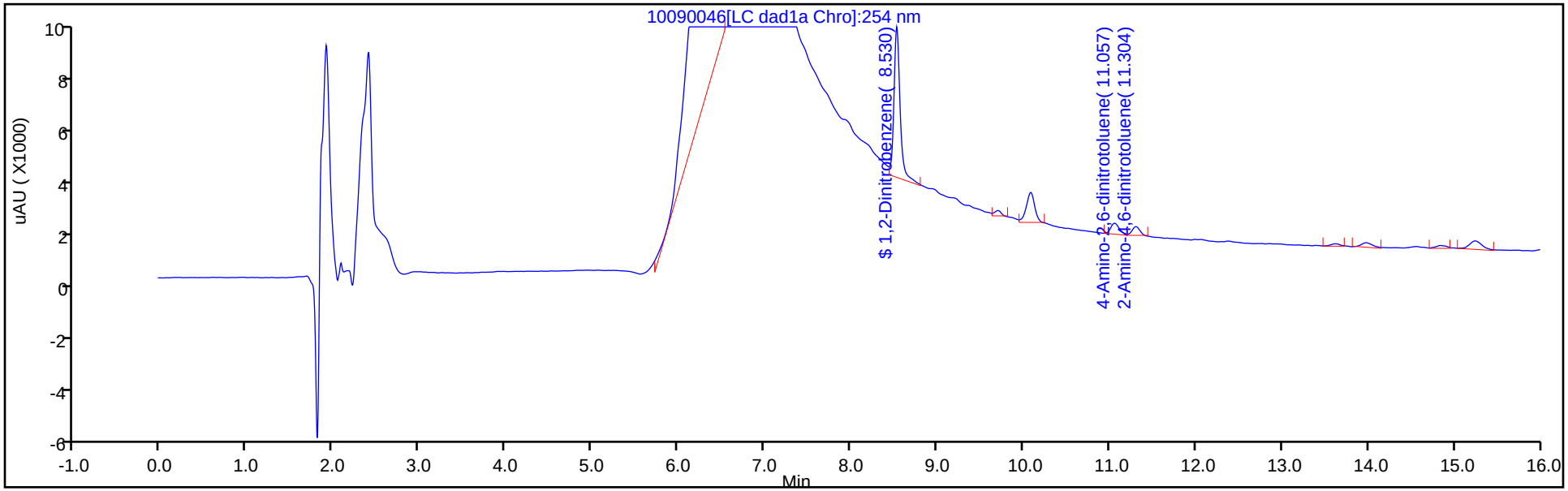
Report Date: 10-Oct-2023 11:59:39 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

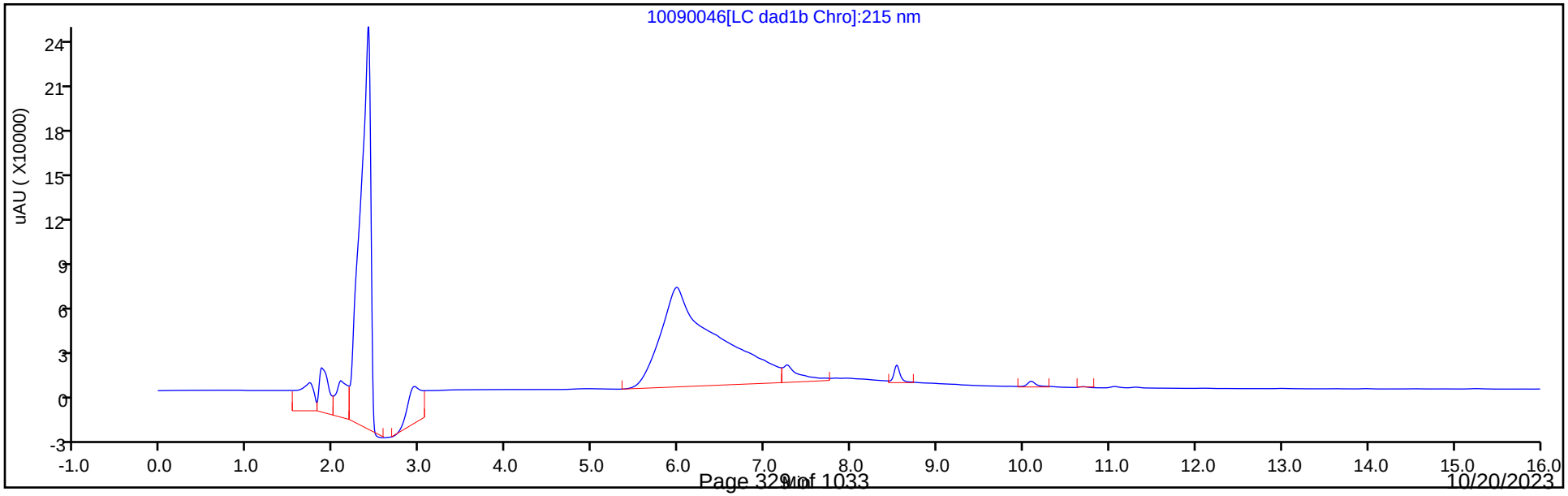
Data File: \\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090046.d

Injection Date:	10-Oct-2023 01:19:06	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-182239-B-3-A	Lab Sample ID:	280-182239-3	Worklist Smp#:	46
Client ID:	LL3mw-237-230901-GW				
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



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\10090046.D				
Lims ID:	280-182239-B-3-A				
Client ID:	LL3mw-237-230901-GW				
Sample Type:	Client				
Inject. Date:	10-Oct-2023 01:19:06	ALS Bottle#:	46	Worklist Smp#:	46
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-182239-B-3-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	10-Oct-2023 11:59:33	Calib Date:	24-Jun-2023 00:23:49		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1622				

First Level Reviewer: K8YG Date: 10-Oct-2023 11:29:41

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2315	115.77

User Disabled Compound Report

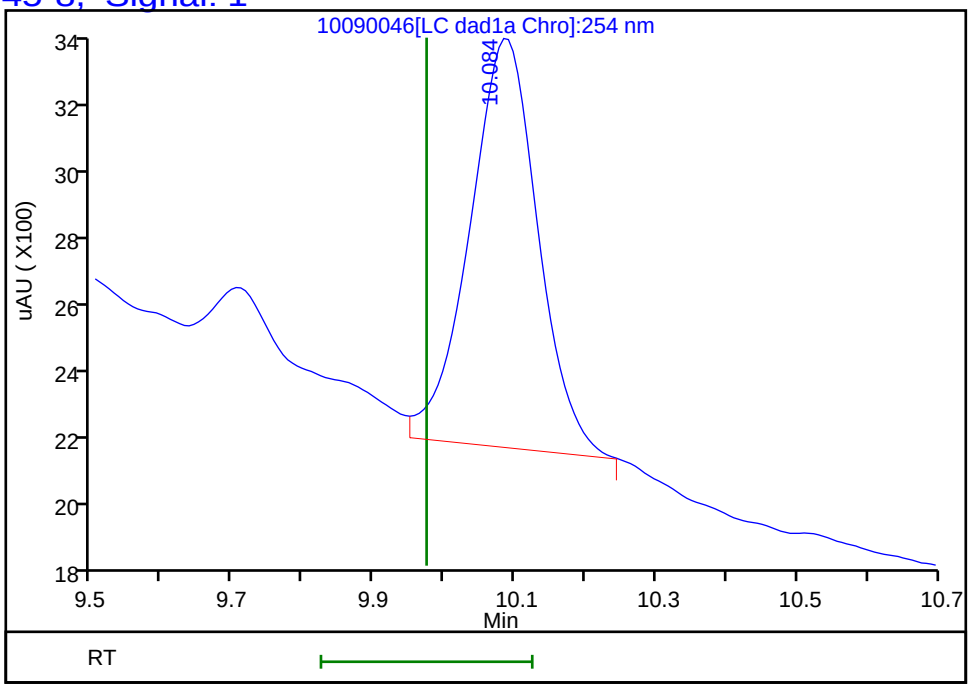
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090046.d
Injection Date: 10-Oct-2023 01:19:06 Instrument ID: CHHPLC_X3
Lims ID: 280-182239-B-3-A Lab Sample ID: 280-182239-3
Client ID: LL3mw-237-230901-GW
Operator ID: JZ/JG ALS Bottle#: 46 Worklist Smp#: 46
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

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

RT: 10.08
Response: 7602
Amount: 0.045451



Reviewer: K8YG, 10-Oct-2023 11:29:41
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

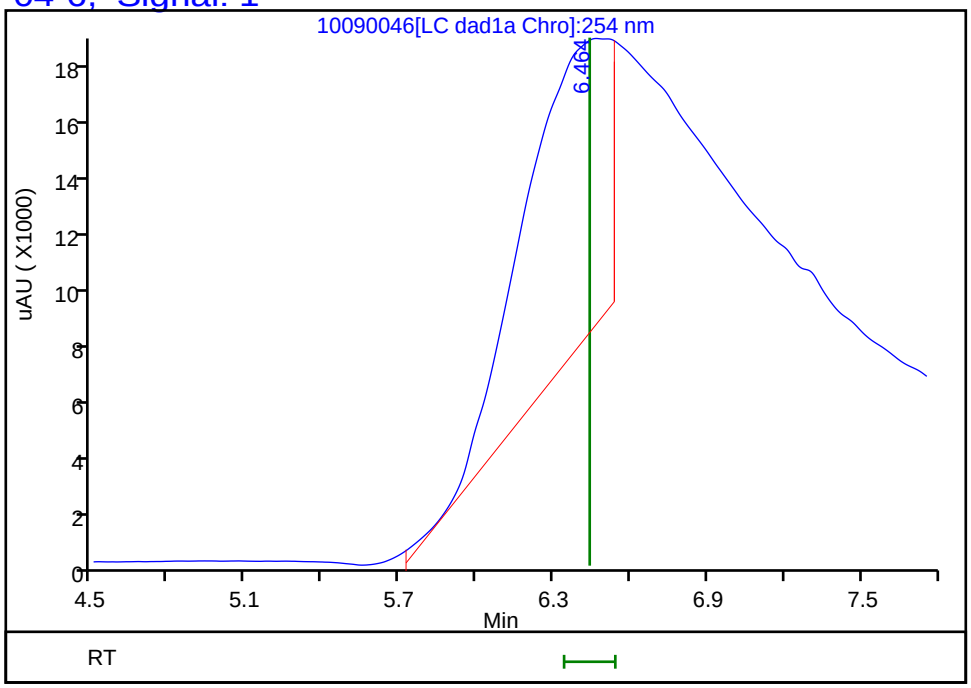
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090046.d
Injection Date: 10-Oct-2023 01:19:06 Instrument ID: CHHPLC_X3
Lims ID: 280-182239-B-3-A Lab Sample ID: 280-182239-3
Client ID: LL3mw-237-230901-GW
Operator ID: JZ/JG ALS Bottle#: 46 Worklist Smp#: 46
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

3 TNX, CAS: 13980-04-6, Signal: 1

RT: 6.46
Response: 253845
Amount: 1.264414



Reviewer: K8YG, 10-Oct-2023 11:29:41
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182239-1

SDG No.:

Client Sample ID: LL3mw-237-230901-GW | Lab Sample ID: 280-182239-3

Matrix: Water | Lab File ID: 10110016.D

Analysis Method: 8330B | Date Collected: 10/02/2023 09:50

Extraction Method: 3535 | Date Extracted: 10/04/2023 13:30

Sample wt/vol: 487.5(mL) | Date Analyzed: 10/11/2023 21:24

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.: 629372 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
35572-78-2	*2-Amino-4,6-dinitrotoluene*	*0.24*	*M J1*	*0.11*	0.10	*0.052*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	92	*M*	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\10110016.D
Lims ID: 280-182239-B-3-A
Client ID: LL3mw-237-230901-GW
Sample Type: Client
Inject. Date: 11-Oct-2023 21:24:56 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-182239-B-3-A
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA

Method: \\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 12-Oct-2023 12:50:27 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1633

First Level Reviewer: K8YG Date: 12-Oct-2023 12:34:28

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1		4.239			ND	
2 2,4-diamino-6-nitrotoluene	1		4.839			ND	
3 TNX	1		5.292			ND	
4 DNX	1		6.152			ND	
6 HMX	1		6.805			ND	
7 MNX	1		7.659			ND	
8 RDX	1		9.052			ND	
9 Nitrobenzene	1		11.625			ND	
$ 10 1,2-Dinitrobenzene	1	12.670	12.572	0.098	47364	0.1845	M
11 3,5-Dinitroaniline	1		14.405			ND	
12 1,3-Dinitrobenzene	1		14.698			ND	
13 Nitroglycerin	2		15.165			ND	
14 o-Nitrotoluene	1		15.785			ND	
15 p-Nitrotoluene	1		16.012			ND	7
16 4-Amino-2,6-dinitrotoluene	1	16.637	16.525	0.112	8118	0.0251	
17 m-Nitrotoluene	1		16.858			ND	
18 2-Amino-4,6-dinitrotoluene	1	17.397	17.338	0.059	10409	0.0239	M
19 1,3,5-Trinitrobenzene	1		17.532			ND	
20 2,6-Dinitrotoluene	1		18.658			ND	
21 2,4-Dinitrotoluene	1		19.118			ND	
22 Tetryl	1		22.339			ND	
23 2,4,6-Trinitrotoluene	1		23.199			ND	
24 PETN	2		24.352			ND	

QC Flag Legend

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

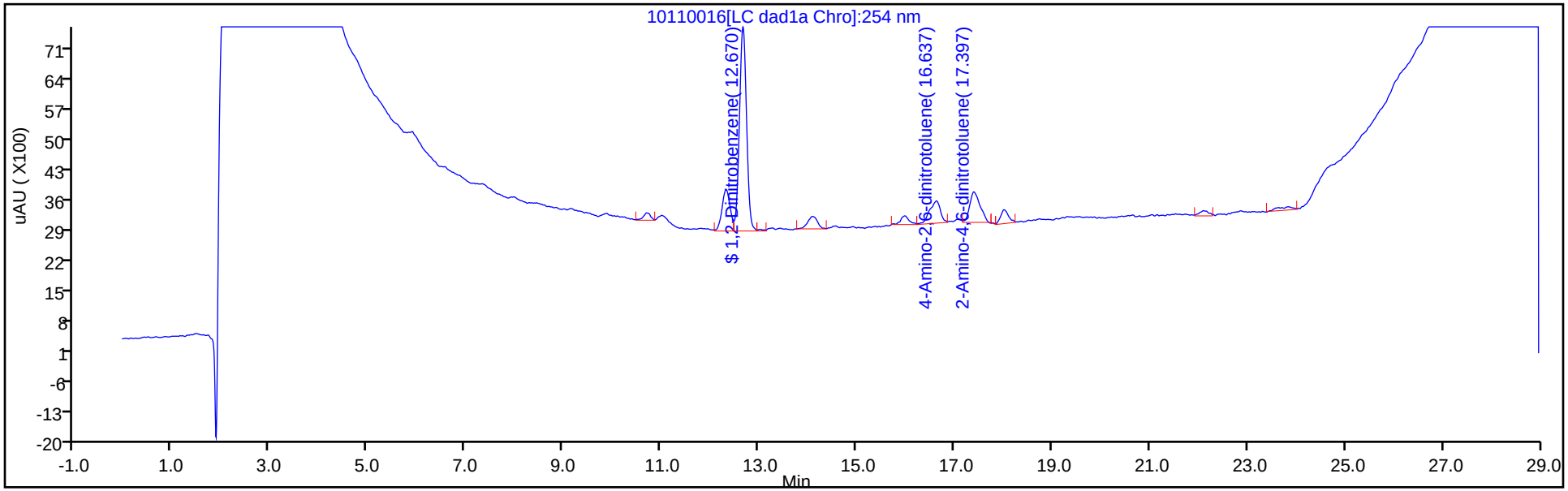
Report Date: 12-Oct-2023 12:50:34 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

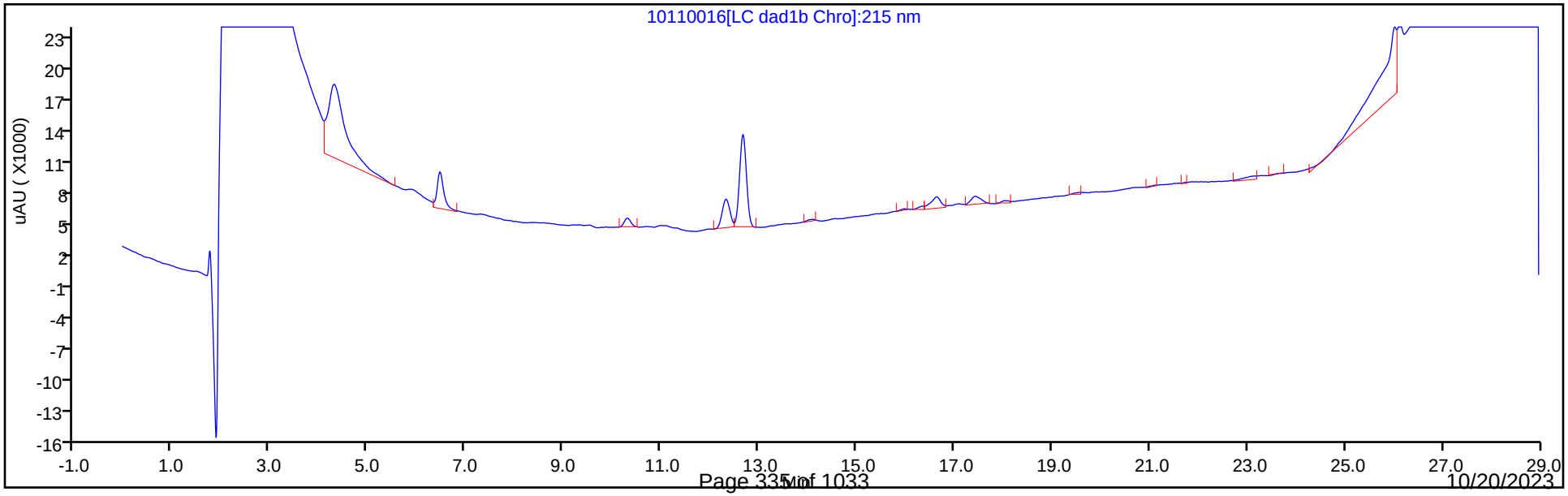
Data File: \\chromfs\denver\chromdata\g2_luna\20231011-126415.b\10110016.d

Injection Date:	11-Oct-2023 21:24:56	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	280-182239-B-3-A	Lab Sample ID:	280-182239-3	Worklist Smp#:	16
Client ID:	LL3mw-237-230901-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\10110016.D				
Lims ID:	280-182239-B-3-A				
Client ID:	LL3mw-237-230901-GW				
Sample Type:	Client				
Inject. Date:	11-Oct-2023 21:24:56	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-182239-B-3-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_G2_LUNA		
Method:	\\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	12-Oct-2023 12:50:27	Calib Date:	26-Sep-2023 04:54:46		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX1633				

First Level Reviewer: K8YG Date: 12-Oct-2023 12:34:28

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1845	92.23

Manual Integration/User Assign Peak Report

Eurofins Denver

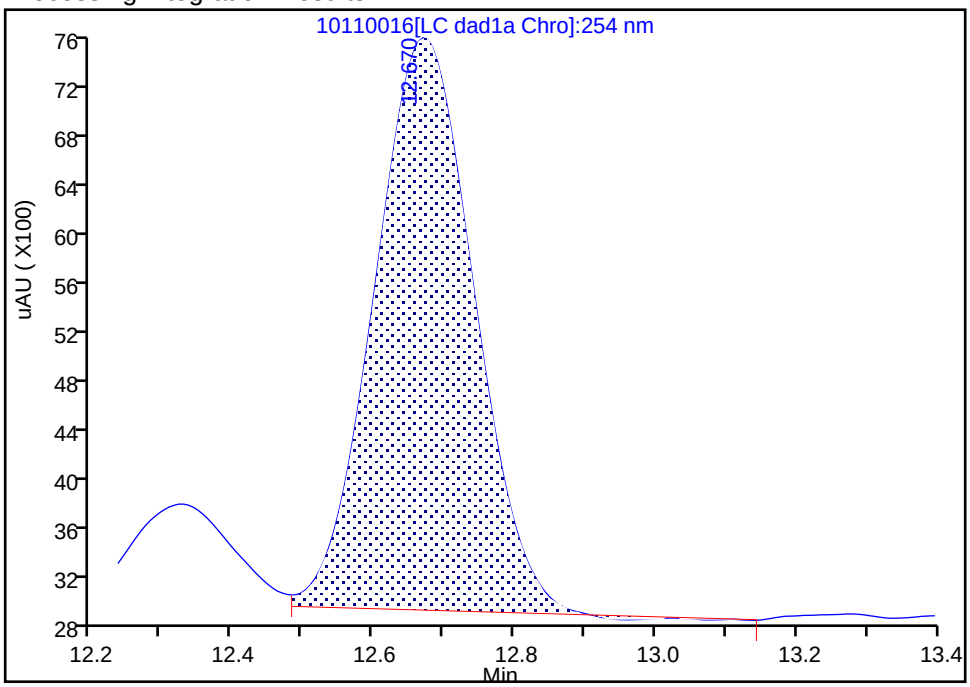
Data File:	\\chromfs\denver\chromdata\g2_luna\20231011-126415.b\10110016.d				
Injection Date:	11-Oct-2023 21:24:56	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-182239-B-3-A	Lab Sample ID:	280-182239-3		
Client ID:	LL3mw-237-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

Signal: 1

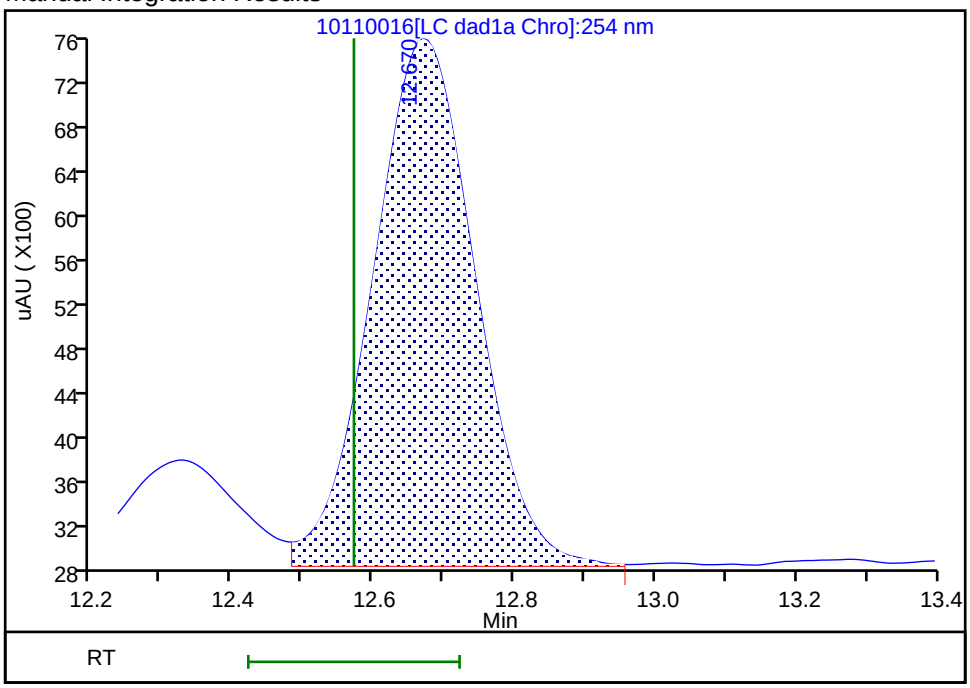
Processing Integration Results

RT: 12.67
Area: 45829
Amount: 0.178481
Amount Units: ug/ml



Manual Integration Results

RT: 12.67
Area: 47364
Amount: 0.184459
Amount Units: ug/ml



Reviewer: K8YG, 12-Oct-2023 12:34:08 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

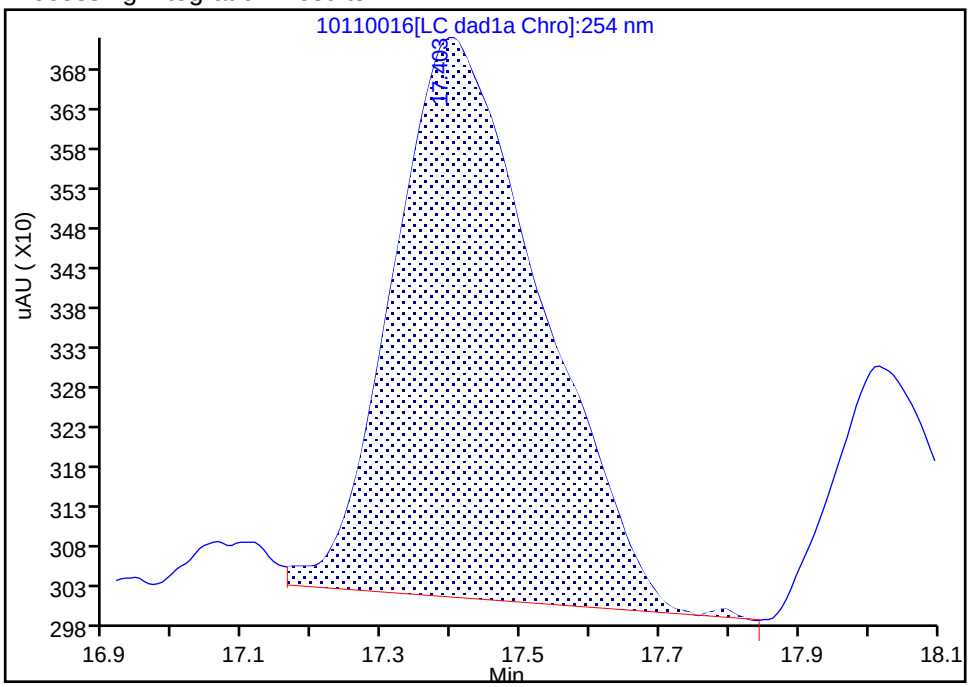
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Injection Date:	11-Oct-2023 21:24:56	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-182239-B-3-A	Lab Sample ID:	280-182239-3		
Client ID:	LL3mw-237-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

Signal: 1

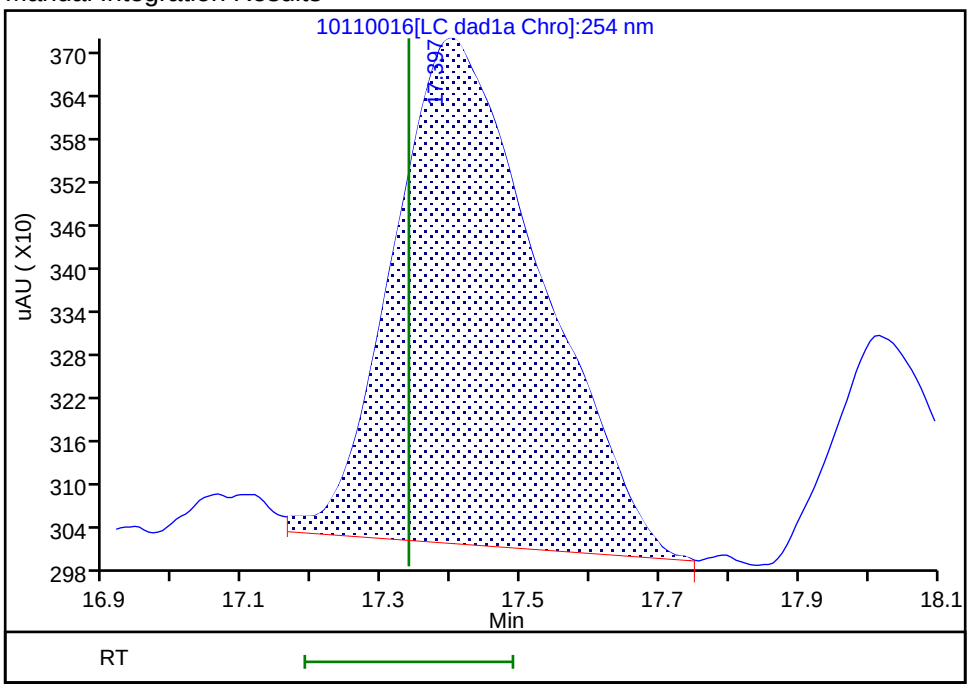
Processing Integration Results

RT: 17.40
Area: 10446
Amount: 0.023980
Amount Units: ug/ml



Manual Integration Results

RT: 17.40
Area: 10409
Amount: 0.023881
Amount Units: ug/ml



Reviewer: K8YG, 12-Oct-2023 12:34:25 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182239-1

SDG No.:

Client Sample ID: LL3mw-241-230901-GW | Lab Sample ID: 280-182239-4

Matrix: Water | Lab File ID: 10090047.D

Analysis Method: 8330B | Date Collected: 10/02/2023 10:37

Extraction Method: 3535 | Date Extracted: 10/04/2023 13:30

Sample wt/vol: 487.8(mL) | Date Analyzed: 10/10/2023 01:42

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

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

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

Cleanup Factor:

Analysis Batch No.: 628987 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	1.7		0.22	0.21	0.086
99-65-0	1,3-Dinitrobenzene	0.10	U M	0.11	0.10	0.038
118-96-7	2,4,6-Trinitrotoluene	0.89		0.11	0.10	0.046
6629-29-4	2,4-diamino-6-nitrotoluene	0.92	U J1	1.0	0.92	0.44
121-14-2	2,4-Dinitrotoluene	0.082	U	0.10	0.082	0.028
59229-75-3	2,6-diamino-4-nitrotoluene	0.92	U J1	1.0	0.92	0.23
606-20-2	2,6-Dinitrotoluene	0.082	U	0.10	0.082	0.041
88-72-2	2-Nitrotoluene	0.21	U M	0.22	0.21	0.088
618-87-1	3,5-Dinitroaniline	0.37	J	0.41	0.31	0.13
99-08-1	3-Nitrotoluene	0.36	U J1	0.41	0.36	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.1	Q J1	0.15	0.12	0.059
99-99-0	4-Nitrotoluene	0.41	U	0.42	0.41	0.10
80251-29-2	DNX	0.26	U	0.51	0.26	0.10
2691-41-0	HMX	0.11	J M J1	0.22	0.21	0.090
5755-27-1	MNX	0.30	U M	0.51	0.30	0.095
98-95-3	Nitrobenzene	0.21	U	0.22	0.21	0.093
55-63-0	Nitroglycerin	2.1	U	2.2	2.1	0.94
78-11-5	PETN	1.0	U	1.1	1.0	0.46
121-82-4	RDX	0.58		0.22	0.21	0.053
479-45-8	Tetryl	0.10	U	0.11	0.10	0.033
13980-04-6	TNX	0.26	U M	0.51	0.26	0.081

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

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\10090047.D
Lims ID: 280-182239-B-4-A
Client ID: LL3mw-241-230901-GW
Sample Type: Client
Inject. Date: 10-Oct-2023 01:42:02 ALS Bottle#: 47 Worklist Smp#: 47
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-182239-B-4-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 10-Oct-2023 11:59:33 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1622

First Level Reviewer: K8YG Date: 10-Oct-2023 09:26:36

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
1	Triamine Trinitrobenzene	1		2.444			ND	
2	2,6-diamino-4-nitrotoluene	1		6.438			ND	
3	TNX	1		6.441			ND	U
4	HMX	1	6.579	6.568	0.011	1007	0.0107	M
5	2,4-diamino-6-nitrotoluene	1		6.625			ND	
6	DNX	1		6.768			ND	
7	MNX	1		7.194			ND	U
8	RDX	1	7.586	7.574	0.012	6246	0.0565	
9	2,4,6-Trinitrophenol	1		7.948			ND	
$ 10	1,2-Dinitrobenzene	1	8.526	8.521	0.005	23390	0.1888	
11	1,3,5-Trinitrobenzene	1	8.653	8.648	0.005	35105	0.1625	
12	1,3-Dinitrobenzene	1		9.254			ND	U
13	Nitrobenzene	1		9.621			ND	
14	3,5-Dinitroaniline	1	9.853	9.841	0.012	7966	0.0359	
15	Tetryl	1		9.974			ND	
16	Nitroglycerin	2		10.421			ND	
17	2,4,6-Trinitrotoluene	1	10.866	10.861	0.005	17889	0.0873	
18	4-Amino-2,6-dinitrotoluene	1	11.046	11.034	0.012	15396	0.1029	
19	2-Amino-4,6-dinitrotoluene	1	11.293	11.281	0.012	25985	0.1341	
20	2,6-Dinitrotoluene	1		11.441			ND	
21	2,4-Dinitrotoluene	1		11.607			ND	
22	o-Nitrotoluene	1		12.421			ND	U
23	p-Nitrotoluene	1		12.827			ND	7
24	m-Nitrotoluene	1		13.387			ND	
25	PETN	2		14.514			ND	
26	Ammonium Picrate	1		0.000			ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Review Flags
M - Manually Integrated
U - Marked Undetected

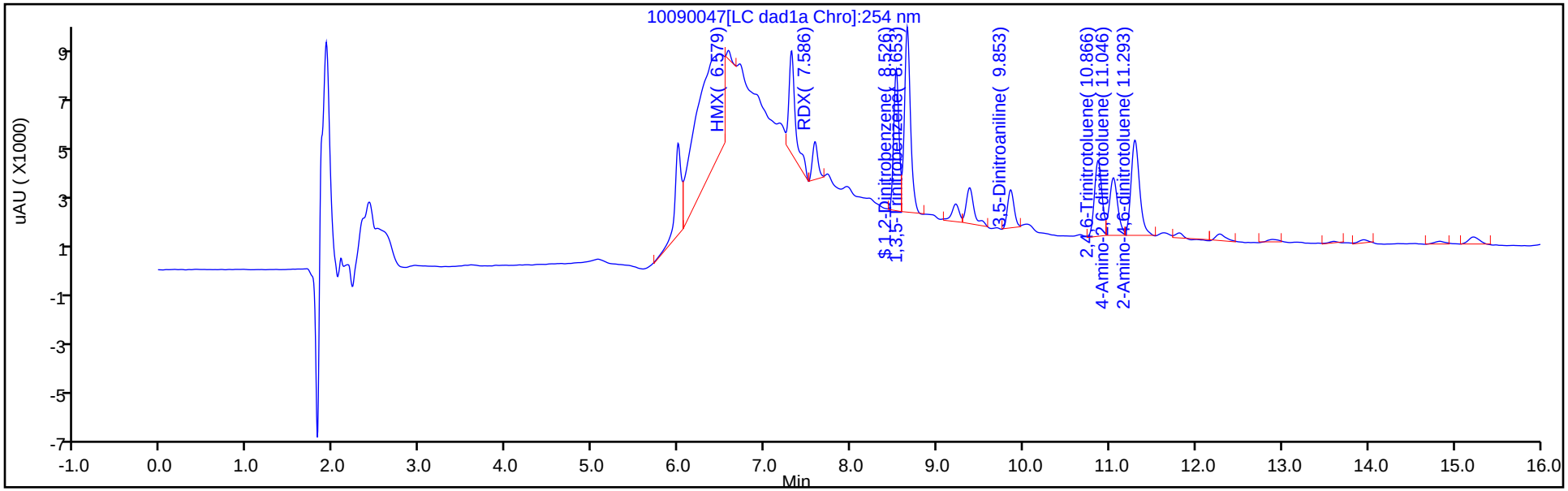
Report Date: 10-Oct-2023 11:59:41 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

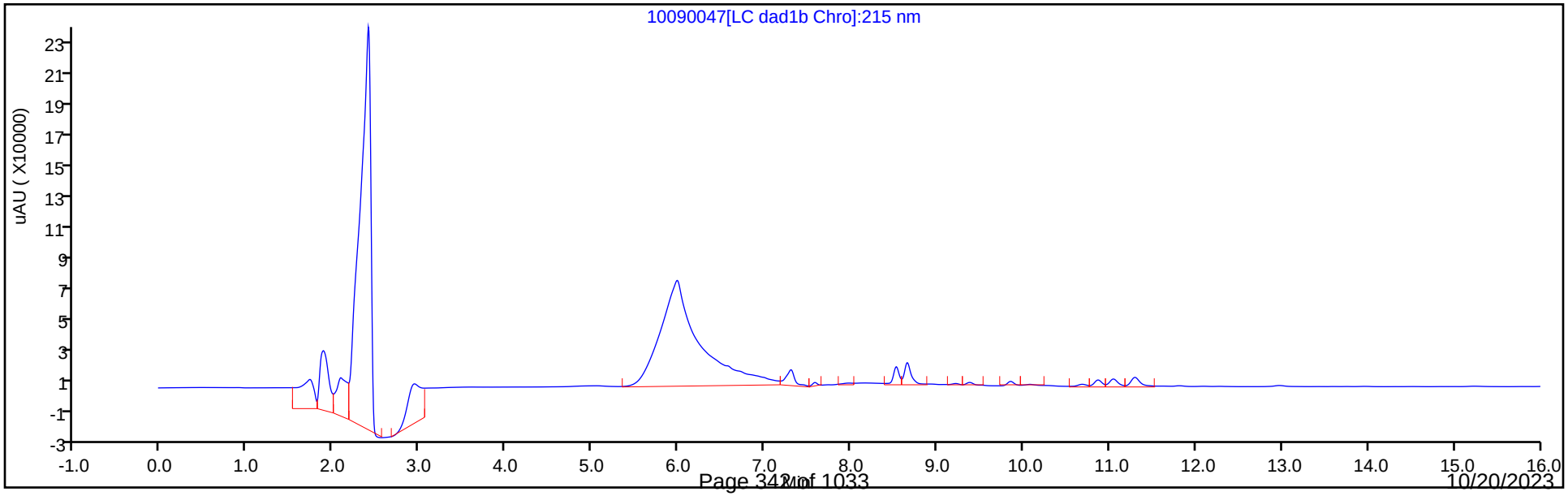
Data File: \\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090047.d

Injection Date:	10-Oct-2023 01:42:02	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-182239-B-4-A	Lab Sample ID:	280-182239-4	Worklist Smp#:	47
Client ID:	LL3mw-241-230901-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



10/20/2023
4:00 PM

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\10090047.D				
Lims ID:	280-182239-B-4-A				
Client ID:	LL3mw-241-230901-GW				
Sample Type:	Client				
Inject. Date:	10-Oct-2023 01:42:02	ALS Bottle#:	47	Worklist Smp#:	47
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-182239-B-4-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	10-Oct-2023 11:59:33	Calib Date:	24-Jun-2023 00:23:49		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1622				

First Level Reviewer: K8YG Date: 10-Oct-2023 09:26:36

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1888	94.38

User Disabled Compound Report

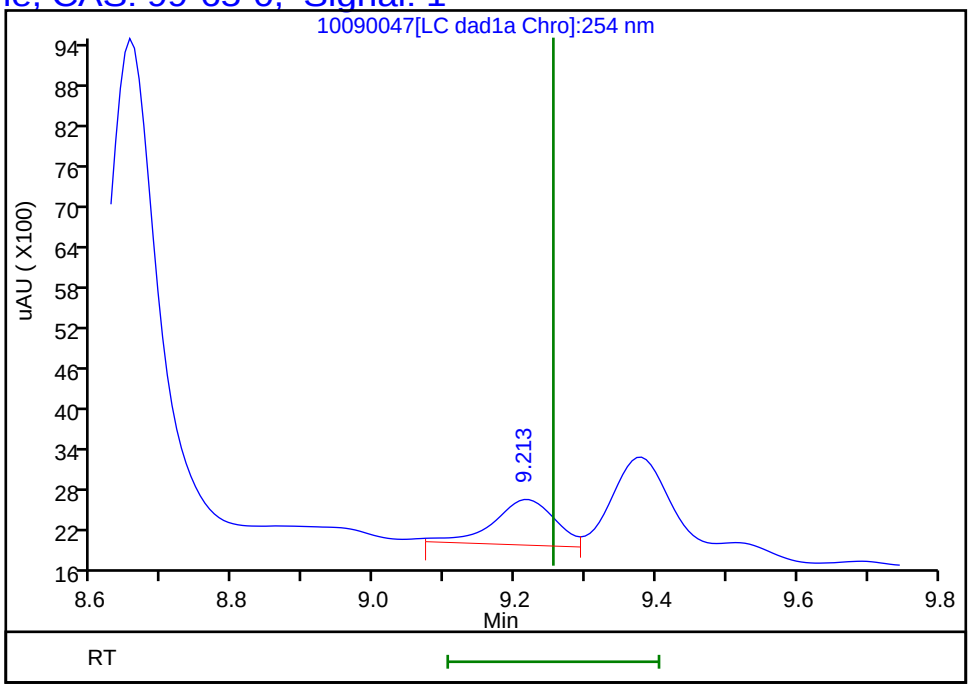
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090047.d
Injection Date: 10-Oct-2023 01:42:02 Instrument ID: CHHPLC_X3
Lims ID: 280-182239-B-4-A Lab Sample ID: 280-182239-4
Client ID: LL3mw-241-230901-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: 4199
Amount: 0.014314



Reviewer: K8YG, 10-Oct-2023 11:31:35
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

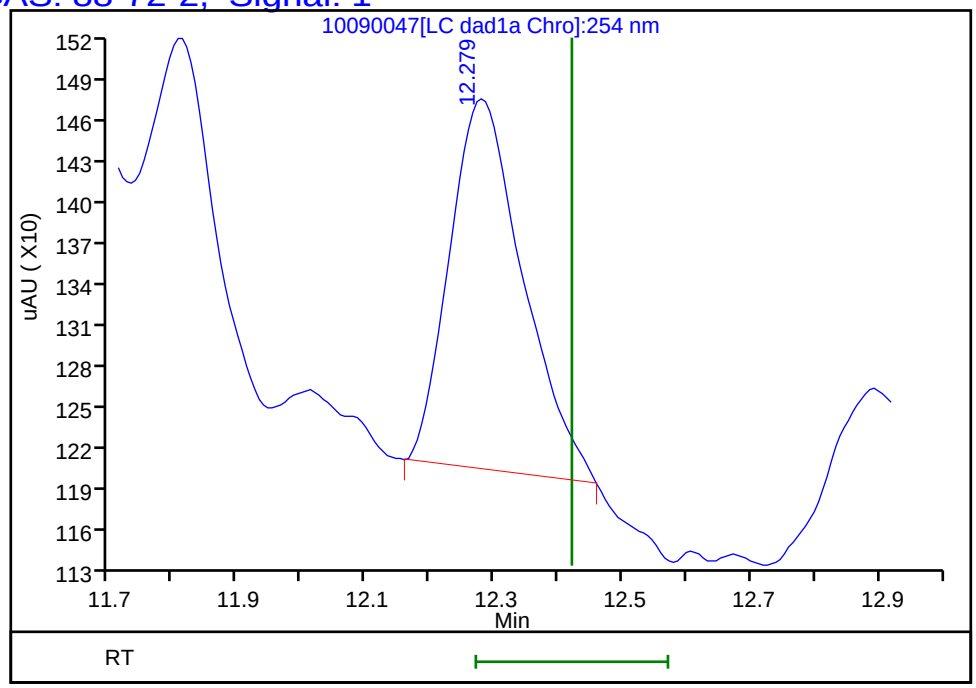
Eurofins Denver

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Injection Date: 10-Oct-2023 01:42:02 Instrument ID: CHHPLC_X3
Lims ID: 280-182239-B-4-A Lab Sample ID: 280-182239-4
Client ID: LL3mw-241-230901-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

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

RT: 12.28
Response: 2114
Amount: 0.016761



Reviewer: K8YG, 10-Oct-2023 11:31:35
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

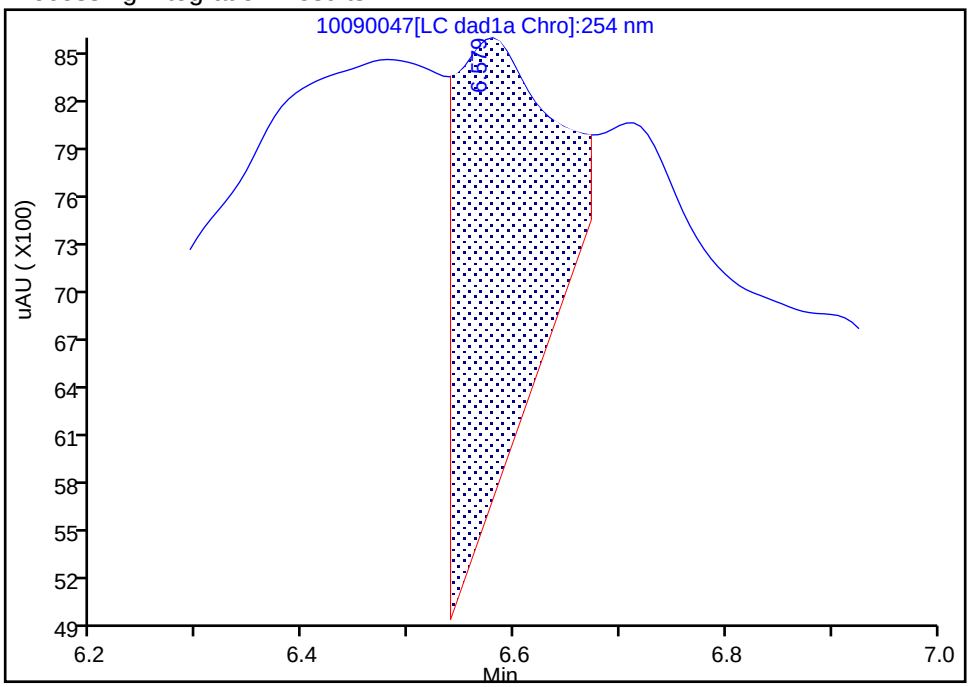
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Injection Date:	10-Oct-2023 01:42:02	Instrument ID:	CHHPLC_X3		
Lims ID:	280-182239-B-4-A	Lab Sample ID:	280-182239-4		
Client ID:	LL3mw-241-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	47	Worklist Smp#:	47
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
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

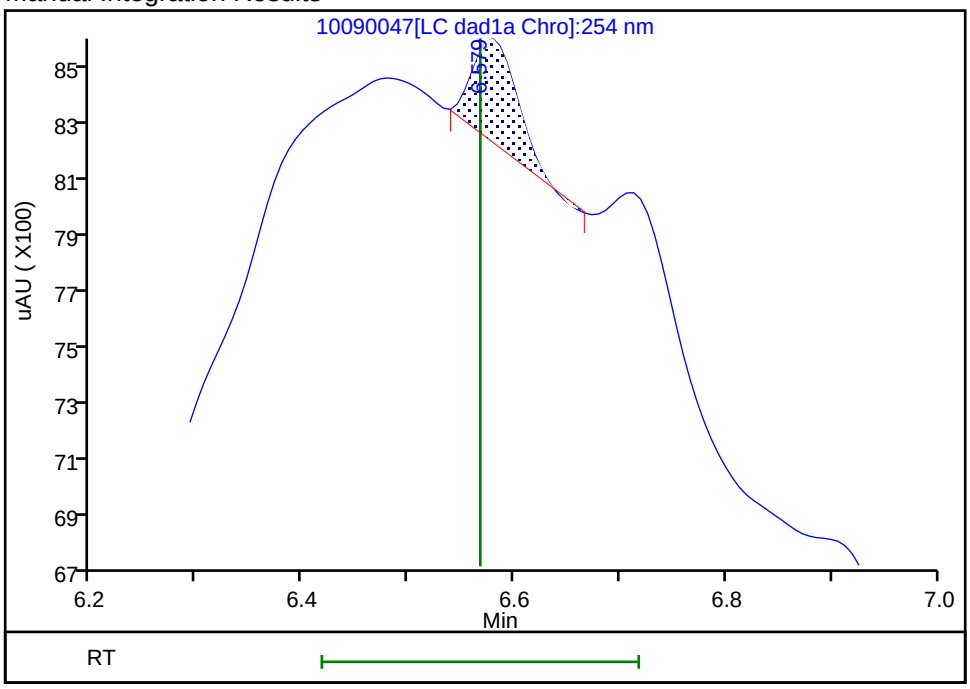
Processing Integration Results

RT: 6.58
Area: 16336
Amount: 0.173316
Amount Units: ug/mL



Manual Integration Results

RT: 6.58
Area: 1007
Amount: 0.010684
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 11:30:27 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

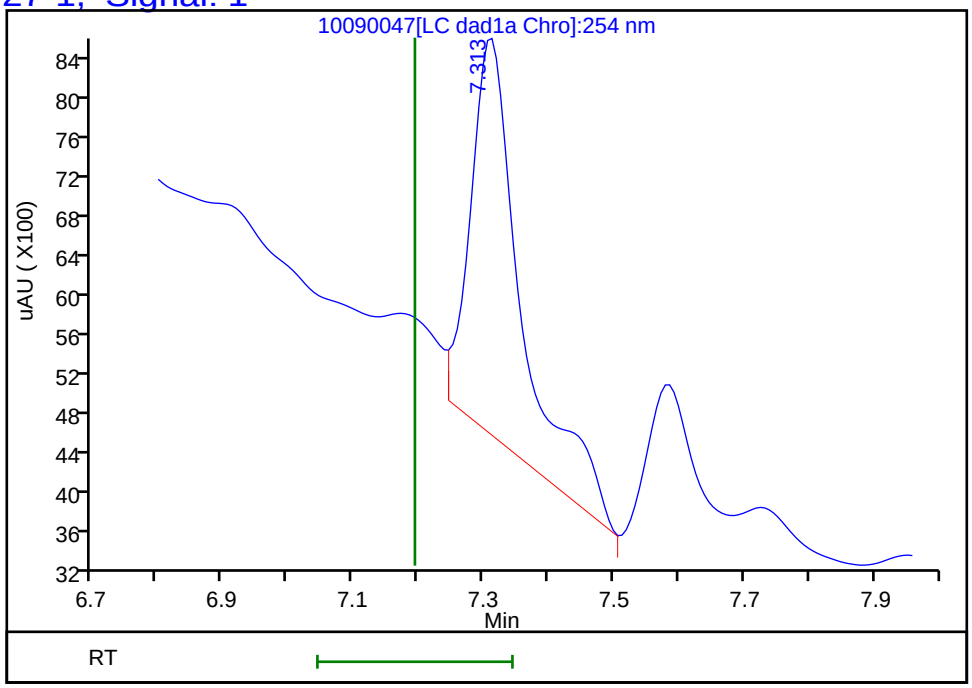
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090047.d				
Injection Date:	10-Oct-2023 01:42:02	Instrument ID:	CHHPLC_X3		
Lims ID:	280-182239-B-4-A	Lab Sample ID:	280-182239-4		
Client ID:	LL3mw-241-230901-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

RT: 7.31
Response: 21440
Amount: 0.154591



Reviewer: K8YG, 10-Oct-2023 11:31:35
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

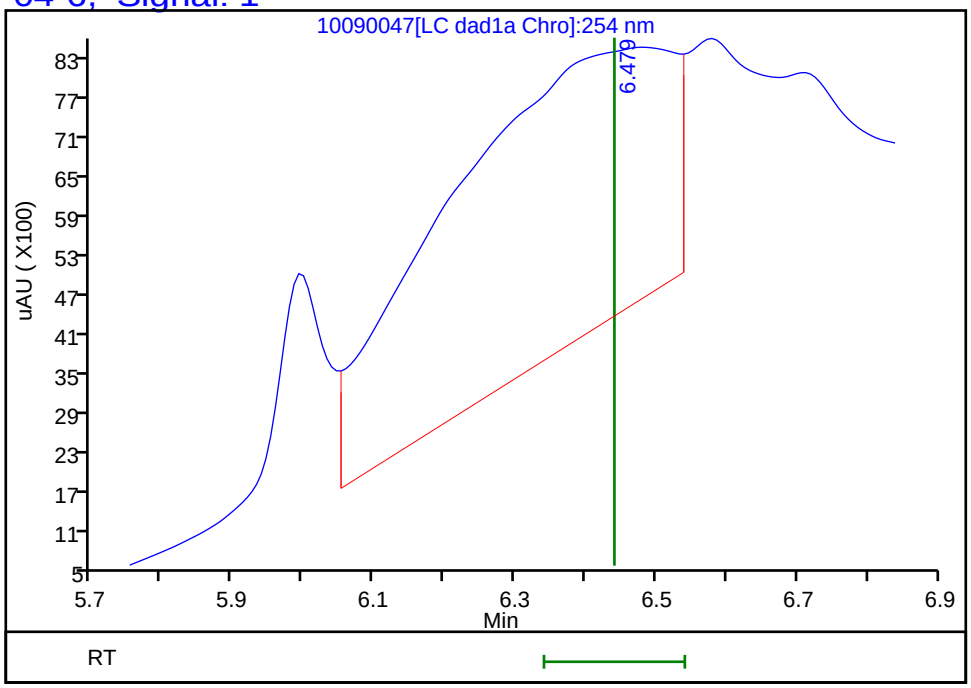
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090047.d
Injection Date: 10-Oct-2023 01:42:02 Instrument ID: CHHPLC_X3
Lims ID: 280-182239-B-4-A Lab Sample ID: 280-182239-4
Client ID: LL3mw-241-230901-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

3 TNX, CAS: 13980-04-6, Signal: 1

RT: 6.48
Response: 100130
Amount: 0.498752



Reviewer: K8YG, 10-Oct-2023 11:31:35
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182239-1

SDG No.:

Client Sample ID: LL3mw-241-230901-GW | Lab Sample ID: 280-182239-4

Matrix: Water | Lab File ID: 10110017.D

Analysis Method: 8330B | Date Collected: 10/02/2023 10:37

Extraction Method: 3535 | Date Extracted: 10/04/2023 13:30

Sample wt/vol: 487.8(mL) | Date Analyzed: 10/11/2023 22:00

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.: 629372 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
35572-78-2	2-Amino-4,6-dinitrotoluene	0.10	U J1	0.11	0.10	0.052
2691-41-0	*HMX*	*0.19*	*J J1*	*0.22*	0.21	*0.090*

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

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\10110017.D
Lims ID: 280-182239-B-4-A
Client ID: LL3mw-241-230901-GW
Sample Type: Client
Inject. Date: 11-Oct-2023 22:00:58 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-182239-B-4-A
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA

Method: \\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 12-Oct-2023 12:50:27 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1633

First Level Reviewer: K8YG Date: 12-Oct-2023 12:35:39

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1	2,6-diamino-4-nitrotoluene	1		4.239			ND	
2	2,4-diamino-6-nitrotoluene	1		4.839			ND	
3	TNX	1		5.292			ND	
4	DNX	1		6.152			ND	
6	HMX	1	6.853	6.805	0.048	3275	0.0189	
7	MNX	1		7.659			ND	
5	2,4,6-Trinitrophenol	1		8.759			ND	
8	RDX	1	9.100	9.052	0.048	9956	0.0480	
9	Nitrobenzene	1		11.625			ND	
$ 10	1,2-Dinitrobenzene	1	12.646	12.572	0.074	47697	0.1858	
11	3,5-Dinitroaniline	1	14.486	14.405	0.081	16955	0.0404	M
12	1,3-Dinitrobenzene	1		14.698			ND	
13	Nitroglycerin	2		15.165			ND	
14	o-Nitrotoluene	1		15.785			ND	
15	p-Nitrotoluene	1		16.012			ND	U
16	4-Amino-2,6-dinitrotoluene	1	16.640	16.525	0.115	34415	0.1227	M
17	m-Nitrotoluene	1		16.858			ND	
18	2-Amino-4,6-dinitrotoluene	1		17.338			ND	
26	Triamine Trinitrobenzene	1	17.440	17.463	-0.023	53919	NC	
19	1,3,5-Trinitrobenzene	1	17.620	17.532	0.088	64980	0.1579	
20	2,6-Dinitrotoluene	1	18.773	18.658	0.115	3321	0.009425	
21	2,4-Dinitrotoluene	1	19.200	19.118	0.082	7525	0.0138	
22	Tetryl	1		22.339			ND	
23	2,4,6-Trinitrotoluene	1	23.313	23.199	0.114	36444	0.0947	
24	PETN	2		24.352			ND	
25	Ammonium Picrate	1		0.000			ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Review Flags
M - Manually Integrated
U - Marked Undetected

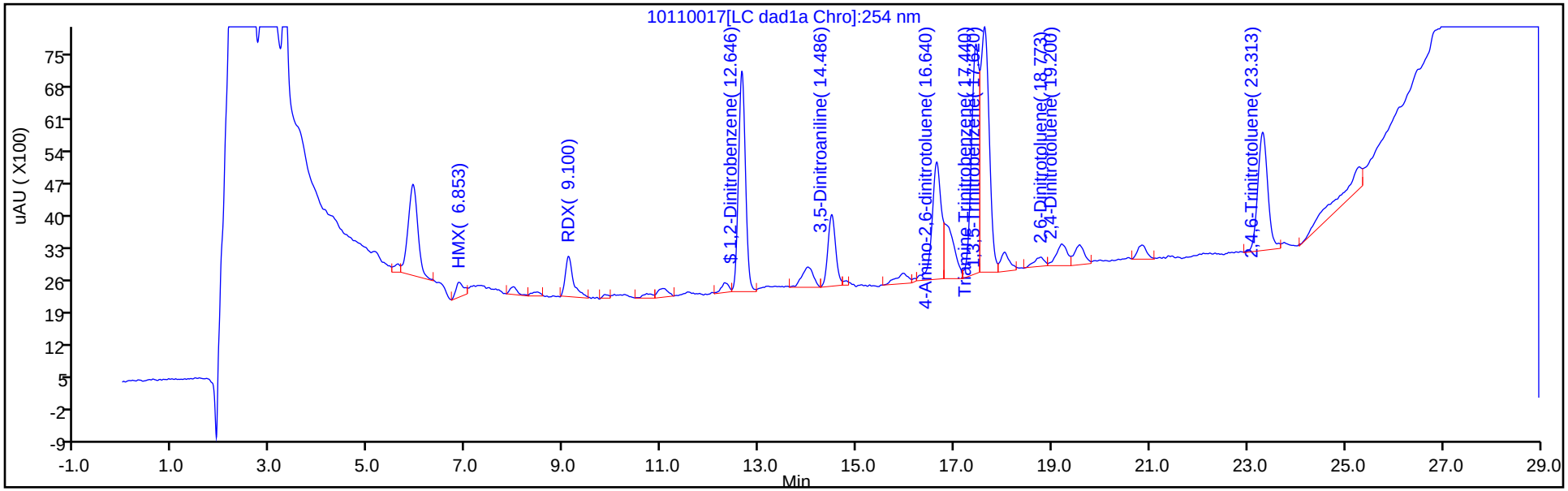
Report Date: 12-Oct-2023 12:50:35 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

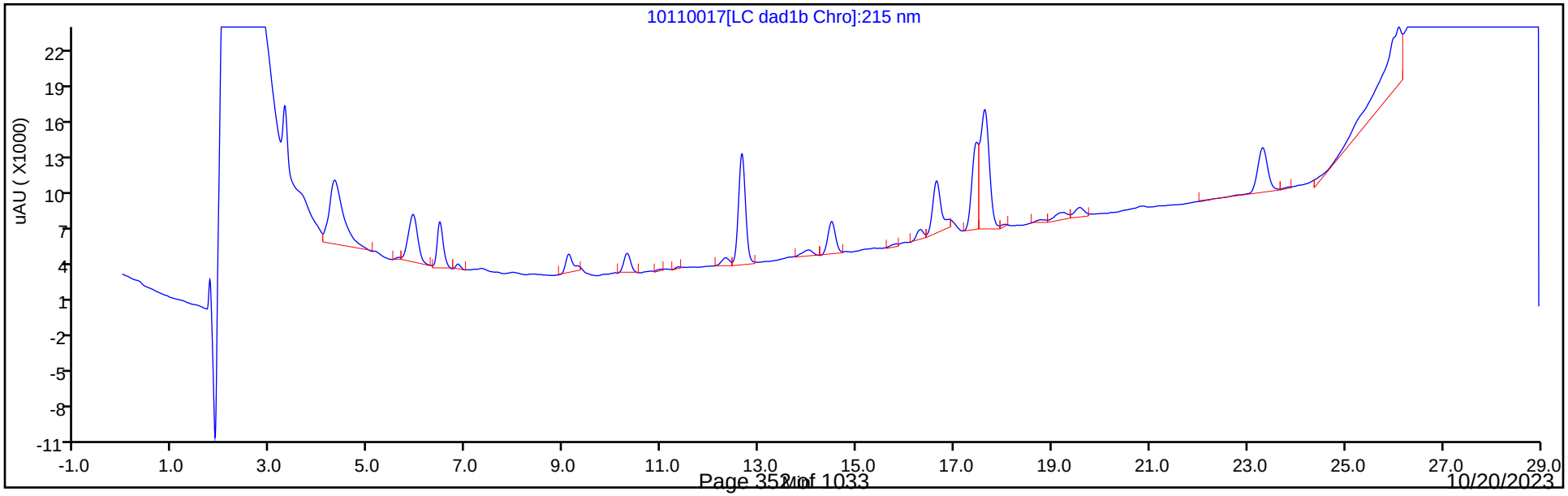
Data File: \\chromfs\denver\chromdata\g2_luna\20231011-126415.b\10110017.d

Injection Date:	11-Oct-2023 22:00:58	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	280-182239-B-4-A	Lab Sample ID:	280-182239-4	Worklist Smp#:	17
Client ID:	LL3mw-241-230901-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\10110017.D				
Lims ID:	280-182239-B-4-A				
Client ID:	LL3mw-241-230901-GW				
Sample Type:	Client				
Inject. Date:	11-Oct-2023 22:00:58	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-182239-B-4-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_G2_LUNA		
Method:	\\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	12-Oct-2023 12:50:27	Calib Date:	26-Sep-2023 04:54:46		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX1633				

First Level Reviewer: K8YG Date: 12-Oct-2023 12:35:39

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1858	92.88

Manual Integration/User Assign Peak Report

Eurofins Denver

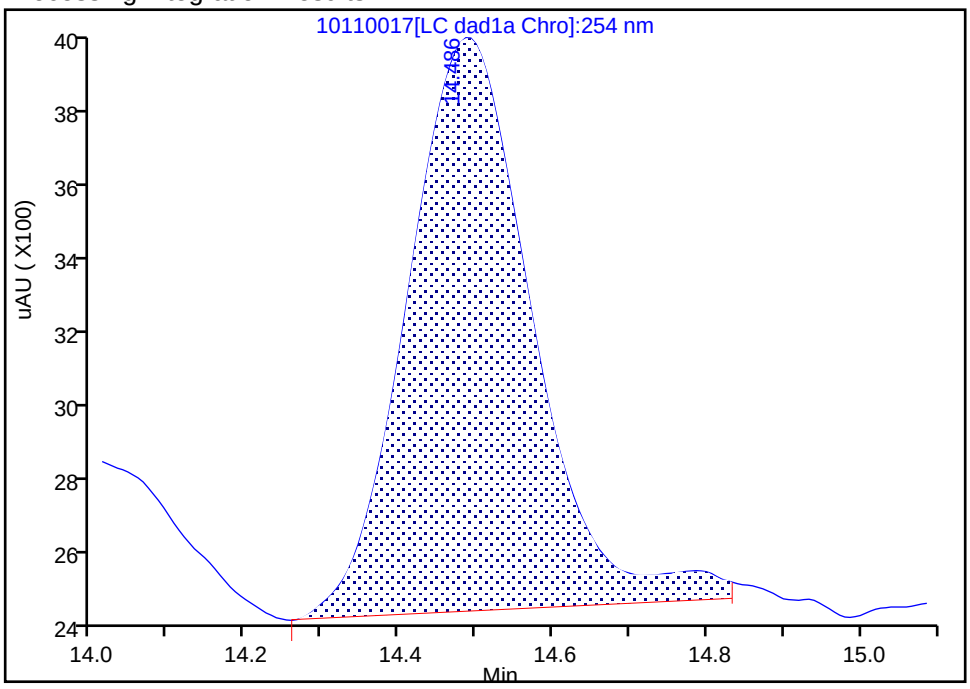
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Injection Date:	11-Oct-2023 22:00:58	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-182239-B-4-A	Lab Sample ID:	280-182239-4		
Client ID:	LL3mw-241-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

11 3,5-Dinitroaniline, CAS: 618-87-1

Signal: 1

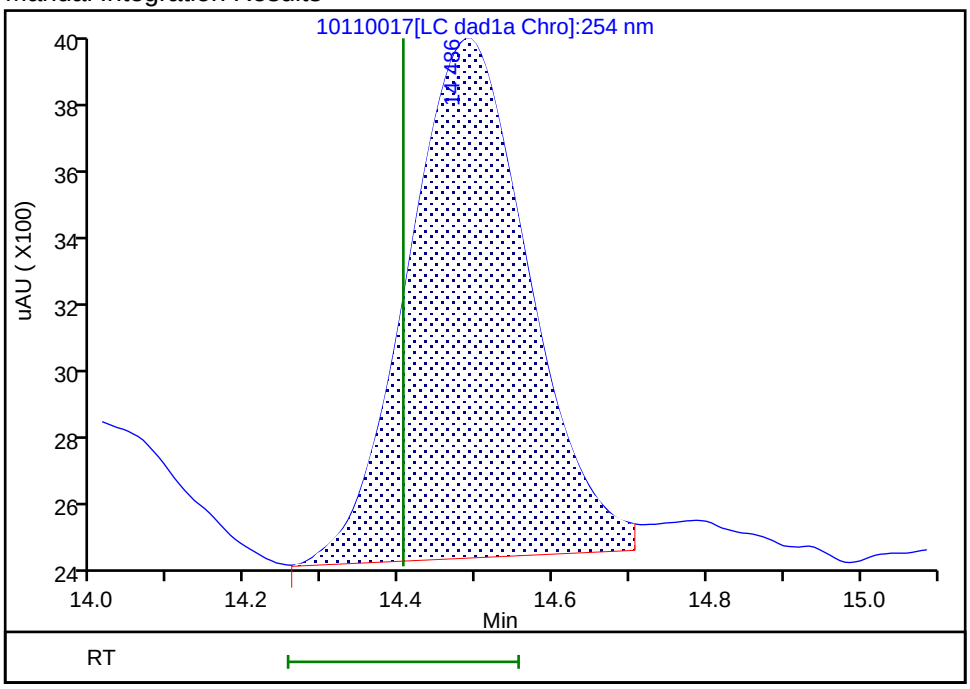
Processing Integration Results

RT: 14.49
Area: 17500
Amount: 0.041718
Amount Units: ug/ml



Manual Integration Results

RT: 14.49
Area: 16955
Amount: 0.040389
Amount Units: ug/ml



Reviewer: K8YG, 12-Oct-2023 12:34:41 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

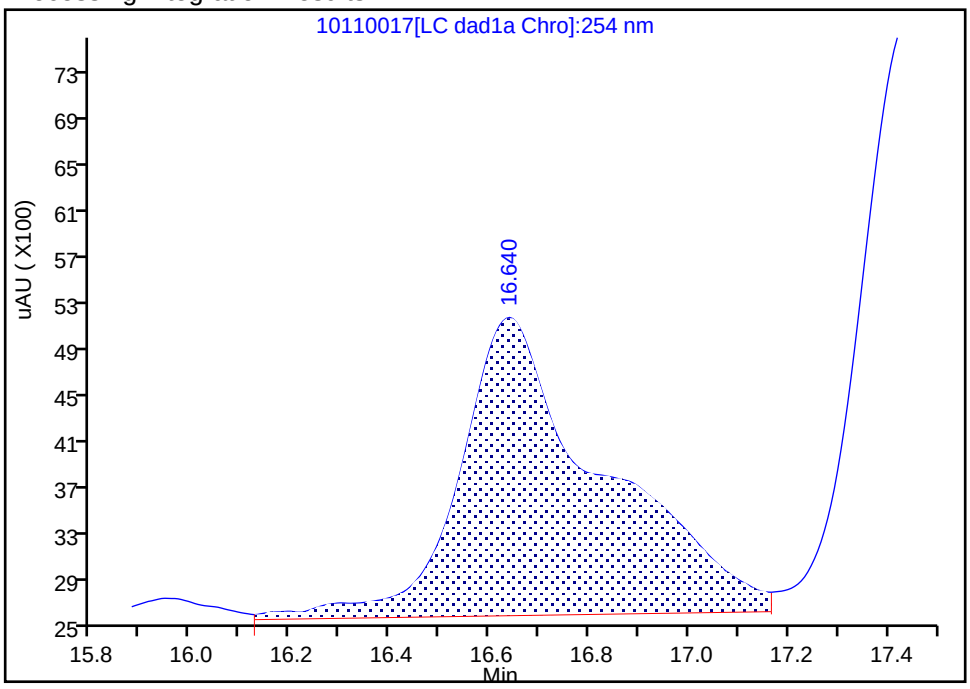
Data File:	\\chromfs\denver\chromdata\g2_luna\20231011-126415.b\10110017.d				
Injection Date:	11-Oct-2023 22:00:58	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-182239-B-4-A	Lab Sample ID:	280-182239-4		
Client ID:	LL3mw-241-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

Signal: 1

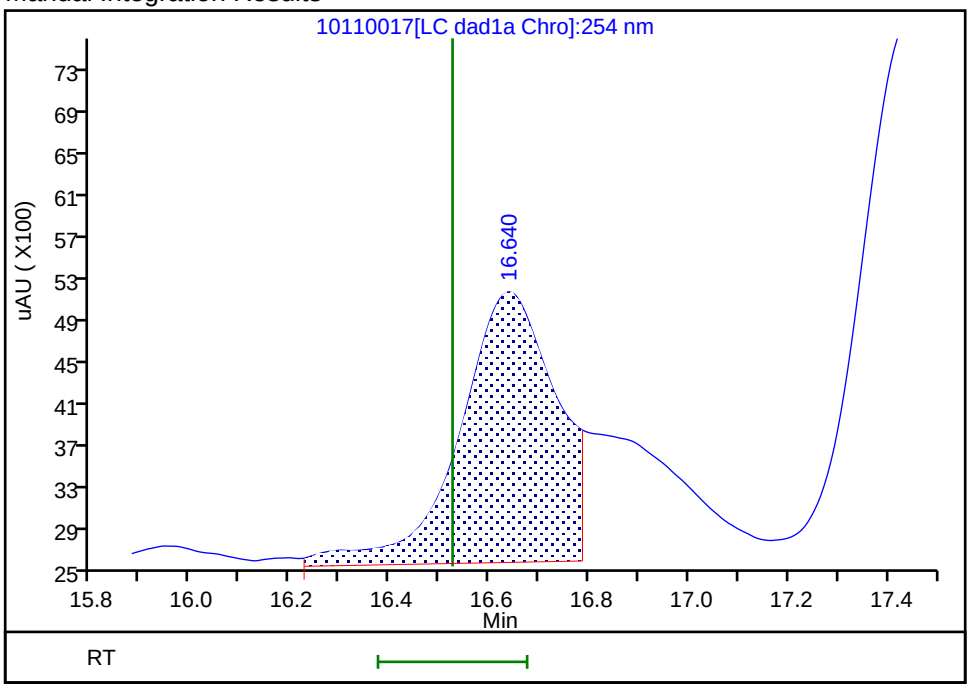
Processing Integration Results

RT: 16.64
Area: 51778
Amount: 0.187198
Amount Units: ug/ml



Manual Integration Results

RT: 16.64
Area: 34415
Amount: 0.122741
Amount Units: ug/ml



Reviewer: K8YG, 12-Oct-2023 12:35:16 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

User Disabled Compound Report

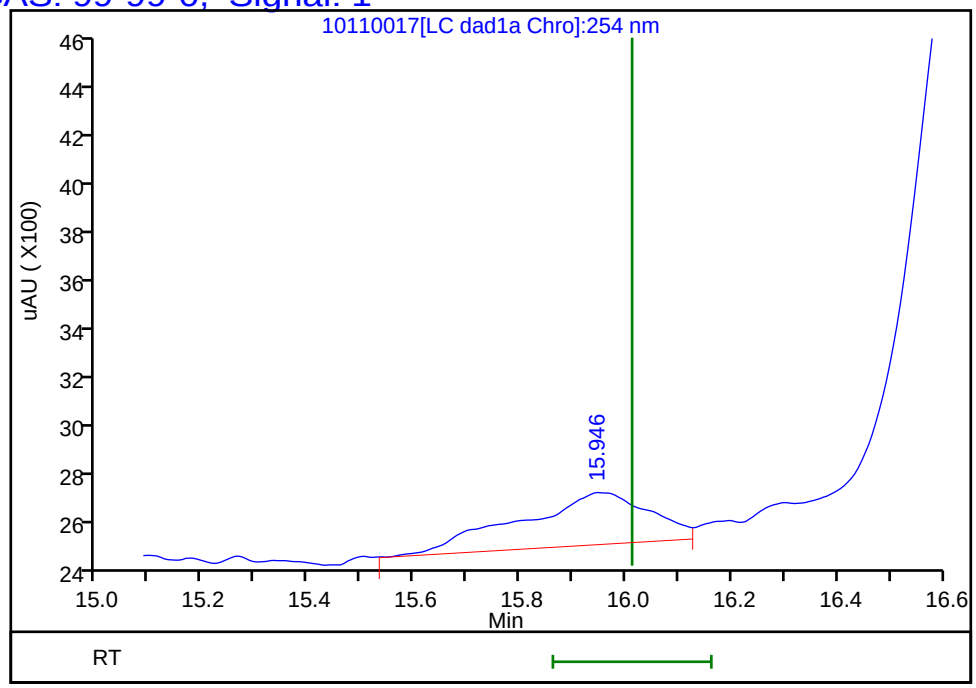
Eurofins Denver

Data File: \\chromfs\denver\chromdata\g2_luna\20231011-126415.b\10110017.d
Injection Date: 11-Oct-2023 22:00:58 Instrument ID: CHHPLC_G2_LUNA
Lims ID: 280-182239-B-4-A Lab Sample ID: 280-182239-4
Client ID: LL3mw-241-230901-GW
Operator ID: JZ/JG ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

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

RT: 15.95
Response: 3633
Amount: 0.013415



Reviewer: K8YG, 12-Oct-2023 12:35:39
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182239-1

SDG No.:

Client Sample ID: LL3mw-241-230902-GW | Lab Sample ID: 280-182239-5

Matrix: Water | Lab File ID: 10090054.D

Analysis Method: 8330B | Date Collected: 10/02/2023 10:37

Extraction Method: 3535 | Date Extracted: 10/04/2023 13:30

Sample wt/vol: 498.1(mL) | Date Analyzed: 10/10/2023 04:22

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

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

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

Cleanup Factor:

Analysis Batch No.: 628987 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	1.8		0.21	0.20	0.084
99-65-0	1,3-Dinitrobenzene	0.10	U M	0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	0.89		0.11	0.10	0.045
6629-29-4	2,4-diamino-6-nitrotoluene	0.90	U	1.0	0.90	0.44
121-14-2	2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.028
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	1.1		0.11	0.10	0.051
88-72-2	2-Nitrotoluene	0.20	U M	0.21	0.20	0.086
618-87-1	3,5-Dinitroaniline	0.37	J	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	0.86	Q	0.15	0.12	0.058
99-99-0	4-Nitrotoluene	0.40	U M	0.41	0.40	0.10
80251-29-2	DNX	0.25	U	0.50	0.25	0.098
2691-41-0	HMX	0.11	J M J1	0.21	0.20	0.088
5755-27-1	MNX	0.29	U 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	0.60		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 M	0.50	0.25	0.080

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	99		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\10090054.D
Lims ID: 280-182239-A-5-A
Client ID: LL3mw-241-230902-GW
Sample Type: Client
Inject. Date: 10-Oct-2023 04:22:47 ALS Bottle#: 54 Worklist Smp#: 54
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-182239-A-5-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 10-Oct-2023 11:59:43 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1622

First Level Reviewer: K8YG Date: 10-Oct-2023 09:27:22

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
2 2,6-diamino-4-nitrotoluene	1		6.438			ND	
3 TNX	1		6.441			ND	U
4 HMX	1	6.573	6.568	0.005	1048	0.0111	M
5 2,4-diamino-6-nitrotoluene	1		6.625			ND	
6 DNX	1		6.768			ND	
7 MNX	1		7.194			ND	U
8 RDX	1	7.580	7.574	0.006	6630	0.0600	
$ 10 1,2-Dinitrobenzene	1	8.520	8.521	-0.001	24431	0.1972	
11 1,3,5-Trinitrobenzene	1	8.647	8.648	-0.001	37794	0.1749	
12 1,3-Dinitrobenzene	1		9.254			ND	U
13 Nitrobenzene	1		9.621			ND	
14 3,5-Dinitroaniline	1	9.847	9.841	0.006	8214	0.0370	
15 Tetryl	1		9.974			ND	
16 Nitroglycerin	2		10.421			ND	
17 2,4,6-Trinitrotoluene	1	10.867	10.861	0.006	18248	0.0891	
18 4-Amino-2,6-dinitrotoluene	1	11.040	11.034	0.006	12809	0.0856	
19 2-Amino-4,6-dinitrotoluene	1	11.293	11.281	0.012	20436	0.1055	
20 2,6-Dinitrotoluene	1		11.441			ND	
21 2,4-Dinitrotoluene	1		11.607			ND	
22 o-Nitrotoluene	1		12.421			ND	U
23 p-Nitrotoluene	1		12.827			ND	U
24 m-Nitrotoluene	1		13.387			ND	
25 PETN	2		14.514			ND	

QC Flag Legend
Processing Flags

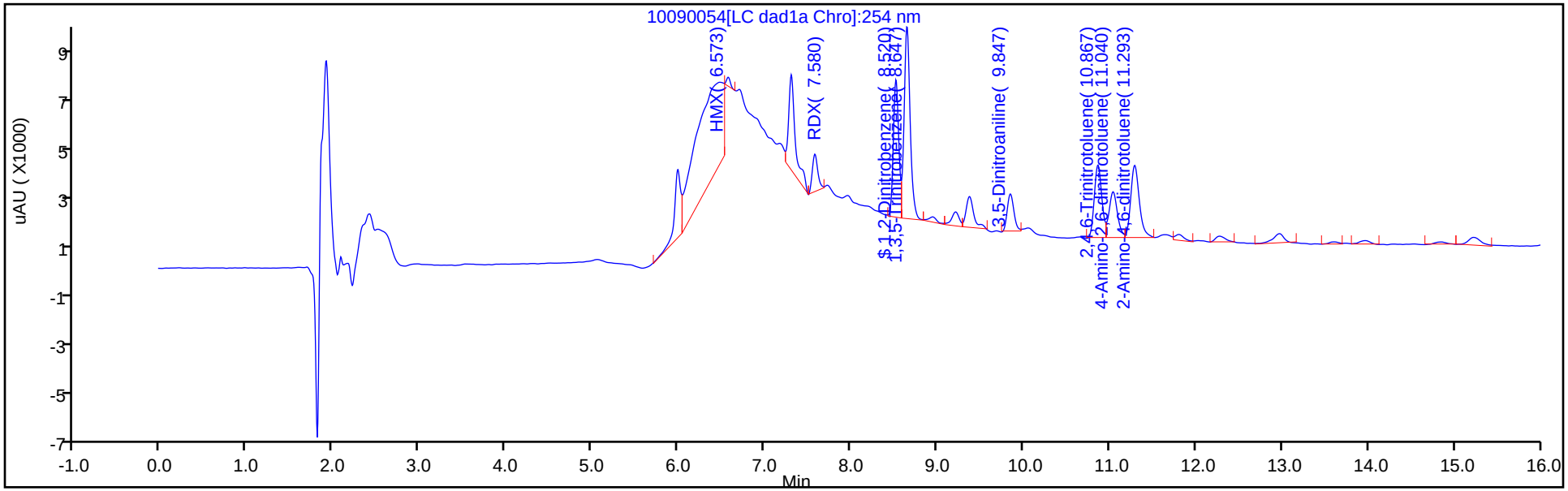
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 10-Oct-2023 11:59:46 Chrom Revision: 2.3 22-Sep-2023 11:33:50

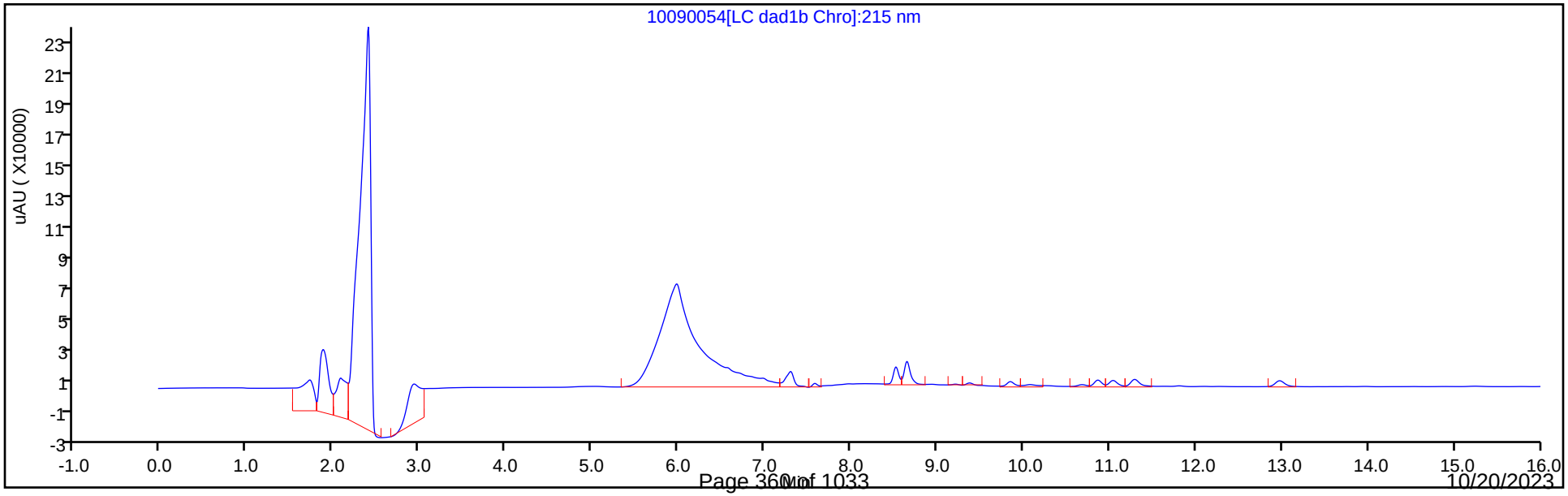
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090054.d				
Injection Date:	10-Oct-2023 04:22:47	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-182239-A-5-A	Lab Sample ID:	280-182239-5	Worklist Smp#:	54
Client ID:	LL3mw-241-230902-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	54
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\10090054.D				
Lims ID:	280-182239-A-5-A				
Client ID:	LL3mw-241-230902-GW				
Sample Type:	Client				
Inject. Date:	10-Oct-2023 04:22:47	ALS Bottle#:	54	Worklist Smp#:	54
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-182239-A-5-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	10-Oct-2023 11:59:43	Calib Date:	24-Jun-2023 00:23:49		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1622				

First Level Reviewer: K8YG Date: 10-Oct-2023 09:27:22

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1972	98.58

User Disabled Compound Report

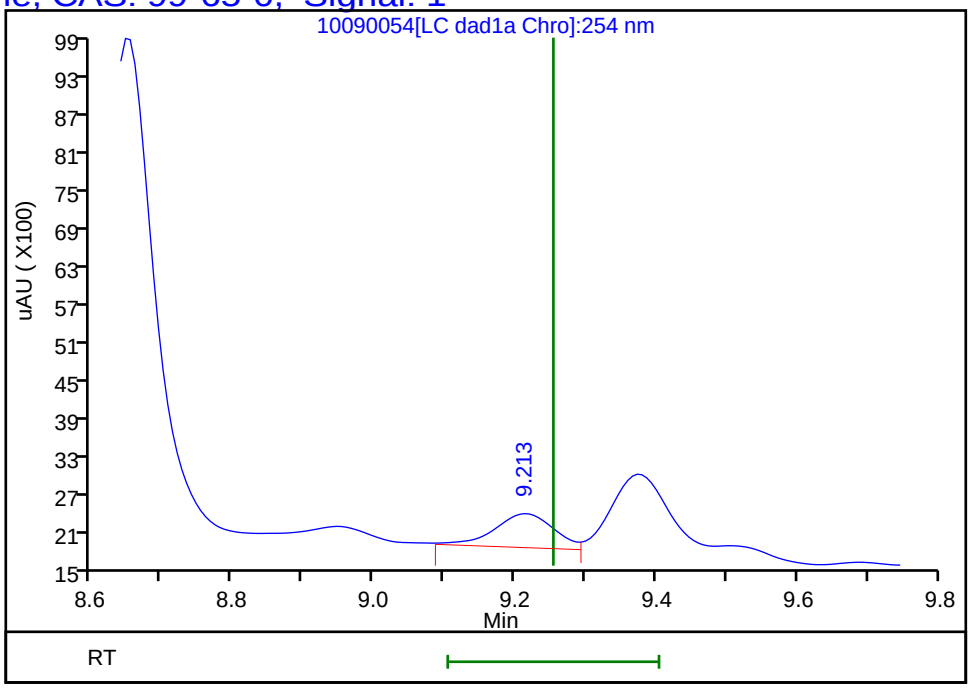
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090054.d
Injection Date: 10-Oct-2023 04:22:47 Instrument ID: CHHPLC_X3
Lims ID: 280-182239-A-5-A Lab Sample ID: 280-182239-5
Client ID: LL3mw-241-230902-GW
Operator ID: JZ/JG ALS Bottle#: 54 Worklist Smp#: 54
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

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

RT: 9.21
Response: 3070
Amount: 0.010465



Reviewer: K8YG, 10-Oct-2023 11:38:56
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

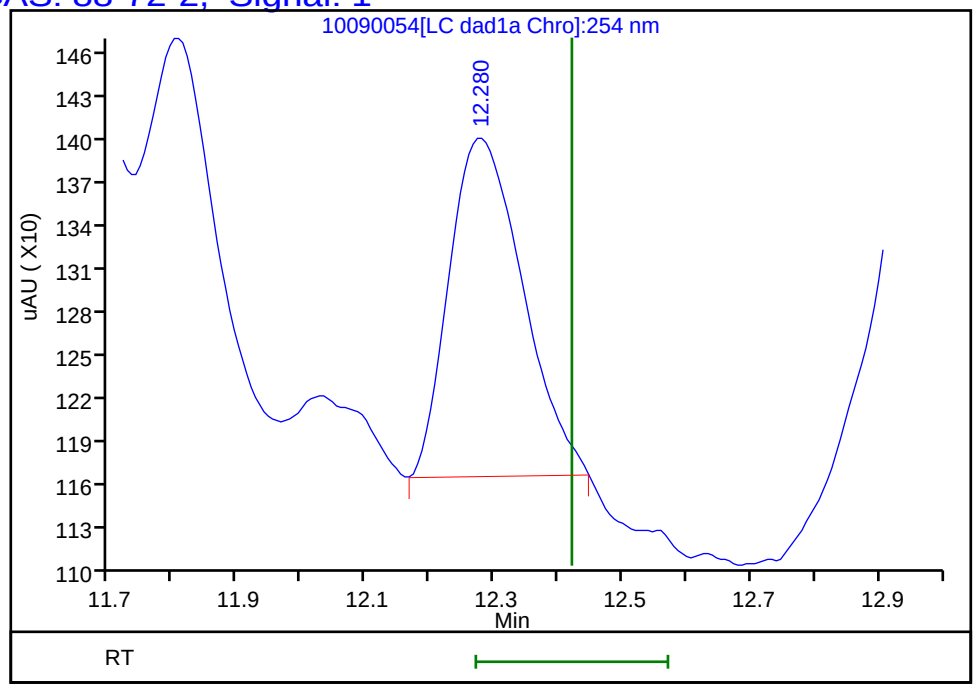
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090054.d
Injection Date: 10-Oct-2023 04:22:47 Instrument ID: CHHPLC_X3
Lims ID: 280-182239-A-5-A Lab Sample ID: 280-182239-5
Client ID: LL3mw-241-230902-GW
Operator ID: JZ/JG ALS Bottle#: 54 Worklist Smp#: 54
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

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

RT: 12.28
Response: 1861
Amount: 0.014755



Reviewer: K8YG, 10-Oct-2023 11:38:56
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

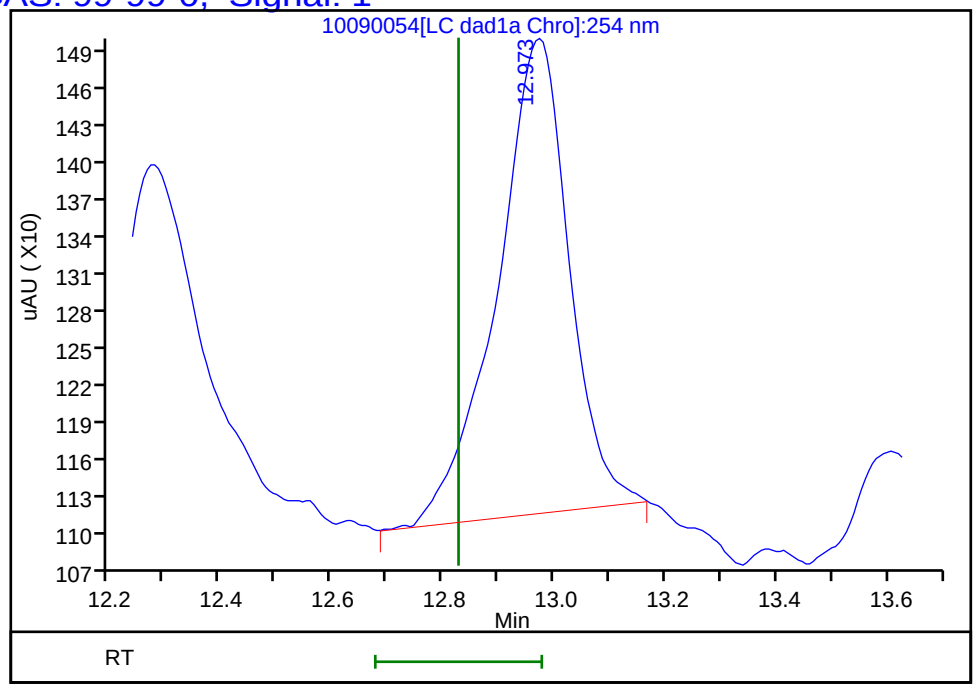
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090054.d
Injection Date: 10-Oct-2023 04:22:47 Instrument ID: CHHPLC_X3
Lims ID: 280-182239-A-5-A Lab Sample ID: 280-182239-5
Client ID: LL3mw-241-230902-GW
Operator ID: JZ/JG ALS Bottle#: 54 Worklist Smp#: 54
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

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

RT: 12.97
Response: 3433
Amount: 0.031184



Reviewer: K8YG, 10-Oct-2023 11:38:56
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

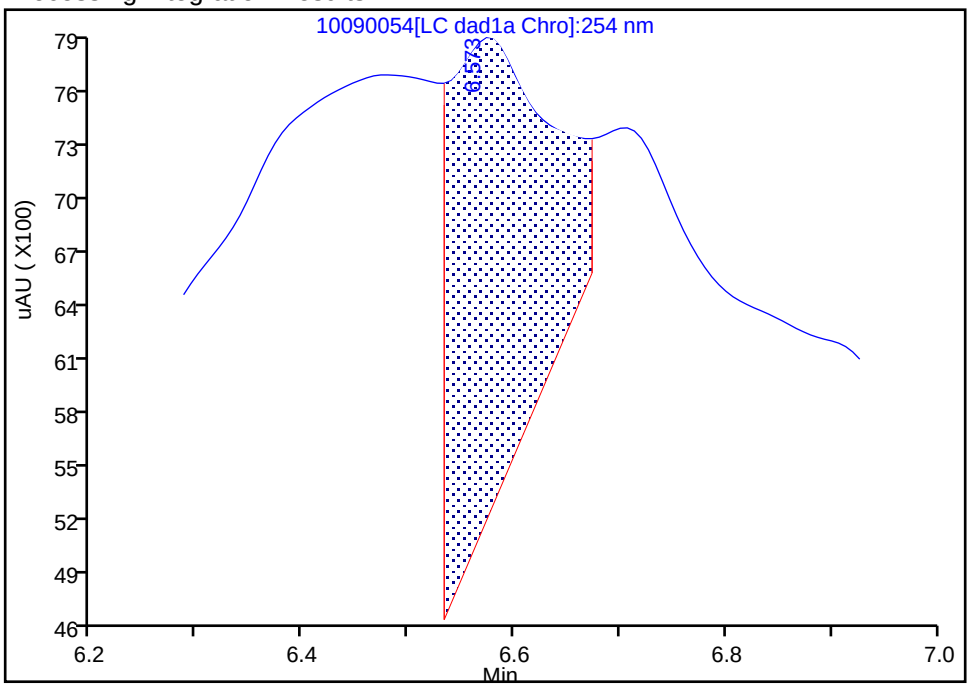
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Injection Date:	10-Oct-2023 04:22:47	Instrument ID:	CHHPLC_X3		
Lims ID:	280-182239-A-5-A	Lab Sample ID:	280-182239-5		
Client ID:	LL3mw-241-230902-GW				
Operator ID:	JZ/JG	ALS Bottle#:	54	Worklist Smp#:	54
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

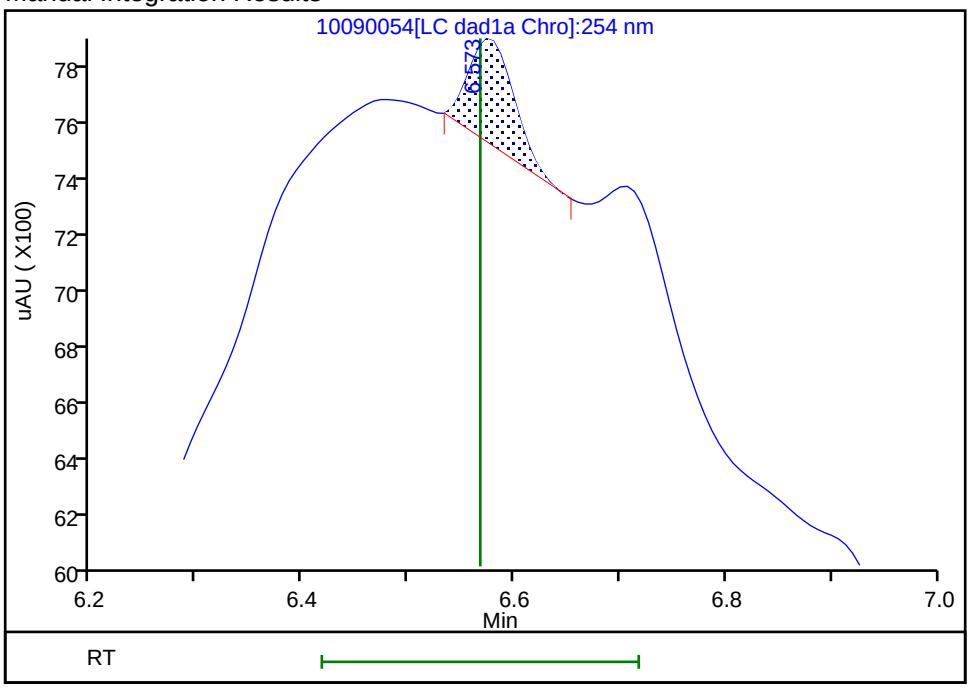
Processing Integration Results

RT: 6.57
Area: 16376
Amount: 0.173741
Amount Units: ug/mL



Manual Integration Results

RT: 6.57
Area: 1048
Amount: 0.011119
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 11:38:29 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

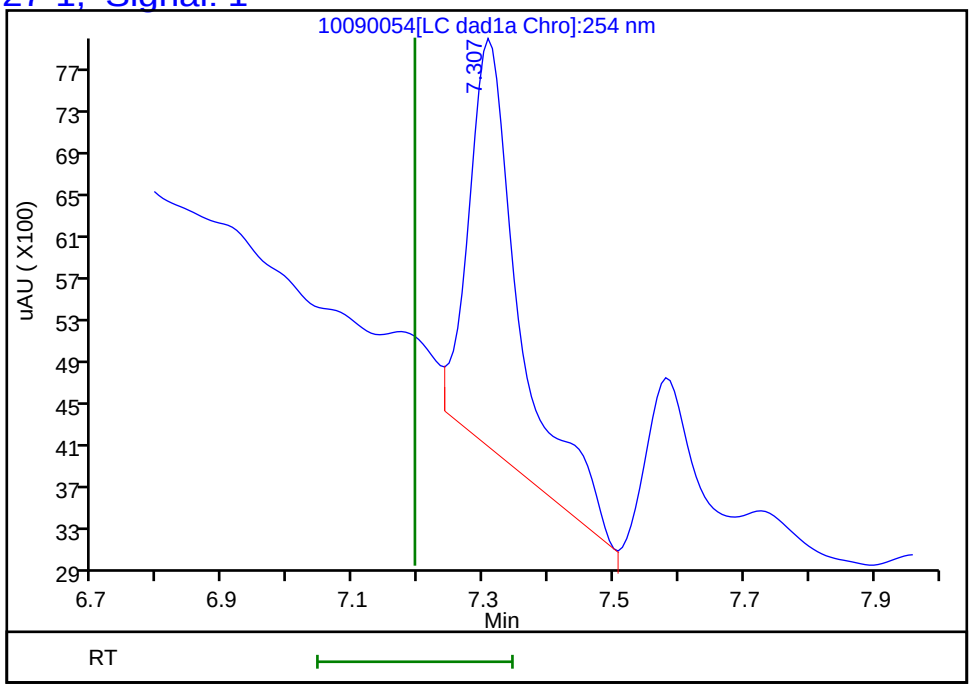
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090054.d
Injection Date: 10-Oct-2023 04:22:47 Instrument ID: CHHPLC_X3
Lims ID: 280-182239-A-5-A Lab Sample ID: 280-182239-5
Client ID: LL3mw-241-230902-GW
Operator ID: JZ/JG ALS Bottle#: 54 Worklist Smp#: 54
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

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

RT: 7.31
Response: 21191
Amount: 0.152796



Reviewer: K8YG, 10-Oct-2023 11:38:56
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

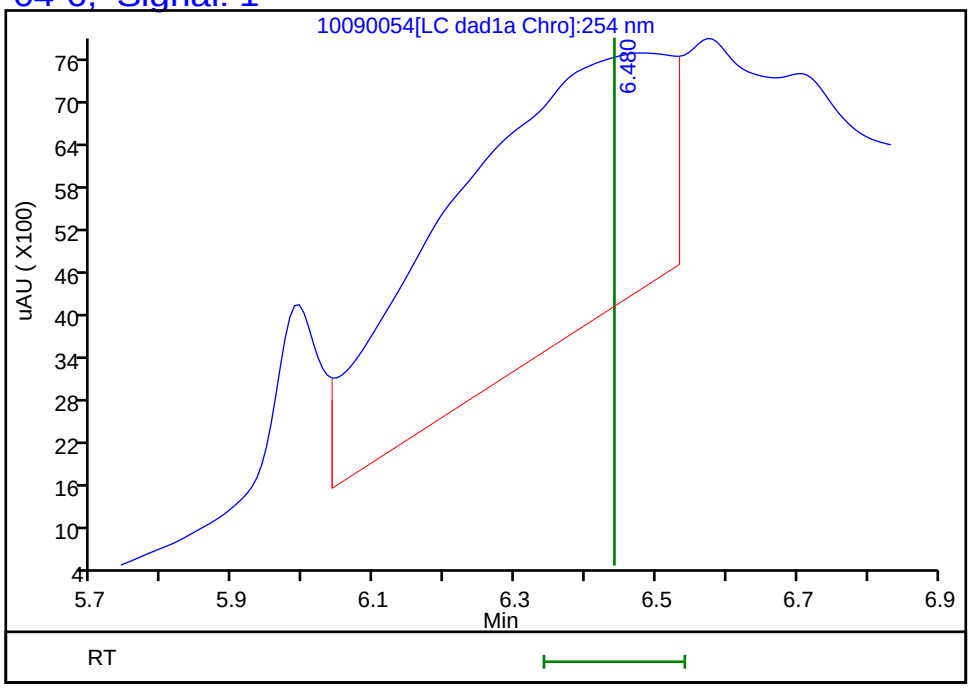
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090054.d
Injection Date: 10-Oct-2023 04:22:47 Instrument ID: CHHPLC_X3
Lims ID: 280-182239-A-5-A Lab Sample ID: 280-182239-5
Client ID: LL3mw-241-230902-GW
Operator ID: JZ/JG ALS Bottle#: 54 Worklist Smp#: 54
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

3 TNX, CAS: 13980-04-6, Signal: 1

RT: 6.48
Response: 86959
Amount: 0.433147



Reviewer: K8YG, 10-Oct-2023 11:38:56
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182239-1

SDG No.:

Client Sample ID: LL3mw-241-230902-GW | Lab Sample ID: 280-182239-5

Matrix: Water | Lab File ID: 10110023.D

Analysis Method: 8330B | Date Collected: 10/02/2023 10:37

Extraction Method: 3535 | Date Extracted: 10/04/2023 13:30

Sample wt/vol: 498.1(mL) | Date Analyzed: 10/12/2023 01:36

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.: 629372 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
2691-41-0	*HMX*	*0.17*	*J J1*	*0.21*	0.20	*0.088*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	95		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\10110023.D
Lims ID: 280-182239-A-5-A
Client ID: LL3mw-241-230902-GW
Sample Type: Client
Inject. Date: 12-Oct-2023 01:36:59 ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-182239-A-5-A
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA

Method: \\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 12-Oct-2023 12:50:38 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1633

First Level Reviewer: K8YG Date: 12-Oct-2023 12:41:08

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1		4.239			ND	
2 2,4-diamino-6-nitrotoluene	1		4.839			ND	
3 TNX	1		5.292			ND	
4 DNX	1		6.152			ND	
6 HMX	1	6.815	6.805	0.010	2960	0.0171	
7 MNX	1		7.659			ND	
8 RDX	1	9.048	9.052	-0.004	10010	0.0482	M
9 Nitrobenzene	1		11.625			ND	
$ 10 1,2-Dinitrobenzene	1	12.608	12.572	0.036	48832	0.1902	
11 3,5-Dinitroaniline	1	14.448	14.405	0.043	18325	0.0437	M
12 1,3-Dinitrobenzene	1		14.698			ND	
13 Nitroglycerin	2		15.165			ND	
14 o-Nitrotoluene	1		15.785			ND	
15 p-Nitrotoluene	1		16.012			ND	7
16 4-Amino-2,6-dinitrotoluene	1	16.574	16.525	0.049	30258	0.1073	M
17 m-Nitrotoluene	1		16.858			ND	
18 2-Amino-4,6-dinitrotoluene	1	17.381	17.338	0.043	38149	0.0976	
19 1,3,5-Trinitrobenzene	1	17.568	17.532	0.036	72198	0.1754	M
20 2,6-Dinitrotoluene	1		18.658			ND	7
21 2,4-Dinitrotoluene	1	19.148	19.118	0.030	6620	0.0121	
22 Tetryl	1		22.339			ND	
23 2,4,6-Trinitrotoluene	1	23.221	23.199	0.022	37315	0.0969	M
24 PETN	2		24.352			ND	

QC Flag Legend

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

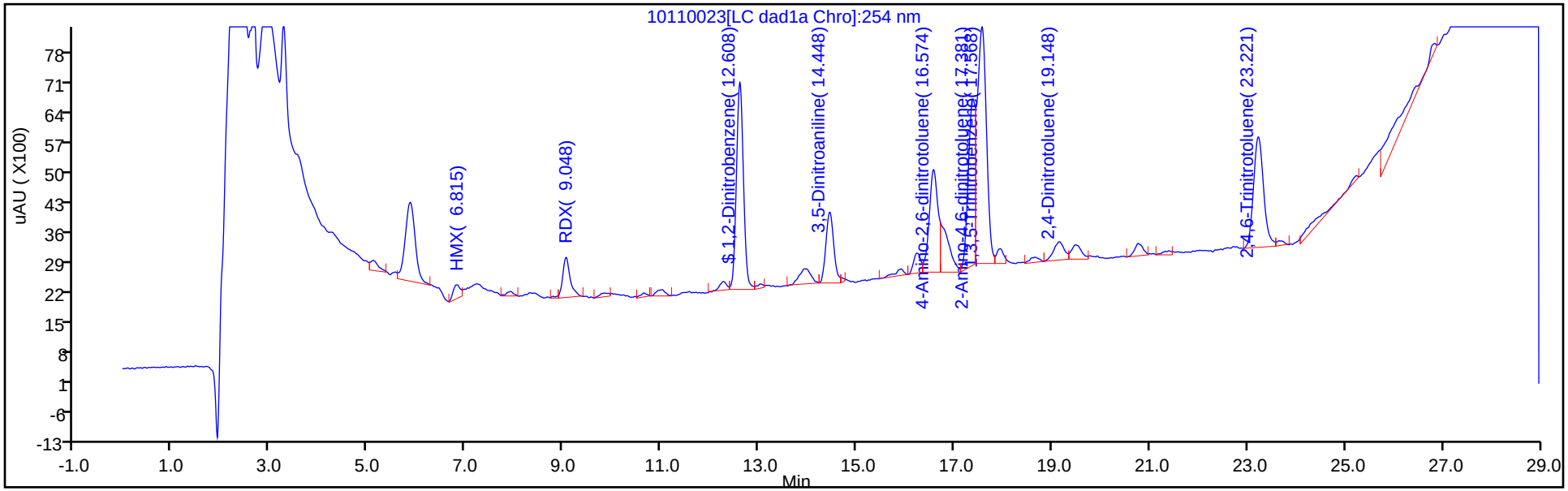
Report Date: 12-Oct-2023 12:50:40 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

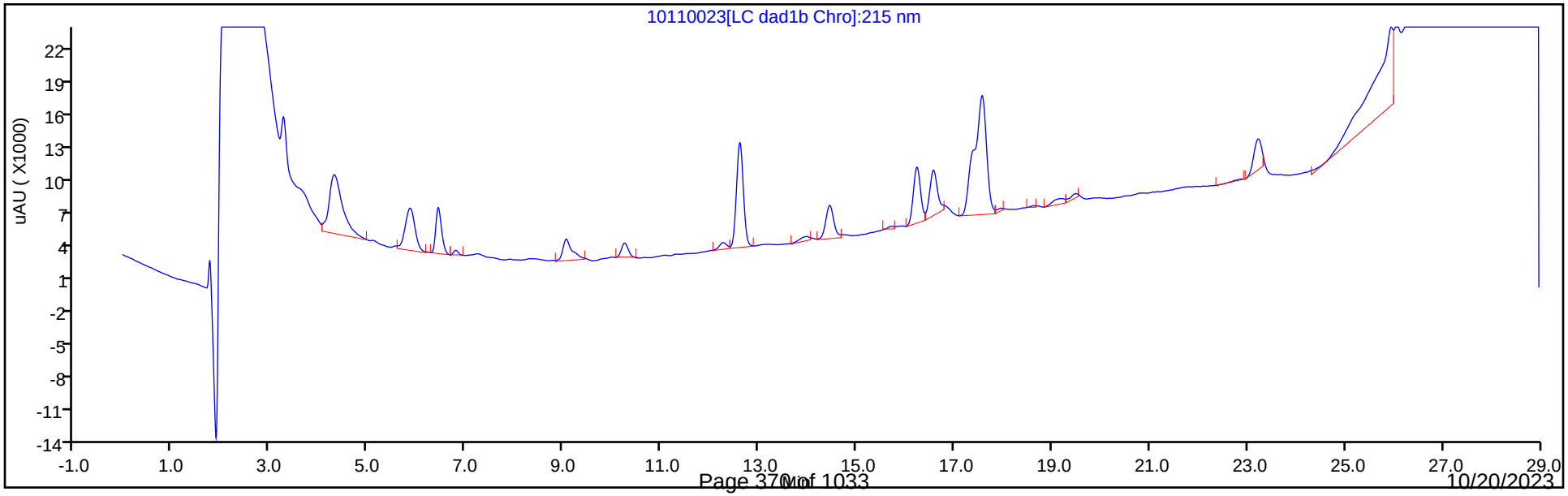
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Injection Date:	12-Oct-2023 01:36:59	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	280-182239-A-5-A	Lab Sample ID:	280-182239-5	Worklist Smp#:	23
Client ID:	LL3mw-241-230902-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\10110023.D				
Lims ID:	280-182239-A-5-A				
Client ID:	LL3mw-241-230902-GW				
Sample Type:	Client				
Inject. Date:	12-Oct-2023 01:36:59	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-182239-A-5-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_G2_LUNA		
Method:	\\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	12-Oct-2023 12:50:38	Calib Date:	26-Sep-2023 04:54:46		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX1633				

First Level Reviewer: K8YG Date: 12-Oct-2023 12:41:08

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1902	95.09

Manual Integration/User Assign Peak Report

Eurofins Denver

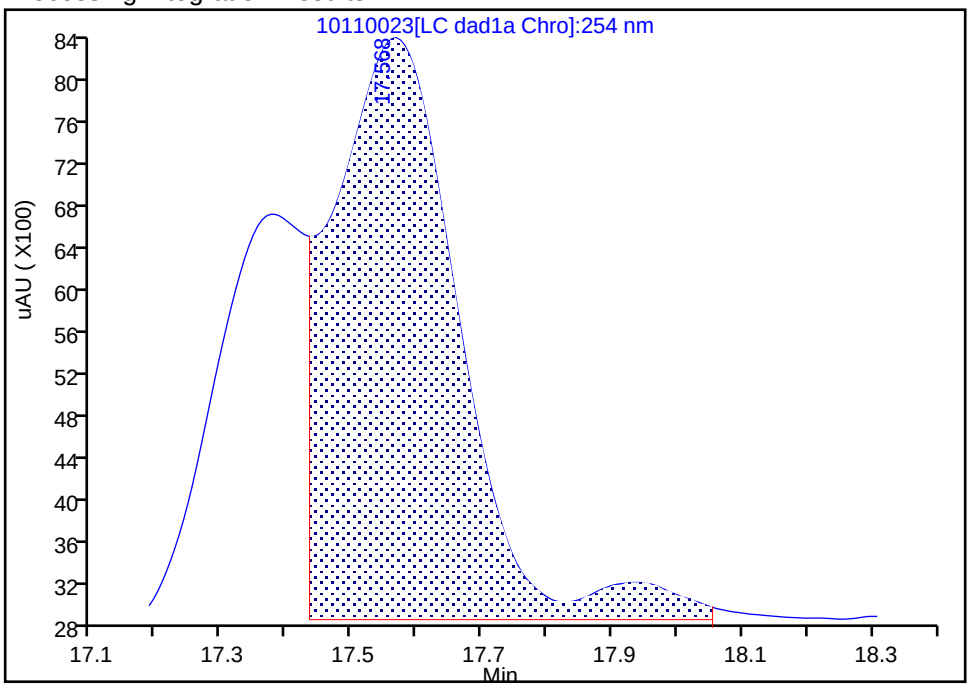
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Injection Date:	12-Oct-2023 01:36:59	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-182239-A-5-A	Lab Sample ID:	280-182239-5		
Client ID:	LL3mw-241-230902-GW				
Operator ID:	JZ/JG	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

19 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

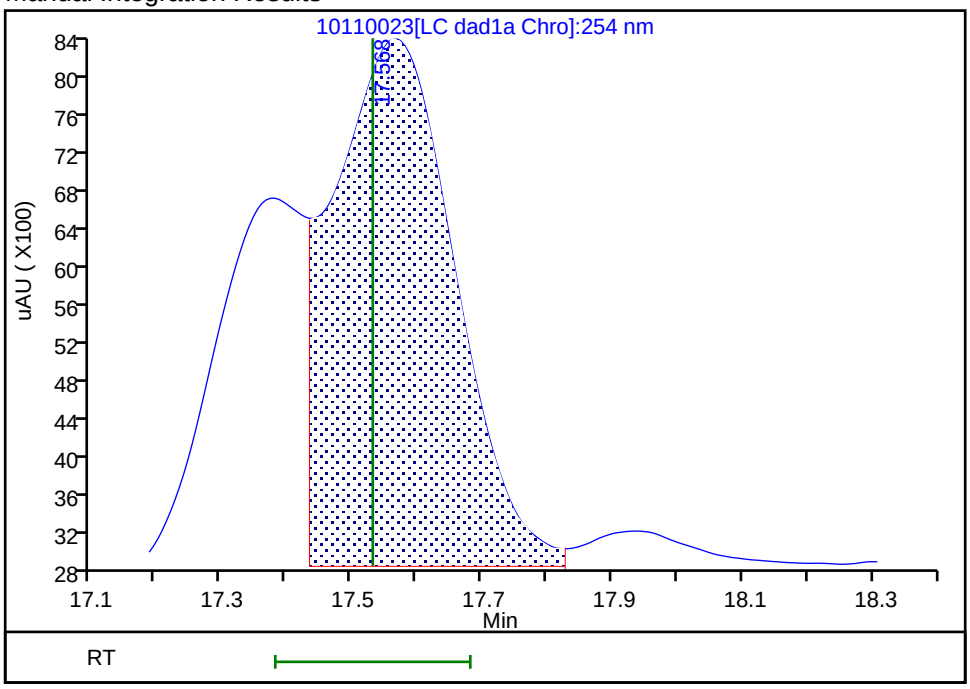
Processing Integration Results

RT: 17.57
Area: 75840
Amount: 0.184243
Amount Units: ug/ml



Manual Integration Results

RT: 17.57
Area: 72198
Amount: 0.175395
Amount Units: ug/ml



Reviewer: K8YG, 12-Oct-2023 12:40:38 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

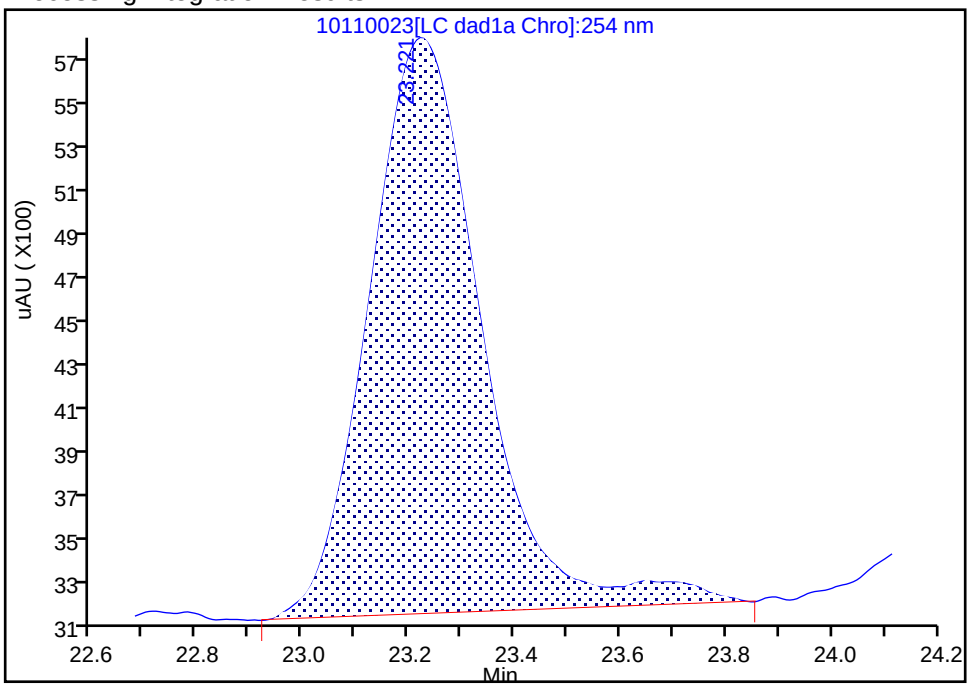
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Injection Date:	12-Oct-2023 01:36:59	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-182239-A-5-A	Lab Sample ID:	280-182239-5		
Client ID:	LL3mw-241-230902-GW				
Operator ID:	JZ/JG	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

23 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

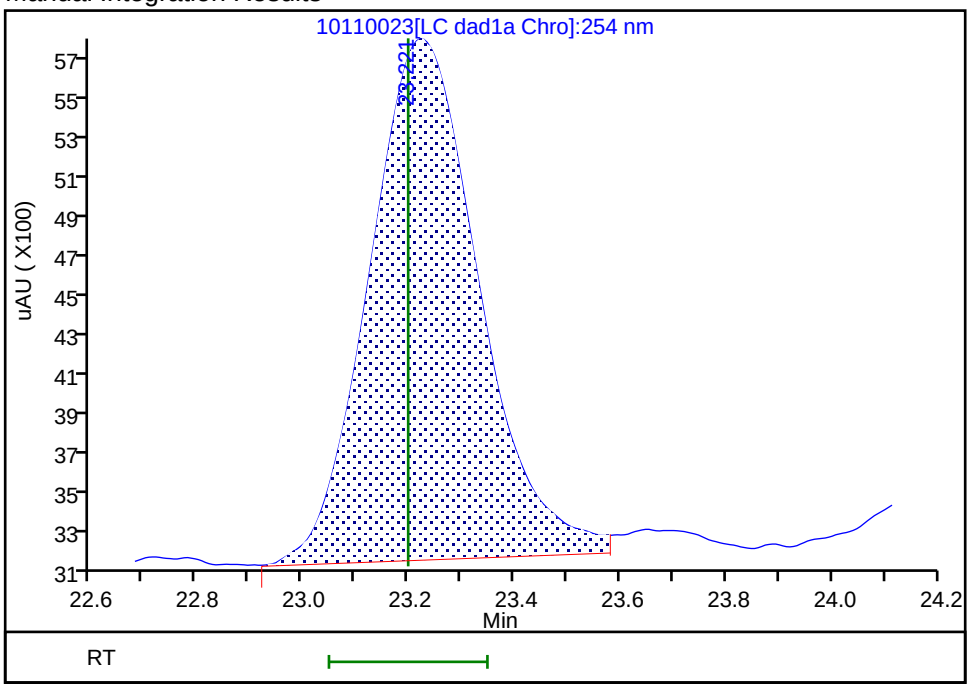
Processing Integration Results

RT: 23.22
Area: 38479
Amount: 0.099949
Amount Units: ug/ml



Manual Integration Results

RT: 23.22
Area: 37315
Amount: 0.096926
Amount Units: ug/ml



Reviewer: K8YG, 12-Oct-2023 12:41:04 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

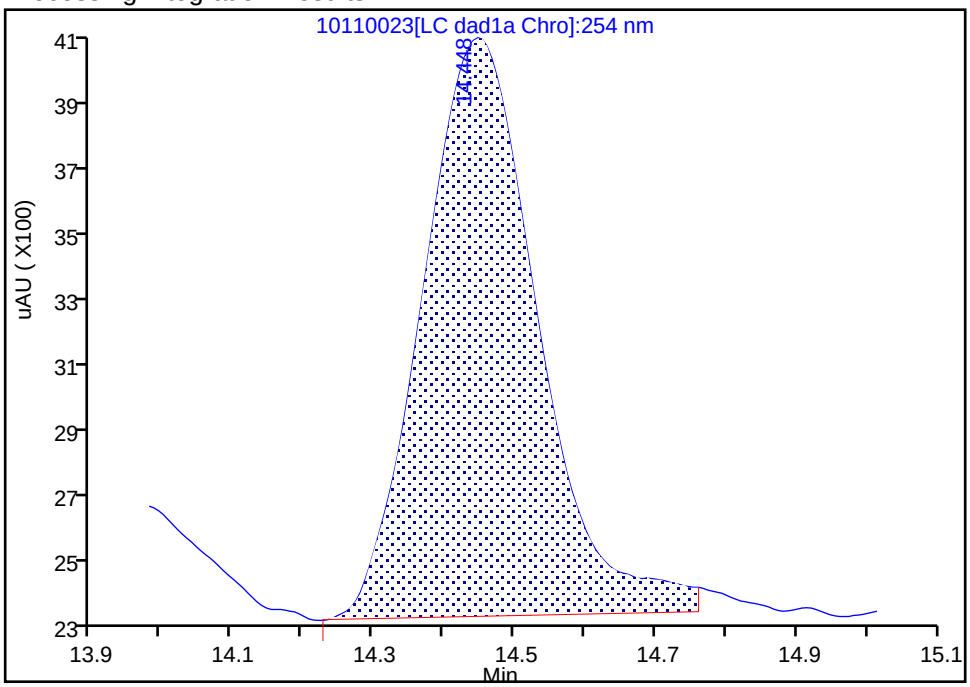
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Injection Date:	12-Oct-2023 01:36:59	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-182239-A-5-A	Lab Sample ID:	280-182239-5		
Client ID:	LL3mw-241-230902-GW				
Operator ID:	JZ/JG	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

11 3,5-Dinitroaniline, CAS: 618-87-1

Signal: 1

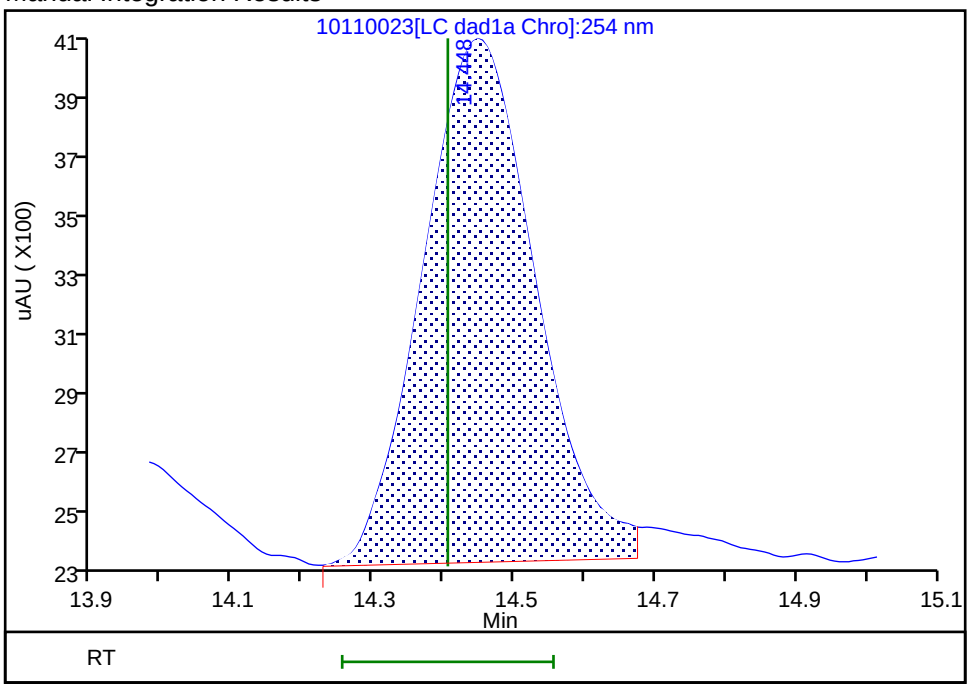
Processing Integration Results

RT: 14.45
Area: 18755
Amount: 0.044778
Amount Units: ug/ml



Manual Integration Results

RT: 14.45
Area: 18325
Amount: 0.043730
Amount Units: ug/ml



Reviewer: K8YG, 12-Oct-2023 12:40:17 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

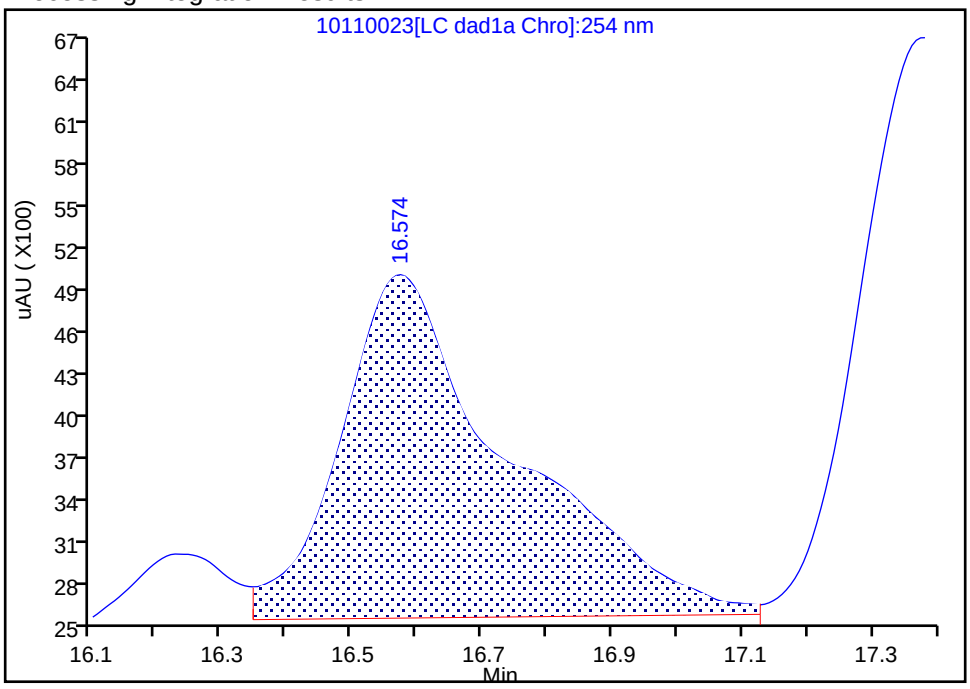
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Injection Date:	12-Oct-2023 01:36:59	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-182239-A-5-A	Lab Sample ID:	280-182239-5		
Client ID:	LL3mw-241-230902-GW				
Operator ID:	JZ/JG	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

Signal: 1

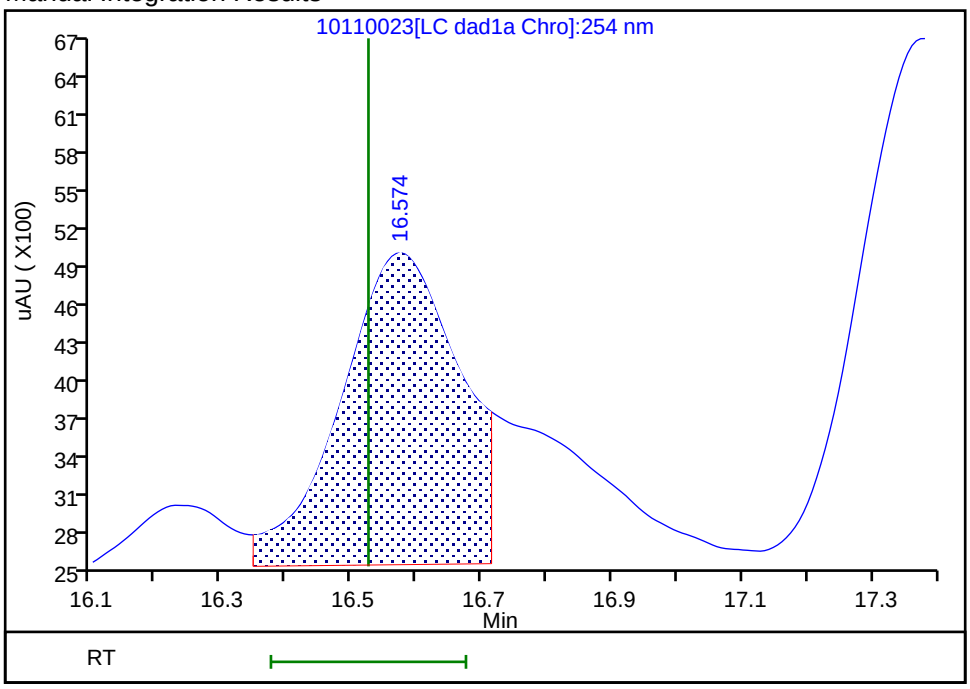
Processing Integration Results

RT: 16.57
Area: 43782
Amount: 0.157514
Amount Units: ug/ml



Manual Integration Results

RT: 16.57
Area: 30258
Amount: 0.107308
Amount Units: ug/ml



Reviewer: K8YG, 12-Oct-2023 12:40:24 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

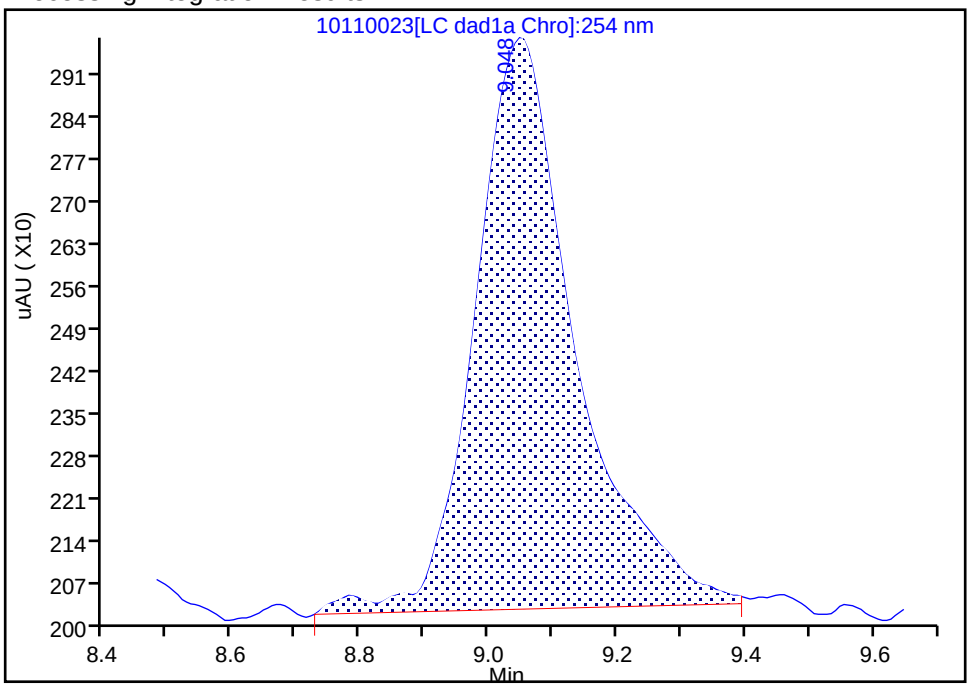
Data File:	\\chromfs\denver\chromdata\g2_luna\20231011-126415.b\10110023.d				
Injection Date:	12-Oct-2023 01:36:59	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-182239-A-5-A	Lab Sample ID:	280-182239-5		
Client ID:	LL3mw-241-230902-GW				
Operator ID:	JZ/JG	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

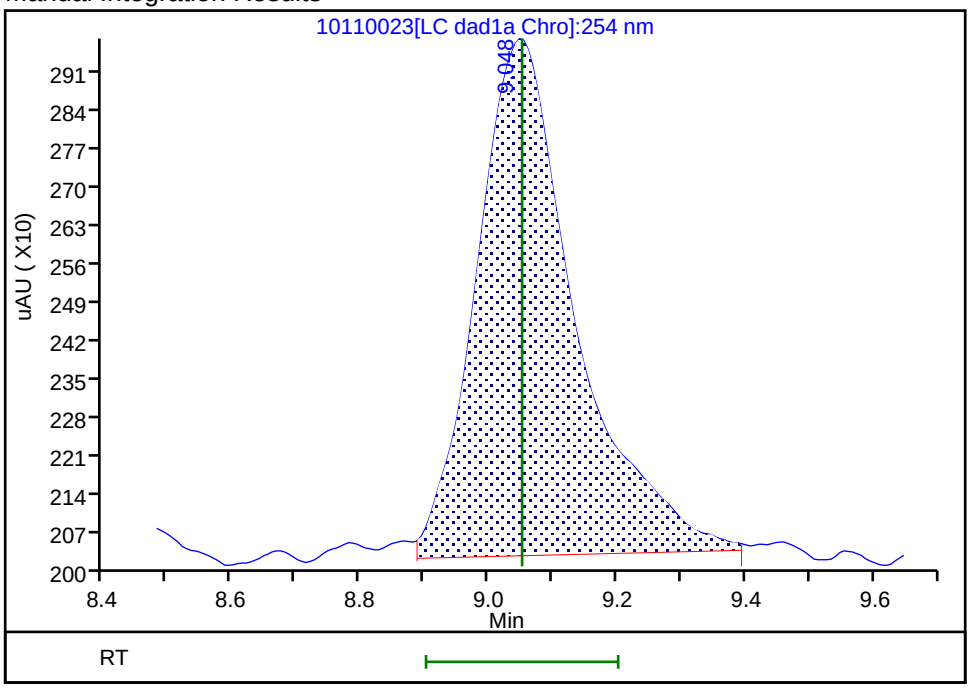
Processing Integration Results

RT: 9.05
Area: 10212
Amount: 0.049194
Amount Units: ug/ml



Manual Integration Results

RT: 9.05
Area: 10010
Amount: 0.048221
Amount Units: ug/ml



Reviewer: K8YG, 12-Oct-2023 12:39:48 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182239-1

SDG No.:

Client Sample ID: LL1mw-093-230901-GW | Lab Sample ID: 280-182239-6

Matrix: Water | Lab File ID: 10090055.D

Analysis Method: 8330B | Date Collected: 10/02/2023 11:30

Extraction Method: 3535 | Date Extracted: 10/04/2023 13:30

Sample wt/vol: 505.8(mL) | Date Analyzed: 10/10/2023 04:45

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.: 628987 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.20	U Q	0.21	0.20	0.083
99-65-0	1,3-Dinitrobenzene	0.099	U Q M	0.11	0.099	0.036
118-96-7	2,4,6-Trinitrotoluene	0.099	U Q	0.11	0.099	0.044
121-14-2	2,4-Dinitrotoluene	0.079	U Q	0.099	0.079	0.027
606-20-2	2,6-Dinitrotoluene	0.079	U Q	0.099	0.079	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.099	U Q	0.11	0.099	0.050
88-72-2	2-Nitrotoluene	0.20	U Q M	0.21	0.20	0.085
99-08-1	3-Nitrotoluene	0.35	U Q	0.40	0.35	0.19
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U Q	0.15	0.12	0.057
99-99-0	4-Nitrotoluene	0.40	U Q	0.41	0.40	0.099
98-95-3	Nitrobenzene	0.20	U Q	0.21	0.20	0.090
55-63-0	Nitroglycerin	2.0	U Q	2.1	2.0	0.91
78-11-5	PETN	0.99	U Q	1.1	0.99	0.44
121-82-4	RDX	0.82	Q M J1	0.21	0.20	0.051
479-45-8	Tetryl	0.099	U Q M	0.11	0.099	0.031

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	72	Q M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\10090055.D
Lims ID: 280-182239-B-6-A
Client ID: LL1mw-093-230901-GW
Sample Type: Client
Inject. Date: 10-Oct-2023 04:45:43 ALS Bottle#: 55 Worklist Smp#: 55
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-182239-B-6-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 10-Oct-2023 11:59:43 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1622

First Level Reviewer: K8YG Date: 10-Oct-2023 09:27:37

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1	6.589	6.568	0.021	1148	0.0122	M
8 RDX	1	7.603	7.574	0.029	9120	0.0825	M
$ 10 1,2-Dinitrobenzene	1	8.523	8.521	0.002	17837	0.1440	M
11 1,3,5-Trinitrobenzene	1		8.648			ND	
12 1,3-Dinitrobenzene	1		9.254			ND	U
13 Nitrobenzene	1		9.621			ND	
15 Tetryl	1		9.974			ND	U
16 Nitroglycerin	2		10.421			ND	
17 2,4,6-Trinitrotoluene	1		10.861			ND	
18 4-Amino-2,6-dinitrotoluene	1		11.034			ND	
19 2-Amino-4,6-dinitrotoluene	1		11.281			ND	
20 2,6-Dinitrotoluene	1		11.441			ND	
21 2,4-Dinitrotoluene	1		11.607			ND	
22 o-Nitrotoluene	1		12.421			ND	U
23 p-Nitrotoluene	1		12.827			ND	
24 m-Nitrotoluene	1		13.387			ND	
25 PETN	2		14.514			ND	

QC Flag Legend

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

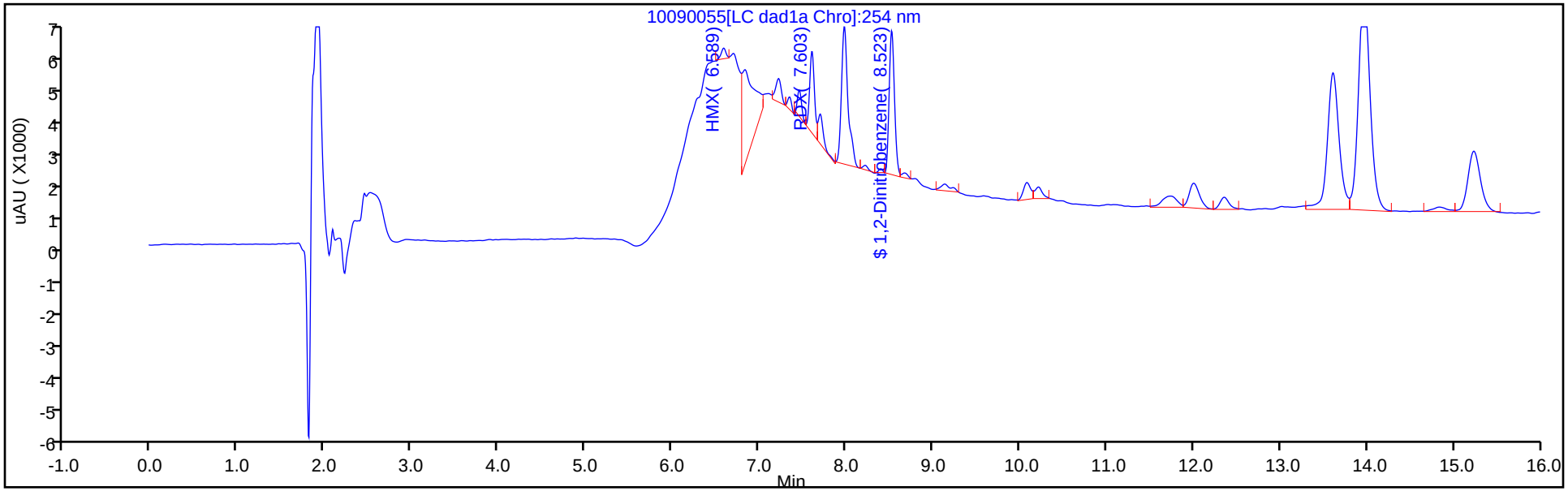
Report Date: 10-Oct-2023 11:59:47 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

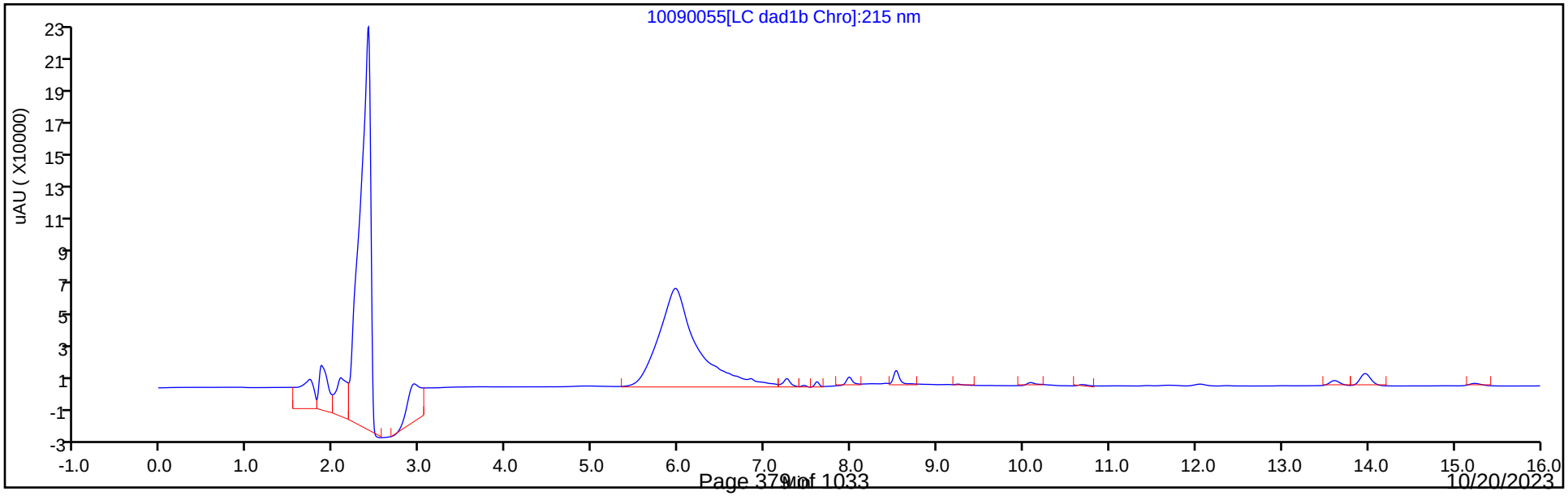
Data File: \\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090055.d

Injection Date:	10-Oct-2023 04:45:43	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-182239-B-6-A	Lab Sample ID:	280-182239-6	Worklist Smp#:	55
Client ID:	LL1mw-093-230901-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	55
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\10090055.D				
Lims ID:	280-182239-B-6-A				
Client ID:	LL1mw-093-230901-GW				
Sample Type:	Client				
Inject. Date:	10-Oct-2023 04:45:43	ALS Bottle#:	55	Worklist Smp#:	55
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-182239-B-6-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	10-Oct-2023 11:59:43	Calib Date:	24-Jun-2023 00:23:49		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1622				

First Level Reviewer: K8YG Date: 10-Oct-2023 09:27:37

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1440	71.98

Manual Integration/User Assign Peak Report

Eurofins Denver

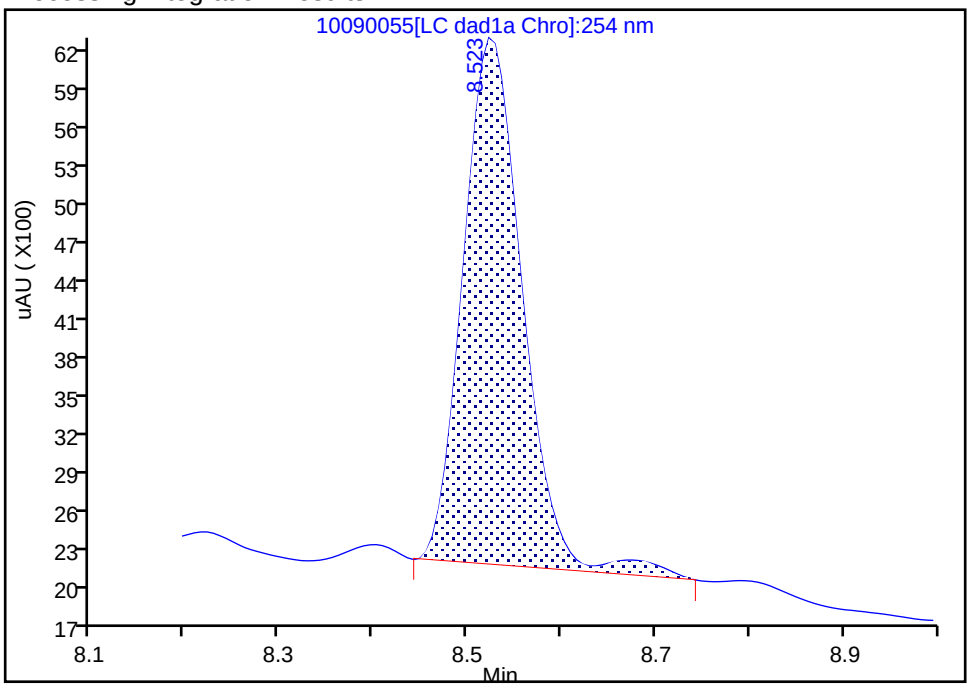
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Injection Date:	10-Oct-2023 04:45:43	Instrument ID:	CHHPLC_X3		
Lims ID:	280-182239-B-6-A	Lab Sample ID:	280-182239-6		
Client ID:	LL1mw-093-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	55	Worklist Smp#:	55
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

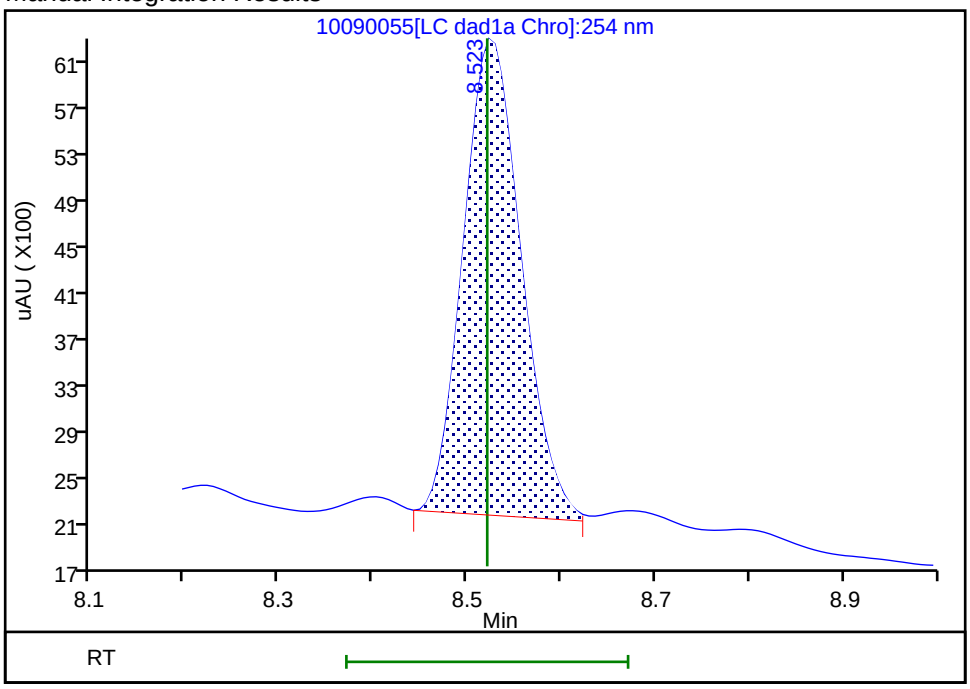
Processing Integration Results

RT: 8.52
Area: 18386
Amount: 0.148381
Amount Units: ug/mL



Manual Integration Results

RT: 8.52
Area: 17837
Amount: 0.143950
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 11:39:09 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

User Disabled Compound Report

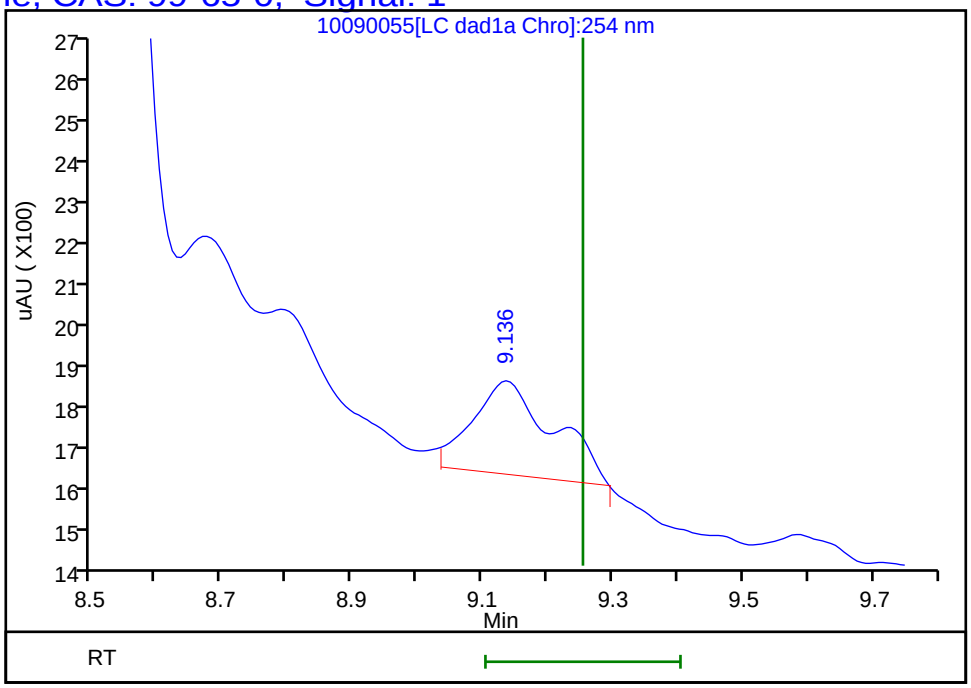
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090055.d
Injection Date: 10-Oct-2023 04:45:43 Instrument ID: CHHPLC_X3
Lims ID: 280-182239-B-6-A Lab Sample ID: 280-182239-6
Client ID: LL1mw-093-230901-GW
Operator ID: JZ/JG ALS Bottle#: 55 Worklist Smp#: 55
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

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

RT: 9.14
Response: 1808
Amount: 0.006163



Reviewer: K8YG, 10-Oct-2023 11:39:37
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

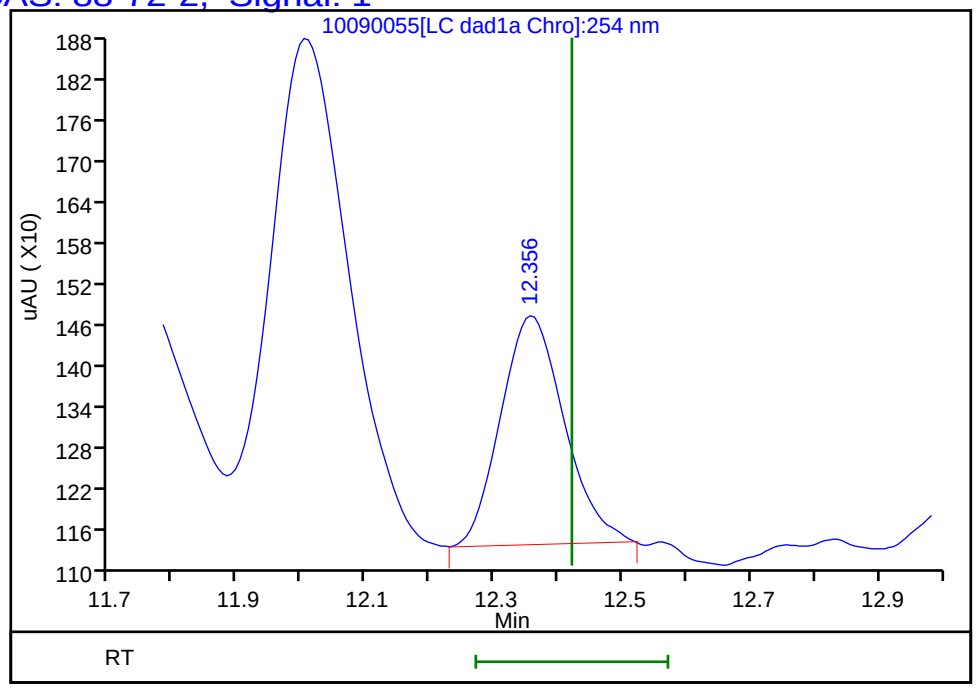
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090055.d
Injection Date: 10-Oct-2023 04:45:43 Instrument ID: CHHPLC_X3
Lims ID: 280-182239-B-6-A Lab Sample ID: 280-182239-6
Client ID: LL1mw-093-230901-GW
Operator ID: JZ/JG ALS Bottle#: 55 Worklist Smp#: 55
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

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

RT: 12.36
Response: 2328
Amount: 0.018458



Reviewer: K8YG, 10-Oct-2023 11:39:37
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

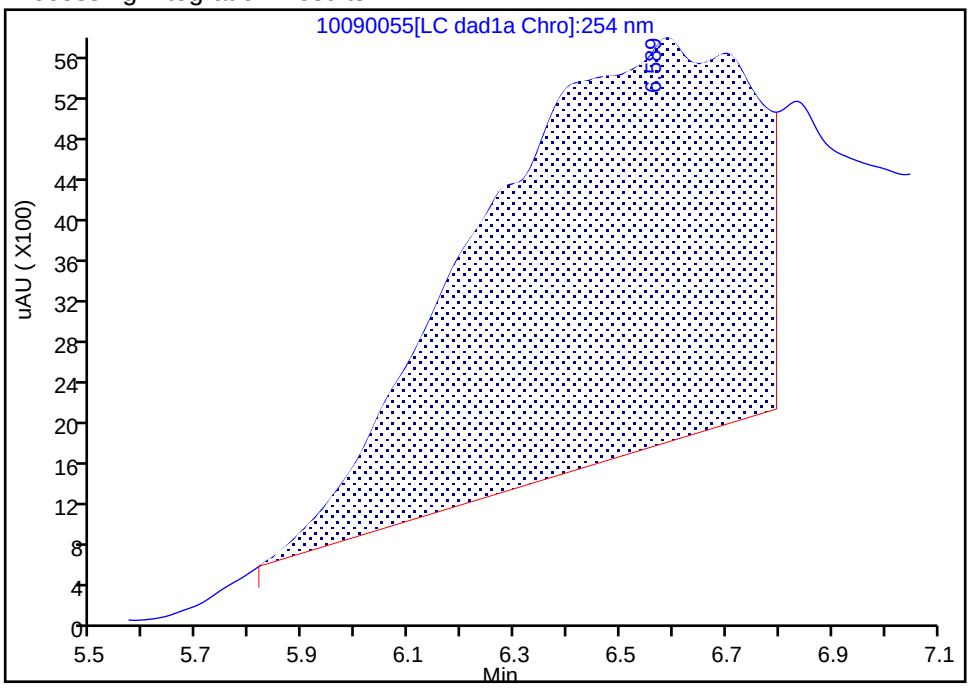
Data File:	\\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090055.d				
Injection Date:	10-Oct-2023 04:45:43	Instrument ID:	CHHPLC_X3		
Lims ID:	280-182239-B-6-A	Lab Sample ID:	280-182239-6		
Client ID:	LL1mw-093-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	55	Worklist Smp#:	55
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

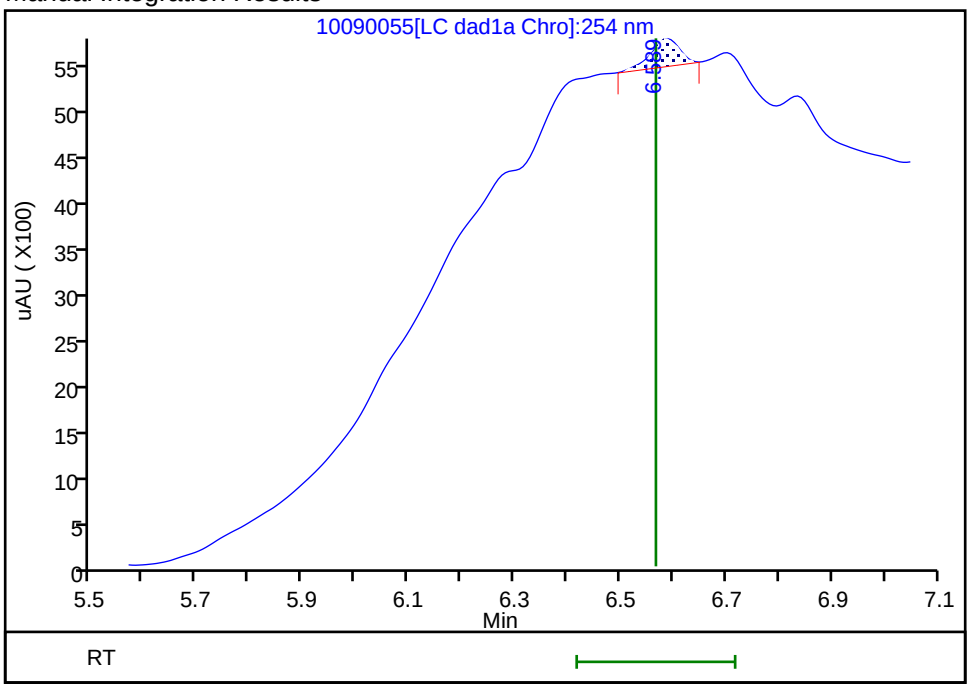
Processing Integration Results

RT: 6.59
Area: 146734
Amount: 1.556771
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 1148
Amount: 0.012180
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 11:39:20 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

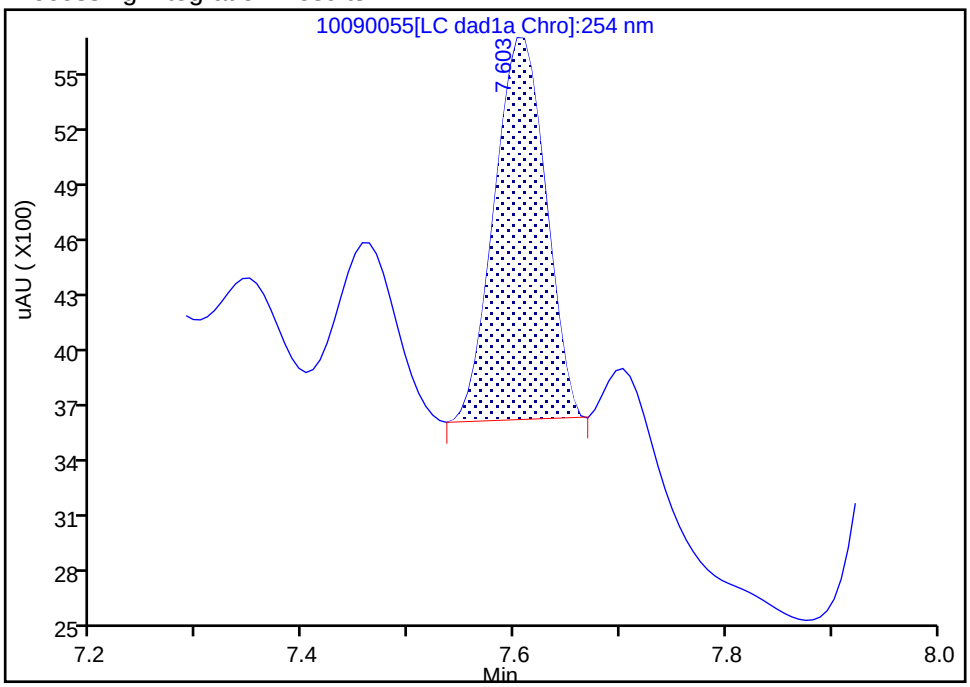
Data File:	\\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090055.d				
Injection Date:	10-Oct-2023 04:45:43	Instrument ID:	CHHPLC_X3		
Lims ID:	280-182239-B-6-A	Lab Sample ID:	280-182239-6		
Client ID:	LL1mw-093-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	55	Worklist Smp#:	55
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

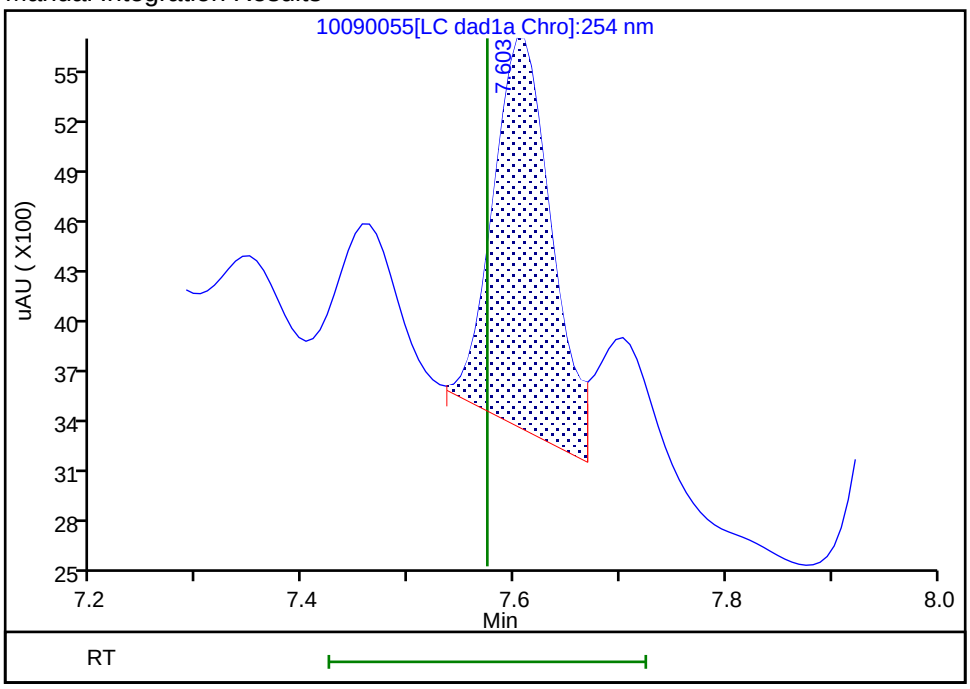
Processing Integration Results

RT: 7.60
Area: 7100
Amount: 0.064258
Amount Units: ug/mL



Manual Integration Results

RT: 7.60
Area: 9120
Amount: 0.082539
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 11:39:27 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

User Disabled Compound Report

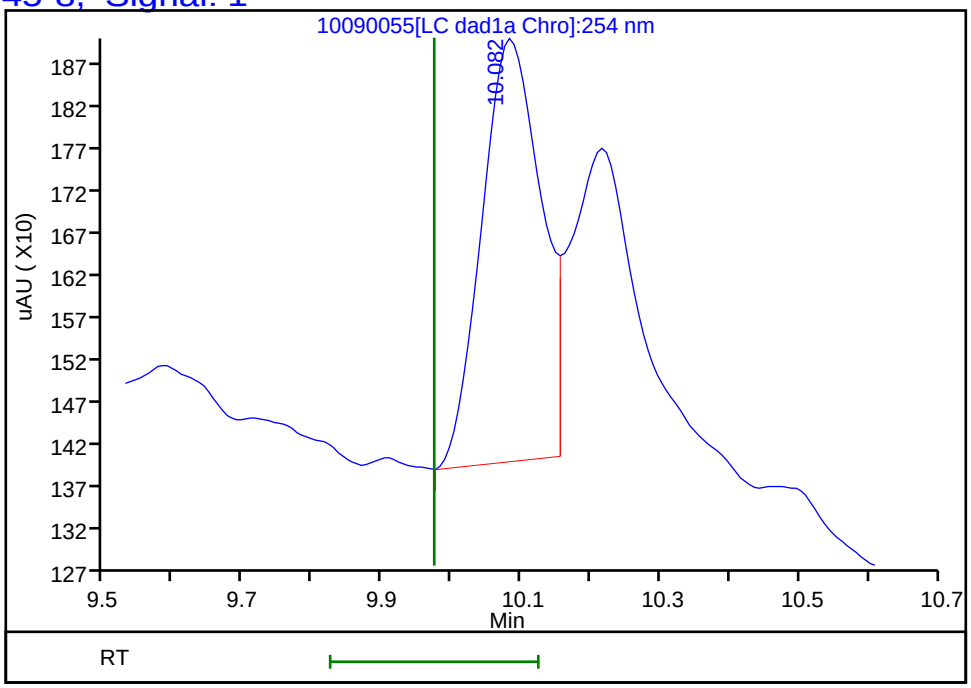
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090055.d
Injection Date: 10-Oct-2023 04:45:43 Instrument ID: CHHPLC_X3
Lims ID: 280-182239-B-6-A Lab Sample ID: 280-182239-6
Client ID: LL1mw-093-230901-GW
Operator ID: JZ/JG ALS Bottle#: 55 Worklist Smp#: 55
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

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

RT: 10.08
Response: 2984
Amount: 0.017841



Reviewer: K8YG, 10-Oct-2023 11:39:37
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182239-1

SDG No.:

Client Sample ID: LL1mw-093-230901-GW | Lab Sample ID: 280-182239-6

Matrix: Water | Lab File ID: 10110024.D

Analysis Method: 8330B | Date Collected: 10/02/2023 11:30

Extraction Method: 3535 | Date Extracted: 10/04/2023 13:30

Sample wt/vol: 505.8(mL) | Date Analyzed: 10/12/2023 02:12

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.: 629372 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
2691-41-0	HMX	0.20	U M Q	0.21	0.20	0.087
121-82-4	*RDX*	*0.082*	*J Q J1*	*0.21*	0.20	*0.051*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	76	*Q*	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\10110024.D
Lims ID: 280-182239-B-6-A
Client ID: LL1mw-093-230901-GW
Sample Type: Client
Inject. Date: 12-Oct-2023 02:12:59 ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-182239-B-6-A
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA

Method: \\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 12-Oct-2023 12:50:38 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1633

First Level Reviewer: K8YG Date: 12-Oct-2023 12:47:24

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
6 HMX	1		6.805			ND	U
8 RDX	1	9.146	9.052	0.094	1726	0.008315	
9 Nitrobenzene	1	11.693	11.625	0.068	3777	0.0102	
$ 10 1,2-Dinitrobenzene	1	12.619	12.572	0.047	38916	0.1516	
12 1,3-Dinitrobenzene	1		14.698			ND	U
13 Nitroglycerin	2		15.165			ND	7
14 o-Nitrotoluene	1		15.785			ND	
15 p-Nitrotoluene	1		16.012			ND	U
16 4-Amino-2,6-dinitrotoluene	1		16.525			ND	U
17 m-Nitrotoluene	1		16.858			ND	
18 2-Amino-4,6-dinitrotoluene	1		17.338			ND	U
19 1,3,5-Trinitrobenzene	1		17.532			ND	U
20 2,6-Dinitrotoluene	1		18.658			ND	
21 2,4-Dinitrotoluene	1		19.118			ND	
22 Tetryl	1		22.339			ND	
23 2,4,6-Trinitrotoluene	1		23.199			ND	
24 PETN	2		24.352			ND	

QC Flag Legend

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

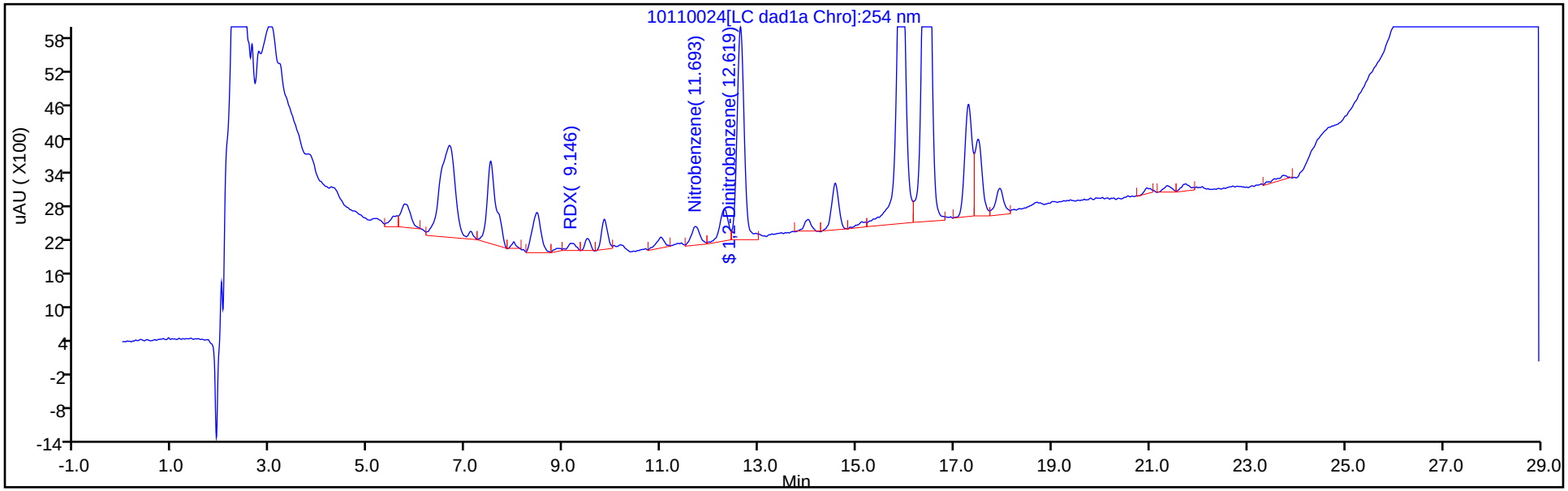
Report Date: 12-Oct-2023 12:50:41 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

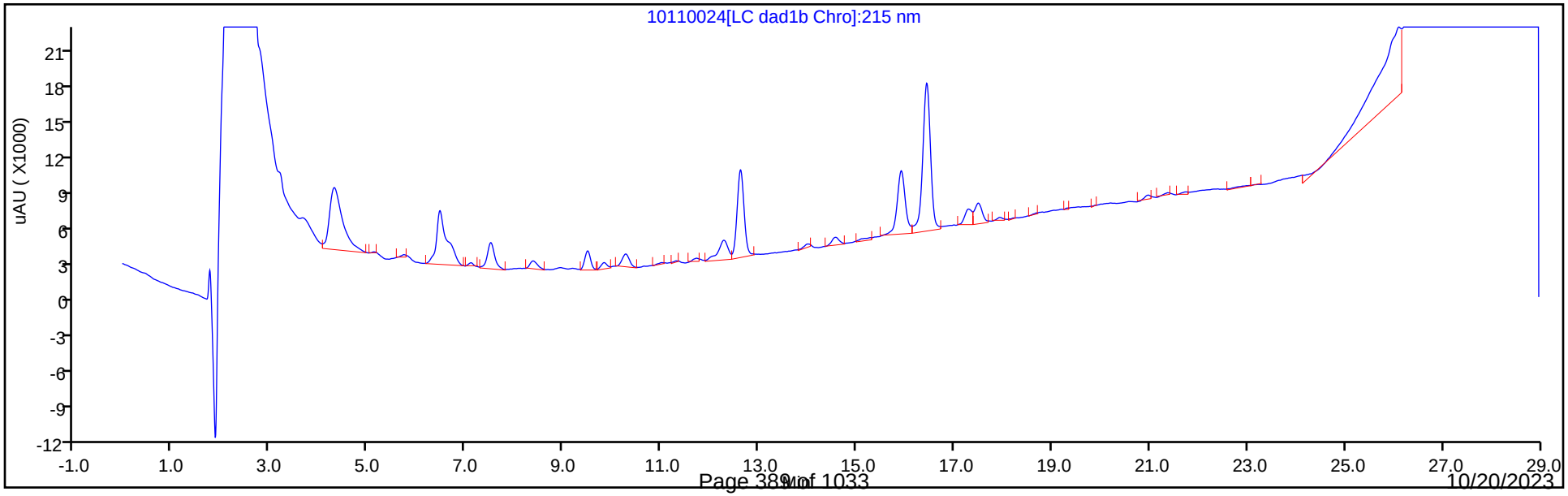
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Injection Date:	12-Oct-2023 02:12:59	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	280-182239-B-6-A	Lab Sample ID:	280-182239-6	Worklist Smp#:	24
Client ID:	LL1mw-093-230901-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\10110024.D				
Lims ID:	280-182239-B-6-A				
Client ID:	LL1mw-093-230901-GW				
Sample Type:	Client				
Inject. Date:	12-Oct-2023 02:12:59	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-182239-B-6-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_G2_LUNA		
Method:	\\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	12-Oct-2023 12:50:38	Calib Date:	26-Sep-2023 04:54:46		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX1633				

First Level Reviewer: K8YG Date: 12-Oct-2023 12:47:24

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1516	75.78

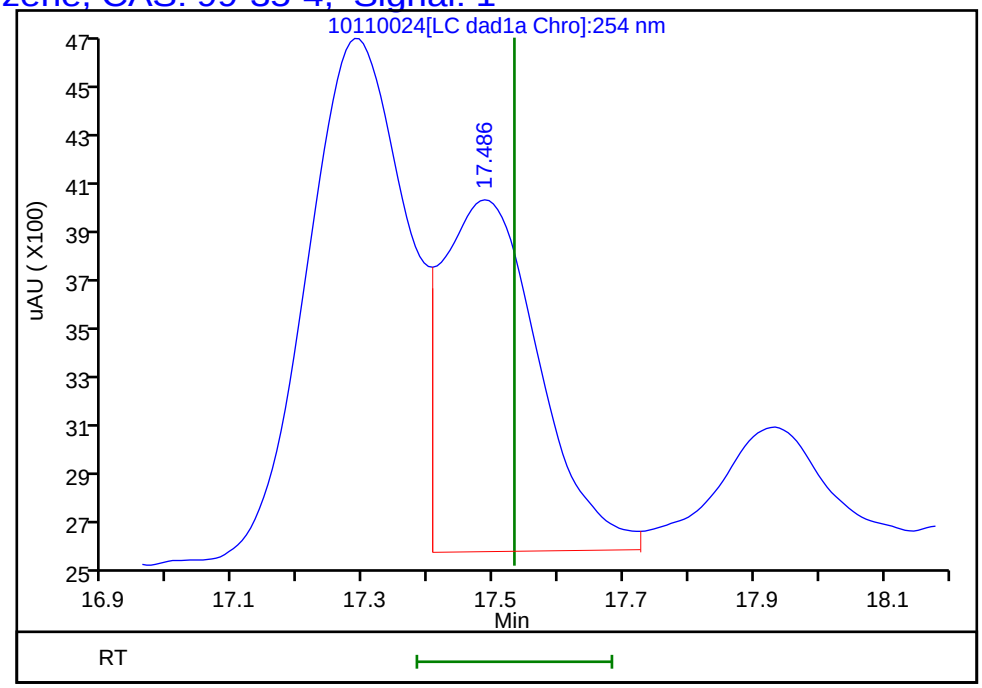
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20231011-126415.b\10110024.d				
Injection Date:	12-Oct-2023 02:12:59	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-182239-B-6-A	Lab Sample ID:	280-182239-6		
Client ID:	LL1mw-093-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

19 1,3,5-Trinitrobenzene, CAS: 99-35-4, Signal: 1

RT: 17.49
Response: 13998
Amount: 0.034006



Reviewer: K8YG, 12-Oct-2023 12:47:24
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

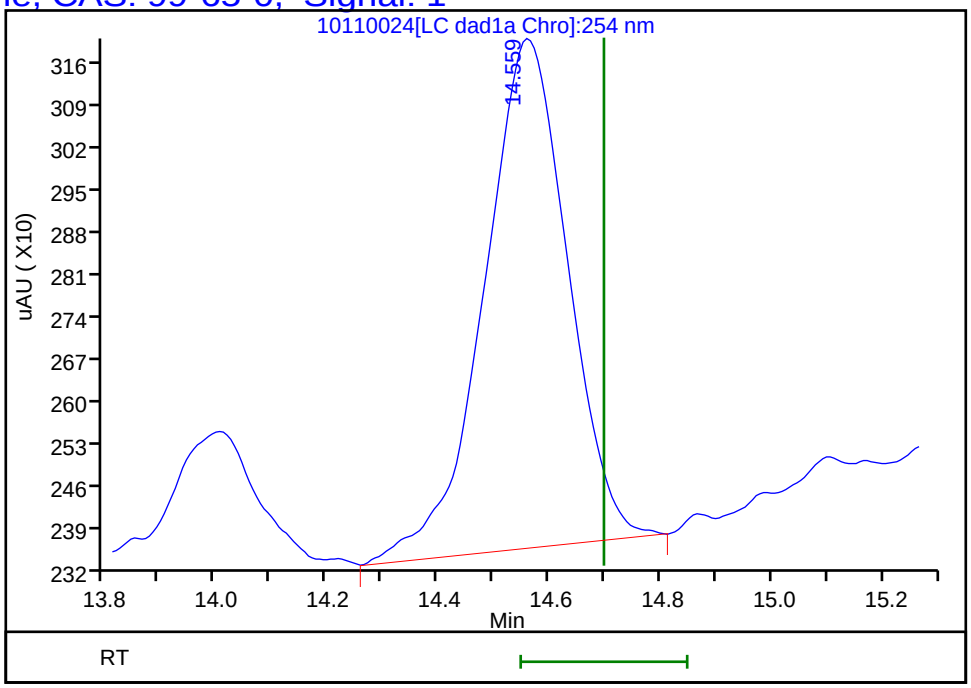
Eurofins Denver

Data File: \\chromfs\denver\chromdata\g2_luna\20231011-126415.b\10110024.d
Injection Date: 12-Oct-2023 02:12:59 Instrument ID: CHHPLC_G2_LUNA
Lims ID: 280-182239-B-6-A Lab Sample ID: 280-182239-6
Client ID: LL1mw-093-230901-GW
Operator ID: JZ/JG ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

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

RT: 14.56
Response: 8830
Amount: 0.015236



Reviewer: K8YG, 12-Oct-2023 12:47:24
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

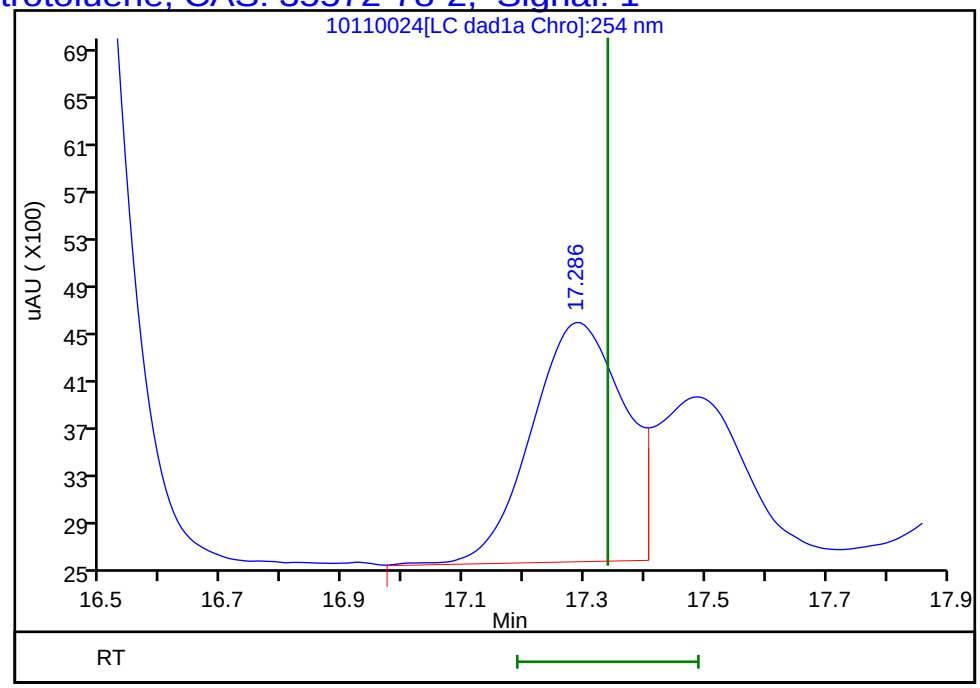
Eurofins Denver

Data File: \\chromfs\denver\chromdata\g2_luna\20231011-126415.b\10110024.d
Injection Date: 12-Oct-2023 02:12:59 Instrument ID: CHHPLC_G2_LUNA
Lims ID: 280-182239-B-6-A Lab Sample ID: 280-182239-6
Client ID: LL1mw-093-230901-GW
Operator ID: JZ/JG ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2, Signal: 1

RT: 17.29
Response: 21458
Amount: 0.053245



Reviewer: K8YG, 12-Oct-2023 12:47:24
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

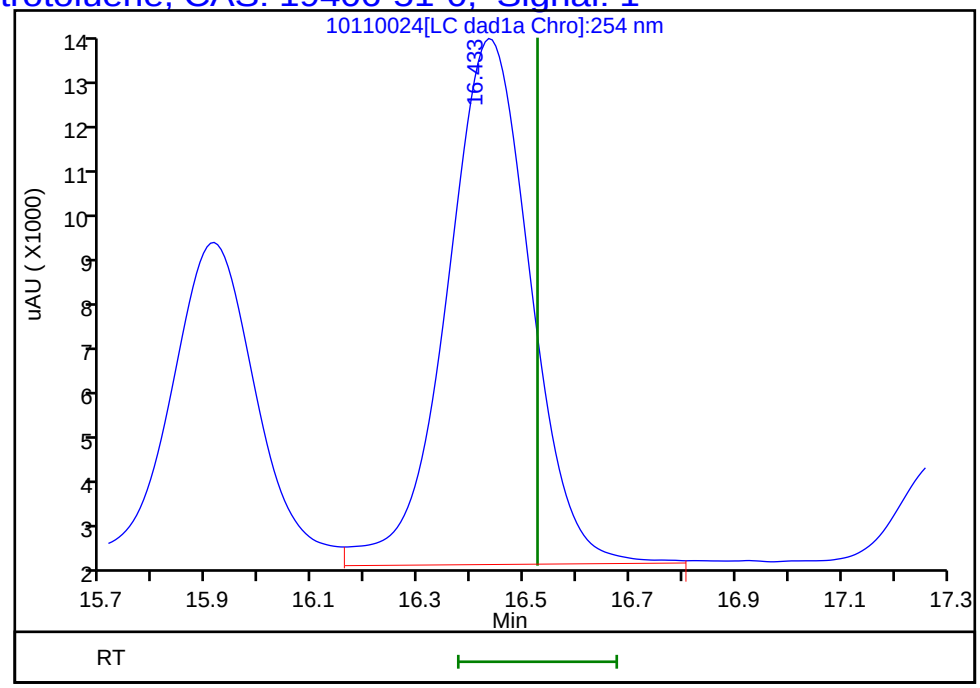
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20231011-126415.b\10110024.d				
Injection Date:	12-Oct-2023 02:12:59	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-182239-B-6-A	Lab Sample ID:	280-182239-6		
Client ID:	LL1mw-093-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0, Signal: 1

RT: 16.43
Response: 115490
Amount: 0.423717



Reviewer: K8YG, 12-Oct-2023 12:47:24
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

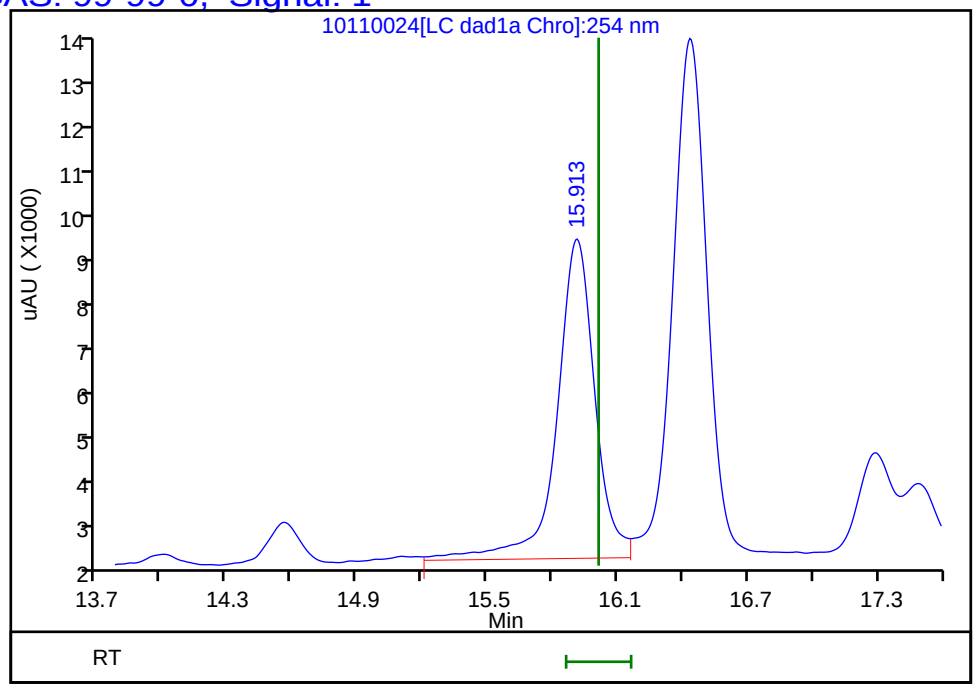
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20231011-126415.b\10110024.d				
Injection Date:	12-Oct-2023 02:12:59	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-182239-B-6-A	Lab Sample ID:	280-182239-6		
Client ID:	LL1mw-093-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

RT: 15.91
Response: 78642
Amount: 0.359284



Reviewer: K8YG, 12-Oct-2023 12:47:24
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

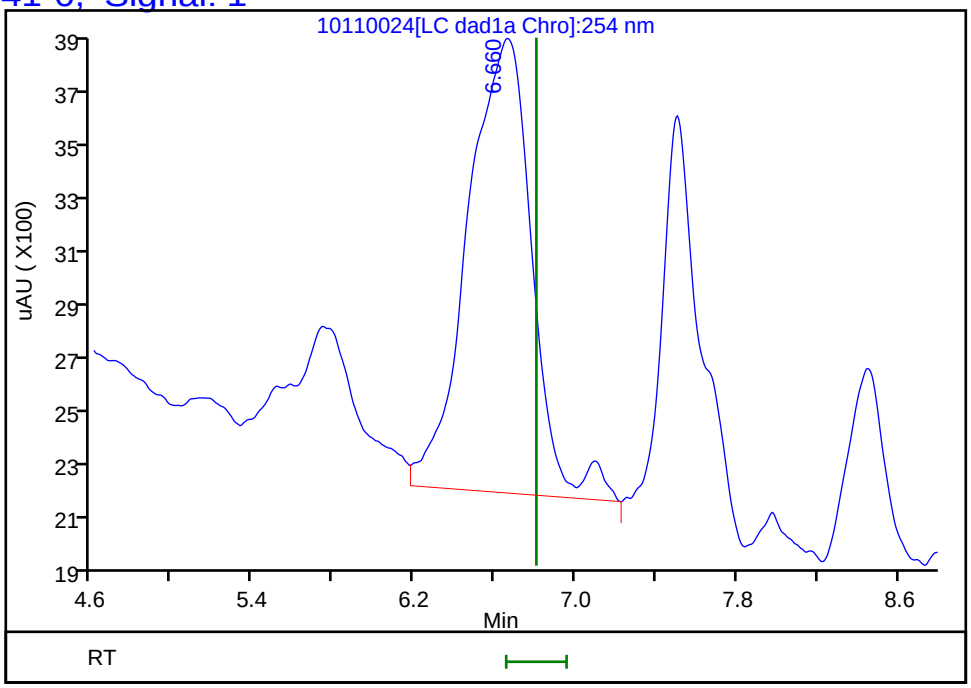
Eurofins Denver

Data File: \\chromfs\denver\chromdata\g2_luna\20231011-126415.b\10110024.d

Injection Date:	12-Oct-2023 02:12:59	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-182239-B-6-A	Lab Sample ID:	280-182239-6		
Client ID:	LL1mw-093-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

RT: 6.66
Response: 36842
Amount: 0.212381



Reviewer: K8YG, 12-Oct-2023 12:47:24
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182239-1

SDG No.:

Client Sample ID: LL1mw-092-230901-GW | Lab Sample ID: 280-182239-7

Matrix: Water | Lab File ID: 10090056.D

Analysis Method: 8330B | Date Collected: 10/02/2023 11:40

Extraction Method: 3535 | Date Extracted: 10/04/2023 13:30

Sample wt/vol: 480.2(mL) | Date Analyzed: 10/10/2023 05:08

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

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

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

Cleanup Factor:

Analysis Batch No.: 628987 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.21	U Q	0.22	0.21	0.088
99-65-0	1,3-Dinitrobenzene	0.10	U Q	0.11	0.10	0.038
118-96-7	2,4,6-Trinitrotoluene	0.10	U Q	0.11	0.10	0.047
121-14-2	2,4-Dinitrotoluene	0.083	U Q	0.10	0.083	0.029
606-20-2	2,6-Dinitrotoluene	0.083	U Q	0.10	0.083	0.042
35572-78-2	2-Amino-4,6-dinitrotoluene	0.10	U Q	0.11	0.10	0.053
88-72-2	2-Nitrotoluene	0.21	U Q M	0.22	0.21	0.089
99-08-1	3-Nitrotoluene	0.36	U Q	0.42	0.36	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U Q	0.16	0.12	0.060
99-99-0	4-Nitrotoluene	0.42	U Q	0.43	0.42	0.10
98-95-3	Nitrobenzene	0.21	U Q	0.22	0.21	0.095
55-63-0	Nitroglycerin	2.1	U Q	2.2	2.1	0.96
78-11-5	PETN	1.0	U Q	1.1	1.0	0.47
121-82-4	RDX	1.0	Q M J1	0.22	0.21	0.054
479-45-8	Tetryl	0.10	U Q	0.11	0.10	0.033

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	68	Q M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\10090056.D
Lims ID: 280-182239-B-7-A
Client ID: LL1mw-092-230901-GW
Sample Type: Client
Inject. Date: 10-Oct-2023 05:08:40 ALS Bottle#: 56 Worklist Smp#: 56
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-182239-B-7-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 10-Oct-2023 11:59:43 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1622

First Level Reviewer: K8YG Date: 10-Oct-2023 09:44:02

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1	6.586	6.568	0.018	1236	0.0131	M
8 RDX	1	7.606	7.574	0.032	10573	0.0957	M
$ 10 1,2-Dinitrobenzene	1	8.526	8.521	0.005	16872	0.1362	M
11 1,3,5-Trinitrobenzene	1		8.648			ND	
12 1,3-Dinitrobenzene	1		9.254			ND	7
13 Nitrobenzene	1		9.621			ND	
15 Tetryl	1		9.974			ND	
16 Nitroglycerin	2		10.421			ND	
17 2,4,6-Trinitrotoluene	1		10.861			ND	
18 4-Amino-2,6-dinitrotoluene	1		11.034			ND	
19 2-Amino-4,6-dinitrotoluene	1		11.281			ND	
20 2,6-Dinitrotoluene	1		11.441			ND	
21 2,4-Dinitrotoluene	1		11.607			ND	
22 o-Nitrotoluene	1		12.421			ND	U
23 p-Nitrotoluene	1		12.827			ND	
24 m-Nitrotoluene	1		13.387			ND	
25 PETN	2		14.514			ND	

QC Flag Legend

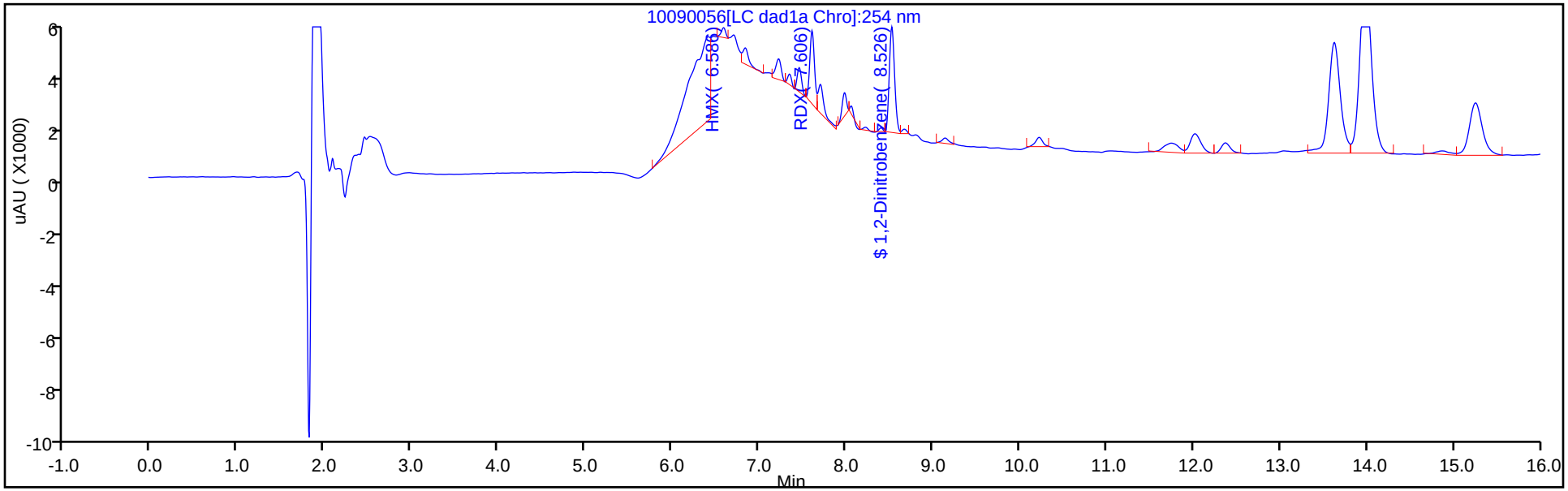
Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 10-Oct-2023 11:59:48 Chrom Revision: 2.3 22-Sep-2023 11:33:50

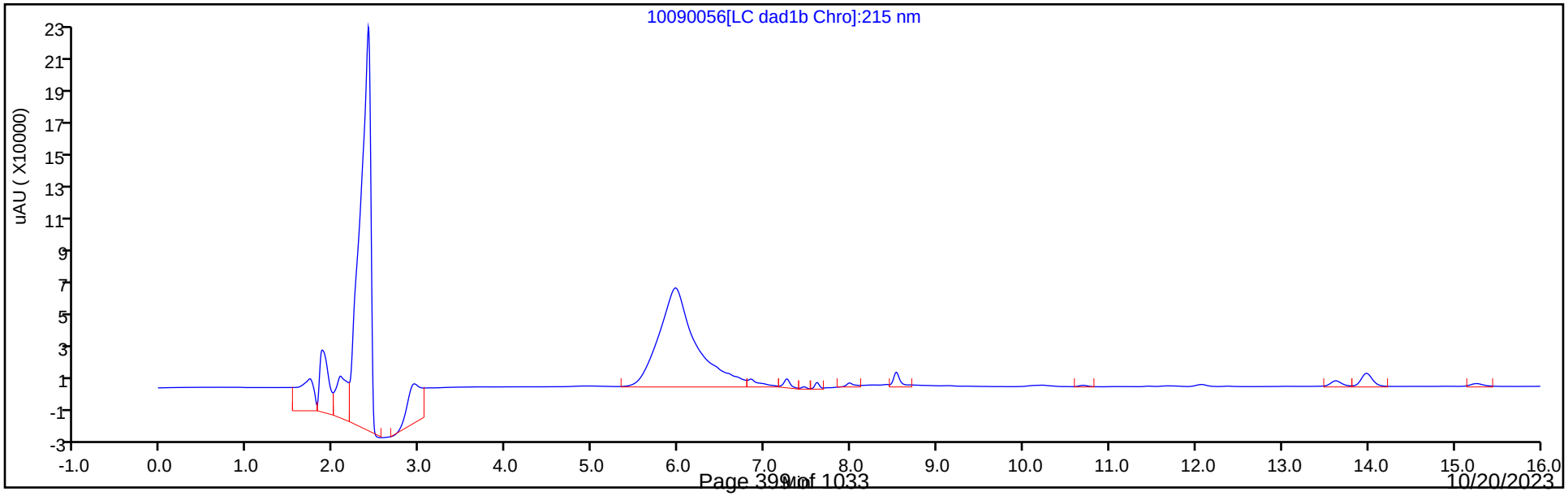
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090056.d				
Injection Date:	10-Oct-2023 05:08:40	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-182239-B-7-A	Lab Sample ID:	280-182239-7	Worklist Smp#:	56
Client ID:	LL1mw-092-230901-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	56
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\10090056.D				
Lims ID:	280-182239-B-7-A				
Client ID:	LL1mw-092-230901-GW				
Sample Type:	Client				
Inject. Date:	10-Oct-2023 05:08:40	ALS Bottle#:	56	Worklist Smp#:	56
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-182239-B-7-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	10-Oct-2023 11:59:43	Calib Date:	24-Jun-2023 00:23:49		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1622				

First Level Reviewer: K8YG Date: 10-Oct-2023 09:44:02

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1362	68.08

Manual Integration/User Assign Peak Report

Eurofins Denver

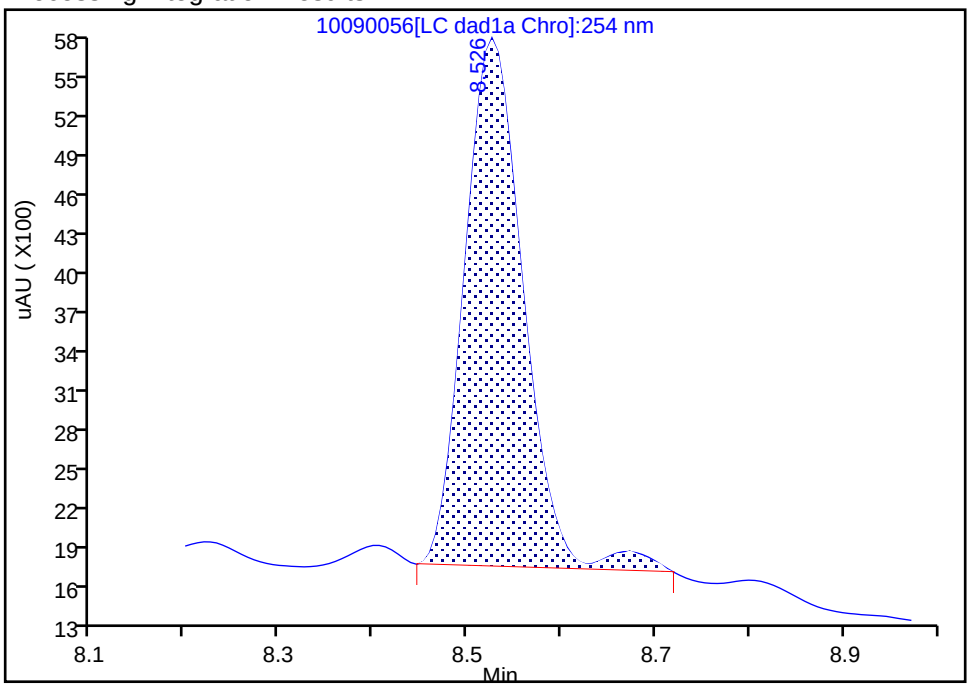
Data File:	\\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090056.d				
Injection Date:	10-Oct-2023 05:08:40	Instrument ID:	CHHPLC_X3		
Lims ID:	280-182239-B-7-A	Lab Sample ID:	280-182239-7		
Client ID:	LL1mw-092-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	56	Worklist Smp#:	56
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

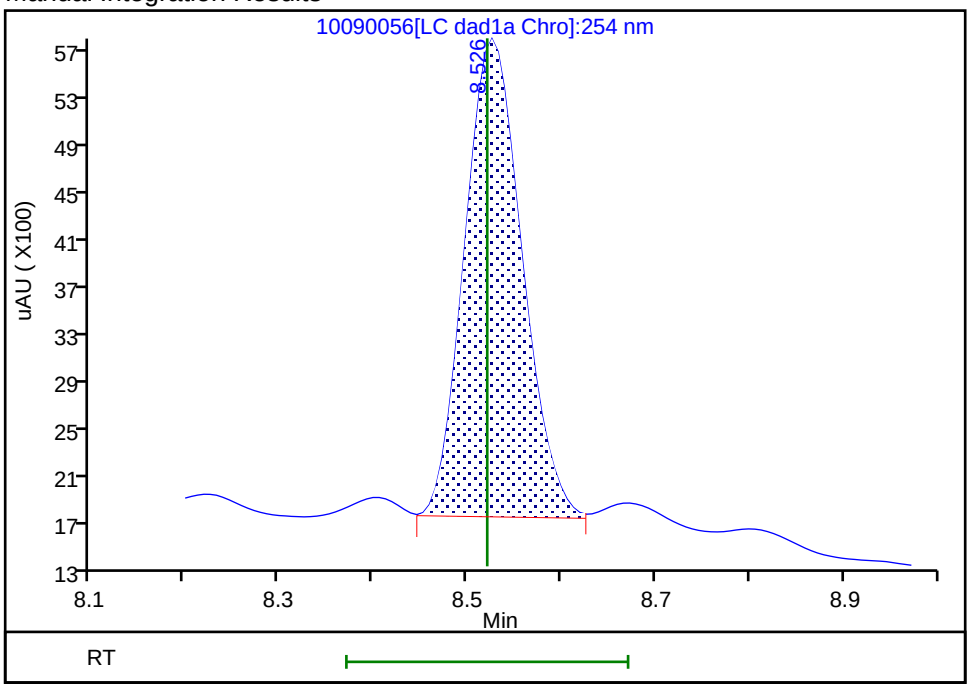
Processing Integration Results

RT: 8.53
Area: 17383
Amount: 0.140286
Amount Units: ug/mL



Manual Integration Results

RT: 8.53
Area: 16872
Amount: 0.136162
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 11:39:46 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

User Disabled Compound Report

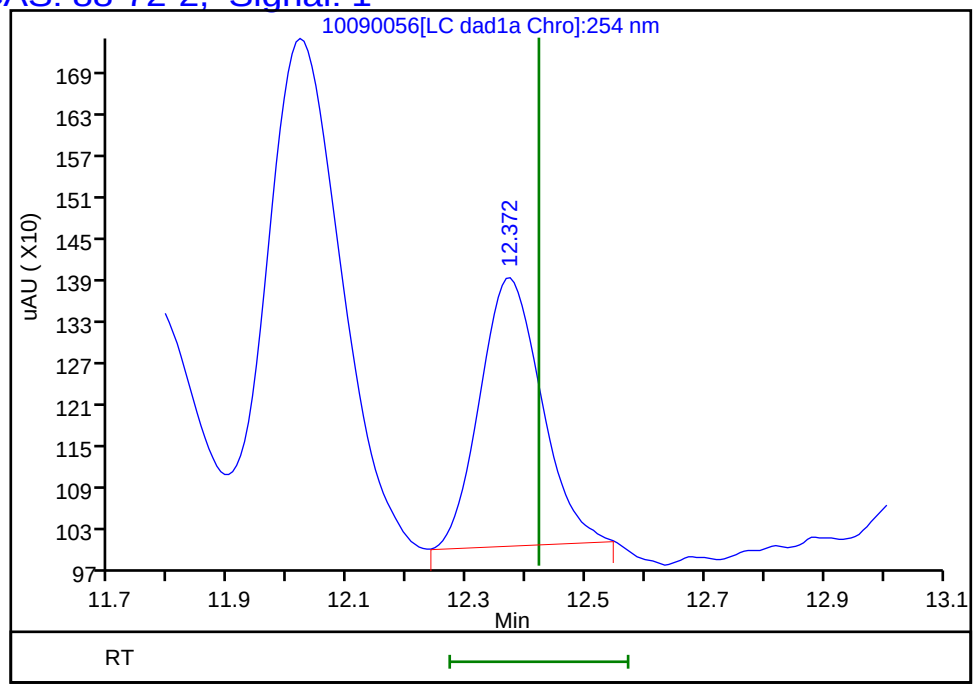
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090056.d
Injection Date: 10-Oct-2023 05:08:40 Instrument ID: CHHPLC_X3
Lims ID: 280-182239-B-7-A Lab Sample ID: 280-182239-7
Client ID: LL1mw-092-230901-GW
Operator ID: JZ/JG ALS Bottle#: 56 Worklist Smp#: 56
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

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

RT: 12.37
Response: 2753
Amount: 0.021828



Reviewer: K8YG, 10-Oct-2023 11:40:10
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

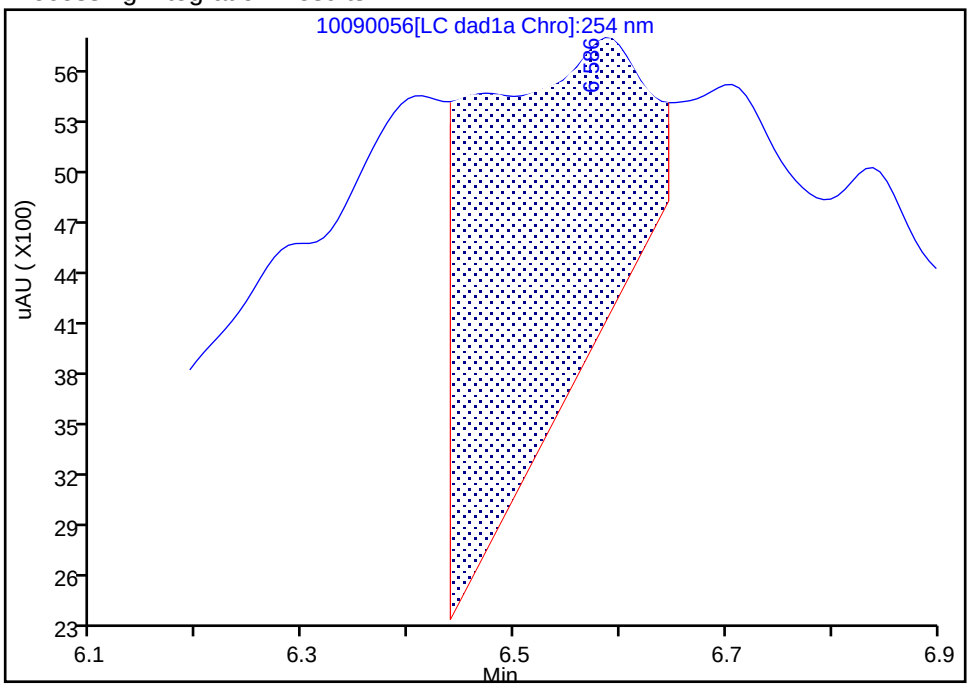
Data File:	\\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090056.d				
Injection Date:	10-Oct-2023 05:08:40	Instrument ID:	CHHPLC_X3		
Lims ID:	280-182239-B-7-A	Lab Sample ID:	280-182239-7		
Client ID:	LL1mw-092-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	56	Worklist Smp#:	56
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

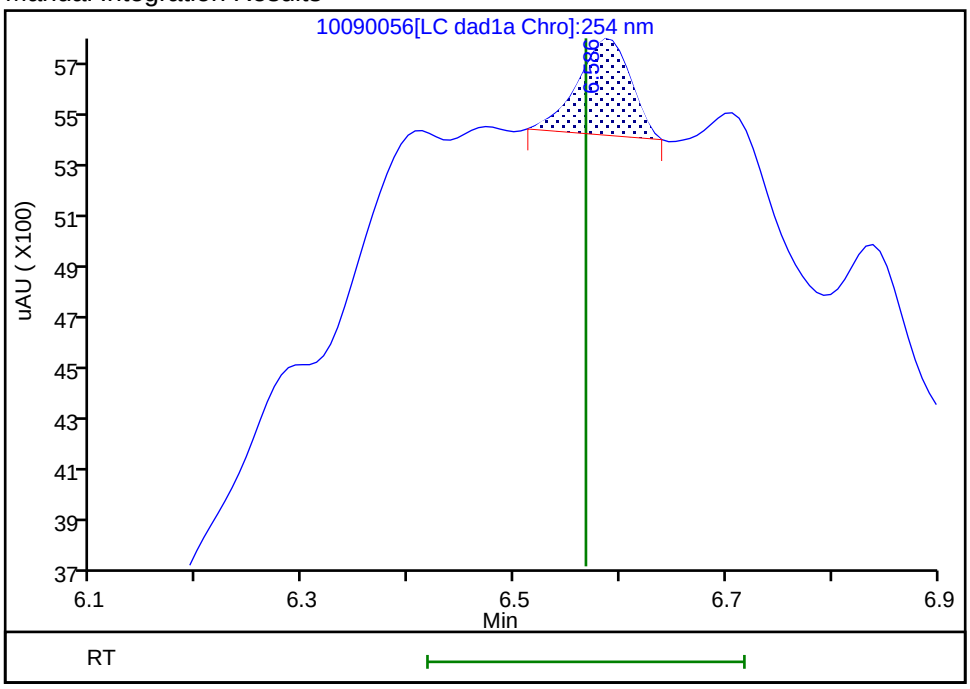
Processing Integration Results

RT: 6.59
Area: 24063
Amount: 0.255296
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 1236
Amount: 0.013113
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 11:40:03 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

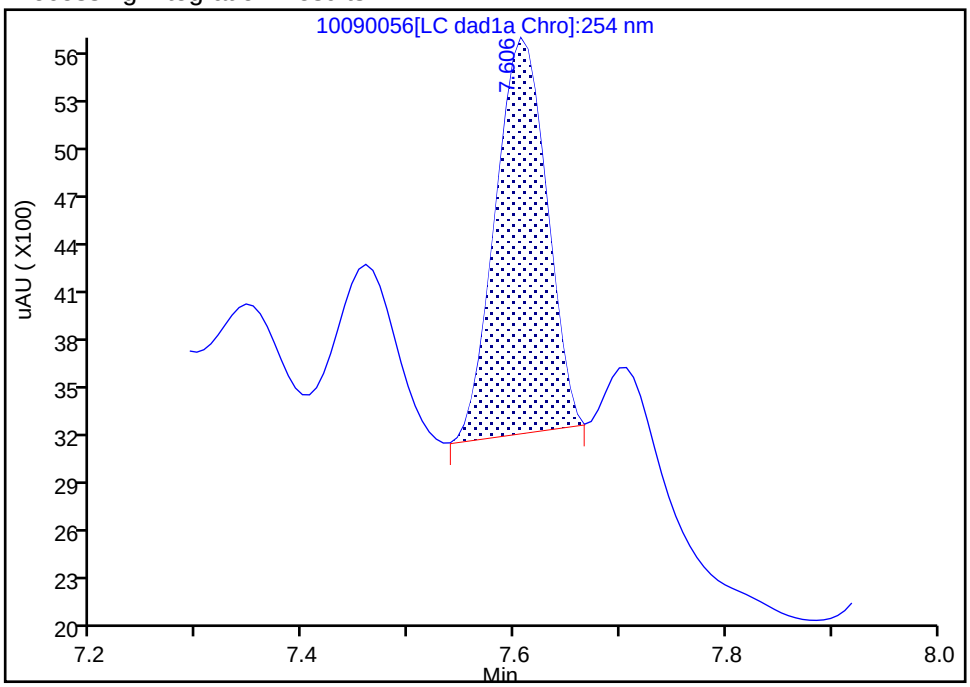
Data File:	\\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090056.d				
Injection Date:	10-Oct-2023 05:08:40	Instrument ID:	CHHPLC_X3		
Lims ID:	280-182239-B-7-A	Lab Sample ID:	280-182239-7		
Client ID:	LL1mw-092-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	56	Worklist Smp#:	56
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

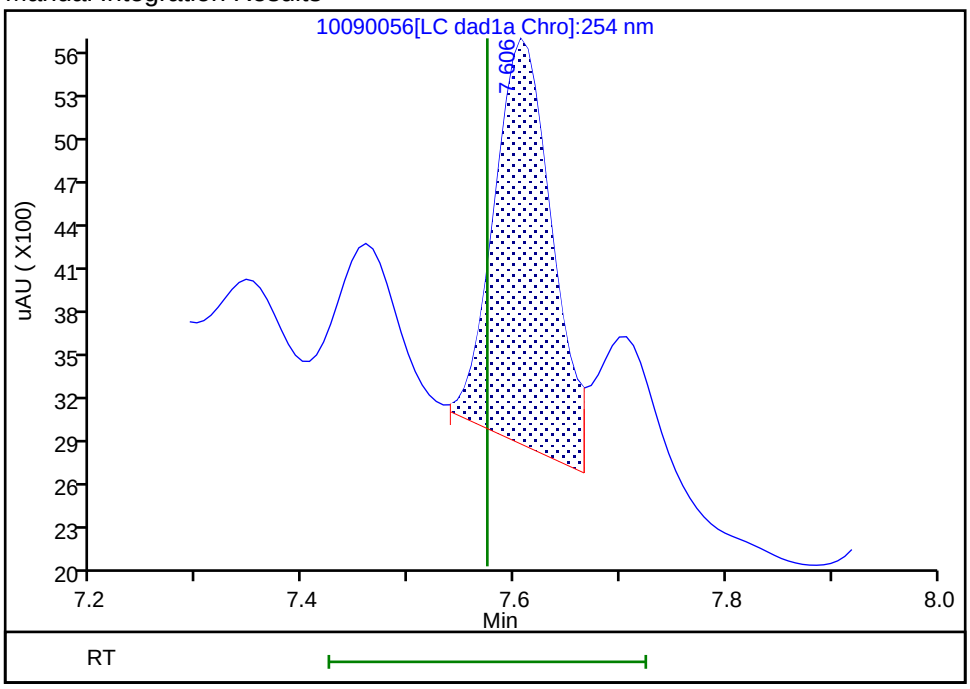
Processing Integration Results

RT: 7.61
Area: 8209
Amount: 0.074294
Amount Units: ug/mL



Manual Integration Results

RT: 7.61
Area: 10573
Amount: 0.095689
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 11:39:54 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182239-1

SDG No.:

Client Sample ID: LL1mw-092-230901-GW | Lab Sample ID: 280-182239-7

Matrix: Water | Lab File ID: 10110025.D

Analysis Method: 8330B | Date Collected: 10/02/2023 11:40

Extraction Method: 3535 | Date Extracted: 10/04/2023 13:30

Sample wt/vol: 480.2(mL) | Date Analyzed: 10/12/2023 02:49

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.: 629372 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
2691-41-0	HMX	0.21	U Q	0.22	0.21	0.091
121-82-4	*RDX*	*0.097*	*J Q J1*	*0.22*	0.21	*0.054*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	72	*Q*	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\10110025.D
Lims ID: 280-182239-B-7-A
Client ID: LL1mw-092-230901-GW
Sample Type: Client
Inject. Date: 12-Oct-2023 02:49:00 ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-182239-B-7-A
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA

Method: \\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 12-Oct-2023 12:50:38 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1633

First Level Reviewer: K8YG Date: 12-Oct-2023 12:47:55

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
6 HMX	1		6.805			ND	
8 RDX	1	9.115	9.052	0.063	1943	0.009360	
9 Nitrobenzene	1	11.648	11.625	0.023	5031	0.0135	
$ 10 1,2-Dinitrobenzene	1	12.568	12.572	-0.004	36765	0.1432	
12 1,3-Dinitrobenzene	1		14.698			ND	
13 Nitroglycerin	2	15.101	15.165	-0.064	3215	0.0259	
14 o-Nitrotoluene	1		15.785			ND	U
15 p-Nitrotoluene	1		16.012			ND	
16 4-Amino-2,6-dinitrotoluene	1		16.525			ND	U
17 m-Nitrotoluene	1		16.858			ND	
18 2-Amino-4,6-dinitrotoluene	1		17.338			ND	U
19 1,3,5-Trinitrobenzene	1		17.532			ND	
20 2,6-Dinitrotoluene	1		18.658			ND	
21 2,4-Dinitrotoluene	1		19.118			ND	7
22 Tetryl	1		22.339			ND	
23 2,4,6-Trinitrotoluene	1		23.199			ND	
24 PETN	2		24.352			ND	

QC Flag Legend

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

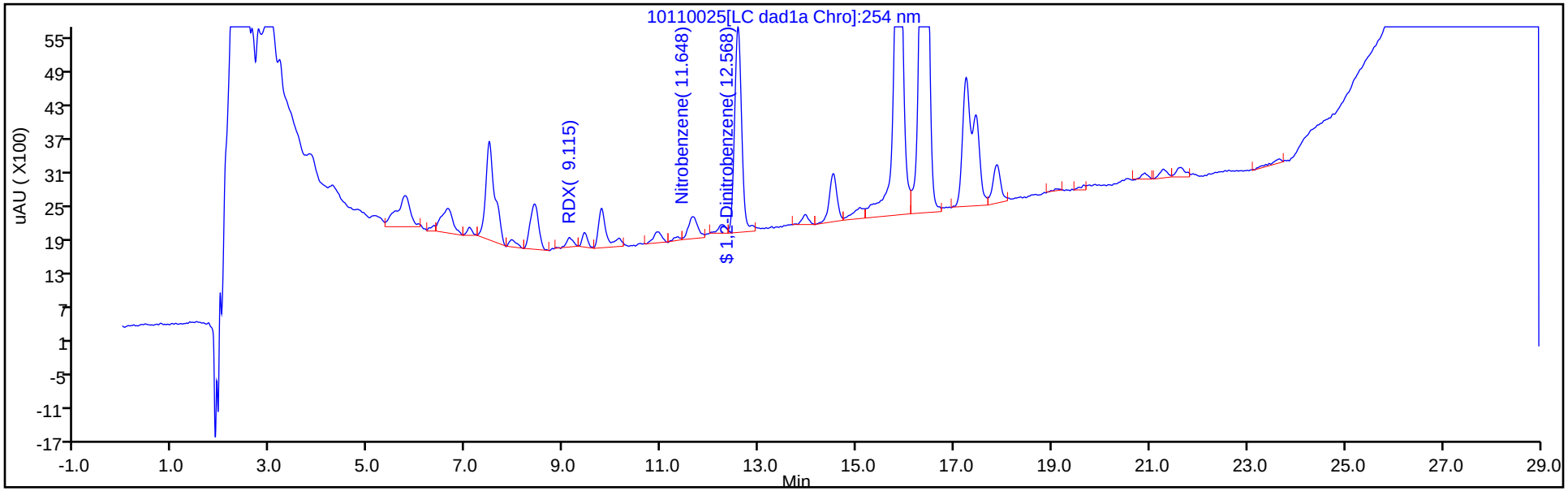
Report Date: 12-Oct-2023 12:50:42 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

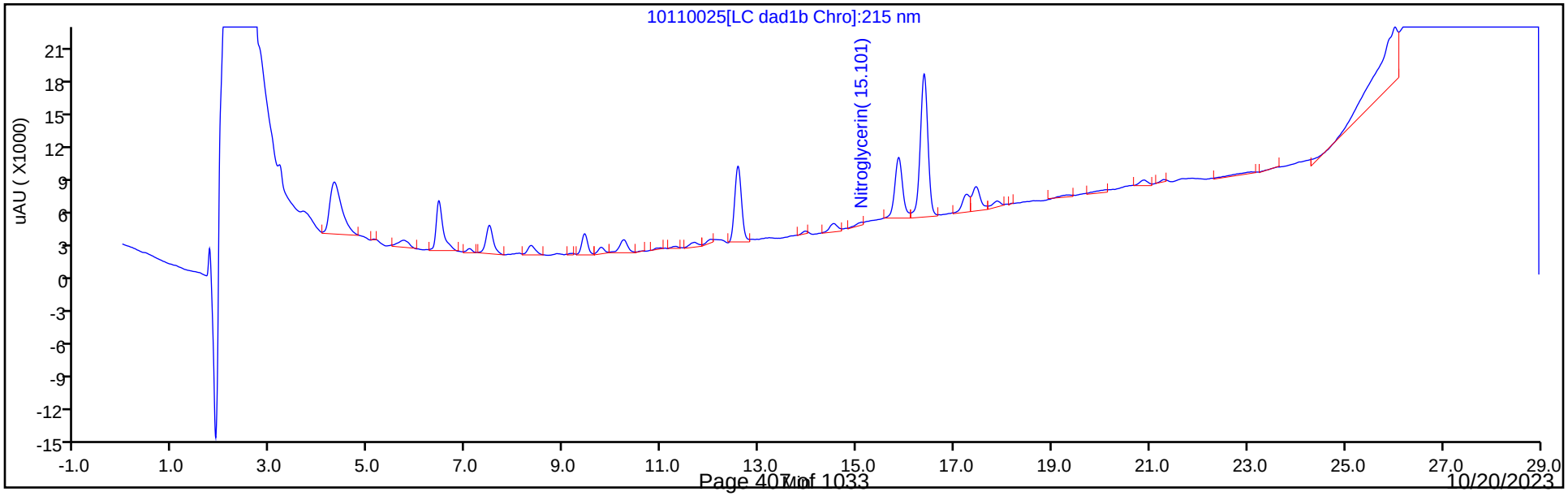
Data File: \\chromfs\denver\chromdata\g2_luna\20231011-126415.b\10110025.d

Injection Date:	12-Oct-2023 02:49:00	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	280-182239-B-7-A	Lab Sample ID:	280-182239-7	Worklist Smp#:	25
Client ID:	LL1mw-092-230901-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\10110025.D				
Lims ID:	280-182239-B-7-A				
Client ID:	LL1mw-092-230901-GW				
Sample Type:	Client				
Inject. Date:	12-Oct-2023 02:49:00	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-182239-B-7-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_G2_LUNA		
Method:	\\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	12-Oct-2023 12:50:38	Calib Date:	26-Sep-2023 04:54:46		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX1633				

First Level Reviewer: K8YG Date: 12-Oct-2023 12:47:55

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1432	71.59

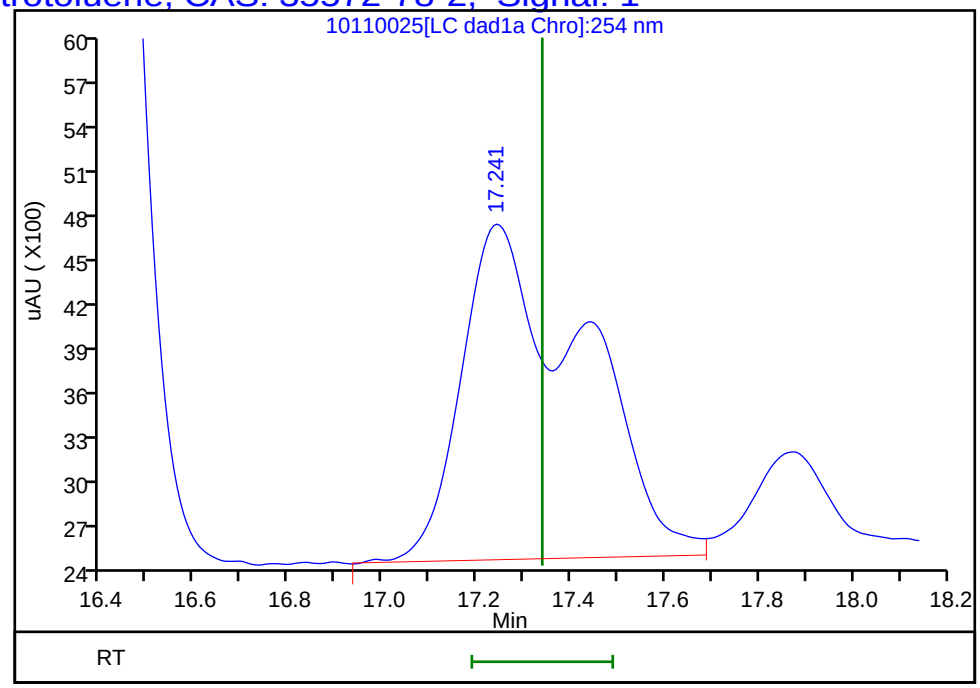
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20231011-126415.b\10110025.d				
Injection Date:	12-Oct-2023 02:49:00	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-182239-B-7-A	Lab Sample ID:	280-182239-7		
Client ID:	LL1mw-092-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2, Signal: 1

RT: 17.24
Response: 40732
Amount: 0.104469



Reviewer: K8YG, 12-Oct-2023 12:47:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

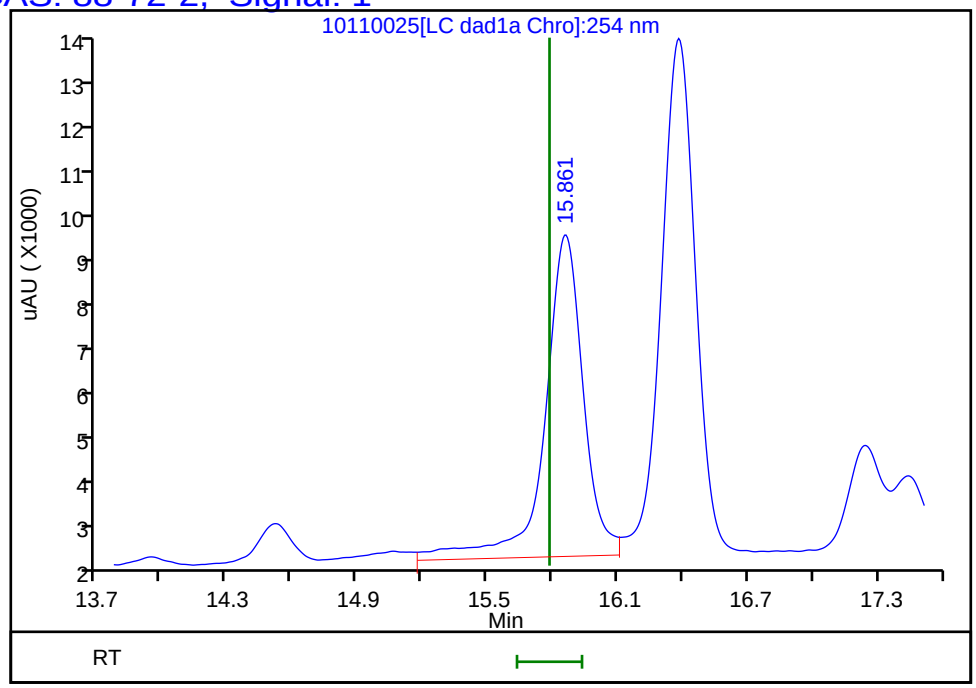
Eurofins Denver

Data File: \\chromfs\denver\chromdata\g2_luna\20231011-126415.b\10110025.d

Injection Date:	12-Oct-2023 02:49:00	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-182239-B-7-A	Lab Sample ID:	280-182239-7		
Client ID:	LL1mw-092-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

RT: 15.86
Response: 87430
Amount: 0.353916



Reviewer: K8YG, 12-Oct-2023 12:47:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

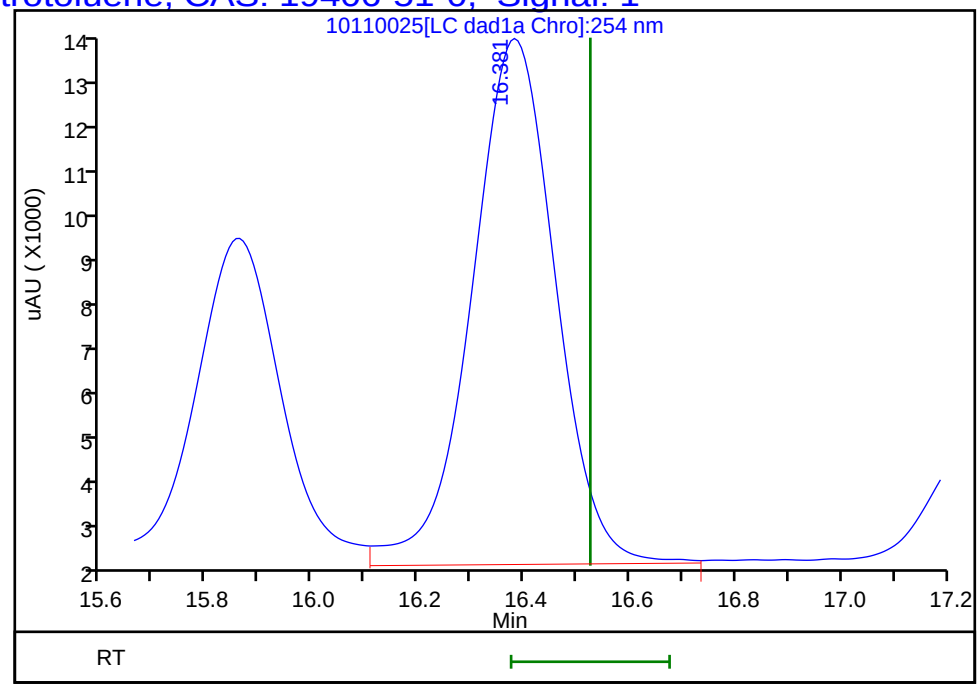
Eurofins Denver

Data File: \\chromfs\denver\chromdata\g2_luna\20231011-126415.b\10110025.d
Injection Date: 12-Oct-2023 02:49:00 Instrument ID: CHHPLC_G2_LUNA
Lims ID: 280-182239-B-7-A Lab Sample ID: 280-182239-7
Client ID: LL1mw-092-230901-GW
Operator ID: JZ/JG ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0, Signal: 1

RT: 16.38
Response: 123306
Amount: 0.452732



Reviewer: K8YG, 12-Oct-2023 12:47:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182239-1

SDG No.:

Client Sample ID: LL3mw-248-230901-GW | Lab Sample ID: 280-182239-8

Matrix: Water | Lab File ID: 10090057.D

Analysis Method: 8330B | Date Collected: 10/02/2023 12:12

Extraction Method: 3535 | Date Extracted: 10/04/2023 13:30

Sample wt/vol: 487.9(mL) | Date Analyzed: 10/10/2023 05:31

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

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

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

Cleanup Factor:

Analysis Batch No.: 628987 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.20	U Q M	0.22	0.20	0.086
99-65-0	1,3-Dinitrobenzene	0.10	U Q M	0.11	0.10	0.038
118-96-7	2,4,6-Trinitrotoluene	0.10	U Q	0.11	0.10	0.046
121-14-2	2,4-Dinitrotoluene	0.082	U Q	0.10	0.082	0.028
606-20-2	2,6-Dinitrotoluene	0.082	U Q	0.10	0.082	0.041
35572-78-2	2-Amino-4,6-dinitrotoluene	0.10	U Q	0.11	0.10	0.052
88-72-2	2-Nitrotoluene	0.20	U Q M	0.22	0.20	0.088
99-08-1	3-Nitrotoluene	0.36	U Q	0.41	0.36	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U Q	0.15	0.12	0.059
99-99-0	4-Nitrotoluene	0.41	U Q	0.42	0.41	0.10
98-95-3	Nitrobenzene	0.20	U Q	0.22	0.20	0.093
55-63-0	Nitroglycerin	2.0	U Q	2.2	2.0	0.94
78-11-5	PETN	1.0	U Q	1.1	1.0	0.46
479-45-8	Tetryl	0.10	U Q	0.11	0.10	0.033

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	80	Q M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\10090057.D
Lims ID: 280-182239-B-8-A
Client ID: LL3mw-248-230901-GW
Sample Type: Client
Inject. Date: 10-Oct-2023 05:31:37 ALS Bottle#: 57 Worklist Smp#: 57
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-182239-B-8-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 10-Oct-2023 11:59:43 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1622

First Level Reviewer: K8YG Date: 10-Oct-2023 09:27:58

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1	6.587	6.568	0.019	2614	0.0277	M
8 RDX	1	7.607	7.574	0.033	15602	0.1412	M
$ 10 1,2-Dinitrobenzene	1	8.533	8.521	0.012	19930	0.1608	M
11 1,3,5-Trinitrobenzene	1		8.648			ND	U
12 1,3-Dinitrobenzene	1		9.254			ND	U
13 Nitrobenzene	1		9.621			ND	
15 Tetryl	1		9.974			ND	
16 Nitroglycerin	2		10.421			ND	
17 2,4,6-Trinitrotoluene	1		10.861			ND	
18 4-Amino-2,6-dinitrotoluene	1		11.034			ND	
19 2-Amino-4,6-dinitrotoluene	1		11.281			ND	
20 2,6-Dinitrotoluene	1		11.441			ND	
21 2,4-Dinitrotoluene	1		11.607			ND	
22 o-Nitrotoluene	1		12.421			ND	U
23 p-Nitrotoluene	1		12.827			ND	
24 m-Nitrotoluene	1		13.387			ND	
25 PETN	2		14.514			ND	

QC Flag Legend

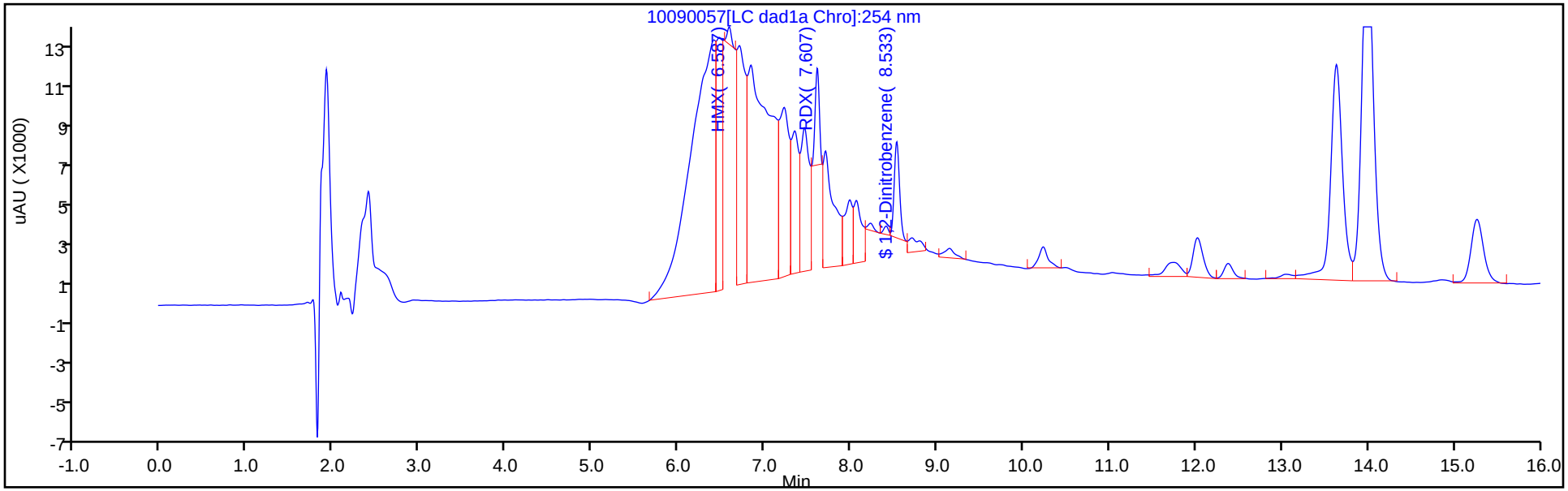
Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 10-Oct-2023 11:59:49 Chrom Revision: 2.3 22-Sep-2023 11:33:50

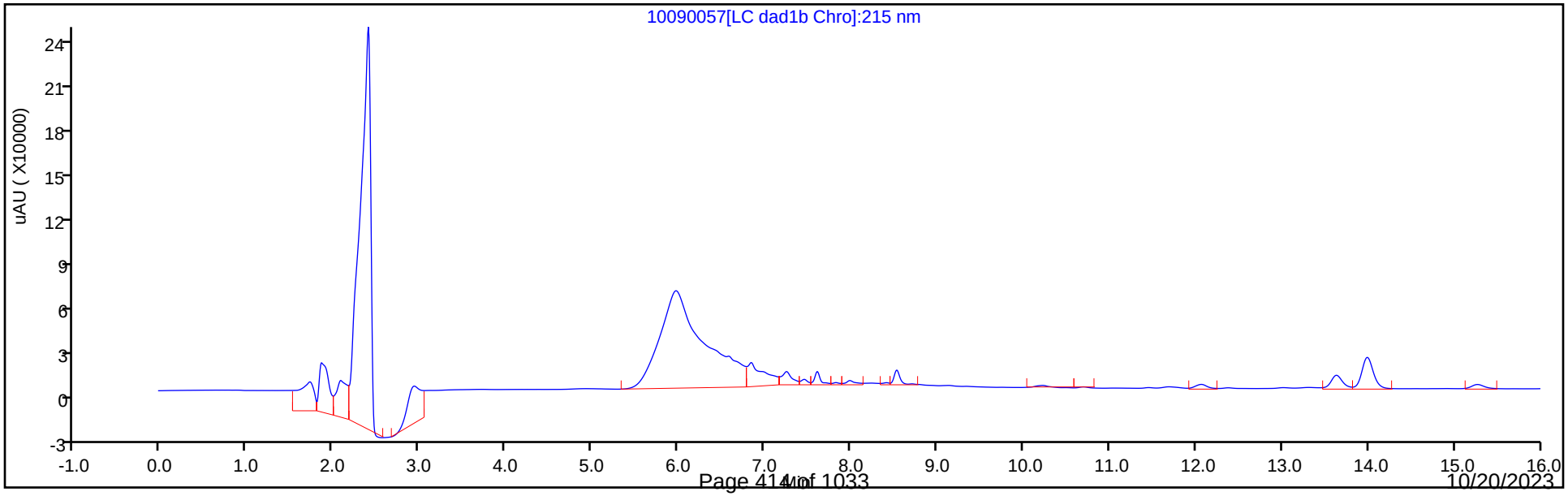
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090057.d				
Injection Date:	10-Oct-2023 05:31:37	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-182239-B-8-A	Lab Sample ID:	280-182239-8	Worklist Smp#:	57
Client ID:	LL3mw-248-230901-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	57
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\10090057.D				
Lims ID:	280-182239-B-8-A				
Client ID:	LL3mw-248-230901-GW				
Sample Type:	Client				
Inject. Date:	10-Oct-2023 05:31:37	ALS Bottle#:	57	Worklist Smp#:	57
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-182239-B-8-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	10-Oct-2023 11:59:43	Calib Date:	24-Jun-2023 00:23:49		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1622				

First Level Reviewer: K8YG Date: 10-Oct-2023 09:27:58

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1608	80.42

Manual Integration/User Assign Peak Report

Eurofins Denver

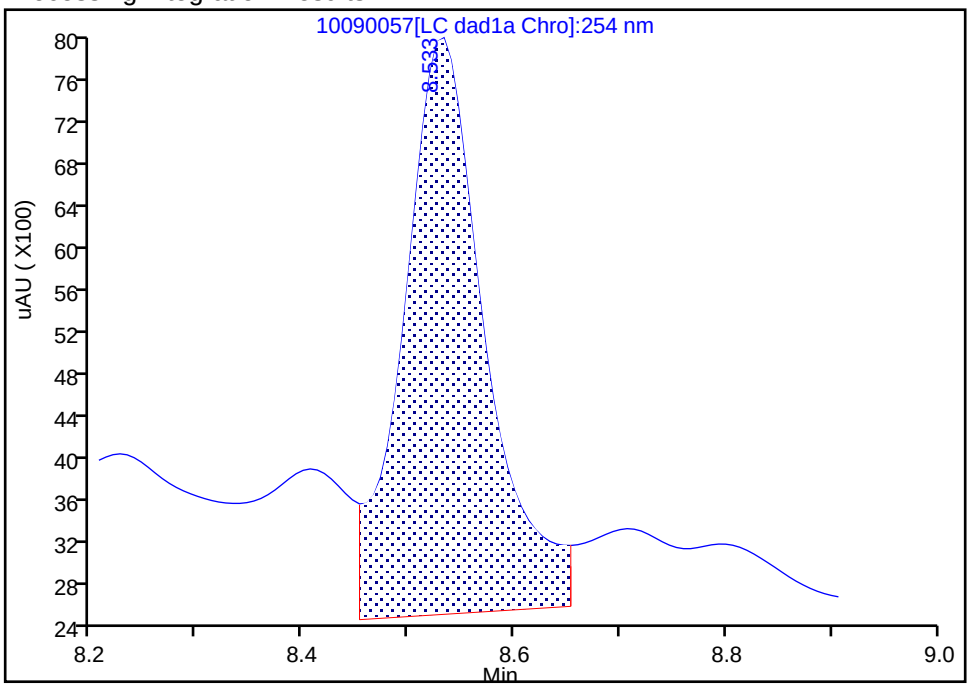
Data File:	\\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090057.d				
Injection Date:	10-Oct-2023 05:31:37	Instrument ID:	CHHPLC_X3		
Lims ID:	280-182239-B-8-A	Lab Sample ID:	280-182239-8		
Client ID:	LL3mw-248-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	57	Worklist Smp#:	57
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

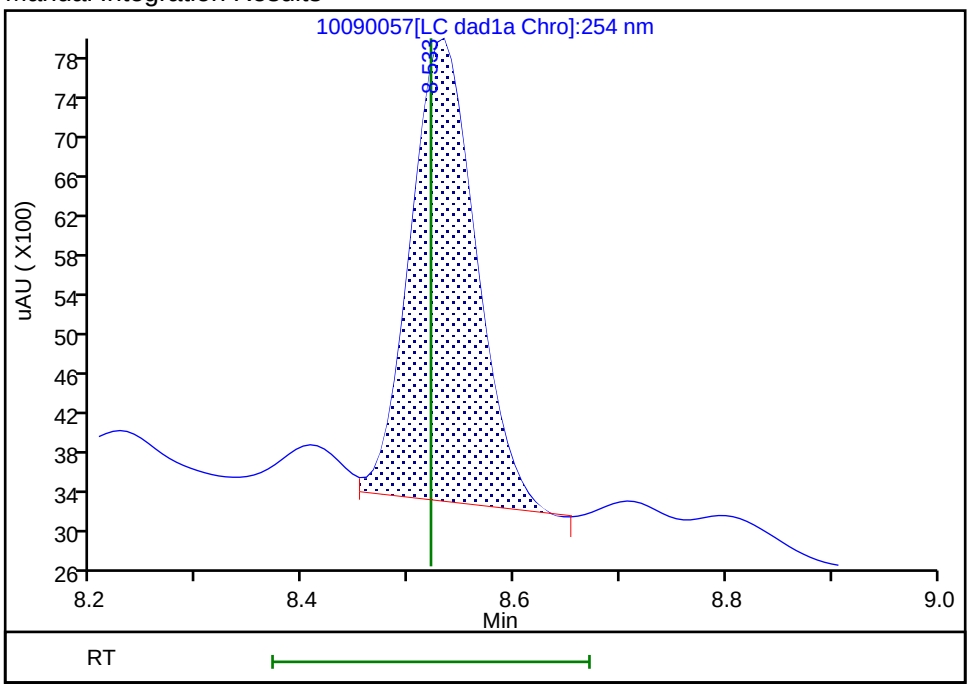
Processing Integration Results

RT: 8.53
Area: 29062
Amount: 0.234540
Amount Units: ug/mL



Manual Integration Results

RT: 8.53
Area: 19930
Amount: 0.160841
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 11:40:24 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

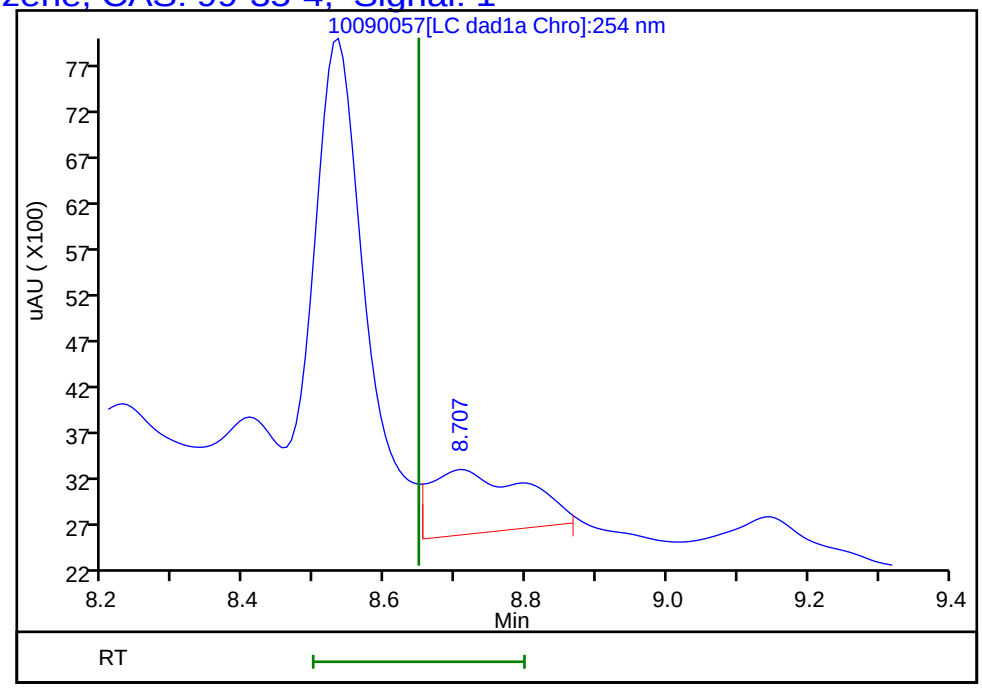
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090057.d				
Injection Date:	10-Oct-2023 05:31:37	Instrument ID:	CHHPLC_X3		
Lims ID:	280-182239-B-8-A	Lab Sample ID:	280-182239-8		
Client ID:	LL3mw-248-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	57	Worklist Smp#:	57
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

RT: 8.71
Response: 6278
Amount: 0.029054



Reviewer: K8YG, 10-Oct-2023 11:40:53
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

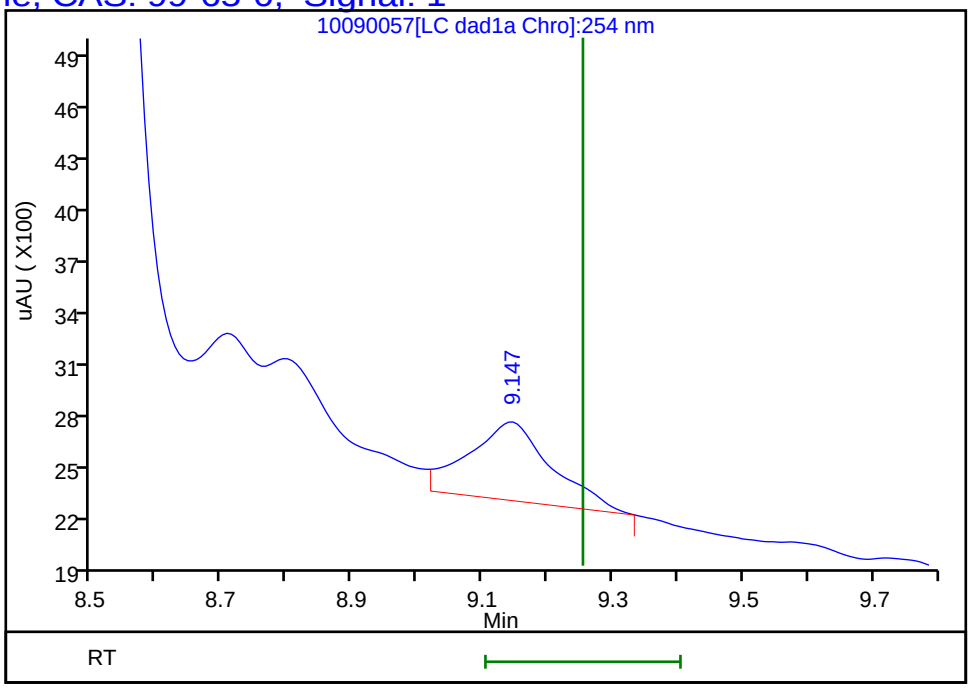
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090057.d
Injection Date: 10-Oct-2023 05:31:37 Instrument ID: CHHPLC_X3
Lims ID: 280-182239-B-8-A Lab Sample ID: 280-182239-8
Client ID: LL3mw-248-230901-GW
Operator ID: JZ/JG ALS Bottle#: 57 Worklist Smp#: 57
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

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

RT: 9.15
Response: 3988
Amount: 0.013595



Reviewer: K8YG, 10-Oct-2023 11:40:53
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

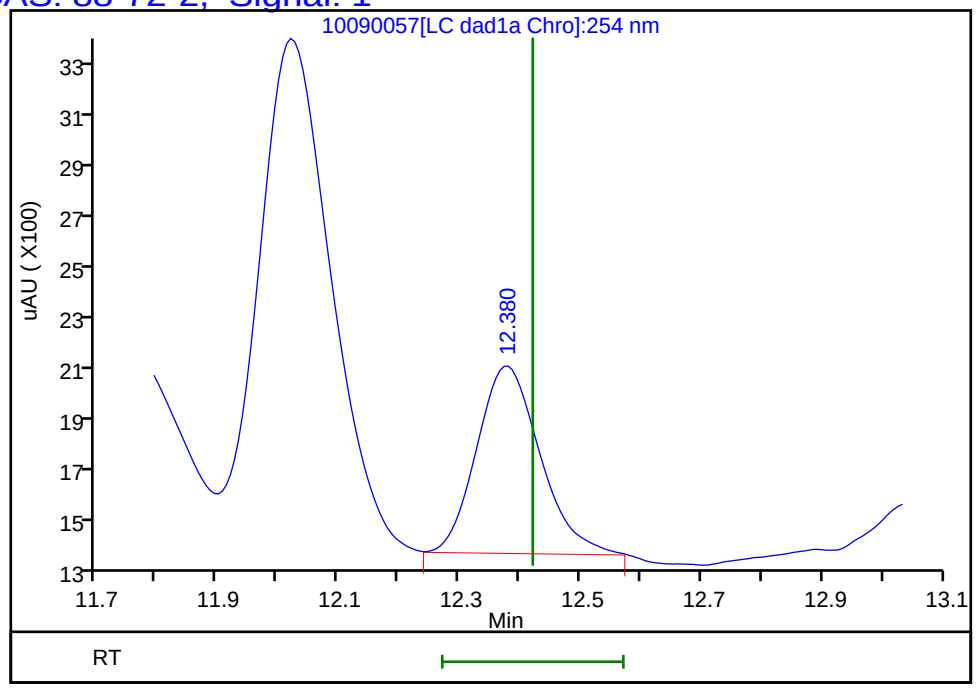
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090057.d
Injection Date: 10-Oct-2023 05:31:37 Instrument ID: CHHPLC_X3
Lims ID: 280-182239-B-8-A Lab Sample ID: 280-182239-8
Client ID: LL3mw-248-230901-GW
Operator ID: JZ/JG ALS Bottle#: 57 Worklist Smp#: 57
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

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

RT: 12.38
Response: 5073
Amount: 0.040223



Reviewer: K8YG, 10-Oct-2023 11:40:53
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

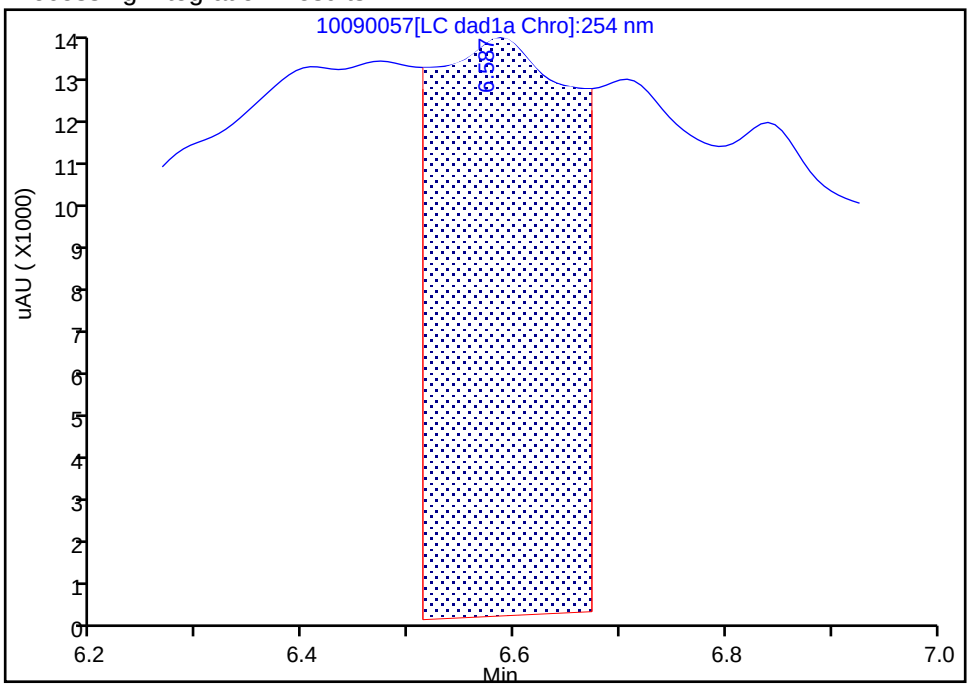
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Injection Date:	10-Oct-2023 05:31:37	Instrument ID:	CHHPLC_X3		
Lims ID:	280-182239-B-8-A	Lab Sample ID:	280-182239-8		
Client ID:	LL3mw-248-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	57	Worklist Smp#:	57
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

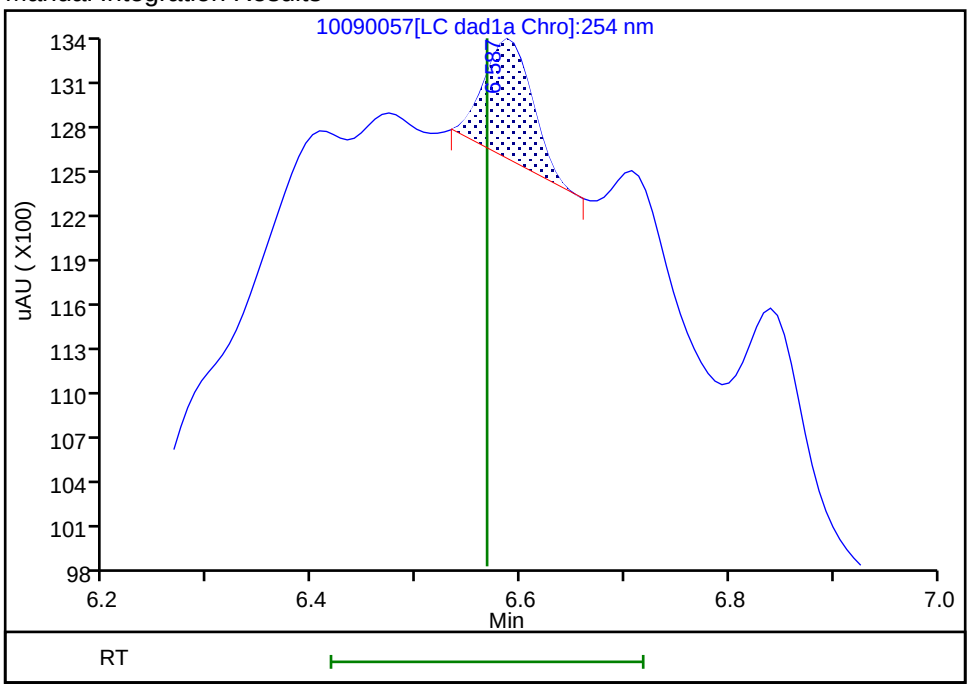
Processing Integration Results

RT: 6.59
Area: 113904
Amount: 1.208462
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 2614
Amount: 0.027733
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 11:40:34 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

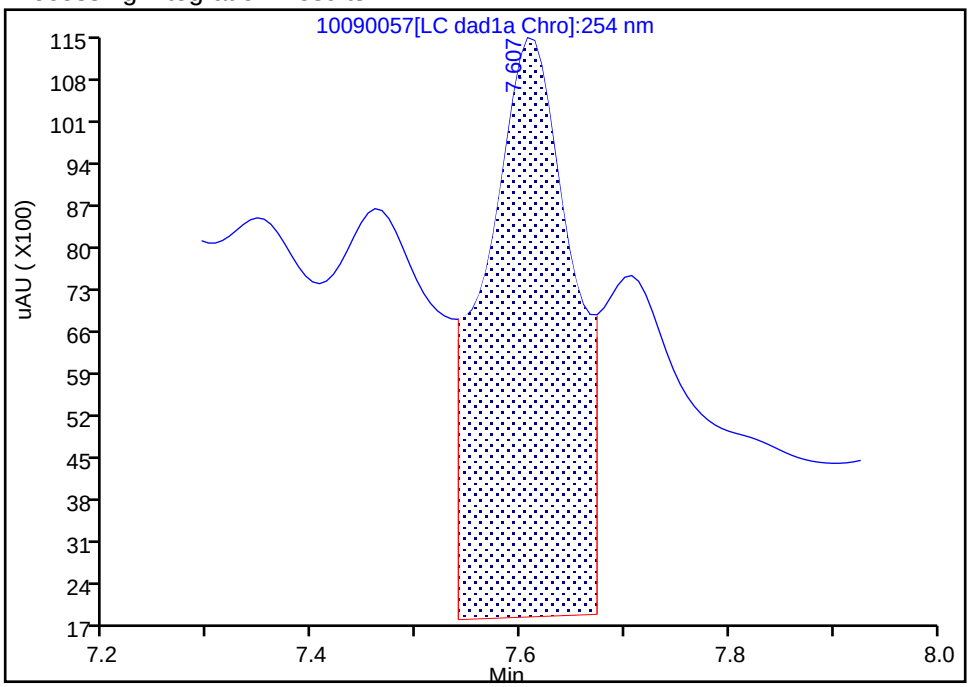
Data File:	\\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090057.d				
Injection Date:	10-Oct-2023 05:31:37	Instrument ID:	CHHPLC_X3		
Lims ID:	280-182239-B-8-A	Lab Sample ID:	280-182239-8		
Client ID:	LL3mw-248-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	57	Worklist Smp#:	57
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

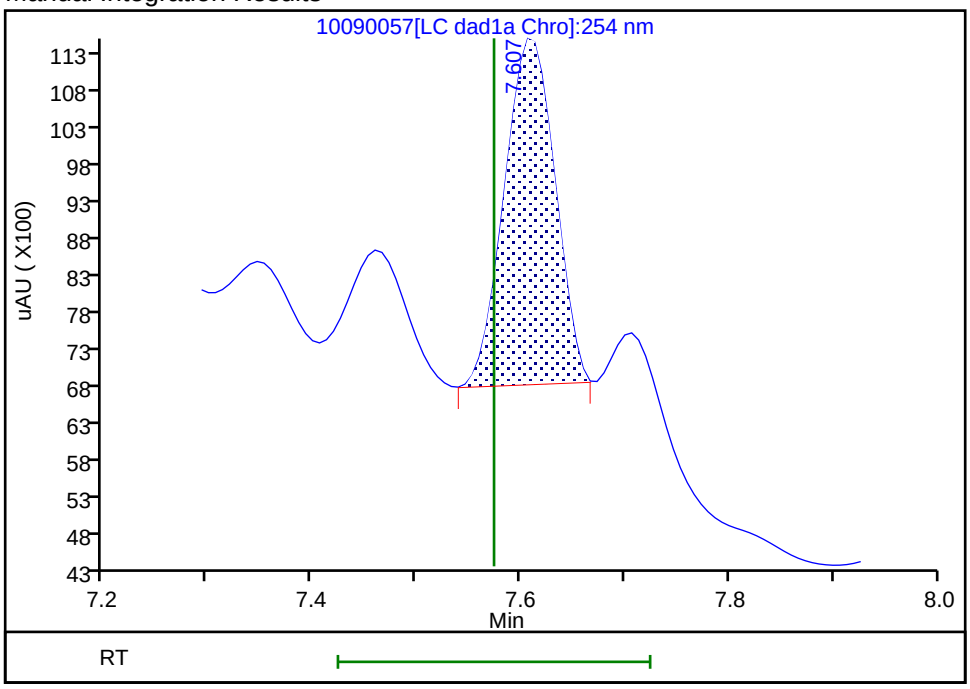
Processing Integration Results

RT: 7.61
Area: 55501
Amount: 0.502304
Amount Units: ug/mL



Manual Integration Results

RT: 7.61
Area: 15602
Amount: 0.141204
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 11:40:42 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182239-1

SDG No.:

Client Sample ID: LL3mw-248-230901-GW | Lab Sample ID: 280-182239-8

Matrix: Water | Lab File ID: 10110026.D

Analysis Method: 8330B | Date Collected: 10/02/2023 12:12

Extraction Method: 3535 | Date Extracted: 10/04/2023 13:30

Sample wt/vol: 487.9(mL) | Date Analyzed: 10/12/2023 03:24

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.: 629372 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
2691-41-0	HMX	0.20	U M	0.22	0.20	0.090
121-82-4	RDX	0.20	U M	0.22	0.20	0.053

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	86		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\10110026.D
Lims ID: 280-182239-B-8-A
Client ID: LL3mw-248-230901-GW
Sample Type: Client
Inject. Date: 12-Oct-2023 03:24:54 ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-182239-B-8-A
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA

Method: \\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 12-Oct-2023 12:50:38 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1633

First Level Reviewer: K8YG Date: 12-Oct-2023 12:48:36

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
6 HMX	1		6.805			ND	U
8 RDX	1		9.052			ND	U
9 Nitrobenzene	1	11.693	11.625	0.068	11924	0.0321	
$ 10 1,2-Dinitrobenzene	1	12.613	12.572	0.041	44032	0.1715	
12 1,3-Dinitrobenzene	1		14.698			ND	U
13 Nitroglycerin	2		15.165			ND	
14 o-Nitrotoluene	1		15.785			ND	
15 p-Nitrotoluene	1		16.012			ND	U
16 4-Amino-2,6-dinitrotoluene	1		16.525			ND	U
17 m-Nitrotoluene	1		16.858			ND	
18 2-Amino-4,6-dinitrotoluene	1		17.338			ND	U
19 1,3,5-Trinitrobenzene	1		17.532			ND	U
20 2,6-Dinitrotoluene	1		18.658			ND	7
21 2,4-Dinitrotoluene	1		19.118			ND	
22 Tetryl	1		22.339			ND	
23 2,4,6-Trinitrotoluene	1		23.199			ND	
24 PETN	2		24.352			ND	

QC Flag Legend

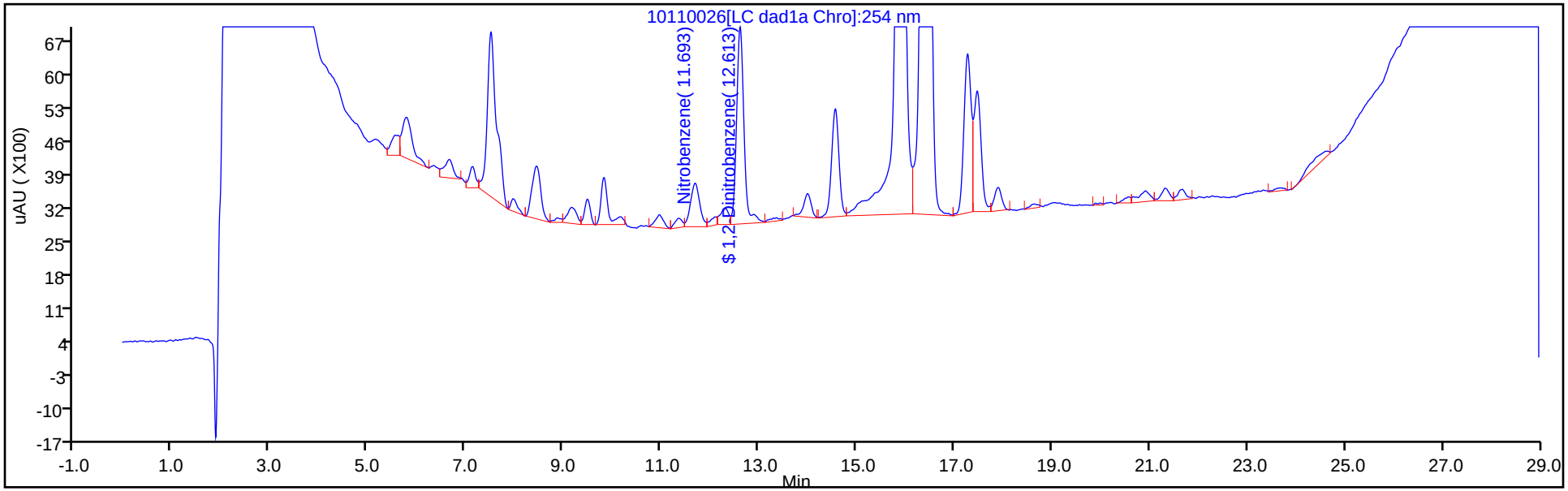
Processing Flags
7 - Failed Limit of Detection
Review Flags
U - Marked Undetected

Report Date: 12-Oct-2023 12:50:43 Chrom Revision: 2.3 22-Sep-2023 11:33:50

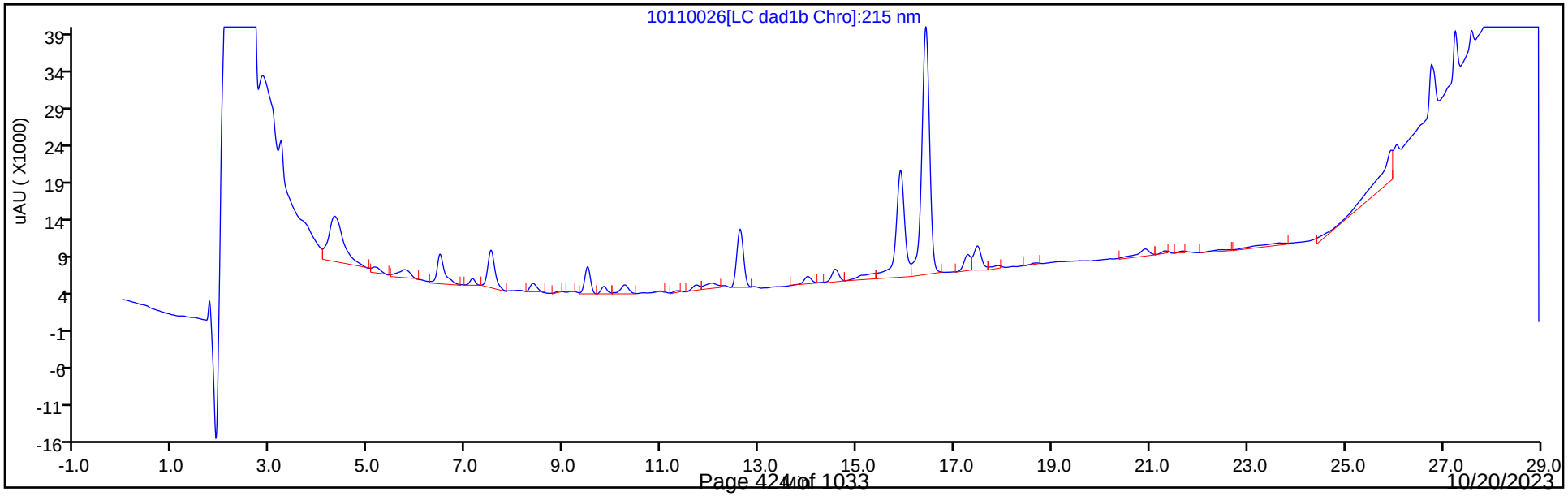
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20231011-126415.b\10110026.d				
Injection Date:	12-Oct-2023 03:24:54	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	280-182239-B-8-A	Lab Sample ID:	280-182239-8	Worklist Smp#:	26
Client ID:	LL3mw-248-230901-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\10110026.D				
Lims ID:	280-182239-B-8-A				
Client ID:	LL3mw-248-230901-GW				
Sample Type:	Client				
Inject. Date:	12-Oct-2023 03:24:54	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-182239-B-8-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_G2_LUNA		
Method:	\\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	12-Oct-2023 12:50:38	Calib Date:	26-Sep-2023 04:54:46		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX1633				

First Level Reviewer: K8YG Date: 12-Oct-2023 12:48:36

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1715	85.74

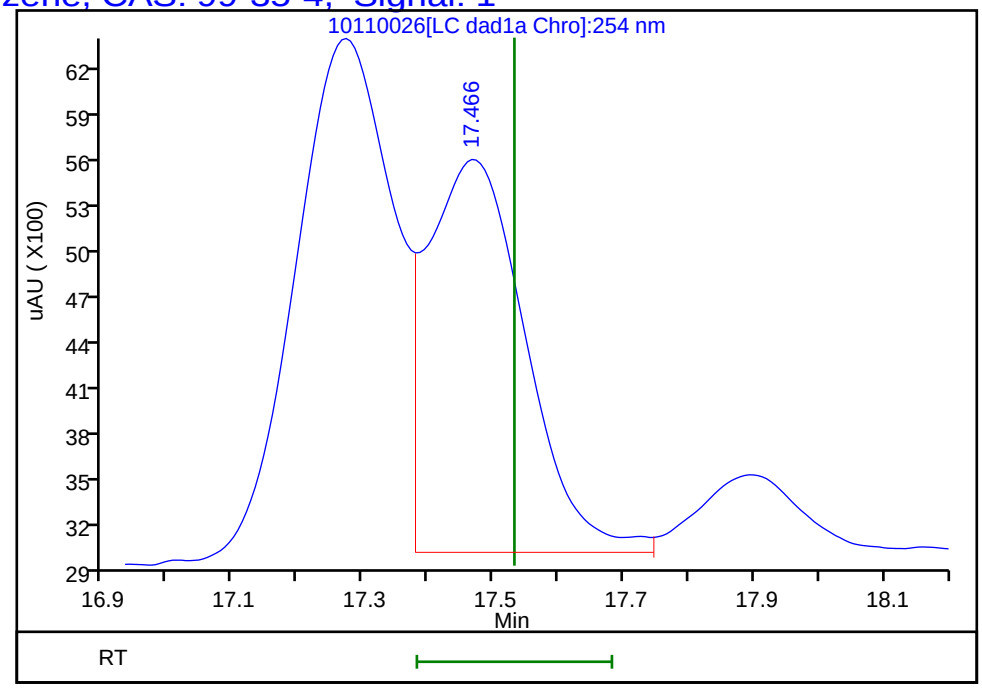
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20231011-126415.b\10110026.d				
Injection Date:	12-Oct-2023 03:24:54	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-182239-B-8-A	Lab Sample ID:	280-182239-8		
Client ID:	LL3mw-248-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

19 1,3,5-Trinitrobenzene, CAS: 99-35-4, Signal: 1

RT: 17.47
Response: 26226
Amount: 0.063712



Reviewer: K8YG, 12-Oct-2023 12:48:36
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

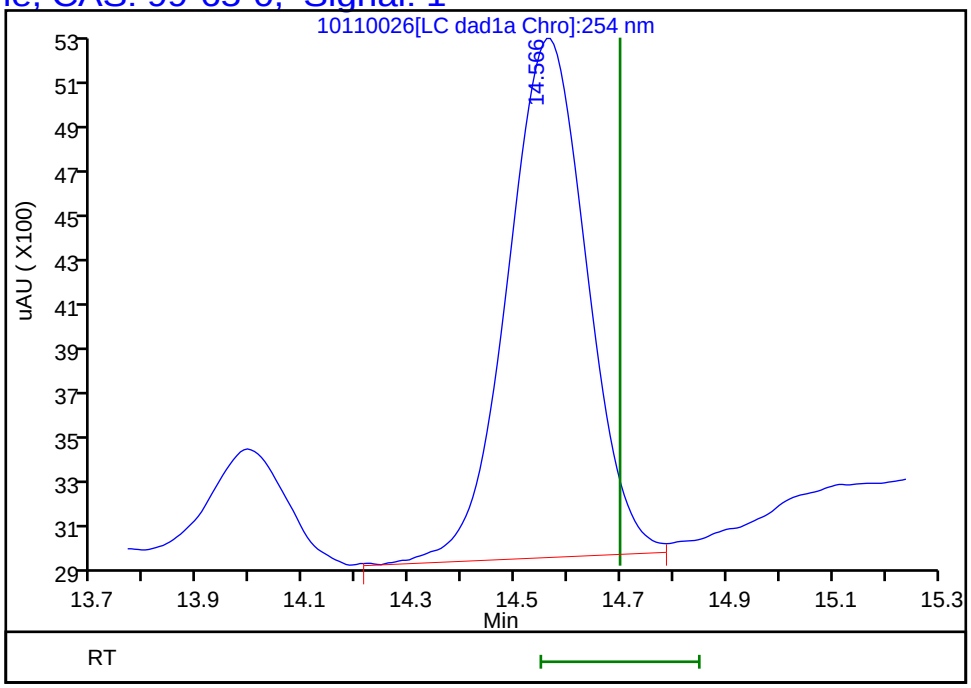
Eurofins Denver

Data File: \\chromfs\denver\chromdata\g2_luna\20231011-126415.b\10110026.d
Injection Date: 12-Oct-2023 03:24:54 Instrument ID: CHHPLC_G2_LUNA
Lims ID: 280-182239-B-8-A Lab Sample ID: 280-182239-8
Client ID: LL3mw-248-230901-GW
Operator ID: JZ/JG ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

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

RT: 14.57
Response: 23584
Amount: 0.040695



Reviewer: K8YG, 12-Oct-2023 12:48:36
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

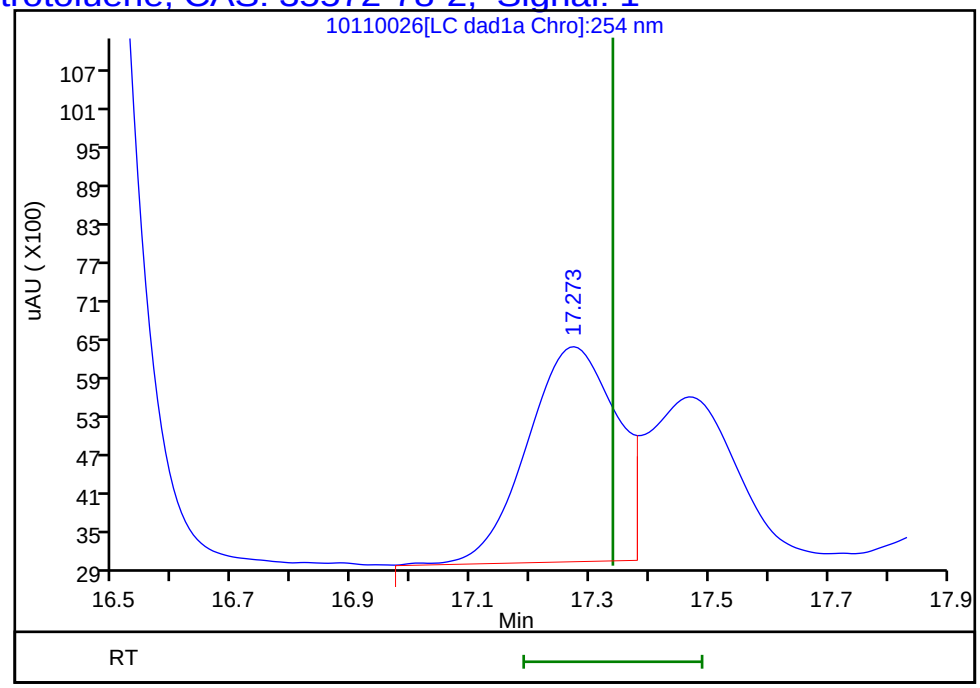
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20231011-126415.b\10110026.d				
Injection Date:	12-Oct-2023 03:24:54	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-182239-B-8-A	Lab Sample ID:	280-182239-8		
Client ID:	LL3mw-248-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2, Signal: 1

RT: 17.27
Response: 34645
Amount: 0.088292



Reviewer: K8YG, 12-Oct-2023 12:48:36
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

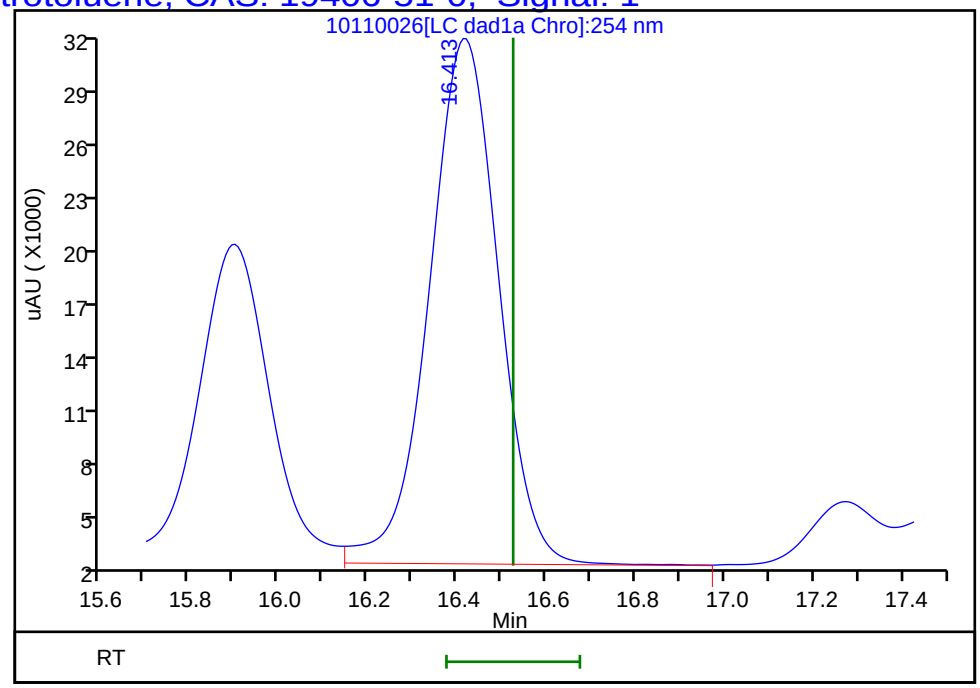
Eurofins Denver

Data File: \\chromfs\denver\chromdata\g2_luna\20231011-126415.b\10110026.d
Injection Date: 12-Oct-2023 03:24:54 Instrument ID: CHHPLC_G2_LUNA
Lims ID: 280-182239-B-8-A Lab Sample ID: 280-182239-8
Client ID: LL3mw-248-230901-GW
Operator ID: JZ/JG ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330

Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0, Signal: 1

RT: 16.41
Response: 304091
Amount: 1.123864



Reviewer: K8YG, 12-Oct-2023 12:48:36
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

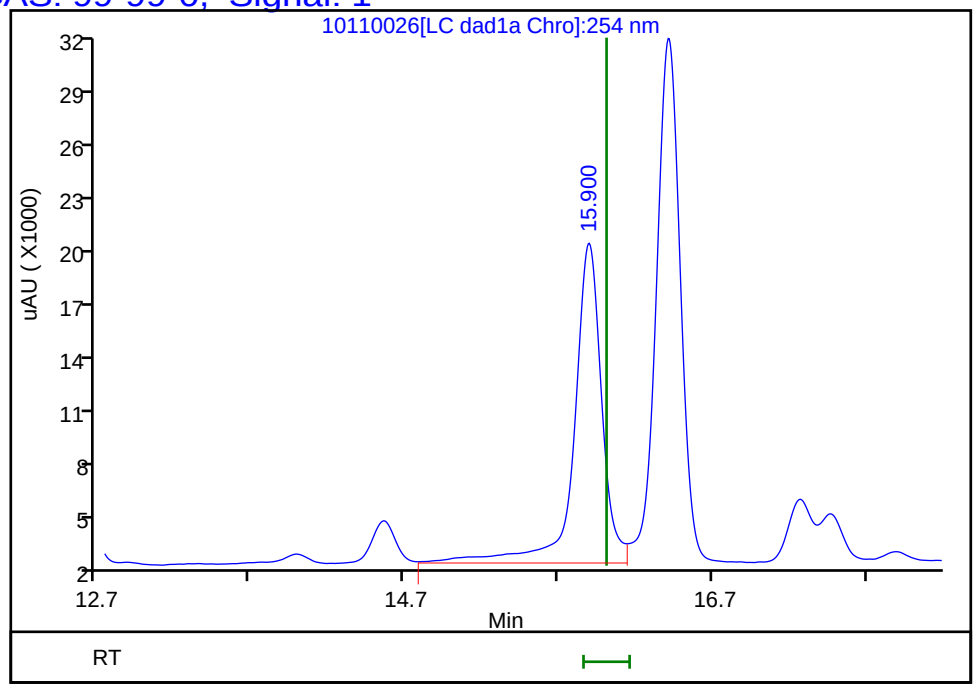
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20231011-126415.b\10110026.d				
Injection Date:	12-Oct-2023 03:24:54	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-182239-B-8-A	Lab Sample ID:	280-182239-8		
Client ID:	LL3mw-248-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

RT: 15.90
Response: 212271
Amount: 0.975451



Reviewer: K8YG, 12-Oct-2023 12:48:36
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

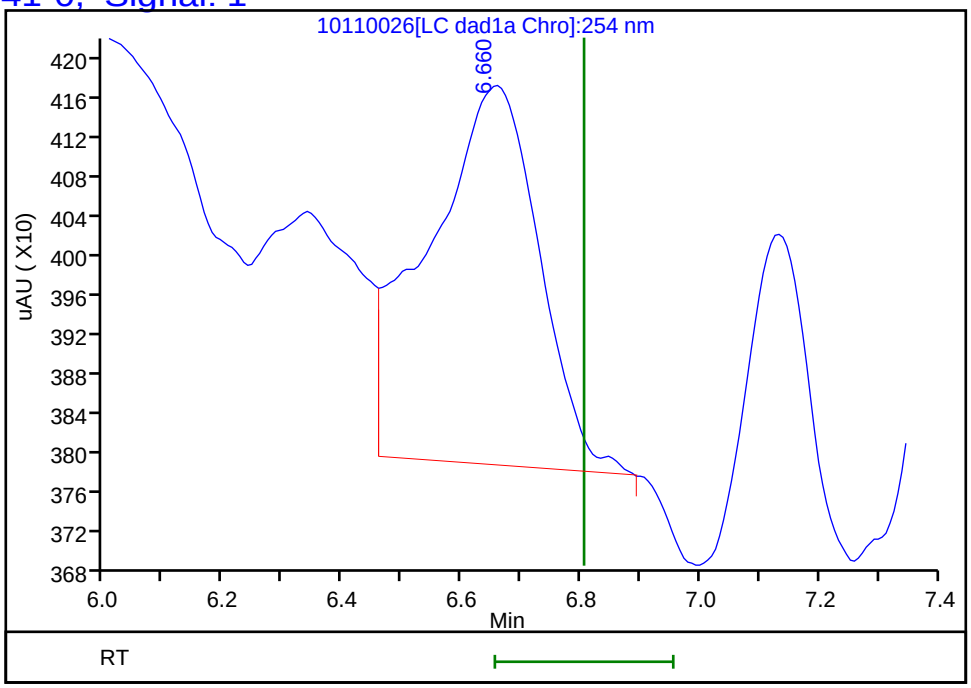
Eurofins Denver

Data File: \\chromfs\denver\chromdata\g2_luna\20231011-126415.b\10110026.d

Injection Date:	12-Oct-2023 03:24:54	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-182239-B-8-A	Lab Sample ID:	280-182239-8		
Client ID:	LL3mw-248-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

RT: 6.66
Response: 4947
Amount: 0.028518



Reviewer: K8YG, 12-Oct-2023 12:48:36
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

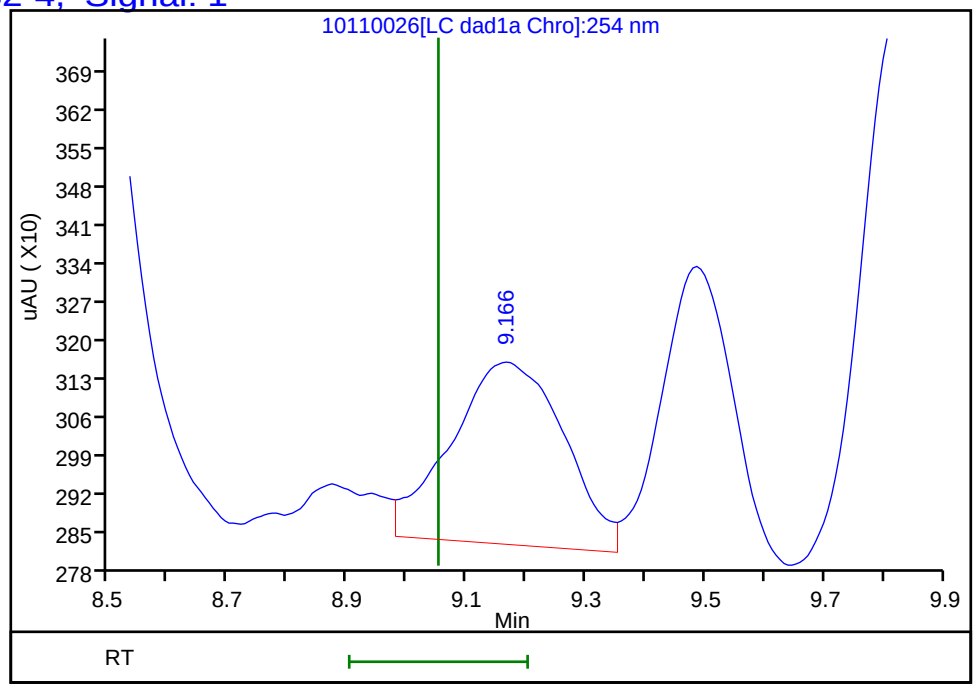
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20231011-126415.b\10110026.d				
Injection Date:	12-Oct-2023 03:24:54	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-182239-B-8-A	Lab Sample ID:	280-182239-8		
Client ID:	LL3mw-248-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

RT: 9.17
Response: 4350
Amount: 0.020955



Reviewer: K8YG, 12-Oct-2023 12:48:36
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182239-1

SDG No.:

Client Sample ID: LL1mw-091-230901-GW | Lab Sample ID: 280-182239-9

Matrix: Water | Lab File ID: 10090058.D

Analysis Method: 8330B | Date Collected: 10/02/2023 12:30

Extraction Method: 3535 | Date Extracted: 10/04/2023 13:30

Sample wt/vol: 486.5(mL) | Date Analyzed: 10/10/2023 05:54

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

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

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

Cleanup Factor:

Analysis Batch No.: 628987 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.21	U M	0.22	0.21	0.086
99-65-0	1,3-Dinitrobenzene	0.10	U M	0.11	0.10	0.038
118-96-7	2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.046
121-14-2	2,4-Dinitrotoluene	0.082	U	0.10	0.082	0.028
606-20-2	2,6-Dinitrotoluene	0.082	U	0.10	0.082	0.041
35572-78-2	2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.052
88-72-2	2-Nitrotoluene	0.21	U M	0.22	0.21	0.088
99-08-1	3-Nitrotoluene	0.36	U	0.41	0.36	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U Q	0.15	0.12	0.059
99-99-0	4-Nitrotoluene	0.41	U	0.42	0.41	0.10
98-95-3	Nitrobenzene	0.21	U	0.22	0.21	0.094
55-63-0	Nitroglycerin	2.1	U	2.2	2.1	0.95
78-11-5	PETN	1.0	U	1.1	1.0	0.46
479-45-8	Tetryl	0.10	U	0.11	0.10	0.033

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	100	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\10090058.D
Lims ID: 280-182239-A-9-A
Client ID: LL1mw-091-230901-GW
Sample Type: Client
Inject. Date: 10-Oct-2023 05:54:35 ALS Bottle#: 58 Worklist Smp#: 58
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-182239-A-9-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 10-Oct-2023 11:59:43 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1622

First Level Reviewer: K8YG Date: 10-Oct-2023 09:28:41

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1	6.586	6.568	0.018	2061	0.0219	M
8 RDX	1	7.606	7.574	0.032	14923	0.1351	M
$ 10 1,2-Dinitrobenzene	1	8.526	8.521	0.005	24819	0.2003	M
11 1,3,5-Trinitrobenzene	1		8.648			ND	MU
12 1,3-Dinitrobenzene	1		9.254			ND	U
13 Nitrobenzene	1		9.621			ND	
15 Tetryl	1		9.974			ND	
16 Nitroglycerin	2		10.421			ND	
17 2,4,6-Trinitrotoluene	1		10.861			ND	
18 4-Amino-2,6-dinitrotoluene	1		11.034			ND	
19 2-Amino-4,6-dinitrotoluene	1		11.281			ND	
20 2,6-Dinitrotoluene	1		11.441			ND	
21 2,4-Dinitrotoluene	1		11.607			ND	
22 o-Nitrotoluene	1		12.421			ND	U
23 p-Nitrotoluene	1		12.827			ND	
24 m-Nitrotoluene	1		13.387			ND	
25 PETN	2		14.514			ND	

QC Flag Legend

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

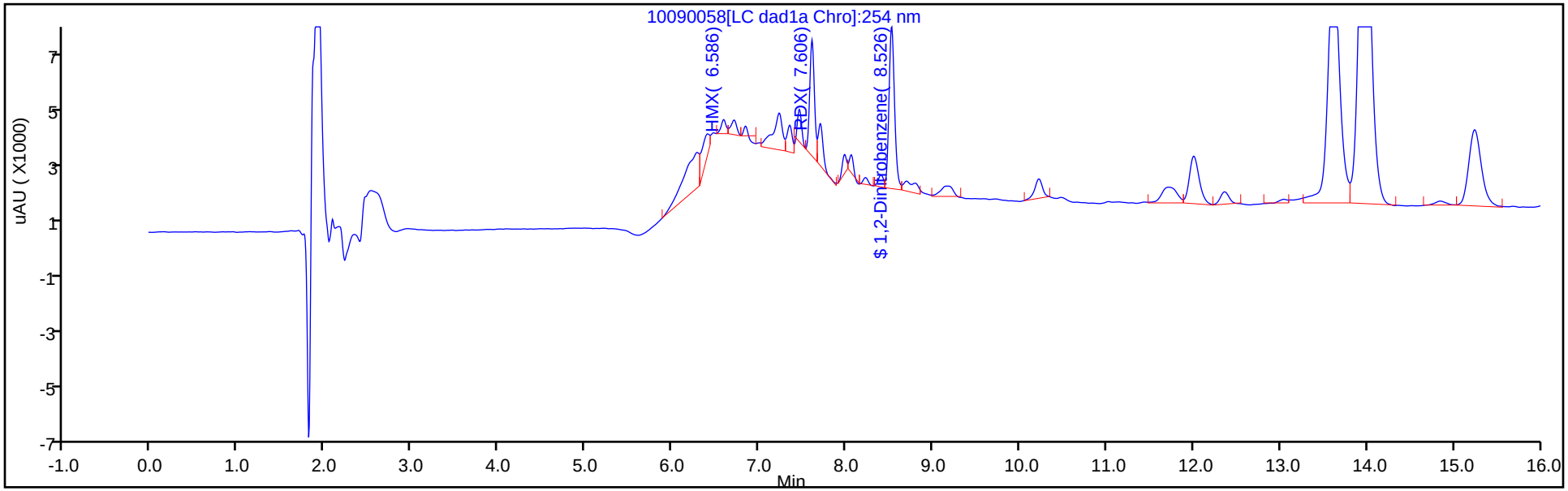
Report Date: 10-Oct-2023 11:59:50 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

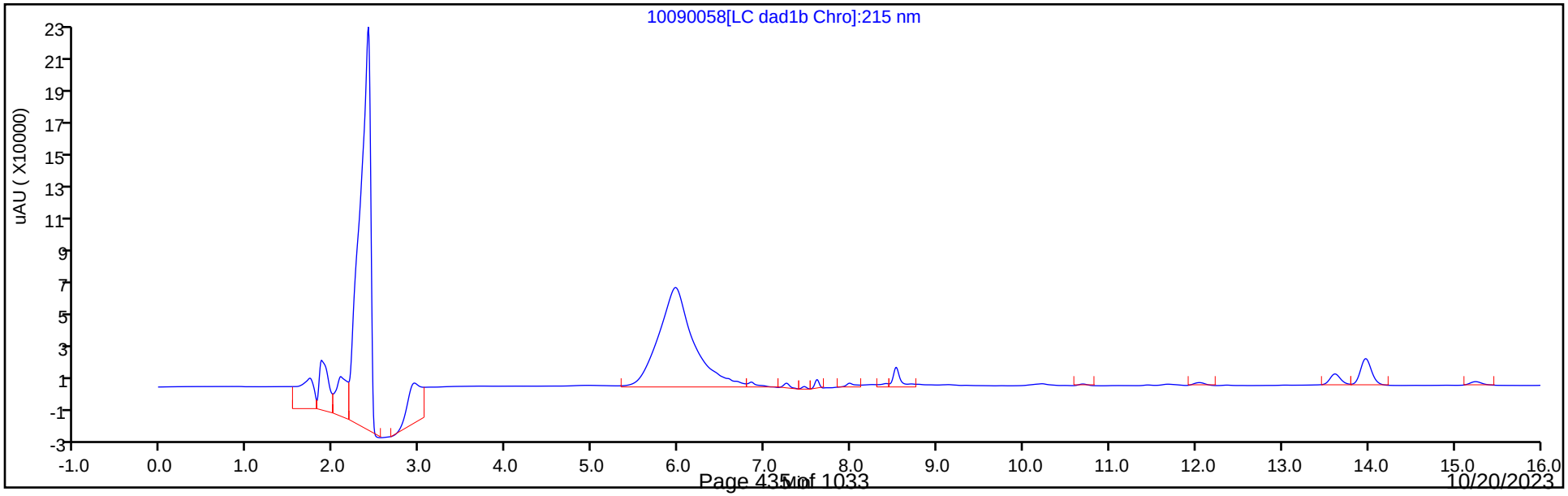
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Injection Date:	10-Oct-2023 05:54:35	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-182239-A-9-A	Lab Sample ID:	280-182239-9	Worklist Smp#:	58
Client ID:	LL1mw-091-230901-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	58
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



10/20/2023
4:00 PM

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\10090058.D				
Lims ID:	280-182239-A-9-A				
Client ID:	LL1mw-091-230901-GW				
Sample Type:	Client				
Inject. Date:	10-Oct-2023 05:54:35	ALS Bottle#:	58	Worklist Smp#:	58
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-182239-A-9-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	10-Oct-2023 11:59:43	Calib Date:	24-Jun-2023 00:23:49		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1622				

First Level Reviewer: K8YG Date: 10-Oct-2023 09:28:41

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2003	100.15

Manual Integration/User Assign Peak Report

Eurofins Denver

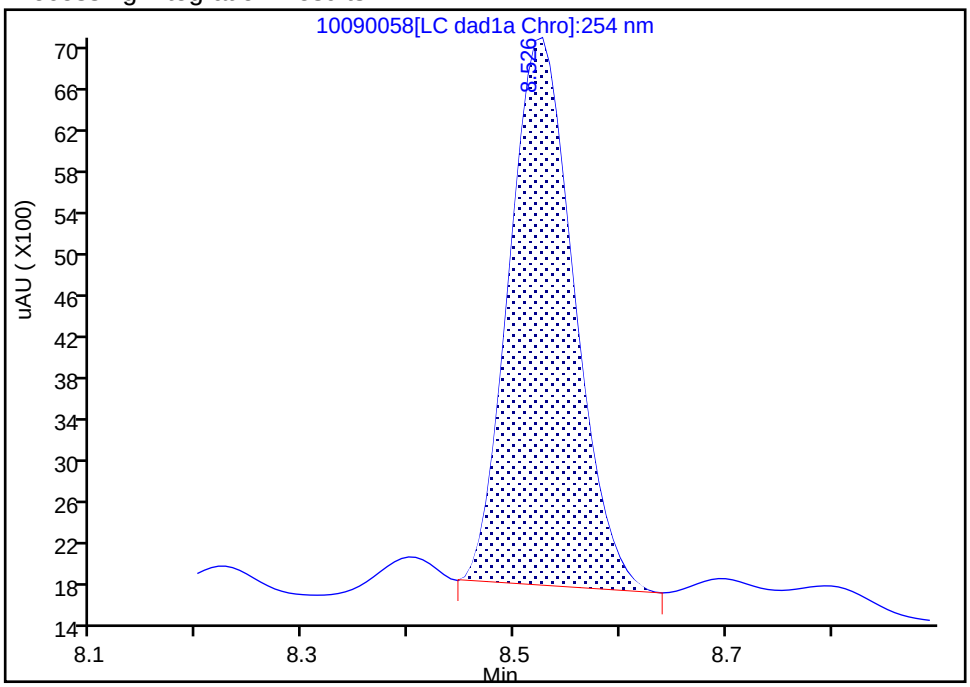
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Injection Date:	10-Oct-2023 05:54:35	Instrument ID:	CHHPLC_X3		
Lims ID:	280-182239-A-9-A	Lab Sample ID:	280-182239-9		
Client ID:	LL1mw-091-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	58	Worklist Smp#:	58
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

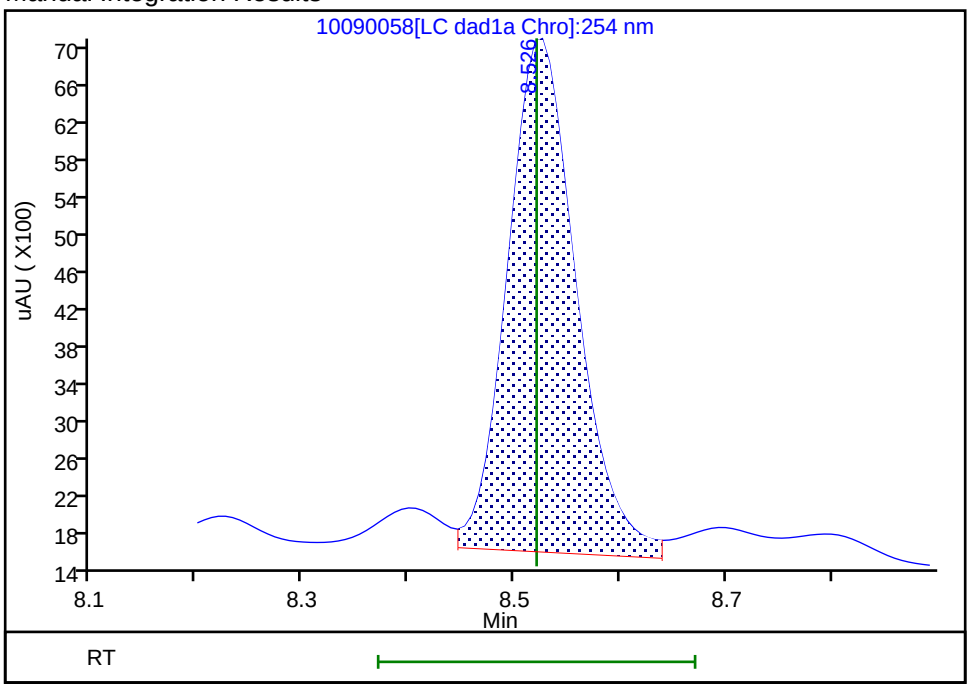
Processing Integration Results

RT: 8.53
Area: 22546
Amount: 0.181953
Amount Units: ug/mL



Manual Integration Results

RT: 8.53
Area: 24819
Amount: 0.200297
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 11:41:03 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

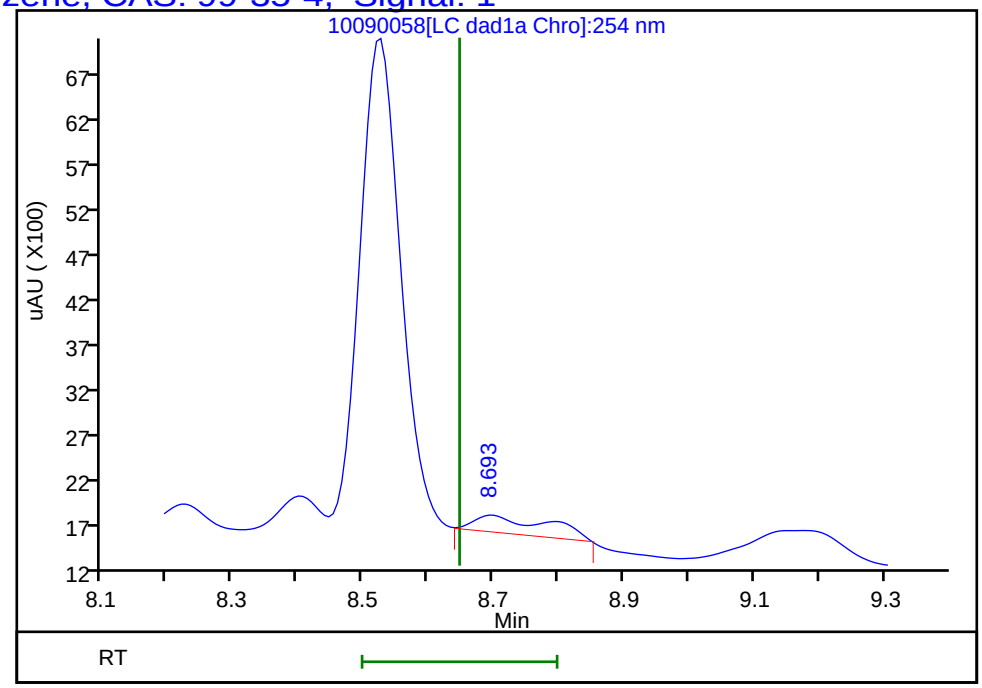
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090058.d				
Injection Date:	10-Oct-2023 05:54:35	Instrument ID:	CHHPLC_X3		
Lims ID:	280-182239-A-9-A	Lab Sample ID:	280-182239-9		
Client ID:	LL1mw-091-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	58	Worklist Smp#:	58
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

RT: 8.69
Response: 1568
Amount: 0.007257



Reviewer: K8YG, 10-Oct-2023 11:41:40
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

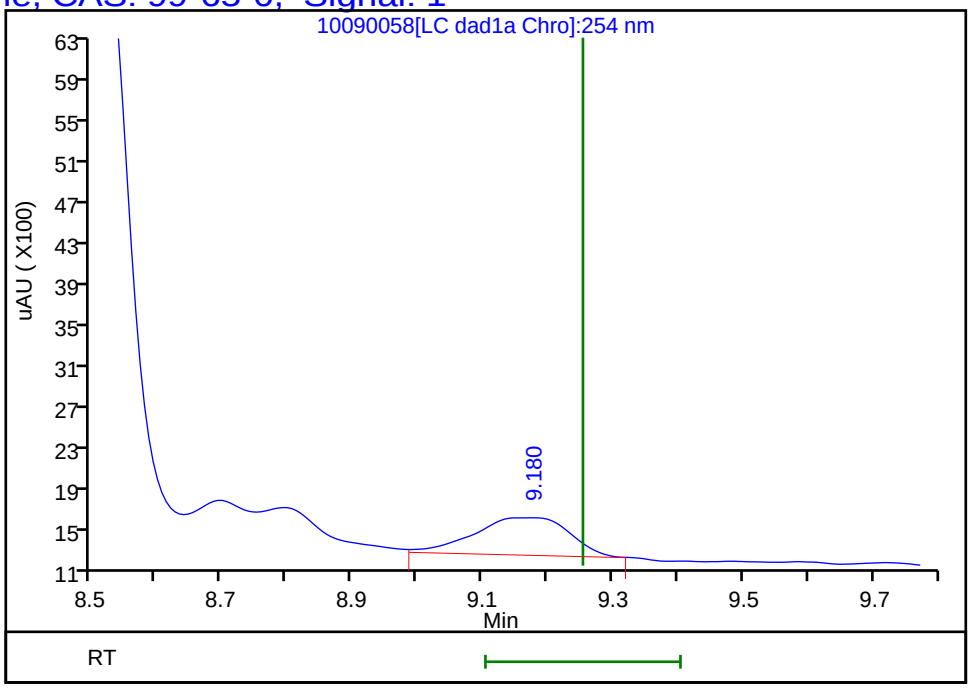
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090058.d
Injection Date: 10-Oct-2023 05:54:35 Instrument ID: CHHPLC_X3
Lims ID: 280-182239-A-9-A Lab Sample ID: 280-182239-9
Client ID: LL1mw-091-230901-GW
Operator ID: JZ/JG ALS Bottle#: 58 Worklist Smp#: 58
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

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

RT: 9.18
Response: 3779
Amount: 0.012882



Reviewer: K8YG, 10-Oct-2023 11:41:40
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

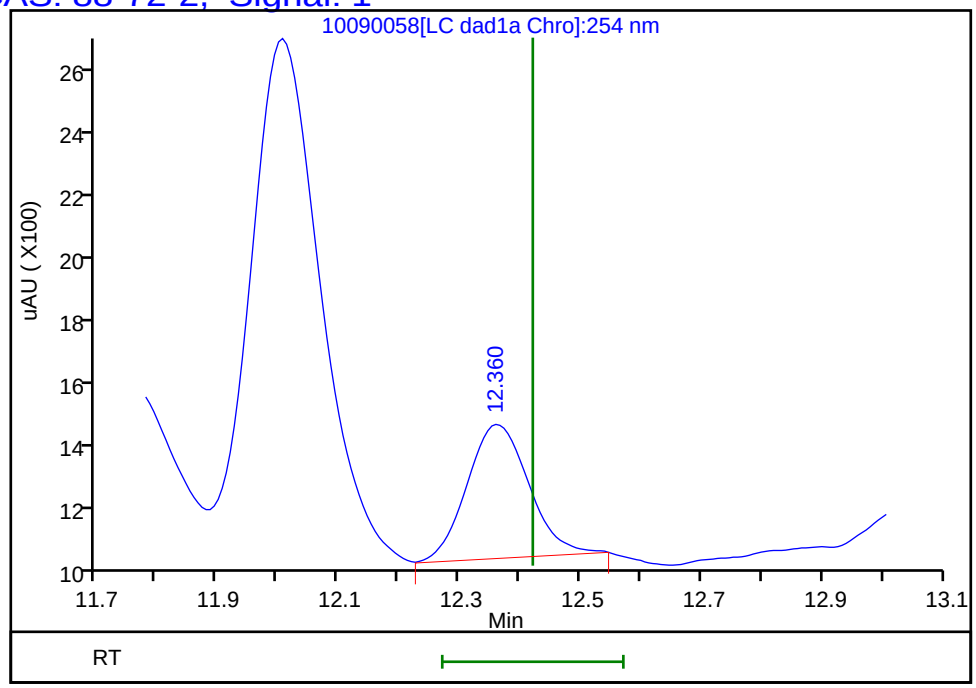
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090058.d
Injection Date: 10-Oct-2023 05:54:35 Instrument ID: CHHPLC_X3
Lims ID: 280-182239-A-9-A Lab Sample ID: 280-182239-9
Client ID: LL1mw-091-230901-GW
Operator ID: JZ/JG ALS Bottle#: 58 Worklist Smp#: 58
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

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

RT: 12.36
Response: 2971
Amount: 0.023556



Reviewer: K8YG, 10-Oct-2023 11:41:40
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

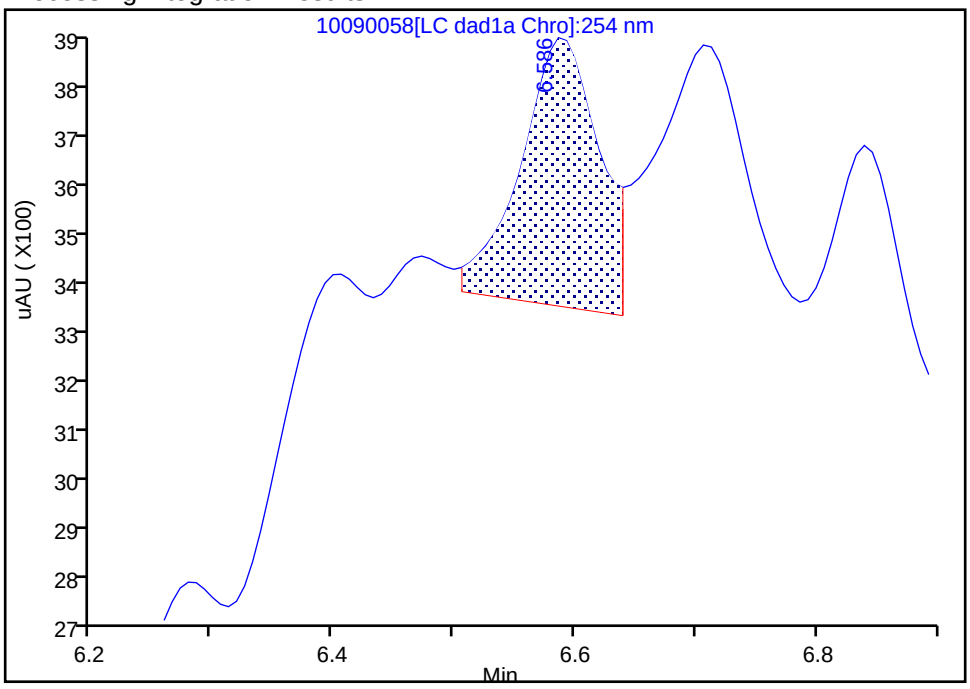
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Injection Date:	10-Oct-2023 05:54:35	Instrument ID:	CHHPLC_X3		
Lims ID:	280-182239-A-9-A	Lab Sample ID:	280-182239-9		
Client ID:	LL1mw-091-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	58	Worklist Smp#:	58
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

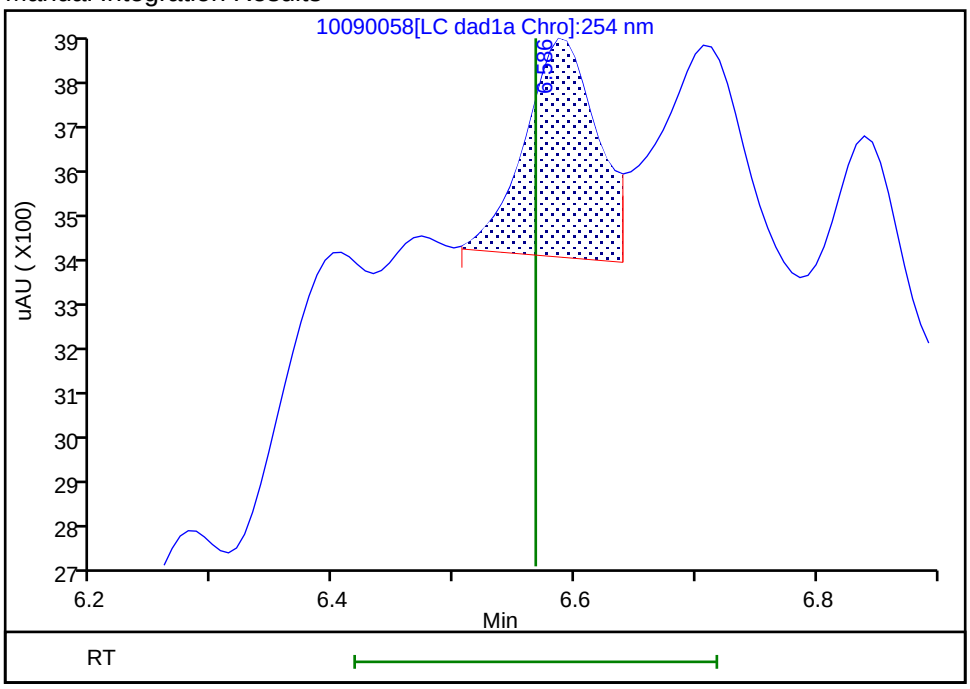
Processing Integration Results

RT: 6.59
Area: 2473
Amount: 0.026237
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 2061
Amount: 0.021866
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 11:41:14 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

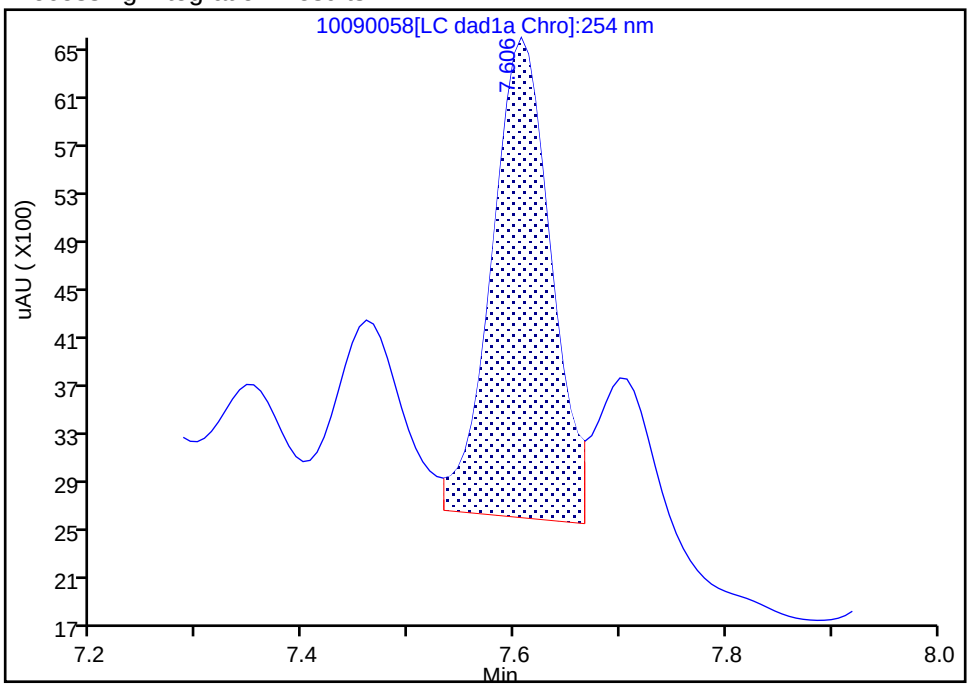
Data File:	\\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090058.d				
Injection Date:	10-Oct-2023 05:54:35	Instrument ID:	CHHPLC_X3		
Lims ID:	280-182239-A-9-A	Lab Sample ID:	280-182239-9		
Client ID:	LL1mw-091-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	58	Worklist Smp#:	58
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

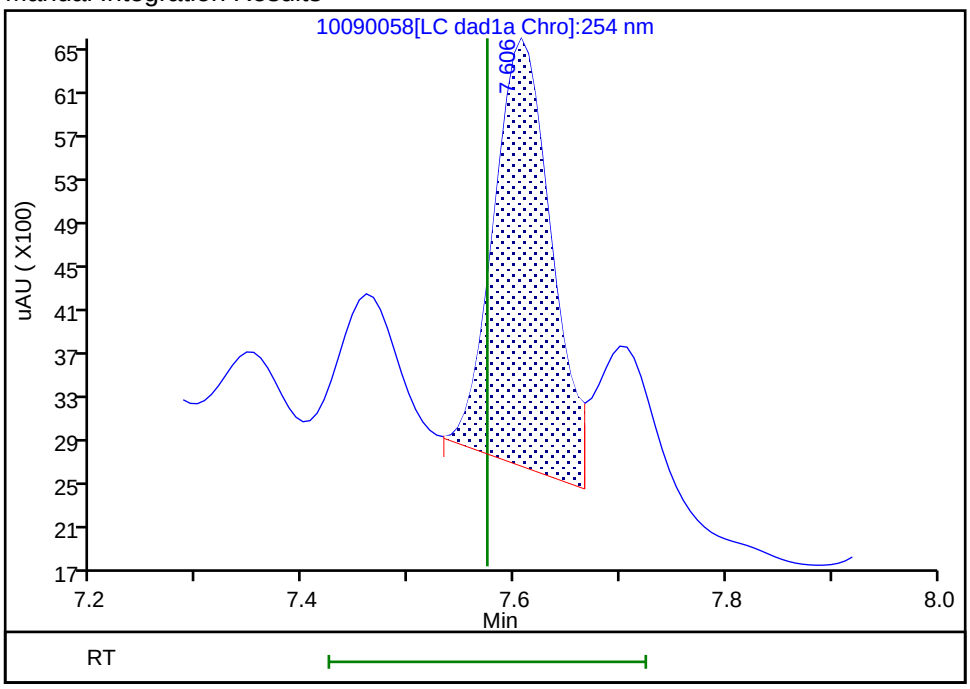
Processing Integration Results

RT: 7.61
Area: 15619
Amount: 0.141358
Amount Units: ug/mL



Manual Integration Results

RT: 7.61
Area: 14923
Amount: 0.135059
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 11:41:24 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182239-1

SDG No.:

Client Sample ID: LL1mw-091-230901-GW | Lab Sample ID: 280-182239-9

Matrix: Water | Lab File ID: 10110027.D

Analysis Method: 8330B | Date Collected: 10/02/2023 12:30

Extraction Method: 3535 | Date Extracted: 10/04/2023 13:30

Sample wt/vol: 486.5(mL) | Date Analyzed: 10/12/2023 04:00

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.: 629372 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
2691-41-0	HMX	0.21	U	0.22	0.21	0.090
121-82-4	RDX	0.21	U M	0.22	0.21	0.053

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	96		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\10110027.D
Lims ID: 280-182239-A-9-A
Client ID: LL1mw-091-230901-GW
Sample Type: Client
Inject. Date: 12-Oct-2023 04:00:50 ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-182239-A-9-A
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA

Method: \\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 12-Oct-2023 12:50:38 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1633

First Level Reviewer: K8YG Date: 12-Oct-2023 12:49:13

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
6 HMX	1		6.805			ND	
8 RDX	1		9.052			ND	U
9 Nitrobenzene	1	11.664	11.625	0.039	8204	0.0221	
$ 10 1,2-Dinitrobenzene	1	12.584	12.572	0.012	49099	0.1912	
12 1,3-Dinitrobenzene	1		14.698			ND	
13 Nitroglycerin	2		15.165			ND	
14 o-Nitrotoluene	1		15.785			ND	U
15 p-Nitrotoluene	1		16.012			ND	
16 4-Amino-2,6-dinitrotoluene	1		16.525			ND	U
17 m-Nitrotoluene	1		16.858			ND	
18 2-Amino-4,6-dinitrotoluene	1		17.338			ND	U
19 1,3,5-Trinitrobenzene	1	17.477	17.532	-0.055	20962	0.0509	
20 2,6-Dinitrotoluene	1		18.658			ND	7
21 2,4-Dinitrotoluene	1		19.118			ND	
22 Tetryl	1		22.339			ND	
23 2,4,6-Trinitrotoluene	1		23.199			ND	
24 PETN	2		24.352			ND	

QC Flag Legend

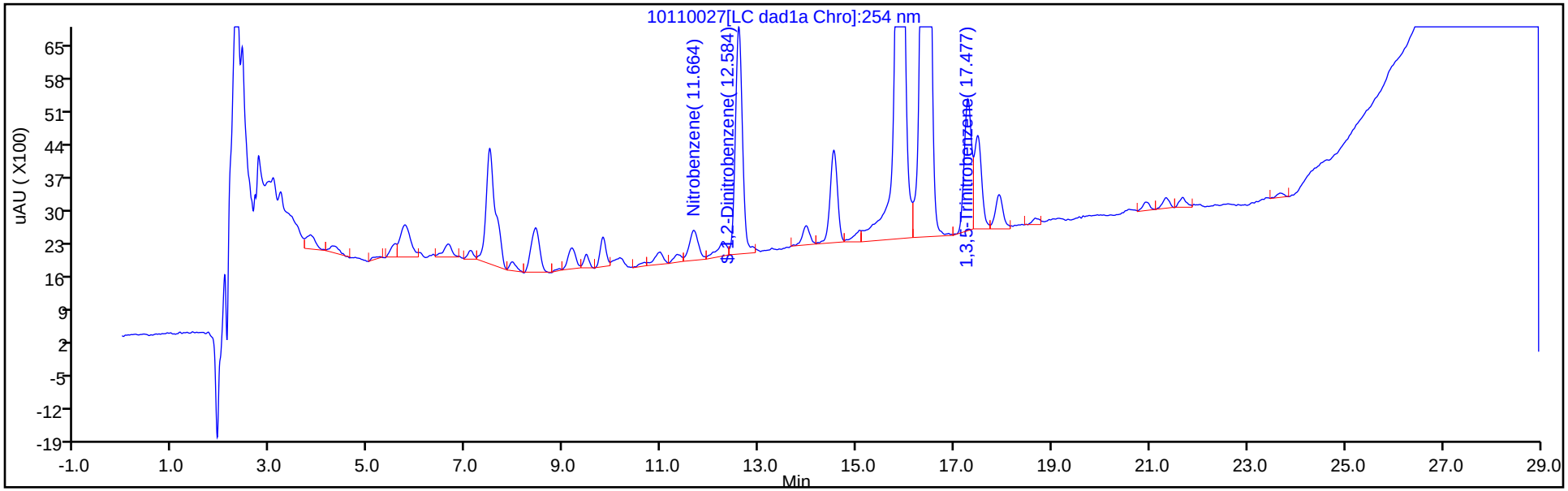
Processing Flags
7 - Failed Limit of Detection
Review Flags
U - Marked Undetected

Report Date: 12-Oct-2023 12:50:44 Chrom Revision: 2.3 22-Sep-2023 11:33:50

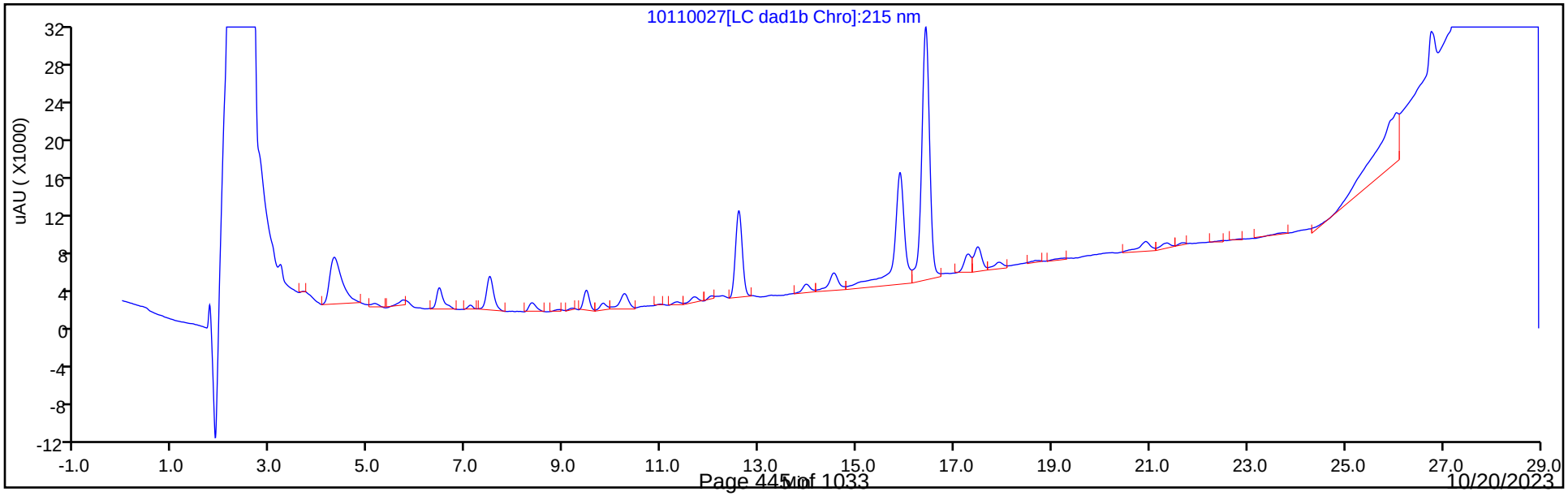
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20231011-126415.b\10110027.d				
Injection Date:	12-Oct-2023 04:00:50	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	280-182239-A-9-A	Lab Sample ID:	280-182239-9	Worklist Smp#:	27
Client ID:	LL1mw-091-230901-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\10110027.D
Lims ID: 280-182239-A-9-A
Client ID: LL1mw-091-230901-GW
Sample Type: Client
Inject. Date: 12-Oct-2023 04:00:50 ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-182239-A-9-A
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA

Method: \\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 12-Oct-2023 12:50:38 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1633

First Level Reviewer: K8YG Date: 12-Oct-2023 12:49:13

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1912	95.61

User Disabled Compound Report

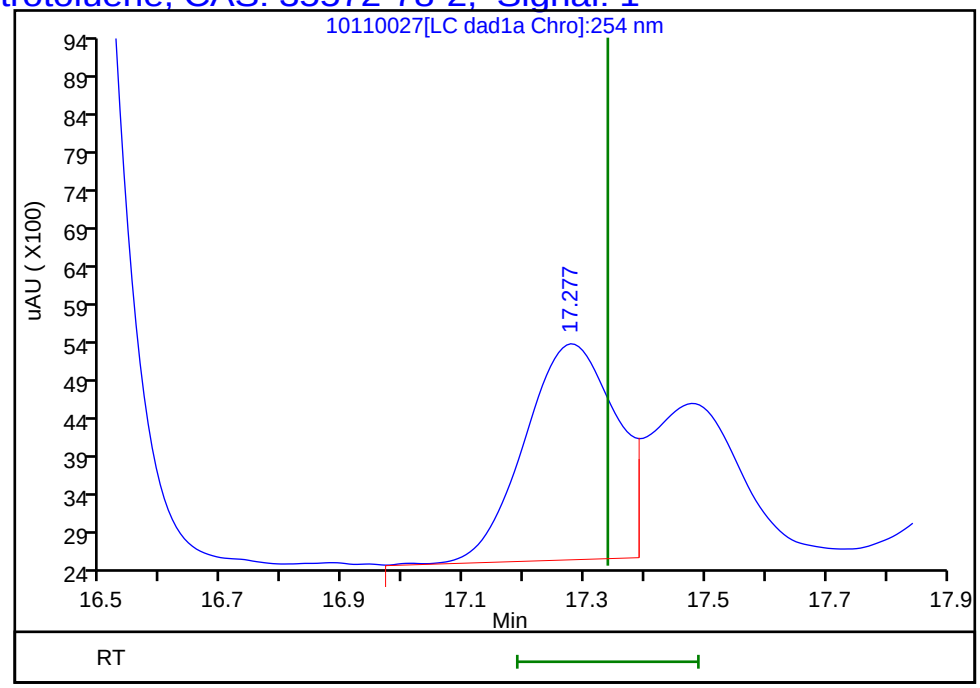
Eurofins Denver

Data File: \\chromfs\denver\chromdata\g2_luna\20231011-126415.b\10110027.d

Injection Date:	12-Oct-2023 04:00:50	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-182239-A-9-A	Lab Sample ID:	280-182239-9		
Client ID:	LL1mw-091-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

18 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2, Signal: 1

RT: 17.28
Response: 29400
Amount: 0.074352



Reviewer: K8YG, 12-Oct-2023 12:49:13

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

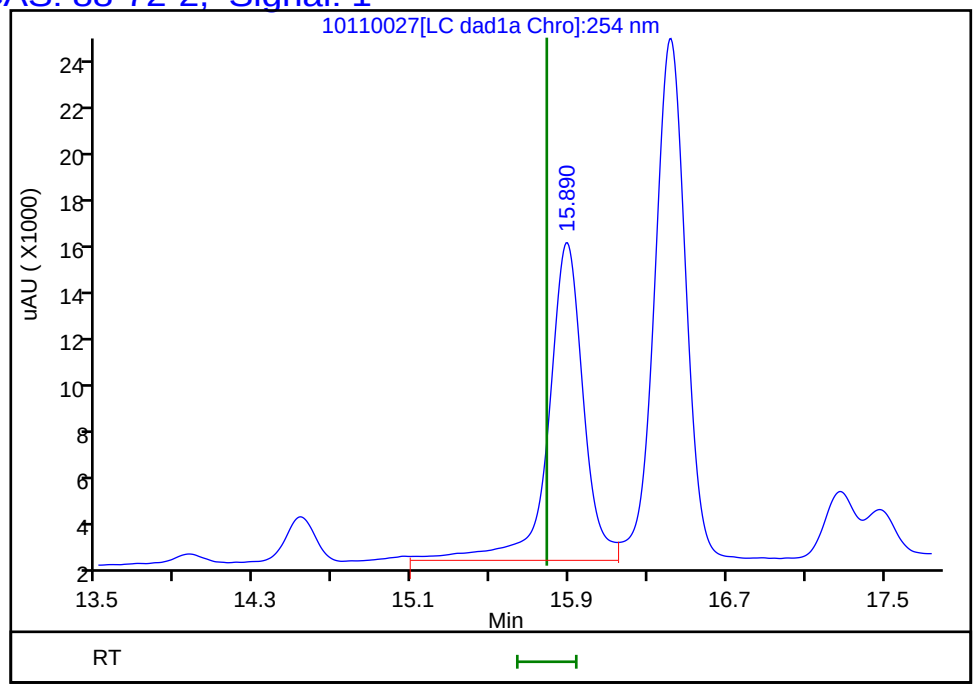
Eurofins Denver

Data File: \\chromfs\denver\chromdata\g2_luna\20231011-126415.b\10110027.d

Injection Date:	12-Oct-2023 04:00:50	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-182239-A-9-A	Lab Sample ID:	280-182239-9		
Client ID:	LL1mw-091-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

RT: 15.89
Response: 169948
Amount: 0.687948



Reviewer: K8YG, 12-Oct-2023 12:49:13
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

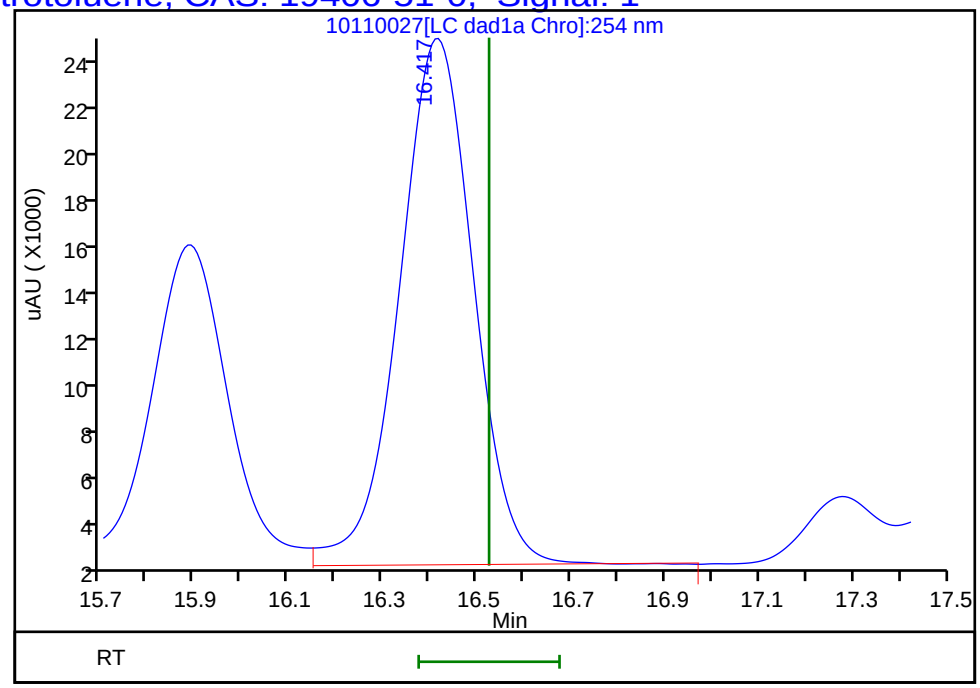
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20231011-126415.b\10110027.d				
Injection Date:	12-Oct-2023 04:00:50	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-182239-A-9-A	Lab Sample ID:	280-182239-9		
Client ID:	LL1mw-091-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0, Signal: 1

RT: 16.42
Response: 245391
Amount: 0.905951



Reviewer: K8YG, 12-Oct-2023 12:49:13
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

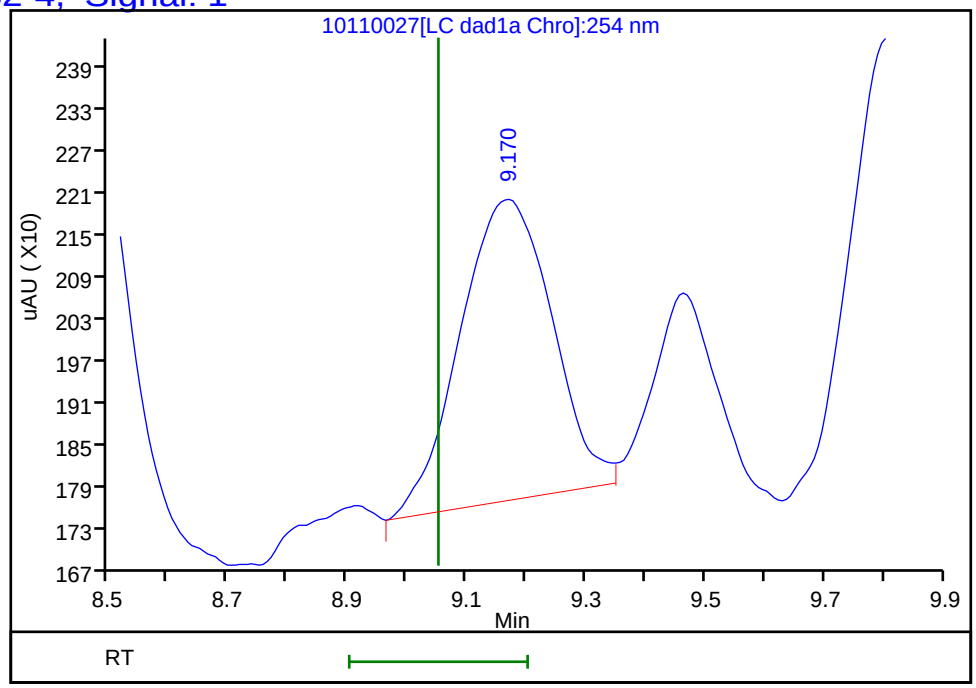
Eurofins Denver

Data File: \\chromfs\denver\chromdata\g2_luna\20231011-126415.b\10110027.d

Injection Date:	12-Oct-2023 04:00:50	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-182239-A-9-A	Lab Sample ID:	280-182239-9		
Client ID:	LL1mw-091-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

RT: 9.17
Response: 4620
Amount: 0.022256



Reviewer: K8YG, 12-Oct-2023 12:49:13

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182239-1

SDG No.:

Client Sample ID: LL3mw-247-230901-GW | Lab Sample ID: 280-182239-12

Matrix: Water | Lab File ID: 10090059.D

Analysis Method: 8330B | Date Collected: 10/02/2023 14:32

Extraction Method: 3535 | Date Extracted: 10/04/2023 13:30

Sample wt/vol: 494.9(mL) | Date Analyzed: 10/10/2023 06:17

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.: 628987 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.20	U M	0.21	0.20	0.085
99-65-0	1,3-Dinitrobenzene	0.10	U M	0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	0.081	U	0.10	0.081	0.028
606-20-2	2,6-Dinitrotoluene	0.081	U	0.10	0.081	0.041
35572-78-2	2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051
88-72-2	2-Nitrotoluene	0.20	U M	0.21	0.20	0.086
99-08-1	3-Nitrotoluene	0.35	U	0.40	0.35	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U Q	0.15	0.12	0.058
99-99-0	4-Nitrotoluene	0.40	U	0.41	0.40	0.10
98-95-3	Nitrobenzene	0.20	U	0.21	0.20	0.092
55-63-0	Nitroglycerin	2.0	U	2.1	2.0	0.93
78-11-5	PETN	1.0	U	1.1	1.0	0.45
121-82-4	RDX	1.9	M J1	0.21	0.20	0.052
479-45-8	Tetryl	0.10	U	0.11	0.10	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	88		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\10090059.D
Lims ID: 280-182239-B-12-A
Client ID: LL3mw-247-230901-GW
Sample Type: Client
Inject. Date: 10-Oct-2023 06:17:36 ALS Bottle#: 59 Worklist Smp#: 59
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-182239-B-12-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 10-Oct-2023 11:59:43 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1622

First Level Reviewer: K8YG Date: 10-Oct-2023 09:44:08

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1	6.592	6.568	0.024	2731	0.0290	M
8 RDX	1	7.605	7.574	0.031	21320	0.1930	M
$ 10 1,2-Dinitrobenzene	1	8.525	8.521	0.004	21847	0.1763	
11 1,3,5-Trinitrobenzene	1		8.648			ND	U
12 1,3-Dinitrobenzene	1		9.254			ND	U
13 Nitrobenzene	1		9.621			ND	
15 Tetryl	1		9.974			ND	
16 Nitroglycerin	2		10.421			ND	
17 2,4,6-Trinitrotoluene	1		10.861			ND	
18 4-Amino-2,6-dinitrotoluene	1		11.034			ND	
19 2-Amino-4,6-dinitrotoluene	1		11.281			ND	
20 2,6-Dinitrotoluene	1		11.441			ND	
21 2,4-Dinitrotoluene	1		11.607			ND	
22 o-Nitrotoluene	1		12.421			ND	U
23 p-Nitrotoluene	1		12.827			ND	
24 m-Nitrotoluene	1		13.387			ND	
25 PETN	2		14.514			ND	

QC Flag Legend

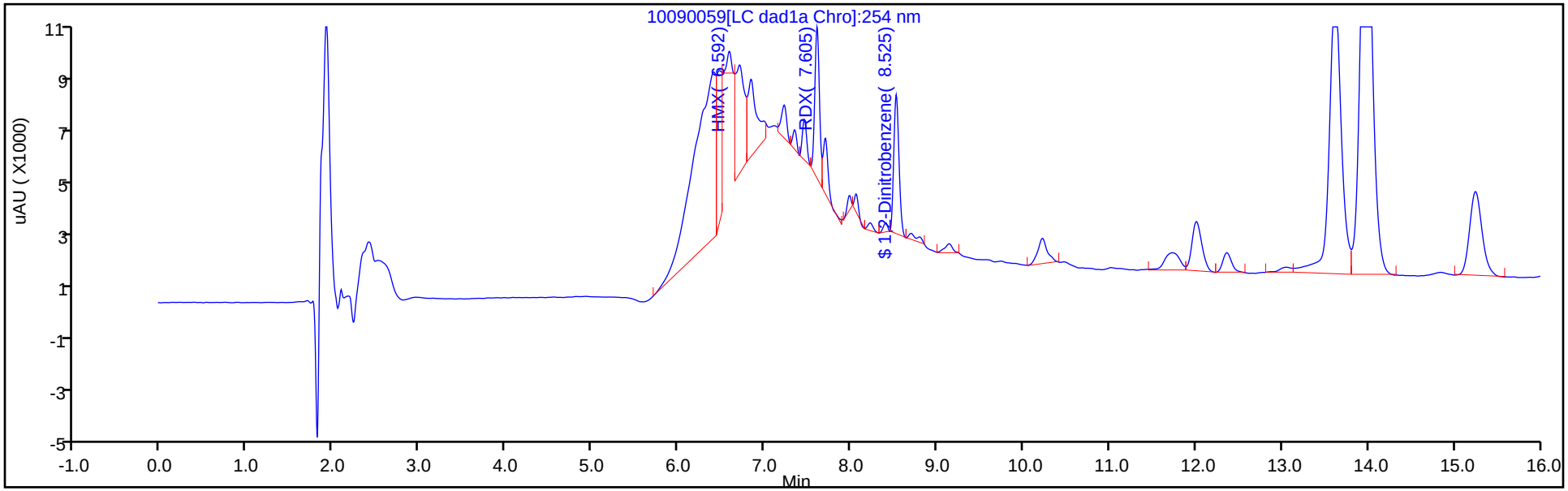
Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 10-Oct-2023 11:59:51 Chrom Revision: 2.3 22-Sep-2023 11:33:50

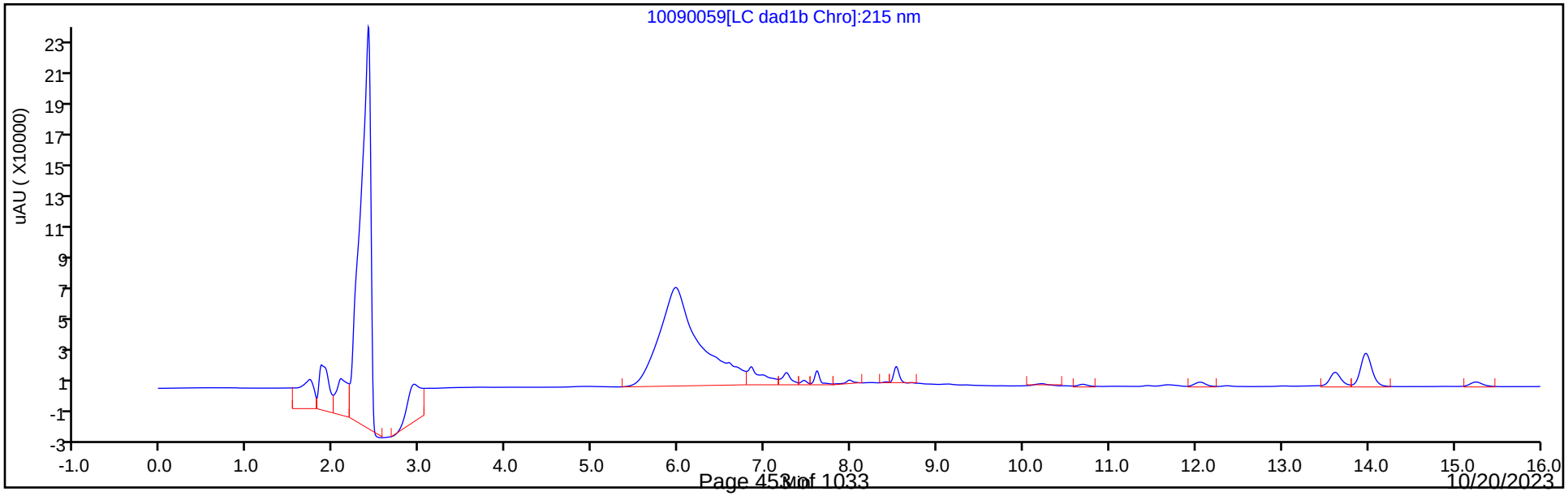
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090059.d				
Injection Date:	10-Oct-2023 06:17:36	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-182239-B-12-A	Lab Sample ID:	280-182239-12	Worklist Smp#:	59
Client ID:	LL3mw-247-230901-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	59
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\10090059.D				
Lims ID:	280-182239-B-12-A				
Client ID:	LL3mw-247-230901-GW				
Sample Type:	Client				
Inject. Date:	10-Oct-2023 06:17:36	ALS Bottle#:	59	Worklist Smp#:	59
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-182239-B-12-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	10-Oct-2023 11:59:43	Calib Date:	24-Jun-2023 00:23:49		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1622				

First Level Reviewer: K8YG Date: 10-Oct-2023 09:44:08

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1763	88.16

User Disabled Compound Report

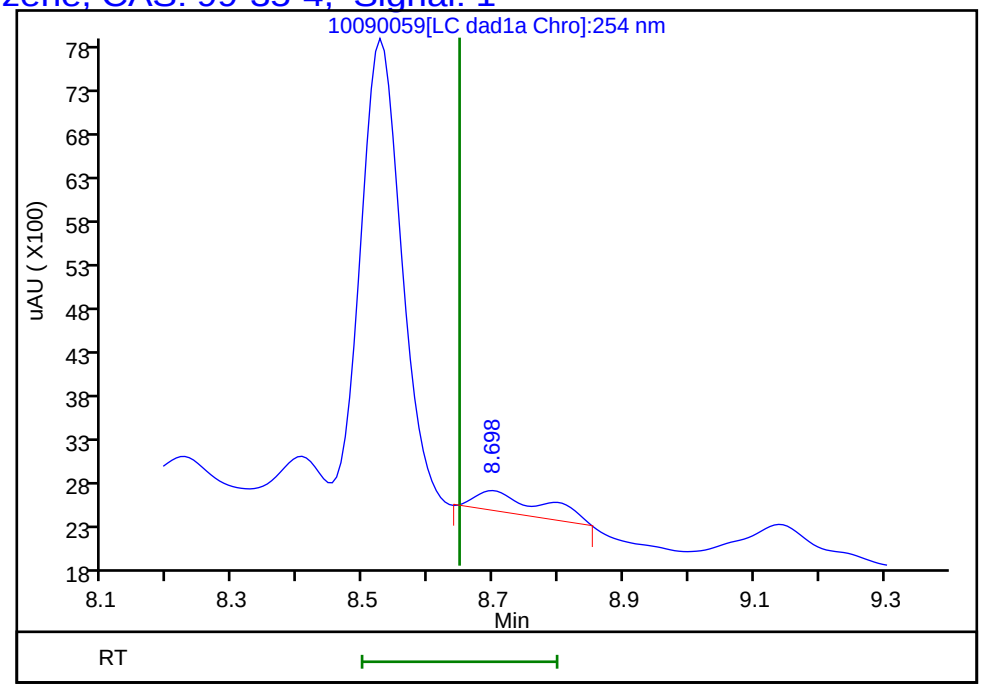
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090059.d
Injection Date: 10-Oct-2023 06:17:36 Instrument ID: CHHPLC_X3
Lims ID: 280-182239-B-12-A Lab Sample ID: 280-182239-12
Client ID: LL3mw-247-230901-GW
Operator ID: JZ/JG ALS Bottle#: 59 Worklist Smp#: 59
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

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

RT: 8.70
Response: 1874
Amount: 0.008673



Reviewer: K8YG, 10-Oct-2023 11:42:12
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

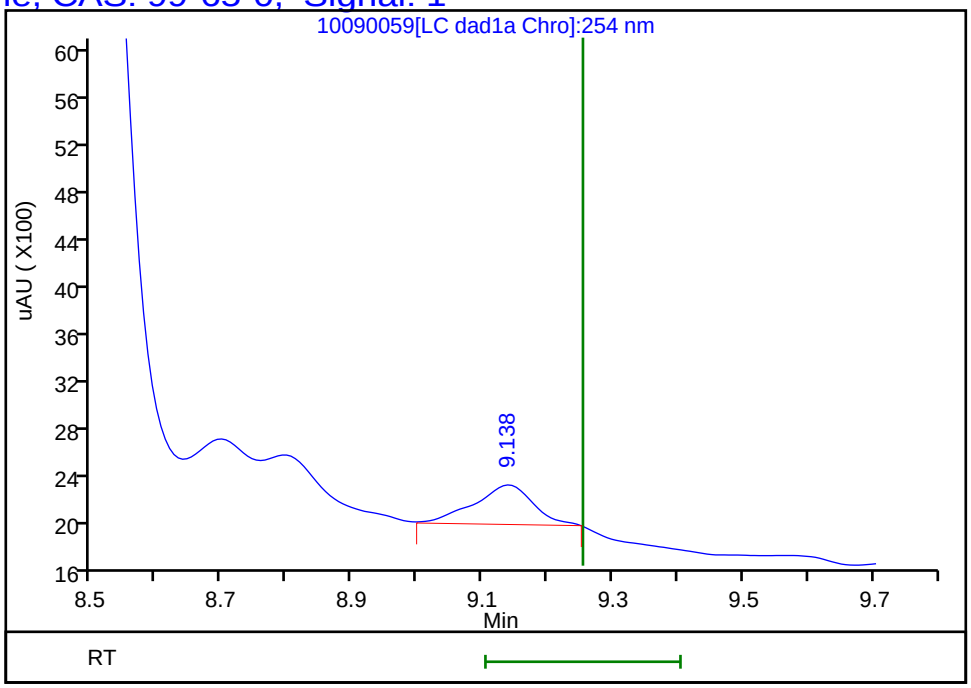
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090059.d
Injection Date: 10-Oct-2023 06:17:36 Instrument ID: CHHPLC_X3
Lims ID: 280-182239-B-12-A Lab Sample ID: 280-182239-12
Client ID: LL3mw-247-230901-GW
Operator ID: JZ/JG ALS Bottle#: 59 Worklist Smp#: 59
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

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

RT: 9.14
Response: 2161
Amount: 0.007367



Reviewer: K8YG, 10-Oct-2023 11:42:12
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

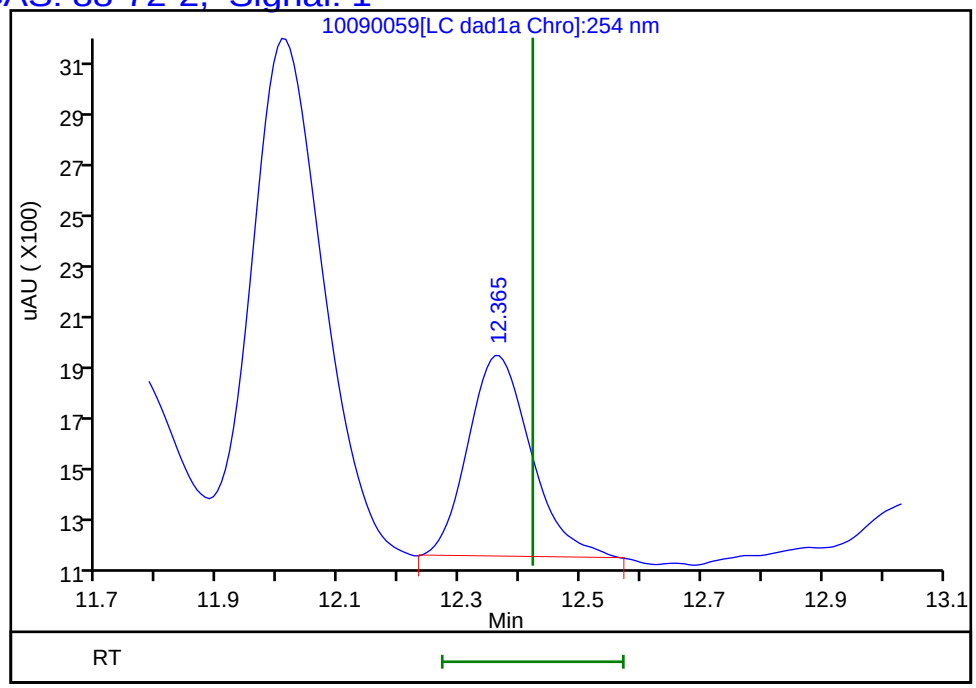
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090059.d
Injection Date: 10-Oct-2023 06:17:36 Instrument ID: CHHPLC_X3
Lims ID: 280-182239-B-12-A Lab Sample ID: 280-182239-12
Client ID: LL3mw-247-230901-GW
Operator ID: JZ/JG ALS Bottle#: 59 Worklist Smp#: 59
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

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

RT: 12.36
Response: 5361
Amount: 0.042506



Reviewer: K8YG, 10-Oct-2023 11:42:12
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

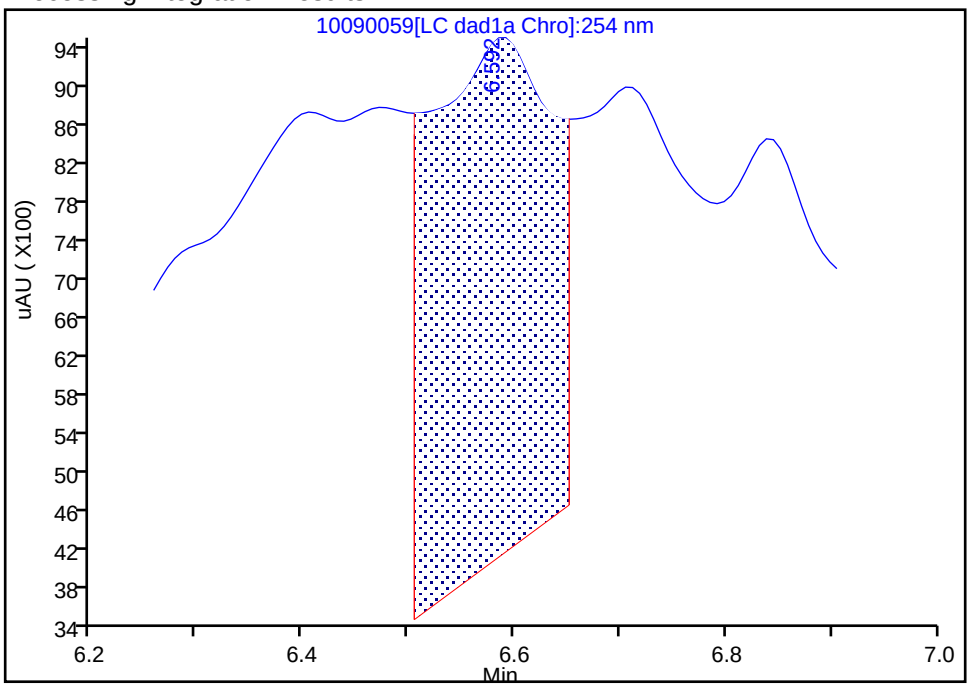
Data File:	\\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090059.d				
Injection Date:	10-Oct-2023 06:17:36	Instrument ID:	CHHPLC_X3		
Lims ID:	280-182239-B-12-A	Lab Sample ID:	280-182239-12		
Client ID:	LL3mw-247-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	59	Worklist Smp#:	59
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

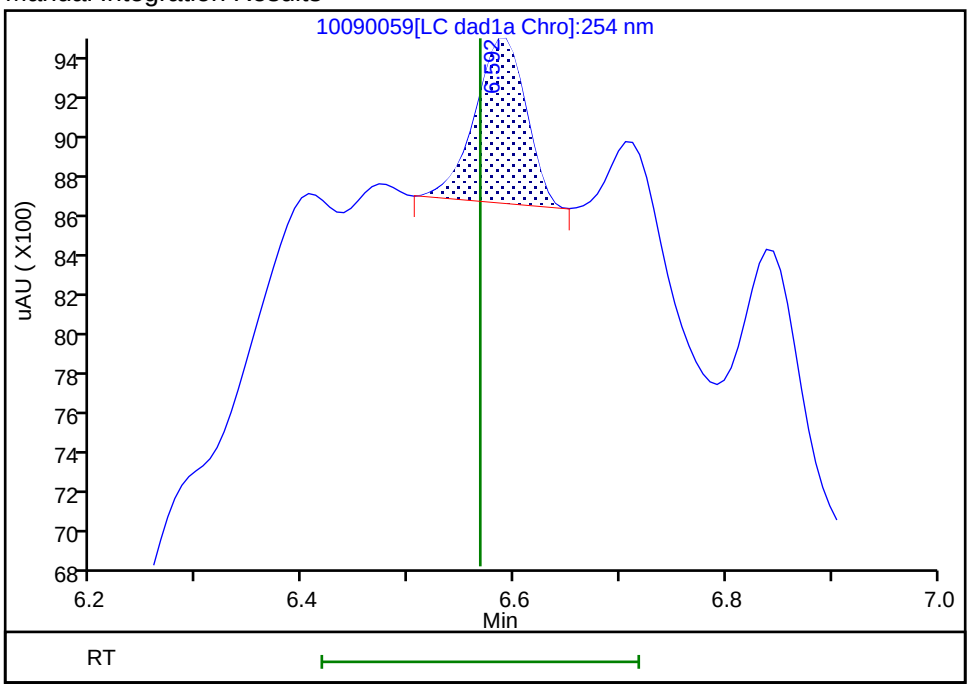
Processing Integration Results

RT: 6.59
Area: 43110
Amount: 0.457375
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 2731
Amount: 0.028974
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 11:41:50 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

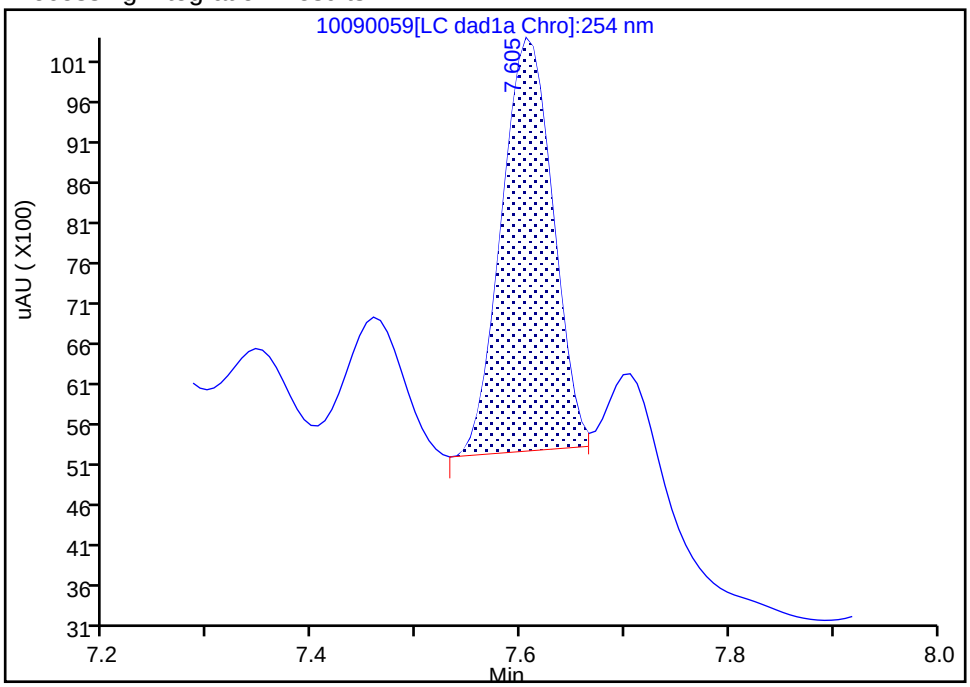
Data File:	\\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090059.d				
Injection Date:	10-Oct-2023 06:17:36	Instrument ID:	CHHPLC_X3		
Lims ID:	280-182239-B-12-A	Lab Sample ID:	280-182239-12		
Client ID:	LL3mw-247-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	59	Worklist Smp#:	59
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

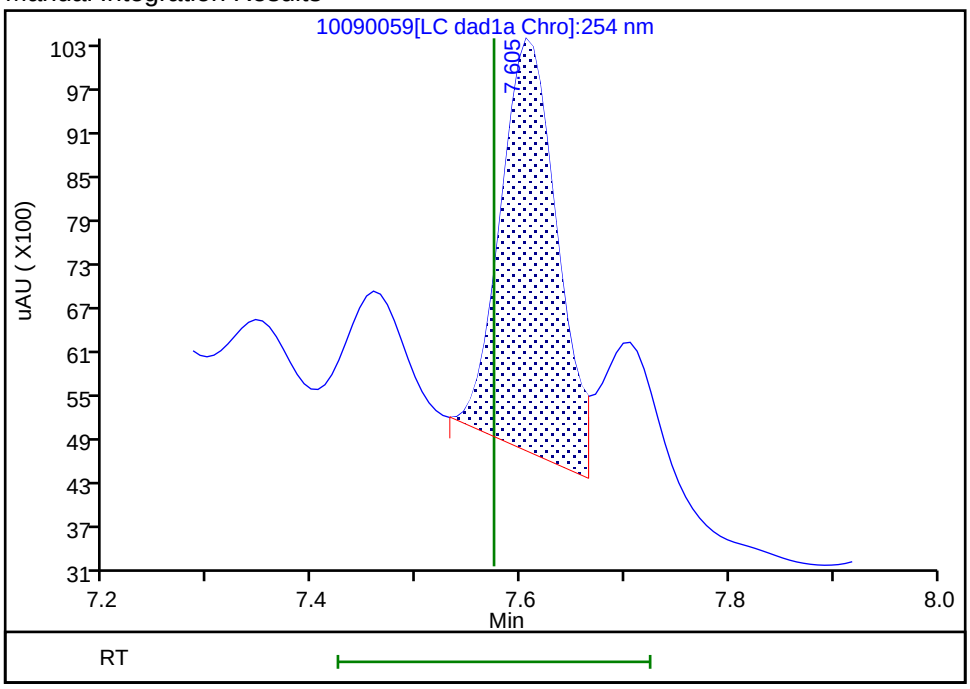
Processing Integration Results

RT: 7.61
Area: 17480
Amount: 0.158200
Amount Units: ug/mL



Manual Integration Results

RT: 7.61
Area: 21320
Amount: 0.192954
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 11:41:57 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182239-1

SDG No.:

Client Sample ID: LL3mw-247-230901-GW | Lab Sample ID: 280-182239-12

Matrix: Water | Lab File ID: 10110028.D

Analysis Method: 8330B | Date Collected: 10/02/2023 14:32

Extraction Method: 3535 | Date Extracted: 10/04/2023 13:30

Sample wt/vol: 494.9(mL) | Date Analyzed: 10/12/2023 04:36

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.: 629372 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
2691-41-0	HMX	0.20	U	0.21	0.20	0.089
121-82-4	*RDX*	*0.23*	*J1*	*0.21*	0.20	*0.052*

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\G2_LUNA\20231011-126415.b\10110028.D
Lims ID: 280-182239-B-12-A
Client ID: LL3mw-247-230901-GW
Sample Type: Client
Inject. Date: 12-Oct-2023 04:36:49 ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-182239-B-12-A
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA

Method: \\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 12-Oct-2023 12:50:38 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1633

First Level Reviewer: K8YG Date: 12-Oct-2023 12:49:53

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	6 HMX	1		6.805			ND	
	8 RDX	1	9.149	9.052	0.097	4629	0.0223	
	9 Nitrobenzene	1	11.709	11.625	0.084	9128	0.0246	
$	10 1,2-Dinitrobenzene	1	12.629	12.572	0.057	47257	0.1840	
	12 1,3-Dinitrobenzene	1		14.698			ND	U
	13 Nitroglycerin	2		15.165			ND	
	14 o-Nitrotoluene	1		15.785			ND	
	15 p-Nitrotoluene	1		16.012			ND	U
	16 4-Amino-2,6-dinitrotoluene	1		16.525			ND	U
	17 m-Nitrotoluene	1		16.858			ND	
	18 2-Amino-4,6-dinitrotoluene	1	17.356	17.338	0.018	34400	0.0876	
	19 1,3,5-Trinitrobenzene	1	17.562	17.532	0.030	24443	0.0594	
	20 2,6-Dinitrotoluene	1		18.658			ND	7
	21 2,4-Dinitrotoluene	1		19.118			ND	
	22 Tetryl	1		22.339			ND	
	23 2,4,6-Trinitrotoluene	1		23.199			ND	
	24 PETN	2		24.352			ND	

QC Flag Legend

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

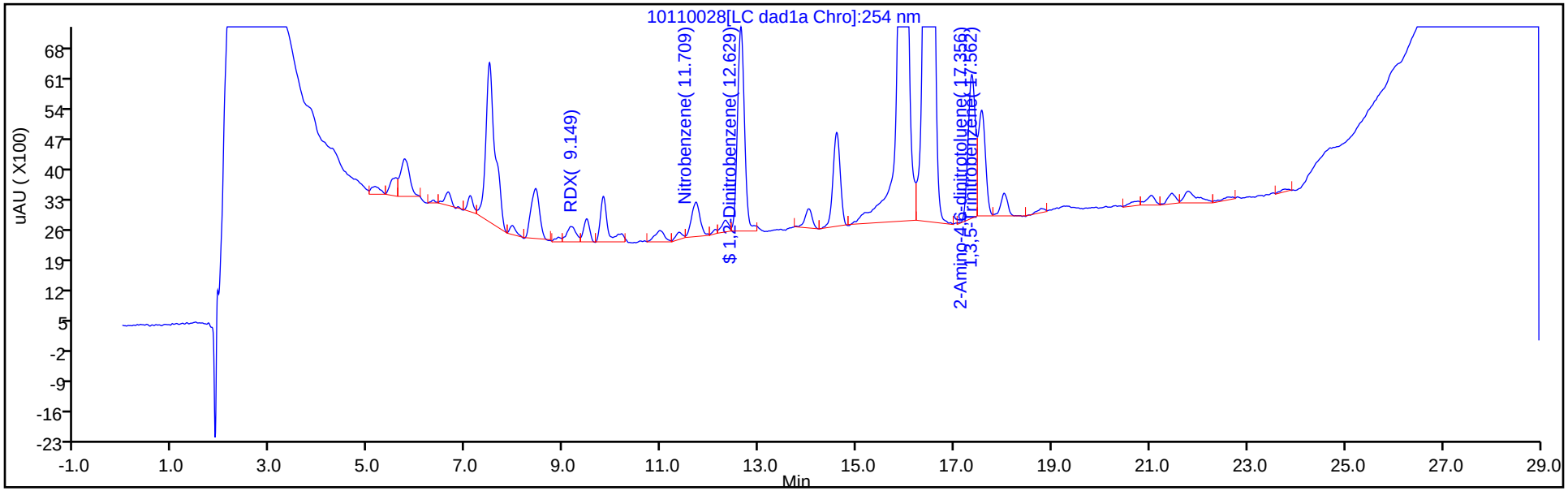
Report Date: 12-Oct-2023 12:50:45 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

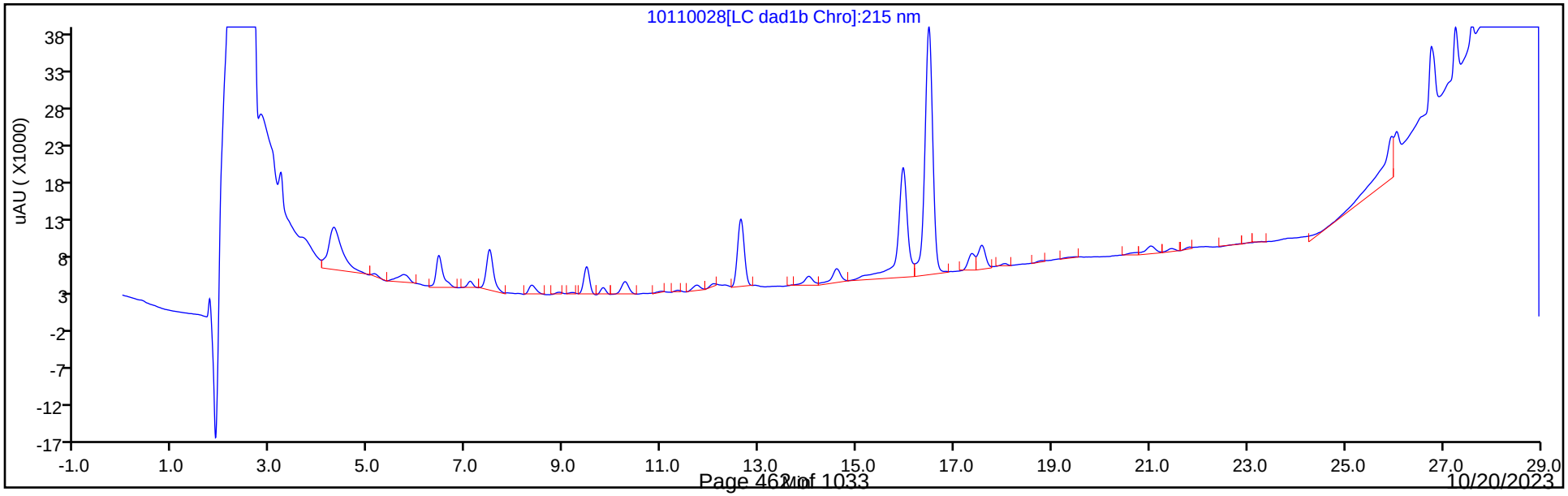
Data File: \\chromfs\denver\chromdata\g2_luna\20231011-126415.b\10110028.d

Injection Date:	12-Oct-2023 04:36:49	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	280-182239-B-12-A	Lab Sample ID:	280-182239-12	Worklist Smp#:	28
Client ID:	LL3mw-247-230901-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\10110028.D				
Lims ID:	280-182239-B-12-A				
Client ID:	LL3mw-247-230901-GW				
Sample Type:	Client				
Inject. Date:	12-Oct-2023 04:36:49	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-182239-B-12-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_G2_LUNA		
Method:	\\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	12-Oct-2023 12:50:38	Calib Date:	26-Sep-2023 04:54:46		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX1633				

First Level Reviewer: K8YG Date: 12-Oct-2023 12:49:53

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1840	92.02

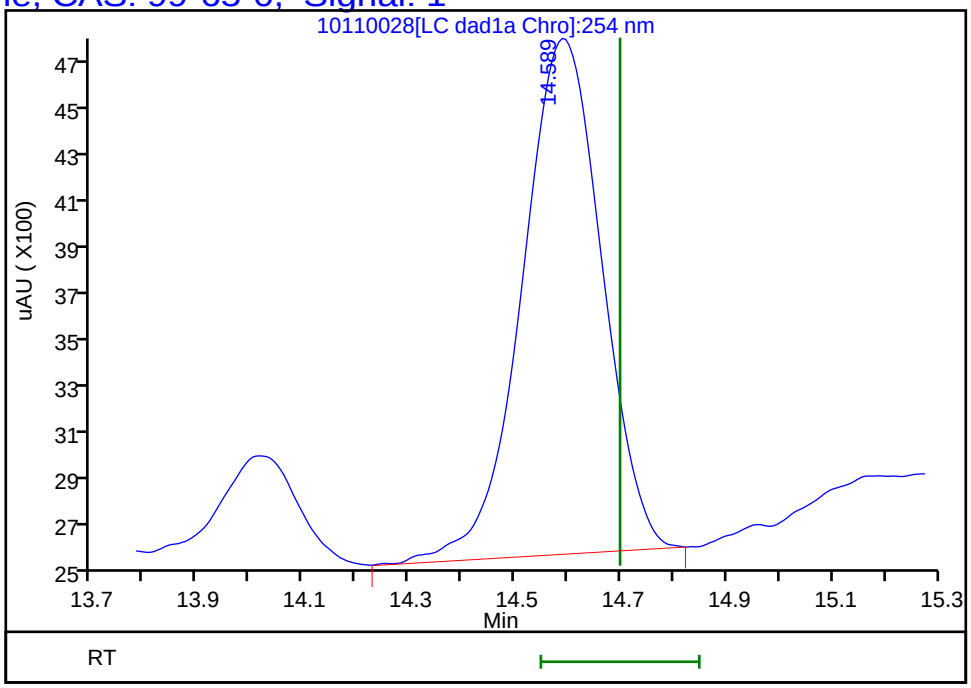
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20231011-126415.b\10110028.d				
Injection Date:	12-Oct-2023 04:36:49	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-182239-B-12-A	Lab Sample ID:	280-182239-12		
Client ID:	LL3mw-247-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

RT: 14.59
Response: 22840
Amount: 0.039411



Reviewer: K8YG, 12-Oct-2023 12:49:53
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

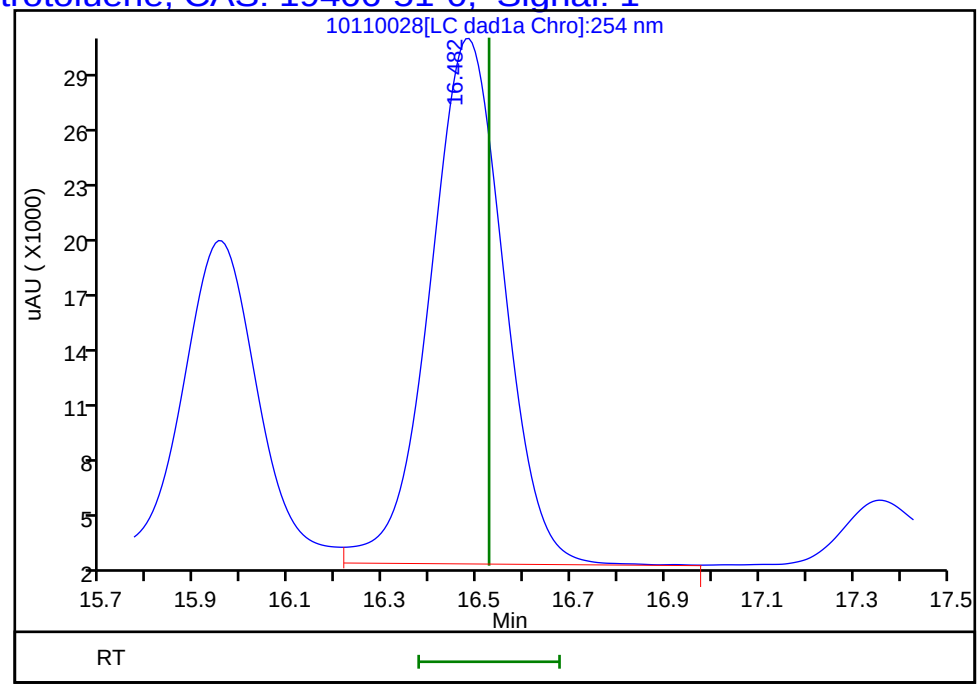
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20231011-126415.b\10110028.d				
Injection Date:	12-Oct-2023 04:36:49	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-182239-B-12-A	Lab Sample ID:	280-182239-12		
Client ID:	LL3mw-247-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

16 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0, Signal: 1

RT: 16.48
Response: 304991
Amount: 1.127205



Reviewer: K8YG, 12-Oct-2023 12:49:53
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

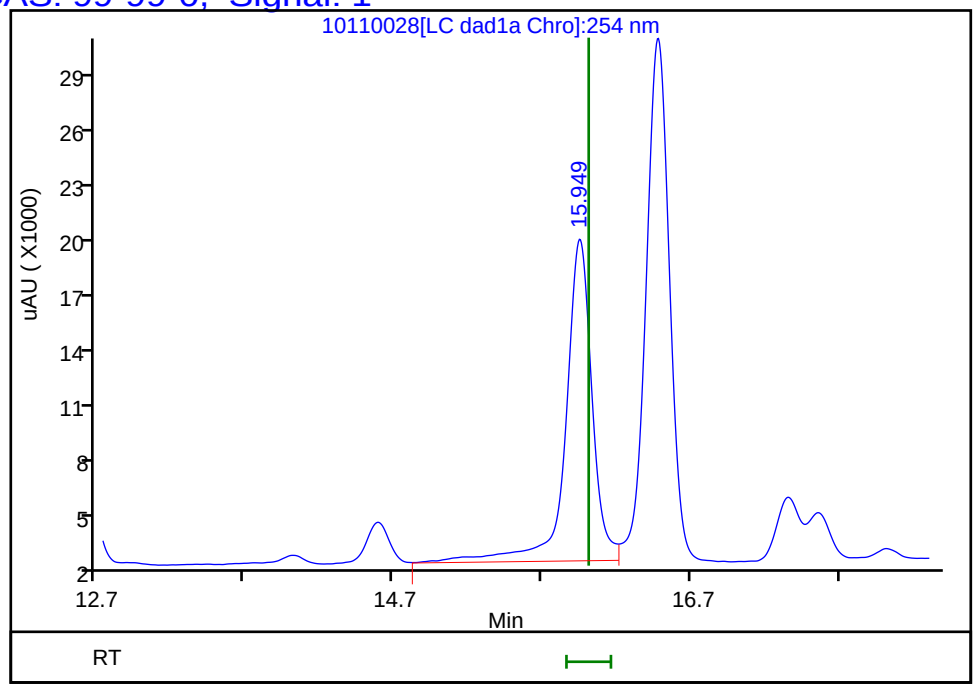
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\g2_luna\20231011-126415.b\10110028.d				
Injection Date:	12-Oct-2023 04:36:49	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-182239-B-12-A	Lab Sample ID:	280-182239-12		
Client ID:	LL3mw-247-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

RT: 15.95
Response: 212921
Amount: 0.978448



Reviewer: K8YG, 12-Oct-2023 12:49:53
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins Denver | Job No.: 280-182239-1 | Analy Batch No.: 627290

SDG No.:

Instrument ID: CHHPLC_G2_LUNA | GC Column: Luna-phenyl ID: 4.6(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 09/25/2023 18:42 | Calibration End Date: 09/25/2023 23:30 | Calibration ID: 84932

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-627290/18	09250018.D
Level 2	IC 280-627290/17	09250017.D
Level 3	IC 280-627290/16	09250016.D
Level 4	IC 280-627290/15	09250015.D
Level 5	IC 280-627290/14	09250014.D
Level 6	IC 280-627290/13	09250013.D
Level 7	IC 280-627290/12	09250012.D
Level 8	IC 280-627290/11	09250011.D
Level 9	IC 280-627290/10	09250010.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	5.278	5.285	5.289	5.281	5.291	5.285	5.261	5.260	5.185		5.141 - 5.441	5.268
DNX	6.124	6.131	6.135	6.127	6.144	6.131	6.108	6.107	6.025		5.994 - 6.294	6.115
HMX	6.771	6.771	6.782	6.767	6.791	6.778	6.761	6.760	6.698		6.641 - 6.941	6.764
MNX	7.624	7.618	7.629	7.621	7.644	7.625	7.608	7.600	7.525		7.494 - 7.794	7.610
Picric acid	+++++	8.678	8.689	8.654	8.664	8.618	8.568	8.540	8.458		8.514 - 8.814	8.609
RDX	9.011	9.005	9.022	9.001	9.038	9.011	8.988	8.987	8.911		8.888 - 9.188	8.997
Nitrobenzene	11.551	11.551	11.575	11.567	11.598	11.564	11.541	11.540	11.458		11.448 - 11.748	11.549
3,5-Dinitroaniline	14.364	14.338	14.375	14.367	14.378	14.351	14.321	14.327	14.278		14.228 - 14.528	14.344
1,3-Dinitrobenzene	14.664	14.638	14.669	14.661	14.671	14.651	14.614	14.627	14.558		14.521 - 14.821	14.639
Nitroglycerin	15.091	15.064	15.115	15.107	15.111	15.098	15.054	15.074	15.031		14.961 - 15.261	15.083
2-Nitrotoluene	15.697	15.684	15.742	15.721	15.738	15.718	15.667	15.687	15.645		15.588 - 15.888	15.700
4-Nitrotoluene	15.931	15.911	15.969	15.941	15.958	15.938	15.887	15.907	15.731		15.808 - 16.108	15.908
4-Amino-2,6-dinitrotoluene	16.437	16.424	16.475	16.461	16.478	16.451	16.394	16.420	16.365		16.328 - 16.628	16.434
3-Nitrotoluene	16.751	16.744	16.802	16.781	16.804	16.778	16.721	16.747	16.691		16.654 - 16.954	16.758
2-Amino-4,6-dinitrotoluene	17.237	17.224	17.282	17.254	17.284	17.251	17.201	17.220	17.191		17.134 - 17.434	17.238
1,3,5-Trinitrobenzene	17.451	17.444	17.489	17.467	17.498	17.471	17.427	17.447	17.385		17.348 - 17.648	17.453
2,6-Dinitrotoluene	18.557	18.524	18.589	18.567	18.598	18.564	18.514	18.534	18.485		18.448 - 18.748	18.548
2,4-Dinitrotoluene	19.017	18.984	19.042	19.021	19.051	19.018	18.974	18.987	18.938		18.901 - 19.201	19.004
Tetryl	22.224	22.191	22.235	22.247	22.244	22.211	22.181	22.207	22.171		22.094 - 22.394	22.212
2,4,6-Trinitrotoluene	23.091	23.045	23.089	23.107	23.104	23.071	23.041	23.074	23.031		22.954 - 23.254	23.073
PETN	24.184	24.171	24.215	24.227	24.211	24.205	24.174	24.200	24.165		24.061 - 24.361	24.195
1,2-Dinitrobenzene	12.491	12.484	12.522	12.514	12.538	12.504	12.481	12.487	12.418		12.388 - 12.688	12.493

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

Lab Name: Eurofins Denver Job No.: 280-182239-1 Analy Batch No.: 627290

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/25/2023 18:42 Calibration End Date: 09/25/2023 23:30 Calibration ID: 84932

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-627290/18	09250018.D
Level 2	IC 280-627290/17	09250017.D
Level 3	IC 280-627290/16	09250016.D
Level 4	IC 280-627290/15	09250015.D
Level 5	IC 280-627290/14	09250014.D
Level 6	IC 280-627290/13	09250013.D
Level 7	IC 280-627290/12	09250012.D
Level 8	IC 280-627290/11	09250011.D
Level 9	IC 280-627290/10	09250010.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	461815 386971 363369	439232 373382	395174 367864	375773 388097	Lin2	957.197858	374554.929							0.9990		0.9900
DNX	321079 286981 266689	310490 276766	295504 272356	279421 284871	Ave		288239.568				6.2		20.0			
HMX	187300 179432 168868	156250 172885	177940 173956	169980 174631	Ave		173471.302				4.9		20.0			
MNX	264010 265964 244927	269623 255820	281988 250402	258920 264764	Ave		261824.305				4.2		20.0			
Picric acid	+++++ 142912 136394	148000 140230	145400 143551	144480 146441	Ave		143426.054				2.6		20.0			
RDX	236600 208856 200608	202700 202463	207060 204396	201330 204269	Ave		207586.757				5.4		20.0			
Nitrobenzene	381000 376684 370304	344350 367558	371820 376931	379810 374071	Ave		371391.992				3.0		20.0			
3,5-Dinitroaniline	462200 427448 367838	403550 420503	409760 426466	420280 426959	Lin2	391.186606	410104.490							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.: 280-182239-1 Analy Batch No.: 627290

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/25/2023 18:42 Calibration End Date: 09/25/2023 23:30 Calibration ID: 84932

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	667900 570764 609314	558000 556443	550320 568996	563490 570540	Ave		579529.535				6.4		20.0			
Nitroglycerin	133480 123608 118790	129650 119635	122900 122194	125699 121979	Ave		124214.981				3.8		20.0			
2-Nitrotoluene	275300 244024 223277	270800 237488	255000 241927	237780 237729	Ave		247036.094				6.8		20.0			
4-Nitrotoluene	286200 214680 224139	258900 213293	233340 216681	224490 217115	Lin2	723.584713	216871.385							0.9990		0.9900
4-Amino-2,6-dinitrotoluene	398000 273612 265643	349200 268898	302300 273259	276790 272622	Lin2	1351.95034	269373.383							0.9990		0.9900
3-Nitrotoluene	385300 273744 266326	333950 269443	291580 272884	285160 271165	Lin2	1184.33387	269480.350							1.0000		0.9900
2-Amino-4,6-dinitrotoluene	534900 393220 341806	409450 389805	413320 393520	391220 388664	Lin2	1423.09870	376274.684							0.9960		0.9900
1,3,5-Trinitrobenzene	415900 402060 432159	439000 393045	417600 396387	407530 400996	Ave		411630.771				3.9		20.0			
2,6-Dinitrotoluene	336000 266056 260065	335800 260443	254960 265649	265940 265199	Lin2	863.540612	260735.329							0.9960		0.9900
2,4-Dinitrotoluene	575300 543600 530117	562050 531333	546420 539851	537340 539776	Ave		545087.414				2.7		20.0			
Tetryl	361500 307496 296672	300850 298368	308000 304430	292480 305263	Ave		308339.878				6.7		20.0			
2,4,6-Trinitrotoluene	371200 396660 387636	326400 389068	405940 393427	397150 397391	Ave		384985.783				6.2		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.: 280-182239-1 Analy Batch No.: 627290

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/25/2023 18:42 Calibration End Date: 09/25/2023 23:30 Calibration ID: 84932

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	115960 128038 128625	105375 128664	115184 130621	123328 131308	Ave		123011.399				7.3		20.0			
1,2-Dinitrobenzene	305200 258584 251560	220950 251193	256740 255347	255720 255664	Ave		256773.116				8.4		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.: 280-182239-1 | Analy Batch No.: 627290

SDG No.:

Instrument ID: CHHPLC_G2_LUNA | GC Column: Luna-pheny ID: 4.6(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 09/25/2023 18:42 | Calibration End Date: 09/25/2023 23:30 | Calibration ID: 84932

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-627290/18	09250018.D
Level 2	IC 280-627290/17	09250017.D
Level 3	IC 280-627290/16	09250016.D
Level 4	IC 280-627290/15	09250015.D
Level 5	IC 280-627290/14	09250014.D
Level 6	IC 280-627290/13	09250013.D
Level 7	IC 280-627290/12	09250012.D
Level 8	IC 280-627290/11	09250011.D
Level 9	IC 280-627290/10	09250010.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	Lin2	4632 149801	8811 258277	19818 389261	37690 911149	97033	0.0100 0.401	0.0201 0.702	0.0502 1.00	0.100 2.51	0.251
DNX	Ave	3214 110817	6216 190840	14790 285156	27970 667388	71817	0.0100 0.400	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250
HMX	Ave	1873 69154	3125 121769	8897 174631	16998 422170	44858	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
MNX	Ave	3081 119417	6293 204553	16454 308980	30216 714574	77595	0.0117 0.467	0.0233 0.817	0.0584 1.17	0.117 2.92	0.292
Picric acid	Ave	+++++ 56092	2960 100486	7270 146441	14448 340985	35728	+++++ 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
RDX	Ave	2366 80985	4054 143077	10353 204269	20133 501519	52214	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Nitrobenzene	Ave	3810 147023	6887 263852	18591 374071	37981 925760	94171	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
3,5-Dinitroaniline	Lin2	4622 168201	8071 298526	20488 426959	42028 919595	106862	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
1,3-Dinitrobenzene	Ave	6679 222577	11160 398297	27516 570540	56349 1523284	142691	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Nitroglycerin	Ave	13348 478538	25930 855360	61450 1219790	125699 2969741	309021	0.100 4.00	0.200 7.00	0.500 10.0	1.00 25.0	2.50
2-Nitrotoluene	Ave	2753 94995	5416 169349	12750 237729	23778 558193	61006	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
4-Nitrotoluene	Lin2	2862 85317	5178 151677	11667 217115	22449 560347	53670	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
4-Amino-2,6-dinitrotoluene	Lin2	3980 107559	6984 191281	15115 272622	27679 664108	68403	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
3-Nitrotoluene	Lin2	3853 107777	6679 191019	14579 271165	28516 665814	68436	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
2-Amino-4,6-dinitrotoluene	Lin2	5349	8189	20666	39122	98305	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.: 280-182239-1 | Analy Batch No.: 627290

SDG No.:

Instrument ID: CHHPLC_G2_LUNA | GC Column: Luna-pheny ID: 4.6(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 09/25/2023 18:42 | Calibration End Date: 09/25/2023 23:30 | Calibration ID: 84932

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
		155922	275464	388664	854516		0.400	0.700	1.00	2.50	
1,3,5-Trinitrobenzene	Ave	4159 157218	8780 277471	20880 400996	40753 1080397	100515	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
2,6-Dinitrotoluene	Lin2	3360 104177	6716 185954	12748 265199	26594 650162	66514	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
2,4-Dinitrotoluene	Ave	5753 212533	11241 377896	27321 539776	53734 1325292	135900	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Tetryl	Ave	3615 119347	6017 213101	15400 305263	29248 741681	76874	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
2,4,6-Trinitrotoluene	Ave	3712 155627	6528 275399	20297 397391	39715 969091	99165	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
PETN	Ave	11596 514656	21075 914344	57592 1313083	123328 3215628	320094	0.100 4.00	0.200 7.00	0.500 10.0	1.00 25.0	2.50
1,2-Dinitrobenzene	Ave	3052 100477	4419 178743	12837 255664	25572 628901	64646	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250

Curve Type Legend:
Ave = Average
Lin2 = Linear 1/conc^2

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250010.D
Lims ID: IC INT 9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 25-Sep-2023 18:42:00 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 9
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub18

Method: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 26-Sep-2023 15:25:33 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1620

First Level Reviewer: LV5D Date: 26-Sep-2023 13:59:14

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.185	5.291	-0.106	911149	2.51	2.43	
4 DNX	1	6.025	6.144	-0.119	667388	2.50	2.32	
6 HMX	1	6.698	6.791	-0.093	422170	2.50	2.43	
7 MNX	1	7.525	7.644	-0.119	714574	2.92	2.73	
5 2,4,6-Trinitrophenol	1	8.458	8.664	-0.206	340985	2.50	2.38	
8 RDX	1	8.911	9.038	-0.127	501519	2.50	2.42	
9 Nitrobenzene	1	11.458	11.598	-0.140	925760	2.50	2.49	
$ 10 1,2-Dinitrobenzene	1	12.418	12.538	-0.120	628901	2.50	2.45	
11 3,5-Dinitroaniline	1	14.278	14.378	-0.100	919595	2.50	2.24	
12 1,3-Dinitrobenzene	1	14.558	14.671	-0.113	1523284	2.50	2.63	
13 Nitroglycerin	2	15.031	15.111	-0.080	2969741	25.0	23.9	
14 o-Nitrotoluene	1	15.645	15.738	-0.093	558193	2.50	2.26	M
15 p-Nitrotoluene	1	15.731	15.958	-0.227	560347	2.50	2.58	Ma
16 4-Amino-2,6-dinitrotoluene	1	16.365	16.478	-0.113	664108	2.50	2.46	
17 m-Nitrotoluene	1	16.691	16.804	-0.113	665814	2.50	2.47	
18 2-Amino-4,6-dinitrotoluene	1	17.191	17.284	-0.093	854516	2.50	2.27	
19 1,3,5-Trinitrobenzene	1	17.385	17.498	-0.113	1080397	2.50	2.62	
20 2,6-Dinitrotoluene	1	18.485	18.598	-0.113	650162	2.50	2.49	
21 2,4-Dinitrotoluene	1	18.938	19.051	-0.113	1325292	2.50	2.43	
22 Tetryl	1	22.171	22.244	-0.073	741681	2.50	2.41	
23 2,4,6-Trinitrotoluene	1	23.031	23.104	-0.073	969091	2.50	2.52	
24 PETN	2	24.165	24.211	-0.046	3215628	25.0	26.1	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

8330IntermStk_00078	Amount Added: 250.00	Units: uL
8330 DMT_00015	Amount Added: 125.00	Units: uL

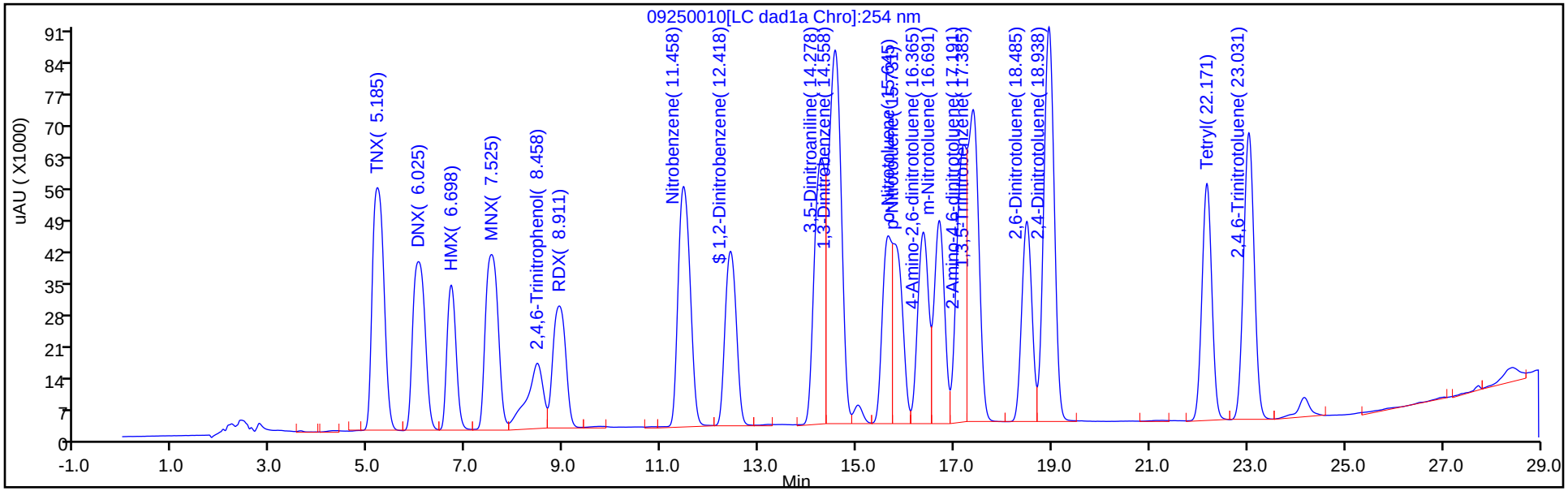
Report Date: 26-Sep-2023 15:25:33 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

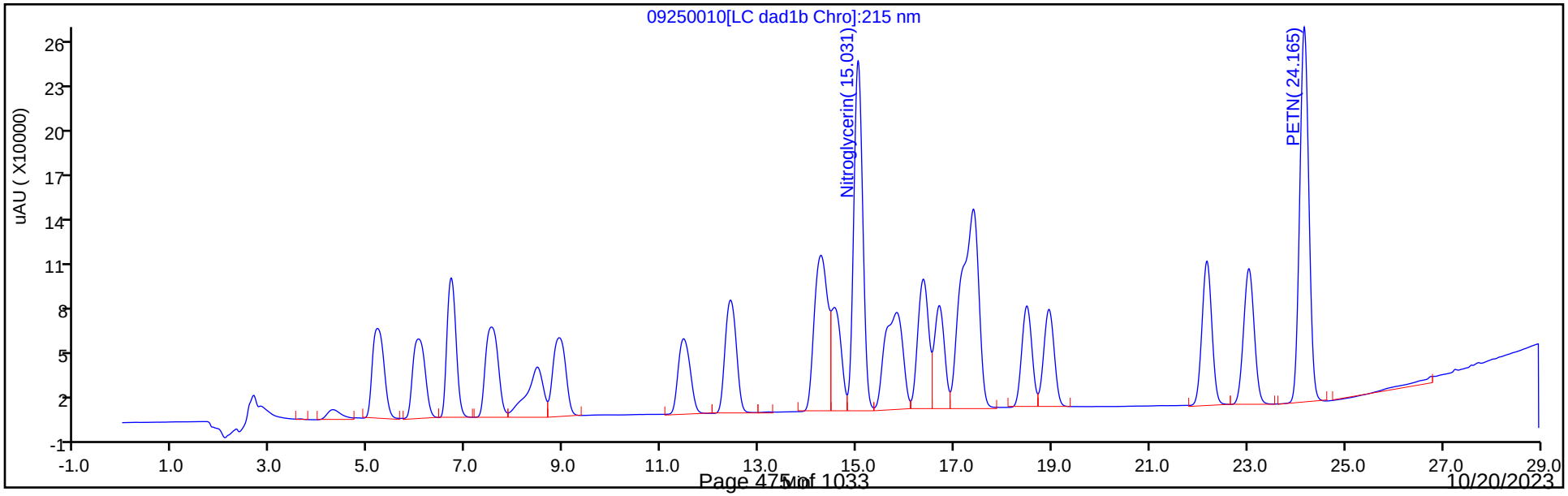
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250010.d

Injection Date:	25-Sep-2023 18:42:00	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	IC INT 9			Worklist Smp#:	10
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



10/20/2023
4:00 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

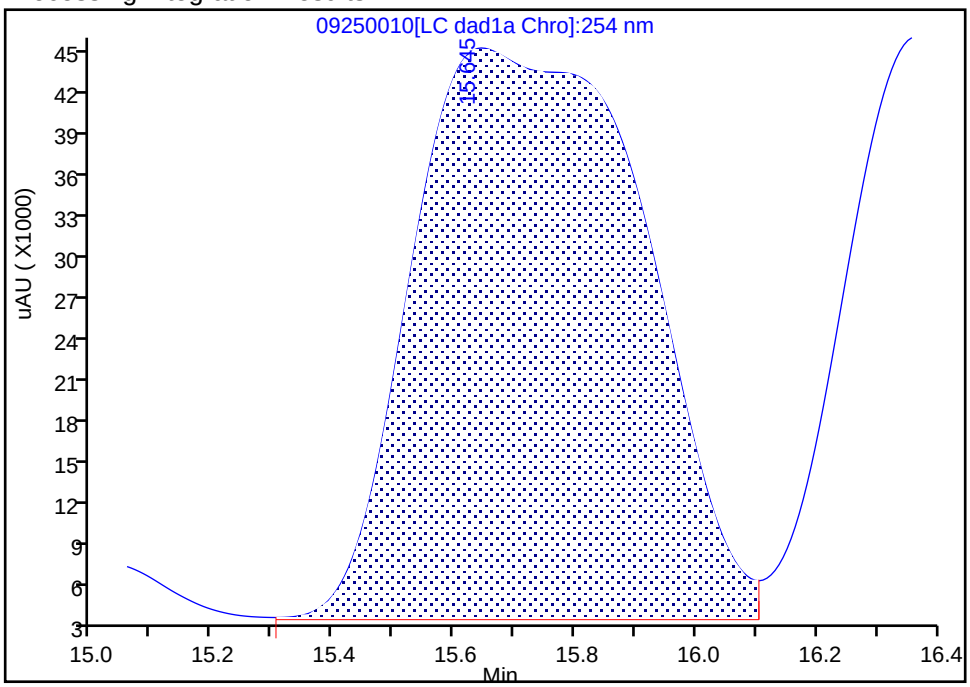
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250010.d
Injection Date: 25-Sep-2023 18:42:00 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT 9
Client ID:
Operator ID: JZ/JG ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

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

Signal: 1

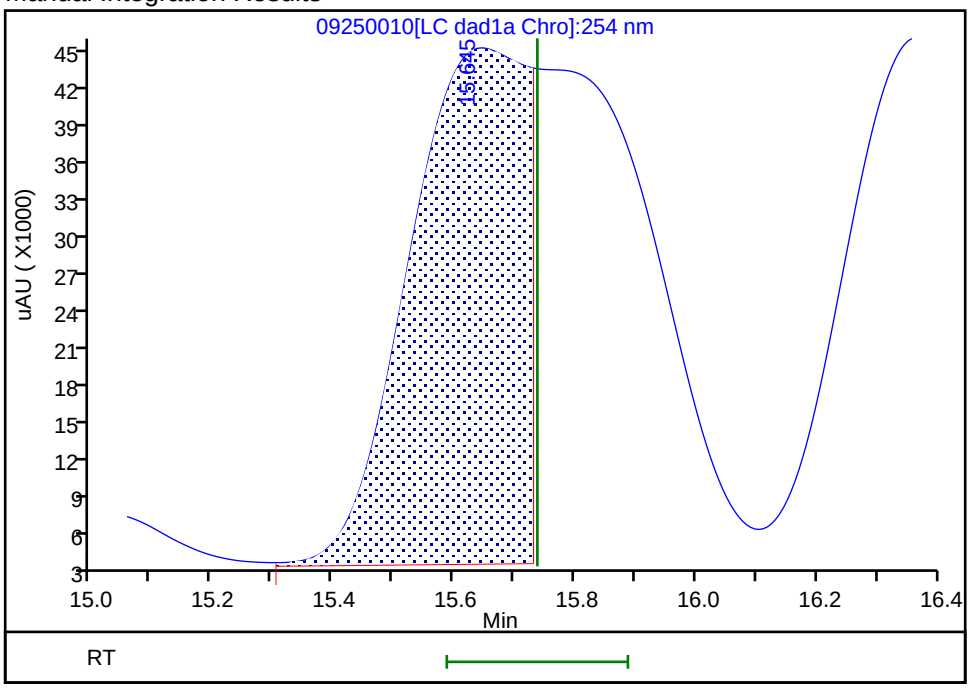
Processing Integration Results

RT: 15.64
Area: 1118542
Amount: 3.449139
Amount Units: ug/ml



Manual Integration Results

RT: 15.64
Area: 558193
Amount: 2.259561
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 13:59:00 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

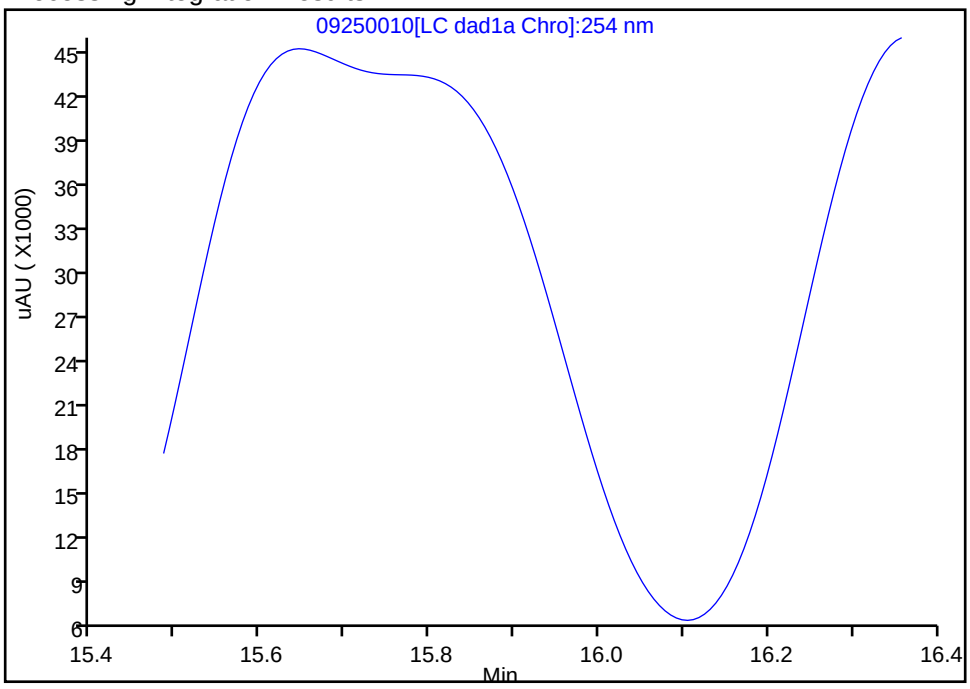
Data File:	\\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250010.d				
Injection Date:	25-Sep-2023 18:42:00	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 9				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

Signal: 1

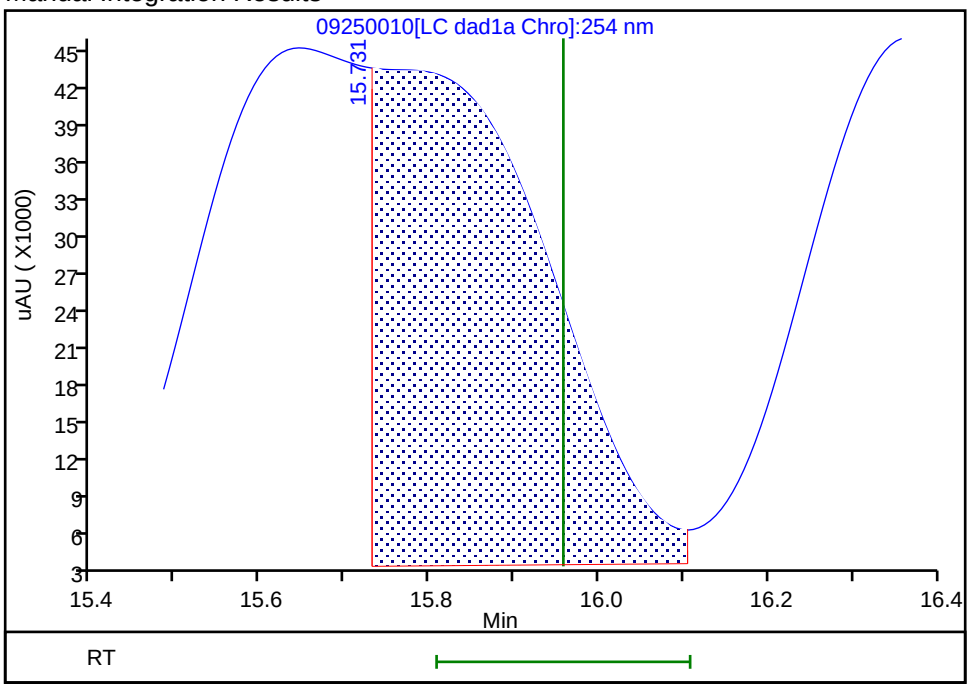
Not Detected
Expected RT: 15.96

Processing Integration Results



Manual Integration Results

RT: 15.73
Area: 560347
Amount: 2.580439
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 13:59:04 -06:00:00 (UTC)
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250011.D
Lims ID: IC INT 8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 25-Sep-2023 19:17:58 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 8
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub18

Method: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 26-Sep-2023 15:25:34 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1620

First Level Reviewer: LV5D Date: 26-Sep-2023 13:59:25

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.260	5.291	-0.031	389261	1.00	1.04	
4 DNX	1	6.107	6.144	-0.037	285156	1.00	0.9893	
6 HMX	1	6.760	6.791	-0.031	174631	1.00	1.01	
7 MNX	1	7.600	7.644	-0.044	308980	1.17	1.18	
5 2,4,6-Trinitrophenol	1	8.540	8.664	-0.124	146441	1.00	1.02	
8 RDX	1	8.987	9.038	-0.051	204269	1.00	0.9840	
9 Nitrobenzene	1	11.540	11.598	-0.058	374071	1.00	1.01	
$ 10 1,2-Dinitrobenzene	1	12.487	12.538	-0.051	255664	1.00	1.00	
11 3,5-Dinitroaniline	1	14.327	14.378	-0.051	426959	1.00	1.04	
12 1,3-Dinitrobenzene	1	14.627	14.671	-0.044	570540	1.00	0.9845	
13 Nitroglycerin	2	15.074	15.111	-0.037	1219790	10.0	9.82	
14 o-Nitrotoluene	1	15.687	15.738	-0.051	237729	1.00	0.9623	
15 p-Nitrotoluene	1	15.907	15.958	-0.051	217115	1.00	1.00	
16 4-Amino-2,6-dinitrotoluene	1	16.420	16.478	-0.058	272622	1.00	1.01	
17 m-Nitrotoluene	1	16.747	16.804	-0.057	271165	1.00	1.00	
18 2-Amino-4,6-dinitrotoluene	1	17.220	17.284	-0.064	388664	1.00	1.03	
19 1,3,5-Trinitrobenzene	1	17.447	17.498	-0.051	400996	1.00	0.9742	
20 2,6-Dinitrotoluene	1	18.534	18.598	-0.064	265199	1.00	1.01	
21 2,4-Dinitrotoluene	1	18.987	19.051	-0.064	539776	1.00	0.99	
22 Tetryl	1	22.207	22.244	-0.037	305263	1.00	0.99	
23 2,4,6-Trinitrotoluene	1	23.074	23.104	-0.030	397391	1.00	1.03	
24 PETN	2	24.200	24.211	-0.011	1313083	10.0	10.7	

QC Flag Legend
Processing Flags

Reagents:

8330IntermStk_00078	Amount Added: 100.00	Units: uL
8330 DMT_00015	Amount Added: 50.00	Units: uL

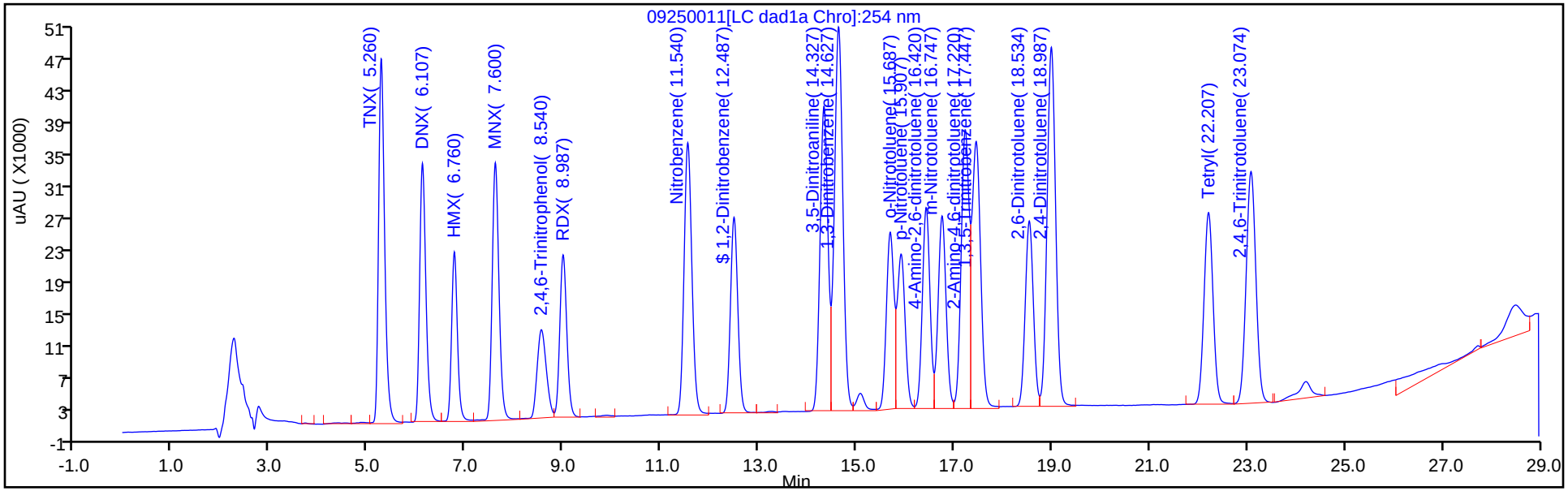
Report Date: 26-Sep-2023 15:25:34 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

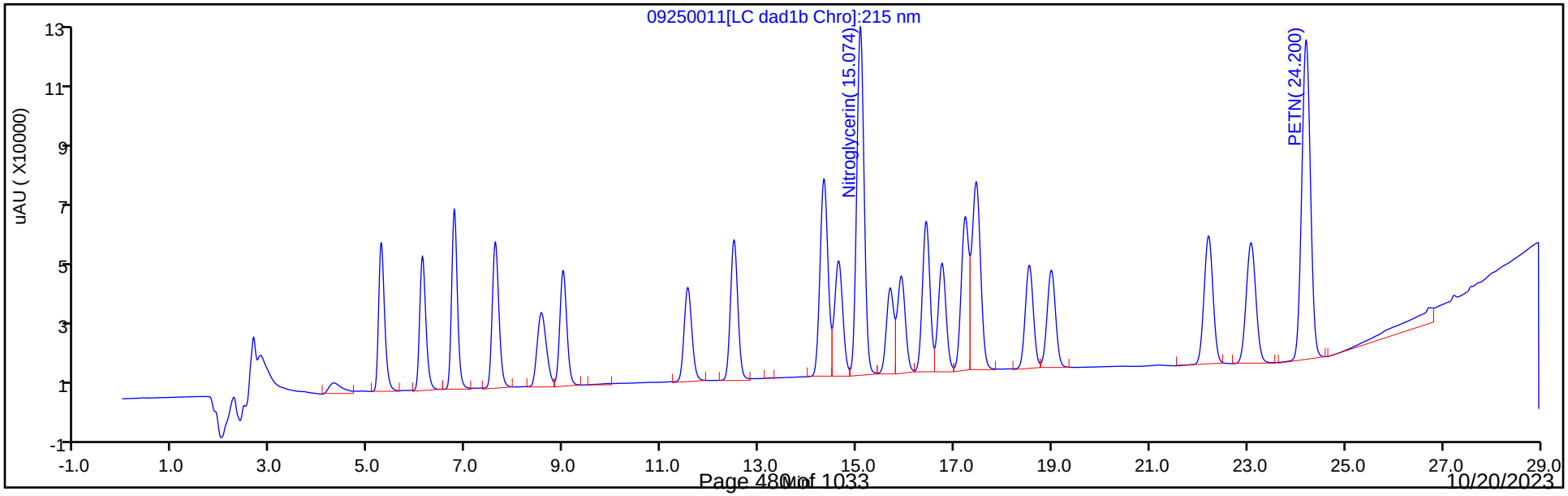
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250011.d

Injection Date:	25-Sep-2023 19:17:58	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	IC INT 8			Worklist Smp#:	11
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



10/20/2023
4:00 PM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250012.D
Lims ID: IC INT 7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 25-Sep-2023 19:53:55 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 7
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub18

Method: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 26-Sep-2023 15:25:34 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1620

First Level Reviewer: LV5D Date: 26-Sep-2023 13:59:35

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.261	5.291	-0.030	258277	0.7021	0.6870	
4 DNX	1	6.108	6.144	-0.036	190840	0.7007	0.6621	
6 HMX	1	6.761	6.791	-0.030	121769	0.7000	0.7020	
7 MNX	1	7.608	7.644	-0.036	204553	0.8169	0.7813	
5 2,4,6-Trinitrophenol	1	8.568	8.664	-0.096	100486	0.7000	0.7006	
8 RDX	1	8.988	9.038	-0.050	143077	0.7000	0.6892	
9 Nitrobenzene	1	11.541	11.598	-0.057	263852	0.7000	0.7104	
$ 10 1,2-Dinitrobenzene	1	12.481	12.538	-0.057	178743	0.7000	0.6961	
11 3,5-Dinitroaniline	1	14.321	14.378	-0.057	298526	0.7000	0.7270	
12 1,3-Dinitrobenzene	1	14.614	14.671	-0.057	398297	0.7000	0.6873	
13 Nitroglycerin	2	15.054	15.111	-0.057	855360	7.00	6.89	
14 o-Nitrotoluene	1	15.667	15.738	-0.071	169349	0.7000	0.6855	
15 p-Nitrotoluene	1	15.887	15.958	-0.071	151677	0.7000	0.6961	
16 4-Amino-2,6-dinitrotoluene	1	16.394	16.478	-0.084	191281	0.7000	0.7051	
17 m-Nitrotoluene	1	16.721	16.804	-0.083	191019	0.7000	0.7044	
18 2-Amino-4,6-dinitrotoluene	1	17.201	17.284	-0.083	275464	0.7000	0.7283	
19 1,3,5-Trinitrobenzene	1	17.427	17.498	-0.071	277471	0.7000	0.6741	
20 2,6-Dinitrotoluene	1	18.514	18.598	-0.084	185954	0.7000	0.7099	
21 2,4-Dinitrotoluene	1	18.974	19.051	-0.077	377896	0.7000	0.6933	
22 Tetryl	1	22.181	22.244	-0.063	213101	0.7000	0.6911	
23 2,4,6-Trinitrotoluene	1	23.041	23.104	-0.063	275399	0.7000	0.7153	
24 PETN	2	24.174	24.211	-0.037	914344	7.00	7.43	

QC Flag Legend
Processing Flags

Reagents:

8330IntermStk_00078	Amount Added:	70.00	Units: uL
8330 DMT_00015	Amount Added:	35.00	Units: uL

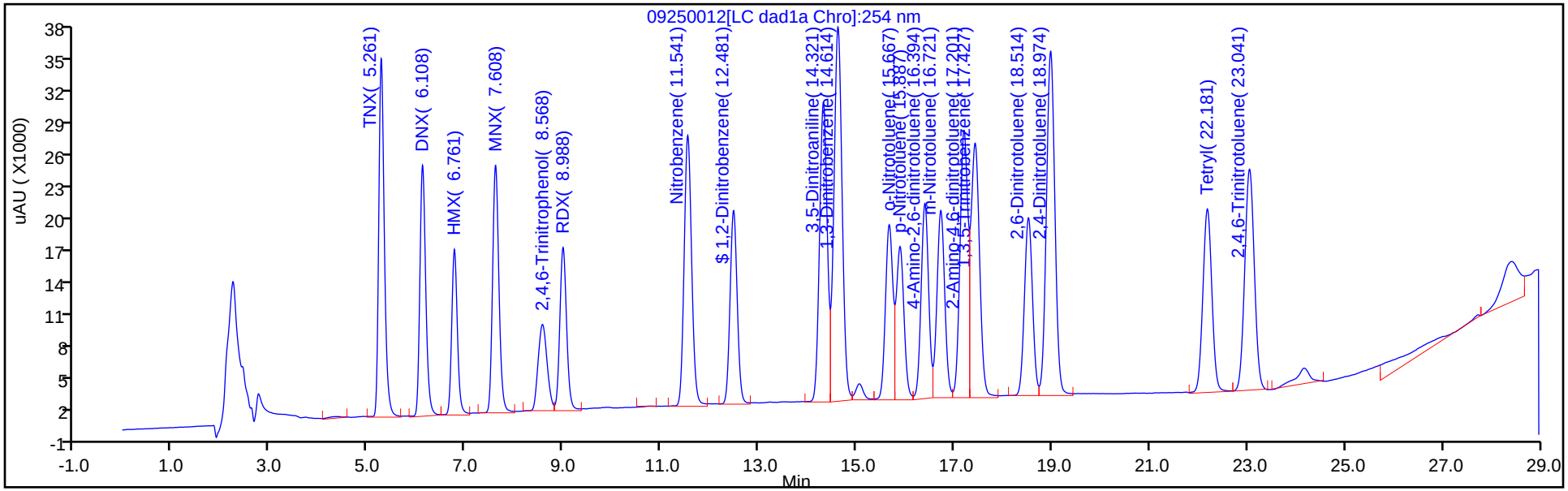
Report Date: 26-Sep-2023 15:25:35 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

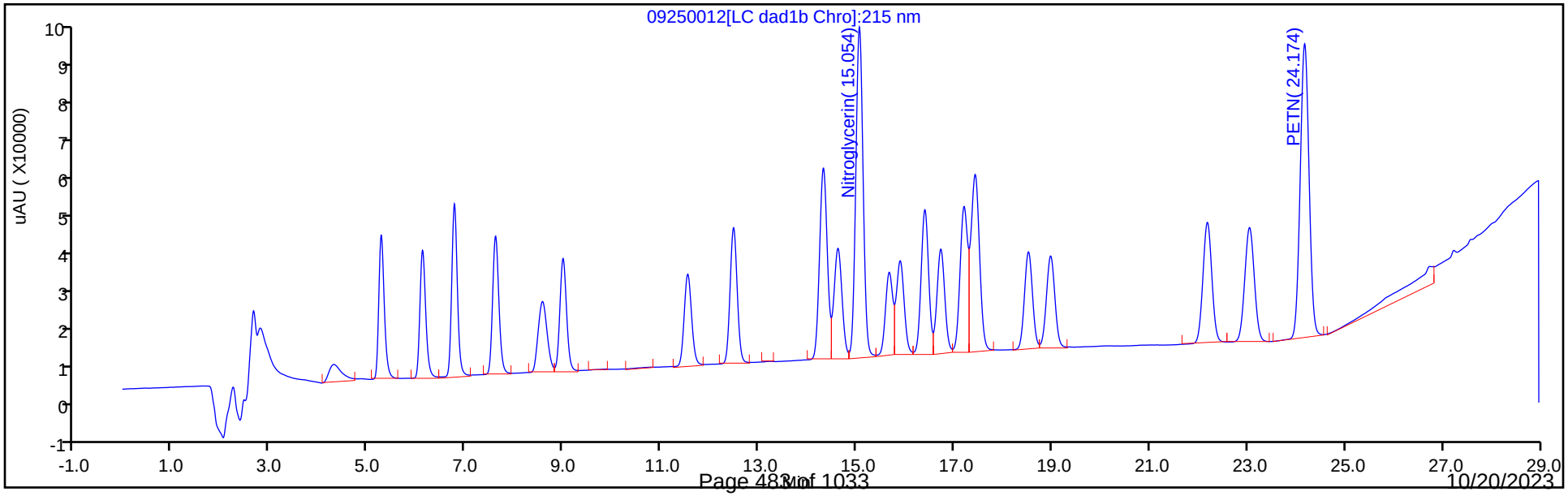
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Injection Date:	25-Sep-2023 19:53:55	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	IC INT 7			Worklist Smp#:	12
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250013.D
Lims ID: IC INT 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 25-Sep-2023 20:29:56 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 6
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub18

Method: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 26-Sep-2023 15:25:35 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1620

First Level Reviewer: LV5D Date: 26-Sep-2023 13:59:46

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.285	5.291	-0.006	149801	0.4012	0.3974	
4 DNX	1	6.131	6.144	-0.013	110817	0.4004	0.3845	
6 HMX	1	6.778	6.791	-0.013	69154	0.4000	0.3986	
7 MNX	1	7.625	7.644	-0.019	119417	0.4668	0.4561	
5 2,4,6-Trinitrophenol	1	8.618	8.664	-0.046	56092	0.4000	0.3911	
8 RDX	1	9.011	9.038	-0.027	80985	0.4000	0.3901	
9 Nitrobenzene	1	11.564	11.598	-0.034	147023	0.4000	0.3959	
$ 10 1,2-Dinitrobenzene	1	12.504	12.538	-0.034	100477	0.4000	0.3913	
11 3,5-Dinitroaniline	1	14.351	14.378	-0.027	168201	0.4000	0.4092	
12 1,3-Dinitrobenzene	1	14.651	14.671	-0.020	222577	0.4000	0.3841	
13 Nitroglycerin	2	15.098	15.111	-0.013	478538	4.00	3.85	
14 o-Nitrotoluene	1	15.718	15.738	-0.020	94995	0.4000	0.3845	
15 p-Nitrotoluene	1	15.938	15.958	-0.020	85317	0.4000	0.3901	
16 4-Amino-2,6-dinitrotoluene	1	16.451	16.478	-0.027	107559	0.4000	0.3943	
17 m-Nitrotoluene	1	16.778	16.804	-0.026	107777	0.4000	0.3955	
18 2-Amino-4,6-dinitrotoluene	1	17.251	17.284	-0.033	155922	0.4000	0.4106	
19 1,3,5-Trinitrobenzene	1	17.471	17.498	-0.027	157218	0.4000	0.3819	
20 2,6-Dinitrotoluene	1	18.564	18.598	-0.034	104177	0.4000	0.3962	
21 2,4-Dinitrotoluene	1	19.018	19.051	-0.033	212533	0.4000	0.3899	
22 Tetryl	1	22.211	22.244	-0.033	119347	0.4000	0.3871	
23 2,4,6-Trinitrotoluene	1	23.071	23.104	-0.033	155627	0.4000	0.4042	
24 PETN	2	24.205	24.211	-0.006	514656	4.00	4.18	

QC Flag Legend
Processing Flags

Reagents:

8330IntermStk_00078	Amount Added:	40.00	Units: uL
8330 DMT_00015	Amount Added:	20.00	Units: uL

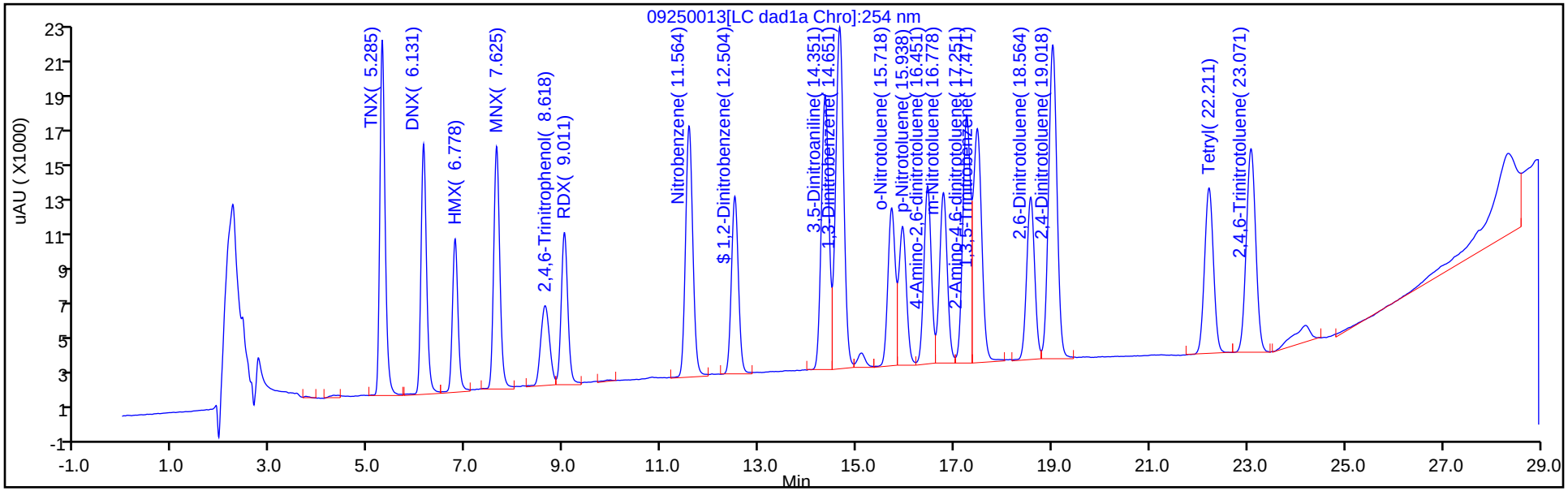
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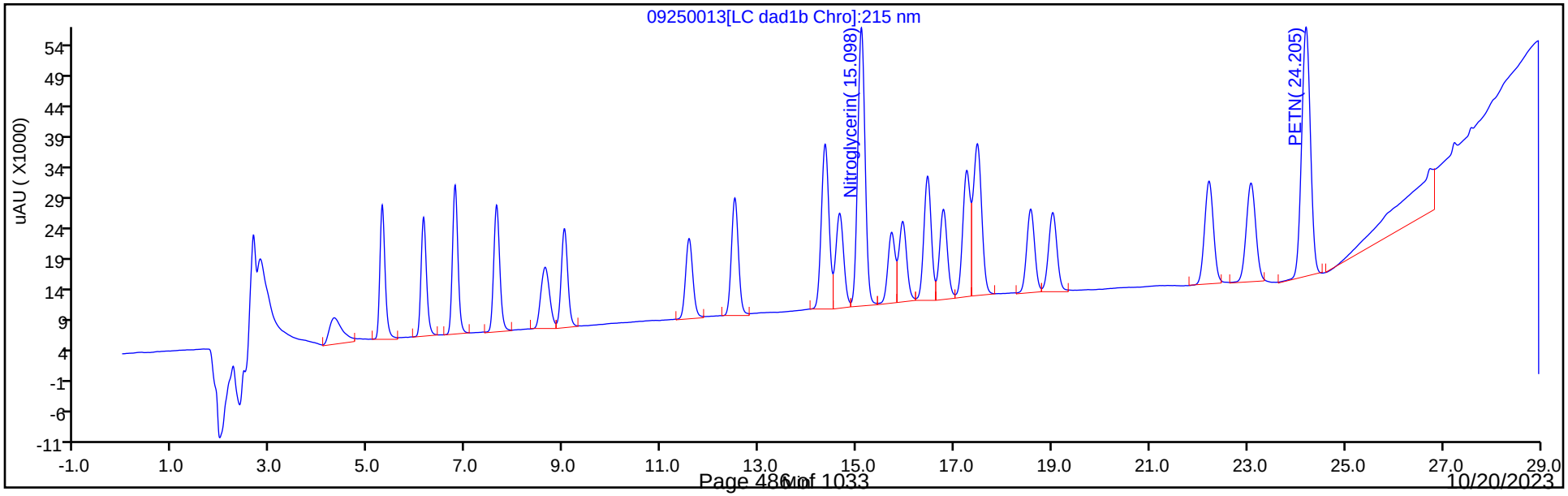
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Injection Date:	25-Sep-2023 20:29:56	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	IC INT 6			Worklist Smp#:	13
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



10/20/2023
4:00 PM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250014.D
Lims ID: IC INT 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 25-Sep-2023 21:05:56 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 5
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub18

Method: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 26-Sep-2023 15:25:36 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1620

First Level Reviewer: LV5D Date: 26-Sep-2023 14:00:00

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.291	5.291	0.000	97033	0.2508	0.2565	
4 DNX	1	6.144	6.144	0.000	71817	0.2503	0.2492	
6 HMX	1	6.791	6.791	0.000	44858	0.2500	0.2586	
7 MNX	1	7.644	7.644	0.000	77595	0.2918	0.2964	
5 2,4,6-Trinitrophenol	1	8.664	8.664	0.000	35728	0.2500	0.2491	
8 RDX	1	9.038	9.038	0.000	52214	0.2500	0.2515	
9 Nitrobenzene	1	11.598	11.598	0.000	94171	0.2500	0.2536	
$ 10 1,2-Dinitrobenzene	1	12.538	12.538	0.000	64646	0.2500	0.2518	
11 3,5-Dinitroaniline	1	14.378	14.378	0.000	106862	0.2500	0.2596	
12 1,3-Dinitrobenzene	1	14.671	14.671	0.000	142691	0.2500	0.2462	
13 Nitroglycerin	2	15.111	15.111	0.000	309021	2.50	2.49	
14 o-Nitrotoluene	1	15.738	15.738	0.000	61006	0.2500	0.2470	
15 p-Nitrotoluene	1	15.958	15.958	0.000	53670	0.2500	0.2441	
16 4-Amino-2,6-dinitrotoluene	1	16.478	16.478	0.000	68403	0.2500	0.2489	
17 m-Nitrotoluene	1	16.804	16.804	0.000	68436	0.2500	0.2496	
18 2-Amino-4,6-dinitrotoluene	1	17.284	17.284	0.000	98305	0.2500	0.2575	
19 1,3,5-Trinitrobenzene	1	17.498	17.498	0.000	100515	0.2500	0.2442	
20 2,6-Dinitrotoluene	1	18.598	18.598	0.000	66514	0.2500	0.2518	
21 2,4-Dinitrotoluene	1	19.051	19.051	0.000	135900	0.2500	0.2493	
22 Tetryl	1	22.244	22.244	0.000	76874	0.2500	0.2493	
23 2,4,6-Trinitrotoluene	1	23.104	23.104	0.000	99165	0.2500	0.2576	
24 PETN	2	24.211	24.211	0.000	320094	2.50	2.60	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00078	Amount Added:	25.00	Units: uL
8330 DMT_00015	Amount Added:	12.50	Units: uL

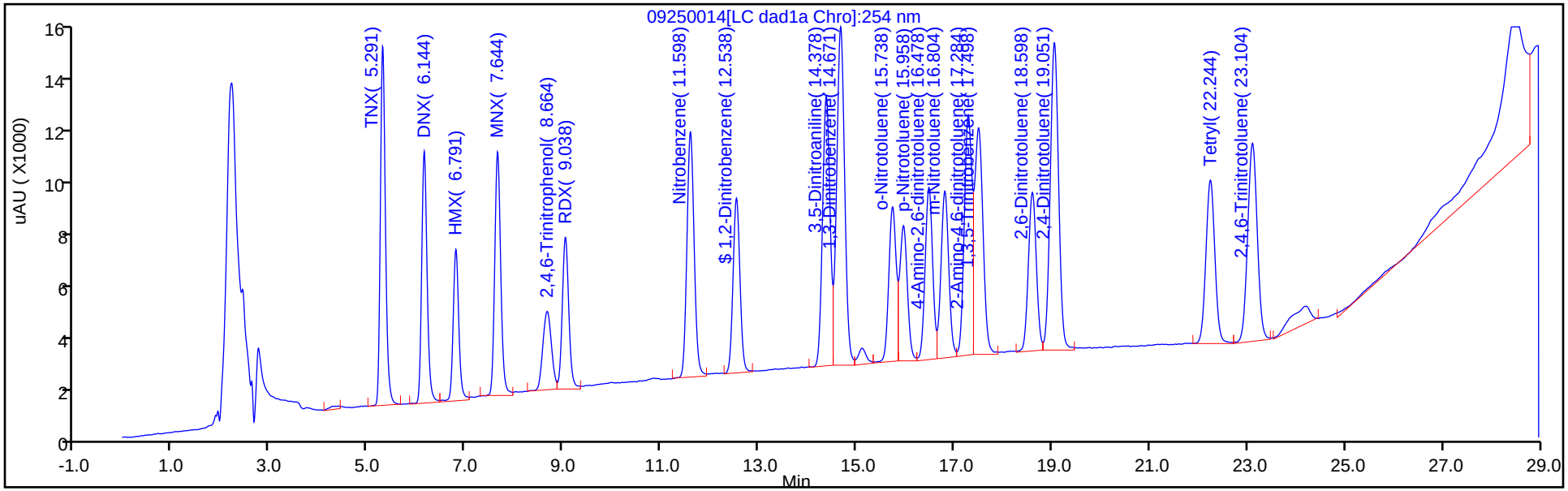
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Eurofins Denver

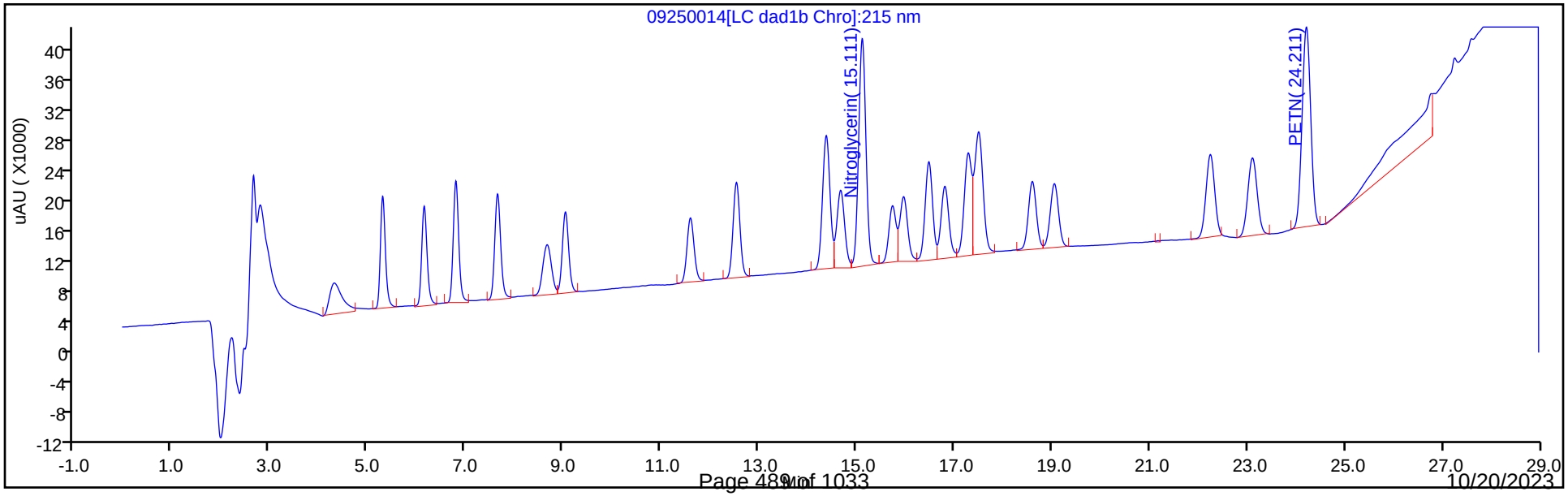
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250014.d

Injection Date:	25-Sep-2023 21:05:56	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	IC INT 5			Worklist Smp#:	14
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

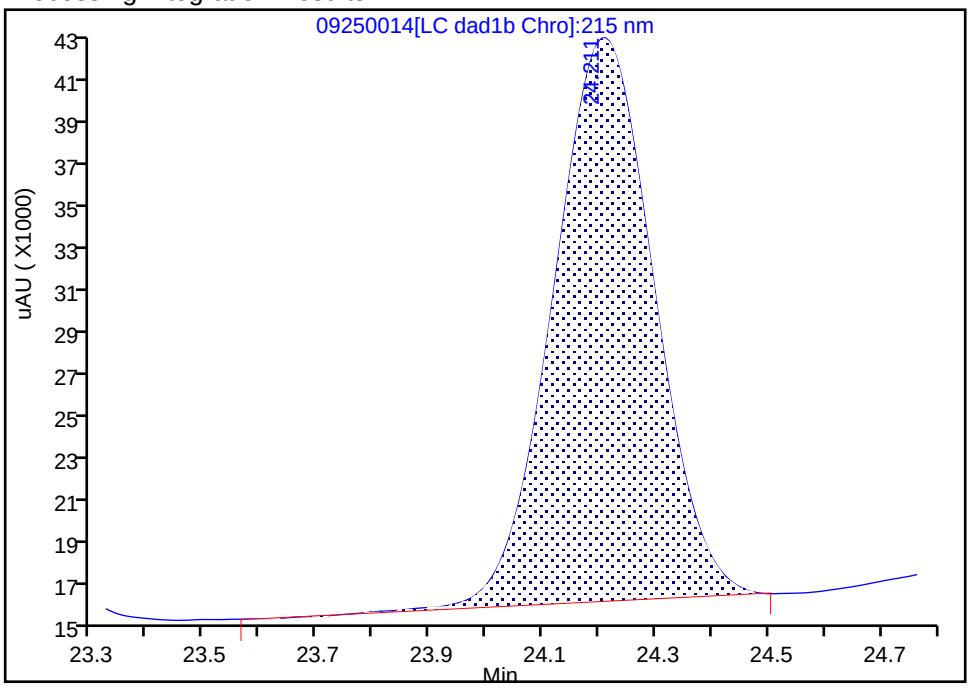
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Lims ID: IC INT 5
Client ID:
Operator ID: JZ/JG ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

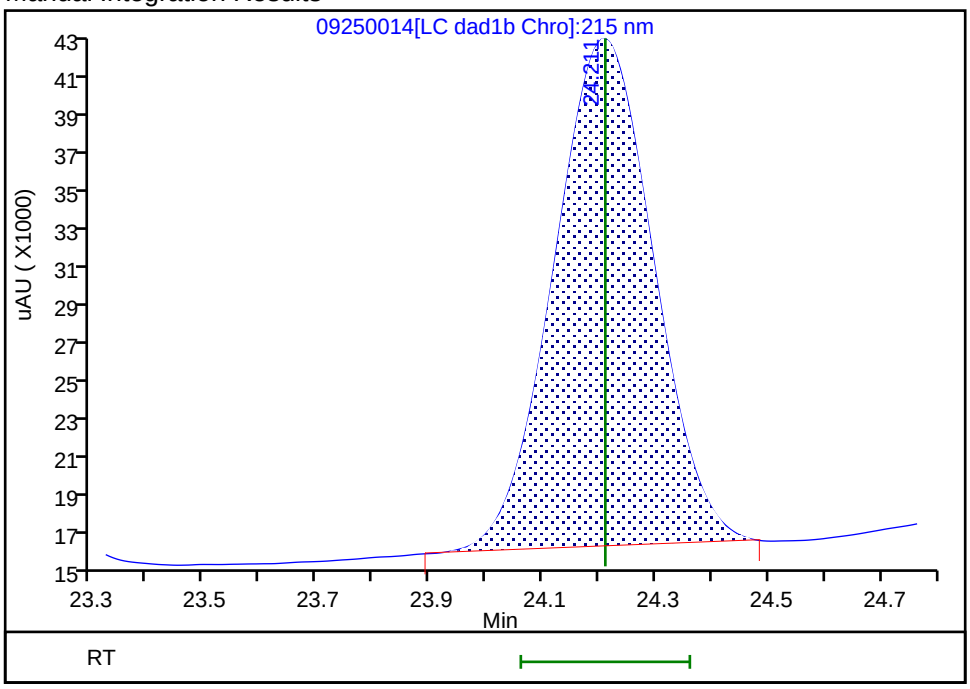
Processing Integration Results

RT: 24.21
Area: 325069
Amount: 2.564843
Amount Units: ug/ml



Manual Integration Results

RT: 24.21
Area: 320094
Amount: 2.602149
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:02:38 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250015.D
Lims ID: IC INT 4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 25-Sep-2023 21:42:00 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 4
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub18

Method: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 26-Sep-2023 15:25:36 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1620

First Level Reviewer: LV5D Date: 26-Sep-2023 14:00:39

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.281	5.291	-0.010	37690	0.1003	0.0981	
4 DNX	1	6.127	6.144	-0.017	27970	0.1001	0.0970	M
6 HMX	1	6.767	6.791	-0.024	16998	0.1000	0.0980	M
7 MNX	1	7.621	7.644	-0.023	30216	0.1167	0.1154	M
5 2,4,6-Trinitrophenol	1	8.654	8.664	-0.010	14448	0.1000	0.1007	M
8 RDX	1	9.001	9.038	-0.037	20133	0.1000	0.0970	M
9 Nitrobenzene	1	11.567	11.598	-0.031	37981	0.1000	0.1023	
$ 10 1,2-Dinitrobenzene	1	12.514	12.538	-0.024	25572	0.1000	0.0996	
11 3,5-Dinitroaniline	1	14.367	14.378	-0.011	42028	0.1000	0.1015	
12 1,3-Dinitrobenzene	1	14.661	14.671	-0.010	56349	0.1000	0.0972	
13 Nitroglycerin	2	15.107	15.111	-0.004	125699	1.00	1.01	
14 o-Nitrotoluene	1	15.721	15.738	-0.017	23778	0.1000	0.0963	
15 p-Nitrotoluene	1	15.941	15.958	-0.017	22449	0.1000	0.1002	
16 4-Amino-2,6-dinitrotoluene	1	16.461	16.478	-0.017	27679	0.1000	0.0977	
17 m-Nitrotoluene	1	16.781	16.804	-0.023	28516	0.1000	0.1014	
18 2-Amino-4,6-dinitrotoluene	1	17.254	17.284	-0.030	39122	0.1000	0.1002	
19 1,3,5-Trinitrobenzene	1	17.467	17.498	-0.031	40753	0.1000	0.0990	
20 2,6-Dinitrotoluene	1	18.567	18.598	-0.031	26594	0.1000	0.0987	
21 2,4-Dinitrotoluene	1	19.021	19.051	-0.030	53734	0.1000	0.0986	
22 Tetryl	1	22.247	22.244	0.003	29248	0.1000	0.0949	
23 2,4,6-Trinitrotoluene	1	23.107	23.104	0.003	39715	0.1000	0.1032	
24 PETN	2	24.227	24.211	0.016	123328	1.00	1.00	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00078	Amount Added:	10.00	Units: uL
8330 DMT_00015	Amount Added:	5.00	Units: uL

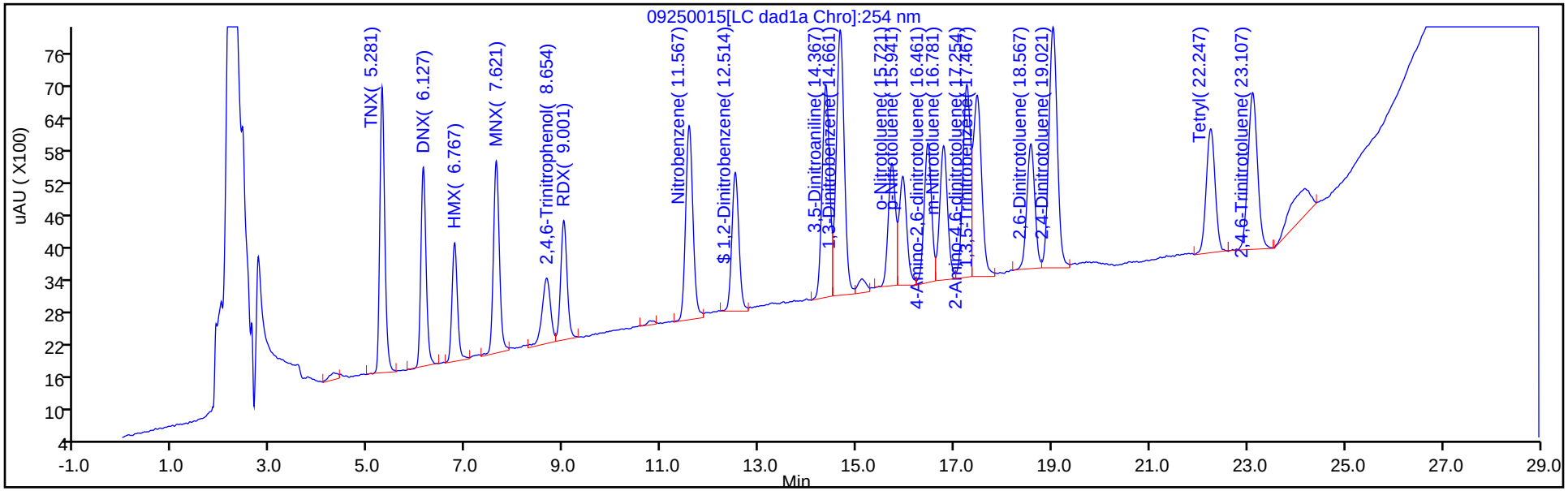
Report Date: 26-Sep-2023 15:25:37 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

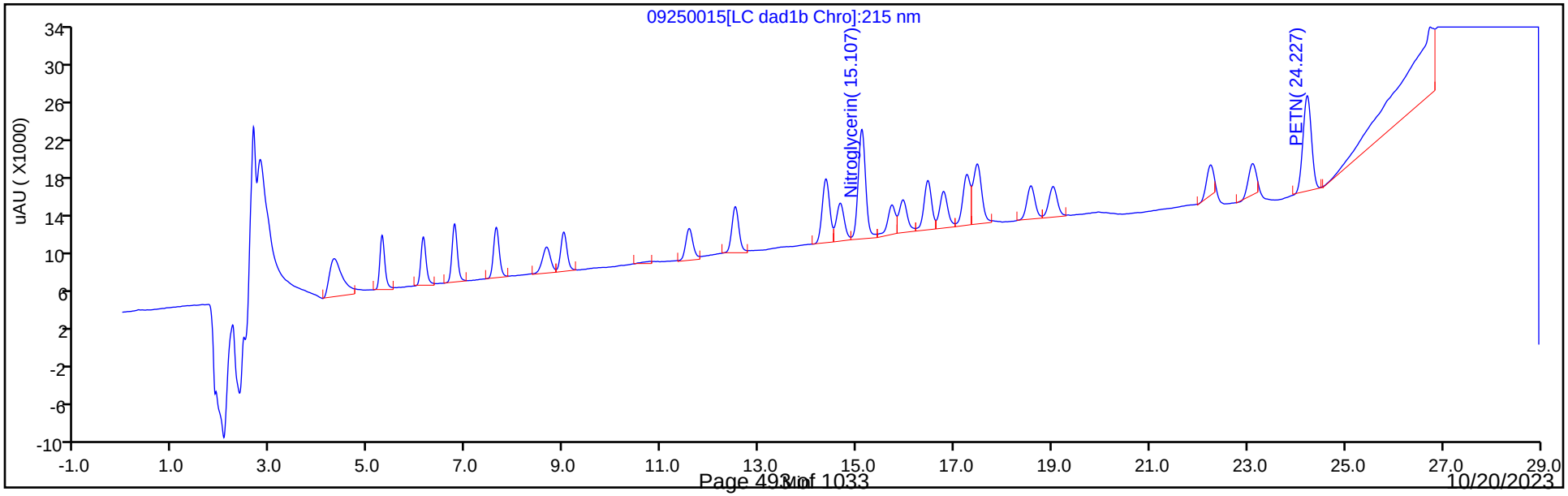
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Injection Date:	25-Sep-2023 21:42:00	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	IC INT 4			Worklist Smp#:	15
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



10/20/2023
4:00 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

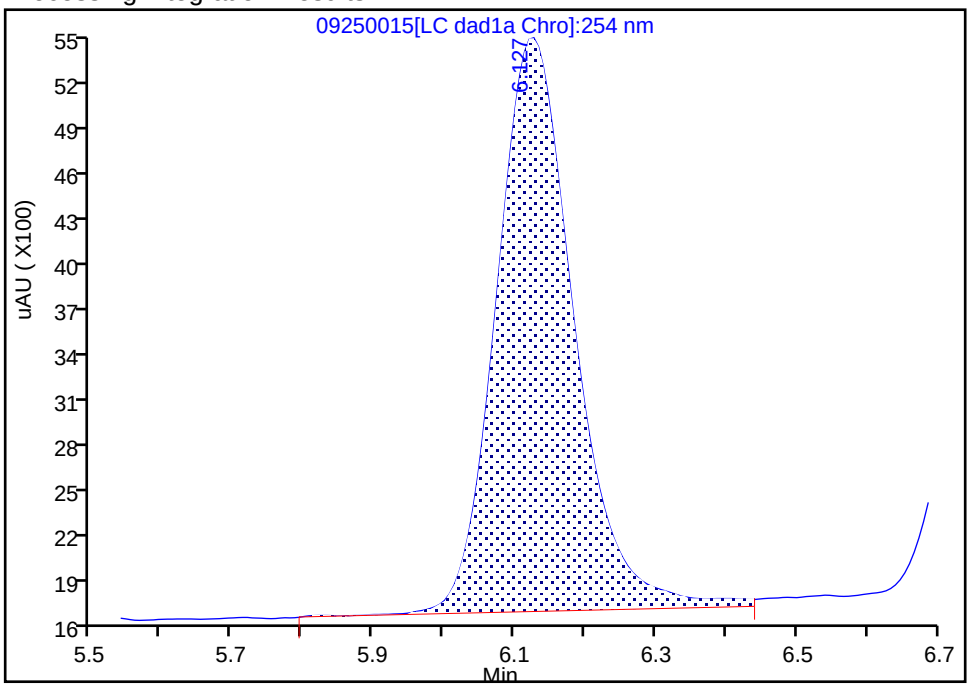
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Injection Date:	25-Sep-2023 21:42:00	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 4				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

4 DNX, CAS: 80251-29-2

Signal: 1

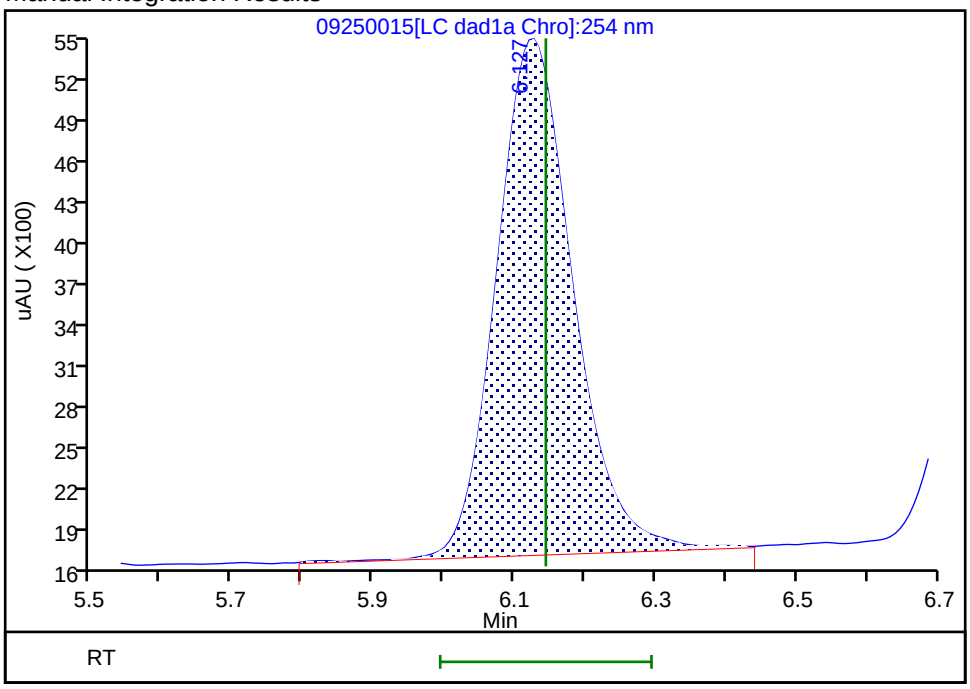
Processing Integration Results

RT: 6.13
Area: 28494
Amount: 0.098487
Amount Units: ug/ml



Manual Integration Results

RT: 6.13
Area: 27970
Amount: 0.097037
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:00:29 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

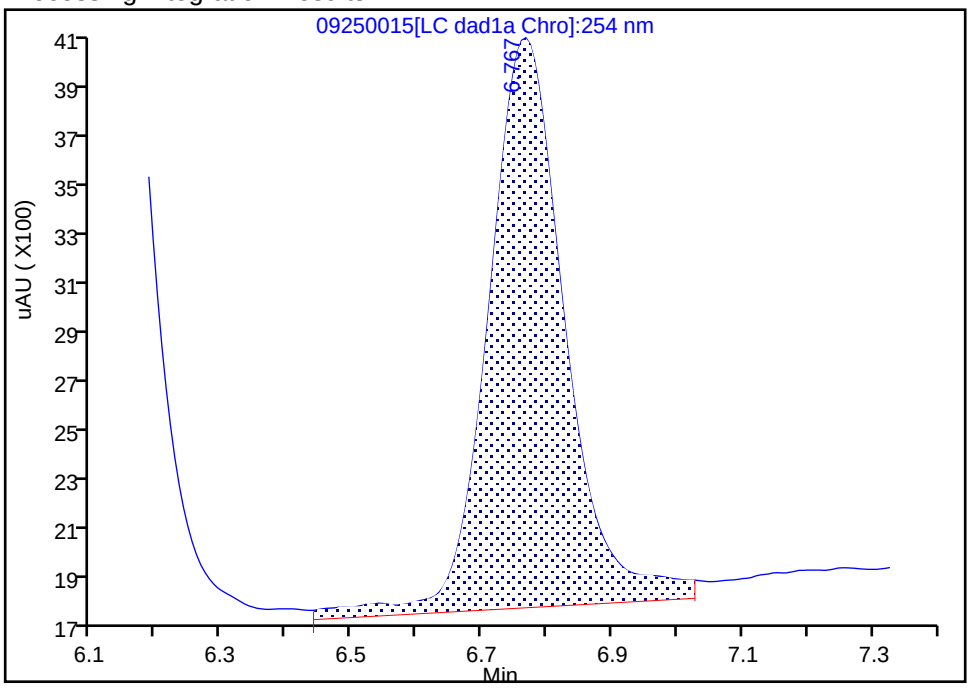
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Lims ID:	IC INT 4				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

6 HMX, CAS: 2691-41-0

Signal: 1

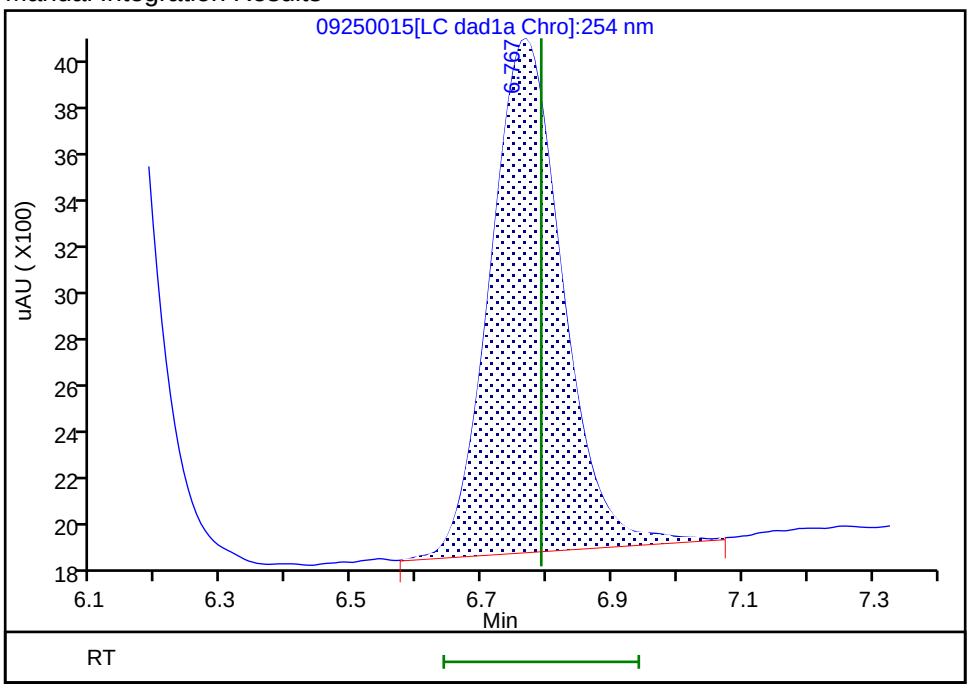
Processing Integration Results

RT: 6.77
Area: 18519
Amount: 0.096909
Amount Units: ug/ml



Manual Integration Results

RT: 6.77
Area: 16998
Amount: 0.097987
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:00:29 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

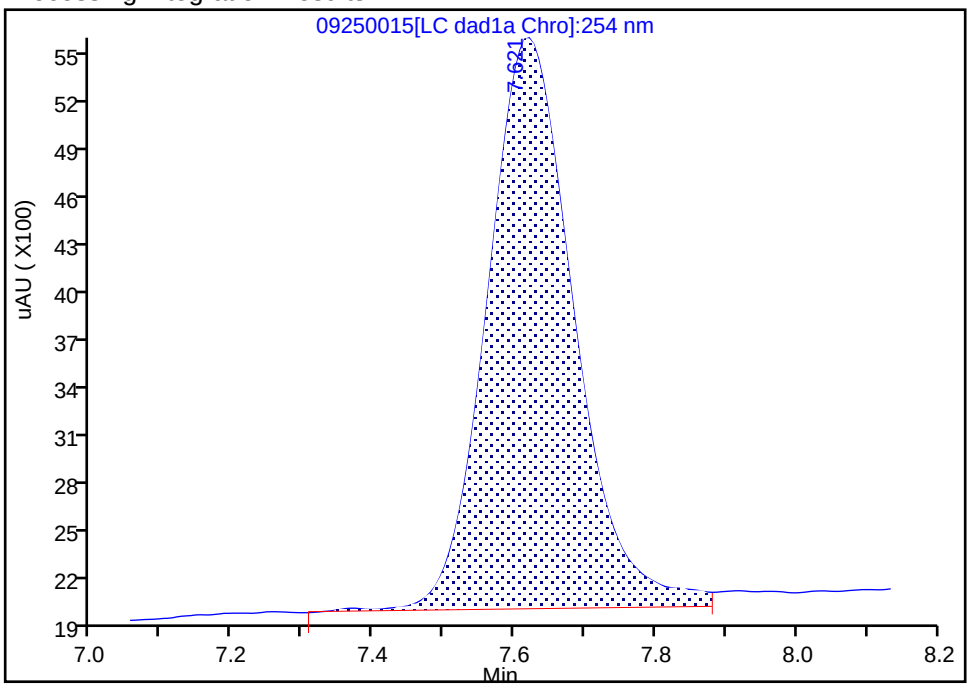
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Injection Date: 25-Sep-2023 21:42:00 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT 4
Client ID:
Operator ID: JZ/JG ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

7 MNX, CAS: 5755-27-1

Signal: 1

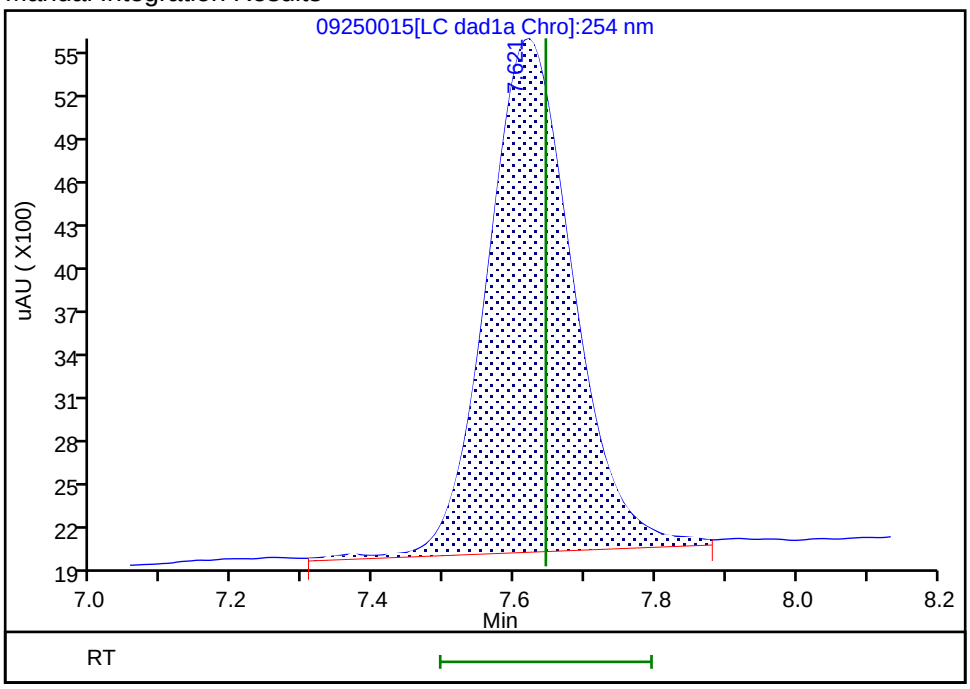
Processing Integration Results

RT: 7.62
Area: 30801
Amount: 0.109447
Amount Units: ug/ml



Manual Integration Results

RT: 7.62
Area: 30216
Amount: 0.115406
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:00:29 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

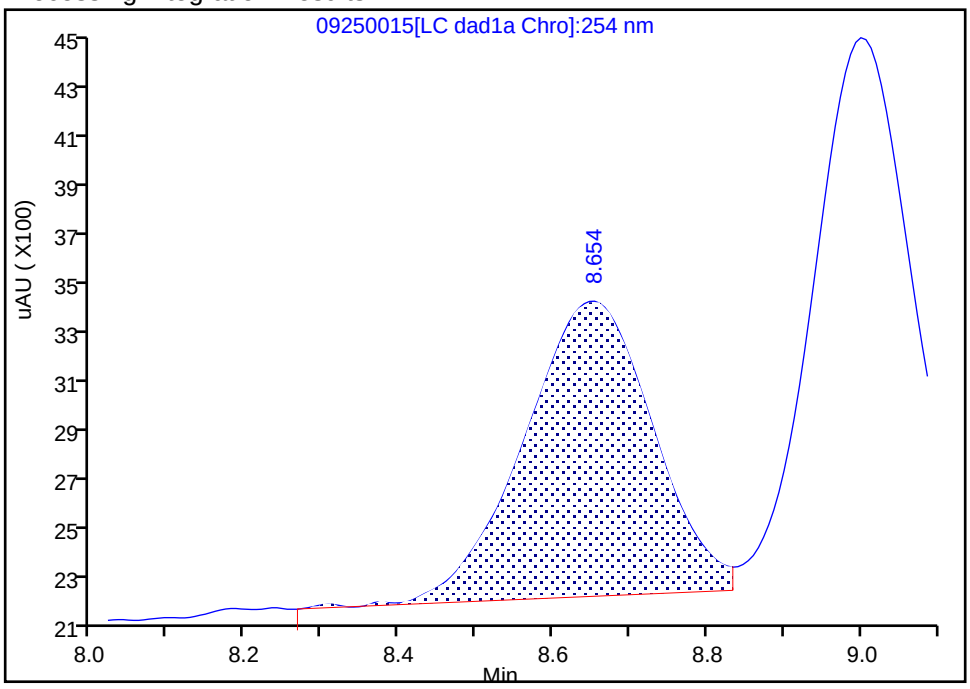
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Injection Date:	25-Sep-2023 21:42:00	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 4				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

5 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

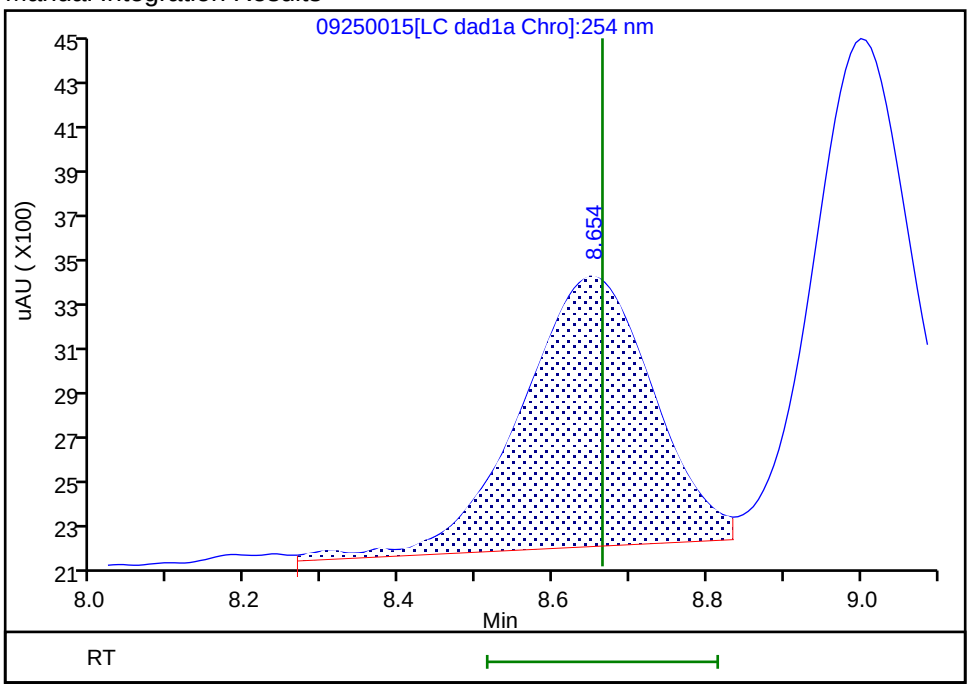
Processing Integration Results

RT: 8.65
Area: 13989
Amount: 0.094739
Amount Units: ug/ml



Manual Integration Results

RT: 8.65
Area: 14448
Amount: 0.100735
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:00:29 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

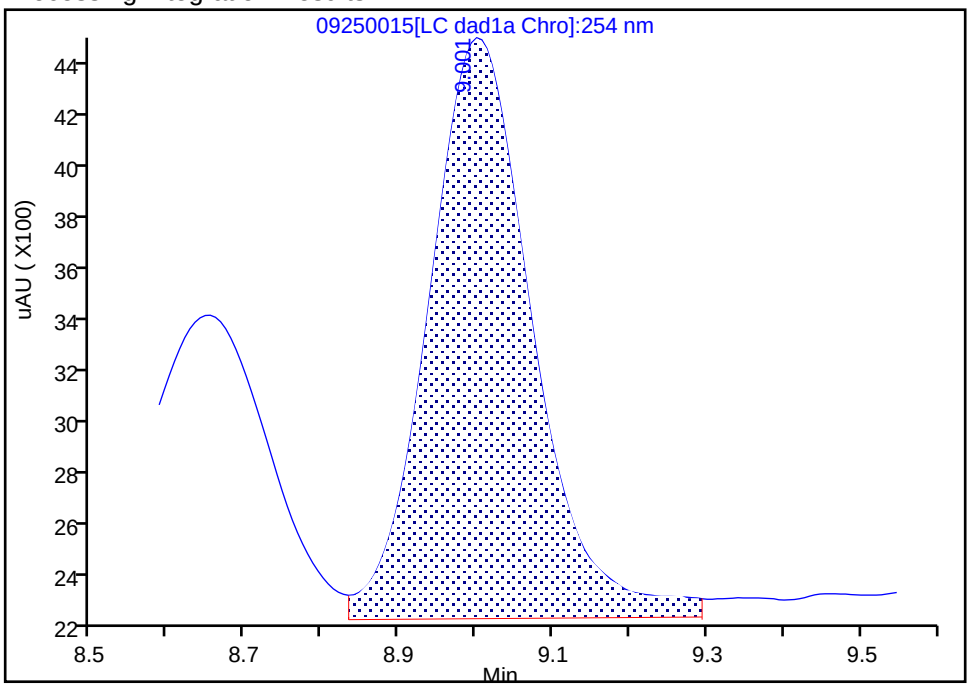
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250015.d
Injection Date: 25-Sep-2023 21:42:00 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT 4
Client ID:
Operator ID: JZ/JG ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

8 RDX, CAS: 121-82-4

Signal: 1

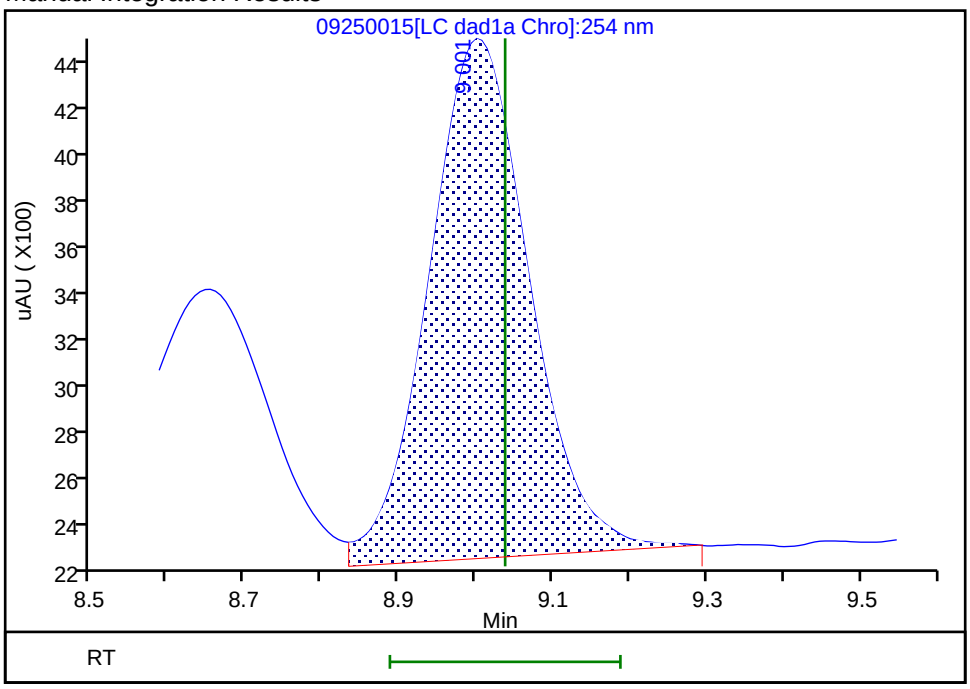
Processing Integration Results

RT: 9.00
Area: 21030
Amount: 0.094840
Amount Units: ug/ml



Manual Integration Results

RT: 9.00
Area: 20133
Amount: 0.096986
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:00:29 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

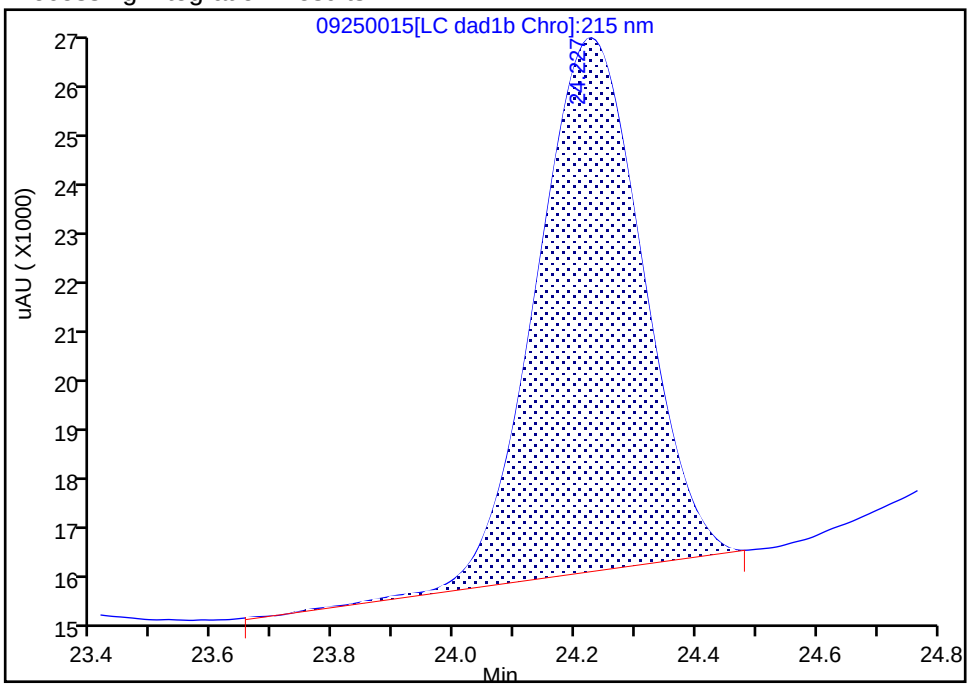
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Injection Date: 25-Sep-2023 21:42:00 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT 4
Client ID:
Operator ID: JZ/JG ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

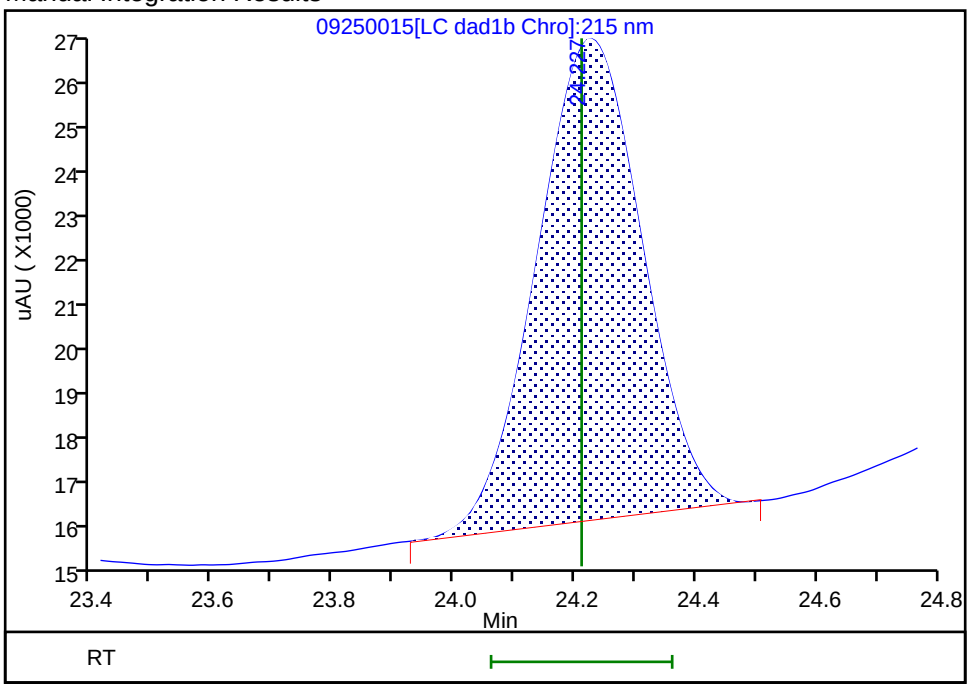
Processing Integration Results

RT: 24.23
Area: 124775
Amount: 0.983246
Amount Units: ug/ml



Manual Integration Results

RT: 24.23
Area: 123328
Amount: 1.002574
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:02:31 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250016.D
Lims ID: IC INT 3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 25-Sep-2023 22:18:06 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 3
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub18

Method: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 26-Sep-2023 15:25:37 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1620

First Level Reviewer: LV5D Date: 26-Sep-2023 14:01:01

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.289	5.291	-0.002	19818	0.0502	0.0504	
4 DNX	1	6.135	6.144	-0.009	14790	0.0501	0.0513	M
6 HMX	1	6.782	6.791	-0.009	8897	0.0500	0.0513	M
7 MNX	1	7.629	7.644	-0.015	16454	0.0584	0.0628	M
5 2,4,6-Trinitrophenol	1	8.689	8.664	0.025	7270	0.0500	0.0507	M
8 RDX	1	9.022	9.038	-0.016	10353	0.0500	0.0499	M
9 Nitrobenzene	1	11.575	11.598	-0.023	18591	0.0500	0.0501	
$ 10 1,2-Dinitrobenzene	1	12.522	12.538	-0.016	12837	0.0500	0.0500	
11 3,5-Dinitroaniline	1	14.375	14.378	-0.003	20488	0.0500	0.0490	
12 1,3-Dinitrobenzene	1	14.669	14.671	-0.002	27516	0.0500	0.0475	
13 Nitroglycerin	2	15.115	15.111	0.004	61450	0.5000	0.4947	
14 o-Nitrotoluene	1	15.742	15.738	0.004	12750	0.0500	0.0516	
15 p-Nitrotoluene	1	15.969	15.958	0.011	11667	0.0500	0.0505	
16 4-Amino-2,6-dinitrotoluene	1	16.475	16.478	-0.003	15115	0.0500	0.0511	
17 m-Nitrotoluene	1	16.802	16.804	-0.002	14579	0.0500	0.0497	
18 2-Amino-4,6-dinitrotoluene	1	17.282	17.284	-0.002	20666	0.0500	0.0511	
19 1,3,5-Trinitrobenzene	1	17.489	17.498	-0.009	20880	0.0500	0.0507	
20 2,6-Dinitrotoluene	1	18.589	18.598	-0.009	12748	0.0500	0.0456	
21 2,4-Dinitrotoluene	1	19.042	19.051	-0.009	27321	0.0500	0.0501	
22 Tetryl	1	22.235	22.244	-0.009	15400	0.0500	0.0499	
23 2,4,6-Trinitrotoluene	1	23.089	23.104	-0.015	20297	0.0500	0.0527	
24 PETN	2	24.215	24.211	0.004	57592	0.5000	0.4682	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00078	Amount Added:	5.00	Units: uL
8330 DMT_00015	Amount Added:	2.50	Units: uL

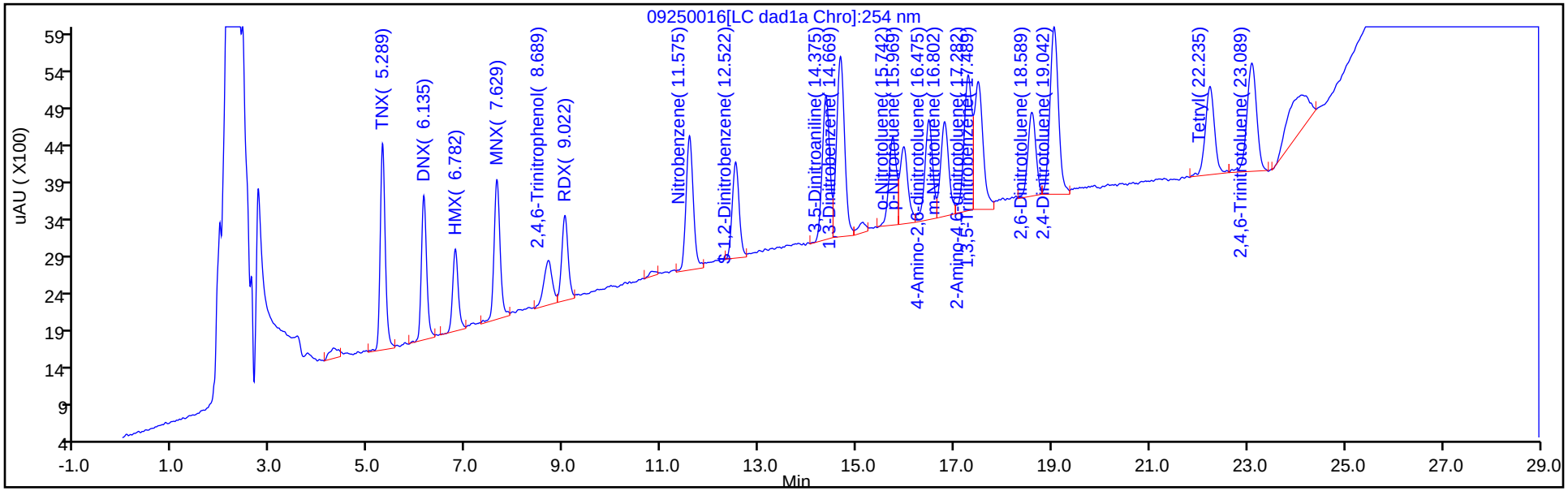
Report Date: 26-Sep-2023 15:25:37 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

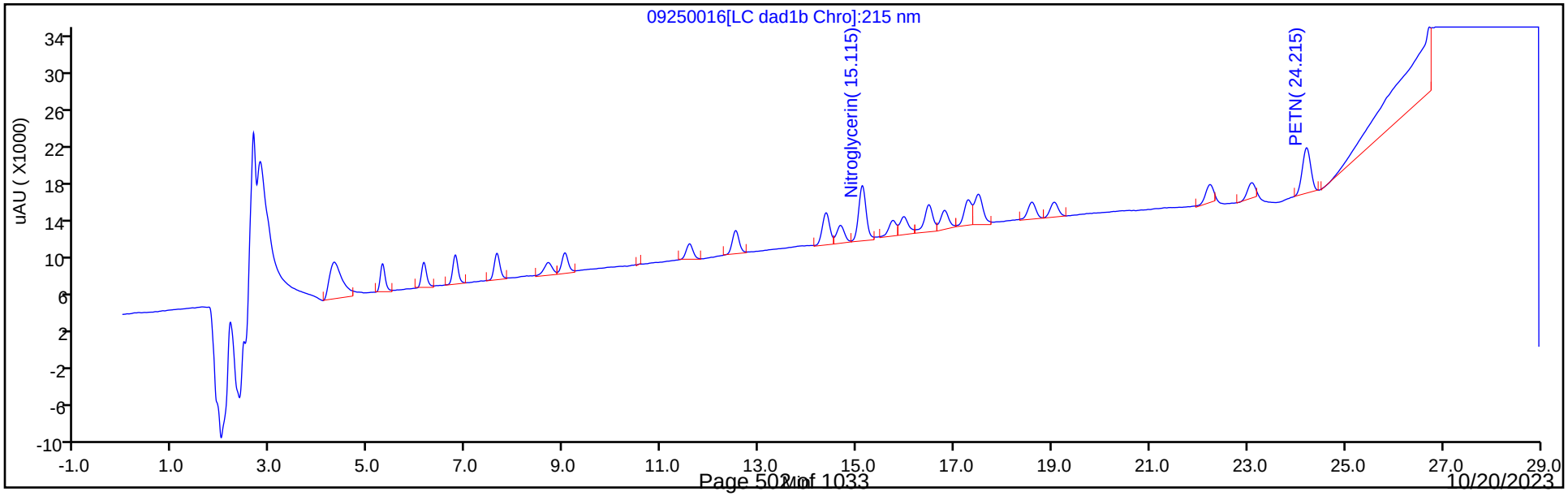
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250016.d

Injection Date:	25-Sep-2023 22:18:06	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	IC INT 3			Worklist Smp#:	16
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



10/20/2023
4:00 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

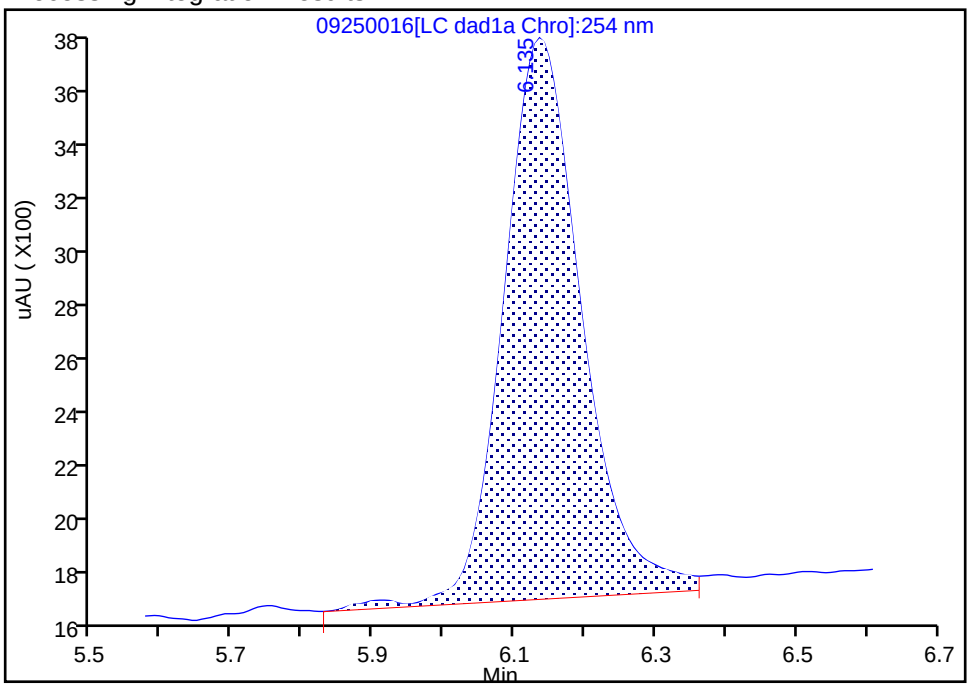
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Lims ID:	IC INT 3				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

4 DNX, CAS: 80251-29-2

Signal: 1

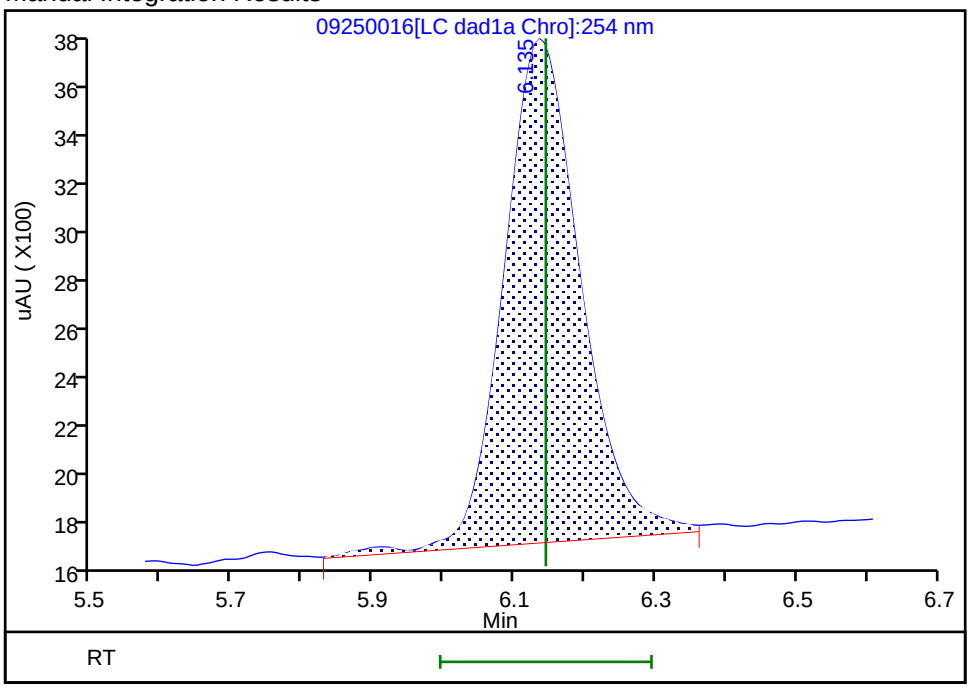
Processing Integration Results

RT: 6.14
Area: 15014
Amount: 0.051999
Amount Units: ug/ml



Manual Integration Results

RT: 6.14
Area: 14790
Amount: 0.051311
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:00:47 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

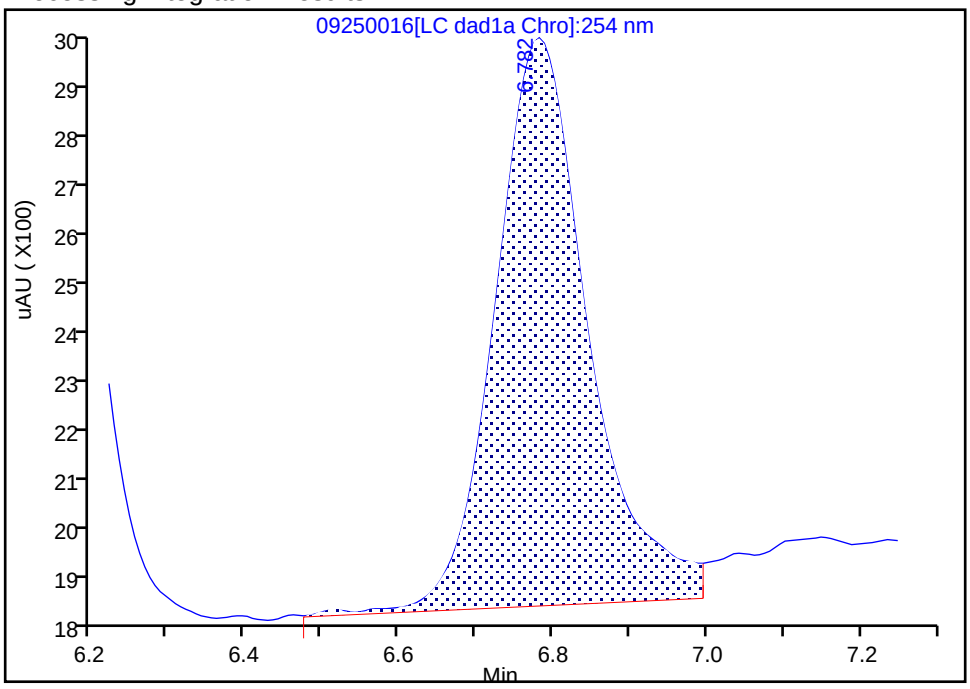
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Injection Date: 25-Sep-2023 22:18:06 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT 3
Client ID:
Operator ID: JZ/JG ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

6 HMX, CAS: 2691-41-0

Signal: 1

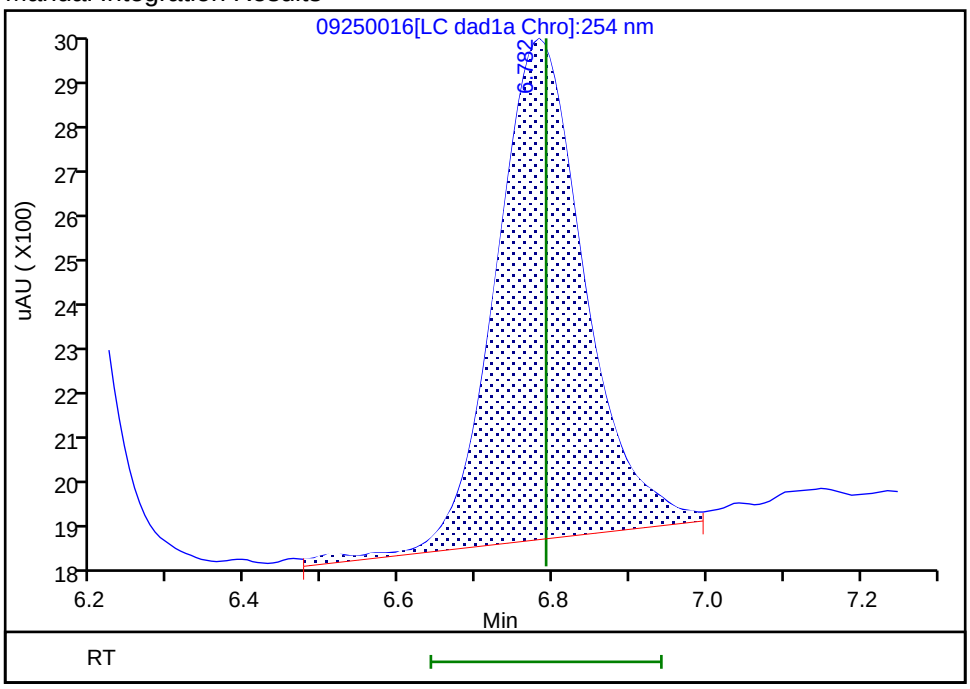
Processing Integration Results

RT: 6.78
Area: 9443
Amount: 0.049856
Amount Units: ug/ml



Manual Integration Results

RT: 6.78
Area: 8897
Amount: 0.051288
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:00:47 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

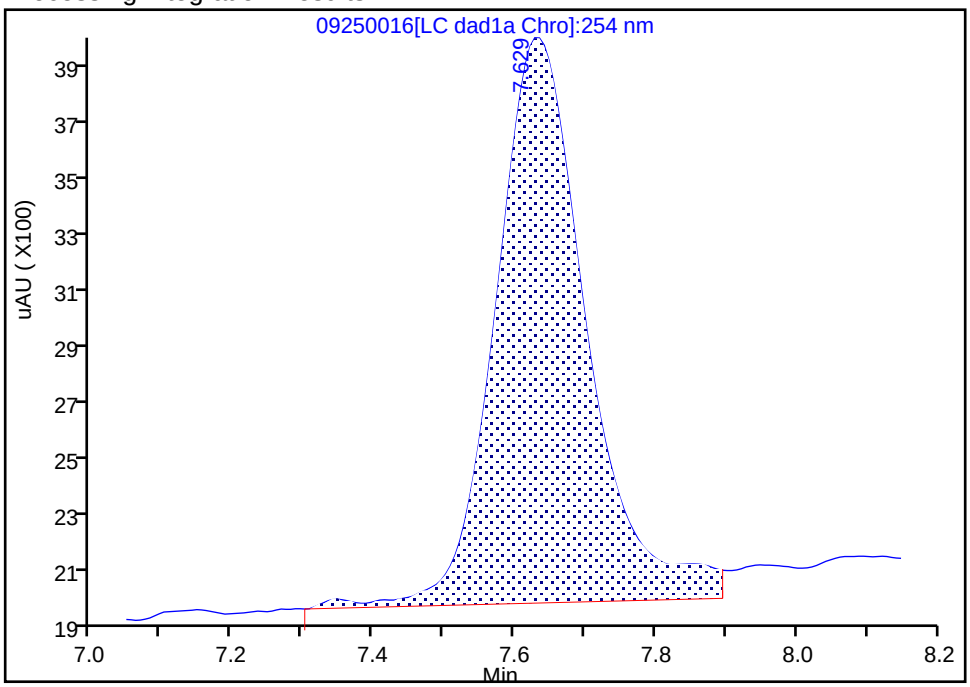
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Injection Date:	25-Sep-2023 22:18:06	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 3				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

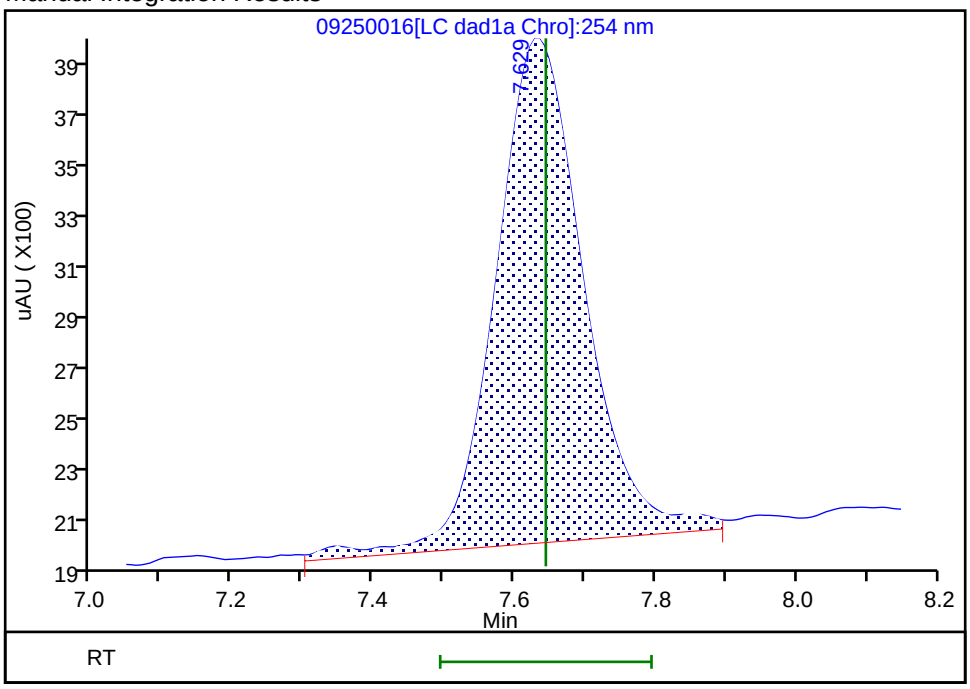
Processing Integration Results

RT: 7.63
Area: 17112
Amount: 0.060926
Amount Units: ug/ml



Manual Integration Results

RT: 7.63
Area: 16454
Amount: 0.062844
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:00:47 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Eurofins Denver

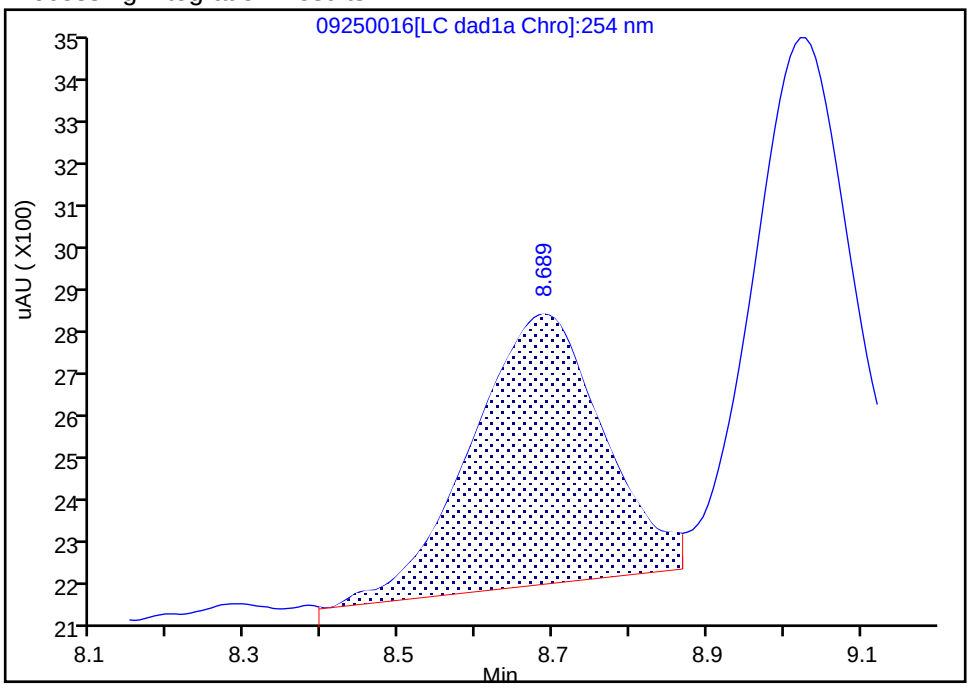
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250016.d
Injection Date: 25-Sep-2023 22:18:06 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT 3
Client ID:
Operator ID: JZ/JG ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

5 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

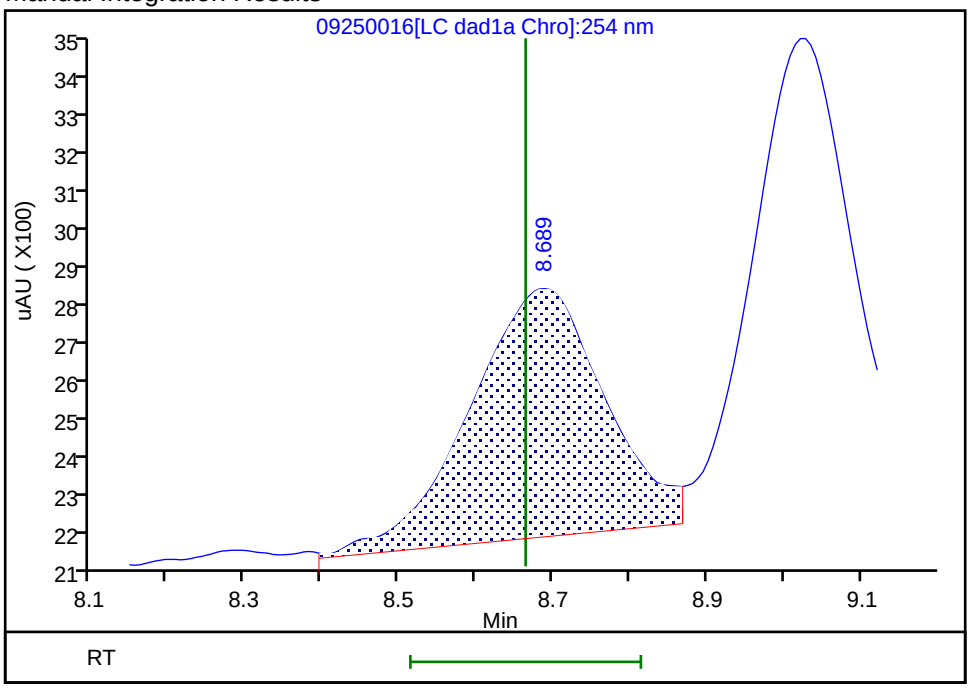
Processing Integration Results

RT: 8.69
Area: 7028
Amount: 0.047432
Amount Units: ug/ml



Manual Integration Results

RT: 8.69
Area: 7270
Amount: 0.050688
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:00:47 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

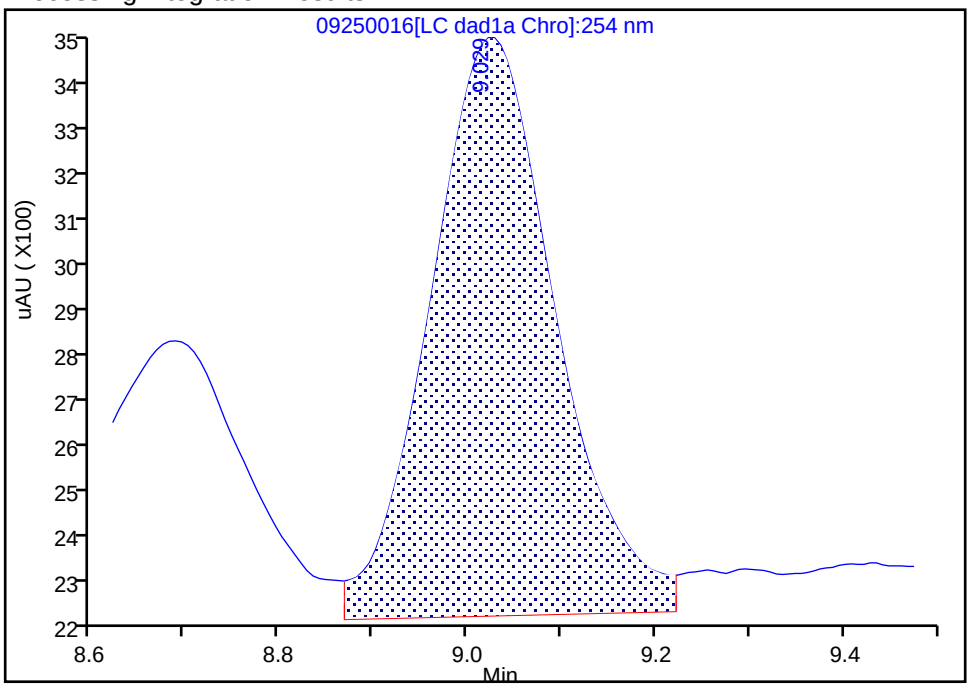
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250016.d
Injection Date: 25-Sep-2023 22:18:06 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT 3
Client ID:
Operator ID: JZ/JG ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

8 RDX, CAS: 121-82-4

Signal: 1

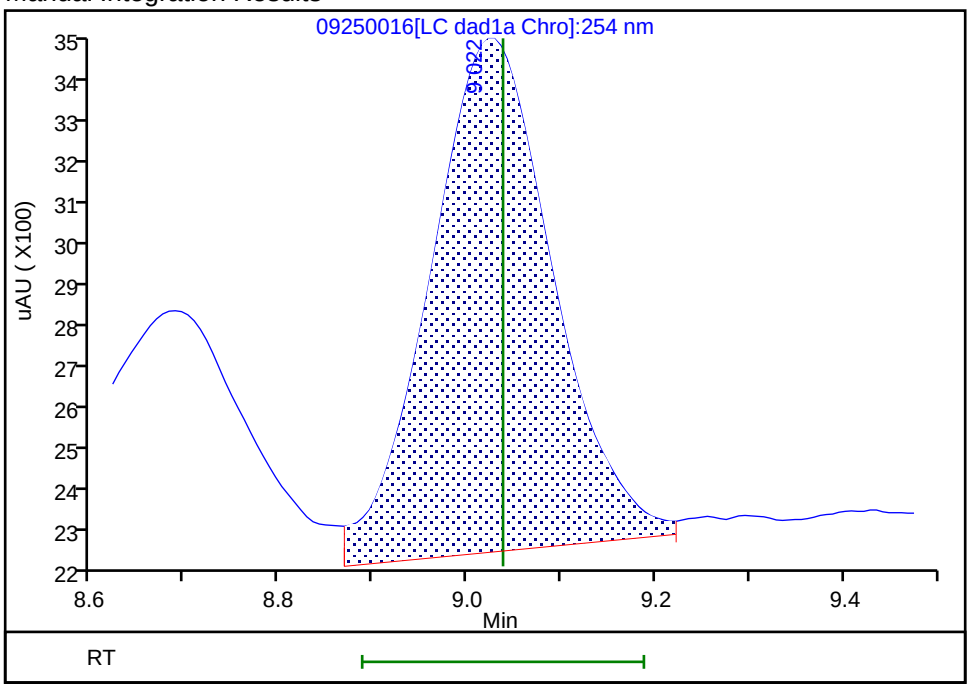
Processing Integration Results

RT: 9.03
Area: 10724
Amount: 0.048581
Amount Units: ug/ml



Manual Integration Results

RT: 9.02
Area: 10353
Amount: 0.049873
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:00:47 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

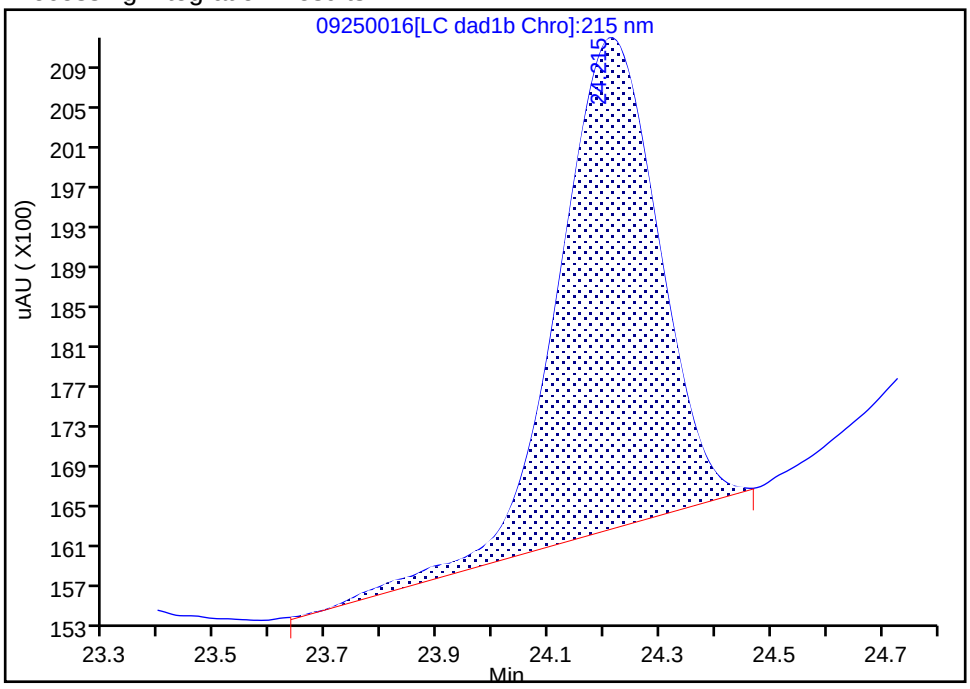
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Injection Date: 25-Sep-2023 22:18:06 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT 3
Client ID:
Operator ID: JZ/JG ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

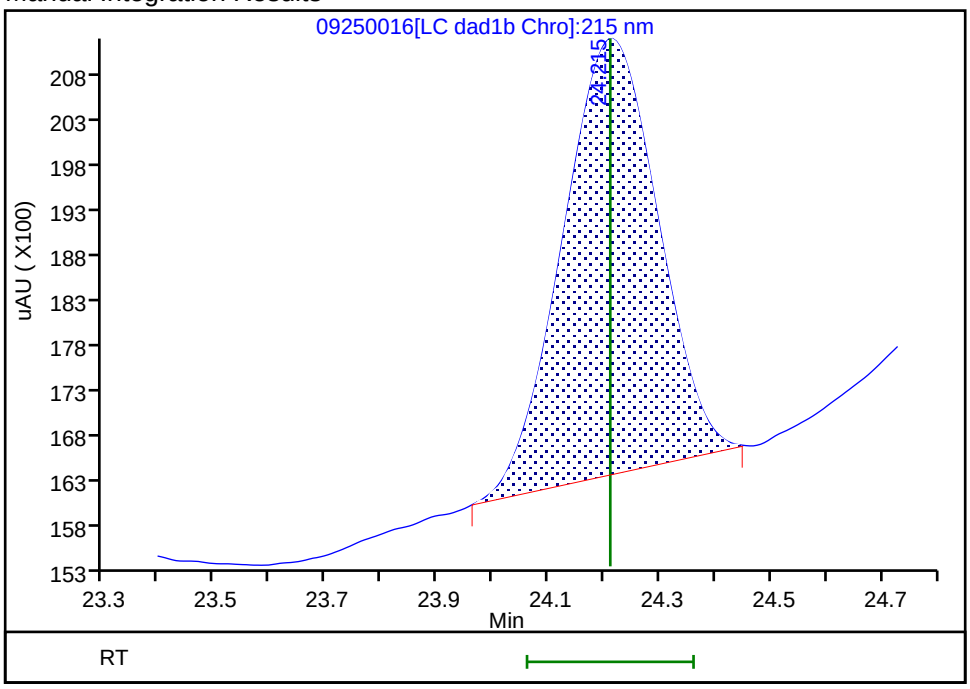
Processing Integration Results

RT: 24.22
Area: 61882
Amount: 0.484004
Amount Units: ug/ml



Manual Integration Results

RT: 24.22
Area: 57592
Amount: 0.468184
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:02:25 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250017.D
Lims ID: IC INT 2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 25-Sep-2023 22:54:10 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 2
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub18

Method: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 26-Sep-2023 15:25:38 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1620

First Level Reviewer: LV5D Date: 26-Sep-2023 15:24:47

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.285	5.291	-0.006	8811	0.0201	0.0210	
4 DNX	1	6.131	6.144	-0.013	6216	0.0200	0.0216	
6 HMX	1	6.771	6.791	-0.020	3125	0.0200	0.0180	M
7 MNX	1	7.618	7.644	-0.026	6293	0.0233	0.0240	M
5 2,4,6-Trinitrophenol	1	8.678	8.664	0.014	2960	0.0200	0.0206	M
8 RDX	1	9.005	9.038	-0.033	4054	0.0200	0.0195	M
9 Nitrobenzene	1	11.551	11.598	-0.047	6887	0.0200	0.0185	M
$ 10 1,2-Dinitrobenzene	1	12.484	12.538	-0.054	4419	0.0200	0.0172	M
11 3,5-Dinitroaniline	1	14.338	14.378	-0.040	8071	0.0200	0.0187	M
12 1,3-Dinitrobenzene	1	14.638	14.671	-0.033	11160	0.0200	0.0193	M
13 Nitroglycerin	2	15.064	15.111	-0.047	25930	0.2000	0.2088	
14 o-Nitrotoluene	1	15.684	15.738	-0.054	5416	0.0200	0.0219	M
15 p-Nitrotoluene	1	15.911	15.958	-0.047	5178	0.0200	0.0205	M
16 4-Amino-2,6-dinitrotoluene	1	16.424	16.478	-0.054	6984	0.0200	0.0209	M
17 m-Nitrotoluene	1	16.744	16.804	-0.060	6679	0.0200	0.0204	M
18 2-Amino-4,6-dinitrotoluene	1	17.224	17.284	-0.060	8189	0.0200	0.0180	M
19 1,3,5-Trinitrobenzene	1	17.444	17.498	-0.054	8780	0.0200	0.0213	M
20 2,6-Dinitrotoluene	1	18.524	18.598	-0.074	6716	0.0200	0.0224	M
21 2,4-Dinitrotoluene	1	18.984	19.051	-0.067	11241	0.0200	0.0206	M
22 Tetryl	1	22.191	22.244	-0.053	6017	0.0200	0.0195	
23 2,4,6-Trinitrotoluene	1	23.045	23.104	-0.059	6528	0.0200	0.0170	
24 PETN	2	24.171	24.211	-0.040	21075	0.2000	0.1713	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00078	Amount Added:	2.00	Units: uL
8330 DMT_00015	Amount Added:	1.00	Units: uL

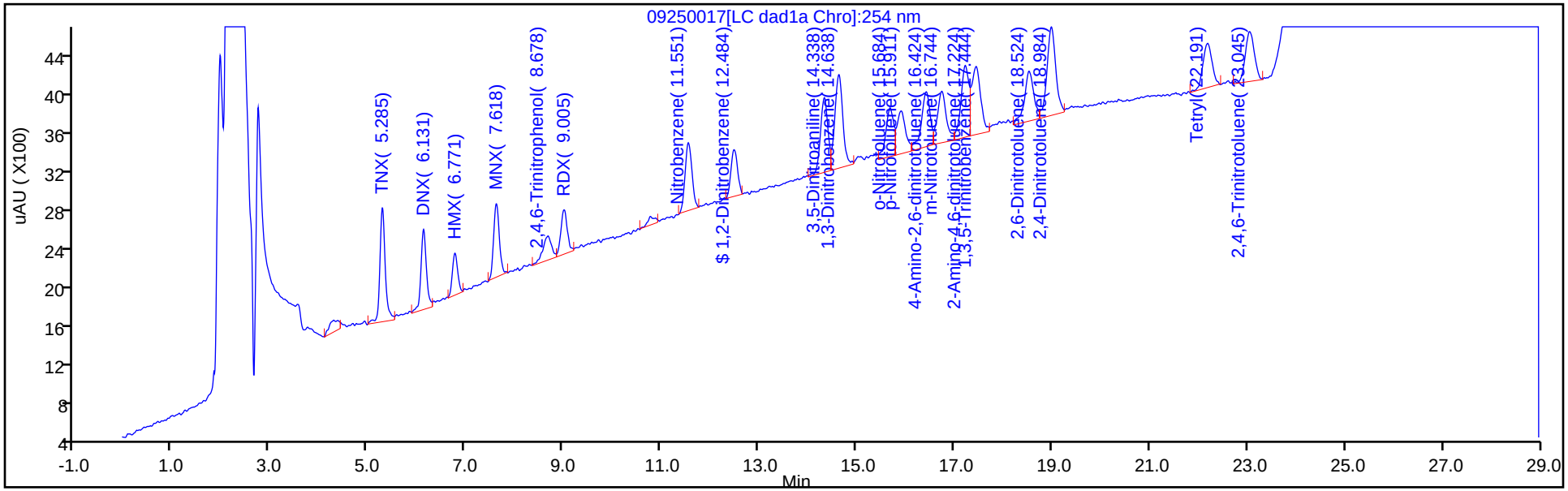
Report Date: 26-Sep-2023 15:25:38 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

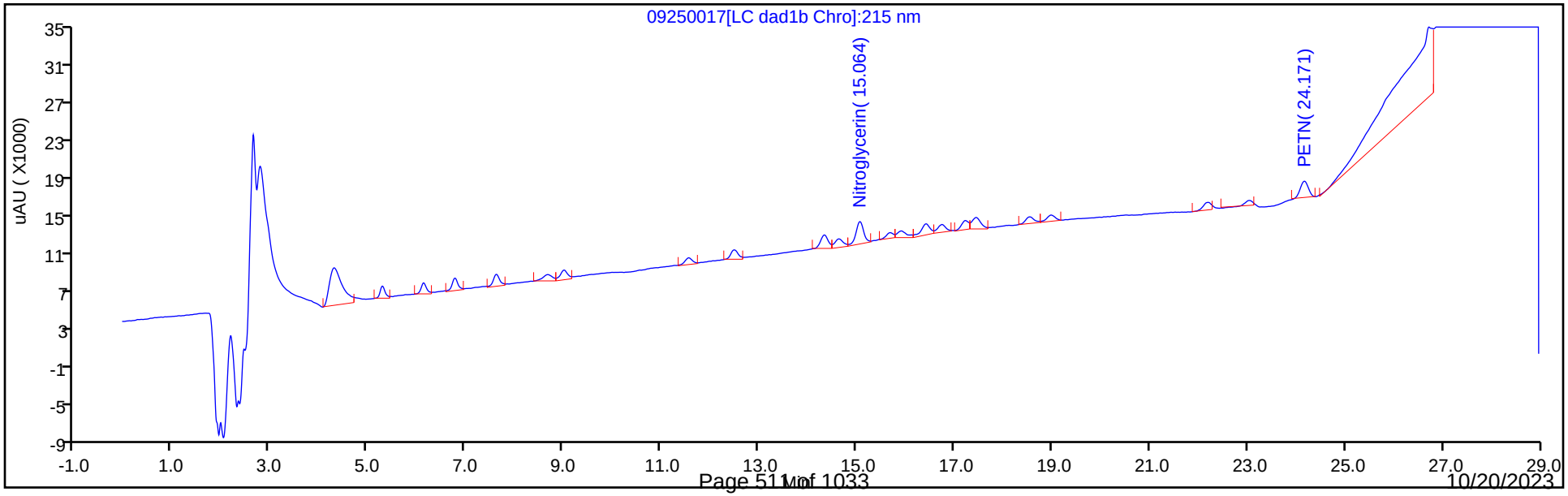
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250017.d

Injection Date:	25-Sep-2023 22:54:10	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	IC INT 2			Worklist Smp#:	17
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

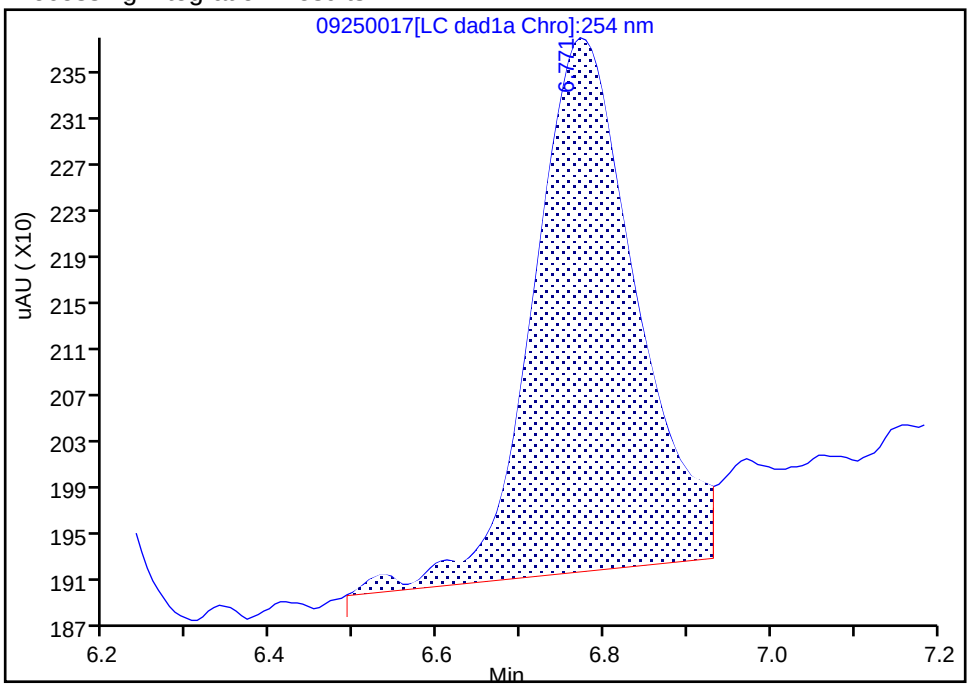
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Injection Date:	25-Sep-2023 22:54:10	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

6 HMX, CAS: 2691-41-0

Signal: 1

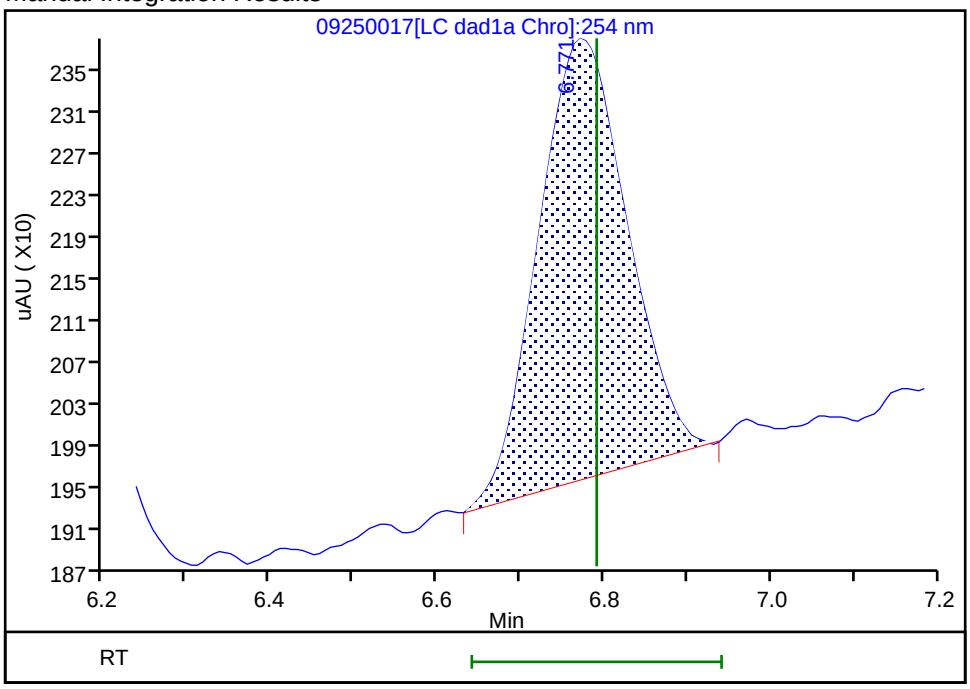
Processing Integration Results

RT: 6.77
Area: 3947
Amount: 0.020973
Amount Units: ug/ml



Manual Integration Results

RT: 6.77
Area: 3125
Amount: 0.018015
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:01:19 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

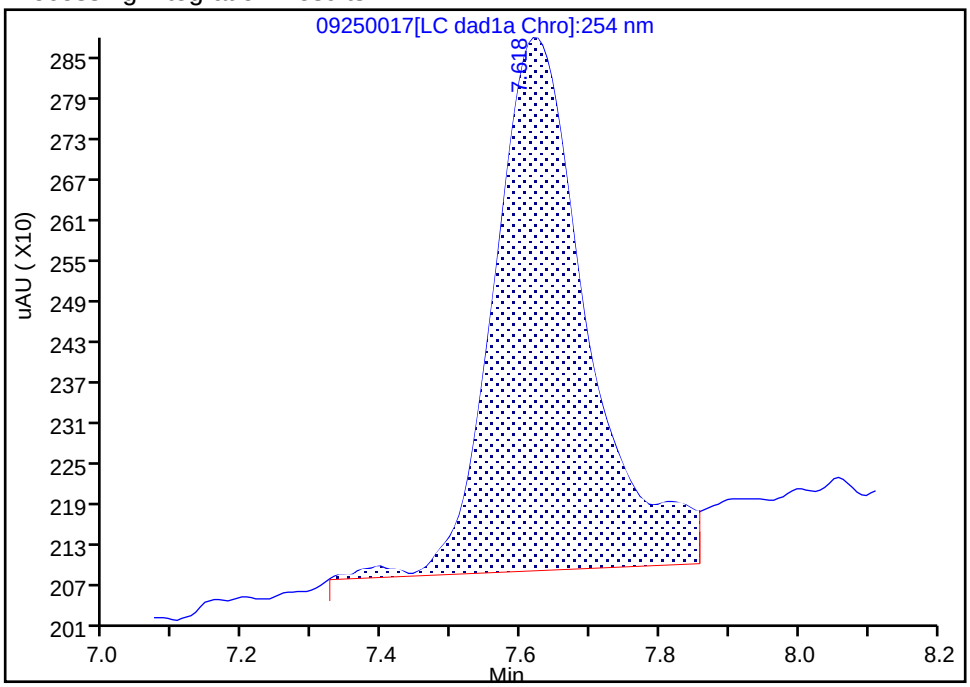
Data File:	\\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250017.d				
Injection Date:	25-Sep-2023 22:54:10	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

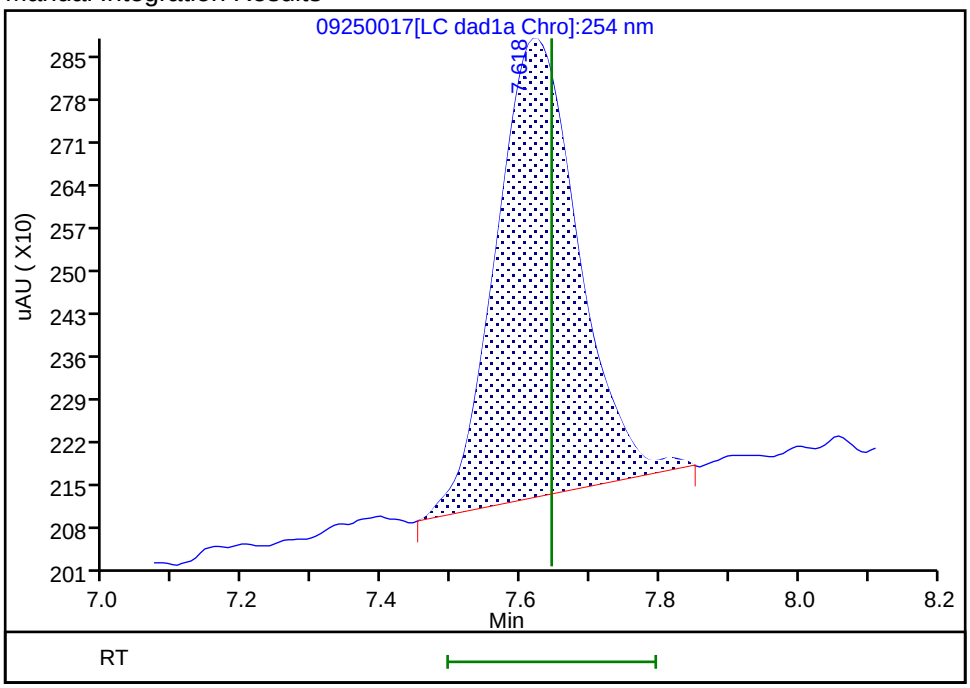
Processing Integration Results

RT: 7.62
Area: 7438
Amount: 0.026601
Amount Units: ug/ml



Manual Integration Results

RT: 7.62
Area: 6293
Amount: 0.024035
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:01:27 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

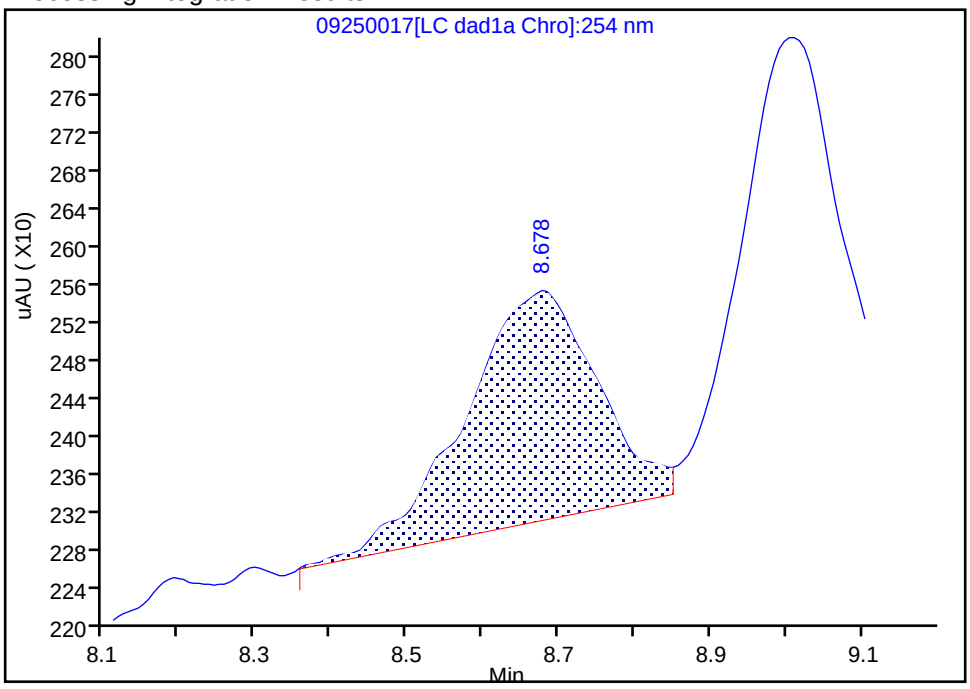
Data File:	\\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250017.d				
Injection Date:	25-Sep-2023 22:54:10	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

5 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

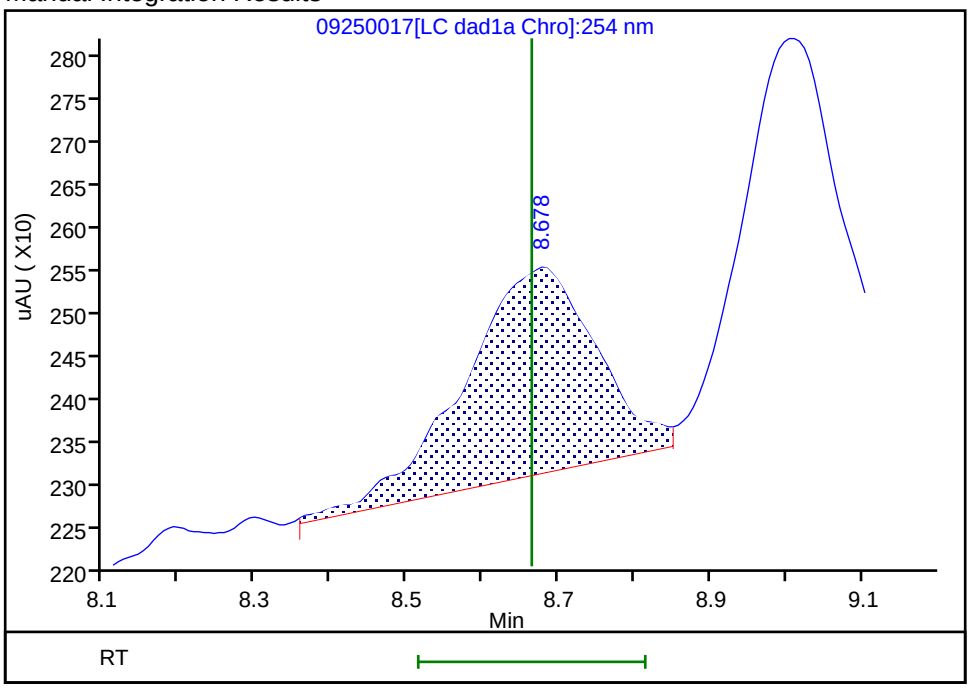
Processing Integration Results

RT: 8.68
Area: 2901
Amount: 0.019508
Amount Units: ug/ml



Manual Integration Results

RT: 8.68
Area: 2960
Amount: 0.020638
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:01:34 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

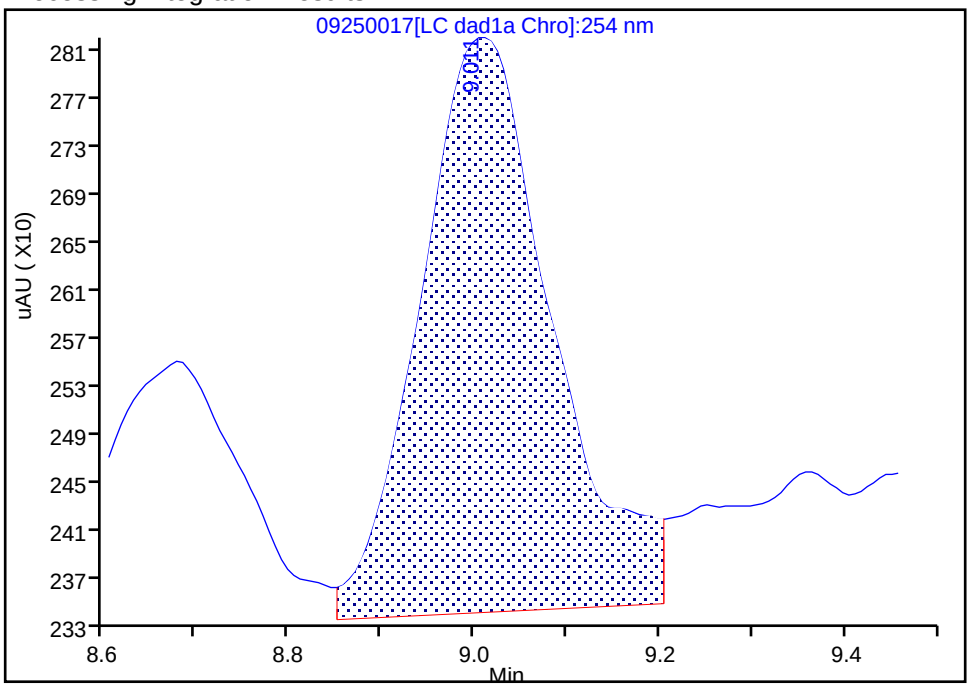
Data File:	\\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250017.d				
Injection Date:	25-Sep-2023 22:54:10	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

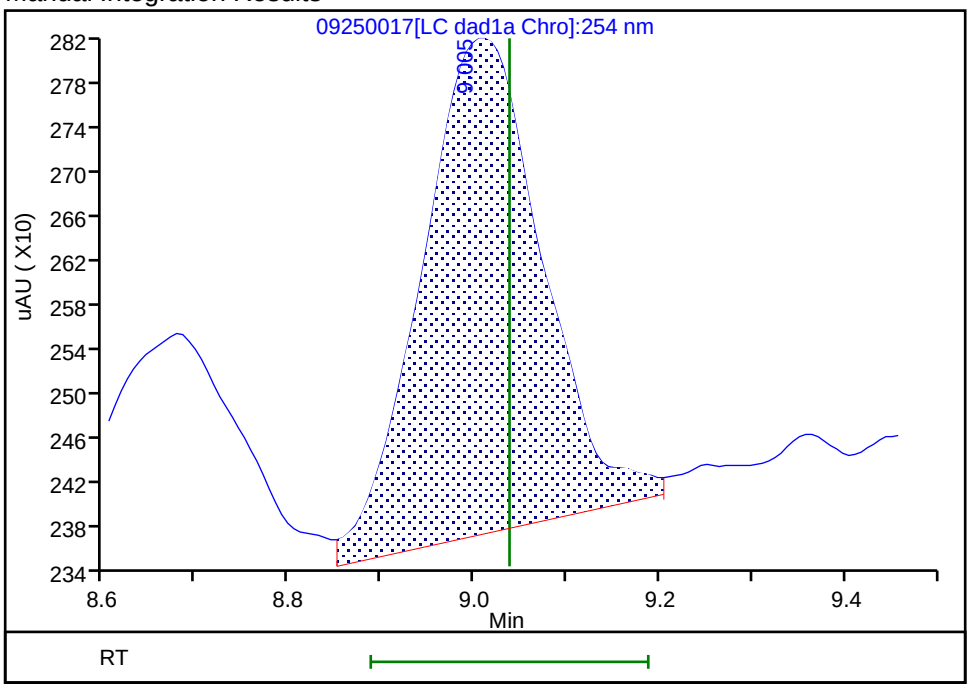
Processing Integration Results

RT: 9.01
Area: 4690
Amount: 0.021326
Amount Units: ug/ml



Manual Integration Results

RT: 9.00
Area: 4054
Amount: 0.019529
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:01:34 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

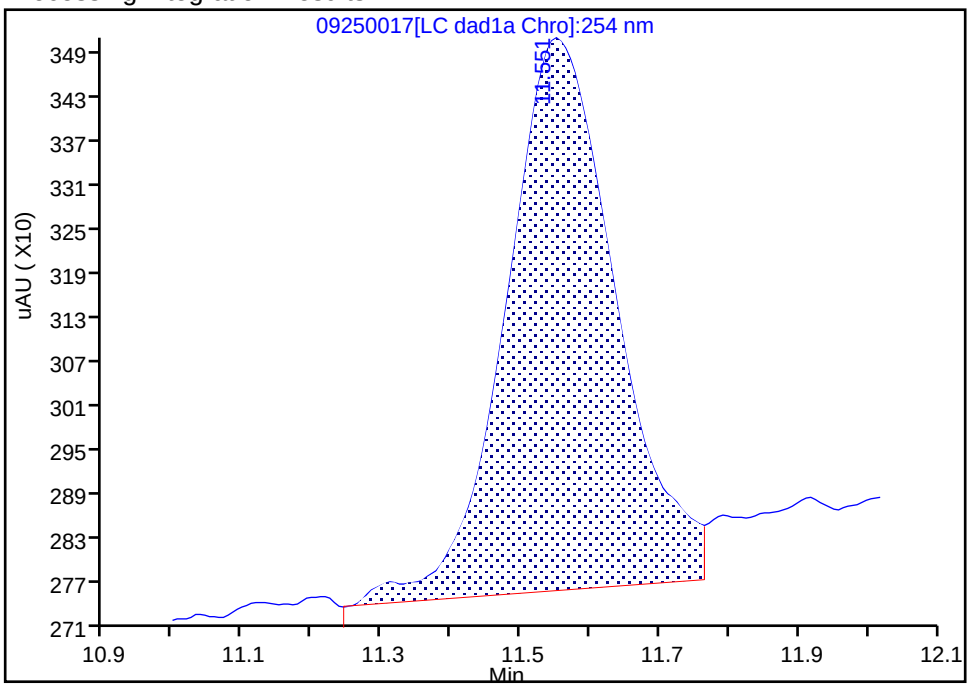
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250017.d
Injection Date: 25-Sep-2023 22:54:10 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT 2
Client ID:
Operator ID: JZ/JG ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

9 Nitrobenzene, CAS: 98-95-3

Signal: 1

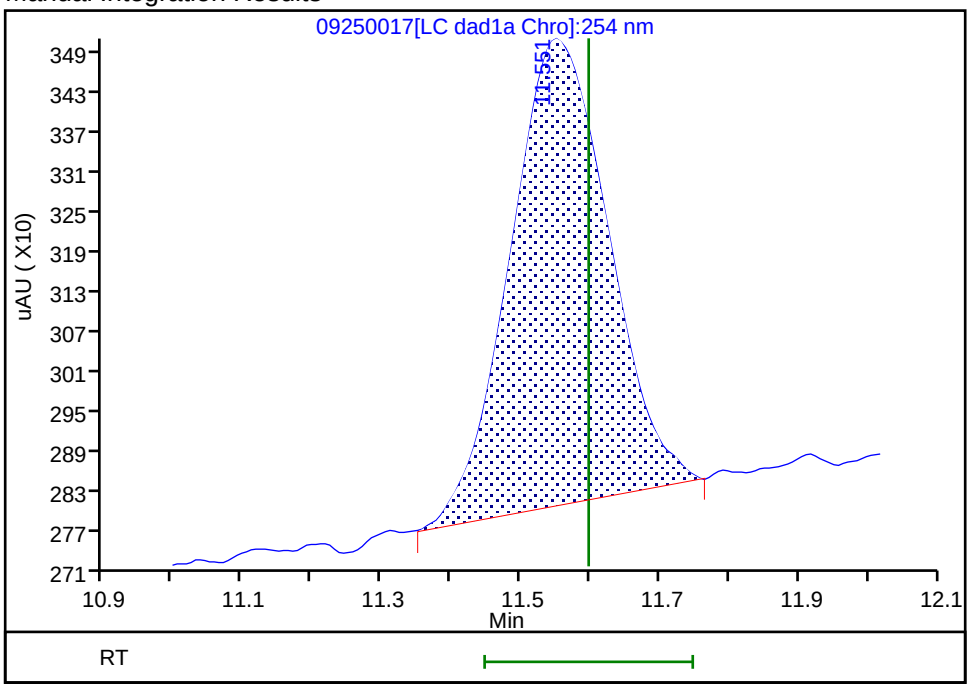
Processing Integration Results

RT: 11.55
Area: 8238
Amount: 0.021302
Amount Units: ug/ml



Manual Integration Results

RT: 11.55
Area: 6887
Amount: 0.018544
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:01:44 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

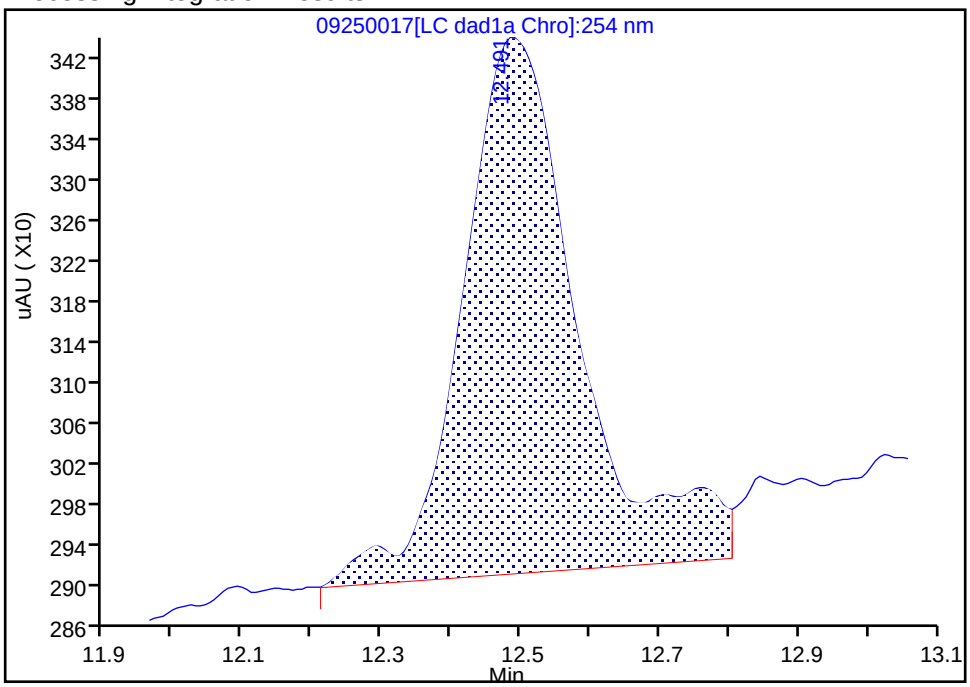
Data File:	\\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250017.d				
Injection Date:	25-Sep-2023 22:54:10	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

Signal: 1

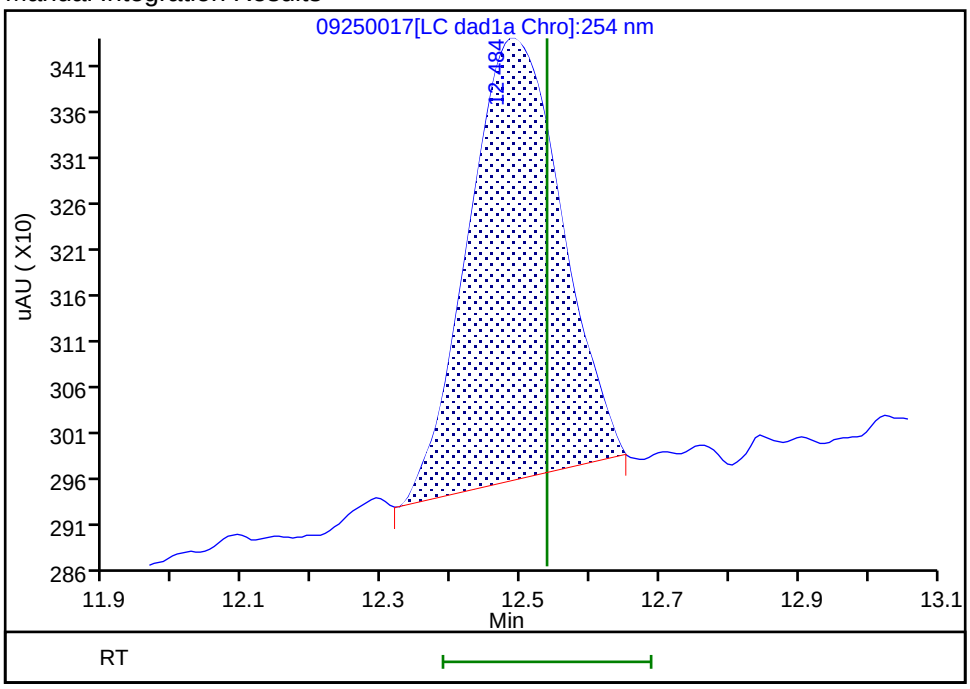
Processing Integration Results

RT: 12.49
Area: 6053
Amount: 0.022429
Amount Units: ug/ml



Manual Integration Results

RT: 12.48
Area: 4419
Amount: 0.017210
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:01:49 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

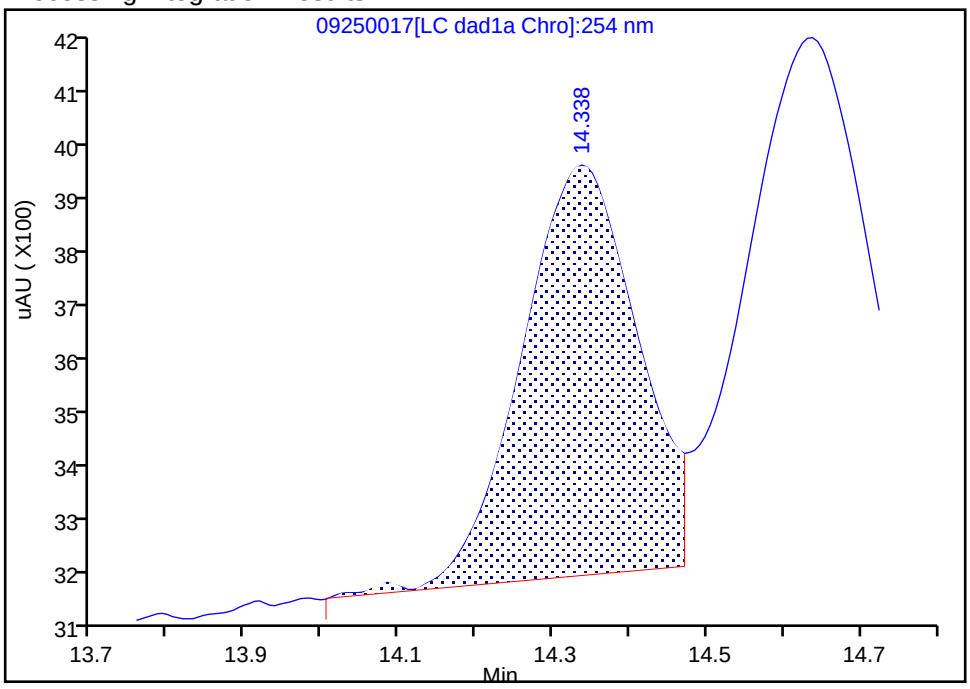
Data File:	\\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250017.d				
Injection Date:	25-Sep-2023 22:54:10	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

11 3,5-Dinitroaniline, CAS: 618-87-1

Signal: 1

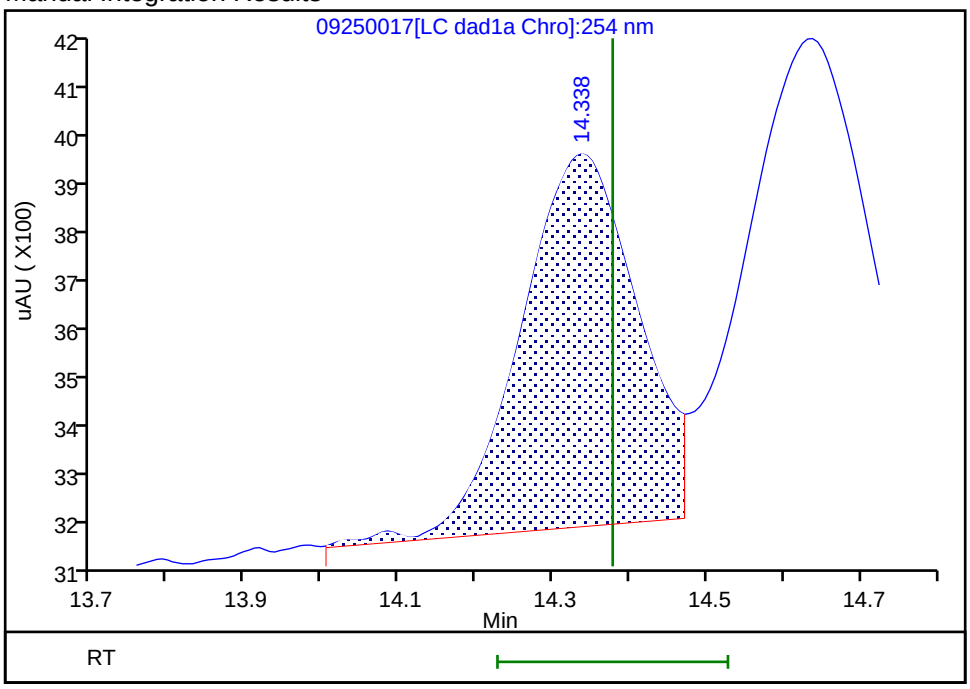
Processing Integration Results

RT: 14.34
Area: 7945
Amount: 0.018887
Amount Units: ug/ml



Manual Integration Results

RT: 14.34
Area: 8071
Amount: 0.018726
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:01:57 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

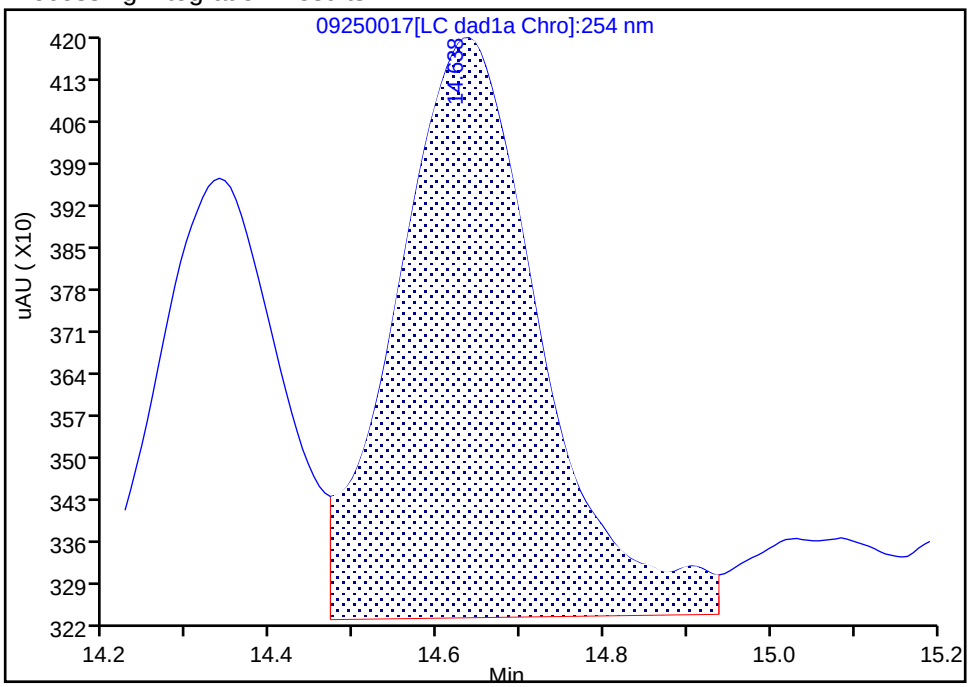
Data File:	\\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250017.d				
Injection Date:	25-Sep-2023 22:54:10	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

Signal: 1

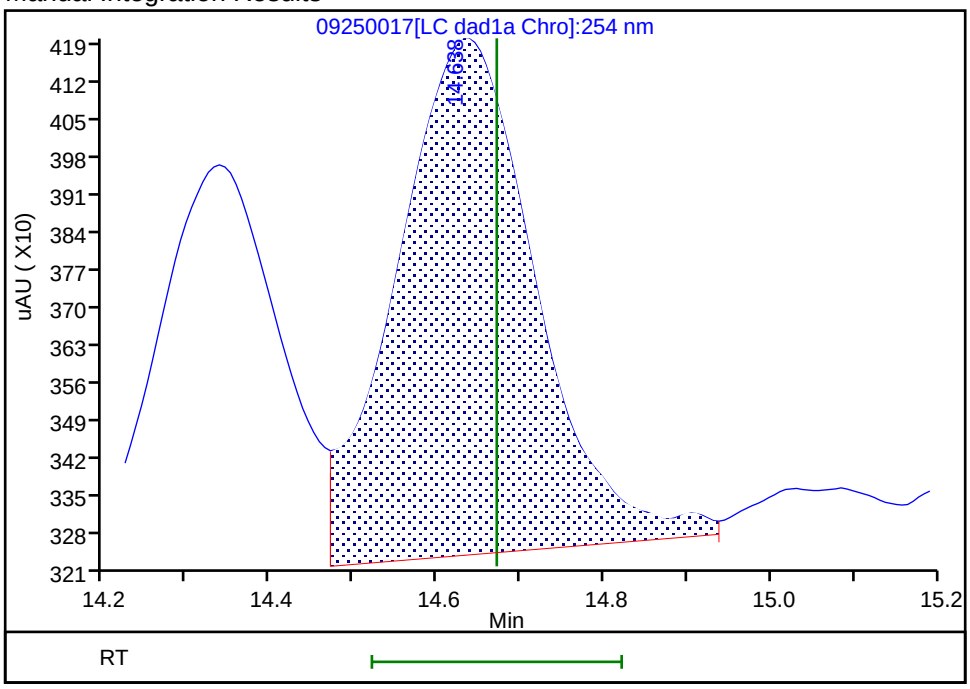
Processing Integration Results

RT: 14.64
Area: 11664
Amount: 0.019906
Amount Units: ug/ml



Manual Integration Results

RT: 14.64
Area: 11160
Amount: 0.019257
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:01:57 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

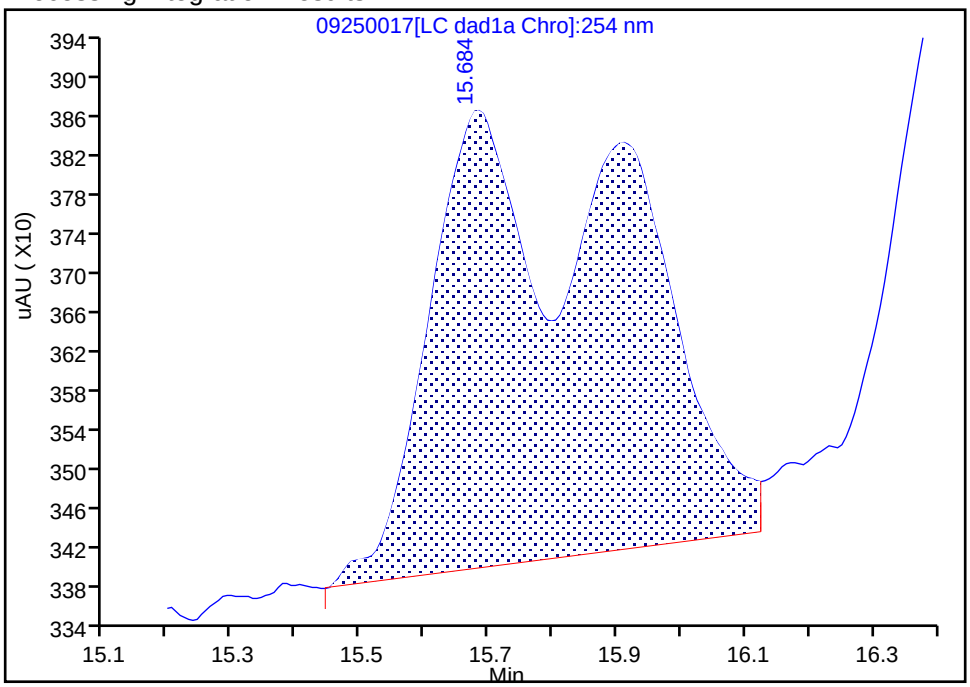
Data File:	\\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250017.d				
Injection Date:	25-Sep-2023 22:54:10	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

Signal: 1

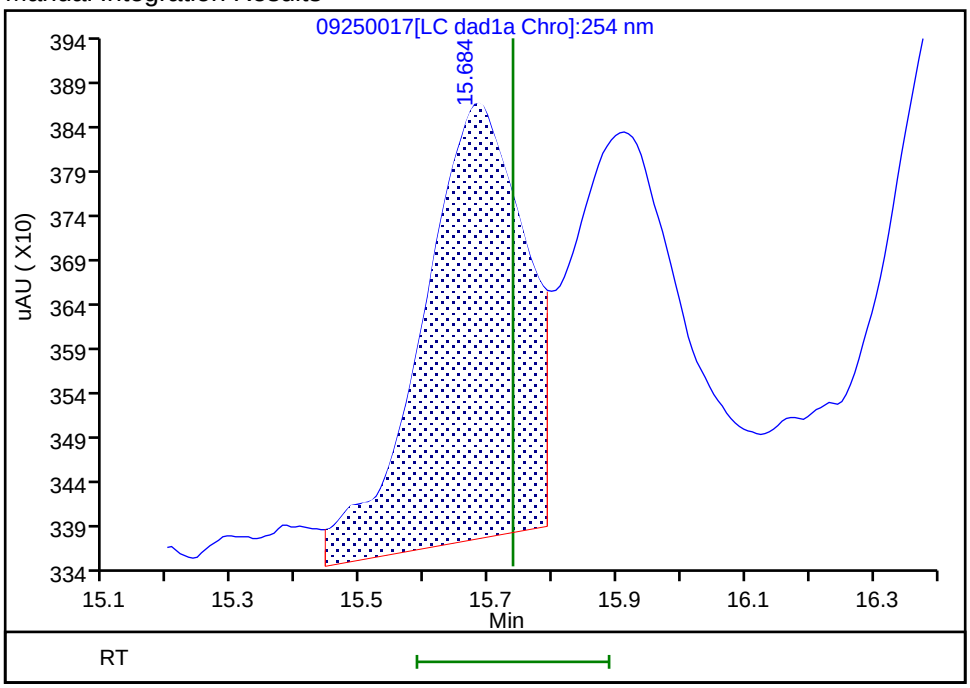
Processing Integration Results

RT: 15.68
Area: 9578
Amount: 0.027034
Amount Units: ug/ml



Manual Integration Results

RT: 15.68
Area: 5416
Amount: 0.021924
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:02:03 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

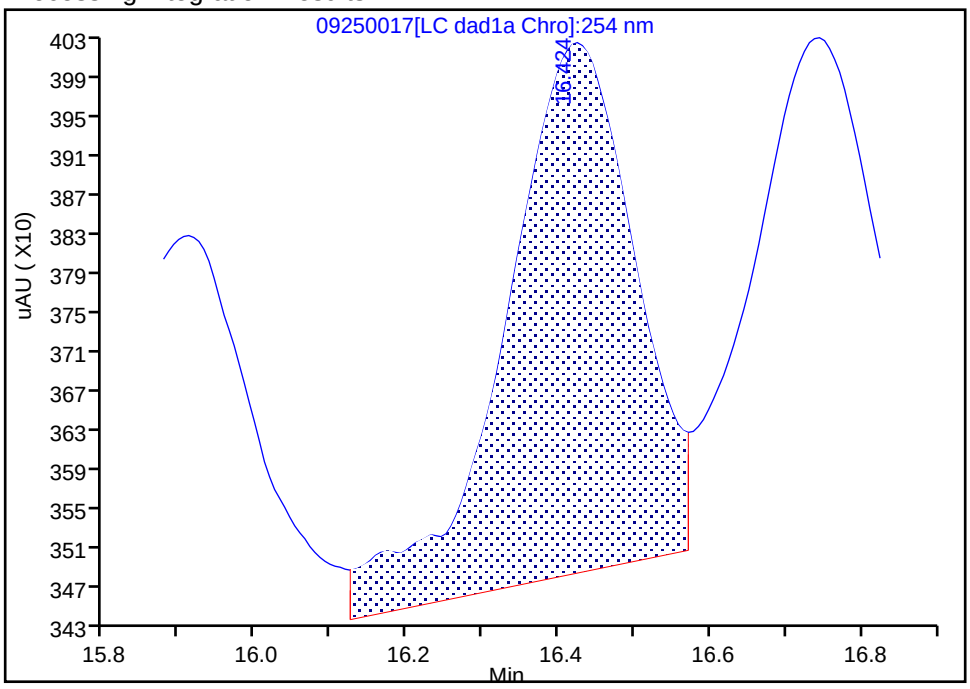
Data File:	\\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250017.d				
Injection Date:	25-Sep-2023 22:54:10	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

Signal: 1

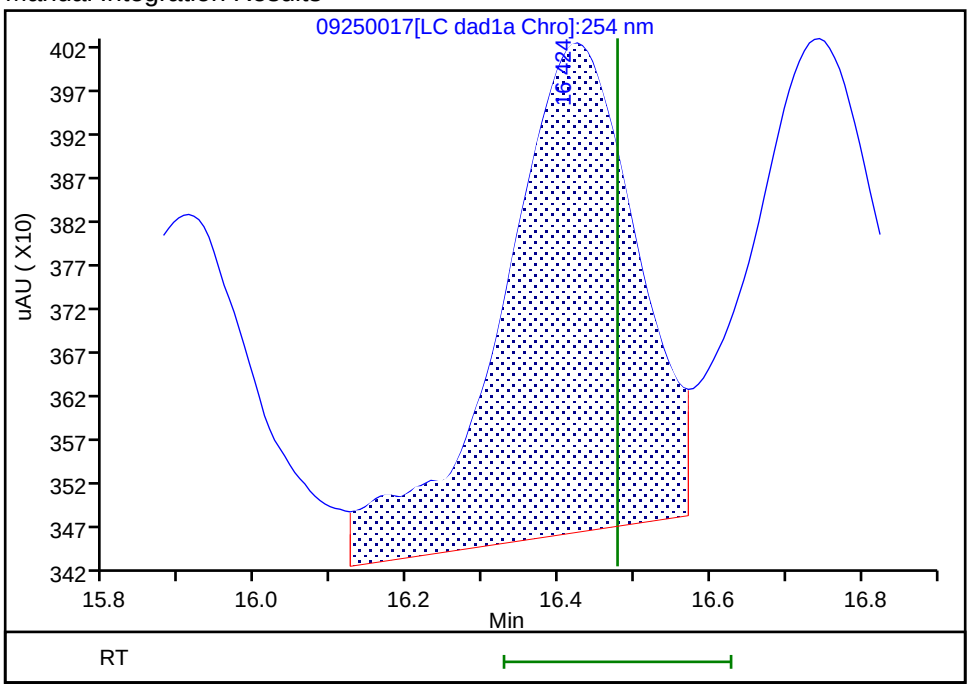
Processing Integration Results

RT: 16.42
Area: 6515
Amount: 0.022799
Amount Units: ug/ml



Manual Integration Results

RT: 16.42
Area: 6984
Amount: 0.020908
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:01:57 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

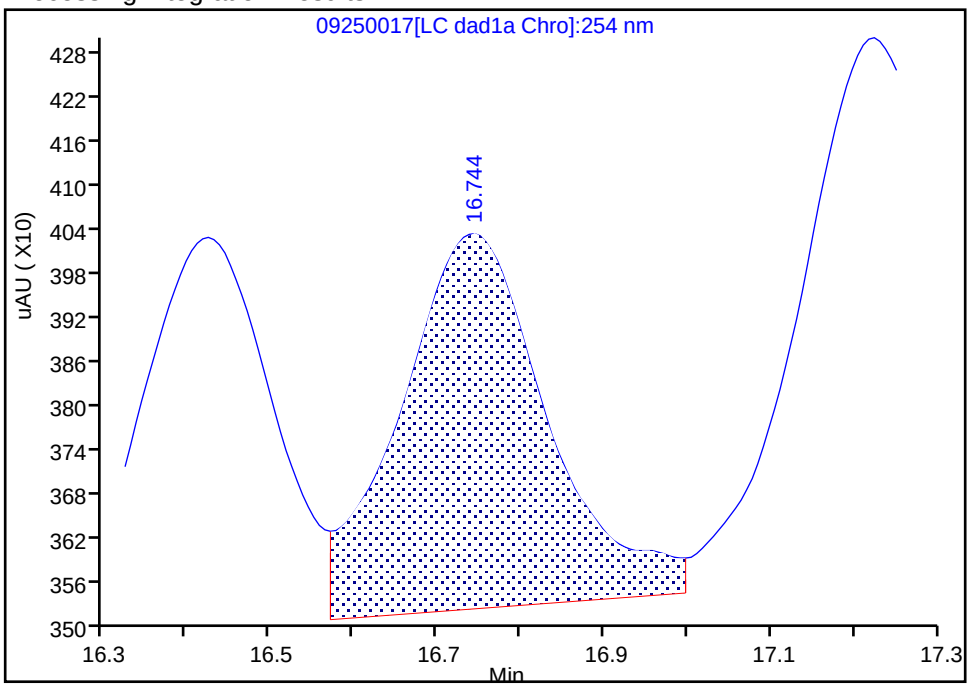
Data File:	\\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250017.d				
Injection Date:	25-Sep-2023 22:54:10	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

17 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

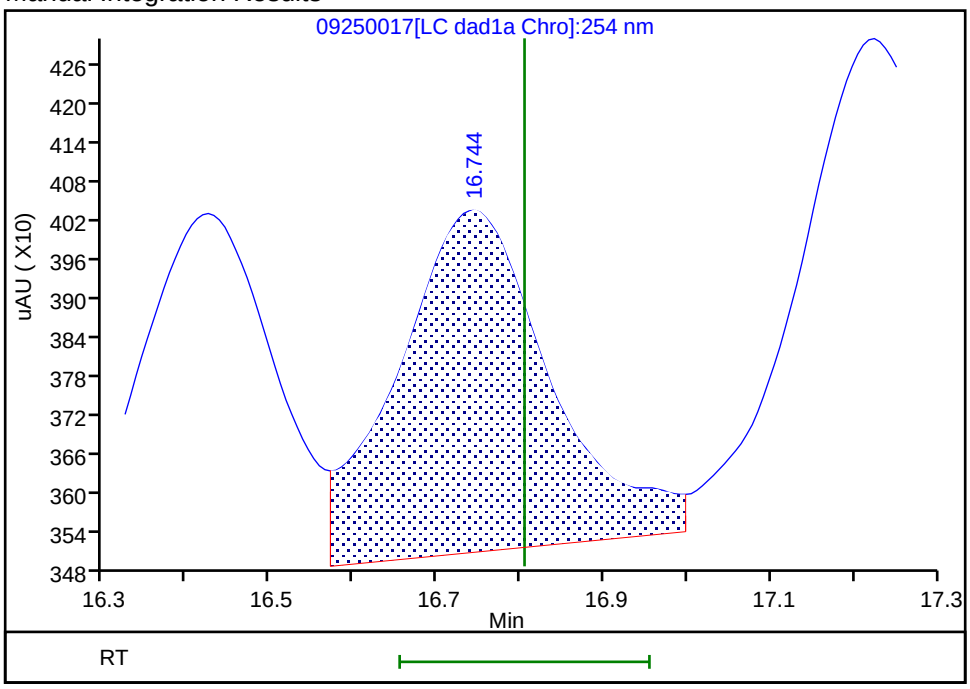
Processing Integration Results

RT: 16.74
Area: 6231
Amount: 0.022324
Amount Units: ug/ml



Manual Integration Results

RT: 16.74
Area: 6679
Amount: 0.020390
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:01:57 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

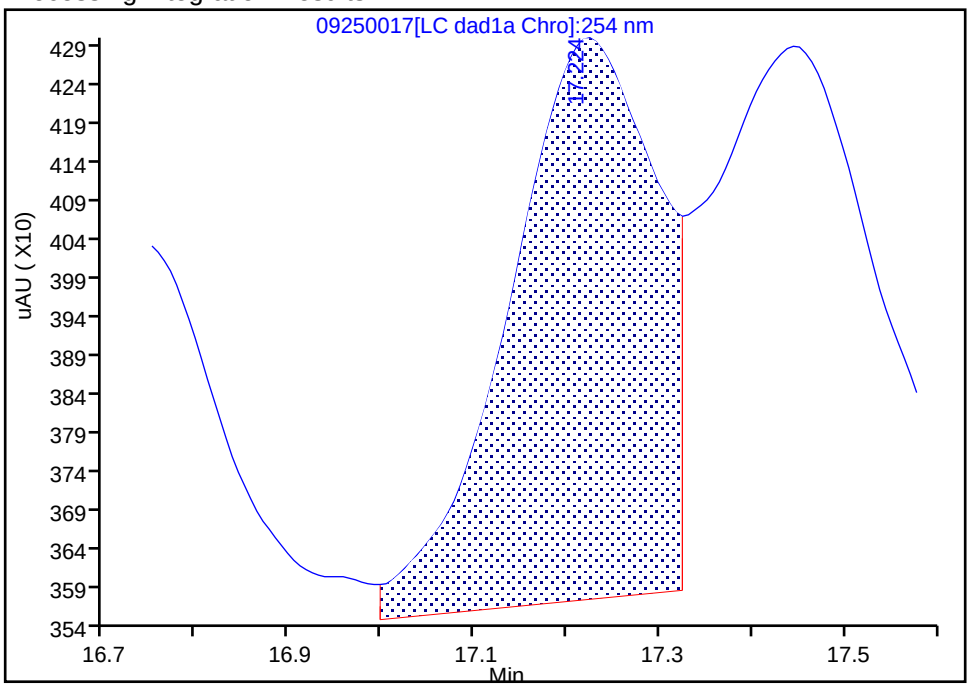
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250017.d
Injection Date: 25-Sep-2023 22:54:10 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT 2
Client ID:
Operator ID: JZ/JG ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

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

Signal: 1

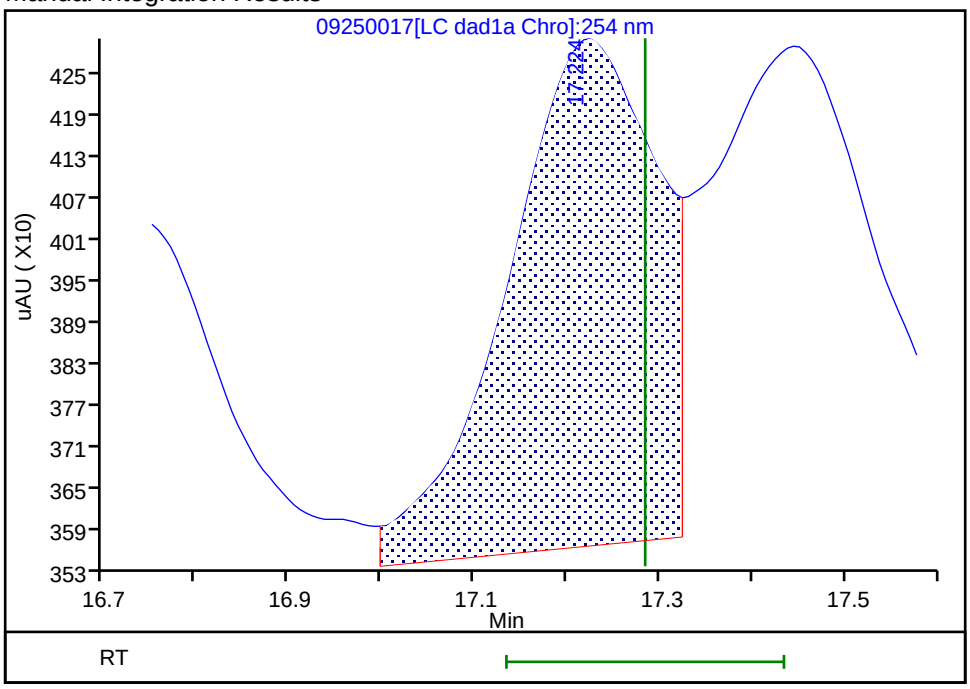
Processing Integration Results

RT: 17.22
Area: 8032
Amount: 0.012641
Amount Units: ug/ml



Manual Integration Results

RT: 17.22
Area: 8189
Amount: 0.017981
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:01:57 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

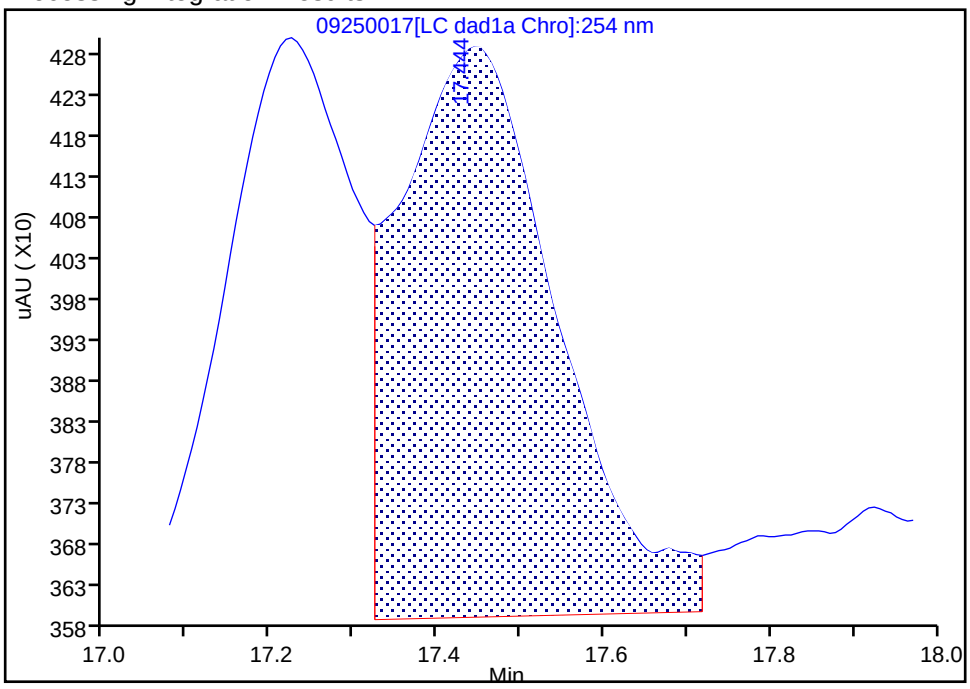
Data File:	\\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250017.d				
Injection Date:	25-Sep-2023 22:54:10	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

19 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

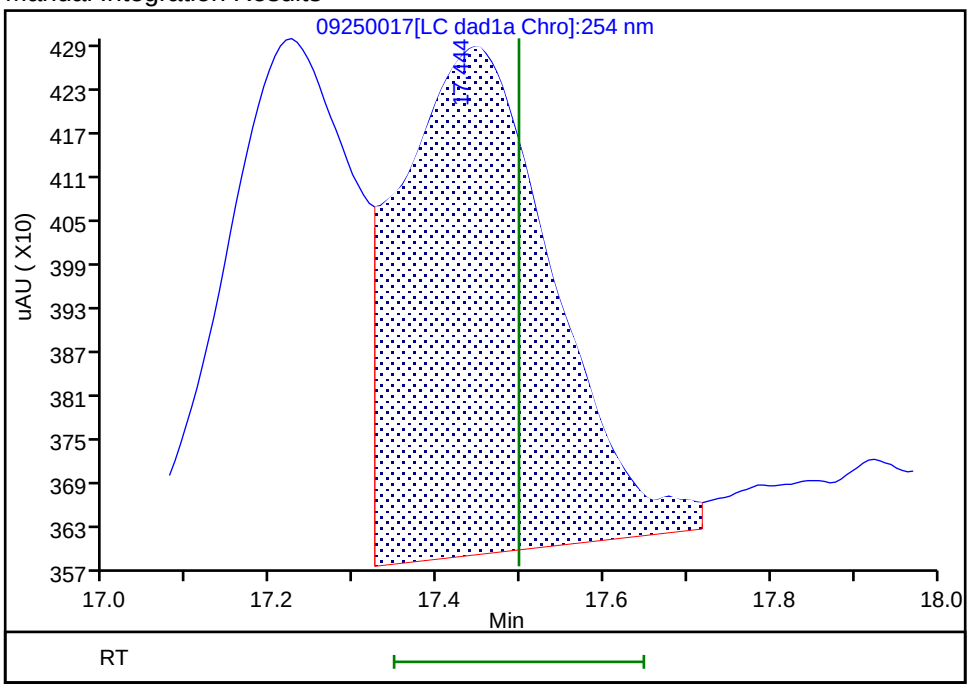
Processing Integration Results

RT: 17.44
Area: 9098
Amount: 0.022025
Amount Units: ug/ml



Manual Integration Results

RT: 17.44
Area: 8780
Amount: 0.021330
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:01:57 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

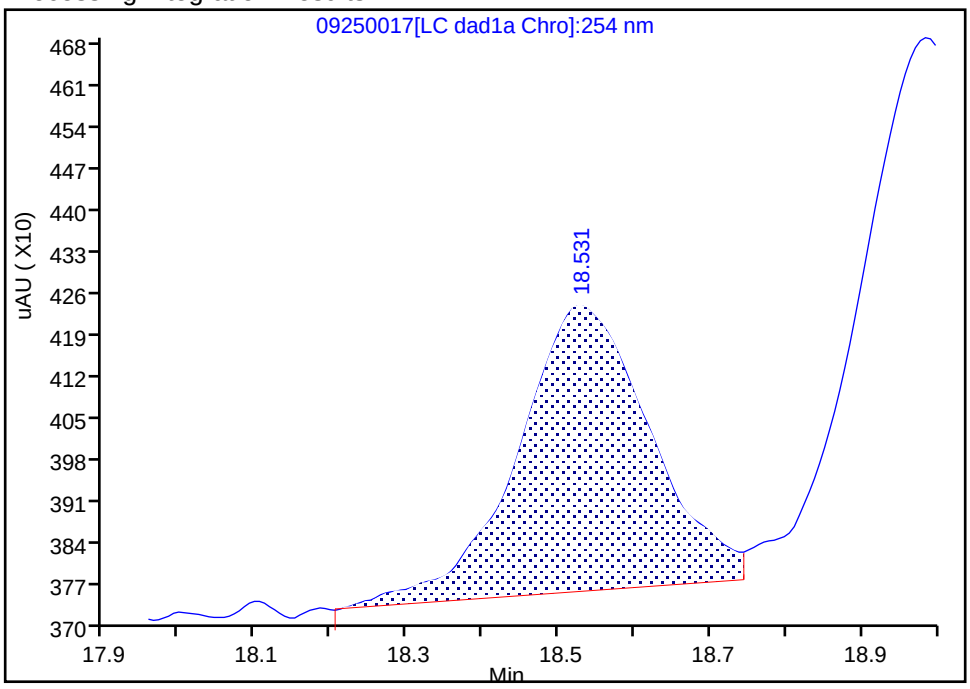
Data File:	\\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250017.d				
Injection Date:	25-Sep-2023 22:54:10	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

Signal: 1

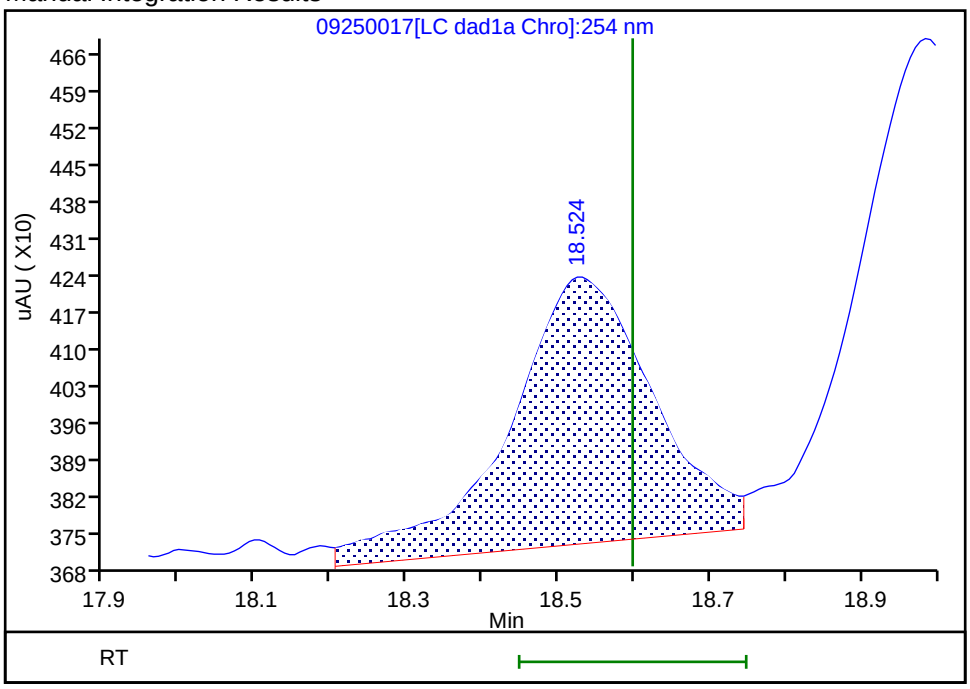
Processing Integration Results

RT: 18.53
Area: 5922
Amount: 0.021510
Amount Units: ug/ml



Manual Integration Results

RT: 18.52
Area: 6716
Amount: 0.022446
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:01:57 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

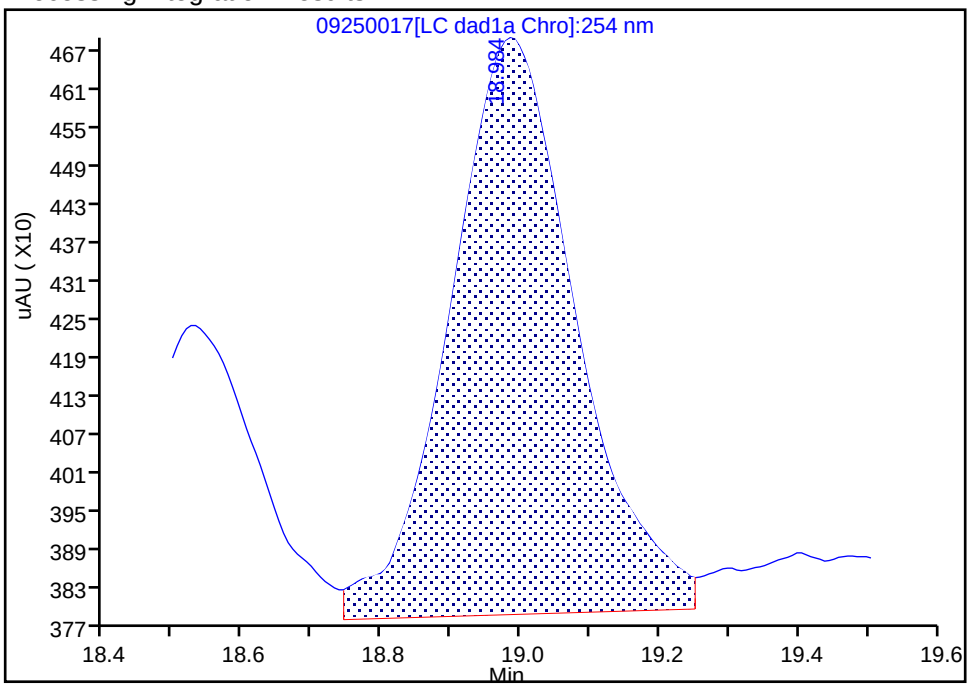
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250017.d
Injection Date: 25-Sep-2023 22:54:10 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT 2
Client ID:
Operator ID: JZ/JG ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

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

Signal: 1

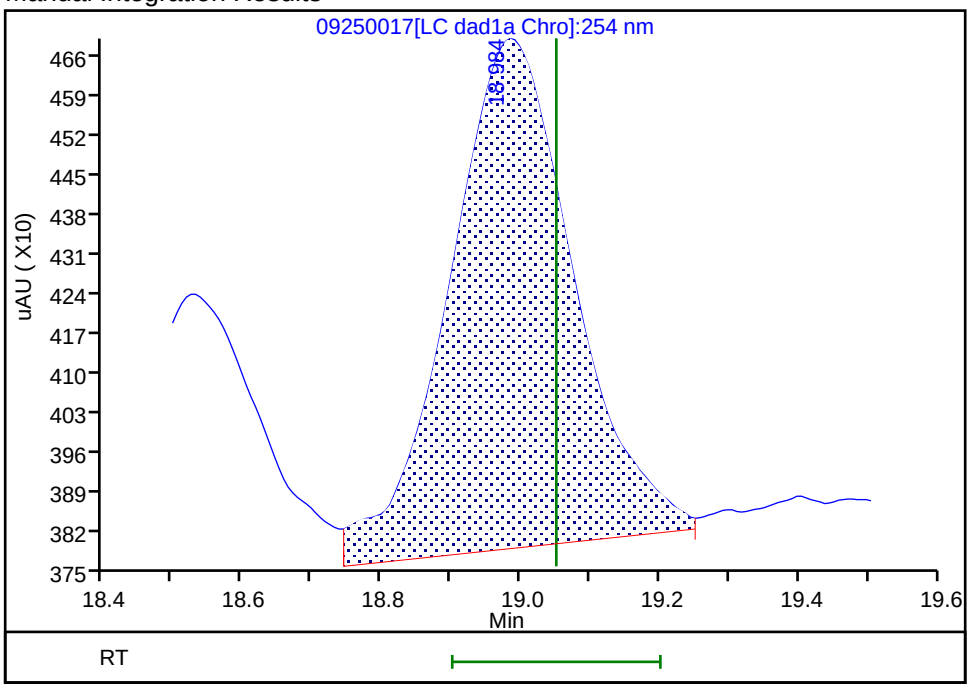
Processing Integration Results

RT: 18.98
Area: 11484
Amount: 0.020690
Amount Units: ug/ml



Manual Integration Results

RT: 18.98
Area: 11241
Amount: 0.020622
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:01:57 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

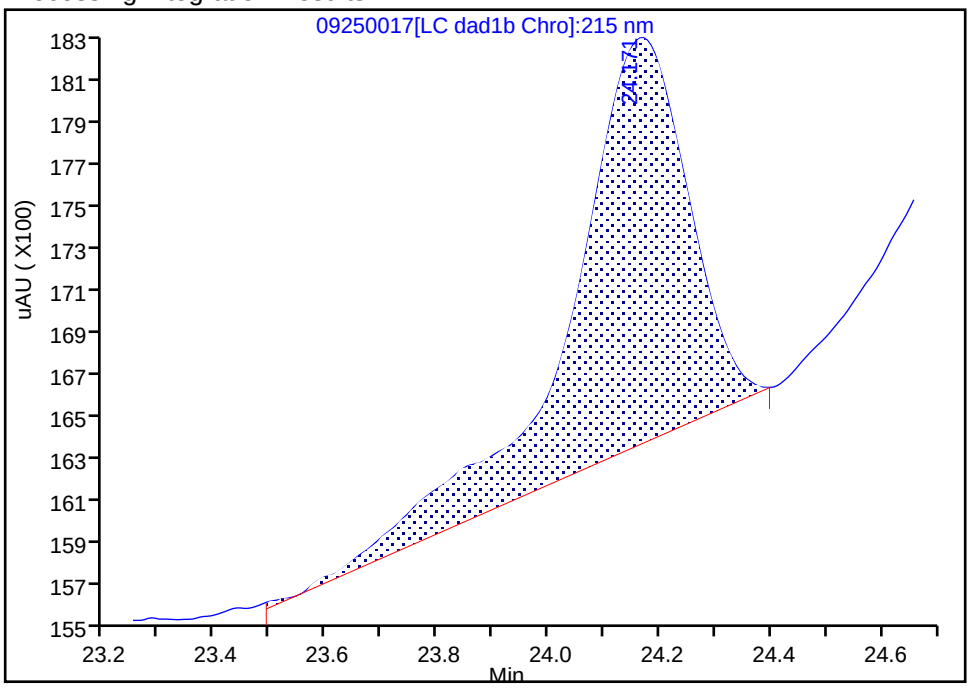
Data File:	\\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250017.d				
Injection Date:	25-Sep-2023 22:54:10	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1B, 215 nm		

24 PETN, CAS: 78-11-5

Signal: 1

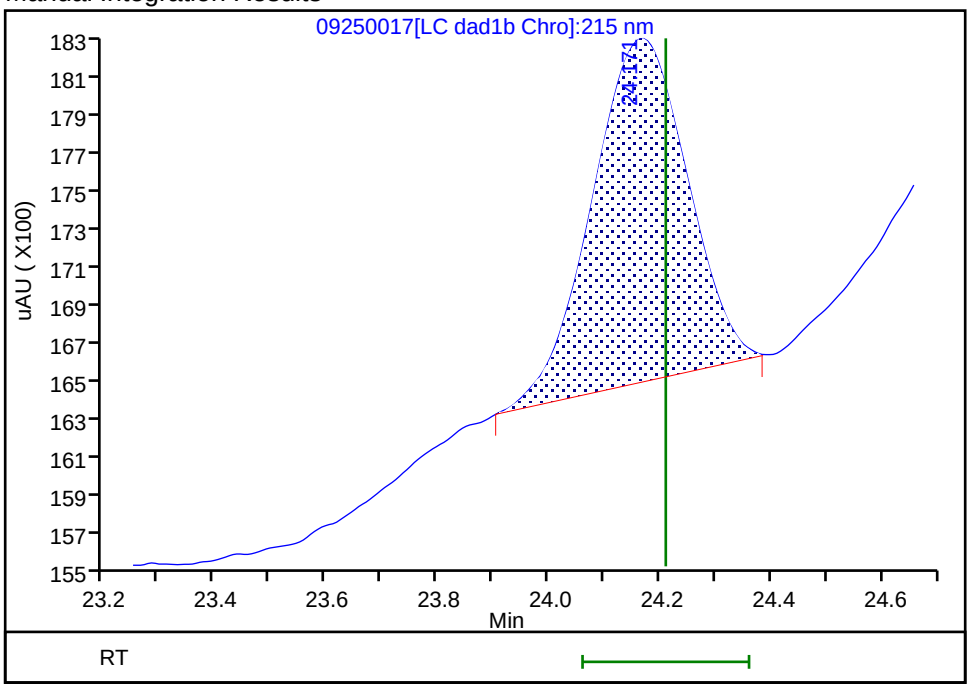
Processing Integration Results

RT: 24.17
Area: 27964
Amount: 0.212361
Amount Units: ug/ml



Manual Integration Results

RT: 24.17
Area: 21075
Amount: 0.171326
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:02:17 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250018.D
Lims ID: IC INT 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 25-Sep-2023 23:30:18 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 1
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub18

Method: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 26-Sep-2023 15:25:39 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1620

First Level Reviewer: LV5D Date: 26-Sep-2023 15:25:08

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.278	5.291	-0.013	4632	0.0100	0.009811	
4 DNX	1	6.124	6.144	-0.020	3214	0.0100	0.0112	
6 HMX	1	6.771	6.791	-0.020	1873	0.0100	0.0108	M
7 MNX	1	7.624	7.644	-0.020	3081	0.0117	0.0118	M
5 2,4,6-Trinitrophenol	1	8.698	8.664	0.034	1867	0.0100	0.0130	M
8 RDX	1	9.011	9.038	-0.027	2366	0.0100	0.0114	M
9 Nitrobenzene	1	11.551	11.598	-0.047	3810	0.0100	0.0103	M
$ 10 1,2-Dinitrobenzene	1	12.491	12.538	-0.047	3052	0.0100	0.0119	M
11 3,5-Dinitroaniline	1	14.364	14.378	-0.014	4622	0.0100	0.0103	M
12 1,3-Dinitrobenzene	1	14.664	14.671	-0.007	6679	0.0100	0.0115	M
13 Nitroglycerin	2	15.091	15.111	-0.020	13348	0.1000	0.1075	
14 o-Nitrotoluene	1	15.697	15.738	-0.041	2753	0.0100	0.0111	M
15 p-Nitrotoluene	1	15.931	15.958	-0.027	2862	0.0100	0.009860	M
16 4-Amino-2,6-dinitrotoluene	1	16.437	16.478	-0.041	3980	0.0100	0.009756	M
17 m-Nitrotoluene	1	16.751	16.804	-0.053	3853	0.0100	0.0099	M
18 2-Amino-4,6-dinitrotoluene	1	17.237	17.284	-0.047	5349	0.0100	0.0104	M
19 1,3,5-Trinitrobenzene	1	17.451	17.498	-0.047	4159	0.0100	0.0101	M
20 2,6-Dinitrotoluene	1	18.557	18.598	-0.041	3360	0.0100	0.009575	M
21 2,4-Dinitrotoluene	1	19.017	19.051	-0.034	5753	0.0100	0.0106	M
22 Tetryl	1	22.224	22.244	-0.020	3615	0.0100	0.0117	
23 2,4,6-Trinitrotoluene	1	23.091	23.104	-0.013	3712	0.0100	0.009642	
24 PETN	2	24.184	24.211	-0.027	11596	0.1000	0.0943	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00078	Amount Added:	1.00	Units: uL
8330 DMT_00015	Amount Added:	0.50	Units: uL

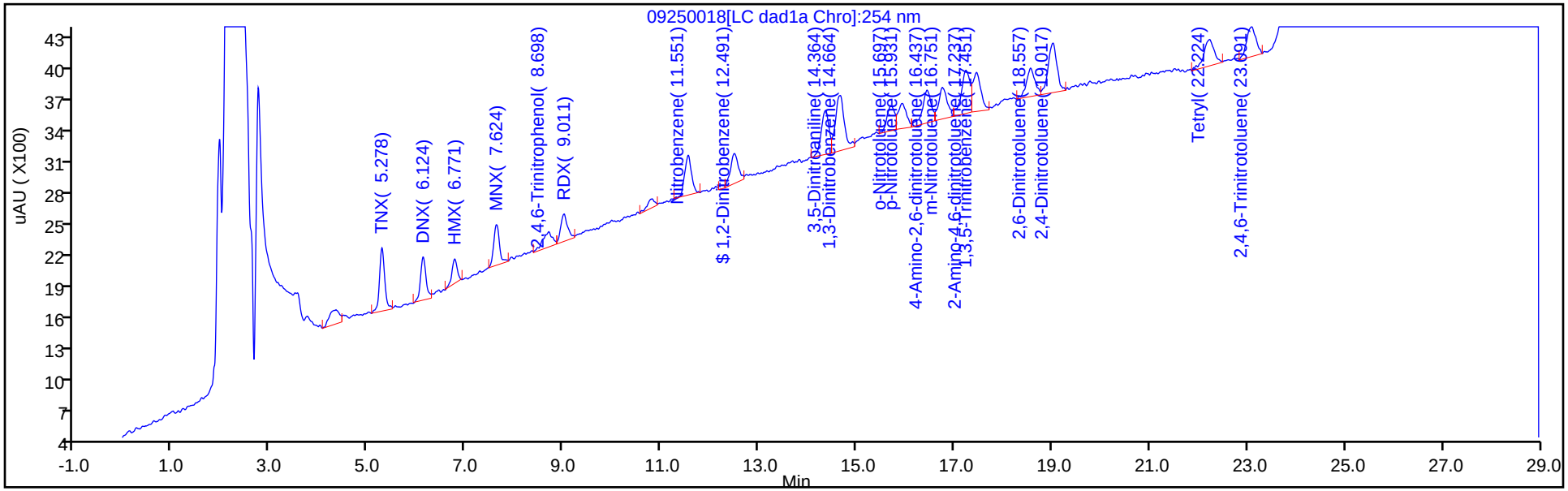
Report Date: 26-Sep-2023 15:25:39 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

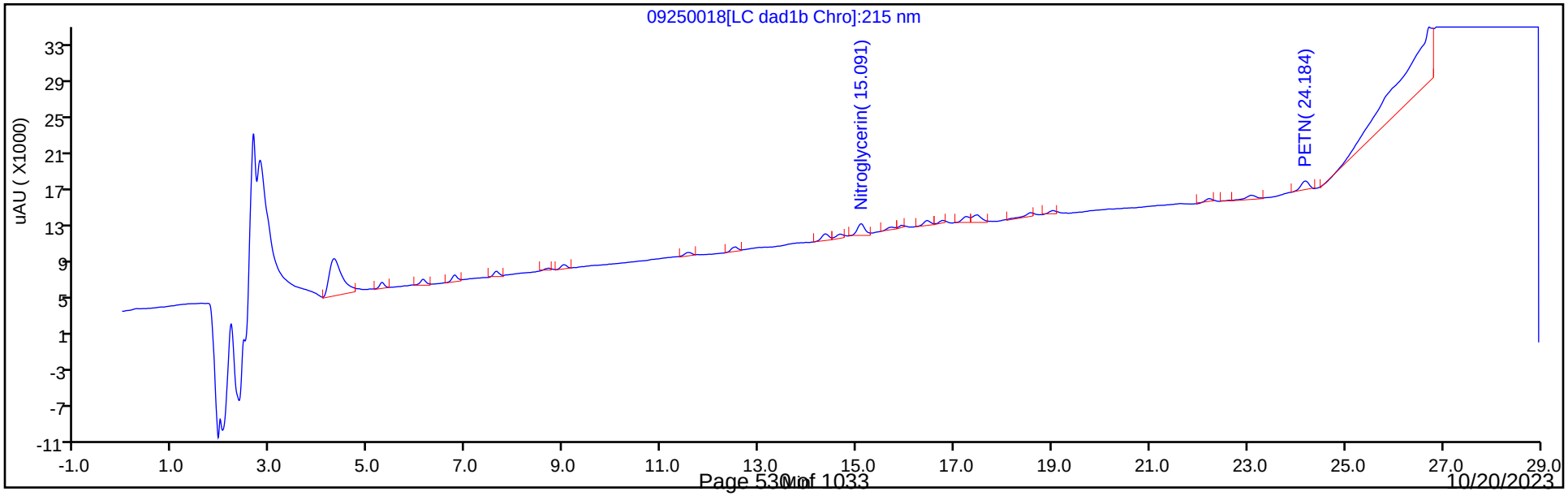
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250018.d

Injection Date:	25-Sep-2023 23:30:18	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	IC INT 1			Worklist Smp#:	18
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



10/20/2023
4:00 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

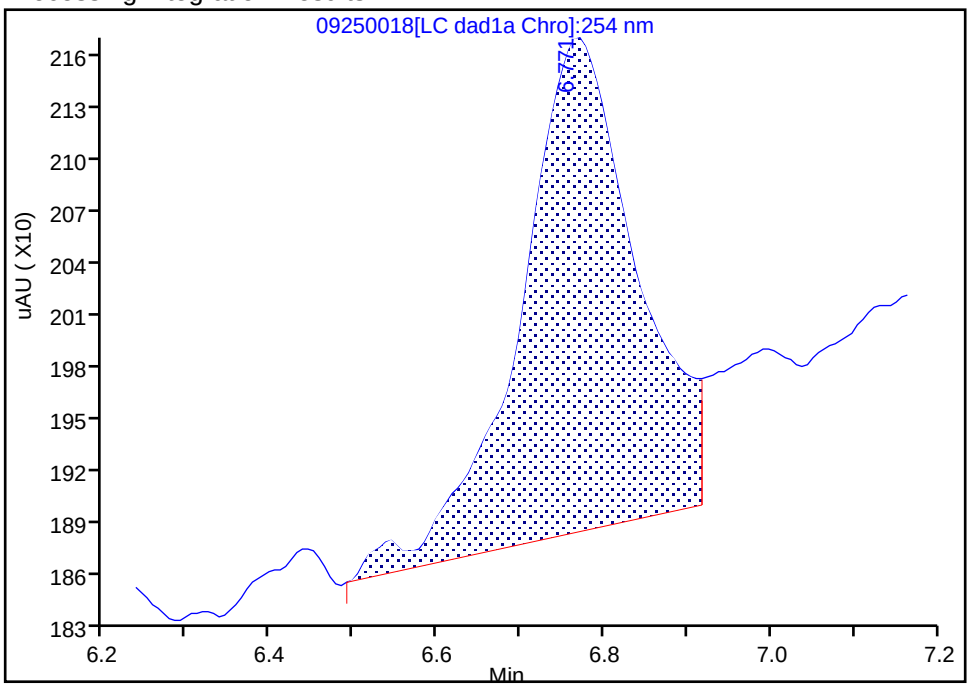
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250018.d
Injection Date: 25-Sep-2023 23:30:18 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT 1
Client ID:
Operator ID: JZ/JG ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

6 HMX, CAS: 2691-41-0

Signal: 1

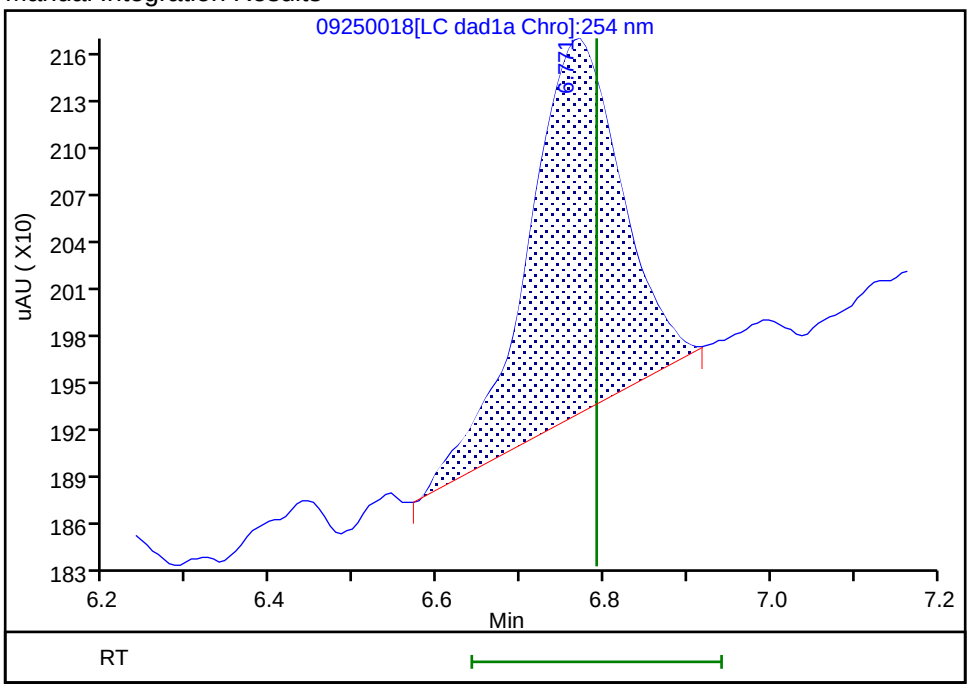
Processing Integration Results

RT: 6.77
Area: 2787
Amount: 0.015178
Amount Units: ug/ml



Manual Integration Results

RT: 6.77
Area: 1873
Amount: 0.010797
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:03:16 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

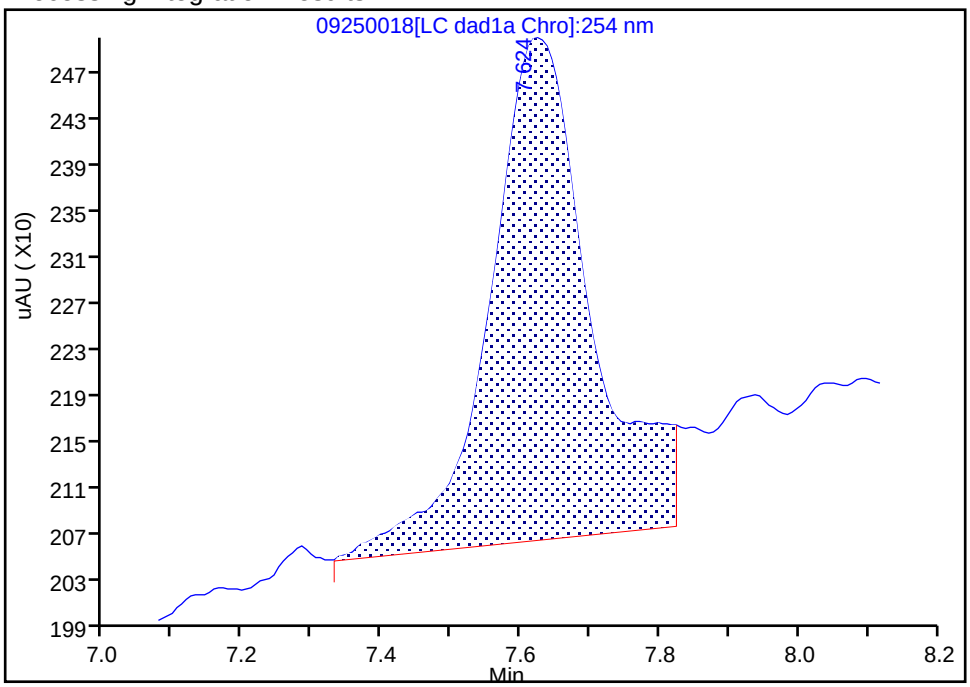
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250018.d
Injection Date: 25-Sep-2023 23:30:18 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT 1
Client ID:
Operator ID: JZ/JG ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

7 MNX, CAS: 5755-27-1

Signal: 1

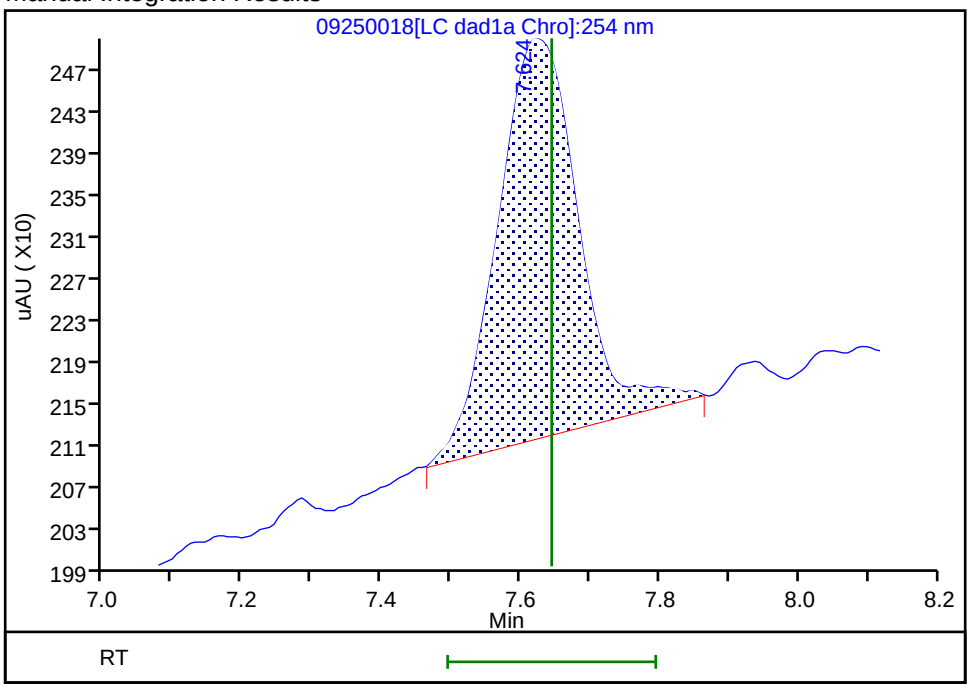
Processing Integration Results

RT: 7.62
Area: 4377
Amount: 0.015965
Amount Units: ug/ml



Manual Integration Results

RT: 7.62
Area: 3081
Amount: 0.011767
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:03:21 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

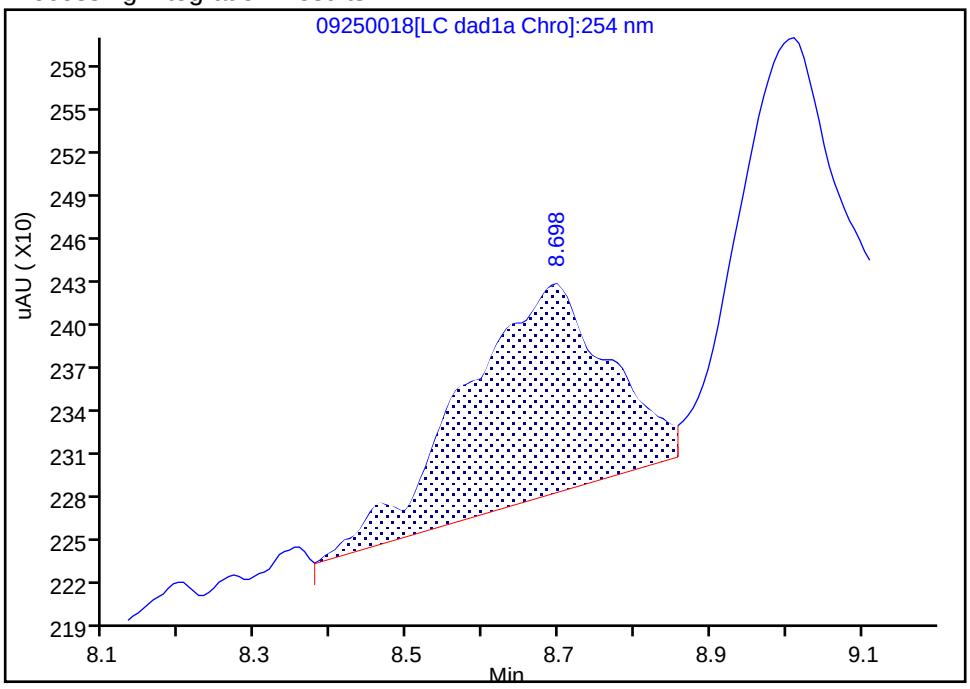
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250018.d
Injection Date: 25-Sep-2023 23:30:18 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT 1
Client ID:
Operator ID: JZ/JG ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

5 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

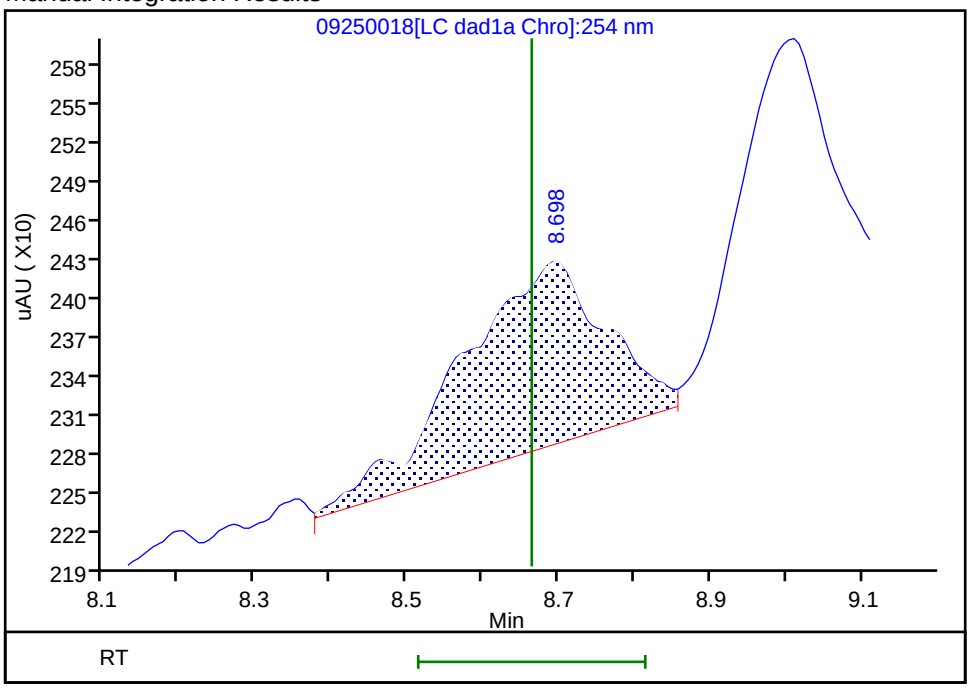
Processing Integration Results

RT: 8.70
Area: 1939
Amount: 0.013010
Amount Units: ug/ml



Manual Integration Results

RT: 8.70
Area: 1867
Amount: 0.013017
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:03:29 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

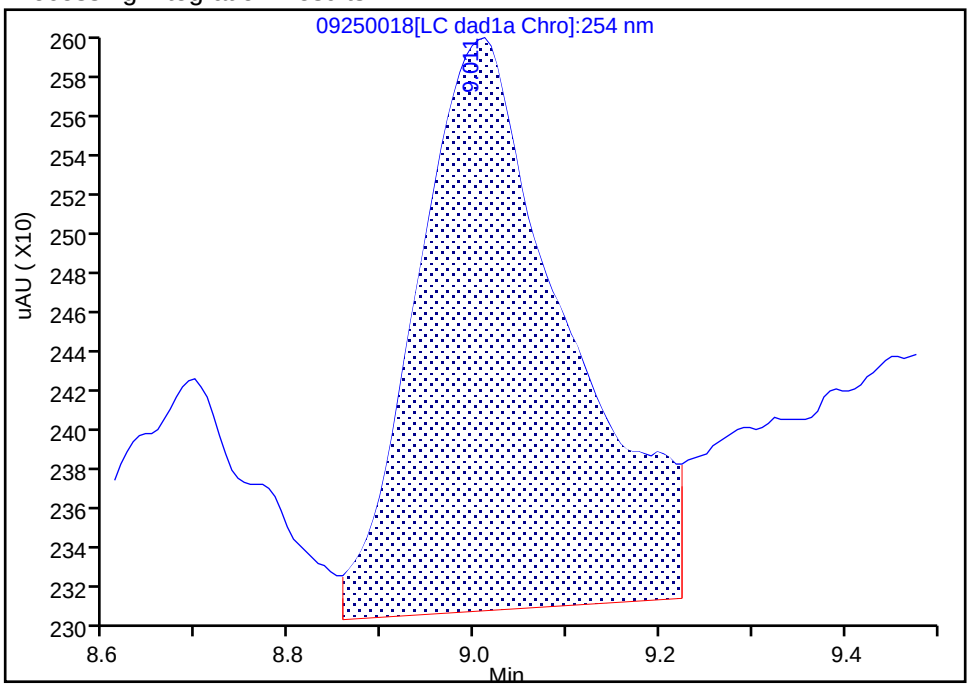
Data File:	\\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250018.d				
Injection Date:	25-Sep-2023 23:30:18	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

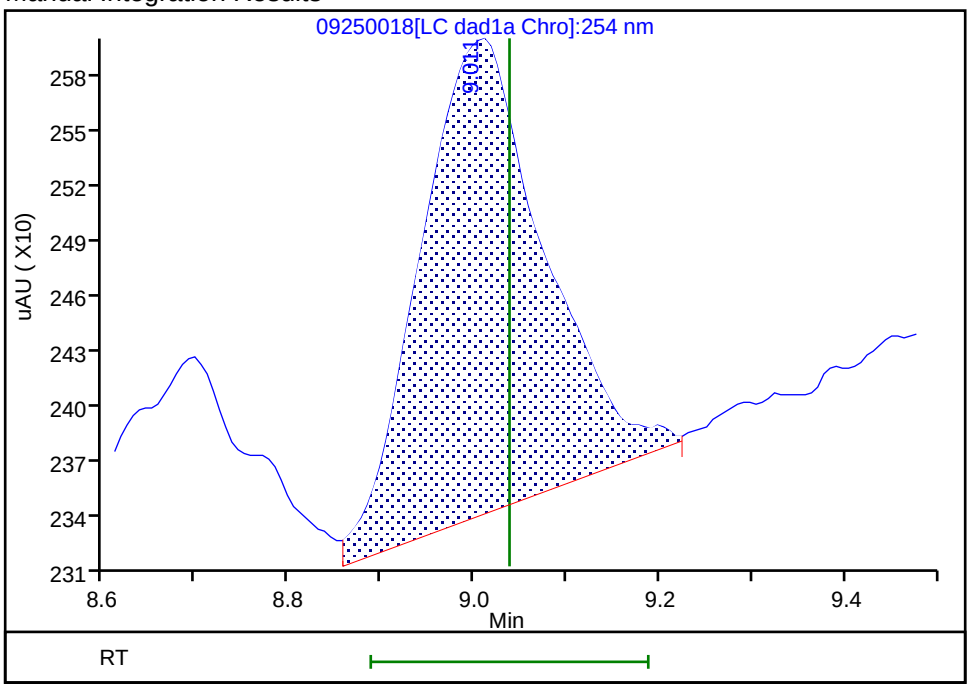
Processing Integration Results

RT: 9.01
Area: 3158
Amount: 0.014594
Amount Units: ug/ml



Manual Integration Results

RT: 9.01
Area: 2366
Amount: 0.011398
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:03:29 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

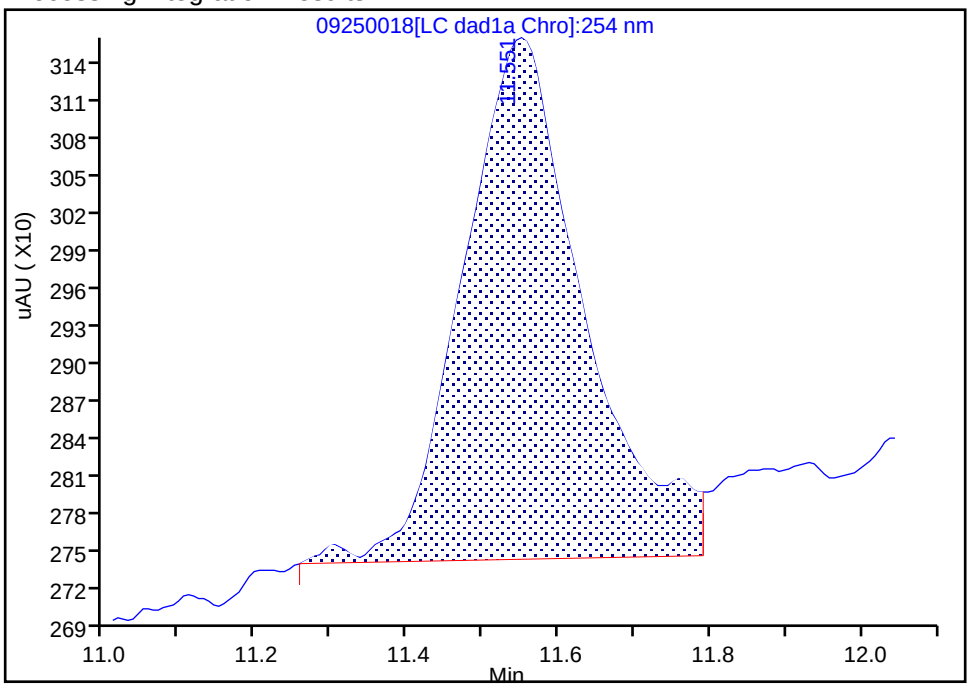
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250018.d
Injection Date: 25-Sep-2023 23:30:18 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT 1
Client ID:
Operator ID: JZ/JG ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

9 Nitrobenzene, CAS: 98-95-3

Signal: 1

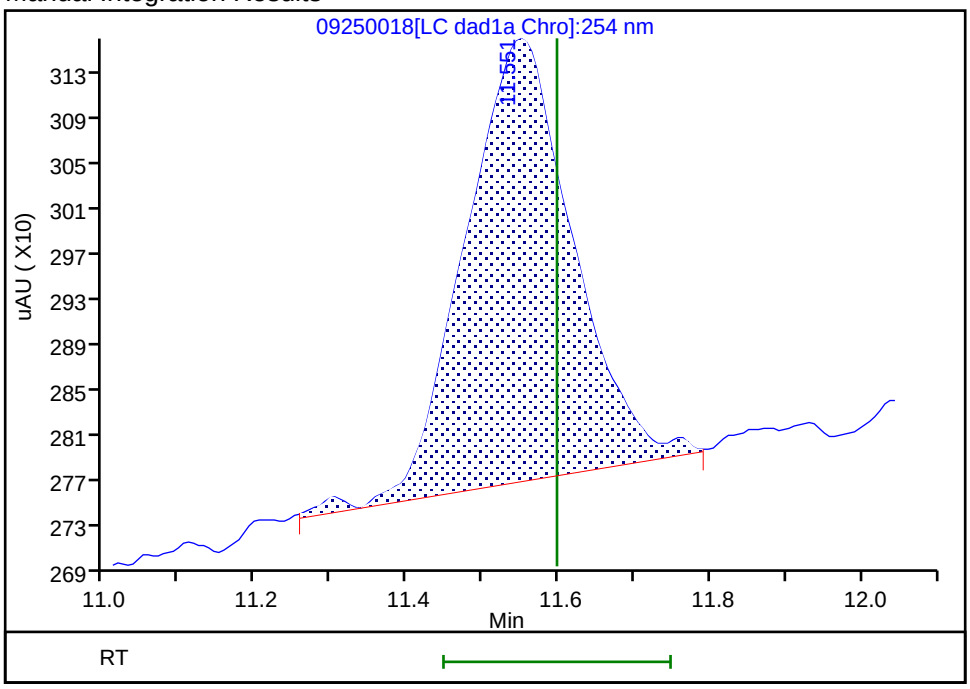
Processing Integration Results

RT: 11.55
Area: 4514
Amount: 0.011904
Amount Units: ug/ml



Manual Integration Results

RT: 11.55
Area: 3810
Amount: 0.010259
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:03:35 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

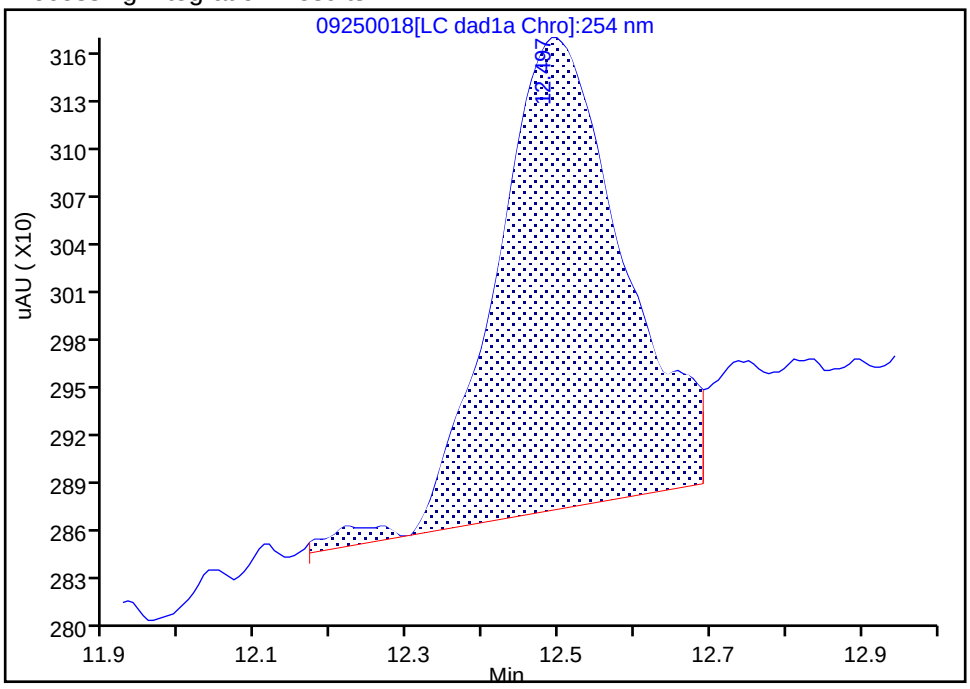
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250018.d
Injection Date: 25-Sep-2023 23:30:18 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT 1
Client ID:
Operator ID: JZ/JG ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

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

Signal: 1

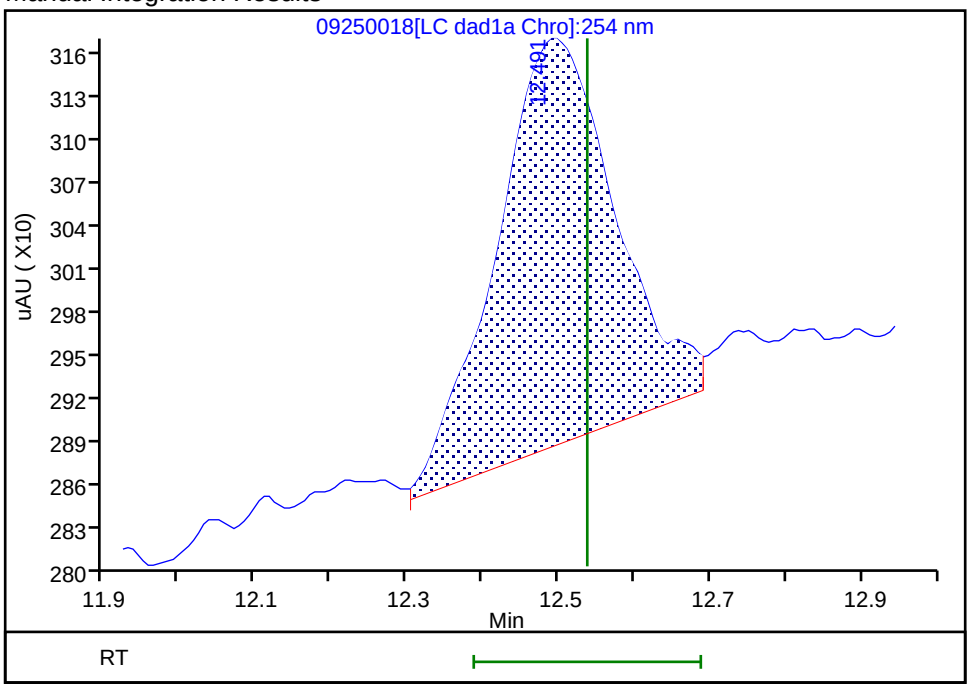
Processing Integration Results

RT: 12.50
Area: 3414
Amount: 0.013091
Amount Units: ug/ml



Manual Integration Results

RT: 12.49
Area: 3052
Amount: 0.011886
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:03:40 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

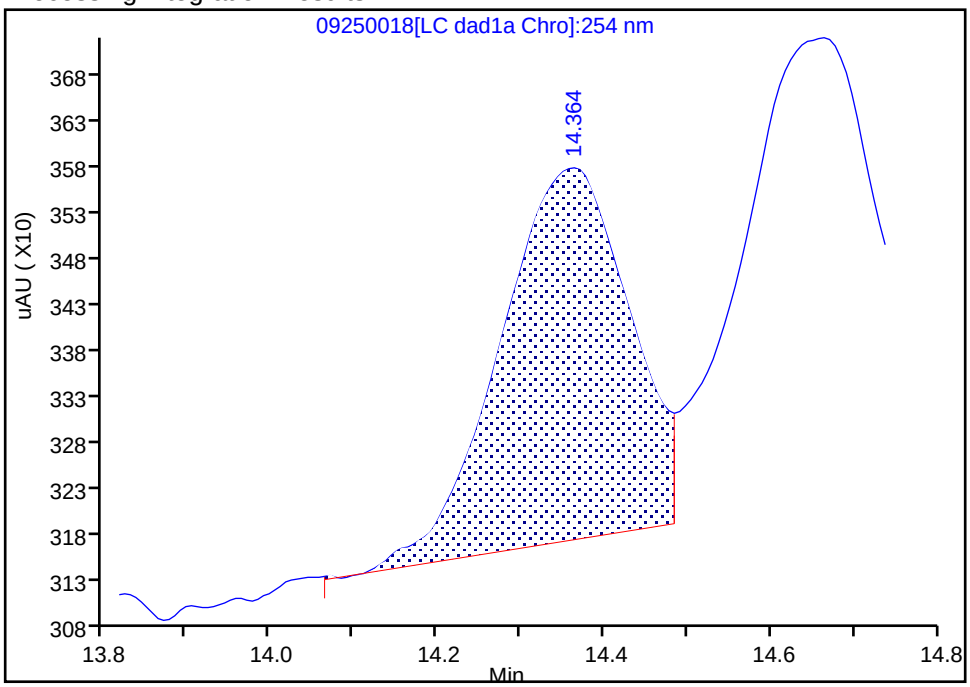
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250018.d
Injection Date: 25-Sep-2023 23:30:18 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT 1
Client ID:
Operator ID: JZ/JG ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

11 3,5-Dinitroaniline, CAS: 618-87-1

Signal: 1

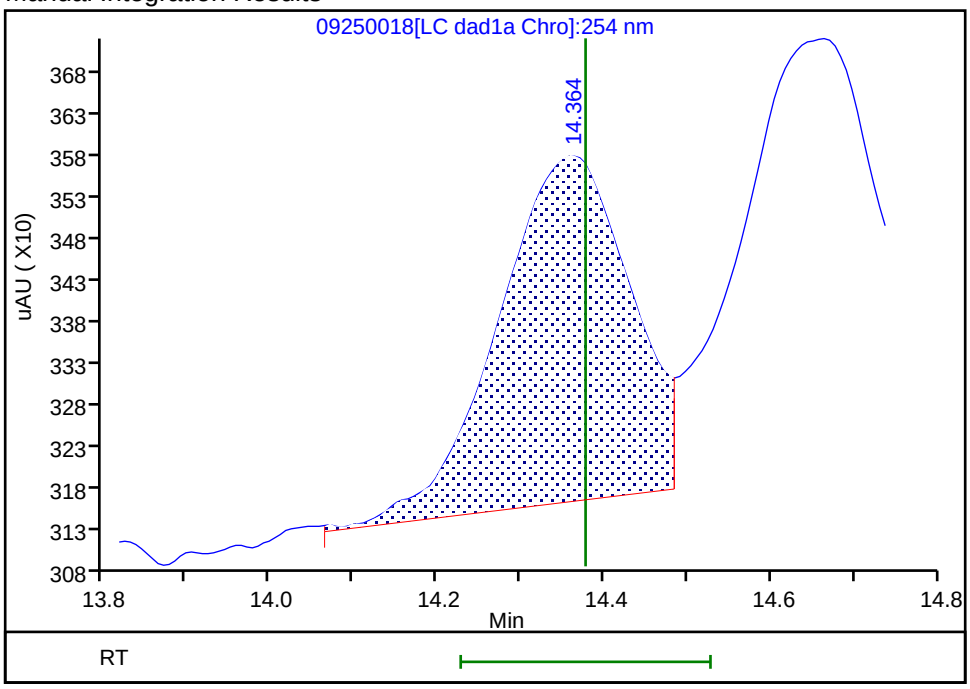
Processing Integration Results

RT: 14.36
Area: 4396
Amount: 0.010206
Amount Units: ug/ml



Manual Integration Results

RT: 14.36
Area: 4622
Amount: 0.010316
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:04:15 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

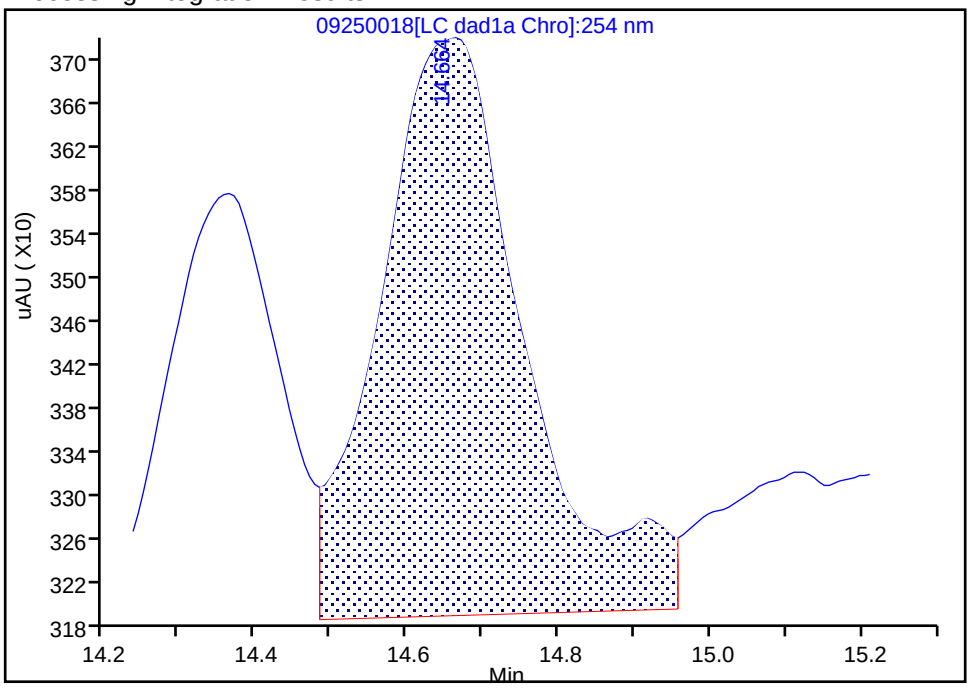
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Injection Date:	25-Sep-2023 23:30:18	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

Signal: 1

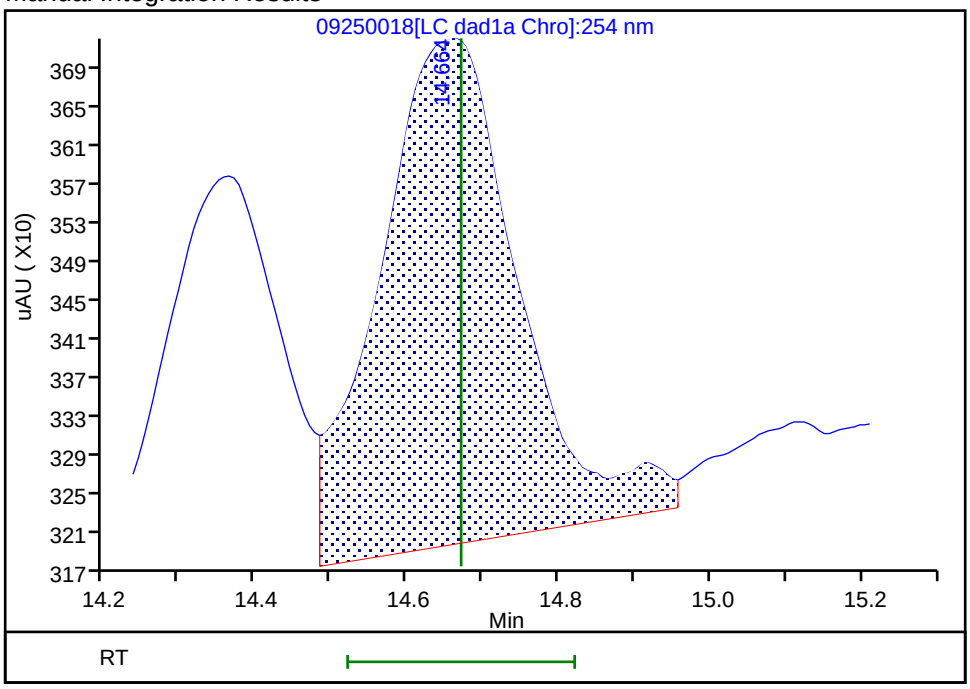
Processing Integration Results

RT: 14.66
Area: 7005
Amount: 0.012012
Amount Units: ug/ml



Manual Integration Results

RT: 14.66
Area: 6679
Amount: 0.011525
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:04:15 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

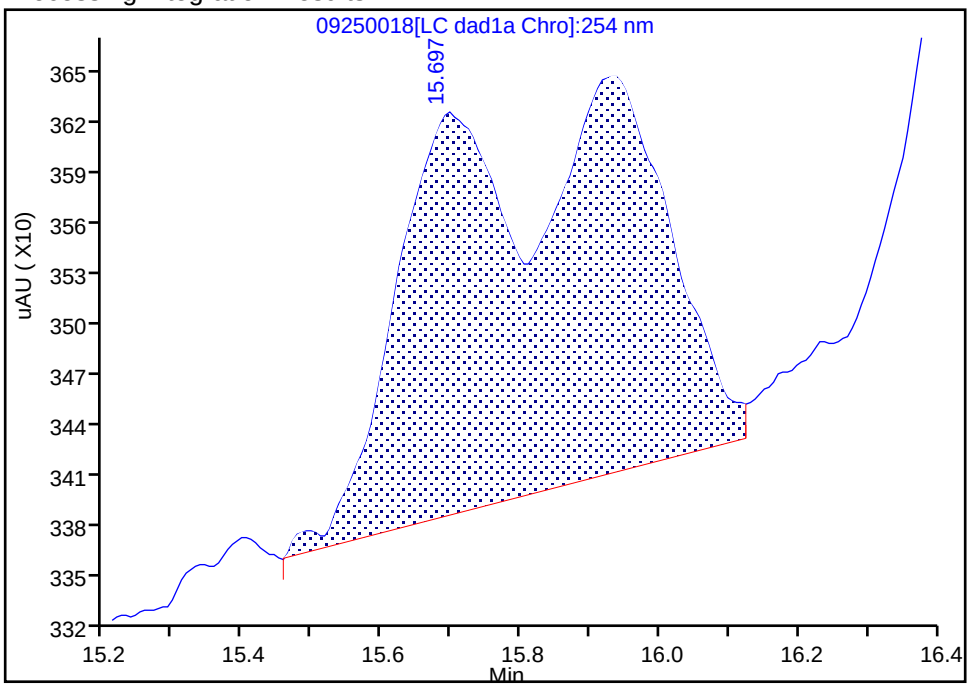
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Injection Date: 25-Sep-2023 23:30:18 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT 1
Client ID:
Operator ID: JZ/JG ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

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

Signal: 1

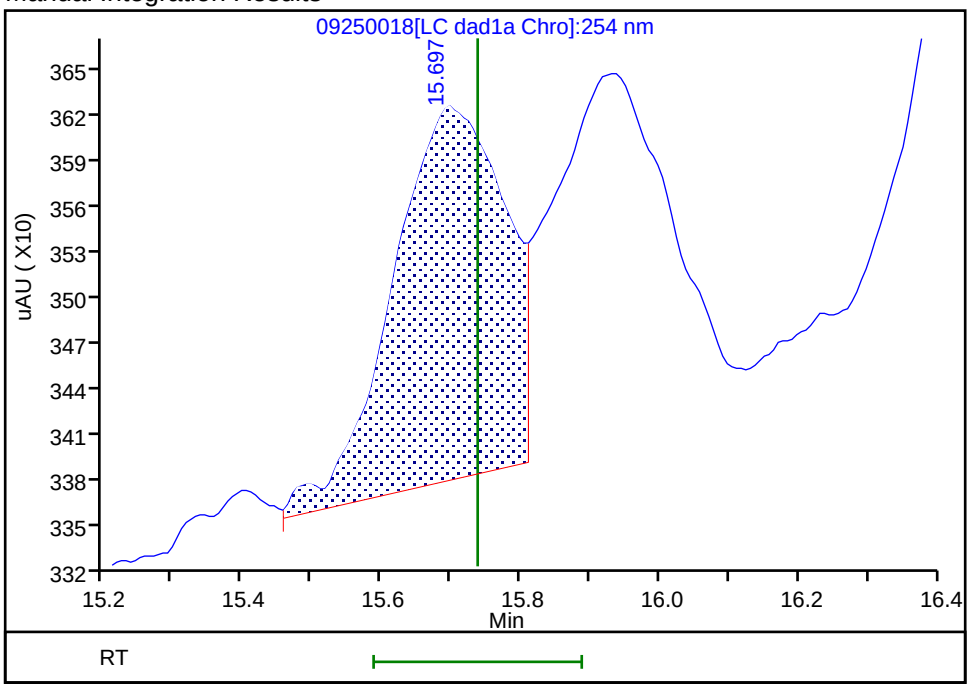
Processing Integration Results

RT: 15.70
Area: 5384
Amount: 0.013586
Amount Units: ug/ml



Manual Integration Results

RT: 15.70
Area: 2753
Amount: 0.011144
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:04:21 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

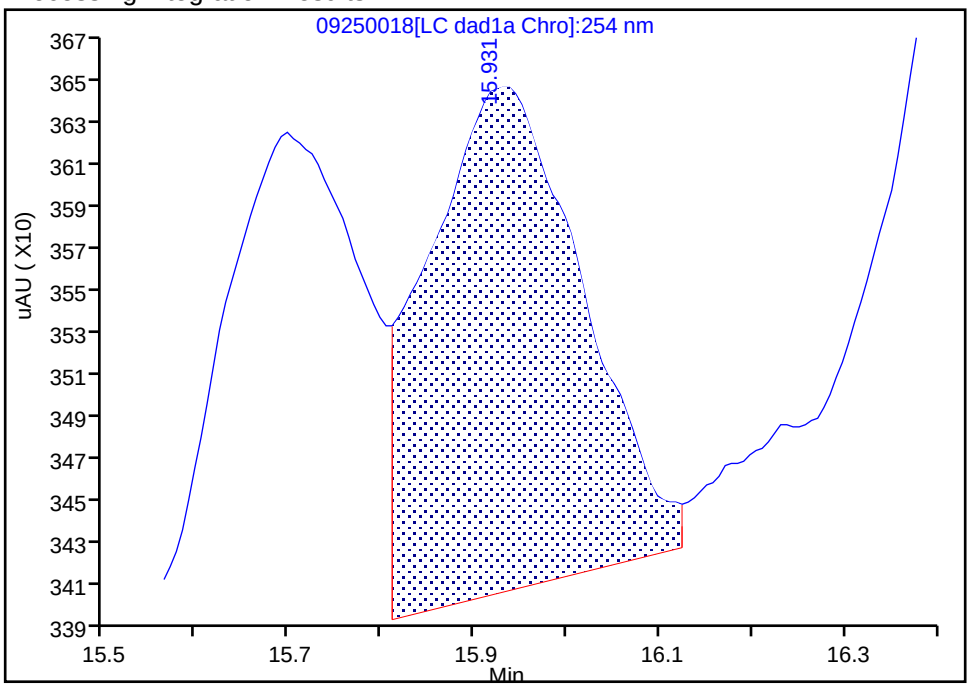
Data File:	\\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250018.d				
Injection Date:	25-Sep-2023 23:30:18	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

Signal: 1

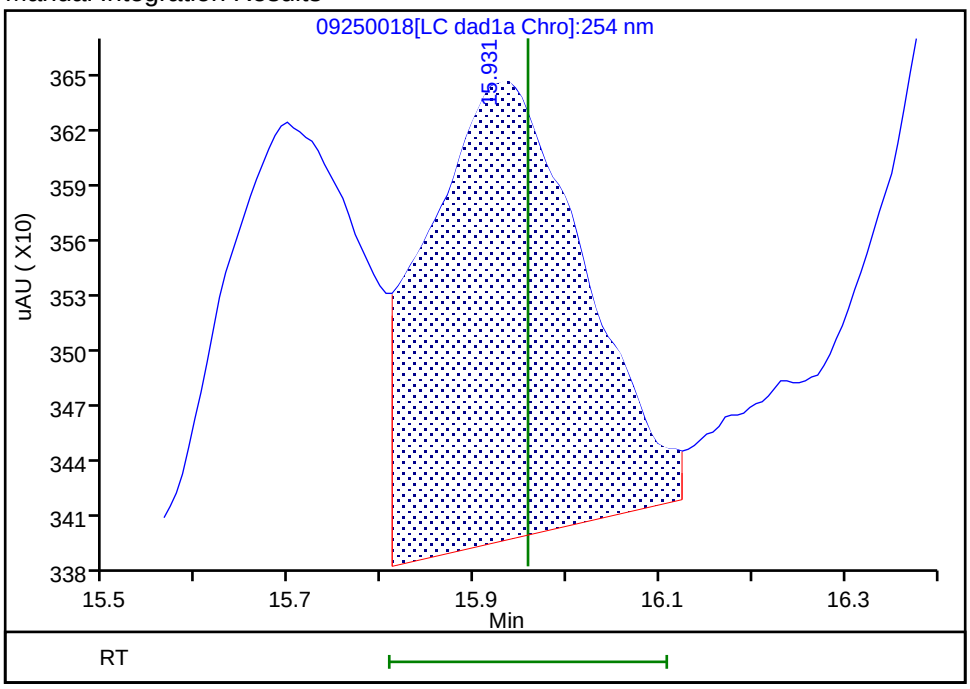
Processing Integration Results

RT: 15.93
Area: 2750
Amount: 0.011913
Amount Units: ug/ml



Manual Integration Results

RT: 15.93
Area: 2862
Amount: 0.009860
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:04:21 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

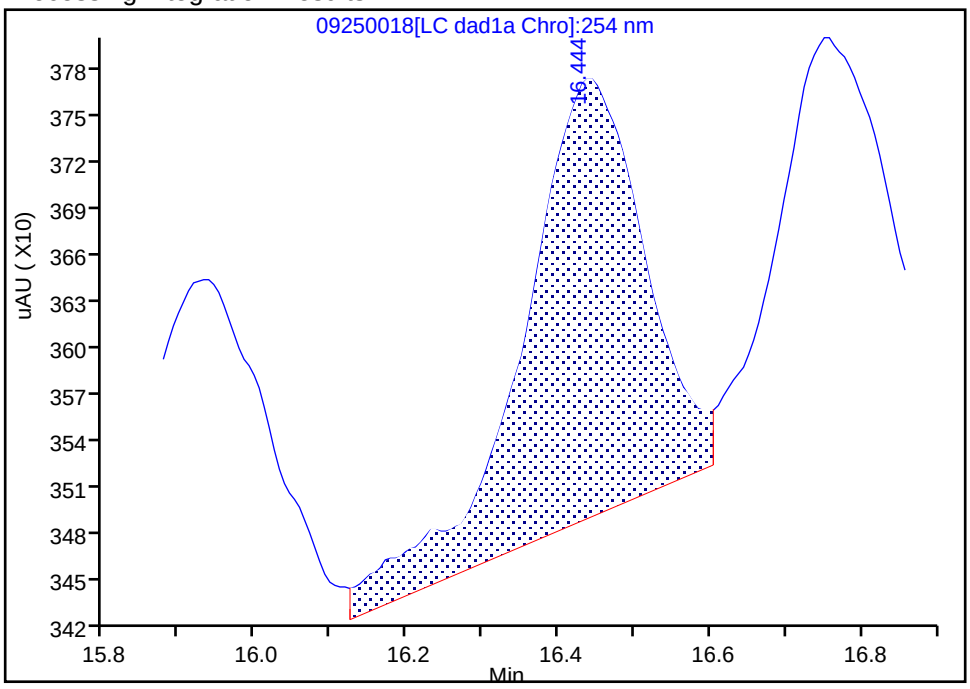
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250018.d
Injection Date: 25-Sep-2023 23:30:18 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT 1
Client ID:
Operator ID: JZ/JG ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

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

Signal: 1

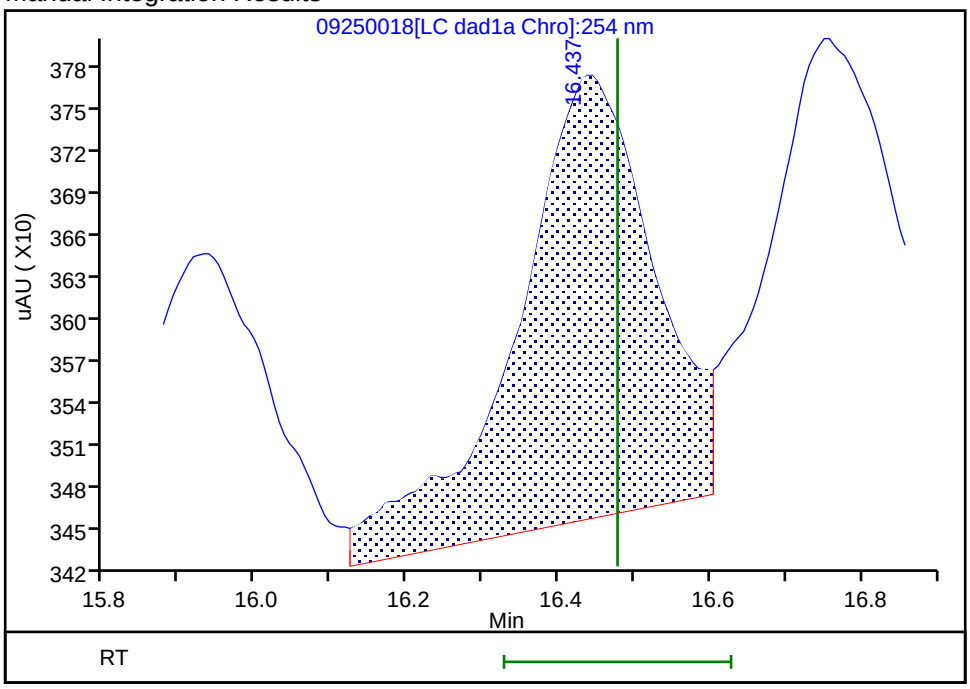
Processing Integration Results

RT: 16.44
Area: 3130
Amount: 0.010854
Amount Units: ug/ml



Manual Integration Results

RT: 16.44
Area: 3980
Amount: 0.009756
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:04:21 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

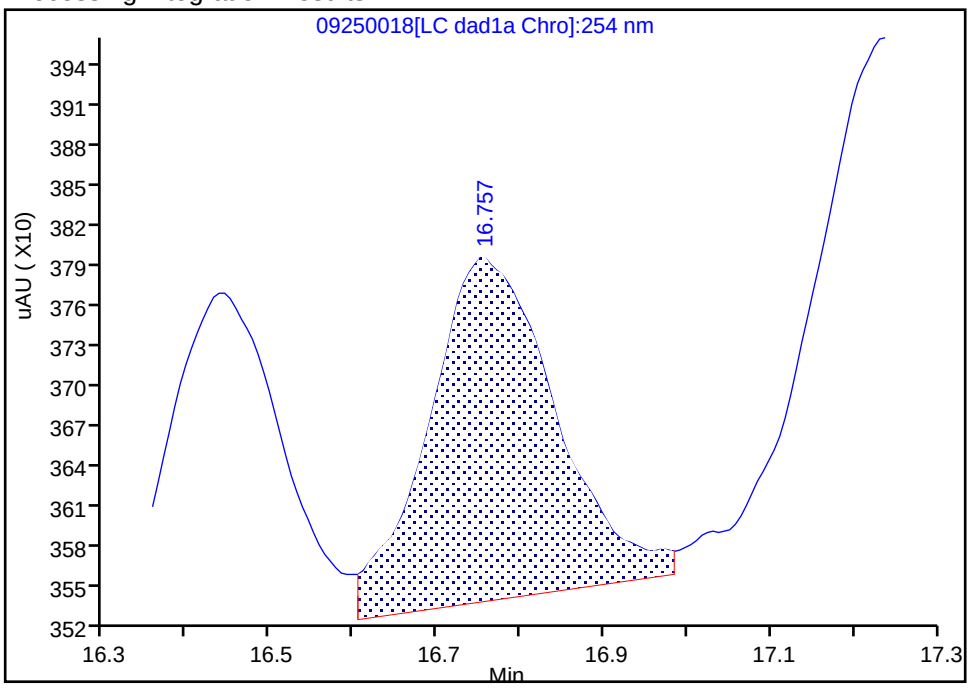
Data File:	\\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250018.d				
Injection Date:	25-Sep-2023 23:30:18	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

17 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

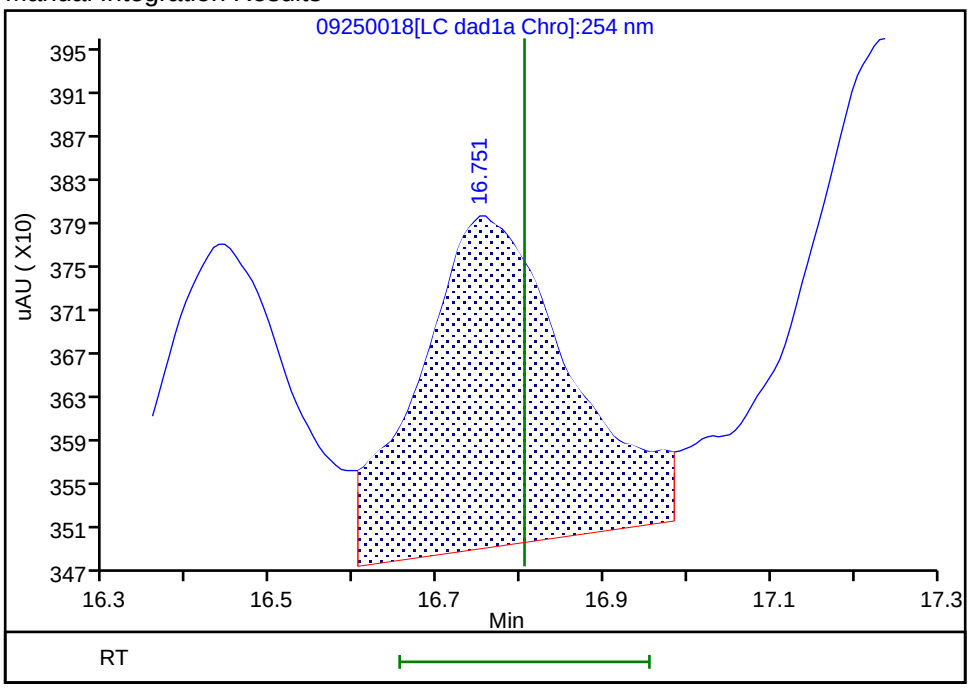
Processing Integration Results

RT: 16.76
Area: 2702
Amount: 0.009595
Amount Units: ug/ml



Manual Integration Results

RT: 16.75
Area: 3853
Amount: 0.009903
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:04:21 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

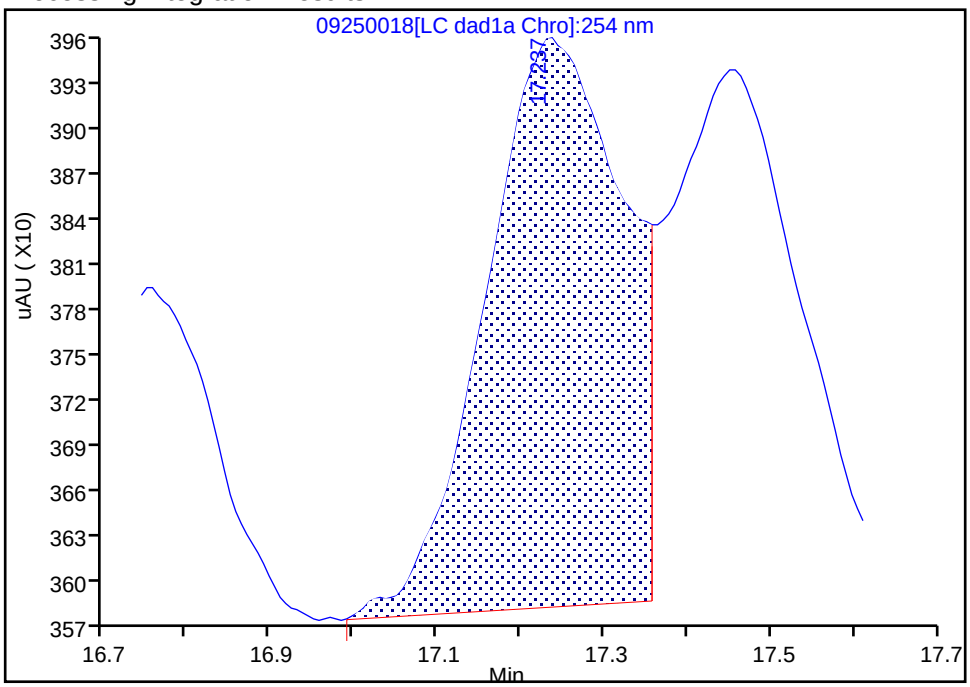
Data File:	\\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250018.d				
Injection Date:	25-Sep-2023 23:30:18	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

Signal: 1

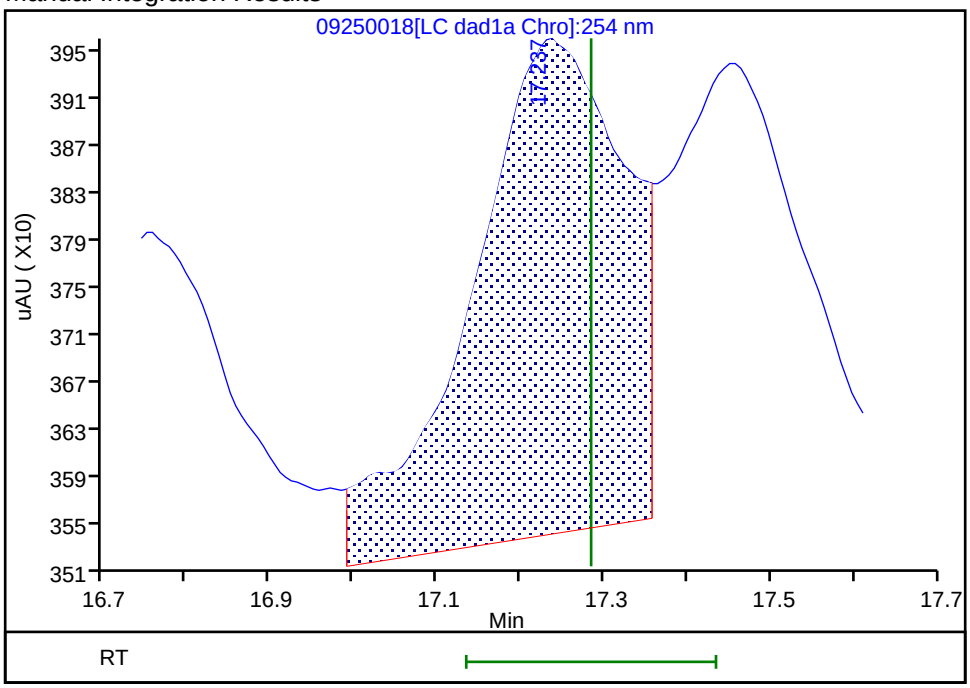
Processing Integration Results

RT: 17.24
Area: 4249
Amount: 0.010785
Amount Units: ug/ml



Manual Integration Results

RT: 17.24
Area: 5349
Amount: 0.010434
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:04:21 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

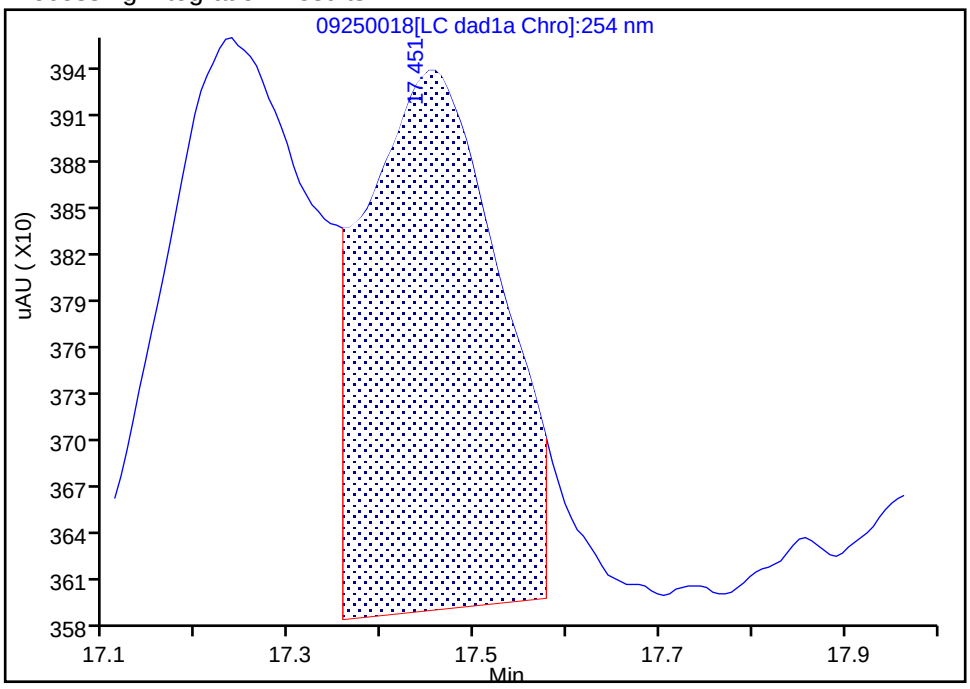
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250018.d
Injection Date: 25-Sep-2023 23:30:18 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT 1
Client ID:
Operator ID: JZ/JG ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

19 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

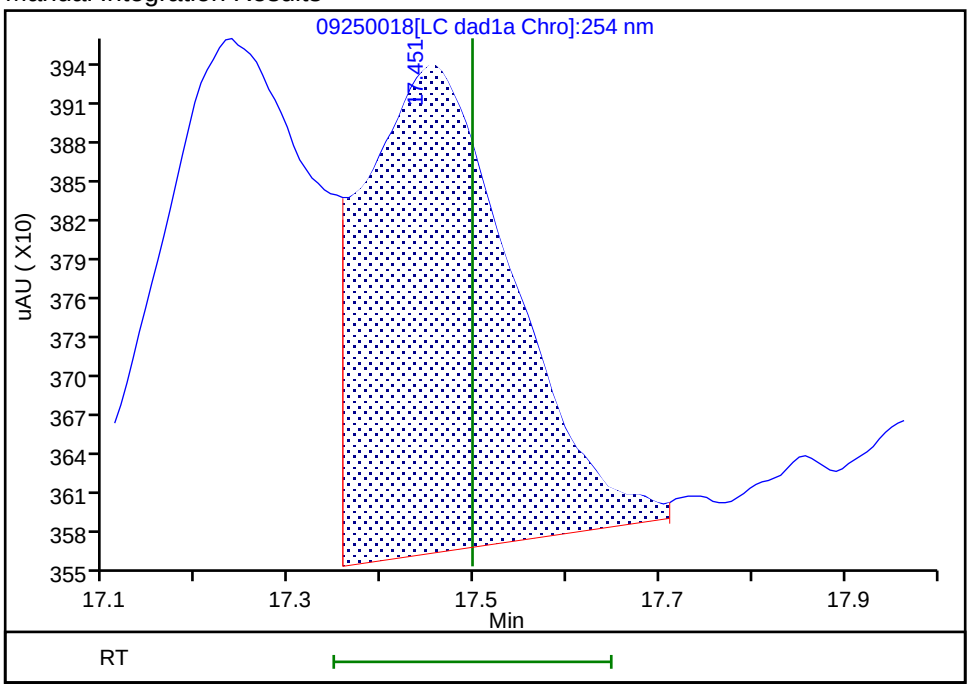
Processing Integration Results

RT: 17.45
Area: 3459
Amount: 0.008565
Amount Units: ug/ml



Manual Integration Results

RT: 17.45
Area: 4159
Amount: 0.010104
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:04:21 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

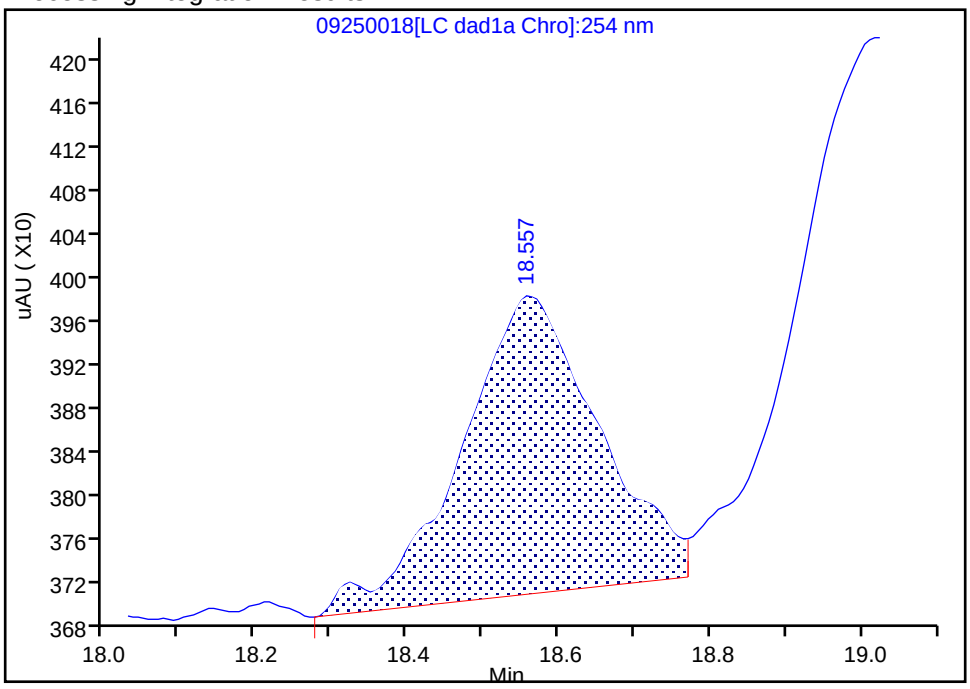
Data File:	\\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250018.d				
Injection Date:	25-Sep-2023 23:30:18	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

Signal: 1

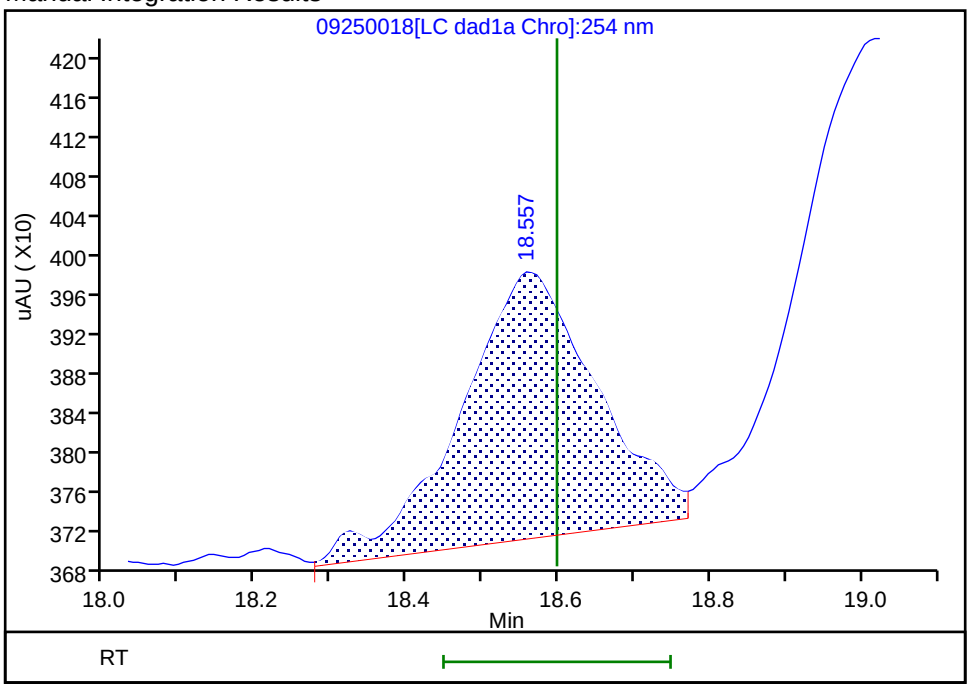
Processing Integration Results

RT: 18.56
Area: 3434
Amount: 0.012276
Amount Units: ug/ml



Manual Integration Results

RT: 18.56
Area: 3360
Amount: 0.009575
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:04:27 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

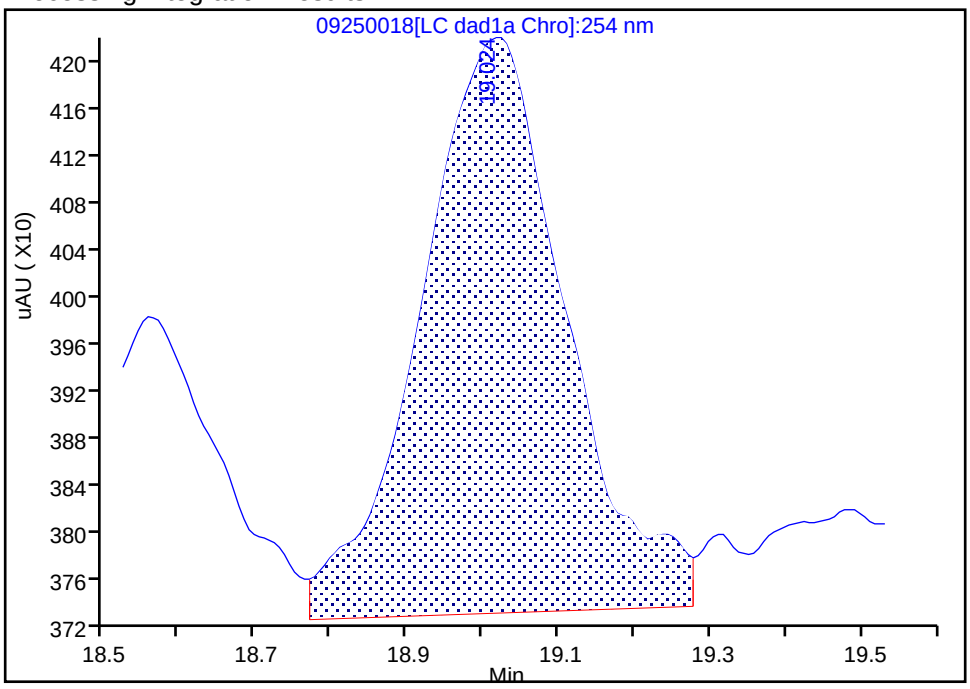
Data File:	\\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250018.d				
Injection Date:	25-Sep-2023 23:30:18	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

Signal: 1

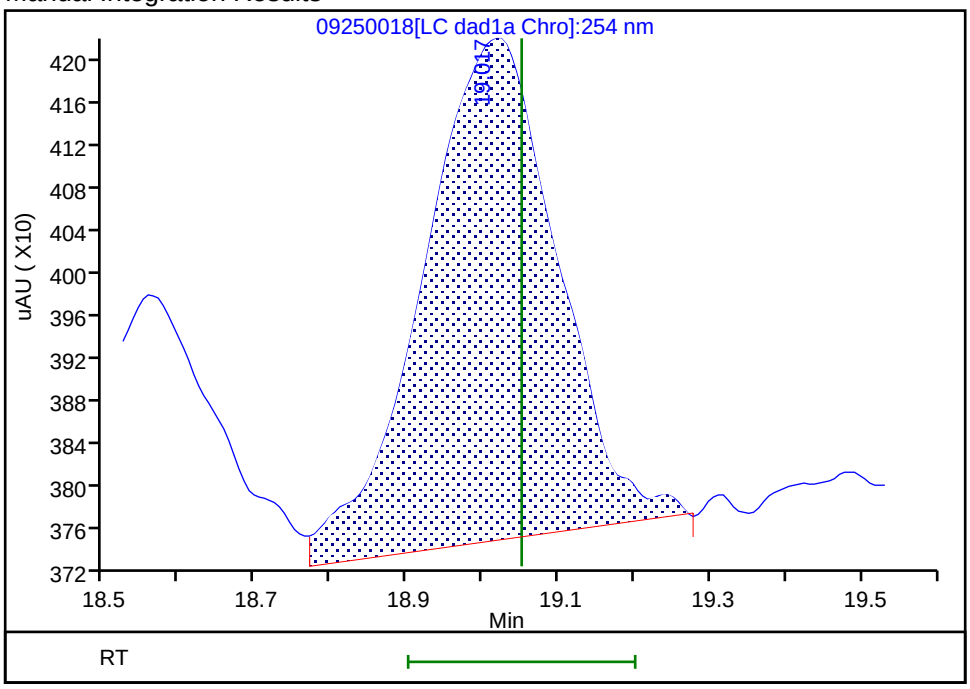
Processing Integration Results

RT: 19.02
Area: 6528
Amount: 0.011790
Amount Units: ug/ml



Manual Integration Results

RT: 19.02
Area: 5753
Amount: 0.010554
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:04:27 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

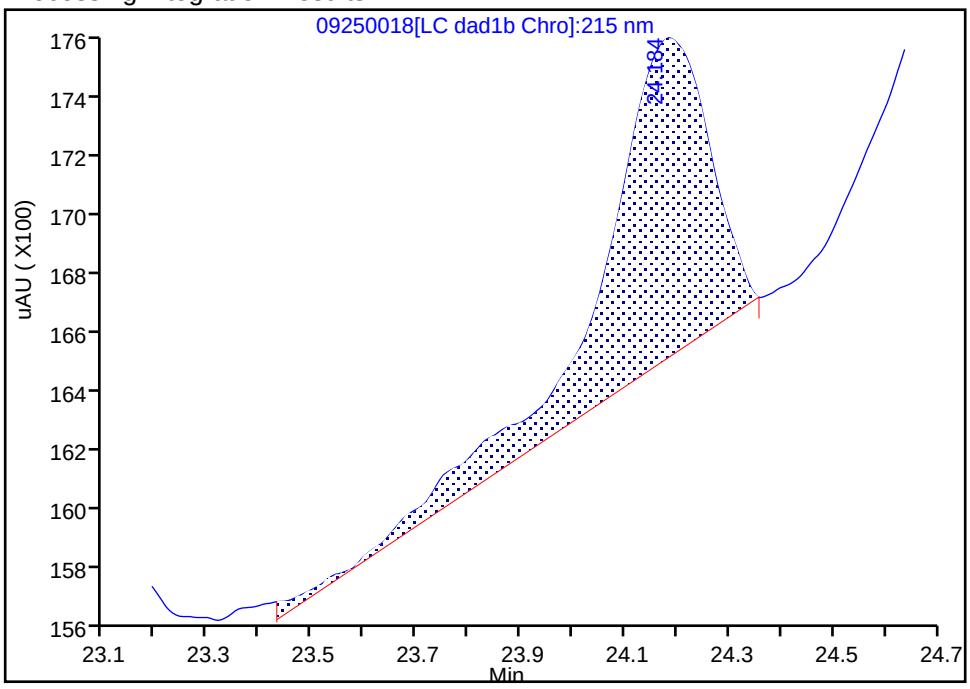
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250018.d
Injection Date: 25-Sep-2023 23:30:18 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC INT 1
Client ID:
Operator ID: JZ/JG ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

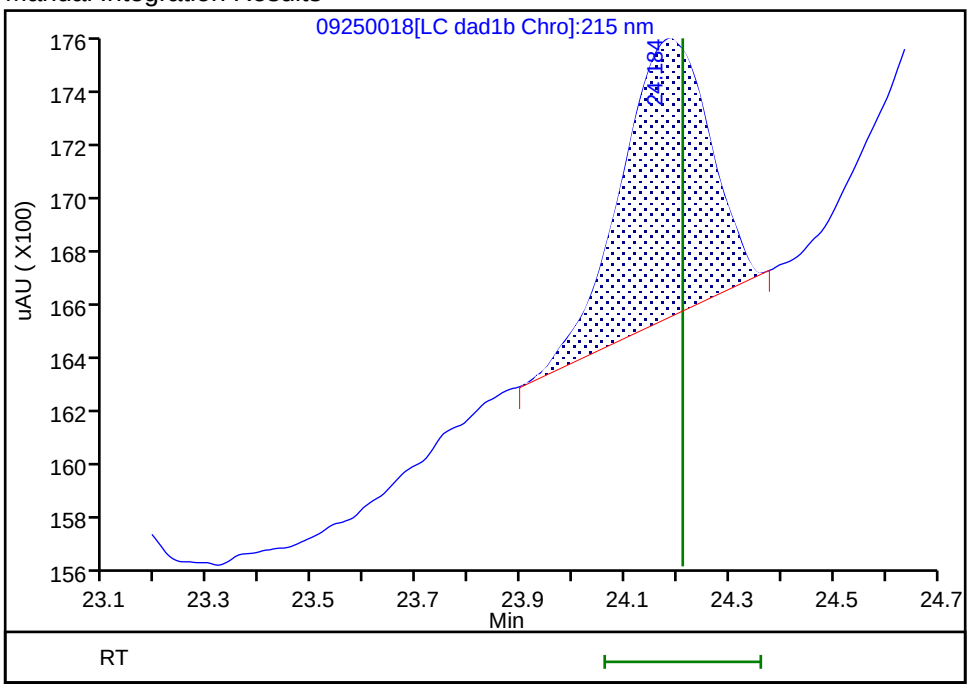
Processing Integration Results

RT: 24.18
Area: 14753
Amount: 0.116607
Amount Units: ug/ml



Manual Integration Results

RT: 24.18
Area: 11596
Amount: 0.094268
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:02:47 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Calibration / TNX

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

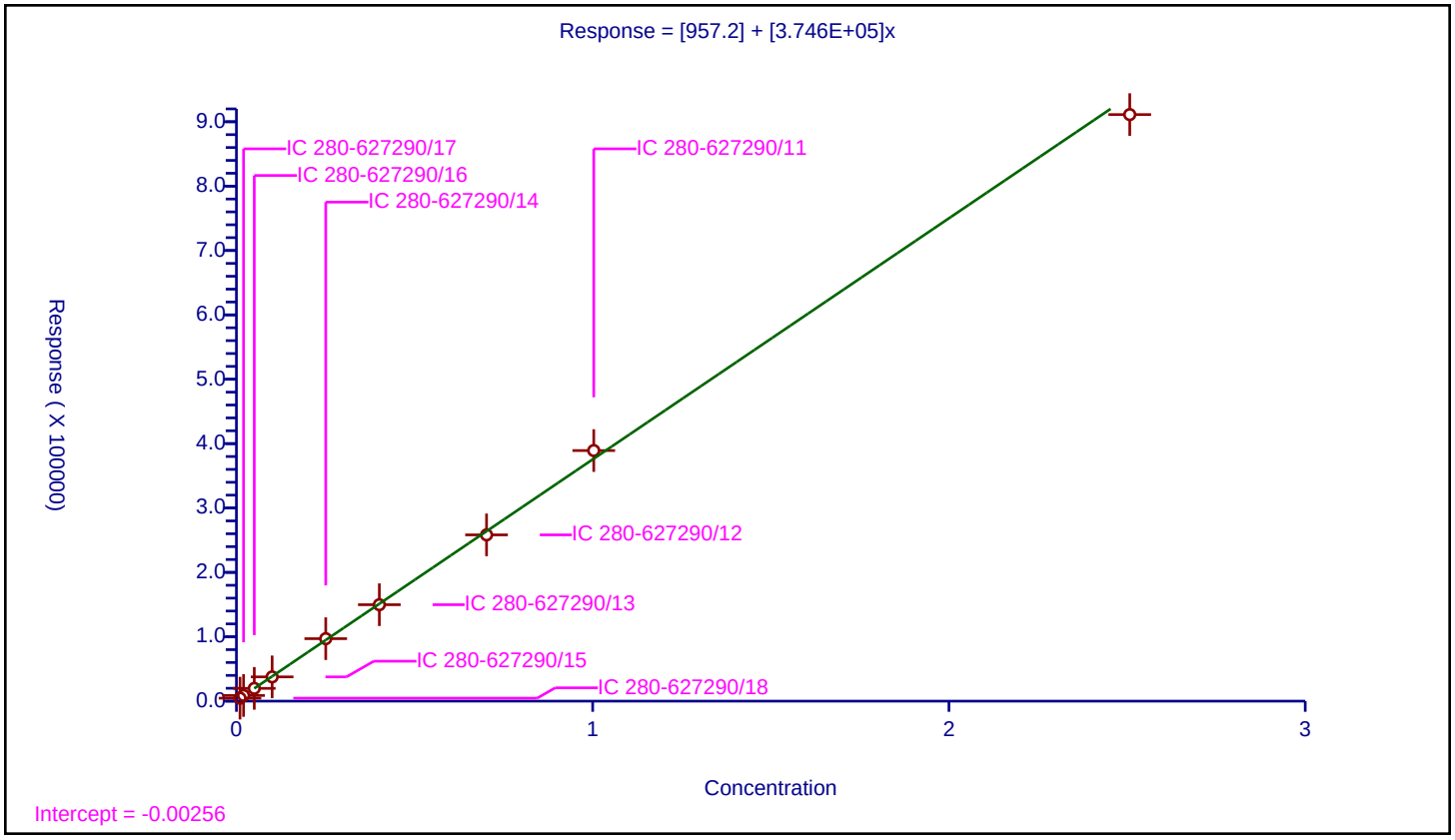
Curve Coefficients

Intercept:	957.2
Slope:	3.746E+05

Error Coefficients

Standard Error:	12200
Relative Standard Error:	3.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-627290/18	0.01003	4632.0			461814.556331	Y
2	IC 280-627290/17	0.02006	8811.0			439232.303091	Y
3	IC 280-627290/16	0.05015	19818.0			395174.47657	Y
4	IC 280-627290/15	0.1003	37690.0			375772.681954	Y
5	IC 280-627290/14	0.25075	97033.0			386971.08674	Y
6	IC 280-627290/13	0.4012	149801.0			373382.352941	Y
7	IC 280-627290/12	0.7021	258277.0			367863.552201	Y
8	IC 280-627290/11	1.003	389261.0			388096.70987	Y
9	IC 280-627290/10	2.5075	911149.0			363369.491525	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

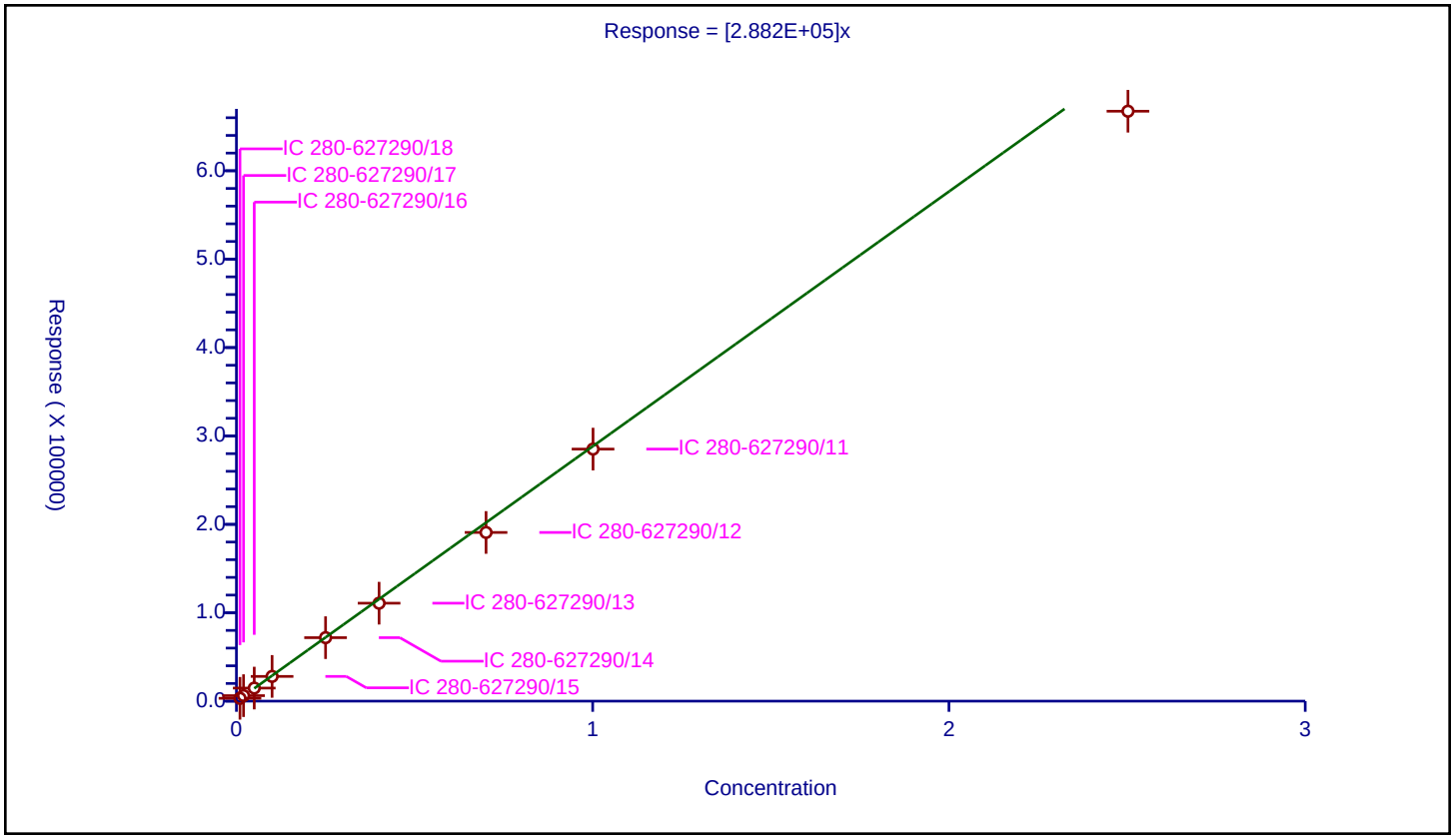
Curve Coefficients

Intercept:	0
Slope:	2.882E+05

Error Coefficients

Standard Error:	19600
Relative Standard Error:	6.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-627290/18	0.01001	3214.0			321078.921079	Y
2	IC 280-627290/17	0.02002	6216.0			310489.51049	Y
3	IC 280-627290/16	0.05005	14790.0			295504.495504	Y
4	IC 280-627290/15	0.1001	27970.0			279420.579421	Y
5	IC 280-627290/14	0.25025	71817.0			286981.018981	Y
6	IC 280-627290/13	0.4004	110817.0			276765.734266	Y
7	IC 280-627290/12	0.7007	190840.0			272356.215213	Y
8	IC 280-627290/11	1.001	285156.0			284871.128871	Y
9	IC 280-627290/10	2.5025	667388.0			266688.511489	Y



Calibration / HMX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

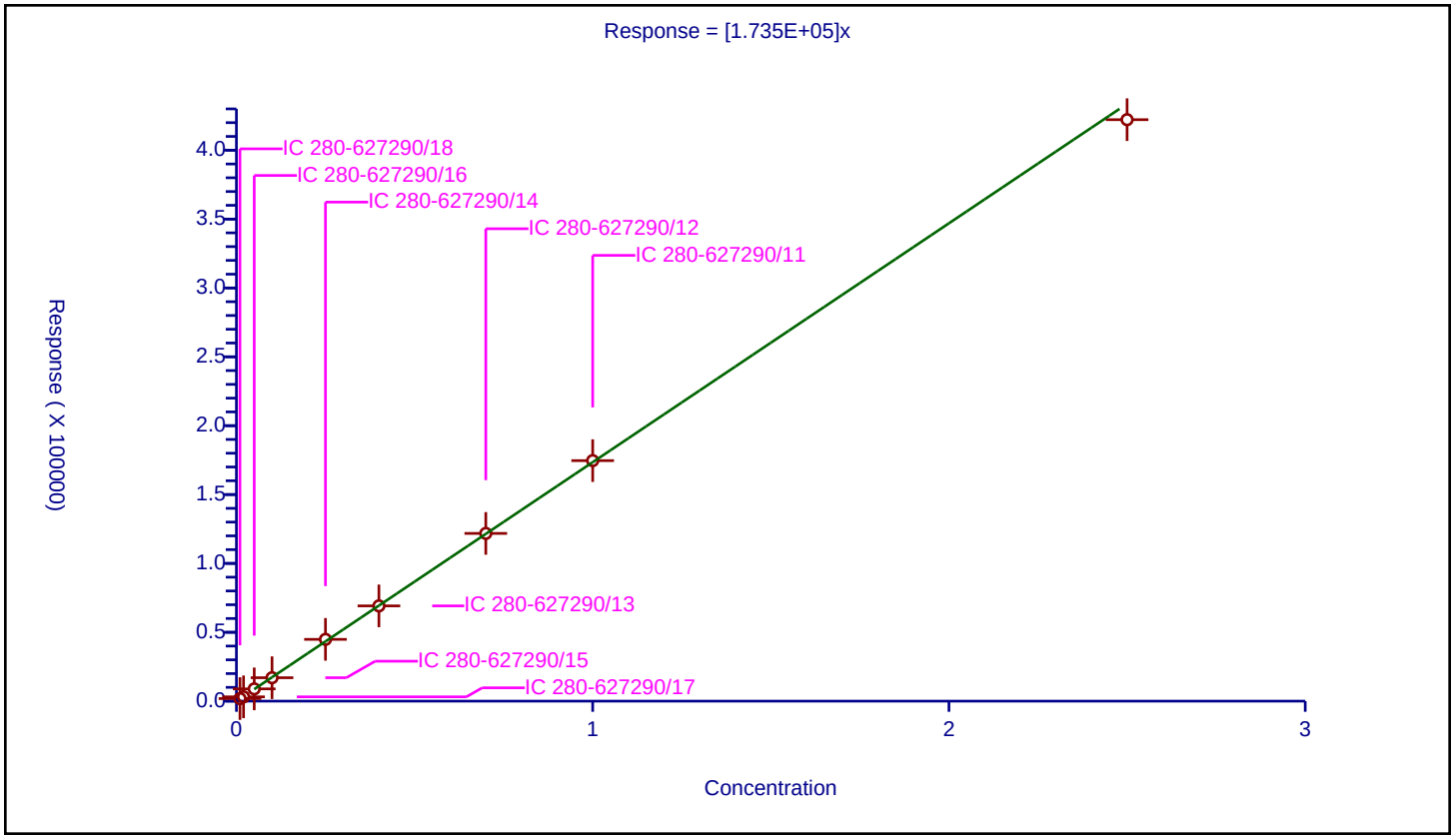
Curve Coefficients

Intercept:	0
Slope:	1.735E+05

Error Coefficients

Standard Error:	4130
Relative Standard Error:	4.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-627290/18	0.01	1873.0			187300.0	Y
2	IC 280-627290/17	0.02	3125.0			156250.0	Y
3	IC 280-627290/16	0.05	8897.0			177940.0	Y
4	IC 280-627290/15	0.1	16998.0			169980.0	Y
5	IC 280-627290/14	0.25	44858.0			179432.0	Y
6	IC 280-627290/13	0.4	69154.0			172885.0	Y
7	IC 280-627290/12	0.7	121769.0			173955.714286	Y
8	IC 280-627290/11	1.0	174631.0			174631.0	Y
9	IC 280-627290/10	2.5	422170.0			168868.0	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

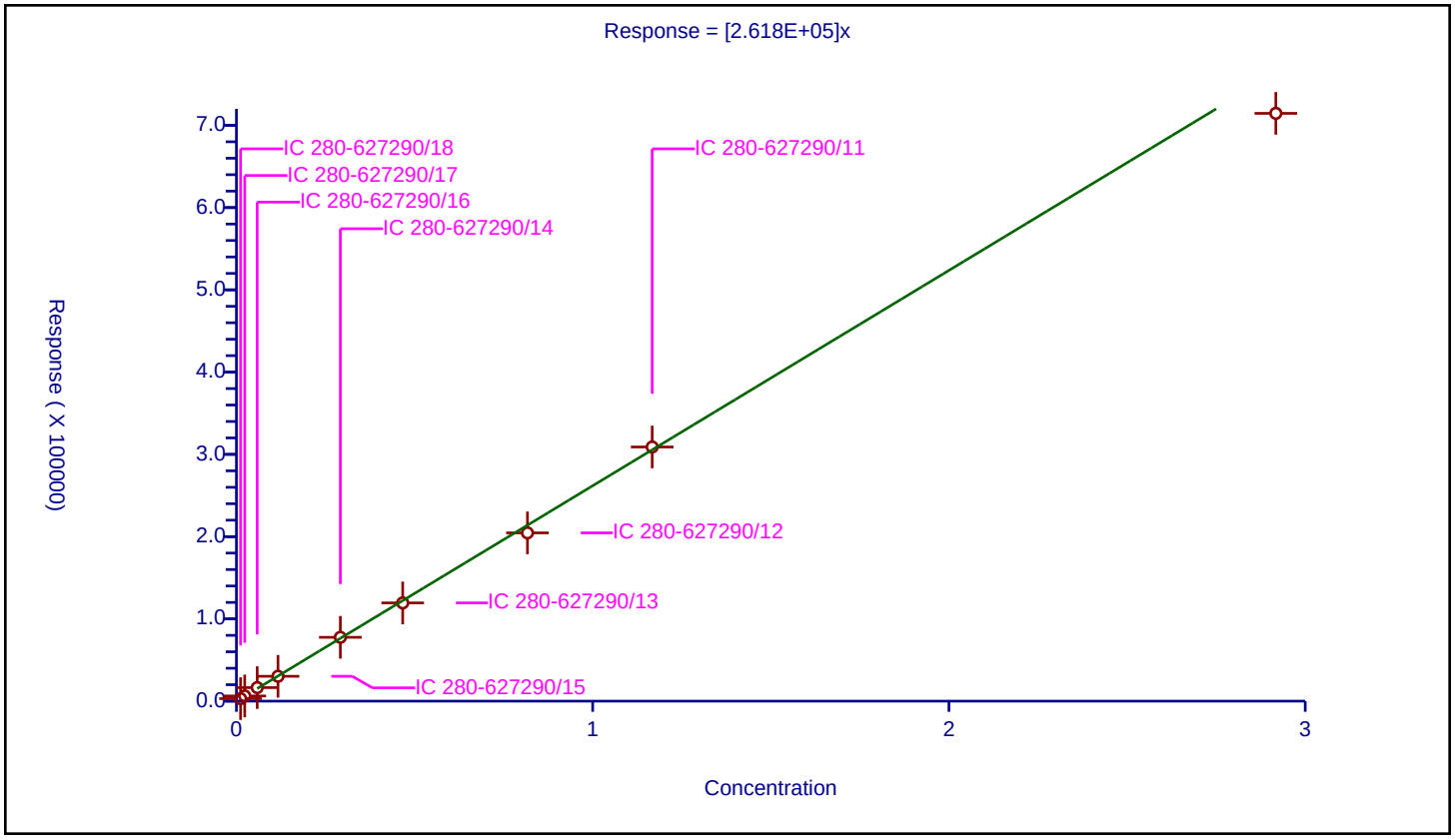
Curve Coefficients

Intercept:	0
Slope:	2.618E+05

Error Coefficients

Standard Error:	17800
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 280-627290/18	0.01167	3081.0			264010.282776	Y
2	IC 280-627290/17	0.02334	6293.0			269622.964867	Y
3	IC 280-627290/16	0.05835	16454.0			281988.003428	Y
4	IC 280-627290/15	0.1167	30216.0			258920.308483	Y
5	IC 280-627290/14	0.29175	77595.0			265964.010283	Y
6	IC 280-627290/13	0.4668	119417.0			255820.479863	Y
7	IC 280-627290/12	0.8169	204553.0			250401.517934	Y
8	IC 280-627290/11	1.167	308980.0			264764.353042	Y
9	IC 280-627290/10	2.9175	714574.0			244926.820908	Y



Calibration / 2,4,6-Trinitrophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

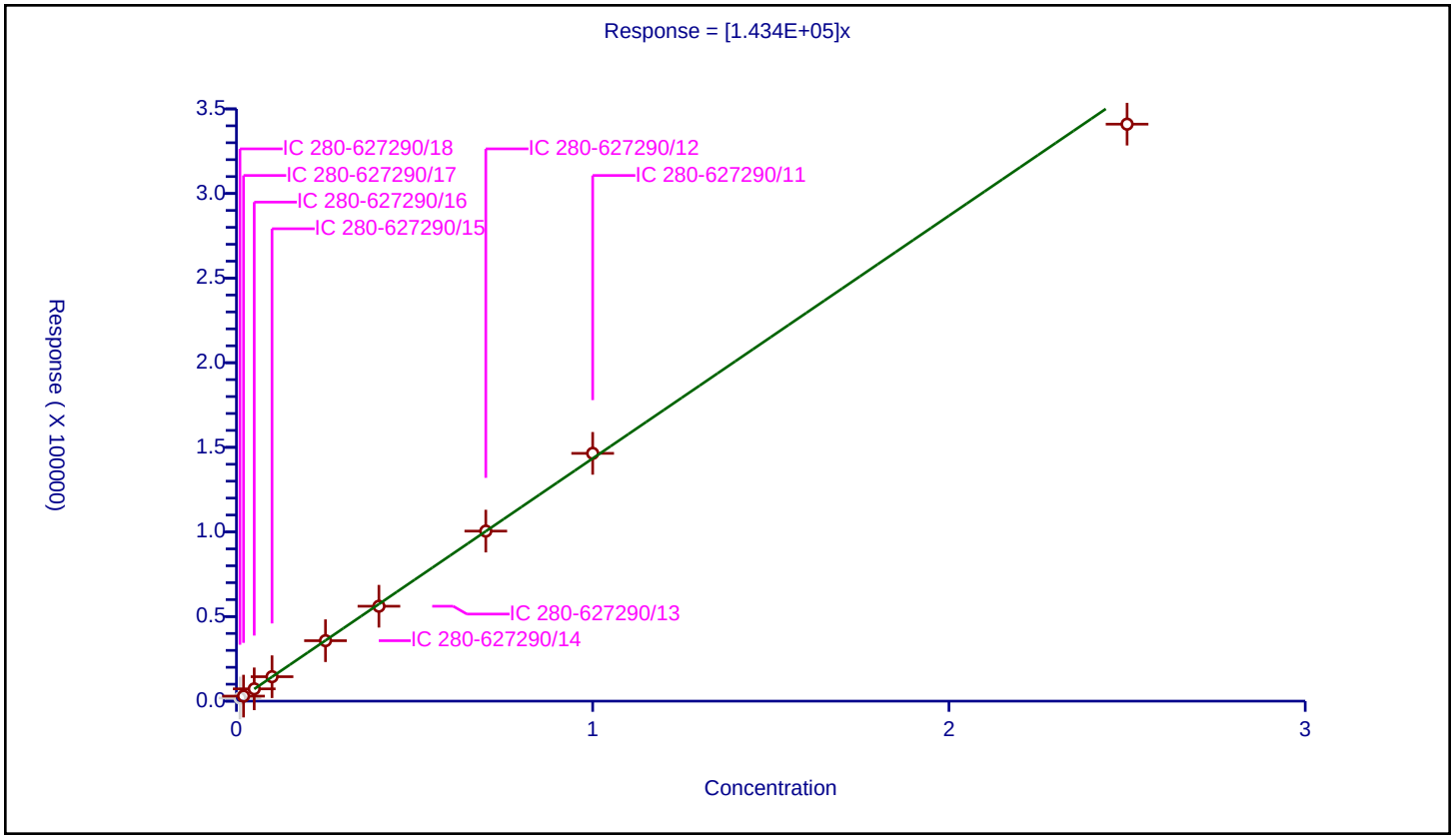
Curve Coefficients

Intercept:	0
Slope:	1.434E+05

Error Coefficients

Standard Error:	6760
Relative Standard Error:	2.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-627290/18	0.01	1867.0			186700.0	N
2	IC 280-627290/17	0.02	2960.0			148000.0	Y
3	IC 280-627290/16	0.05	7270.0			145400.0	Y
4	IC 280-627290/15	0.1	14448.0			144480.0	Y
5	IC 280-627290/14	0.25	35728.0			142912.0	Y
6	IC 280-627290/13	0.4	56092.0			140230.0	Y
7	IC 280-627290/12	0.7	100486.0			143551.428571	Y
8	IC 280-627290/11	1.0	146441.0			146441.0	Y
9	IC 280-627290/10	2.5	340985.0			136394.0	Y



Calibration / RDX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

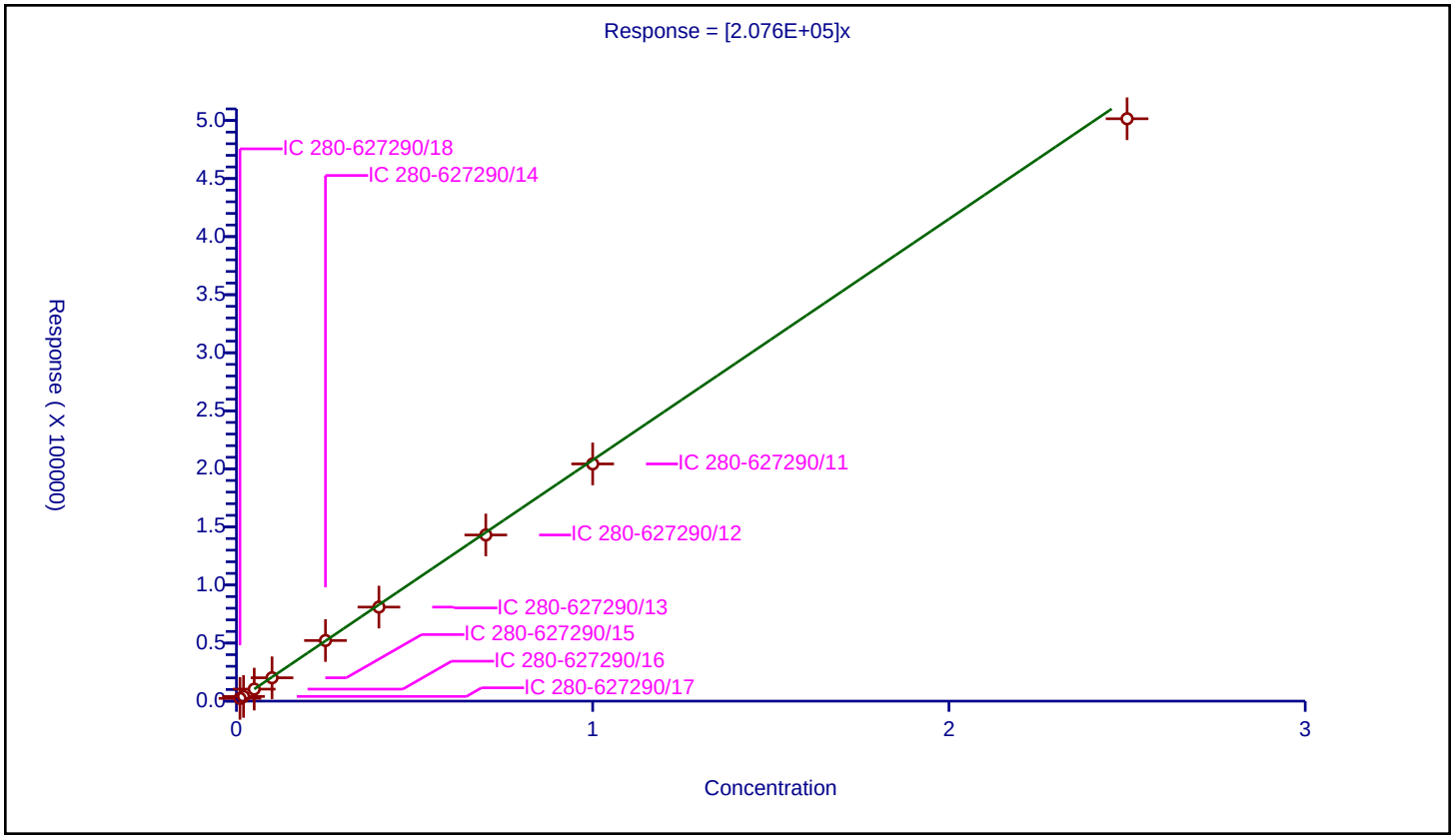
Curve Coefficients

Intercept:	0
Slope:	2.076E+05

Error Coefficients

Standard Error:	6380
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 280-627290/18	0.01	2366.0			236600.0	Y
2	IC 280-627290/17	0.02	4054.0			202700.0	Y
3	IC 280-627290/16	0.05	10353.0			207060.0	Y
4	IC 280-627290/15	0.1	20133.0			201330.0	Y
5	IC 280-627290/14	0.25	52214.0			208856.0	Y
6	IC 280-627290/13	0.4	80985.0			202462.5	Y
7	IC 280-627290/12	0.7	143077.0			204395.714286	Y
8	IC 280-627290/11	1.0	204269.0			204269.0	Y
9	IC 280-627290/10	2.5	501519.0			200607.6	Y



Calibration / Nitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

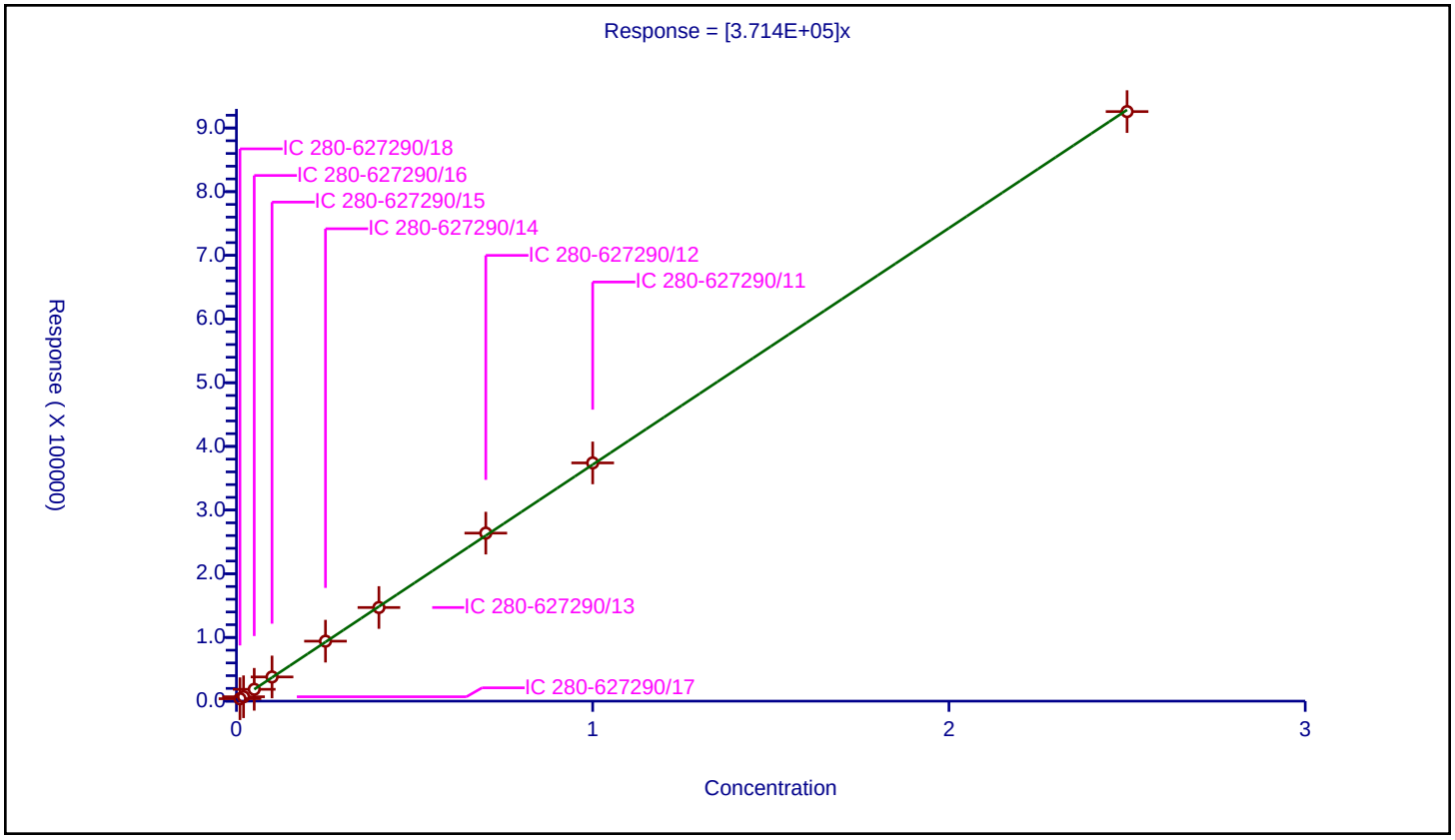
Curve Coefficients

Intercept:	0
Slope:	3.714E+05

Error Coefficients

Standard Error:	2080
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 280-627290/18	0.01	3810.0			381000.0	Y
2	IC 280-627290/17	0.02	6887.0			344350.0	Y
3	IC 280-627290/16	0.05	18591.0			371820.0	Y
4	IC 280-627290/15	0.1	37981.0			379810.0	Y
5	IC 280-627290/14	0.25	94171.0			376684.0	Y
6	IC 280-627290/13	0.4	147023.0			367557.5	Y
7	IC 280-627290/12	0.7	263852.0			376931.428571	Y
8	IC 280-627290/11	1.0	374071.0			374071.0	Y
9	IC 280-627290/10	2.5	925760.0			370304.0	Y



Calibration / 1,2-Dinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

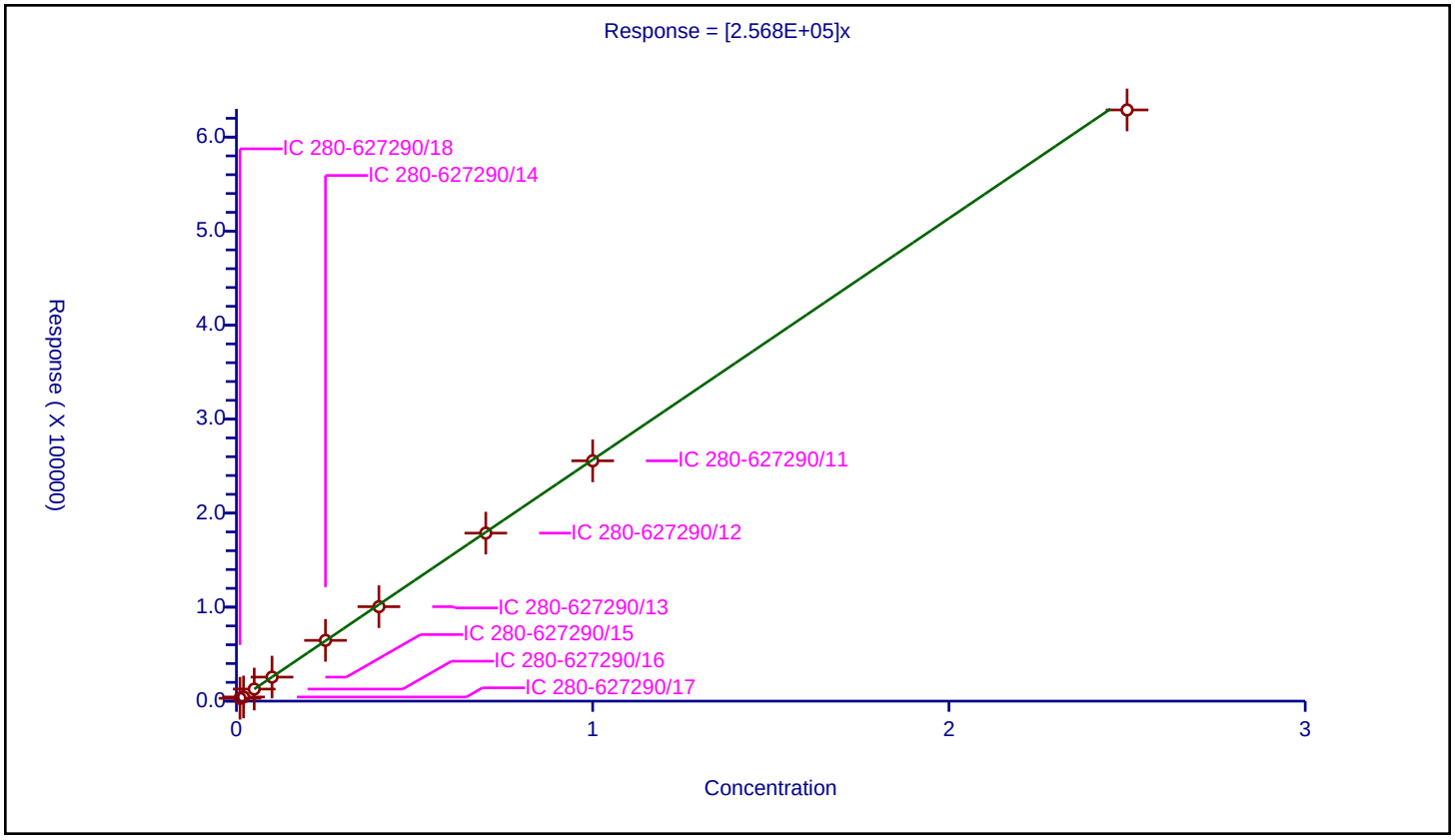
Curve Coefficients

Intercept:	0
Slope:	2.568E+05

Error Coefficients

Standard Error:	4720
Relative Standard Error:	8.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-627290/18	0.01	3052.0			305200.0	Y
2	IC 280-627290/17	0.02	4419.0			220950.0	Y
3	IC 280-627290/16	0.05	12837.0			256740.0	Y
4	IC 280-627290/15	0.1	25572.0			255720.0	Y
5	IC 280-627290/14	0.25	64646.0			258584.0	Y
6	IC 280-627290/13	0.4	100477.0			251192.5	Y
7	IC 280-627290/12	0.7	178743.0			255347.142857	Y
8	IC 280-627290/11	1.0	255664.0			255664.0	Y
9	IC 280-627290/10	2.5	628901.0			251560.4	Y



Calibration / 3,5-Dinitroaniline

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

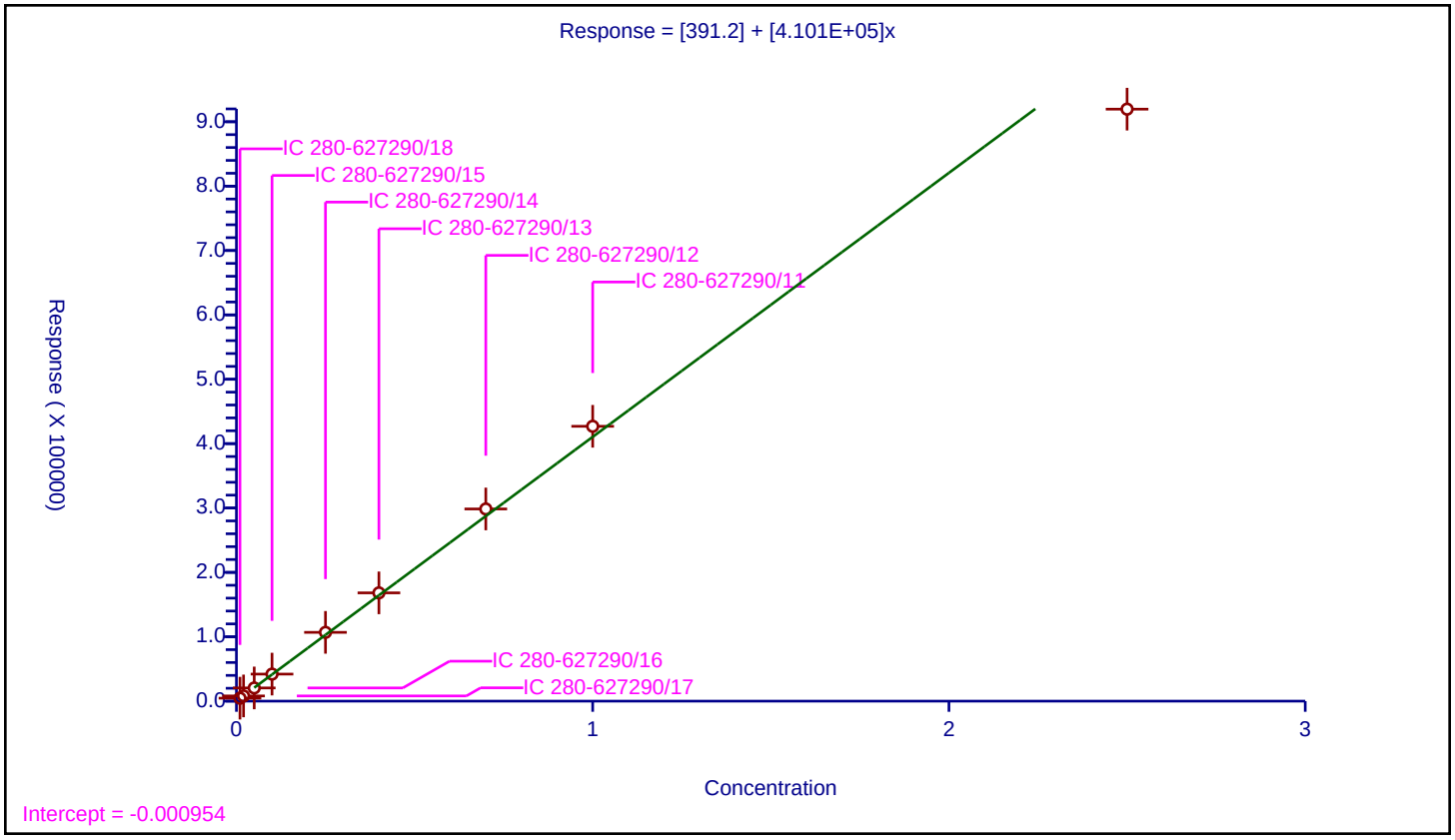
Curve Coefficients

Intercept:	391.2
Slope:	4.101E+05

Error Coefficients

Standard Error:	40800
Relative Standard Error:	5.5
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-627290/18	0.01	4622.0			462200.0	Y
2	IC 280-627290/17	0.02	8071.0			403550.0	Y
3	IC 280-627290/16	0.05	20488.0			409760.0	Y
4	IC 280-627290/15	0.1	42028.0			420280.0	Y
5	IC 280-627290/14	0.25	106862.0			427448.0	Y
6	IC 280-627290/13	0.4	168201.0			420502.5	Y
7	IC 280-627290/12	0.7	298526.0			426465.714286	Y
8	IC 280-627290/11	1.0	426959.0			426959.0	Y
9	IC 280-627290/10	2.5	919595.0			367838.0	Y



Calibration / 1,3-Dinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

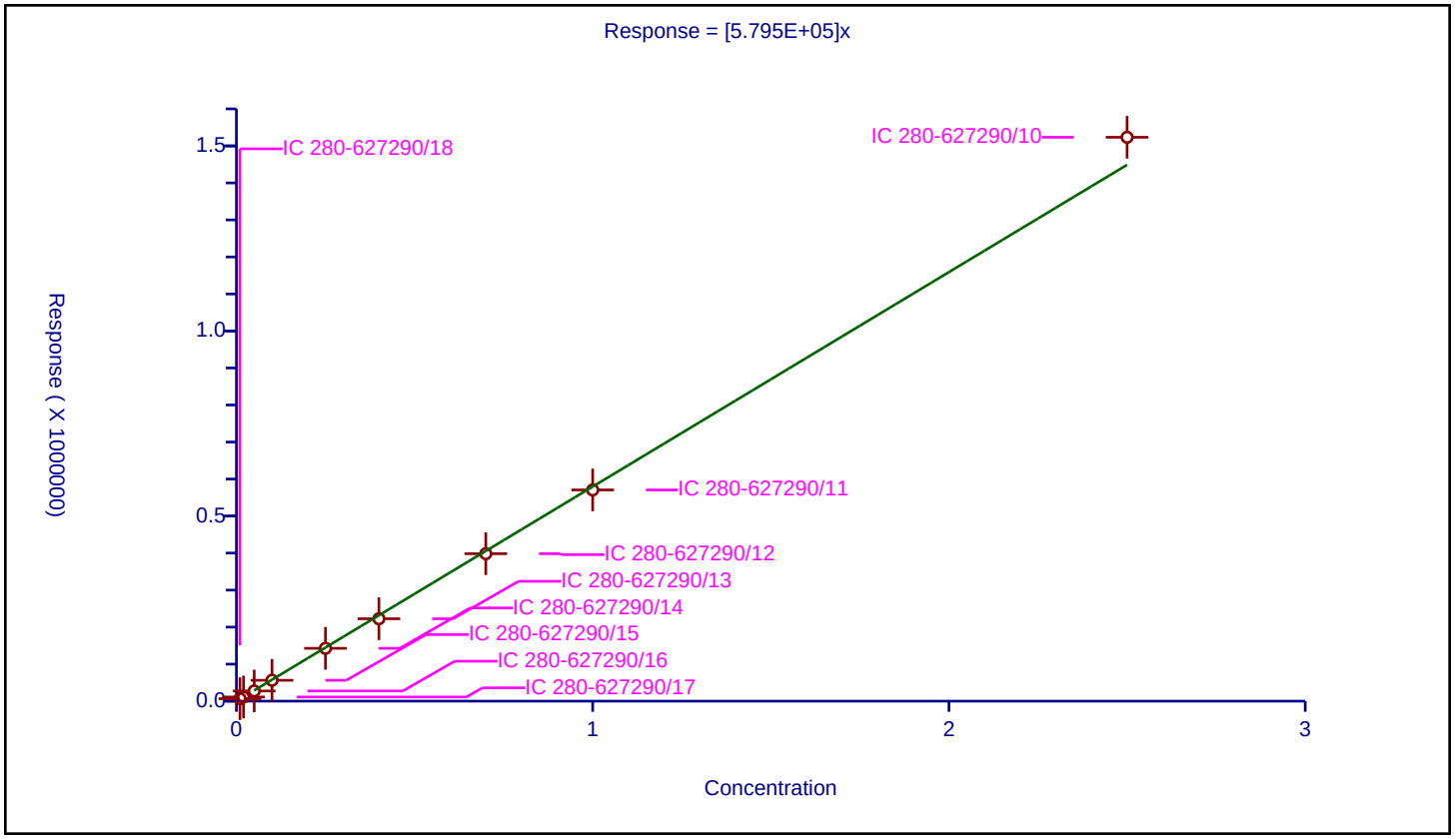
Curve Coefficients

Intercept:	0
Slope:	5.795E+05

Error Coefficients

Standard Error:	26900
Relative Standard Error:	6.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-627290/18	0.01	6679.0			667900.0	Y
2	IC 280-627290/17	0.02	11160.0			558000.0	Y
3	IC 280-627290/16	0.05	27516.0			550320.0	Y
4	IC 280-627290/15	0.1	56349.0			563490.0	Y
5	IC 280-627290/14	0.25	142691.0			570764.0	Y
6	IC 280-627290/13	0.4	222577.0			556442.5	Y
7	IC 280-627290/12	0.7	398297.0			568995.714286	Y
8	IC 280-627290/11	1.0	570540.0			570540.0	Y
9	IC 280-627290/10	2.5	1523284.0			609313.6	Y



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Calibration / Nitroglycerin

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

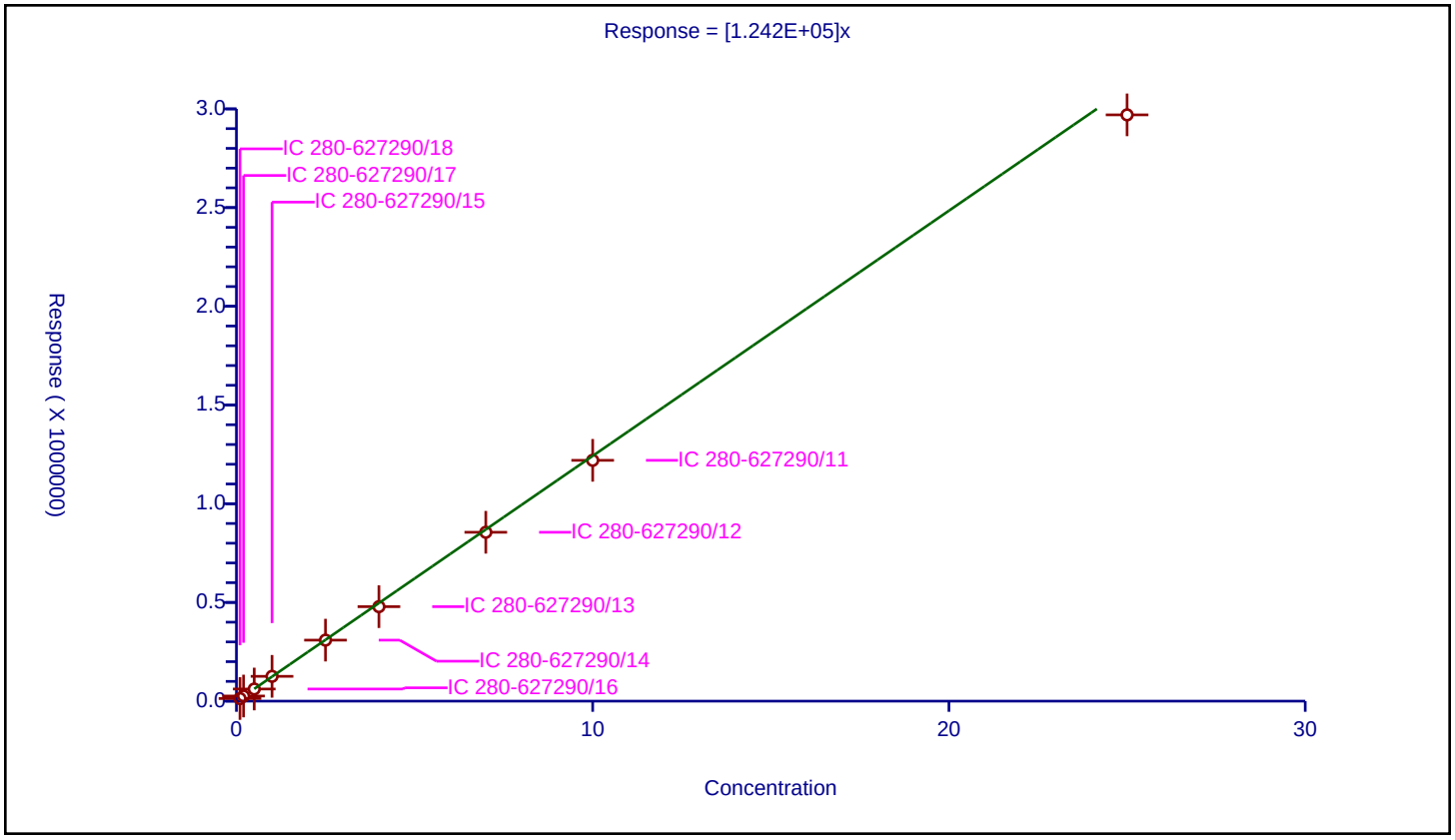
Curve Coefficients

Intercept:	0
Slope:	1.242E+05

Error Coefficients

Standard Error:	49300
Relative Standard Error:	3.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-627290/18	0.1	13348.0			133480.0	Y
2	IC 280-627290/17	0.2	25930.0			129650.0	Y
3	IC 280-627290/16	0.5	61450.0			122900.0	Y
4	IC 280-627290/15	1.0	125699.0			125699.0	Y
5	IC 280-627290/14	2.5	309021.0			123608.4	Y
6	IC 280-627290/13	4.0	478538.0			119634.5	Y
7	IC 280-627290/12	7.0	855360.0			122194.285714	Y
8	IC 280-627290/11	10.0	1219790.0			121979.0	Y
9	IC 280-627290/10	25.0	2969741.0			118789.64	Y



Calibration / o-Nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

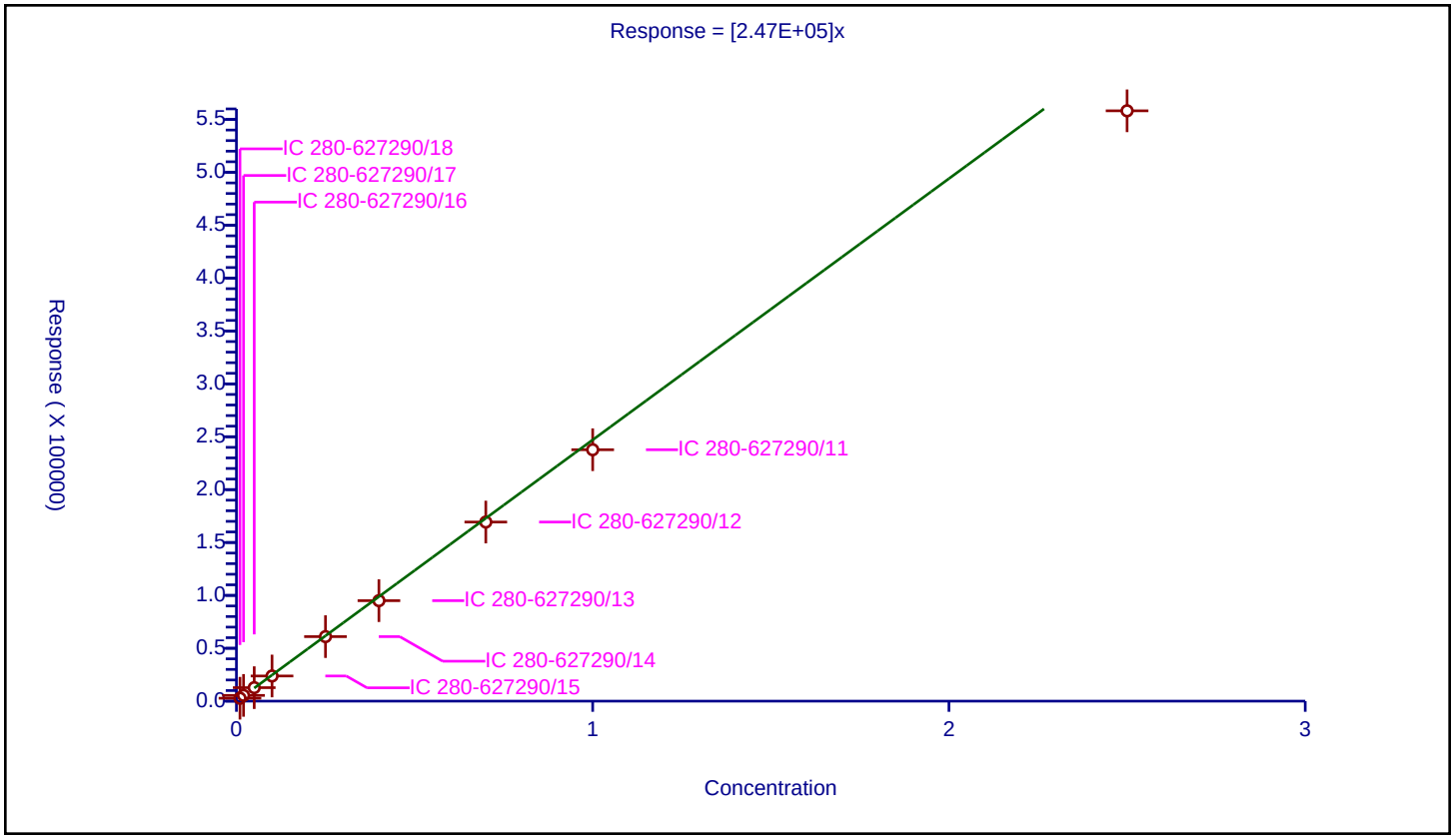
Curve Coefficients

Intercept:	0
Slope:	2.47E+05

Error Coefficients

Standard Error:	21300
Relative Standard Error:	6.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-627290/18	0.01	2753.0			275300.0	Y
2	IC 280-627290/17	0.02	5416.0			270800.0	Y
3	IC 280-627290/16	0.05	12750.0			255000.0	Y
4	IC 280-627290/15	0.1	23778.0			237780.0	Y
5	IC 280-627290/14	0.25	61006.0			244024.0	Y
6	IC 280-627290/13	0.4	94995.0			237487.5	Y
7	IC 280-627290/12	0.7	169349.0			241927.142857	Y
8	IC 280-627290/11	1.0	237729.0			237729.0	Y
9	IC 280-627290/10	2.5	558193.0			223277.2	Y



Calibration / p-Nitrotoluene

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

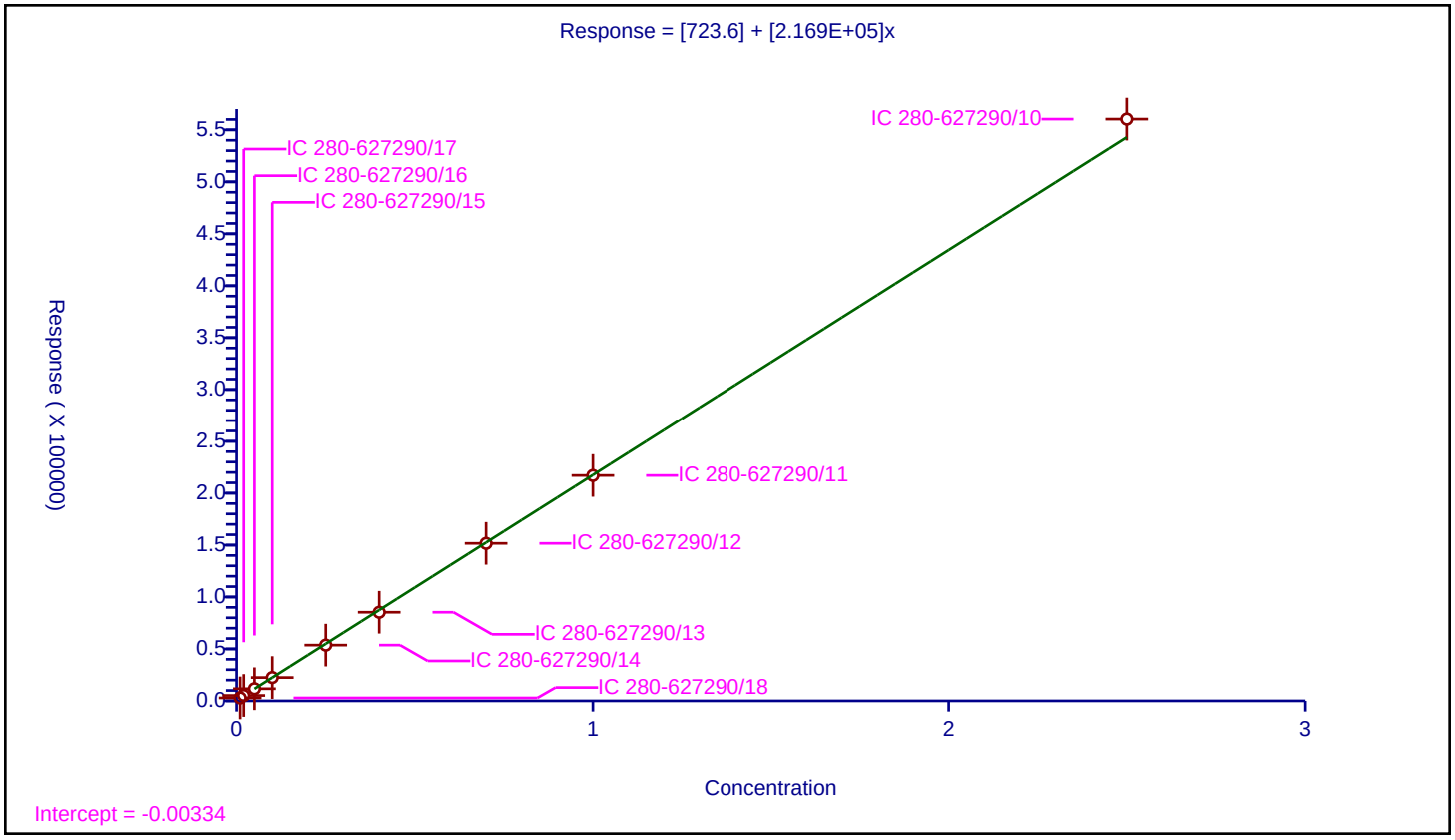
Curve Coefficients

Intercept:	723.6
Slope:	2.169E+05

Error Coefficients

Standard Error:	6670
Relative Standard Error:	2.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-627290/18	0.01	2862.0			286200.0	Y
2	IC 280-627290/17	0.02	5178.0			258900.0	Y
3	IC 280-627290/16	0.05	11667.0			233340.0	Y
4	IC 280-627290/15	0.1	22449.0			224490.0	Y
5	IC 280-627290/14	0.25	53670.0			214680.0	Y
6	IC 280-627290/13	0.4	85317.0			213292.5	Y
7	IC 280-627290/12	0.7	151677.0			216681.428571	Y
8	IC 280-627290/11	1.0	217115.0			217115.0	Y
9	IC 280-627290/10	2.5	560347.0			224138.8	Y



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Calibration / 4-Amino-2,6-dinitrotoluene

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

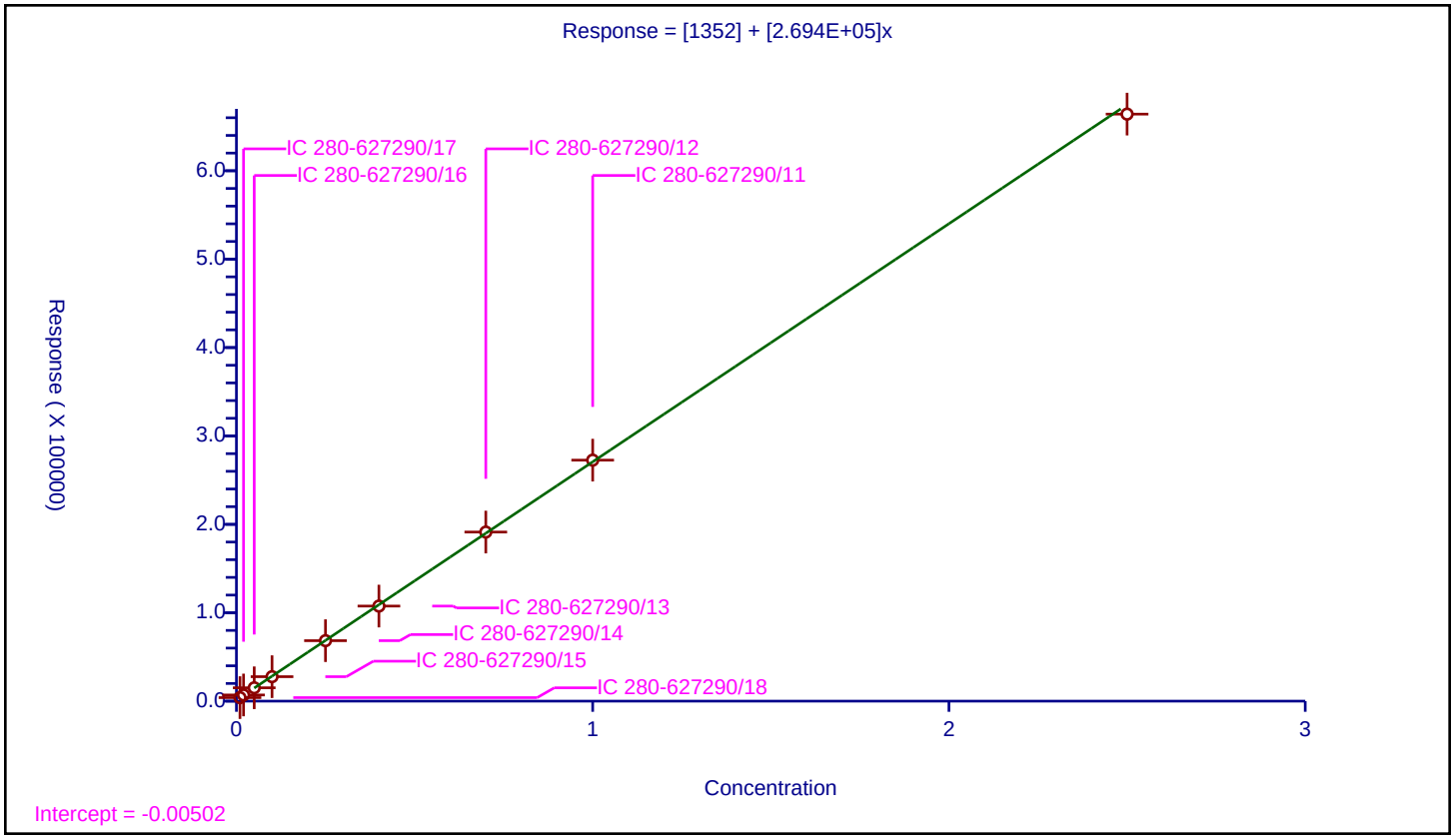
Curve Coefficients

Intercept:	1352
Slope:	2.694E+05

Error Coefficients

Standard Error:	4180
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 280-627290/18	0.01	3980.0			398000.0	Y
2	IC 280-627290/17	0.02	6984.0			349200.0	Y
3	IC 280-627290/16	0.05	15115.0			302300.0	Y
4	IC 280-627290/15	0.1	27679.0			276790.0	Y
5	IC 280-627290/14	0.25	68403.0			273612.0	Y
6	IC 280-627290/13	0.4	107559.0			268897.5	Y
7	IC 280-627290/12	0.7	191281.0			273258.571429	Y
8	IC 280-627290/11	1.0	272622.0			272622.0	Y
9	IC 280-627290/10	2.5	664108.0			265643.2	Y



Calibration / m-Nitrotoluene

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

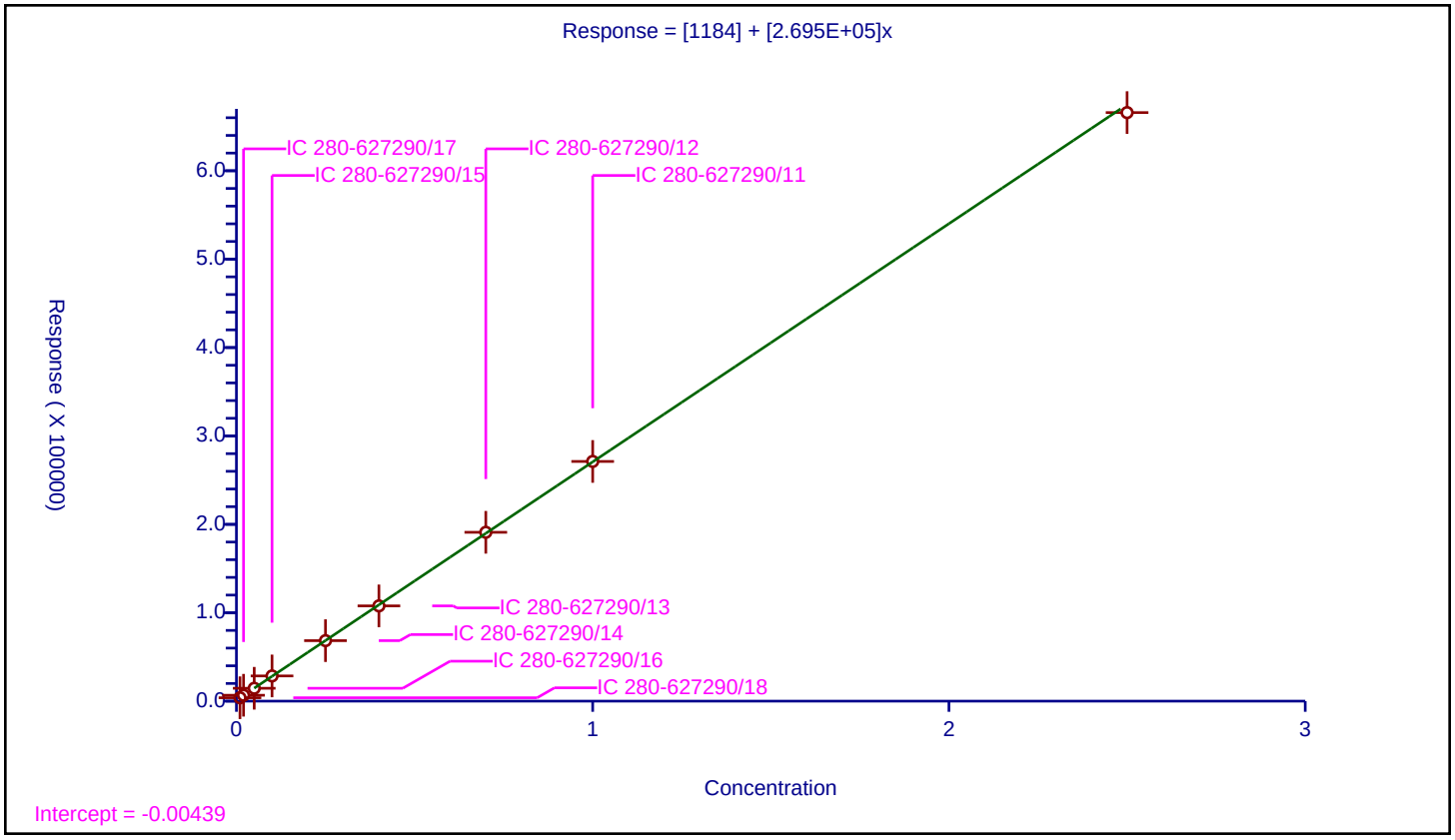
Curve Coefficients

Intercept:	1184
Slope:	2.695E+05

Error Coefficients

Standard Error:	3500
Relative Standard Error:	1.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-627290/18	0.01	3853.0			385300.0	Y
2	IC 280-627290/17	0.02	6679.0			333950.0	Y
3	IC 280-627290/16	0.05	14579.0			291580.0	Y
4	IC 280-627290/15	0.1	28516.0			285160.0	Y
5	IC 280-627290/14	0.25	68436.0			273744.0	Y
6	IC 280-627290/13	0.4	107777.0			269442.5	Y
7	IC 280-627290/12	0.7	191019.0			272884.285714	Y
8	IC 280-627290/11	1.0	271165.0			271165.0	Y
9	IC 280-627290/10	2.5	665814.0			266325.6	Y



Calibration / 2-Amino-4,6-dinitrotoluene

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

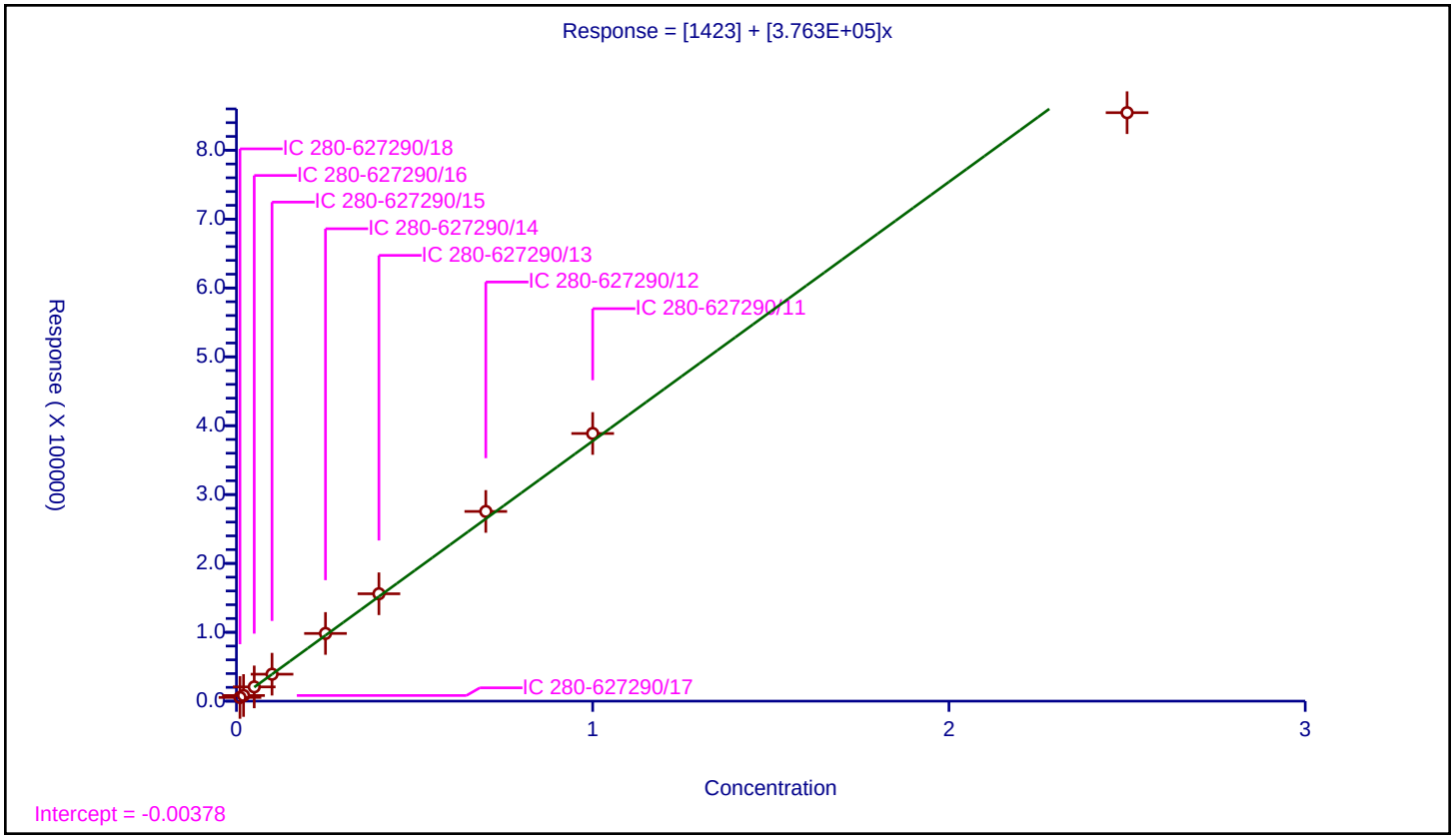
Curve Coefficients

Intercept:	1423
Slope:	3.763E+05

Error Coefficients

Standard Error:	33700
Relative Standard Error:	6.0
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-627290/18	0.01	5349.0			534900.0	Y
2	IC 280-627290/17	0.02	8189.0			409450.0	Y
3	IC 280-627290/16	0.05	20666.0			413320.0	Y
4	IC 280-627290/15	0.1	39122.0			391220.0	Y
5	IC 280-627290/14	0.25	98305.0			393220.0	Y
6	IC 280-627290/13	0.4	155922.0			389805.0	Y
7	IC 280-627290/12	0.7	275464.0			393520.0	Y
8	IC 280-627290/11	1.0	388664.0			388664.0	Y
9	IC 280-627290/10	2.5	854516.0			341806.4	Y



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Calibration / 1,3,5-Trinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

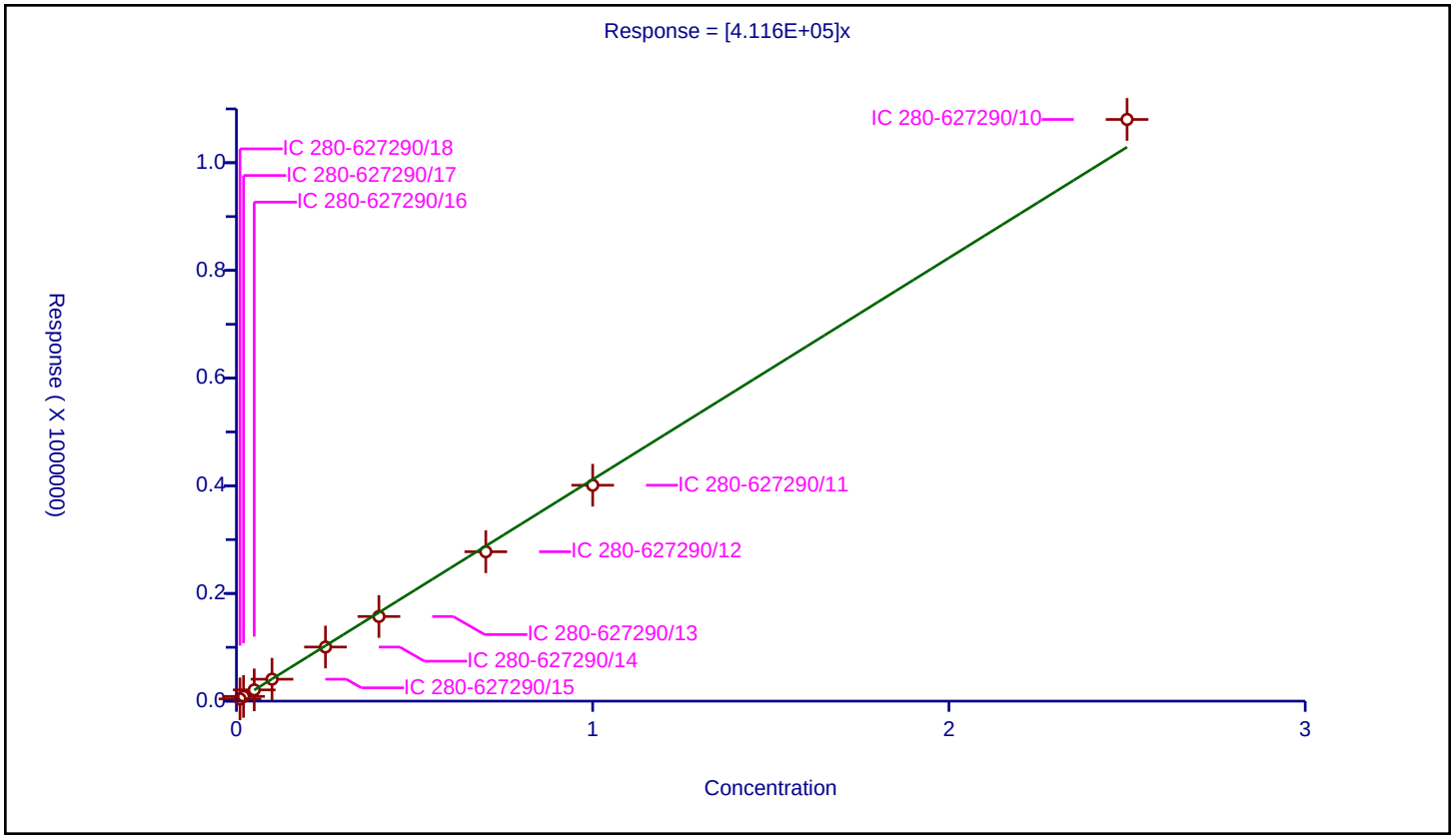
Curve Coefficients

Intercept:	0
Slope:	4.116E+05

Error Coefficients

Standard Error:	19100
Relative Standard Error:	3.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-627290/18	0.01	4159.0			415900.0	Y
2	IC 280-627290/17	0.02	8780.0			439000.0	Y
3	IC 280-627290/16	0.05	20880.0			417600.0	Y
4	IC 280-627290/15	0.1	40753.0			407530.0	Y
5	IC 280-627290/14	0.25	100515.0			402060.0	Y
6	IC 280-627290/13	0.4	157218.0			393045.0	Y
7	IC 280-627290/12	0.7	277471.0			396387.142857	Y
8	IC 280-627290/11	1.0	400996.0			400996.0	Y
9	IC 280-627290/10	2.5	1080397.0			432158.8	Y



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Calibration / 2,6-Dinitrotoluene

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

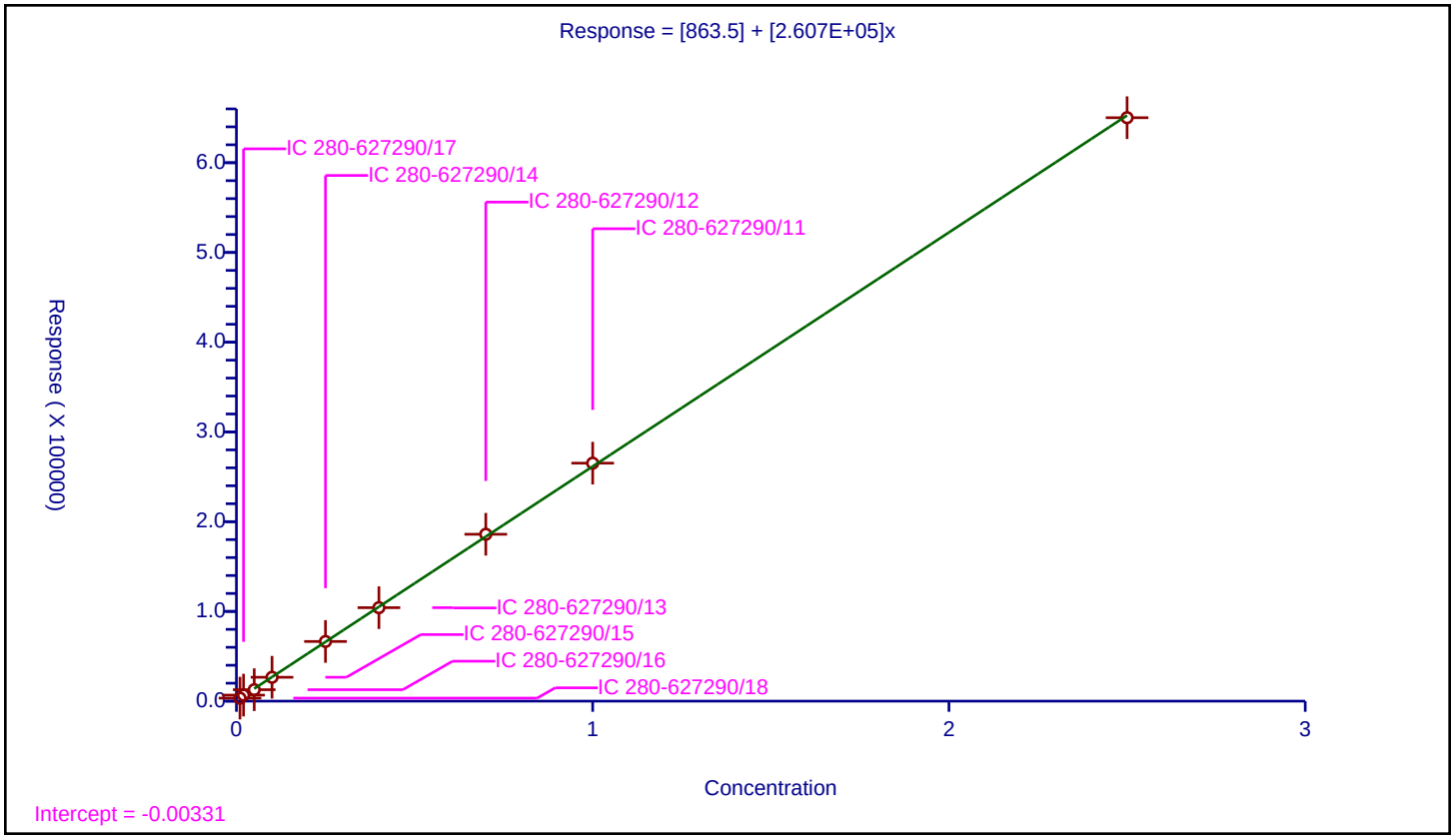
Curve Coefficients

Intercept:	863.5
Slope:	2.607E+05

Error Coefficients

Standard Error:	2040
Relative Standard Error:	6.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-627290/18	0.01	3360.0			336000.0	Y
2	IC 280-627290/17	0.02	6716.0			335800.0	Y
3	IC 280-627290/16	0.05	12748.0			254960.0	Y
4	IC 280-627290/15	0.1	26594.0			265940.0	Y
5	IC 280-627290/14	0.25	66514.0			266056.0	Y
6	IC 280-627290/13	0.4	104177.0			260442.5	Y
7	IC 280-627290/12	0.7	185954.0			265648.571429	Y
8	IC 280-627290/11	1.0	265199.0			265199.0	Y
9	IC 280-627290/10	2.5	650162.0			260064.8	Y



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Calibration / 2,4-Dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

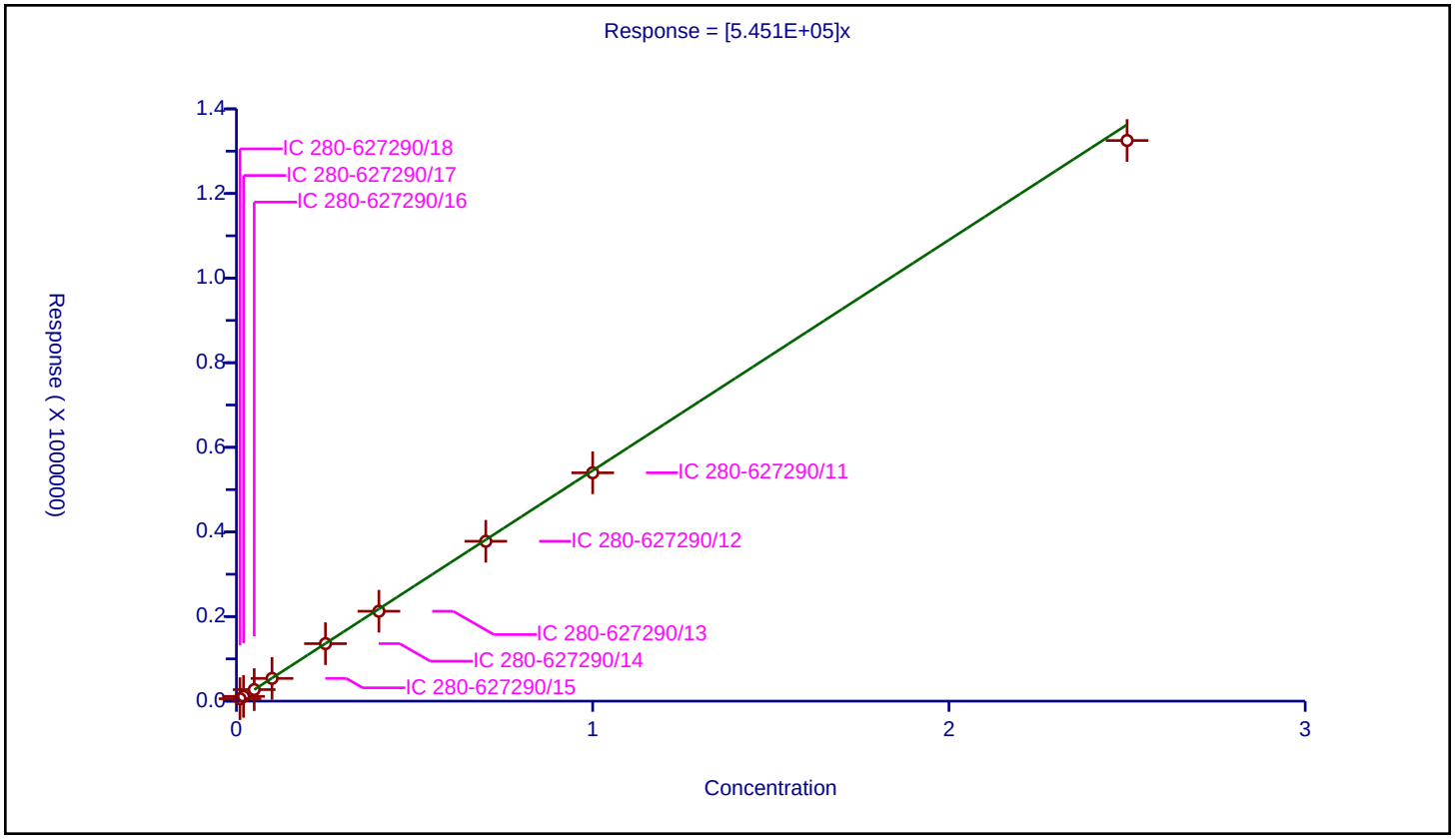
Curve Coefficients

Intercept:	0
Slope:	5.451E+05

Error Coefficients

Standard Error:	13600
Relative Standard Error:	2.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-627290/18	0.01	5753.0			575300.0	Y
2	IC 280-627290/17	0.02	11241.0			562050.0	Y
3	IC 280-627290/16	0.05	27321.0			546420.0	Y
4	IC 280-627290/15	0.1	53734.0			537340.0	Y
5	IC 280-627290/14	0.25	135900.0			543600.0	Y
6	IC 280-627290/13	0.4	212533.0			531332.5	Y
7	IC 280-627290/12	0.7	377896.0			539851.428571	Y
8	IC 280-627290/11	1.0	539776.0			539776.0	Y
9	IC 280-627290/10	2.5	1325292.0			530116.8	Y



Calibration / Tetryl

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

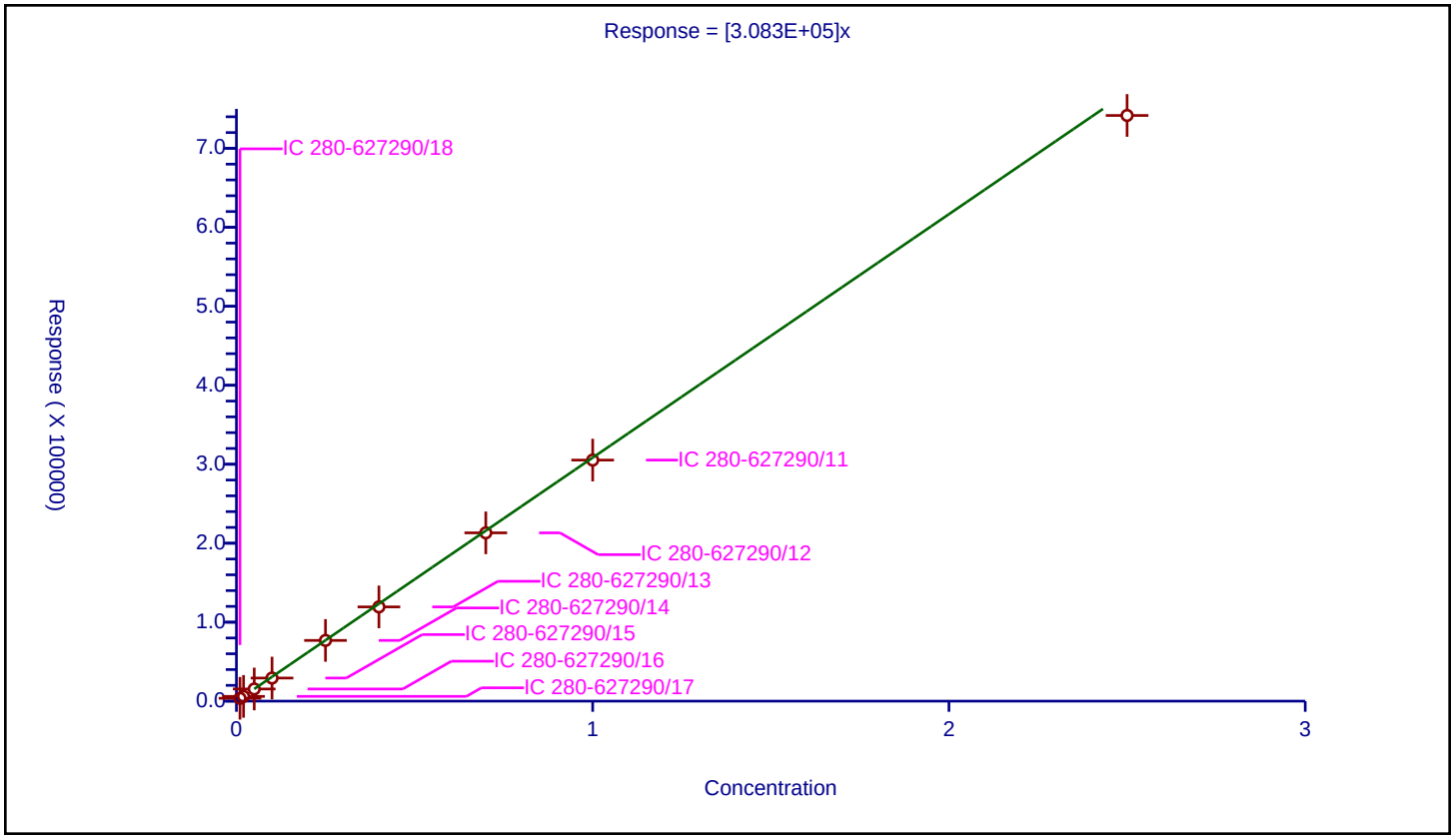
Curve Coefficients

Intercept:	0
Slope:	3.083E+05

Error Coefficients

Standard Error:	10500
Relative Standard Error:	6.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-627290/18	0.01	3615.0			361500.0	Y
2	IC 280-627290/17	0.02	6017.0			300850.0	Y
3	IC 280-627290/16	0.05	15400.0			308000.0	Y
4	IC 280-627290/15	0.1	29248.0			292480.0	Y
5	IC 280-627290/14	0.25	76874.0			307496.0	Y
6	IC 280-627290/13	0.4	119347.0			298367.5	Y
7	IC 280-627290/12	0.7	213101.0			304430.0	Y
8	IC 280-627290/11	1.0	305263.0			305263.0	Y
9	IC 280-627290/10	2.5	741681.0			296672.4	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

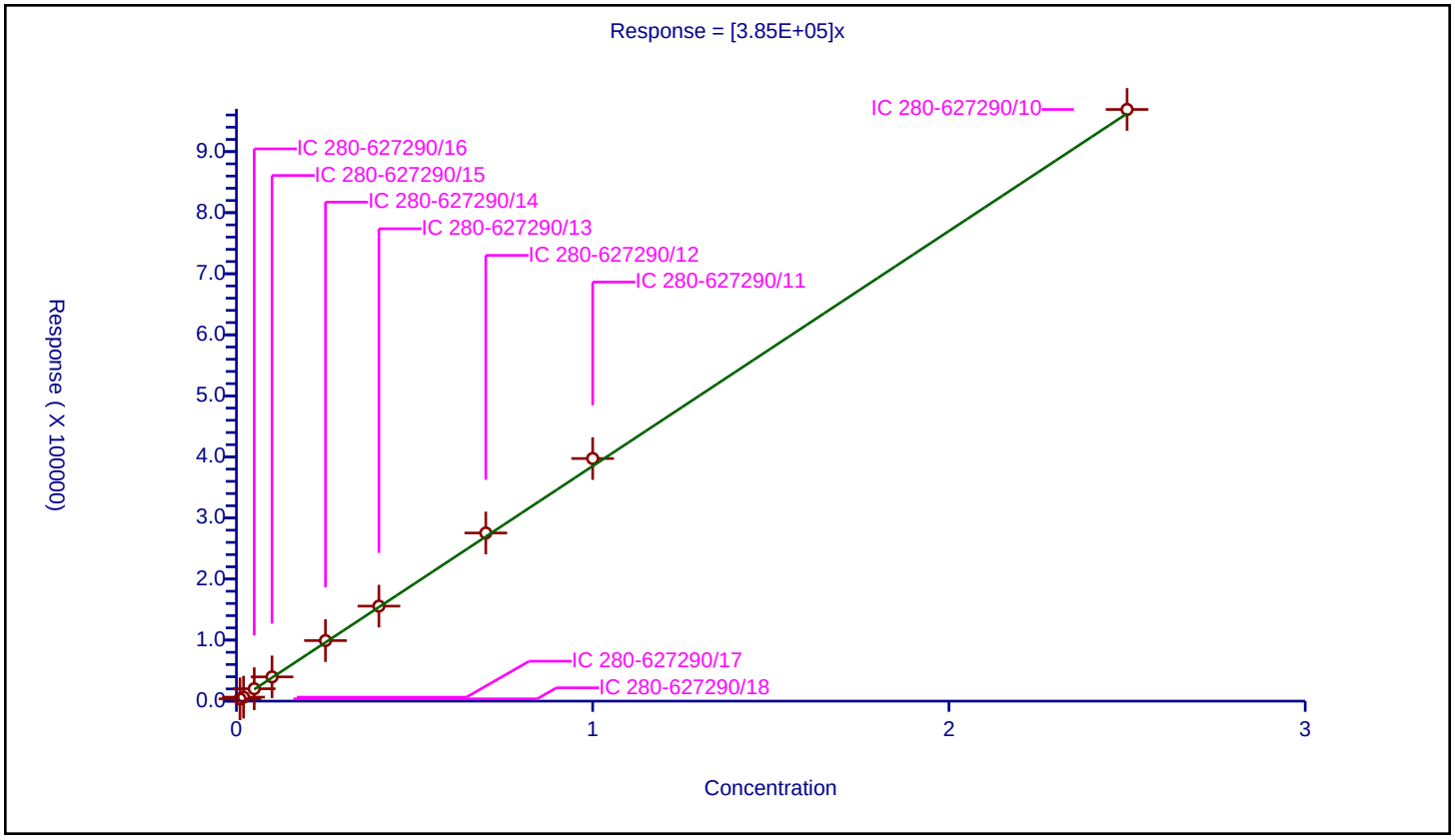
Curve Coefficients

Intercept:	0
Slope:	3.85E+05

Error Coefficients

Standard Error:	5570
Relative Standard Error:	6.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-627290/18	0.01	3712.0			371200.0	Y
2	IC 280-627290/17	0.02	6528.0			326400.0	Y
3	IC 280-627290/16	0.05	20297.0			405940.0	Y
4	IC 280-627290/15	0.1	39715.0			397150.0	Y
5	IC 280-627290/14	0.25	99165.0			396660.0	Y
6	IC 280-627290/13	0.4	155627.0			389067.5	Y
7	IC 280-627290/12	0.7	275399.0			393427.142857	Y
8	IC 280-627290/11	1.0	397391.0			397391.0	Y
9	IC 280-627290/10	2.5	969091.0			387636.4	Y



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Calibration / PETN

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

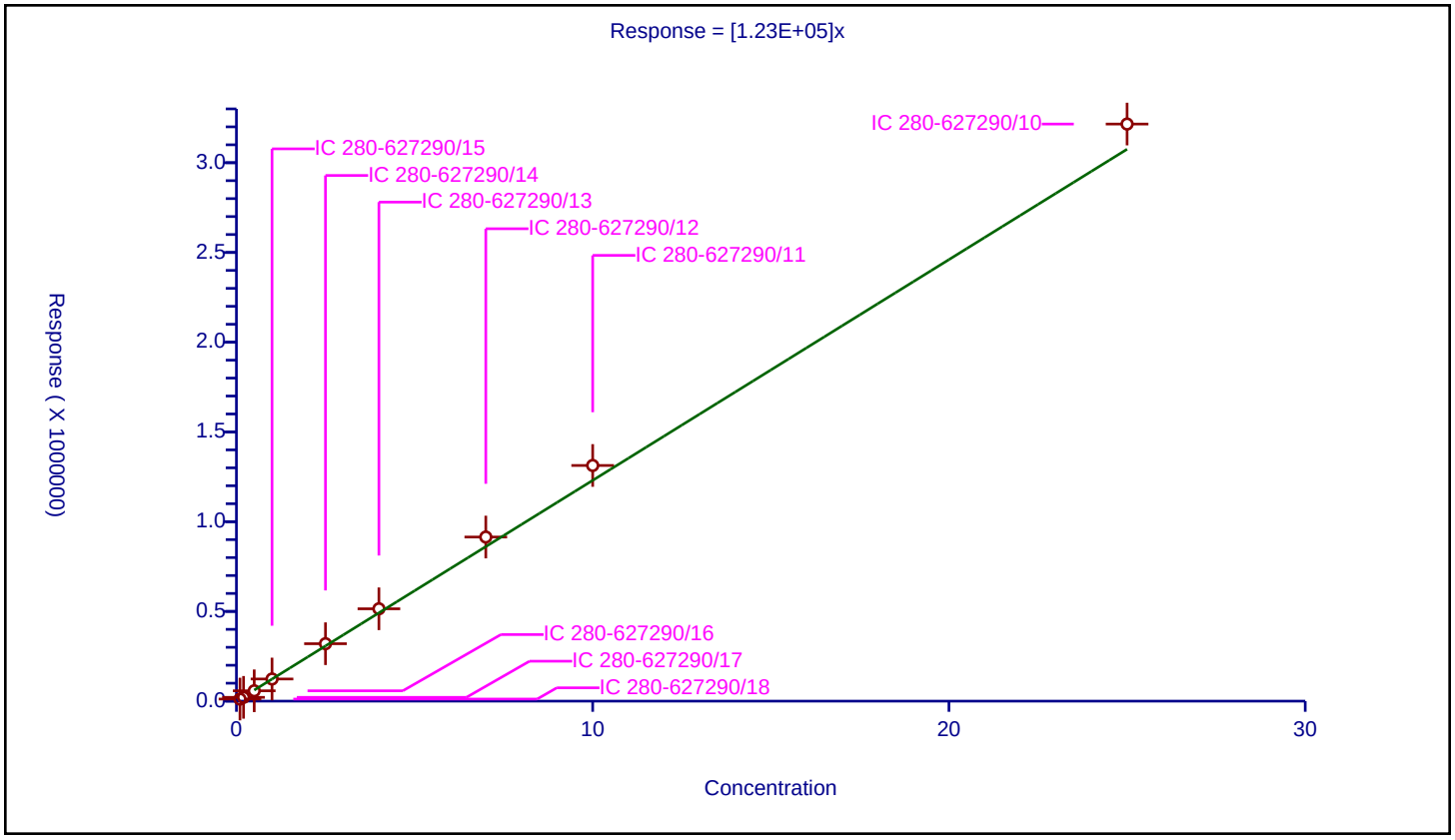
Curve Coefficients

Intercept:	0
Slope:	1.23E+05

Error Coefficients

Standard Error:	61400
Relative Standard Error:	7.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-627290/18	0.1	11596.0			115960.0	Y
2	IC 280-627290/17	0.2	21075.0			105375.0	Y
3	IC 280-627290/16	0.5	57592.0			115184.0	Y
4	IC 280-627290/15	1.0	123328.0			123328.0	Y
5	IC 280-627290/14	2.5	320094.0			128037.6	Y
6	IC 280-627290/13	4.0	514656.0			128664.0	Y
7	IC 280-627290/12	7.0	914344.0			130620.571429	Y
8	IC 280-627290/11	10.0	1313083.0			131308.3	Y
9	IC 280-627290/10	25.0	3215628.0			128625.12	Y



FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins Denver | Job No.: 280-182239-1 | Analy Batch No.: 627290

SDG No.:

Instrument ID: CHHPLC_G2_LUNA | GC Column: Luna-phenyl ID: 4.6(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 09/26/2023 00:42 | Calibration End Date: 09/26/2023 04:54 | Calibration ID: 84933

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-627290/27	09250027.D
Level 2	IC 280-627290/26	09250026.D
Level 3	IC 280-627290/25	09250025.D
Level 4	IC 280-627290/24	09250024.D
Level 5	IC 280-627290/23	09250023.D
Level 6	IC 280-627290/22	09250022.D
Level 7	IC 280-627290/21	09250021.D
Level 8	IC 280-627290/20	09250020.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	+++++	+++++	4.227	4.223	4.230	4.219	4.214	4.200			4.080 - 4.380	4.219
2,4-diamino-6-nitrotoluene	+++++	+++++	4.807	4.803	4.810	4.813	4.814	4.847			4.660 - 4.960	4.816

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

Lab Name: Eurofins Denver Job No.: 280-182239-1 Analy Batch No.: 627290

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/26/2023 00:42 Calibration End Date: 09/26/2023 04:54 Calibration ID: 84933

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-627290/27	09250027.D
Level 2	IC 280-627290/26	09250026.D
Level 3	IC 280-627290/25	09250025.D
Level 4	IC 280-627290/24	09250024.D
Level 5	IC 280-627290/23	09250023.D
Level 6	IC 280-627290/22	09250022.D
Level 7	IC 280-627290/21	09250021.D
Level 8	IC 280-627290/20	09250020.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	+++++ 387758	+++++ 369949	381960 389304	391204 405683	Ave		387642.812				3.0		20.0			
2,4-diamino-6-nitrotoluene	+++++ 237655	+++++ 227633	239310 240760	238144 220192	Ave		233948.976				3.5		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.: 280-182239-1 | Analy Batch No.: 627290

SDG No.:

Instrument ID: CHHPLC_G2_LUNA | GC Column: Luna-pheny ID: 4.6(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 09/26/2023 00:42 | Calibration End Date: 09/26/2023 04:54 | Calibration ID: 84933

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-627290/27	09250027.D
Level 2	IC 280-627290/26	09250026.D
Level 3	IC 280-627290/25	09250025.D
Level 4	IC 280-627290/24	09250024.D
Level 5	IC 280-627290/23	09250023.D
Level 6	IC 280-627290/22	09250022.D
Level 7	IC 280-627290/21	09250021.D
Level 8	IC 280-627290/20	09250020.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	+++++ 258964	+++++ 389304	38196 1014207	97801	155103	+++++ 0.700	+++++ 1.00	0.100 2.50	0.250	0.400
2,4-diamino-6-nitrotoluene	Ave	+++++ 159343	+++++ 240760	23931 550480	59536	95062	+++++ 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\G2_LUNA\20230925-125782.b\09250020.D				
Lims ID:	IC ADD 8				
Client ID:					
Sample Type:	IC	Calib Level:	8		
Inject. Date:	26-Sep-2023 00:42:39	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_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub19				
Method:	\\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	26-Sep-2023 15:25:40	Calib Date:	26-Sep-2023 04:54:46		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX1620				
First Level Reviewer: LV5D		Date:	26-Sep-2023 14:14:16		

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	4.200	4.230	-0.030	1014207	2.50	2.62	a
2 2,4-diamino-6-nitrotoluene	1	4.847	4.810	0.037	550480	2.50	2.35	

QC Flag Legend

Processing Flags
Review Flags
a - User Assigned ID

Reagents:

8330_ADDs_00037 Amount Added: 125.00 Units: uL

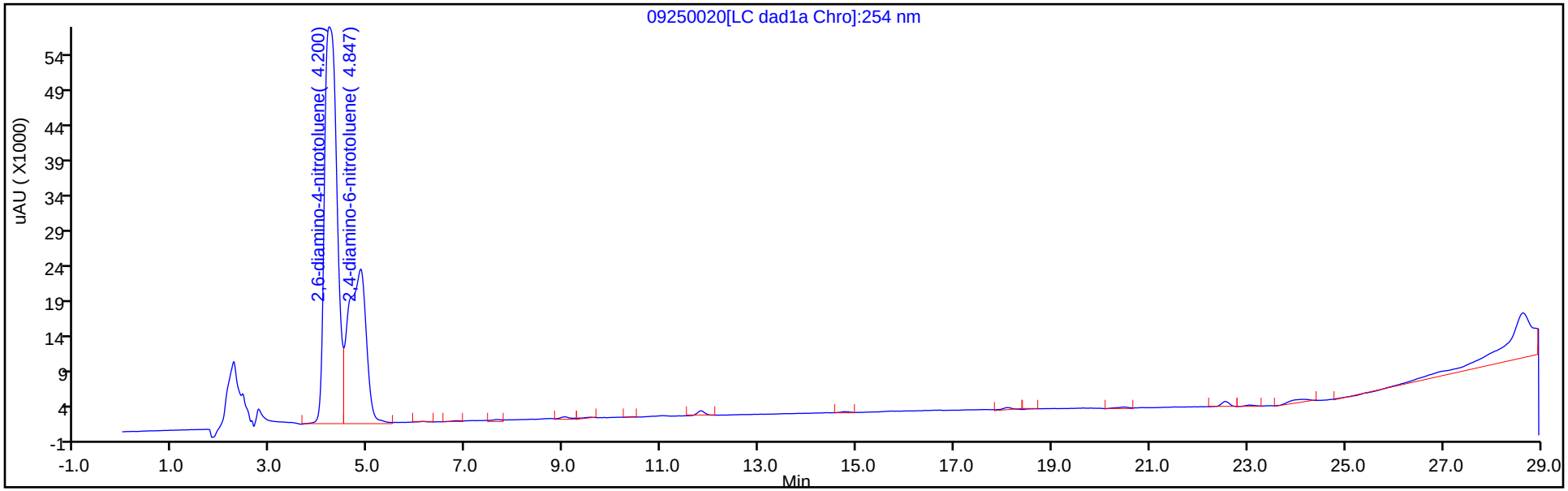
Report Date: 26-Sep-2023 15:25:40 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

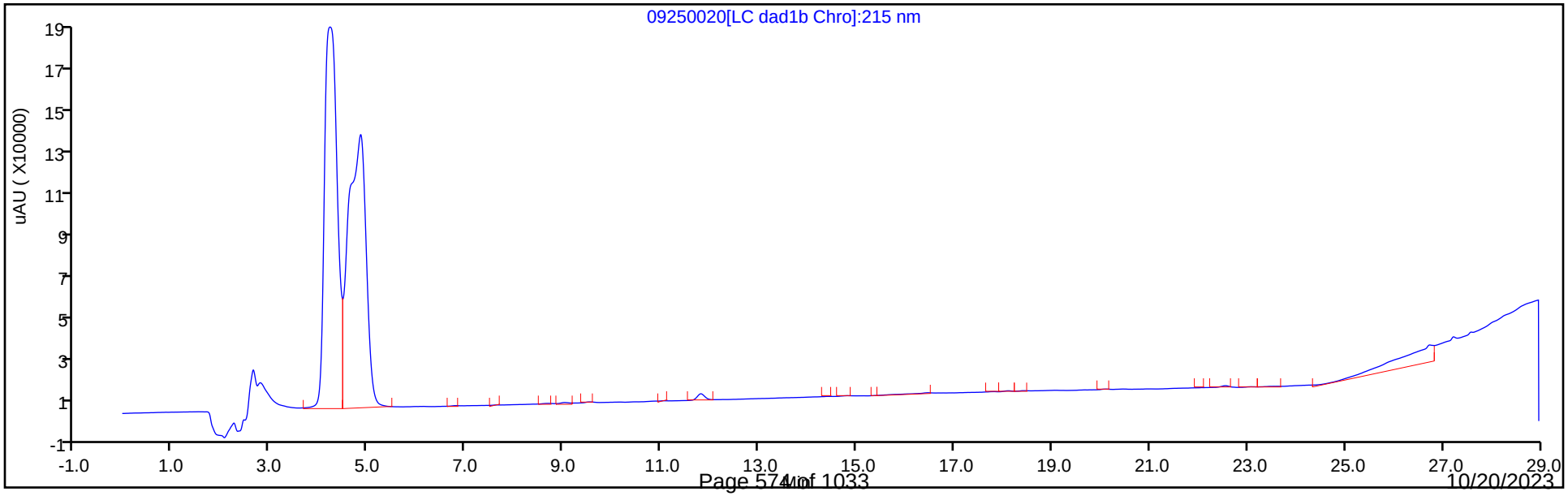
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250020.d

Injection Date:	26-Sep-2023 00:42:39	Instrument ID:	CHHPLC_G2_LUNA	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:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

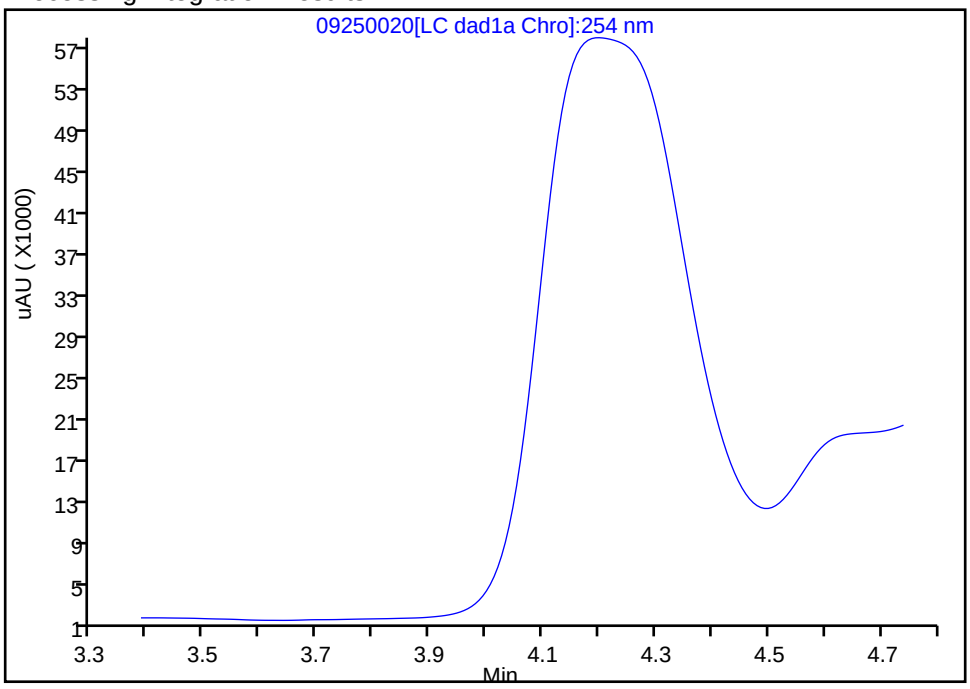
Data File:	\\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250020.d				
Injection Date:	26-Sep-2023 00:42:39	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC ADD 8				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

1 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

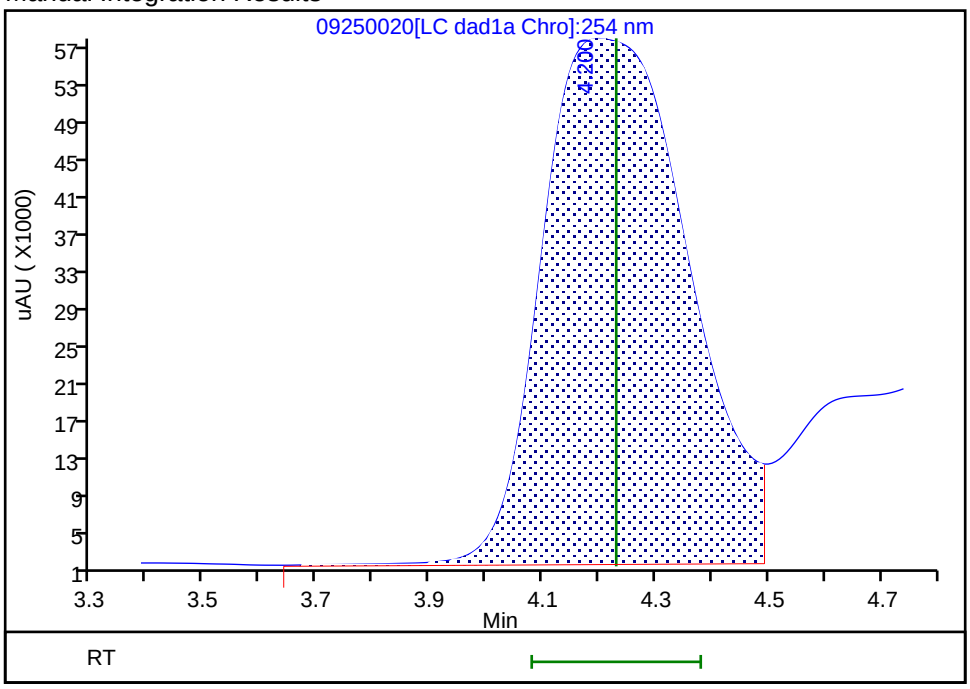
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.20
Area: 1014207
Amount: 2.616344
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:14:14 -06:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250021.D
Lims ID: IC ADD 7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 26-Sep-2023 01:18:41 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_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub19

Method: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 26-Sep-2023 15:25:41 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1620

First Level Reviewer: LV5D Date: 26-Sep-2023 14:14:19

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	4.214	4.230	-0.016	389304	1.00	1.00	a
2 2,4-diamino-6-nitrotoluene	1	4.814	4.810	0.004	240760	1.00	1.03	

QC Flag Legend

Processing Flags
Review Flags
a - User Assigned ID

Reagents:

8330_ADDs_00037 Amount Added: 50.00 Units: uL

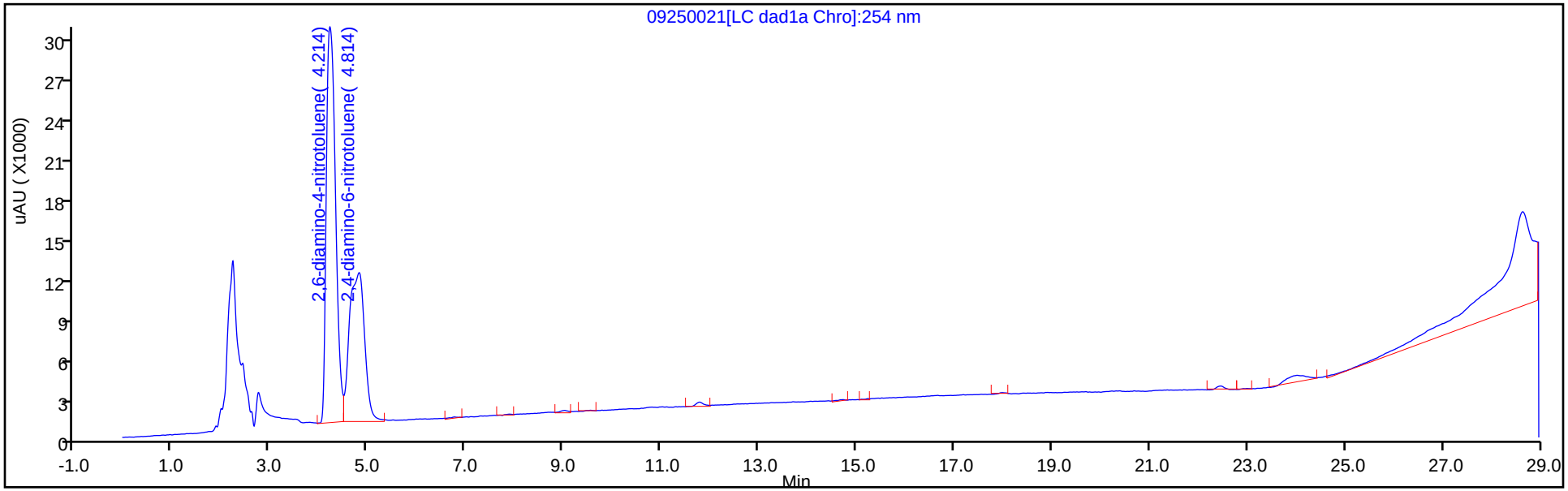
Report Date: 26-Sep-2023 15:25:41 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

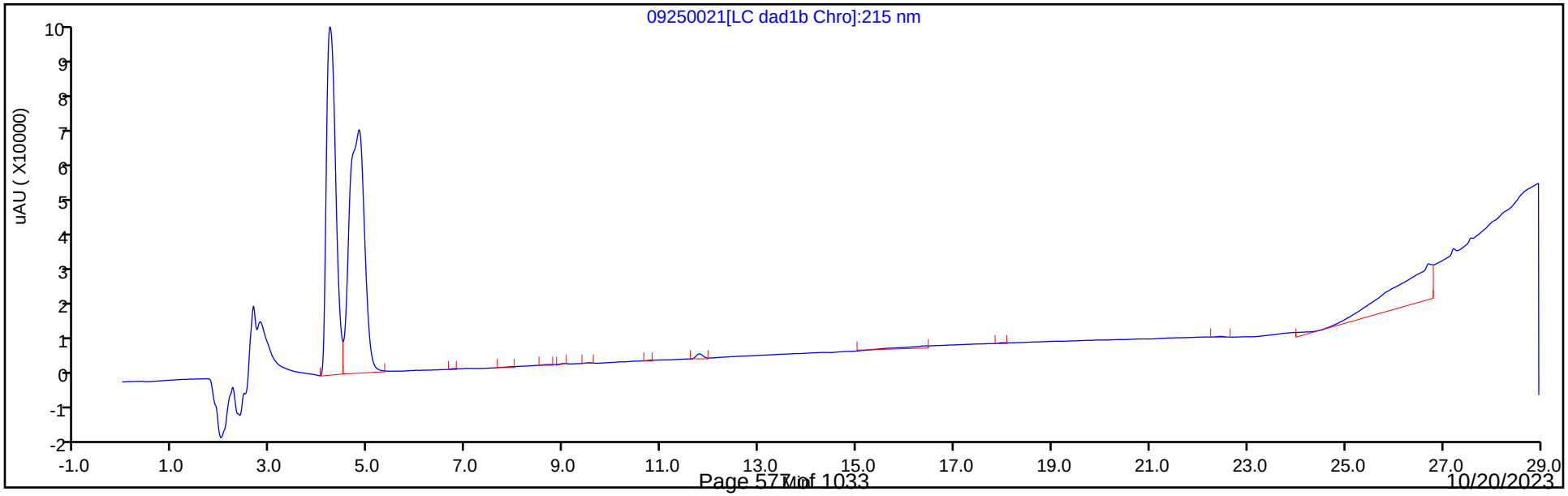
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250021.d

Injection Date:	26-Sep-2023 01:18:41	Instrument ID:	CHHPLC_G2_LUNA	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:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

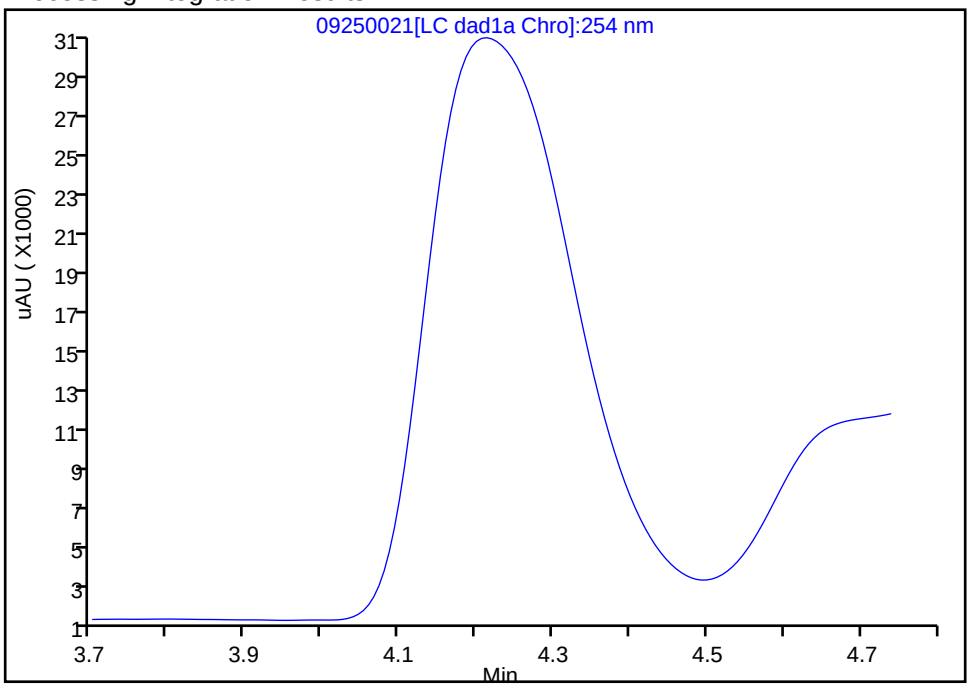
Data File:	\\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250021.d				
Injection Date:	26-Sep-2023 01:18:41	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC ADD 7				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

1 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

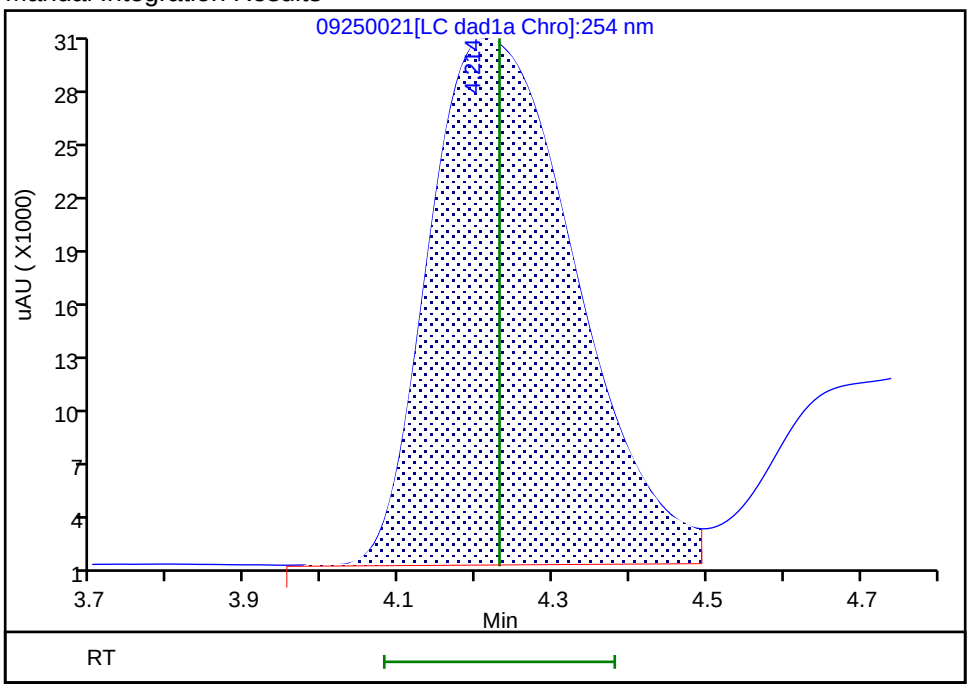
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.21
Area: 389304
Amount: 1.004285
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:14:18 -06:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250022.D
Lims ID: IC ADD 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 26-Sep-2023 01:54:36 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_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub19

Method: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 26-Sep-2023 15:25:41 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1620

First Level Reviewer: LV5D Date: 26-Sep-2023 14:14:22

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.219	4.230	-0.011	258964	0.7000	0.6680	a
2 2,4-diamino-6-nitrotoluene	1	4.813	4.810	0.003	159343	0.7000	0.6811	

QC Flag Legend

Processing Flags
Review Flags
a - User Assigned ID

Reagents:

8330_ADDs_00037 Amount Added: 35.00 Units: uL

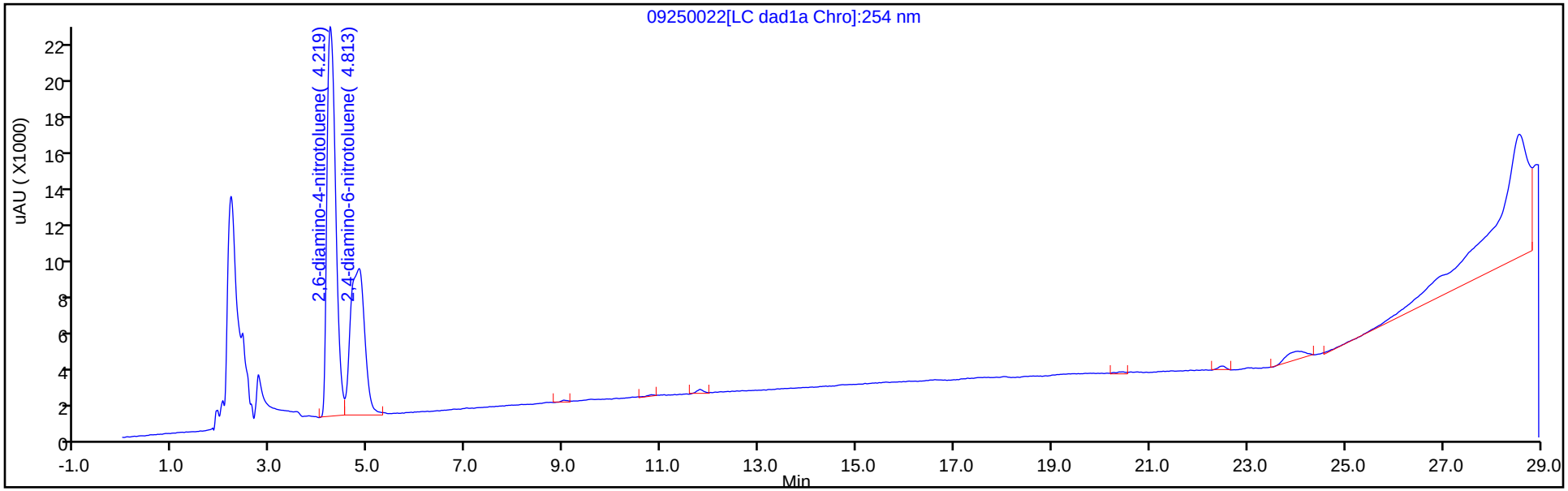
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Eurofins Denver

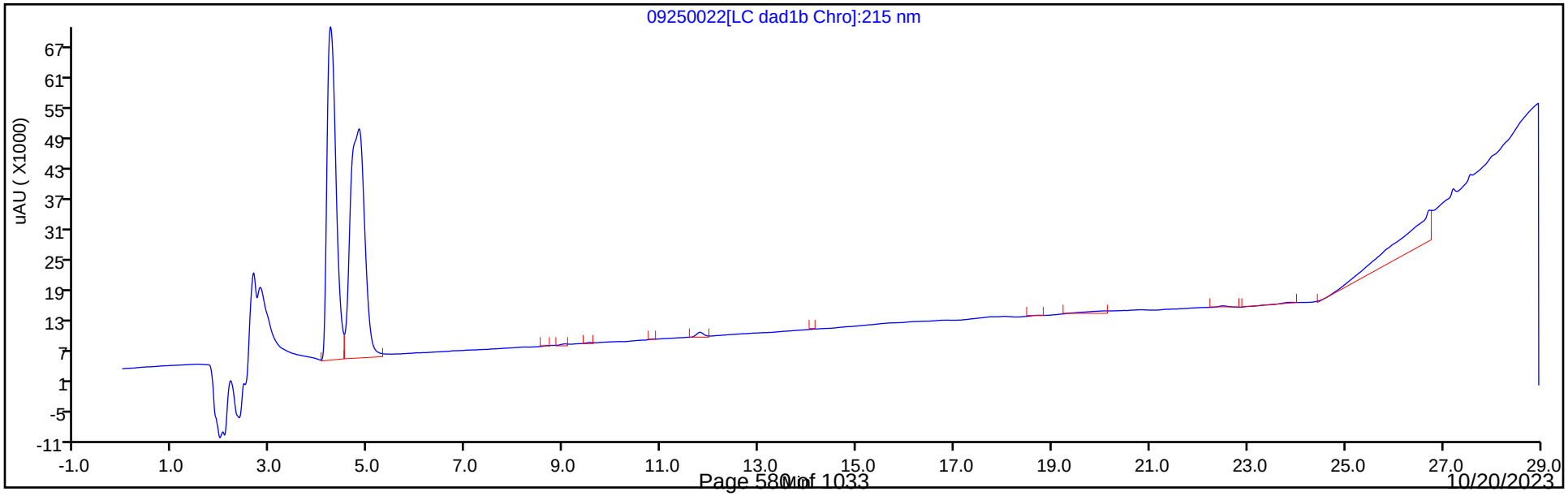
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250022.d

Injection Date:	26-Sep-2023 01:54:36	Instrument ID:	CHHPLC_G2_LUNA	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:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

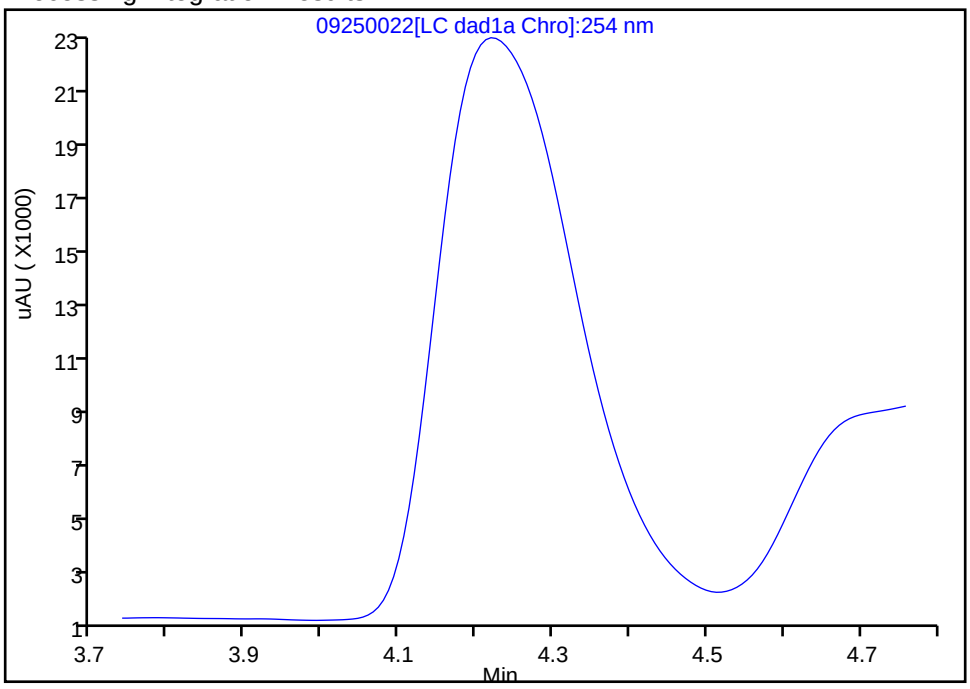
Data File:	\\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250022.d				
Injection Date:	26-Sep-2023 01:54:36	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC ADD 6				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

1 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

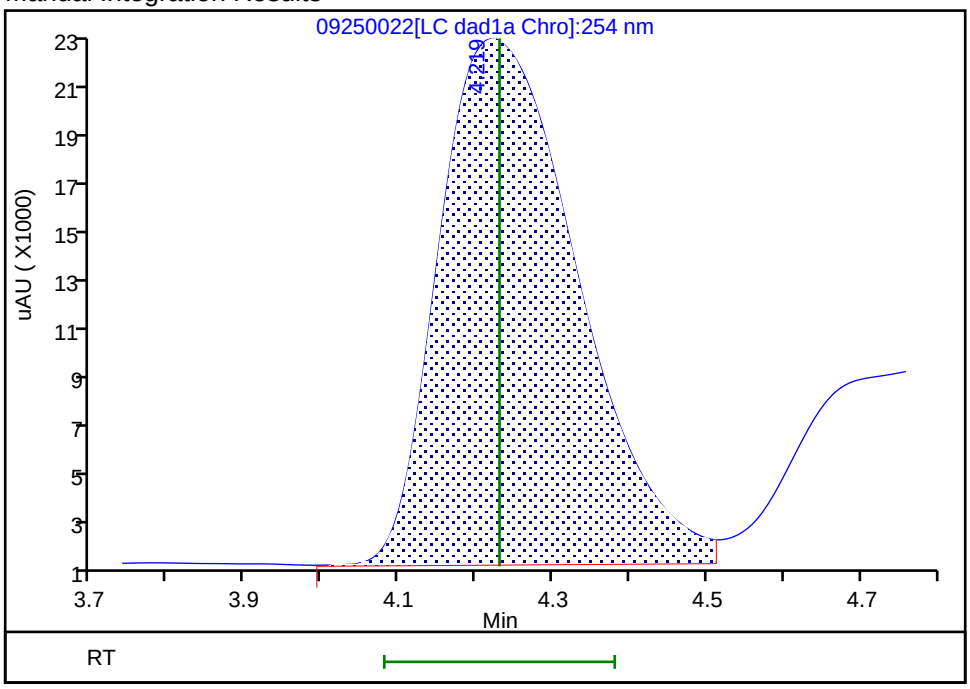
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.22
Area: 258964
Amount: 0.668048
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:14:21 -06:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250023.D
Lims ID: IC ADD 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 26-Sep-2023 02:30:35 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_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub19

Method: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 26-Sep-2023 15:25:42 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1620

First Level Reviewer: LV5D Date: 26-Sep-2023 14:14:25

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.230	4.230	0.000	155103	0.4000	0.4001	a
2 2,4-diamino-6-nitrotoluene	1	4.810	4.810	0.000	95062	0.4000	0.4063	

QC Flag Legend

Processing Flags
Review Flags
a - User Assigned ID

Reagents:

8330_ADDs_00037 Amount Added: 20.00 Units: uL

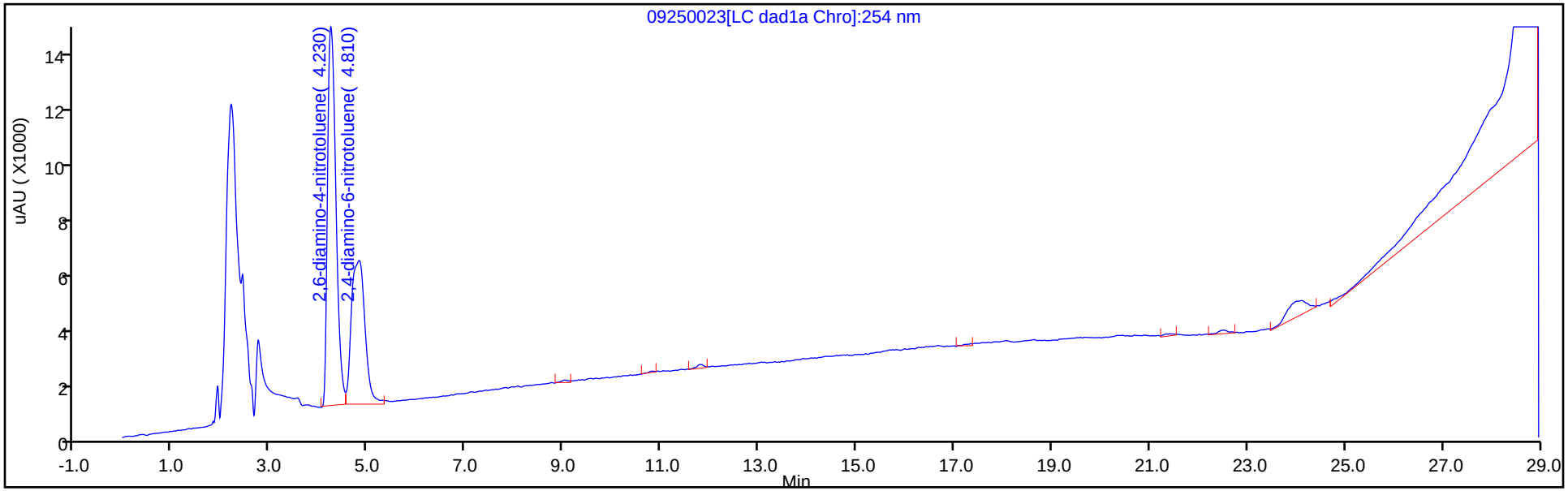
Report Date: 26-Sep-2023 15:25:42 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

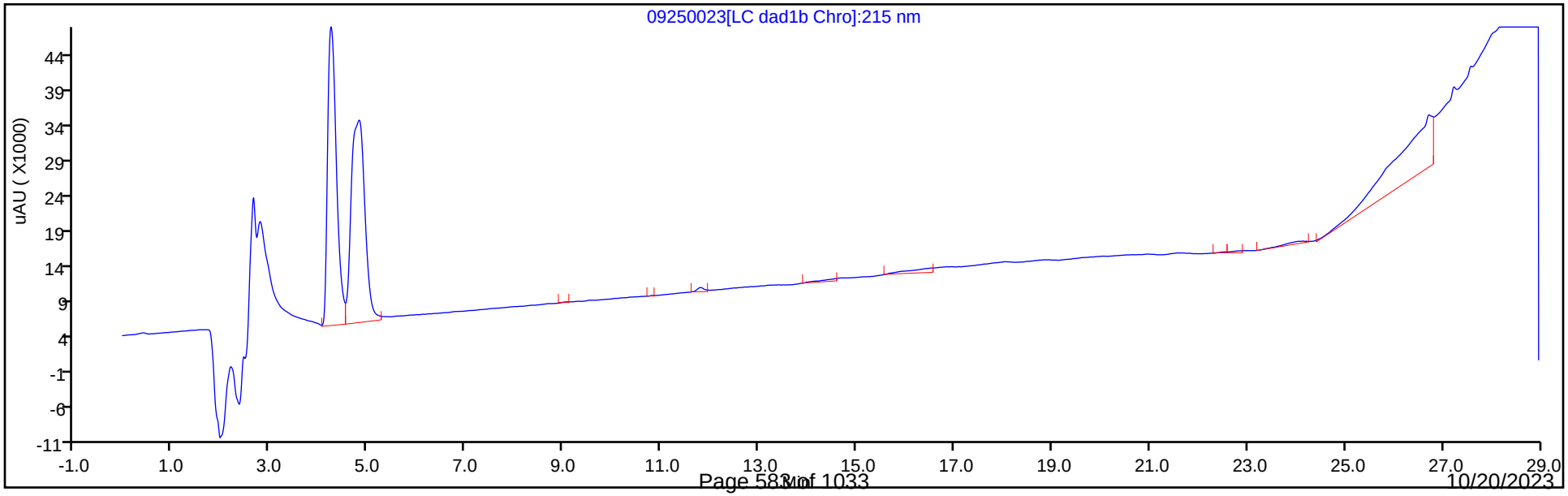
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250023.d

Injection Date:	26-Sep-2023 02:30:35	Instrument ID:	CHHPLC_G2_LUNA	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:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

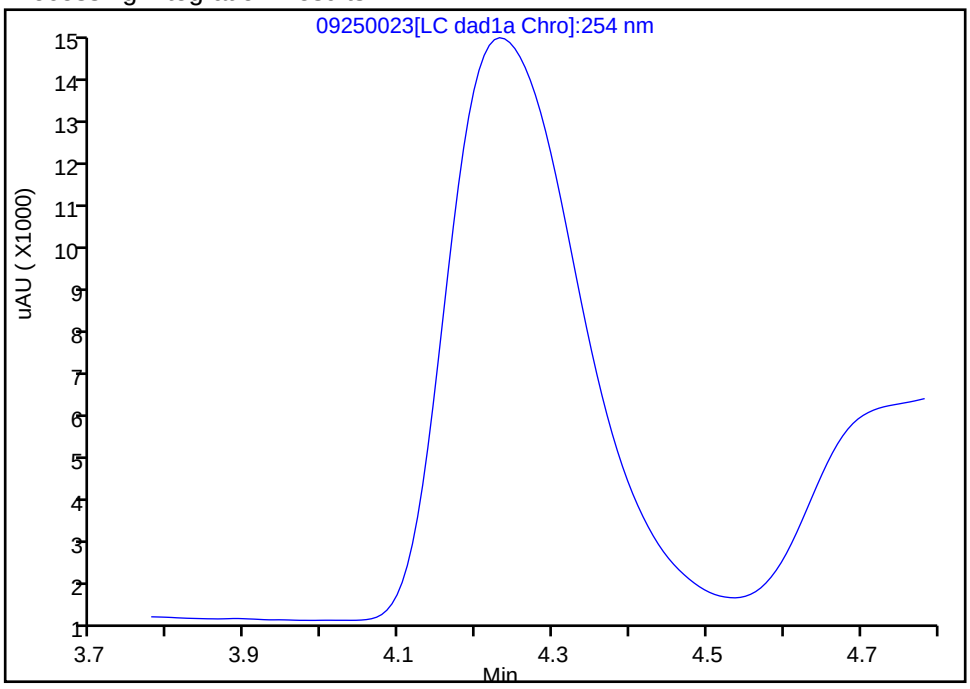
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250023.d
Injection Date: 26-Sep-2023 02:30:35 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC ADD 5
Client ID:
Operator ID: JZ/JG ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

1 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

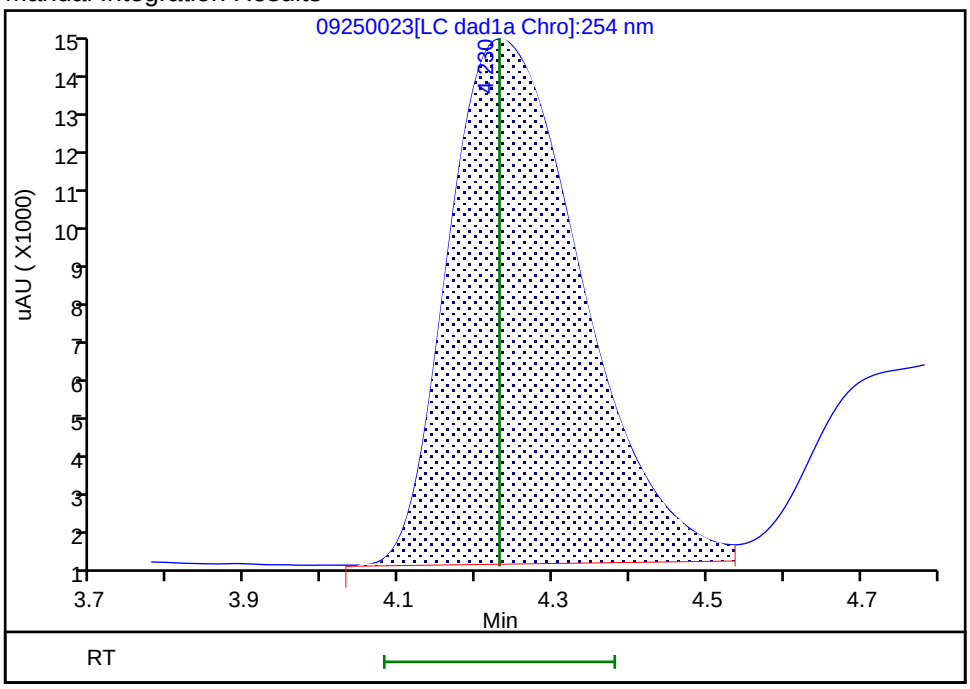
Not Detected
Expected RT: 4.23

Processing Integration Results



RT: 4.23
Area: 155103
Amount: 0.400118
Amount Units: ug/ml

Manual Integration Results



Reviewer: LV5D, 26-Sep-2023 14:14:23 -06:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250024.D
Lims ID: IC ADD 4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 26-Sep-2023 03:06:33 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_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub19

Method: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 26-Sep-2023 15:25:42 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1620

First Level Reviewer: LV5D Date: 26-Sep-2023 14:14:28

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	4.223	4.230	-0.007	97801	0.2500	0.2523	a
2 2,4-diamino-6-nitrotoluene	1	4.803	4.810	-0.007	59536	0.2500	0.2545	

QC Flag Legend

Processing Flags
Review Flags
a - User Assigned ID

Reagents:

8330_ADDs_00037 Amount Added: 12.50 Units: uL

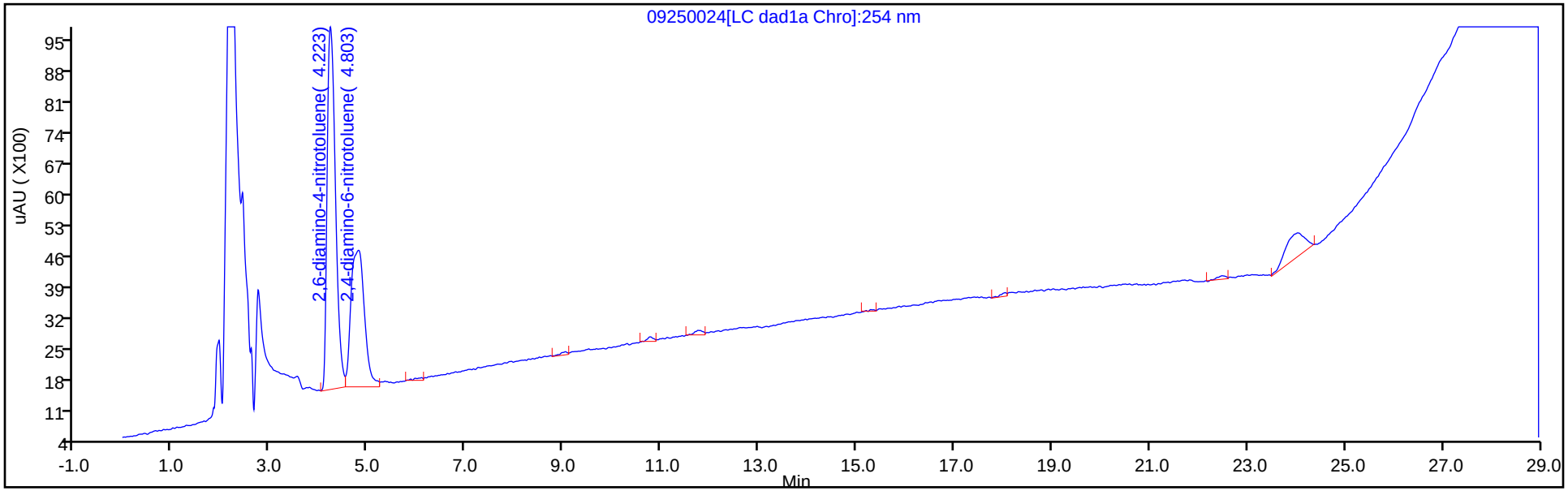
Report Date: 26-Sep-2023 15:25:42 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

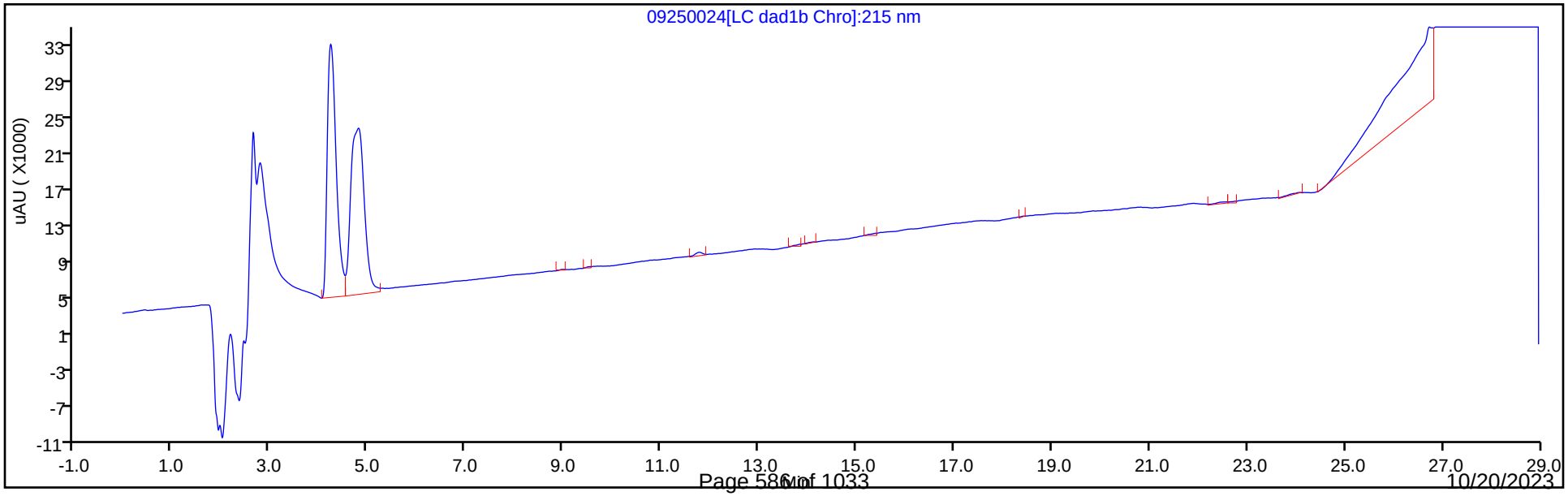
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250024.d

Injection Date:	26-Sep-2023 03:06:33	Instrument ID:	CHHPLC_G2_LUNA	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:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

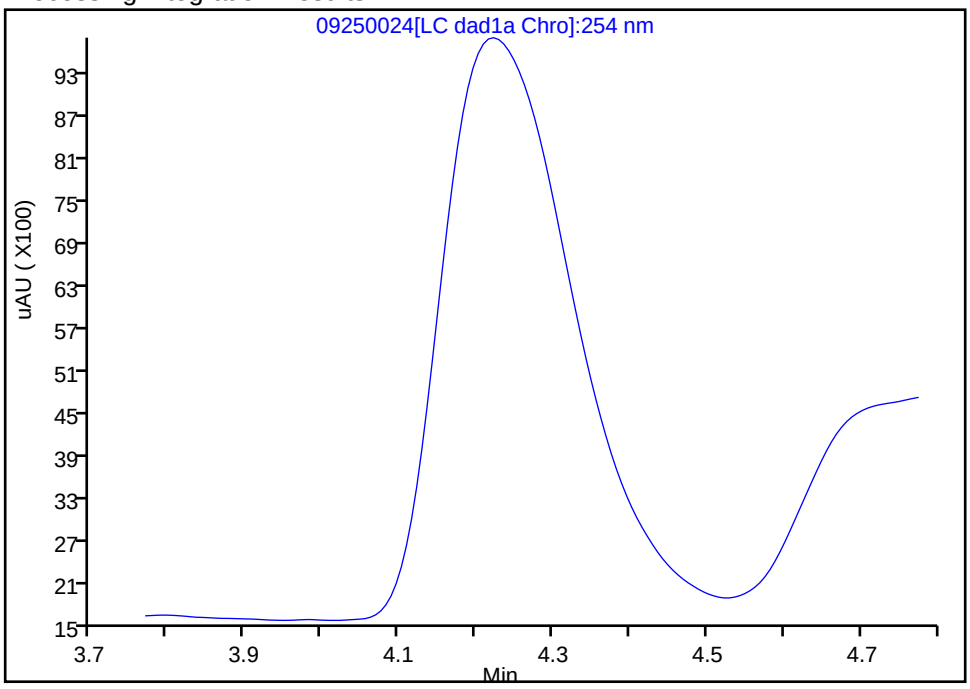
Data File:	\\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250024.d				
Injection Date:	26-Sep-2023 03:06:33	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC ADD 4				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

1 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

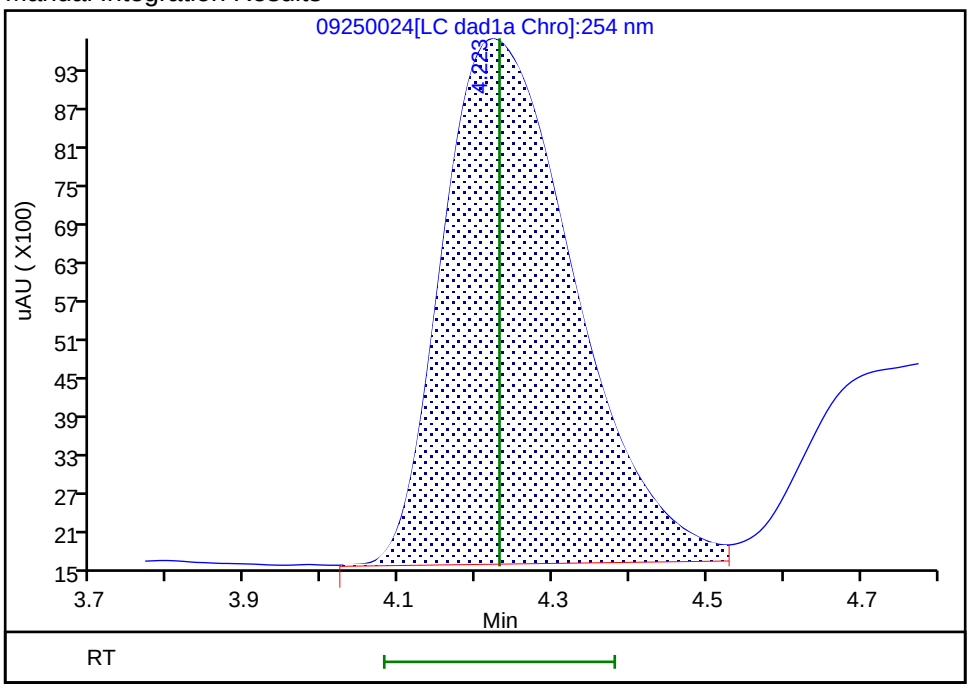
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.22
Area: 97801
Amount: 0.252297
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:14:27 -06:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250025.D
Lims ID: IC ADD 3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 26-Sep-2023 03:42:27 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_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub19

Method: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 26-Sep-2023 15:25:43 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1620

First Level Reviewer: LV5D Date: 26-Sep-2023 14:14:32

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	4.227	4.230	-0.003	38196	0.1000	0.0985	a
2 2,4-diamino-6-nitrotoluene	1	4.807	4.810	-0.003	23931	0.1000	0.1023	

QC Flag Legend

Processing Flags
Review Flags
a - User Assigned ID

Reagents:

8330_ADDs_00037 Amount Added: 5.00 Units: uL

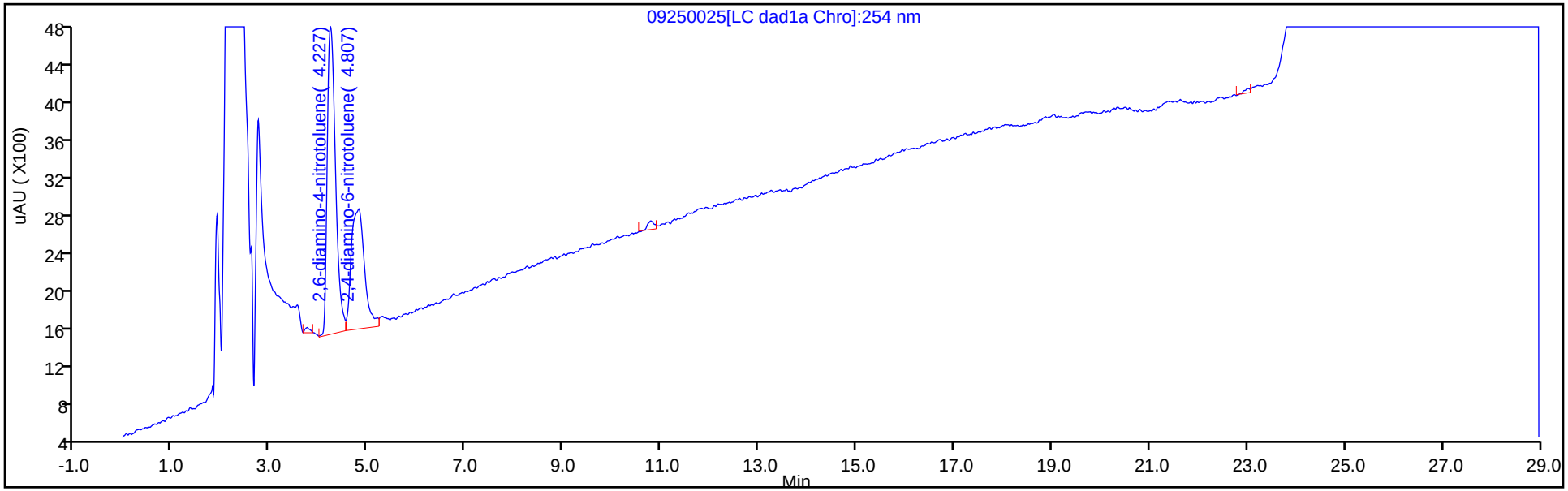
Report Date: 26-Sep-2023 15:25:43 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

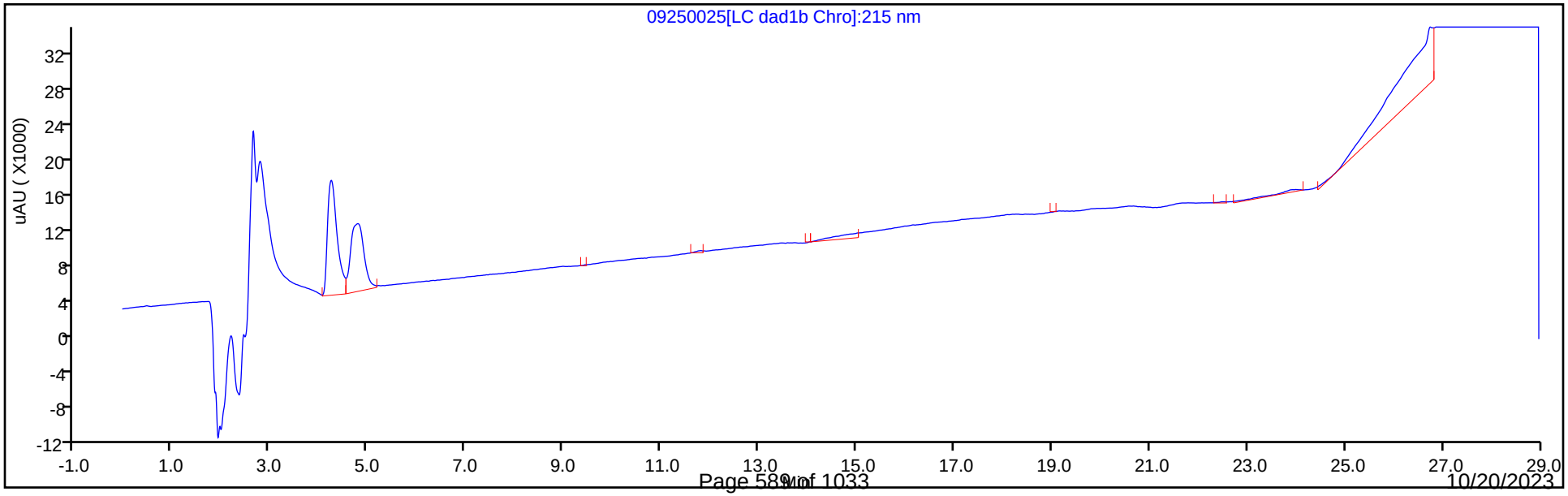
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250025.d

Injection Date:	26-Sep-2023 03:42:27	Instrument ID:	CHHPLC_G2_LUNA	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:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

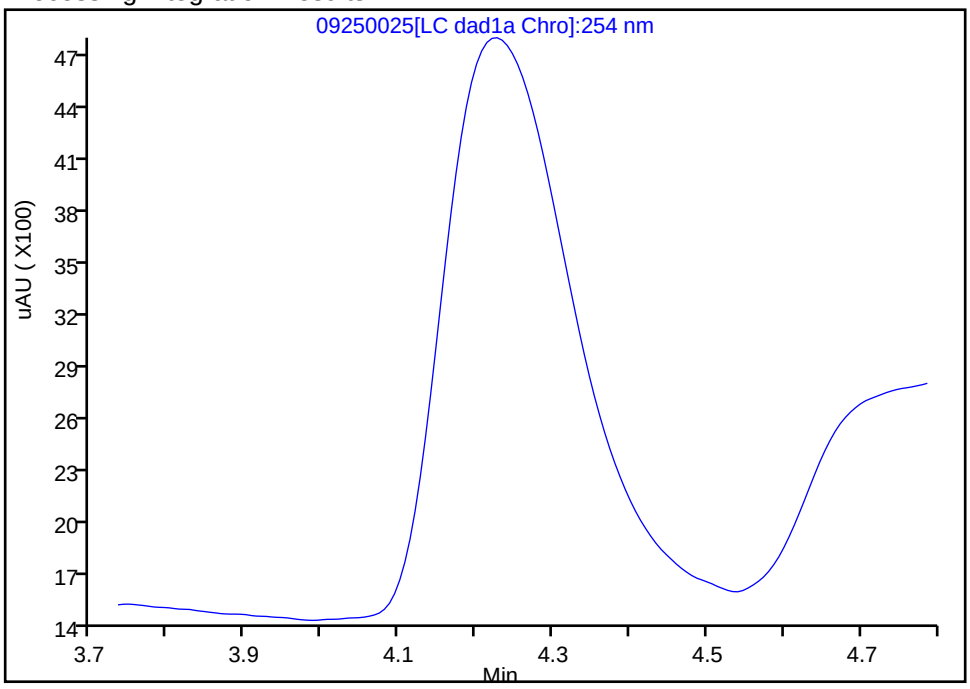
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250025.d
Injection Date: 26-Sep-2023 03:42:27 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC ADD 3
Client ID:
Operator ID: JZ/JG ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

1 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

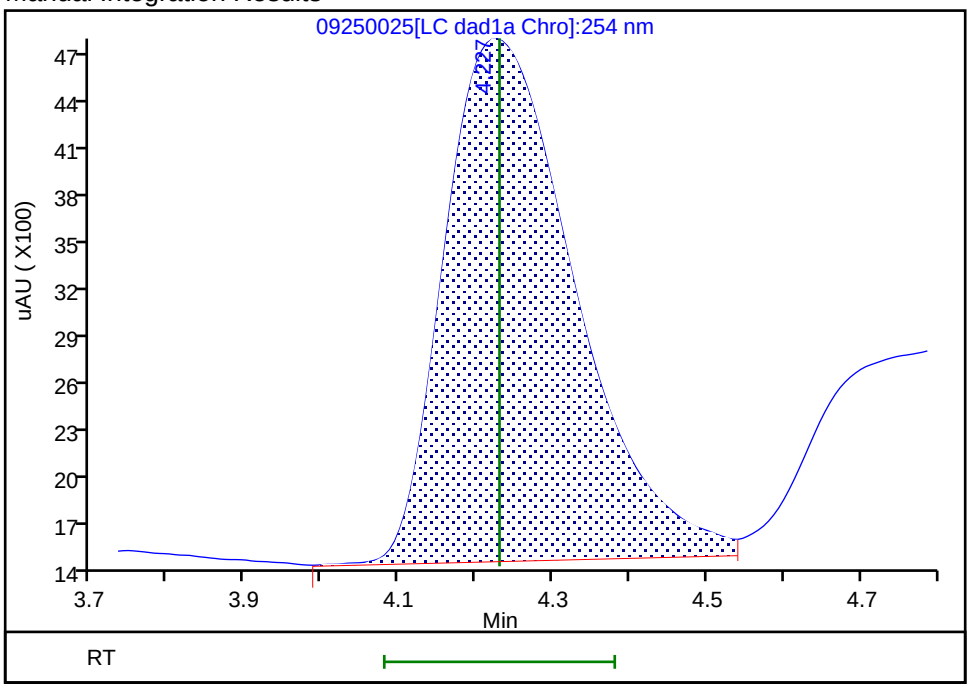
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.23
Area: 38196
Amount: 0.098534
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:14:30 -06:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250026.D
Lims ID: IC ADD 2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 26-Sep-2023 04:18:35 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_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub19

Method: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 26-Sep-2023 15:25:43 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1620

First Level Reviewer: LV5D Date: 26-Sep-2023 14:14:35

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.225	4.230	-0.005	22868	0.0400	0.0590	a
2 2,4-diamino-6-nitrotoluene	1	4.792	4.810	-0.018	14140	0.0400	0.0604	

QC Flag Legend

Processing Flags
Review Flags
a - User Assigned ID

Reagents:

8330_ADDs_00037 Amount Added: 2.00 Units: uL

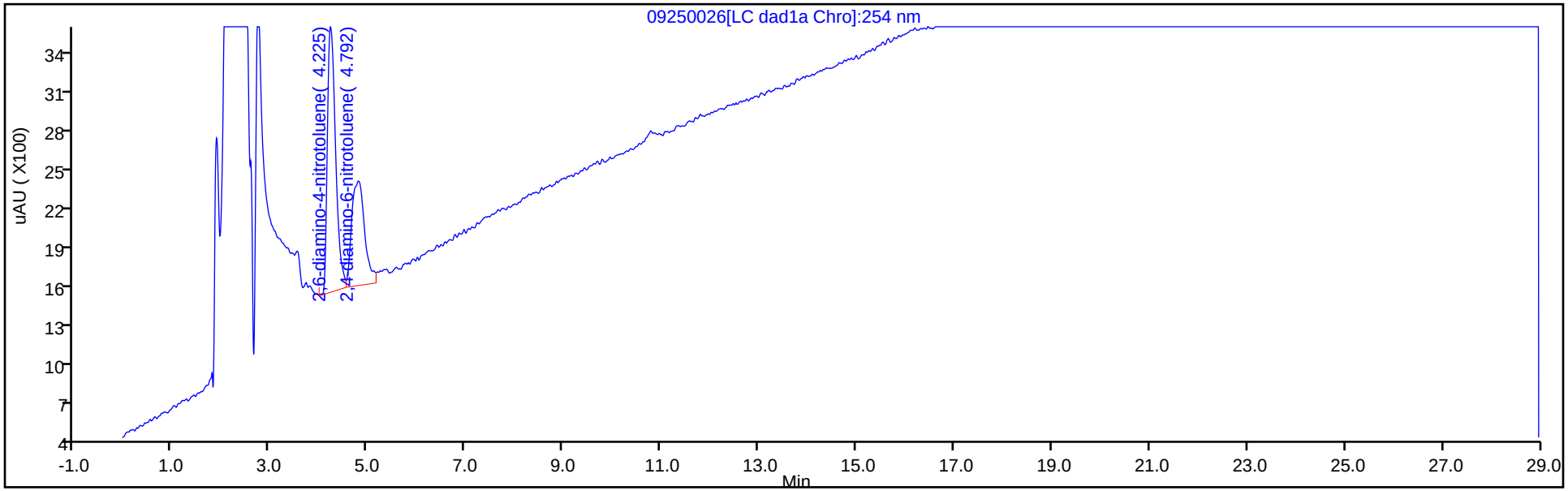
Report Date: 26-Sep-2023 15:25:44 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

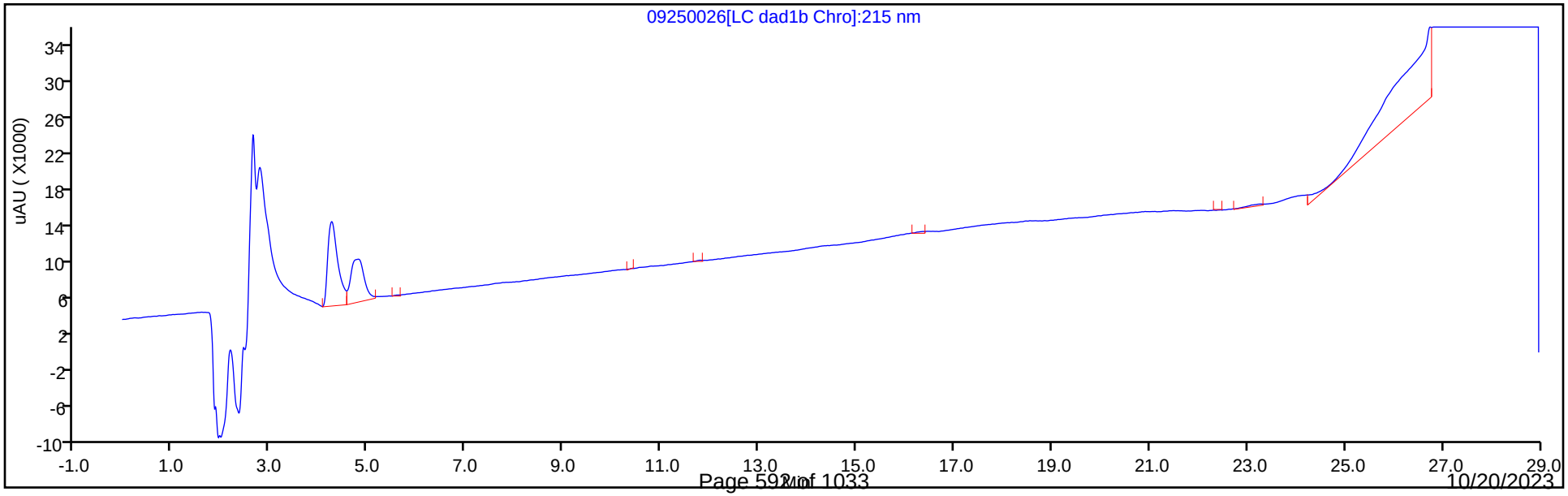
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250026.d

Injection Date:	26-Sep-2023 04:18:35	Instrument ID:	CHHPLC_G2_LUNA	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:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

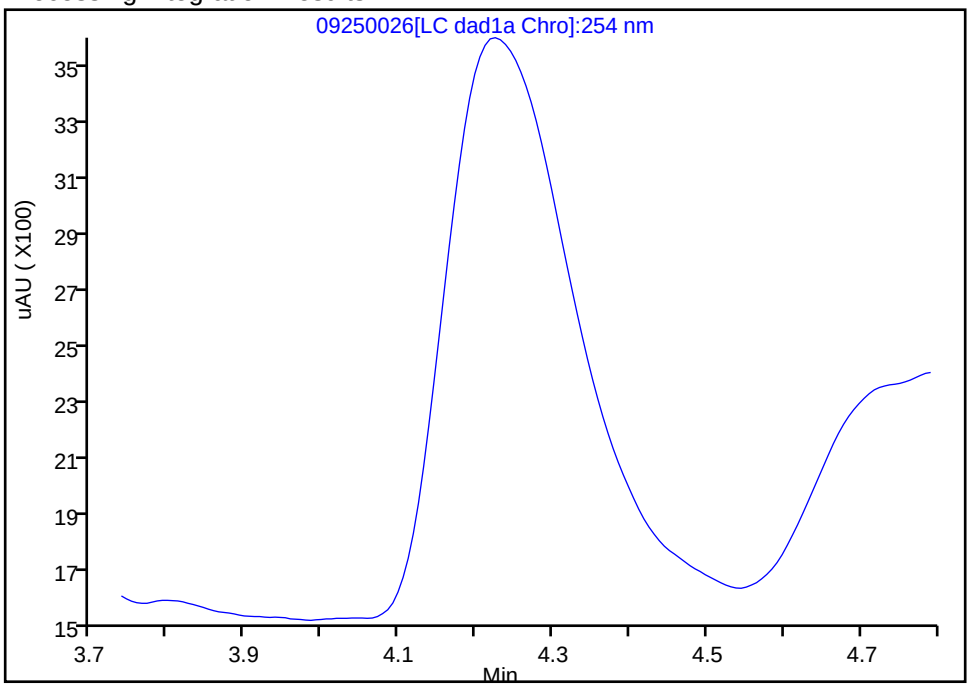
Data File:	\\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250026.d				
Injection Date:	26-Sep-2023 04:18:35	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC ADD 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

1 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

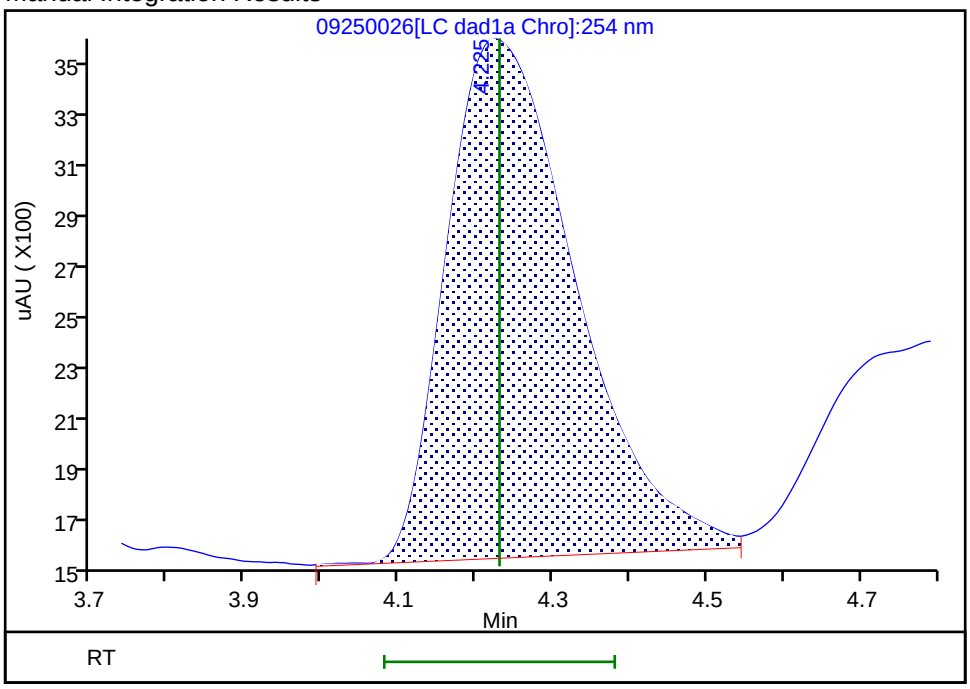
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.22
Area: 22868
Amount: 0.058992
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:14:33 -06:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D
Lims ID: IC ADD 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 26-Sep-2023 04:54:46 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_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub19

Method: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 26-Sep-2023 15:25:44 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1620

First Level Reviewer: LV5D Date: 26-Sep-2023 14:15:01

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	4.230	4.230	0.000	19367	0.0200	0.0500	a
2 2,4-diamino-6-nitrotoluene	1	4.803	4.810	-0.007	12993	0.0200	0.0555	

QC Flag Legend

Processing Flags
Review Flags
a - User Assigned ID

Reagents:

8330_ADDs_00037 Amount Added: 1.00 Units: uL

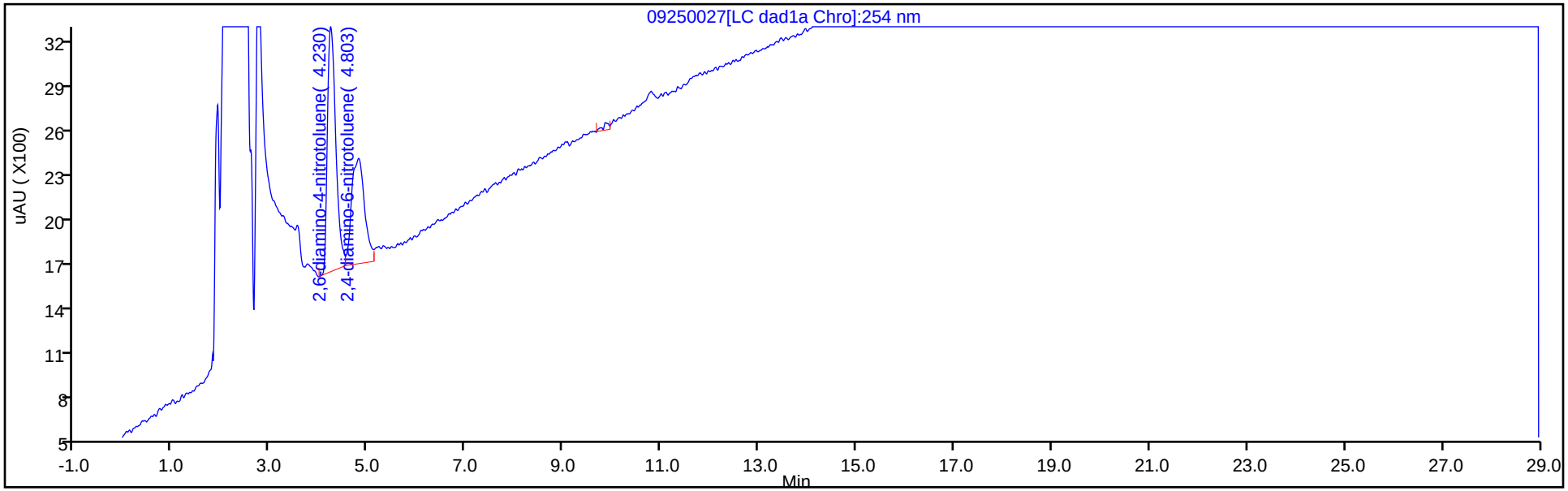
Report Date: 26-Sep-2023 15:25:44 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

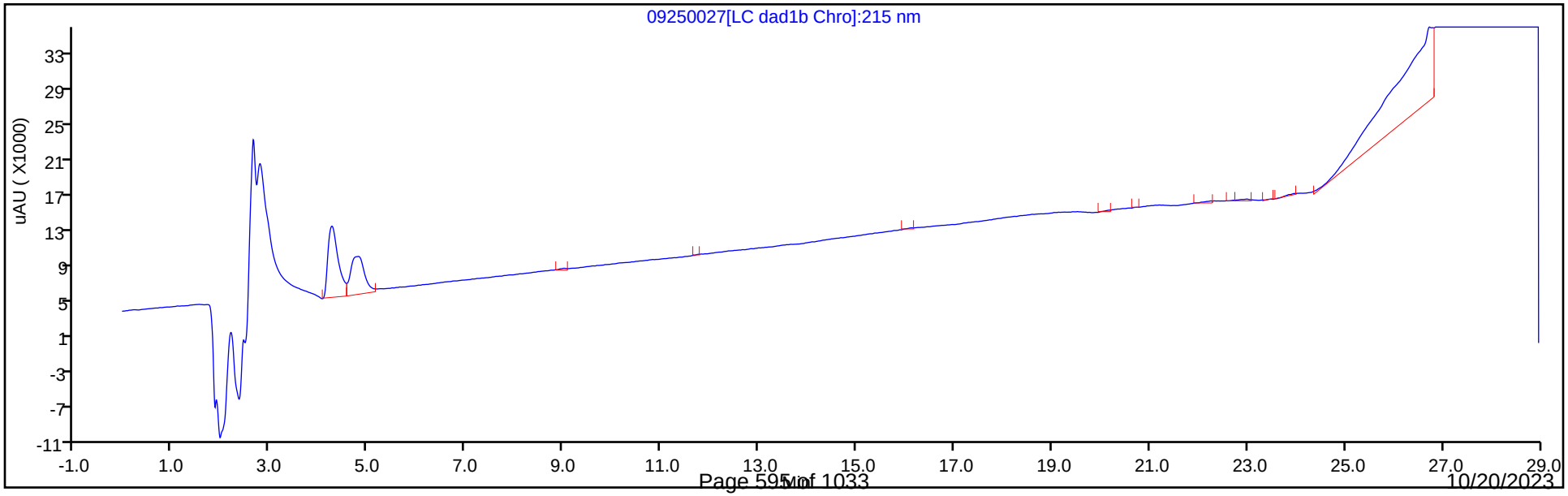
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250027.d

Injection Date:	26-Sep-2023 04:54:46	Instrument ID:	CHHPLC_G2_LUNA	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:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

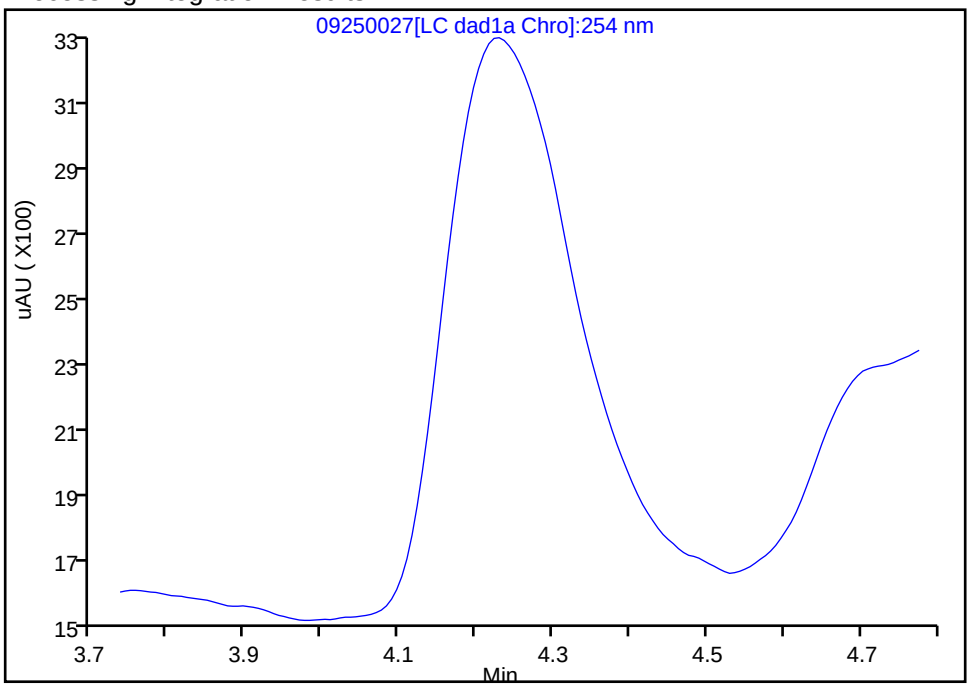
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250027.d
Injection Date: 26-Sep-2023 04:54:46 Instrument ID: CHHPLC_G2_LUNA
Lims ID: IC ADD 1
Client ID:
Operator ID: JZ/JG ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: G2_8330_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC DAD1A, 254 nm

1 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

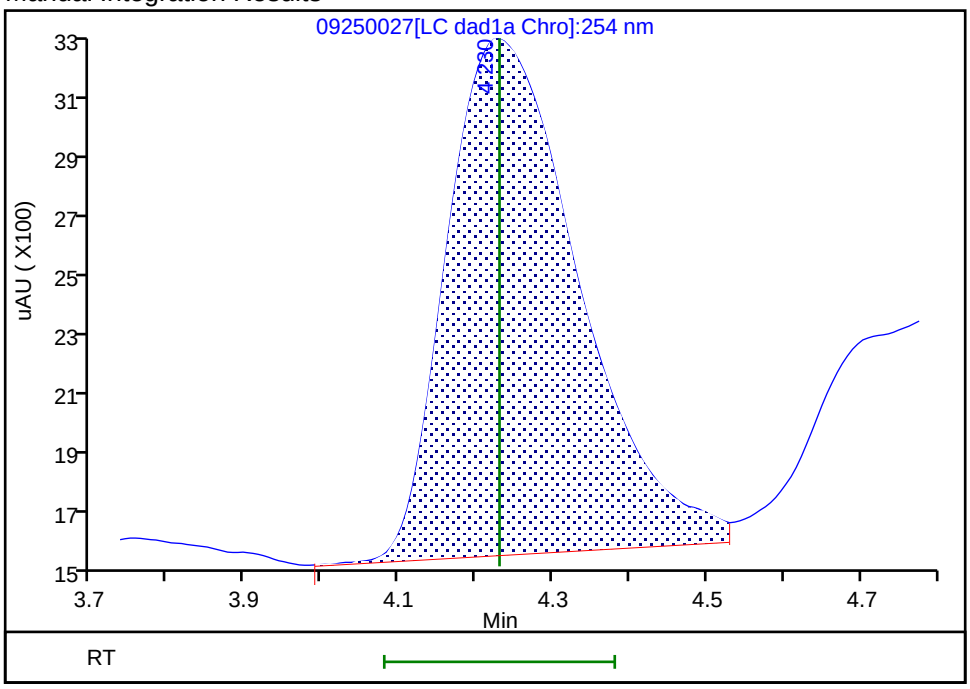
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.23
Area: 19367
Amount: 0.049961
Amount Units: ug/ml



Reviewer: LV5D, 26-Sep-2023 14:14:37 -06:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

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

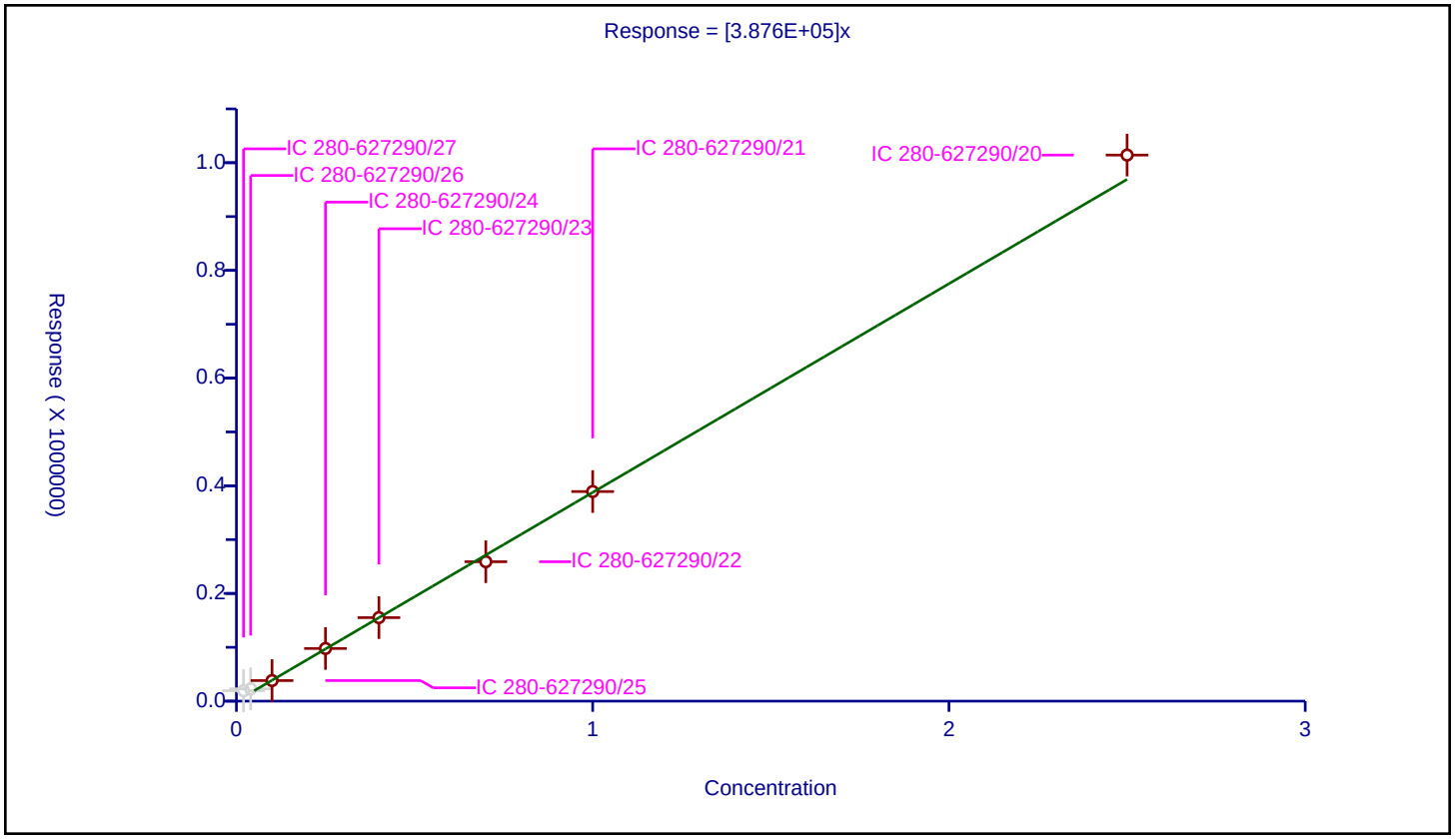
Curve Coefficients

Intercept:	0
Slope:	3.876E+05

Error Coefficients

Standard Error:	20900
Relative Standard Error:	3.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-627290/27	0.02	19367.0			968350.0	N
2	IC 280-627290/26	0.04	22868.0			571700.0	N
3	IC 280-627290/25	0.1	38196.0			381960.0	Y
4	IC 280-627290/24	0.25	97801.0			391204.0	Y
5	IC 280-627290/23	0.4	155103.0			387757.5	Y
6	IC 280-627290/22	0.7	258964.0			369948.571429	Y
7	IC 280-627290/21	1.0	389304.0			389304.0	Y
8	IC 280-627290/20	2.5	1014207.0			405682.8	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

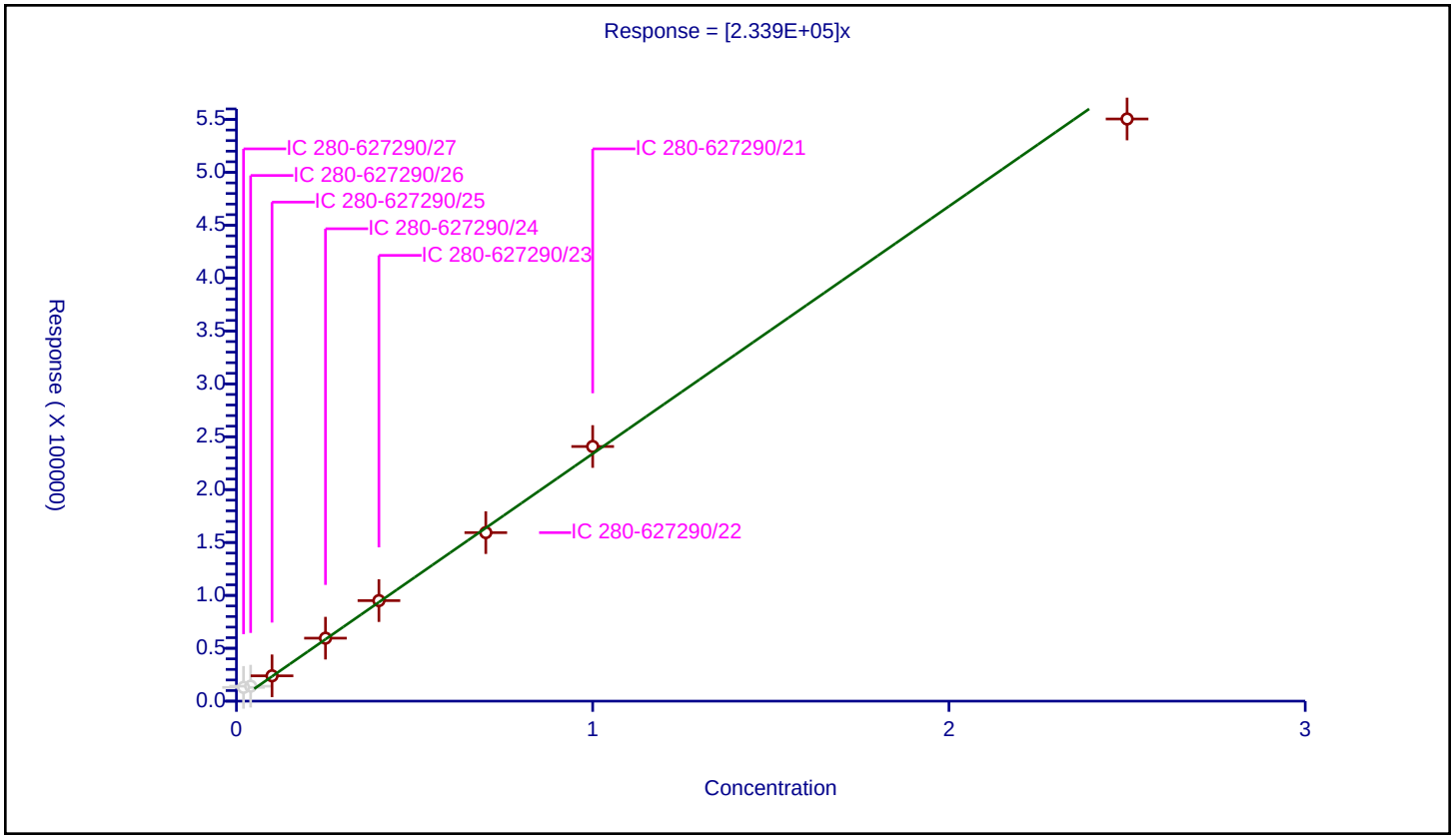
Curve Coefficients

Intercept:	0
Slope:	2.339E+05

Error Coefficients

Standard Error:	15800
Relative Standard Error:	3.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-627290/27	0.02	12993.0			649650.0	N
2	IC 280-627290/26	0.04	14140.0			353500.0	N
3	IC 280-627290/25	0.1	23931.0			239310.0	Y
4	IC 280-627290/24	0.25	59536.0			238144.0	Y
5	IC 280-627290/23	0.4	95062.0			237655.0	Y
6	IC 280-627290/22	0.7	159343.0			227632.857143	Y
7	IC 280-627290/21	1.0	240760.0			240760.0	Y
8	IC 280-627290/20	2.5	550480.0			220192.0	Y



10/20/2023
4:00 PM

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins Denver | Job No.: 280-182239-1 | Analy Batch No.: 617295

SDG No.:

Instrument ID: CHHPLC_X3 | GC Column: UltraCarb5u ID: 4.6(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 06/23/2023 17:53 | Calibration End Date: 06/23/2023 20:57 | Calibration ID: 81926

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-617295/19	06230019.D
Level 2	IC 280-617295/18	06230018.D
Level 3	IC 280-617295/17	06230017.D
Level 4	IC 280-617295/16	06230016.D
Level 5	IC 280-617295/15	06230015.D
Level 6	IC 280-617295/14	06230014.D
Level 7	IC 280-617295/13	06230013.D
Level 8	IC 280-617295/12	06230012.D
Level 9	IC 280-617295/11	06230011.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8	LVL 9		RT WINDOW	AVG RT
TNX	6.474	6.473	6.472	6.470	6.478	6.474	6.466	6.470	6.463		6.370 - 6.570	6.471
HMX	6.601	6.593	6.598	6.597	6.598	6.600	6.593	6.597	6.590		6.447 - 6.747	6.596
DNX	6.801	6.799	6.798	6.803	6.805	6.807	6.800	6.797	6.797		6.703 - 6.903	6.801
MNX	7.241	7.233	7.232	7.237	7.238	7.240	7.233	7.230	7.223		7.087 - 7.387	7.234
RDX	7.627	7.619	7.625	7.623	7.625	7.627	7.626	7.623	7.617		7.473 - 7.773	7.624
Picric acid	8.041	8.026	8.032	8.030	8.025	8.020	8.006	7.997	7.957		7.880 - 8.180	8.015
1,3,5-Trinitrobenzene	8.714	8.699	8.712	8.710	8.711	8.714	8.713	8.710	8.703		8.560 - 8.860	8.710
1,3-Dinitrobenzene	9.334	9.326	9.338	9.336	9.338	9.340	9.340	9.343	9.330		9.186 - 9.486	9.336
Nitrobenzene	9.714	9.699	9.711	9.710	9.711	9.713	9.713	9.716	9.703		9.560 - 9.860	9.710
3,5-Dinitroaniline	9.941	9.932	9.945	9.943	9.945	9.947	9.953	9.950	9.936		9.793 - 10.093	9.944
Tetryl	10.081	10.066	10.085	10.083	10.085	10.087	10.093	10.096	10.083		9.933 - 10.233	10.084
Nitroglycerin	10.534	10.526	10.538	10.536	10.545	10.540	10.546	10.550	10.530		10.386 - 10.686	10.538
2,4,6-Trinitrotoluene	10.974	10.959	10.978	10.976	10.985	10.980	10.986	10.990	10.976		10.876 - 11.076	10.978
4-Amino-2,6-dinitrotoluene	11.174	11.159	11.178	11.170	11.178	11.180	11.180	11.190	11.170		11.070 - 11.270	11.175
2-Amino-4,6-dinitrotoluene	11.421	11.412	11.431	11.423	11.431	11.433	11.433	11.443	11.423		11.323 - 11.523	11.428
2,6-Dinitrotoluene	11.574	11.566	11.585	11.576	11.585	11.587	11.586	11.603	11.576		11.476 - 11.676	11.582
2,4-Dinitrotoluene	11.741	11.732	11.751	11.743	11.758	11.753	11.753	11.770	11.750		11.643 - 11.843	11.750
2-Nitrotoluene	12.567	12.559	12.585	12.570	12.585	12.587	12.580	12.603	12.576		12.420 - 12.720	12.579
4-Nitrotoluene	12.994	12.979	13.005	12.983	13.011	13.007	13.000	13.023	12.996		12.833 - 13.133	13.000
3-Nitrotoluene	13.554	13.552	13.578	13.556	13.585	13.580	13.573	13.603	13.576		13.406 - 13.706	13.573
PETN	14.721	14.719	14.751	14.723	14.765	14.760	14.746	14.790	14.763		14.573 - 14.873	14.749
1,2-Dinitrobenzene	8.594	8.579	8.585	8.590	8.591	8.594	8.593	8.590	8.583		8.440 - 8.740	8.589

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

Lab Name: Eurofins Denver Job No.: 280-182239-1 Analy Batch No.: 617295

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/23/2023 17:53 Calibration End Date: 06/23/2023 20:57 Calibration ID: 81926

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-617295/19	06230019.D
Level 2	IC 280-617295/18	06230018.D
Level 3	IC 280-617295/17	06230017.D
Level 4	IC 280-617295/16	06230016.D
Level 5	IC 280-617295/15	06230015.D
Level 6	IC 280-617295/14	06230014.D
Level 7	IC 280-617295/13	06230013.D
Level 8	IC 280-617295/12	06230012.D
Level 9	IC 280-617295/11	06230011.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	218345 199282 202810	194267 190950	198903 201995	199432 200863	Ave		200760.909				3.8		20.0			
HMX	104800 93284 93922	98000 89623	89920 93704	92010 93035	Ave		94255.3540				4.9		20.0			
DNX	141059 145443 150089	130869 142877	145834 149216	147113 147935	Ave		144492.787				4.1		20.0			
MNX	155184 135373 135234	135176 133762	139692 138336	138586 136855	Ave		138688.620				4.7		20.0			
RDX	122500 108156 107283	111700 106285	109440 107483	114570 107019	Ave		110492.851				4.7		20.0			
Picric acid	75600 77048 79416	72350 78670	79580 79549	79510 79045	Ave		77863.1079				3.2		20.0			
1,3,5-Trinitrobenzene	201900 220552 221605	204150 222658	216100 222134	216840 218769	Ave		216078.621				3.6		20.0			
1,3-Dinitrobenzene	290100 293424 298160	279950 295148	293680 295721	298900 295042	Ave		293347.214				1.9		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

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

Lab Name: Eurofins Denver Job No.: 280-182239-1 Analy Batch No.: 617295

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/23/2023 17:53 Calibration End Date: 06/23/2023 20:57 Calibration ID: 81926

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5 LVL 9	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
Nitrobenzene	202000 190284 194953	186550 191388	191220 192774	193090 192007	Ave		192696.176				2.2		20.0			
3,5-Dinitroaniline	215100 223884 228641	213100 226128	223360 223811	224860 223593	Lin2	-127.03053	225169.737							1.0000		0.9900
Tetryl	154600 168428 171425	162400 169073	164640 172947	169610 172187	Ave		167256.605				3.5		20.0			
Nitroglycerin	60470 64467 66333	63410 67620	62508 65912	65270 65866	Ave		64650.6462				3.4		20.0			
2,4,6-Trinitrotoluene	191800 206336 208465	199050 207430	205380 208274	209070 208313	Ave		204902.054				2.8		20.0			
4-Amino-2,6-dinitrotoluene	146400 147684 149596	155550 149973	148620 149269	150580 148367	Ave		149559.741				1.7		20.0			
2-Amino-4,6-dinitrotoluene	195000 192472 199138	193150 192890	192080 191494	193020 194204	Ave		193716.432				1.2		20.0			
2,6-Dinitrotoluene	137300 142012 139214	145800 143420	143200 144666	144950 143182	Ave		142638.190				1.9		20.0			
2,4-Dinitrotoluene	294100 292196 301304	291450 296063	296000 297416	298110 294715	Ave		295705.957				1.0		20.0			
2-Nitrotoluene	129100 123032 125800	127800 124178	128060 124377	129120 123644	Ave		126123.360				1.9		20.0			
4-Nitrotoluene	116500 104936 107763	120200 106565	110860 107116	110570 106286	Ave		110088.390				4.7		20.0			
3-Nitrotoluene	187000 135416 138231	167050 136003	145640 136367	140010 135553	Lin2	535.002088	135553.140							1.0000		0.9900

Note: The M1 coefficient is the same as Ave CF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

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

Lab Name: Eurofins Denver Job No.: 280-182239-1 Analy Batch No.: 617295

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/23/2023 17:53 Calibration End Date: 06/23/2023 20:57 Calibration ID: 81926

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	73280 71671 73155	68185 72517	71842 72738	72200 72573	Ave		72017.9754				2.1		20.0			
1,2-Dinitrobenzene	117200 124272 124483	118950 125155	125000 125046	127830 127262	Ave		123910.879				2.9		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

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

Lab Name: Eurofins Denver | Job No.: 280-182239-1 | Analy Batch No.: 617295

SDG No.:

Instrument ID: CHHPLC_X3 | GC Column: UltraCarb5 ID: 4.6(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 06/23/2023 17:53 | Calibration End Date: 06/23/2023 20:57 | Calibration ID: 81926

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-617295/19	06230019.D
Level 2	IC 280-617295/18	06230018.D
Level 3	IC 280-617295/17	06230017.D
Level 4	IC 280-617295/16	06230016.D
Level 5	IC 280-617295/15	06230015.D
Level 6	IC 280-617295/14	06230014.D
Level 7	IC 280-617295/13	06230013.D
Level 8	IC 280-617295/12	06230012.D
Level 9	IC 280-617295/11	06230011.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	2190 76609	3897 141821	9975 201466	20003 508547	49970	0.0100 0.401	0.0201 0.702	0.0502 1.00	0.100 2.51	0.251
HMX	Ave	1048 35849	1960 65593	4496 93035	9201 234806	23321	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
DNX	Ave	1412 57208	2620 104556	7299 148083	14726 375597	36397	0.0100 0.400	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250
MNX	Ave	1811 62440	3155 113007	8151 159710	16173 394545	39495	0.0117 0.467	0.0233 0.817	0.0584 1.17	0.117 2.92	0.292
RDX	Ave	1225 42514	2234 75238	5472 107019	11457 268207	27039	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Picric acid	Ave	756 31468	1447 55684	3979 79045	7951 198541	19262	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
1,3,5-Trinitrobenzene	Ave	2019 89063	4083 155494	10805 218769	21684 554012	55138	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
1,3-Dinitrobenzene	Ave	2901 118059	5599 207005	14684 295042	29890 745400	73356	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Nitrobenzene	Ave	2020 76555	3731 134942	9561 192007	19309 487382	47571	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
3,5-Dinitroaniline	Lin2	2151 90451	4262 156668	11168 223593	22486 571603	55971	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Tetryl	Ave	1546 67629	3248 121063	8232 172187	16961 428562	42107	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Nitroglycerin	Ave	6047 270481	12682 461386	31254 658658	65270 1658317	161167	0.100 4.00	0.200 7.00	0.500 10.0	1.00 25.0	2.50
2,4,6-Trinitrotoluene	Ave	1918 82972	3981 145792	10269 208313	20907 521163	51584	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
4-Amino-2,6-dinitrotoluene	Ave	1464 59989	3111 104488	7431 148367	15058 373989	36921	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
2-Amino-4,6-dinitrotoluene	Ave	1950	3863	9604	19302	48118	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.: 280-182239-1 | Analy Batch No.: 617295

SDG No.:

Instrument ID: CHHPLC_X3 | GC Column: UltraCarb5 ID: 4.6(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 06/23/2023 17:53 | Calibration End Date: 06/23/2023 20:57 | Calibration ID: 81926

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
		77156	134046	194204	497844		0.400	0.700	1.00	2.50	
2,6-Dinitrotoluene	Ave	1373 57368	2916 101266	7160 143182	14495 348035	35503	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
2,4-Dinitrotoluene	Ave	2941 118425	5829 208191	14800 294715	29811 753261	73049	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
2-Nitrotoluene	Ave	1291 49671	2556 87064	6403 123644	12912 314499	30758	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
4-Nitrotoluene	Ave	1165 42626	2404 74981	5543 106286	11057 269407	26234	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
3-Nitrotoluene	Lin2	1870 54401	3341 95457	7282 135553	14001 345577	33854	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
PETN	Ave	7328 290067	13637 509169	35921 725734	72200 1828875	179178	0.100 4.00	0.200 7.00	0.500 10.0	1.00 25.0	2.50
1,2-Dinitrobenzene	Ave	1172 50062	2379 87532	6250 127262	12783 311208	31068	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\20230623-122860.b\06230011.D
Lims ID: IC INT/DMT 9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 23-Jun-2023 17:53:55 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/DMT 9
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 24-Jun-2023 12:55:47 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1681

First Level Reviewer: LV5D Date: 23-Jun-2023 18:20:21

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.463	6.470	-0.007	508547	2.51	2.53	Ma
4 HMX	1	6.590	6.597	-0.007	234806	2.50	2.49	M
6 DNX	1	6.797	6.803	-0.006	375597	2.50	2.60	M
7 MNX	1	7.223	7.237	-0.014	394545	2.92	2.84	M
8 RDX	1	7.617	7.623	-0.006	268207	2.50	2.43	
9 2,4,6-Trinitrophenol	1	7.957	8.030	-0.073	198541	2.50	2.55	
$ 10 1,2-Dinitrobenzene	1	8.583	8.590	-0.007	311208	2.50	2.51	
11 1,3,5-Trinitrobenzene	1	8.703	8.710	-0.007	554012	2.50	2.56	
12 1,3-Dinitrobenzene	1	9.330	9.336	-0.006	745400	2.50	2.54	
13 Nitrobenzene	1	9.703	9.710	-0.007	487382	2.50	2.53	
14 3,5-Dinitroaniline	1	9.936	9.943	-0.007	571603	2.50	2.54	
15 Tetryl	1	10.083	10.083	0.000	428562	2.50	2.56	
16 Nitroglycerin	2	10.530	10.536	-0.006	1658317	25.0	25.7	
17 2,4,6-Trinitrotoluene	1	10.976	10.976	0.000	521163	2.50	2.54	
18 4-Amino-2,6-dinitrotoluene	1	11.170	11.170	0.000	373989	2.50	2.50	
19 2-Amino-4,6-dinitrotoluene	1	11.423	11.423	0.000	497844	2.50	2.57	
20 2,6-Dinitrotoluene	1	11.576	11.576	0.000	348035	2.50	2.44	
21 2,4-Dinitrotoluene	1	11.750	11.743	0.007	753261	2.50	2.55	
22 o-Nitrotoluene	1	12.576	12.570	0.006	314499	2.50	2.49	
23 p-Nitrotoluene	1	12.996	12.983	0.013	269407	2.50	2.45	
24 m-Nitrotoluene	1	13.576	13.556	0.020	345577	2.50	2.55	
25 PETN	2	14.763	14.723	0.040	1828875	25.0	25.4	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

8330IntermStk_00077	Amount Added: 250.00	Units: uL
8330 DMT_00013	Amount Added: 125.00	Units: uL

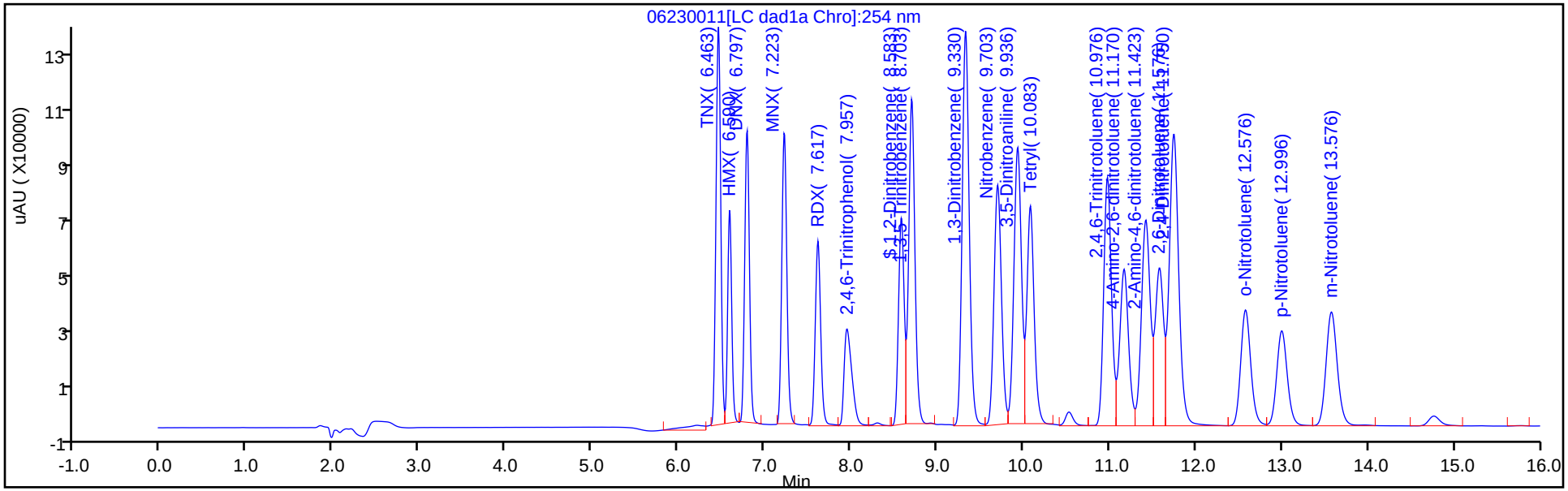
Report Date: 24-Jun-2023 12:55:47 Chrom Revision: 2.3 05-Jun-2023 19:02:10

Eurofins Denver

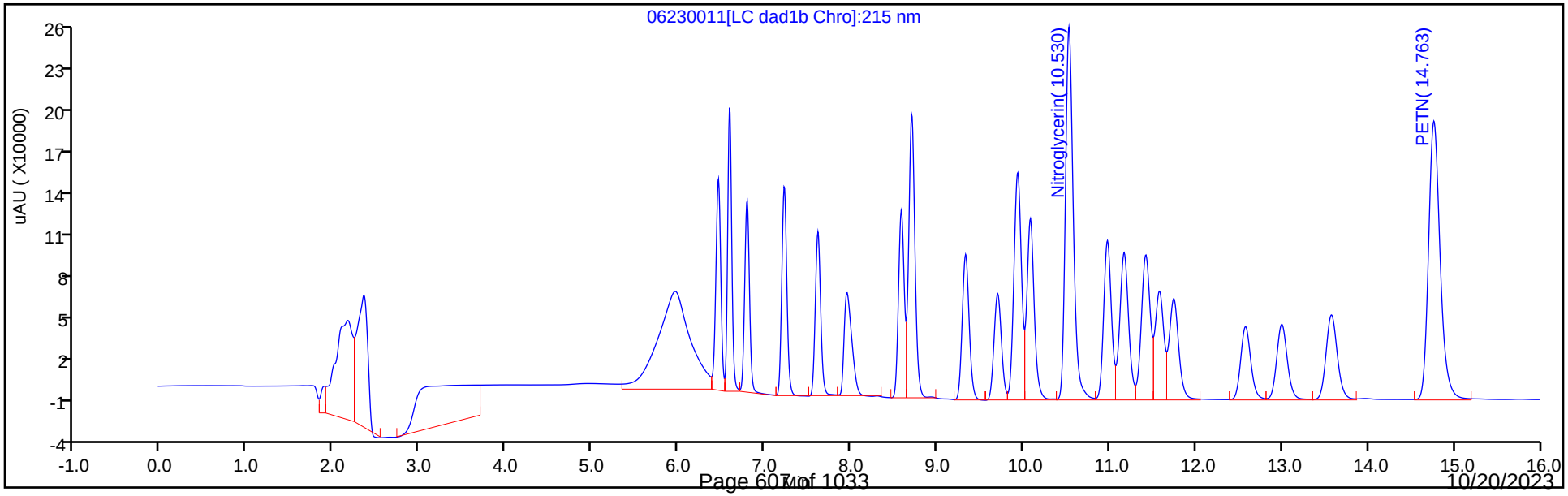
Data File: \\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230011.d

Injection Date:	23-Jun-2023 17:53:55	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	IC INT/DMT 9			Worklist Smp#:	11
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



10/20/2023
4:00 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

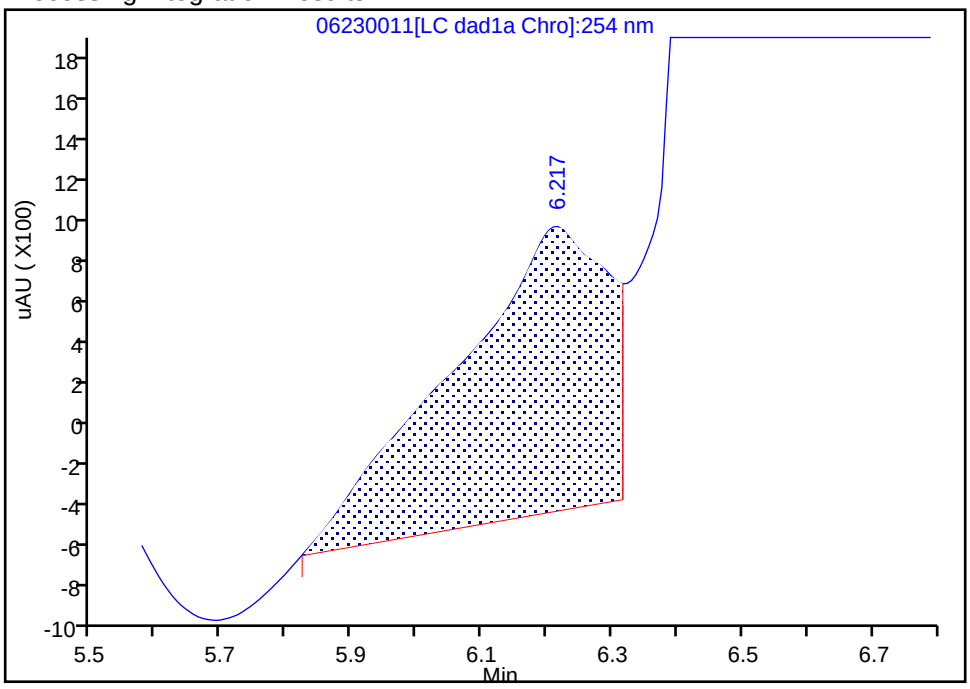
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230011.d				
Injection Date:	23-Jun-2023 17:53:55	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 9				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

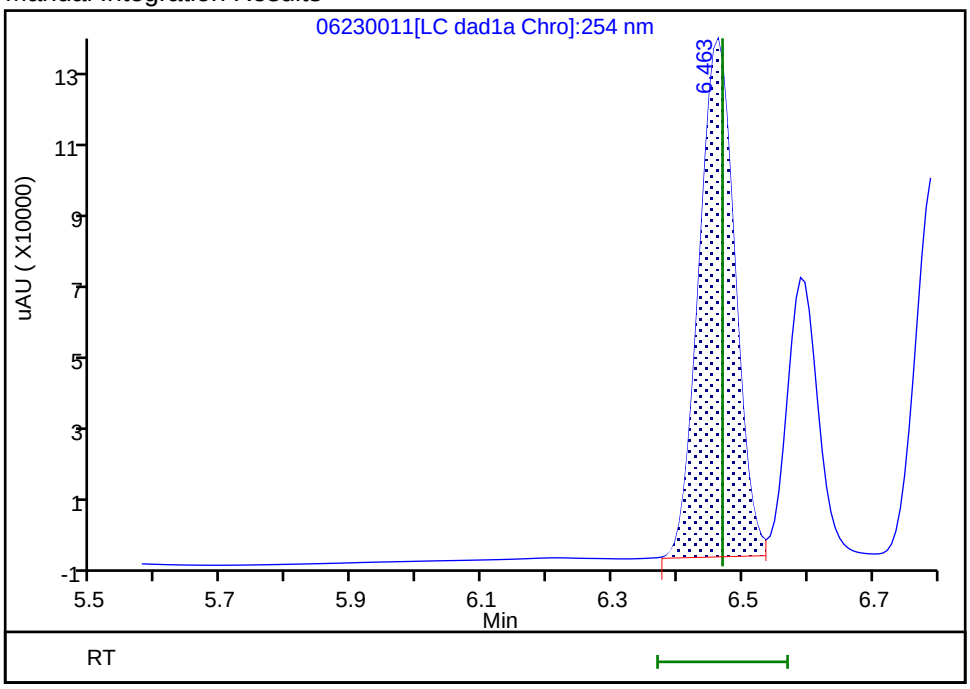
Processing Integration Results

RT: 6.22
Area: 22780
Amount: 0.128896
Amount Units: ug/mL



Manual Integration Results

RT: 6.46
Area: 508547
Amount: 2.533098
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 18:20:12 -06:00:00 (UTC)

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

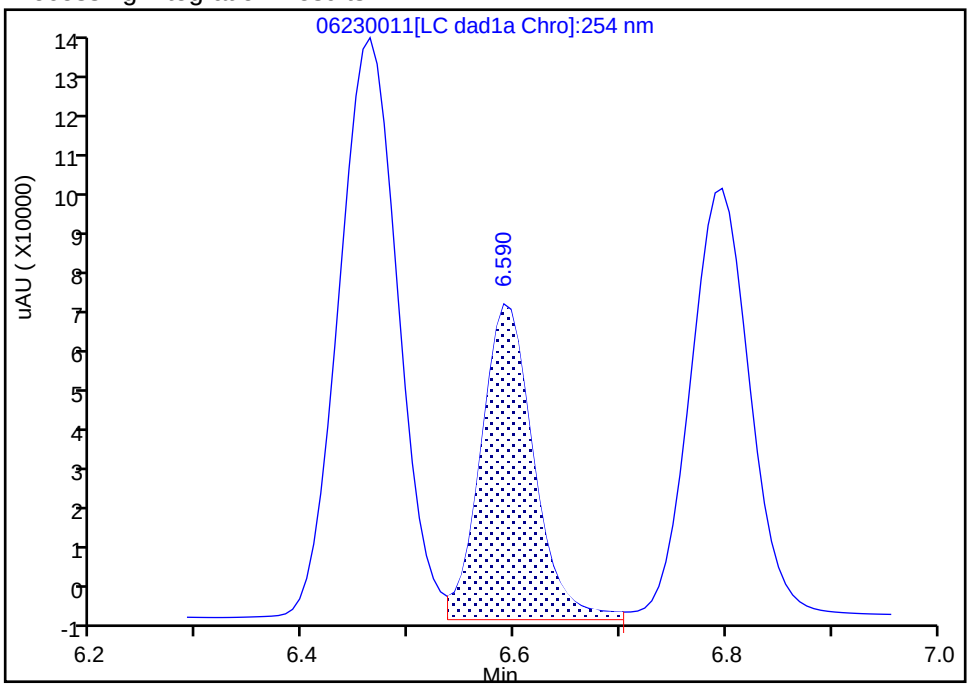
Data File: \\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230011.d
Injection Date: 23-Jun-2023 17:53:55 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 9
Client ID:
Operator ID: JZ/JG ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

4 HMX, CAS: 2691-41-0

Signal: 1

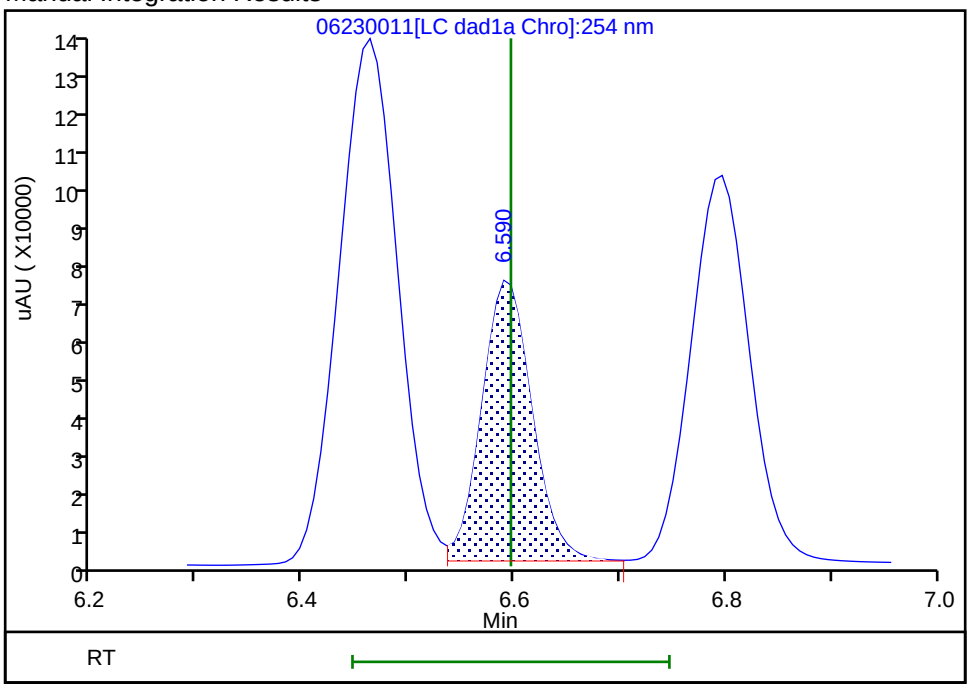
Processing Integration Results

RT: 6.59
Area: 250801
Amount: 2.654489
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 234806
Amount: 2.491169
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 18:20:04 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

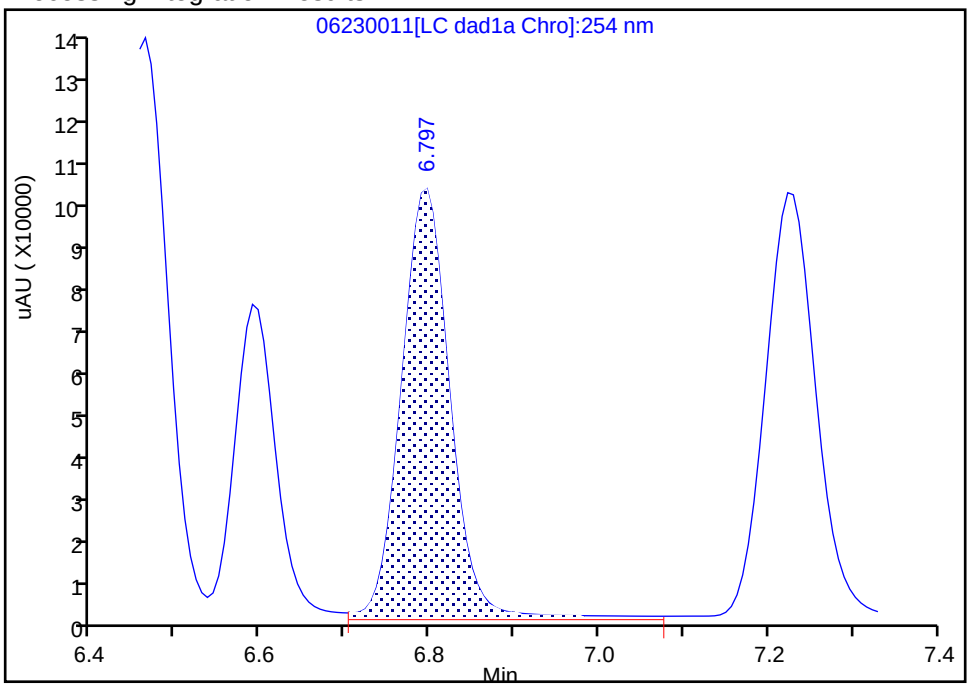
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230011.d				
Injection Date:	23-Jun-2023 17:53:55	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 9				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

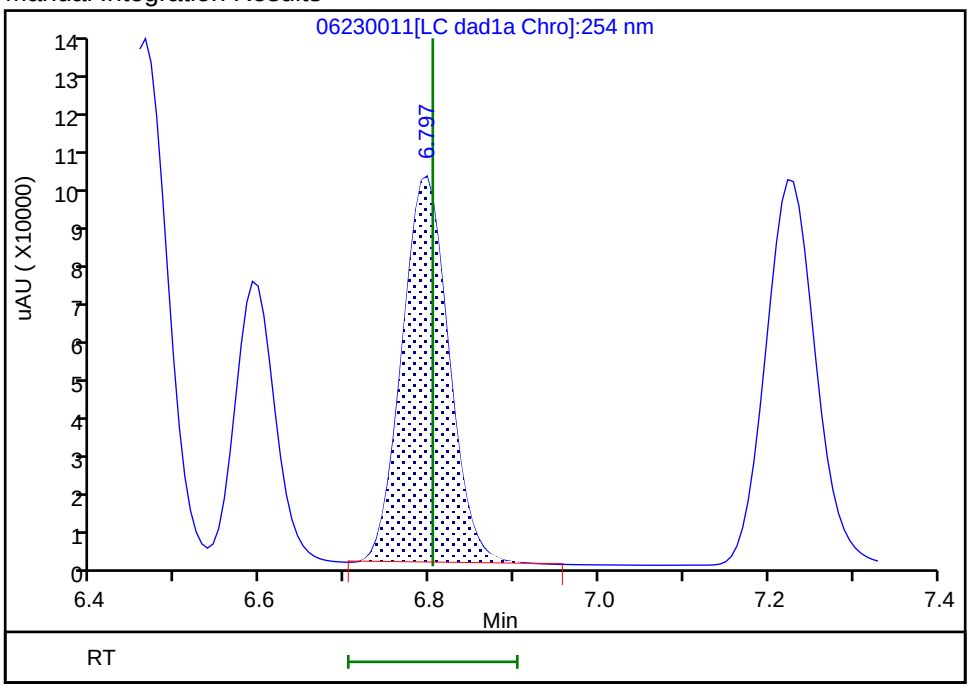
Processing Integration Results

RT: 6.80
Area: 401390
Amount: 2.744869
Amount Units: ug/mL



Manual Integration Results

RT: 6.80
Area: 375597
Amount: 2.599417
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 18:19:56 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

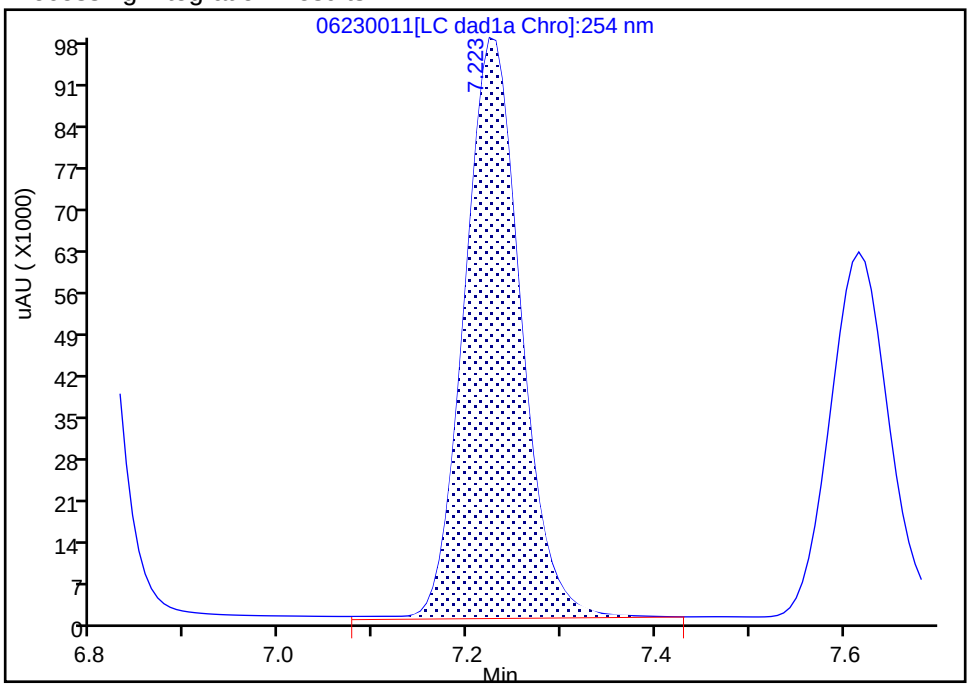
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230011.d				
Injection Date:	23-Jun-2023 17:53:55	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 9				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

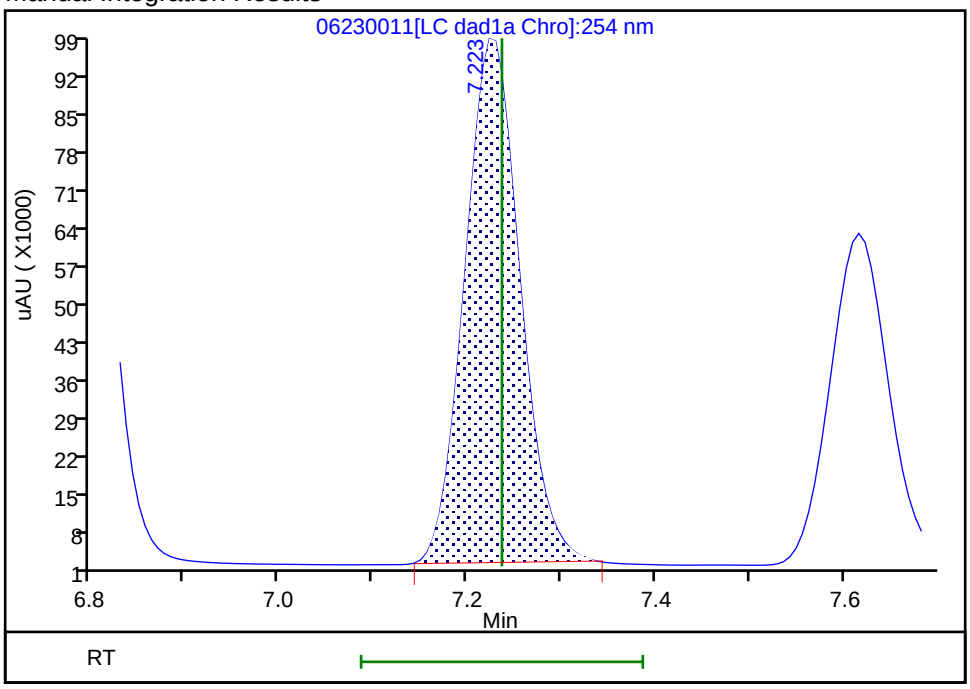
Processing Integration Results

RT: 7.22
Area: 409944
Amount: 3.100717
Amount Units: ug/mL



Manual Integration Results

RT: 7.22
Area: 394545
Amount: 2.844826
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 18:20:19 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230012.D
Lims ID: IC INT/DMT 8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 23-Jun-2023 18:16:50 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/DMT 8
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 24-Jun-2023 12:55:48 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1681

First Level Reviewer: LV5D Date: 23-Jun-2023 18:54:16

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.470	6.470	0.000	201466	1.00	1.00	M
4 HMX	1	6.597	6.597	0.000	93035	1.00	0.9871	M
6 DNX	1	6.797	6.803	-0.006	148083	1.00	1.02	M
7 MNX	1	7.230	7.237	-0.007	159710	1.17	1.15	
8 RDX	1	7.623	7.623	0.000	107019	1.00	0.9686	
9 2,4,6-Trinitrophenol	1	7.997	8.030	-0.033	79045	1.00	1.02	
$ 10 1,2-Dinitrobenzene	1	8.590	8.590	0.000	127262	1.00	1.03	
11 1,3,5-Trinitrobenzene	1	8.710	8.710	0.000	218769	1.00	1.01	
12 1,3-Dinitrobenzene	1	9.343	9.336	0.007	295042	1.00	1.01	
13 Nitrobenzene	1	9.716	9.710	0.006	192007	1.00	1.00	
14 3,5-Dinitroaniline	1	9.950	9.943	0.007	223593	1.00	0.99	
15 Tetryl	1	10.096	10.083	0.013	172187	1.00	1.03	
16 Nitroglycerin	2	10.550	10.536	0.014	658658	10.0	10.2	
17 2,4,6-Trinitrotoluene	1	10.990	10.976	0.014	208313	1.00	1.02	
18 4-Amino-2,6-dinitrotoluene	1	11.190	11.170	0.020	148367	1.00	0.99	
19 2-Amino-4,6-dinitrotoluene	1	11.443	11.423	0.020	194204	1.00	1.00	
20 2,6-Dinitrotoluene	1	11.603	11.576	0.027	143182	1.00	1.00	
21 2,4-Dinitrotoluene	1	11.770	11.743	0.027	294715	1.00	1.00	
22 o-Nitrotoluene	1	12.603	12.570	0.033	123644	1.00	0.9803	
23 p-Nitrotoluene	1	13.023	12.983	0.040	106286	1.00	0.9655	
24 m-Nitrotoluene	1	13.603	13.556	0.047	135553	1.00	1.00	
25 PETN	2	14.790	14.723	0.067	725734	10.0	10.1	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00013	Amount Added: 50.00	Units: uL
8330IntermStk_00077	Amount Added: 100.00	Units: uL

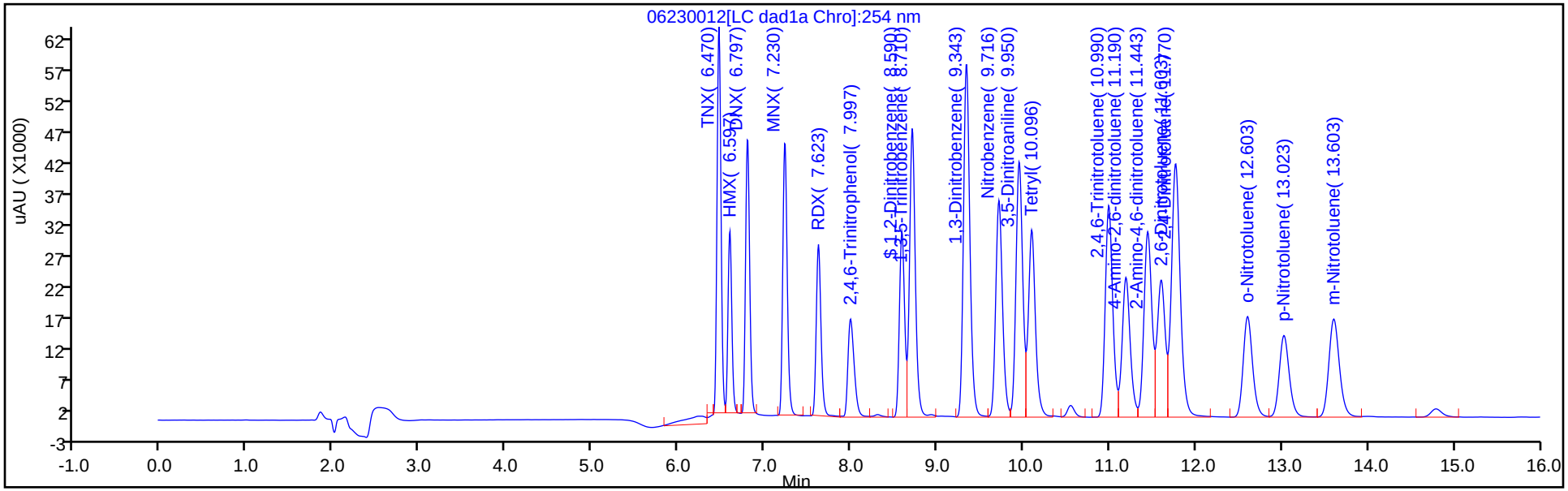
Report Date: 24-Jun-2023 12:55:48 Chrom Revision: 2.3 05-Jun-2023 19:02:10

Eurofins Denver

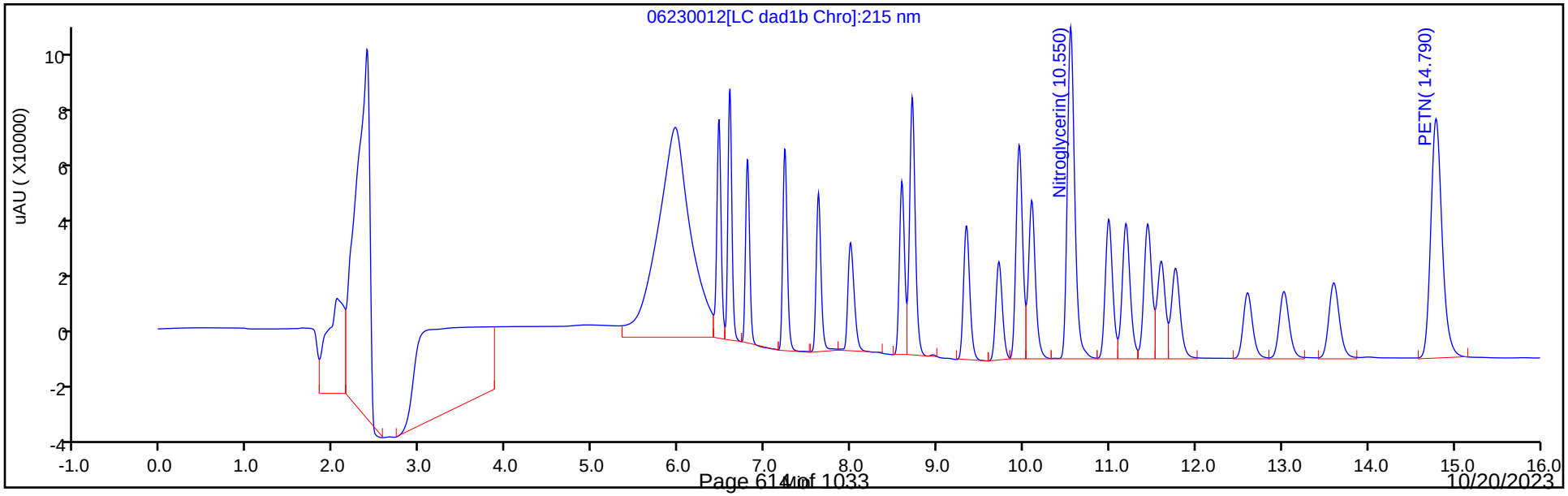
Data File: \\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230012.d

Injection Date:	23-Jun-2023 18:16:50	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	IC INT/DMT 8			Worklist Smp#:	12
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



10/20/2023
4:00 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

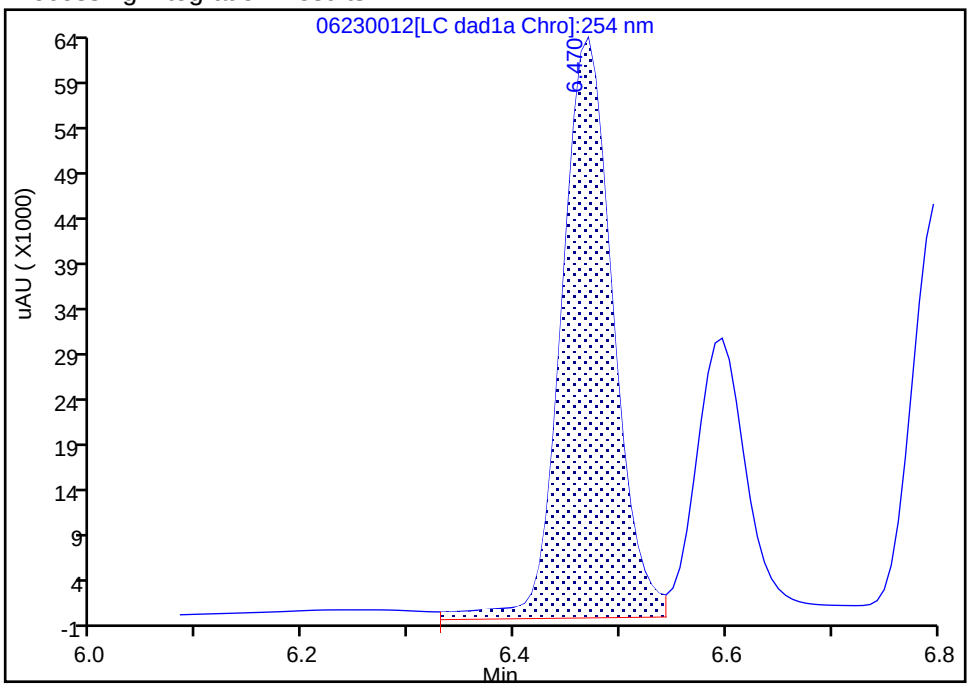
Data File: \\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230012.d
Injection Date: 23-Jun-2023 18:16:50 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 8
Client ID:
Operator ID: JZ/JG ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 TNX, CAS: 13980-04-6

Signal: 1

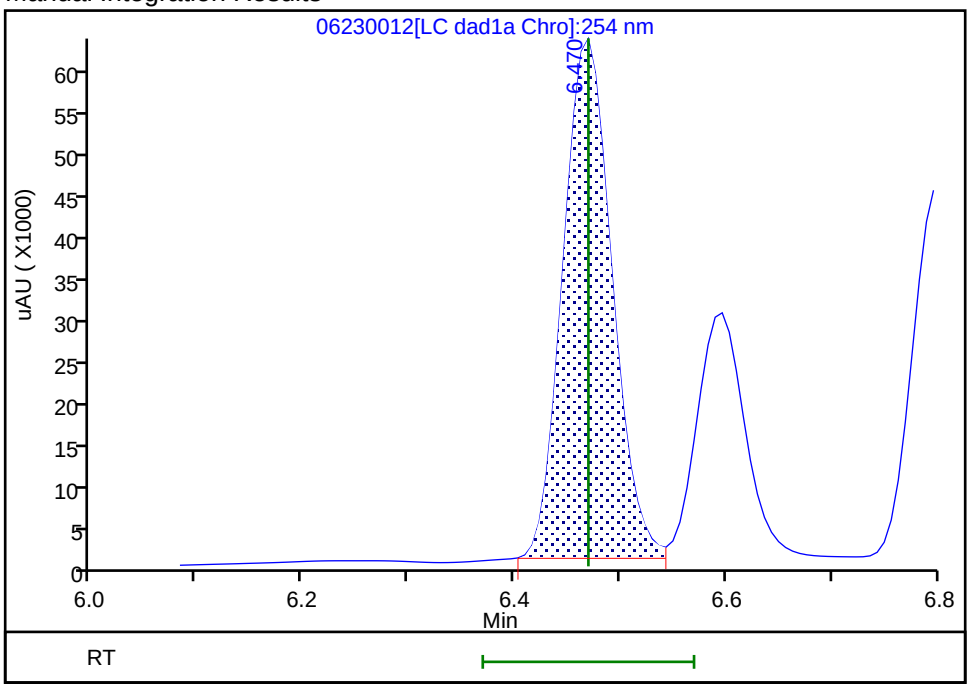
Processing Integration Results

RT: 6.47
Area: 216616
Amount: 1.084797
Amount Units: ug/mL



Manual Integration Results

RT: 6.47
Area: 201466
Amount: 1.003512
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 18:54:07 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

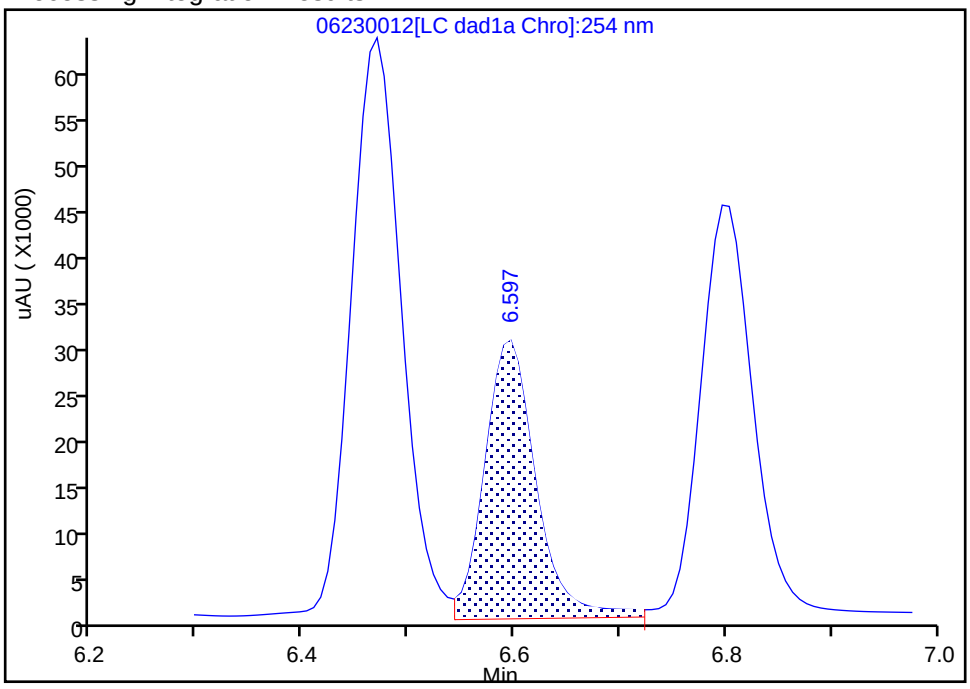
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230012.d				
Injection Date:	23-Jun-2023 18:16:50	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 8				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

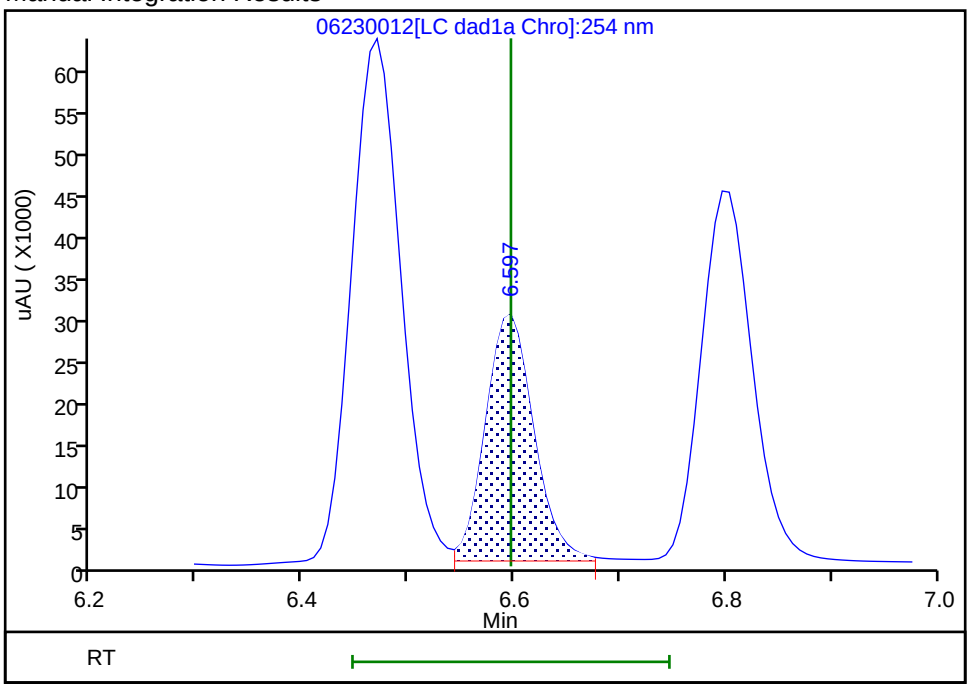
Processing Integration Results

RT: 6.60
Area: 103827
Amount: 1.091337
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 93035
Amount: 0.987053
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 18:54:08 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

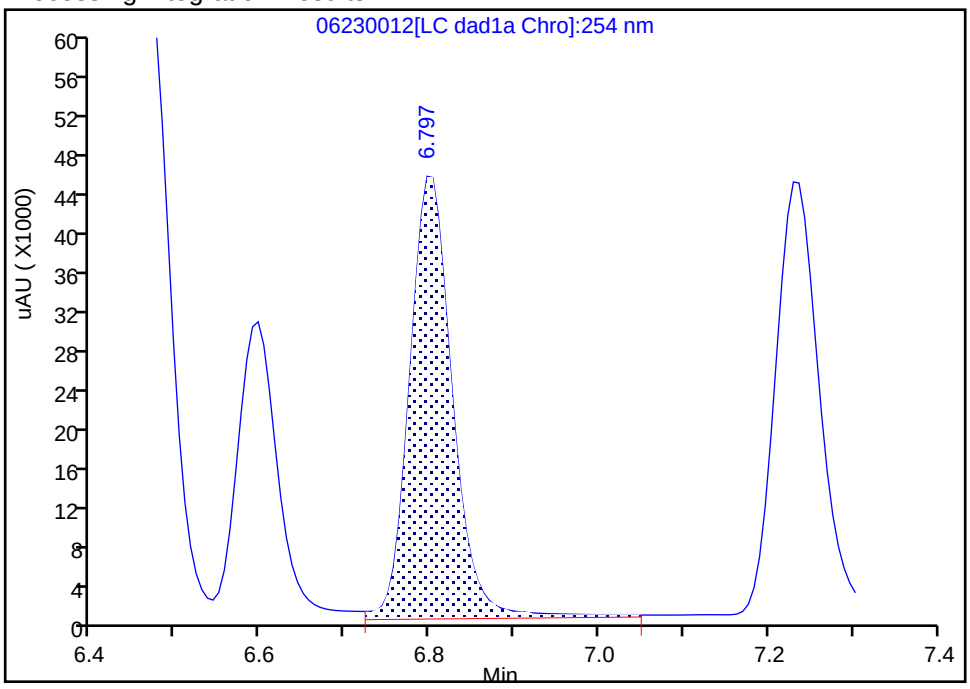
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Injection Date: 23-Jun-2023 18:16:50 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 8
Client ID:
Operator ID: JZ/JG ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

6 DNX, CAS: 80251-29-2

Signal: 1

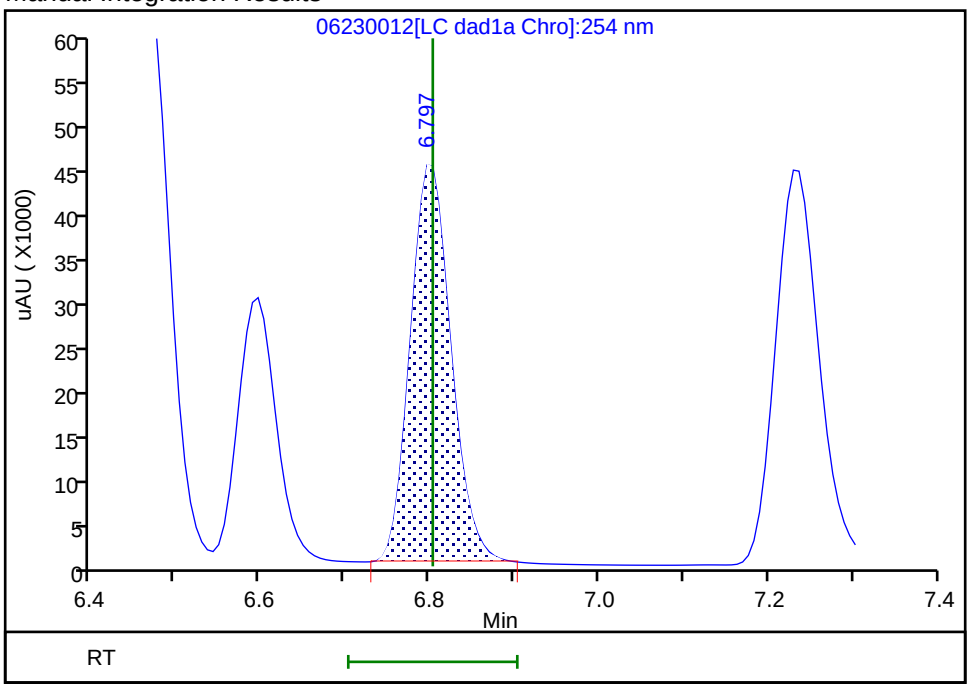
Processing Integration Results

RT: 6.80
Area: 160299
Amount: 1.093419
Amount Units: ug/mL



Manual Integration Results

RT: 6.80
Area: 148083
Amount: 1.024847
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 18:54:10 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230013.D
Lims ID: IC INT/DMT 7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 23-Jun-2023 18:39:49 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/DMT 7
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 24-Jun-2023 12:55:48 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1681

First Level Reviewer: LV5D Date: 23-Jun-2023 19:10:47

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.466	6.470	-0.004	141821	0.7021	0.7064	M
4 HMX	1	6.593	6.597	-0.004	65593	0.7000	0.6959	M
6 DNX	1	6.800	6.803	-0.003	104556	0.7007	0.7236	M
7 MNX	1	7.233	7.237	-0.004	113007	0.8169	0.8148	
8 RDX	1	7.626	7.623	0.003	75238	0.7000	0.6809	
9 2,4,6-Trinitrophenol	1	8.006	8.030	-0.024	55684	0.7000	0.7152	
$ 10 1,2-Dinitrobenzene	1	8.593	8.590	0.003	87532	0.7000	0.7064	
11 1,3,5-Trinitrobenzene	1	8.713	8.710	0.003	155494	0.7000	0.7196	
12 1,3-Dinitrobenzene	1	9.340	9.336	0.004	207005	0.7000	0.7057	
13 Nitrobenzene	1	9.713	9.710	0.003	134942	0.7000	0.7003	
14 3,5-Dinitroaniline	1	9.953	9.943	0.010	156668	0.7000	0.6963	
15 Tetryl	1	10.093	10.083	0.010	121063	0.7000	0.7238	
16 Nitroglycerin	2	10.546	10.536	0.010	461386	7.00	7.14	
17 2,4,6-Trinitrotoluene	1	10.986	10.976	0.010	145792	0.7000	0.7115	
18 4-Amino-2,6-dinitrotoluene	1	11.180	11.170	0.010	104488	0.7000	0.6986	
19 2-Amino-4,6-dinitrotoluene	1	11.433	11.423	0.010	134046	0.7000	0.6920	
20 2,6-Dinitrotoluene	1	11.586	11.576	0.010	101266	0.7000	0.7100	
21 2,4-Dinitrotoluene	1	11.753	11.743	0.010	208191	0.7000	0.7040	
22 o-Nitrotoluene	1	12.580	12.570	0.010	87064	0.7000	0.6903	
23 p-Nitrotoluene	1	13.000	12.983	0.017	74981	0.7000	0.6811	
24 m-Nitrotoluene	1	13.573	13.556	0.017	95457	0.7000	0.7003	
25 PETN	2	14.746	14.723	0.023	509169	7.00	7.07	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00013	Amount Added:	35.00	Units: uL
8330IntermStk_00077	Amount Added:	70.00	Units: uL

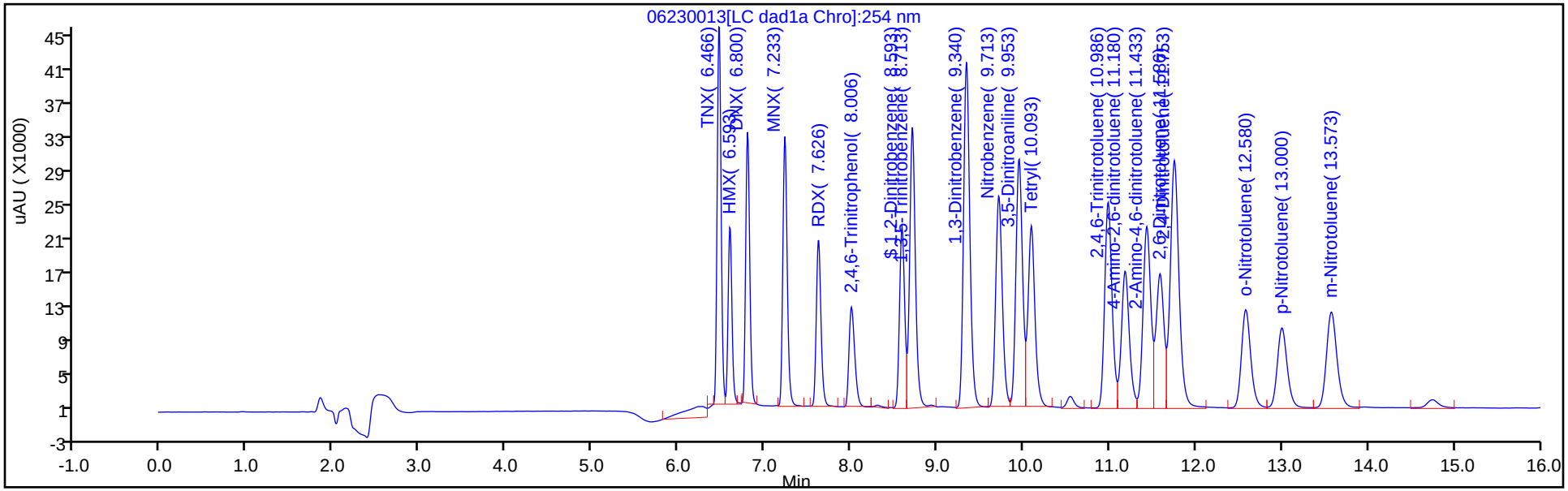
Report Date: 24-Jun-2023 12:55:48 Chrom Revision: 2.3 05-Jun-2023 19:02:10

Eurofins Denver

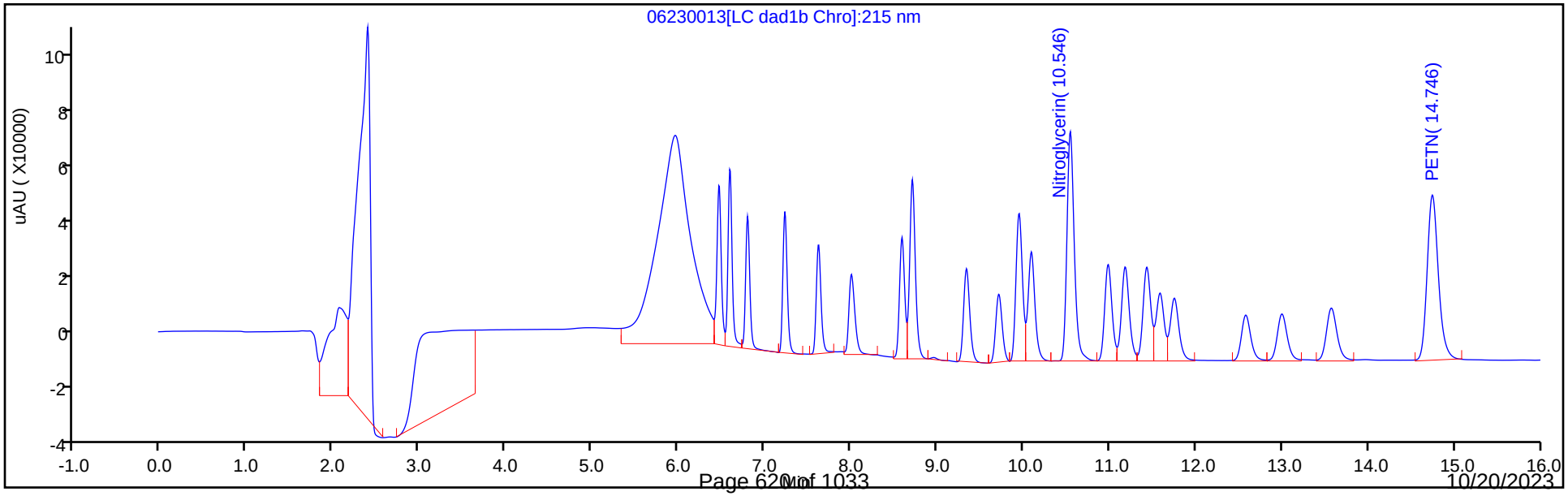
Data File: \\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230013.d

Injection Date:	23-Jun-2023 18:39:49	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	IC INT/DMT 7			Worklist Smp#:	13
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



10/20/2023
4:00 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

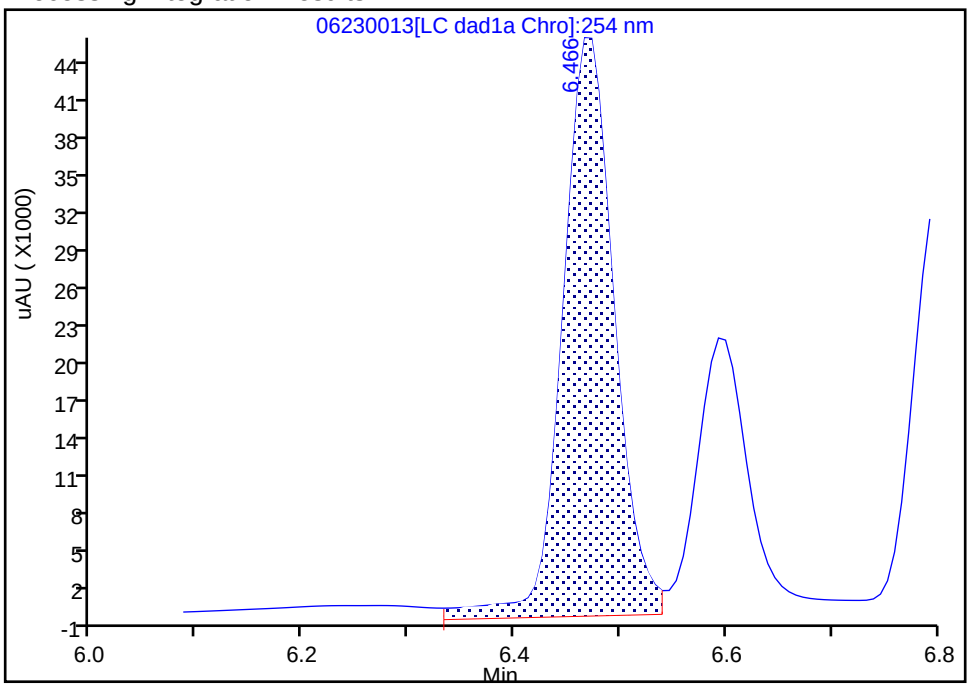
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230013.d				
Injection Date:	23-Jun-2023 18:39:49	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 7				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

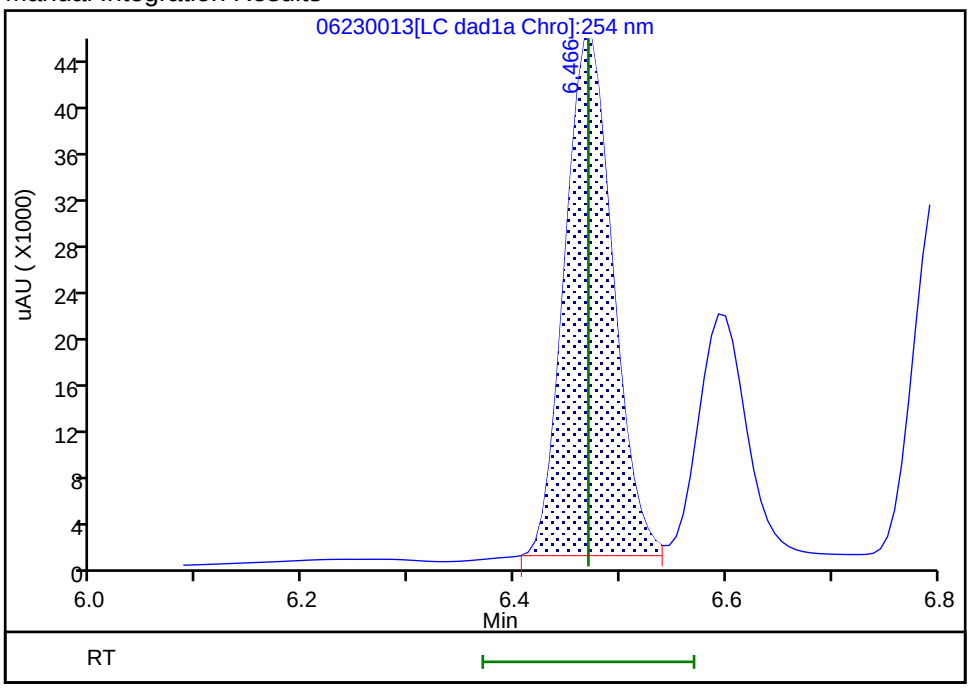
Processing Integration Results

RT: 6.47
Area: 155955
Amount: 0.779468
Amount Units: ug/mL



Manual Integration Results

RT: 6.47
Area: 141821
Amount: 0.706417
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 19:10:12 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

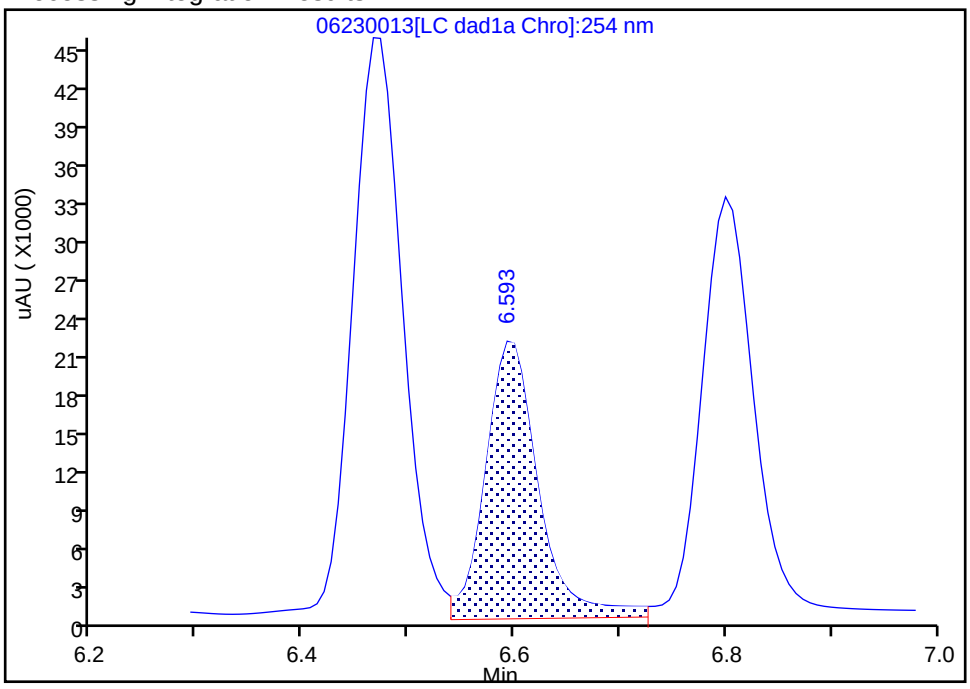
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230013.d				
Injection Date:	23-Jun-2023 18:39:49	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 7				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

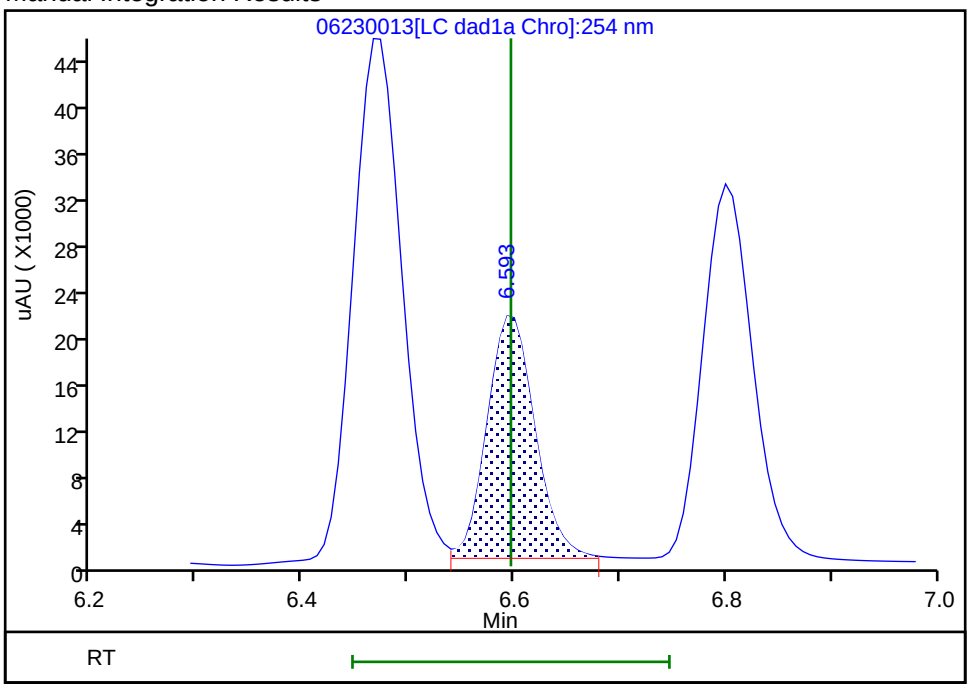
Processing Integration Results

RT: 6.59
Area: 75772
Amount: 0.790781
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 65593
Amount: 0.695907
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 19:10:13 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

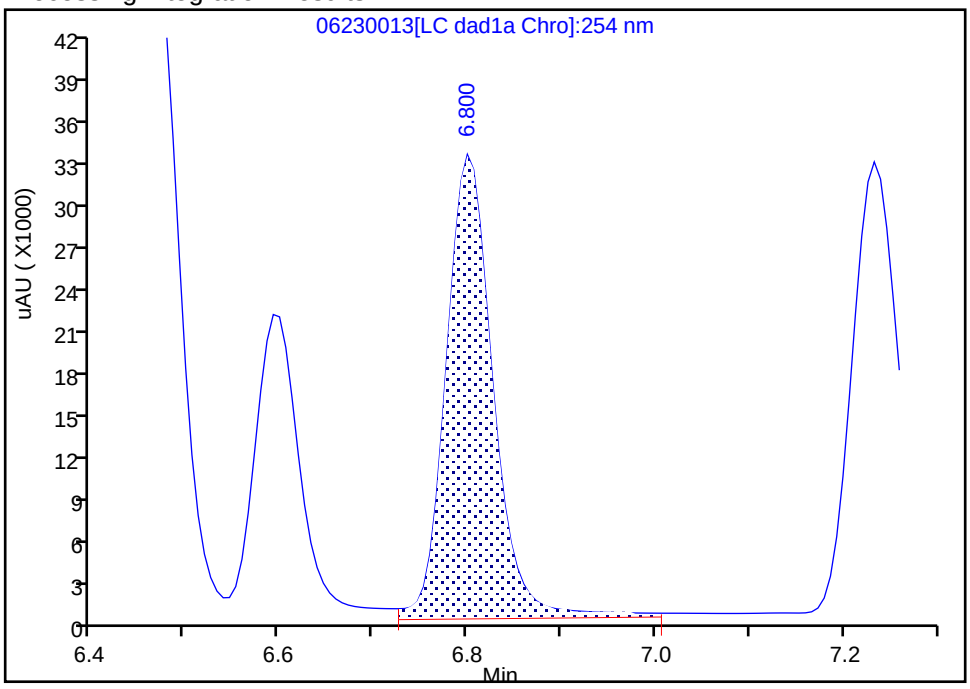
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230013.d				
Injection Date:	23-Jun-2023 18:39:49	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 7				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

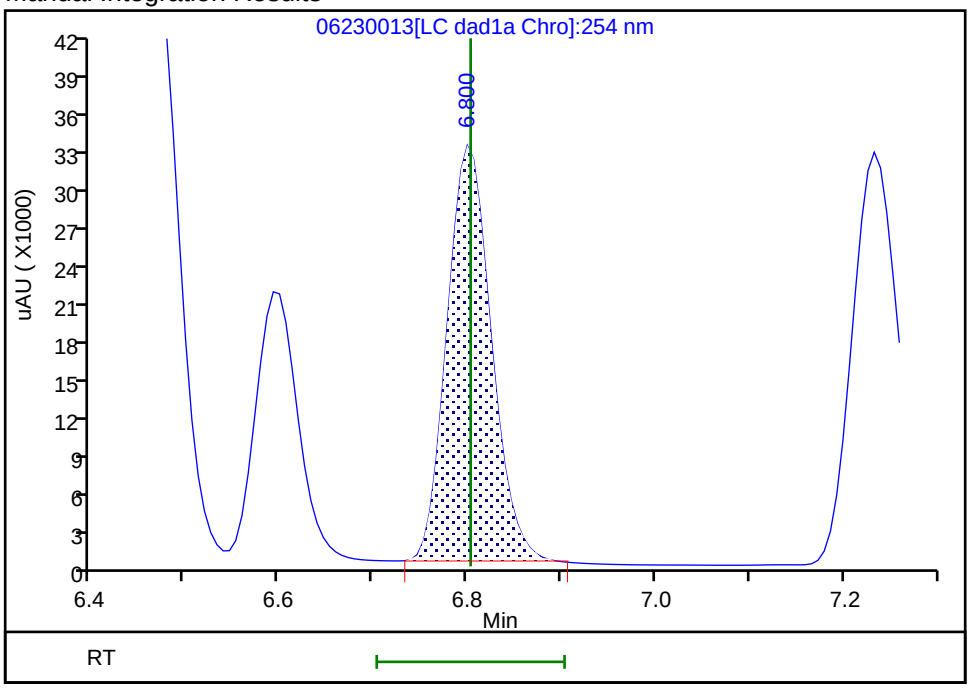
Processing Integration Results

RT: 6.80
Area: 113702
Amount: 0.773362
Amount Units: ug/mL



Manual Integration Results

RT: 6.80
Area: 104556
Amount: 0.723607
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 19:10:15 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230014.D
Lims ID: IC INT/DMT 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 23-Jun-2023 19:02:45 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/DMT 6
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 24-Jun-2023 12:55:49 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1681

First Level Reviewer: LV5D Date: 23-Jun-2023 19:38:20

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.474	6.470	0.004	76609	0.4012	0.3816	M
4 HMX	1	6.600	6.597	0.003	35849	0.4000	0.3803	M
6 DNX	1	6.807	6.803	0.004	57208	0.4004	0.3959	M
7 MNX	1	7.240	7.237	0.003	62440	0.4668	0.4502	
8 RDX	1	7.627	7.623	0.004	42514	0.4000	0.3848	
9 2,4,6-Trinitrophenol	1	8.020	8.030	-0.010	31468	0.4000	0.4041	
$ 10 1,2-Dinitrobenzene	1	8.594	8.590	0.004	50062	0.4000	0.4040	
11 1,3,5-Trinitrobenzene	1	8.714	8.710	0.004	89063	0.4000	0.4122	
12 1,3-Dinitrobenzene	1	9.340	9.336	0.004	118059	0.4000	0.4025	
13 Nitrobenzene	1	9.713	9.710	0.003	76555	0.4000	0.3973	
14 3,5-Dinitroaniline	1	9.947	9.943	0.004	90451	0.4000	0.4023	
15 Tetryl	1	10.087	10.083	0.004	67629	0.4000	0.4043	
16 Nitroglycerin	2	10.540	10.536	0.004	270481	4.00	4.18	
17 2,4,6-Trinitrotoluene	1	10.980	10.976	0.004	82972	0.4000	0.4049	
18 4-Amino-2,6-dinitrotoluene	1	11.180	11.170	0.010	59989	0.4000	0.4011	
19 2-Amino-4,6-dinitrotoluene	1	11.433	11.423	0.010	77156	0.4000	0.3983	
20 2,6-Dinitrotoluene	1	11.587	11.576	0.011	57368	0.4000	0.4022	
21 2,4-Dinitrotoluene	1	11.753	11.743	0.010	118425	0.4000	0.4005	
22 o-Nitrotoluene	1	12.587	12.570	0.017	49671	0.4000	0.3938	
23 p-Nitrotoluene	1	13.007	12.983	0.024	42626	0.4000	0.3872	
24 m-Nitrotoluene	1	13.580	13.556	0.024	54401	0.4000	0.3974	
25 PETN	2	14.760	14.723	0.037	290067	4.00	4.03	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00077	Amount Added:	40.00	Units: uL
8330 DMT_00013	Amount Added:	20.00	Units: uL

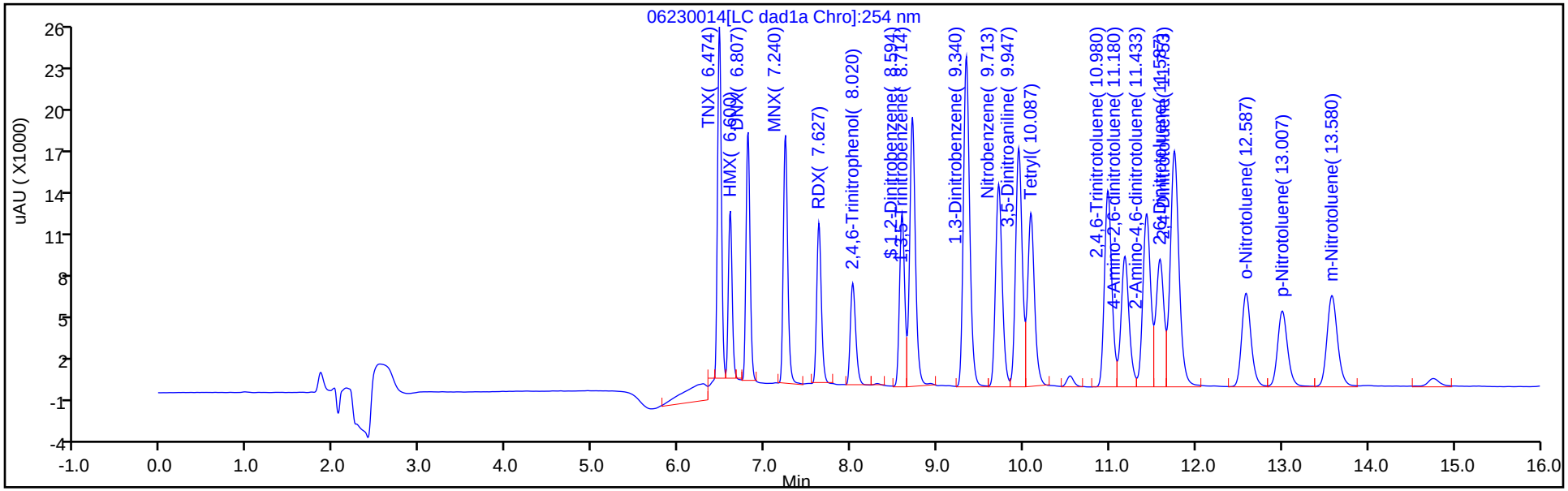
Report Date: 24-Jun-2023 12:55:49 Chrom Revision: 2.3 05-Jun-2023 19:02:10

Eurofins Denver

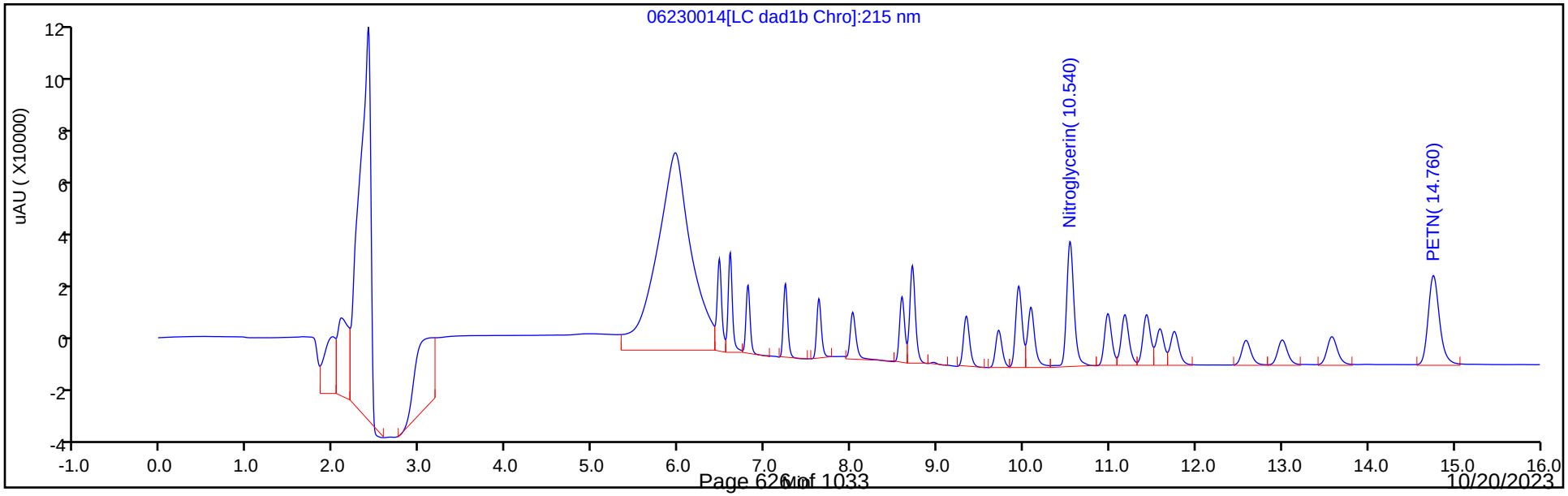
Data File: \\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230014.d

Injection Date:	23-Jun-2023 19:02:45	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	IC INT/DMT 6			Worklist Smp#:	14
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



10/20/2023
4:00 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

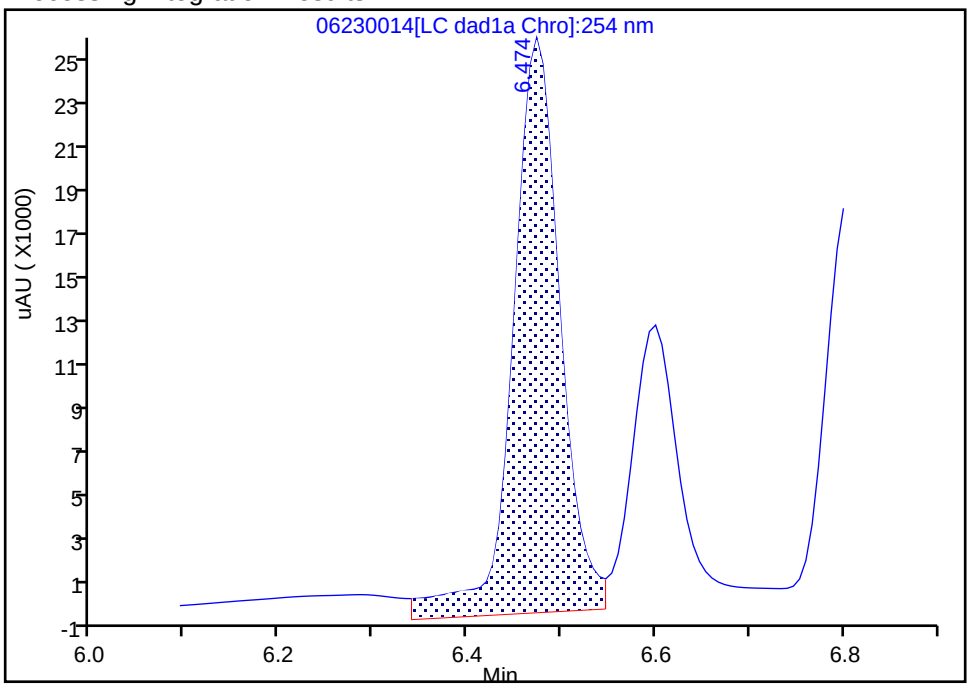
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230014.d				
Injection Date:	23-Jun-2023 19:02:45	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 6				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

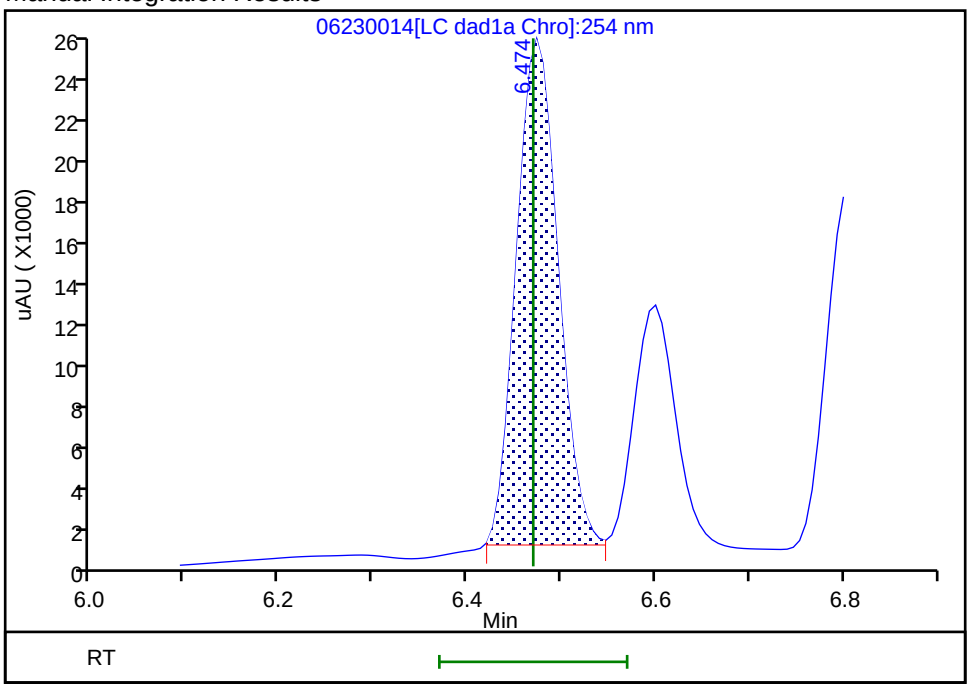
Processing Integration Results

RT: 6.47
Area: 91599
Amount: 0.456417
Amount Units: ug/mL



Manual Integration Results

RT: 6.47
Area: 76609
Amount: 0.381593
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 19:38:09 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

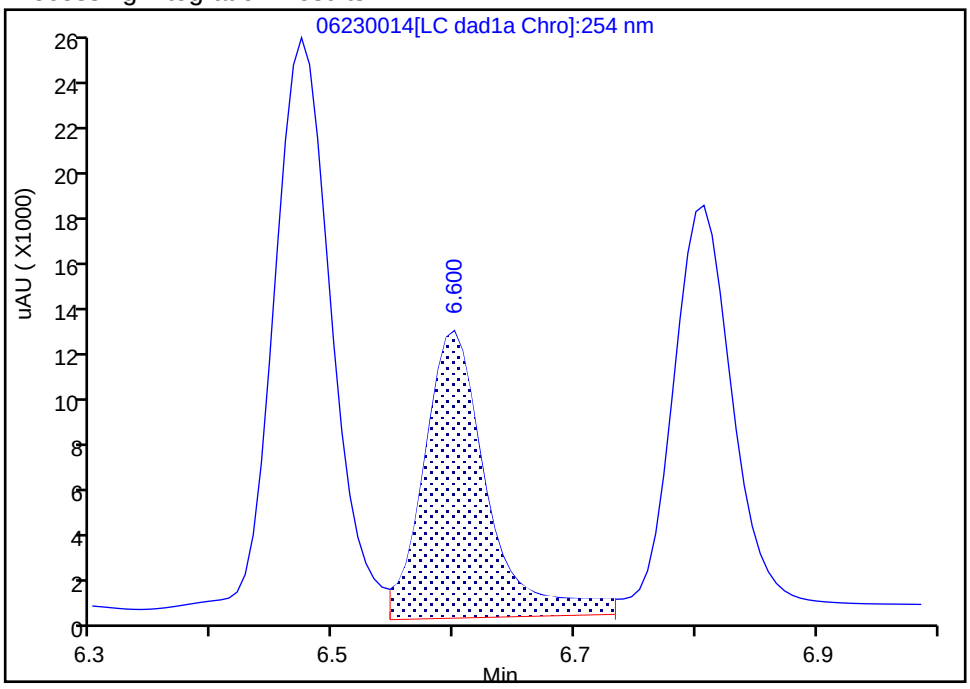
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230014.d				
Injection Date:	23-Jun-2023 19:02:45	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 6				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

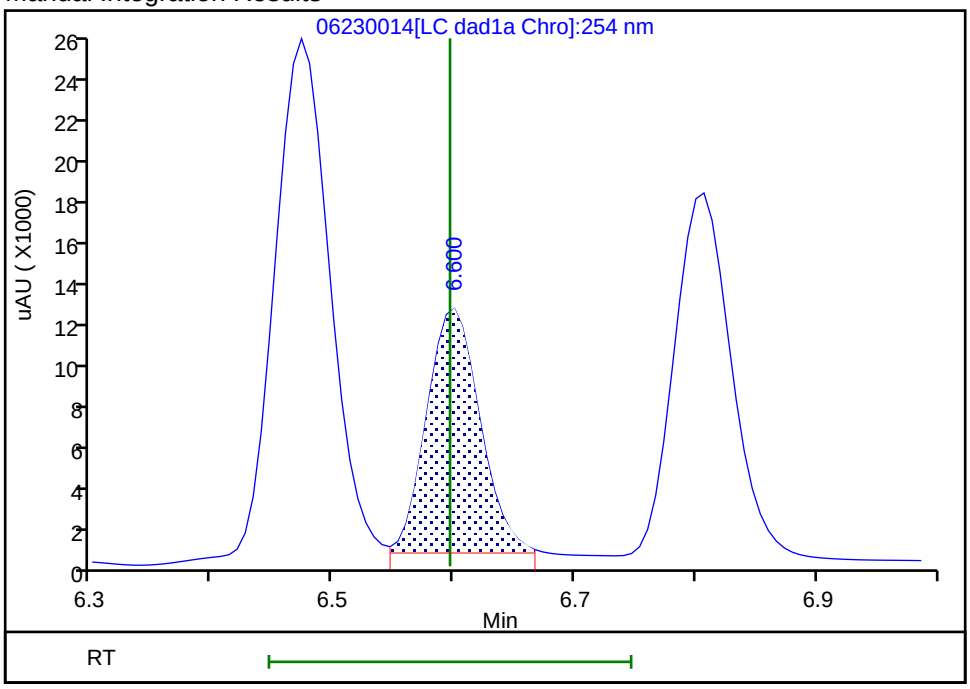
Processing Integration Results

RT: 6.60
Area: 46317
Amount: 0.478320
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 35849
Amount: 0.380339
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 19:38:10 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

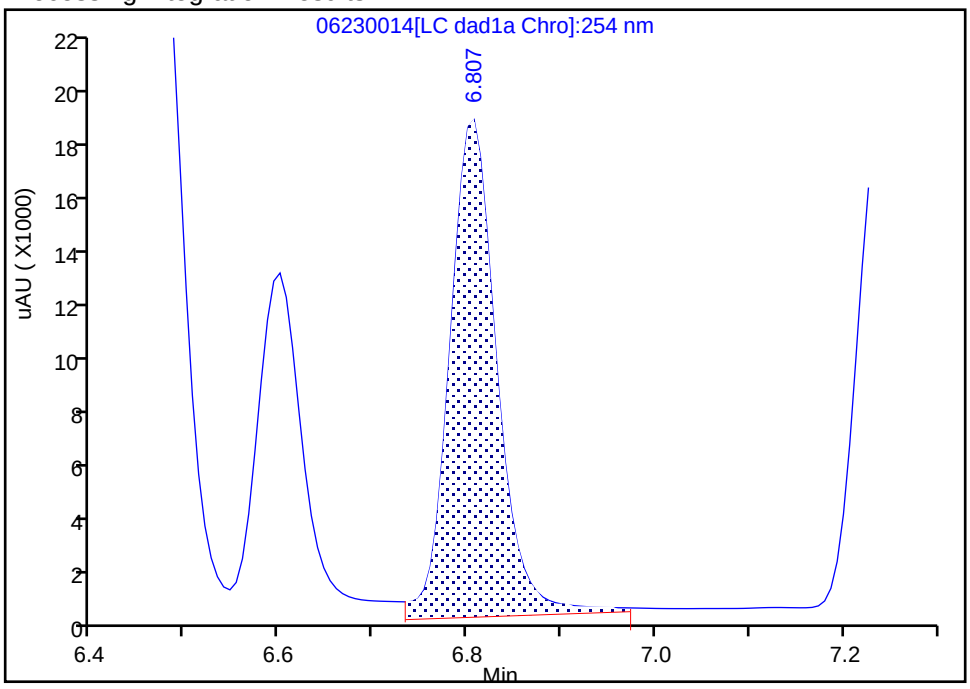
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230014.d				
Injection Date:	23-Jun-2023 19:02:45	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 6				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

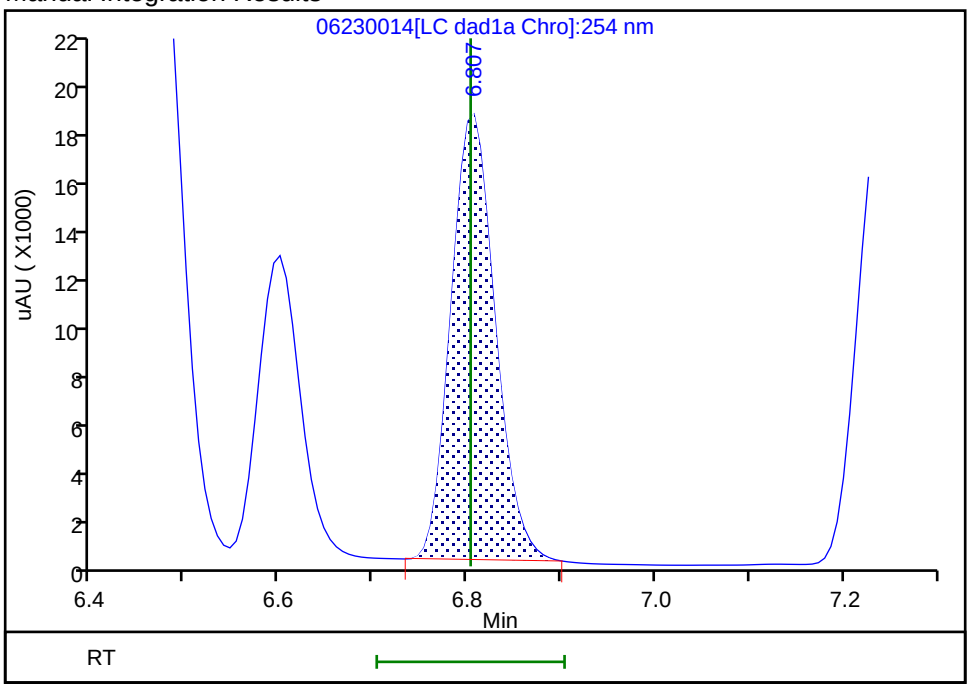
Processing Integration Results

RT: 6.81
Area: 63610
Amount: 0.433034
Amount Units: ug/mL



Manual Integration Results

RT: 6.81
Area: 57208
Amount: 0.395923
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 19:38:16 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230015.D
Lims ID: IC INT/DMT 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 23-Jun-2023 19:25:40 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/DMT 5
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 24-Jun-2023 12:55:49 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1681

First Level Reviewer: LV5D Date: 23-Jun-2023 20:05:56

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.478	6.470	0.008	49970	0.2508	0.2489	M
4 HMX	1	6.598	6.597	0.001	23321	0.2500	0.2474	M
6 DNX	1	6.805	6.803	0.002	36397	0.2503	0.2519	M
7 MNX	1	7.238	7.237	0.001	39495	0.2918	0.2848	
8 RDX	1	7.625	7.623	0.002	27039	0.2500	0.2447	
9 2,4,6-Trinitrophenol	1	8.025	8.030	-0.005	19262	0.2500	0.2474	
$ 10 1,2-Dinitrobenzene	1	8.591	8.590	0.001	31068	0.2500	0.2507	
11 1,3,5-Trinitrobenzene	1	8.711	8.710	0.001	55138	0.2500	0.2552	
12 1,3-Dinitrobenzene	1	9.338	9.336	0.002	73356	0.2500	0.2501	
13 Nitrobenzene	1	9.711	9.710	0.001	47571	0.2500	0.2469	
14 3,5-Dinitroaniline	1	9.945	9.943	0.002	55971	0.2500	0.2491	
15 Tetryl	1	10.085	10.083	0.002	42107	0.2500	0.2518	
16 Nitroglycerin	2	10.545	10.536	0.009	161167	2.50	2.49	
17 2,4,6-Trinitrotoluene	1	10.985	10.976	0.009	51584	0.2500	0.2517	
18 4-Amino-2,6-dinitrotoluene	1	11.178	11.170	0.008	36921	0.2500	0.2469	
19 2-Amino-4,6-dinitrotoluene	1	11.431	11.423	0.008	48118	0.2500	0.2484	
20 2,6-Dinitrotoluene	1	11.585	11.576	0.009	35503	0.2500	0.2489	
21 2,4-Dinitrotoluene	1	11.758	11.743	0.015	73049	0.2500	0.2470	
22 o-Nitrotoluene	1	12.585	12.570	0.015	30758	0.2500	0.2439	
23 p-Nitrotoluene	1	13.011	12.983	0.028	26234	0.2500	0.2383	
24 m-Nitrotoluene	1	13.585	13.556	0.029	33854	0.2500	0.2458	
25 PETN	2	14.765	14.723	0.042	179178	2.50	2.49	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00077	Amount Added:	25.00	Units: uL
8330 DMT_00013	Amount Added:	12.50	Units: uL

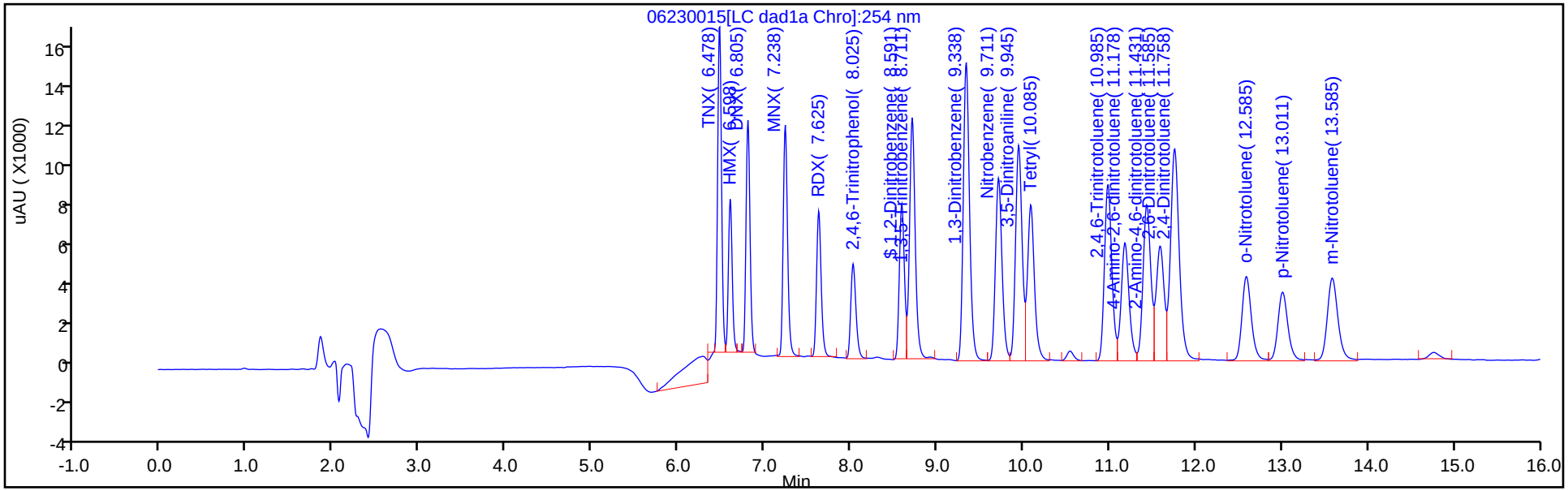
Report Date: 24-Jun-2023 12:55:49 Chrom Revision: 2.3 05-Jun-2023 19:02:10

Eurofins Denver

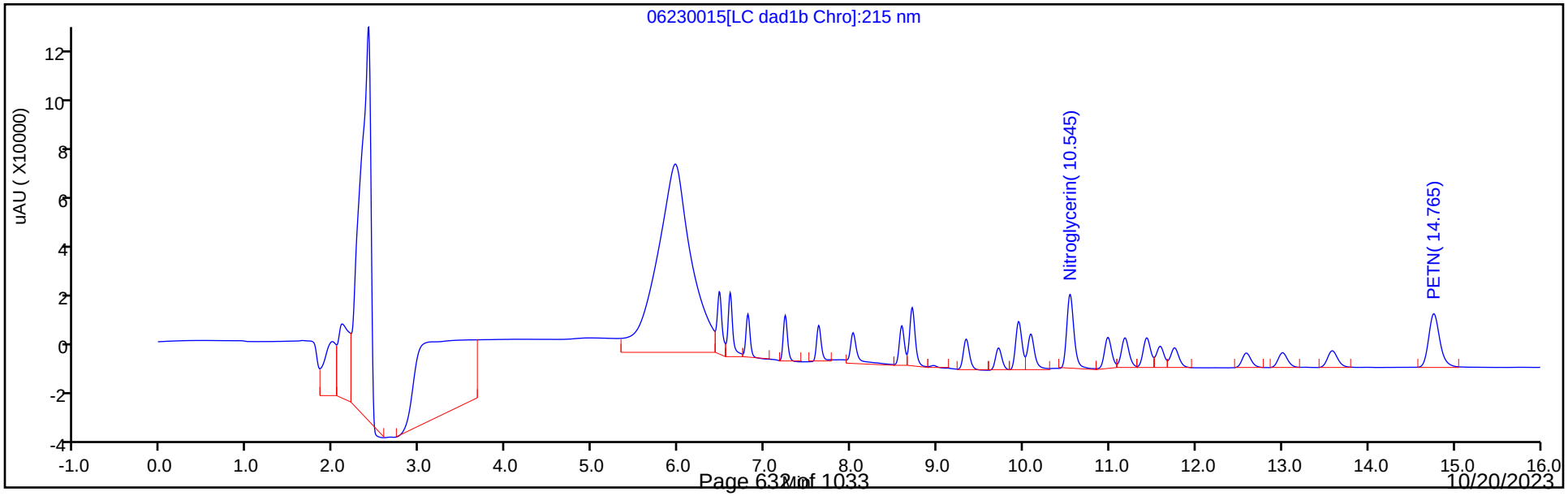
Data File: \\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230015.d

Injection Date:	23-Jun-2023 19:25:40	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	IC INT/DMT 5			Worklist Smp#:	15
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



10/20/2023
4:00 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

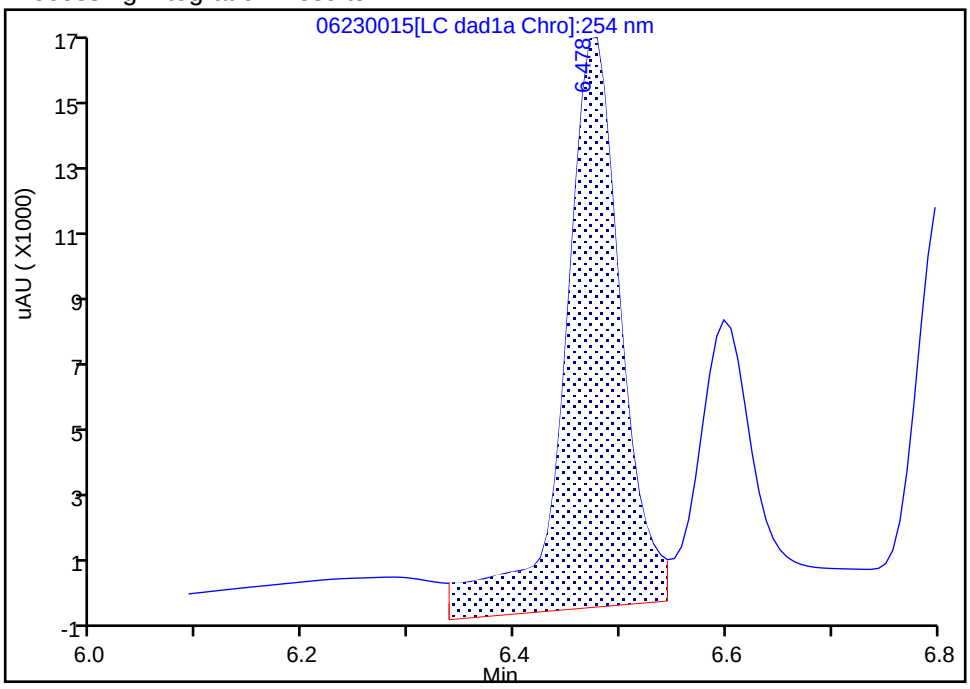
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230015.d				
Injection Date:	23-Jun-2023 19:25:40	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 5				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

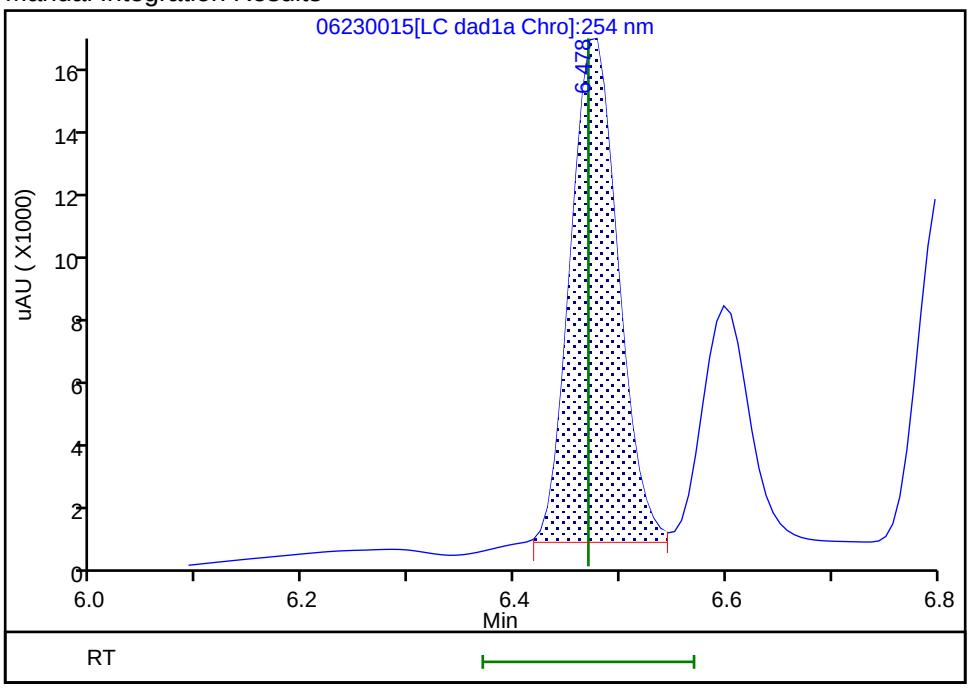
Processing Integration Results

RT: 6.48
Area: 64305
Amount: 0.315734
Amount Units: ug/mL



Manual Integration Results

RT: 6.48
Area: 49970
Amount: 0.248903
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 20:05:50 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

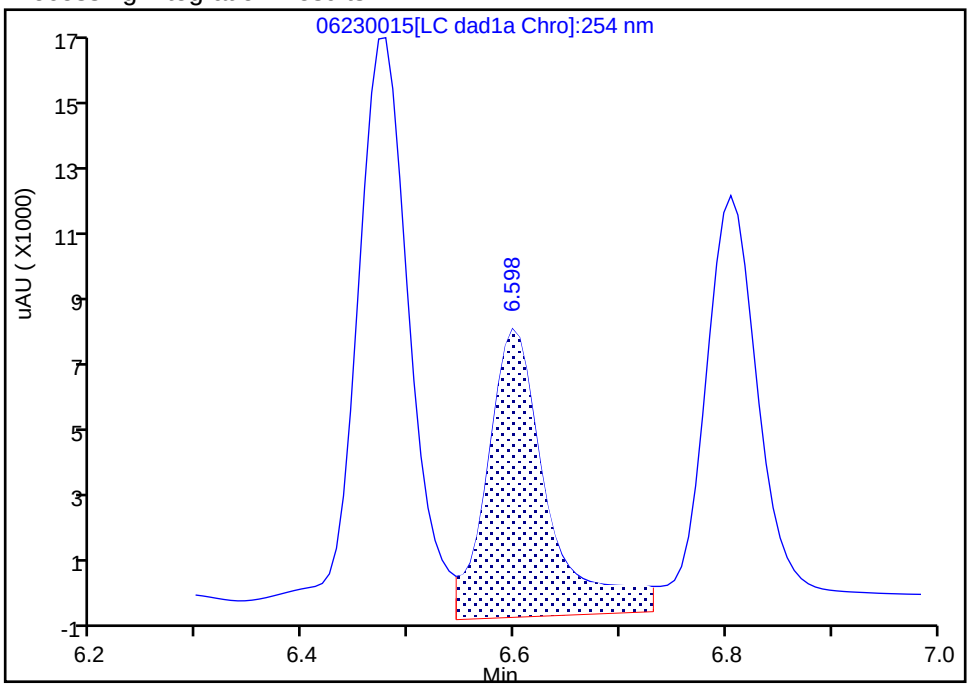
Data File: \\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230015.d
Injection Date: 23-Jun-2023 19:25:40 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 5
Client ID:
Operator ID: JZ/JG ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

4 HMX, CAS: 2691-41-0

Signal: 1

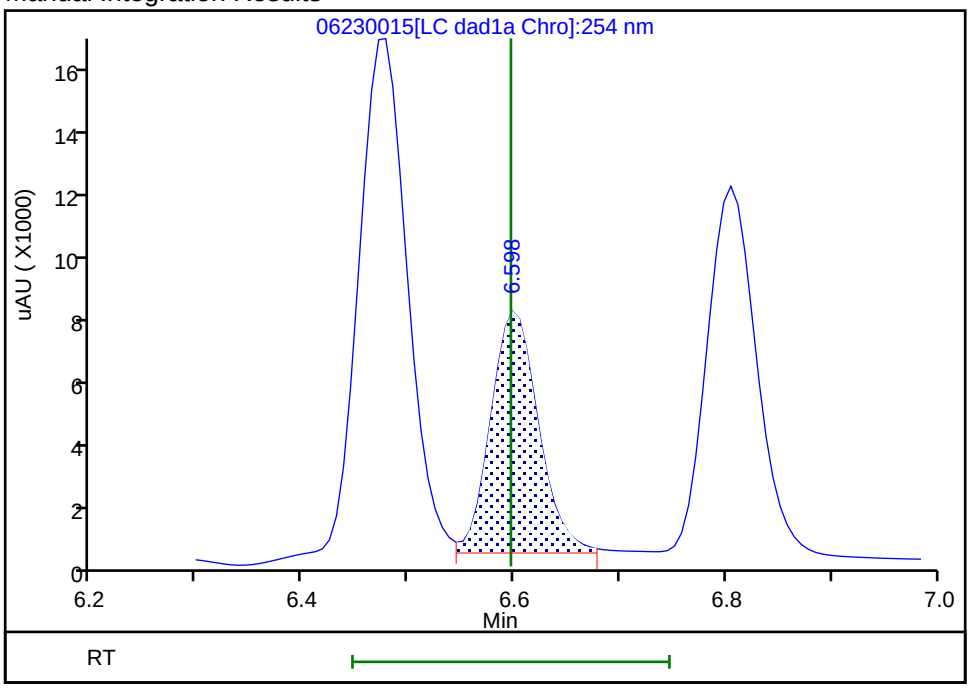
Processing Integration Results

RT: 6.60
Area: 32748
Amount: 0.334028
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 23321
Amount: 0.247424
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 20:05:51 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Eurofins Denver

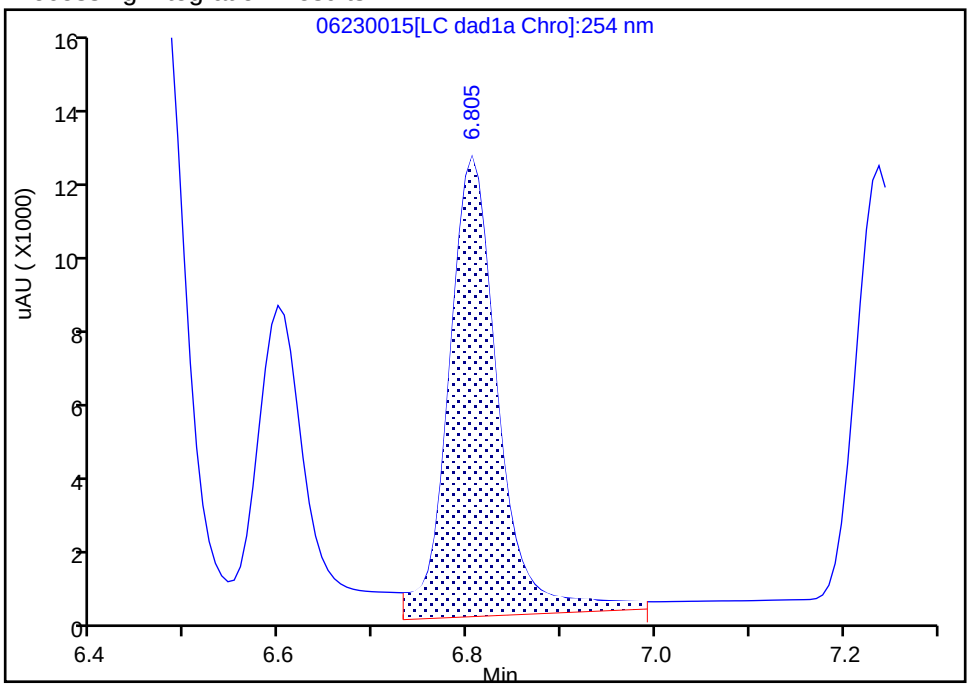
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230015.d				
Injection Date:	23-Jun-2023 19:25:40	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 5				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

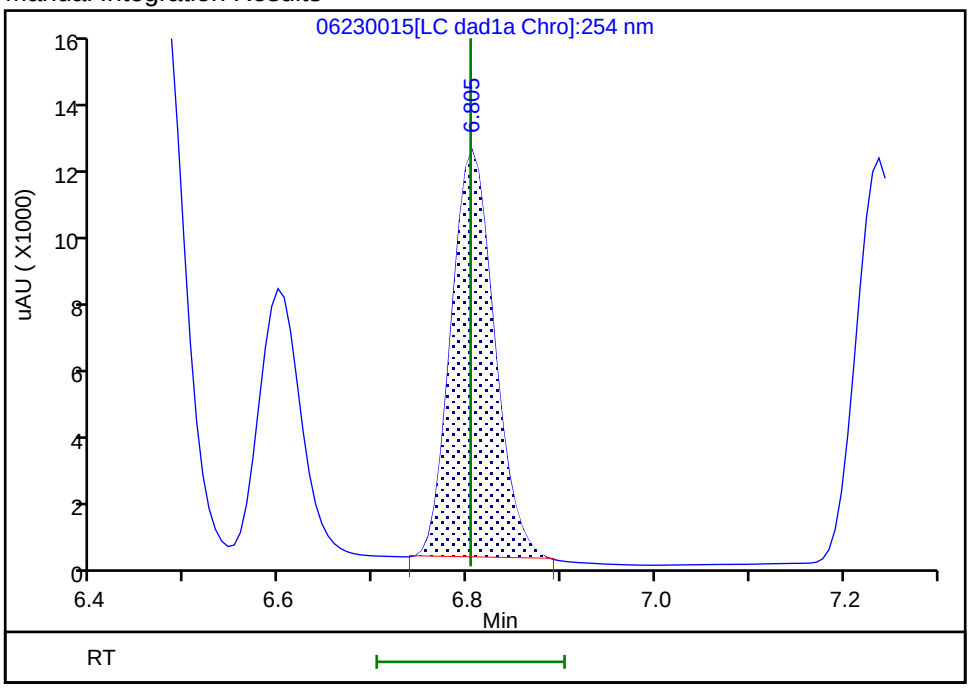
Processing Integration Results

RT: 6.80
Area: 43745
Amount: 0.293331
Amount Units: ug/mL



Manual Integration Results

RT: 6.80
Area: 36397
Amount: 0.251895
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 20:05:53 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230016.D
Lims ID: IC INT/DMT 4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 23-Jun-2023 19:48:35 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/DMT 4
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 24-Jun-2023 12:55:50 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1681

First Level Reviewer: LV5D Date: 23-Jun-2023 20:36:30

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.470	6.470	0.000	20003	0.1003	0.0996	M
4 HMX	1	6.597	6.597	0.000	9201	0.1000	0.0976	M
6 DNX	1	6.803	6.803	0.000	14726	0.1001	0.1019	M
7 MNX	1	7.237	7.237	0.000	16173	0.1167	0.1166	
8 RDX	1	7.623	7.623	0.000	11457	0.1000	0.1037	
9 2,4,6-Trinitrophenol	1	8.030	8.030	0.000	7951	0.1000	0.1021	
$ 10 1,2-Dinitrobenzene	1	8.590	8.590	0.000	12783	0.1000	0.1032	
11 1,3,5-Trinitrobenzene	1	8.710	8.710	0.000	21684	0.1000	0.1004	
12 1,3-Dinitrobenzene	1	9.336	9.336	0.000	29890	0.1000	0.1019	
13 Nitrobenzene	1	9.710	9.710	0.000	19309	0.1000	0.1002	
14 3,5-Dinitroaniline	1	9.943	9.943	0.000	22486	0.1000	0.1004	
15 Tetryl	1	10.083	10.083	0.000	16961	0.1000	0.1014	
16 Nitroglycerin	2	10.536	10.536	0.000	65270	1.00	1.01	
17 2,4,6-Trinitrotoluene	1	10.976	10.976	0.000	20907	0.1000	0.1020	
18 4-Amino-2,6-dinitrotoluene	1	11.170	11.170	0.000	15058	0.1000	0.1007	
19 2-Amino-4,6-dinitrotoluene	1	11.423	11.423	0.000	19302	0.1000	0.0996	
20 2,6-Dinitrotoluene	1	11.576	11.576	0.000	14495	0.1000	0.1016	
21 2,4-Dinitrotoluene	1	11.743	11.743	0.000	29811	0.1000	0.1008	
22 o-Nitrotoluene	1	12.570	12.570	0.000	12912	0.1000	0.1024	
23 p-Nitrotoluene	1	12.983	12.983	0.000	11057	0.1000	0.1004	
24 m-Nitrotoluene	1	13.556	13.556	0.000	14001	0.1000	0.0993	
25 PETN	2	14.723	14.723	0.000	72200	1.00	1.00	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00077	Amount Added:	10.00	Units: uL
8330 DMT_00013	Amount Added:	5.00	Units: uL

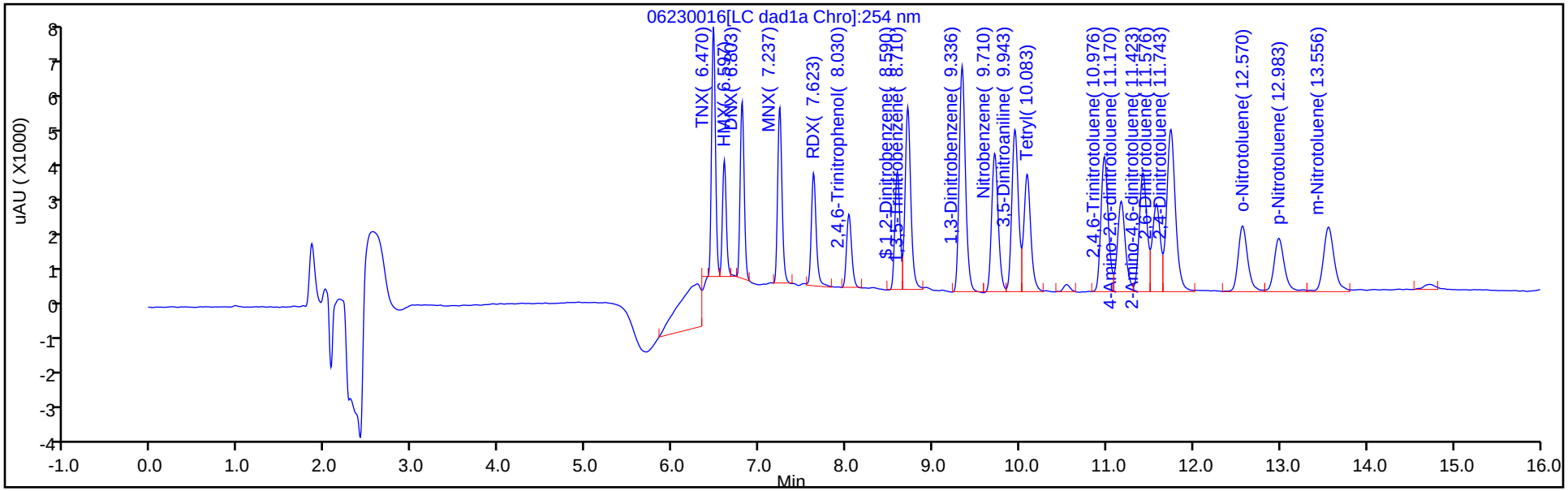
Report Date: 24-Jun-2023 12:55:50 Chrom Revision: 2.3 05-Jun-2023 19:02:10

Eurofins Denver

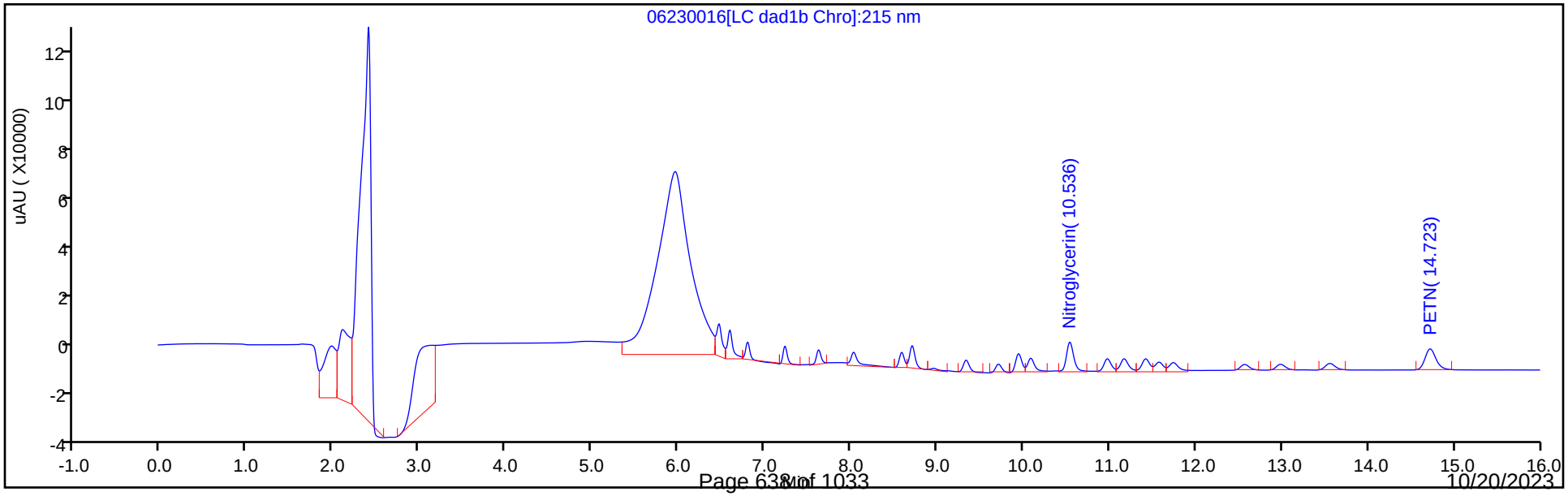
Data File: \\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230016.d

Injection Date:	23-Jun-2023 19:48:35	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	IC INT/DMT 4			Worklist Smp#:	16
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



10/20/2023
4:00 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

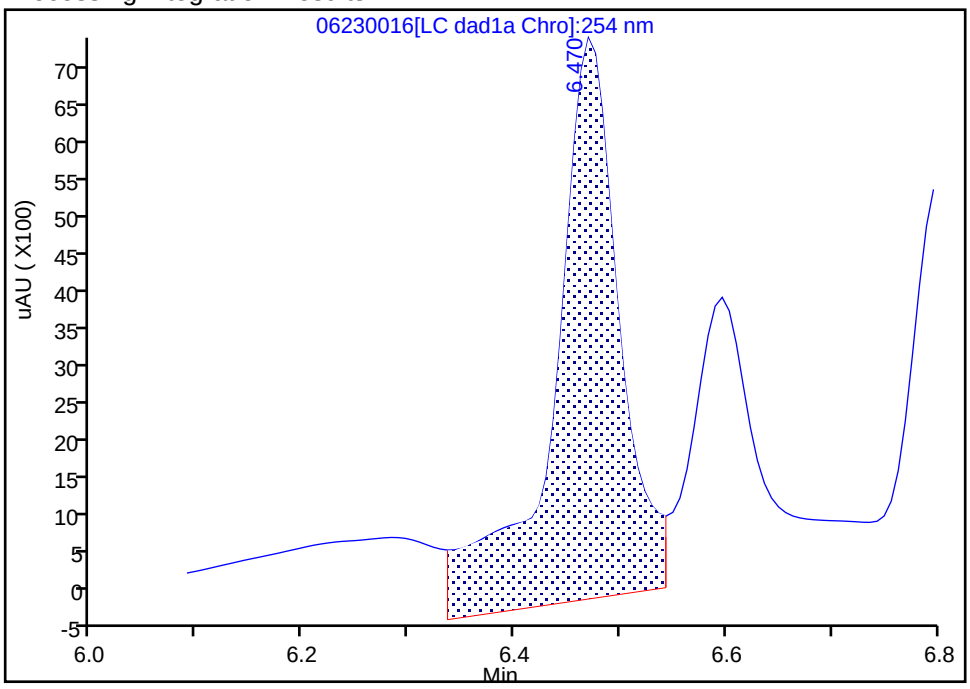
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230016.d				
Injection Date:	23-Jun-2023 19:48:35	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 4				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

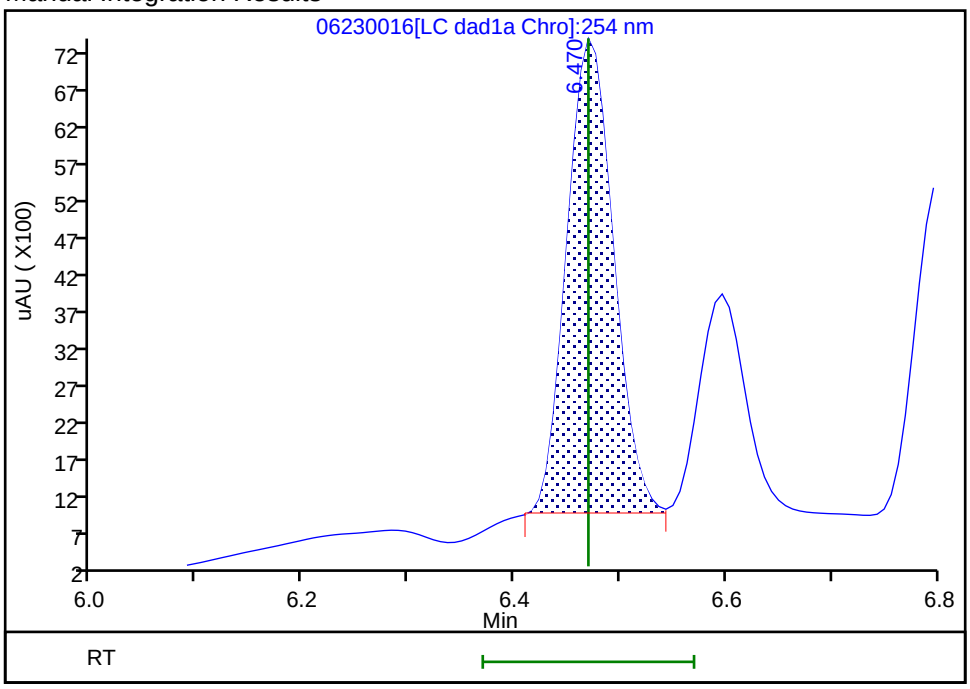
Processing Integration Results

RT: 6.47
Area: 32992
Amount: 0.149030
Amount Units: ug/mL



Manual Integration Results

RT: 6.47
Area: 20003
Amount: 0.099636
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 20:36:24 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

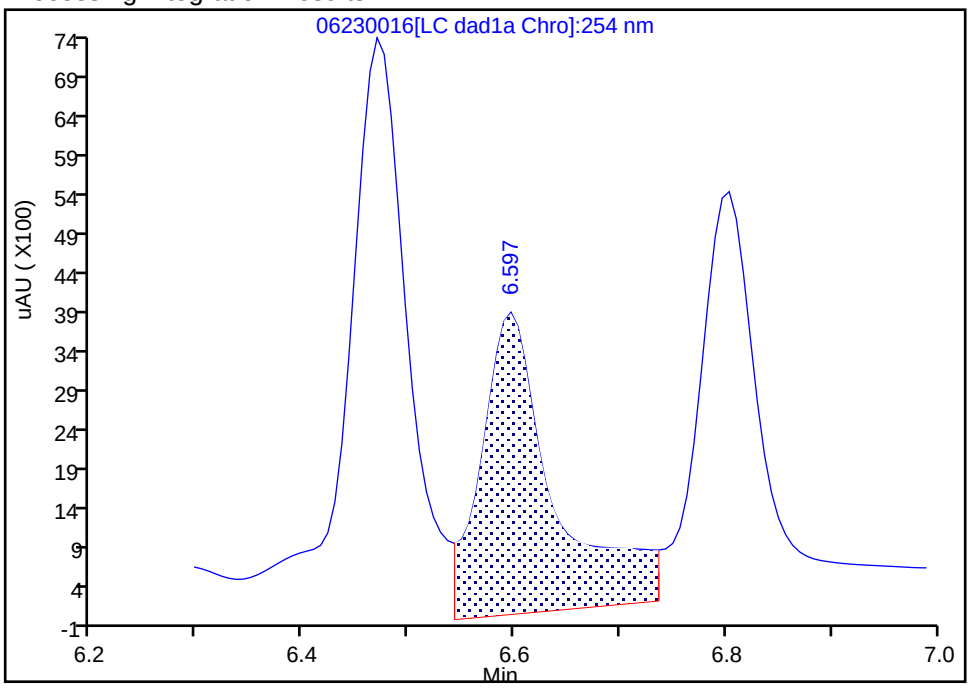
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230016.d				
Injection Date:	23-Jun-2023 19:48:35	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 4				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

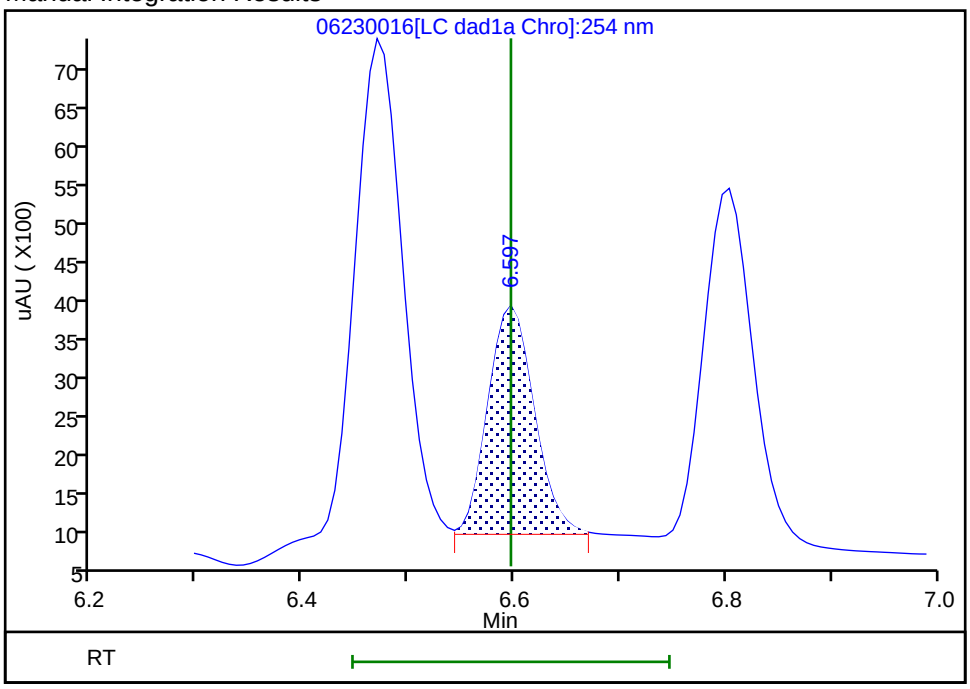
Processing Integration Results

RT: 6.60
Area: 18398
Amount: 0.150991
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 9201
Amount: 0.097618
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 20:36:25 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

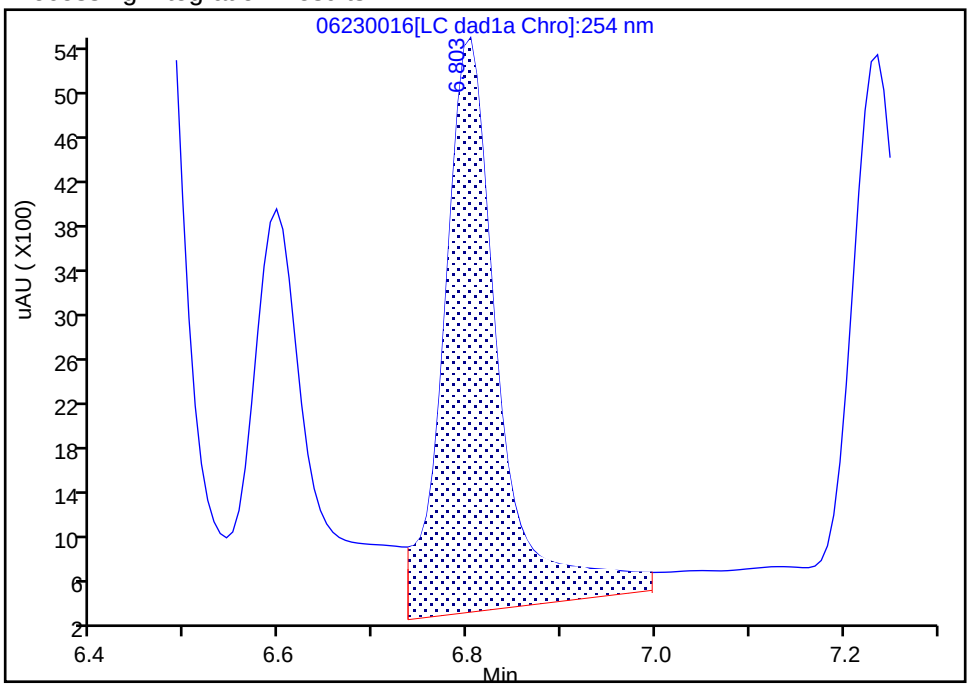
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230016.d				
Injection Date:	23-Jun-2023 19:48:35	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 4				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

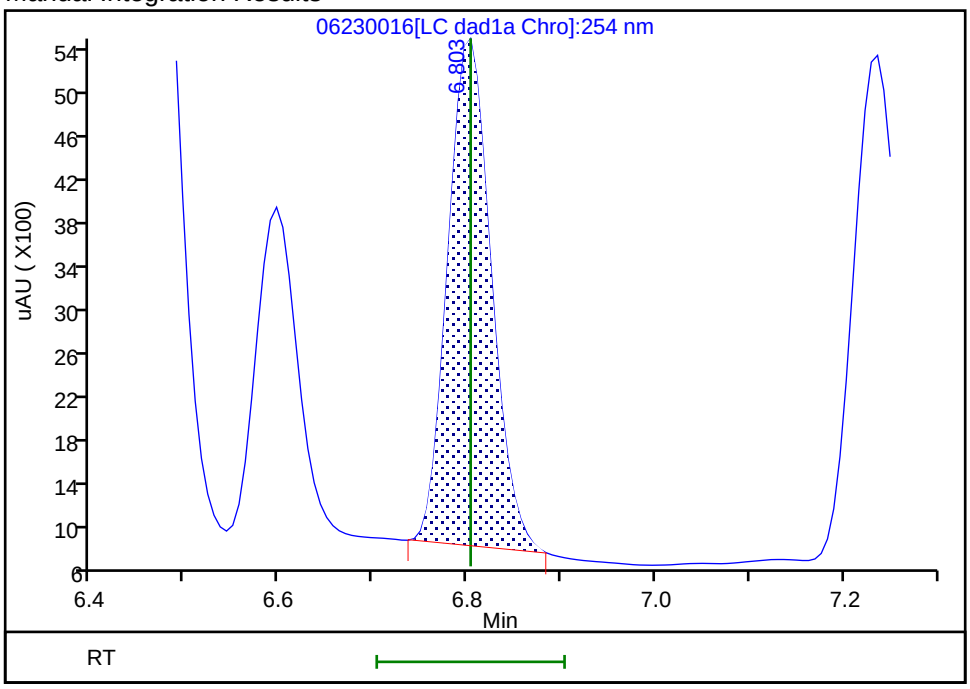
Processing Integration Results

RT: 6.80
Area: 21037
Amount: 0.133837
Amount Units: ug/mL



Manual Integration Results

RT: 6.80
Area: 14726
Amount: 0.101915
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 20:36:28 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230017.D
Lims ID: IC INT/DMT 3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 23-Jun-2023 20:11:32 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/DMT 3
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 24-Jun-2023 12:55:50 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1681

First Level Reviewer: LV5D Date: 23-Jun-2023 20:36:49

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.472	6.470	0.002	9975	0.0502	0.0497	M
4 HMX	1	6.598	6.597	0.001	4496	0.0500	0.0477	M
6 DNX	1	6.798	6.803	-0.005	7299	0.0501	0.0505	M
7 MNX	1	7.232	7.237	-0.005	8151	0.0584	0.0588	
8 RDX	1	7.625	7.623	0.002	5472	0.0500	0.0495	
9 2,4,6-Trinitrophenol	1	8.032	8.030	0.002	3979	0.0500	0.0511	
$ 10 1,2-Dinitrobenzene	1	8.585	8.590	-0.005	6250	0.0500	0.0504	
11 1,3,5-Trinitrobenzene	1	8.712	8.710	0.002	10805	0.0500	0.0500	
12 1,3-Dinitrobenzene	1	9.338	9.336	0.002	14684	0.0500	0.0501	
13 Nitrobenzene	1	9.711	9.710	0.001	9561	0.0500	0.0496	
14 3,5-Dinitroaniline	1	9.945	9.943	0.002	11168	0.0500	0.0502	
15 Tetryl	1	10.085	10.083	0.002	8232	0.0500	0.0492	
16 Nitroglycerin	2	10.538	10.536	0.002	31254	0.5000	0.4834	
17 2,4,6-Trinitrotoluene	1	10.978	10.976	0.002	10269	0.0500	0.0501	
18 4-Amino-2,6-dinitrotoluene	1	11.178	11.170	0.008	7431	0.0500	0.0497	
19 2-Amino-4,6-dinitrotoluene	1	11.431	11.423	0.008	9604	0.0500	0.0496	
20 2,6-Dinitrotoluene	1	11.585	11.576	0.009	7160	0.0500	0.0502	
21 2,4-Dinitrotoluene	1	11.751	11.743	0.008	14800	0.0500	0.0500	
22 o-Nitrotoluene	1	12.585	12.570	0.015	6403	0.0500	0.0508	
23 p-Nitrotoluene	1	13.005	12.983	0.022	5543	0.0500	0.0504	
24 m-Nitrotoluene	1	13.578	13.556	0.022	7282	0.0500	0.0498	
25 PETN	2	14.751	14.723	0.028	35921	0.5000	0.4988	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00077	Amount Added:	5.00	Units: uL
8330 DMT_00013	Amount Added:	2.50	Units: uL

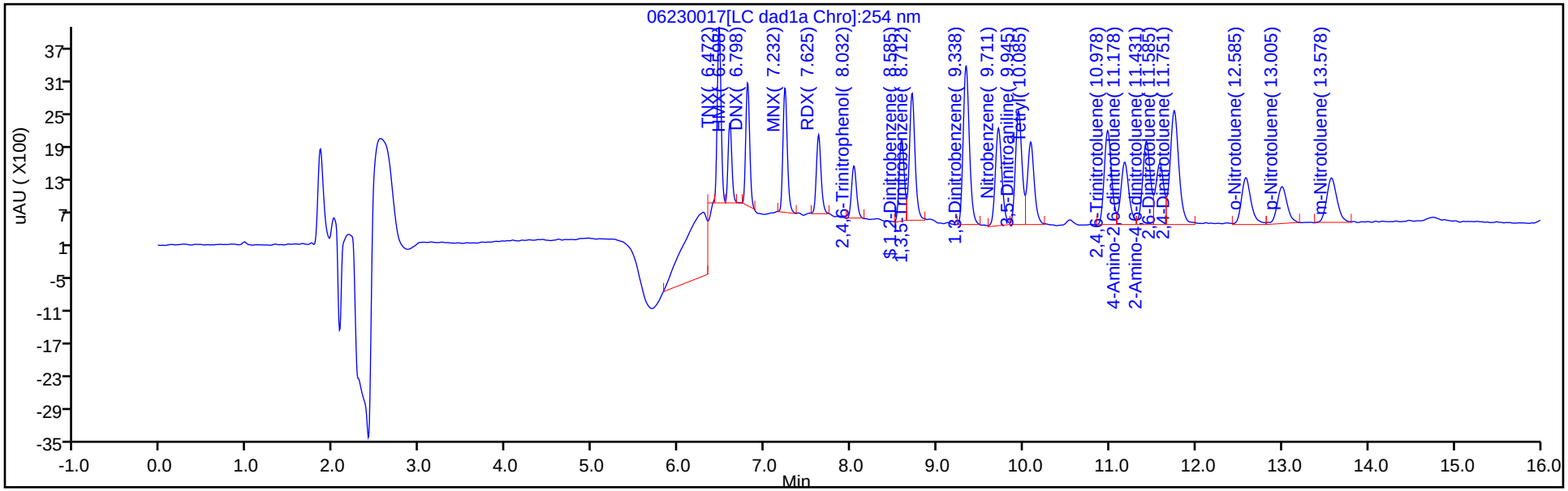
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Eurofins Denver

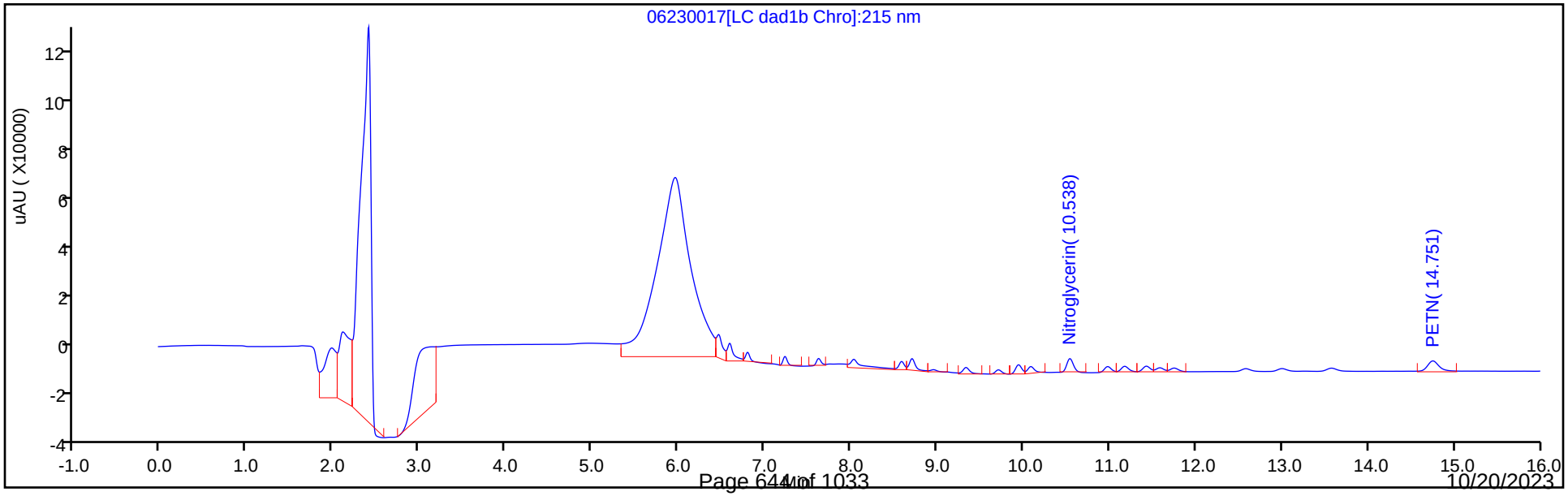
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Injection Date:	23-Jun-2023 20:11:32	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	IC INT/DMT 3			Worklist Smp#:	17
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



10/20/2023
4:00 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

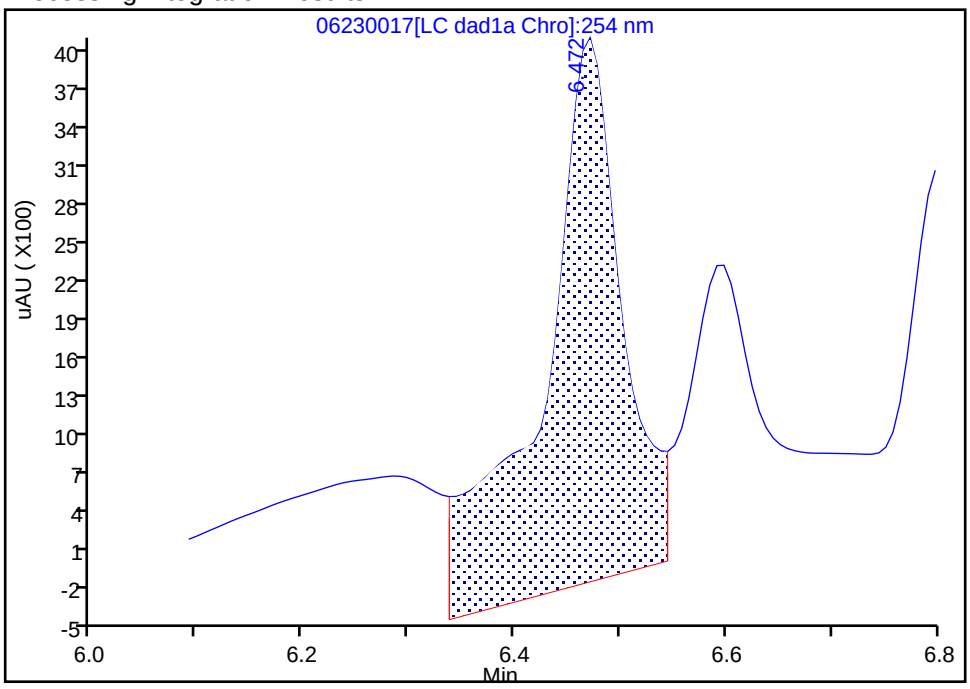
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230017.d				
Injection Date:	23-Jun-2023 20:11:32	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 3				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

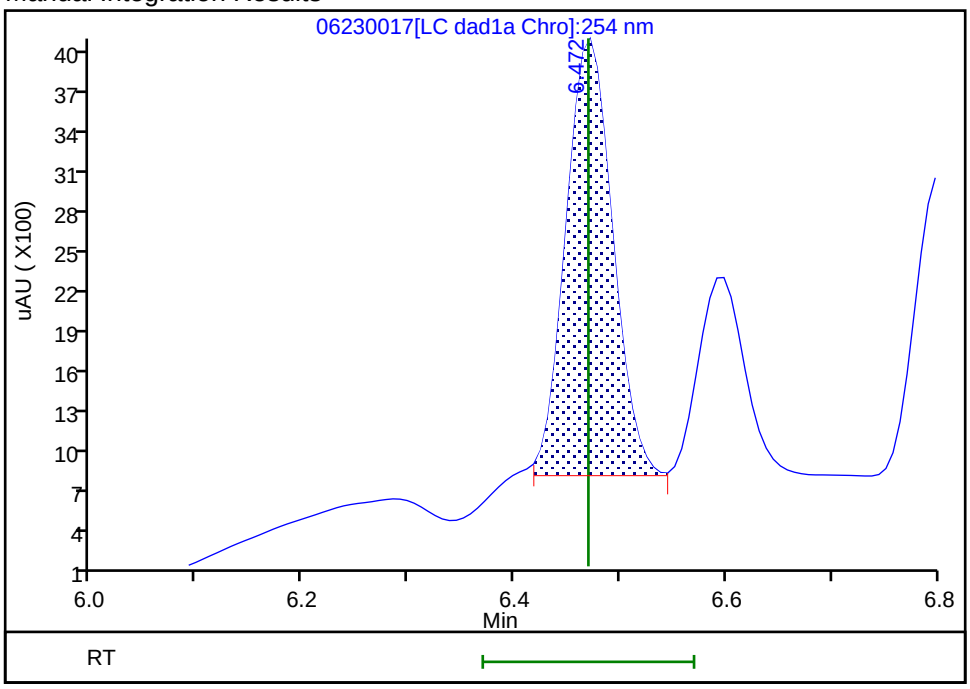
Processing Integration Results

RT: 6.47
Area: 22565
Amount: 0.100036
Amount Units: ug/mL



Manual Integration Results

RT: 6.47
Area: 9975
Amount: 0.049686
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 20:36:36 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

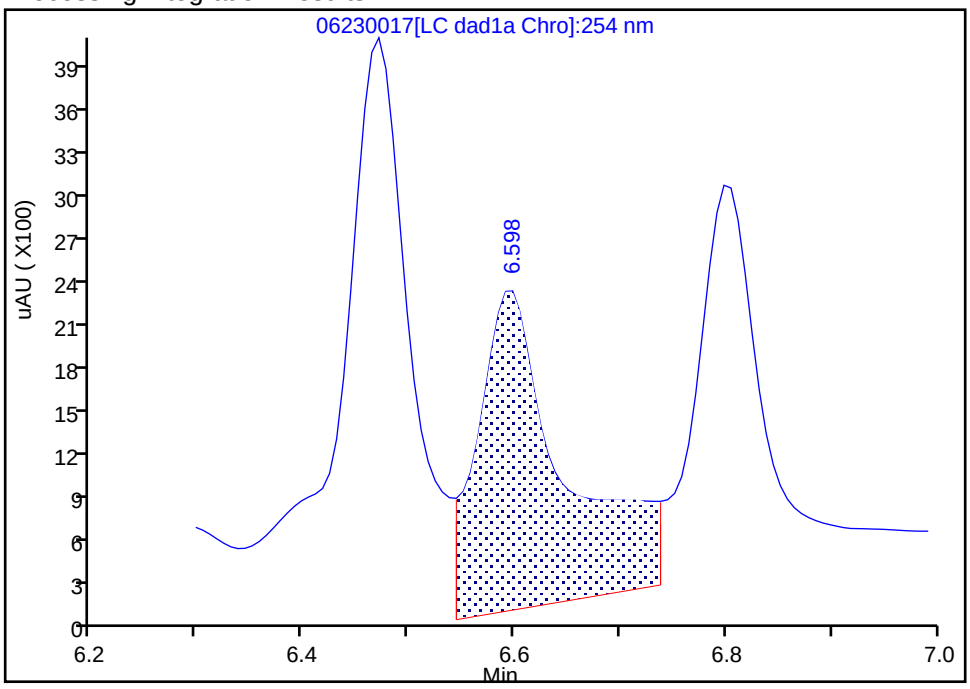
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Lims ID:	IC INT/DMT 3				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

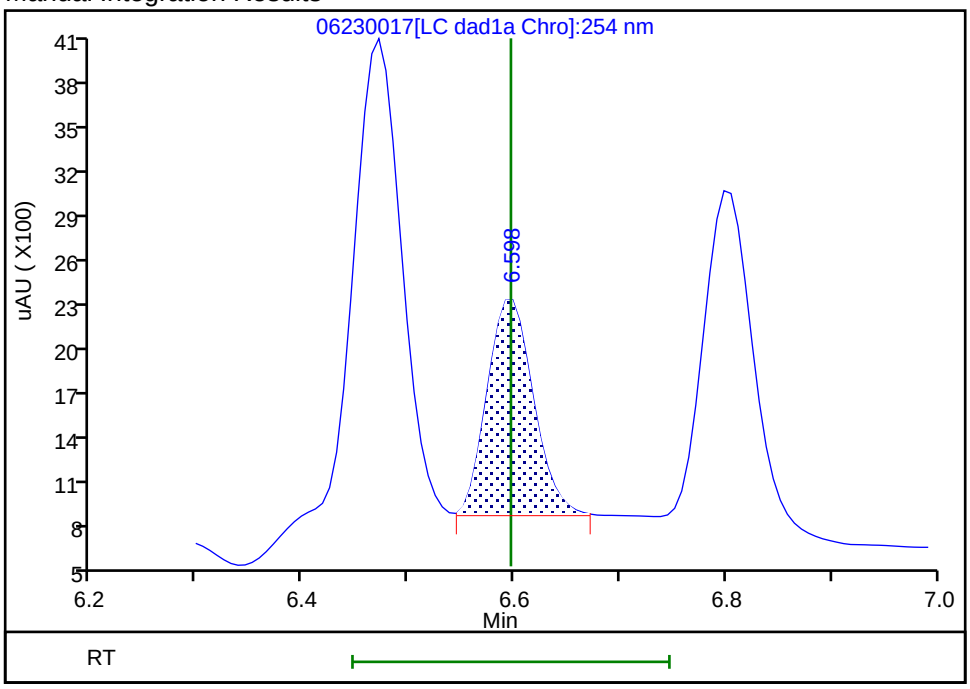
Processing Integration Results

RT: 6.60
Area: 12742
Amount: 0.114145
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 4496
Amount: 0.047700
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 20:36:38 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

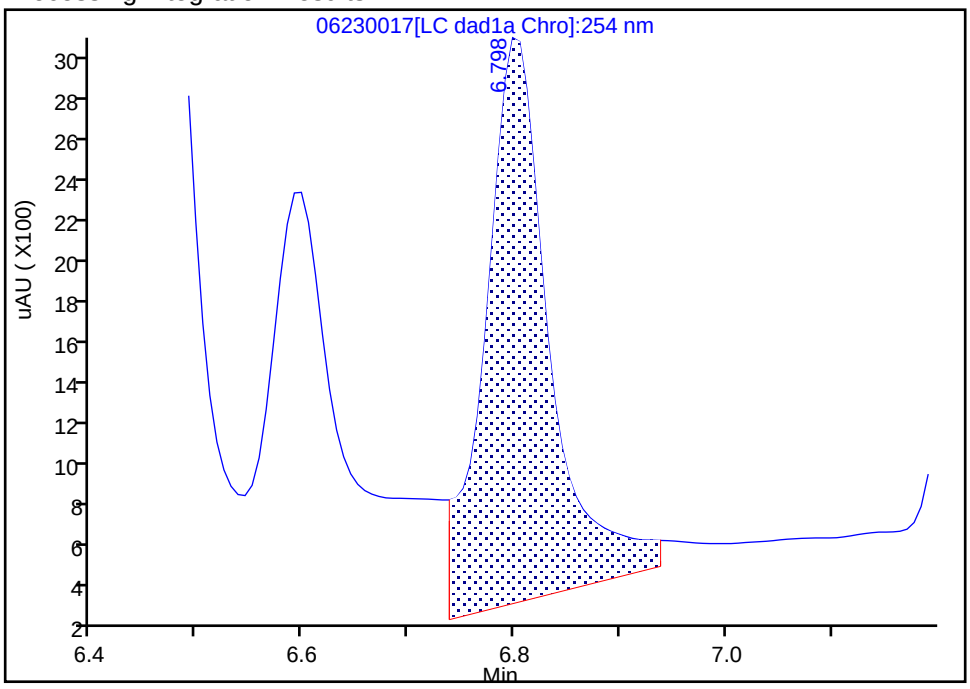
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230017.d				
Injection Date:	23-Jun-2023 20:11:32	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 3				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

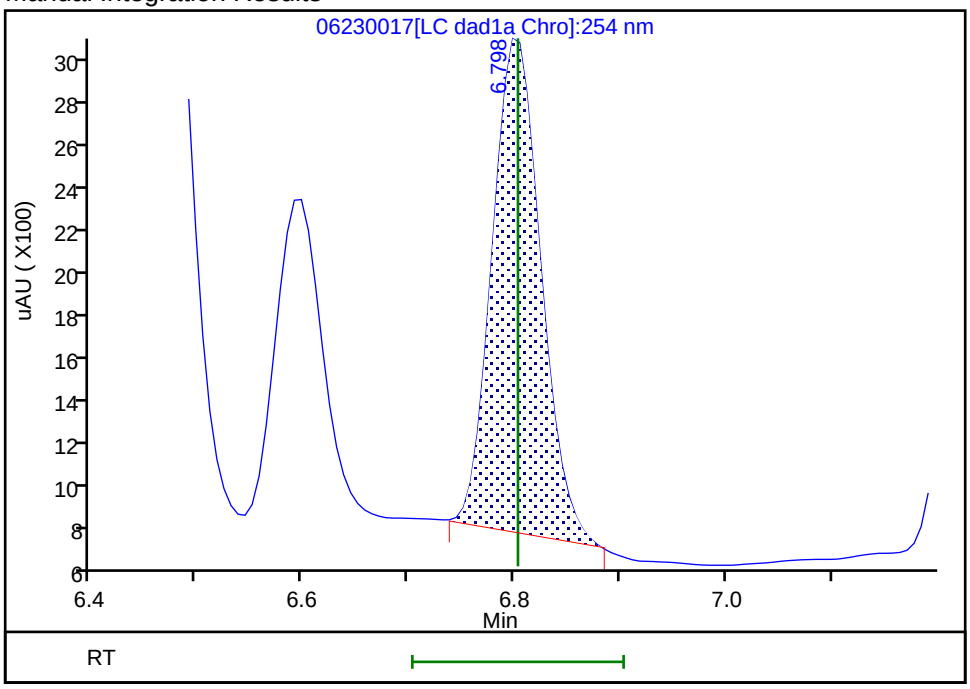
Processing Integration Results

RT: 6.80
Area: 11546
Amount: 0.074238
Amount Units: ug/mL



Manual Integration Results

RT: 6.80
Area: 7299
Amount: 0.050515
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 20:36:41 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

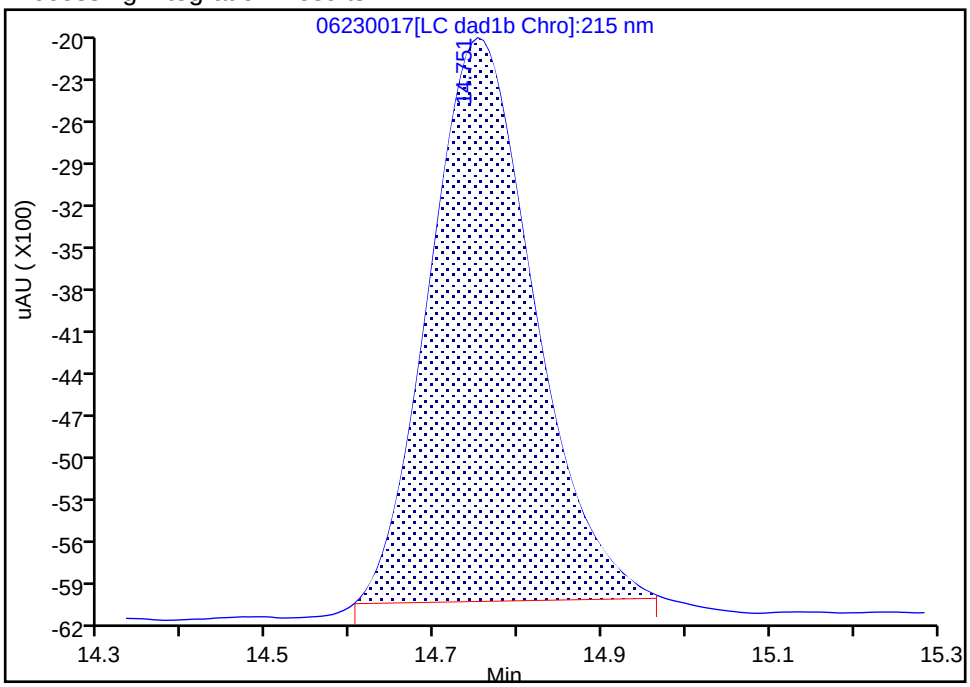
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230017.d				
Injection Date:	23-Jun-2023 20:11:32	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 3				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1C, 215 nm		

25 PETN, CAS: 78-11-5

Signal: 1

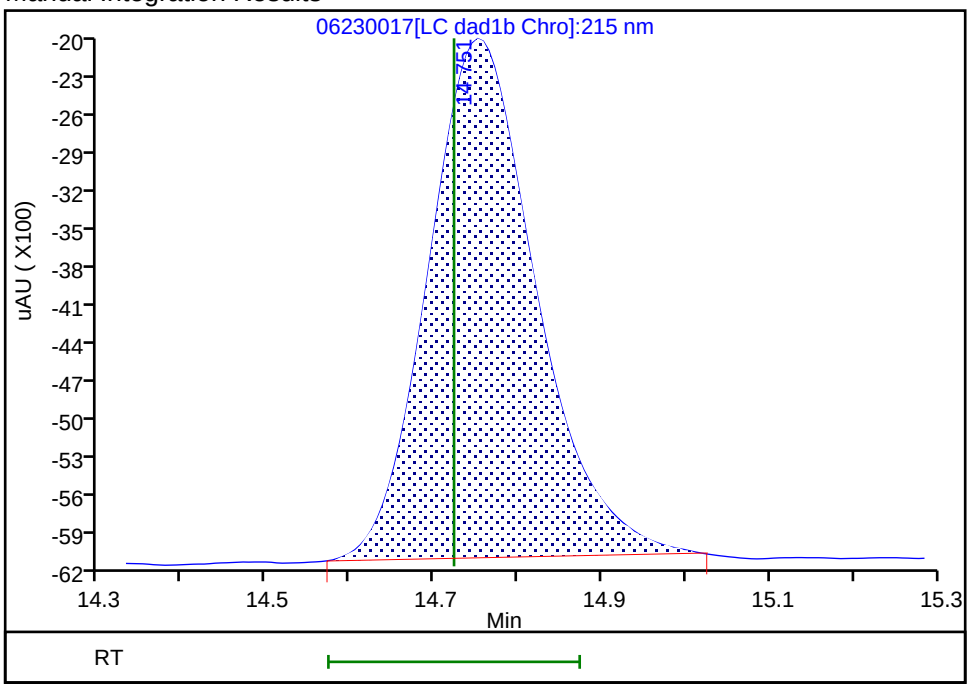
Processing Integration Results

RT: 14.75
Area: 34085
Amount: 0.477036
Amount Units: ug/mL



Manual Integration Results

RT: 14.75
Area: 35921
Amount: 0.498778
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 20:36:48 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230018.D
Lims ID: IC INT/DMT 2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 23-Jun-2023 20:34:25 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/DMT 2
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 24-Jun-2023 12:55:51 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1681

First Level Reviewer: LV5D Date: 23-Jun-2023 21:02:22

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.473	6.470	0.003	3897	0.0201	0.0194	M
4 HMX	1	6.593	6.597	-0.004	1960	0.0200	0.0208	M
6 DNX	1	6.799	6.803	-0.004	2620	0.0200	0.0181	M
7 MNX	1	7.233	7.237	-0.004	3155	0.0233	0.0227	
8 RDX	1	7.619	7.623	-0.004	2234	0.0200	0.0202	
9 2,4,6-Trinitrophenol	1	8.026	8.030	-0.004	1447	0.0200	0.0186	
$ 10 1,2-Dinitrobenzene	1	8.579	8.590	-0.011	2379	0.0200	0.0192	
11 1,3,5-Trinitrobenzene	1	8.699	8.710	-0.011	4083	0.0200	0.0189	
12 1,3-Dinitrobenzene	1	9.326	9.336	-0.010	5599	0.0200	0.0191	
13 Nitrobenzene	1	9.699	9.710	-0.011	3731	0.0200	0.0194	
14 3,5-Dinitroaniline	1	9.932	9.943	-0.011	4262	0.0200	0.0195	
15 Tetryl	1	10.066	10.083	-0.017	3248	0.0200	0.0194	
16 Nitroglycerin	2	10.526	10.536	-0.010	12682	0.2000	0.1962	
17 2,4,6-Trinitrotoluene	1	10.959	10.976	-0.017	3981	0.0200	0.0194	
18 4-Amino-2,6-dinitrotoluene	1	11.159	11.170	-0.011	3111	0.0200	0.0208	
19 2-Amino-4,6-dinitrotoluene	1	11.412	11.423	-0.011	3863	0.0200	0.0199	
20 2,6-Dinitrotoluene	1	11.566	11.576	-0.010	2916	0.0200	0.0204	
21 2,4-Dinitrotoluene	1	11.732	11.743	-0.011	5829	0.0200	0.0197	
22 o-Nitrotoluene	1	12.559	12.570	-0.011	2556	0.0200	0.0203	
23 p-Nitrotoluene	1	12.979	12.983	-0.004	2404	0.0200	0.0218	
24 m-Nitrotoluene	1	13.552	13.556	-0.004	3341	0.0200	0.0207	
25 PETN	2	14.719	14.723	-0.004	13637	0.2000	0.1894	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00077	Amount Added:	2.00	Units: uL
8330 DMT_00013	Amount Added:	1.00	Units: uL

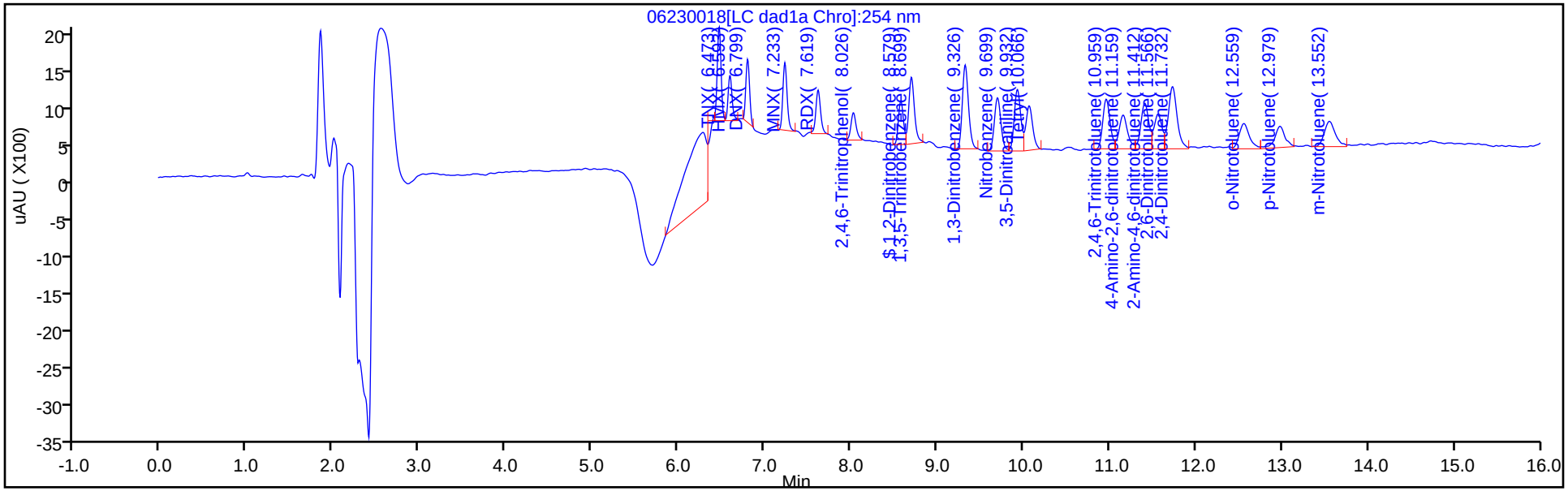
Report Date: 24-Jun-2023 12:55:51 Chrom Revision: 2.3 05-Jun-2023 19:02:10

Eurofins Denver

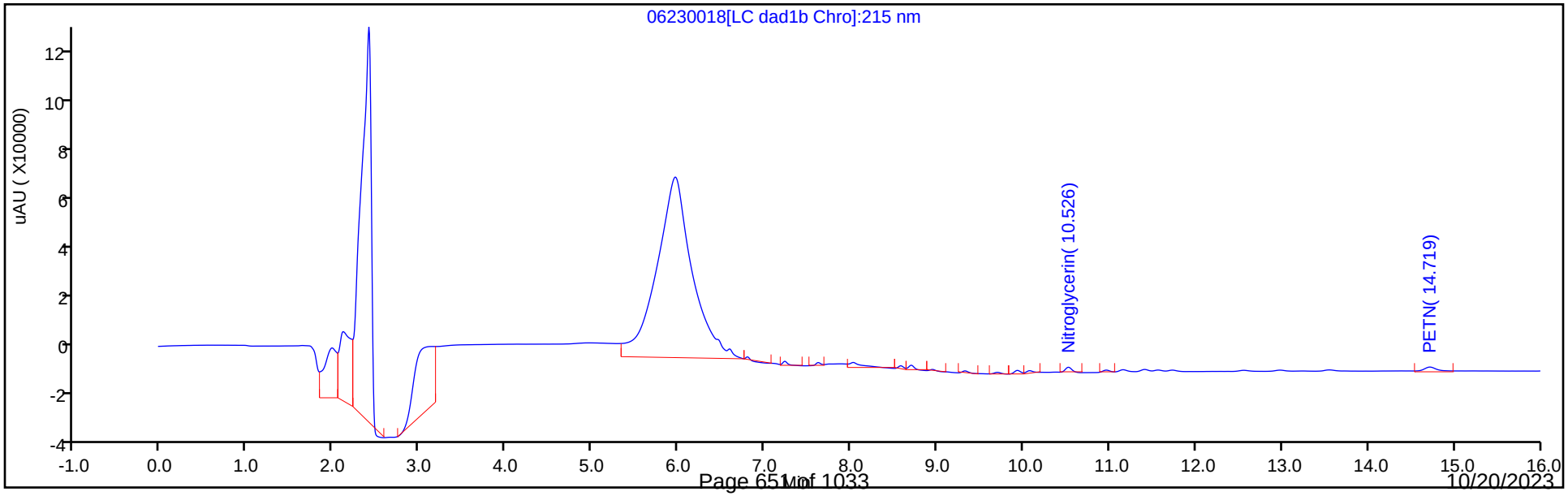
Data File: \\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230018.d

Injection Date:	23-Jun-2023 20:34:25	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	IC INT/DMT 2			Worklist Smp#:	18
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



10/20/2023
4:00 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

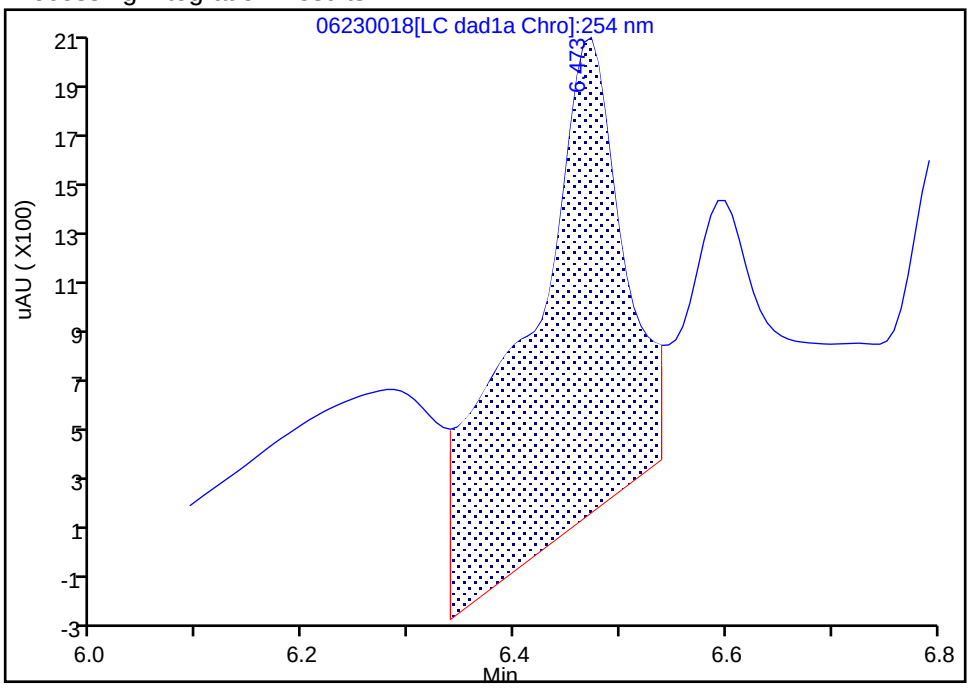
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230018.d				
Injection Date:	23-Jun-2023 20:34:25	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

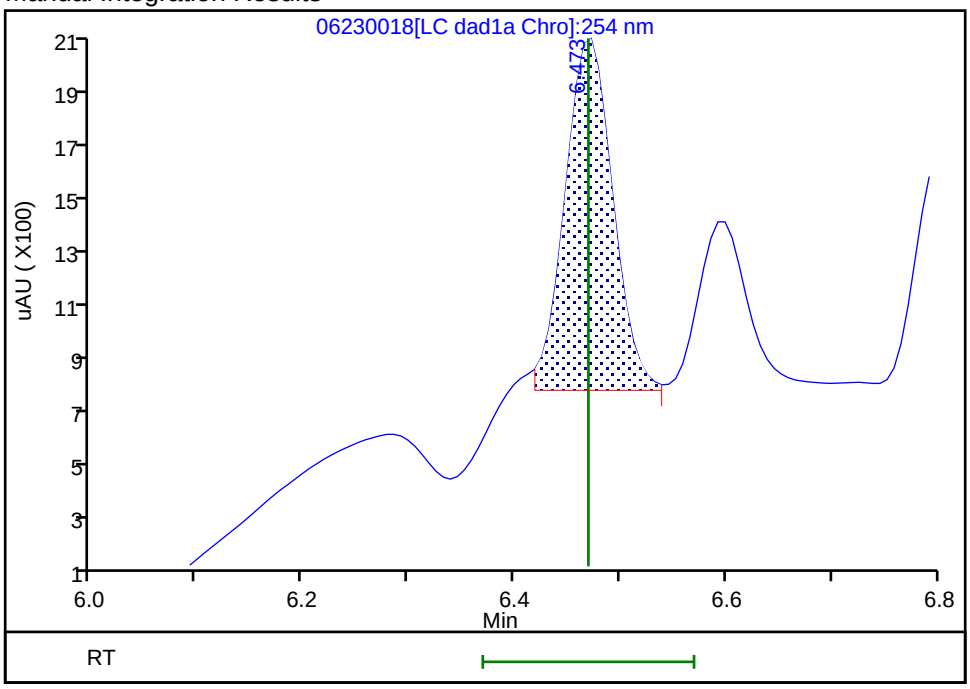
Processing Integration Results

RT: 6.47
Area: 12448
Amount: 0.050881
Amount Units: ug/mL



Manual Integration Results

RT: 6.47
Area: 3897
Amount: 0.019411
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 21:02:09 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

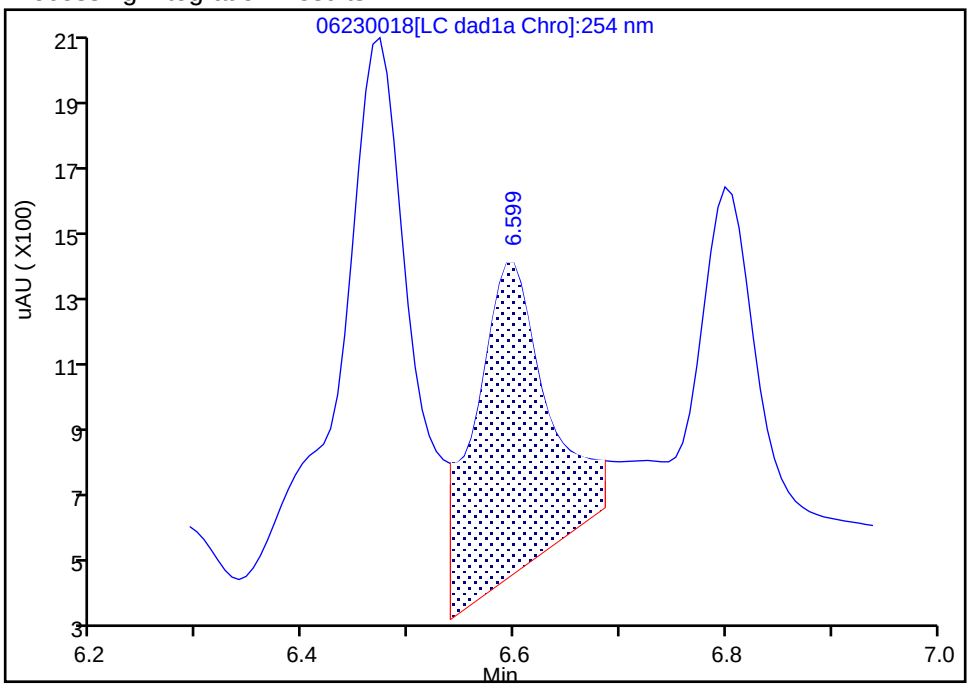
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230018.d				
Injection Date:	23-Jun-2023 20:34:25	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

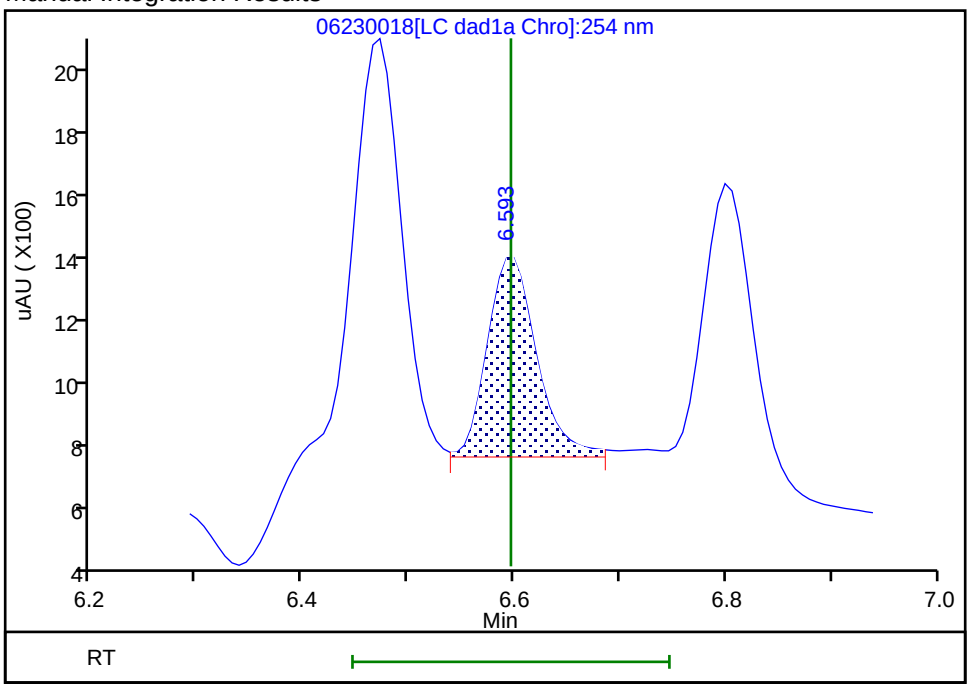
Processing Integration Results

RT: 6.60
Area: 4371
Amount: 0.039965
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 1960
Amount: 0.020795
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 21:02:06 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

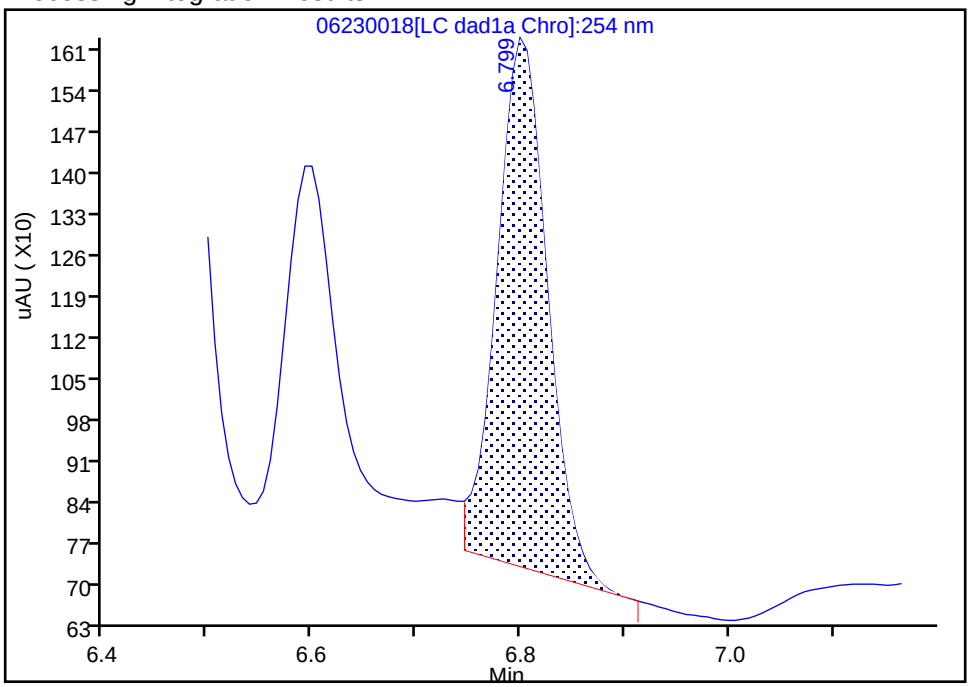
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230018.d				
Injection Date:	23-Jun-2023 20:34:25	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

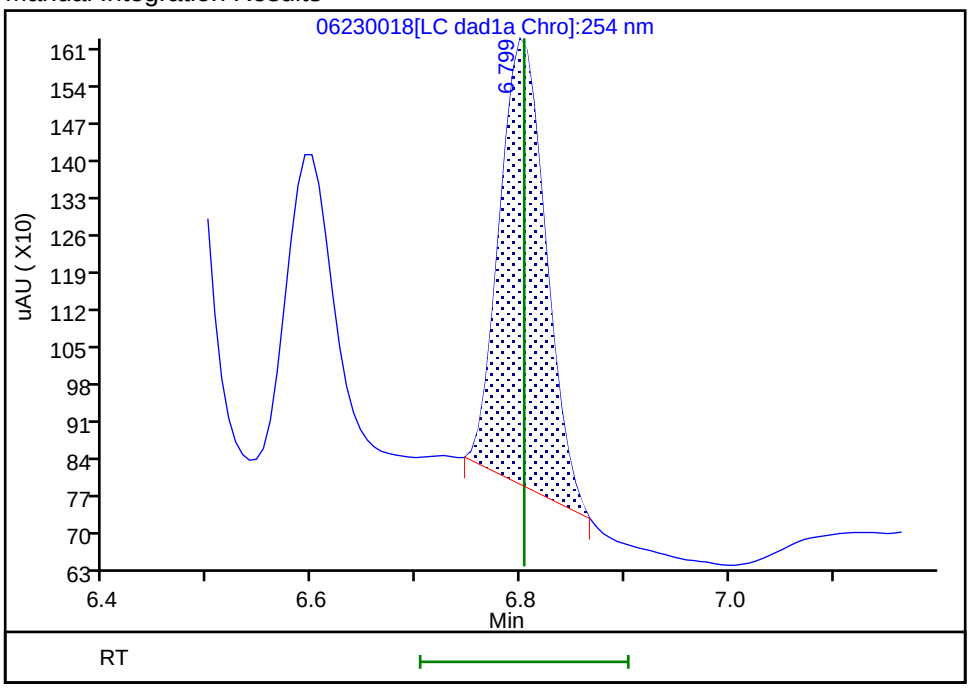
Processing Integration Results

RT: 6.80
Area: 3071
Amount: 0.020912
Amount Units: ug/mL



Manual Integration Results

RT: 6.80
Area: 2620
Amount: 0.018132
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 21:02:11 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

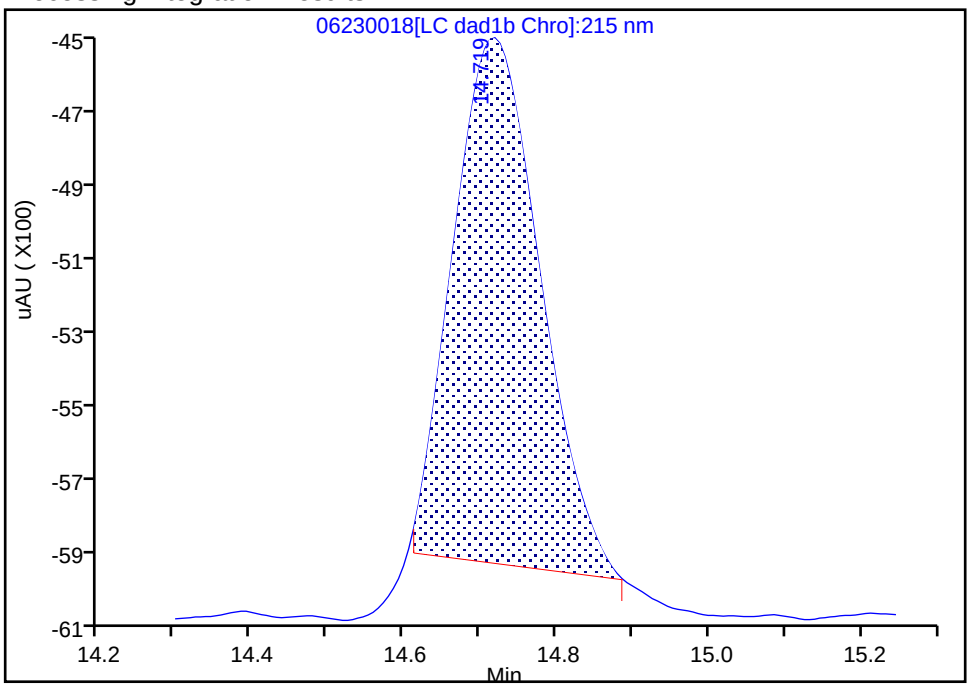
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Injection Date:	23-Jun-2023 20:34:25	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1C, 215 nm		

25 PETN, CAS: 78-11-5

Signal: 1

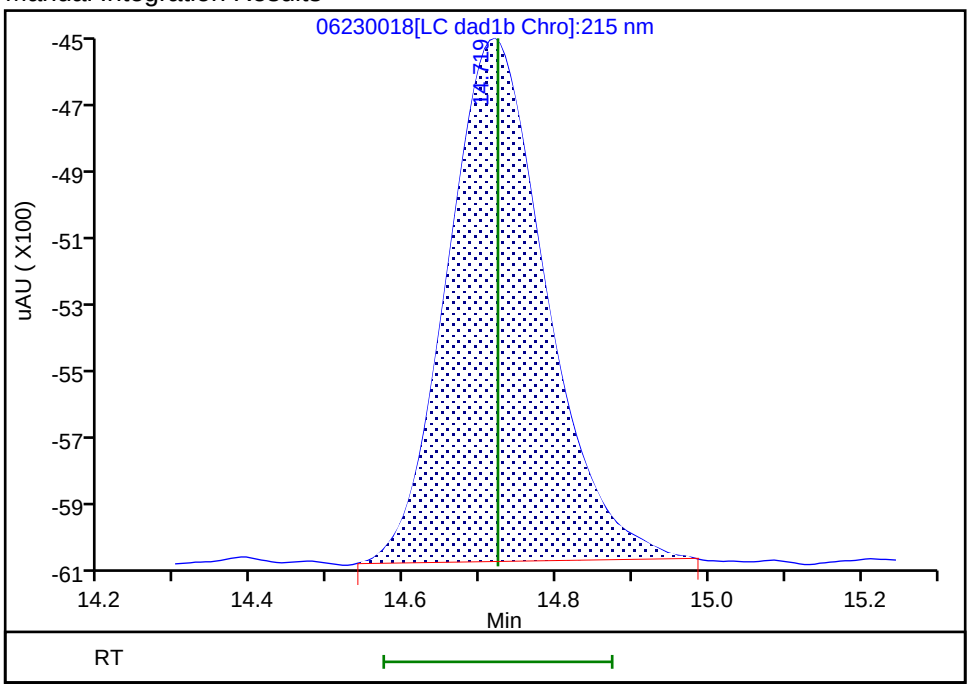
Processing Integration Results

RT: 14.72
Area: 10960
Amount: 0.155528
Amount Units: ug/mL



Manual Integration Results

RT: 14.72
Area: 13637
Amount: 0.189356
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 21:02:17 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230019.D
Lims ID: IC INT/DMT 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 23-Jun-2023 20:57:20 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/DMT 1
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub27

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 24-Jun-2023 12:55:51 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1681

First Level Reviewer: LV5D Date: 23-Jun-2023 21:21:44

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.474	6.470	0.004	2190	0.0100	0.0109	M
4 HMX	1	6.601	6.597	0.004	1048	0.0100	0.0111	M
6 DNX	1	6.801	6.803	-0.002	1412	0.0100	0.009772	M
7 MNX	1	7.241	7.237	0.004	1811	0.0117	0.0131	
8 RDX	1	7.627	7.623	0.004	1225	0.0100	0.0111	
9 2,4,6-Trinitrophenol	1	8.041	8.030	0.011	756	0.0100	0.009709	
$ 10 1,2-Dinitrobenzene	1	8.594	8.590	0.004	1172	0.0100	0.009458	
11 1,3,5-Trinitrobenzene	1	8.714	8.710	0.004	2019	0.0100	0.009344	
12 1,3-Dinitrobenzene	1	9.334	9.336	-0.002	2901	0.0100	0.009889	
13 Nitrobenzene	1	9.714	9.710	0.004	2020	0.0100	0.0105	
14 3,5-Dinitroaniline	1	9.941	9.943	-0.002	2151	0.0100	0.0101	
15 Tetryl	1	10.081	10.083	-0.002	1546	0.0100	0.009243	
16 Nitroglycerin	2	10.534	10.536	-0.002	6047	0.1000	0.0935	
17 2,4,6-Trinitrotoluene	1	10.974	10.976	-0.002	1918	0.0100	0.009361	
18 4-Amino-2,6-dinitrotoluene	1	11.174	11.170	0.004	1464	0.0100	0.009789	
19 2-Amino-4,6-dinitrotoluene	1	11.421	11.423	-0.002	1950	0.0100	0.0101	
20 2,6-Dinitrotoluene	1	11.574	11.576	-0.002	1373	0.0100	0.009626	
21 2,4-Dinitrotoluene	1	11.741	11.743	-0.002	2941	0.0100	0.0099	
22 o-Nitrotoluene	1	12.567	12.570	-0.003	1291	0.0100	0.0102	
23 p-Nitrotoluene	1	12.994	12.983	0.011	1165	0.0100	0.0106	
24 m-Nitrotoluene	1	13.554	13.556	-0.002	1870	0.0100	0.009849	
25 PETN	2	14.721	14.723	-0.002	7328	0.1000	0.1018	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00077	Amount Added:	1.00	Units: uL
8330 DMT_00013	Amount Added:	0.50	Units: uL

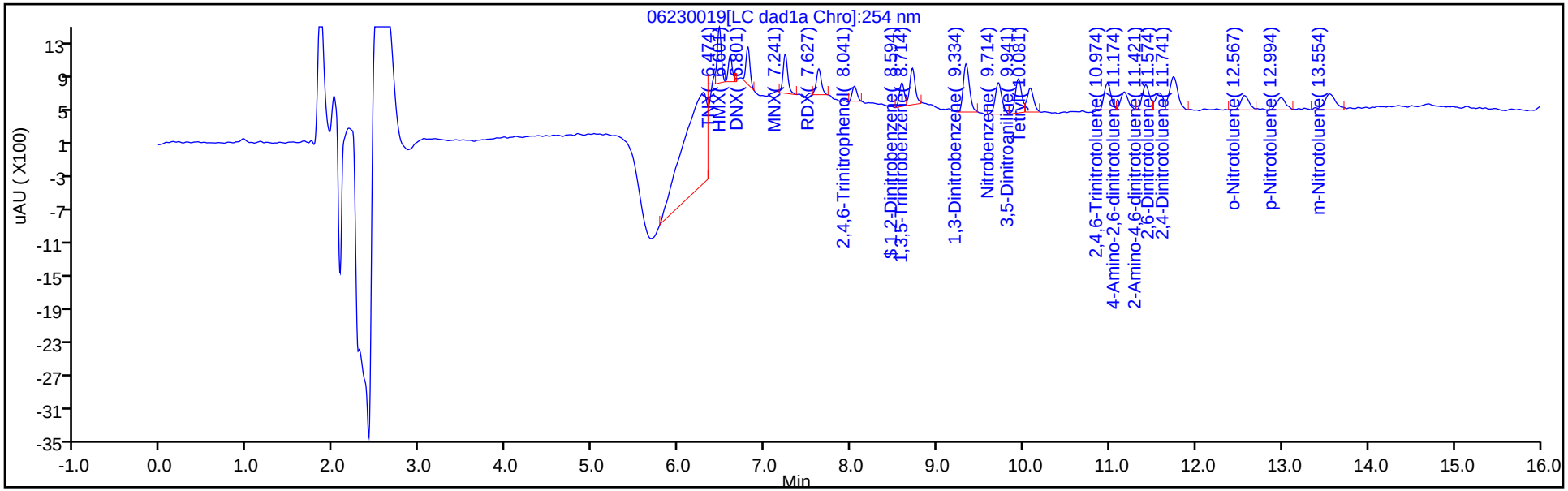
Report Date: 24-Jun-2023 12:55:52 Chrom Revision: 2.3 05-Jun-2023 19:02:10

Eurofins Denver

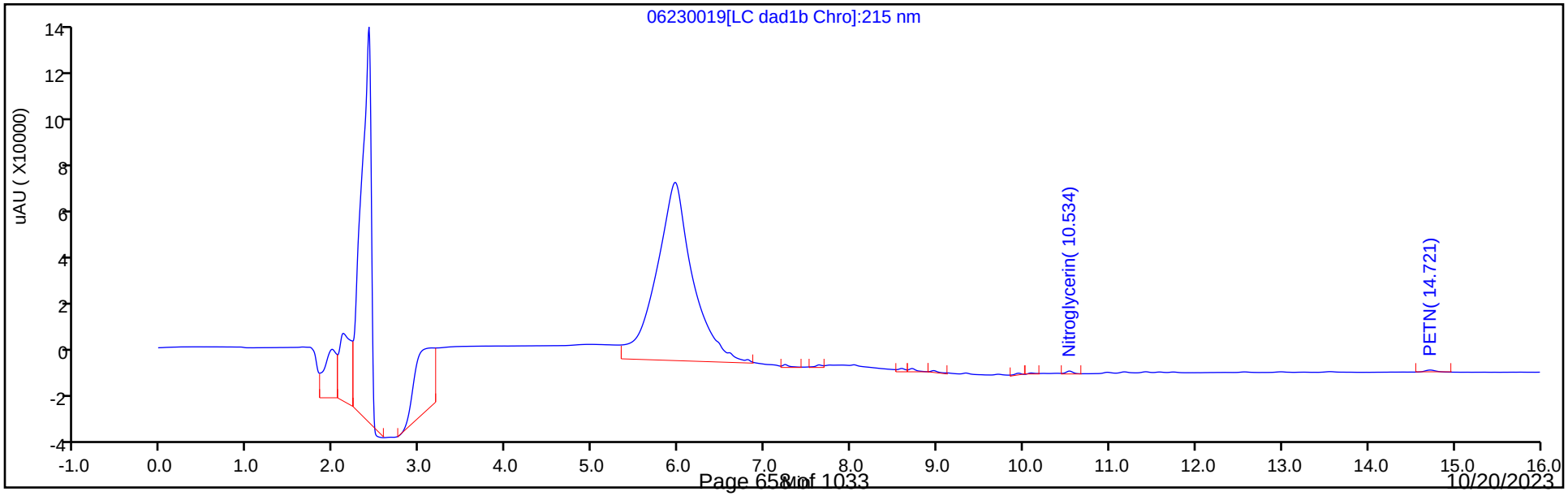
Data File: \\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230019.d

Injection Date:	23-Jun-2023 20:57:20	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	IC INT/DMT 1			Worklist Smp#:	19
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



10/20/2023
4:00 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

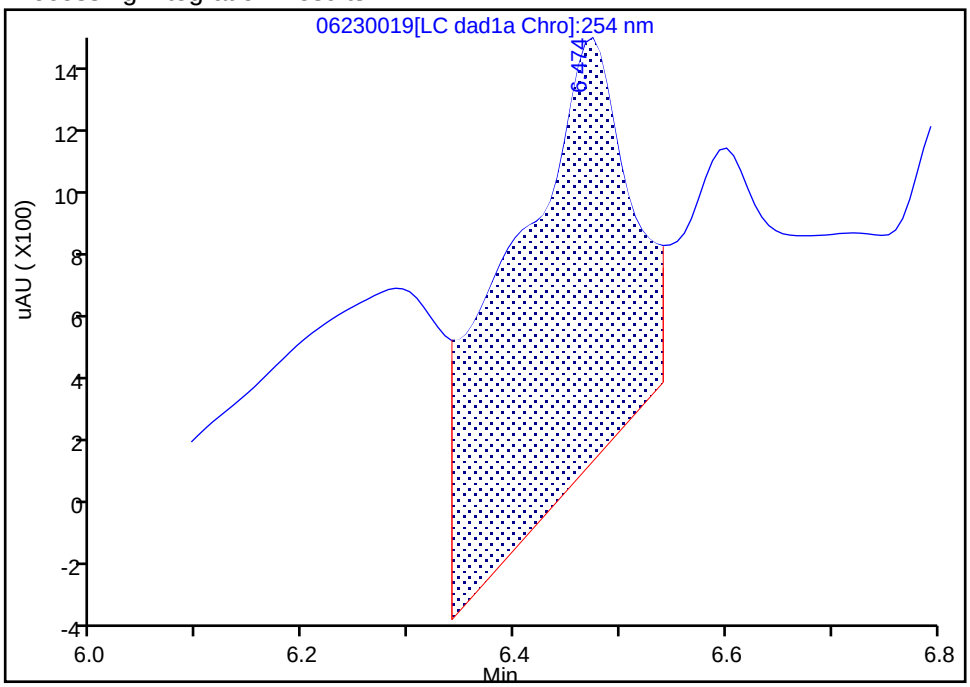
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230019.d				
Injection Date:	23-Jun-2023 20:57:20	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT/DMT 1				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

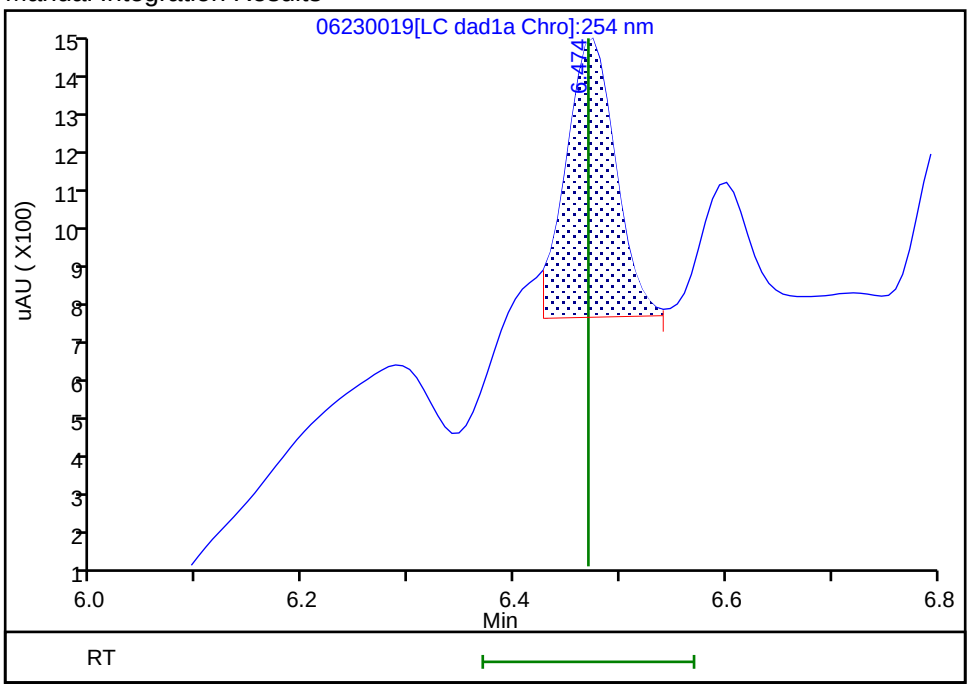
Processing Integration Results

RT: 6.47
Area: 11267
Amount: 0.037393
Amount Units: ug/mL



Manual Integration Results

RT: 6.47
Area: 2190
Amount: 0.010908
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 21:21:33 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

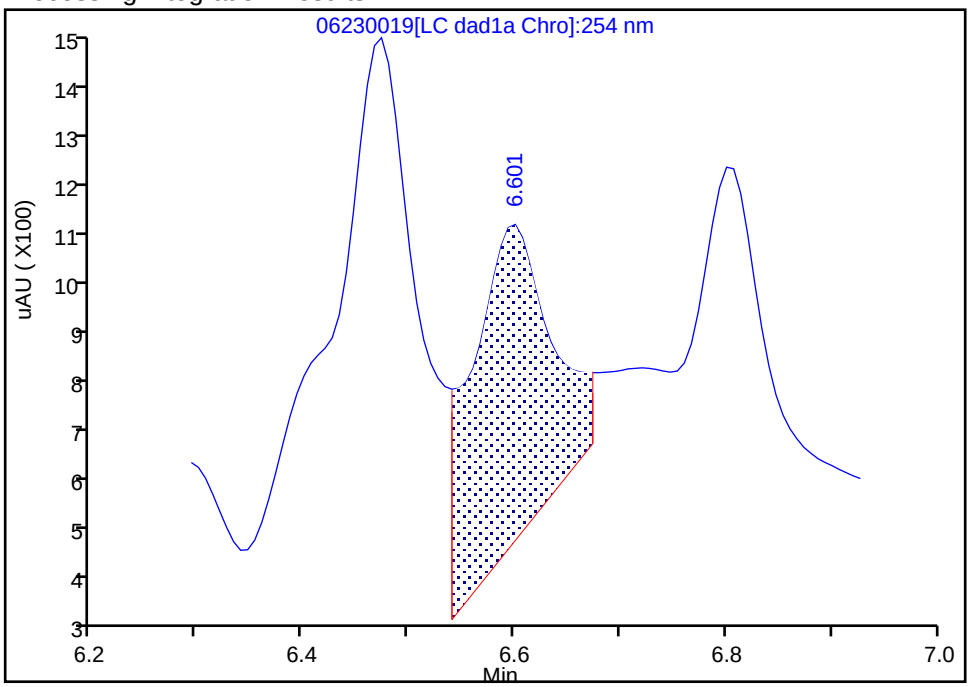
Data File: \\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230019.d
Injection Date: 23-Jun-2023 20:57:20 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 1
Client ID:
Operator ID: JZ/JG ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

4 HMX, CAS: 2691-41-0

Signal: 1

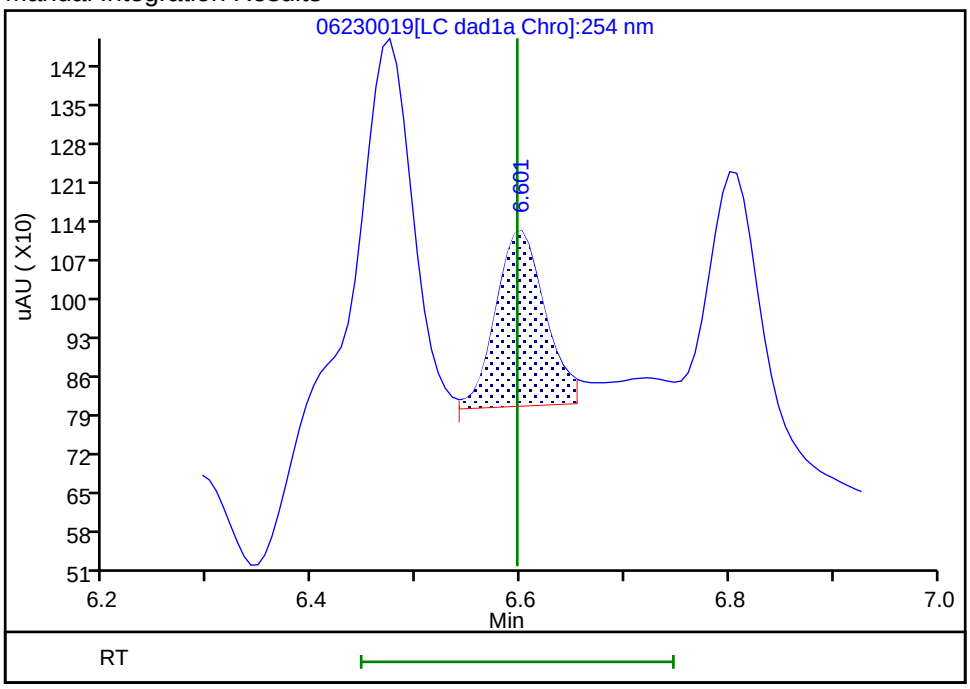
Processing Integration Results

RT: 6.60
Area: 3145
Amount: 0.026753
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 1048
Amount: 0.011119
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 21:21:35 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

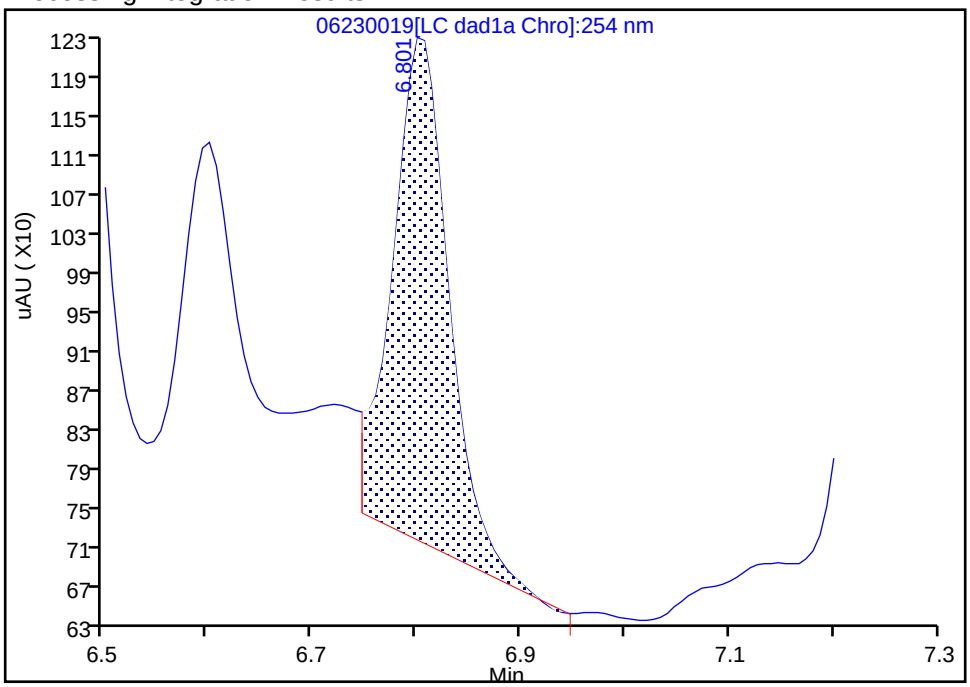
Data File: \\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230019.d
Injection Date: 23-Jun-2023 20:57:20 Instrument ID: CHHPLC_X3
Lims ID: IC INT/DMT 1
Client ID:
Operator ID: JZ/JG ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

6 DNX, CAS: 80251-29-2

Signal: 1

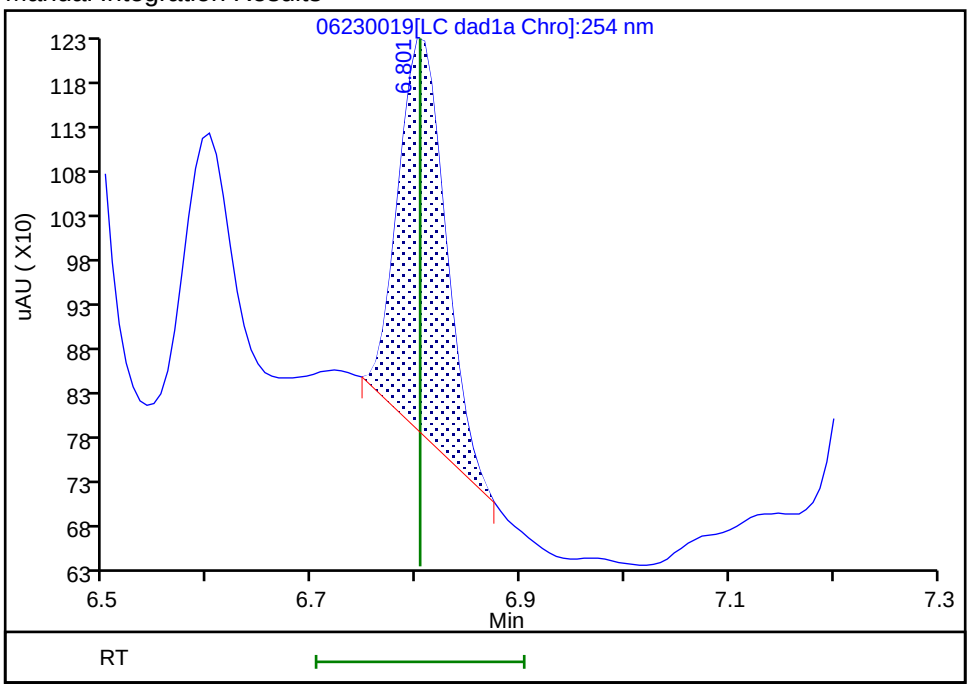
Processing Integration Results

RT: 6.80
Area: 1950
Amount: 0.012960
Amount Units: ug/mL



Manual Integration Results

RT: 6.80
Area: 1412
Amount: 0.009772
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 21:21:40 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Calibration / TNX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

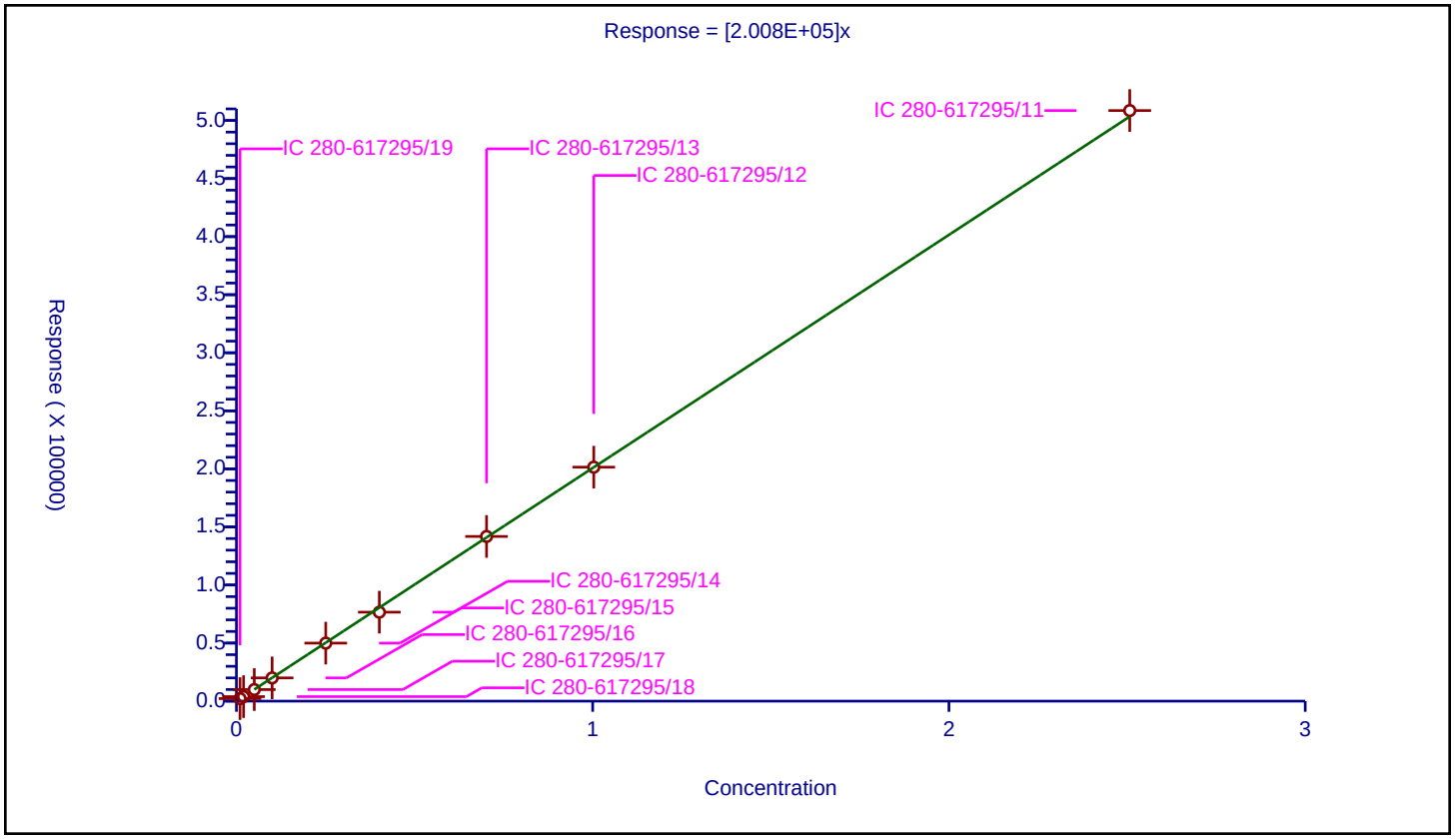
Curve Coefficients

Intercept:	0
Slope:	2.008E+05

Error Coefficients

Standard Error:	2320
Relative Standard Error:	3.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-617295/19	0.01003	2190.0			218344.965105	Y
2	IC 280-617295/18	0.02006	3897.0			194267.198405	Y
3	IC 280-617295/17	0.05015	9975.0			198903.29013	Y
4	IC 280-617295/16	0.1003	20003.0			199431.704885	Y
5	IC 280-617295/15	0.25075	49970.0			199282.153539	Y
6	IC 280-617295/14	0.4012	76609.0			190949.651047	Y
7	IC 280-617295/13	0.7021	141821.0			201995.442245	Y
8	IC 280-617295/12	1.003	201466.0			200863.409771	Y
9	IC 280-617295/11	2.5075	508547.0			202810.368893	Y



Calibration / HMX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

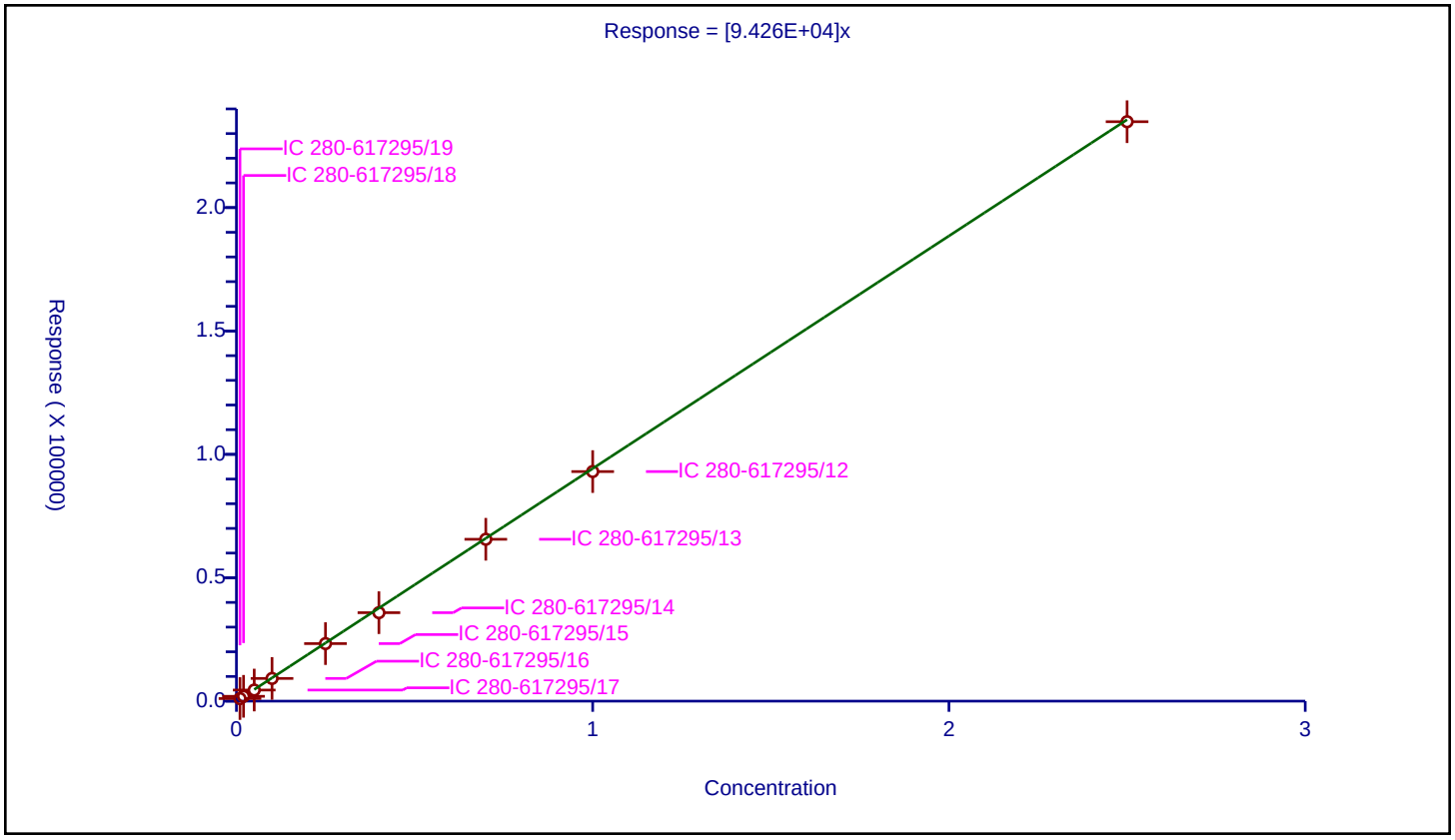
Curve Coefficients

Intercept:	0
Slope:	9.426E+04

Error Coefficients

Standard Error:	862
Relative Standard Error:	4.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-617295/19	0.01	1048.0			104800.0	Y
2	IC 280-617295/18	0.02	1960.0			98000.0	Y
3	IC 280-617295/17	0.05	4496.0			89920.0	Y
4	IC 280-617295/16	0.1	9201.0			92010.0	Y
5	IC 280-617295/15	0.25	23321.0			93284.0	Y
6	IC 280-617295/14	0.4	35849.0			89622.5	Y
7	IC 280-617295/13	0.7	65593.0			93704.285714	Y
8	IC 280-617295/12	1.0	93035.0			93035.0	Y
9	IC 280-617295/11	2.5	234806.0			93922.4	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

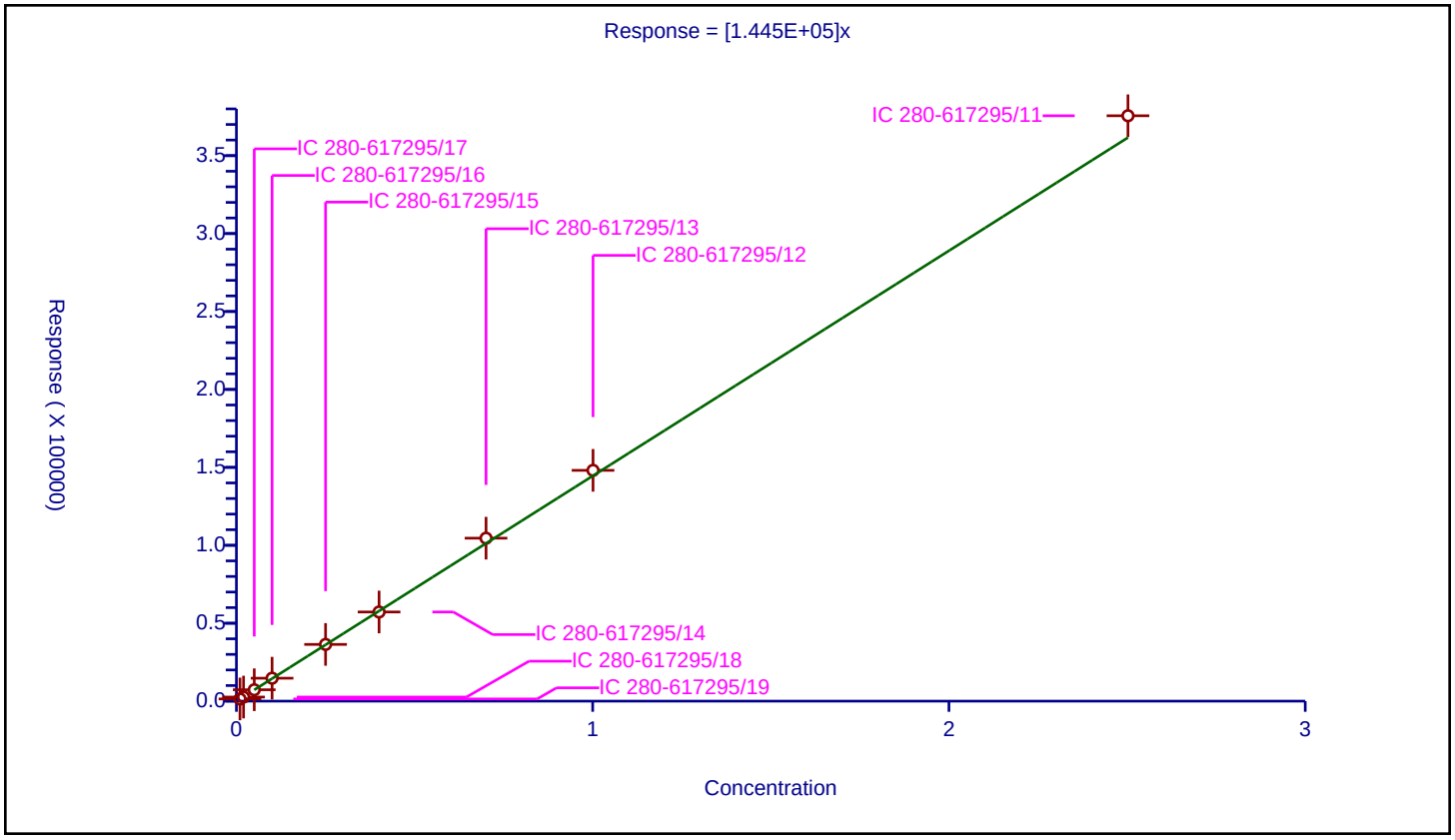
Curve Coefficients

Intercept:	0
Slope:	1.445E+05

Error Coefficients

Standard Error:	5240
Relative Standard Error:	4.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-617295/19	0.01001	1412.0			141058.941059	Y
2	IC 280-617295/18	0.02002	2620.0			130869.130869	Y
3	IC 280-617295/17	0.05005	7299.0			145834.165834	Y
4	IC 280-617295/16	0.1001	14726.0			147112.887113	Y
5	IC 280-617295/15	0.25025	36397.0			145442.557443	Y
6	IC 280-617295/14	0.4004	57208.0			142877.122877	Y
7	IC 280-617295/13	0.7007	104556.0			149216.497788	Y
8	IC 280-617295/12	1.001	148083.0			147935.064935	Y
9	IC 280-617295/11	2.5025	375597.0			150088.711289	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

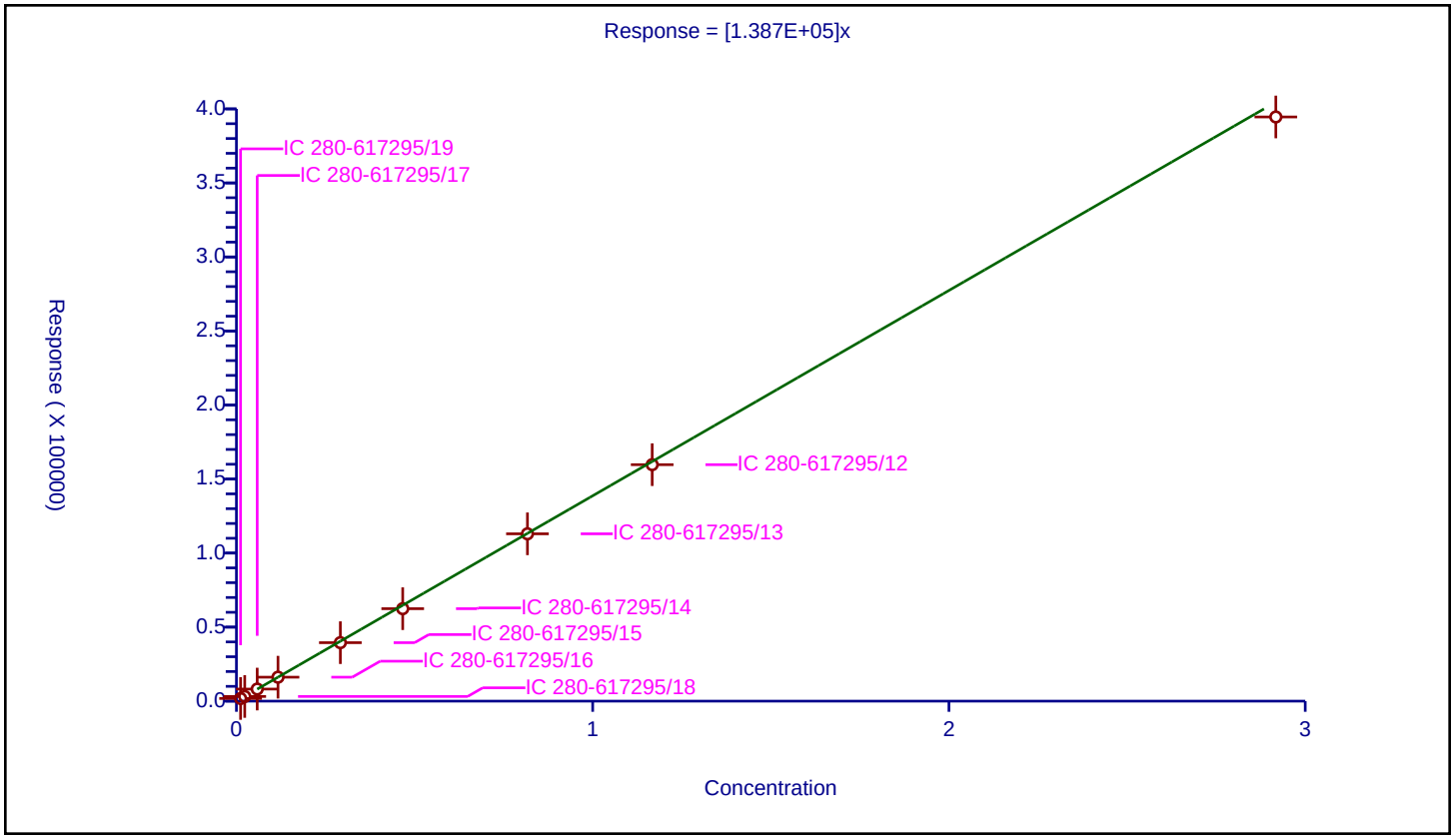
Curve Coefficients

Intercept:	0
Slope:	1.387E+05

Error Coefficients

Standard Error:	3750
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 280-617295/19	0.01167	1811.0			155184.233076	Y
2	IC 280-617295/18	0.02334	3155.0			135175.664096	Y
3	IC 280-617295/17	0.05835	8151.0			139691.51671	Y
4	IC 280-617295/16	0.1167	16173.0			138586.118252	Y
5	IC 280-617295/15	0.29175	39495.0			135372.750643	Y
6	IC 280-617295/14	0.4668	62440.0			133761.782348	Y
7	IC 280-617295/13	0.8169	113007.0			138336.393683	Y
8	IC 280-617295/12	1.167	159710.0			136855.184233	Y
9	IC 280-617295/11	2.9175	394545.0			135233.933162	Y



Calibration / RDX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

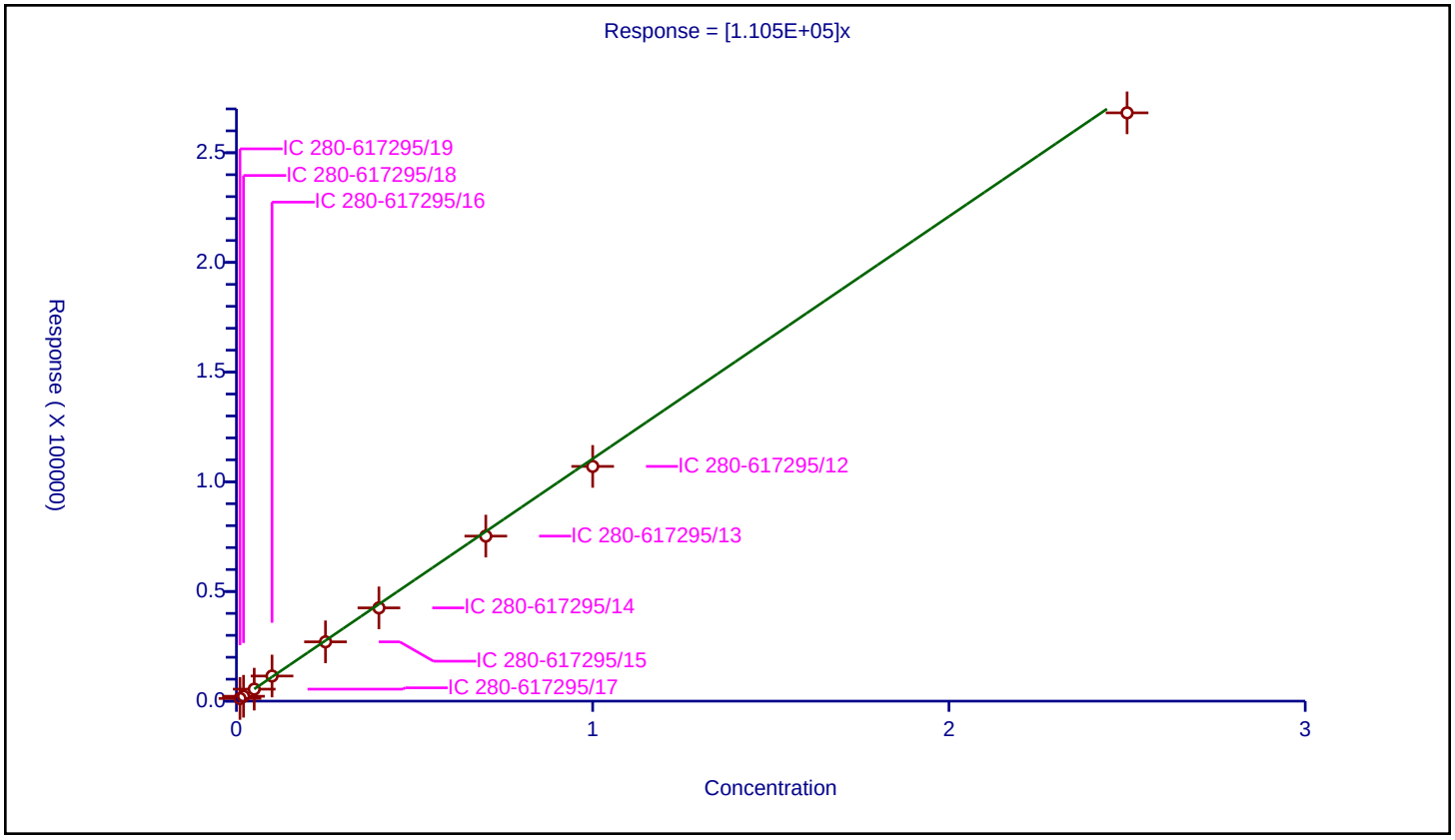
Curve Coefficients

Intercept:	0
Slope:	1.105E+05

Error Coefficients

Standard Error:	3250
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 280-617295/19	0.01	1225.0			122500.0	Y
2	IC 280-617295/18	0.02	2234.0			111700.0	Y
3	IC 280-617295/17	0.05	5472.0			109440.0	Y
4	IC 280-617295/16	0.1	11457.0			114570.0	Y
5	IC 280-617295/15	0.25	27039.0			108156.0	Y
6	IC 280-617295/14	0.4	42514.0			106285.0	Y
7	IC 280-617295/13	0.7	75238.0			107482.857143	Y
8	IC 280-617295/12	1.0	107019.0			107019.0	Y
9	IC 280-617295/11	2.5	268207.0			107282.8	Y



Calibration / 2,4,6-Trinitrophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

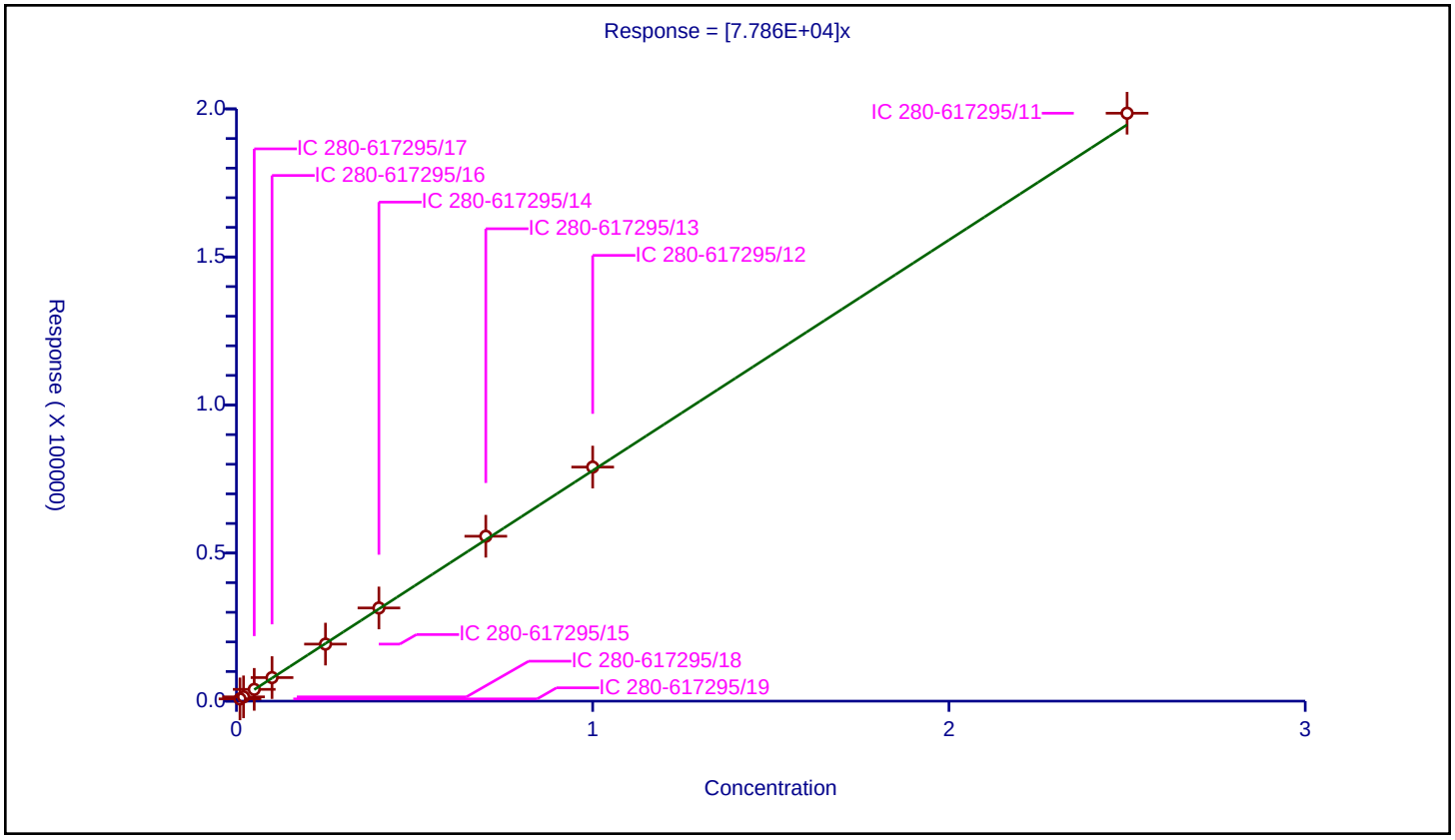
Curve Coefficients

Intercept:	0
Slope:	7.786E+04

Error Coefficients

Standard Error:	1500
Relative Standard Error:	3.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-617295/19	0.01	756.0			75600.0	Y
2	IC 280-617295/18	0.02	1447.0			72350.0	Y
3	IC 280-617295/17	0.05	3979.0			79580.0	Y
4	IC 280-617295/16	0.1	7951.0			79510.0	Y
5	IC 280-617295/15	0.25	19262.0			77048.0	Y
6	IC 280-617295/14	0.4	31468.0			78670.0	Y
7	IC 280-617295/13	0.7	55684.0			79548.571429	Y
8	IC 280-617295/12	1.0	79045.0			79045.0	Y
9	IC 280-617295/11	2.5	198541.0			79416.4	Y



10/20/2023
4:00 PM

Calibration / 1,2-Dinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

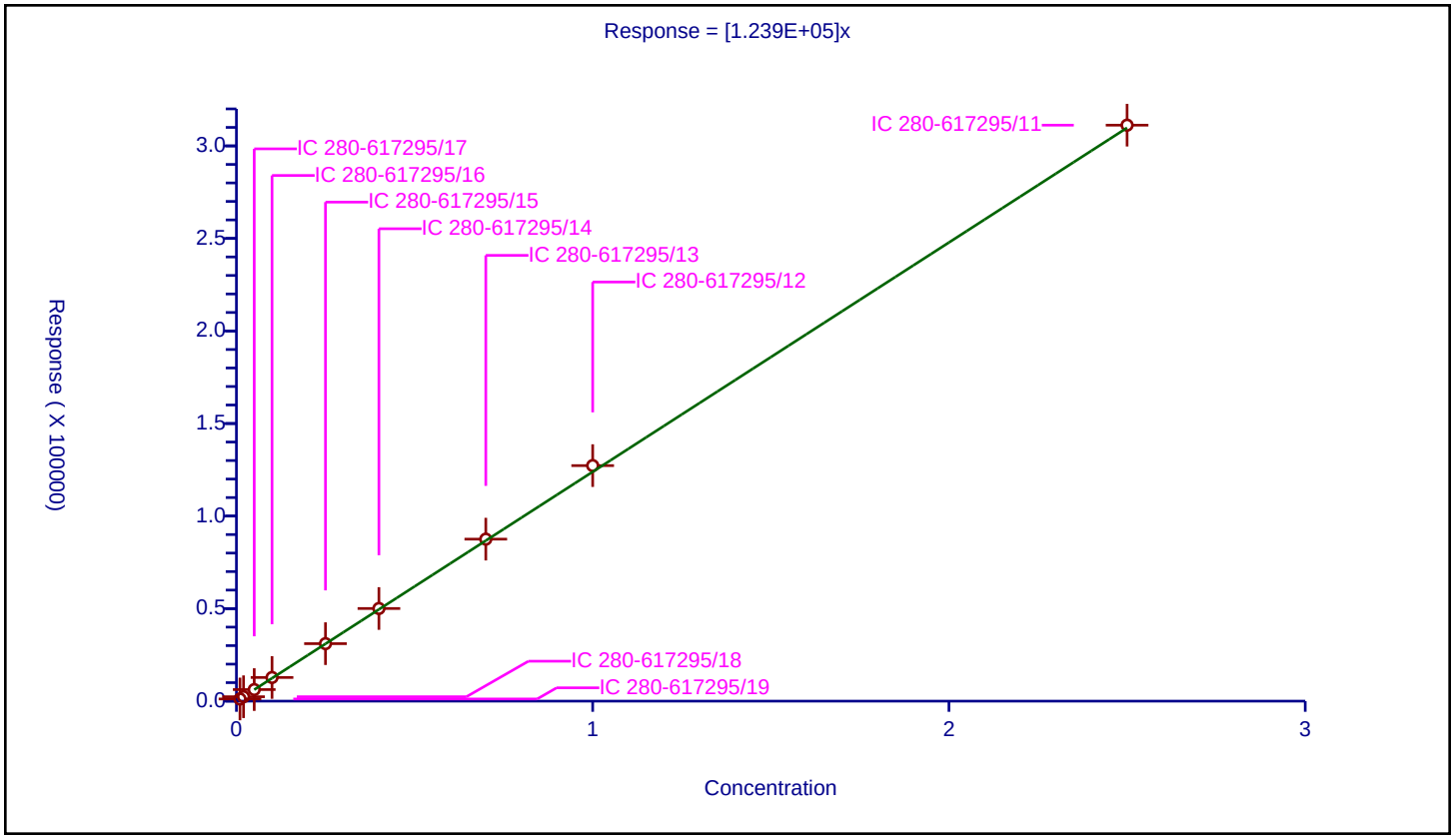
Curve Coefficients

Intercept:	0
Slope:	1.239E+05

Error Coefficients

Standard Error:	1340
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 280-617295/19	0.01	1172.0			117200.0	Y
2	IC 280-617295/18	0.02	2379.0			118950.0	Y
3	IC 280-617295/17	0.05	6250.0			125000.0	Y
4	IC 280-617295/16	0.1	12783.0			127830.0	Y
5	IC 280-617295/15	0.25	31068.0			124272.0	Y
6	IC 280-617295/14	0.4	50062.0			125155.0	Y
7	IC 280-617295/13	0.7	87532.0			125045.714286	Y
8	IC 280-617295/12	1.0	127262.0			127262.0	Y
9	IC 280-617295/11	2.5	311208.0			124483.2	Y



10/20/2023
4:00 PM

Calibration / 1,3,5-Trinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

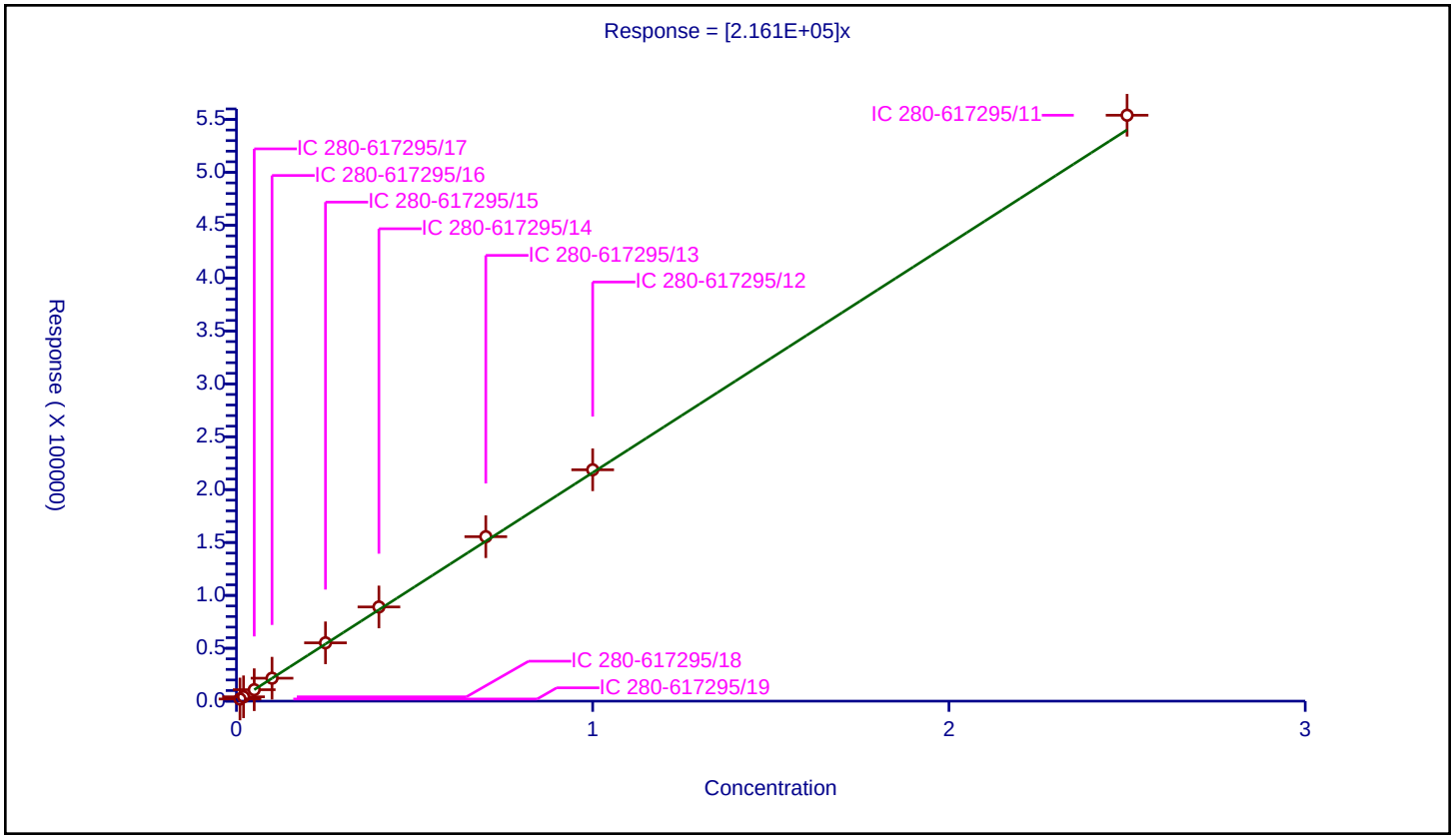
Curve Coefficients

Intercept:	0
Slope:	2.161E+05

Error Coefficients

Standard Error:	5300
Relative Standard Error:	3.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-617295/19	0.01	2019.0			201900.0	Y
2	IC 280-617295/18	0.02	4083.0			204150.0	Y
3	IC 280-617295/17	0.05	10805.0			216100.0	Y
4	IC 280-617295/16	0.1	21684.0			216840.0	Y
5	IC 280-617295/15	0.25	55138.0			220552.0	Y
6	IC 280-617295/14	0.4	89063.0			222657.5	Y
7	IC 280-617295/13	0.7	155494.0			222134.285714	Y
8	IC 280-617295/12	1.0	218769.0			218769.0	Y
9	IC 280-617295/11	2.5	554012.0			221604.8	Y



Calibration / 1,3-Dinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

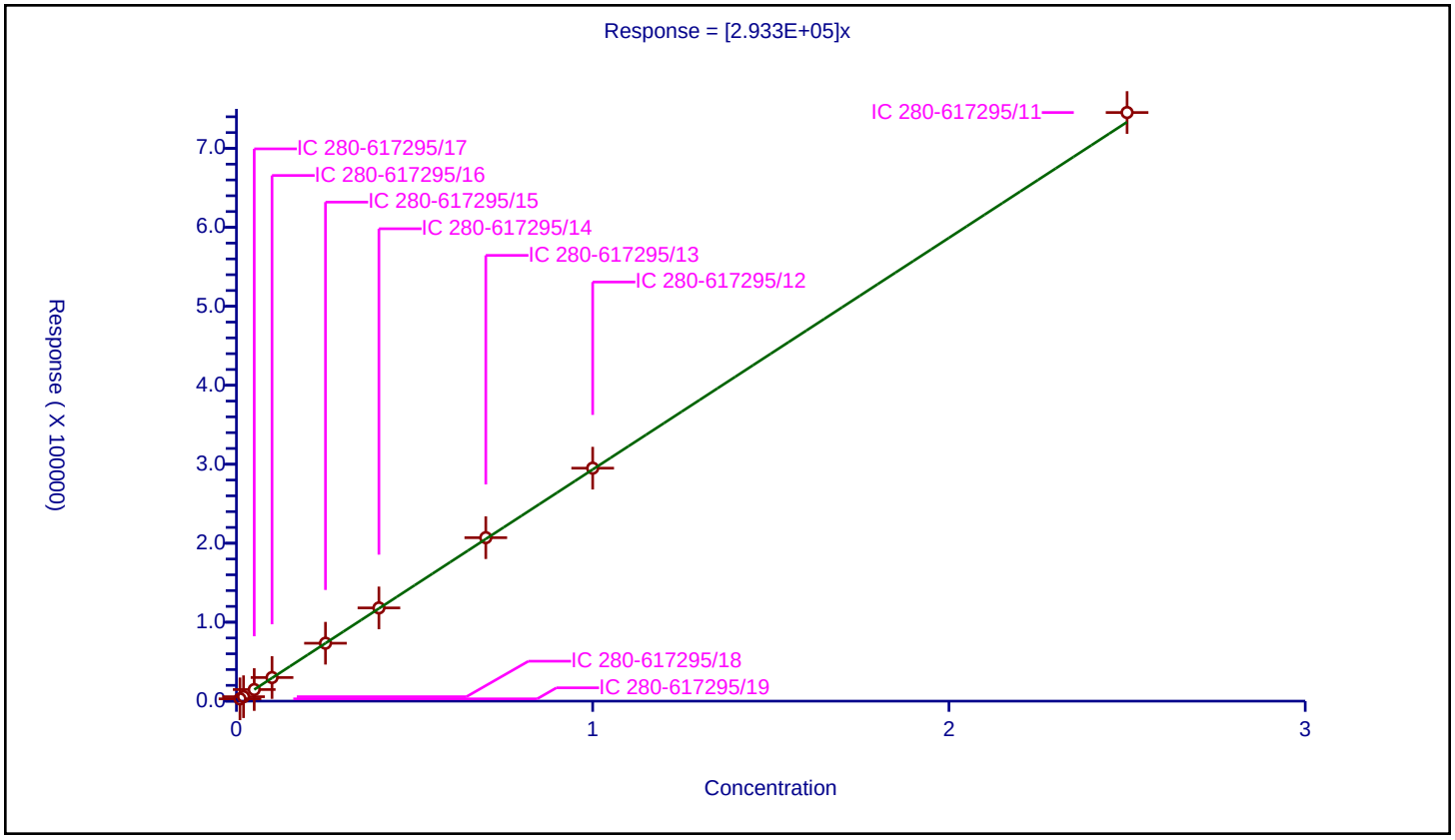
Curve Coefficients

Intercept:	0
Slope:	2.933E+05

Error Coefficients

Standard Error:	4350
Relative Standard Error:	1.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-617295/19	0.01	2901.0			290100.0	Y
2	IC 280-617295/18	0.02	5599.0			279950.0	Y
3	IC 280-617295/17	0.05	14684.0			293680.0	Y
4	IC 280-617295/16	0.1	29890.0			298900.0	Y
5	IC 280-617295/15	0.25	73356.0			293424.0	Y
6	IC 280-617295/14	0.4	118059.0			295147.5	Y
7	IC 280-617295/13	0.7	207005.0			295721.428571	Y
8	IC 280-617295/12	1.0	295042.0			295042.0	Y
9	IC 280-617295/11	2.5	745400.0			298160.0	Y



Calibration / Nitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

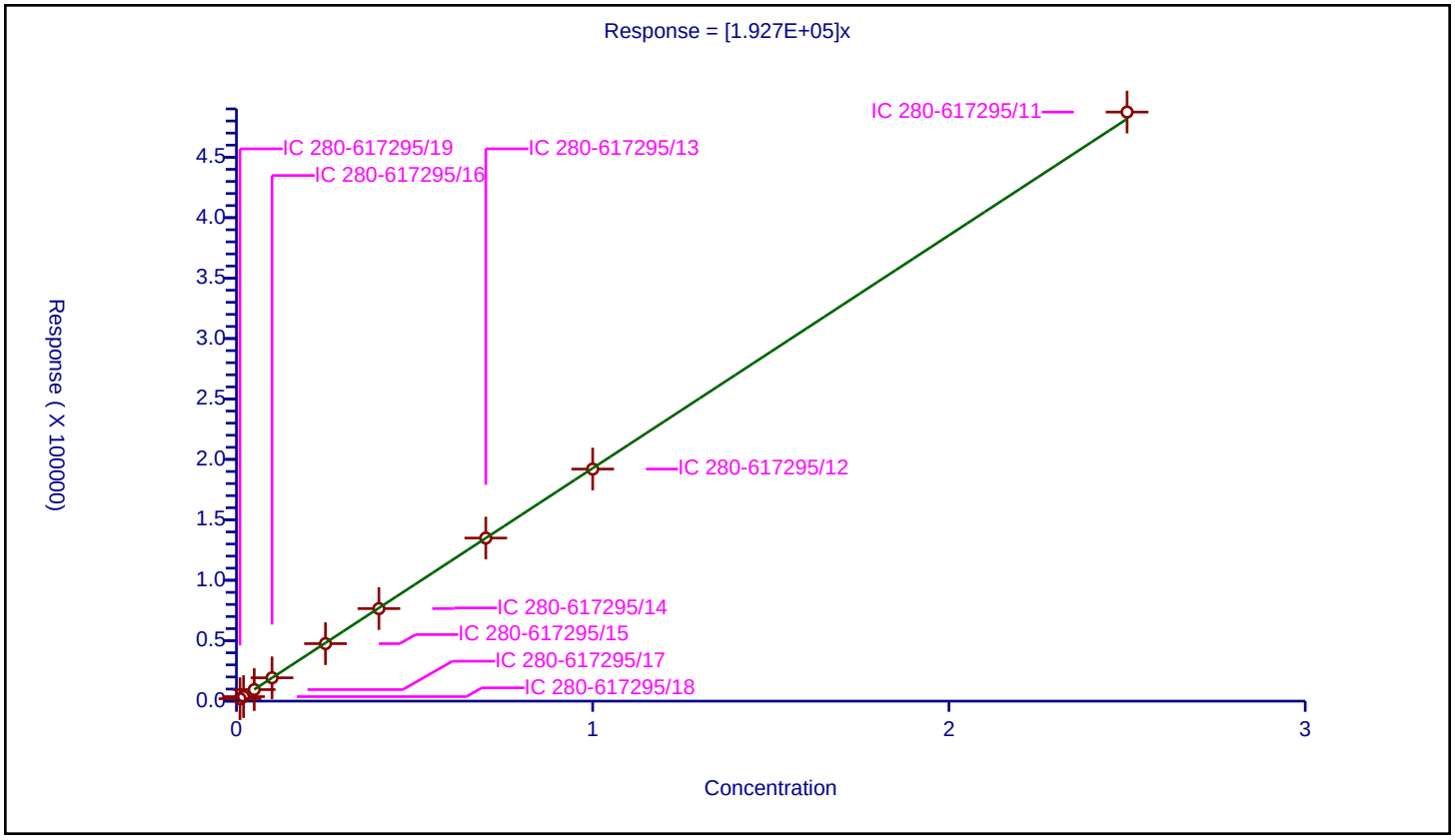
Curve Coefficients

Intercept:	0
Slope:	1.927E+05

Error Coefficients

Standard Error:	2030
Relative Standard Error:	2.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-617295/19	0.01	2020.0			202000.0	Y
2	IC 280-617295/18	0.02	3731.0			186550.0	Y
3	IC 280-617295/17	0.05	9561.0			191220.0	Y
4	IC 280-617295/16	0.1	19309.0			193090.0	Y
5	IC 280-617295/15	0.25	47571.0			190284.0	Y
6	IC 280-617295/14	0.4	76555.0			191387.5	Y
7	IC 280-617295/13	0.7	134942.0			192774.285714	Y
8	IC 280-617295/12	1.0	192007.0			192007.0	Y
9	IC 280-617295/11	2.5	487382.0			194952.8	Y



Calibration / 3,5-Dinitroaniline

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

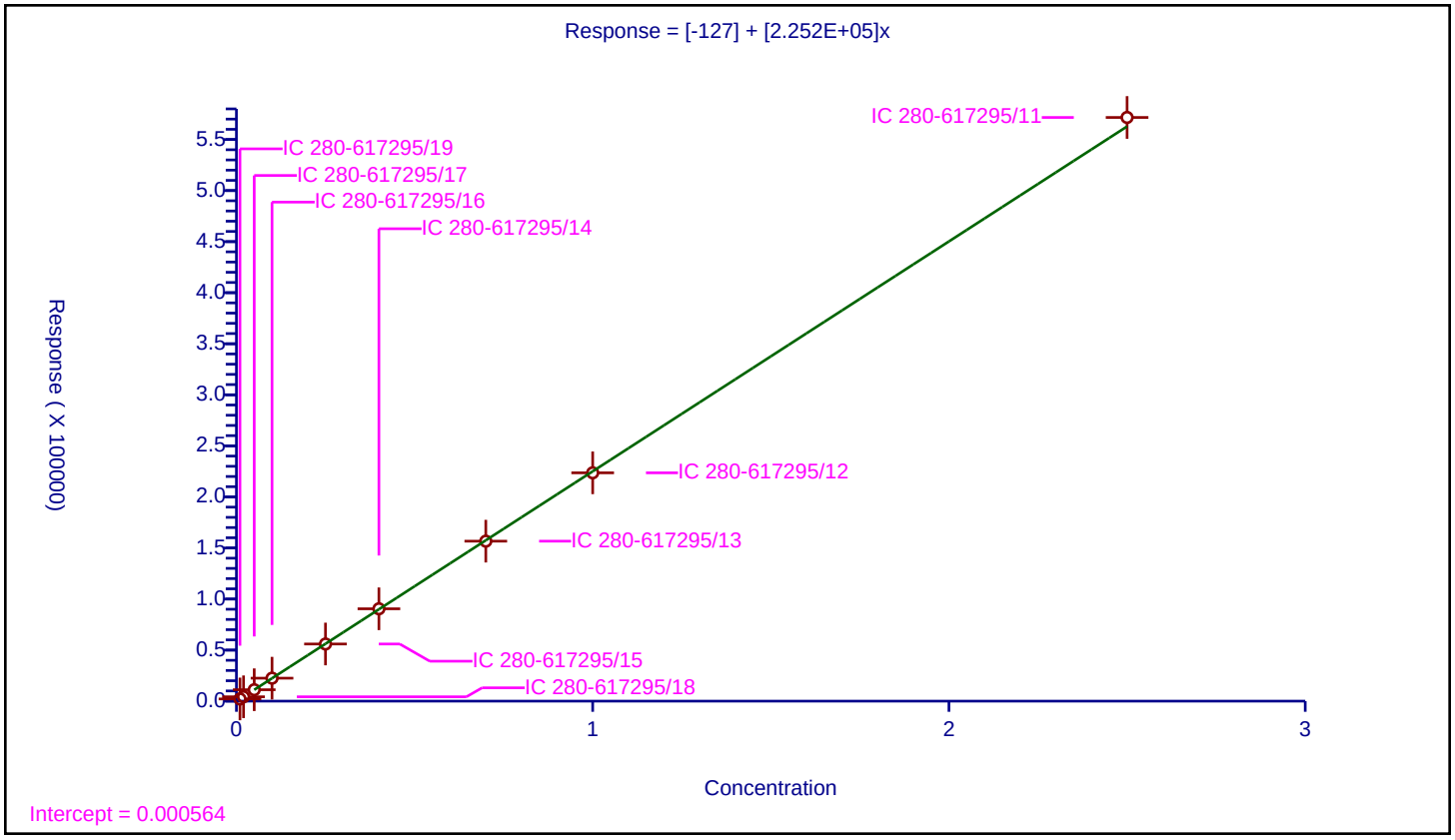
Curve Coefficients

Intercept:	-127
Slope:	2.252E+05

Error Coefficients

Standard Error:	3390
Relative Standard Error:	1.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-617295/19	0.01	2151.0			215100.0	Y
2	IC 280-617295/18	0.02	4262.0			213100.0	Y
3	IC 280-617295/17	0.05	11168.0			223360.0	Y
4	IC 280-617295/16	0.1	22486.0			224860.0	Y
5	IC 280-617295/15	0.25	55971.0			223884.0	Y
6	IC 280-617295/14	0.4	90451.0			226127.5	Y
7	IC 280-617295/13	0.7	156668.0			223811.428571	Y
8	IC 280-617295/12	1.0	223593.0			223593.0	Y
9	IC 280-617295/11	2.5	571603.0			228641.2	Y



Calibration / Tetryl

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

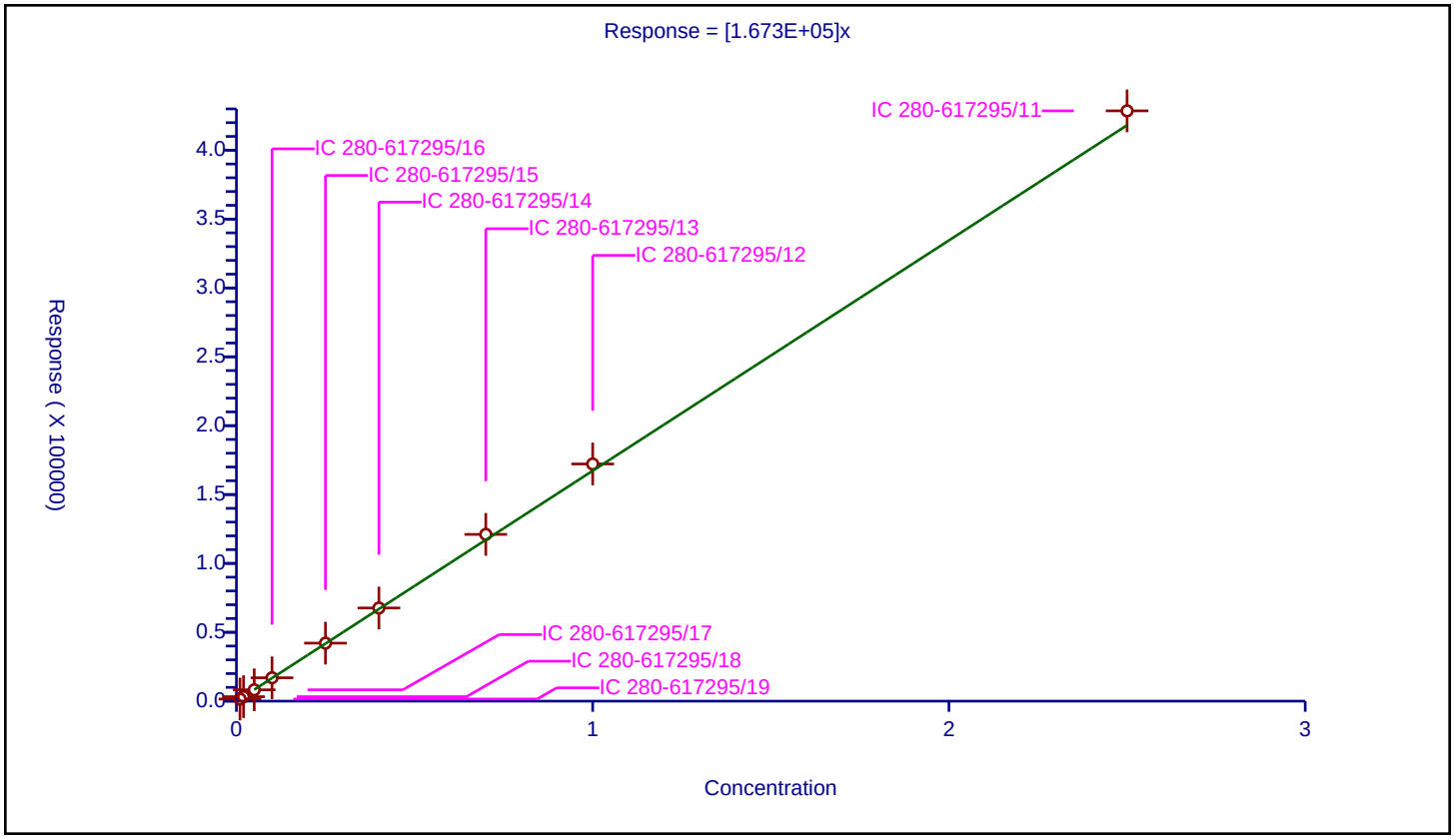
Curve Coefficients

Intercept:	0
Slope:	1.673E+05

Error Coefficients

Standard Error:	4320
Relative Standard Error:	3.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-617295/19	0.01	1546.0			154600.0	Y
2	IC 280-617295/18	0.02	3248.0			162400.0	Y
3	IC 280-617295/17	0.05	8232.0			164640.0	Y
4	IC 280-617295/16	0.1	16961.0			169610.0	Y
5	IC 280-617295/15	0.25	42107.0			168428.0	Y
6	IC 280-617295/14	0.4	67629.0			169072.5	Y
7	IC 280-617295/13	0.7	121063.0			172947.142857	Y
8	IC 280-617295/12	1.0	172187.0			172187.0	Y
9	IC 280-617295/11	2.5	428562.0			171424.8	Y



Calibration / Nitroglycerin

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

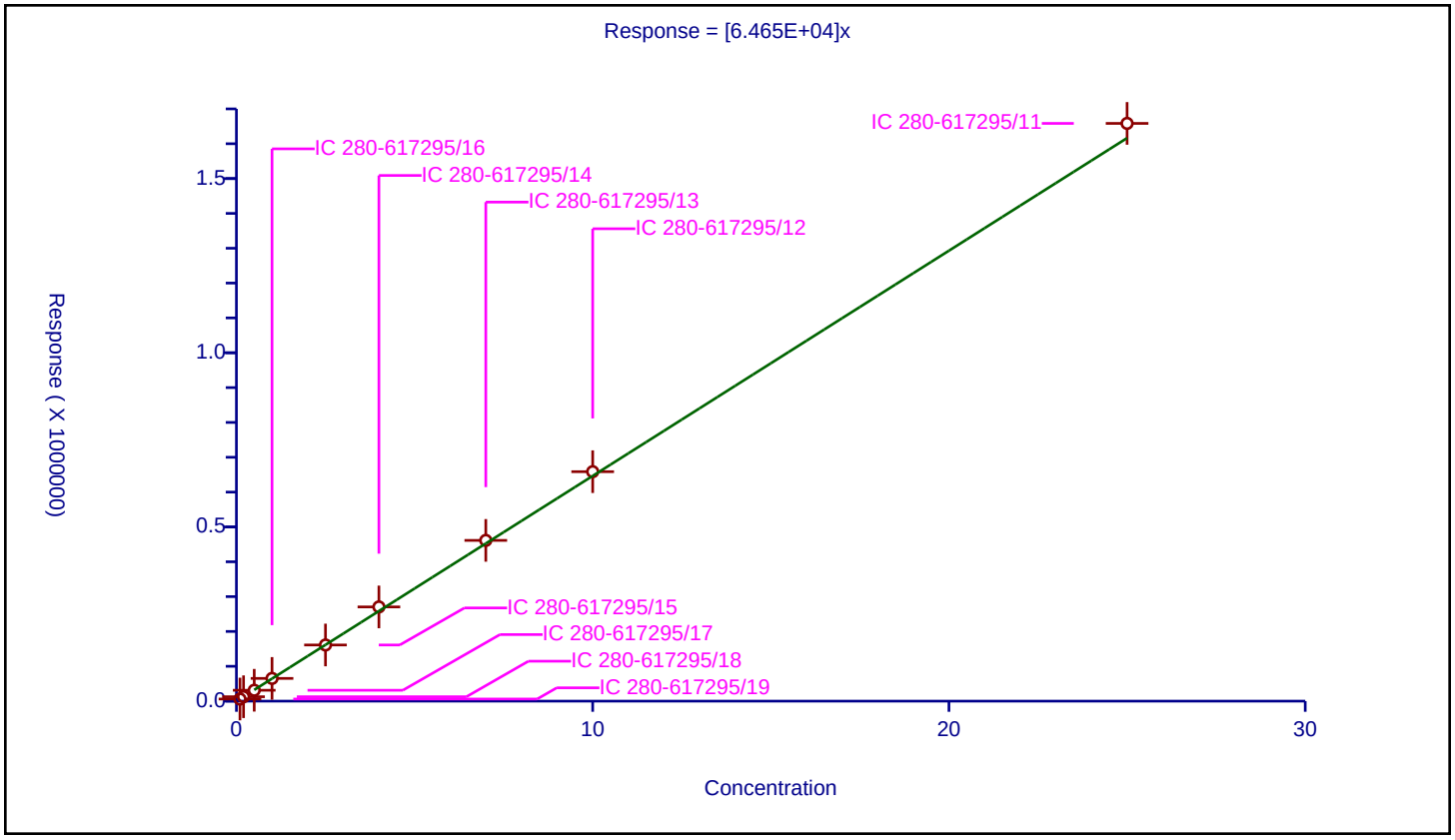
Curve Coefficients

Intercept:	0
Slope:	6.465E+04

Error Coefficients

Standard Error:	16300
Relative Standard Error:	3.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-617295/19	0.1	6047.0			60470.0	Y
2	IC 280-617295/18	0.2	12682.0			63410.0	Y
3	IC 280-617295/17	0.5	31254.0			62508.0	Y
4	IC 280-617295/16	1.0	65270.0			65270.0	Y
5	IC 280-617295/15	2.5	161167.0			64466.8	Y
6	IC 280-617295/14	4.0	270481.0			67620.25	Y
7	IC 280-617295/13	7.0	461386.0			65912.285714	Y
8	IC 280-617295/12	10.0	658658.0			65865.8	Y
9	IC 280-617295/11	25.0	1658317.0			66332.68	Y



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Calibration / 2,4,6-Trinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

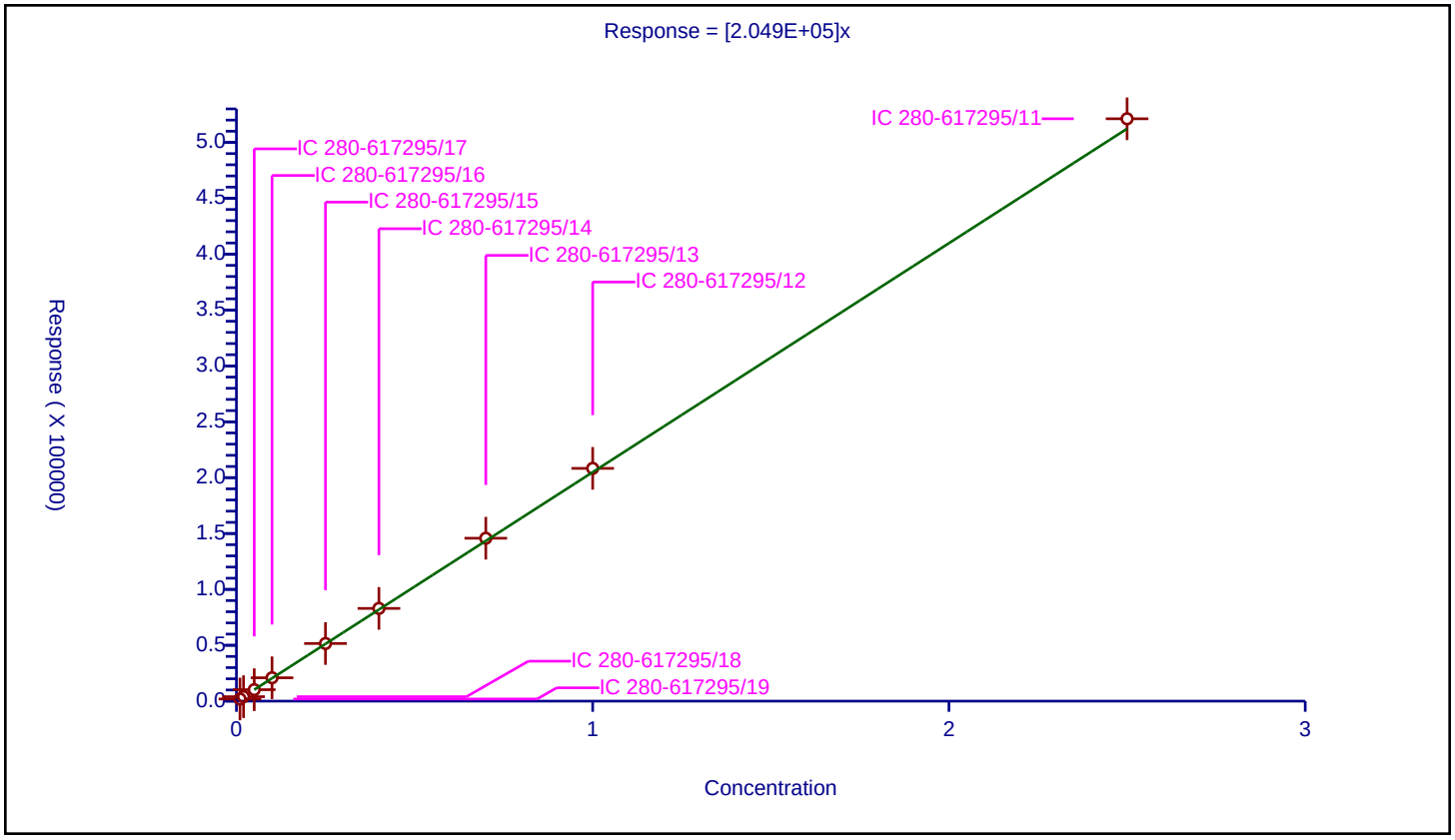
Curve Coefficients

Intercept:	0
Slope:	2.049E+05

Error Coefficients

Standard Error:	3500
Relative Standard Error:	2.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-617295/19	0.01	1918.0			191800.0	Y
2	IC 280-617295/18	0.02	3981.0			199050.0	Y
3	IC 280-617295/17	0.05	10269.0			205380.0	Y
4	IC 280-617295/16	0.1	20907.0			209070.0	Y
5	IC 280-617295/15	0.25	51584.0			206336.0	Y
6	IC 280-617295/14	0.4	82972.0			207430.0	Y
7	IC 280-617295/13	0.7	145792.0			208274.285714	Y
8	IC 280-617295/12	1.0	208313.0			208313.0	Y
9	IC 280-617295/11	2.5	521163.0			208465.2	Y



Calibration / 4-Amino-2,6-dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

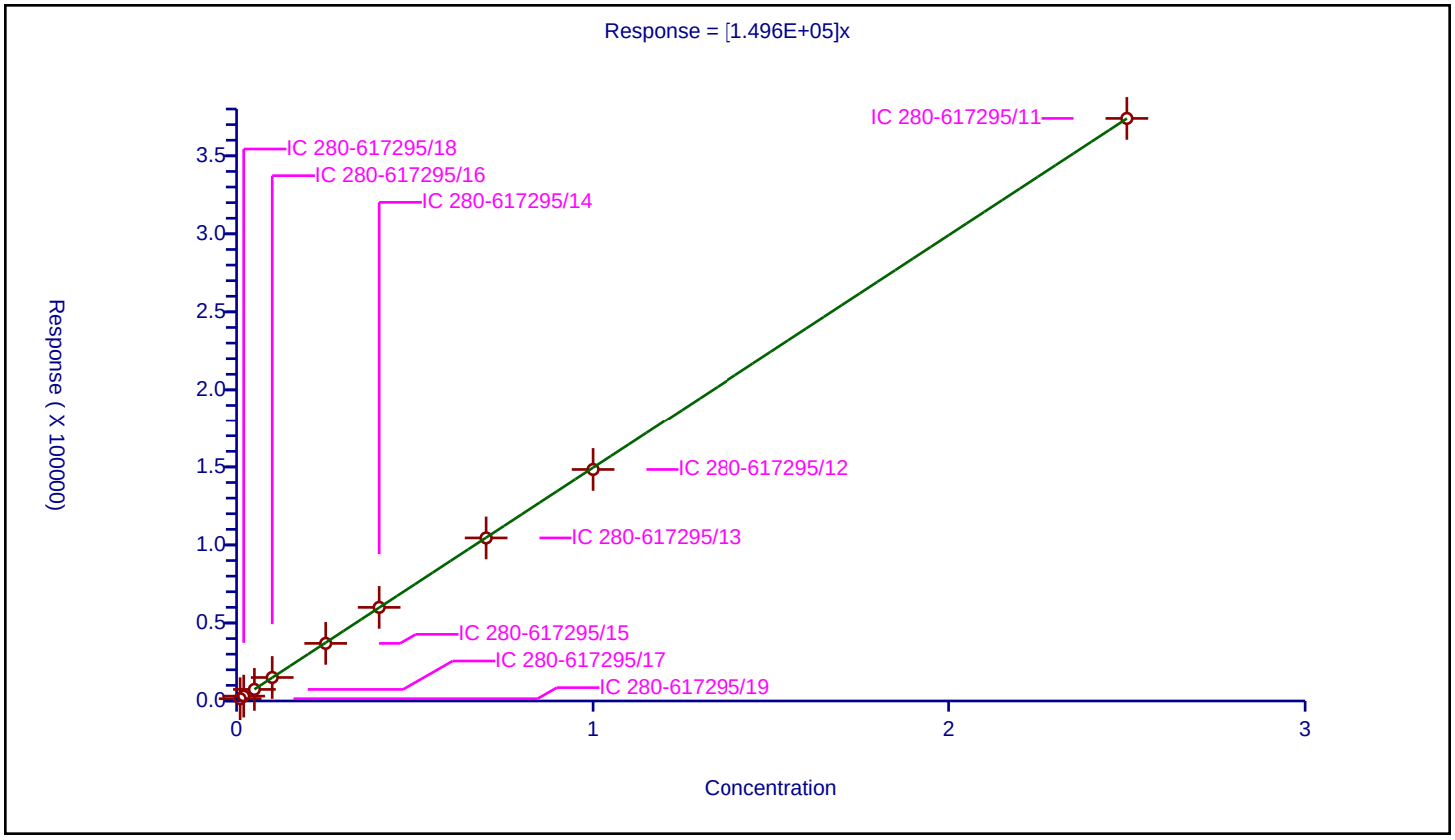
Curve Coefficients

Intercept:	0
Slope:	1.496E+05

Error Coefficients

Standard Error:	467
Relative Standard Error:	1.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-617295/19	0.01	1464.0			146400.0	Y
2	IC 280-617295/18	0.02	3111.0			155550.0	Y
3	IC 280-617295/17	0.05	7431.0			148620.0	Y
4	IC 280-617295/16	0.1	15058.0			150580.0	Y
5	IC 280-617295/15	0.25	36921.0			147684.0	Y
6	IC 280-617295/14	0.4	59989.0			149972.5	Y
7	IC 280-617295/13	0.7	104488.0			149268.571429	Y
8	IC 280-617295/12	1.0	148367.0			148367.0	Y
9	IC 280-617295/11	2.5	373989.0			149595.6	Y



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Calibration / 2-Amino-4,6-dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

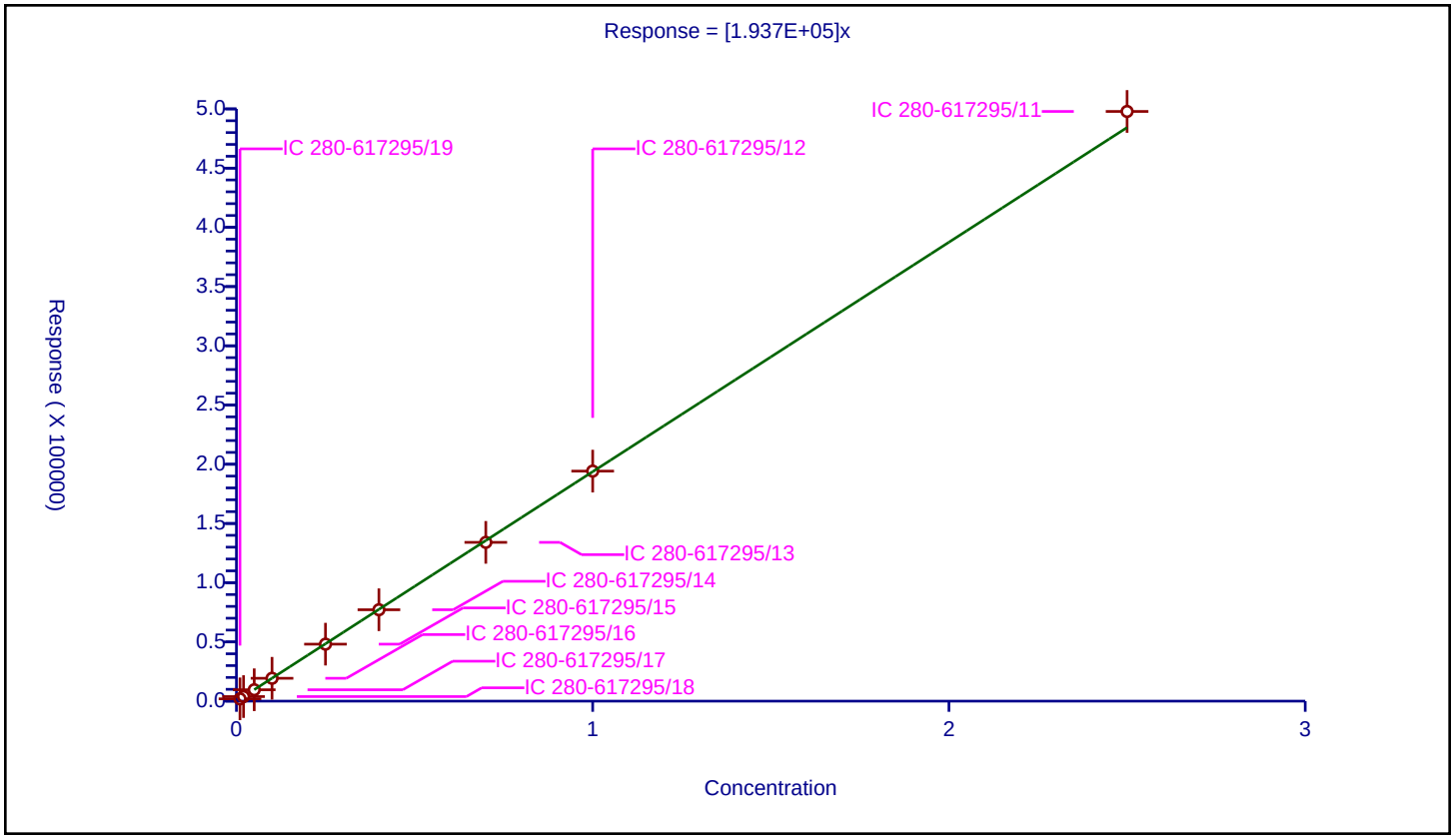
Curve Coefficients

Intercept:	0
Slope:	1.937E+05

Error Coefficients

Standard Error:	4830
Relative Standard Error:	1.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-617295/19	0.01	1950.0			195000.0	Y
2	IC 280-617295/18	0.02	3863.0			193150.0	Y
3	IC 280-617295/17	0.05	9604.0			192080.0	Y
4	IC 280-617295/16	0.1	19302.0			193020.0	Y
5	IC 280-617295/15	0.25	48118.0			192472.0	Y
6	IC 280-617295/14	0.4	77156.0			192890.0	Y
7	IC 280-617295/13	0.7	134046.0			191494.285714	Y
8	IC 280-617295/12	1.0	194204.0			194204.0	Y
9	IC 280-617295/11	2.5	497844.0			199137.6	Y



Calibration / 2,6-Dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

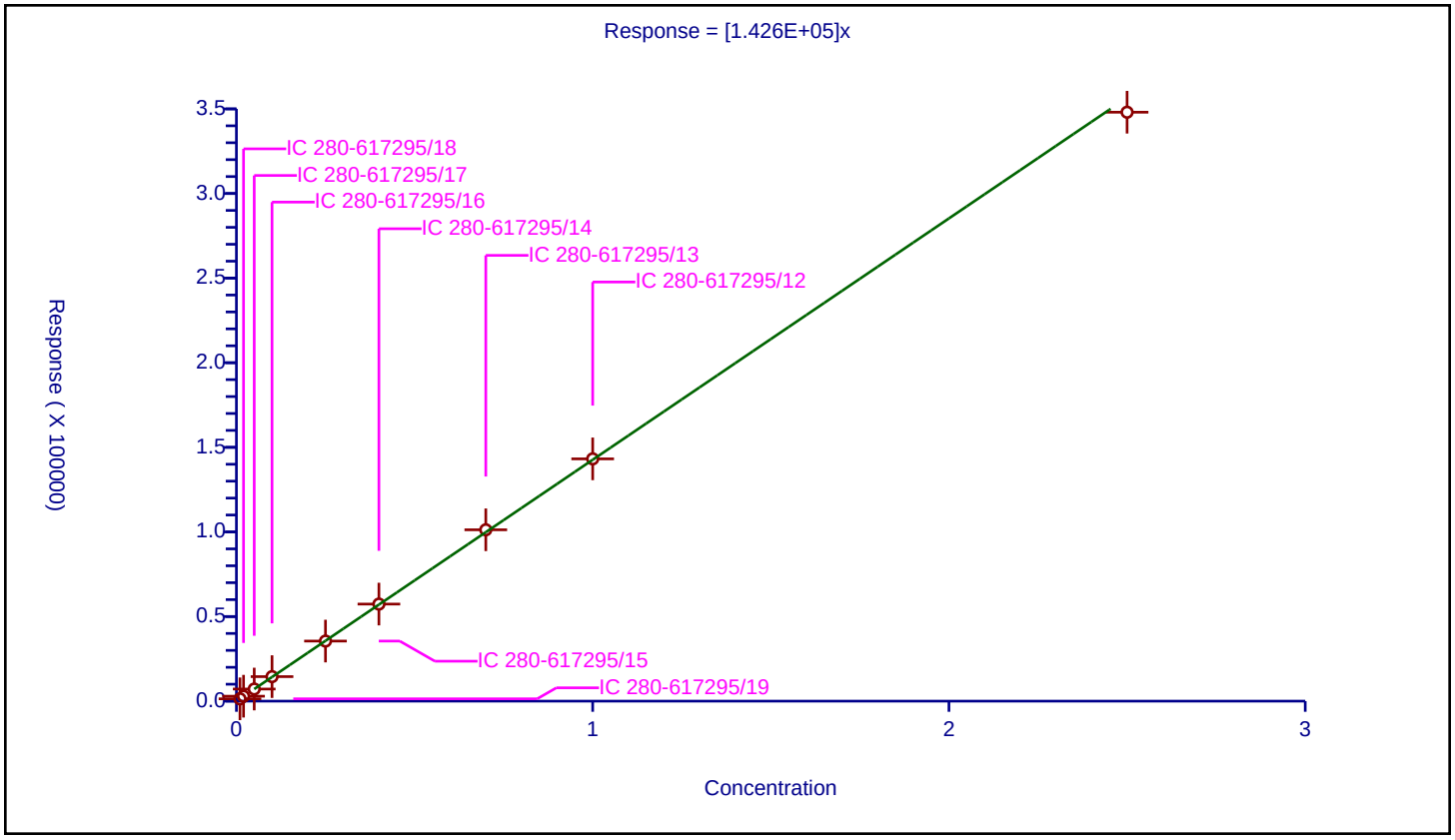
Curve Coefficients

Intercept:	0
Slope:	1.426E+05

Error Coefficients

Standard Error:	3080
Relative Standard Error:	1.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-617295/19	0.01	1373.0			137300.0	Y
2	IC 280-617295/18	0.02	2916.0			145800.0	Y
3	IC 280-617295/17	0.05	7160.0			143200.0	Y
4	IC 280-617295/16	0.1	14495.0			144950.0	Y
5	IC 280-617295/15	0.25	35503.0			142012.0	Y
6	IC 280-617295/14	0.4	57368.0			143420.0	Y
7	IC 280-617295/13	0.7	101266.0			144665.714286	Y
8	IC 280-617295/12	1.0	143182.0			143182.0	Y
9	IC 280-617295/11	2.5	348035.0			139214.0	Y



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Calibration / 2,4-Dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

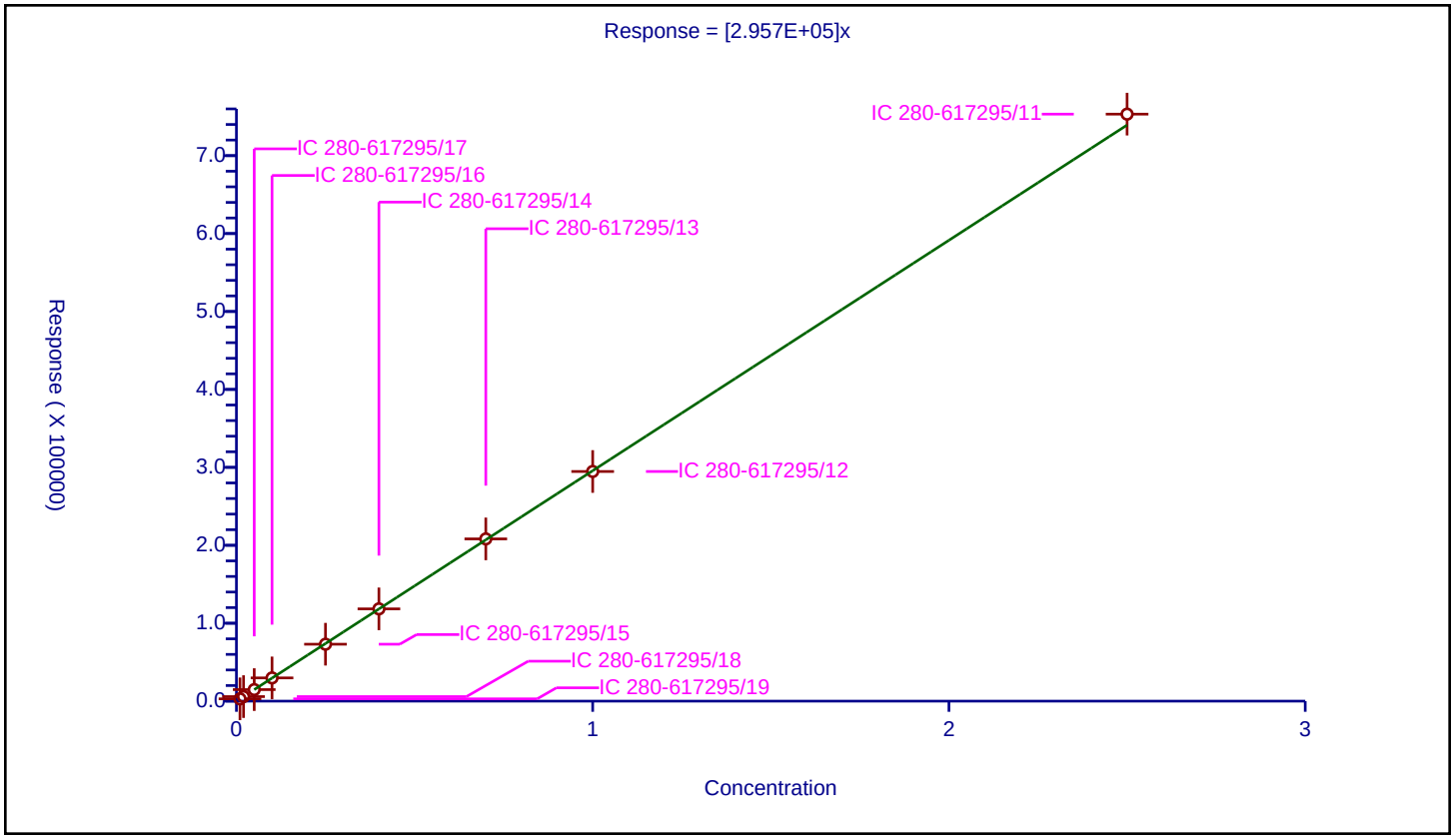
Curve Coefficients

Intercept:	0
Slope:	2.957E+05

Error Coefficients

Standard Error:	4990
Relative Standard Error:	1.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-617295/19	0.01	2941.0			294100.0	Y
2	IC 280-617295/18	0.02	5829.0			291450.0	Y
3	IC 280-617295/17	0.05	14800.0			296000.0	Y
4	IC 280-617295/16	0.1	29811.0			298110.0	Y
5	IC 280-617295/15	0.25	73049.0			292196.0	Y
6	IC 280-617295/14	0.4	118425.0			296062.5	Y
7	IC 280-617295/13	0.7	208191.0			297415.714286	Y
8	IC 280-617295/12	1.0	294715.0			294715.0	Y
9	IC 280-617295/11	2.5	753261.0			301304.4	Y



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Calibration / o-Nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

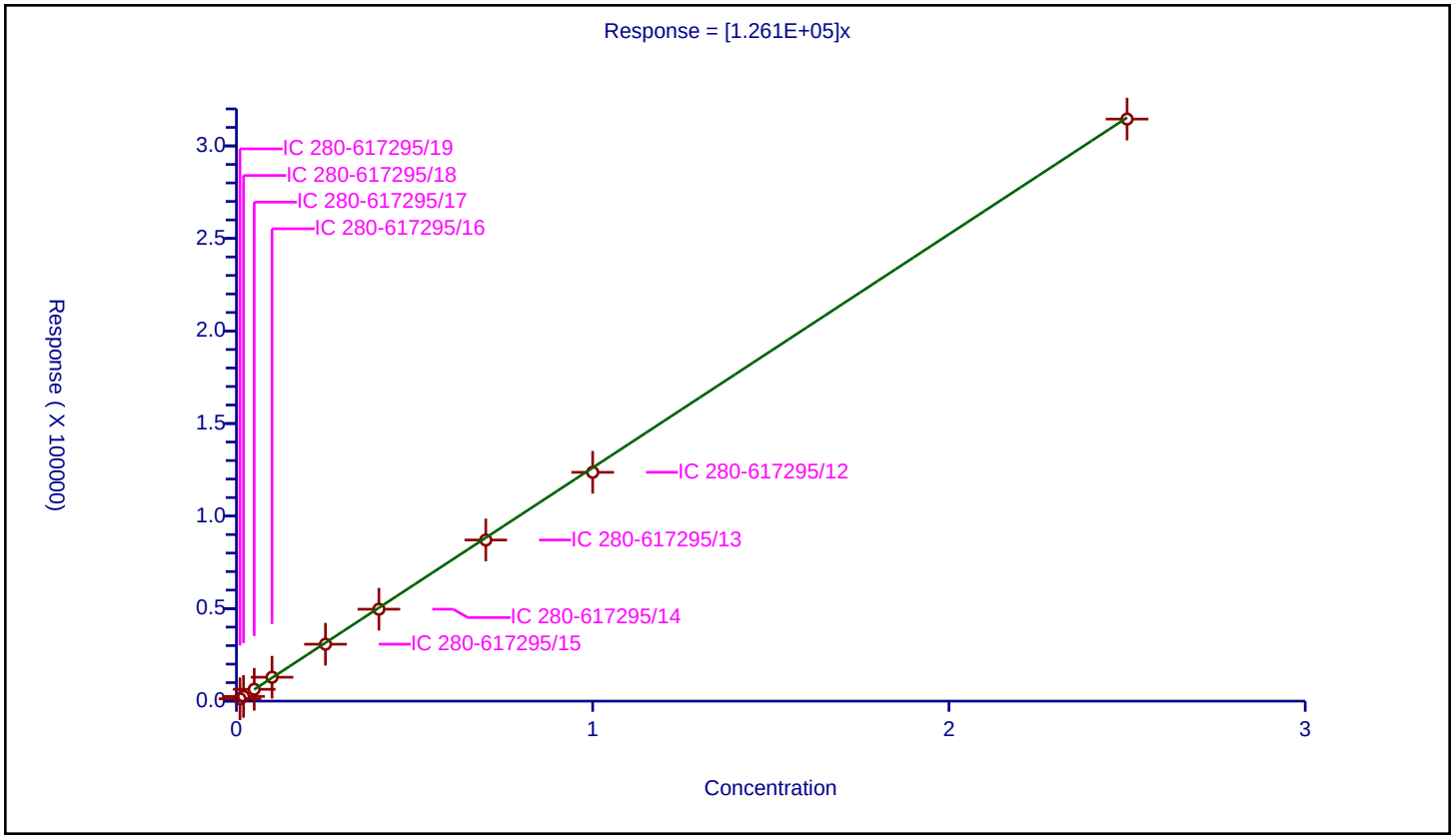
Curve Coefficients

Intercept:	0
Slope:	1.261E+05

Error Coefficients

Standard Error:	1100
Relative Standard Error:	1.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-617295/19	0.01	1291.0			129100.0	Y
2	IC 280-617295/18	0.02	2556.0			127800.0	Y
3	IC 280-617295/17	0.05	6403.0			128060.0	Y
4	IC 280-617295/16	0.1	12912.0			129120.0	Y
5	IC 280-617295/15	0.25	30758.0			123032.0	Y
6	IC 280-617295/14	0.4	49671.0			124177.5	Y
7	IC 280-617295/13	0.7	87064.0			124377.142857	Y
8	IC 280-617295/12	1.0	123644.0			123644.0	Y
9	IC 280-617295/11	2.5	314499.0			125799.6	Y



Calibration / p-Nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

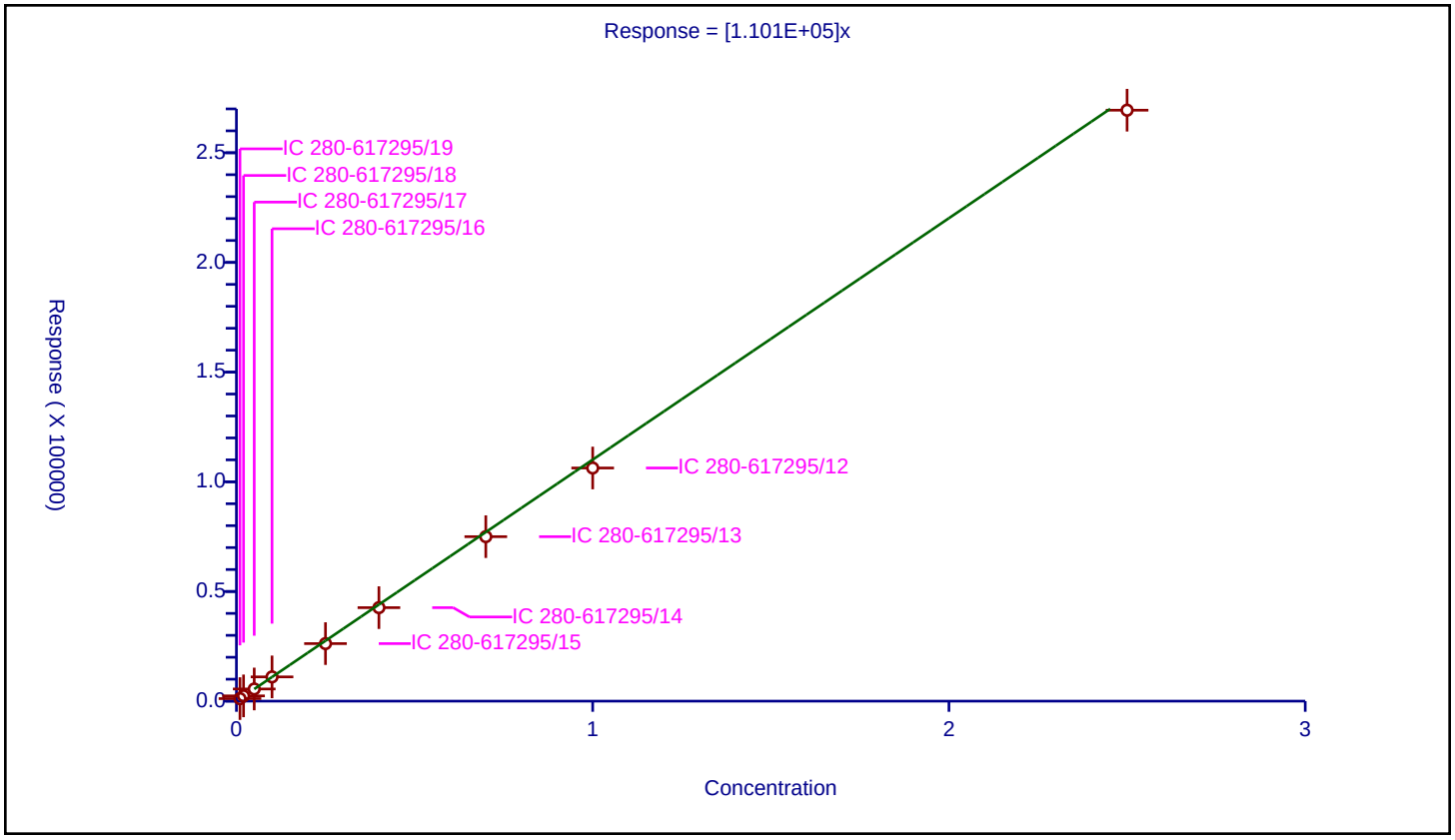
Curve Coefficients

Intercept:	0
Slope:	1.101E+05

Error Coefficients

Standard Error:	2650
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 280-617295/19	0.01	1165.0			116500.0	Y
2	IC 280-617295/18	0.02	2404.0			120200.0	Y
3	IC 280-617295/17	0.05	5543.0			110860.0	Y
4	IC 280-617295/16	0.1	11057.0			110570.0	Y
5	IC 280-617295/15	0.25	26234.0			104936.0	Y
6	IC 280-617295/14	0.4	42626.0			106565.0	Y
7	IC 280-617295/13	0.7	74981.0			107115.714286	Y
8	IC 280-617295/12	1.0	106286.0			106286.0	Y
9	IC 280-617295/11	2.5	269407.0			107762.8	Y



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Calibration / m-Nitrotoluene

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

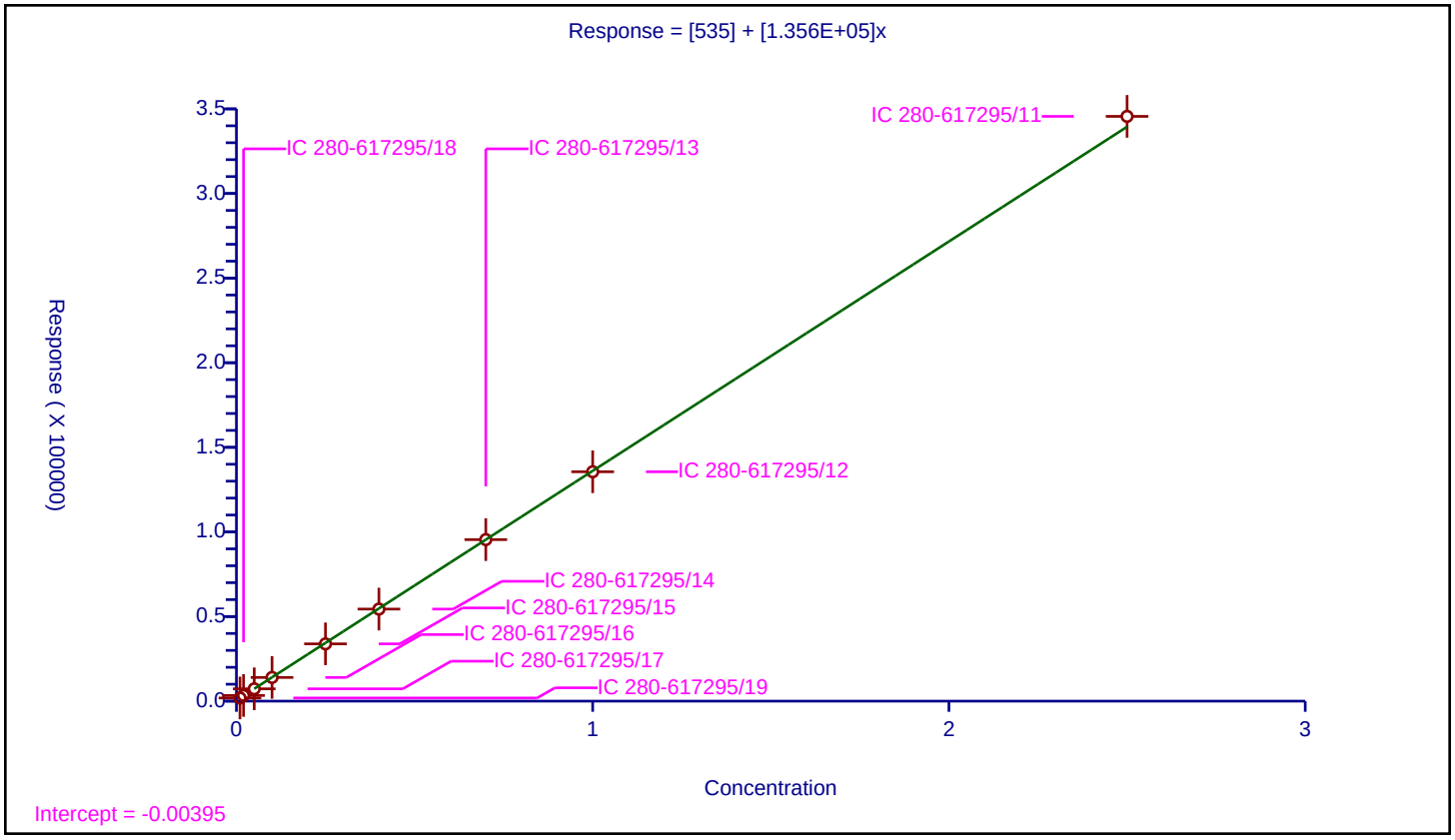
Curve Coefficients

Intercept:	535
Slope:	1.356E+05

Error Coefficients

Standard Error:	2350
Relative Standard Error:	1.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-617295/19	0.01	1870.0			187000.0	Y
2	IC 280-617295/18	0.02	3341.0			167050.0	Y
3	IC 280-617295/17	0.05	7282.0			145640.0	Y
4	IC 280-617295/16	0.1	14001.0			140010.0	Y
5	IC 280-617295/15	0.25	33854.0			135416.0	Y
6	IC 280-617295/14	0.4	54401.0			136002.5	Y
7	IC 280-617295/13	0.7	95457.0			136367.142857	Y
8	IC 280-617295/12	1.0	135553.0			135553.0	Y
9	IC 280-617295/11	2.5	345577.0			138230.8	Y



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Calibration / PETN

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

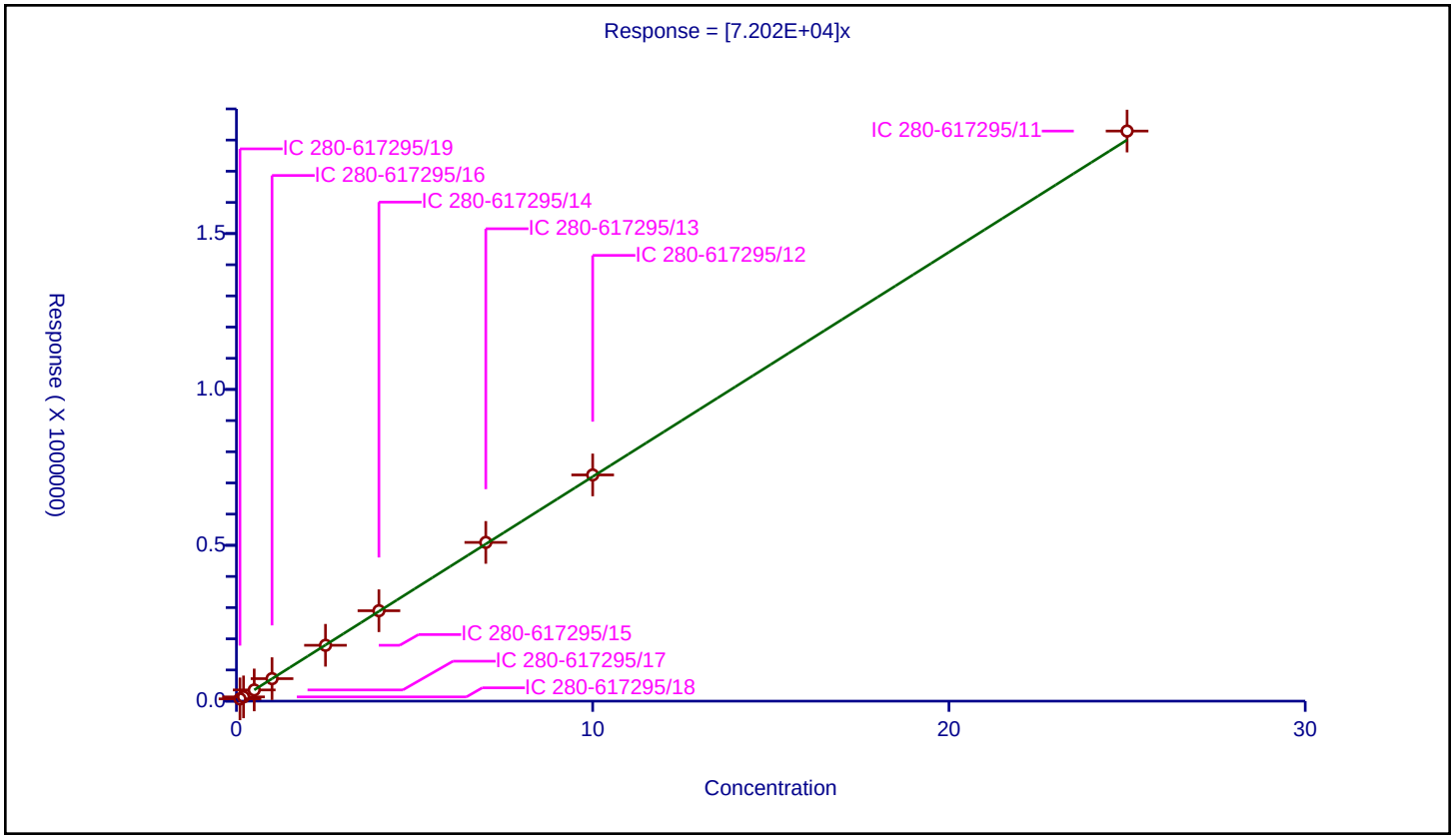
Curve Coefficients

Intercept:	0
Slope:	7.202E+04

Error Coefficients

Standard Error:	10400
Relative Standard Error:	2.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-617295/19	0.1	7328.0			73280.0	Y
2	IC 280-617295/18	0.2	13637.0			68185.0	Y
3	IC 280-617295/17	0.5	35921.0			71842.0	Y
4	IC 280-617295/16	1.0	72200.0			72200.0	Y
5	IC 280-617295/15	2.5	179178.0			71671.2	Y
6	IC 280-617295/14	4.0	290067.0			72516.75	Y
7	IC 280-617295/13	7.0	509169.0			72738.428571	Y
8	IC 280-617295/12	10.0	725734.0			72573.4	Y
9	IC 280-617295/11	25.0	1828875.0			73155.0	Y



10/20/2023
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FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins Denver | Job No.: 280-182239-1 | Analy Batch No.: 617295

SDG No.:

Instrument ID: CHHPLC_X3 | GC Column: UltraCarb5u ID: 4.6(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 06/23/2023 21:43 | Calibration End Date: 06/24/2023 00:23 | Calibration ID: 81927

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-617295/28	06230028.D
Level 2	IC 280-617295/27	06230027.D
Level 3	IC 280-617295/26	06230026.D
Level 4	IC 280-617295/25	06230025.D
Level 5	IC 280-617295/24	06230024.D
Level 6	IC 280-617295/23	06230023.D
Level 7	IC 280-617295/22	06230022.D
Level 8	IC 280-617295/21	06230021.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	6.470	6.478	6.471	6.475	6.474	6.474	6.467	6.467			6.325 - 6.625	6.472
2,4-diamino-6-nitrotoluene	6.663	6.672	6.664	6.669	6.668	6.668	6.660	6.661			6.519 - 6.819	6.666

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

Lab Name: Eurofins Denver Job No.: 280-182239-1 Analy Batch No.: 617295

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/23/2023 21:43 Calibration End Date: 06/24/2023 00:23 Calibration ID: 81927

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-617295/28	06230028.D
Level 2	IC 280-617295/27	06230027.D
Level 3	IC 280-617295/26	06230026.D
Level 4	IC 280-617295/25	06230025.D
Level 5	IC 280-617295/24	06230024.D
Level 6	IC 280-617295/23	06230023.D
Level 7	IC 280-617295/22	06230022.D
Level 8	IC 280-617295/21	06230021.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	220600 213353	263000 220126	226520 222122	225404 213398	Ave		225565.227				7.0		20.0			
2,4-diamino-6-nitrotoluene	156550 131303	165000 137551	144420 139337	140720 131729	Ave		143326.266				8.3		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.: 280-182239-1 | Analy Batch No.: 617295

SDG No.:

Instrument ID: CHHPLC_X3 | GC Column: UltraCarb5 ID: 4.6(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 06/23/2023 21:43 | Calibration End Date: 06/24/2023 00:23 | Calibration ID: 81927

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-617295/28	06230028.D
Level 2	IC 280-617295/27	06230027.D
Level 3	IC 280-617295/26	06230026.D
Level 4	IC 280-617295/25	06230025.D
Level 5	IC 280-617295/24	06230024.D
Level 6	IC 280-617295/23	06230023.D
Level 7	IC 280-617295/22	06230022.D
Level 8	IC 280-617295/21	06230021.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	4412 154088	10520 222122	22652 533494	56351	85341	0.0200 0.700	0.0400 1.00	0.100 2.50	0.250	0.400
2,4-diamino-6-nitrotoluene	Ave	3131 96286	6600 139337	14442 329323	35180	52521	0.0200 0.700	0.0400 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_X\20230623-122860.b\06230021.D				
Lims ID:	IC ADD 8				
Client ID:					
Sample Type:	IC	Calib Level:	8		
Inject. Date:	23-Jun-2023 21:43:15	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC ADD 8				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub28				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	24-Jun-2023 12:55:52	Calib Date:	24-Jun-2023 00:23:49		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1681				
First Level Reviewer: LV5D		Date:	24-Jun-2023 10:41:47		

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	6.467	6.475	-0.008	533494	2.50	2.37	M
5 2,4-diamino-6-nitrotoluene	1	6.661	6.669	-0.008	329323	2.50	2.30	M

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

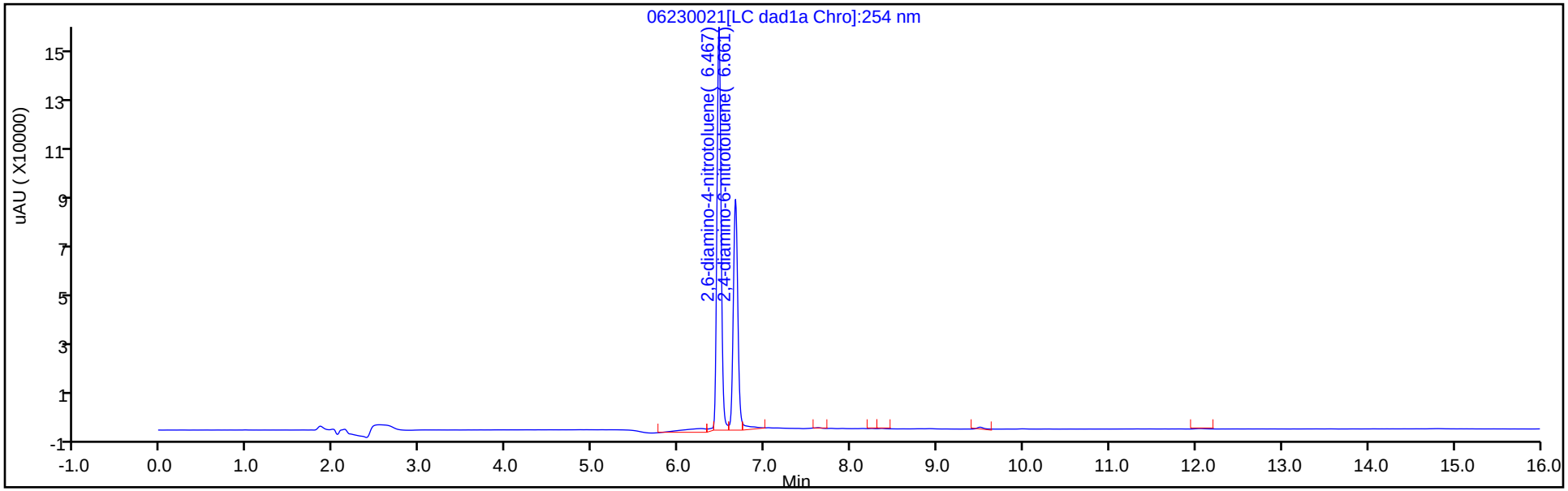
8330_ADDs_00037 Amount Added: 125.00 Units: uL

Report Date: 24-Jun-2023 12:55:52 Chrom Revision: 2.3 05-Jun-2023 19:02:10

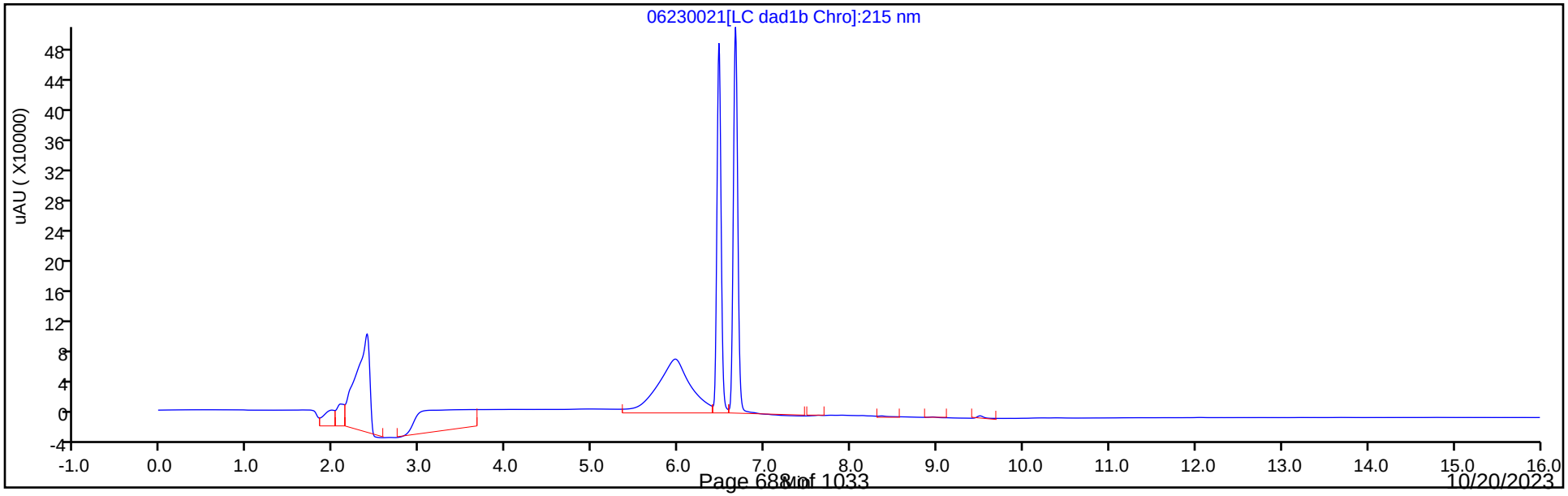
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230021.d				
Injection Date:	23-Jun-2023 21:43:15	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	IC ADD 8			Worklist Smp#:	21
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	21
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

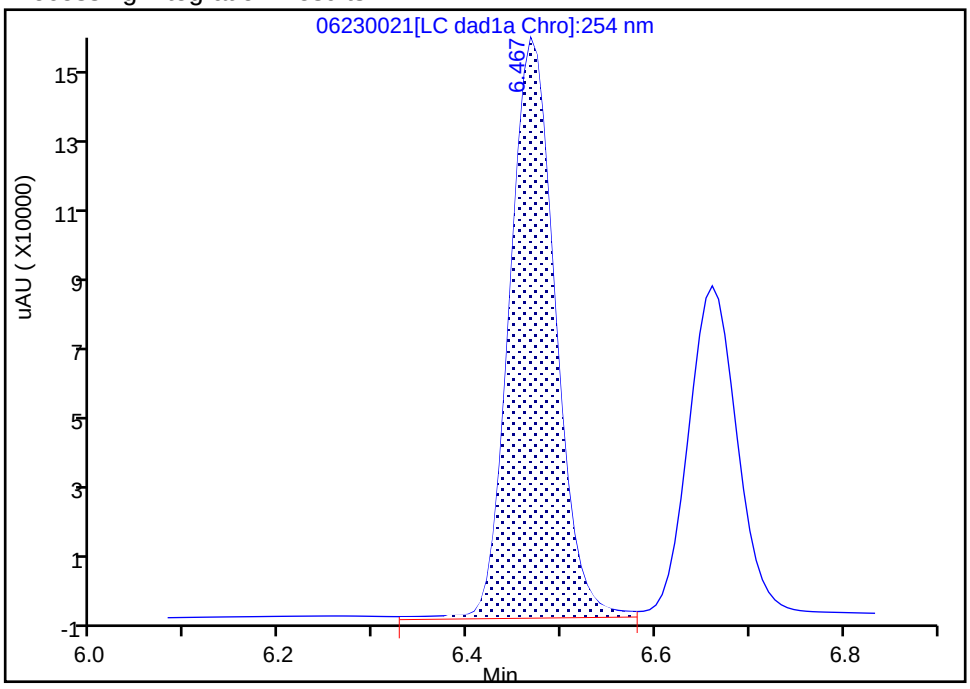
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230021.d				
Injection Date:	23-Jun-2023 21:43:15	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 8				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

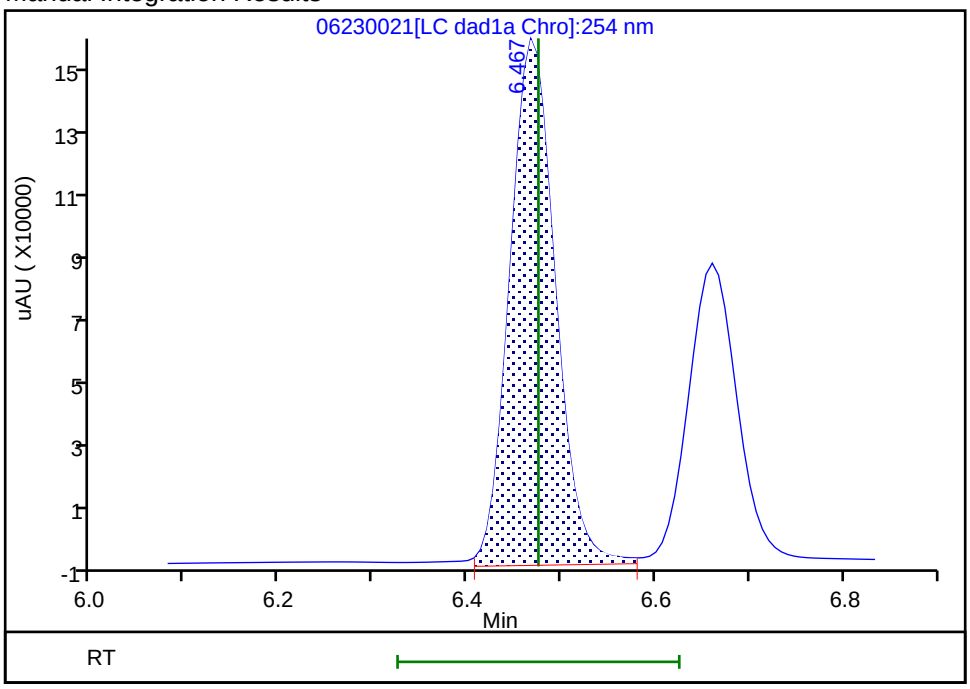
Processing Integration Results

RT: 6.47
Area: 539094
Amount: 2.445370
Amount Units: ug/mL



Manual Integration Results

RT: 6.47
Area: 533494
Amount: 2.365143
Amount Units: ug/mL



Reviewer: LV5D, 24-Jun-2023 10:41:42 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

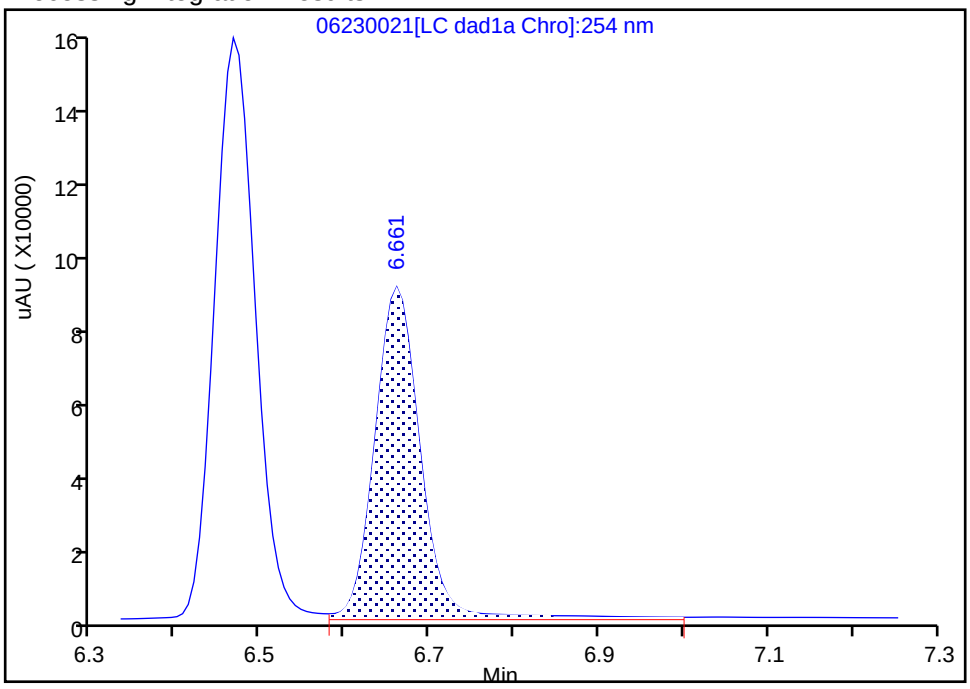
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230021.d				
Injection Date:	23-Jun-2023 21:43:15	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 8				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

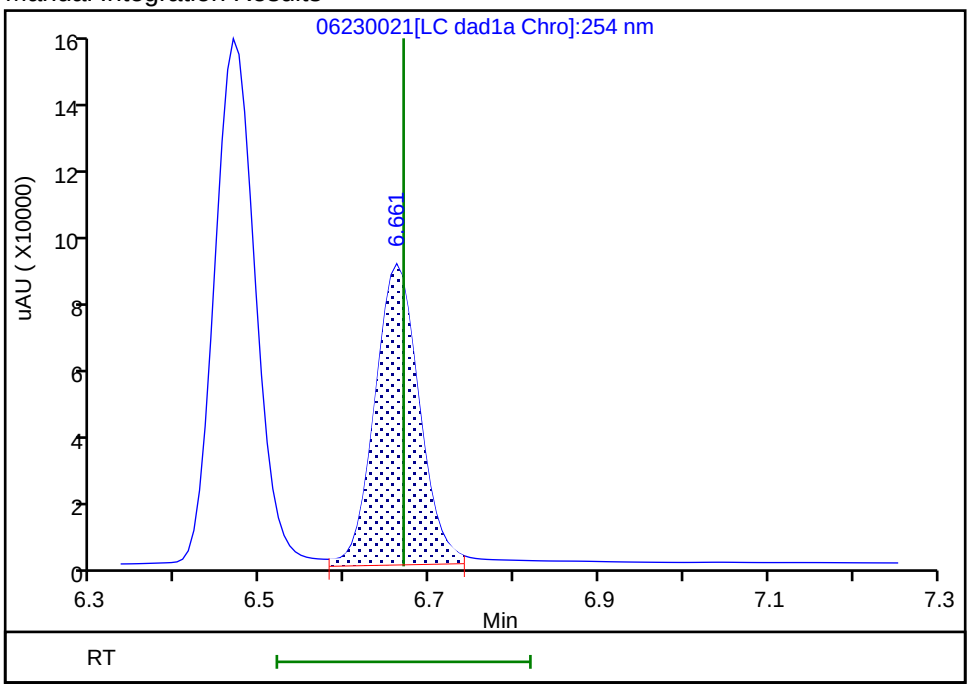
Processing Integration Results

RT: 6.66
Area: 343766
Amount: 2.533529
Amount Units: ug/mL



Manual Integration Results

RT: 6.66
Area: 329323
Amount: 2.297716
Amount Units: ug/mL



Reviewer: LV5D, 24-Jun-2023 10:41:43 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230022.D
Lims ID: IC ADD 7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 23-Jun-2023 22:06:06 ALS Bottle#: 22 Worklist Smp#: 22
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC ADD 7
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub28

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 24-Jun-2023 12:55:52 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1681

First Level Reviewer: LV5D Date: 24-Jun-2023 10:41:59

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	6.467	6.475	-0.008	222122	1.00	0.9847	M
5 2,4-diamino-6-nitrotoluene	1	6.660	6.669	-0.009	139337	1.00	0.9722	M

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330_ADDs_00037 Amount Added: 50.00 Units: uL

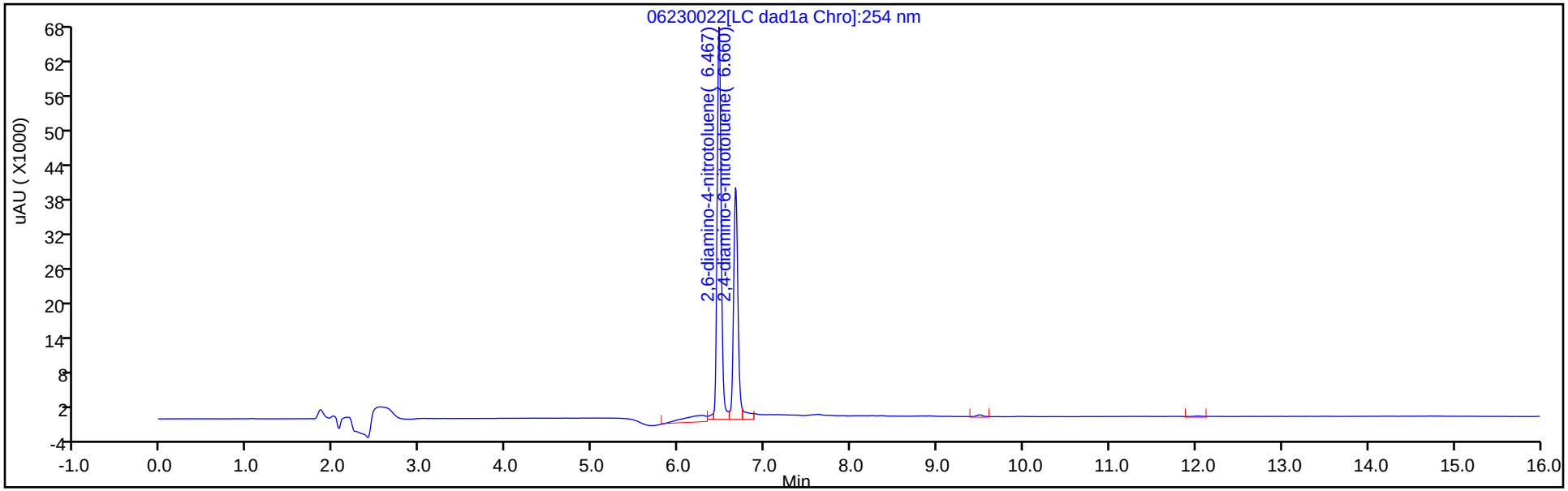
Report Date: 24-Jun-2023 12:55:53 Chrom Revision: 2.3 05-Jun-2023 19:02:10

Eurofins Denver

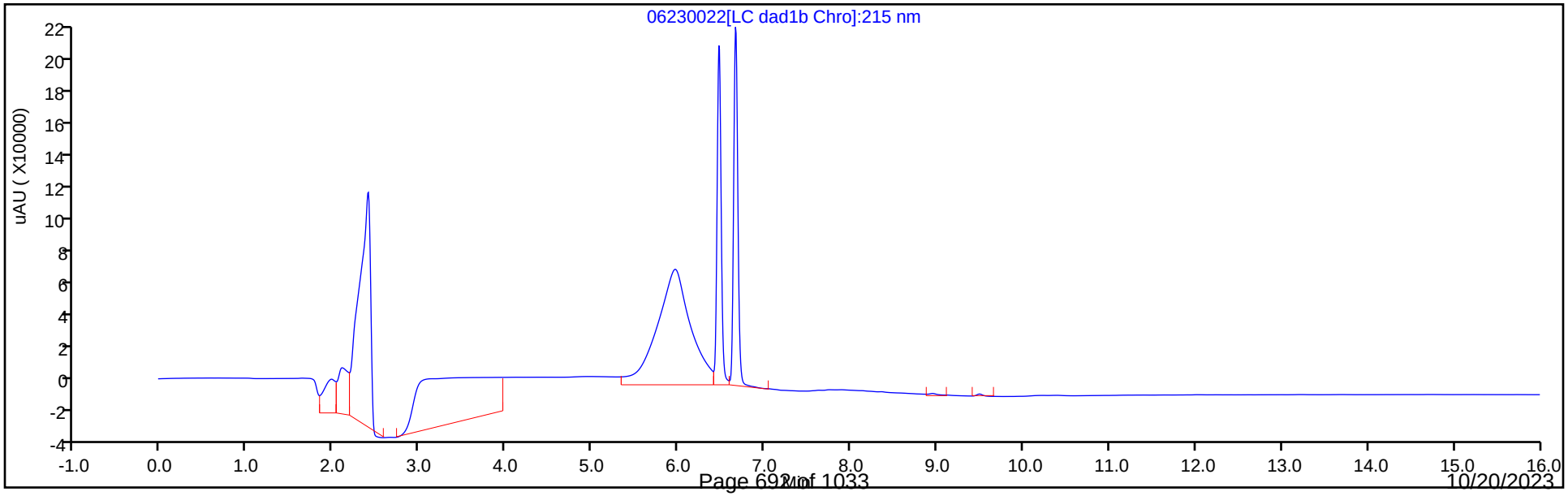
Data File: \\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230022.d

Injection Date:	23-Jun-2023 22:06:06	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	IC ADD 7			Worklist Smp#:	22
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Manual Integration/User Assign Peak Report

Eurofins Denver

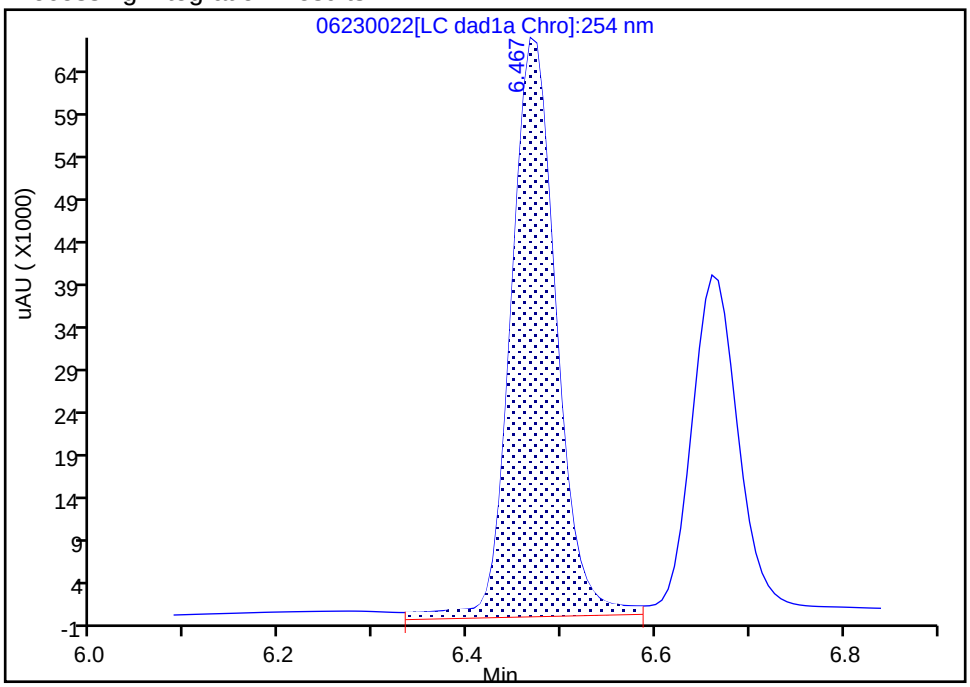
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230022.d				
Injection Date:	23-Jun-2023 22:06:06	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 7				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

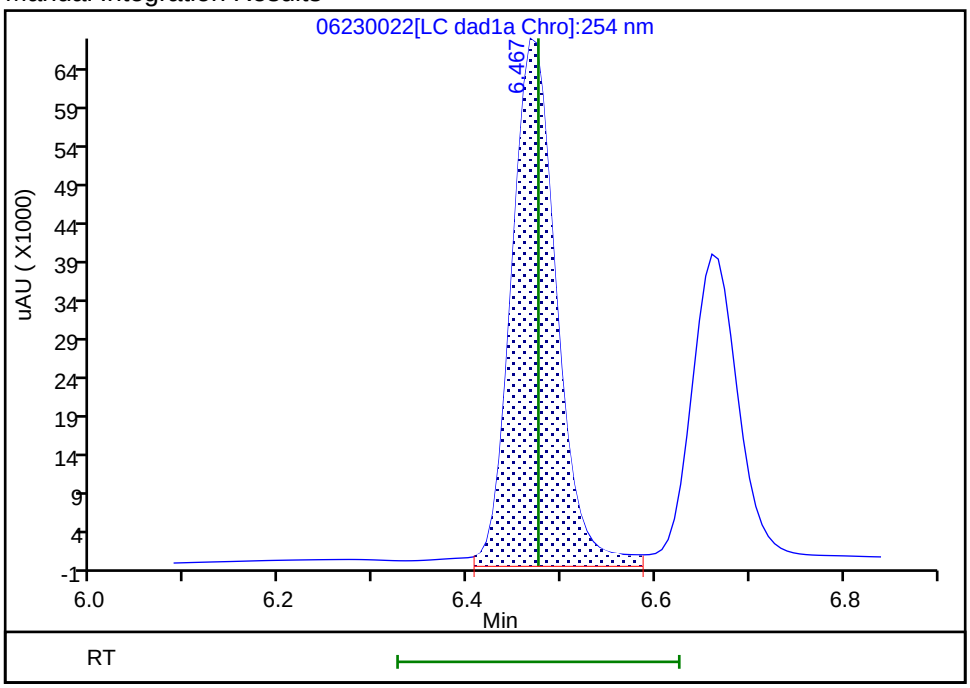
Processing Integration Results

RT: 6.47
Area: 225519
Amount: 0.988383
Amount Units: ug/mL



Manual Integration Results

RT: 6.47
Area: 222122
Amount: 0.984735
Amount Units: ug/mL



Reviewer: LV5D, 24-Jun-2023 10:41:56 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Eurofins Denver

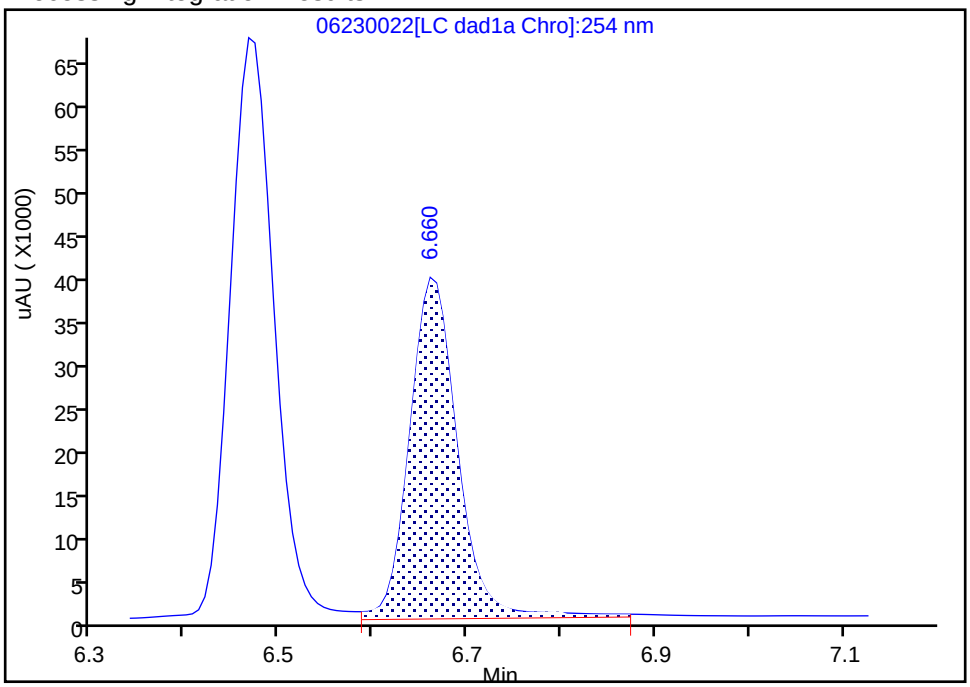
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230022.d				
Injection Date:	23-Jun-2023 22:06:06	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 7				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

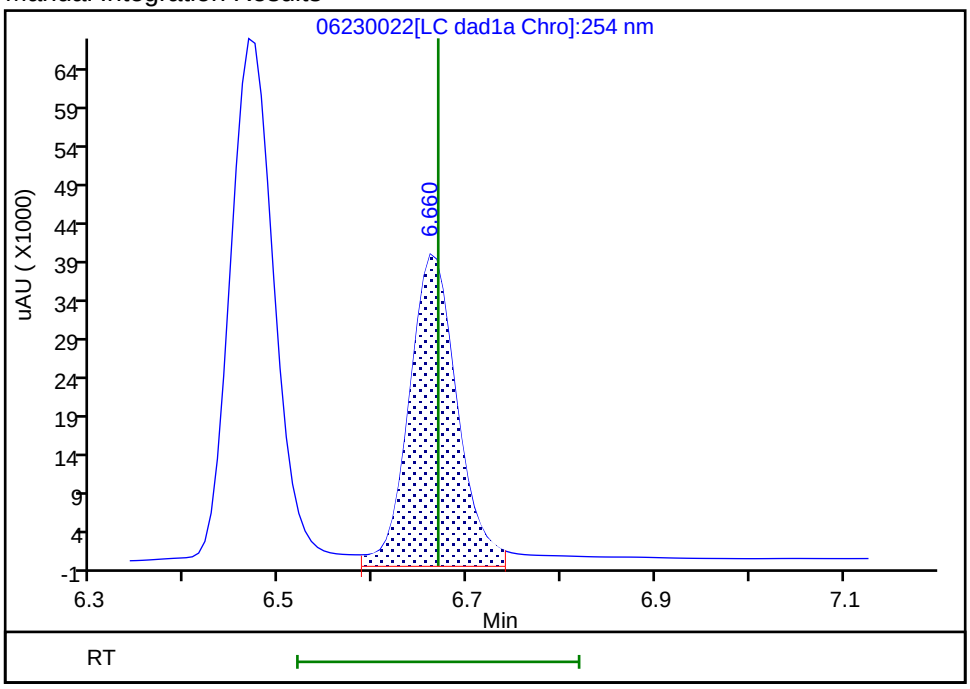
Processing Integration Results

RT: 6.66
Area: 139316
Amount: 0.997706
Amount Units: ug/mL



Manual Integration Results

RT: 6.66
Area: 139337
Amount: 0.972167
Amount Units: ug/mL



Reviewer: LV5D, 24-Jun-2023 10:41:57 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230023.D
Lims ID: IC ADD 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 23-Jun-2023 22:29:01 ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC ADD 6
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub28

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 24-Jun-2023 12:55:53 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1681

First Level Reviewer: LV5D Date: 24-Jun-2023 10:42:08

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	6.474	6.475	-0.001	154088	0.7000	0.6831	M
5 2,4-diamino-6-nitrotoluene	1	6.668	6.669	-0.001	96286	0.7000	0.6718	M

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330_ADDs_00037 Amount Added: 35.00 Units: uL

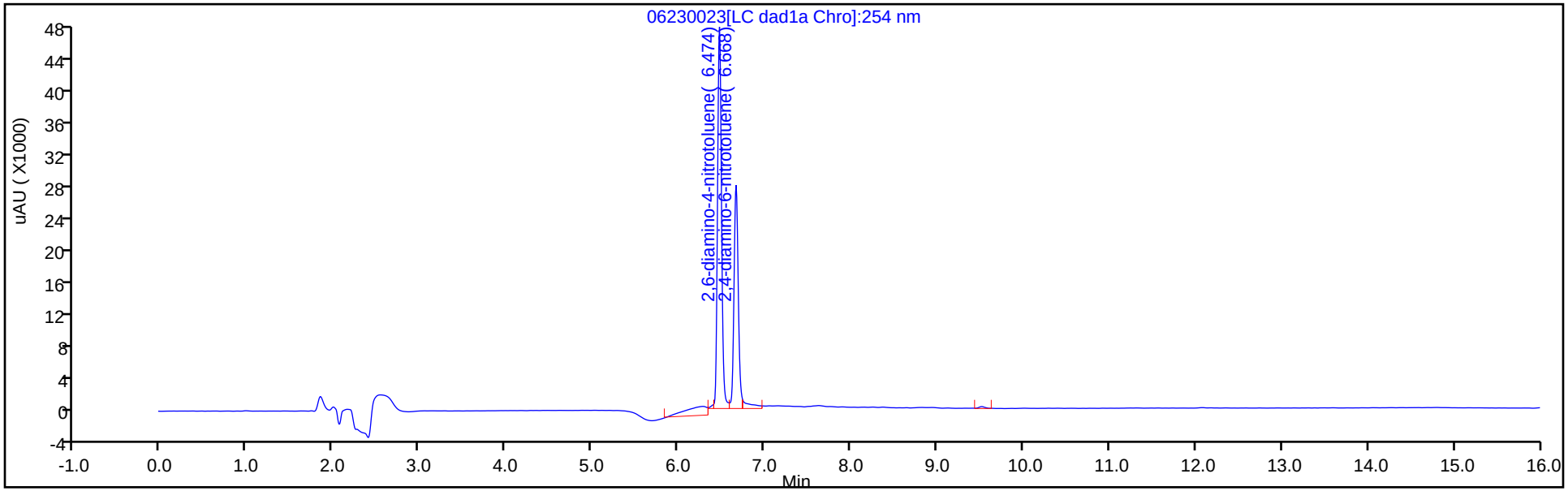
Report Date: 24-Jun-2023 12:55:53 Chrom Revision: 2.3 05-Jun-2023 19:02:10

Eurofins Denver

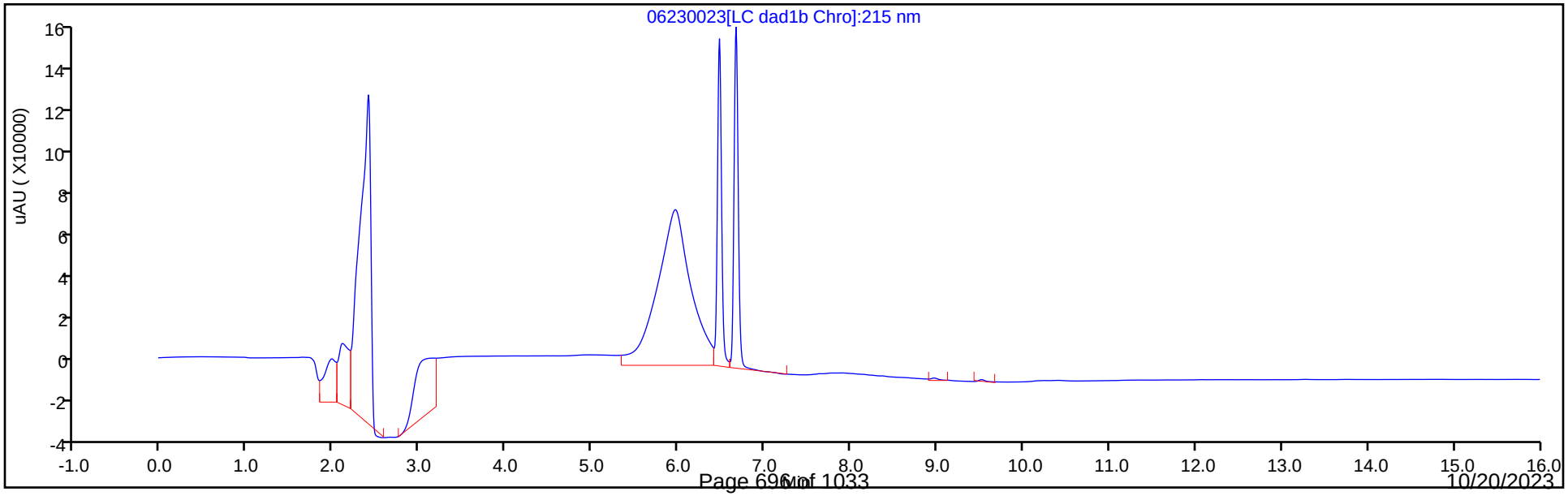
Data File: \\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230023.d

Injection Date:	23-Jun-2023 22:29:01	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	IC ADD 6			Worklist Smp#:	23
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Manual Integration/User Assign Peak Report

Eurofins Denver

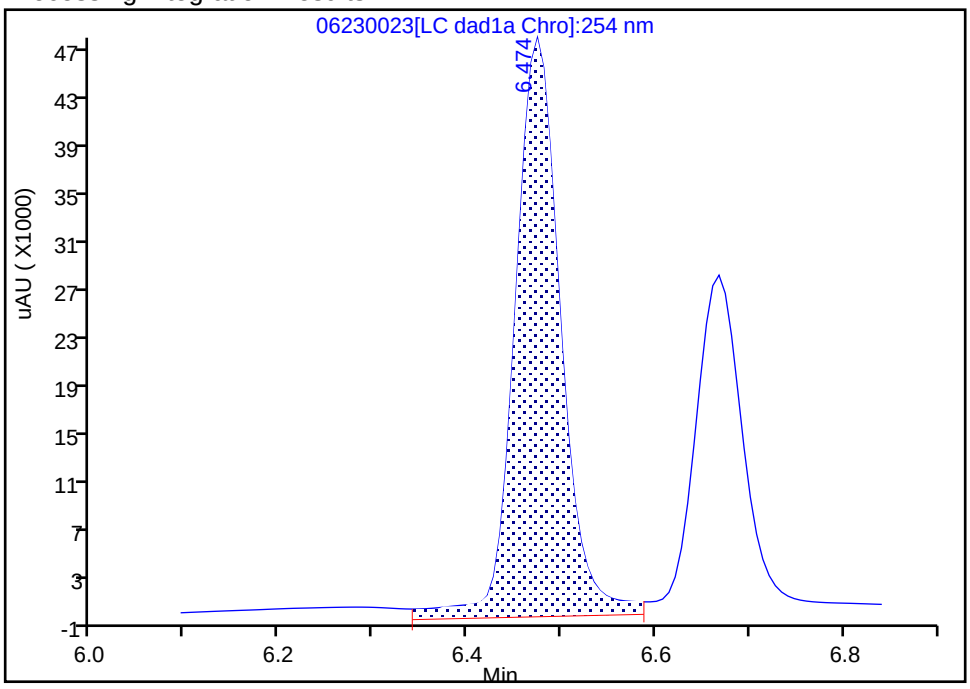
Data File: \\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230023.d
Injection Date: 23-Jun-2023 22:29:01 Instrument ID: CHHPLC_X3
Lims ID: IC ADD 6
Client ID:
Operator ID: JZ/JG ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

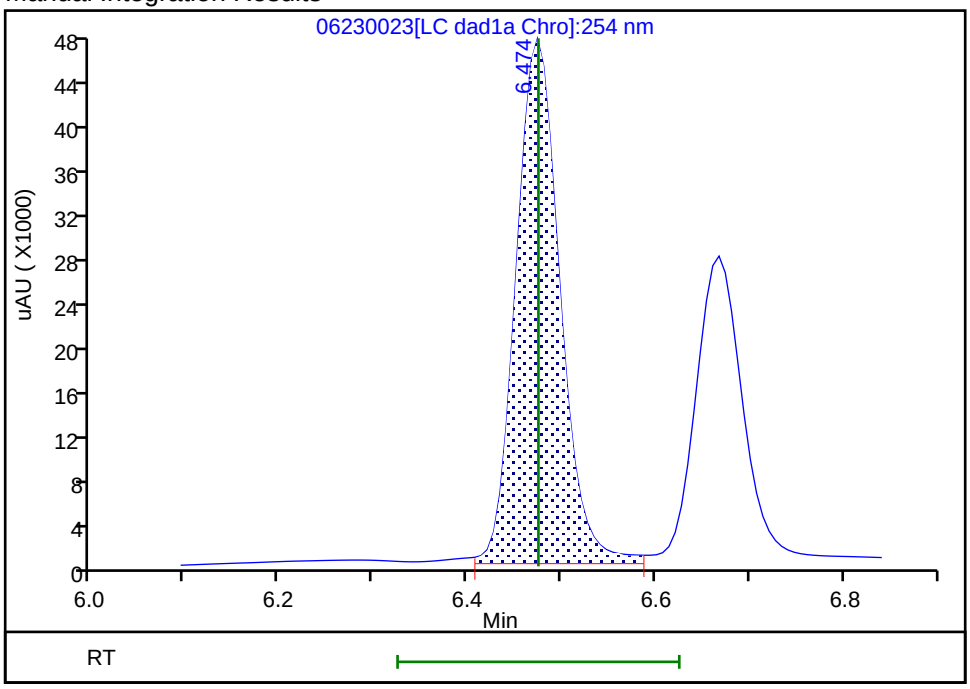
Processing Integration Results

RT: 6.47
Area: 162603
Amount: 0.697057
Amount Units: ug/mL



Manual Integration Results

RT: 6.47
Area: 154088
Amount: 0.683119
Amount Units: ug/mL



Reviewer: LV5D, 24-Jun-2023 10:42:06 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

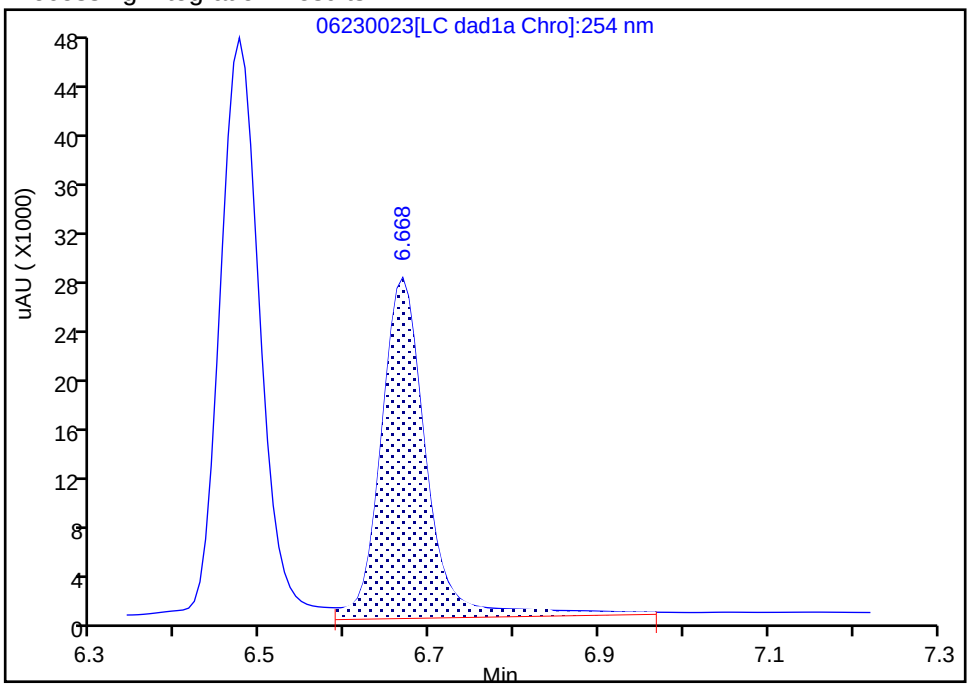
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230023.d				
Injection Date:	23-Jun-2023 22:29:01	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 6				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

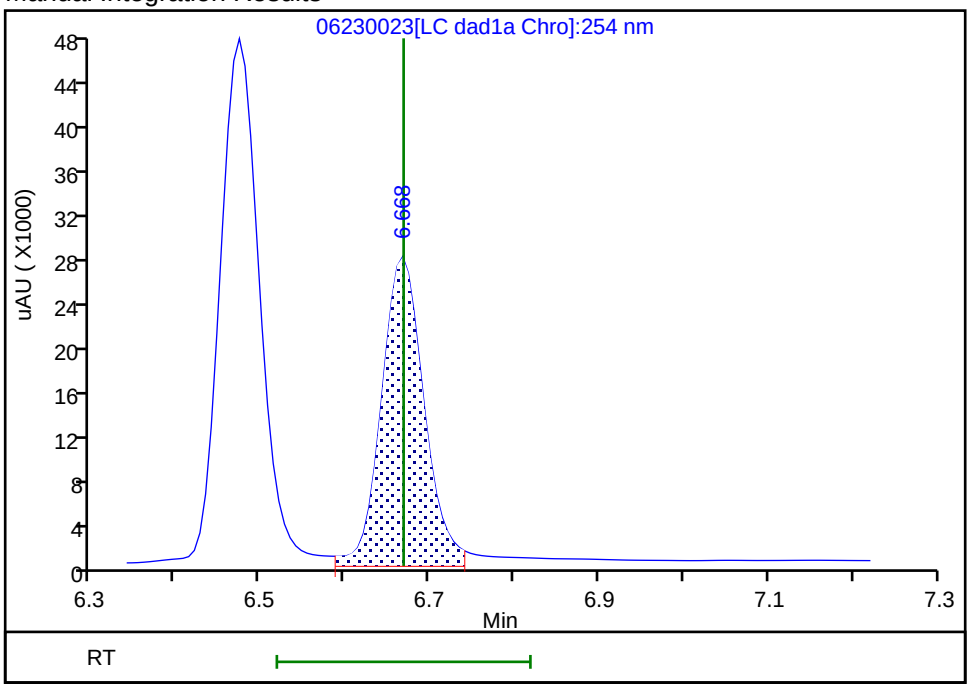
Processing Integration Results

RT: 6.67
Area: 105227
Amount: 0.731247
Amount Units: ug/mL



Manual Integration Results

RT: 6.67
Area: 96286
Amount: 0.671796
Amount Units: ug/mL



Reviewer: LV5D, 24-Jun-2023 10:42:07 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230024.D				
Lims ID:	IC ADD 5				
Client ID:					
Sample Type:	IC	Calib Level:	5		
Inject. Date:	23-Jun-2023 22:52:03	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC ADD 5				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub28				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	24-Jun-2023 12:55:53	Calib Date:	24-Jun-2023 00:23:49		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1681				
First Level Reviewer: LV5D		Date:	24-Jun-2023 10:42:22		

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	6.474	6.475	-0.001	85341	0.4000	0.3783	M
5 2,4-diamino-6-nitrotoluene	1	6.668	6.669	-0.001	52521	0.4000	0.3664	M

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330_ADDs_00037 Amount Added: 20.00 Units: uL

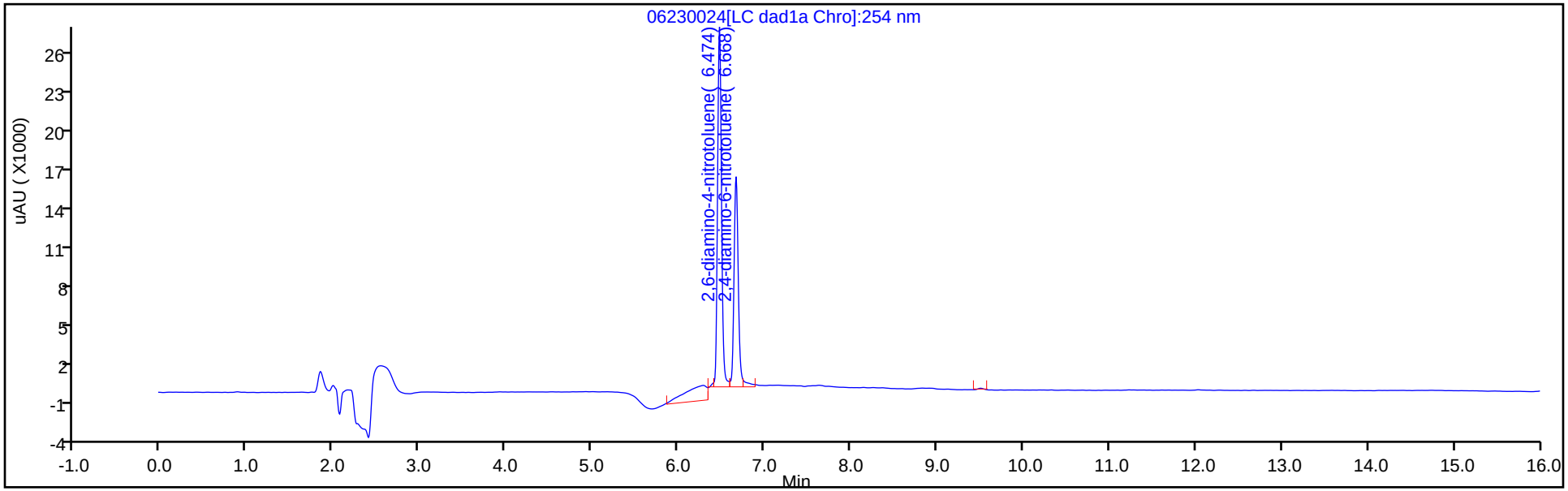
Report Date: 24-Jun-2023 12:55:53 Chrom Revision: 2.3 05-Jun-2023 19:02:10

Eurofins Denver

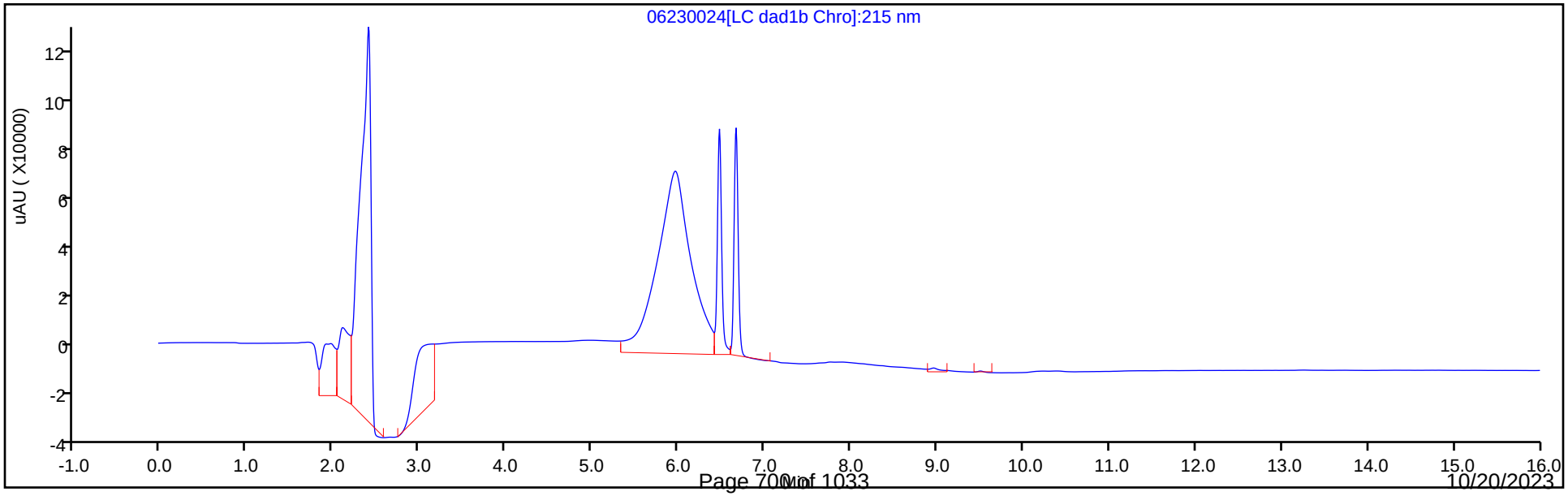
Data File: \\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230024.d

Injection Date:	23-Jun-2023 22:52:03	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	IC ADD 5			Worklist Smp#:	24
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Manual Integration/User Assign Peak Report

Eurofins Denver

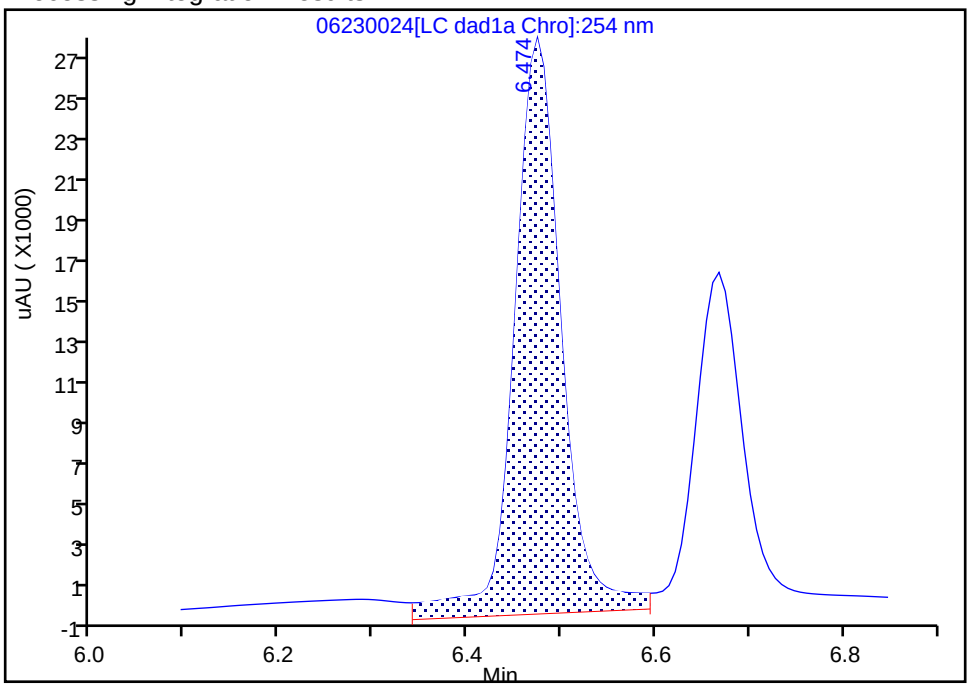
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230024.d				
Injection Date:	23-Jun-2023 22:52:03	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 5				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

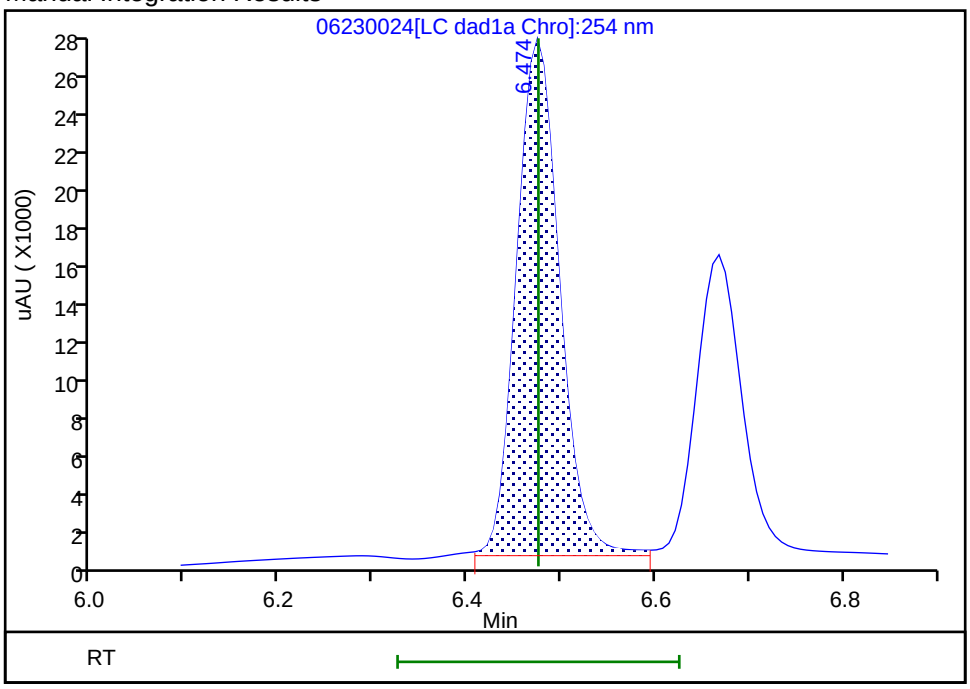
Processing Integration Results

RT: 6.47
Area: 96404
Amount: 0.391345
Amount Units: ug/mL



Manual Integration Results

RT: 6.47
Area: 85341
Amount: 0.378343
Amount Units: ug/mL



Reviewer: LV5D, 24-Jun-2023 10:42:20 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

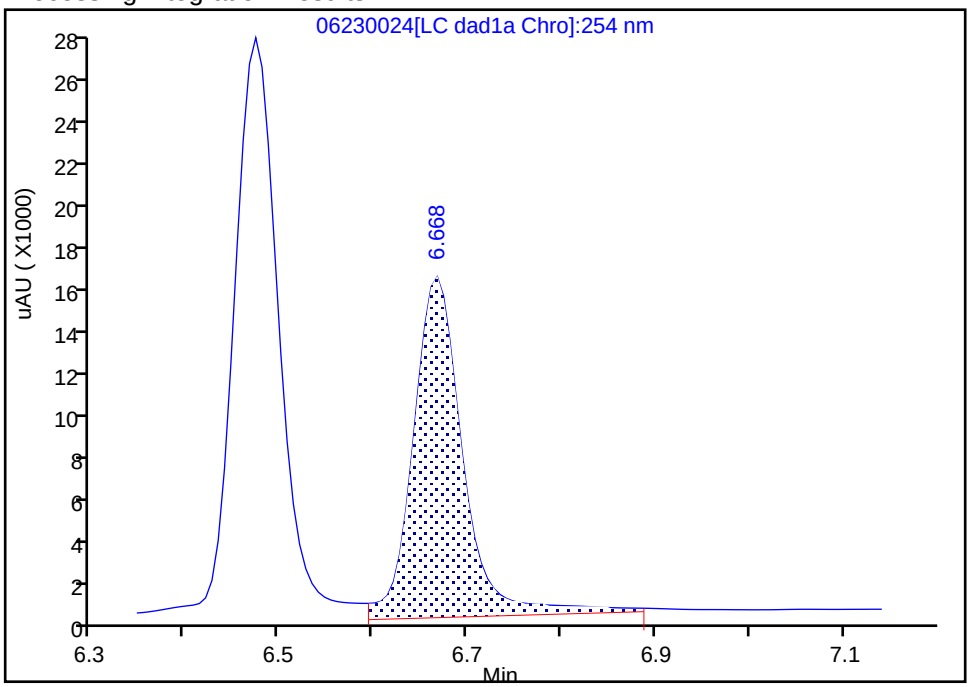
Data File: \\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230024.d
Injection Date: 23-Jun-2023 22:52:03 Instrument ID: CHHPLC_X3
Lims ID: IC ADD 5
Client ID:
Operator ID: JZ/JG ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

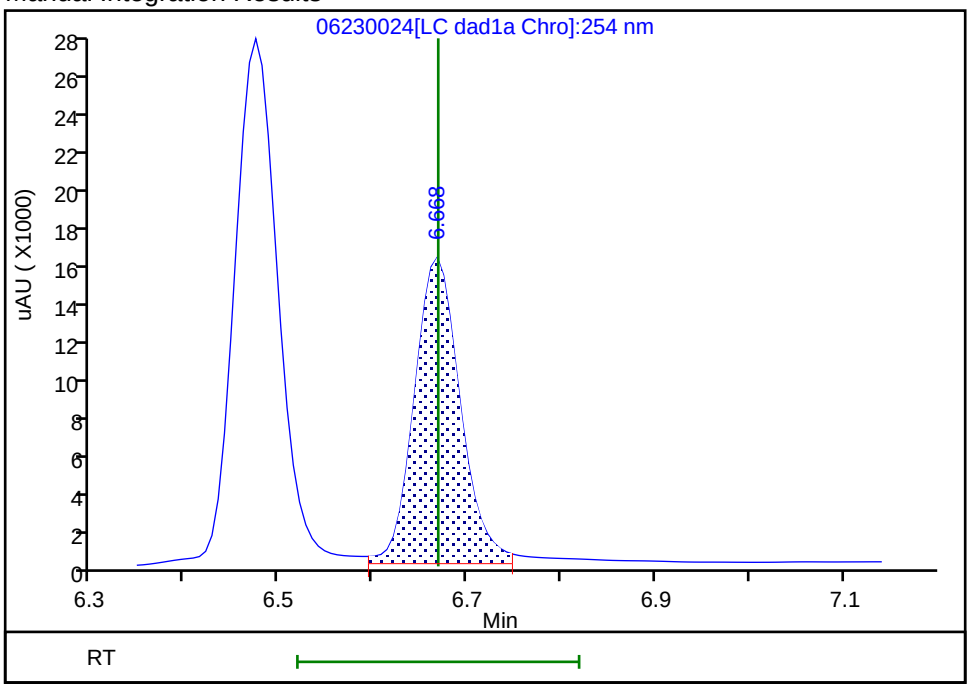
Processing Integration Results

RT: 6.67
Area: 59274
Amount: 0.377302
Amount Units: ug/mL



Manual Integration Results

RT: 6.67
Area: 52521
Amount: 0.366444
Amount Units: ug/mL



Reviewer: LV5D, 24-Jun-2023 10:42:21 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230025.D
Lims ID: IC ADD 4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 23-Jun-2023 23:14:58 ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC ADD 4
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub28

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 24-Jun-2023 12:55:54 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1681

First Level Reviewer: LV5D Date: 24-Jun-2023 10:42:36

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	6.475	6.475	0.000	56351	0.2500	0.2498	M
5 2,4-diamino-6-nitrotoluene	1	6.669	6.669	0.000	35180	0.2500	0.2455	M

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330_ADDs_00037 Amount Added: 12.50 Units: uL

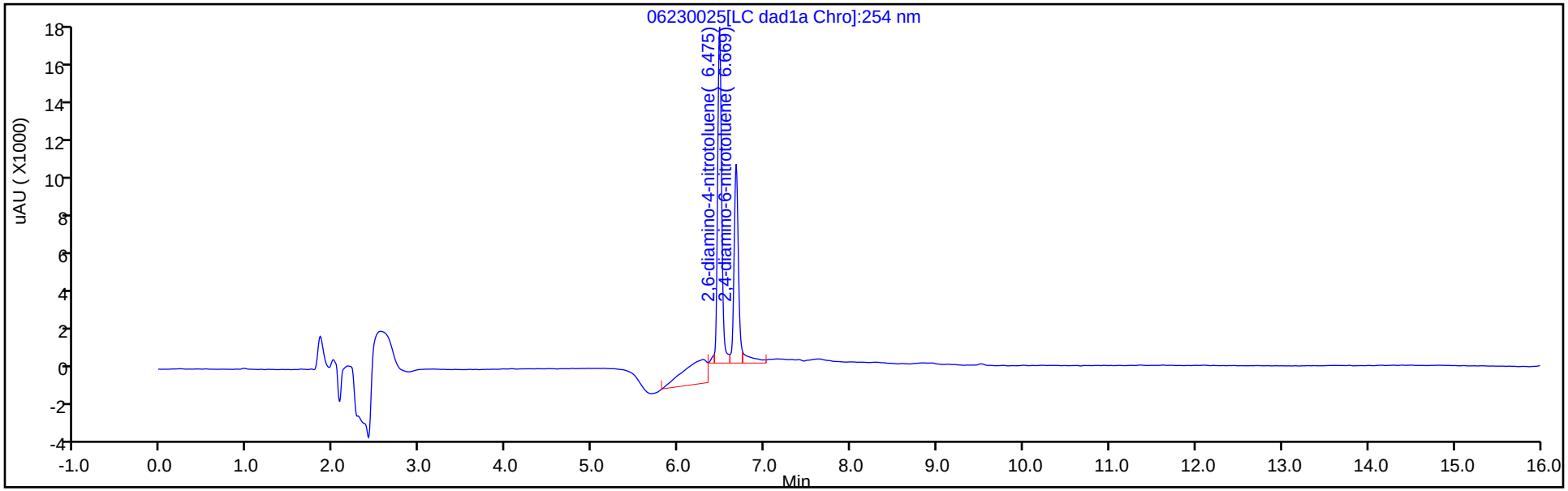
Report Date: 24-Jun-2023 12:55:54 Chrom Revision: 2.3 05-Jun-2023 19:02:10

Eurofins Denver

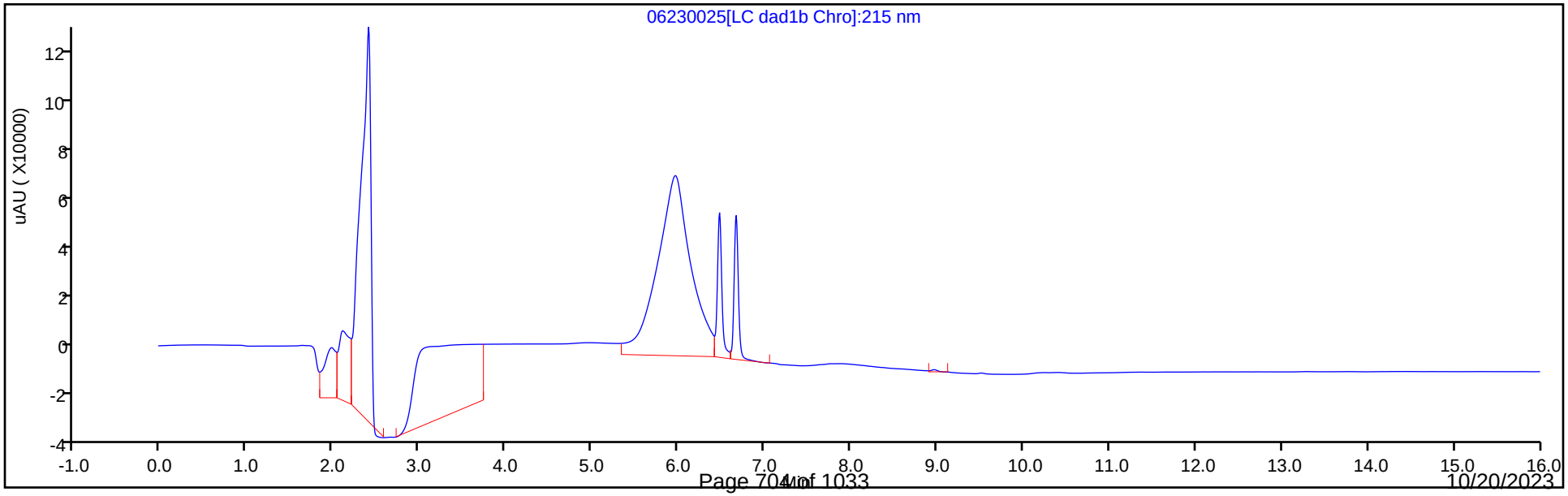
Data File: \\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230025.d

Injection Date:	23-Jun-2023 23:14:58	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	IC ADD 4			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



Manual Integration/User Assign Peak Report

Eurofins Denver

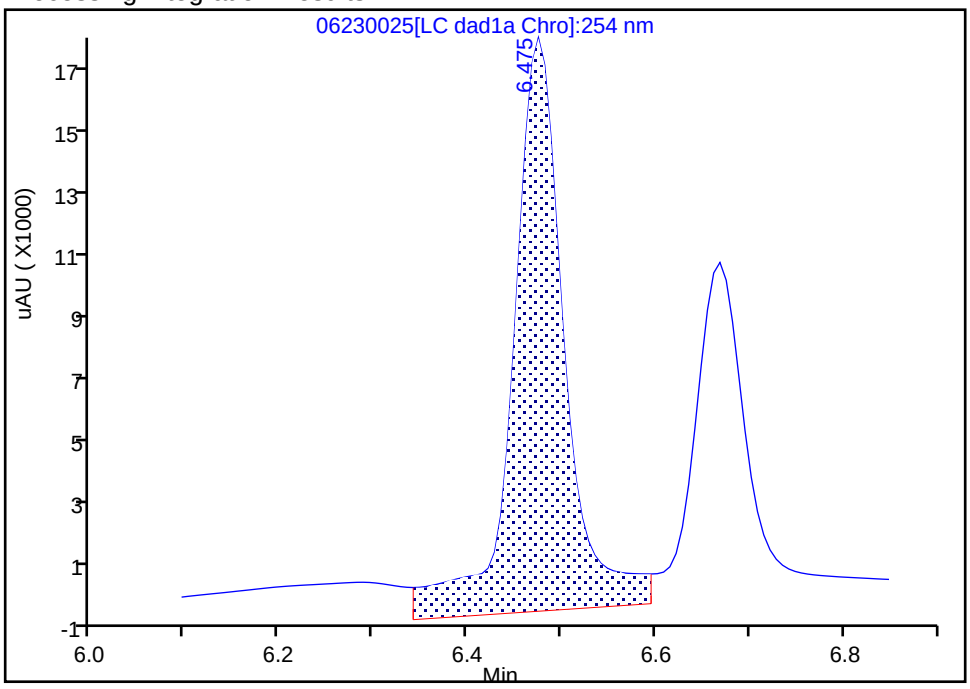
Data File: \\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230025.d
Injection Date: 23-Jun-2023 23:14:58 Instrument ID: CHHPLC_X3
Lims ID: IC ADD 4
Client ID:
Operator ID: JZ/JG ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

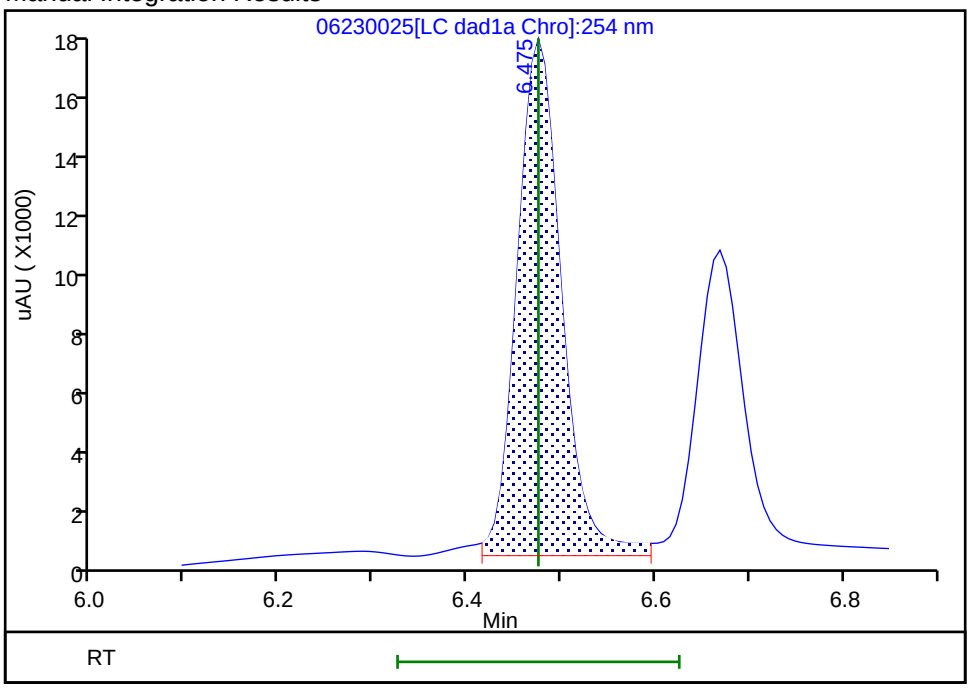
Processing Integration Results

RT: 6.48
Area: 69279
Amount: 0.268827
Amount Units: ug/mL



Manual Integration Results

RT: 6.48
Area: 56351
Amount: 0.249821
Amount Units: ug/mL



Reviewer: LV5D, 24-Jun-2023 10:42:34 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

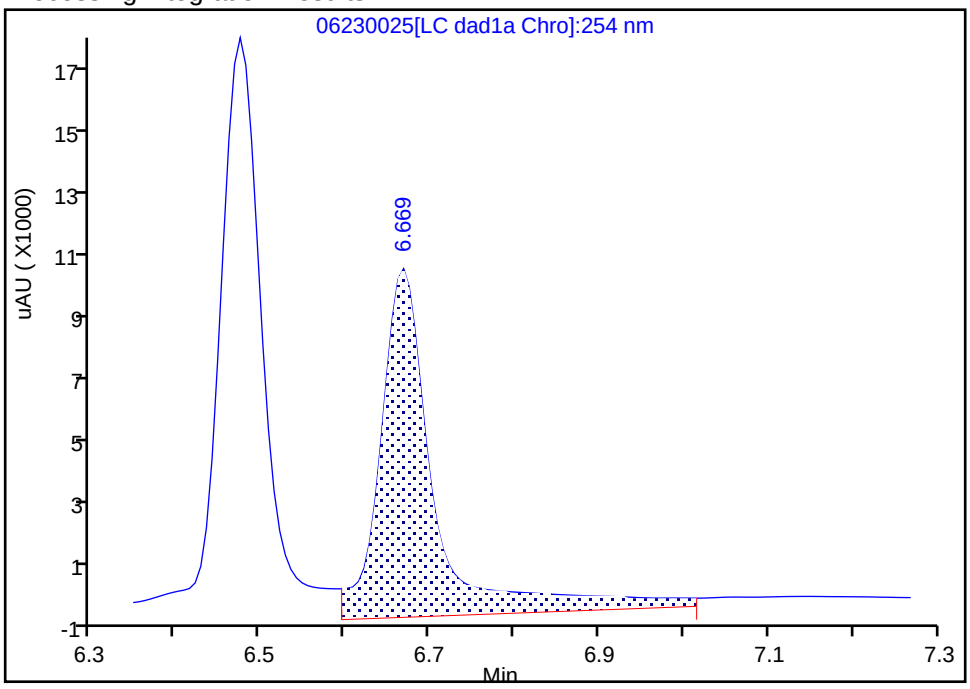
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230025.d				
Injection Date:	23-Jun-2023 23:14:58	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 4				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

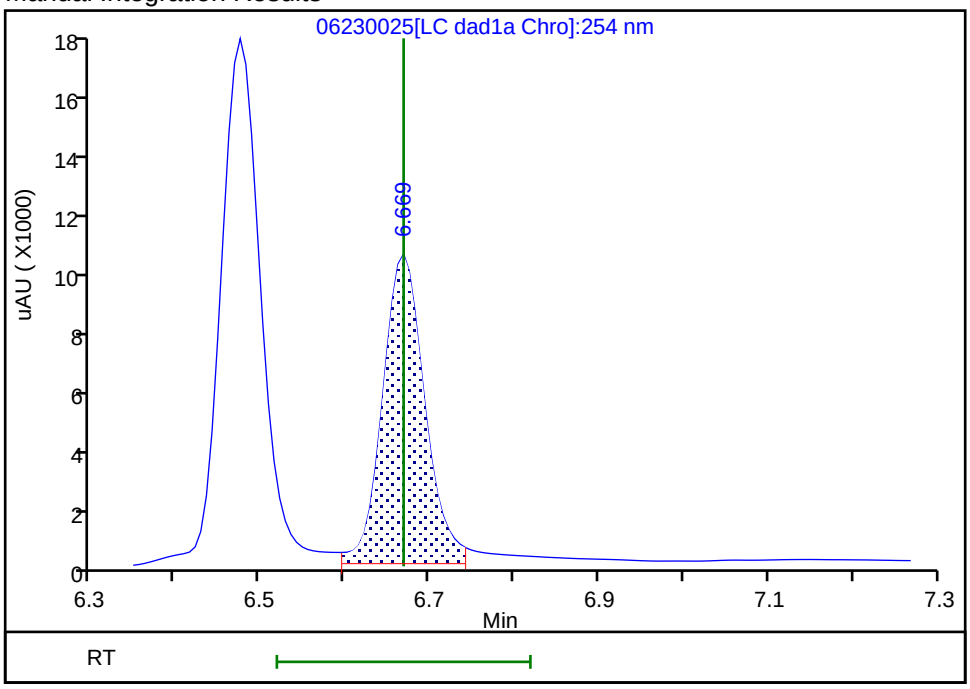
Processing Integration Results

RT: 6.67
Area: 47664
Amount: 0.288662
Amount Units: ug/mL



Manual Integration Results

RT: 6.67
Area: 35180
Amount: 0.245454
Amount Units: ug/mL



Reviewer: LV5D, 24-Jun-2023 10:42:35 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230026.D				
Lims ID:	IC ADD 3				
Client ID:					
Sample Type:	IC	Calib Level:	3		
Inject. Date:	23-Jun-2023 23:37:56	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC ADD 3				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub28				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	24-Jun-2023 12:55:54	Calib Date:	24-Jun-2023 00:23:49		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1681				
First Level Reviewer: LV5D		Date:	24-Jun-2023 10:42:44		

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	6.471	6.475	-0.004	22652	0.1000	0.1004	M
5 2,4-diamino-6-nitrotoluene	1	6.664	6.669	-0.005	14442	0.1000	0.1008	M

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330_ADDs_00037 Amount Added: 5.00 Units: uL

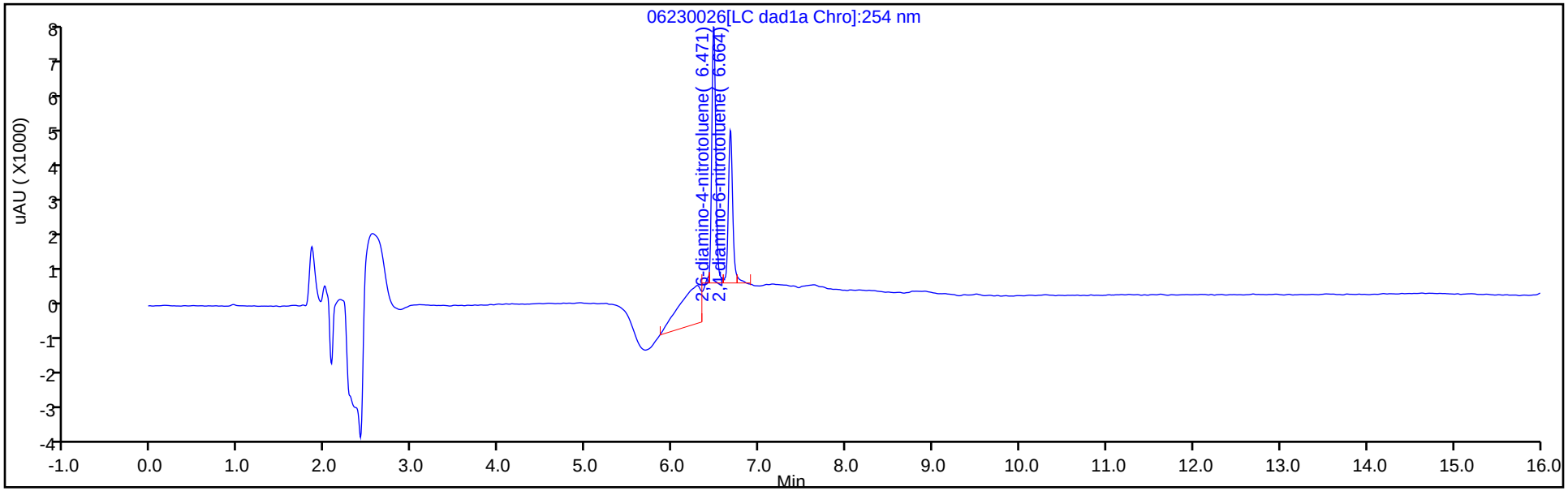
Report Date: 24-Jun-2023 12:55:54 Chrom Revision: 2.3 05-Jun-2023 19:02:10

Eurofins Denver

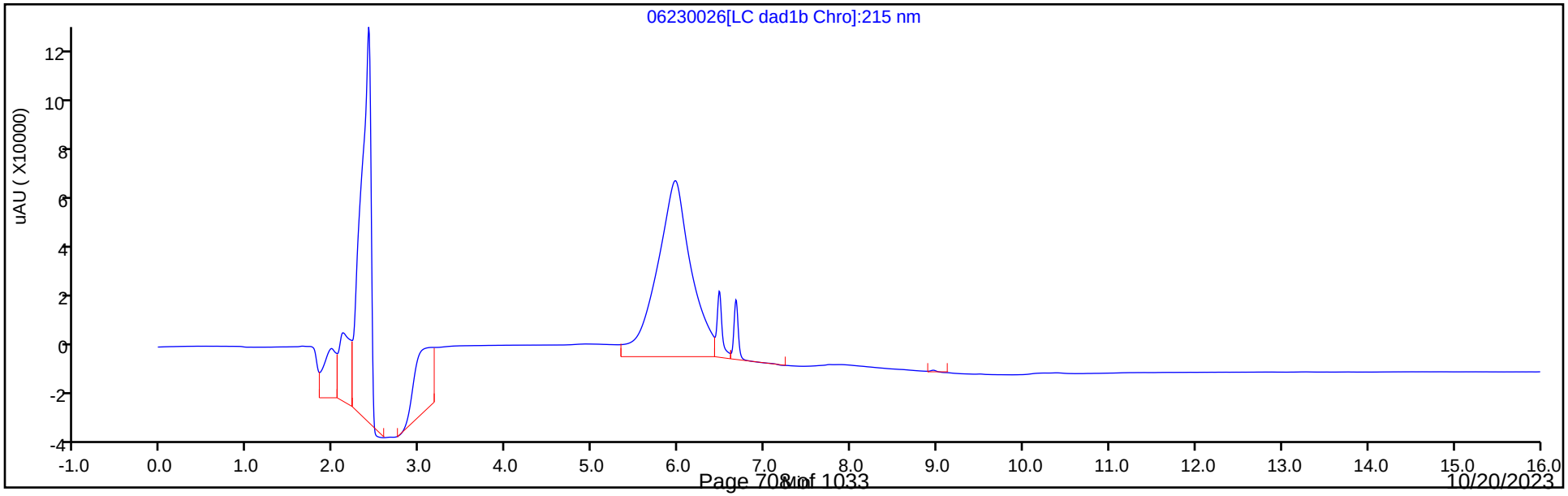
Data File: \\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230026.d

Injection Date:	23-Jun-2023 23:37:56	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	IC ADD 3			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



Manual Integration/User Assign Peak Report

Eurofins Denver

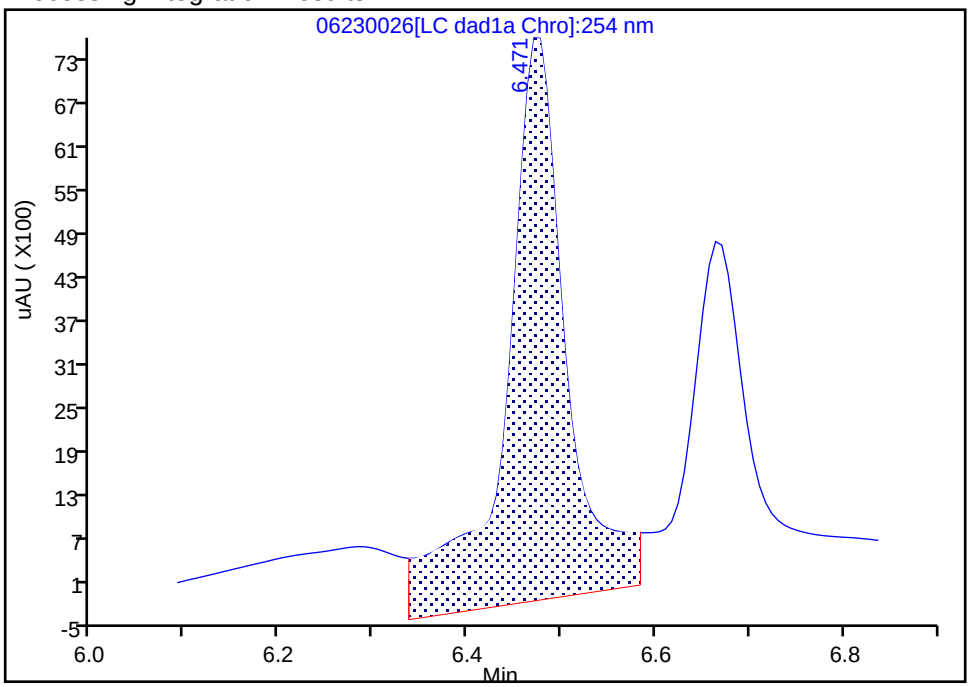
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230026.d				
Injection Date:	23-Jun-2023 23:37:56	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 3				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

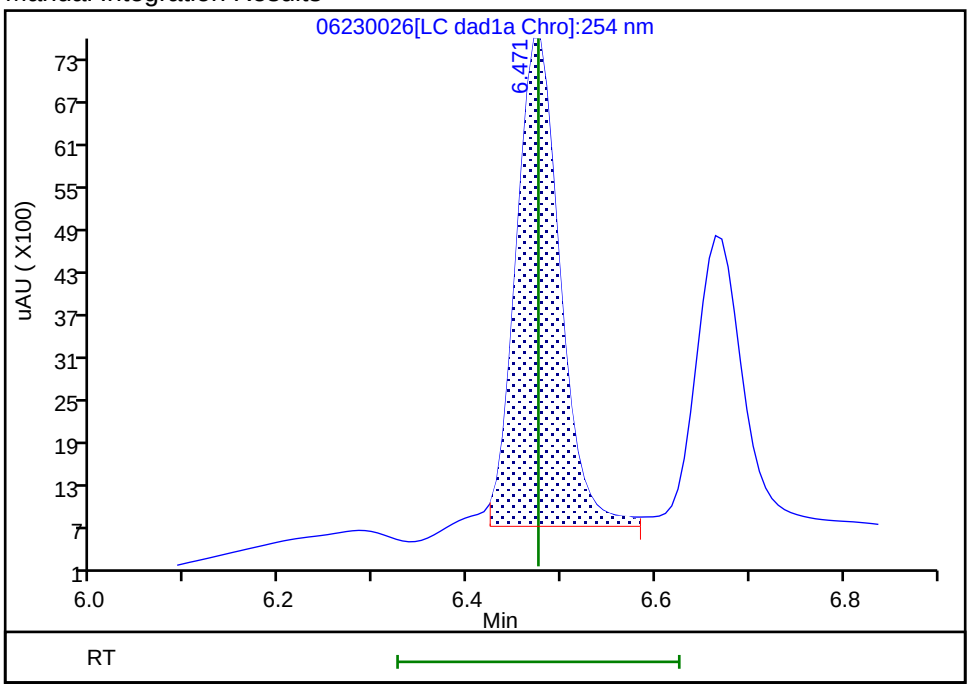
Processing Integration Results

RT: 6.47
Area: 34869
Amount: 0.105424
Amount Units: ug/mL



Manual Integration Results

RT: 6.47
Area: 22652
Amount: 0.100423
Amount Units: ug/mL



Reviewer: LV5D, 24-Jun-2023 10:42:42 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

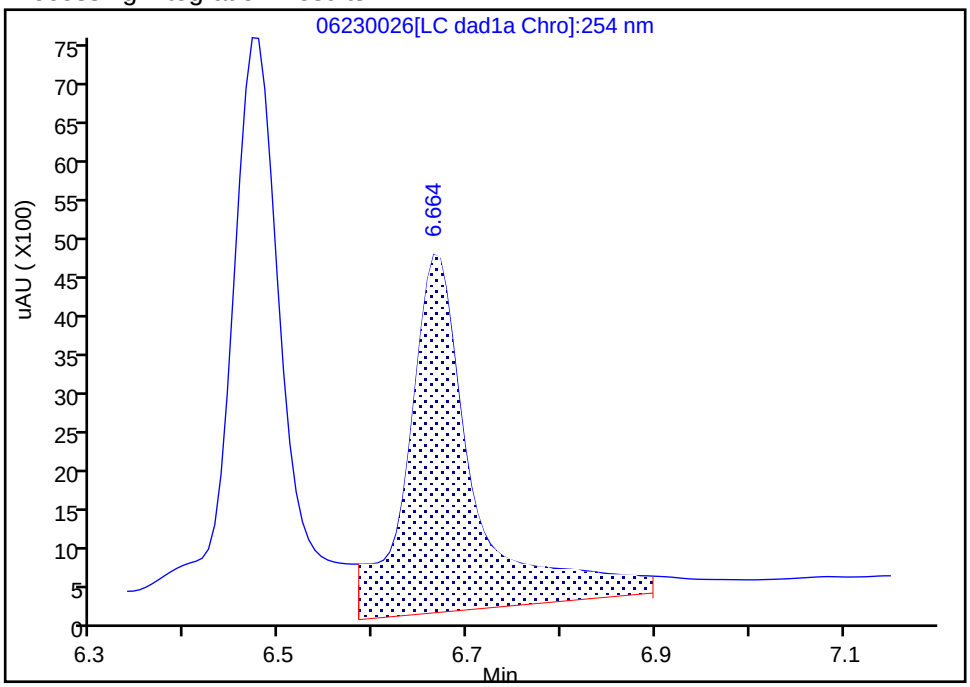
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230026.d				
Injection Date:	23-Jun-2023 23:37:56	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 3				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

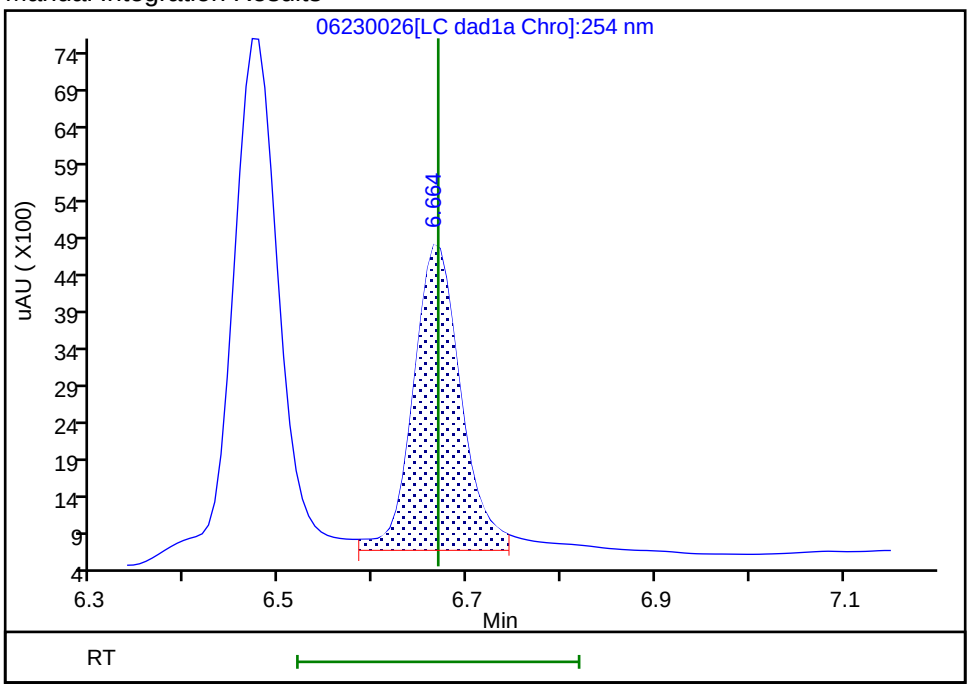
Processing Integration Results

RT: 6.66
Area: 22563
Amount: 0.092053
Amount Units: ug/mL



Manual Integration Results

RT: 6.66
Area: 14442
Amount: 0.100763
Amount Units: ug/mL



Reviewer: LV5D, 24-Jun-2023 10:42:43 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230027.D
Lims ID: IC ADD 2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 24-Jun-2023 00:00:54 ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC ADD 2
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub28

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 24-Jun-2023 12:55:55 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1681

First Level Reviewer: LV5D Date: 24-Jun-2023 10:42:52

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	6.478	6.475	0.003	10520	0.0400	0.0466	M
5 2,4-diamino-6-nitrotoluene	1	6.672	6.669	0.003	6600	0.0400	0.0460	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330_ADDs_00037 Amount Added: 2.00 Units: uL

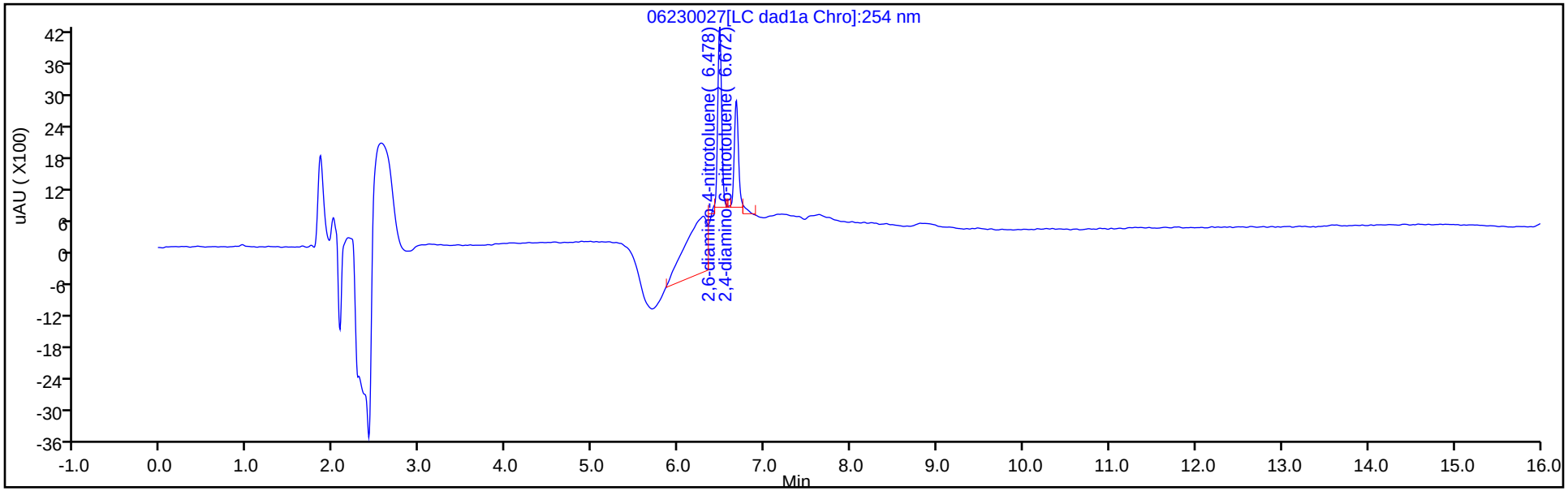
Report Date: 24-Jun-2023 12:55:55 Chrom Revision: 2.3 05-Jun-2023 19:02:10

Eurofins Denver

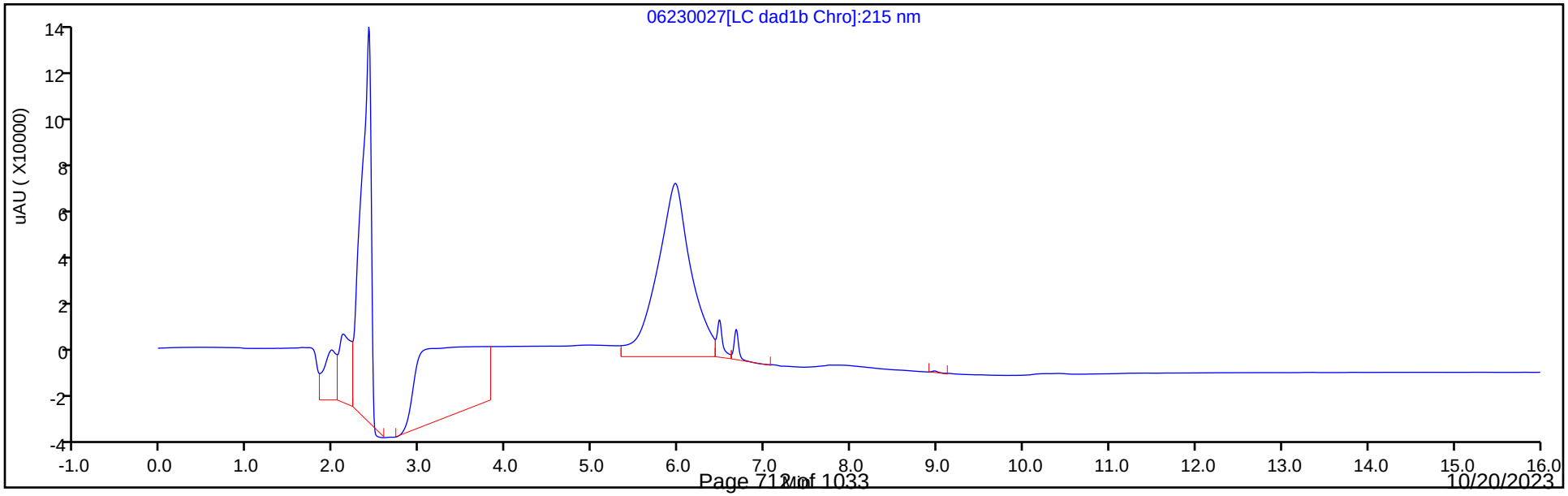
Data File: \\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230027.d

Injection Date:	24-Jun-2023 00:00:54	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	IC ADD 2			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



Manual Integration/User Assign Peak Report

Eurofins Denver

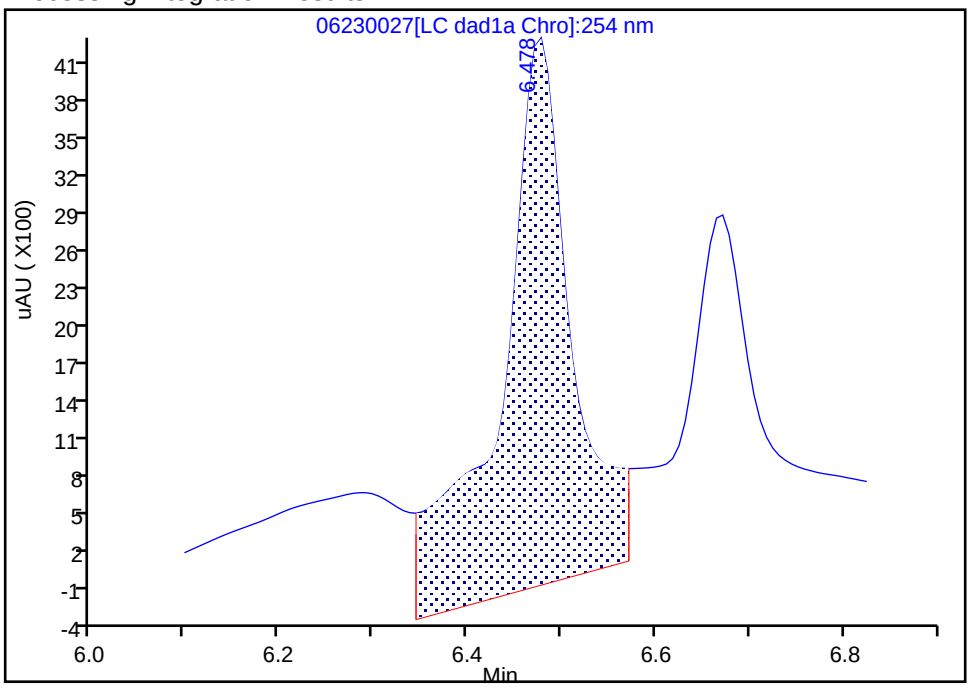
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230027.d				
Injection Date:	24-Jun-2023 00:00:54	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

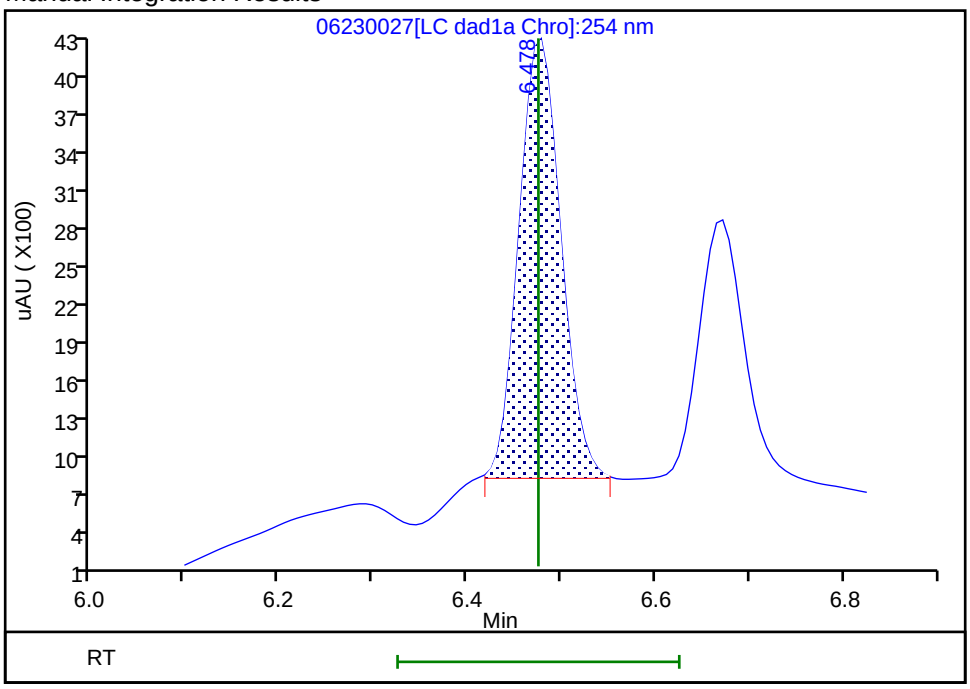
Processing Integration Results

RT: 6.48
Area: 22857
Amount: 0.065981
Amount Units: ug/mL



Manual Integration Results

RT: 6.48
Area: 10520
Amount: 0.046638
Amount Units: ug/mL



Reviewer: LV5D, 24-Jun-2023 12:55:06 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

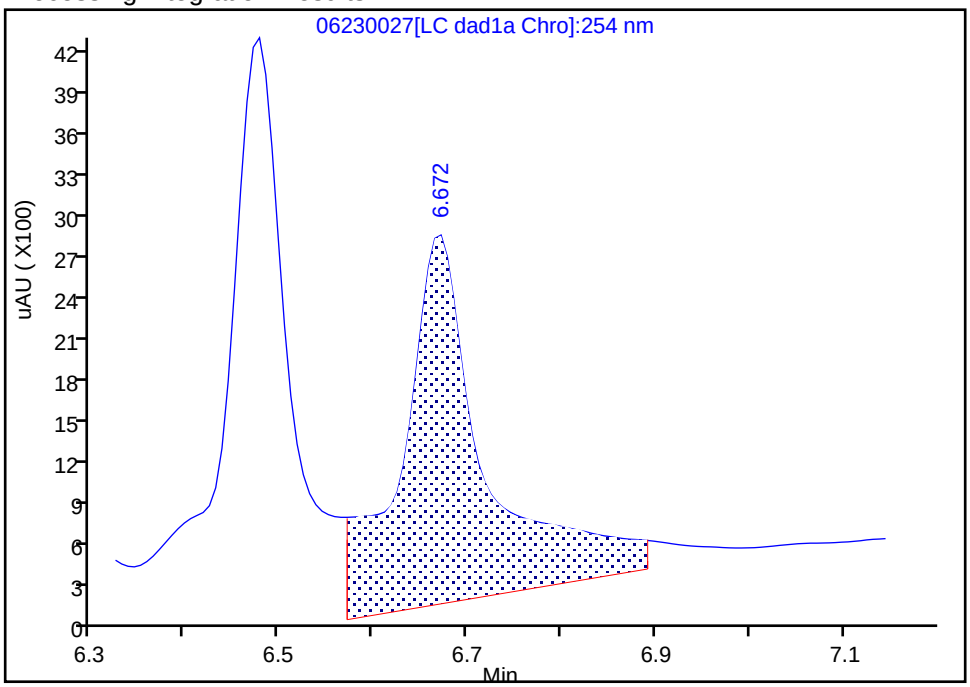
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230027.d				
Injection Date:	24-Jun-2023 00:00:54	Instrument ID:	CHHPLC_X3		
Lims ID:	IC ADD 2				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

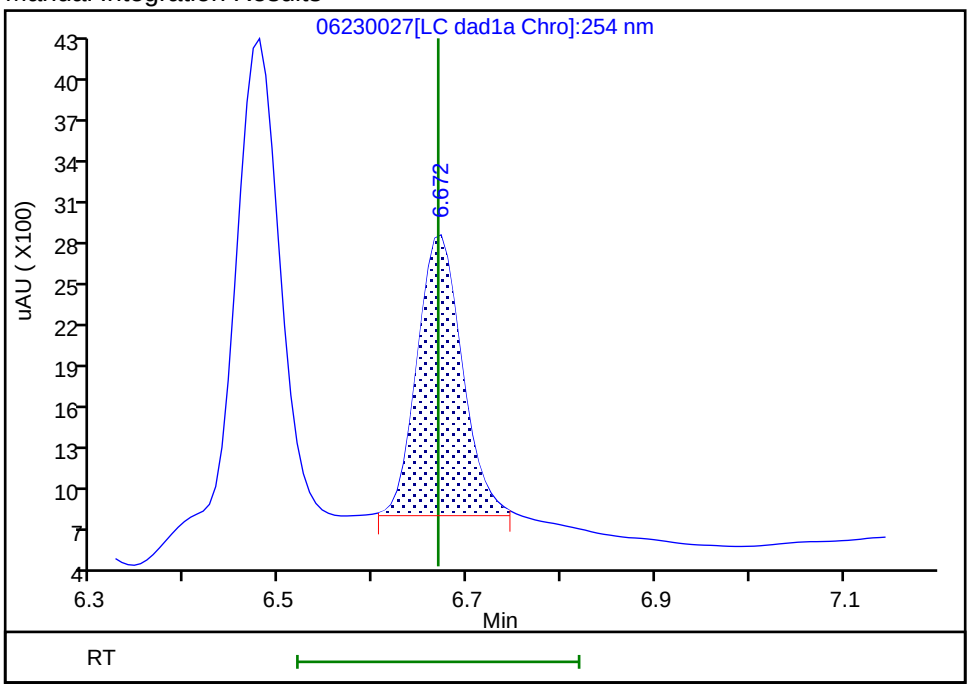
Processing Integration Results

RT: 6.67
Area: 16387
Amount: 0.066781
Amount Units: ug/mL



Manual Integration Results

RT: 6.67
Area: 6600
Amount: 0.046049
Amount Units: ug/mL



Reviewer: LV5D, 24-Jun-2023 12:55:07 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D
Lims ID: IC ADD 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 24-Jun-2023 00:23:49 ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC ADD 1
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub28

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 24-Jun-2023 12:55:55 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1681

First Level Reviewer: LV5D Date: 24-Jun-2023 10:43:02

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	6.470	6.475	-0.005	4412	0.0200	0.0196	M
5 2,4-diamino-6-nitrotoluene	1	6.663	6.669	-0.006	3131	0.0200	0.0218	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330_ADDs_00037 Amount Added: 1.00 Units: uL

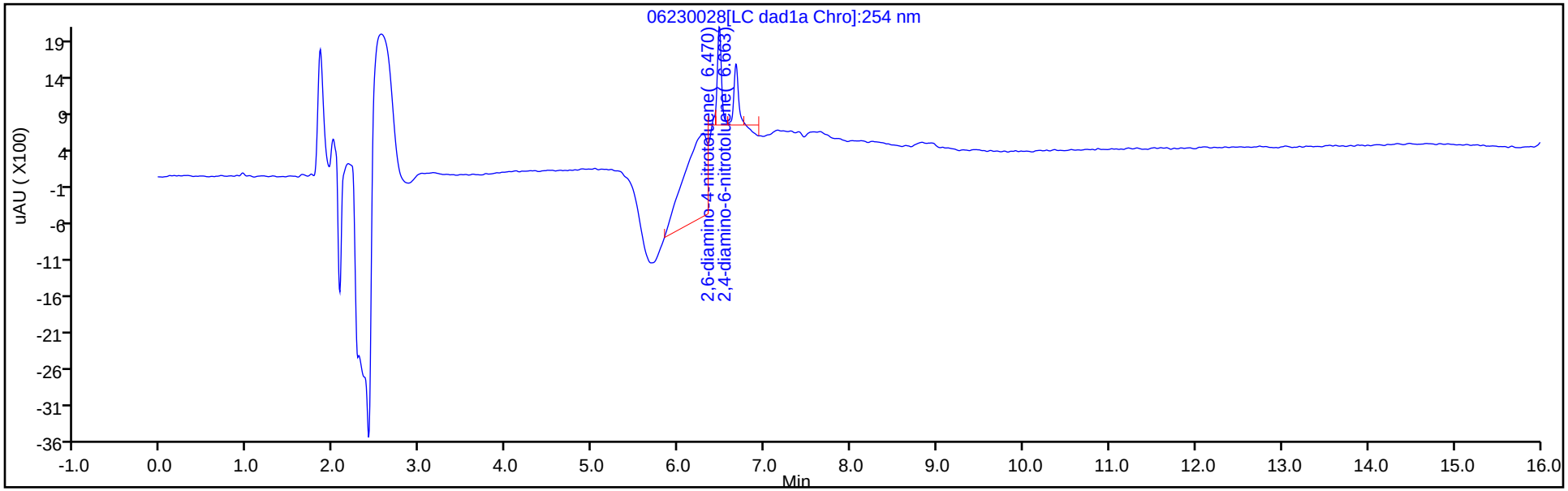
Report Date: 24-Jun-2023 12:55:55 Chrom Revision: 2.3 05-Jun-2023 19:02:10

Eurofins Denver

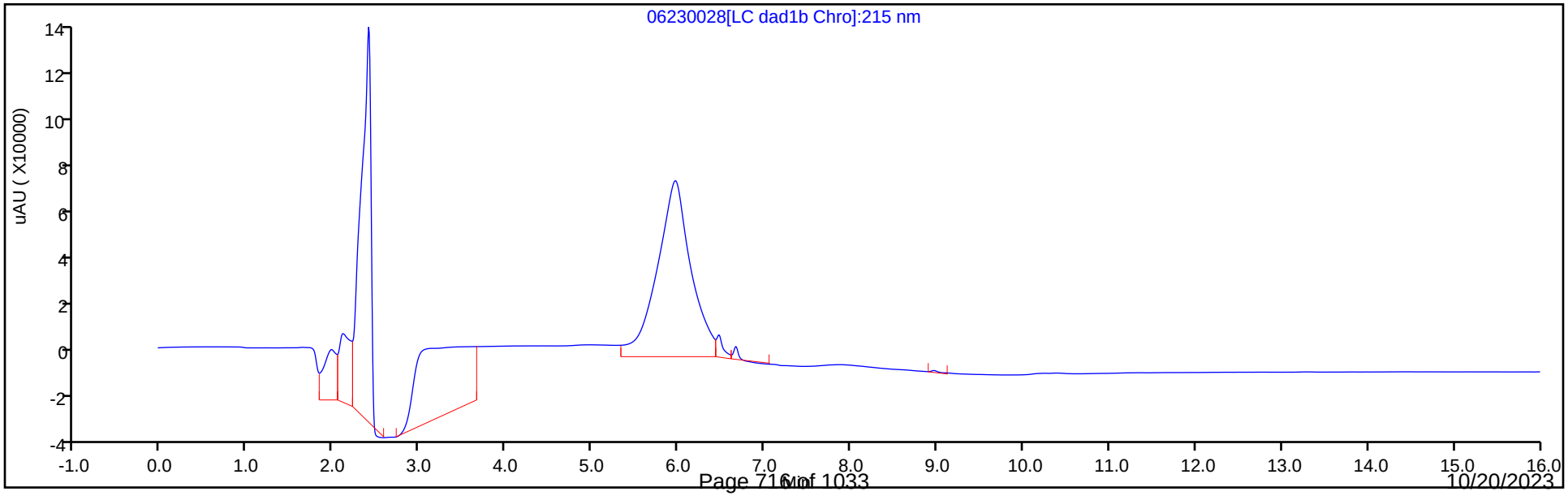
Data File: \\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230028.d

Injection Date:	24-Jun-2023 00:23:49	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	IC ADD 1			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



10/20/2023
4:00 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

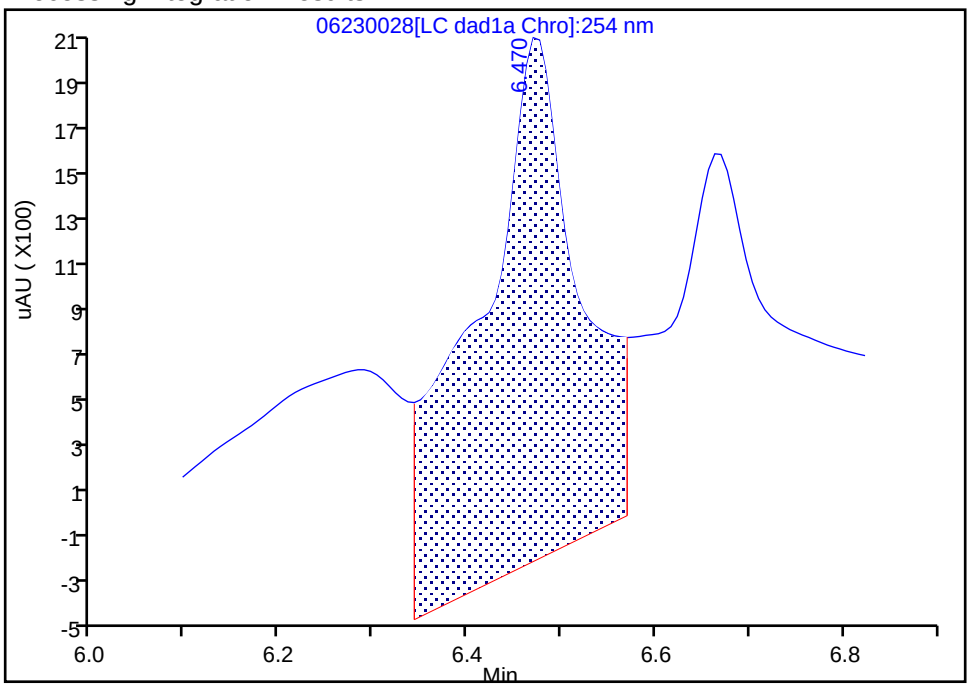
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Lims ID:	IC ADD 1				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

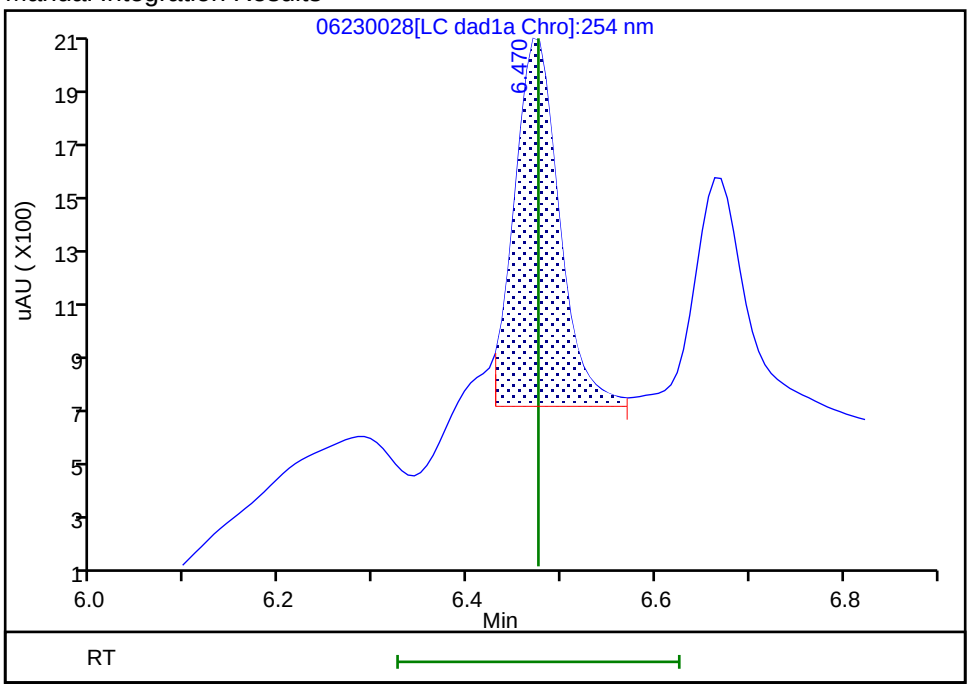
Processing Integration Results

RT: 6.47
Area: 17580
Amount: 0.056430
Amount Units: ug/mL



Manual Integration Results

RT: 6.47
Area: 4412
Amount: 0.019560
Amount Units: ug/mL



Reviewer: LV5D, 24-Jun-2023 10:43:00 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

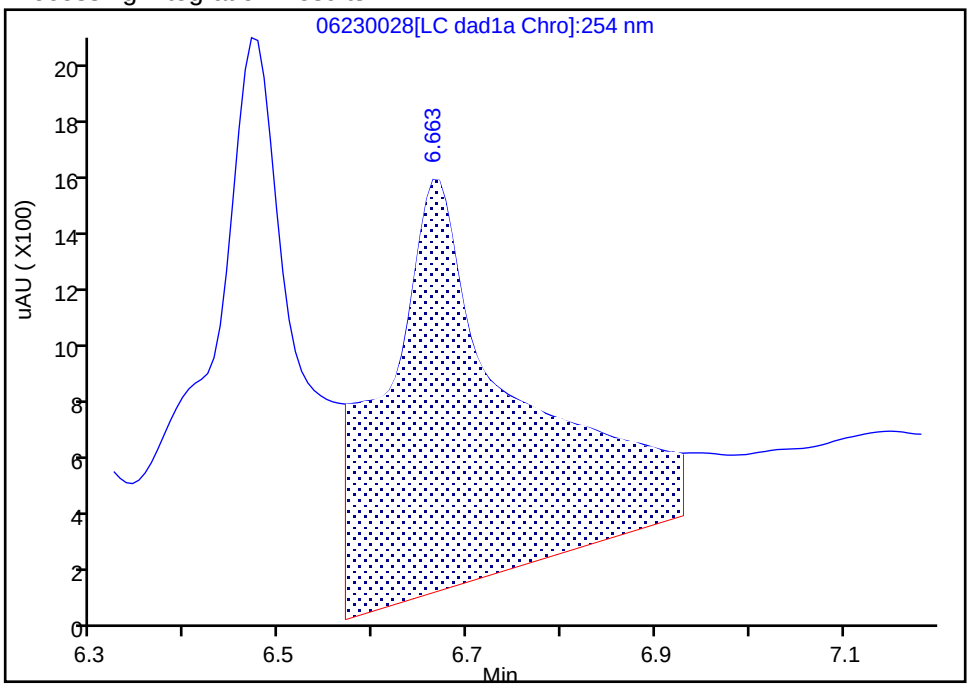
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Injection Date: 24-Jun-2023 00:23:49 Instrument ID: CHHPLC_X3
Lims ID: IC ADD 1
Client ID:
Operator ID: JZ/JG ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

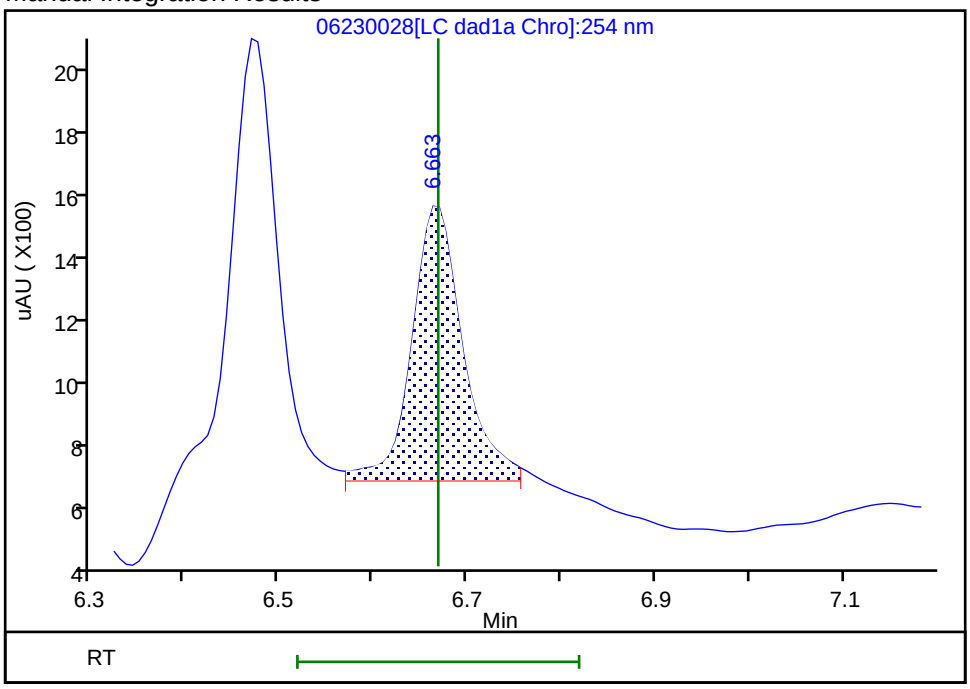
Processing Integration Results

RT: 6.66
Area: 14567
Amount: 0.066524
Amount Units: ug/mL



Manual Integration Results

RT: 6.66
Area: 3131
Amount: 0.021845
Amount Units: ug/mL



Reviewer: LV5D, 24-Jun-2023 10:43:01 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

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

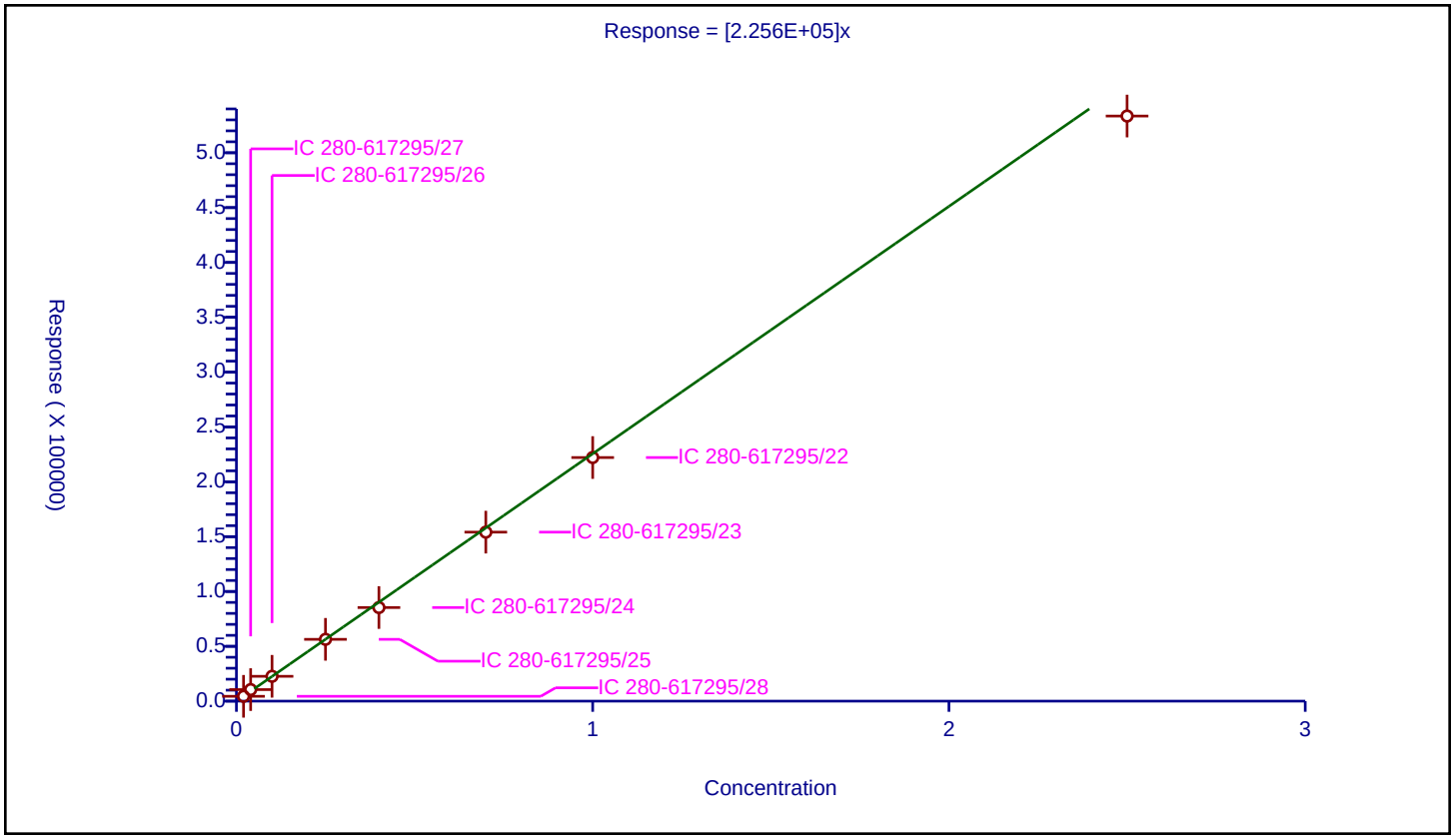
Curve Coefficients

Intercept:	0
Slope:	2.256E+05

Error Coefficients

Standard Error:	11800
Relative Standard Error:	7.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-617295/28	0.02	4412.0			220600.0	Y
2	IC 280-617295/27	0.04	10520.0			263000.0	Y
3	IC 280-617295/26	0.1	22652.0			226520.0	Y
4	IC 280-617295/25	0.25	56351.0			225404.0	Y
5	IC 280-617295/24	0.4	85341.0			213352.5	Y
6	IC 280-617295/23	0.7	154088.0			220125.714286	Y
7	IC 280-617295/22	1.0	222122.0			222122.0	Y
8	IC 280-617295/21	2.5	533494.0			213397.6	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

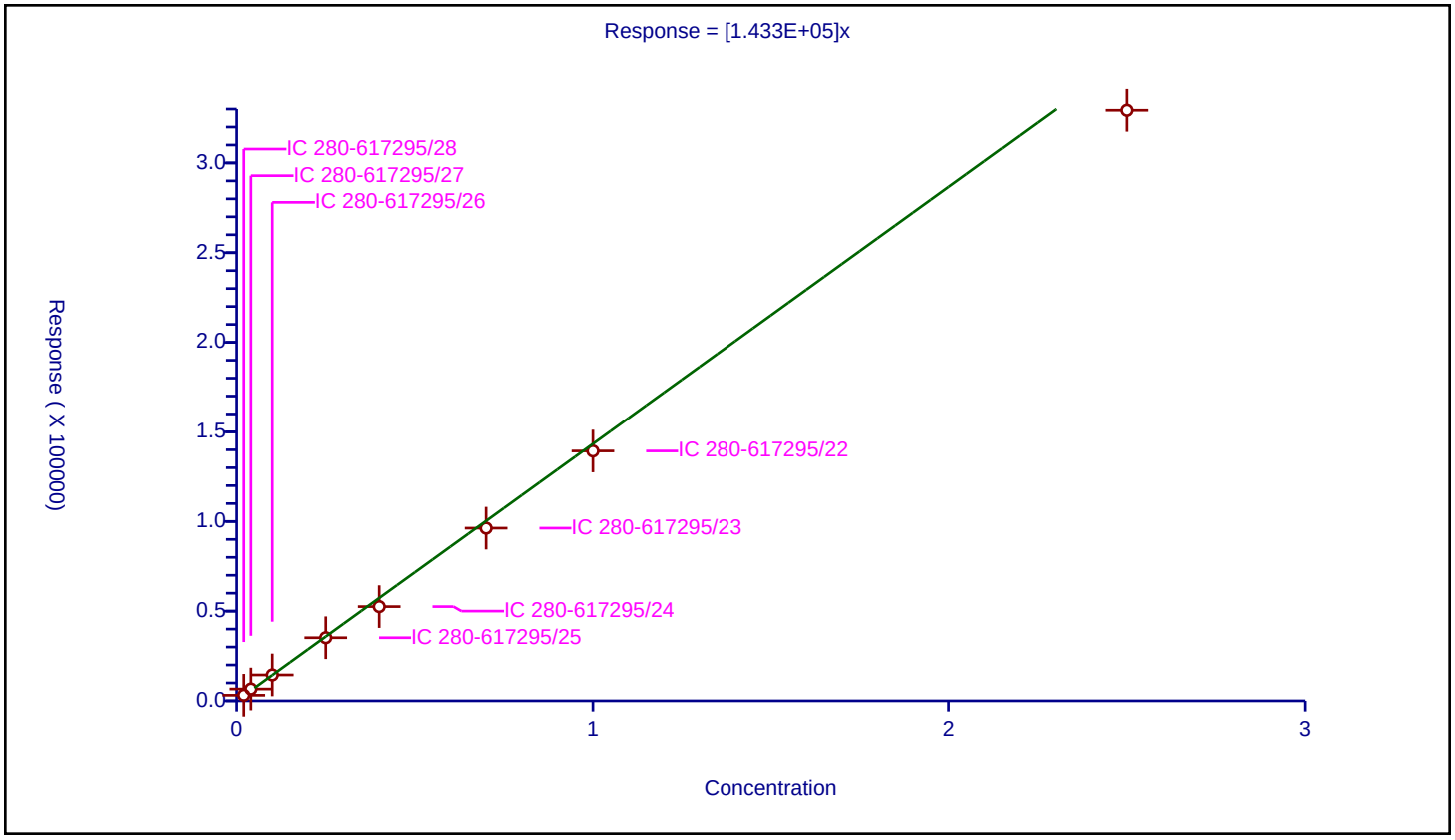
Curve Coefficients

Intercept:	0
Slope:	1.433E+05

Error Coefficients

Standard Error:	11300
Relative Standard Error:	8.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-617295/28	0.02	3131.0			156550.0	Y
2	IC 280-617295/27	0.04	6600.0			165000.0	Y
3	IC 280-617295/26	0.1	14442.0			144420.0	Y
4	IC 280-617295/25	0.25	35180.0			140720.0	Y
5	IC 280-617295/24	0.4	52521.0			131302.5	Y
6	IC 280-617295/23	0.7	96286.0			137551.428571	Y
7	IC 280-617295/22	1.0	139337.0			139337.0	Y
8	IC 280-617295/21	2.5	329323.0			131729.2	Y



10/20/2023
4:00 PM

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-182239-1

SDG No.:

Lab Sample ID: ICV 280-627290/19 | Calibration Date: 09/26/2023 00:06

Instrument ID: CHHPLC_G2_LUNA | Calib Start Date: 09/25/2023 18:42

GC Column: Luna-phenylhex ID: 4.60(mm) | Calib End Date: 09/25/2023 23:30

Lab File ID: 09250019.D | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Lin2		354446		234	250	-6.4	20.0
DNX	Ave	288240	264076		230	251	-8.4	20.0
HMX	Ave	173471	179932		259	250	3.7	20.0
MNX	Ave	261824	242753		271	293	-7.3	20.0
Picric acid	Ave	143426	142924		249	250	-0.4	20.0
RDX	Ave	207587	205284		247	250	-1.1	20.0
Nitrobenzene	Ave	371392	372800		251	250	0.4	20.0
3,5-Dinitroaniline	Lin2		422768		257	250	2.7	20.0
1,3-Dinitrobenzene	Ave	579530	571728		247	250	-1.3	20.0
Nitroglycerin	Ave	124215	124510		2510	2500	0.2	20.0
2-Nitrotoluene	Ave	247036	244804		248	250	-0.9	20.0
4-Nitrotoluene	Lin2		216100		246	250	-1.7	20.0
4-Amino-2,6-dinitrotoluene	Lin2		276988		252	250	0.8	20.0
3-Nitrotoluene	Lin2		273212		249	250	-0.4	20.0
2-Amino-4,6-dinitrotoluene	Lin2		392380		257	250	2.8	20.0
1,3,5-Trinitrobenzene	Ave	411631	399928		243	250	-2.8	20.0
2,6-Dinitrotoluene	Lin2		266240		252	250	0.8	20.0
2,4-Dinitrotoluene	Ave	545087	541828		249	250	-0.6	20.0
Tetryl	Ave	308340	304404		247	250	-1.3	20.0
2,4,6-Trinitrotoluene	Ave	384986	396652		258	250	3.0	20.0
PETN	Ave	123011	129159		2620	2500	5.0	20.0
1,2-Dinitrobenzene	Ave	256773	258484		252	250	0.7	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Lab Sample ID: ICV 280-627290/19 Calibration Date: 09/26/2023 00:06

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 09/25/2023 18:42

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 09/25/2023 23:30

Lab File ID: 09250019.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.29	5.14	5.44
DNX	6.13	5.99	6.29
HMX	6.78	6.64	6.94
MNX	7.63	7.49	7.79
Picric acid	8.65	8.51	8.81
RDX	9.02	8.89	9.19
Nitrobenzene	11.57	11.45	11.75
3,5-Dinitroaniline	14.37	14.23	14.53
1,3-Dinitrobenzene	14.67	14.52	14.82
Nitroglycerin	15.11	14.96	15.26
2-Nitrotoluene	15.72	15.59	15.89
4-Nitrotoluene	15.95	15.81	16.11
4-Amino-2,6-dinitrotoluene	16.46	16.33	16.63
3-Nitrotoluene	16.78	16.65	16.95
2-Amino-4,6-dinitrotoluene	17.26	17.13	17.43
1,3,5-Trinitrobenzene	17.47	17.35	17.65
2,6-Dinitrotoluene	18.57	18.45	18.75
2,4-Dinitrotoluene	19.02	18.90	19.20
Tetryl	22.23	22.09	22.39
2,4,6-Trinitrotoluene	23.09	22.95	23.25
PETN	24.21	24.06	24.36
1,2-Dinitrobenzene	12.51	12.39	12.69

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250019.D
Lims ID: ICV INT
Client ID:
Sample Type: ICV
Inject. Date: 26-Sep-2023 00:06:31 ALS Bottle#: 7 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICV INT
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist:

Method: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 26-Sep-2023 15:30:47 Calib Date: 25-Sep-2023 23:30:18
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250018.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1620

First Level Reviewer: LV5D Date: 26-Sep-2023 14:05:06

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.286	5.291	-0.005	88700	0.2503	0.2343	
4 DNX	1	6.132	6.144	-0.012	66283	0.2510	0.2300	
6 HMX	1	6.779	6.791	-0.012	44983	0.2500	0.2593	
7 MNX	1	7.632	7.644	-0.012	71066	0.2928	0.2714	
5 2,4,6-Trinitrophenol	1	8.646	8.664	-0.018	35731	0.2500	0.2491	
8 RDX	1	9.019	9.038	-0.019	51321	0.2500	0.2472	
9 Nitrobenzene	1	11.566	11.598	-0.032	93200	0.2500	0.2509	
$ 10 1,2-Dinitrobenzene	1	12.512	12.538	-0.026	64621	0.2500	0.2517	
11 3,5-Dinitroaniline	1	14.366	14.378	-0.012	105692	0.2500	0.2568	
12 1,3-Dinitrobenzene	1	14.666	14.671	-0.005	142932	0.2500	0.2466	
13 Nitroglycerin	2	15.106	15.111	-0.005	311274	2.50	2.51	
14 o-Nitrotoluene	1	15.719	15.738	-0.019	61201	0.2500	0.2477	
15 p-Nitrotoluene	1	15.946	15.958	-0.012	54025	0.2500	0.2458	
16 4-Amino-2,6-dinitrotoluene	1	16.459	16.478	-0.019	69247	0.2500	0.2520	
17 m-Nitrotoluene	1	16.779	16.804	-0.025	68303	0.2500	0.2491	
18 2-Amino-4,6-dinitrotoluene	1	17.259	17.284	-0.025	98095	0.2500	0.2569	
19 1,3,5-Trinitrobenzene	1	17.472	17.498	-0.026	99982	0.2500	0.2429	
20 2,6-Dinitrotoluene	1	18.566	18.598	-0.032	66560	0.2500	0.2520	
21 2,4-Dinitrotoluene	1	19.019	19.051	-0.032	135457	0.2500	0.2485	
22 Tetryl	1	22.232	22.244	-0.012	76101	0.2500	0.2468	
23 2,4,6-Trinitrotoluene	1	23.092	23.104	-0.012	99163	0.2500	0.2576	
24 PETN	2	24.206	24.211	-0.005	322898	2.50	2.62	

QC Flag Legend
Processing Flags

Reagents:

8330Surrogate_00150	Amount Added:	25.00	Units: uL
8330_OP_DMT_00022	Amount Added:	25.00	Units: uL
8330 LCS_00130	Amount Added:	25.00	Units: uL

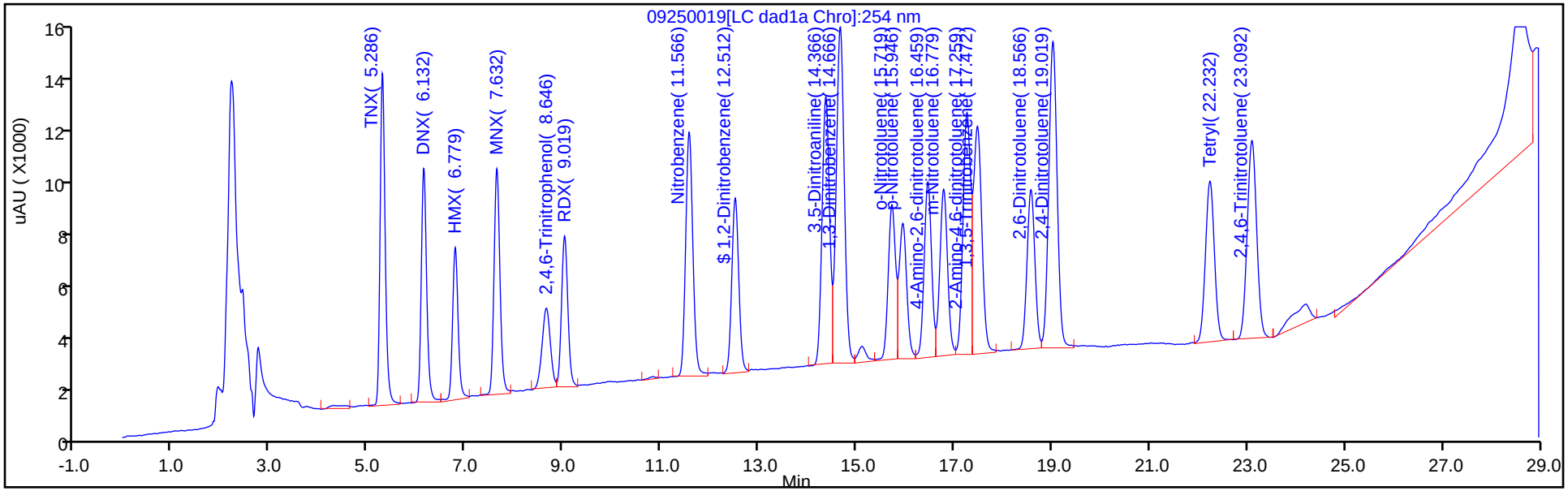
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Eurofins Denver

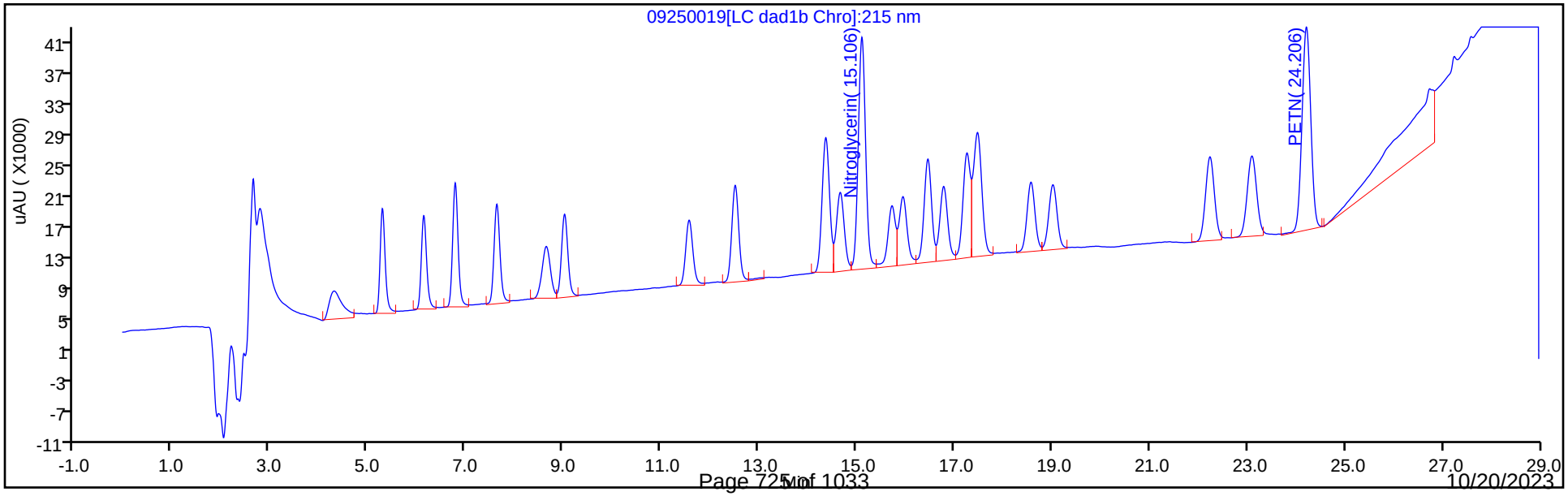
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Injection Date:	26-Sep-2023 00:06:31	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	ICV INT			Worklist Smp#:	19
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



10/20/2023 4:00 PM

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-182239-1

SDG No.:

Lab Sample ID: ICV 280-627290/28 | Calibration Date: 09/26/2023 05:31

Instrument ID: CHHPLC_G2_LUNA | Calib Start Date: 09/26/2023 00:42

GC Column: Luna-phenylhex ID: 4.60(mm) | Calib End Date: 09/26/2023 04:54

Lab File ID: 09250028.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	387643	365704		236	250	-5.7	20.0
2,4-diamino-6-nitrotoluene	Ave	233949	220120		235	250	-5.9	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Lab Sample ID: ICV 280-627290/28 Calibration Date: 09/26/2023 05:31

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 09/26/2023 00:42

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 09/26/2023 04:54

Lab File ID: 09250028.D

Analyte	RT	RT WINDOW	
		FROM	TO
2,6-diamino-4-nitrotoluene	4.22	4.08	4.38
2,4-diamino-6-nitrotoluene	4.79	4.66	4.96

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250028.D
Lims ID: ICV ADD
Client ID:
Sample Type: ICV
Inject. Date: 26-Sep-2023 05:31:02 ALS Bottle#: 8 Worklist Smp#: 28
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICV ADD
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist:

Method: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 26-Sep-2023 15:30:47 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1620

First Level Reviewer: LV5D Date: 26-Sep-2023 14:15:24

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	4.224	4.230	-0.006	91426	0.2500	0.2359	
2 2,4-diamino-6-nitrotoluene	1	4.790	4.810	-0.020	55030	0.2500	0.2352	

QC Flag Legend
Processing Flags

Reagents:
8330DiaminLCS_00060 Amount Added: 12.50 Units: uL

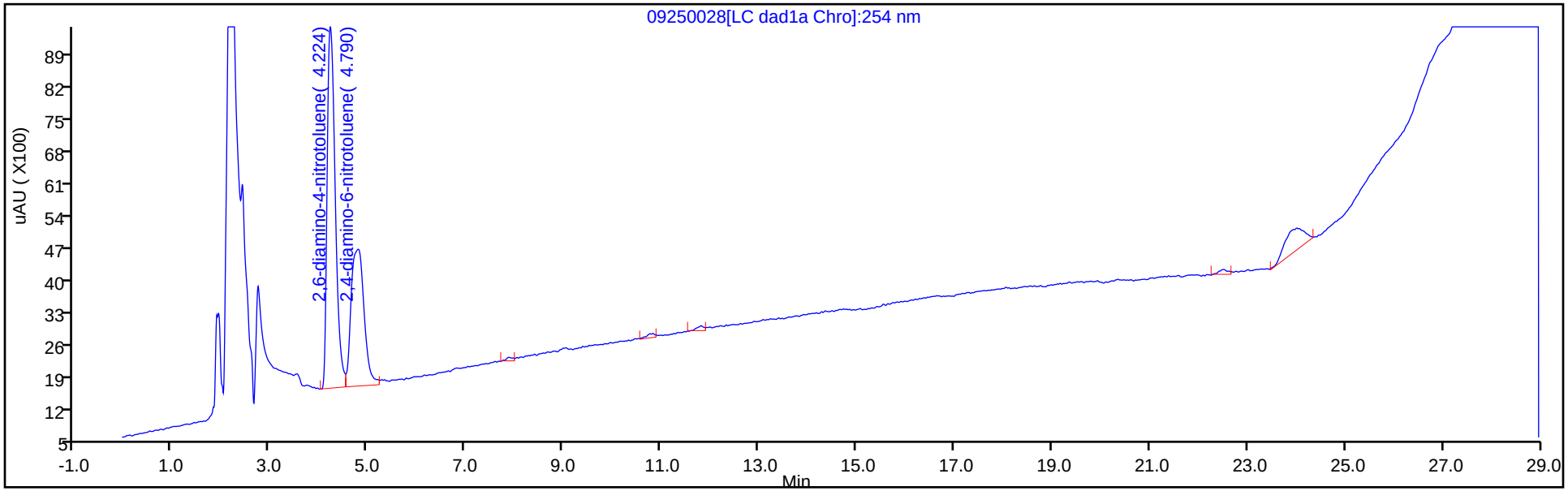
Report Date: 26-Sep-2023 15:31:32 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

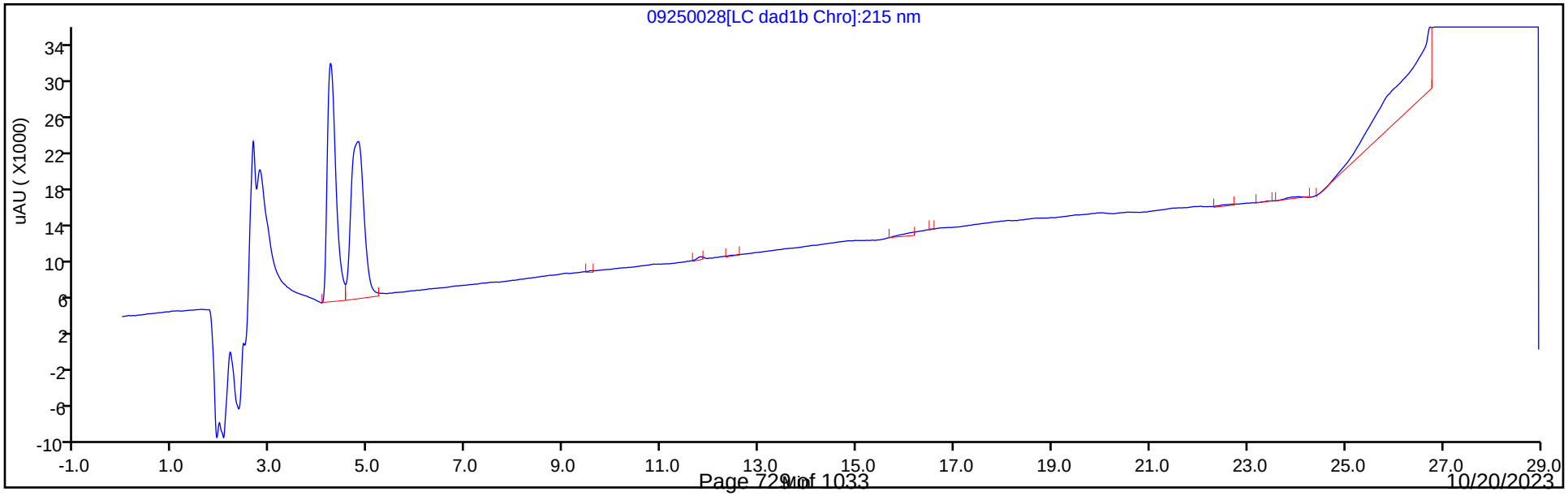
Data File: \\chromfs\denver\chromdata\g2_luna\20230925-125782.b\09250028.d

Injection Date:	26-Sep-2023 05:31:02	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	ICV ADD			Worklist Smp#:	28
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-182239-1

SDG No.:

Lab Sample ID: CCV 280-629372/9 | Calibration Date: 10/11/2023 17:13

Instrument ID: CHHPLC_G2_LUNA | Calib Start Date: 09/25/2023 18:42

GC Column: Luna-phenylhex ID: 4.60(mm) | Calib End Date: 09/25/2023 23:30

Lab File ID: 10110009.D | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Lin2		388124		257	251	2.6	20.0
DNX	Ave	288240	284775		247	250	-1.2	20.0
HMX	Ave	173471	178716		258	250	3.0	20.0
MNX	Ave	261824	263829		294	292	0.8	20.0
Picric acid	Ave	143426	138824		242	250	-3.2	20.0
RDX	Ave	207587	216476		261	250	4.3	20.0
Nitrobenzene	Ave	371392	380040		256	250	2.3	20.0
3,5-Dinitroaniline	Lin2		427016		259	250	3.7	20.0
1,3-Dinitrobenzene	Ave	579530	569944		246	250	-1.7	20.0
Nitroglycerin	Ave	124215	122810		2470	2500	-1.1	20.0
2-Nitrotoluene	Ave	247036	242988		246	250	-1.6	20.0
4-Nitrotoluene	Lin2		213572		243	250	-2.9	20.0
4-Amino-2,6-dinitrotoluene	Lin2		277052		252	250	0.8	20.0
3-Nitrotoluene	Lin2		271468		247	250	-1.0	20.0
2-Amino-4,6-dinitrotoluene	Lin2		401000		263	250	5.1	20.0
1,3,5-Trinitrobenzene	Ave	411631	396984		241	250	-3.6	20.0
2,6-Dinitrotoluene	Lin2		264400		250	250	0.0	20.0
2,4-Dinitrotoluene	Ave	545087	543836		249	250	-0.2	20.0
Tetryl	Ave	308340	312800		254	250	1.4	20.0
2,4,6-Trinitrotoluene	Ave	384986	409216		266	250	6.3	20.0
PETN	Ave	123011	128534		2610	2500	4.5	20.0
1,2-Dinitrobenzene	Ave	256773	259380		253	250	1.0	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Lab Sample ID: CCV 280-629372/9 Calibration Date: 10/11/2023 17:13

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 09/25/2023 18:42

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 09/25/2023 23:30

Lab File ID: 10110009.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.29	5.14	5.44
DNX	6.15	6.00	6.30
HMX	6.81	6.66	6.96
MNX	7.66	7.51	7.81
Picric acid	8.76	8.61	8.91
RDX	9.05	8.90	9.20
Nitrobenzene	11.63	11.48	11.78
3,5-Dinitroaniline	14.41	14.26	14.56
1,3-Dinitrobenzene	14.70	14.55	14.85
Nitroglycerin	15.17	15.02	15.32
2-Nitrotoluene	15.79	15.64	15.94
4-Nitrotoluene	16.01	15.86	16.16
4-Amino-2,6-dinitrotoluene	16.53	16.38	16.68
3-Nitrotoluene	16.86	16.71	17.01
2-Amino-4,6-dinitrotoluene	17.34	17.19	17.49
1,3,5-Trinitrobenzene	17.53	17.38	17.68
2,6-Dinitrotoluene	18.66	18.51	18.81
2,4-Dinitrotoluene	19.12	18.97	19.27
Tetryl	22.34	22.19	22.49
2,4,6-Trinitrotoluene	23.20	23.05	23.35
PETN	24.35	24.20	24.50
1,2-Dinitrobenzene	12.57	12.42	12.72

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\10110009.D
Lims ID: CCV ADD
Client ID:
Sample Type: CCV
Inject. Date: 11-Oct-2023 17:13:04 ALS Bottle#: 7 Worklist Smp#: 9
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV ADD
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub12

Method: \\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 12-Oct-2023 12:50:27 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1633

First Level Reviewer: LV5D Date: 11-Oct-2023 18:31:59

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	4.239	4.239	0.000	103669	0.2500	0.2674	
2 2,4-diamino-6-nitrotoluene	1	4.839	4.839	0.000	62850	0.2500	0.2686	
3 TNX	1	5.292	5.292	0.000	97322	0.2508	0.2573	
4 DNX	1	6.152	6.152	0.000	71265	0.2503	0.2472	
6 HMX	1	6.805	6.805	0.000	44679	0.2500	0.2576	
7 MNX	1	7.659	7.659	0.000	76972	0.2918	0.2940	
5 2,4,6-Trinitrophenol	1	8.759	8.759	0.000	34706	0.2500	0.2420	
8 RDX	1	9.052	9.052	0.000	54119	0.2500	0.2607	
9 Nitrobenzene	1	11.625	11.625	0.000	95010	0.2500	0.2558	
$ 10 1,2-Dinitrobenzene	1	12.572	12.572	0.000	64845	0.2500	0.2525	
11 3,5-Dinitroaniline	1	14.405	14.405	0.000	106754	0.2500	0.2594	
12 1,3-Dinitrobenzene	1	14.698	14.698	0.000	142486	0.2500	0.2459	
13 Nitroglycerin	2	15.165	15.165	0.000	307025	2.50	2.47	
14 o-Nitrotoluene	1	15.785	15.785	0.000	60747	0.2500	0.2459	
15 p-Nitrotoluene	1	16.012	16.012	0.000	53393	0.2500	0.2429	
16 4-Amino-2,6-dinitrotoluene	1	16.525	16.525	0.000	69263	0.2500	0.2521	
17 m-Nitrotoluene	1	16.858	16.858	0.000	67867	0.2500	0.2474	
18 2-Amino-4,6-dinitrotoluene	1	17.338	17.338	0.000	100250	0.2500	0.2626	
19 1,3,5-Trinitrobenzene	1	17.532	17.532	0.000	99246	0.2500	0.2411	
20 2,6-Dinitrotoluene	1	18.658	18.658	0.000	66100	0.2500	0.2502	
21 2,4-Dinitrotoluene	1	19.118	19.118	0.000	135959	0.2500	0.2494	
22 Tetryl	1	22.339	22.339	0.000	78200	0.2500	0.2536	
23 2,4,6-Trinitrotoluene	1	23.199	23.199	0.000	102304	0.2500	0.2657	
24 PETN	2	24.352	24.352	0.000	321335	2.50	2.61	

QC Flag Legend
Processing Flags

Reagents:

8330 DMT_00015	Amount Added:	12.50	Units: uL
8330IntermStk_00078	Amount Added:	25.00	Units: uL
8330_ADDs_00037	Amount Added:	12.50	Units: uL

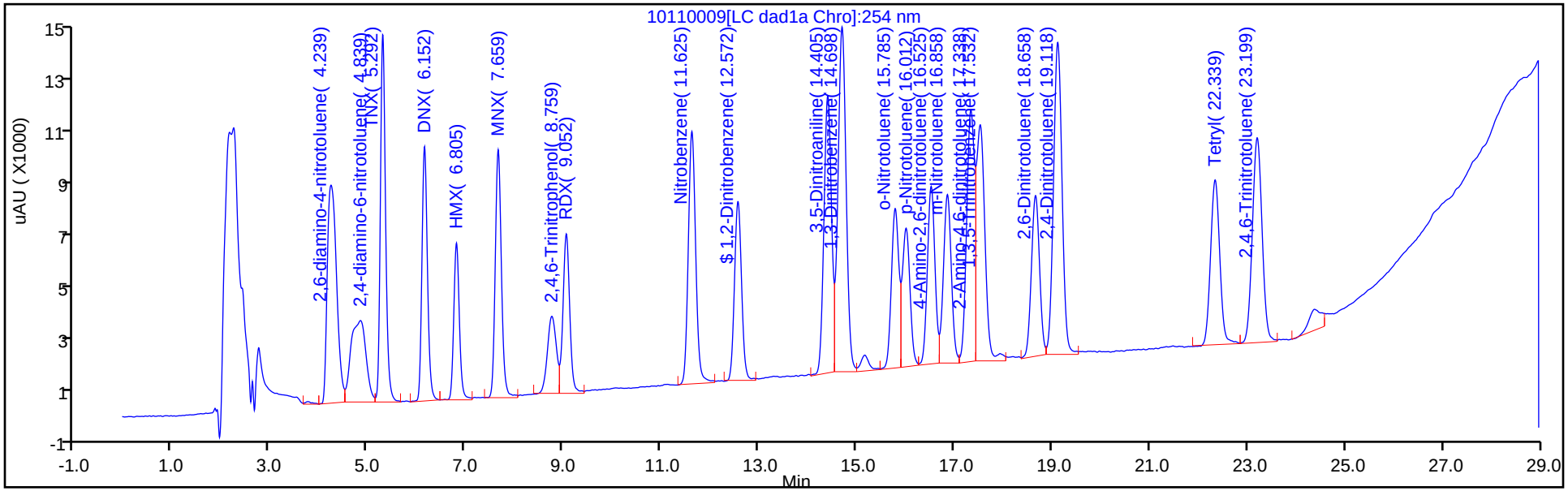
Report Date: 12-Oct-2023 12:50:27 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

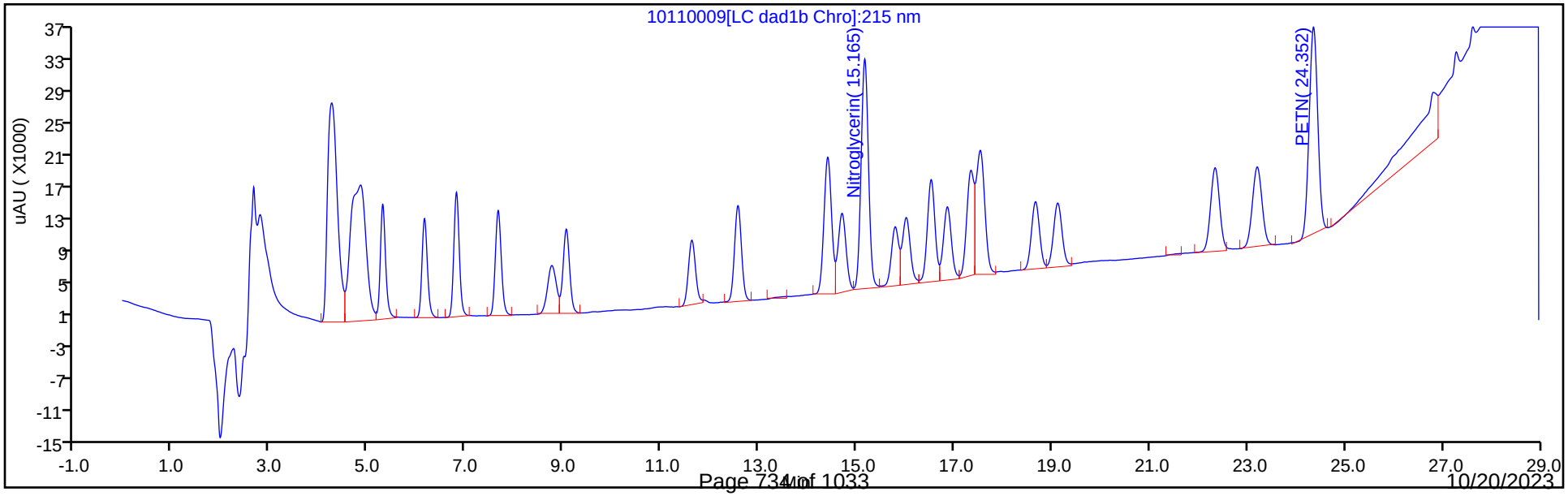
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Injection Date:	11-Oct-2023 17:13:04	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	CCV ADD			Worklist Smp#:	9
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Lab Sample ID: CCV 280-629372/9 Calibration Date: 10/11/2023 17:13

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 09/26/2023 00:42

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 09/26/2023 04:54

Lab File ID: 10110009.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	387643	414676		267	250	7.0	20.0
2,4-diamino-6-nitrotoluene	Ave	233949	251400		269	250	7.5	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Lab Sample ID: CCV 280-629372/9 Calibration Date: 10/11/2023 17:13

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 09/26/2023 00:42

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 09/26/2023 04:54

Lab File ID: 10110009.D

Analyte	RT	RT WINDOW	
		FROM	TO
2,6-diamino-4-nitrotoluene	4.24	4.09	4.39
2,4-diamino-6-nitrotoluene	4.84	4.69	4.99

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\10110009.D
Lims ID: CCV ADD
Client ID:
Sample Type: CCV
Inject. Date: 11-Oct-2023 17:13:04 ALS Bottle#: 7 Worklist Smp#: 9
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV ADD
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub12

Method: \\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 12-Oct-2023 12:50:27 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1633

First Level Reviewer: LV5D Date: 11-Oct-2023 18:31:59

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	4.239	4.239	0.000	103669	0.2500	0.2674	
2 2,4-diamino-6-nitrotoluene	1	4.839	4.839	0.000	62850	0.2500	0.2686	
3 TNX	1	5.292	5.292	0.000	97322	0.2508	0.2573	
4 DNX	1	6.152	6.152	0.000	71265	0.2503	0.2472	
6 HMX	1	6.805	6.805	0.000	44679	0.2500	0.2576	
7 MNX	1	7.659	7.659	0.000	76972	0.2918	0.2940	
5 2,4,6-Trinitrophenol	1	8.759	8.759	0.000	34706	0.2500	0.2420	
8 RDX	1	9.052	9.052	0.000	54119	0.2500	0.2607	
9 Nitrobenzene	1	11.625	11.625	0.000	95010	0.2500	0.2558	
$ 10 1,2-Dinitrobenzene	1	12.572	12.572	0.000	64845	0.2500	0.2525	
11 3,5-Dinitroaniline	1	14.405	14.405	0.000	106754	0.2500	0.2594	
12 1,3-Dinitrobenzene	1	14.698	14.698	0.000	142486	0.2500	0.2459	
13 Nitroglycerin	2	15.165	15.165	0.000	307025	2.50	2.47	
14 o-Nitrotoluene	1	15.785	15.785	0.000	60747	0.2500	0.2459	
15 p-Nitrotoluene	1	16.012	16.012	0.000	53393	0.2500	0.2429	
16 4-Amino-2,6-dinitrotoluene	1	16.525	16.525	0.000	69263	0.2500	0.2521	
17 m-Nitrotoluene	1	16.858	16.858	0.000	67867	0.2500	0.2474	
18 2-Amino-4,6-dinitrotoluene	1	17.338	17.338	0.000	100250	0.2500	0.2626	
19 1,3,5-Trinitrobenzene	1	17.532	17.532	0.000	99246	0.2500	0.2411	
20 2,6-Dinitrotoluene	1	18.658	18.658	0.000	66100	0.2500	0.2502	
21 2,4-Dinitrotoluene	1	19.118	19.118	0.000	135959	0.2500	0.2494	
22 Tetryl	1	22.339	22.339	0.000	78200	0.2500	0.2536	
23 2,4,6-Trinitrotoluene	1	23.199	23.199	0.000	102304	0.2500	0.2657	
24 PETN	2	24.352	24.352	0.000	321335	2.50	2.61	

QC Flag Legend
Processing Flags

Reagents:

8330 DMT_00015	Amount Added:	12.50	Units: uL
8330IntermStk_00078	Amount Added:	25.00	Units: uL
8330_ADDs_00037	Amount Added:	12.50	Units: uL

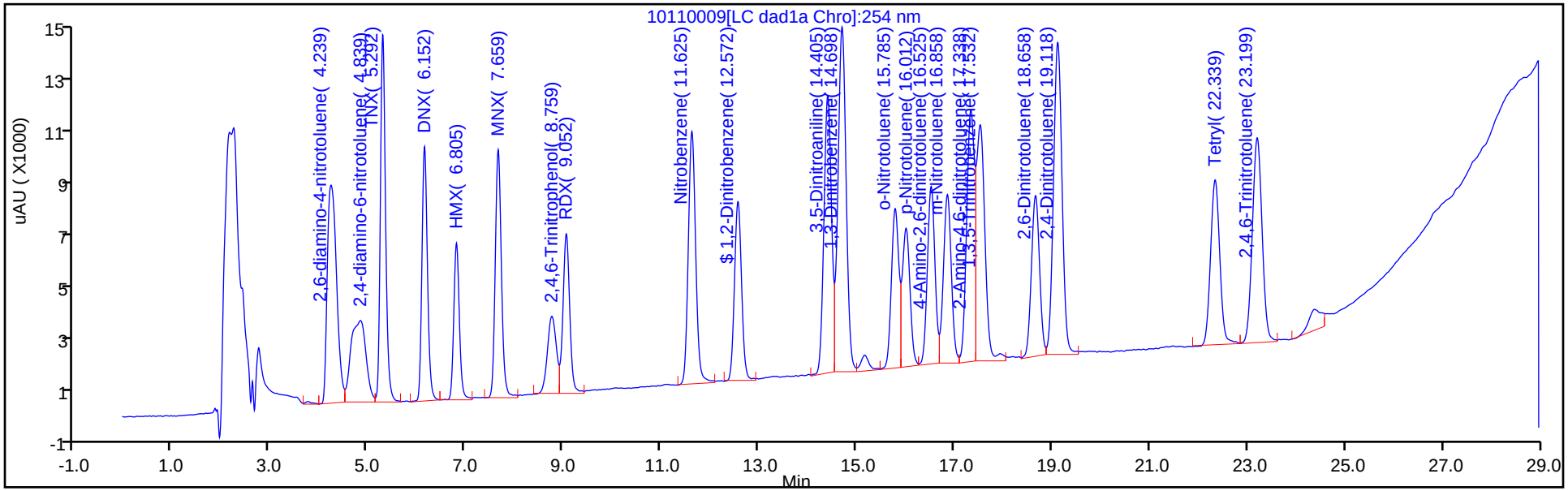
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Eurofins Denver

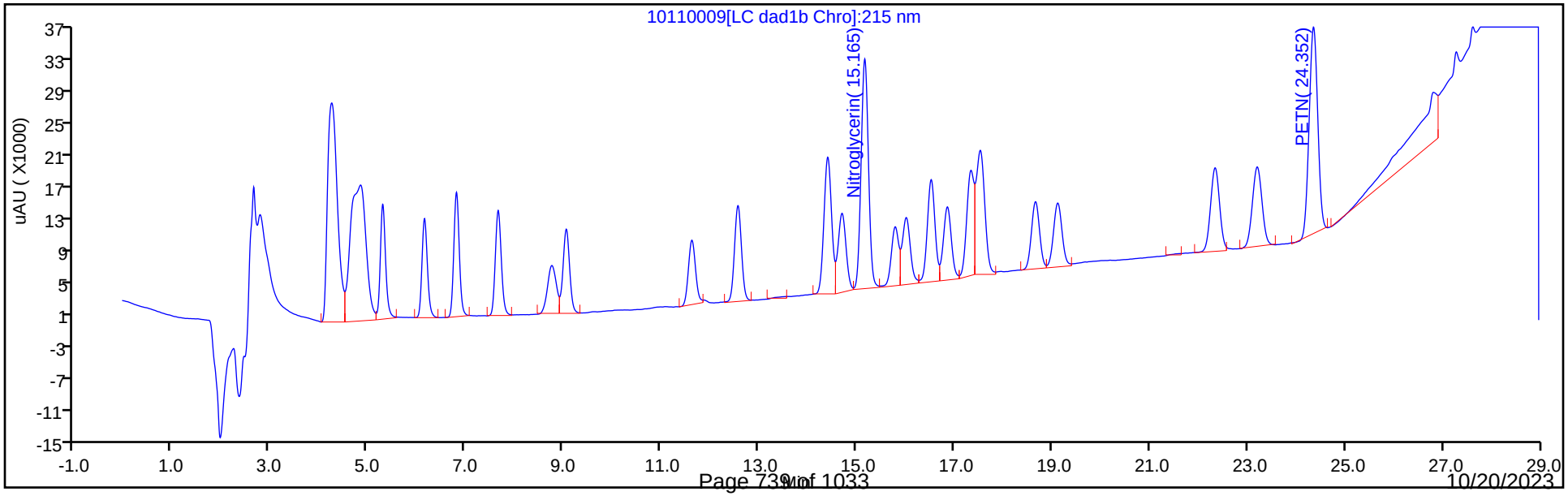
Data File: \\chromfs\denver\chromdata\g2_luna\20231011-126415.b\10110009.d

Injection Date:	11-Oct-2023 17:13:04	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	CCV ADD			Worklist Smp#:	9
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Lab Sample ID: CCV 280-629372/20 Calibration Date: 10/11/2023 23:49

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 09/25/2023 18:42

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 09/25/2023 23:30

Lab File ID: 10110020.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Lin2		389105		258	251	2.9	20.0
DNX	Ave	288240	283880		246	250	-1.5	20.0
HMX	Ave	173471	178168		257	250	2.7	20.0
MNX	Ave	261824	264559		295	292	1.0	20.0
Picric acid	Ave	143426	141532		247	250	-1.3	20.0
RDX	Ave	207587	214852		259	250	3.5	20.0
Nitrobenzene	Ave	371392	378224		255	250	1.8	20.0
3,5-Dinitroaniline	Lin2		431220		262	250	4.8	20.0
1,3-Dinitrobenzene	Ave	579530	573840		248	250	-1.0	20.0
Nitroglycerin	Ave	124215	124115		2500	2500	-0.0	20.0
2-Nitrotoluene	Ave	247036	237092		240	250	-4.0	20.0
4-Nitrotoluene	Lin2		213848		243	250	-2.7	20.0
4-Amino-2,6-dinitrotoluene	Lin2		278156		253	250	1.3	20.0
3-Nitrotoluene	Lin2		270020		246	250	-1.6	20.0
2-Amino-4,6-dinitrotoluene	Lin2		403008		264	250	5.6	20.0
1,3,5-Trinitrobenzene	Ave	411631	392144		238	250	-4.7	20.0
2,6-Dinitrotoluene	Lin2		265068		251	250	0.3	20.0
2,4-Dinitrotoluene	Ave	545087	545484		250	250	0.0	20.0
Tetryl	Ave	308340	306704		249	250	-0.5	20.0
2,4,6-Trinitrotoluene	Ave	384986	405016		263	250	5.2	20.0
PETN	Ave	123011	130008		2640	2500	5.7	20.0
1,2-Dinitrobenzene	Ave	256773	272844		266	250	6.3	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Lab Sample ID: CCV 280-629372/20 Calibration Date: 10/11/2023 23:49

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 09/25/2023 18:42

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 09/25/2023 23:30

Lab File ID: 10110020.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.32	5.14	5.44
DNX	6.18	6.00	6.30
HMX	6.85	6.66	6.96
MNX	7.71	7.51	7.81
Picric acid	8.78	8.61	8.91
RDX	9.12	8.90	9.20
Nitrobenzene	11.69	11.48	11.78
3,5-Dinitroaniline	14.46	14.26	14.56
1,3-Dinitrobenzene	14.75	14.55	14.85
Nitroglycerin	15.20	15.02	15.32
2-Nitrotoluene	15.82	15.64	15.94
4-Nitrotoluene	16.04	15.86	16.16
4-Amino-2,6-dinitrotoluene	16.56	16.38	16.68
3-Nitrotoluene	16.88	16.71	17.01
2-Amino-4,6-dinitrotoluene	17.36	17.19	17.49
1,3,5-Trinitrobenzene	17.56	17.38	17.68
2,6-Dinitrotoluene	18.68	18.51	18.81
2,4-Dinitrotoluene	19.13	18.97	19.27
Tetryl	22.34	22.19	22.49
2,4,6-Trinitrotoluene	23.21	23.05	23.35
PETN	24.34	24.20	24.50
1,2-Dinitrobenzene	12.64	12.42	12.72

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\10110020.D
Lims ID: CCV ADD
Client ID:
Sample Type: CCV
Inject. Date: 11-Oct-2023 23:49:06 ALS Bottle#: 7 Worklist Smp#: 20
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV ADD
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub12

Method: \\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 12-Oct-2023 12:50:38 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1633

First Level Reviewer: K8YG Date: 12-Oct-2023 12:38:37

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.258	4.239	0.019	104579	0.2500	0.2698	
2 2,4-diamino-6-nitrotoluene	1	4.871	4.839	0.032	63811	0.2500	0.2728	
3 TNX	1	5.324	5.292	0.032	97568	0.2508	0.2579	
4 DNX	1	6.184	6.152	0.032	71041	0.2503	0.2465	
6 HMX	1	6.851	6.805	0.046	44542	0.2500	0.2568	
7 MNX	1	7.711	7.659	0.052	77185	0.2918	0.2948	
5 2,4,6-Trinitrophenol	1	8.784	8.759	0.025	35383	0.2500	0.2467	
8 RDX	1	9.118	9.052	0.066	53713	0.2500	0.2587	
9 Nitrobenzene	1	11.691	11.625	0.066	94556	0.2500	0.2546	
$ 10 1,2-Dinitrobenzene	1	12.638	12.572	0.066	68211	0.2500	0.2656	
11 3,5-Dinitroaniline	1	14.464	14.405	0.059	107805	0.2500	0.2619	
12 1,3-Dinitrobenzene	1	14.751	14.698	0.053	143460	0.2500	0.2475	
13 Nitroglycerin	2	15.198	15.165	0.033	310288	2.50	2.50	
14 o-Nitrotoluene	1	15.824	15.785	0.039	59273	0.2500	0.2399	
15 p-Nitrotoluene	1	16.044	16.012	0.032	53462	0.2500	0.2432	
16 4-Amino-2,6-dinitrotoluene	1	16.558	16.525	0.033	69539	0.2500	0.2531	
17 m-Nitrotoluene	1	16.884	16.858	0.026	67505	0.2500	0.2461	
18 2-Amino-4,6-dinitrotoluene	1	17.364	17.338	0.026	100752	0.2500	0.2640	
19 1,3,5-Trinitrobenzene	1	17.558	17.532	0.026	98036	0.2500	0.2382	M
20 2,6-Dinitrotoluene	1	18.678	18.658	0.020	66267	0.2500	0.2508	
21 2,4-Dinitrotoluene	1	19.131	19.118	0.013	136371	0.2500	0.2502	
22 Tetryl	1	22.344	22.339	0.005	76676	0.2500	0.2487	
23 2,4,6-Trinitrotoluene	1	23.211	23.199	0.012	101254	0.2500	0.2630	
24 PETN	2	24.338	24.352	-0.014	325021	2.50	2.64	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00015	Amount Added:	12.50	Units: uL
8330IntermStk_00078	Amount Added:	25.00	Units: uL
8330_ADDs_00037	Amount Added:	12.50	Units: uL

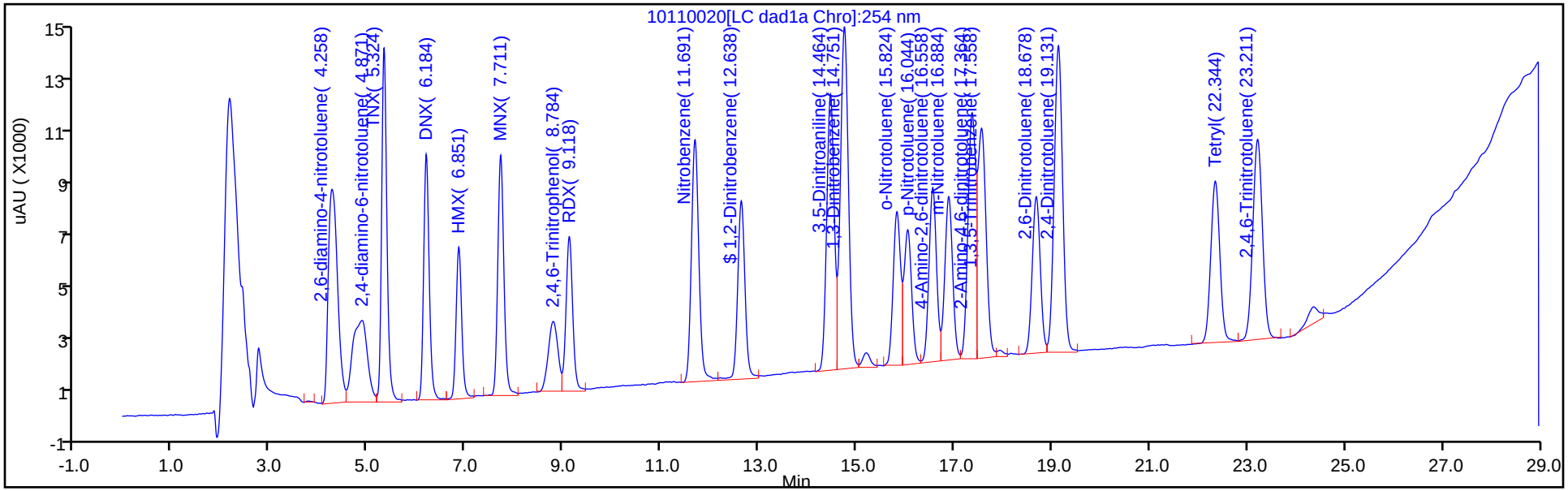
Report Date: 12-Oct-2023 12:50:38 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

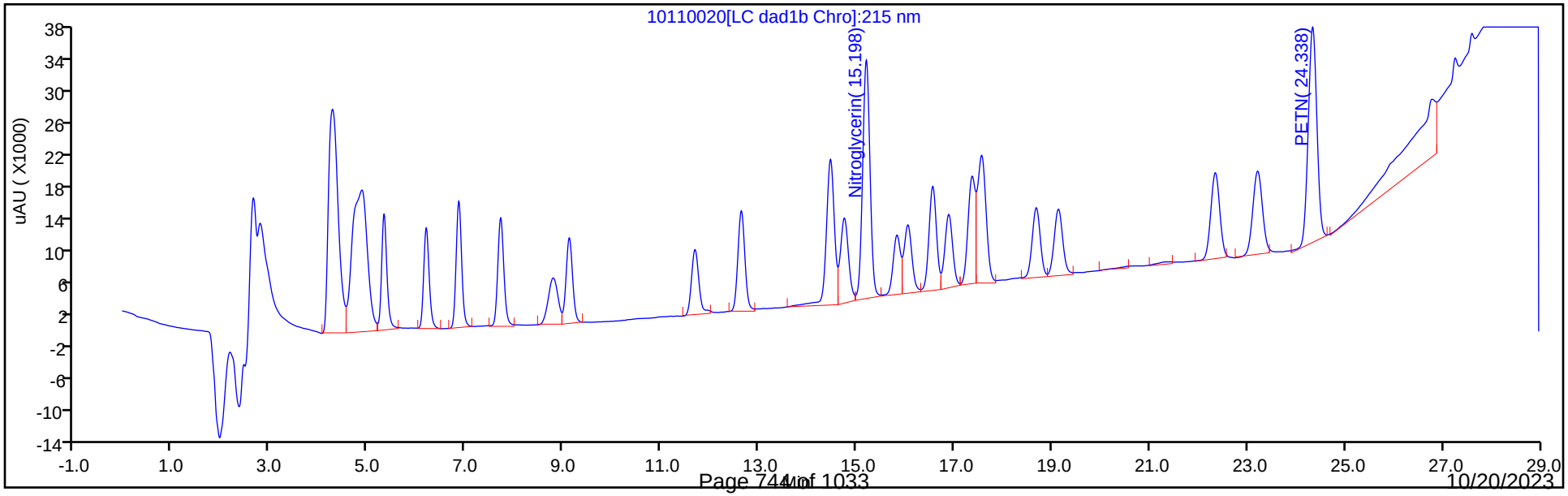
Data File: \\chromfs\denver\chromdata\g2_luna\20231011-126415.b\10110020.d

Injection Date:	11-Oct-2023 23:49:06	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	CCV ADD			Worklist Smp#:	20
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



10/20/2023
4:00 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

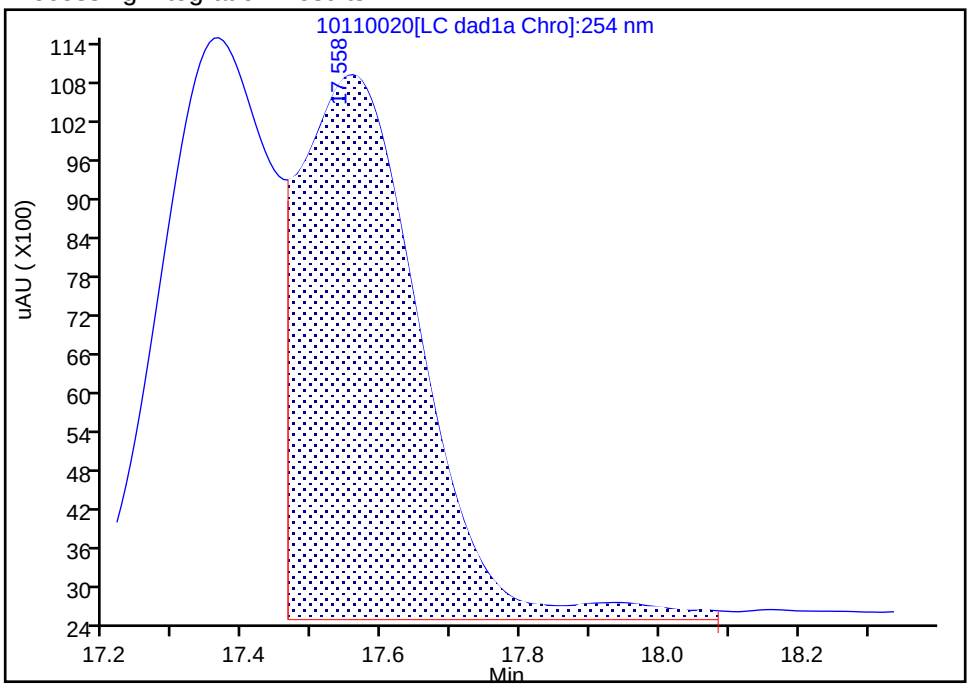
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Injection Date:	11-Oct-2023 23:49:06	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

19 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

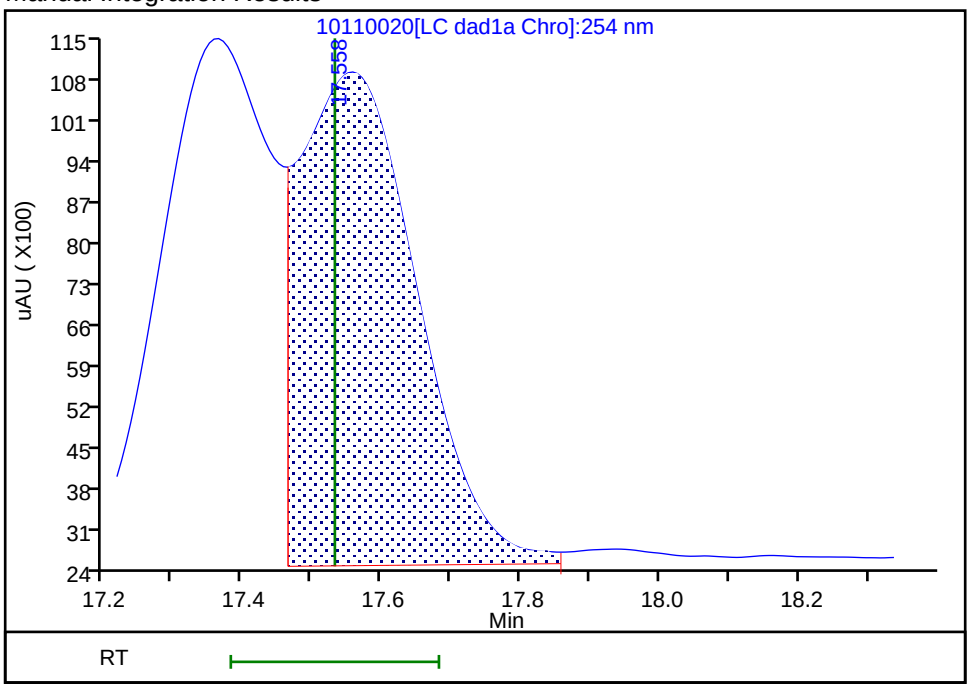
Processing Integration Results

RT: 17.56
Area: 100818
Amount: 0.244923
Amount Units: ug/ml



Manual Integration Results

RT: 17.56
Area: 98036
Amount: 0.238165
Amount Units: ug/ml



Reviewer: K8YG, 12-Oct-2023 12:38:22 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-182239-1

SDG No.:

Lab Sample ID: CCV 280-629372/20 | Calibration Date: 10/11/2023 23:49

Instrument ID: CHHPLC_G2_LUNA | Calib Start Date: 09/26/2023 00:42

GC Column: Luna-phenylhex ID: 4.60(mm) | Calib End Date: 09/26/2023 04:54

Lab File ID: 10110020.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	387643	418316		270	250	7.9	20.0
2,4-diamino-6-nitrotoluene	Ave	233949	255244		273	250	9.1	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Lab Sample ID: CCV 280-629372/20 Calibration Date: 10/11/2023 23:49

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 09/26/2023 00:42

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 09/26/2023 04:54

Lab File ID: 10110020.D

Analyte	RT	RT WINDOW	
		FROM	TO
2,6-diamino-4-nitrotoluene	4.26	4.09	4.39
2,4-diamino-6-nitrotoluene	4.87	4.69	4.99

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\10110020.D
Lims ID: CCV ADD
Client ID:
Sample Type: CCV
Inject. Date: 11-Oct-2023 23:49:06 ALS Bottle#: 7 Worklist Smp#: 20
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV ADD
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub12

Method: \\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 12-Oct-2023 12:50:38 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1633

First Level Reviewer: K8YG Date: 12-Oct-2023 12:38:37

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 2,6-diamino-4-nitrotoluene	1	4.258	4.239	0.019	104579	0.2500	0.2698	
	2 2,4-diamino-6-nitrotoluene	1	4.871	4.839	0.032	63811	0.2500	0.2728	
	3 TNX	1	5.324	5.292	0.032	97568	0.2508	0.2579	
	4 DNX	1	6.184	6.152	0.032	71041	0.2503	0.2465	
	6 HMX	1	6.851	6.805	0.046	44542	0.2500	0.2568	
	7 MNX	1	7.711	7.659	0.052	77185	0.2918	0.2948	
	5 2,4,6-Trinitrophenol	1	8.784	8.759	0.025	35383	0.2500	0.2467	
	8 RDX	1	9.118	9.052	0.066	53713	0.2500	0.2587	
	9 Nitrobenzene	1	11.691	11.625	0.066	94556	0.2500	0.2546	
$	10 1,2-Dinitrobenzene	1	12.638	12.572	0.066	68211	0.2500	0.2656	
	11 3,5-Dinitroaniline	1	14.464	14.405	0.059	107805	0.2500	0.2619	
	12 1,3-Dinitrobenzene	1	14.751	14.698	0.053	143460	0.2500	0.2475	
	13 Nitroglycerin	2	15.198	15.165	0.033	310288	2.50	2.50	
	14 o-Nitrotoluene	1	15.824	15.785	0.039	59273	0.2500	0.2399	
	15 p-Nitrotoluene	1	16.044	16.012	0.032	53462	0.2500	0.2432	
	16 4-Amino-2,6-dinitrotoluene	1	16.558	16.525	0.033	69539	0.2500	0.2531	
	17 m-Nitrotoluene	1	16.884	16.858	0.026	67505	0.2500	0.2461	
	18 2-Amino-4,6-dinitrotoluene	1	17.364	17.338	0.026	100752	0.2500	0.2640	
	19 1,3,5-Trinitrobenzene	1	17.558	17.532	0.026	98036	0.2500	0.2382	M
	20 2,6-Dinitrotoluene	1	18.678	18.658	0.020	66267	0.2500	0.2508	
	21 2,4-Dinitrotoluene	1	19.131	19.118	0.013	136371	0.2500	0.2502	
	22 Tetryl	1	22.344	22.339	0.005	76676	0.2500	0.2487	
	23 2,4,6-Trinitrotoluene	1	23.211	23.199	0.012	101254	0.2500	0.2630	
	24 PETN	2	24.338	24.352	-0.014	325021	2.50	2.64	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00015	Amount Added:	12.50	Units: uL
8330IntermStk_00078	Amount Added:	25.00	Units: uL
8330_ADDs_00037	Amount Added:	12.50	Units: uL

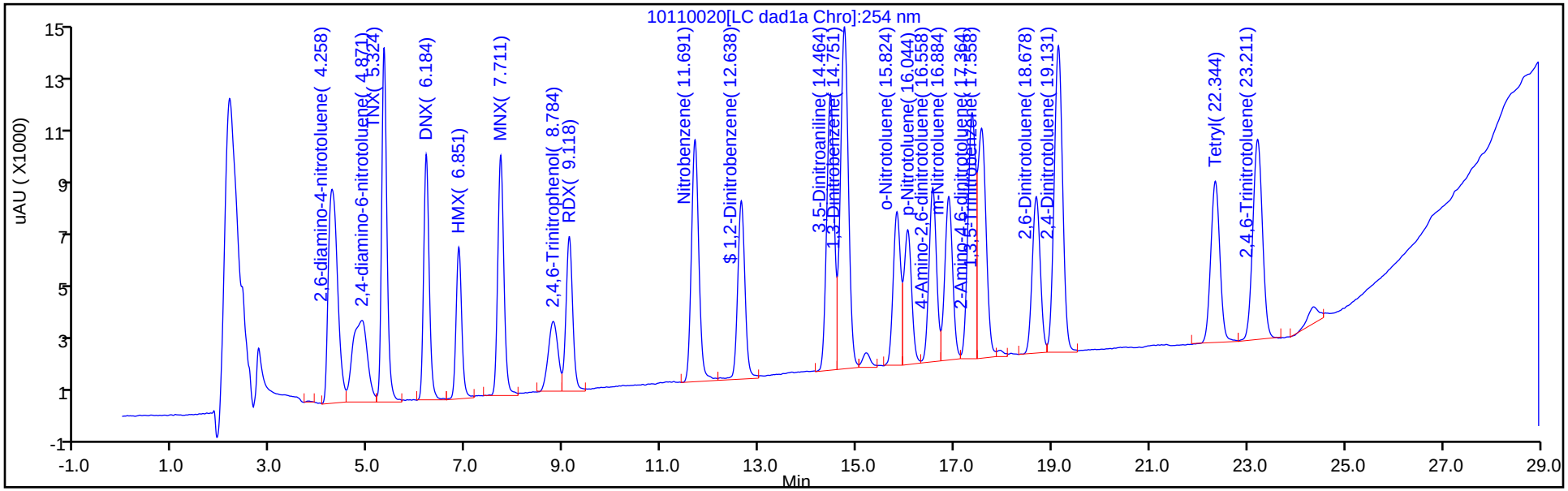
Report Date: 12-Oct-2023 12:50:38 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

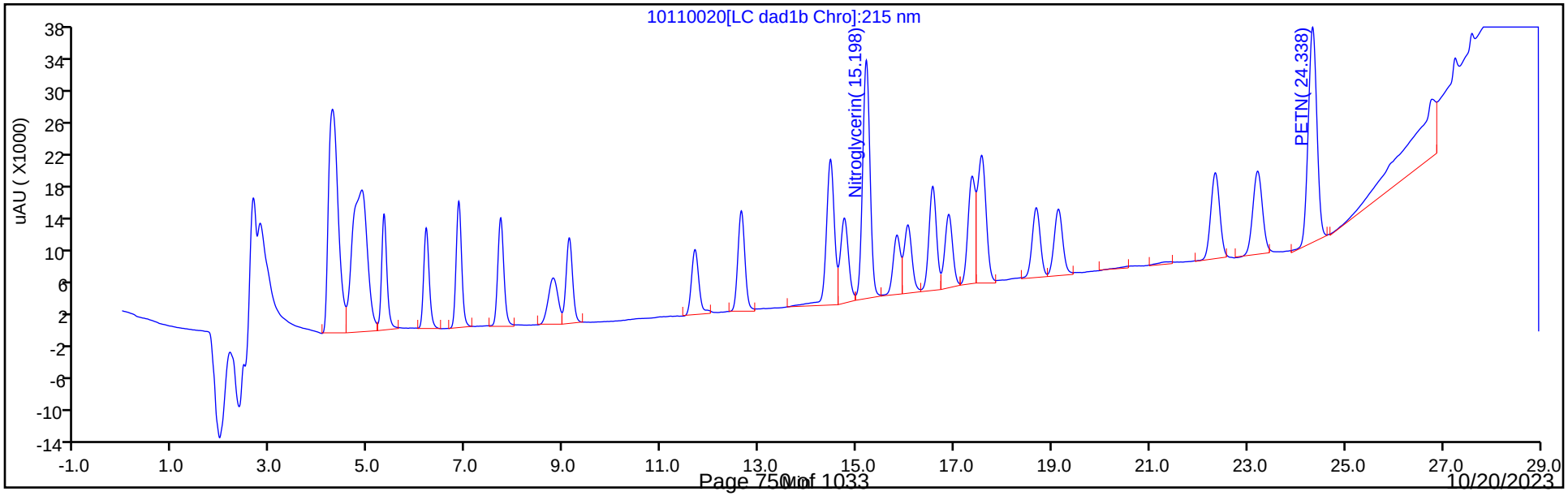
Data File: \\chromfs\denver\chromdata\g2_luna\20231011-126415.b\10110020.d

Injection Date:	11-Oct-2023 23:49:06	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	CCV ADD			Worklist Smp#:	20
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



10/20/2023 4:00 PM

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Lab Sample ID: CCV 280-629372/29 Calibration Date: 10/12/2023 05:49

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 09/25/2023 18:42

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 09/25/2023 23:30

Lab File ID: 10110029.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Lin2		387190		257	251	2.4	20.0
DNX	Ave	288240	286082		248	250	-0.7	20.0
HMX	Ave	173471	180332		260	250	4.0	20.0
MNX	Ave	261824	262279		292	292	0.2	20.0
Picric acid	Ave	143426	145416		253	250	1.4	20.0
RDX	Ave	207587	216408		261	250	4.2	20.0
Nitrobenzene	Ave	371392	368340		248	250	-0.8	20.0
3,5-Dinitroaniline	Lin2		435980		265	250	5.9	20.0
1,3-Dinitrobenzene	Ave	579530	575876		248	250	-0.6	20.0
Nitroglycerin	Ave	124215	126116		2540	2500	1.5	20.0
2-Nitrotoluene	Ave	247036	237736		241	250	-3.8	20.0
4-Nitrotoluene	Lin2		214148		244	250	-2.6	20.0
4-Amino-2,6-dinitrotoluene	Lin2		280372		255	250	2.1	20.0
3-Nitrotoluene	Lin2		268540		245	250	-2.1	20.0
2-Amino-4,6-dinitrotoluene	Lin2		418992		275	250	9.8	20.0
1,3,5-Trinitrobenzene	Ave	411631	400064		243	250	-2.8	20.0
2,6-Dinitrotoluene	Lin2		268632		254	250	1.7	20.0
2,4-Dinitrotoluene	Ave	545087	547836		251	250	0.5	20.0
Tetryl	Ave	308340	316968		257	250	2.8	20.0
2,4,6-Trinitrotoluene	Ave	384986	412932		268	250	7.3	20.0
PETN	Ave	123011	129839		2640	2500	5.6	20.0
1,2-Dinitrobenzene	Ave	256773	260680		254	250	1.5	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Lab Sample ID: CCV 280-629372/29 Calibration Date: 10/12/2023 05:49

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 09/25/2023 18:42

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 09/25/2023 23:30

Lab File ID: 10110029.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.30	5.14	5.44
DNX	6.15	6.00	6.30
HMX	6.81	6.66	6.96
MNX	7.66	7.51	7.81
Picric acid	8.70	8.61	8.91
RDX	9.06	8.90	9.20
Nitrobenzene	11.65	11.48	11.78
3,5-Dinitroaniline	14.47	14.26	14.56
1,3-Dinitrobenzene	14.76	14.55	14.85
Nitroglycerin	15.22	15.02	15.32
2-Nitrotoluene	15.84	15.64	15.94
4-Nitrotoluene	16.07	15.86	16.16
4-Amino-2,6-dinitrotoluene	16.59	16.38	16.68
3-Nitrotoluene	16.92	16.71	17.01
2-Amino-4,6-dinitrotoluene	17.41	17.19	17.49
1,3,5-Trinitrobenzene	17.59	17.38	17.68
2,6-Dinitrotoluene	18.74	18.51	18.81
2,4-Dinitrotoluene	19.20	18.97	19.27
Tetryl	22.44	22.19	22.49
2,4,6-Trinitrotoluene	23.30	23.05	23.35
PETN	24.43	24.20	24.50
1,2-Dinitrobenzene	12.61	12.42	12.72

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\10110029.D
Lims ID: CCV ADD
Client ID:
Sample Type: CCV
Inject. Date: 12-Oct-2023 05:49:04 ALS Bottle#: 7 Worklist Smp#: 29
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV ADD
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub12

Method: \\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 12-Oct-2023 12:50:46 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1633

	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	4.245	4.239	0.006	104560	0.2500	0.2697	
2	2,4-diamino-6-nitrotoluene	1	4.845	4.839	0.006	63598	0.2500	0.2718	
3	TNX	1	5.298	5.292	0.006	97088	0.2508	0.2567	
4	DNX	1	6.151	6.152	-0.001	71592	0.2503	0.2484	
6	HMX	1	6.805	6.805	0.000	45083	0.2500	0.2599	
7	MNX	1	7.658	7.659	-0.001	76520	0.2918	0.2923	
5	2,4,6-Trinitrophenol	1	8.698	8.759	-0.061	36354	0.2500	0.2535	
8	RDX	1	9.058	9.052	0.006	54102	0.2500	0.2606	
9	Nitrobenzene	1	11.651	11.625	0.026	92085	0.2500	0.2479	
$ 10	1,2-Dinitrobenzene	1	12.611	12.572	0.039	65170	0.2500	0.2538	
11	3,5-Dinitroaniline	1	14.471	14.405	0.066	108995	0.2500	0.2648	
12	1,3-Dinitrobenzene	1	14.758	14.698	0.060	143969	0.2500	0.2484	
13	Nitroglycerin	2	15.218	15.165	0.053	315290	2.50	2.54	
14	o-Nitrotoluene	1	15.844	15.785	0.059	59434	0.2500	0.2406	
15	p-Nitrotoluene	1	16.071	16.012	0.059	53537	0.2500	0.2435	
16	4-Amino-2,6-dinitrotoluene	1	16.591	16.525	0.066	70093	0.2500	0.2552	
17	m-Nitrotoluene	1	16.918	16.858	0.060	67135	0.2500	0.2447	
18	2-Amino-4,6-dinitrotoluene	1	17.411	17.338	0.073	104748	0.2500	0.2746	
19	1,3,5-Trinitrobenzene	1	17.591	17.532	0.059	100016	0.2500	0.2430	
20	2,6-Dinitrotoluene	1	18.744	18.658	0.086	67158	0.2500	0.2543	
21	2,4-Dinitrotoluene	1	19.204	19.118	0.086	136959	0.2500	0.2513	
22	Tetryl	1	22.438	22.339	0.099	79242	0.2500	0.2570	
23	2,4,6-Trinitrotoluene	1	23.298	23.199	0.099	103233	0.2500	0.2681	
24	PETN	2	24.431	24.352	0.079	324598	2.50	2.64	

Reagents:

8330 DMT_00015	Amount Added: 12.50	Units: uL
8330IntermStk_00078	Amount Added: 25.00	Units: uL
8330_ADDs_00037	Amount Added: 12.50	Units: uL

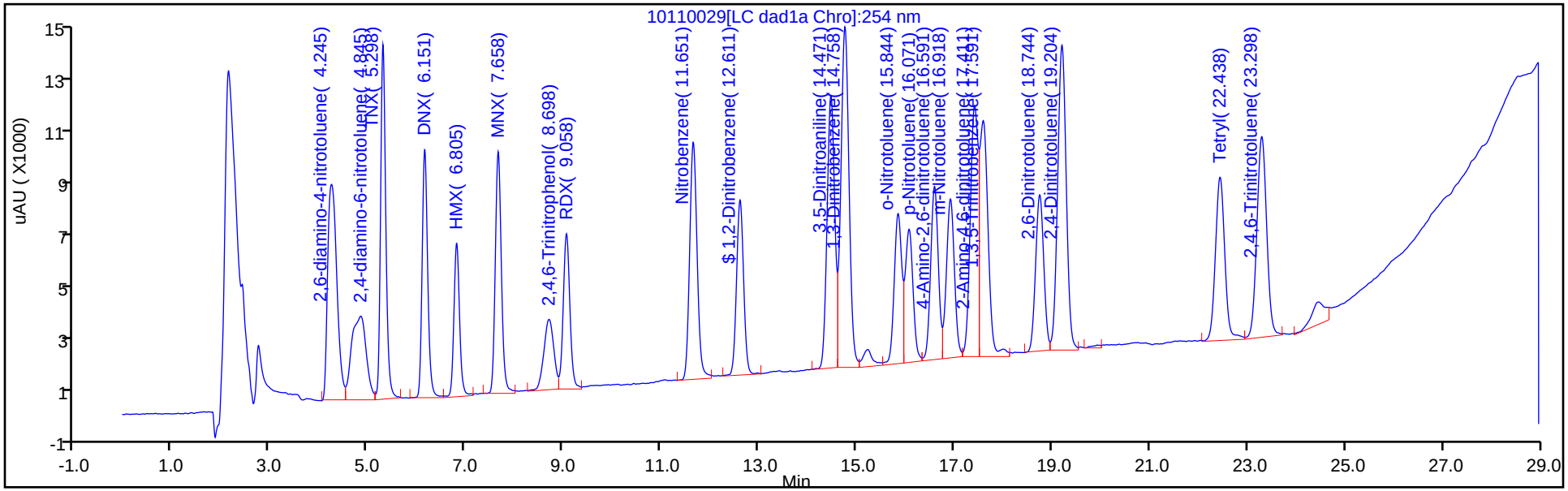
Report Date: 12-Oct-2023 12:50:46 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

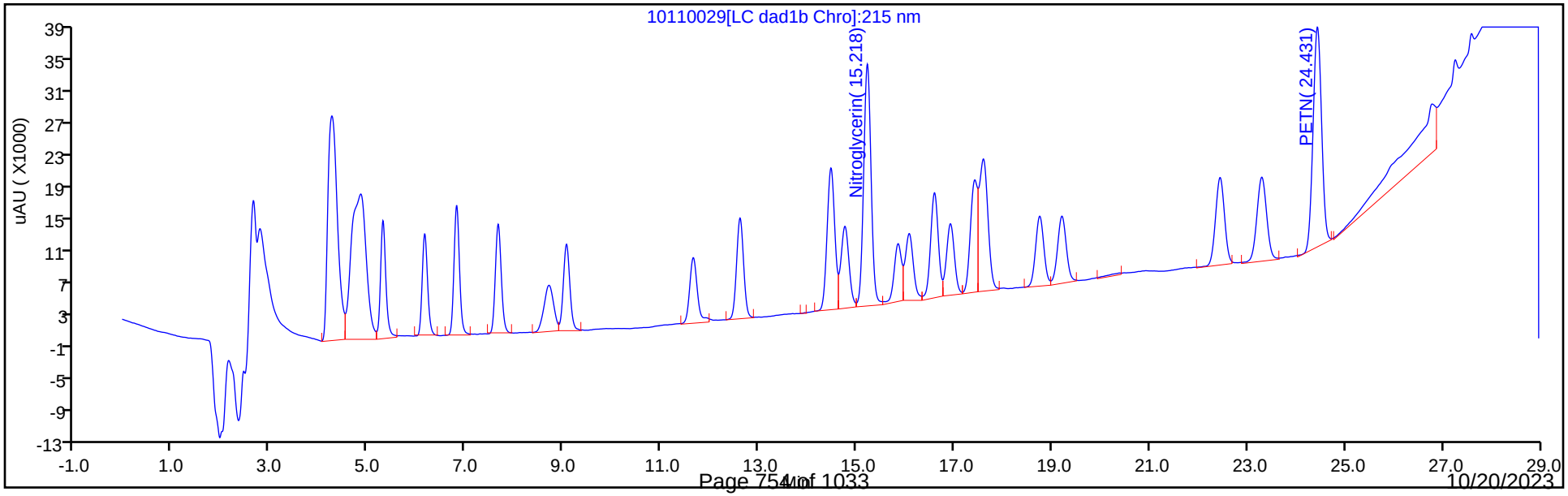
Data File: \\chromfs\denver\chromdata\g2_luna\20231011-126415.b\10110029.d

Injection Date:	12-Oct-2023 05:49:04	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	CCV ADD			Worklist Smp#:	29
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



10/20/2023
4:00 PM

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Lab Sample ID: CCV 280-629372/29 Calibration Date: 10/12/2023 05:49

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 09/26/2023 00:42

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 09/26/2023 04:54

Lab File ID: 10110029.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	387643	418240		270	250	7.9	20.0
2,4-diamino-6-nitrotoluene	Ave	233949	254392		272	250	8.7	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Lab Sample ID: CCV 280-629372/29 Calibration Date: 10/12/2023 05:49

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 09/26/2023 00:42

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 09/26/2023 04:54

Lab File ID: 10110029.D

Analyte	RT	RT WINDOW	
		FROM	TO
2,6-diamino-4-nitrotoluene	4.25	4.09	4.39
2,4-diamino-6-nitrotoluene	4.85	4.69	4.99

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\10110029.D
Lims ID: CCV ADD
Client ID:
Sample Type: CCV
Inject. Date: 12-Oct-2023 05:49:04 ALS Bottle#: 7 Worklist Smp#: 29
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV ADD
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub12

Method: \\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 12-Oct-2023 12:50:46 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1633

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	4.245	4.239	0.006	104560	0.2500	0.2697	
2 2,4-diamino-6-nitrotoluene	1	4.845	4.839	0.006	63598	0.2500	0.2718	
3 TNX	1	5.298	5.292	0.006	97088	0.2508	0.2567	
4 DNX	1	6.151	6.152	-0.001	71592	0.2503	0.2484	
6 HMX	1	6.805	6.805	0.000	45083	0.2500	0.2599	
7 MNX	1	7.658	7.659	-0.001	76520	0.2918	0.2923	
5 2,4,6-Trinitrophenol	1	8.698	8.759	-0.061	36354	0.2500	0.2535	
8 RDX	1	9.058	9.052	0.006	54102	0.2500	0.2606	
9 Nitrobenzene	1	11.651	11.625	0.026	92085	0.2500	0.2479	
$ 10 1,2-Dinitrobenzene	1	12.611	12.572	0.039	65170	0.2500	0.2538	
11 3,5-Dinitroaniline	1	14.471	14.405	0.066	108995	0.2500	0.2648	
12 1,3-Dinitrobenzene	1	14.758	14.698	0.060	143969	0.2500	0.2484	
13 Nitroglycerin	2	15.218	15.165	0.053	315290	2.50	2.54	
14 o-Nitrotoluene	1	15.844	15.785	0.059	59434	0.2500	0.2406	
15 p-Nitrotoluene	1	16.071	16.012	0.059	53537	0.2500	0.2435	
16 4-Amino-2,6-dinitrotoluene	1	16.591	16.525	0.066	70093	0.2500	0.2552	
17 m-Nitrotoluene	1	16.918	16.858	0.060	67135	0.2500	0.2447	
18 2-Amino-4,6-dinitrotoluene	1	17.411	17.338	0.073	104748	0.2500	0.2746	
19 1,3,5-Trinitrobenzene	1	17.591	17.532	0.059	100016	0.2500	0.2430	
20 2,6-Dinitrotoluene	1	18.744	18.658	0.086	67158	0.2500	0.2543	
21 2,4-Dinitrotoluene	1	19.204	19.118	0.086	136959	0.2500	0.2513	
22 Tetryl	1	22.438	22.339	0.099	79242	0.2500	0.2570	
23 2,4,6-Trinitrotoluene	1	23.298	23.199	0.099	103233	0.2500	0.2681	
24 PETN	2	24.431	24.352	0.079	324598	2.50	2.64	

Reagents:

8330 DMT_00015	Amount Added: 12.50	Units: uL
8330IntermStk_00078	Amount Added: 25.00	Units: uL
8330_ADDs_00037	Amount Added: 12.50	Units: uL

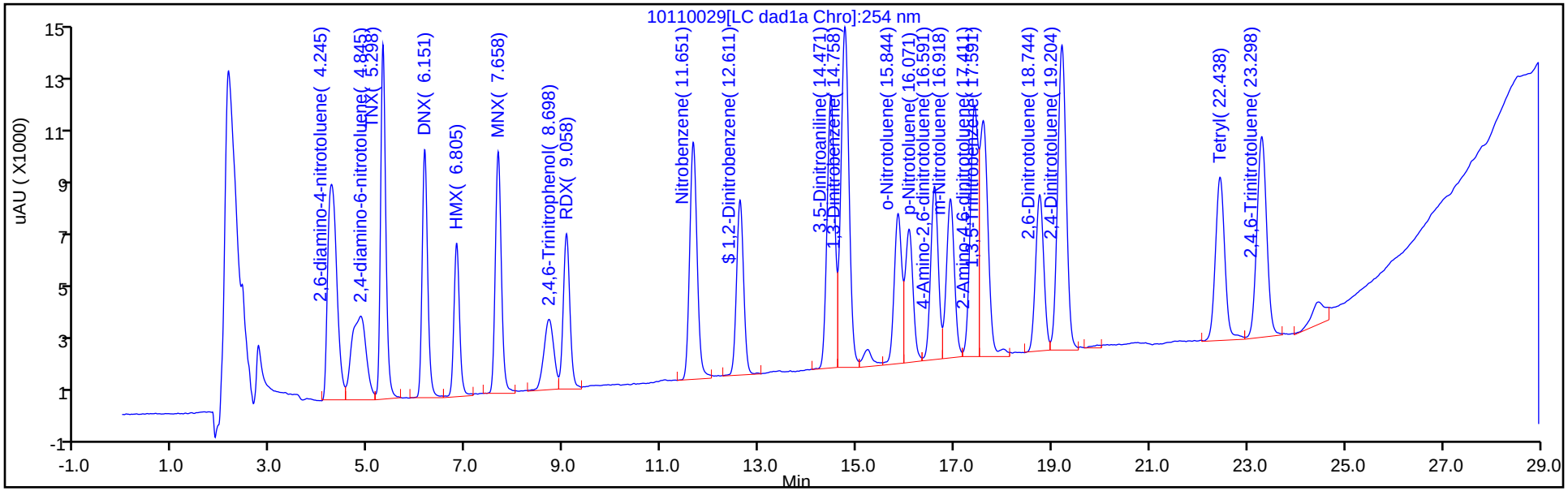
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Eurofins Denver

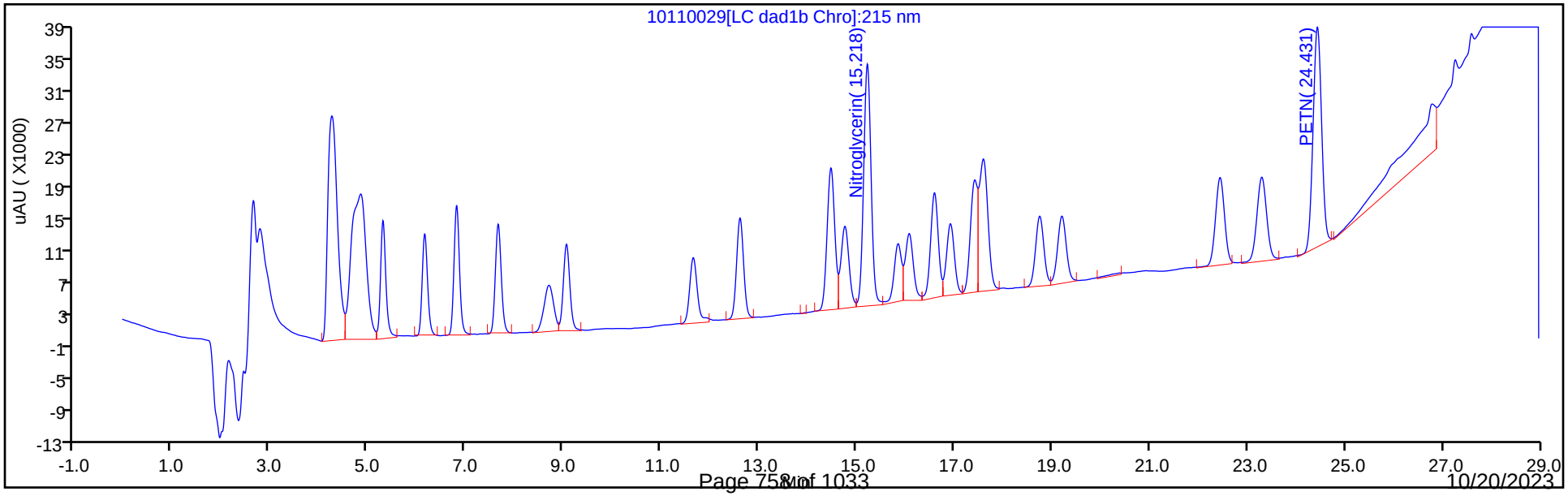
Data File: \\chromfs\denver\chromdata\g2_luna\20231011-126415.b\10110029.d

Injection Date:	12-Oct-2023 05:49:04	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	CCV ADD			Worklist Smp#:	29
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Lab Sample ID: ICV 280-617295/20 Calibration Date: 06/23/2023 21:20

Instrument ID: CHHPLC_X3 Calib Start Date: 06/23/2023 17:53

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 06/23/2023 20:57

Lab File ID: 06230020.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	200761	199627		499	502	-0.6	20.0
HMX	Ave	94255	83092		441	500	-11.8	20.0
DNX	Ave	144493	149728		519	501	3.6	20.0
MNX	Ave	138689	138972		585	584	0.2	20.0
RDX	Ave	110493	105934		479	500	-4.1	20.0
Picric acid	Ave	77863	85034		546	500	9.2	20.0
1,3,5-Trinitrobenzene	Ave	216079	236762		548	500	9.6	20.0
1,3-Dinitrobenzene	Ave	293347	307830		525	500	4.9	20.0
Nitrobenzene	Ave	192696	199368		517	500	3.5	20.0
3,5-Dinitroaniline	Lin2		225728		502	500	0.4	20.0
Tetryl	Ave	167257	189110		565	500	13.1	20.0
Nitroglycerin	Ave	64651	68558		5300	5000	6.0	20.0
2,4,6-Trinitrotoluene	Ave	204902	210316		513	500	2.6	20.0
4-Amino-2,6-dinitrotoluene	Ave	149560	156178		522	500	4.4	20.0
2-Amino-4,6-dinitrotoluene	Ave	193716	201626		520	500	4.1	20.0
2,6-Dinitrotoluene	Ave	142638	147100		516	500	3.1	20.0
2,4-Dinitrotoluene	Ave	295706	300582		508	500	1.6	20.0
2-Nitrotoluene	Ave	126123	126932		503	500	0.6	20.0
4-Nitrotoluene	Ave	110088	109714		498	500	-0.3	20.0
3-Nitrotoluene	Lin2		139916		512	500	2.4	20.0
PETN	Ave	72018	77398		5370	5000	7.5	20.0
1,2-Dinitrobenzene	Ave	123911	127840		516	500	3.2	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Lab Sample ID: ICV 280-617295/20 Calibration Date: 06/23/2023 21:20

Instrument ID: CHHPLC_X3 Calib Start Date: 06/23/2023 17:53

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 06/23/2023 20:57

Lab File ID: 06230020.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.47	6.37	6.57
HMX	6.60	6.45	6.75
DNX	6.80	6.70	6.90
MNX	7.23	7.09	7.39
RDX	7.63	7.47	7.77
Picric acid	8.01	7.88	8.18
1,3,5-Trinitrobenzene	8.71	8.56	8.86
1,3-Dinitrobenzene	9.33	9.19	9.49
Nitrobenzene	9.69	9.56	9.86
3,5-Dinitroaniline	9.93	9.79	10.09
Tetryl	10.07	9.93	10.23
Nitroglycerin	10.52	10.39	10.69
2,4,6-Trinitrotoluene	10.96	10.88	11.08
4-Amino-2,6-dinitrotoluene	11.15	11.07	11.27
2-Amino-4,6-dinitrotoluene	11.40	11.32	11.52
2,6-Dinitrotoluene	11.56	11.48	11.68
2,4-Dinitrotoluene	11.73	11.64	11.84
2-Nitrotoluene	12.55	12.42	12.72
4-Nitrotoluene	12.97	12.83	13.13
3-Nitrotoluene	13.54	13.41	13.71
PETN	14.71	14.57	14.87
1,2-Dinitrobenzene	8.58	8.44	8.74

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230020.D
Lims ID: ICV INT/DMT
Client ID:
Sample Type: ICV
Inject. Date: 23-Jun-2023 21:20:20 ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICV INT/DMT
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist:

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 24-Jun-2023 12:56:19 Calib Date: 23-Jun-2023 20:57:20
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1681

First Level Reviewer: LV5D Date: 23-Jun-2023 21:43:56

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.471	6.470	0.001	100113	0.5015	0.4987	M
4 HMX	1	6.598	6.597	0.001	41546	0.5000	0.4408	M
6 DNX	1	6.798	6.803	-0.005	74939	0.5005	0.5186	M
7 MNX	1	7.231	7.237	-0.006	81090	0.5835	0.5847	
8 RDX	1	7.625	7.623	0.002	52967	0.5000	0.4794	
9 2,4,6-Trinitrophenol	1	8.005	8.030	-0.025	42517	0.5000	0.5460	
$ 10 1,2-Dinitrobenzene	1	8.578	8.590	-0.012	63920	0.5000	0.5159	
11 1,3,5-Trinitrobenzene	1	8.705	8.710	-0.005	118381	0.5000	0.5479	
12 1,3-Dinitrobenzene	1	9.325	9.336	-0.011	153915	0.5000	0.5247	
13 Nitrobenzene	1	9.691	9.710	-0.019	99684	0.5000	0.5173	
14 3,5-Dinitroaniline	1	9.925	9.943	-0.018	112864	0.5000	0.5018	
15 Tetryl	1	10.065	10.083	-0.018	94555	0.5000	0.5653	
16 Nitroglycerin	2	10.518	10.536	-0.018	342788	5.00	5.30	
17 2,4,6-Trinitrotoluene	1	10.958	10.976	-0.018	105158	0.5000	0.5132	
18 4-Amino-2,6-dinitrotoluene	1	11.151	11.170	-0.019	78089	0.5000	0.5221	
19 2-Amino-4,6-dinitrotoluene	1	11.398	11.423	-0.025	100813	0.5000	0.5204	
20 2,6-Dinitrotoluene	1	11.558	11.576	-0.018	73550	0.5000	0.5156	
21 2,4-Dinitrotoluene	1	11.725	11.743	-0.018	150291	0.5000	0.5082	
22 o-Nitrotoluene	1	12.545	12.570	-0.025	63466	0.5000	0.5032	
23 p-Nitrotoluene	1	12.965	12.983	-0.018	54857	0.5000	0.4983	
24 m-Nitrotoluene	1	13.538	13.556	-0.018	69958	0.5000	0.5121	
25 PETN	2	14.711	14.723	-0.012	386990	5.00	5.37	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330Surrogate_00146	Amount Added:	50.00	Units: uL
8330 LCS_00127	Amount Added:	50.00	Units: uL
8330_OP_DMT_00021	Amount Added:	50.00	Units: uL

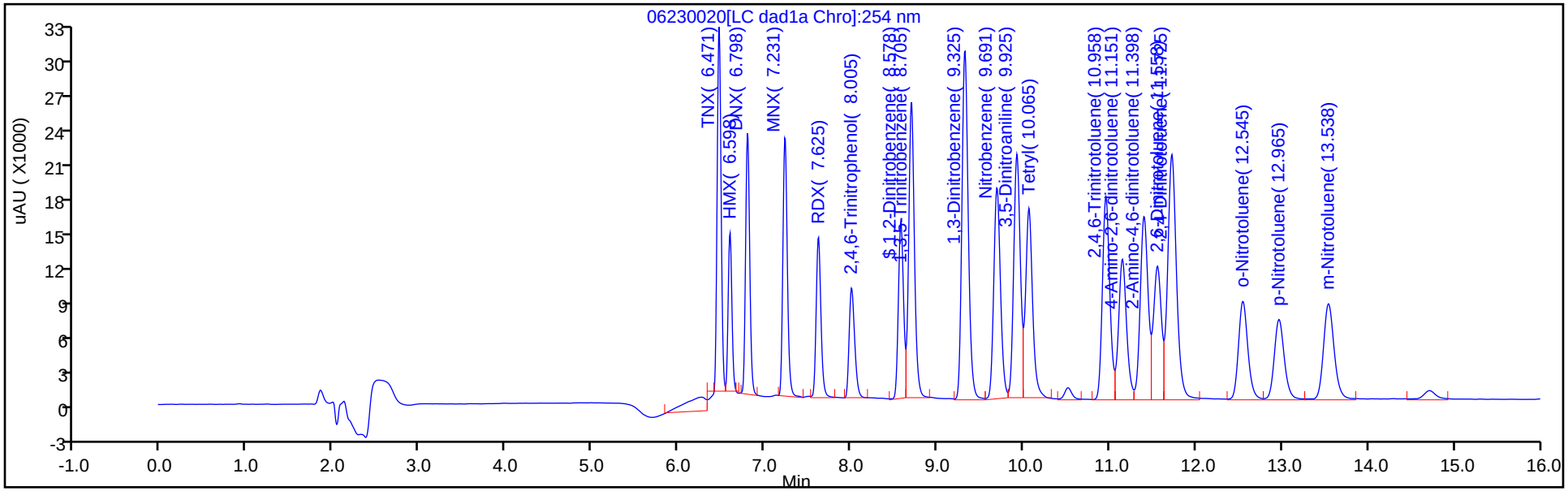
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Eurofins Denver

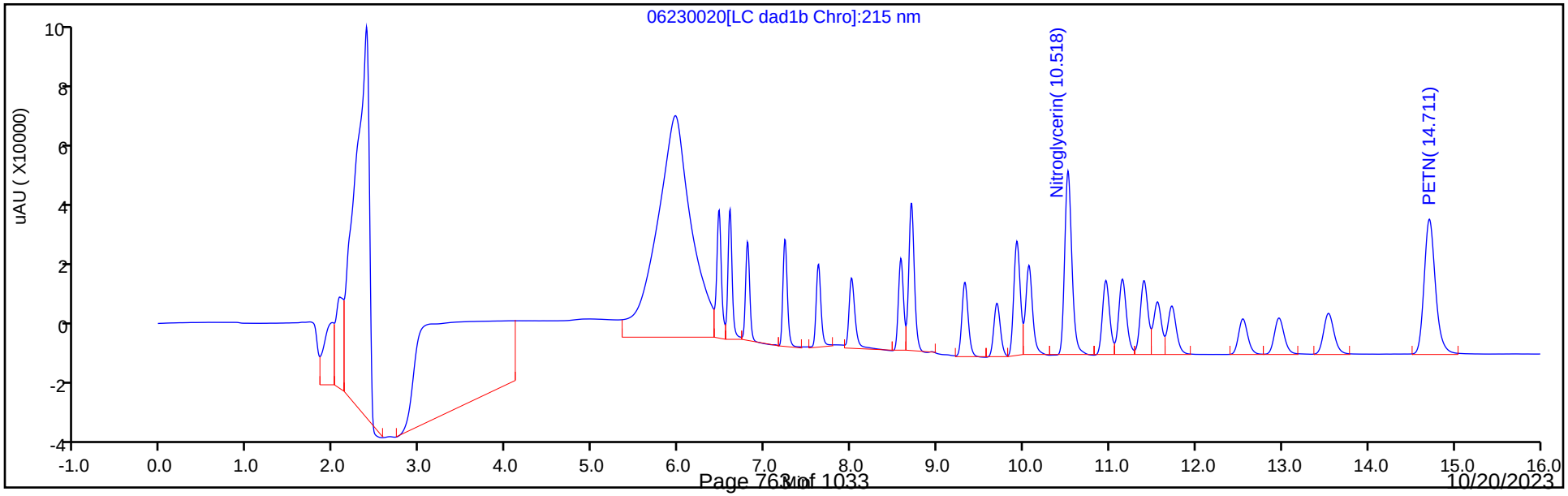
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Injection Date:	23-Jun-2023 21:20:20	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	ICV INT/DMT			Worklist Smp#:	20
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



10/20/2023
4:00 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

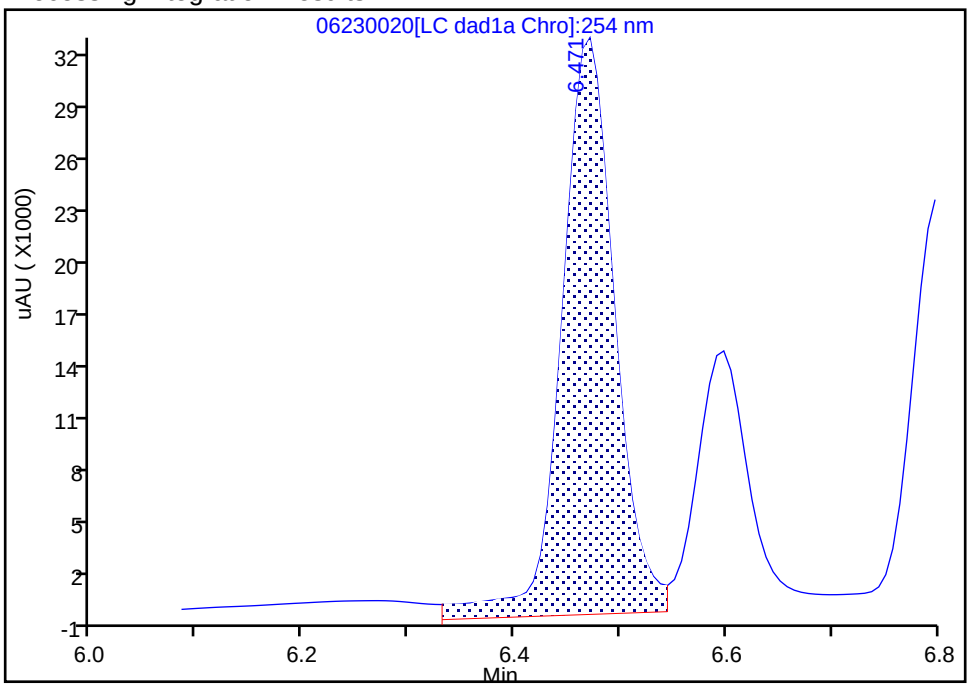
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Injection Date: 23-Jun-2023 21:20:20 Instrument ID: CHHPLC_X3
Lims ID: ICV INT/DMT
Client ID:
Operator ID: JZ/JG ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 TNX, CAS: 13980-04-6

Signal: 1

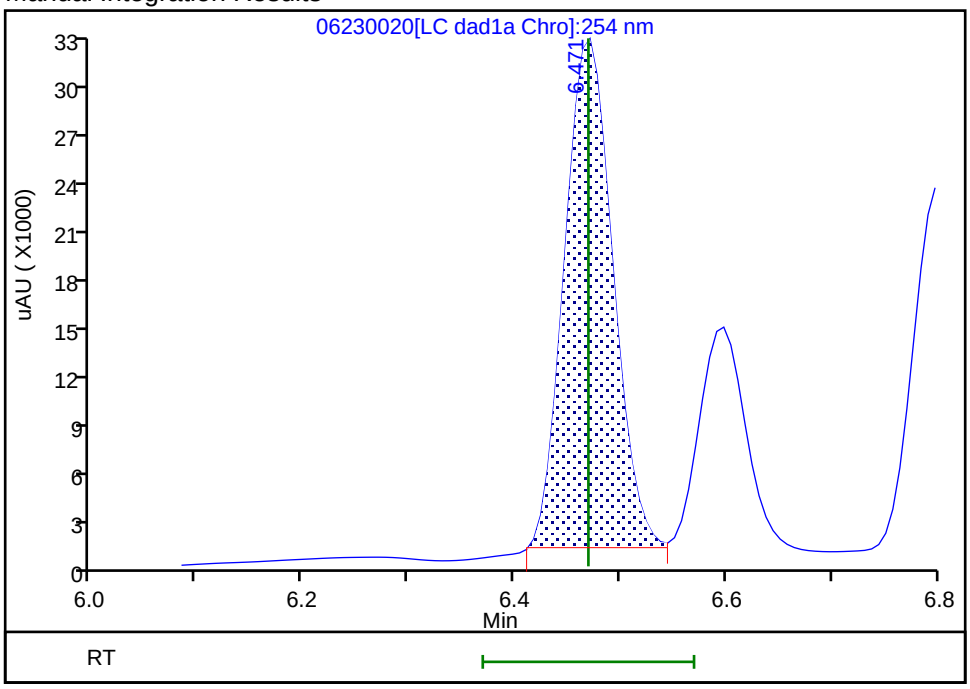
Processing Integration Results

RT: 6.47
Area: 115764
Amount: 0.576626
Amount Units: ug/mL



Manual Integration Results

RT: 6.47
Area: 100113
Amount: 0.498668
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 21:43:50 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

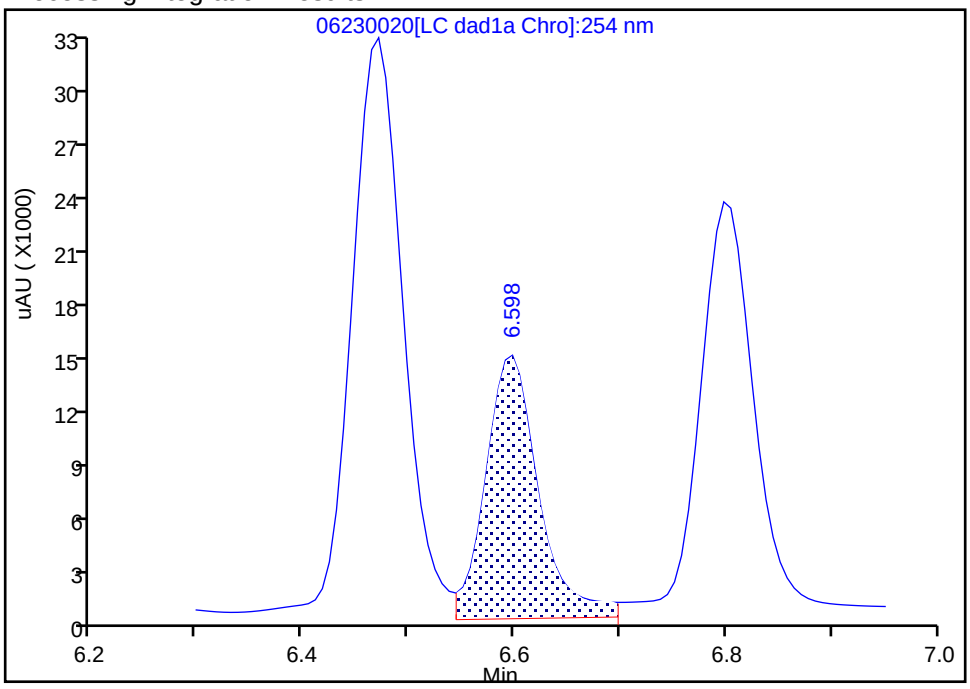
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Injection Date:	23-Jun-2023 21:20:20	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV INT/DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

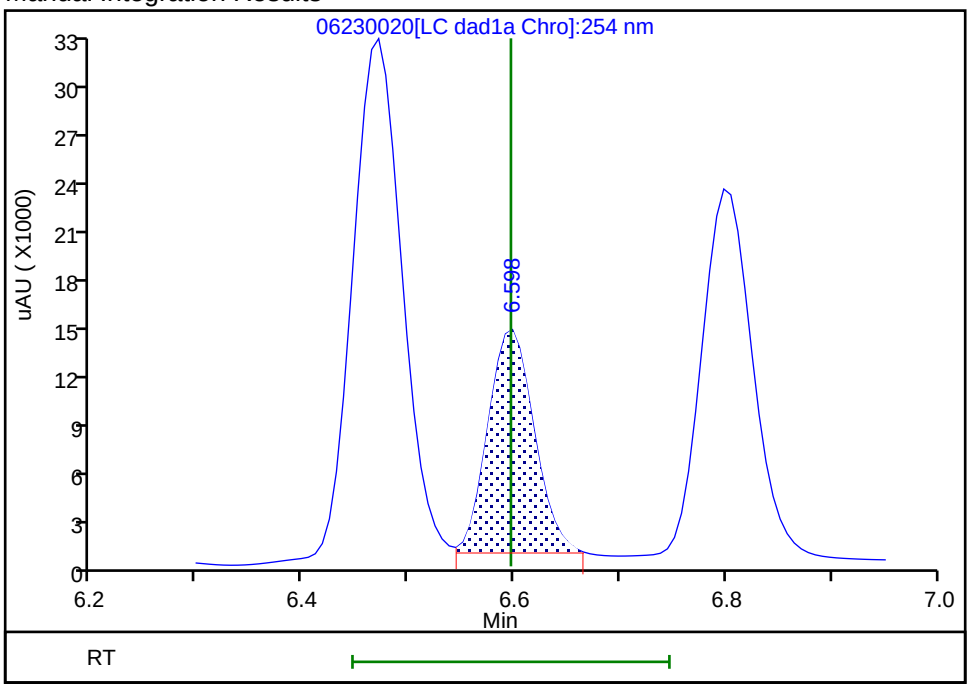
Processing Integration Results

RT: 6.60
Area: 51262
Amount: 0.543863
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 41546
Amount: 0.440781
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 21:43:51 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Eurofins Denver

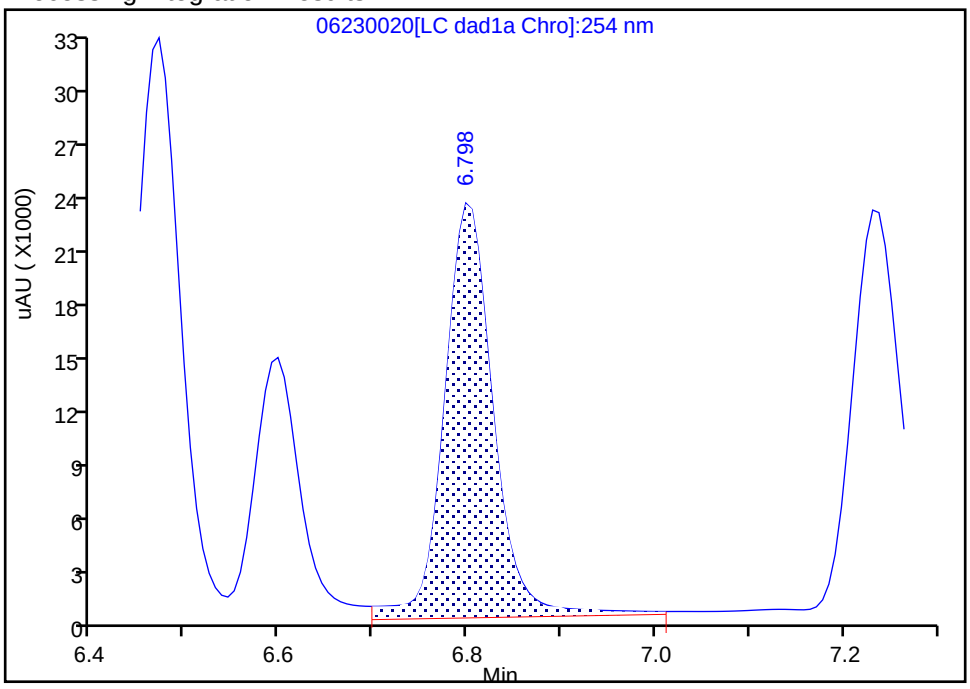
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Injection Date:	23-Jun-2023 21:20:20	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV INT/DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

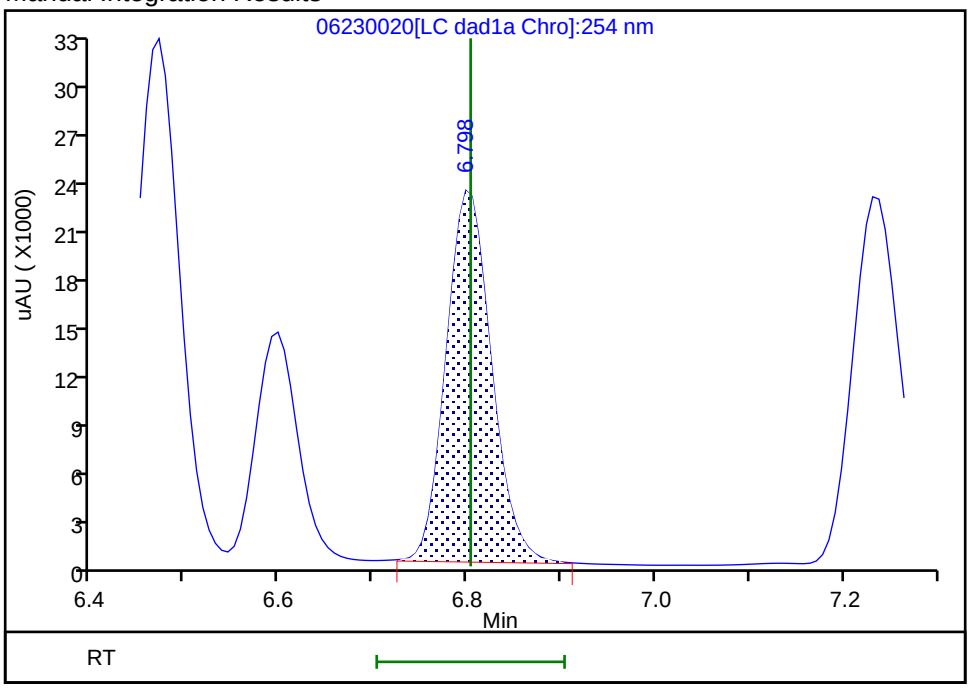
Processing Integration Results

RT: 6.80
Area: 84885
Amount: 0.587469
Amount Units: ug/mL



Manual Integration Results

RT: 6.80
Area: 74939
Amount: 0.518635
Amount Units: ug/mL



Reviewer: LV5D, 23-Jun-2023 21:43:54 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Lab Sample ID: ICV 280-617295/29 Calibration Date: 06/24/2023 00:46

Instrument ID: CHHPLC_X3 Calib Start Date: 06/23/2023 21:43

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 06/24/2023 00:23

Lab File ID: 06230029.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	225565	222918		494	500	-1.2	20.0
2,4-diamino-6-nitrotoluene	Ave	143326	140752		491	500	-1.8	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Lab Sample ID: ICV 280-617295/29 Calibration Date: 06/24/2023 00:46

Instrument ID: CHHPLC_X3 Calib Start Date: 06/23/2023 21:43

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 06/24/2023 00:23

Lab File ID: 06230029.D

Analyte	RT	RT WINDOW	
		FROM	TO
2,6-diamino-4-nitrotoluene	6.47	6.33	6.63
2,4-diamino-6-nitrotoluene	6.66	6.52	6.82

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230029.D
Lims ID: ICV ADD
Client ID:
Sample Type: ICV
Inject. Date: 24-Jun-2023 00:46:42 ALS Bottle#: 29 Worklist Smp#: 29
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICV ADD
Operator ID: JZ/JG Instrument ID: CHHPLC_X3
Sublist:

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 24-Jun-2023 12:55:55 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1681

First Level Reviewer: LV5D Date: 24-Jun-2023 10:43:11

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	6.469	6.475	-0.006	111459	0.5000	0.4941	M
5 2,4-diamino-6-nitrotoluene	1	6.663	6.669	-0.006	70376	0.5000	0.4910	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330DiaminLCS_00058 Amount Added: 50.00 Units: uL

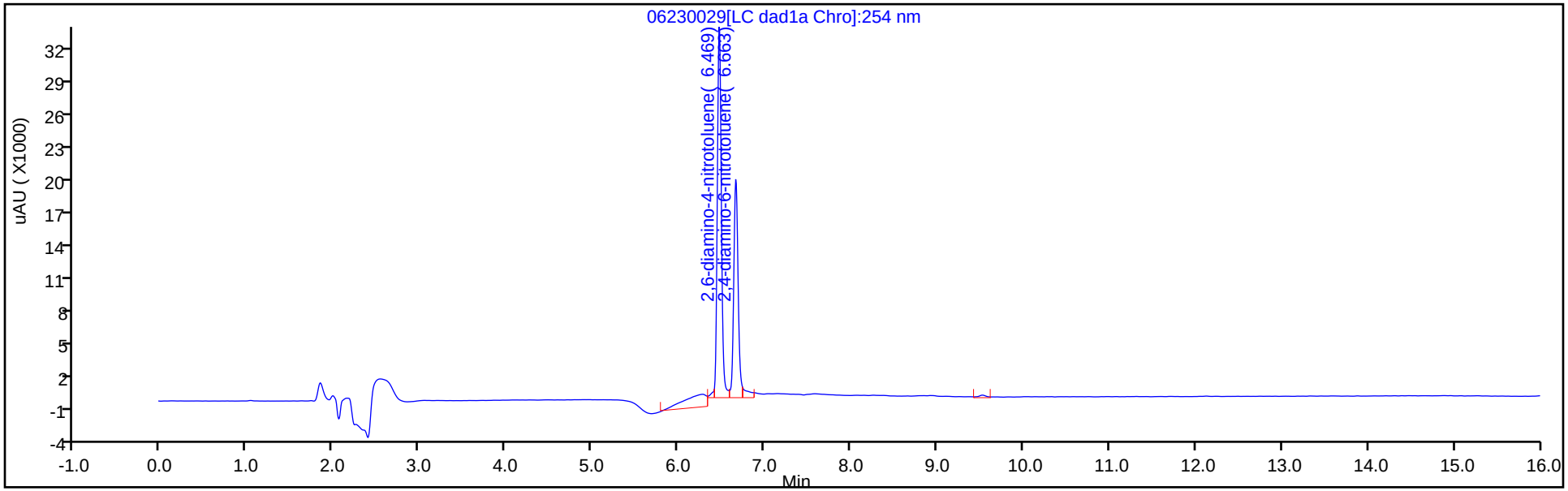
Report Date: 24-Jun-2023 12:56:06 Chrom Revision: 2.3 05-Jun-2023 19:02:10

Eurofins Denver

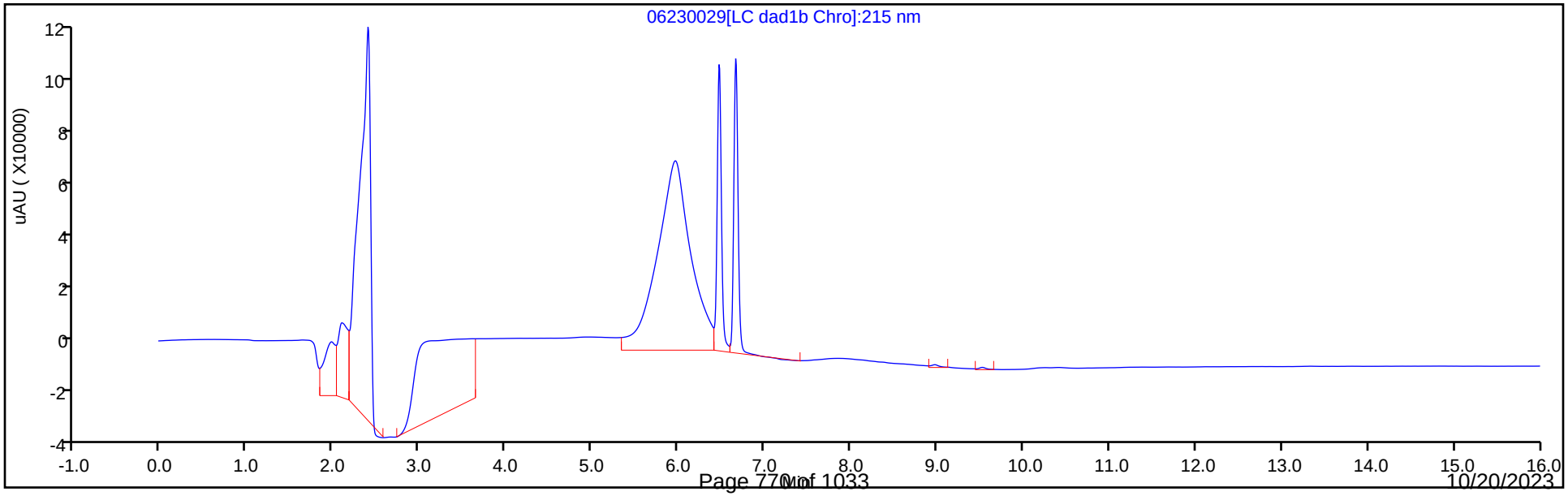
Data File: \\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230029.d

Injection Date:	24-Jun-2023 00:46:42	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	ICV ADD			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



Manual Integration/User Assign Peak Report

Eurofins Denver

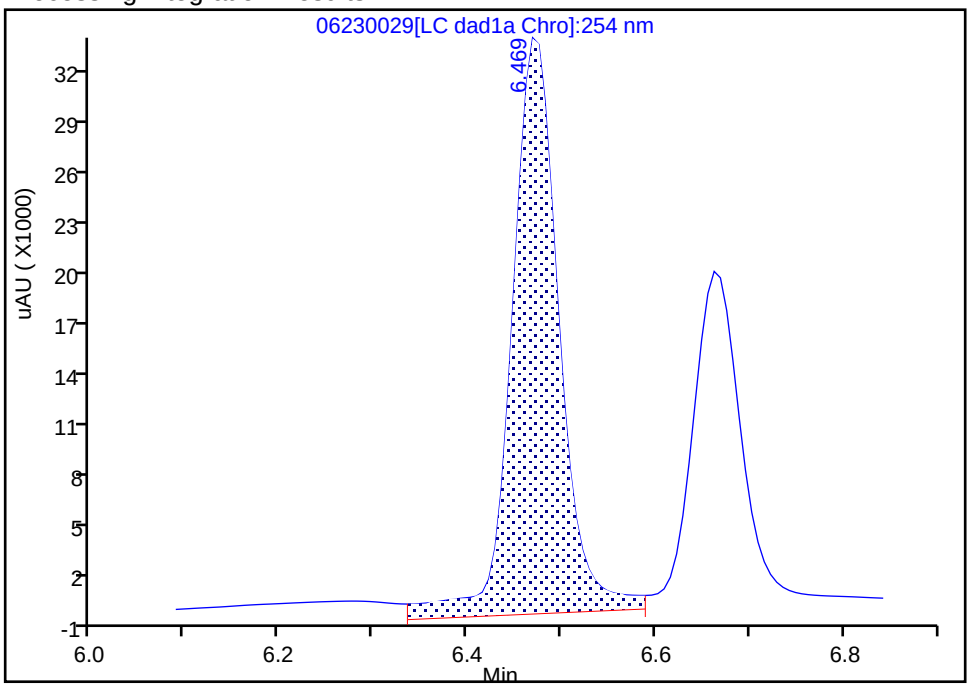
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Injection Date:	24-Jun-2023 00:46:42	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

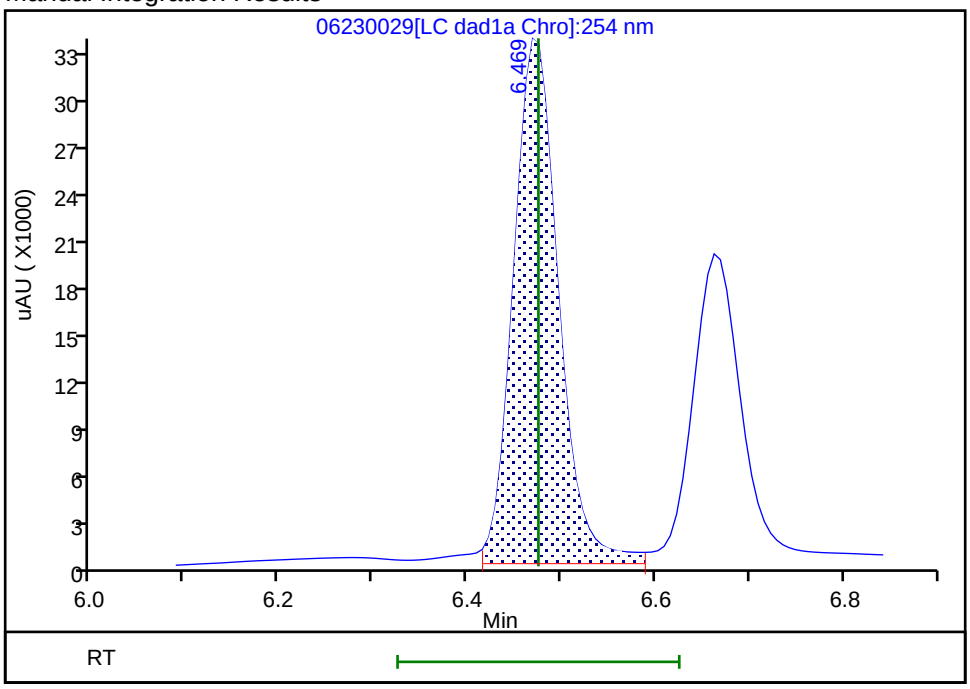
Processing Integration Results

RT: 6.47
Area: 120408
Amount: 0.525262
Amount Units: ug/mL



Manual Integration Results

RT: 6.47
Area: 111459
Amount: 0.494132
Amount Units: ug/mL



Reviewer: LV5D, 24-Jun-2023 10:43:09 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

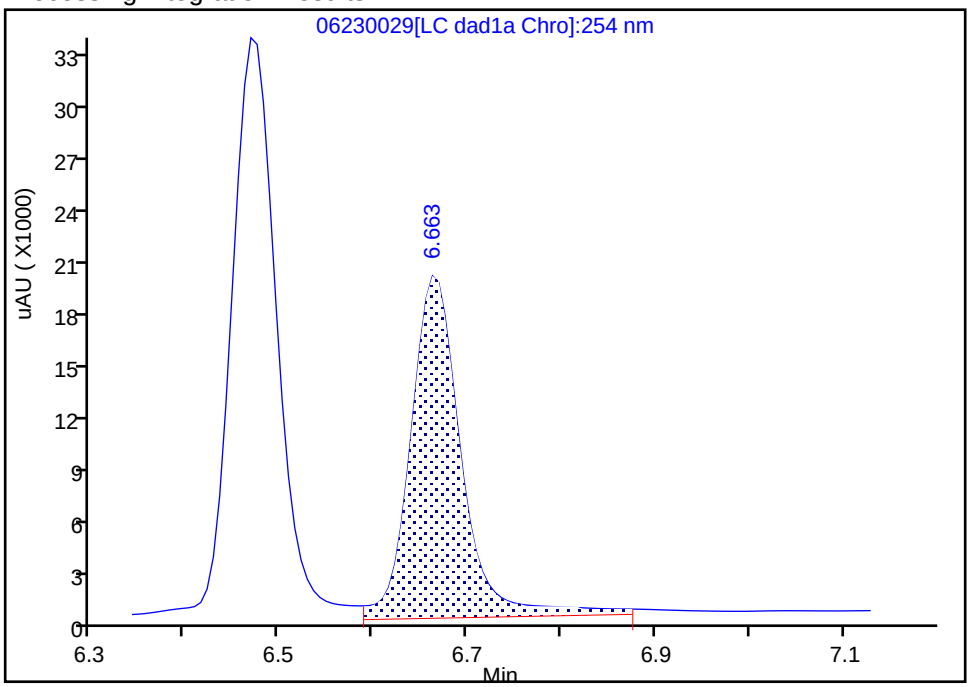
Data File:	\\chromfs\denver\chromdata\chhplc_x\20230623-122860.b\06230029.d				
Injection Date:	24-Jun-2023 00:46:42	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit 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

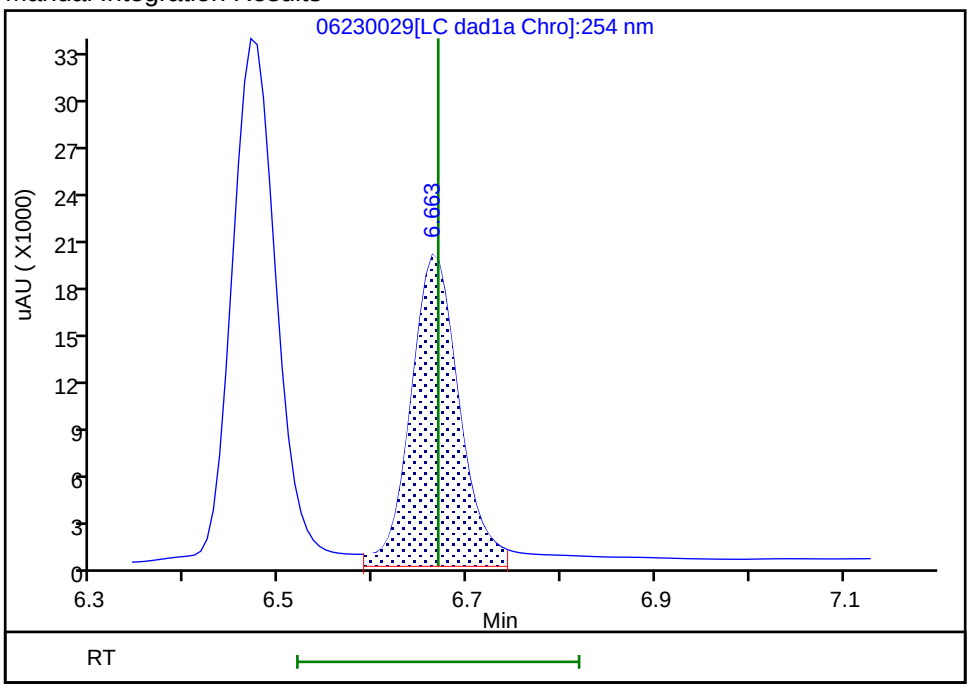
Processing Integration Results

RT: 6.66
Area: 74254
Amount: 0.503423
Amount Units: ug/mL



Manual Integration Results

RT: 6.66
Area: 70376
Amount: 0.491020
Amount Units: ug/mL



Reviewer: LV5D, 24-Jun-2023 10:43:10 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Lab Sample ID: CCV 280-628987/37 Calibration Date: 10/09/2023 21:52

Instrument ID: CHHPLC_X3 Calib Start Date: 06/23/2023 17:53

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 06/23/2023 20:57

Lab File ID: 10090037.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	200761	202955		253	251	1.1	20.0
HMX	Ave	94255	94672		251	250	0.4	20.0
DNX	Ave	144493	152056		263	250	5.2	20.0
MNX	Ave	138689	138722		292	292	0.0	20.0
RDX	Ave	110493	107568		243	250	-2.6	20.0
Picric acid	Ave	77863	76308		245	250	-2.0	20.0
1,3,5-Trinitrobenzene	Ave	216079	218156		252	250	1.0	20.0
1,3-Dinitrobenzene	Ave	293347	295072		251	250	0.6	20.0
Nitrobenzene	Ave	192696	182684		237	250	-5.2	20.0
3,5-Dinitroaniline	Lin2		212364		236	250	-5.5	20.0
Tetryl	Ave	167257	175992		263	250	5.2	20.0
Nitroglycerin	Ave	64651	67797		2620	2500	4.9	20.0
2,4,6-Trinitrotoluene	Ave	204902	206380		252	250	0.7	20.0
4-Amino-2,6-dinitrotoluene	Ave	149560	150008		251	250	0.3	20.0
2-Amino-4,6-dinitrotoluene	Ave	193716	192372		248	250	-0.7	20.0
2,6-Dinitrotoluene	Ave	142638	142196		249	250	-0.3	20.0
2,4-Dinitrotoluene	Ave	295706	295668		250	250	-0.0	20.0
2-Nitrotoluene	Ave	126123	118276		234	250	-6.2	20.0
4-Nitrotoluene	Ave	110088	102444		233	250	-6.9	20.0
3-Nitrotoluene	Lin2		129664		235	250	-5.9	20.0
PETN	Ave	72018	74003		2570	2500	2.8	20.0
1,2-Dinitrobenzene	Ave	123911	127284		257	250	2.7	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Lab Sample ID: CCV 280-628987/37 Calibration Date: 10/09/2023 21:52

Instrument ID: CHHPLC_X3 Calib Start Date: 06/23/2023 17:53

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 06/23/2023 20:57

Lab File ID: 10090037.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.45	6.34	6.54
HMX	6.58	6.42	6.72
DNX	6.78	6.67	6.87
MNX	7.20	7.04	7.34
RDX	7.58	7.42	7.72
Picric acid	7.96	7.80	8.10
1,3,5-Trinitrobenzene	8.66	8.50	8.80
1,3-Dinitrobenzene	9.27	9.10	9.40
Nitrobenzene	9.64	9.47	9.77
3,5-Dinitroaniline	9.86	9.69	9.99
Tetryl	9.98	9.82	10.12
Nitroglycerin	10.44	10.27	10.57
2,4,6-Trinitrotoluene	10.87	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	11.46	11.34	11.54
2,4-Dinitrotoluene	11.62	11.51	11.71
2-Nitrotoluene	12.43	12.27	12.57
4-Nitrotoluene	12.84	12.68	12.98
3-Nitrotoluene	13.40	13.24	13.54
PETN	14.54	14.36	14.66
1,2-Dinitrobenzene	8.53	8.37	8.67

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\10090037.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 09-Oct-2023 21:52:31 ALS Bottle#: 7 Worklist Smp#: 37
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\20231009-126302.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 11-Oct-2023 15:40:59 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1656

First Level Reviewer: K8YG Date: 10-Oct-2023 09:40:45

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.449	6.441	0.008	50891	0.2508	0.2535	M
4 HMX	1	6.575	6.568	0.007	23668	0.2500	0.2511	M
6 DNX	1	6.775	6.768	0.007	38052	0.2503	0.2633	M
7 MNX	1	7.202	7.194	0.008	40472	0.2918	0.2918	
8 RDX	1	7.582	7.574	0.008	26892	0.2500	0.2434	
9 2,4,6-Trinitrophenol	1	7.962	7.948	0.014	19077	0.2500	0.2450	
$ 10 1,2-Dinitrobenzene	1	8.529	8.521	0.008	31821	0.2500	0.2568	
11 1,3,5-Trinitrobenzene	1	8.655	8.648	0.007	54539	0.2500	0.2524	
12 1,3-Dinitrobenzene	1	9.269	9.254	0.015	73768	0.2500	0.2515	
13 Nitrobenzene	1	9.635	9.621	0.014	45671	0.2500	0.2370	
14 3,5-Dinitroaniline	1	9.855	9.841	0.014	53091	0.2500	0.2363	
15 Tetryl	1	9.982	9.974	0.008	43998	0.2500	0.2631	
16 Nitroglycerin	2	10.435	10.421	0.014	169493	2.50	2.62	
17 2,4,6-Trinitrotoluene	1	10.869	10.861	0.008	51595	0.2500	0.2518	
18 4-Amino-2,6-dinitrotoluene	1	11.049	11.034	0.015	37502	0.2500	0.2507	
19 2-Amino-4,6-dinitrotoluene	1	11.295	11.281	0.014	48093	0.2500	0.2483	
20 2,6-Dinitrotoluene	1	11.455	11.441	0.014	35549	0.2500	0.2492	
21 2,4-Dinitrotoluene	1	11.622	11.607	0.015	73917	0.2500	0.2500	
22 o-Nitrotoluene	1	12.429	12.421	0.008	29569	0.2500	0.2344	
23 p-Nitrotoluene	1	12.842	12.827	0.015	25611	0.2500	0.2326	
24 m-Nitrotoluene	1	13.402	13.387	0.015	32416	0.2500	0.2352	
25 PETN	2	14.535	14.514	0.021	185007	2.50	2.57	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00015	Amount Added:	12.50	Units: uL
8330IntermStk_00078	Amount Added:	25.00	Units: uL

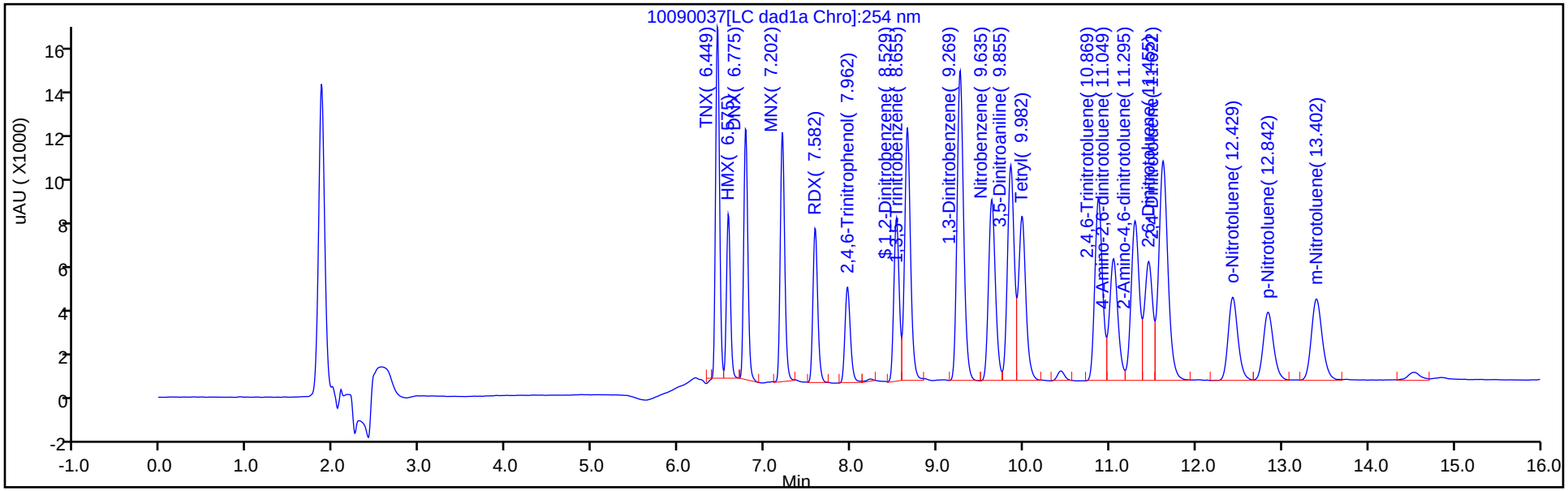
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Eurofins Denver

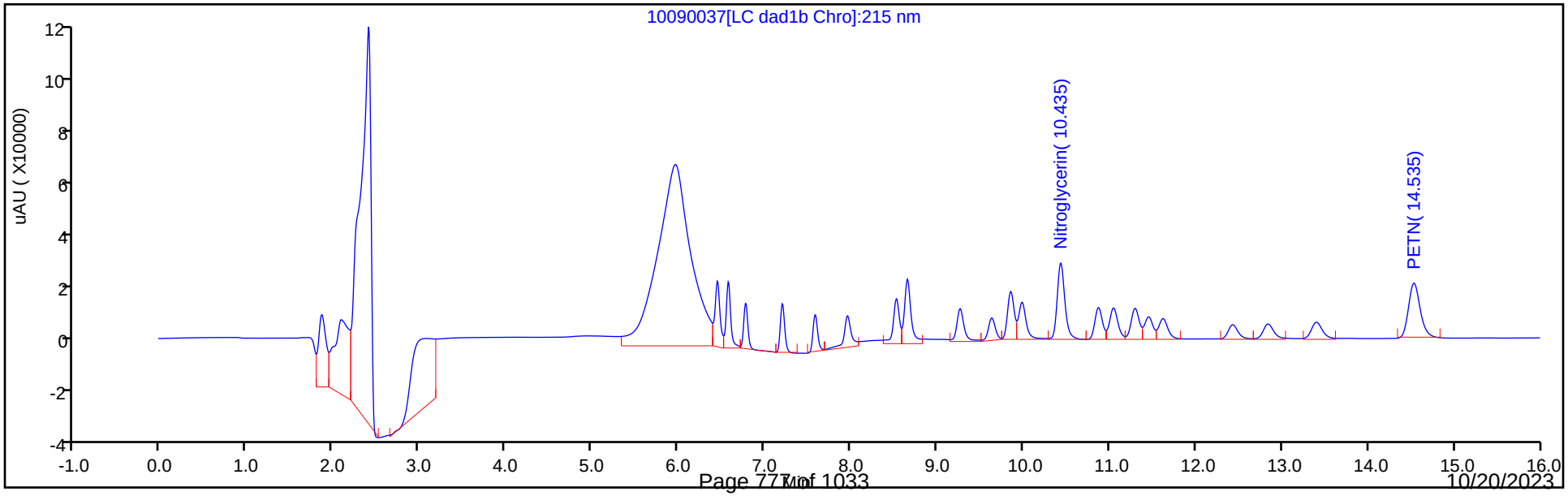
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Injection Date:	09-Oct-2023 21:52:31	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV DMT			Worklist Smp#:	37
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



10/20/2023
4:00 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

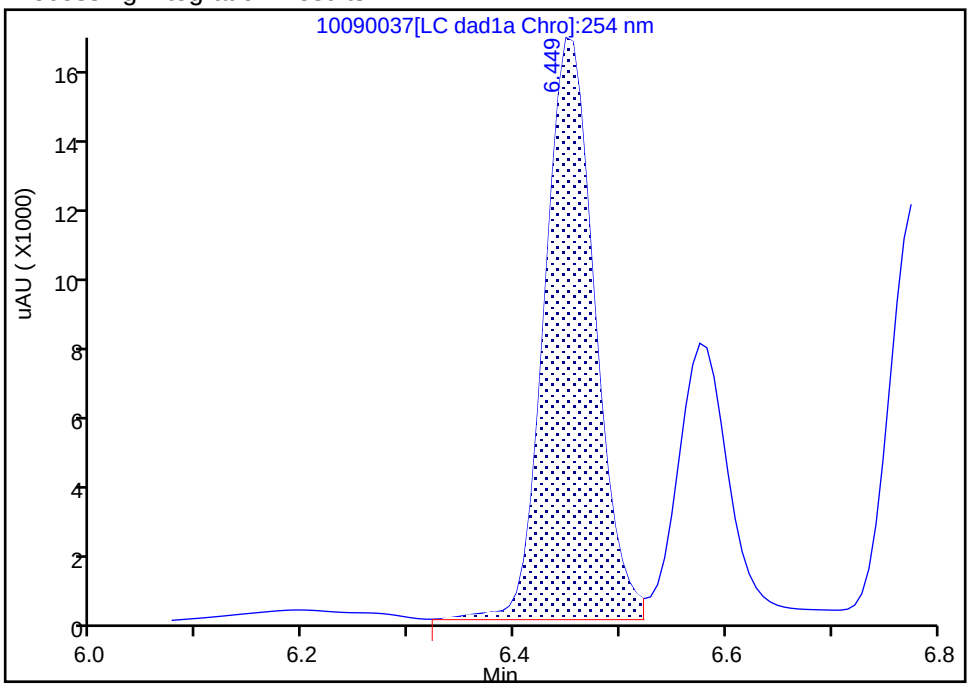
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Injection Date:	09-Oct-2023 21:52:31	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

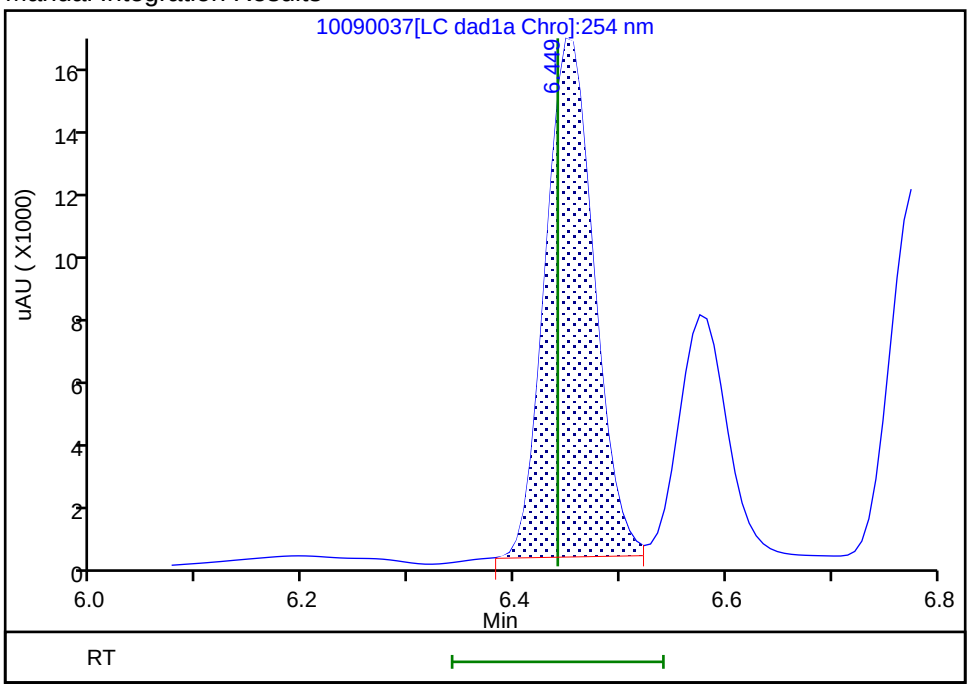
Processing Integration Results

RT: 6.45
Area: 53012
Amount: 0.264055
Amount Units: ug/mL



Manual Integration Results

RT: 6.45
Area: 50891
Amount: 0.253491
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 11:24:37 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

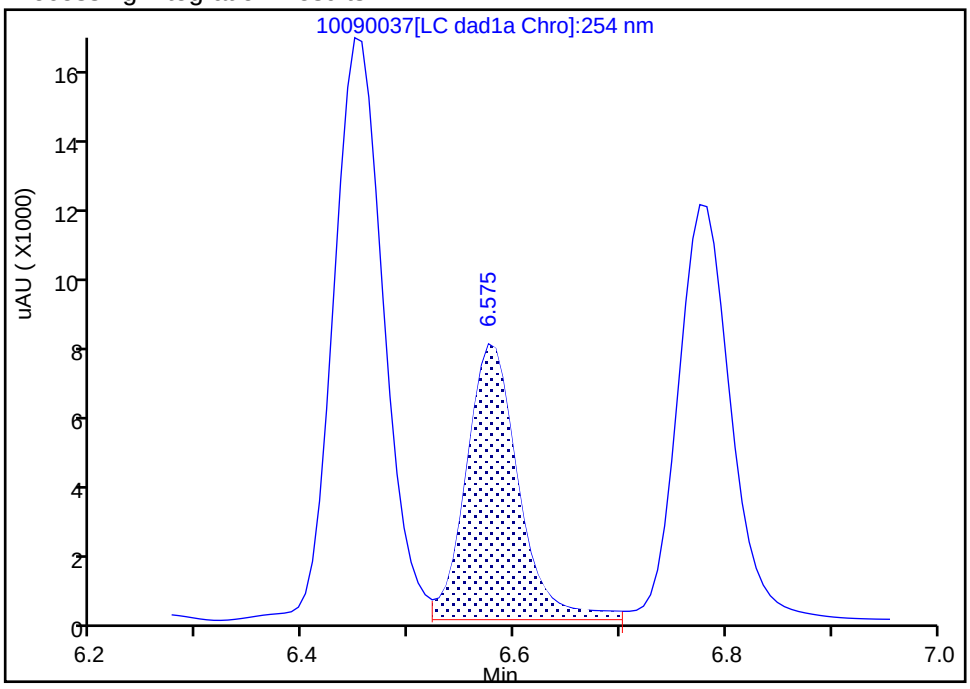
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Injection Date:	09-Oct-2023 21:52:31	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

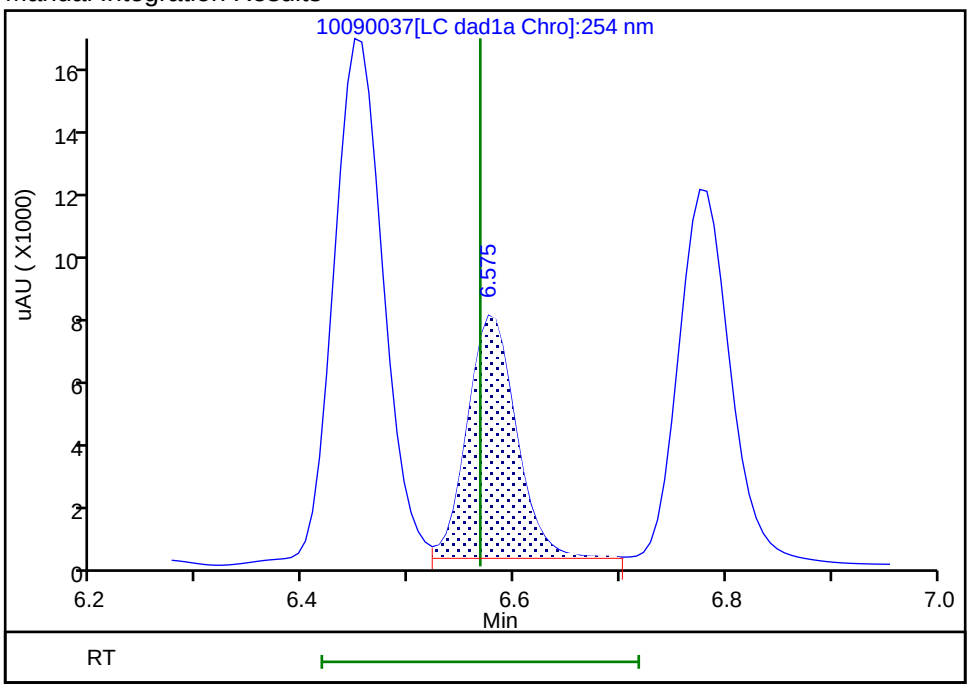
Processing Integration Results

RT: 6.58
Area: 26087
Amount: 0.276769
Amount Units: ug/mL



Manual Integration Results

RT: 6.58
Area: 23668
Amount: 0.251105
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 11:24:34 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

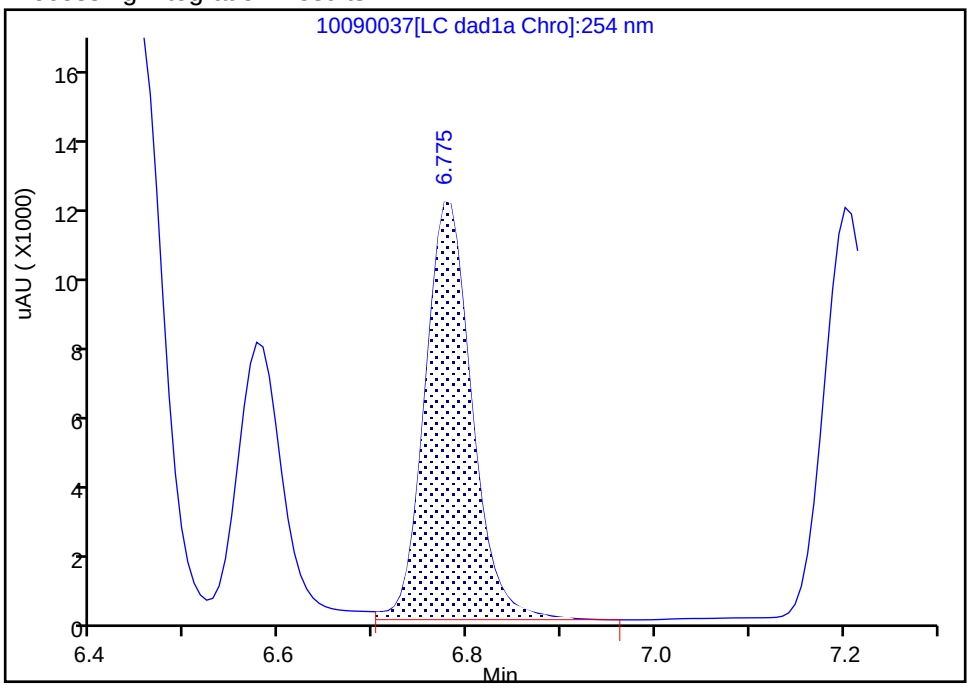
Data File:	\\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090037.d				
Injection Date:	09-Oct-2023 21:52:31	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

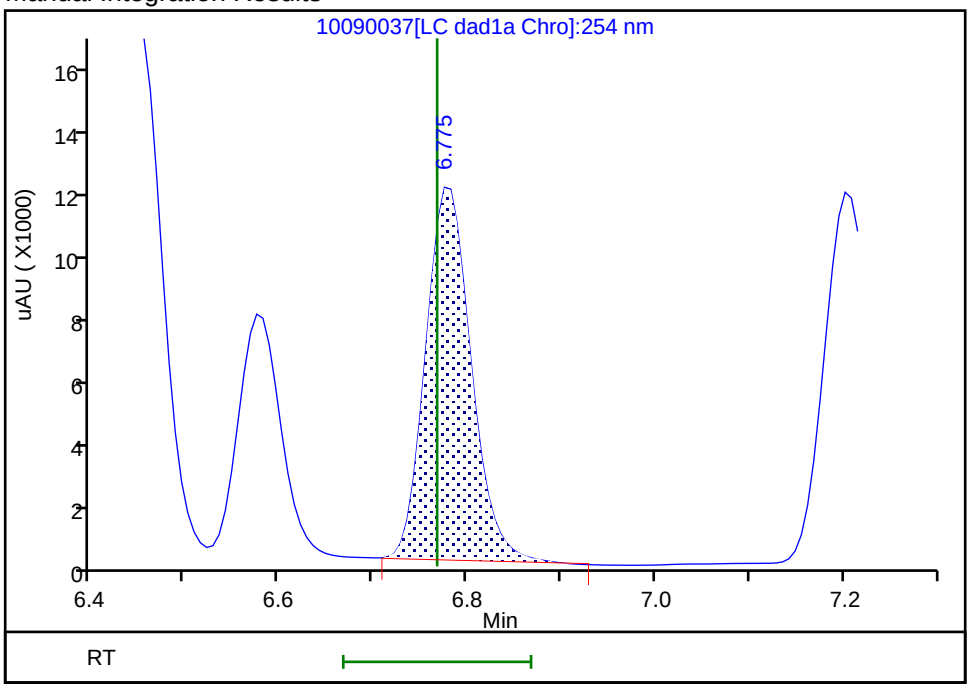
Processing Integration Results

RT: 6.78
Area: 39901
Amount: 0.276145
Amount Units: ug/mL



Manual Integration Results

RT: 6.78
Area: 38052
Amount: 0.263349
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 11:24:41 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Lab Sample ID: CCV 280-628987/38 Calibration Date: 10/09/2023 22:15

Instrument ID: CHHPLC_X3 Calib Start Date: 06/23/2023 21:43

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 06/24/2023 00:23

Lab File ID: 10090038.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	225565	210196		233	250	-6.8	20.0
2,4-diamino-6-nitrotoluene	Ave	143326	126988		222	250	-11.4	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Lab Sample ID: CCV 280-628987/38 Calibration Date: 10/09/2023 22:15

Instrument ID: CHHPLC_X3 Calib Start Date: 06/23/2023 21:43

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 06/24/2023 00:23

Lab File ID: 10090038.D

Analyte	RT	RT WINDOW	
		FROM	TO
2,6-diamino-4-nitrotoluene	6.45	6.29	6.59
2,4-diamino-6-nitrotoluene	6.63	6.48	6.78

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\10090038.D
Lims ID: CCV ADD
Client ID:
Sample Type: CCV
Inject. Date: 09-Oct-2023 22:15:27 ALS Bottle#: 8 Worklist Smp#: 38
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\20231009-126302.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 10-Oct-2023 11:59:33 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1622

First Level Reviewer: K8YG Date: 10-Oct-2023 11:25:04

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	6.446	6.438	0.008	52549	0.2500	0.2330	M
5 2,4-diamino-6-nitrotoluene	1	6.632	6.625	0.007	31747	0.2500	0.2215	M

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330_ADDs_00037 Amount Added: 12.50 Units: uL

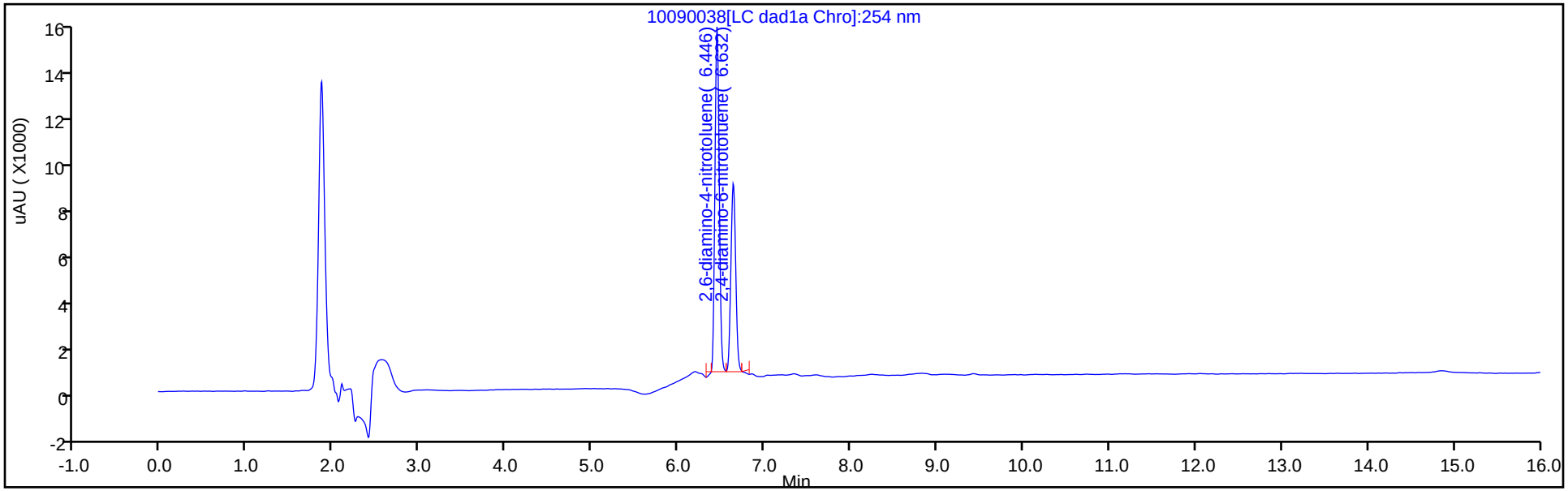
Report Date: 10-Oct-2023 11:59:33 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

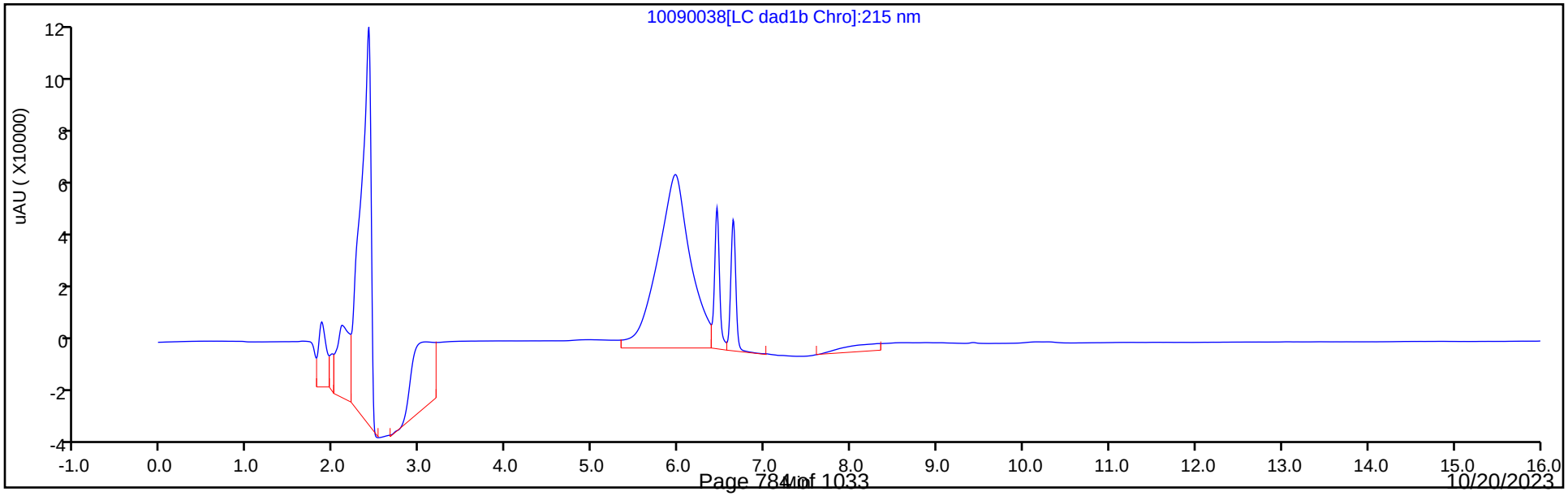
Data File: \\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090038.d

Injection Date:	09-Oct-2023 22:15:27	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV ADD			Worklist Smp#:	38
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

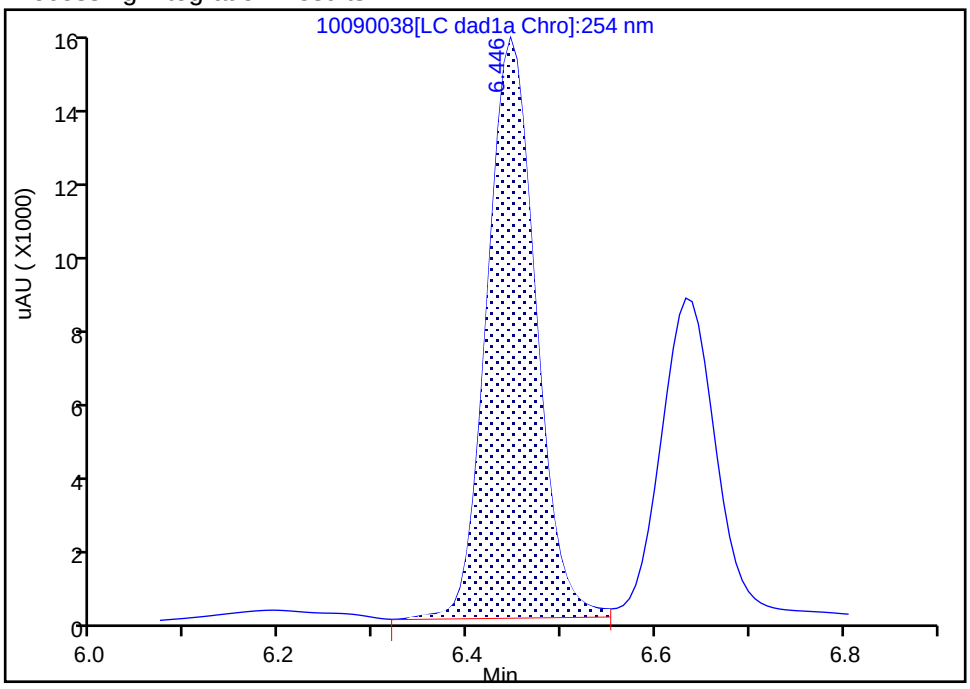
Data File:	\\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090038.d				
Injection Date:	09-Oct-2023 22:15:27	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	8	Worklist Smp#:	38
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

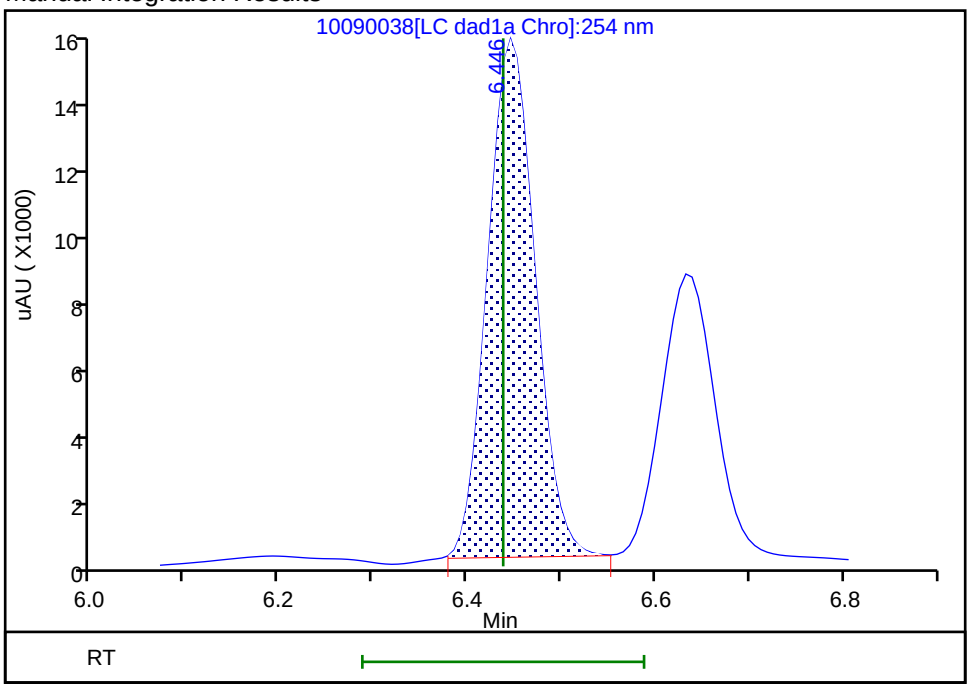
Processing Integration Results

RT: 6.45
Area: 54989
Amount: 0.243783
Amount Units: ug/mL



Manual Integration Results

RT: 6.45
Area: 52549
Amount: 0.232966
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 11:25:00 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

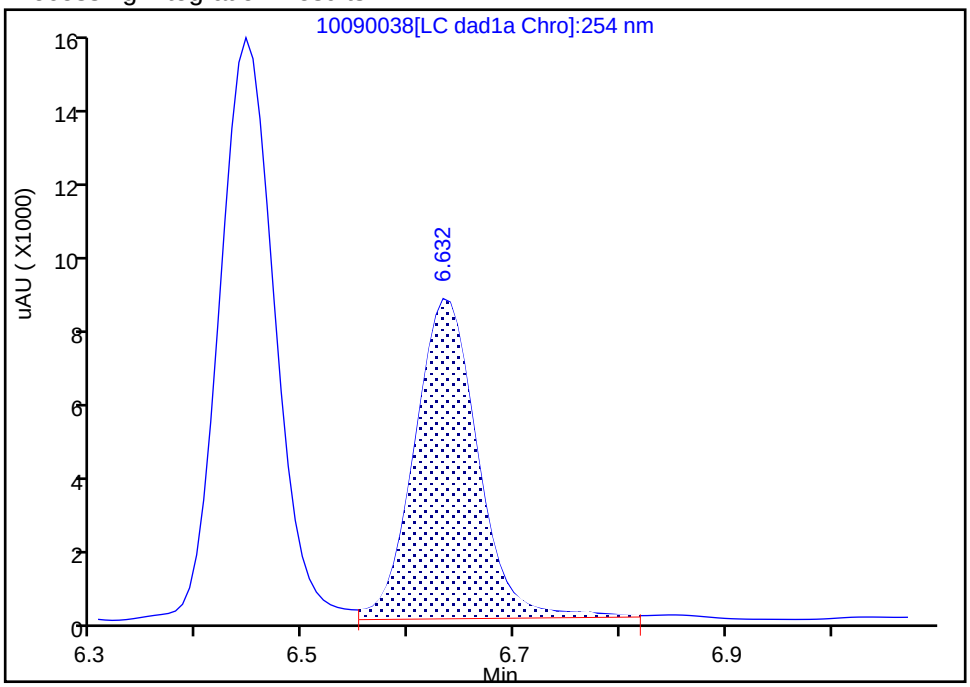
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Injection Date:	09-Oct-2023 22:15:27	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	8	Worklist Smp#:	38
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

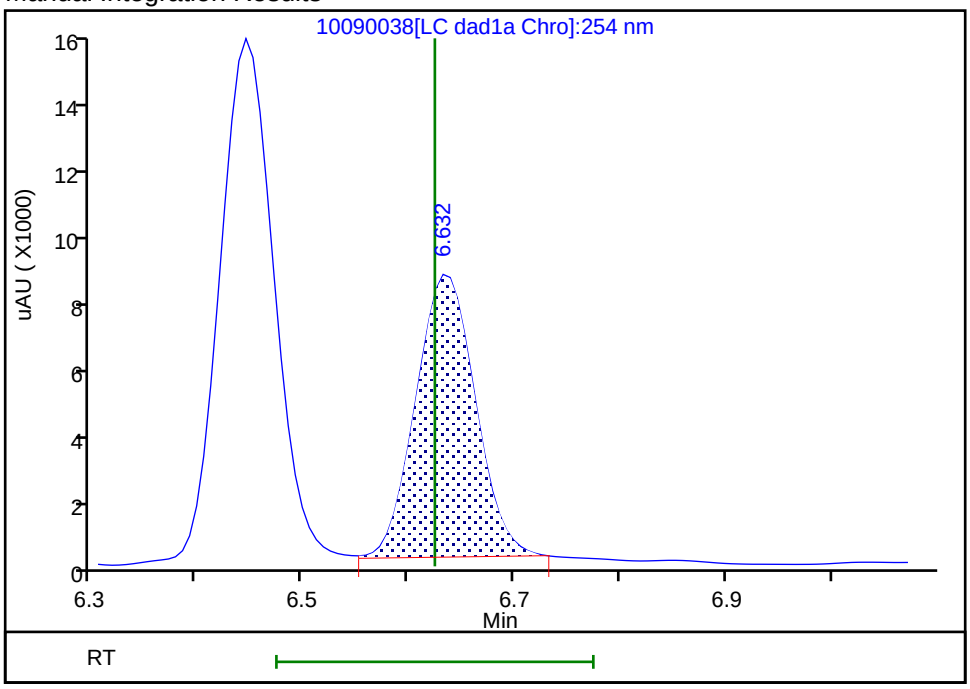
Processing Integration Results

RT: 6.63
Area: 34531
Amount: 0.240926
Amount Units: ug/mL



Manual Integration Results

RT: 6.63
Area: 31747
Amount: 0.221502
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 11:25:03 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-182239-1

SDG No.:

Lab Sample ID: CCV 280-628987/49 | Calibration Date: 10/10/2023 02:27

Instrument ID: CHHPLC_X3 | Calib Start Date: 06/23/2023 17:53

GC Column: UltraCarb5uODS ID: 4.60(mm) | Calib End Date: 06/23/2023 20:57

Lab File ID: 10090049.D | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	200761	201823		252	251	0.5	20.0
HMX	Ave	94255	94480		251	250	0.2	20.0
DNX	Ave	144493	152595		264	250	5.6	20.0
MNX	Ave	138689	140110		295	292	1.0	20.0
RDX	Ave	110493	108204		245	250	-2.1	20.0
Picric acid	Ave	77863	77432		249	250	-0.6	20.0
1,3,5-Trinitrobenzene	Ave	216079	218936		253	250	1.3	20.0
1,3-Dinitrobenzene	Ave	293347	296520		253	250	1.1	20.0
Nitrobenzene	Ave	192696	180196		234	250	-6.5	20.0
3,5-Dinitroaniline	Lin2		215564		240	250	-4.0	20.0
Tetryl	Ave	167257	175916		263	250	5.2	20.0
Nitroglycerin	Ave	64651	68638		2650	2500	6.2	20.0
2,4,6-Trinitrotoluene	Ave	204902	207012		253	250	1.0	20.0
4-Amino-2,6-dinitrotoluene	Ave	149560	151460		253	250	1.3	20.0
2-Amino-4,6-dinitrotoluene	Ave	193716	194936		252	250	0.6	20.0
2,6-Dinitrotoluene	Ave	142638	139428		244	250	-2.3	20.0
2,4-Dinitrotoluene	Ave	295706	299704		253	250	1.4	20.0
2-Nitrotoluene	Ave	126123	116064		230	250	-8.0	20.0
4-Nitrotoluene	Ave	110088	100780		229	250	-8.5	20.0
3-Nitrotoluene	Lin2		127788		232	250	-7.3	20.0
PETN	Ave	72018	74374		2580	2500	3.3	20.0
1,2-Dinitrobenzene	Ave	123911	129240		261	250	4.3	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Lab Sample ID: CCV 280-628987/49 Calibration Date: 10/10/2023 02:27

Instrument ID: CHHPLC_X3 Calib Start Date: 06/23/2023 17:53

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 06/23/2023 20:57

Lab File ID: 10090049.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.45	6.34	6.54
HMX	6.58	6.42	6.72
DNX	6.78	6.67	6.87
MNX	7.20	7.04	7.34
RDX	7.58	7.42	7.72
Picric acid	7.96	7.80	8.10
1,3,5-Trinitrobenzene	8.66	8.50	8.80
1,3-Dinitrobenzene	9.27	9.10	9.40
Nitrobenzene	9.64	9.47	9.77
3,5-Dinitroaniline	9.86	9.69	9.99
Tetryl	9.99	9.82	10.12
Nitroglycerin	10.44	10.27	10.57
2,4,6-Trinitrotoluene	10.88	10.76	10.96
4-Amino-2,6-dinitrotoluene	11.06	10.93	11.13
2-Amino-4,6-dinitrotoluene	11.31	11.18	11.38
2,6-Dinitrotoluene	11.46	11.34	11.54
2,4-Dinitrotoluene	11.63	11.51	11.71
2-Nitrotoluene	12.44	12.27	12.57
4-Nitrotoluene	12.86	12.68	12.98
3-Nitrotoluene	13.42	13.24	13.54
PETN	14.56	14.36	14.66
1,2-Dinitrobenzene	8.52	8.37	8.67

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\10090049.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 10-Oct-2023 02:27:56 ALS Bottle#: 7 Worklist Smp#: 49
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\20231009-126302.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 10-Oct-2023 11:59:42 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1622

First Level Reviewer: K8YG Date: 10-Oct-2023 11:35:36

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3	TNX	1	6.450	6.441	0.009	50607	0.2508	0.2521	M
4	HMX	1	6.577	6.568	0.009	23620	0.2500	0.2506	M
6	DNX	1	6.777	6.768	0.009	38187	0.2503	0.2643	M
7	MNX	1	7.203	7.194	0.009	40877	0.2918	0.2947	M
8	RDX	1	7.583	7.574	0.009	27051	0.2500	0.2448	
9	2,4,6-Trinitrophenol	1	7.957	7.948	0.009	19358	0.2500	0.2486	
$ 10	1,2-Dinitrobenzene	1	8.523	8.521	0.002	32310	0.2500	0.2608	
11	1,3,5-Trinitrobenzene	1	8.657	8.648	0.009	54734	0.2500	0.2533	
12	1,3-Dinitrobenzene	1	9.270	9.254	0.016	74130	0.2500	0.2527	
13	Nitrobenzene	1	9.637	9.621	0.016	45049	0.2500	0.2338	
14	3,5-Dinitroaniline	1	9.863	9.841	0.022	53891	0.2500	0.2399	
15	Tetryl	1	9.990	9.974	0.016	43979	0.2500	0.2629	
16	Nitroglycerin	2	10.443	10.421	0.022	171596	2.50	2.65	
17	2,4,6-Trinitrotoluene	1	10.877	10.861	0.016	51753	0.2500	0.2526	
18	4-Amino-2,6-dinitrotoluene	1	11.057	11.034	0.023	37865	0.2500	0.2532	
19	2-Amino-4,6-dinitrotoluene	1	11.310	11.281	0.029	48734	0.2500	0.2516	
20	2,6-Dinitrotoluene	1	11.463	11.441	0.022	34857	0.2500	0.2444	
21	2,4-Dinitrotoluene	1	11.630	11.607	0.023	74926	0.2500	0.2534	
22	o-Nitrotoluene	1	12.443	12.421	0.022	29016	0.2500	0.2301	
23	p-Nitrotoluene	1	12.857	12.827	0.030	25195	0.2500	0.2289	
24	m-Nitrotoluene	1	13.417	13.387	0.030	31947	0.2500	0.2317	
25	PETN	2	14.557	14.514	0.043	185936	2.50	2.58	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00015	Amount Added:	12.50	Units: uL
8330IntermStk_00078	Amount Added:	25.00	Units: uL

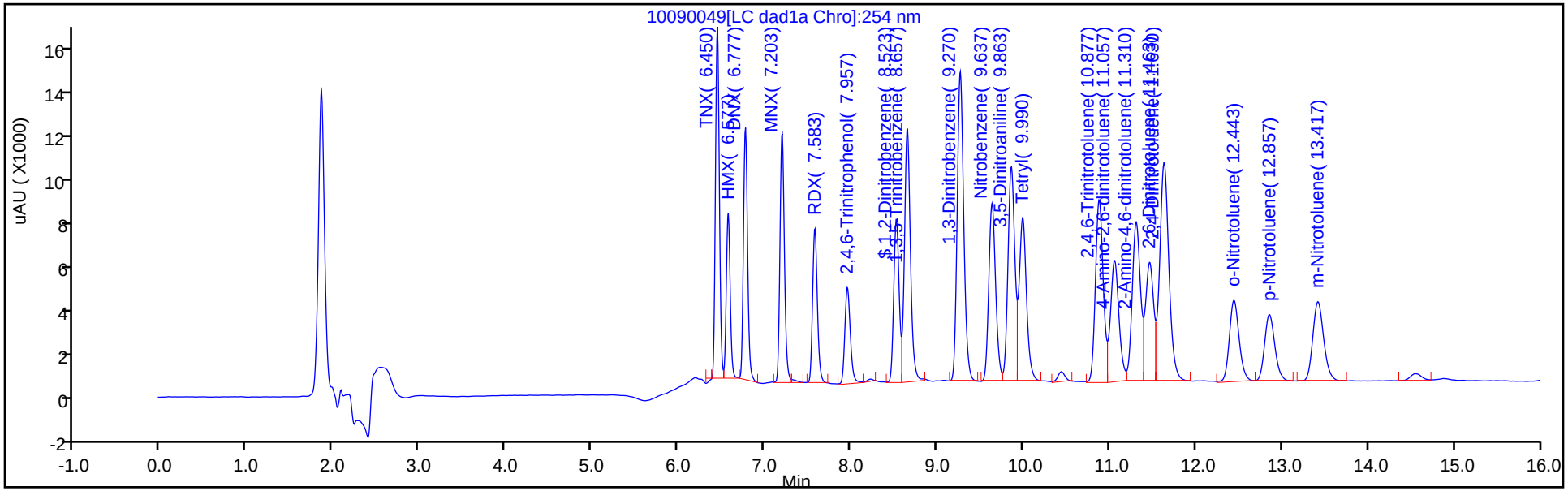
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Eurofins Denver

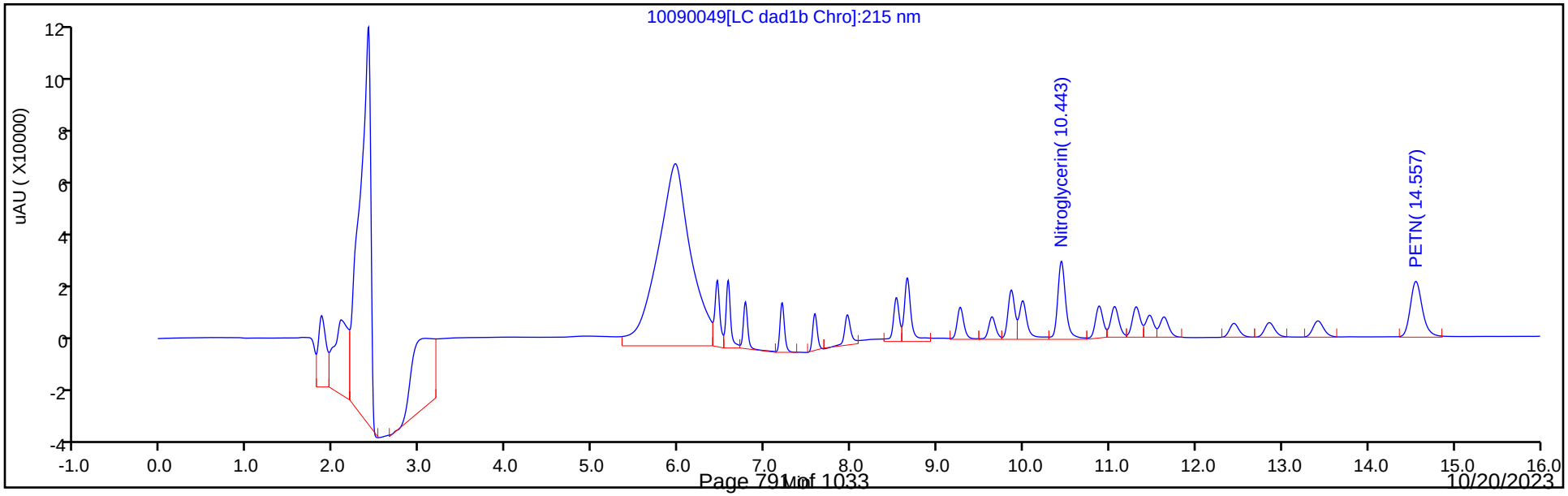
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Injection Date:	10-Oct-2023 02:27:56	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV DMT			Worklist Smp#:	49
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

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

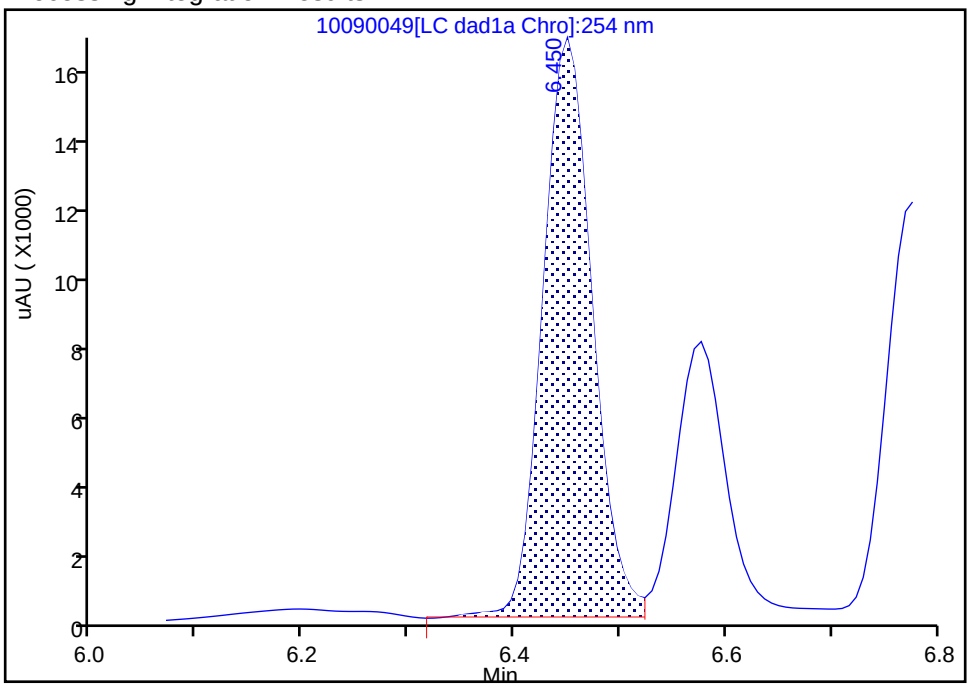
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Injection Date:	10-Oct-2023 02:27:56	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	49
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

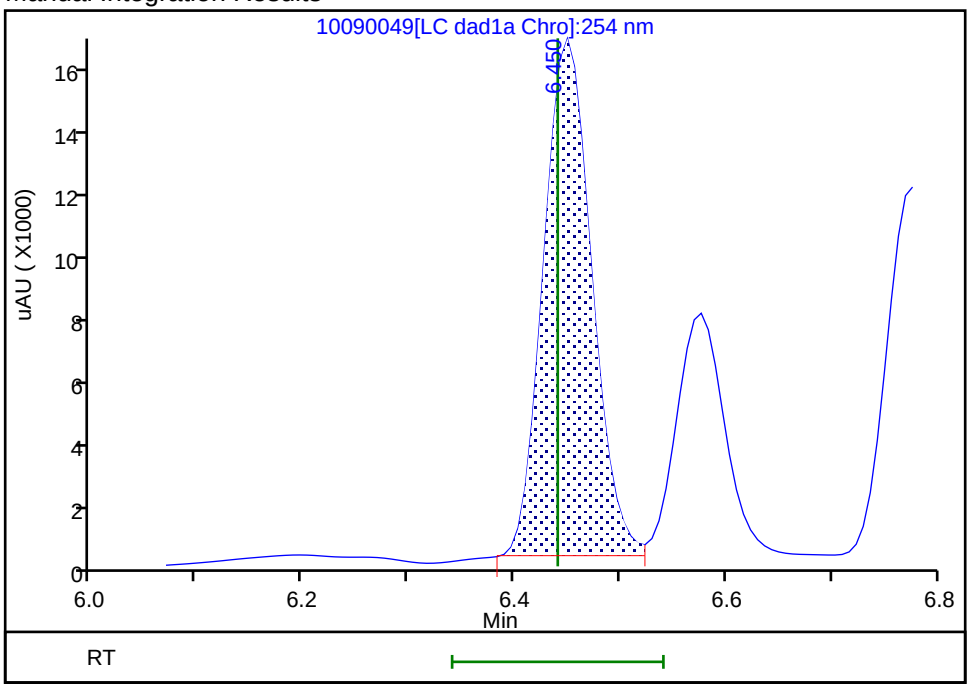
Processing Integration Results

RT: 6.45
Area: 52841
Amount: 0.263204
Amount Units: ug/mL



Manual Integration Results

RT: 6.45
Area: 50607
Amount: 0.252076
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 11:35:30 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

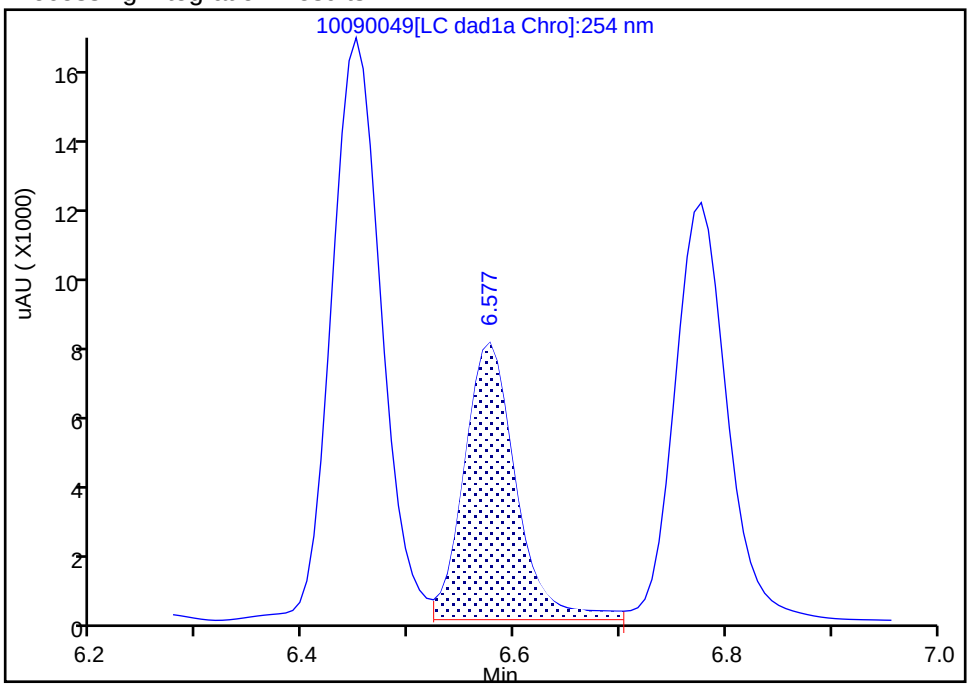
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Injection Date:	10-Oct-2023 02:27:56	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	49
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

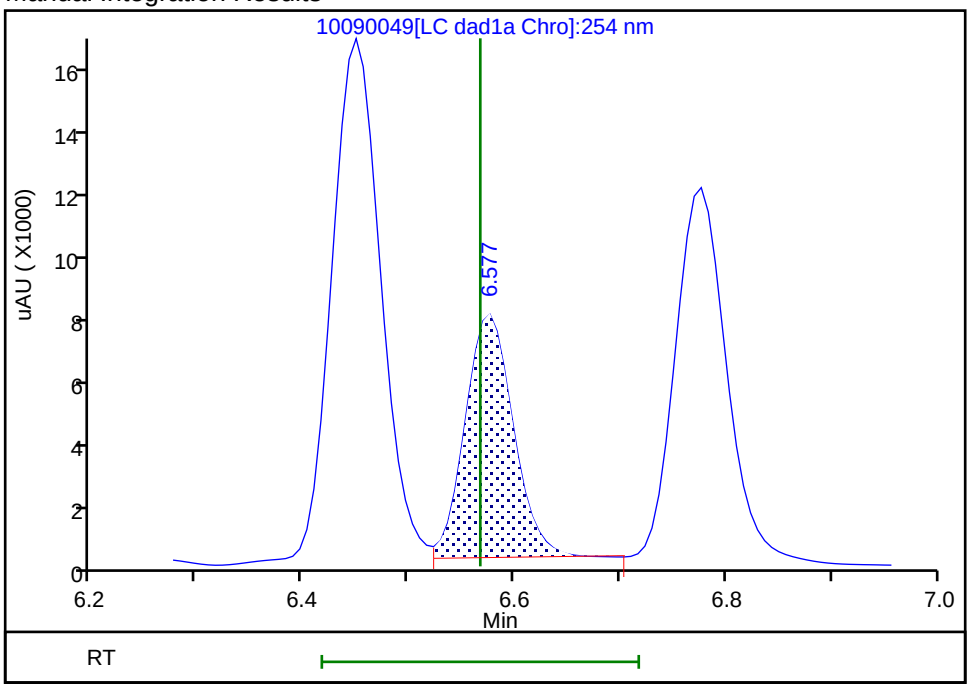
Processing Integration Results

RT: 6.58
Area: 26234
Amount: 0.278329
Amount Units: ug/mL



Manual Integration Results

RT: 6.58
Area: 23620
Amount: 0.250596
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 11:35:21 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

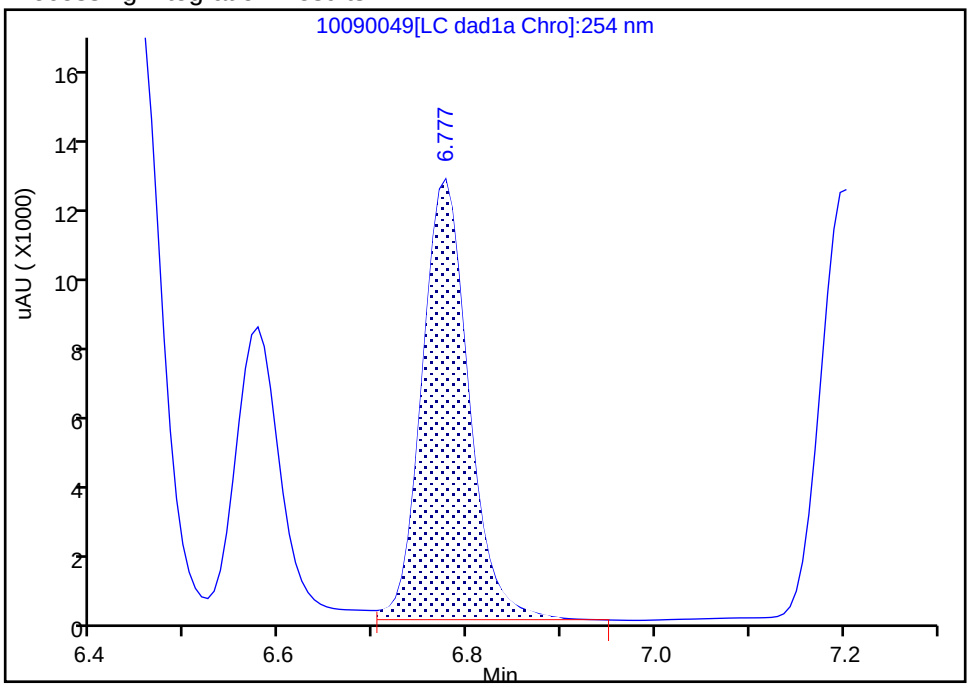
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Injection Date:	10-Oct-2023 02:27:56	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	49
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

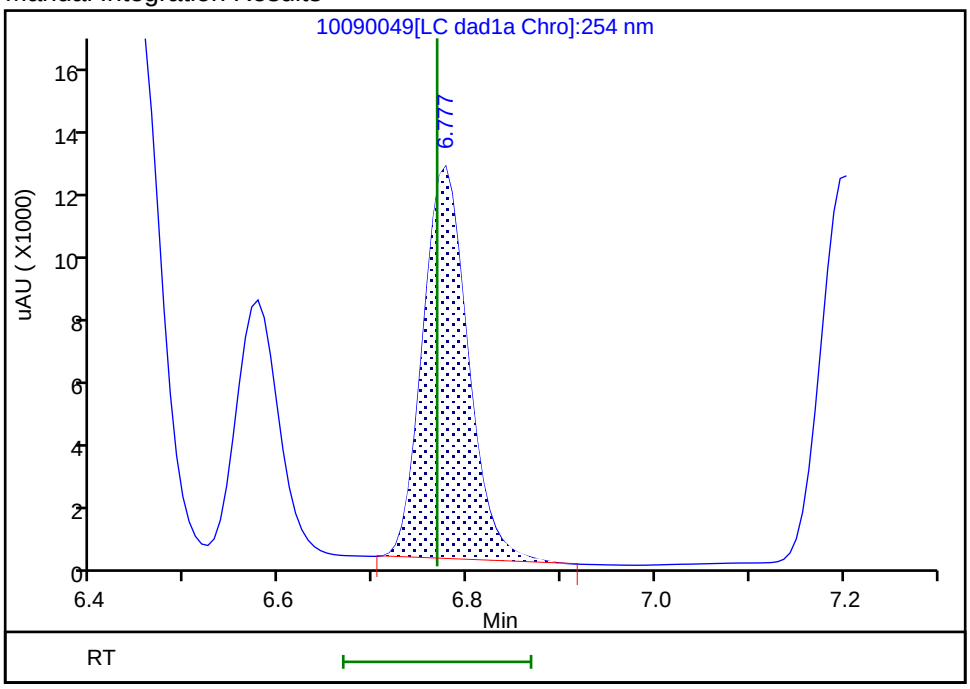
Processing Integration Results

RT: 6.78
Area: 39981
Amount: 0.276699
Amount Units: ug/mL



Manual Integration Results

RT: 6.78
Area: 38187
Amount: 0.264283
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 11:35:26 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

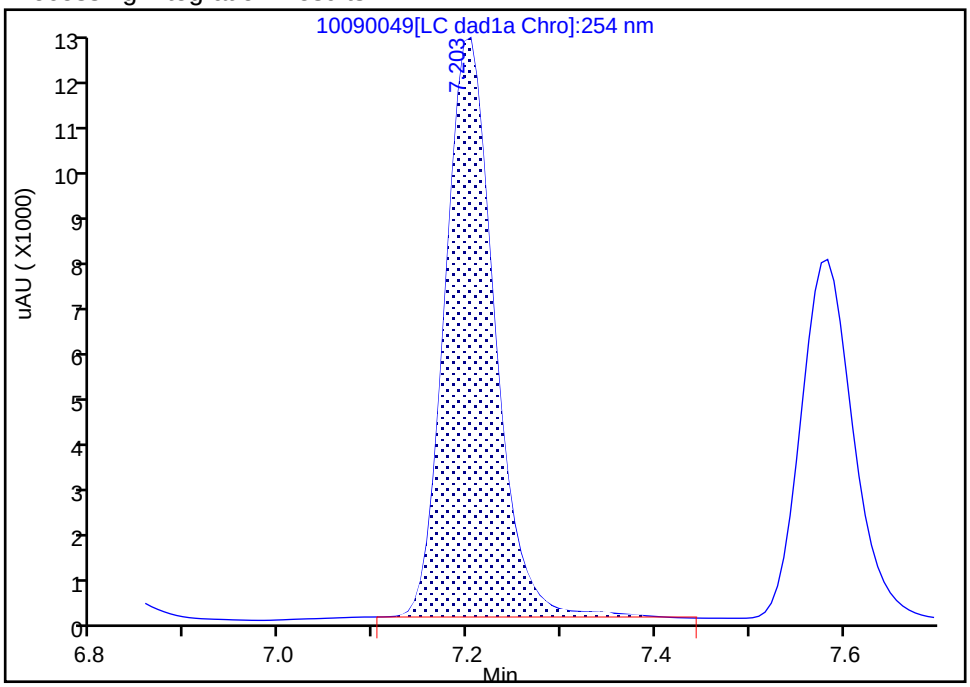
Data File:	\\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090049.d				
Injection Date:	10-Oct-2023 02:27:56	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	49
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

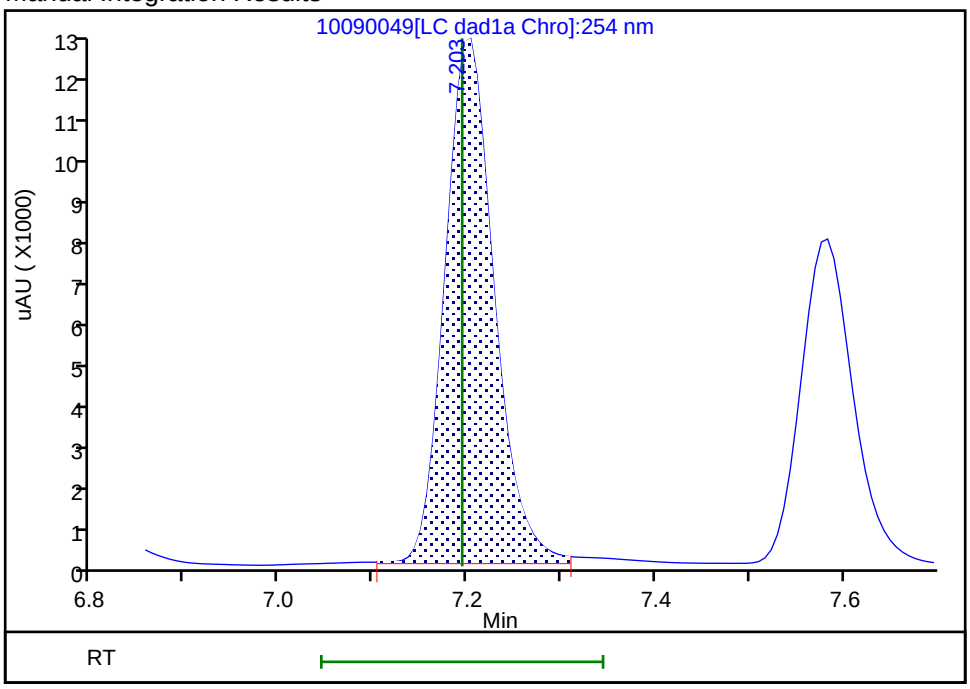
Processing Integration Results

RT: 7.20
Area: 41375
Amount: 0.298330
Amount Units: ug/mL



Manual Integration Results

RT: 7.20
Area: 40877
Amount: 0.294739
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 11:35:35 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Lab Sample ID: CCV 280-628987/50 Calibration Date: 10/10/2023 02:50

Instrument ID: CHHPLC_X3 Calib Start Date: 06/23/2023 21:43

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 06/24/2023 00:23

Lab File ID: 10090050.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	225565	209824		233	250	-7.0	20.0
2,4-diamino-6-nitrotoluene	Ave	143326	127716		223	250	-10.9	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Lab Sample ID: CCV 280-628987/50 Calibration Date: 10/10/2023 02:50

Instrument ID: CHHPLC_X3 Calib Start Date: 06/23/2023 21:43

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 06/24/2023 00:23

Lab File ID: 10090050.D

Analyte	RT	RT WINDOW	
		FROM	TO
2,6-diamino-4-nitrotoluene	6.45	6.29	6.59
2,4-diamino-6-nitrotoluene	6.63	6.48	6.78

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\10090050.D
Lims ID: CCV ADD
Client ID:
Sample Type: CCV
Inject. Date: 10-Oct-2023 02:50:57 ALS Bottle#: 8 Worklist Smp#: 50
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\20231009-126302.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 10-Oct-2023 11:59:43 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1622

First Level Reviewer: K8YG Date: 10-Oct-2023 09:27:07

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	6.446	6.438	0.008	52456	0.2500	0.2326	M
5 2,4-diamino-6-nitrotoluene	1	6.633	6.625	0.008	31929	0.2500	0.2228	M

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330_ADDs_00037 Amount Added: 12.50 Units: uL

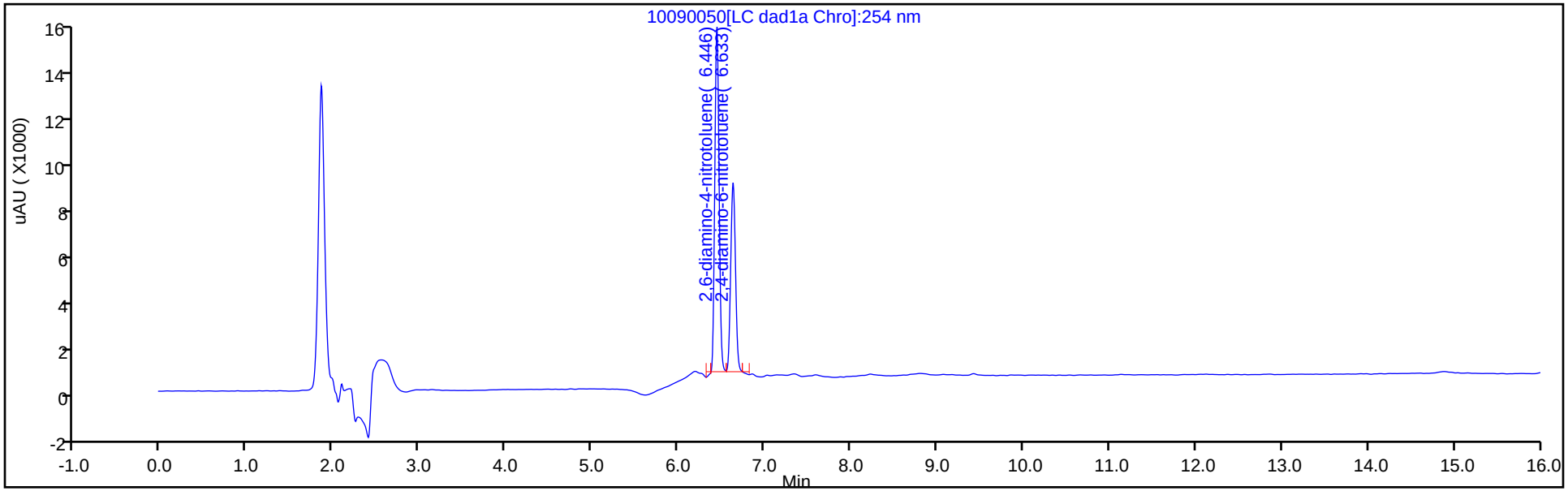
Report Date: 10-Oct-2023 11:59:43 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

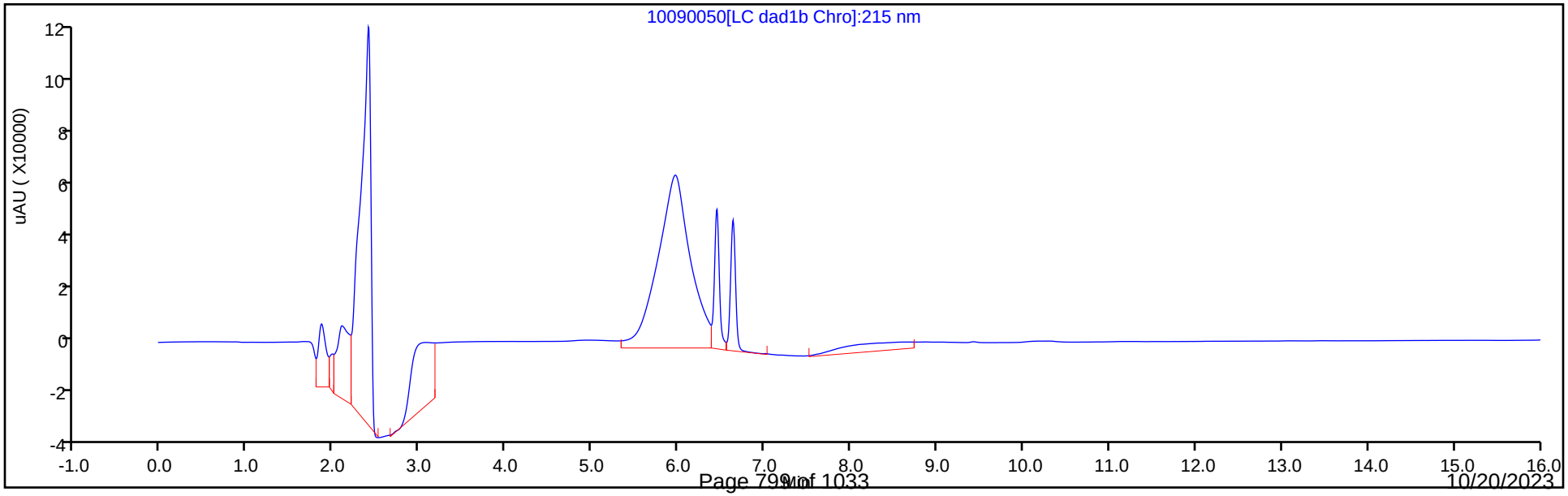
Data File: \\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090050.d

Injection Date:	10-Oct-2023 02:50:57	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV ADD			Worklist Smp#:	50
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

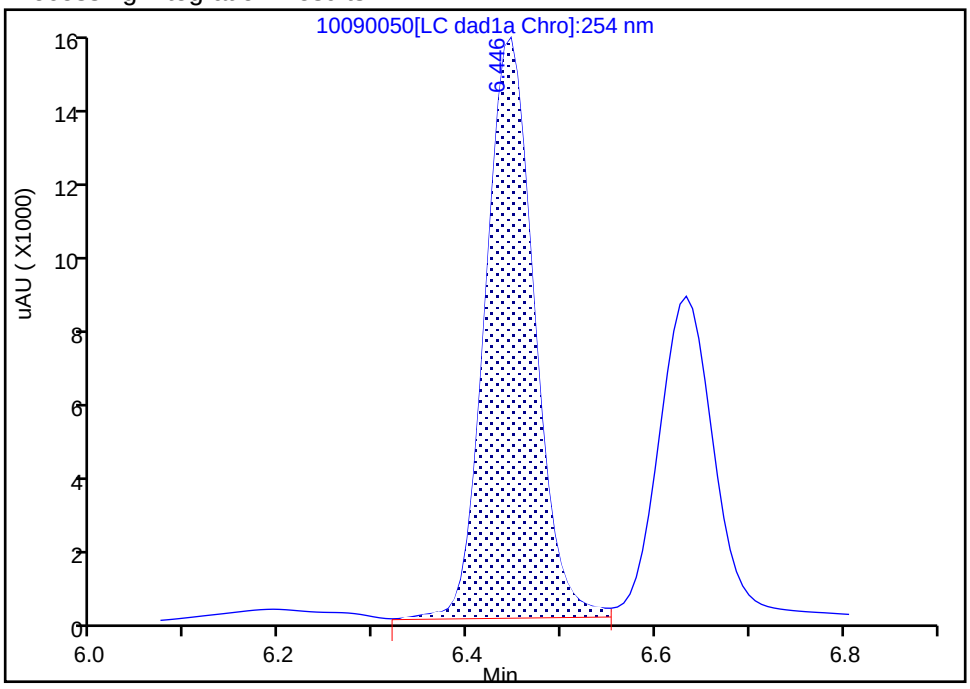
Data File:	\\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090050.d				
Injection Date:	10-Oct-2023 02:50:57	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	8	Worklist Smp#:	50
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

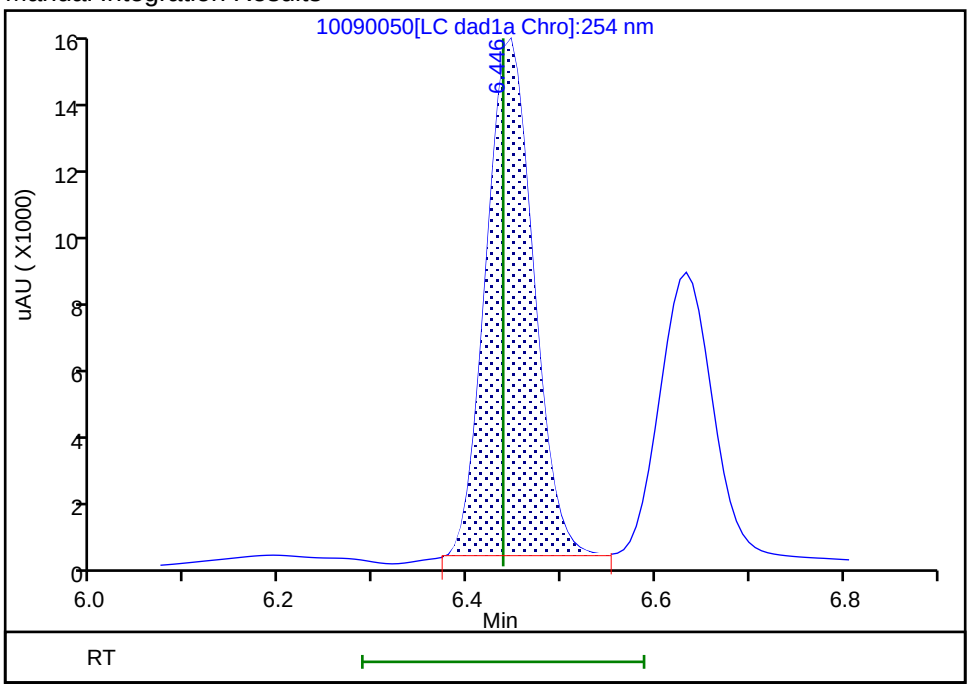
Processing Integration Results

RT: 6.45
Area: 54897
Amount: 0.243375
Amount Units: ug/mL



Manual Integration Results

RT: 6.45
Area: 52456
Amount: 0.232554
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 11:35:47 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

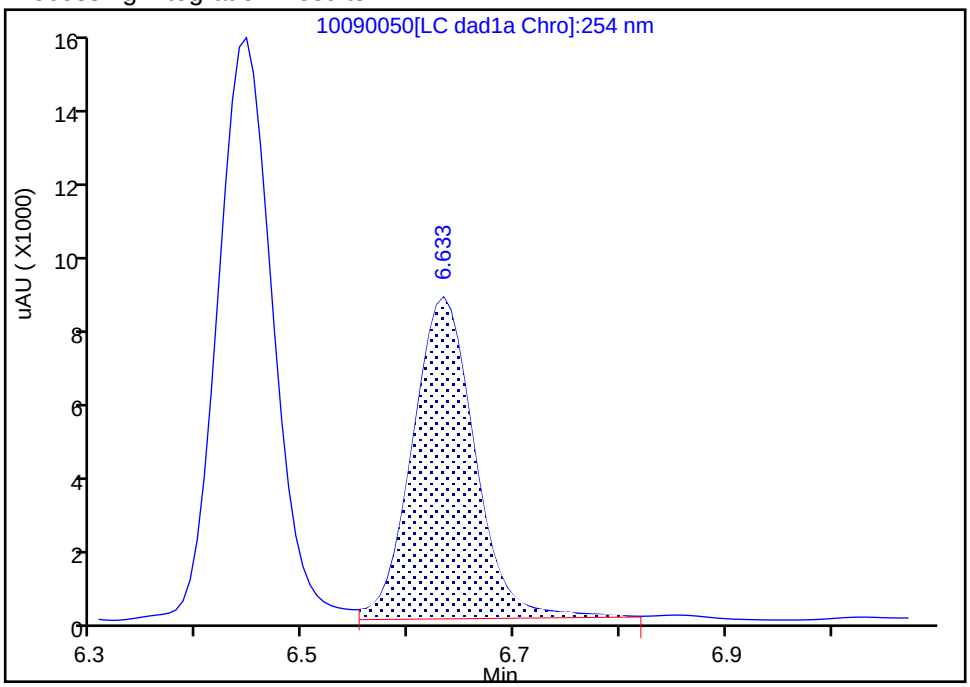
Data File:	\\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090050.d				
Injection Date:	10-Oct-2023 02:50:57	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	8	Worklist Smp#:	50
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

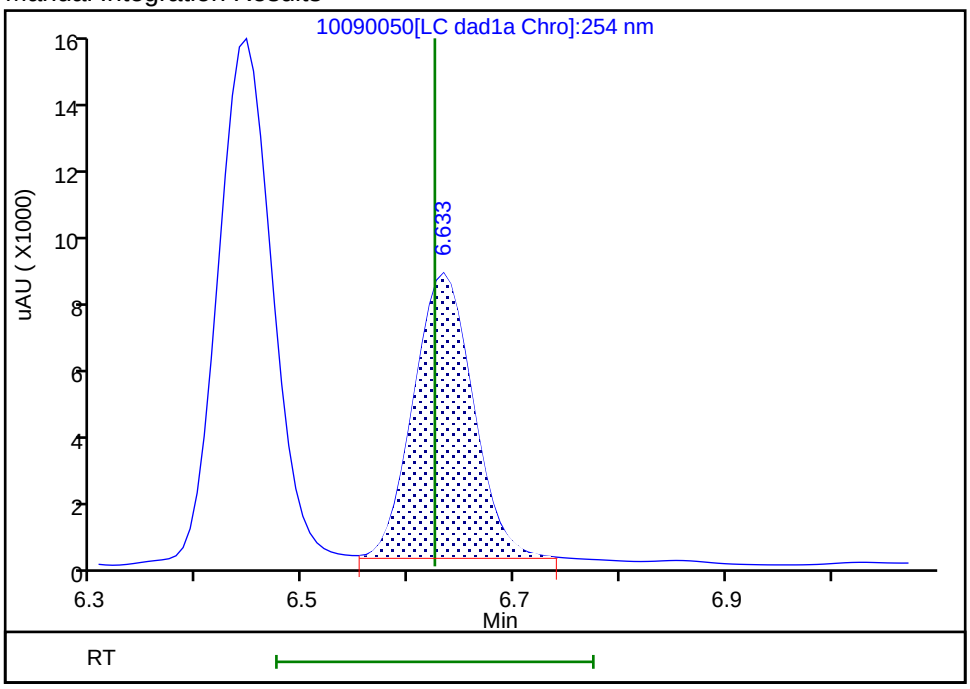
Processing Integration Results

RT: 6.63
Area: 34343
Amount: 0.239614
Amount Units: ug/mL



Manual Integration Results

RT: 6.63
Area: 31929
Amount: 0.222771
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 11:35:50 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Lab Sample ID: CCV 280-628987/60 Calibration Date: 10/10/2023 06:40

Instrument ID: CHHPLC_X3 Calib Start Date: 06/23/2023 17:53

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 06/23/2023 20:57

Lab File ID: 10090060.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	200761	199549		249	251	-0.6	20.0
HMX	Ave	94255	95108		252	250	0.9	20.0
DNX	Ave	144493	152084		263	250	5.3	20.0
MNX	Ave	138689	139239		293	292	0.4	20.0
RDX	Ave	110493	107940		244	250	-2.3	20.0
Picric acid	Ave	77863	77604		249	250	-0.3	20.0
1,3,5-Trinitrobenzene	Ave	216079	219352		254	250	1.5	20.0
1,3-Dinitrobenzene	Ave	293347	296336		253	250	1.0	20.0
Nitrobenzene	Ave	192696	179180		232	250	-7.0	20.0
3,5-Dinitroaniline	Lin2		216088		240	250	-3.8	20.0
Tetryl	Ave	167257	173704		260	250	3.9	20.0
Nitroglycerin	Ave	64651	66780		2580	2500	3.3	20.0
2,4,6-Trinitrotoluene	Ave	204902	204496		250	250	-0.2	20.0
4-Amino-2,6-dinitrotoluene	Ave	149560	151904		254	250	1.6	20.0
2-Amino-4,6-dinitrotoluene	Ave	193716	191420		247	250	-1.2	20.0
2,6-Dinitrotoluene	Ave	142638	142904		250	250	0.2	20.0
2,4-Dinitrotoluene	Ave	295706	297144		251	250	0.5	20.0
2-Nitrotoluene	Ave	126123	115492		229	250	-8.4	20.0
4-Nitrotoluene	Ave	110088	101300		230	250	-8.0	20.0
3-Nitrotoluene	Lin2		127324		231	250	-7.6	20.0
PETN	Ave	72018	74314		2580	2500	3.2	20.0
1,2-Dinitrobenzene	Ave	123911	126924		256	250	2.4	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Lab Sample ID: CCV 280-628987/60 Calibration Date: 10/10/2023 06:40

Instrument ID: CHHPLC_X3 Calib Start Date: 06/23/2023 17:53

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 06/23/2023 20:57

Lab File ID: 10090060.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.45	6.34	6.54
HMX	6.57	6.42	6.72
DNX	6.77	6.67	6.87
MNX	7.20	7.04	7.34
RDX	7.58	7.42	7.72
Picric acid	7.96	7.80	8.10
1,3,5-Trinitrobenzene	8.65	8.50	8.80
1,3-Dinitrobenzene	9.27	9.10	9.40
Nitrobenzene	9.63	9.47	9.77
3,5-Dinitroaniline	9.85	9.69	9.99
Tetryl	9.99	9.82	10.12
Nitroglycerin	10.43	10.27	10.57
2,4,6-Trinitrotoluene	10.87	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	11.46	11.34	11.54
2,4-Dinitrotoluene	11.63	11.51	11.71
2-Nitrotoluene	12.44	12.27	12.57
4-Nitrotoluene	12.85	12.68	12.98
3-Nitrotoluene	13.41	13.24	13.54
PETN	14.55	14.36	14.66
1,2-Dinitrobenzene	8.53	8.37	8.67

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\10090060.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 10-Oct-2023 06:40:34 ALS Bottle#: 7 Worklist Smp#: 60
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\20231009-126302.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 10-Oct-2023 11:59:51 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1622

First Level Reviewer: K8YG Date: 10-Oct-2023 09:28:46

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.447	6.441	0.006	50037	0.2508	0.2492	M
4 HMX	1	6.574	6.568	0.006	23777	0.2500	0.2523	M
6 DNX	1	6.774	6.768	0.006	38059	0.2503	0.2634	M
7 MNX	1	7.200	7.194	0.006	40623	0.2918	0.2929	M
8 RDX	1	7.580	7.574	0.006	26985	0.2500	0.2442	
9 2,4,6-Trinitrophenol	1	7.960	7.948	0.012	19401	0.2500	0.2492	
$ 10 1,2-Dinitrobenzene	1	8.527	8.521	0.006	31731	0.2500	0.2561	
11 1,3,5-Trinitrobenzene	1	8.654	8.648	0.006	54838	0.2500	0.2538	
12 1,3-Dinitrobenzene	1	9.267	9.254	0.013	74084	0.2500	0.2525	
13 Nitrobenzene	1	9.634	9.621	0.013	44795	0.2500	0.2325	
14 3,5-Dinitroaniline	1	9.854	9.841	0.013	54022	0.2500	0.2405	
15 Tetryl	1	9.987	9.974	0.013	43426	0.2500	0.2596	
16 Nitroglycerin	2	10.434	10.421	0.013	166951	2.50	2.58	
17 2,4,6-Trinitrotoluene	1	10.874	10.861	0.013	51124	0.2500	0.2495	
18 4-Amino-2,6-dinitrotoluene	1	11.054	11.034	0.020	37976	0.2500	0.2539	
19 2-Amino-4,6-dinitrotoluene	1	11.300	11.281	0.019	47855	0.2500	0.2470	
20 2,6-Dinitrotoluene	1	11.460	11.441	0.019	35726	0.2500	0.2505	
21 2,4-Dinitrotoluene	1	11.627	11.607	0.020	74286	0.2500	0.2512	
22 o-Nitrotoluene	1	12.440	12.421	0.019	28873	0.2500	0.2289	
23 p-Nitrotoluene	1	12.854	12.827	0.027	25325	0.2500	0.2300	
24 m-Nitrotoluene	1	13.414	13.387	0.027	31831	0.2500	0.2309	
25 PETN	2	14.554	14.514	0.040	185785	2.50	2.58	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00015	Amount Added:	12.50	Units: uL
8330IntermStk_00078	Amount Added:	25.00	Units: uL

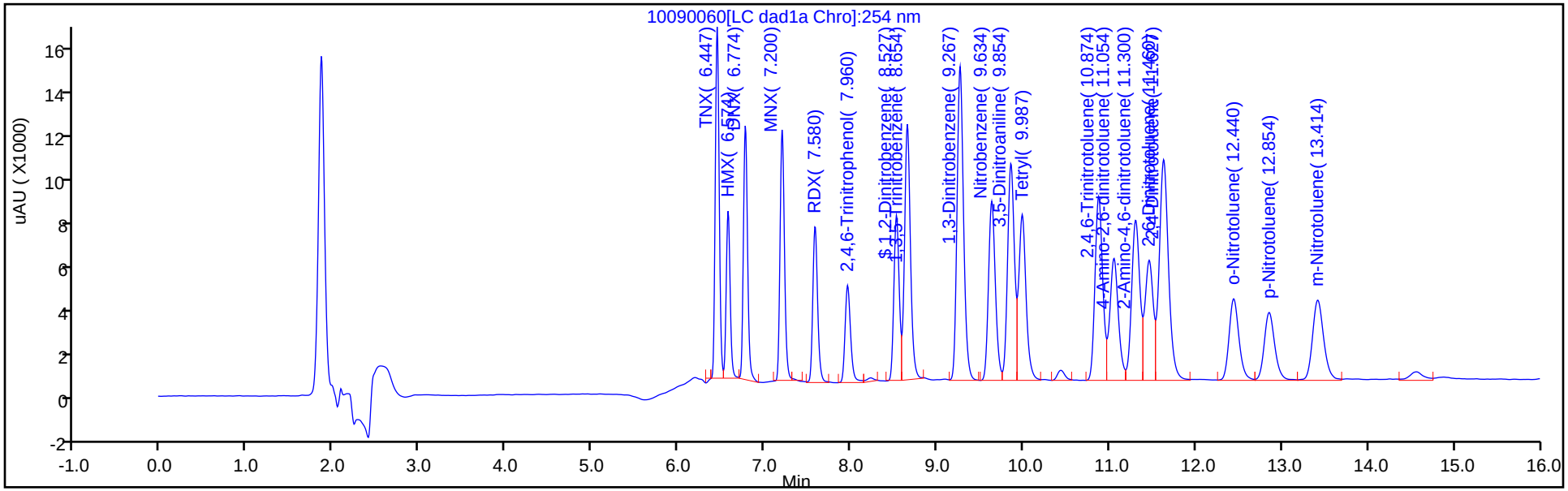
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Eurofins Denver

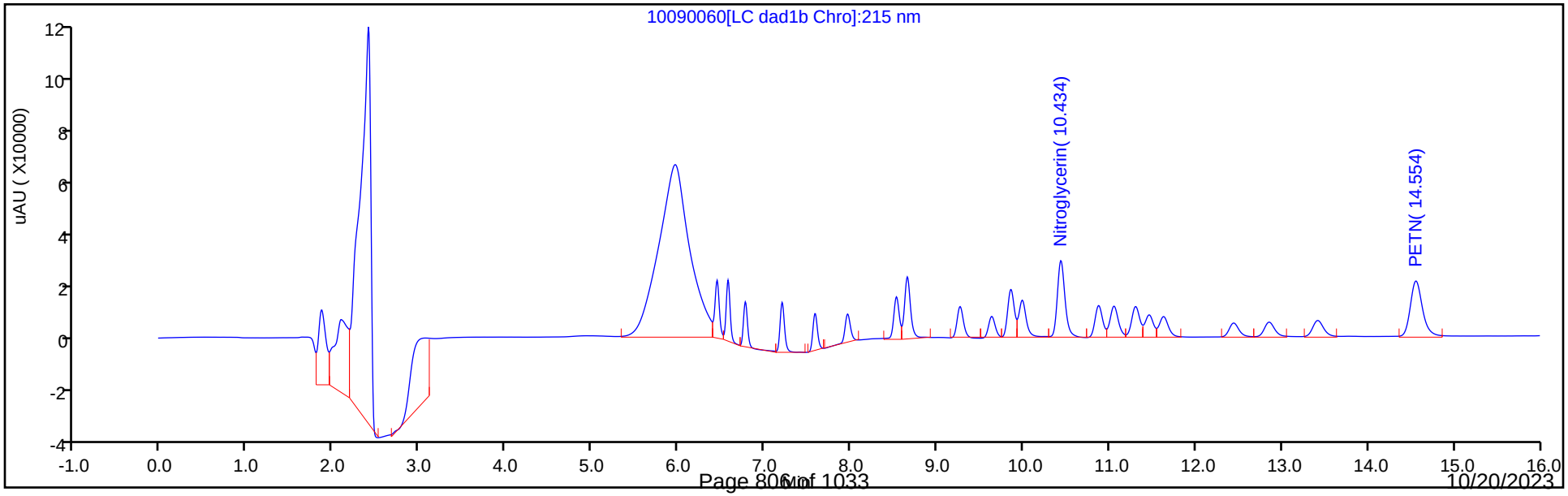
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Injection Date:	10-Oct-2023 06:40:34	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV DMT			Worklist Smp#:	60
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



10/20/2023
4:00 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

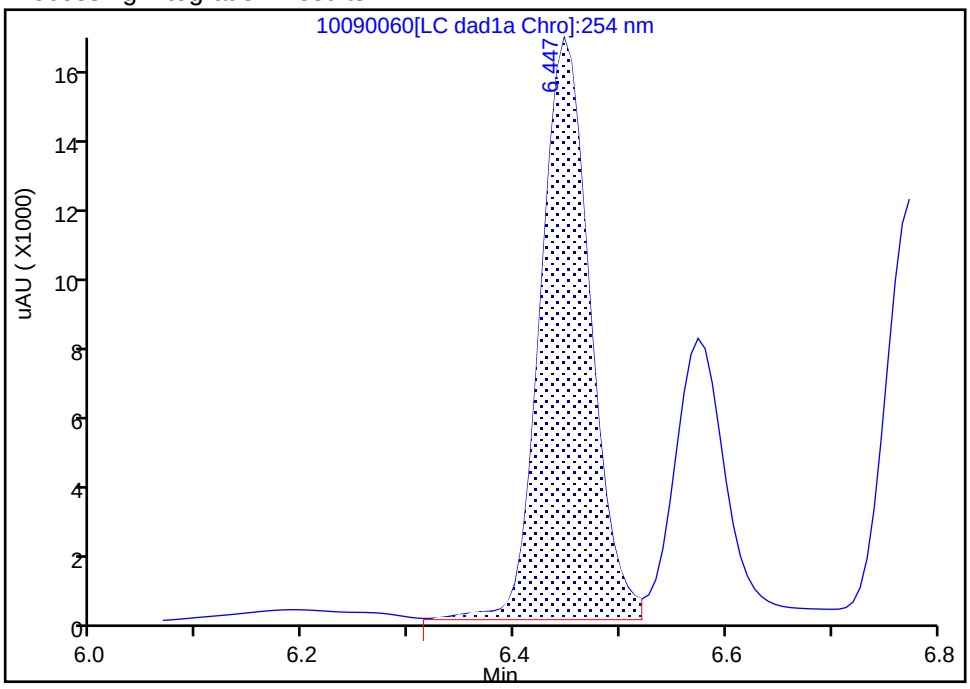
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Injection Date:	10-Oct-2023 06:40:34	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	60
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

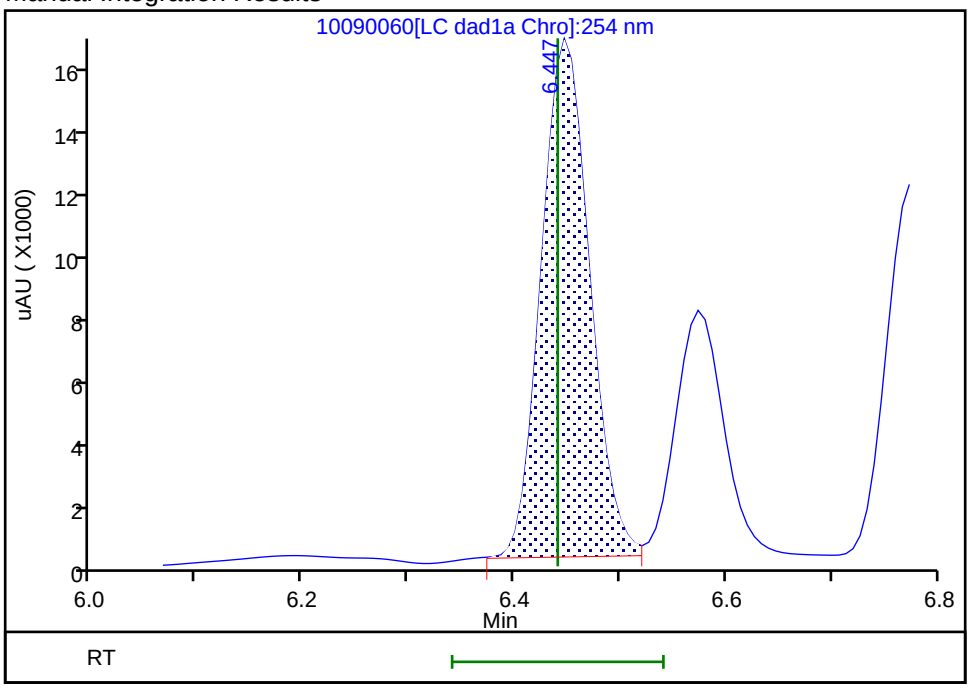
Processing Integration Results

RT: 6.45
Area: 52138
Amount: 0.259702
Amount Units: ug/mL



Manual Integration Results

RT: 6.45
Area: 50037
Amount: 0.249237
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 11:42:27 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

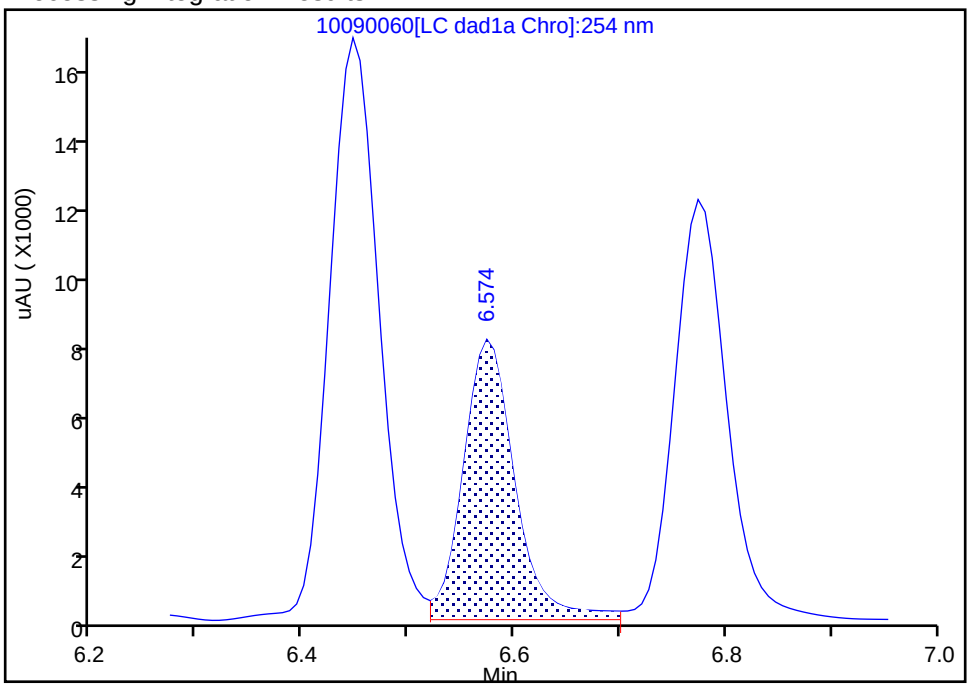
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Injection Date:	10-Oct-2023 06:40:34	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	60
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

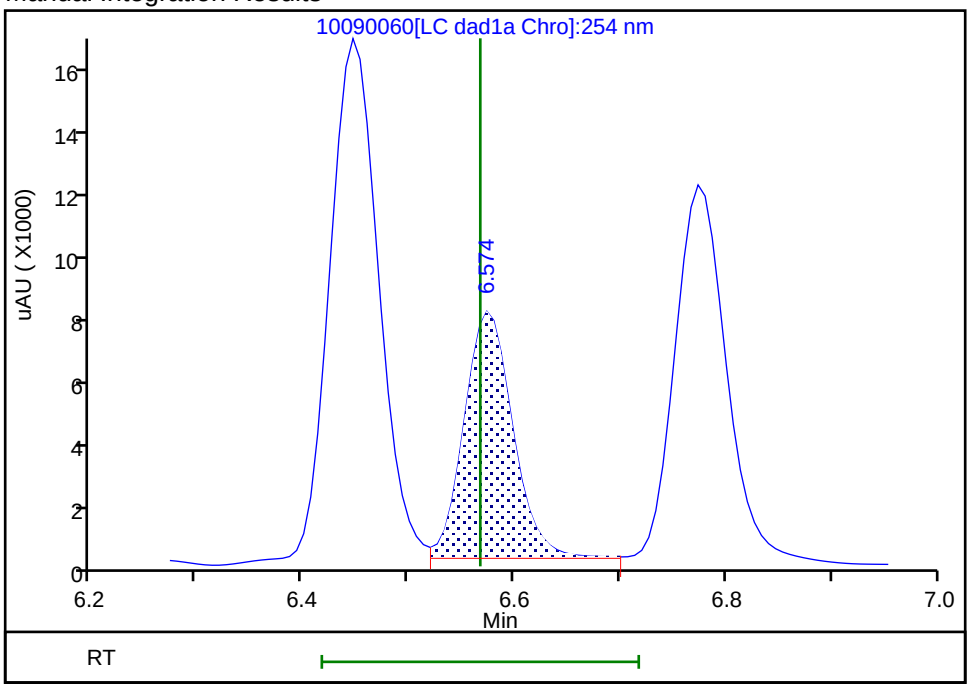
Processing Integration Results

RT: 6.57
Area: 26132
Amount: 0.277247
Amount Units: ug/mL



Manual Integration Results

RT: 6.57
Area: 23777
Amount: 0.252262
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 11:42:20 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Eurofins Denver

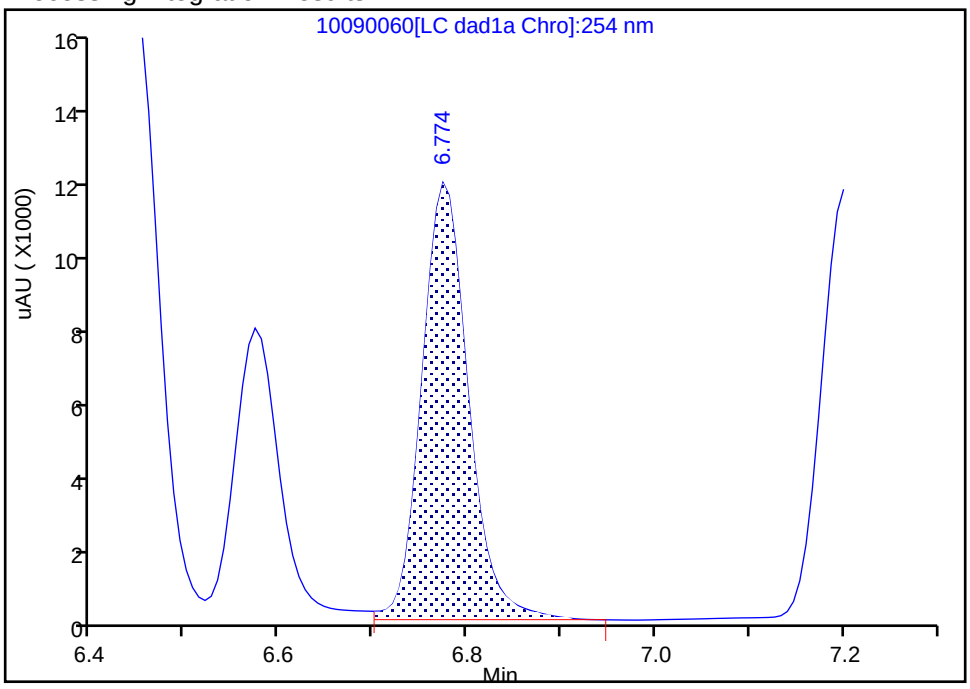
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Injection Date:	10-Oct-2023 06:40:34	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	60
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

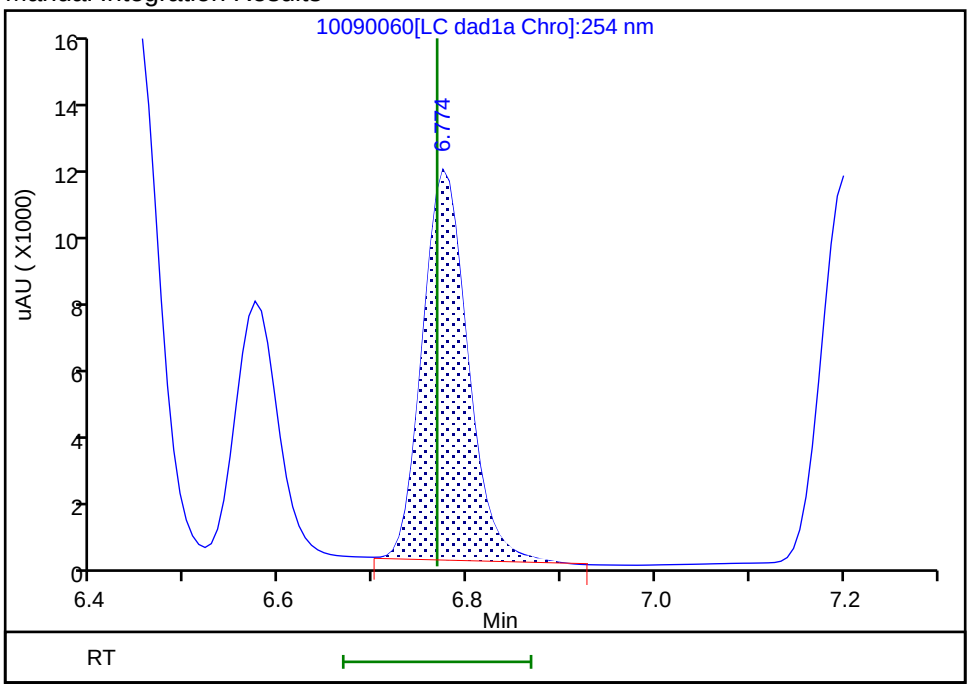
Processing Integration Results

RT: 6.77
Area: 39803
Amount: 0.275467
Amount Units: ug/mL



Manual Integration Results

RT: 6.77
Area: 38059
Amount: 0.263397
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 11:42:24 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

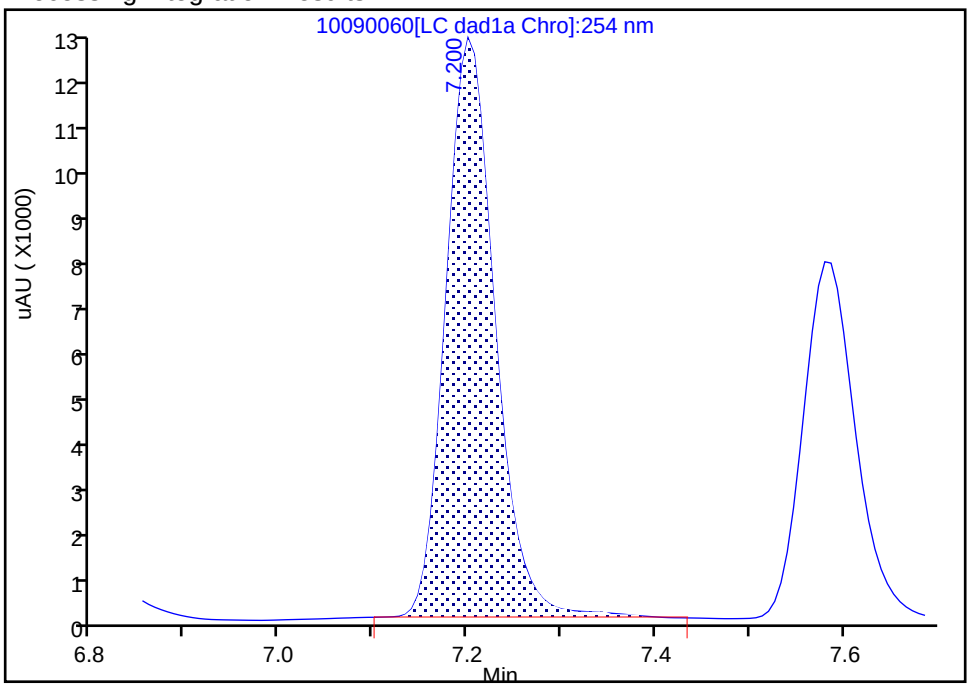
Data File:	\\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090060.d				
Injection Date:	10-Oct-2023 06:40:34	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	7	Worklist Smp#:	60
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

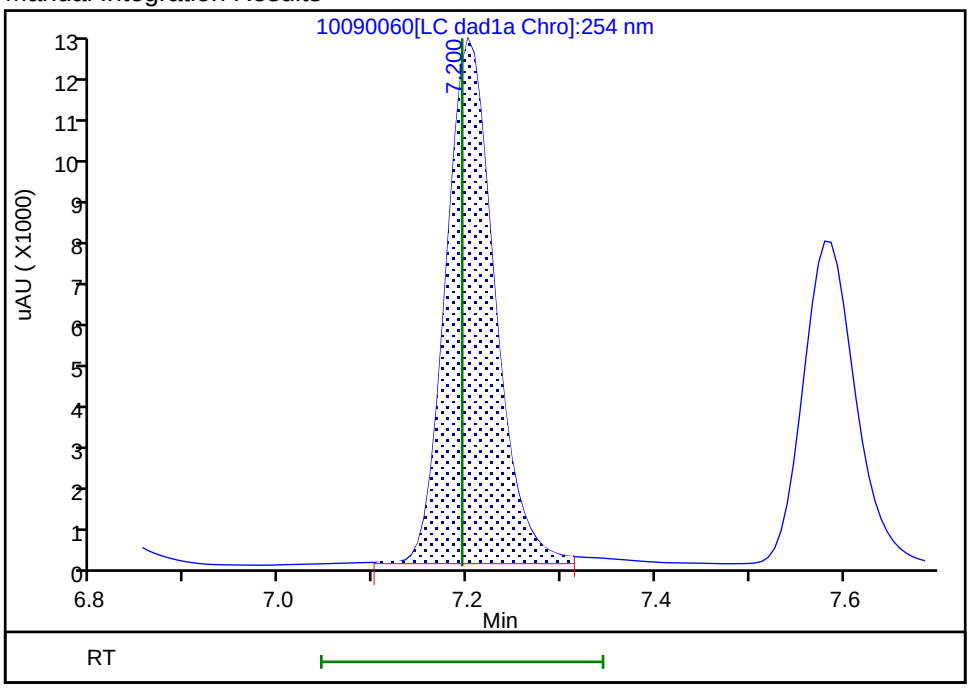
Processing Integration Results

RT: 7.20
Area: 41055
Amount: 0.296023
Amount Units: ug/mL



Manual Integration Results

RT: 7.20
Area: 40623
Amount: 0.292908
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 11:42:32 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Lab Sample ID: CCV 280-628987/61 Calibration Date: 10/10/2023 07:03

Instrument ID: CHHPLC_X3 Calib Start Date: 06/23/2023 21:43

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 06/24/2023 00:23

Lab File ID: 10090061.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	225565	211380		234	250	-6.3	20.0
2,4-diamino-6-nitrotoluene	Ave	143326	128072		223	250	-10.6	20.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Lab Sample ID: CCV 280-628987/61 Calibration Date: 10/10/2023 07:03

Instrument ID: CHHPLC_X3 Calib Start Date: 06/23/2023 21:43

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 06/24/2023 00:23

Lab File ID: 10090061.D

Analyte	RT	RT WINDOW	
		FROM	TO
2,6-diamino-4-nitrotoluene	6.44	6.29	6.59
2,4-diamino-6-nitrotoluene	6.63	6.48	6.78

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\10090061.D
Lims ID: CCV ADD
Client ID:
Sample Type: CCV
Inject. Date: 10-Oct-2023 07:03:34 ALS Bottle#: 8 Worklist Smp#: 61
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\20231009-126302.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 10-Oct-2023 11:59:52 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1622

First Level Reviewer: K8YG Date: 10-Oct-2023 09:45:23

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	6.441	6.438	0.003	52845	0.2500	0.2343	M
5 2,4-diamino-6-nitrotoluene	1	6.628	6.625	0.003	32018	0.2500	0.2234	M

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330_ADDs_00037 Amount Added: 12.50 Units: uL

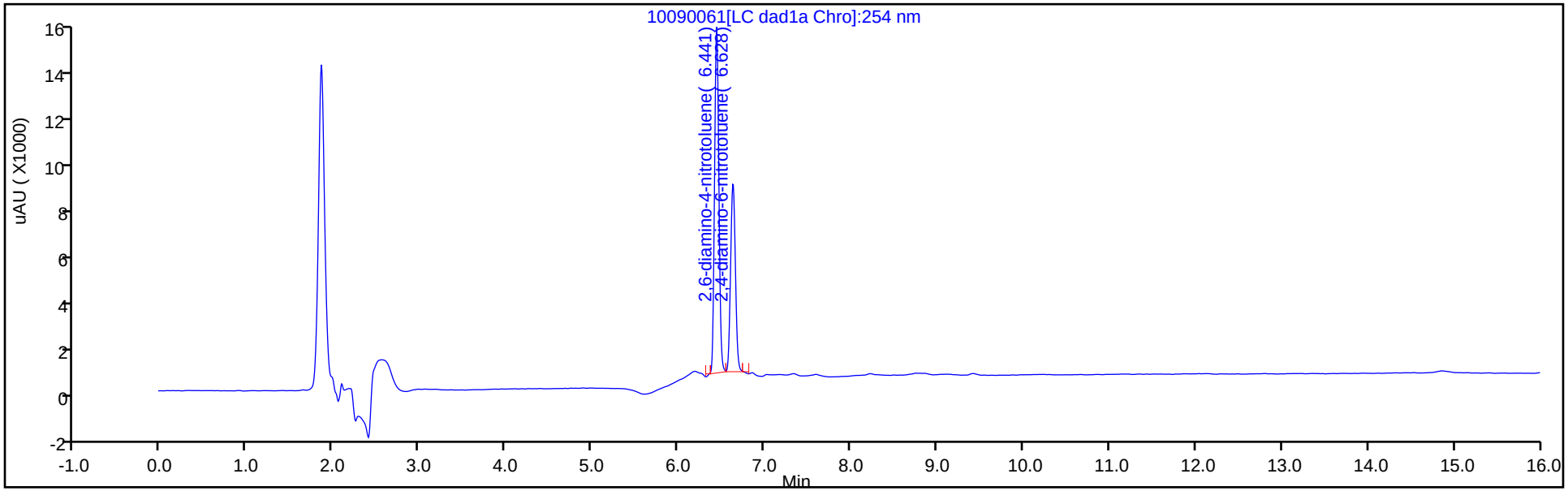
Report Date: 10-Oct-2023 11:59:53 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

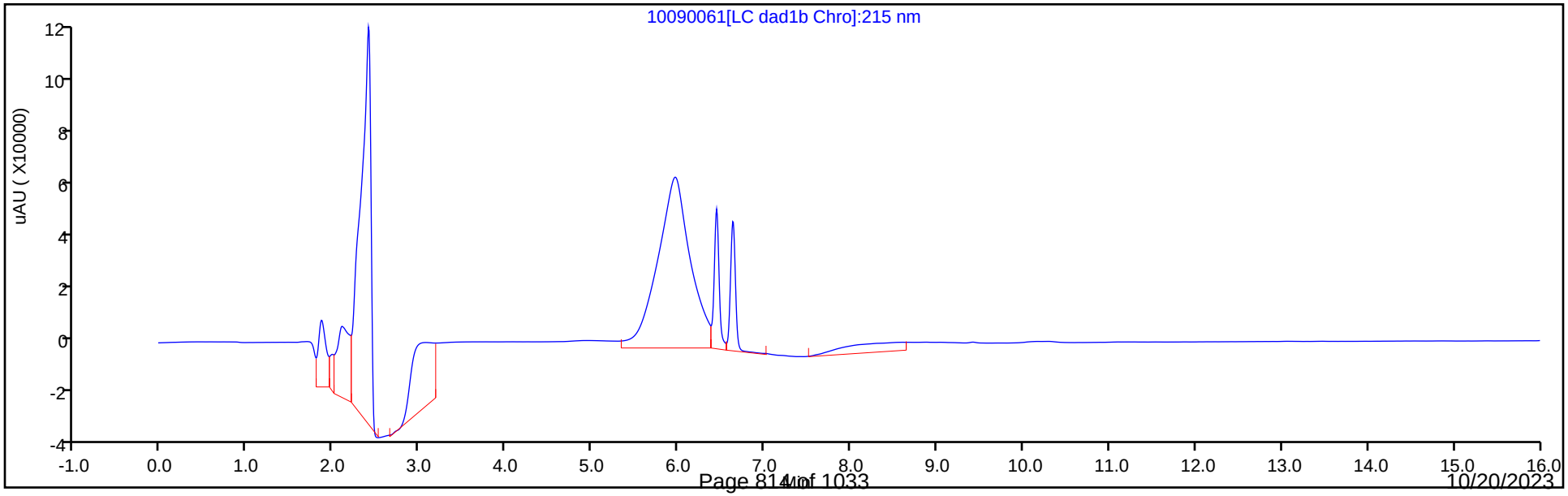
Data File: \\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090061.d

Injection Date:	10-Oct-2023 07:03:34	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	CCV ADD			Worklist Smp#:	61
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

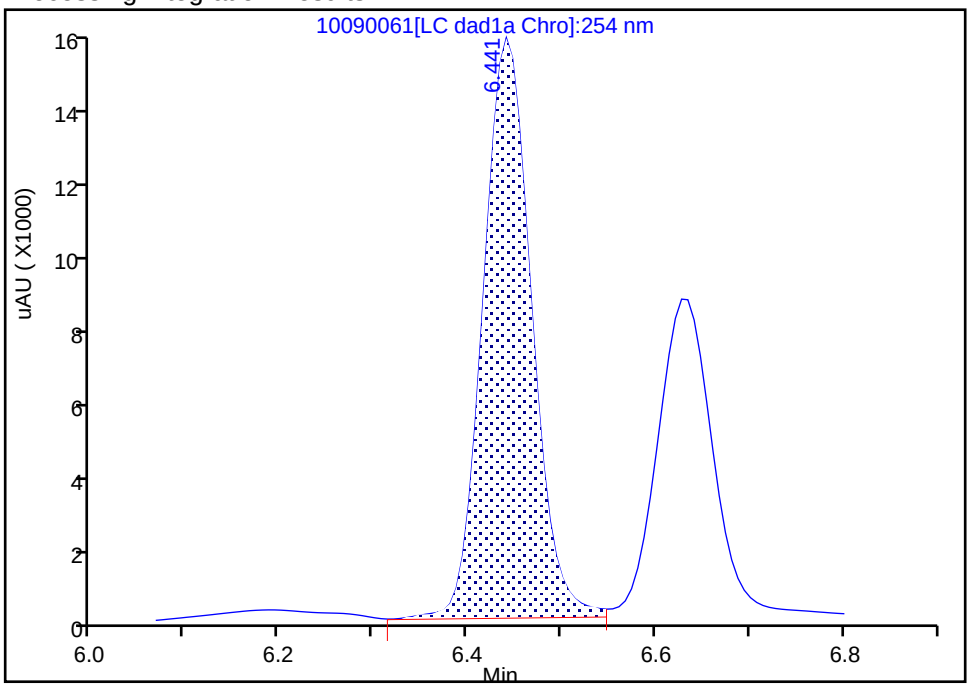
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Injection Date:	10-Oct-2023 07:03:34	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	8	Worklist Smp#:	61
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

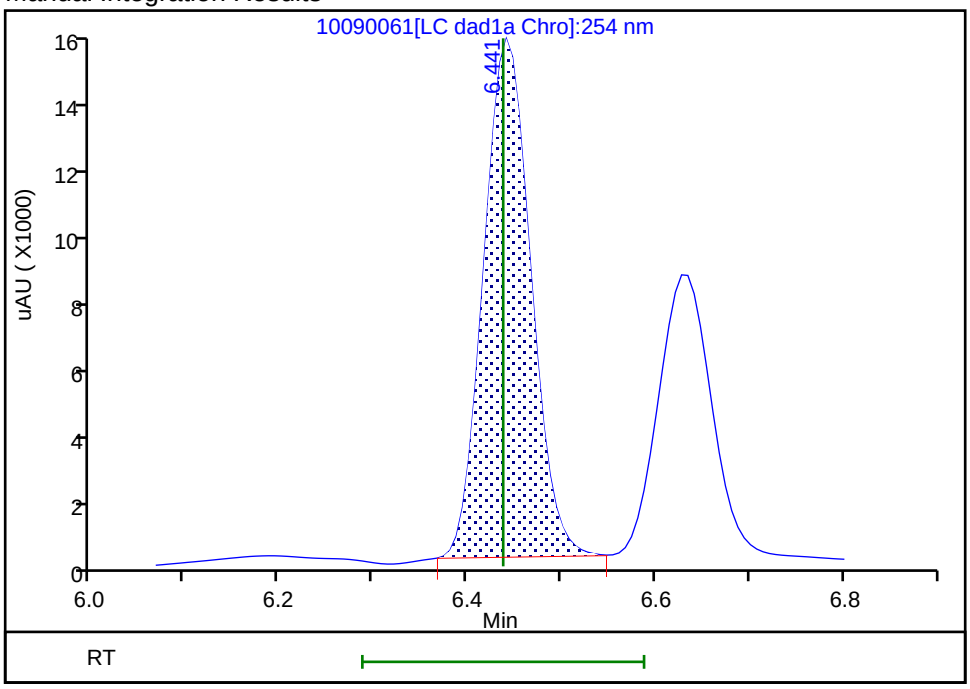
Processing Integration Results

RT: 6.44
Area: 54901
Amount: 0.243393
Amount Units: ug/mL



Manual Integration Results

RT: 6.44
Area: 52845
Amount: 0.234278
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 11:42:46 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

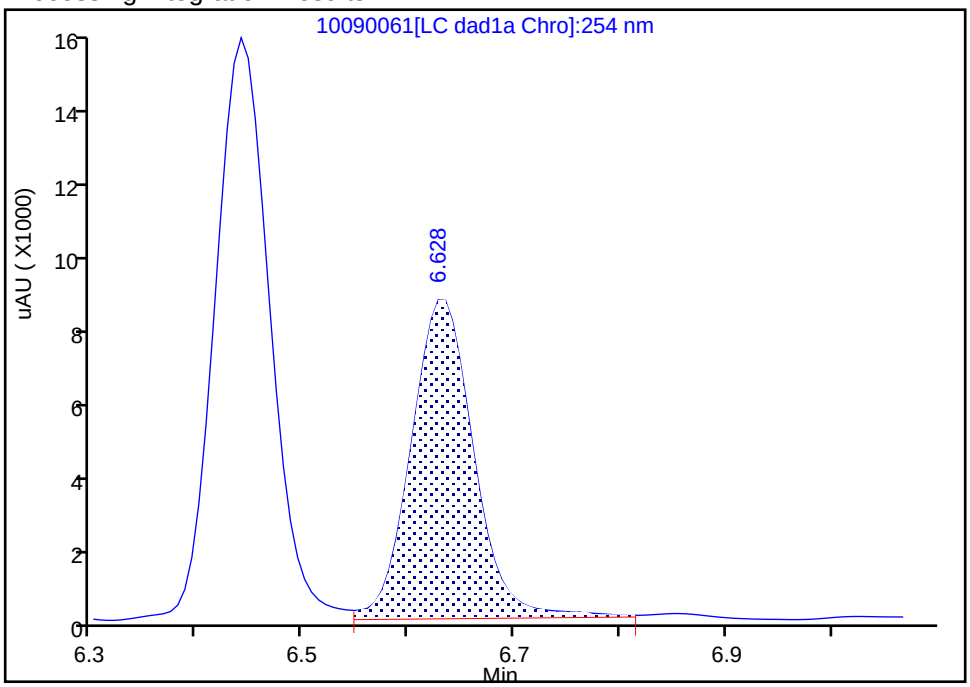
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Injection Date:	10-Oct-2023 07:03:34	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV ADD				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	8	Worklist Smp#:	61
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

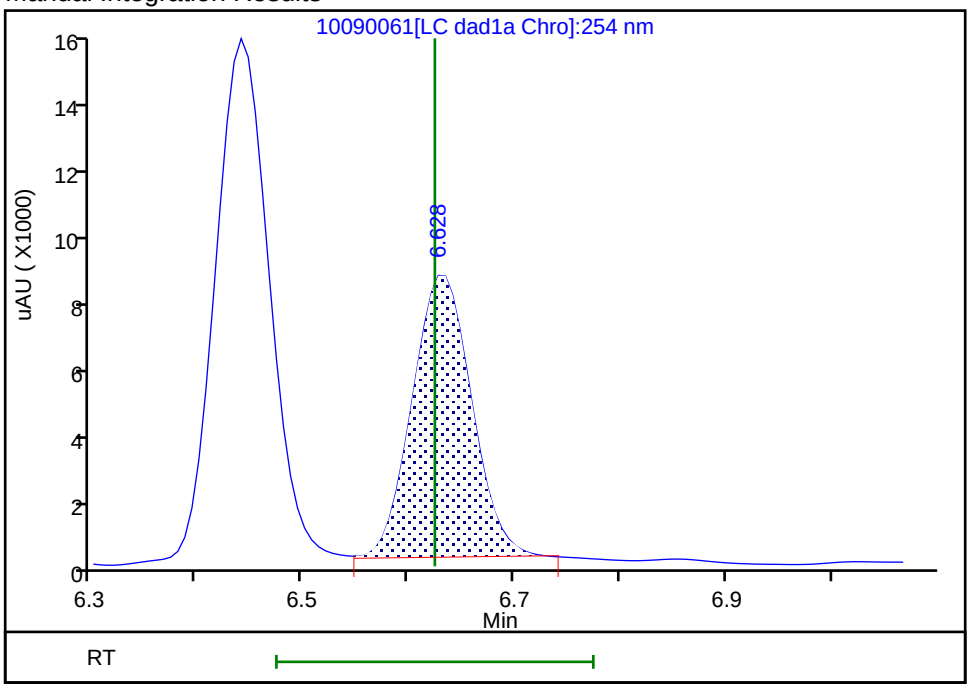
Processing Integration Results

RT: 6.63
Area: 34411
Amount: 0.240089
Amount Units: ug/mL



Manual Integration Results

RT: 6.63
Area: 32018
Amount: 0.223392
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 11:42:48 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182239-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-628393/1-A

Matrix: Water | Lab File ID: 10090039.D

Analysis Method: 8330B | Date Collected:

Extraction Method: 3535 | Date Extracted: 10/04/2023 13:30

Sample wt/vol: 500(mL) | Date Analyzed: 10/09/2023 22:38

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

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

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

Cleanup Factor:

Analysis Batch No.: 628987 | 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	0.103	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	99	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\10090039.D
Lims ID: MB 280-628393/1-A
Client ID:
Sample Type: MB
Inject. Date: 09-Oct-2023 22:38:27 ALS Bottle#: 39 Worklist Smp#: 39
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-628393/1-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 10-Oct-2023 11:59:33 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1622

First Level Reviewer: K8YG Date: 10-Oct-2023 09:26:19

	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		6.438				ND	7
3	TNX	1		6.441				ND	
4	HMX	1		6.568				ND	
5	2,4-diamino-6-nitrotoluene	1		6.625				ND	
6	DNX	1		6.768				ND	
7	MNX	1	7.217	7.194	0.023	1434		0.0103	M
8	RDX	1		7.574				ND	
9	2,4,6-Trinitrophenol	1		7.948				ND	
$ 10	1,2-Dinitrobenzene	1	8.530	8.521	0.009	24561	0.2000	0.1982	M
11	1,3,5-Trinitrobenzene	1		8.648				ND	
12	1,3-Dinitrobenzene	1		9.254				ND	
13	Nitrobenzene	1		9.621				ND	
14	3,5-Dinitroaniline	1		9.841				ND	
15	Tetryl	1		9.974				ND	
16	Nitroglycerin	2		10.421				ND	
17	2,4,6-Trinitrotoluene	1		10.861				ND	
18	4-Amino-2,6-dinitrotoluene	1		11.034				ND	
19	2-Amino-4,6-dinitrotoluene	1		11.281				ND	
20	2,6-Dinitrotoluene	1		11.441				ND	
21	2,4-Dinitrotoluene	1		11.607				ND	
22	o-Nitrotoluene	1		12.421				ND	7
23	p-Nitrotoluene	1		12.827				ND	
24	m-Nitrotoluene	1		13.387				ND	
25	PETN	2		14.514				ND	
26	Ammonium Picrate	1		0.000				ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Review Flags
M - Manually Integrated

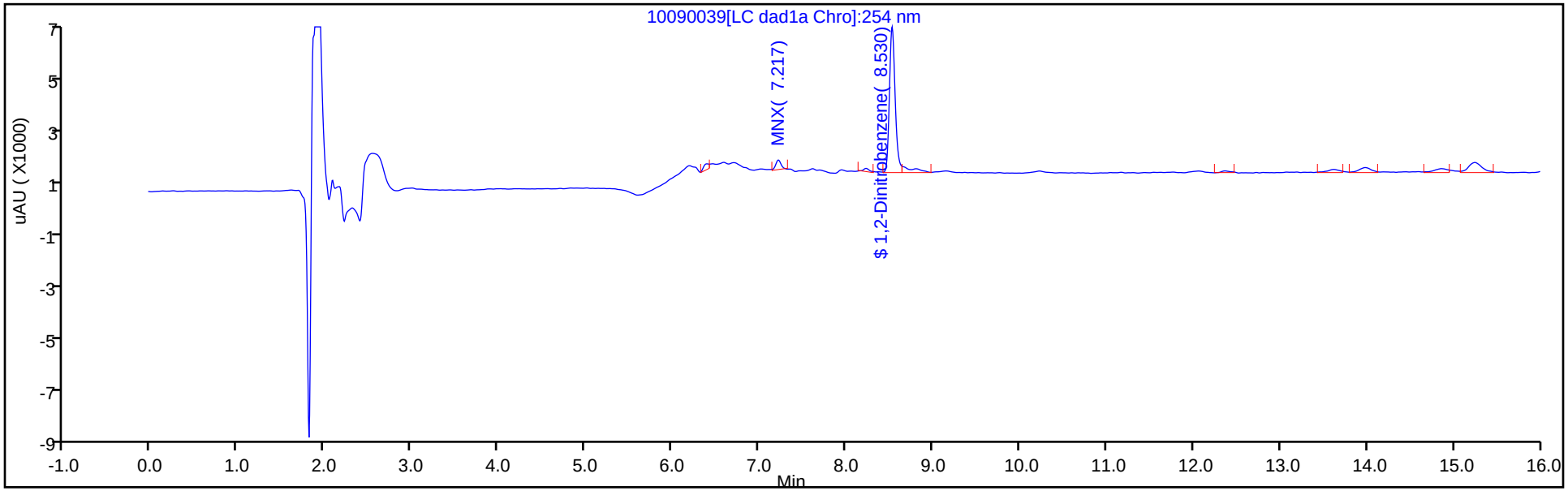
Report Date: 10-Oct-2023 11:59:34 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

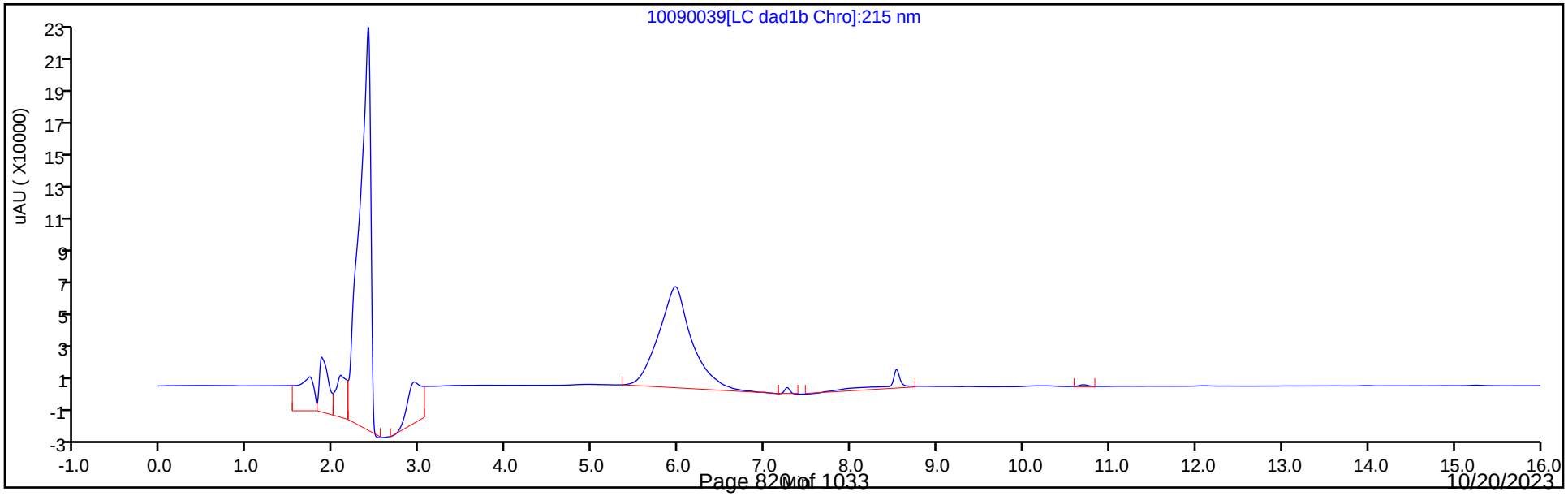
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Injection Date:	09-Oct-2023 22:38:27	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	MB 280-628393/1-A			Worklist Smp#:	39
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	39
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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\20231009-126302.b\10090039.D				
Lims ID:	MB 280-628393/1-A				
Client ID:					
Sample Type:	MB				
Inject. Date:	09-Oct-2023 22:38:27	ALS Bottle#:	39	Worklist Smp#:	39
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	MB 280-628393/1-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	10-Oct-2023 11:59:33	Calib Date:	24-Jun-2023 00:23:49		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1622				

First Level Reviewer: K8YG Date: 10-Oct-2023 09:26:19

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1982	99.11

Manual Integration/User Assign Peak Report

Eurofins Denver

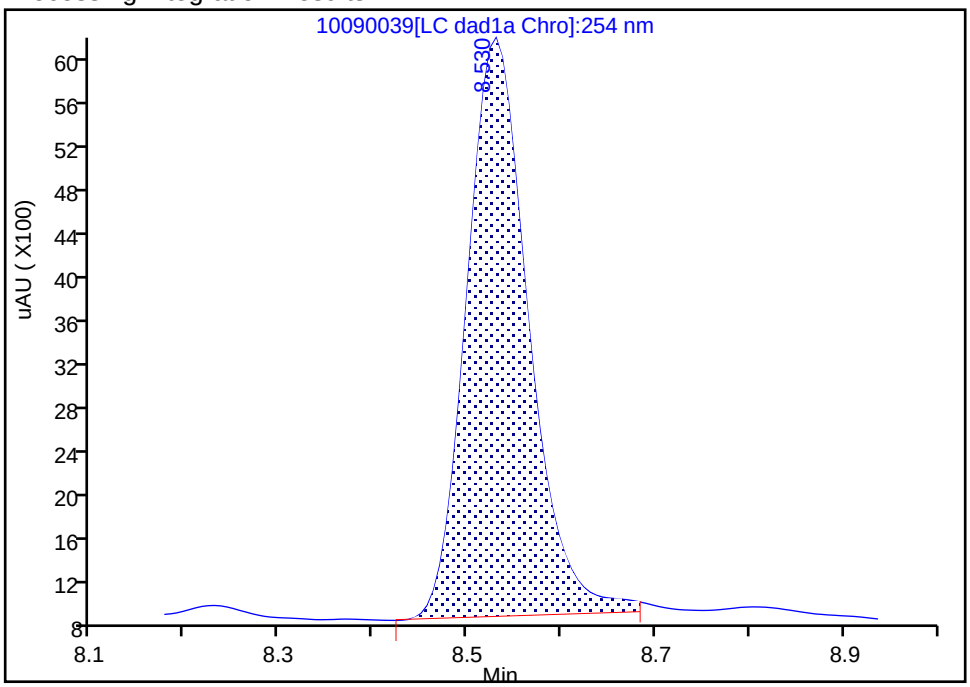
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Lims ID:	MB 280-628393/1-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	39	Worklist Smp#:	39
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

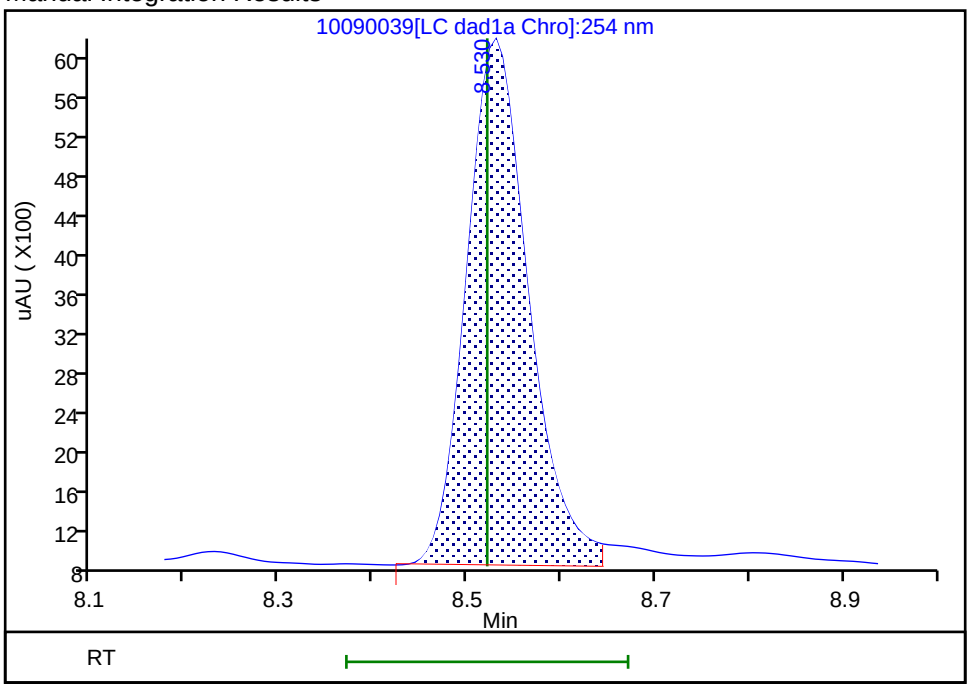
Processing Integration Results

RT: 8.53
Area: 24350
Amount: 0.196512
Amount Units: ug/mL



Manual Integration Results

RT: 8.53
Area: 24561
Amount: 0.198215
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 11:25:37 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

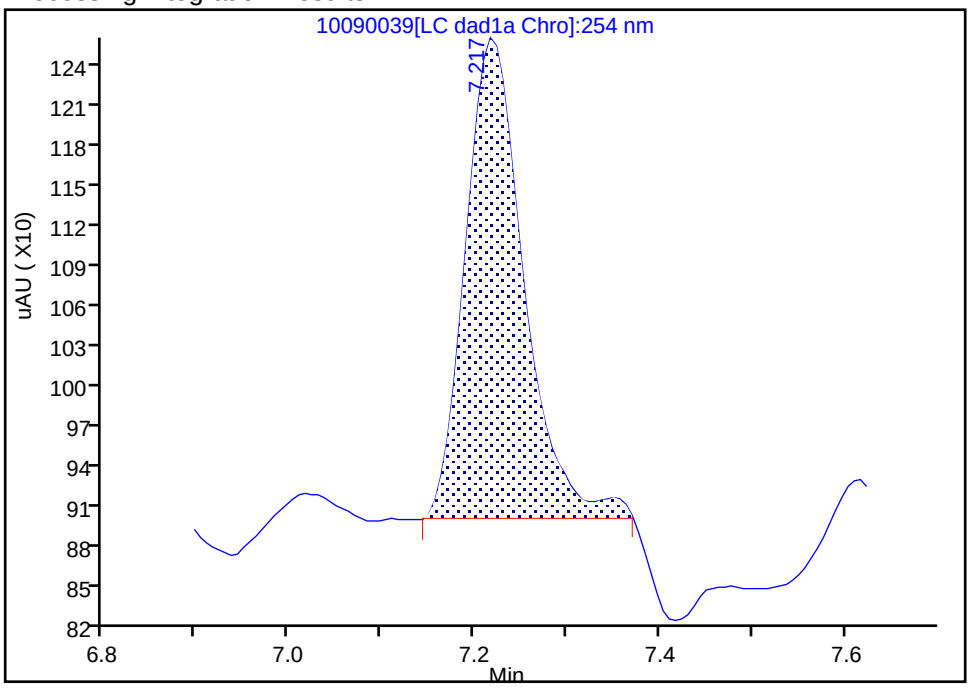
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Lims ID: MB 280-628393/1-A
Client ID:
Operator ID: JZ/JG ALS Bottle#: 39 Worklist Smp#: 39
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

7 MNX, CAS: 5755-27-1

Signal: 1

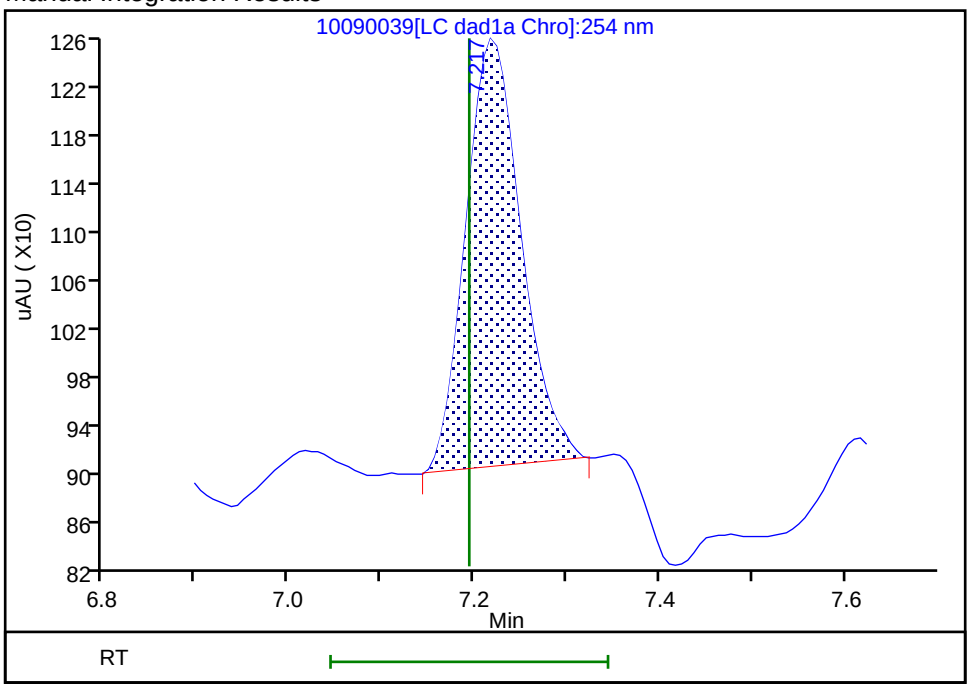
Processing Integration Results

RT: 7.22
Area: 1535
Amount: 0.011068
Amount Units: ug/mL



Manual Integration Results

RT: 7.22
Area: 1434
Amount: 0.010340
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 11:25:23 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182239-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-628393/2-A

Matrix: Water | Lab File ID: 10090040.D

Analysis Method: 8330B | Date Collected:

Extraction Method: 3535 | Date Extracted: 10/04/2023 13:30

Sample wt/vol: 500(mL) | Date Analyzed: 10/09/2023 23:01

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

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

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

Cleanup Factor:

Analysis Batch No.: 628987 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.10		0.21	0.20	0.084
99-65-0	1,3-Dinitrobenzene	1.95		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	1.87		0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	1.75		0.11	0.10	0.051
88-72-2	2-Nitrotoluene	1.59		0.21	0.20	0.086
618-87-1	3,5-Dinitroaniline	1.61		0.40	0.30	0.13
99-08-1	3-Nitrotoluene	1.55		0.40	0.35	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.39	Q	0.15	0.12	0.058
99-99-0	4-Nitrotoluene	1.53		0.41	0.40	0.10
80251-29-2	DNX	2.00	M	0.50	0.25	0.097
2691-41-0	HMX	1.74	M	0.21	0.20	0.088
5755-27-1	MNX	2.27		0.50	0.29	0.093
98-95-3	Nitrobenzene	1.72		0.21	0.20	0.091
55-63-0	Nitroglycerin	20.0		2.1	2.0	0.92
78-11-5	PETN	20.2		1.1	1.0	0.45
121-82-4	RDX	1.87		0.21	0.20	0.052
479-45-8	Tetryl	2.03		0.11	0.10	0.032
13980-04-6	TNX	1.76	M	0.50	0.25	0.079

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	96		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\10090040.D
Lims ID: LCS 280-628393/2-A
Client ID:
Sample Type: LCS
Inject. Date: 09-Oct-2023 23:01:23 ALS Bottle#: 40 Worklist Smp#: 40
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-628393/2-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 10-Oct-2023 11:59:33 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1622

First Level Reviewer: K8YG Date: 10-Oct-2023 09:41:22

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.448	6.441	0.007	35265	0.2002	0.1757	M
4 HMX	1	6.575	6.568	0.007	16387	0.2000	0.1739	M
6 DNX	1	6.782	6.768	0.014	28849	0.2008	0.1997	M
7 MNX	1	7.202	7.194	0.008	31519	0.2342	0.2273	
8 RDX	1	7.582	7.574	0.008	20616	0.2000	0.1866	
9 2,4,6-Trinitrophenol	1	7.955	7.948	0.007	17274	0.2000	0.2219	
$ 10 1,2-Dinitrobenzene	1	8.528	8.521	0.007	23831	0.2000	0.1923	
11 1,3,5-Trinitrobenzene	1	8.655	8.648	0.007	45346	0.2000	0.2099	
12 1,3-Dinitrobenzene	1	9.268	9.254	0.014	57343	0.2000	0.1955	
13 Nitrobenzene	1	9.635	9.621	0.014	33122	0.2000	0.1719	
14 3,5-Dinitroaniline	1	9.862	9.841	0.021	36158	0.2000	0.1611	
15 Tetryl	1	9.995	9.974	0.021	33982	0.2000	0.2032	
16 Nitroglycerin	2	10.442	10.421	0.021	129052	2.00	2.00	
17 2,4,6-Trinitrotoluene	1	10.882	10.861	0.021	39075	0.2000	0.1907	
18 4-Amino-2,6-dinitrotoluene	1	11.055	11.034	0.021	20732	0.2000	0.1386	
19 2-Amino-4,6-dinitrotoluene	1	11.308	11.281	0.027	33940	0.2000	0.1752	
20 2,6-Dinitrotoluene	1	11.462	11.441	0.021	26670	0.2000	0.1870	
21 2,4-Dinitrotoluene	1	11.635	11.607	0.028	56642	0.2000	0.1915	
22 o-Nitrotoluene	1	12.442	12.421	0.021	20025	0.2000	0.1588	
23 p-Nitrotoluene	1	12.855	12.827	0.028	16894	0.2000	0.1535	
24 m-Nitrotoluene	1	13.415	13.387	0.028	21569	0.2000	0.1552	
25 PETN	2	14.555	14.514	0.041	145240	2.00	2.02	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

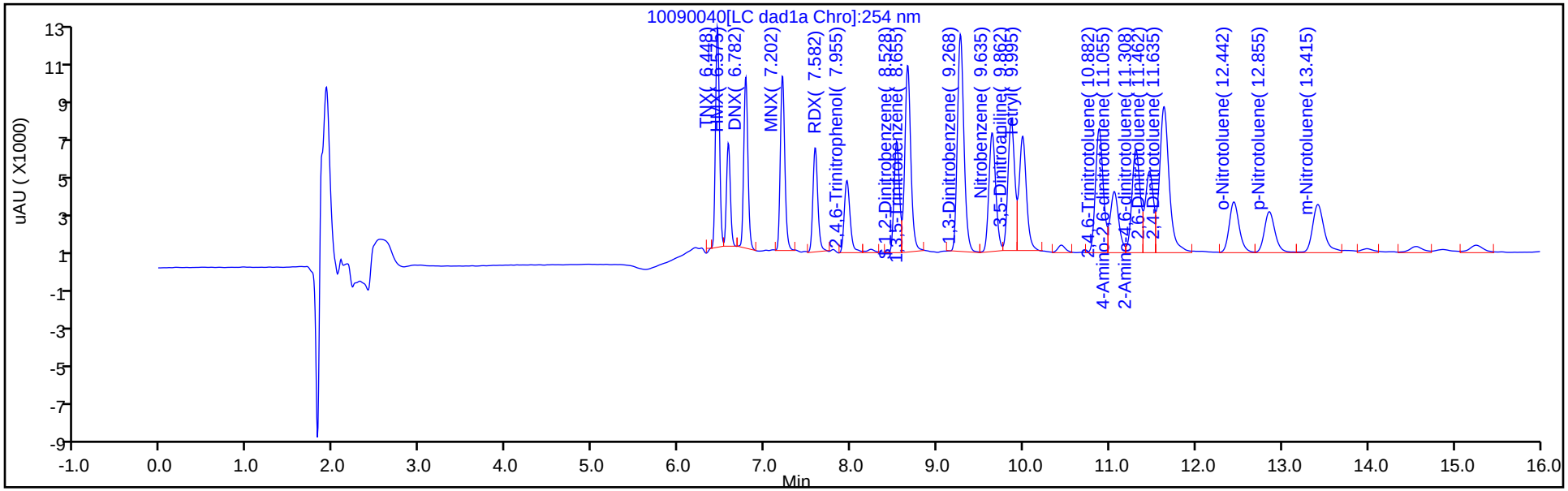
Report Date: 10-Oct-2023 11:59:35 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

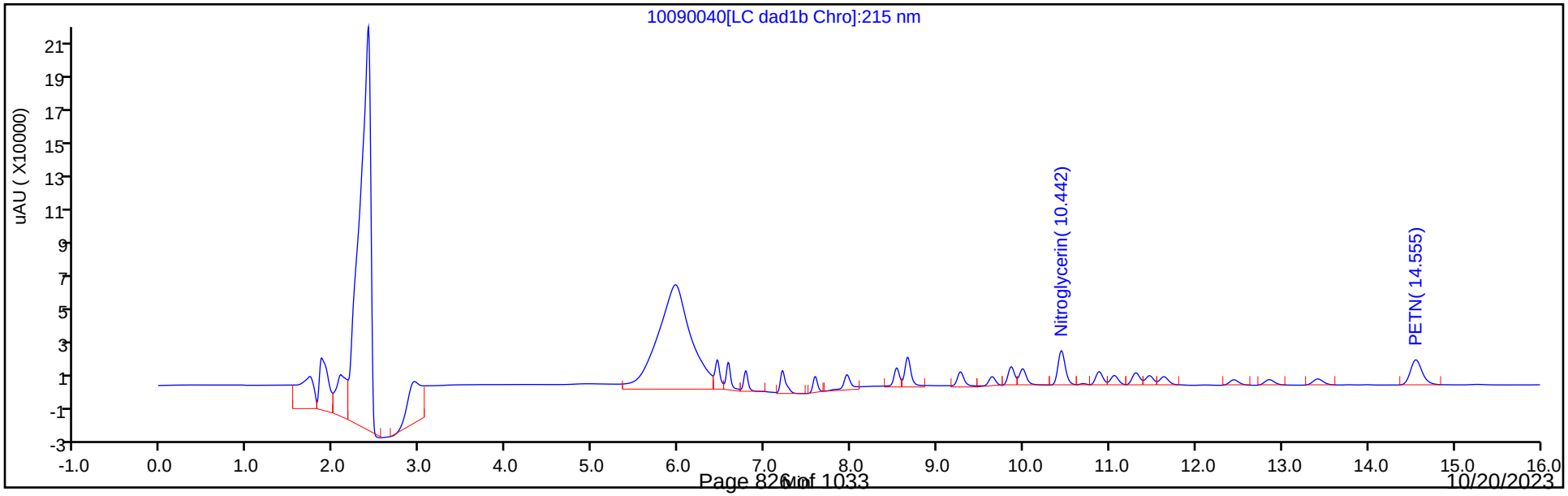
Data File: \\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090040.d

Injection Date:	09-Oct-2023 23:01:23	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	LCS 280-628393/2-A			Worklist Smp#:	40
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	40
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



10/20/2023
4:00 PM

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\10090040.D				
Lims ID:	LCS 280-628393/2-A				
Client ID:					
Sample Type:	LCS				
Inject. Date:	09-Oct-2023 23:01:23	ALS Bottle#:	40	Worklist Smp#:	40
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCS 280-628393/2-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	10-Oct-2023 11:59:33	Calib Date:	24-Jun-2023 00:23:49		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1622				

First Level Reviewer: K8YG Date: 10-Oct-2023 09:41:22

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1923	96.16

Manual Integration/User Assign Peak Report

Eurofins Denver

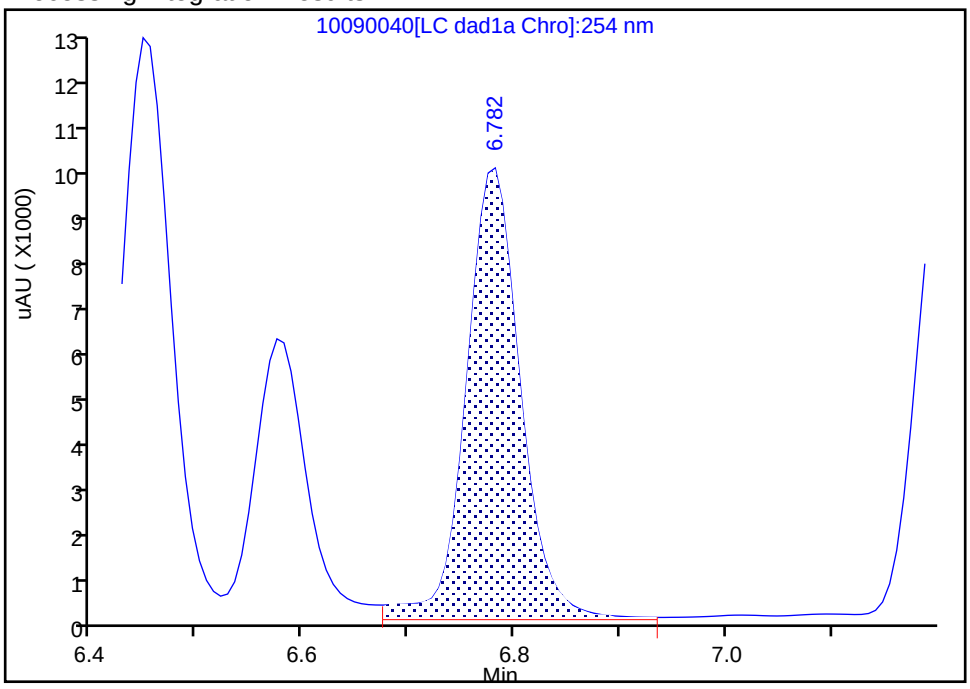
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Injection Date:	09-Oct-2023 23:01:23	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-628393/2-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	40	Worklist Smp#:	40
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

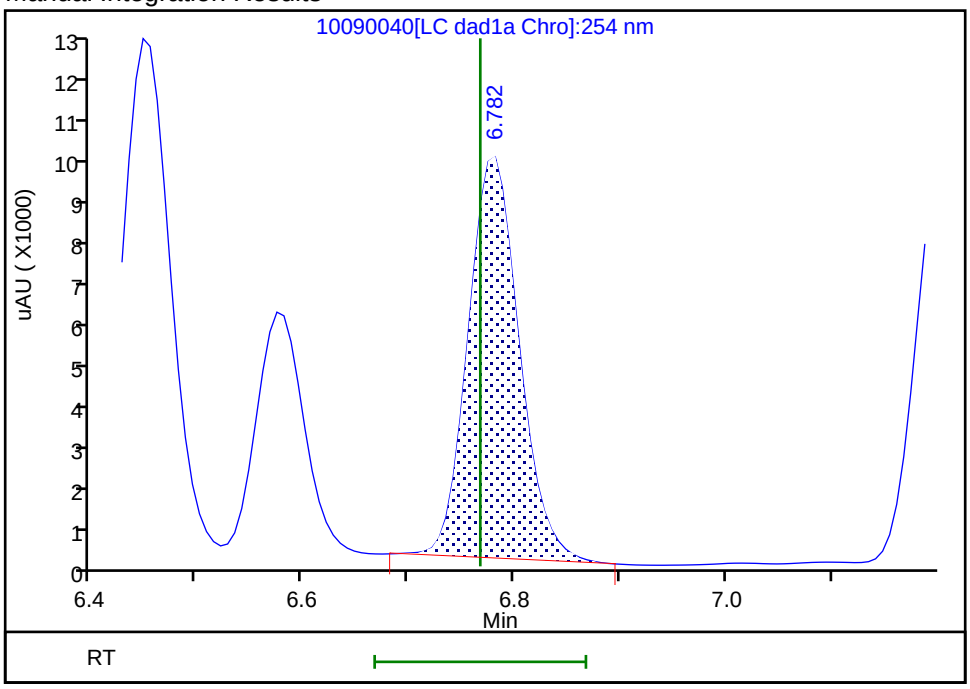
Processing Integration Results

RT: 6.78
Area: 31319
Amount: 0.216751
Amount Units: ug/mL



Manual Integration Results

RT: 6.78
Area: 28849
Amount: 0.199657
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 11:26:05 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

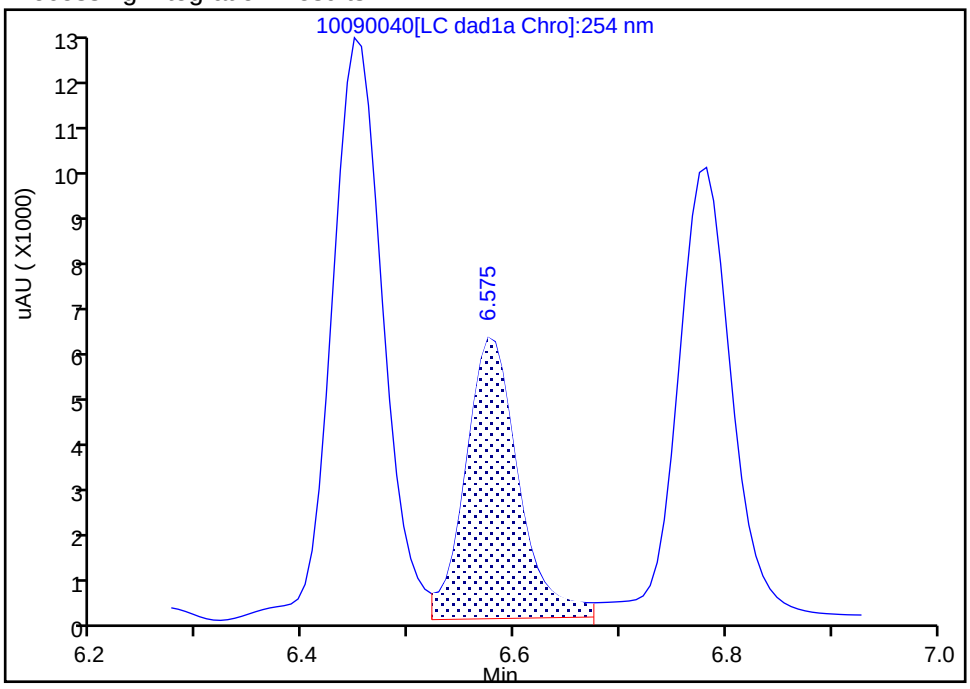
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Injection Date:	09-Oct-2023 23:01:23	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-628393/2-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	40	Worklist Smp#:	40
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

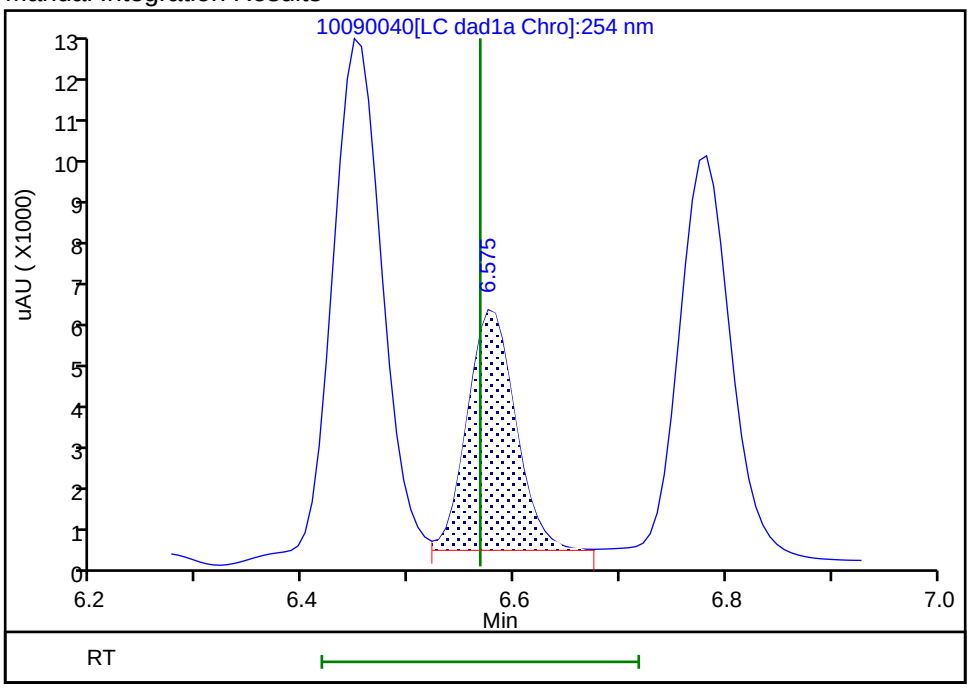
Processing Integration Results

RT: 6.58
Area: 19046
Amount: 0.202068
Amount Units: ug/mL



Manual Integration Results

RT: 6.58
Area: 16387
Amount: 0.173857
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 11:26:00 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

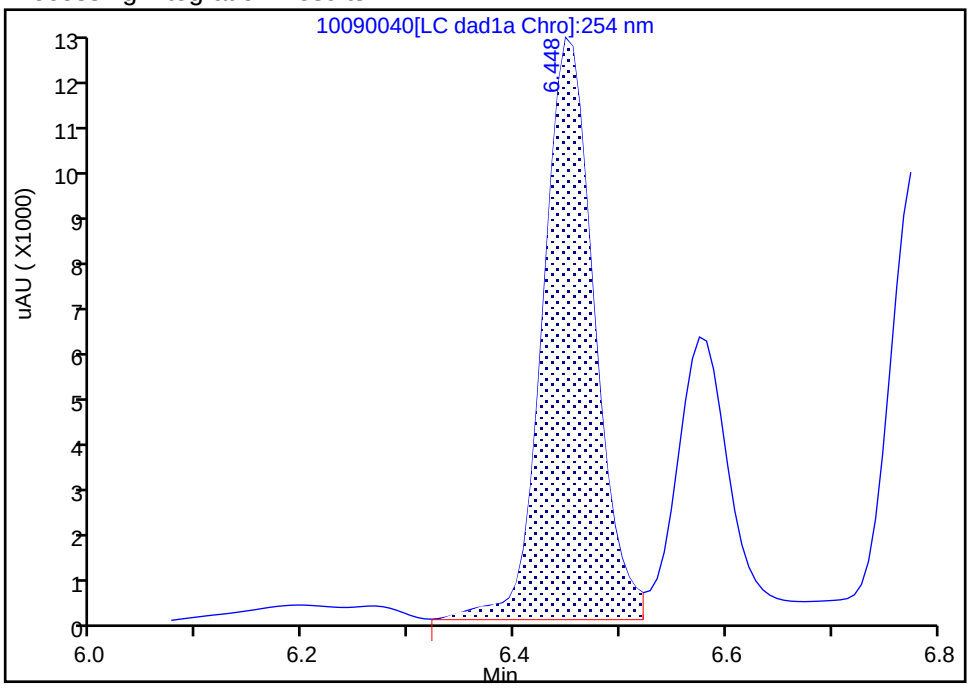
Data File:	\\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090040.d				
Injection Date:	09-Oct-2023 23:01:23	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-628393/2-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	40	Worklist Smp#:	40
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

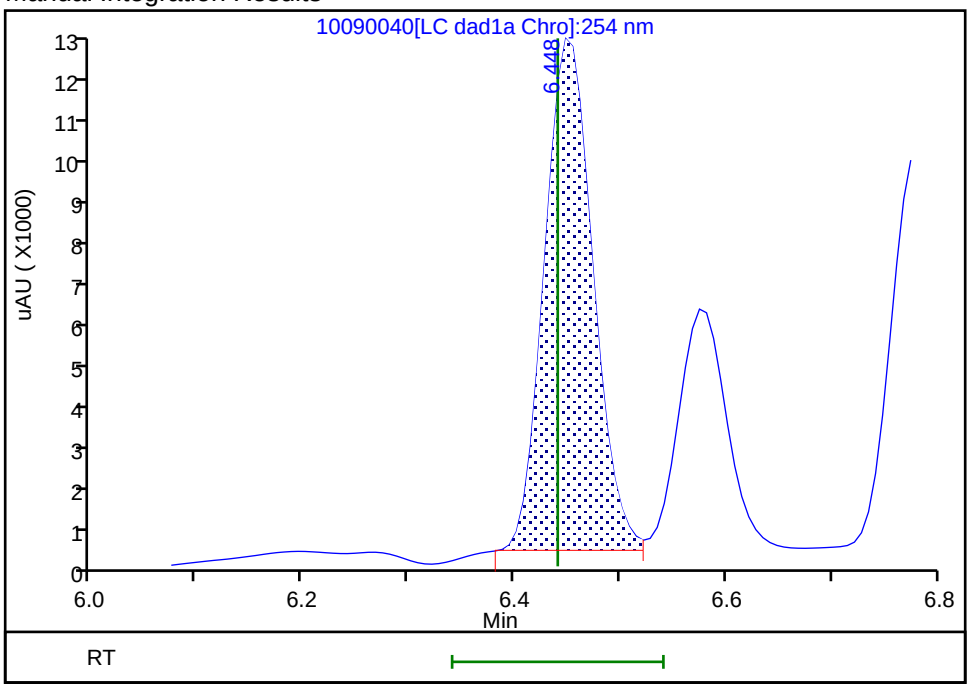
Processing Integration Results

RT: 6.45
Area: 38123
Amount: 0.189893
Amount Units: ug/mL



Manual Integration Results

RT: 6.45
Area: 35265
Amount: 0.175657
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 11:26:10 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182239-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-628393/4-A

Matrix: Water | Lab File ID: 10090042.D

Analysis Method: 8330B | Date Collected:

Extraction Method: 3535 | Date Extracted: 10/04/2023 13:30

Sample wt/vol: 500(mL) | Date Analyzed: 10/09/2023 23:47

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

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

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

Cleanup Factor:

Analysis Batch No.: 628987 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
6629-29-4	2,4-diamino-6-nitrotoluene	1.78	M	1.0	0.90	0.43
59229-75-3	2,6-diamino-4-nitrotoluene	1.86	M	1.0	0.90	0.22

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	102		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\10090042.D
Lims ID: LCS 280-628393/4-A
Client ID:
Sample Type: LCS
Inject. Date: 09-Oct-2023 23:47:16 ALS Bottle#: 42 Worklist Smp#: 42
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-628393/4-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 10-Oct-2023 15:10:49 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1653

First Level Reviewer: K8YG Date: 10-Oct-2023 09:41:26

	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	6.447	6.438	0.009	41978	0.2000	0.1861	M
	5 2,4-diamino-6-nitrotoluene	1	6.634	6.625	0.009	25540	0.2000	0.1782	M
$	10 1,2-Dinitrobenzene	1	8.534	8.521	0.013	25390	0.2000	0.2049	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

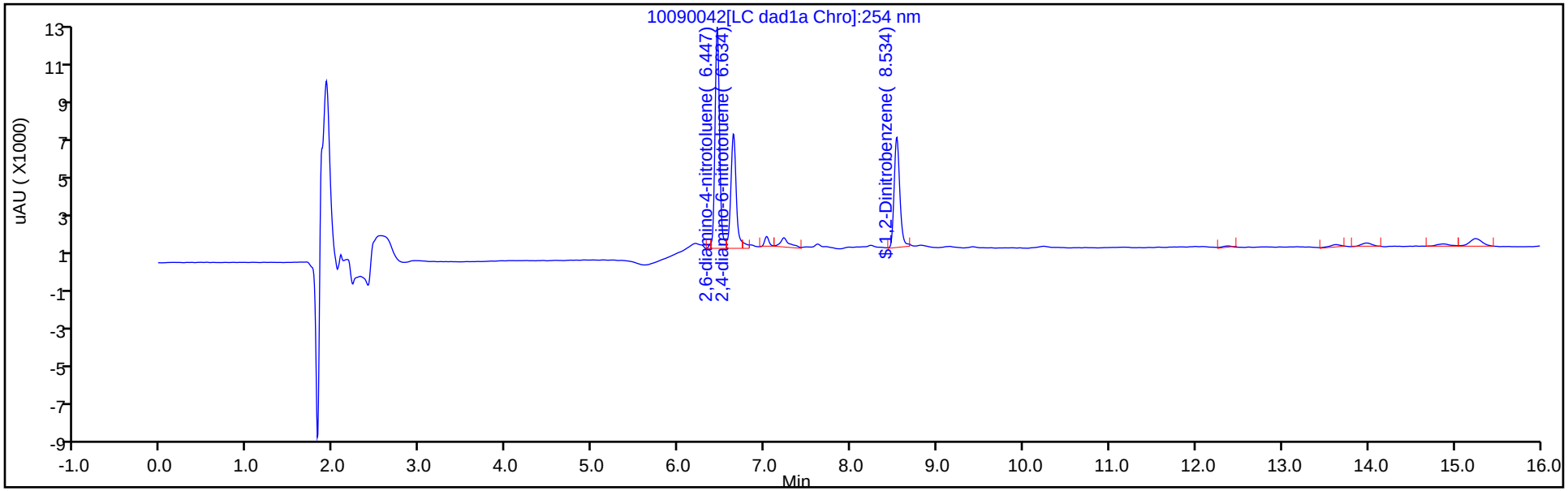
Report Date: 10-Oct-2023 15:10:49 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

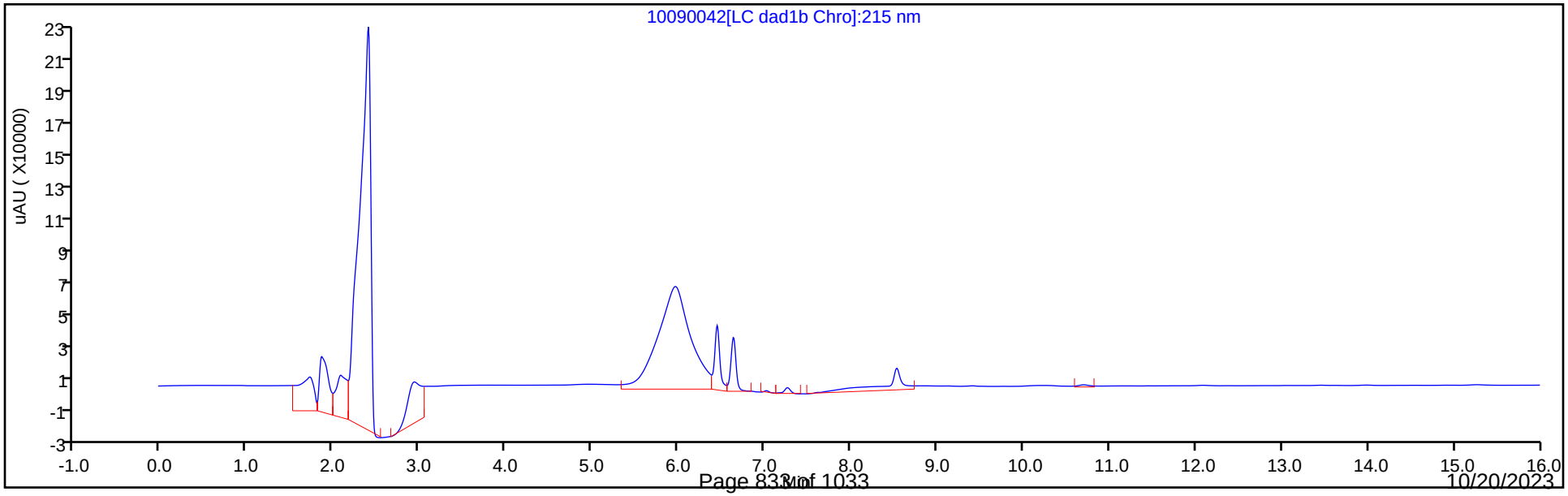
Data File: \\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090042.d

Injection Date:	09-Oct-2023 23:47:16	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	LCS 280-628393/4-A			Worklist Smp#:	42
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	42
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\10090042.D
Lims ID: LCS 280-628393/4-A
Client ID:
Sample Type: LCS
Inject. Date: 09-Oct-2023 23:47:16 ALS Bottle#: 42 Worklist Smp#: 42
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-628393/4-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 10-Oct-2023 15:10:49 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1653

First Level Reviewer: K8YG Date: 10-Oct-2023 09:41:26

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2049	102.45

Manual Integration/User Assign Peak Report

Eurofins Denver

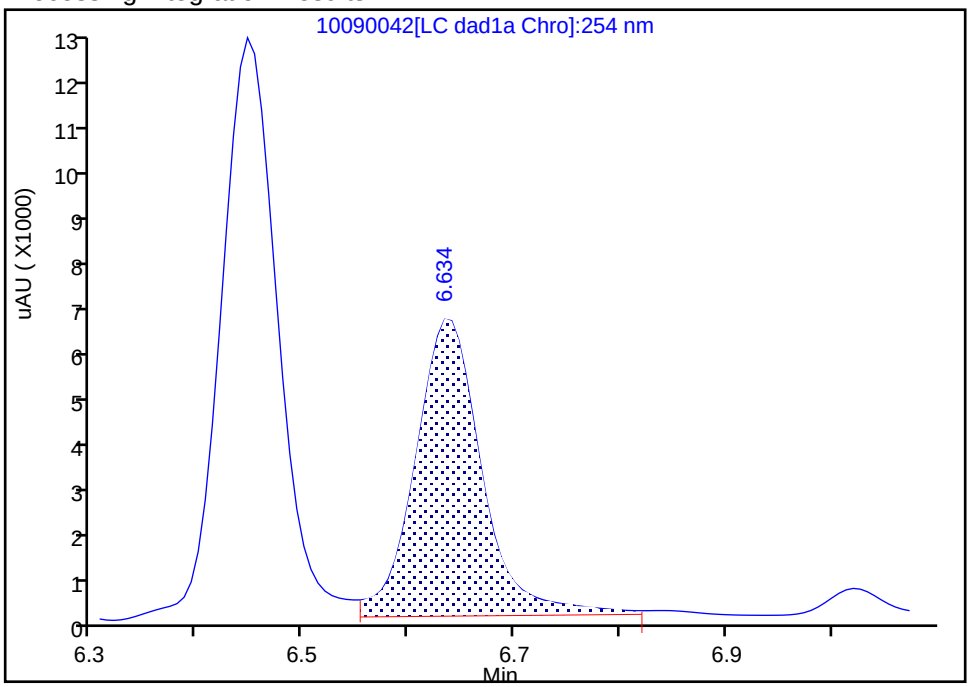
Data File: \\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090042.d
Injection Date: 09-Oct-2023 23:47:16 Instrument ID: CHHPLC_X3
Lims ID: LCS 280-628393/4-A
Client ID:
Operator ID: JZ/JG ALS Bottle#: 42 Worklist Smp#: 42
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

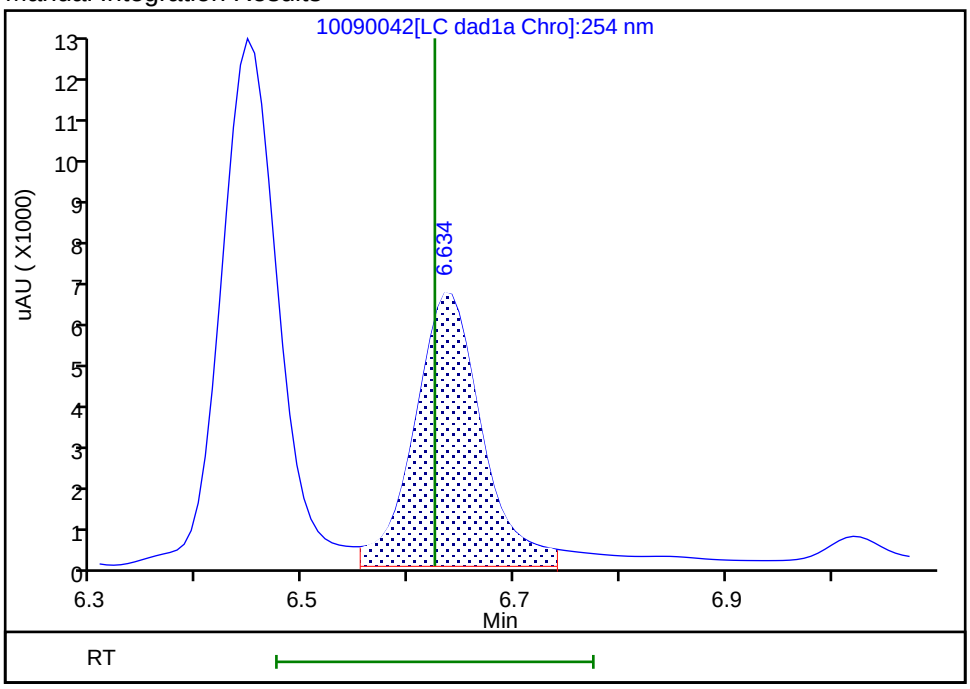
Processing Integration Results

RT: 6.63
Area: 25255
Amount: 0.176206
Amount Units: ug/mL



Manual Integration Results

RT: 6.63
Area: 25540
Amount: 0.178195
Amount Units: ug/mL



Reviewer: LV5D, 10-Oct-2023 15:10:47 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

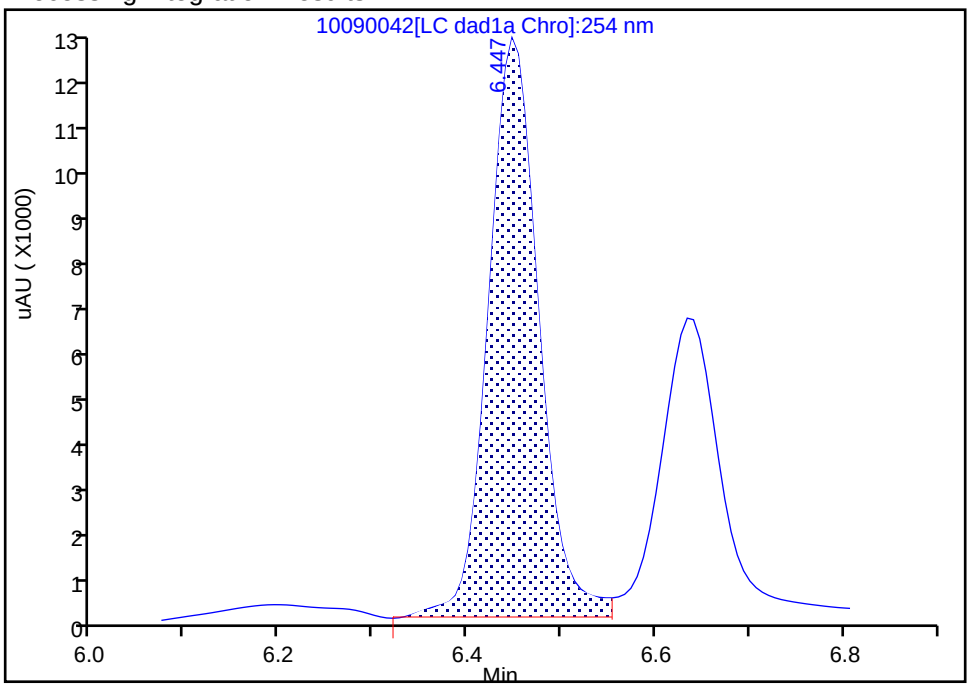
Data File: \\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090042.d
Injection Date: 09-Oct-2023 23:47:16 Instrument ID: CHHPLC_X3
Lims ID: LCS 280-628393/4-A
Client ID:
Operator ID: JZ/JG ALS Bottle#: 42 Worklist Smp#: 42
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

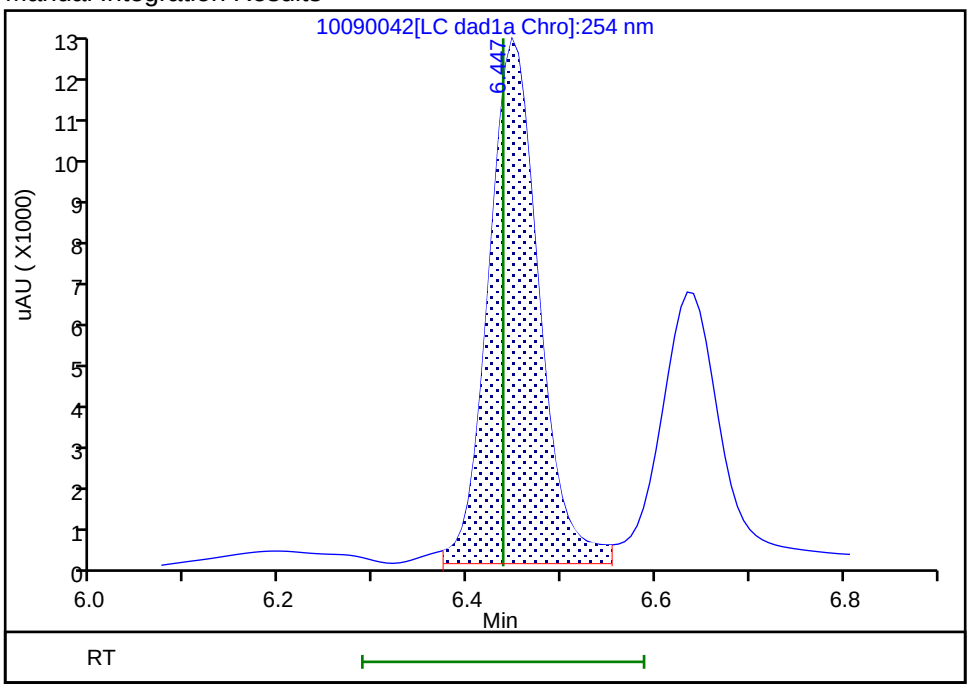
Processing Integration Results

RT: 6.45
Area: 42055
Amount: 0.186443
Amount Units: ug/mL



Manual Integration Results

RT: 6.45
Area: 41978
Amount: 0.186101
Amount Units: ug/mL



Reviewer: LV5D, 10-Oct-2023 15:10:47 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182239-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 280-628393/3-A

Matrix: Water | Lab File ID: 10090041.D

Analysis Method: 8330B | Date Collected:

Extraction Method: 3535 | Date Extracted: 10/04/2023 13:30

Sample wt/vol: 500(mL) | Date Analyzed: 10/09/2023 23:24

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

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

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

Cleanup Factor:

Analysis Batch No.: 628987 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.14		0.21	0.20	0.084
99-65-0	1,3-Dinitrobenzene	2.03		0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	1.96		0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	1.97		0.10	0.080	0.027
606-20-2	2,6-Dinitrotoluene	1.96		0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	1.87		0.11	0.10	0.051
88-72-2	2-Nitrotoluene	1.65		0.21	0.20	0.086
618-87-1	3,5-Dinitroaniline	1.75		0.40	0.30	0.13
99-08-1	3-Nitrotoluene	1.67		0.40	0.35	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.61		0.15	0.12	0.058
99-99-0	4-Nitrotoluene	1.62		0.41	0.40	0.10
80251-29-2	DNX	1.99	M	0.50	0.25	0.097
2691-41-0	HMX	1.78	M	0.21	0.20	0.088
5755-27-1	MNX	2.30		0.50	0.29	0.093
98-95-3	Nitrobenzene	1.77		0.21	0.20	0.091
55-63-0	Nitroglycerin	20.4		2.1	2.0	0.92
78-11-5	PETN	20.7		1.1	1.0	0.45
121-82-4	RDX	1.99		0.21	0.20	0.052
479-45-8	Tetryl	2.02		0.11	0.10	0.032
13980-04-6	TNX	1.72	M	0.50	0.25	0.079

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

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\10090041.D
Lims ID: LCSD 280-628393/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 09-Oct-2023 23:24:20 ALS Bottle#: 41 Worklist Smp#: 41
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 280-628393/3-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 10-Oct-2023 11:59:33 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1622

First Level Reviewer: K8YG Date: 10-Oct-2023 11:27:11

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.451	6.441	0.010	34447	0.2002	0.1716	M
4 HMX	1	6.578	6.568	0.010	16750	0.2000	0.1777	M
6 DNX	1	6.784	6.768	0.016	28703	0.2008	0.1986	M
7 MNX	1	7.211	7.194	0.017	31912	0.2342	0.2301	
8 RDX	1	7.591	7.574	0.017	21991	0.2000	0.1990	
9 2,4,6-Trinitrophenol	1	7.958	7.948	0.010	16869	0.2000	0.2166	
$ 10 1,2-Dinitrobenzene	1	8.538	8.521	0.017	24191	0.2000	0.1952	
11 1,3,5-Trinitrobenzene	1	8.664	8.648	0.016	46303	0.2000	0.2143	
12 1,3-Dinitrobenzene	1	9.278	9.254	0.024	59413	0.2000	0.2025	
13 Nitrobenzene	1	9.644	9.621	0.023	34082	0.2000	0.1769	
14 3,5-Dinitroaniline	1	9.864	9.841	0.023	39299	0.2000	0.1751	
15 Tetryl	1	9.998	9.974	0.024	33866	0.2000	0.2025	
16 Nitroglycerin	2	10.444	10.421	0.023	131714	2.00	2.04	
17 2,4,6-Trinitrotoluene	1	10.884	10.861	0.023	40146	0.2000	0.1959	
18 4-Amino-2,6-dinitrotoluene	1	11.064	11.034	0.030	24048	0.2000	0.1608	
19 2-Amino-4,6-dinitrotoluene	1	11.311	11.281	0.030	36132	0.2000	0.1865	
20 2,6-Dinitrotoluene	1	11.471	11.441	0.030	27916	0.2000	0.1957	
21 2,4-Dinitrotoluene	1	11.638	11.607	0.031	58232	0.2000	0.1969	
22 o-Nitrotoluene	1	12.451	12.421	0.030	20837	0.2000	0.1652	
23 p-Nitrotoluene	1	12.864	12.827	0.037	17860	0.2000	0.1622	
24 m-Nitrotoluene	1	13.424	13.387	0.037	23194	0.2000	0.1672	
25 PETN	2	14.564	14.514	0.050	149258	2.00	2.07	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

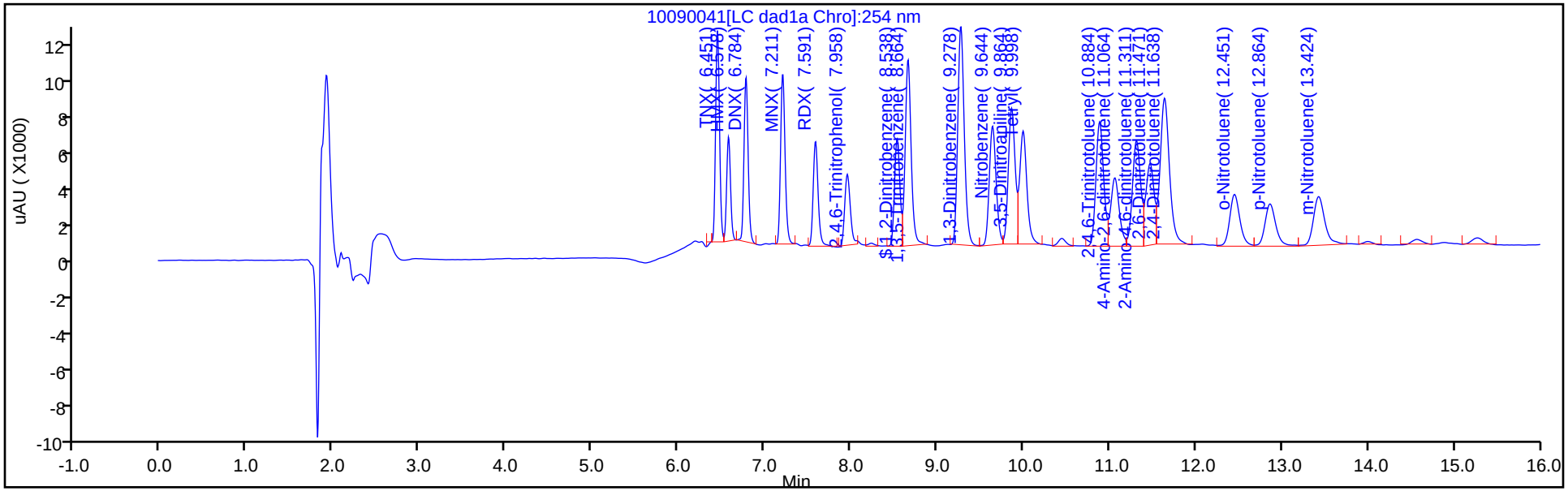
Report Date: 10-Oct-2023 11:59:35 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

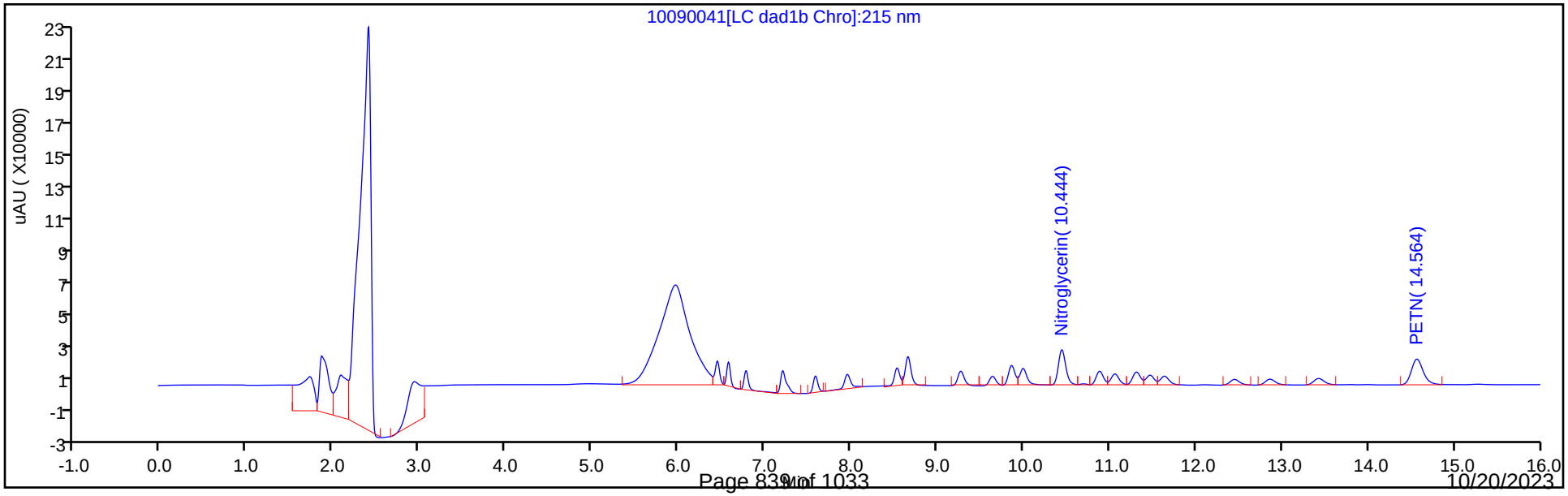
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Injection Date:	09-Oct-2023 23:24:20	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	LCSD 280-628393/3-A			Worklist Smp#:	41
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	41
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



10/20/2023
4:00 PM

Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\10090041.D
Lims ID: LCSD 280-628393/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 09-Oct-2023 23:24:20 ALS Bottle#: 41 Worklist Smp#: 41
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 280-628393/3-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 10-Oct-2023 11:59:33 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1622

First Level Reviewer: K8YG Date: 10-Oct-2023 11:27:11

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1952	97.61

Manual Integration/User Assign Peak Report

Eurofins Denver

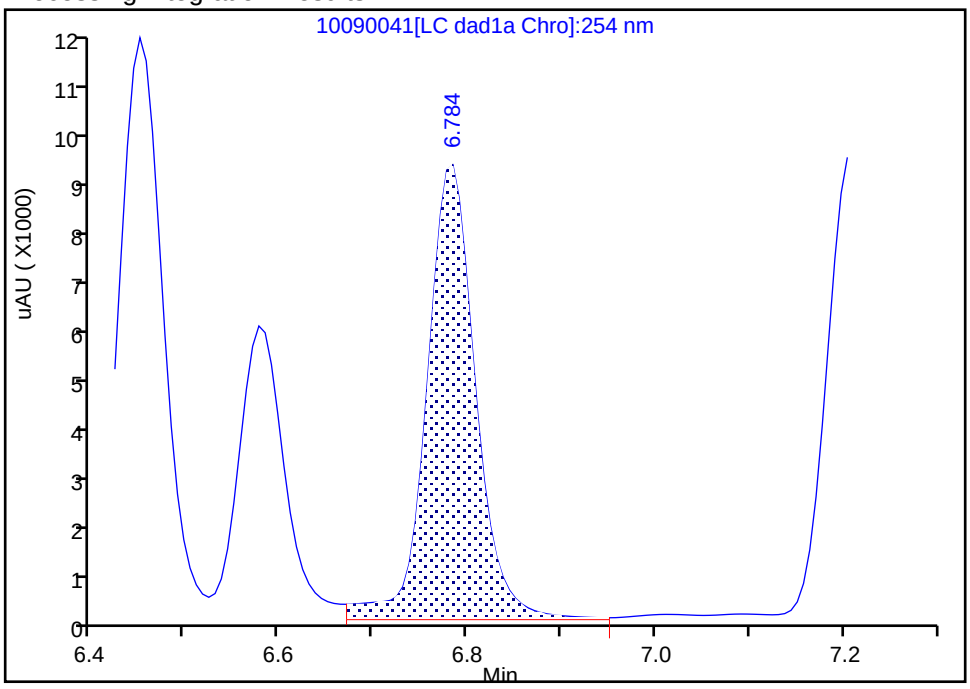
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Injection Date:	09-Oct-2023 23:24:20	Instrument ID:	CHHPLC_X3		
Lims ID:	LCSD 280-628393/3-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	41	Worklist Smp#:	41
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

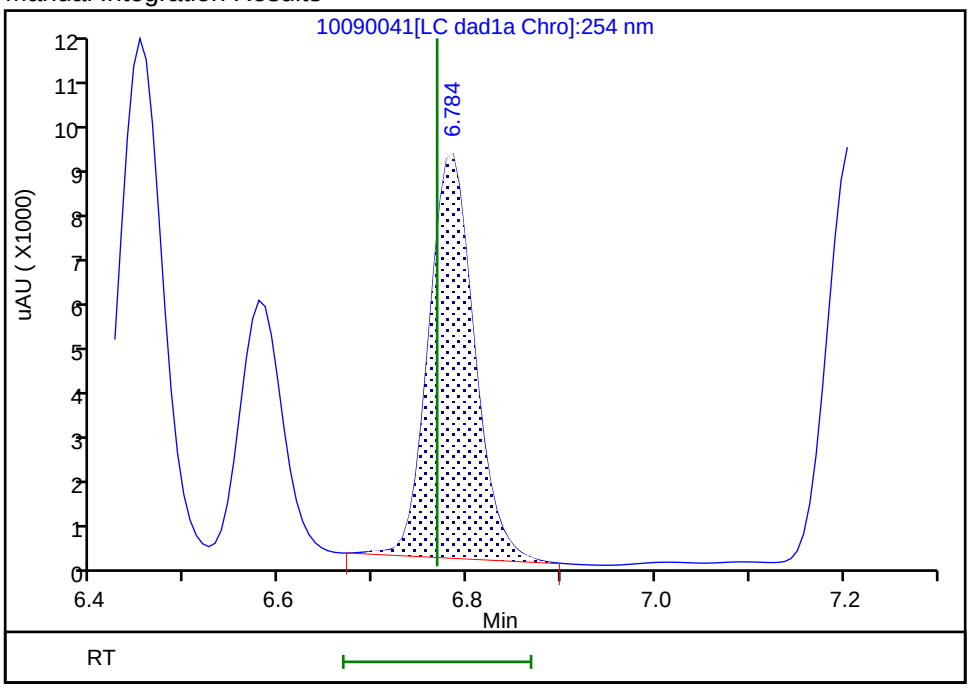
Processing Integration Results

RT: 6.78
Area: 31370
Amount: 0.217104
Amount Units: ug/mL



Manual Integration Results

RT: 6.78
Area: 28703
Amount: 0.198647
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 11:26:33 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

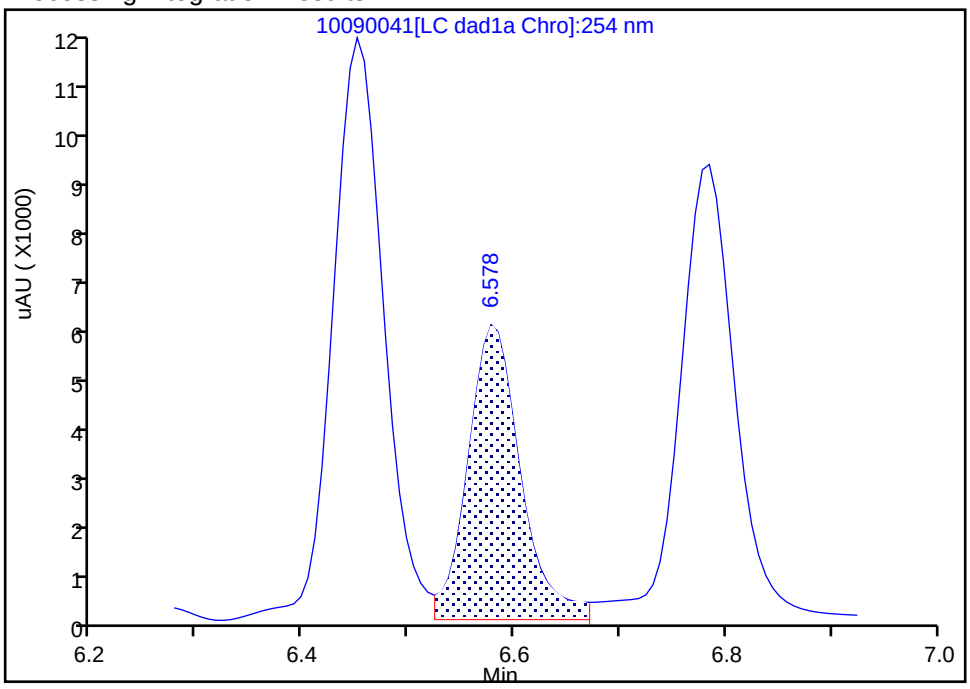
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Injection Date:	09-Oct-2023 23:24:20	Instrument ID:	CHHPLC_X3		
Lims ID:	LCSD 280-628393/3-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	41	Worklist Smp#:	41
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

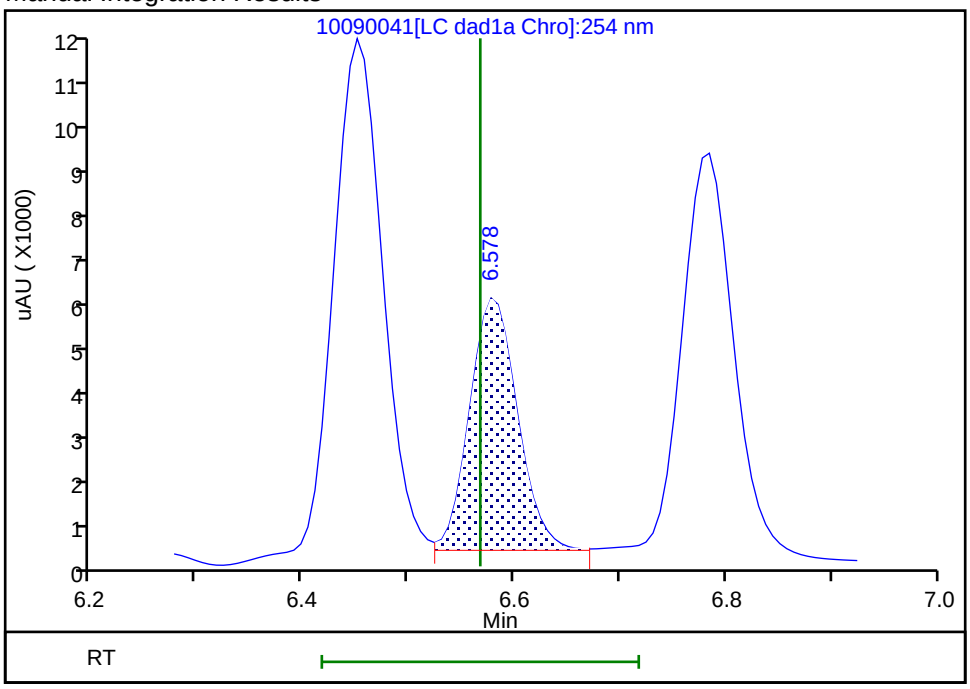
Processing Integration Results

RT: 6.58
Area: 19359
Amount: 0.205389
Amount Units: ug/mL



Manual Integration Results

RT: 6.58
Area: 16750
Amount: 0.177709
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 11:26:24 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

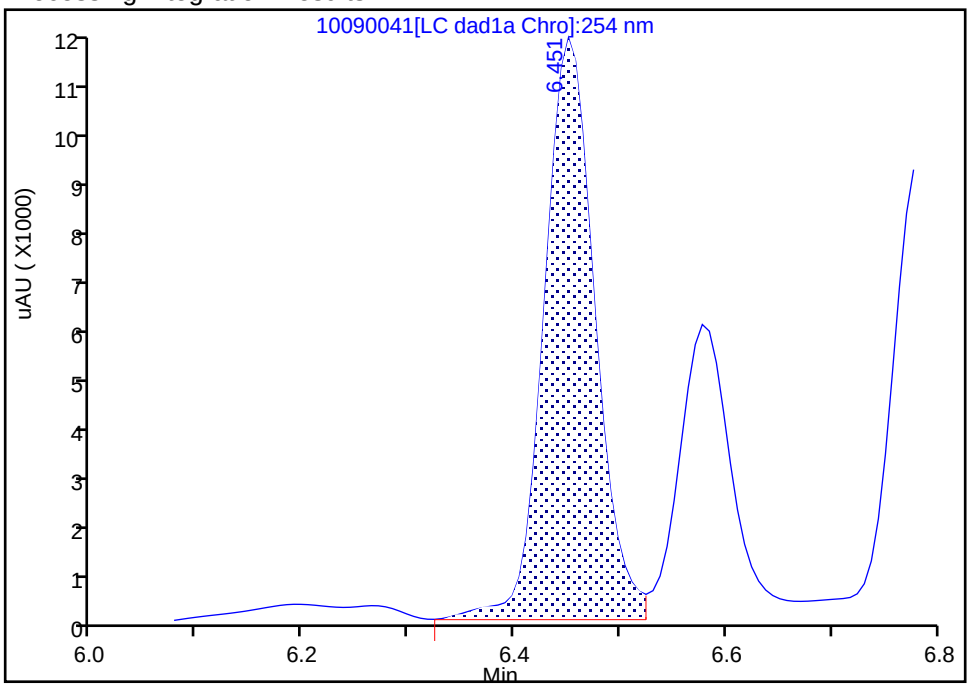
Data File:	\\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090041.d				
Injection Date:	09-Oct-2023 23:24:20	Instrument ID:	CHHPLC_X3		
Lims ID:	LCSD 280-628393/3-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	41	Worklist Smp#:	41
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

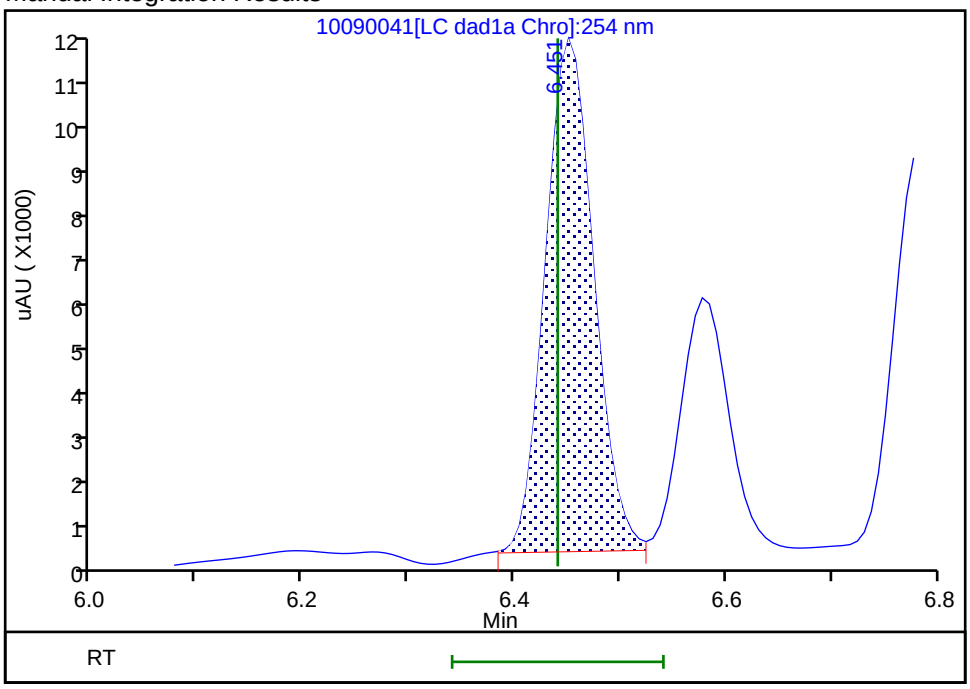
Processing Integration Results

RT: 6.45
Area: 37253
Amount: 0.185559
Amount Units: ug/mL



Manual Integration Results

RT: 6.45
Area: 34447
Amount: 0.171582
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 11:26:28 -06:00:00 (UTC)
Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182239-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 280-628393/5-A

Matrix: Water | Lab File ID: 10090043.D

Analysis Method: 8330B | Date Collected:

Extraction Method: 3535 | Date Extracted: 10/04/2023 13:30

Sample wt/vol: 500(mL) | Date Analyzed: 10/10/2023 00:10

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

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

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

Cleanup Factor:

Analysis Batch No.: 628987 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
6629-29-4	2,4-diamino-6-nitrotoluene	1.48	M	1.0	0.90	0.43
59229-75-3	2,6-diamino-4-nitrotoluene	1.62	M	1.0	0.90	0.22

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

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\10090043.D
Lims ID: LCSD 280-628393/5-A
Client ID:
Sample Type: LCSD
Inject. Date: 10-Oct-2023 00:10:12 ALS Bottle#: 43 Worklist Smp#: 43
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 280-628393/5-A
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 10-Oct-2023 15:11:01 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1653

First Level Reviewer: K8YG Date: 10-Oct-2023 11:27:58

	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	6.445	6.438	0.007	36546	0.2000	0.1620	M
	5 2,4-diamino-6-nitrotoluene	1	6.639	6.625	0.014	21157	0.2000	0.1476	M
$	10 1,2-Dinitrobenzene	1	8.532	8.521	0.011	24348	0.2000	0.1965	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

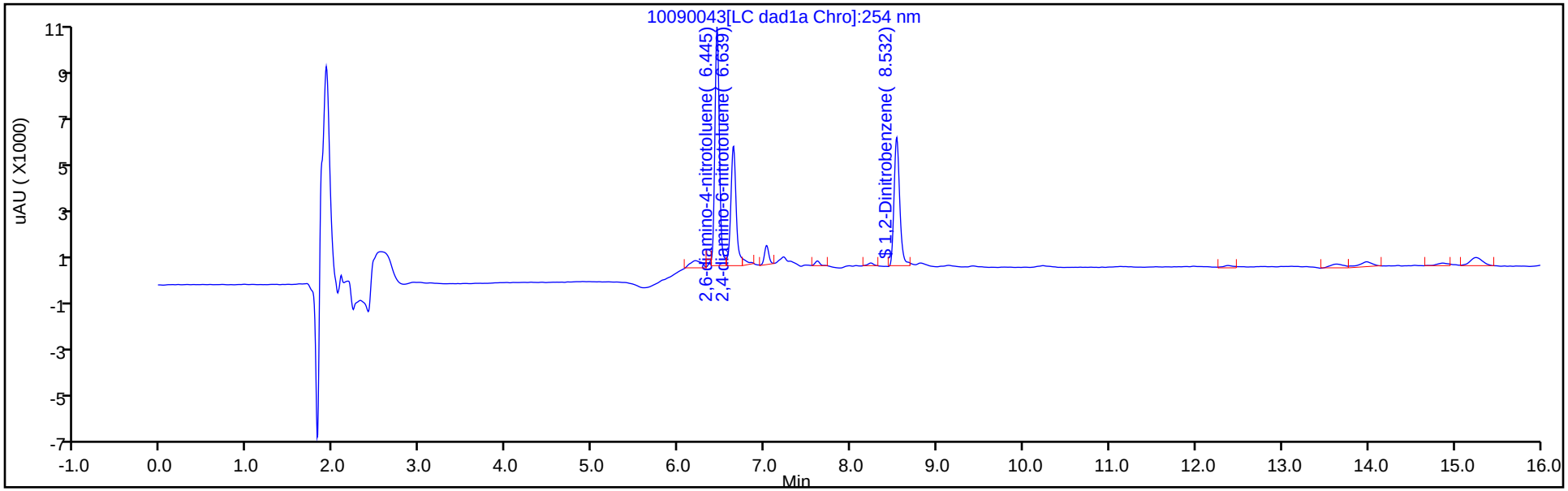
Report Date: 10-Oct-2023 15:11:01 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

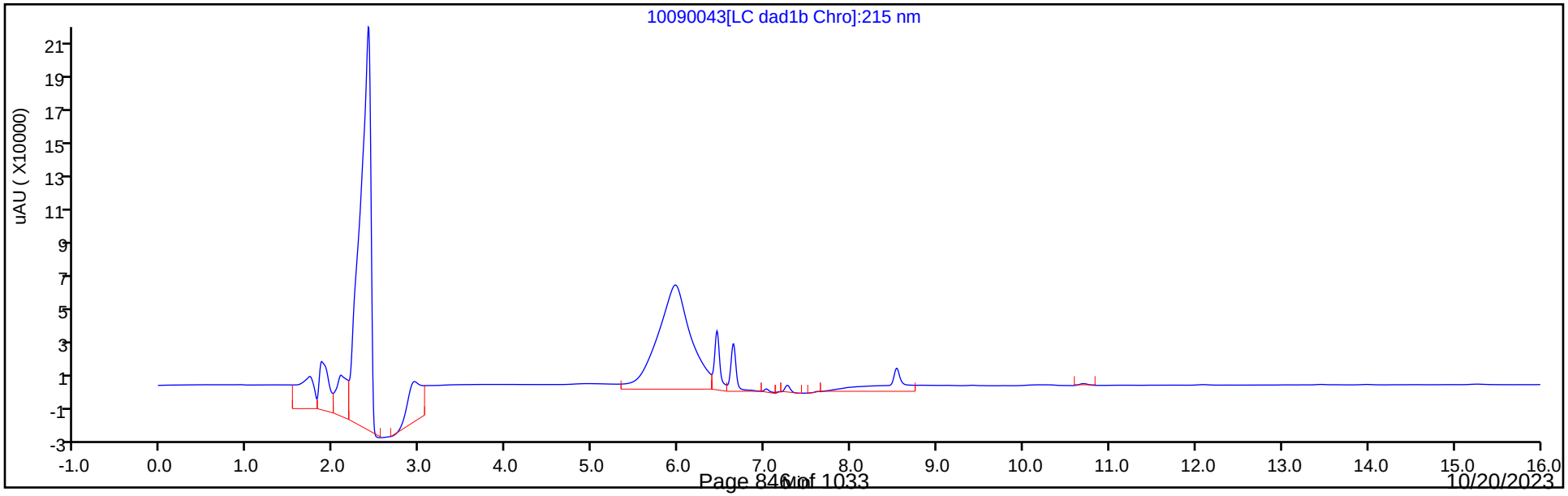
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Injection Date:	10-Oct-2023 00:10:12	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	LCSD 280-628393/5-A			Worklist Smp#:	43
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	43
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\10090043.D				
Lims ID:	LCSD 280-628393/5-A				
Client ID:					
Sample Type:	LCSD				
Inject. Date:	10-Oct-2023 00:10:12	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCSD 280-628393/5-A				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	10-Oct-2023 15:11:01	Calib Date:	24-Jun-2023 00:23:49		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1653				

First Level Reviewer: K8YG Date: 10-Oct-2023 11:27:58

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1965	98.25

Manual Integration/User Assign Peak Report

Eurofins Denver

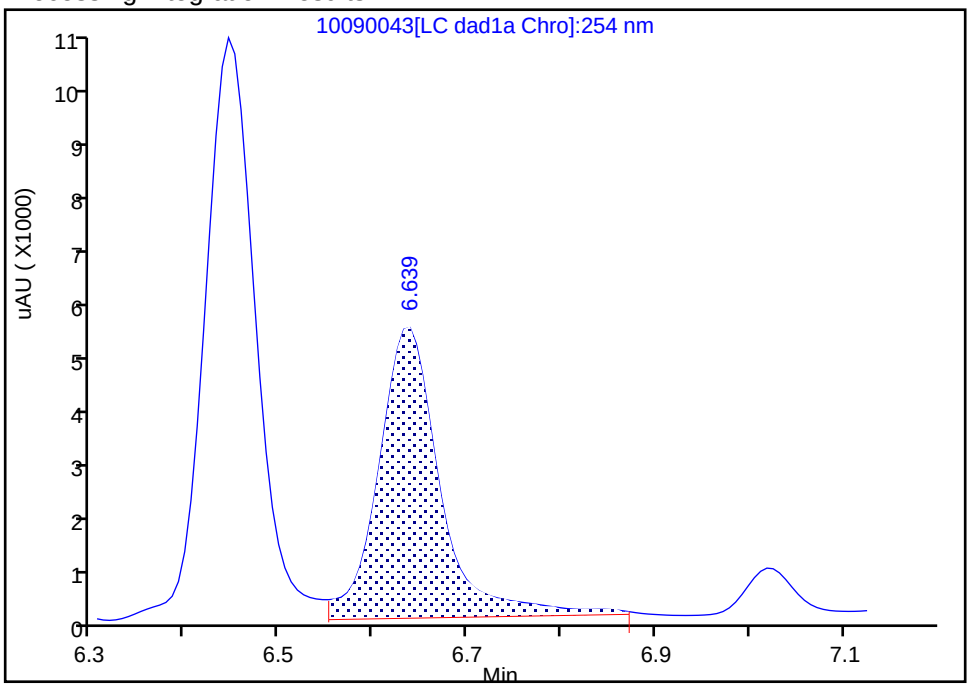
Data File: \\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090043.d
Injection Date: 10-Oct-2023 00:10:12 Instrument ID: CHHPLC_X3
Lims ID: LCSD 280-628393/5-A
Client ID:
Operator ID: JZ/JG ALS Bottle#: 43 Worklist Smp#: 43
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

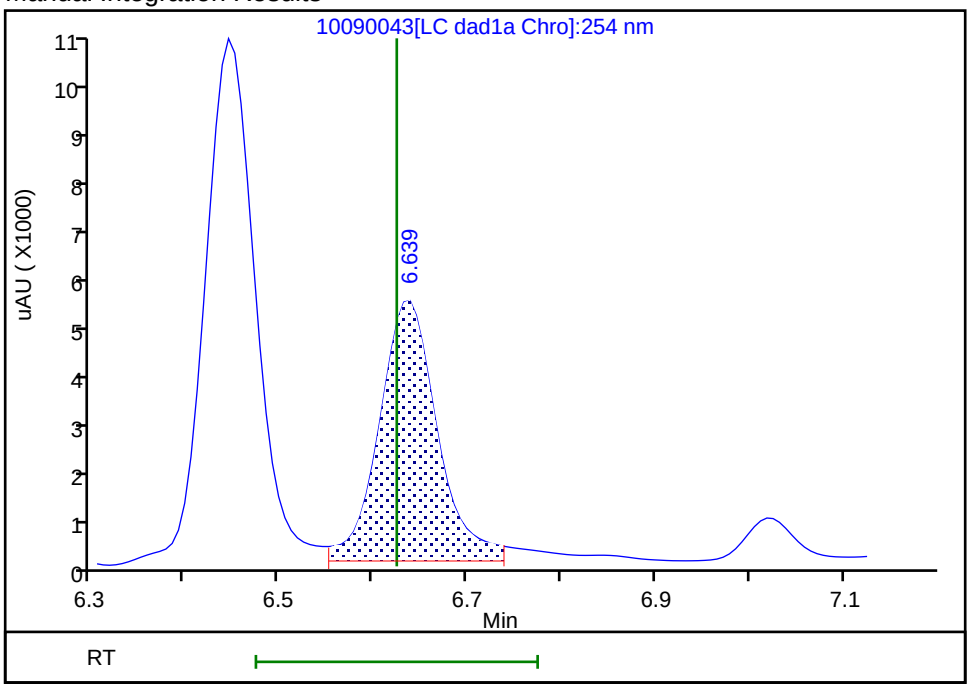
Processing Integration Results

RT: 6.64
Area: 22645
Amount: 0.157996
Amount Units: ug/mL



Manual Integration Results

RT: 6.64
Area: 21157
Amount: 0.147614
Amount Units: ug/mL



Reviewer: LV5D, 10-Oct-2023 15:10:56 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

Eurofins Denver

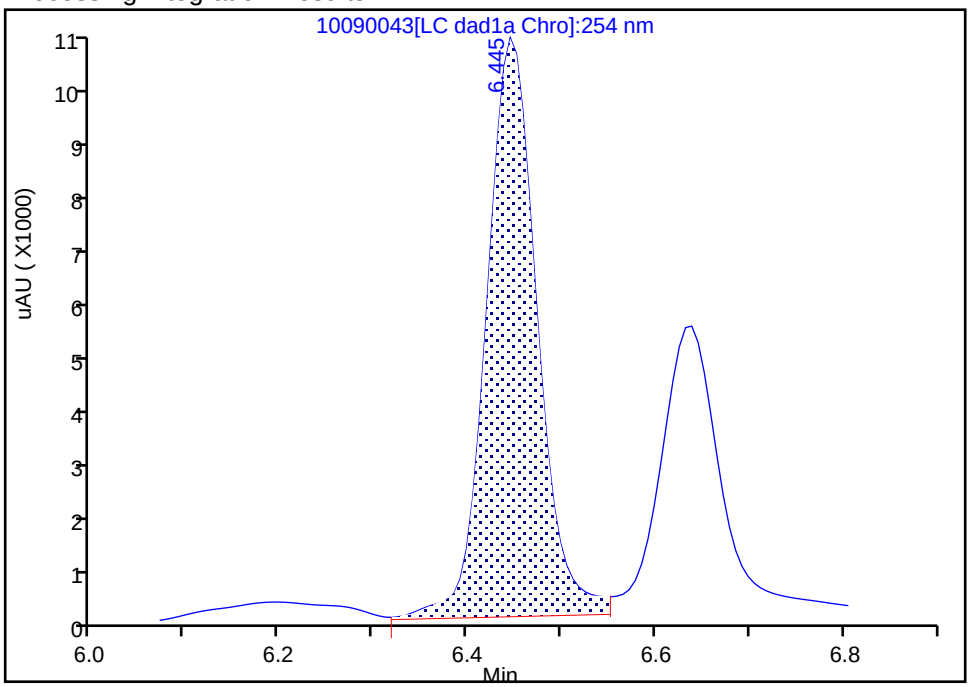
Data File:	\\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090043.d				
Injection Date:	10-Oct-2023 00:10:12	Instrument ID:	CHHPLC_X3		
Lims ID:	LCSD 280-628393/5-A				
Client ID:					
Operator ID:	JZ/JG	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

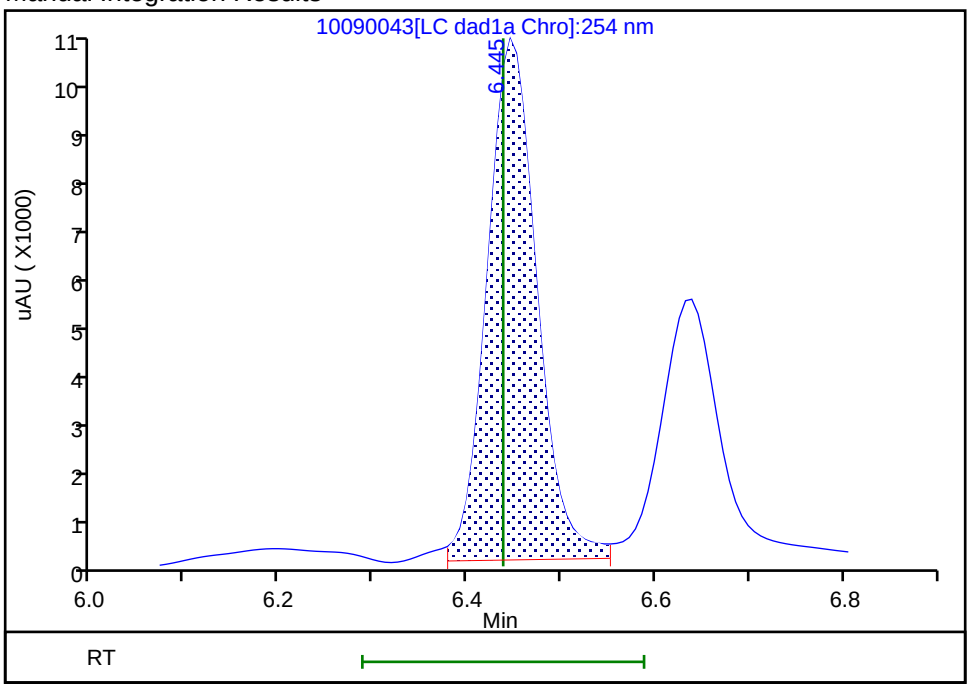
Processing Integration Results

RT: 6.45
Area: 37669
Amount: 0.166998
Amount Units: ug/mL



Manual Integration Results

RT: 6.45
Area: 36546
Amount: 0.162020
Amount Units: ug/mL



Reviewer: LV5D, 10-Oct-2023 15:10:56 -06:00:00 (UTC)
Audit Action: Assigned New Baseline Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182239-1

SDG No.:

Client Sample ID: LL3mw-241-230901-GW MS | Lab Sample ID: 280-182239-4 MS

Matrix: Water | Lab File ID: 10090048.D

Analysis Method: 8330B | Date Collected: 10/02/2023 10:37

Extraction Method: 3535 | Date Extracted: 10/04/2023 13:30

Sample wt/vol: 491.8(mL) | Date Analyzed: 10/10/2023 02:04

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

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

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

Cleanup Factor:

Analysis Batch No.: 628987 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	3.64		0.21	0.20	0.086
99-65-0	1,3-Dinitrobenzene	2.23	M	0.11	0.10	0.038
118-96-7	2,4,6-Trinitrotoluene	2.84		0.11	0.10	0.046
121-14-2	2,4-Dinitrotoluene	2.08		0.10	0.081	0.028
606-20-2	2,6-Dinitrotoluene	2.10		0.10	0.081	0.041
88-72-2	2-Nitrotoluene	1.77		0.21	0.20	0.087
618-87-1	3,5-Dinitroaniline	2.20		0.41	0.31	0.13
99-08-1	3-Nitrotoluene	1.52		0.41	0.36	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	2.87		0.15	0.12	0.059
99-99-0	4-Nitrotoluene	1.67		0.42	0.41	0.10
80251-29-2	DNX	1.88	M	0.51	0.25	0.099
2691-41-0	HMX	1.80	M	0.21	0.20	0.089
5755-27-1	MNX	2.33	M	0.51	0.29	0.094
98-95-3	Nitrobenzene	1.80		0.21	0.20	0.093
55-63-0	Nitroglycerin	19.7		2.1	2.0	0.94
78-11-5	PETN	21.0		1.1	1.0	0.45
121-82-4	RDX	2.41	M	0.21	0.20	0.052
479-45-8	Tetryl	2.36		0.11	0.10	0.032
13980-04-6	TNX	1.75	M	0.51	0.25	0.081

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

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\10090048.D
Lims ID: 280-182239-D-4-A MS
Client ID: LL3mw-241-230901-GW
Sample Type: MS
Inject. Date: 10-Oct-2023 02:04:59 ALS Bottle#: 48 Worklist Smp#: 48
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-182239-D-4-A MS
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 10-Oct-2023 12:44:19 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1622

First Level Reviewer: K8YG Date: 10-Oct-2023 09:26:58

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
$ 10 1,2-Dinitrobenzene	1	8.526	8.521	0.005	22938	0.2000	0.1851	
3 TNX	1	6.453	6.441	0.012	34474	0.2002	0.1717	M
4 HMX	1	6.573	6.568	0.005	16680	0.2000	0.1770	M
6 DNX	1	6.780	6.768	0.012	26694	0.2008	0.1847	M
7 MNX	1	7.200	7.194	0.006	31844	0.2342	0.2296	M
8 RDX	1	7.586	7.574	0.012	26160	0.2000	0.2368	M
9 2,4,6-Trinitrophenol	1	7.946	7.948	-0.002	18483	0.2000	0.2374	
11 1,3,5-Trinitrobenzene	1	8.653	8.648	0.005	77396	0.2000	0.3582	
12 1,3-Dinitrobenzene	1	9.266	9.254	0.012	64480	0.2000	0.2198	M
13 Nitrobenzene	1	9.633	9.621	0.012	34079	0.2000	0.1769	
14 3,5-Dinitroaniline	1	9.860	9.841	0.019	48524	0.2000	0.2161	
15 Tetryl	1	9.993	9.974	0.019	38810	0.2000	0.2320	
16 Nitroglycerin	2	10.440	10.421	0.019	125162	2.00	1.94	
17 2,4,6-Trinitrotoluene	1	10.880	10.861	0.019	57202	0.2000	0.2792	
18 4-Amino-2,6-dinitrotoluene	1	11.060	11.034	0.026	42177	0.2000	0.2820	
19 2-Amino-4,6-dinitrotoluene	1	11.306	11.281	0.025	64624	0.2000	0.3336	
20 2,6-Dinitrotoluene	1	11.460	11.441	0.019	29414	0.2000	0.2062	
21 2,4-Dinitrotoluene	1	11.633	11.607	0.026	60533	0.2000	0.2047	
22 o-Nitrotoluene	1	12.440	12.421	0.019	21958	0.2000	0.1741	
23 p-Nitrotoluene	1	12.853	12.827	0.026	18085	0.2000	0.1643	
24 m-Nitrotoluene	1	13.413	13.387	0.026	20834	0.2000	0.1497	
25 PETN	2	14.553	14.514	0.039	148872	2.00	2.07	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

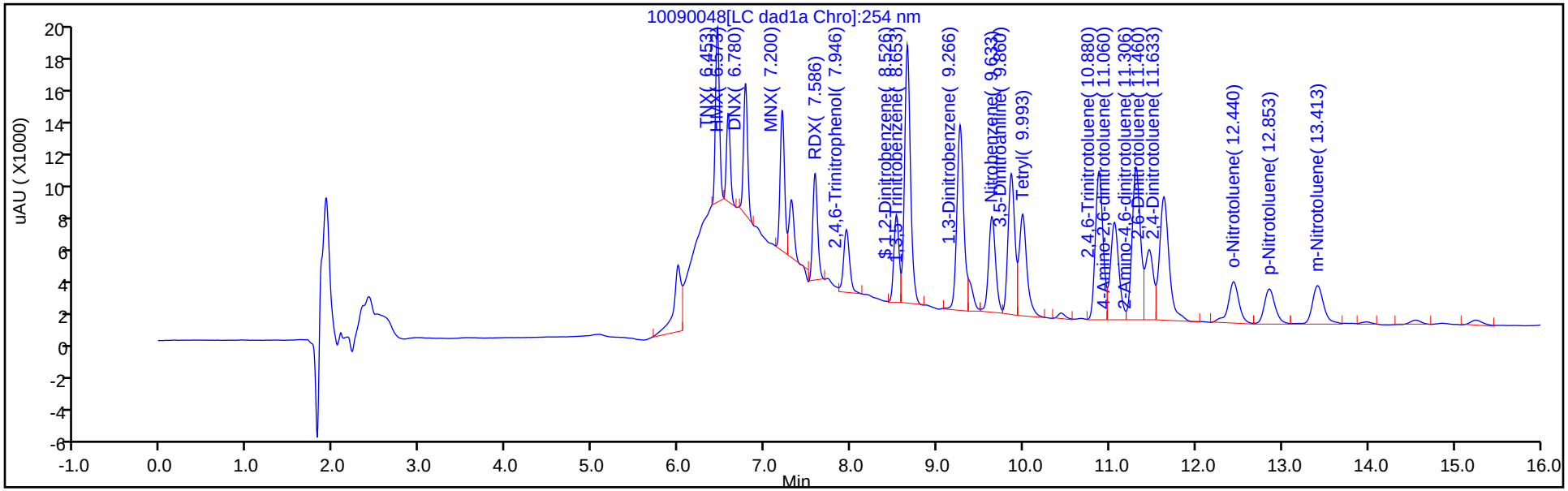
Report Date: 10-Oct-2023 12:44:19 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

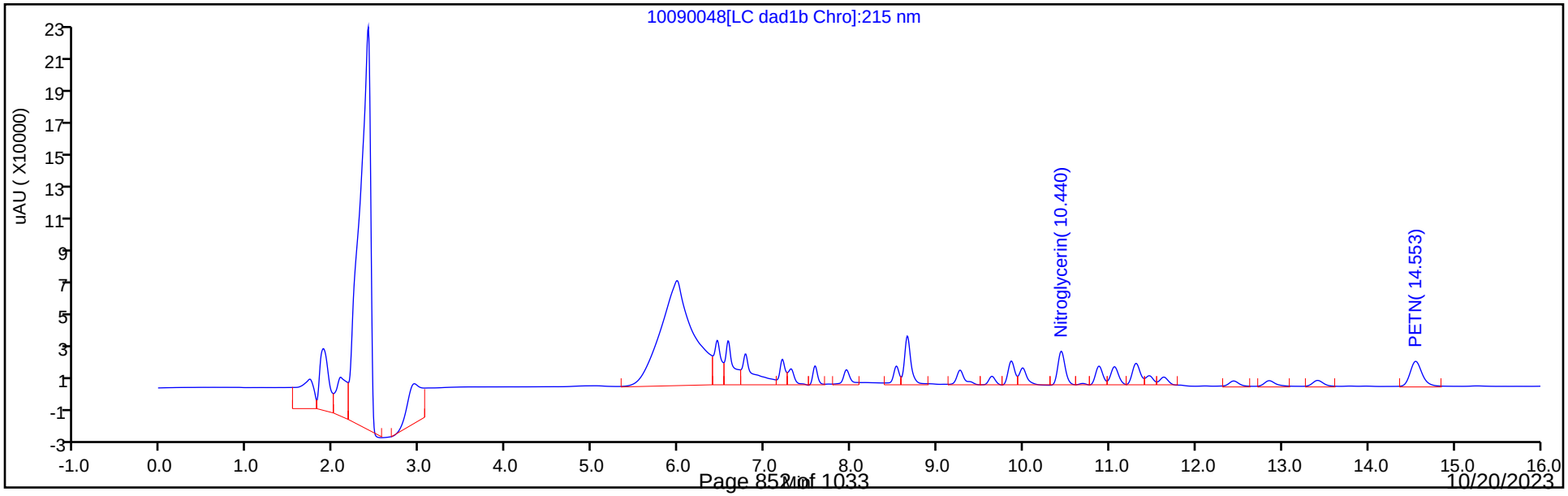
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Injection Date:	10-Oct-2023 02:04:59	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-182239-D-4-A MS			Worklist Smp#:	48
Client ID:	LL3mw-241-230901-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	48
Method:	8330_X3	Limit Group:	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



10/20/2023
4:00 PM

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\10090048.D				
Lims ID:	280-182239-D-4-A MS				
Client ID:	LL3mw-241-230901-GW				
Sample Type:	MS				
Inject. Date:	10-Oct-2023 02:04:59	ALS Bottle#:	48	Worklist Smp#:	48
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-182239-D-4-A MS				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	10-Oct-2023 12:44:19	Calib Date:	24-Jun-2023 00:23:49		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1622				

First Level Reviewer: K8YG Date: 10-Oct-2023 09:26:58

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1851	92.56

Manual Integration/User Assign Peak Report

Eurofins Denver

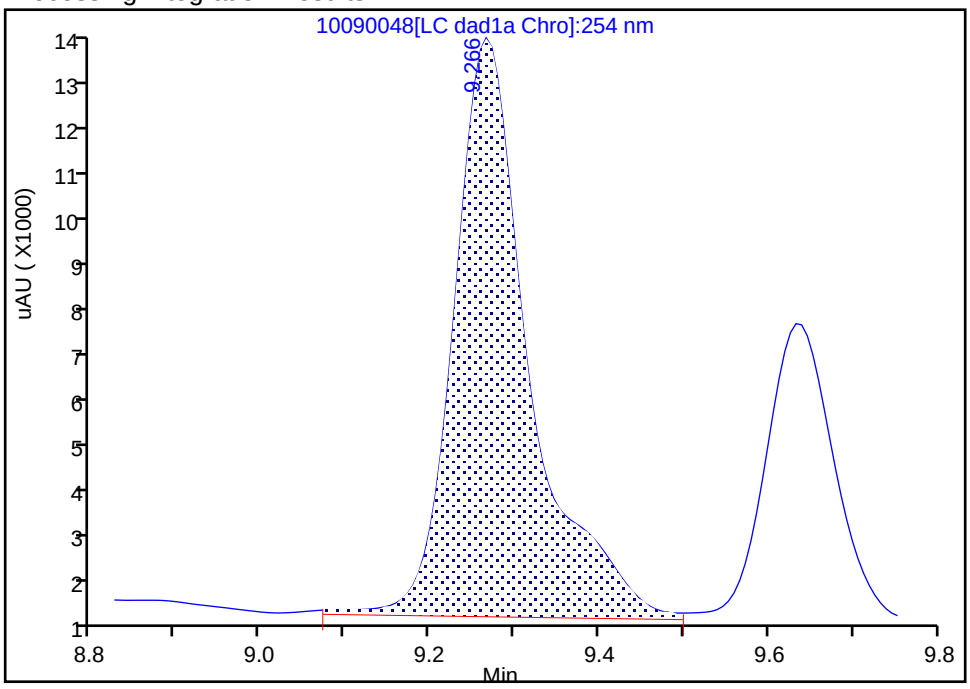
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Injection Date:	10-Oct-2023 02:04:59	Instrument ID:	CHHPLC_X3		
Lims ID:	280-182239-D-4-A MS				
Client ID:	LL3mw-241-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	48	Worklist Smp#:	48
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

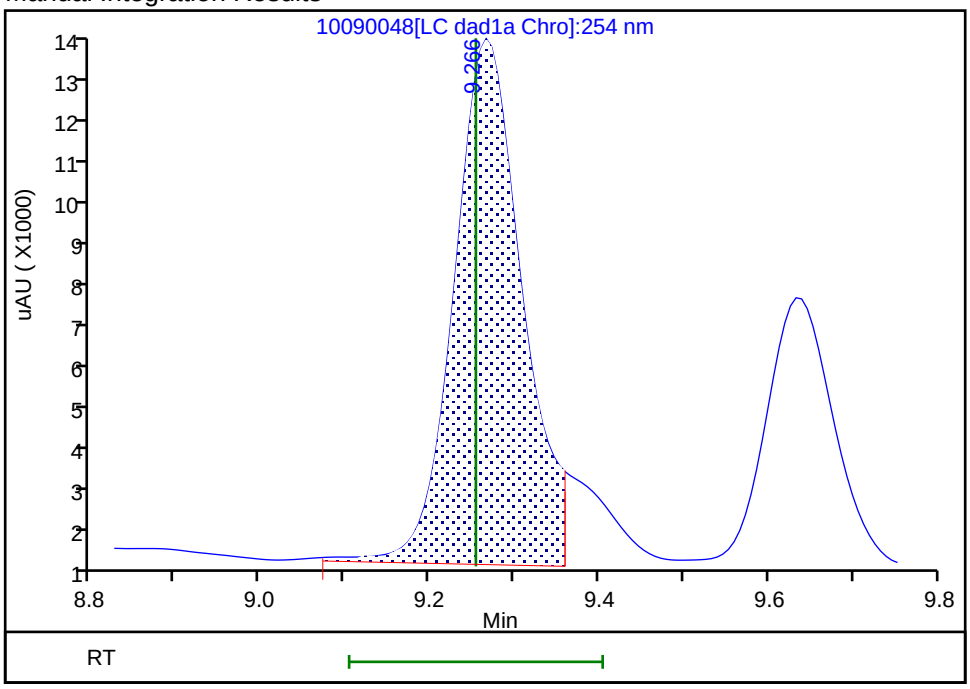
Processing Integration Results

RT: 9.27
Area: 72129
Amount: 0.245883
Amount Units: ug/mL



Manual Integration Results

RT: 9.27
Area: 64480
Amount: 0.219808
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 12:44:07 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

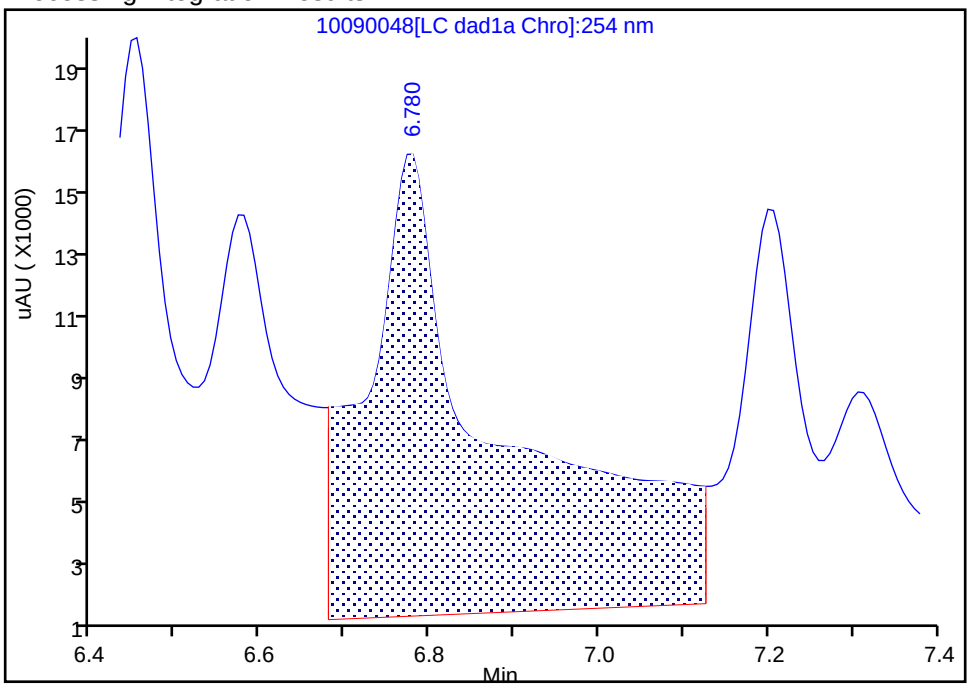
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Injection Date:	10-Oct-2023 02:04:59	Instrument ID:	CHHPLC_X3		
Lims ID:	280-182239-D-4-A MS				
Client ID:	LL3mw-241-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	48	Worklist Smp#:	48
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

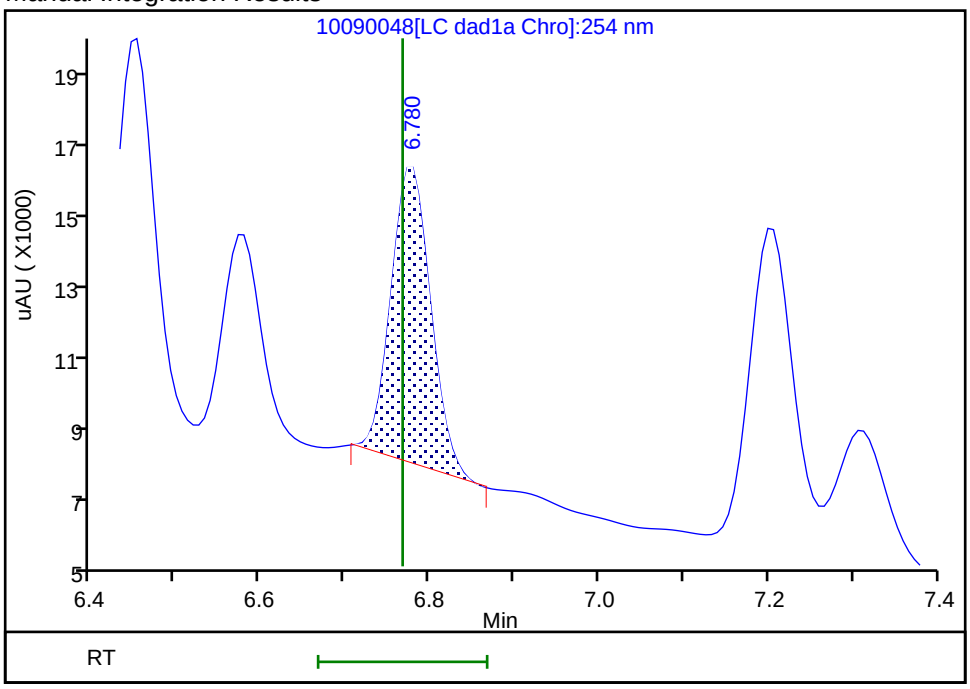
Processing Integration Results

RT: 6.78
Area: 159504
Amount: 1.103889
Amount Units: ug/mL



Manual Integration Results

RT: 6.78
Area: 26694
Amount: 0.184743
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 12:43:45 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

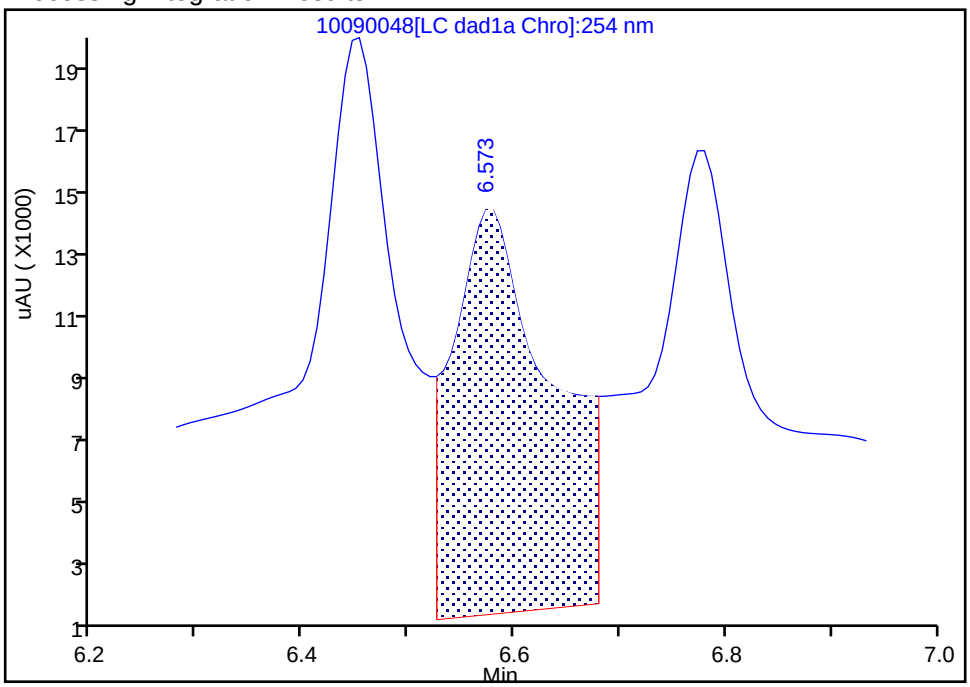
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Injection Date:	10-Oct-2023 02:04:59	Instrument ID:	CHHPLC_X3		
Lims ID:	280-182239-D-4-A MS				
Client ID:	LL3mw-241-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	48	Worklist Smp#:	48
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

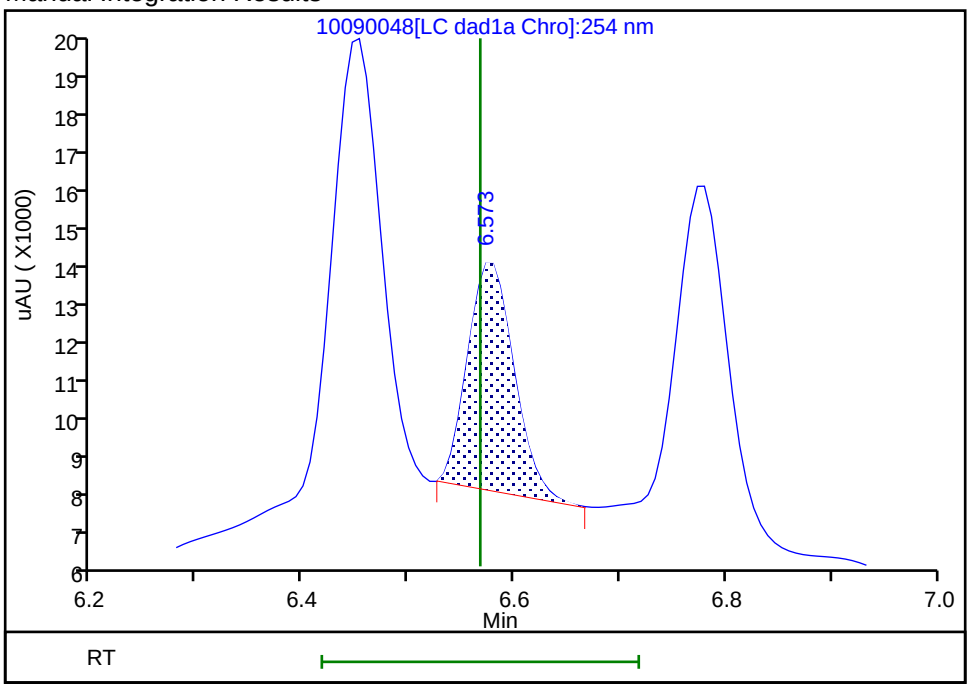
Processing Integration Results

RT: 6.57
Area: 81270
Amount: 0.862232
Amount Units: ug/mL



Manual Integration Results

RT: 6.57
Area: 16680
Amount: 0.176966
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 12:43:39 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

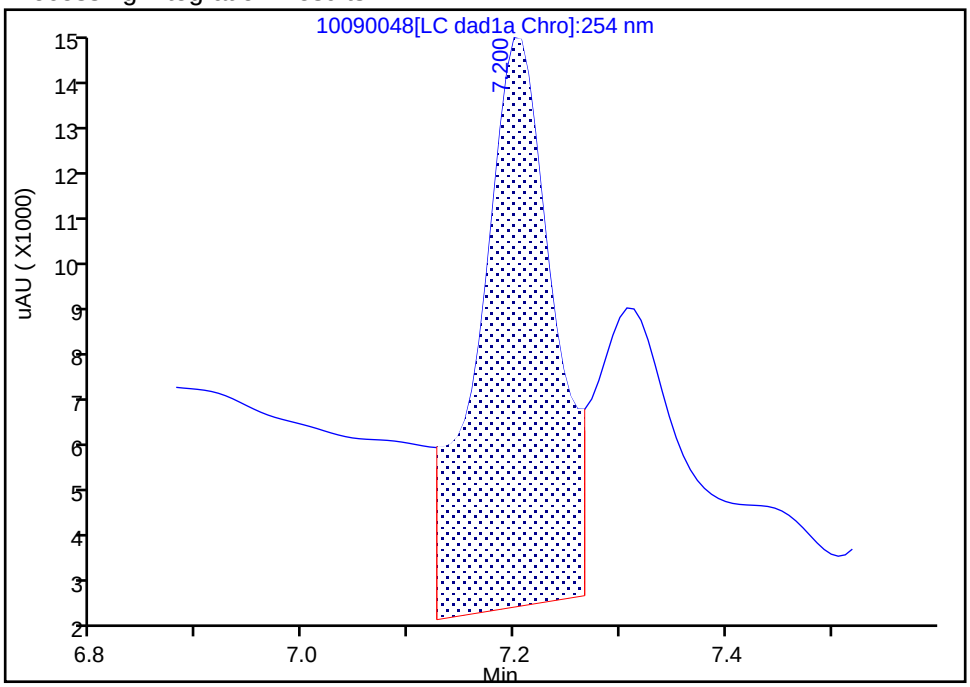
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Injection Date:	10-Oct-2023 02:04:59	Instrument ID:	CHHPLC_X3		
Lims ID:	280-182239-D-4-A MS				
Client ID:	LL3mw-241-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	48	Worklist Smp#:	48
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

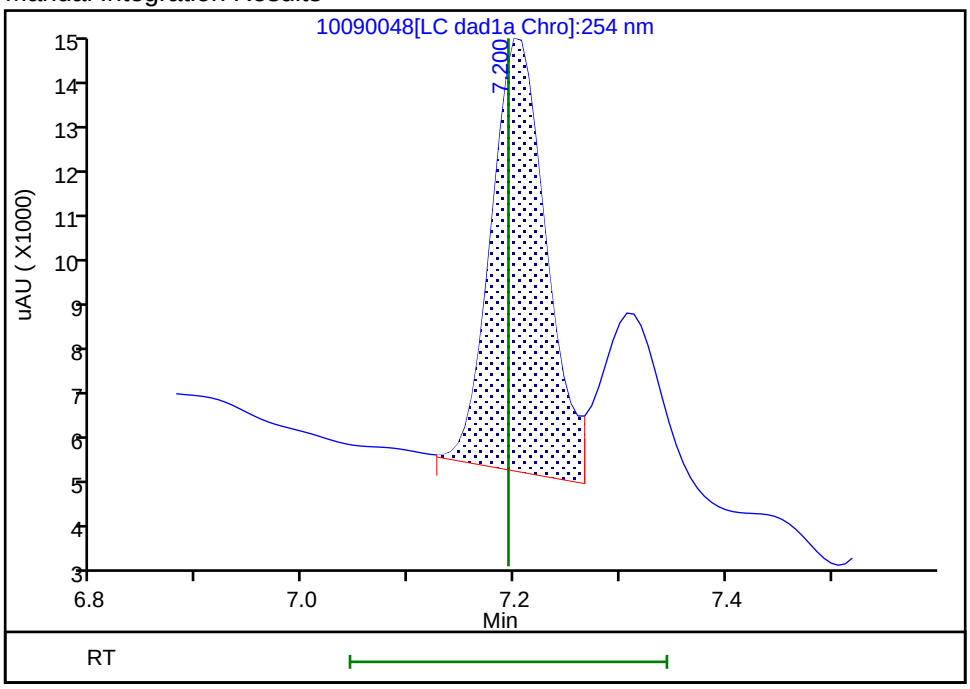
Processing Integration Results

RT: 7.20
Area: 56796
Amount: 0.409522
Amount Units: ug/mL



Manual Integration Results

RT: 7.20
Area: 31844
Amount: 0.229608
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 12:43:52 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

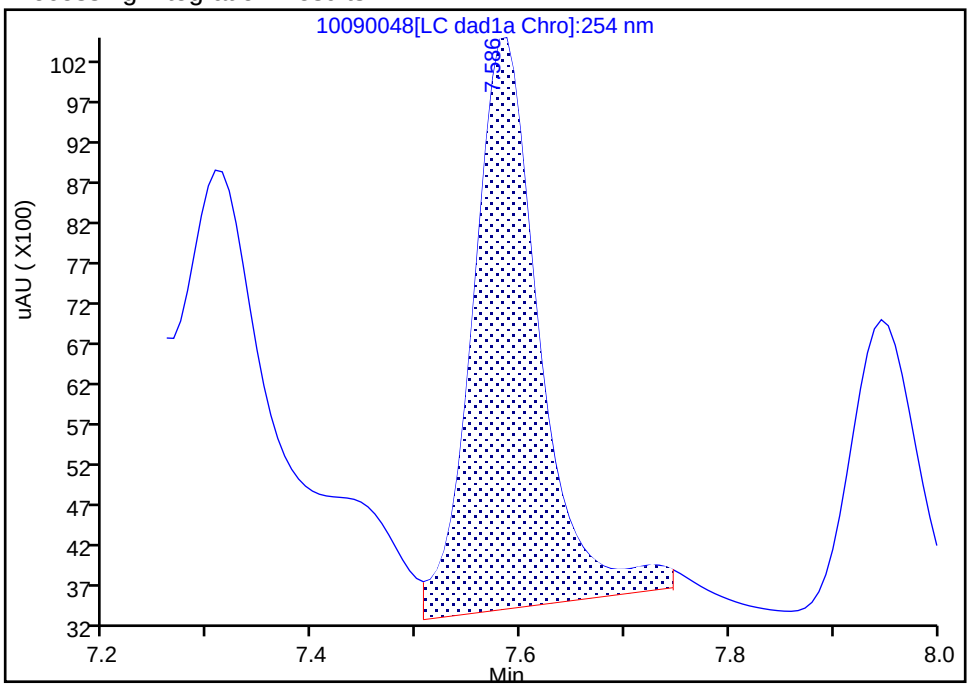
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Injection Date:	10-Oct-2023 02:04:59	Instrument ID:	CHHPLC_X3		
Lims ID:	280-182239-D-4-A MS				
Client ID:	LL3mw-241-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	48	Worklist Smp#:	48
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

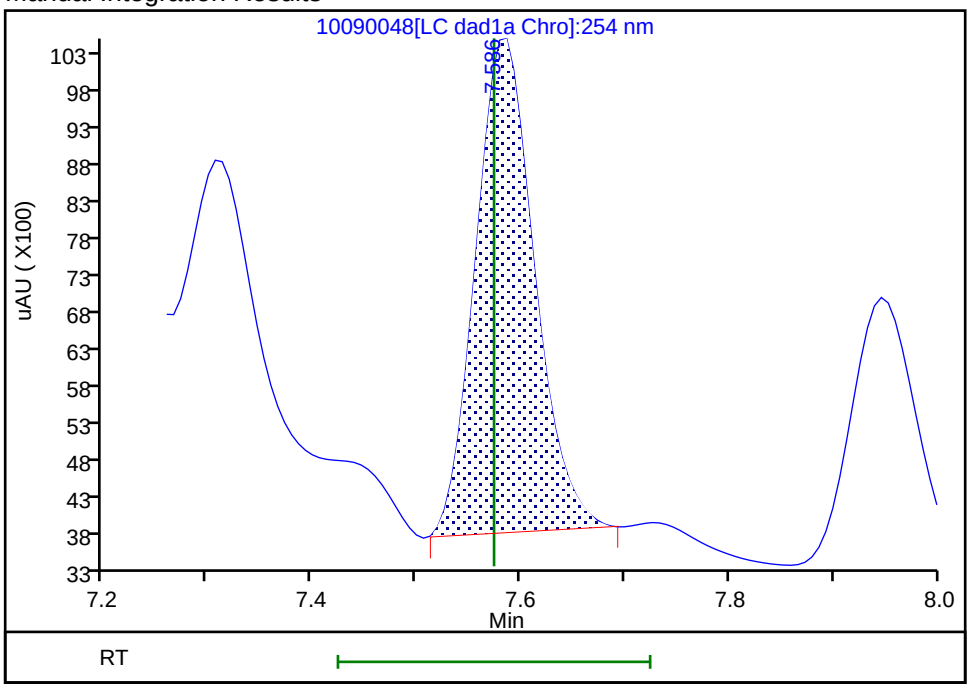
Processing Integration Results

RT: 7.59
Area: 31585
Amount: 0.285856
Amount Units: ug/mL



Manual Integration Results

RT: 7.59
Area: 26160
Amount: 0.236757
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 12:43:58 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

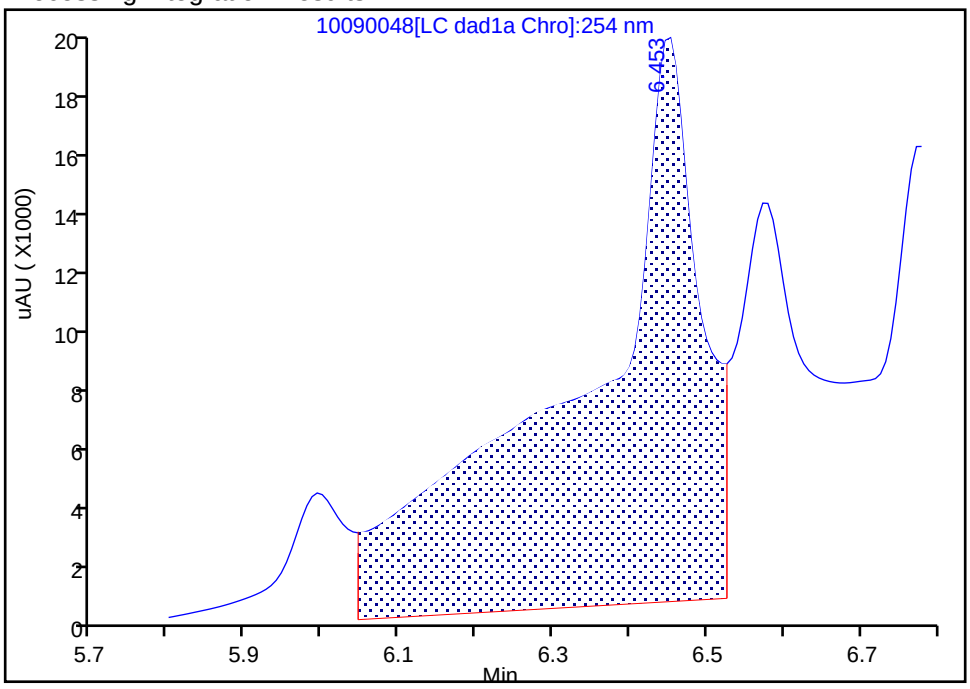
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Injection Date:	10-Oct-2023 02:04:59	Instrument ID:	CHHPLC_X3		
Lims ID:	280-182239-D-4-A MS				
Client ID:	LL3mw-241-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	48	Worklist Smp#:	48
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

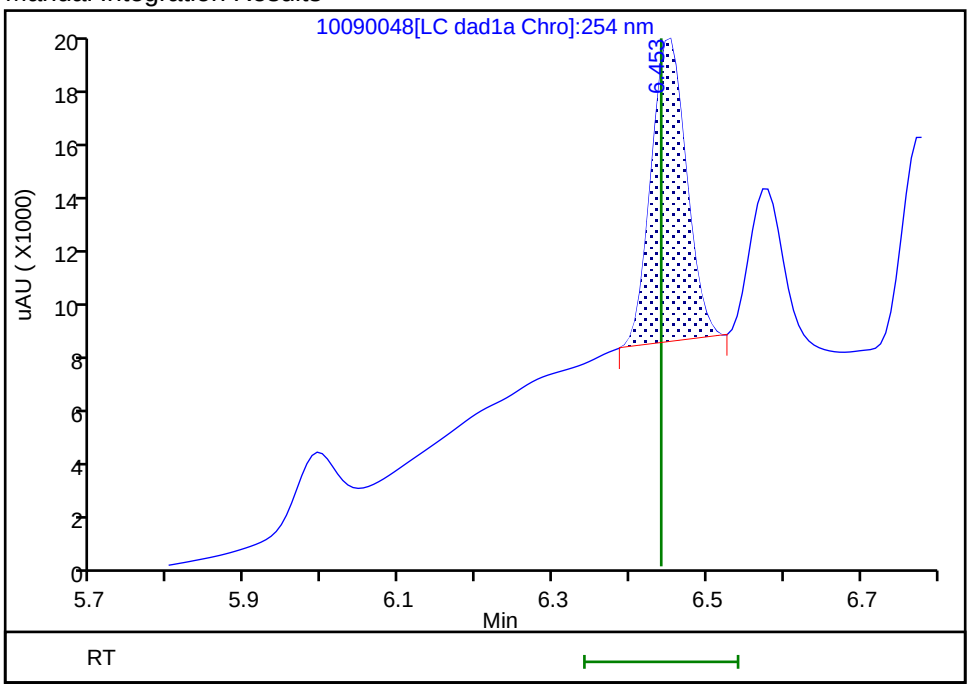
Processing Integration Results

RT: 6.45
Area: 205255
Amount: 1.022385
Amount Units: ug/mL



Manual Integration Results

RT: 6.45
Area: 34474
Amount: 0.171717
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 12:43:35 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182239-1

SDG No.:

Client Sample ID: LL3mw-241-230901-GW MS | Lab Sample ID: 280-182239-4 MS

Matrix: Water | Lab File ID: 10090052.D

Analysis Method: 8330B | Date Collected: 10/02/2023 10:37

Extraction Method: 3535 | Date Extracted: 10/04/2023 13:30

Sample wt/vol: 496.7(mL) | Date Analyzed: 10/10/2023 03:36

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.: 628987 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
6629-29-4	2,4-diamino-6-nitrotoluene	0.977	J M J1	1.0	0.91	0.44
59229-75-3	2,6-diamino-4-nitrotoluene	1.31	M J1	1.0	0.91	0.22

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	82	Q	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\10090052.D
Lims ID: 280-182239-C-4-A MS
Client ID: LL3mw-241-230901-GW
Sample Type: MS
Inject. Date: 10-Oct-2023 03:36:55 ALS Bottle#: 52 Worklist Smp#: 52
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-182239-C-4-A MS
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 10-Oct-2023 12:46:23 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1622

First Level Reviewer: K8YG Date: 10-Oct-2023 09:27:13

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
$ 10 1,2-Dinitrobenzene	1	8.525	8.521	0.004	20250	0.2000	0.1634	
2 2,6-diamino-4-nitrotoluene	1	6.451	6.438	0.013	29420	0.2000	0.1304	M
5 2,4-diamino-6-nitrotoluene	1	6.638	6.625	0.013	13907	0.2000	0.0970	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

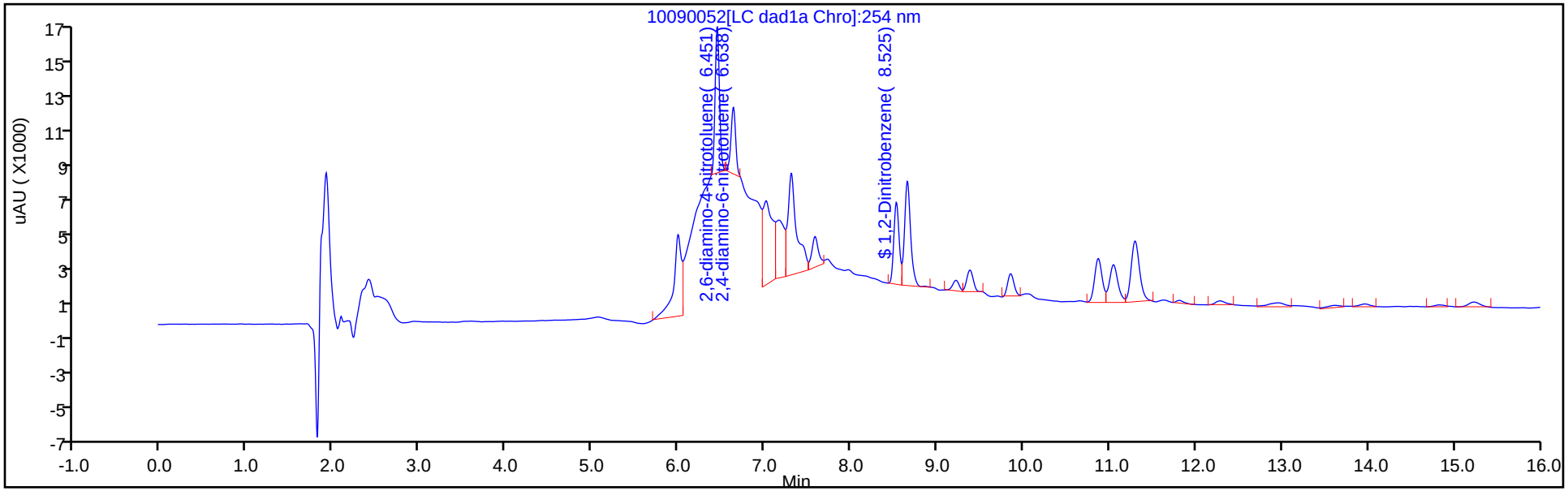
Report Date: 10-Oct-2023 12:46:23 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

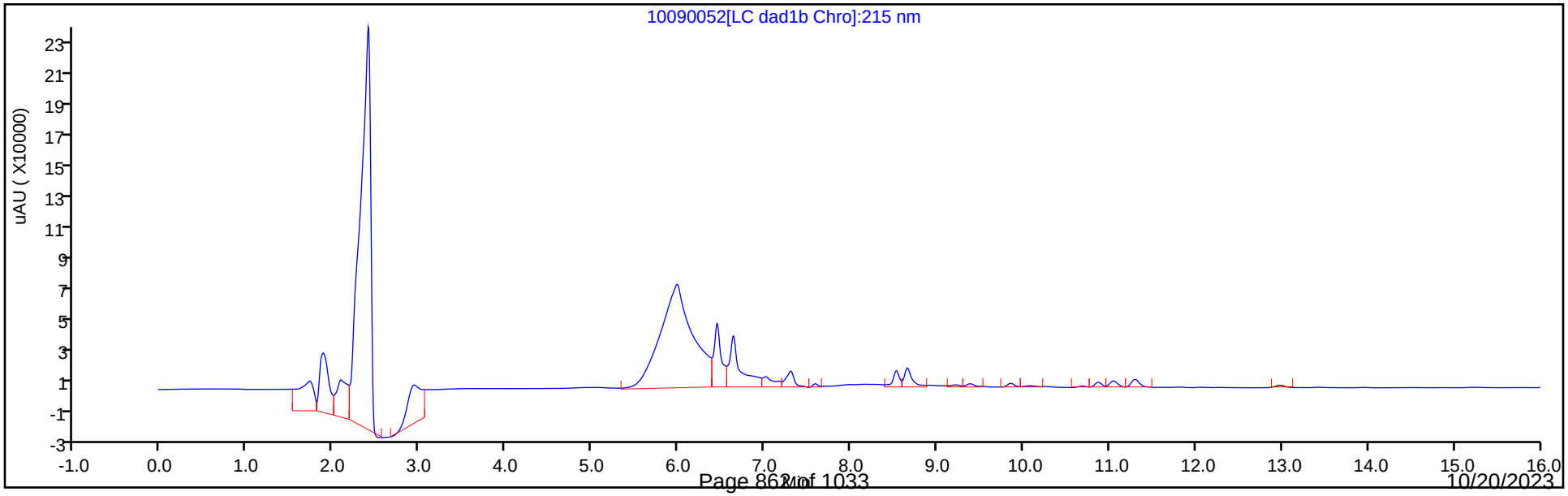
Data File: \\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090052.d

Injection Date:	10-Oct-2023 03:36:55	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-182239-C-4-A MS			Worklist Smp#:	52
Client ID:	LL3mw-241-230901-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	52
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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\20231009-126302.b\10090052.D				
Lims ID:	280-182239-C-4-A MS				
Client ID:	LL3mw-241-230901-GW				
Sample Type:	MS				
Inject. Date:	10-Oct-2023 03:36:55	ALS Bottle#:	52	Worklist Smp#:	52
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-182239-C-4-A MS				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	10-Oct-2023 12:46:23	Calib Date:	24-Jun-2023 00:23:49		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1622				

First Level Reviewer: K8YG Date: 10-Oct-2023 09:27:13

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1634	81.71

Eurofins Denver

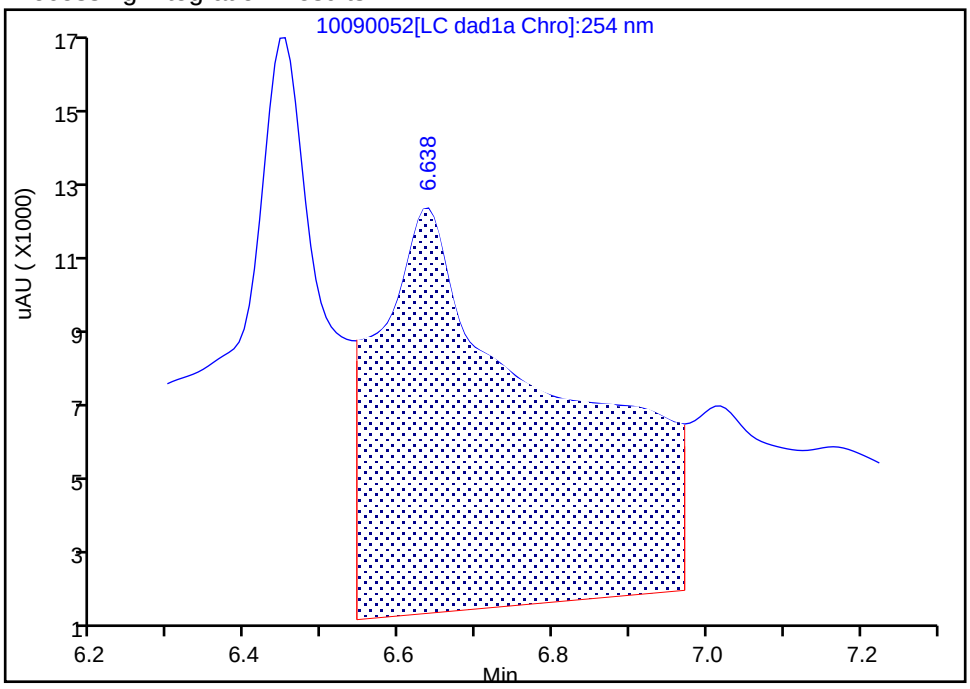
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Injection Date:	10-Oct-2023 03:36:55	Instrument ID:	CHHPLC_X3		
Lims ID:	280-182239-C-4-A MS				
Client ID:	LL3mw-241-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	52	Worklist Smp#:	52
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

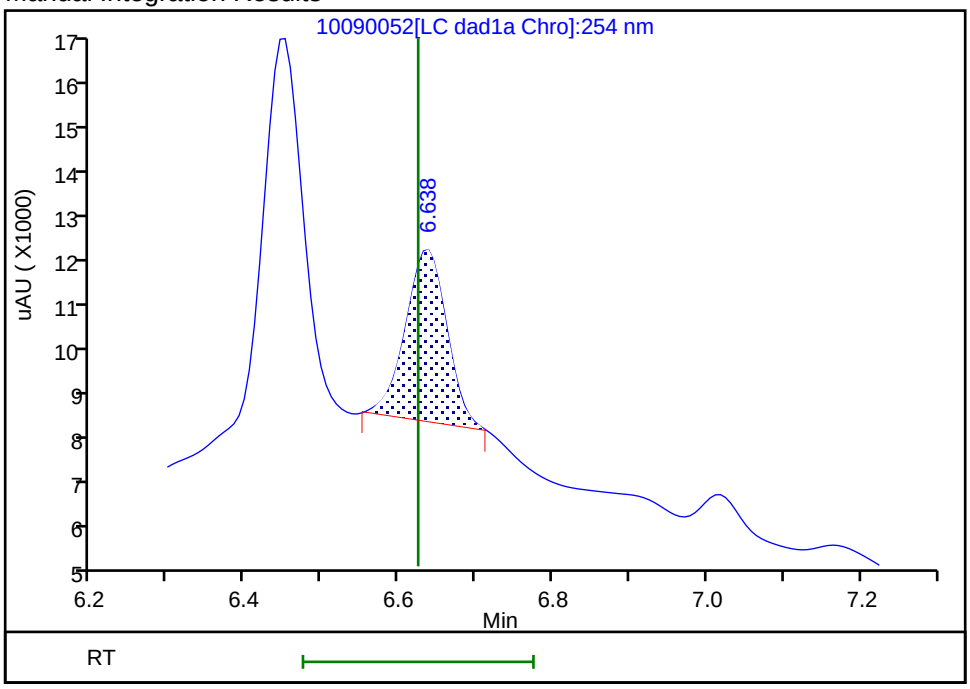
Processing Integration Results

RT: 6.64
Area: 170679
Amount: 1.190842
Amount Units: ug/mL



Manual Integration Results

RT: 6.64
Area: 13907
Amount: 0.097030
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 12:46:21 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

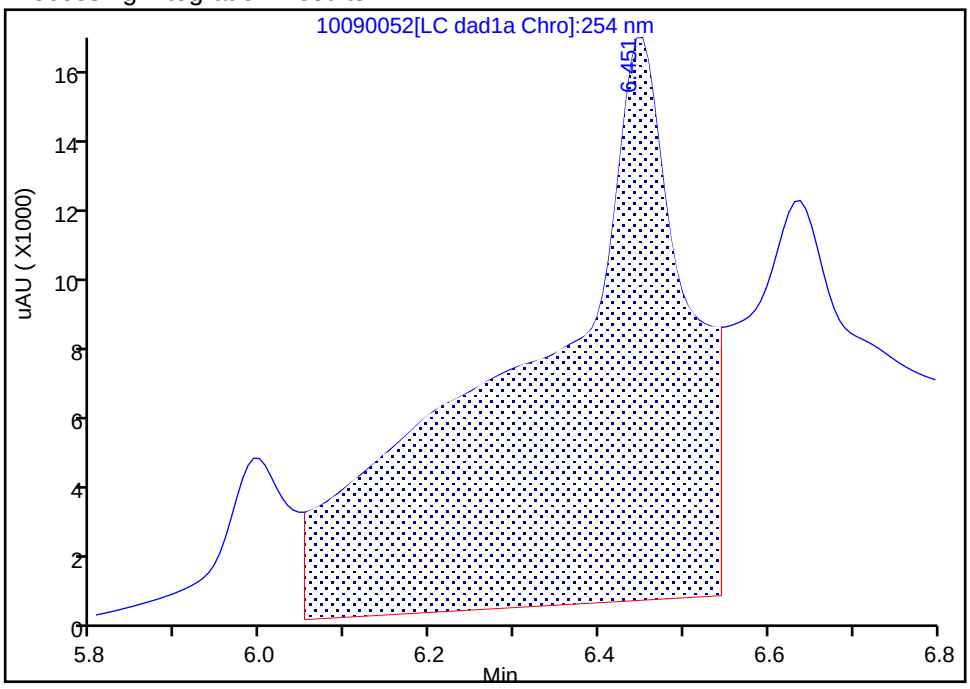
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Injection Date:	10-Oct-2023 03:36:55	Instrument ID:	CHHPLC_X3		
Lims ID:	280-182239-C-4-A MS				
Client ID:	LL3mw-241-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	52	Worklist Smp#:	52
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

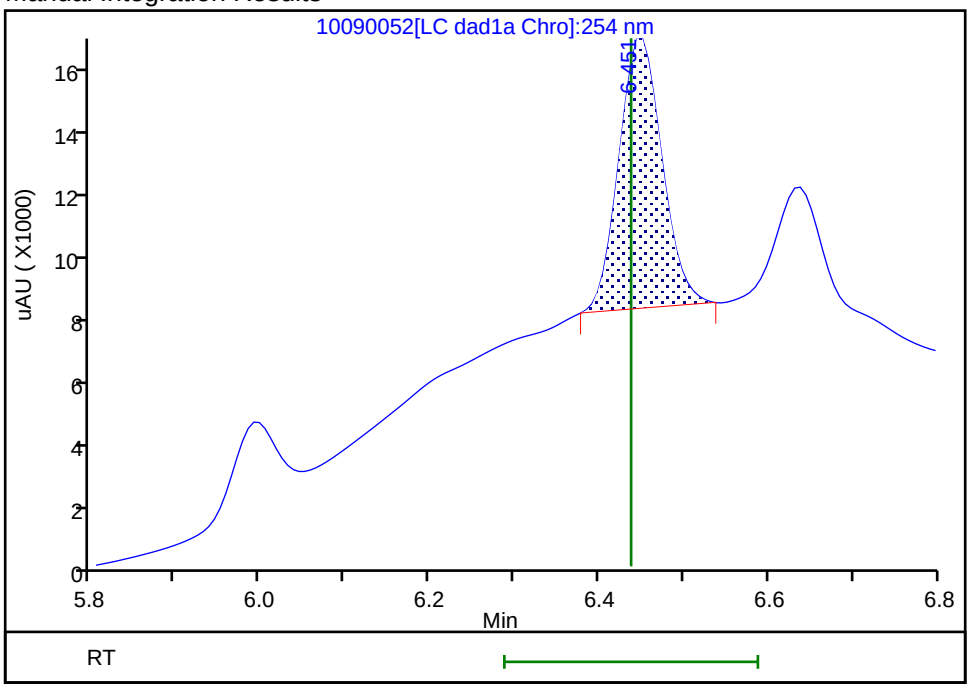
Processing Integration Results

RT: 6.45
Area: 211056
Amount: 0.935676
Amount Units: ug/mL



Manual Integration Results

RT: 6.45
Area: 29420
Amount: 0.130428
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 12:46:13 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182239-1

SDG No.:

Client Sample ID: LL3mw-241-230901-GW MS | Lab Sample ID: 280-182239-4 MS

Matrix: Water | Lab File ID: 10110018.D

Analysis Method: 8330B | Date Collected: 10/02/2023 10:37

Extraction Method: 3535 | Date Extracted: 10/04/2023 13:30

Sample wt/vol: 491.8(mL) | Date Analyzed: 10/11/2023 22:36

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.: 629372 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
35572-78-2	2-Amino-4,6-dinitrotoluene	3.49	J1	0.11	0.10	0.052
2691-41-0	*HMX*	*1.99*	*M*	*0.21*	0.20	*0.089*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	95	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\10110018.D
Lims ID: 280-182239-D-4-A MS
Client ID: LL3mw-241-230901-GW
Sample Type: MS
Inject. Date: 11-Oct-2023 22:36:55 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-182239-D-4-A MS
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA

Method: \\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 12-Oct-2023 12:50:27 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1633

First Level Reviewer: K8YG Date: 12-Oct-2023 12:36:58

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.320	5.292	0.028	68519	0.2002	0.1804	
4 DNX	1	6.173	6.152	0.021	57645	0.2008	0.2000	M
6 HMX	1	6.827	6.805	0.022	33889	0.2000	0.1954	M
7 MNX	1	7.687	7.659	0.028	57450	0.2342	0.2194	M
5 2,4,6-Trinitrophenol	1	8.727	8.759	-0.032	31631	0.2000	0.2205	
8 RDX	1	9.113	9.052	0.061	48878	0.2000	0.2355	
9 Nitrobenzene	1	11.700	11.625	0.075	68026	0.2000	0.1832	M
$ 10 1,2-Dinitrobenzene	1	12.660	12.572	0.088	49032	0.2000	0.1910	M
11 3,5-Dinitroaniline	1	14.487	14.405	0.082	95904	0.2000	0.2329	
12 1,3-Dinitrobenzene	1	14.773	14.698	0.075	111741	0.2000	0.1928	
13 Nitroglycerin	2	15.227	15.165	0.062	251274	2.00	2.02	
14 o-Nitrotoluene	1	15.853	15.785	0.068	40962	0.2000	0.1658	
15 p-Nitrotoluene	1	16.073	16.012	0.061	33240	0.2000	0.1499	
16 4-Amino-2,6-dinitrotoluene	1	16.593	16.525	0.068	79950	0.2000	0.2918	
17 m-Nitrotoluene	1	16.920	16.858	0.062	52378	0.2000	0.1900	
18 2-Amino-4,6-dinitrotoluene	1	17.413	17.338	0.075	130490	0.2000	0.3430	
19 1,3,5-Trinitrobenzene	1	17.600	17.532	0.068	136698	0.2000	0.3321	
20 2,6-Dinitrotoluene	1	18.740	18.658	0.082	51450	0.2000	0.1940	
21 2,4-Dinitrotoluene	1	19.193	19.118	0.075	105520	0.2000	0.1936	M
22 Tetryl	1	22.440	22.339	0.101	61843	0.2000	0.2006	
23 2,4,6-Trinitrotoluene	1	23.307	23.199	0.108	111897	0.2000	0.2907	M
24 PETN	2	24.467	24.352	0.115	257226	2.00	2.09	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

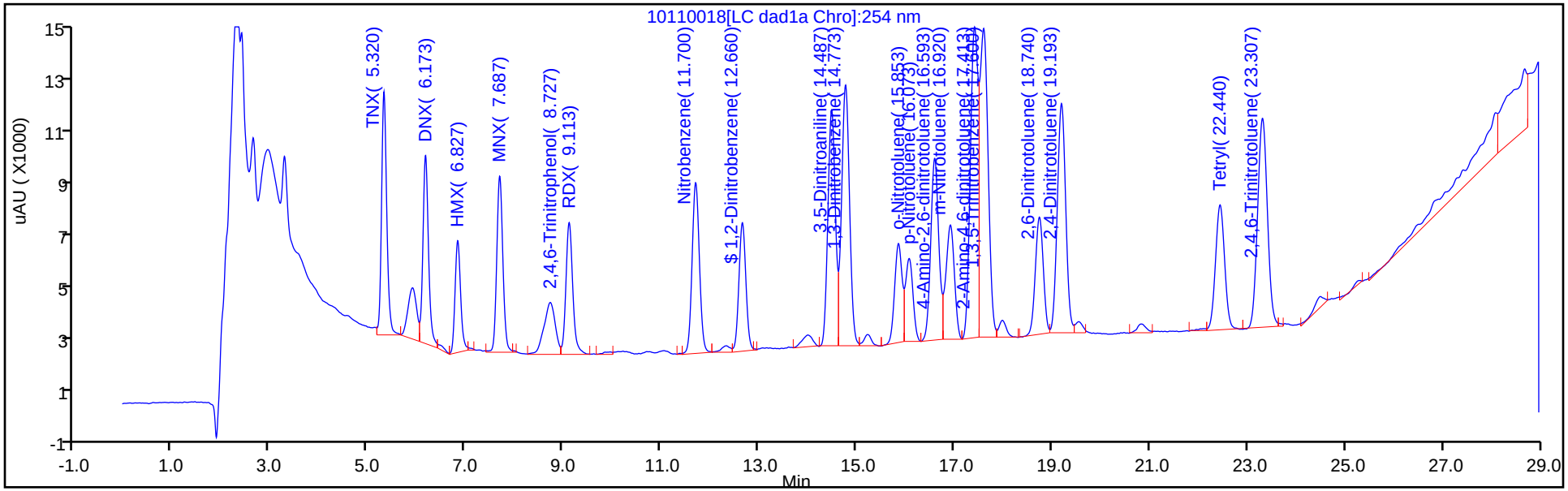
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Eurofins Denver

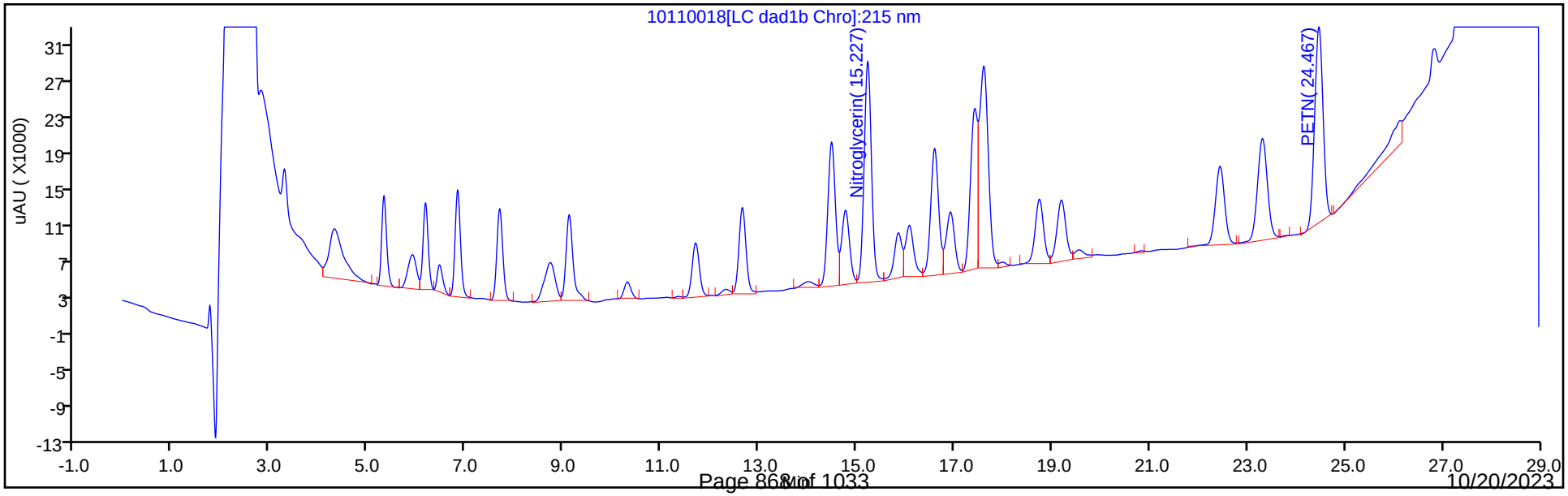
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Injection Date:	11-Oct-2023 22:36:55	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	280-182239-D-4-A MS			Worklist Smp#:	18
Client ID:	LL3mw-241-230901-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\10110018.D
Lims ID: 280-182239-D-4-A MS
Client ID: LL3mw-241-230901-GW
Sample Type: MS
Inject. Date: 11-Oct-2023 22:36:55 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-182239-D-4-A MS
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA

Method: \\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 12-Oct-2023 12:50:27 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1633

First Level Reviewer: K8YG Date: 12-Oct-2023 12:36:58

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1910	95.48

Manual Integration/User Assign Peak Report

Eurofins Denver

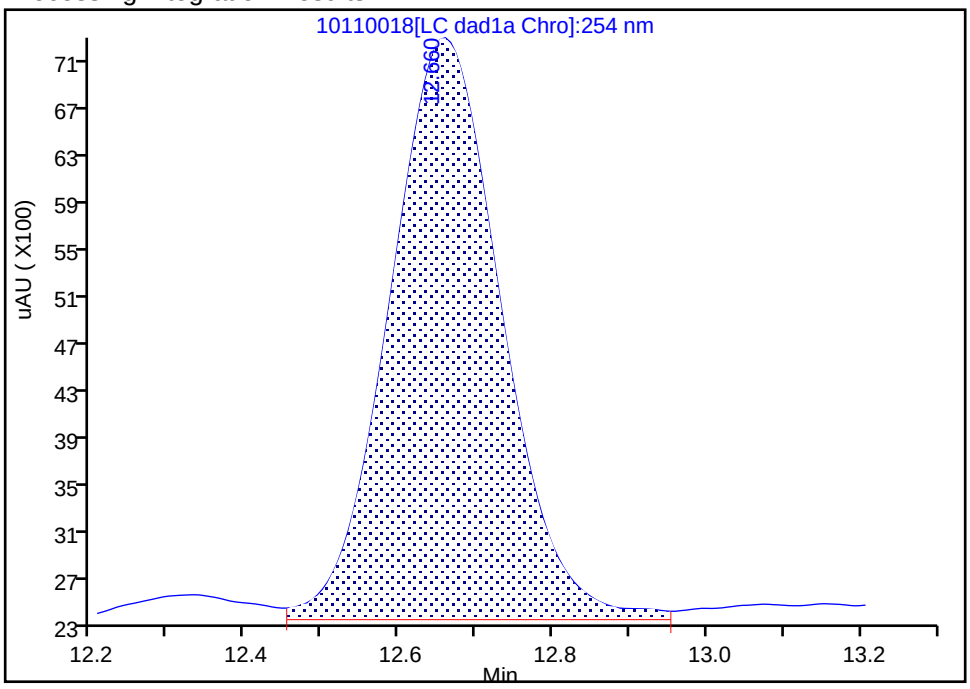
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Injection Date:	11-Oct-2023 22:36:55	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-182239-D-4-A MS				
Client ID:	LL3mw-241-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

Signal: 1

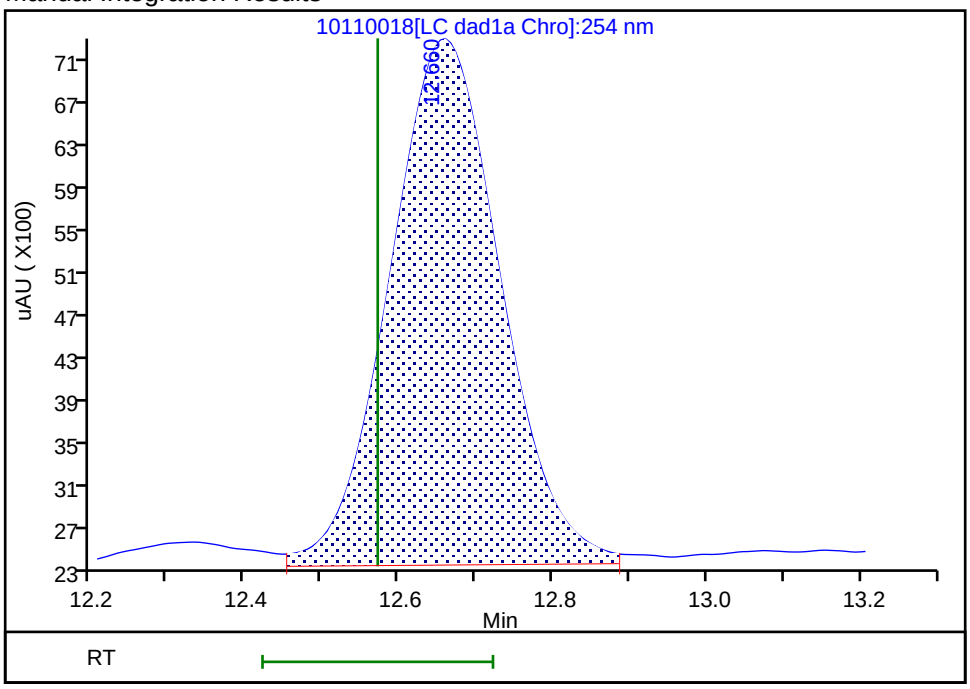
Processing Integration Results

RT: 12.66
Area: 49329
Amount: 0.192111
Amount Units: ug/ml



Manual Integration Results

RT: 12.66
Area: 49032
Amount: 0.190955
Amount Units: ug/ml



Reviewer: K8YG, 12-Oct-2023 12:36:29 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

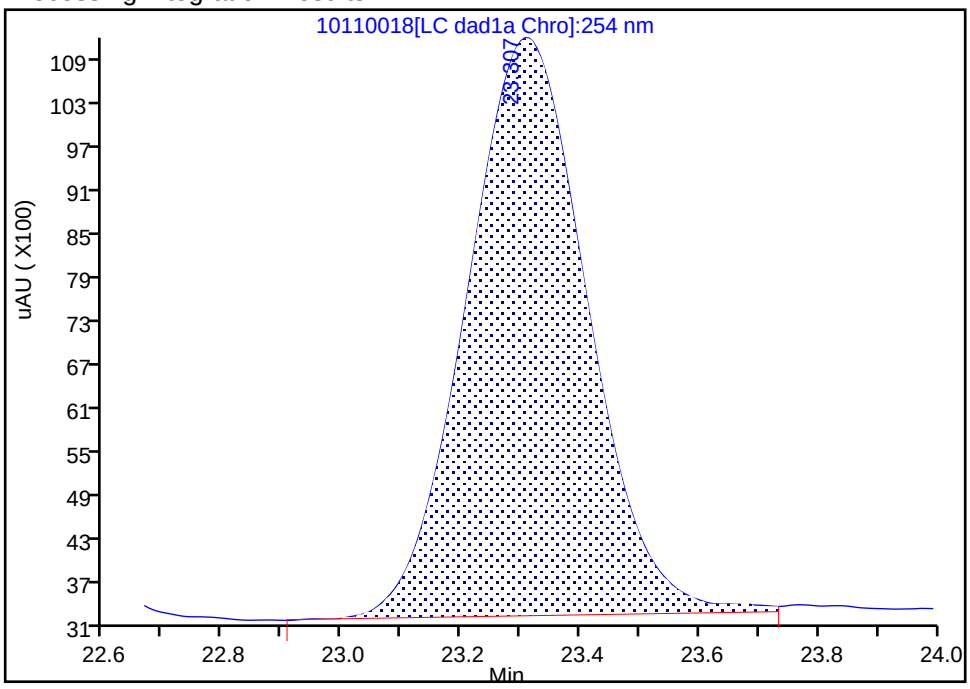
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Injection Date:	11-Oct-2023 22:36:55	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-182239-D-4-A MS				
Client ID:	LL3mw-241-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

23 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

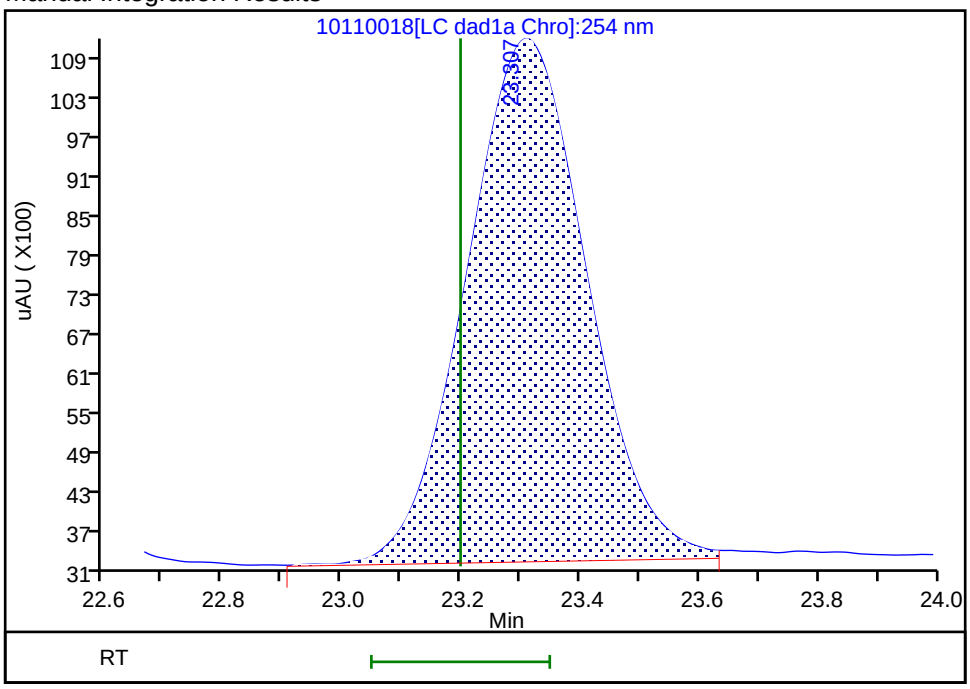
Processing Integration Results

RT: 23.31
Area: 112488
Amount: 0.292187
Amount Units: ug/ml



Manual Integration Results

RT: 23.31
Area: 111897
Amount: 0.290652
Amount Units: ug/ml



Reviewer: K8YG, 12-Oct-2023 12:36:54 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

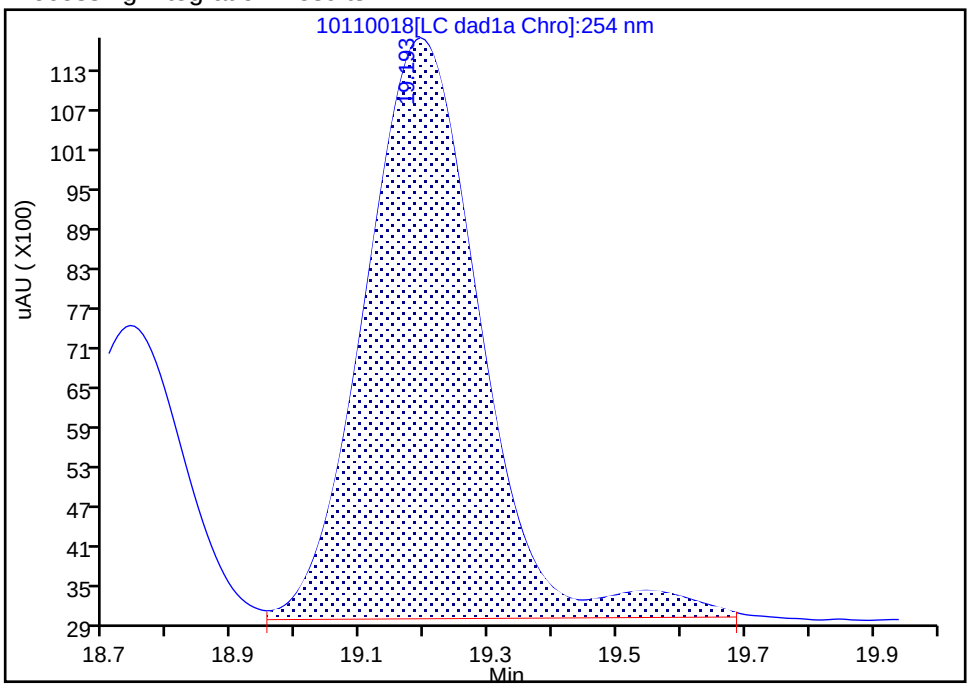
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Lims ID:	280-182239-D-4-A MS				
Client ID:	LL3mw-241-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

Signal: 1

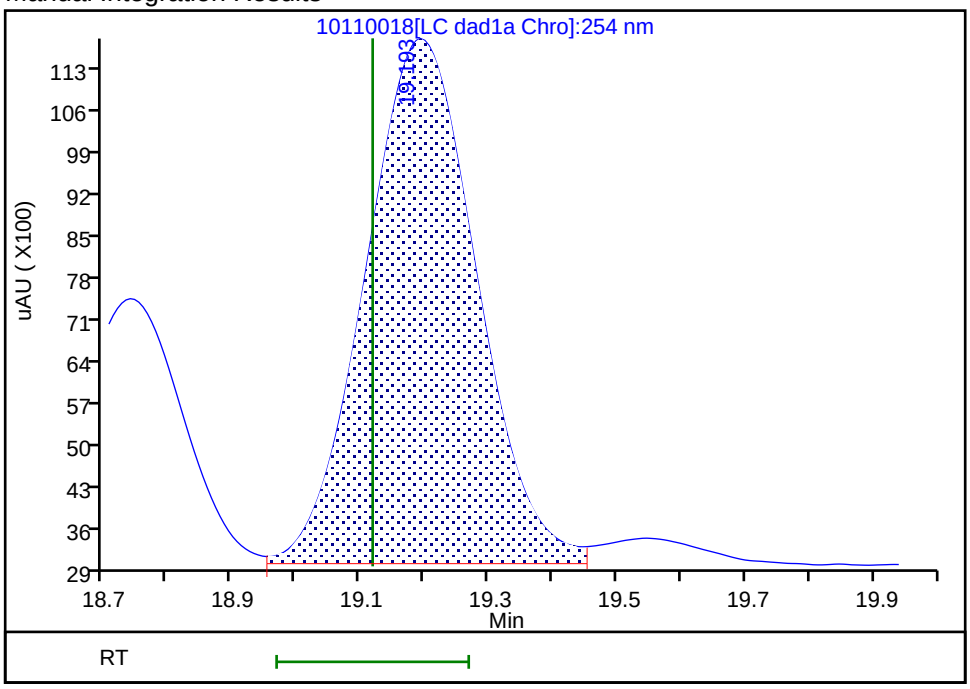
Processing Integration Results

RT: 19.19
Area: 109817
Amount: 0.201467
Amount Units: ug/ml



Manual Integration Results

RT: 19.19
Area: 105520
Amount: 0.193584
Amount Units: ug/ml



Reviewer: K8YG, 12-Oct-2023 12:36:48 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

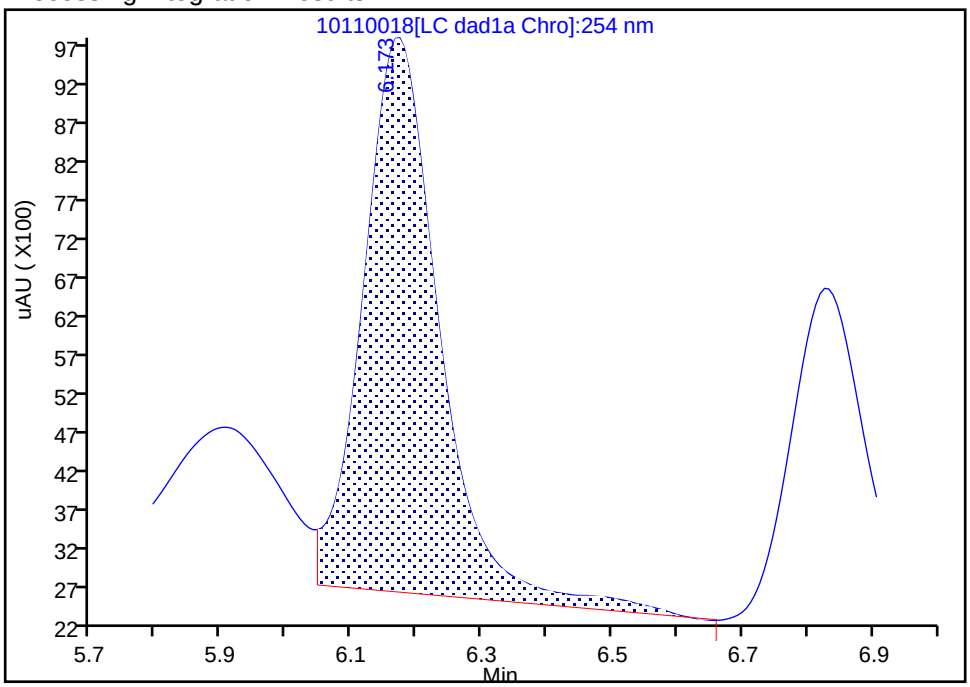
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Injection Date:	11-Oct-2023 22:36:55	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-182239-D-4-A MS				
Client ID:	LL3mw-241-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

4 DNX, CAS: 80251-29-2

Signal: 1

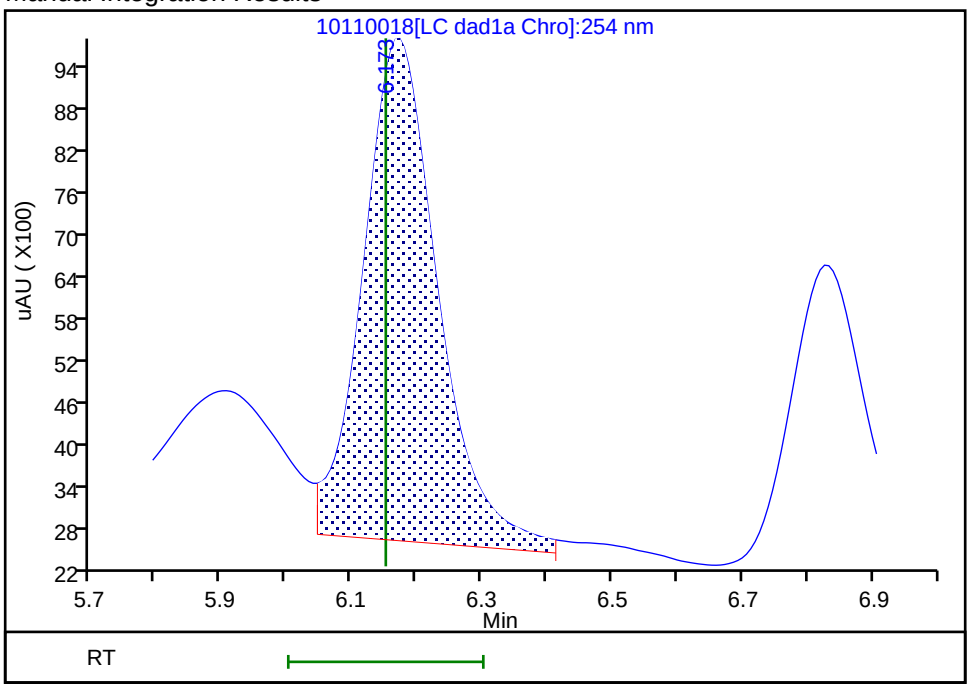
Processing Integration Results

RT: 6.17
Area: 59322
Amount: 0.205808
Amount Units: ug/ml



Manual Integration Results

RT: 6.17
Area: 57645
Amount: 0.199990
Amount Units: ug/ml



Reviewer: K8YG, 12-Oct-2023 12:35:58 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

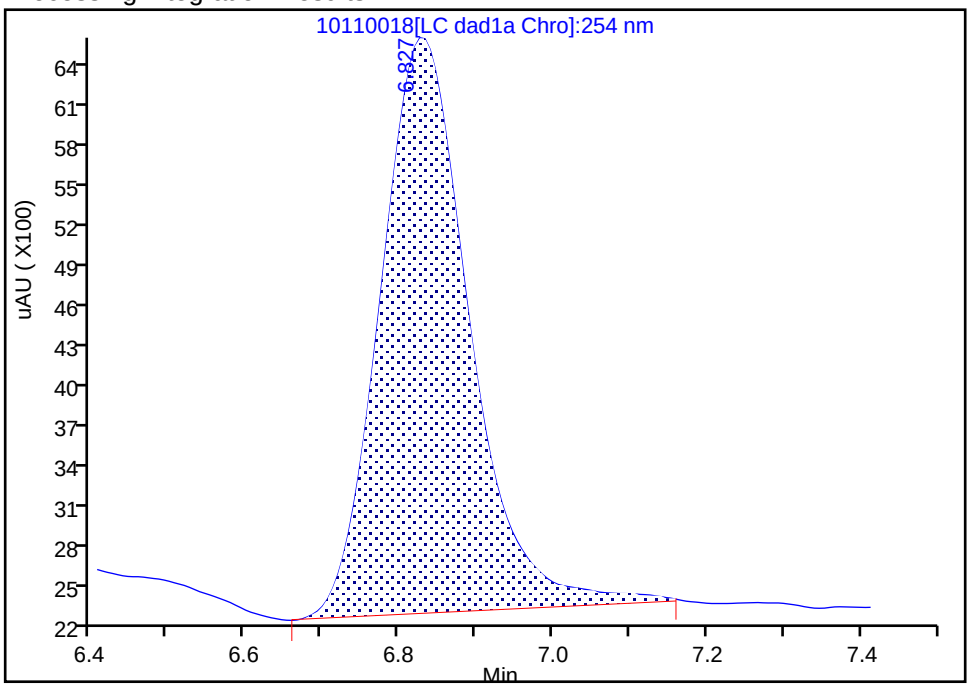
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Injection Date:	11-Oct-2023 22:36:55	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-182239-D-4-A MS				
Client ID:	LL3mw-241-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

6 HMX, CAS: 2691-41-0

Signal: 1

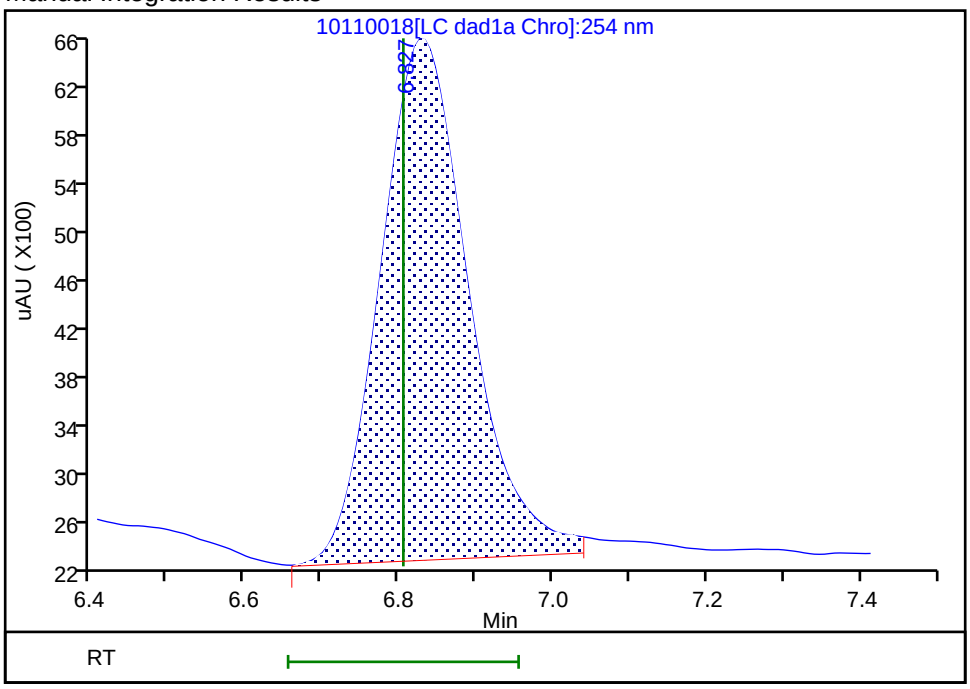
Processing Integration Results

RT: 6.83
Area: 34408
Amount: 0.198350
Amount Units: ug/ml



Manual Integration Results

RT: 6.83
Area: 33889
Amount: 0.195358
Amount Units: ug/ml



Reviewer: K8YG, 12-Oct-2023 12:36:06 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

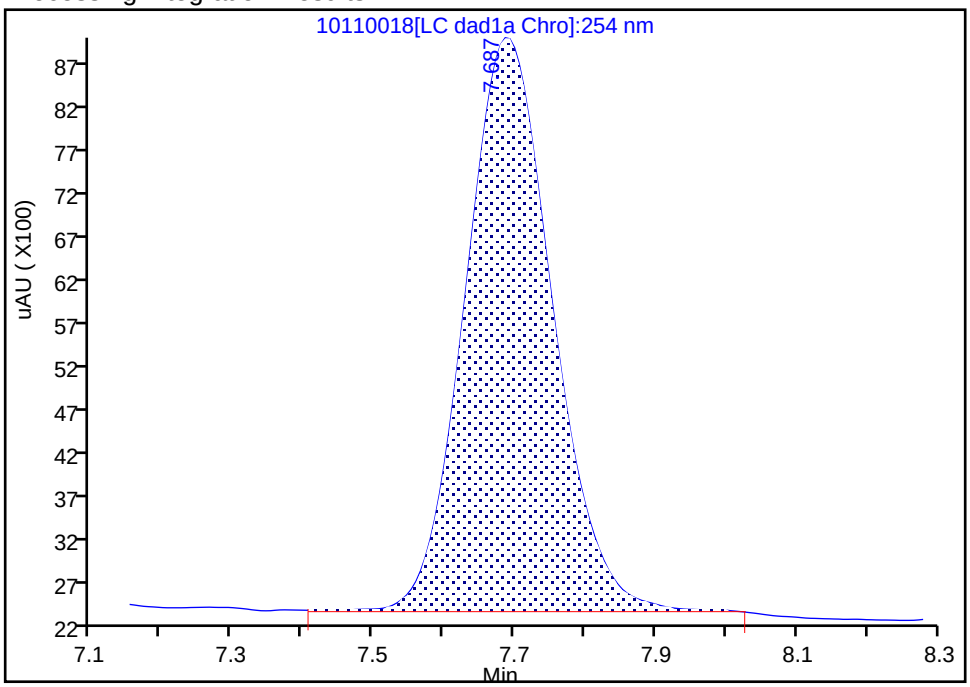
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Injection Date:	11-Oct-2023 22:36:55	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-182239-D-4-A MS				
Client ID:	LL3mw-241-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

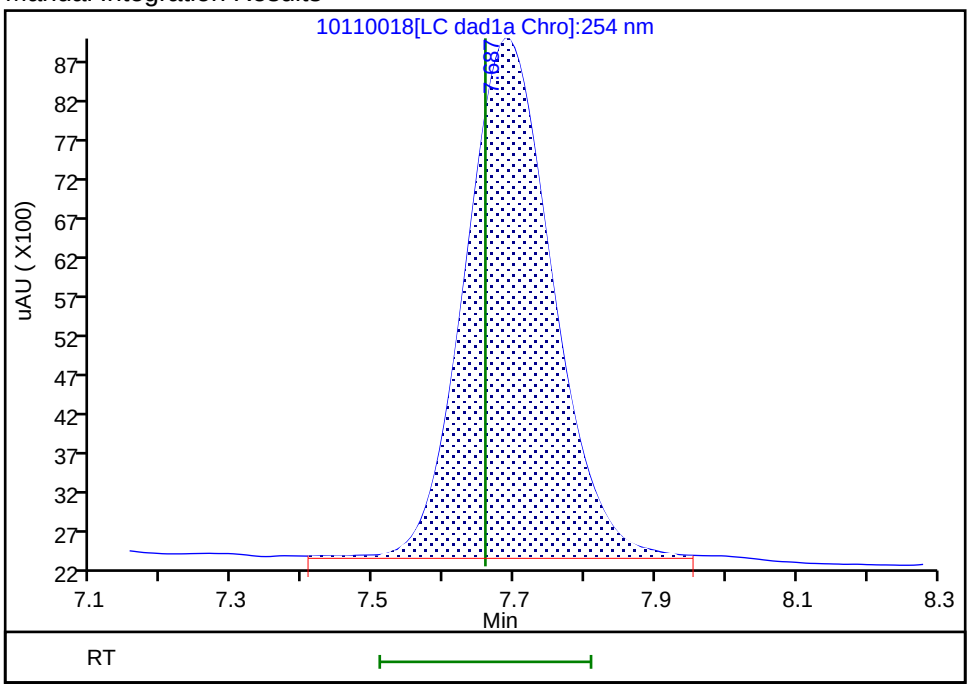
Processing Integration Results

RT: 7.69
Area: 57538
Amount: 0.219758
Amount Units: ug/ml



Manual Integration Results

RT: 7.69
Area: 57450
Amount: 0.219422
Amount Units: ug/ml



Reviewer: K8YG, 12-Oct-2023 12:36:12 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

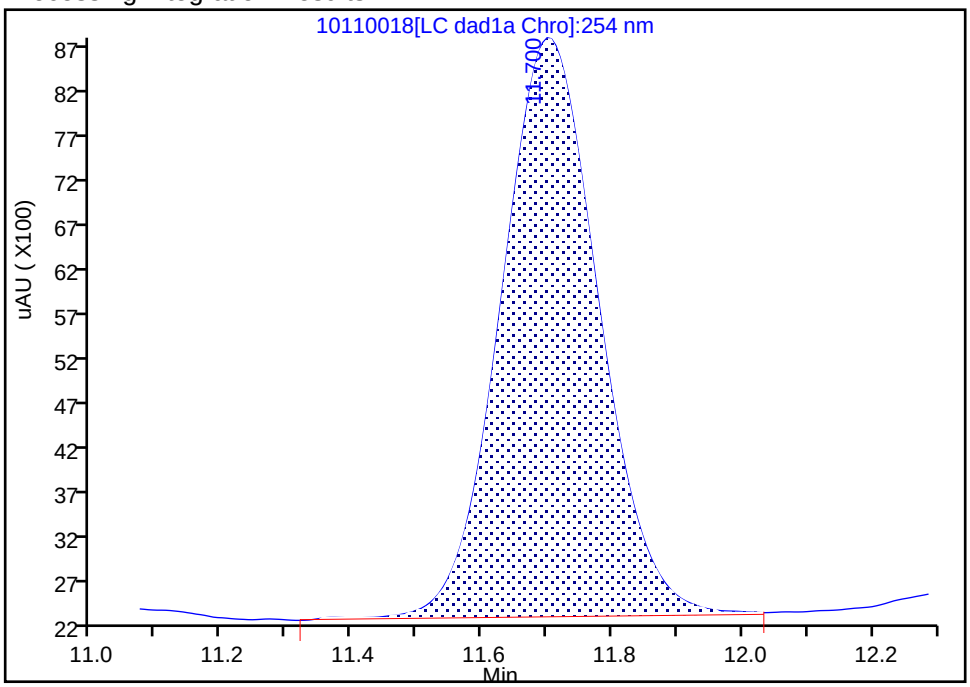
Data File:	\\chromfs\denver\chromdata\g2_luna\20231011-126415.b\10110018.d				
Injection Date:	11-Oct-2023 22:36:55	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-182239-D-4-A MS				
Client ID:	LL3mw-241-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

9 Nitrobenzene, CAS: 98-95-3

Signal: 1

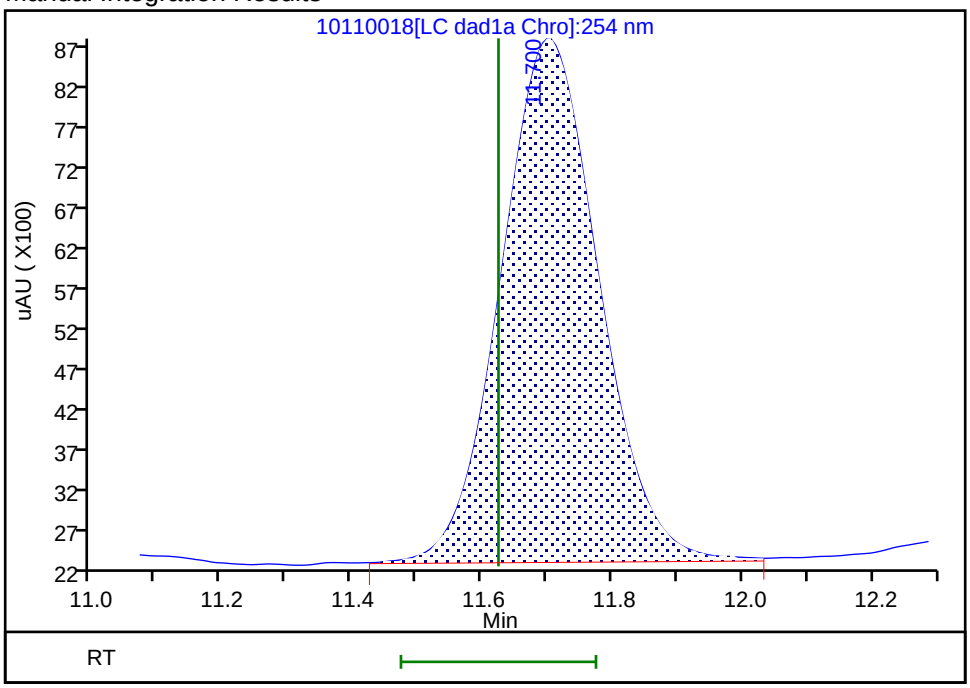
Processing Integration Results

RT: 11.70
Area: 68136
Amount: 0.183461
Amount Units: ug/ml



Manual Integration Results

RT: 11.70
Area: 68026
Amount: 0.183165
Amount Units: ug/ml



Reviewer: K8YG, 12-Oct-2023 12:36:23 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182239-1

SDG No.:

Client Sample ID: LL3mw-241-230901-GW MSD | Lab Sample ID: 280-182239-4 MSD

Matrix: Water | Lab File ID: 10090051.D

Analysis Method: 8330B | Date Collected: 10/02/2023 10:37

Extraction Method: 3535 | Date Extracted: 10/04/2023 13:30

Sample wt/vol: 495.9(mL) | Date Analyzed: 10/10/2023 03:13

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.: 628987 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	3.64		0.21	0.20	0.085
99-65-0	1,3-Dinitrobenzene	2.16	M	0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	2.83		0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	2.05		0.10	0.081	0.028
606-20-2	2,6-Dinitrotoluene	1.94		0.10	0.081	0.040
88-72-2	2-Nitrotoluene	1.67		0.21	0.20	0.086
618-87-1	3,5-Dinitroaniline	2.07		0.40	0.30	0.13
99-08-1	3-Nitrotoluene	1.43	J1	0.40	0.35	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	2.52	J1	0.15	0.12	0.058
99-99-0	4-Nitrotoluene	1.60		0.41	0.40	0.10
80251-29-2	DNX	1.84	M	0.50	0.25	0.098
2691-41-0	HMX	1.81	M	0.21	0.20	0.088
5755-27-1	MNX	2.25	M	0.50	0.29	0.094
98-95-3	Nitrobenzene	1.70		0.21	0.20	0.092
55-63-0	Nitroglycerin	19.6		2.1	2.0	0.93
78-11-5	PETN	20.8		1.1	1.0	0.45
121-82-4	RDX	2.41	M	0.21	0.20	0.052
479-45-8	Tetryl	2.32		0.11	0.10	0.032
13980-04-6	TNX	1.74	M	0.50	0.25	0.080

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	91		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\10090051.D
Lims ID: 280-182239-D-4-B MSD
Client ID: LL3mw-241-230901-GW
Sample Type: MSD
Inject. Date: 10-Oct-2023 03:13:59 ALS Bottle#: 51 Worklist Smp#: 51
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-182239-D-4-B MSD
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 10-Oct-2023 12:45:39 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1622

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
$ 10 1,2-Dinitrobenzene	1	8.530	8.521	0.009	22538	0.2000	0.1819	
3 TNX	1	6.450	6.441	0.009	34740	0.2002	0.1730	M
4 HMX	1	6.576	6.568	0.008	16905	0.2000	0.1794	M
6 DNX	1	6.776	6.768	0.008	26409	0.2008	0.1828	M
7 MNX	1	7.203	7.194	0.009	31017	0.2342	0.2236	M
8 RDX	1	7.583	7.574	0.009	26449	0.2000	0.2394	M
9 2,4,6-Trinitrophenol	1	7.950	7.948	0.002	18999	0.2000	0.2440	
11 1,3,5-Trinitrobenzene	1	8.656	8.648	0.008	78107	0.2000	0.3615	
12 1,3-Dinitrobenzene	1	9.270	9.254	0.016	62799	0.2000	0.2141	M
13 Nitrobenzene	1	9.636	9.621	0.015	32508	0.2000	0.1687	
14 3,5-Dinitroaniline	1	9.856	9.841	0.015	46053	0.2000	0.2051	
15 Tetryl	1	9.990	9.974	0.016	38431	0.2000	0.2298	
16 Nitroglycerin	2	10.436	10.421	0.015	125662	2.00	1.94	
17 2,4,6-Trinitrotoluene	1	10.876	10.861	0.015	57591	0.2000	0.2811	
18 4-Amino-2,6-dinitrotoluene	1	11.056	11.034	0.022	37340	0.2000	0.2497	
19 2-Amino-4,6-dinitrotoluene	1	11.303	11.281	0.022	63035	0.2000	0.3254	
20 2,6-Dinitrotoluene	1	11.463	11.441	0.022	27501	0.2000	0.1928	
21 2,4-Dinitrotoluene	1	11.630	11.607	0.023	60193	0.2000	0.2036	
22 o-Nitrotoluene	1	12.436	12.421	0.015	20921	0.2000	0.1659	
23 p-Nitrotoluene	1	12.850	12.827	0.023	17515	0.2000	0.1591	
24 m-Nitrotoluene	1	13.410	13.387	0.023	19779	0.2000	0.1420	
25 PETN	2	14.550	14.514	0.036	148613	2.00	2.06	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

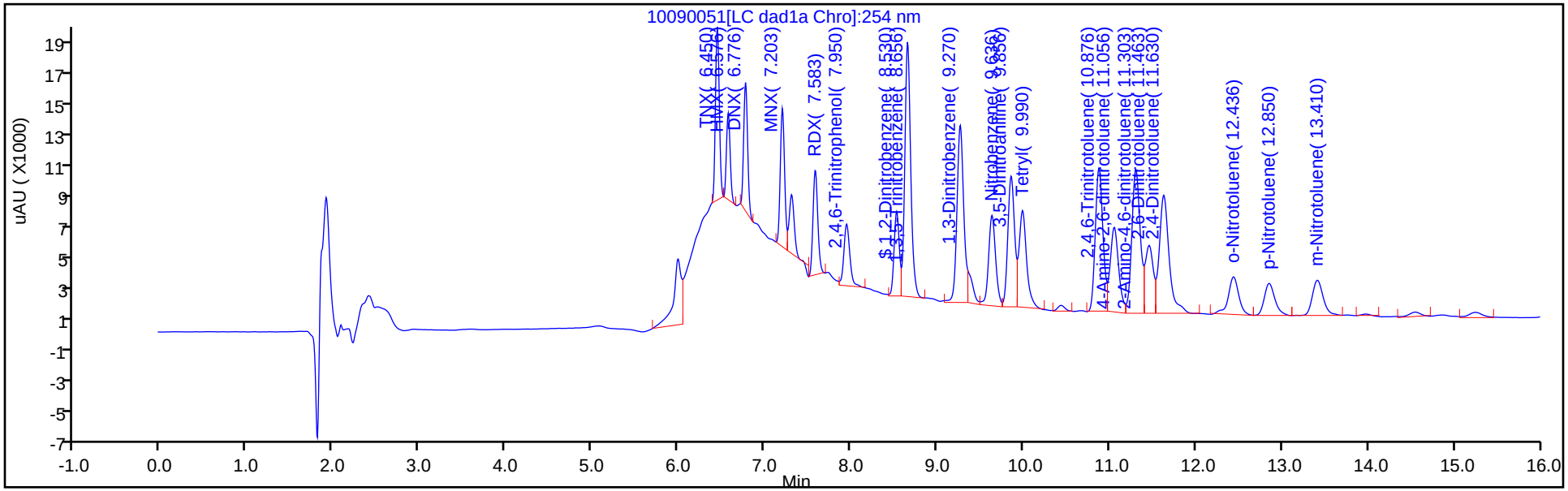
Report Date: 10-Oct-2023 12:45:39 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

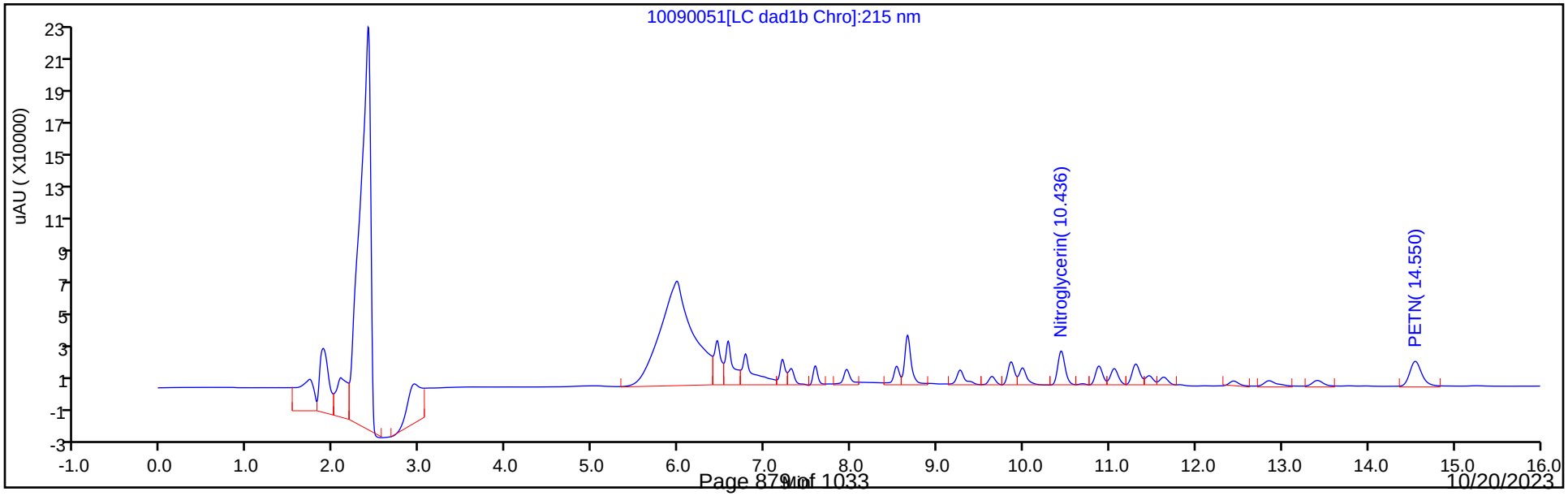
Data File: \\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090051.d

Injection Date:	10-Oct-2023 03:13:59	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-182239-D-4-B MSD			Worklist Smp#:	51
Client ID:	LL3mw-241-230901-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



10/20/2023
4:00 PM

Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\10090051.D				
Lims ID:	280-182239-D-4-B MSD				
Client ID:	LL3mw-241-230901-GW				
Sample Type:	MSD				
Inject. Date:	10-Oct-2023 03:13:59	ALS Bottle#:	51	Worklist Smp#:	51
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-182239-D-4-B MSD				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	10-Oct-2023 12:45:39	Calib Date:	24-Jun-2023 00:23:49		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1622				

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1819	90.94

Manual Integration/User Assign Peak Report

Eurofins Denver

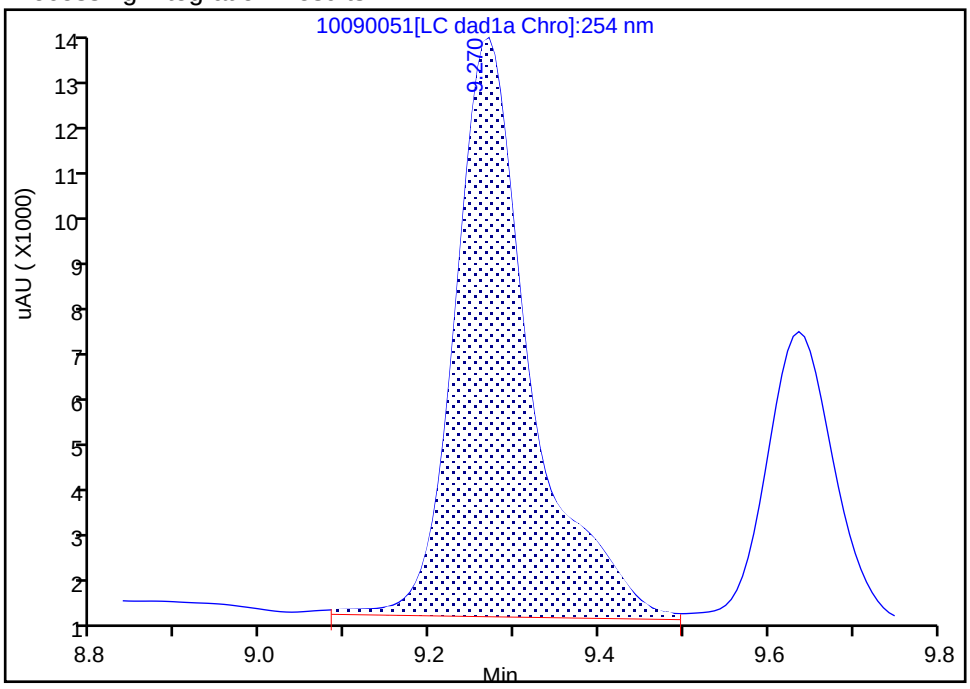
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Injection Date:	10-Oct-2023 03:13:59	Instrument ID:	CHHPLC_X3		
Lims ID:	280-182239-D-4-B MSD				
Client ID:	LL3mw-241-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	51	Worklist Smp#:	51
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

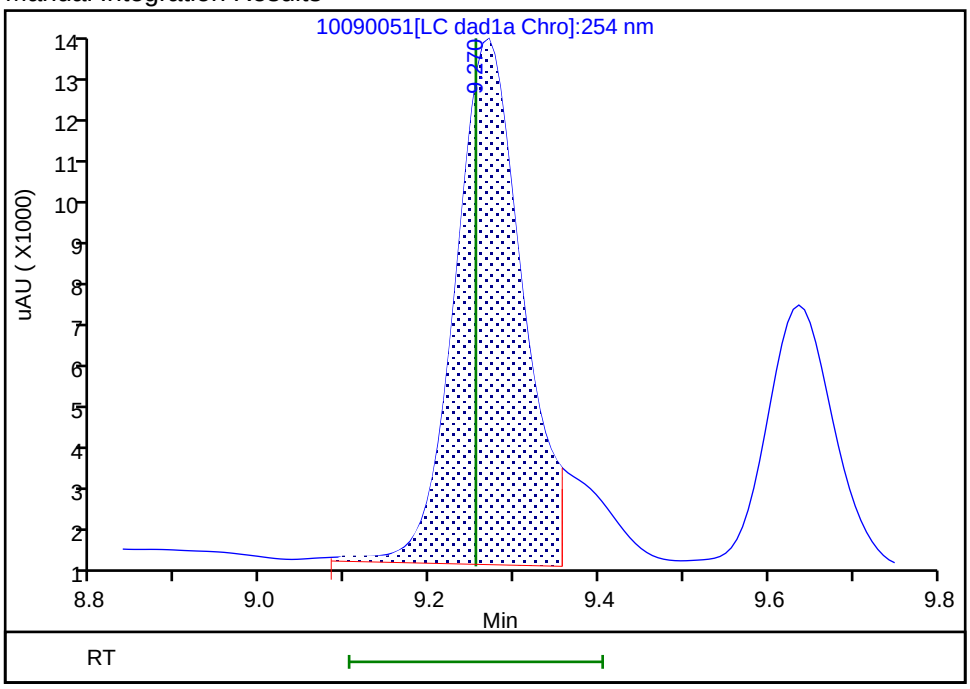
Processing Integration Results

RT: 9.27
Area: 70787
Amount: 0.241308
Amount Units: ug/mL



Manual Integration Results

RT: 9.27
Area: 62799
Amount: 0.214077
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 12:45:27 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

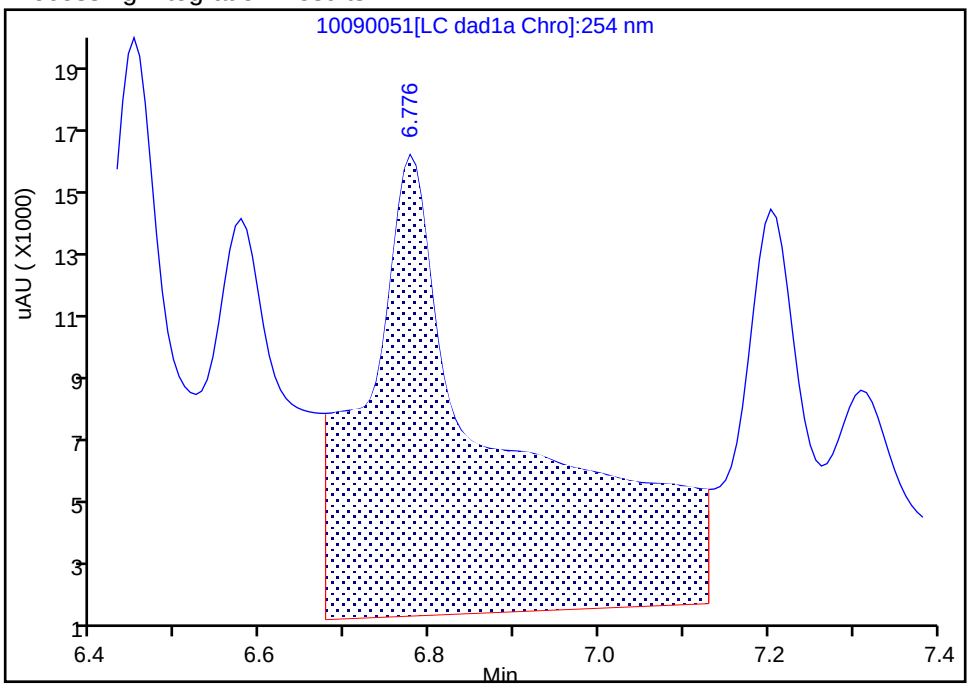
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Injection Date:	10-Oct-2023 03:13:59	Instrument ID:	CHHPLC_X3		
Lims ID:	280-182239-D-4-B MSD				
Client ID:	LL3mw-241-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	51	Worklist Smp#:	51
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

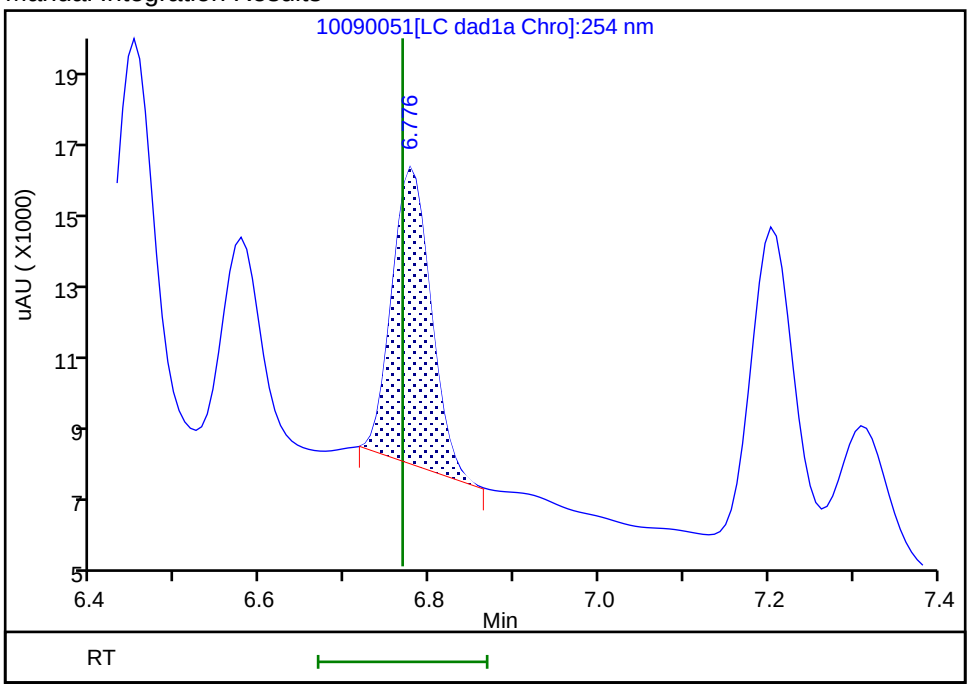
Processing Integration Results

RT: 6.78
Area: 159741
Amount: 1.105529
Amount Units: ug/mL



Manual Integration Results

RT: 6.78
Area: 26409
Amount: 0.182770
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 12:45:06 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

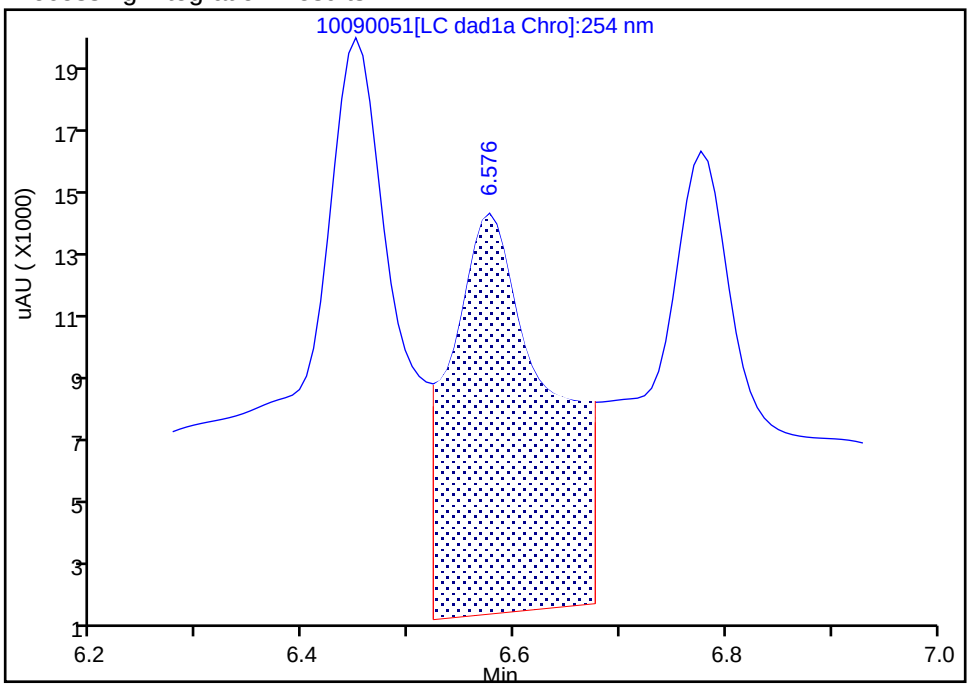
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Injection Date:	10-Oct-2023 03:13:59	Instrument ID:	CHHPLC_X3		
Lims ID:	280-182239-D-4-B MSD				
Client ID:	LL3mw-241-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	51	Worklist Smp#:	51
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

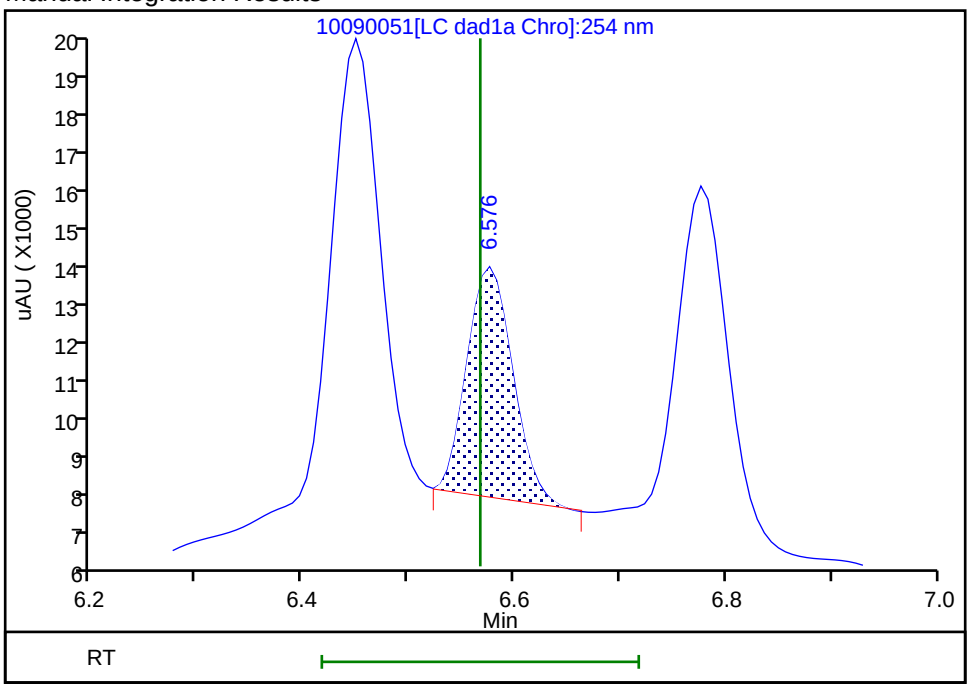
Processing Integration Results

RT: 6.58
Area: 80068
Amount: 0.849480
Amount Units: ug/mL



Manual Integration Results

RT: 6.58
Area: 16905
Amount: 0.179353
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 12:45:02 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

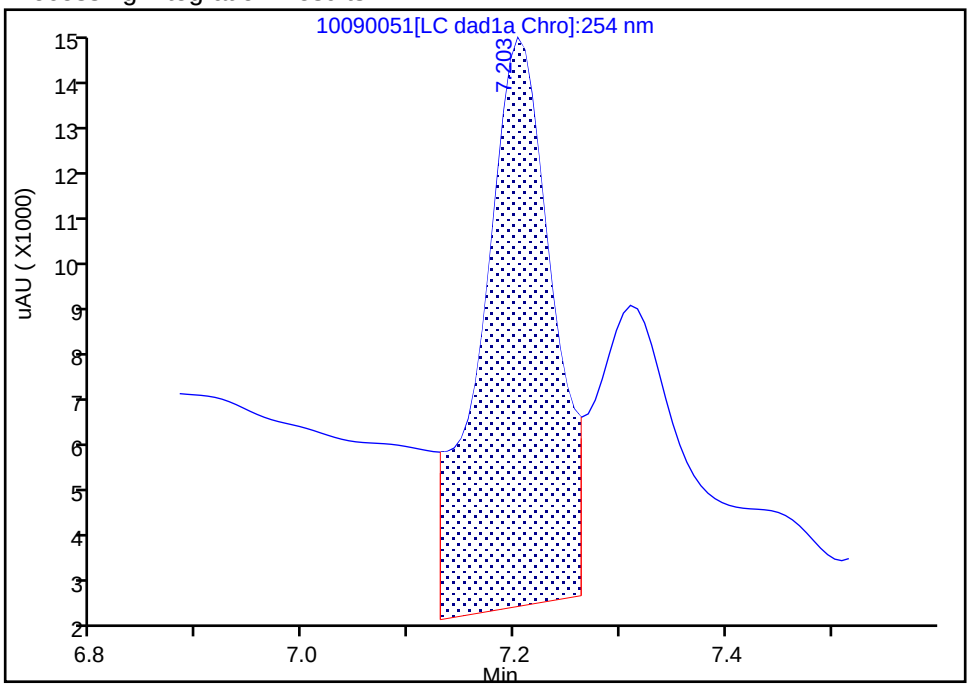
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Injection Date:	10-Oct-2023 03:13:59	Instrument ID:	CHHPLC_X3		
Lims ID:	280-182239-D-4-B MSD				
Client ID:	LL3mw-241-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	51	Worklist Smp#:	51
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

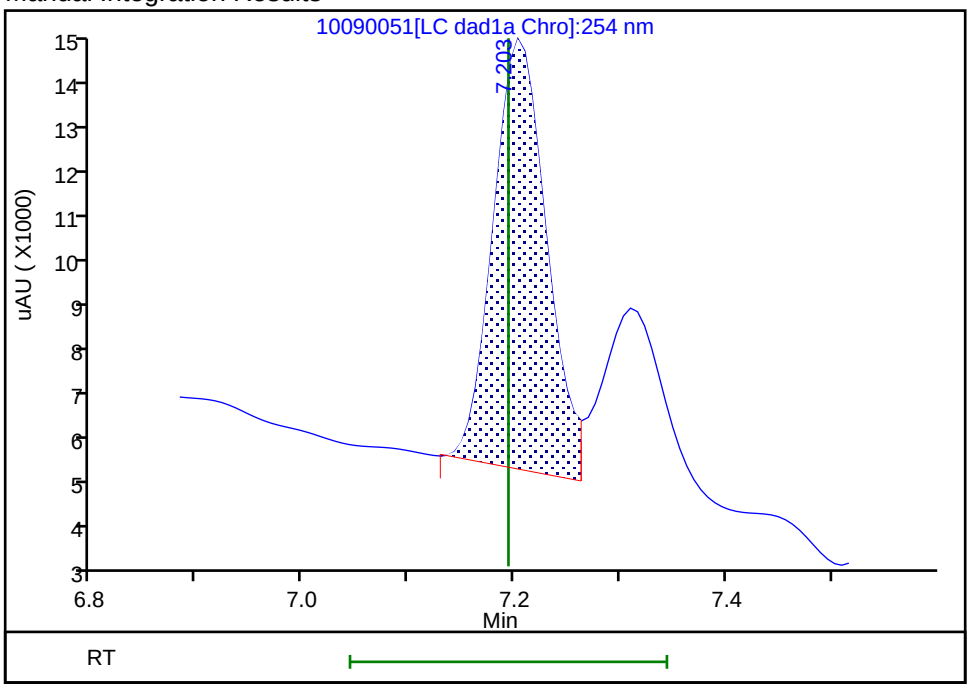
Processing Integration Results

RT: 7.20
Area: 54841
Amount: 0.395425
Amount Units: ug/mL



Manual Integration Results

RT: 7.20
Area: 31017
Amount: 0.223645
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 12:45:15 -06:00:00 (UTC)

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

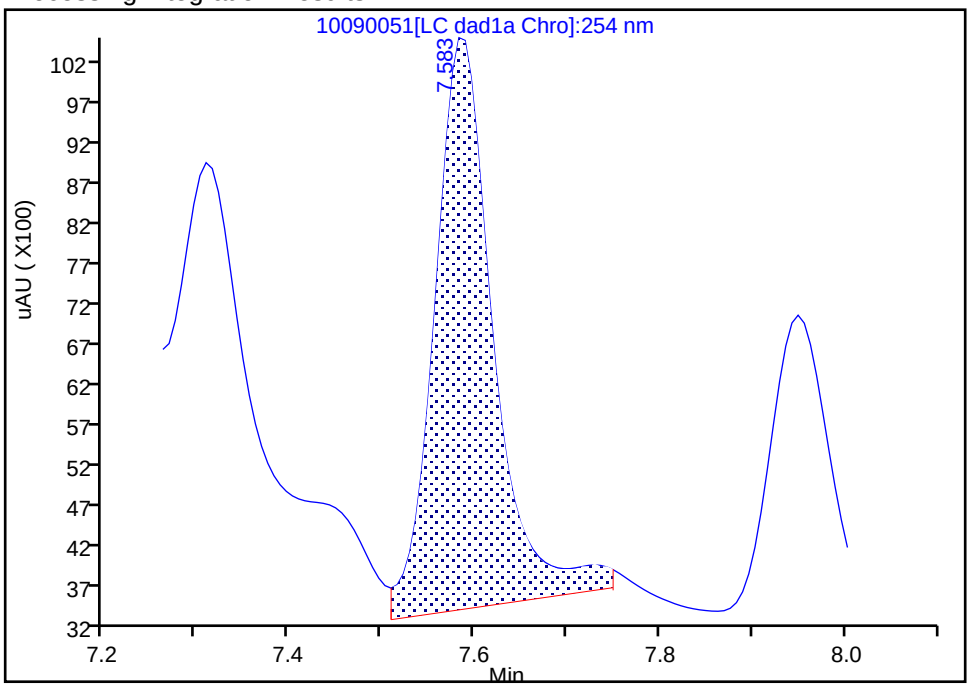
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Injection Date:	10-Oct-2023 03:13:59	Instrument ID:	CHHPLC_X3		
Lims ID:	280-182239-D-4-B MSD				
Client ID:	LL3mw-241-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	51	Worklist Smp#:	51
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

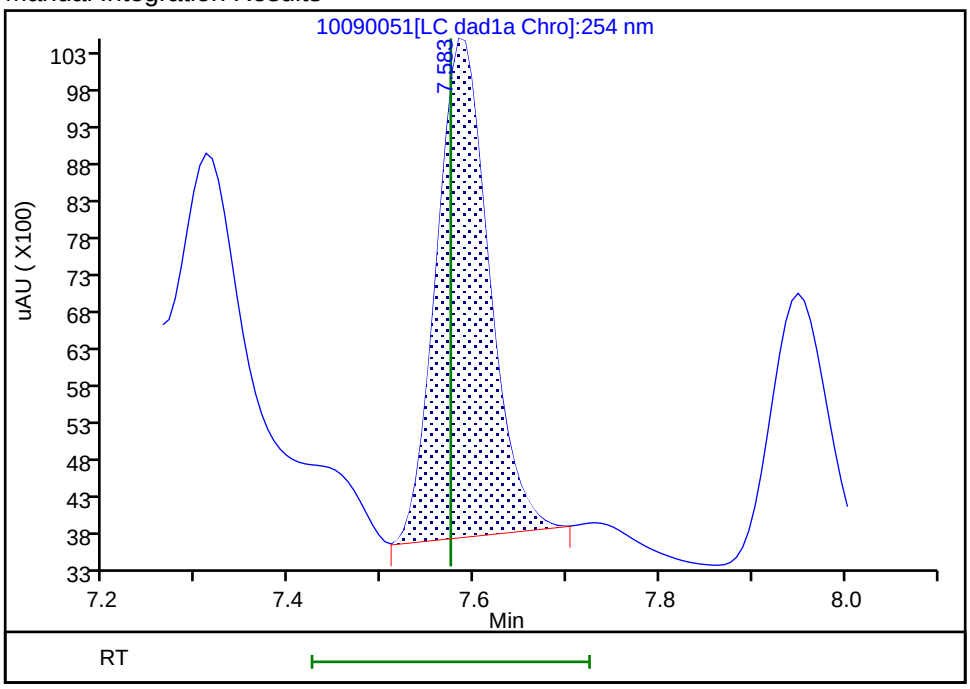
Processing Integration Results

RT: 7.58
Area: 31322
Amount: 0.283475
Amount Units: ug/mL



Manual Integration Results

RT: 7.58
Area: 26449
Amount: 0.239373
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 12:45:21 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

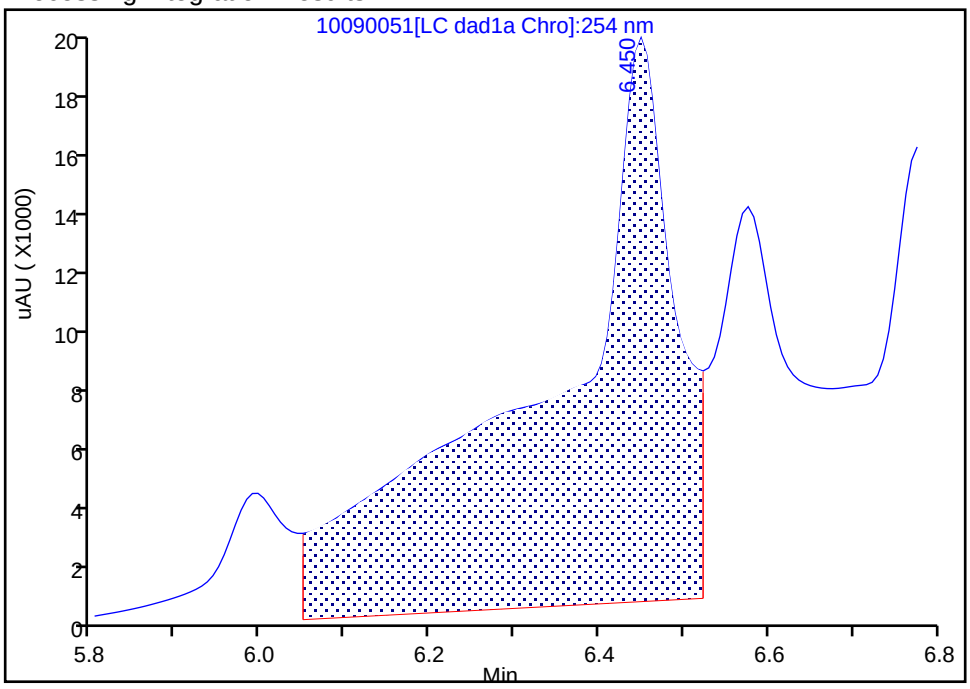
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Injection Date:	10-Oct-2023 03:13:59	Instrument ID:	CHHPLC_X3		
Lims ID:	280-182239-D-4-B MSD				
Client ID:	LL3mw-241-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	51	Worklist Smp#:	51
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

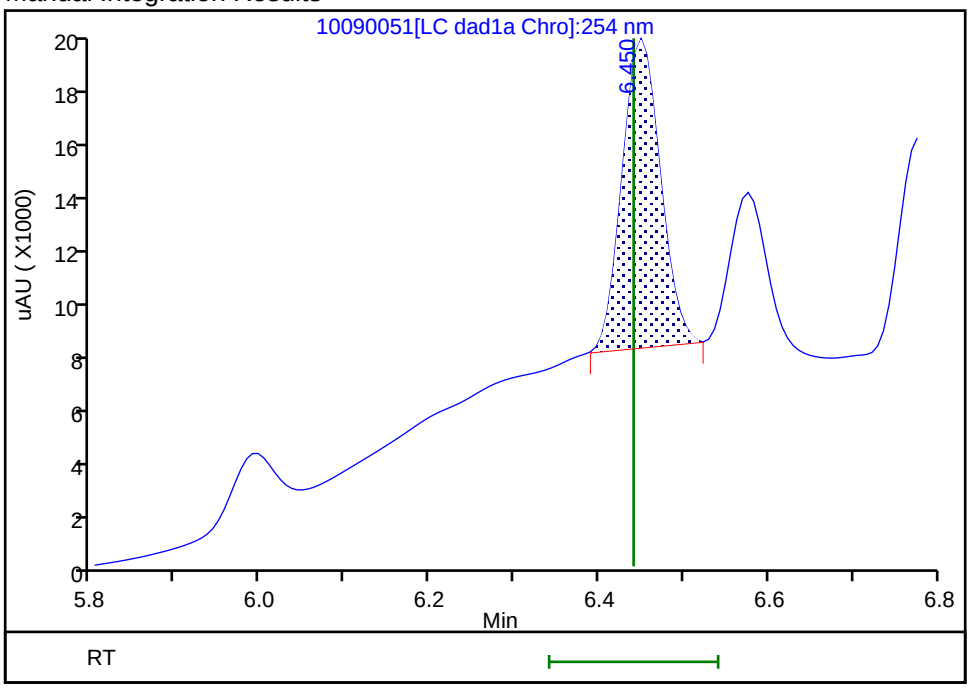
Processing Integration Results

RT: 6.45
Area: 201356
Amount: 1.002964
Amount Units: ug/mL



Manual Integration Results

RT: 6.45
Area: 34740
Amount: 0.173042
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 12:44:57 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182239-1

SDG No.:

Client Sample ID: LL3mw-241-230901-GW MSD | Lab Sample ID: 280-182239-4 MSD

Matrix: Water | Lab File ID: 10090053.D

Analysis Method: 8330B | Date Collected: 10/02/2023 10:37

Extraction Method: 3535 | Date Extracted: 10/04/2023 13:30

Sample wt/vol: 474.6(mL) | Date Analyzed: 10/10/2023 03:59

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.: 628987 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
6629-29-4	2,4-diamino-6-nitrotoluene	1.51	M J1	1.1	0.95	0.46
59229-75-3	2,6-diamino-4-nitrotoluene	1.78	M J1	1.1	0.95	0.23

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	88		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\10090053.D
Lims ID: 280-182239-B-4-B MSD
Client ID: LL3mw-241-230901-GW
Sample Type: MSD
Inject. Date: 10-Oct-2023 03:59:52 ALS Bottle#: 53 Worklist Smp#: 53
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-182239-B-4-B MSD
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 10-Oct-2023 12:46:56 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1622

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
$ 10	1,2-Dinitrobenzene	1	8.525	8.521	0.004	21819	0.2000	0.1761	
2	2,6-diamino-4-nitrotoluene	1	6.445	6.438	0.007	38105	0.2000	0.1689	M
5	2,4-diamino-6-nitrotoluene	1	6.632	6.625	0.007	20492	0.2000	0.1430	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

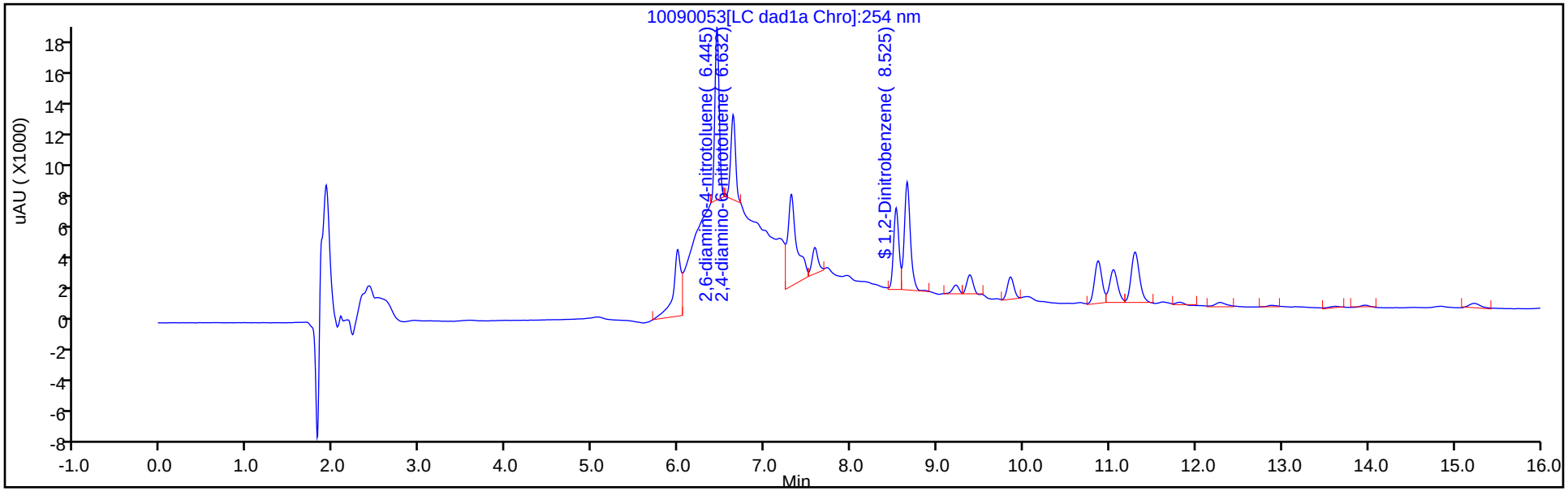
Report Date: 10-Oct-2023 12:46:56 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

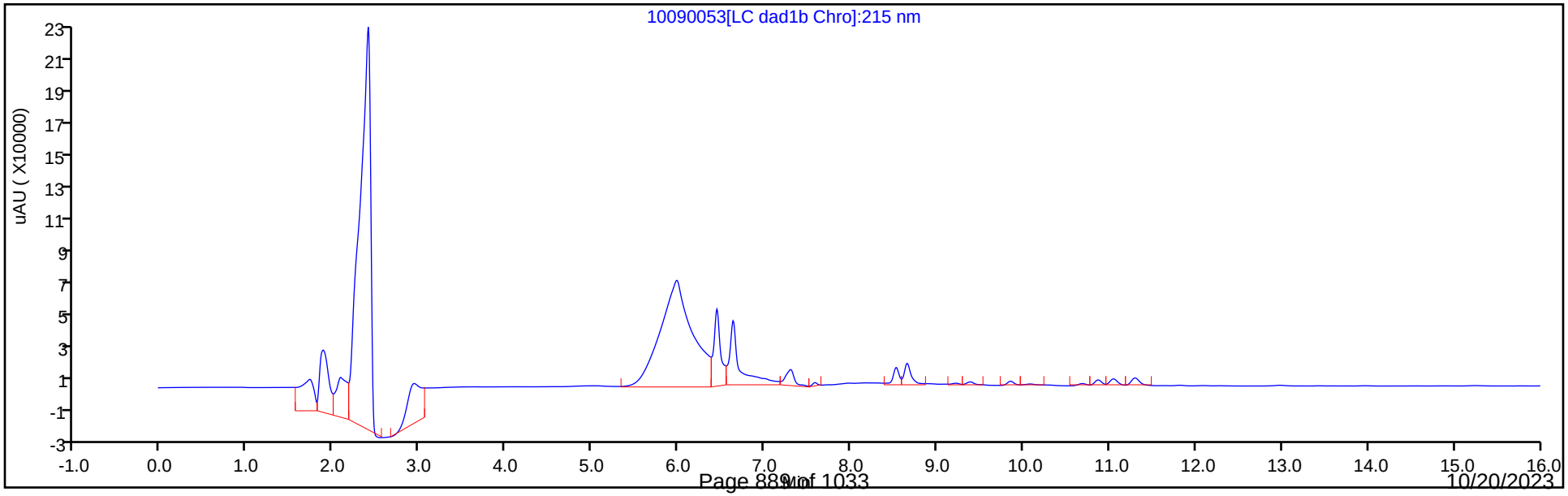
Data File: \\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090053.d

Injection Date:	10-Oct-2023 03:59:52	Instrument ID:	CHHPLC_X3	Operator ID:	JZ/JG
Lims ID:	280-182239-B-4-B MSD			Worklist Smp#:	53
Client ID:	LL3mw-241-230901-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	53
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\10090053.D
Lims ID: 280-182239-B-4-B MSD
Client ID: LL3mw-241-230901-GW
Sample Type: MSD
Inject. Date: 10-Oct-2023 03:59:52 ALS Bottle#: 53 Worklist Smp#: 53
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-182239-B-4-B MSD
Operator ID: JZ/JG Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20231009-126302.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 10-Oct-2023 12:46:56 Calib Date: 24-Jun-2023 00:23:49
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20230623-122860.b\06230028.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1622

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1761	88.04

Manual Integration/User Assign Peak Report

Eurofins Denver

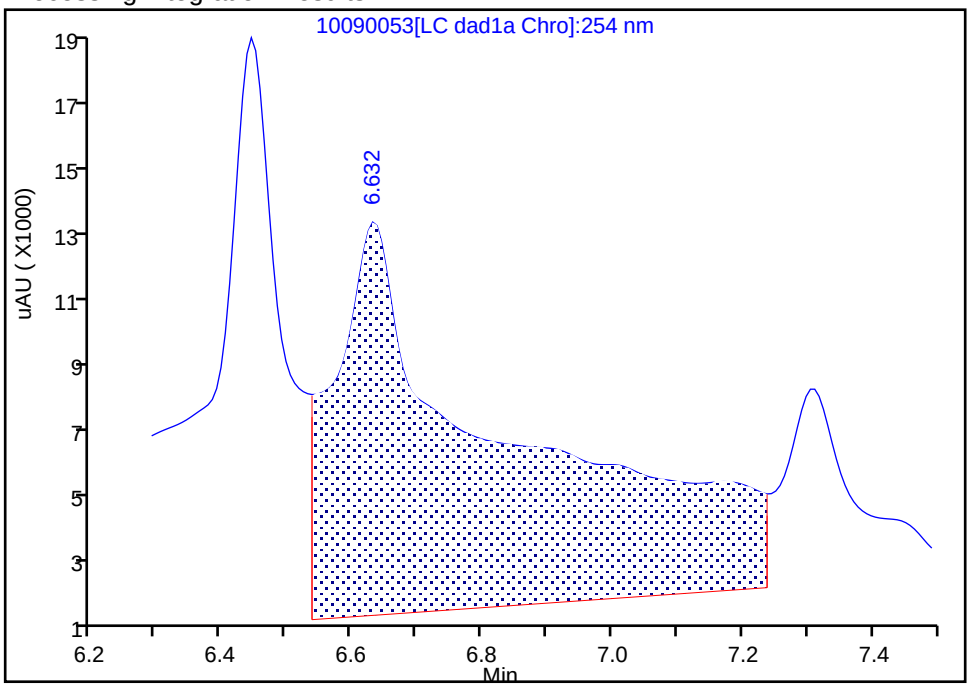
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Injection Date:	10-Oct-2023 03:59:52	Instrument ID:	CHHPLC_X3		
Lims ID:	280-182239-B-4-B MSD				
Client ID:	LL3mw-241-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	53	Worklist Smp#:	53
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 2,4-diamino-6-nitrotoluene, CAS: 6629-29-4

Signal: 1

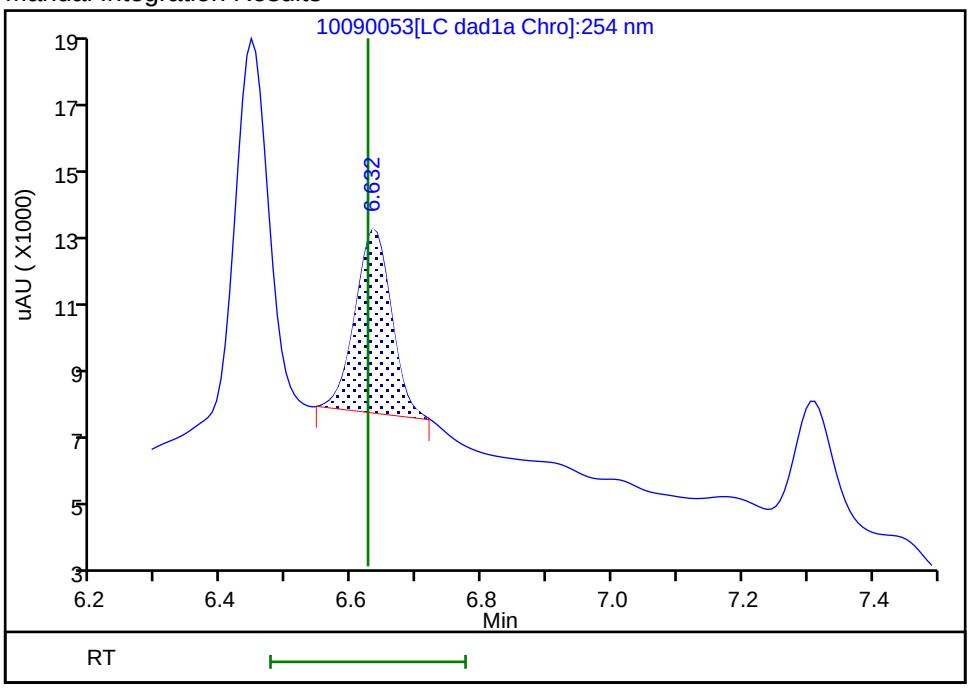
Processing Integration Results

RT: 6.63
Area: 220690
Amount: 1.539774
Amount Units: ug/mL



Manual Integration Results

RT: 6.63
Area: 20492
Amount: 0.142974
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 12:46:49 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

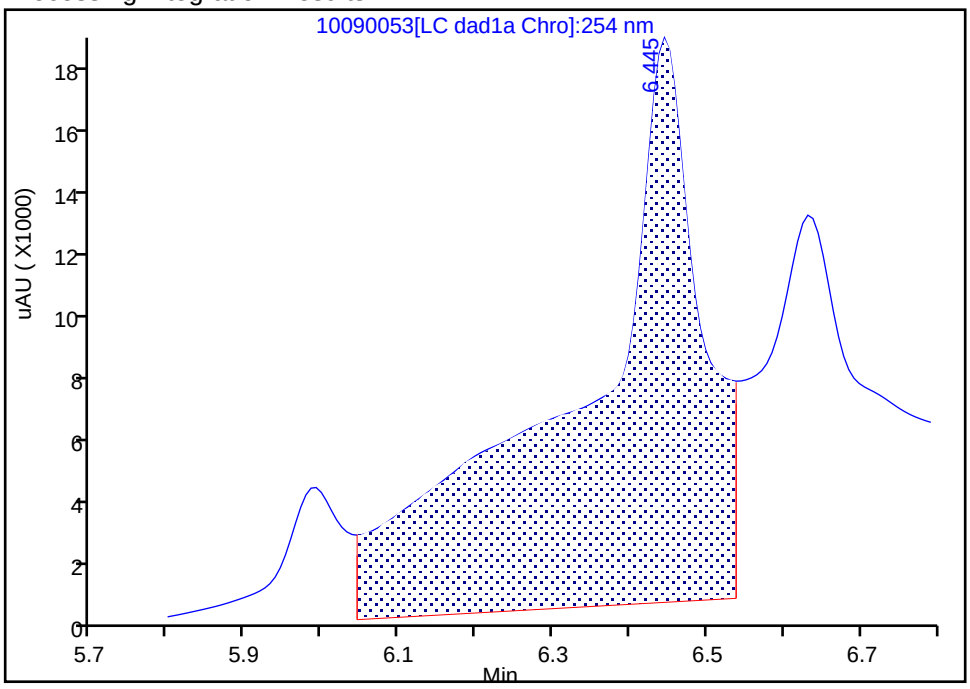
Data File: \\chromfs\denver\chromdata\chhplc_x\20231009-126302.b\10090053.d
Injection Date: 10-Oct-2023 03:59:52 Instrument ID: CHHPLC_X3
Lims ID: 280-182239-B-4-B MSD
Client ID: LL3mw-241-230901-GW
Operator ID: JZ/JG ALS Bottle#: 53 Worklist Smp#: 53
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

2 2,6-diamino-4-nitrotoluene, CAS: 59229-75-3

Signal: 1

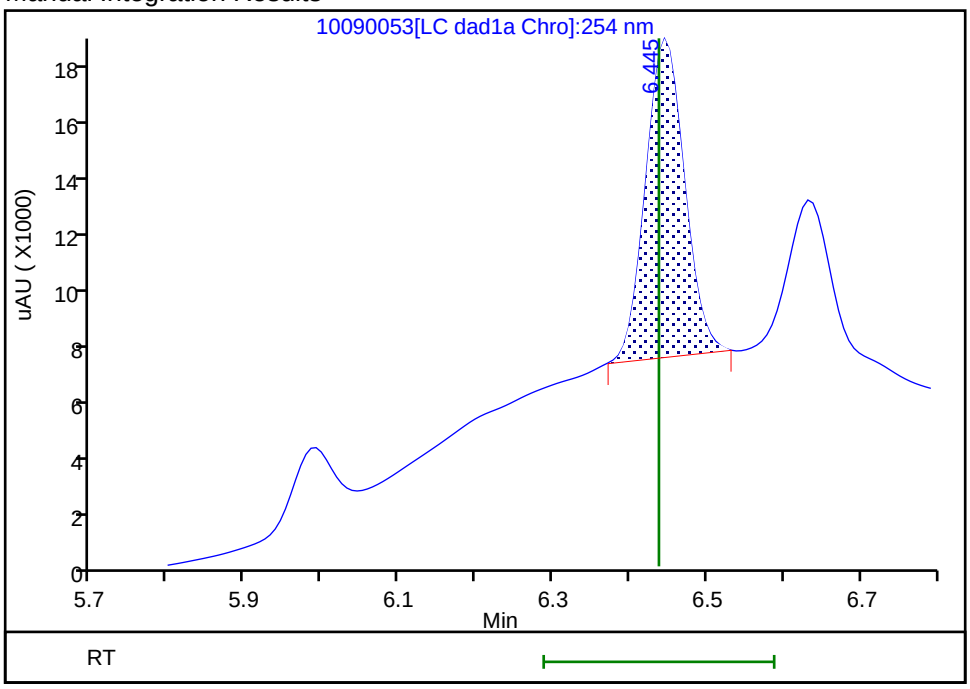
Processing Integration Results

RT: 6.45
Area: 198184
Amount: 0.878611
Amount Units: ug/mL



Manual Integration Results

RT: 6.45
Area: 38105
Amount: 0.168931
Amount Units: ug/mL



Reviewer: K8YG, 10-Oct-2023 12:46:45 -06:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-182239-1

SDG No.:

Client Sample ID: LL3mw-241-230901-GW MSD | Lab Sample ID: 280-182239-4 MSD

Matrix: Water | Lab File ID: 10110019.D

Analysis Method: 8330B | Date Collected: 10/02/2023 10:37

Extraction Method: 3535 | Date Extracted: 10/04/2023 13:30

Sample wt/vol: 495.9(mL) | Date Analyzed: 10/11/2023 23:12

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.: 629372 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
35572-78-2	2-Amino-4,6-dinitrotoluene	3.29	J1	0.11	0.10	0.051
2691-41-0	*HMX*	*1.99*		*0.21*	0.20	*0.088*

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\G2_LUNA\20231011-126415.b\10110019.D
Lims ID: 280-182239-D-4-B MSD
Client ID: LL3mw-241-230901-GW
Sample Type: MSD
Inject. Date: 11-Oct-2023 23:12:55 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-182239-D-4-B MSD
Operator ID: JZ/JG Instrument ID: CHHPLC_G2_LUNA

Method: \\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 12-Oct-2023 12:50:27 Calib Date: 26-Sep-2023 04:54:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX1633

First Level Reviewer: K8YG Date: 12-Oct-2023 12:38:05

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.306	5.292	0.014	69878	0.2002	0.1840	
4 DNX	1	6.159	6.152	0.007	60045	0.2008	0.2083	
6 HMX	1	6.833	6.805	0.028	34252	0.2000	0.1975	
7 MNX	1	7.699	7.659	0.040	57644	0.2342	0.2202	
5 2,4,6-Trinitrophenol	1	8.746	8.759	-0.013	32264	0.2000	0.2250	
8 RDX	1	9.113	9.052	0.061	49597	0.2000	0.2389	
9 Nitrobenzene	1	11.693	11.625	0.068	66489	0.2000	0.1790	
$ 10 1,2-Dinitrobenzene	1	12.639	12.572	0.067	48420	0.2000	0.1886	
11 3,5-Dinitroaniline	1	14.473	14.405	0.068	92792	0.2000	0.2253	
12 1,3-Dinitrobenzene	1	14.759	14.698	0.061	109752	0.2000	0.1894	
13 Nitroglycerin	2	15.213	15.165	0.048	245250	2.00	1.97	
14 o-Nitrotoluene	1	15.846	15.785	0.061	39110	0.2000	0.1583	
15 p-Nitrotoluene	1	16.066	16.012	0.054	33586	0.2000	0.1515	
16 4-Amino-2,6-dinitrotoluene	1	16.579	16.525	0.054	76814	0.2000	0.2801	
17 m-Nitrotoluene	1	16.893	16.858	0.035	52426	0.2000	0.1901	
18 2-Amino-4,6-dinitrotoluene	1	17.379	17.338	0.041	124171	0.2000	0.3262	
19 1,3,5-Trinitrobenzene	1	17.573	17.532	0.041	147602	0.2000	0.3586	
20 2,6-Dinitrotoluene	1	18.686	18.658	0.028	50855	0.2000	0.1917	
21 2,4-Dinitrotoluene	1	19.133	19.118	0.015	102029	0.2000	0.1872	M
22 Tetryl	1	22.346	22.339	0.007	61556	0.2000	0.1996	
23 2,4,6-Trinitrotoluene	1	23.213	23.199	0.014	113014	0.2000	0.2936	
24 PETN	2	24.346	24.352	-0.006	259124	2.00	2.11	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

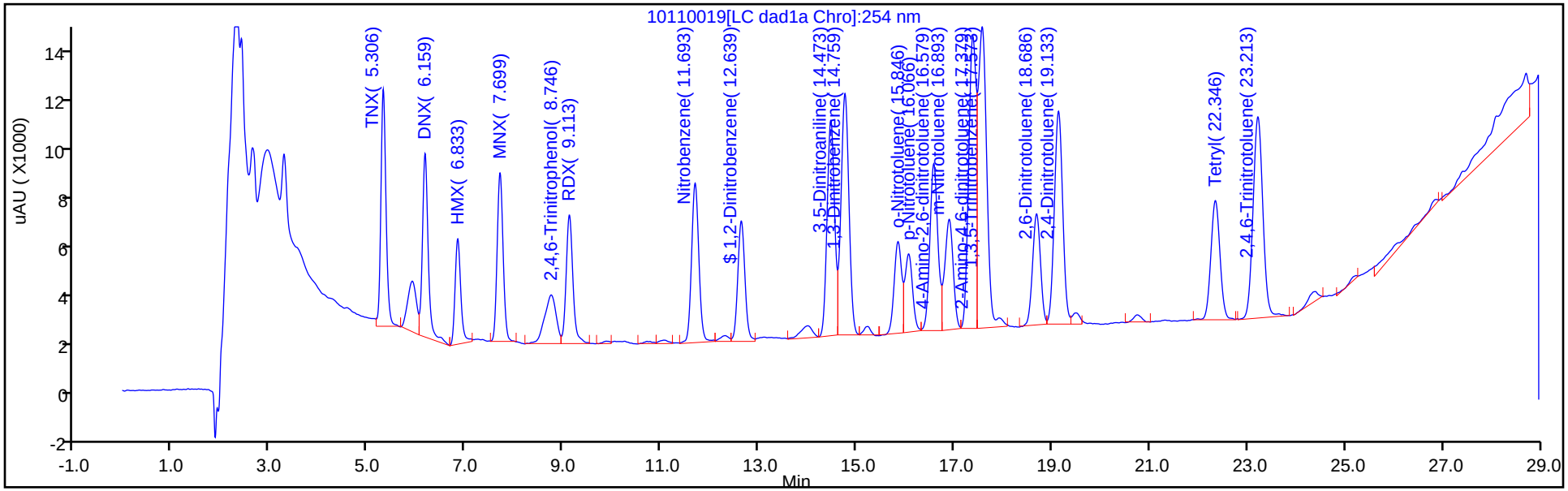
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Eurofins Denver

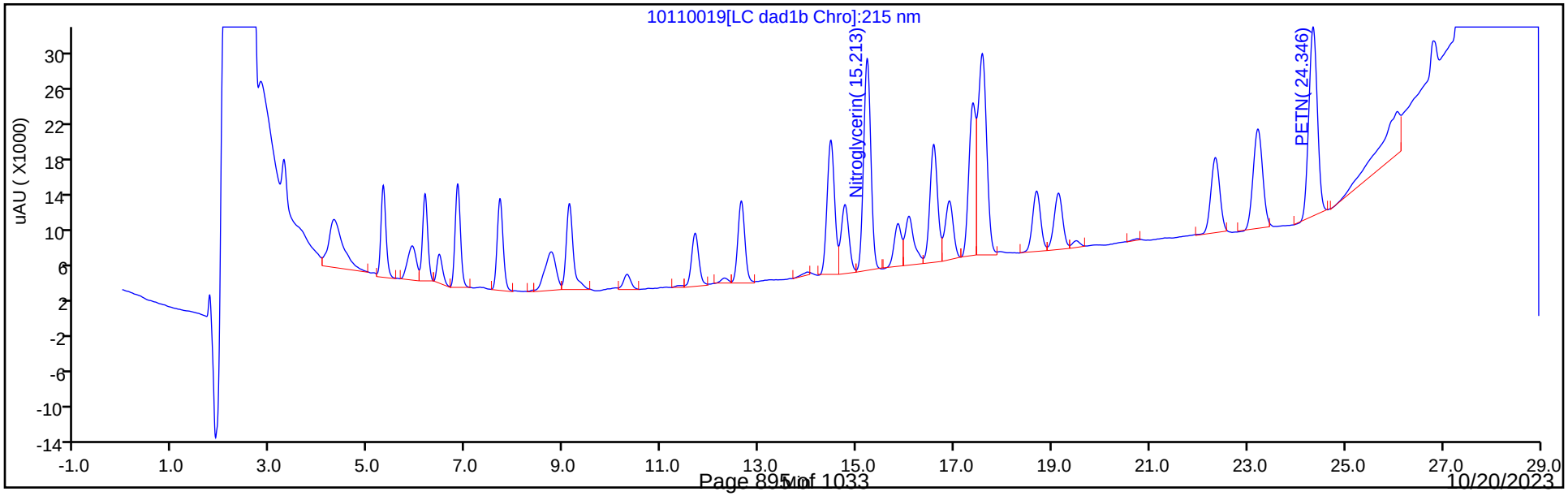
Data File: \\chromfs\denver\chromdata\g2_luna\20231011-126415.b\10110019.d

Injection Date:	11-Oct-2023 23:12:55	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	JZ/JG
Lims ID:	280-182239-D-4-B MSD			Worklist Smp#:	19
Client ID:	LL3mw-241-230901-GW				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\10110019.D				
Lims ID:	280-182239-D-4-B MSD				
Client ID:	LL3mw-241-230901-GW				
Sample Type:	MSD				
Inject. Date:	11-Oct-2023 23:12:55	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-182239-D-4-B MSD				
Operator ID:	JZ/JG	Instrument ID:	CHHPLC_G2_LUNA		
Method:	\\chromfs\Denver\ChromData\G2_LUNA\20231011-126415.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	12-Oct-2023 12:50:27	Calib Date:	26-Sep-2023 04:54:46		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\G2_LUNA\20230925-125782.b\09250027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX1633				

First Level Reviewer: K8YG Date: 12-Oct-2023 12:38:05

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1886	94.29

Manual Integration/User Assign Peak Report

Eurofins Denver

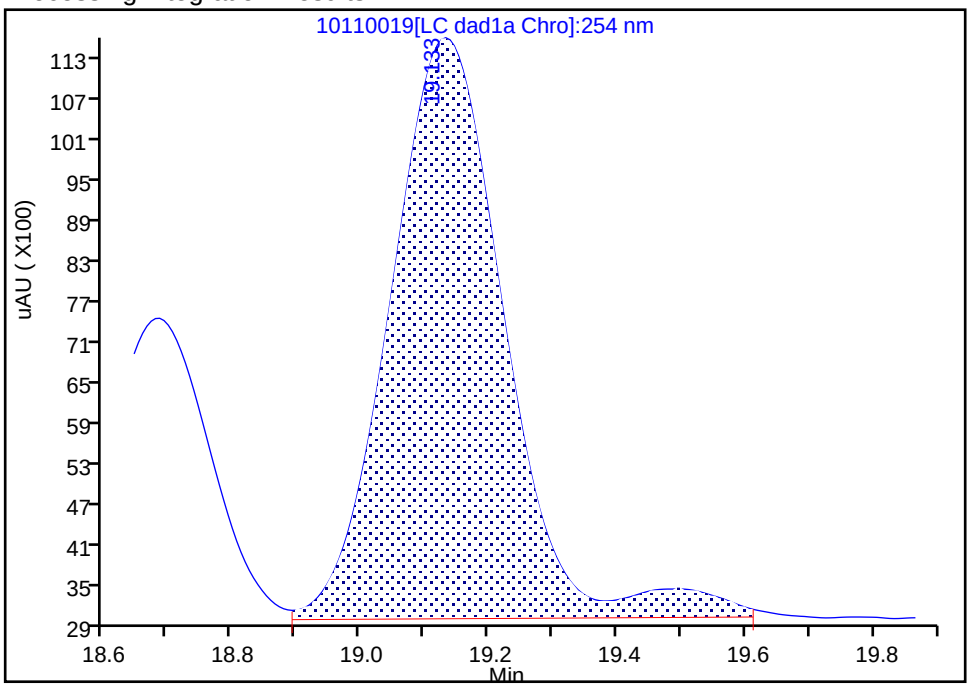
Data File:	\\chromfs\denver\chromdata\g2_luna\20231011-126415.b\10110019.d				
Injection Date:	11-Oct-2023 23:12:55	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-182239-D-4-B MSD				
Client ID:	LL3mw-241-230901-GW				
Operator ID:	JZ/JG	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

Signal: 1

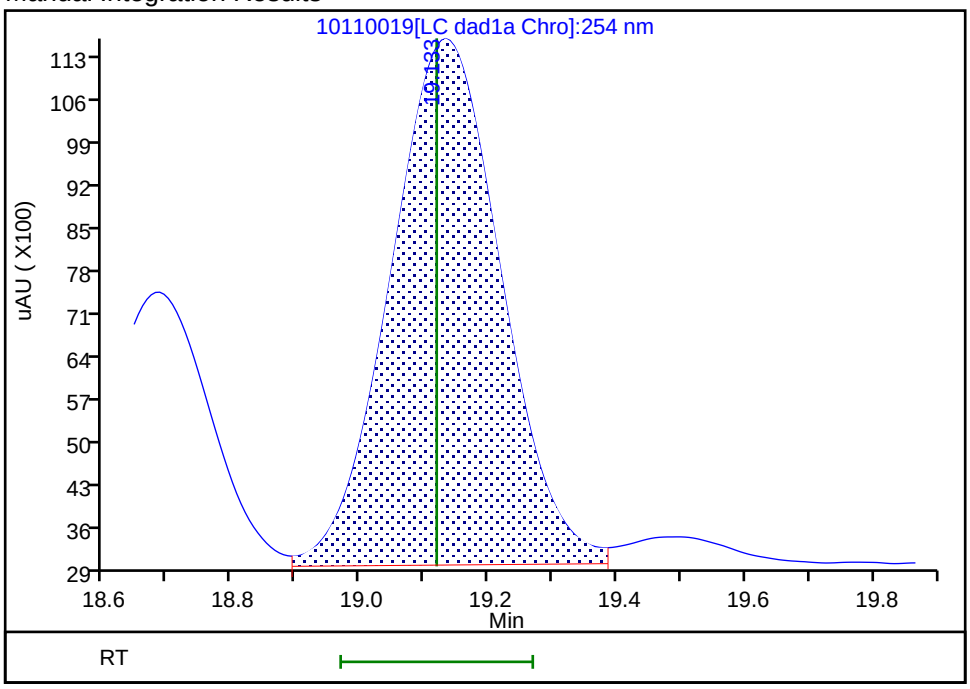
Processing Integration Results

RT: 19.13
Area: 106519
Amount: 0.195416
Amount Units: ug/ml



Manual Integration Results

RT: 19.13
Area: 102029
Amount: 0.187179
Amount Units: ug/ml



Reviewer: K8YG, 12-Oct-2023 12:37:58 -06:00:00 (UTC)

Audit Action: Split an Integrated Peak Audit Reason: Baseline

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 06/23/2023 17:53

Analysis Batch Number: 617295 End Date: 06/24/2023 00:46

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-617295/11		06/23/2023 17:53	1	06230011.D	UltraCarb5uODS 4.6(mm)
IC 280-617295/12		06/23/2023 18:16	1	06230012.D	UltraCarb5uODS 4.6(mm)
IC 280-617295/13		06/23/2023 18:39	1	06230013.D	UltraCarb5uODS 4.6(mm)
IC 280-617295/14		06/23/2023 19:02	1	06230014.D	UltraCarb5uODS 4.6(mm)
IC 280-617295/15		06/23/2023 19:25	1	06230015.D	UltraCarb5uODS 4.6(mm)
IC 280-617295/16		06/23/2023 19:48	1	06230016.D	UltraCarb5uODS 4.6(mm)
IC 280-617295/17		06/23/2023 20:11	1	06230017.D	UltraCarb5uODS 4.6(mm)
IC 280-617295/18		06/23/2023 20:34	1	06230018.D	UltraCarb5uODS 4.6(mm)
IC 280-617295/19		06/23/2023 20:57	1	06230019.D	UltraCarb5uODS 4.6(mm)
ICV 280-617295/20		06/23/2023 21:20	1	06230020.D	UltraCarb5uODS 4.6(mm)
IC 280-617295/21		06/23/2023 21:43	1	06230021.D	UltraCarb5uODS 4.6(mm)
IC 280-617295/22		06/23/2023 22:06	1	06230022.D	UltraCarb5uODS 4.6(mm)
IC 280-617295/23		06/23/2023 22:29	1	06230023.D	UltraCarb5uODS 4.6(mm)
IC 280-617295/24		06/23/2023 22:52	1	06230024.D	UltraCarb5uODS 4.6(mm)
IC 280-617295/25		06/23/2023 23:14	1	06230025.D	UltraCarb5uODS 4.6(mm)
IC 280-617295/26		06/23/2023 23:37	1	06230026.D	UltraCarb5uODS 4.6(mm)
IC 280-617295/27		06/24/2023 00:00	1	06230027.D	UltraCarb5uODS 4.6(mm)
IC 280-617295/28		06/24/2023 00:23	1	06230028.D	UltraCarb5uODS 4.6(mm)
ICV 280-617295/29		06/24/2023 00:46	1	06230029.D	UltraCarb5uODS 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Start Date: 09/25/2023 18:42

Analysis Batch Number: 627290 End Date: 09/26/2023 05:31

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-627290/10		09/25/2023 18:42	1	09250010.D	Luna-phenylhex 4.6(mm)
IC 280-627290/11		09/25/2023 19:17	1	09250011.D	Luna-phenylhex 4.6(mm)
IC 280-627290/12		09/25/2023 19:53	1	09250012.D	Luna-phenylhex 4.6(mm)
IC 280-627290/13		09/25/2023 20:29	1	09250013.D	Luna-phenylhex 4.6(mm)
IC 280-627290/14		09/25/2023 21:05	1	09250014.D	Luna-phenylhex 4.6(mm)
IC 280-627290/15		09/25/2023 21:42	1	09250015.D	Luna-phenylhex 4.6(mm)
IC 280-627290/16		09/25/2023 22:18	1	09250016.D	Luna-phenylhex 4.6(mm)
IC 280-627290/17		09/25/2023 22:54	1	09250017.D	Luna-phenylhex 4.6(mm)
IC 280-627290/18		09/25/2023 23:30	1	09250018.D	Luna-phenylhex 4.6(mm)
ICV 280-627290/19		09/26/2023 00:06	1	09250019.D	Luna-phenylhex 4.6(mm)
IC 280-627290/20		09/26/2023 00:42	1	09250020.D	Luna-phenylhex 4.6(mm)
IC 280-627290/21		09/26/2023 01:18	1	09250021.D	Luna-phenylhex 4.6(mm)
IC 280-627290/22		09/26/2023 01:54	1	09250022.D	Luna-phenylhex 4.6(mm)
IC 280-627290/23		09/26/2023 02:30	1	09250023.D	Luna-phenylhex 4.6(mm)
IC 280-627290/24		09/26/2023 03:06	1	09250024.D	Luna-phenylhex 4.6(mm)
IC 280-627290/25		09/26/2023 03:42	1	09250025.D	Luna-phenylhex 4.6(mm)
IC 280-627290/26		09/26/2023 04:18	1	09250026.D	Luna-phenylhex 4.6(mm)
IC 280-627290/27		09/26/2023 04:54	1	09250027.D	Luna-phenylhex 4.6(mm)
ICV 280-627290/28		09/26/2023 05:31	1	09250028.D	Luna-phenylhex 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 10/09/2023 13:04

Analysis Batch Number: 628987 End Date: 10/10/2023 07:03

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-628987/14		10/09/2023 13:04	1		UltraCarb5uODS 4.6(mm)
CCV 280-628987/37		10/09/2023 21:52	1	10090037.D	UltraCarb5uODS 4.6(mm)
CCV 280-628987/38		10/09/2023 22:15	1	10090038.D	UltraCarb5uODS 4.6(mm)
MB 280-628393/1-A		10/09/2023 22:38	1	10090039.D	UltraCarb5uODS 4.6(mm)
LCS 280-628393/2-A		10/09/2023 23:01	1	10090040.D	UltraCarb5uODS 4.6(mm)
LCSD 280-628393/3-A		10/09/2023 23:24	1	10090041.D	UltraCarb5uODS 4.6(mm)
LCS 280-628393/4-A		10/09/2023 23:47	1	10090042.D	UltraCarb5uODS 4.6(mm)
LCSD 280-628393/5-A		10/10/2023 00:10	1	10090043.D	UltraCarb5uODS 4.6(mm)
280-182239-1	SCFmw-004-230901-GW	10/10/2023 00:33	1	10090044.D	UltraCarb5uODS 4.6(mm)
280-182239-2	SCFmw-004-230902-GW	10/10/2023 00:56	1	10090045.D	UltraCarb5uODS 4.6(mm)
280-182239-3	LL3mw-237-230901-GW	10/10/2023 01:19	1	10090046.D	UltraCarb5uODS 4.6(mm)
280-182239-4	LL3mw-241-230901-GW	10/10/2023 01:42	1	10090047.D	UltraCarb5uODS 4.6(mm)
280-182239-4 MS	LL3mw-241-230901-GW MS	10/10/2023 02:04	1	10090048.D	UltraCarb5uODS 4.6(mm)
CCV 280-628987/49		10/10/2023 02:27	1	10090049.D	UltraCarb5uODS 4.6(mm)
CCV 280-628987/50		10/10/2023 02:50	1	10090050.D	UltraCarb5uODS 4.6(mm)
280-182239-4 MSD	LL3mw-241-230901-GW MSD	10/10/2023 03:13	1	10090051.D	UltraCarb5uODS 4.6(mm)
280-182239-4 MS	LL3mw-241-230901-GW MS	10/10/2023 03:36	1	10090052.D	UltraCarb5uODS 4.6(mm)
280-182239-4 MSD	LL3mw-241-230901-GW MSD	10/10/2023 03:59	1	10090053.D	UltraCarb5uODS 4.6(mm)
280-182239-5	LL3mw-241-230902-GW	10/10/2023 04:22	1	10090054.D	UltraCarb5uODS 4.6(mm)
280-182239-6	LL1mw-093-230901-GW	10/10/2023 04:45	1	10090055.D	UltraCarb5uODS 4.6(mm)
280-182239-7	LL1mw-092-230901-GW	10/10/2023 05:08	1	10090056.D	UltraCarb5uODS 4.6(mm)
280-182239-8	LL3mw-248-230901-GW	10/10/2023 05:31	1	10090057.D	UltraCarb5uODS 4.6(mm)
280-182239-9	LL1mw-091-230901-GW	10/10/2023 05:54	1	10090058.D	UltraCarb5uODS 4.6(mm)
280-182239-12	LL3mw-247-230901-GW	10/10/2023 06:17	1	10090059.D	UltraCarb5uODS 4.6(mm)
CCV 280-628987/60		10/10/2023 06:40	1	10090060.D	UltraCarb5uODS 4.6(mm)
CCV 280-628987/61		10/10/2023 07:03	1	10090061.D	UltraCarb5uODS 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Start Date: 10/11/2023 17:13

Analysis Batch Number: 629372 End Date: 10/12/2023 05:49

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-629372/9		10/11/2023 17:13	1	10110009.D	Luna-phenylhex 4.6(mm)
ZZZZZ		10/11/2023 17:49	1		Luna-phenylhex 4.6(mm)
ZZZZZ		10/11/2023 18:25	1		Luna-phenylhex 4.6(mm)
ZZZZZ		10/11/2023 19:01	1		Luna-phenylhex 4.6(mm)
ZZZZZ		10/11/2023 19:37	1		Luna-phenylhex 4.6(mm)
ZZZZZ		10/11/2023 20:12	1		Luna-phenylhex 4.6(mm)
280-182239-1	SCFmw-004-230901-GW	10/11/2023 20:48	1	10110015.D	Luna-phenylhex 4.6(mm)
280-182239-3	LL3mw-237-230901-GW	10/11/2023 21:24	1	10110016.D	Luna-phenylhex 4.6(mm)
280-182239-4	LL3mw-241-230901-GW	10/11/2023 22:00	1	10110017.D	Luna-phenylhex 4.6(mm)
280-182239-4 MS	LL3mw-241-230901-GW MS	10/11/2023 22:36	1	10110018.D	Luna-phenylhex 4.6(mm)
280-182239-4 MSD	LL3mw-241-230901-GW MSD	10/11/2023 23:12	1	10110019.D	Luna-phenylhex 4.6(mm)
CCV 280-629372/20		10/11/2023 23:49	1	10110020.D	Luna-phenylhex 4.6(mm)
ZZZZZ		10/12/2023 00:25	1		Luna-phenylhex 4.6(mm)
ZZZZZ		10/12/2023 01:01	1		Luna-phenylhex 4.6(mm)
280-182239-5	LL3mw-241-230902-GW	10/12/2023 01:36	1	10110023.D	Luna-phenylhex 4.6(mm)
280-182239-6	LL1mw-093-230901-GW	10/12/2023 02:12	1	10110024.D	Luna-phenylhex 4.6(mm)
280-182239-7	LL1mw-092-230901-GW	10/12/2023 02:49	1	10110025.D	Luna-phenylhex 4.6(mm)
280-182239-8	LL3mw-248-230901-GW	10/12/2023 03:24	1	10110026.D	Luna-phenylhex 4.6(mm)
280-182239-9	LL1mw-091-230901-GW	10/12/2023 04:00	1	10110027.D	Luna-phenylhex 4.6(mm)
280-182239-12	LL3mw-247-230901-GW	10/12/2023 04:36	1	10110028.D	Luna-phenylhex 4.6(mm)
280-182239-2	SCFmw-004-230902-GW	10/12/2023 05:12	1	10110030.D	Luna-phenylhex 4.6(mm)
CCV 280-629372/29		10/12/2023 05:49	1	10110029.D	Luna-phenylhex 4.6(mm)

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Batch Number: 617295 Batch Start Date: 06/23/23 17:53 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 00127	8330_ADDs 00037	8330_OP_DMT 00021	8330DiaminLCS 00058
IC 280-617295/11		8330B		1 mL	125 uL				
IC 280-617295/12		8330B		1 mL	50 uL				
IC 280-617295/13		8330B		1 mL	35 uL				
IC 280-617295/14		8330B		1 mL	20 uL				
IC 280-617295/15		8330B		1 mL	12.5 uL				
IC 280-617295/16		8330B		1 mL	5 uL				
IC 280-617295/17		8330B		1 mL	2.5 uL				
IC 280-617295/18		8330B		1 mL	1 uL				
IC 280-617295/19		8330B		1 mL	0.5 uL				
ICV 280-617295/20		8330B		1 mL		50 uL		50 uL	
IC 280-617295/21		8330B		1 mL			125 uL		
IC 280-617295/22		8330B		1 mL			50 uL		
IC 280-617295/23		8330B		1 mL			35 uL		
IC 280-617295/24		8330B		1 mL			20 uL		
IC 280-617295/25		8330B		1 mL			12.5 uL		
IC 280-617295/26		8330B		1 mL			5 uL		
IC 280-617295/27		8330B		1 mL			2 uL		
IC 280-617295/28		8330B		1 mL			1 uL		
ICV 280-617295/29		8330B		1 mL					50 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330IntermStk 00077	8330Surrogate 00146				

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.: 280-182239-1

SDG No.:

Batch Number: 617295 Batch Start Date: 06/23/23 17:53 Batch Analyst: Zhang, Jian

Batch Method: 8330B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330IntermStk 00077	8330Surrogate 00146				
IC 280-617295/11		8330B		250 uL					
IC 280-617295/12		8330B		100 uL					
IC 280-617295/13		8330B		70 uL					
IC 280-617295/14		8330B		40 uL					
IC 280-617295/15		8330B		25 uL					
IC 280-617295/16		8330B		10 uL					
IC 280-617295/17		8330B		5 uL					
IC 280-617295/18		8330B		2 uL					
IC 280-617295/19		8330B		1 uL					
ICV 280-617295/20		8330B			50 uL				
IC 280-617295/21		8330B							
IC 280-617295/22		8330B							
IC 280-617295/23		8330B							
IC 280-617295/24		8330B							
IC 280-617295/25		8330B							
IC 280-617295/26		8330B							
IC 280-617295/27		8330B							
IC 280-617295/28		8330B							
ICV 280-617295/29		8330B							

Batch Notes	
Methanol ID	223237

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.: 280-182239-1

SDG No.:

Batch Number: 617295 Batch Start Date: 06/23/23 17:53 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.: 280-182239-1

SDG No.:

Batch Number: 627290 Batch Start Date: 09/25/23 18:42 Batch Analyst: Zhang, Jian

Batch Method: 8330B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	8330 DMT 00015	8330 LCS 00130	8330_ADDs 00037	8330_OP_DMT 00022	8330DiaminLCS 00060
IC 280-627290/10		8330B		1 mL	125 uL				
IC 280-627290/11		8330B		1 mL	50 uL				
IC 280-627290/12		8330B		1 mL	35 uL				
IC 280-627290/13		8330B		1 mL	20 uL				
IC 280-627290/14		8330B		1 mL	12.5 uL				
IC 280-627290/15		8330B		1 mL	5 uL				
IC 280-627290/16		8330B		1 mL	2.5 uL				
IC 280-627290/17		8330B		1 mL	1 uL				
IC 280-627290/18		8330B		1 mL	0.5 uL				
ICV 280-627290/19		8330B		1 mL		25 uL		25 uL	
IC 280-627290/20		8330B		1 mL			125 uL		
IC 280-627290/21		8330B		1 mL			50 uL		
IC 280-627290/22		8330B		1 mL			35 uL		
IC 280-627290/23		8330B		1 mL			20 uL		
IC 280-627290/24		8330B		1 mL			12.5 uL		
IC 280-627290/25		8330B		1 mL			5 uL		
IC 280-627290/26		8330B		1 mL			2 uL		
IC 280-627290/27		8330B		1 mL			1 uL		
ICV 280-627290/28		8330B		1 mL					12.5 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330IntermStk 00078	8330Surrogate 00150				

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.: 280-182239-1

SDG No.:

Batch Number: 627290 Batch Start Date: 09/25/23 18:42 Batch Analyst: Zhang, Jian

Batch Method: 8330B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330IntermStk 00078	8330Surrogate 00150				
IC 280-627290/10		8330B		250 uL					
IC 280-627290/11		8330B		100 uL					
IC 280-627290/12		8330B		70 uL					
IC 280-627290/13		8330B		40 uL					
IC 280-627290/14		8330B		25 uL					
IC 280-627290/15		8330B		10 uL					
IC 280-627290/16		8330B		5 uL					
IC 280-627290/17		8330B		2 uL					
IC 280-627290/18		8330B		1 uL					
ICV 280-627290/19		8330B			25 uL				
IC 280-627290/20		8330B							
IC 280-627290/21		8330B							
IC 280-627290/22		8330B							
IC 280-627290/23		8330B							
IC 280-627290/24		8330B							
IC 280-627290/25		8330B							
IC 280-627290/26		8330B							
IC 280-627290/27		8330B							
ICV 280-627290/28		8330B							

Batch Notes	
Methanol ID	230922

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.: 280-182239-1

SDG No.:

Batch Number: 627290 Batch Start Date: 09/25/23 18:42 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.: 280-182239-1

SDG No.:

Batch Number: 628393 Batch Start Date: 10/04/23 13:30 Batch Analyst: Hermanova, Eva

Batch Method: 3535 Batch End Date: 10/04/23 16:49

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	8330 LCS 00131	8330_OP_DMT 00023
MB 280-628393/1		3535, 8330B				500 mL	5 mL		
LCS 280-628393/2		3535, 8330B				500 mL	5 mL	0.1 mL	0.1 mL
LCSD 280-628393/3		3535, 8330B				500 mL	5 mL	0.1 mL	0.1 mL
LCS 280-628393/4		3535, 8330B				500 mL	5 mL		
LCSD 280-628393/5		3535, 8330B				500 mL	5 mL		
280-182239-A-1	SCFmw-004-230901-GW	3535, 8330B	T	767.8 g	285.0 g	482.8 mL	5 mL		
280-182239-B-2	SCFmw-004-230902-GW	3535, 8330B	T	773.2 g	283.5 g	489.7 mL	5 mL		
280-182239-B-3	LL3mw-237-230901-GW	3535, 8330B	T	771.3 g	283.8 g	487.5 mL	5 mL		
280-182239-B-4	LL3mw-241-230901-GW	3535, 8330B	T	771.6 g	283.8 g	487.8 mL	5 mL		
280-182239-D-4 MS	LL3mw-241-230901-GW	3535, 8330B	T	777.4 g	285.6 g	491.8 mL	5 mL	0.1 mL	0.1 mL
280-182239-D-4 MSD	LL3mw-241-230901-GW	3535, 8330B	T	782.5 g	286.6 g	495.9 mL	5 mL	0.1 mL	0.1 mL
280-182239-C-4 MS	LL3mw-241-230901-GW	3535, 8330B	T	782.6 g	285.9 g	496.7 mL	5 mL		
280-182239-B-4 MSD	LL3mw-241-230901-GW	3535, 8330B	T	761.7 g	287.1 g	474.6 mL	5 mL		
280-182239-A-5	LL3mw-241-230902-GW	3535, 8330B	T	783.5 g	285.4 g	498.1 mL	5 mL		
280-182239-B-6	LL1mw-093-230901-GW	3535, 8330B	T	788.0 g	282.2 g	505.8 mL	5 mL		
280-182239-B-7	LL1mw-092-230901-GW	3535, 8330B	T	763.5 g	283.3 g	480.2 mL	5 mL		
280-182239-B-8	LL3mw-248-230901-GW	3535, 8330B	T	770.3 g	282.4 g	487.9 mL	5 mL		
280-182239-A-9	LL1mw-091-230901-GW	3535, 8330B	T	768.1 g	281.6 g	486.5 mL	5 mL		
280-182239-B-12	LL3mw-247-230901-GW	3535, 8330B	T	779.5 g	284.6 g	494.9 mL	5 mL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330DiaminLCS 00060	8330Surrogate 00150	AnalysisComment			
MB 280-628393/1		3535, 8330B			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.: 280-182239-1

SDG No.:

Batch Number: 628393 Batch Start Date: 10/04/23 13:30 Batch Analyst: Hermanova, Eva

Batch Method: 3535 Batch End Date: 10/04/23 16:49

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330DiaminLCS 00060	8330Surrogate 00150	AnalysisComment			
LCS 280-628393/2		3535, 8330B			0.1 mL	DMT			
LCSD 280-628393/3		3535, 8330B			0.1 mL	DMT			
LCS 280-628393/4		3535, 8330B		0.05 mL	0.1 mL	Diamino			
LCSD 280-628393/5		3535, 8330B		0.05 mL	0.1 mL	Diamino			
280-182239-A-1	SCFmw-004-230901-GW	3535, 8330B	T		0.1 mL				
280-182239-B-2	SCFmw-004-230902-GW	3535, 8330B	T		0.1 mL				
280-182239-B-3	LL3mw-237-230901-GW	3535, 8330B	T		0.1 mL				
280-182239-B-4	LL3mw-241-230901-GW	3535, 8330B	T		0.1 mL				
280-182239-D-4 MS	LL3mw-241-230901-GW	3535, 8330B	T		0.1 mL	DMT			
280-182239-D-4 MSD	LL3mw-241-230901-GW	3535, 8330B	T		0.1 mL	DMT			
280-182239-C-4 MS	LL3mw-241-230901-GW	3535, 8330B	T	0.05 mL	0.1 mL	Diamino			
280-182239-B-4 MSD	LL3mw-241-230901-GW	3535, 8330B	T	0.05 mL	0.1 mL	Diamino			
280-182239-A-5	LL3mw-241-230902-GW	3535, 8330B	T		0.1 mL				
280-182239-B-6	LL1mw-093-230901-GW	3535, 8330B	T		0.1 mL				
280-182239-B-7	LL1mw-092-230901-GW	3535, 8330B	T		0.1 mL				
280-182239-B-8	LL3mw-248-230901-GW	3535, 8330B	T		0.1 mL				
280-182239-A-9	LL1mw-091-230901-GW	3535, 8330B	T		0.1 mL				
280-182239-B-12	LL3mw-247-230901-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.: 280-182239-1

SDG No.:

Batch Number: 628393 Batch Start Date: 10/04/23 13:30 Batch Analyst: Hermanova, Eva

Batch Method: 3535 Batch End Date: 10/04/23 16:49

Batch Notes	
First Start time	10/04/2023 13:50
First End time	10/04/2023 16:08
SPE Cartridge Type	Sep-Pak Porapak Rdx
SPE Cartridge Lot ID	005433023A
Balance ID	24350888
Balance is Level? (Y/N)	yes
Manifold ID	Manifold: A
QC Bottle Lot ID	01136011
Pipette/Syringe/Dispenser ID	Dobby/ DOD/ Pugsley
Solvent Name	CaCl2
Solvent Lot #	CaCl2_Sol_00088
Rinse Solvent Name	Acetonotrile
Rinse Solvent Lot	Acetonotrile_00079
Acid Name	0.2% AAinACN
Acid ID	0.2% AAinACN_00001
Analyst ID - Spike Analyst	EH
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.

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job Number: 280-182239-1

SDG No.:

Project: RVAAP FWGW

Client Sample ID	Lab Sample ID
LL12mw-185-230901-GW	280-182239-10
LL12mw-185-230902-GW	280-182239-11

Comments:

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: LL12mw-185-230901-GW
Lab Sample ID: 280-182239-10
Lab Name: Eurofins Denver
Job No.: 280-182239-1
SDG ID.:
Matrix: Water
Date Sampled: 10/02/2023 14:25
Reporting Basis: WET
Date Received: 10/03/2023 09:35

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia as N	0.097	0.10	0.050	0.029	mg/L	J		1	350.1
Nitrate as N	56	5.0	2.0	0.90	mg/L		D	10	9056

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: LL12mw-185-230902-GW
Lab Sample ID: 280-182239-11
Lab Name: Eurofins Denver
Job No.: 280-182239-1
SDG ID.:
Matrix: Water
Date Sampled: 10/02/2023 14:25
Reporting Basis: WET
Date Received: 10/03/2023 09:35

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia as N	0.11	0.10	0.050	0.029	mg/L			1	350.1
Nitrate as N	54	5.0	2.0	0.90	mg/L		D	10	9056

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Analyst: MMP Batch Start Date: 10/19/2023

Reporting Units: mg/L Analytical Batch No.: 630439

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
14	ICV	11:04	Ammonia as N	2.52	2.51	101	90-110		350.1 ICV_00582
15	ICVL	11:07	Ammonia as N	0.518	0.501	103	90-110		350.1 ICV_00582
16	ICB	11:10	Ammonia as N	0.050				U	
40	CCV	12:14	Ammonia as N	2.58	2.50	103	90-110		350.1 cal_00601
41	CCVL	12:16	Ammonia as N	0.517	0.500	103	90-110		350.1 cal_00601
42	CCB	12:19	Ammonia as N	0.050				U	
55	CCV	12:54	Ammonia as N	2.54	2.50	101	90-110		350.1 cal_00601
56	CCVL	12:56	Ammonia as N	0.525	0.500	105	90-110		350.1 cal_00601
57	CCB	12:59	Ammonia as N	0.0280				J	
68	CCV	13:28	Ammonia as N	2.49	2.50	100	90-110		350.1 cal_00601
69	CCVL	13:31	Ammonia as N	0.528	0.500	106	90-110		350.1 cal_00601
70	CCB	13:34	Ammonia as N	0.0440				J	
83	CCV	14:08	Ammonia as N	2.53	2.50	101	90-110		350.1 cal_00601
84	CCVL	14:11	Ammonia as N	0.536	0.500	107	90-110		350.1 cal_00601
85	CCB	14:14	Ammonia as N	0.0390				J	

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

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Analyst: MEC Batch Start Date: 08/16/2023

Reporting Units: mg/L Analytical Batch No.: 623067

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
8	ICV	10:08	Nitrate as N	3.95	4.00	99	90-110		IC ICV 5_00413
9	ICB	10:23	Nitrate as N	0.20				U	

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

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Analyst: MEC Batch Start Date: 10/03/2023

Reporting Units: mg/L Analytical Batch No.: 628268

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	CCV	12:29	Nitrate as N	4.65	5.00	93	90-110		IC LCS_01980
2	CCB	12:44	Nitrate as N	0.20				U	
17	CCV	16:43	Nitrate as N	4.62	5.00	92	90-110		IC LCS_01980
18	CCB	16:58	Nitrate as N	0.20				U	
23	CCV	18:13	Nitrate as N	4.63	5.00	93	90-110		IC LCS_01980
24	CCB	18:28	Nitrate as N	0.20				U	

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

FORM II-IN

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Method	Lab Sample ID	Analyte	Result	Qual	Units	LOQ	Dil
Batch ID: 630439 Date: 10/19/2023 12:43							
350.1	MB 280-630439/51	Ammonia as N	0.050	U	mg/L	0.10	1
Batch ID: 628268 Date: 10/03/2023 13:44							
9056	MB 280-628268/6	Nitrate as N	0.20	U	mg/L	0.50	1

5-IN
MATRIX SPIKE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 630439 Date: 10/19/2023 14:00											
350.1	280-182239-10	Ammonia as N	0.097	J	mg/L						
350.1	280-182239-10 MS	Ammonia as N	1.10		mg/L	1.00	100	90-110			

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

FORM V-IN

5-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 630439 Date: 10/19/2023 14:03											
350.1	280-182239-10 MSD	Ammonia as N	1.13		mg/L	1.00	103	90-110	3	10	

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

FORM V-IN

7A-IN
LAB CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 630439	Date: 10/19/2023 12:46										
						LCS Source: 350.1 cal_00601					
350.1	LCS 280-630439/52	Ammonia as N	2.55		mg/L	2.50	102	90-110	1	10	
Batch ID: 628268	Date: 10/03/2023 13:14										
						LCS Source: IC LCS_01980					
9056	LCS 280-628268/4	Nitrate as N	4.63		mg/L	5.00	93	88-111	0	10	

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

FORM VIIA-IN

7A-IN
LAB CONTROL SAMPLE DUPLICATE
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 630439	Date: 10/19/2023 12:48										
						LCSD Source: 350.1 cal_00601					
350.1	LCSD 280-630439/53	Ammonia as N	2.52		mg/L	2.50	101	90-110	1	10	
Batch ID: 628268	Date: 10/03/2023 13:29										
						LCSD Source: IC LCS_01980					
9056	LCSD 280-628268/5	Nitrate as N	4.62		mg/L	5.00	92	88-111	0	10	

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

FORM VIIA-IN

7A-IN
METHOD REPORTING LIMIT CHECK
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 628268	Date: 10/03/2023 12:59										
						LCS Source: IC Cal low_00731					
9056	MRL 280-628268/3	Nitrate as N	0.404	J	mg/L	0.500	81	50-150			

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

FORM VIIA-IN

16A-IN
INITIAL CALIBRATION SUMMARY

Lab Name: Eurofins Denver Job No: 280-182239-1

SDG No.: Analysis Batch No.: 623067

Instrument ID: WC_IonChrom10 Calibration ID: 83633

Start Date: 08/16/2023 08:23 End Date: 08/16/2023 09:39

Analytical Method: 9056

Analyte	Corr. Coeff.	Slope	Intercept	Calib. Type	Weighting
Nitrate as N	1.0000	49200000	-1790000	WLR	Inverse Conc

16B-IN
INITIAL CALIBRATION

Lab Name: Eurofins Denver | Job No: 280-182239-1

SDG No.: | Analysis Batch No.: 623067

Instrument ID: WC_IonChrom10 | Calibration ID: 83633

Start Date: 08/16/2023 08:23 | End Date: 08/16/2023 09:39

Analytical Method: 9056 | Concentration Units: ug/mL

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Nitrate as N	0.20	0.22	8	0.50	0.49	-3	1.0	0.95	-5

16B-IN
INITIAL CALIBRATION

Lab Name: Eurofins Denver Job No: 280-182239-1

SDG No.: Analysis Batch No.: 623067

Instrument ID: WC_IonChrom10 Calibration ID: 83633

Start Date: 08/16/2023 08:23 End Date: 08/16/2023 09:39

Analytical Method: 9056 Concentration Units: ug/mL

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Nitrate as N	4.0	3.9	-1	8.0	8.0	0	10.0	10.1	1

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job Number: 280-182239-1

SDG Number:

Matrix: Water Instrument ID: WC_SKALAR_01

Method: 350.1 DL Date: 04/29/2022 13:46

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Ammonia as N		0.1	0.029

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job Number: 280-182239-1

SDG Number:

Matrix: Water Instrument ID: WC_SKALAR_01

Method: 350.1 XMDL Date: 03/28/2011 13:26

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Ammonia as N		0.1	0.0225

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job Number: 280-182239-1

SDG Number:

Matrix: Water Instrument ID: WC_IonChrom10

Method: 9056 DL Date: 06/21/2019 00:00

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Nitrate as N		0.5	0.0901

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job Number: 280-182239-1

SDG Number:

Matrix: Water Instrument ID: WC_IonChrom10

Method: 9056 XMDL Date: 06/21/2019 00:00

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Nitrate as N		0.5	0.0901

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Instrument ID: WC_SKALAR_01 Analysis Method: 350.1

Start Date: 10/19/2023 10:29 End Date: 10/19/2023 17:52

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
ZZZZZZ			10:29																									
ZZZZZZ			10:31																									
ZZZZZZ			10:35																									
ZZZZZZ			10:38																									
ZZZZZZ			10:41																									
ZZZZZZ			10:43																									
ZZZZZZ			10:46																									
ZZZZZZ			10:48																									
ZZZZZZ			10:51																									
ZZZZZZ			10:54																									
ZZZZZZ			10:56																									
ZZZZZZ			10:59																									
ZZZZZZ			11:02																									
ICV 280-630439/14	1		11:04	X																								
ICVL 280-630439/15	1		11:07	X																								
ICB 280-630439/16	1		11:10	X																								
ZZZZZZ			11:12																									
ZZZZZZ			11:15																									
ZZZZZZ			11:18																									
ZZZZZZ			11:20																									
ZZZZZZ			11:23																									
ZZZZZZ			11:26																									
ZZZZZZ			11:28																									
ZZZZZZ			11:31																									
ZZZZZZ			11:34																									
ZZZZZZ			11:36																									
CCV 280-630439/27			11:39																									
CCVL 280-630439/28			11:42																									
CCB 280-630439/29			11:44																									
ZZZZZZ			11:47																									
ZZZZZZ			11:50																									
ZZZZZZ			11:52																									
ZZZZZZ			11:55																									
ZZZZZZ			11:58																									
ZZZZZZ			12:00																									
ZZZZZZ			12:03																									
ZZZZZZ			12:06																									
ZZZZZZ			12:08																									
ZZZZZZ			12:11																									
CCV 280-630439/40	1		12:14	X																								
CCVL 280-630439/41	1		12:16	X																								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Instrument ID: WC_SKALAR_01 Analysis Method: 350.1

Start Date: 10/19/2023 10:29 End Date: 10/19/2023 17:52

Lab Sample Id	D/F	Type	Time	Analytes
				NH3
CCB 280-630439/42	1		12:19	X
ZZZZZZ			12:22	
ZZZZZZ			12:24	
ZZZZZZ			12:27	
ZZZZZZ			12:30	
ZZZZZZ			12:32	
ZZZZZZ			12:35	
ZZZZZZ			12:38	
ZZZZZZ			12:40	
MB 280-630439/51	1	T	12:43	X
LCS 280-630439/52	1	T	12:46	X
LCSD 280-630439/53	1	T	12:48	X
ZZZZZZ			12:51	
CCV 280-630439/55	1		12:54	X
CCVL 280-630439/56	1		12:56	X
CCB 280-630439/57	1		12:59	X
ZZZZZZ			13:02	
ZZZZZZ			13:05	
ZZZZZZ			13:07	
ZZZZZZ			13:10	
ZZZZZZ			13:12	
ZZZZZZ			13:15	
ZZZZZZ			13:17	
ZZZZZZ			13:20	
ZZZZZZ			13:23	
ZZZZZZ			13:26	
CCV 280-630439/68	1		13:28	X
CCVL 280-630439/69	1		13:31	X
CCB 280-630439/70	1		13:34	X
ZZZZZZ			13:36	
ZZZZZZ			13:39	
ZZZZZZ			13:42	
ZZZZZZ			13:44	
ZZZZZZ			13:47	
ZZZZZZ			13:50	
ZZZZZZ			13:52	
ZZZZZZ			13:55	
280-182239-10	1	T	13:58	X
280-182239-10 MS	1	T	14:00	X
280-182239-10 MSD	1	T	14:03	X
280-182239-11	1	T	14:06	X

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Instrument ID: WC_SKALAR_01 Analysis Method: 350.1

Start Date: 10/19/2023 10:29 End Date: 10/19/2023 17:52

Lab Sample Id	D/F	Type	Time	Analytes
				NH3
CCV 280-630439/83	1		14:08	X
CCVL 280-630439/84	1		14:11	X
CCB 280-630439/85	1		14:14	X
ZZZZZZ			14:16	
ZZZZZZ			14:19	
ZZZZZZ			14:22	
ZZZZZZ			14:24	
ZZZZZZ			14:27	
ZZZZZZ			14:30	
ZZZZZZ			14:32	
ZZZZZZ			14:35	
ZZZZZZ			14:38	
ZZZZZZ			14:40	
CCV 280-630439/96			14:43	
CCVL 280-630439/97			14:46	
CCB 280-630439/98			14:48	
ZZZZZZ			14:51	
ZZZZZZ			14:54	
ZZZZZZ			14:57	
ZZZZZZ			14:59	
ZZZZZZ			15:02	
ZZZZZZ			15:04	
ZZZZZZ			15:07	
ZZZZZZ			15:10	
ZZZZZZ			15:13	
ZZZZZZ			15:16	
ZZZZZZ			15:19	
ZZZZZZ			15:21	
CCV 280-630439/111			15:25	
CCVL 280-630439/112			15:28	
CCB 280-630439/113			15:30	
ZZZZZZ			15:34	
ZZZZZZ			15:36	
ZZZZZZ			15:39	
ZZZZZZ			15:41	
ZZZZZZ			15:44	
ZZZZZZ			15:47	
ZZZZZZ			15:50	
ZZZZZZ			15:52	
ZZZZZZ			15:55	
ZZZZZZ			15:58	

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver | Job No.: 280-182239-1

SDG No.:

Instrument ID: WC_SKALAR_01 | Analysis Method: 350.1

Start Date: 10/19/2023 10:29 | End Date: 10/19/2023 17:52

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
CCV 280-630439/124			16:00																									
CCVL 280-630439/125			16:03																									
CCB 280-630439/126			16:06																									
ZZZZZZ			16:08																									
ZZZZZZ			16:11																									
ZZZZZZ			16:15																									
ZZZZZZ			16:17																									
ZZZZZZ			16:19																									
ZZZZZZ			16:21																									
ZZZZZZ			16:24																									
ZZZZZZ			16:27																									
ZZZZZZ			16:29																									
ZZZZZZ			16:32																									
ZZZZZZ			16:35																									
ZZZZZZ			16:38																									
CCV 280-630439/139			16:40																									
CCVL 280-630439/140			16:43																									
CCB 280-630439/141			16:46																									
ZZZZZZ			16:48																									
ZZZZZZ			16:51																									
ZZZZZZ			16:54																									
ZZZZZZ			16:56																									
ZZZZZZ			16:59																									
ZZZZZZ			17:02																									
ZZZZZZ			17:04																									
ZZZZZZ			17:07																									
ZZZZZZ			17:10																									
ZZZZZZ			17:12																									
CCV 280-630439/152			17:15																									
CCVL 280-630439/153			17:17																									
CCB 280-630439/154			17:20																									
ZZZZZZ			17:22																									
ZZZZZZ			17:25																									
ZZZZZZ			17:28																									
ZZZZZZ			17:31																									
ZZZZZZ			17:34																									
ZZZZZZ			17:36																									
CCV 280-630439/161			17:39																									
CCVL 280-630439/162			17:41																									
CCB 280-630439/163			17:44																									
ZZZZZZ			17:47																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Instrument ID: WC_SKALAR_01 Analysis Method: 350.1

Start Date: 10/19/2023 10:29 End Date: 10/19/2023 17:52

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
ZZZZZZ			17:50																									
ZZZZZZ			17:52																									

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Method: 9056

Start Date: 08/16/2023 08:23 End Date: 08/17/2023 02:38

Lab Sample Id	D/F	Type	Time	Analytes
				NO3
STD1 280-623067/1 IC	1		08:23	X
STD2 280-623067/2 IC	1		08:38	X
STD3 280-623067/3 IC	1		08:54	X
STD4 280-623067/4 IC	1		09:09	X
STD5 280-623067/5 IC	1		09:24	X
STD6 280-623067/6 IC	1		09:39	X
RTC 280-623067/7			09:54	
ICV 280-623067/8	1		10:08	X
ICB 280-623067/9	1		10:23	X
ZZZZZZ			11:49	
ZZZZZZ			12:04	
ZZZZZZ			12:19	
ZZZZZZ			12:34	
ZZZZZZ			12:49	
ZZZZZZ			13:04	
ZZZZZZ			13:19	
ZZZZZZ			13:34	
ZZZZZZ			13:49	
ZZZZZZ			14:04	
ZZZZZZ			14:19	
ZZZZZZ			16:52	
ZZZZZZ			17:07	
ZZZZZZ			17:22	
CCV 280-623067/24			17:37	
CCB 280-623067/25			17:52	
ZZZZZZ			18:07	
ZZZZZZ			18:22	
ZZZZZZ			18:37	
ZZZZZZ			18:52	
ZZZZZZ			19:07	
ZZZZZZ			19:22	
ZZZZZZ			19:38	
ZZZZZZ			19:53	
ZZZZZZ			20:08	
ZZZZZZ			20:23	
CCV 280-623067/36			20:38	
CCB 280-623067/37			20:53	
ZZZZZZ			21:08	
ZZZZZZ			21:23	
ZZZZZZ			21:38	
ZZZZZZ			21:53	

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Method: 9056

Start Date: 08/16/2023 08:23 End Date: 08/17/2023 02:38

Lab Sample Id	D/F	Type	Time	Analytes																								
				NO3																								
ZZZZZZ			22:08																									
ZZZZZZ			22:23																									
ZZZZZZ			22:38																									
ZZZZZZ			22:53																									
ZZZZZZ			23:08																									
ZZZZZZ			23:23																									
CCV 280-623067/48			23:38																									
CCB 280-623067/49			23:53																									
ZZZZZZ			00:08																									
ZZZZZZ			00:23																									
ZZZZZZ			00:38																									
ZZZZZZ			00:53																									
ZZZZZZ			01:08																									
ZZZZZZ			01:23																									
ZZZZZZ			01:38																									
ZZZZZZ			01:53																									
ZZZZZZ			02:08																									
CCV 280-623067/59			02:23																									
CCB 280-623067/60			02:38																									

Prep Types:
=

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver | Job No.: 280-182239-1

SDG No.:

Instrument ID: WC_IonChrom10 | Analysis Method: 9056

Start Date: 10/03/2023 12:29 | End Date: 10/03/2023 22:27

Lab Sample Id	D/F	Type	Time	Analytes																								
				NO3																								
CCV 280-628268/1	1		12:29	X																								
CCB 280-628268/2	1		12:44	X																								
MRL 280-628268/3	1	T	12:59	X																								
LCS 280-628268/4	1	T	13:14	X																								
LCSD 280-628268/5	1	T	13:29	X																								
MB 280-628268/6	1	T	13:44	X																								
ZZZZZZ			14:12																									
ZZZZZZ			14:27																									
ZZZZZZ			14:42																									
ZZZZZZ			14:57																									
ZZZZZZ			15:12																									
ZZZZZZ			15:27																									
ZZZZZZ			15:42																									
ZZZZZZ			15:57																									
280-182239-10	10	T	16:13	X																								
280-182239-11	10	T	16:28	X																								
CCV 280-628268/17	1		16:43	X																								
CCB 280-628268/18	1		16:58	X																								
ZZZZZZ			17:13																									
ZZZZZZ			17:28																									
ZZZZZZ			17:43																									
ZZZZZZ			17:58																									
CCV 280-628268/23	1		18:13	X																								
CCB 280-628268/24	1		18:28	X																								
ZZZZZZ			21:42																									
ZZZZZZ			21:57																									
CCV 280-628268/27			22:12																									
CCB 280-628268/28			22:27																									

Prep Types:
T = Total/NA

FORM XIII-IN

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Batch Number: 630439 Batch Start Date: 10/19/23 10:29 Batch Analyst: Peterson, McKenzy M

Batch Method: 350.1 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	ClResPres	InitialAmount	FinalAmount	Initial pH	350.1 cal 00601	350.1 ICV 00582
ICV 280-630439/14		350.1		no	100 mL	100 mL	<2 SU		2.5 mL
ICVL 280-630439/15		350.1		no	100 mL	100 mL	<2 SU		0.5 mL
ICB 280-630439/16		350.1		no	35 mL	35 mL	<2 SU		
CCV 280-630439/40		350.1		no	100 mL	100 mL	<2 SU	2.5 mL	
CCVL 280-630439/41		350.1		no	100 mL	100 mL	<2 SU	0.5 mL	
CCB 280-630439/42		350.1		no	10 mL	10 mL	<2 SU		
MB 280-630439/51		350.1		no	35 mL	35 mL	<2 SU		
LCS 280-630439/52		350.1		no	100 mL	100 mL	<2 SU	2.5 mL	
LCSD 280-630439/53		350.1		no	100 mL	100 mL	<2 SU	2.5 mL	
CCV 280-630439/55		350.1		no	100 mL	100 mL	<2 SU	2.5 mL	
CCVL 280-630439/56		350.1		no	100 mL	100 mL	<2 SU	0.5 mL	
CCB 280-630439/57		350.1		no	10 mL	10 mL	<2 SU		
CCV 280-630439/68		350.1		no	100 mL	100 mL	<2 SU	2.5 mL	
CCVL 280-630439/69		350.1		no	100 mL	100 mL	<2 SU	0.5 mL	
CCB 280-630439/70		350.1		no	10 mL	10 mL	<2 SU		
280-182239-A-10	LL12mw-185-230901-GW	350.1	T	no	10 mL	10 mL	<2 SU		
280-182239-A-10 MS	LL12mw-185-230901-GW	350.1	T	no	10 mL	10 mL	<2 SU	0.1 mL	
280-182239-A-10 MSD	LL12mw-185-230901-GW	350.1	T	no	10 mL	10 mL	<2 SU	0.1 mL	
280-182239-A-11	LL12mw-185-230902-GW	350.1	T	no	10 mL	10 mL	<2 SU		
CCV 280-630439/83		350.1		no	100 mL	100 mL	<2 SU	2.5 mL	
CCVL 280-630439/84		350.1		no	100 mL	100 mL	<2 SU	0.5 mL	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Batch Number: 630439 Batch Start Date: 10/19/23 10:29 Batch Analyst: Peterson, McKenzy M

Batch Method: 350.1 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	ClResPres	InitialAmount	FinalAmount	Initial pH	350.1 cal 00601	350.1 ICV 00582
CCB 280-630439/85		350.1		no	10 mL	10 mL	<2 SU		

Batch Notes	
pH Indicator ID	HC312502
Acid used for pH adjustment	SulfuricAcid_00294
Sodium Nitroprusside ID	Na Nitro_00065 Na Salicylate_00082
Hypochlorite ID	Na Hypo_00071
EDTA Buffer ID	Buffer A_00053
Potassium Sodium Tartrate ID	Buffer B_00074
Carrier Identification	Ammonia Rinse_00074
Sodium Salicylate ID	Sodium Sal_00028
Pipette/Syringe/Dispenser ID	ARM5000, 1000 INTERCESSOR, BWH 200
Dichloroisocyanurate ID	Na Dichlororo_00001

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Batch Number: 623067 Batch Start Date: 08/16/23 08:23 Batch Analyst: Collins, Michael E

Batch Method: 9056 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Cl ICV Std 00006	IC CAL cl/so4 00494	IC Cal low 00722	IC ICV 5 00413
STD1 280-623067/1 IC		9056		10 mL	10 mL		0.04 mL	0.04 mL	
STD2 280-623067/2 IC		9056		10 mL	10 mL		0.1 mL	0.1 mL	
STD3 280-623067/3 IC		9056		10 mL	10 mL		0.2 mL	0.2 mL	
STD4 280-623067/4 IC		9056		10 mL	10 mL		2.4 mL	0.8 mL	
STD5 280-623067/5 IC		9056		10 mL	10 mL		4.8 mL	1.6 mL	
STD6 280-623067/6 IC		9056		10 mL	10 mL		8 mL	2 mL	
ICV 280-623067/8		9056		10 mL	10 mL	0.8 mL			0.8 mL
ICB 280-623067/9		9056		10 mL	10 mL				

Lab Sample ID	Client Sample ID	Method Chain	Basis	IC SO4 ICV 00024					
STD1 280-623067/1 IC		9056							
STD2 280-623067/2 IC		9056							
STD3 280-623067/3 IC		9056							
STD4 280-623067/4 IC		9056							
STD5 280-623067/5 IC		9056							
STD6 280-623067/6 IC		9056							
ICV 280-623067/8		9056		0.8 mL					
ICB 280-623067/9		9056							

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Batch Number: 623067 Batch Start Date: 08/16/23 08:23 Batch Analyst: Collins, Michael E

Batch Method: 9056 Batch End Date:

Batch Notes	
Filter ID	SF020E
Pipette/Syringe/Dispenser ID	ARM5000, 1000HEX, 200CJ, 100IC, ICM5000
Sufficient Volume for Batch QC	yes
Eluent 1 ID	IC10 Eluent_00006
Batch Comment	MEC

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.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-182239-1

SDG No.:

Batch Number: 628268 Batch Start Date: 10/03/23 12:29 Batch Analyst: Collins, Michael E

Batch Method: 9056 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	IC CAL cl/so4 00501	IC Cal low 00731	IC LCS 01980	
CCV 280-628268/1		9056		10 mL	10 mL			10 mL	
CCB 280-628268/2		9056		10 mL	10 mL				
MRL 280-628268/3		9056		10 mL	10 mL	0.2 mL	0.1 mL		
LCS 280-628268/4		9056		10 mL	10 mL			10 mL	
LCSD 280-628268/5		9056		10 mL	10 mL			10 mL	
MB 280-628268/6		9056		10 mL	10 mL				
280-182239-B-10	LL12mw-185-230901-GW	9056	T	10 mL	10 mL				
280-182239-B-11	LL12mw-185-230902-GW	9056	T	10 mL	10 mL				
CCV 280-628268/17		9056		10 mL	10 mL			10 mL	
CCB 280-628268/18		9056		10 mL	10 mL				
CCV 280-628268/23		9056		10 mL	10 mL			10 mL	
CCB 280-628268/24		9056		10 mL	10 mL				

Batch Notes	
Filter ID	SF020E
Pipette/Syringe/Dispenser ID	ARM5000, 1000HEX, 200CJ, 100IC,ICM5000
Sufficient Volume for Batch QC	yes
Eluent 1 ID	IC10 Eluent_00008
Batch Comment	MEC

Basis	Basis Description
T	Total/NA

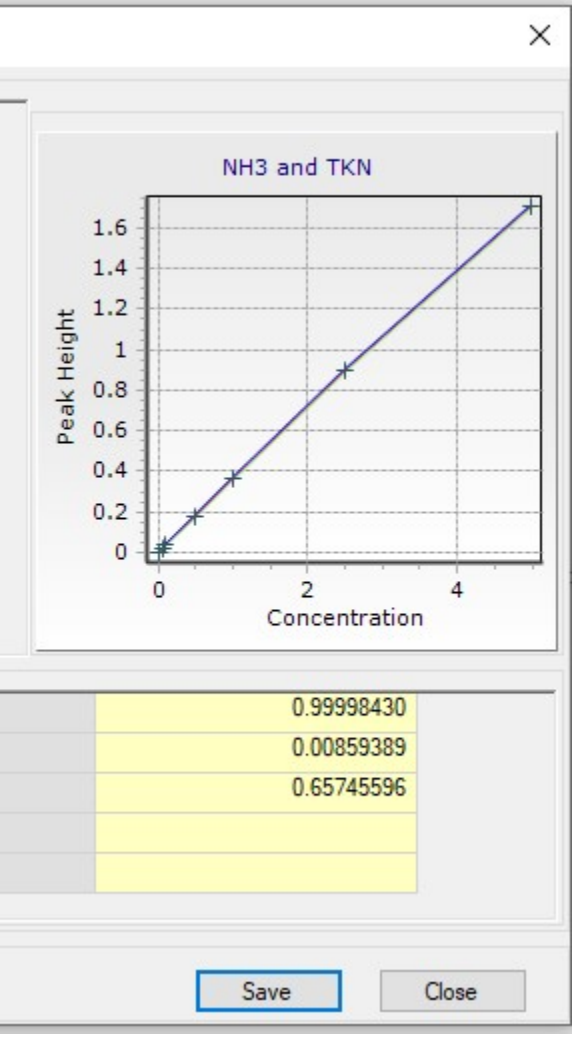
The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Select/deselect Standards

	SerialNumber	Cup position	Sample Type	Identity	Concentration	Corrected Height	Result	Use this	Y Residuals	Relative Error(%)
1	4	ST1	S1	0 mg/L	0.000	0.000	0.005	☑		
2	5	ST2	S2	0.05	0.050	0.019	0.056	☑	12.23%	12.33%
3	6	ST3	S3	0.1	0.100	0.035	0.099	☑	-0.84%	-0.79%
4	7	ST4	S4	0.5	0.500	0.180	0.487	☑	-2.66%	-2.58%
5	8	ST5	S5	1	1.000	0.367	0.997	☑	-0.25%	-0.25%
6	9	ST6	S6	2.5	2.500	0.898	2.507	☑	0.25%	0.26%
7	10	ST7	S7	5	5.000	1.706	4.998	☑	-0.03%	-0.03%

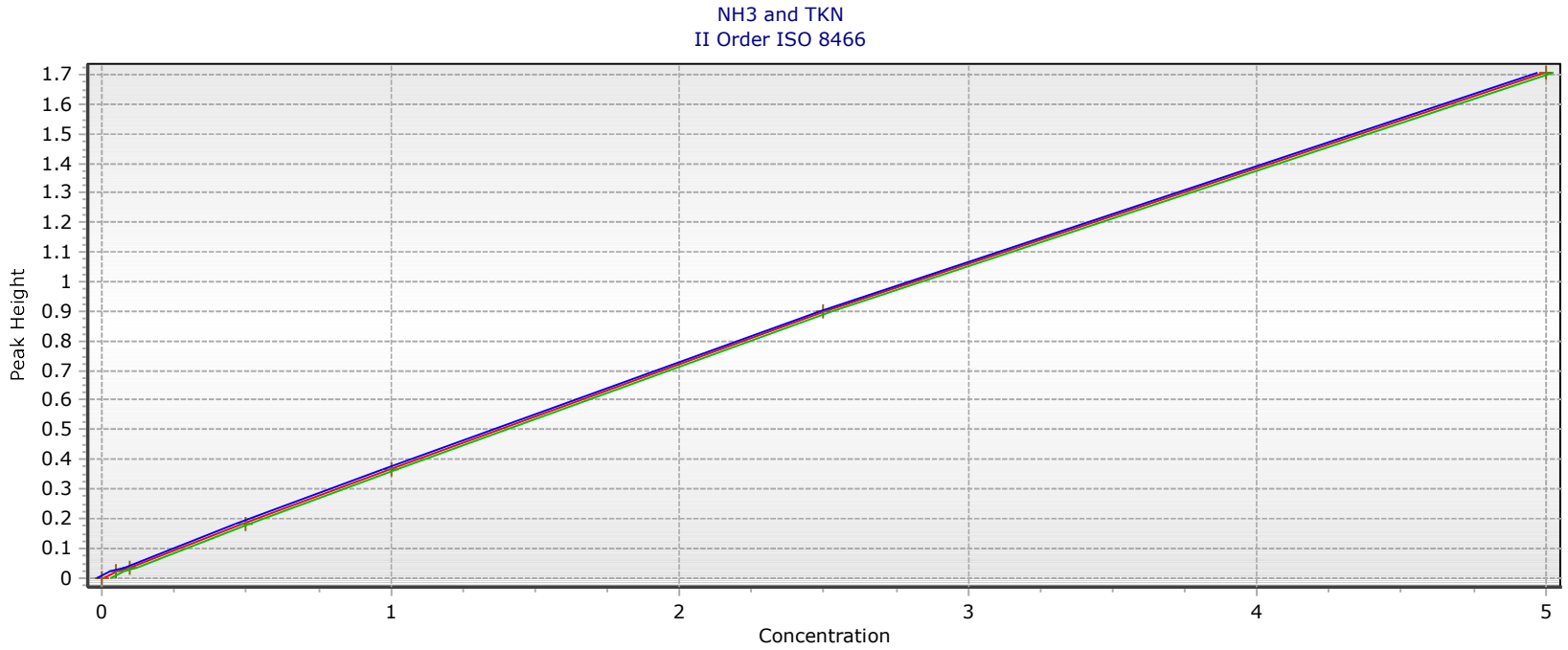
Method Name	Ammonia	a	-0.00218257	R Squared
Module Name	NH3 and TKN	b	0.37695012	Constant Sx0
Calibration Order	II Order ISO 8466	c	-0.00703311	Constant Vx0
Residual Std. Dev. (Sy)	0.00308145539816	d		
		Correlation Coefficient	0.99963641	

Calibration Order: II Order ISO 8466


NH3 and TKN
Peak Height
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
0
2
4
Concentration
0.99998430
0.00859389
0.65745596
Save
Close

FlowAccessV3

Date:Oct 19 2023 5:59:17PM

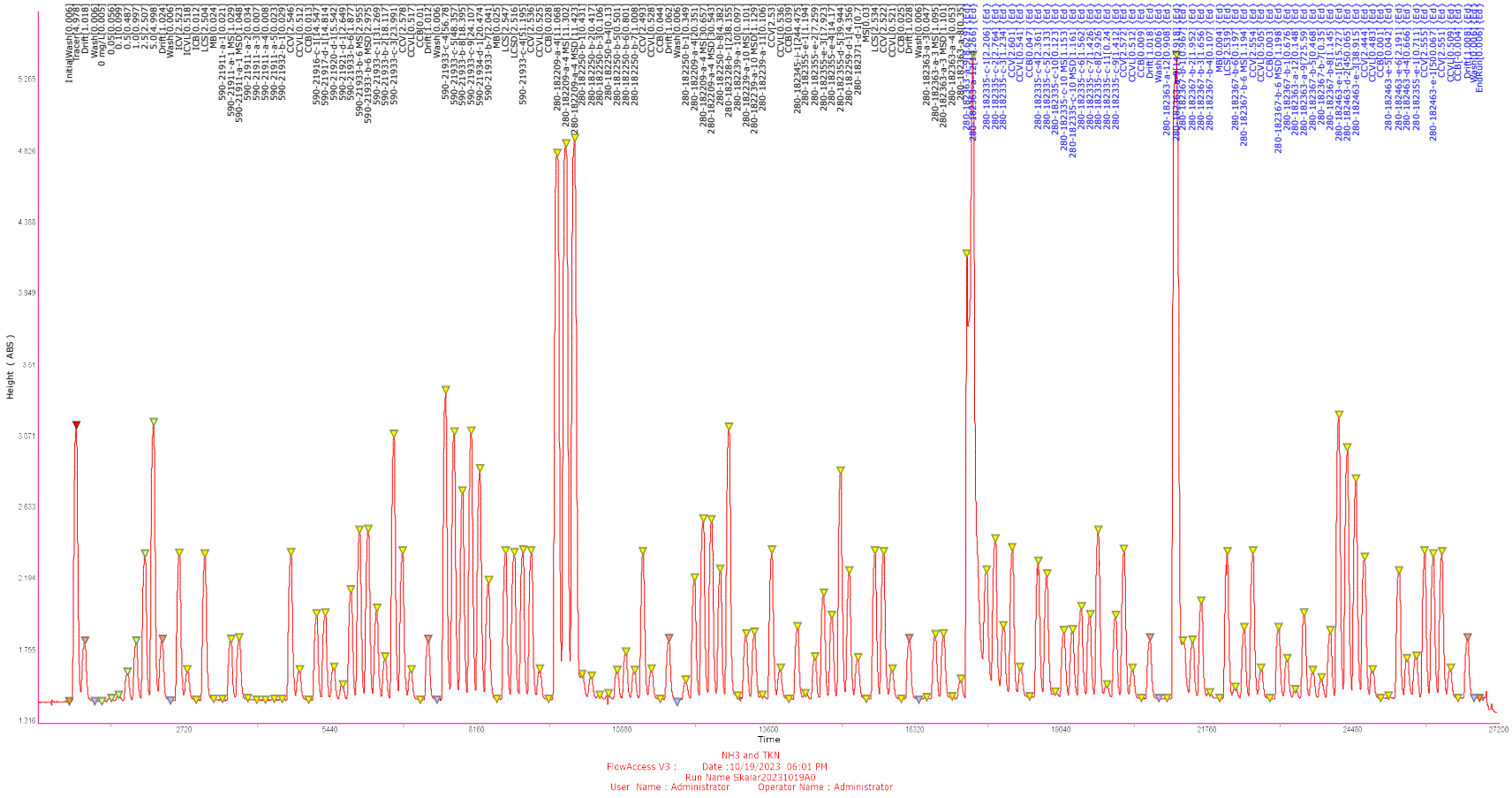


a = -0.0021825721954689 b = 0.3769501232909030 c =-0.0070331071659042 RSD = 0.00308145539816

r =0.99963641120510 R2 = 0.99998430185500

Run Name : Skalar20231019A0

User Name : Administrator Operator Name : Administrator



10/20/2023
4:00 PM

FlowAccessV3 Results Report

Run Name : Skalar20231019A0
DateTime :Oct 19 2023 10:19:26AM
User Name : Administrator Operator Name : Administrator

	Position	SampleType	SampleIdentity	Comments	ExternalDilution	NH3 and TKN- Results
1	IW	IW	InitialWash		1.0000	0.006
2	ST7	T	Tracer		1.0000	4.978
3	ST5	D	Drift		1.0000	1.018
4	WT	W	Wash		1.0000	0.006
5	ST1	S1	0 mg/L		1.0000	0.005
6	ST2	S2	0.05		1.0000	0.056
7	ST3	S3	0.1		1.0000	0.099
8	ST4	S4	0.5		1.0000	0.487
9	ST5	S5	1.0		1.0000	0.997
10	ST6	S6	2.5		1.0000	2.507
11	ST7	S7	5.0		1.0000	4.998
12	ST5	D	Drift		1.0000	1.024
13	WT	W	Wash		1.0000	0.006
14	ST8	U	ICV		1.0000	2.523
15	ST9	U	ICVL		1.0000	0.518
16	ST1	U	ICB		1.0000	0.012
17	D29	U	LCS		1.0000	2.504
18	ST1	U	MB		1.0000	0.024
19	A1	U	590-21911-a-1		1.0000	0.021
20	A2	U	590-21911-a-1 MS		1.0000	1.029
21	A3	U	590-21911-a-1 MSD		1.0000	1.048
22	A4	U	590-21911-a-2		1.0000	0.034
23	A5	U	590-21911-a-3		1.0000	0.007
24	A6	U	590-21911-a-4		1.0000	0.008
25	A7	U	590-21911-a-5		1.0000	0.023
26	A8	U	590-21932-b-1		1.0000	0.029
27	ST6	U	CCV		1.0000	2.546
28	ST4	U	CCVL		1.0000	0.512
29	WT	U	CCB		1.0000	0.013
30	A9	U	590-21916-c-1		10.0000	14.547
31	A10	U	590-21917-d-1		10.0000	14.814
32	A11	U	590-21920-d-1		10.0000	5.542
33	A12	U	590-21921-d-1		10.0000	2.649
34	A13	U	590-21933-b-6		1.0000	1.877
35	A14	U	590-21933-b-6 MS		1.0000	2.955
36	A15	U	590-21933-b-6 MSD		1.0000	2.975
37	A16	U	590-21933-c-1		20.0000	31.269
38	A17	U	590-21933-b-2		25.0000	18.117
39	A18	U	590-21933-c-3		5.0000	23.991
40	ST6	U	CCV		1.0000	2.578

Run Name : Skalar20231019A0
DateTime :Oct 19 2023 10:19:26AM
User Name : Administrator Operator Name : Administrator

	Position	SampleType	SampleIdentity	Comments	ExternalDilution	NH3 and TKN- Results
41	ST4	U	CCVL		1.0000	0.517
42	WT	U	CCB		1.0000	0.010
43	ST5	D	Drift		1.0000	1.012
44	WT	W	Wash		1.0000	0.006
45	A19	U	590-21933-c-4		10.0000	56.780
46	A20	U	590-21933-c-5		10.0000	48.357
47	A21	U	590-21933-b-8		5.0000	18.395
48	A22	U	590-21933-c-9		5.0000	24.107
49	A23	U	590-21934-d-1		5.0000	20.474
50	A24	U	590-21933-b-7	20 SAMPLES	1.0000	2.041
51	ST1	U	MB		1.0000	0.025
52	D29	U	LCS		1.0000	2.547
53	D30	U	LCSD		1.0000	2.516
54	A19	U	590-21933-c-4	RERUN	20.0000	51.195
55	ST6	U	CCV		1.0000	2.536
56	ST4	U	CCVL		1.0000	0.525
57	WT	U	CCB		1.0000	0.028
58	A25	U	280-182209-a-4		1.0000	11.068
59	A26	U	280-182209-a-4 MS		1.0000	11.302
60	A27	U	280-182209-a-4 MSD		1.0000	11.423
61	A28	U	280-182250-b-1		1.0000	0.431
62	A29	U	280-182250-b-2		1.0000	0.417
63	A30	U	280-182250-b-3		1.0000	0.106
64	A31	U	280-182250-b-4		1.0000	0.130
65	A32	U	280-182250-b-5		1.0000	0.501
66	A33	U	280-182250-b-6		1.0000	0.801
67	A34	U	280-182250-b-7		2.0000	1.008
68	ST6	U	CCV		1.0000	2.493
69	ST4	U	CCVL		1.0000	0.528
70	WT	U	CCB		1.0000	0.044
71	ST5	D	Drift		1.0000	1.062
72	WT	W	Wash		1.0000	0.006
73	A28	U	280-182250-b-1	RERUN TO CON	1.0000	0.349
74	A25	U	280-182209-a-4	RERUN	10.0000	20.351
75	A26	U	280-182209-a-4 MS	RERUN	10.0000	30.657
76	A27	U	280-182209-a-4 MSD	RERUN	10.0000	30.543
77	A35	U	280-182250-b-8		2.0000	4.382
78	B1	U	280-182328-b-1	TX QAS	50.0000	238.155
79	B2	U	280-182239-a-10		1.0000	0.097
80	B3	U	280-182239-a-10 MS		1.0000	1.101

Run Name : Skalar20231019A0
DateTime :Oct 19 2023 10:19:26AM
User Name : Administrator Operator Name : Administrator

	Position	SampleType	SampleIdentity	Comments	ExternalDilution	NH3 and TKN- Results
81	B4	U	280-182239-a-10 MS		1.0000	1.129
82	B5	U	280-182239-a-11		1.0000	0.106
83	ST6	U	CCV		1.0000	2.530
84	ST4	U	CCVL		1.0000	0.536
85	WT	U	CCB		1.0000	0.039
86	B6	U	280-182345-i-1		200.0000	244.475
87	B7	U	280-182355-e-1	AZ QAS	10.0000	1.194
88	B8	U	280-182355-e-2	AZ QAS	10.0000	7.259
89	B9	U	280-182355-e-3	AZ QAS	10.0000	17.923
90	B10	U	280-182355-e-4	AZ QAS	10.0000	14.170
91	B11	U	280-182355-d-5	AZ QAS	10.0000	39.944
92	B12	U	280-182259-d-1		2.0000	4.356
93	B13	U	280-182371-d-1	40 SAMPLES	1.0000	0.700
94	ST1	U	MS		1.0000	0.030
95	D29	U	LCS		1.0000	2.534
96	ST6	U	CCV		1.0000	2.522
97	ST4	U	CCVL		1.0000	0.521
98	WT	U	CCB		1.0000	0.025
99	ST5	D	Drift		1.0000	1.028
100	WT	W	Wash		1.0000	0.006
101	B14	U	280-182363-a-3		1.0000	0.047
102	B15	U	280-182363-a-3 MS		1.0000	1.095
103	B16	U	280-182363-a-3 MSD		1.0000	1.101
104	B17	U	280-182363-a-4		1.0000	0.053
105	B18	U	280-182363-a-8		1.0000	0.350
106	B19	U	280-182363-a-9		1.0000	8.629
107	B20	U	280-182363-a-12		1.0000	14.266
108	B21	U	280-182335-c-1		1.0000	2.206
109	B22	U	280-182335-c-2		1.0000	2.764
110	B23	U	280-182335-c-3		1.0000	1.234
111	ST6	U	CCV		1.0000	2.601
112	ST4	U	CCVL		1.0000	0.541
113	WT	U	CCB		1.0000	0.047
114	B24	U	280-182335-c-4		1.0000	2.361
115	B25	U	280-182335-c-5		1.0000	2.133
116	B26	U	280-182335-c-10		1.0000	0.123
117	B27	U	280-182335-c-10 MS		1.0000	1.153
118	B28	U	280-182335-c-10 MS		1.0000	1.161
119	B29	U	280-182335-c-6		1.0000	1.562
120	B30	U	280-182335-c-7		1.0000	1.426

Run Name : Skalar20231019A0
DateTime :Oct 19 2023 10:19:26AM
User Name : Administrator Operator Name : Administrator

	Position	SampleType	SampleIdentity	Comments	ExternalDilution	NH3 and TKN- Results
121	B31	U	280-182335-c-8		1.0000	2.926
122	B32	U	280-182335-c-11		1.0000	0.240
123	B33	U	280-182335-c-9		1.0000	1.412
124	ST6	U	CCV		1.0000	2.572
125	ST4	U	CCVL		1.0000	0.512
126	WT	U	CCB		1.0000	0.009
127	ST5	D	Drift		1.0000	1.018
128	WT	W	Wash		1.0000	0.006
129	B20	U	280-182363-a-12	RERUN	100.0000	0.908
130	B19	U	280-182363-a-9	RERUN	10.0000	143.918
131	B34	U	280-182367-b-1		1.0000	0.967
132	B35	U	280-182367-b-2		2.0000	1.952
133	C1	U	280-182367-b-3		1.0000	1.656
134	C2	U	280-182367-b-4	60 SAMPLES	1.0000	0.107
135	ST1	U	MB		1.0000	0.004
136	D29	U	LCS		1.0000	2.539
137	C3	U	280-182367-b-6		1.0000	0.197
138	C4	U	280-182367-b-6 MS		1.0000	1.194
139	ST6	U	CCV		1.0000	2.554
140	ST4	U	CCVL		1.0000	0.505
141	WT	U	CCB		1.0000	0.003
142	C5	U	280-182367-b-6 MSD		1.0000	1.198
143	B34	U	280-182367-b-1	RERUN	1.0000	0.676
144	B20	U	280-182363-a-12	RERUN	1.0000	0.148
145	B19	U	280-182363-a-9	RERUN	500.0000	725.590
146	C6	U	280-182367-b-5		1.0000	0.468
147	C7	U	280-182367-b-7		1.0000	0.350
148	C8	U	280-182367-b-8		1.0000	1.145
149	C9	U	280-182463-e-1		100.0000	515.727
150	C10	U	280-182463-d-2		100.0000	450.065
151	C11	U	280-182463-e-3		10.0000	38.915
152	ST6	U	CCV		1.0000	2.444
153	ST4	U	CCVL		1.0000	0.483
154	WT	U	CCB		1.0000	0.001
155	C12	U	280-182463-e-5		1.0000	0.042
156	C13	U	280-182463-e-6		1.0000	2.191
157	C14	U	280-182463-d-4		1.0000	0.666
158	B7	U	280-182355-e-1	RERUN	1.0000	0.711
159	ST6	U	CCV		1.0000	2.555
160	C9	U	280-182463-e-1	RERUN	200.0000	500.067

Run Name : Skalar20231019A0
DateTime :Oct 19 2023 10:19:26AM
User Name : Administrator Operator Name : Administrator

	Position	SampleType	SampleIdentity	Comments	ExternalDilution	NH3 and TKN- Results
161	ST6	U	CCV		1.0000	2.551
162	ST4	U	CCVL		1.0000	0.509
163	WT	U	CCB		1.0000	-0.004
164	ST5	D	Drift		1.0000	1.008
165	WT	W	Wash		1.0000	0.006
166	E	E	EndRun		1.0000	0.006

Run Name : Skalar20231019A0
DateTime :Oct 19 2023 10:19:26AM
User Name : Administrator Operator Name : Administrator

	NH3 and TKN-	NH3 and TKN-	NH3 and TKN-
1	0.0000	Oct 19 2023 10:29:00AM	0.006
2	1.7000	Oct 19 2023 10:31:00AM	4.978
3	0.3744	Oct 19 2023 10:35:00AM	1.018
4	0.0000	Oct 19 2023 10:38:00AM	0.006
5	-0.0003	Oct 19 2023 10:41:00AM	0.005
6	0.0190	Oct 19 2023 10:43:00AM	0.056
7	0.0351	Oct 19 2023 10:46:00AM	0.099
8	0.1798	Oct 19 2023 10:48:00AM	0.487
9	0.3668	Oct 19 2023 10:51:00AM	0.997
10	0.8985	Oct 19 2023 10:54:00AM	2.507
11	1.7063	Oct 19 2023 10:56:00AM	4.998
12	0.3764	Oct 19 2023 10:59:00AM	1.024
13	0.0000	Oct 19 2023 11:02:00AM	0.006
14	0.9040	Oct 19 2023 11:04:00AM	2.523
15	0.1912	Oct 19 2023 11:07:00AM	0.518
16	0.0024	Oct 19 2023 11:10:00AM	0.012
17	0.8976	Oct 19 2023 11:12:00AM	2.504
18	0.0068	Oct 19 2023 11:15:00AM	0.024
19	0.0058	Oct 19 2023 11:18:00AM	0.021
20	0.3781	Oct 19 2023 11:20:00AM	1.029
21	0.3851	Oct 19 2023 11:23:00AM	1.048
22	0.0104	Oct 19 2023 11:26:00AM	0.034
23	0.0004	Oct 19 2023 11:28:00AM	0.007
24	0.0007	Oct 19 2023 11:31:00AM	0.008
25	0.0064	Oct 19 2023 11:34:00AM	0.023
26	0.0086	Oct 19 2023 11:36:00AM	0.029
27	0.9119	Oct 19 2023 11:39:00AM	2.546
28	0.1890	Oct 19 2023 11:42:00AM	0.512
29	0.0026	Oct 19 2023 11:44:00AM	0.013
30	0.5313	Oct 19 2023 11:47:00AM	1.455
31	0.5408	Oct 19 2023 11:50:00AM	1.481
32	0.2046	Oct 19 2023 11:52:00AM	0.554
33	0.0972	Oct 19 2023 11:55:00AM	0.265
34	0.6807	Oct 19 2023 11:58:00AM	1.877
35	1.0504	Oct 19 2023 12:00:00PM	2.955
36	1.0571	Oct 19 2023 12:03:00PM	2.975
37	0.5700	Oct 19 2023 12:06:00PM	1.563
38	0.2673	Oct 19 2023 12:08:00PM	0.725
39	1.6445	Oct 19 2023 12:11:00PM	4.798
40	0.9227	Oct 19 2023 12:14:00PM	2.578

Run Name : Skalar20231019A0
DateTime :Oct 19 2023 10:19:26AM
User Name : Administrator Operator Name : Administrator

	NH3 and TKN-	NH3 and TKN-	NH3 and TKN-
41	0.1909	Oct 19 2023 12:16:00PM	0.517
42	0.0017	Oct 19 2023 12:19:00PM	0.010
43	0.3720	Oct 19 2023 12:22:00PM	1.012
44	0.0000	Oct 19 2023 12:24:00PM	0.006
45	1.9114	Oct 19 2023 12:27:00PM	5.678
46	1.6562	Oct 19 2023 12:30:00PM	4.836
47	1.2894	Oct 19 2023 12:32:00PM	3.679
48	1.6518	Oct 19 2023 12:35:00PM	4.821
49	1.4234	Oct 19 2023 12:38:00PM	4.095
50	0.7379	Oct 19 2023 12:40:00PM	2.041
51	0.0072	Oct 19 2023 12:43:00PM	0.025
52	0.9123	Oct 19 2023 12:46:00PM	2.547
53	0.9017	Oct 19 2023 12:48:00PM	2.516
54	0.9166	Oct 19 2023 12:51:00PM	2.560
55	0.9086	Oct 19 2023 12:54:00PM	2.536
56	0.1939	Oct 19 2023 12:56:00PM	0.525
57	0.0085	Oct 19 2023 12:59:00PM	0.028
58	3.3083	Oct 19 2023 1:02:00PM	11.068
59	3.3598	Oct 19 2023 1:05:00PM	11.302
60	3.3859	Oct 19 2023 1:07:00PM	11.423
61	0.1588	Oct 19 2023 1:10:00PM	0.431
62	0.1537	Oct 19 2023 1:12:00PM	0.417
63	0.0376	Oct 19 2023 1:15:00PM	0.106
64	0.0466	Oct 19 2023 1:17:00PM	0.130
65	0.1849	Oct 19 2023 1:20:00PM	0.501
66	0.2954	Oct 19 2023 1:23:00PM	0.801
67	0.1860	Oct 19 2023 1:26:00PM	0.504
68	0.8938	Oct 19 2023 1:28:00PM	2.493
69	0.1950	Oct 19 2023 1:31:00PM	0.528
70	0.0143	Oct 19 2023 1:34:00PM	0.044
71	0.3904	Oct 19 2023 1:36:00PM	1.062
72	0.0000	Oct 19 2023 1:39:00PM	0.006
73	0.1285	Oct 19 2023 1:42:00PM	0.349
74	0.7358	Oct 19 2023 1:44:00PM	2.035
75	1.0873	Oct 19 2023 1:47:00PM	3.066
76	1.0835	Oct 19 2023 1:50:00PM	3.054
77	0.7900	Oct 19 2023 1:52:00PM	2.191
78	1.6337	Oct 19 2023 1:55:00PM	4.763
79	0.0343	Oct 19 2023 1:58:00PM	0.097
80	0.4043	Oct 19 2023 2:00:00PM	1.101

Run Name : Skalar20231019A0
DateTime :Oct 19 2023 10:19:26AM
User Name : Administrator Operator Name : Administrator

	NH3 and TKN-	NH3 and TKN-	NH3 and TKN-
81	0.4143	Oct 19 2023 2:03:00PM	1.129
82	0.0379	Oct 19 2023 2:06:00PM	0.106
83	0.9066	Oct 19 2023 2:08:00PM	2.530
84	0.1979	Oct 19 2023 2:11:00PM	0.536
85	0.0124	Oct 19 2023 2:14:00PM	0.039
86	0.4481	Oct 19 2023 2:16:00PM	1.222
87	0.0427	Oct 19 2023 2:19:00PM	0.119
88	0.2678	Oct 19 2023 2:22:00PM	0.726
89	0.6508	Oct 19 2023 2:24:00PM	1.792
90	0.5178	Oct 19 2023 2:27:00PM	1.417
91	1.3913	Oct 19 2023 2:30:00PM	3.994
92	0.7855	Oct 19 2023 2:32:00PM	2.178
93	0.2582	Oct 19 2023 2:35:00PM	0.700
94	0.0091	Oct 19 2023 2:38:00PM	0.030
95	0.9079	Oct 19 2023 2:40:00PM	2.534
96	0.9039	Oct 19 2023 2:43:00PM	2.522
97	0.1924	Oct 19 2023 2:46:00PM	0.521
98	0.0071	Oct 19 2023 2:48:00PM	0.025
99	0.3777	Oct 19 2023 2:51:00PM	1.028
100	0.0000	Oct 19 2023 2:54:00PM	0.006
101	0.0156	Oct 19 2023 2:57:00PM	0.047
102	0.4023	Oct 19 2023 2:59:00PM	1.095
103	0.4044	Oct 19 2023 3:02:00PM	1.101
104	0.0176	Oct 19 2023 3:04:00PM	0.053
105	0.1288	Oct 19 2023 3:07:00PM	0.350
106	2.7269	Oct 19 2023 3:10:00PM	8.629
107	3.9439	Oct 19 2023 3:13:00PM	14.266
108	0.7951	Oct 19 2023 3:16:00PM	2.206
109	0.9860	Oct 19 2023 3:19:00PM	2.764
110	0.4522	Oct 19 2023 3:21:00PM	1.234
111	0.9305	Oct 19 2023 3:25:00PM	2.601
112	0.1997	Oct 19 2023 3:28:00PM	0.541
113	0.0155	Oct 19 2023 3:30:00PM	0.047
114	0.8487	Oct 19 2023 3:34:00PM	2.361
115	0.7698	Oct 19 2023 3:36:00PM	2.133
116	0.0441	Oct 19 2023 3:39:00PM	0.123
117	0.4230	Oct 19 2023 3:41:00PM	1.153
118	0.4260	Oct 19 2023 3:44:00PM	1.161
119	0.5695	Oct 19 2023 3:47:00PM	1.562
120	0.5210	Oct 19 2023 3:50:00PM	1.426

Run Name : Skalar20231019A0
DateTime :Oct 19 2023 10:19:26AM
User Name : Administrator Operator Name : Administrator

	NH3 and TKN-	NH3 and TKN-	NH3 and TKN-
121	1.0404	Oct 19 2023 3:52:00PM	2.926
122	0.0880	Oct 19 2023 3:55:00PM	0.240
123	0.5162	Oct 19 2023 3:58:00PM	1.412
124	0.9209	Oct 19 2023 4:00:00PM	2.572
125	0.1889	Oct 19 2023 4:03:00PM	0.512
126	0.0011	Oct 19 2023 4:06:00PM	0.009
127	0.3743	Oct 19 2023 4:08:00PM	1.018
128	0.0000	Oct 19 2023 4:11:00PM	0.006
129	0.0012	Oct 19 2023 4:15:00PM	0.009
130	3.9661	Oct 19 2023 4:17:00PM	14.392
131	0.3559	Oct 19 2023 4:19:00PM	0.967
132	0.3589	Oct 19 2023 4:21:00PM	0.976
133	0.6029	Oct 19 2023 4:24:00PM	1.656
134	0.0379	Oct 19 2023 4:27:00PM	0.107
135	-0.0008	Oct 19 2023 4:29:00PM	0.004
136	0.9096	Oct 19 2023 4:32:00PM	2.539
137	0.0719	Oct 19 2023 4:35:00PM	0.197
138	0.4379	Oct 19 2023 4:38:00PM	1.194
139	0.9145	Oct 19 2023 4:40:00PM	2.554
140	0.1865	Oct 19 2023 4:43:00PM	0.505
141	-0.0012	Oct 19 2023 4:46:00PM	0.003
142	0.4393	Oct 19 2023 4:48:00PM	1.198
143	0.2493	Oct 19 2023 4:51:00PM	0.676
144	0.0535	Oct 19 2023 4:54:00PM	0.148
145	0.5300	Oct 19 2023 4:56:00PM	1.451
146	0.1726	Oct 19 2023 4:59:00PM	0.468
147	0.1290	Oct 19 2023 5:02:00PM	0.350
148	0.4204	Oct 19 2023 5:04:00PM	1.145
149	1.7548	Oct 19 2023 5:07:00PM	5.157
150	1.5519	Oct 19 2023 5:10:00PM	4.501
151	1.3582	Oct 19 2023 5:12:00PM	3.892
152	0.8772	Oct 19 2023 5:15:00PM	2.444
153	0.1784	Oct 19 2023 5:17:00PM	0.483
154	-0.0017	Oct 19 2023 5:20:00PM	0.001
155	0.0136	Oct 19 2023 5:22:00PM	0.042
156	0.7898	Oct 19 2023 5:25:00PM	2.191
157	0.2458	Oct 19 2023 5:28:00PM	0.666
158	0.2623	Oct 19 2023 5:31:00PM	0.711
159	0.9149	Oct 19 2023 5:34:00PM	2.555
160	0.8964	Oct 19 2023 5:36:00PM	2.500

Run Name : Skalar20231019A0
DateTime :Oct 19 2023 10:19:26AM
User Name : Administrator Operator Name : Administrator

	NH3 and TKN-	NH3 and TKN-	NH3 and TKN-
161	0.9136	Oct 19 2023 5:39:00PM	2.551
162	0.1879	Oct 19 2023 5:41:00PM	0.509
163	-0.0038	Oct 19 2023 5:44:00PM	-0.004
164	0.3707	Oct 19 2023 5:47:00PM	1.008
165	0.0000	Oct 19 2023 5:50:00PM	0.006
166	0.0000	Oct 19 2023 5:52:00PM	0.006

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100
Lims ID: STD1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 16-Aug-2023 08:23:00 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0124540-001
Misc. Info.: 280-0124540-001
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub9

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 17-Aug-2023 10:41:27 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1649

First Level Reviewer: LVW8 Date: 16-Aug-2023 10:26:43

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.073	3.088	-0.015	6493840	NC	NC	Ma
2 Chloride	4.205	4.257	-0.052	16343527	NC	NC	
3 Nitrite as N	4.892	4.875	0.017	9494239	0.2000	0.1920	
4 Bromide	6.050	6.008	0.042	2213156	NC	NC	
5 Nitrate as N	6.813	6.717	0.096	8809383	0.2000	0.2157	
6 Orthophosphate as P	8.590	8.530	0.060	20373197	0.2000	0.1606	Ma
7 Sulfate	9.640	9.610	0.030	16127136	NC	NC	Ma

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

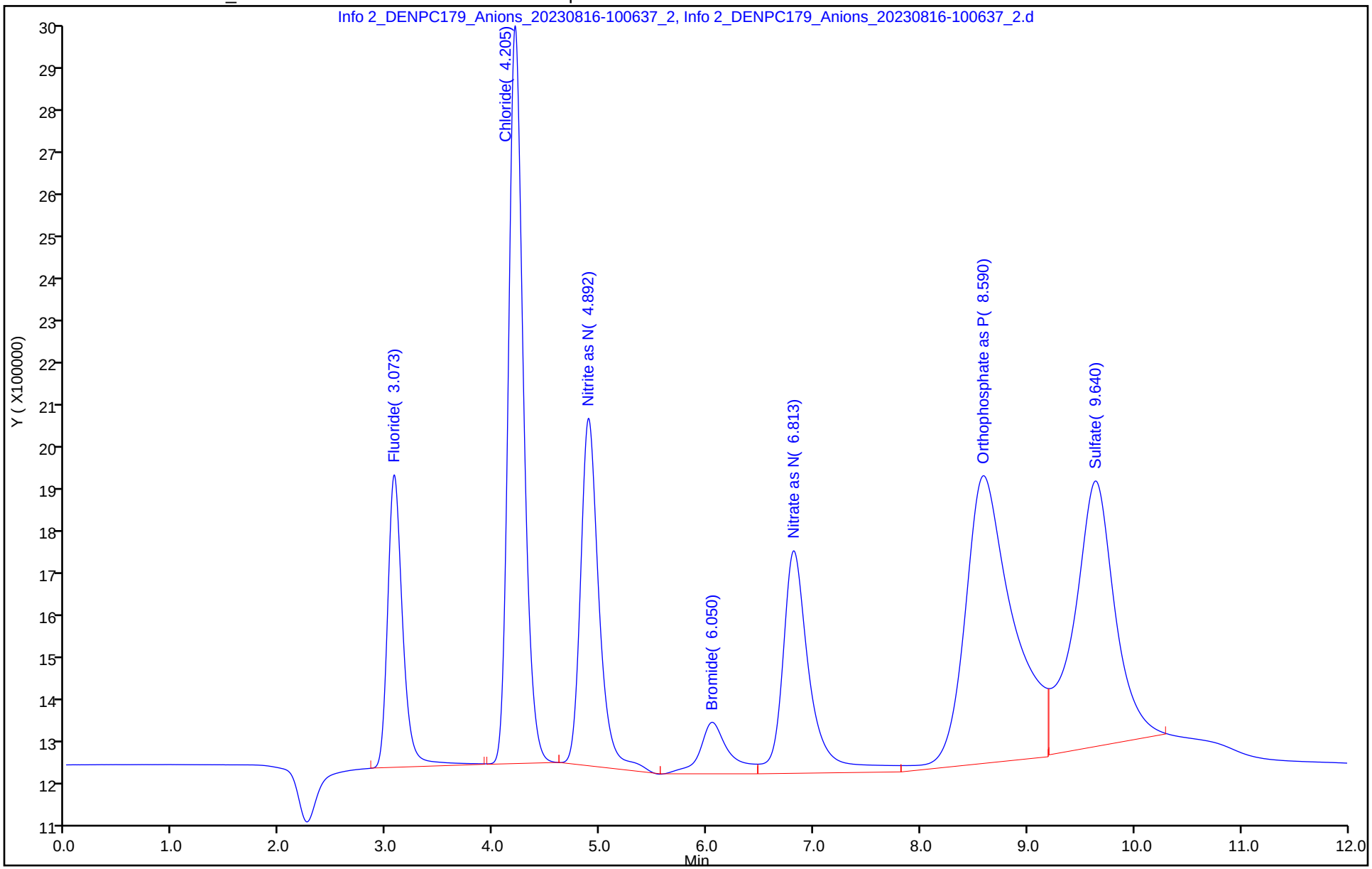
Reagents:

IC Cal low_00722 Amount Added: 0.04 Units: mL
IC CAL cl/so4_00494 Amount Added: 0.04 Units: mL

Report Date: 17-Aug-2023 10:41:27 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100637_2.d				
Injection Date:	16-Aug-2023 08:23:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD1			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



10/20/2023
4:00 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Injection Date: 16-Aug-2023 08:23:00 Instrument ID: WC_IonChrom10

Lims ID: STD1

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 1

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions

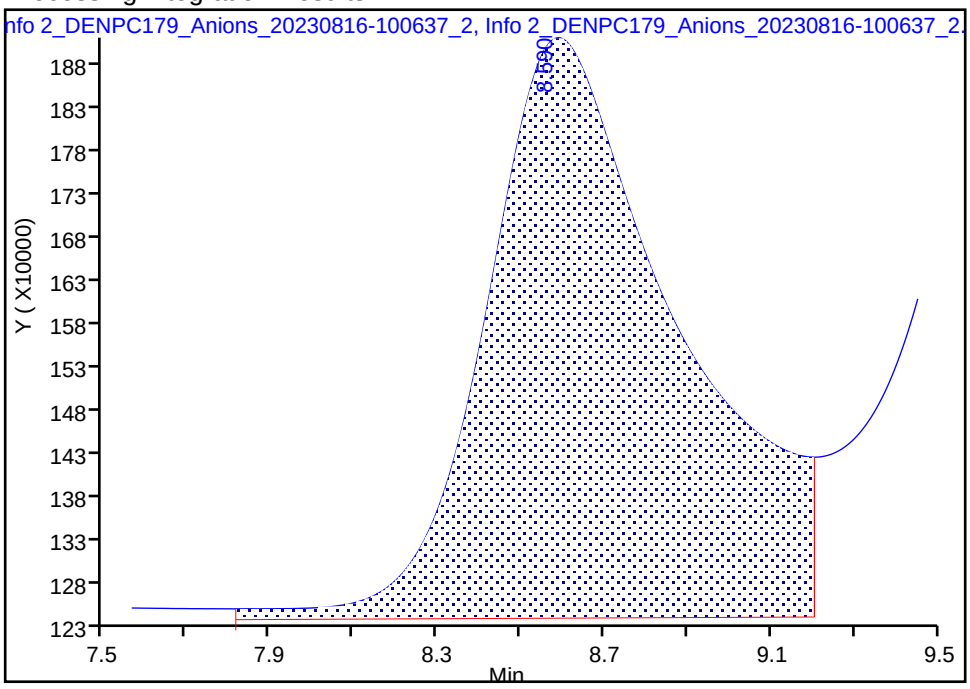
Column: Detector Info 2_091554_1

6 Orthophosphate as P, CAS: STL00599

Signal: 1

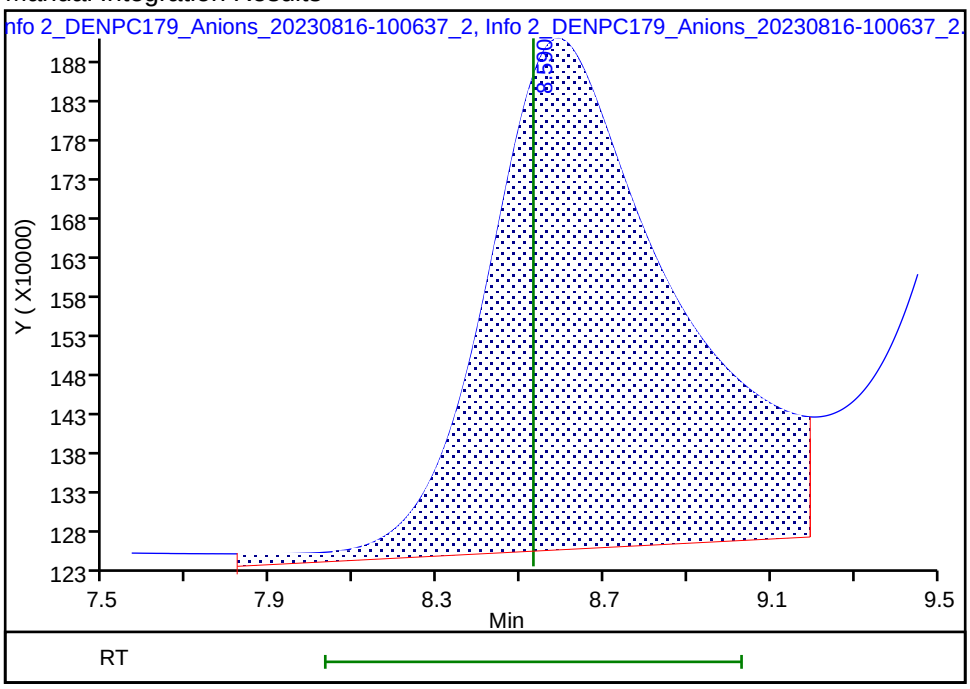
Processing Integration Results

RT: 8.59
Area: 21590016
Amount: 0.049185
Amount Units: ug/ml



Manual Integration Results

RT: 8.59
Area: 20373197
Amount: 0.160645
Amount Units: ug/ml



Reviewer: LVW8, 16-Aug-2023 10:42:23 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100
Lims ID: STD2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 16-Aug-2023 08:38:00 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0124540-002
Misc. Info.: 280-0124540-002
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub9

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 17-Aug-2023 10:41:28 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1649

First Level Reviewer: LVW8 Date: 16-Aug-2023 10:27:05

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.077	3.088	-0.011	18607618	NC	NC	Ma
2 Chloride	4.205	4.257	-0.052	44142315	NC	NC	
3 Nitrite as N	4.890	4.875	0.015	25589762	0.5000	0.4965	
4 Bromide	6.045	6.008	0.037	4337564	NC	NC	
5 Nitrate as N	6.797	6.717	0.080	22129548	0.5000	0.4867	
6 Orthophosphate as P	8.580	8.530	0.050	30713996	0.5000	0.5759	M
7 Sulfate	9.643	9.610	0.033	32737705	NC	NC	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

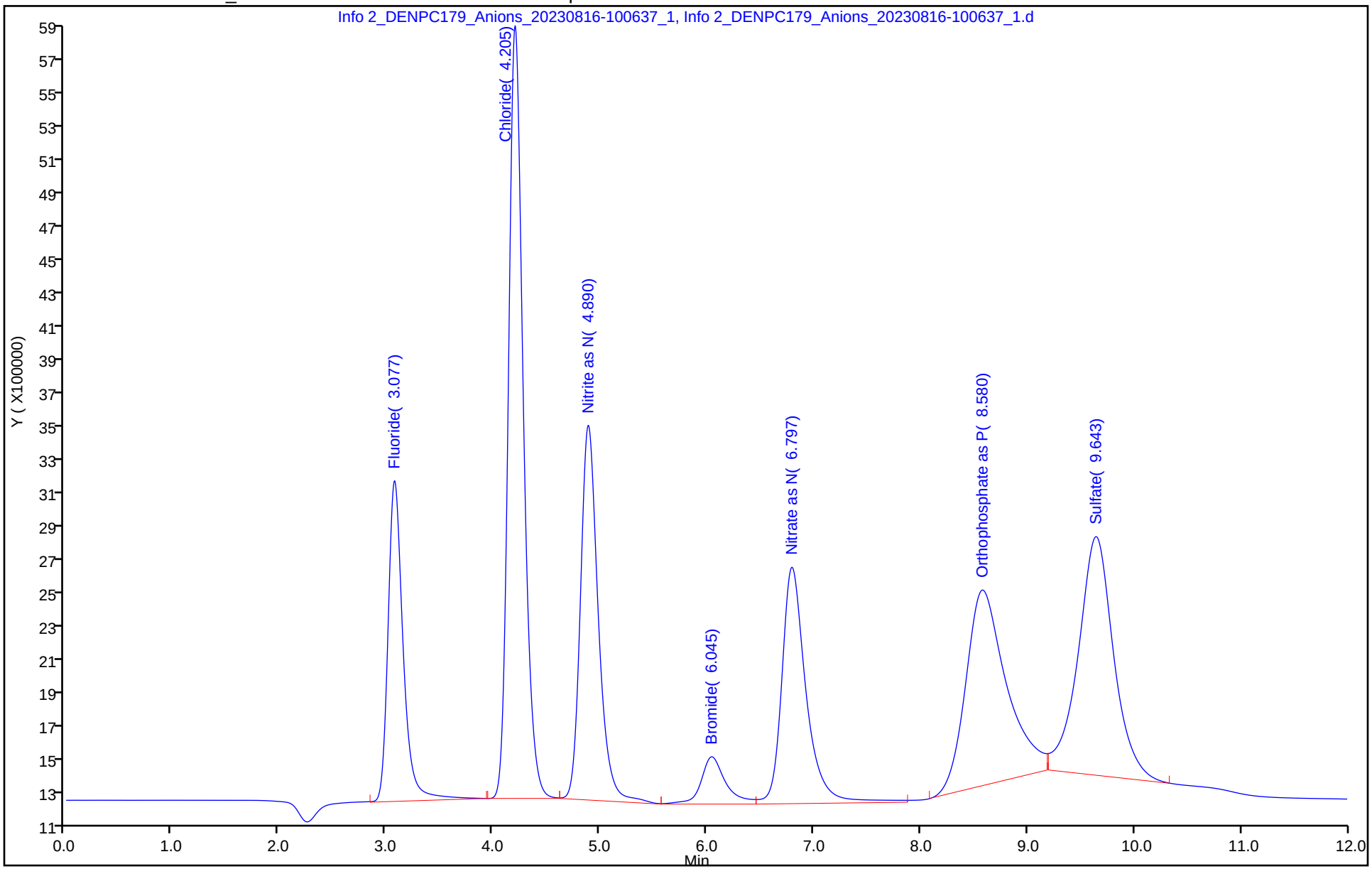
Reagents:

IC Cal low_00722 Amount Added: 0.10 Units: mL
IC CAL cl/so4_00494 Amount Added: 0.10 Units: mL

Report Date: 17-Aug-2023 10:41:28 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100637_1.d				
Injection Date:	16-Aug-2023 08:38:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD2			Worklist Smp#:	2
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



10/20/2023
4:00 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Injection Date: 16-Aug-2023 08:38:00 Instrument ID: WC_IonChrom10

Lims ID: STD2

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 2

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions

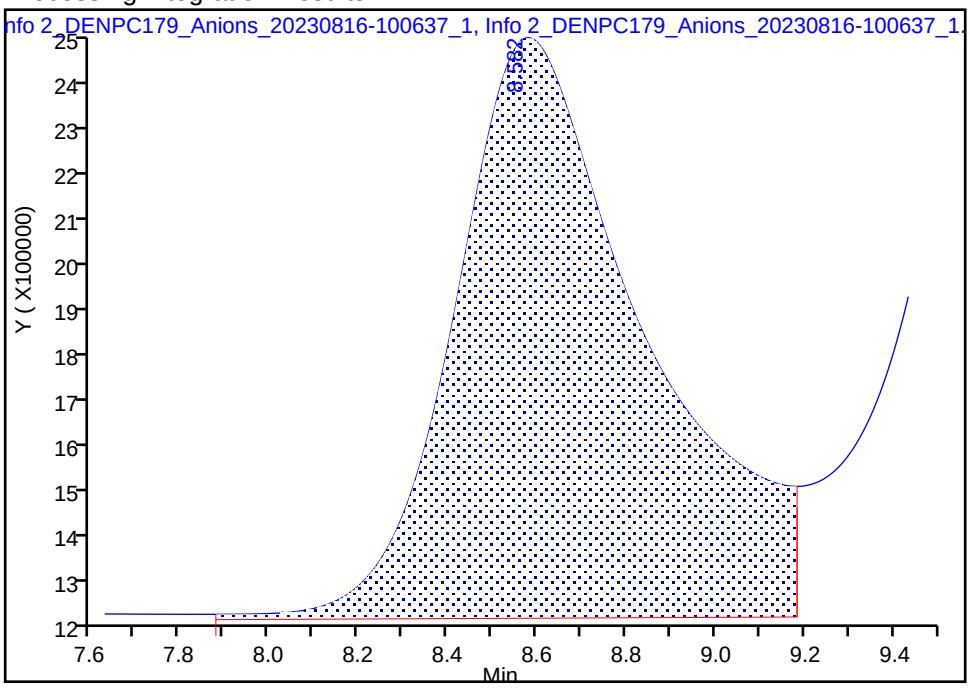
Column: Detector Info 2_091554_1

6 Orthophosphate as P, CAS: STL00599

Signal: 1

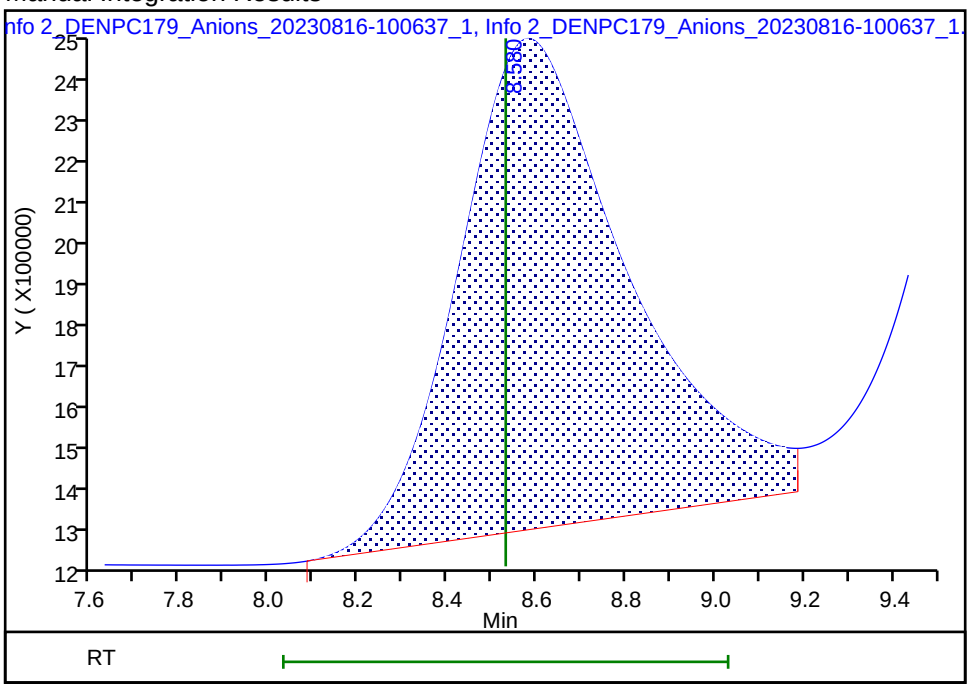
Processing Integration Results

RT: 8.58
Area: 37638482
Amount: 0.687214
Amount Units: ug/ml



Manual Integration Results

RT: 8.58
Area: 30713996
Amount: 0.575942
Amount Units: ug/ml



Reviewer: LVW8, 16-Aug-2023 10:36:01 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100
Lims ID: STD3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 16-Aug-2023 08:54:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0124540-003
Misc. Info.: 280-0124540-003
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub9

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 17-Aug-2023 10:39:52 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1649

First Level Reviewer: LVW8 Date: 16-Aug-2023 10:27:53

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.078	3.078	0.000	40803610	NC	NC	Ma
2 Chloride	4.202	4.238	-0.036	92390398	NC	NC	
3 Nitrite as N	4.885	4.873	0.012	53593060	1.00	1.03	
4 Bromide	6.037	6.012	0.025	7960626	NC	NC	
5 Nitrate as N	6.777	6.723	0.054	44959242	1.00	0.9512	
6 Orthophosphate as P	8.570	8.545	0.025	42106377	1.00	1.03	M
7 Sulfate	9.643	9.628	0.015	62271915	NC	NC	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

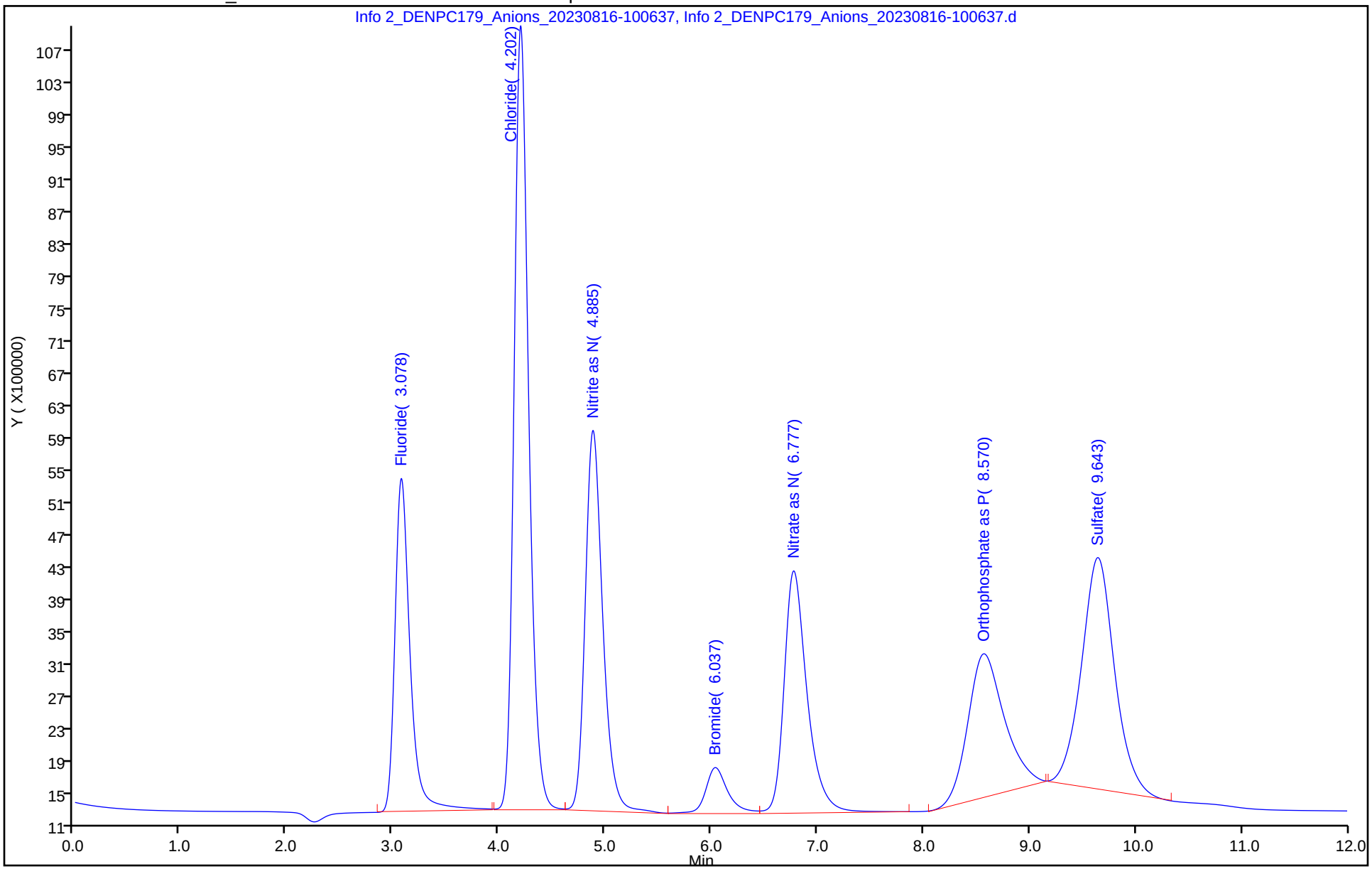
Reagents:

IC Cal low_00722 Amount Added: 0.20 Units: mL
IC CAL cl/so4_00494 Amount Added: 0.20 Units: mL

Report Date: 17-Aug-2023 10:39:52 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100637.d				
Injection Date:	16-Aug-2023 08:54:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD3			Worklist Smp#:	3
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



10/20/2023
4:00 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Injection Date: 16-Aug-2023 08:54:00 Instrument ID: WC_IonChrom10

Lims ID: STD3

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 3

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions

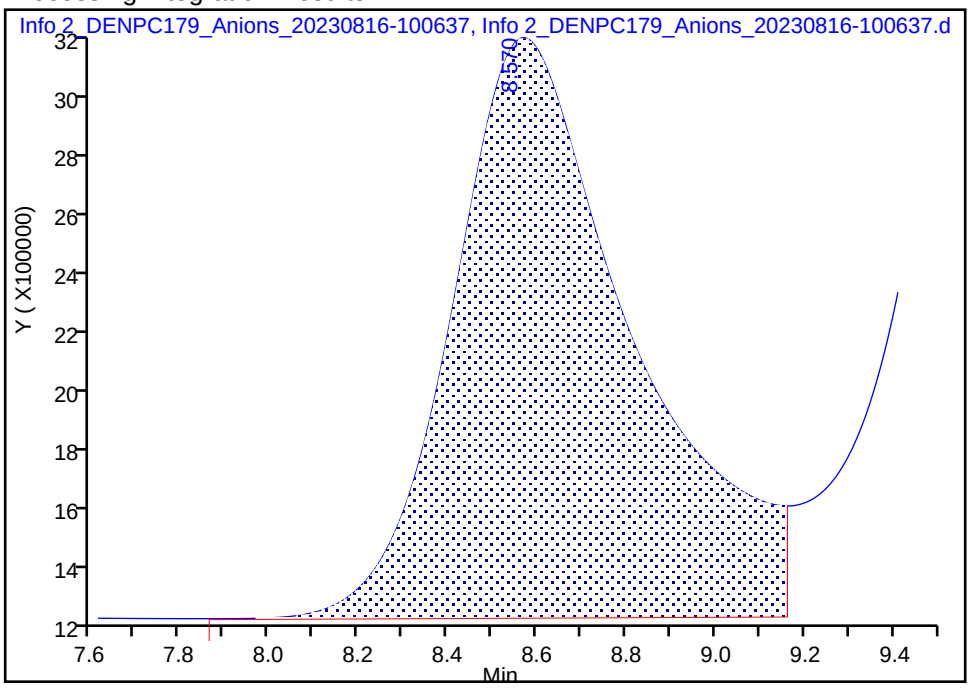
Column: Detector Info 2_091554_1

6 Orthophosphate as P, CAS: STL00599

Signal: 1

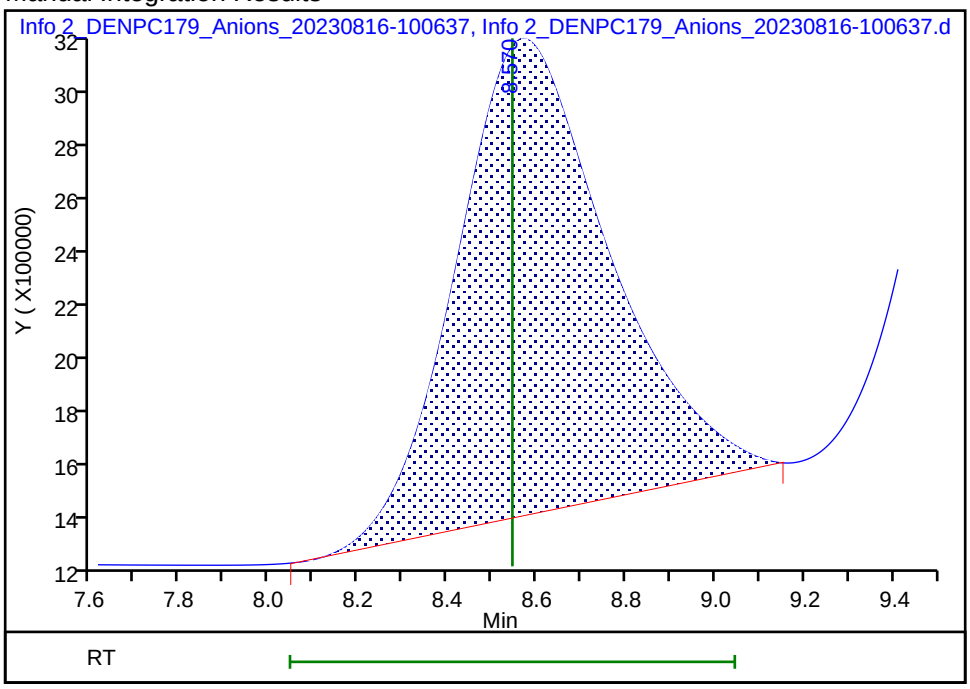
Processing Integration Results

RT: 8.57
Area: 55252876
Amount: 1.438957
Amount Units: ug/ml



Manual Integration Results

RT: 8.57
Area: 42106377
Amount: 1.033471
Amount Units: ug/ml



Reviewer: LVW8, 16-Aug-2023 10:27:44 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100
Lims ID: STD4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 16-Aug-2023 09:09:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0124540-004
Misc. Info.: 280-0124540-004
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub9

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 17-Aug-2023 10:41:29 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1649

First Level Reviewer: LVW8 Date: 16-Aug-2023 10:28:16

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.083	3.083	0.000	171459973	NC	NC	Ma
2 Chloride	4.225	4.225	0.000	1158723576	NC	NC	
3 Nitrite as N	4.877	4.877	0.000	218611235	4.00	4.15	
4 Bromide	6.022	6.022	0.000	32146652	NC	NC	
5 Nitrate as N	6.737	6.737	0.000	192114513	4.00	3.94	
6 Orthophosphate as P	8.543	8.543	0.000	118853705	4.00	4.12	M
7 Sulfate	9.627	9.627	0.000	859732703	NC	NC	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

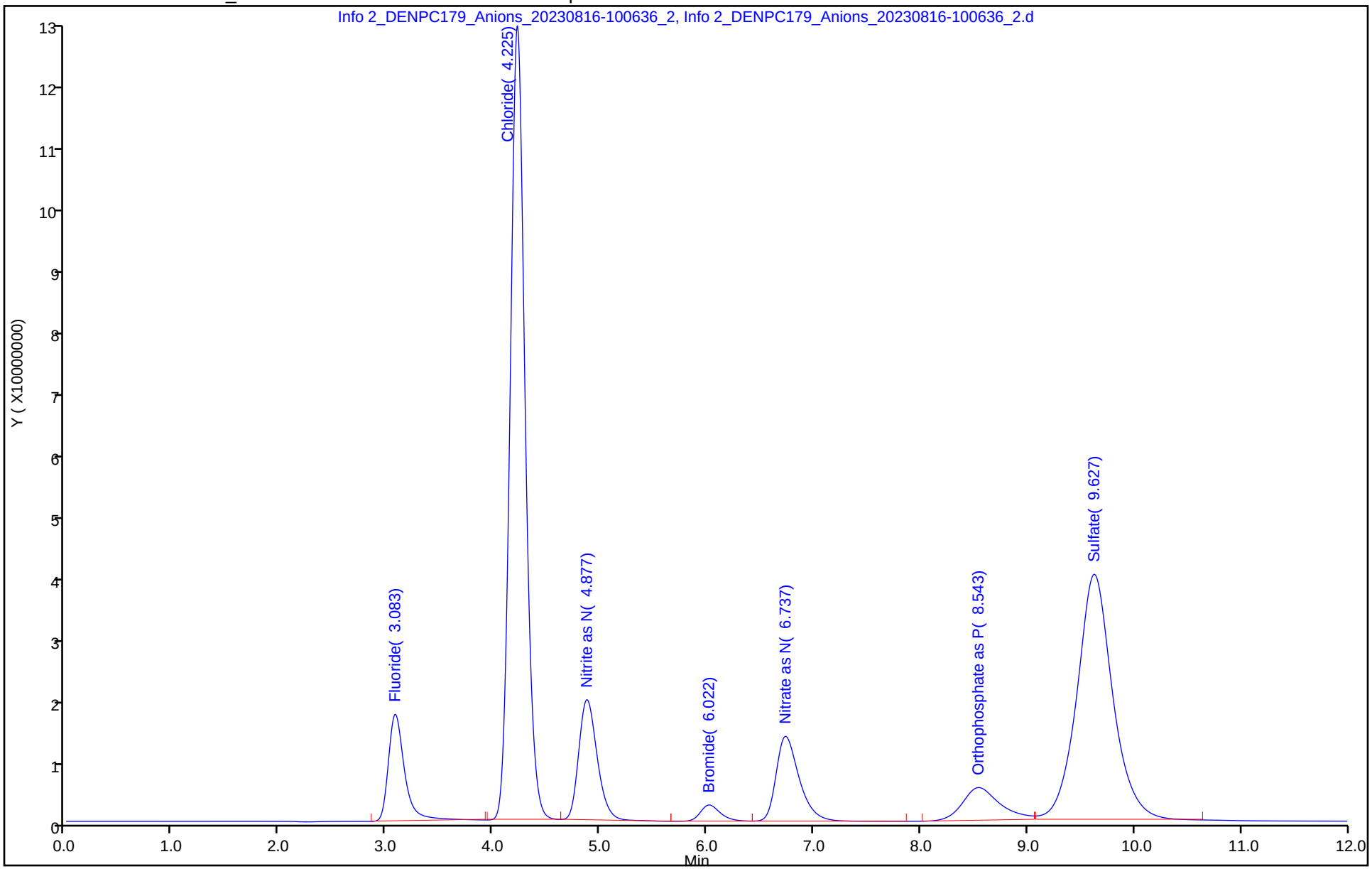
Reagents:

IC Cal low_00722 Amount Added: 0.80 Units: mL
IC CAL cl/so4_00494 Amount Added: 2.40 Units: mL

Report Date: 17-Aug-2023 10:41:29 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100636_2.d				
Injection Date:	16-Aug-2023 09:09:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD4			Worklist Smp#:	4
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



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4:00 PM

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Injection Date: 16-Aug-2023 09:09:00 Instrument ID: WC_IonChrom10

Lims ID: STD4

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 4

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions

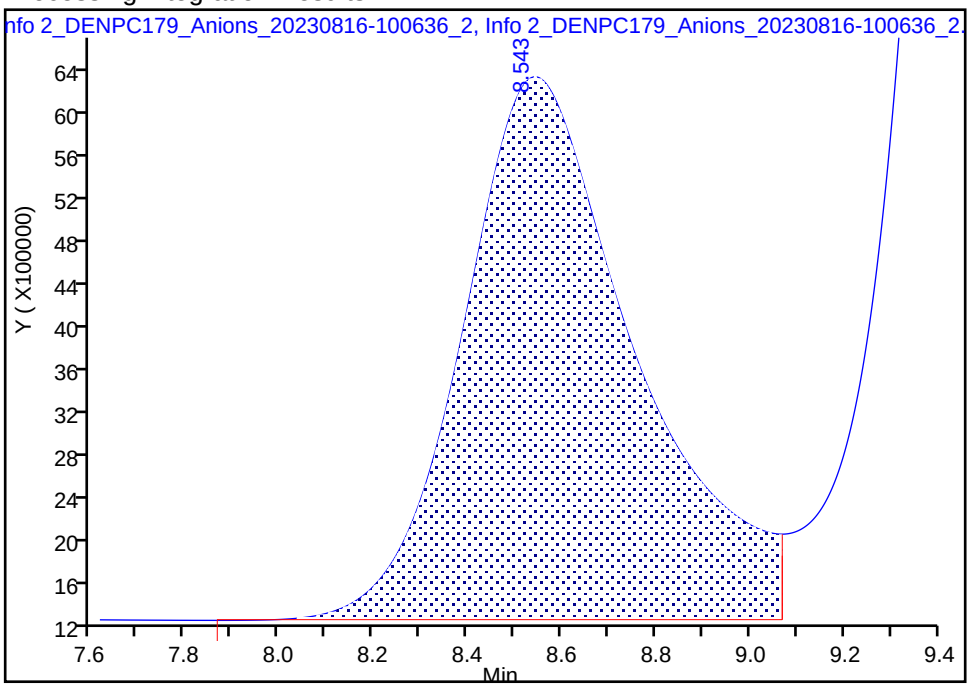
Column: Detector Info 2_091554_1

6 Orthophosphate as P, CAS: STL00599

Signal: 1

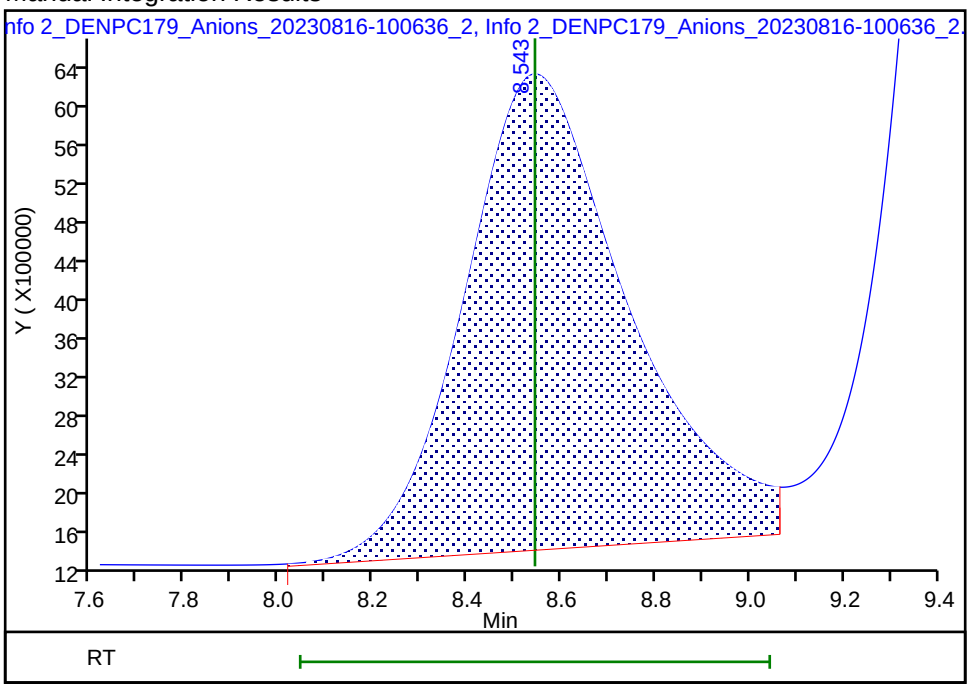
Processing Integration Results

RT: 8.54
Area: 129165919
Amount: 4.442737
Amount Units: ug/ml



Manual Integration Results

RT: 8.54
Area: 118853705
Amount: 4.115722
Amount Units: ug/ml



Reviewer: LVW8, 16-Aug-2023 10:28:08 -06:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100
Lims ID: STD5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 16-Aug-2023 09:24:00 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0124540-005
Misc. Info.: 280-0124540-005
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub9

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 17-Aug-2023 10:41:30 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1649

First Level Reviewer: LVW8 Date: 16-Aug-2023 10:30:04

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.088	3.088	0.000	330613515	NC	NC	Ma
2 Chloride	4.257	4.257	0.000	2318734502	NC	NC	
3 Nitrite as N	4.875	4.875	0.000	422833757	8.00	8.01	
4 Bromide	6.008	6.008	0.000	66462794	NC	NC	
5 Nitrate as N	6.717	6.717	0.000	392369909	8.00	8.02	
6 Orthophosphate as P	8.530	8.530	0.000	216637163	8.00	8.04	
7 Sulfate	9.610	9.610	0.000	1757412080	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

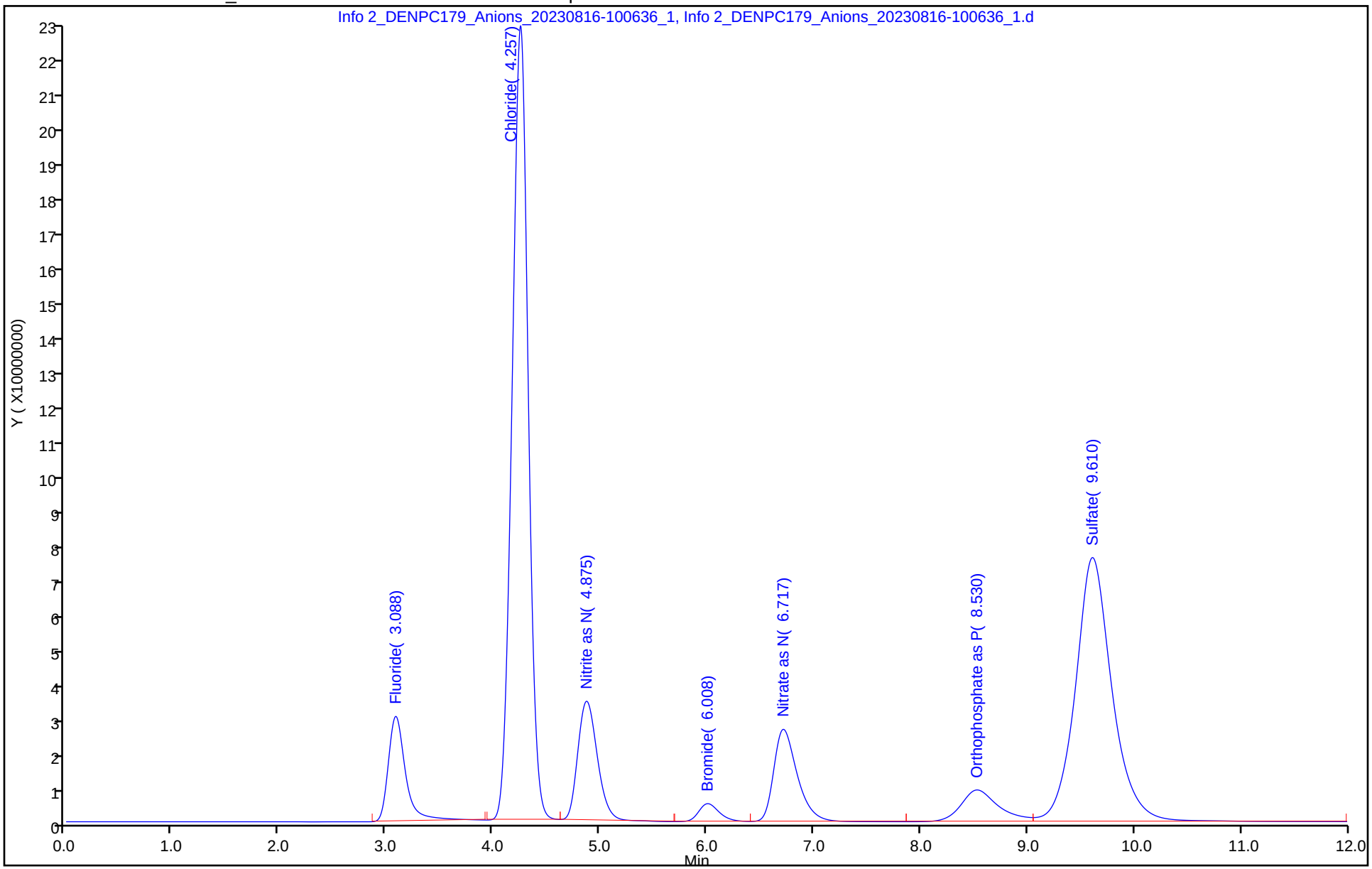
Reagents:

IC Cal low_00722 Amount Added: 1.60 Units: mL
IC CAL cl/so4_00494 Amount Added: 4.80 Units: mL

Report Date: 17-Aug-2023 10:41:31 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100636_1.d				
Injection Date:	16-Aug-2023 09:24:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD5			Worklist Smp#:	5
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



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4:00 PM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100
Lims ID: STD6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 16-Aug-2023 09:39:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0124540-006
Misc. Info.: 280-0124540-006
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub9

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 17-Aug-2023 10:39:54 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1649

First Level Reviewer: LVW8 Date: 16-Aug-2023 10:29:55

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.085	3.088	-0.003	411861883	NC	NC	Ma
2 Chloride	4.292	4.257	0.035	3859357572	NC	NC	
3 Nitrite as N	4.877	4.875	0.002	519039593	10.0	9.83	
4 Bromide	5.998	6.008	-0.010	84169414	NC	NC	
5 Nitrate as N	6.708	6.717	-0.009	493796088	10.0	10.1	
6 Orthophosphate as P	8.523	8.530	-0.007	259679126	10.0	9.77	
7 Sulfate	9.588	9.610	-0.022	2909731694	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

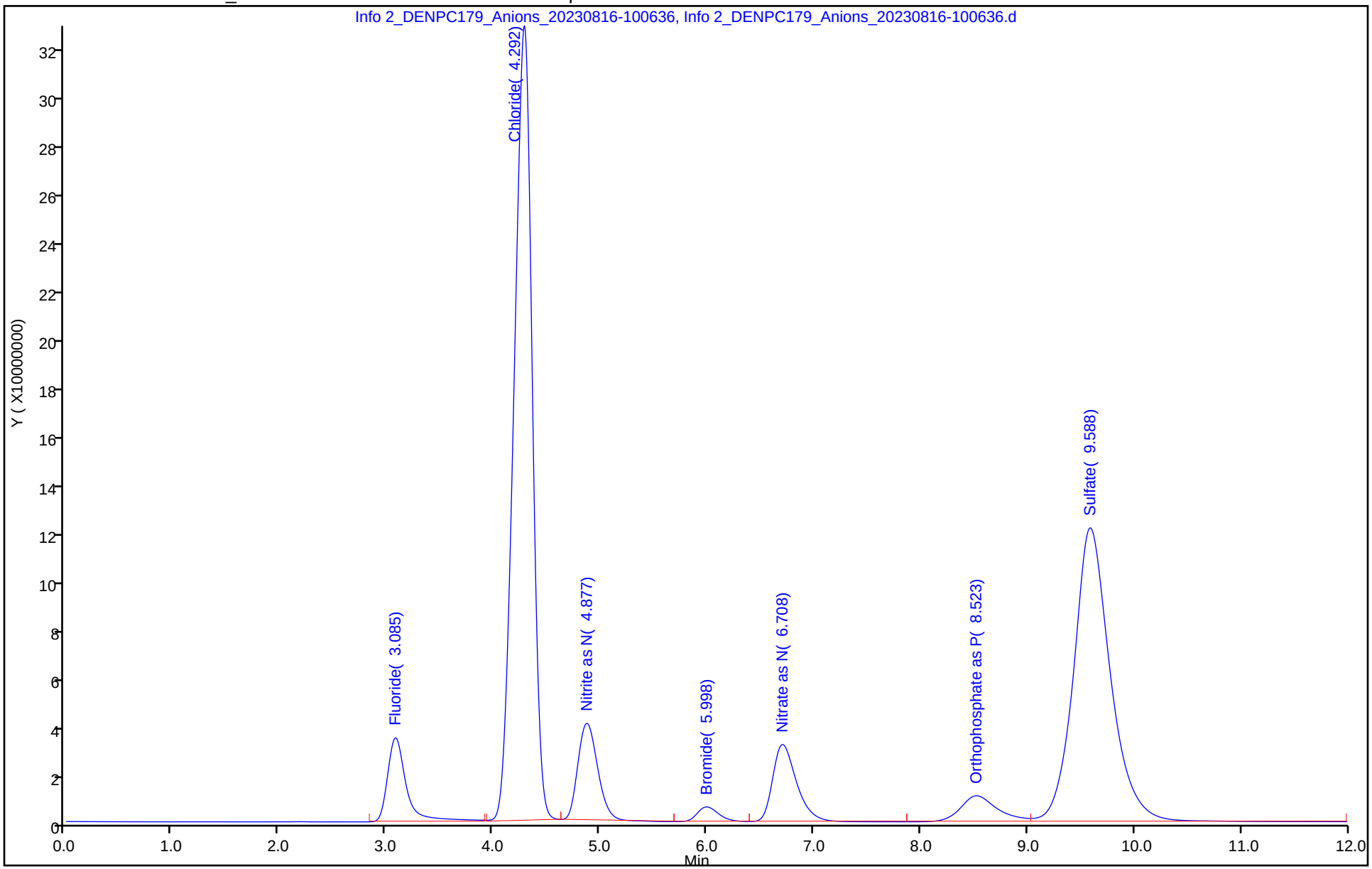
Reagents:

IC Cal low_00722 Amount Added: 2.00 Units: mL
IC CAL cl/so4_00494 Amount Added: 8.00 Units: mL

Report Date: 17-Aug-2023 10:39:54 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100636.d				
Injection Date:	16-Aug-2023 09:39:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD6			Worklist Smp#:	6
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



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4:00 PM

Eurofins Environment Testing America
Worklist Report

Worklist Name: 08 15 23 CAL
Worklist Number: 124540
Instrument Name: WC_IonChrom10
Chrom Method: Anions_IC10
Injection Volume: 5.000
Units: ul
Analysis Type: Semi VOA
Batch Directory: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b
Upload Directory: \\CORPTALSAPP16\280-DN-RawData\WetChem\IonChrom10

Smp #	Lims ID	Smp Type	Ical Lvl	Dil Fact	Fract	Initial Vol/Wt	Vol/Wt Units	Sample Reagents	pH	Comment
1	# 1 STD1	IC	1	1.000	rectInjection	10.00	mL	IC Cal low_00722 IC CAL cl/so4_00494		
2	# 2 STD2	IC	2	1.000	rectInjection	10.00	mL	IC Cal low_00722 IC CAL cl/so4_00494		
3	# 3 STD3	IC	3	1.000	rectInjection	10.00	mL	IC Cal low_00722 IC CAL cl/so4_00494		
4	# 4 STD4	IC	4	1.000	rectInjection	10.00	mL	IC Cal low_00722 IC CAL cl/so4_00494		
5	# 5 STD5	IC	5	1.000	rectInjection	10.00	mL	IC Cal low_00722 IC CAL cl/so4_00494		
6	# 6 STD6	IC	6	1.000	rectInjection	10.00	mL	IC Cal low_00722 IC CAL cl/so4_00494		
7	# 7 rtc	RTC		1.000	rectInjection	10.00	mL	IC LCS_01972		
8	# 8 icv	ICV		1.000	rectInjection	10.00	mL	IC ICV 5_00413 IC SO4 ICV_00024 Cl ICV Std_00006		
9	# 9 icb	ICB		1.000	rectInjection	10.00	mL			
10	#10 mrl	MRL		1.000	rectInjection	10.00	mL	IC Cal low_00722 IC CAL cl/so4_00494		
11	#11 lcs	LCS		1.000	rectInjection	10.00	mL	IC LCS_01972		
12	#12 lcsd	LCSD		1.000	rectInjection	10.00	mL	IC LCS_01972		
13	#13 mb	MB		1.000	rectInjection	10.00	mL			
14	#14 280-180347-D-18	Client		1.000	rectInjection	10.00	mL			
15	#15 280-180347-D-19	Client		1.000	rectInjection	10.00	mL			
16	#16 280-180347-D-20	Client		1.000	rectInjection	10.00	mL			
17	#17 280-179722-B-11-A	Client		1.000	rectInjection	10.00	mL			
18	#18 280-179722-B-11-A	Client		10.00	rectInjection	10.00	mL			
19	#19 280-179722-C-6-A	Client		1.000	rectInjection	10.00	mL			
20	#20 280-179722-C-6-A	Client		10.00	rectInjection	10.00	mL			
21	#21 280-180350-B-2	Client		1.000	rectInjection	10.00	mL			
22	#22 280-180350-B-3	Client		1.000	rectInjection	10.00	mL			
23	#23 280-180361-A-2	Client		1.000	rectInjection	10.00	mL			
24	#24 ccv	CCV		1.000	rectInjection	10.00	mL	IC LCS_01972		
25	#25 ccb	CCB		1.000	rectInjection	10.00	mL			
26	#26 280-180361-A-2 DU	DU		1.000	rectInjection	10.00	mL			
27	#27 280-180361-A-2 MS	MS		1.000	rectInjection	10.00	mL	ICMS/MSD WEEK_00831		
28	#28 280-180361-A-2 MSD	MSD		1.000	rectInjection	10.00	mL	ICMS/MSD WEEK_00831		
29	#29 280-180361-A-1	Client		10.00	rectInjection	10.00	mL			
30	#30 280-180349-B-2	Client		1.000	rectInjection	10.00	mL			
31	#31 280-180363-A-1	Client		1.000	rectInjection	10.00	mL			
32	#32 280-180362-A-1	Client		5.000	rectInjection	10.00	mL			
33	#33 280-180359-A-3	Client		1.000	rectInjection	10.00	mL			
34	#34 280-180362-A-2	Client		5.000	rectInjection	10.00	mL			
35	#35 280-180359-A-2	Client		2.000	rectInjection	10.00	mL			
36	#36 ccv	CCV		1.000	rectInjection	10.00	mL	IC LCS_01972		
37	#37 ccb	CCB		1.000	rectInjection	10.00	mL			
38	#38 280-180363-A-3	Client		1.000	rectInjection	10.00	mL			
39	#39 280-180363-A-2	Client		1.000	rectInjection	10.00	mL			
40	#40 280-180363-A-2 DU	DU		1.000	rectInjection	10.00	mL			
41	#41 280-180363-A-2 MS	MS		1.000	rectInjection	10.00	mL	ICMS/MSD WEEK_00831		
42	#42 280-180363-A-2 MSD	MSD		1.000	rectInjection	10.00	mL	ICMS/MSD WEEK_00831		
43	#43 280-180359-A-4	Client		1.000	rectInjection	10.00	mL			
44	#44 280-180349-B-3	Client		1.000	rectInjection	10.00	mL			
45	#45 280-180359-A-1	Client		1.000	rectInjection	10.00	mL			
46	#46 lcs	LCS		1.000	rectInjection	10.00	mL	IC LCS_01972		
47	#47 lcsd	LCSD		1.000	rectInjection	10.00	mL	IC LCS_01972		
48	#48 ccv	CCV		1.000	rectInjection	10.00	mL	IC LCS_01972		
49	#49 ccb	CCB		1.000	rectInjection	10.00	mL			
50	#50 mb	MB		1.000	rectInjection	10.00	mL			
51	#51 280-180355-A-1	Client		1.000	rectInjection	10.00	mL			
52	#52 280-180360-B-5	Client		2.000	rectInjection	10.00	mL			
53	#53 280-180362-A-4	Client		1.000	rectInjection	10.00	mL			
54	#54 280-180362-A-4 DU	DU		1.000	rectInjection	10.00	mL			

Smp #	Lims ID	Smp Type	Ical Lvl	Dil Fact	Fract	Initial Vol/Wt	Vol/Wt Units	Sample Reagents	pH	Comment
55	#55 280-180362-A-4 MS	MS		1.000	rectInjection	10.00	mL	ICMS/MSD WEEK_00831		
56	#56 280-180362-A-4 MSD	MSD		1.000	rectInjection	10.00	mL	ICMS/MSD WEEK_00831		
57	#57 280-180360-B-3	Client		1.000	rectInjection	10.00	mL			
58	#58 280-180360-B-1	Client		1.000	rectInjection	10.00	mL			
59	#59 ccv	CCV		1.000	rectInjection	10.00	mL	IC LCS_01972		
60	#60 ccb	CCB		1.000	rectInjection	10.00	mL			

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Anions_IC10.m
Instrument: WC_IonChrom10 Lims Location: 280
Lock State: Initial Calib Locked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 17-Aug-2023 11:15:05
No.Compounds:7
Sublist: chrom-Anions_IC10*sub9
Limit Group: Wet - Anions

Detectors

Detector: 1, Info 2_091554_1
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-14.933 No. Points: 7196

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 08:23:00 Worklist: 124540 Sample#: 1
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 08:38:00 Worklist: 124540 Sample#: 2
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 08:54:00 Worklist: 124540 Sample#: 3
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 09:09:00 Worklist: 124540 Sample#: 4
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 09:24:00 Worklist: 124540 Sample#: 5
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 09:39:00 Worklist: 124540 Sample#: 6

Start Cal Date: 16-Aug-2023 08:23:00 End Cal Date: 16-Aug-2023 09:39:00

Individual Compound Calibration Parameters

Quant Method: ESTD RF Calibration: Replace
Rule Name: Linear1 Curve: Linear Weighting: Conc
Origin: None Error: raw_COD Error Limit: 1.00
RF %Dif: 0.0 SPCC Limit: 0.0 CCC Limit: 0.0
Dependent Variable: Resp

Number of Compounds: 3

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error
3 Nitrite as N				Signal: 1					
47471195	51179524	53593060	54652809	52854220	51903959	-659672			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		52874248		
9494239	25589762	53593060	218611235	422833757	519039593				
124540(1)	124540(2)	124540(3)	124540(4)	124540(5)	124540(6)				
5 Nitrate as N				Signal: 1					
44046915	44259096	44959242	48028628	49046239	49379609	-1793758			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		49153639		
8809383	22129548	44959242	192114513	392369909	493796088				
124540(1)	124540(2)	124540(3)	124540(4)	124540(5)	124540(6)				
6 Orthophosphate as P				Signal: 1					
101865985	61427992	42106377	29713426	27079645	25967913	16373185			0.999
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		24899766		
M20373197	M30713996	M42106377	M118853705	216637163	259679126				
124540(1)	124540(2)	124540(3)	124540(4)	124540(5)	124540(6)				

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Anions_IC10.m
Instrument: WC_IonChrom10 Lims Location: 280
Lock State: Initial Calib Locked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 17-Aug-2023 11:15:05
No.Compounds:7
Sublist: chrom-Anions_IC10*sub9
Limit Group: Wet - Anions 28D

Detectors

Detector: 1, Info 2_091554_1
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-14.933 No. Points: 7196

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 08:23:00 Worklist: 124540 Sample#: 1
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 08:38:00 Worklist: 124540 Sample#: 2
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 08:54:00 Worklist: 124540 Sample#: 3
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 09:09:00 Worklist: 124540 Sample#: 4
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 09:24:00 Worklist: 124540 Sample#: 5
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 09:39:00 Worklist: 124540 Sample#: 6

Start Cal Date: 16-Aug-2023 08:23:00 End Cal Date: 16-Aug-2023 09:39:00

Individual Compound Calibration Parameters

Quant Method: ESTD RF Calibration: Replace
Rule Name: Linear1 Curve: Linear Weighting: Conc
Origin: None Error: raw_COD Error Limit: 1.00
RF %Dif: 0.0 SPCC Limit: 0.0 CCC Limit: 0.0
Dependent Variable: Resp

Number of Compounds: 4

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error
1 Fluoride				Signal: 1					
32469200	37215236	40803610	42864993	41326689	41186188	-1753153			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		41787315		
M6493840	M18607618	M40803610	M171459973	M330613515	M411861883				
124540(1)	124540(2)	124540(3)	124540(4)	124540(5)	124540(6)				
2 Chloride				Signal: 1					
16343527	17656926	18478080	19312060	19322788	19296788	-3421991			1.000
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		19331335		
16343527	44142315	92390398	1158723576	2318734502	3859357572				
124540(1)	124540(2)	124540(3)	124540(4)	124540(5)	124540(6)				
4 Bromide				Signal: 1					
11065780	8675128	7960626	8036663	8307849	8416941	361716			0.999
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		8232908		
2213156	4337564	7960626	32146652	66462794	84169414				
124540(1)	124540(2)	124540(3)	124540(4)	124540(5)	124540(6)				
7 Sulfate				Signal: 1					
16127136	13095082	12454383	14328878	14645101	14548658	-1219203			1.000
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		14531090		
M16127136	M32737705	M62271915	M859732703	1757412080	2909731694				
124540(1)	124540(2)	124540(3)	124540(4)	124540(5)	124540(6)				

Preliminary Report

Eurofins Denver
ICV, ICal Verification Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10
Lims ID: icv
Client ID:
Sample Type: ICV
Inject. Date: 16-Aug-2023 10:08:00 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0124540-008
Misc. Info.: 280-0124540-008
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist:

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 17-Aug-2023 11:15:05 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10(

Column 1 : Det: Info 2_091554_1
Process Host: CTX1649

First Level Reviewer: LVW8 Date: 17-Aug-2023 11:27:01

Start Cal Date: 16-Aug-2023 08:23:00
End Cal Date: 16-Aug-2023 09:39:00

Compound	Amount Added	Amount Detected	%Drift	Max. %Drift	%Rec	%Rec Limits
1 Fluoride	4.00	3.60	*-10.0	10.0	90.0	
2 Chloride	80.0	84.0	5.0	10.0	105.0	
4 Bromide	4.00	3.88	-3.1	10.0	96.9	
7 Sulfate	80.0	81.1	1.3	10.0	101.3	

Preliminary Report

Eurofins Denver
ICV, ICal Verification Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10
Lims ID: icv
Client ID:
Sample Type: ICV
Inject. Date: 16-Aug-2023 10:08:00 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0124540-008
Misc. Info.: 280-0124540-008
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist:

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 17-Aug-2023 11:27:17 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10(

Column 1 : Det: Info 2_091554_1
Process Host: CTX1649

First Level Reviewer: LVW8 Date: 17-Aug-2023 11:27:17

Start Cal Date: 16-Aug-2023 08:23:00
End Cal Date: 16-Aug-2023 09:39:00

Compound	Amount Added	Amount Detected	%Drift	Max. %Drift	%Rec	%Rec Limits
3 Nitrite as N	4.00	4.14	3.5	10.0	103.5	
5 Nitrate as N	4.00	3.95	-1.2	10.0	98.8	
6 Orthophosphate as	4.00	4.21	5.3	10.0	105.3	

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Soil / Hazardous Waste PT Concentration Ranges and PTRLs

PTRL TNI Proficiency Testing Reporting Limits (PTRLs) are provided as guidance to laboratories analyzing TNI PT samples. At a minimum, the laboratory should use a method that is sensitive enough to generate quantitative results at the PTRLs shown. (REF: TNI PT FOT Tables)

NA Not Applicable (NA) has been applied to analytes where a PTRL is not applicable and to state specific analytes that have not had a PTRL determined by the applicable accrediting agency.

Nitrite in Soil

NELAC Code	Analyte Name	Units	Concentration Range	PTRL
1840	Nitrite as N	mg/kg	10.0 - 500	NA

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Instructions for Soil (HW) - Nitrite as N

SAMPLE DESCRIPTION

- Provided in two different containers.
- Provided as a 20 g Ottawa sand matrix in a 40 mL VOA vial.
- Provided as a 5 mL spiking solution in water flame sealed in a 5 mL amber ampoule.
- The standard should be stored at 4±2°C.

GENERAL INFORMATION

- This standard is pre-dried so percent moisture is 0%.
- After spiking, the diluted standard will contain the analyte in the concentration range.
- Store any remaining standard at 4±2°C.
- It is recommended to save any remaining standard until final reports have been sent.

ADDITIONAL INFORMATION

- Use a sample weight of 10 grams when reporting.
- Due to the nature of this standard, the standard should be analyzed immediately after dilution.

INSTRUCTIONS

- The standard should be brought to room temperature when used.
- Open the blank soil matrix vial and transfer the 10.0 g of the matrix into your extraction vessel.
- Carefully open the ampule by snapping off the top at the narrow part of the neck.
- Using a gas tight syringe, transfer exactly 1.0 mL of the spiking solution onto the blank soil matrix in the extraction vessel.
- The standard is now ready for preparation and analysis per your normal procedure.
- Due to the nature of this standard, the standard should be analyzed **immediately** after dilution.
- Report result in mg/kg.

Please take all necessary safety precautions when handling this product. Phenova products are intended for use by laboratory professionals only and may be hazardous. Buyer/user shall ensure sufficient knowledge, training, facilities and skills necessary to safely handle and store products provided. Material Safety Data Sheets (MSDS) for all Phenova products are available upon request.

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Performance Test (PT) Preparation Form

Preparation

Job #: 280-179722 Sample # 11

Method: 9056 48Hr

Sample Name (*from vial or PT instructions*): Soil(HW) Nitrite as N

Standard Lot #(s) or Vial #(s) (If Applicable): 7093-71

Analyst Review of PT Instructions by (Initials): MEC (Date): 8/16/23

PT Sample Type: X Ampoule ____ Whole volume

Volume or Weight of PT Sample Used : 1 (Units): mL

Prepared Volume of diluted PT Sample (If reagent blank spiked from ampoule):

10 (Units): G or 100 mL

2nd Analyst Witness/Review of PT Instructions by (Initials): mp (Date): 8-16-23
(This 2nd level review is to be done at the time of PT preparation)

Include a copy of the PT instructions with this form, and include both in the batch folder.

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Soil / Hazardous Waste PT Concentration Ranges and PTRLs

PTRL TNI Proficiency Testing Reporting Limits (PTRLs) are provided as guidance to laboratories analyzing TNI PT samples. At a minimum, the laboratory should use a method that is sensitive enough to generate quantitative results at the PTRLs shown. (REF: TNI PT FOT Tables)

NA Not Applicable (NA) has been applied to analytes where a PTRL is not applicable and to state specific analytes that have not had a PTRL determined by the applicable accrediting agency.

Anions

NELAC Code	Analyte Name	Units	Concentration Range	PTRL
1540	Bromide	mg/kg	10.0 - 100	1.00
1575	Chloride	mg/kg	200 - 1000	20.0
1730	Fluoride	mg/kg	25.0 - 500	2.50
1810	Nitrate as N	mg/kg	25.0 - 500	2.50
2000	Sulfate	mg/kg	25.0 - 2000	2.50
1870	Orthophosphate as P	mg/kg	25.0 - 500	NA

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Instructions for Soil (HW) - Anions

SAMPLE DESCRIPTION

- Provided as a 40 g pre-spiked soil matrix in a 2 oz glass jar.
- This standard can be stored at room temperature (20 - 25° C).

GENERAL INFORMATION

- This standard is pre-spiked and ready to use,
- This standard is pre-dried so percent moisture is 0%.
- The standard will contain the analytes within the required concentration range.
- Store any remaining standard at room temperature (20 - 25° C).
- It is recommended to save any remaining standard until final reports have been sent.

ADDITIONAL INFORMATION

- This standard was designed for use with deionized water extraction technique.
- Due to potential settling during shipping, homogenize this standard before taking an aliquot.

INSTRUCTIONS

- This standard is pre-spiked and ready to use.
- Thoroughly mix the standard prior to removing an aliquot.
- Extract an aliquot of the sample and analyze by your normal procedure.
- Report result in mg/kg.

Please take all necessary safety precautions when handling this product. Phenova products are intended for use by laboratory professionals only and may be hazardous. Buyer/user shall ensure sufficient knowledge, training, facilities and skills necessary to safely handle and store products provided. Material Safety Data Sheets (MSDS) for all Phenova products are available upon request.

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Performance Test (PT) Preparation Form

Preparation

Job #: 280-179722 Sample # 6

Method: ~~300~~ MEC 9056 48Hr/28D

Sample Name (*from vial or PT instructions*): Soil (HW) - Anions

Standard Lot #(s) or Vial #(s) (If Applicable): 7093-08

Analyst Review of PT Instructions by (Initials): MEC (Date): 8/16/23

PT Sample Type: _____ Ampoule ____ Whole volume

Volume or Weight of PT Sample Used : 10 (Units): G

Prepared Volume of diluted PT Sample (If reagent blank spiked from ampoule):

_____(Units):_____

2nd Analyst Witness/Review of PT Instructions by (Initials): mp (Date): 8-16-23
(This 2nd level review is to be done at the time of PT preparation)

Include a copy of the PT instructions with this form, and include both in the batch folder.

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-104
Lims ID: icv
Client ID:
Sample Type: ICV
Inject. Date: 16-Aug-2023 10:08:00 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0124540-008
Misc. Info.: 280-0124540-008
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist:

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 17-Aug-2023 11:45:40 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1649

First Level Reviewer: LVW8 Date: 17-Aug-2023 11:27:17

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.078	3.078	0.000	148600573	NC	NC	Ma
2 Chloride	4.238	4.238	0.000	1620371327	NC	NC	
3 Nitrite as N	4.873	4.873	0.000	218249168	4.00	4.14	
4 Bromide	6.012	6.012	0.000	32280328	NC	NC	
5 Nitrate as N	6.723	6.723	0.000	192424246	4.00	3.95	
6 Orthophosphate as P	8.545	8.545	0.000	121270311	4.00	4.21	
7 Sulfate	9.628	9.628	0.000	1176664399	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

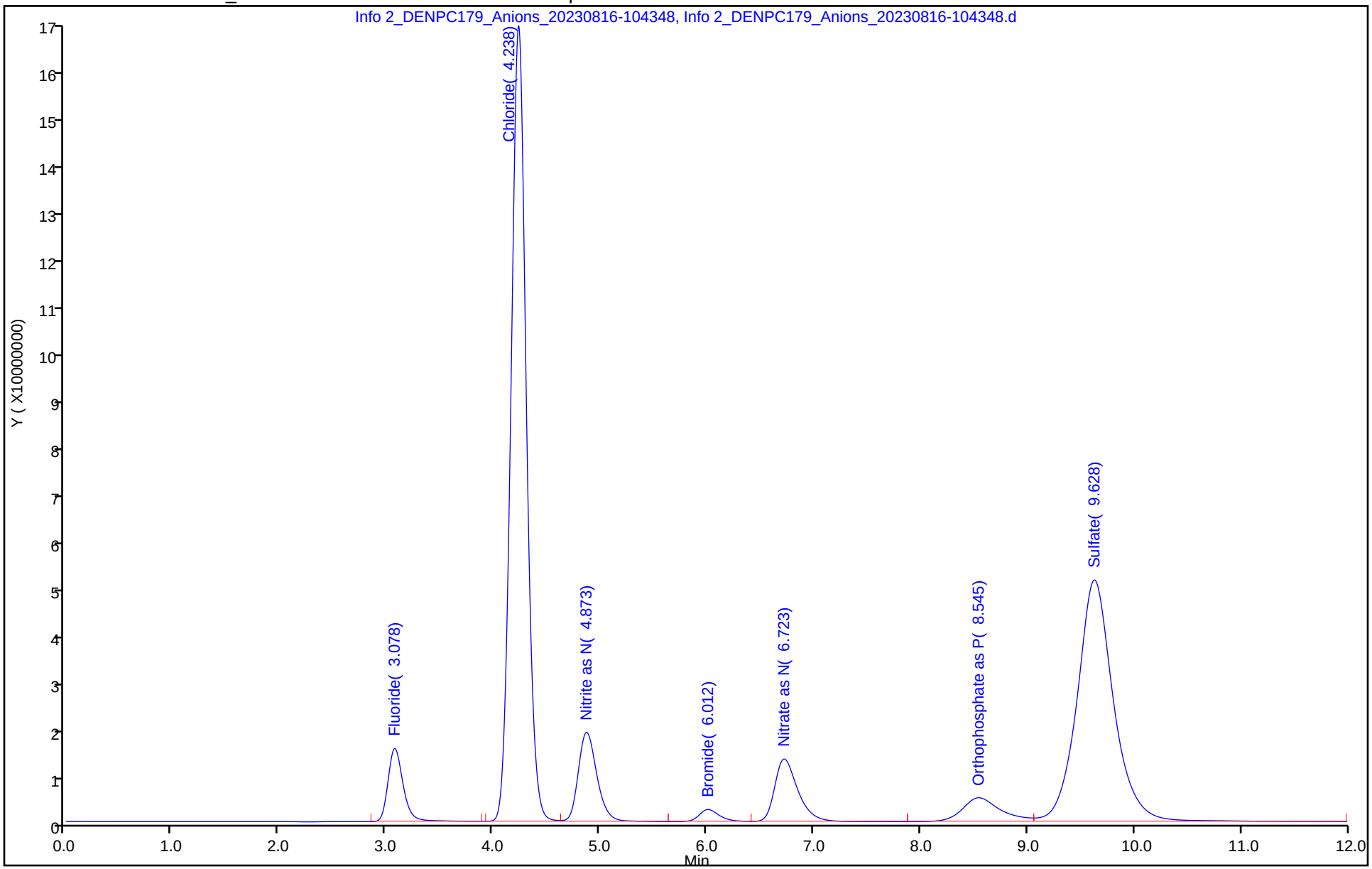
Reagents:

IC ICV 5_00413	Amount Added:	0.80	Units: mL
IC SO4 ICV_00024	Amount Added:	0.80	Units: mL
Cl ICV Std_00006	Amount Added:	0.80	Units: mL

Report Date: 17-Aug-2023 11:45:40 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-104348.d				
Injection Date:	16-Aug-2023 10:08:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	icv			Worklist Smp#:	8
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



10/20/2023
4:00 PM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-104
Lims ID: icb
Client ID:
Sample Type: ICB
Inject. Date: 16-Aug-2023 10:23:00 ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0124540-009
Misc. Info.: 280-0124540-009
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 17-Aug-2023 11:45:40 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1649

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.078				ND	
2 Chloride	4.200	4.238	-0.038	264090		NC	
3 Nitrite as N	4.857	4.873	-0.016	208499		0.0164	
4 Bromide	6.118	6.012	0.106	349466		NC	
5 Nitrate as N		6.723				ND	
6 Orthophosphate as P	8.595	8.545	0.050	6392990		-0.4008	
7 Sulfate	9.723	9.628	0.095	5568928		NC	

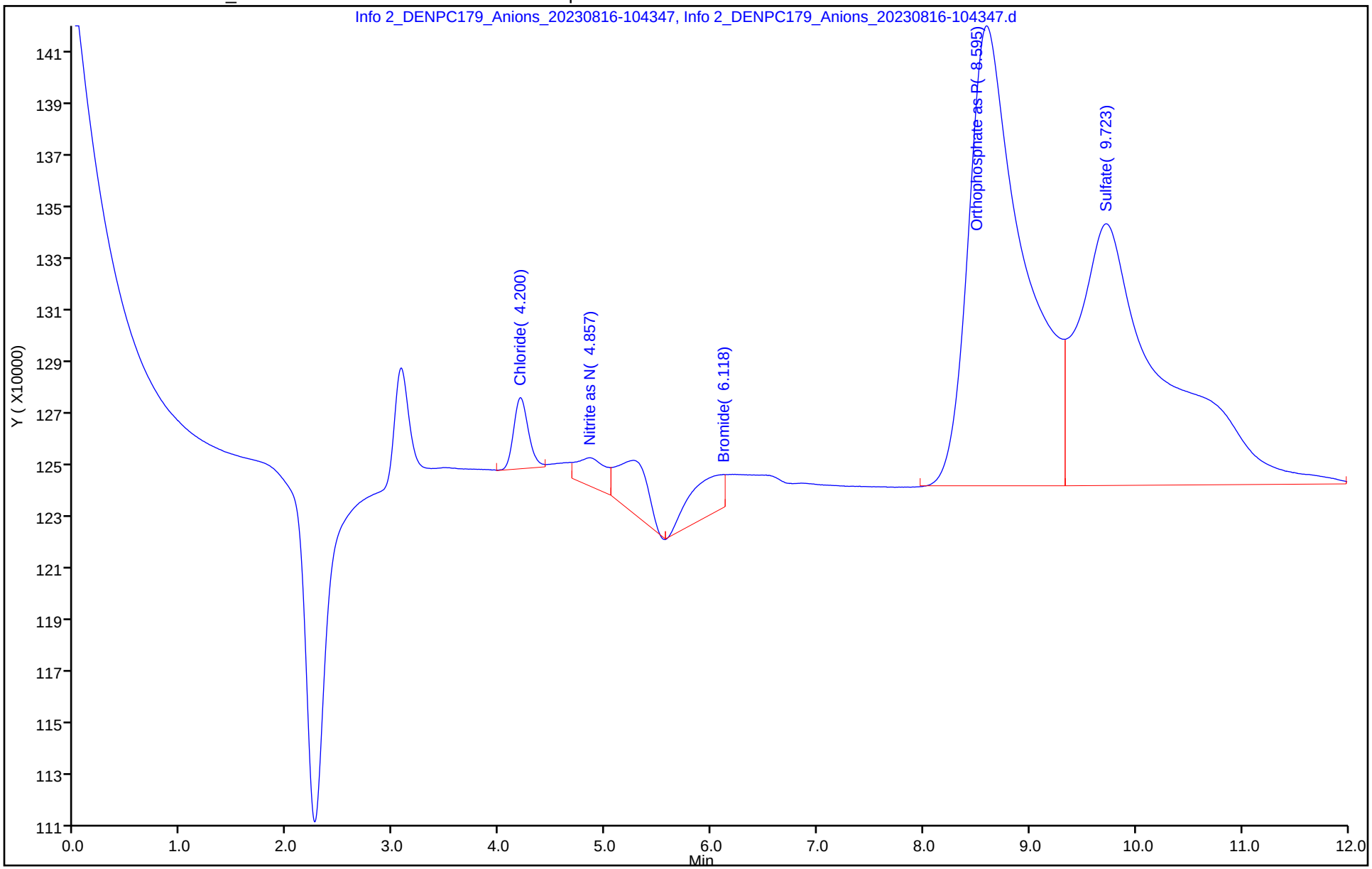
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 17-Aug-2023 11:45:41 Chrom Revision: 2.3 01-Aug-2023 10:44:40

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-104347.d				
Injection Date:	16-Aug-2023 10:23:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	icb			Worklist Smp#:	9
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



10/20/2023
4:00 PM

Eurofins Environment Testing
Worklist Report

Worklist Name: 10 03 23 Worklist Number: 126096
Instrument Name: WC_IonChrom10 Chrom Method: Anions_IC10
Injection Volume: 5.000 Units: ul
Analysis Type: Semi VOA
Batch Directory: \\chromfs\Denver\ChromData\WC_IonChrom10\20231003-126096.b
Upload Directory: \\CORPTALSAPP16\280-DN-RawData\WetChem\IonChrom10

Smp #	Lims ID	Smp Type	Dil Fact	Fract	Initial Vol/Wt	Vol/Wt Units	Sample Reagents	pH	Comment
1	# 1 ccv	CCV	1.000	irectInjection	10.00	mL	IC LCS_01980		
2	# 2 ccb	CCB	1.000	irectInjection	10.00	mL			
3	# 3 mrl	MRL	1.000	irectInjection	10.00	mL	IC Cal low_00731 IC CAL cl/so4_00501		
4	# 4 lcs	LCS	1.000	irectInjection	10.00	mL	IC LCS_01980		
5	# 5 lcsd	LCSD	1.000	irectInjection	10.00	mL	IC LCS_01980		
6	# 6 mb	MB	1.000	irectInjection	10.00	mL			
7	# 7 mdlv	MDLV	1.000	irectInjection	10.00	mL	IC MDLV_00042		
8	# 8 mdlv	MDLV	1.000	irectInjection	10.00	mL	IC MDLV_00042		
9	# 9 mdlv	MDLV	1.000	irectInjection	10.00	mL	IC MDLV_00042		
10	#10 loqv	LOQV	1.000	irectInjection	10.00	mL	IC LOQV_00029		
11	#11 soil mdlv	Client	1.000	irectInjection	10.00	mL			
12	#12 soil mdlv	Client	1.000	irectInjection	10.00	mL			
13	#13 soil mdlv	Client	1.000	irectInjection	10.00	mL			
14	#14 soil loqv	Client	1.000	irectInjection	10.00	mL			
15	#15 280-182239-B-10	Client	10.00	irectInjection	10.00	mL			
16	#16 280-182239-B-11	Client	10.00	irectInjection	10.00	mL			
17	#17 ccv	CCV	1.000	irectInjection	10.00	mL	IC LCS_01980		
18	#18 ccb	CCB	1.000	irectInjection	10.00	mL			
19	#19 280-182241-C-1	Client	1.000	irectInjection	10.00	mL			
20	#20 280-182241-C-1 DU	DU	1.000	irectInjection	10.00	mL			
21	#21 280-182241-C-1 MS	MS	1.000	irectInjection	10.00	mL	ICMS/MSD WEEK_00838		
22	#22 280-182241-C-1 MSD	MSD	1.000	irectInjection	10.00	mL	ICMS/MSD WEEK_00838		
23	#23 ccv	CCV	1.000	irectInjection	10.00	mL	IC LCS_01980		
24	#24 ccb	CCB	1.000	irectInjection	10.00	mL			
25	#25 280-182292-A-2	Client	1.000	irectInjection	10.00	mL			
26	#26 280-182292-A-1	Client	1.000	irectInjection	10.00	mL			
27	#27 CCV	CCV	1.000	irectInjection	10.00	mL	IC LCS_01980		
28	#28 CCB	CCB	1.000	irectInjection	10.00	mL			

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Anions_IC10.m
Instrument: WC_IonChrom10 Lims Location: 280
Lock State: Initial Calib Locked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 17-Aug-2023 11:15:05
No.Compounds:7
Sublist: chrom-Anions_IC10*sub9
Limit Group: Wet - Anions

Detectors

Detector: 1, Info 2_091554_1
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-14.933 No. Points: 7196

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 08:23:00 Worklist: 124540 Sample#: 1
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 08:38:00 Worklist: 124540 Sample#: 2
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 08:54:00 Worklist: 124540 Sample#: 3
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 09:09:00 Worklist: 124540 Sample#: 4
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 09:24:00 Worklist: 124540 Sample#: 5
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 09:39:00 Worklist: 124540 Sample#: 6

Start Cal Date: 16-Aug-2023 08:23:00 End Cal Date: 16-Aug-2023 09:39:00

Individual Compound Calibration Parameters

Quant Method: ESTD RF Calibration: Replace
Rule Name: Linear1 Curve: Linear Weighting: Conc
Origin: None Error: raw_COD Error Limit: 1.00
RF %Dif: 0.0 SPCC Limit: 0.0 CCC Limit: 0.0
Dependent Variable: Resp

Number of Compounds: 3

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error
3 Nitrite as N				Signal: 1					
47471195	51179524	53593060	54652809	52854220	51903959	-659672			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		52874248		
9494239	25589762	53593060	218611235	422833757	519039593				
124540(1)	124540(2)	124540(3)	124540(4)	124540(5)	124540(6)				
5 Nitrate as N				Signal: 1					
44046915	44259096	44959242	48028628	49046239	49379609	-1793758			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		49153639		
8809383	22129548	44959242	192114513	392369909	493796088				
124540(1)	124540(2)	124540(3)	124540(4)	124540(5)	124540(6)				
6 Orthophosphate as P				Signal: 1					
101865985	61427992	42106377	29713426	27079645	25967913	16373185			0.999
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		24899766		
M20373197	M30713996	M42106377	M118853705	216637163	259679126				
124540(1)	124540(2)	124540(3)	124540(4)	124540(5)	124540(6)				

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Anions_IC10.m
Instrument: WC_IonChrom10 Lims Location: 280
Lock State: Initial Calib Locked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 17-Aug-2023 11:15:05
No.Compounds:7
Sublist: chrom-Anions_IC10*sub9
Limit Group: Wet - Anions 28D

Detectors

Detector: 1, Info 2_091554_1
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-14.933 No. Points: 7196

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 08:23:00 Worklist: 124540 Sample#: 1
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 08:38:00 Worklist: 124540 Sample#: 2
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 08:54:00 Worklist: 124540 Sample#: 3
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 09:09:00 Worklist: 124540 Sample#: 4
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 09:24:00 Worklist: 124540 Sample#: 5
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10063
Inj Date: 16-Aug-2023 09:39:00 Worklist: 124540 Sample#: 6

Start Cal Date: 16-Aug-2023 08:23:00 End Cal Date: 16-Aug-2023 09:39:00

Individual Compound Calibration Parameters

Quant Method: ESTD RF Calibration: Replace
Rule Name: Linear1 Curve: Linear Weighting: Conc
Origin: None Error: raw_COD Error Limit: 1.00
RF %Dif: 0.0 SPCC Limit: 0.0 CCC Limit: 0.0
Dependent Variable: Resp

Number of Compounds: 4

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error
1 Fluoride				Signal: 1					
32469200	37215236	40803610	42864993	41326689	41186188	-1753153			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		41787315		
M6493840	M18607618	M40803610	M171459973	M330613515	M411861883				
124540(1)	124540(2)	124540(3)	124540(4)	124540(5)	124540(6)				
2 Chloride				Signal: 1					
16343527	17656926	18478080	19312060	19322788	19296788	-3421991			1.000
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		19331335		
16343527	44142315	92390398	1158723576	2318734502	3859357572				
124540(1)	124540(2)	124540(3)	124540(4)	124540(5)	124540(6)				
4 Bromide				Signal: 1					
11065780	8675128	7960626	8036663	8307849	8416941	361716			0.999
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		8232908		
2213156	4337564	7960626	32146652	66462794	84169414				
124540(1)	124540(2)	124540(3)	124540(4)	124540(5)	124540(6)				
7 Sulfate				Signal: 1					
16127136	13095082	12454383	14328878	14645101	14548658	-1219203			1.000
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		14531090		
M16127136	M32737705	M62271915	M859732703	1757412080	2909731694				
124540(1)	124540(2)	124540(3)	124540(4)	124540(5)	124540(6)				

Preliminary Report

Eurofins Denver
ICV, ICal Verification Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10
Lims ID: icv
Client ID:
Sample Type: ICV
Inject. Date: 16-Aug-2023 10:08:00 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0124540-008
Misc. Info.: 280-0124540-008
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist:

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 17-Aug-2023 11:15:05 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10(

Column 1 : Det: Info 2_091554_1
Process Host: CTX1649

First Level Reviewer: LVW8 Date: 17-Aug-2023 11:27:01

Start Cal Date: 16-Aug-2023 08:23:00
End Cal Date: 16-Aug-2023 09:39:00

Compound	Amount Added	Amount Detected	%Drift	Max. %Drift	%Rec	%Rec Limits
1 Fluoride	4.00	3.60	*-10.0	10.0	90.0	
2 Chloride	80.0	84.0	5.0	10.0	105.0	
4 Bromide	4.00	3.88	-3.1	10.0	96.9	
7 Sulfate	80.0	81.1	1.3	10.0	101.3	

Preliminary Report

Eurofins Denver
ICV, ICal Verification Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10
Lims ID: icv
Client ID:
Sample Type: ICV
Inject. Date: 16-Aug-2023 10:08:00 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0124540-008
Misc. Info.: 280-0124540-008
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist:

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 17-Aug-2023 11:27:17 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-10(

Column 1 : Det: Info 2_091554_1
Process Host: CTX1649

First Level Reviewer: LVW8 Date: 17-Aug-2023 11:27:17

Start Cal Date: 16-Aug-2023 08:23:00
End Cal Date: 16-Aug-2023 09:39:00

Compound	Amount Added	Amount Detected	%Drift	Max. %Drift	%Rec	%Rec Limits
3 Nitrite as N	4.00	4.14	3.5	10.0	103.5	
5 Nitrate as N	4.00	3.95	-1.2	10.0	98.8	
6 Orthophosphate as	4.00	4.21	5.3	10.0	105.3	

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20231003-126096.b\Info 2_DENPC179_Anions_20231003-144
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 03-Oct-2023 12:29:00 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0126096-001
Misc. Info.: 280-0126096-001
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub9

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20231003-126096.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 04-Oct-2023 11:41:17 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1625

First Level Reviewer: LVW8 Date: 03-Oct-2023 14:55:46

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.078			ND	ND	
2 Chloride	4.233	4.232	0.001	1919735472	NC	NC	
3 Nitrite as N	4.868	4.865	0.003	258942061	5.00	4.91	
4 Bromide	6.015	6.013	0.002	35753746	NC	NC	
5 Nitrate as N	6.747	6.740	0.007	226588274	5.00	4.65	
6 Orthophosphate as P	8.487	8.497	-0.010	166326157	5.00	6.02	
7 Sulfate	9.528	9.543	-0.015	1457903252	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

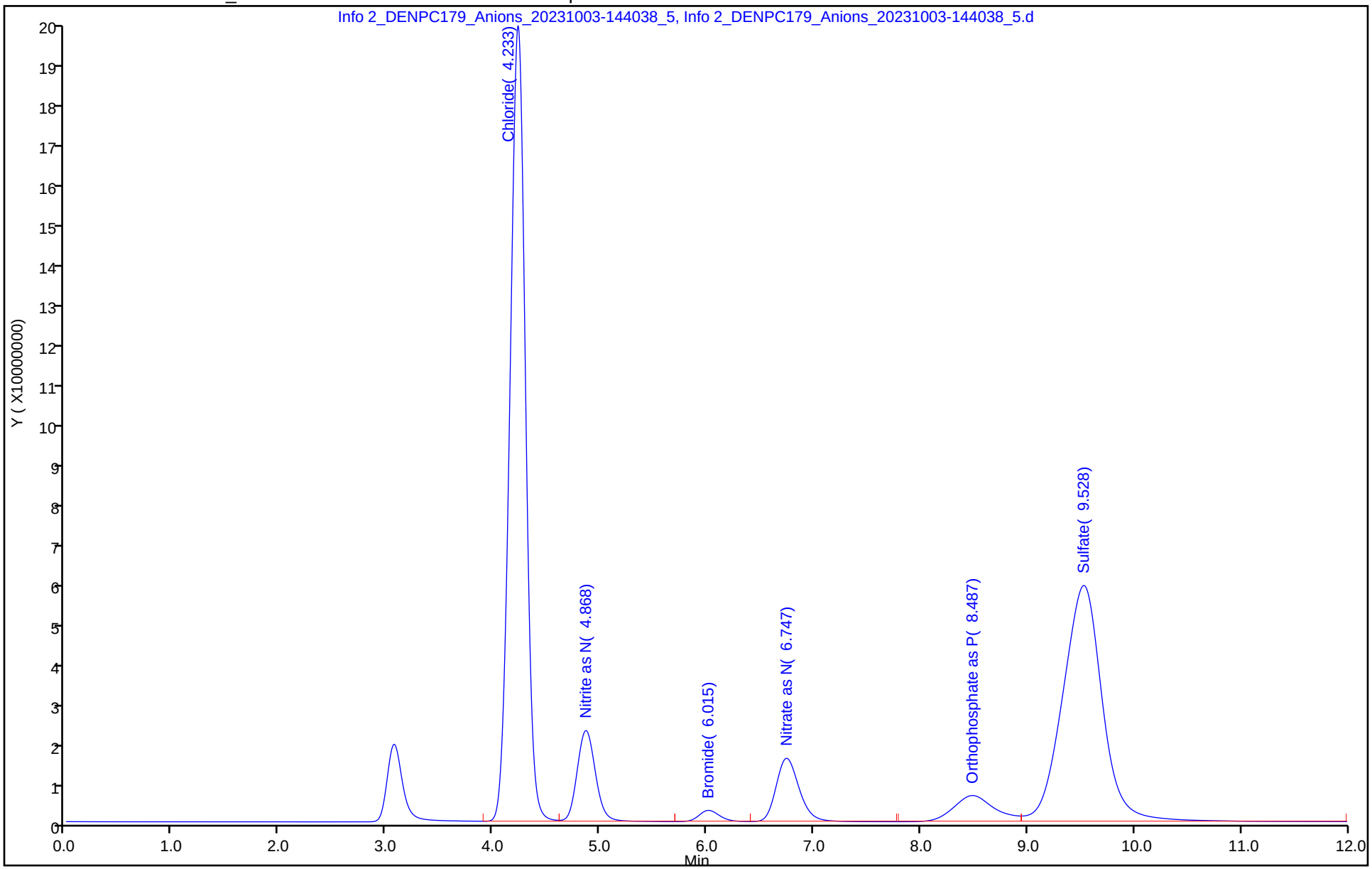
Reagents:

IC LCS_01980 Amount Added: 10.00 Units: mL

Report Date: 04-Oct-2023 11:41:17 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20231003-126096.b\Info 2_DENPC179_Anions_20231003-144038_5.d				
Injection Date:	03-Oct-2023 12:29:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



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4:00 PM

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20231003-126096.b\Info 2_DENPC179_Anions_20231003-144				
Lims ID:	ccb				
Client ID:					
Sample Type:	CCB				
Inject. Date:	03-Oct-2023 12:44:00	ALS Bottle#:	0	Worklist Smp#:	2
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0126096-002				
Misc. Info.:	280-0126096-002				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Method:	\\chromfs\Denver\ChromData\WC_IonChrom10\20231003-126096.b\Anions_IC10.m				
Limit Group:	Wet - Anions				
Last Update:	04-Oct-2023 11:41:14	Calib Date:	16-Aug-2023 09:39:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100				
Column 1 :			Det: Info 2_091554_1		
Process Host:	CTX1625				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.078				ND	
2 Chloride		4.232				ND	
3 Nitrite as N		4.865				ND	
4 Bromide	6.073	6.013	0.060	48292		NC	
5 Nitrate as N		6.740				ND	
6 Orthophosphate as P	8.577	8.497	0.080	29600538		0.5312	
7 Sulfate		9.543				ND	

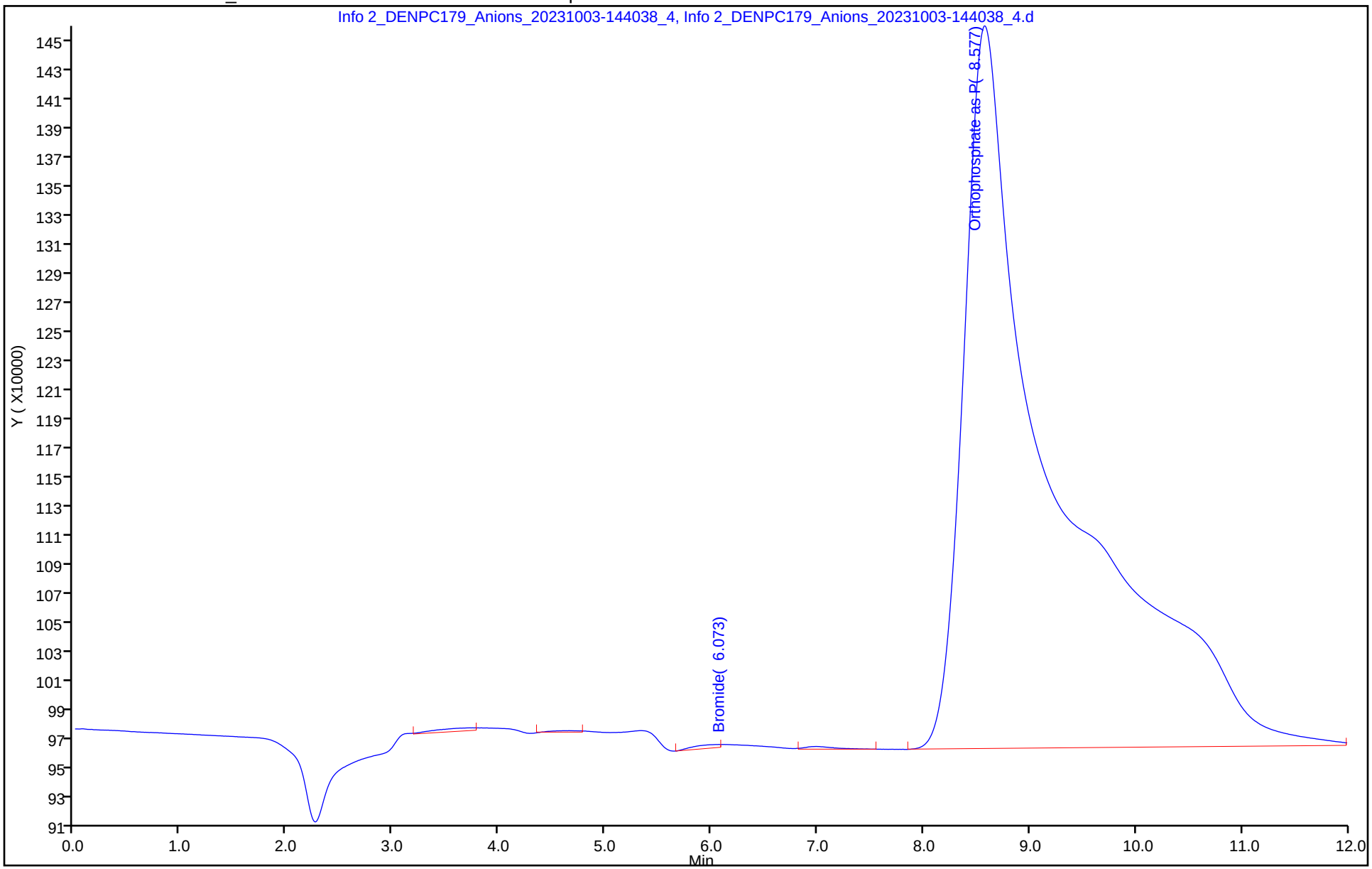
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 04-Oct-2023 11:41:16 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20231003-126096.b\Info 2_DENPC179_Anions_20231003-144038_4.d				
Injection Date:	03-Oct-2023 12:44:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	2
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



10/20/2023
4:00 PM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20231003-126096.b\Info 2_DENPC179_Anions_20231003-144
Lims ID: mrl
Client ID:
Sample Type: MRL
Inject. Date: 03-Oct-2023 12:59:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0126096-003
Misc. Info.: 280-0126096-003
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20231003-126096.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 04-Oct-2023 11:41:14 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1625

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.078			ND	ND	
2 Chloride	4.190	4.232	-0.042	89366566	NC	NC	
3 Nitrite as N	4.873	4.865	0.008	23054097	0.5000	0.4485	
4 Bromide	6.047	6.013	0.034	3061296	NC	NC	
5 Nitrate as N	6.798	6.740	0.058	18067766	0.5000	0.4041	
6 Orthophosphate as P	8.538	8.497	0.041	44409322	0.5000	1.13	
7 Sulfate	9.558	9.543	0.015	83489316	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

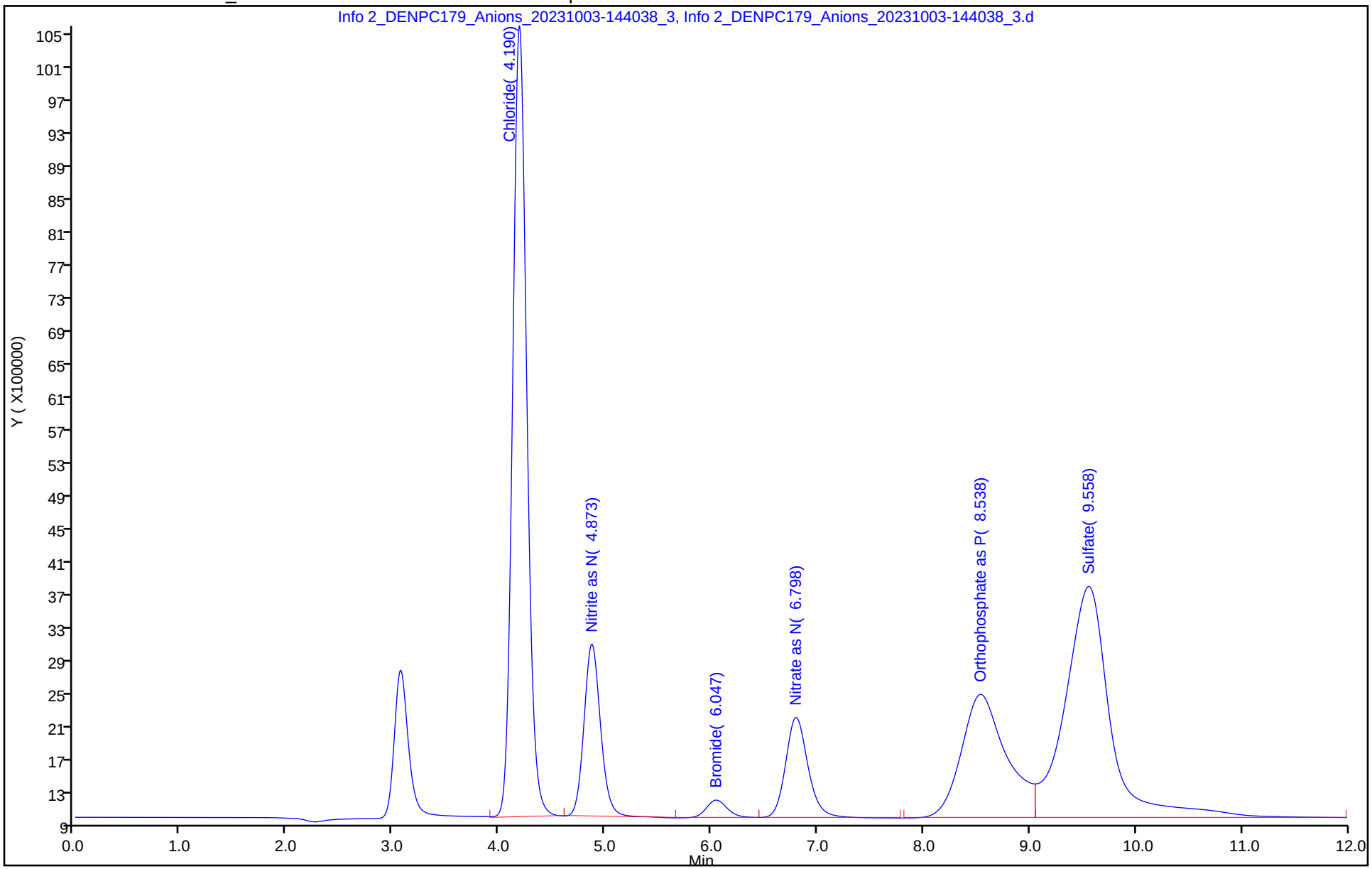
Reagents:

IC Cal low_00731 Amount Added: 0.10 Units: mL
IC CAL cl/so4_00501 Amount Added: 0.20 Units: mL

Report Date: 04-Oct-2023 11:41:16 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20231003-126096.b\Info 2_DENPC179_Anions_20231003-144038_3.d				
Injection Date:	03-Oct-2023 12:59:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	mrl			Worklist Smp#:	3
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



10/20/2023
4:00 PM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20231003-126096.b\Info 2_DENPC179_Anions_20231003-144
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 03-Oct-2023 13:14:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0126096-004
Misc. Info.: 280-0126096-004
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20231003-126096.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 04-Oct-2023 11:41:14 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1625

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.078			ND	ND	
2 Chloride	4.233	4.232	0.001	1912254081	NC	NC	
3 Nitrite as N	4.865	4.865	0.000	254813256	5.00	4.83	
4 Bromide	6.013	6.013	0.000	35535931	NC	NC	
5 Nitrate as N	6.740	6.740	0.000	225793567	5.00	4.63	
6 Orthophosphate as P	8.497	8.497	0.000	167770244	5.00	6.08	
7 Sulfate	9.542	9.543	-0.001	1452944447	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

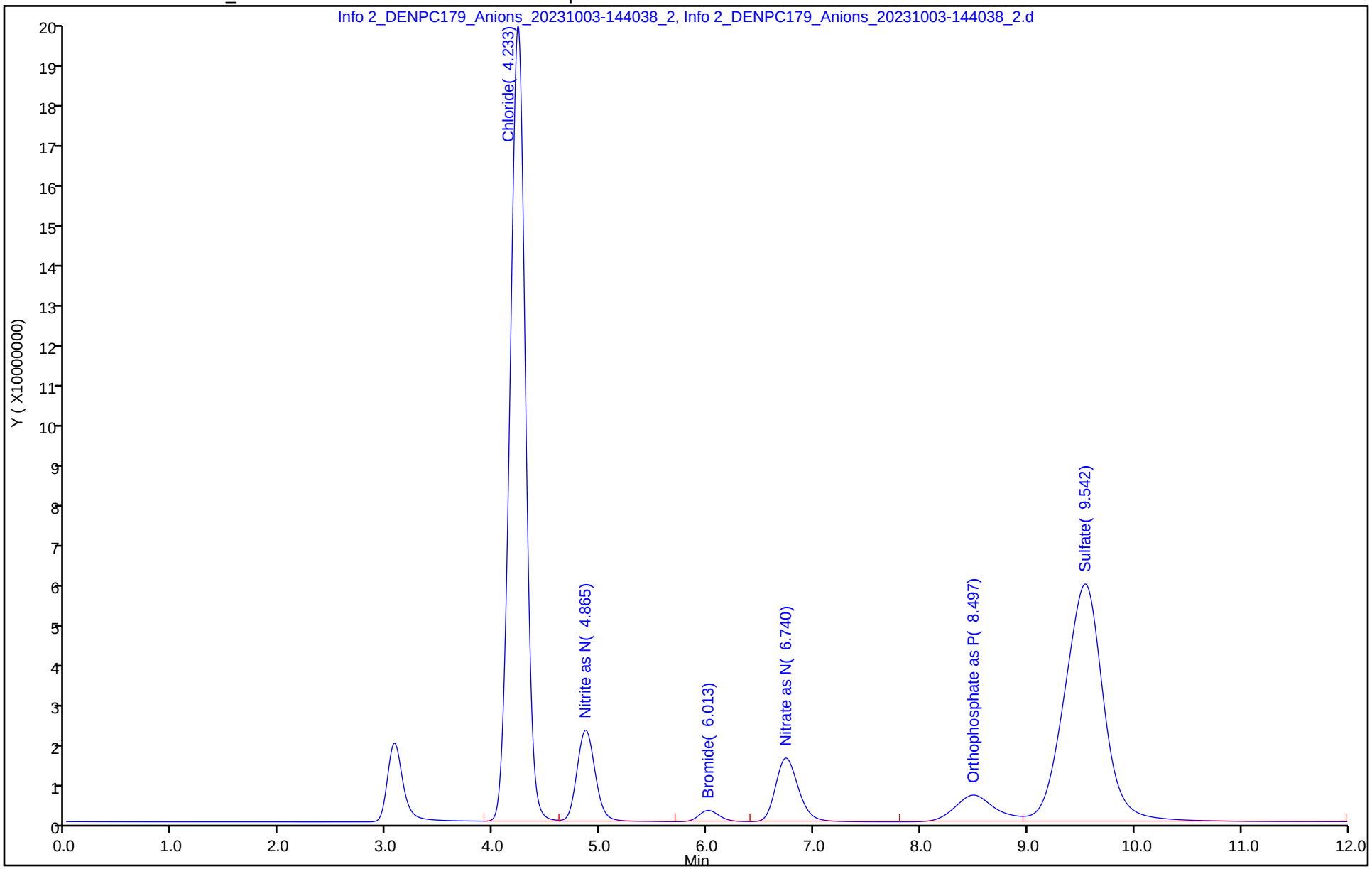
Reagents:

IC LCS_01980 Amount Added: 10.00 Units: mL

Report Date: 04-Oct-2023 11:41:15 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20231003-126096.b\Info 2_DENPC179_Anions_20231003-144038_2.d				
Injection Date:	03-Oct-2023 13:14:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	lcs			Worklist Smp#:	4
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



10/20/2023
4:00 PM

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20231003-126096.b\Info 2_DENPC179_Anions_20231003-144
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 03-Oct-2023 13:29:00 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0126096-005
Misc. Info.: 280-0126096-005
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20231003-126096.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 04-Oct-2023 11:41:14 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1625

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.078			ND	ND	
2 Chloride	4.232	4.232	0.000	1911008287	NC	NC	
3 Nitrite as N	4.865	4.865	0.000	254353292	5.00	4.82	
4 Bromide	6.013	6.013	0.000	35376296	NC	NC	
5 Nitrate as N	6.740	6.740	0.000	225320241	5.00	4.62	
6 Orthophosphate as P	8.497	8.497	0.000	166596612	5.00	6.03	
7 Sulfate	9.543	9.543	0.000	1452180717	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

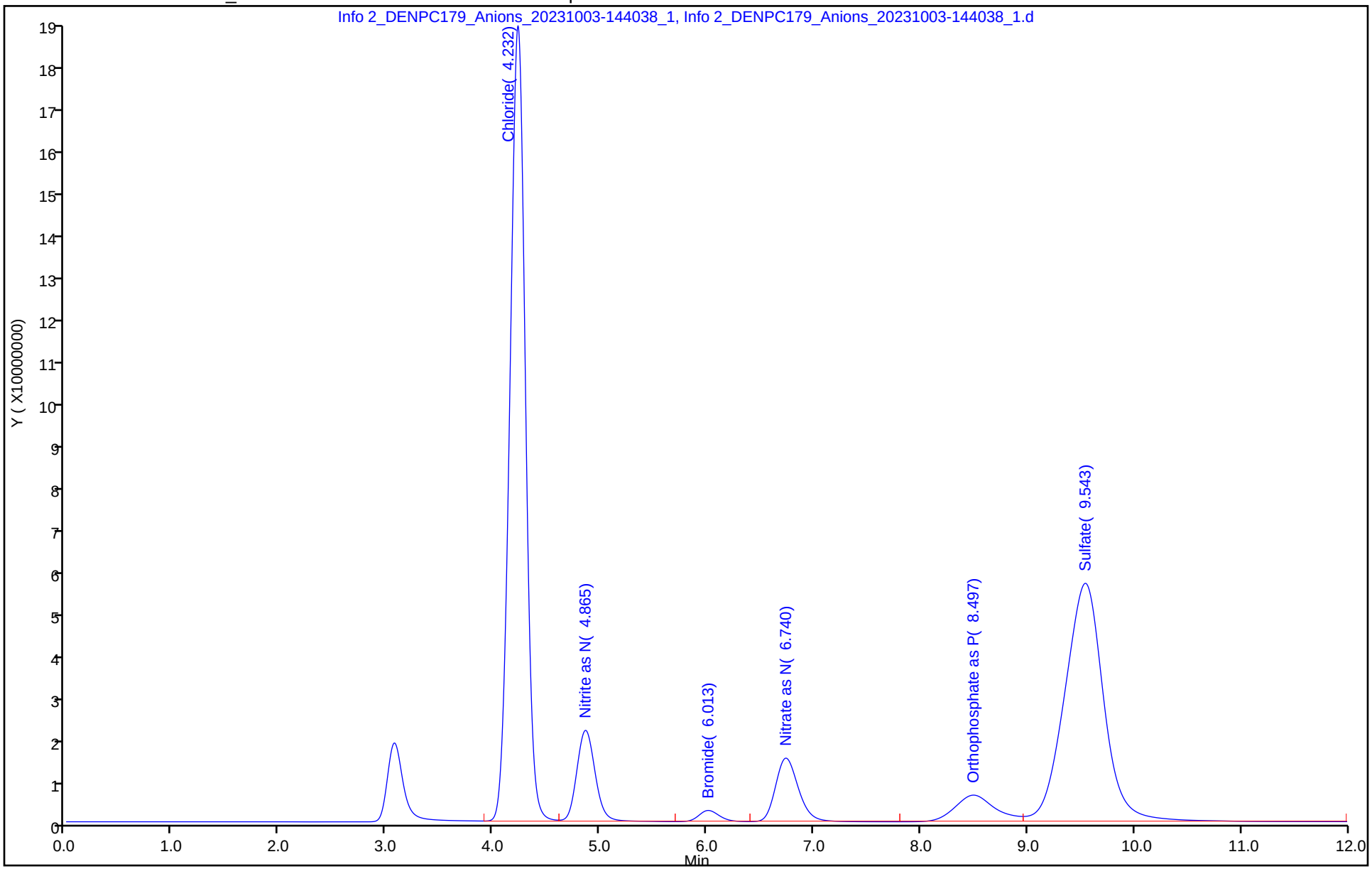
Reagents:

IC LCS_01980 Amount Added: 10.00 Units: mL

Report Date: 04-Oct-2023 11:41:14 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20231003-126096.b\Info 2_DENPC179_Anions_20231003-144038_1.d				
Injection Date:	03-Oct-2023 13:29:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	lcsd			Worklist Smp#:	5
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



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Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20231003-126096.b\Info 2_DENPC179_Anions_20231003-144				
Lims ID:	mb				
Client ID:					
Sample Type:	MB				
Inject. Date:	03-Oct-2023 13:44:00	ALS Bottle#:	0	Worklist Smp#:	6
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0126096-006				
Misc. Info.:	280-0126096-006				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Method:	\\chromfs\Denver\ChromData\WC_IonChrom10\20231003-126096.b\Anions_IC10.m				
Limit Group:	Wet - Anions				
Last Update:	04-Oct-2023 11:38:33	Calib Date:	16-Aug-2023 09:39:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100				
Column 1 :			Det: Info 2_091554_1		
Process Host:	CTX1625				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.078				ND	
2 Chloride		4.232				ND	
3 Nitrite as N		4.865				ND	
4 Bromide	5.987	6.013	-0.026	22119		NC	
5 Nitrate as N		6.740				ND	
6 Orthophosphate as P	8.583	8.497	0.086	32226588		0.6367	
7 Sulfate		9.543				ND	

QC Flag Legend

Processing Flags

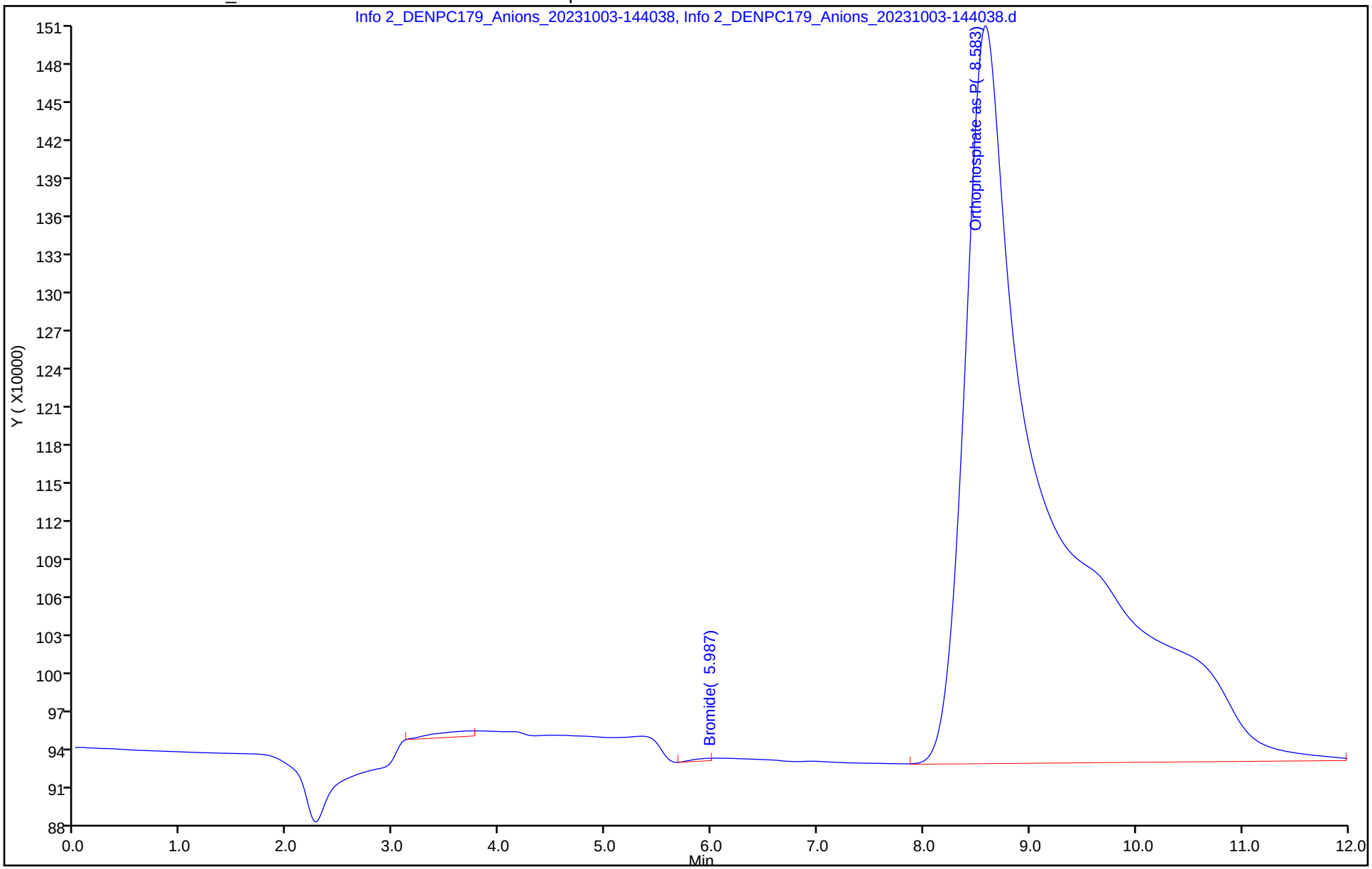
NC - Not Calibrated

Report Date: 04-Oct-2023 11:38:34 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20231003-126096.b\Info 2_DENPC179_Anions_20231003-144038.d

Injection Date:	03-Oct-2023 13:44:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	mb			Worklist Smp#:	6
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



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Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20231003-126096.b\Info 2_DENPC179_Anions_20231004-111				
Lims ID:	280-182239-B-10				
Client ID:	LL12mw-185-230901-GW				
Sample Type:	Client				
Inject. Date:	03-Oct-2023 16:13:00	ALS Bottle#:	0	Worklist Smp#:	15
Injection Vol:	5.0 ul	Dil. Factor:	10.0000		
Sample Info:	280-0126096-015				
Misc. Info.:	280-0126096-015				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Method:	\\chromfs\Denver\ChromData\WC_IonChrom10\20231003-126096.b\Anions_IC10.m				
Limit Group:	Wet - Anions				
Last Update:	04-Oct-2023 11:41:17	Calib Date:	16-Aug-2023 09:39:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100				
Column 1 :			Det: Info 2_091554_1		
Process Host:	CTX1625				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride		3.078			ND	
2 Chloride	4.228	4.232	-0.004	1607481260	NC	
3 Nitrite as N		4.865			ND	
4 Bromide	6.097	6.013	0.084	608302	NC	
5 Nitrate as N	6.767	6.740	0.027	272630228	5.58	
6 Orthophosphate as P	8.697	8.497	0.200	6559167	-0.3941	
7 Sulfate	9.600	9.543	0.057	623715421	NC	

QC Flag Legend

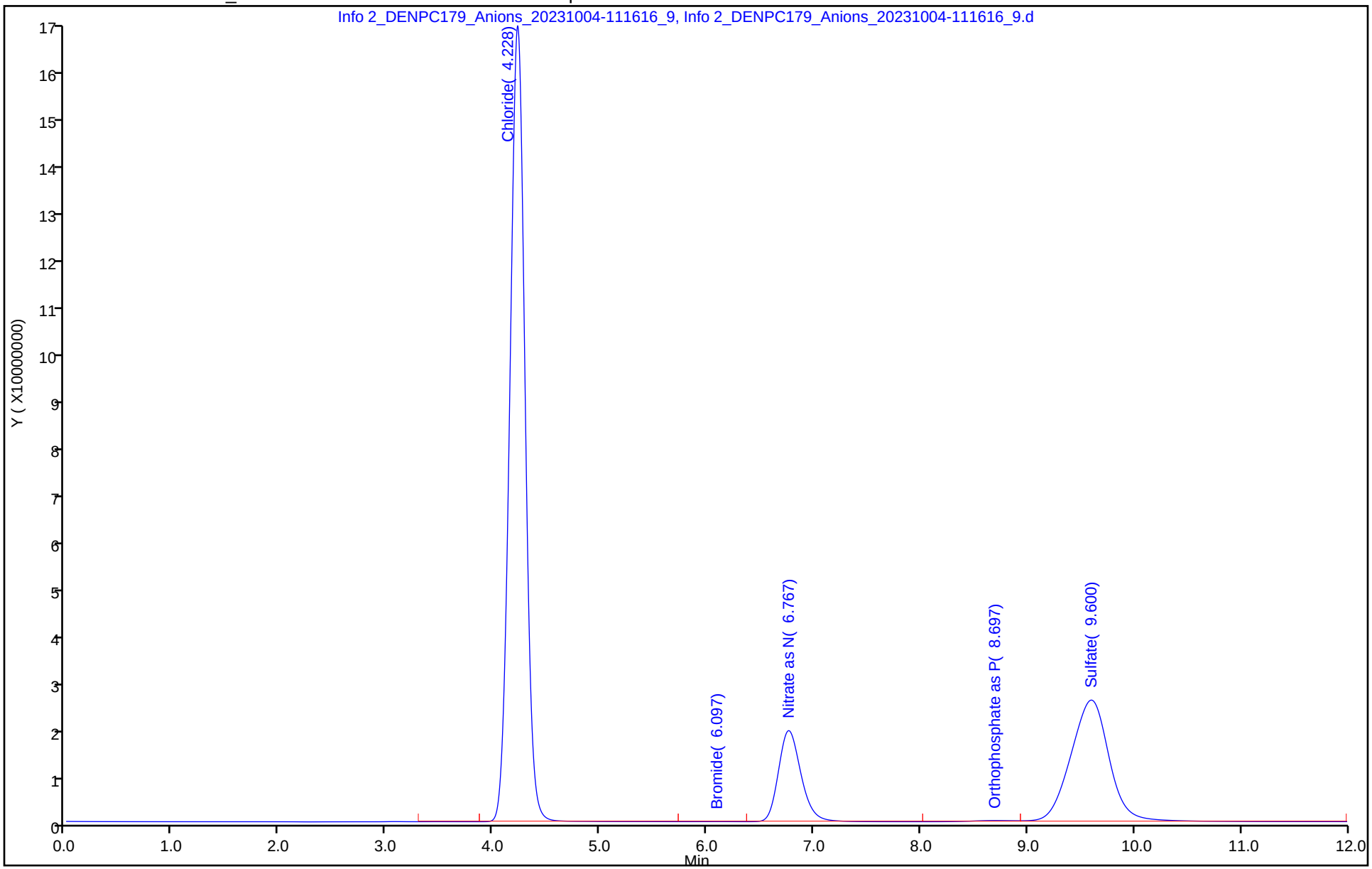
Processing Flags

NC - Not Calibrated

Report Date: 04-Oct-2023 11:41:28 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20231003-126096.b\Info 2_DENPC179_Anions_20231004-111616_9.d				
Injection Date:	03-Oct-2023 16:13:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-182239-B-10	Lab Sample ID:	280-182239-10	Worklist Smp#:	15
Client ID:	LL12mw-185-230901-GW				
Injection Vol:	5.0 ul	Dil. Factor:	10.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



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Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20231003-126096.b\Info 2_DENPC179_Anions_20231004-111
Lims ID: 280-182239-B-11
Client ID: LL12mw-185-230902-GW
Sample Type: Client
Inject. Date: 03-Oct-2023 16:28:00 ALS Bottle#: 0 Worklist Smp#: 16
Injection Vol: 5.0 ul Dil. Factor: 10.0000
Sample Info: 280-0126096-016
Misc. Info.: 280-0126096-016
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20231003-126096.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 04-Oct-2023 11:41:17 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1625

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride		3.078			ND	
2 Chloride	4.227	4.232	-0.005	1555701668	NC	
3 Nitrite as N		4.865			ND	
4 Bromide	6.093	6.013	0.080	623358	NC	
5 Nitrate as N	6.762	6.740	0.022	263808857	5.40	
6 Orthophosphate as P	8.723	8.497	0.226	3272328	-0.5261	
7 Sulfate	9.598	9.543	0.055	595816745	NC	

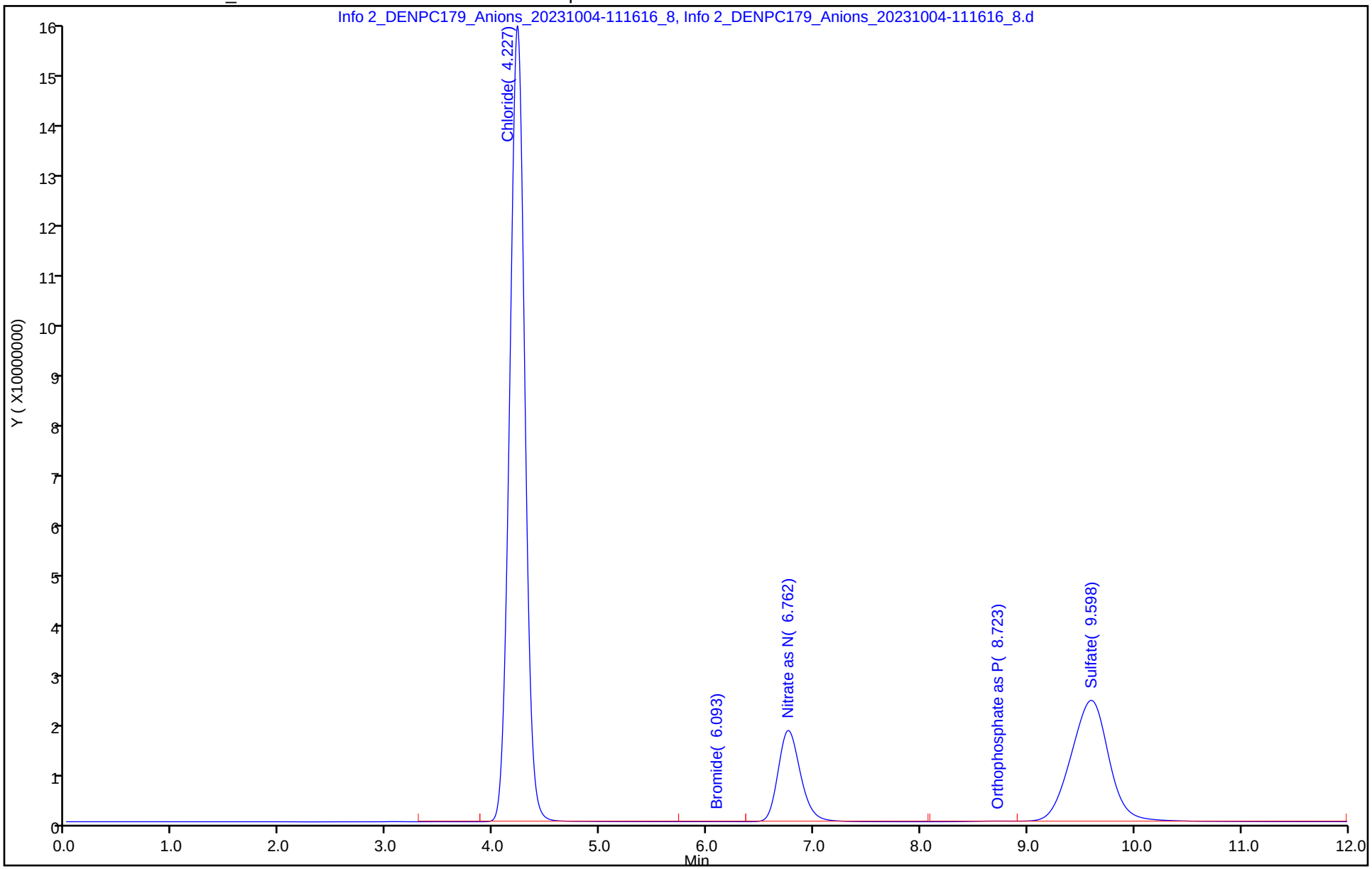
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 04-Oct-2023 11:41:28 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20231003-126096.b\Info 2_DENPC179_Anions_20231004-111616_8.d				
Injection Date:	03-Oct-2023 16:28:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-182239-B-11	Lab Sample ID:	280-182239-11	Worklist Smp#:	16
Client ID:	LL12mw-185-230902-GW				
Injection Vol:	5.0 ul	Dil. Factor:	10.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



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Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20231003-126096.b\Info 2_DENPC179_Anions_20231004-111
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 03-Oct-2023 16:43:00 ALS Bottle#: 0 Worklist Smp#: 17
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0126096-017
Misc. Info.: 280-0126096-017
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub9

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20231003-126096.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 04-Oct-2023 11:41:29 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1625

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.078			ND	ND	
2 Chloride	4.233	4.232	0.001	1904493433	NC	NC	
3 Nitrite as N	4.863	4.865	-0.002	251636018	5.00	4.77	
4 Bromide	6.002	6.013	-0.011	35428944	NC	NC	
5 Nitrate as N	6.727	6.740	-0.013	225070429	5.00	4.62	
6 Orthophosphate as P	8.510	8.497	0.013	156694436	5.00	5.64	
7 Sulfate	9.555	9.543	0.012	1443256563	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

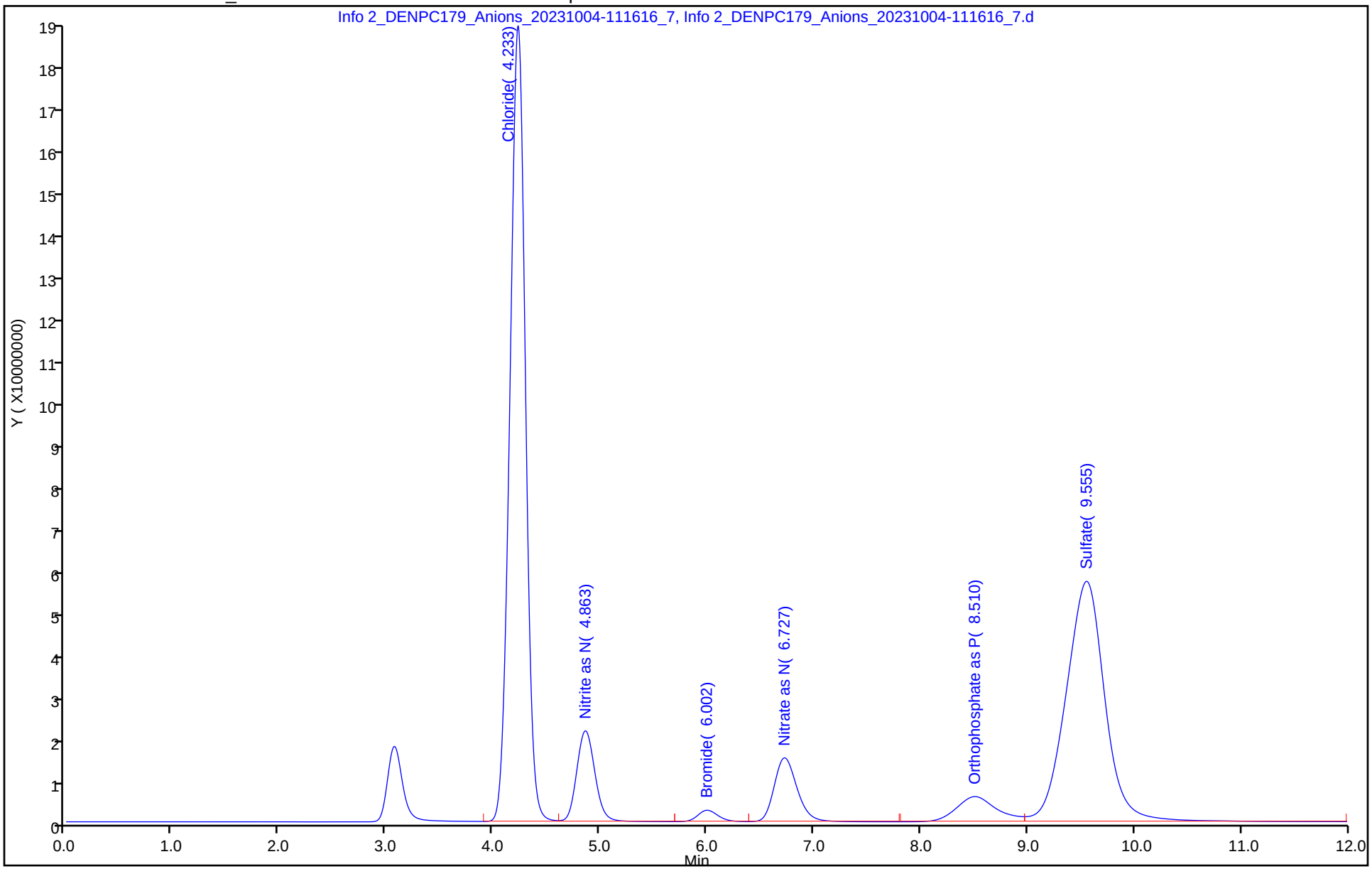
Reagents:

IC LCS_01980 Amount Added: 10.00 Units: mL

Report Date: 04-Oct-2023 11:41:29 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20231003-126096.b\Info 2_DENPC179_Anions_20231004-111616_7.d				
Injection Date:	03-Oct-2023 16:43:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	17
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



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Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20231003-126096.b\Info 2_DENPC179_Anions_20231004-111				
Lims ID:	ccb				
Client ID:					
Sample Type:	CCB				
Inject. Date:	03-Oct-2023 16:58:00	ALS Bottle#:	0	Worklist Smp#:	18
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0126096-018				
Misc. Info.:	280-0126096-018				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Method:	\\chromfs\Denver\ChromData\WC_IonChrom10\20231003-126096.b\Anions_IC10.m				
Limit Group:	Wet - Anions				
Last Update:	04-Oct-2023 11:41:29	Calib Date:	16-Aug-2023 09:39:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100				
Column 1 :			Det: Info 2_091554_1		
Process Host:	CTX1625				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.078				ND	
2 Chloride	4.175	4.232	-0.057	40845		NC	
3 Nitrite as N		4.865				ND	
4 Bromide	6.017	6.013	0.004	23466		NC	
5 Nitrate as N		6.740				ND	
6 Orthophosphate as P	8.602	8.497	0.105	22554910		0.2483	
7 Sulfate		9.543				ND	

QC Flag Legend

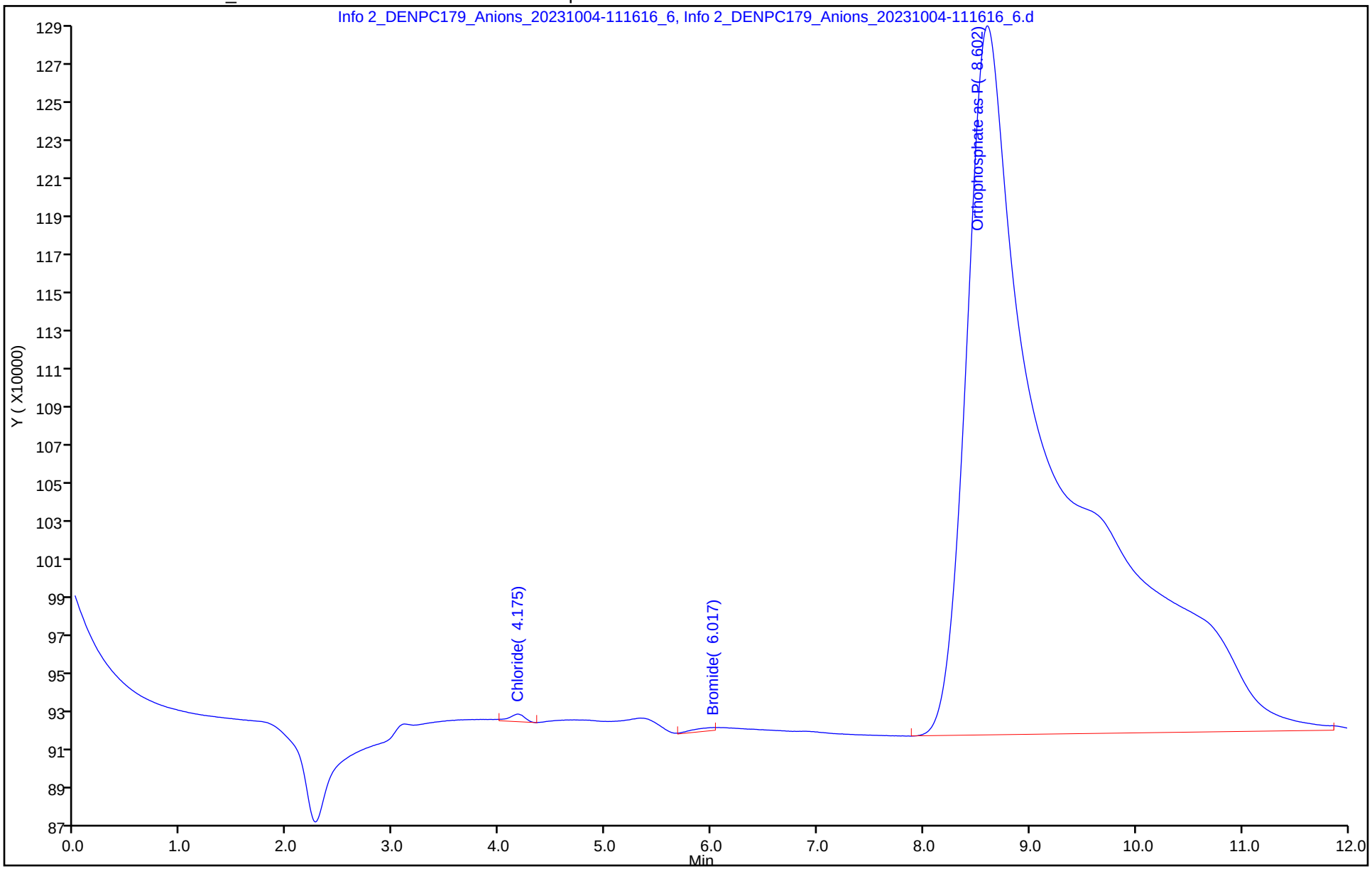
Processing Flags

NC - Not Calibrated

Report Date: 04-Oct-2023 11:41:30 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20231003-126096.b\Info 2_DENPC179_Anions_20231004-111616_6.d				
Injection Date:	03-Oct-2023 16:58:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	18
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



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Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20231003-126096.b\Info 2_DENPC179_Anions_20231004-111
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 03-Oct-2023 18:13:00 ALS Bottle#: 0 Worklist Smp#: 23
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0126096-023
Misc. Info.: 280-0126096-023
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub9

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20231003-126096.b\Anions_IC10.m
Limit Group: Wet - Anions
Last Update: 04-Oct-2023 11:41:33 Calib Date: 16-Aug-2023 09:39:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100

Column 1 : Det: Info 2_091554_1
Process Host: CTX1625

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.078			ND	ND	
2 Chloride	4.232	4.232	0.000	1908287208	NC	NC	
3 Nitrite as N	4.862	4.865	-0.003	252347413	5.00	4.79	
4 Bromide	5.993	6.013	-0.020	35535812	NC	NC	
5 Nitrate as N	6.720	6.740	-0.020	225825362	5.00	4.63	
6 Orthophosphate as P	8.502	8.497	0.005	159185881	5.00	5.74	
7 Sulfate	9.550	9.543	0.007	1449763200	NC	NC	

QC Flag Legend

Processing Flags
NC - Not Calibrated
ND - Not Detected or Marked ND

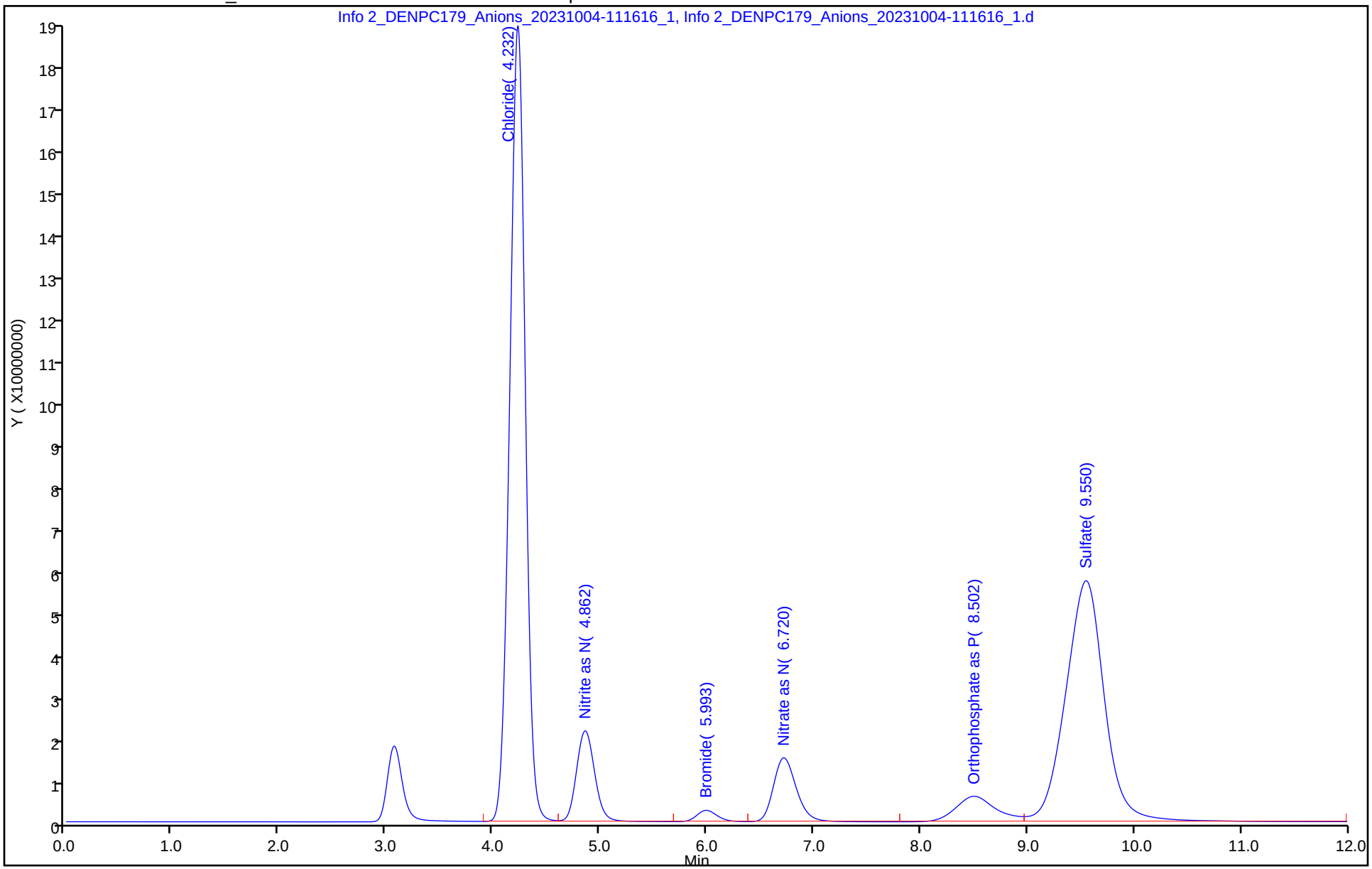
Reagents:

IC LCS_01980 Amount Added: 10.00 Units: mL

Report Date: 04-Oct-2023 11:41:33 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20231003-126096.b\Info 2_DENPC179_Anions_20231004-111616_1.d				
Injection Date:	03-Oct-2023 18:13:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	23
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



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4:00 PM

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20231003-126096.b\Info 2_DENPC179_Anions_20231004-111				
Lims ID:	ccb				
Client ID:					
Sample Type:	CCB				
Inject. Date:	03-Oct-2023 18:28:00	ALS Bottle#:	0	Worklist Smp#:	24
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0126096-024				
Misc. Info.:	280-0126096-024				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Method:	\\chromfs\Denver\ChromData\WC_IonChrom10\20231003-126096.b\Anions_IC10.m				
Limit Group:	Wet - Anions				
Last Update:	04-Oct-2023 11:38:44	Calib Date:	16-Aug-2023 09:39:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20230815-124540.b\Info 2_DENPC179_Anions_20230816-100				
Column 1 :			Det: Info 2_091554_1		
Process Host:	CTX1625				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		3.078				ND	
2 Chloride		4.232				ND	
3 Nitrite as N		4.865				ND	
4 Bromide	6.050	6.013	0.037	46765		NC	
5 Nitrate as N		6.740				ND	
6 Orthophosphate as P	8.603	8.497	0.106	23965059		0.3049	
7 Sulfate		9.543				ND	

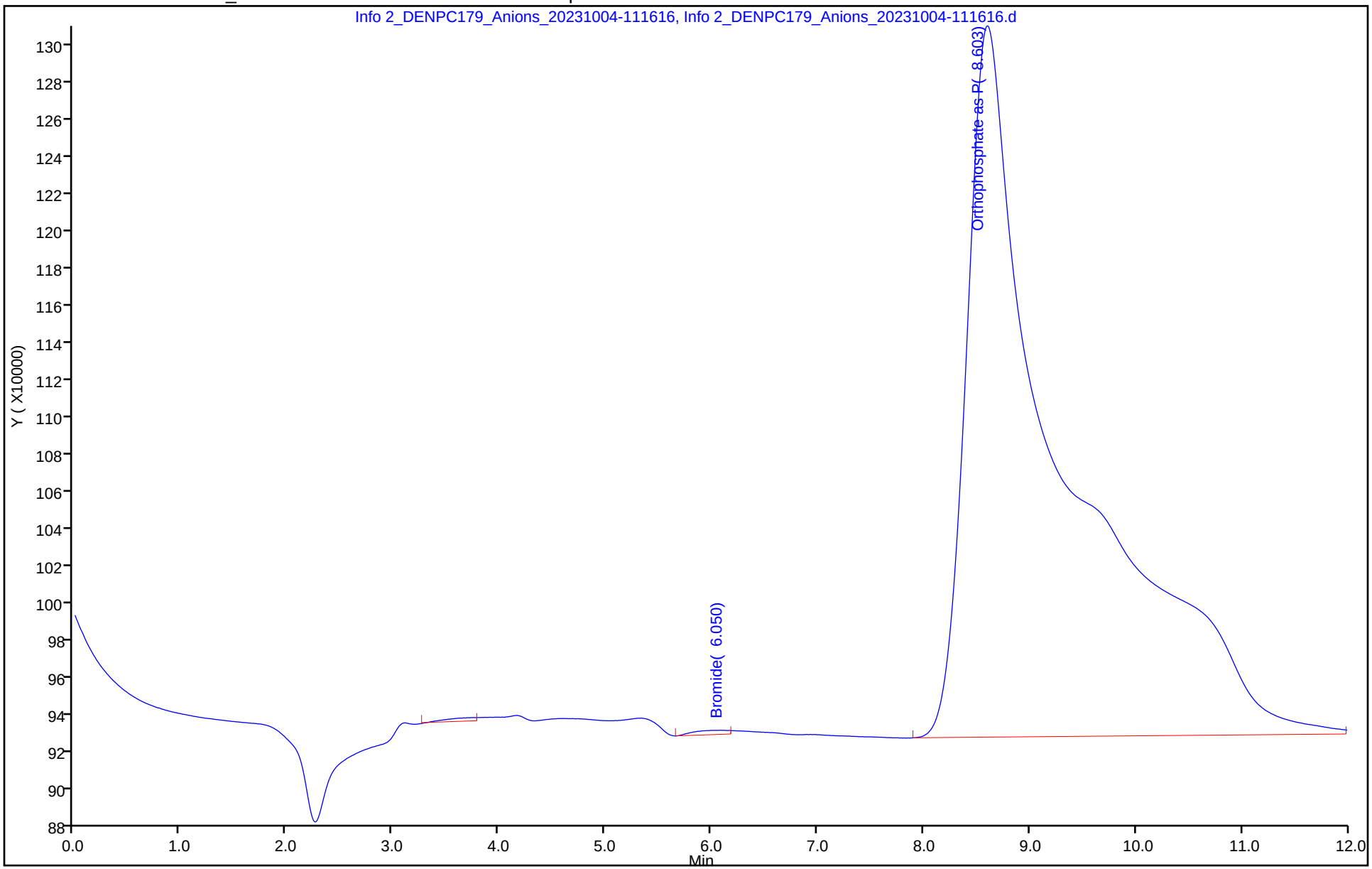
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 04-Oct-2023 11:38:45 Chrom Revision: 2.3 22-Sep-2023 11:33:50

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20231003-126096.b\Info 2_DENPC179_Anions_20231004-111616.d				
Injection Date:	03-Oct-2023 18:28:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	24
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions		



10/20/2023
4:00 PM

Shipping and Receiving Documents

Chain of Custody Record

leidos

Page 1 of 1

COC No.: RVAAP-378TA

Date: 10/2/23

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 Fall 2023
Job/P.O. No.: P010216426
Sampler (Signature) (Printed Name) Chris McFarland

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-004-230901-GW	-	-	10/2/23	0915	W	2		2	
	SCFmw-004-230902-GW	-	-	10/2/23	0905	W	2		2	

Requested Parameters

Relinquished by	Date	Received by	Date	Notes: Total Number of Containers: 4	Shipment Method: Courier
Signature	10/2/23	Signature	10-3-23	A. Cool, 4C B. HCl, pH<2, Cool, 4C C. HNO3, pH<2, Cool, 4C D. NaOH, pH>12, Cool 4C	
Printed Name: Charles Spicer	Time: 1730	Printed Name: EETDEN	Time: 0935	1. SW 8260B Notes: 2. SW 8270D 3. SW 8270D SIM 4. SW 8082A 5. SW 8081B	FedEx
Company: Leidos		Company: ~~EETDEN~~		6. SW 8330 7. SW 6010/6020/7470 8. SW 9012B 9. SW 9034 10. SW 9056/9056A	8174 6109 4780 8174 6109 4791
Relinquished by	Date	Received by	Date	11. SW 6860 12. EPA 353.2 13. SW 7196 14. SM2320B	Temperature Blank: 1.3c, 0.9c, Fa.3 IR MOMO
Signature		Signature			Lab: Leidos 8866 Commons Drive Twinsburg, OH 44087 (330) 405-5802
Printed Name	Time	Printed Name	Time		
Company		Company			

Leidos White: Laboratory Pink: Project Manager Yellow: Project QAO Goldenrod: Field Project Manager

280-182239 Chain of Custody

leidos

Chain of Custody Record

COC No.: RVAAP-379-TA

Date: 10/2/23

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 Fall 2023
Job/P.O. No.: P010216426
Sampler (Signature) (Printed Name)
Matt Schlaly Matt Rechenberg

Laboratory Name: TA- Denver
Address: 4955 Yarrow Street
Arvada, CO 80002
Phone: 303-736-0107
Contact: Patrick McEntee

Laboratory No	Sample ID	Site Type	Depth	Date	Time	Matrix	Expanded Explosives (6)(A)	Temperature Blank	Total Number of Containers	OBSERVATIONS, COMMENTS SPECIAL INSTRUCTIONS
	LL3mw-237-230901-GW	—	-	10/2/23	0958	W	2		2	

Requested Parameters

MSR 10/2/23

Relinquished by	Date	Received by	Date
Signature: Charles Spurr	10/2/23	Signature: Avan Padgett	10.3.23
Printed Name: Charles Spurr	Time: 1730	Printed Name: AVAN PADGETT	Time: 0935
Company: Leidos		Company: FETPEN	
Relinquished by	Date	Received by	Date
Signature		Signature	
Printed Name	Time	Printed Name	Time
Company		Company	

Notes: Total Number of Containers: 2

A. Cool, 4C
B. HCl, pH<2, Cool, 4C
C. HNO3, pH<2, Cool, 4C
D. NaOH, pH>12, Cool 4C

Notes:
1. SW 8260B
2. SW 8270D
3. SW 8270D SIM
4. SW 8082A
5. SW 8081B
6. SW 8330
7. SW 6010/6020/7470
8. SW 9012B
9. SW 9034
10. SW 9056/9056A
11. SW 6860
12. EPA 353.2
13. SW 7196
14. SM2320B

Shipment Method: Courier

FedEx

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

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COC No.: RVAAP-38-TA

Date: 10/2/23

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 Fall 2023
Job/P.O. No.: P010216426
Sampler (Signature) [signature] (Printed Name) Je Kravetz

Laboratory Name: TA- Denver
Address: 4955 Yarrow Street
Arvada, CO 80002
Phone: 303-736-0107
Contact: Patrick McEntee

Requested Parameters

Laboratory No	Sample ID	Site Type	Depth	Date	Time	Matrix	Expanded Explosives (6)(A)	Temperature Blank	Total Number of Containers	OBSERVATIONS, COMMENTS SPECIAL INSTRUCTIONS
	LL3mw-241-230901-GW			10/2/23	1037	W	2		2	
	LL3mw-241-230901-GWMSD			10/2/23	1037	W	8		8	extra volume for MS/MSD
	LL3mw-241-230902-GW			10/2/23	1037	W	2		2	

JK 10/2/23

Relinquished by	Date	Received by	Date	Notes: Total Number of Containers: 12	Shipment Method: Courier
Signature [signature]	10/2/23	Signature [signature]	10.3.23	A. Cool, 4C B. HCl, pH<2, Cool, 4C C. HNO3, pH<2, Cool, 4C D. NaOH, pH>12, Cool 4C	FedEx
Printed Name Charles Spurr	Time 1730	Printed Name Dylan Padgett	Time 0935	1. SW 8260B Notes: 2. SW 8270D 3. SW 8270D SIM 4. SW 8082A 5. SW 8081B	
Company Leidos		Company EETDEN			
Relinquished by	Date	Received by	Date	6. SW 8330 7. SW 6010/6020/7470 8. SW 9012B 9. SW 9034 10. SW 9056/9056A	
Signature		Signature		11. SW 6860 12. EPA 353.2 13. SW 7196 14. SM2320B	Temperature Blank
Printed Name	Time	Printed Name	Time		Lab: Leidos 8866 Commons Drive Twinsburg, OH 44087 (330) 405-5802
Company		Company			

Leidos White: Laboratory Pink: Project Manager Yellow: Project QAO Goldenrod: Field Project Manager

Chain of Custody Record

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COC No.: RVAAP-331-TA

Page 4 of 9

Date: 10/26/23

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 Fall 2023
Job/P.O. No.: P010216426

Laboratory Name: TA- Denver
Address: 4955 Yarrow Street
Arvada, CO 80002
Phone: 303-736-0107
Contact: Patrick McEntee

Laboratory No.	Sample ID		Depth	Date	Time	Matrix	VOCs (1)(B)	SVOCs (2)(A)	LL PAHs (3)(A)	TPH GRO (4)(B)	TPH DRO (5)(A)	Explosives (6)(A)	Nitrate (7)(A)	Ammonia (8)(D)	Metals - LEAD (9)(C)	Temperature Blank	Total Number of Conta	OBSERVATIONS COMMENTS
	LL1mw-093-230901-GW		-	10/26/23	1134	W						2					2	

Requested Parameters

c 10/26/23

Relinquished by	Date	Received by	Date	Notes: Total Number of Containers: 2
Signature	10/26/23	Signature	10.3.23	A. Cool, 4C
Printed Name: Charles Spurr	Time: 1730	Printed Name: Dylan Padgett	Time: 0935	B. HCl, pH<2, Cool, 4C
Company: Leidos		Company: EETDEN		C. HNO3, pH<2, Cool, 4C
				D. H2SO4, pH<2, Cool 4C
Relinquished by	Date	Received by	Date	
Signature		Signature		
Printed Name	Time	Printed Name	Time	
Company		Company		

1. SW 8260C	3 x 40 ml-VOA	
2. SW 8270E	2 x 125 ml-amber	
3. SW 8270E SIM	2 x 250 ml-amber	
4. Modified 8015 (GRO)	3 x 40 ml-VOA	
5. Modified 8015 (DRO)	2 x 1-L amber	
6. SW 8330	2 x 500-ml amber	
7. SW 9056	1 x 250-ml plastic	
8. EPA 350.1	1 x 250-ml amber	
8. SW 6020	1 x 500 ml plastic	

Shipment Method: FedEx

Tracking Numbers:

Temperature upon receipt

Leidos
8866 Commons Drive
Twinsburg, OH 44087
(330) 405-5802

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Chain of Custody Record

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COC No.: RVAAP-382-TA

Page 5 of 9

Date: 10/2/23

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 Fall 2023
Job/P.O. No.: P010216426

Laboratory Name: TA- Denver
Address: 4955 Yarrow Street
Arvada, CO 80002
Phone: 303-736-0107
Contact: Patrick McEntee

Laboratory No.	Sample ID	Depth	Date	Time	Matrix	VOCs (1)(B)	SVOCs (2)(A)	LL PAHs (3)(A)	TPH GRO (4)(B)	TPH DRO (5)(A)	Explosives (6)(A)	Nitrate (7)(A)	Ammonia (8)(D)	Metals - LEAD (9)(C)	Temperature Blank	Total Number of Conta	OBSERVATIONS COMMENTS
	LL1mw-092-230901-GW	—	10/2/23	1140	W						2					2	

10/2/23

Relinquished by	Date	Received by	Date	Notes: Total Number of Containers: 2
Signature	10/2/23	Signature	10/3/23	A. Cool, 4C B. HCl, pH<2, Cool, 4C C. HNO3, pH<2, Cool, 4C D. H2SO4, pH<2, Cool 4C
Printed Name: Charles Spurr	Time: 1730	Printed Name: Dylan Padgett	Time: 0935	1. SW 8260C — 3 x 40 ml-VOA 2. SW 8270E — 2 x 125 ml-amber 3. SW 8270E SIM — 2 x 250 ml-amber 4. Modified 8015 (GRO) — 3 x 40 ml-VOA 5. Modified 8015 (DRO) — 2 x 1-L amber 6. SW 8330 — 2 x 500-ml amber 7. SW 9056 — 1 x 250-ml plastic 8. EPA 350.1 — 1 x 250-ml amber 8. SW 6020 — 1 x 500 ml plastic
Company: Leidos		Company: EETDEN		
Relinquished by	Date	Received by	Date	
Signature		Signature		
Printed Name	Time	Printed Name	Time	
Company		Company		

Shipment Method: FedEx

Tracking Numbers:

Temperature upon receipt

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Twinsburg, OH 44087
(330) 405-5802

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COC No.: RVAAP-383-TA

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Date: 10/2/23

Sampler: Matt Shanley Matt Rechenberg

Name Leidos

Address: 8866 Commons Blvd. Suite 201, Twinsburg, OH 44087

Phone Number: (330) 405-5802

Project Manager: Jed Thomas

Project: RVAAP FWGW Sampling Event Fall ~~2021~~ 2023

Job/P.O. No.: P010216426

MSR 10/2/23

Laboratory Name: TA- Denver
Address: 4955 Yarrow Street
Arvada, CO 80002
Phone: 303-736-0107
Contact: Patrick McEntee

Laboratory No.	Sample ID	Depth	Date	Time	Matrix	Requested Parameters: VOCs (1)(B)	SVOCs (2)(A)	LL PAHs (3)(A)	TPH GRO (4)(B)	TPH DRO (5)(A)	Explosives (6)(A)	Nitrate (7)(A)	Ammonia (8)(D)	Metals - LEAD (9)(C)	Temperature Blank	Total Number of Conta	OBSERVATIONS COMMENTS
	LL3mw-248-230901-GW		10/2/23	1212	W						2					2	

MSR 10/2/23

Relinquished by	Date	Received by	Date
Signature	10/2/23	Signature	10-3-23
Charles Spurr	Time	Dylan Padgett	Time
Printed Name	1730	Printed Name	0935
Leidos		EETDEN	
Company		Company	
Relinquished by	Date	Received by	Date
Signature		Signature	
	Time		Time
Printed Name		Printed Name	
Company		Company	

Notes: Total Number of Containers: 2

A. Cool, 4C
B. HCl, pH<2, Cool, 4C
C. HNO3, pH<2, Cool, 4C
D. H2SO4, pH<2, Cool 4C

1. SW 8260C	3 x 40 ml-VOA
2. SW 8270E	2 x 125 ml-amber
3. SW 8270E SIM	2 x 250 ml-amber
4. Modified 8015 (GRO)	3 x 40 ml-VOA
5. Modified 8015 (DRO)	2 x 1-L amber
6. SW 8330	2 x 500-ml amber
7. SW 9056	1 x 250-ml plastic
8. EPA 350.1	1 x 250-ml amber
8. SW 6020	1 x 500 ml plastic

Shipment Method: Fed Ex

Tracking Numbers:

Temperature upon receipt

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(330) 405-5802

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Collected By Katie Lee Clee

COC No.: RVAAP-384-TA

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Date: 10/02/23

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 Fall 2023
Job/P.O. No.: P010216426

Laboratory Name: TA- Denver
Address: 4955 Yarrow Street
Arvada, CO 80002
Phone: 303-736-0107
Contact: Patrick McEntee

Laboratory No.	Sample ID	Depth	Date	Time	Matrix	VOCs (1)(B)	SVOCs (2)(A)	LL PAHs (3)(A)	TPH GRO (4)(B)	TPH DRO (5)(A)	Explosives (6)(A)	Nitrate (7)(A)	Ammonia (8)(D)	Metals - LEAD (9)(C)	Temperature Blank	Total Number of Conta	OBSERVATIONS COMMENTS
	LL1mw-091-230901-GW	36	10/02/23	1230	W						2					2	

Clee 10/2/23

Relinquished by	Date	Received by	Date	Notes: Total Number of Containers: 2
Signature: Clee	10/3/23	Signature: DVP	10.3.23	A. Cool, 4C B. HCl, pH<2, Cool, 4C C. HNO3, pH<2, Cool, 4C D. H2SO4, pH<2, Cool 4C
Printed Name: Charles Spencer	Time: 1730	Printed Name: Dylan Padgett	Time: 0935	1. SW 8260C — 3 x 40 ml-VOA 2. SW 8270E — 2 x 125 ml-amber 3. SW 8270E SIM — 2 x 250 ml-amber 4. Modified 8015 (GRO) — 3 x 40 ml-VOA 5. Modified 8015 (DRO) — 2 x 1-L amber 6. SW 8330 — 2 x 500-ml amber 7. SW 9056 — 1 x 250-ml plastic 8. EPA 350.1 — 1 x 250-ml amber 8. SW 6020 — 1 x 500 ml plastic
Company: Leidos		Company: EETDEN		
Relinquished by	Date	Received by	Date	
Signature		Signature		
Printed Name	Time	Printed Name	Time	
Company		Company		

Shipment Method: FedEx

Tracking Numbers:

Temperature upon receipt

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Twinsburg, OH 44087
(330) 405-5802

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Chain of Custody Record

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Page 8 of 9

COC No.: RVAAP-385-TA

Date: 10/2/23

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~~ Fall 2023
Job/P.O. No.: P010216426
Sampler (Signature) Matt Schultz (Printed Name) Matt Rechenberg

MSR 10/2/23

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	Nitrate (10)(A)	AMMONIA 15(E)	Temperature Blank	Total Number of Containers	OBSERVATIONS, COMMENTS SPECIAL INSTRUCTIONS
	LL12mw-185-230901-GW	—	—	10/2/23	1425	W	1	1		2	
	LL12mw-185-230901-GWMSD	—	—	10/2/23	1425	W		1		1	
	LL12mw-185-230902-GW	—	—	10/2/23	1425	W	1	1		2	

MSR 10/2/23

Relinquished by	Date	Received by	Date	Notes: Total Number of Containers: 5
Signature	10/2/23	Signature	10.3.23	A. Cool, 4C E. H2SO4
Printed Name: Charles Spurr	Time: 1730	Printed Name: Dylan Padgett	Time: 0935	B. HCl, pH<2, Cool, 4C C. HNO3, pH<2, Cool, 4C D. NaOH, pH>12, Cool 4C
Company: Leidos		Company: EETDEN		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 15. E350.1
Relinquished by	Date	Received by	Date	
Signature		Signature		
Printed Name	Time	Printed Name	Time	
Company		Company		

Shipment Method: Courier

FedEx

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

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COC No.: RVAAP-386-TA

Page 9 of 9

Date: 10/2/23

Name Leidos
Address: 8866 Commons Blvd. Suite 201, Twinsburg, OH 44087
Phone Number: (330) 405-5802
Project Manager: Jed Thomas Fall 2023 JK 10/2/23
Project: RVAAP FWGW Sampling Event ~~Fall 2021~~
Job/P.O. No.: P010216426 for Vitale Joe Kravetz

Laboratory Name: TA- Denver
Address: 4955 Yarrow Street
Arvada, CO 80002
Phone: 303-736-0107
Contact: Patrick McEntee

Laboratory No.	Sample ID	Depth	Date	Time	Matrix	VOCs (1)(B)	SVOCs (2)(A)	LL PAHs (3)(A)	TPH GRO (4)(B)	TPH DRO (5)(A)	Explosives (6)(A)	Nitrate (7)(A)	Ammonia (8)(D)	Metals - LEAD (9)(C)	Temperature Blank	Total Number of Conta	OBSERVATIONS COMMENTS
	LL3mw-247-230901-GW	—	10/2/23	1432	W						2					2	
				JK 10/2/23													

Requested Parameters

Relinquished by	Date	Received by	Date	Notes: Total Number of Containers: 2	Shipment Method: Fed Ex
Signature	10/2/23	Signature	10.3.23	A. Cool, 4C B. HCl, pH<2, Cool, 4C C. HNO3, pH<2, Cool, 4C D. H2SO4, pH<2, Cool 4C	
Printed Name: Charles Spurr	Time: 1730	Printed Name: Dylan Padgett	Time: 0935	1. SW 8260C — 3 x 40 ml-VOA 2. SW 8270E — 2 x 125 ml-amber 3. SW 8270E SIM — 2 x 250 ml-amber 4. Modified 8015 (GRO) — 3 x 40 ml-VOA 5. Modified 8015 (DRO) — 2 x 1-L amber 6. SW 8330 — 2 x 500-ml amber 7. SW 9056 — 1 x 250-ml plastic 8. EPA 350.1 — 1 x 250-ml amber 8. SW 6020 — 1 x 500 ml plastic	**Tracking Numbers:**
Company: Leidos		Company: EETDEN			
Relinquished by	Date	Received by	Date		**Temperature upon receipt**
Signature		Signature			
Printed Name	Time	Printed Name	Time		
Company		Company			**Leidos** 8866 Commons Drive Twinsburg, OH 44087 (330) 405-5802

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Login Sample Receipt Checklist

Client: Leidos, Inc.

Job Number: 280-182239-1

Login Number: 182239
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.	False	Refer to Job Narrative for details.
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.	True	
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	