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ANALYTICAL REPORT

Job Number: 280-134063-1

Job Description: Cornhusker (CHAAP)

For:
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Attention: Corey Schwabenlander

Approved for release.
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The Lab Certification ID# is 4025.

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

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 Test America Project Manager.

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Qualifiers

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
H	Sample was prepped or analyzed beyond the specified holding time
J	Estimated: The analyte was positively identified; the quantitation is an estimation
J1	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
M	Manual integrated compound.
Q	One or more quality control criteria failed.
U	Undetected at the Limit of Detection.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

CASE NARRATIVE

Client: Brice Environmental Services, Corp

Project: Cornhusker (CHAAP)

Report Number: 280-134063-1

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

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

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

RECEIPT
The samples were received on 2/26/2020 9:20 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.6º C.

NITROAROMATICS AND NITRAMINES (HPLC)
Samples OS001-DP02-25 (280-134063-1), OS001-DP502-25 (280-134063-2), OS001-DP02-35 (280-134063-3) and OS001-DP02-45 (280-134063-4) were analyzed for Nitroaromatics and Nitramines (HPLC) in accordance with 8330A. The samples were prepared on 02/28/2020 and 03/04/2020 and analyzed on 03/02/2020, 03/04/2020, 03/05/2020 and 03/09/2020.

2-Amino-4,6-dinitrotoluene, 2-Nitrotoluene, 3-Nitrotoluene, 4-Amino-2,6-dinitrotoluene and 4-Nitrotoluene failed the recovery criteria low for LCS 280-487255/2-A. Refer to the QC report for details. The following samples are affected:
OS001-DP02-25 (280-134063-1), OS001-DP502-25 (280-134063-2), OS001-DP02-35 (280-134063-3), OS001-DP02-45 (280-134063-4), OS001-DP02-45 (280-134063-4[MS]) and OS001-DP02-45 (280-134063-4[MSD]). 1,2-Dinitrobenzene failed the surrogate recovery criteria low for LCSD 280-487600/4-A associated with the re-extraction batch. Refer to the QC report for details. Both data sets are reported. No sample volume remained to extract a third time. All other QC was within control as well as all target analytes were within control; therefore the data was reported.

2-Nitrotoluene failed the recovery criteria low for the MS of sample OS001-DP02-45MS (280-134063-4) in batch 280-487395. 1,3,5-Trinitrobenzene and Tetryl failed the recovery criteria high. 1,3,5-Trinitrobenzene and 2-Nitrotoluene failed the recovery criteria low for the MSD of sample OS001-DP02-45MSD (280-134063-4) in batch 280-487395. Tetryl failed the recovery criteria high. Refer to the QC report for details.

Surrogate recovery for the following samples associated with preparation batch 280-487600 and analytical batch 280-487660 were outside control limits: OS001-DP02-25 (280-134063-1), OS001-DP502-25 (280-134063-2), OS001-DP02-35 (280-134063-3), OS001-DP02-45 (280-134063-4[MS]) and OS001-DP02-45 (280-134063-4[MSD]). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Surrogate recovery for the following samples associated with preparation batch 280-487600 and analytical batch 280-488169 were outside control limits: OS001-DP02-25 (280-134063-1) and OS001-DP02-35 (280-134063-3). 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 HMX for the following sample in preparation batch 280-487255 and analytical batch 280-487395: OS001-DP02-25 (280-134063-1). The results from both columns has been reported and qualified in accordance with the laboratory's QAS.

The following samples in preparation batch 280-487255 required filtration to reduce matrix interferences: OS001-DP02-25 (280-134063-1), OS001-DP502-25 (280-134063-2), OS001-DP02-35 (280-134063-3), OS001-DP02-45 (280-134063-4), OS001-DP02-45 (280-134063-4[MS]) and OS001-DP02-45 (280-134063-4[MSD]).

Due to analyst oversight, a MNX matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 280-487255 was not performed. A LCS and LCSD for MNX was performed for the batch.

Insufficient sample volume was available to perform a MNX matrix spike/matrix spike duplicate (MS/MSD) associated with the re-preparation batch 280-487600.

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

Detection Summary

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

Job ID: 280-134063-1

Client Sample ID: OS001-DP02-25 — Lab Sample ID: 280-134063-1

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
2,4,6-Trinitrotoluene	9.2		0.43	0.43	0.17	ug/L	1		8330A	Total/NA
2-Amino-4,6-dinitrotoluene	2.5	Q	0.22	0.13	0.055	ug/L	1		8330A	Total/NA
HMX	0.43	M J1	0.43	0.22	0.095	ug/L	1		8330A	Total/NA
HMX	0.67	J1	0.43	0.22	0.095	ug/L	1		8330A	Total/NA
2,4,6-Trinitrotoluene - RE	0.76	Q H M	0.44	0.44	0.18	ug/L	1		8330A	Total/NA

Client Sample ID: OS001-DP502-25 — Lab Sample ID: 280-134063-2

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
2,4,6-Trinitrotoluene	8.5		0.42	0.42	0.17	ug/L	1		8330A	Total/NA
2-Amino-4,6-dinitrotoluene	2.3	Q	0.21	0.13	0.053	ug/L	1		8330A	Total/NA
HMX	0.34	J M	0.42	0.21	0.092	ug/L	1		8330A	Total/NA
2,4,6-Trinitrotoluene - RE	7.8	Q H M	0.42	0.42	0.17	ug/L	1		8330A	Total/NA
2-Amino-4,6-dinitrotoluene - RE	2.2	Q H	0.21	0.12	0.053	ug/L	1		8330A	Total/NA
HMX - RE	0.32	J H M Q	0.42	0.21	0.091	ug/L	1		8330A	Total/NA

Client Sample ID: OS001-DP02-35 — Lab Sample ID: 280-134063-3

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
1,3,5-Trinitrobenzene	14		1.1	0.42	0.21	ug/L	1		8330A	Total/NA
2,4,6-Trinitrotoluene	8.2		0.42	0.42	0.17	ug/L	1		8330A	Total/NA
2-Amino-4,6-dinitrotoluene	0.43	Q	0.21	0.13	0.054	ug/L	1		8330A	Total/NA
1,3,5-Trinitrobenzene - RE	2.0	Q H	1.0	0.41	0.21	ug/L	1		8330A	Total/NA

Client Sample ID: OS001-DP02-45 — Lab Sample ID: 280-134063-4

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
1,3,5-Trinitrobenzene	17	J1	1.1	0.42	0.21	ug/L	1		8330A	Total/NA
2,4,6-Trinitrotoluene	1.1		0.42	0.42	0.17	ug/L	1		8330A	Total/NA
2-Amino-4,6-dinitrotoluene	0.67	Q	0.21	0.13	0.054	ug/L	1		8330A	Total/NA
1,3,5-Trinitrobenzene - RE	21	H J1	1.1	0.43	0.21	ug/L	1		8330A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

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

Job ID: 280-134063-1

Client Sample ID: OS001-DP02-25

Lab Sample ID: 280-134063-1

Date Collected: 02/24/20 14:55
Matrix: Water
Date Received: 02/26/20 09:20

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.43	U M	1.1	0.43	0.22	ug/L		03/02/20 19:09	1
1,3-Dinitrobenzene	0.22	U M	0.43	0.22	0.096	ug/L		03/02/20 19:09	1
2,4,6-Trinitrotoluene	**9.2**		0.43	0.43	0.17	ug/L		03/02/20 19:09	1
2,4-Dinitrotoluene	0.22	U	0.43	0.22	0.091	ug/L		03/02/20 19:09	1
2,6-Dinitrotoluene	0.22	U	0.22	0.22	0.070	ug/L		03/02/20 19:09	1
2-Amino-4,6-dinitrotoluene	**2.5**	**Q**	0.22	0.13	0.055	ug/L		03/02/20 19:09	1
2-Nitrotoluene	0.22	U Q	0.43	0.22	0.093	ug/L		03/02/20 19:09	1
3-Nitrotoluene	0.43	U M Q	0.43	0.43	0.21	ug/L		03/02/20 19:09	1
4-Amino-2,6-dinitrotoluene	0.13	U Q	0.22	0.13	0.062	ug/L		03/02/20 19:09	1
4-Nitrotoluene	0.43	U M Q	1.1	0.43	0.22	ug/L		03/02/20 19:09	1
HMX	**0.43**	**M J1**	0.43	0.22	0.095	ug/L		03/02/20 19:09	1
HMX	**0.67**	**J1**	0.43	0.22	0.095	ug/L		03/04/20 08:01	1
MNX	0.43	U M Q	2.2	0.43	0.17	ug/L		03/02/20 19:09	1
Nitrobenzene	0.22	U	0.43	0.22	0.098	ug/L		03/02/20 19:09	1
RDX	0.43	U	0.43	0.43	0.17	ug/L		03/04/20 08:01	1
Tetryl	0.22	U M	0.26	0.22	0.086	ug/L		03/02/20 19:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*102*	*M*	*83 - 119*	*02/28/20 13:30*	*03/02/20 19:09*	*1*
1,2-Dinitrobenzene	*107*		*83 - 119*	*02/28/20 13:30*	*03/04/20 08:01*	*1*

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.44	U H M Q	1.1	0.44	0.22	ug/L		03/05/20 11:32	1
1,3-Dinitrobenzene	0.22	U H Q	0.44	0.22	0.097	ug/L		03/05/20 11:32	1
2,4,6-Trinitrotoluene	**0.76**	**Q H M**	0.44	0.44	0.18	ug/L		03/05/20 11:32	1
2,4-Dinitrotoluene	0.22	U H Q	0.44	0.22	0.092	ug/L		03/05/20 11:32	1
2,6-Dinitrotoluene	0.22	U H Q	0.22	0.22	0.071	ug/L		03/05/20 11:32	1
2-Amino-4,6-dinitrotoluene	0.13	U Q H	0.22	0.13	0.056	ug/L		03/09/20 20:08	1
2-Nitrotoluene	0.22	U H Q	0.44	0.22	0.094	ug/L		03/05/20 11:32	1
3-Nitrotoluene	0.44	U H Q	0.44	0.44	0.21	ug/L		03/05/20 11:32	1
4-Amino-2,6-dinitrotoluene	0.13	U H Q	0.22	0.13	0.063	ug/L		03/05/20 11:32	1
4-Nitrotoluene	0.44	U H Q	1.1	0.44	0.22	ug/L		03/05/20 11:32	1
HMX	0.22	U H Q	0.44	0.22	0.096	ug/L		03/05/20 11:32	1
MNX	0.44	U Q H	2.2	0.44	0.17	ug/L		03/05/20 11:32	1
Nitrobenzene	0.22	U H Q	0.44	0.22	0.10	ug/L		03/05/20 11:32	1
RDX	0.44	U H Q	0.44	0.44	0.17	ug/L		03/05/20 11:32	1
Tetryl	0.22	U H Q	0.26	0.22	0.087	ug/L		03/05/20 11:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*8*	*Q*	*83 - 119*	*03/04/20 07:23*	*03/05/20 11:32*	*1*
1,2-Dinitrobenzene	*0.3*	*Q M*	*83 - 119*	*03/04/20 07:23*	*03/09/20 20:08*	*1*

Client Sample ID: OS001-DP502-25

Lab Sample ID: 280-134063-2

Date Collected: 02/24/20 15:00
Matrix: Water
Date Received: 02/26/20 09:20

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.42	U M	1.1	0.42	0.21	ug/L		03/02/20 19:32	1
1,3-Dinitrobenzene	0.21	U M	0.42	0.21	0.093	ug/L		03/02/20 19:32	1

Client Sample ID: OS001-DP502-25

Lab Sample ID: 280-134063-2

Date Collected: 02/24/20 15:00

Matrix: Water

Date Received: 02/26/20 09:20

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2,4,6-Trinitrotoluene	**8.5**		0.42	0.42	0.17	ug/L		03/02/20 19:32	1
2,4-Dinitrotoluene	0.21	U	0.42	0.21	0.088	ug/L		03/02/20 19:32	1
2,6-Dinitrotoluene	0.21	U	0.21	0.21	0.068	ug/L		03/02/20 19:32	1
2-Amino-4,6-dinitrotoluene	**2.3**	**Q**	0.21	0.13	0.053	ug/L		03/02/20 19:32	1
2-Nitrotoluene	0.21	U M Q	0.42	0.21	0.090	ug/L		03/02/20 19:32	1
3-Nitrotoluene	0.42	U M Q	0.42	0.42	0.21	ug/L		03/02/20 19:32	1
4-Amino-2,6-dinitrotoluene	0.13	U Q	0.21	0.13	0.061	ug/L		03/02/20 19:32	1
4-Nitrotoluene	0.42	U M Q	1.1	0.42	0.21	ug/L		03/02/20 19:32	1
HMX	**0.34**	**J M**	0.42	0.21	0.092	ug/L		03/02/20 19:32	1
MNX	0.42	U M Q	2.1	0.42	0.16	ug/L		03/02/20 19:32	1
Nitrobenzene	0.21	U	0.42	0.21	0.096	ug/L		03/02/20 19:32	1
RDX	0.42	U	0.42	0.42	0.17	ug/L		03/04/20 08:36	1
Tetryl	0.21	U M	0.25	0.21	0.084	ug/L		03/02/20 19:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*92*	*M*	*83 - 119*	*02/28/20 13:30*	*03/02/20 19:32*	*1*
1,2-Dinitrobenzene	*91*		*83 - 119*	*02/28/20 13:30*	*03/04/20 08:36*	*1*

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.42	U H M Q	1.0	0.42	0.21	ug/L		03/05/20 11:55	1
1,3-Dinitrobenzene	0.21	U H Q	0.42	0.21	0.092	ug/L		03/05/20 11:55	1
2,4,6-Trinitrotoluene	**7.8**	**Q H M**	0.42	0.42	0.17	ug/L		03/05/20 11:55	1
2,4-Dinitrotoluene	0.21	U H Q	0.42	0.21	0.087	ug/L		03/05/20 11:55	1
2,6-Dinitrotoluene	0.21	U H Q	0.21	0.21	0.067	ug/L		03/05/20 11:55	1
2-Amino-4,6-dinitrotoluene	**2.2**	**Q H**	0.21	0.12	0.053	ug/L		03/05/20 11:55	1
2-Nitrotoluene	0.21	U H Q	0.42	0.21	0.089	ug/L		03/05/20 11:55	1
3-Nitrotoluene	0.42	U H	0.42	0.42	0.20	ug/L		03/09/20 20:43	1
4-Amino-2,6-dinitrotoluene	0.12	U H Q	0.21	0.12	0.060	ug/L		03/05/20 11:55	1
4-Nitrotoluene	0.42	U H Q	1.0	0.42	0.21	ug/L		03/05/20 11:55	1
HMX	**0.32**	**J H M Q**	0.42	0.21	0.091	ug/L		03/05/20 11:55	1
MNX	0.42	U H	2.1	0.42	0.16	ug/L		03/09/20 20:43	1
Nitrobenzene	0.21	U H Q	0.42	0.21	0.095	ug/L		03/05/20 11:55	1
RDX	0.42	U H	0.42	0.42	0.16	ug/L		03/09/20 20:43	1
Tetryl	0.21	U H M Q	0.25	0.21	0.083	ug/L		03/05/20 11:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*68*	*Q*	*83 - 119*	*03/04/20 07:23*	*03/05/20 11:55*	*1*
1,2-Dinitrobenzene	*96*	*M*	*83 - 119*	*03/04/20 07:23*	*03/09/20 20:43*	*1*

Client Sample ID: OS001-DP02-35

Lab Sample ID: 280-134063-3

Date Collected: 02/24/20 15:40

Matrix: Water

Date Received: 02/26/20 09:20

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	**14**		1.1	0.42	0.21	ug/L		03/02/20 19:55	1
1,3-Dinitrobenzene	0.21	U	0.42	0.21	0.094	ug/L		03/02/20 19:55	1
2,4,6-Trinitrotoluene	**8.2**		0.42	0.42	0.17	ug/L		03/02/20 19:55	1
2,4-Dinitrotoluene	0.21	U	0.42	0.21	0.089	ug/L		03/02/20 19:55	1
2,6-Dinitrotoluene	0.21	U	0.21	0.21	0.068	ug/L		03/02/20 19:55	1

Client Sample ID: OS001-DP02-35

Lab Sample ID: 280-134063-3

Date Collected: 02/24/20 15:40

Matrix: Water

Date Received: 02/26/20 09:20

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2-Amino-4,6-dinitrotoluene	**0.43**	**Q**	0.21	0.13	0.054	ug/L		03/02/20 19:55	1
2-Nitrotoluene	0.21	U Q	0.42	0.21	0.090	ug/L		03/02/20 19:55	1
3-Nitrotoluene	0.42	U M Q	0.42	0.42	0.21	ug/L		03/02/20 19:55	1
4-Amino-2,6-dinitrotoluene	0.13	U Q	0.21	0.13	0.061	ug/L		03/02/20 19:55	1
4-Nitrotoluene	0.42	U M Q	1.1	0.42	0.21	ug/L		03/02/20 19:55	1
HMX	0.21	U M	0.42	0.21	0.093	ug/L		03/02/20 19:55	1
MNX	0.42	U M Q	2.1	0.42	0.16	ug/L		03/02/20 19:55	1
Nitrobenzene	0.21	U	0.42	0.21	0.096	ug/L		03/02/20 19:55	1
RDX	0.42	U	0.42	0.42	0.17	ug/L		03/02/20 19:55	1
Tetryl	0.21	U M	0.25	0.21	0.084	ug/L		03/02/20 19:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*86*		*83 - 119*	*02/28/20 13:30*	*03/02/20 19:55*	*1*
1,2-Dinitrobenzene	*107*		*83 - 119*	*02/28/20 13:30*	*03/04/20 09:11*	*1*

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	**2.0**	**Q H**	1.0	0.41	0.21	ug/L		03/05/20 12:18	1
1,3-Dinitrobenzene	0.21	U Q H	0.41	0.21	0.092	ug/L		03/05/20 12:18	1
2,4,6-Trinitrotoluene	0.41	U Q H M	0.41	0.41	0.17	ug/L		03/09/20 21:18	1
2,4-Dinitrotoluene	0.21	U Q H	0.41	0.21	0.086	ug/L		03/05/20 12:18	1
2,6-Dinitrotoluene	0.21	U Q H	0.21	0.21	0.067	ug/L		03/05/20 12:18	1
2-Amino-4,6-dinitrotoluene	0.12	U Q H	0.21	0.12	0.052	ug/L		03/05/20 12:18	1
2-Nitrotoluene	0.21	U Q H	0.41	0.21	0.088	ug/L		03/05/20 12:18	1
3-Nitrotoluene	0.41	U Q H	0.41	0.41	0.20	ug/L		03/05/20 12:18	1
4-Amino-2,6-dinitrotoluene	0.12	U Q H	0.21	0.12	0.060	ug/L		03/05/20 12:18	1
4-Nitrotoluene	0.41	U Q H	1.0	0.41	0.21	ug/L		03/05/20 12:18	1
HMX	0.21	U Q H	0.41	0.21	0.090	ug/L		03/05/20 12:18	1
MNX	0.41	U H Q	2.1	0.41	0.16	ug/L		03/05/20 12:18	1
Nitrobenzene	0.21	U Q H	0.41	0.21	0.094	ug/L		03/05/20 12:18	1
RDX	0.41	U Q H	0.41	0.41	0.16	ug/L		03/05/20 12:18	1
Tetryl	0.21	U Q H M	0.25	0.21	0.082	ug/L		03/05/20 12:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*15*	*Q*	*83 - 119*	*03/04/20 07:23*	*03/05/20 12:18*	*1*
1,2-Dinitrobenzene	*9*	*Q M*	*83 - 119*	*03/04/20 07:23*	*03/09/20 21:18*	*1*

Client Sample ID: OS001-DP02-45

Lab Sample ID: 280-134063-4

Date Collected: 02/24/20 16:30

Matrix: Water

Date Received: 02/26/20 09:20

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	**17**	**J1**	1.1	0.42	0.21	ug/L		03/02/20 21:27	1
1,3-Dinitrobenzene	0.21	U	0.42	0.21	0.094	ug/L		03/02/20 21:27	1
2,4,6-Trinitrotoluene	**1.1**		0.42	0.42	0.17	ug/L		03/02/20 21:27	1
2,4-Dinitrotoluene	0.21	U	0.42	0.21	0.089	ug/L		03/02/20 21:27	1
2,6-Dinitrotoluene	0.21	U	0.21	0.21	0.068	ug/L		03/02/20 21:27	1
2-Amino-4,6-dinitrotoluene	**0.67**	**Q**	0.21	0.13	0.054	ug/L		03/02/20 21:27	1
2-Nitrotoluene	0.21	U Q J1	0.42	0.21	0.091	ug/L		03/02/20 21:27	1
3-Nitrotoluene	0.42	U M Q	0.42	0.42	0.21	ug/L		03/02/20 21:27	1

Client Sample ID: OS001-DP02-45

Lab Sample ID: 280-134063-4

Date Collected: 02/24/20 16:30

Matrix: Water

Date Received: 02/26/20 09:20

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
4-Amino-2,6-dinitrotoluene	0.13	U Q	0.21	0.13	0.061	ug/L		03/02/20 21:27	1
4-Nitrotoluene	0.42	U M Q	1.1	0.42	0.21	ug/L		03/02/20 21:27	1
HMX	0.21	U	0.42	0.21	0.093	ug/L		03/02/20 21:27	1
MNX	0.42	U Q	2.1	0.42	0.16	ug/L		03/02/20 21:27	1
Nitrobenzene	0.21	U	0.42	0.21	0.097	ug/L		03/02/20 21:27	1
RDX	0.42	U	0.42	0.42	0.17	ug/L		03/04/20 09:46	1
Tetryl	0.21	U J1	0.25	0.21	0.084	ug/L		03/02/20 21:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*85*		*83 - 119*	*02/28/20 13:30*	*03/02/20 21:27*	*1*
1,2-Dinitrobenzene	*99*		*83 - 119*	*02/28/20 13:30*	*03/04/20 09:46*	*1*

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	**21**	**H J1**	1.1	0.43	0.21	ug/L		03/05/20 12:41	1
1,3-Dinitrobenzene	0.21	U H J1	0.43	0.21	0.095	ug/L		03/05/20 12:41	1
2,4,6-Trinitrotoluene	0.43	U H J1	0.43	0.43	0.17	ug/L		03/09/20 21:53	1
2,4-Dinitrotoluene	0.21	U H J1	0.43	0.21	0.090	ug/L		03/05/20 12:41	1
2,6-Dinitrotoluene	0.21	U H J1	0.21	0.21	0.069	ug/L		03/05/20 12:41	1
2-Amino-4,6-dinitrotoluene	0.13	U H J1	0.21	0.13	0.054	ug/L		03/09/20 21:53	1
2-Nitrotoluene	0.21	U H J1	0.43	0.21	0.091	ug/L		03/05/20 12:41	1
3-Nitrotoluene	0.43	U H M J1	0.43	0.43	0.21	ug/L		03/05/20 12:41	1
4-Amino-2,6-dinitrotoluene	0.13	U H J1	0.21	0.13	0.062	ug/L		03/05/20 12:41	1
4-Nitrotoluene	0.43	U H M J1	1.1	0.43	0.21	ug/L		03/05/20 12:41	1
HMX	0.21	U H J1	0.43	0.21	0.094	ug/L		03/05/20 12:41	1
MNX	0.43	U H	2.1	0.43	0.16	ug/L		03/05/20 12:41	1
Nitrobenzene	0.21	U H J1	0.43	0.21	0.097	ug/L		03/05/20 12:41	1
RDX	0.43	U H J1	0.43	0.43	0.17	ug/L		03/09/20 21:53	1
Tetryl	0.21	U H J1	0.26	0.21	0.085	ug/L		03/05/20 12:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*90*		*83 - 119*	*03/04/20 07:23*	*03/05/20 12:41*	*1*
1,2-Dinitrobenzene	*111*		*83 - 119*	*03/04/20 07:23*	*03/09/20 21:53*	*1*

Default Detection Limits

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

Job ID: 280-134063-1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Prep: 3535

Analyte	LOQ	DL	Units
1,3,5-Trinitrobenzene	1.0	0.20	ug/L
1,3-Dinitrobenzene	0.40	0.089	ug/L
2,4,6-Trinitrotoluene	0.40	0.16	ug/L
2,4-Dinitrotoluene	0.40	0.084	ug/L
2,6-Dinitrotoluene	0.20	0.065	ug/L
2-Amino-4,6-dinitrotoluene	0.20	0.051	ug/L
2-Nitrotoluene	0.40	0.086	ug/L
3-Nitrotoluene	0.40	0.20	ug/L
4-Amino-2,6-dinitrotoluene	0.20	0.058	ug/L
4-Nitrotoluene	1.0	0.20	ug/L
HMX	0.40	0.088	ug/L
MNX	2.0	0.15	ug/L
Nitrobenzene	0.40	0.091	ug/L
RDX	0.40	0.16	ug/L
Tetryl	0.24	0.079	ug/L

Surrogate Summary

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

Job ID: 280-134063-1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

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

Lab Sample ID	Client Sample ID	12DNB1 (83-119)
280-134063-1	OS001-DP02-25	102 M
280-134063-1 - RE	OS001-DP02-25	8 Q
280-134063-2	OS001-DP502-25	92 M
280-134063-2 - RE	OS001-DP502-25	68 Q
280-134063-3	OS001-DP02-35	86
280-134063-3 - RE	OS001-DP02-35	15 Q
280-134063-4	OS001-DP02-45	85
280-134063-4 - RE	OS001-DP02-45	90
280-134063-4 MS	OS001-DP02-45	81 Q
280-134063-4 MS - RE	OS001-DP02-45	17 Q
280-134063-4 MSD	OS001-DP02-45	79 Q
280-134063-4 MSD - RE	OS001-DP02-45	16 Q
LCS 280-487255/2-A	Lab Control Sample	87
LCS 280-487255/5-A	Lab Control Sample	100
LCS 280-487600/2-A	Lab Control Sample	100
LCS 280-487600/3-A	Lab Control Sample	92
LCSD 280-487255/6-A	Lab Control Sample Dup	93
LCSD 280-487600/4-A	Lab Control Sample Dup	63 Q
MB 280-487255/1-A	Method Blank	96
MB 280-487600/1-A	Method Blank	93

Percent Surrogate Recovery (Acceptance Limits)

Surrogate Legend

12DNB = 1,2-Dinitrobenzene

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

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

Lab Sample ID	Client Sample ID	12DNB2 (83-119)
280-134063-1	OS001-DP02-25	107
280-134063-1 - RE	OS001-DP02-25	0.3 Q M
280-134063-2	OS001-DP502-25	91
280-134063-2 - RE	OS001-DP502-25	96 M
280-134063-3	OS001-DP02-35	107
280-134063-3 - RE	OS001-DP02-35	9 Q M
280-134063-4	OS001-DP02-45	99
280-134063-4 - RE	OS001-DP02-45	111

Percent Surrogate Recovery (Acceptance Limits)

Surrogate Legend

12DNB = 1,2-Dinitrobenzene

QC Sample Results

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

Job ID: 280-134063-1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Lab Sample ID: MB 280-487255/1-A
Matrix: Water
Analysis Batch: 487395

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 487255

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.40	U	1.0	0.40	0.20	ug/L		03/02/20 16:29	1
1,3-Dinitrobenzene	0.20	U	0.40	0.20	0.089	ug/L		03/02/20 16:29	1
2,4,6-Trinitrotoluene	0.40	U	0.40	0.40	0.16	ug/L		03/02/20 16:29	1
2,4-Dinitrotoluene	0.20	U	0.40	0.20	0.084	ug/L		03/02/20 16:29	1
2,6-Dinitrotoluene	0.20	U	0.20	0.20	0.065	ug/L		03/02/20 16:29	1
2-Amino-4,6-dinitrotoluene	0.12	U	0.20	0.12	0.051	ug/L		03/02/20 16:29	1
2-Nitrotoluene	0.20	U	0.40	0.20	0.086	ug/L		03/02/20 16:29	1
3-Nitrotoluene	0.40	U M	0.40	0.40	0.20	ug/L		03/02/20 16:29	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.20	0.12	0.058	ug/L		03/02/20 16:29	1
4-Nitrotoluene	0.40	U	1.0	0.40	0.20	ug/L		03/02/20 16:29	1
HMX	0.20	U	0.40	0.20	0.088	ug/L		03/02/20 16:29	1
MNX	0.40	U M	2.0	0.40	0.15	ug/L		03/02/20 16:29	1
Nitrobenzene	0.20	U	0.40	0.20	0.091	ug/L		03/02/20 16:29	1
RDX	0.40	U	0.40	0.40	0.16	ug/L		03/02/20 16:29	1
Tetryl	0.20	U	0.24	0.20	0.079	ug/L		03/02/20 16:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*96*		*83 - 119*	*02/28/20 13:30*	*03/02/20 16:29*	*1*

Lab Sample ID: LCS 280-487255/2-A
Matrix: Water
Analysis Batch: 487395

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 487255

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3,5-Trinitrobenzene	2.00	1.85		ug/L		92	73 - 125
1,3-Dinitrobenzene	2.00	1.74		ug/L		87	78 - 120
2,4,6-Trinitrotoluene	2.00	1.71		ug/L		86	71 - 123
2,4-Dinitrotoluene	2.00	1.68		ug/L		84	78 - 120
2,6-Dinitrotoluene	2.00	1.61		ug/L		80	77 - 127
2-Amino-4,6-dinitrotoluene	2.00	1.54	Q	ug/L		77	79 - 120
2-Nitrotoluene	2.00	1.12	Q	ug/L		56	70 - 127
3-Nitrotoluene	2.00	1.25	Q	ug/L		63	73 - 125
4-Amino-2,6-dinitrotoluene	2.00	1.44	Q	ug/L		72	76 - 125
4-Nitrotoluene	2.00	1.27	Q	ug/L		64	71 - 127
HMX	2.00	1.84	M	ug/L		92	65 - 135
Nitrobenzene	2.00	1.36		ug/L		68	65 - 134
RDX	2.00	1.96		ug/L		98	68 - 130
Tetryl	2.00	2.07		ug/L		103	64 - 128

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

Lab Sample ID: LCS 280-487255/5-A
Matrix: Water
Analysis Batch: 487395

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 487255

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
MNX	2.33	2.45		ug/L		105	57 - 132

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

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

Lab Sample ID: LCSD 280-487255/6-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 487395 — **Prep Batch: 487255**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
MNX			2.33	2.39		ug/L		102	57 - 132	2	30

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

Lab Sample ID: 280-134063-4 MS — **Client Sample ID: OS001-DP02-45**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 487395 — **Prep Batch: 487255**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,3,5-Trinitrobenzene	17	J1	2.20	20.3	4 Q	ug/L		157	73 - 125		
1,3-Dinitrobenzene	0.21	U	2.20	2.14	Q	ug/L		97	78 - 120		
2,4,6-Trinitrotoluene	1.1		2.20	3.31	Q	ug/L		100	71 - 123		
2,4-Dinitrotoluene	0.21	U	2.20	2.00	Q	ug/L		91	78 - 120		
2,6-Dinitrotoluene	0.21	U	2.20	2.12	Q	ug/L		96	77 - 127		
2-Amino-4,6-dinitrotoluene	0.67	Q	2.20	2.61	Q	ug/L		88	79 - 120		
2-Nitrotoluene	0.21	U Q J1	2.20	1.42	J1 Q	ug/L		64	70 - 127		
3-Nitrotoluene	0.42	U M Q	2.20	1.69	Q	ug/L		77	73 - 125		
4-Amino-2,6-dinitrotoluene	0.13	U Q	2.20	2.11	Q	ug/L		96	76 - 125		
4-Nitrotoluene	0.42	U M Q	2.20	1.77	Q	ug/L		80	71 - 127		
HMX	0.21	U	2.20	1.92	M Q	ug/L		87	65 - 135		
Nitrobenzene	0.21	U	2.20	1.61	Q	ug/L		73	65 - 134		
RDX	0.21	J M	2.20	2.21	M Q	ug/L		91	68 - 130		
Tetryl	0.21	U J1	2.20	9.93	M J1 Q	ug/L		451	64 - 128		

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dinitrobenzene	81	Q	83 - 119

Lab Sample ID: 280-134063-4 MSD — **Client Sample ID: OS001-DP02-45**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 487395 — **Prep Batch: 487255**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3,5-Trinitrobenzene	17	J1	2.16	16.5	4 Q	ug/L		-19	73 - 125	21	30
1,3-Dinitrobenzene	0.21	U	2.16	2.01	Q	ug/L		93	78 - 120	6	30
2,4,6-Trinitrotoluene	1.1		2.16	2.97	Q	ug/L		86	71 - 123	11	30
2,4-Dinitrotoluene	0.21	U	2.16	1.89	Q	ug/L		87	78 - 120	6	30
2,6-Dinitrotoluene	0.21	U	2.16	1.99	Q	ug/L		92	77 - 127	6	30
2-Amino-4,6-dinitrotoluene	0.67	Q	2.16	2.37	Q	ug/L		79	79 - 120	10	30
2-Nitrotoluene	0.21	U Q J1	2.16	1.30	J1 Q	ug/L		60	70 - 127	9	30
3-Nitrotoluene	0.42	U M Q	2.16	1.58	Q	ug/L		73	73 - 125	6	30
4-Amino-2,6-dinitrotoluene	0.13	U Q	2.16	1.95	Q	ug/L		90	76 - 125	7	30
4-Nitrotoluene	0.42	U M Q	2.16	1.60	Q	ug/L		74	71 - 127	10	30
HMX	0.21	U	2.16	2.22	M Q	ug/L		103	65 - 135	14	30

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

Lab Sample ID: 280-134063-4 MSD
Matrix: Water
Analysis Batch: 487395

Client Sample ID: OS001-DP02-45
Prep Type: Total/NA
Prep Batch: 487255

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrobenzene	0.21	U	2.16	1.47	Q	ug/L		68	65 - 134	9	30
RDX	0.21	J M	2.16	2.32	Q	ug/L		98	68 - 130	5	30
Tetryl	0.21	U J1	2.16	8.41	M J1 Q	ug/L		390	64 - 128	17	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dinitrobenzene	*79*	*Q*	*83 - 119*

Lab Sample ID: MB 280-487600/1-A
Matrix: Water
Analysis Batch: 487660

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 487600

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.40	U	1.0	0.40	0.20	ug/L		03/05/20 10:00	1
1,3-Dinitrobenzene	0.20	U	0.40	0.20	0.089	ug/L		03/05/20 10:00	1
2,4,6-Trinitrotoluene	0.40	U	0.40	0.40	0.16	ug/L		03/05/20 10:00	1
2,4-Dinitrotoluene	0.20	U	0.40	0.20	0.084	ug/L		03/05/20 10:00	1
2,6-Dinitrotoluene	0.20	U	0.20	0.20	0.065	ug/L		03/05/20 10:00	1
2-Amino-4,6-dinitrotoluene	0.12	U	0.20	0.12	0.051	ug/L		03/05/20 10:00	1
2-Nitrotoluene	0.20	U	0.40	0.20	0.086	ug/L		03/05/20 10:00	1
3-Nitrotoluene	0.40	U	0.40	0.40	0.20	ug/L		03/05/20 10:00	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.20	0.12	0.058	ug/L		03/05/20 10:00	1
4-Nitrotoluene	0.40	U	1.0	0.40	0.20	ug/L		03/05/20 10:00	1
HMX	0.20	U	0.40	0.20	0.088	ug/L		03/05/20 10:00	1
MNX	0.40	U	2.0	0.40	0.15	ug/L		03/05/20 10:00	1
Nitrobenzene	0.20	U	0.40	0.20	0.091	ug/L		03/05/20 10:00	1
RDX	0.40	U	0.40	0.40	0.16	ug/L		03/05/20 10:00	1
Tetryl	0.20	U	0.24	0.20	0.079	ug/L		03/05/20 10:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*93*		*83 - 119*	*03/04/20 07:23*	*03/05/20 10:00*	*1*

Lab Sample ID: LCS 280-487600/2-A
Matrix: Water
Analysis Batch: 487660

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 487600

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3,5-Trinitrobenzene	2.00	2.06		ug/L		103	73 - 125
1,3-Dinitrobenzene	2.00	1.99		ug/L		100	78 - 120
2,4,6-Trinitrotoluene	2.00	1.99		ug/L		99	71 - 123
2,4-Dinitrotoluene	2.00	1.90		ug/L		95	78 - 120
2,6-Dinitrotoluene	2.00	1.96		ug/L		98	77 - 127
2-Amino-4,6-dinitrotoluene	2.00	1.91		ug/L		96	79 - 120
2-Nitrotoluene	2.00	1.78		ug/L		89	70 - 127
3-Nitrotoluene	2.00	1.94		ug/L		97	73 - 125
4-Amino-2,6-dinitrotoluene	2.00	1.80		ug/L		90	76 - 125
4-Nitrotoluene	2.00	1.84		ug/L		92	71 - 127
HMX	2.00	1.93	M	ug/L		96	65 - 135
Nitrobenzene	2.00	1.90		ug/L		95	65 - 134

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

Lab Sample ID: LCS 280-487600/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 487660 — **Prep Batch: 487600**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
RDX	2.00	1.85		ug/L		93	68 - 130
Tetryl	2.00	1.92		ug/L		96	64 - 128

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

Lab Sample ID: LCS 280-487600/3-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 487660 — **Prep Batch: 487600**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
MNX	2.33	1.96	J	ug/L		84	57 - 132

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

Lab Sample ID: LCSD 280-487600/4-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 487660 — **Prep Batch: 487600**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
MNX	2.33	1.62	J	ug/L		70	57 - 132	19	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dinitrobenzene	*63*	*Q*	*83 - 119*

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

Lab Sample ID: 280-134063-4 MS — **Client Sample ID: OS001-DP02-45**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 487660 — **Prep Batch: 487600**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3,5-Trinitrobenzene - RE	21	H J1	2.06	3.56	Q H 4	ug/L		-830	73 - 125
1,3-Dinitrobenzene - RE	0.21	U H J1	2.06	0.358	J Q H J1	ug/L		17	78 - 120
2,4,6-Trinitrotoluene - RE	1.7	H J1	2.06	0.589	Q H J1	ug/L		-54	71 - 123
2,4-Dinitrotoluene - RE	0.21	U H J1	2.06	0.328	J Q H J1	ug/L		16	78 - 120
2,6-Dinitrotoluene - RE	0.21	U H J1	2.06	0.366	Q H J1	ug/L		18	77 - 127
2-Amino-4,6-dinitrotoluene - RE	0.68	H J1	2.06	0.427	Q H J1	ug/L		-12	79 - 120
2-Nitrotoluene - RE	0.21	U H J1	2.06	0.280	J Q H J1	ug/L		14	70 - 127
3-Nitrotoluene - RE	0.43	U H M J1	2.06	0.361	J Q H J1	ug/L		18	73 - 125
4-Amino-2,6-dinitrotoluene - RE	0.13	U H J1	2.06	0.355	Q H J1	ug/L		17	76 - 125
4-Nitrotoluene - RE	0.43	U H M J1	2.06	0.286	J Q H J1	ug/L		14	71 - 127
HMX - RE	0.21	U H J1	2.06	0.340	J Q H J1 M	ug/L		17	65 - 135
Nitrobenzene - RE	0.21	U H J1	2.06	0.322	J Q H J1	ug/L		16	65 - 134
RDX - RE	0.28	H J1	2.06	0.460	Q H J1	ug/L		9	68 - 130
Tetryl - RE	0.21	U H J1	2.06	0.21	U Q H J1	ug/L		0	64 - 128

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

Lab Sample ID: 280-134063-4 MS
Matrix: Water
Analysis Batch: 487660

Client Sample ID: OS001-DP02-45
Prep Type: Total/NA
Prep Batch: 487600

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dinitrobenzene - RE	*17*	*Q*	*83 - 119*

Lab Sample ID: 280-134063-4 MSD
Matrix: Water
Analysis Batch: 487660

Client Sample ID: OS001-DP02-45
Prep Type: Total/NA
Prep Batch: 487600

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3,5-Trinitrobenzene - RE	21	H J1	2.09	3.26	Q H 4	ug/L		-832	73 - 125	9	30
1,3-Dinitrobenzene - RE	0.21	U H J1	2.09	0.347	J Q H J1	ug/L		17	78 - 120	3	30
2,4,6-Trinitrotoluene - RE	1.7	H J1	2.09	0.572	Q H J1	ug/L		-54	71 - 123	3	30
2,4-Dinitrotoluene - RE	0.21	U H J1	2.09	0.322	J Q H J1	ug/L		15	78 - 120	2	30
2,6-Dinitrotoluene - RE	0.21	U H J1	2.09	0.343	Q H J1	ug/L		16	77 - 127	6	30
2-Amino-4,6-dinitrotoluene - RE	0.68	H J1	2.09	0.434	Q H J1	ug/L		-12	79 - 120	1	30
2-Nitrotoluene - RE	0.21	U H J1	2.09	0.291	J Q H J1	ug/L		14	70 - 127	4	30
3-Nitrotoluene - RE	0.43	U H M J1	2.09	0.395	J Q H J1	ug/L		19	73 - 125	9	30
4-Amino-2,6-dinitrotoluene - RE	0.13	U H J1	2.09	0.356	Q H J1	ug/L		17	76 - 125	0	30
4-Nitrotoluene - RE	0.43	U H M J1	2.09	0.313	J Q H J1	ug/L		15	71 - 127	9	30
HMX - RE	0.21	U H J1	2.09	11.8	Q H J1	ug/L		563	65 - 135	189	30
Nitrobenzene - RE	0.21	U H J1	2.09	0.324	J Q H J1	ug/L		16	65 - 134	1	30
RDX - RE	0.28	H J1	2.09	0.416	J Q H J1	ug/L		7	68 - 130	10	30
Tetryl - RE	0.21	U H J1	2.09	0.21	U Q H J1	ug/L		0	64 - 128	NC	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dinitrobenzene - RE	*16*	*Q*	*83 - 119*

QC Association Summary

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

Job ID: 280-134063-1

HPLC/IC

Prep Batch: 487255

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-134063-1	OS001-DP02-25	Total/NA	Water	3535	
280-134063-2	OS001-DP502-25	Total/NA	Water	3535	
280-134063-3	OS001-DP02-35	Total/NA	Water	3535	
280-134063-4	OS001-DP02-45	Total/NA	Water	3535	
MB 280-487255/1-A	Method Blank	Total/NA	Water	3535	
LCS 280-487255/2-A	Lab Control Sample	Total/NA	Water	3535	
LCS 280-487255/5-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 280-487255/6-A	Lab Control Sample Dup	Total/NA	Water	3535	
280-134063-4 MS	OS001-DP02-45	Total/NA	Water	3535	
280-134063-4 MSD	OS001-DP02-45	Total/NA	Water	3535	

Analysis Batch: 487395

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-134063-1	OS001-DP02-25	Total/NA	Water	8330A	487255
280-134063-2	OS001-DP502-25	Total/NA	Water	8330A	487255
280-134063-3	OS001-DP02-35	Total/NA	Water	8330A	487255
280-134063-4	OS001-DP02-45	Total/NA	Water	8330A	487255
MB 280-487255/1-A	Method Blank	Total/NA	Water	8330A	487255
LCS 280-487255/2-A	Lab Control Sample	Total/NA	Water	8330A	487255
LCS 280-487255/5-A	Lab Control Sample	Total/NA	Water	8330A	487255
LCSD 280-487255/6-A	Lab Control Sample Dup	Total/NA	Water	8330A	487255
280-134063-4 MS	OS001-DP02-45	Total/NA	Water	8330A	487255
280-134063-4 MSD	OS001-DP02-45	Total/NA	Water	8330A	487255

Analysis Batch: 487545

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-134063-1	OS001-DP02-25	Total/NA	Water	8330A	487255
280-134063-2	OS001-DP502-25	Total/NA	Water	8330A	487255
280-134063-3	OS001-DP02-35	Total/NA	Water	8330A	487255
280-134063-4	OS001-DP02-45	Total/NA	Water	8330A	487255

Prep Batch: 487600

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-134063-1 - RE	OS001-DP02-25	Total/NA	Water	3535	
280-134063-2 - RE	OS001-DP502-25	Total/NA	Water	3535	
280-134063-3 - RE	OS001-DP02-35	Total/NA	Water	3535	
280-134063-4 - RE	OS001-DP02-45	Total/NA	Water	3535	
MB 280-487600/1-A	Method Blank	Total/NA	Water	3535	
LCS 280-487600/2-A	Lab Control Sample	Total/NA	Water	3535	
LCS 280-487600/3-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 280-487600/4-A	Lab Control Sample Dup	Total/NA	Water	3535	
280-134063-4 MS - RE	OS001-DP02-45	Total/NA	Water	3535	
280-134063-4 MSD - RE	OS001-DP02-45	Total/NA	Water	3535	

Analysis Batch: 487660

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-134063-1 - RE	OS001-DP02-25	Total/NA	Water	8330A	487600
280-134063-2 - RE	OS001-DP502-25	Total/NA	Water	8330A	487600
280-134063-3 - RE	OS001-DP02-35	Total/NA	Water	8330A	487600
280-134063-4 - RE	OS001-DP02-45	Total/NA	Water	8330A	487600
MB 280-487600/1-A	Method Blank	Total/NA	Water	8330A	487600

HPLC/IC (Continued)

Analysis Batch: 487660 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 280-487600/2-A	Lab Control Sample	Total/NA	Water	8330A	487600
LCS 280-487600/3-A	Lab Control Sample	Total/NA	Water	8330A	487600
LCSD 280-487600/4-A	Lab Control Sample Dup	Total/NA	Water	8330A	487600
280-134063-4 MS - RE	OS001-DP02-45	Total/NA	Water	8330A	487600
280-134063-4 MSD - RE	OS001-DP02-45	Total/NA	Water	8330A	487600

Analysis Batch: 488169

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-134063-1 - RE	OS001-DP02-25	Total/NA	Water	8330A	487600
280-134063-2 - RE	OS001-DP502-25	Total/NA	Water	8330A	487600
280-134063-3 - RE	OS001-DP02-35	Total/NA	Water	8330A	487600
280-134063-4 - RE	OS001-DP02-45	Total/NA	Water	8330A	487600

Lab Chronicle

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

Job ID: 280-134063-1

Client Sample ID: OS001-DP02-25

Lab Sample ID: 280-134063-1

Date Collected: 02/24/20 14:55

Matrix: Water

Date Received: 02/26/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			462 mL	5 mL	487255	02/28/20 13:30	MLA	TAL DEN
Total/NA	Analysis	8330A		1	1 mL	1.0 mL	487545	03/04/20 08:01	CBB	TAL DEN
Total/NA	Prep	3535	RE		455.4 mL	5 mL	487600	03/04/20 07:23	JT	TAL DEN
Total/NA	Analysis	8330A	RE	1			488169	03/09/20 20:08	CBB	TAL DEN
Total/NA	Prep	3535			462 mL	5 mL	487255	02/28/20 13:30	MLA	TAL DEN
Total/NA	Analysis	8330A		1			487395	03/02/20 19:09	CBB	TAL DEN
Total/NA	Prep	3535	RE		455.4 mL	5 mL	487600	03/04/20 07:23	JT	TAL DEN
Total/NA	Analysis	8330A	RE	1			487660	03/05/20 11:32	CBB	TAL DEN

Client Sample ID: OS001-DP502-25

Lab Sample ID: 280-134063-2

Date Collected: 02/24/20 15:00

Matrix: Water

Date Received: 02/26/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			474.7 mL	5 mL	487255	02/28/20 13:30	MLA	TAL DEN
Total/NA	Analysis	8330A		1	1 mL	1.0 mL	487545	03/04/20 08:36	CBB	TAL DEN
Total/NA	Prep	3535	RE		480.6 mL	5 mL	487600	03/04/20 07:23	JT	TAL DEN
Total/NA	Analysis	8330A	RE	1			488169	03/09/20 20:43	CBB	TAL DEN
Total/NA	Prep	3535			474.7 mL	5 mL	487255	02/28/20 13:30	MLA	TAL DEN
Total/NA	Analysis	8330A		1			487395	03/02/20 19:32	CBB	TAL DEN
Total/NA	Prep	3535	RE		480.6 mL	5 mL	487600	03/04/20 07:23	JT	TAL DEN
Total/NA	Analysis	8330A	RE	1			487660	03/05/20 11:55	CBB	TAL DEN

Client Sample ID: OS001-DP02-35

Lab Sample ID: 280-134063-3

Date Collected: 02/24/20 15:40

Matrix: Water

Date Received: 02/26/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			473.3 mL	5 mL	487255	02/28/20 13:30	MLA	TAL DEN
Total/NA	Analysis	8330A		1	1 mL	1.0 mL	487545	03/04/20 09:11	CBB	TAL DEN
Total/NA	Prep	3535	RE		484.5 mL	5 mL	487600	03/04/20 07:23	JT	TAL DEN
Total/NA	Analysis	8330A	RE	1			488169	03/09/20 21:18	CBB	TAL DEN
Total/NA	Prep	3535			473.3 mL	5 mL	487255	02/28/20 13:30	MLA	TAL DEN
Total/NA	Analysis	8330A		1			487395	03/02/20 19:55	CBB	TAL DEN
Total/NA	Prep	3535	RE		484.5 mL	5 mL	487600	03/04/20 07:23	JT	TAL DEN
Total/NA	Analysis	8330A	RE	1			487660	03/05/20 12:18	CBB	TAL DEN

Client Sample ID: OS001-DP02-45

Lab Sample ID: 280-134063-4

Date Collected: 02/24/20 16:30

Matrix: Water

Date Received: 02/26/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			471.4 mL	5 mL	487255	02/28/20 13:30	MLA	TAL DEN
Total/NA	Analysis	8330A		1	1 mL	1.0 mL	487545	03/04/20 09:46	CBB	TAL DEN

Lab Chronicle

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

Job ID: 280-134063-1

Client Sample ID: OS001-DP02-45

Date Collected: 02/24/20 16:30
Date Received: 02/26/20 09:20

Lab Sample ID: 280-134063-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535	RE		467.7 mL	5 mL	487600	03/04/20 07:23	JT	TAL DEN
Total/NA	Analysis	8330A	RE	1			488169	03/09/20 21:53	CBB	TAL DEN
Total/NA	Prep	3535			471.4 mL	5 mL	487255	02/28/20 13:30	MLA	TAL DEN
Total/NA	Analysis	8330A		1			487395	03/02/20 21:27	CBB	TAL DEN
Total/NA	Prep	3535	RE		467.7 mL	5 mL	487600	03/04/20 07:23	JT	TAL DEN
Total/NA	Analysis	8330A	RE	1			487660	03/05/20 12:41	CBB	TAL DEN

Laboratory References:

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

Accreditation/Certification Summary

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

Job ID: 280-134063-1

Laboratory: Eurofins TestAmerica, Denver

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	2907.01	10-31-21

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte

Method Summary

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

Job ID: 280-134063-1

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

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

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

Sample Summary

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

Job ID: 280-134063-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
280-134063-1	OS001-DP02-25	Water	02/24/20 14:55	02/26/20 09:20	
280-134063-2	OS001-DP502-25	Water	02/24/20 15:00	02/26/20 09:20	
280-134063-3	OS001-DP02-35	Water	02/24/20 15:40	02/26/20 09:20	
280-134063-4	OS001-DP02-45	Water	02/24/20 16:30	02/26/20 09:20	

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 487544

Lab Sample ID: IC 280-487544/7 Client Sample ID:

Date Analyzed: 03/03/20 18:01 Lab File ID: 03030007.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitroglycerin	15.73	Baseline	beckerc	03/04/20 08:29

Lab Sample ID: IC 280-487544/8 Client Sample ID:

Date Analyzed: 03/03/20 18:36 Lab File ID: 03030008.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitroglycerin	15.79	Baseline	beckerc	03/04/20 08:29

Lab Sample ID: IC 280-487544/9 Client Sample ID:

Date Analyzed: 03/03/20 19:11 Lab File ID: 03030009.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitroglycerin	15.81	Baseline	beckerc	03/04/20 08:22

Lab Sample ID: IC 280-487544/10 Client Sample ID:

Date Analyzed: 03/03/20 19:46 Lab File ID: 03030010.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitroglycerin	15.81	Baseline	beckerc	03/04/20 08:23

Lab Sample ID: IC 280-487544/11 Client Sample ID:

Date Analyzed: 03/03/20 20:21 Lab File ID: 03030011.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitroglycerin	15.82	Baseline	beckerc	03/04/20 08:23
PETN	25.29	Baseline	beckerc	03/04/20 08:23

8330A

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 487544

Lab Sample ID: IC 280-487544/12 Client Sample ID:

Date Analyzed: 03/03/20 20:56 Lab File ID: 03030012.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PETN	25.29	Baseline	beckerc	03/04/20 08:24

Lab Sample ID: IC 280-487544/13 Client Sample ID:

Date Analyzed: 03/03/20 21:31 Lab File ID: 03030013.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PETN	25.30	Baseline	beckerc	03/04/20 08:24

Lab Sample ID: IC 280-487544/14 Client Sample ID:

Date Analyzed: 03/03/20 22:06 Lab File ID: 03030014.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3-Dinitrobenzene	15.56	Baseline	beckerc	03/04/20 08:28
Nitroglycerin	15.81	Baseline	beckerc	03/04/20 08:27
2-Nitrotoluene	16.58	Baseline	beckerc	03/04/20 08:28
4-Nitrotoluene	16.85	Baseline	beckerc	03/04/20 08:28
4-Amino-2,6-dinitrotoluene	17.17	Baseline	beckerc	03/04/20 08:28
3-Nitrotoluene	17.77	Baseline	beckerc	03/04/20 08:28
2-Amino-4,6-dinitrotoluene	18.01	Baseline	beckerc	03/04/20 08:28
1,3,5-Trinitrobenzene	18.91	Baseline	beckerc	03/04/20 08:28
2,6-Dinitrotoluene	19.85	Baseline	beckerc	03/04/20 08:28
2,4-Dinitrotoluene	20.31	Baseline	beckerc	03/04/20 08:28
2,4,6-Trinitrotoluene	24.71	Baseline	beckerc	03/04/20 08:27
PETN	25.47	Baseline	beckerc	03/04/20 08:27

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 487544

Lab Sample ID: ICV 280-487544/15 Client Sample ID:

Date Analyzed: 03/03/20 22:41 Lab File ID: 03030015.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitroglycerin	15.79	Baseline	beckerc	03/04/20 08:28

Lab Sample ID: IC 280-487544/19 Client Sample ID:

Date Analyzed: 03/04/20 01:01 Lab File ID: 03030019.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	5.40	Baseline	beckerc	03/05/20 08:43

Lab Sample ID: IC 280-487544/20 Client Sample ID:

Date Analyzed: 03/04/20 01:36 Lab File ID: 03030020.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	5.40	Baseline	beckerc	03/05/20 08:43

Lab Sample ID: IC 280-487544/21 Client Sample ID:

Date Analyzed: 03/04/20 02:11 Lab File ID: 03030021.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	5.40	Baseline	beckerc	03/05/20 08:43

Lab Sample ID: IC 280-487544/22 Client Sample ID:

Date Analyzed: 03/04/20 02:46 Lab File ID: 03030022.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	5.40	Baseline	beckerc	03/05/20 08:42

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 487544

Lab Sample ID: IC 280-487544/23 Client Sample ID:

Date Analyzed: 03/04/20 03:21 Lab File ID: 03030023.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	5.40	Baseline	beckerc	03/05/20 08:42

8330A

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 487545

Lab Sample ID: 280-134063-1 Client Sample ID: OS001-DP02-25

Date Analyzed: 03/04/20 08:01 Lab File ID: 03030031.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,4,6-Trinitrotoluene	24.66	Baseline	beckerc	03/05/20 08:52

Lab Sample ID: 280-134063-2 Client Sample ID: OS001-DP502-25

Date Analyzed: 03/04/20 08:36 Lab File ID: 03030032.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitrobenzene		Invalid Compound ID	beckerc	03/05/20 08:52

Lab Sample ID: 280-134063-4 Client Sample ID: OS001-DP02-45

Date Analyzed: 03/04/20 09:46 Lab File ID: 03030034.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		Invalid Compound ID	beckerc	03/05/20 08:53
2,4,6-Trinitrotoluene	24.68	Baseline	beckerc	03/05/20 08:54

8330A

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 488169

Lab Sample ID: CCV 280-488169/7 Client Sample ID:

Date Analyzed: 03/09/20 16:38 Lab File ID: 03090007.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitroglycerin	15.58	Baseline	beckerc	03/12/20 15:01
3-Nitrotoluene	17.60	Unspecified		
2-Amino-4,6-dinitrotoluene	17.72	Baseline	beckerc	03/12/20 14:58
PETN	25.12	Baseline	beckerc	03/12/20 15:01

Lab Sample ID: 280-134063-1 RE Client Sample ID: OS001-DP02-25 RE

Date Analyzed: 03/09/20 20:08 Lab File ID: 03090013.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		Invalid Compound ID	beckerc	03/12/20 15:06
1,2-Dinitrobenzene	12.89	Baseline	beckerc	03/12/20 15:07
2,4,6-Trinitrotoluene	24.61	Baseline	beckerc	03/12/20 15:07

Lab Sample ID: 280-134063-2 RE Client Sample ID: OS001-DP502-25 RE

Date Analyzed: 03/09/20 20:43 Lab File ID: 03090014.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.82	Baseline	beckerc	03/12/20 15:08
1,2-Dinitrobenzene	12.88	Baseline	beckerc	03/12/20 15:08
2,4,6-Trinitrotoluene	24.59	Baseline	beckerc	03/12/20 15:09

Lab Sample ID: 280-134063-3 RE Client Sample ID: OS001-DP02-35 RE

Date Analyzed: 03/09/20 21:18 Lab File ID: 03090015.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,4,6-Trinitrotoluene		Invalid Compound ID	beckerc	03/12/20 15:10
1,2-Dinitrobenzene	12.88	Baseline	beckerc	03/12/20 15:09

8330A

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Analysis Batch Number: 488169

Lab Sample ID: CCV 280-488169/19 Client Sample ID:

Date Analyzed: 03/09/20 23:38 Lab File ID: 03090019.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3-Dinitrobenzene	15.48	Baseline	beckerc	03/12/20 15:16
Nitroglycerin	15.72	Baseline	beckerc	03/12/20 15:16
2-Nitrotoluene	16.51	Baseline	beckerc	03/12/20 15:15
4-Nitrotoluene	16.77	Baseline	beckerc	03/12/20 15:15
4-Amino-2,6-dinitrotoluene	17.07	Baseline	beckerc	03/12/20 15:16
3-Nitrotoluene	17.79	Unspecified		
2-Amino-4,6-dinitrotoluene	17.92	Baseline	beckerc	03/12/20 15:15
PETN	25.24	Baseline	beckerc	03/12/20 15:16

8330A

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 463276

Lab Sample ID: IC 280-463276/12 Client Sample ID:

Date Analyzed: 07/01/19 16:36 Lab File ID: 07010012.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.65	Baseline Smoothing	fiedlerh	07/01/19 18:30

Lab Sample ID: IC 280-463276/13 Client Sample ID:

Date Analyzed: 07/01/19 17:00 Lab File ID: 07010013.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.65	Baseline Smoothing	fiedlerh	07/01/19 18:30
2-Amino-4,6-dinitrotoluene	11.72	Unspecified		
2,6-Dinitrotoluene	11.85	Unspecified		

Lab Sample ID: IC 280-463276/14 Client Sample ID:

Date Analyzed: 07/01/19 17:23 Lab File ID: 07010014.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Picric acid	8.21	Baseline Smoothing	fiedlerh	07/01/19 18:33
2-Amino-4,6-dinitrotoluene	11.72	Unspecified		
2,6-Dinitrotoluene	11.84	Unspecified		

Lab Sample ID: ICV 280-463276/15 Client Sample ID:

Date Analyzed: 07/01/19 17:46 Lab File ID: 07010015.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.64	Baseline Smoothing	fiedlerh	07/01/19 18:32

8330A

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 482211

Lab Sample ID: IC 280-482211/7 Client Sample ID:

Date Analyzed: 01/06/20 18:00 Lab File ID: 01060007.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.58	Baseline Smoothing	beckerc	01/07/20 11:14
DNX	6.91	Baseline Smoothing	beckerc	01/07/20 11:14

Lab Sample ID: IC 280-482211/8 Client Sample ID:

Date Analyzed: 01/06/20 18:23 Lab File ID: 01060008.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.59	Baseline Smoothing	beckerc	01/07/20 11:14
DNX	6.91	Baseline Smoothing	beckerc	01/07/20 11:14

Lab Sample ID: IC 280-482211/9 Client Sample ID:

Date Analyzed: 01/06/20 18:46 Lab File ID: 01060009.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.59	Baseline Smoothing	beckerc	01/07/20 11:15
DNX	6.91	Baseline Smoothing	beckerc	01/07/20 11:15

Lab Sample ID: IC 280-482211/10 Client Sample ID:

Date Analyzed: 01/06/20 19:09 Lab File ID: 01060010.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.59	Baseline Smoothing	beckerc	01/07/20 11:15
DNX	6.91	Baseline Smoothing	beckerc	01/07/20 11:15

8330A

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 482211

Lab Sample ID: IC 280-482211/11 Client Sample ID:

Date Analyzed: 01/06/20 19:32 Lab File ID: 01060011.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.59	Baseline Smoothing	beckerc	01/07/20 11:16

Lab Sample ID: IC 280-482211/13 Client Sample ID:

Date Analyzed: 01/06/20 20:18 Lab File ID: 01060013.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.59	Baseline Smoothing	beckerc	01/07/20 11:16

Lab Sample ID: IC 280-482211/14 Client Sample ID:

Date Analyzed: 01/06/20 20:40 Lab File ID: 01060014.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.59	Baseline Smoothing	beckerc	01/07/20 11:16

Lab Sample ID: ICV 280-482211/15 Client Sample ID:

Date Analyzed: 01/06/20 21:03 Lab File ID: 01060015.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.59	Baseline Smoothing	beckerc	01/07/20 11:17
DNX	6.91	Baseline Smoothing	beckerc	01/07/20 11:17

8330A

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 487395

Lab Sample ID: CCV 280-487395/9 Client Sample ID:

Date Analyzed: 03/02/20 16:06 Lab File ID: 03020009.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.59	Baseline	beckerc	03/03/20 11:00
DNX	6.91	Baseline	beckerc	03/03/20 11:00

Lab Sample ID: MB 280-487255/1-A Client Sample ID:

Date Analyzed: 03/02/20 16:29 Lab File ID: 03020010.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.26	Baseline	beckerc	03/03/20 11:05
3-Nitrotoluene		Invalid Compound ID	beckerc	03/03/20 11:04

Lab Sample ID: LCS 280-487255/2-A Client Sample ID:

Date Analyzed: 03/02/20 16:51 Lab File ID: 03020011.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.68	Baseline	beckerc	03/03/20 11:05

8330A

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 487395

Lab Sample ID: 280-134063-1 Client Sample ID: OS001-DP02-25

Date Analyzed: 03/02/20 19:09 Lab File ID: 03020017.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.68	Baseline	beckerc	03/03/20 11:09
RDX	7.75	Baseline	beckerc	03/03/20 11:10
1,2-Dinitrobenzene	8.71	Baseline	beckerc	03/03/20 11:10
1,3,5-Trinitrobenzene		Invalid Compound ID	beckerc	03/03/20 11:11
1,3-Dinitrobenzene		Invalid Compound ID	beckerc	03/03/20 11:11
3-Nitrotoluene		Invalid Compound ID	beckerc	03/03/20 11:11
4-Nitrotoluene		Invalid Compound ID	beckerc	03/03/20 11:11
MNX		Invalid Compound ID	beckerc	03/03/20 11:10
Tetryl		Invalid Compound ID	beckerc	03/03/20 11:11

Lab Sample ID: 280-134063-2 Client Sample ID: OS001-DP502-25

Date Analyzed: 03/02/20 19:32 Lab File ID: 03020018.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.67	Baseline	beckerc	03/03/20 11:12
RDX	7.75	Baseline	beckerc	03/03/20 11:12
1,2-Dinitrobenzene	8.72	Baseline	beckerc	03/03/20 11:12
1,3,5-Trinitrobenzene		Invalid Compound ID	beckerc	03/03/20 11:13
1,3-Dinitrobenzene		Invalid Compound ID	beckerc	03/03/20 11:13
2-Nitrotoluene		Invalid Compound ID	beckerc	03/03/20 11:13
3-Nitrotoluene		Invalid Compound ID	beckerc	03/03/20 11:13
4-Nitrotoluene		Invalid Compound ID	beckerc	03/03/20 11:13
MNX		Invalid Compound ID	beckerc	03/03/20 11:12
Tetryl		Invalid Compound ID	beckerc	03/03/20 11:13

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 487395

Lab Sample ID: 280-134063-3 Client Sample ID: OS001-DP02-35

Date Analyzed: 03/02/20 19:55 Lab File ID: 03020019.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
3-Nitrotoluene		Invalid Compound ID	beckerc	03/03/20 11:14
4-Nitrotoluene		Invalid Compound ID	beckerc	03/03/20 11:14
HMX		Invalid Compound ID	beckerc	03/03/20 11:14
MNX		Invalid Compound ID	beckerc	03/03/20 11:14
Tetryl		Invalid Compound ID	beckerc	03/03/20 11:14

Lab Sample ID: CCV 280-487395/22 Client Sample ID:

Date Analyzed: 03/02/20 21:04 Lab File ID: 03020022.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.59	Baseline	beckerc	03/03/20 11:15
DNX	6.91	Baseline	beckerc	03/03/20 11:15

Lab Sample ID: 280-134063-4 Client Sample ID: OS001-DP02-45

Date Analyzed: 03/02/20 21:27 Lab File ID: 03020023.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	7.75	Baseline	beckerc	03/03/20 11:16
3-Nitrotoluene		Invalid Compound ID	beckerc	03/03/20 11:17
4-Nitrotoluene		Invalid Compound ID	beckerc	03/03/20 11:17

8330A

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 487395

Lab Sample ID: 280-134063-4 MS Client Sample ID: OS001-DP02-45 MS

Date Analyzed: 03/02/20 21:49 Lab File ID: 03020024.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.68	Baseline	beckerc	03/03/20 11:17
RDX	7.76	Baseline	beckerc	03/03/20 11:17
Tetryl	10.13	Baseline	beckerc	03/03/20 11:18

Lab Sample ID: 280-134063-4 MSD Client Sample ID: OS001-DP02-45 MSD

Date Analyzed: 03/02/20 22:12 Lab File ID: 03020025.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.68	Baseline	beckerc	03/03/20 11:19
Tetryl	10.13	Baseline	beckerc	03/03/20 11:19

Lab Sample ID: CCV 280-487395/35 Client Sample ID:

Date Analyzed: 03/03/20 02:02 Lab File ID: 03020035.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.59	Baseline	beckerc	03/03/20 11:30
DNX	6.91	Baseline	beckerc	03/03/20 11:30

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 487658

Lab Sample ID: IC 280-487658/7 Client Sample ID:

Date Analyzed: 03/04/20 14:07 Lab File ID: 03040007.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.68	Baseline	beckerc	03/05/20 08:19

Lab Sample ID: IC 280-487658/8 Client Sample ID:

Date Analyzed: 03/04/20 14:30 Lab File ID: 03040008.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.69	Baseline	beckerc	03/05/20 08:21

Lab Sample ID: IC 280-487658/9 Client Sample ID:

Date Analyzed: 03/04/20 14:53 Lab File ID: 03040009.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.68	Baseline	beckerc	03/05/20 08:21

Lab Sample ID: IC 280-487658/10 Client Sample ID:

Date Analyzed: 03/04/20 15:16 Lab File ID: 03040010.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.68	Baseline	beckerc	03/05/20 08:21

Lab Sample ID: IC 280-487658/11 Client Sample ID:

Date Analyzed: 03/04/20 15:39 Lab File ID: 03040011.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.68	Baseline	beckerc	03/05/20 08:22

8330A

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 487658

Lab Sample ID: IC 280-487658/12 Client Sample ID:

Date Analyzed: 03/04/20 16:01 Lab File ID: 03040012.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.68	Baseline	beckerc	03/05/20 08:22

Lab Sample ID: IC 280-487658/13 Client Sample ID:

Date Analyzed: 03/04/20 16:24 Lab File ID: 03040013.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.68	Baseline	beckerc	03/05/20 08:22

Lab Sample ID: IC 280-487658/14 Client Sample ID:

Date Analyzed: 03/04/20 16:47 Lab File ID: 03040014.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.68	Baseline	beckerc	03/05/20 08:23
2-Amino-4,6-dinitrotoluene	11.62	Baseline	beckerc	03/05/20 08:23
2,6-Dinitrotoluene	11.79	Unspecified		

Lab Sample ID: ICV 280-487658/15 Client Sample ID:

Date Analyzed: 03/04/20 17:10 Lab File ID: 03040015.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.68	Baseline	beckerc	03/05/20 08:23

8330A

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 487658

Lab Sample ID: IC 280-487658/25 Client Sample ID:

Date Analyzed: 03/04/20 21:00 Lab File ID: 03040025.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.59	Baseline	beckerc	03/05/20 08:29
DNX	6.92	Baseline	beckerc	03/05/20 08:29
MNX	7.36	Baseline	beckerc	03/05/20 08:30

Lab Sample ID: IC 280-487658/26 Client Sample ID:

Date Analyzed: 03/04/20 21:23 Lab File ID: 03040026.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.59	Baseline	beckerc	03/05/20 08:30
DNX	6.92	Baseline	beckerc	03/05/20 08:30

Lab Sample ID: IC 280-487658/27 Client Sample ID:

Date Analyzed: 03/04/20 21:45 Lab File ID: 03040027.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.59	Baseline	beckerc	03/05/20 08:30
DNX	6.92	Baseline	beckerc	03/05/20 08:30

Lab Sample ID: IC 280-487658/28 Client Sample ID:

Date Analyzed: 03/04/20 22:09 Lab File ID: 03040028.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.59	Baseline	beckerc	03/05/20 08:31
DNX	6.92	Baseline	beckerc	03/05/20 08:31

8330A

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 487658

Lab Sample ID: IC 280-487658/29 Client Sample ID:

Date Analyzed: 03/04/20 22:31 Lab File ID: 03040029.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.59	Baseline	beckerc	03/05/20 08:31
DNX	6.92	Baseline	beckerc	03/05/20 08:31

Lab Sample ID: IC 280-487658/30 Client Sample ID:

Date Analyzed: 03/04/20 22:54 Lab File ID: 03040030.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.59	Baseline	beckerc	03/05/20 08:31
DNX	6.92	Baseline	beckerc	03/05/20 08:32

Lab Sample ID: IC 280-487658/31 Client Sample ID:

Date Analyzed: 03/04/20 23:17 Lab File ID: 03040031.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.59	Baseline	beckerc	03/05/20 08:32
DNX	6.91	Baseline	beckerc	03/05/20 08:32

Lab Sample ID: IC 280-487658/32 Client Sample ID:

Date Analyzed: 03/04/20 23:40 Lab File ID: 03040032.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.59	Baseline	beckerc	03/05/20 08:32
DNX	6.91	Baseline	beckerc	03/05/20 08:32

8330A

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 487658

Lab Sample ID: ICV 280-487658/33 Client Sample ID:

Date Analyzed: 03/05/20 00:03 Lab File ID: 03040033.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.59	Baseline	beckerc	03/05/20 08:37
DNX	6.91	Baseline	beckerc	03/05/20 08:37

8330A

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 487660

Lab Sample ID: CCV 280-487660/56 Client Sample ID:

Date Analyzed: 03/05/20 08:51 Lab File ID: 03040056.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.68	Baseline	beckerc	03/06/20 09:36

Lab Sample ID: CCV 280-487660/58 Client Sample ID:

Date Analyzed: 03/05/20 09:37 Lab File ID: 03040058.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.59	Baseline	beckerc	03/06/20 09:38
DNX	6.92	Baseline	beckerc	03/06/20 09:38

Lab Sample ID: LCS 280-487600/2-A Client Sample ID:

Date Analyzed: 03/05/20 10:23 Lab File ID: 03040060.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.68	Baseline	beckerc	03/06/20 09:39

Lab Sample ID: 280-134063-1 RE Client Sample ID: OS001-DP02-25 RE

Date Analyzed: 03/05/20 11:32 Lab File ID: 03040063.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3,5-Trinitrobenzene		Invalid Compound ID	beckerc	03/06/20 09:41
2,4,6-Trinitrotoluene	11.18	Baseline	beckerc	03/06/20 09:41

8330A

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 487660

Lab Sample ID: 280-134063-2 RE Client Sample ID: OS001-DP502-25 RE

Date Analyzed: 03/05/20 11:55 Lab File ID: 03040064.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.67	Baseline	beckerc	03/06/20 09:41
MNX	7.35	Baseline	beckerc	03/06/20 09:41
RDX	7.74	Baseline	beckerc	03/06/20 09:41
1,3,5-Trinitrobenzene		Invalid Compound ID	beckerc	03/06/20 09:42
Tetryl		Invalid Compound ID	beckerc	03/06/20 09:42
2,4,6-Trinitrotoluene	11.18	Baseline	beckerc	03/06/20 09:42

Lab Sample ID: 280-134063-3 RE Client Sample ID: OS001-DP02-35 RE

Date Analyzed: 03/05/20 12:18 Lab File ID: 03040065.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetryl		Invalid Compound ID	beckerc	03/06/20 09:43

Lab Sample ID: 280-134063-4 RE Client Sample ID: OS001-DP02-45 RE

Date Analyzed: 03/05/20 12:41 Lab File ID: 03040066.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
3-Nitrotoluene		Invalid Compound ID	beckerc	03/06/20 09:44
4-Nitrotoluene		Invalid Compound ID	beckerc	03/06/20 09:44

Lab Sample ID: 280-134063-4 MS RE Client Sample ID: OS001-DP02-45 MS RE

Date Analyzed: 03/05/20 13:04 Lab File ID: 03040067.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.68	Baseline	beckerc	03/06/20 09:44

8330A

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 487660

Lab Sample ID: CCV 280-487660/69 Client Sample ID:

Date Analyzed: 03/05/20 13:50 Lab File ID: 03040069.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.68	Baseline	beckerc	03/06/20 09:46

Lab Sample ID: CCV 280-487660/71 Client Sample ID:

Date Analyzed: 03/05/20 14:35 Lab File ID: 03040071.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.59	Assign Peak	beckerc	03/06/20 09:47
DNX	6.91	Assign Peak	beckerc	03/06/20 09:47

8330A

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
8330 DMT_00004	02/06/20	01/06/20	Acetonitrile, Lot 231453	5 mL	MNX,TNX,DNX_00032	1 mL	DNX	20.02 ug/mL
							MNX	23.34 ug/mL
							TNX	20.02 ug/mL
.MNX,TNX,DNX_00032	12/31/19	ULTRA Scientific, Lot CS-5628			(Purchased Reagent)		DNX	100.1 ug/mL
							MNX	116.7 ug/mL
							TNX	100.1 ug/mL
8330 DMT_00005	03/31/20	01/21/20	Acetonitrile, Lot 231453	5 mL	MNX,TNX,DNX_00032	1 mL	DNX	20.02 ug/mL
							MNX	23.34 ug/mL
							TNX	20.02 ug/mL
.MNX,TNX,DNX_00032	12/31/19	ULTRA Scientific, Lot CS-5628			(Purchased Reagent)		DNX	100.1 ug/mL
							MNX	116.7 ug/mL
							TNX	100.1 ug/mL
8330 LCS_00089	11/08/19	05/08/19	Acetonitrile, Lot ACN_00030	100 mL	8330LCSMix1_00109	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_00008	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
.8330LCSMix1_00109	10/31/22	Restek, Lot A0131772			(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_00008	08/31/23	Restek, Lot A0141002			(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_00094	04/03/20	10/03/19	Acetonitrile, Lot ACN_00039	100 mL	8330 LCSMix2_00105	1 mL	2,6-Dinitrotoluene	10 ug/mL
							2-Amino-4,6-dinitrotoluene	10 ug/mL
							2-Nitrotoluene	10 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							3-Nitrotoluene	10 ug/mL
							4-Amino-2,6-dinitrotoluene	10 ug/mL
							4-Nitrotoluene	10 ug/mL
							Tetryl	10 ug/mL
					EXP-SS-MIX1_00008	1 mL	1,3,5-Trinitrobenzene	10 ug/mL
							1,3-Dinitrobenzene	10 ug/mL
							2,4,6-Trinitrotoluene	10 ug/mL
							2,4-Dinitrotoluene	10 ug/mL
							HMX	10 ug/mL
							Nitrobenzene	10 ug/mL
							RDX	10 ug/mL
.8330 LCSMix2_00105	08/07/23		Restek, Lot A0141002		(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
.EXP-SS-MIX1_00008	07/31/24		Restek, Lot A0151407		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							2,4,6-Trinitrotoluene	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							RDX	1000 ug/mL
8330 LCS_00095	07/24/20	01/24/20	Acetonitrile, Lot ACN_00231	100 mL	8330_NG_Stk_00081	1 mL	Nitroglycerin	100 ug/mL
					8330_NG_Stk_00082	1 mL	Nitroglycerin	100 ug/mL
					8330_PETN_Stk_00089	1 mL	PETN	100 ug/mL
					8330_PETN_Stk_00090	1 mL	PETN	100 ug/mL
					8330LCSMix1_00113	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_00009	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_00086	1 mL	2,4,6-Trinitrophenol	10 ug/mL
.8330_NG_Stk_00081	08/31/22		Restek, Lot A0151571		(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_NG_Stk_00082	08/31/22		Restek, Lot A0151571		(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_PETN_Stk_00089	11/30/22		Restek, Lot A0154763		(Purchased Reagent)		PETN	5000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.8330_PETN_Stk_00090	11/30/22		Restek, Lot A0154763		(Purchased Reagent)		PETN	5000 ug/mL
.8330LCSMix1_00113	07/31/24		Restek, Lot A0151407		(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_00009	05/31/24		Restek, Lot A0149387		(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_00086	11/30/23		Restek, Lot A0148431		(Purchased Reagent)		2,4,6-Trinitrophenol	1000 ug/mL
8330_OP_DMT_00004	02/06/20	01/06/20	Acetonitrile, Lot 00226	10 mL	MNX,TNX,DNX_00036	1 mL	MNX	11.67 ug/mL
.MNX,TNX,DNX_00036	12/31/19		ULTRA Scientific, Lot CS-5628		(Purchased Reagent)		MNX	116.7 ug/mL
8330_OP_DMT_00005	03/31/20	01/21/20	Acetonitrile, Lot 00226	10 mL	MNX,TNX,DNX_00036	1 mL	MNX	11.67 ug/mL
.MNX,TNX,DNX_00036	12/31/19		ULTRA Scientific, Lot CS-5628		(Purchased Reagent)		MNX	116.7 ug/mL
8330_OP_DMT_00006	02/24/21	02/24/20	Acetonitrile, Lot 0000196715	10 mL	MNX,TNX,DNX_00042	1 mL	DNX	10.01 ug/mL
							MNX	11.67 ug/mL
							TNX	10.01 ug/mL
.MNX,TNX,DNX_00042	02/28/21		ULTRA Scientific, Lot 006516106		(Purchased Reagent)		DNX	100.1 ug/mL
							MNX	116.7 ug/mL
							TNX	100.1 ug/mL
8330IntermStk_00058	07/19/19	05/07/19	Acetonitrile, Lot 200488	5 mL	8330_NG_Stk_00052	200 uL	Nitroglycerin	200 ug/mL
					8330_PETN_Stk_00056	200 uL	PETN	200 ug/mL
					8330ICALStock_00029	1 mL	1,3,5-Trinitrobenzene	20 ug/mL
							1,3-Dinitrobenzene	20.02 ug/mL
							2,4,6-Trinitrotoluene	20.08 ug/mL
							2,4-Dinitrotoluene	20.04 ug/mL
							2,6-Dinitrotoluene	20.06 ug/mL
							2-Amino-4,6-dinitrotoluene	20.06 ug/mL
							2-Nitrotoluene	20.06 ug/mL
							3-Nitrotoluene	20.08 ug/mL
							4-Amino-2,6-dinitrotoluene	20.06 ug/mL
							4-Nitrotoluene	20.08 ug/mL
							HMX	20 ug/mL
							Nitrobenzene	20.04 ug/mL
							RDX	20 ug/mL
							Tetryl	20 ug/mL
							1,2-Dinitrobenzene	20 ug/mL
					8330PAStkPS_00058	1 mL	2,4,6-Trinitrophenol	20 ug/mL
.8330_NG_Stk_00052	01/01/20		Restek, Lot A0124122		(Purchased Reagent)		Nitroglycerin	5000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.8330_PETN_Stk_00056	01/01/20	Restek, Lot A0124124			(Purchased Reagent)		PETN	5000 ug/mL
.8330ICALStock_00029	11/30/19	11/30/18	Acetonitrile, Lot 200488	10 mL	8330 Stock_TS_00012	1 mL	1,3,5-Trinitrobenzene	100 ug/mL
							1,3-Dinitrobenzene	100.1 ug/mL
							2,4,6-Trinitrotoluene	100.4 ug/mL
							2,4-Dinitrotoluene	100.2 ug/mL
							2,6-Dinitrotoluene	100.3 ug/mL
							2-Amino-4,6-dinitrotoluene	100.3 ug/mL
							2-Nitrotoluene	100.3 ug/mL
							3-Nitrotoluene	100.4 ug/mL
							4-Amino-2,6-dinitrotoluene	100.3 ug/mL
							4-Nitrotoluene	100.4 ug/mL
							HMX	100 ug/mL
							Nitrobenzene	100.2 ug/mL
							RDX	100 ug/mL
							Tetryl	100 ug/mL
					8330SurrStock_00163	1 mL	1,2-Dinitrobenzene	100 ug/mL
..8330 Stock_TS_00012	04/30/20	Ultra Scientific, Lot CR-1002			(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1001 ug/mL
							2,4,6-Trinitrotoluene	1004 ug/mL
							2,4-Dinitrotoluene	1002 ug/mL
							2,6-Dinitrotoluene	1003 ug/mL
							2-Amino-4,6-dinitrotoluene	1003 ug/mL
							2-Nitrotoluene	1003 ug/mL
							3-Nitrotoluene	1004 ug/mL
							4-Amino-2,6-dinitrotoluene	1003 ug/mL
							4-Nitrotoluene	1004 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1002 ug/mL
							RDX	1000 ug/mL
							Tetryl	1000 ug/mL
..8330SurrStock_00163	08/15/24	AccuStandard, Lot 216071012			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330PAStkPS_00058	07/19/19	AccuStandard, Lot 216061376-01			(Purchased Reagent)		2,4,6-Trinitrophenol	100 ug/mL
8330IntermStk_00061	09/09/21	01/09/20	Acetonitrile, Lot 130057	10 mL	8330_NG_Stk_00075	200 uL	Nitroglycerin	100 ug/mL
					8330_PETN_Stk_00087	200 uL	PETN	100 ug/mL
					8330ICALStock_00030	1 mL	1,3,5-Trinitrobenzene	10.02 ug/mL
							1,3-Dinitrobenzene	10.02 ug/mL
							2,4,6-Trinitrotoluene	10.04 ug/mL
							2,4-Dinitrotoluene	10.04 ug/mL
							2,6-Dinitrotoluene	10.04 ug/mL
							2-Amino-4,6-dinitrotoluene	10.04 ug/mL
							2-Nitrotoluene	10 ug/mL
							3-Nitrotoluene	10.01 ug/mL
							4-Amino-2,6-dinitrotoluene	10.01 ug/mL
							4-Nitrotoluene	10.02 ug/mL
							HMX	10 ug/mL
							Nitrobenzene	10.04 ug/mL

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							RDX	10 ug/mL
							Tetryl	10.02 ug/mL
							1,2-Dinitrobenzene	10 ug/mL
					8330PAStkPS_00061	1 mL	2,4,6-Trinitrophenol	10 ug/mL
.8330_NG_Stk_00075	08/31/22	Restek, Lot A0151571			(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_PETN_Stk_00087	11/30/22	Restek, Lot A0154763			(Purchased Reagent)		PETN	5000 ug/mL
.8330ICALStock_00030	03/03/22	01/09/20	Acetonitrile, Lot 130057	10 mL	8330 Stock_TS_00015	1 mL	1,3,5-Trinitrobenzene	100.2 ug/mL
							1,3-Dinitrobenzene	100.2 ug/mL
							2,4,6-Trinitrotoluene	100.4 ug/mL
							2,4-Dinitrotoluene	100.4 ug/mL
							2,6-Dinitrotoluene	100.4 ug/mL
							2-Amino-4,6-dinitrotoluene	100.4 ug/mL
							2-Nitrotoluene	100 ug/mL
							3-Nitrotoluene	100.1 ug/mL
							4-Amino-2,6-dinitrotoluene	100.1 ug/mL
							4-Nitrotoluene	100.2 ug/mL
							HMX	100 ug/mL
							Nitrobenzene	100.4 ug/mL
							RDX	100 ug/mL
							Tetryl	100.2 ug/mL
					8330SurrStock_00164	1 mL	1,2-Dinitrobenzene	100 ug/mL
..8330 Stock_TS_00015	03/31/22	Ultra Scientific, Lot CT-0801			(Purchased Reagent)		1,3,5-Trinitrobenzene	1002 ug/mL
							1,3-Dinitrobenzene	1002 ug/mL
							2,4,6-Trinitrotoluene	1004 ug/mL
							2,4-Dinitrotoluene	1004 ug/mL
							2,6-Dinitrotoluene	1004 ug/mL
							2-Amino-4,6-dinitrotoluene	1004 ug/mL
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1001 ug/mL
							4-Amino-2,6-dinitrotoluene	1001 ug/mL
							4-Nitrotoluene	1002 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1004 ug/mL
							RDX	1000 ug/mL
							Tetryl	1002 ug/mL
..8330SurrStock_00164	07/01/26	AccuStandard, Lot 216071012			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330PAStkPS_00061	09/09/21	AccuStandard, Lot 214121302-02			(Purchased Reagent)		2,4,6-Trinitrophenol	100 ug/mL
8330Surrogate_00103	12/04/19	03/17/19	Acetonitrile, Lot ACN_00219	500 mL	8330SurrStkSS_00134	1.25 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00135	1.25 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00152	1.25 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00153	1.25 mL	1,2-Dinitrobenzene	10 ug/mL
.8330SurrStkSS_00134	02/28/22	Restek, Lot A0124792			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00135	02/28/22	Restek, Lot A0124792			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00152	07/31/23	Restek, Lot A0139489			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00153	07/31/23	Restek, Lot A0139489			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
8330Surrogate_00109	03/20/20	09/20/19	Acetonitrile, Lot ACN_00223	250 mL	8330SurrStkSS_00147	0.5 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00155	1 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00158	1 mL	1,2-Dinitrobenzene	10 ug/mL
.8330SurrStkSS_00147	03/31/23	Restek, Lot A0135839			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00155	07/31/23	Restek, Lot A0139489			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00158	07/31/24	Restek, Lot A0146866			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
8330Surrogate_00110	05/17/20	12/17/19	Acetonitrile, Lot ACN_00223	250 mL	8330SurrStkSS_00145	0.25 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00158	0.25 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00160	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00161	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
.8330SurrStkSS_00145	03/31/23	Restek, Lot A0135839			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00158	07/31/24	Restek, Lot A0146866			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00160	10/28/22	Restek, Lot A0150790			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00161	07/31/24	Restek, Lot A0150790			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL

Reagent

8330 LCSMix2_00105

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

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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Certificate #3222.01

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31451 **Lot No.:** A0141002

Description : 8330 Calibration Mix #2

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

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

Expiration Date : August 31, 2023 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Tetryl **CAS #** 479-45-8 **Purity** 99%	(Lot 091120JLM)	1,000.0 µg/mL	+/- 5.9397 µg/mL +/- 54.7830 µg/mL +/- 63.8824 µg/mL	Gravimetric Unstressed Stressed
2	4-Amino-2,6-dinitrotoluene **CAS #** 19406-51-0 **Purity** 99%	(Lot ER070908-01)	1,002.0 µg/mL	+/- 5.9516 µg/mL +/- 54.8926 µg/mL +/- 64.0101 µg/mL	Gravimetric Unstressed Stressed
3	2-Amino-4,6-dinitrotoluene **CAS #** 35572-78-2 **Purity** 98%	(Lot 29550-55)	1,007.4 µg/mL	+/- 5.9839 µg/mL +/- 55.1906 µg/mL +/- 64.3577 µg/mL	Gravimetric Unstressed Stressed
4	2,6-Dinitrotoluene **CAS #** 606-20-2 **Purity** 99%	(Lot BCBB8606V)	1,000.0 µg/mL	+/- 5.9397 µg/mL +/- 54.7830 µg/mL +/- 63.8824 µg/mL	Gravimetric Unstressed Stressed
5	2-Nitrotoluene **CAS #** 88-72-2 **Purity** 99%	(Lot GA01)	1,004.0 µg/mL	+/- 5.9635 µg/mL +/- 55.0021 µg/mL +/- 64.1379 µg/mL	Gravimetric Unstressed Stressed
6	4-Nitrotoluene **CAS #** 99-99-0 **Purity** 99%	(Lot FAU01)	1,002.0 µg/mL	+/- 5.9516 µg/mL +/- 54.8926 µg/mL +/- 64.0101 µg/mL	Gravimetric Unstressed Stressed
7	3-Nitrotoluene **CAS #** 99-08-1 **Purity** 98%	(Lot FBO01)	1,003.5 µg/mL	+/- 5.9606 µg/mL +/- 54.9758 µg/mL +/- 64.1072 µg/mL	Gravimetric Unstressed Stressed

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

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

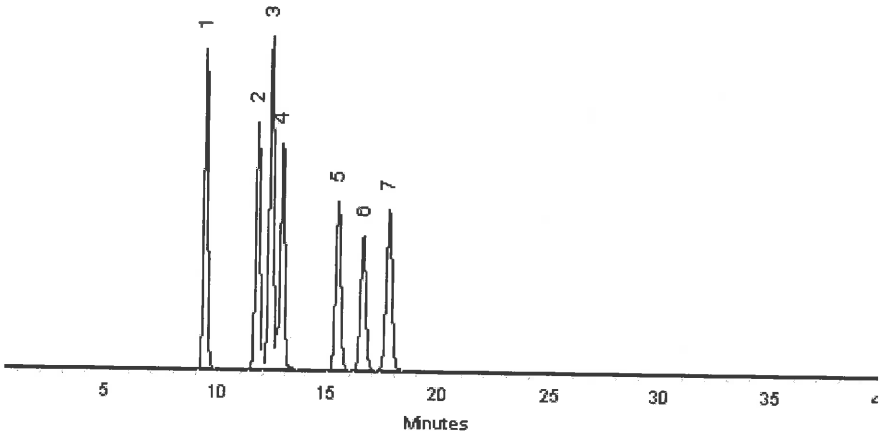
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Matt Fragassi - Mix Technician

Date Mixed: 23-Aug-2018 **Balance:** B345965662

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 28-Aug-2018

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

Reagent

8330 Stock_TS_00012

Certificate of Analysis

Agilent

Combined Stock Solution

Product Number: NAIM-833E **Page:** 1 of 1

Lot Number: CR-1002 **Lot Issue Date:** 10-Mar-2017 **Expiration Date:** 30-Apr-2020

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
HMX	002691-41-0	RM06237	1000 ± 5 µg/mL
RDX	000121-82-4	RM10915	1000 ± 5 µg/mL
1,3,5-trinitrobenzene	000099-35-4	RM06608	1000 ± 5 µg/mL
m-dinitrobenzene	000099-65-0	RM04448	1001 ± 5 µg/mL
nitrobenzene	000098-95-3	RM11472	1002 ± 5 µg/mL
2,4,6-trinitrotoluene (TNT)	000118-96-7	RM11972	1004 ± 5 µg/mL
2,4-dinitrotoluene	000121-14-2	RM01209	1002 ± 5 µg/mL
tetryl	000479-45-8	RM12295	1000 ± 5 µg/mL
2,6-dinitrotoluene	000606-20-2	RM10763	1003 ± 5 µg/mL
2-nitrotoluene	000088-72-2	NT01996	1003 ± 5 µg/mL
3-nitrotoluene	000099-08-1	NT02212	1004 ± 5 µg/mL
4-nitrotoluene	000099-99-0	NT02096	1004 ± 5 µg/mL
2-amino-4,6-dinitrotoluene	035572-78-2	RM04229	1003 ± 5 µg/mL
4-amino-2,6-dinitrotoluene	019406-51-0	RM04226	1003 ± 5 µg/mL

Matrix: acetonitrile

Storage: Store at Room Temperature (15° to 30°C).

ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.

John Russo
President

Monica Bourgeois
Director of QA/RA

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY

ISO 9001
Registered
TUV USA, Inc.

250 Smith Street North Kingstown, Rhode Island 02852 **www.ultrasci.com**

Reagent

8330 Stock_TS_00015

Certificate of Analysis
ISO Guide 34

Agilent

Stock Standard

Product Number: NAIM-833E **Page:** 1 of 2

Lot Number: CT-0801 **Lot Issue Date:** 25-Feb-2019 **Expiration Date:** 31-Mar-2022

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with Agilent's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
HMX	002691-41-0	RM06237	1000 ± 5 µg/mL
RDX	000121-82-4	RM10915	1000 ± 5 µg/mL
1,3,5-trinitrobenzene	000099-35-4	RM06608	1002 ± 5 µg/mL
m-dinitrobenzene	000099-65-0	RM14290	1002 ± 5 µg/mL
nitrobenzene	000098-95-3	RM11472	1004 ± 5 µg/mL
2,4,6-trinitrotoluene (TNT)	000118-96-7	RM11972	1004 ± 5 µg/mL
2,4-dinitrotoluene	000121-14-2	RM10279	1004 ± 5 µg/mL
tetryl	000479-45-8	RM14651	1002 ± 5 µg/mL
2,6-dinitrotoluene	000606-20-2	NT00450	1004 ± 5 µg/mL
2-nitrotoluene	000088-72-2	NT01996	1000 ± 5 µg/mL
3-nitrotoluene	000099-08-1	NT02212	1001 ± 5 µg/mL
4-nitrotoluene	000099-99-0	NT02096	1002 ± 5 µg/mL
2-amino-4,6-dinitrotoluene	035572-78-2	RM04229	1004 ± 5 µg/mL
4-amino-2,6-dinitrotoluene	019406-51-0	RM04226	1001 ± 5 µg/mL

Matrix: acetonitrile

Storage: Store at Room Temperature (15° to 30°C).

Agilent uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.

ANAB ACCREDITED ISO Guide 34 REFERENCE MATERIAL PRODUCER

ISO Guide 34 Cert No. AR-1936

Produced in accordance with TUV USA Inc 56 100 18560026 registered ISO 9001 Quality Management System

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY

ISO17025 Cert No. AT-1937

Certificate of Analysis
ISO Guide 34

Stock Standard

Product Number: NAIM-833E **Page:** 2 of 2

Lot Number: CT-0801 **Lot Issue Date:** 25-Feb-2019 **Expiration Date:** 31-Mar-2022

Analyte	CAS#	Analyte Lot	True Value

Monica Bourgeois
QMS Representative

ISO Guide 34 Cert No.
AR-1936

Produced in accordance with TUV USA Inc 56 100 18560026
registered ISO 9001 Quality Management System

ISO17025 Cert No.
AT-1937

Reagent

8330_NG_Stk_00052

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CERTIFIED REFERENCE MATERIAL

Certificate of Composition

ISO Guide 34 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. : 568871 **Lot No.:** A0124122

Description : Custom Nitroglycerin Standard

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

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

Expiration Date : January 31, 2020 **Storage:** 10°C or colder

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

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Nitroglycerin		5,016.0 µg/mL	+/-	46.6461	µg/mL	Gravimetric
	CAS # 55-63-0	(Lot 150612JLM)		+/-	277.1256	µg/mL	Unstressed
	Purity 99%			+/-	322.4378	µg/mL	Stressed

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

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

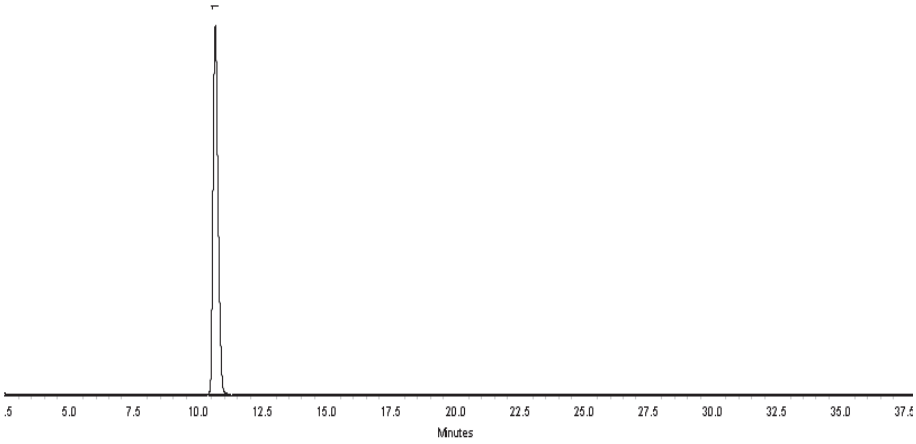
Flow Rate:
1.0 ml/min.

Mobile Phase A:
-

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

Mobile Phase Composition:
100%B

Det. Type:
Wavelength: 210 nm



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

Kendra Jozefick - Mix Technician

Date Mixed: 12-Jan-2017 **Balance:** B442140311

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 17-Jan-2017

REVIEWED

Manufactured under Restek's ISO 9001:2008
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 Guides 34 and 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)	< 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:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330_NG_Stk_00075

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

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CERTIFIED REFERENCE MATERIAL

Certificate of Composition

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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. : 568871 **Lot No.:** A0151571

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, 2022 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)			
1	Nitroglycerin		5,036.0	µg/mL	+/-	46.8321	µg/mL	Gravimetric
	CAS # 55-63-0	(Lot 170616JLM)			+/-	278.2306	µg/mL	Unstressed
	Purity 99%				+/-	323.7234	µg/mL	Stressed

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

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

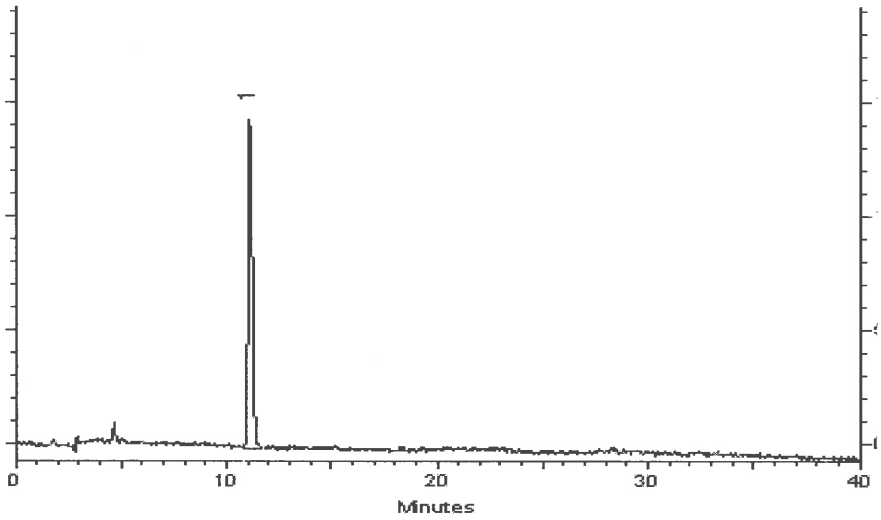
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Joseph Jaglowski - Mix Technician

Date Mixed: 05-Aug-2019 **Balance:** B707717271

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 09-Aug-2019

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

Reagent

8330_NG_Stk_00081

110 Benner Circle
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CERTIFIED REFERENCE MATERIAL

Certificate of Composition

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ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568871 **Lot No.:** A0151571

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, 2022 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)			
1	Nitroglycerin		5,036.0	µg/mL	+/-	46.8321	µg/mL	Gravimetric
	CAS # 55-63-0	(Lot 170616JLM)			+/-	278.2306	µg/mL	Unstressed
	Purity 99%				+/-	323.7234	µg/mL	Stressed

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

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

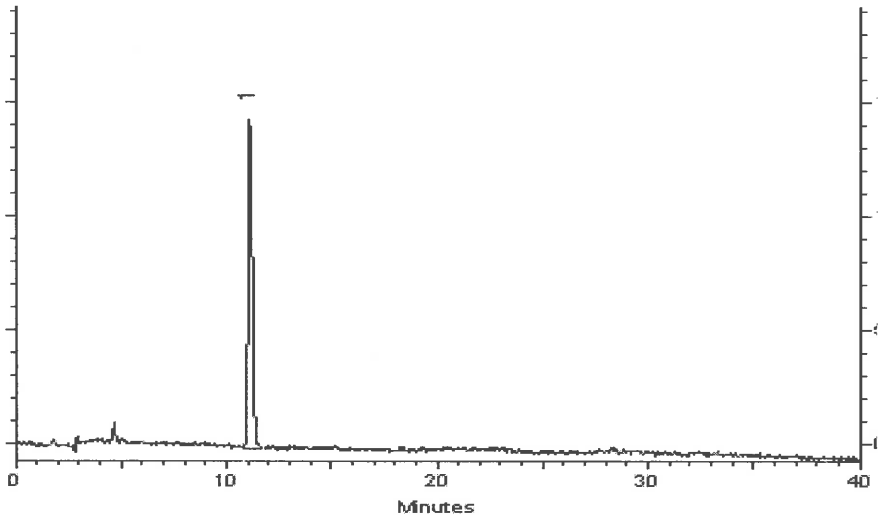
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Joseph Jaglowski - Mix Technician **Date Mixed:** 05-Aug-2019 **Balance:** B707717271

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 09-Aug-2019

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

Reagent

8330_NG_Stk_00082

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

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CERTIFIED REFERENCE MATERIAL

Certificate of Composition

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ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568871 **Lot No.:** A0151571

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, 2022 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)			
1	Nitroglycerin		5,036.0	µg/mL	+/-	46.8321	µg/mL	Gravimetric
	CAS # 55-63-0	(Lot 170616JLM)			+/-	278.2306	µg/mL	Unstressed
	Purity 99%				+/-	323.7234	µg/mL	Stressed

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

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

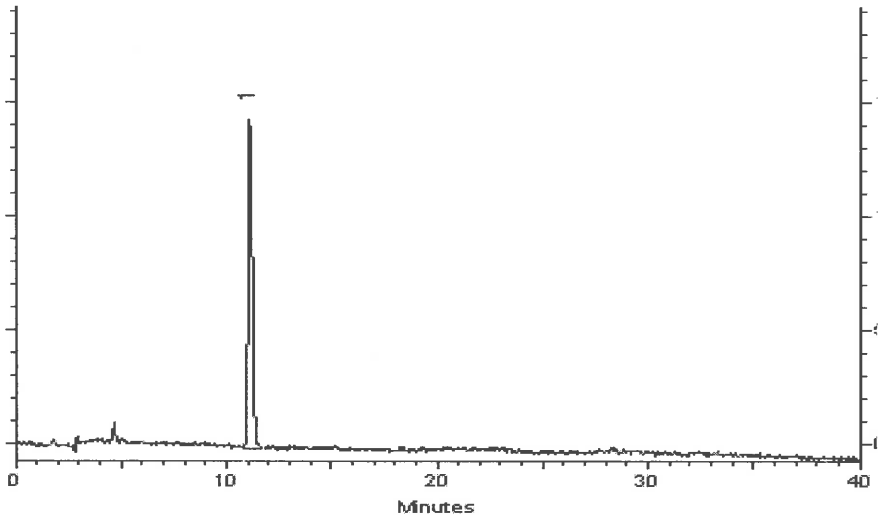
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Joseph Jaglowski - Mix Technician

Date Mixed: 05-Aug-2019 **Balance:** B707717271

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 09-Aug-2019

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

Reagent

8330_PETN_Stk_00056

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568872 **Lot No.:** A0124124

Description : Custom PETN Standard

Custom PETN Standard 5000 µg/mL, Acetonitrile, 1mL/ampul

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

Expiration Date : January 31, 2020 **Storage:** 10°C or colder

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

Elution Order	Compound			Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	PETN			5,024.0 µg/mL	+/-	46.7205	µg/mL	Gravimetric
	CAS #	78-11-5	(Lot 051108JLM)		+/-	277.5676	µg/mL	Unstressed
	Purity	99%			+/-	322.9521	µg/mL	Stressed

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

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

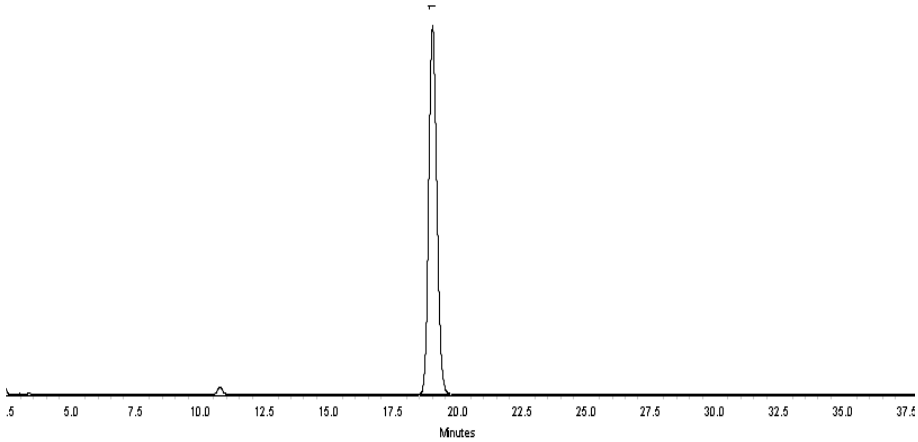
Flow Rate:
1.0 ml/min.

Mobile Phase A:
-

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

Mobile Phase Composition:
100%B

Det. Type:
Wavelength: 210 nm



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

Kendra Jozefick - Mix Technician

Date Mixed: 12-Jan-2017 **Balance:** B442140311

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 17-Jan-2017 REVIEWED By Amanda Miller at 3:54 pm, Jan 17, 2017

Manufactured under Restek's ISO 9001:2008 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 Guides 34 and 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)	< 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:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8330_PETN_Stk_00087

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568872 **Lot No.:** A0154763

Description : Custom PETN Standard

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

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

Expiration Date : November 30, 2022 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound			Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)			
1	PETN			5,024.0	µg/mL	+/-	46.7205	µg/mL	Gravimetric
	CAS #	78-11-5	(Lot 051108JLM)			+/-	277.5676	µg/mL	Unstressed
	Purity	99%				+/-	322.9521	µg/mL	Stressed

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

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

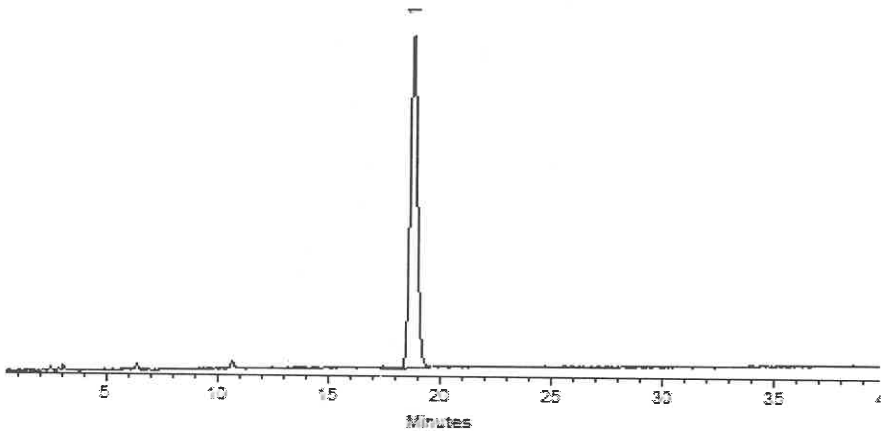
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Clara Windle - Operations Technician I

Date Mixed: 05-Nov-2019 **Balance:** B442140311

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 08-Nov-2019

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

Reagent

8330_PETN_Stk_00089

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Testing Laboratory
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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568872 **Lot No.:** A0154763

Description : Custom PETN Standard

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

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

Expiration Date : November 30, 2022 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound			Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)			
1	PETN			5,024.0	µg/mL	+/-	46.7205	µg/mL	Gravimetric
	CAS #	78-11-5	(Lot 051108JLM)			+/-	277.5676	µg/mL	Unstressed
	Purity	99%				+/-	322.9521	µg/mL	Stressed

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

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

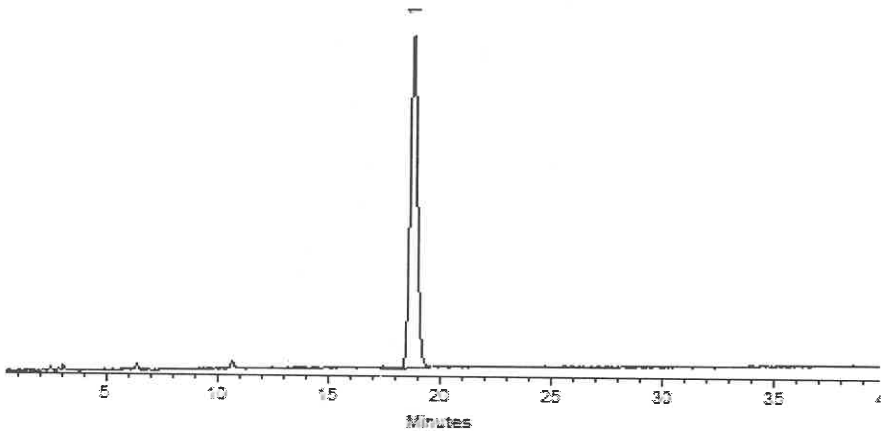
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Clara Windle - Operations Technician I

Date Mixed: 05-Nov-2019 **Balance:** B442140311

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 08-Nov-2019

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

Reagent

8330_PETN_Stk_00090

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568872 **Lot No.:** A0154763

Description : Custom PETN Standard

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

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

Expiration Date : November 30, 2022 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound			Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)			
1	PETN			5,024.0	µg/mL	+/-	46.7205	µg/mL	Gravimetric
	CAS #	78-11-5	(Lot 051108JLM)			+/-	277.5676	µg/mL	Unstressed
	Purity	99%				+/-	322.9521	µg/mL	Stressed

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

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

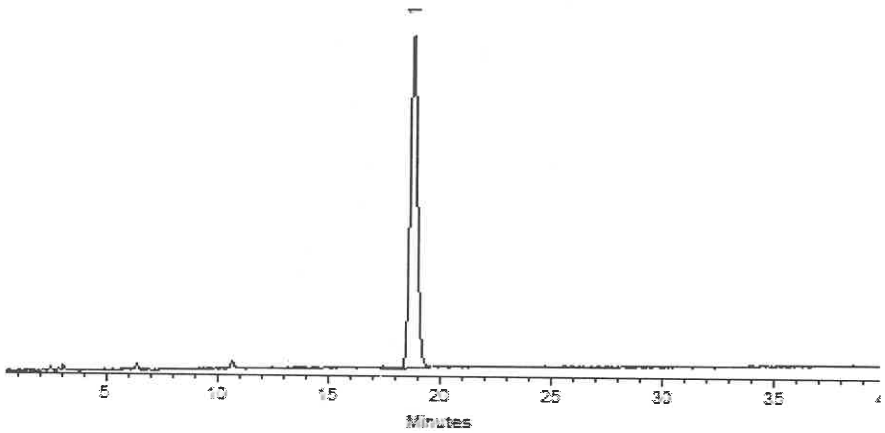
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Clara Windle - Operations Technician I

Date Mixed: 05-Nov-2019 **Balance:** B442140311

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 08-Nov-2019

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

Reagent

8330LCSMix1_00109

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31450 **Lot No.:** A0131772

Description : 8330 Calibration Mix #1

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

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

Expiration Date : October 31, 2022 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	HMX **CAS #** 2691-41-0 **Purity** 98%	(Lot 111005JLM)	1,009.4 µg/mL	+/- 5.9955 µg/mL +/- 55.2980 µg/mL +/- 64.4829 µg/mL	Gravimetric Unstressed Stressed
2	RDX **CAS #** 121-82-4 **Purity** 99%	(Lot 080220JLM)	1,005.0 µg/mL	+/- 5.9694 µg/mL +/- 55.0569 µg/mL +/- 64.2018 µg/mL	Gravimetric Unstressed Stressed
3	1,3,5-Trinitrobenzene **CAS #** 99-35-4 **Purity** 97%	(Lot DJ5QO)	1,009.8 µg/mL	+/- 5.9977 µg/mL +/- 55.3182 µg/mL +/- 64.5065 µg/mL	Gravimetric Unstressed Stressed
4	1,3-Dinitrobenzene **CAS #** 99-65-0 **Purity** 99%	(Lot BCBB1436V)	1,008.0 µg/mL	+/- 5.9872 µg/mL +/- 55.2213 µg/mL +/- 64.3934 µg/mL	Gravimetric Unstressed Stressed
5	Nitrobenzene **CAS #** 98-95-3 **Purity** 99%	(Lot SHBF2348V)	1,002.0 µg/mL	+/- 5.9516 µg/mL +/- 54.8926 µg/mL +/- 64.0101 µg/mL	Gravimetric Unstressed Stressed
6	2,4,6-Trinitrotoluene **CAS #** 118-96-7 **Purity** 99%	(Lot 2554100)	1,008.0 µg/mL	+/- 5.9872 µg/mL +/- 55.2213 µg/mL +/- 64.3934 µg/mL	Gravimetric Unstressed Stressed
7	2,4-Dinitrotoluene **CAS #** 121-14-2 **Purity** 99%	(Lot MKAA0690V)	1,005.0 µg/mL	+/- 5.9694 µg/mL +/- 55.0569 µg/mL +/- 64.2018 µg/mL	Gravimetric Unstressed Stressed

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

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

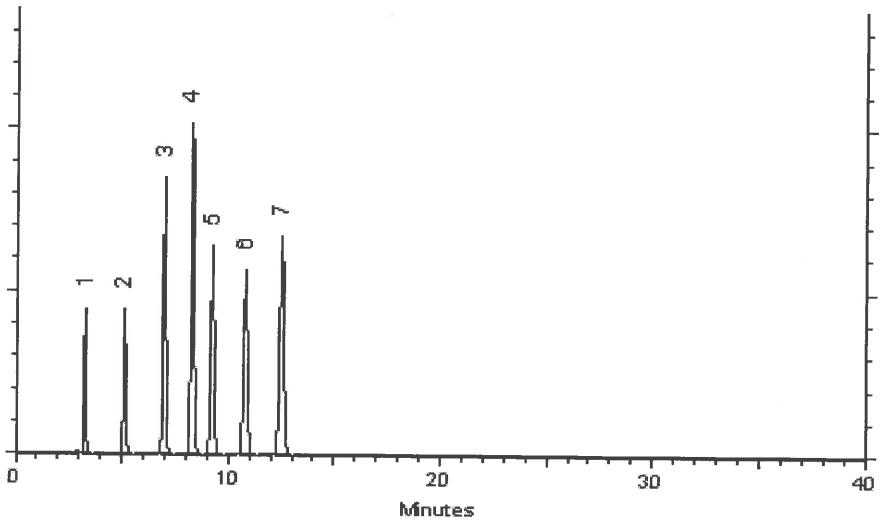
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Dawn Brownson - Mix Technician

Date Mixed: 19-Oct-2017 **Balance:** B707717271

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 23-Oct-2017

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

Reagent

8330LCSMix1_00113

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

Catalog No. : 31450 **Lot No.:** A0151407

Description : 8330 Calibration Mix #1

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

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

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

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	HMX **CAS #** 2691-41-0 **Purity** 97%	(Lot 190402JLM)	1,004.9 µg/mL	+/- 5.9689 µg/mL +/- 55.0525 µg/mL +/- 64.1967 µg/mL	Gravimetric Unstressed Stressed
2	RDX **CAS #** 121-82-4 **Purity** 99%	(Lot 080228JLM)	1,005.0 µg/mL	+/- 5.9694 µg/mL +/- 55.0569 µg/mL +/- 64.2018 µg/mL	Gravimetric Unstressed Stressed
3	1,3,5-Trinitrobenzene **CAS #** 99-35-4 **Purity** 97%	(Lot DJ5QO)	1,003.0 µg/mL	+/- 5.9574 µg/mL +/- 54.9463 µg/mL +/- 64.0727 µg/mL	Gravimetric Unstressed Stressed
4	1,3-Dinitrobenzene **CAS #** 99-65-0 **Purity** 99%	(Lot BCBN4329V)	1,001.0 µg/mL	+/- 5.9456 µg/mL +/- 54.8378 µg/mL +/- 63.9463 µg/mL	Gravimetric Unstressed Stressed
5	Nitrobenzene **CAS #** 98-95-3 **Purity** 99%	(Lot SHBJ3622)	1,001.0 µg/mL	+/- 5.9456 µg/mL +/- 54.8378 µg/mL +/- 63.9463 µg/mL	Gravimetric Unstressed Stressed
6	2,4,6-Trinitrotoluene **CAS #** 118-96-7 **Purity** 99%	(Lot 5737200)	1,005.0 µg/mL	+/- 5.9694 µg/mL +/- 55.0569 µg/mL +/- 64.2018 µg/mL	Gravimetric Unstressed Stressed
7	2,4-Dinitrotoluene **CAS #** 121-14-2 **Purity** 99%	(Lot MKAA0690)	1,001.0 µg/mL	+/- 5.9456 µg/mL +/- 54.8378 µg/mL +/- 63.9463 µg/mL	Gravimetric Unstressed Stressed

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

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

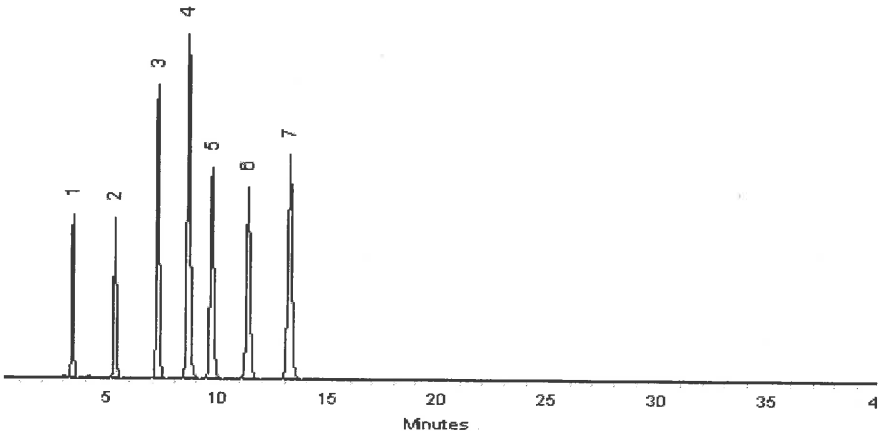
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Matt Fragassi - Mix Technician

Date Mixed: 30-Jul-2019 **Balance:** 1127510105

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 01-Aug-2019

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

Reagent

8330LCSmix2_00008

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31451 **Lot No.:** A0141002

Description : 8330 Calibration Mix #2

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

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

Expiration Date : August 31, 2023 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Tetryl **CAS #** 479-45-8 **Purity** 99%	(Lot 091120JLM)	1,000.0 µg/mL	+/- 5.9397 µg/mL +/- 54.7830 µg/mL +/- 63.8824 µg/mL	Gravimetric Unstressed Stressed
2	4-Amino-2,6-dinitrotoluene **CAS #** 19406-51-0 **Purity** 99%	(Lot ER070908-01)	1,002.0 µg/mL	+/- 5.9516 µg/mL +/- 54.8926 µg/mL +/- 64.0101 µg/mL	Gravimetric Unstressed Stressed
3	2-Amino-4,6-dinitrotoluene **CAS #** 35572-78-2 **Purity** 98%	(Lot 29550-55)	1,007.4 µg/mL	+/- 5.9839 µg/mL +/- 55.1906 µg/mL +/- 64.3577 µg/mL	Gravimetric Unstressed Stressed
4	2,6-Dinitrotoluene **CAS #** 606-20-2 **Purity** 99%	(Lot BCBB8606V)	1,000.0 µg/mL	+/- 5.9397 µg/mL +/- 54.7830 µg/mL +/- 63.8824 µg/mL	Gravimetric Unstressed Stressed
5	2-Nitrotoluene **CAS #** 88-72-2 **Purity** 99%	(Lot GA01)	1,004.0 µg/mL	+/- 5.9635 µg/mL +/- 55.0021 µg/mL +/- 64.1379 µg/mL	Gravimetric Unstressed Stressed
6	4-Nitrotoluene **CAS #** 99-99-0 **Purity** 99%	(Lot FAU01)	1,002.0 µg/mL	+/- 5.9516 µg/mL +/- 54.8926 µg/mL +/- 64.0101 µg/mL	Gravimetric Unstressed Stressed
7	3-Nitrotoluene **CAS #** 99-08-1 **Purity** 98%	(Lot FBO01)	1,003.5 µg/mL	+/- 5.9606 µg/mL +/- 54.9758 µg/mL +/- 64.1072 µg/mL	Gravimetric Unstressed Stressed

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

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

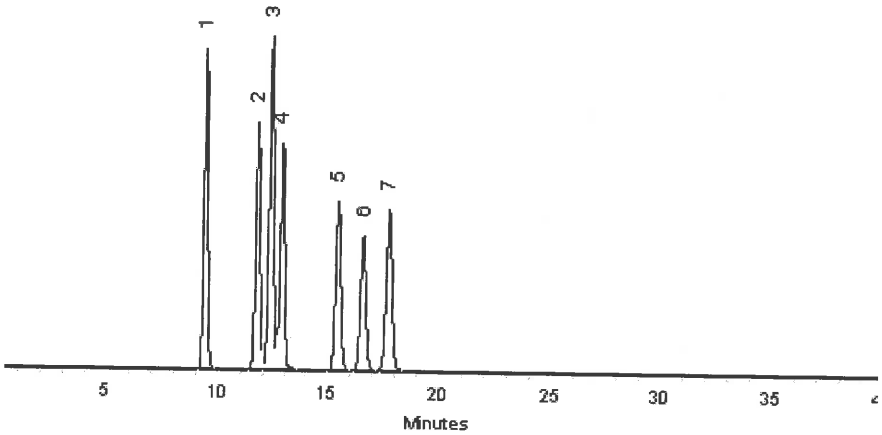
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Matt Fragassi - Mix Technician

Date Mixed: 23-Aug-2018 **Balance:** B345965662

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 28-Aug-2018

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

Reagent

8330LCSmix2_00009

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. : 31451 **Lot No.:** A0149387

Description : 8330 Calibration Mix #2

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

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

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

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Tetryl **CAS #** 479-45-8 **Purity** 99%	(Lot 091120JLM)	1,004.0 µg/mL	+/- 5.9635 µg/mL +/- 55.0021 µg/mL +/- 64.1379 µg/mL	Gravimetric Unstressed Stressed
2	4-Amino-2,6-dinitrotoluene **CAS #** 19406-51-0 **Purity** 99%	(Lot ER070908-01)	1,000.0 µg/mL	+/- 5.9397 µg/mL +/- 54.7830 µg/mL +/- 63.8824 µg/mL	Gravimetric Unstressed Stressed
3	2-Amino-4,6-dinitrotoluene **CAS #** 35572-78-2 **Purity** 98%	(Lot 29550-55)	999.6 µg/mL	+/- 5.9373 µg/mL +/- 54.7611 µg/mL +/- 63.8568 µg/mL	Gravimetric Unstressed Stressed
4	2,6-Dinitrotoluene **CAS #** 606-20-2 **Purity** 99%	(Lot 1437483V)	1,004.0 µg/mL	+/- 5.9635 µg/mL +/- 55.0021 µg/mL +/- 64.1379 µg/mL	Gravimetric Unstressed Stressed
5	2-Nitrotoluene **CAS #** 88-72-2 **Purity** 99%	(Lot GA01)	1,010.0 µg/mL	+/- 5.9991 µg/mL +/- 55.3308 µg/mL +/- 64.5212 µg/mL	Gravimetric Unstressed Stressed
6	4-Nitrotoluene **CAS #** 99-99-0 **Purity** 99%	(Lot FAU01)	1,006.0 µg/mL	+/- 5.9753 µg/mL +/- 55.1117 µg/mL +/- 64.2657 µg/mL	Gravimetric Unstressed Stressed
7	3-Nitrotoluene **CAS #** 99-08-1 **Purity** 98%	(Lot 07329LG)	1,007.4 µg/mL	+/- 5.9839 µg/mL +/- 55.1906 µg/mL +/- 64.3577 µg/mL	Gravimetric Unstressed Stressed

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

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

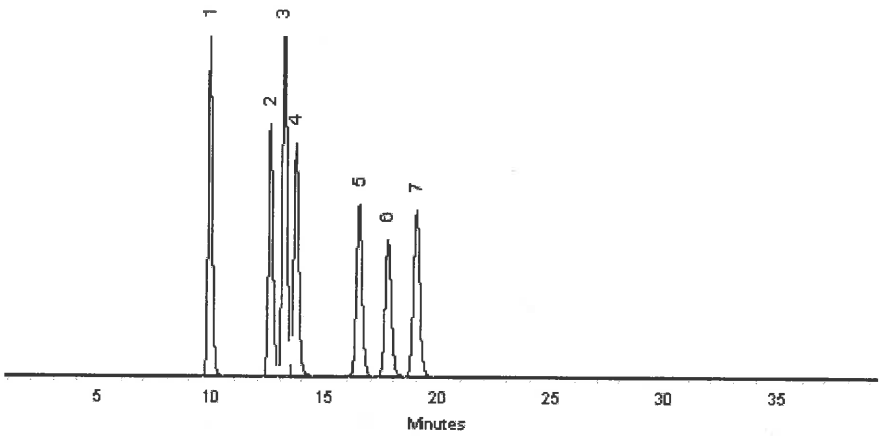
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Lane Kibe - Mix Technician

Date Mixed: 21-May-2019 **Balance:** 1127510105

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 23-May-2019

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

Reagent

8330PAStkPS_00058

125 Market Street
New Haven, CT 06513
USA

AccuStandard® Inc.

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

CERTIFICATE OF ANALYSIS

Catalog No: M-8330-ADD-3
Description: Picric acid
Lot: 216061376-01
Solvent: Acetonitrile (50%)
Methanol (50%)
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Jun 19, 2017
Expiration: Jul 19, 2019
Sample Size: 1 mL
Components: 1

Storage Condition: Ambient (>5 °C)

Included on ISO/IEC 17025 Scope of Accreditation: Yes

Included on ISO Guide 34 Scope of Accreditation: Yes

Component	CAS #	Purity % (HPLC)	Prepared Concentration[1] (µg/mL)	Certified Analyte Concentration[2] (µg/mL)
Picric acid	88-89-1	99.1	100.1	99.2

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

[1] All weights are traceable through NIST, Test No. 822-275872-11

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

The Uncertainty associated with the gravimetric values reported on this certificate is ±0.24%. This value is the 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.

See reverse side for additional information

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard is accredited to ISO Guide 34, ISO/IEC 17025 and certified to ISO 9001:2015

QR-ORG/INO-001
Rev. 4/17

Reagent

8330PAStkPS_00061

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: 214121302-02
Solvent: Acetonitrile (50%)
Methanol (50%)
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Aug 9, 2019
Expiration: Sep 9, 2021
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

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

Component	CAS #	Purity % (HPLC)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
Picric acid	88-89-1	99.1	100.1	99.2

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

Certified By: Larry Decker, Organic QC Manager

Page 1 of 1

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

AccuStandard®, Inc.
125 Market St., New Haven, CT 06513 USA
Tel: 203-786-5290 Fax: 203-786-5287

SAFETY DATA SHEET

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

1.1 - Product Identifiers

Catalog Name: M-8330-ADD-3

Description: Picric Acid in Acetonitrile/Methanol Blend

1.2 - Relevant Identified Uses of the Substance or Mixture

Laboratory Chemical Reference Material

1.3 - Supplier Details

Company: AccuStandard, Inc.
125 Market St.
New Haven, CT 06513 USA

Telephone Number: 203-786-5290

Fax: 203-786-5287

Email: edocs@accustandard.com

1.4 - Emergency Telephone Number

Emergency Phone #: AccuStandard, Inc.
1-203-502-7070 (USA)
+001-203-502-7070 (International)

24 hours / 7 days a week

SECTION 2 - HAZARDS IDENTIFICATION

2.1 - GHS Label Elements

Signal Word: Danger

Hazard Codes:

H225 - Highly Flammable (Flammable liquids, category 2)

H315 - Irritating to skin. (Skin corrosion/irritation, category 2)

H319 - Causes severe eye irritation. (Eye damage/irritation, category 2A)

H332 - Harmful if inhaled. (Acute toxicity, inhalation, category 4)

H336 - Overexposure may cause dizziness, nausea, muscle weakness, narcosis and respiratory failure.

H360 - California Proposition 65 Warning: This product contains a component (or components) that may cause birth defects or other reproductive harm in a quantity greater than or equal to 0.1%.

H370 - Causes damage to organs. (Specific target organ toxicity, single exposure, category 1)

Precautionary Codes:

P202 - This product should only by used by persons trained in the safe handling of hazardous chemicals.

P233 - Store in a tightly closed container. (P404)

SECTION 2 - HAZARDS IDENTIFICATION *- continued*

2.1 - GHS Label Elements *- continued*

P260 - Do not breathe vapor.

P262 - Do not get in eyes, on skin or clothing.

P264 - Wash thoroughly after handling. Do not take internally. Eye wash and safety equipment should be readily available.

P284 - Respiratory Protection: If workplace exposure limit(s) of product or any component is exceeded (see TLV/PEL), or a risk assessment shows air-purifying respirators are appropriate, use of a NIOSH/MSHA approved air supplied respirator is advised. Use a full-face respirator with multi-purpose combination (US) or type ABEK (EN14387) respirator cartridges in absence of proper environmental control. Always use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Engineering and/or administrative controls should be implemented to reduce exposure.

P338 - Eye contact: Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers.

P340 - Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

P352 - Skin contact: Wash thoroughly with soap and water. Get medical attention if irritation develops or persists.

2.2 - Other Hazards

2.2.1 - Symptom of Exposure Health/Environment

Highly Flammable (Flammable liquids, category 2)

Causes damage to organs. (Specific target organ toxicity, single exposure, category 1)

After ingestion or inhalation, initial symptoms may be only that of mild intoxication, but may become severe after 12 or 18 hours.

Overexposure may cause dizziness, nausea, muscle weakness, narcosis and respiratory failure.

2.2.2 - Potential Health Effects

Causes severe eye irritation. (Eye damage/irritation, category 2A)

Irritating to skin. (Skin corrosion/irritation, category 2)

May be harmful if absorbed through the skin. (Acute toxicity, dermal, category 5)

Irritating to mucous membrane and upper respiratory system.

Harmful if inhaled. (Acute toxicity, inhalation, category 4)

May be harmful if swallowed. (Acute toxicity, oral, category 5)

2.2.3 - Routes of Entry

Inhalation, ingestion or skin contact.

2.2.4 - Carcinogenicity

California Proposition 65 Warning: This product contains a component (or components) that may cause birth defects or other reproductive harm in a quantity greater than or equal to 0.1%.

SECTION 3 - COMPOSITION / ANALYTES DATA

Description: Picric Acid in Acetonitrile/Methanol Blend

			ACGIH -TLV (mg/m³)			OSHA -PEL (mg/m³)		
Analyte	CAS #	% Concentration	TWA	STEL	Skin	TWA	STEL	Skin
Picric acid	88-89-1	0.010	0.1			0.1		
Acetonitrile	75-05-8	49.995				70		
Methanol	67-56-1	49.995				260		

SECTION 10 - STABILITY AND REACTIVITY

Stability: Stable

Materials to Avoid: Acids
Bases
Oxidizers

Hazardous Decomposition: Hydrogen cyanide (HCN); Carbon oxides; Nitrogen oxides Forms HCN when heated to about 120 °C

Hazardous Polymerization: Will not occur

Condition to Avoid: Heat; Contact with ignition sources

SECTION 11 - TOXICOLOGICAL INFORMATION

Human Health Toxicity

See section 2 for specific toxicological information for the ingredients of this product.

LD50 (Oral): N/A

LD50 (Dermal) : N/A

LC50 (Inhalation): N/A

No specific human health toxicity information is available for this product. Information provided is based on similar products.

WARNING: This product contains chemicals known to the state of California to cause birth defects or other reproductive harm.

No other information related to the toxicological properties of this product is available at this time.

SECTION 12 - ECOLOGICAL INFORMATION

Environmental Toxicity

By complying with sections 6 and 7 there should be no release to the environment.

LC50 (Fish): N/A

EC50 (Aquatic Invertebrate): N/A

BCF: N/A

No specific environmental toxicity information is available for this product. It is not expected to be an environmental concern.

No other information related to the ecological properties of this product is available at this time.

SECTION 13 - DISPOSAL CONSIDERATIONS

Recycle or incinerate at any EPA approved facility or dispose in compliance with Federal, State and local regulations. Empty containers must be triple-rinsed prior to disposal.

SECTION 14 - TRANSPORT INFORMATION

Transportation Information (DOT/IATA)

UN Number: UN1993

Class: 3

Packing Group: II

Proper Shipping Name: Flammable liquid, n.o.s. (Acetonitrile, Methanol)

Poison by Inhalation: No

Marine Pollutant: No

SECTION 15 - REGULATORY INFORMATION

WARNING: This product contains chemicals known to the state of California to cause birth defects or other reproductive harm.

All components are listed on the TSCA Inventory.

For laboratory, research and development use only. Not for manufacturing or commercial purposes.

In addition to federal and state regulations, local regulations may apply. Check with your local regulatory authorities.

SECTION 16 - OTHER INFORMATION

This document has been designed to meet the requirements of OSHA, ANSI, GHS and CHIPs regulations. Chemicals are classified using the Globally Harmonized System for Classification and Labeling of Chemicals and CLP Regulation (EC) No. 1272/2008.

The statements contained herein are offered for informational purposes only and are based on technical data that we believe to be accurate. The manufacturer will not assume any liability for the accuracy and completeness of this information. Final determination of the suitability of the material is the responsibility of the user. Although certain hazards are described herein, the user should not presume that these are the only hazards that exist. Since conditions and manner of use are outside of the manufacturers control, we make

NO WARRANTY OF MERCHANTABILITY, EXPRESSED OR IMPLIED, AND ASSUME NO LIABILITY RESULTING FROM ITS USE.

Legend : N/A = Not Available ND = Not Determined NR = Not Regulated

Alteration of any information contained herein without written permission from the manufacturer is strictly prohibited.

HMIS/NFPA HAZARD INDEX

0 - Minimal
1 - Slight
2 - Moderate
3 - Serious
4 - Severe

* - Additional Hazard

GHS HAZARD INDEX

Category 1 - Most Severe
Category 5 - Least Severe

**** End of Document ****

Reagent

8330Surrogate_00110

eurofins | Environment Testing TestAmerica

8330Surrogate_00110

good ✓

Reagent ID: 8330Surrogate_00110

		Expiration Date:	05/17/2020
Description:	10ug/mL 1,2-Dinitrobenzene	Laboratory:	Eurofins TestAmerica, Denver
No. of Bottles:	1	Prepared By:	Bourgery, David F
Storage Location:	Explosives Prep	Solvent:	Acetonitrile
Reagent Volume:	250.000 mL	Solvent Lot:	ACN_00223
Creation Date:	12/17/2019		
Open Date:			
Container(s):	6017392		

WL 88127 → C18

Comment: Stored Frozen. 6 month expiration date. Take 1mL of 1,2 Dinitrobenzene (8330SurrStock) and Dilute to 100 mL in ACN. Mulitply recipe as needed.

POS #6

Reagent Analyte Information

Analyte	Source ID	Source Exp. Date	Source Conc.	Source Conc. Units	Final Conc.	Final Conc. Units
1,2-Dinitrobenzene	8330SurrStkSS_00145	03/31/2023	1000.00000	ug/mL	10.00000	ug/mL
1,2-Dinitrobenzene (Surr)	8330SurrStkSS_00145	03/31/2023	1000.00000	ug/mL	10.00000	ug/mL
1,2-Dinitrobenzene	8330SurrStkSS_00158	07/31/2024	1000.00000	ug/mL	10.00000	ug/mL
1,2-Dinitrobenzene (Surr)	8330SurrStkSS_00158	07/31/2024	1000.00000	ug/mL	10.00000	ug/mL
1,2-Dinitrobenzene	8330SurrStkSS_00160	07/31/2024	1000.00000	ug/mL	10.00000	ug/mL
1,2-Dinitrobenzene (Surr)	8330SurrStkSS_00160	07/31/2024	1000.00000	ug/mL	10.00000	ug/mL
1,2-Dinitrobenzene	8330SurrStkSS_00161	07/31/2024	1000.00000	ug/mL	10.00000	ug/mL
1,2-Dinitrobenzene (Surr)	8330SurrStkSS_00161	07/31/2024	1000.00000	ug/mL	10.00000	ug/mL

Source Reagents

Reagent	Description	Type	Expiration	Vendor	Vendor Lot #	Vendor Cat Lot #	Volume Used	Volume Units
8330SurrStkSS_00145	31453, 1000ug/mL Restek 1,2-DNB SS	ASTD	03/31/23	Restek	A0135839	31453	0.25000	mL
8330SurrStkSS_00158	31453, 1000ug/mL Restek 1,2-DNB SS	ASTD	07/31/24	Restek	A0146866	31453	0.25000	mL
8330SurrStkSS_00160	31453, 1000ug/mL Restek 1,2-DNB SS	ASTD	07/31/24	Restek	A0150790	31453	1.00000	mL
8330SurrStkSS_00161	31453, 1000ug/mL Restek 1,2-DNB SS	ASTD	07/31/24	Restek	A0150790	31453	1.00000	mL

Preliminary Report

Eurofins TestAmerica, Denver

LCS, Lab Control Sample Report

Sample Path: \\chromna\Denver\ChromData\CHHPLC_X\20191220-88127.b\12200006.D

Lims ID: C18column:B16162 Inj. Date: 20-Dec-2019 11:19:02

Worklist ID: 280-0088127-006 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 3535	Limits 2 3535	Limits 3 3535
$ 9 1,2-Dinitrobenzene	0.4000	0.3843	96.1	83-119	63-127	

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

280-132090-A-2-A	280-132090-A-3-A	280-132090-A-4-A
280-132090-A-5-A	280-132090-A-6-A	280-132090-A-7-A
280-132090-A-8-A	280-132031-A-1-A	280-132031-A-2-A
280-132031-A-3-A	280-132031-A-4-A	280-131963-A-1-B
280-131963-B-2-A	280-131963-A-3-A	280-131963-B-4-A
280-131977-A-1-A	280-131977-B-2-A	280-131977-B-3-A
280-131977-A-4-A	280-131977-A-5-A	280-131977-A-6-A

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

280-131996-A-4-A	280-131996-A-5-A	280-131996-A-6-A
280-131996-A-7-A	280-131996-A-8-A	280-131996-A-9-A
280-131996-A-11-A	280-131996-A-12-A	280-131996-A-13-A
280-131996-A-14-A	280-131996-A-15-A	280-131996-A-1-A
280-131996-A-2-A	280-131996-A-3-A	280-131996-A-10-A

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

280-132013-A-1-A	600-197143-C-1-A	280-131992-C-1-A
280-131988-A-1-A	280-131988-A-2-A	280-131988-A-3-A
280-131988-B-4-A		

Reagent

8330SurrStkSS_00134

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ISO Guide 34 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. : 31453 **Lot No.:** A0124792

Description : 8330 Surrogate Mix

8330 Surrogate Std 1, 2-Dinitrobenzene 1000µg/mL, Methanol, 1mL/ampul

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

Expiration Date : February 28, 2022 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	1,2-Dinitrobenzene	1,006.0 µg/mL	+/- 5.9753 µg/mL	Gravimetric
	CAS # 528-29-0 (Lot MKBW2921V)		+/- 56.4187 µg/mL	Unstressed
	Purity 99%		+/- 57.7382 µg/mL	Stressed

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

Reagent

8330SurrStkSS_00135

RESTEK® CERTIFIED REFERENCE MATERIAL

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

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Certificate of Analysis

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31453 **Lot No.:** A0124792

Description : 8330 Surrogate Mix

8330 Surrogate Std 1, 2-Dinitrobenzene 1000µg/mL, Methanol, 1mL/ampul

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

Expiration Date : February 28, 2022 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	1,2-Dinitrobenzene	1,006.0 µg/mL	+/- 5.9753 µg/mL	Gravimetric
	CAS # 528-29-0 (Lot MKBW2921V)		+/- 56.4187 µg/mL	Unstressed
	Purity 99%		+/- 57.7382 µg/mL	Stressed

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

Reagent

8330SurrStkSS_00145

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ISO Guide 34 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. : 31453 **Lot No.:** A0135839

Description : 8330 Surrogate Mix

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

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

Expiration Date : March 31, 2023 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,2-Dinitrobenzene		1,000.0 µg/mL	+/- 5.9397	µg/mL	Gravimetric
	CAS # 528-29-0	(Lot MKBW2921V)		+/- 56.0822	µg/mL	Unstressed
	Purity 99%			+/- 57.3938	µg/mL	Stressed

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

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

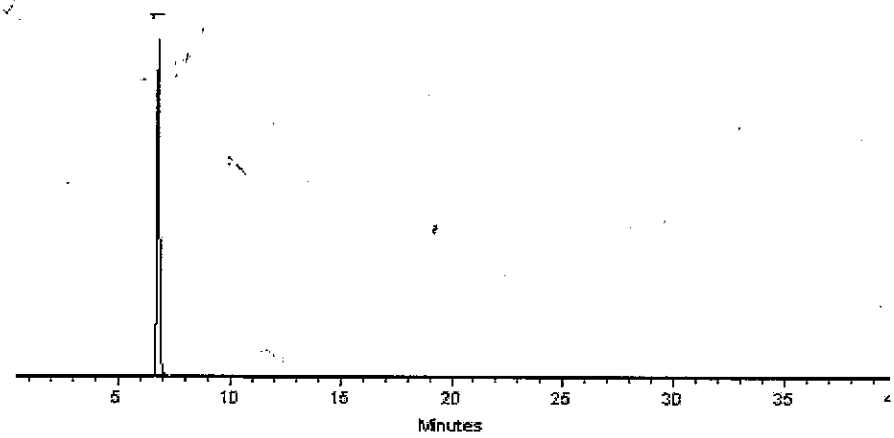
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Dustin J Lidgett

Dustin Lidgett - Mix Technician **Date Mixed:** 05-Mar-2018 **Balance:** 1128360905

Jennifer J Pollino

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 09-Mar-2018

Manufactured under Restek's ISO 9001:2008 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 Guides 34 and 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)	< 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.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely

Reagent

8330SurrStkSS_00147

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ISO Guide 34 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. : 31453 **Lot No.:** A0135839

Description : 8330 Surrogate Mix

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

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

Expiration Date : March 31, 2023 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,2-Dinitrobenzene		1,000.0 µg/mL	+/- 5.9397	µg/mL	Gravimetric
	CAS # 528-29-0	(Lot MKBW2921V)		+/- 56.0822	µg/mL	Unstressed
	Purity 99%			+/- 57.3938	µg/mL	Stressed

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

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

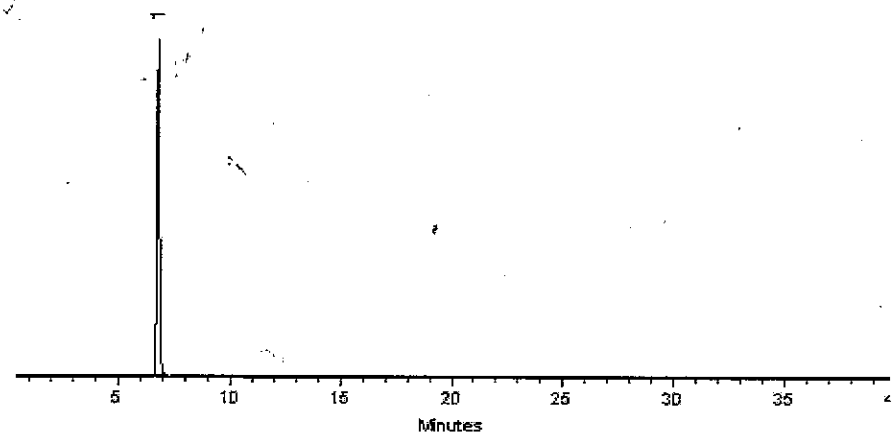
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Dustin J Lidgett

Dustin Lidgett - Mix Technician **Date Mixed:** 05-Mar-2018 **Balance:** 1128360905

Jennifer J Pollino

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 09-Mar-2018

Manufactured under Restek's ISO 9001:2008 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 Guides 34 and 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)	< 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.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely

Reagent

8330SurrStkSS_00152

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. : 31453 **Lot No.:** A0139489

Description : 8330 Surrogate Mix

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

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

Expiration Date : July 31, 2023 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)			
1	1,2-Dinitrobenzene		1,001.0	µg/mL	+/-	5.9456	µg/mL	Gravimetric
	CAS # 528-29-0	(Lot MKBW2921V)			+/-	56.1383	µg/mL	Unstressed
	Purity 99%				+/-	57.4512	µg/mL	Stressed

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
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0°C or colder (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.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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

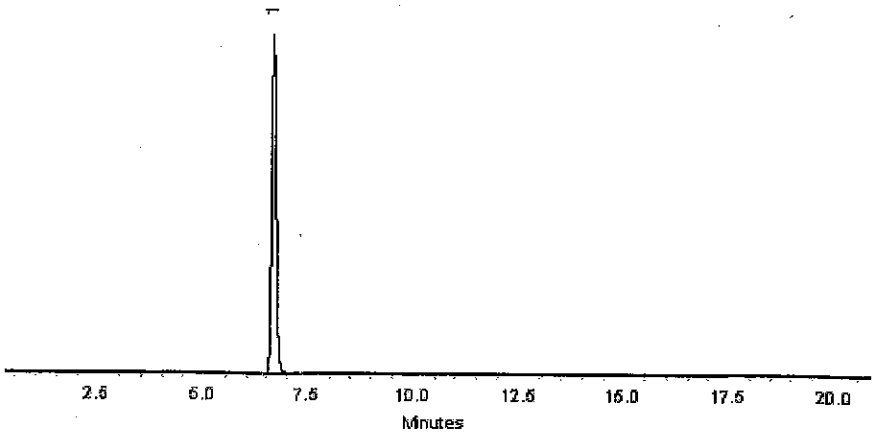
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Joseph Jaglowski - Mix Technician **Date Mixed:** 10-Jul-2018 **Balance:** B707717271

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 17-Jul-2018

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

Reagent

8330SurrStkSS_00153

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. : 31453 **Lot No.:** A0139489

Description : 8330 Surrogate Mix

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

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

Expiration Date : July 31, 2023 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)			
1	1,2-Dinitrobenzene		1,001.0	µg/mL	+/-	5.9456	µg/mL	Gravimetric
	CAS # 528-29-0	(Lot MKBW2921V)			+/-	56.1383	µg/mL	Unstressed
	Purity 99%				+/-	57.4512	µg/mL	Stressed

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/µECD, GC/MS, LC/MS, RI, and/or melting point.
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- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified 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
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- 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.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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

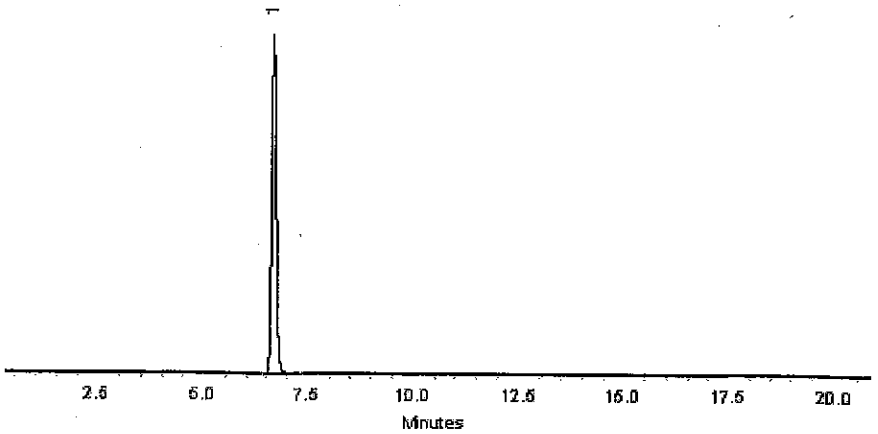
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Joseph Jaglowski - Mix Technician **Date Mixed:** 10-Jul-2018 **Balance:** B707717271

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 17-Jul-2018

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

Reagent

8330SurrStkSS_00155

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. : 31453 **Lot No.:** A0139489

Description : 8330 Surrogate Mix

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

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

Expiration Date : July 31, 2023 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)			
1	1,2-Dinitrobenzene		1,001.0	µg/mL	+/-	5.9456	µg/mL	Gravimetric
	CAS # 528-29-0	(Lot MKBW2921V)			+/-	56.1383	µg/mL	Unstressed
	Purity 99%				+/-	57.4512	µg/mL	Stressed

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/µECD, GC/MS, LC/MS, RI, and/or melting point.
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- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified 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%.
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- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
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0°C or colder (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.
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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:

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

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

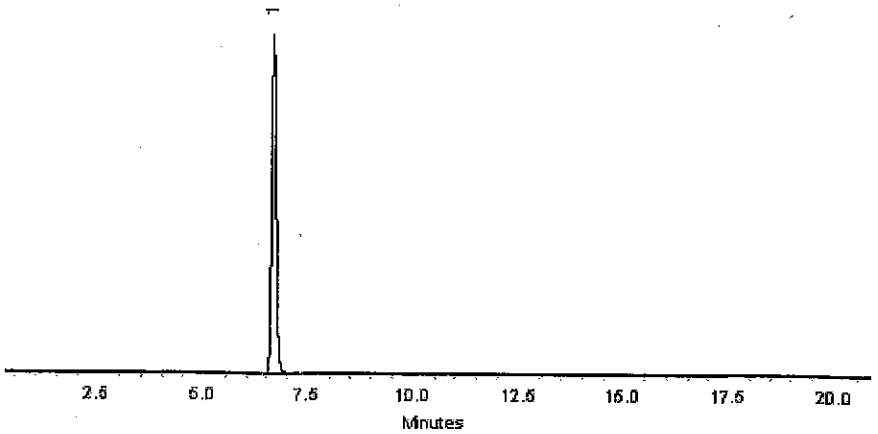
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Joseph Jaglowski - Mix Technician **Date Mixed:** 10-Jul-2018 **Balance:** B707717271

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 17-Jul-2018

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

Reagent

8330SurrStkSS_00158

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

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31453 **Lot No.:** A0150790

Description : 8330 Surrogate Mix

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

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

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

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,2-Dinitrobenzene	1,003.0 µg/mL	+/- 5.9575	µg/mL	Gravimetric
	CAS # 528-29-0 (Lot MKCH6067)		+/- 56.2504	µg/mL	Unstressed
	Purity 99%		+/- 57.5660	µg/mL	Stressed

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

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

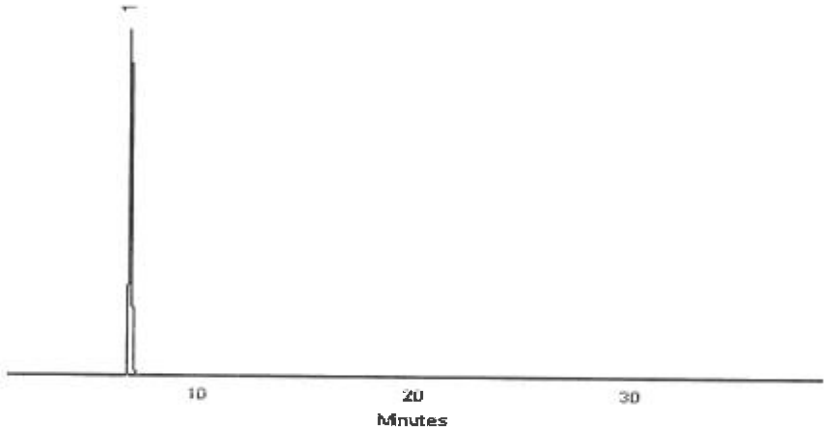
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Walker Workman - Operations Technician I

Date Mixed: 12-Jul-2019 **Balance:** 1128360905

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 16-Jul-2019

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

Reagent

8330SurrStkSS_00160

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
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Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31453 **Lot No.:** A0150790

Description : 8330 Surrogate Mix

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

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

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

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,2-Dinitrobenzene	1,003.0 µg/mL	+/- 5.9575	µg/mL	Gravimetric
	CAS # 528-29-0 (Lot MKCH6067)		+/- 56.2504	µg/mL	Unstressed
	Purity 99%		+/- 57.5660	µg/mL	Stressed

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

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

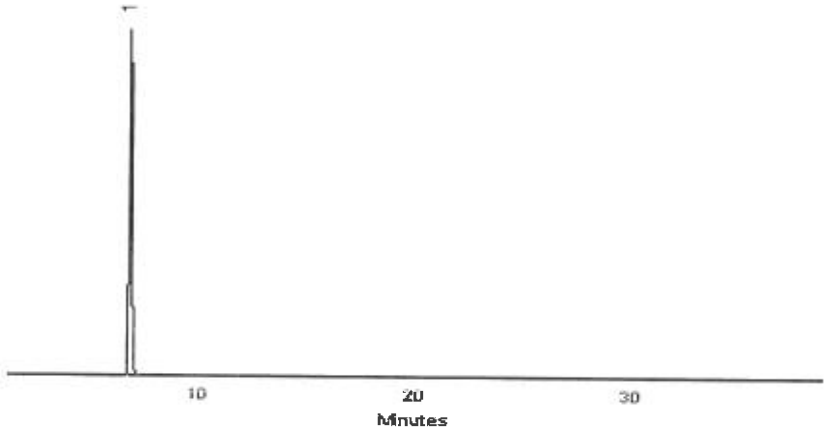
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Walker Workman - Operations Technician I

Date Mixed: 12-Jul-2019 **Balance:** 1128360905

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 16-Jul-2019

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

Reagent

8330SurrStkSS_00161

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31453 **Lot No.:** A0150790

Description : 8330 Surrogate Mix

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

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

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

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,2-Dinitrobenzene	1,003.0 µg/mL	+/- 5.9575	µg/mL	Gravimetric
	CAS # 528-29-0 (Lot MKCH6067)		+/- 56.2504	µg/mL	Unstressed
	Purity 99%		+/- 57.5660	µg/mL	Stressed

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

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

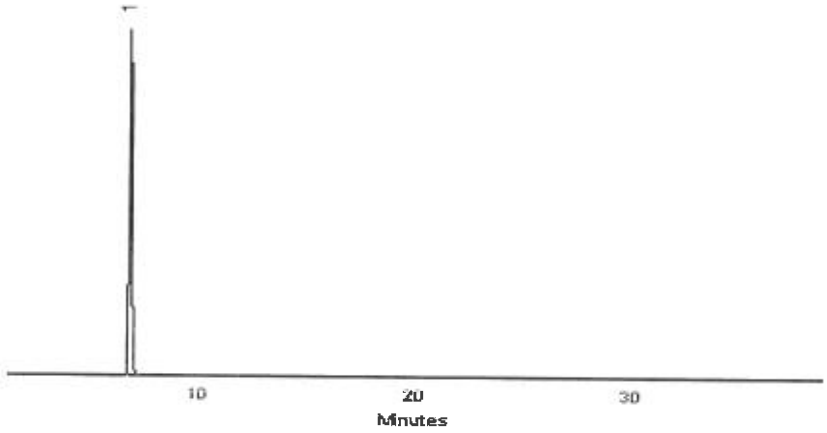
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Walker Workman - Operations Technician I

Date Mixed: 12-Jul-2019 **Balance:** 1128360905

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 16-Jul-2019

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

Reagent

8330SurrStock_00163

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: 216071012
Solvent: Methanol
Hazards: **HIGHLY FLAMMABLE** - *Refer to SDS for safety info*

Danger 2

Date Certified: Jul 1, 2016
Expiration: Jul 1, 2026
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Included on ISO/IEC 17025 Scope of Accreditation: Yes

Included on ISO Guide 34 Scope of Accreditation: Yes

Component	CAS #	Purity % (GC/FID)	Prepared Concentration[1] (µg/mL)	Certified Analyte Concentration[2] (µg/mL)
1,2-Dinitrobenzene	528-29-0	100.0	100.1	1001

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] All weights are traceable through NIST, Test No. 822-275872-11

[2] Certified Analyte Concentration = Purity x Prepared Concentration. The Uncertainty associated with the gravimetric values reported on this certificate is ±0.24%. The CRM Uncertainty calculated for this product is ±5%. These values are the expanded uncertainty and represent 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.

See reverse side for additional information

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

Reagent

8330SurrStock_00164

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: 216071012
Solvent: Methanol
Hazards: **HIGHLY FLAMMABLE** - *Refer to SDS for safety info*

Danger 2

Date Certified: Jul 1, 2016
Expiration: Jul 1, 2026
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Included on ISO/IEC 17025 Scope of Accreditation: Yes

Included on ISO Guide 34 Scope of Accreditation: Yes

Component	CAS #	Purity % (GC/FID)	Prepared Concentration[1] (µg/mL)	Certified Analyte Concentration[2] (µg/mL)
1,2-Dinitrobenzene	528-29-0	100.0	100.1	1001

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] All weights are traceable through NIST, Test No. 822-275872-11

[2] Certified Analyte Concentration = Purity x Prepared Concentration. The Uncertainty associated with the gravimetric values reported on this certificate is ±0.24%. The CRM Uncertainty calculated for this product is ±5%. These values are the expanded uncertainty and represent 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.

See reverse side for additional information

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

Reagent

EXP-SS-MIX1_00008

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. : 31450 **Lot No.:** A0151407

Description : 8330 Calibration Mix #1

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

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

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

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	HMX **CAS #** 2691-41-0 **Purity** 97%	(Lot 190402JLM)	1,004.9 µg/mL	+/- 5.9689 +/- 55.0525 +/- 64.1967	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	RDX **CAS #** 121-82-4 **Purity** 99%	(Lot 080228JLM)	1,005.0 µg/mL	+/- 5.9694 +/- 55.0569 +/- 64.2018	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	1,3,5-Trinitrobenzene **CAS #** 99-35-4 **Purity** 97%	(Lot DJ5QO)	1,003.0 µg/mL	+/- 5.9574 +/- 54.9463 +/- 64.0727	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	1,3-Dinitrobenzene **CAS #** 99-65-0 **Purity** 99%	(Lot BCBN4329V)	1,001.0 µg/mL	+/- 5.9456 +/- 54.8378 +/- 63.9463	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Nitrobenzene **CAS #** 98-95-3 **Purity** 99%	(Lot SHBJ3622)	1,001.0 µg/mL	+/- 5.9456 +/- 54.8378 +/- 63.9463	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	2,4,6-Trinitrotoluene **CAS #** 118-96-7 **Purity** 99%	(Lot 5737200)	1,005.0 µg/mL	+/- 5.9694 +/- 55.0569 +/- 64.2018	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	2,4-Dinitrotoluene **CAS #** 121-14-2 **Purity** 99%	(Lot MKAA0690)	1,001.0 µg/mL	+/- 5.9456 +/- 54.8378 +/- 63.9463	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

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

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

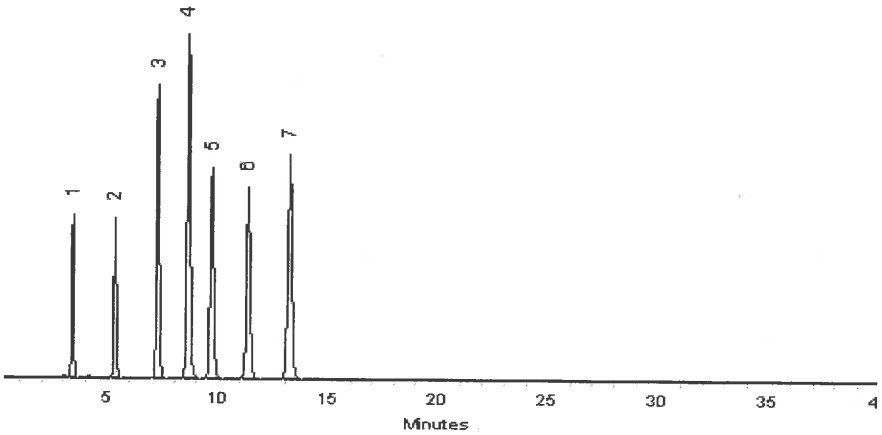
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Matt Fragassi - Mix Technician

Date Mixed: 30-Jul-2019 **Balance:** 1127510105

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 01-Aug-2019

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

Reagent

MNX,TNX,DNX_00032

Agilent

Certificate of Analysis
ISO Guide 34

Custom Standard

Product Number:	CUS-23984			**Page:**	1 of 1
Lot Number:	CS-5628	**Lot Issue Date:**	16-Nov-2018	**Expiration Date:**	31-Dec-2019

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with Agilent Technologies ISO 9001 registered quality system. A review of the gravimetric preparation data by our ISO 17025 accredited laboratory serves to verify the concentration of each analyte. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)		RM12428	100.3 ± 0.5 µg/mL
1-nitro-3,5-dinitroso-1,3,5-triazacyclohexane		RM12428	100.1 ± 0.5 µg/mL
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane		RM12428	116.7 ± 0.6 µg/mL

Matrix: acetonitrile

Storage: Store at Room Temperature (15° to 30°C).

Agilent uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.

Monica Bourgeois
QMS Representative

ANAB ACCREDITED ISO GUIDE 34 REFERENCE MATERIAL PRODUCER
ISO Guide 34 Cert No.
AR-1936

Produced in accordance with TUV USA Inc 56 100 18560026
registered ISO 9001 Quality Managment System

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
ISO17025 Cert No.
AT-1937

ORG ver 1.1

250 Smith Street North Kingstown, Rhode Island 02852 **www.ultrasci.com**

Reagent

MNX,TNX,DNX_00036

Agilent

Certificate of Analysis
ISO Guide 34

Custom Standard

Product Number:	CUS-23984			**Page:**	1 of 1
Lot Number:	CS-5628	**Lot Issue Date:**	16-Nov-2018	**Expiration Date:**	31-Dec-2019

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with Agilent Technologies ISO 9001 registered quality system. A review of the gravimetric preparation data by our ISO 17025 accredited laboratory serves to verify the concentration of each analyte. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)		RM12428	100.3 ± 0.5 µg/mL
1-nitro-3,5-dinitroso-1,3,5-triazacyclohexane		RM12428	100.1 ± 0.5 µg/mL
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane		RM12428	116.7 ± 0.6 µg/mL

Matrix: acetonitrile

Storage: Store at Room Temperature (15° to 30°C).

Agilent uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.

Monica Bourgeois
QMS Representative

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER
ISO Guide 34 Cert No. AR-1936

Produced in accordance with TUV USA Inc 56 100 18560026
registered ISO 9001 Quality Managment System

ANAB ACCREDITED TESTING LABORATORY
ISO17025 Cert No. AT-1937

250 Smith Street North Kingstown, Rhode Island 02852 www.ultrasci.com

Reagent

MNX,TNX,DNX_00042

Agilent

Certificate of Analysis

Product Name: Custom Standard

Product Number: CUS-23984 **Lot Issue Date:** 24-Jan-2020

Lot Number: 0006516106 **Expiration Date:** 28-Feb-2021

Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system, and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)	N/A	RM12426	100.3 ± 0.5 µg/mL
1-nitro-3,5-dinitroso-1,3,5-triazacyclohexane (DNX)	N/A	RM12428	100.4 ± 0.5 µg/mL
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane (MNX)	N/A	RM12428	117.1 ± 0.6 µg/mL

Matrix: acetonitrile

Storage Conditions: Store at Room Temperature (15° to 30°C).

Traceability:

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

Homogeneity:

This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:

This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:

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

Hazards:

Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

Expiration of Certification:

The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER

ISO 17034 Cert No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

Page: 1 of 2

www.agilent.com/quality/ CSD-QA-015.1

ANAB ACCREDITED TESTING LABORATORY

ISO 17025 Cert No. AT-1937

250 Smith Street North Kingstown, Rhode Island 02852 www.agilent.com/quality

Certificate of Analysis

Product Number: CUS-23984 **Lot Number:** 0006516106

Maintenance of Certification:
If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

Monica Bourgeois
QMS Representative

ISO 17034 Cert No.
AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

www.agilent.com/quality/
CSD-QA-015.1

ISO 17025 Cert
No. AT-1937

Reagent

PicricARestek_00086

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31499 **Lot No.:** A0148431

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 : April 30, 2024 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Picric Acid		1,001.0 µg/mL	+/- 5.9459	µg/mL	Gravimetric
	CAS # 88-89-1	(Lot 06130CU)		+/- 54.8400	µg/mL	Unstressed
	Purity 97%			+/- 63.9488	µg/mL	Stressed

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

Specific Reference Material Notes:
This is a derivatized analysis.

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

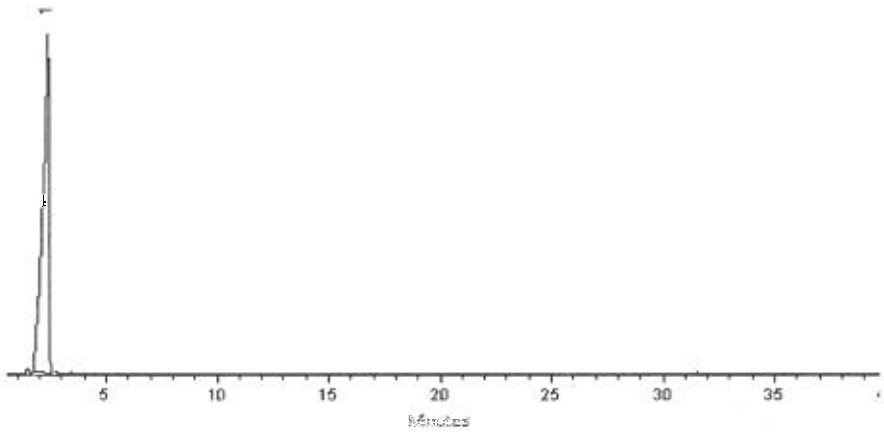
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Dustin J Lidgett

Dustin Lidgett - Mix Technician **Date Mixed:** 22-Apr-2019 **Balance:** 1127510105

Jennifer J Pollino

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 25-Apr-2019

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

8330A_DOD5

Nitroaromatics and Nitramines (HPLC)

FORM II
HPLC/IC SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

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 #
OS001-DP02-25	280-134063-1		107
OS001-DP02-25	280-134063-1	102 M	
OS001-DP02-25 RE	280-134063-1 RE		0.3 Q M
OS001-DP02-25 RE	280-134063-1 RE	8 Q	
OS001-DP502-25	280-134063-2		91
OS001-DP502-25	280-134063-2	92 M	
OS001-DP502-25 RE	280-134063-2 RE		96 M
OS001-DP502-25 RE	280-134063-2 RE	68 Q	
OS001-DP02-35	280-134063-3		107
OS001-DP02-35	280-134063-3	86	
OS001-DP02-35 RE	280-134063-3 RE		9 Q M
OS001-DP02-35 RE	280-134063-3 RE	15 Q	
OS001-DP02-45	280-134063-4		99
OS001-DP02-45	280-134063-4	85	
OS001-DP02-45 RE	280-134063-4 RE		111
OS001-DP02-45 RE	280-134063-4 RE	90	
	MB 280-487255/1-A	96	
	MB 280-487600/1-A	93	
	LCS 280-487255/2-A	87	
	LCS 280-487255/5-A	100	
	LCS 280-487600/2-A	100	
	LCS 280-487600/3-A	92	
	LCSD 280-487255/6-A	93	
	LCSD 280-487600/4-A	63 Q	
OS001-DP02-45 MS	280-134063-4 MS	81 Q	
OS001-DP02-45 MS RE	280-134063-4 MS RE	17 Q	
OS001-DP02-45 MSD	280-134063-4 MSD	79 Q	
OS001-DP02-45 MSD RE	280-134063-4 MSD RE	16 Q	

	QC LIMITS
12DNB = 1,2-Dinitrobenzene	83-119

Column to be used to flag recovery values

FORM II 8330A

FORM III
HPLC/IC LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 03020011.D

Lab ID: LCS 280-487255/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.00	1.85	92	73-125	
1,3-Dinitrobenzene	2.00	1.74	87	78-120	
2,4,6-Trinitrotoluene	2.00	1.71	86	71-123	
2,4-Dinitrotoluene	2.00	1.68	84	78-120	
2,6-Dinitrotoluene	2.00	1.61	80	77-127	
2-Amino-4,6-dinitrotoluene	2.00	1.54	77	79-120	Q
2-Nitrotoluene	2.00	1.12	56	70-127	Q
3-Nitrotoluene	2.00	1.25	63	73-125	Q
4-Amino-2,6-dinitrotoluene	2.00	1.44	72	76-125	Q
4-Nitrotoluene	2.00	1.27	64	71-127	Q
HMX	2.00	1.84	92	65-135	M
Nitrobenzene	2.00	1.36	68	65-134	
RDX	2.00	1.96	98	68-130	
Tetryl	2.00	2.07	103	64-128	

Column to be used to flag recovery and RPD values

FORM III 8330A

FORM III
HPLC/IC LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 03020014.D

Lab ID: LCS 280-487255/5-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
MNX	2.33	2.45	105	57-132	

Column to be used to flag recovery and RPD values

FORM III 8330A

FORM III
HPLC/IC LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 03040060.D

Lab ID: LCS 280-487600/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.00	2.06	103	73-125	
1,3-Dinitrobenzene	2.00	1.99	100	78-120	
2,4,6-Trinitrotoluene	2.00	1.99	99	71-123	
2,4-Dinitrotoluene	2.00	1.90	95	78-120	
2,6-Dinitrotoluene	2.00	1.96	98	77-127	
2-Amino-4,6-dinitrotoluene	2.00	1.91	96	79-120	
2-Nitrotoluene	2.00	1.78	89	70-127	
3-Nitrotoluene	2.00	1.94	97	73-125	
4-Amino-2,6-dinitrotoluene	2.00	1.80	90	76-125	
4-Nitrotoluene	2.00	1.84	92	71-127	
HMX	2.00	1.93	96	65-135	M
Nitrobenzene	2.00	1.90	95	65-134	
RDX	2.00	1.85	93	68-130	
Tetryl	2.00	1.92	96	64-128	

Column to be used to flag recovery and RPD values

FORM III 8330A

FORM III
HPLC/IC LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 03040061.D

Lab ID: LCS 280-487600/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
MNX	2.33	1.96 J	84	57-132	

Column to be used to flag recovery and RPD values

FORM III 8330A

FORM III
HPLC/IC LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 03020015.D

Lab ID: LCSD 280-487255/6-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
MNX	2.33	2.39	102	2	30	57-132	

Column to be used to flag recovery and RPD values

FORM III 8330A

FORM III
HPLC/IC LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 03040062.D

Lab ID: LCSD 280-487600/4-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
MNX	2.33	1.62 J	70	19	30	57-132	

Column to be used to flag recovery and RPD values

FORM III 8330A

FORM III
HPLC/IC MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 03020024.D

Lab ID: 280-134063-4 MS Client ID: OS001-DP02-45 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.20	17	20.3	157	73-125	4 Q
1,3-Dinitrobenzene	2.20	0.21 U	2.14	97	78-120	Q
2,4,6-Trinitrotoluene	2.20	1.1	3.31	100	71-123	Q
2,4-Dinitrotoluene	2.20	0.21 U	2.00	91	78-120	Q
2,6-Dinitrotoluene	2.20	0.21 U	2.12	96	77-127	Q
2-Amino-4,6-dinitrotoluene	2.20	0.67	2.61	88	79-120	Q
2-Nitrotoluene	2.20	0.21 U	1.42	64	70-127	J1 Q
3-Nitrotoluene	2.20	0.42 U	1.69	77	73-125	Q
4-Amino-2,6-dinitrotoluene	2.20	0.13 U	2.11	96	76-125	Q
4-Nitrotoluene	2.20	0.42 U	1.77	80	71-127	Q
HMX	2.20	0.21 U	1.92	87	65-135	M Q
Nitrobenzene	2.20	0.21 U	1.61	73	65-134	Q
RDX	2.20	0.21 J	2.21	91	68-130	M Q
Tetryl	2.20	0.21 U	9.93	451	64-128	M J1 Q

Column to be used to flag recovery and RPD values

FORM III 8330A

FORM III
HPLC/IC MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 03040067.D

Lab ID: 280-134063-4 MS RE Client ID: OS001-DP02-45 MS RE

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.06	21	3.56	-830	73-125	Q H 4
1,3-Dinitrobenzene	2.06	0.21 U	0.358 J	17	78-120	Q H J1
2,4,6-Trinitrotoluene	2.06	1.7	0.589	-54	71-123	Q H J1
2,4-Dinitrotoluene	2.06	0.21 U	0.328 J	16	78-120	Q H J1
2,6-Dinitrotoluene	2.06	0.21 U	0.366	18	77-127	Q H J1
2-Amino-4,6-dinitrotoluene	2.06	0.68	0.427	-12	79-120	Q H J1
2-Nitrotoluene	2.06	0.21 U	0.280 J	14	70-127	Q H J1
3-Nitrotoluene	2.06	0.43 U	0.361 J	18	73-125	Q H J1
4-Amino-2,6-dinitrotoluene	2.06	0.13 U	0.355	17	76-125	Q H J1
4-Nitrotoluene	2.06	0.43 U	0.286 J	14	71-127	Q H J1
HMX	2.06	0.21 U	0.340 J	17	65-135	Q H J1 M
Nitrobenzene	2.06	0.21 U	0.322 J	16	65-134	Q H J1
RDX	2.06	0.28 J	0.460	9	68-130	Q H J1
Tetryl	2.06	0.21 U	0.21 U	0	64-128	Q H J1

Column to be used to flag recovery and RPD values

FORM III 8330A

FORM III
HPLC/IC MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 03020025.D

Lab ID: 280-134063-4 MSD Client ID: OS001-DP02-45 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.16	16.5	-19	21	30	73-125	4 Q
1,3-Dinitrobenzene	2.16	2.01	93	6	30	78-120	Q
2,4,6-Trinitrotoluene	2.16	2.97	86	11	30	71-123	Q
2,4-Dinitrotoluene	2.16	1.89	87	6	30	78-120	Q
2,6-Dinitrotoluene	2.16	1.99	92	6	30	77-127	Q
2-Amino-4,6-dinitrotoluene	2.16	2.37	79	10	30	79-120	Q
2-Nitrotoluene	2.16	1.30	60	9	30	70-127	J1 Q
3-Nitrotoluene	2.16	1.58	73	6	30	73-125	Q
4-Amino-2,6-dinitrotoluene	2.16	1.95	90	7	30	76-125	Q
4-Nitrotoluene	2.16	1.60	74	10	30	71-127	Q
HMX	2.16	2.22	103	14	30	65-135	M Q
Nitrobenzene	2.16	1.47	68	9	30	65-134	Q
RDX	2.16	2.32	98	5	30	68-130	Q
Tetryl	2.16	8.41	390	17	30	64-128	M J1 Q

Column to be used to flag recovery and RPD values

FORM III 8330A

FORM III
HPLC/IC MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 03040068.D

Lab ID: 280-134063-4 MSD RE Client ID: OS001-DP02-45 MSD RE

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.09	3.26	-832	9	30	73-125	Q H 4
1,3-Dinitrobenzene	2.09	0.347 J	17	3	30	78-120	Q H J1
2,4,6-Trinitrotoluene	2.09	0.572	-54	3	30	71-123	Q H J1
2,4-Dinitrotoluene	2.09	0.322 J	15	2	30	78-120	Q H J1
2,6-Dinitrotoluene	2.09	0.343	16	6	30	77-127	Q H J1
2-Amino-4,6-dinitrotoluene	2.09	0.434	-12	1	30	79-120	Q H J1
2-Nitrotoluene	2.09	0.291 J	14	4	30	70-127	Q H J1
3-Nitrotoluene	2.09	0.395 J	19	9	30	73-125	Q H J1
4-Amino-2,6-dinitrotoluene	2.09	0.356	17	0	30	76-125	Q H J1
4-Nitrotoluene	2.09	0.313 J	15	9	30	71-127	Q H J1
HMX	2.09	11.8	563	189	30	65-135	Q H J1
Nitrobenzene	2.09	0.324 J	16	1	30	65-134	Q H J1
RDX	2.09	0.416 J	7	10	30	68-130	Q H J1
Tetryl	2.09	0.21 U	0	NC	30	64-128	Q H J1

Column to be used to flag recovery and RPD values

FORM III 8330A

FORM IV
HPLC/IC METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Lab Sample ID: MB 280-487255/1-A

Matrix: Water Date Extracted: 02/28/2020 13:30

Lab File ID:(1) 03020010.D Lab File ID:(2)

Date Analyzed:(1) 03/02/2020 16:29 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 280-487255/2-A	03/02/2020 16:51	
	LCS 280-487255/5-A	03/02/2020 18:00	
	LCSD 280-487255/6-A	03/02/2020 18:23	
OS001-DP02-25	280-134063-1	03/02/2020 19:09	03/04/2020 08:01
OS001-DP502-25	280-134063-2	03/02/2020 19:32	03/04/2020 08:36
OS001-DP02-35	280-134063-3	03/02/2020 19:55	03/04/2020 09:11
OS001-DP02-45	280-134063-4	03/02/2020 21:27	03/04/2020 09:46
OS001-DP02-45 MS	280-134063-4 MS	03/02/2020 21:49	
OS001-DP02-45 MSD	280-134063-4 MSD	03/02/2020 22:12	

FORM IV
HPLC/IC METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Lab Sample ID: MB 280-487600/1-A

Matrix: Water Date Extracted: 03/04/2020 07:23

Lab File ID:(1) 03040059.D Lab File ID:(2)

Date Analyzed:(1) 03/05/2020 10:00 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 280-487600/2-A	03/05/2020 10:23	
	LCS 280-487600/3-A	03/05/2020 10:46	
	LCSD 280-487600/4-A	03/05/2020 11:09	
OS001-DP02-25 RE	280-134063-1 RE	03/05/2020 11:32	03/09/2020 20:08
OS001-DP502-25 RE	280-134063-2 RE	03/05/2020 11:55	03/09/2020 20:43
OS001-DP02-35 RE	280-134063-3 RE	03/05/2020 12:18	03/09/2020 21:18
OS001-DP02-45 RE	280-134063-4 RE	03/05/2020 12:41	03/09/2020 21:53
OS001-DP02-45 MS RE	280-134063-4 MS RE	03/05/2020 13:04	
OS001-DP02-45 MSD RE	280-134063-4 MSD RE	03/05/2020 13:27	

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Client Sample ID: OS001-DP02-25 Lab Sample ID: 280-134063-1

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

Date Analyzed (1): 03/02/2020 19:09 Date Analyzed (2): 03/04/2020 08:01

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
HMX	1		6.68	6.53	6.83	0.43		44.7
	2		6.93	6.80	7.10	0.67		
2,4,6-Trinitrotoluene	1		11.17	11.07	11.27	9.2		0.7
	2		24.66	24.56	24.86	9.3		
2-Amino-4,6-dinitrotoluene	1		11.61	11.51	11.71	2.5		2.6
	2		17.97	17.86	18.16	2.4		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Client Sample ID: OS001-DP02-25 RE Lab Sample ID: 280-134063-1 RE

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

Date Analyzed (1): 03/05/2020 11:32 Date Analyzed (2): 03/09/2020 20:08

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
2,4,6-Trinitrotoluene	1		11.18	11.08	11.28	0.76		17.4
	2		24.61	24.49	24.79	0.64		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Client Sample ID: OS001-DP502-25 Lab Sample ID: 280-134063-2

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

Date Analyzed (1): 03/02/2020 19:32 Date Analyzed (2): 03/04/2020 08:36

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
HMX	1		6.67	6.53	6.83	0.34		30.6
	2		6.92	6.80	7.10	0.46		
2,4,6-Trinitrotoluene	1		11.18	11.07	11.27	8.5		3.7
	2		24.67	24.56	24.86	8.8		
2-Amino-4,6-dinitrotoluene	1		11.62	11.51	11.71	2.3		2.8
	2		17.98	17.86	18.16	2.3		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Client Sample ID: OS001-DP502-25 RE Lab Sample ID: 280-134063-2 RE

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

Date Analyzed (1): 03/05/2020 11:55 Date Analyzed (2): 03/09/2020 20:43

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
HMX	1		6.67	6.53	6.83	0.32		19.4
	2		6.82	6.75	7.05	0.39		
2,4,6-Trinitrotoluene	1		11.18	11.08	11.28	7.8		2.8
	2		24.59	24.49	24.79	8.0		
2-Amino-4,6-dinitrotoluene	1		11.62	11.52	11.72	2.2		8.5
	2		17.84	17.77	18.07	2.0		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Client Sample ID: OS001-DP02-35 Lab Sample ID: 280-134063-3

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

Date Analyzed (1): 03/02/2020 19:55 Date Analyzed (2): 03/04/2020 09:11

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
1,3,5-Trinitrobenzene	1		8.88	8.73	9.03	14		0.8
	2		18.88	18.76	19.06	14		
2,4,6-Trinitrotoluene	1		11.18	11.07	11.27	8.2		7.4
	2		24.69	24.56	24.86	8.8		
2-Amino-4,6-dinitrotoluene	1		11.62	11.51	11.71	0.43		17.0
	2		18.01	17.86	18.16	0.51		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Client Sample ID: OS001-DP02-35 RE Lab Sample ID: 280-134063-3 RE

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

Date Analyzed (1): 03/05/2020 12:18 Date Analyzed (2): 03/09/2020 21:18

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
1,3,5-Trinitrobenzene	1		8.88	8.73	9.03	2.0		6.1
	2		18.77	18.67	18.97	1.9		

FORM X 8330A

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Client Sample ID: OS001-DP02-45 Lab Sample ID: 280-134063-4

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

Date Analyzed (1): 03/02/2020 21:27 Date Analyzed (2): 03/04/2020 09:46

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
1,3,5-Trinitrobenzene	1		8.88	8.73	9.03	17		4.9
	2		18.88	18.76	19.06	18		
2,4,6-Trinitrotoluene	1		11.17	11.07	11.27	1.1		27.4
	2		24.68	24.56	24.86	1.5		
2-Amino-4,6-dinitrotoluene	1		11.61	11.51	11.71	0.67		26.8
	2		18.00	17.86	18.16	0.51		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Client Sample ID: OS001-DP02-45 RE Lab Sample ID: 280-134063-4 RE

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

Date Analyzed (1): 03/05/2020 12:41 Date Analyzed (2): 03/09/2020 21:53

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

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
1,3,5-Trinitrobenzene	1		8.88	8.73	9.03	21		2.3
	2		18.80	18.67	18.97	21		

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-134063-1
SDG No.:
Client Sample ID: OS001-DP02-25
Lab Sample ID: 280-134063-1
Matrix: Water
Lab File ID: 03020017.D
Analysis Method: 8330A
Date Collected: 02/24/2020 14:55
Extraction Method: 3535
Date Extracted: 02/28/2020 13:30
Sample wt/vol: 462(mL)
Date Analyzed: 03/02/2020 19:09
Con. Extract Vol.: 5(mL)
Dilution Factor: 1
Injection Volume: 100(uL)
GC Column: UltraCarb5uODS ID: 4.6(mm)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 487395
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.43	U M	1.1	0.43	0.22
99-65-0	1,3-Dinitrobenzene	0.22	U M	0.43	0.22	0.096
118-96-7	2,4,6-Trinitrotoluene	9.2		0.43	0.43	0.17
121-14-2	2,4-Dinitrotoluene	0.22	U	0.43	0.22	0.091
606-20-2	2,6-Dinitrotoluene	0.22	U	0.22	0.22	0.070
35572-78-2	2-Amino-4,6-dinitrotoluene	2.5	Q	0.22	0.13	0.055
88-72-2	2-Nitrotoluene	0.22	U Q	0.43	0.22	0.093
99-08-1	3-Nitrotoluene	0.43	U M Q	0.43	0.43	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	0.13	U Q	0.22	0.13	0.062
99-99-0	4-Nitrotoluene	0.43	U M Q	1.1	0.43	0.22
2691-41-0	HMX	0.43	M J1	0.43	0.22	0.095
5755-27-1	MNX	0.43	U M Q	2.2	0.43	0.17
98-95-3	Nitrobenzene	0.22	U	0.43	0.22	0.098
479-45-8	Tetryl	0.22	U M	0.26	0.22	0.086

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	102	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200302-89712.b\03020017.D				
Lims ID:	280-134063-A-1-A				
Client ID:	OS001-DP02-25				
Sample Type:	Client				
Inject. Date:	02-Mar-2020 19:09:26	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-134063-A-1-A				
Misc. Info.:	280-0089712-017				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		

Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200302-89712.b\8330_X3.m		
Limit Group:	GCSV - 8330		
Last Update:	03-Mar-2020 11:54:24	Calib Date:	06-Jan-2020 20:40:54
Integrator:	Falcon		
Quant Method:	External Standard	Quant By:	Initial Calibration
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060014.D		

Column 1 :	UltraCarb5uODS (20) (4.60 mm)	Det: LC DAD1B, 254 nm
Process Host:	CTX0310	

First Level Reviewer: beckerc Date: 03-Mar-2020 11:11:35

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	3 HMX	1	6.681	6.680	0.001	3629	0.0395	M
	6 MNX	1		7.363			ND	MU
	7 RDX	1	7.754	7.754	0.000	3449	0.0310	M
$	9 1,2-Dinitrobenzene	1	8.714	8.707	0.007	28314	0.2032	M
	10 1,3,5-Trinitrobenzene	1		8.880			ND	MU
	11 1,3-Dinitrobenzene	1		9.527			ND	U
	12 Nitrobenzene	1		9.914			ND	
	14 Tetryl	1		10.207			ND	U
	16 2,4,6-Trinitrotoluene	1	11.174	11.174	0.000	193386	0.8509	
	17 4-Amino-2,6-dinitrotoluene	1		11.327			ND	
	18 2-Amino-4,6-dinitrotoluene	1	11.607	11.614	-0.007	46967	0.2288	
	19 2,6-Dinitrotoluene	1		11.780			ND	
	20 2,4-Dinitrotoluene	1		11.974			ND	
	21 o-Nitrotoluene	1		12.820			ND	
	22 p-Nitrotoluene	1		13.260			ND	U
	23 m-Nitrotoluene	1		13.854			ND	U

QC Flag Legend

Review Flags

M - Manually Integrated

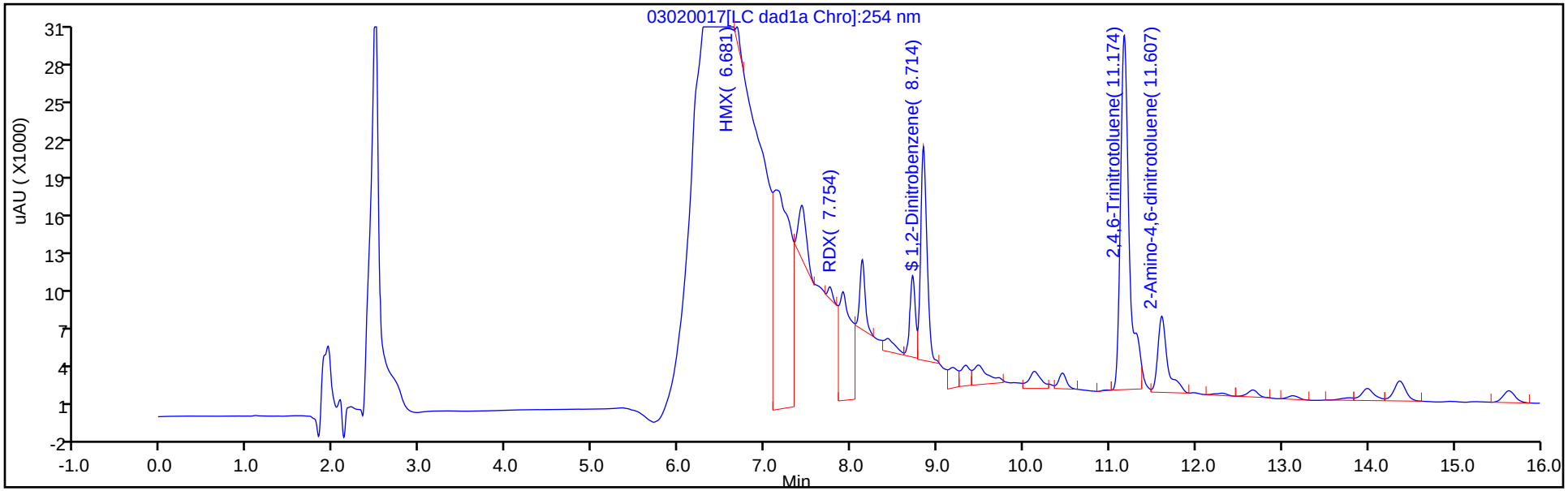
U - Marked Undetected

Report Date: 03-Mar-2020 11:54:47 Chrom Revision: 2.3 19-Feb-2020 16:45:46

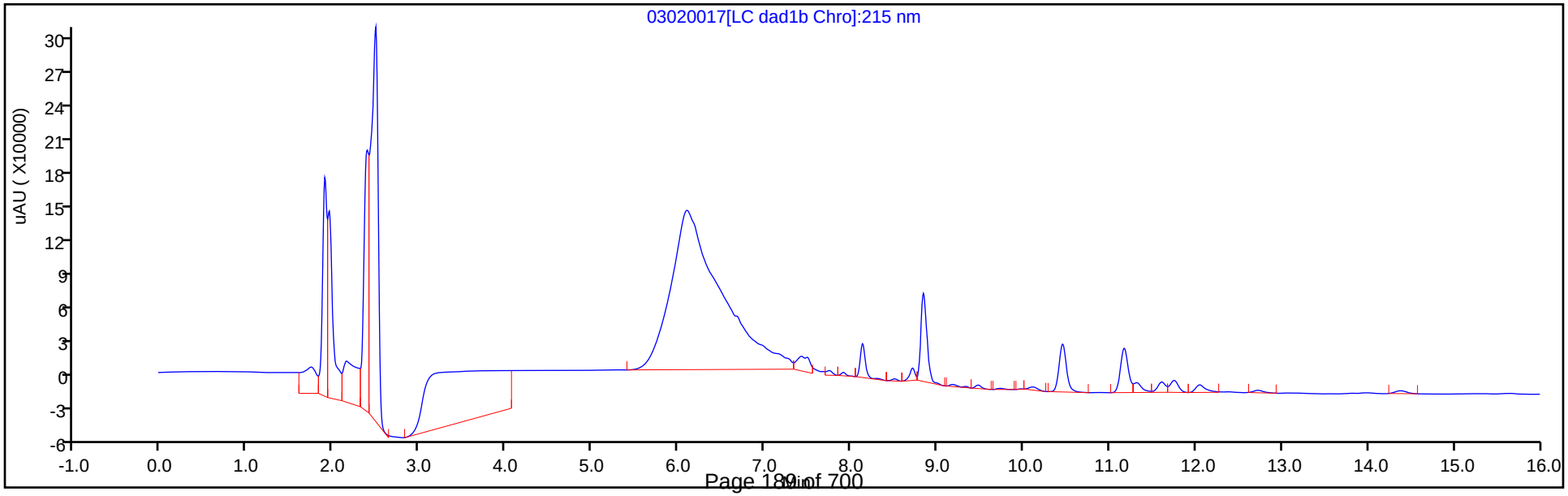
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020017.d				
Injection Date:	02-Mar-2020 19:09:26	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	280-134063-A-1-A	Lab Sample ID:	280-134063-1	Worklist Smp#:	17
Client ID:	OS001-DP02-25				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200302-89712.b\03020017.D				
Lims ID:	280-134063-A-1-A				
Client ID:	OS001-DP02-25				
Sample Type:	Client				
Inject. Date:	02-Mar-2020 19:09:26	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-134063-A-1-A				
Misc. Info.:	280-0089712-017				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200302-89712.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	03-Mar-2020 11:54:24	Calib Date:	06-Jan-2020 20:40:54		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060014.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0310				

First Level Reviewer: beckerc Date: 03-Mar-2020 11:11:35

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.2032	101.61

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

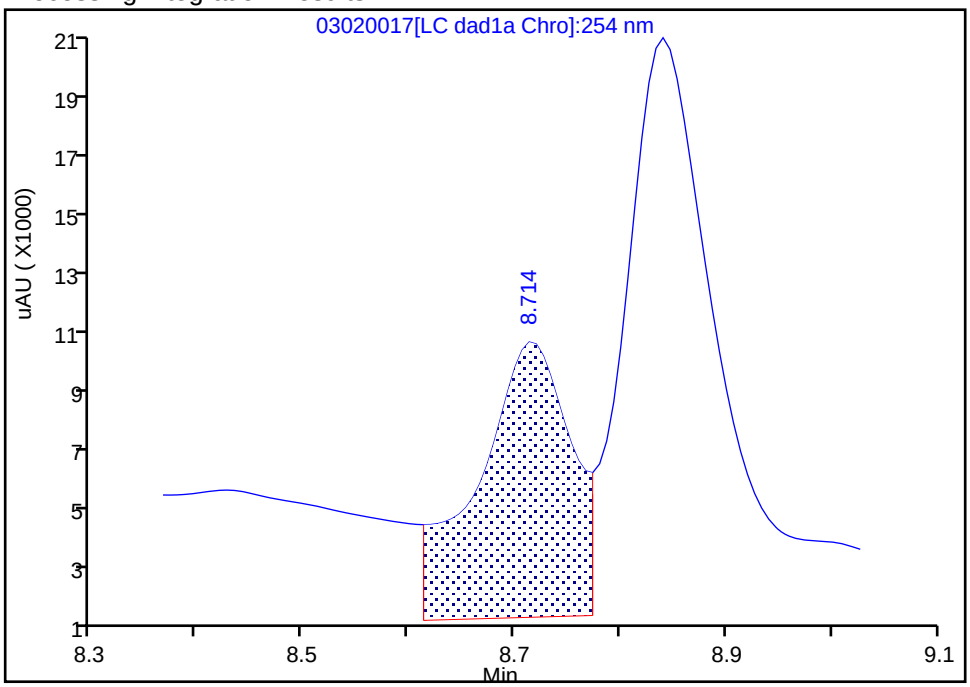
Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020017.d				
Injection Date:	02-Mar-2020 19:09:26	Instrument ID:	CHHPLC_X3		
Lims ID:	280-134063-A-1-A	Lab Sample ID:	280-134063-1		
Client ID:	OS001-DP02-25				
Operator ID:	CB	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

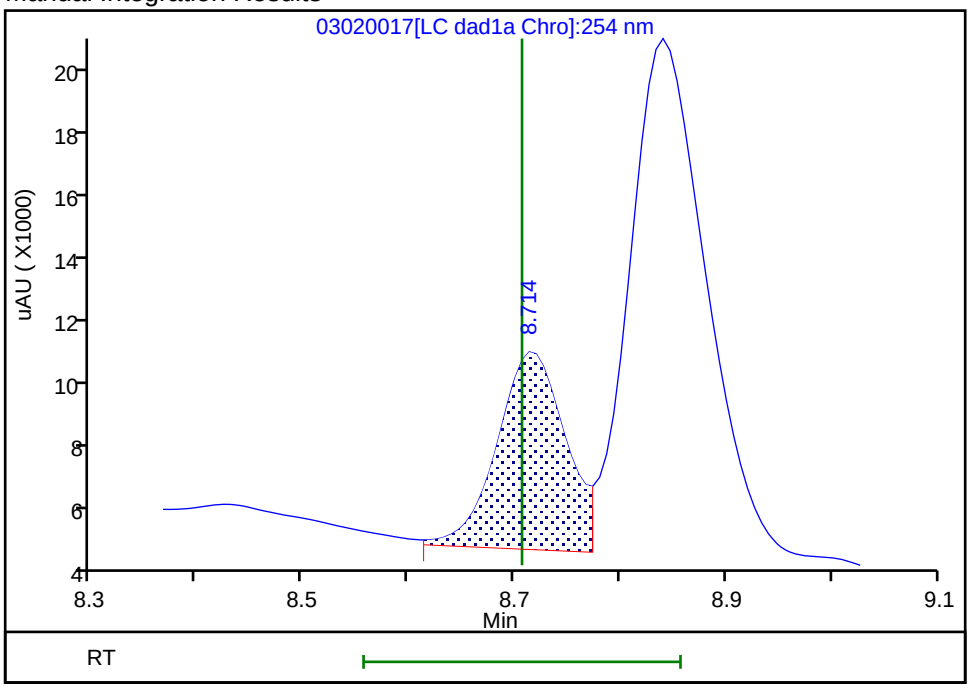
Processing Integration Results

RT: 8.71
Area: 55030
Amount: 0.394966
Amount Units: ug/mL



Manual Integration Results

RT: 8.71
Area: 28314
Amount: 0.203218
Amount Units: ug/mL



Reviewer: beckerc, 03-Mar-2020 11:10:23
Audit Action: Assigned New Baseline Audit Reason: Baseline

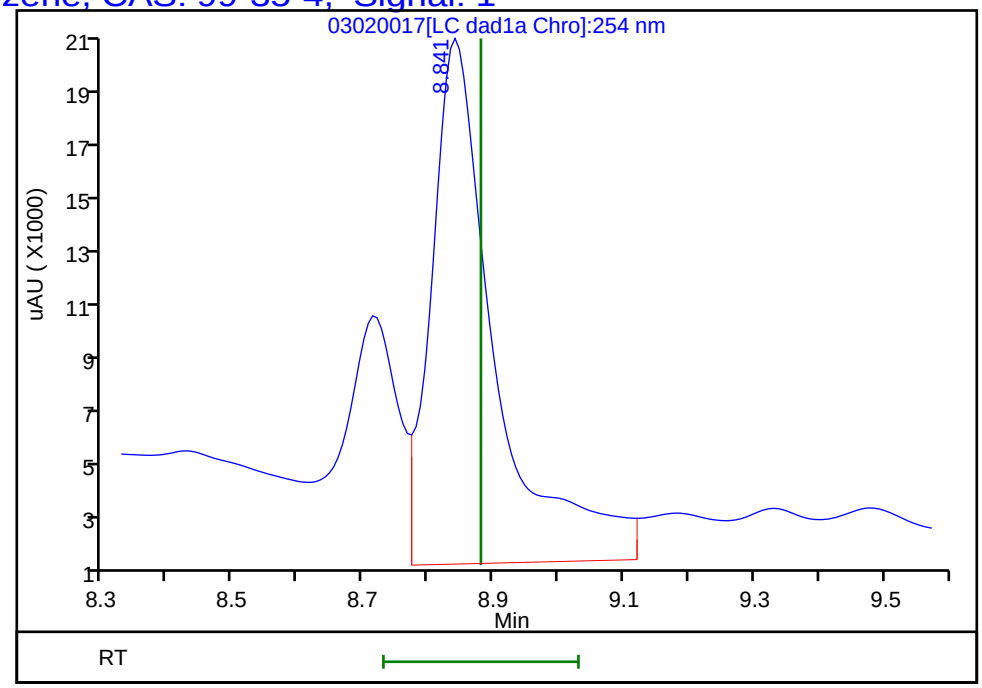
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020017.d				
Injection Date:	02-Mar-2020 19:09:26	Instrument ID:	CHHPLC_X3		
Lims ID:	280-134063-A-1-A	Lab Sample ID:	280-134063-1		
Client ID:	OS001-DP02-25				
Operator ID:	CB	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

10 1,3,5-Trinitrobenzene, CAS: 99-35-4, Signal: 1

RT: 8.84
Response: 128199
Amount: 0.523098



Reviewer: beckerc, 03-Mar-2020 11:11:35
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

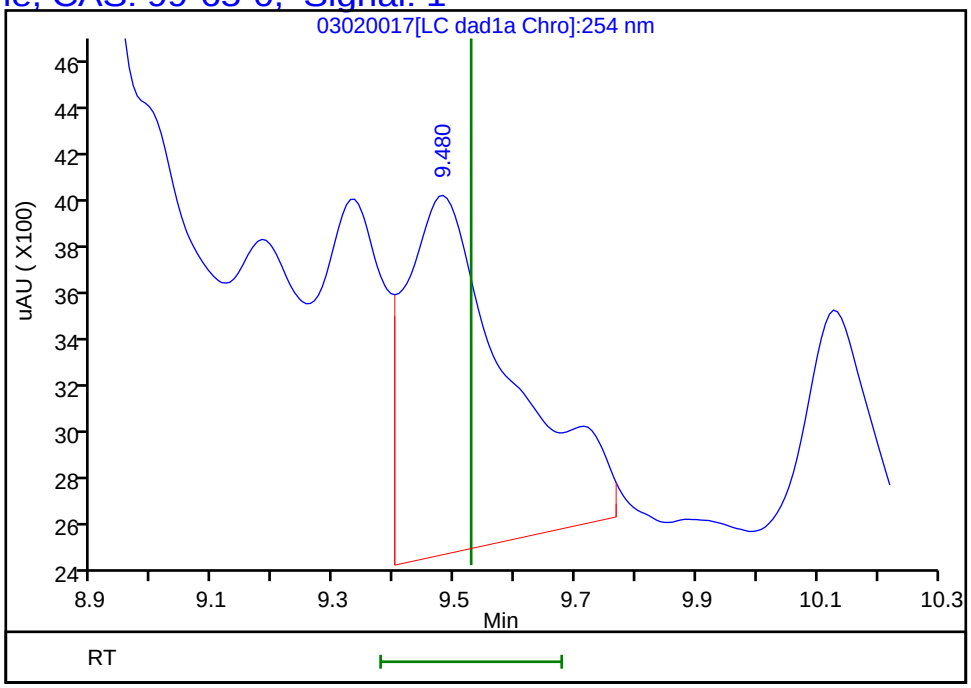
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020017.d				
Injection Date:	02-Mar-2020 19:09:26	Instrument ID:	CHHPLC_X3		
Lims ID:	280-134063-A-1-A	Lab Sample ID:	280-134063-1		
Client ID:	OS001-DP02-25				
Operator ID:	CB	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

11 1,3-Dinitrobenzene, CAS: 99-65-0, Signal: 1

RT: 9.48
Response: 17991
Amount: 0.057816



Reviewer: beckerc, 03-Mar-2020 11:11:35
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

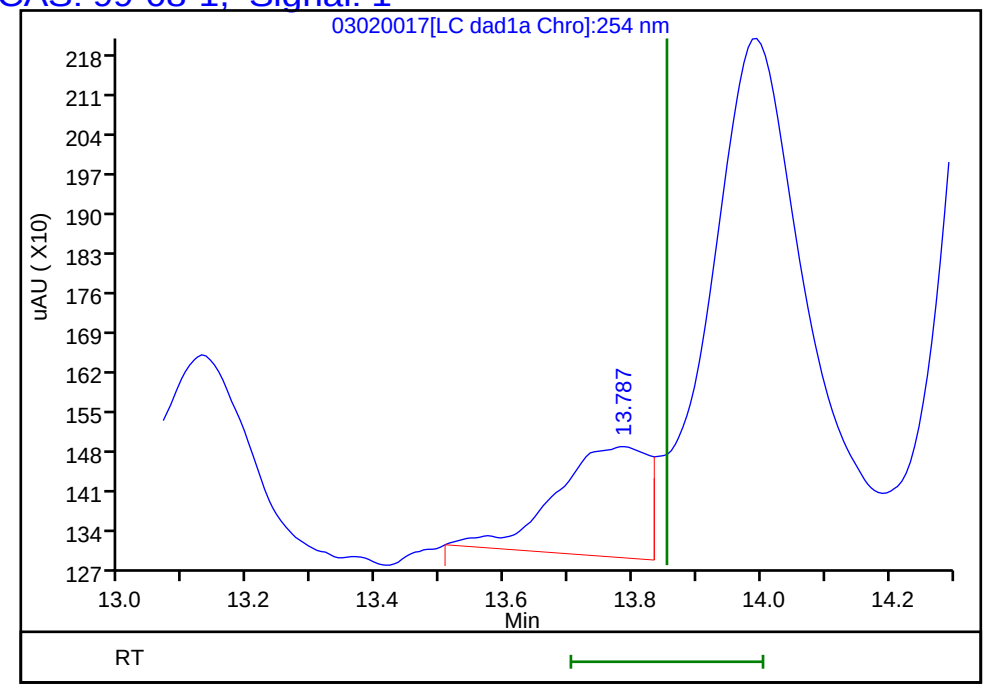
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020017.d				
Injection Date:	02-Mar-2020 19:09:26	Instrument ID:	CHHPLC_X3		
Lims ID:	280-134063-A-1-A	Lab Sample ID:	280-134063-1		
Client ID:	OS001-DP02-25				
Operator ID:	CB	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		

23 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 13.79
Response: 1938
Amount: 0.013354



Reviewer: beckerc, 03-Mar-2020 11:11:35
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

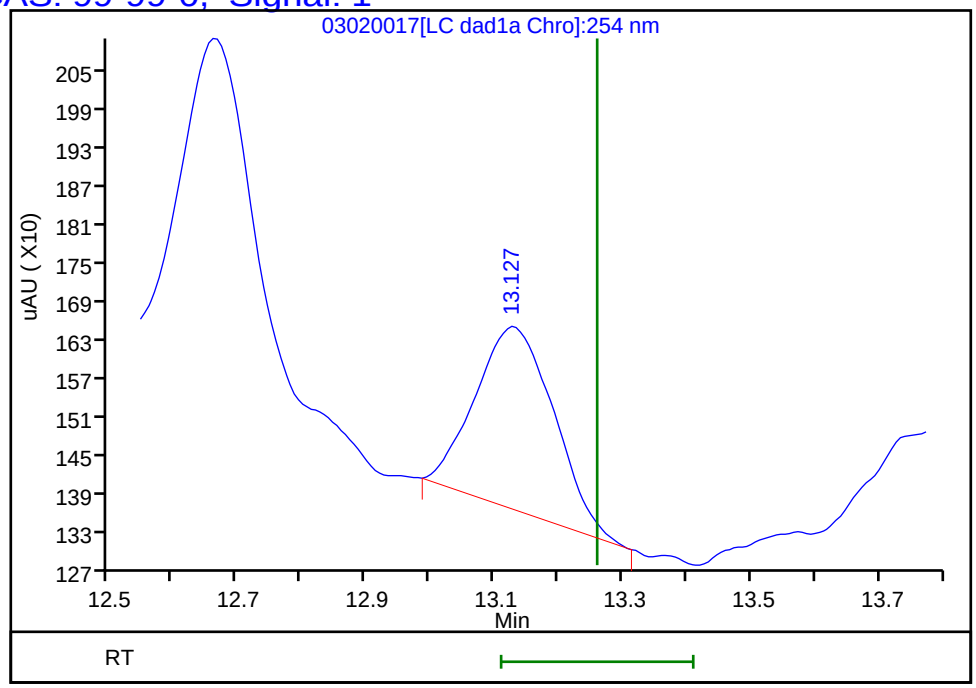
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020017.d				
Injection Date:	02-Mar-2020 19:09:26	Instrument ID:	CHHPLC_X3		
Lims ID:	280-134063-A-1-A	Lab Sample ID:	280-134063-1		
Client ID:	OS001-DP02-25				
Operator ID:	CB	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		

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

RT: 13.13
Response: 2431
Amount: 0.022049



Reviewer: beckerc, 03-Mar-2020 11:11:35
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

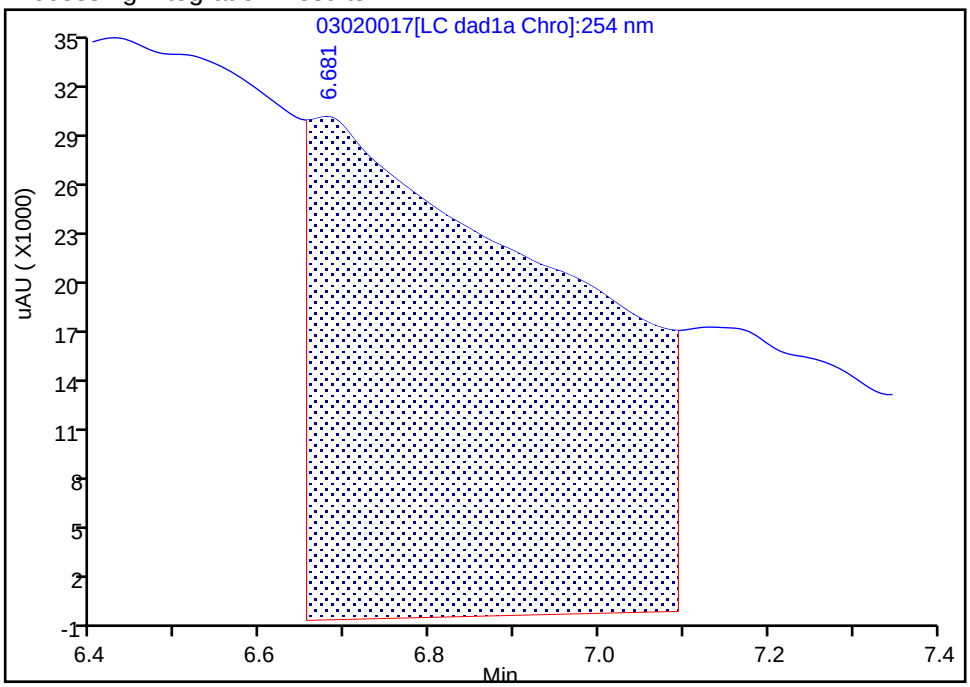
Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020017.d				
Injection Date:	02-Mar-2020 19:09:26	Instrument ID:	CHHPLC_X3		
Lims ID:	280-134063-A-1-A	Lab Sample ID:	280-134063-1		
Client ID:	OS001-DP02-25				
Operator ID:	CB	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

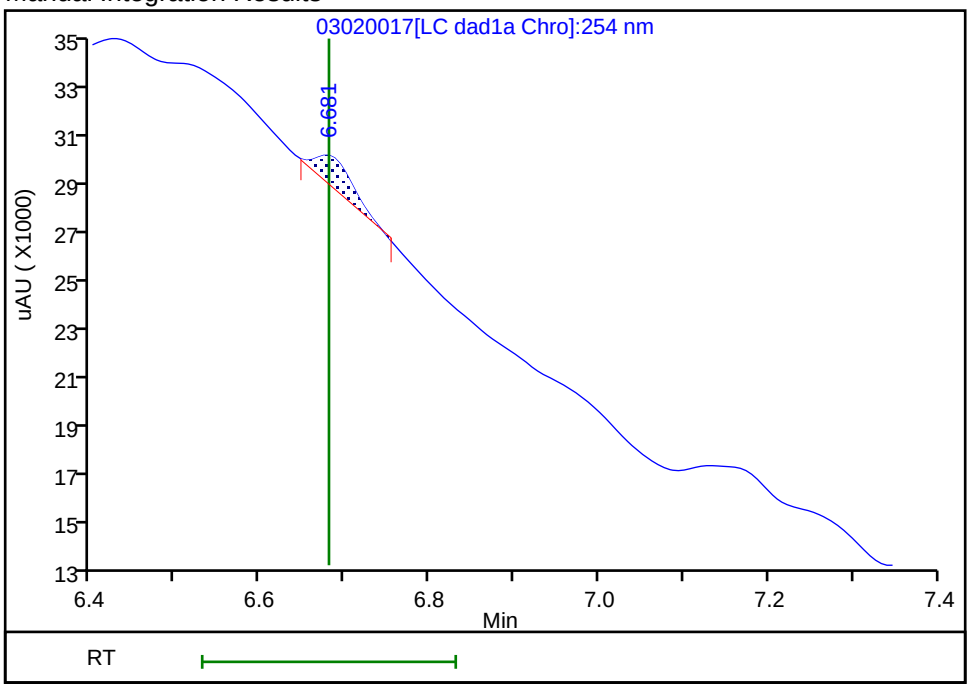
Processing Integration Results

RT: 6.68
Area: 606949
Amount: 6.609251
Amount Units: ug/mL



Manual Integration Results

RT: 6.68
Area: 3629
Amount: 0.039517
Amount Units: ug/mL



Reviewer: beckerc, 03-Mar-2020 11:09:45
Audit Action: Manually Integrated Audit Reason: Baseline

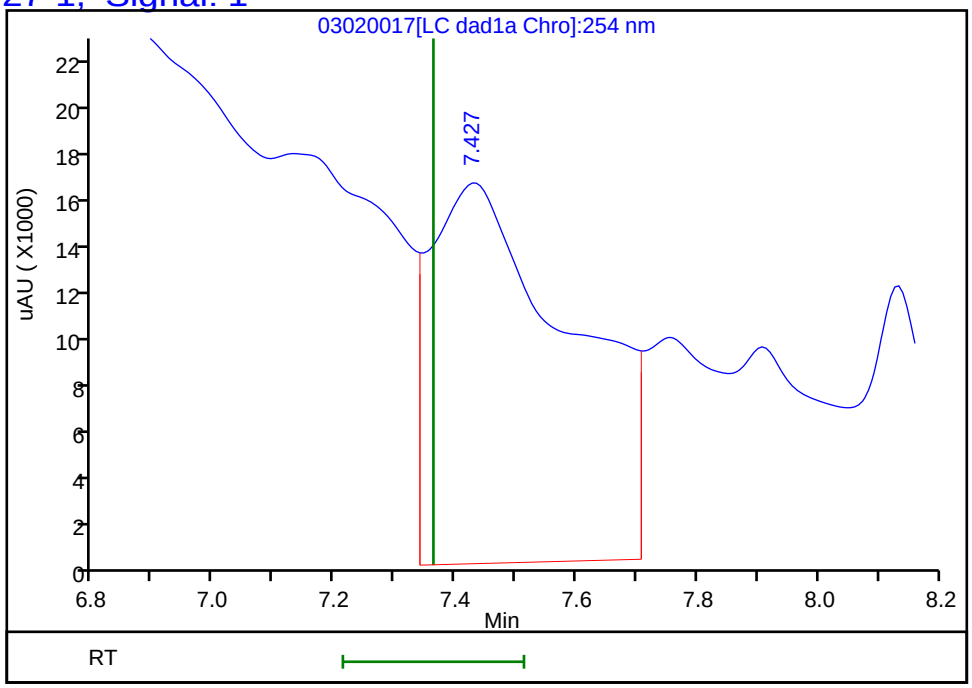
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020017.d				
Injection Date:	02-Mar-2020 19:09:26	Instrument ID:	CHHPLC_X3		
Lims ID:	280-134063-A-1-A	Lab Sample ID:	280-134063-1		
Client ID:	OS001-DP02-25				
Operator ID:	CB	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 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.43
Response: 252051
Amount: 1.796113



Reviewer: beckerc, 03-Mar-2020 11:11:35
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

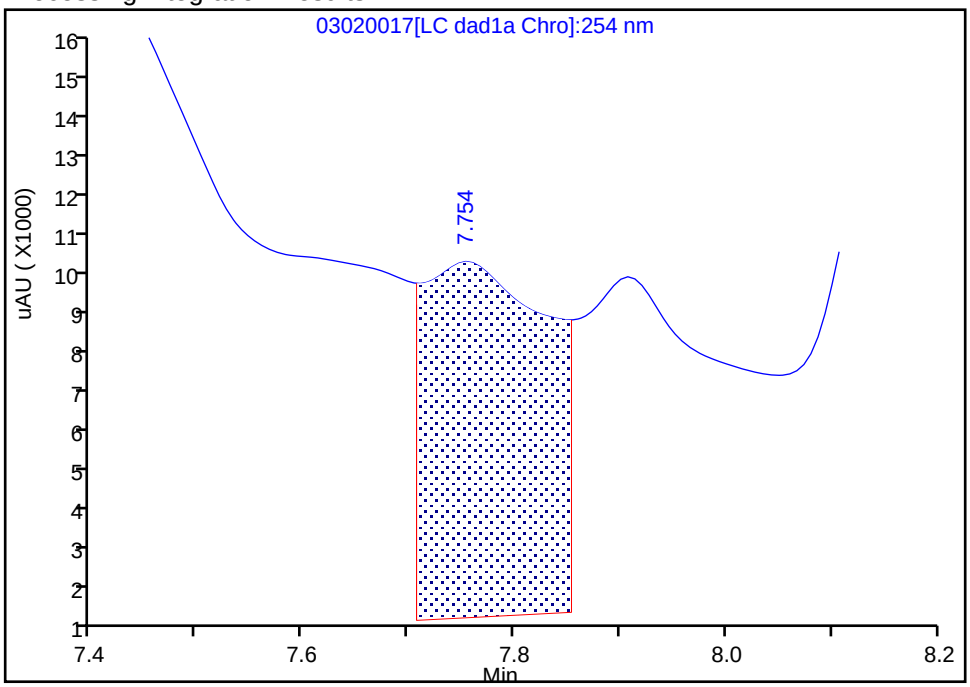
Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020017.d				
Injection Date:	02-Mar-2020 19:09:26	Instrument ID:	CHHPLC_X3		
Lims ID:	280-134063-A-1-A	Lab Sample ID:	280-134063-1		
Client ID:	OS001-DP02-25				
Operator ID:	CB	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 RDX, CAS: 121-82-4

Signal: 1

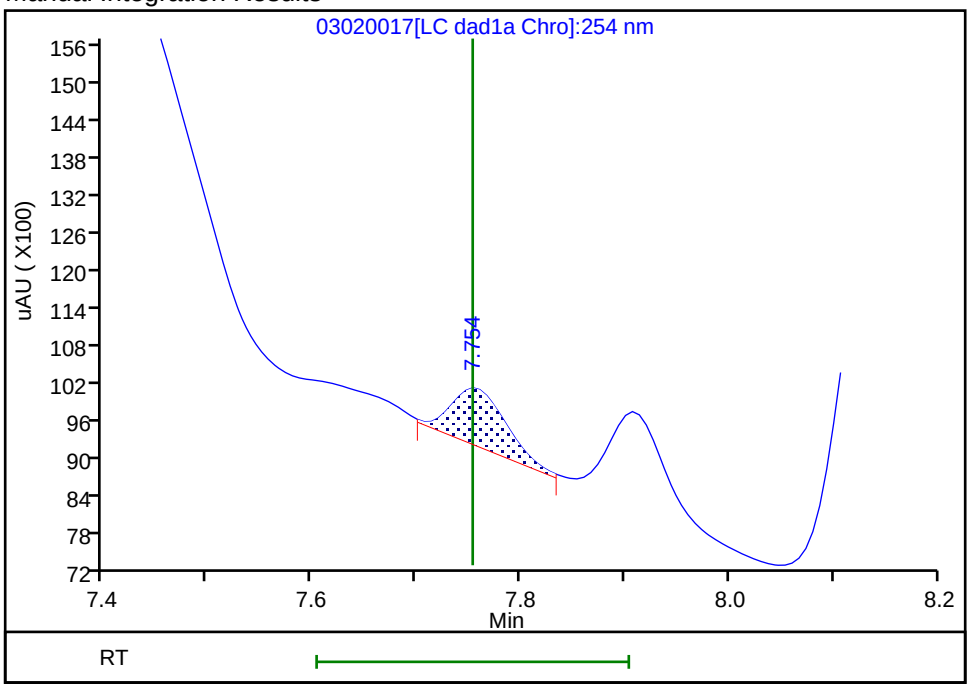
Processing Integration Results

RT: 7.75
Area: 72476
Amount: 0.652229
Amount Units: ug/mL



Manual Integration Results

RT: 7.75
Area: 3449
Amount: 0.031038
Amount Units: ug/mL



Reviewer: beckerc, 03-Mar-2020 11:10:09

Audit Action: Manually Integrated Audit Reason: Baseline

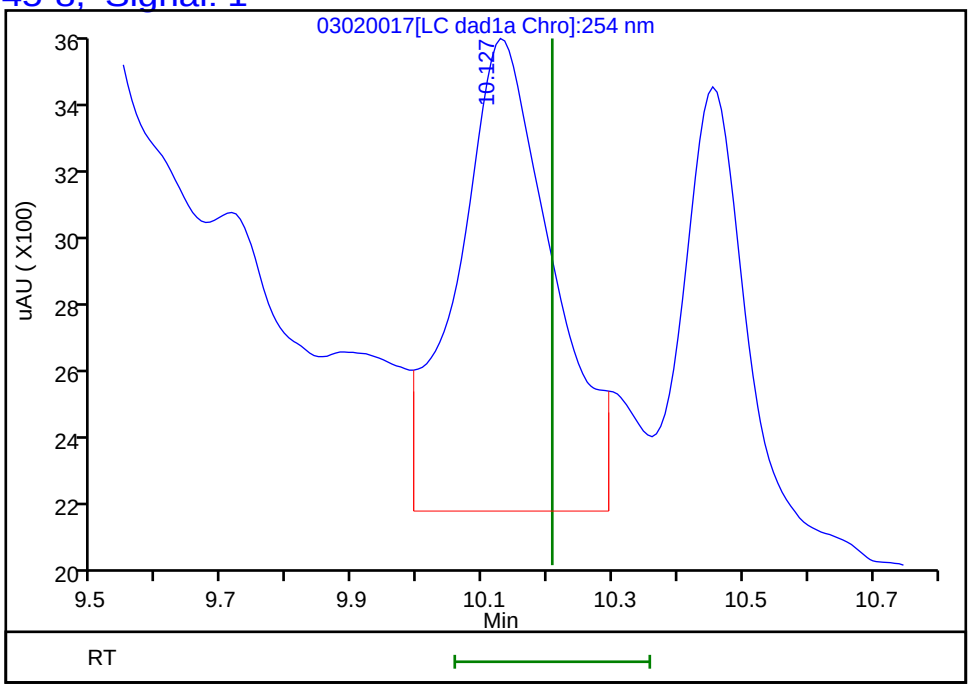
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020017.d				
Injection Date:	02-Mar-2020 19:09:26	Instrument ID:	CHHPLC_X3		
Lims ID:	280-134063-A-1-A	Lab Sample ID:	280-134063-1		
Client ID:	OS001-DP02-25				
Operator ID:	CB	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		

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

RT: 10.13
Response: 13386
Amount: 0.082651



Reviewer: beckerc, 03-Mar-2020 11:11:35
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-134063-1
SDG No.:
Client Sample ID: OS001-DP02-25
Lab Sample ID: 280-134063-1
Matrix: Water
Lab File ID: 03030031.D
Analysis Method: 8330A
Date Collected: 02/24/2020 14:55
Extraction Method: 3535
Date Extracted: 02/28/2020 13:30
Sample wt/vol: 462(mL)
Date Analyzed: 03/04/2020 08:01
Con. Extract Vol.: 5(mL)
Dilution Factor: 1
Injection Volume: 100(uL)
GC Column: Luna-phenylhex ID: 4.6(mm)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 487545
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
2691-41-0	*HMX*	*0.67*	*J1*	*0.43*	0.22	*0.095*
121-82-4	RDX	0.43	U	0.43	0.43	0.17

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

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030031.D				
Lims ID:	280-134063-A-1-A				
Client ID:	OS001-DP02-25				
Sample Type:	Client				
Inject. Date:	04-Mar-2020 08:01:03	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-134063-A-1-A				
Misc. Info.:	280-0089749-031				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		

Method:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\G2_8330_Luna.m		
Limit Group:	GCSV - 8330		
Last Update:	05-Mar-2020 11:40:10	Calib Date:	04-Mar-2020 03:21:00
Integrator:	Falcon		
Quant Method:	External Standard	Quant By:	Initial Calibration
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030023.D		

Column 1 :	Luna-Phenyl hexyl (4.60 mm)	Det: LC DAD1A, 254 nm
Process Host:	CTX0319	

First Level Reviewer: beckerc Date: 05-Mar-2020 08:50:09

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
6 HMX	1	6.928	6.947	-0.019	12663	0.0623	
7 MNX	1		7.707			ND	
8 RDX	1		9.120			ND	
9 Nitrobenzene	1	12.141	12.113	0.028	13632	0.0257	
$ 10 1,2-Dinitrobenzene	1	12.988	13.033	-0.045	61703	0.2143	
12 1,3-Dinitrobenzene	1		15.553			ND	
14 o-Nitrotoluene	1	16.514	16.580	-0.066	22396	0.0901	
15 p-Nitrotoluene	1		16.853			ND	
16 4-Amino-2,6-dinitrotoluene	1	17.108	17.160	-0.052	75772	0.2286	
17 m-Nitrotoluene	1		17.787			ND	
18 2-Amino-4,6-dinitrotoluene	1	17.968	18.013	-0.045	109662	0.2229	
19 1,3,5-Trinitrobenzene	1	18.854	18.907	-0.053	7296	0.007116	
20 2,6-Dinitrotoluene	1		19.853			ND	
21 2,4-Dinitrotoluene	1		20.320			ND	
22 Tetryl	1		23.580			ND	
23 2,4,6-Trinitrotoluene	1	24.661	24.713	-0.052	345563	0.8570	M

QC Flag Legend

Review Flags

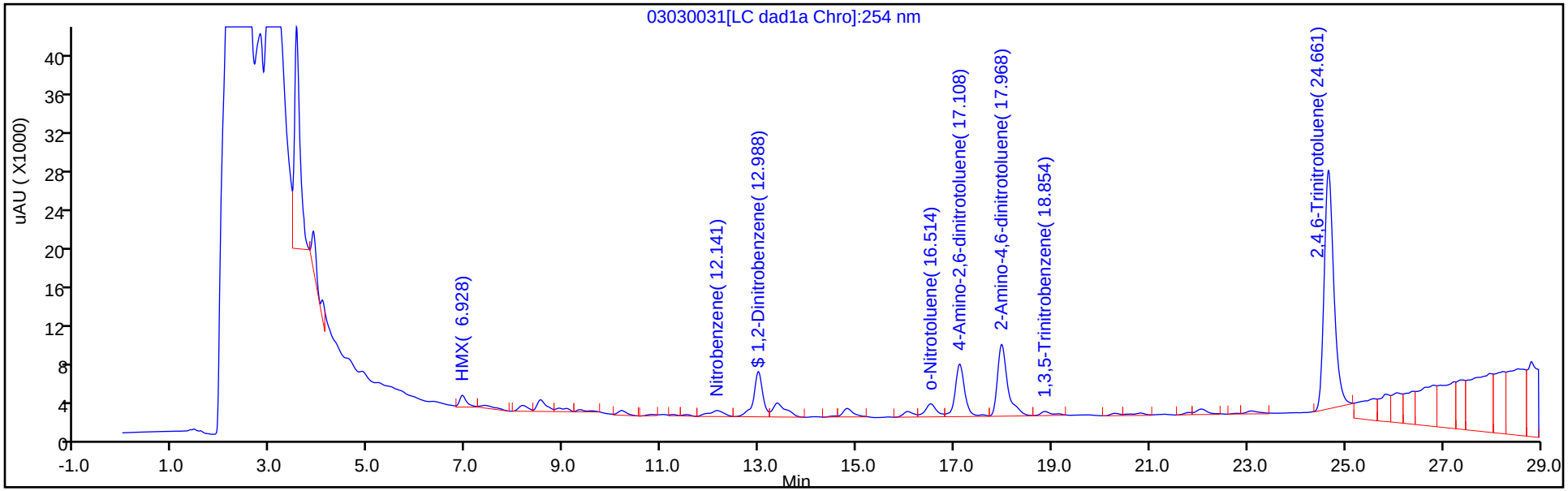
M - Manually Integrated

Report Date: 05-Mar-2020 11:48:22 Chrom Revision: 2.3 19-Feb-2020 16:45:46

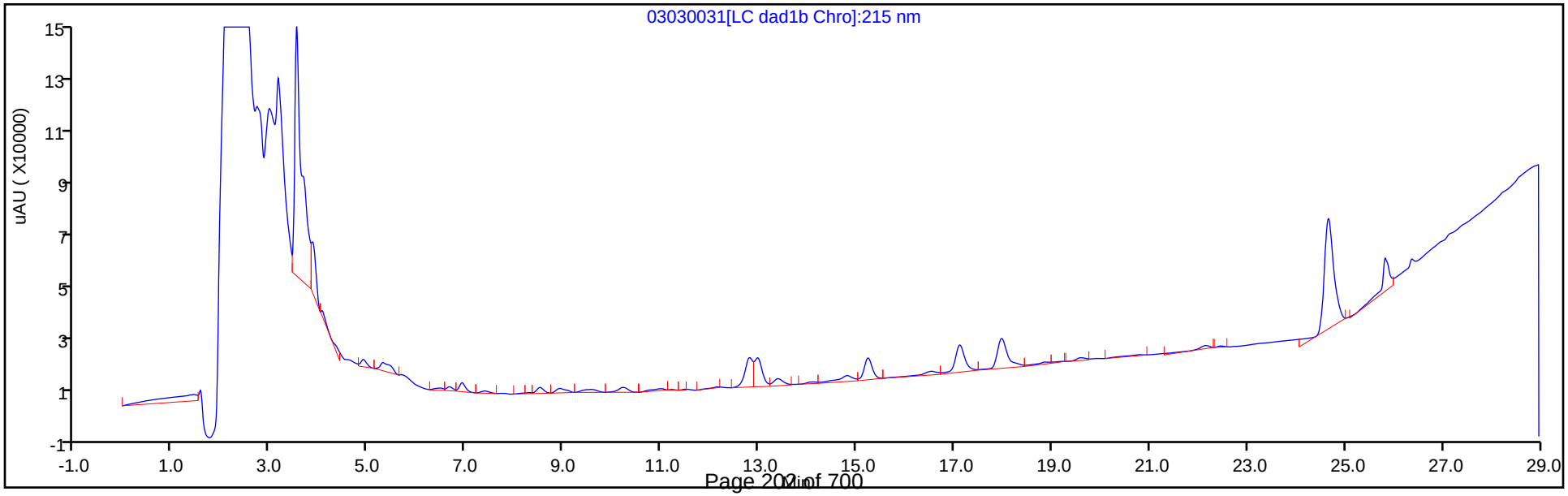
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\g2_luna\20200303-89749.b\03030031.d				
Injection Date:	04-Mar-2020 08:01:03	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	280-134063-A-1-A	Lab Sample ID:	280-134063-1	Worklist Smp#:	31
Client ID:	OS001-DP02-25				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



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



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030031.D				
Lims ID:	280-134063-A-1-A				
Client ID:	OS001-DP02-25				
Sample Type:	Client				
Inject. Date:	04-Mar-2020 08:01:03	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-134063-A-1-A				
Misc. Info.:	280-0089749-031				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		

Method:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\G2_8330_Luna.m		
Limit Group:	GCSV - 8330		
Last Update:	05-Mar-2020 11:40:10	Calib Date:	04-Mar-2020 03:21:00
Integrator:	Falcon		
Quant Method:	External Standard	Quant By:	Initial Calibration
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030023.D		

Column 1 :	Luna-Phenyl hexyl (4.60 mm)	Det: LC DAD1A, 254 nm
Process Host:	CTX0319	

First Level Reviewer: beckerc Date: 05-Mar-2020 08:50:09

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2143	107.15

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

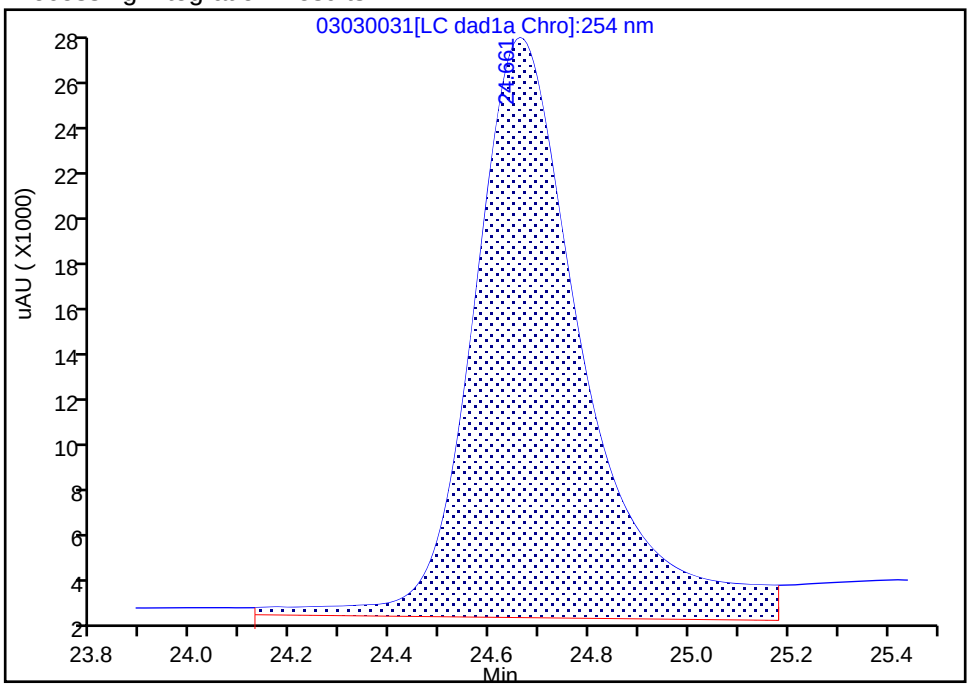
Data File:	\\chromna\denver\chromdata\g2_luna\20200303-89749.b\03030031.d				
Injection Date:	04-Mar-2020 08:01:03	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-134063-A-1-A	Lab Sample ID:	280-134063-1		
Client ID:	OS001-DP02-25				
Operator ID:	CB	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

23 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

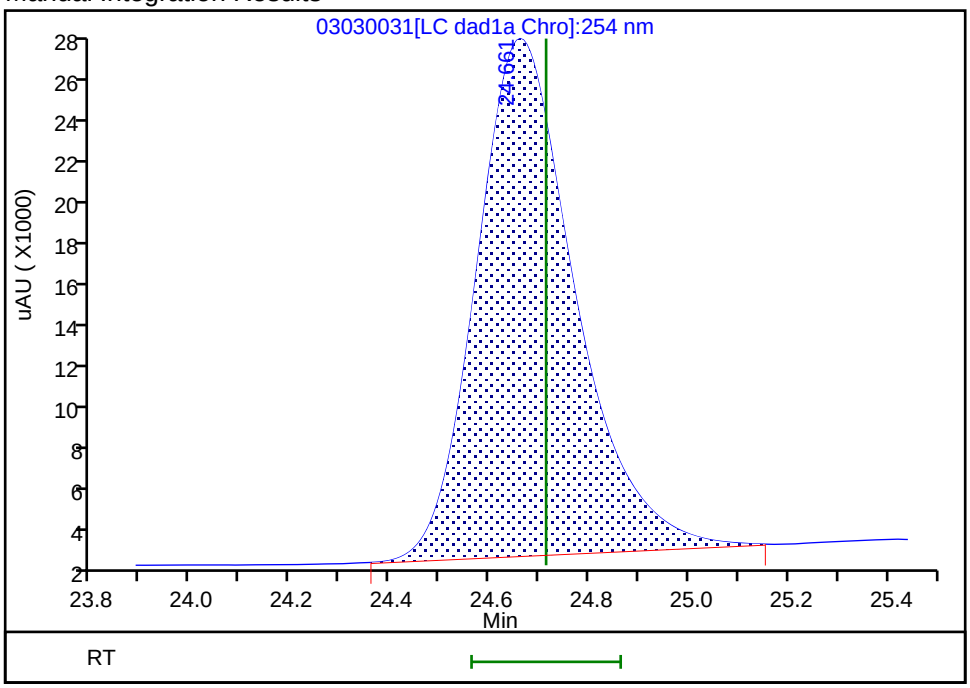
Processing Integration Results

RT: 24.66
Area: 399776
Amount: 0.992977
Amount Units: ug/ml



Manual Integration Results

RT: 24.66
Area: 345563
Amount: 0.857036
Amount Units: ug/ml



Reviewer: beckerc, 05-Mar-2020 08:52:27

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-134063-1
SDG No.:
Client Sample ID: OS001-DP02-25 RE
Lab Sample ID: 280-134063-1 RE
Matrix: Water
Lab File ID: 03040063.D
Analysis Method: 8330A
Date Collected: 02/24/2020 14:55
Extraction Method: 3535
Date Extracted: 03/04/2020 07:23
Sample wt/vol: 455.4(mL)
Date Analyzed: 03/05/2020 11:32
Con. Extract Vol.: 5(mL)
Dilution Factor: 1
Injection Volume: 100(uL)
GC Column: UltraCarb5uODS ID: 4.6(mm)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 487660
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.44	U H M Q	1.1	0.44	0.22
99-65-0	1,3-Dinitrobenzene	0.22	U H Q	0.44	0.22	0.097
118-96-7	2,4,6-Trinitrotoluene	0.76	Q H M	0.44	0.44	0.18
121-14-2	2,4-Dinitrotoluene	0.22	U H Q	0.44	0.22	0.092
606-20-2	2,6-Dinitrotoluene	0.22	U H Q	0.22	0.22	0.071
88-72-2	2-Nitrotoluene	0.22	U H Q	0.44	0.22	0.094
99-08-1	3-Nitrotoluene	0.44	U H Q	0.44	0.44	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	0.13	U H Q	0.22	0.13	0.063
99-99-0	4-Nitrotoluene	0.44	U H Q	1.1	0.44	0.22
2691-41-0	HMX	0.22	U H Q	0.44	0.22	0.096
5755-27-1	MNX	0.44	U Q H	2.2	0.44	0.17
98-95-3	Nitrobenzene	0.22	U H Q	0.44	0.22	0.10
121-82-4	RDX	0.44	U H Q	0.44	0.44	0.17
479-45-8	Tetryl	0.22	U H Q	0.26	0.22	0.087

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	8	Q	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040063.D				
Lims ID:	280-134063-B-1-A				
Client ID:	OS001-DP02-25				
Sample Type:	Client				
Inject. Date:	05-Mar-2020 11:32:20	ALS Bottle#:	63	Worklist Smp#:	63
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-134063-B-1-A				
Misc. Info.:	280-0089779-063				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Mar-2020 10:25:55	Calib Date:	04-Mar-2020 23:40:46		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0308				
First Level Reviewer: beckerc		Date:	06-Mar-2020 09:41:23		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
3 HMX	1		6.683			ND	
6 MNX	1		7.361			ND	
7 RDX	1		7.750			ND	
$ 9 1,2-Dinitrobenzene	1	8.707	8.710	-0.003	2290	0.0157	
10 1,3,5-Trinitrobenzene	1		8.883			ND	U
11 1,3-Dinitrobenzene	1		9.529			ND	
12 Nitrobenzene	1		9.916			ND	
14 Tetryl	1		10.216			ND	
16 2,4,6-Trinitrotoluene	1	11.180	11.183	-0.003	15238	0.0690	M
17 4-Amino-2,6-dinitrotoluene	1		11.336			ND	
18 2-Amino-4,6-dinitrotoluene	1	11.620	11.623	-0.003	3650	0.0168	
19 2,6-Dinitrotoluene	1		11.789			ND	
20 2,4-Dinitrotoluene	1		11.983			ND	
21 o-Nitrotoluene	1		12.829			ND	
22 p-Nitrotoluene	1		13.269			ND	
23 m-Nitrotoluene	1		13.863			ND	

QC Flag Legend

Review Flags

M - Manually Integrated

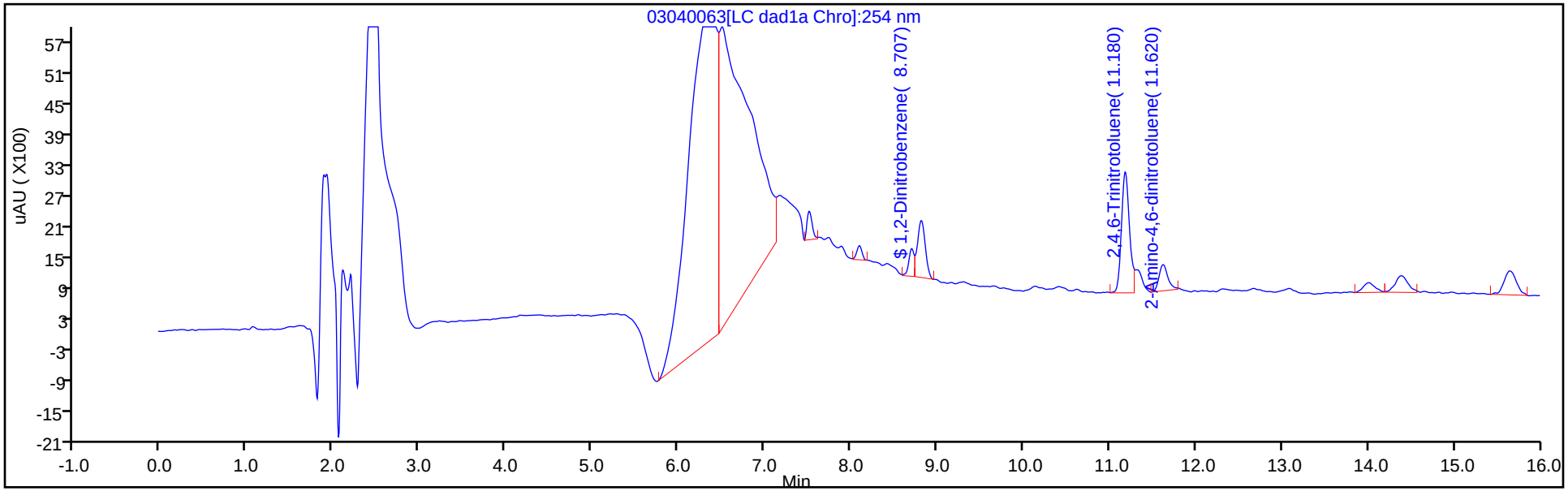
U - Marked Undetected

Report Date: 06-Mar-2020 10:26:01 Chrom Revision: 2.3 19-Feb-2020 16:45:46

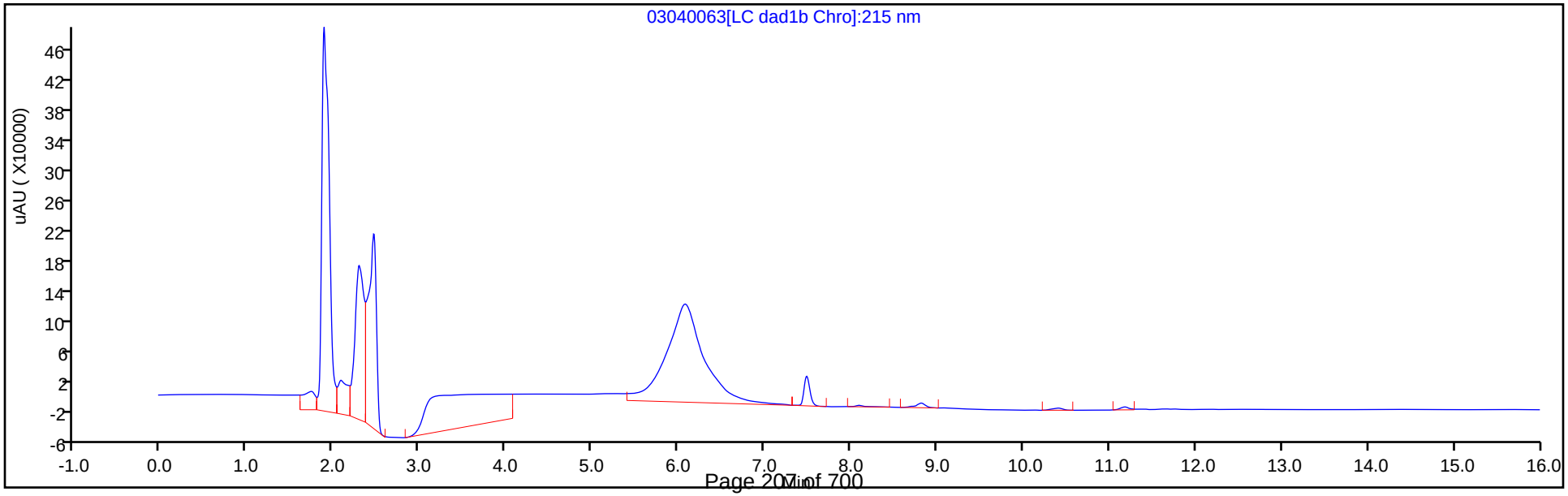
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040063.d				
Injection Date:	05-Mar-2020 11:32:20	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	280-134063-B-1-A	Lab Sample ID:	280-134063-1	Worklist Smp#:	63
Client ID:	OS001-DP02-25				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	63
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040063.D				
Lims ID:	280-134063-B-1-A				
Client ID:	OS001-DP02-25				
Sample Type:	Client				
Inject. Date:	05-Mar-2020 11:32:20	ALS Bottle#:	63	Worklist Smp#:	63
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-134063-B-1-A				
Misc. Info.:	280-0089779-063				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Mar-2020 10:25:55	Calib Date:	04-Mar-2020 23:40:46		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0308				

First Level Reviewer: beckerc Date: 06-Mar-2020 09:41:23

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.0157	7.83

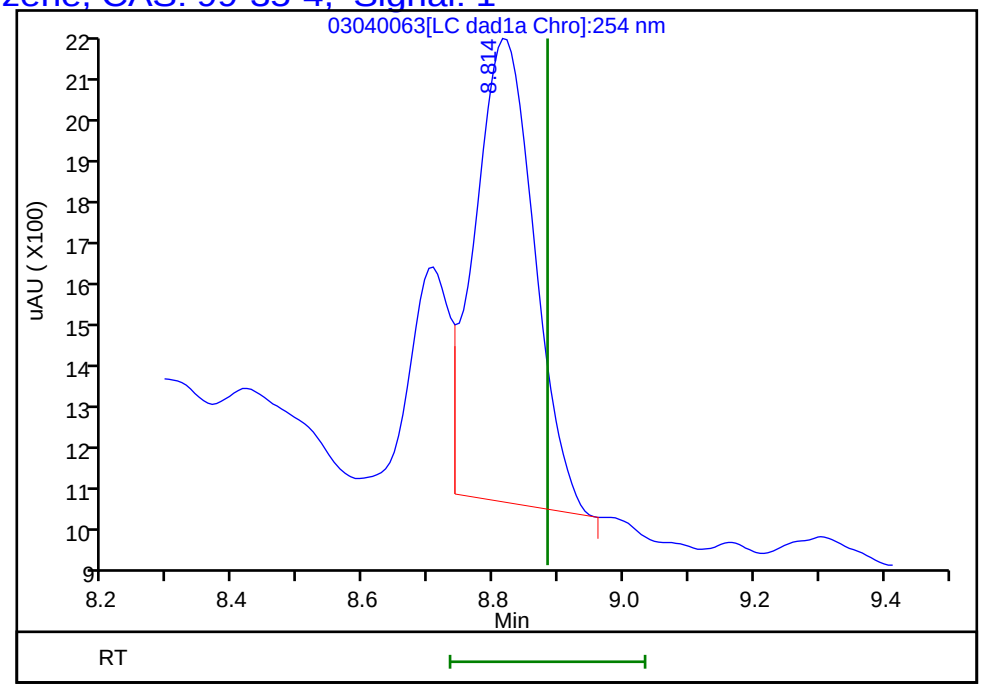
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040063.d				
Injection Date:	05-Mar-2020 11:32:20	Instrument ID:	CHHPLC_X3		
Lims ID:	280-134063-B-1-A	Lab Sample ID:	280-134063-1		
Client ID:	OS001-DP02-25				
Operator ID:	CB	ALS Bottle#:	63	Worklist Smp#:	63
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

10 1,3,5-Trinitrobenzene, CAS: 99-35-4, Signal: 1

RT: 8.81
Response: 7034
Amount: 0.028892



Reviewer: beckerc, 06-Mar-2020 09:41:23
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

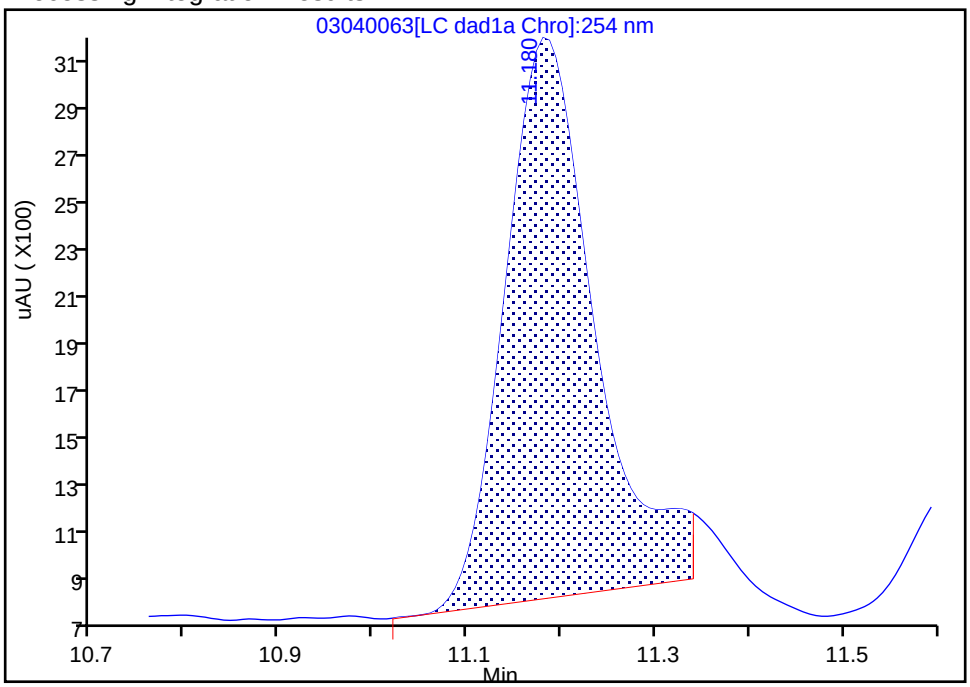
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040063.d				
Injection Date:	05-Mar-2020 11:32:20	Instrument ID:	CHHPLC_X3		
Lims ID:	280-134063-B-1-A	Lab Sample ID:	280-134063-1		
Client ID:	OS001-DP02-25				
Operator ID:	CB	ALS Bottle#:	63	Worklist Smp#:	63
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

16 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

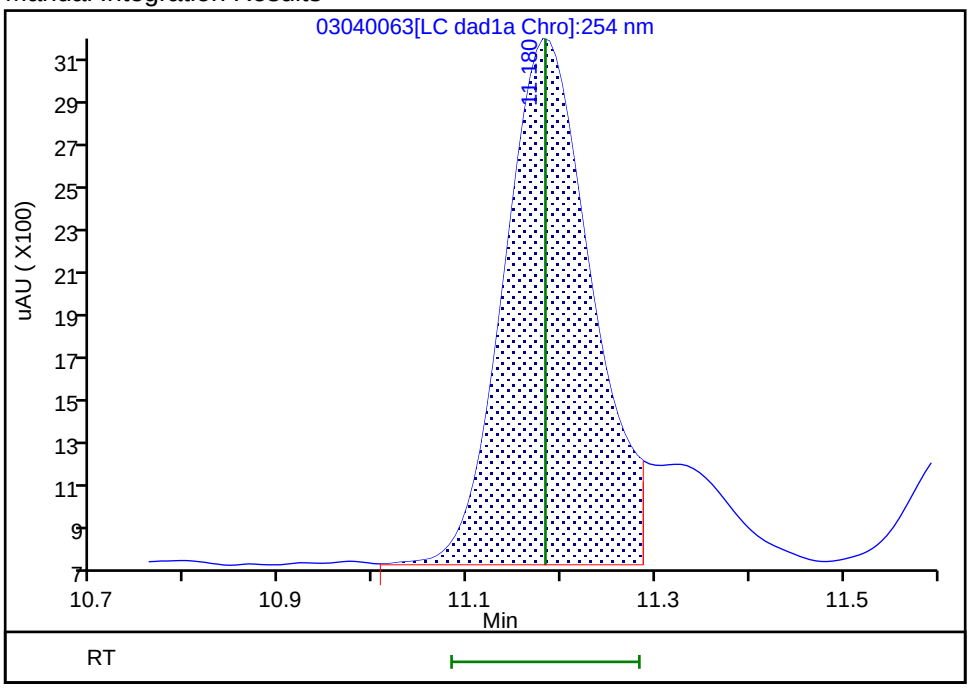
Processing Integration Results

RT: 11.18
Area: 15033
Amount: 0.068050
Amount Units: ug/mL



Manual Integration Results

RT: 11.18
Area: 15238
Amount: 0.068978
Amount Units: ug/mL



Reviewer: beckerc, 06-Mar-2020 09:41:17

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-134063-1
SDG No.:
Client Sample ID: OS001-DP02-25 RE
Lab Sample ID: 280-134063-1 RE
Matrix: Water
Lab File ID: 03090013.D
Analysis Method: 8330A
Date Collected: 02/24/2020 14:55
Extraction Method: 3535
Date Extracted: 03/04/2020 07:23
Sample wt/vol: 455.4(mL)
Date Analyzed: 03/09/2020 20:08
Con. Extract Vol.: 5(mL)
Dilution Factor: 1
Injection Volume: 100(uL)
GC Column: Luna-phenylhex ID: 4.6(mm)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 488169
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
35572-78-2	*2-Amino-4,6-dinitrotoluene*	*0.13*	*U Q H*	*0.22*	0.13	*0.056*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	0.3	*Q M*	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20200309-89910.b\03090013.D				
Lims ID:	280-134063-B-1-A				
Client ID:	OS001-DP02-25				
Sample Type:	Client				
Inject. Date:	09-Mar-2020 20:08:21	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-134063-B-1-A				
Misc. Info.:	280-0089910-013				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		
Method:	\\chromna\Denver\ChromData\G2_LUNA\20200309-89910.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	12-Mar-2020 15:31:39	Calib Date:	04-Mar-2020 03:21:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030023.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0315				

First Level Reviewer: beckerc Date: 12-Mar-2020 15:03:12

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
6 HMX	1		6.898			ND	U
7 MNX	1		7.707			ND	
8 RDX	1		9.058			ND	
9 Nitrobenzene	1		12.058			ND	
$ 10 1,2-Dinitrobenzene	1	12.885	12.964	-0.079	3770	0.000644	M
12 1,3-Dinitrobenzene	1		15.484			ND	
14 o-Nitrotoluene	1		16.511			ND	
15 p-Nitrotoluene	1		16.771			ND	
16 4-Amino-2,6-dinitrotoluene	1	17.018	17.071	-0.053	9326	0.0200	
17 m-Nitrotoluene	1		17.791			ND	
18 2-Amino-4,6-dinitrotoluene	1		17.918			ND	
19 1,3,5-Trinitrobenzene	1		18.824			ND	
20 2,6-Dinitrotoluene	1		19.778			ND	
21 2,4-Dinitrotoluene	1		20.244			ND	
22 Tetryl	1		23.498			ND	
23 2,4,6-Trinitrotoluene	1	24.605	24.638	-0.033	26881	0.0579	M

QC Flag Legend

Review Flags

M - Manually Integrated

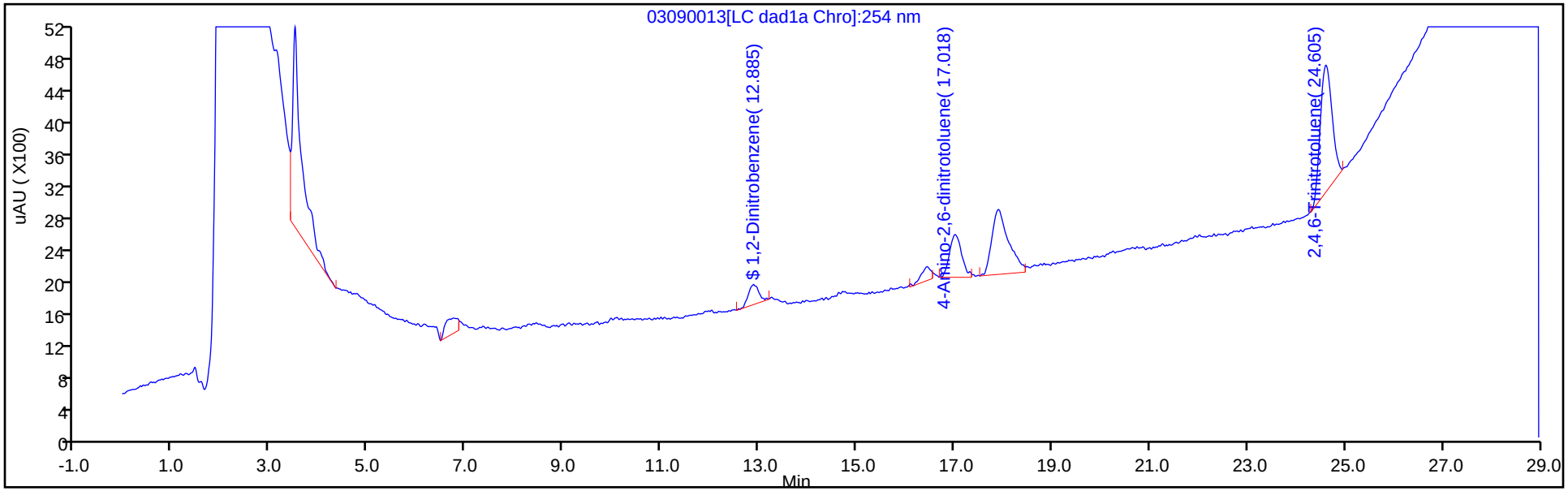
U - Marked Undetected

Report Date: 12-Mar-2020 15:31:50 Chrom Revision: 2.3 19-Feb-2020 16:45:46

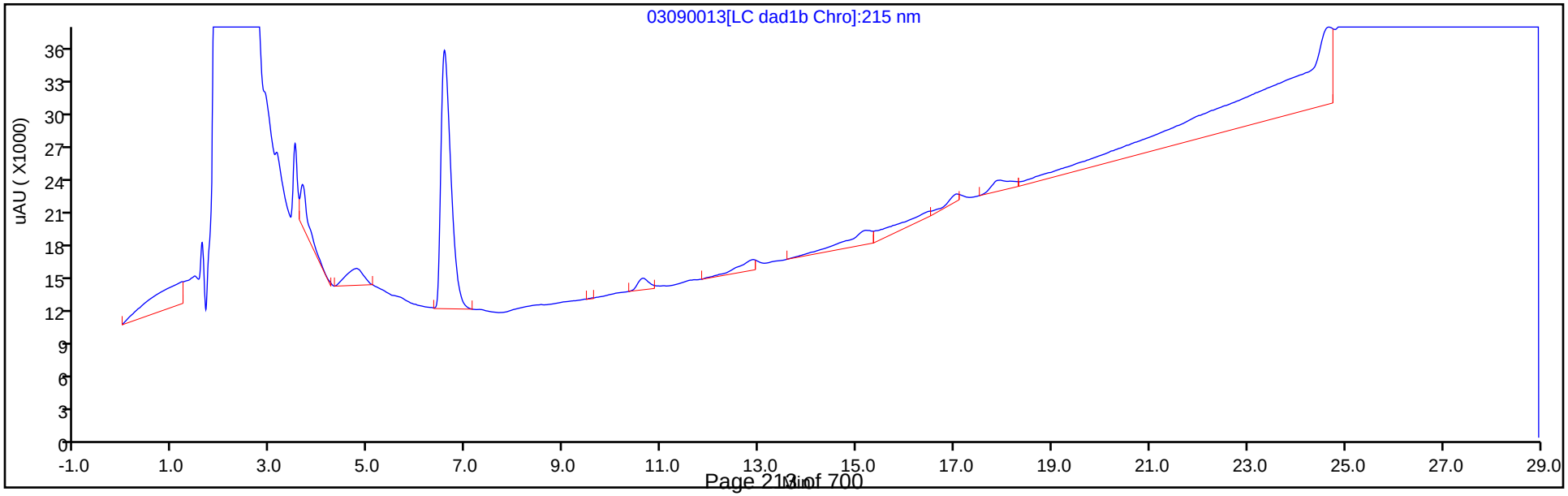
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\g2_luna\20200309-89910.b\03090013.d				
Injection Date:	09-Mar-2020 20:08:21	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	280-134063-B-1-A	Lab Sample ID:	280-134063-1	Worklist Smp#:	13
Client ID:	OS001-DP02-25				
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 Peak: 1



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



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20200309-89910.b\03090013.D				
Lims ID:	280-134063-B-1-A				
Client ID:	OS001-DP02-25				
Sample Type:	Client				
Inject. Date:	09-Mar-2020 20:08:21	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-134063-B-1-A				
Misc. Info.:	280-0089910-013				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		
Method:	\\chromna\Denver\ChromData\G2_LUNA\20200309-89910.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	12-Mar-2020 15:31:39	Calib Date:	04-Mar-2020 03:21:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030023.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0315				

First Level Reviewer: beckerc Date: 12-Mar-2020 15:03:12

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.000644	0.32

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

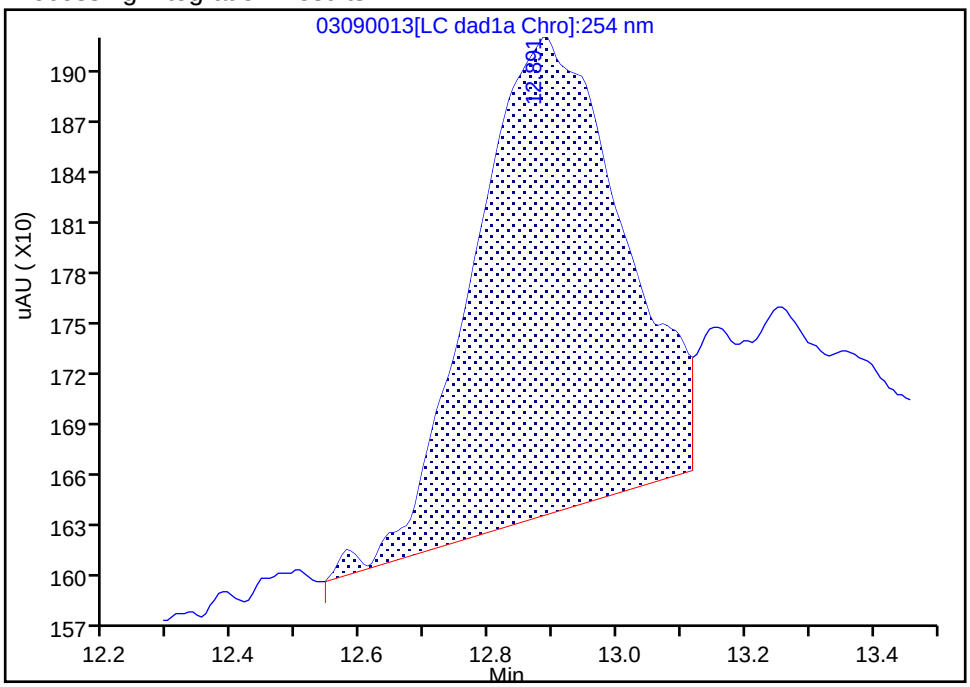
Data File:	\\chromna\denver\chromdata\g2_luna\20200309-89910.b\03090013.d				
Injection Date:	09-Mar-2020 20:08:21	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-134063-B-1-A	Lab Sample ID:	280-134063-1		
Client ID:	OS001-DP02-25				
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

Signal: 1

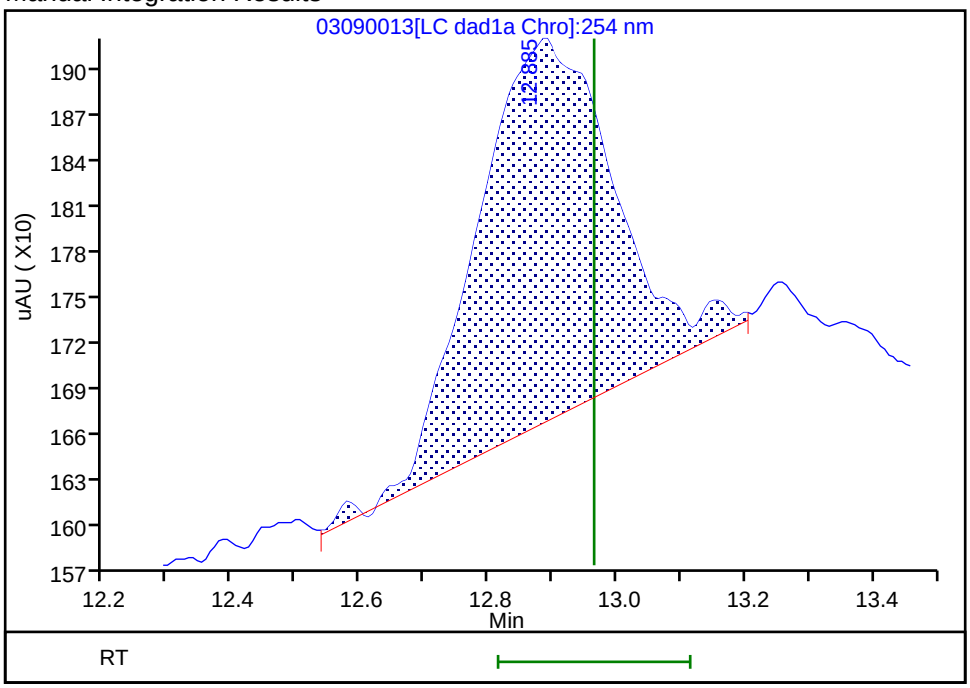
Processing Integration Results

RT: 12.89
Area: 4585
Amount: 0.003650
Amount Units: ug/ml



Manual Integration Results

RT: 12.88
Area: 3770
Amount: 0.000644
Amount Units: ug/ml



Reviewer: beckerc, 12-Mar-2020 15:07:35

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

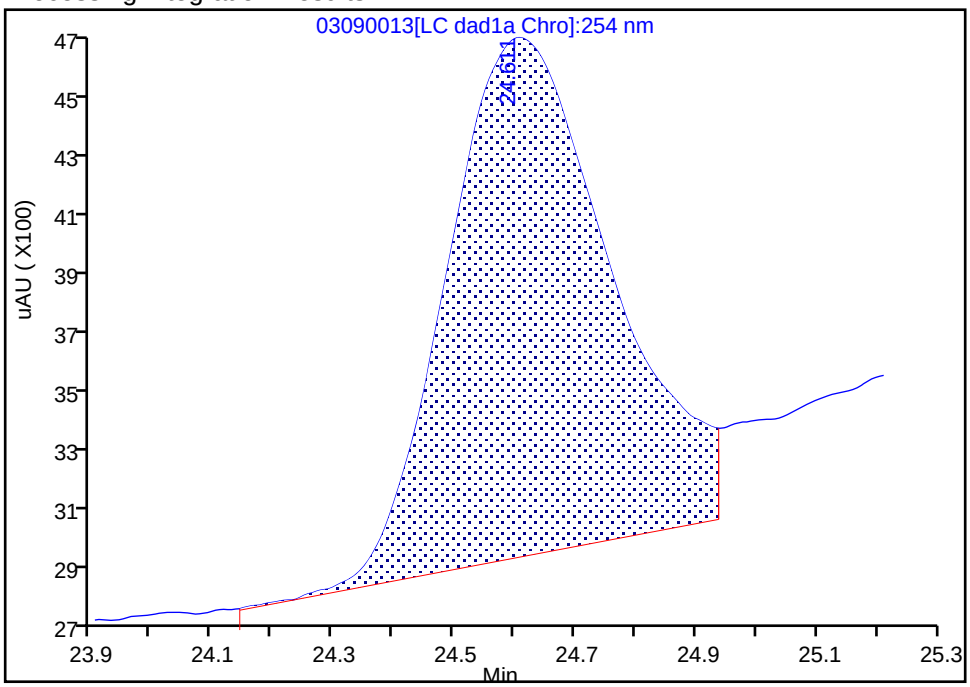
Data File:	\\chromna\denver\chromdata\g2_luna\20200309-89910.b\03090013.d				
Injection Date:	09-Mar-2020 20:08:21	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-134063-B-1-A	Lab Sample ID:	280-134063-1		
Client ID:	OS001-DP02-25				
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

23 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

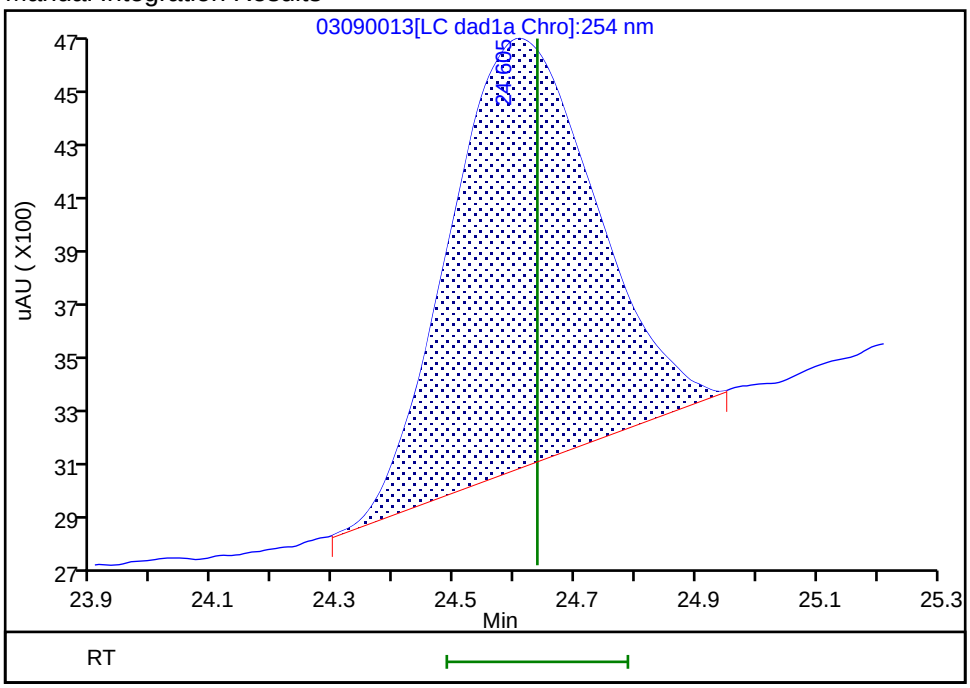
Processing Integration Results

RT: 24.61
Area: 32748
Amount: 0.072641
Amount Units: ug/ml



Manual Integration Results

RT: 24.60
Area: 26881
Amount: 0.057929
Amount Units: ug/ml



Reviewer: beckerc, 12-Mar-2020 15:07:20

Audit Action: Manually Integrated Audit Reason: Baseline

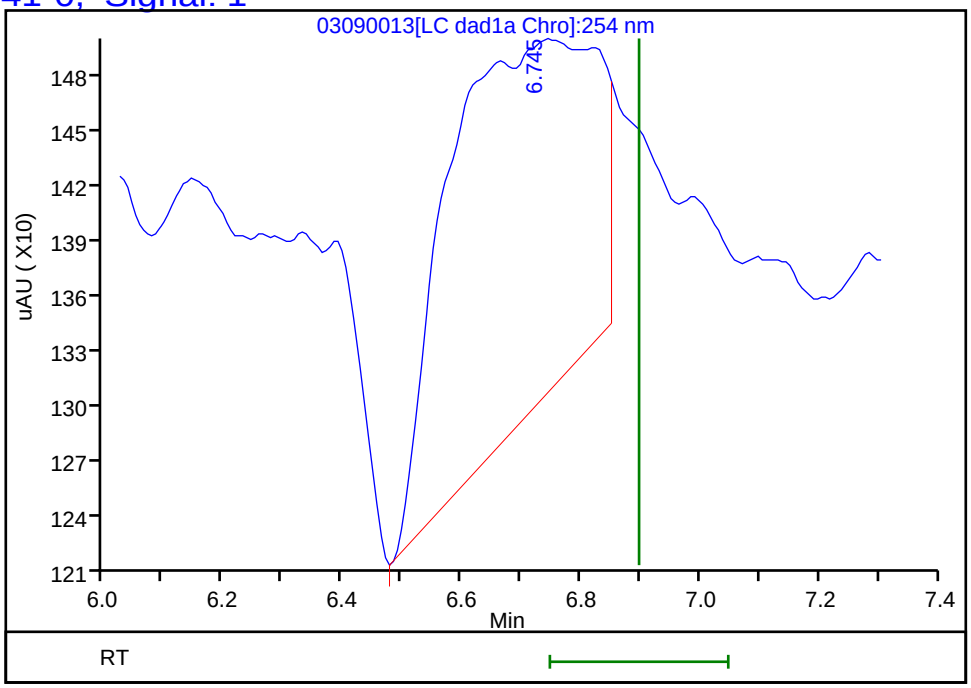
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\g2_luna\20200309-89910.b\03090013.d				
Injection Date:	09-Mar-2020 20:08:21	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-134063-B-1-A	Lab Sample ID:	280-134063-1		
Client ID:	OS001-DP02-25				
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

RT: 6.74
Response: 3543
Amount: 0.009568



Reviewer: beckerc, 12-Mar-2020 15:07:40
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-134063-1
SDG No.:
Client Sample ID: OS001-DP502-25
Lab Sample ID: 280-134063-2
Matrix: Water
Lab File ID: 03020018.D
Analysis Method: 8330A
Date Collected: 02/24/2020 15:00
Extraction Method: 3535
Date Extracted: 02/28/2020 13:30
Sample wt/vol: 474.7(mL)
Date Analyzed: 03/02/2020 19:32
Con. Extract Vol.: 5(mL)
Dilution Factor: 1
Injection Volume: 100(uL)
GC Column: UltraCarb5uODS ID: 4.6(mm)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 487395
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.42	U M	1.1	0.42	0.21
99-65-0	1,3-Dinitrobenzene	0.21	U M	0.42	0.21	0.093
118-96-7	2,4,6-Trinitrotoluene	8.5		0.42	0.42	0.17
121-14-2	2,4-Dinitrotoluene	0.21	U	0.42	0.21	0.088
606-20-2	2,6-Dinitrotoluene	0.21	U	0.21	0.21	0.068
35572-78-2	2-Amino-4,6-dinitrotoluene	2.3	Q	0.21	0.13	0.053
88-72-2	2-Nitrotoluene	0.21	U M Q	0.42	0.21	0.090
99-08-1	3-Nitrotoluene	0.42	U M Q	0.42	0.42	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	0.13	U Q	0.21	0.13	0.061
99-99-0	4-Nitrotoluene	0.42	U M Q	1.1	0.42	0.21
2691-41-0	HMX	0.34	J M	0.42	0.21	0.092
5755-27-1	MNX	0.42	U M Q	2.1	0.42	0.16
98-95-3	Nitrobenzene	0.21	U	0.42	0.21	0.096
479-45-8	Tetryl	0.21	U M	0.25	0.21	0.084

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	92	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200302-89712.b\03020018.D				
Lims ID:	280-134063-A-2-A				
Client ID:	OS001-DP502-25				
Sample Type:	Client				
Inject. Date:	02-Mar-2020 19:32:22	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-134063-A-2-A				
Misc. Info.:	280-0089712-018				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200302-89712.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	03-Mar-2020 11:54:24	Calib Date:	06-Jan-2020 20:40:54		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060014.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0310				
First Level Reviewer: beckerc		Date:	03-Mar-2020 11:13:40		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
3 HMX	1	6.669	6.680	-0.011	2933	0.0319	M
6 MNX	1		7.363			ND	U
7 RDX	1	7.749	7.754	-0.005	2456	0.0221	M
$ 9 1,2-Dinitrobenzene	1	8.716	8.707	0.009	25729	0.1847	M
10 1,3,5-Trinitrobenzene	1		8.880			ND	MU
11 1,3-Dinitrobenzene	1		9.527			ND	U
12 Nitrobenzene	1		9.914			ND	
14 Tetryl	1		10.207			ND	U
16 2,4,6-Trinitrotoluene	1	11.182	11.174	0.008	182982	0.8051	
17 4-Amino-2,6-dinitrotoluene	1		11.327			ND	
18 2-Amino-4,6-dinitrotoluene	1	11.622	11.614	0.008	45253	0.2205	
19 2,6-Dinitrotoluene	1		11.780			ND	
20 2,4-Dinitrotoluene	1		11.974			ND	
21 o-Nitrotoluene	1		12.820			ND	U
22 p-Nitrotoluene	1		13.260			ND	U
23 m-Nitrotoluene	1		13.854			ND	U

QC Flag Legend

Review Flags

M - Manually Integrated

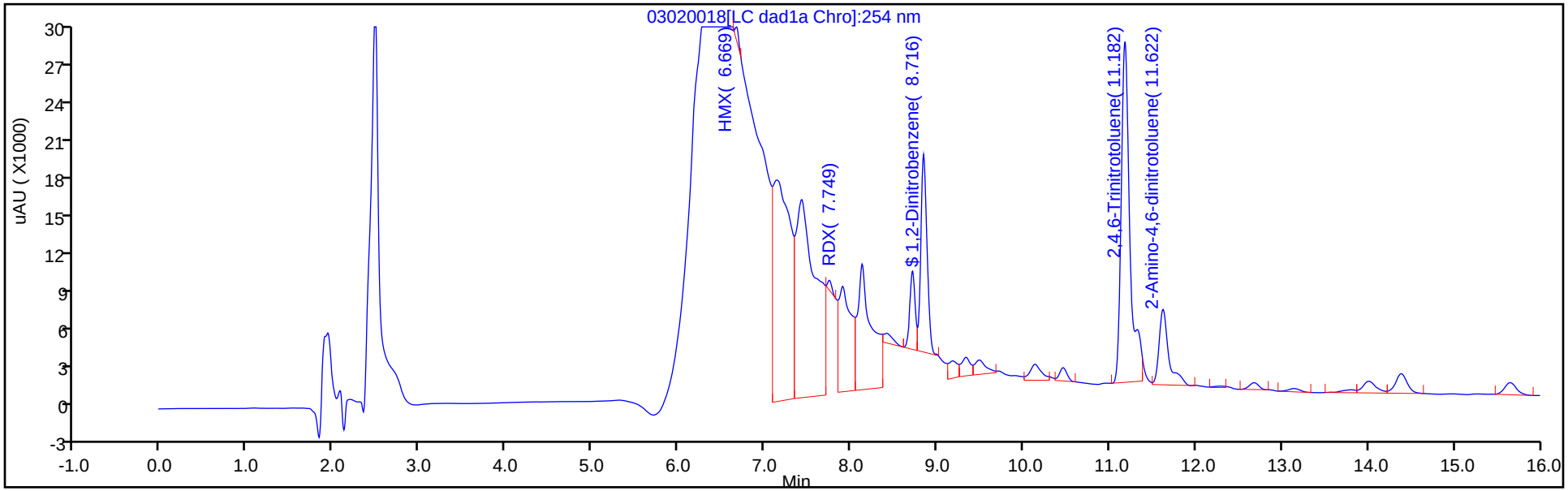
U - Marked Undetected

Report Date: 03-Mar-2020 11:54:51 Chrom Revision: 2.3 19-Feb-2020 16:45:46

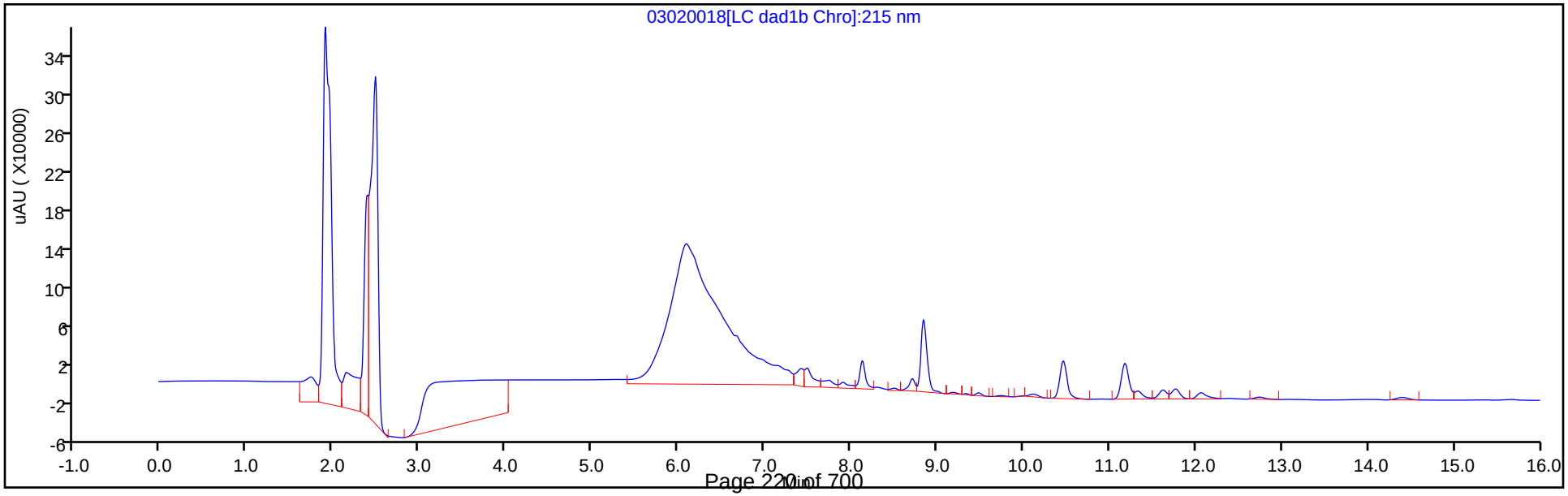
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020018.d				
Injection Date:	02-Mar-2020 19:32:22	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	280-134063-A-2-A	Lab Sample ID:	280-134063-2	Worklist Smp#:	18
Client ID:	OS001-DP502-25				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200302-89712.b\03020018.D				
Lims ID:	280-134063-A-2-A				
Client ID:	OS001-DP502-25				
Sample Type:	Client				
Inject. Date:	02-Mar-2020 19:32:22	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-134063-A-2-A				
Misc. Info.:	280-0089712-018				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200302-89712.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	03-Mar-2020 11:54:24	Calib Date:	06-Jan-2020 20:40:54		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060014.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0310				

First Level Reviewer: beckerc Date: 03-Mar-2020 11:13:40

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1847	92.33

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

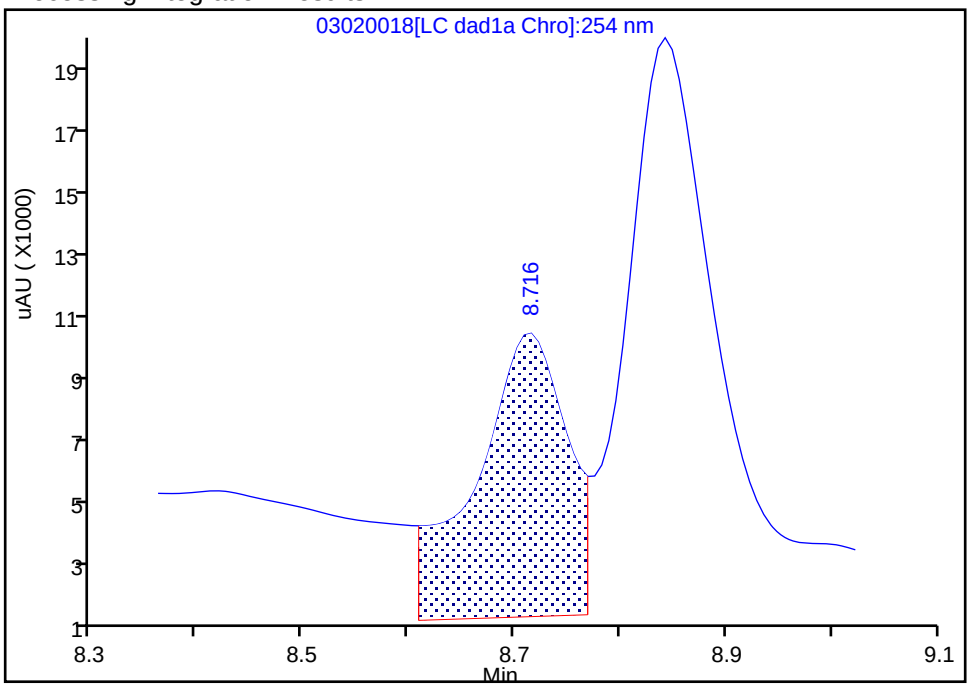
Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020018.d				
Injection Date:	02-Mar-2020 19:32:22	Instrument ID:	CHHPLC_X3		
Lims ID:	280-134063-A-2-A	Lab Sample ID:	280-134063-2		
Client ID:	OS001-DP502-25				
Operator ID:	CB	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 9 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

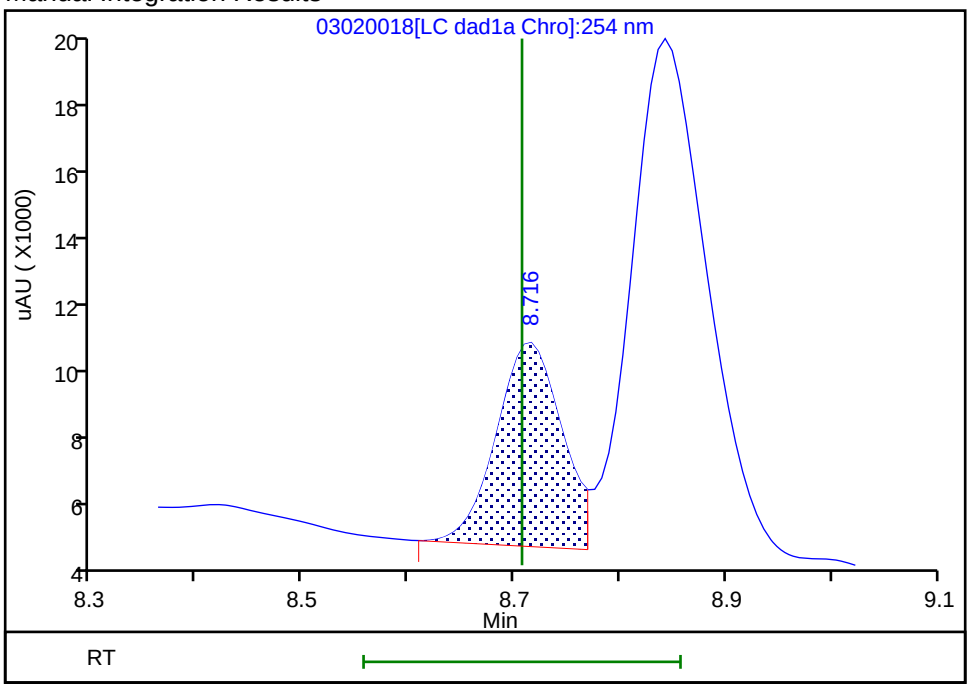
Processing Integration Results

RT: 8.72
Area: 50992
Amount: 0.365984
Amount Units: ug/mL



Manual Integration Results

RT: 8.72
Area: 25729
Amount: 0.184664
Amount Units: ug/mL



Reviewer: beckerc, 03-Mar-2020 11:12:58
Audit Action: Assigned New Baseline Audit Reason: Baseline

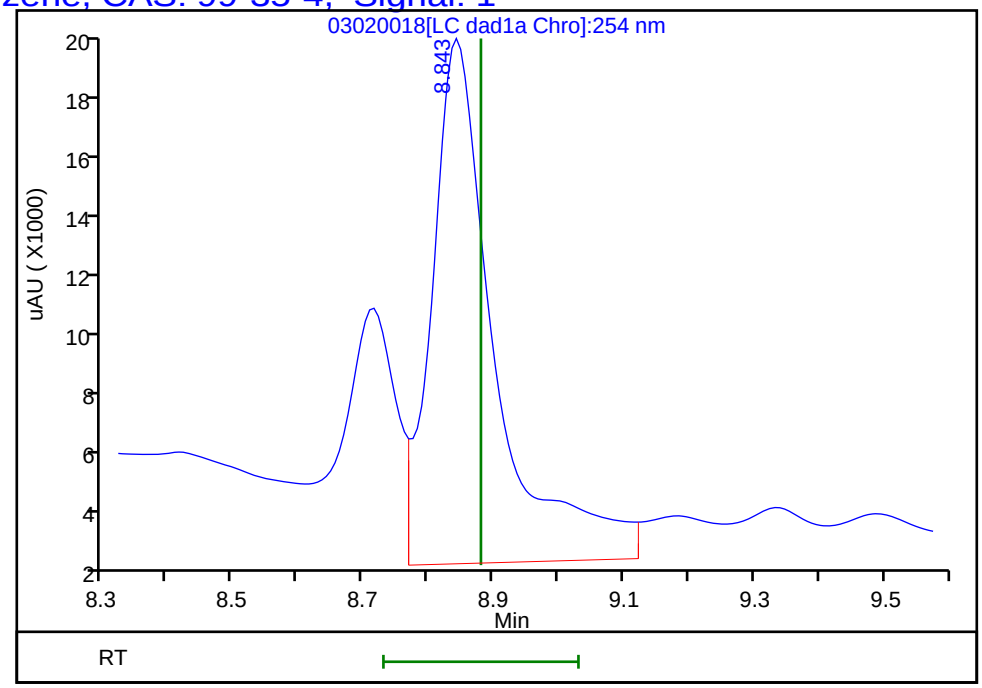
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020018.d				
Injection Date:	02-Mar-2020 19:32:22	Instrument ID:	CHHPLC_X3		
Lims ID:	280-134063-A-2-A	Lab Sample ID:	280-134063-2		
Client ID:	OS001-DP502-25				
Operator ID:	CB	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

10 1,3,5-Trinitrobenzene, CAS: 99-35-4, Signal: 1

RT: 8.84
Response: 116729
Amount: 0.476296



Reviewer: beckerc, 03-Mar-2020 11:13:40
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

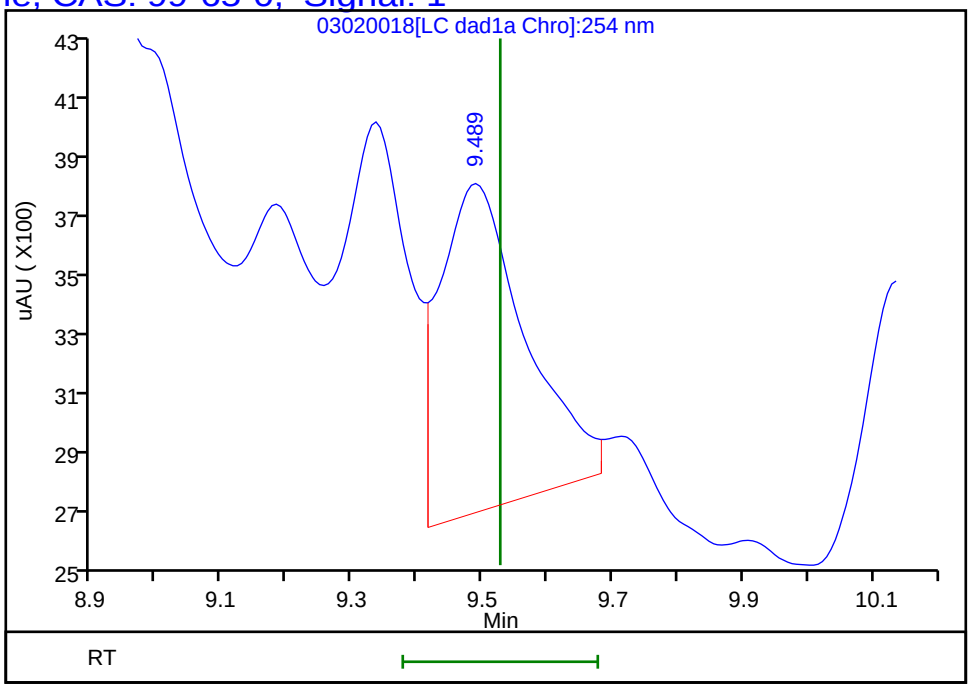
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020018.d				
Injection Date:	02-Mar-2020 19:32:22	Instrument ID:	CHHPLC_X3		
Lims ID:	280-134063-A-2-A	Lab Sample ID:	280-134063-2		
Client ID:	OS001-DP502-25				
Operator ID:	CB	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

11 1,3-Dinitrobenzene, CAS: 99-65-0, Signal: 1

RT: 9.49
Response: 9916
Amount: 0.031866



Reviewer: beckerc, 03-Mar-2020 11:13:40
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

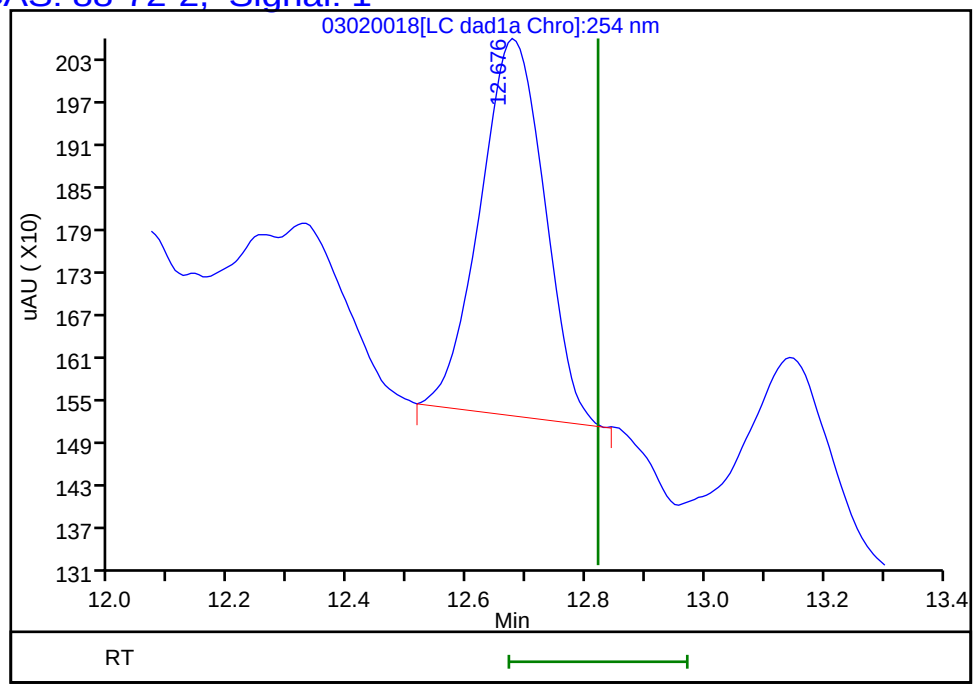
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020018.d				
Injection Date:	02-Mar-2020 19:32:22	Instrument ID:	CHHPLC_X3		
Lims ID:	280-134063-A-2-A	Lab Sample ID:	280-134063-2		
Client ID:	OS001-DP502-25				
Operator ID:	CB	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		

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

RT: 12.68
Response: 3981
Amount: 0.030674



Reviewer: beckerc, 03-Mar-2020 11:13:40
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

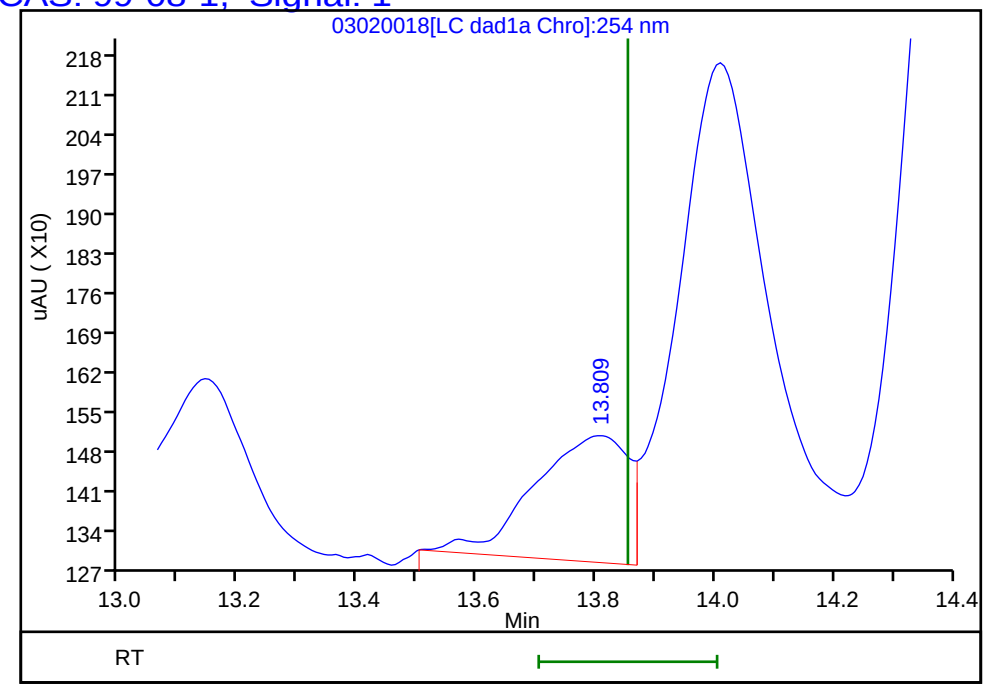
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020018.d				
Injection Date:	02-Mar-2020 19:32:22	Instrument ID:	CHHPLC_X3		
Lims ID:	280-134063-A-2-A	Lab Sample ID:	280-134063-2		
Client ID:	OS001-DP502-25				
Operator ID:	CB	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		

23 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 13.81
Response: 2454
Amount: 0.016910



Reviewer: beckerc, 03-Mar-2020 11:13:40
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

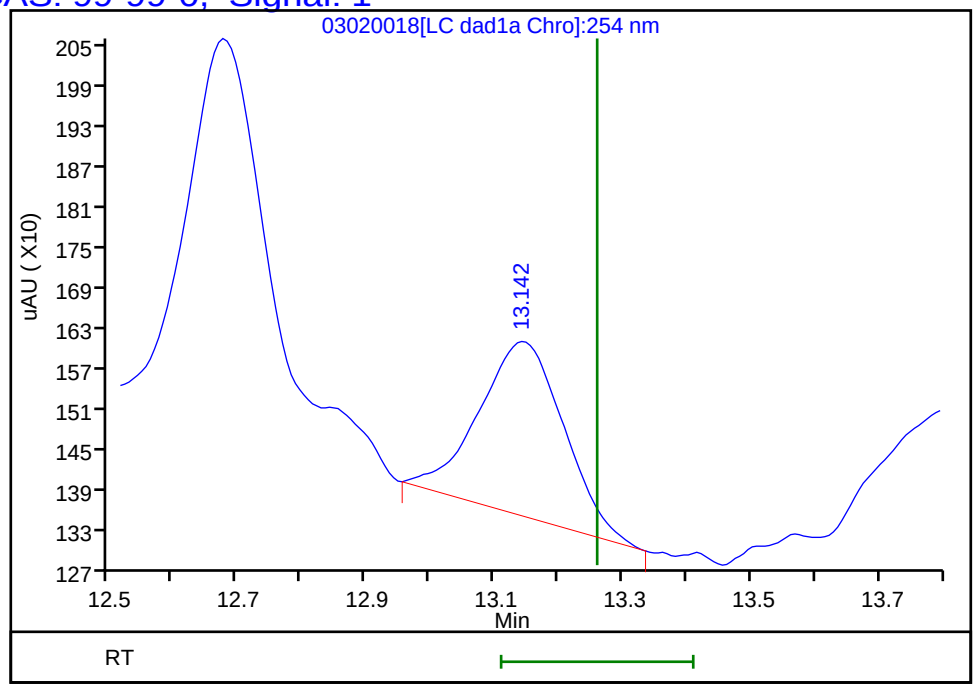
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020018.d				
Injection Date:	02-Mar-2020 19:32:22	Instrument ID:	CHHPLC_X3		
Lims ID:	280-134063-A-2-A	Lab Sample ID:	280-134063-2		
Client ID:	OS001-DP502-25				
Operator ID:	CB	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		

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

RT: 13.14
Response: 2379
Amount: 0.021577



Reviewer: beckerc, 03-Mar-2020 11:13:40
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

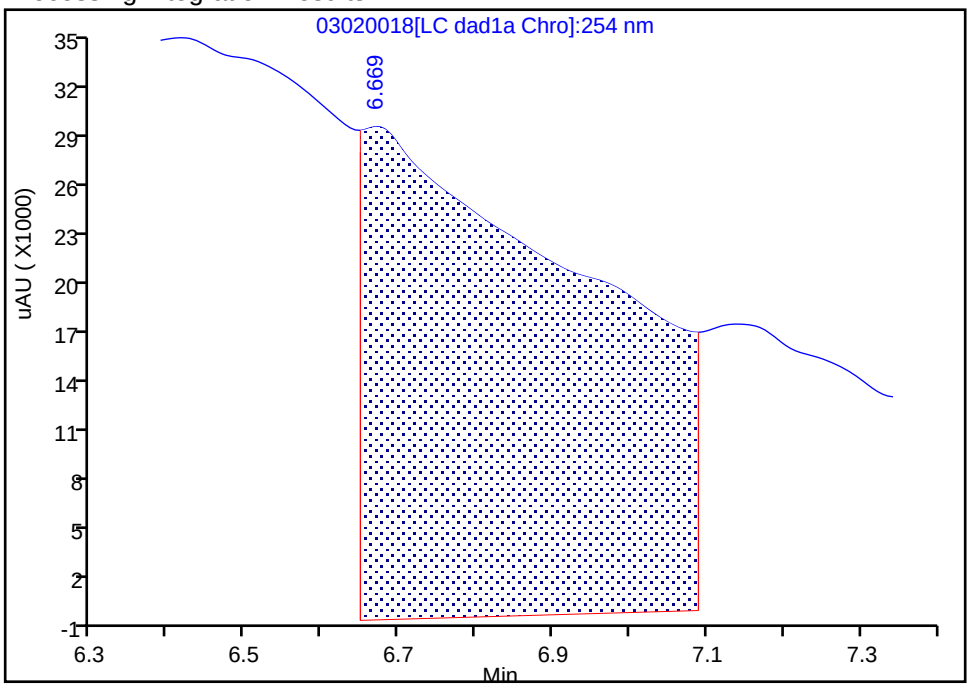
Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020018.d				
Injection Date:	02-Mar-2020 19:32:22	Instrument ID:	CHHPLC_X3		
Lims ID:	280-134063-A-2-A	Lab Sample ID:	280-134063-2		
Client ID:	OS001-DP502-25				
Operator ID:	CB	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

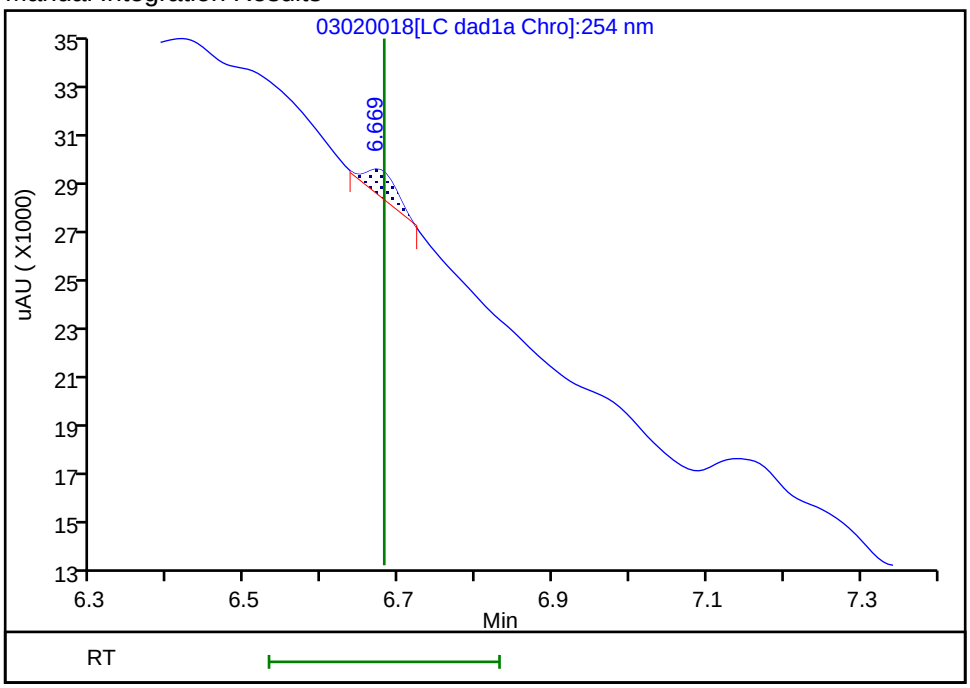
Processing Integration Results

RT: 6.67
Area: 589569
Amount: 6.419995
Amount Units: ug/mL



Manual Integration Results

RT: 6.67
Area: 2933
Amount: 0.031938
Amount Units: ug/mL



Reviewer: beckerc, 03-Mar-2020 11:12:29

Audit Action: Manually Integrated Audit Reason: Baseline

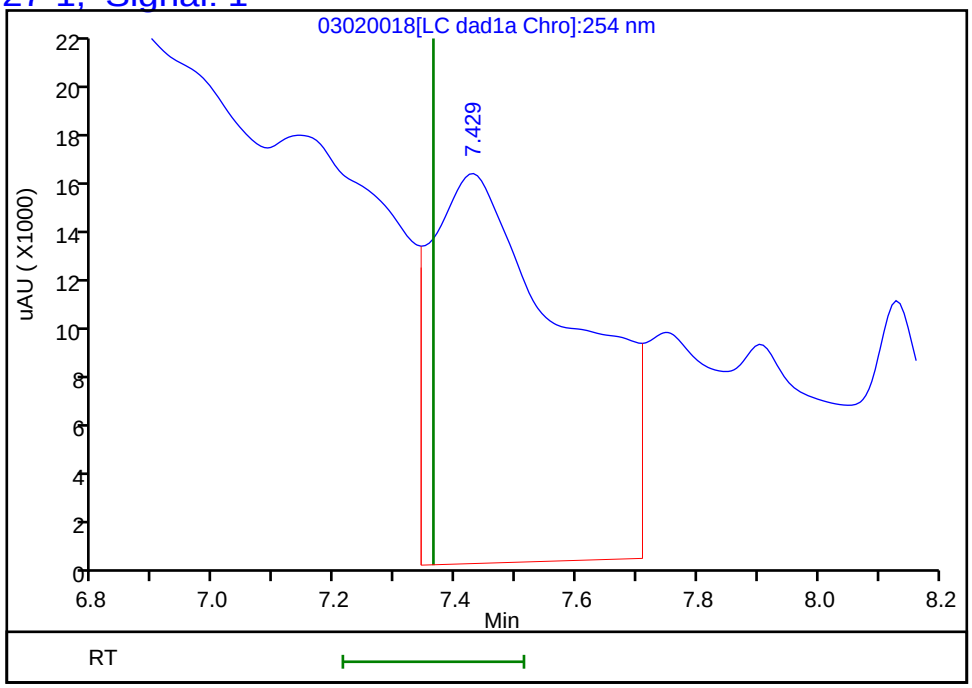
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020018.d				
Injection Date:	02-Mar-2020 19:32:22	Instrument ID:	CHHPLC_X3		
Lims ID:	280-134063-A-2-A	Lab Sample ID:	280-134063-2		
Client ID:	OS001-DP502-25				
Operator ID:	CB	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 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.43
Response: 244797
Amount: 1.744421



Reviewer: beckerc, 03-Mar-2020 11:13:40
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

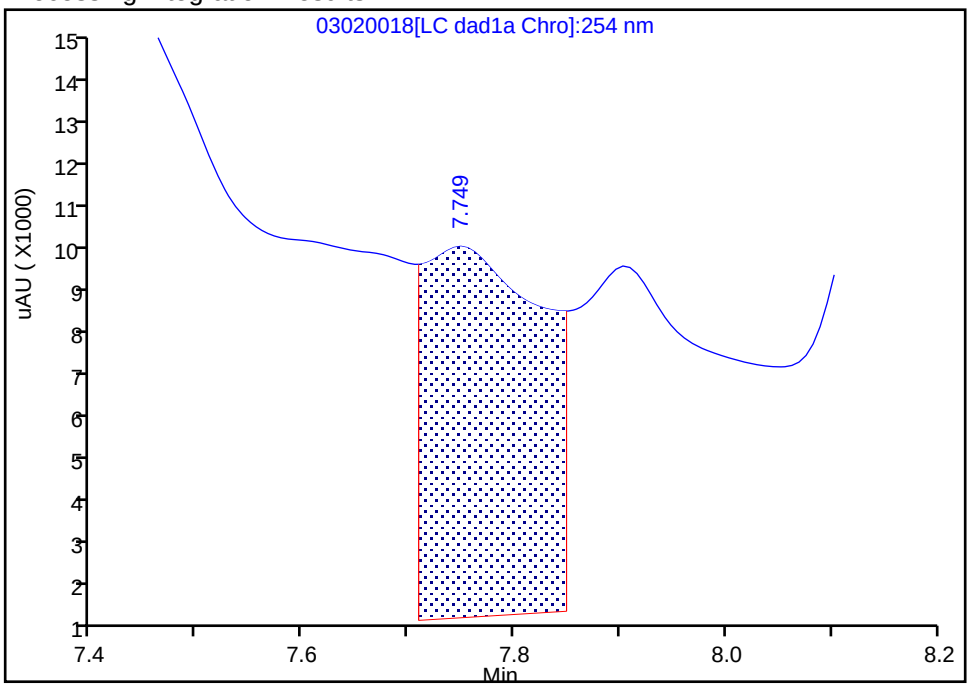
Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020018.d				
Injection Date:	02-Mar-2020 19:32:22	Instrument ID:	CHHPLC_X3		
Lims ID:	280-134063-A-2-A	Lab Sample ID:	280-134063-2		
Client ID:	OS001-DP502-25				
Operator ID:	CB	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 RDX, CAS: 121-82-4

Signal: 1

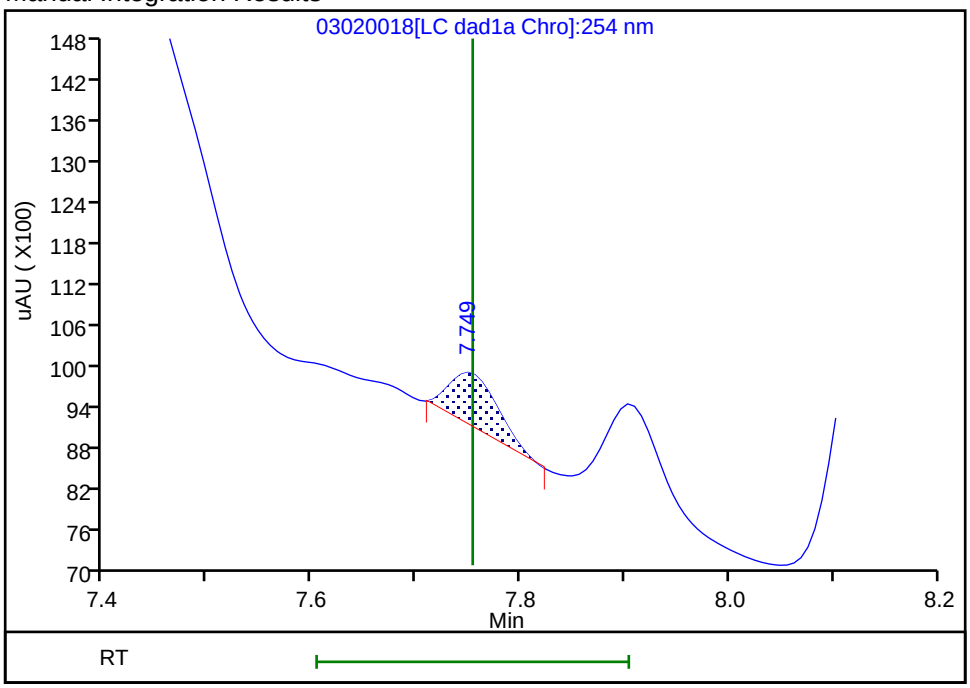
Processing Integration Results

RT: 7.75
Area: 66775
Amount: 0.600925
Amount Units: ug/mL



Manual Integration Results

RT: 7.75
Area: 2456
Amount: 0.022102
Amount Units: ug/mL



Reviewer: beckerc, 03-Mar-2020 11:12:42

Audit Action: Manually Integrated Audit Reason: Baseline

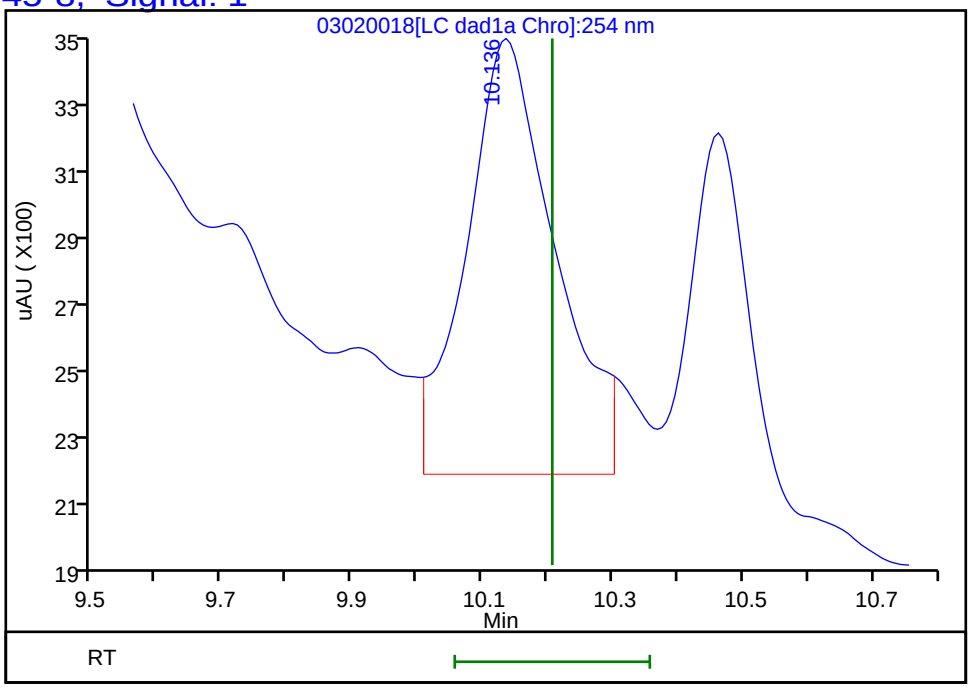
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020018.d				
Injection Date:	02-Mar-2020 19:32:22	Instrument ID:	CHHPLC_X3		
Lims ID:	280-134063-A-2-A	Lab Sample ID:	280-134063-2		
Client ID:	OS001-DP502-25				
Operator ID:	CB	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

RT: 10.14
Response: 11544
Amount: 0.071278



Reviewer: beckerc, 03-Mar-2020 11:13:40
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-134063-1
SDG No.:
Client Sample ID: OS001-DP502-25
Lab Sample ID: 280-134063-2
Matrix: Water
Lab File ID: 03030032.D
Analysis Method: 8330A
Date Collected: 02/24/2020 15:00
Extraction Method: 3535
Date Extracted: 02/28/2020 13:30
Sample wt/vol: 474.7(mL)
Date Analyzed: 03/04/2020 08:36
Con. Extract Vol.: 5(mL)
Dilution Factor: 1
Injection Volume: 100(uL)
GC Column: Luna-phenylhex ID: 4.6(mm)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 487545
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
121-82-4	RDX	0.42	U	0.42	0.42	0.17

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	91		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030032.D				
Lims ID:	280-134063-A-2-A				
Client ID:	OS001-DP502-25				
Sample Type:	Client				
Inject. Date:	04-Mar-2020 08:36:01	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-134063-A-2-A				
Misc. Info.:	280-0089749-032				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		
Method:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2020 11:40:10	Calib Date:	04-Mar-2020 03:21:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030023.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0319				

First Level Reviewer: beckerc Date: 05-Mar-2020 08:53:01

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
6 HMX	1	6.922	6.947	-0.025	9409	0.0435	
7 MNX	1		7.707			ND	
8 RDX	1		9.120			ND	
9 Nitrobenzene	1		12.113			ND	U
$ 10 1,2-Dinitrobenzene	1	13.002	13.033	-0.031	52842	0.1816	
12 1,3-Dinitrobenzene	1		15.553			ND	
14 o-Nitrotoluene	1	16.535	16.580	-0.045	20870	0.0833	
15 p-Nitrotoluene	1		16.853			ND	
16 4-Amino-2,6-dinitrotoluene	1	17.122	17.160	-0.038	74145	0.2235	
17 m-Nitrotoluene	1		17.787			ND	
18 2-Amino-4,6-dinitrotoluene	1	17.982	18.013	-0.031	105538	0.2144	
19 1,3,5-Trinitrobenzene	1	18.855	18.907	-0.052	6956	0.006376	
20 2,6-Dinitrotoluene	1		19.853			ND	
21 2,4-Dinitrotoluene	1		20.320			ND	
22 Tetryl	1		23.580			ND	
23 2,4,6-Trinitrotoluene	1	24.669	24.713	-0.044	336901	0.8353	

QC Flag Legend

Review Flags

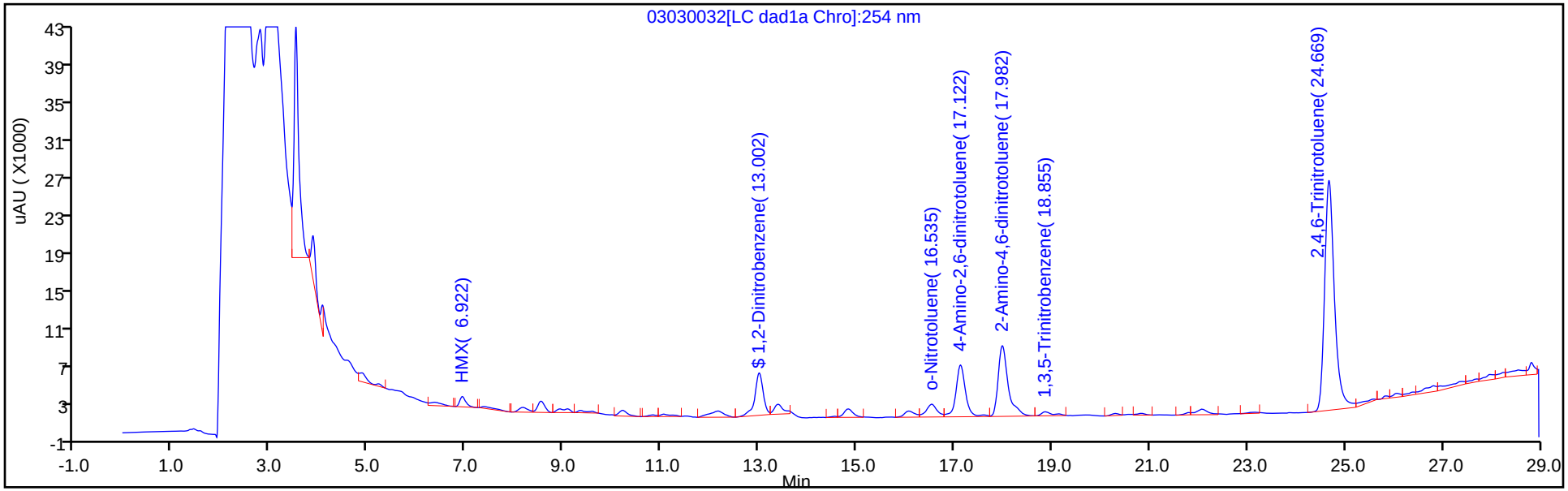
U - Marked Undetected

Report Date: 05-Mar-2020 11:48:25 Chrom Revision: 2.3 19-Feb-2020 16:45:46

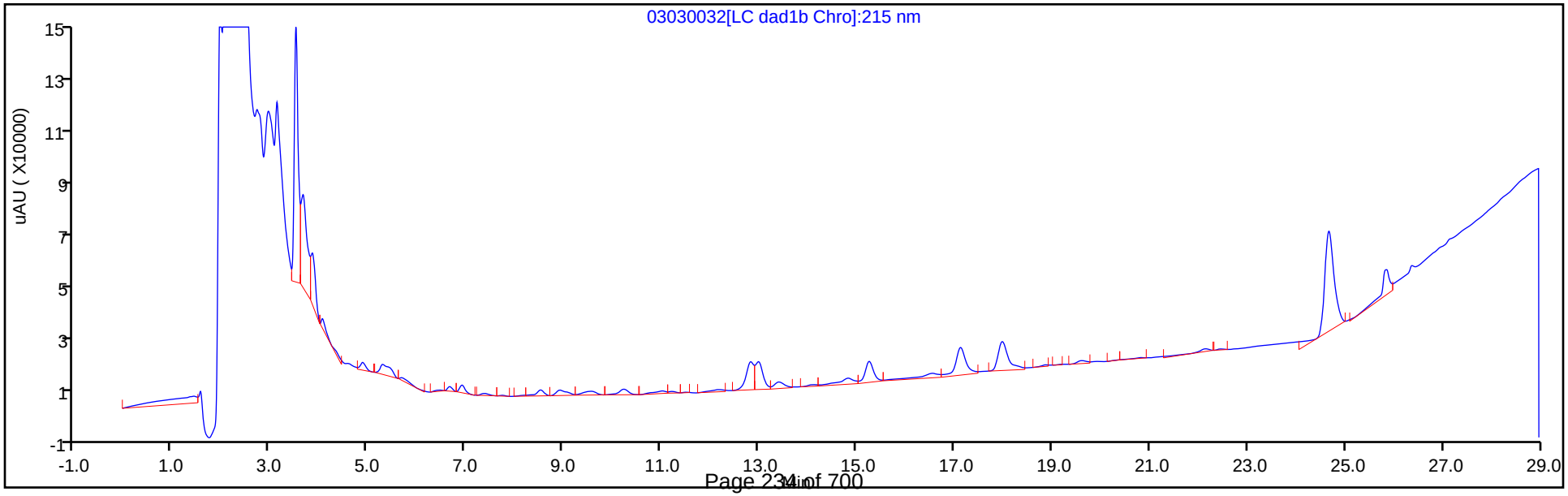
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\g2_luna\20200303-89749.b\03030032.d				
Injection Date:	04-Mar-2020 08:36:01	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	280-134063-A-2-A	Lab Sample ID:	280-134063-2	Worklist Smp#:	32
Client ID:	OS001-DP502-25				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	32
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



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



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030032.D				
Lims ID:	280-134063-A-2-A				
Client ID:	OS001-DP502-25				
Sample Type:	Client				
Inject. Date:	04-Mar-2020 08:36:01	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-134063-A-2-A				
Misc. Info.:	280-0089749-032				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		

Method:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\G2_8330_Luna.m		
Limit Group:	GCSV - 8330		
Last Update:	05-Mar-2020 11:40:10	Calib Date:	04-Mar-2020 03:21:00
Integrator:	Falcon		
Quant Method:	External Standard	Quant By:	Initial Calibration
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030023.D		

Column 1 :	Luna-Phenyl hexyl (4.60 mm)	Det: LC DAD1A, 254 nm
Process Host:	CTX0319	

First Level Reviewer: beckerc Date: 05-Mar-2020 08:53:01

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1816	90.81

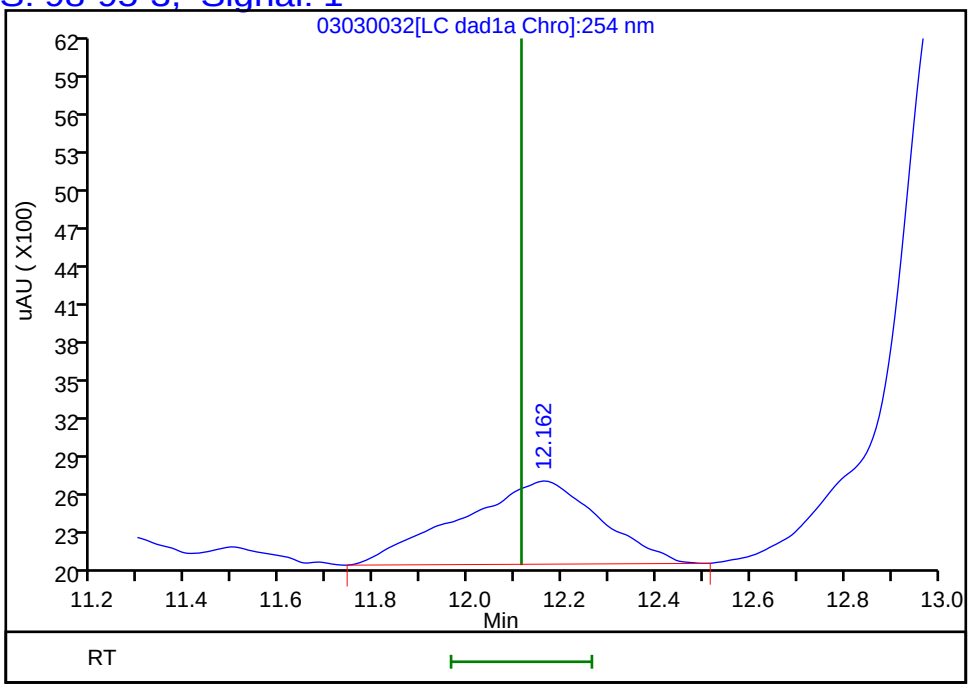
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\g2_luna\20200303-89749.b\03030032.d				
Injection Date:	04-Mar-2020 08:36:01	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-134063-A-2-A	Lab Sample ID:	280-134063-2		
Client ID:	OS001-DP502-25				
Operator ID:	CB	ALS Bottle#:	32	Worklist Smp#:	32
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

RT: 12.16
Response: 13409
Amount: 0.025147



Reviewer: beckerc, 05-Mar-2020 08:53:01
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-134063-1
SDG No.:
Client Sample ID: OS001-DP502-25 RE
Lab Sample ID: 280-134063-2 RE
Matrix: Water
Lab File ID: 03040064.D
Analysis Method: 8330A
Date Collected: 02/24/2020 15:00
Extraction Method: 3535
Date Extracted: 03/04/2020 07:23
Sample wt/vol: 480.6(mL)
Date Analyzed: 03/05/2020 11:55
Con. Extract Vol.: 5(mL)
Dilution Factor: 1
Injection Volume: 100(uL)
GC Column: UltraCarb5uODS ID: 4.6(mm)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 487660
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.42	U H M Q	1.0	0.42	0.21
99-65-0	1,3-Dinitrobenzene	0.21	U H Q	0.42	0.21	0.092
118-96-7	2,4,6-Trinitrotoluene	7.8	Q H M	0.42	0.42	0.17
121-14-2	2,4-Dinitrotoluene	0.21	U H Q	0.42	0.21	0.087
606-20-2	2,6-Dinitrotoluene	0.21	U H Q	0.21	0.21	0.067
35572-78-2	2-Amino-4,6-dinitrotoluene	2.2	Q H	0.21	0.12	0.053
88-72-2	2-Nitrotoluene	0.21	U H Q	0.42	0.21	0.089
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U H Q	0.21	0.12	0.060
99-99-0	4-Nitrotoluene	0.42	U H Q	1.0	0.42	0.21
2691-41-0	HMX	0.32	J H M Q	0.42	0.21	0.091
98-95-3	Nitrobenzene	0.21	U H Q	0.42	0.21	0.095
479-45-8	Tetryl	0.21	U H M Q	0.25	0.21	0.083

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	68	Q	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040064.D				
Lims ID:	280-134063-B-2-A				
Client ID:	OS001-DP502-25				
Sample Type:	Client				
Inject. Date:	05-Mar-2020 11:55:16	ALS Bottle#:	64	Worklist Smp#:	64
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-134063-B-2-A				
Misc. Info.:	280-0089779-064				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Mar-2020 10:25:55	Calib Date:	04-Mar-2020 23:40:46		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0308				
First Level Reviewer: beckerc		Date:	06-Mar-2020 09:43:09		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
3 HMX	1	6.672	6.683	-0.011	2785	0.0312	M
6 MNX	1	7.352	7.361	-0.009	5330	0.0336	M
7 RDX	1	7.739	7.750	-0.011	2140	0.0182	M
$ 9 1,2-Dinitrobenzene	1	8.705	8.710	-0.005	19818	0.1355	
10 1,3,5-Trinitrobenzene	1		8.883			ND	U
11 1,3-Dinitrobenzene	1		9.529			ND	
12 Nitrobenzene	1		9.916			ND	
14 Tetryl	1		10.216			ND	U
16 2,4,6-Trinitrotoluene	1	11.178	11.183	-0.005	165161	0.7476	M
17 4-Amino-2,6-dinitrotoluene	1		11.336			ND	
18 2-Amino-4,6-dinitrotoluene	1	11.618	11.623	-0.005	46246	0.2126	
19 2,6-Dinitrotoluene	1		11.789			ND	
20 2,4-Dinitrotoluene	1		11.983			ND	
21 o-Nitrotoluene	1		12.829			ND	
22 p-Nitrotoluene	1		13.269			ND	
23 m-Nitrotoluene	1	13.825	13.863	-0.038	1177	0.007631	

QC Flag Legend

Review Flags

M - Manually Integrated

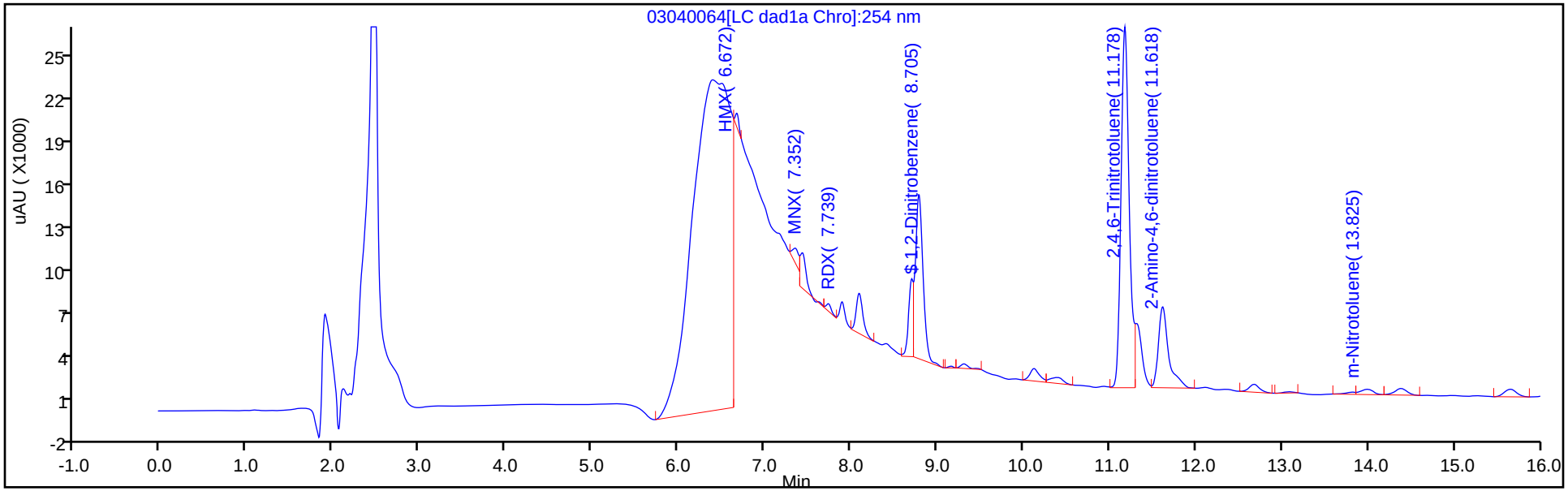
U - Marked Undetected

Report Date: 06-Mar-2020 10:26:03 Chrom Revision: 2.3 19-Feb-2020 16:45:46

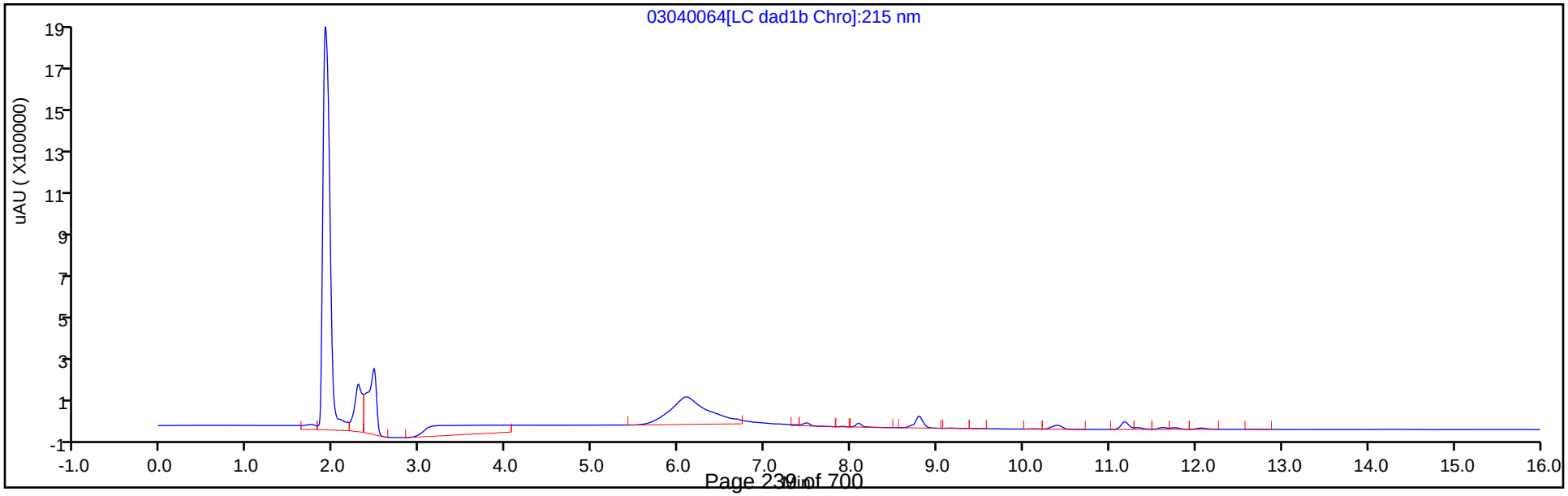
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040064.d				
Injection Date:	05-Mar-2020 11:55:16	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	280-134063-B-2-A	Lab Sample ID:	280-134063-2	Worklist Smp#:	64
Client ID:	OS001-DP502-25				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	64
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040064.D				
Lims ID:	280-134063-B-2-A				
Client ID:	OS001-DP502-25				
Sample Type:	Client				
Inject. Date:	05-Mar-2020 11:55:16	ALS Bottle#:	64	Worklist Smp#:	64
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-134063-B-2-A				
Misc. Info.:	280-0089779-064				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Mar-2020 10:25:55	Calib Date:	04-Mar-2020 23:40:46		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0308				

First Level Reviewer: beckerc Date: 06-Mar-2020 09:43:09

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1355	67.77

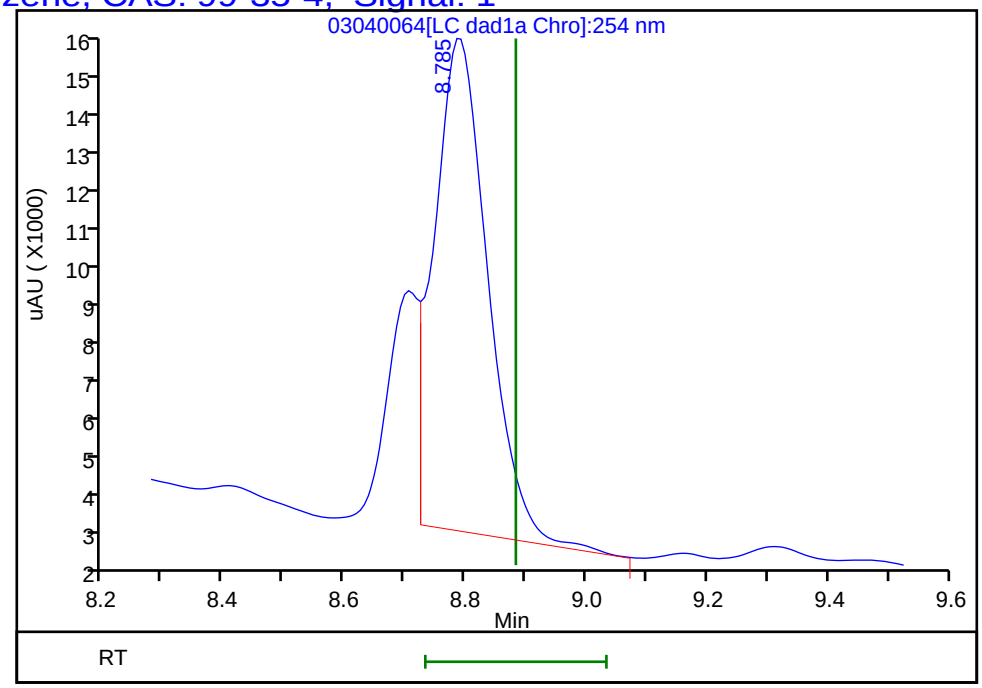
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040064.d				
Injection Date:	05-Mar-2020 11:55:16	Instrument ID:	CHHPLC_X3		
Lims ID:	280-134063-B-2-A	Lab Sample ID:	280-134063-2		
Client ID:	OS001-DP502-25				
Operator ID:	CB	ALS Bottle#:	64	Worklist Smp#:	64
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

10 1,3,5-Trinitrobenzene, CAS: 99-35-4, Signal: 1

RT: 8.79
Response: 69461
Amount: 0.285309



Reviewer: beckerc, 06-Mar-2020 09:43:09
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

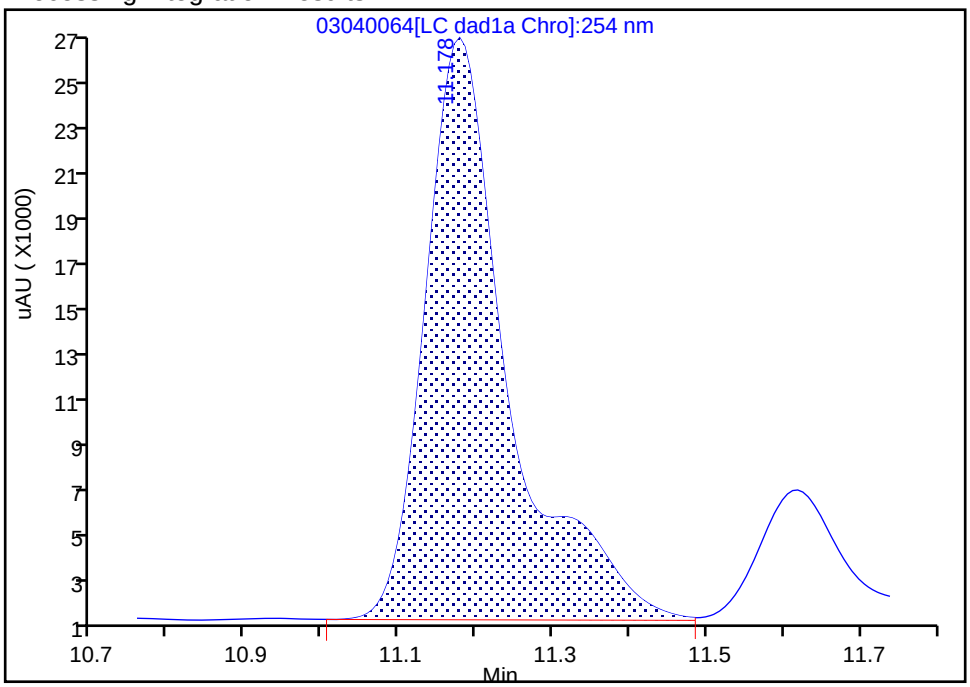
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040064.d				
Injection Date:	05-Mar-2020 11:55:16	Instrument ID:	CHHPLC_X3		
Lims ID:	280-134063-B-2-A	Lab Sample ID:	280-134063-2		
Client ID:	OS001-DP502-25				
Operator ID:	CB	ALS Bottle#:	64	Worklist Smp#:	64
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

16 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

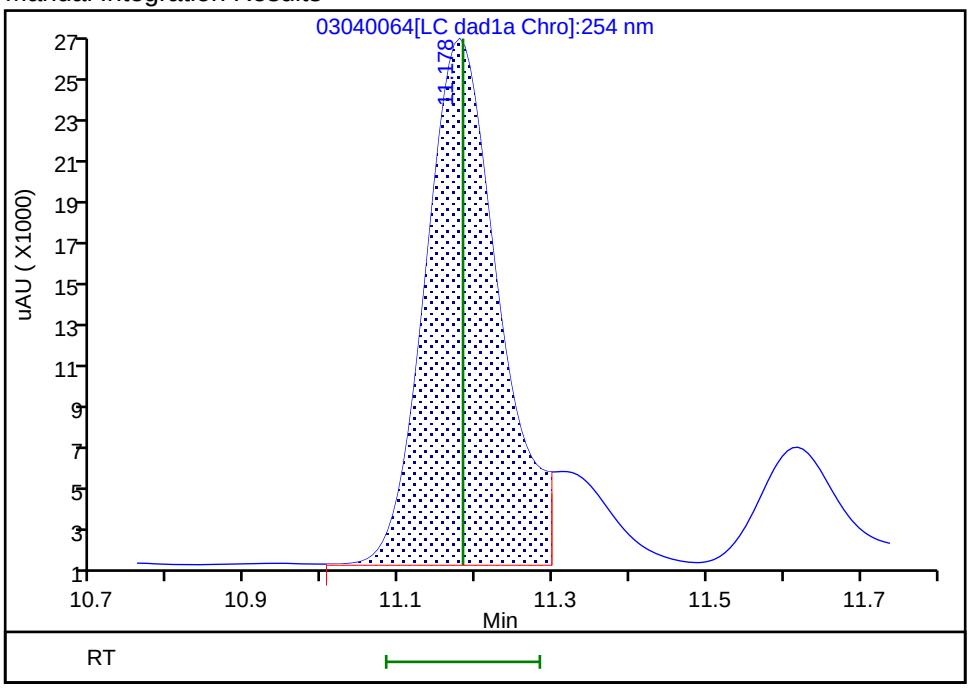
Processing Integration Results

RT: 11.18
Area: 187842
Amount: 0.850306
Amount Units: ug/mL



Manual Integration Results

RT: 11.18
Area: 165161
Amount: 0.747636
Amount Units: ug/mL



Reviewer: beckerc, 06-Mar-2020 09:42:33

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

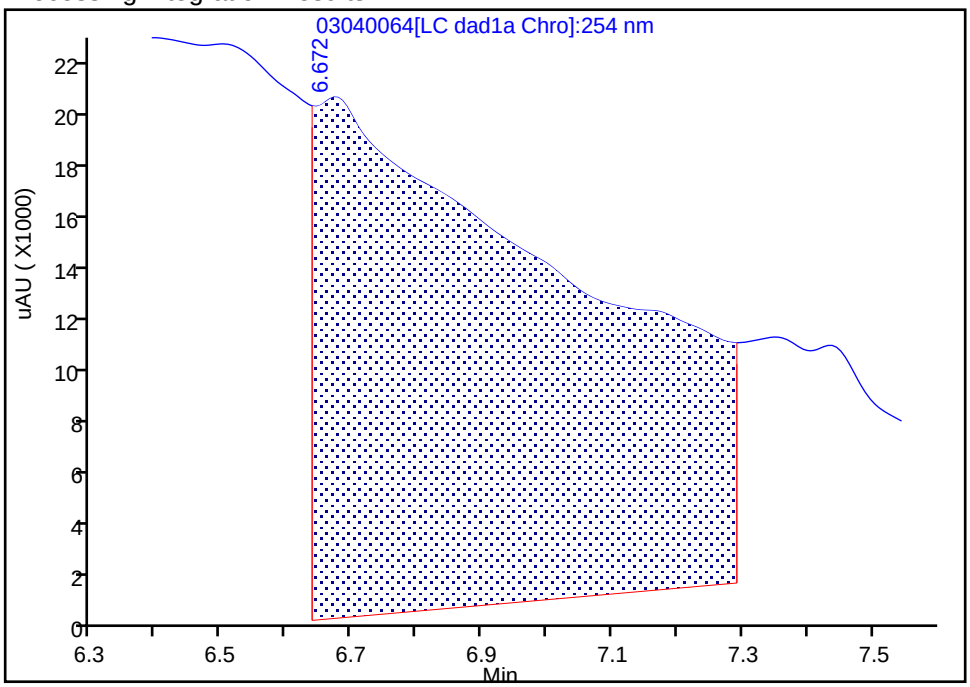
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040064.d				
Injection Date:	05-Mar-2020 11:55:16	Instrument ID:	CHHPLC_X3		
Lims ID:	280-134063-B-2-A	Lab Sample ID:	280-134063-2		
Client ID:	OS001-DP502-25				
Operator ID:	CB	ALS Bottle#:	64	Worklist Smp#:	64
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

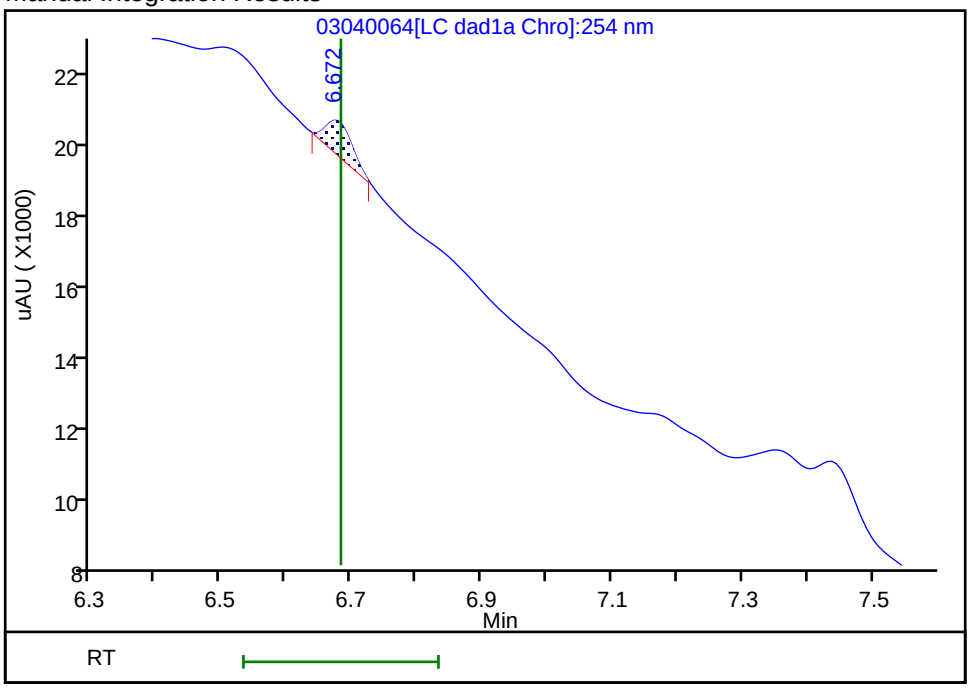
Processing Integration Results

RT: 6.67
Area: 551862
Amount: 6.188351
Amount Units: ug/mL



Manual Integration Results

RT: 6.67
Area: 2785
Amount: 0.031230
Amount Units: ug/mL



Reviewer: beckerc, 06-Mar-2020 09:41:42

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

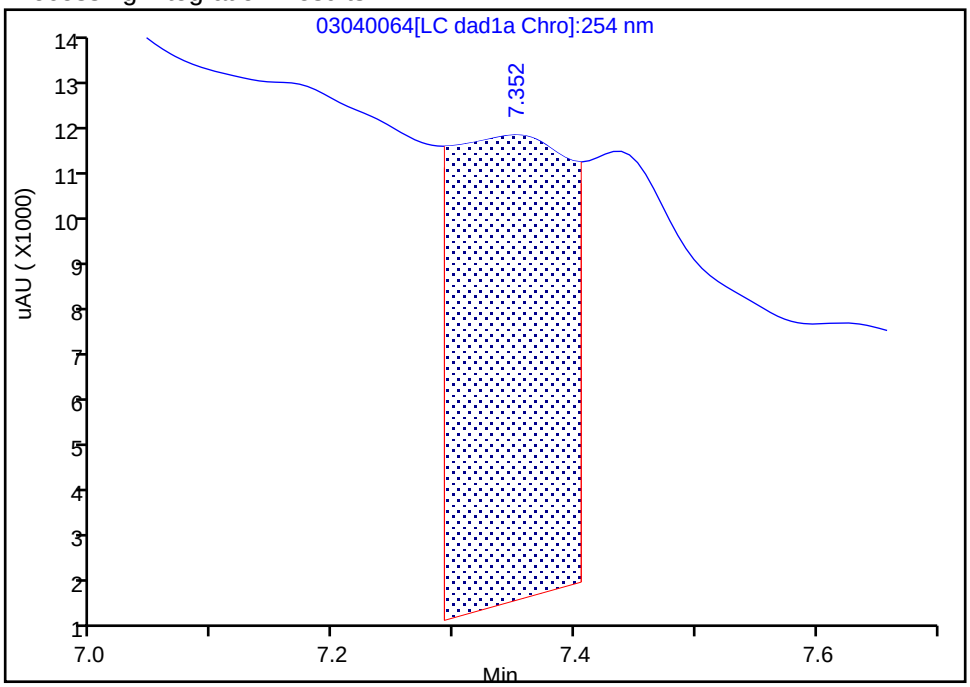
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040064.d				
Injection Date:	05-Mar-2020 11:55:16	Instrument ID:	CHHPLC_X3		
Lims ID:	280-134063-B-2-A	Lab Sample ID:	280-134063-2		
Client ID:	OS001-DP502-25				
Operator ID:	CB	ALS Bottle#:	64	Worklist Smp#:	64
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

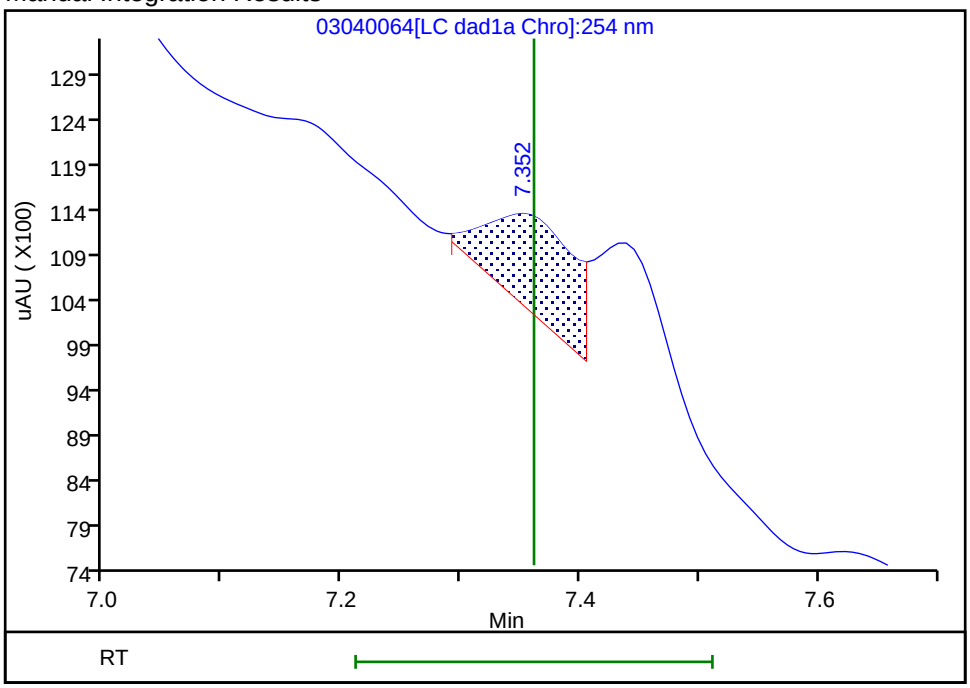
Processing Integration Results

RT: 7.35
Area: 61165
Amount: 0.385791
Amount Units: ug/mL



Manual Integration Results

RT: 7.35
Area: 5330
Amount: 0.033618
Amount Units: ug/mL



Reviewer: beckerc, 06-Mar-2020 09:41:53
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

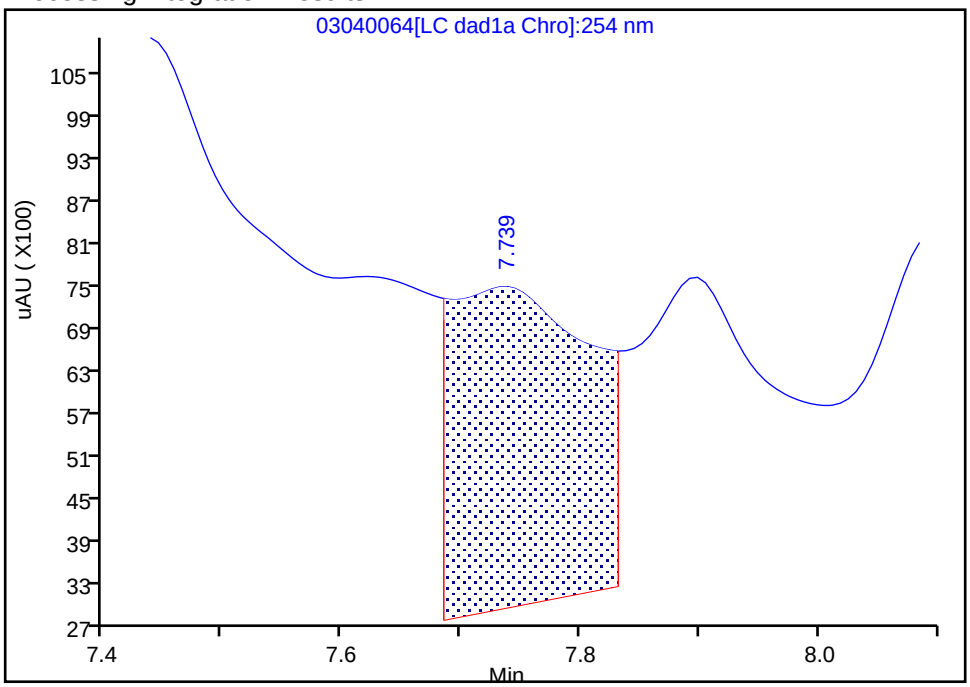
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040064.d				
Injection Date:	05-Mar-2020 11:55:16	Instrument ID:	CHHPLC_X3		
Lims ID:	280-134063-B-2-A	Lab Sample ID:	280-134063-2		
Client ID:	OS001-DP502-25				
Operator ID:	CB	ALS Bottle#:	64	Worklist Smp#:	64
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 RDX, CAS: 121-82-4

Signal: 1

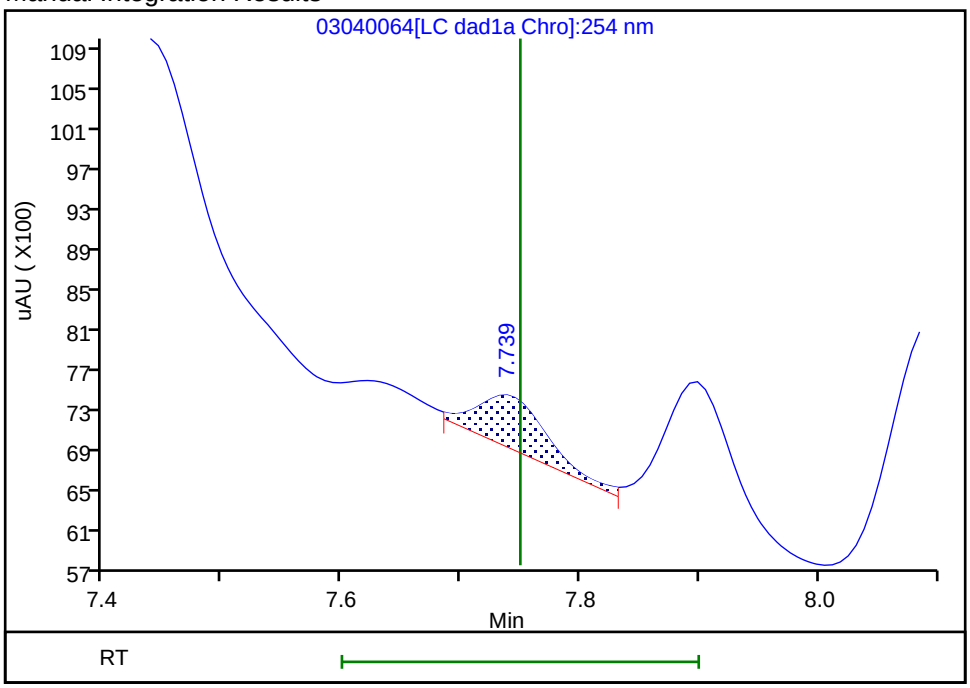
Processing Integration Results

RT: 7.74
Area: 36104
Amount: 0.306307
Amount Units: ug/mL



Manual Integration Results

RT: 7.74
Area: 2140
Amount: 0.018156
Amount Units: ug/mL



Reviewer: beckerc, 06-Mar-2020 09:41:57
Audit Action: Assigned New Baseline Audit Reason: Baseline

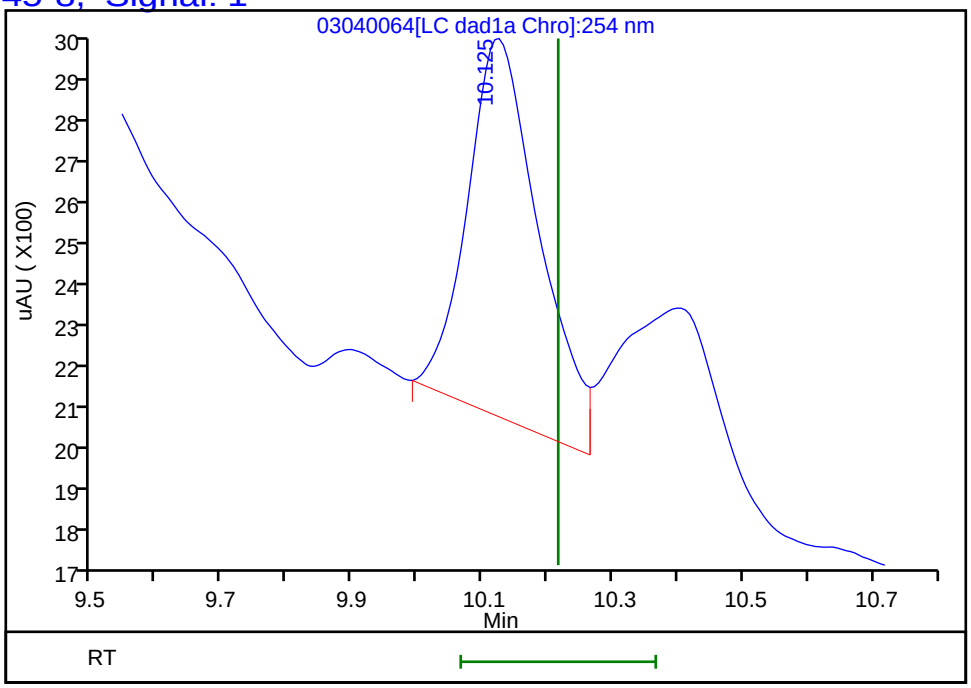
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040064.d				
Injection Date:	05-Mar-2020 11:55:16	Instrument ID:	CHHPLC_X3		
Lims ID:	280-134063-B-2-A	Lab Sample ID:	280-134063-2		
Client ID:	OS001-DP502-25				
Operator ID:	CB	ALS Bottle#:	64	Worklist Smp#:	64
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

RT: 10.13
Response: 6624
Amount: 0.034167



Reviewer: beckerc, 06-Mar-2020 09:43:09
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-134063-1
SDG No.:
Client Sample ID: OS001-DP502-25 RE
Lab Sample ID: 280-134063-2 RE
Matrix: Water
Lab File ID: 03090014.D
Analysis Method: 8330A
Date Collected: 02/24/2020 15:00
Extraction Method: 3535
Date Extracted: 03/04/2020 07:23
Sample wt/vol: 480.6(mL)
Date Analyzed: 03/09/2020 20:43
Con. Extract Vol.: 5(mL)
Dilution Factor: 1
Injection Volume: 100(uL)
GC Column: Luna-phenylhex ID: 4.6(mm)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 488169
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-08-1	*3-Nitrotoluene*	*0.42*	*U H*	*0.42*	0.42	*0.20*
5755-27-1	*MNX*	*0.42*	*U H*	*2.1*	0.42	*0.16*
121-82-4	*RDX*	*0.42*	*U H*	*0.42*	0.42	*0.16*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	96	*M*	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20200309-89910.b\03090014.D				
Lims ID:	280-134063-B-2-A				
Client ID:	OS001-DP502-25				
Sample Type:	Client				
Inject. Date:	09-Mar-2020 20:43:20	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-134063-B-2-A				
Misc. Info.:	280-0089910-014				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		

Method:	\\chromna\Denver\ChromData\G2_LUNA\20200309-89910.b\G2_8330_Luna.m		
Limit Group:	GCSV - 8330		
Last Update:	12-Mar-2020 15:31:39	Calib Date:	04-Mar-2020 03:21:00
Integrator:	Falcon		
Quant Method:	External Standard	Quant By:	Initial Calibration
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030023.D		

Column 1 :	Luna-Phenyl hexyl (4.60 mm)	Det: LC DAD1A, 254 nm
Process Host:	CTX0315	

First Level Reviewer: beckerc Date: 12-Mar-2020 15:09:18

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
6 HMX	1	6.822	6.898	-0.076	8454	0.0380	M
7 MNX	1		7.707			ND	
8 RDX	1		9.058			ND	
9 Nitrobenzene	1	11.922	12.058	-0.136	8138	0.0114	
$ 10 1,2-Dinitrobenzene	1	12.875	12.964	-0.089	55917	0.1930	M
12 1,3-Dinitrobenzene	1		15.484			ND	
14 o-Nitrotoluene	1	16.388	16.511	-0.123	7189	0.0226	
15 p-Nitrotoluene	1		16.771			ND	
16 4-Amino-2,6-dinitrotoluene	1	16.988	17.071	-0.083	56031	0.1667	
17 m-Nitrotoluene	1		17.791			ND	
18 2-Amino-4,6-dinitrotoluene	1	17.842	17.918	-0.076	96311	0.1953	
19 1,3,5-Trinitrobenzene	1		18.824			ND	
20 2,6-Dinitrotoluene	1		19.778			ND	
21 2,4-Dinitrotoluene	1		20.244			ND	
22 Tetryl	1		23.498			ND	
23 2,4,6-Trinitrotoluene	1	24.588	24.638	-0.050	310474	0.7690	M

QC Flag Legend

Review Flags

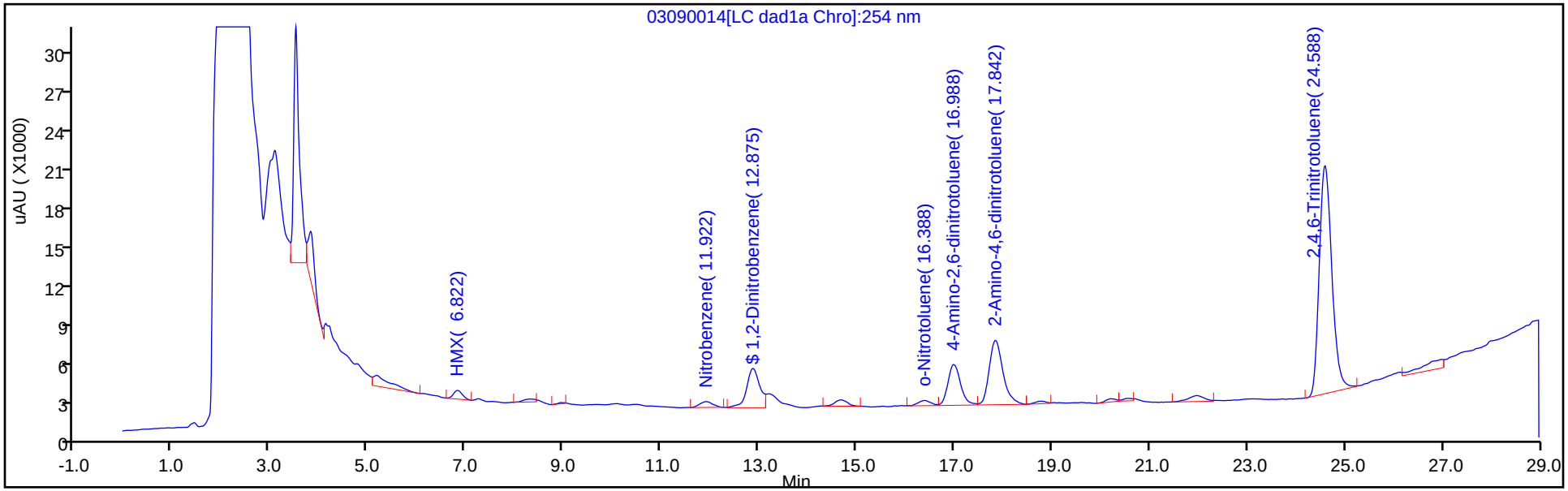
M - Manually Integrated

Report Date: 12-Mar-2020 15:31:52 Chrom Revision: 2.3 19-Feb-2020 16:45:46

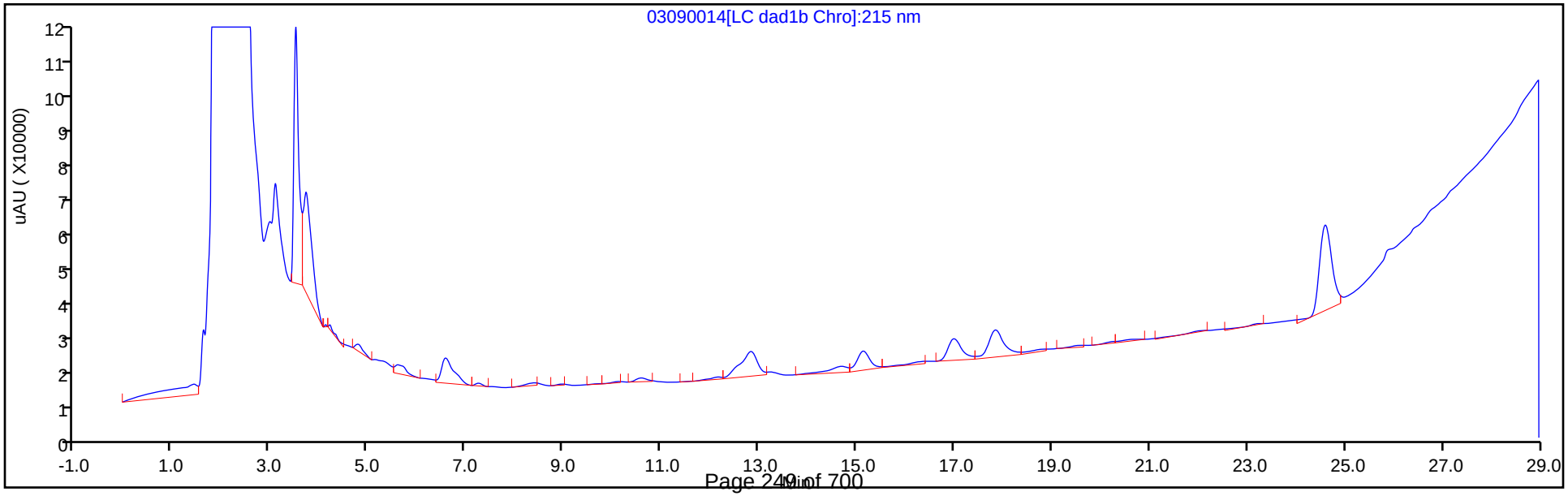
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\g2_luna\20200309-89910.b\03090014.d				
Injection Date:	09-Mar-2020 20:43:20	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	280-134063-B-2-A	Lab Sample ID:	280-134063-2	Worklist Smp#:	14
Client ID:	OS001-DP502-25				
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 Peak: 1



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



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20200309-89910.b\03090014.D				
Lims ID:	280-134063-B-2-A				
Client ID:	OS001-DP502-25				
Sample Type:	Client				
Inject. Date:	09-Mar-2020 20:43:20	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-134063-B-2-A				
Misc. Info.:	280-0089910-014				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		
Method:	\\chromna\Denver\ChromData\G2_LUNA\20200309-89910.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	12-Mar-2020 15:31:39	Calib Date:	04-Mar-2020 03:21:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030023.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0315				

First Level Reviewer: beckerc Date: 12-Mar-2020 15:09:18

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1930	96.48

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

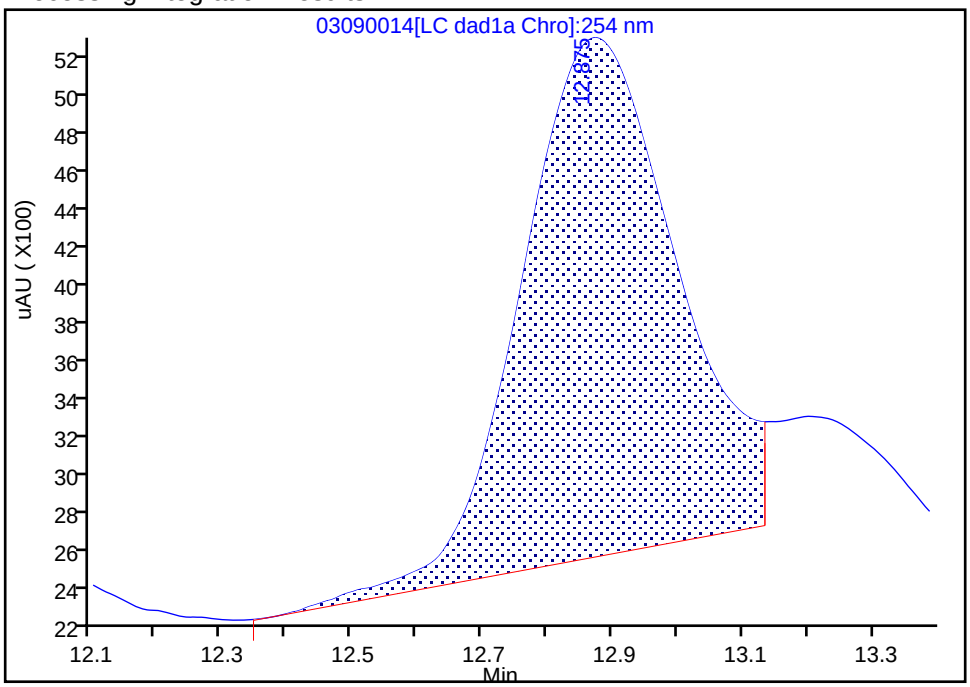
Data File:	\\chromna\denver\chromdata\g2_luna\20200309-89910.b\03090014.d				
Injection Date:	09-Mar-2020 20:43:20	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-134063-B-2-A	Lab Sample ID:	280-134063-2		
Client ID:	OS001-DP502-25				
Operator ID:	CB	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

Signal: 1

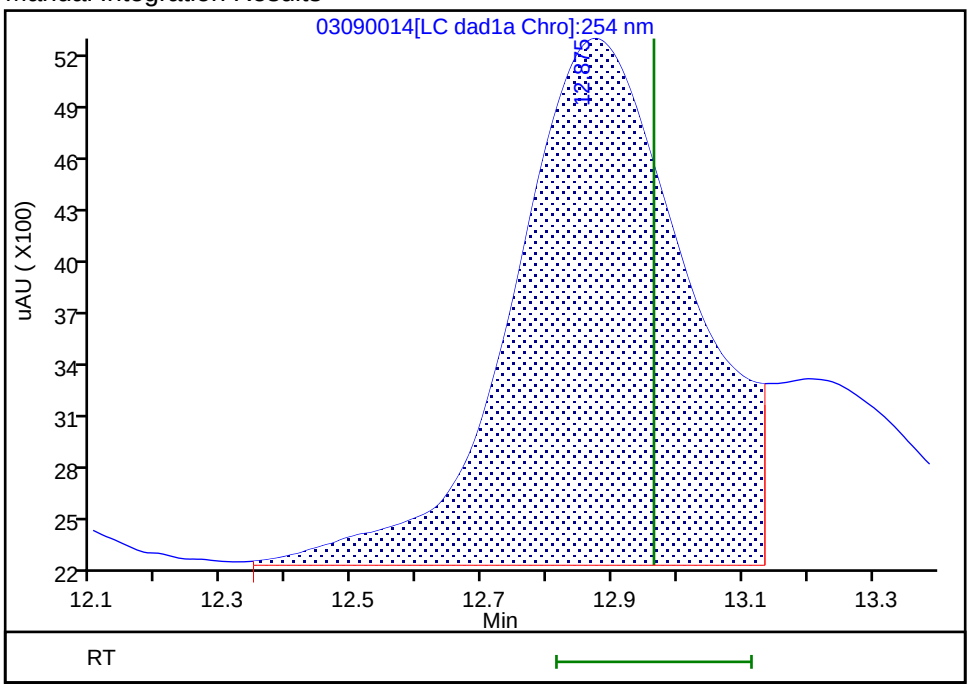
Processing Integration Results

RT: 12.87
Area: 43715
Amount: 0.147955
Amount Units: ug/ml



Manual Integration Results

RT: 12.87
Area: 55917
Amount: 0.192954
Amount Units: ug/ml



Reviewer: beckerc, 12-Mar-2020 15:08:02
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

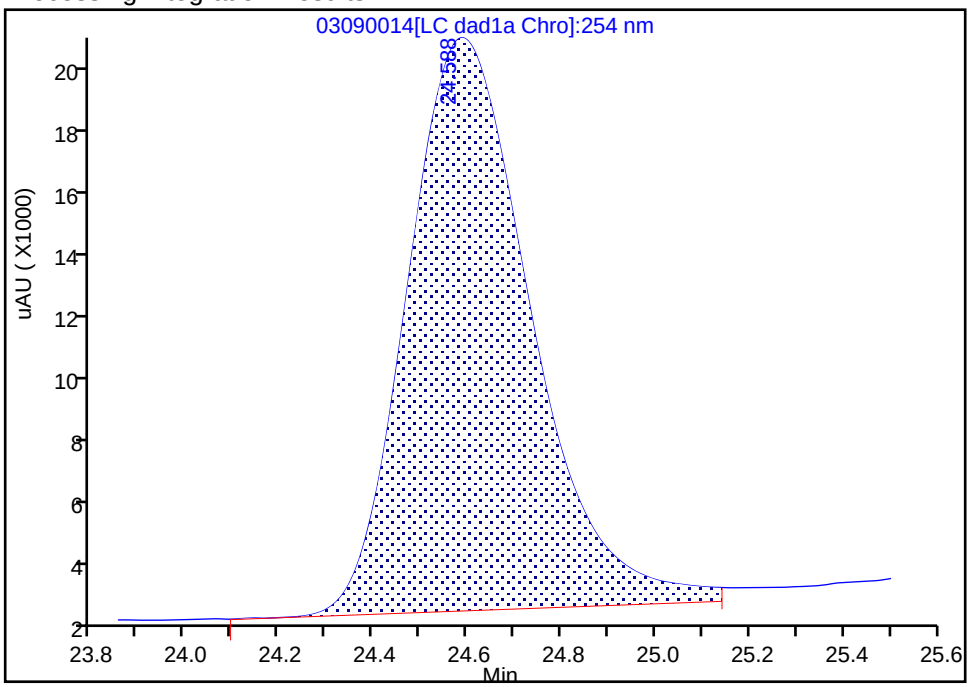
Data File:	\\chromna\denver\chromdata\g2_luna\20200309-89910.b\03090014.d				
Injection Date:	09-Mar-2020 20:43:20	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-134063-B-2-A	Lab Sample ID:	280-134063-2		
Client ID:	OS001-DP502-25				
Operator ID:	CB	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

23 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

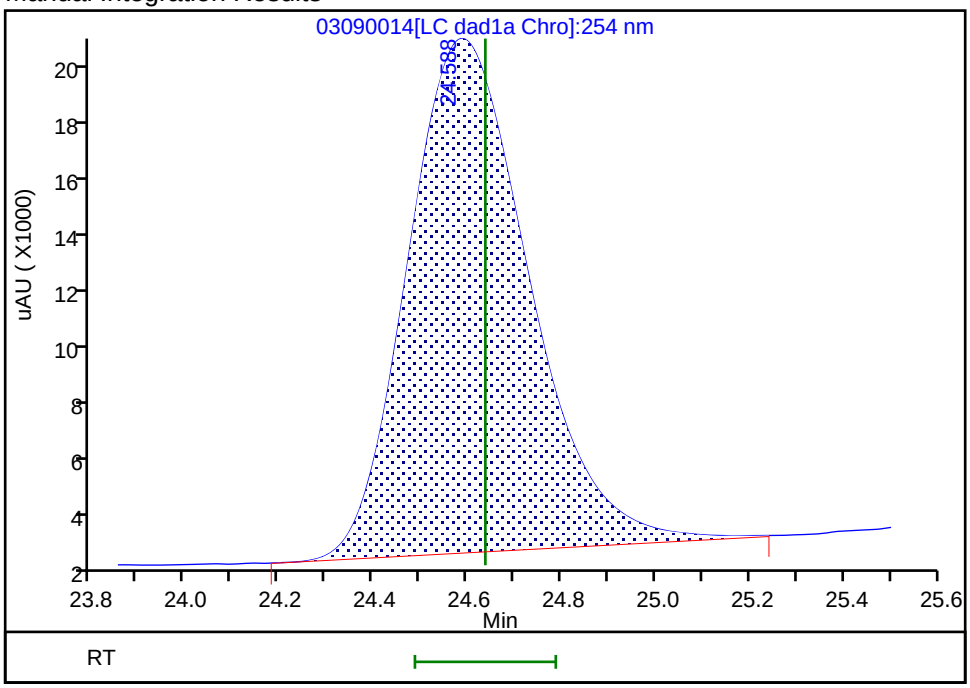
Processing Integration Results

RT: 24.59
Area: 318549
Amount: 0.789297
Amount Units: ug/ml



Manual Integration Results

RT: 24.59
Area: 310474
Amount: 0.769049
Amount Units: ug/ml



Reviewer: beckerc, 12-Mar-2020 15:09:04

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

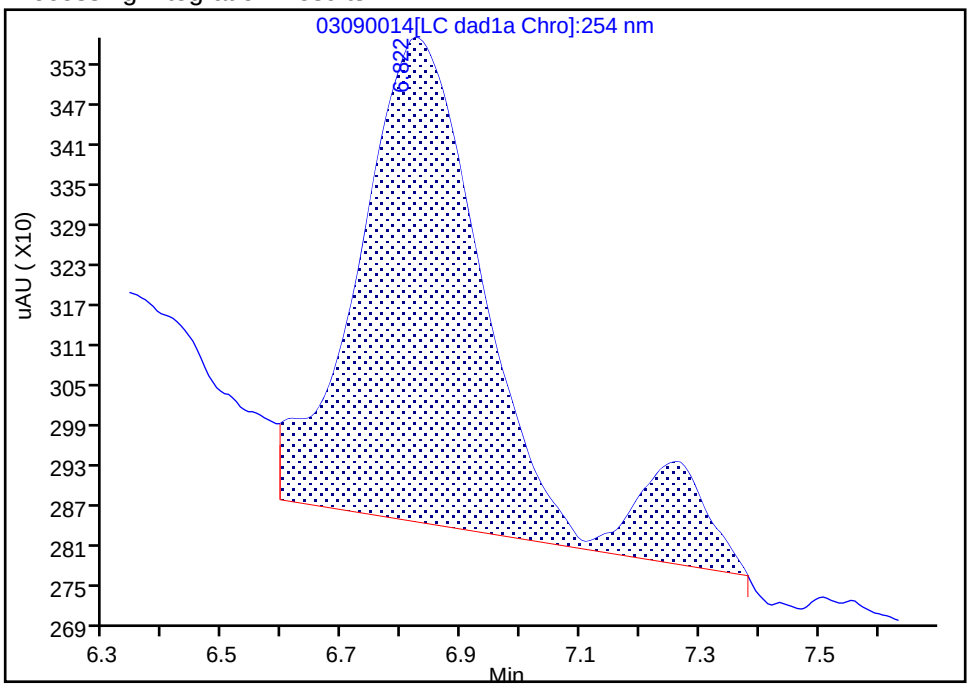
Data File:	\\chromna\denver\chromdata\g2_luna\20200309-89910.b\03090014.d				
Injection Date:	09-Mar-2020 20:43:20	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-134063-B-2-A	Lab Sample ID:	280-134063-2		
Client ID:	OS001-DP502-25				
Operator ID:	CB	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

6 HMX, CAS: 2691-41-0

Signal: 1

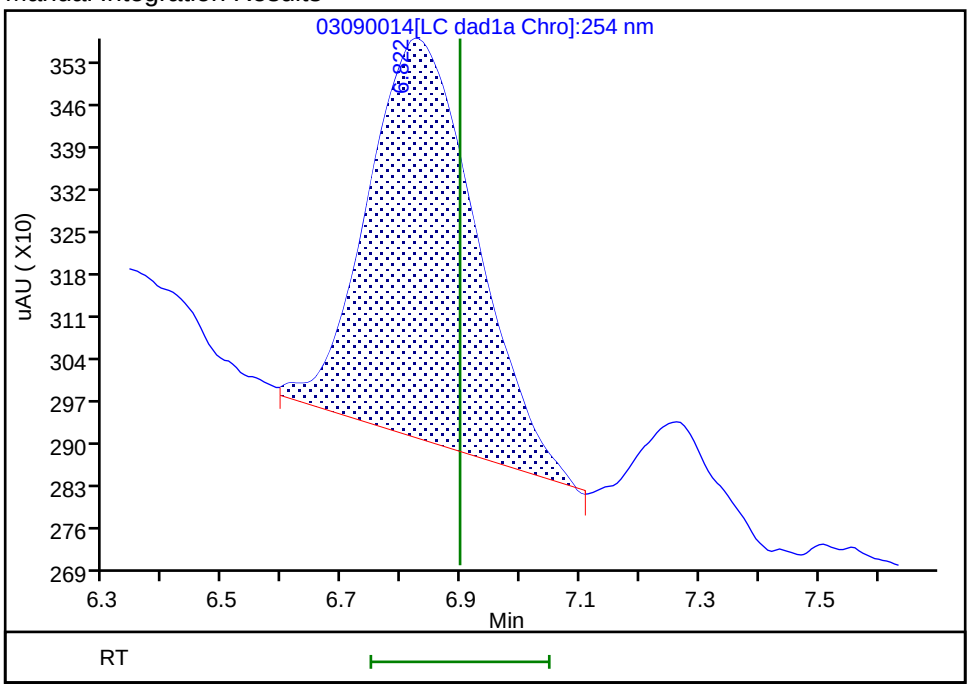
Processing Integration Results

RT: 6.82
Area: 11549
Amount: 0.055841
Amount Units: ug/ml



Manual Integration Results

RT: 6.82
Area: 8454
Amount: 0.037953
Amount Units: ug/ml



Reviewer: beckerc, 12-Mar-2020 15:08:17

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-134063-1
SDG No.:
Client Sample ID: OS001-DP02-35
Lab Sample ID: 280-134063-3
Matrix: Water
Lab File ID: 03020019.D
Analysis Method: 8330A
Date Collected: 02/24/2020 15:40
Extraction Method: 3535
Date Extracted: 02/28/2020 13:30
Sample wt/vol: 473.3(mL)
Date Analyzed: 03/02/2020 19:55
Con. Extract Vol.: 5(mL)
Dilution Factor: 1
Injection Volume: 100(uL)
GC Column: UltraCarb5uODS ID: 4.6(mm)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 487395
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	14		1.1	0.42	0.21
99-65-0	1,3-Dinitrobenzene	0.21	U	0.42	0.21	0.094
118-96-7	2,4,6-Trinitrotoluene	8.2		0.42	0.42	0.17
121-14-2	2,4-Dinitrotoluene	0.21	U	0.42	0.21	0.089
606-20-2	2,6-Dinitrotoluene	0.21	U	0.21	0.21	0.068
35572-78-2	2-Amino-4,6-dinitrotoluene	0.43	Q	0.21	0.13	0.054
88-72-2	2-Nitrotoluene	0.21	U Q	0.42	0.21	0.090
99-08-1	3-Nitrotoluene	0.42	U M Q	0.42	0.42	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	0.13	U Q	0.21	0.13	0.061
99-99-0	4-Nitrotoluene	0.42	U M Q	1.1	0.42	0.21
2691-41-0	HMX	0.21	U M	0.42	0.21	0.093
5755-27-1	MNX	0.42	U M Q	2.1	0.42	0.16
98-95-3	Nitrobenzene	0.21	U	0.42	0.21	0.096
121-82-4	RDX	0.42	U	0.42	0.42	0.17
479-45-8	Tetryl	0.21	U M	0.25	0.21	0.084

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	86		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200302-89712.b\03020019.D				
Lims ID:	280-134063-A-3-A				
Client ID:	OS001-DP02-35				
Sample Type:	Client				
Inject. Date:	02-Mar-2020 19:55:18	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-134063-A-3-A				
Misc. Info.:	280-0089712-019				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200302-89712.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	03-Mar-2020 11:54:24	Calib Date:	06-Jan-2020 20:40:54		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060014.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0310				
First Level Reviewer: beckerc		Date:	03-Mar-2020 11:14:24		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
3 HMX	1		6.680			ND	U
6 MNX	1		7.363			ND	U
7 RDX	1		7.754			ND	
$ 9 1,2-Dinitrobenzene	1	8.717	8.707	0.010	23879	0.1714	
10 1,3,5-Trinitrobenzene	1	8.883	8.880	0.003	324270	1.32	
11 1,3-Dinitrobenzene	1		9.527			ND	
12 Nitrobenzene	1		9.914			ND	
14 Tetryl	1		10.207			ND	U
16 2,4,6-Trinitrotoluene	1	11.177	11.174	0.003	176528	0.7767	
17 4-Amino-2,6-dinitrotoluene	1		11.327			ND	
18 2-Amino-4,6-dinitrotoluene	1	11.623	11.614	0.009	8352	0.0407	
19 2,6-Dinitrotoluene	1		11.780			ND	
20 2,4-Dinitrotoluene	1		11.974			ND	
21 o-Nitrotoluene	1		12.820			ND	
22 p-Nitrotoluene	1		13.260			ND	U
23 m-Nitrotoluene	1		13.854			ND	U

QC Flag Legend

Review Flags

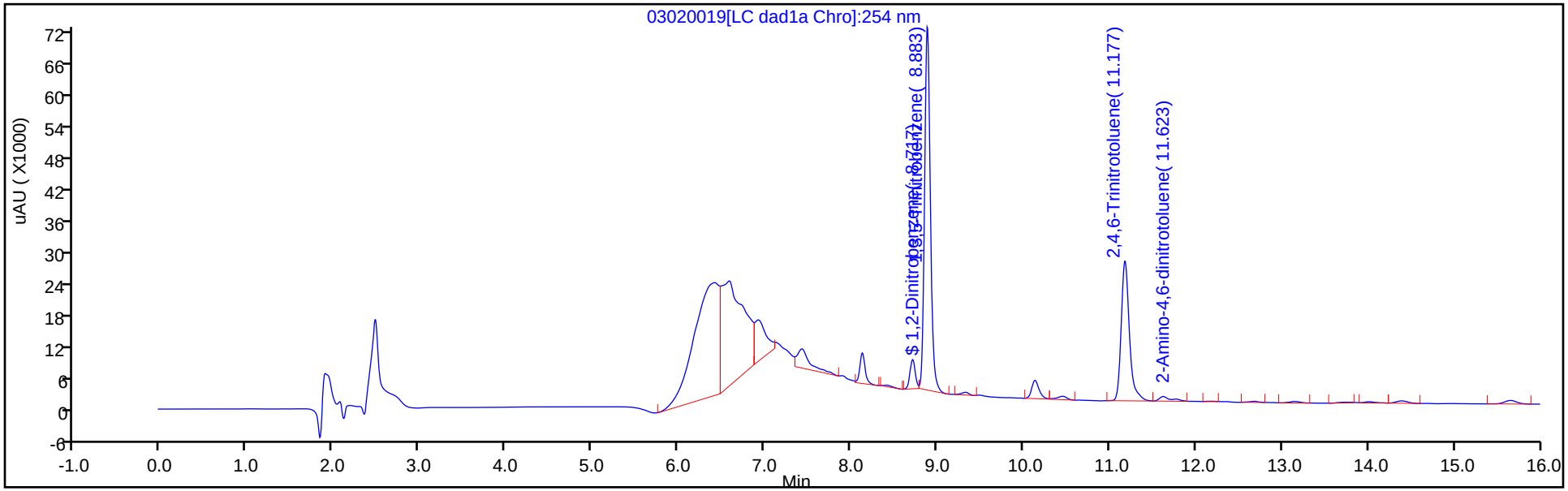
U - Marked Undetected

Report Date: 03-Mar-2020 11:54:56 Chrom Revision: 2.3 19-Feb-2020 16:45:46

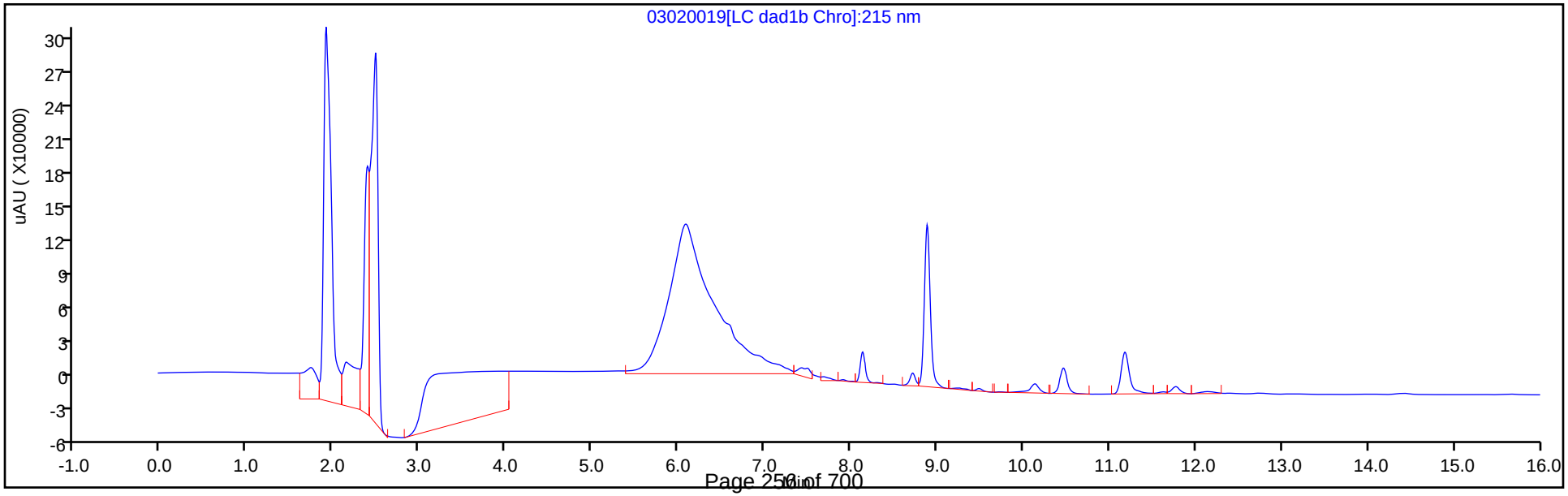
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020019.d				
Injection Date:	02-Mar-2020 19:55:18	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	280-134063-A-3-A	Lab Sample ID:	280-134063-3	Worklist Smp#:	19
Client ID:	OS001-DP02-35				
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



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



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200302-89712.b\03020019.D				
Lims ID:	280-134063-A-3-A				
Client ID:	OS001-DP02-35				
Sample Type:	Client				
Inject. Date:	02-Mar-2020 19:55:18	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-134063-A-3-A				
Misc. Info.:	280-0089712-019				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200302-89712.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	03-Mar-2020 11:54:24	Calib Date:	06-Jan-2020 20:40:54		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060014.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0310				

First Level Reviewer: beckerc Date: 03-Mar-2020 11:14:24

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1714	85.69

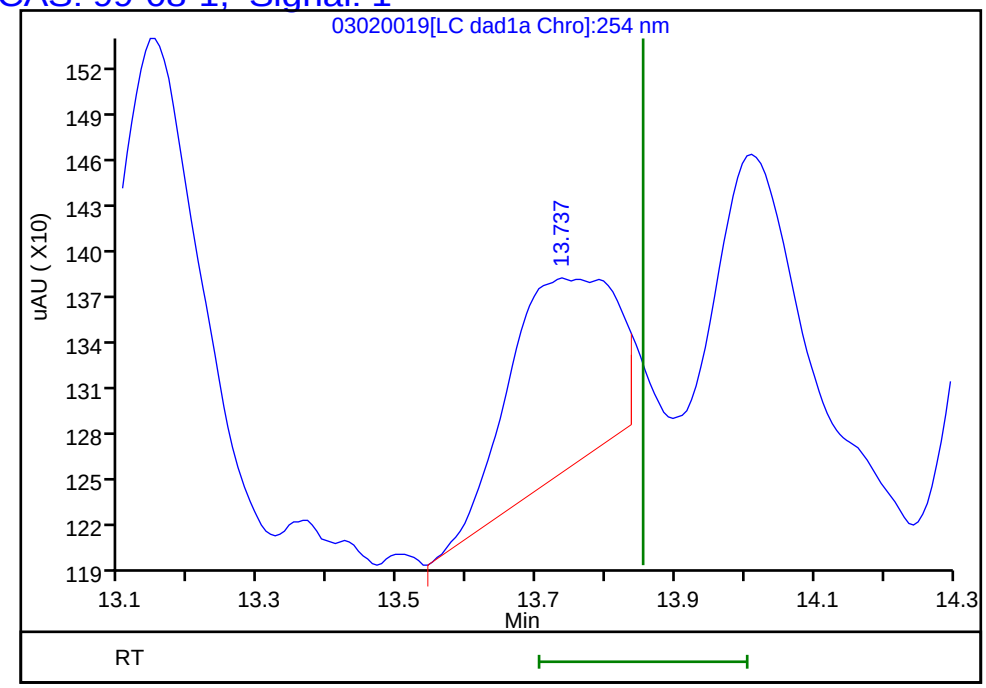
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020019.d				
Injection Date:	02-Mar-2020 19:55:18	Instrument ID:	CHHPLC_X3		
Lims ID:	280-134063-A-3-A	Lab Sample ID:	280-134063-3		
Client ID:	OS001-DP02-35				
Operator ID:	CB	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		

23 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 13.74
Response: 1331
Amount: 0.009172



Reviewer: beckerc, 03-Mar-2020 11:14:24
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

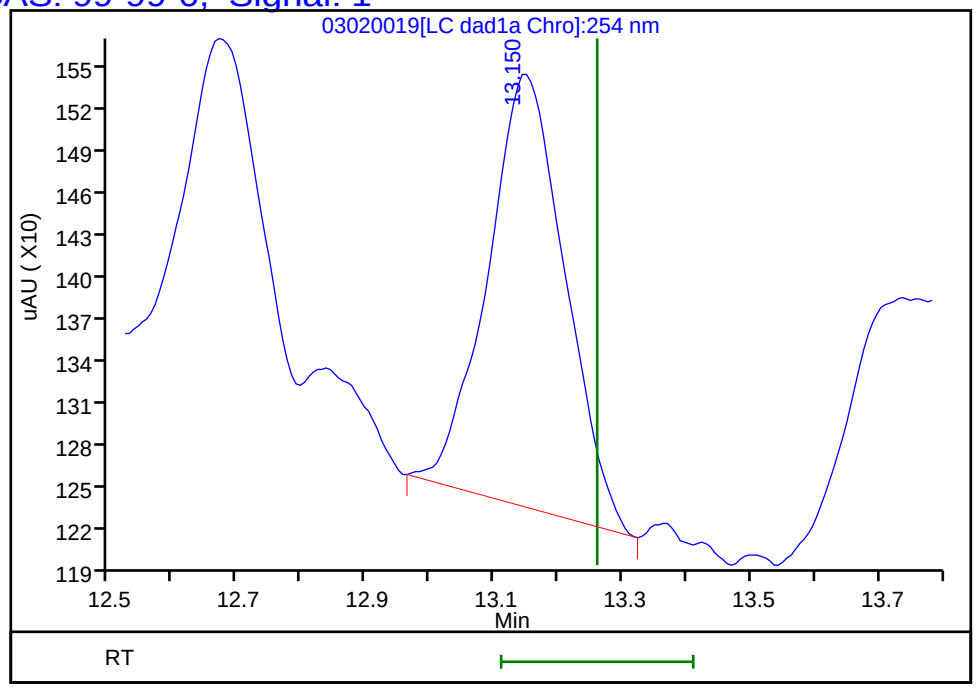
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020019.d				
Injection Date:	02-Mar-2020 19:55:18	Instrument ID:	CHHPLC_X3		
Lims ID:	280-134063-A-3-A	Lab Sample ID:	280-134063-3		
Client ID:	OS001-DP02-35				
Operator ID:	CB	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

RT: 13.15
Response: 2535
Amount: 0.022992



Reviewer: beckerc, 03-Mar-2020 11:14:24
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

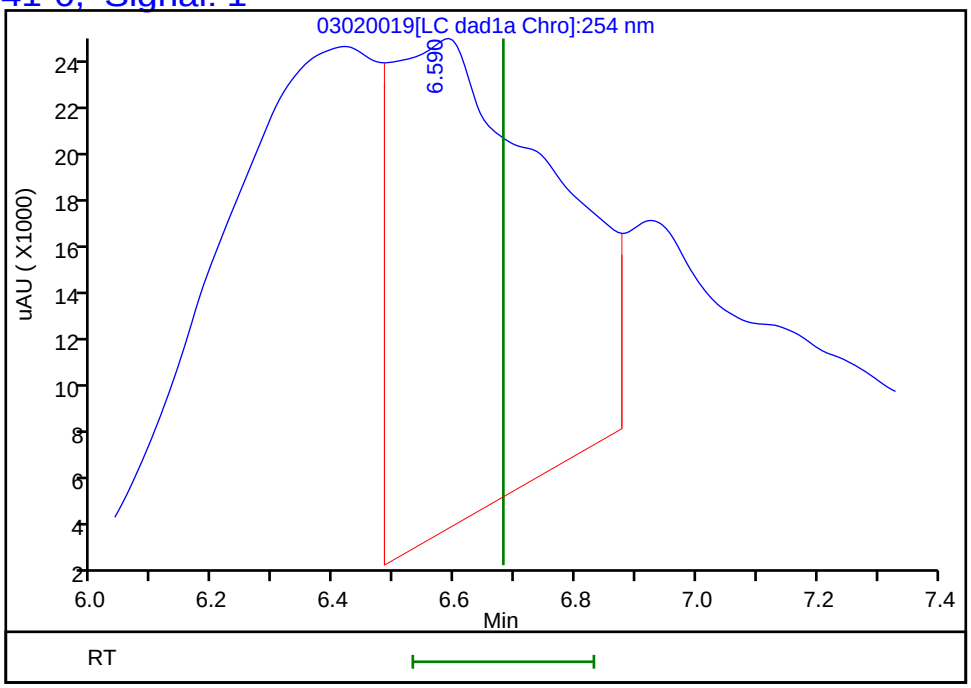
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020019.d				
Injection Date:	02-Mar-2020 19:55:18	Instrument ID:	CHHPLC_X3		
Lims ID:	280-134063-A-3-A	Lab Sample ID:	280-134063-3		
Client ID:	OS001-DP02-35				
Operator ID:	CB	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 HMX, CAS: 2691-41-0, Signal: 1

RT: 6.59
Response: 355090
Amount: 3.866683



Reviewer: beckerc, 03-Mar-2020 11:14:24
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

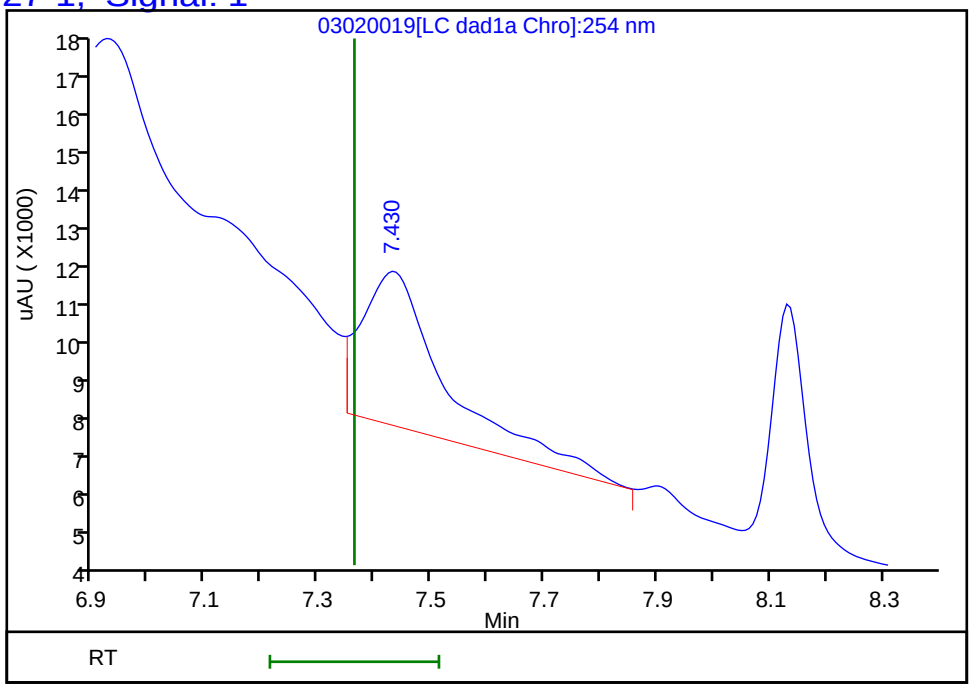
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020019.d				
Injection Date:	02-Mar-2020 19:55:18	Instrument ID:	CHHPLC_X3		
Lims ID:	280-134063-A-3-A	Lab Sample ID:	280-134063-3		
Client ID:	OS001-DP02-35				
Operator ID:	CB	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 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.43
Response: 37272
Amount: 0.265600



Reviewer: beckerc, 03-Mar-2020 11:14:24
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

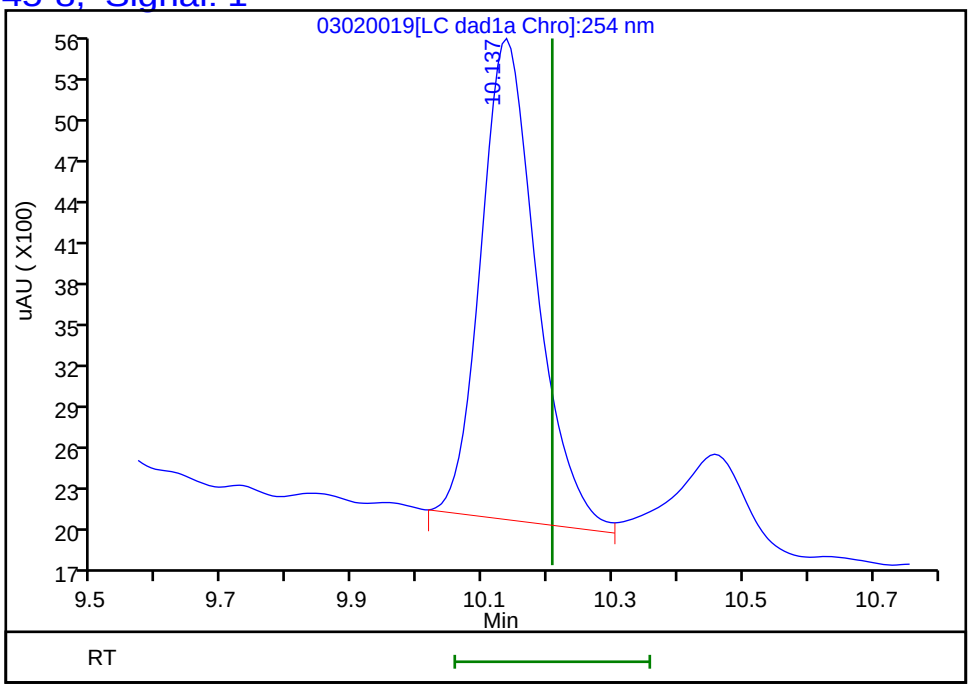
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020019.d				
Injection Date:	02-Mar-2020 19:55:18	Instrument ID:	CHHPLC_X3		
Lims ID:	280-134063-A-3-A	Lab Sample ID:	280-134063-3		
Client ID:	OS001-DP02-35				
Operator ID:	CB	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

RT: 10.14
Response: 20811
Amount: 0.128497



Reviewer: beckerc, 03-Mar-2020 11:14:24
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Client Sample ID: OS001-DP02-35 Lab Sample ID: 280-134063-3

Matrix: Water Lab File ID: 03030033.D

Analysis Method: 8330A Date Collected: 02/24/2020 15:40

Extraction Method: 3535 Date Extracted: 02/28/2020 13:30

Sample wt/vol: 473.3(mL) Date Analyzed: 03/04/2020 09:11

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

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

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

Analysis Batch No.: 487545 Units: ug/L

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

FORM I 8330A

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030033.D				
Lims ID:	280-134063-A-3-A				
Client ID:	OS001-DP02-35				
Sample Type:	Client				
Inject. Date:	04-Mar-2020 09:11:01	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-134063-A-3-A				
Misc. Info.:	280-0089749-033				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		

Method:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\G2_8330_Luna.m		
Limit Group:	GCSV - 8330		
Last Update:	05-Mar-2020 11:40:10	Calib Date:	04-Mar-2020 03:21:00
Integrator:	Falcon		
Quant Method:	External Standard	Quant By:	Initial Calibration
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030023.D		

Column 1 :	Luna-Phenyl hexyl (4.60 mm)	Det: LC DAD1A, 254 nm
Process Host:	CTX0319	

First Level Reviewer: beckerc Date: 05-Mar-2020 08:53:26

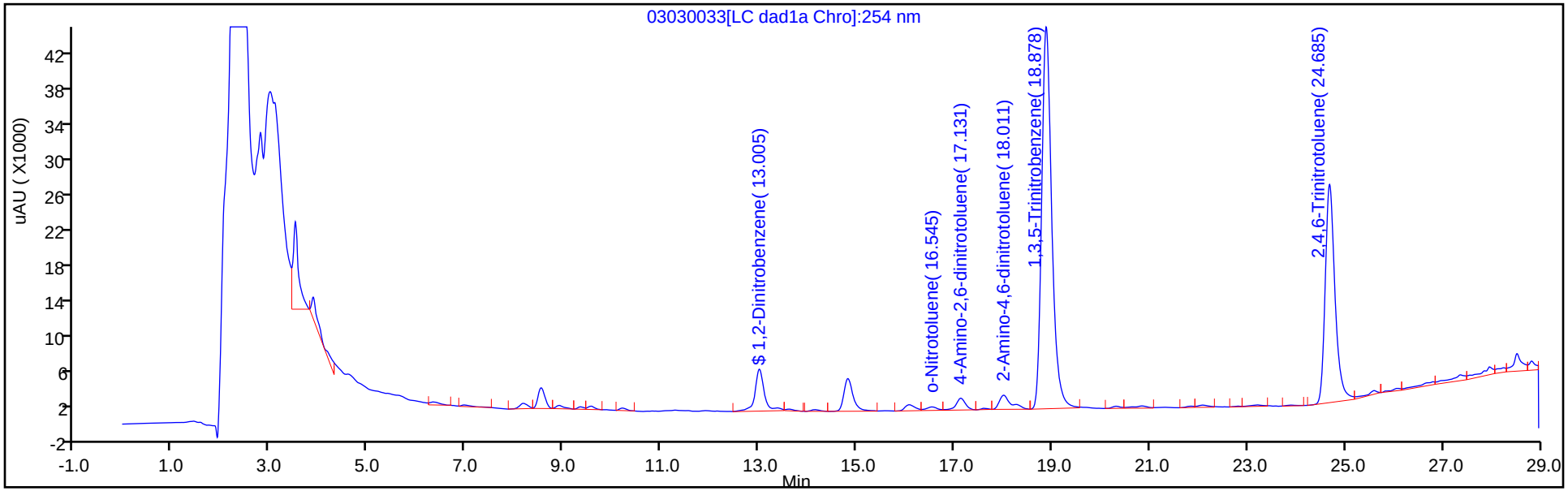
Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
6 HMX	1		6.947			ND	
7 MNX	1		7.707			ND	
8 RDX	1		9.120			ND	
9 Nitrobenzene	1		12.113			ND	
$ 10 1,2-Dinitrobenzene	1	13.005	13.033	-0.028	61759	0.2145	
12 1,3-Dinitrobenzene	1		15.553			ND	
14 o-Nitrotoluene	1	16.545	16.580	-0.035	6041	0.0175	
15 p-Nitrotoluene	1		16.853			ND	
16 4-Amino-2,6-dinitrotoluene	1	17.131	17.160	-0.029	17701	0.0463	
17 m-Nitrotoluene	1		17.787			ND	
18 2-Amino-4,6-dinitrotoluene	1	18.011	18.013	-0.002	26386	0.0482	
19 1,3,5-Trinitrobenzene	1	18.878	18.907	-0.029	607579	1.31	
20 2,6-Dinitrotoluene	1		19.853			ND	
21 2,4-Dinitrotoluene	1		20.320			ND	
22 Tetryl	1		23.580			ND	
23 2,4,6-Trinitrotoluene	1	24.685	24.713	-0.028	337399	0.8366	

Report Date: 05-Mar-2020 11:48:28 Chrom Revision: 2.3 19-Feb-2020 16:45:46

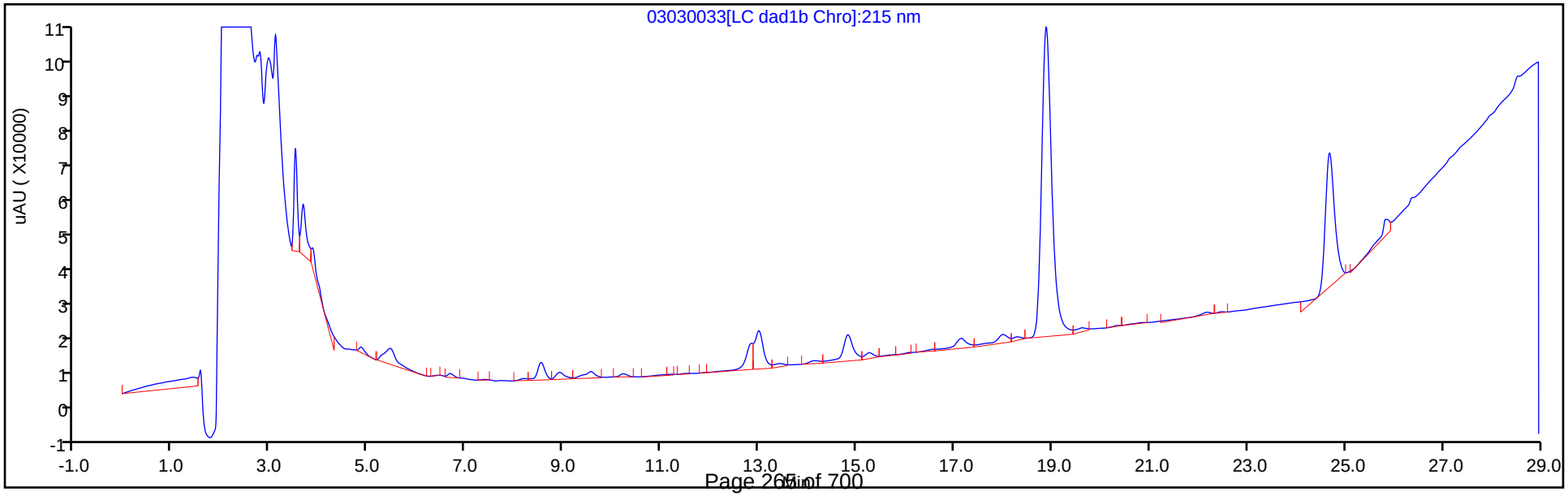
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\g2_luna\20200303-89749.b\03030033.d				
Injection Date:	04-Mar-2020 09:11:01	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	280-134063-A-3-A	Lab Sample ID:	280-134063-3	Worklist Smp#:	33
Client ID:	OS001-DP02-35				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	33
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



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



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030033.D				
Lims ID:	280-134063-A-3-A				
Client ID:	OS001-DP02-35				
Sample Type:	Client				
Inject. Date:	04-Mar-2020 09:11:01	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-134063-A-3-A				
Misc. Info.:	280-0089749-033				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		

Method:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\G2_8330_Luna.m		
Limit Group:	GCSV - 8330		
Last Update:	05-Mar-2020 11:40:10	Calib Date:	04-Mar-2020 03:21:00
Integrator:	Falcon		
Quant Method:	External Standard	Quant By:	Initial Calibration
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030023.D		

Column 1 :	Luna-Phenyl hexyl (4.60 mm)	Det: LC DAD1A, 254 nm
Process Host:	CTX0319	

First Level Reviewer: beckerc Date: 05-Mar-2020 08:53:26

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2145	107.25

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-134063-1
SDG No.:
Client Sample ID: OS001-DP02-35 RE
Lab Sample ID: 280-134063-3 RE
Matrix: Water
Lab File ID: 03040065.D
Analysis Method: 8330A
Date Collected: 02/24/2020 15:40
Extraction Method: 3535
Date Extracted: 03/04/2020 07:23
Sample wt/vol: 484.5(mL)
Date Analyzed: 03/05/2020 12:18
Con. Extract Vol.: 5(mL)
Dilution Factor: 1
Injection Volume: 100(uL)
GC Column: UltraCarb5uODS ID: 4.6(mm)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 487660
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.0	Q H	1.0	0.41	0.21
99-65-0	1,3-Dinitrobenzene	0.21	U Q H	0.41	0.21	0.092
121-14-2	2,4-Dinitrotoluene	0.21	U Q H	0.41	0.21	0.086
606-20-2	2,6-Dinitrotoluene	0.21	U Q H	0.21	0.21	0.067
35572-78-2	2-Amino-4,6-dinitrotoluene	0.12	U Q H	0.21	0.12	0.052
88-72-2	2-Nitrotoluene	0.21	U Q H	0.41	0.21	0.088
99-08-1	3-Nitrotoluene	0.41	U Q H	0.41	0.41	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U Q H	0.21	0.12	0.060
99-99-0	4-Nitrotoluene	0.41	U Q H	1.0	0.41	0.21
2691-41-0	HMX	0.21	U Q H	0.41	0.21	0.090
5755-27-1	MNX	0.41	U H Q	2.1	0.41	0.16
98-95-3	Nitrobenzene	0.21	U Q H	0.41	0.21	0.094
121-82-4	RDX	0.41	U Q H	0.41	0.41	0.16
479-45-8	Tetryl	0.21	U Q H M	0.25	0.21	0.082

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	15	Q	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040065.D				
Lims ID:	280-134063-B-3-A				
Client ID:	OS001-DP02-35				
Sample Type:	Client				
Inject. Date:	05-Mar-2020 12:18:12	ALS Bottle#:	65	Worklist Smp#:	65
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-134063-B-3-A				
Misc. Info.:	280-0089779-065				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Mar-2020 10:25:55	Calib Date:	04-Mar-2020 23:40:46		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0308				
First Level Reviewer: beckerc		Date:	06-Mar-2020 09:43:24		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
3 HMX	1		6.683			ND	
6 MNX	1		7.361			ND	
7 RDX	1		7.750			ND	
$ 9 1,2-Dinitrobenzene	1	8.703	8.710	-0.007	4409	0.0302	
10 1,3,5-Trinitrobenzene	1	8.876	8.883	-0.007	48112	0.1976	
11 1,3-Dinitrobenzene	1		9.529			ND	
12 Nitrobenzene	1		9.916			ND	
14 Tetryl	1		10.216			ND	U
16 2,4,6-Trinitrotoluene	1	11.183	11.183	0.000	31031	0.1405	
17 4-Amino-2,6-dinitrotoluene	1		11.336			ND	
18 2-Amino-4,6-dinitrotoluene	1		11.623			ND	
19 2,6-Dinitrotoluene	1		11.789			ND	
20 2,4-Dinitrotoluene	1		11.983			ND	
21 o-Nitrotoluene	1		12.829			ND	
22 p-Nitrotoluene	1		13.269			ND	
23 m-Nitrotoluene	1		13.863			ND	

QC Flag Legend

Review Flags

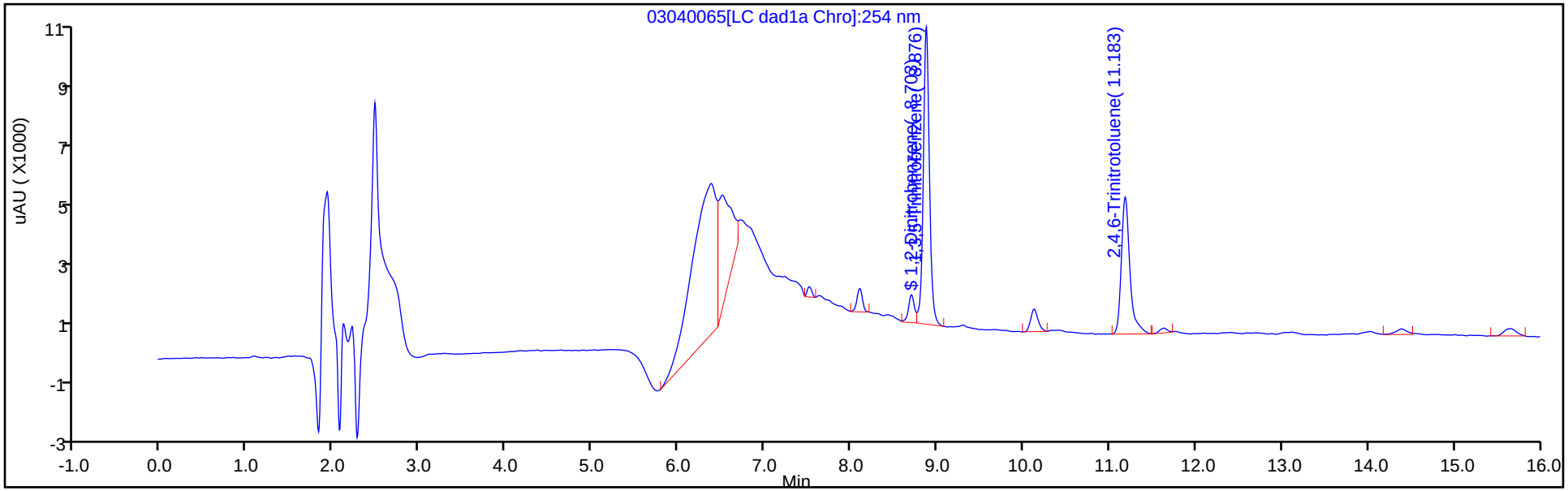
U - Marked Undetected

Report Date: 06-Mar-2020 10:26:04 Chrom Revision: 2.3 19-Feb-2020 16:45:46

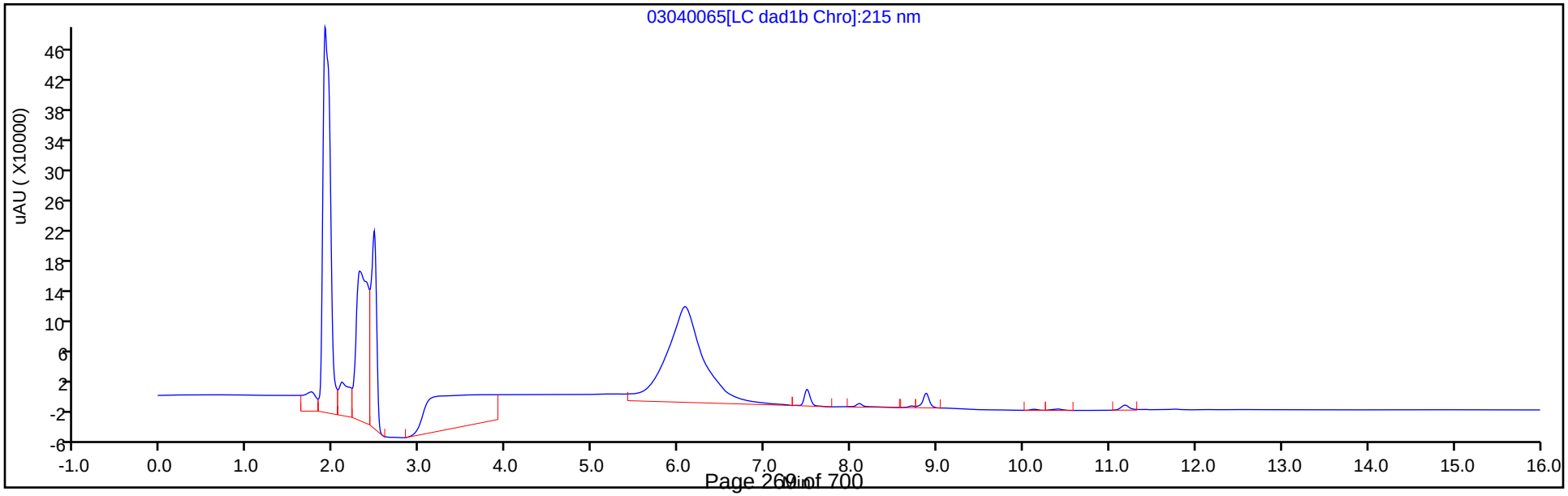
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040065.d				
Injection Date:	05-Mar-2020 12:18:12	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	280-134063-B-3-A	Lab Sample ID:	280-134063-3	Worklist Smp#:	65
Client ID:	OS001-DP02-35				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	65
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040065.D				
Lims ID:	280-134063-B-3-A				
Client ID:	OS001-DP02-35				
Sample Type:	Client				
Inject. Date:	05-Mar-2020 12:18:12	ALS Bottle#:	65	Worklist Smp#:	65
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-134063-B-3-A				
Misc. Info.:	280-0089779-065				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Mar-2020 10:25:55	Calib Date:	04-Mar-2020 23:40:46		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0308				

First Level Reviewer: beckerc Date: 06-Mar-2020 09:43:24

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.0302	15.08

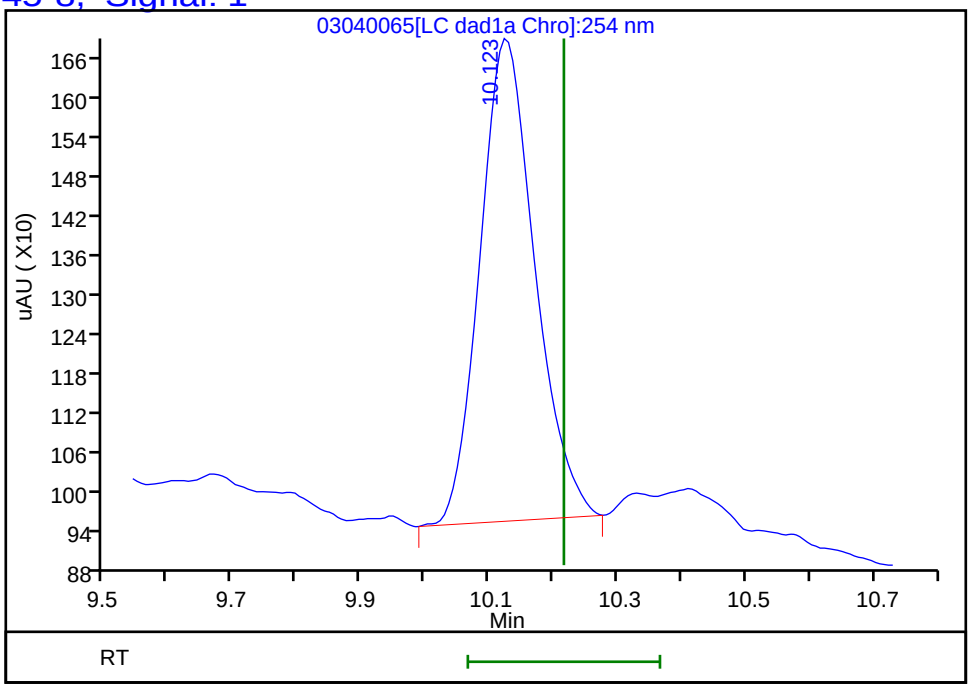
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040065.d				
Injection Date:	05-Mar-2020 12:18:12	Instrument ID:	CHHPLC_X3		
Lims ID:	280-134063-B-3-A	Lab Sample ID:	280-134063-3		
Client ID:	OS001-DP02-35				
Operator ID:	CB	ALS Bottle#:	65	Worklist Smp#:	65
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

RT: 10.12
Response: 4392
Amount: 0.022654



Reviewer: beckerc, 06-Mar-2020 09:43:24
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-134063-1
SDG No.:
Client Sample ID: OS001-DP02-35 RE
Lab Sample ID: 280-134063-3 RE
Matrix: Water
Lab File ID: 03090015.D
Analysis Method: 8330A
Date Collected: 02/24/2020 15:40
Extraction Method: 3535
Date Extracted: 03/04/2020 07:23
Sample wt/vol: 484.5(mL)
Date Analyzed: 03/09/2020 21:18
Con. Extract Vol.: 5(mL)
Dilution Factor: 1
Injection Volume: 100(uL)
GC Column: Luna-phenylhex ID: 4.6(mm)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 488169
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
118-96-7	*2,4,6-Trinitrotoluene*	*0.41*	*U Q H M*	*0.41*	0.41	*0.17*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	9	*Q M*	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20200309-89910.b\03090015.D				
Lims ID:	280-134063-B-3-A				
Client ID:	OS001-DP02-35				
Sample Type:	Client				
Inject. Date:	09-Mar-2020 21:18:16	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-134063-B-3-A				
Misc. Info.:	280-0089910-015				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		
Method:	\\chromna\Denver\ChromData\G2_LUNA\20200309-89910.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	12-Mar-2020 15:31:39	Calib Date:	04-Mar-2020 03:21:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030023.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0315				
First Level Reviewer: beckerc		Date:	12-Mar-2020 15:10:02		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
6 HMX	1		6.898			ND	
7 MNX	1		7.707			ND	
8 RDX	1		9.058			ND	
9 Nitrobenzene	1		12.058			ND	
$ 10 1,2-Dinitrobenzene	1	12.879	12.964	-0.085	8728	0.0189	M
12 1,3-Dinitrobenzene	1		15.484			ND	
14 o-Nitrotoluene	1		16.511			ND	
15 p-Nitrotoluene	1		16.771			ND	
16 4-Amino-2,6-dinitrotoluene	1	17.012	17.071	-0.059	4504	0.004850	
17 m-Nitrotoluene	1		17.791			ND	
18 2-Amino-4,6-dinitrotoluene	1		17.918			ND	
19 1,3,5-Trinitrobenzene	1	18.772	18.824	-0.052	89445	0.1859	
20 2,6-Dinitrotoluene	1		19.778			ND	
21 2,4-Dinitrotoluene	1		20.244			ND	
22 Tetryl	1		23.498			ND	
23 2,4,6-Trinitrotoluene	1		24.638			ND	U

QC Flag Legend

Review Flags

M - Manually Integrated

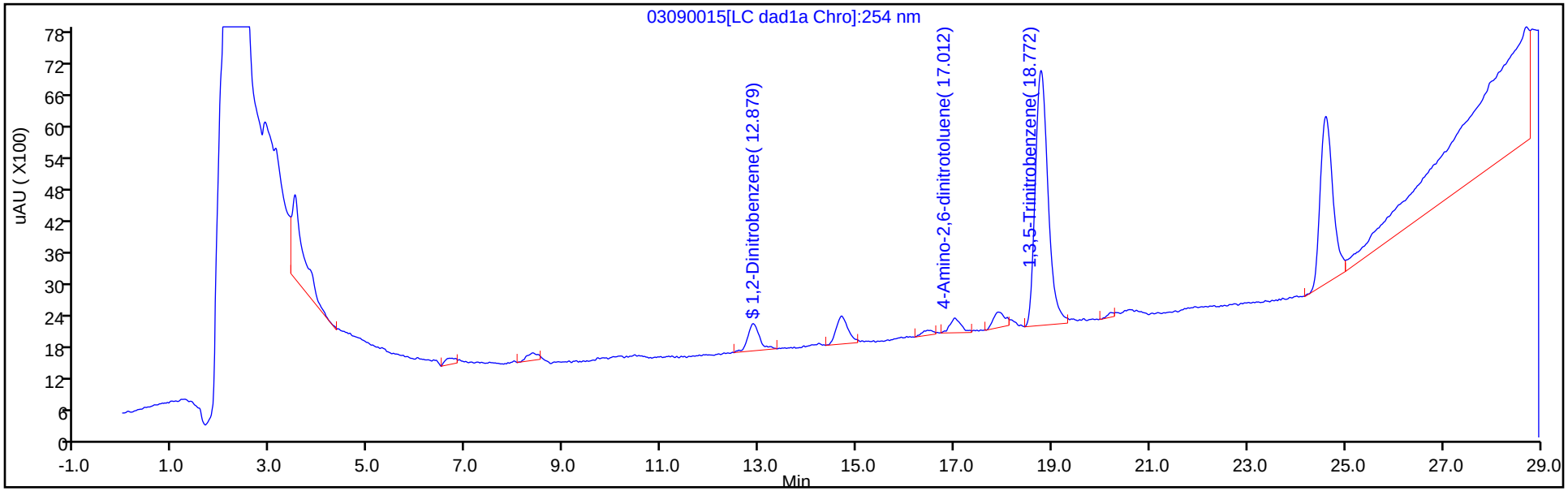
U - Marked Undetected

Report Date: 12-Mar-2020 15:31:53 Chrom Revision: 2.3 19-Feb-2020 16:45:46

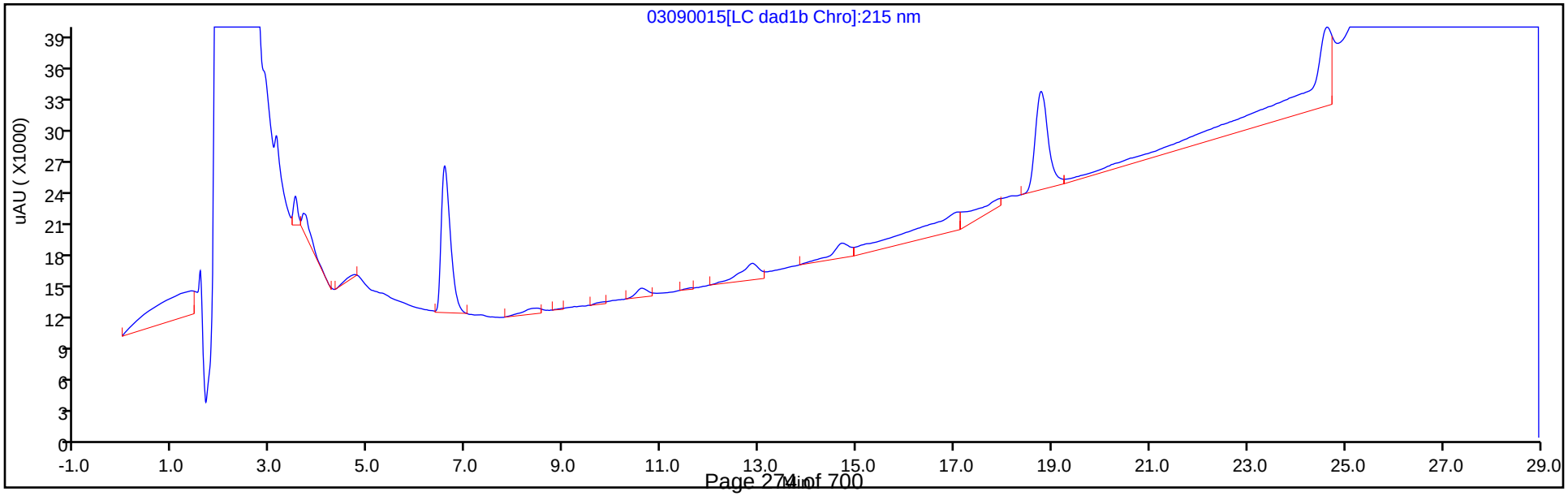
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\g2_luna\20200309-89910.b\03090015.d				
Injection Date:	09-Mar-2020 21:18:16	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	280-134063-B-3-A	Lab Sample ID:	280-134063-3	Worklist Smp#:	15
Client ID:	OS001-DP02-35				
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 Peak: 1



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



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20200309-89910.b\03090015.D				
Lims ID:	280-134063-B-3-A				
Client ID:	OS001-DP02-35				
Sample Type:	Client				
Inject. Date:	09-Mar-2020 21:18:16	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-134063-B-3-A				
Misc. Info.:	280-0089910-015				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		

Method:	\\chromna\Denver\ChromData\G2_LUNA\20200309-89910.b\G2_8330_Luna.m		
Limit Group:	GCSV - 8330		
Last Update:	12-Mar-2020 15:31:39	Calib Date:	04-Mar-2020 03:21:00
Integrator:	Falcon		
Quant Method:	External Standard	Quant By:	Initial Calibration
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030023.D		

Column 1 :	Luna-Phenyl hexyl (4.60 mm)	Det: LC DAD1A, 254 nm	
Process Host:	CTX0315		

First Level Reviewer: beckerc Date: 12-Mar-2020 15:10:02

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.0189	9.46

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

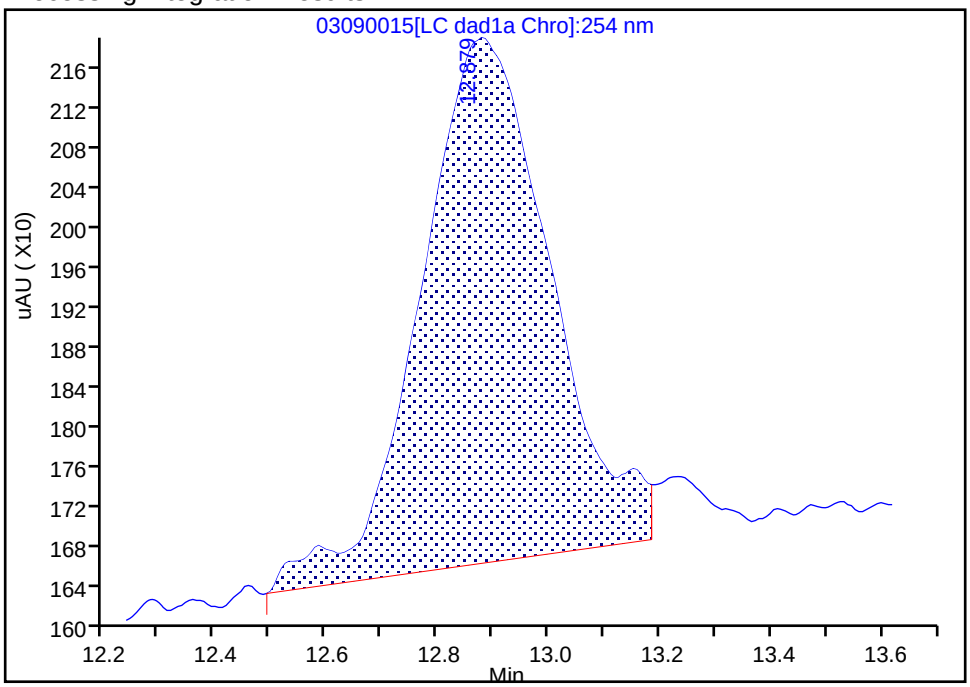
Data File:	\\chromna\denver\chromdata\g2_luna\20200309-89910.b\03090015.d				
Injection Date:	09-Mar-2020 21:18:16	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-134063-B-3-A	Lab Sample ID:	280-134063-3		
Client ID:	OS001-DP02-35				
Operator ID:	CB	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 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		

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

Signal: 1

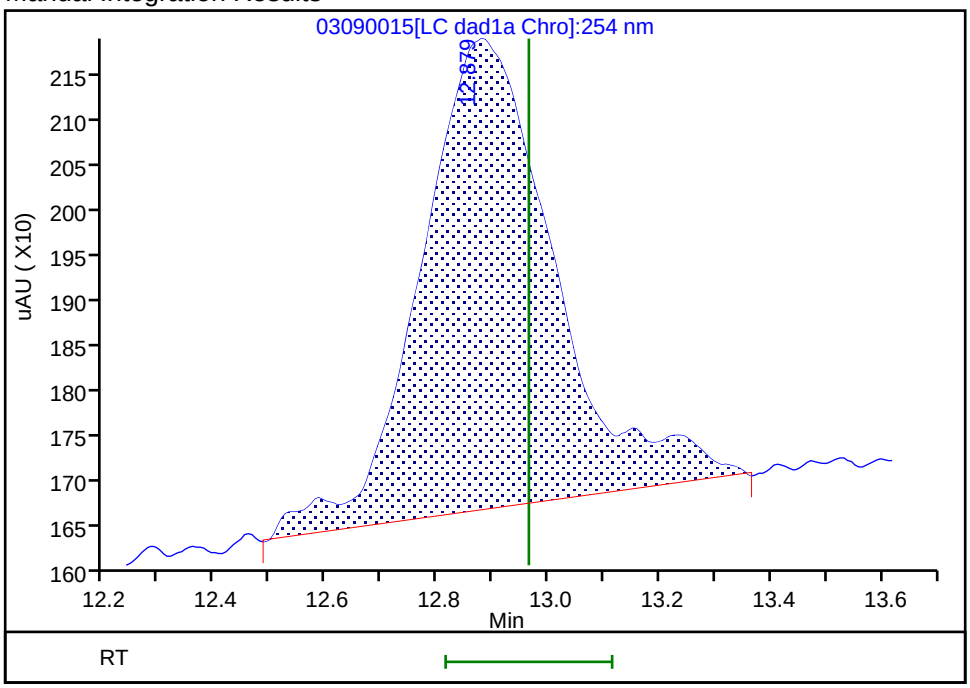
Processing Integration Results

RT: 12.88
Area: 8575
Amount: 0.018364
Amount Units: ug/ml



Manual Integration Results

RT: 12.88
Area: 8728
Amount: 0.018928
Amount Units: ug/ml



Reviewer: beckerc, 12-Mar-2020 15:09:30

Audit Action: Manually Integrated Audit Reason: Baseline

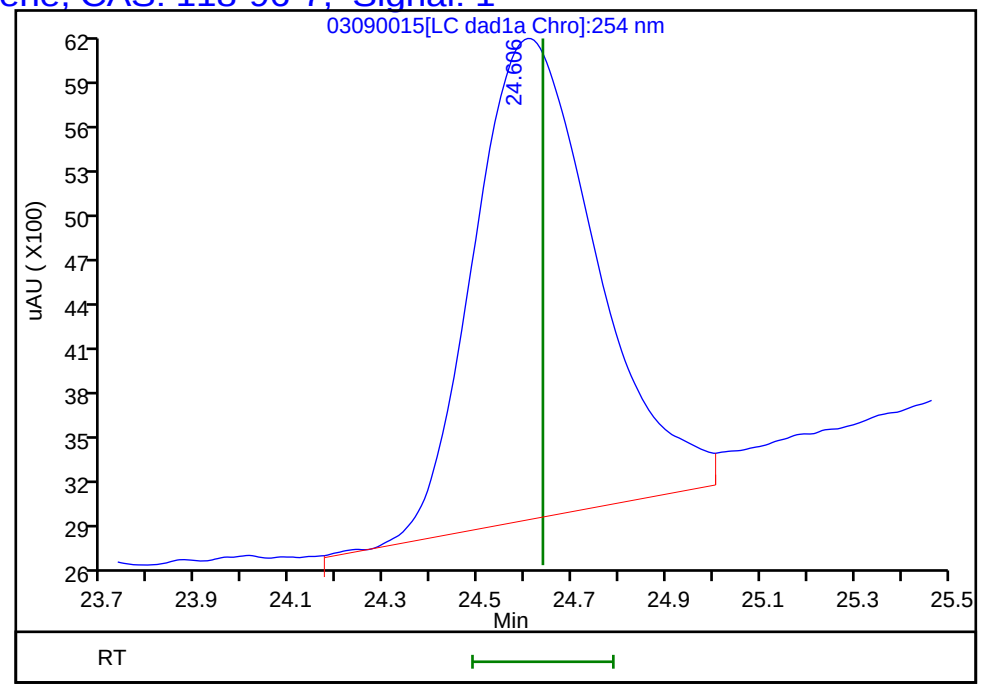
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\g2_luna\20200309-89910.b\03090015.d				
Injection Date:	09-Mar-2020 21:18:16	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-134063-B-3-A	Lab Sample ID:	280-134063-3		
Client ID:	OS001-DP02-35				
Operator ID:	CB	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

23 2,4,6-Trinitrotoluene, CAS: 118-96-7, Signal: 1

RT: 24.61
Response: 58354
Amount: 0.136849



Reviewer: beckerc, 12-Mar-2020 15:10:02
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-134063-1
SDG No.:
Client Sample ID: OS001-DP02-45
Lab Sample ID: 280-134063-4
Matrix: Water
Lab File ID: 03020023.D
Analysis Method: 8330A
Date Collected: 02/24/2020 16:30
Extraction Method: 3535
Date Extracted: 02/28/2020 13:30
Sample wt/vol: 471.4(mL)
Date Analyzed: 03/02/2020 21:27
Con. Extract Vol.: 5(mL)
Dilution Factor: 1
Injection Volume: 100(uL)
GC Column: UltraCarb5uODS ID: 4.6(mm)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 487395
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	17	J1	1.1	0.42	0.21
99-65-0	1,3-Dinitrobenzene	0.21	U	0.42	0.21	0.094
118-96-7	2,4,6-Trinitrotoluene	1.1		0.42	0.42	0.17
121-14-2	2,4-Dinitrotoluene	0.21	U	0.42	0.21	0.089
606-20-2	2,6-Dinitrotoluene	0.21	U	0.21	0.21	0.068
35572-78-2	2-Amino-4,6-dinitrotoluene	0.67	Q	0.21	0.13	0.054
88-72-2	2-Nitrotoluene	0.21	U Q J1	0.42	0.21	0.091
99-08-1	3-Nitrotoluene	0.42	U M Q	0.42	0.42	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	0.13	U Q	0.21	0.13	0.061
99-99-0	4-Nitrotoluene	0.42	U M Q	1.1	0.42	0.21
2691-41-0	HMX	0.21	U	0.42	0.21	0.093
5755-27-1	MNX	0.42	U Q	2.1	0.42	0.16
98-95-3	Nitrobenzene	0.21	U	0.42	0.21	0.097
479-45-8	Tetryl	0.21	U J1	0.25	0.21	0.084

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	85		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200302-89712.b\03020023.D				
Lims ID:	280-134063-A-4-A				
Client ID:	OS001-DP02-45				
Sample Type:	Client				
Inject. Date:	02-Mar-2020 21:27:02	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-134063-A-4-A				
Misc. Info.:	280-0089712-023				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200302-89712.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	03-Mar-2020 11:55:02	Calib Date:	06-Jan-2020 20:40:54		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060014.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0310				
First Level Reviewer: beckerc		Date:	03-Mar-2020 11:17:06		

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	1 2,6-diamino-4-nitrotoluene	1		6.555			ND	
	2 TNX	1		6.590			ND	
	3 HMX	1		6.680			ND	
	4 2,4-diamino-6-nitrotoluene	1		6.742			ND	
	5 DNX	1	6.943	6.910	0.033	17627	0.1134	M
	6 MNX	1		7.363			ND	
	7 RDX	1	7.749	7.754	-0.005	2206	0.0199	M
	8 2,4,6-Trinitrophenol	1		8.067			ND	U
$	9 1,2-Dinitrobenzene	1	8.709	8.707	0.002	23716	0.1702	
	10 1,3,5-Trinitrobenzene	1	8.876	8.880	-0.004	389709	1.59	
	11 1,3-Dinitrobenzene	1		9.527			ND	
	12 Nitrobenzene	1		9.914			ND	
	13 3,5-Dinitroaniline	1		10.188			ND	U
	14 Tetryl	1		10.207			ND	
	15 Nitroglycerin	2		10.720			ND	
	16 2,4,6-Trinitrotoluene	1	11.169	11.174	-0.005	23801	0.1047	
	17 4-Amino-2,6-dinitrotoluene	1		11.327			ND	
	18 2-Amino-4,6-dinitrotoluene	1	11.609	11.614	-0.005	12934	0.0630	
	19 2,6-Dinitrotoluene	1		11.780			ND	
	20 2,4-Dinitrotoluene	1		11.974			ND	
	21 o-Nitrotoluene	1		12.820			ND	
	22 p-Nitrotoluene	1		13.260			ND	U
	23 m-Nitrotoluene	1		13.854			ND	U
	24 PETN	2		14.967			ND	
	25 Ammonium Picrate	1		0.000			ND	

QC Flag Legend

Review Flags

M - Manually Integrated

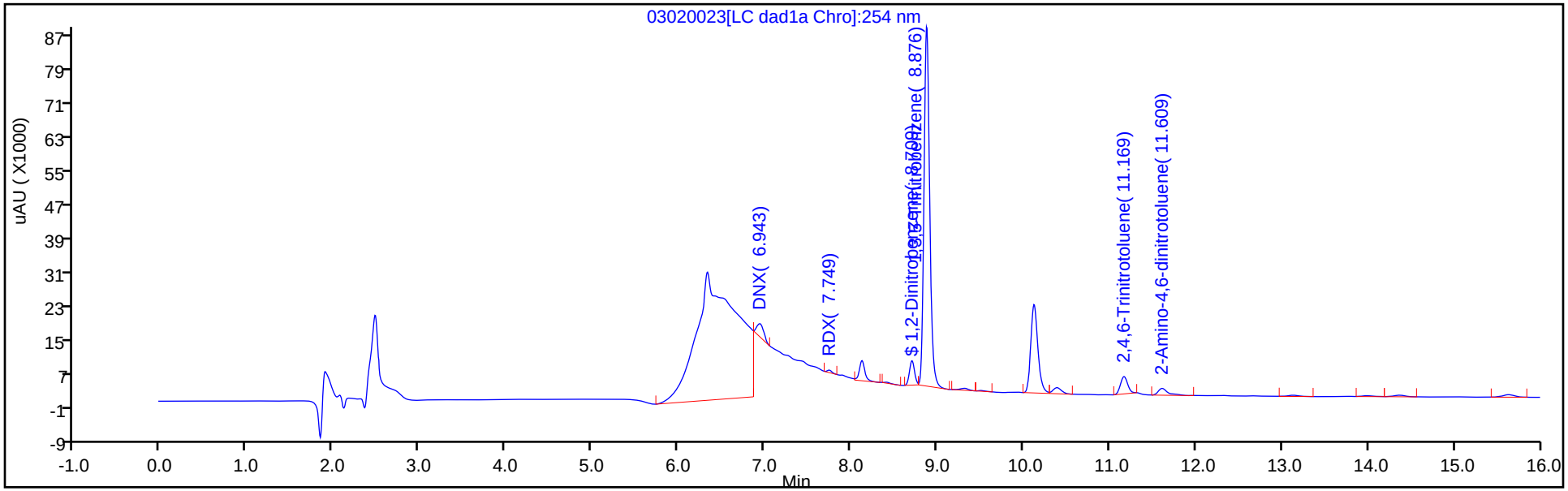
U - Marked Undetected

Report Date: 03-Mar-2020 11:55:04 Chrom Revision: 2.3 19-Feb-2020 16:45:46

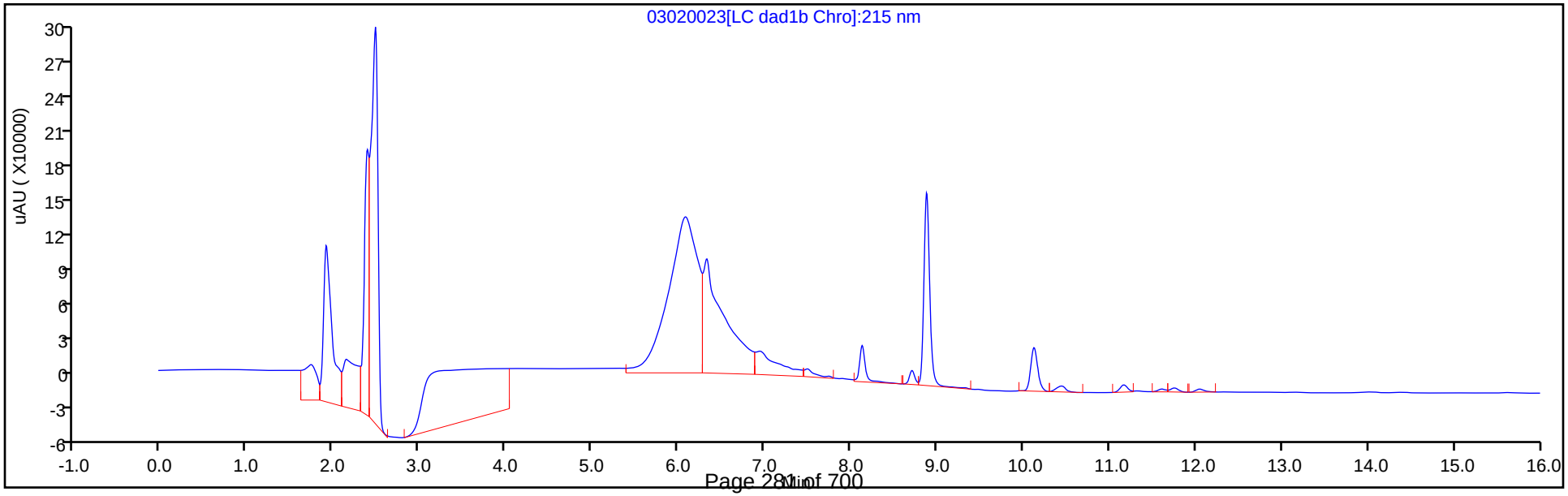
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020023.d				
Injection Date:	02-Mar-2020 21:27:02	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	280-134063-A-4-A	Lab Sample ID:	280-134063-4	Worklist Smp#:	23
Client ID:	OS001-DP02-45				
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



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



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200302-89712.b\03020023.D				
Lims ID:	280-134063-A-4-A				
Client ID:	OS001-DP02-45				
Sample Type:	Client				
Inject. Date:	02-Mar-2020 21:27:02	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-134063-A-4-A				
Misc. Info.:	280-0089712-023				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		

Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200302-89712.b\8330_X3.m		
Limit Group:	GCSV - 8330		
Last Update:	03-Mar-2020 11:55:02	Calib Date:	06-Jan-2020 20:40:54
Integrator:	Falcon		
Quant Method:	External Standard	Quant By:	Initial Calibration
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060014.D		

Column 1 :	UltraCarb5uODS (20) (4.60 mm)	Det: LC DAD1B, 254 nm
Process Host:	CTX0310	

First Level Reviewer: beckerc Date: 03-Mar-2020 11:17:06

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1702	85.11

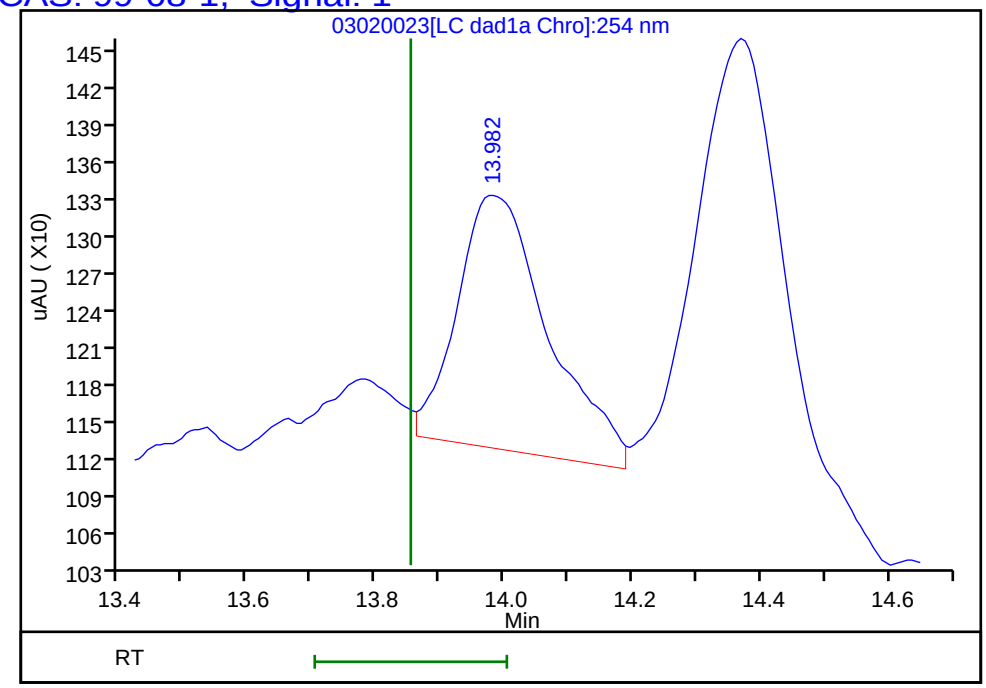
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020023.d				
Injection Date:	02-Mar-2020 21:27:02	Instrument ID:	CHHPLC_X3		
Lims ID:	280-134063-A-4-A	Lab Sample ID:	280-134063-4		
Client ID:	OS001-DP02-45				
Operator ID:	CB	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		

23 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 13.98
Response: 1977
Amount: 0.013623



Reviewer: beckerc, 03-Mar-2020 11:17:06
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

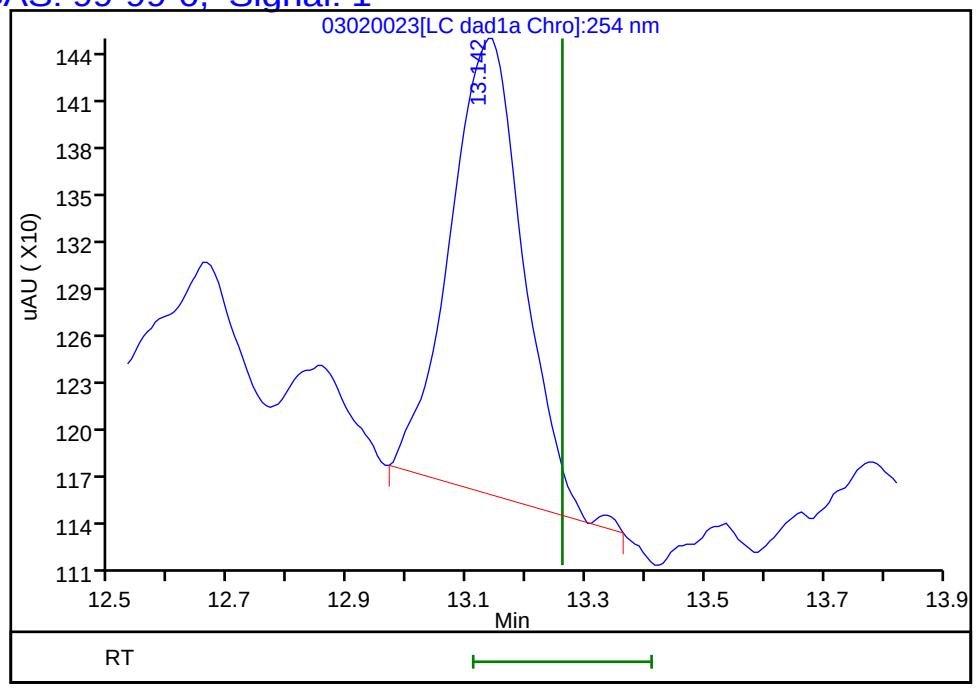
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020023.d				
Injection Date:	02-Mar-2020 21:27:02	Instrument ID:	CHHPLC_X3		
Lims ID:	280-134063-A-4-A	Lab Sample ID:	280-134063-4		
Client ID:	OS001-DP02-45				
Operator ID:	CB	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

RT: 13.14
Response: 2439
Amount: 0.022121



Reviewer: beckerc, 03-Mar-2020 11:17:06
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

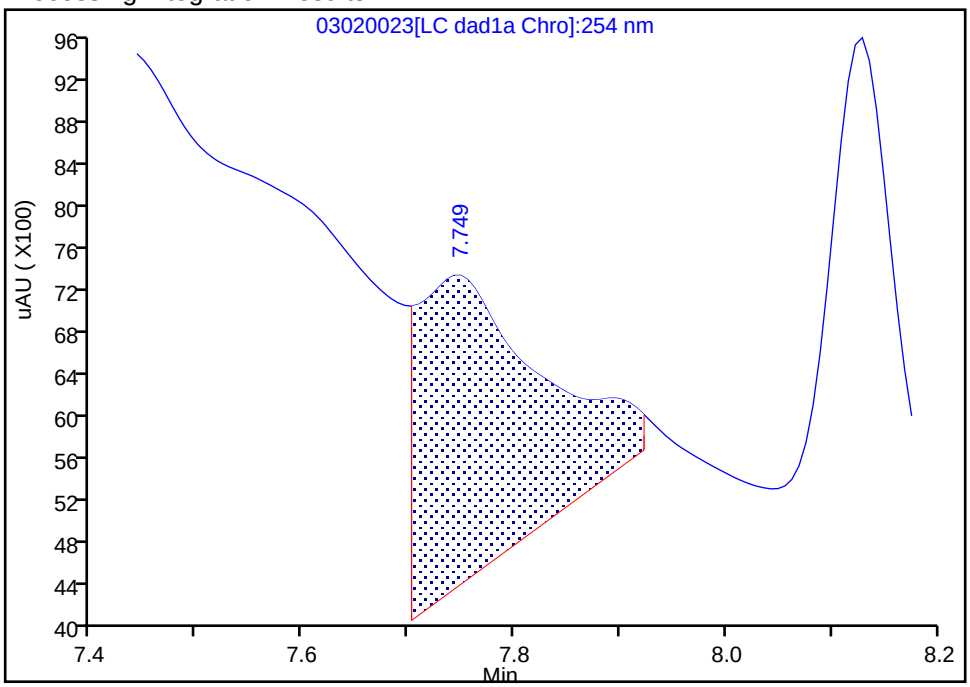
Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020023.d				
Injection Date:	02-Mar-2020 21:27:02	Instrument ID:	CHHPLC_X3		
Lims ID:	280-134063-A-4-A	Lab Sample ID:	280-134063-4		
Client ID:	OS001-DP02-45				
Operator ID:	CB	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 RDX, CAS: 121-82-4

Signal: 1

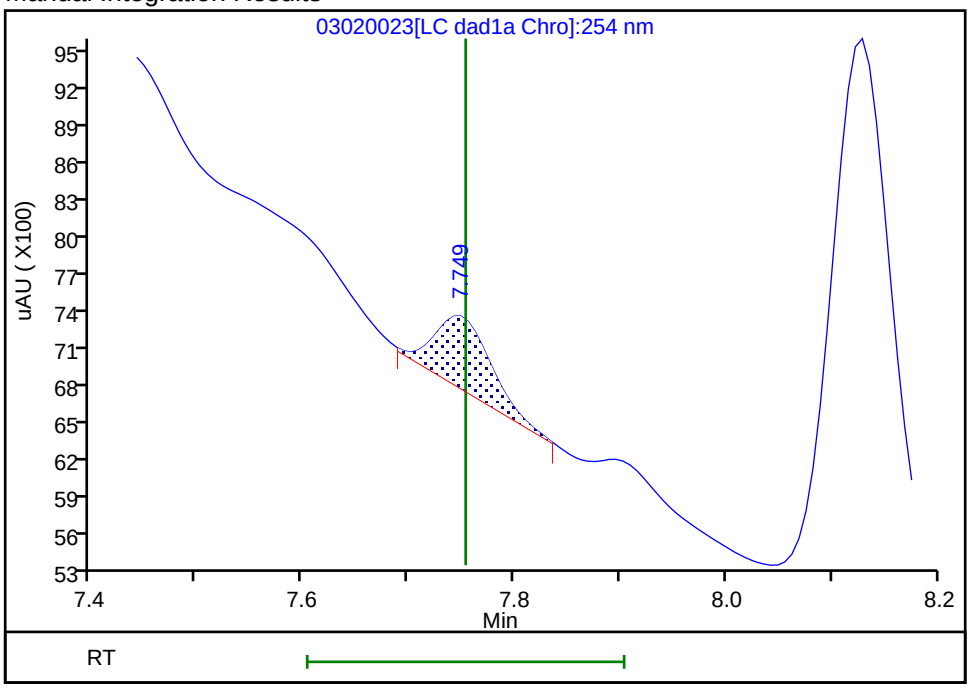
Processing Integration Results

RT: 7.75
Area: 22968
Amount: 0.206695
Amount Units: ug/mL



Manual Integration Results

RT: 7.75
Area: 2206
Amount: 0.019852
Amount Units: ug/mL



Reviewer: beckerc, 03-Mar-2020 11:16:12
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-134063-1
SDG No.:
Client Sample ID: OS001-DP02-45
Lab Sample ID: 280-134063-4
Matrix: Water
Lab File ID: 03030034.D
Analysis Method: 8330A
Date Collected: 02/24/2020 16:30
Extraction Method: 3535
Date Extracted: 02/28/2020 13:30
Sample wt/vol: 471.4(mL)
Date Analyzed: 03/04/2020 09:46
Con. Extract Vol.: 5(mL)
Dilution Factor: 1
Injection Volume: 100(uL)
GC Column: Luna-phenylhex ID: 4.6(mm)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 487545
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
121-82-4	RDX	0.42	U	0.42	0.42	0.17

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	99		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030034.D				
Lims ID:	280-134063-A-4-A				
Client ID:	OS001-DP02-45				
Sample Type:	Client				
Inject. Date:	04-Mar-2020 09:46:05	ALS Bottle#:	34	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-134063-A-4-A				
Misc. Info.:	280-0089749-034				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		
Method:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2020 11:40:10	Calib Date:	04-Mar-2020 03:21:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030023.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0319				

First Level Reviewer: beckerc Date: 05-Mar-2020 08:54:22

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	1 2,6-diamino-4-nitrotoluene	1		4.360			ND	
	2 2,4-diamino-6-nitrotoluene	1		4.913			ND	
	3 TNX	1		5.400			ND	
	5 2,4,6-Trinitrophenol	1		5.587			ND	
	4 DNX	1		6.200			ND	
	6 HMX	1		6.947			ND	MU
	7 MNX	1		7.707			ND	
	8 RDX	1		9.120			ND	
	9 Nitrobenzene	1		12.113			ND	
$	10 1,2-Dinitrobenzene	1	13.009	13.033	-0.024	57280	0.1980	
	11 3,5-Dinitroaniline	1	14.822	14.853	-0.031	254522	0.4695	
	12 1,3-Dinitrobenzene	1		15.553			ND	
	13 Nitroglycerin	2		15.813			ND	
	14 o-Nitrotoluene	1		16.580			ND	
	15 p-Nitrotoluene	1		16.853			ND	
	16 4-Amino-2,6-dinitrotoluene	1	17.142	17.160	-0.018	12087	0.0287	
	17 m-Nitrotoluene	1		17.787			ND	
	18 2-Amino-4,6-dinitrotoluene	1	18.002	18.013	-0.011	26331	0.0481	
	19 1,3,5-Trinitrobenzene	1	18.882	18.907	-0.025	771475	1.67	
	20 2,6-Dinitrotoluene	1		19.853			ND	
	21 2,4-Dinitrotoluene	1		20.320			ND	
	22 Tetryl	1		23.580			ND	
	23 2,4,6-Trinitrotoluene	1	24.682	24.713	-0.031	58808	0.1380	M
	24 PETN	2		25.293			ND	
	25 Ammonium Picrate	1		0.000			ND	

QC Flag Legend

Review Flags

M - Manually Integrated

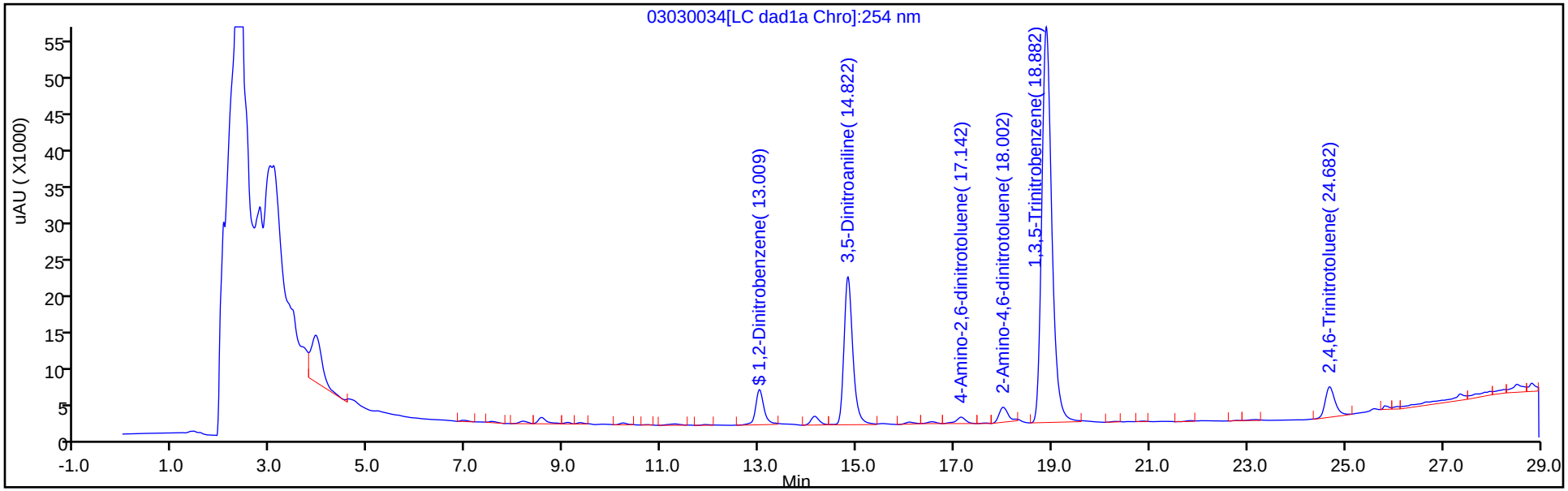
U - Marked Undetected

Report Date: 05-Mar-2020 11:48:30 Chrom Revision: 2.3 19-Feb-2020 16:45:46

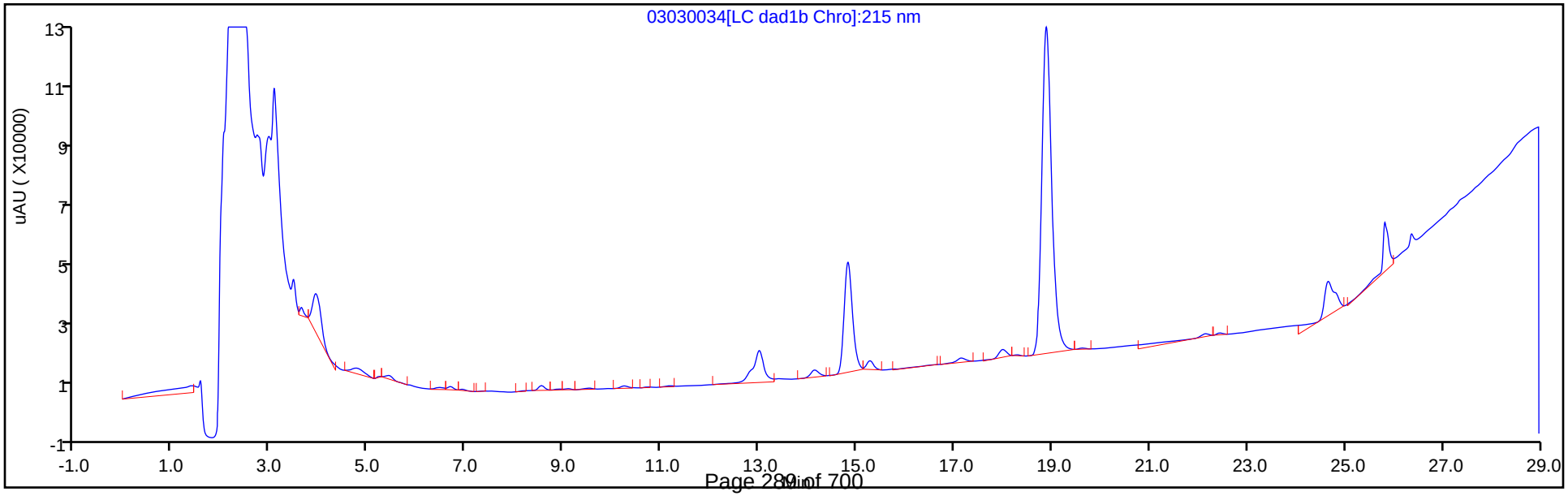
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\g2_luna\20200303-89749.b\03030034.d				
Injection Date:	04-Mar-2020 09:46:05	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	280-134063-A-4-A	Lab Sample ID:	280-134063-4	Worklist Smp#:	34
Client ID:	OS001-DP02-45				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	34
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



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



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030034.D				
Lims ID:	280-134063-A-4-A				
Client ID:	OS001-DP02-45				
Sample Type:	Client				
Inject. Date:	04-Mar-2020 09:46:05	ALS Bottle#:	34	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-134063-A-4-A				
Misc. Info.:	280-0089749-034				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		

Method:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\G2_8330_Luna.m		
Limit Group:	GCSV - 8330		
Last Update:	05-Mar-2020 11:40:10	Calib Date:	04-Mar-2020 03:21:00
Integrator:	Falcon		
Quant Method:	External Standard	Quant By:	Initial Calibration
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030023.D		

Column 1 :	Luna-Phenyl hexyl (4.60 mm)	Det: LC DAD1A, 254 nm
Process Host:	CTX0319	

First Level Reviewer: beckerc Date: 05-Mar-2020 08:54:22

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1980	98.99

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

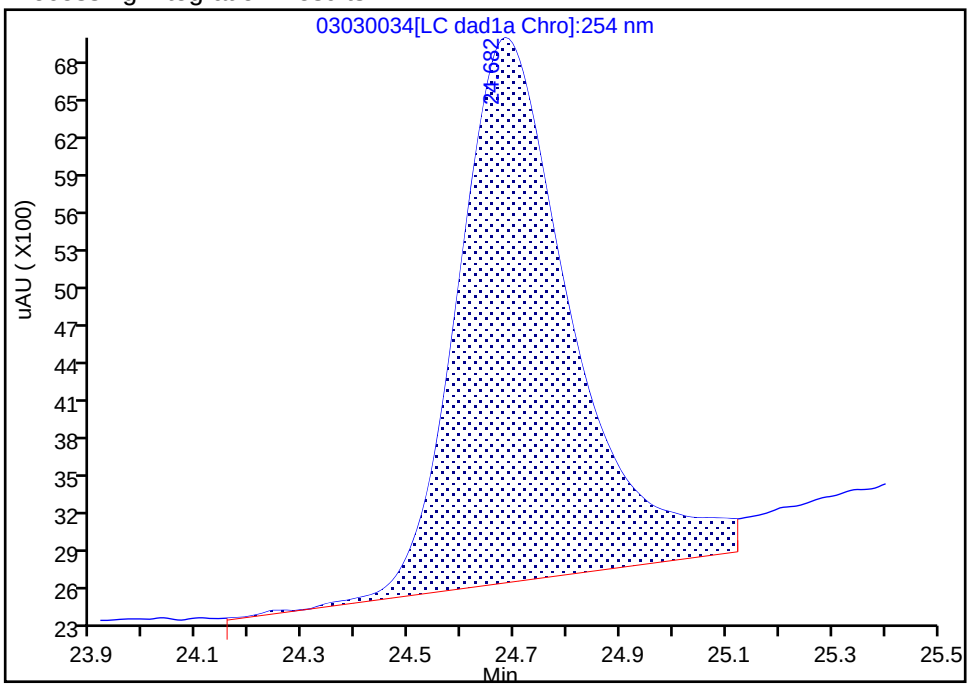
Data File:	\\chromna\denver\chromdata\g2_luna\20200303-89749.b\03030034.d				
Injection Date:	04-Mar-2020 09:46:05	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-134063-A-4-A	Lab Sample ID:	280-134063-4		
Client ID:	OS001-DP02-45				
Operator ID:	CB	ALS Bottle#:	34	Worklist Smp#:	34
Injection Vol:	100.0 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

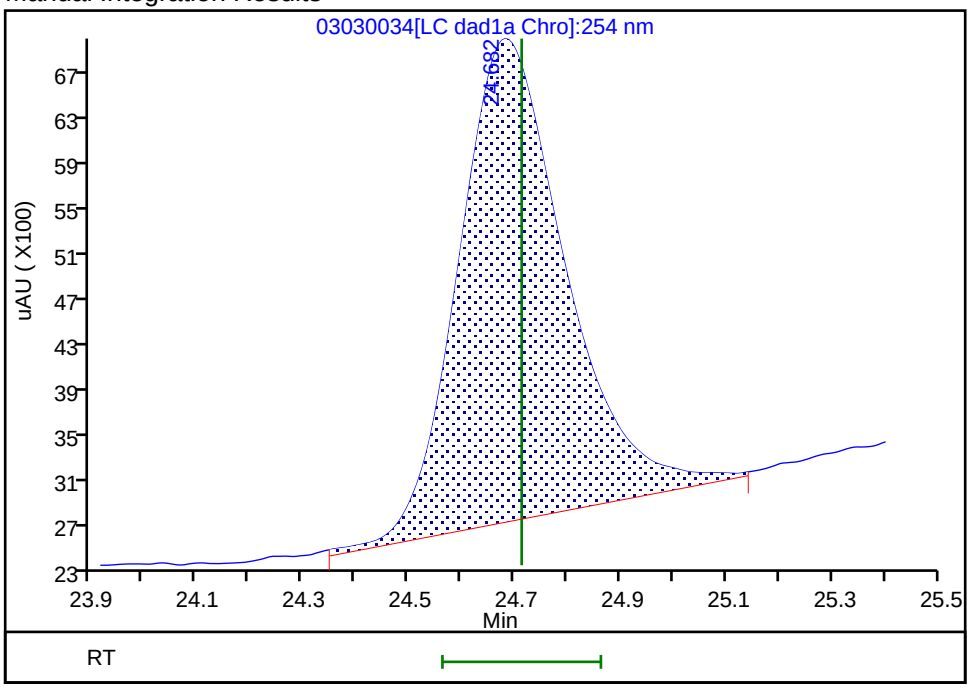
Processing Integration Results

RT: 24.68
Area: 63323
Amount: 0.149309
Amount Units: ug/ml



Manual Integration Results

RT: 24.68
Area: 58808
Amount: 0.137987
Amount Units: ug/ml



Reviewer: beckerc, 05-Mar-2020 08:54:19

Audit Action: Manually Integrated Audit Reason: Baseline

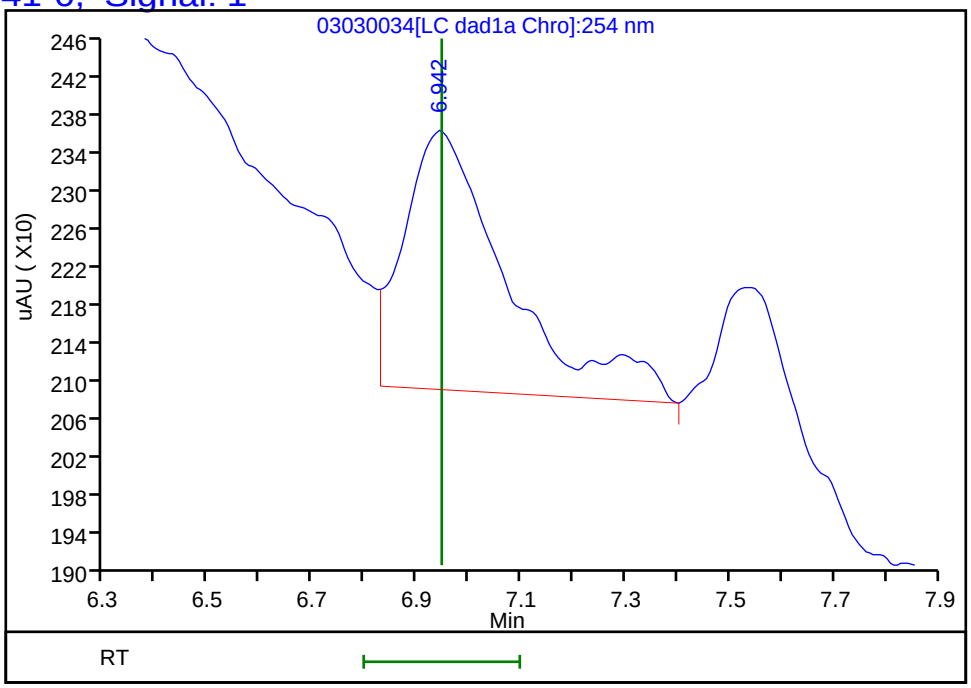
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\g2_luna\20200303-89749.b\03030034.d				
Injection Date:	04-Mar-2020 09:46:05	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	280-134063-A-4-A	Lab Sample ID:	280-134063-4		
Client ID:	OS001-DP02-45				
Operator ID:	CB	ALS Bottle#:	34	Worklist Smp#:	34
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: 6.94
Response: 3774
Amount: 0.010904



Reviewer: beckerc, 05-Mar-2020 08:54:22
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-134063-1
SDG No.:
Client Sample ID: OS001-DP02-45 RE
Lab Sample ID: 280-134063-4 RE
Matrix: Water
Lab File ID: 03040066.D
Analysis Method: 8330A
Date Collected: 02/24/2020 16:30
Extraction Method: 3535
Date Extracted: 03/04/2020 07:23
Sample wt/vol: 467.7(mL)
Date Analyzed: 03/05/2020 12:41
Con. Extract Vol.: 5(mL)
Dilution Factor: 1
Injection Volume: 100(uL)
GC Column: UltraCarb5uODS ID: 4.6(mm)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 487660
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	21	H J1	1.1	0.43	0.21
99-65-0	1,3-Dinitrobenzene	0.21	U H J1	0.43	0.21	0.095
121-14-2	2,4-Dinitrotoluene	0.21	U H J1	0.43	0.21	0.090
606-20-2	2,6-Dinitrotoluene	0.21	U H J1	0.21	0.21	0.069
88-72-2	2-Nitrotoluene	0.21	U H J1	0.43	0.21	0.091
99-08-1	3-Nitrotoluene	0.43	U H M J1	0.43	0.43	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	0.13	U H J1	0.21	0.13	0.062
99-99-0	4-Nitrotoluene	0.43	U H M J1	1.1	0.43	0.21
2691-41-0	HMX	0.21	U H J1	0.43	0.21	0.094
5755-27-1	MNX	0.43	U H	2.1	0.43	0.16
98-95-3	Nitrobenzene	0.21	U H J1	0.43	0.21	0.097
479-45-8	Tetryl	0.21	U H J1	0.26	0.21	0.085

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

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040066.D
Lims ID: 280-134063-B-4-A
Client ID: OS001-DP02-45
Sample Type: Client
Inject. Date: 05-Mar-2020 12:41:08 ALS Bottle#: 66 Worklist Smp#: 66
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-134063-B-4-A
Misc. Info.: 280-0089779-066
Operator ID: CB Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Mar-2020 10:25:55 Calib Date: 04-Mar-2020 23:40:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0308

First Level Reviewer: beckerc Date: 06-Mar-2020 09:44:24

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	1 2,6-diamino-4-nitrotoluene	1	6.516	6.548	-0.032	4613	0.0184	M
	2 TNX	1		6.594			ND	
	3 HMX	1		6.683			ND	
	4 2,4-diamino-6-nitrotoluene	1		6.735			ND	
	5 DNX	1		6.914			ND	U
	6 MNX	1		7.361			ND	
	7 RDX	1	7.736	7.750	-0.014	3043	0.0258	
	8 2,4,6-Trinitrophenol	1		8.056			ND	U
$	9 1,2-Dinitrobenzene	1	8.702	8.710	-0.008	26173	0.1790	
	10 1,3,5-Trinitrobenzene	1	8.876	8.883	-0.007	470497	1.93	
	11 1,3-Dinitrobenzene	1		9.529			ND	
	12 Nitrobenzene	1		9.916			ND	
	13 3,5-Dinitroaniline	1	10.122	10.142	-0.020	130260	0.4774	
	14 Tetryl	1		10.216			ND	
	15 Nitroglycerin	2		10.729			ND	
	16 2,4,6-Trinitrotoluene	1	11.182	11.183	-0.001	35115	0.1590	
	17 4-Amino-2,6-dinitrotoluene	1		11.336			ND	
	18 2-Amino-4,6-dinitrotoluene	1	11.622	11.623	-0.001	13912	0.0640	
	19 2,6-Dinitrotoluene	1		11.789			ND	
	20 2,4-Dinitrotoluene	1		11.983			ND	
	21 o-Nitrotoluene	1		12.829			ND	
	22 p-Nitrotoluene	1		13.269			ND	U
	23 m-Nitrotoluene	1		13.863			ND	U
	24 PETN	2		14.969			ND	
	25 Ammonium Picrate	1		0.000			ND	

QC Flag Legend

Review Flags

M - Manually Integrated

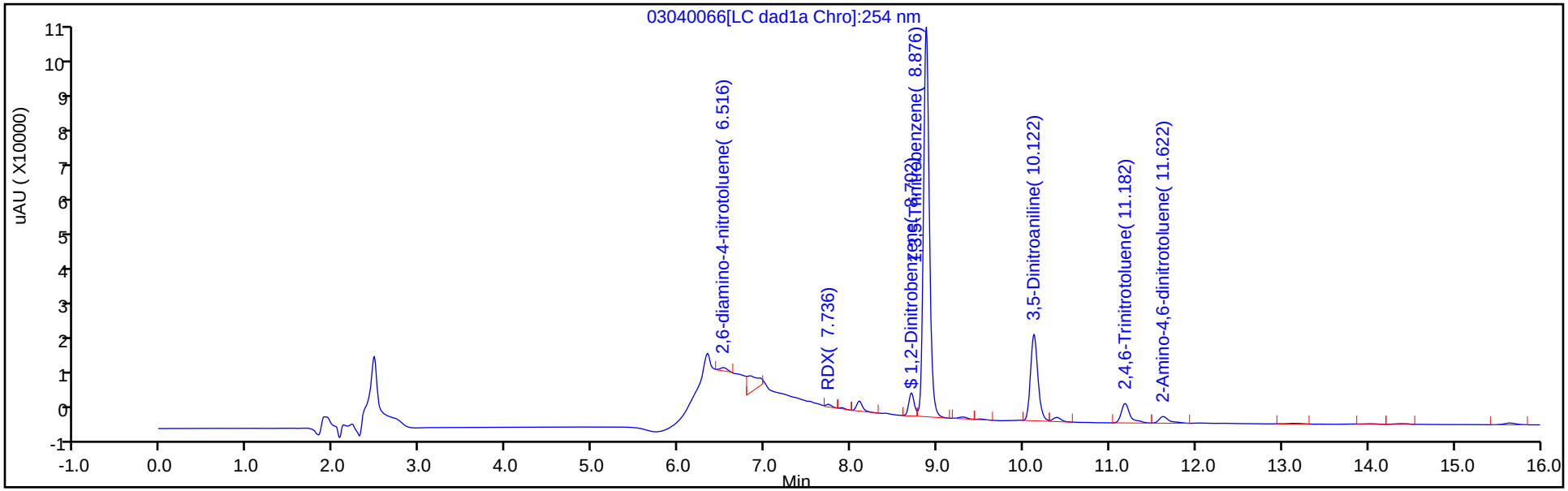
U - Marked Undetected

Report Date: 06-Mar-2020 10:26:05 Chrom Revision: 2.3 19-Feb-2020 16:45:46

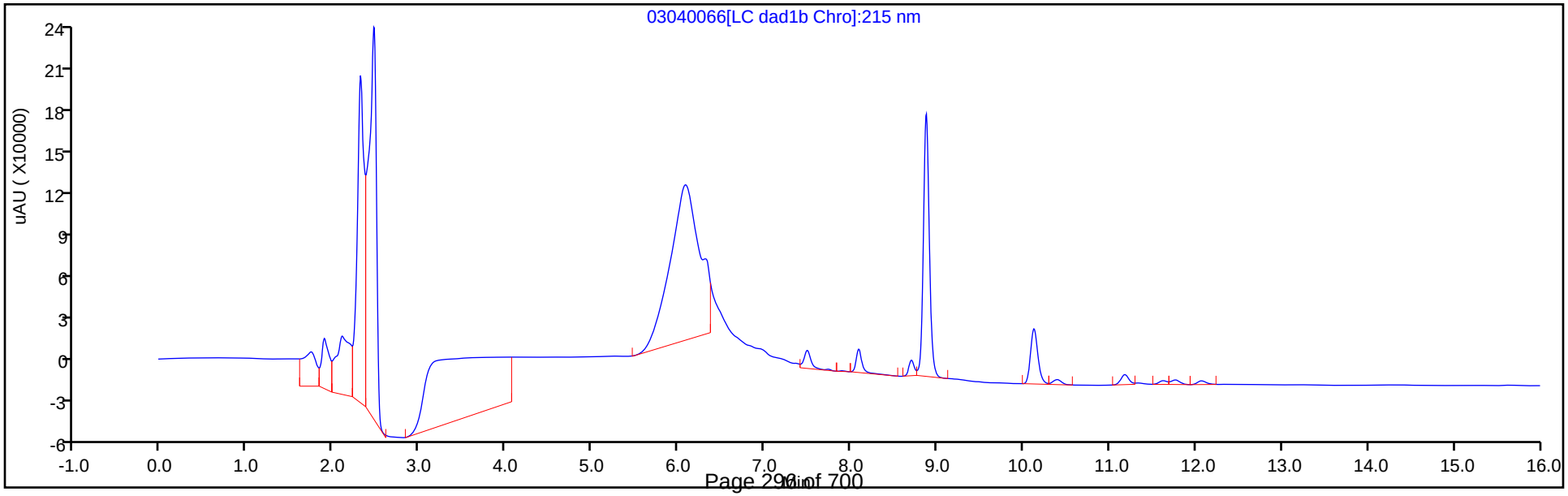
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040066.d				
Injection Date:	05-Mar-2020 12:41:08	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	280-134063-B-4-A	Lab Sample ID:	280-134063-4	Worklist Smp#:	66
Client ID:	OS001-DP02-45				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	66
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040066.D				
Lims ID:	280-134063-B-4-A				
Client ID:	OS001-DP02-45				
Sample Type:	Client				
Inject. Date:	05-Mar-2020 12:41:08	ALS Bottle#:	66	Worklist Smp#:	66
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-134063-B-4-A				
Misc. Info.:	280-0089779-066				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Mar-2020 10:25:55	Calib Date:	04-Mar-2020 23:40:46		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0308				

First Level Reviewer: beckerc Date: 06-Mar-2020 09:44:24

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1790	89.50

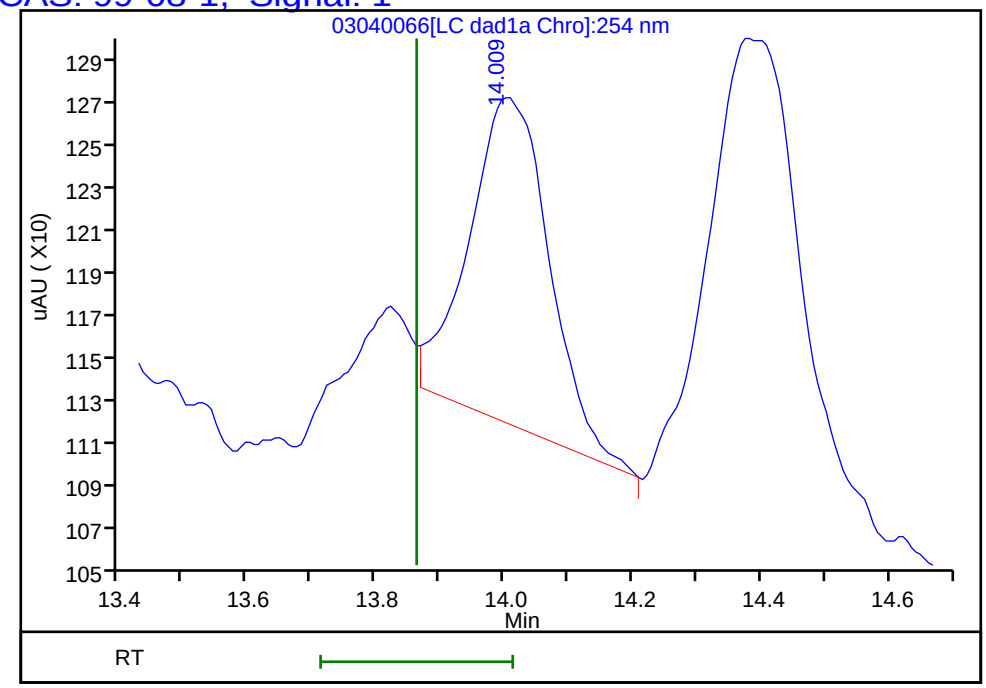
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040066.d				
Injection Date:	05-Mar-2020 12:41:08	Instrument ID:	CHHPLC_X3		
Lims ID:	280-134063-B-4-A	Lab Sample ID:	280-134063-4		
Client ID:	OS001-DP02-45				
Operator ID:	CB	ALS Bottle#:	66	Worklist Smp#:	66
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

23 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 14.01
Response: 1298
Amount: 0.008415



Reviewer: beckerc, 06-Mar-2020 09:44:24
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

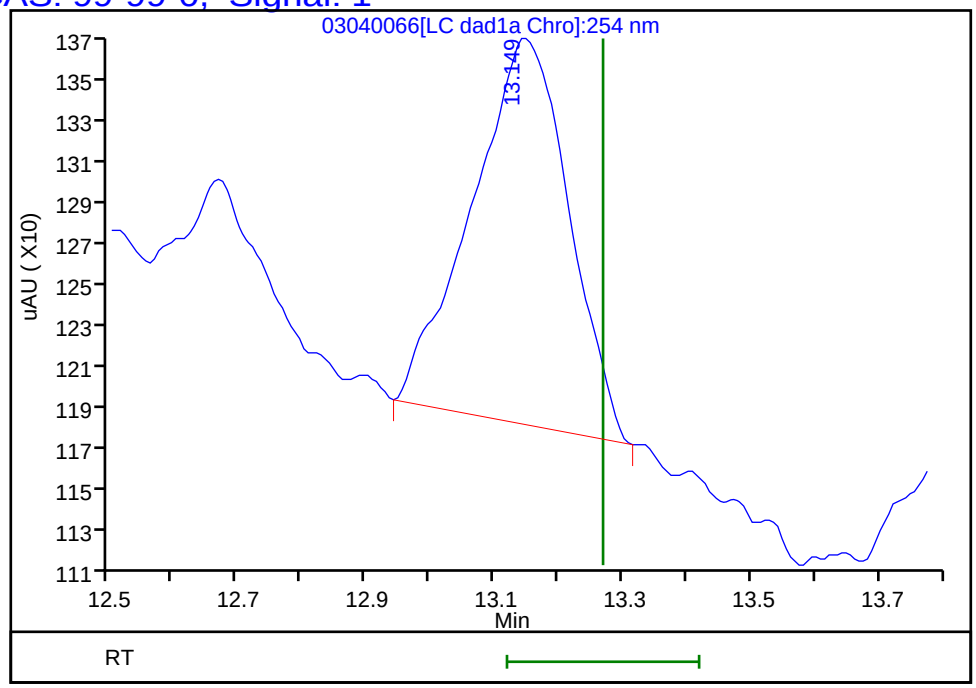
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040066.d				
Injection Date:	05-Mar-2020 12:41:08	Instrument ID:	CHHPLC_X3		
Lims ID:	280-134063-B-4-A	Lab Sample ID:	280-134063-4		
Client ID:	OS001-DP02-45				
Operator ID:	CB	ALS Bottle#:	66	Worklist Smp#:	66
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

RT: 13.15
Response: 1994
Amount: 0.016575



Reviewer: beckerc, 06-Mar-2020 09:44:24
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-134063-1
SDG No.:
Client Sample ID: OS001-DP02-45 RE
Lab Sample ID: 280-134063-4 RE
Matrix: Water
Lab File ID: 03090016.D
Analysis Method: 8330A
Date Collected: 02/24/2020 16:30
Extraction Method: 3535
Date Extracted: 03/04/2020 07:23
Sample wt/vol: 467.7(mL)
Date Analyzed: 03/09/2020 21:53
Con. Extract Vol.: 5(mL)
Dilution Factor: 1
Injection Volume: 100(uL)
GC Column: Luna-phenylhex ID: 4.6(mm)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 488169
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
118-96-7	*2,4,6-Trinitrotoluene*	*0.43*	*U H J1*	*0.43*	0.43	*0.17*
35572-78-2	*2-Amino-4,6-dinitrotoluene*	*0.13*	*U H J1*	*0.21*	0.13	*0.054*
121-82-4	*RDX*	*0.43*	*U H J1*	*0.43*	0.43	*0.17*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	111		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20200309-89910.b\03090016.D				
Lims ID:	280-134063-B-4-A				
Client ID:	OS001-DP02-45				
Sample Type:	Client				
Inject. Date:	09-Mar-2020 21:53:13	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-134063-B-4-A				
Misc. Info.:	280-0089910-016				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		
Method:	\\chromna\Denver\ChromData\G2_LUNA\20200309-89910.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	12-Mar-2020 15:31:39	Calib Date:	04-Mar-2020 03:21:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030023.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0315				

First Level Reviewer: beckerc Date: 12-Mar-2020 15:10:27

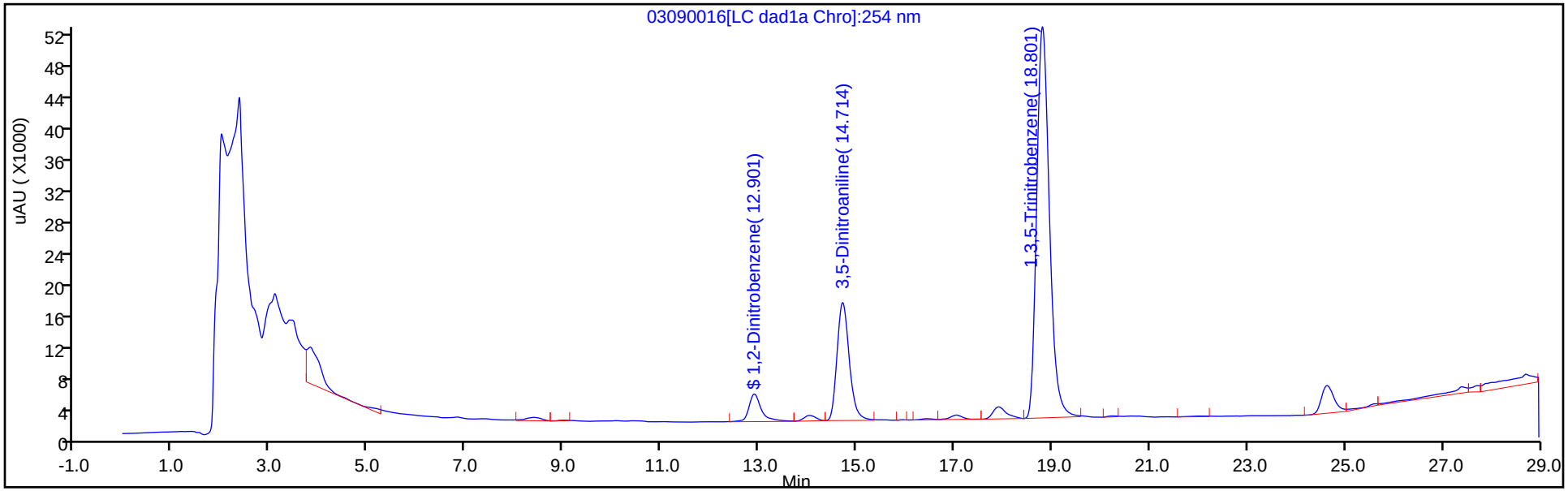
Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1		4.344			ND	
2 2,4-diamino-6-nitrotoluene	1		4.891			ND	
3 TNX	1		5.400			ND	
5 2,4,6-Trinitrophenol	1		5.524			ND	
4 DNX	1		6.200			ND	
6 HMX	1		6.898			ND	
7 MNX	1		7.707			ND	
8 RDX	1		9.058			ND	
9 Nitrobenzene	1		12.058			ND	
$ 10 1,2-Dinitrobenzene	1	12.901	12.964	-0.063	63706	0.2217	
11 3,5-Dinitroaniline	1	14.714	14.778	-0.064	264924	0.4888	
12 1,3-Dinitrobenzene	1		15.484			ND	
13 Nitroglycerin	2		15.724			ND	
14 o-Nitrotoluene	1		16.511			ND	
15 p-Nitrotoluene	1		16.771			ND	
16 4-Amino-2,6-dinitrotoluene	1		17.071			ND	
17 m-Nitrotoluene	1		17.791			ND	
18 2-Amino-4,6-dinitrotoluene	1		17.918			ND	
19 1,3,5-Trinitrobenzene	1	18.801	18.824	-0.023	912824	1.98	
20 2,6-Dinitrotoluene	1		19.778			ND	
21 2,4-Dinitrotoluene	1		20.244			ND	
22 Tetryl	1		23.498			ND	
23 2,4,6-Trinitrotoluene	1		24.638			ND	
24 PETN	2		25.238			ND	
25 Ammonium Picrate	1		0.000			ND	

Report Date: 12-Mar-2020 15:31:55 Chrom Revision: 2.3 19-Feb-2020 16:45:46

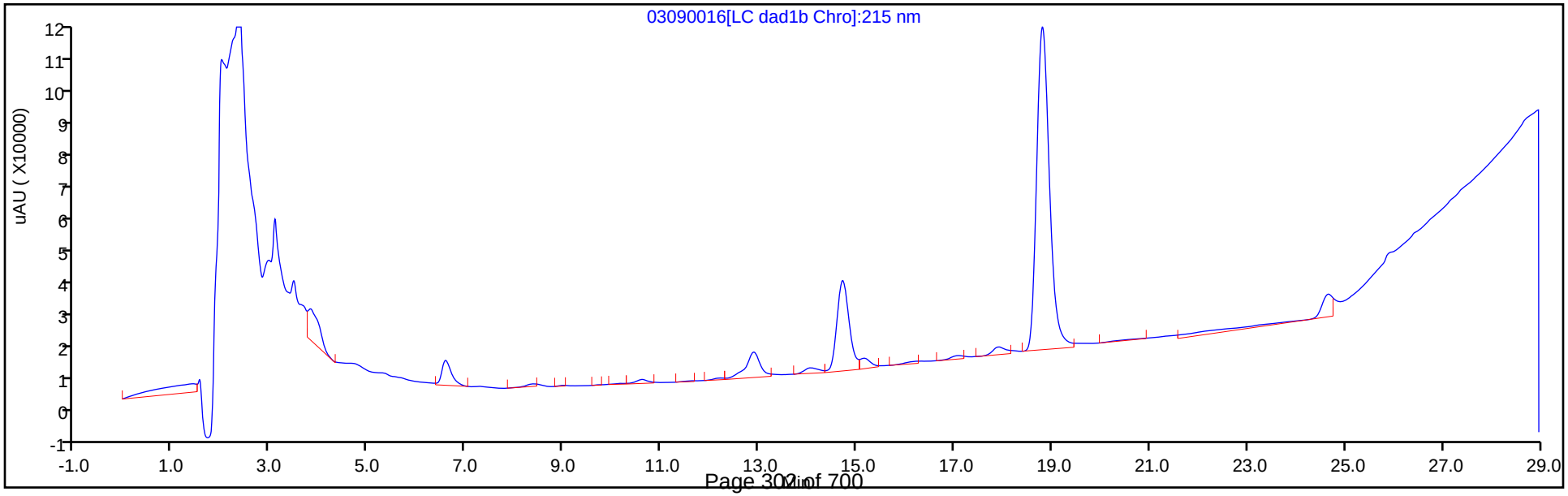
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\g2_luna\20200309-89910.b\03090016.d				
Injection Date:	09-Mar-2020 21:53:13	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	280-134063-B-4-A	Lab Sample ID:	280-134063-4	Worklist Smp#:	16
Client ID:	OS001-DP02-45				
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 Peak: 1



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



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20200309-89910.b\03090016.D				
Lims ID:	280-134063-B-4-A				
Client ID:	OS001-DP02-45				
Sample Type:	Client				
Inject. Date:	09-Mar-2020 21:53:13	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-134063-B-4-A				
Misc. Info.:	280-0089910-016				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		

Method:	\\chromna\Denver\ChromData\G2_LUNA\20200309-89910.b\G2_8330_Luna.m		
Limit Group:	GCSV - 8330		
Last Update:	12-Mar-2020 15:31:39	Calib Date:	04-Mar-2020 03:21:00
Integrator:	Falcon		
Quant Method:	External Standard	Quant By:	Initial Calibration
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030023.D		

Column 1 :	Luna-Phenyl hexyl (4.60 mm)	Det: LC DAD1A, 254 nm
Process Host:	CTX0315	

First Level Reviewer: beckerc Date: 12-Mar-2020 15:10:27

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2217	110.84

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1 Analy Batch No.: 487544

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/03/2020 18:01 Calibration End Date: 03/03/2020 22:06 Calibration ID: 42492

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-487544/14	03030014.D
Level 2	IC 280-487544/13	03030013.D
Level 3	IC 280-487544/12	03030012.D
Level 4	IC 280-487544/11	03030011.D
Level 5	IC 280-487544/10	03030010.D
Level 6	IC 280-487544/9	03030009.D
Level 7	IC 280-487544/8	03030008.D
Level 8	IC 280-487544/7	03030007.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
Picric acid	5.672	5.669	5.639	5.617	5.587	5.558	5.510				5.437 - 5.737	5.607
HMX	6.945	6.963	6.953	6.957	6.947	6.945	6.936	6.869			6.797 - 7.097	6.939
RDX	9.125	9.143	9.126	9.130	9.120	9.112	9.096	9.029			8.970 - 9.270	9.110
Nitrobenzene	12.119	12.129	12.126	12.124	12.113	12.105	12.090	11.995			11.963 - 12.263	12.100
1,3-Dinitrobenzene	15.559	15.569	15.566	15.564	15.553	15.551	15.530	15.462			15.403 - 15.703	15.544
Nitroglycerin	15.812	15.816	15.819	15.817	15.813	15.811	15.790	15.729			15.663 - 15.963	15.801
2-Nitrotoluene	16.579	16.596	16.586	16.590	16.580	16.578	16.556				16.430 - 16.730	16.581
4-Nitrotoluene	16.852	16.856	16.859	16.864	16.853	16.851	16.830				16.703 - 17.003	16.852
4-Amino-2,6-dinitrotoluene	17.165	17.169	17.166	17.164	17.160	17.151	17.130				17.010 - 17.310	17.158
3-Nitrotoluene	17.772	17.796	17.792	17.790	17.787	17.785	17.763				17.637 - 17.937	17.784
2-Amino-4,6-dinitrotoluene	18.005	18.016	18.012	18.017	18.013	18.005	17.976				17.863 - 18.163	18.006
1,3,5-Trinitrobenzene	18.905	18.909	18.912	18.910	18.907	18.905	18.890	18.835			18.757 - 19.057	18.897
2,6-Dinitrotoluene	19.845	19.856	19.852	19.857	19.853	19.851	19.830	19.775			19.703 - 20.003	19.840
2,4-Dinitrotoluene	20.312	20.323	20.319	20.324	20.320	20.318	20.296	20.242			20.170 - 20.470	20.307
Tetryl	23.585	23.589	23.579	23.584	23.580	23.585	23.563	23.529			23.430 - 23.730	23.574
2,4,6-Trinitrotoluene	24.712	24.716	24.706	24.710	24.713	24.712	24.696	24.662			24.563 - 24.863	24.703
PETN	25.465	25.296	25.293	25.290	25.293	25.292	25.283	25.269			25.143 - 25.443	25.310
1,2-Dinitrobenzene	13.032	13.043	13.039	13.037	13.033	13.025	13.010	12.929			12.883 - 13.183	13.019

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

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1 Analy Batch No.: 487544

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/03/2020 18:01 Calibration End Date: 03/03/2020 22:06 Calibration ID: 42492

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-487544/14	03030014.D
Level 2	IC 280-487544/13	03030013.D
Level 3	IC 280-487544/12	03030012.D
Level 4	IC 280-487544/11	03030011.D
Level 5	IC 280-487544/10	03030010.D
Level 6	IC 280-487544/9	03030009.D
Level 7	IC 280-487544/8	03030008.D
Level 8	IC 280-487544/7	03030007.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
Picric acid	307200 167250	165320 172741	162930 174722	160392	Lin2	1432.33755	158794.688							0.9920		0.9900
HMX	366400 181740	189580 181403	185550 182080	179496 180885	Lin2	1887.46964	173019.401							0.9960		0.9900
RDX	493500 221358	230640 220387	232290 221782	218996 220334	Lin2	2775.08934	209079.626							0.9940		0.9900
Nitrobenzene	772112 403551	398108 406357	400339 407363	384187 419445	Lin2	3759.78981	383712.763							0.9930		0.9900
1,3-Dinitrobenzene	1383832 669790	693852 668584	699750 674646	654607 669329	Lin2	7294.50627	637510.790							0.9960		0.9900
Nitroglycerin	326880 146487	157722 147329	156826 146085	148550 143395	Lin2	18358.0452	139686.787							0.9960		0.9900
2-Nitrotoluene	443400 239523	229680 243911	242010 244658	226236	Lin2	2104.57823	225290.269							0.9920		0.9900
4-Nitrotoluene	428044 229953	226467 229393	227275 231470	217333	Lin2	2074.83879	214608.004							0.9940		0.9900
4-Amino-2,6-dinitrotoluene	620480 333274	348372 333833	338082 336895	328923	Lin2	2959.42058	318445.921							0.9970		0.9900
3-Nitrotoluene	413986 240574	237043 240594	233946 233533	228575	Lin2	1841.01540	224676.844							0.9960		0.9900
2-Amino-4,6-dinitrotoluene	944622 495498	512351 497499	509014 510549	490641	Qua	3819.85650	465803.759	40313.2760						1.0000		0.9900
1,3,5-Trinitrobenzene	865968 474217	526567 472136	477375 475185	473816 471216	Lin2	4025.62451	459589.258							0.9990		0.9900
2,6-Dinitrotoluene	565139 292702	298825 291857	298466 295155	287697 289377	Lin2	2797.82260	278869.343							0.9960		0.9900
2,4-Dinitrotoluene	1210857 617861	633247 617665	637918 623179	611143 624629	Lin2	6043.87499	592221.333							0.9960		0.9900

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

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

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1 Analy Batch No.: 487544

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/03/2020 18:01 Calibration End Date: 03/03/2020 22:06 Calibration ID: 42492

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
Tetryl	819561 365793	368323 367729	367335 369337	361509 369261	Lin2	4624.47319	343226.702							0.9910		0.9900
2,4,6-Trinitrotoluene	789044 419465	407390 420538	424960 422393	409669 421343	Lin2	3778.97123	398797.764							0.9940		0.9900
PETN	319690 143409	128678 143380	137231 145088	136140 144459	Lin1	11553.4593	142137.751							0.9980		0.9900
1,2-Dinitrobenzene	640500 291080	298100 286084	293310 290041	284160 286945	Lin2	3595.33024	271161.032							0.9930		0.9900

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

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

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1 Analy Batch No.: 487544

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/03/2020 18:01 Calibration End Date: 03/03/2020 22:06 Calibration ID: 42492

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-487544/14	03030014.D
Level 2	IC 280-487544/13	03030013.D
Level 3	IC 280-487544/12	03030012.D
Level 4	IC 280-487544/11	03030011.D
Level 5	IC 280-487544/10	03030010.D
Level 6	IC 280-487544/9	03030009.D
Level 7	IC 280-487544/8	03030008.D
Level 8	IC 280-487544/7	03030007.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
Picric acid	Lin2	3072 120919	8266 174722	16293	40098	66900	0.0100 0.700	0.0500 1.00	0.100	0.250	0.400
HMX	Lin2	3664 126982	9479 182080	18555 452212	44874	72696	0.0100 0.700	0.0500 1.00	0.100 2.50	0.250	0.400
RDX	Lin2	4935 154271	11532 221782	23229 550834	54749	88543	0.0100 0.700	0.0500 1.00	0.100 2.50	0.250	0.400
Nitrobenzene	Lin2	7752 285588	19985 408992	40194 1052808	96431	162066	0.0100 0.703	0.0502 1.00	0.100 2.51	0.251	0.402
1,3-Dinitrobenzene	Lin2	13866 468945	34762 675995	70115 1676668	163979	268452	0.0100 0.701	0.0501 1.00	0.100 2.51	0.251	0.401
Nitroglycerin	Lin2	32688 1031302	78861 1460853	156826 3584879	371375	585948	0.100 7.00	0.500 10.0	1.00 25.0	2.50	4.00
2-Nitrotoluene	Lin2	4434 170738	11484 244658	24201	56559	95809	0.0100 0.700	0.0500 1.00	0.100	0.250	0.400
4-Nitrotoluene	Lin2	4289 160896	11346 231933	22773	54442	92165	0.0100 0.701	0.0501 1.00	0.100	0.251	0.401
4-Amino-2,6-dinitrotoluene	Lin2	6211 233917	17436 337232	33842	82313	133443	0.0100 0.701	0.0501 1.00	0.100	0.250	0.400
3-Nitrotoluene	Lin2	4144 168584	11864 233767	23418	57201	96326	0.0100 0.701	0.0501 1.00	0.100	0.250	0.400
2-Amino-4,6-dinitrotoluene	Qua	9484 349642	25720 512591	51105	123151	198992	0.0100 0.703	0.0502 1.00	0.100	0.251	0.402
1,3,5-Trinitrobenzene	Lin2	8677 331156	26381 476135	47833 1180395	118691	190066	0.0100 0.701	0.0501 1.00	0.100 2.51	0.251	0.401
2,6-Dinitrotoluene	Lin2	5674 205117	15001 296336	29966 726336	72212	117549	0.0100 0.703	0.0502 1.00	0.100 2.51	0.251	0.402
2,4-Dinitrotoluene	Lin2	12157 434095	31789 625672	64047 1567820	153397	248133	0.0100 0.703	0.0502 1.00	0.100 2.51	0.251	0.402
Tetryl	Lin2	8212 257925	18453 370076	36807 924998	90558	146610	0.0100 0.701	0.0501 1.00	0.100 2.51	0.251	0.401

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

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1 Analy Batch No.: 487544

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/03/2020 18:01 Calibration End Date: 03/03/2020 22:06 Calibration ID: 42492

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
2,4,6-Trinitrotoluene	Lin2	7922 295554	20451 424083	42666 1057572	102827	168457	0.0100 0.703	0.0502 1.00	0.100 2.51	0.251	0.402
PETN	Lin1	31969 1003662	64339 1450880	137231 3611463	340351	573634	0.100 7.00	0.500 10.0	1.00 25.0	2.50	4.00
1,2-Dinitrobenzene	Lin2	6405 200259	14905 290041	29331 717363	71040	116432	0.0100 0.700	0.0500 1.00	0.100 2.50	0.250	0.400

Curve Type Legend:

Lin1 = Linear 1/conc
Lin2 = Linear 1/conc^2
Qua = Quadratic

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030007.D				
Lims ID:	IC FULL 8				
Client ID:					
Sample Type:	IC	Calib Level:	8		
Inject. Date:	03-Mar-2020 18:01:29	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC FULL 8				
Misc. Info.:	280-0089749-007				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub6				
Method:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2020 11:40:03	Calib Date:	04-Mar-2020 03:21:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030023.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0319				

First Level Reviewer: beckerc Date: 04-Mar-2020 08:11:21

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	4.302	4.360	-0.058	1265338	2.50	2.66	
2 2,4-diamino-6-nitrotoluene	1		4.913			ND	ND	U
5 2,4,6-Trinitrophenol	1		5.587			ND	ND	U
6 HMX	1	6.869	6.947	-0.078	452212	2.50	2.60	
8 RDX	1	9.029	9.120	-0.091	550834	2.50	2.62	
9 Nitrobenzene	1	11.995	12.113	-0.118	1052808	2.51	2.73	
$ 10 1,2-Dinitrobenzene	1	12.929	13.033	-0.104	717363	2.50	2.63	
11 3,5-Dinitroaniline	1	14.762	14.853	-0.091	1377200	2.50	2.55	
12 1,3-Dinitrobenzene	1	15.462	15.553	-0.091	1676668	2.51	2.62	
13 Nitroglycerin	2	15.729	15.813	-0.084	3584879	25.0	25.5	M
14 o-Nitrotoluene	1		16.580			ND	ND	U
15 p-Nitrotoluene	1		16.853			ND	ND	
16 4-Amino-2,6-dinitrotoluene	1		17.160			ND	ND	U
17 m-Nitrotoluene	1		17.787			ND	ND	U
18 2-Amino-4,6-dinitrotoluene	1		18.013			ND	ND	
19 1,3,5-Trinitrobenzene	1	18.835	18.907	-0.072	1180395	2.51	2.56	
20 2,6-Dinitrotoluene	1	19.775	19.853	-0.078	726336	2.51	2.59	
21 2,4-Dinitrotoluene	1	20.242	20.320	-0.078	1567820	2.51	2.64	
22 Tetryl	1	23.529	23.580	-0.051	924998	2.51	2.68	
23 2,4,6-Trinitrotoluene	1	24.662	24.713	-0.051	1057572	2.51	2.64	
24 PETN	2	25.269	25.293	-0.024	3611463	25.0	25.3	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

U - Marked Undetected

Reagents:

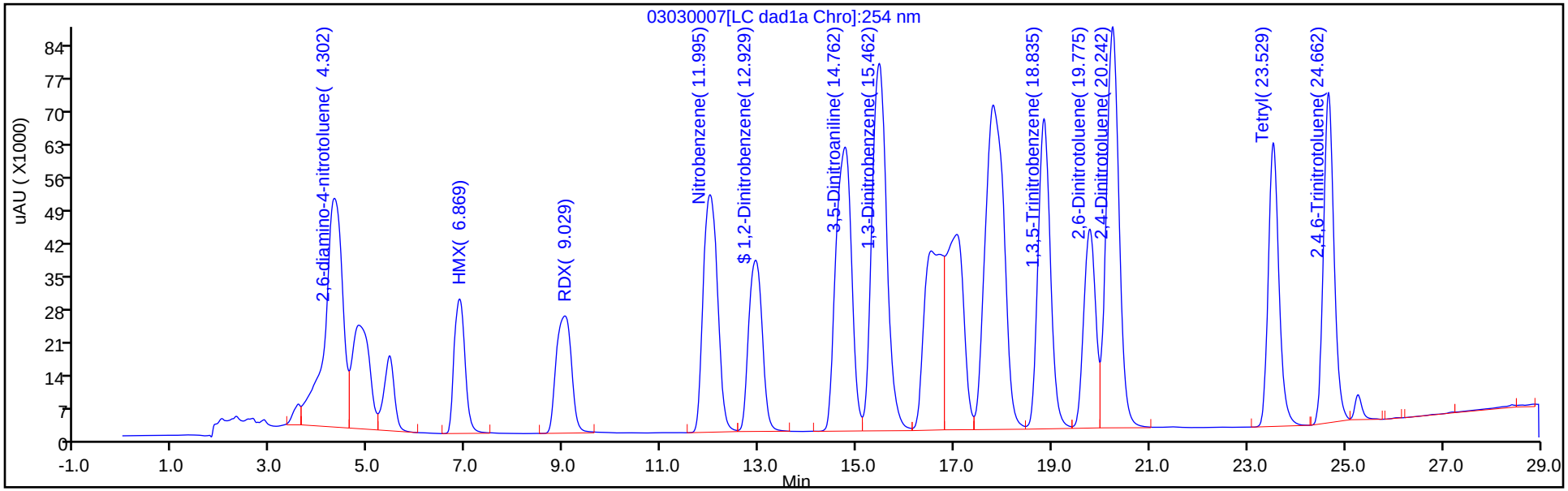
8330IntermStk_00061	Amount Added: 250.00	Units: uL
8330_ADDs_00023	Amount Added: 125.00	Units: uL

Report Date: 05-Mar-2020 11:40:04 Chrom Revision: 2.3 19-Feb-2020 16:45:46

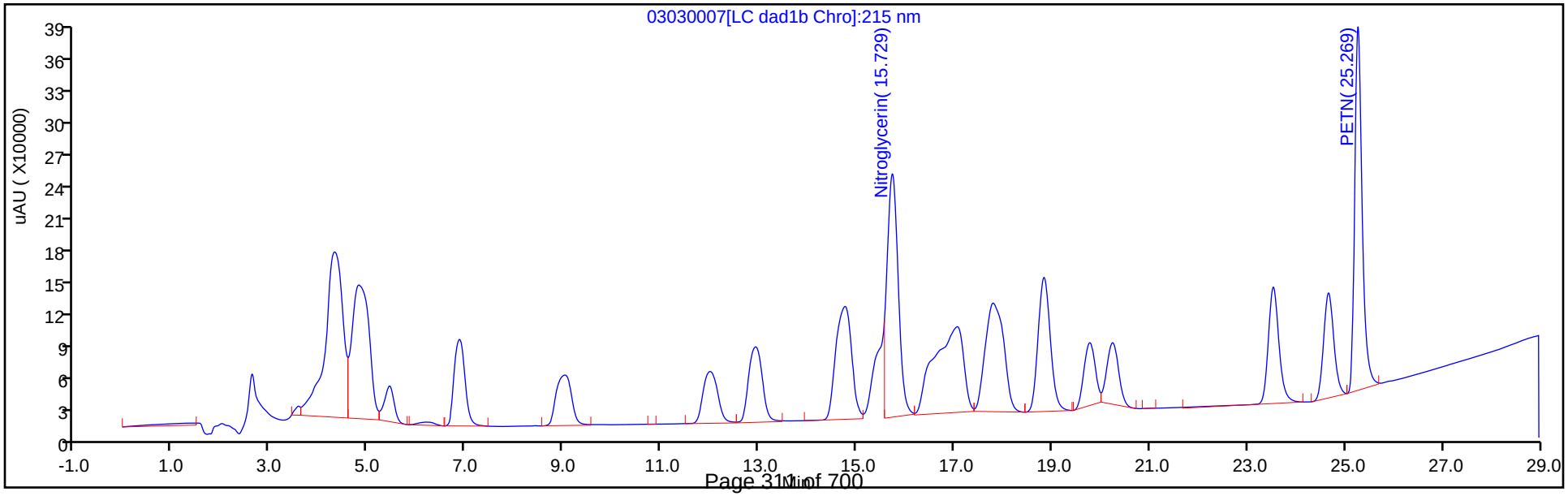
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\g2_luna\20200303-89749.b\03030007.d				
Injection Date:	03-Mar-2020 18:01:29	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC FULL 8			Worklist Smp#:	7
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 Peak: 1



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

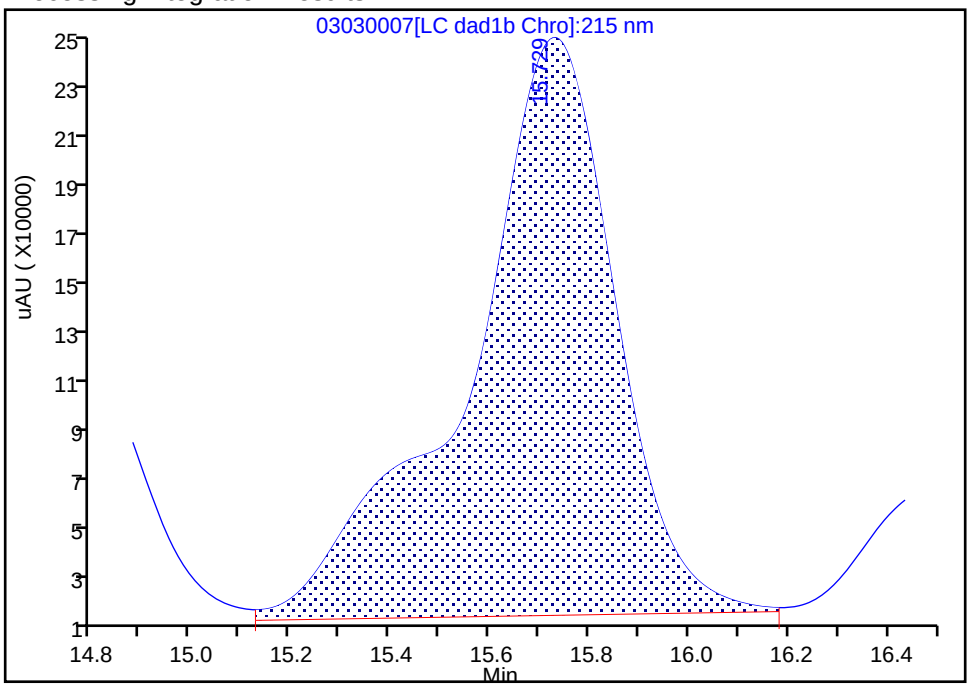
Data File:	\\chromna\denver\chromdata\g2_luna\20200303-89749.b\03030007.d				
Injection Date:	03-Mar-2020 18:01:29	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 8				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:		Detector	LC DAD1B, 215 nm		

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

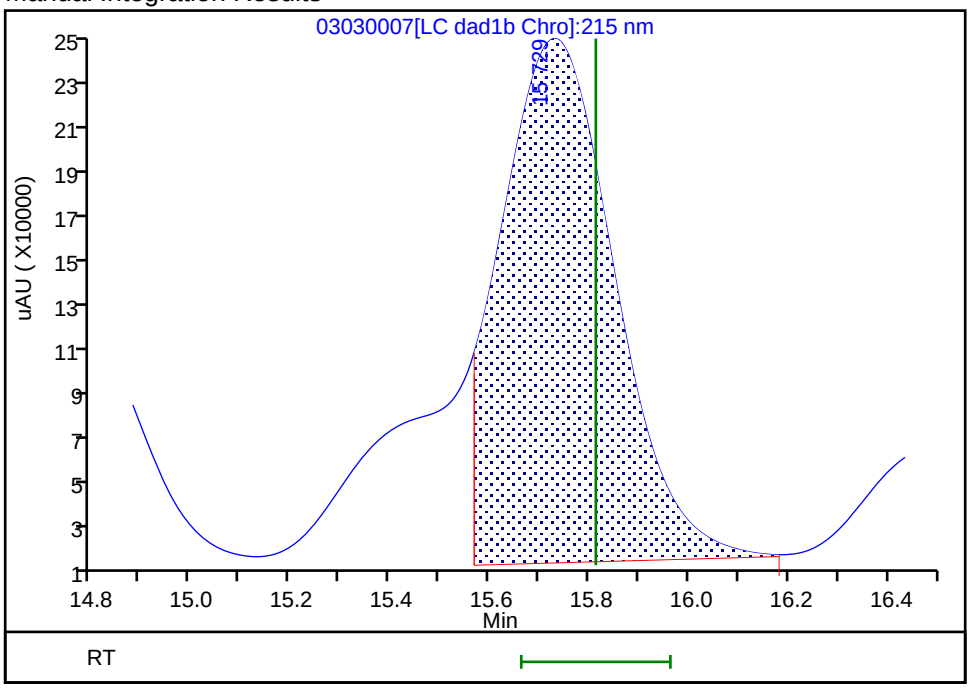
Processing Integration Results

RT: 15.73
Area: 4686578
Amount: 26.504305
Amount Units: ug/ml



Manual Integration Results

RT: 15.73
Area: 3584879
Amount: 25.532271
Amount Units: ug/ml



Reviewer: beckerc, 04-Mar-2020 08:29:36

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030008.D				
Lims ID:	IC FULL 7				
Client ID:					
Sample Type:	IC	Calib Level:	7		
Inject. Date:	03-Mar-2020 18:36:30	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC FULL 7				
Misc. Info.:	280-0089749-008				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub6				
Method:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2020 11:40:04	Calib Date:	04-Mar-2020 03:21:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030023.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0319				

First Level Reviewer: beckerc Date: 04-Mar-2020 08:12:04

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	4.343	4.360	-0.017	465813	1.00	0.9775	
2 2,4-diamino-6-nitrotoluene	1	4.910	4.913	-0.003	290042	1.00	1.00	
5 2,4,6-Trinitrophenol	1	5.510	5.587	-0.077	174722	1.00	1.09	
6 HMX	1	6.936	6.947	-0.011	182080	1.00	1.04	
8 RDX	1	9.096	9.120	-0.024	221782	1.00	1.05	
9 Nitrobenzene	1	12.090	12.113	-0.023	408992	1.00	1.06	
$ 10 1,2-Dinitrobenzene	1	13.010	13.033	-0.023	290041	1.00	1.06	
11 3,5-Dinitroaniline	1	14.823	14.853	-0.030	548705	1.00	1.01	
12 1,3-Dinitrobenzene	1	15.530	15.553	-0.023	675995	1.00	1.05	
13 Nitroglycerin	2	15.790	15.813	-0.023	1460853	10.0	10.3	M
14 o-Nitrotoluene	1	16.556	16.580	-0.024	244658	1.00	1.08	
15 p-Nitrotoluene	1	16.830	16.853	-0.023	231933	1.00	1.07	
16 4-Amino-2,6-dinitrotoluene	1	17.130	17.160	-0.030	337232	1.00	1.05	
17 m-Nitrotoluene	1	17.763	17.787	-0.024	233767	1.00	1.03	
18 2-Amino-4,6-dinitrotoluene	1	17.976	18.013	-0.037	512591	1.00	1.00	
19 1,3,5-Trinitrobenzene	1	18.890	18.907	-0.017	476135	1.00	1.03	
20 2,6-Dinitrotoluene	1	19.830	19.853	-0.023	296336	1.00	1.05	
21 2,4-Dinitrotoluene	1	20.296	20.320	-0.024	625672	1.00	1.05	
22 Tetryl	1	23.563	23.580	-0.017	370076	1.00	1.06	
23 2,4,6-Trinitrotoluene	1	24.696	24.713	-0.017	424083	1.00	1.05	
24 PETN	2	25.283	25.293	-0.010	1450880	10.0	10.1	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

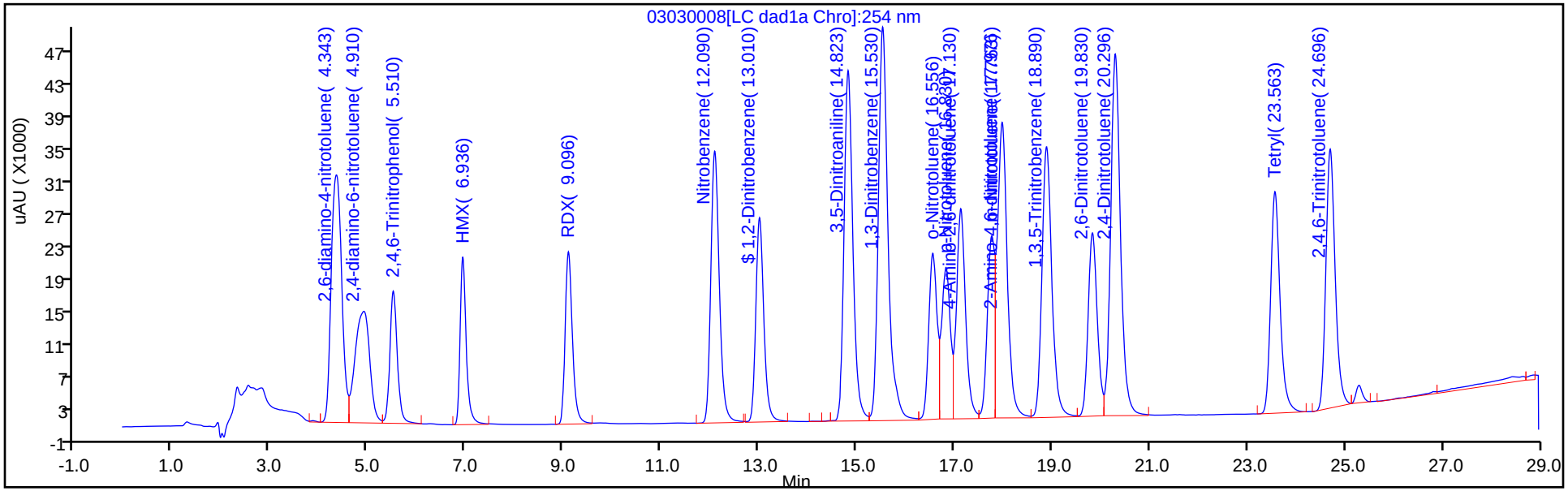
8330IntermStk_00061	Amount Added: 100.00	Units: uL
8330_ADDs_00023	Amount Added: 50.00	Units: uL

Report Date: 05-Mar-2020 11:40:05 Chrom Revision: 2.3 19-Feb-2020 16:45:46

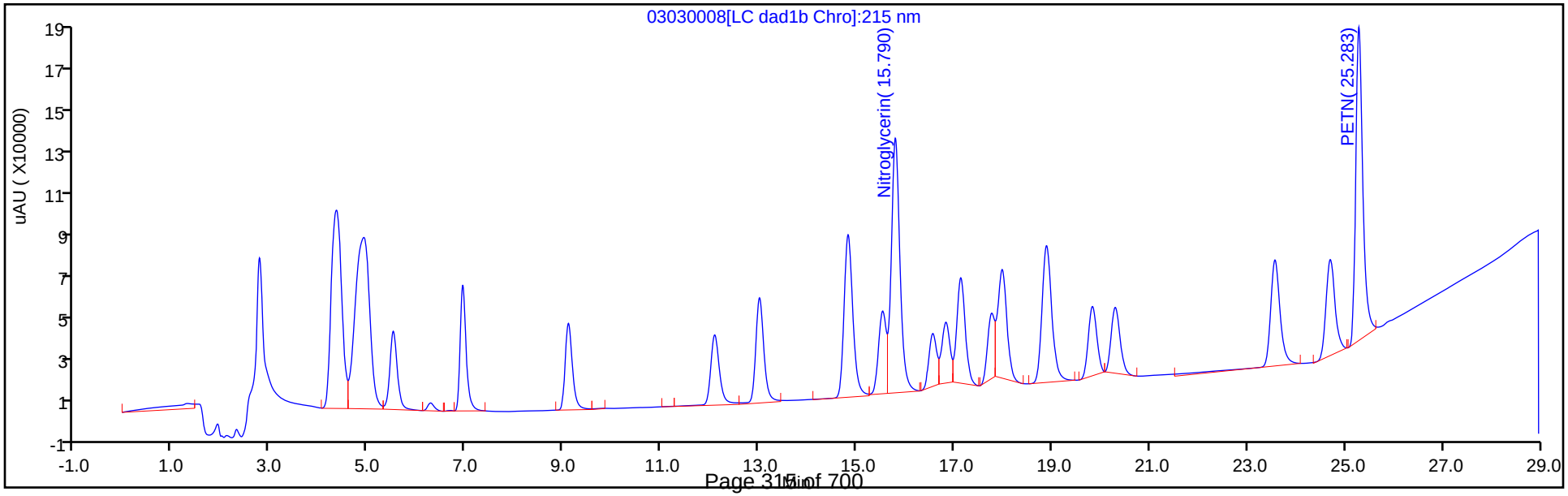
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\g2_luna\20200303-89749.b\03030008.d				
Injection Date:	03-Mar-2020 18:36:30	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC FULL 7			Worklist Smp#:	8
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 Peak: 1



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

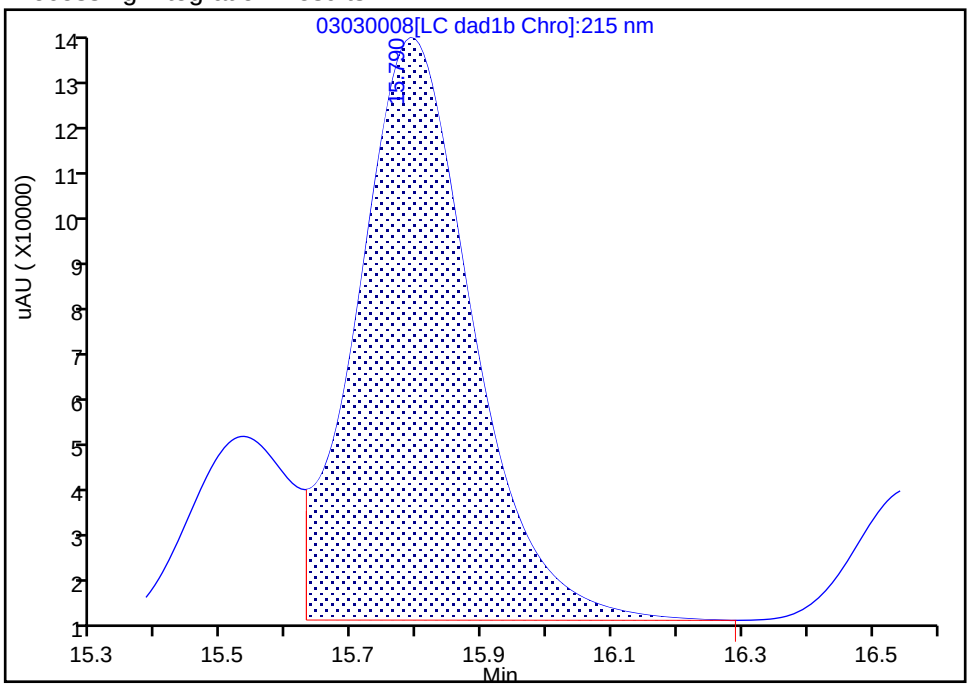
Data File:	\\chromna\denver\chromdata\g2_luna\20200303-89749.b\03030008.d				
Injection Date:	03-Mar-2020 18:36:30	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 7				
Client ID:					
Operator ID:	CB	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:		Detector	LC DAD1B, 215 nm		

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

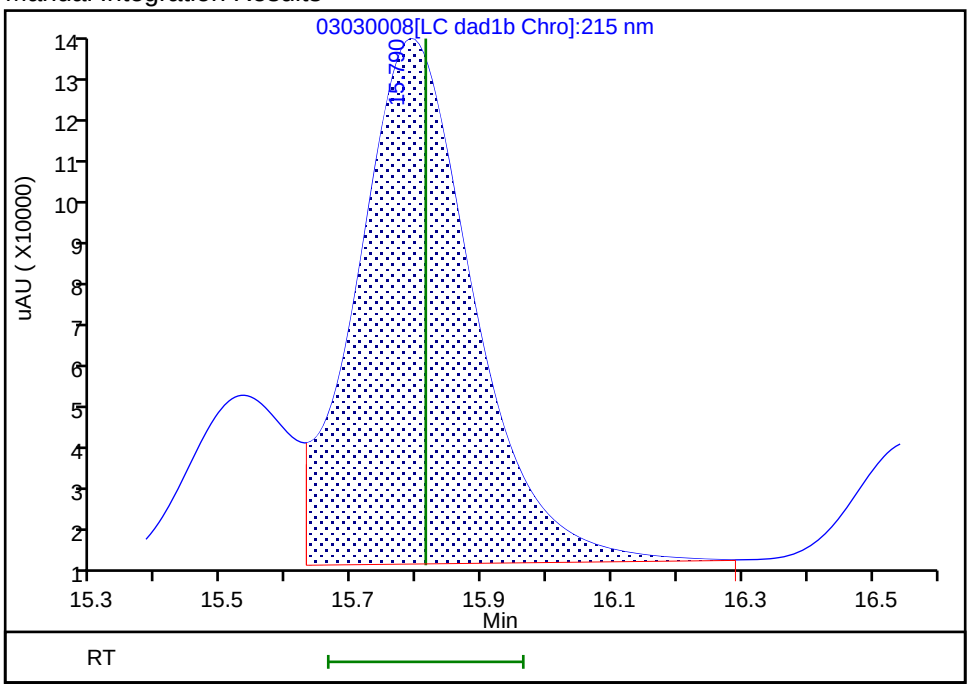
Processing Integration Results

RT: 15.79
Area: 1433292
Amount: 10.161071
Amount Units: ug/ml



Manual Integration Results

RT: 15.79
Area: 1460853
Amount: 10.326639
Amount Units: ug/ml



Reviewer: beckerc, 04-Mar-2020 08:29:55
Audit Action: Assigned New Baseline Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030009.D				
Lims ID:	IC FULL 6				
Client ID:					
Sample Type:	IC	Calib Level:	6		
Inject. Date:	03-Mar-2020 19:11:30	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC FULL 6				
Misc. Info.:	280-0089749-009				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub6				
Method:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2020 11:40:06	Calib Date:	04-Mar-2020 03:21:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030023.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0319				

First Level Reviewer: beckerc Date: 04-Mar-2020 08:22:50

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	4.352	4.360	-0.008	320883	0.7000	0.6734	
2 2,4-diamino-6-nitrotoluene	1	4.918	4.913	0.005	201934	0.7000	0.6999	
5 2,4,6-Trinitrophenol	1	5.558	5.587	-0.029	120919	0.7000	0.7525	
6 HMX	1	6.945	6.947	-0.002	126982	0.7000	0.7230	
8 RDX	1	9.112	9.120	-0.008	154271	0.7000	0.7246	
9 Nitrobenzene	1	12.105	12.113	-0.008	285588	0.7028	0.7345	
$ 10 1,2-Dinitrobenzene	1	13.025	13.033	-0.008	200259	0.7000	0.7253	
11 3,5-Dinitroaniline	1	14.845	14.853	-0.008	377286	0.7000	0.6966	
12 1,3-Dinitrobenzene	1	15.551	15.553	-0.002	468945	0.7014	0.7241	
13 Nitroglycerin	2	15.811	15.813	-0.002	1031302	7.00	7.25	M
14 o-Nitrotoluene	1	16.578	16.580	-0.002	170738	0.7000	0.7485	
15 p-Nitrotoluene	1	16.851	16.853	-0.002	160896	0.7014	0.7401	
16 4-Amino-2,6-dinitrotoluene	1	17.151	17.160	-0.009	233917	0.7007	0.7253	
17 m-Nitrotoluene	1	17.785	17.787	-0.002	168584	0.7007	0.7421	
18 2-Amino-4,6-dinitrotoluene	1	18.005	18.013	-0.008	349642	0.7028	0.7000	
19 1,3,5-Trinitrobenzene	1	18.905	18.907	-0.002	331156	0.7014	0.7118	
20 2,6-Dinitrotoluene	1	19.851	19.853	-0.002	205117	0.7028	0.7255	
21 2,4-Dinitrotoluene	1	20.318	20.320	-0.002	434095	0.7028	0.7228	
22 Tetryl	1	23.585	23.580	0.005	257925	0.7014	0.7380	
23 2,4,6-Trinitrotoluene	1	24.712	24.713	-0.001	295554	0.7028	0.7316	
24 PETN	2	25.292	25.293	-0.001	1003662	7.00	6.98	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

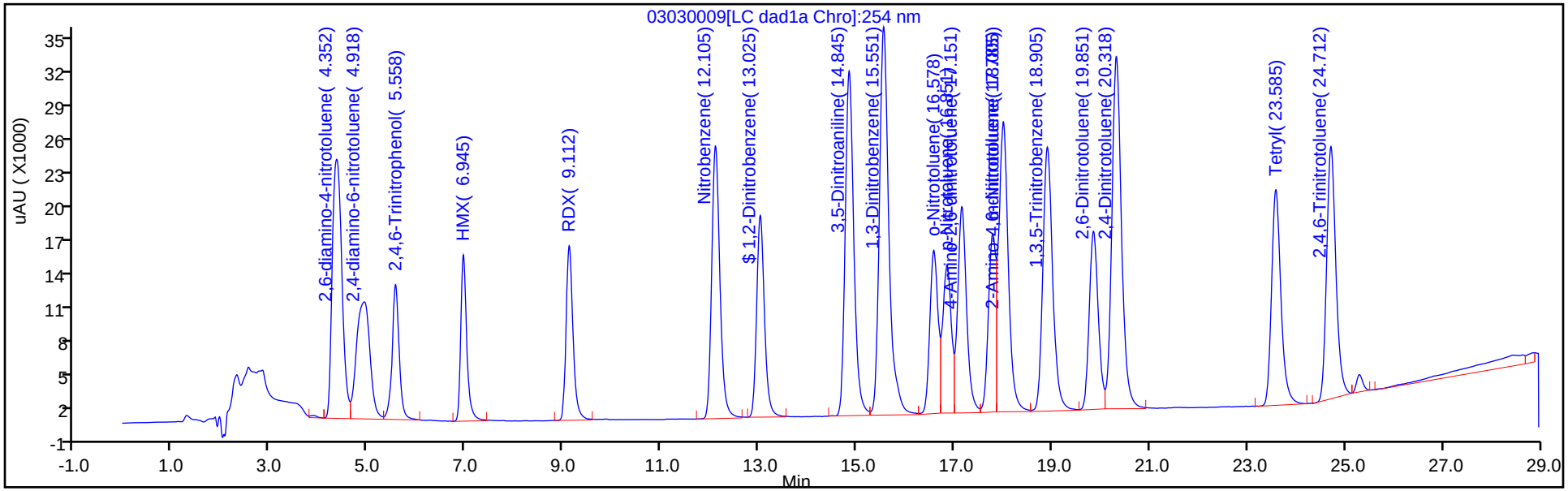
8330_ADDs_00023	Amount Added:	35.00	Units: uL
8330IntermStk_00061	Amount Added:	70.00	Units: uL

Report Date: 05-Mar-2020 11:40:06 Chrom Revision: 2.3 19-Feb-2020 16:45:46

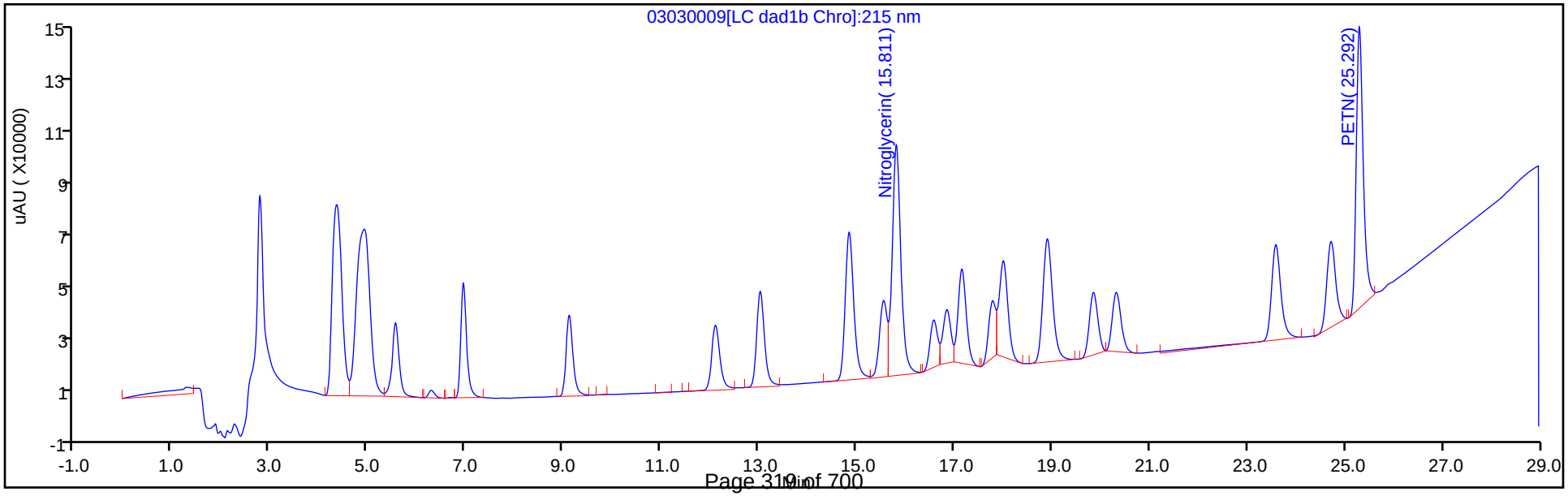
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\g2_luna\20200303-89749.b\03030009.d				
Injection Date:	03-Mar-2020 19:11:30	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC FULL 6			Worklist Smp#:	9
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

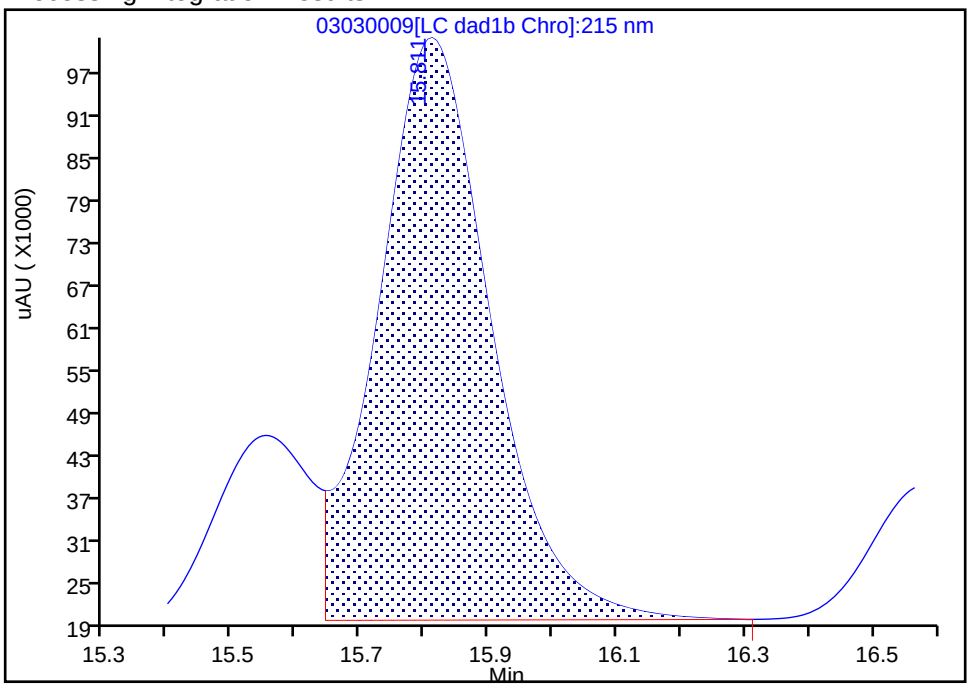
Data File:	\\chromna\denver\chromdata\g2_luna\20200303-89749.b\03030009.d				
Injection Date:	03-Mar-2020 19:11:30	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:		Detector	LC DAD1B, 215 nm		

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

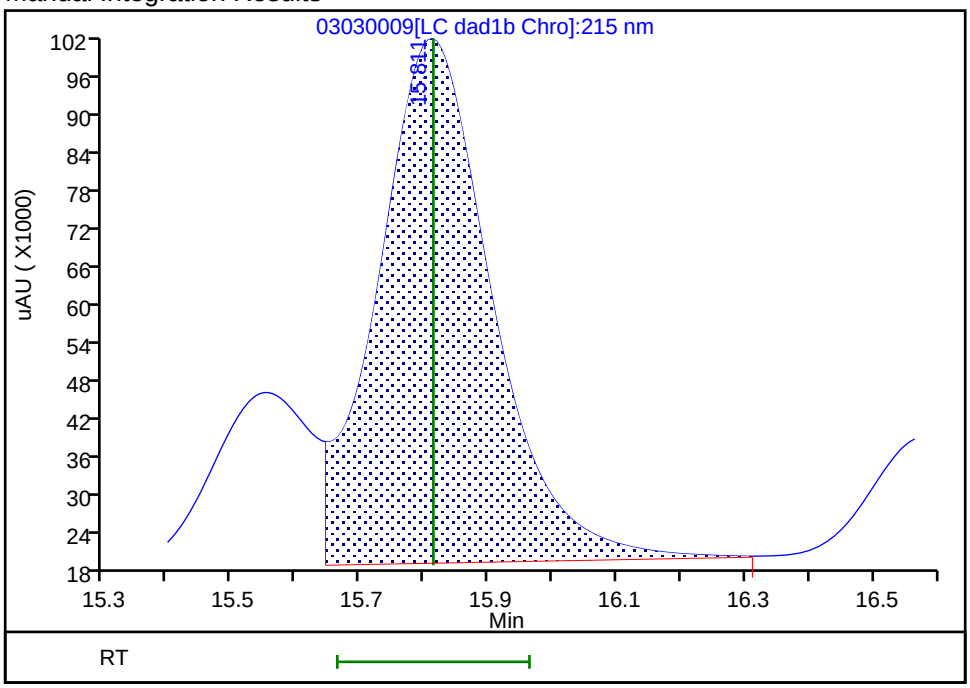
Processing Integration Results

RT: 15.81
Area: 1002262
Amount: 5.606804
Amount Units: ug/ml



Manual Integration Results

RT: 15.81
Area: 1031302
Amount: 7.251537
Amount Units: ug/ml



Reviewer: beckerc, 04-Mar-2020 08:22:41
Audit Action: Assigned New Baseline Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030010.D				
Lims ID:	IC FULL 5				
Client ID:					
Sample Type:	IC	Calib Level:	5		
Inject. Date:	03-Mar-2020 19:46:29	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC FULL 5				
Misc. Info.:	280-0089749-010				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub6				
Method:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2020 11:40:07	Calib Date:	04-Mar-2020 03:21:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030023.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0319				

First Level Reviewer: beckerc Date: 04-Mar-2020 08:23:14

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	4.360	4.360	0.000	186279	0.4000	0.3909	
2 2,4-diamino-6-nitrotoluene	1	4.913	4.913	0.000	115169	0.4000	0.3995	
5 2,4,6-Trinitrophenol	1	5.587	5.587	0.000	66900	0.4000	0.4123	
6 HMX	1	6.947	6.947	0.000	72696	0.4000	0.4093	
8 RDX	1	9.120	9.120	0.000	88543	0.4000	0.4102	
9 Nitrobenzene	1	12.113	12.113	0.000	162066	0.4016	0.4126	
$ 10 1,2-Dinitrobenzene	1	13.033	13.033	0.000	116432	0.4000	0.4161	
11 3,5-Dinitroaniline	1	14.853	14.853	0.000	218697	0.4000	0.4033	
12 1,3-Dinitrobenzene	1	15.553	15.553	0.000	268452	0.4008	0.4097	
13 Nitroglycerin	2	15.813	15.813	0.000	585948	4.00	4.06	M
14 o-Nitrotoluene	1	16.580	16.580	0.000	95809	0.4000	0.4159	
15 p-Nitrotoluene	1	16.853	16.853	0.000	92165	0.4008	0.4198	
16 4-Amino-2,6-dinitrotoluene	1	17.160	17.160	0.000	133443	0.4004	0.4098	
17 m-Nitrotoluene	1	17.787	17.787	0.000	96326	0.4004	0.4205	
18 2-Amino-4,6-dinitrotoluene	1	18.013	18.013	0.000	198992	0.4016	0.4048	
19 1,3,5-Trinitrobenzene	1	18.907	18.907	0.000	190066	0.4008	0.4048	
20 2,6-Dinitrotoluene	1	19.853	19.853	0.000	117549	0.4016	0.4115	
21 2,4-Dinitrotoluene	1	20.320	20.320	0.000	248133	0.4016	0.4088	
22 Tetryl	1	23.580	23.580	0.000	146610	0.4008	0.4137	
23 2,4,6-Trinitrotoluene	1	24.713	24.713	0.000	168457	0.4016	0.4129	
24 PETN	2	25.293	25.293	0.000	573634	4.00	3.95	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

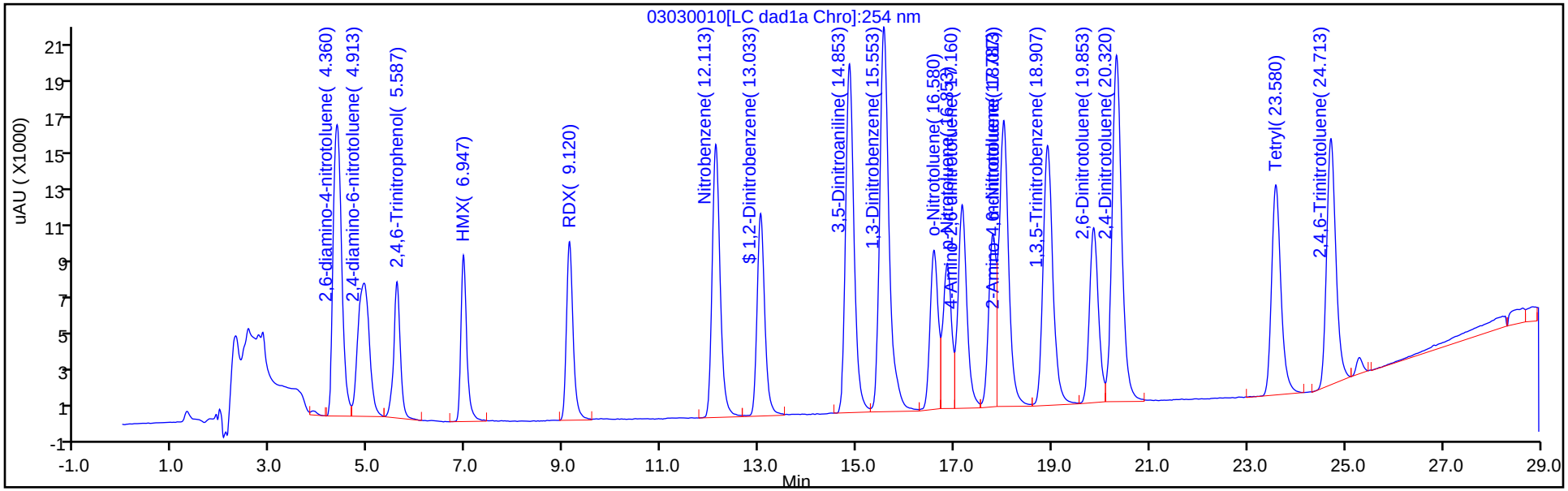
8330IntermStk_00061	Amount Added: 40.00	Units: uL
8330_ADDs_00023	Amount Added: 20.00	Units: uL

Report Date: 05-Mar-2020 11:40:07 Chrom Revision: 2.3 19-Feb-2020 16:45:46

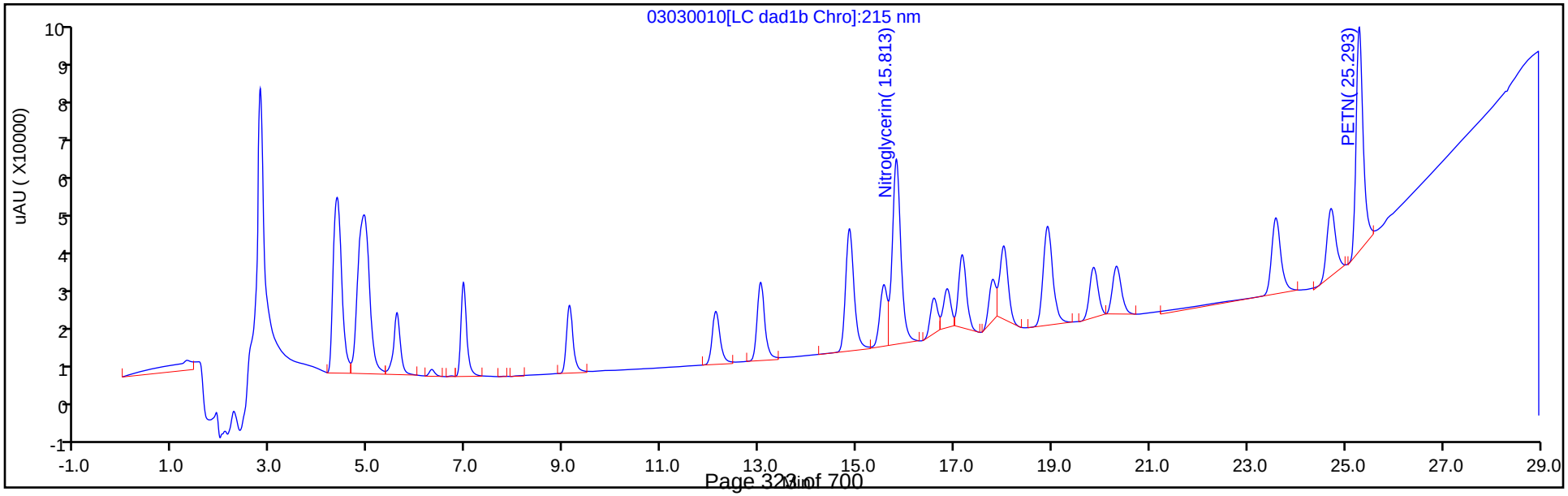
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\g2_luna\20200303-89749.b\03030010.d				
Injection Date:	03-Mar-2020 19:46:29	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC FULL 5			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 Peak: 1



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

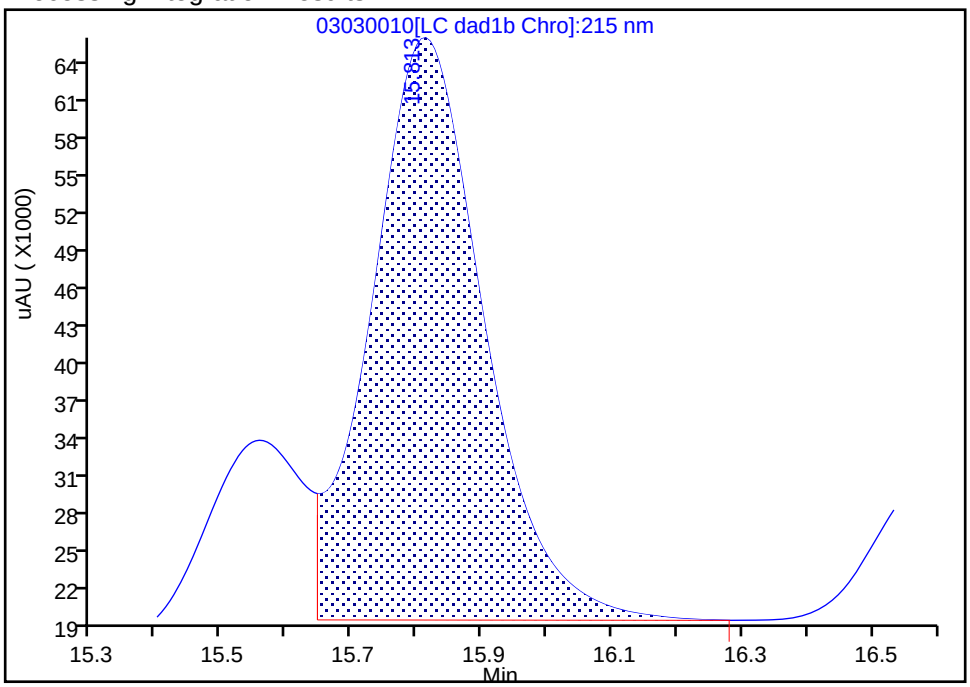
Data File:	\\chromna\denver\chromdata\g2_luna\20200303-89749.b\03030010.d				
Injection Date:	03-Mar-2020 19:46:29	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 5				
Client ID:					
Operator ID:	CB	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:		Detector	LC DAD1B, 215 nm		

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

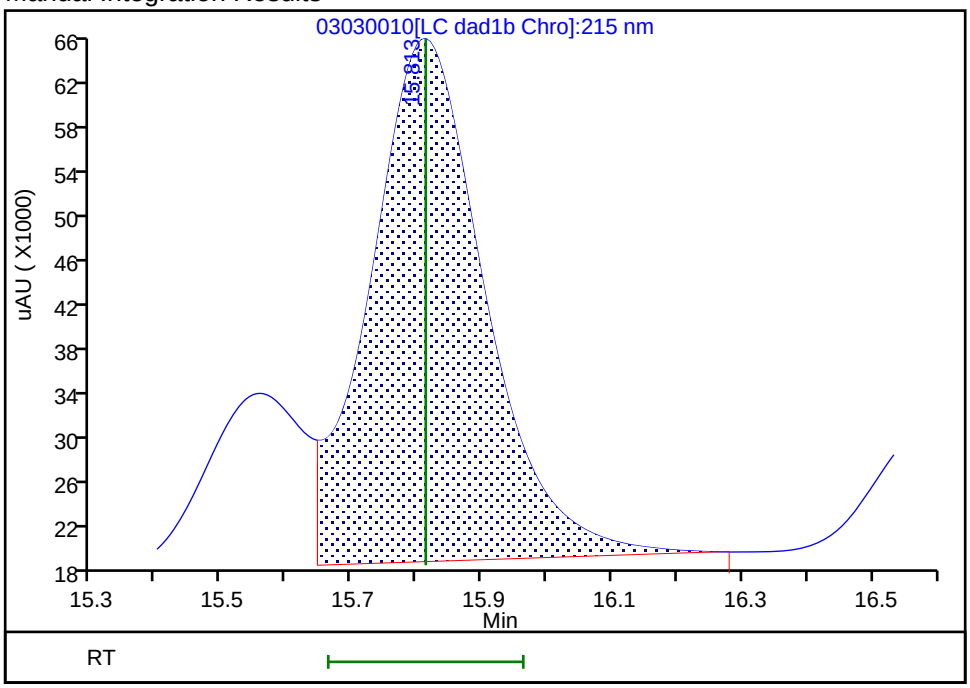
Processing Integration Results

RT: 15.81
Area: 563566
Amount: 3.143553
Amount Units: ug/ml



Manual Integration Results

RT: 15.81
Area: 585948
Amount: 4.063305
Amount Units: ug/ml



Reviewer: beckerc, 04-Mar-2020 08:23:09

Audit Action: Assigned New Baseline Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030011.D				
Lims ID:	IC FULL 4				
Client ID:					
Sample Type:	IC	Calib Level:	4		
Inject. Date:	03-Mar-2020 20:21:37	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC FULL 4				
Misc. Info.:	280-0089749-011				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub6				
Method:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2020 11:40:08	Calib Date:	04-Mar-2020 03:21:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030023.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0319				

First Level Reviewer: beckerc Date: 05-Mar-2020 08:50:22

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	4.364	4.360	0.004	110706	0.2500	0.2323	
2 2,4-diamino-6-nitrotoluene	1	4.917	4.913	0.004	68062	0.2500	0.2365	
5 2,4,6-Trinitrophenol	1	5.617	5.587	0.030	40098	0.2500	0.2435	
6 HMX	1	6.957	6.947	0.010	44874	0.2500	0.2484	
8 RDX	1	9.130	9.120	0.010	54749	0.2500	0.2486	
9 Nitrobenzene	1	12.124	12.113	0.011	96431	0.2510	0.2415	
$ 10 1,2-Dinitrobenzene	1	13.037	13.033	0.004	71040	0.2500	0.2487	
11 3,5-Dinitroaniline	1	14.857	14.853	0.004	128545	0.2500	0.2366	
12 1,3-Dinitrobenzene	1	15.564	15.553	0.011	163979	0.2505	0.2458	
13 Nitroglycerin	2	15.817	15.813	0.004	371375	2.50	2.53	M
14 o-Nitrotoluene	1	16.590	16.580	0.010	56559	0.2500	0.2417	
15 p-Nitrotoluene	1	16.864	16.853	0.011	54442	0.2505	0.2440	
16 4-Amino-2,6-dinitrotoluene	1	17.164	17.160	0.004	82313	0.2503	0.2492	
17 m-Nitrotoluene	1	17.790	17.787	0.003	57201	0.2503	0.2464	
18 2-Amino-4,6-dinitrotoluene	1	18.017	18.013	0.004	123151	0.2510	0.2507	
19 1,3,5-Trinitrobenzene	1	18.910	18.907	0.003	118691	0.2505	0.2495	
20 2,6-Dinitrotoluene	1	19.857	19.853	0.004	72212	0.2510	0.2489	
21 2,4-Dinitrotoluene	1	20.324	20.320	0.004	153397	0.2510	0.2488	
22 Tetryl	1	23.584	23.580	0.004	90558	0.2505	0.2504	
23 2,4,6-Trinitrotoluene	1	24.710	24.713	-0.003	102827	0.2510	0.2484	
24 PETN	2	25.290	25.293	-0.003	340351	2.50	2.31	M

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

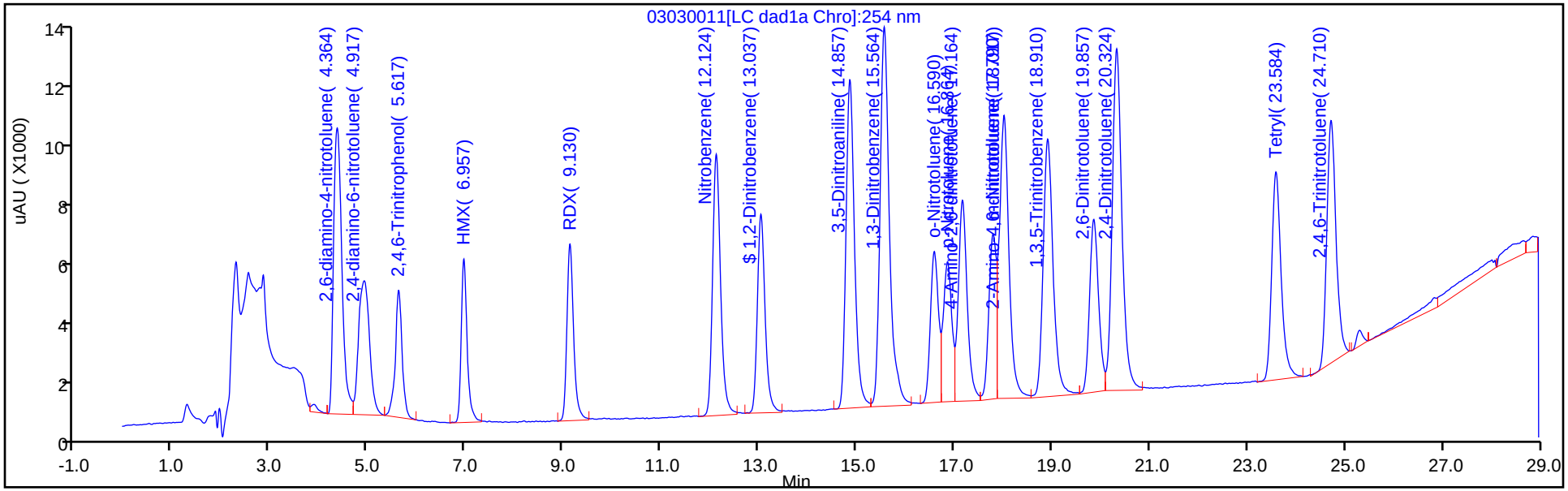
8330IntermStk_00061	Amount Added:	25.00	Units: uL
8330_ADDs_00023	Amount Added:	12.50	Units: uL

Report Date: 05-Mar-2020 11:40:08 Chrom Revision: 2.3 19-Feb-2020 16:45:46

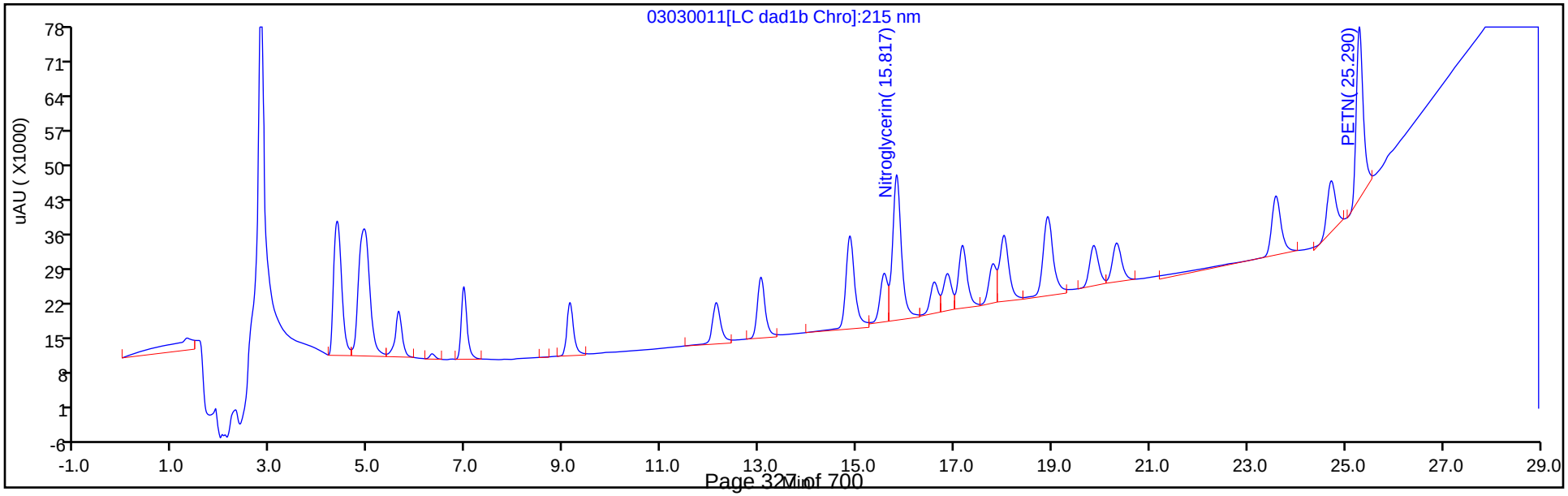
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\g2_luna\20200303-89749.b\03030011.d				
Injection Date:	03-Mar-2020 20:21:37	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC FULL 4			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 Peak: 1



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

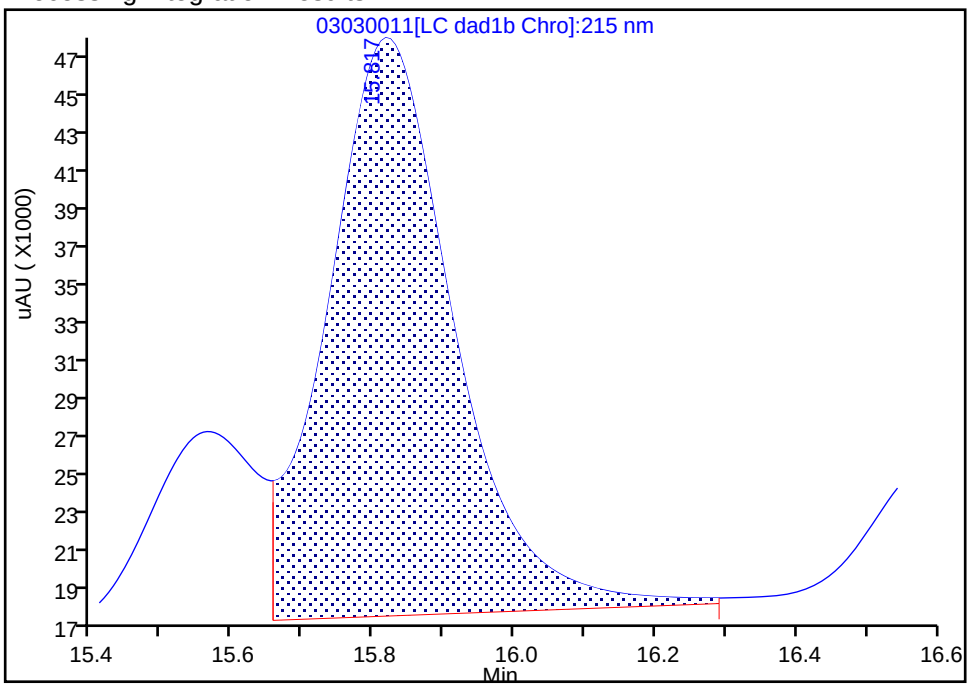
Data File:	\\chromna\denver\chromdata\g2_luna\20200303-89749.b\03030011.d				
Injection Date:	03-Mar-2020 20:21:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:		Detector	LC DAD1B, 215 nm		

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

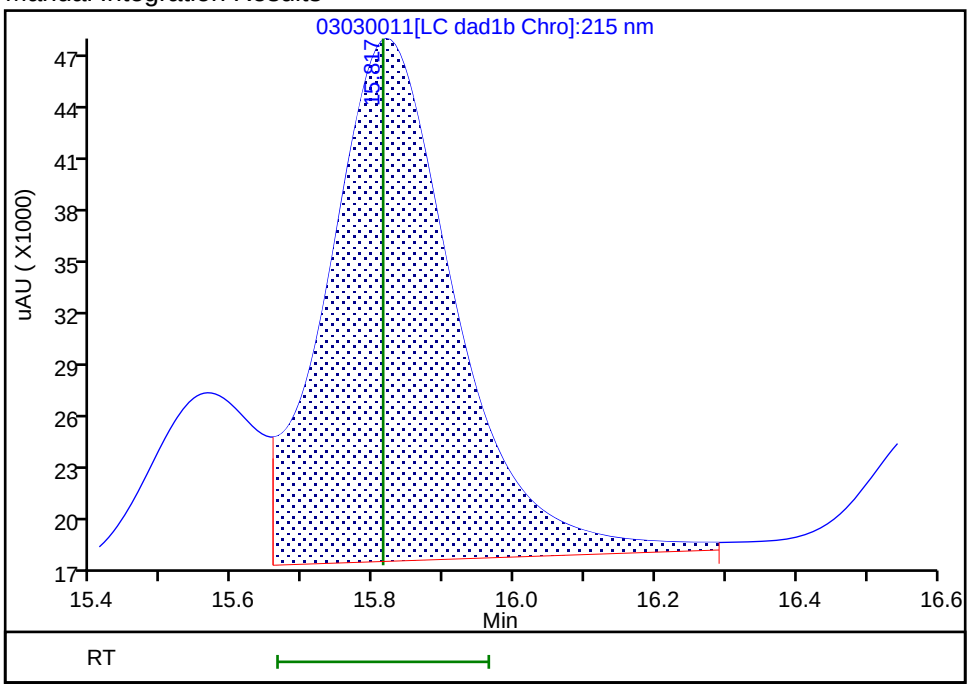
Processing Integration Results

RT: 15.82
Area: 365808
Amount: 2.032536
Amount Units: ug/ml



Manual Integration Results

RT: 15.82
Area: 371375
Amount: 2.527204
Amount Units: ug/ml



Reviewer: beckerc, 04-Mar-2020 08:23:53
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

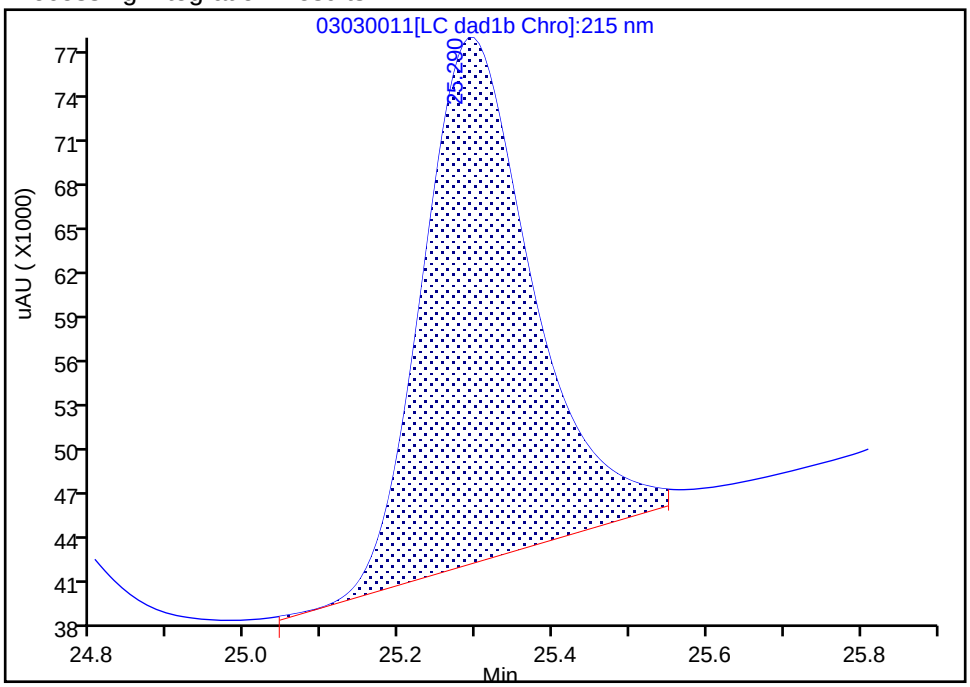
Data File:	\\chromna\denver\chromdata\g2_luna\20200303-89749.b\03030011.d				
Injection Date:	03-Mar-2020 20:21:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:		Detector	LC DAD1B, 215 nm		

24 PETN, CAS: 78-11-5

Signal: 1

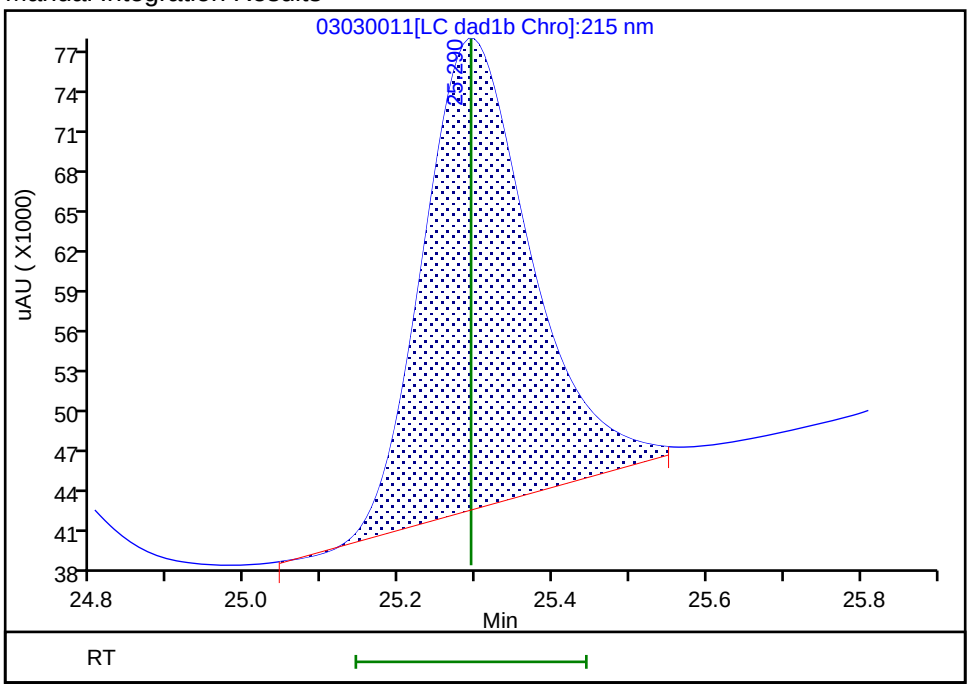
Processing Integration Results

RT: 25.29
Area: 349715
Amount: 2.284475
Amount Units: ug/ml



Manual Integration Results

RT: 25.29
Area: 340351
Amount: 2.313232
Amount Units: ug/ml



Reviewer: beckerc, 04-Mar-2020 08:23:43
Audit Action: Assigned New Baseline Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030012.D				
Lims ID:	IC FULL 3				
Client ID:					
Sample Type:	IC	Calib Level:	3		
Inject. Date:	03-Mar-2020 20:56:37	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC FULL 3				
Misc. Info.:	280-0089749-012				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub6				
Method:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2020 11:40:09	Calib Date:	04-Mar-2020 03:21:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030023.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0319				

First Level Reviewer: beckerc Date: 04-Mar-2020 08:24:34

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 2,6-diamino-4-nitrotoluene	1	4.359	4.360	-0.001	47982	0.1000	0.1007	
	2 2,4-diamino-6-nitrotoluene	1	4.913	4.913	0.000	30408	0.1000	0.1061	
	5 2,4,6-Trinitrophenol	1	5.639	5.587	0.052	16293	0.1000	0.0936	
	6 HMX	1	6.953	6.947	0.006	18555	0.1000	0.0963	
	8 RDX	1	9.126	9.120	0.006	23229	0.1000	0.0978	
	9 Nitrobenzene	1	12.126	12.113	0.013	40194	0.1004	0.0950	
$	10 1,2-Dinitrobenzene	1	13.039	13.033	0.006	29331	0.1000	0.0949	
	11 3,5-Dinitroaniline	1	14.859	14.853	0.006	55437	0.1000	0.1014	
	12 1,3-Dinitrobenzene	1	15.566	15.553	0.013	70115	0.1002	0.0985	
	13 Nitroglycerin	2	15.819	15.813	0.006	156826	1.00	0.99	
	14 o-Nitrotoluene	1	16.586	16.580	0.006	24201	0.1000	0.0981	
	15 p-Nitrotoluene	1	16.859	16.853	0.006	22773	0.1002	0.0964	
	16 4-Amino-2,6-dinitrotoluene	1	17.166	17.160	0.006	33842	0.1001	0.0970	
	17 m-Nitrotoluene	1	17.792	17.787	0.005	23418	0.1001	0.0960	
	18 2-Amino-4,6-dinitrotoluene	1	18.012	18.013	-0.001	51105	0.1004	0.1006	
	19 1,3,5-Trinitrobenzene	1	18.912	18.907	0.005	47833	0.1002	0.0953	
	20 2,6-Dinitrotoluene	1	19.852	19.853	-0.001	29966	0.1004	0.0974	
	21 2,4-Dinitrotoluene	1	20.319	20.320	-0.001	64047	0.1004	0.0979	
	22 Tetryl	1	23.579	23.580	-0.001	36807	0.1002	0.0938	
	23 2,4,6-Trinitrotoluene	1	24.706	24.713	-0.007	42666	0.1004	0.0975	
	24 PETN	2	25.293	25.293	0.000	137231	1.00	0.8842	M

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

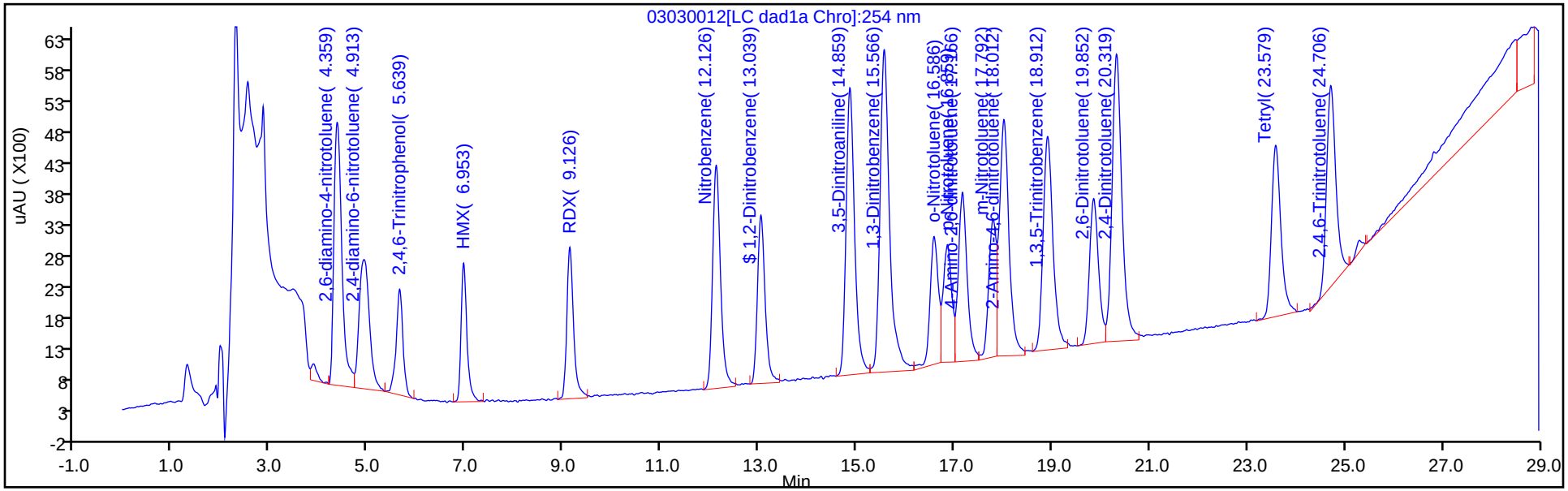
8330IntermStk_00061	Amount Added: 10.00	Units: uL
8330_ADDs_00023	Amount Added: 5.00	Units: uL

Report Date: 05-Mar-2020 11:40:09 Chrom Revision: 2.3 19-Feb-2020 16:45:46

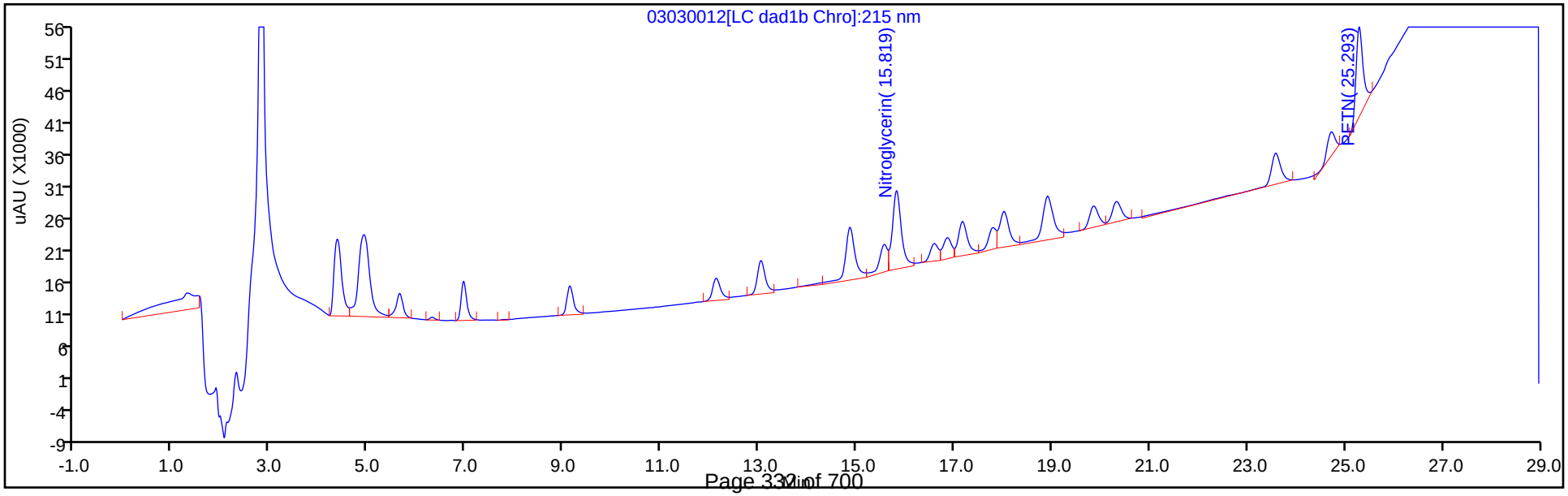
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\g2_luna\20200303-89749.b\03030012.d				
Injection Date:	03-Mar-2020 20:56:37	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC FULL 3			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 Peak: 1



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

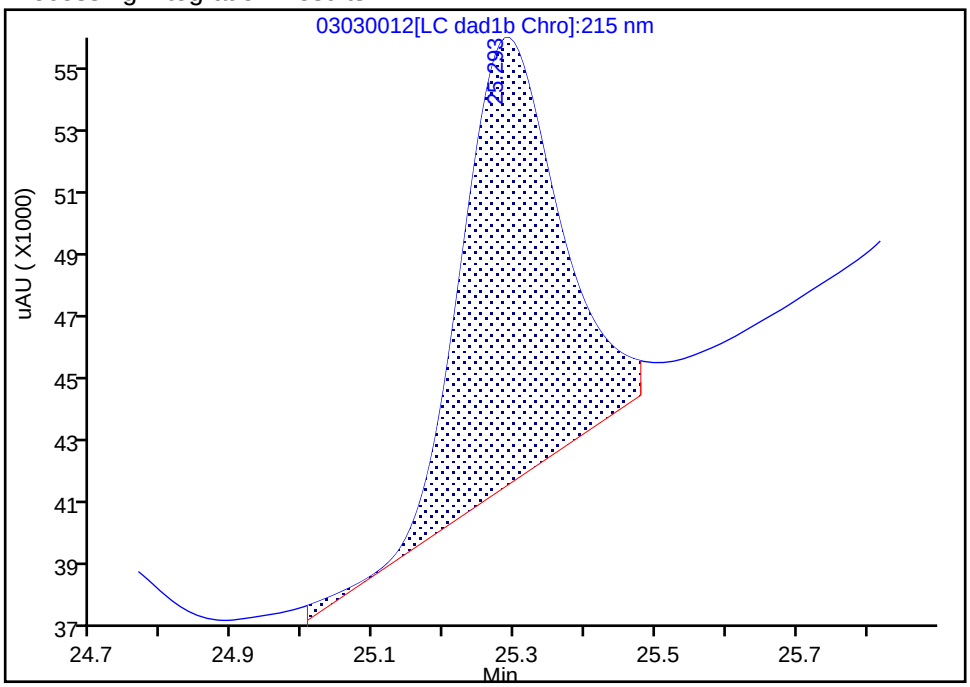
Data File:	\\chromna\denver\chromdata\g2_luna\20200303-89749.b\03030012.d				
Injection Date:	03-Mar-2020 20:56:37	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:		Detector	LC DAD1B, 215 nm		

24 PETN, CAS: 78-11-5

Signal: 1

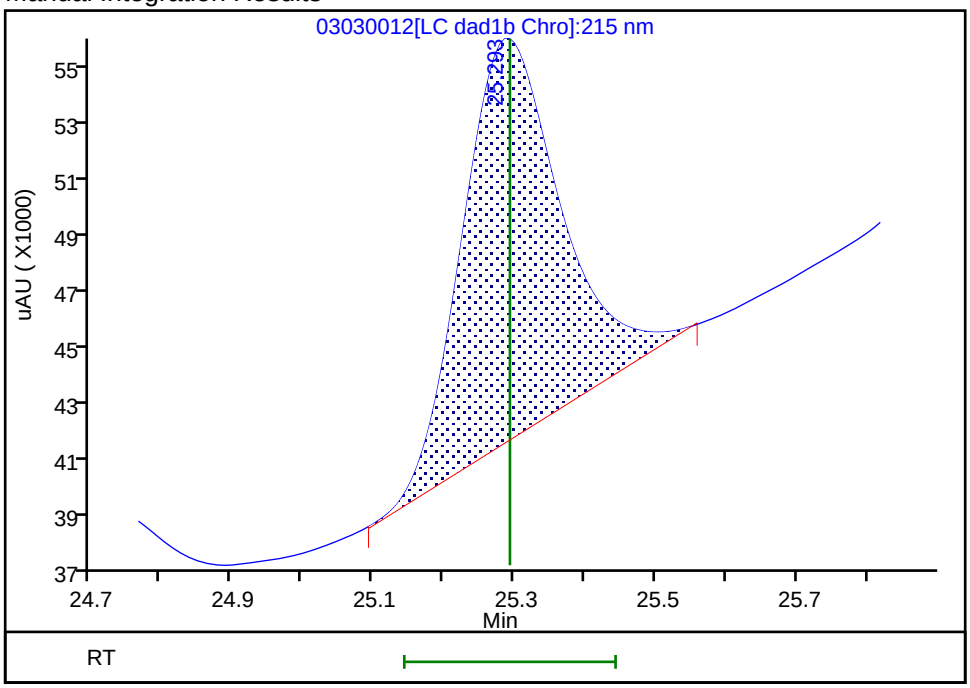
Processing Integration Results

RT: 25.29
Area: 137961
Amount: 0.771631
Amount Units: ug/ml



Manual Integration Results

RT: 25.29
Area: 137231
Amount: 0.884195
Amount Units: ug/ml



Reviewer: beckerc, 04-Mar-2020 08:24:16

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030013.D				
Lims ID:	IC FULL 2				
Client ID:					
Sample Type:	IC	Calib Level:	2		
Inject. Date:	03-Mar-2020 21:31:32	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC FULL 2				
Misc. Info.:	280-0089749-013				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub6				
Method:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2020 11:40:09	Calib Date:	04-Mar-2020 03:21:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030023.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0319				

First Level Reviewer: beckerc Date: 04-Mar-2020 08:25:34

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.369	4.360	0.009	24893	0.0500	0.0522	
2 2,4-diamino-6-nitrotoluene	1	4.916	4.913	0.003	15782	0.0500	0.0555	
5 2,4,6-Trinitrophenol	1	5.669	5.587	0.082	8266	0.0500	0.0430	
6 HMX	1	6.963	6.947	0.016	9479	0.0500	0.0439	
8 RDX	1	9.143	9.120	0.023	11532	0.0500	0.0419	
9 Nitrobenzene	1	12.129	12.113	0.016	19985	0.0502	0.0423	
$ 10 1,2-Dinitrobenzene	1	13.043	13.033	0.010	14905	0.0500	0.0417	
11 3,5-Dinitroaniline	1	14.863	14.853	0.010	27791	0.0500	0.0503	
12 1,3-Dinitrobenzene	1	15.569	15.553	0.016	34762	0.0501	0.0431	
13 Nitroglycerin	2	15.816	15.813	0.003	78861	0.5000	0.4331	
14 o-Nitrotoluene	1	16.596	16.580	0.016	11484	0.0500	0.0416	
15 p-Nitrotoluene	1	16.856	16.853	0.003	11346	0.0501	0.0432	
16 4-Amino-2,6-dinitrotoluene	1	17.169	17.160	0.009	17436	0.0501	0.0455	
17 m-Nitrotoluene	1	17.796	17.787	0.009	11864	0.0501	0.0446	
18 2-Amino-4,6-dinitrotoluene	1	18.016	18.013	0.003	25720	0.0502	0.0468	
19 1,3,5-Trinitrobenzene	1	18.909	18.907	0.002	26381	0.0501	0.0486	
20 2,6-Dinitrotoluene	1	19.856	19.853	0.003	15001	0.0502	0.0438	
21 2,4-Dinitrotoluene	1	20.323	20.320	0.003	31789	0.0502	0.0435	
22 Tetryl	1	23.589	23.580	0.009	18453	0.0501	0.0403	
23 2,4,6-Trinitrotoluene	1	24.716	24.713	0.003	20451	0.0502	0.0418	
24 PETN	2	25.296	25.293	0.003	64339	0.5000	0.3714	M

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

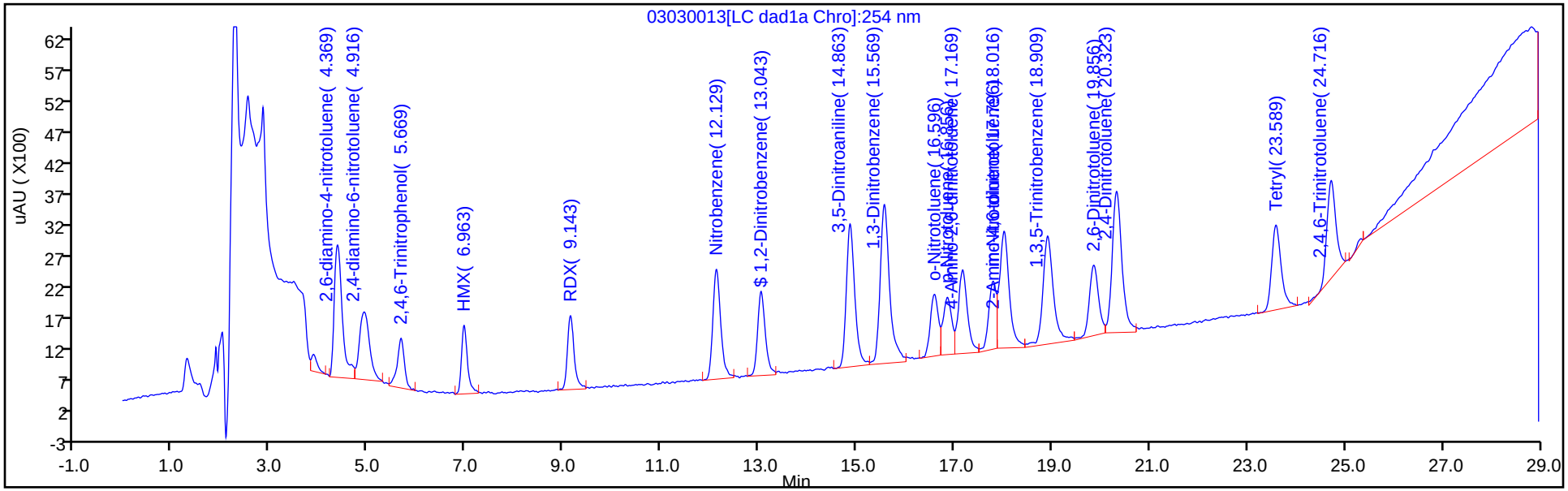
8330IntermStk_00061	Amount Added:	5.00	Units: uL
8330_ADDs_00023	Amount Added:	2.50	Units: uL

Report Date: 05-Mar-2020 11:40:10 Chrom Revision: 2.3 19-Feb-2020 16:45:46

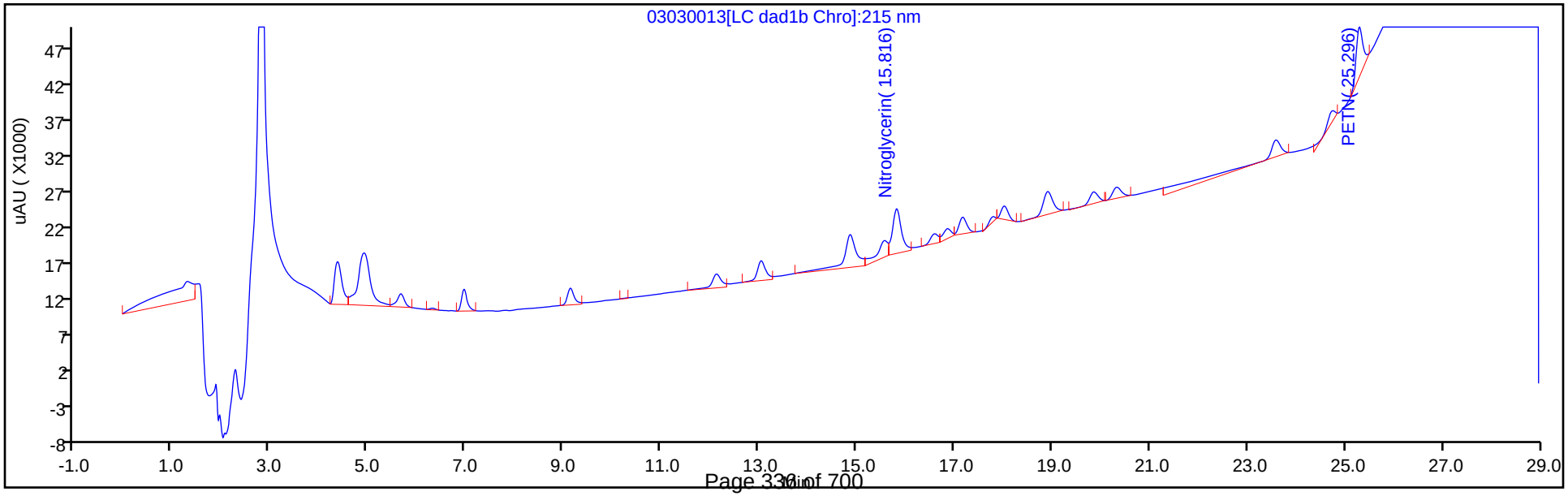
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\g2_luna\20200303-89749.b\03030013.d				
Injection Date:	03-Mar-2020 21:31:32	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC FULL 2			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 Peak: 1



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

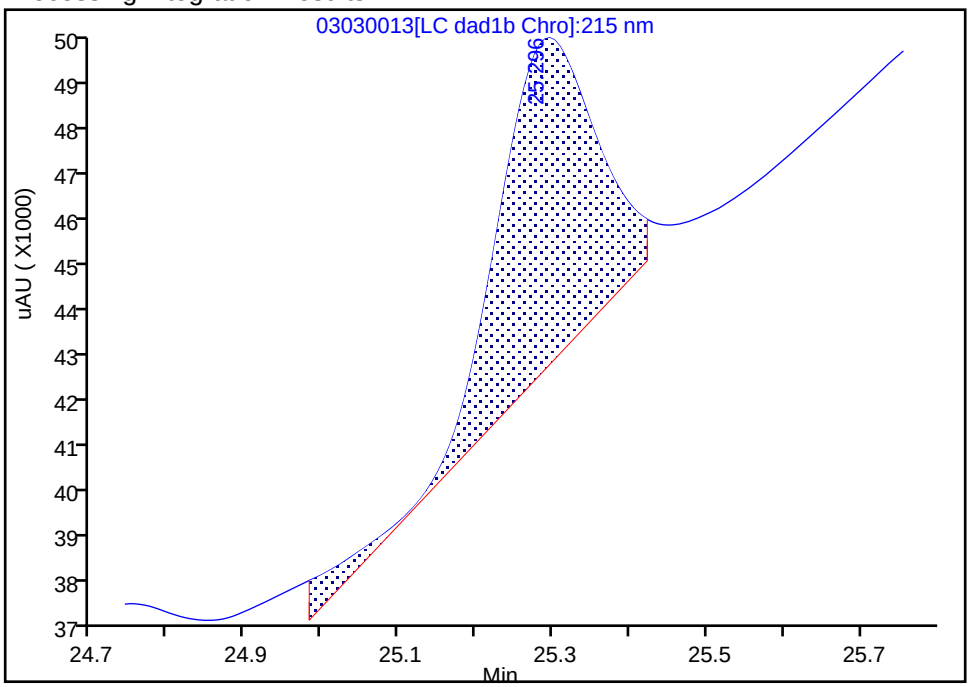
Data File:	\\chromna\denver\chromdata\g2_luna\20200303-89749.b\03030013.d				
Injection Date:	03-Mar-2020 21:31:32	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 2				
Client ID:					
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:		Detector	LC DAD1B, 215 nm		

24 PETN, CAS: 78-11-5

Signal: 1

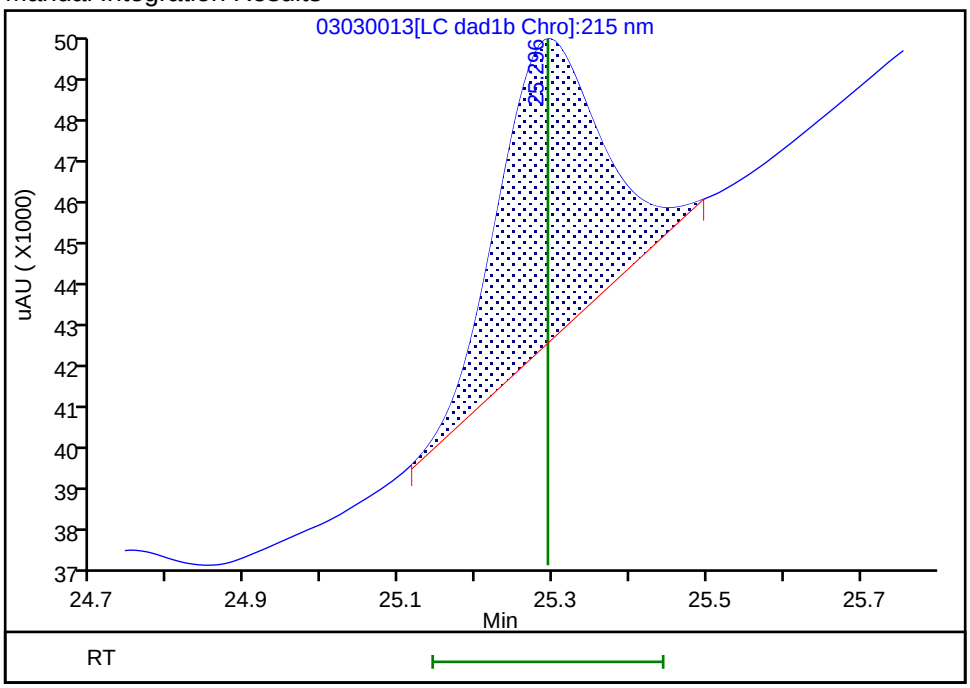
Processing Integration Results

RT: 25.30
Area: 62227
Amount: 0.229536
Amount Units: ug/ml



Manual Integration Results

RT: 25.30
Area: 64339
Amount: 0.371369
Amount Units: ug/ml



Reviewer: beckerc, 04-Mar-2020 08:24:58
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030014.D				
Lims ID:	IC FULL 1				
Client ID:					
Sample Type:	IC	Calib Level:	1		
Inject. Date:	03-Mar-2020 22:06:26	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC FULL 1				
Misc. Info.:	280-0089749-014				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub6				
Method:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2020 11:40:10	Calib Date:	04-Mar-2020 03:21:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030023.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0319				

First Level Reviewer: beckerc Date: 04-Mar-2020 08:28:16

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	4.359	4.360	-0.001	9912	0.0200	0.0208	M
2 2,4-diamino-6-nitrotoluene	1	4.912	4.913	-0.001	4831	0.0200	0.0176	M
5 2,4,6-Trinitrophenol	1	5.672	5.587	0.085	3072	0.0100	0.0103	
6 HMX	1	6.945	6.947	-0.002	3664	0.0100	0.0103	
8 RDX	1	9.125	9.120	0.005	4935	0.0100	0.0103	
9 Nitrobenzene	1	12.119	12.113	0.006	7752	0.0100	0.0104	
$ 10 1,2-Dinitrobenzene	1	13.032	13.033	-0.001	6405	0.0100	0.0104	
11 3,5-Dinitroaniline	1	14.852	14.853	-0.001	11388	0.0200	0.0200	M
12 1,3-Dinitrobenzene	1	15.559	15.553	0.006	13866	0.0100	0.0103	M
13 Nitroglycerin	2	15.812	15.813	-0.001	32688	0.1000	0.1026	M
14 o-Nitrotoluene	1	16.579	16.580	-0.001	4434	0.0100	0.0103	M
15 p-Nitrotoluene	1	16.852	16.853	-0.001	4289	0.0100	0.0103	M
16 4-Amino-2,6-dinitrotoluene	1	17.165	17.160	0.005	6211	0.0100	0.0102	M
17 m-Nitrotoluene	1	17.772	17.787	-0.015	4144	0.0100	0.0103	M
18 2-Amino-4,6-dinitrotoluene	1	18.005	18.013	-0.008	9484	0.0100	0.0121	M
19 1,3,5-Trinitrobenzene	1	18.905	18.907	-0.002	8677	0.0100	0.0101	M
20 2,6-Dinitrotoluene	1	19.845	19.853	-0.008	5674	0.0100	0.0103	M
21 2,4-Dinitrotoluene	1	20.312	20.320	-0.008	12157	0.0100	0.0103	M
22 Tetryl	1	23.585	23.580	0.005	8212	0.0100	0.0105	
23 2,4,6-Trinitrotoluene	1	24.712	24.713	-0.001	7922	0.0100	0.0104	M
24 PETN	2	25.465	25.293	0.172	31969	0.1000	0.1436	M

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

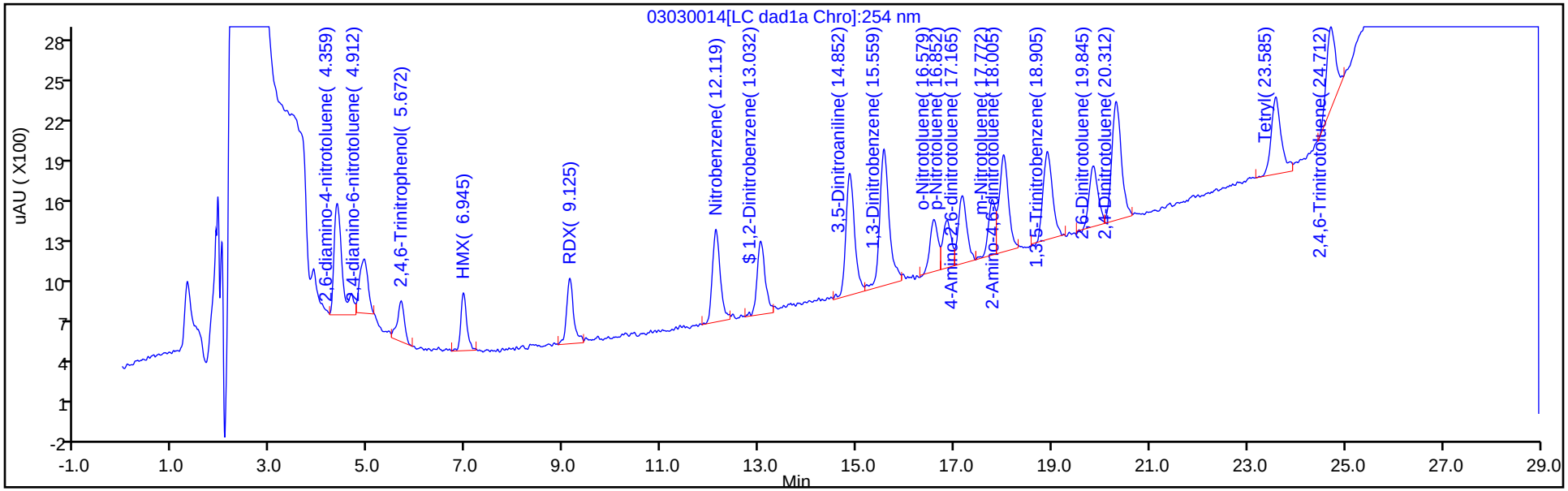
8330IntermStk_00061	Amount Added:	1.00	Units: uL
8330_ADDs_00023	Amount Added:	1.00	Units: uL

Report Date: 05-Mar-2020 11:40:10 Chrom Revision: 2.3 19-Feb-2020 16:45:46

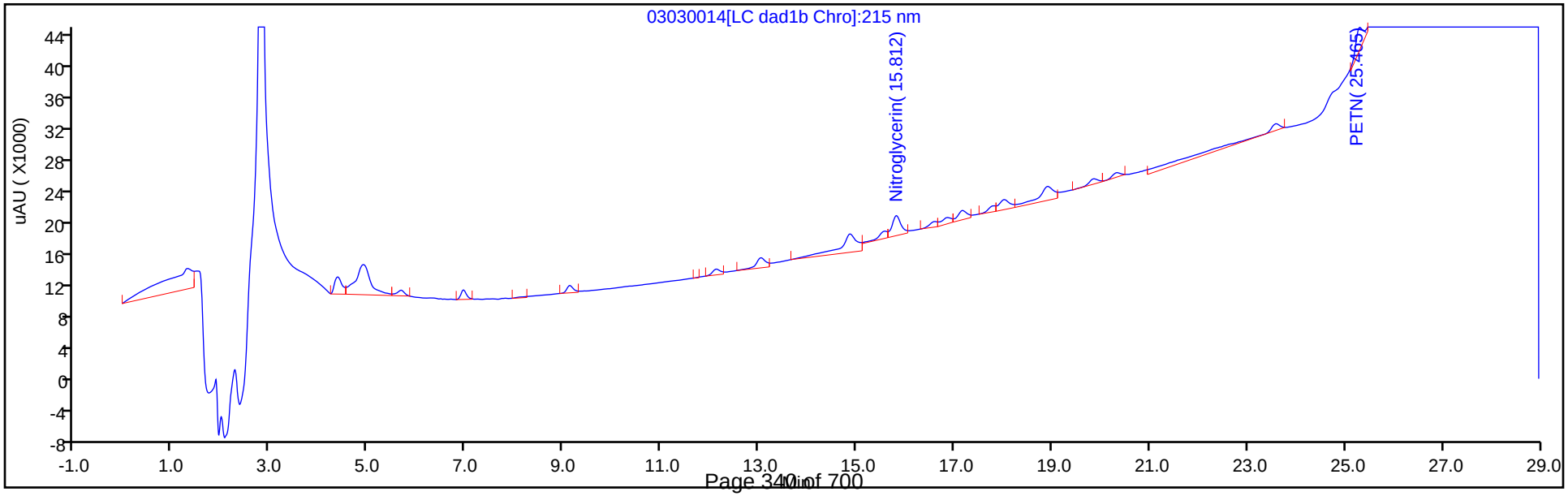
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\g2_luna\20200303-89749.b\03030014.d				
Injection Date:	03-Mar-2020 22:06:26	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC FULL 1			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 Peak: 1



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

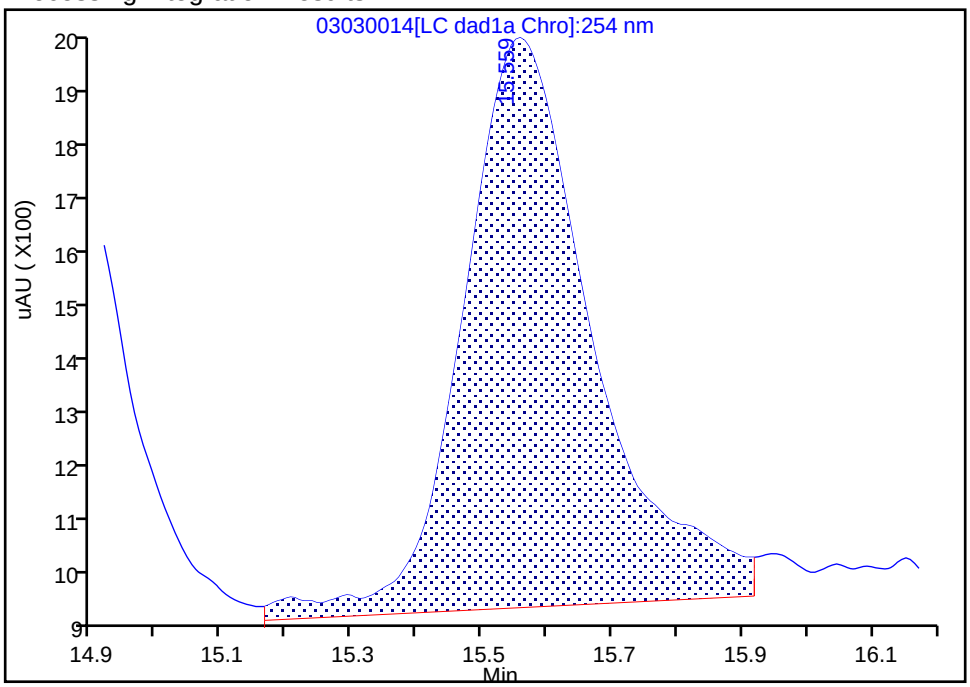
Data File:	\\chromna\denver\chromdata\g2_luna\20200303-89749.b\03030014.d				
Injection Date:	03-Mar-2020 22:06:26	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 1				
Client ID:					
Operator ID:	CB	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

Signal: 1

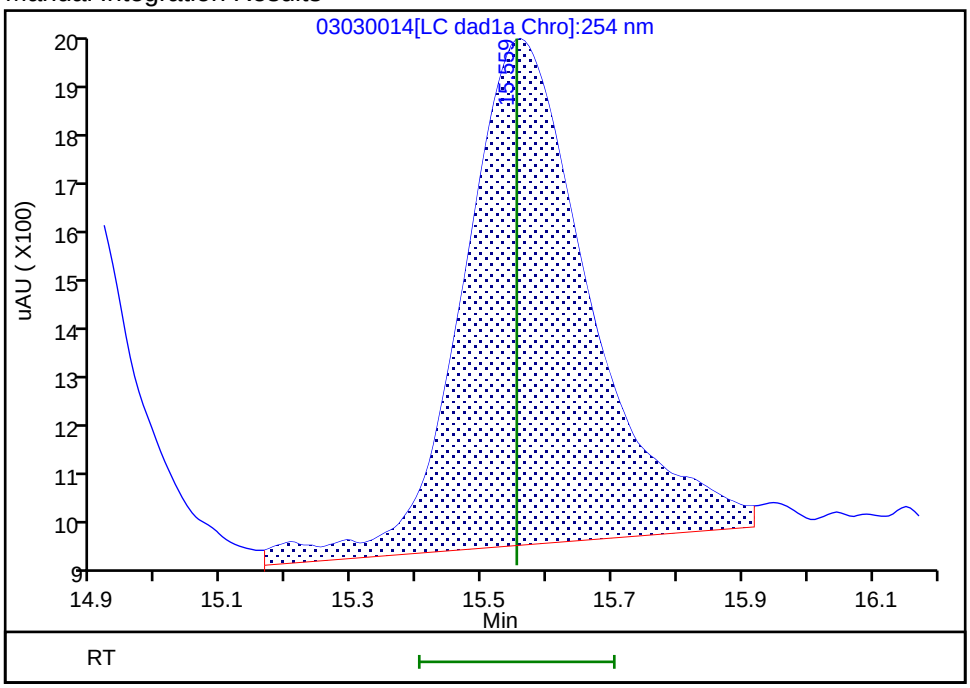
Processing Integration Results

RT: 15.56
Area: 14386
Amount: 0.010336
Amount Units: ug/ml



Manual Integration Results

RT: 15.56
Area: 13866
Amount: 0.010308
Amount Units: ug/ml



Reviewer: beckerc, 04-Mar-2020 08:28:10
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

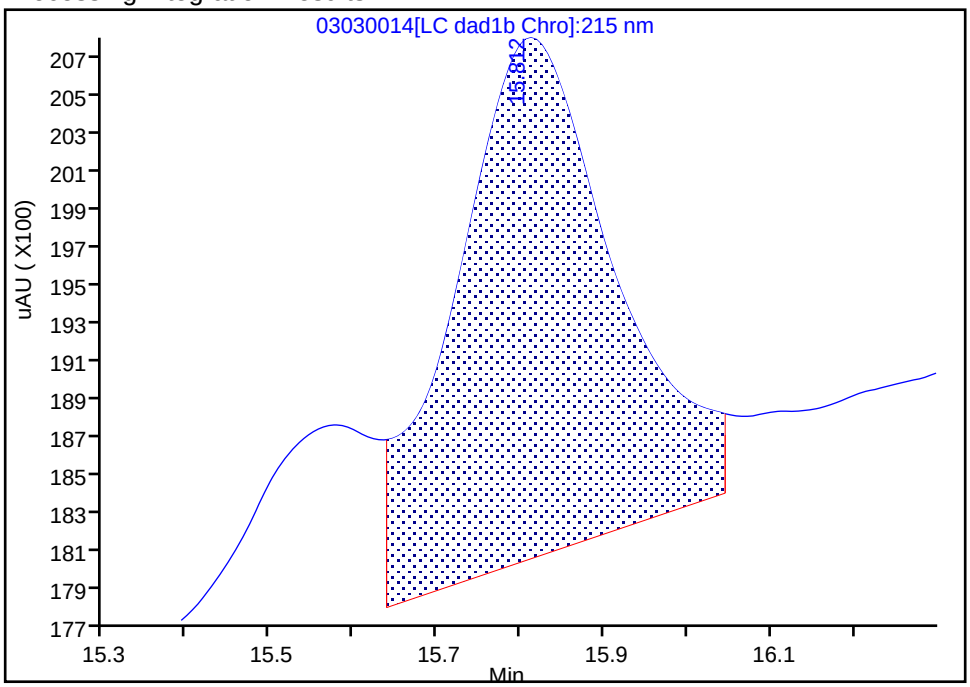
Data File:	\\chromna\denver\chromdata\g2_luna\20200303-89749.b\03030014.d				
Injection Date:	03-Mar-2020 22:06:26	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 1				
Client ID:					
Operator ID:	CB	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:		Detector	LC DAD1B, 215 nm		

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

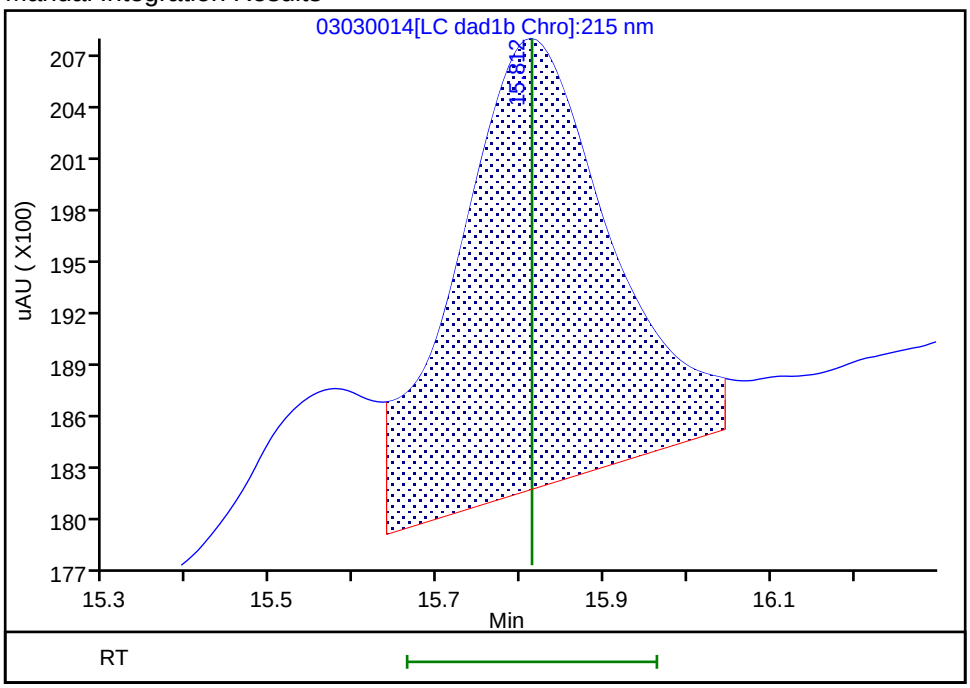
Processing Integration Results

RT: 15.81
Area: 35433
Amount: 0.196572
Amount Units: ug/ml



Manual Integration Results

RT: 15.81
Area: 32688
Amount: 0.102586
Amount Units: ug/ml



Reviewer: beckerc, 04-Mar-2020 08:27:58
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

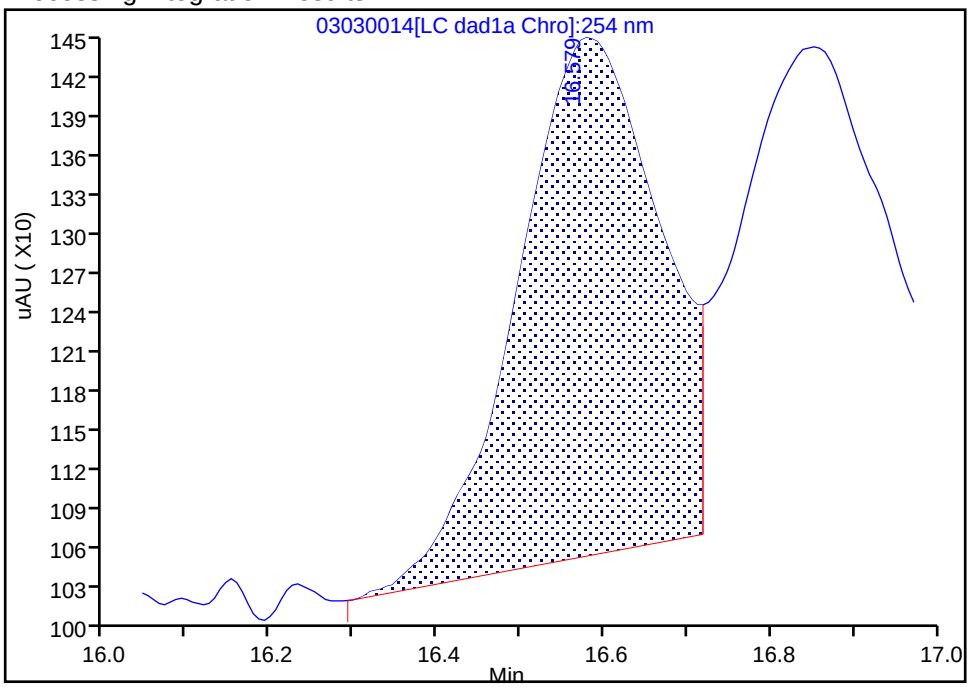
Data File:	\\chromna\denver\chromdata\g2_luna\20200303-89749.b\03030014.d				
Injection Date:	03-Mar-2020 22:06:26	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 1				
Client ID:					
Operator ID:	CB	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

Signal: 1

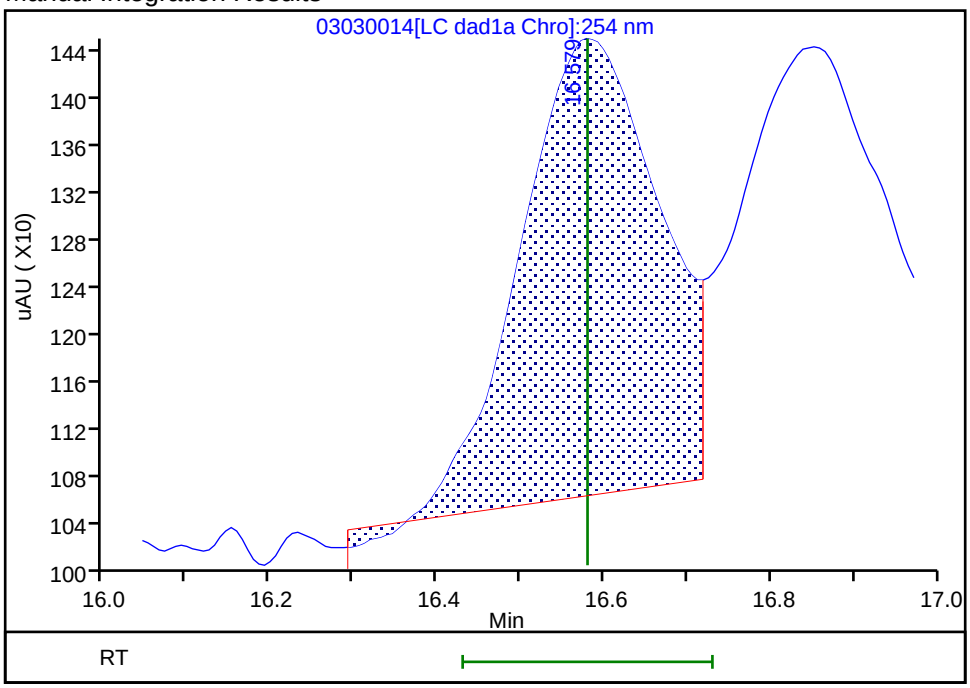
Processing Integration Results

RT: 16.58
Area: 4716
Amount: 0.010380
Amount Units: ug/ml



Manual Integration Results

RT: 16.58
Area: 4434
Amount: 0.010340
Amount Units: ug/ml



Reviewer: beckerc, 04-Mar-2020 08:28:10
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

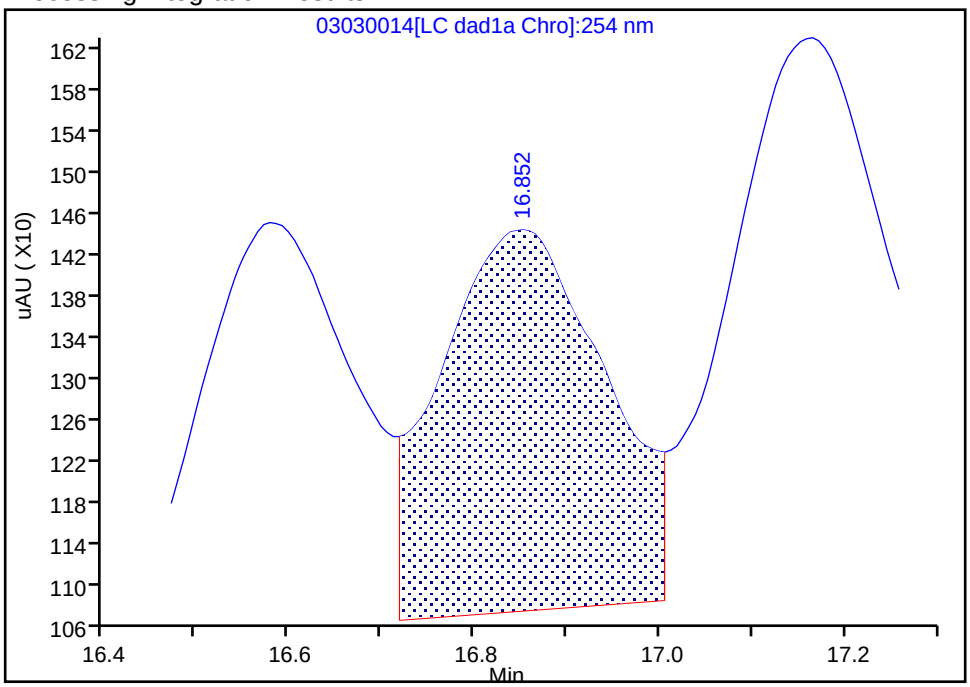
Data File:	\\chromna\denver\chromdata\g2_luna\20200303-89749.b\03030014.d				
Injection Date:	03-Mar-2020 22:06:26	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 1				
Client ID:					
Operator ID:	CB	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

Signal: 1

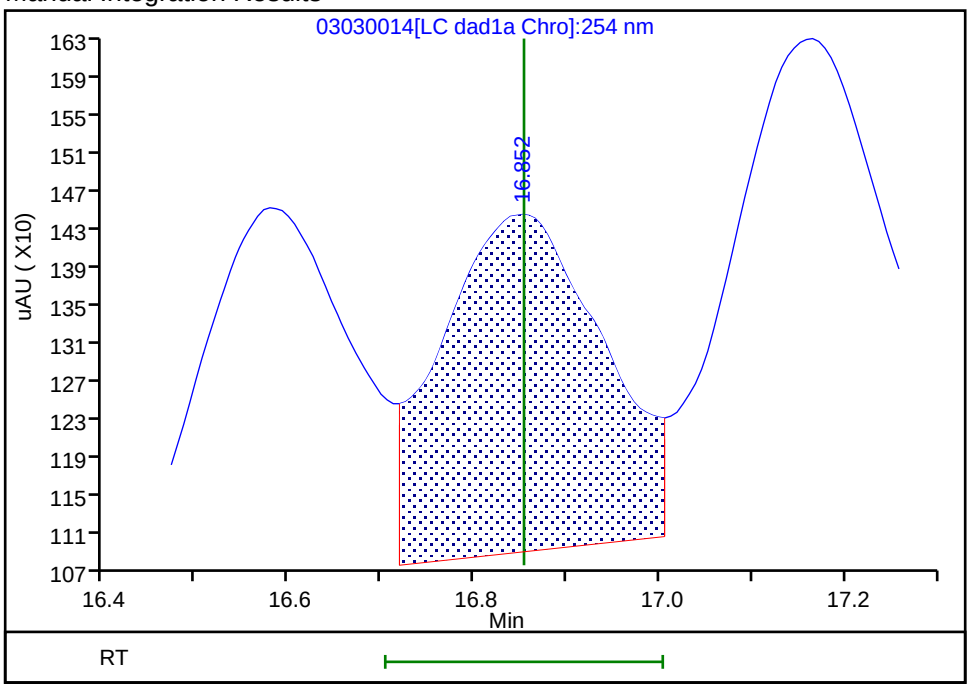
Processing Integration Results

RT: 16.85
Area: 4504
Amount: 0.010349
Amount Units: ug/ml



Manual Integration Results

RT: 16.85
Area: 4289
Amount: 0.010317
Amount Units: ug/ml



Reviewer: beckerc, 04-Mar-2020 08:28:10
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

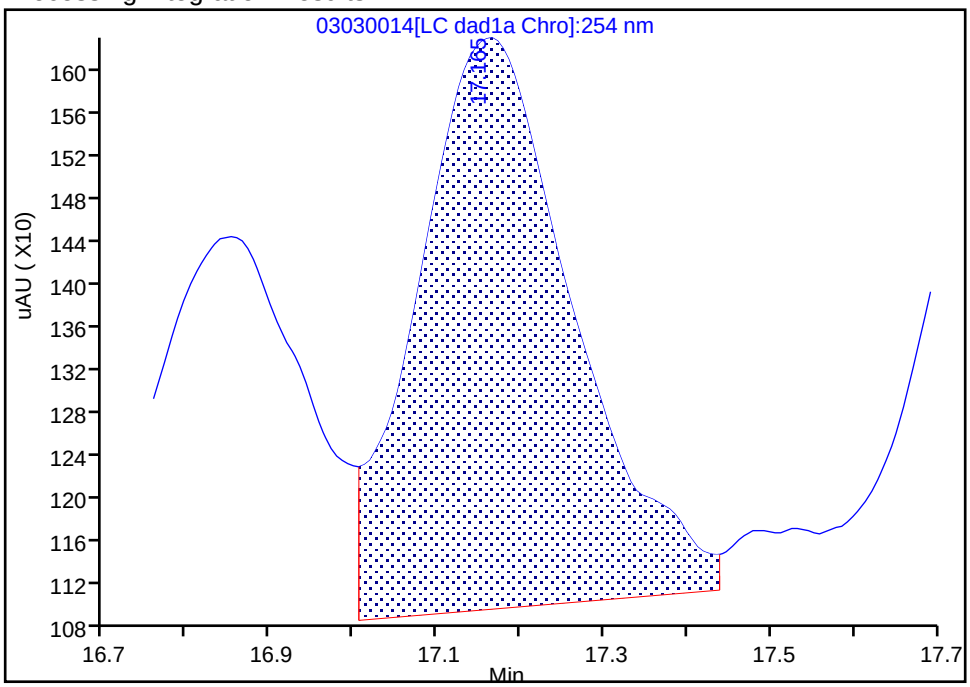
Data File:	\\chromna\denver\chromdata\g2_luna\20200303-89749.b\03030014.d				
Injection Date:	03-Mar-2020 22:06:26	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 1				
Client ID:					
Operator ID:	CB	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

Signal: 1

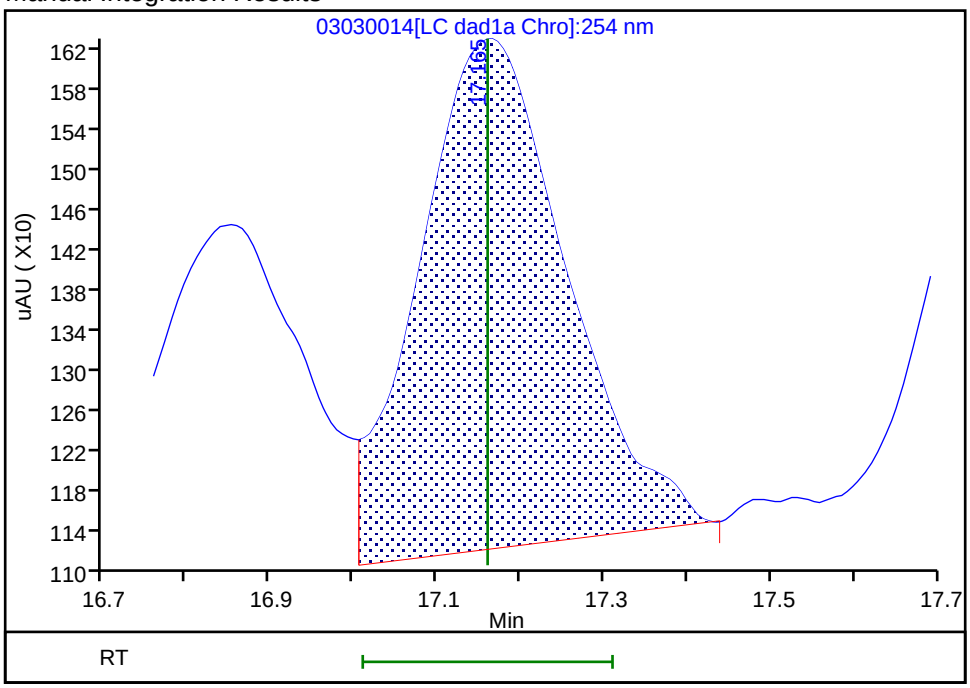
Processing Integration Results

RT: 17.17
Area: 6887
Amount: 0.073603
Amount Units: ug/ml



Manual Integration Results

RT: 17.17
Area: 6211
Amount: 0.010211
Amount Units: ug/ml



Reviewer: beckerc, 04-Mar-2020 08:28:10
Audit Action: Assigned New Baseline Audit Reason: Baseline

Eurofins TestAmerica, Denver

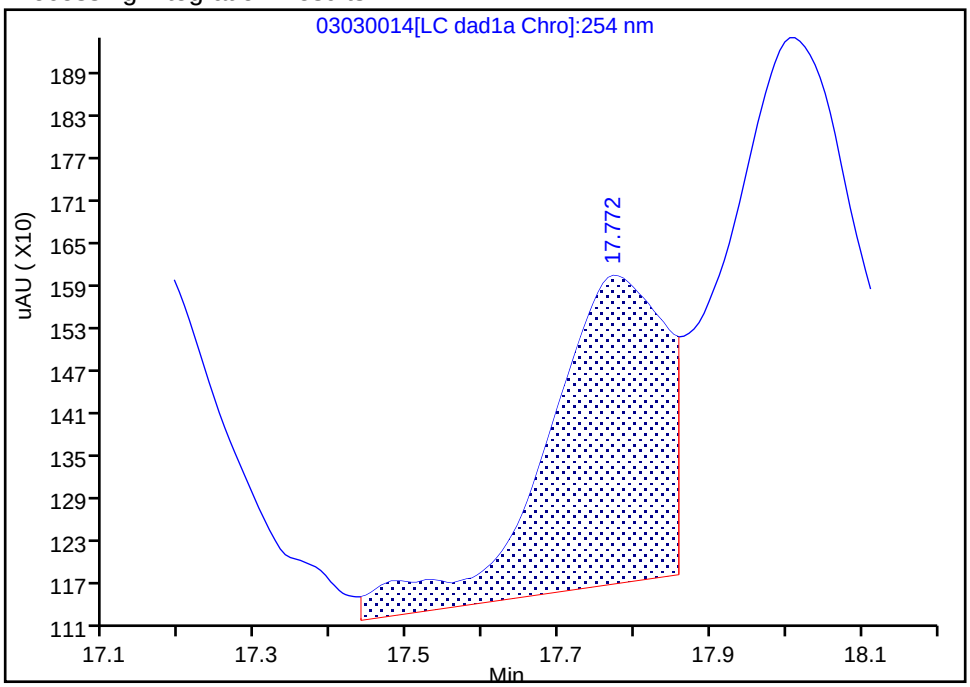
Data File:	\\chromna\denver\chromdata\g2_luna\20200303-89749.b\03030014.d				
Injection Date:	03-Mar-2020 22:06:26	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 1				
Client ID:					
Operator ID:	CB	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

17 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

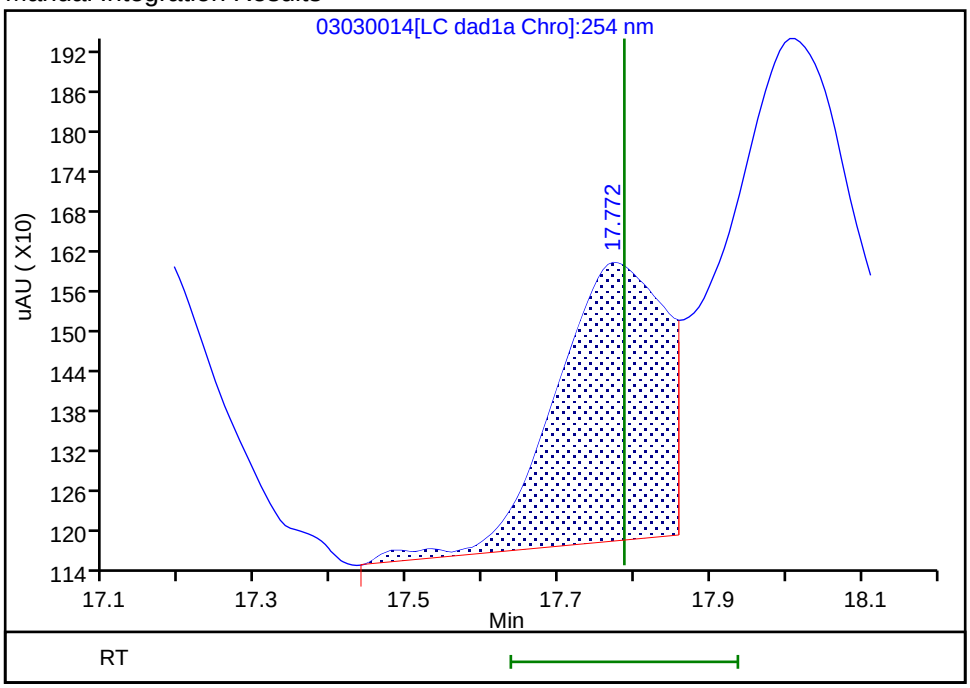
Processing Integration Results

RT: 17.77
Area: 4748
Amount: NaN
Amount Units: ug/ml



Manual Integration Results

RT: 17.77
Area: 4144
Amount: 0.010250
Amount Units: ug/ml



Reviewer: beckerc, 04-Mar-2020 08:28:10
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

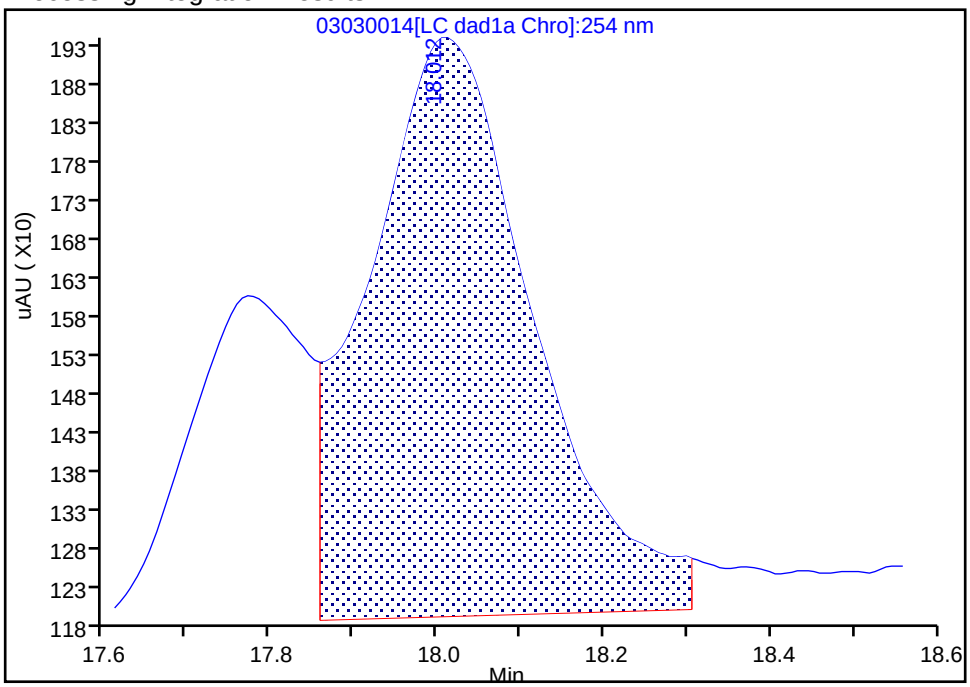
Data File:	\\chromna\denver\chromdata\g2_luna\20200303-89749.b\03030014.d				
Injection Date:	03-Mar-2020 22:06:26	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 1				
Client ID:					
Operator ID:	CB	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

Signal: 1

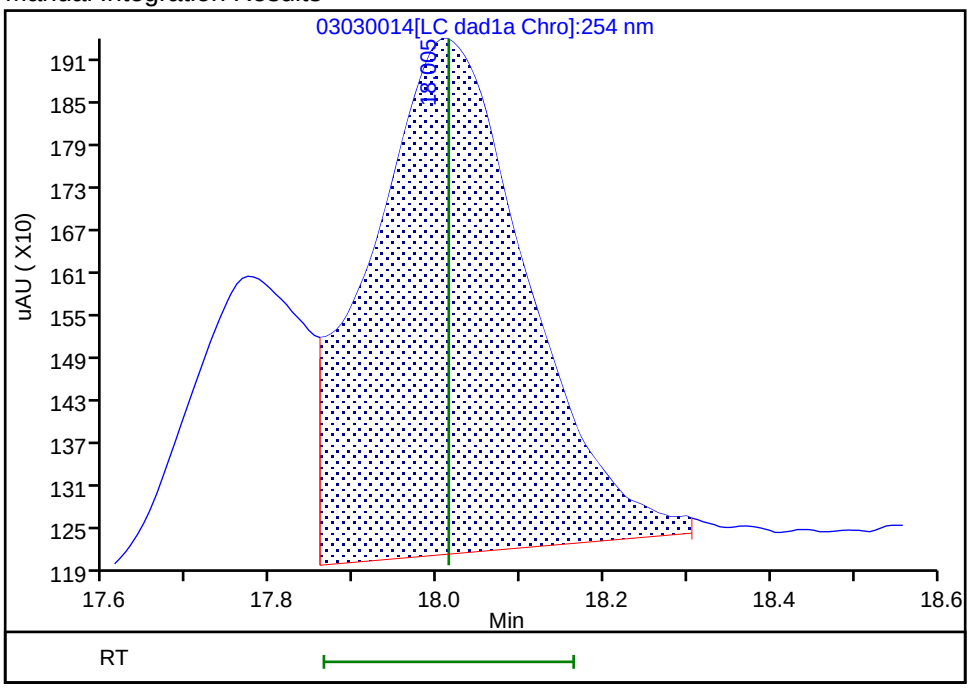
Processing Integration Results

RT: 18.01
Area: 10275
Amount: 0.013107
Amount Units: ug/ml



Manual Integration Results

RT: 18.01
Area: 9484
Amount: 0.012147
Amount Units: ug/ml



Reviewer: beckerc, 04-Mar-2020 08:28:10
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

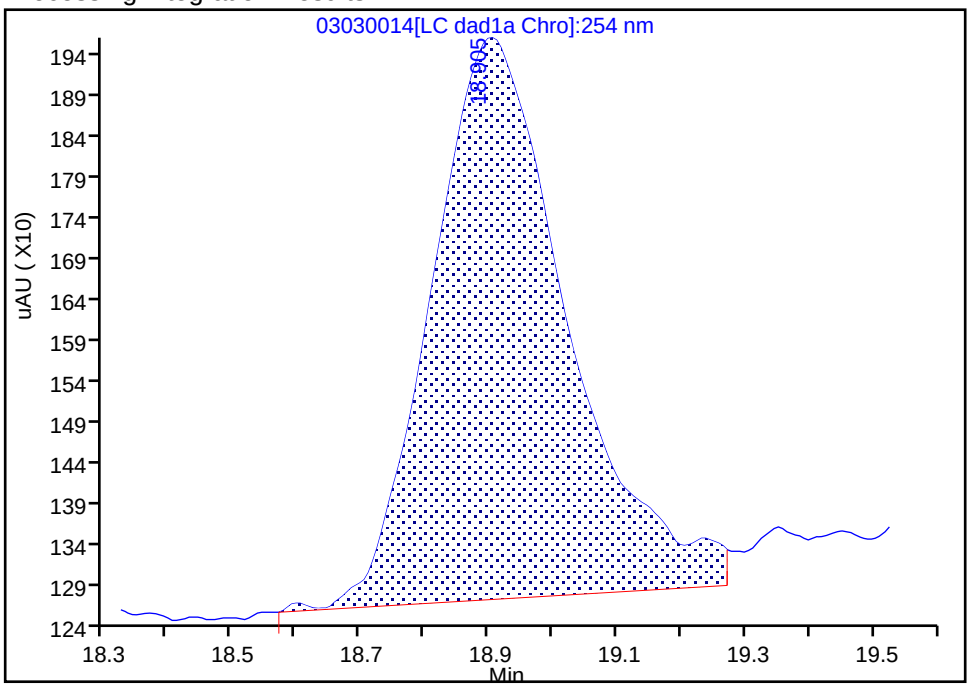
Data File:	\\chromna\denver\chromdata\g2_luna\20200303-89749.b\03030014.d				
Injection Date:	03-Mar-2020 22:06:26	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 1				
Client ID:					
Operator ID:	CB	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

19 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

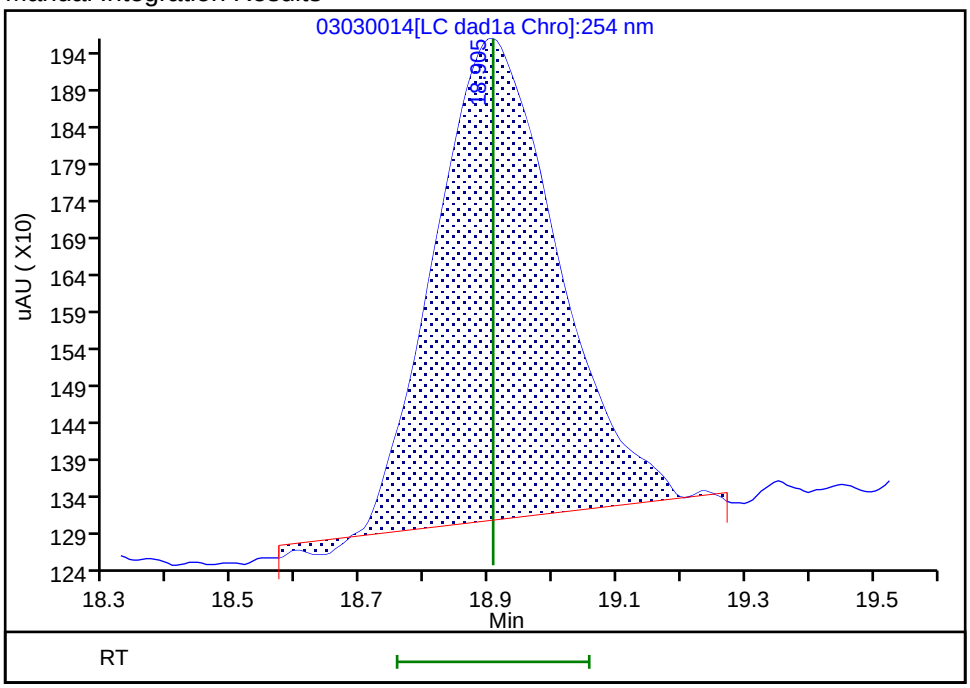
Processing Integration Results

RT: 18.91
Area: 10210
Amount: 0.010234
Amount Units: ug/ml



Manual Integration Results

RT: 18.91
Area: 8677
Amount: 0.010121
Amount Units: ug/ml



Reviewer: beckerc, 04-Mar-2020 08:28:10

Audit Action: Assigned New Baseline Audit Reason: Baseline

Eurofins TestAmerica, Denver

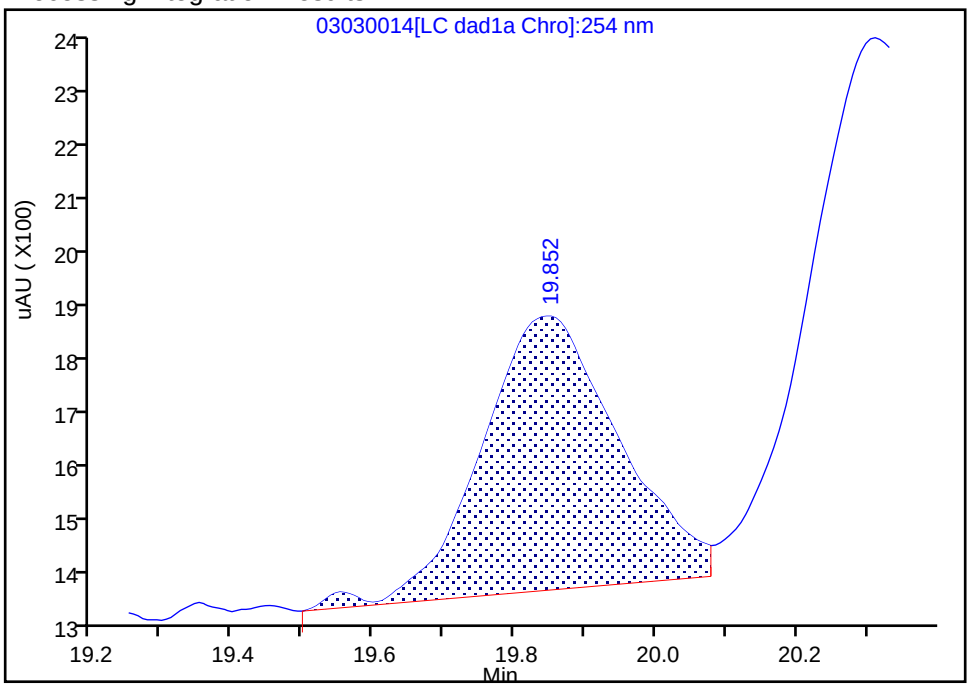
Data File:	\\chromna\denver\chromdata\g2_luna\20200303-89749.b\03030014.d				
Injection Date:	03-Mar-2020 22:06:26	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 1				
Client ID:					
Operator ID:	CB	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

Signal: 1

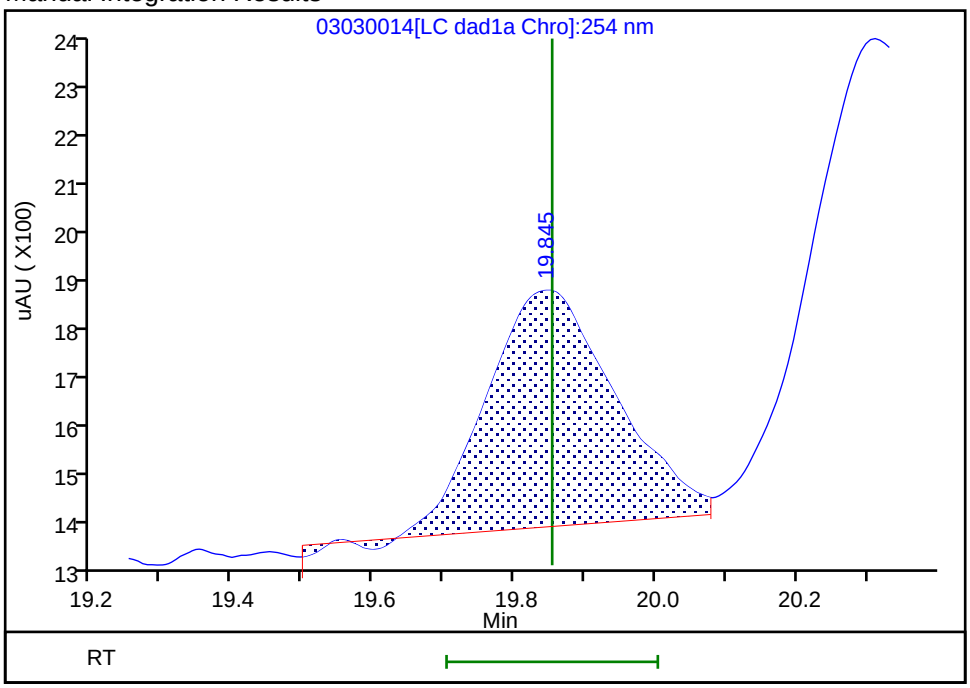
Processing Integration Results

RT: 19.85
Area: 6422
Amount: 0.010407
Amount Units: ug/ml



Manual Integration Results

RT: 19.85
Area: 5674
Amount: 0.010314
Amount Units: ug/ml



Reviewer: beckerc, 04-Mar-2020 08:28:10
Audit Action: Assigned New Baseline Audit Reason: Baseline

Eurofins TestAmerica, Denver

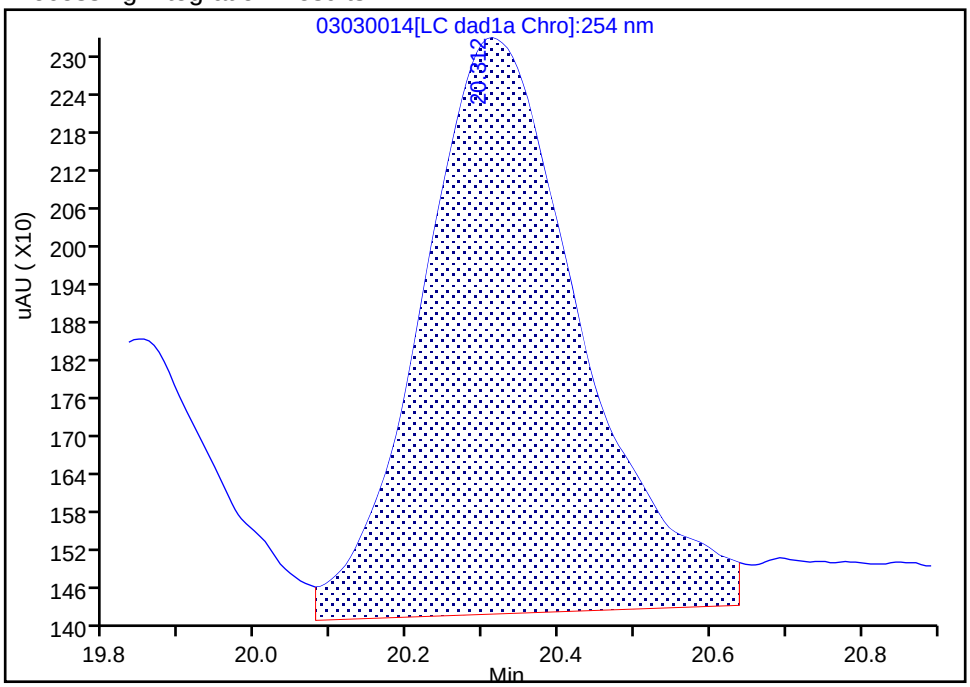
Data File:	\\chromna\denver\chromdata\g2_luna\20200303-89749.b\03030014.d				
Injection Date:	03-Mar-2020 22:06:26	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 1				
Client ID:					
Operator ID:	CB	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

Signal: 1

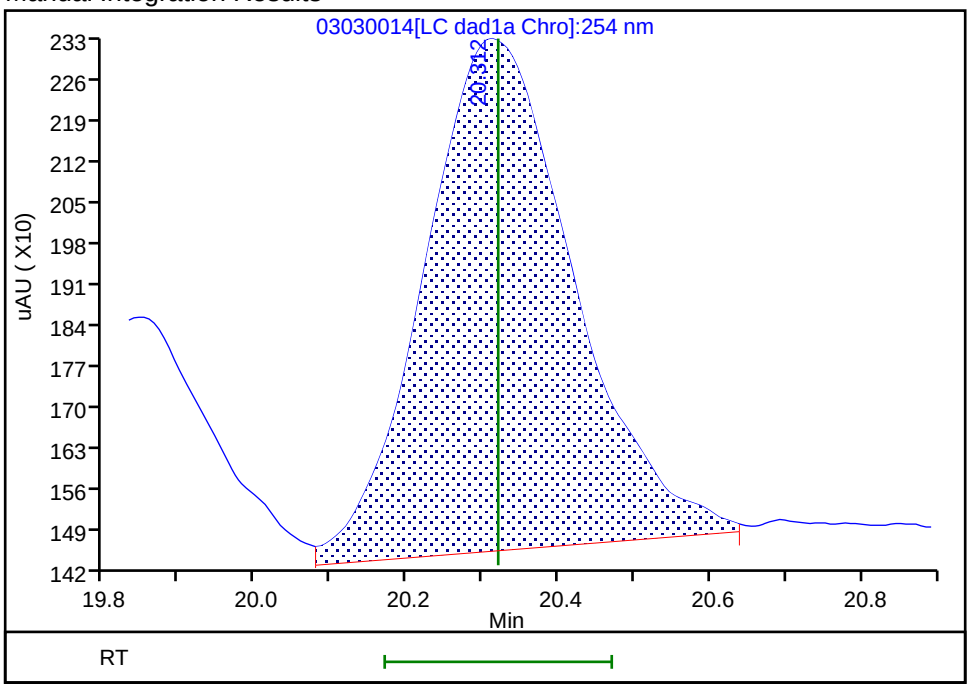
Processing Integration Results

RT: 20.31
Area: 13433
Amount: 0.010397
Amount Units: ug/ml



Manual Integration Results

RT: 20.31
Area: 12157
Amount: 0.010322
Amount Units: ug/ml



Reviewer: beckerc, 04-Mar-2020 08:28:10
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

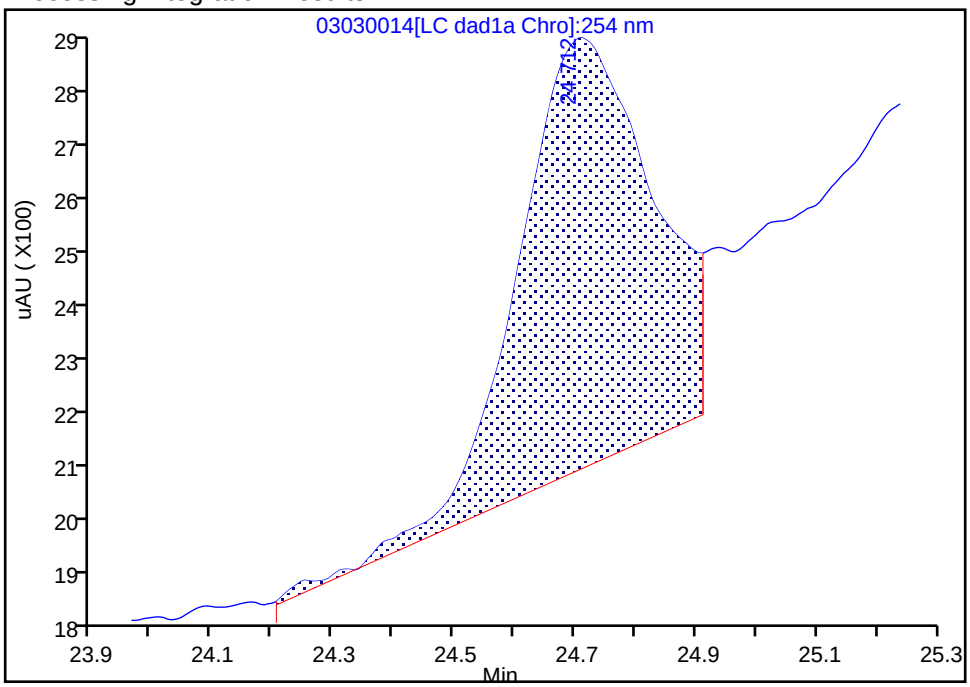
Data File:	\\chromna\denver\chromdata\g2_luna\20200303-89749.b\03030014.d				
Injection Date:	03-Mar-2020 22:06:26	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 1				
Client ID:					
Operator ID:	CB	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

23 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

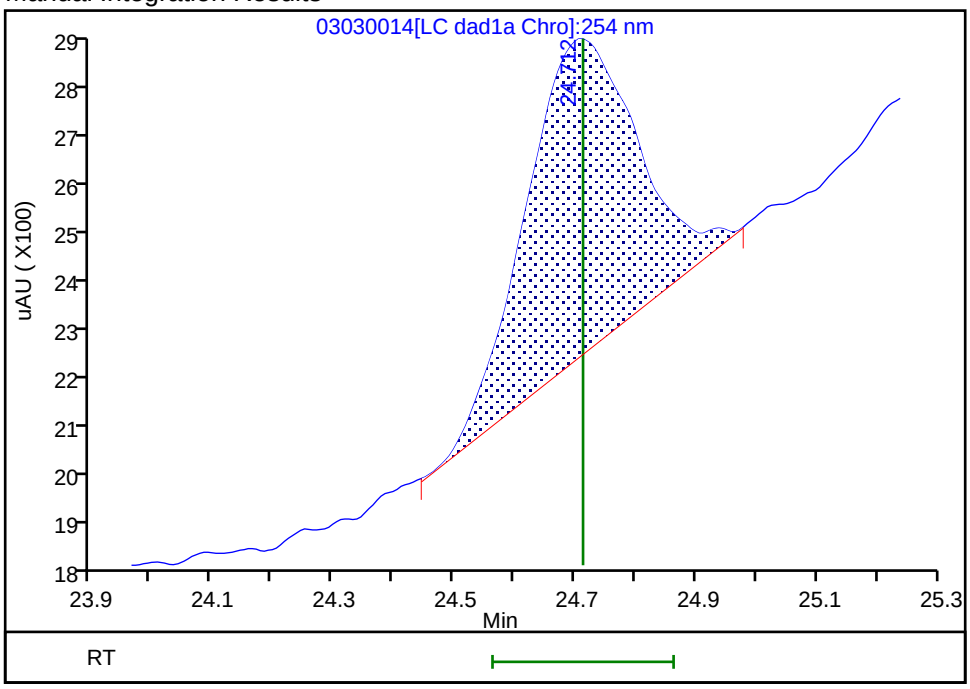
Processing Integration Results

RT: 24.71
Area: 11542
Amount: 0.014517
Amount Units: ug/ml



Manual Integration Results

RT: 24.71
Area: 7922
Amount: 0.010389
Amount Units: ug/ml



Reviewer: beckerc, 04-Mar-2020 08:27:29

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

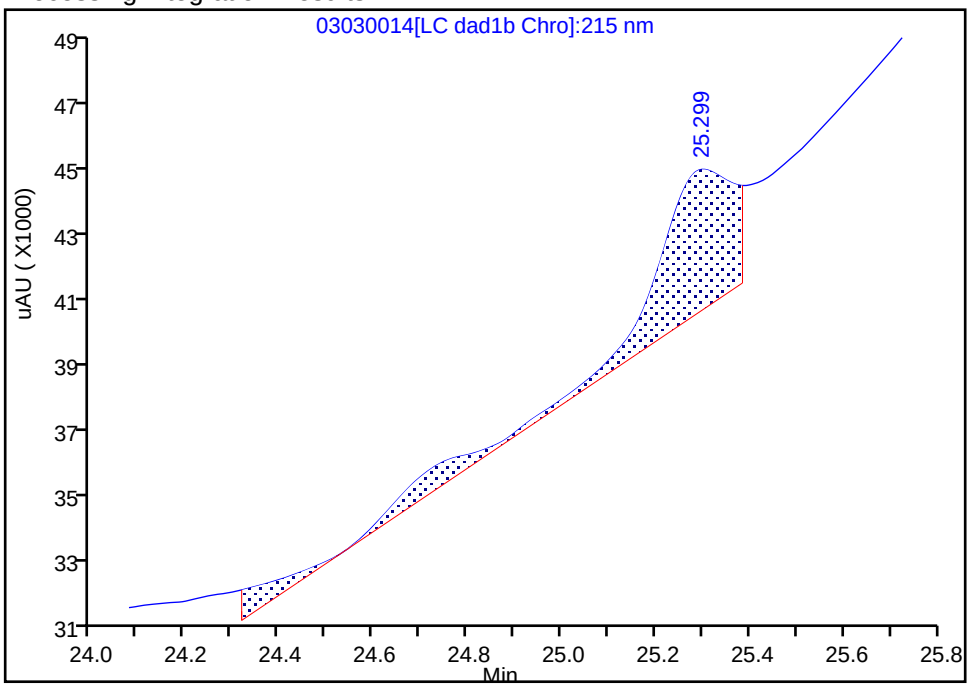
Data File:	\\chromna\denver\chromdata\g2_luna\20200303-89749.b\03030014.d				
Injection Date:	03-Mar-2020 22:06:26	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC FULL 1				
Client ID:					
Operator ID:	CB	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:		Detector	LC DAD1B, 215 nm		

24 PETN, CAS: 78-11-5

Signal: 1

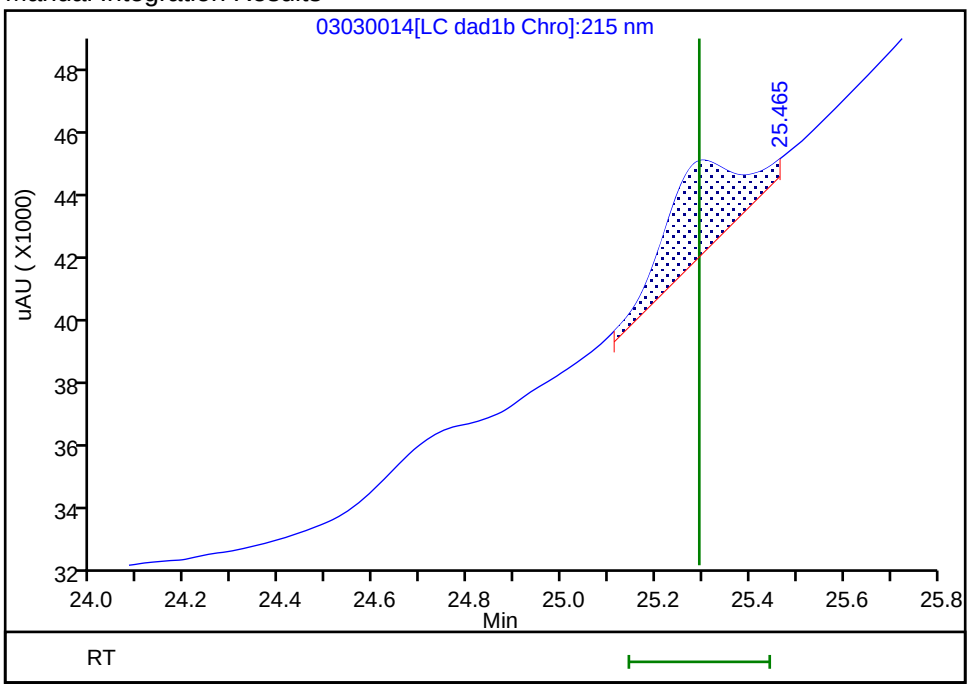
Processing Integration Results

RT: 25.30
Area: 56322
Amount: 0.185048
Amount Units: ug/ml



Manual Integration Results

RT: 25.47
Area: 31969
Amount: 0.143632
Amount Units: ug/ml



Reviewer: beckerc, 04-Mar-2020 08:27:41

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1 Analy Batch No.: 487544

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/03/2020 23:16 Calibration End Date: 03/04/2020 03:21 Calibration ID: 42493

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-487544/23	03030023.D
Level 2	IC 280-487544/22	03030022.D
Level 3	IC 280-487544/21	03030021.D
Level 4	IC 280-487544/20	03030020.D
Level 5	IC 280-487544/19	03030019.D
Level 6	IC 280-487544/18	03030018.D
Level 7	IC 280-487544/17	03030017.D
Level 8	IC 280-487544/16	03030016.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
TNX	5.403	5.400	5.400	5.398	5.400	5.405	5.407	5.380			5.250 - 5.550	5.399
DNX	6.203	6.207	6.200	6.205	6.200	6.205	6.213	6.187			6.050 - 6.350	6.203
MNX	7.710	7.714	7.707	7.711	7.707	7.711	7.720	7.693			7.557 - 7.857	7.709

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

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1 Analy Batch No.: 487544

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/03/2020 23:16 Calibration End Date: 03/04/2020 03:21 Calibration ID: 42493

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-487544/23	03030023.D
Level 2	IC 280-487544/22	03030022.D
Level 3	IC 280-487544/21	03030021.D
Level 4	IC 280-487544/20	03030020.D
Level 5	IC 280-487544/19	03030019.D
Level 6	IC 280-487544/18	03030018.D
Level 7	IC 280-487544/17	03030017.D
Level 8	IC 280-487544/16	03030016.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
TNX	470380 456214	448112 450390	453067 460609	435297 462553	Ave		454577.672				2.3		20.0			
DNX	334765 329366	328172 324187	328432 331166	315828 330710	Ave		327828.250				1.7		20.0			
MNX	309254 308231	311380 302759	303033 307918	296586 306966	Ave		305765.831				1.5		20.0			

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

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

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1 Analy Batch No.: 487544

SDG No.:

Instrument ID: CHHPLC_G2_LUNA GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/03/2020 23:16 Calibration End Date: 03/04/2020 03:21 Calibration ID: 42493

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-487544/23	03030023.D
Level 2	IC 280-487544/22	03030022.D
Level 3	IC 280-487544/21	03030021.D
Level 4	IC 280-487544/20	03030020.D
Level 5	IC 280-487544/19	03030019.D
Level 6	IC 280-487544/18	03030018.D
Level 7	IC 280-487544/17	03030017.D
Level 8	IC 280-487544/16	03030016.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
TNX	Ave	9417 315588	22428 461070	45352 1157540	108933	182668	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
DNX	Ave	6702 227158	16425 331497	32876 827603	79036	131878	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
MNX	Ave	7218 247324	18169 359340	35364 895572	86529	143882	0.0233 0.817	0.0584 1.17	0.117 2.92	0.292	0.467

Curve Type Legend:
Ave = Average

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030016.D				
Lims ID:	IC DMT 8				
Client ID:					
Sample Type:	IC	Calib Level:	8		
Inject. Date:	03-Mar-2020 23:16:19	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 8				
Misc. Info.:	280-0089749-016				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub13				
Method:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2020 11:27:47	Calib Date:	04-Mar-2020 03:21:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030023.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0319				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.380	5.400	-0.020	1157540	2.50	2.55	
4 DNX	1	6.187	6.200	-0.013	827603	2.50	2.52	
7 MNX	1	7.693	7.707	-0.014	895572	2.92	2.93	

Reagents:

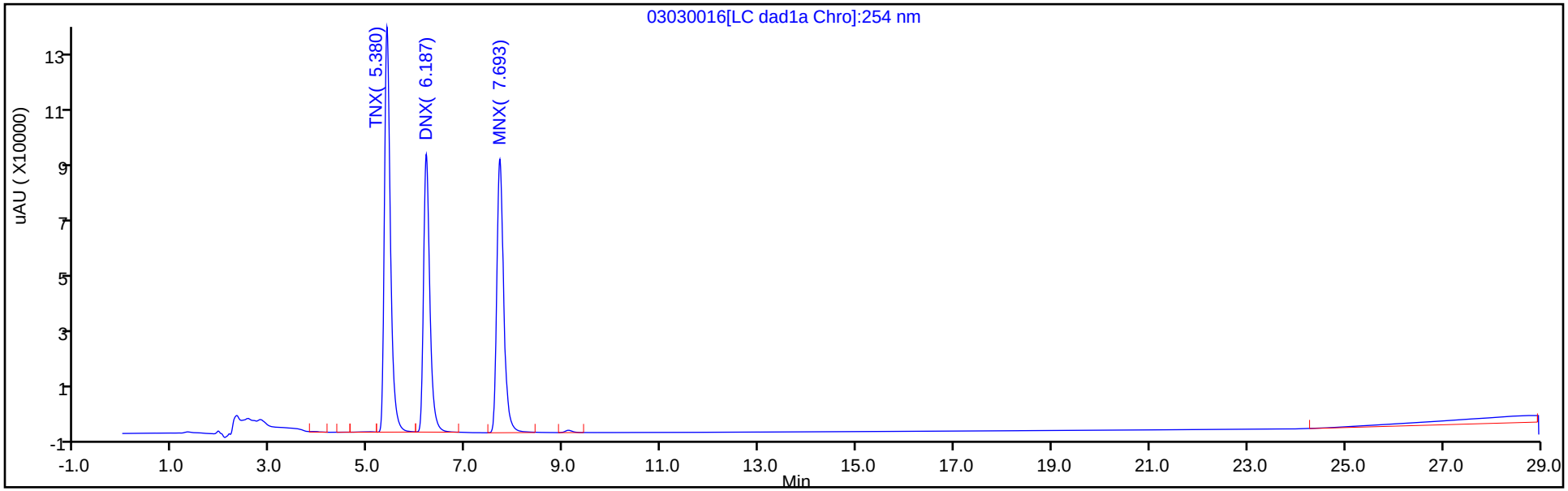
8330 DMT_00005 Amount Added: 125.00 Units: uL

Report Date: 05-Mar-2020 11:27:48 Chrom Revision: 2.3 19-Feb-2020 16:45:46

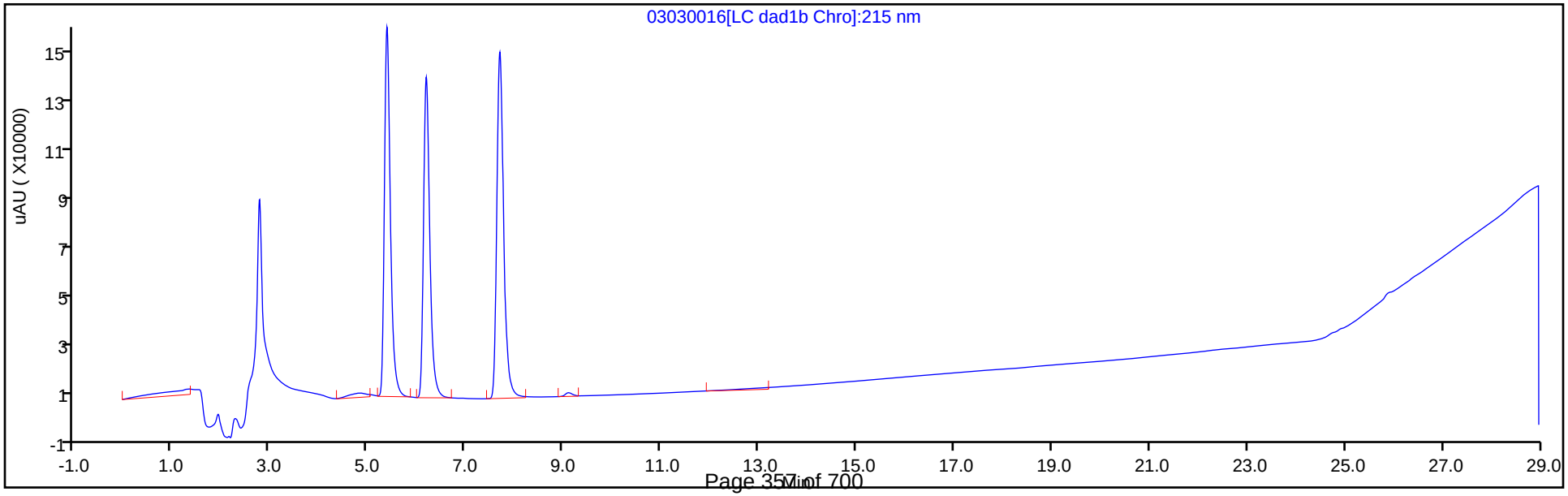
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\g2_luna\20200303-89749.b\03030016.d				
Injection Date:	03-Mar-2020 23:16:19	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC DMT 8			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 Peak: 1



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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030017.D				
Lims ID:	IC DMT 7				
Client ID:					
Sample Type:	IC	Calib Level:	7		
Inject. Date:	03-Mar-2020 23:51:15	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 7				
Misc. Info.:	280-0089749-017				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub13				
Method:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2020 11:27:49	Calib Date:	04-Mar-2020 03:21:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030023.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0319				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.407	5.400	0.007	461070	1.00	1.01	
4 DNX	1	6.213	6.200	0.013	331497	1.00	1.01	
7 MNX	1	7.720	7.707	0.013	359340	1.17	1.18	

Reagents:

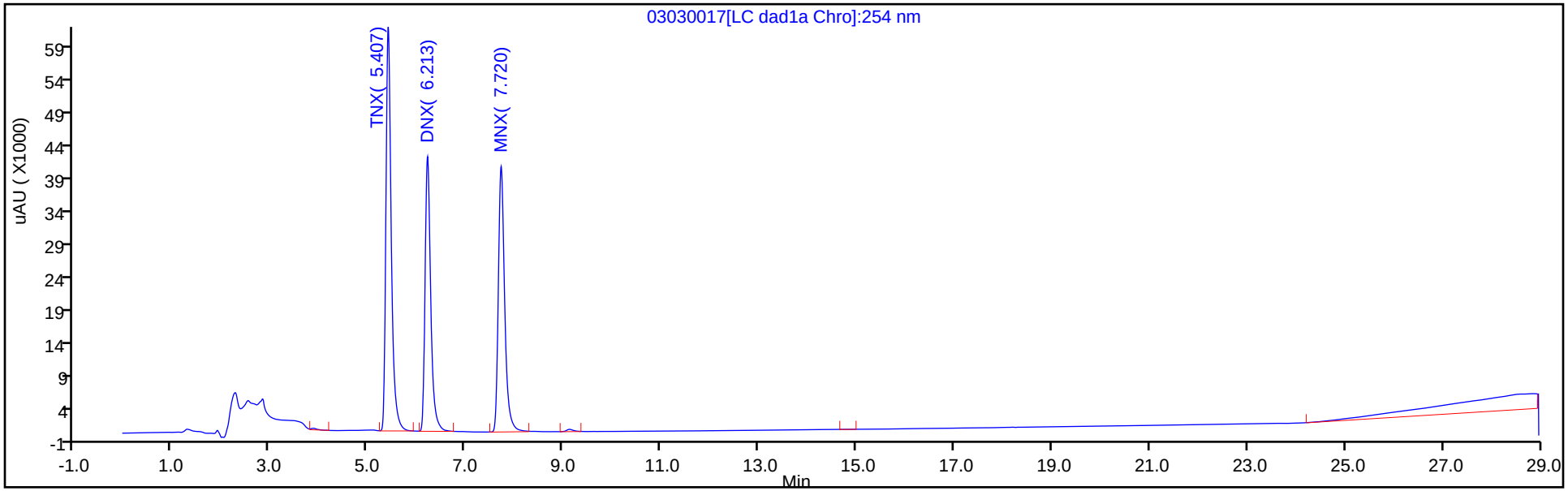
8330 DMT_00005 Amount Added: 50.00 Units: uL

Report Date: 05-Mar-2020 11:27:49 Chrom Revision: 2.3 19-Feb-2020 16:45:46

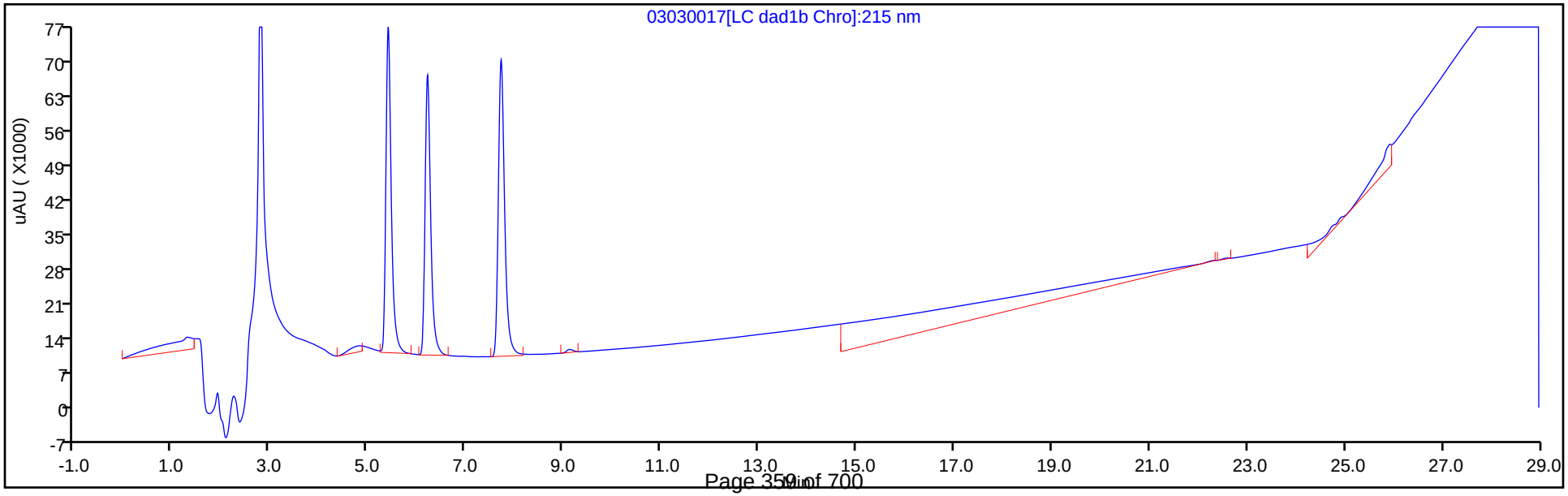
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\g2_luna\20200303-89749.b\03030017.d				
Injection Date:	03-Mar-2020 23:51:15	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC DMT 7			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 Peak: 1



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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030018.D				
Lims ID:	IC DMT 6				
Client ID:					
Sample Type:	IC	Calib Level:	6		
Inject. Date:	04-Mar-2020 00:26:10	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 6				
Misc. Info.:	280-0089749-018				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub13				
Method:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2020 11:27:50	Calib Date:	04-Mar-2020 03:21:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030023.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0319				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.405	5.400	0.005	315588	0.7007	0.6942	
4 DNX	1	6.205	6.200	0.005	227158	0.7007	0.6929	
7 MNX	1	7.711	7.707	0.004	247324	0.8169	0.8089	

Reagents:

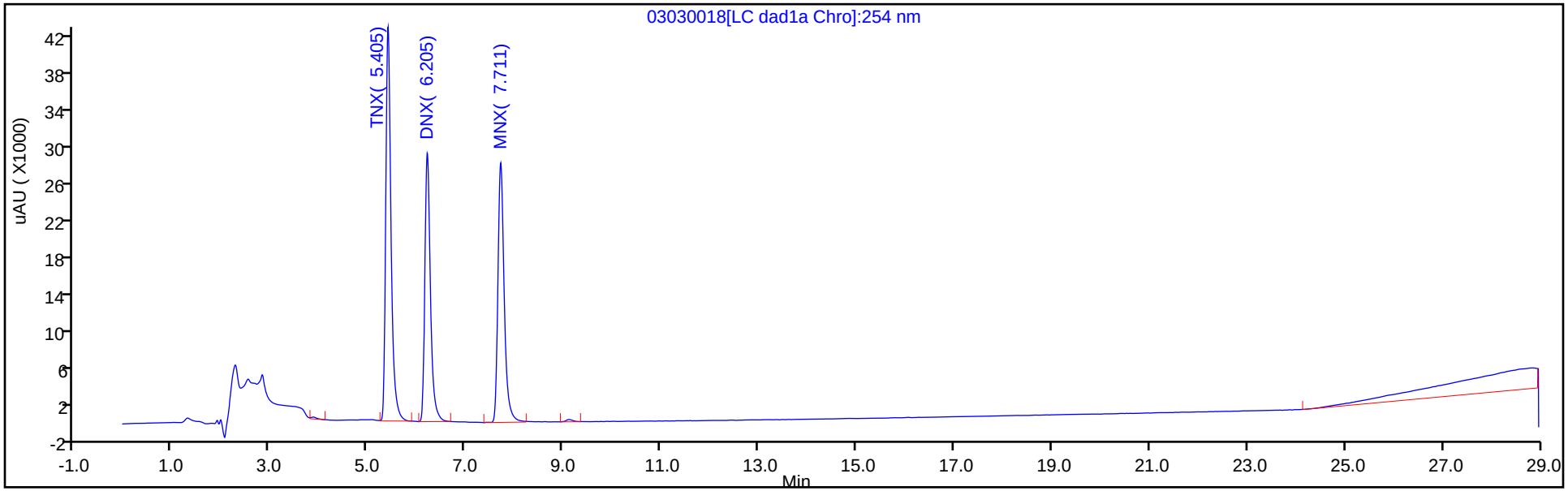
8330 DMT_00005 Amount Added: 35.00 Units: uL

Report Date: 05-Mar-2020 11:27:50 Chrom Revision: 2.3 19-Feb-2020 16:45:46

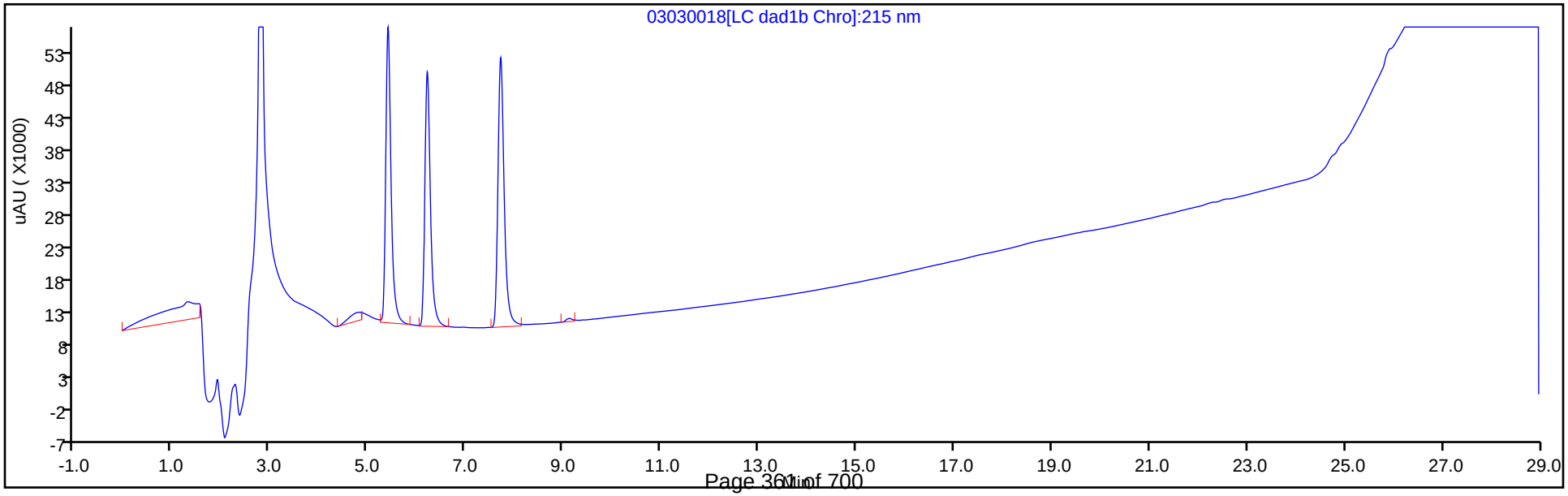
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\g2_luna\20200303-89749.b\03030018.d				
Injection Date:	04-Mar-2020 00:26:10	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC DMT 6			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 Peak: 1



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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030019.D				
Lims ID:	IC DMT 5				
Client ID:					
Sample Type:	IC	Calib Level:	5		
Inject. Date:	04-Mar-2020 01:01:09	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 5				
Misc. Info.:	280-0089749-019				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub13				
Method:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2020 11:27:51	Calib Date:	04-Mar-2020 03:21:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030023.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0319				

First Level Reviewer: beckerc Date: 05-Mar-2020 08:44:02

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.400	5.400	0.000	182668	0.4004	0.4018	M
4 DNX	1	6.200	6.200	0.000	131878	0.4004	0.4023	
7 MNX	1	7.707	7.707	0.000	143882	0.4668	0.4706	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

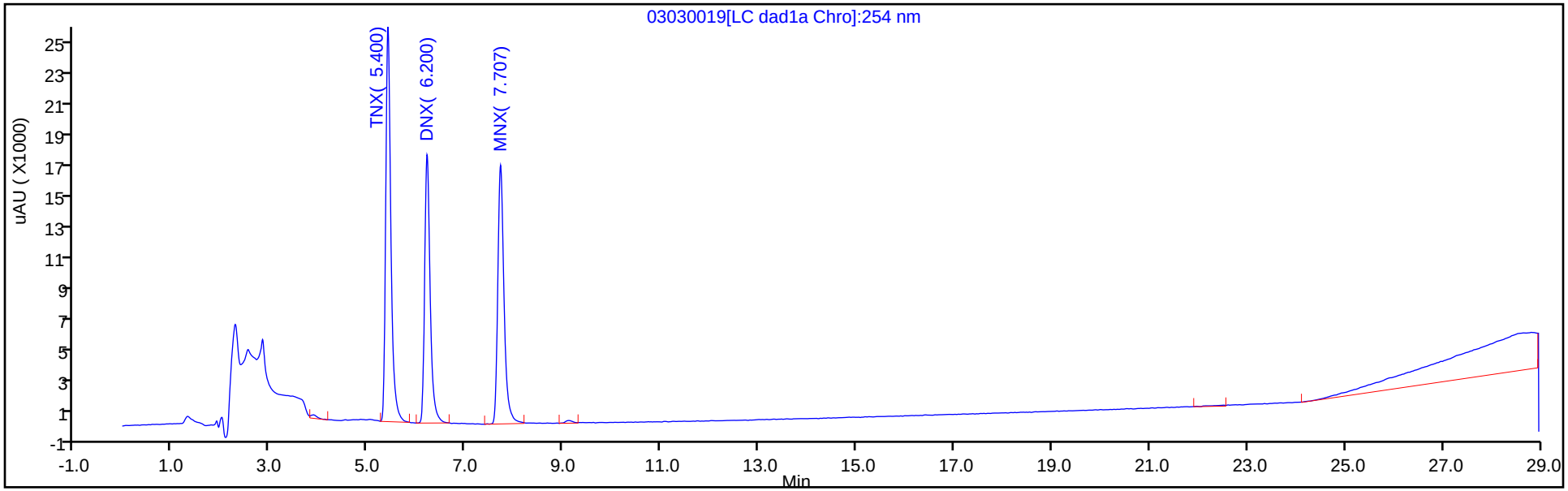
8330 DMT_00005 Amount Added: 20.00 Units: uL

Report Date: 05-Mar-2020 11:27:51 Chrom Revision: 2.3 19-Feb-2020 16:45:46

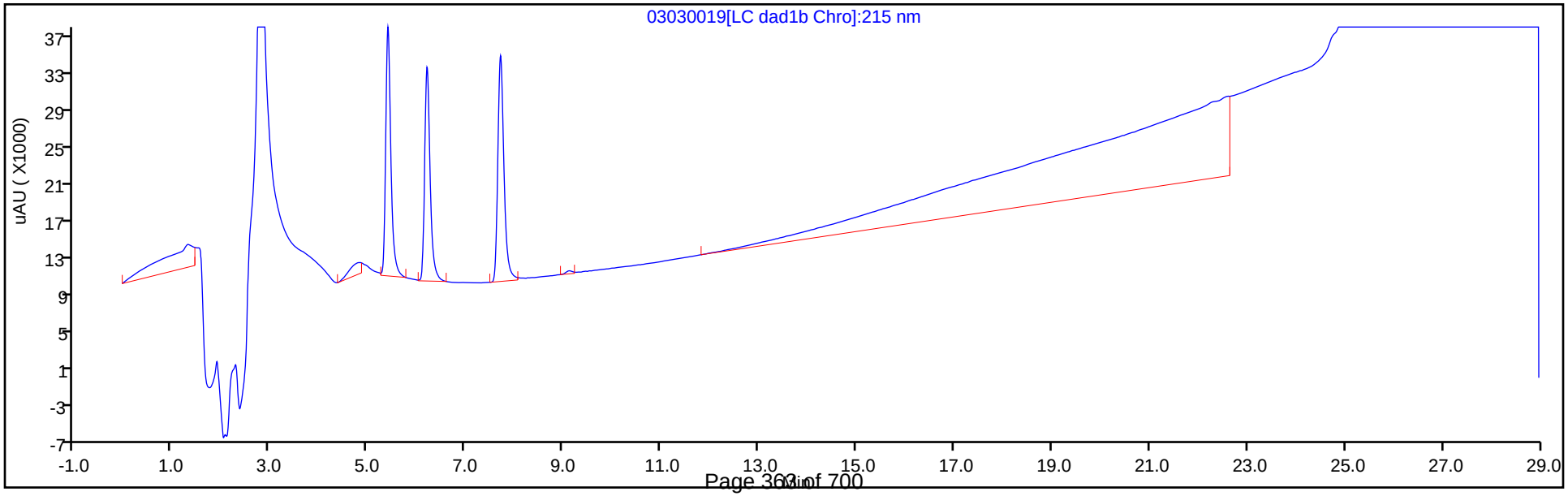
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\g2_luna\20200303-89749.b\03030019.d				
Injection Date:	04-Mar-2020 01:01:09	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC DMT 5			Worklist Smp#:	19
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 1



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

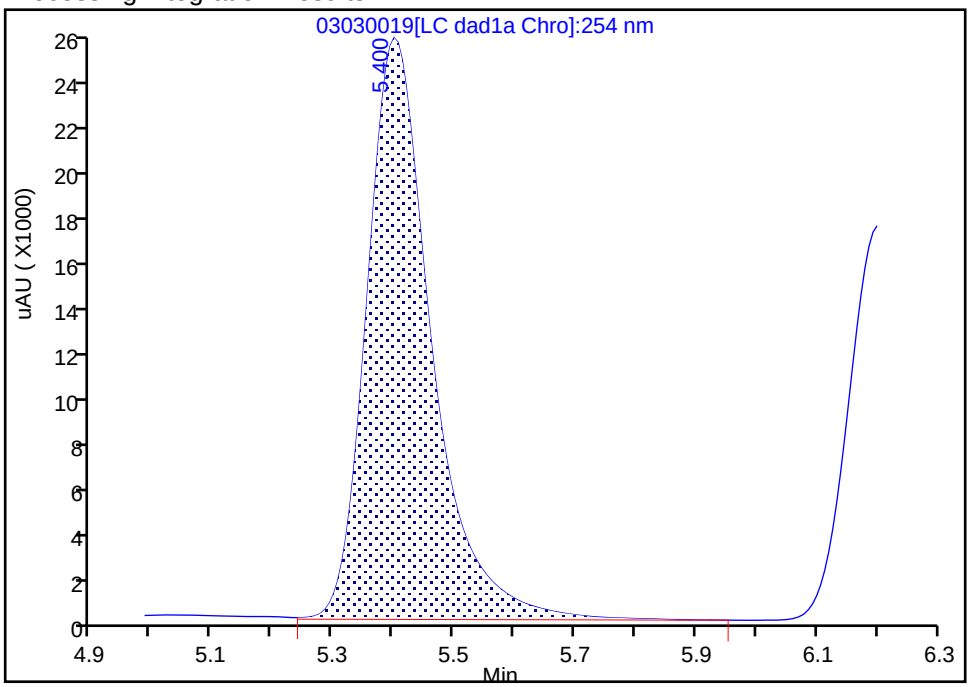
Data File:	\\chromna\denver\chromdata\g2_luna\20200303-89749.b\03030019.d				
Injection Date:	04-Mar-2020 01:01:09	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC DMT 5				
Client ID:					
Operator ID:	CB	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

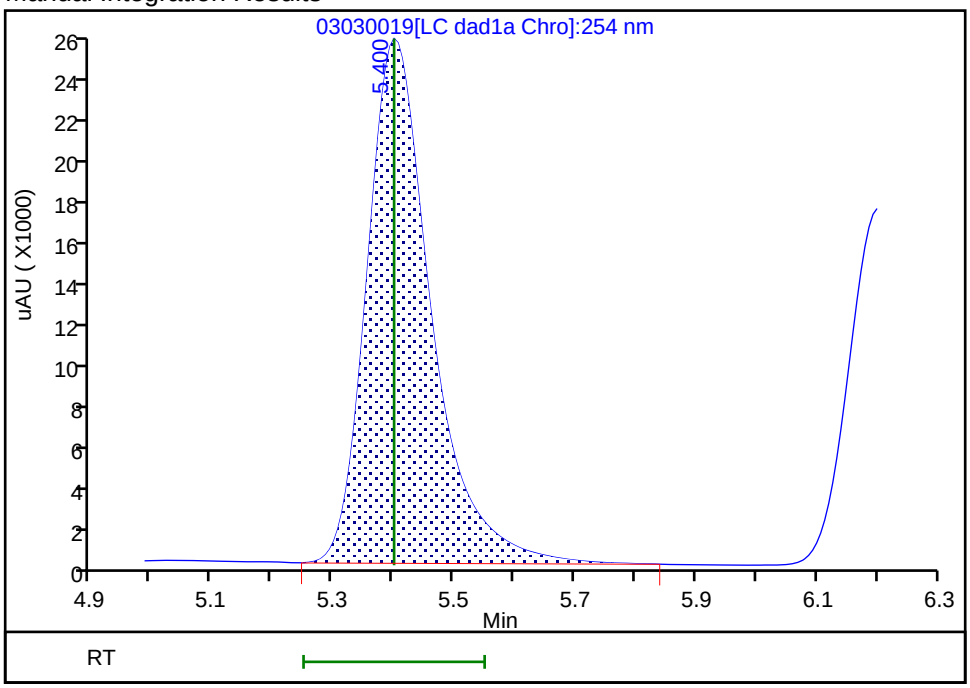
Processing Integration Results

RT: 5.40
Area: 184347
Amount: 0.405068
Amount Units: ug/ml



Manual Integration Results

RT: 5.40
Area: 182668
Amount: 0.401841
Amount Units: ug/ml



Reviewer: beckerc, 05-Mar-2020 08:43:57

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030020.D				
Lims ID:	IC DMT 4				
Client ID:					
Sample Type:	IC	Calib Level:	4		
Inject. Date:	04-Mar-2020 01:36:10	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 4				
Misc. Info.:	280-0089749-020				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub13				
Method:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2020 11:27:52	Calib Date:	04-Mar-2020 03:21:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030023.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0319				

First Level Reviewer: beckerc Date: 05-Mar-2020 08:43:41

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.398	5.400	-0.002	108933	0.2503	0.2396	M
4 DNX	1	6.205	6.200	0.005	79036	0.2503	0.2411	
7 MNX	1	7.711	7.707	0.004	86529	0.2918	0.2830	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

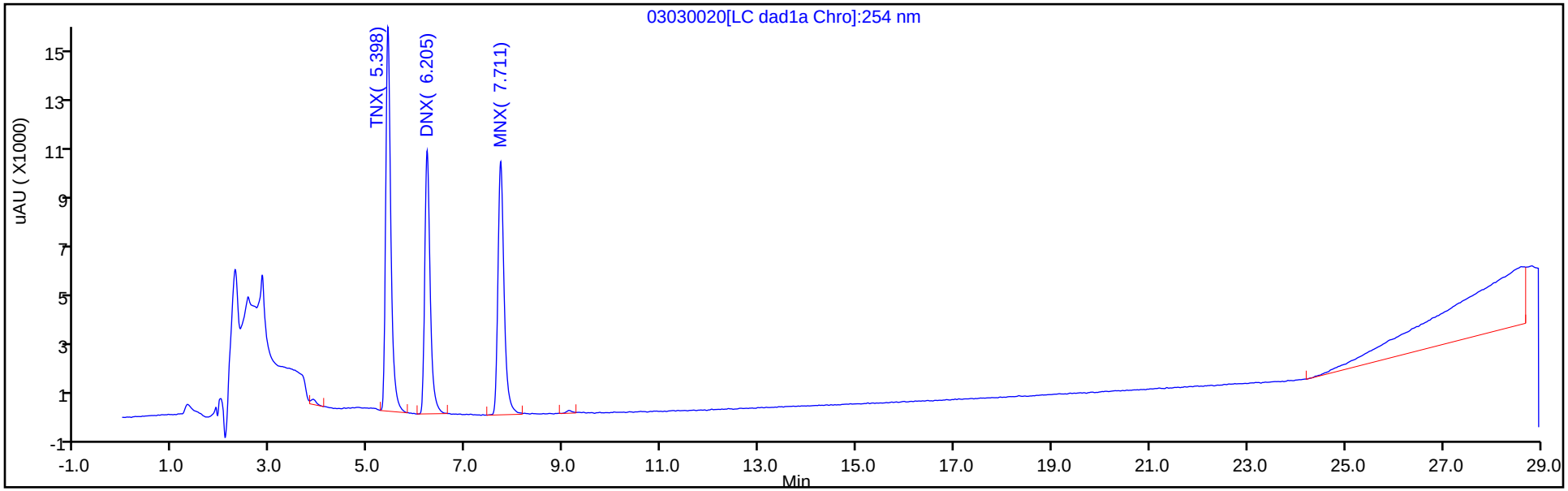
8330 DMT_00005 Amount Added: 12.50 Units: uL

Report Date: 05-Mar-2020 11:27:52 Chrom Revision: 2.3 19-Feb-2020 16:45:46

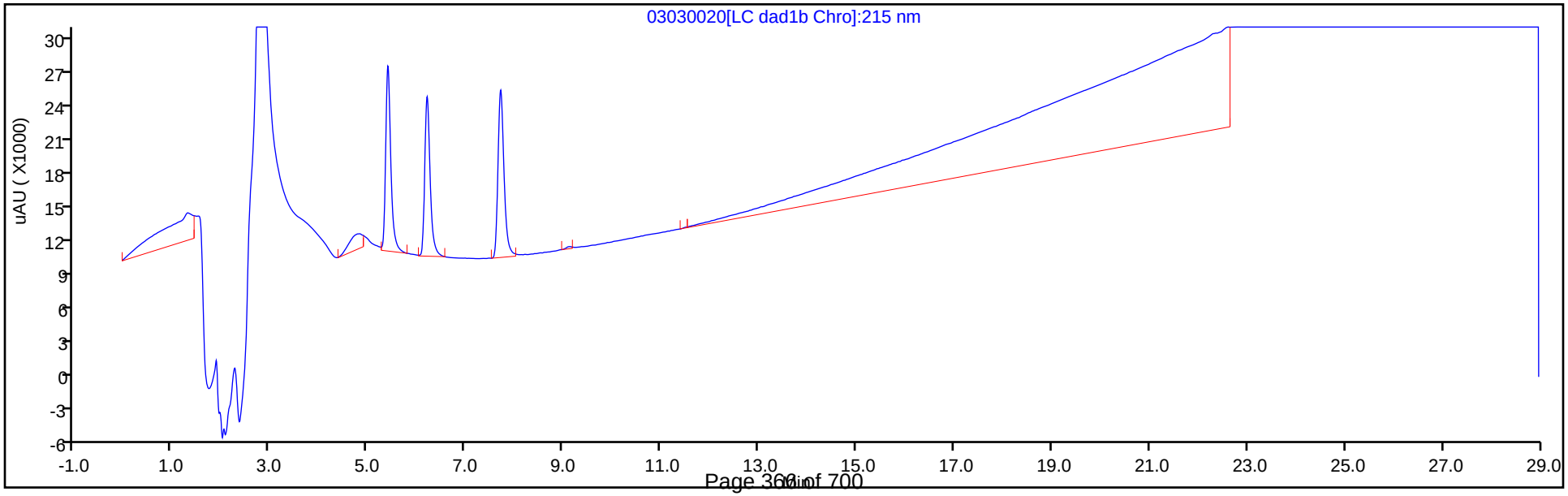
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\g2_luna\20200303-89749.b\03030020.d				
Injection Date:	04-Mar-2020 01:36:10	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC DMT 4			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 Peak: 1



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

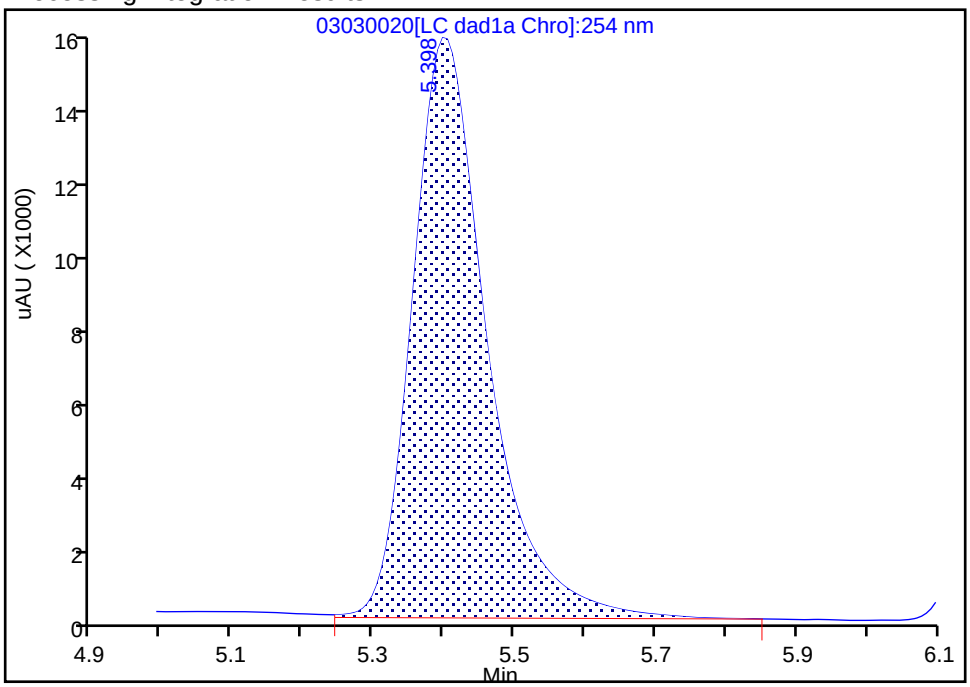
Data File:	\\chromna\denver\chromdata\g2_luna\20200303-89749.b\03030020.d				
Injection Date:	04-Mar-2020 01:36:10	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC DMT 4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

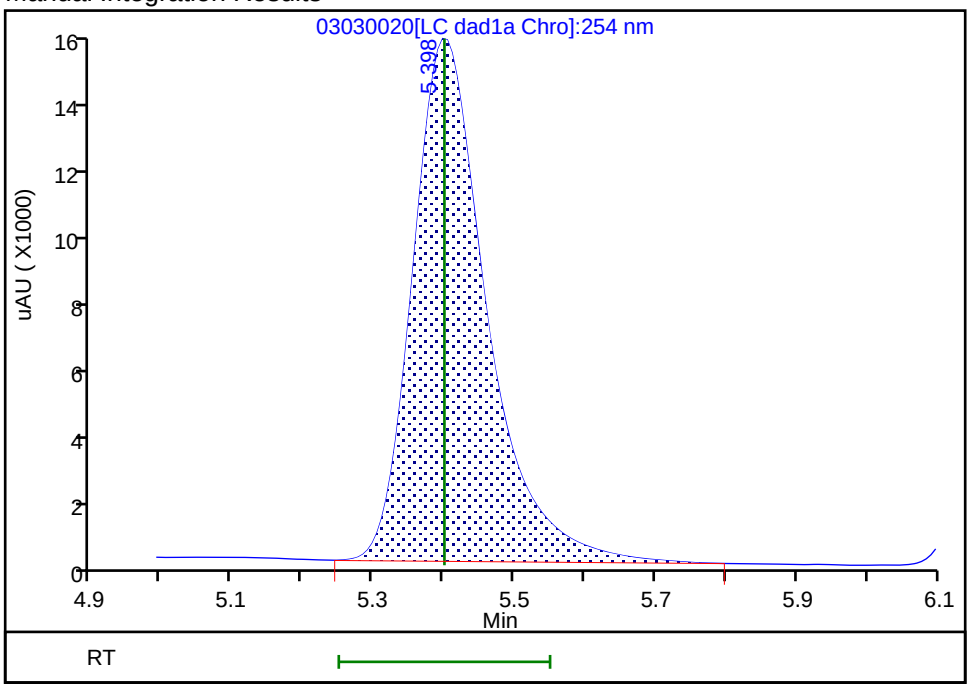
Processing Integration Results

RT: 5.40
Area: 110130
Amount: 0.241672
Amount Units: ug/ml



Manual Integration Results

RT: 5.40
Area: 108933
Amount: 0.239636
Amount Units: ug/ml



Reviewer: beckerc, 05-Mar-2020 08:43:37

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030021.D				
Lims ID:	IC DMT 3				
Client ID:					
Sample Type:	IC	Calib Level:	3		
Inject. Date:	04-Mar-2020 02:11:08	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 3				
Misc. Info.:	280-0089749-021				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub13				
Method:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2020 11:27:53	Calib Date:	04-Mar-2020 03:21:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030023.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0319				

First Level Reviewer: beckerc Date: 05-Mar-2020 08:43:22

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.400	5.400	0.000	45352	0.1001	0.0998	M
4 DNX	1	6.200	6.200	0.000	32876	0.1001	0.1003	
7 MNX	1	7.707	7.707	0.000	35364	0.1167	0.1157	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

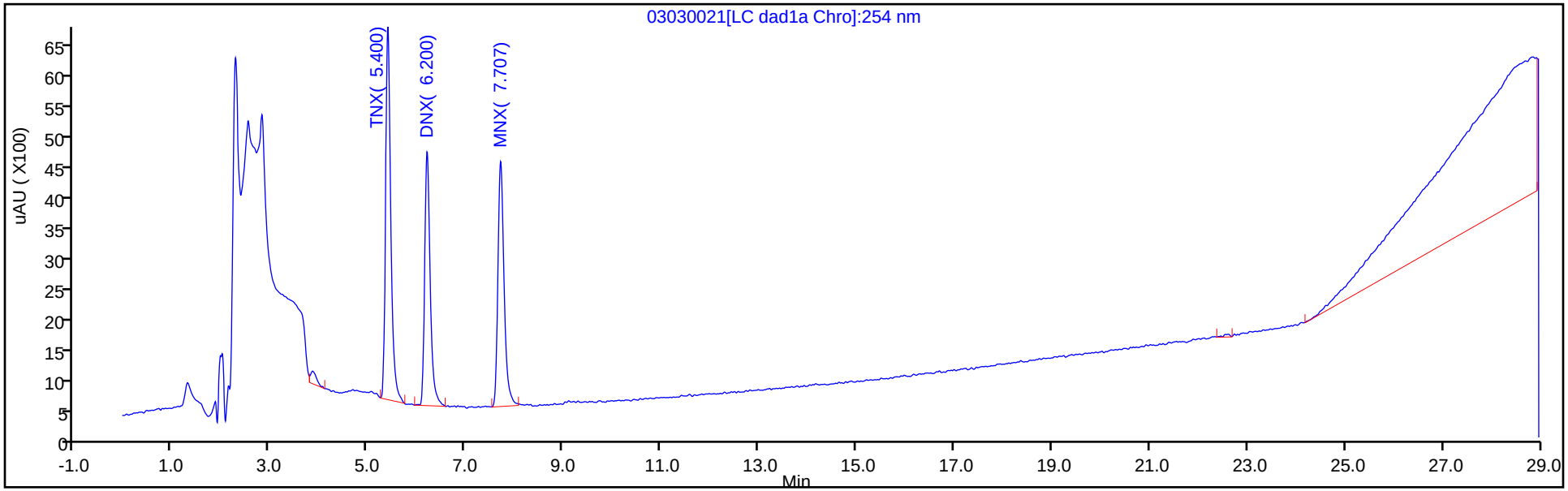
8330 DMT_00005 Amount Added: 5.00 Units: uL

Report Date: 05-Mar-2020 11:27:53 Chrom Revision: 2.3 19-Feb-2020 16:45:46

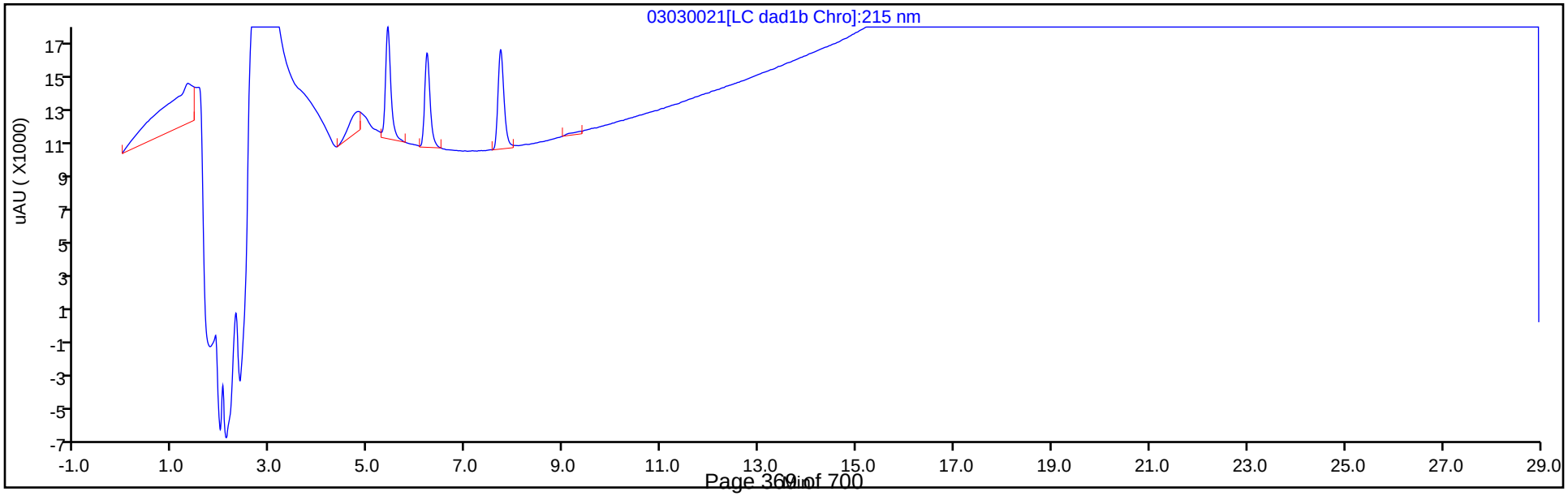
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\g2_luna\20200303-89749.b\03030021.d				
Injection Date:	04-Mar-2020 02:11:08	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC DMT 3			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 Peak: 1



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

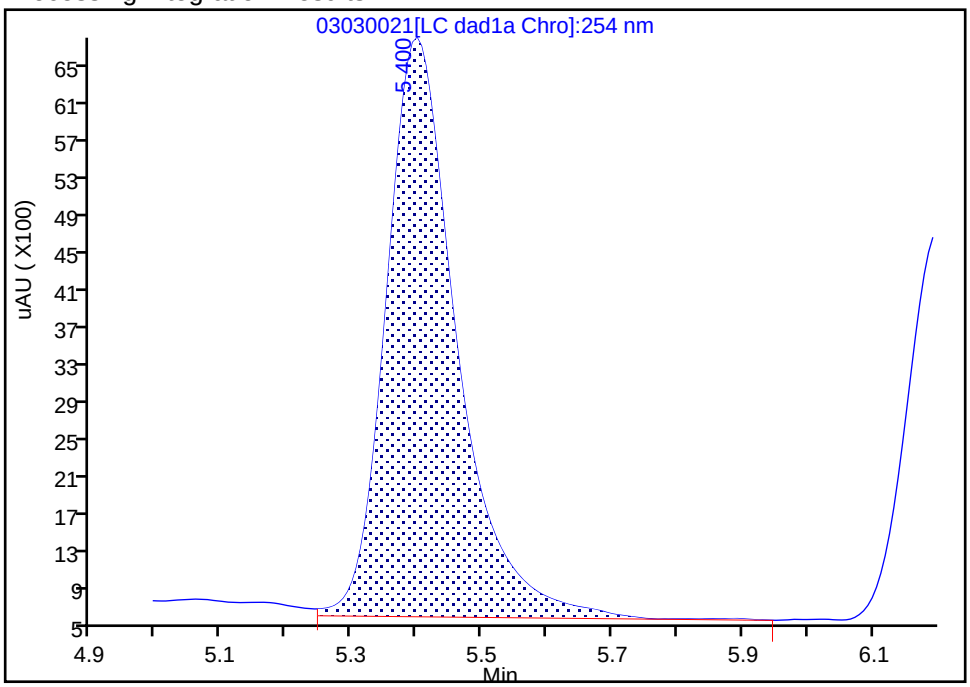
Data File:	\\chromna\denver\chromdata\g2_luna\20200303-89749.b\03030021.d				
Injection Date:	04-Mar-2020 02:11:08	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC DMT 3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

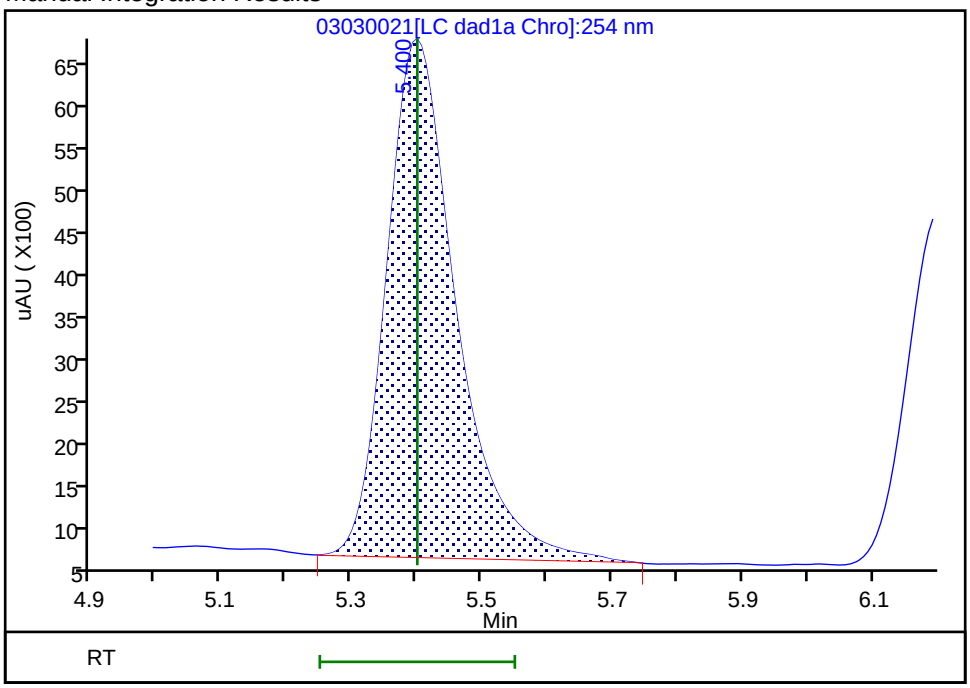
Processing Integration Results

RT: 5.40
Area: 46697
Amount: 0.102097
Amount Units: ug/ml



Manual Integration Results

RT: 5.40
Area: 45352
Amount: 0.099767
Amount Units: ug/ml



Reviewer: beckerc, 05-Mar-2020 08:43:18

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030022.D				
Lims ID:	IC DMT 2				
Client ID:					
Sample Type:	IC	Calib Level:	2		
Inject. Date:	04-Mar-2020 02:46:06	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 2				
Misc. Info.:	280-0089749-022				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub13				
Method:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2020 11:27:54	Calib Date:	04-Mar-2020 03:21:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030023.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0319				

First Level Reviewer: beckerc Date: 05-Mar-2020 08:42:59

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.400	5.400	0.000	22428	0.0501	0.0493	M
4 DNX	1	6.207	6.200	0.007	16425	0.0501	0.0501	
7 MNX	1	7.714	7.707	0.007	18169	0.0584	0.0594	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

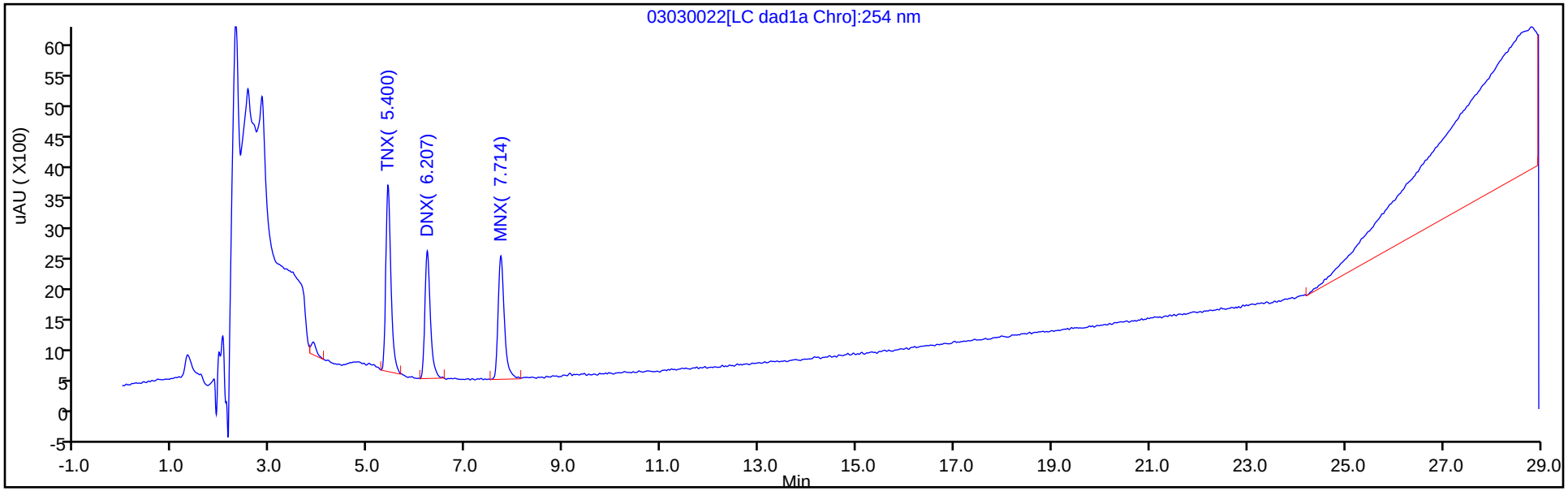
8330 DMT_00005 Amount Added: 2.50 Units: uL

Report Date: 05-Mar-2020 11:27:54 Chrom Revision: 2.3 19-Feb-2020 16:45:46

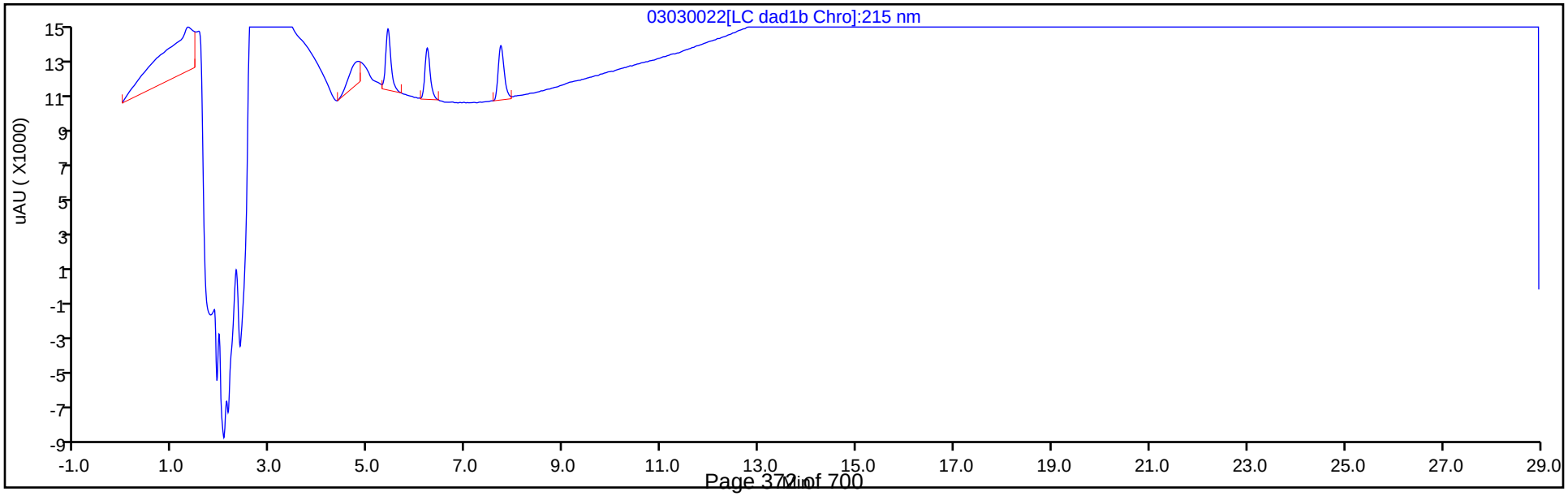
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\g2_luna\20200303-89749.b\03030022.d				
Injection Date:	04-Mar-2020 02:46:06	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC DMT 2			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 Peak: 1



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

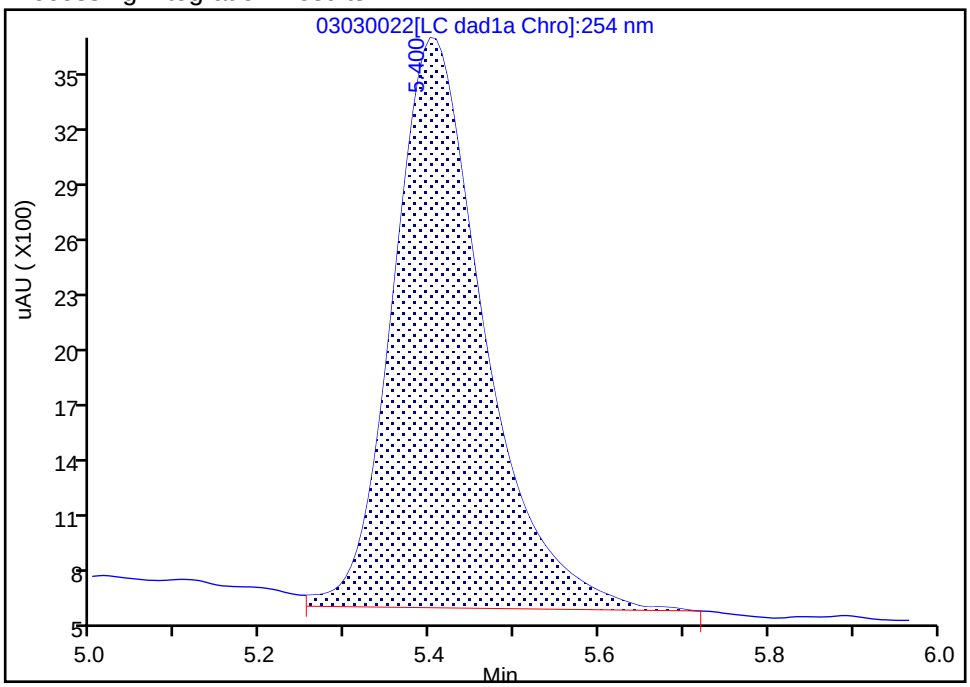
Data File:	\\chromna\denver\chromdata\g2_luna\20200303-89749.b\03030022.d				
Injection Date:	04-Mar-2020 02:46:06	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC DMT 2				
Client ID:					
Operator ID:	CB	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

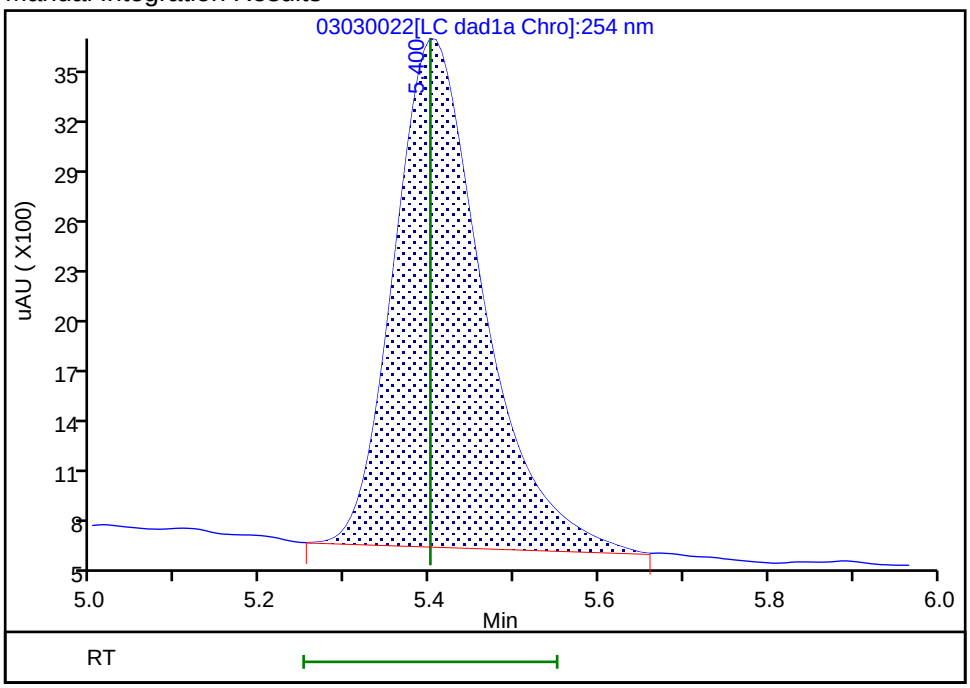
Processing Integration Results

RT: 5.40
Area: 23296
Amount: 0.050693
Amount Units: ug/ml



Manual Integration Results

RT: 5.40
Area: 22428
Amount: 0.049338
Amount Units: ug/ml



Reviewer: beckerc, 05-Mar-2020 08:42:55

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030023.D				
Lims ID:	IC DMT 1				
Client ID:					
Sample Type:	IC	Calib Level:	1		
Inject. Date:	04-Mar-2020 03:21:00	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 1				
Misc. Info.:	280-0089749-023				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub13				
Method:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2020 11:27:55	Calib Date:	04-Mar-2020 03:21:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030023.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0319				

First Level Reviewer: beckerc Date: 05-Mar-2020 08:42:41

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.403	5.400	0.003	9417	0.0200	0.0207	M
4 DNX	1	6.203	6.200	0.003	6702	0.0200	0.0204	
7 MNX	1	7.710	7.707	0.003	7218	0.0233	0.0236	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

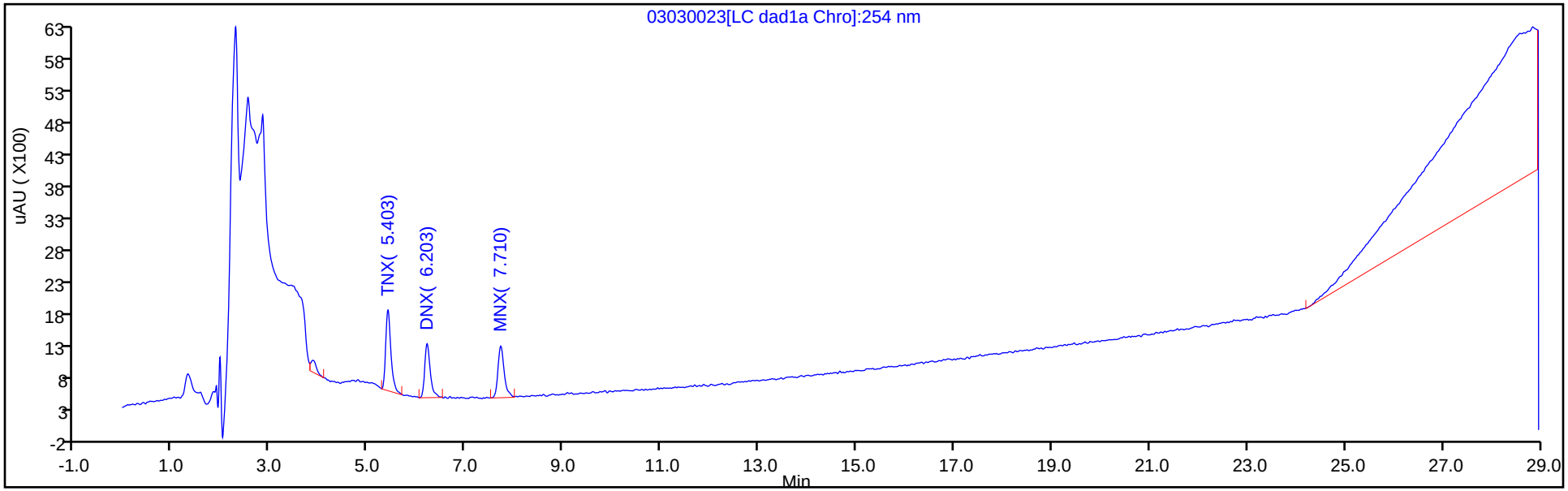
8330 DMT_00005 Amount Added: 1.00 Units: uL

Report Date: 05-Mar-2020 11:27:55 Chrom Revision: 2.3 19-Feb-2020 16:45:46

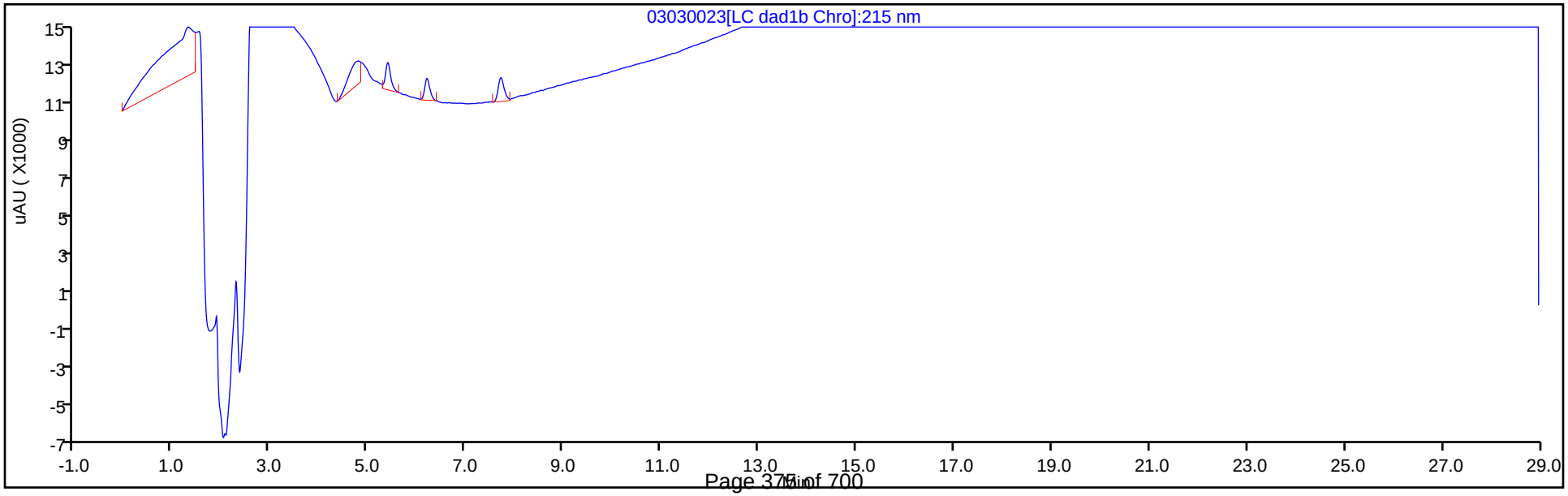
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\g2_luna\20200303-89749.b\03030023.d				
Injection Date:	04-Mar-2020 03:21:00	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	IC DMT 1			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 Peak: 1



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

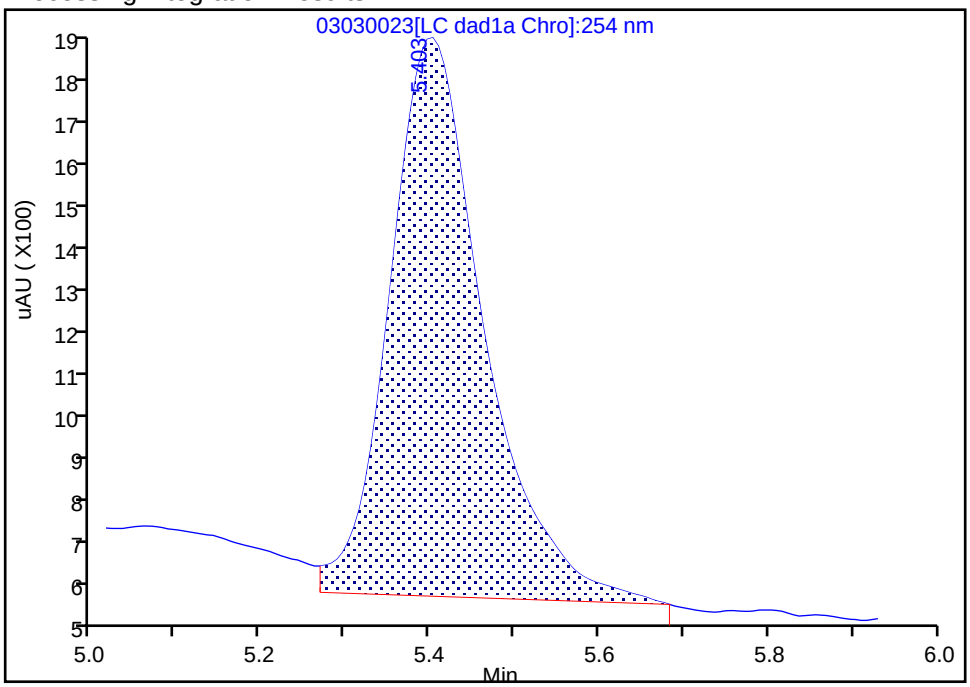
Data File:	\\chromna\denver\chromdata\g2_luna\20200303-89749.b\03030023.d				
Injection Date:	04-Mar-2020 03:21:00	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	IC DMT 1				
Client ID:					
Operator ID:	CB	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

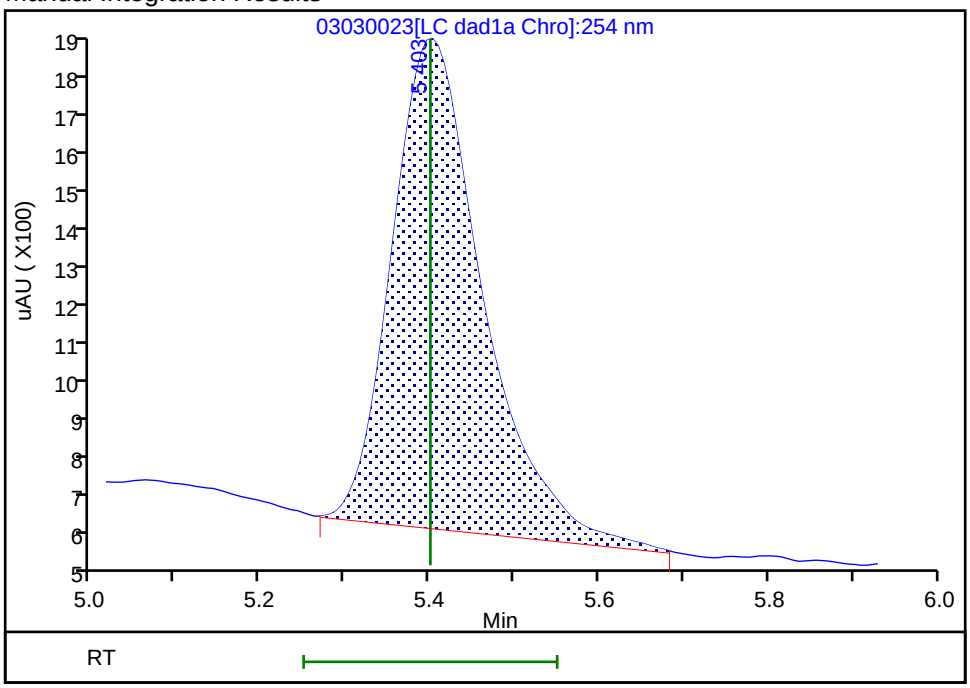
Processing Integration Results

RT: 5.40
Area: 10062
Amount: 0.021705
Amount Units: ug/ml



Manual Integration Results

RT: 5.40
Area: 9417
Amount: 0.020716
Amount Units: ug/ml



Reviewer: beckerc, 05-Mar-2020 08:42:37

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1 Analy Batch No.: 463276

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/01/2019 14:40 Calibration End Date: 07/01/2019 17:23 Calibration ID: 37011

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-463276/14	07010014.D
Level 2	IC 280-463276/13	07010013.D
Level 3	IC 280-463276/12	07010012.D
Level 4	IC 280-463276/11	07010011.D
Level 5	IC 280-463276/10	07010010.D
Level 6	IC 280-463276/9	07010009.D
Level 7	IC 280-463276/8	07010008.D
Level 8	IC 280-463276/7	07010007.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
HMX	6.642	6.648	6.645	6.638	6.646	6.644	6.645	6.639			6.493 - 6.793	6.643
RDX	7.762	7.768	7.759	7.758	7.759	7.764	7.772	7.759			7.607 - 7.907	7.763
Picric acid	8.209	8.215	8.199	8.191	8.179	8.171	8.158	8.085			8.027 - 8.327	8.176
1,3,5-Trinitrobenzene	8.902	8.908	8.899	8.898	8.899	8.904	8.912	8.899			8.747 - 9.047	8.903
1,3-Dinitrobenzene	9.562	9.568	9.565	9.565	9.559	9.571	9.578	9.565			9.407 - 9.707	9.567
Nitrobenzene	9.949	9.954	9.952	9.951	9.945	9.957	9.965	9.952			9.793 - 10.093	9.953
Tetryl	10.275	10.288	10.279	10.278	10.272	10.291	10.298	10.285			10.120 - 10.420	10.283
Nitroglycerin	10.775	10.788	10.779	10.785	10.779	10.791	10.798	10.778			10.620 - 10.920	10.784
2,4,6-Trinitrotoluene	11.229	11.241	11.232	11.238	11.232	11.244	11.252	11.238			11.123 - 11.323	11.238
4-Amino-2,6-dinitrotoluene	11.422	11.434	11.425	11.425	11.419	11.437	11.452	11.432			11.317 - 11.517	11.431
2-Amino-4,6-dinitrotoluene	11.715	11.721	11.712	11.718	11.705	11.731	11.738	11.718			11.603 - 11.803	11.720
2,6-Dinitrotoluene	11.842	11.854	11.852	11.851	11.845	11.864	11.872	11.858			11.737 - 11.937	11.855
2,4-Dinitrotoluene	12.042	12.054	12.045	12.051	12.039	12.064	12.072	12.052			11.937 - 12.137	12.052
2-Nitrotoluene	12.882	12.894	12.892	12.891	12.879	12.904	12.912	12.898			12.727 - 13.027	12.894
4-Nitrotoluene	13.329	13.334	13.332	13.331	13.325	13.344	13.358	13.338			13.167 - 13.467	13.336
3-Nitrotoluene	13.915	13.934	13.932	13.925	13.919	13.944	13.958	13.938			13.767 - 14.067	13.933
PETN	15.015	15.041	15.032	15.025	15.019	15.051	15.058	15.045			14.860 - 15.160	15.036
1,2-Dinitrobenzene	8.742	8.748	8.739	8.745	8.739	8.751	8.752	8.745			8.587 - 8.887	8.745

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

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1 Analy Batch No.: 463276

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/01/2019 14:40 Calibration End Date: 07/01/2019 17:23 Calibration ID: 37011

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-463276/14	07010014.D
Level 2	IC 280-463276/13	07010013.D
Level 3	IC 280-463276/12	07010012.D
Level 4	IC 280-463276/11	07010011.D
Level 5	IC 280-463276/10	07010010.D
Level 6	IC 280-463276/9	07010009.D
Level 7	IC 280-463276/8	07010008.D
Level 8	IC 280-463276/7	07010007.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
HMX	89750 95318	89840 97413	85950 97946	87784 90666	Ave		91833.2446				4.9		20.0			
RDX	116900 107183	113880 113994	106270 115333	106608 108796	Ave		111120.423				3.9		20.0			
Picric acid	115100 83438	96140 88936	86330 89601	83168 83162	Ave		90734.2268				11.9		20.0			
1,3,5-Trinitrobenzene	231900 245955	252720 254053	234380 258481	241100 242023	Ave		245076.507				3.9		20.0			
1,3-Dinitrobenzene	296204 306151	323277 320835	303966 325162	304951 308858	Ave		311175.451				3.4		20.0			
Nitrobenzene	186976 193580	206567 204311	194850 209370	195944 199625	Ave		198903.056				3.8		20.0			
Tetryl	140150 162025	164180 169667	159520 173034	159276 167806	Ave		161957.218				6.2		20.0			
Nitroglycerin	63150 71560	71662 74671	69583 75926	70987 71328	Ave		71108.3505				5.4		20.0			
2,4,6-Trinitrotoluene	226295 222398	236315 231917	222122 235332	219442 224394	Ave		227276.691				2.8		20.0			
4-Amino-2,6-dinitrotoluene	176471 161515	171785 167985	161715 170409	160291 160853	Ave		166377.838				3.7		20.0			
2-Amino-4,6-dinitrotoluene	191476 204177	207458 212138	203998 213209	201440 207996	Ave		205236.402				3.3		20.0			
2,6-Dinitrotoluene	168594 153719	165942 161295	152672 165239	153236 153578	Ave		159284.393				4.2		20.0			
2,4-Dinitrotoluene	290669 296722	305549 310537	292715 315315	293844 298227	Ave		300447.252				3.0		20.0			
2-Nitrotoluene	127617 124990	135872 132549	127368 134538	127386 127948	Ave		129783.617				3.1		20.0			

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

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

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1 Analy Batch No.: 463276

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/01/2019 14:40 Calibration End Date: 07/01/2019 17:23 Calibration ID: 37011

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
4-Nitrotoluene	107669 107174	111693 114057	107371 115455	108558 110063	Ave		110254.875				2.9		20.0			
3-Nitrotoluene	144721 139472	152410 147486	142161 150123	141510 143094	Ave		145122.200				3.1		20.0			
PETN	55530 76267	76864 79871	73030 80847	75248 76653	Ave		74288.8082				10.7		20.0			
1,2-Dinitrobenzene	130450 137375	142700 144760	136320 145938	137532 139553	Ave		139328.475				3.6		20.0			

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

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

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1 Analy Batch No.: 463276

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/01/2019 14:40 Calibration End Date: 07/01/2019 17:23 Calibration ID: 37011

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-463276/14	07010014.D
Level 2	IC 280-463276/13	07010013.D
Level 3	IC 280-463276/12	07010012.D
Level 4	IC 280-463276/11	07010011.D
Level 5	IC 280-463276/10	07010010.D
Level 6	IC 280-463276/9	07010009.D
Level 7	IC 280-463276/8	07010008.D
Level 8	IC 280-463276/7	07010007.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
HMX	Ave	1795 68189	4492 97946	8595 226664	21946	38127	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400
RDX	Ave	2338 79796	5694 115333	10627 271989	26652	42873	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400
Picric acid	Ave	2302 62255	4807 89601	8633 207904	20792	33375	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400
1,3,5-Trinitrobenzene	Ave	4638 177837	12636 258481	23438 605058	60275	98382	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400
1,3-Dinitrobenzene	Ave	5930 224809	16180 325487	30427 772917	76314	122583	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
Nitrobenzene	Ave	3747 143304	10349 209789	19524 500061	49084	77587	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251	0.401
Tetryl	Ave	2803 118767	8209 173034	15952 419514	39819	64810	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400
Nitroglycerin	Ave	12630 522695	35831 759263	69583 1783196	177468	286239	0.200 7.00	0.500 10.0	1.00 25.0	2.50	4.00
2,4,6-Trinitrotoluene	Ave	4544 162991	11863 236273	22301 563229	55080	89315	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251	0.402
4-Amino-2,6-dinitrotoluene	Ave	3540 117942	8615 170920	16220 403338	40193	64800	0.0201 0.702	0.0502 1.00	0.100 2.51	0.251	0.401
2-Amino-4,6-dinitrotoluene	Ave	3841 148942	10404 213849	20461 521549	50511	81916	0.0201 0.702	0.0502 1.00	0.100 2.51	0.251	0.401
2,6-Dinitrotoluene	Ave	3382 113245	8322 165735	15313 385096	38424	61672	0.0201 0.702	0.0502 1.00	0.100 2.51	0.251	0.401
2,4-Dinitrotoluene	Ave	5825 217811	15308 315946	29330 747059	73608	118926	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251	0.401
2-Nitrotoluene	Ave	2560 93063	6814 134942	12775 320829	31942	50146	0.0201 0.702	0.0502 1.00	0.100 2.51	0.251	0.401
4-Nitrotoluene	Ave	2162 80159	5607 115917	10780 276257	27248	43041	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251	0.402

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

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1 Analy Batch No.: 463276

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/01/2019 14:40 Calibration End Date: 07/01/2019 17:23 Calibration ID: 37011

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
3-Nitrotoluene	Ave	2906 103653	7651 150723	14273 359167	35519	56012	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251	0.402
PETN	Ave	11106 559099	38432 808473	73030 1916332	188119	305068	0.200 7.00	0.500 10.0	1.00 25.0	2.50	4.00
1,2-Dinitrobenzene	Ave	2609 101332	7135 145938	13632 348882	34383	54950	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400

Curve Type Legend:
Ave = Average

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010007.D				
Lims ID:	IC MAIN L8				
Client ID:					
Sample Type:	IC	Calib Level:	8		
Inject. Date:	01-Jul-2019 14:40:42	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC MAIN L8				
Misc. Info.:	280-0083376-007				
Operator ID:	hkf	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub9				
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	02-Jul-2019 11:34:43	Calib Date:	02-Jul-2019 00:18:07		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0309				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.639	6.643	-0.004	226664	2.50	2.47	
7 RDX	1	7.759	7.757	0.002	271989	2.50	2.45	
8 2,4,6-Trinitrophenol	1	8.085	8.177	-0.092	207904	2.50	2.29	
$ 9 1,2-Dinitrobenzene	1	8.745	8.737	0.008	348882	2.50	2.50	
10 1,3,5-Trinitrobenzene	1	8.899	8.897	0.002	605058	2.50	2.47	
11 1,3-Dinitrobenzene	1	9.565	9.557	0.008	772917	2.50	2.48	
12 Nitrobenzene	1	9.952	9.943	0.009	500061	2.51	2.51	
14 Tetryl	1	10.285	10.270	0.015	419514	2.50	2.59	
15 Nitroglycerin	2	10.778	10.770	0.008	1783196	25.0	25.1	
16 2,4,6-Trinitrotoluene	1	11.238	11.223	0.015	563229	2.51	2.48	
17 4-Amino-2,6-dinitrotoluene	1	11.432	11.417	0.015	403338	2.51	2.42	
18 2-Amino-4,6-dinitrotoluene	1	11.718	11.703	0.015	521549	2.51	2.54	
19 2,6-Dinitrotoluene	1	11.858	11.837	0.021	385096	2.51	2.42	
20 2,4-Dinitrotoluene	1	12.052	12.037	0.015	747059	2.51	2.49	
21 o-Nitrotoluene	1	12.898	12.877	0.021	320829	2.51	2.47	
22 p-Nitrotoluene	1	13.338	13.317	0.021	276257	2.51	2.51	
23 m-Nitrotoluene	1	13.938	13.917	0.021	359167	2.51	2.47	
24 PETN	2	15.045	15.010	0.035	1916332	25.0	25.8	

Reagents:

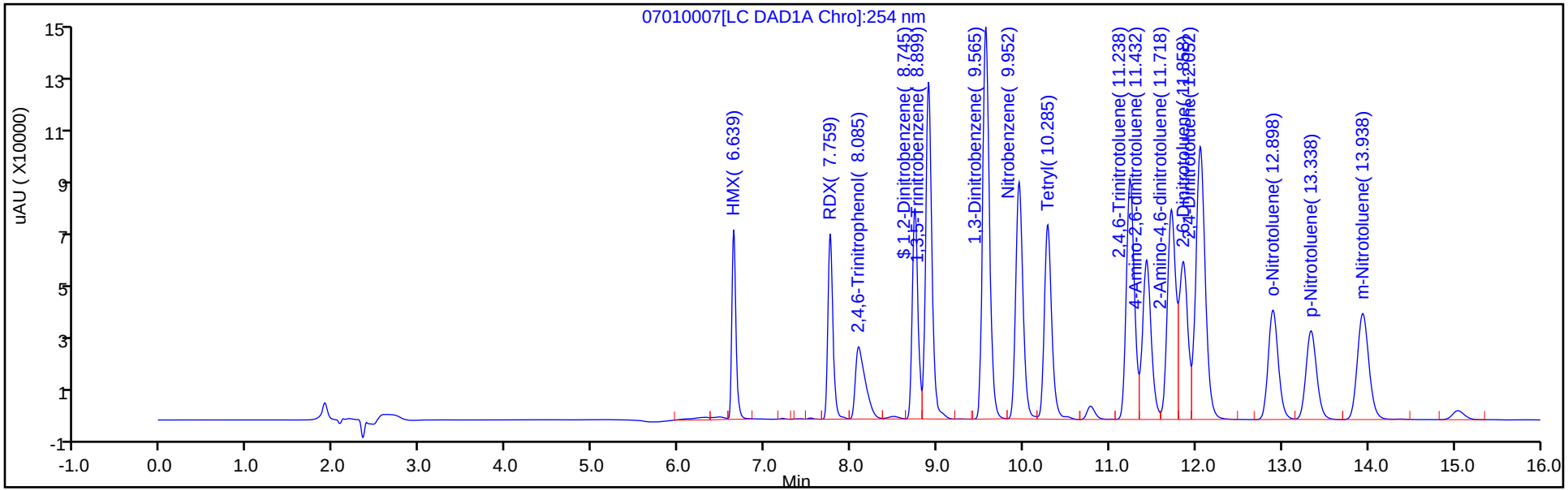
8330IntermStk_00058 Amount Added: 125.00 Units: uL

Report Date: 02-Jul-2019 11:34:44 Chrom Revision: 2.3 20-Jun-2019 20:50:56

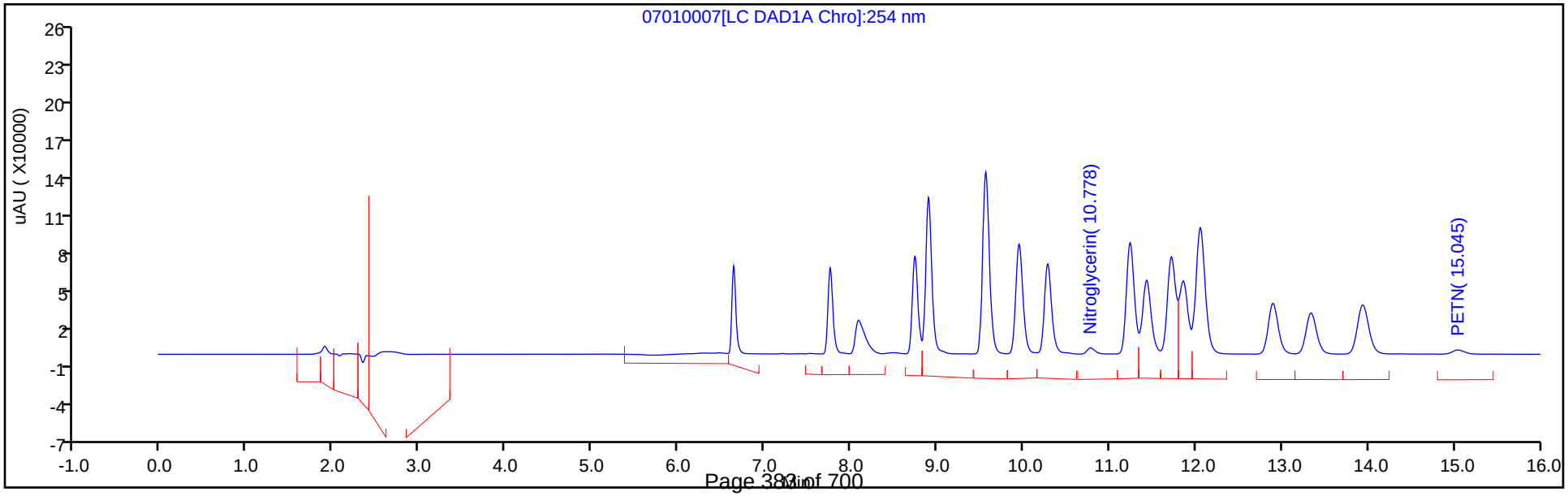
Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010007.D				
Injection Date:	01-Jul-2019 14:40:42	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	IC MAIN L8			Worklist Smp#:	7
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010008.D				
Lims ID:	IC MAIN L7				
Client ID:					
Sample Type:	IC	Calib Level:	7		
Inject. Date:	01-Jul-2019 15:04:44	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC MAIN L7				
Misc. Info.:	280-0083376-008				
Operator ID:	hkf	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub9				
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	02-Jul-2019 11:34:46	Calib Date:	02-Jul-2019 00:18:07		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0309				

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 HMX	1	6.645	6.638	0.007	97946	1.00	1.07	
	7 RDX	1	7.772	7.758	0.014	115333	1.00	1.04	
	8 2,4,6-Trinitrophenol	1	8.158	8.191	-0.033	89601	1.00	0.9875	
$	9 1,2-Dinitrobenzene	1	8.752	8.745	0.007	145938	1.00	1.05	
	10 1,3,5-Trinitrobenzene	1	8.912	8.898	0.014	258481	1.00	1.05	
	11 1,3-Dinitrobenzene	1	9.578	9.565	0.013	325487	1.00	1.05	
	12 Nitrobenzene	1	9.965	9.951	0.014	209789	1.00	1.05	
	14 Tetryl	1	10.298	10.278	0.020	173034	1.00	1.07	
	15 Nitroglycerin	2	10.798	10.785	0.013	759263	10.0	10.7	
	16 2,4,6-Trinitrotoluene	1	11.252	11.238	0.014	236273	1.00	1.04	
	17 4-Amino-2,6-dinitrotoluene	1	11.452	11.425	0.027	170920	1.00	1.03	
	18 2-Amino-4,6-dinitrotoluene	1	11.738	11.718	0.020	213849	1.00	1.04	
	19 2,6-Dinitrotoluene	1	11.872	11.851	0.021	165735	1.00	1.04	
	20 2,4-Dinitrotoluene	1	12.072	12.051	0.021	315946	1.00	1.05	
	21 o-Nitrotoluene	1	12.912	12.891	0.021	134942	1.00	1.04	
	22 p-Nitrotoluene	1	13.358	13.331	0.027	115917	1.00	1.05	
	23 m-Nitrotoluene	1	13.958	13.925	0.033	150723	1.00	1.04	
	24 PETN	2	15.058	15.025	0.033	808473	10.0	10.9	

Reagents:

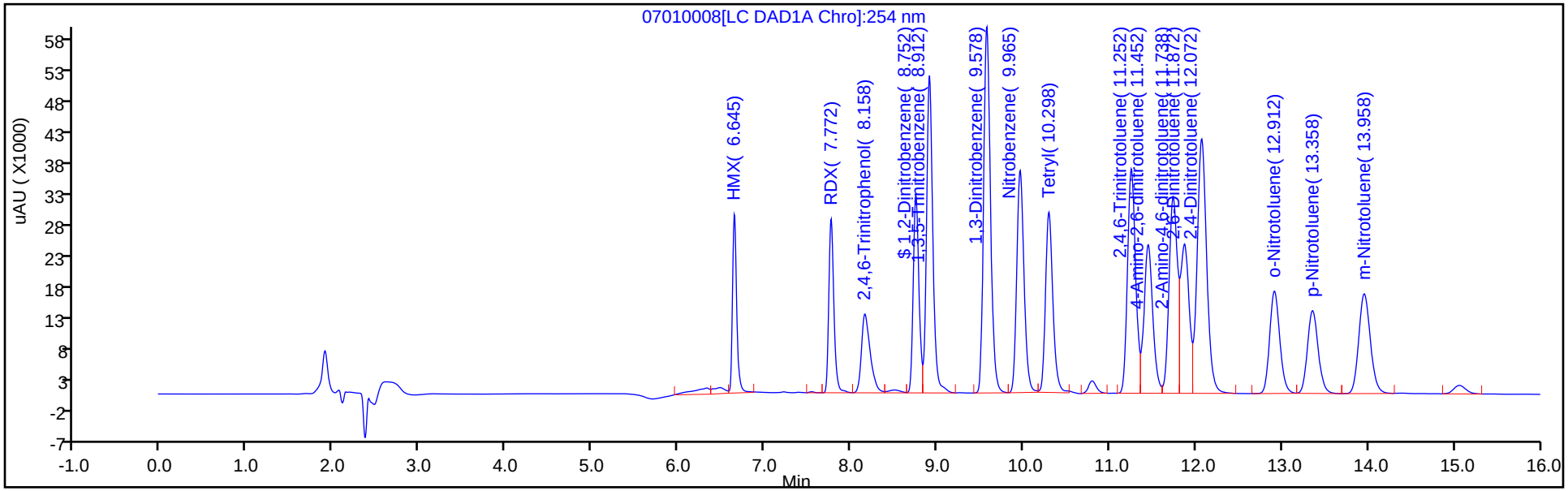
8330IntermStk_00058 Amount Added: 50.00 Units: uL

Report Date: 02-Jul-2019 11:34:46 Chrom Revision: 2.3 20-Jun-2019 20:50:56

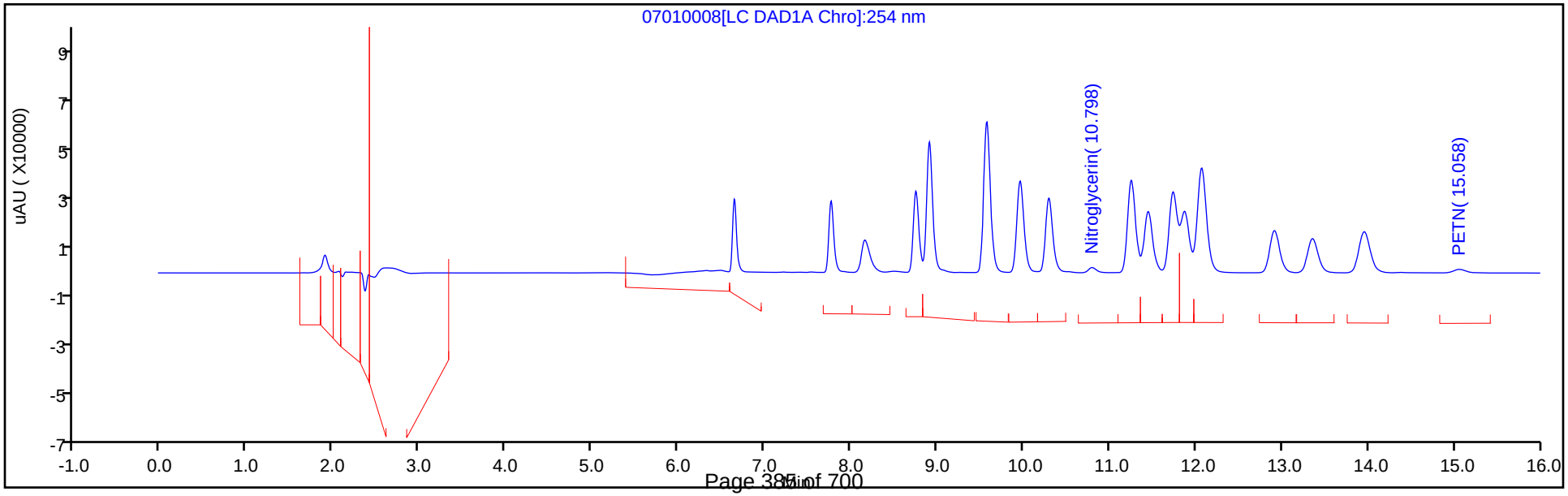
Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010008.D				
Injection Date:	01-Jul-2019 15:04:44	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	IC MAIN L7			Worklist Smp#:	8
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



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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010009.D				
Lims ID:	IC MAIN L6				
Client ID:					
Sample Type:	IC	Calib Level:	6		
Inject. Date:	01-Jul-2019 15:27:41	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC MAIN L6				
Misc. Info.:	280-0083376-009				
Operator ID:	hkf	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub9				
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	02-Jul-2019 11:34:47	Calib Date:	02-Jul-2019 00:18:07		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0309				

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 HMX	1	6.644	6.643	0.001	68189	0.7000	0.7425	
	7 RDX	1	7.764	7.757	0.007	79796	0.7000	0.7181	
	8 2,4,6-Trinitrophenol	1	8.171	8.177	-0.006	62255	0.7000	0.6861	
$	9 1,2-Dinitrobenzene	1	8.751	8.737	0.014	101332	0.7000	0.7273	
	10 1,3,5-Trinitrobenzene	1	8.904	8.897	0.007	177837	0.7000	0.7256	
	11 1,3-Dinitrobenzene	1	9.571	9.557	0.014	224809	0.7007	0.7225	
	12 Nitrobenzene	1	9.957	9.943	0.014	143304	0.7014	0.7205	
	14 Tetryl	1	10.291	10.270	0.021	118767	0.7000	0.7333	
	15 Nitroglycerin	2	10.791	10.770	0.021	522695	7.00	7.35	
	16 2,4,6-Trinitrotoluene	1	11.244	11.223	0.021	162991	0.7028	0.7171	
	17 4-Amino-2,6-dinitrotoluene	1	11.437	11.417	0.020	117942	0.7021	0.7089	
	18 2-Amino-4,6-dinitrotoluene	1	11.731	11.703	0.028	148942	0.7021	0.7257	
	19 2,6-Dinitrotoluene	1	11.864	11.837	0.027	113245	0.7021	0.7110	
	20 2,4-Dinitrotoluene	1	12.064	12.037	0.027	217811	0.7014	0.7250	
	21 o-Nitrotoluene	1	12.904	12.877	0.027	93063	0.7021	0.7171	
	22 p-Nitrotoluene	1	13.344	13.317	0.027	80159	0.7028	0.7270	
	23 m-Nitrotoluene	1	13.944	13.917	0.027	103653	0.7028	0.7142	
	24 PETN	2	15.051	15.010	0.041	559099	7.00	7.53	

Reagents:

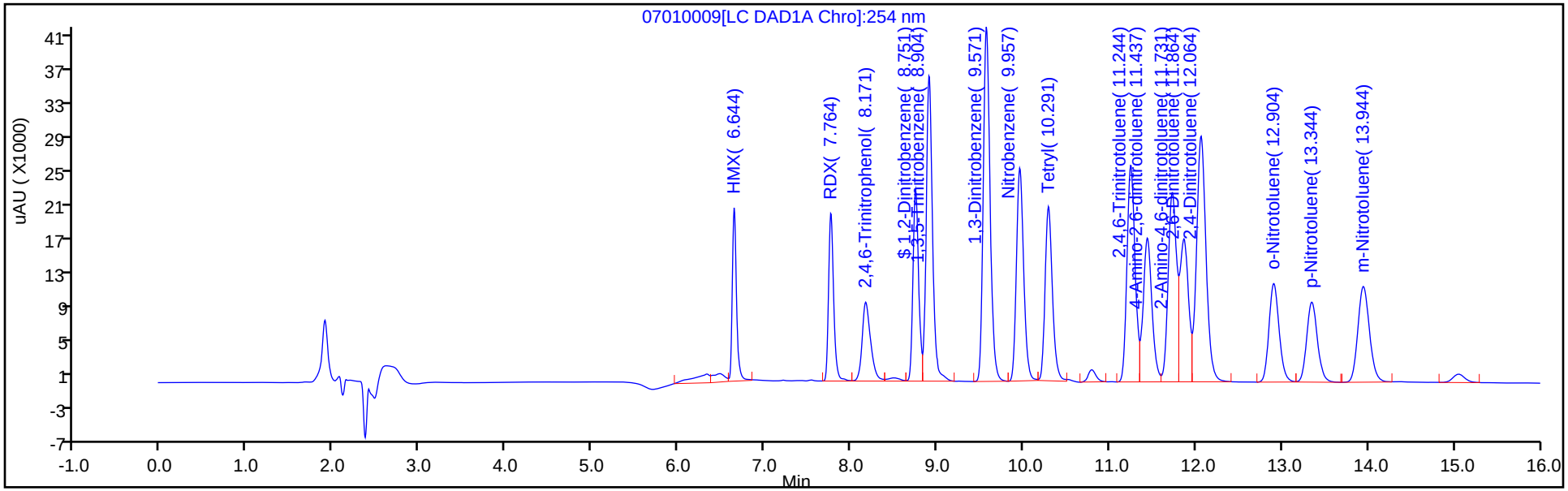
8330IntermStk_00058 Amount Added: 35.00 Units: uL

Report Date: 02-Jul-2019 11:34:48 Chrom Revision: 2.3 20-Jun-2019 20:50:56

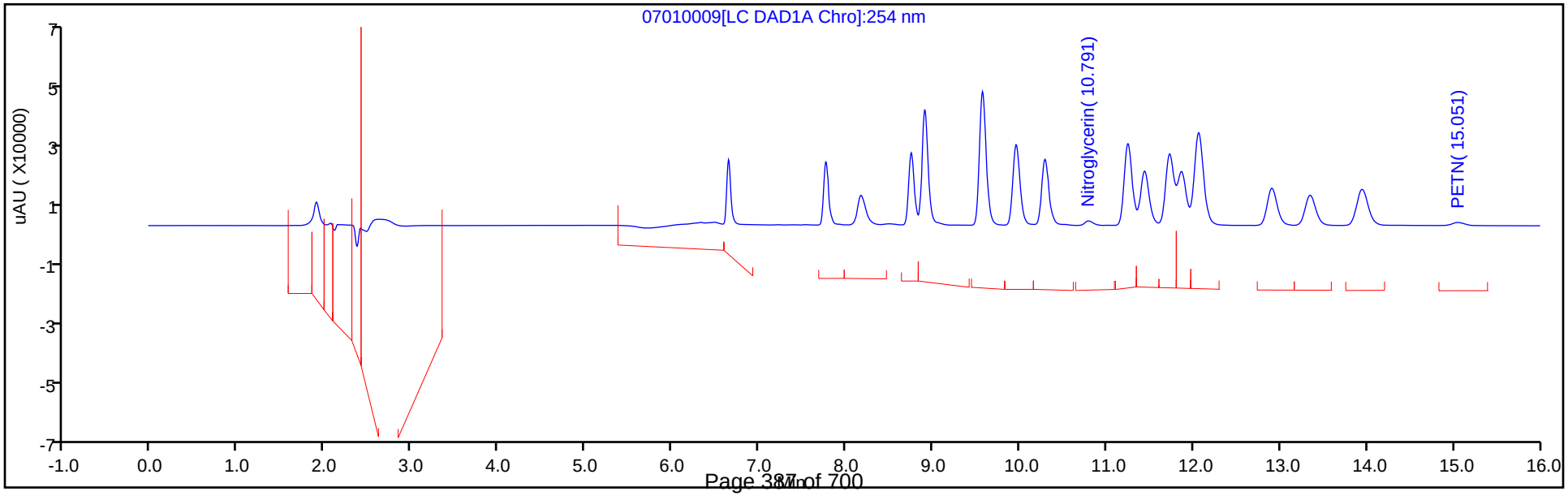
Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010009.D				
Injection Date:	01-Jul-2019 15:27:41	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	IC MAIN L6			Worklist Smp#:	9
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010010.D				
Lims ID:	IC MAIN L5				
Client ID:					
Sample Type:	IC	Calib Level:	5		
Inject. Date:	01-Jul-2019 15:50:38	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC MAIN L5				
Misc. Info.:	280-0083376-010				
Operator ID:	hkf	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub9				
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	02-Jul-2019 11:34:49	Calib Date:	02-Jul-2019 00:18:07		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0309				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.646	6.638	0.008	38127	0.4000	0.4152	
7 RDX	1	7.759	7.758	0.001	42873	0.4000	0.3858	
8 2,4,6-Trinitrophenol	1	8.179	8.191	-0.012	33375	0.4000	0.3678	
$ 9 1,2-Dinitrobenzene	1	8.739	8.745	-0.006	54950	0.4000	0.3944	
10 1,3,5-Trinitrobenzene	1	8.899	8.898	0.001	98382	0.4000	0.4014	
11 1,3-Dinitrobenzene	1	9.559	9.565	-0.006	122583	0.4004	0.3939	
12 Nitrobenzene	1	9.945	9.951	-0.006	77587	0.4008	0.3901	
14 Tetryl	1	10.272	10.278	-0.006	64810	0.4000	0.4002	
15 Nitroglycerin	2	10.779	10.785	-0.006	286239	4.00	4.03	
16 2,4,6-Trinitrotoluene	1	11.232	11.238	-0.006	89315	0.4016	0.3930	
17 4-Amino-2,6-dinitrotoluene	1	11.419	11.425	-0.006	64800	0.4012	0.3895	
18 2-Amino-4,6-dinitrotoluene	1	11.705	11.718	-0.013	81916	0.4012	0.3991	
19 2,6-Dinitrotoluene	1	11.845	11.851	-0.006	61672	0.4012	0.3872	
20 2,4-Dinitrotoluene	1	12.039	12.051	-0.012	118926	0.4008	0.3958	
21 o-Nitrotoluene	1	12.879	12.891	-0.012	50146	0.4012	0.3864	
22 p-Nitrotoluene	1	13.325	13.331	-0.006	43041	0.4016	0.3904	
23 m-Nitrotoluene	1	13.919	13.925	-0.006	56012	0.4016	0.3860	
24 PETN	2	15.019	15.025	-0.006	305068	4.00	4.11	

Reagents:

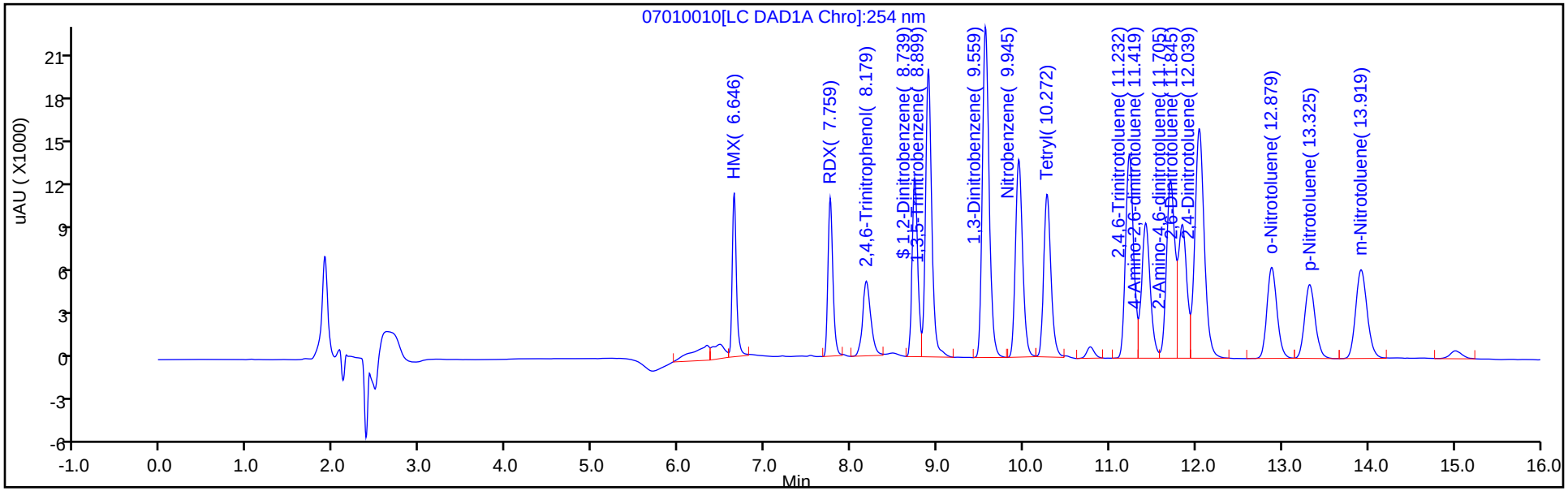
8330IntermStk_00058 Amount Added: 20.00 Units: uL

Report Date: 02-Jul-2019 11:34:50 Chrom Revision: 2.3 20-Jun-2019 20:50:56

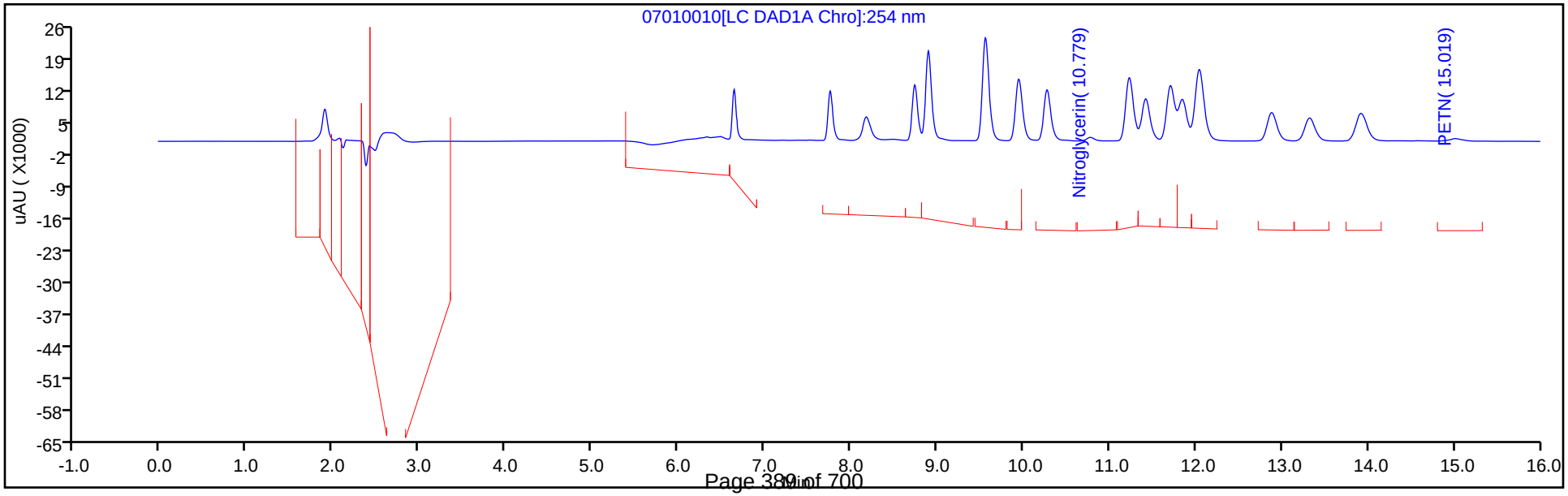
Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010010.D				
Injection Date:	01-Jul-2019 15:50:38	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	IC MAIN L5			Worklist Smp#:	10
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010011.D
Lims ID: IC MAIN L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 01-Jul-2019 16:13:37 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC MAIN L4
Misc. Info.: 280-0083376-011
Operator ID: hkf Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 02-Jul-2019 11:34:51 Calib Date: 02-Jul-2019 00:18:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0309

First Level Reviewer: fiedlerh Date: 01-Jul-2019 16:40:25

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.638	6.643	-0.005	21946	0.2500	0.2390	
7 RDX	1	7.758	7.757	0.001	26652	0.2500	0.2398	
8 2,4,6-Trinitrophenol	1	8.191	8.177	0.014	20792	0.2500	0.2292	
$ 9 1,2-Dinitrobenzene	1	8.745	8.737	0.008	34383	0.2500	0.2468	
10 1,3,5-Trinitrobenzene	1	8.898	8.897	0.001	60275	0.2500	0.2459	
11 1,3-Dinitrobenzene	1	9.565	9.557	0.008	76314	0.2503	0.2452	
12 Nitrobenzene	1	9.951	9.943	0.008	49084	0.2505	0.2468	
14 Tetryl	1	10.278	10.270	0.008	39819	0.2500	0.2459	
15 Nitroglycerin	2	10.785	10.770	0.015	177468	2.50	2.50	
16 2,4,6-Trinitrotoluene	1	11.238	11.223	0.015	55080	0.2510	0.2423	
17 4-Amino-2,6-dinitrotoluene	1	11.425	11.417	0.008	40193	0.2508	0.2416	
18 2-Amino-4,6-dinitrotoluene	1	11.718	11.703	0.015	50511	0.2508	0.2461	
19 2,6-Dinitrotoluene	1	11.851	11.837	0.014	38424	0.2508	0.2412	
20 2,4-Dinitrotoluene	1	12.051	12.037	0.014	73608	0.2505	0.2450	
21 o-Nitrotoluene	1	12.891	12.877	0.014	31942	0.2508	0.2461	
22 p-Nitrotoluene	1	13.331	13.317	0.014	27248	0.2510	0.2471	
23 m-Nitrotoluene	1	13.925	13.917	0.008	35519	0.2510	0.2448	
24 PETN	2	15.025	15.010	0.015	188119	2.50	2.53	

Reagents:

8330IntermStk_00058 Amount Added: 12.50 Units: uL

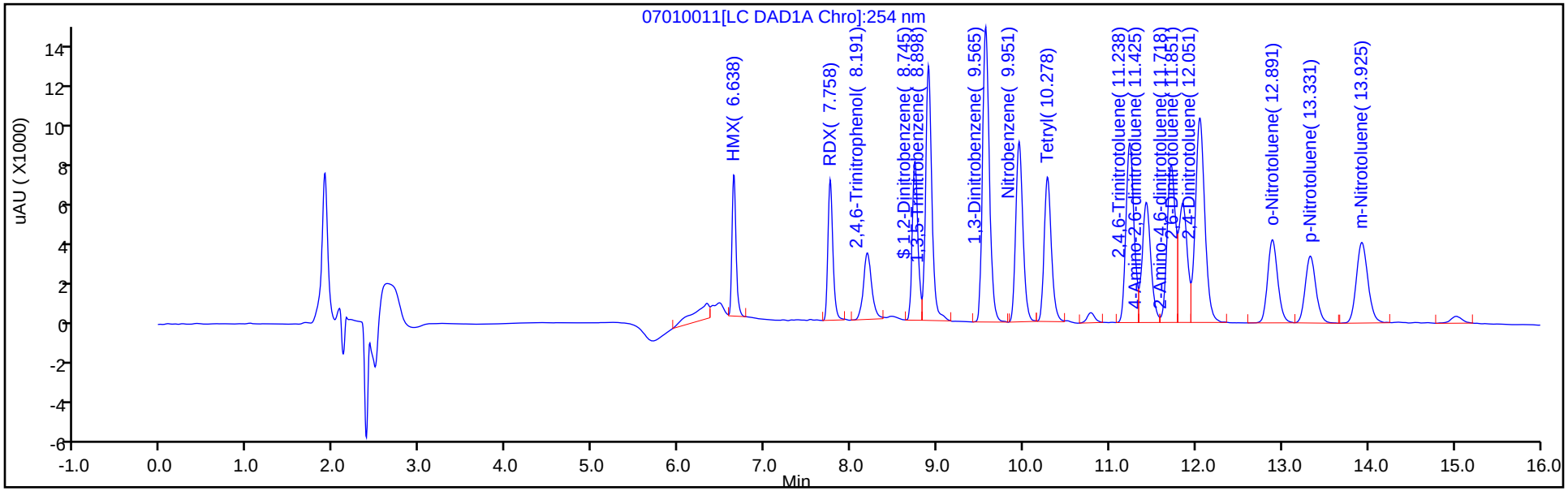
Report Date: 02-Jul-2019 11:34:51 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

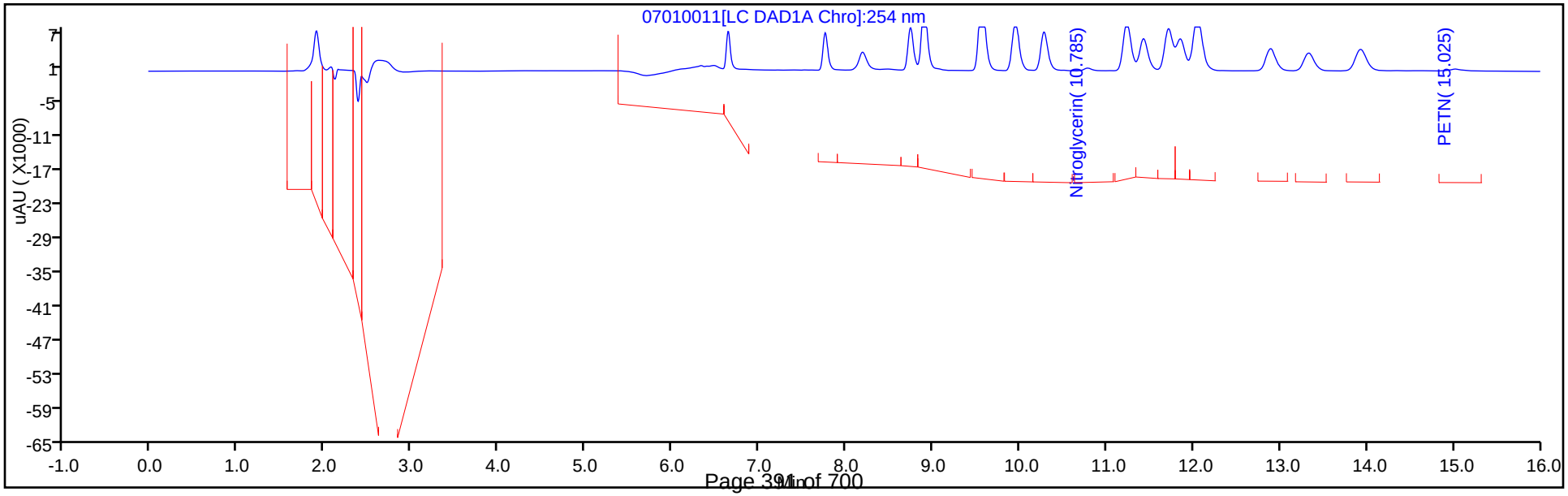
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010011.D

Injection Date:	01-Jul-2019 16:13:37	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	IC MAIN L4			Worklist Smp#:	11
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010012.D				
Lims ID:	IC MAIN L3				
Client ID:					
Sample Type:	IC	Calib Level:	3		
Inject. Date:	01-Jul-2019 16:36:33	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC MAIN L3				
Misc. Info.:	280-0083376-012				
Operator ID:	hkf	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub9				
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	02-Jul-2019 11:34:53	Calib Date:	02-Jul-2019 00:18:07		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0309				

First Level Reviewer: fiedlerh Date: 01-Jul-2019 18:30:35

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.645	6.643	0.002	8595	0.1000	0.0936	M
7 RDX	1	7.759	7.757	0.002	10627	0.1000	0.0956	
8 2,4,6-Trinitrophenol	1	8.199	8.177	0.022	8633	0.1000	0.0951	
$ 9 1,2-Dinitrobenzene	1	8.739	8.737	0.002	13632	0.1000	0.0978	
10 1,3,5-Trinitrobenzene	1	8.899	8.897	0.002	23438	0.1000	0.0956	
11 1,3-Dinitrobenzene	1	9.565	9.557	0.008	30427	0.1001	0.0978	
12 Nitrobenzene	1	9.952	9.943	0.009	19524	0.1002	0.0982	
14 Tetryl	1	10.279	10.270	0.009	15952	0.1000	0.0985	
15 Nitroglycerin	2	10.779	10.770	0.009	69583	1.00	0.9785	
16 2,4,6-Trinitrotoluene	1	11.232	11.223	0.009	22301	0.1004	0.0981	
17 4-Amino-2,6-dinitrotoluene	1	11.425	11.417	0.008	16220	0.1003	0.0975	
18 2-Amino-4,6-dinitrotoluene	1	11.712	11.703	0.009	20461	0.1003	0.0997	
19 2,6-Dinitrotoluene	1	11.852	11.837	0.015	15313	0.1003	0.0961	
20 2,4-Dinitrotoluene	1	12.045	12.037	0.008	29330	0.1002	0.0976	
21 o-Nitrotoluene	1	12.892	12.877	0.015	12775	0.1003	0.0984	
22 p-Nitrotoluene	1	13.332	13.317	0.015	10780	0.1004	0.0978	
23 m-Nitrotoluene	1	13.932	13.917	0.015	14273	0.1004	0.0984	
24 PETN	2	15.032	15.010	0.022	73030	1.00	0.9831	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

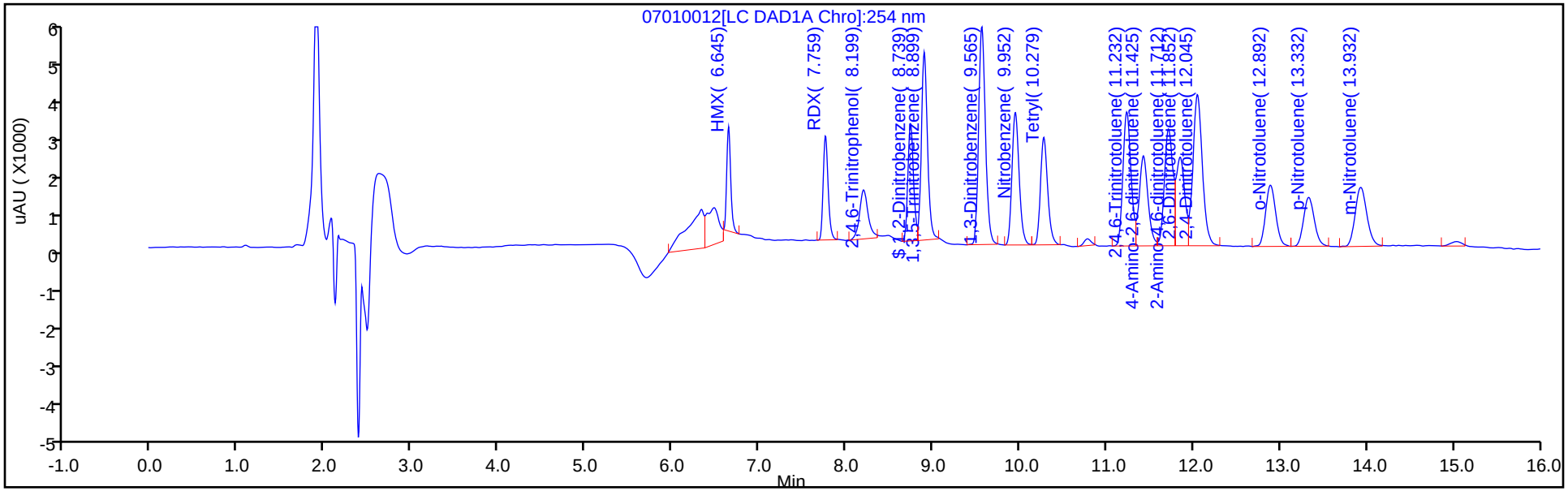
8330IntermStk_00058 Amount Added: 5.00 Units: uL

Report Date: 02-Jul-2019 11:34:53 Chrom Revision: 2.3 20-Jun-2019 20:50:56

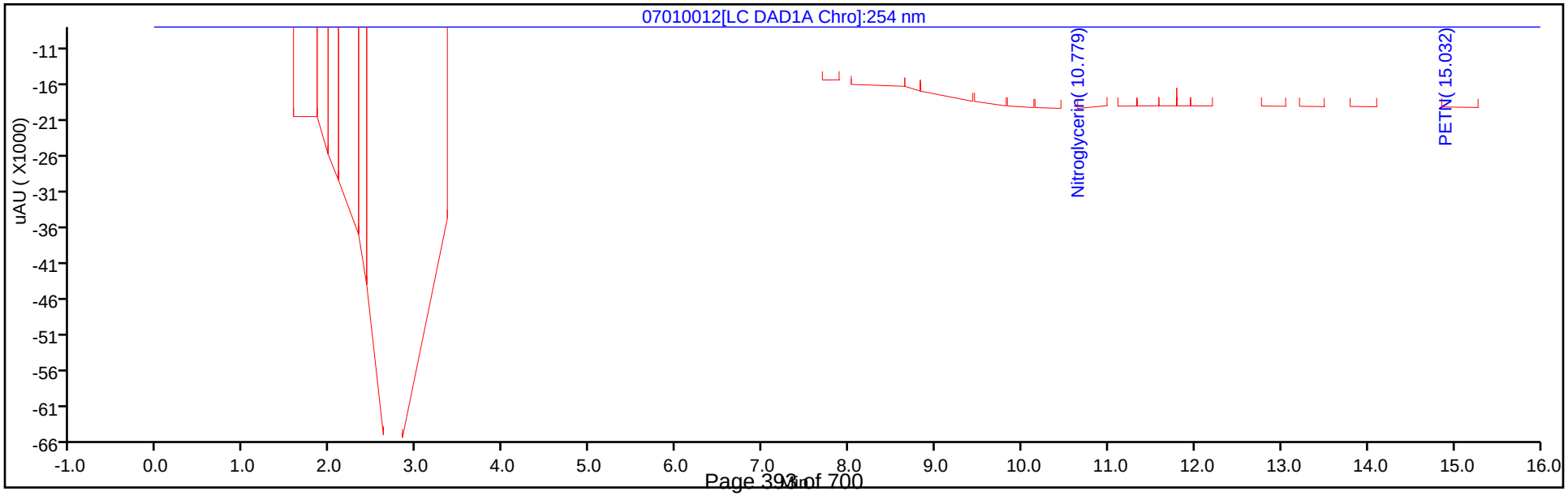
Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010012.D				
Injection Date:	01-Jul-2019 16:36:33	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	IC MAIN L3			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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

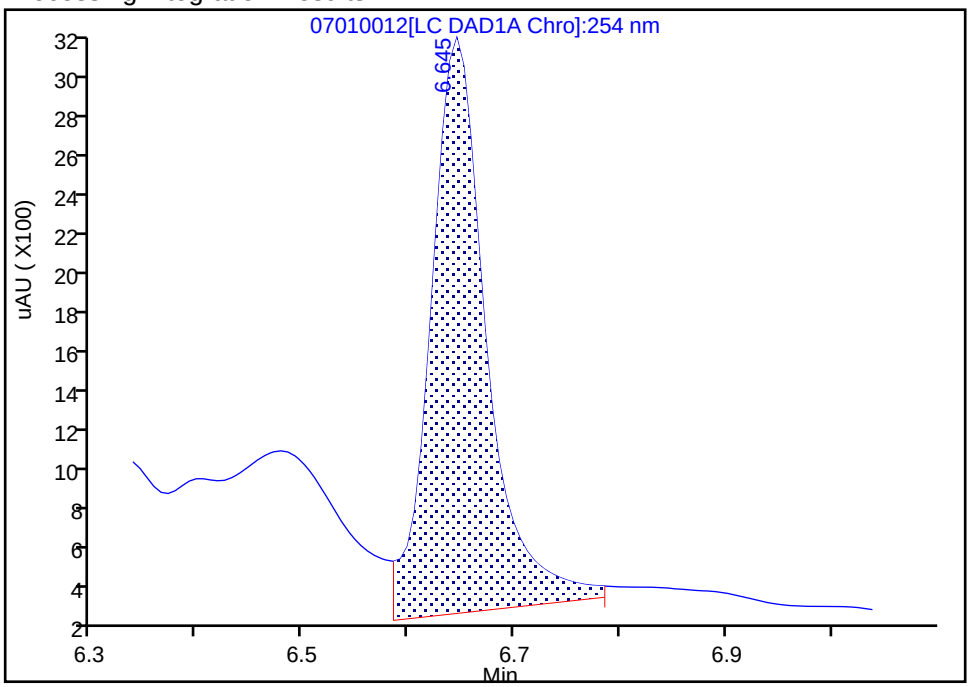
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010012.D				
Injection Date:	01-Jul-2019 16:36:33	Instrument ID:	CHHPLC_X3		
Lims ID:	IC MAIN L3				
Client ID:					
Operator ID:	hkf	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

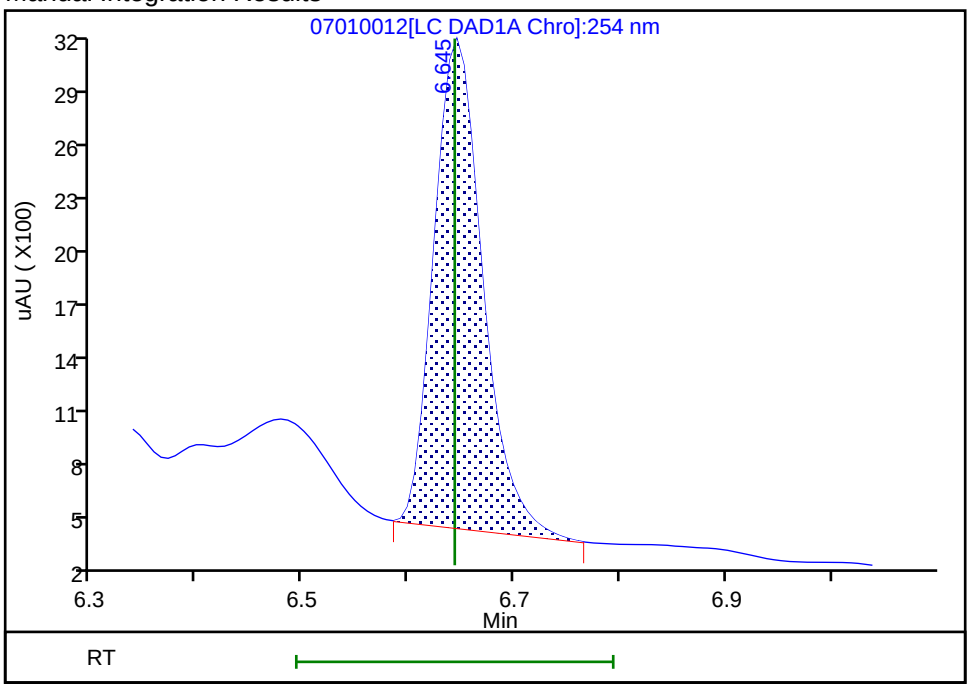
Processing Integration Results

RT: 6.65
Area: 10637
Amount: 0.107460
Amount Units: ug/mL



Manual Integration Results

RT: 6.65
Area: 8595
Amount: 0.093594
Amount Units: ug/mL



Reviewer: fiedlerh, 01-Jul-2019 18:30:35

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010013.D
Lims ID: IC MAIN L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 01-Jul-2019 17:00:38 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC MAIN L2
Misc. Info.: 280-0083376-013
Operator ID: hkf Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 02-Jul-2019 11:34:55 Calib Date: 02-Jul-2019 00:18:07
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0309

First Level Reviewer: fiedlerh Date: 01-Jul-2019 18:30:58

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.648	6.643	0.005	4492	0.0500	0.0489	M
7 RDX	1	7.768	7.757	0.011	5694	0.0500	0.0512	
8 2,4,6-Trinitrophenol	1	8.215	8.177	0.038	4807	0.0500	0.0530	
$ 9 1,2-Dinitrobenzene	1	8.748	8.737	0.011	7135	0.0500	0.0512	
10 1,3,5-Trinitrobenzene	1	8.908	8.897	0.011	12636	0.0500	0.0516	
11 1,3-Dinitrobenzene	1	9.568	9.557	0.011	16180	0.0501	0.0520	
12 Nitrobenzene	1	9.954	9.943	0.011	10349	0.0501	0.0520	
14 Tetryl	1	10.288	10.270	0.018	8209	0.0500	0.0507	
15 Nitroglycerin	2	10.788	10.770	0.018	35831	0.5000	0.5039	
16 2,4,6-Trinitrotoluene	1	11.241	11.223	0.018	11863	0.0502	0.0522	
17 4-Amino-2,6-dinitrotoluene	1	11.434	11.417	0.017	8615	0.0502	0.0518	
18 2-Amino-4,6-dinitrotoluene	1	11.721	11.703	0.018	10404	0.0502	0.0507	M
19 2,6-Dinitrotoluene	1	11.854	11.837	0.017	8322	0.0502	0.0522	M
20 2,4-Dinitrotoluene	1	12.054	12.037	0.017	15308	0.0501	0.0510	
21 o-Nitrotoluene	1	12.894	12.877	0.017	6814	0.0502	0.0525	
22 p-Nitrotoluene	1	13.334	13.317	0.017	5607	0.0502	0.0509	
23 m-Nitrotoluene	1	13.934	13.917	0.017	7651	0.0502	0.0527	
24 PETN	2	15.041	15.010	0.031	38432	0.5000	0.5173	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00058 Amount Added: 2.50 Units: uL

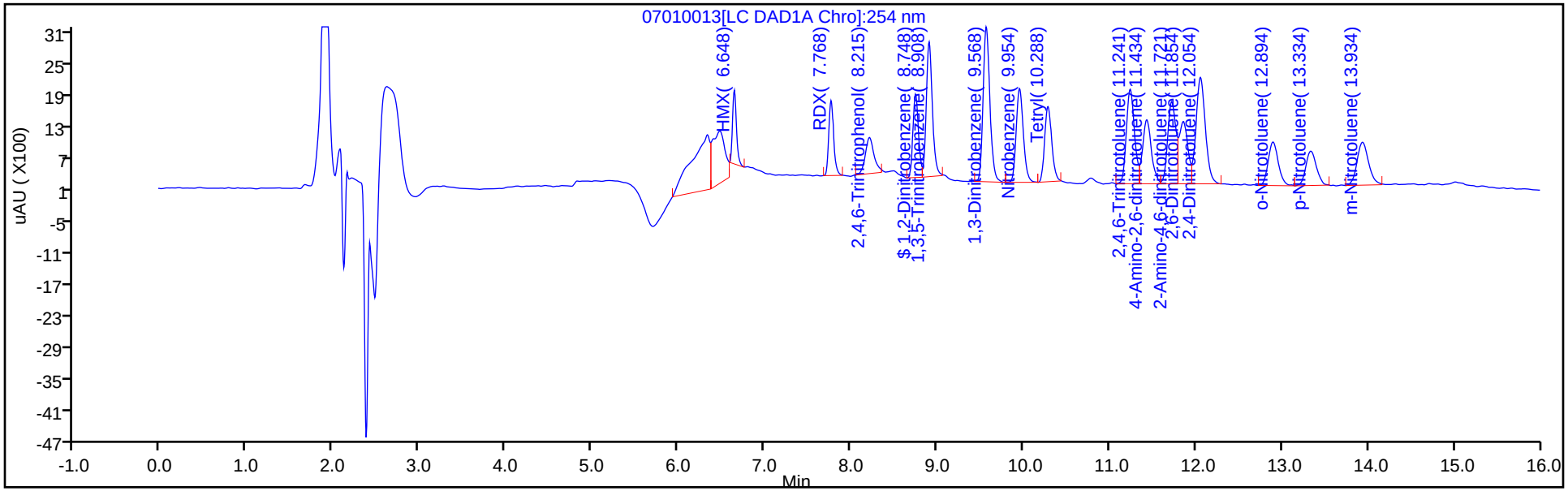
Report Date: 02-Jul-2019 11:34:55 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

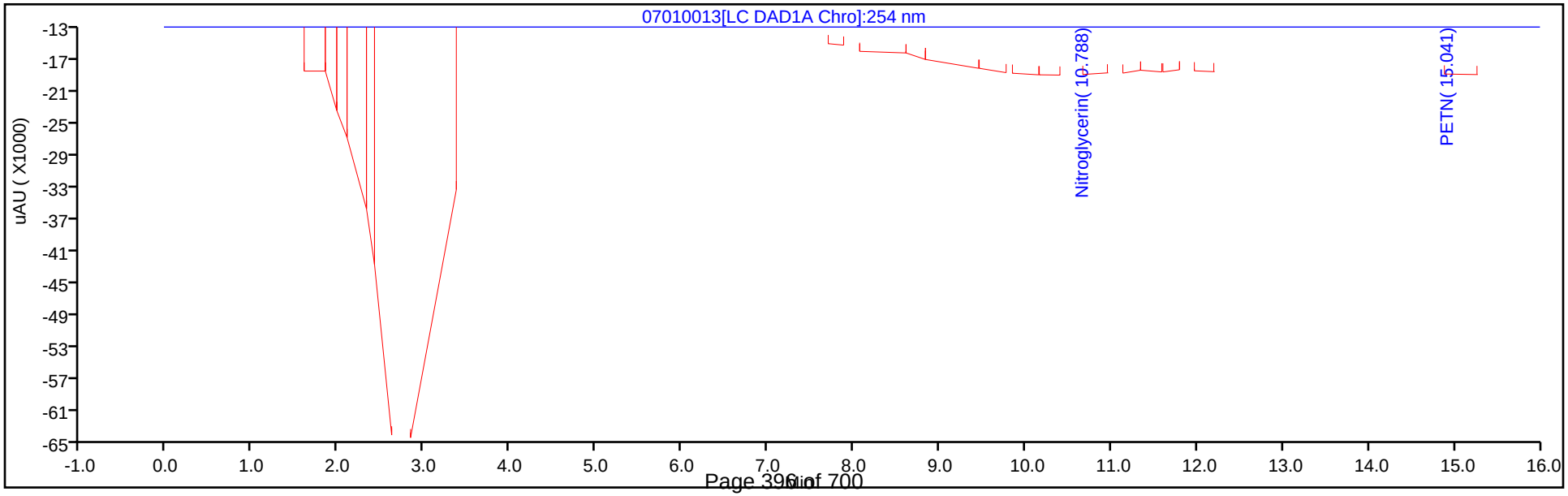
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010013.D

Injection Date:	01-Jul-2019 17:00:38	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	IC MAIN L2			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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

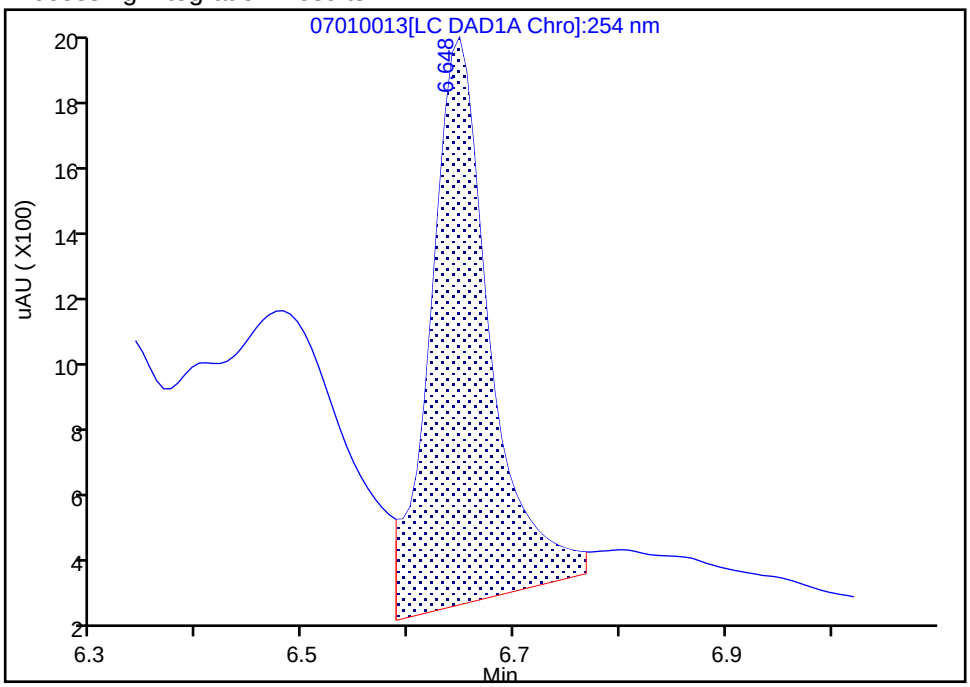
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010013.D				
Injection Date:	01-Jul-2019 17:00:38	Instrument ID:	CHHPLC_X3		
Lims ID:	IC MAIN L2				
Client ID:					
Operator ID:	hkf	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

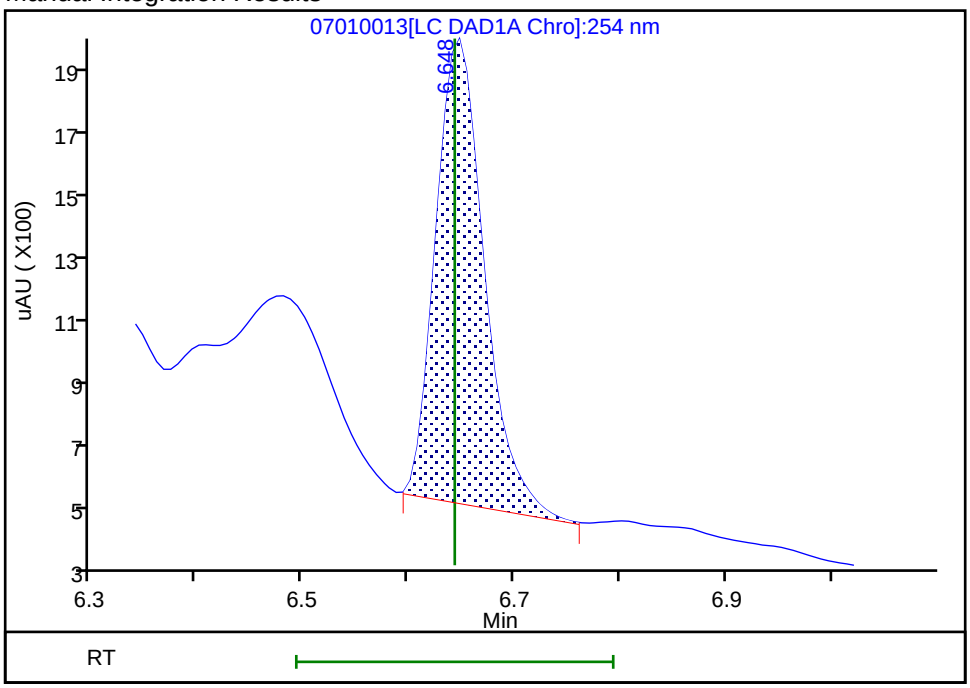
Processing Integration Results

RT: 6.65
Area: 6332
Amount: 0.065662
Amount Units: ug/mL



Manual Integration Results

RT: 6.65
Area: 4492
Amount: 0.048915
Amount Units: ug/mL



Reviewer: fiedlerh, 01-Jul-2019 18:30:57

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010014.D				
Lims ID:	IC MAIN L1				
Client ID:					
Sample Type:	IC	Calib Level:	1		
Inject. Date:	01-Jul-2019 17:23:38	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC MAIN L1				
Misc. Info.:	280-0083376-014				
Operator ID:	hkf	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub9				
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	02-Jul-2019 11:34:57	Calib Date:	02-Jul-2019 00:18:07		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0309				
First Level Reviewer: fiedlerh		Date:	01-Jul-2019 18:31:18		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.642	6.643	-0.001	1795	0.0200	0.0195	
7 RDX	1	7.762	7.757	0.005	2338	0.0200	0.0210	
8 2,4,6-Trinitrophenol	1	8.209	8.177	0.032	2302	0.0200	0.0254	M
$ 9 1,2-Dinitrobenzene	1	8.742	8.737	0.005	2609	0.0200	0.0187	
10 1,3,5-Trinitrobenzene	1	8.902	8.897	0.005	4638	0.0200	0.0189	
11 1,3-Dinitrobenzene	1	9.562	9.557	0.005	5930	0.0200	0.0191	
12 Nitrobenzene	1	9.949	9.943	0.006	3747	0.0200	0.0188	
14 Tetryl	1	10.275	10.270	0.005	2803	0.0200	0.0173	
15 Nitroglycerin	2	10.775	10.770	0.005	12630	0.2000	0.1776	
16 2,4,6-Trinitrotoluene	1	11.229	11.223	0.006	4544	0.0201	0.0200	
17 4-Amino-2,6-dinitrotoluene	1	11.422	11.417	0.005	3540	0.0201	0.0213	
18 2-Amino-4,6-dinitrotoluene	1	11.715	11.703	0.012	3841	0.0201	0.0187	M
19 2,6-Dinitrotoluene	1	11.842	11.837	0.005	3382	0.0201	0.0212	M
20 2,4-Dinitrotoluene	1	12.042	12.037	0.005	5825	0.0200	0.0194	
21 o-Nitrotoluene	1	12.882	12.877	0.005	2560	0.0201	0.0197	
22 p-Nitrotoluene	1	13.329	13.317	0.012	2162	0.0201	0.0196	
23 m-Nitrotoluene	1	13.915	13.917	-0.002	2906	0.0201	0.0200	
24 PETN	2	15.015	15.010	0.005	11106	0.2000	0.1495	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8330IntermStk_00058 Amount Added: 1.00 Units: uL

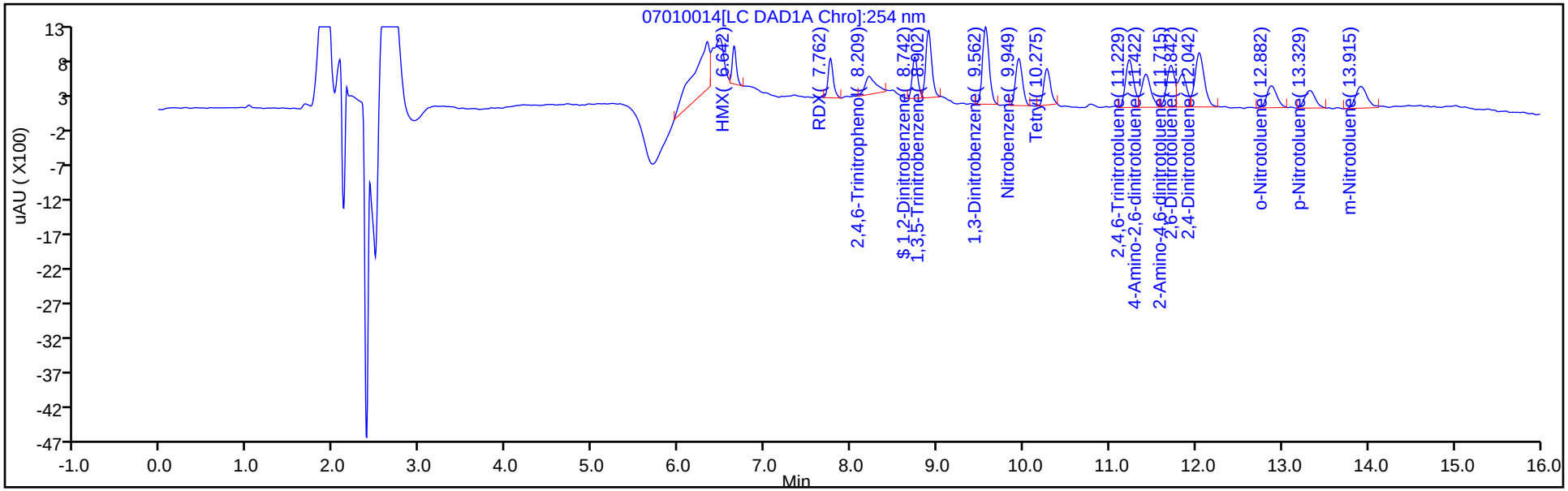
Report Date: 02-Jul-2019 11:34:58 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

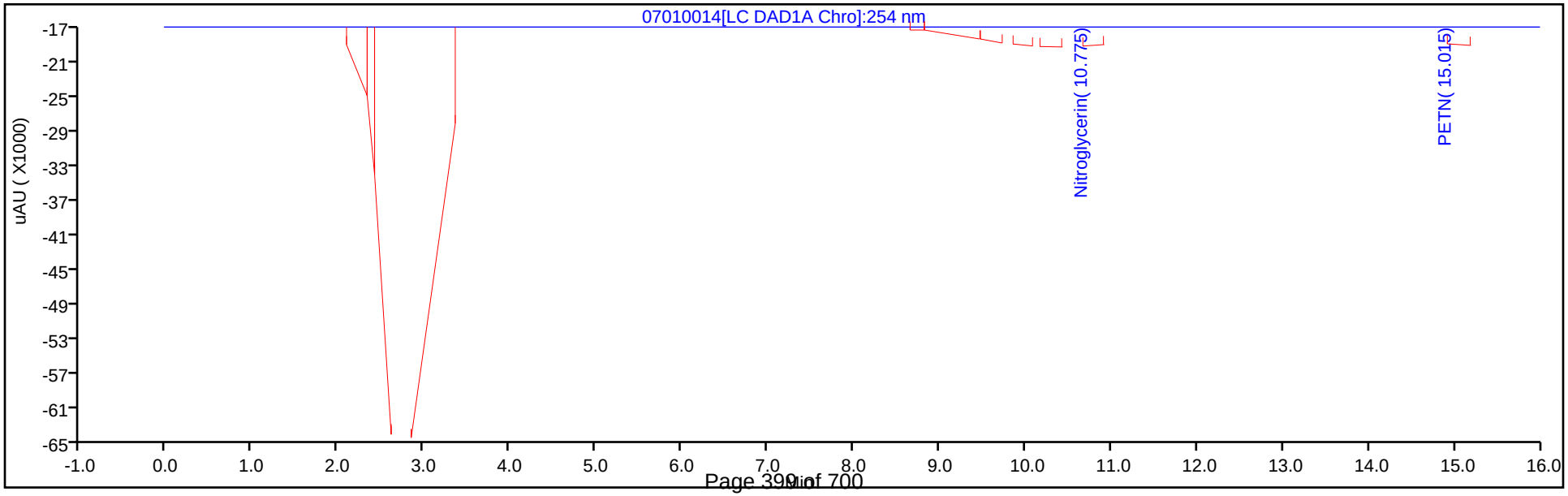
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010014.D

Injection Date:	01-Jul-2019 17:23:38	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	IC MAIN L1			Worklist Smp#:	14
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

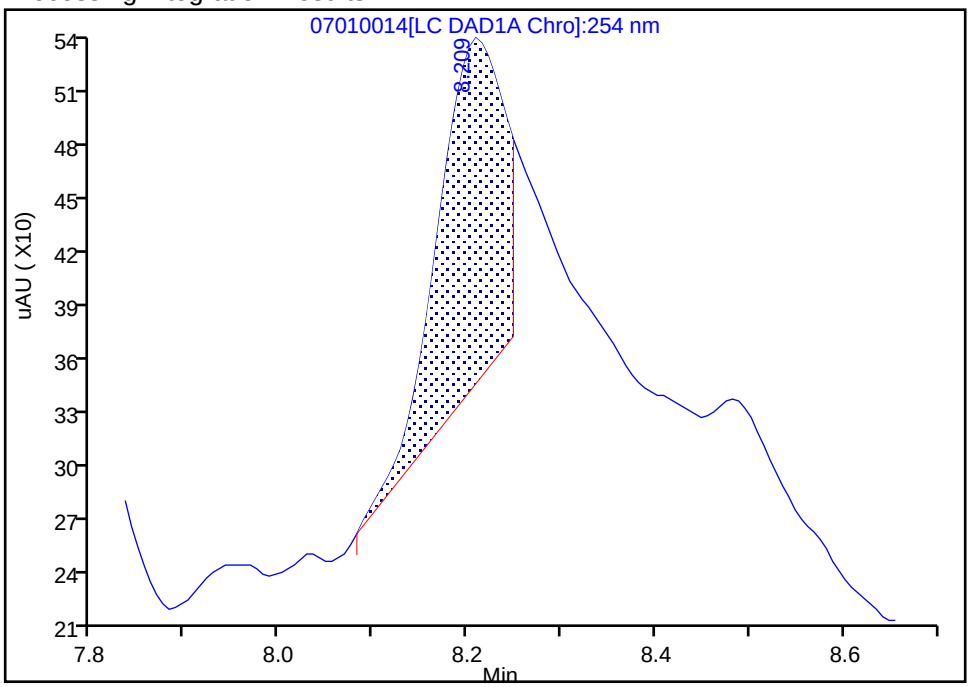
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010014.D				
Injection Date:	01-Jul-2019 17:23:38	Instrument ID:	CHHPLC_X3		
Lims ID:	IC MAIN L1				
Client ID:					
Operator ID:	hkf	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

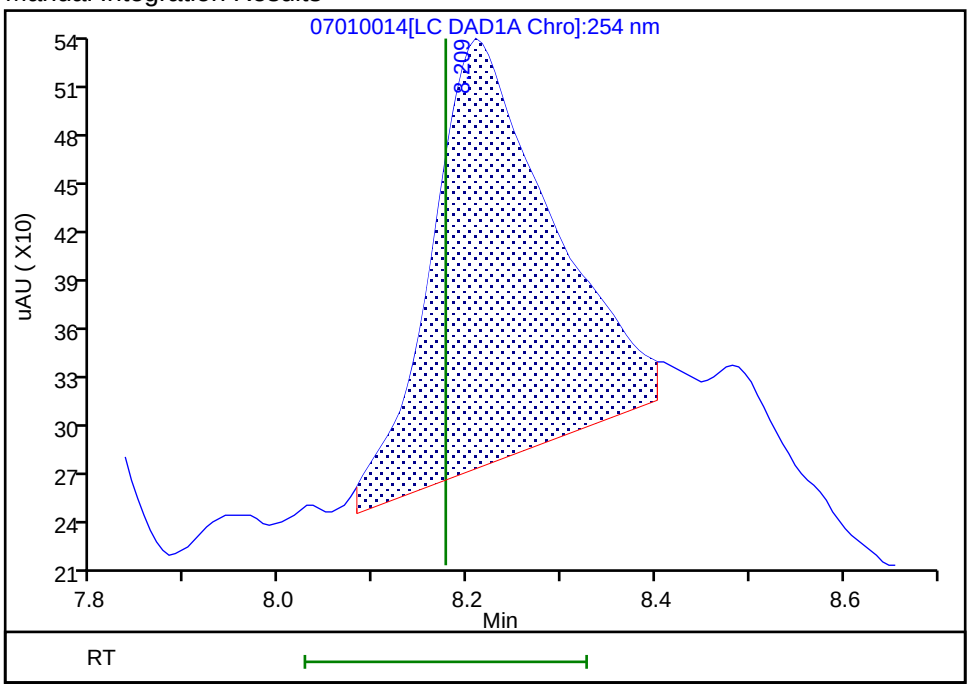
Processing Integration Results

RT: 8.21
Area: 906
Amount: 0.011048
Amount Units: ug/mL



Manual Integration Results

RT: 8.21
Area: 2302
Amount: 0.025371
Amount Units: ug/mL



Reviewer: fiedlerh, 01-Jul-2019 18:33:21

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1 Analy Batch No.: 482211

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/06/2020 18:00 Calibration End Date: 01/06/2020 20:40 Calibration ID: 41252

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-482211/14	01060014.D
Level 2	IC 280-482211/13	01060013.D
Level 3	IC 280-482211/12	01060012.D
Level 4	IC 280-482211/11	01060011.D
Level 5	IC 280-482211/10	01060010.D
Level 6	IC 280-482211/9	01060009.D
Level 7	IC 280-482211/8	01060008.D
Level 8	IC 280-482211/7	01060007.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
TNX	6.593	6.590	6.593	6.590	6.591	6.587	6.587	6.582			6.490 - 6.690	6.589
DNX	6.913	6.910	6.920	6.910	6.911	6.913	6.913	6.909			6.810 - 7.010	6.912
MNX	7.367	7.364	7.367	7.363	7.364	7.360	7.360	7.356			7.213 - 7.513	7.363

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

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1 Analy Batch No.: 482211

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/06/2020 18:00 Calibration End Date: 01/06/2020 20:40 Calibration ID: 41252

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-482211/14	01060014.D
Level 2	IC 280-482211/13	01060013.D
Level 3	IC 280-482211/12	01060012.D
Level 4	IC 280-482211/11	01060011.D
Level 5	IC 280-482211/10	01060010.D
Level 6	IC 280-482211/9	01060009.D
Level 7	IC 280-482211/8	01060008.D
Level 8	IC 280-482211/7	01060007.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
TNX	192907 217777	200180 215937	215664 217015	167692 214906	Ave		205259.872				8.6		20.0			
DNX	171778 158227	167033 156168	157522 154784	124336 153291	Ave		155392.393				9.1		20.0			
MNX	149529 146093	145724 143337	144567 142088	111548 139766	Ave		140331.372				8.5		20.0			

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

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

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1 Analy Batch No.: 482211

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/06/2020 18:00 Calibration End Date: 01/06/2020 20:40 Calibration ID: 41252

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-482211/14	01060014.D
Level 2	IC 280-482211/13	01060013.D
Level 3	IC 280-482211/12	01060012.D
Level 4	IC 280-482211/11	01060011.D
Level 5	IC 280-482211/10	01060010.D
Level 6	IC 280-482211/9	01060009.D
Level 7	IC 280-482211/8	01060008.D
Level 8	IC 280-482211/7	01060007.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
TNX	Ave	3862 151307	10019 217232	21588 537803	41965	87198	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
DNX	Ave	3439 109427	8360 154939	15768 383610	31115	63354	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
MNX	Ave	3490 117092	8503 165817	16871 407766	32544	68196	0.0233 0.817	0.0584 1.17	0.117 2.92	0.292	0.467

Curve Type Legend:
Ave = Average

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060007.D				
Lims ID:	IC DMT 8				
Client ID:					
Sample Type:	IC	Calib Level:	8		
Inject. Date:	06-Jan-2020 18:00:12	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 8				
Misc. Info.:	280-0088401-007				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	07-Jan-2020 11:17:47	Calib Date:	06-Jan-2020 20:40:54		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060014.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0307				

First Level Reviewer: beckerc Date: 07-Jan-2020 09:59:19

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.582	6.590	-0.008	537803	2.50	2.62	M
5 DNX	1	6.909	6.910	-0.001	383610	2.50	2.47	M
6 MNX	1	7.356	7.363	-0.007	407766	2.92	2.91	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8330 DMT_00004 Amount Added: 125.00 Units: uL

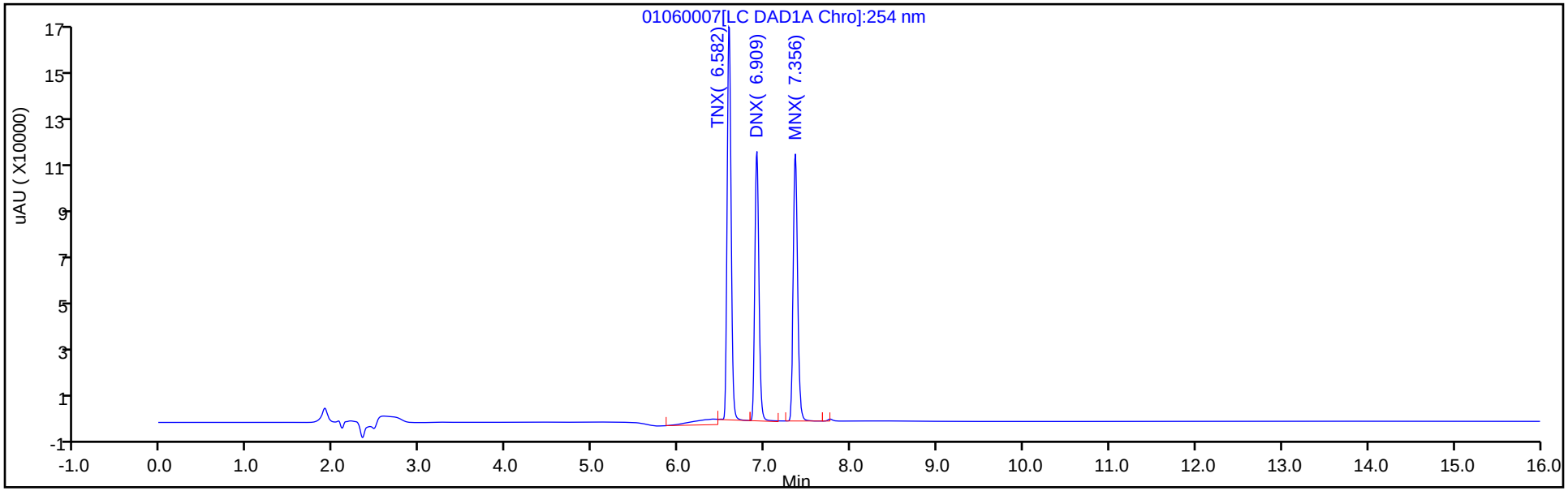
Report Date: 07-Jan-2020 11:17:48 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Denver

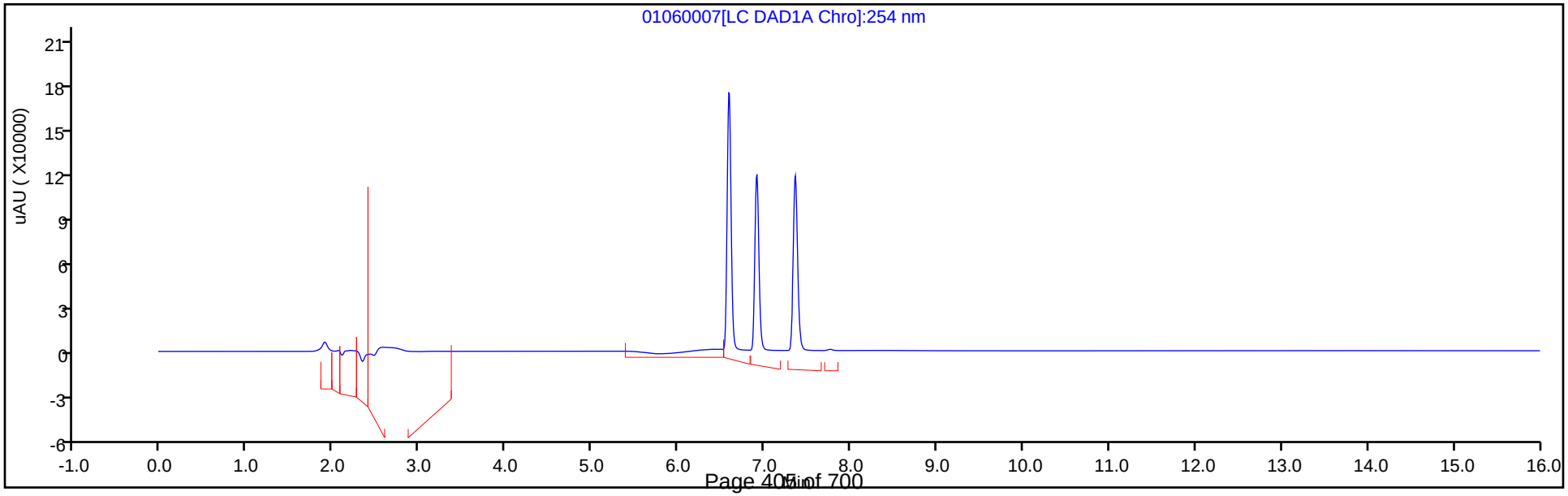
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060007.D

Injection Date:	06-Jan-2020 18:00:12	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC DMT 8			Worklist Smp#:	7
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

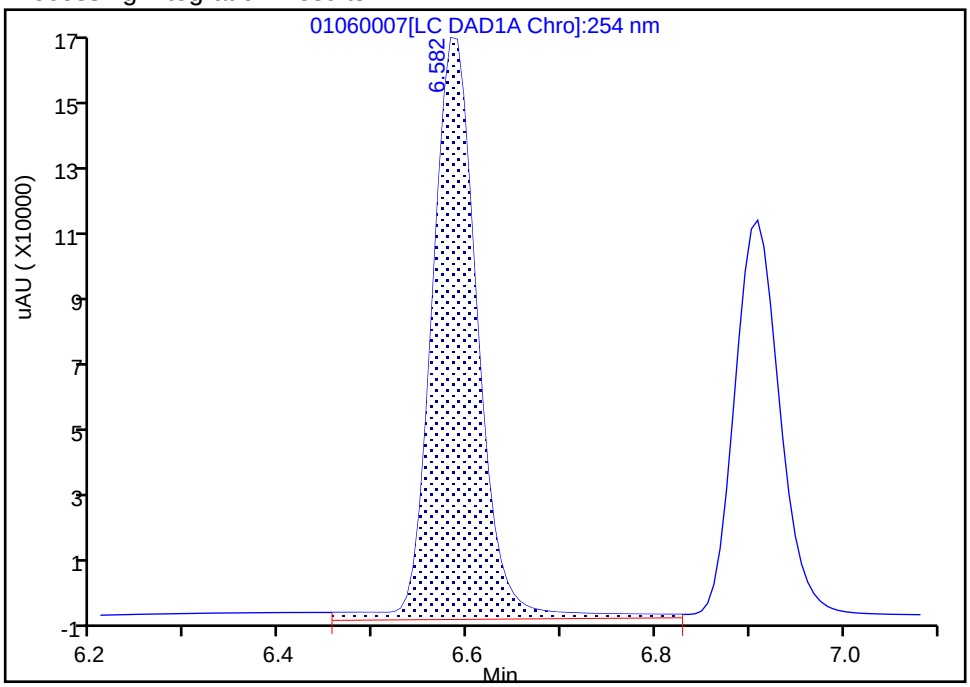
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060007.D				
Injection Date:	06-Jan-2020 18:00:12	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 8				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

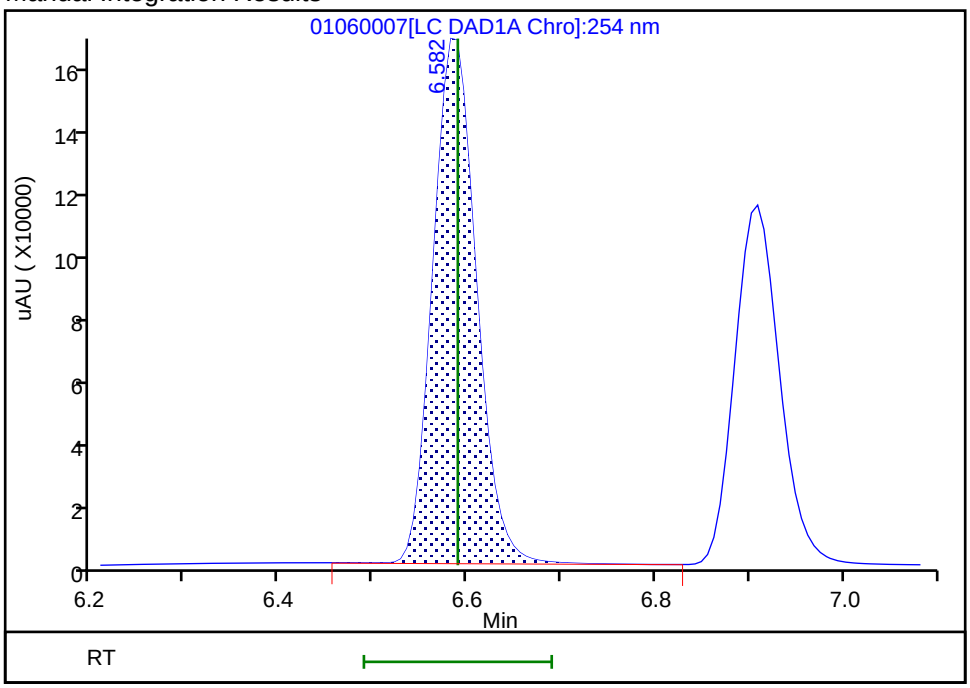
Processing Integration Results

RT: 6.58
Area: 572210
Amount: 2.442208
Amount Units: ug/mL



Manual Integration Results

RT: 6.58
Area: 537803
Amount: 2.620108
Amount Units: ug/mL



Reviewer: beckerc, 07-Jan-2020 11:14:23

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

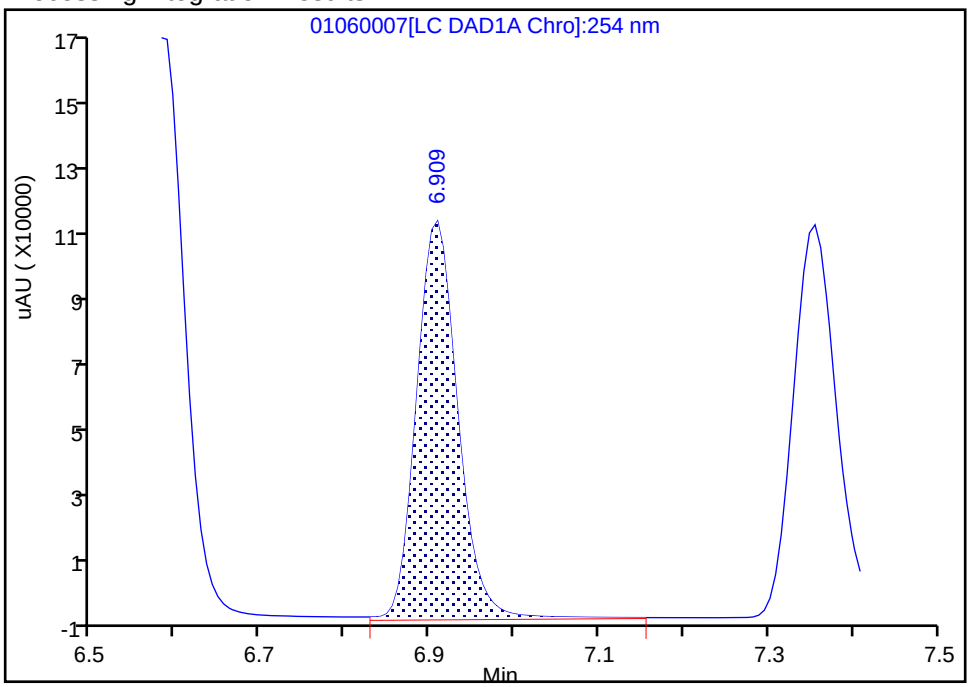
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060007.D				
Injection Date:	06-Jan-2020 18:00:12	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 8				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

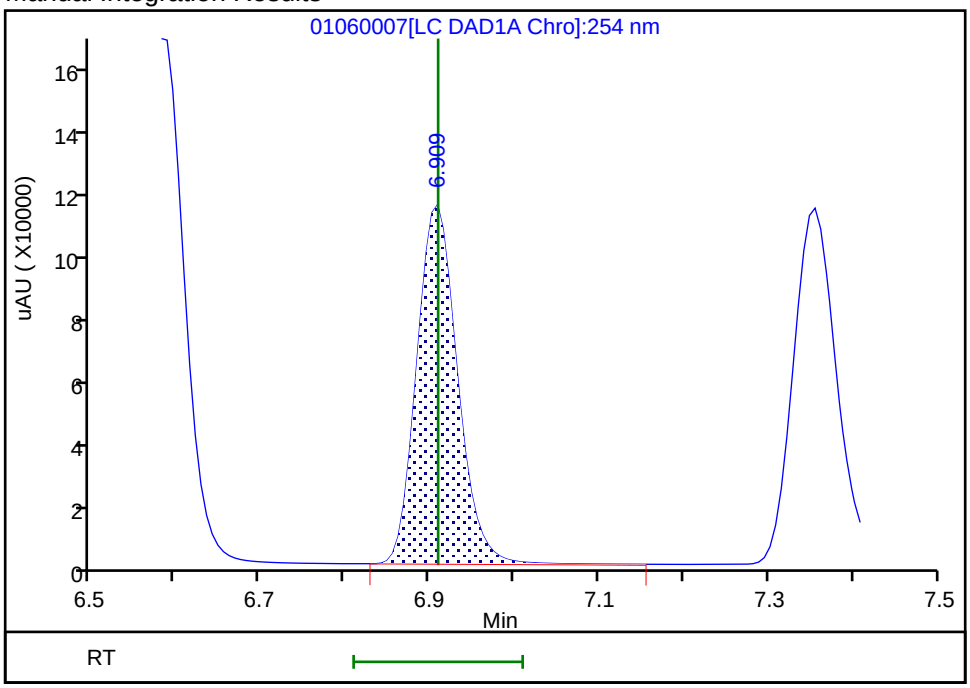
Processing Integration Results

RT: 6.91
Area: 391979
Amount: 2.431253
Amount Units: ug/mL



Manual Integration Results

RT: 6.91
Area: 383610
Amount: 2.468654
Amount Units: ug/mL



Reviewer: beckerc, 07-Jan-2020 11:14:23
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060008.D				
Lims ID:	IC DMT 7				
Client ID:					
Sample Type:	IC	Calib Level:	7		
Inject. Date:	06-Jan-2020 18:23:07	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 7				
Misc. Info.:	280-0088401-008				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	07-Jan-2020 11:17:50	Calib Date:	06-Jan-2020 20:40:54		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060014.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0307				

First Level Reviewer: beckerc Date: 07-Jan-2020 09:59:42

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.587	6.590	-0.003	217232	1.00	1.06	M
5 DNX	1	6.913	6.910	0.003	154939	1.00	1.00	M
6 MNX	1	7.360	7.363	-0.003	165817	1.17	1.18	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

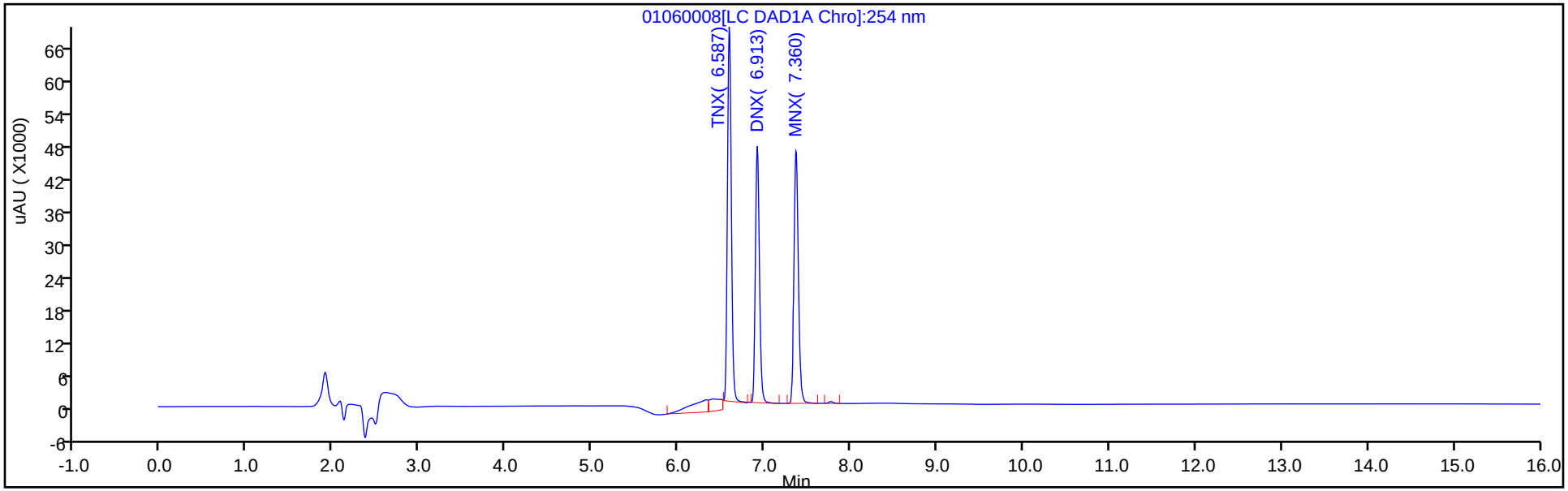
8330 DMT_00004 Amount Added: 50.00 Units: uL

Report Date: 07-Jan-2020 11:17:51 Chrom Revision: 2.3 15-Dec-2019 06:20:02

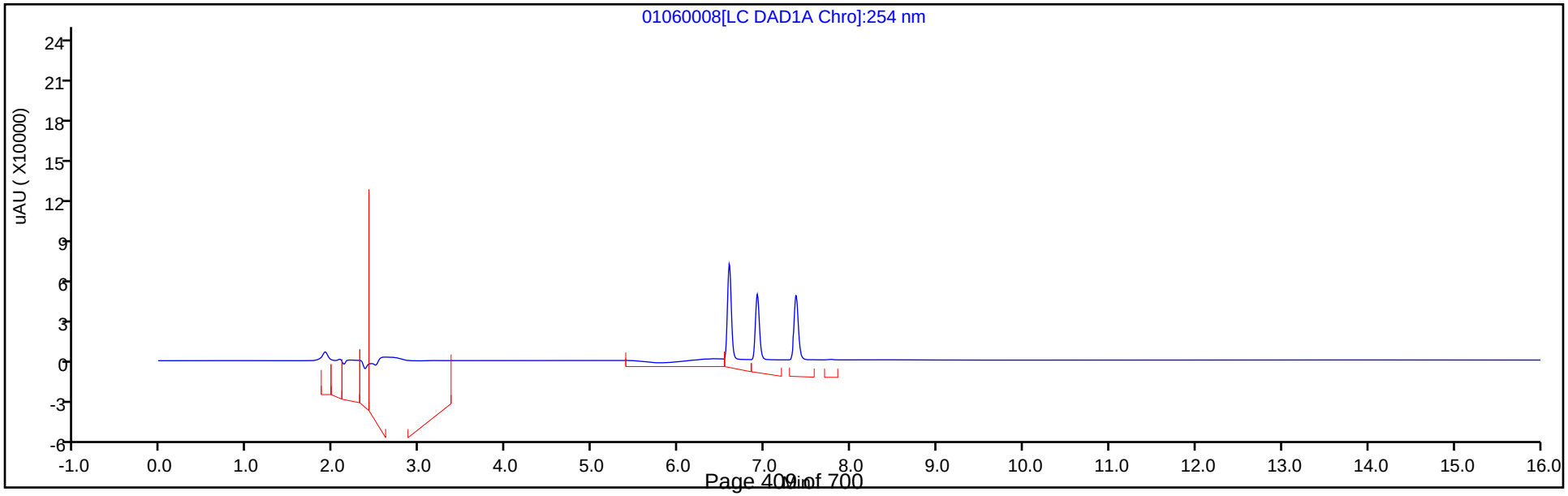
Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060008.D				
Injection Date:	06-Jan-2020 18:23:07	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC DMT 7			Worklist Smp#:	8
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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

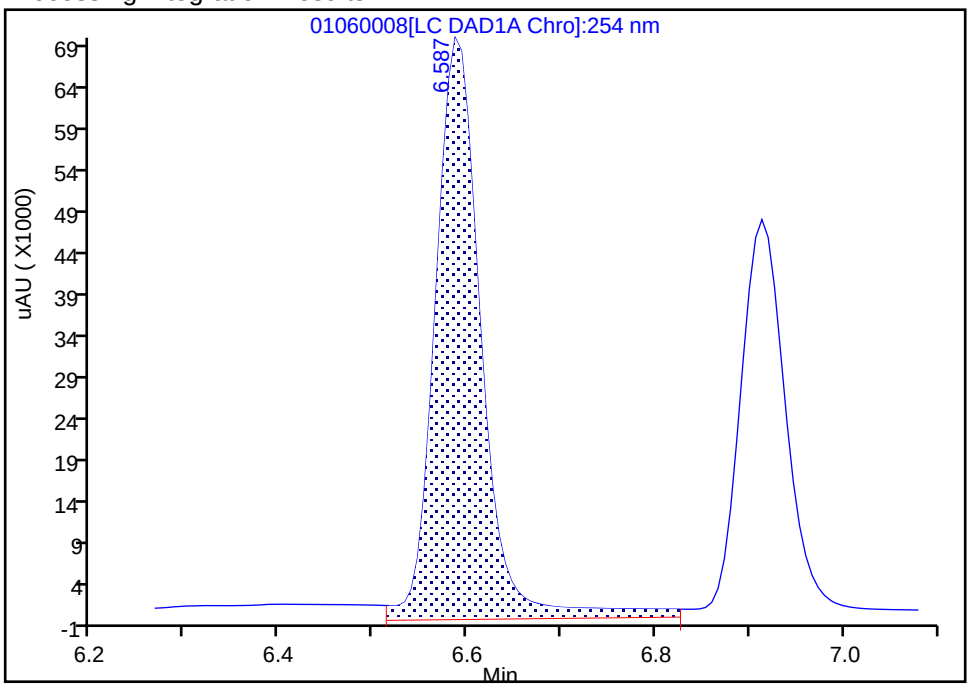
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060008.D				
Injection Date:	06-Jan-2020 18:23:07	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 7				
Client ID:					
Operator ID:	CB	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

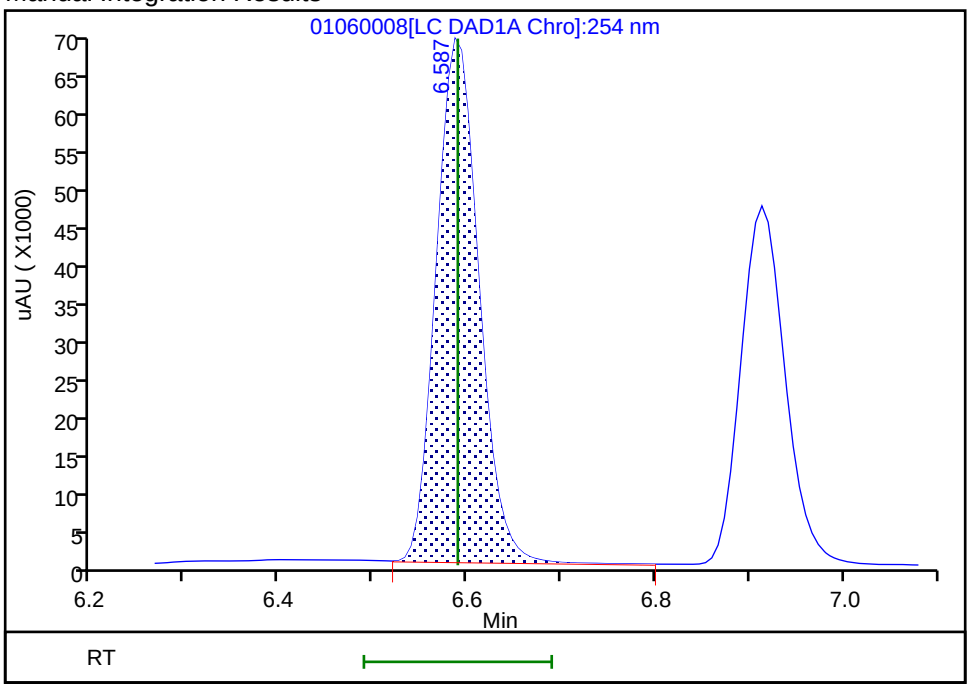
Processing Integration Results

RT: 6.59
Area: 240505
Amount: 0.997859
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 217232
Amount: 1.058327
Amount Units: ug/mL



Reviewer: beckerc, 07-Jan-2020 11:14:48

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

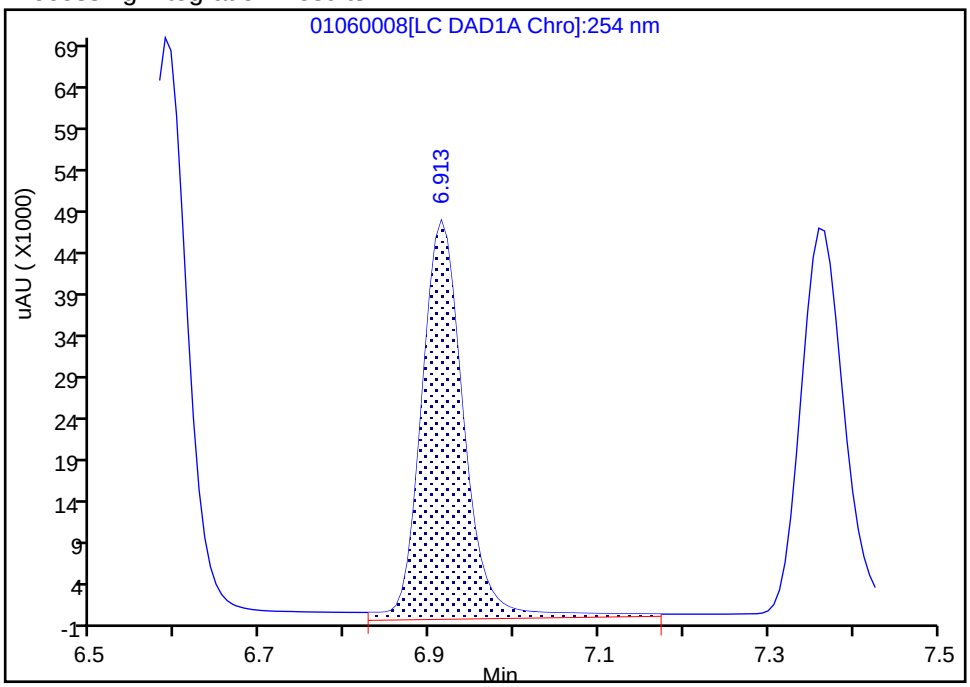
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060008.D				
Injection Date:	06-Jan-2020 18:23:07	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 7				
Client ID:					
Operator ID:	CB	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

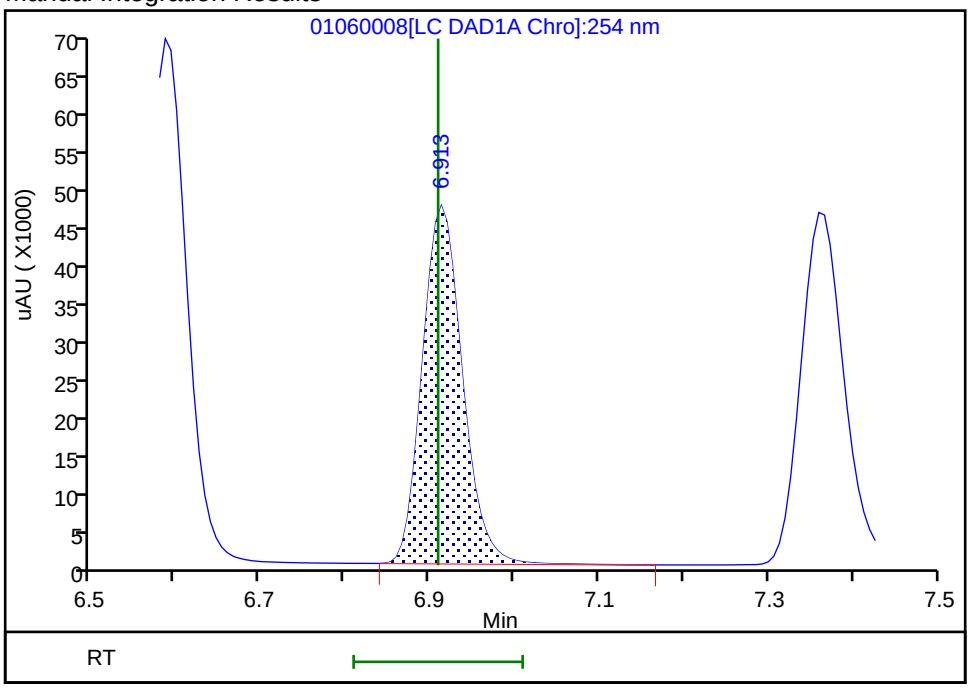
Processing Integration Results

RT: 6.91
Area: 166922
Amount: 1.038027
Amount Units: ug/mL



Manual Integration Results

RT: 6.91
Area: 154939
Amount: 0.997082
Amount Units: ug/mL



Reviewer: beckerc, 07-Jan-2020 11:14:54

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060009.D				
Lims ID:	IC DMT 6				
Client ID:					
Sample Type:	IC	Calib Level:	6		
Inject. Date:	06-Jan-2020 18:46:11	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 6				
Misc. Info.:	280-0088401-009				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	07-Jan-2020 11:17:51	Calib Date:	06-Jan-2020 20:40:54		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060014.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0307				

First Level Reviewer: beckerc Date: 07-Jan-2020 10:00:12

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.587	6.590	-0.003	151307	0.7007	0.7371	M
5 DNX	1	6.913	6.910	0.003	109427	0.7007	0.7042	M
6 MNX	1	7.360	7.363	-0.003	117092	0.8169	0.8344	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

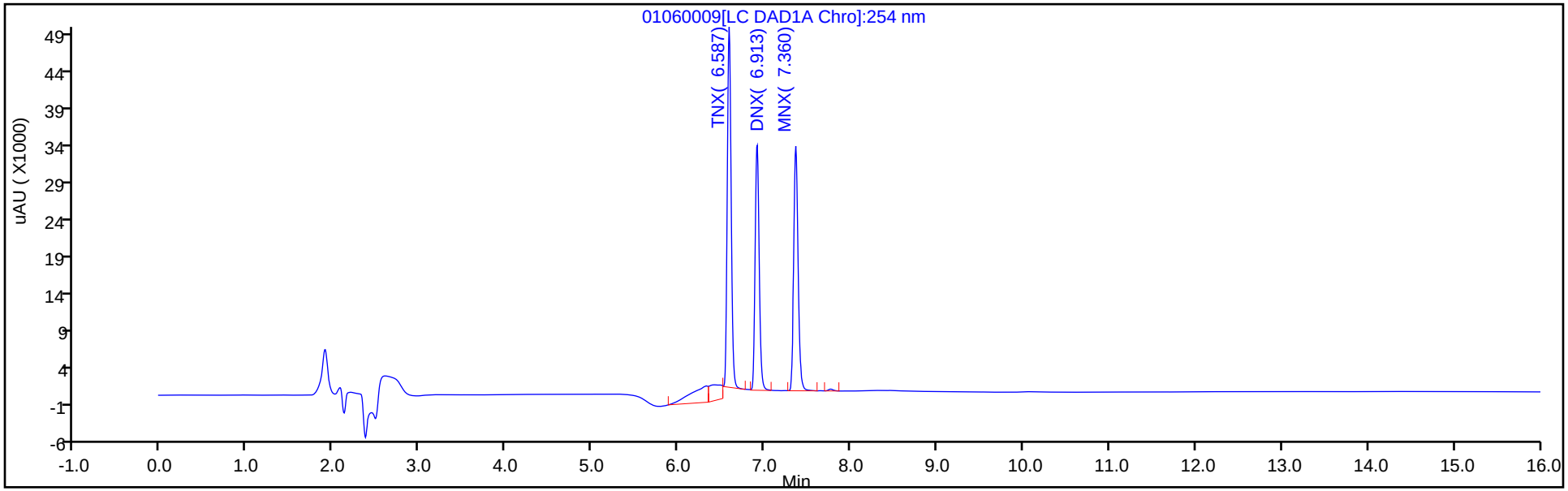
8330 DMT_00004 Amount Added: 35.00 Units: uL

Report Date: 07-Jan-2020 11:17:51 Chrom Revision: 2.3 15-Dec-2019 06:20:02

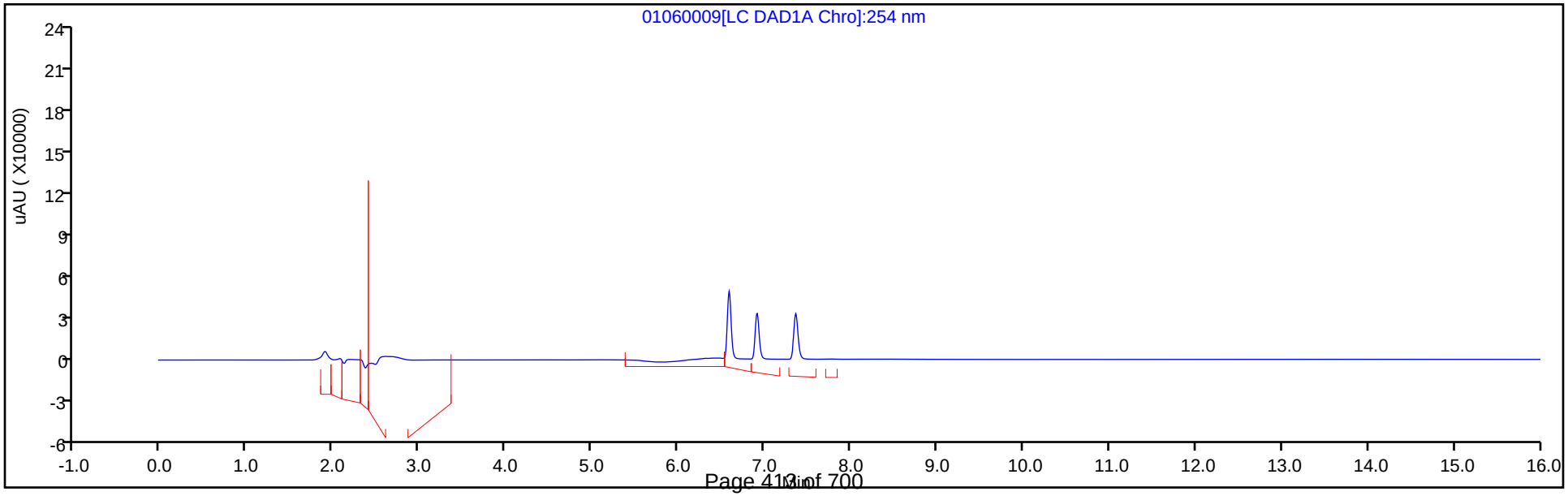
Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060009.D				
Injection Date:	06-Jan-2020 18:46:11	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC DMT 6			Worklist Smp#:	9
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

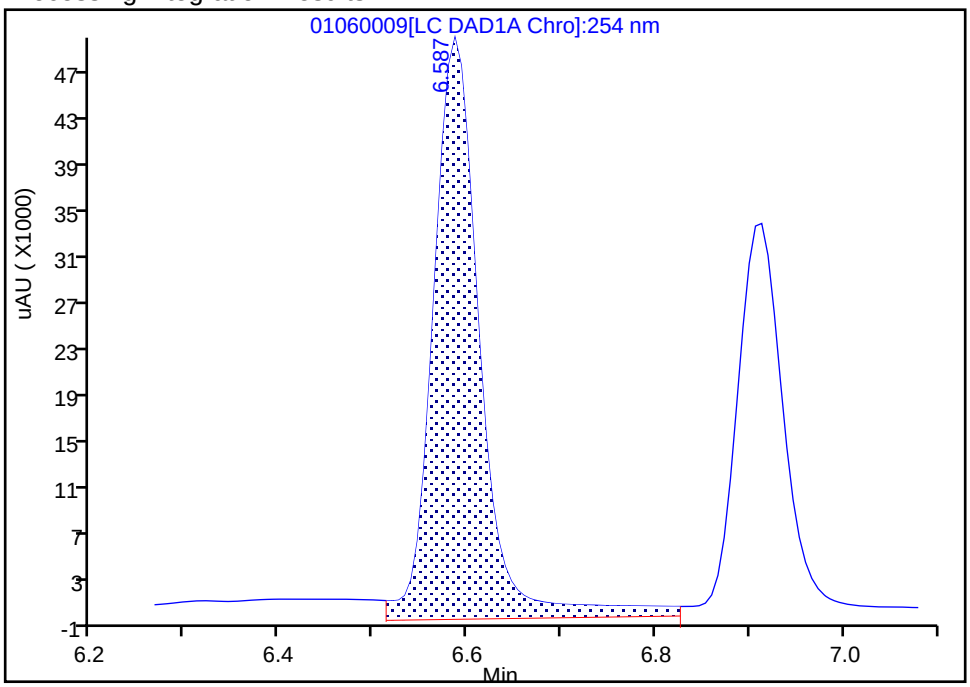
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060009.D				
Injection Date:	06-Jan-2020 18:46:11	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

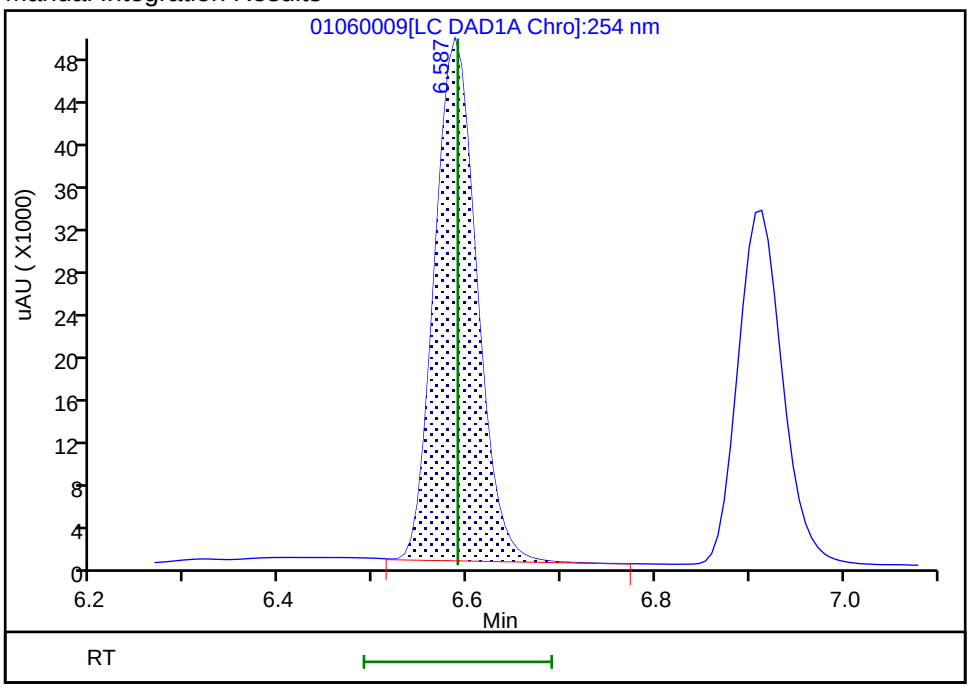
Processing Integration Results

RT: 6.59
Area: 173723
Amount: 0.751023
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 151307
Amount: 0.737148
Amount Units: ug/mL



Reviewer: beckerc, 07-Jan-2020 11:15:12

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

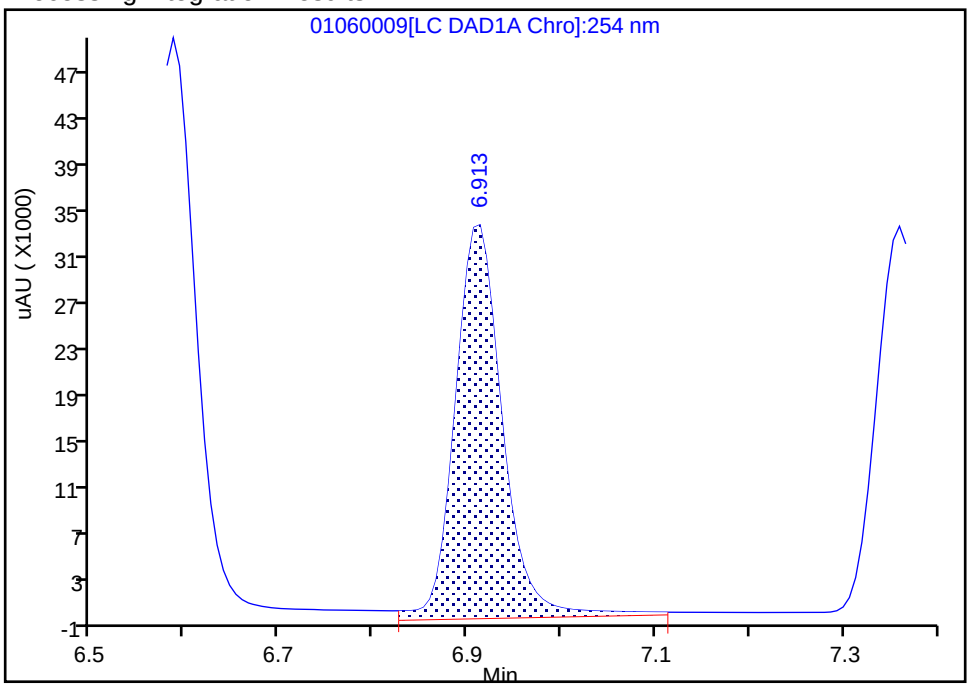
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060009.D				
Injection Date:	06-Jan-2020 18:46:11	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

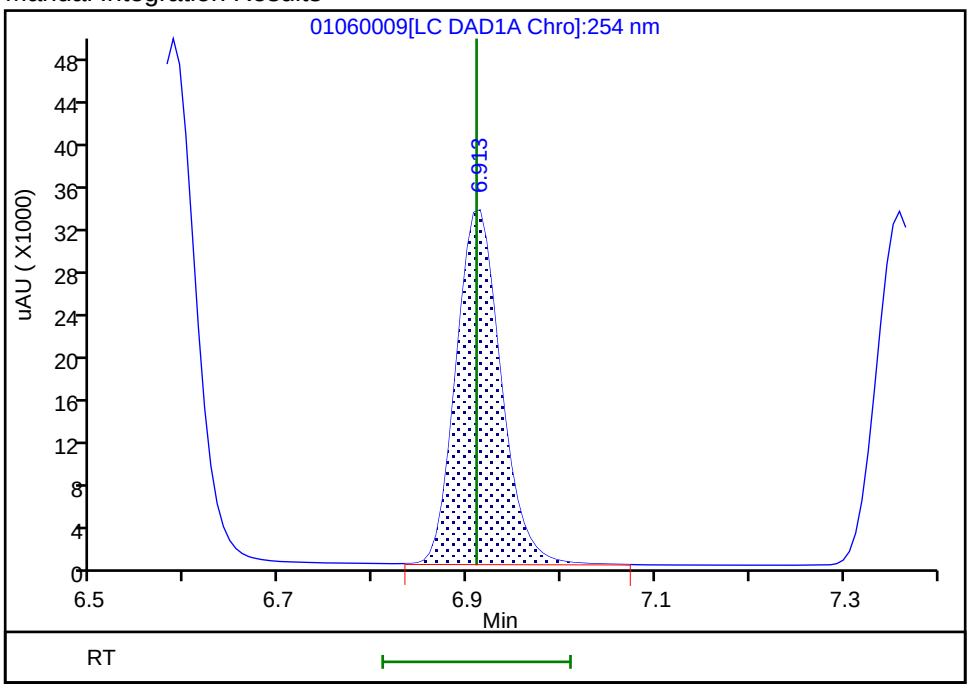
Processing Integration Results

RT: 6.91
Area: 117736
Amount: 0.739034
Amount Units: ug/mL



Manual Integration Results

RT: 6.91
Area: 109427
Amount: 0.704198
Amount Units: ug/mL



Reviewer: beckerc, 07-Jan-2020 11:15:16

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060010.D				
Lims ID:	IC DMT 5				
Client ID:					
Sample Type:	IC	Calib Level:	5		
Inject. Date:	06-Jan-2020 19:09:14	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 5				
Misc. Info.:	280-0088401-010				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	07-Jan-2020 11:17:52	Calib Date:	06-Jan-2020 20:40:54		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060014.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0307				

First Level Reviewer: beckerc Date: 07-Jan-2020 10:00:35

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.591	6.590	0.001	87198	0.4004	0.4248	M
5 DNX	1	6.911	6.910	0.001	63354	0.4004	0.4077	M
6 MNX	1	7.364	7.363	0.001	68196	0.4668	0.4860	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

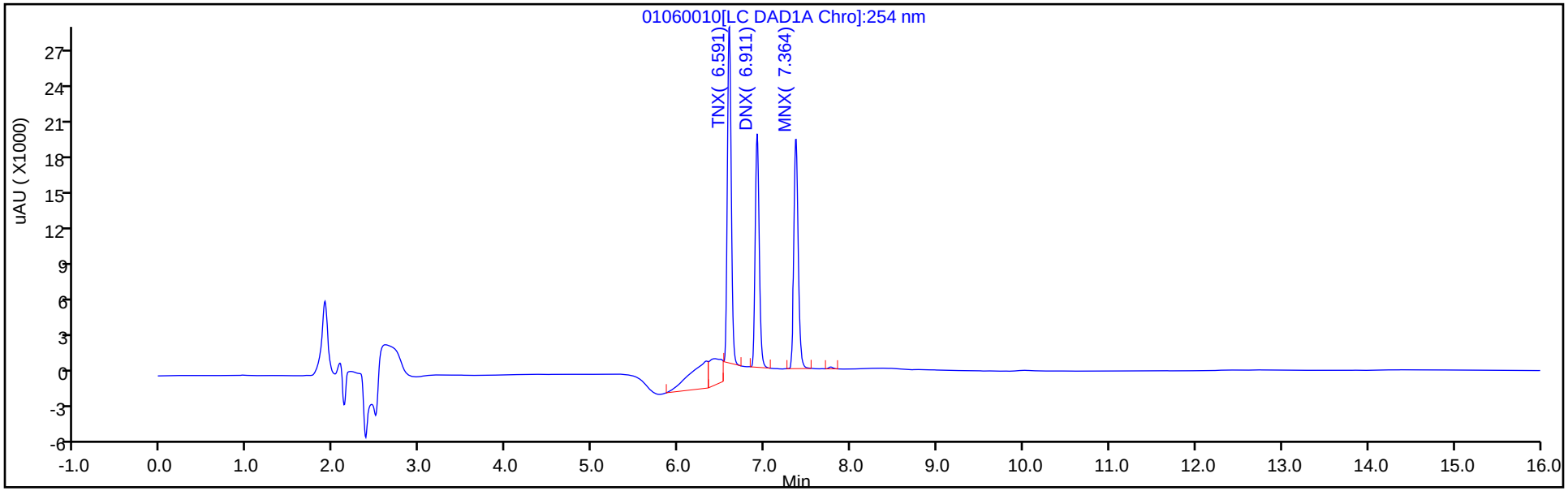
8330 DMT_00004 Amount Added: 20.00 Units: uL

Report Date: 07-Jan-2020 11:17:53 Chrom Revision: 2.3 15-Dec-2019 06:20:02

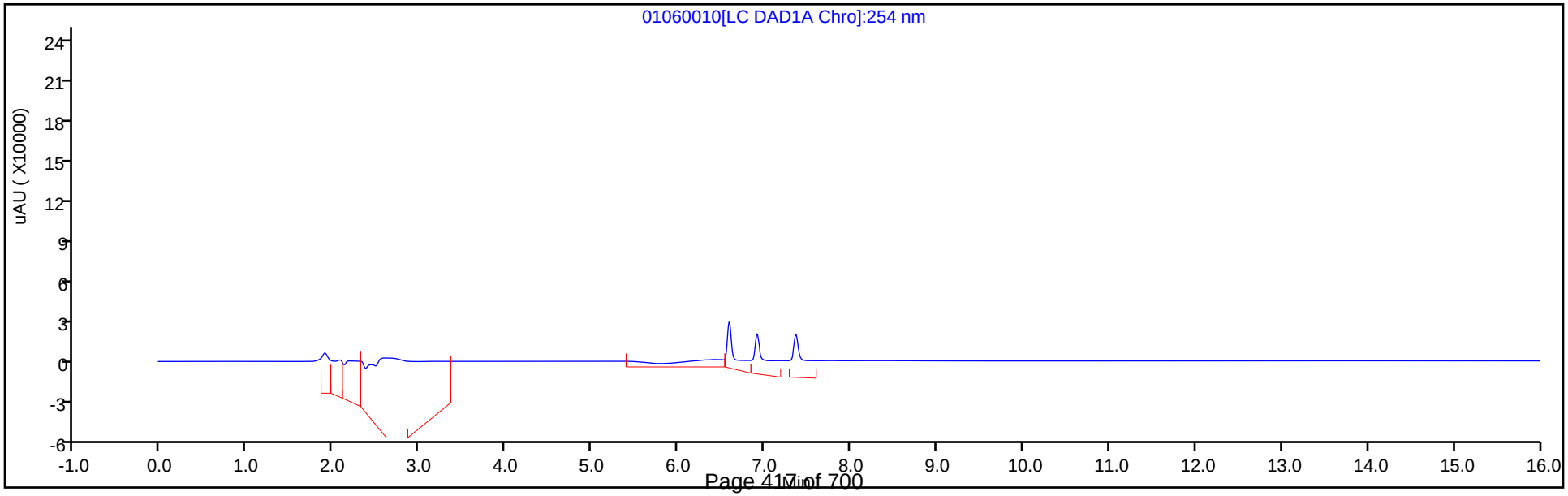
Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060010.D				
Injection Date:	06-Jan-2020 19:09:14	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC DMT 5			Worklist Smp#:	10
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

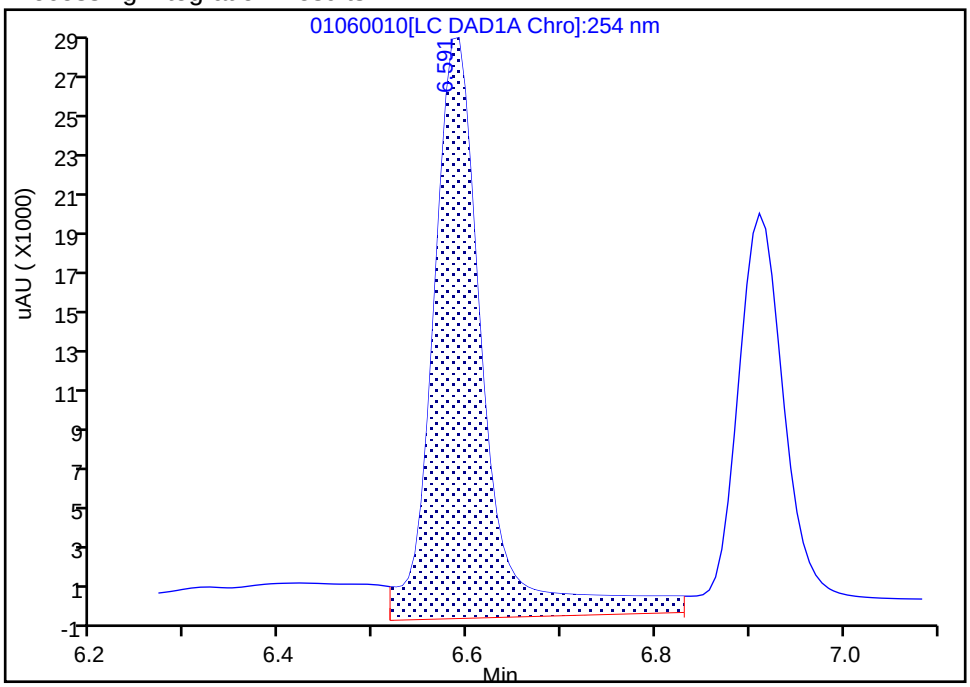
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060010.D				
Injection Date:	06-Jan-2020 19:09:14	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 5				
Client ID:					
Operator ID:	CB	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

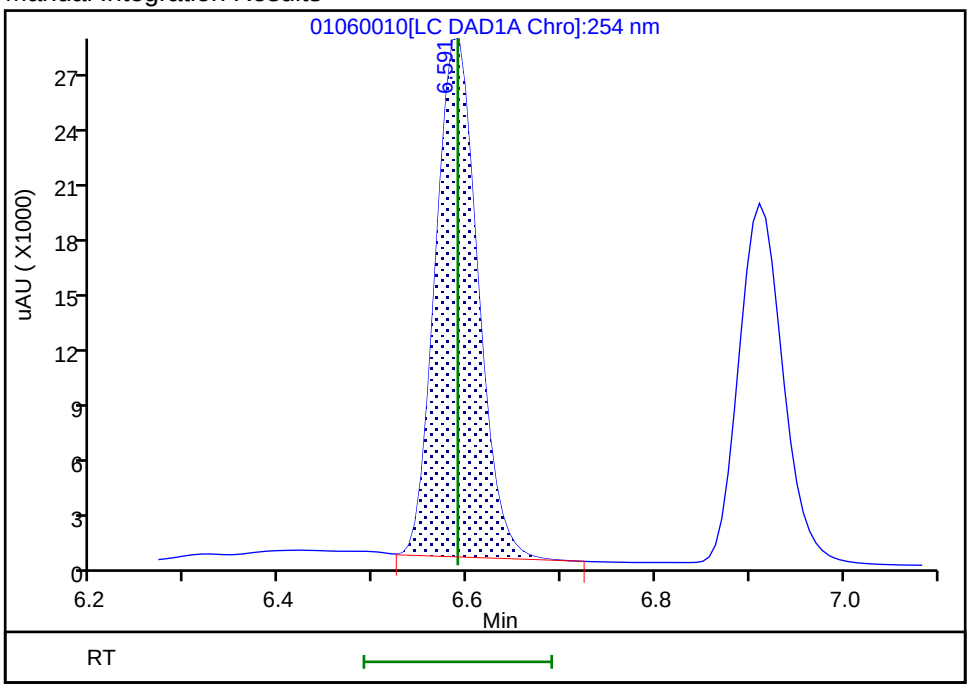
Processing Integration Results

RT: 6.59
Area: 109546
Amount: 0.496206
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 87198
Amount: 0.424818
Amount Units: ug/mL



Reviewer: beckerc, 07-Jan-2020 11:15:33

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

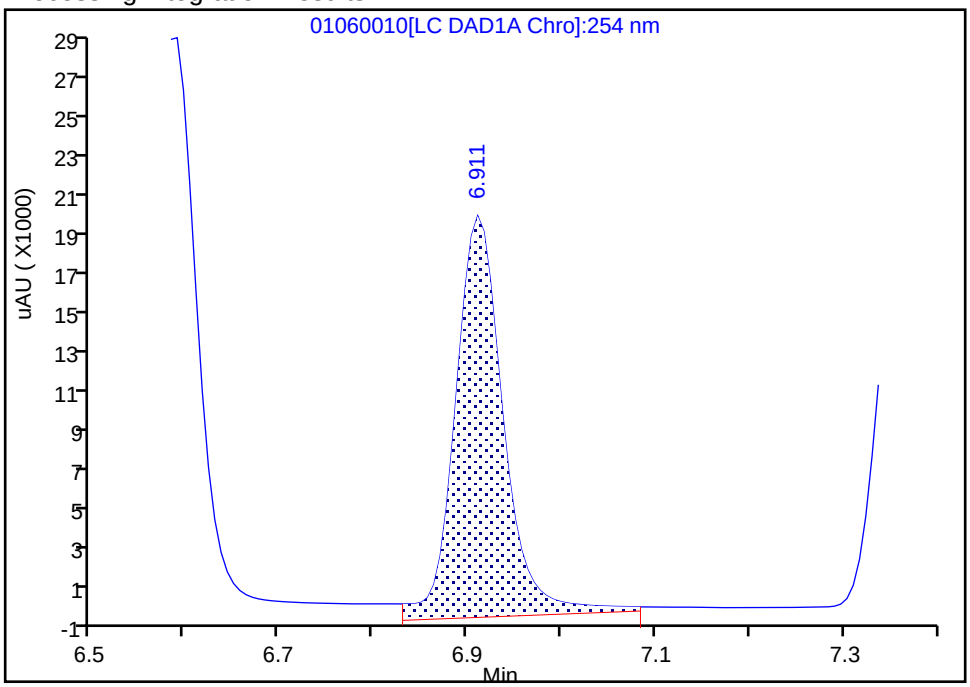
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060010.D				
Injection Date:	06-Jan-2020 19:09:14	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 5				
Client ID:					
Operator ID:	CB	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

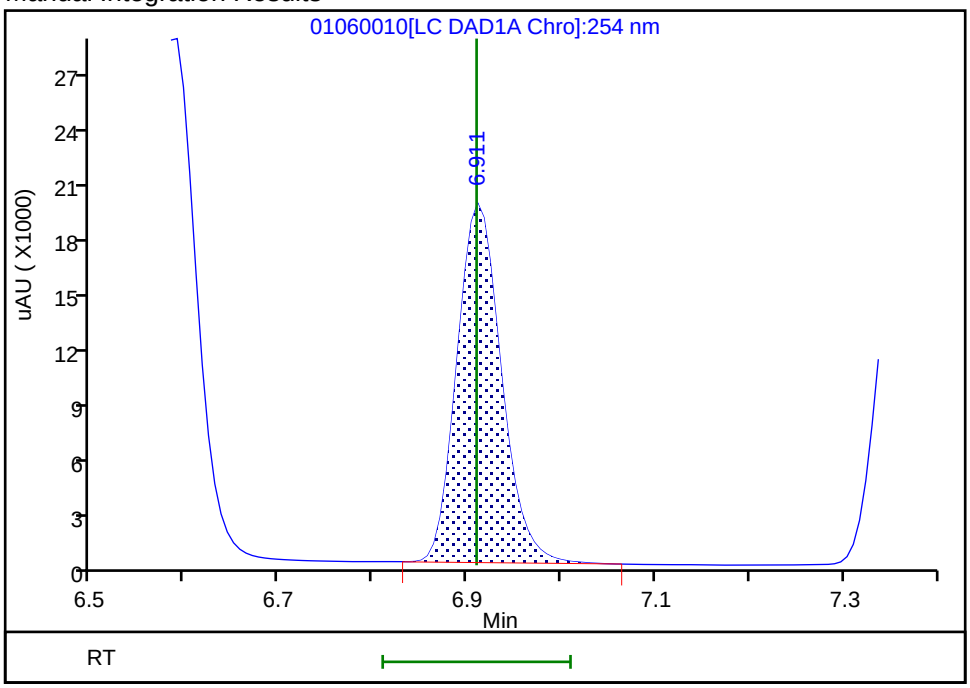
Processing Integration Results

RT: 6.91
Area: 71157
Amount: 0.450850
Amount Units: ug/mL



Manual Integration Results

RT: 6.91
Area: 63354
Amount: 0.407703
Amount Units: ug/mL



Reviewer: beckerc, 07-Jan-2020 11:15:37

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060011.D				
Lims ID:	IC DMT 4				
Client ID:					
Sample Type:	IC	Calib Level:	4		
Inject. Date:	06-Jan-2020 19:32:09	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 4				
Misc. Info.:	280-0088401-011				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	07-Jan-2020 11:17:54	Calib Date:	06-Jan-2020 20:40:54		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060014.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0307				

First Level Reviewer: beckerc Date: 07-Jan-2020 10:01:00

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.590	6.590	0.000	41965	0.2503	0.2044	M
5 DNX	1	6.910	6.910	0.000	31115	0.2503	0.2002	
6 MNX	1	7.363	7.363	0.000	32544	0.2918	0.2319	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8330 DMT_00004 Amount Added: 12.50 Units: uL

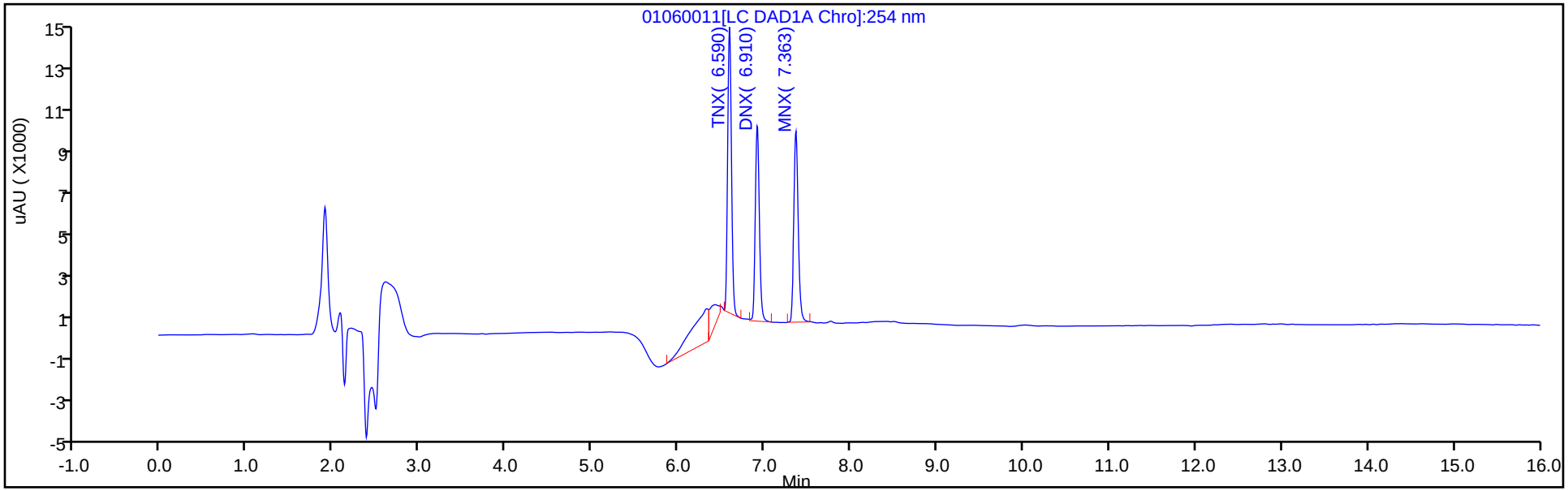
Report Date: 07-Jan-2020 11:17:54 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Denver

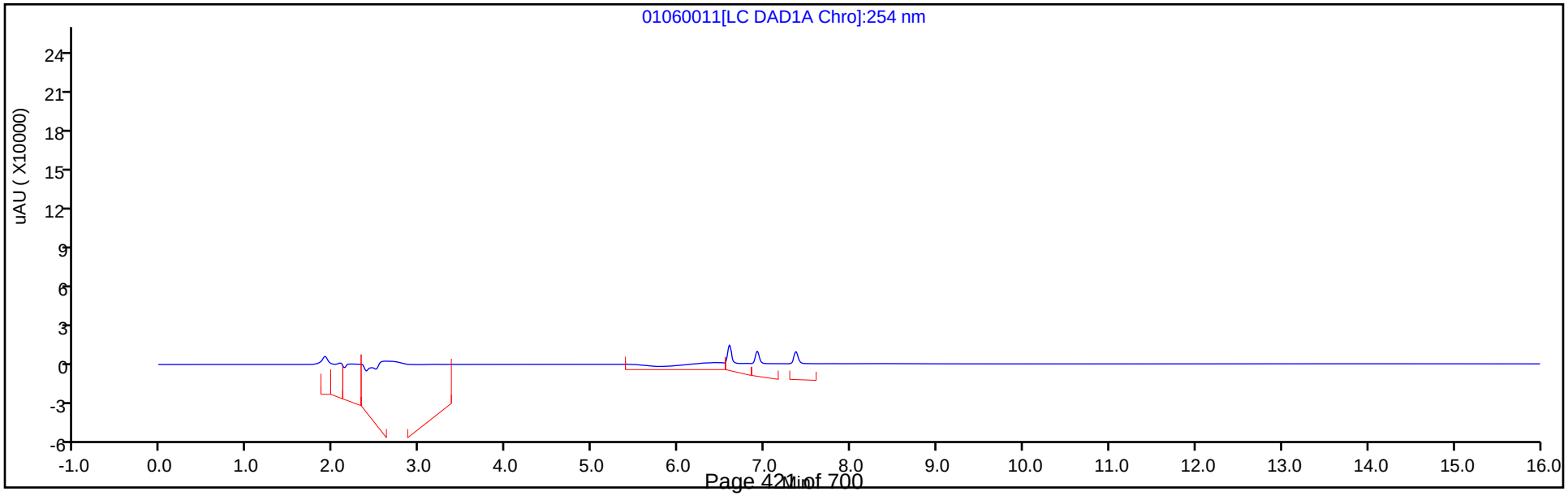
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060011.D

Injection Date:	06-Jan-2020 19:32:09	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC DMT 4			Worklist Smp#:	11
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

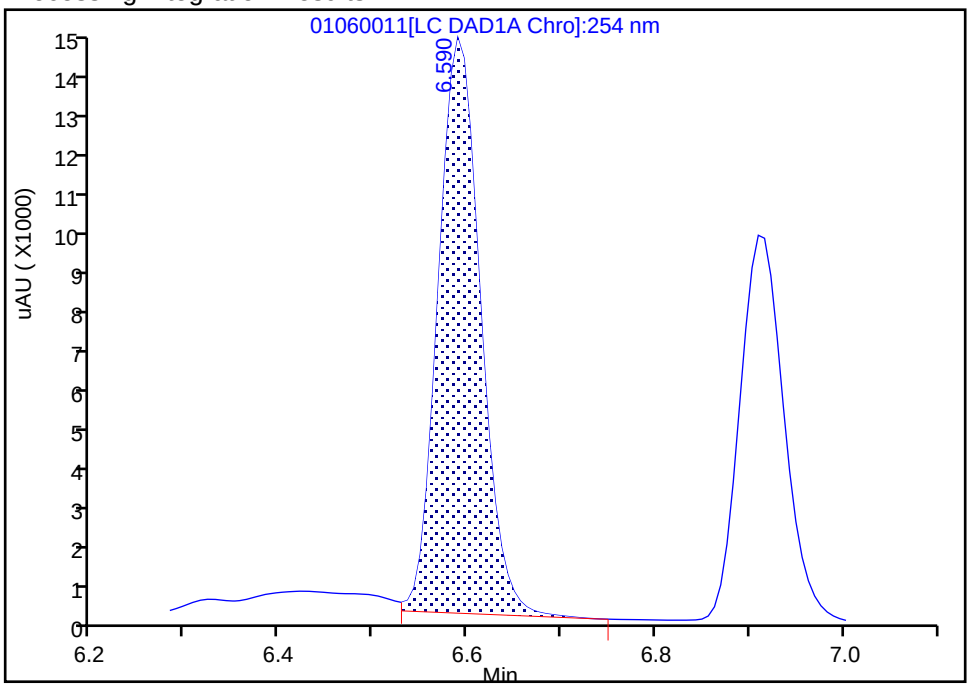
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060011.D				
Injection Date:	06-Jan-2020 19:32:09	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

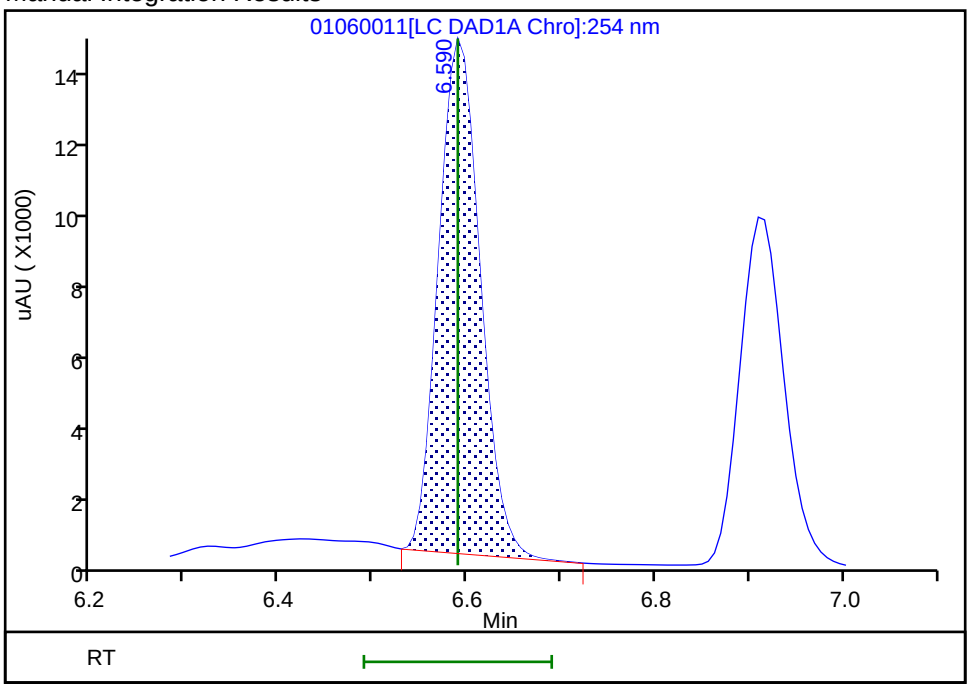
Processing Integration Results

RT: 6.59
Area: 43110
Amount: 0.196332
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 41965
Amount: 0.204448
Amount Units: ug/mL



Reviewer: beckerc, 07-Jan-2020 11:16:01

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060012.D				
Lims ID:	IC DMT 3				
Client ID:					
Sample Type:	IC	Calib Level:	3		
Inject. Date:	06-Jan-2020 19:55:04	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 3				
Misc. Info.:	280-0088401-012				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	07-Jan-2020 11:17:55	Calib Date:	06-Jan-2020 20:40:54		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060014.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0307				

First Level Reviewer: beckerc Date: 07-Jan-2020 10:01:18

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.593	6.590	0.003	21588	0.1001	0.1052	
5 DNX	1	6.920	6.910	0.010	15768	0.1001	0.1015	
6 MNX	1	7.367	7.363	0.004	16871	0.1167	0.1202	

Reagents:

8330 DMT_00004 Amount Added: 5.00 Units: uL

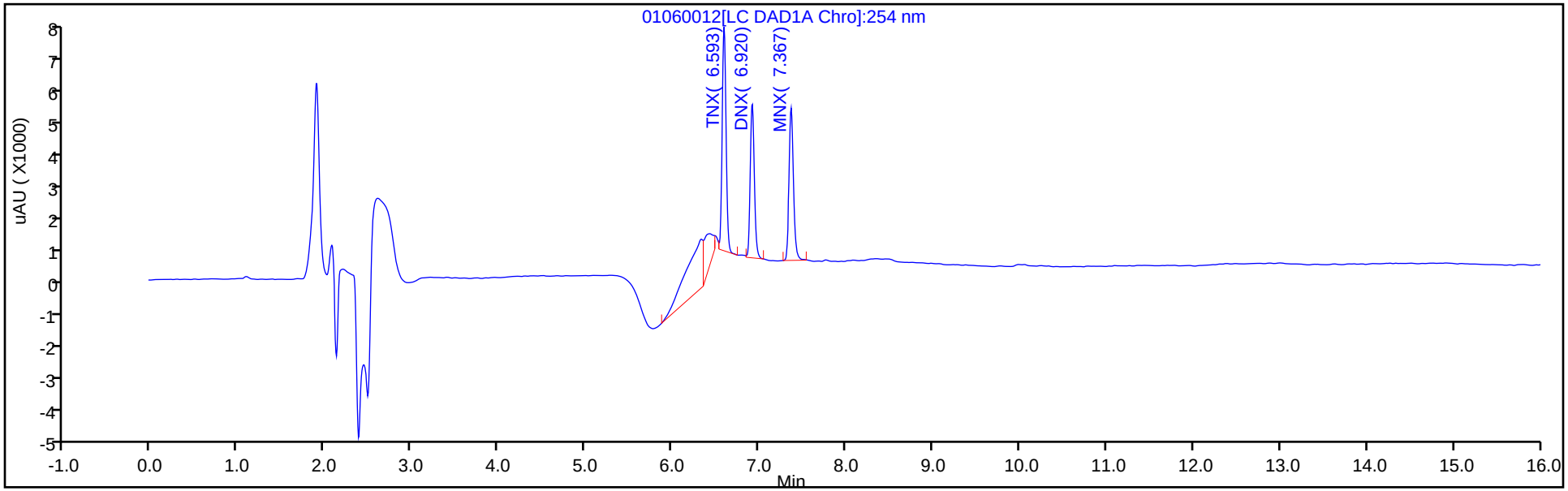
Report Date: 07-Jan-2020 11:17:55 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Denver

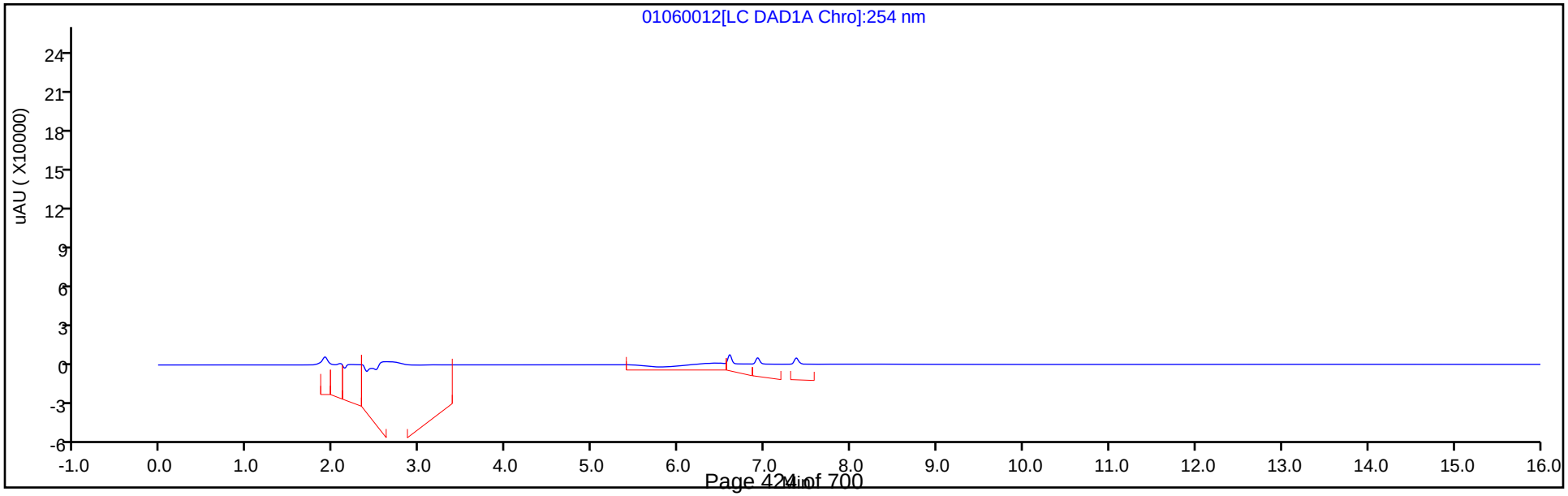
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060012.D

Injection Date:	06-Jan-2020 19:55:04	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC DMT 3			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



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



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060013.D				
Lims ID:	IC DMT 2				
Client ID:					
Sample Type:	IC	Calib Level:	2		
Inject. Date:	06-Jan-2020 20:18:00	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 2				
Misc. Info.:	280-0088401-013				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	07-Jan-2020 11:17:56	Calib Date:	06-Jan-2020 20:40:54		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060014.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0307				

First Level Reviewer: beckerc Date: 07-Jan-2020 10:01:39

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.590	6.590	0.000	10019	0.0501	0.0488	M
5 DNX	1	6.910	6.910	0.000	8360	0.0501	0.0538	
6 MNX	1	7.364	7.363	0.001	8503	0.0584	0.0606	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8330 DMT_00004 Amount Added: 2.50 Units: uL

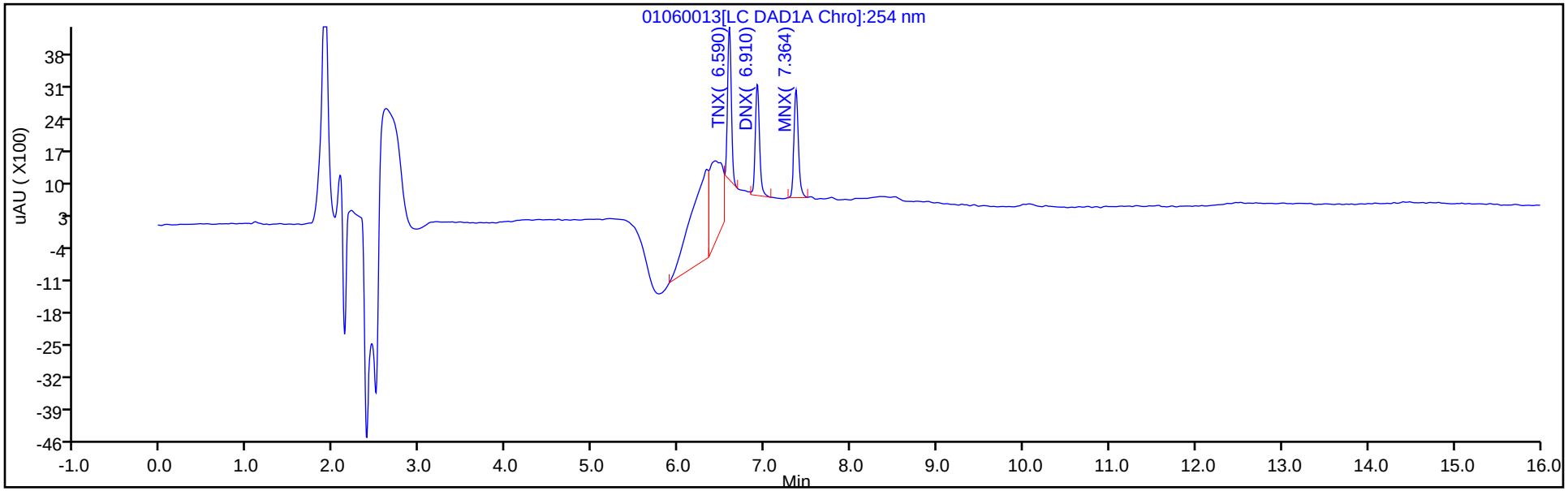
Report Date: 07-Jan-2020 11:17:56 Chrom Revision: 2.3 15-Dec-2019 06:20:02

Eurofins TestAmerica, Denver

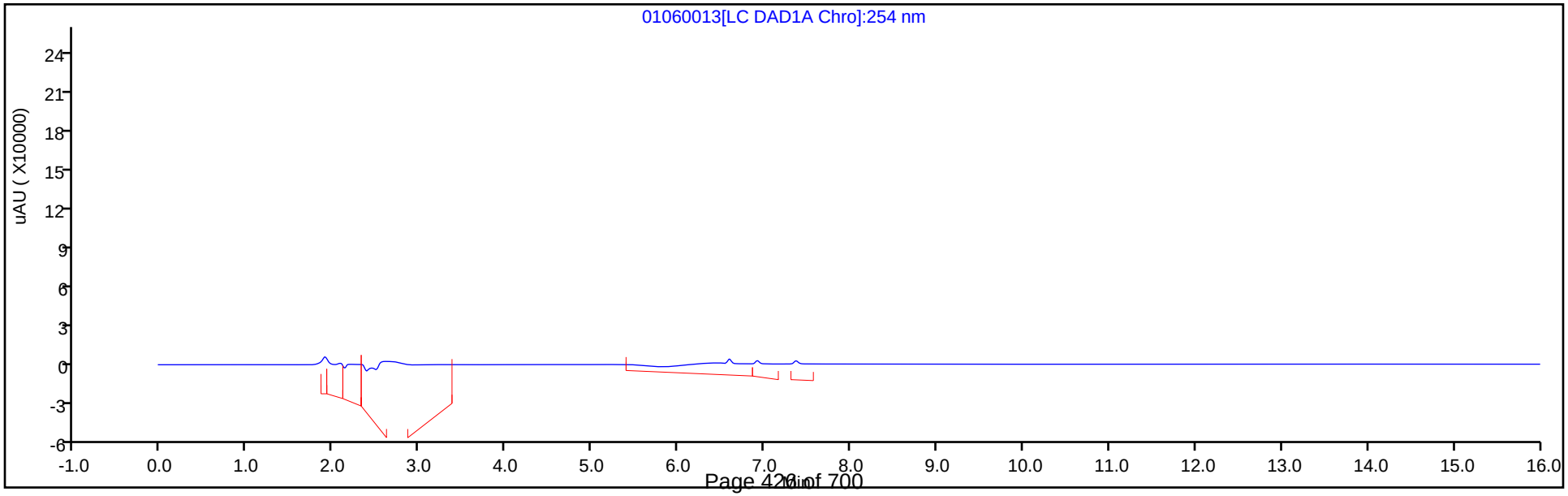
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060013.D

Injection Date:	06-Jan-2020 20:18:00	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC DMT 2			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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

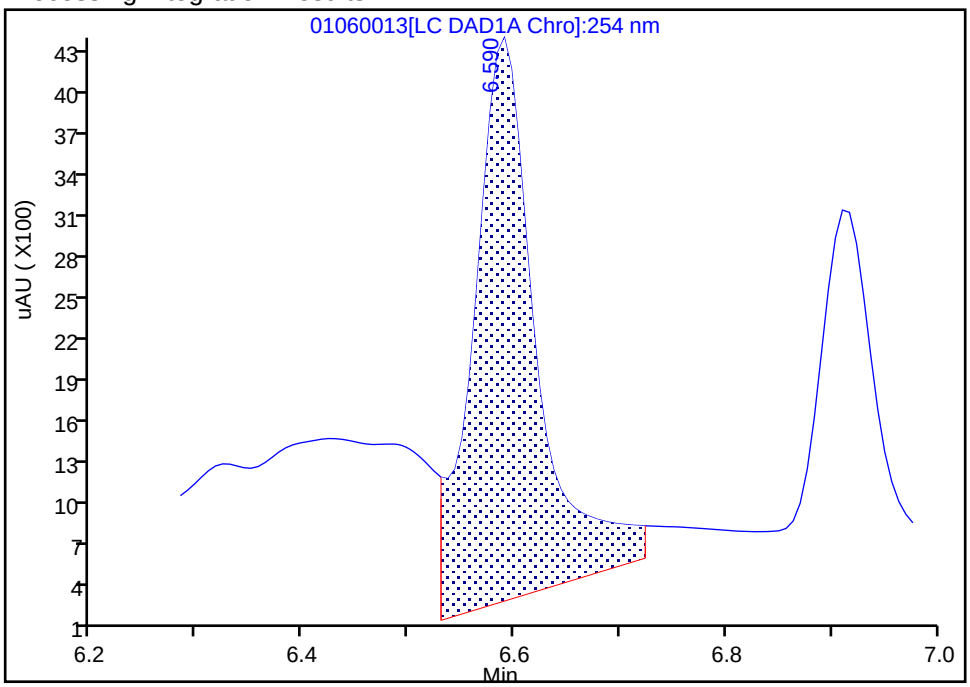
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060013.D				
Injection Date:	06-Jan-2020 20:18:00	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 2				
Client ID:					
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

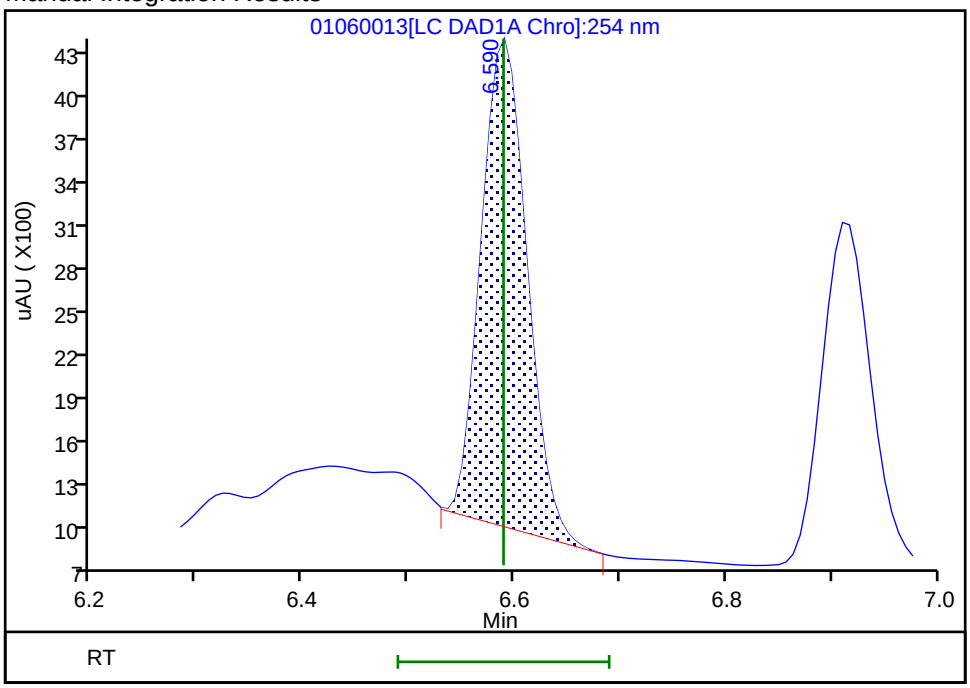
Processing Integration Results

RT: 6.59
Area: 17126
Amount: 0.074441
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 10019
Amount: 0.048811
Amount Units: ug/mL



Reviewer: beckerc, 07-Jan-2020 11:16:29

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060014.D				
Lims ID:	IC DMT 1				
Client ID:					
Sample Type:	IC	Calib Level:	1		
Inject. Date:	06-Jan-2020 20:40:54	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 1				
Misc. Info.:	280-0088401-014				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	07-Jan-2020 11:17:57	Calib Date:	06-Jan-2020 20:40:54		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060014.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0307				

First Level Reviewer: beckerc Date: 07-Jan-2020 10:02:03

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.593	6.590	0.003	3862	0.0200	0.0188	M
5 DNX	1	6.913	6.910	0.003	3439	0.0200	0.0221	
6 MNX	1	7.367	7.363	0.004	3490	0.0233	0.0249	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

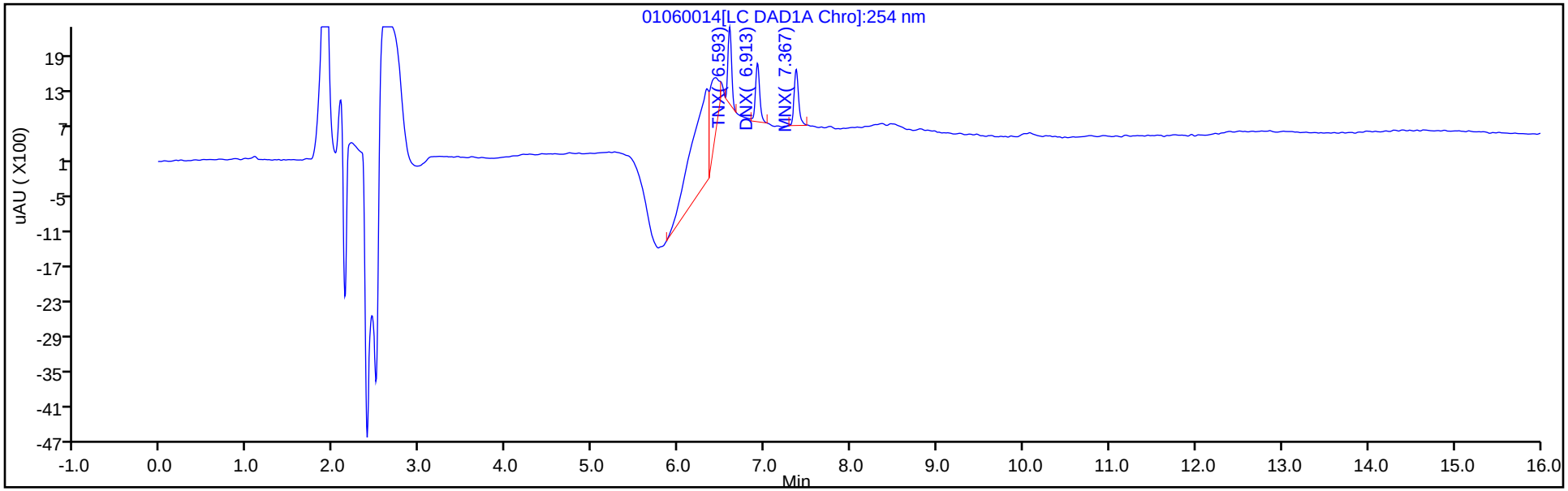
8330 DMT_00004 Amount Added: 1.00 Units: uL

Report Date: 07-Jan-2020 11:17:57 Chrom Revision: 2.3 15-Dec-2019 06:20:02

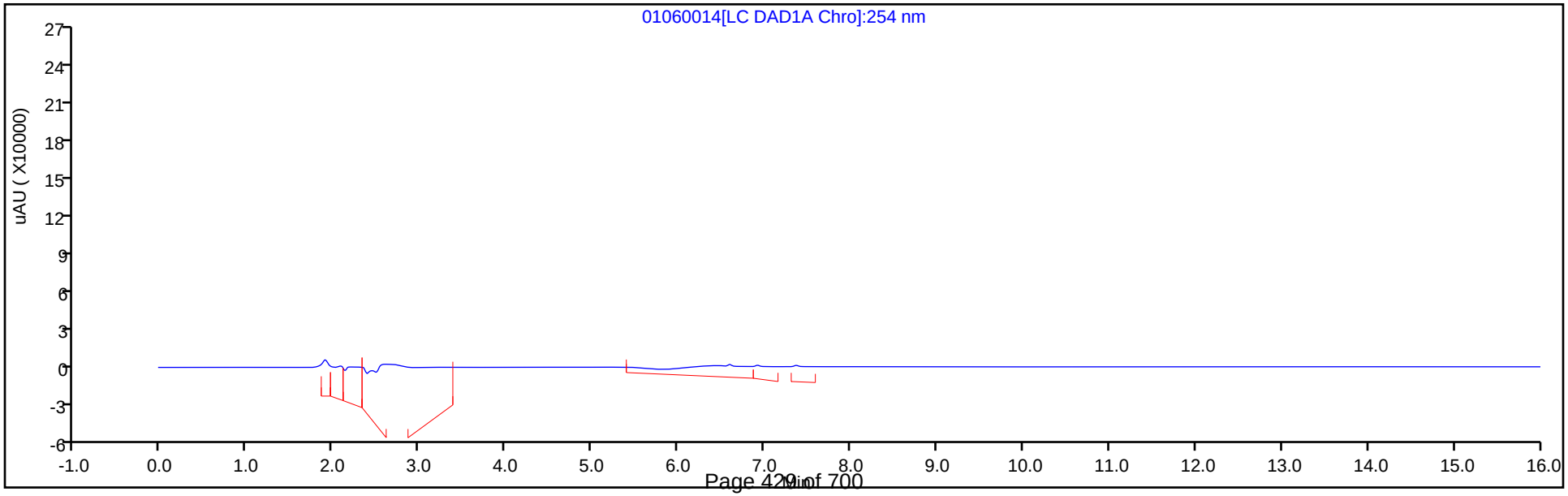
Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060014.D				
Injection Date:	06-Jan-2020 20:40:54	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC DMT 1			Worklist Smp#:	14
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

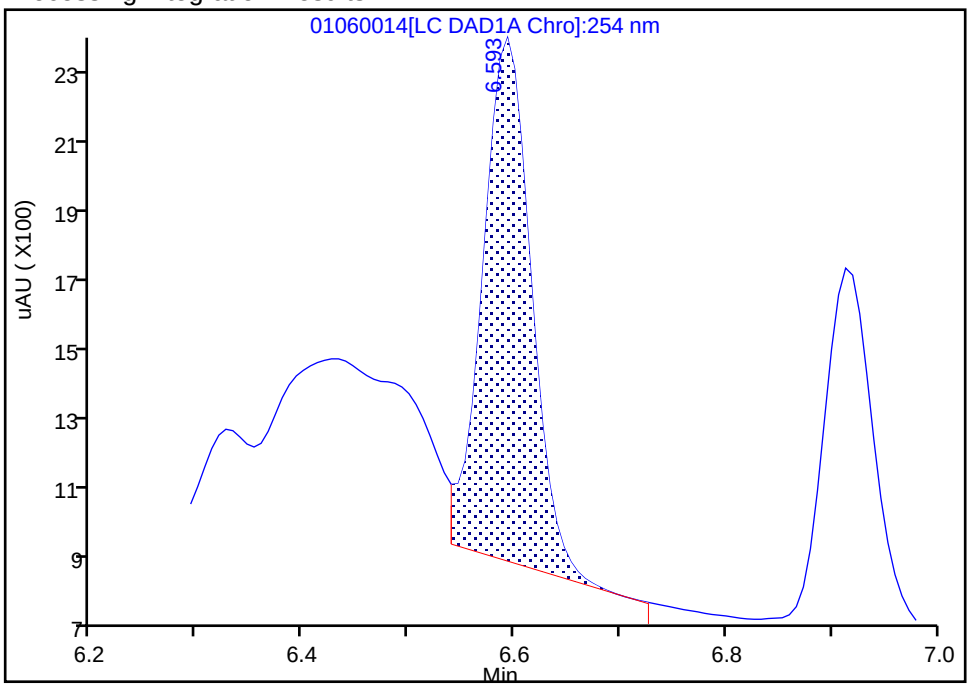
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060014.D				
Injection Date:	06-Jan-2020 20:40:54	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 1				
Client ID:					
Operator ID:	CB	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

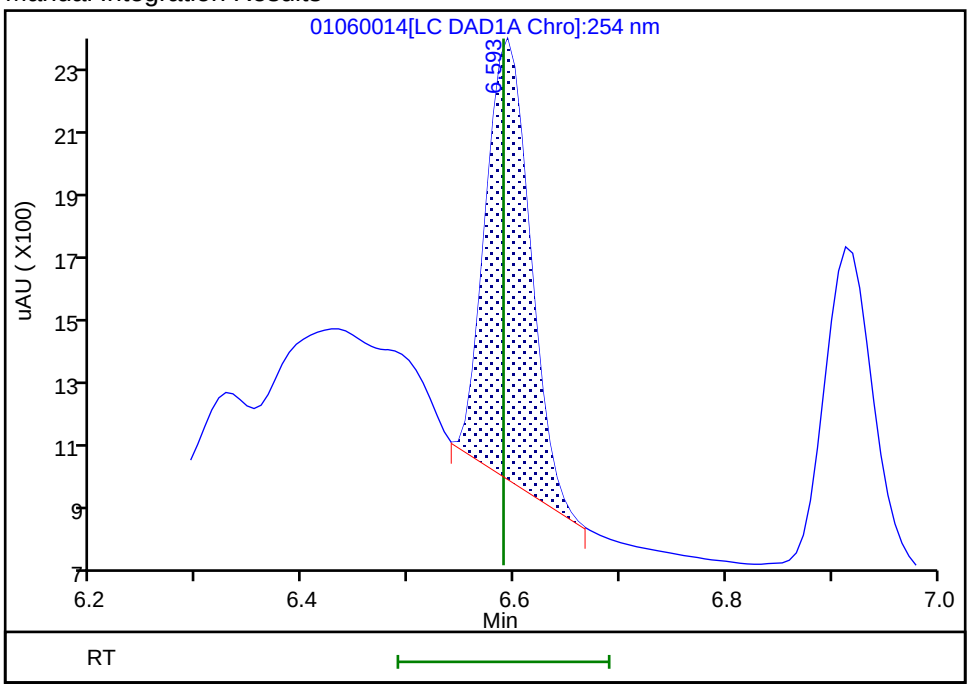
Processing Integration Results

RT: 6.59
Area: 4517
Amount: 0.021576
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 3862
Amount: 0.018815
Amount Units: ug/mL



Reviewer: beckerc, 07-Jan-2020 11:16:47

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1 Analy Batch No.: 487658

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/04/2020 14:07 Calibration End Date: 03/04/2020 16:47 Calibration ID: 42562

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-487658/14	03040014.D
Level 2	IC 280-487658/13	03040013.D
Level 3	IC 280-487658/12	03040012.D
Level 4	IC 280-487658/11	03040011.D
Level 5	IC 280-487658/10	03040010.D
Level 6	IC 280-487658/9	03040009.D
Level 7	IC 280-487658/8	03040008.D
Level 8	IC 280-487658/7	03040007.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
HMX	6.682	6.684	6.682	6.683	6.684	6.683	6.685	6.682			6.533 - 6.833	6.683
RDX	7.755	7.750	7.749	7.750	7.758	7.756	7.759	7.748			7.600 - 7.900	7.753
Picric acid	8.082	8.077	8.069	8.063	8.058	8.043	8.032	7.982			7.906 - 8.206	8.051
1,3,5-Trinitrobenzene	8.882	8.884	8.882	8.883	8.884	8.883	8.885	8.875			8.733 - 9.033	8.882
1,3-Dinitrobenzene	9.535	9.530	9.529	9.536	9.531	9.529	9.532	9.522			9.379 - 9.679	9.531
Nitrobenzene	9.922	9.917	9.915	9.923	9.917	9.916	9.912	9.908			9.766 - 10.066	9.916
Tetryl	10.215	10.217	10.215	10.216	10.217	10.216	10.212	10.208			10.066 - 10.366	10.215
Nitroglycerin	10.728	10.730	10.722	10.730	10.731	10.729	10.719	10.708			10.579 - 10.879	10.725
2,4,6-Trinitrotoluene	11.182	11.183	11.175	11.183	11.184	11.182	11.172	11.175			11.083 - 11.283	11.180
4-Amino-2,6-dinitrotoluene	11.342	11.337	11.329	11.336	11.344	11.336	11.325	11.322			11.236 - 11.436	11.334
2-Amino-4,6-dinitrotoluene	11.622	11.623	11.615	11.623	11.631	11.622	11.612	11.608			11.523 - 11.723	11.620
2,6-Dinitrotoluene	11.788	11.790	11.782	11.790	11.791	11.789	11.779	11.775			11.689 - 11.889	11.786
2,4-Dinitrotoluene	11.988	11.983	11.975	11.983	11.991	11.982	11.972	11.968			11.883 - 12.083	11.980
2-Nitrotoluene	12.828	12.830	12.822	12.830	12.831	12.822	12.819	12.815			12.679 - 12.979	12.825
4-Nitrotoluene	13.268	13.263	13.255	13.263	13.271	13.262	13.252	13.248			13.119 - 13.419	13.260
3-Nitrotoluene	13.868	13.863	13.855	13.863	13.871	13.856	13.852	13.842			13.713 - 14.013	13.859
PETN	14.962	14.963	14.962	14.963	14.971	14.956	14.952	14.942			14.819 - 15.119	14.959
1,2-Dinitrobenzene	8.715	8.710	8.709	8.710	8.711	8.709	8.712	8.702			8.560 - 8.860	8.710

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

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1 Analy Batch No.: 487658

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/04/2020 14:07 Calibration End Date: 03/04/2020 16:47 Calibration ID: 42562

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-487658/14	03040014.D
Level 2	IC 280-487658/13	03040013.D
Level 3	IC 280-487658/12	03040012.D
Level 4	IC 280-487658/11	03040011.D
Level 5	IC 280-487658/10	03040010.D
Level 6	IC 280-487658/9	03040009.D
Level 7	IC 280-487658/8	03040008.D
Level 8	IC 280-487658/7	03040007.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
HMX	76000 92195	84000 92901	90690 91886	91556 94192	Ave		89177.5536				6.9		20.0			
RDX	135800 113668	121280 113474	118060 112538	114104 114027	Ave		117868.823				6.6		20.0			
Picric acid	85600 87078	86880 87800	86250 87686	86696 89985	Ave		87246.8375				1.5		20.0			
1,3,5-Trinitrobenzene	241317 243301	243114 244799	242255 243367	242443 247077	Ave		243459.240				0.7		20.0			
1,3-Dinitrobenzene	317016 326305	319760 327946	324012 325028	322762 331181	Ave		324251.264				1.4		20.0			
Nitrobenzene	213496 213700	206972 215276	212400 212102	209502 218063	Ave		212688.862				1.6		20.0			
Tetryl	201248 192630	193054 193253	192365 192871	189457 196083	Ave		193870.110				1.8		20.0			
Nitroglycerin	65725 73511	68592 73876	71710 73303	73524 74137	Ave		71797.3561				4.2		20.0			
2,4,6-Trinitrotoluene	221713 220022	223725 219599	219920 221109	216454 224745	Ave		220910.986				1.2		20.0			
4-Amino-2,6-dinitrotoluene	172827 171731	179960 174551	170849 170344	174965 172519	Ave		173468.308				1.8		20.0			
2-Amino-4,6-dinitrotoluene	221713 216511	215040 216363	215538 218189	214008 222947	Ave		217538.754				1.5		20.0			
2,6-Dinitrotoluene	159512 159933	160657 161471	158845 155997	160088 158732	Ave		159404.313				1.0		20.0			
2,4-Dinitrotoluene	316285 321230	320458 323479	317131 322066	320327 328339	Ave		321164.424				1.2		20.0			
2-Nitrotoluene	165800 137323	156020 137486	142550 135008	137560 138961	Ave		143838.427				7.7		20.0			

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

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

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1 Analy Batch No.: 487658

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/04/2020 14:07 Calibration End Date: 03/04/2020 16:47 Calibration ID: 42562

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
4-Nitrotoluene	127495 118346	123273 118529	119112 116856	118255 120524	Ave		120298.779				2.9		20.0			
3-Nitrotoluene	160639 152110	161319 152488	152188 149787	150997 154421	Ave		154243.594				2.8		20.0			
PETN	66740 82493	74332 83187	80671 82517	81690 84015	Ave		79455.6132				7.5		20.0			
1,2-Dinitrobenzene	149050 144823	148380 145561	145890 144385	144548 147083	Ave		146215.016				1.2		20.0			

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

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

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1 Analy Batch No.: 487658

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/04/2020 14:07 Calibration End Date: 03/04/2020 16:47 Calibration ID: 42562

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-487658/14	03040014.D
Level 2	IC 280-487658/13	03040013.D
Level 3	IC 280-487658/12	03040012.D
Level 4	IC 280-487658/11	03040011.D
Level 5	IC 280-487658/10	03040010.D
Level 6	IC 280-487658/9	03040009.D
Level 7	IC 280-487658/8	03040008.D
Level 8	IC 280-487658/7	03040007.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
HMX	Ave	1520 65031	4200 91886	9069 235480	22889	36878	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400
RDX	Ave	2716 79432	6064 112538	11806 285067	28526	45467	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400
Picric acid	Ave	1712 61460	4344 87686	8625 224963	21674	34831	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400
1,3,5-Trinitrobenzene	Ave	4836 171702	12180 243854	24274 618928	60732	97515	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251	0.401
1,3-Dinitrobenzene	Ave	6353 230021	16020 325678	32466 829608	80852	130783	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251	0.401
Nitrobenzene	Ave	4287 151296	10390 212950	21325 547337	52585	85822	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251	0.402
Tetryl	Ave	4033 135548	9672 193257	19275 491187	47459	77206	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251	0.401
Nitroglycerin	Ave	13145 517135	34296 733033	71710 1853418	183811	294044	0.200 7.00	0.500 10.0	1.00 25.0	2.50	4.00
2,4,6-Trinitrotoluene	Ave	4452 154334	11231 221993	22080 564111	54330	88361	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251	0.402
4-Amino-2,6-dinitrotoluene	Ave	3460 122308	9007 170514	17102 431730	43785	68761	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
2-Amino-4,6-dinitrotoluene	Ave	4452 152060	10795 219062	21640 559598	53716	86951	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251	0.402
2,6-Dinitrotoluene	Ave	3203 113482	8065 156621	15948 398417	40182	64229	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251	0.402
2,4-Dinitrotoluene	Ave	6351 227341	16087 323354	31840 824132	80402	129006	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251	0.402
2-Nitrotoluene	Ave	3316 96240	7801 135008	14255 347403	34390	54929	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400
4-Nitrotoluene	Ave	2555 83136	6176 117090	11935 301912	29623	47433	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251	0.401

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

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1 Analy Batch No.: 487658

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/04/2020 14:07 Calibration End Date: 03/04/2020 16:47 Calibration ID: 42562

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
3-Nitrotoluene	Ave	3216 106848	8074 149937	15234 386438	37787	60905	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
PETN	Ave	13348 582311	37166 825168	80671 2100383	204225	329970	0.200 7.00	0.500 10.0	1.00 25.0	2.50	4.00
1,2-Dinitrobenzene	Ave	2981 101893	7419 144385	14589 367708	36137	57929	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250	0.400

Curve Type Legend:
Ave = Average

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040007.D
Lims ID: IC MAIN L8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 04-Mar-2020 14:07:07 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC MAIN L8
Misc. Info.: 280-0089779-007
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Mar-2020 10:24:59 Calib Date: 04-Mar-2020 23:40:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0308

First Level Reviewer: beckerc Date: 05-Mar-2020 08:21:11

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.682	6.683	-0.001	235480	2.50	2.64	M
7 RDX	1	7.748	7.750	-0.002	285067	2.50	2.42	
8 2,4,6-Trinitrophenol	1	7.982	8.056	-0.074	224963	2.50	2.58	
$ 9 1,2-Dinitrobenzene	1	8.702	8.710	-0.008	367708	2.50	2.51	
10 1,3,5-Trinitrobenzene	1	8.875	8.883	-0.008	618928	2.51	2.54	
11 1,3-Dinitrobenzene	1	9.522	9.529	-0.007	829608	2.51	2.56	
12 Nitrobenzene	1	9.908	9.916	-0.008	547337	2.51	2.57	
14 Tetryl	1	10.208	10.216	-0.008	491187	2.51	2.53	
15 Nitroglycerin	2	10.708	10.729	-0.021	1853418	25.0	25.8	
16 2,4,6-Trinitrotoluene	1	11.175	11.183	-0.008	564111	2.51	2.55	
17 4-Amino-2,6-dinitrotoluene	1	11.322	11.336	-0.014	431730	2.50	2.49	
18 2-Amino-4,6-dinitrotoluene	1	11.608	11.623	-0.015	559598	2.51	2.57	
19 2,6-Dinitrotoluene	1	11.775	11.789	-0.014	398417	2.51	2.50	
20 2,4-Dinitrotoluene	1	11.968	11.983	-0.015	824132	2.51	2.57	
21 o-Nitrotoluene	1	12.815	12.829	-0.014	347403	2.50	2.42	
22 p-Nitrotoluene	1	13.248	13.269	-0.021	301912	2.51	2.51	
23 m-Nitrotoluene	1	13.842	13.863	-0.021	386438	2.50	2.51	
24 PETN	2	14.942	14.969	-0.027	2100383	25.0	26.4	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

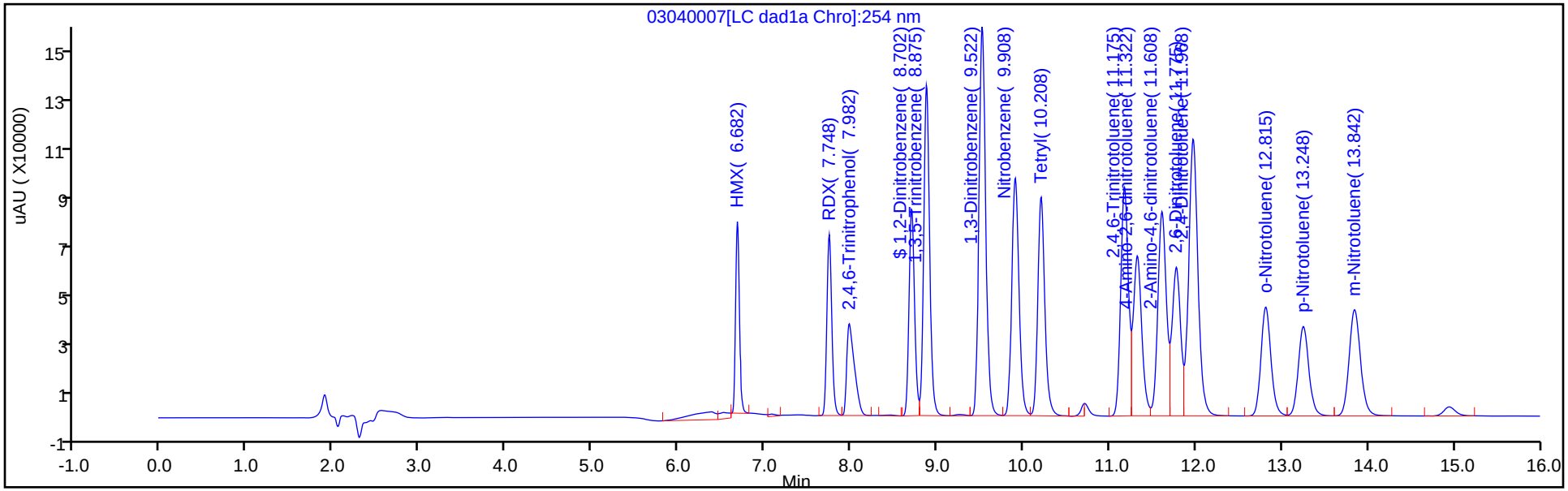
8330IntermStk_00061 Amount Added: 250.00 Units: uL

Report Date: 06-Mar-2020 10:24:59 Chrom Revision: 2.3 19-Feb-2020 16:45:46

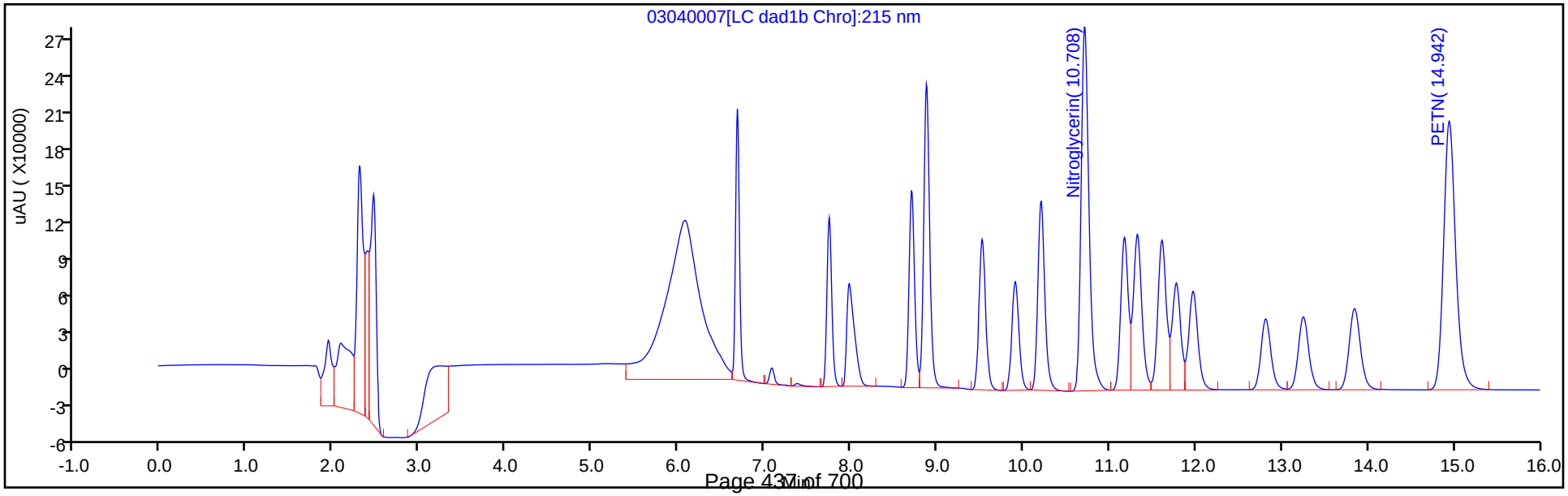
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040007.d				
Injection Date:	04-Mar-2020 14:07:07	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC MAIN L8			Worklist Smp#:	7
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

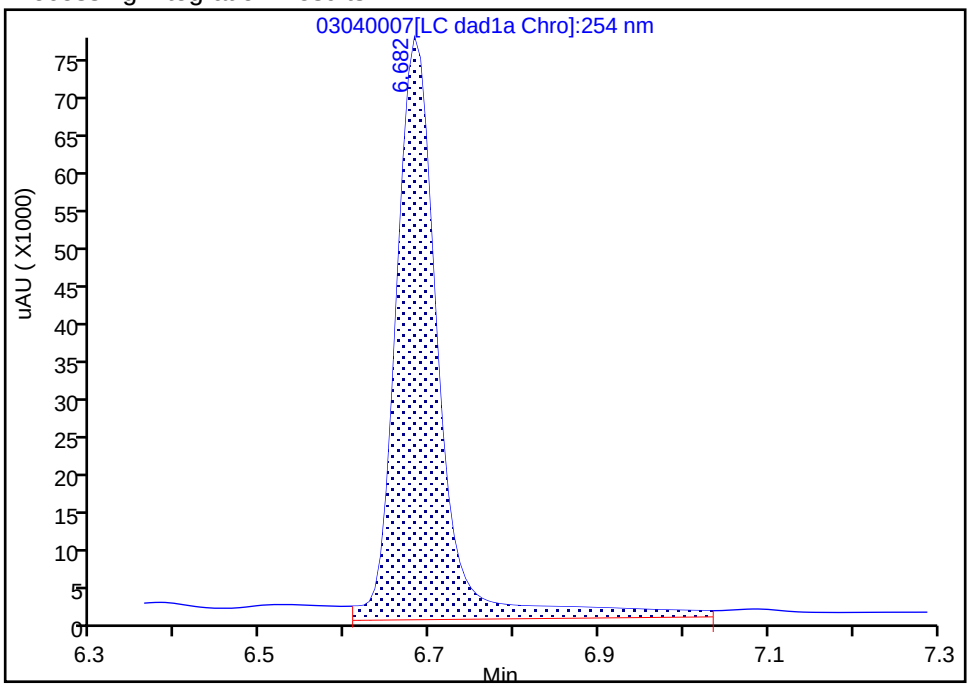
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040007.d				
Injection Date:	04-Mar-2020 14:07:07	Instrument ID:	CHHPLC_X3		
Lims ID:	IC MAIN L8				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

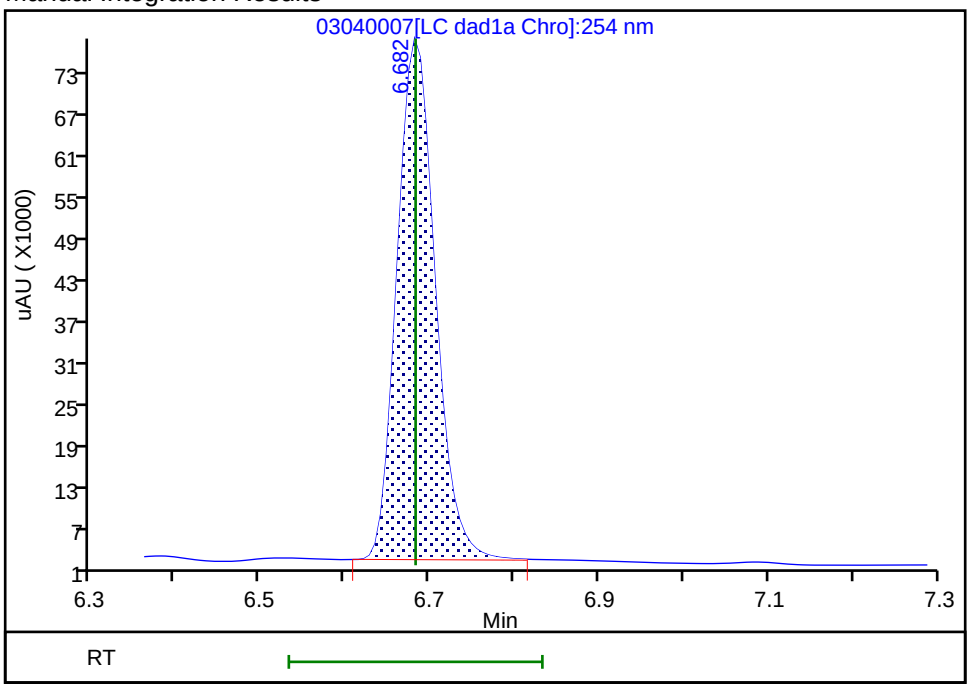
Processing Integration Results

RT: 6.68
Area: 273190
Amount: 2.501188
Amount Units: ug/mL



Manual Integration Results

RT: 6.68
Area: 235480
Amount: 2.640575
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:19:14

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040008.D				
Lims ID:	IC MAIN L7				
Client ID:					
Sample Type:	IC	Calib Level:	7		
Inject. Date:	04-Mar-2020 14:30:11	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC MAIN L7				
Misc. Info.:	280-0089779-008				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub9				
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Mar-2020 10:25:01	Calib Date:	04-Mar-2020 23:40:46		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0308				

First Level Reviewer: beckerc Date: 05-Mar-2020 08:21:29

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 HMX	1	6.685	6.683	0.002	91886	1.00	1.03	M
	7 RDX	1	7.759	7.750	0.009	112538	1.00	0.9548	
	8 2,4,6-Trinitrophenol	1	8.032	8.056	-0.024	87686	1.00	1.01	
$	9 1,2-Dinitrobenzene	1	8.712	8.710	0.002	144385	1.00	0.9875	
	10 1,3,5-Trinitrobenzene	1	8.885	8.883	0.002	243854	1.00	1.00	
	11 1,3-Dinitrobenzene	1	9.532	9.529	0.003	325678	1.00	1.00	
	12 Nitrobenzene	1	9.912	9.916	-0.004	212950	1.00	1.00	
	14 Tetryl	1	10.212	10.216	-0.004	193257	1.00	1.00	
	15 Nitroglycerin	2	10.719	10.729	-0.010	733033	10.0	10.2	
	16 2,4,6-Trinitrotoluene	1	11.172	11.183	-0.011	221993	1.00	1.00	
	17 4-Amino-2,6-dinitrotoluene	1	11.325	11.336	-0.011	170514	1.00	0.9830	
	18 2-Amino-4,6-dinitrotoluene	1	11.612	11.623	-0.011	219062	1.00	1.01	
	19 2,6-Dinitrotoluene	1	11.779	11.789	-0.010	156621	1.00	0.9825	
	20 2,4-Dinitrotoluene	1	11.972	11.983	-0.011	323354	1.00	1.01	
	21 o-Nitrotoluene	1	12.819	12.829	-0.010	135008	1.00	0.9386	
	22 p-Nitrotoluene	1	13.252	13.269	-0.017	117090	1.00	0.9733	
	23 m-Nitrotoluene	1	13.852	13.863	-0.011	149937	1.00	0.9721	
	24 PETN	2	14.952	14.969	-0.017	825168	10.0	10.4	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

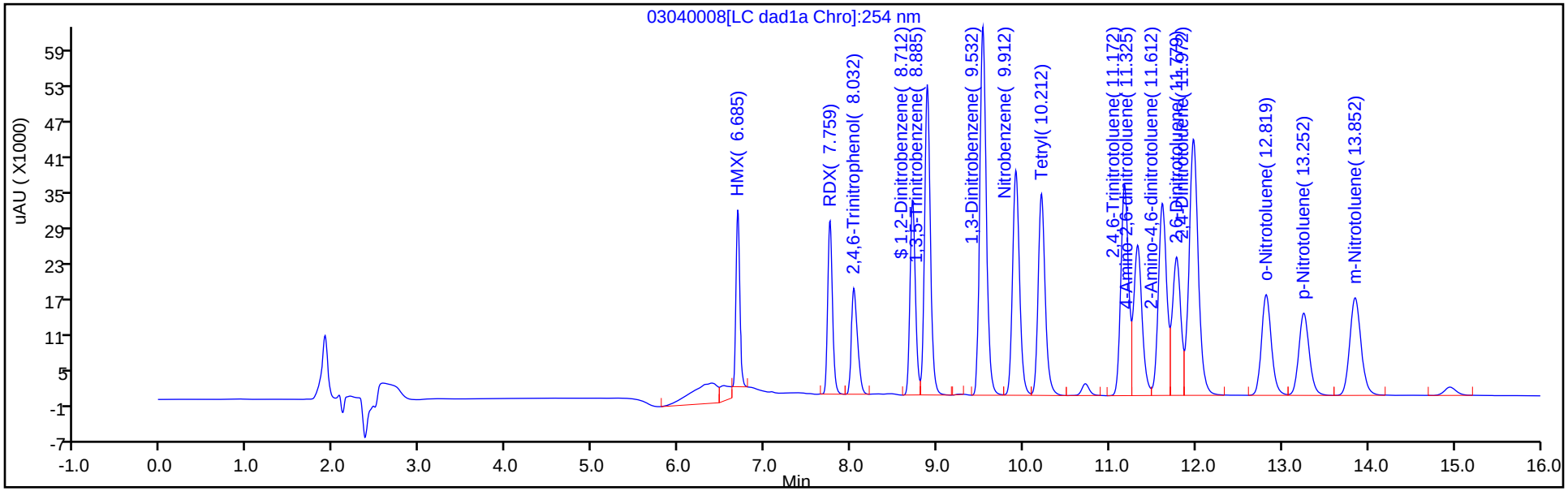
8330IntermStk_00061 Amount Added: 100.00 Units: uL

Report Date: 06-Mar-2020 10:25:02 Chrom Revision: 2.3 19-Feb-2020 16:45:46

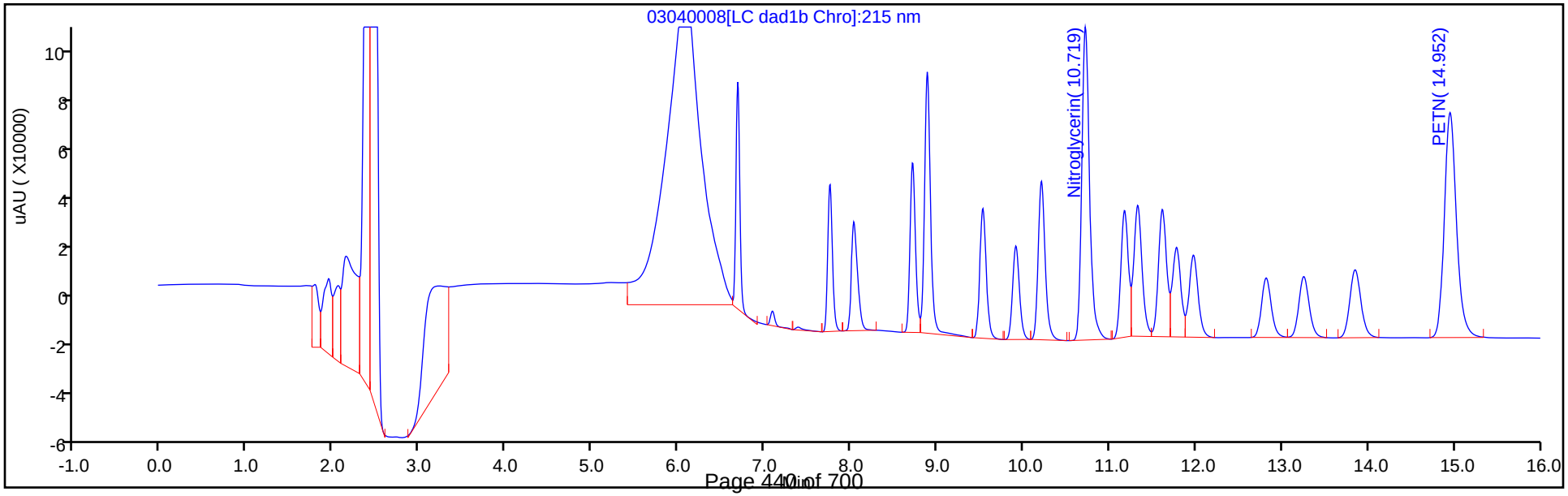
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040008.d				
Injection Date:	04-Mar-2020 14:30:11	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC MAIN L7			Worklist Smp#:	8
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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

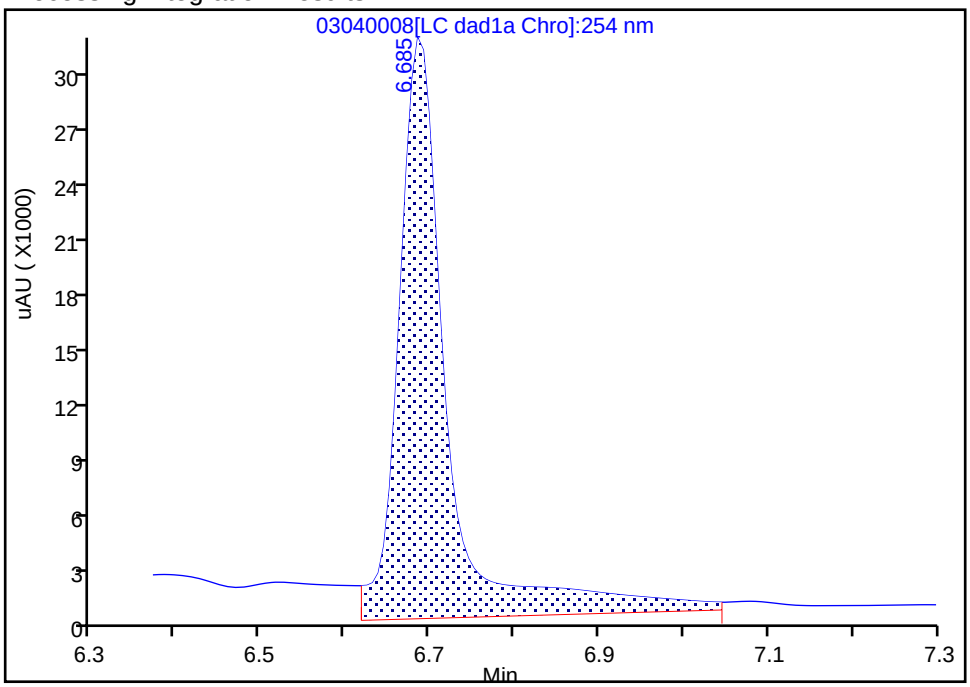
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040008.d				
Injection Date:	04-Mar-2020 14:30:11	Instrument ID:	CHHPLC_X3		
Lims ID:	IC MAIN L7				
Client ID:					
Operator ID:	CB	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

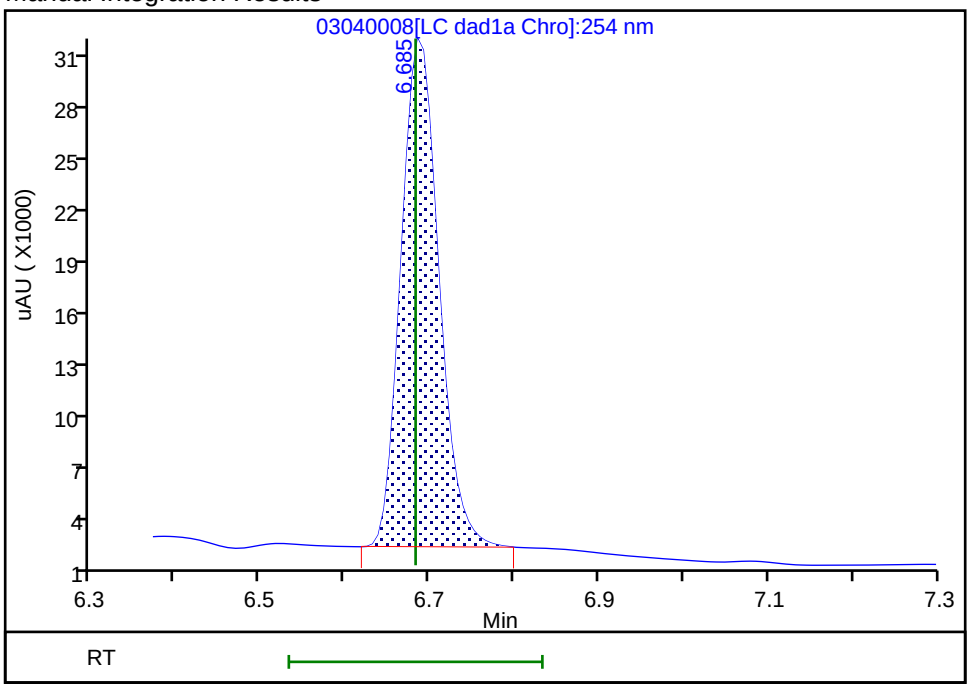
Processing Integration Results

RT: 6.69
Area: 125872
Amount: 0.749140
Amount Units: ug/mL



Manual Integration Results

RT: 6.69
Area: 91886
Amount: 1.030371
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:21:25

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040009.D
Lims ID: IC MAIN L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 04-Mar-2020 14:53:07 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC MAIN L6
Misc. Info.: 280-0089779-009
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Mar-2020 10:25:02 Calib Date: 04-Mar-2020 23:40:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0308

First Level Reviewer: beckerc Date: 05-Mar-2020 08:21:45

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.683	6.683	0.000	65031	0.7000	0.7292	M
7 RDX	1	7.756	7.750	0.006	79432	0.7000	0.6739	
8 2,4,6-Trinitrophenol	1	8.043	8.056	-0.013	61460	0.7000	0.7044	
$ 9 1,2-Dinitrobenzene	1	8.709	8.710	-0.001	101893	0.7000	0.6969	
10 1,3,5-Trinitrobenzene	1	8.883	8.883	0.000	171702	0.7014	0.7053	
11 1,3-Dinitrobenzene	1	9.529	9.529	0.000	230021	0.7014	0.7094	
12 Nitrobenzene	1	9.916	9.916	0.000	151296	0.7028	0.7113	
14 Tetryl	1	10.216	10.216	0.000	135548	0.7014	0.6992	
15 Nitroglycerin	2	10.729	10.729	0.000	517135	7.00	7.20	
16 2,4,6-Trinitrotoluene	1	11.182	11.183	-0.001	154334	0.7028	0.6986	
17 4-Amino-2,6-dinitrotoluene	1	11.336	11.336	0.000	122308	0.7007	0.7051	
18 2-Amino-4,6-dinitrotoluene	1	11.622	11.623	-0.001	152060	0.7028	0.6990	
19 2,6-Dinitrotoluene	1	11.789	11.789	0.000	113482	0.7028	0.7119	
20 2,4-Dinitrotoluene	1	11.982	11.983	-0.001	227341	0.7028	0.7079	
21 o-Nitrotoluene	1	12.822	12.829	-0.007	96240	0.7000	0.6691	
22 p-Nitrotoluene	1	13.262	13.269	-0.007	83136	0.7014	0.6911	
23 m-Nitrotoluene	1	13.856	13.863	-0.007	106848	0.7007	0.6927	
24 PETN	2	14.956	14.969	-0.013	582311	7.00	7.33	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

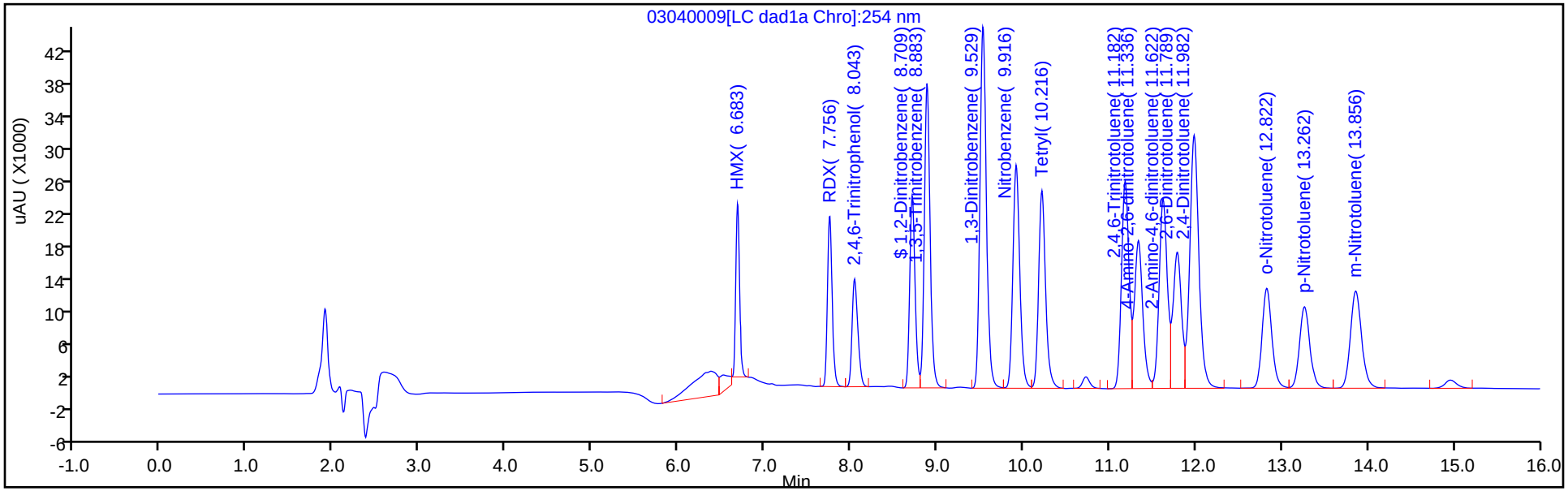
8330IntermStk_00061 Amount Added: 70.00 Units: uL

Report Date: 06-Mar-2020 10:25:02 Chrom Revision: 2.3 19-Feb-2020 16:45:46

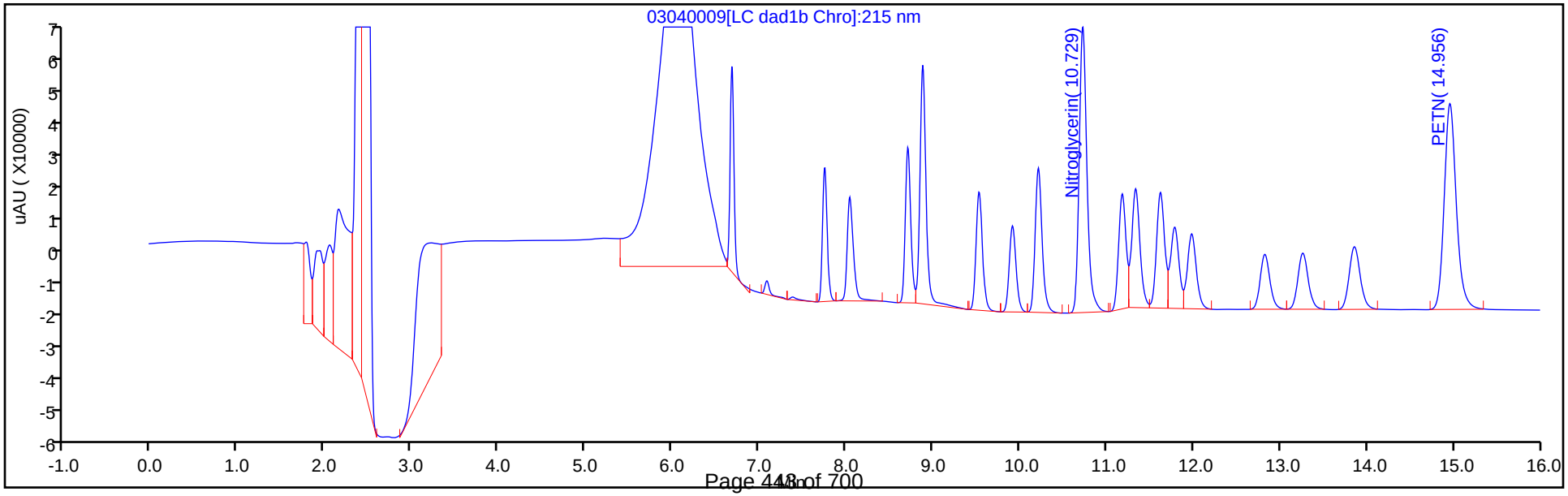
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040009.d				
Injection Date:	04-Mar-2020 14:53:07	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC MAIN L6			Worklist Smp#:	9
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

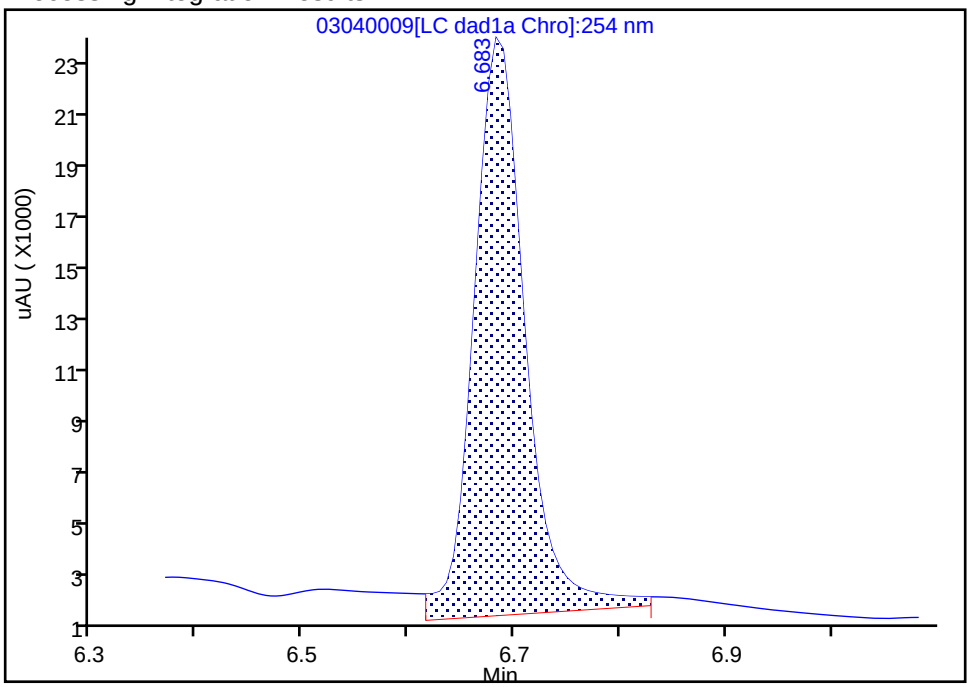
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040009.d				
Injection Date:	04-Mar-2020 14:53:07	Instrument ID:	CHHPLC_X3		
Lims ID:	IC MAIN L6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

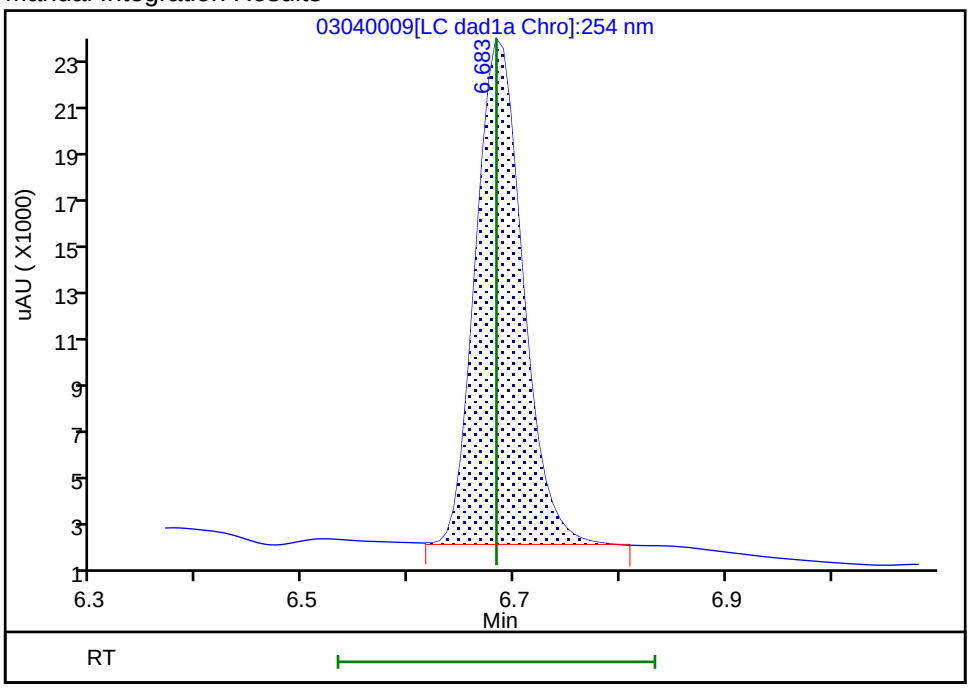
Processing Integration Results

RT: 6.68
Area: 73442
Amount: 0.448436
Amount Units: ug/mL



Manual Integration Results

RT: 6.68
Area: 65031
Amount: 0.729231
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:21:40

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040010.D				
Lims ID:	IC MAIN L5				
Client ID:					
Sample Type:	IC	Calib Level:	5		
Inject. Date:	04-Mar-2020 15:16:04	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC MAIN L5				
Misc. Info.:	280-0089779-010				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub9				
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Mar-2020 10:25:03	Calib Date:	04-Mar-2020 23:40:46		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0308				

First Level Reviewer: beckerc Date: 05-Mar-2020 08:22:03

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.684	6.683	0.001	36878	0.4000	0.4135	M
7 RDX	1	7.758	7.750	0.008	45467	0.4000	0.3857	
8 2,4,6-Trinitrophenol	1	8.058	8.056	0.002	34831	0.4000	0.3992	
$ 9 1,2-Dinitrobenzene	1	8.711	8.710	0.001	57929	0.4000	0.3962	
10 1,3,5-Trinitrobenzene	1	8.884	8.883	0.001	97515	0.4008	0.4005	
11 1,3-Dinitrobenzene	1	9.531	9.529	0.002	130783	0.4008	0.4033	
12 Nitrobenzene	1	9.917	9.916	0.001	85822	0.4016	0.4035	
14 Tetryl	1	10.217	10.216	0.001	77206	0.4008	0.3982	
15 Nitroglycerin	2	10.731	10.729	0.002	294044	4.00	4.10	
16 2,4,6-Trinitrotoluene	1	11.184	11.183	0.001	88361	0.4016	0.4000	
17 4-Amino-2,6-dinitrotoluene	1	11.344	11.336	0.008	68761	0.4004	0.3964	
18 2-Amino-4,6-dinitrotoluene	1	11.631	11.623	0.008	86951	0.4016	0.3997	
19 2,6-Dinitrotoluene	1	11.791	11.789	0.002	64229	0.4016	0.4029	
20 2,4-Dinitrotoluene	1	11.991	11.983	0.008	129006	0.4016	0.4017	
21 o-Nitrotoluene	1	12.831	12.829	0.002	54929	0.4000	0.3819	
22 p-Nitrotoluene	1	13.271	13.269	0.002	47433	0.4008	0.3943	
23 m-Nitrotoluene	1	13.871	13.863	0.008	60905	0.4004	0.3949	
24 PETN	2	14.971	14.969	0.002	329970	4.00	4.15	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

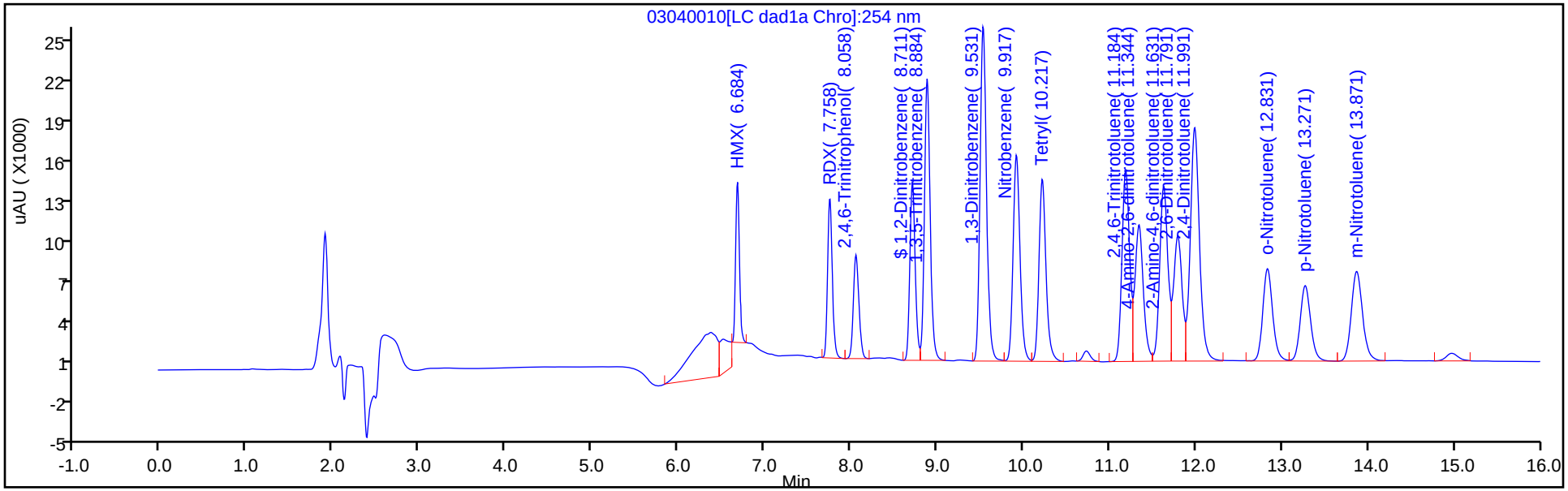
8330IntermStk_00061 Amount Added: 40.00 Units: uL

Report Date: 06-Mar-2020 10:25:04 Chrom Revision: 2.3 19-Feb-2020 16:45:46

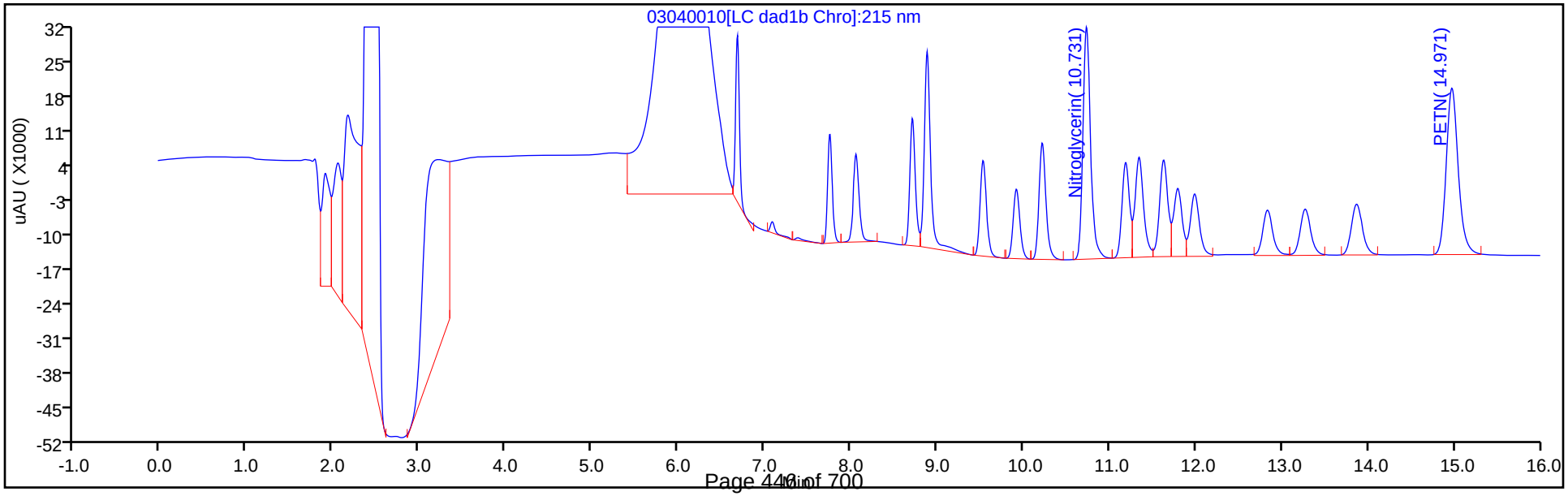
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040010.d				
Injection Date:	04-Mar-2020 15:16:04	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC MAIN L5			Worklist Smp#:	10
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

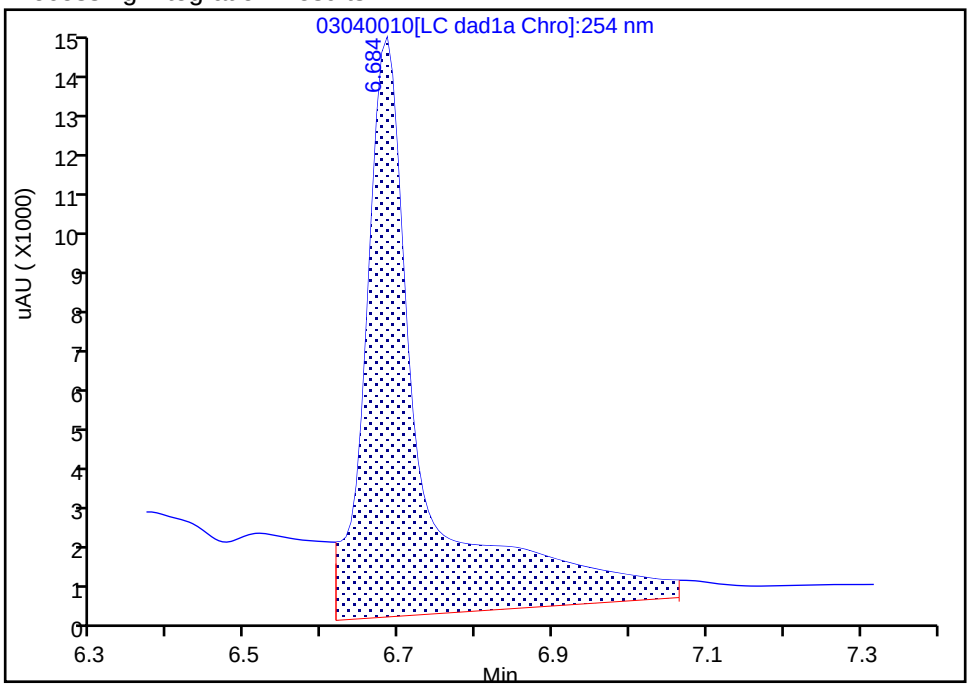
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040010.d				
Injection Date:	04-Mar-2020 15:16:04	Instrument ID:	CHHPLC_X3		
Lims ID:	IC MAIN L5				
Client ID:					
Operator ID:	CB	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

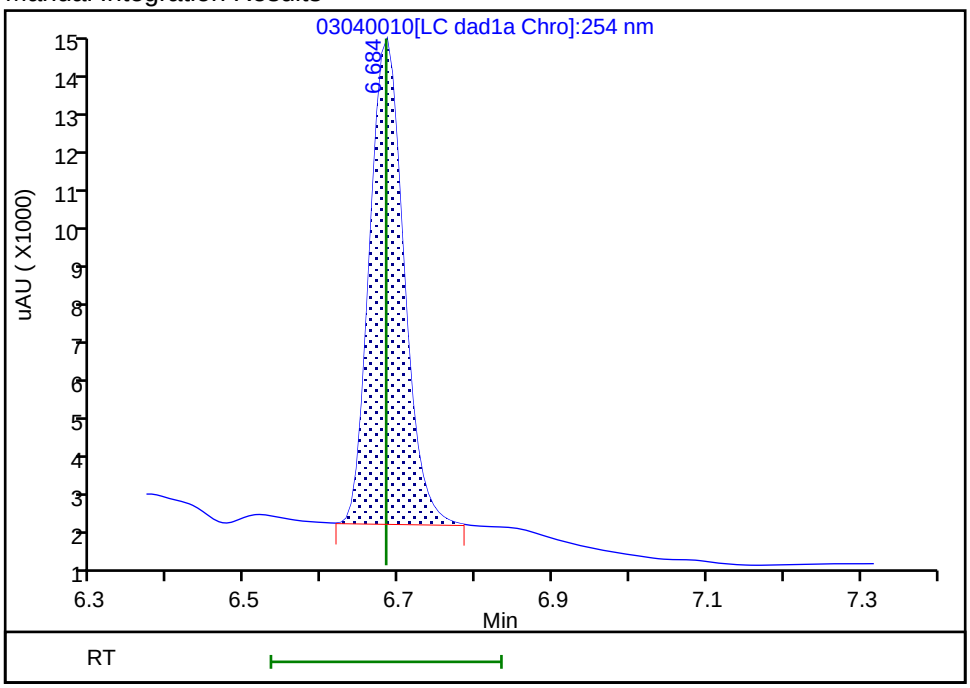
Processing Integration Results

RT: 6.68
Area: 70815
Amount: 0.436397
Amount Units: ug/mL



Manual Integration Results

RT: 6.68
Area: 36878
Amount: 0.413535
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:21:59
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040011.D				
Lims ID:	IC MAIN L4				
Client ID:					
Sample Type:	IC	Calib Level:	4		
Inject. Date:	04-Mar-2020 15:39:01	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC MAIN L4				
Misc. Info.:	280-0089779-011				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub9				
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Mar-2020 10:25:05	Calib Date:	04-Mar-2020 23:40:46		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0308				

First Level Reviewer: beckerc Date: 05-Mar-2020 08:22:21

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.683	6.683	0.000	22889	0.2500	0.2567	M
7 RDX	1	7.750	7.750	0.000	28526	0.2500	0.2420	
8 2,4,6-Trinitrophenol	1	8.063	8.056	0.007	21674	0.2500	0.2484	
$ 9 1,2-Dinitrobenzene	1	8.710	8.710	0.000	36137	0.2500	0.2471	
10 1,3,5-Trinitrobenzene	1	8.883	8.883	0.000	60732	0.2505	0.2495	
11 1,3-Dinitrobenzene	1	9.536	9.529	0.007	80852	0.2505	0.2493	
12 Nitrobenzene	1	9.923	9.916	0.007	52585	0.2510	0.2472	
14 Tetryl	1	10.216	10.216	0.000	47459	0.2505	0.2448	
15 Nitroglycerin	2	10.730	10.729	0.001	183811	2.50	2.56	
16 2,4,6-Trinitrotoluene	1	11.183	11.183	0.000	54330	0.2510	0.2459	
17 4-Amino-2,6-dinitrotoluene	1	11.336	11.336	0.000	43785	0.2503	0.2524	
18 2-Amino-4,6-dinitrotoluene	1	11.623	11.623	0.000	53716	0.2510	0.2469	
19 2,6-Dinitrotoluene	1	11.790	11.789	0.001	40182	0.2510	0.2521	
20 2,4-Dinitrotoluene	1	11.983	11.983	0.000	80402	0.2510	0.2503	
21 o-Nitrotoluene	1	12.830	12.829	0.001	34390	0.2500	0.2391	
22 p-Nitrotoluene	1	13.263	13.269	-0.006	29623	0.2505	0.2462	
23 m-Nitrotoluene	1	13.863	13.863	0.000	37787	0.2503	0.2450	
24 PETN	2	14.963	14.969	-0.006	204225	2.50	2.57	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

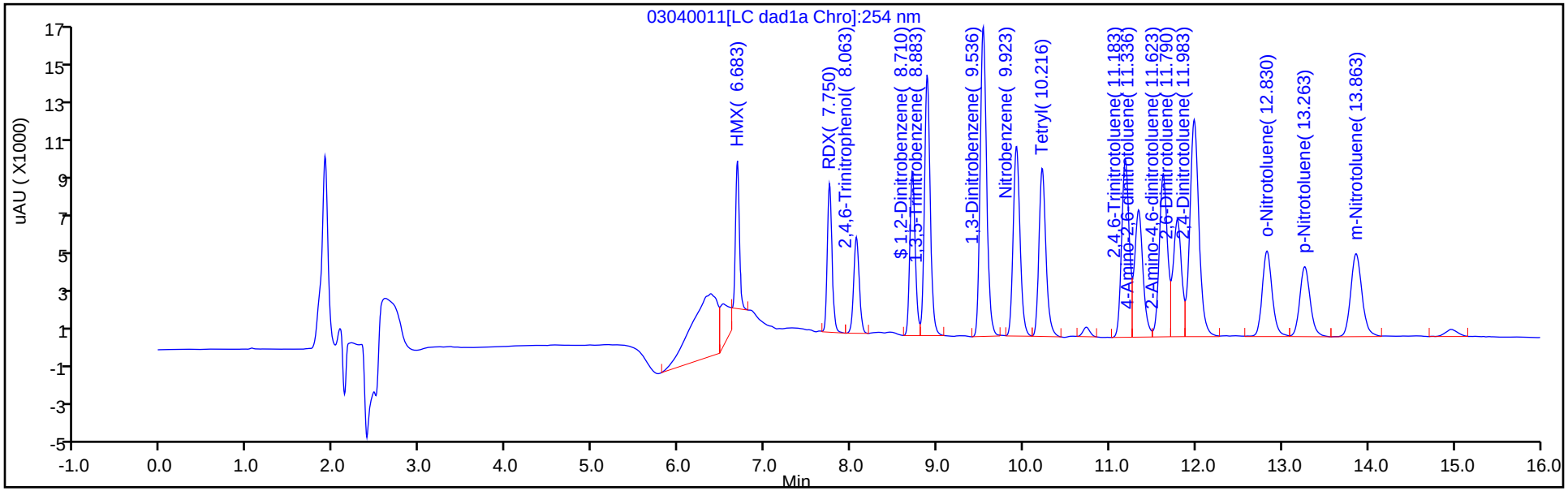
8330IntermStk_00061 Amount Added: 25.00 Units: uL

Report Date: 06-Mar-2020 10:25:05 Chrom Revision: 2.3 19-Feb-2020 16:45:46

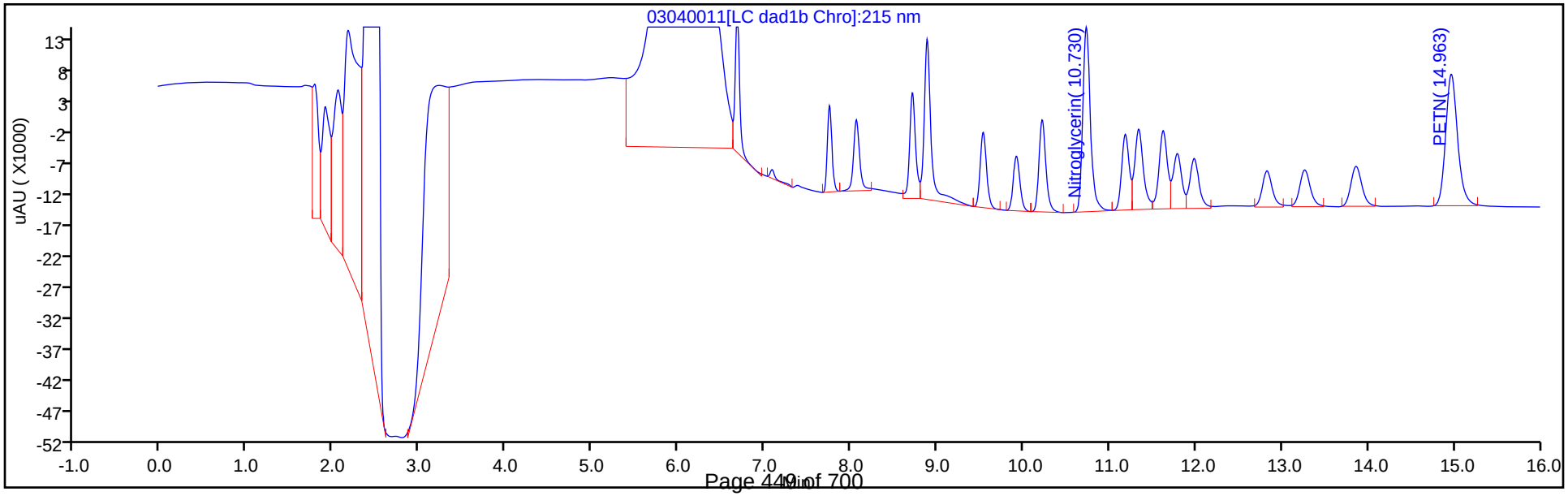
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040011.d				
Injection Date:	04-Mar-2020 15:39:01	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC MAIN L4			Worklist Smp#:	11
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

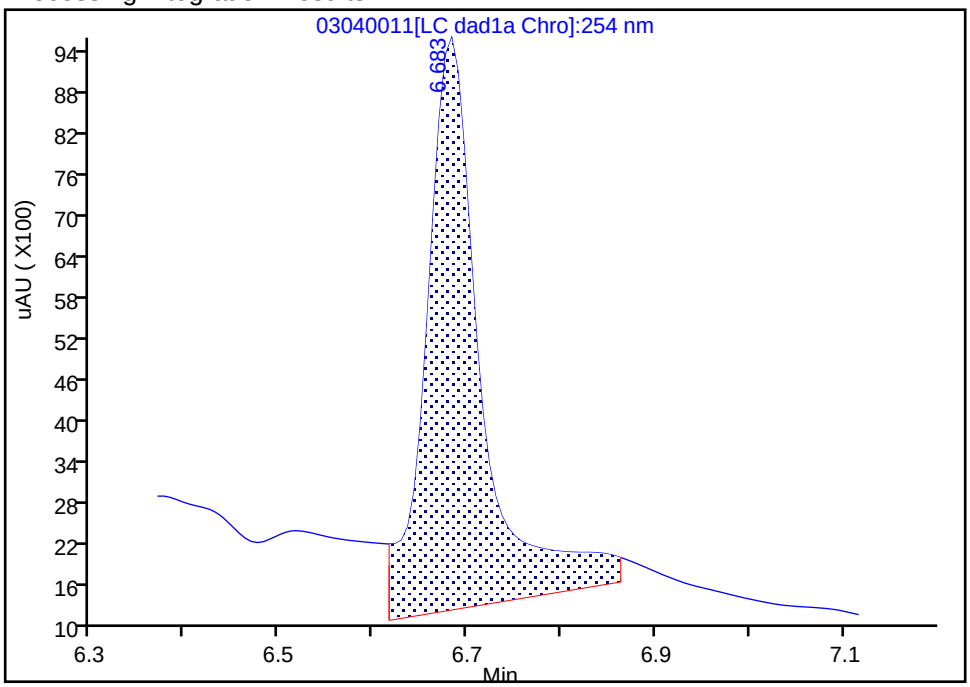
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040011.d				
Injection Date:	04-Mar-2020 15:39:01	Instrument ID:	CHHPLC_X3		
Lims ID:	IC MAIN L4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

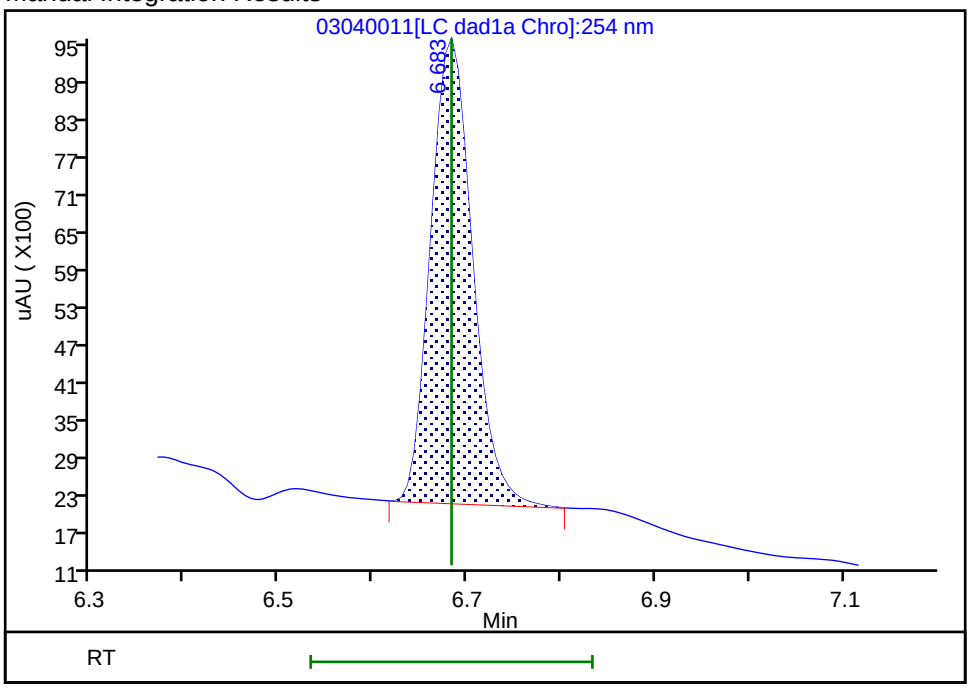
Processing Integration Results

RT: 6.68
Area: 33992
Amount: 0.316859
Amount Units: ug/mL



Manual Integration Results

RT: 6.68
Area: 22889
Amount: 0.256668
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:22:17

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040012.D				
Lims ID:	IC MAIN L3				
Client ID:					
Sample Type:	IC	Calib Level:	3		
Inject. Date:	04-Mar-2020 16:01:56	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC MAIN L3				
Misc. Info.:	280-0089779-012				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub9				
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Mar-2020 10:25:06	Calib Date:	04-Mar-2020 23:40:46		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0308				

First Level Reviewer: beckerc Date: 05-Mar-2020 08:22:43

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.682	6.683	-0.001	9069	0.1000	0.1017	M
7 RDX	1	7.749	7.750	-0.001	11806	0.1000	0.1002	
8 2,4,6-Trinitrophenol	1	8.069	8.056	0.013	8625	0.1000	0.0989	
$ 9 1,2-Dinitrobenzene	1	8.709	8.710	-0.001	14589	0.1000	0.0998	
10 1,3,5-Trinitrobenzene	1	8.882	8.883	-0.001	24274	0.1002	0.0997	
11 1,3-Dinitrobenzene	1	9.529	9.529	0.000	32466	0.1002	0.1001	
12 Nitrobenzene	1	9.915	9.916	-0.001	21325	0.1004	0.1003	
14 Tetryl	1	10.215	10.216	-0.001	19275	0.1002	0.0994	
15 Nitroglycerin	2	10.722	10.729	-0.007	71710	1.00	1.00	
16 2,4,6-Trinitrotoluene	1	11.175	11.183	-0.008	22080	0.1004	0.0999	
17 4-Amino-2,6-dinitrotoluene	1	11.329	11.336	-0.007	17102	0.1001	0.0986	
18 2-Amino-4,6-dinitrotoluene	1	11.615	11.623	-0.008	21640	0.1004	0.0995	
19 2,6-Dinitrotoluene	1	11.782	11.789	-0.007	15948	0.1004	0.1000	
20 2,4-Dinitrotoluene	1	11.975	11.983	-0.008	31840	0.1004	0.0991	
21 o-Nitrotoluene	1	12.822	12.829	-0.007	14255	0.1000	0.0991	
22 p-Nitrotoluene	1	13.255	13.269	-0.014	11935	0.1002	0.0992	
23 m-Nitrotoluene	1	13.855	13.863	-0.008	15234	0.1001	0.0988	
24 PETN	2	14.962	14.969	-0.007	80671	1.00	1.02	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

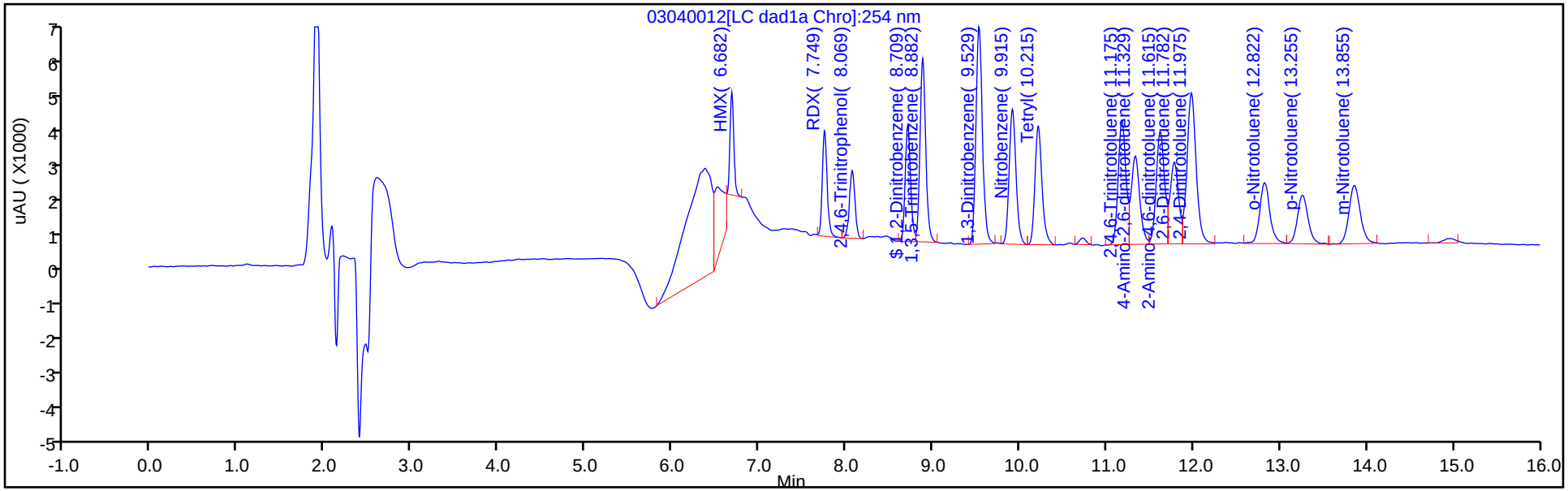
8330IntermStk_00061 Amount Added: 10.00 Units: uL

Report Date: 06-Mar-2020 10:25:06 Chrom Revision: 2.3 19-Feb-2020 16:45:46

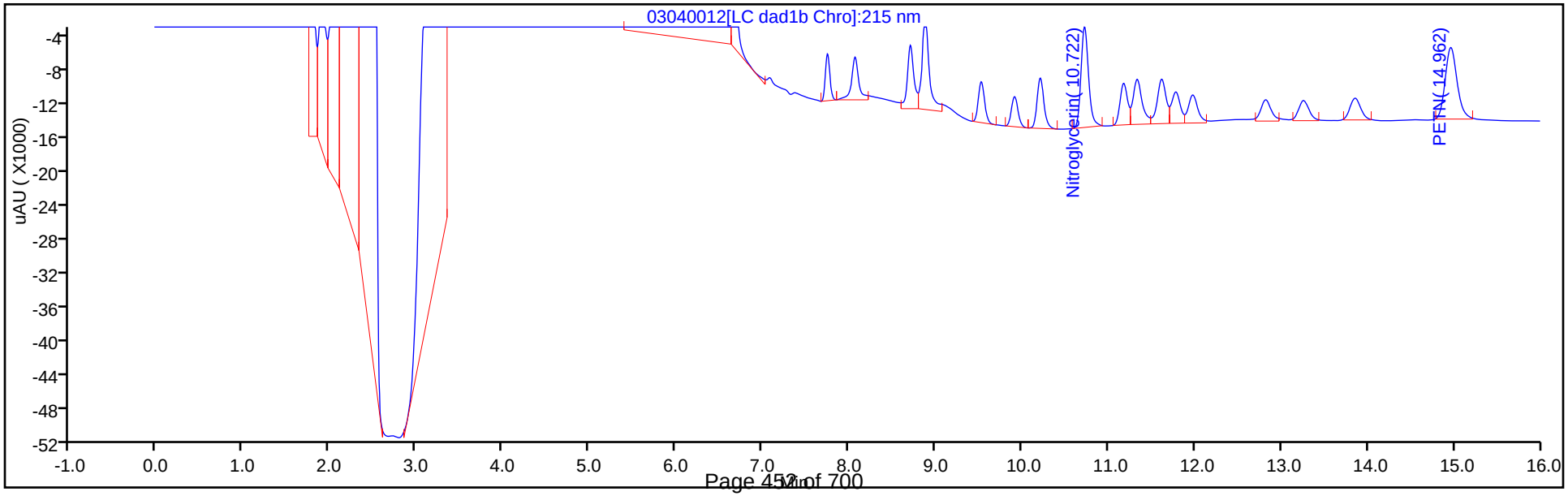
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040012.d				
Injection Date:	04-Mar-2020 16:01:56	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC MAIN L3			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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

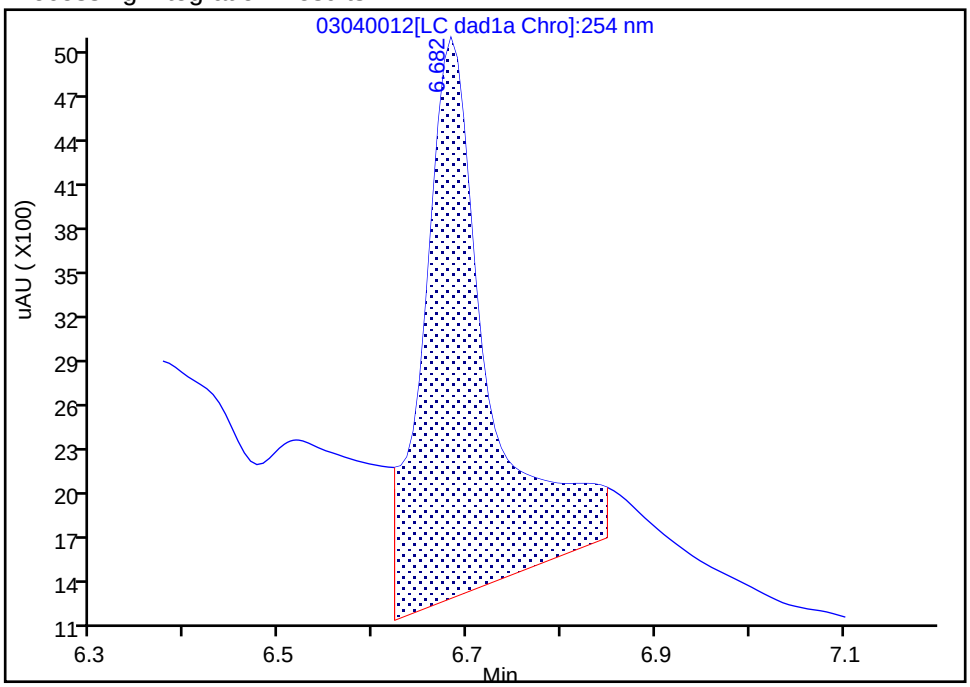
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040012.d				
Injection Date:	04-Mar-2020 16:01:56	Instrument ID:	CHHPLC_X3		
Lims ID:	IC MAIN L3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

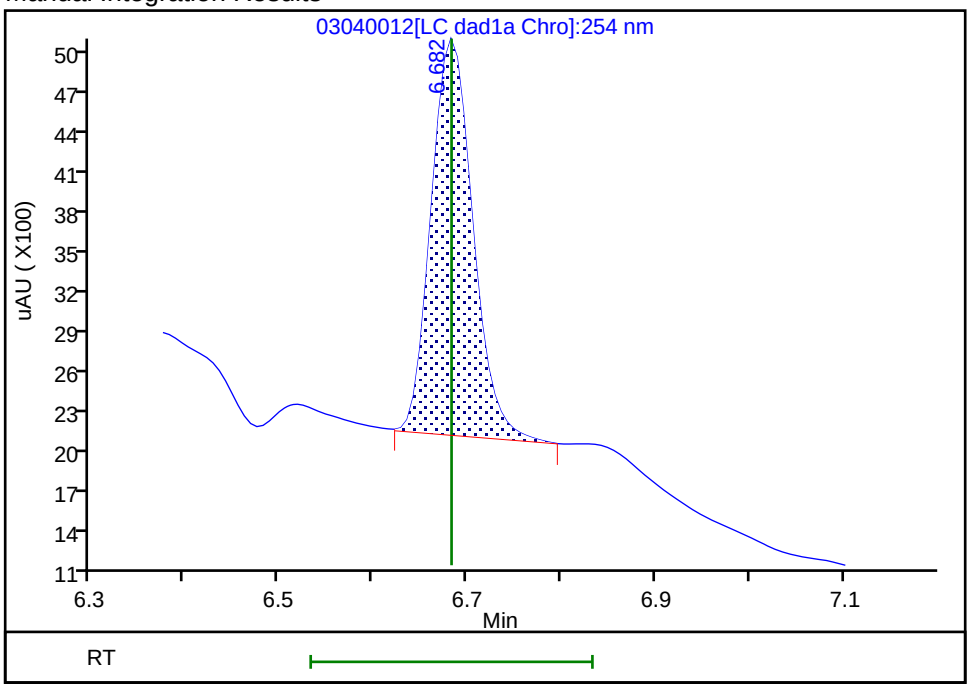
Processing Integration Results

RT: 6.68
Area: 18300
Amount: 0.148246
Amount Units: ug/mL



Manual Integration Results

RT: 6.68
Area: 9069
Amount: 0.101696
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:22:39

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040013.D				
Lims ID:	IC MAIN L2				
Client ID:					
Sample Type:	IC	Calib Level:	2		
Inject. Date:	04-Mar-2020 16:24:51	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC MAIN L2				
Misc. Info.:	280-0089779-013				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub9				
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Mar-2020 10:25:07	Calib Date:	04-Mar-2020 23:40:46		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0308				

First Level Reviewer: beckerc Date: 05-Mar-2020 08:23:01

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.684	6.683	0.001	4200	0.0500	0.0471	M
7 RDX	1	7.750	7.750	0.000	6064	0.0500	0.0514	
8 2,4,6-Trinitrophenol	1	8.077	8.056	0.021	4344	0.0500	0.0498	
$ 9 1,2-Dinitrobenzene	1	8.710	8.710	0.000	7419	0.0500	0.0507	
10 1,3,5-Trinitrobenzene	1	8.884	8.883	0.001	12180	0.0501	0.0500	
11 1,3-Dinitrobenzene	1	9.530	9.529	0.001	16020	0.0501	0.0494	
12 Nitrobenzene	1	9.917	9.916	0.001	10390	0.0502	0.0489	
14 Tetryl	1	10.217	10.216	0.001	9672	0.0501	0.0499	
15 Nitroglycerin	2	10.730	10.729	0.001	34296	0.5000	0.4777	
16 2,4,6-Trinitrotoluene	1	11.183	11.183	0.000	11231	0.0502	0.0508	
17 4-Amino-2,6-dinitrotoluene	1	11.337	11.336	0.001	9007	0.0501	0.0519	
18 2-Amino-4,6-dinitrotoluene	1	11.623	11.623	0.000	10795	0.0502	0.0496	
19 2,6-Dinitrotoluene	1	11.790	11.789	0.001	8065	0.0502	0.0506	
20 2,4-Dinitrotoluene	1	11.983	11.983	0.000	16087	0.0502	0.0501	
21 o-Nitrotoluene	1	12.830	12.829	0.001	7801	0.0500	0.0542	
22 p-Nitrotoluene	1	13.263	13.269	-0.006	6176	0.0501	0.0513	
23 m-Nitrotoluene	1	13.863	13.863	0.000	8074	0.0501	0.0523	
24 PETN	2	14.963	14.969	-0.006	37166	0.5000	0.4678	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

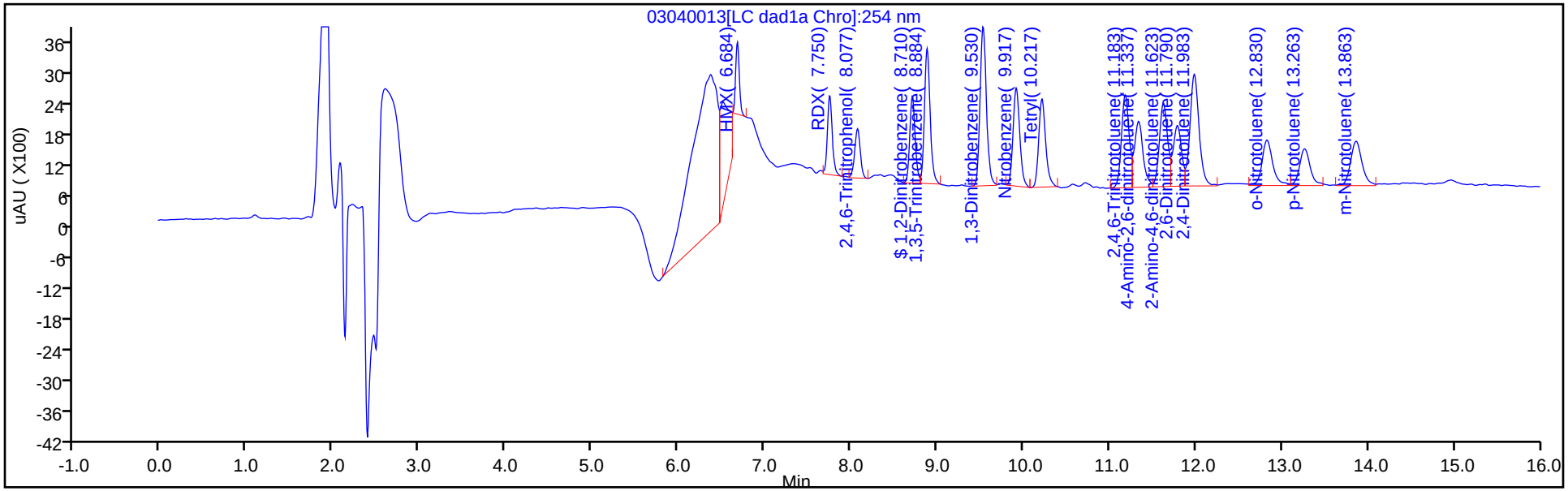
8330IntermStk_00061 Amount Added: 5.00 Units: uL

Report Date: 06-Mar-2020 10:25:07 Chrom Revision: 2.3 19-Feb-2020 16:45:46

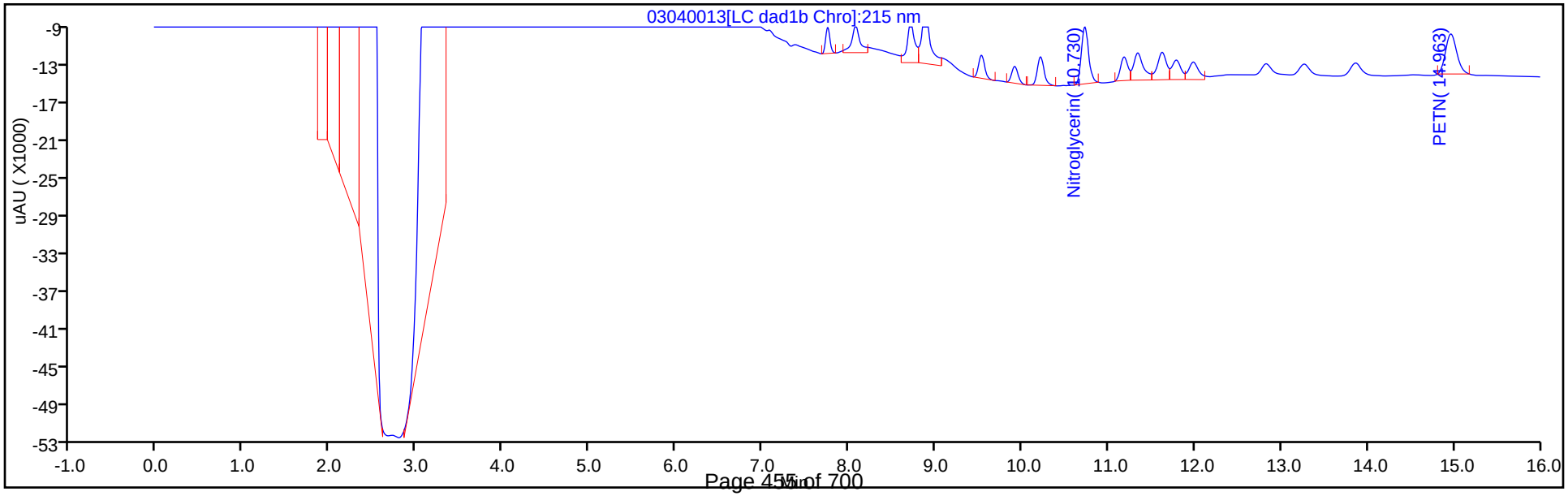
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040013.d				
Injection Date:	04-Mar-2020 16:24:51	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC MAIN L2			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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

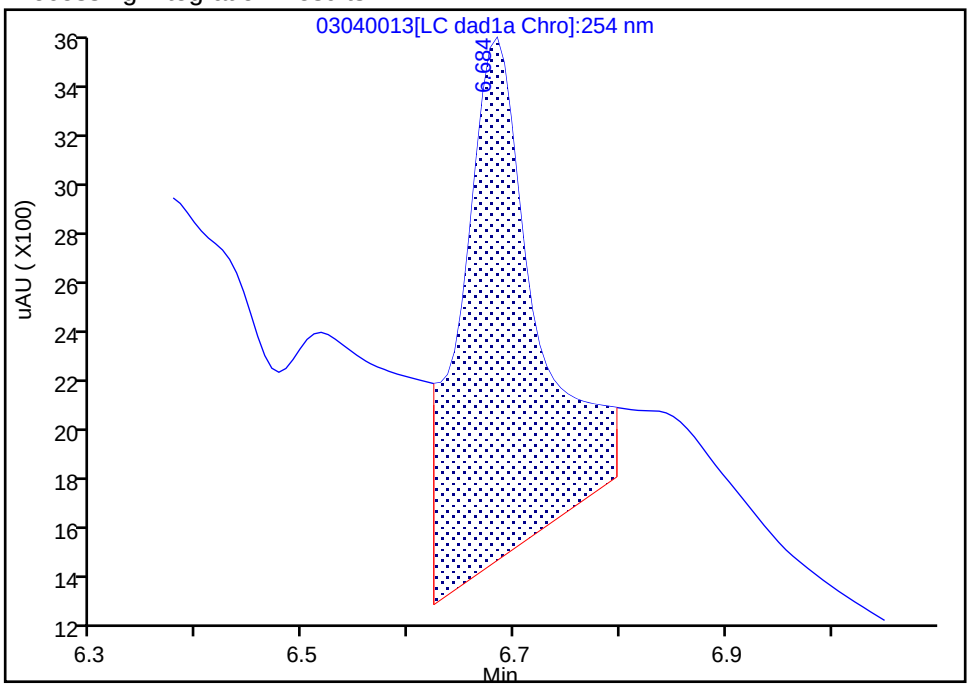
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040013.d				
Injection Date:	04-Mar-2020 16:24:51	Instrument ID:	CHHPLC_X3		
Lims ID:	IC MAIN L2				
Client ID:					
Operator ID:	CB	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

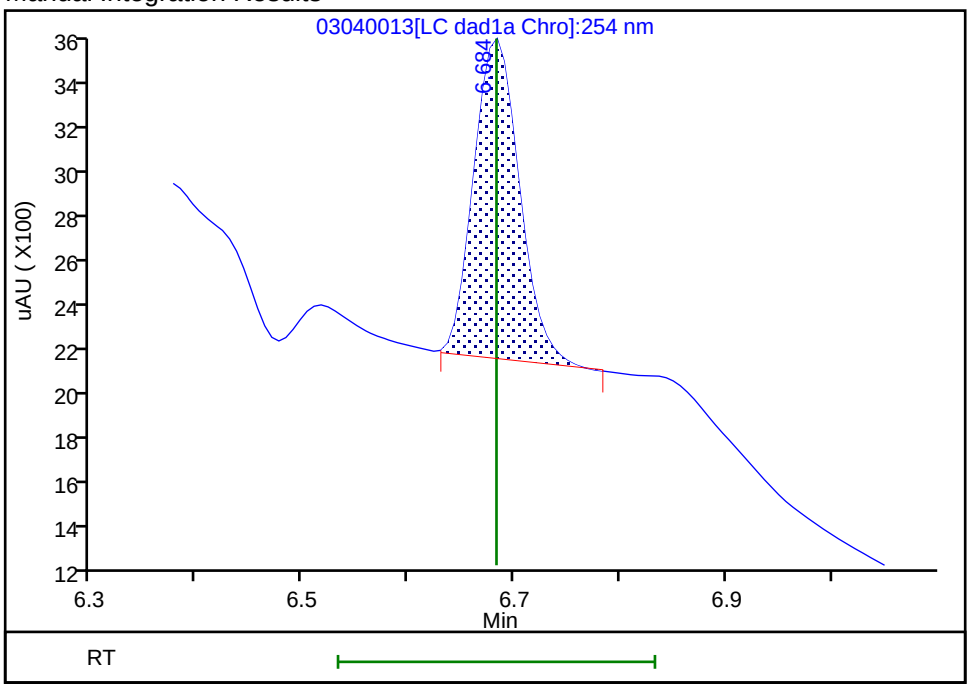
Processing Integration Results

RT: 6.68
Area: 10197
Amount: 0.075771
Amount Units: ug/mL



Manual Integration Results

RT: 6.68
Area: 4200
Amount: 0.047097
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:22:58
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040014.D
Lims ID: IC MAIN L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 04-Mar-2020 16:47:48 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC MAIN L1
Misc. Info.: 280-0089779-014
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Mar-2020 10:25:08 Calib Date: 04-Mar-2020 23:40:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0308

First Level Reviewer: beckerc Date: 05-Mar-2020 08:23:37

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.682	6.683	-0.001	1520	0.0200	0.0170	M
7 RDX	1	7.755	7.750	0.005	2716	0.0200	0.0230	
8 2,4,6-Trinitrophenol	1	8.082	8.056	0.026	1712	0.0200	0.0196	
$ 9 1,2-Dinitrobenzene	1	8.715	8.710	0.005	2981	0.0200	0.0204	
10 1,3,5-Trinitrobenzene	1	8.882	8.883	-0.001	4836	0.0200	0.0199	
11 1,3-Dinitrobenzene	1	9.535	9.529	0.006	6353	0.0200	0.0196	
12 Nitrobenzene	1	9.922	9.916	0.006	4287	0.0201	0.0202	
14 Tetryl	1	10.215	10.216	-0.001	4033	0.0200	0.0208	
15 Nitroglycerin	2	10.728	10.729	-0.001	13145	0.2000	0.1831	
16 2,4,6-Trinitrotoluene	1	11.182	11.183	-0.001	4452	0.0201	0.0202	
17 4-Amino-2,6-dinitrotoluene	1	11.342	11.336	0.006	3460	0.0200	0.0199	
18 2-Amino-4,6-dinitrotoluene	1	11.622	11.623	-0.001	4452	0.0201	0.0205	M
19 2,6-Dinitrotoluene	1	11.788	11.789	-0.001	3203	0.0201	0.0201	M
20 2,4-Dinitrotoluene	1	11.988	11.983	0.005	6351	0.0201	0.0198	
21 o-Nitrotoluene	1	12.828	12.829	-0.001	3316	0.0200	0.0231	
22 p-Nitrotoluene	1	13.268	13.269	-0.001	2555	0.0200	0.0212	
23 m-Nitrotoluene	1	13.868	13.863	0.005	3216	0.0200	0.0209	
24 PETN	2	14.962	14.969	-0.007	13348	0.2000	0.1680	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

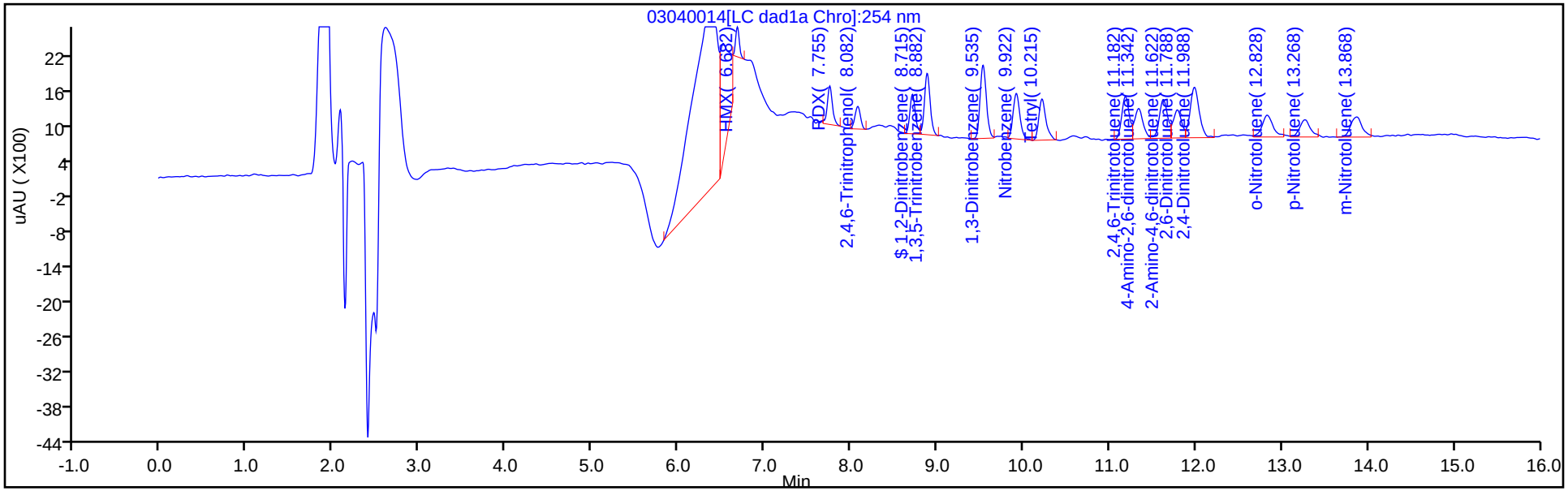
8330IntermStk_00061 Amount Added: 2.00 Units: uL

Report Date: 06-Mar-2020 10:25:09 Chrom Revision: 2.3 19-Feb-2020 16:45:46

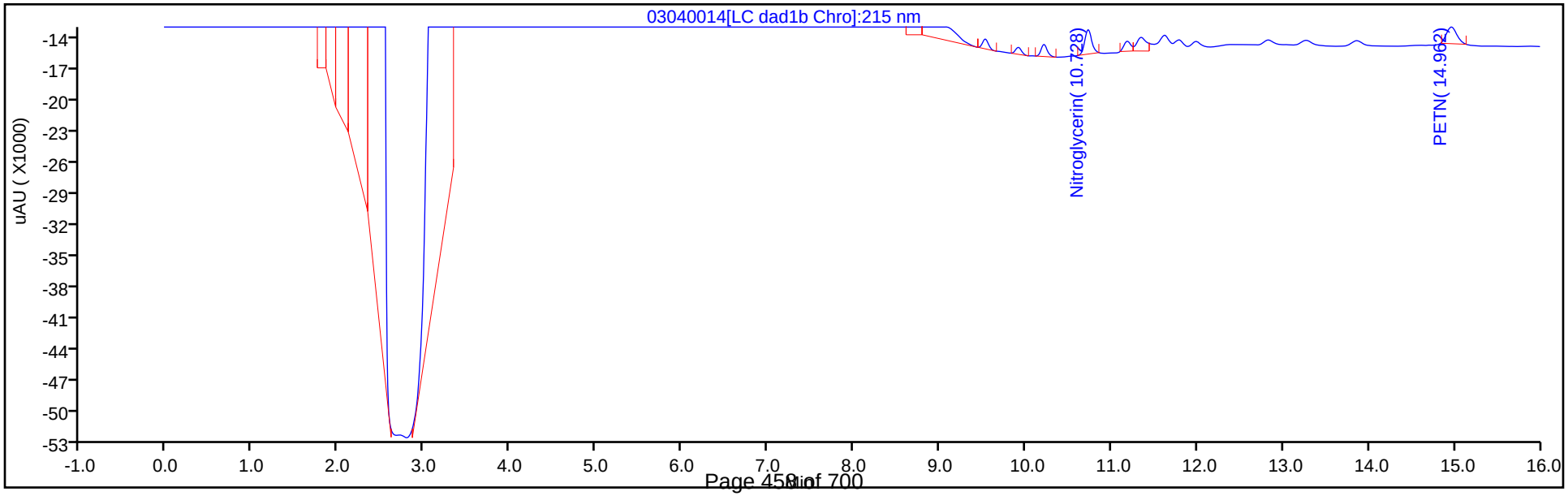
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040014.d				
Injection Date:	04-Mar-2020 16:47:48	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC MAIN L1			Worklist Smp#:	14
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

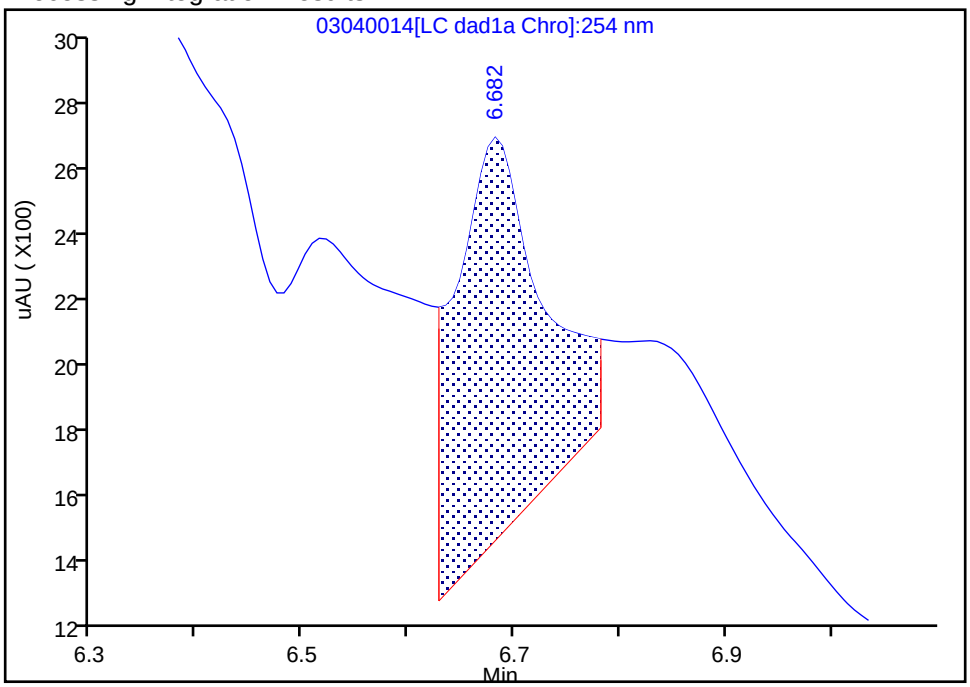
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040014.d				
Injection Date:	04-Mar-2020 16:47:48	Instrument ID:	CHHPLC_X3		
Lims ID:	IC MAIN L1				
Client ID:					
Operator ID:	CB	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

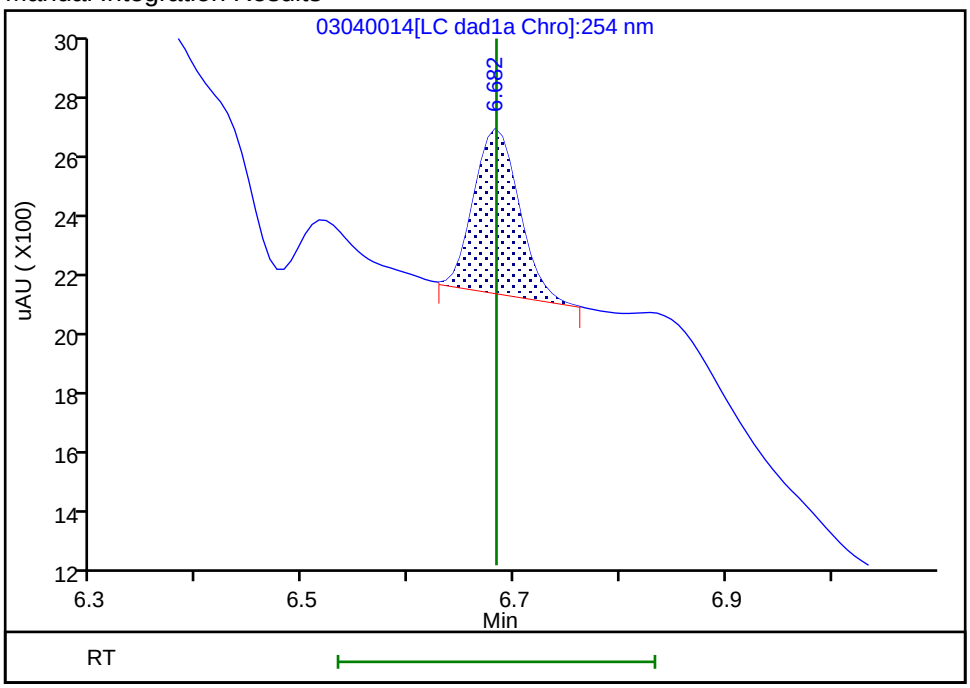
Processing Integration Results

RT: 6.68
Area: 6385
Amount: 0.053394
Amount Units: ug/mL



Manual Integration Results

RT: 6.68
Area: 1520
Amount: 0.017045
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:23:15
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

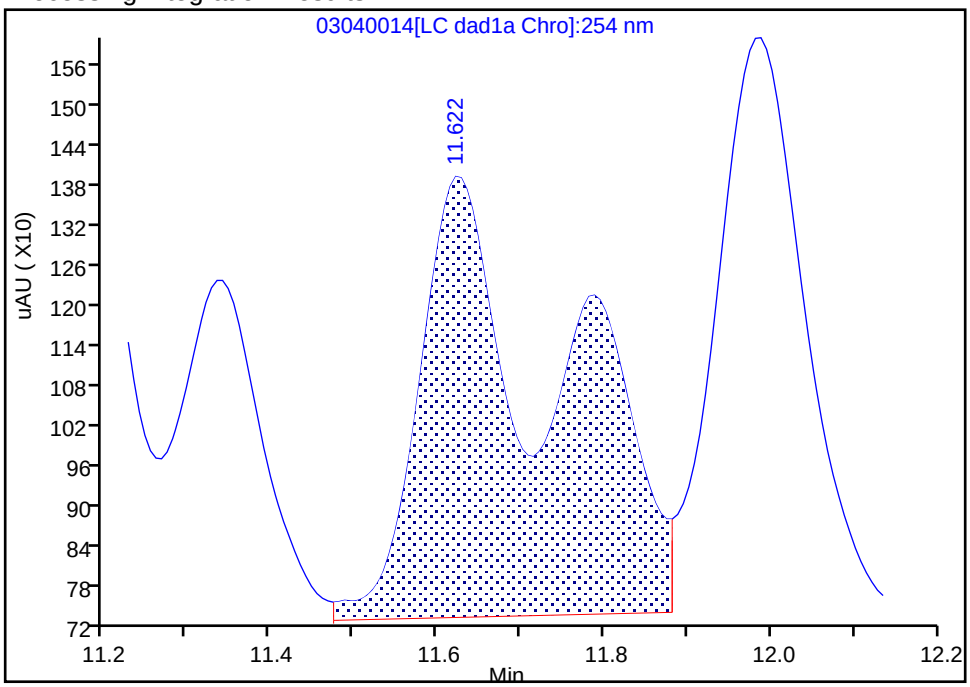
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040014.d				
Injection Date:	04-Mar-2020 16:47:48	Instrument ID:	CHHPLC_X3		
Lims ID:	IC MAIN L1				
Client ID:					
Operator ID:	CB	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

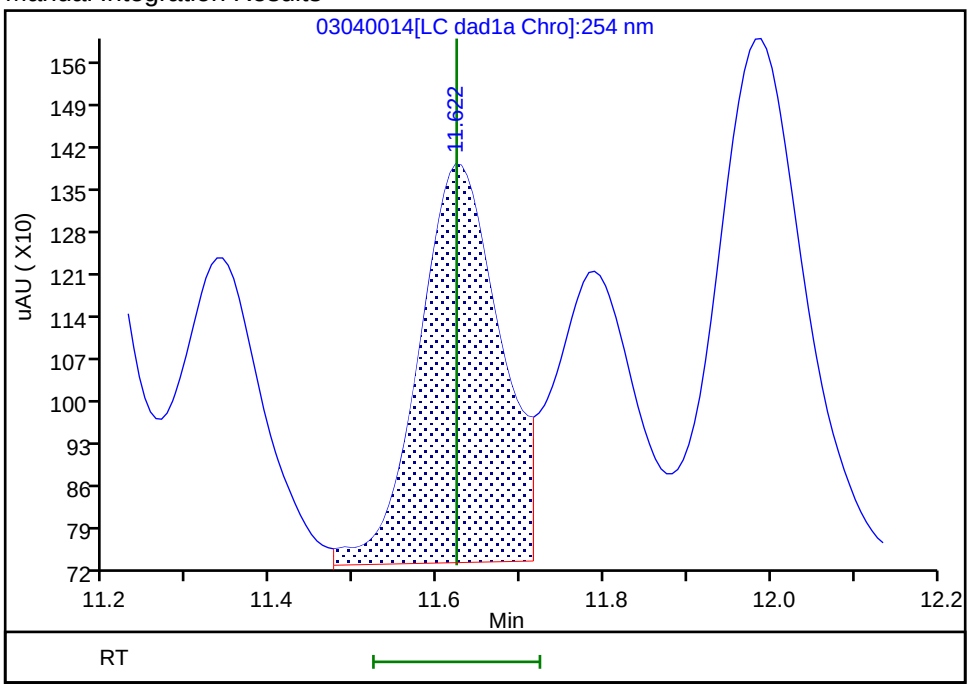
Processing Integration Results

RT: 11.62
Area: 7655
Amount: 0.026996
Amount Units: ug/mL



Manual Integration Results

RT: 11.62
Area: 4452
Amount: 0.020465
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:23:29
Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1 Analy Batch No.: 487658

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/04/2020 21:00 Calibration End Date: 03/04/2020 23:40 Calibration ID: 42564

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-487658/32	03040032.D
Level 2	IC 280-487658/31	03040031.D
Level 3	IC 280-487658/30	03040030.D
Level 4	IC 280-487658/29	03040029.D
Level 5	IC 280-487658/28	03040028.D
Level 6	IC 280-487658/27	03040027.D
Level 7	IC 280-487658/26	03040026.D
Level 8	IC 280-487658/25	03040025.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
TNX	6.592	6.588	6.589	6.591	6.591	6.591	6.591	6.590			6.491 - 6.691	6.590
DNX	6.912	6.914	6.915	6.918	6.917	6.918	6.918	6.916			6.818 - 7.018	6.916
MNX	7.359	7.354	7.355	7.358	7.357	7.358	7.358	7.356			7.208 - 7.508	7.357

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

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1 Analy Batch No.: 487658

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/04/2020 21:00 Calibration End Date: 03/04/2020 23:40 Calibration ID: 42564

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-487658/32	03040032.D
Level 2	IC 280-487658/31	03040031.D
Level 3	IC 280-487658/30	03040030.D
Level 4	IC 280-487658/29	03040029.D
Level 5	IC 280-487658/28	03040028.D
Level 6	IC 280-487658/27	03040027.D
Level 7	IC 280-487658/26	03040026.D
Level 8	IC 280-487658/25	03040025.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
TNX	216933 212722	213207 212002	209810 219067	231497 225632	Ave		217608.702				3.5		20.0			
DNX	117133 161214	137942 160624	149221 163997	167576 165720	Ave		152928.307				11.5		20.0			
MNX	175621 156707	161285 152355	156238 154895	157686 153564	Ave		158544.202				4.7		20.0			

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

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

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1 Analy Batch No.: 487658

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/04/2020 21:00 Calibration End Date: 03/04/2020 23:40 Calibration ID: 42564

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-487658/32	03040032.D
Level 2	IC 280-487658/31	03040031.D
Level 3	IC 280-487658/30	03040030.D
Level 4	IC 280-487658/29	03040029.D
Level 5	IC 280-487658/28	03040028.D
Level 6	IC 280-487658/27	03040027.D
Level 7	IC 280-487658/26	03040026.D
Level 8	IC 280-487658/25	03040025.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
TNX	Ave	4343 148550	10671 219286	21002 564643	57932	85174	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
DNX	Ave	2345 112549	6904 164161	14937 414714	41936	64550	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
MNX	Ave	4099 124459	9411 180763	18233 448024	46005	73151	0.0233 0.817	0.0584 1.17	0.117 2.92	0.292	0.467

Curve Type Legend:
Ave = Average

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040025.D				
Lims ID:	IC DMT L8				
Client ID:					
Sample Type:	IC	Calib Level:	8		
Inject. Date:	04-Mar-2020 21:00:00	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT L8				
Misc. Info.:	280-0089779-025				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Mar-2020 10:25:20	Calib Date:	04-Mar-2020 23:40:46		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0308				

First Level Reviewer: beckerc Date: 05-Mar-2020 08:30:04

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.590	6.591	-0.001	564643	2.50	2.59	M
5 DNX	1	6.916	6.918	-0.002	414714	2.50	2.71	M
6 MNX	1	7.356	7.358	-0.002	448024	2.92	2.83	M

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

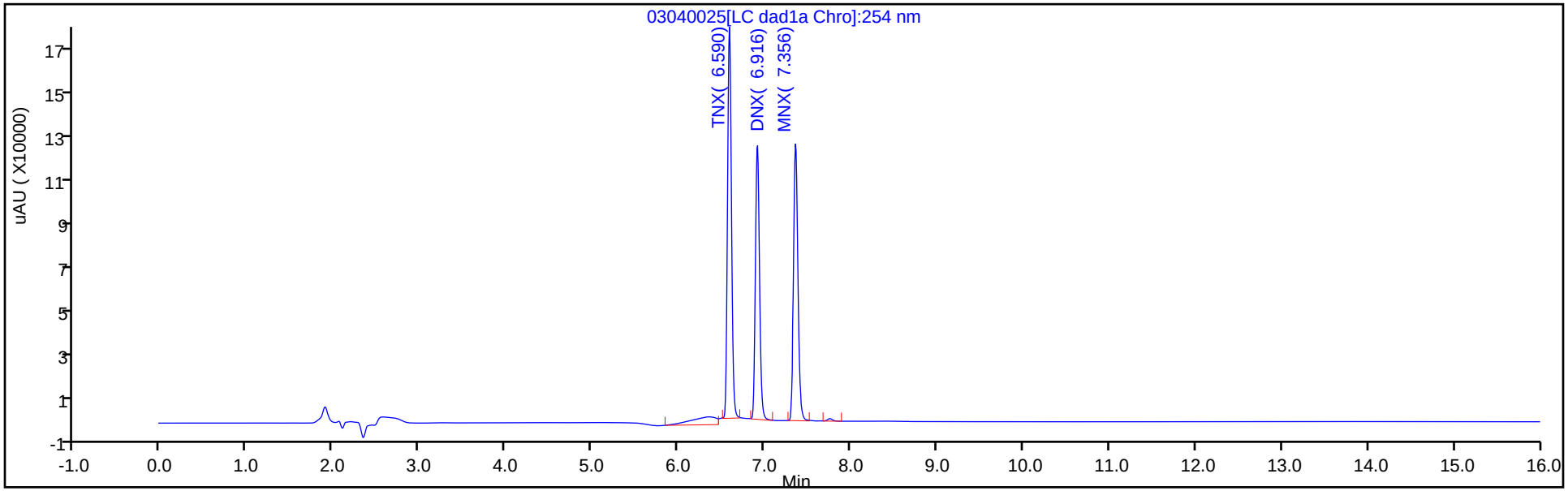
8330 DMT_00005 Amount Added: 125.00 Units: uL

Report Date: 06-Mar-2020 10:25:21 Chrom Revision: 2.3 19-Feb-2020 16:45:46

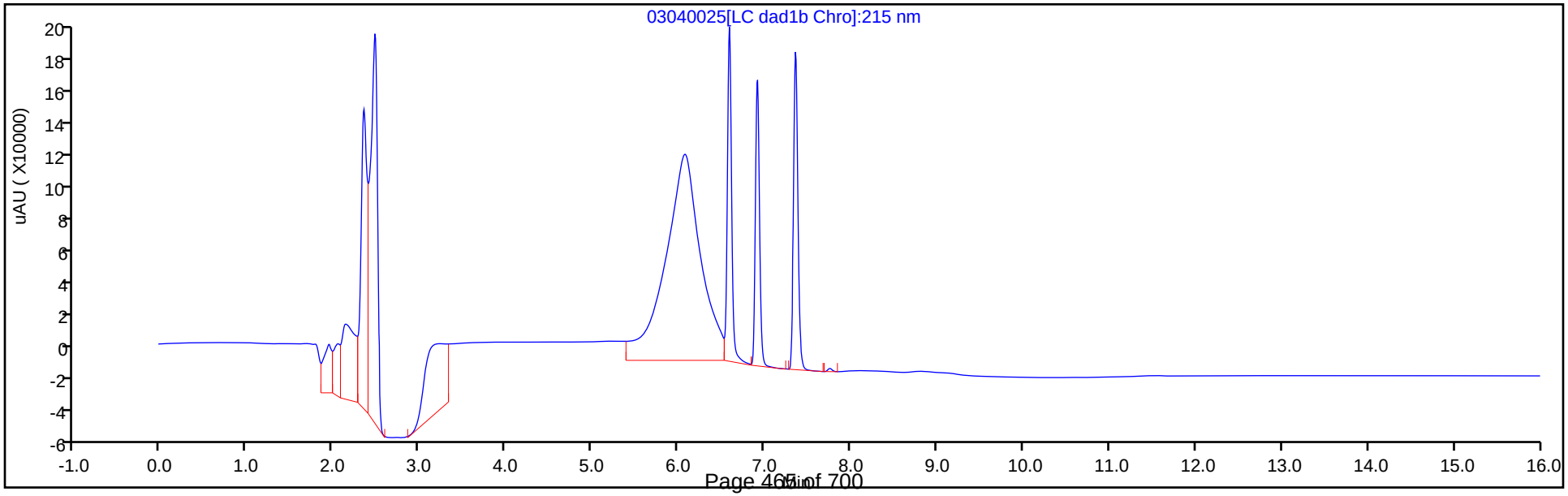
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040025.d				
Injection Date:	04-Mar-2020 21:00:00	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC DMT L8			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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

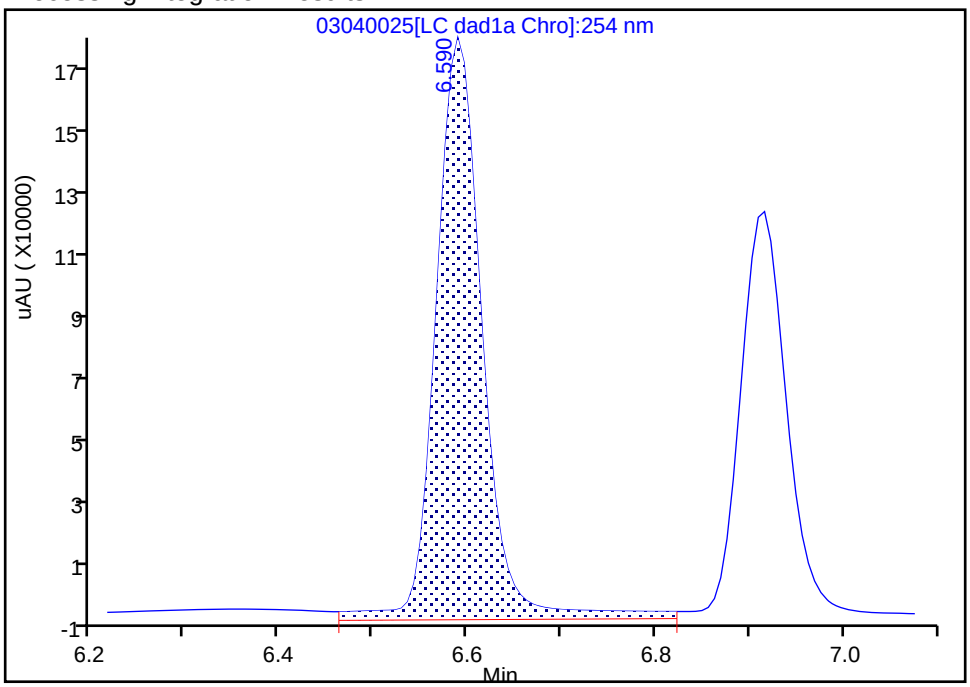
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040025.d				
Injection Date:	04-Mar-2020 21:00:00	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L8				
Client ID:					
Operator ID:	CB	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

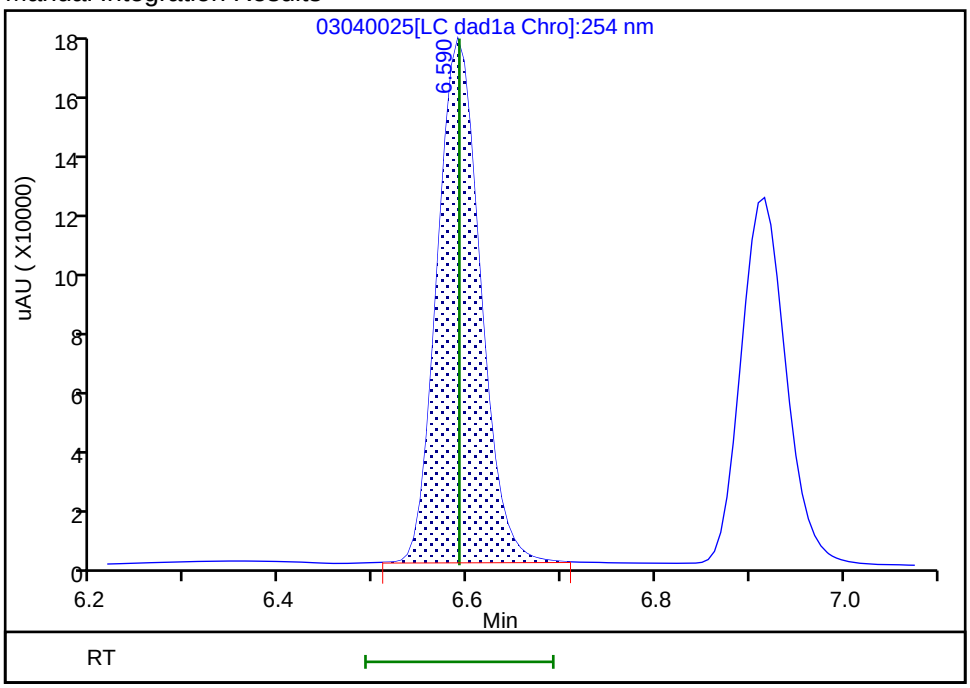
Processing Integration Results

RT: 6.59
Area: 620676
Amount: 2.450904
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 564643
Amount: 2.594763
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:29:45

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

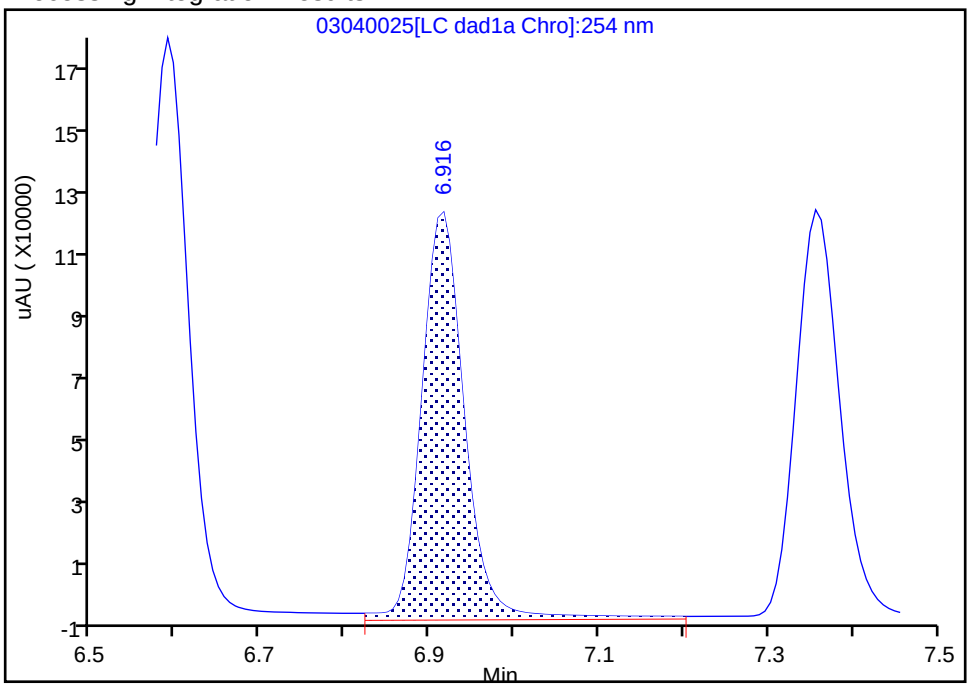
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040025.d				
Injection Date:	04-Mar-2020 21:00:00	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L8				
Client ID:					
Operator ID:	CB	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

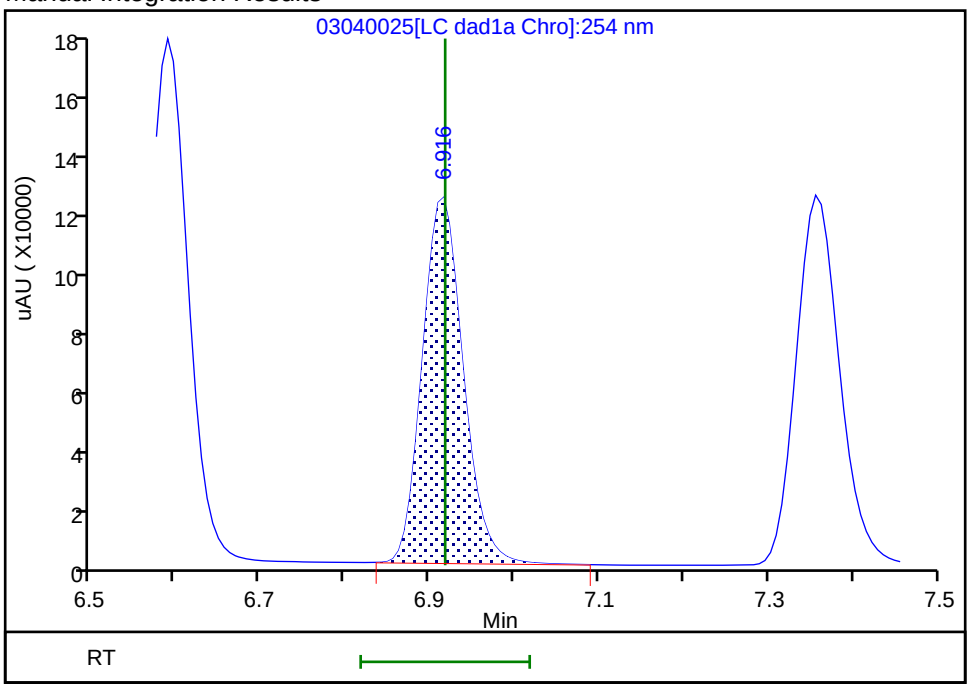
Processing Integration Results

RT: 6.92
Area: 445633
Amount: 2.254277
Amount Units: ug/mL



Manual Integration Results

RT: 6.92
Area: 414714
Amount: 2.711820
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:29:52
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

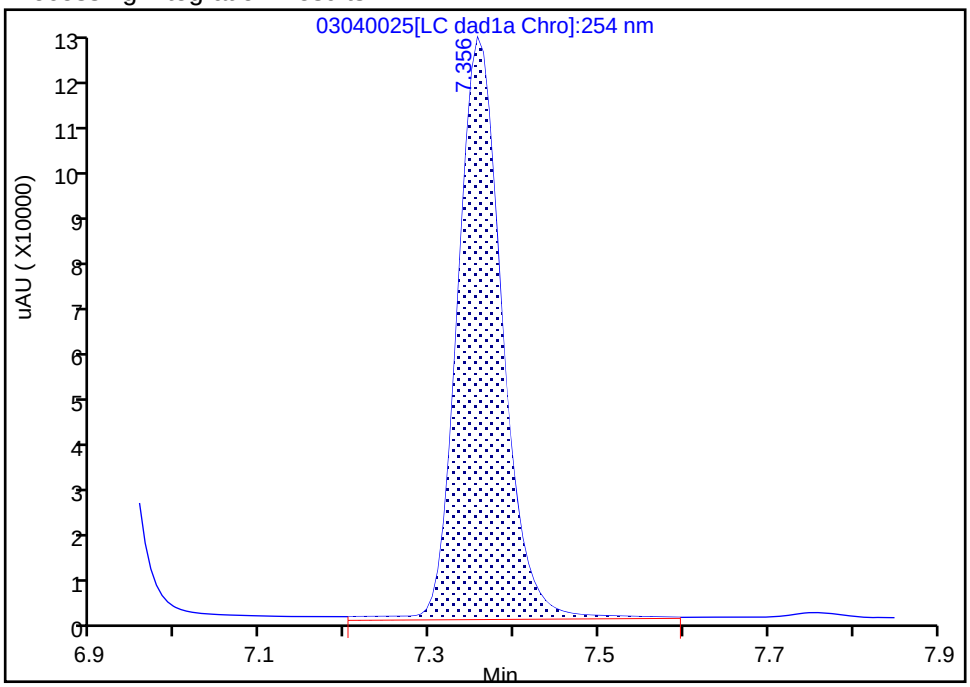
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040025.d				
Injection Date:	04-Mar-2020 21:00:00	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L8				
Client ID:					
Operator ID:	CB	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

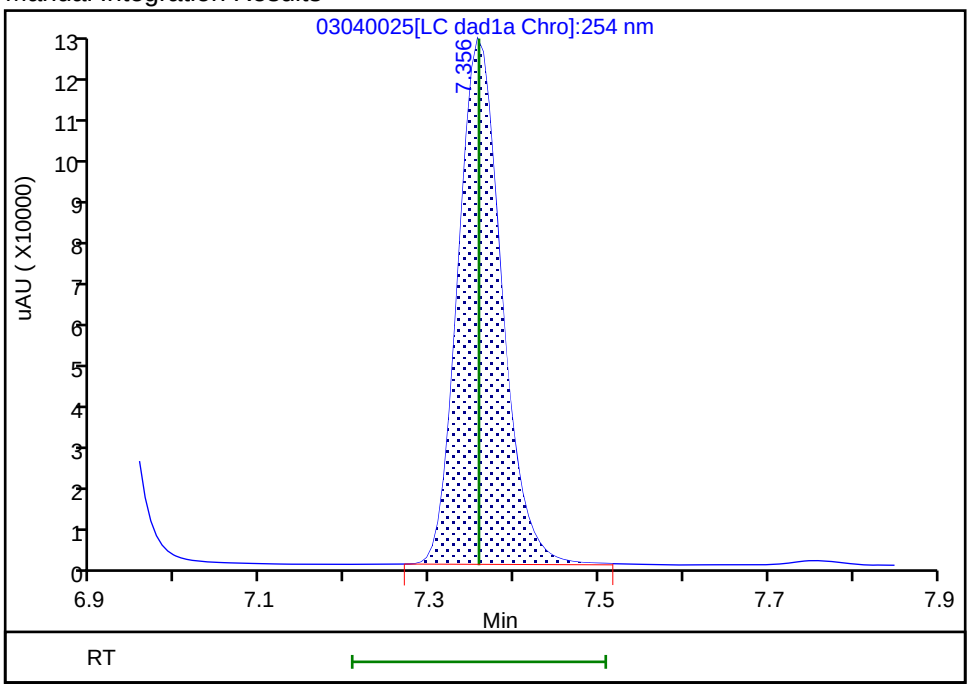
Processing Integration Results

RT: 7.36
Area: 461400
Amount: 2.899748
Amount Units: ug/mL



Manual Integration Results

RT: 7.36
Area: 448024
Amount: 2.825862
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:30:00

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040026.D				
Lims ID:	IC DMT L7				
Client ID:					
Sample Type:	IC	Calib Level:	7		
Inject. Date:	04-Mar-2020 21:23:03	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT L7				
Misc. Info.:	280-0089779-026				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Mar-2020 10:25:21	Calib Date:	04-Mar-2020 23:40:46		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0308				

First Level Reviewer: beckerc Date: 05-Mar-2020 08:30:32

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.591	6.591	0.000	219286	1.00	1.01	M
5 DNX	1	6.918	6.918	0.000	164161	1.00	1.07	M
6 MNX	1	7.358	7.358	0.000	180763	1.17	1.14	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

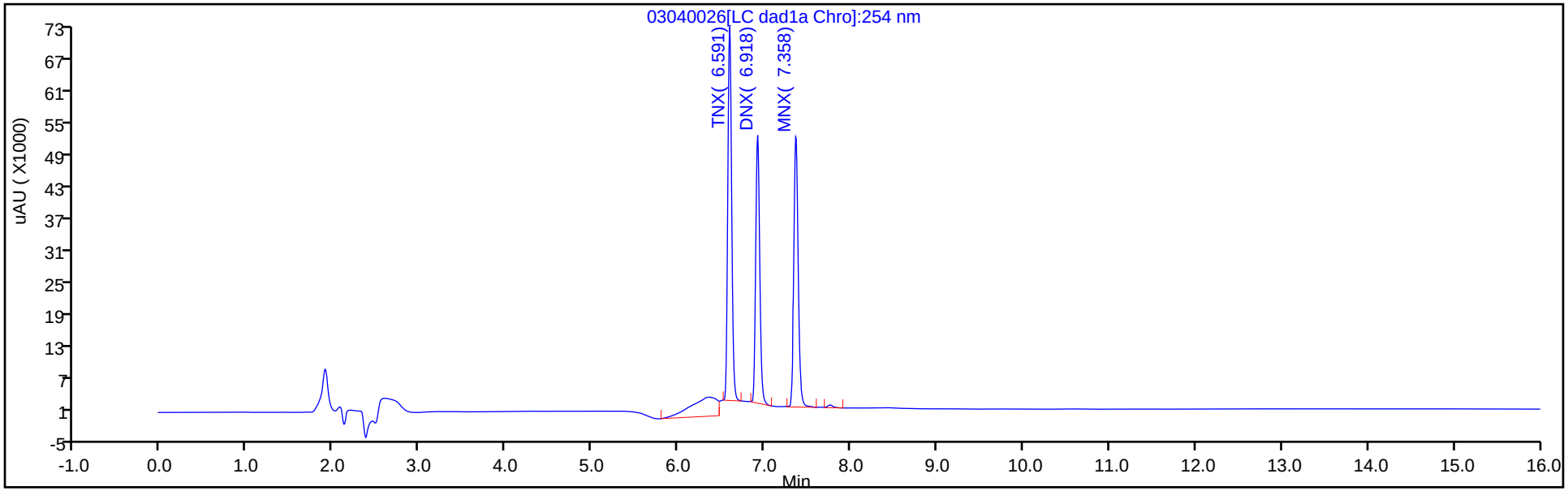
8330 DMT_00005 Amount Added: 50.00 Units: uL

Report Date: 06-Mar-2020 10:25:22 Chrom Revision: 2.3 19-Feb-2020 16:45:46

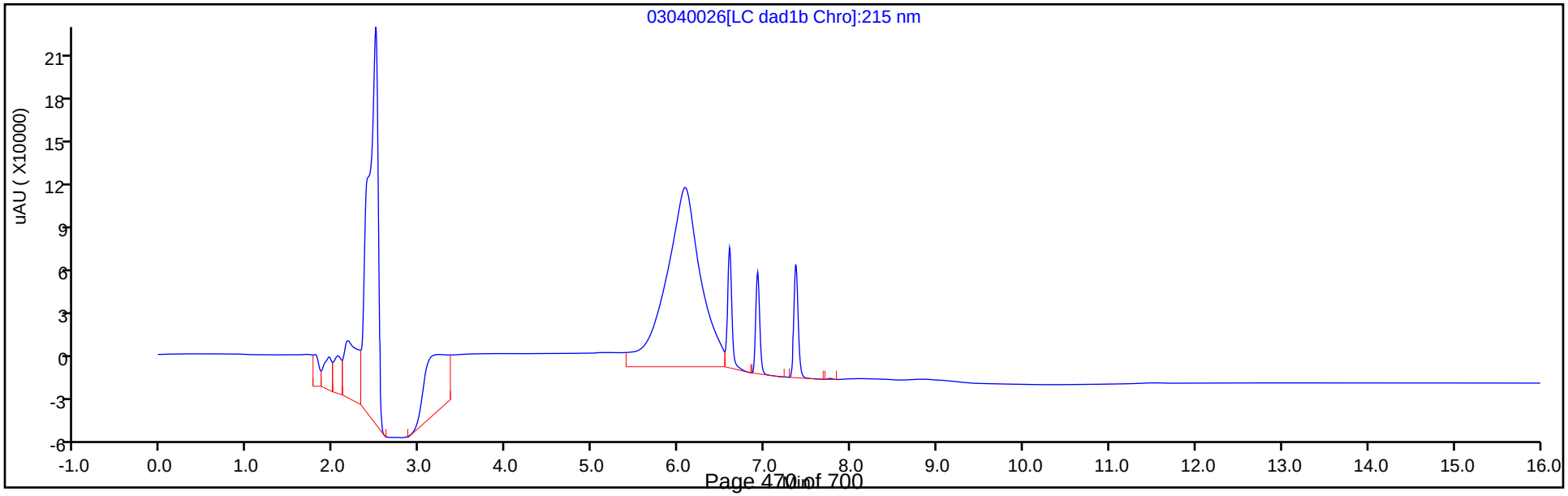
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040026.d				
Injection Date:	04-Mar-2020 21:23:03	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC DMT L7			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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

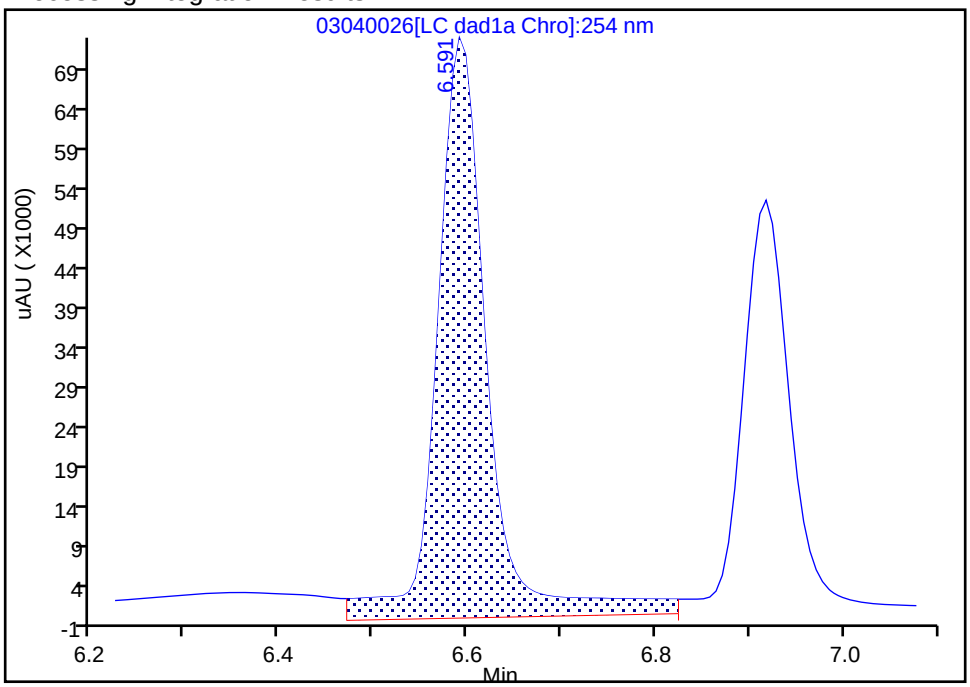
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040026.d				
Injection Date:	04-Mar-2020 21:23:03	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L7				
Client ID:					
Operator ID:	CB	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

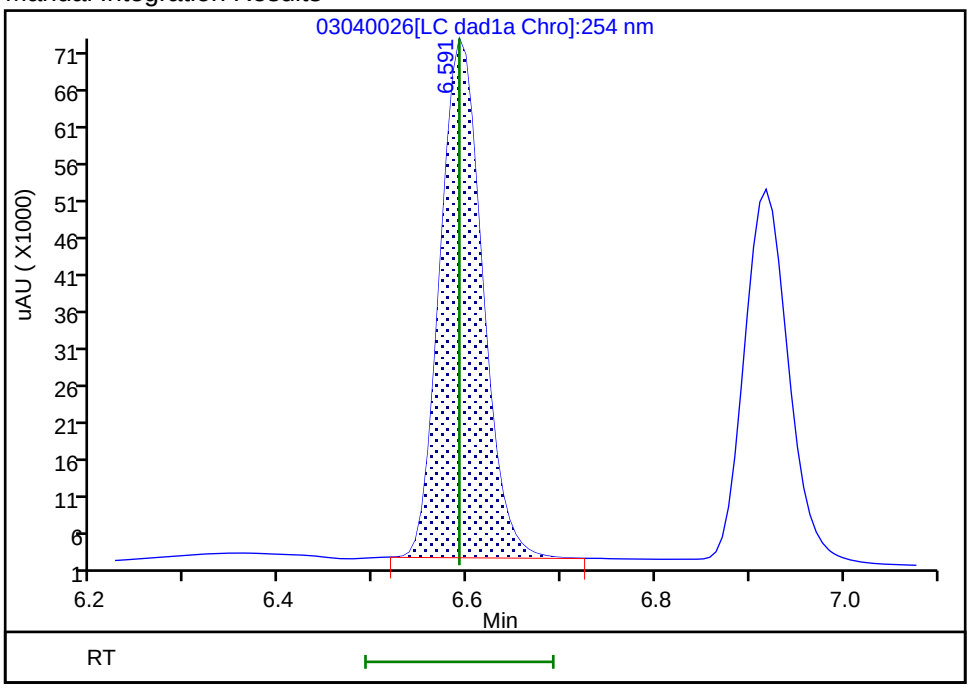
Processing Integration Results

RT: 6.59
Area: 269369
Amount: 1.068967
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 219286
Amount: 1.007708
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:30:20
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

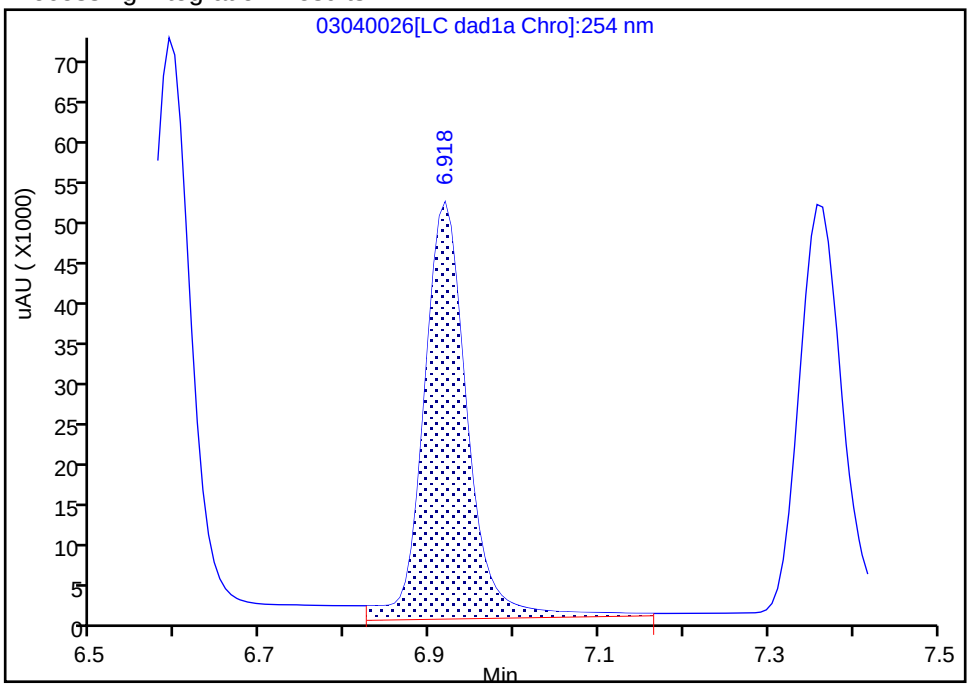
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040026.d				
Injection Date:	04-Mar-2020 21:23:03	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L7				
Client ID:					
Operator ID:	CB	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

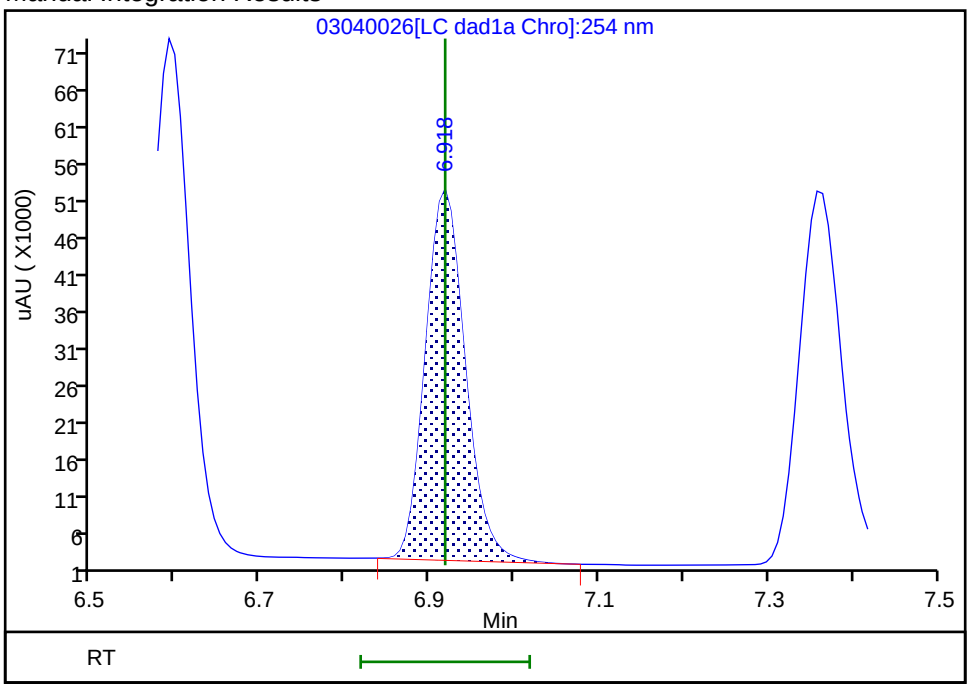
Processing Integration Results

RT: 6.92
Area: 184230
Amount: 0.939283
Amount Units: ug/mL



Manual Integration Results

RT: 6.92
Area: 164161
Amount: 1.073451
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:30:26

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040027.D				
Lims ID:	IC DMT L6				
Client ID:					
Sample Type:	IC	Calib Level:	6		
Inject. Date:	04-Mar-2020 21:45:58	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT L6				
Misc. Info.:	280-0089779-027				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Mar-2020 10:25:23	Calib Date:	04-Mar-2020 23:40:46		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0308				

First Level Reviewer: beckerc Date: 05-Mar-2020 08:30:53

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.591	6.591	0.000	148550	0.7007	0.6826	M
5 DNX	1	6.918	6.918	0.000	112549	0.7007	0.7360	M
6 MNX	1	7.358	7.358	0.000	124459	0.8169	0.7850	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

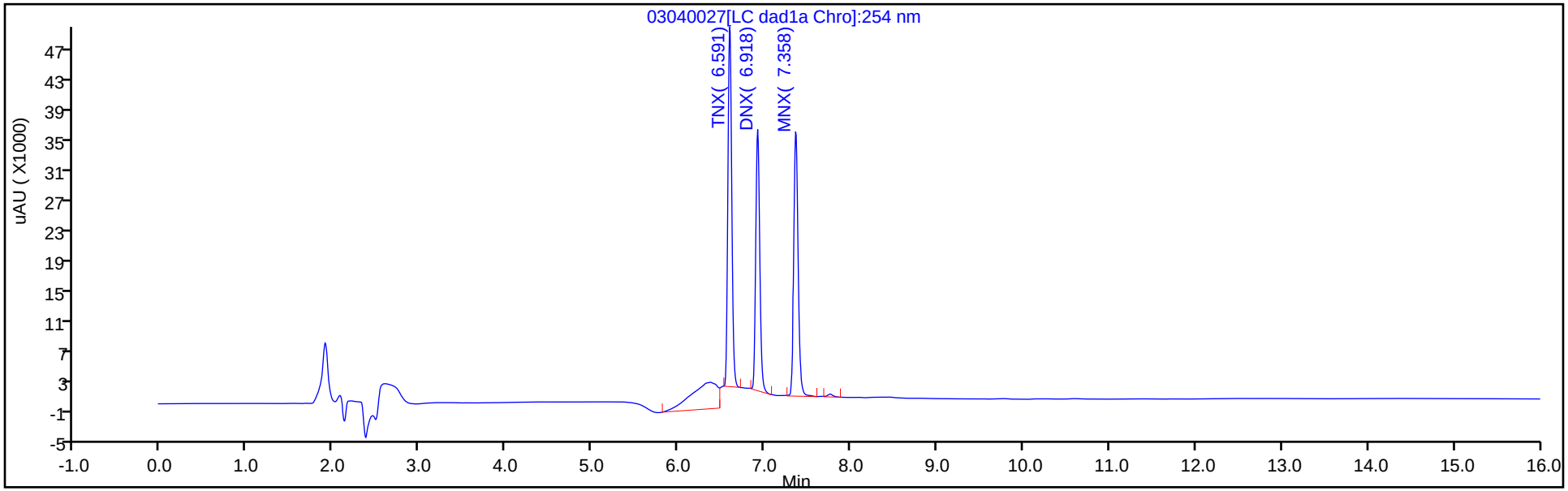
8330 DMT_00005 Amount Added: 35.00 Units: uL

Report Date: 06-Mar-2020 10:25:23 Chrom Revision: 2.3 19-Feb-2020 16:45:46

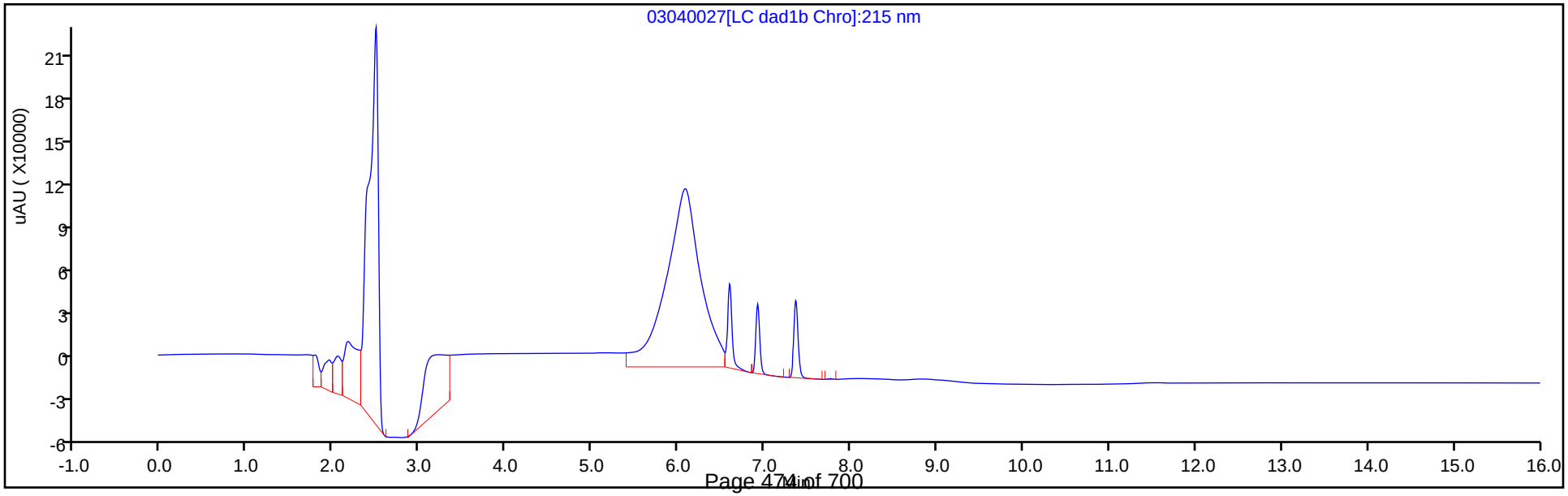
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040027.d				
Injection Date:	04-Mar-2020 21:45:58	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC DMT L6			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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

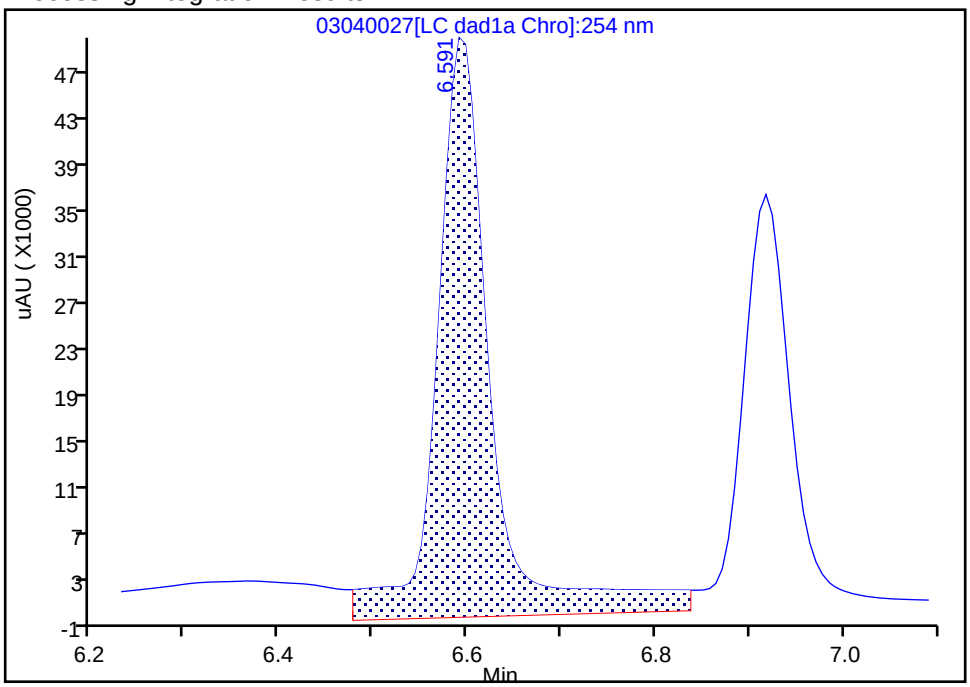
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040027.d				
Injection Date:	04-Mar-2020 21:45:58	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

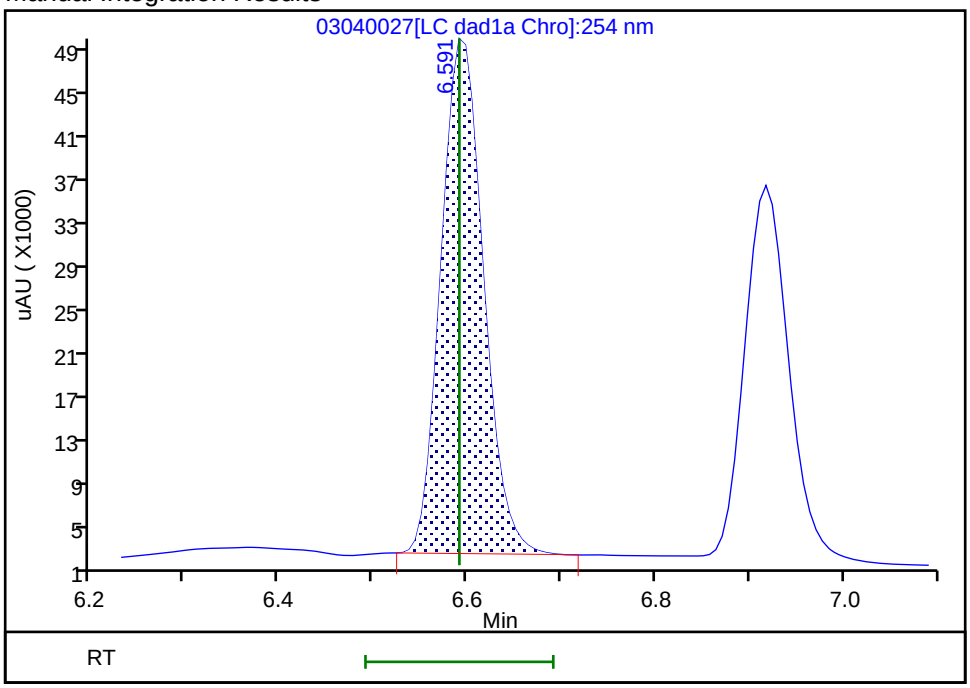
Processing Integration Results

RT: 6.59
Area: 198883
Amount: 0.812342
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 148550
Amount: 0.682647
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:30:45
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

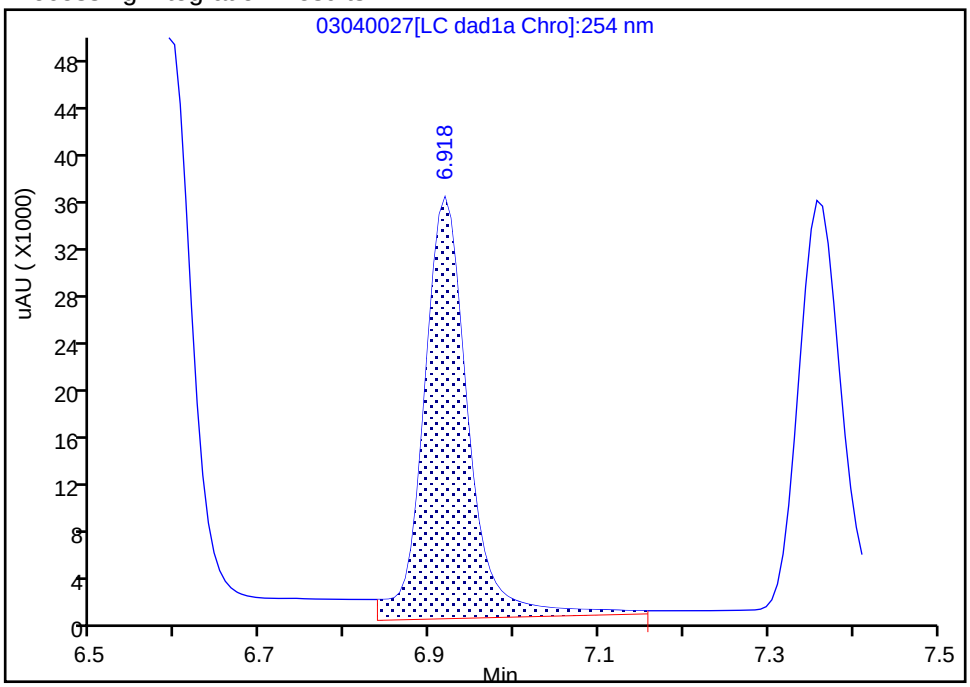
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040027.d				
Injection Date:	04-Mar-2020 21:45:58	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L6				
Client ID:					
Operator ID:	CB	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

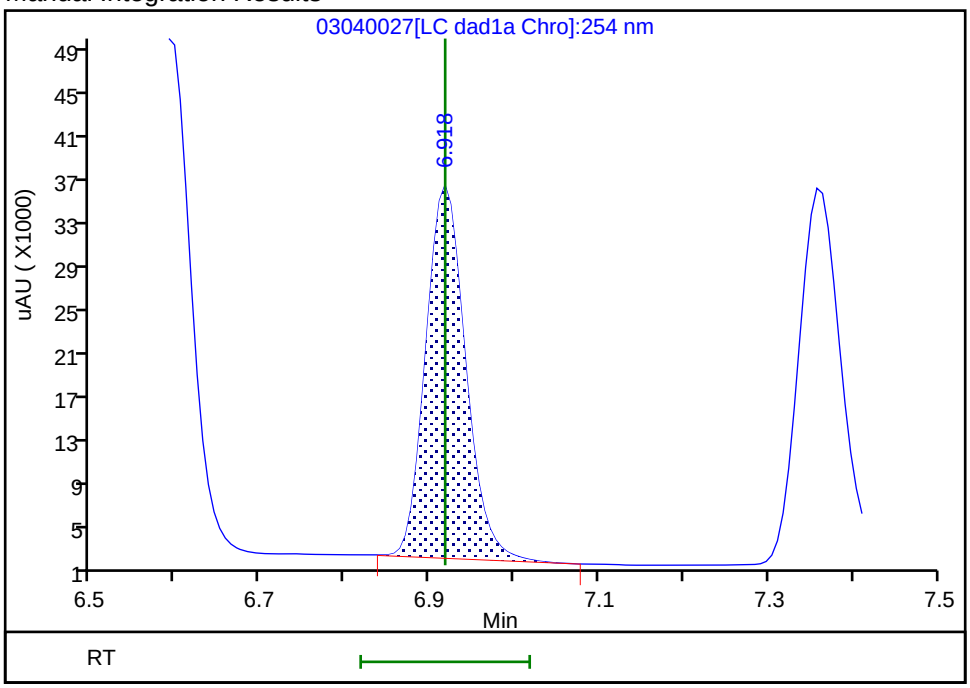
Processing Integration Results

RT: 6.92
Area: 130368
Amount: 0.673274
Amount Units: ug/mL



Manual Integration Results

RT: 6.92
Area: 112549
Amount: 0.735959
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:30:49
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040028.D				
Lims ID:	IC DMT L5				
Client ID:					
Sample Type:	IC	Calib Level:	5		
Inject. Date:	04-Mar-2020 22:09:00	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT L5				
Misc. Info.:	280-0089779-028				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Mar-2020 10:25:24	Calib Date:	04-Mar-2020 23:40:46		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0308				

First Level Reviewer: beckerc Date: 05-Mar-2020 08:31:18

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.591	6.591	0.000	85174	0.4004	0.3914	M
5 DNX	1	6.917	6.918	-0.001	64550	0.4004	0.4221	M
6 MNX	1	7.357	7.358	-0.001	73151	0.4668	0.4614	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

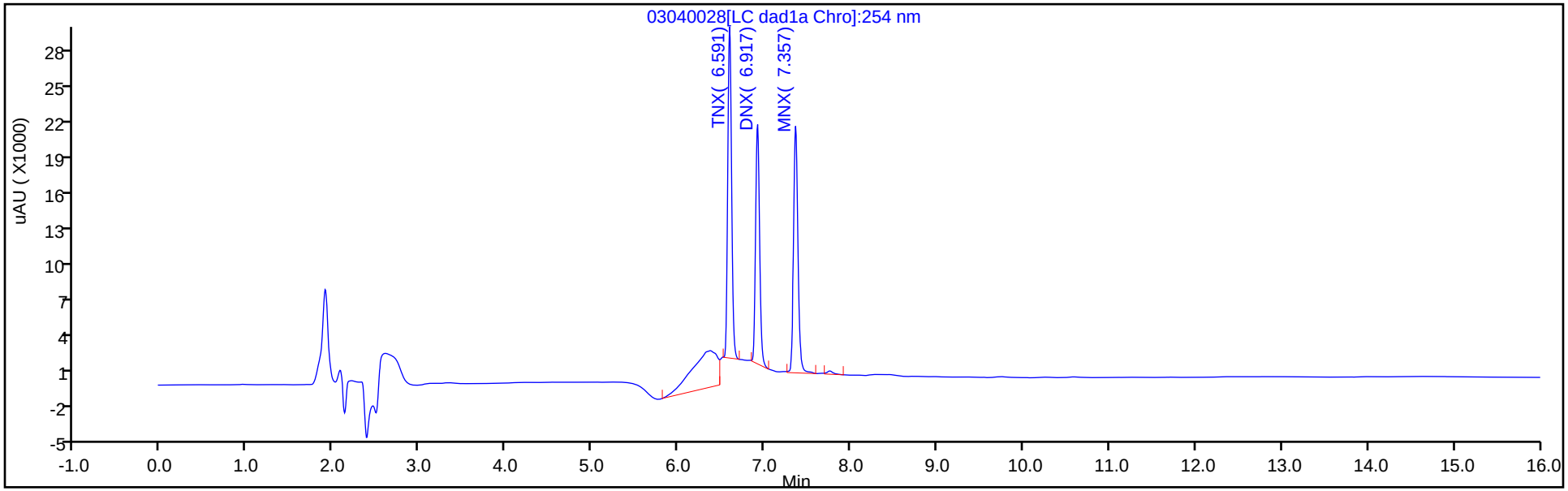
8330 DMT_00005 Amount Added: 20.00 Units: uL

Report Date: 06-Mar-2020 10:25:24 Chrom Revision: 2.3 19-Feb-2020 16:45:46

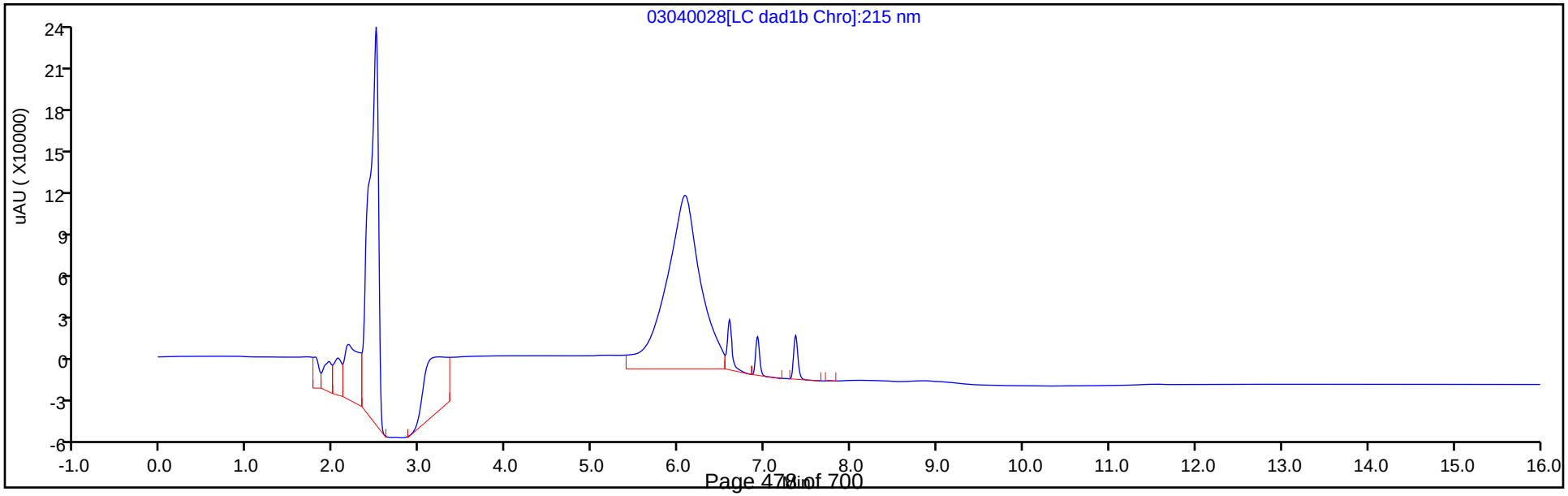
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040028.d				
Injection Date:	04-Mar-2020 22:09:00	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC DMT L5			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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

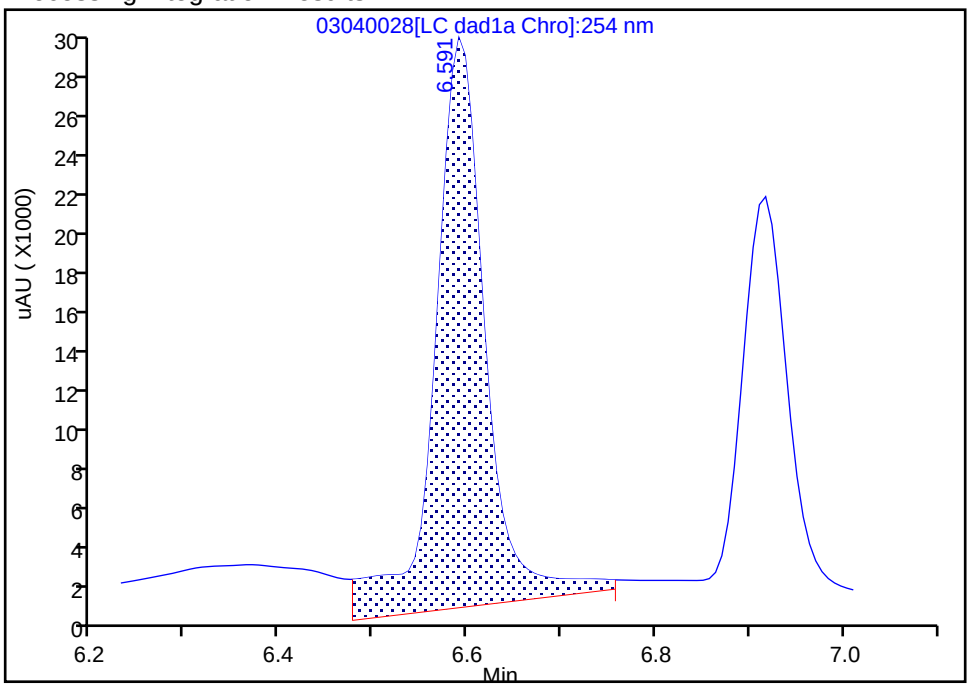
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040028.d				
Injection Date:	04-Mar-2020 22:09:00	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L5				
Client ID:					
Operator ID:	CB	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

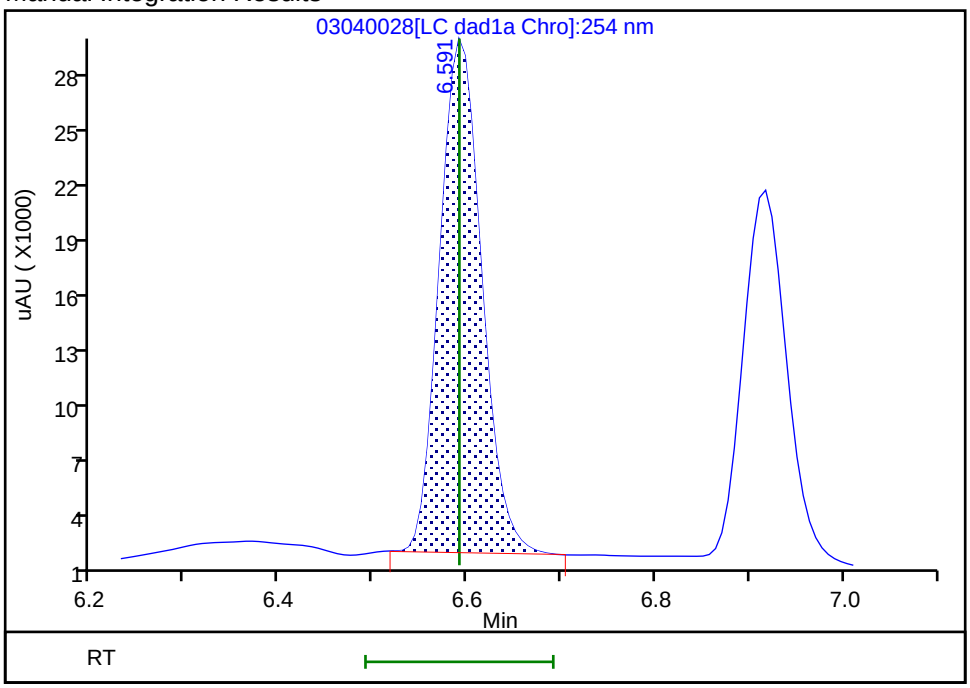
Processing Integration Results

RT: 6.59
Area: 108455
Amount: 0.455381
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 85174
Amount: 0.391409
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:31:08

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

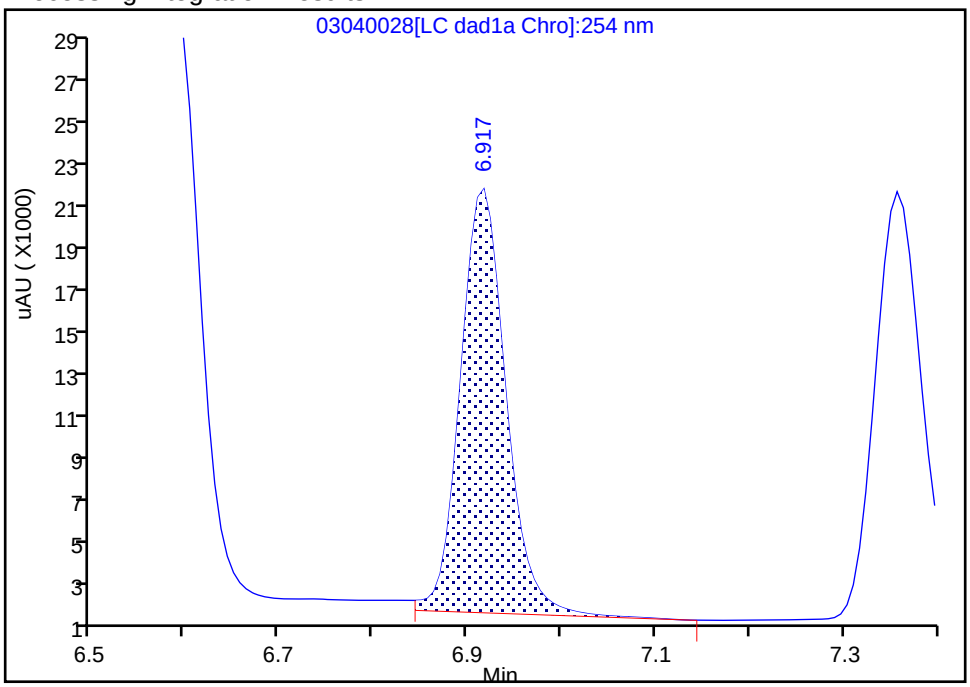
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040028.d				
Injection Date:	04-Mar-2020 22:09:00	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L5				
Client ID:					
Operator ID:	CB	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

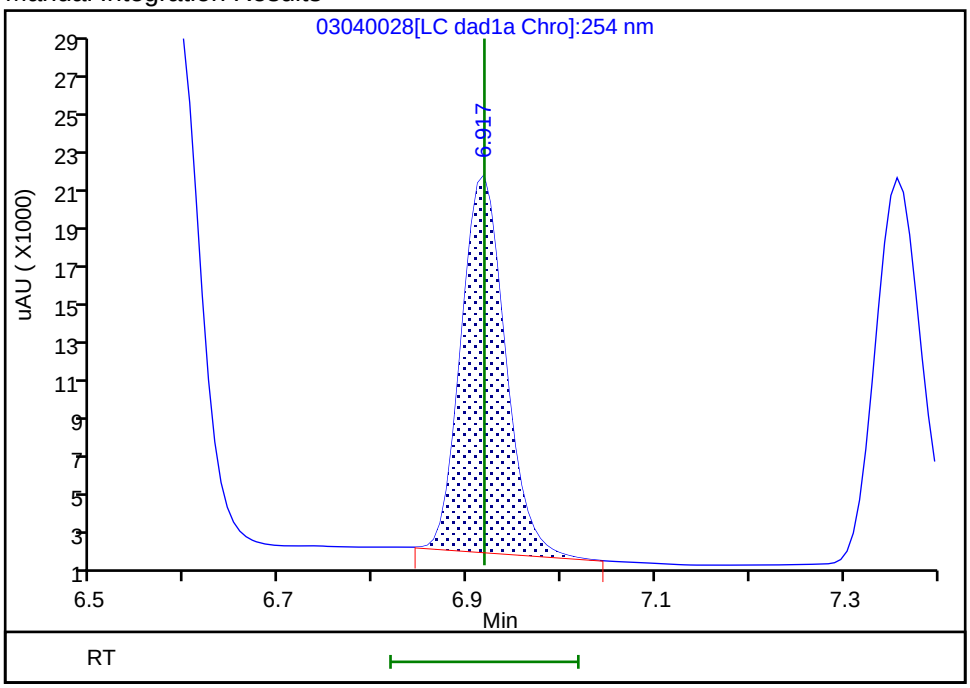
Processing Integration Results

RT: 6.92
Area: 67686
Amount: 0.396160
Amount Units: ug/mL



Manual Integration Results

RT: 6.92
Area: 64550
Amount: 0.422093
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:31:13

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040029.D				
Lims ID:	IC DMT L4				
Client ID:					
Sample Type:	IC	Calib Level:	4		
Inject. Date:	04-Mar-2020 22:31:57	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT L4				
Misc. Info.:	280-0089779-029				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Mar-2020 10:25:24	Calib Date:	04-Mar-2020 23:40:46		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0308				

First Level Reviewer: beckerc Date: 05-Mar-2020 08:31:44

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.591	6.591	0.000	57932	0.2503	0.2662	M
5 DNX	1	6.918	6.918	0.000	41936	0.2503	0.2742	M
6 MNX	1	7.358	7.358	0.000	46005	0.2918	0.2902	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

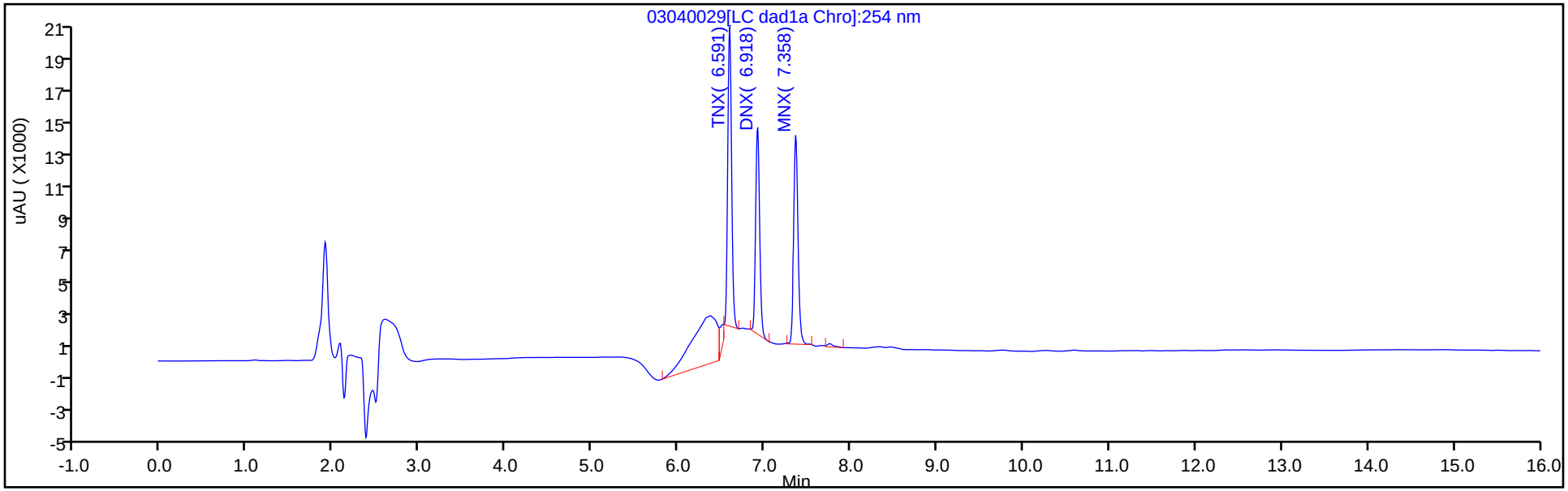
8330 DMT_00005 Amount Added: 12.50 Units: uL

Report Date: 06-Mar-2020 10:25:25 Chrom Revision: 2.3 19-Feb-2020 16:45:46

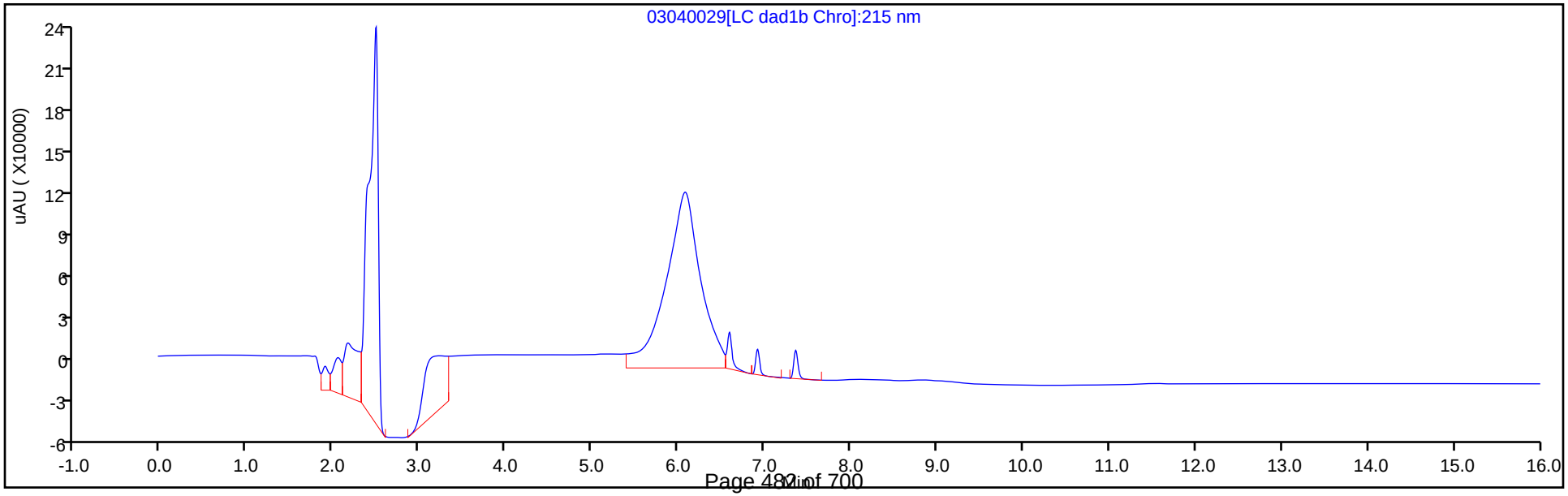
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040029.d				
Injection Date:	04-Mar-2020 22:31:57	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC DMT L4			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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

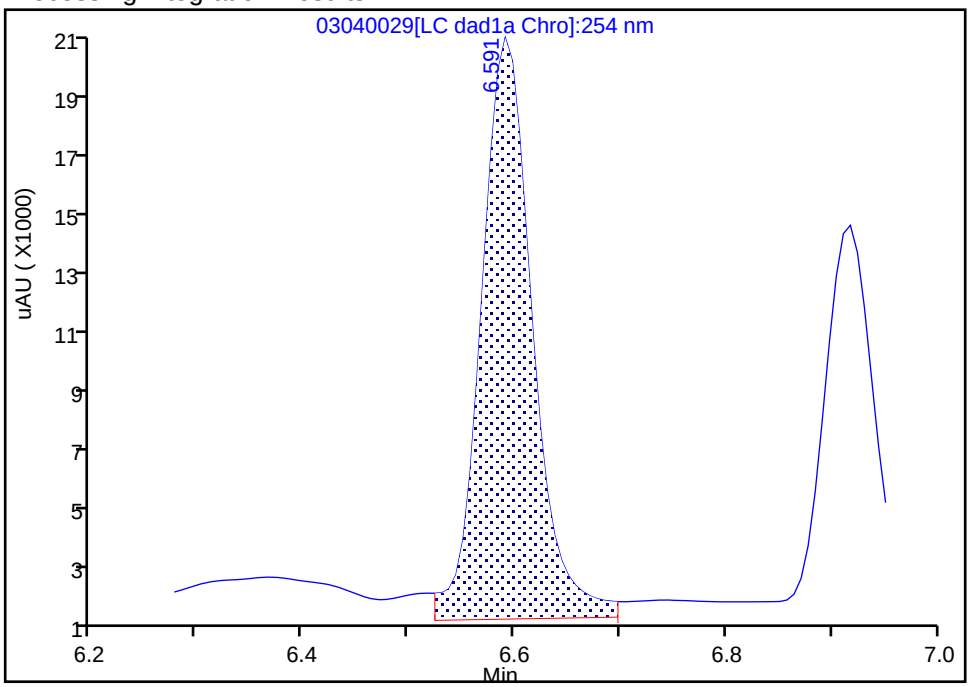
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040029.d				
Injection Date:	04-Mar-2020 22:31:57	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

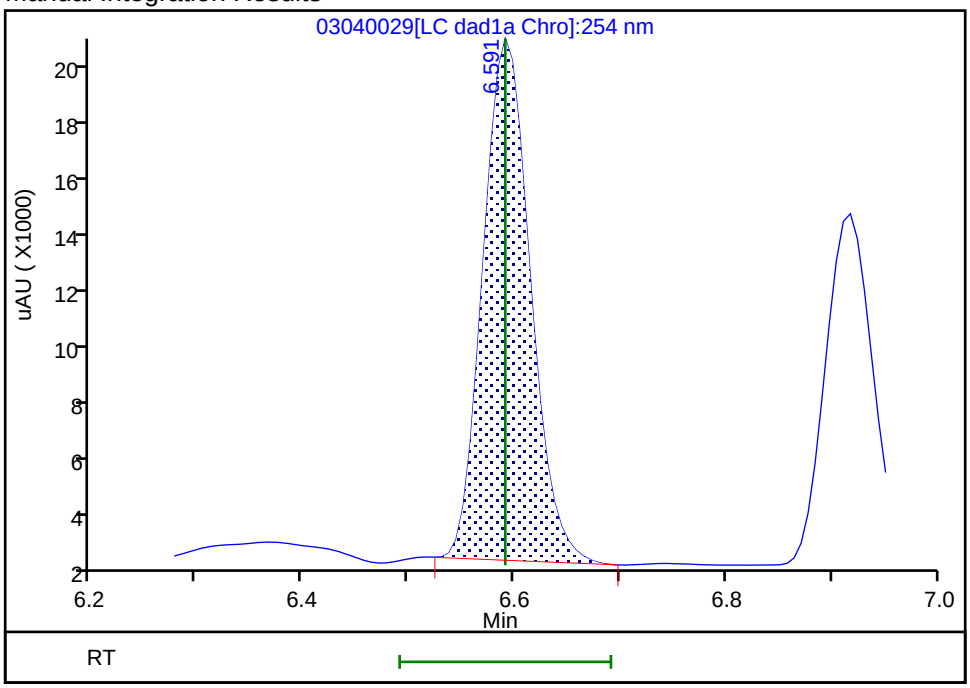
Processing Integration Results

RT: 6.59
Area: 65279
Amount: 0.274722
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 57932
Amount: 0.266221
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:31:35

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

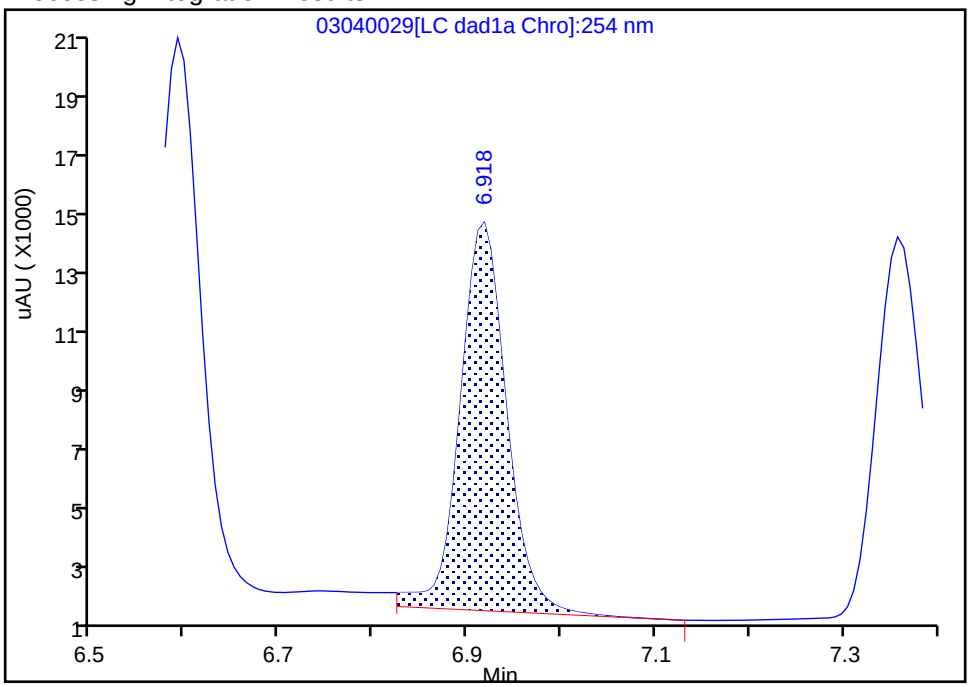
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040029.d				
Injection Date:	04-Mar-2020 22:31:57	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L4				
Client ID:					
Operator ID:	CB	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

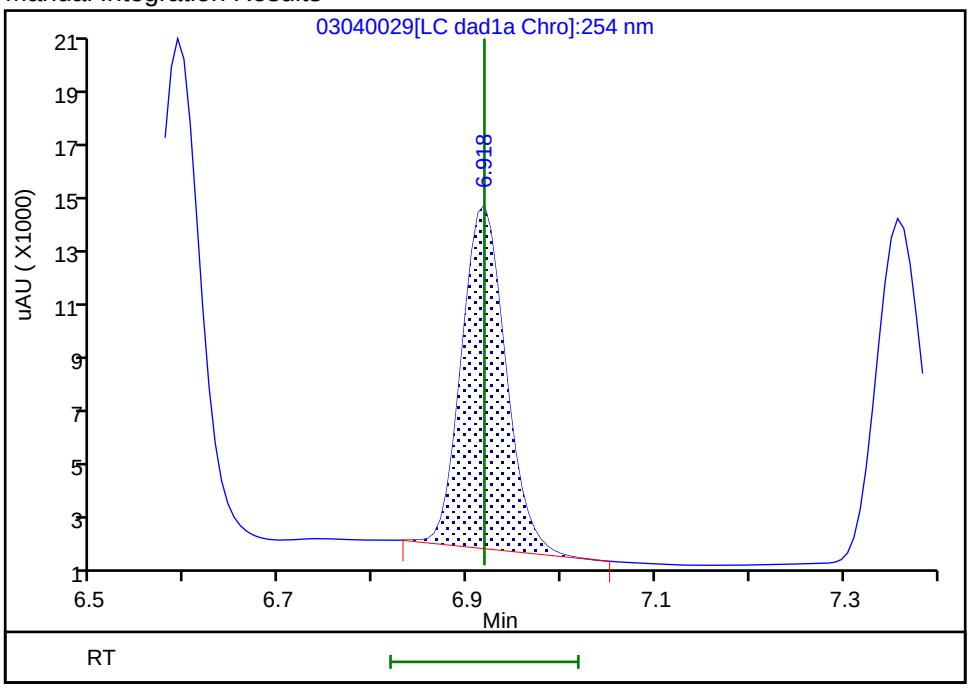
Processing Integration Results

RT: 6.92
Area: 45380
Amount: 0.263025
Amount Units: ug/mL



Manual Integration Results

RT: 6.92
Area: 41936
Amount: 0.274220
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:31:40

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040030.D				
Lims ID:	IC DMT L3				
Client ID:					
Sample Type:	IC	Calib Level:	3		
Inject. Date:	04-Mar-2020 22:54:53	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT L3				
Misc. Info.:	280-0089779-030				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Mar-2020 10:25:25	Calib Date:	04-Mar-2020 23:40:46		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0308				

First Level Reviewer: beckerc Date: 05-Mar-2020 08:32:08

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.589	6.591	-0.002	21002	0.1001	0.0965	M
5 DNX	1	6.915	6.918	-0.003	14937	0.1001	0.0977	M
6 MNX	1	7.355	7.358	-0.003	18233	0.1167	0.1150	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

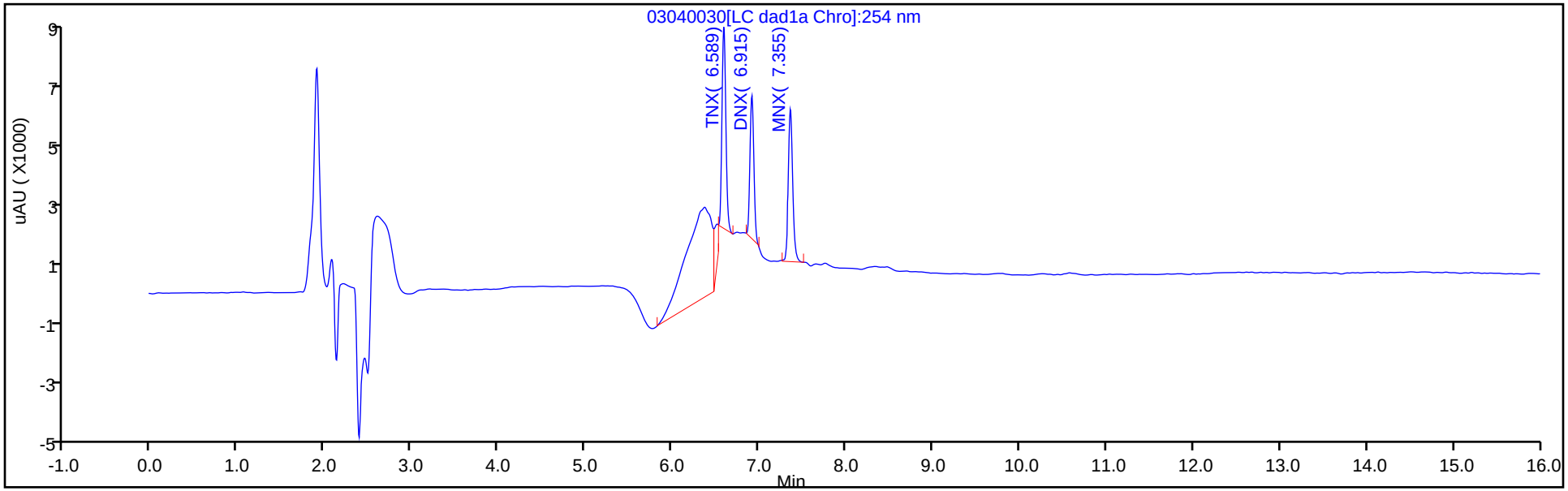
8330 DMT_00005 Amount Added: 5.00 Units: uL

Report Date: 06-Mar-2020 10:25:26 Chrom Revision: 2.3 19-Feb-2020 16:45:46

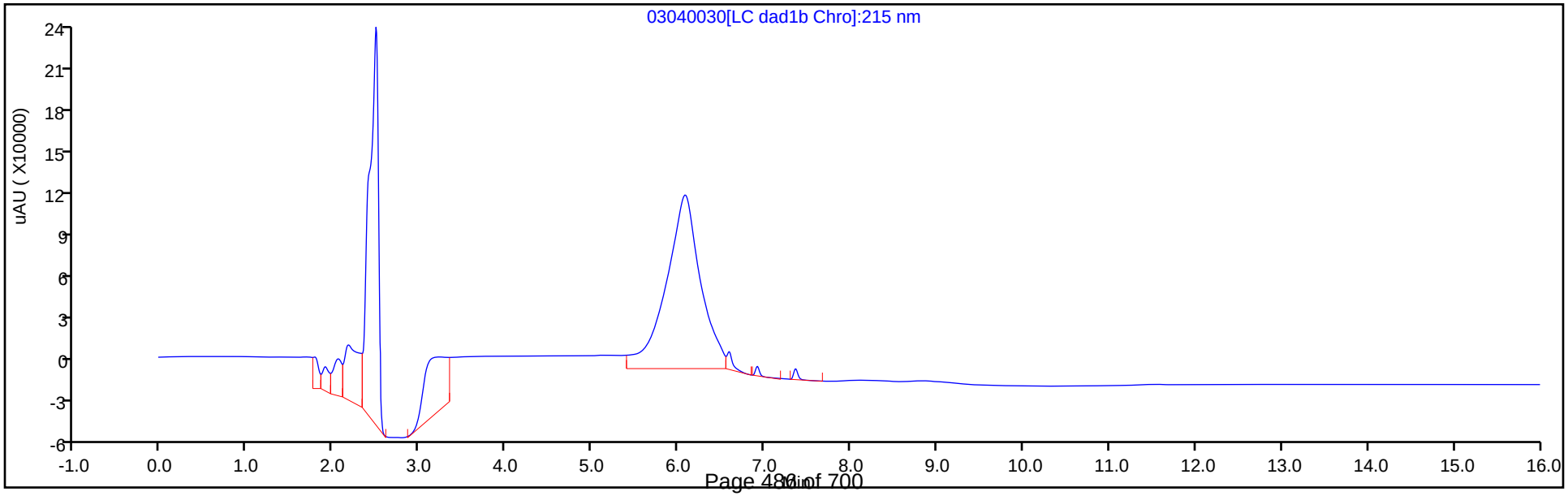
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040030.d				
Injection Date:	04-Mar-2020 22:54:53	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC DMT L3			Worklist Smp#:	30
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	30
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

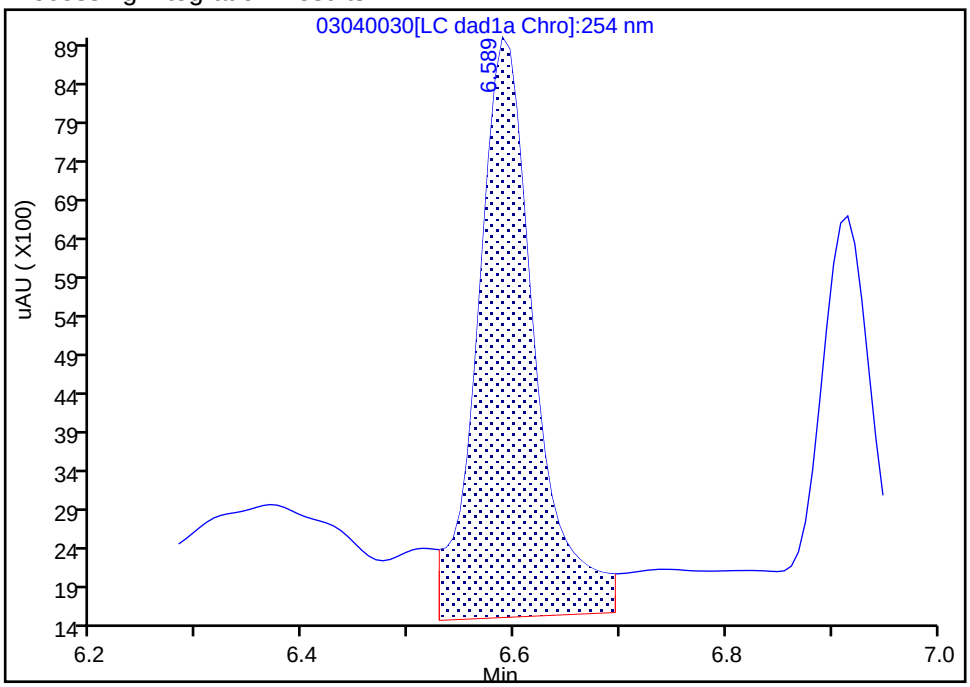
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040030.d				
Injection Date:	04-Mar-2020 22:54:53	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

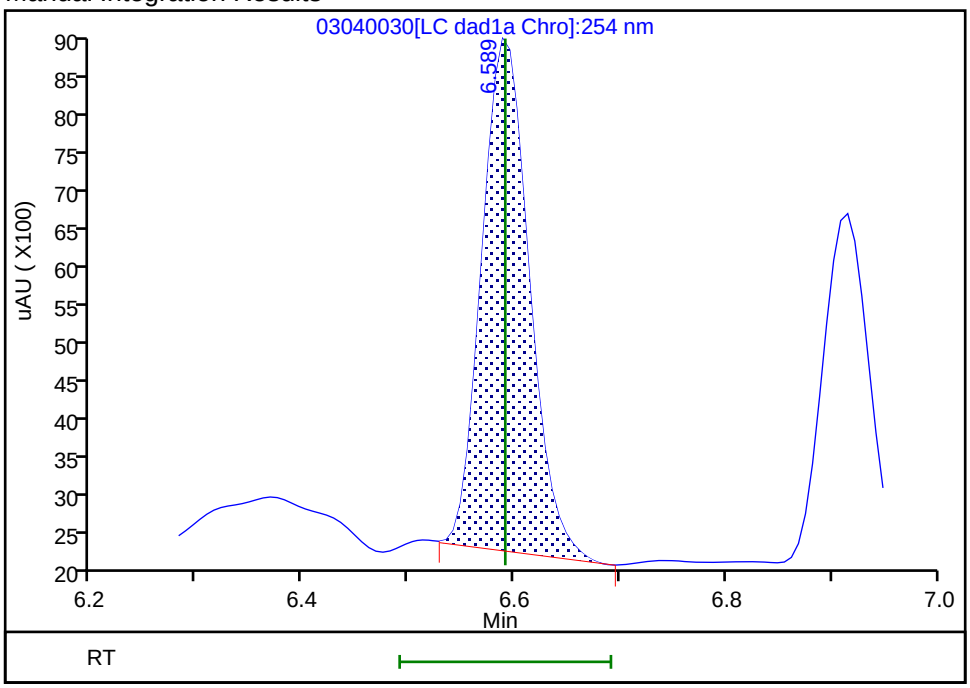
Processing Integration Results

RT: 6.59
Area: 27927
Amount: 0.102862
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 21002
Amount: 0.096513
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:31:59
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

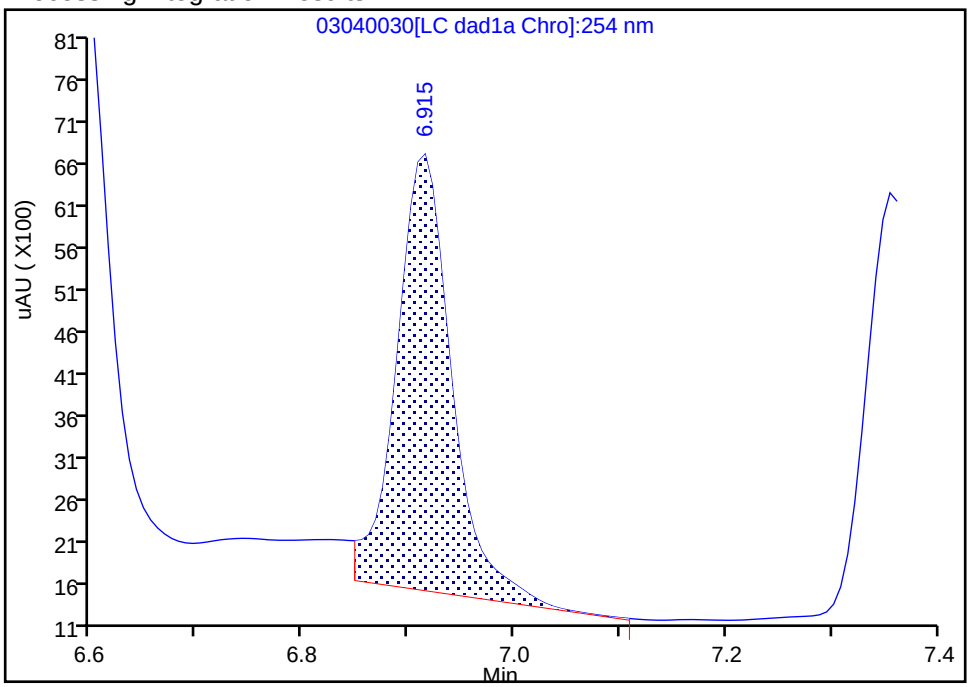
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040030.d				
Injection Date:	04-Mar-2020 22:54:53	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L3				
Client ID:					
Operator ID:	CB	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

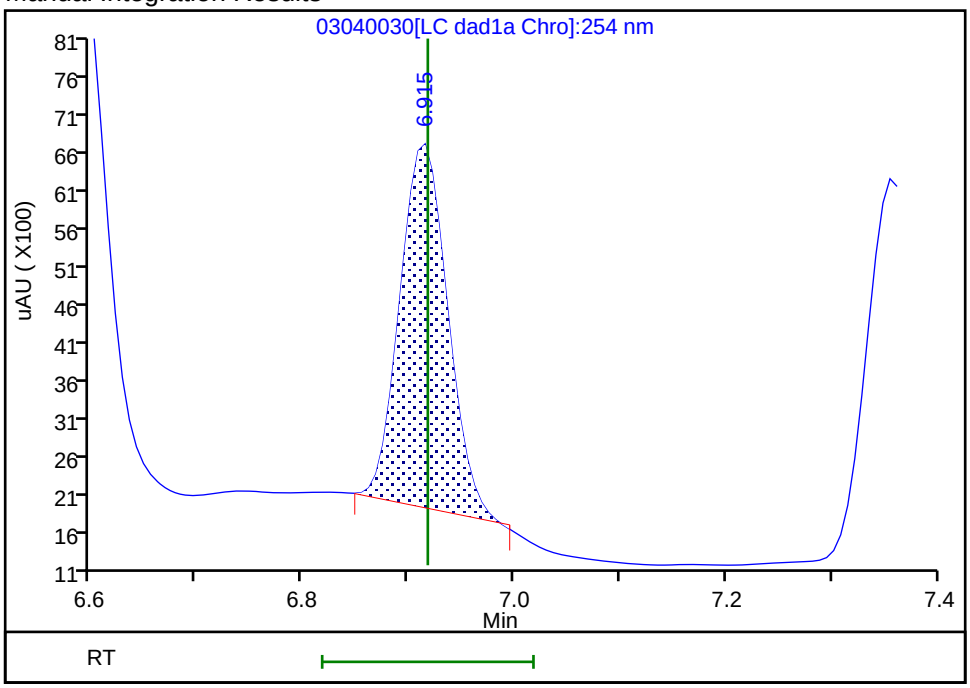
Processing Integration Results

RT: 6.92
Area: 18794
Amount: 0.101797
Amount Units: ug/mL



Manual Integration Results

RT: 6.92
Area: 14937
Amount: 0.097673
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:32:04
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040031.D				
Lims ID:	IC DMT L2				
Client ID:					
Sample Type:	IC	Calib Level:	2		
Inject. Date:	04-Mar-2020 23:17:52	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT L2				
Misc. Info.:	280-0089779-031				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Mar-2020 10:25:26	Calib Date:	04-Mar-2020 23:40:46		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0308				

First Level Reviewer: beckerc Date: 05-Mar-2020 08:32:31

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.588	6.591	-0.003	10671	0.0501	0.0490	M
5 DNX	1	6.914	6.918	-0.004	6904	0.0501	0.0451	M
6 MNX	1	7.354	7.358	-0.004	9411	0.0584	0.0594	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

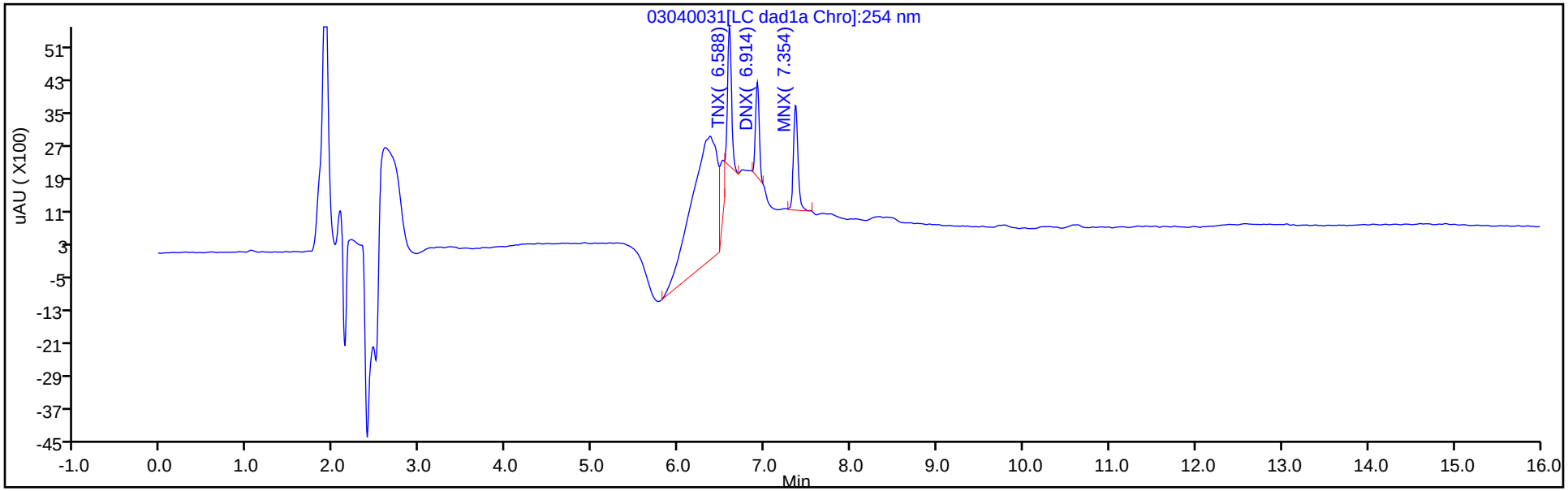
8330 DMT_00005 Amount Added: 2.50 Units: uL

Report Date: 06-Mar-2020 10:25:27 Chrom Revision: 2.3 19-Feb-2020 16:45:46

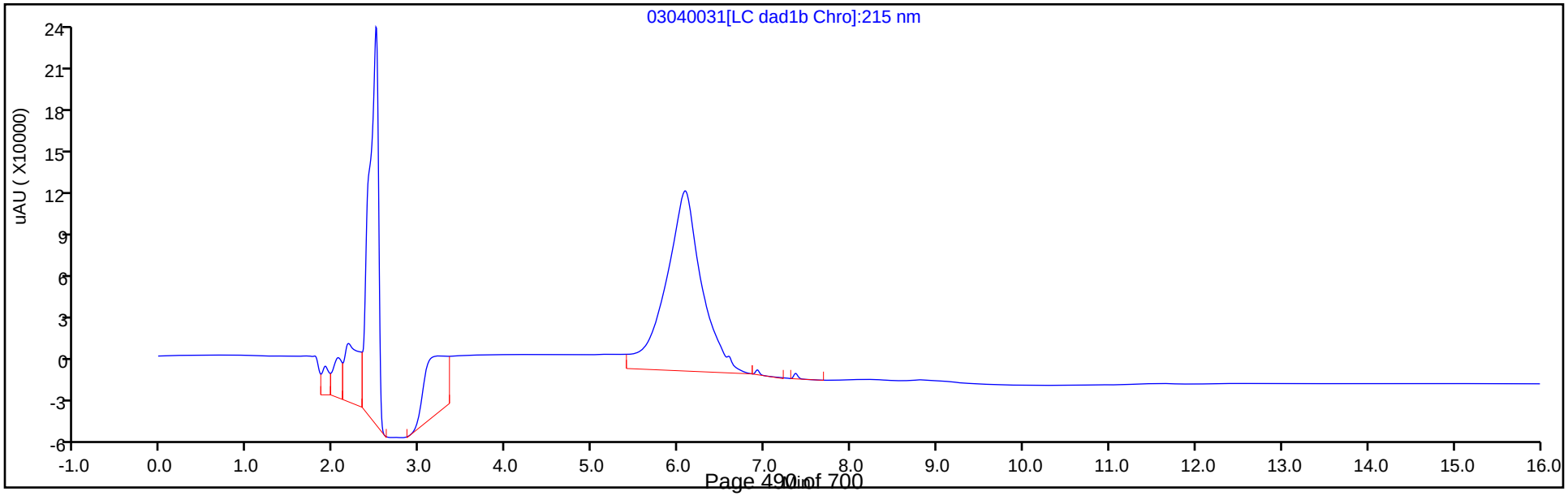
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040031.d				
Injection Date:	04-Mar-2020 23:17:52	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC DMT L2			Worklist Smp#:	31
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

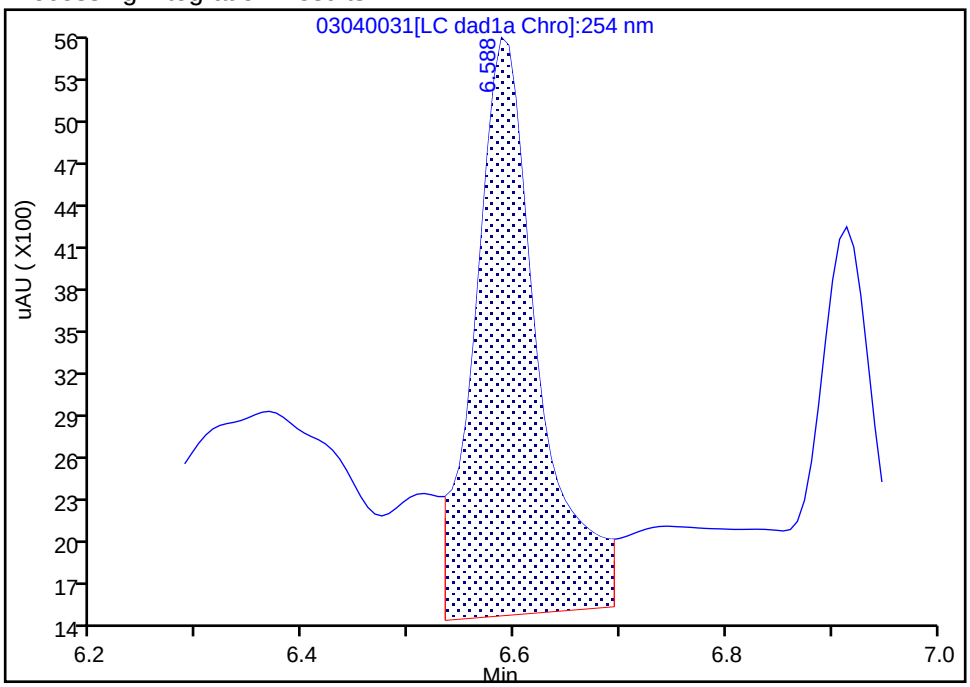
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040031.d				
Injection Date:	04-Mar-2020 23:17:52	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L2				
Client ID:					
Operator ID:	CB	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

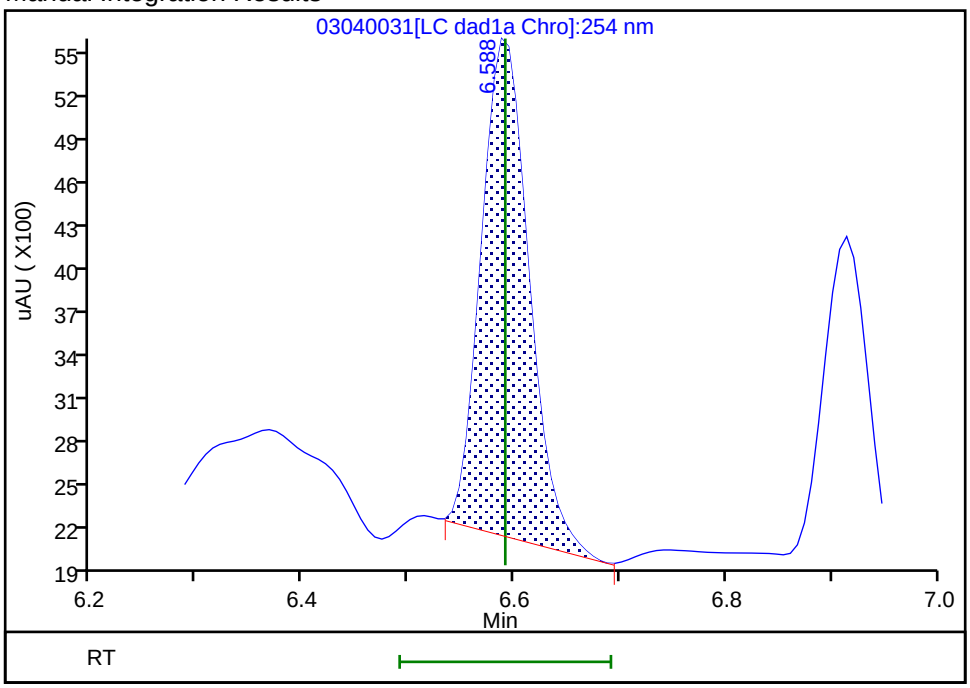
Processing Integration Results

RT: 6.59
Area: 17098
Amount: 0.055915
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 10671
Amount: 0.049038
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:32:24
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

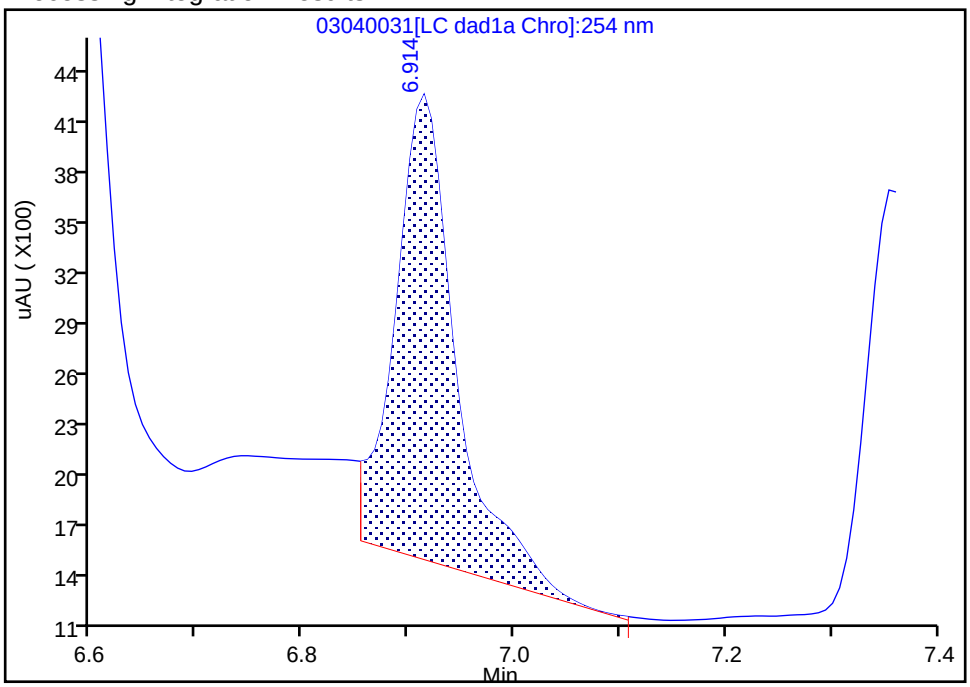
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040031.d				
Injection Date:	04-Mar-2020 23:17:52	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L2				
Client ID:					
Operator ID:	CB	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

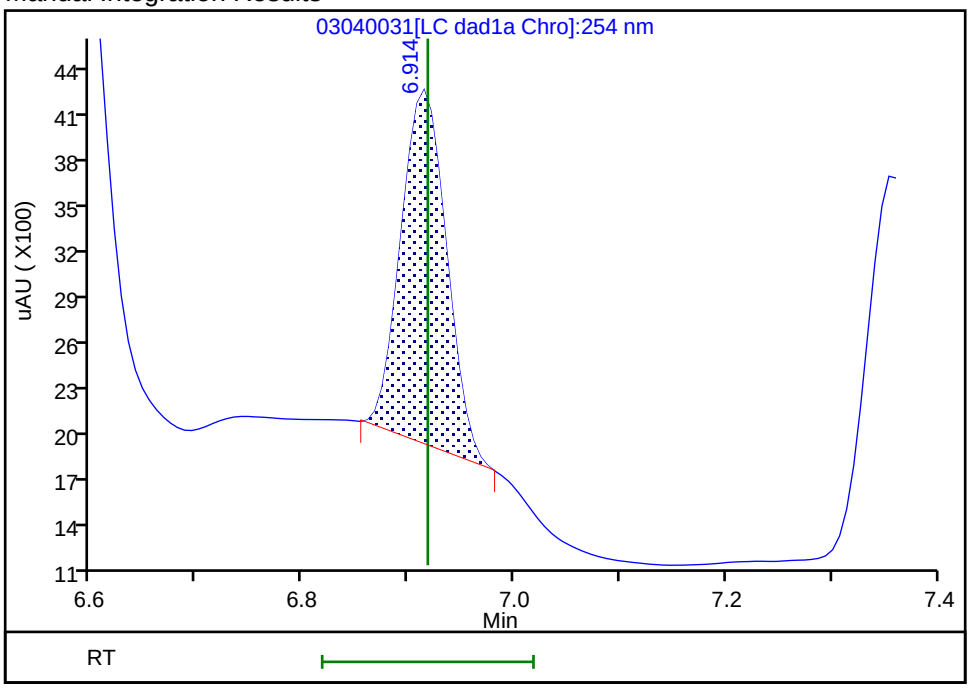
Processing Integration Results

RT: 6.91
Area: 11060
Amount: 0.055514
Amount Units: ug/mL



Manual Integration Results

RT: 6.91
Area: 6904
Amount: 0.045145
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:32:28

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D				
Lims ID:	IC DMT L1				
Client ID:					
Sample Type:	IC	Calib Level:	1		
Inject. Date:	04-Mar-2020 23:40:46	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT L1				
Misc. Info.:	280-0089779-032				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Mar-2020 10:25:27	Calib Date:	04-Mar-2020 23:40:46		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0308				

First Level Reviewer: beckerc Date: 05-Mar-2020 08:32:54

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.592	6.591	0.001	4343	0.0200	0.0200	M
5 DNX	1	6.912	6.918	-0.006	2345	0.0200	0.0153	M
6 MNX	1	7.359	7.358	0.001	4099	0.0233	0.0259	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

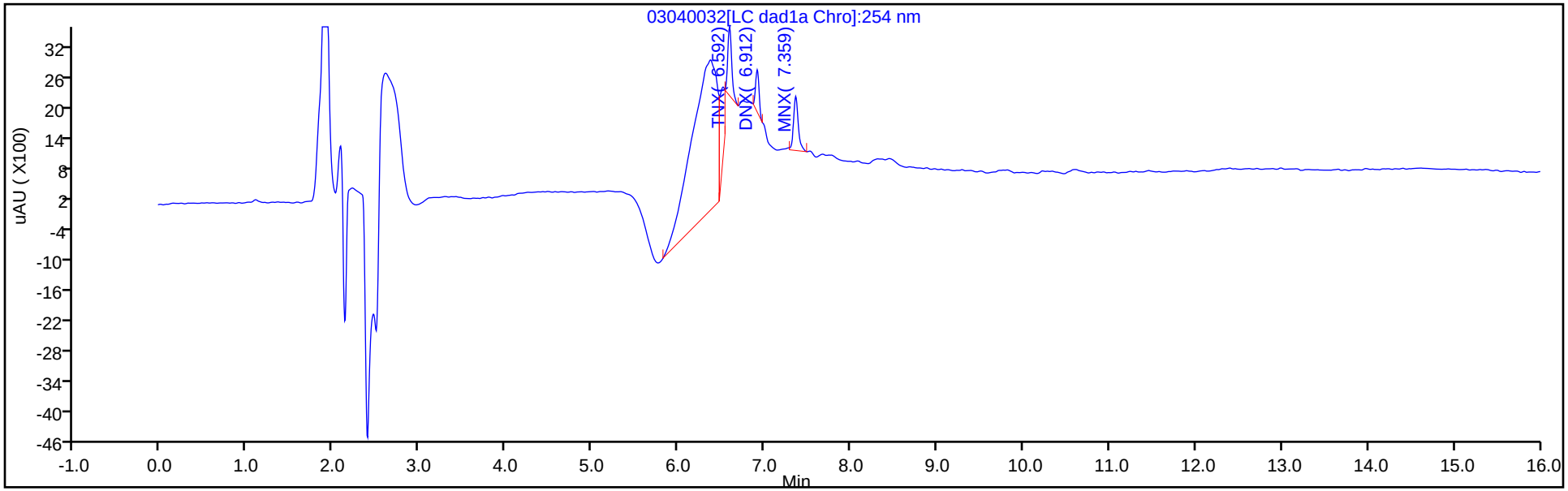
8330 DMT_00005 Amount Added: 1.00 Units: uL

Report Date: 06-Mar-2020 10:25:28 Chrom Revision: 2.3 19-Feb-2020 16:45:46

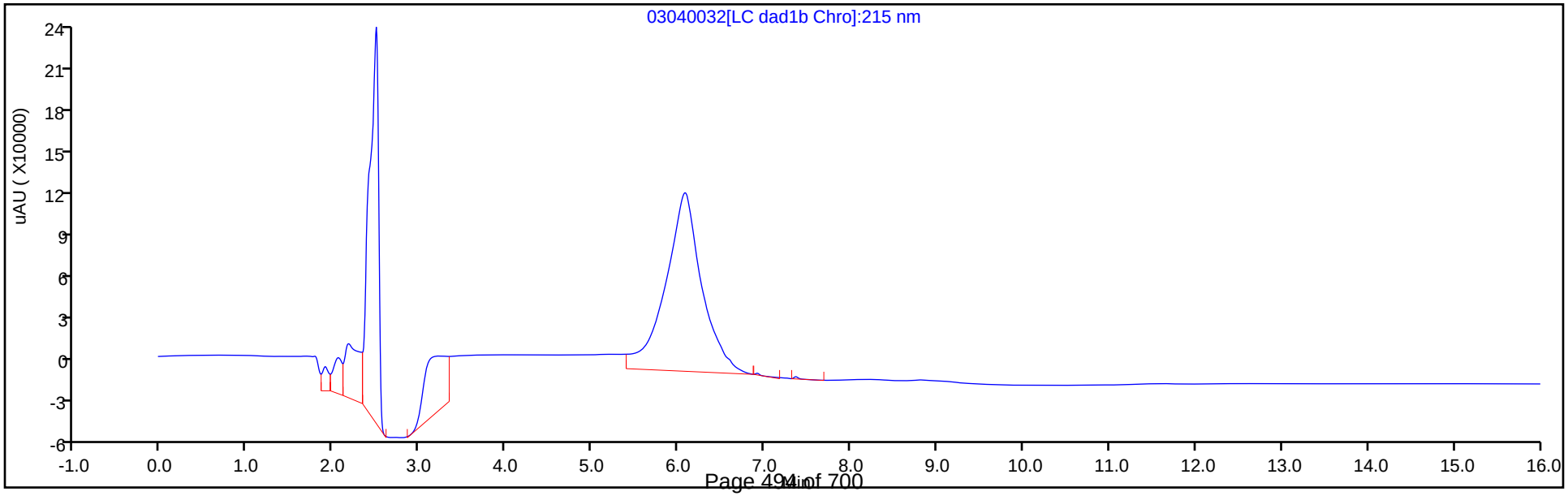
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040032.d				
Injection Date:	04-Mar-2020 23:40:46	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	IC DMT L1			Worklist Smp#:	32
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	32
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

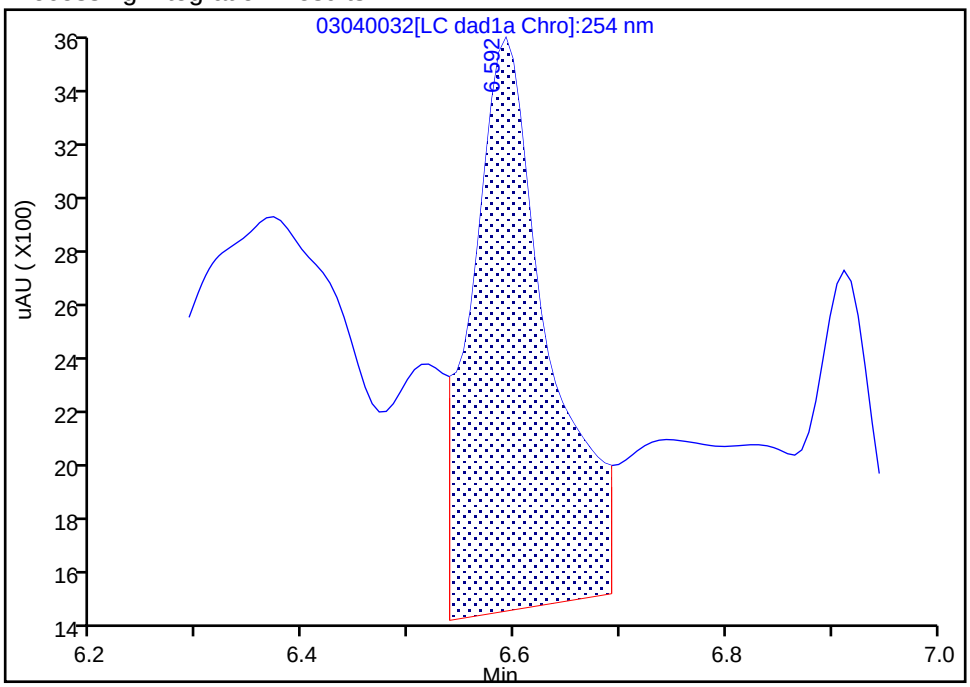
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040032.d				
Injection Date:	04-Mar-2020 23:40:46	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L1				
Client ID:					
Operator ID:	CB	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

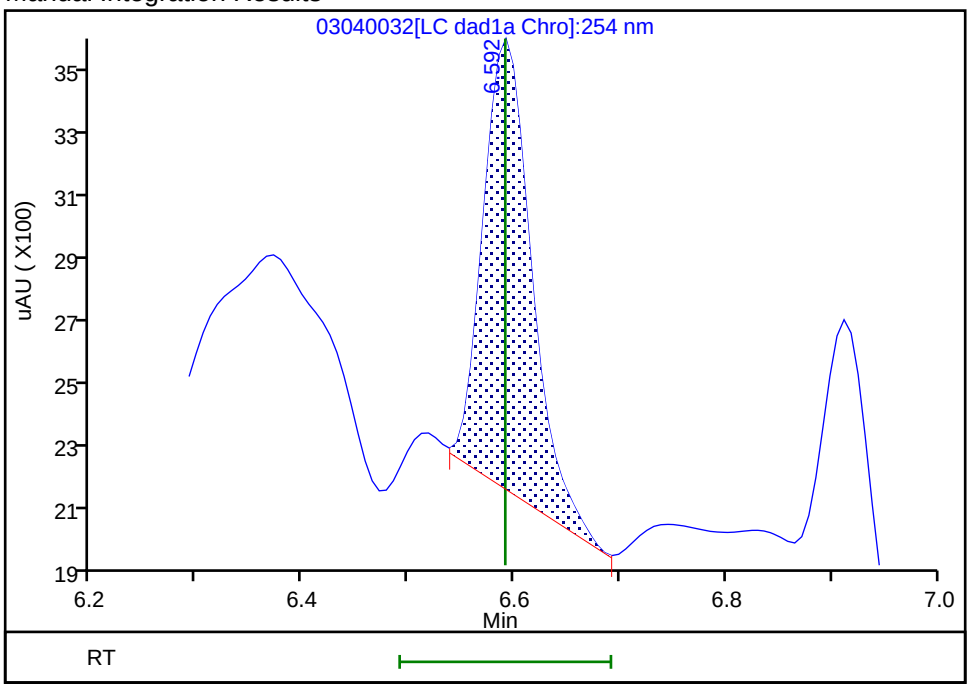
Processing Integration Results

RT: 6.59
Area: 10465
Amount: 0.032149
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 4343
Amount: 0.019958
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:32:43
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

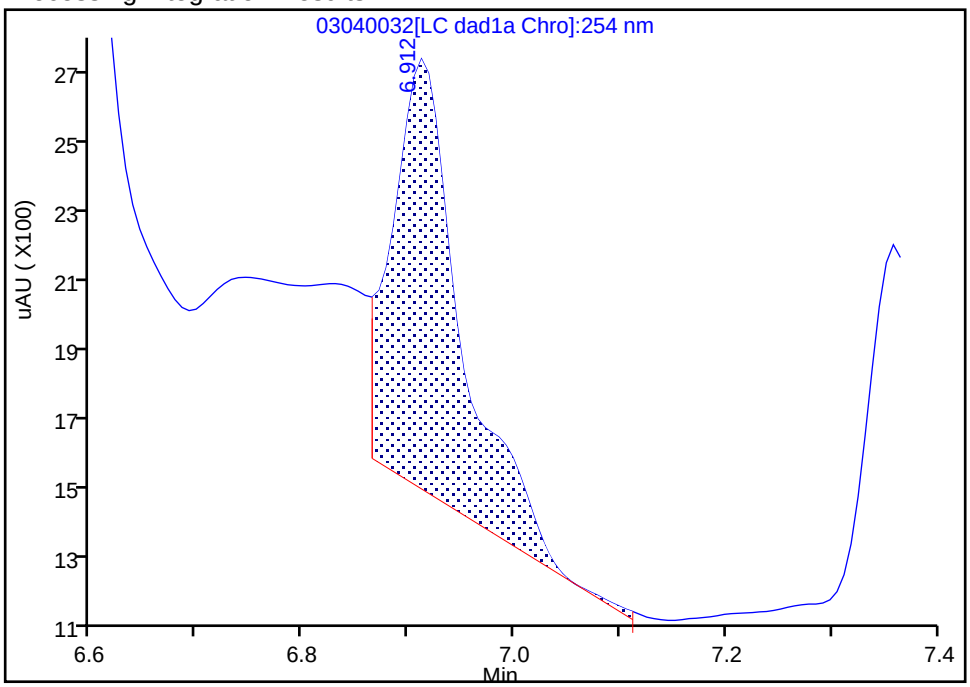
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040032.d				
Injection Date:	04-Mar-2020 23:40:46	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT L1				
Client ID:					
Operator ID:	CB	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

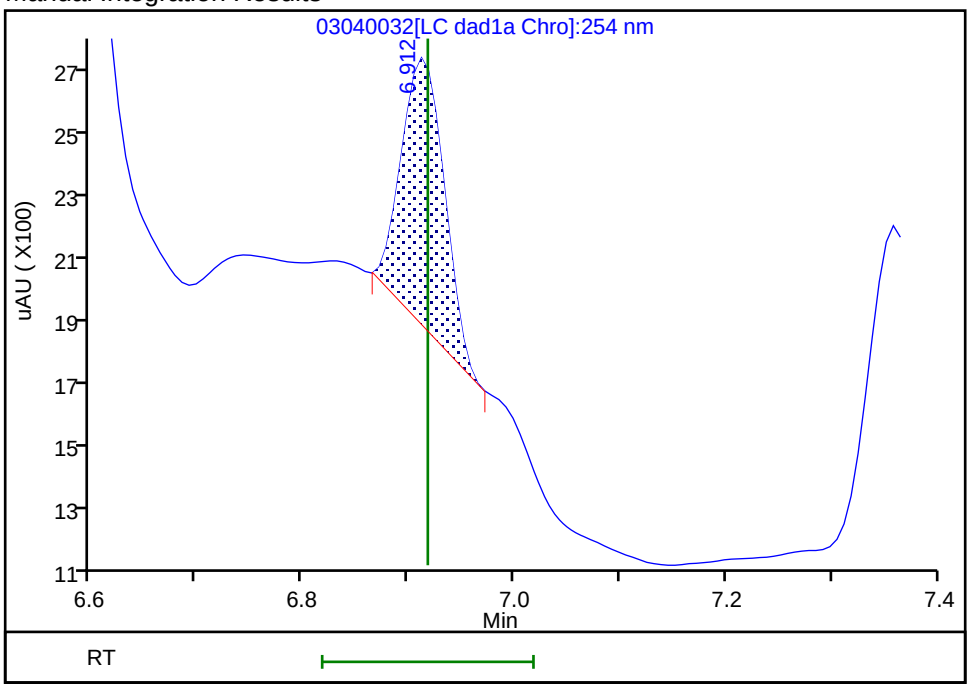
Processing Integration Results

RT: 6.91
Area: 5489
Amount: 0.028357
Amount Units: ug/mL



Manual Integration Results

RT: 6.91
Area: 2345
Amount: 0.015334
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:32:46

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Lab Sample ID: ICV 280-487544/15 Calibration Date: 03/03/2020 22:41

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 03/03/2020 18:01

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 03/03/2020 22:06

Lab File ID: 03030015.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Picric acid	Lin2		176650		436	400	9.0	15.0
HMX	Lin2		182133		410	400	2.5	15.0
RDX	Lin2		224258		416	400	3.9	15.0
Nitrobenzene	Lin2		421965		430	400	7.5	15.0
1,3-Dinitrobenzene	Lin2		688550		421	400	5.1	15.0
Nitroglycerin	Lin2		146094		4050	4000	1.3	15.0
2-Nitrotoluene	Lin2		246105		428	400	6.9	15.0
4-Nitrotoluene	Lin2		240890		439	400	9.8	15.0
4-Amino-2,6-dinitrotoluene	Lin2		335405		412	400	3.0	15.0
3-Nitrotoluene	Lin2		251900		440	400	10.1	15.0
2-Amino-4,6-dinitrotoluene	Qua		511803		416	400	4.1	15.0
1,3,5-Trinitrobenzene	Lin2		502695		429	400	7.2	15.0
2,6-Dinitrotoluene	Lin2		298105		418	400	4.4	15.0
2,4-Dinitrotoluene	Lin2		606623		400	400	-0.1	15.0
Tetryl	Lin2		362515		409	400	2.3	15.0
2,4,6-Trinitrotoluene	Lin2		424075		416	400	4.0	15.0
PETN	Lin1		141085		3890	4000	-2.8	15.0
1,2-Dinitrobenzene	Lin2		289355		414	400	3.4	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Lab Sample ID: ICV 280-487544/15 Calibration Date: 03/03/2020 22:41

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 03/03/2020 18:01

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 03/03/2020 22:06

Lab File ID: 03030015.D

Analyte	RT	RT WINDOW	
		FROM	TO
Picric acid	5.56	5.44	5.74
HMX	6.93	6.80	7.10
RDX	9.10	8.97	9.27
Nitrobenzene	12.08	11.96	12.26
1,3-Dinitrobenzene	15.53	15.40	15.70
Nitroglycerin	15.79	15.66	15.96
2-Nitrotoluene	16.56	16.43	16.73
4-Nitrotoluene	16.82	16.70	17.00
4-Amino-2,6-dinitrotoluene	17.14	17.01	17.31
3-Nitrotoluene	17.76	17.64	17.94
2-Amino-4,6-dinitrotoluene	17.98	17.86	18.16
1,3,5-Trinitrobenzene	18.88	18.76	19.06
2,6-Dinitrotoluene	19.82	19.70	20.00
2,4-Dinitrotoluene	20.29	20.17	20.47
Tetryl	23.56	23.43	23.73
2,4,6-Trinitrotoluene	24.69	24.56	24.86
PETN	25.27	25.14	25.44
1,2-Dinitrobenzene	13.01	12.88	13.18

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030015.D
Lims ID: ICV FULL
Client ID:
Sample Type: ICV
Inject. Date: 03-Mar-2020 22:41:21 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICV FULL
Misc. Info.: 280-0089749-015
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA
Sublist:

Method: \\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 05-Mar-2020 11:40:10 Calib Date: 03-Mar-2020 22:06:26
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030014.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0319

First Level Reviewer: beckerc Date: 04-Mar-2020 08:28:56

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.337	4.360	-0.023	183371	0.4000	0.3848	
2 2,4-diamino-6-nitrotoluene	1	4.910	4.913	-0.003	112796	0.4000	0.3913	
5 2,4,6-Trinitrophenol	1	5.557	5.587	-0.030	70660	0.4000	0.4360	
6 HMX	1	6.930	6.947	-0.017	72853	0.4000	0.4102	
8 RDX	1	9.097	9.120	-0.023	89703	0.4000	0.4158	
9 Nitrobenzene	1	12.083	12.113	-0.030	168786	0.4000	0.4301	
$ 10 1,2-Dinitrobenzene	1	13.010	13.033	-0.023	115742	0.4000	0.4136	
11 3,5-Dinitroaniline	1	14.830	14.853	-0.023	209488	0.4000	0.3863	
12 1,3-Dinitrobenzene	1	15.530	15.553	-0.023	275420	0.4000	0.4206	
13 Nitroglycerin	2	15.790	15.813	-0.023	584375	4.00	4.05	M
14 o-Nitrotoluene	1	16.557	16.580	-0.023	98442	0.4000	0.4276	
15 p-Nitrotoluene	1	16.823	16.853	-0.030	96356	0.4000	0.4393	
16 4-Amino-2,6-dinitrotoluene	1	17.137	17.160	-0.023	134162	0.4000	0.4120	
17 m-Nitrotoluene	1	17.757	17.787	-0.030	100760	0.4000	0.4403	
18 2-Amino-4,6-dinitrotoluene	1	17.983	18.013	-0.030	204721	0.4000	0.4163	
19 1,3,5-Trinitrobenzene	1	18.883	18.907	-0.024	201078	0.4000	0.4288	
20 2,6-Dinitrotoluene	1	19.823	19.853	-0.030	119242	0.4000	0.4176	
21 2,4-Dinitrotoluene	1	20.290	20.320	-0.030	242649	0.4000	0.3995	
22 Tetryl	1	23.557	23.580	-0.023	145006	0.4000	0.4090	
23 2,4,6-Trinitrotoluene	1	24.690	24.713	-0.023	169630	0.4000	0.4159	
24 PETN	2	25.270	25.293	-0.023	564338	4.00	3.89	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

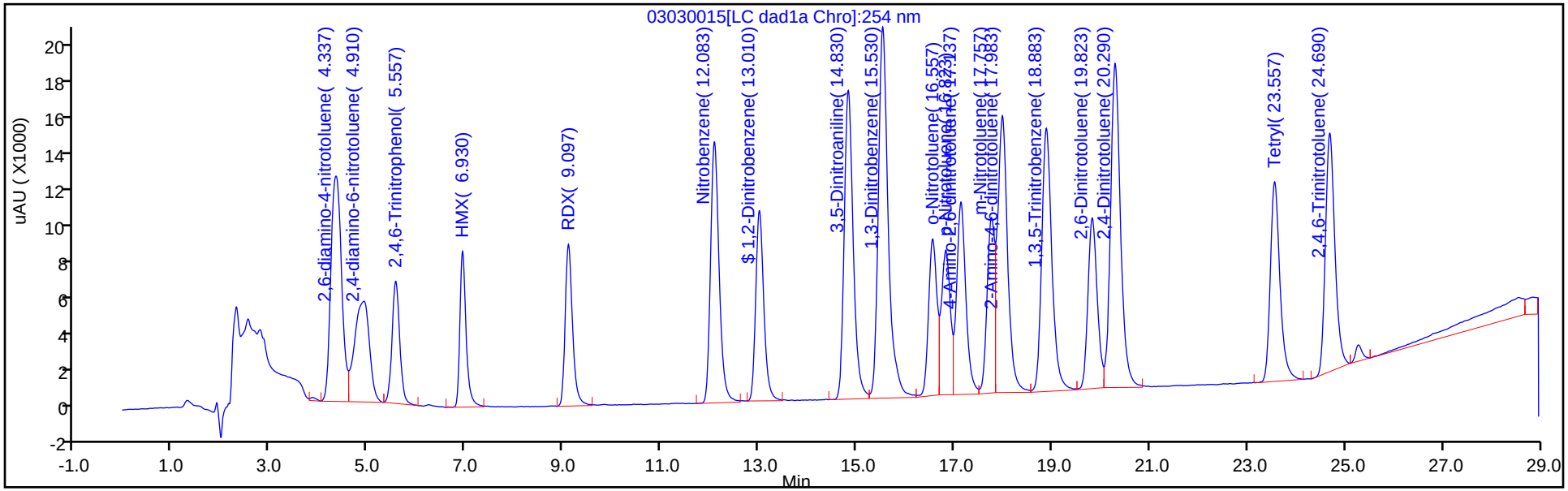
8330Surrogate_00109	Amount Added:	40.00	Units: uL
3,5-DNA LCS_00034	Amount Added:	40.00	Units: uL
8330 LCS_00094	Amount Added:	40.00	Units: uL
8330DiaminLCS_00036	Amount Added:	40.00	Units: uL

Report Date: 05-Mar-2020 11:40:11 Chrom Revision: 2.3 19-Feb-2020 16:45:46

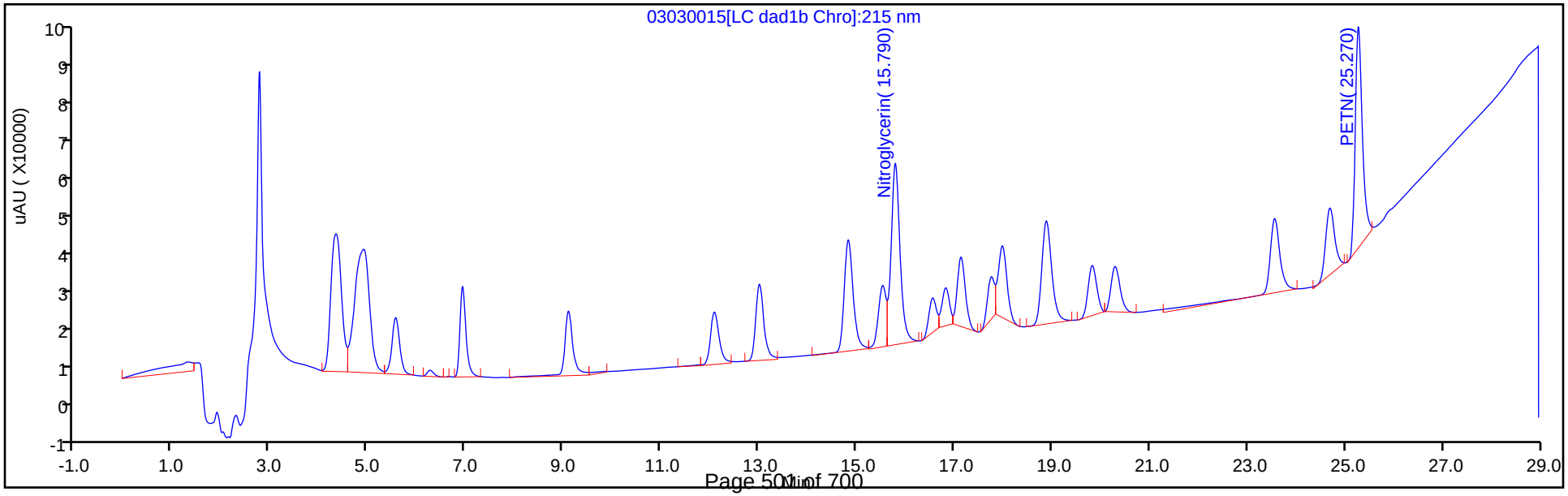
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\g2_luna\20200303-89749.b\03030015.d				
Injection Date:	03-Mar-2020 22:41:21	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	ICV FULL			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 Peak: 1



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

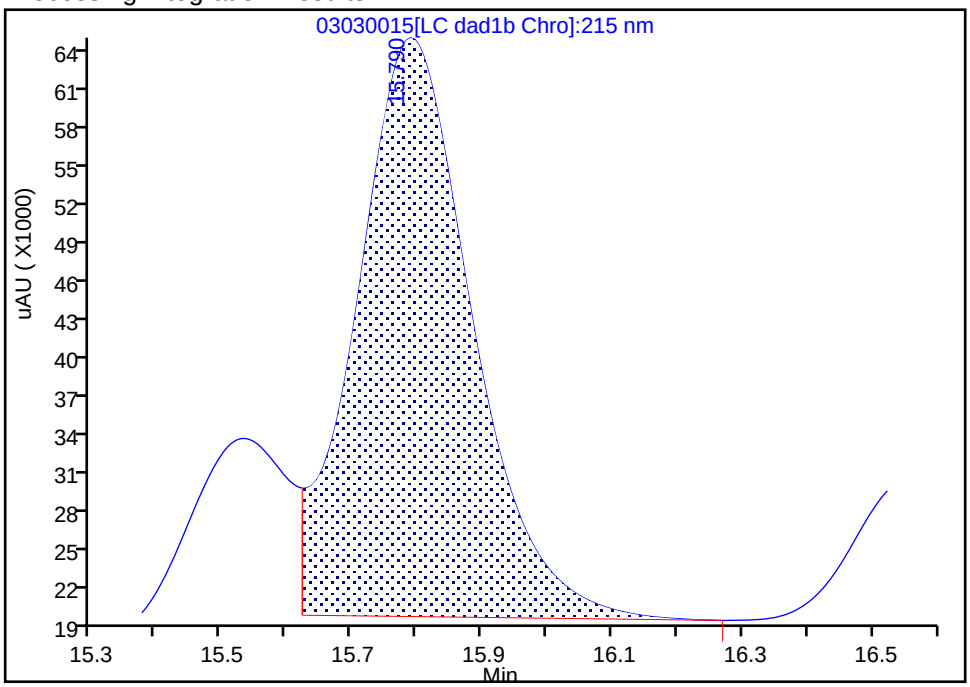
Data File:	\\chromna\denver\chromdata\g2_luna\20200303-89749.b\03030015.d				
Injection Date:	03-Mar-2020 22:41:21	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	ICV FULL				
Client ID:					
Operator ID:	CB	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:		Detector	LC DAD1B, 215 nm		

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

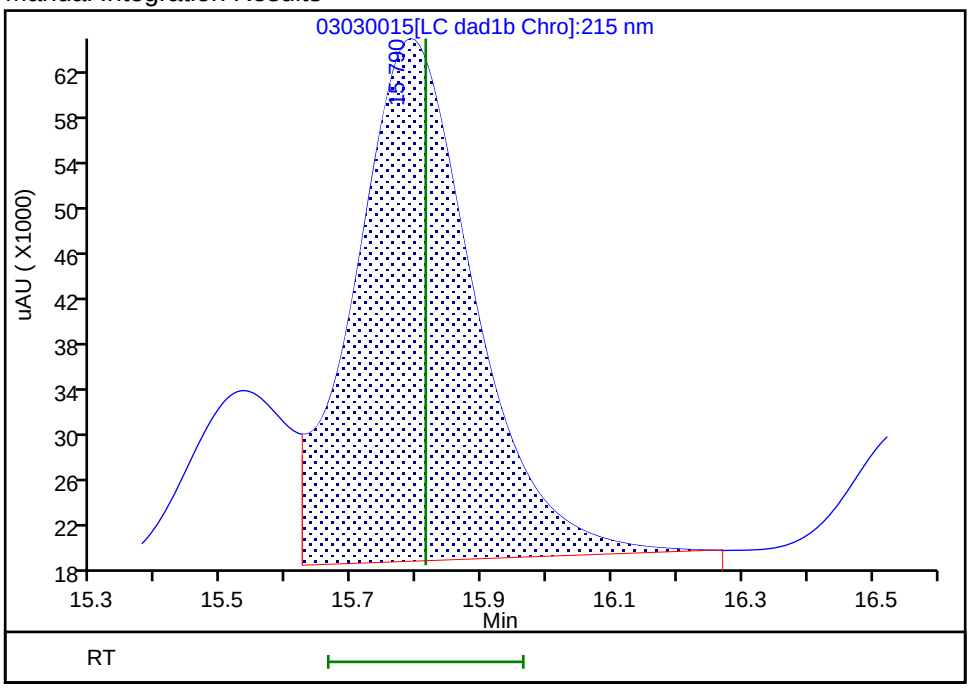
Processing Integration Results

RT: 15.79
Area: 552385
Amount: 3.123938
Amount Units: ug/ml



Manual Integration Results

RT: 15.79
Area: 584375
Amount: 4.052044
Amount Units: ug/ml



Reviewer: beckerc, 04-Mar-2020 08:28:40
Audit Action: Assigned New Baseline Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Lab Sample ID: ICV 280-487544/24 Calibration Date: 03/04/2020 03:55

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 03/03/2020 23:16

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 03/04/2020 03:21

Lab File ID: 03030024.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	454578	385944		340	400	-15.1*	15.0
DNX	Ave	327828	287023		351	400	-12.4	15.0
MNX	Ave	305766	266795		407	467	-12.7	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Lab Sample ID: ICV 280-487545/24 Calibration Date: 03/04/2020 03:55

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 03/03/2020 23:16

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 03/04/2020 03:21

Lab File ID: 03030024.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	454578	385944		340	400	-15.1*	15.0
DNX	Ave	327828	287023		351	400	-12.4	15.0
MNX	Ave	305766	266795		407	467	-12.7	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Lab Sample ID: ICV 280-487544/24 Calibration Date: 03/04/2020 03:55

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 03/03/2020 23:16

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 03/04/2020 03:21

Lab File ID: 03030024.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.39	5.25	5.55
DNX	6.19	6.05	6.35
MNX	7.70	7.56	7.86

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Lab Sample ID: ICV 280-487545/24 Calibration Date: 03/04/2020 03:55

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 03/03/2020 23:16

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 03/04/2020 03:21

Lab File ID: 03030024.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.39	5.25	5.55
DNX	6.19	6.05	6.35
MNX	7.70	7.56	7.86

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030024.D				
Lims ID:	ICV DMT				
Client ID:					
Sample Type:	ICV				
Inject. Date:	04-Mar-2020 03:55:58	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	ICV DMT				
Misc. Info.:	280-0089749-024				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:					
Method:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2020 11:27:55	Calib Date:	04-Mar-2020 03:21:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030023.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0319				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.394	5.400	-0.006	154532	0.4004	0.3399	
4 DNX	1	6.194	6.200	-0.006	114924	0.4004	0.3506	
7 MNX	1	7.701	7.707	-0.006	124540	0.4668	0.4073	

Reagents:

8330_OP_DMT_00005 Amount Added: 40.00 Units: uL

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030024.D				
Lims ID:	ICV DMT				
Client ID:					
Sample Type:	ICV				
Inject. Date:	04-Mar-2020 03:55:58	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	ICV DMT				
Misc. Info.:	280-0089749-024				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:					
Method:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2020 11:27:55	Calib Date:	04-Mar-2020 03:21:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030023.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0319				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.394	5.400	-0.006	154532	0.4004	0.3399	
4 DNX	1	6.194	6.200	-0.006	114924	0.4004	0.3506	
7 MNX	1	7.701	7.707	-0.006	124540	0.4668	0.4073	

Reagents:

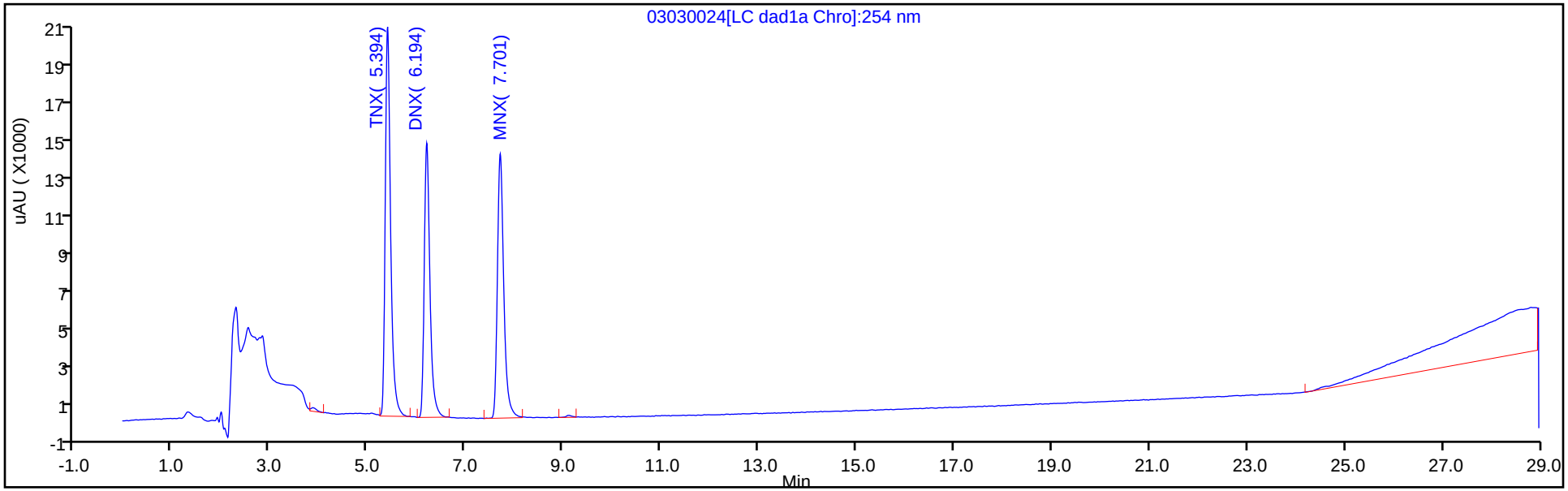
8330_OP_DMT_00005 Amount Added: 40.00 Units: uL

Report Date: 05-Mar-2020 11:27:57 Chrom Revision: 2.3 19-Feb-2020 16:45:46

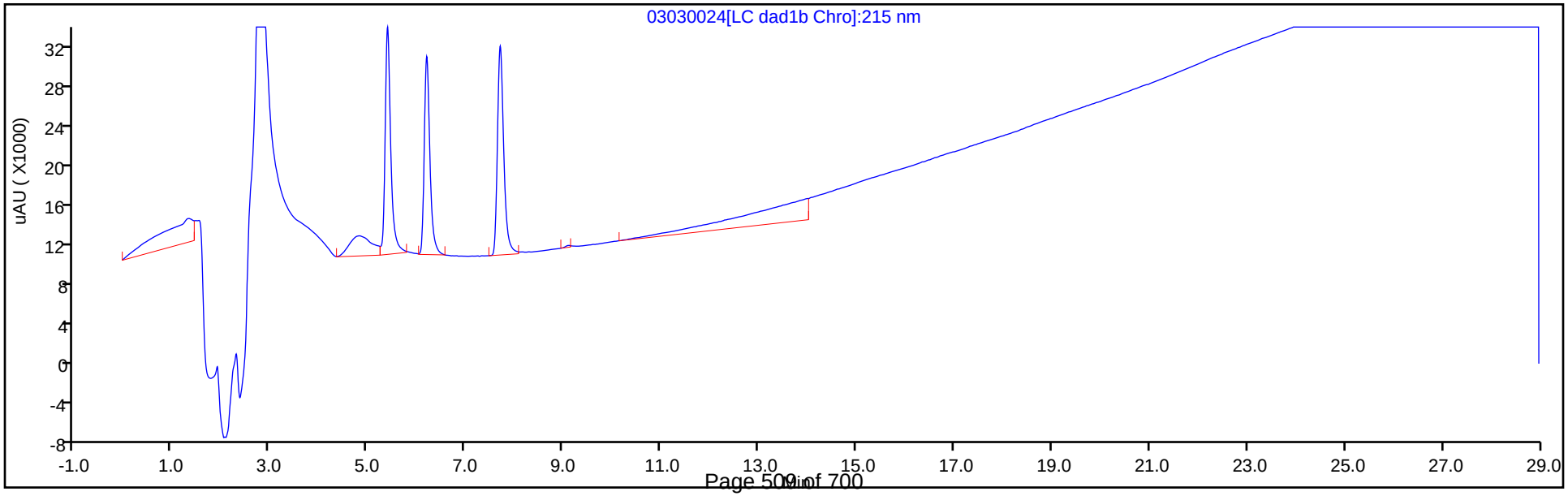
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\g2_luna\20200303-89749.b\03030024.d				
Injection Date:	04-Mar-2020 03:55:58	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	ICV DMT			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 Peak: 1



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

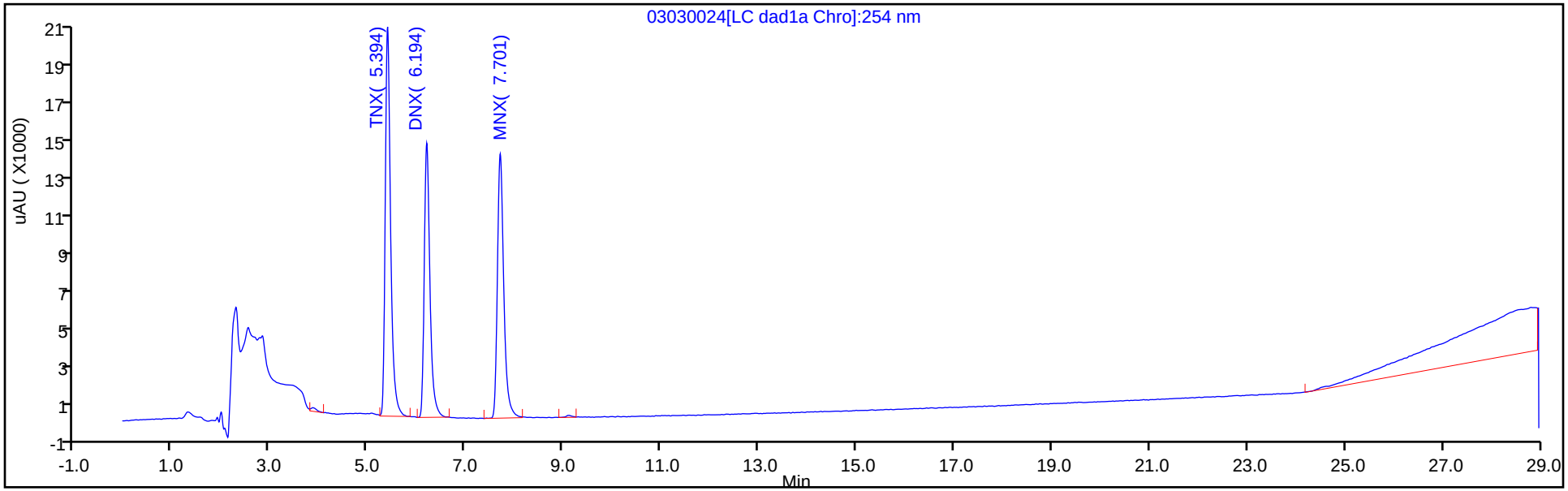


Report Date: 05-Mar-2020 11:27:57 Chrom Revision: 2.3 19-Feb-2020 16:45:46

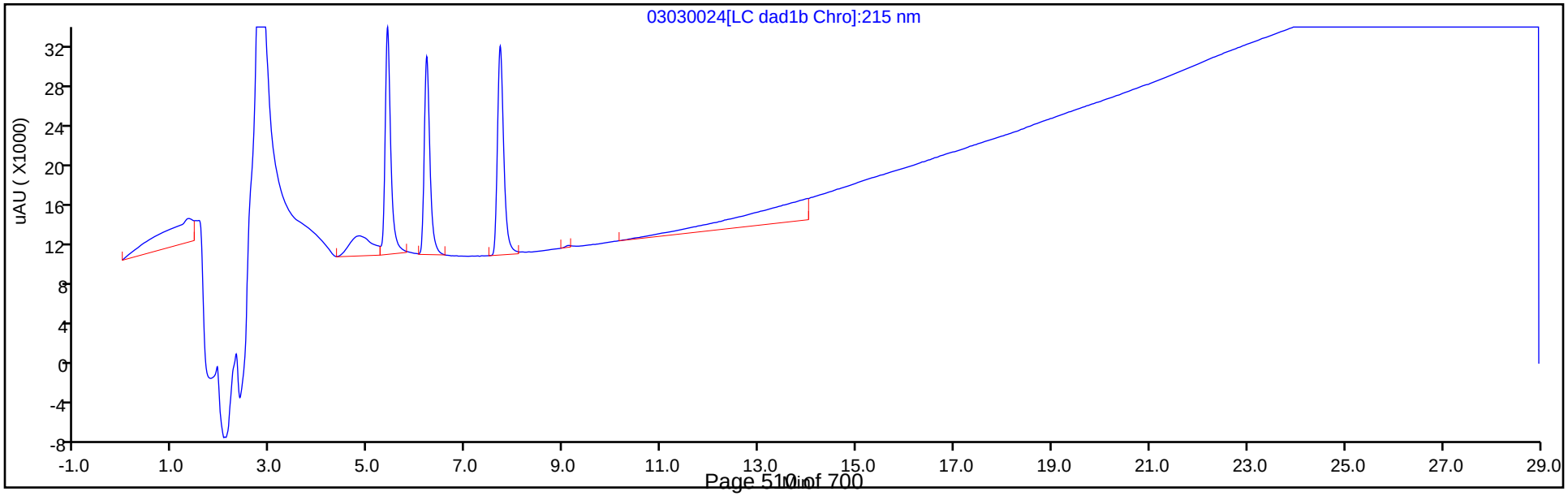
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\g2_luna\20200303-89749.b\03030024.d				
Injection Date:	04-Mar-2020 03:55:58	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	ICV DMT			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 Peak: 1



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



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Lab Sample ID: CCV 280-487545/35 Calibration Date: 03/04/2020 10:21

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 03/03/2020 18:01

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 03/03/2020 22:06

Lab File ID: 03030035.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Picric acid	Lin2		163656		249	250	-0.5	15.0
HMX	Lin2		180420		250	250	-0.0	15.0
RDX	Lin2		223880		254	250	1.8	15.0
Nitrobenzene	Lin2		366339		230	251	-8.4	15.0
1,3-Dinitrobenzene	Lin2		667557		251	251	0.1	15.0
Nitroglycerin	Lin2		147995		2520	2500	0.7	15.0
2-Nitrotoluene	Lin2		214428		229	250	-8.6	15.0
4-Nitrotoluene	Lin2		212044		238	251	-5.1	15.0
4-Amino-2,6-dinitrotoluene	Lin2		333754		253	250	1.1	15.0
3-Nitrotoluene	Lin2		200132		215	250	-14.2	15.0
2-Amino-4,6-dinitrotoluene	Qua		509598		261	251	3.8	15.0
1,3,5-Trinitrobenzene	Lin2		475026		250	251	-0.1	15.0
2,6-Dinitrotoluene	Lin2		291590		252	251	0.6	15.0
2,4-Dinitrotoluene	Lin2		619203		252	251	0.5	15.0
Tetryl	Lin2		364331		252	251	0.8	15.0
2,4,6-Trinitrotoluene	Lin2		416124		252	251	0.6	15.0
PETN	Lin1		138583		2360	2500	-5.8	15.0
1,2-Dinitrobenzene	Lin2		287704		252	250	0.8	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Lab Sample ID: CCV 280-487545/35 Calibration Date: 03/04/2020 10:21

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 03/03/2020 18:01

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 03/03/2020 22:06

Lab File ID: 03030035.D

Analyte	RT	RT WINDOW	
		FROM	TO
Picric acid	5.56	5.44	5.74
HMX	6.93	6.80	7.10
RDX	9.10	8.97	9.27
Nitrobenzene	12.11	11.96	12.26
1,3-Dinitrobenzene	15.54	15.40	15.70
Nitroglycerin	15.79	15.66	15.96
2-Nitrotoluene	16.57	16.43	16.73
4-Nitrotoluene	16.84	16.70	17.00
4-Amino-2,6-dinitrotoluene	17.14	17.01	17.31
3-Nitrotoluene	17.77	17.64	17.94
2-Amino-4,6-dinitrotoluene	17.99	17.86	18.16
1,3,5-Trinitrobenzene	18.89	18.76	19.06
2,6-Dinitrotoluene	19.83	19.70	20.00
2,4-Dinitrotoluene	20.30	20.17	20.47
Tetryl	23.56	23.43	23.73
2,4,6-Trinitrotoluene	24.69	24.56	24.86
PETN	25.28	25.14	25.44
1,2-Dinitrobenzene	13.01	12.88	13.18

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030035.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 04-Mar-2020 10:21:05 ALS Bottle#: 11 Worklist Smp#: 35
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0089749-035
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 05-Mar-2020 11:48:32 Calib Date: 04-Mar-2020 03:21:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030023.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0319

First Level Reviewer: beckerc Date: 05-Mar-2020 08:54:50

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	4.358	4.360	-0.002	111442	0.2500	0.2339	
2 2,4-diamino-6-nitrotoluene	1	4.912	4.913	-0.001	66559	0.2500	0.2313	
5 2,4,6-Trinitrophenol	1	5.558	5.587	-0.029	40914	0.2500	0.2486	
6 HMX	1	6.932	6.947	-0.015	45105	0.2500	0.2498	
8 RDX	1	9.098	9.120	-0.022	55970	0.2500	0.2544	
9 Nitrobenzene	1	12.105	12.113	-0.008	91951	0.2510	0.2298	
$ 10 1,2-Dinitrobenzene	1	13.012	13.033	-0.021	71926	0.2500	0.2520	
11 3,5-Dinitroaniline	1	14.825	14.853	-0.028	130425	0.2500	0.2401	
12 1,3-Dinitrobenzene	1	15.538	15.553	-0.015	167223	0.2505	0.2509	
13 Nitroglycerin	2	15.792	15.813	-0.021	369988	2.50	2.52	
14 o-Nitrotoluene	1	16.565	16.580	-0.015	53607	0.2500	0.2286	
15 p-Nitrotoluene	1	16.838	16.853	-0.015	53117	0.2505	0.2378	
16 4-Amino-2,6-dinitrotoluene	1	17.138	17.160	-0.022	83522	0.2503	0.2530	
17 m-Nitrotoluene	1	17.772	17.787	-0.015	50083	0.2503	0.2147	
18 2-Amino-4,6-dinitrotoluene	1	17.985	18.013	-0.028	127909	0.2510	0.2605	
19 1,3,5-Trinitrobenzene	1	18.885	18.907	-0.022	118994	0.2505	0.2502	
20 2,6-Dinitrotoluene	1	19.832	19.853	-0.021	73189	0.2510	0.2524	
21 2,4-Dinitrotoluene	1	20.298	20.320	-0.022	155420	0.2510	0.2522	
22 Tetryl	1	23.558	23.580	-0.022	91265	0.2505	0.2524	
23 2,4,6-Trinitrotoluene	1	24.692	24.713	-0.021	104447	0.2510	0.2524	
24 PETN	2	25.278	25.293	-0.015	346457	2.50	2.36	

Reagents:

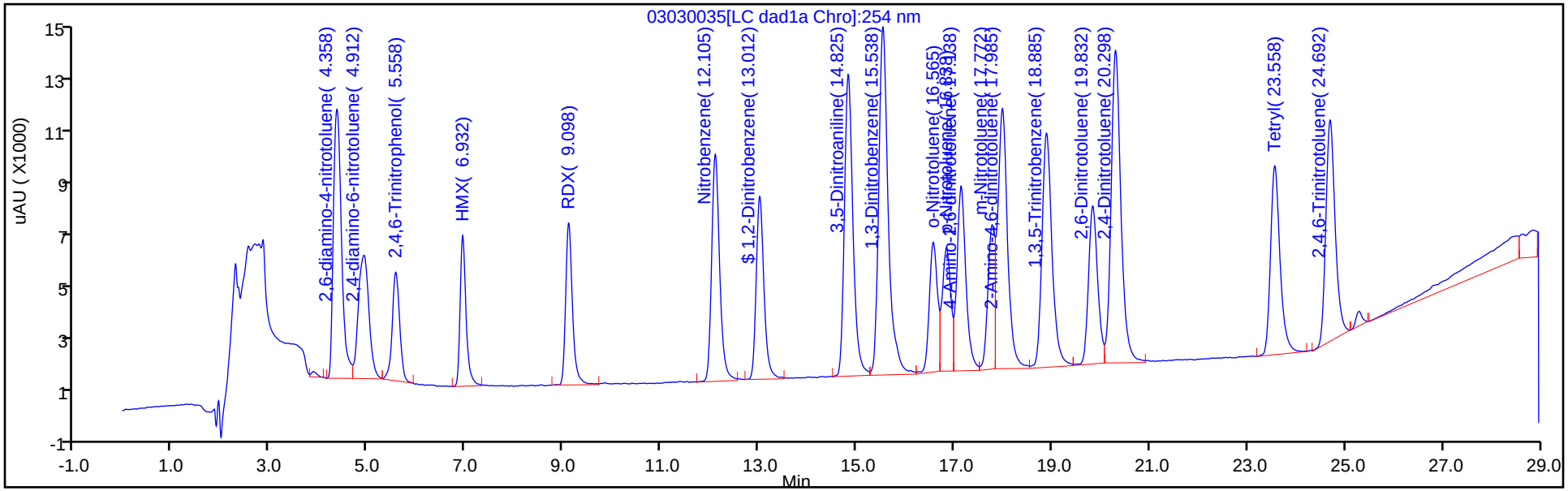
8330IntermStk_00061 Amount Added: 25.00 Units: uL
8330_ADDs_00023 Amount Added: 12.50 Units: uL

Report Date: 05-Mar-2020 11:48:32 Chrom Revision: 2.3 19-Feb-2020 16:45:46

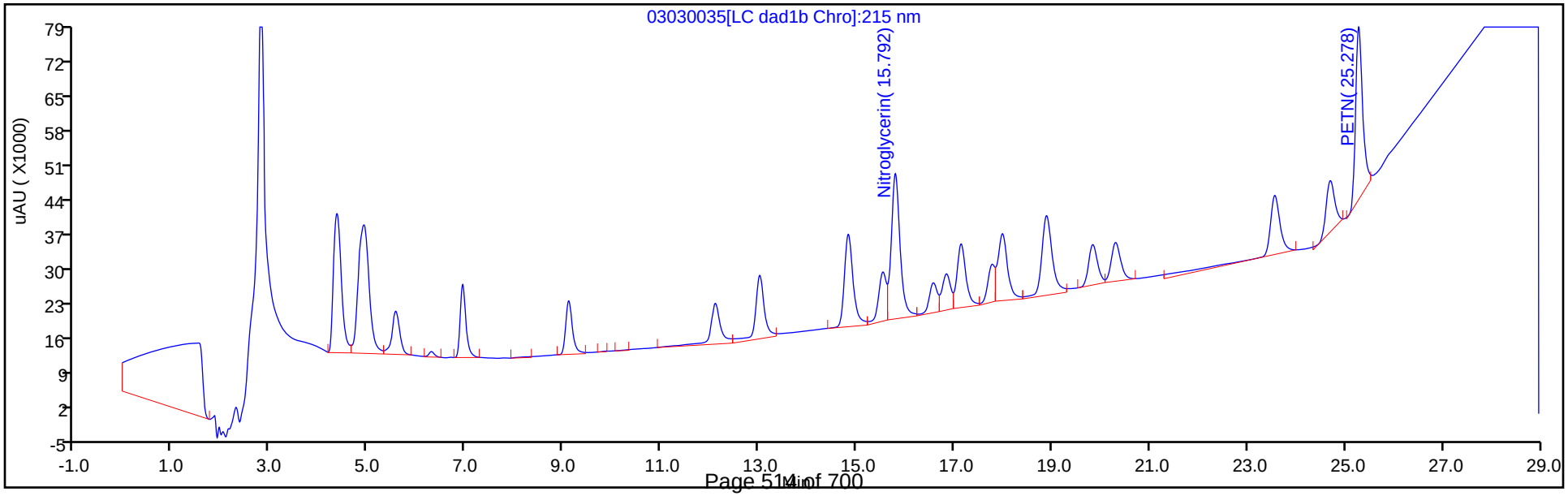
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\g2_luna\20200303-89749.b\03030035.d				
Injection Date:	04-Mar-2020 10:21:05	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	CCV			Worklist Smp#:	35
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 Peak: 1



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



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Lab Sample ID: CCV 280-487545/36 Calibration Date: 03/04/2020 10:56

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 03/03/2020 23:16

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 03/04/2020 03:21

Lab File ID: 03030036.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	454578	425562		234	250	-6.4	15.0
DNX	Ave	327828	312444		239	250	-4.7	15.0
MNX	Ave	305766	294817		281	292	-3.6	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Lab Sample ID: CCV 280-487545/36 Calibration Date: 03/04/2020 10:56

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 03/03/2020 23:16

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 03/04/2020 03:21

Lab File ID: 03030036.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.41	5.25	5.55
DNX	6.21	6.05	6.35
MNX	7.72	7.56	7.86

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030036.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	04-Mar-2020 10:56:07	ALS Bottle#:	20	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0089749-036				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub13				
Method:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2020 11:48:34	Calib Date:	04-Mar-2020 03:21:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030023.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0319				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.412	5.400	0.012	106497	0.2503	0.2343	
4 DNX	1	6.212	6.200	0.012	78189	0.2503	0.2385	
7 MNX	1	7.718	7.707	0.011	86013	0.2918	0.2813	

Reagents:

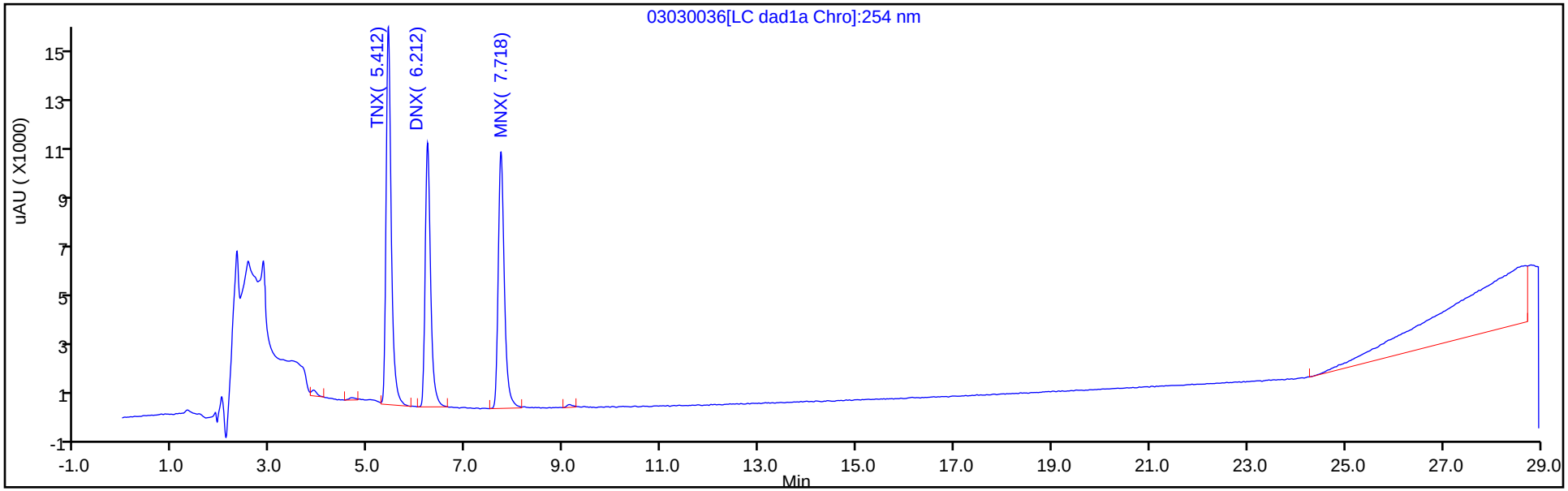
8330 DMT_00005 Amount Added: 12.50 Units: uL

Report Date: 05-Mar-2020 11:48:34 Chrom Revision: 2.3 19-Feb-2020 16:45:46

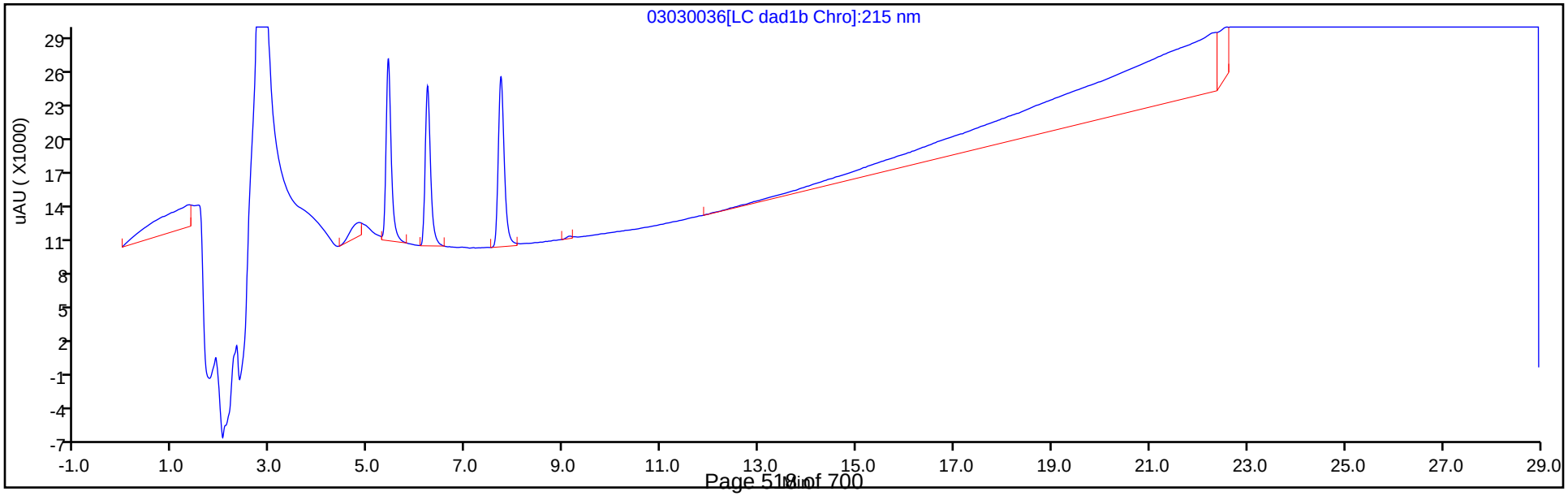
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\g2_luna\20200303-89749.b\03030036.d				
Injection Date:	04-Mar-2020 10:56:07	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	CCV DMT			Worklist Smp#:	36
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 Peak: 1



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



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Lab Sample ID: CCV 280-488169/7 Calibration Date: 03/09/2020 16:38

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 03/03/2020 18:01

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 03/03/2020 22:06

Lab File ID: 03090007.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Picric acid	Lin2		157488		239	250	-4.4	15.0
HMX	Lin2		176332		244	250	-2.4	15.0
RDX	Lin2		217676		247	250	-1.2	15.0
Nitrobenzene	Lin2		411219		259	251	3.3	15.0
1,3-Dinitrobenzene	Lin2		669230		252	251	0.4	15.0
Nitroglycerin	Lin2		153760		2620	2500	4.8	15.0
2-Nitrotoluene	Lin2		232852		249	250	-0.4	15.0
4-Nitrotoluene	Lin2		213194		239	251	-4.5	15.0
4-Amino-2,6-dinitrotoluene	Lin2		361830		275	250	9.9	15.0
3-Nitrotoluene	Lin2		203512		218	250	-12.7	15.0
2-Amino-4,6-dinitrotoluene	Qua		544892		279	251	11.0	15.0
1,3,5-Trinitrobenzene	Lin2		475517		250	251	-0.0	15.0
2,6-Dinitrotoluene	Lin2		281853		244	251	-2.9	15.0
2,4-Dinitrotoluene	Lin2		623191		254	251	1.2	15.0
Tetryl	Lin2		366052		254	251	1.3	15.0
2,4,6-Trinitrotoluene	Lin2		401299		243	251	-3.1	15.0
PETN	Lin1		126390		2140	2500	-14.3	15.0
1,2-Dinitrobenzene	Lin2		283992		249	250	-0.6	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Lab Sample ID: CCV 280-488169/7 Calibration Date: 03/09/2020 16:38

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 03/03/2020 18:01

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 03/03/2020 22:06

Lab File ID: 03090007.D

Analyte	RT	RT WINDOW	
		FROM	TO
Picric acid	5.42	5.37	5.67
HMX	6.80	6.75	7.05
RDX	8.94	8.91	9.21
Nitrobenzene	11.93	11.91	12.21
1,3-Dinitrobenzene	15.33	15.33	15.63
Nitroglycerin	15.58	15.57	15.87
2-Nitrotoluene	16.36	16.36	16.66
4-Nitrotoluene	16.62	16.62	16.92
4-Amino-2,6-dinitrotoluene	16.89	16.92	17.22
3-Nitrotoluene	17.60	17.64	17.94
2-Amino-4,6-dinitrotoluene	17.72	17.77	18.07
1,3,5-Trinitrobenzene	18.66	18.67	18.97
2,6-Dinitrotoluene	19.59	19.63	19.93
2,4-Dinitrotoluene	20.06	20.09	20.39
Tetryl	23.30	23.35	23.65
2,4,6-Trinitrotoluene	24.46	24.49	24.79
PETN	25.12	25.09	25.39
1,2-Dinitrobenzene	12.82	12.81	13.11

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20200309-89910.b\03090007.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 09-Mar-2020 16:38:25 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0089910-007
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromna\Denver\ChromData\G2_LUNA\20200309-89910.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 12-Mar-2020 15:31:35 Calib Date: 04-Mar-2020 03:21:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030023.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0315

First Level Reviewer: beckerc Date: 10-Mar-2020 12:57:25

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	4.304	4.344	-0.040	116690	0.2500	0.2449	
2 2,4-diamino-6-nitrotoluene	1	4.831	4.891	-0.060	71007	0.2500	0.2467	
5 2,4,6-Trinitrophenol	1	5.424	5.524	-0.100	39372	0.2500	0.2389	
6 HMX	1	6.804	6.898	-0.094	44083	0.2500	0.2439	
8 RDX	1	8.944	9.058	-0.114	54419	0.2500	0.2470	
9 Nitrobenzene	1	11.931	12.058	-0.127	103216	0.2510	0.2592	
$ 10 1,2-Dinitrobenzene	1	12.818	12.964	-0.146	70998	0.2500	0.2486	
11 3,5-Dinitroaniline	1	14.611	14.778	-0.167	135580	0.2500	0.2496	
12 1,3-Dinitrobenzene	1	15.331	15.484	-0.153	167642	0.2505	0.2515	
13 Nitroglycerin	2	15.584	15.724	-0.140	384401	2.50	2.62	M
14 o-Nitrotoluene	1	16.364	16.511	-0.147	58213	0.2500	0.2490	
15 p-Nitrotoluene	1	16.624	16.771	-0.147	53405	0.2505	0.2392	
16 4-Amino-2,6-dinitrotoluene	1	16.891	17.071	-0.180	90548	0.2503	0.2751	
17 m-Nitrotoluene	1	17.604	17.791	-0.187	50929	0.2503	0.2185	M
18 2-Amino-4,6-dinitrotoluene	1	17.724	17.918	-0.194	136768	0.2510	0.2787	M
19 1,3,5-Trinitrobenzene	1	18.658	18.824	-0.166	119117	0.2505	0.2504	
20 2,6-Dinitrotoluene	1	19.591	19.778	-0.187	70745	0.2510	0.2437	
21 2,4-Dinitrotoluene	1	20.064	20.244	-0.180	156421	0.2510	0.2539	
22 Tetryl	1	23.304	23.498	-0.194	91696	0.2505	0.2537	
23 2,4,6-Trinitrotoluene	1	24.464	24.638	-0.174	100726	0.2510	0.2431	
24 PETN	2	25.124	25.238	-0.114	315975	2.50	2.14	M

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

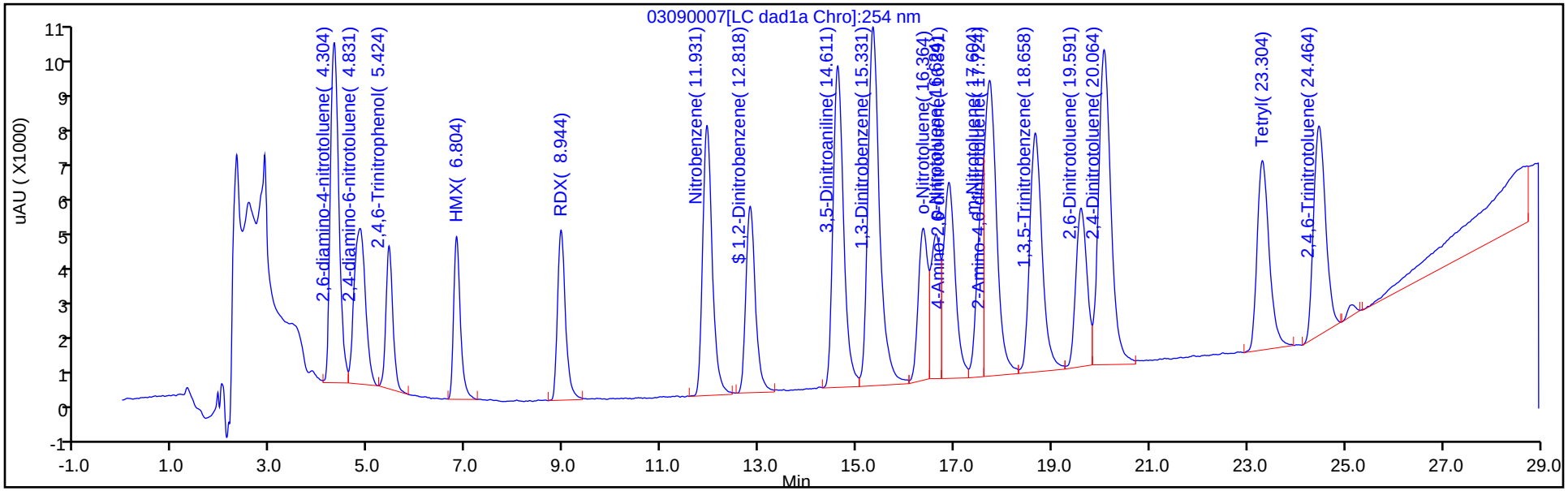
8330IntermStk_00061	Amount Added:	25.00	Units: uL
8330_ADDs_00023	Amount Added:	12.50	Units: uL

Report Date: 12-Mar-2020 15:31:35 Chrom Revision: 2.3 19-Feb-2020 16:45:46

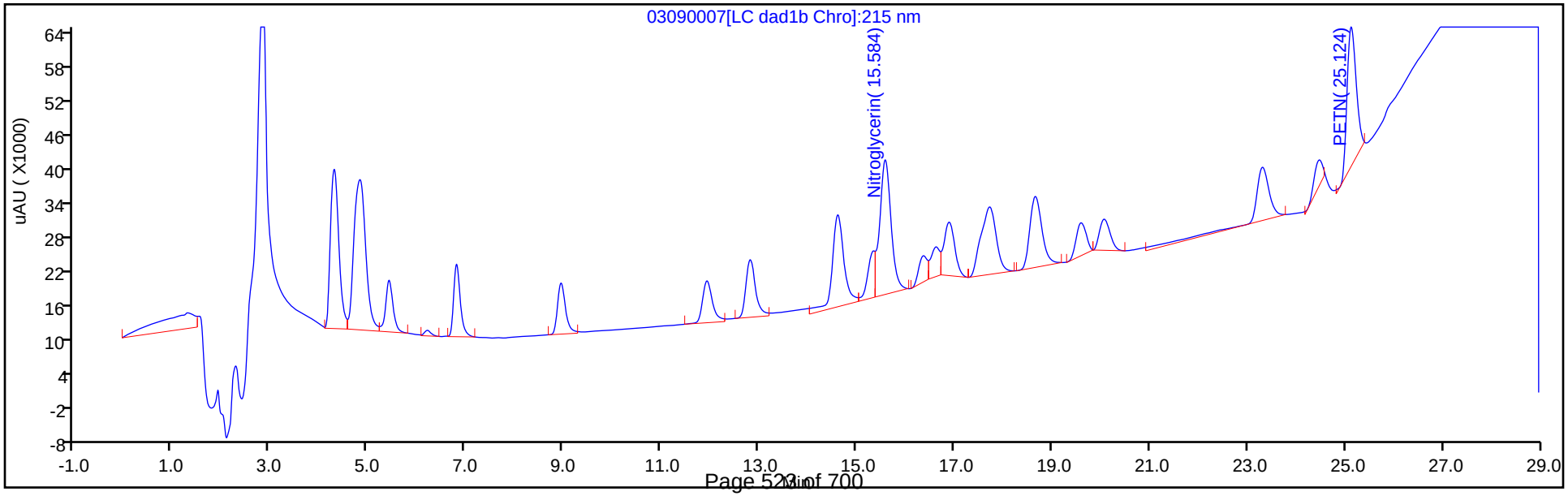
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\g2_luna\20200309-89910.b\03090007.d				
Injection Date:	09-Mar-2020 16:38:25	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	CCV			Worklist Smp#:	7
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 Peak: 1



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

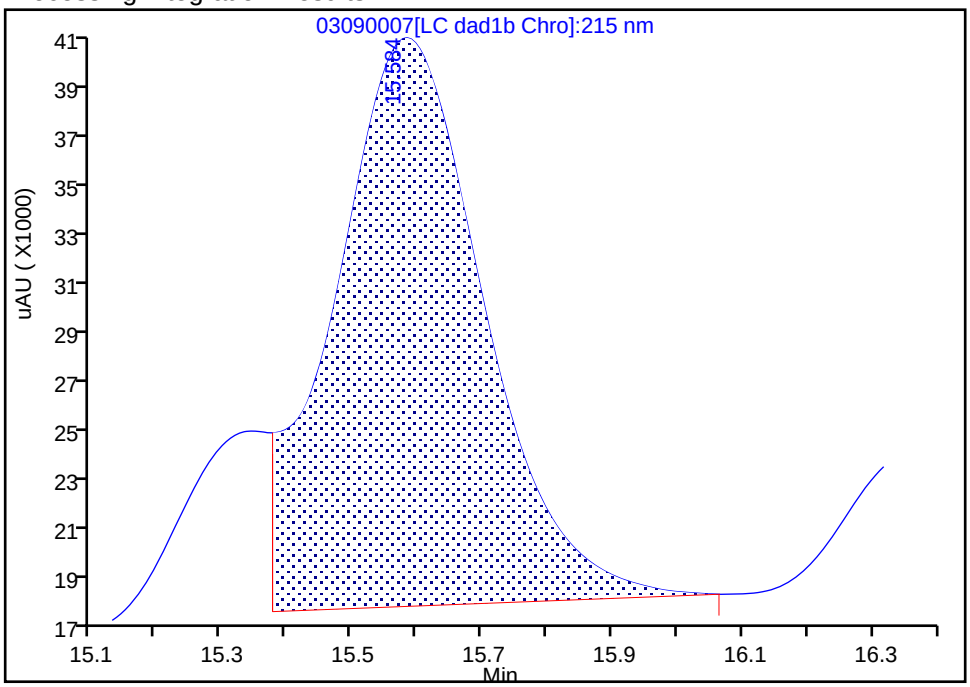
Data File:	\\chromna\denver\chromdata\g2_luna\20200309-89910.b\03090007.d				
Injection Date:	09-Mar-2020 16:38:25	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:		Detector	LC DAD1B, 215 nm		

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

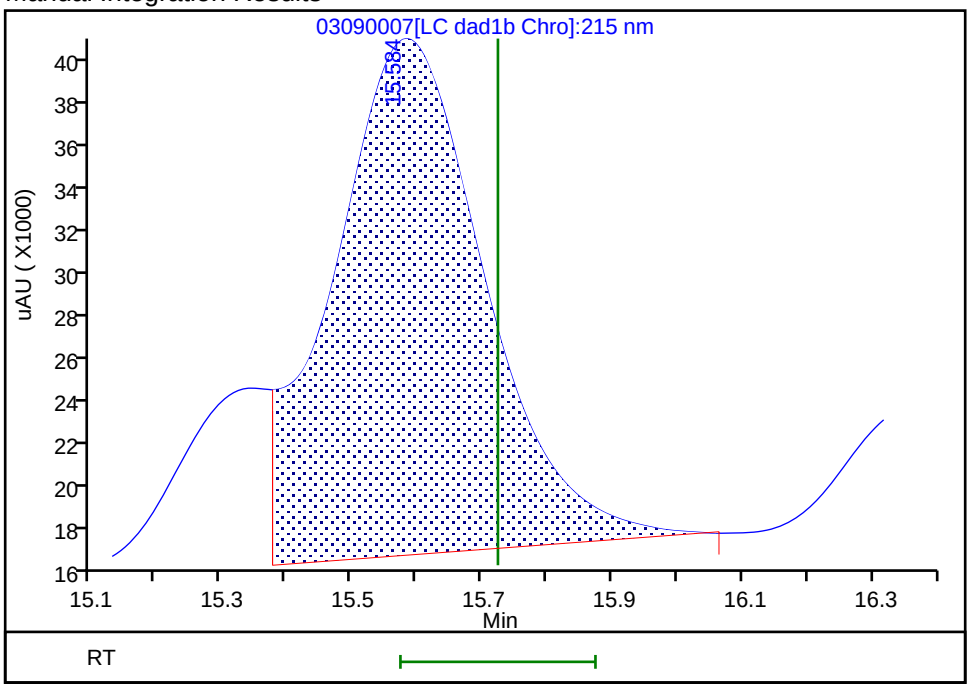
Processing Integration Results

RT: 15.58
Area: 370125
Amount: 2.518255
Amount Units: ug/ml



Manual Integration Results

RT: 15.58
Area: 384401
Amount: 2.620455
Amount Units: ug/ml



Reviewer: beckerc, 12-Mar-2020 15:01:42
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

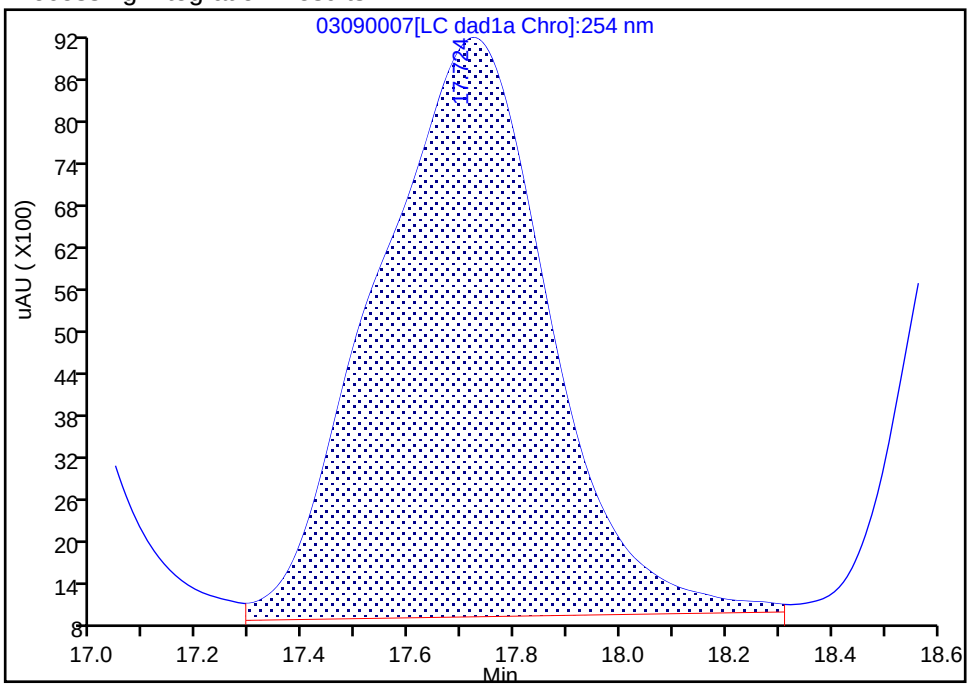
Data File:	\\chromna\denver\chromdata\g2_luna\20200309-89910.b\03090007.d				
Injection Date:	09-Mar-2020 16:38:25	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit 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

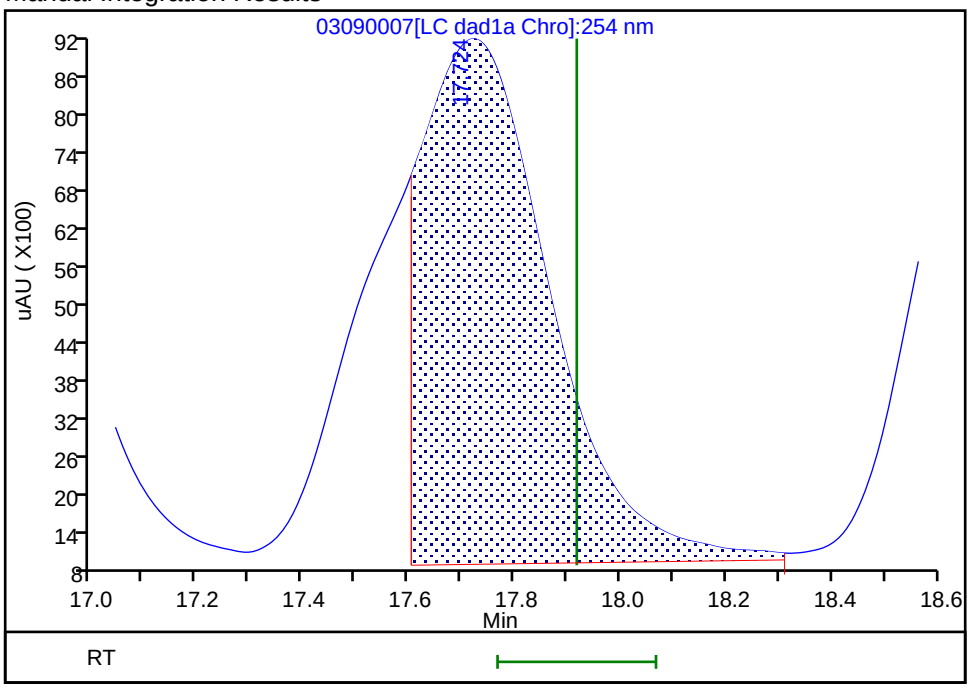
Processing Integration Results

RT: 17.72
Area: 187671
Amount: 0.382063
Amount Units: ug/ml



Manual Integration Results

RT: 17.72
Area: 136768
Amount: 0.278695
Amount Units: ug/ml



Reviewer: beckerc, 12-Mar-2020 14:58:45

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

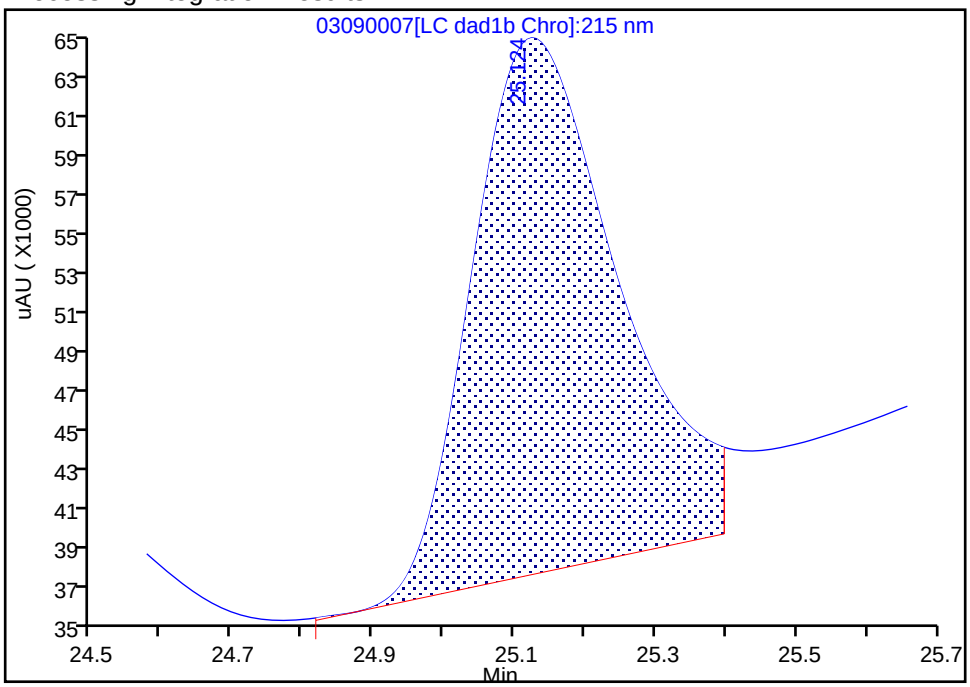
Data File:	\\chromna\denver\chromdata\g2_luna\20200309-89910.b\03090007.d				
Injection Date:	09-Mar-2020 16:38:25	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:		Detector	LC DAD1B, 215 nm		

24 PETN, CAS: 78-11-5

Signal: 1

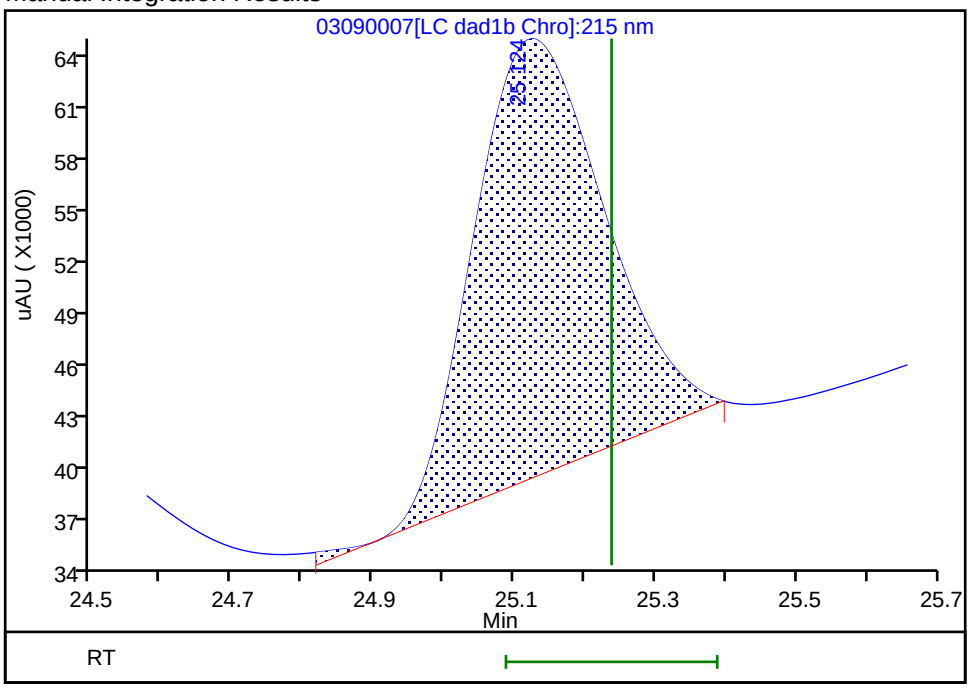
Processing Integration Results

RT: 25.12
Area: 380564
Amount: 2.596147
Amount Units: ug/ml



Manual Integration Results

RT: 25.12
Area: 315975
Amount: 2.141736
Amount Units: ug/ml



Reviewer: beckerc, 12-Mar-2020 15:01:53

Audit Action: Assigned New Baseline Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Lab Sample ID: CCV 280-488169/8 Calibration Date: 03/09/2020 17:13

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 03/03/2020 23:16

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 03/04/2020 03:21

Lab File ID: 03090008.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	454578	482374		266	250	6.1	15.0
DNX	Ave	327828	338669		259	250	3.3	15.0
MNX	Ave	305766	312720		298	292	2.3	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Lab Sample ID: CCV 280-488169/8 Calibration Date: 03/09/2020 17:13

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 03/03/2020 23:16

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 03/04/2020 03:21

Lab File ID: 03090008.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.36	5.25	5.55
DNX	6.15	6.05	6.35
MNX	7.63	7.56	7.86

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20200309-89910.b\03090008.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	09-Mar-2020 17:13:27	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0089910-008				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub13				
Method:	\\chromna\Denver\ChromData\G2_LUNA\20200309-89910.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	12-Mar-2020 15:31:39	Calib Date:	04-Mar-2020 03:21:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030023.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0315				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.363	5.400	-0.037	120714	0.2503	0.2656	
4 DNX	1	6.149	6.200	-0.051	84752	0.2503	0.2585	
7 MNX	1	7.629	7.707	-0.078	91236	0.2918	0.2984	

Reagents:

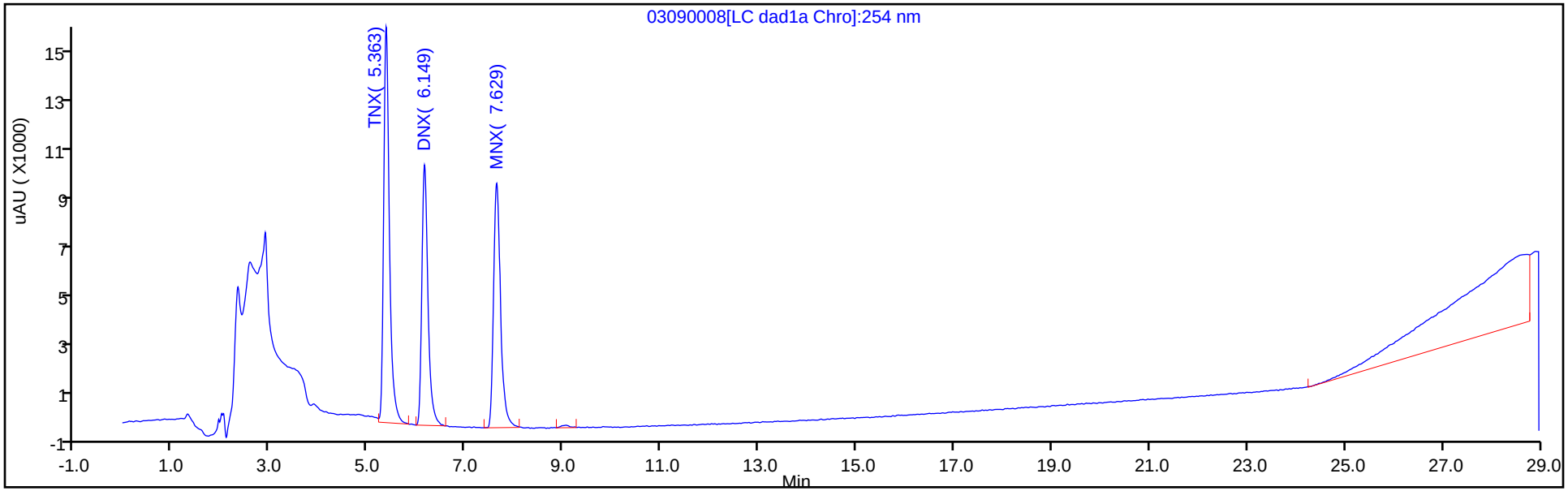
8330 DMT_00005 Amount Added: 12.50 Units: uL

Report Date: 12-Mar-2020 15:31:39 Chrom Revision: 2.3 19-Feb-2020 16:45:46

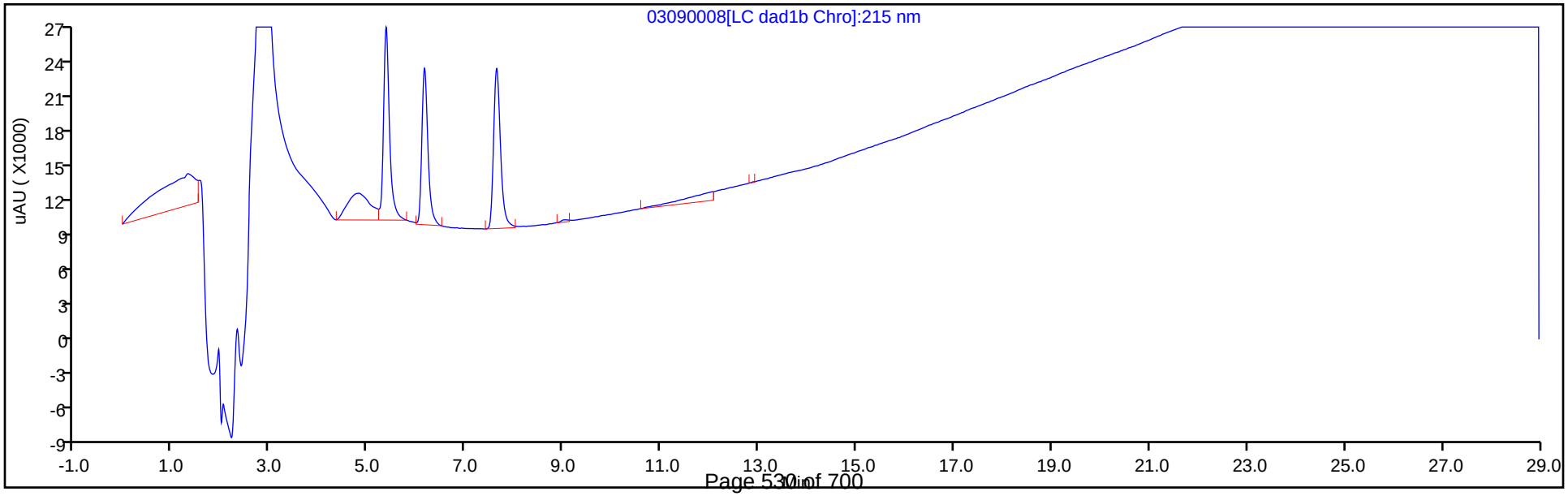
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\g2_luna\20200309-89910.b\03090008.d				
Injection Date:	09-Mar-2020 17:13:27	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	CCV DMT			Worklist Smp#:	8
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 Peak: 1



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



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Lab Sample ID: CCV 280-488169/19 Calibration Date: 03/09/2020 23:38

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 03/03/2020 18:01

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 03/03/2020 22:06

Lab File ID: 03090019.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Picric acid	Lin2		171716		261	250	4.5	15.0
HMX	Lin2		180528		250	250	-0.0	15.0
RDX	Lin2		222784		253	250	1.2	15.0
Nitrobenzene	Lin2		407410		257	251	2.3	15.0
1,3-Dinitrobenzene	Lin2		666914		251	251	0.0	15.0
Nitroglycerin	Lin2		151481		2580	2500	3.2	15.0
2-Nitrotoluene	Lin2		228528		244	250	-2.3	15.0
4-Nitrotoluene	Lin2		220068		247	251	-1.3	15.0
4-Amino-2,6-dinitrotoluene	Lin2		352324		268	250	6.9	15.0
3-Nitrotoluene	Lin2		232683		251	250	0.3	15.0
2-Amino-4,6-dinitrotoluene	Qua		508968		260	251	3.7	15.0
1,3,5-Trinitrobenzene	Lin2		470036		247	251	-1.2	15.0
2,6-Dinitrotoluene	Lin2		279932		242	251	-3.6	15.0
2,4-Dinitrotoluene	Lin2		614833		250	251	-0.2	15.0
Tetryl	Lin2		363597		252	251	0.6	15.0
2,4,6-Trinitrotoluene	Lin2		402773		244	251	-2.8	15.0
PETN	Lin1		133230		2260	2500	-9.5	15.0
1,2-Dinitrobenzene	Lin2		288976		253	250	1.3	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Lab Sample ID: CCV 280-488169/19 Calibration Date: 03/09/2020 23:38

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 03/03/2020 18:01

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 03/03/2020 22:06

Lab File ID: 03090019.D

Analyte	RT	RT WINDOW	
		FROM	TO
Picric acid	5.52	5.37	5.67
HMX	6.90	6.75	7.05
RDX	9.06	8.91	9.21
Nitrobenzene	12.06	11.91	12.21
1,3-Dinitrobenzene	15.48	15.33	15.63
Nitroglycerin	15.72	15.57	15.87
2-Nitrotoluene	16.51	16.36	16.66
4-Nitrotoluene	16.77	16.62	16.92
4-Amino-2,6-dinitrotoluene	17.07	16.92	17.22
3-Nitrotoluene	17.79	17.64	17.94
2-Amino-4,6-dinitrotoluene	17.92	17.77	18.07
1,3,5-Trinitrobenzene	18.82	18.67	18.97
2,6-Dinitrotoluene	19.78	19.63	19.93
2,4-Dinitrotoluene	20.24	20.09	20.39
Tetryl	23.50	23.35	23.65
2,4,6-Trinitrotoluene	24.64	24.49	24.79
PETN	25.24	25.09	25.39
1,2-Dinitrobenzene	12.96	12.81	13.11

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\G2_LUNA\20200309-89910.b\03090019.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 09-Mar-2020 23:38:00 ALS Bottle#: 7 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0089910-019
Operator ID: CB Instrument ID: CHHPLC_G2_LUNA
Sublist: chrom-G2_8330_Luna*sub6

Method: \\chromna\Denver\ChromData\G2_LUNA\20200309-89910.b\G2_8330_Luna.m
Limit Group: GCSV - 8330
Last Update: 12-Mar-2020 15:31:59 Calib Date: 04-Mar-2020 03:21:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030023.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC DAD1A, 254 nm
Process Host: CTX0315

First Level Reviewer: beckerc Date: 12-Mar-2020 15:17:12

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	4.344	4.344	0.000	117904	0.2500	0.2474	
2 2,4-diamino-6-nitrotoluene	1	4.891	4.891	0.000	76357	0.2500	0.2652	
5 2,4,6-Trinitrophenol	1	5.524	5.524	0.000	42929	0.2500	0.2613	
6 HMX	1	6.898	6.898	0.000	45132	0.2500	0.2499	
8 RDX	1	9.058	9.058	0.000	55696	0.2500	0.2531	
9 Nitrobenzene	1	12.058	12.058	0.000	102260	0.2510	0.2567	
$ 10 1,2-Dinitrobenzene	1	12.964	12.964	0.000	72244	0.2500	0.2532	
11 3,5-Dinitroaniline	1	14.778	14.778	0.000	135777	0.2500	0.2500	a
12 1,3-Dinitrobenzene	1	15.484	15.484	0.000	167062	0.2505	0.2506	a
13 Nitroglycerin	2	15.724	15.724	0.000	378703	2.50	2.58	M
14 o-Nitrotoluene	1	16.511	16.511	0.000	57132	0.2500	0.2443	a
15 p-Nitrotoluene	1	16.771	16.771	0.000	55127	0.2505	0.2472	a
16 4-Amino-2,6-dinitrotoluene	1	17.071	17.071	0.000	88169	0.2503	0.2676	a
17 m-Nitrotoluene	1	17.791	17.791	0.000	58229	0.2503	0.2510	M
18 2-Amino-4,6-dinitrotoluene	1	17.918	17.918	0.000	127751	0.2510	0.2602	Ma
19 1,3,5-Trinitrobenzene	1	18.824	18.824	0.000	117744	0.2505	0.2474	
20 2,6-Dinitrotoluene	1	19.778	19.778	0.000	70263	0.2510	0.2419	
21 2,4-Dinitrotoluene	1	20.244	20.244	0.000	154323	0.2510	0.2504	
22 Tetryl	1	23.498	23.498	0.000	91081	0.2505	0.2519	
23 2,4,6-Trinitrotoluene	1	24.638	24.638	0.000	101096	0.2510	0.2440	
24 PETN	2	25.238	25.238	0.000	333075	2.50	2.26	M

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

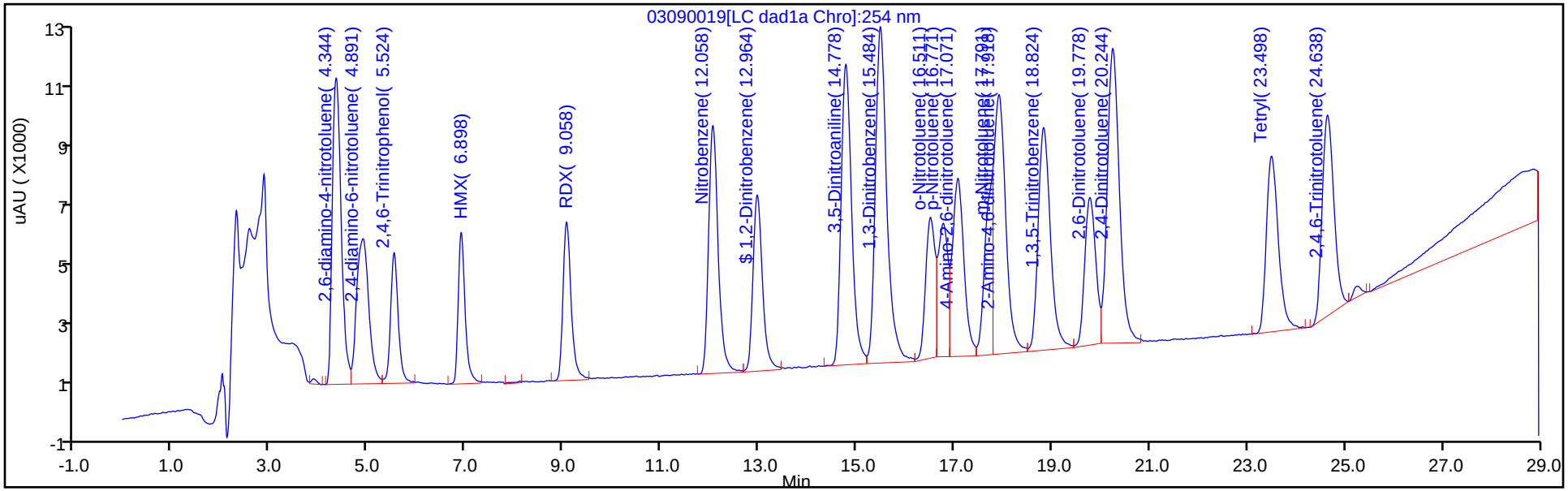
8330IntermStk_00061	Amount Added:	25.00	Units: uL
8330_ADDs_00023	Amount Added:	12.50	Units: uL

Report Date: 12-Mar-2020 15:31:59 Chrom Revision: 2.3 19-Feb-2020 16:45:46

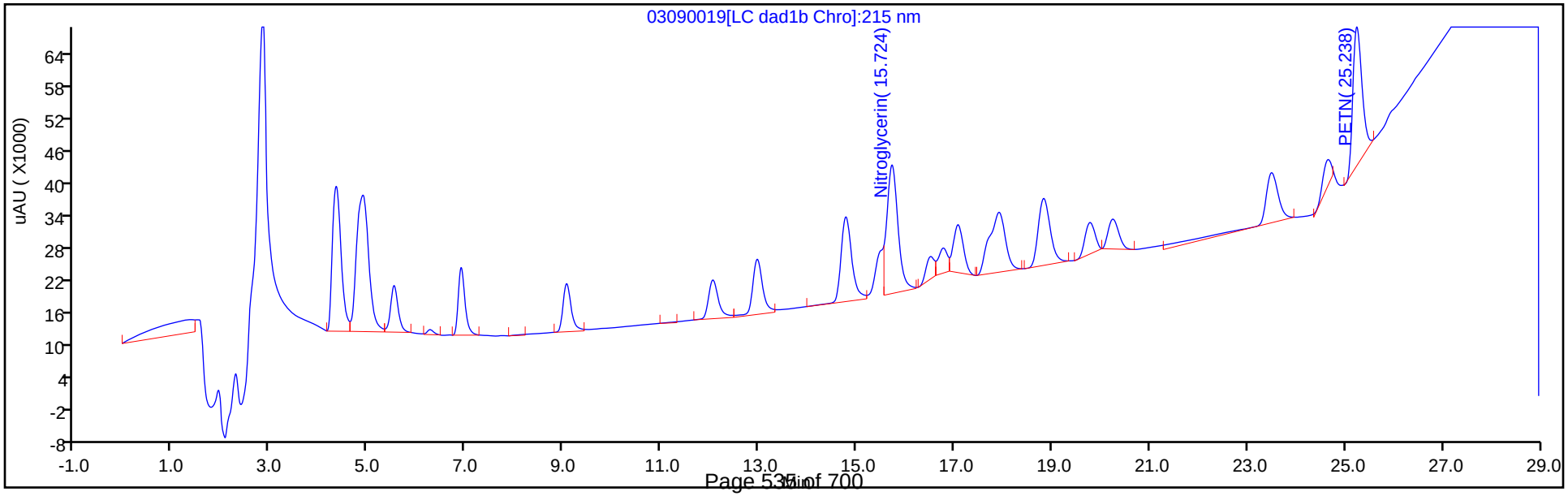
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\g2_luna\20200309-89910.b\03090019.d				
Injection Date:	09-Mar-2020 23:38:00	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	CCV			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 Peak: 1



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

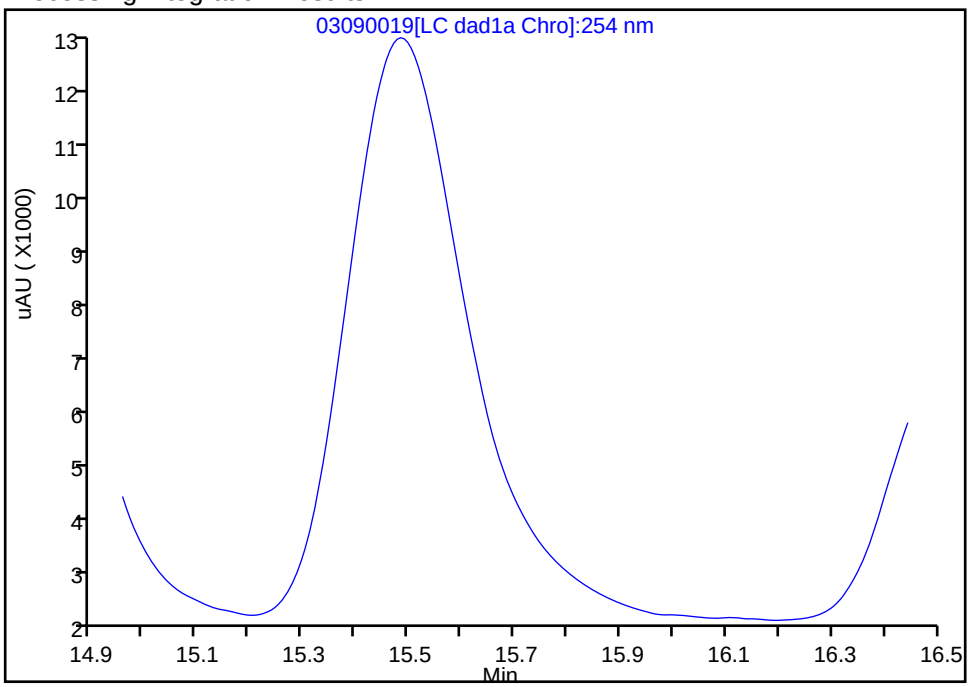
Data File:	\\chromna\denver\chromdata\g2_luna\20200309-89910.b\03090019.d				
Injection Date:	09-Mar-2020 23:38:00	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

Signal: 1

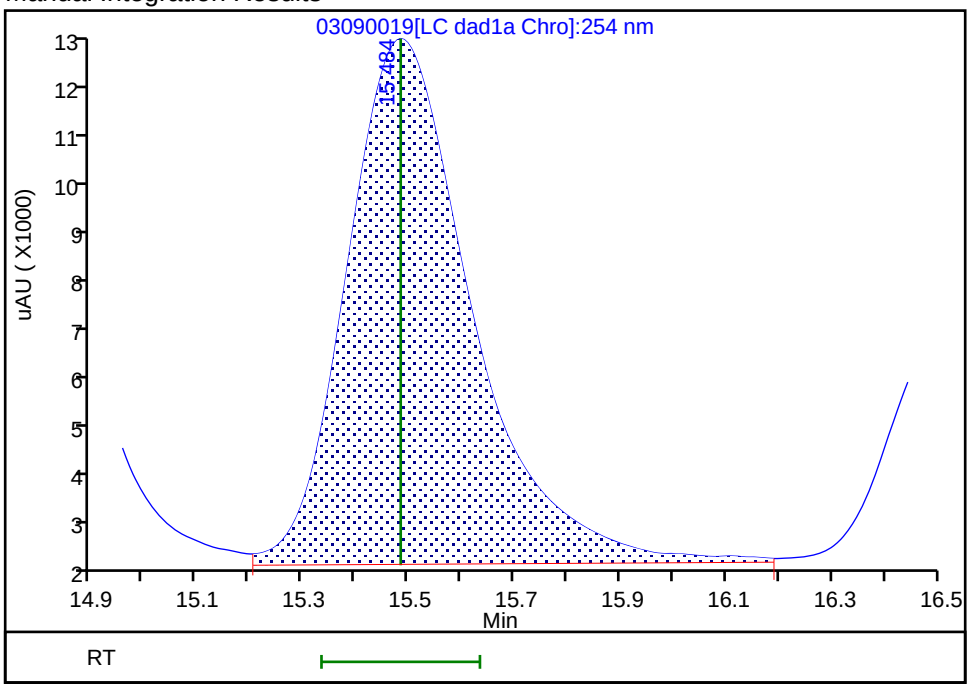
Not Detected
Expected RT: 15.48

Processing Integration Results



Manual Integration Results

RT: 15.48
Area: 167062
Amount: 0.250611
Amount Units: ug/ml



Reviewer: beckerc, 12-Mar-2020 15:16:45
Audit Action: Assigned Compound ID Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

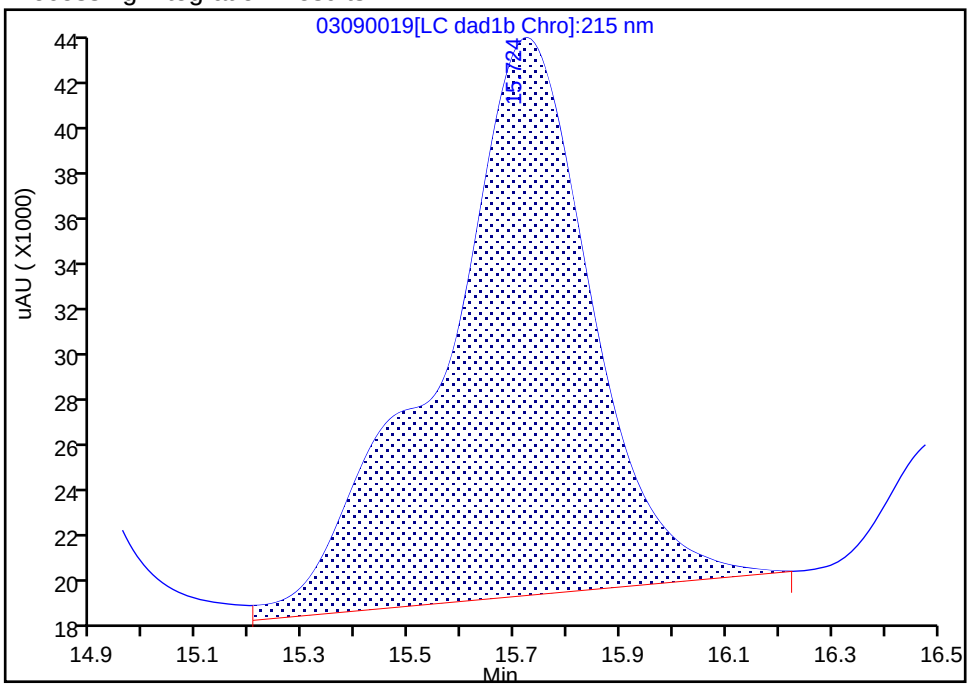
Data File:	\\chromna\denver\chromdata\g2_luna\20200309-89910.b\03090019.d				
Injection Date:	09-Mar-2020 23:38:00	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:		Detector	LC DAD1B, 215 nm		

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

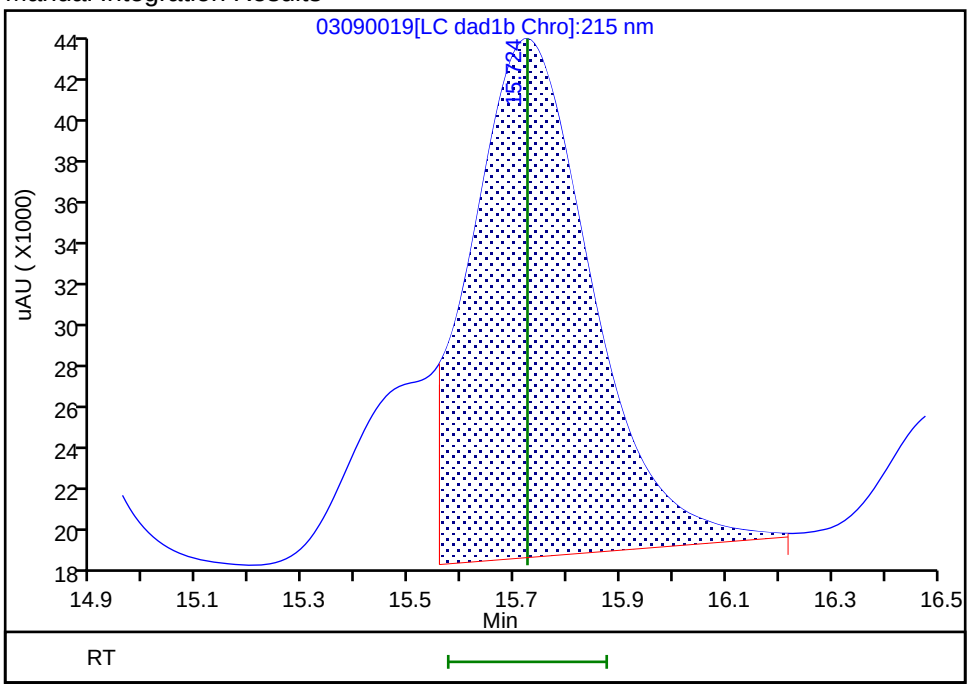
Processing Integration Results

RT: 15.72
Area: 473565
Amount: 3.258769
Amount Units: ug/ml



Manual Integration Results

RT: 15.72
Area: 378703
Amount: 2.579664
Amount Units: ug/ml



Reviewer: beckerc, 12-Mar-2020 15:16:13

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

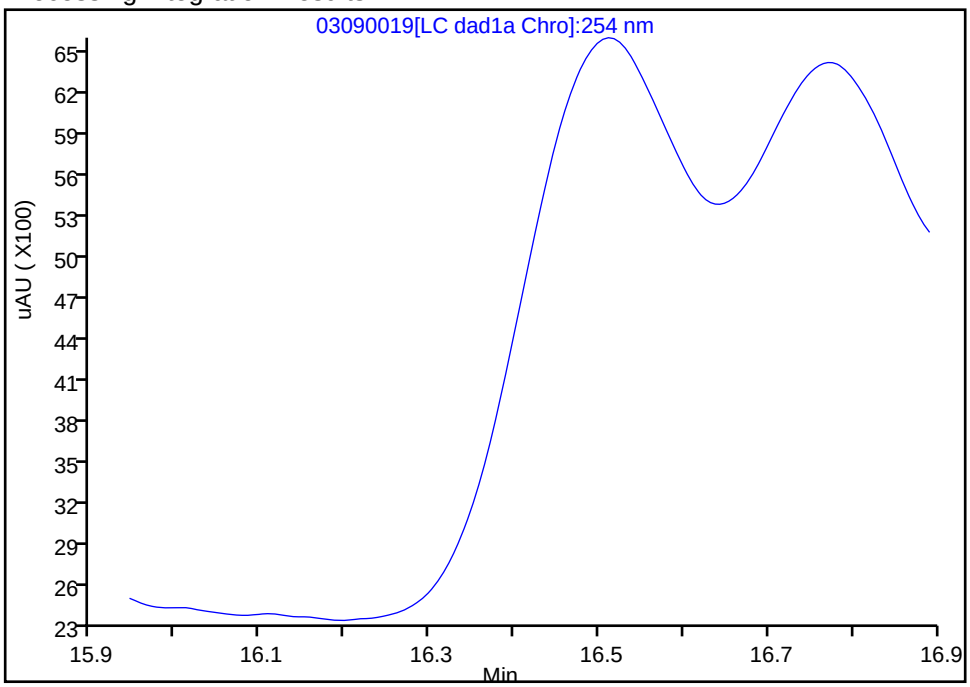
Data File:	\\chromna\denver\chromdata\g2_luna\20200309-89910.b\03090019.d				
Injection Date:	09-Mar-2020 23:38:00	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

Signal: 1

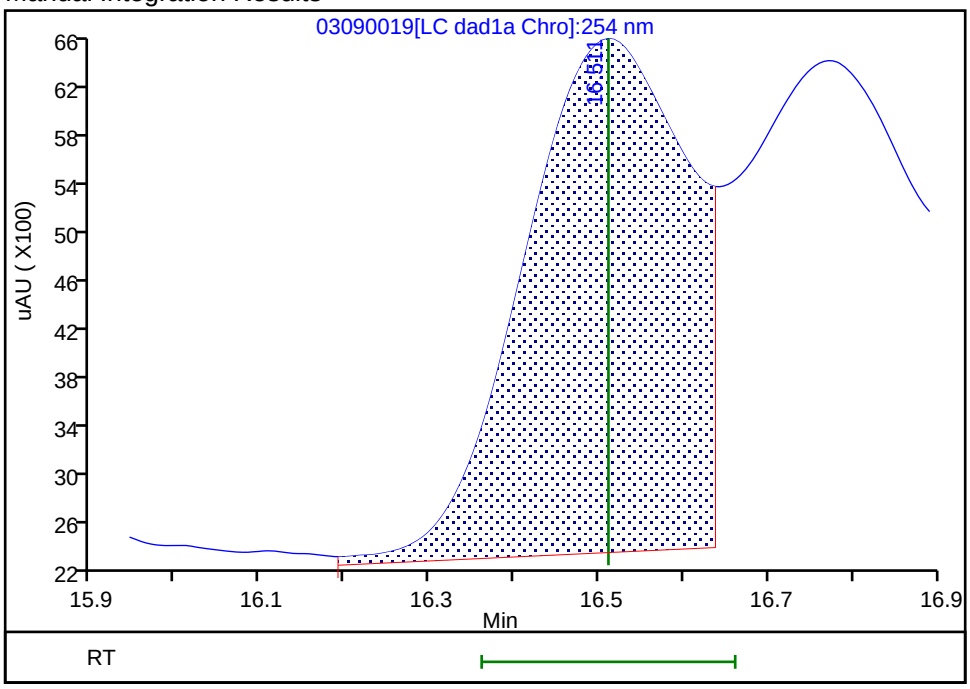
Not Detected
Expected RT: 16.51

Processing Integration Results



Manual Integration Results

RT:	16.51
Area:	57132
Amount:	0.244251
Amount Units:	ug/ml



Reviewer: beckerc, 12-Mar-2020 15:15:49
Audit Action: Assigned Compound ID Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

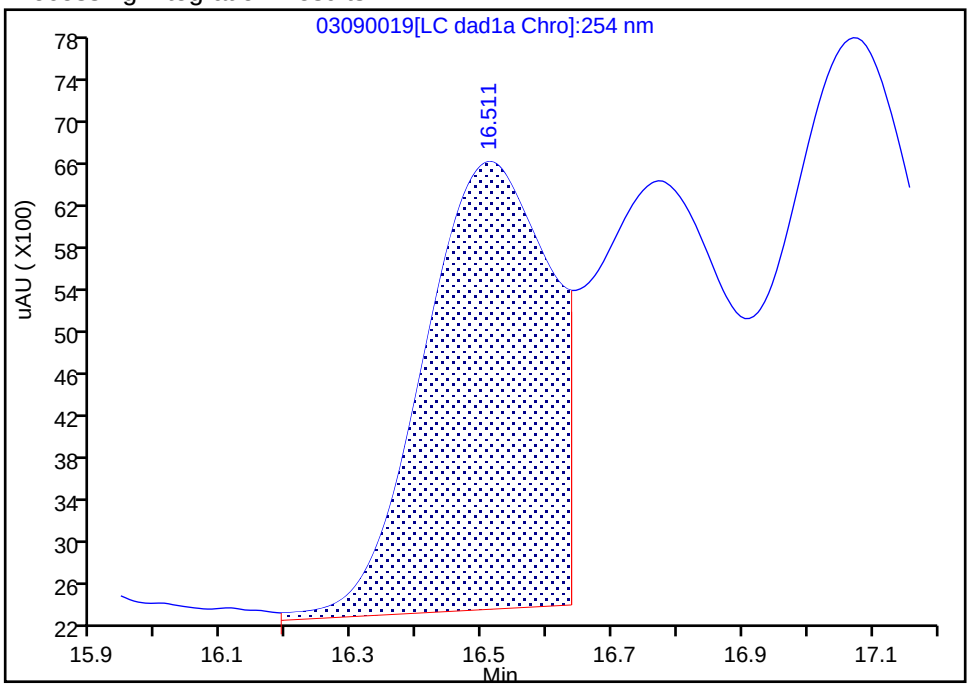
Data File:	\\chromna\denver\chromdata\g2_luna\20200309-89910.b\03090019.d				
Injection Date:	09-Mar-2020 23:38:00	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

Signal: 1

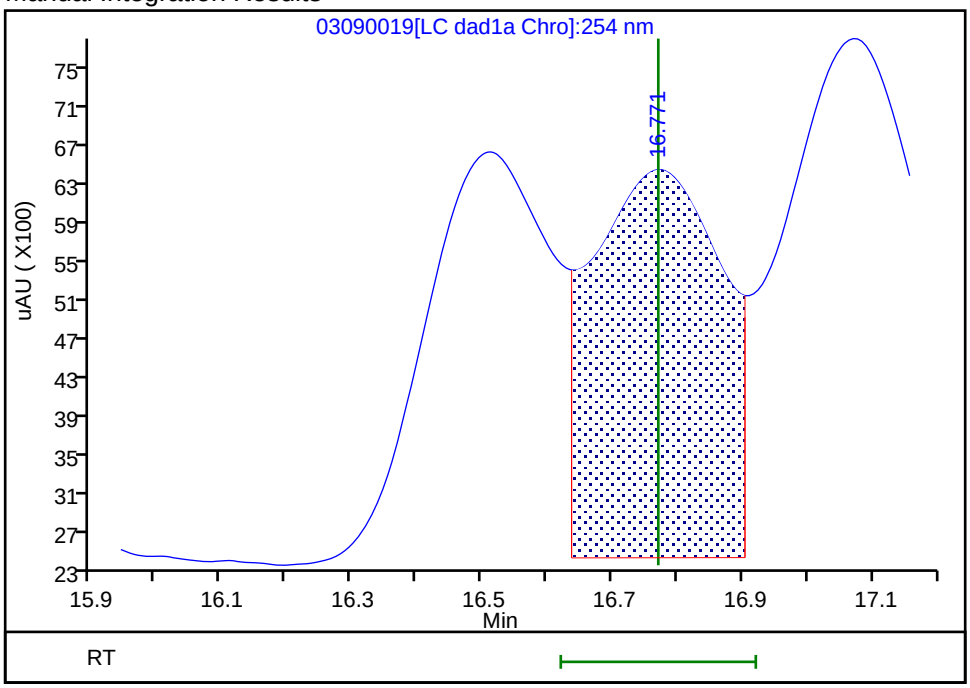
Processing Integration Results

RT: 16.51
Area: 57132
Amount: 0.256548
Amount Units: ug/ml



Manual Integration Results

RT: 16.77
Area: 55127
Amount: 0.247205
Amount Units: ug/ml



Reviewer: beckerc, 12-Mar-2020 15:15:55
Audit Action: Assigned Compound ID Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

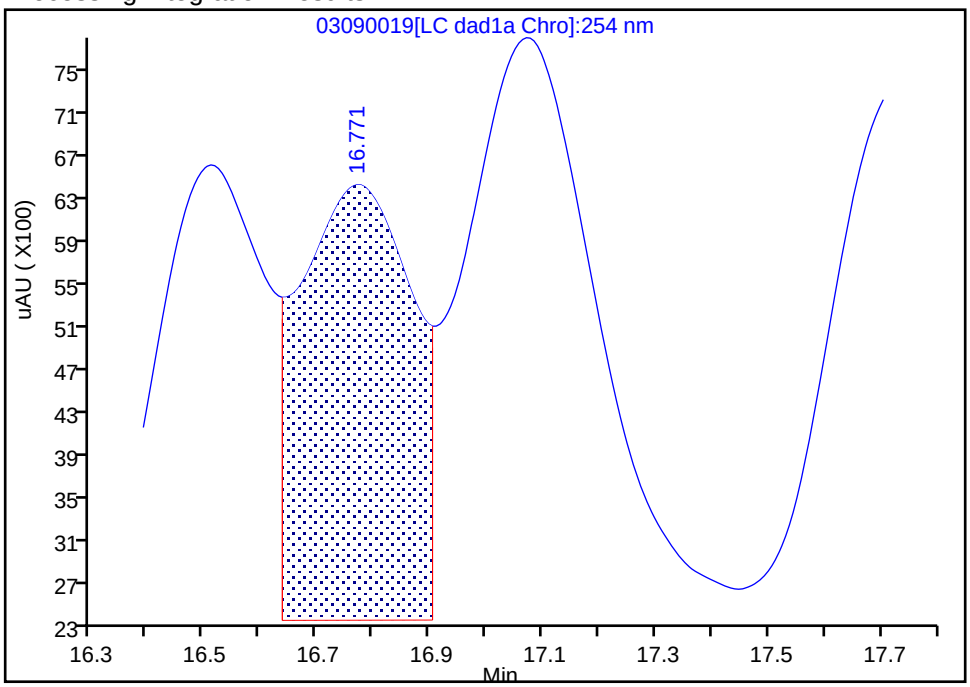
Data File:	\\chromna\denver\chromdata\g2_luna\20200309-89910.b\03090019.d				
Injection Date:	09-Mar-2020 23:38:00	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

Signal: 1

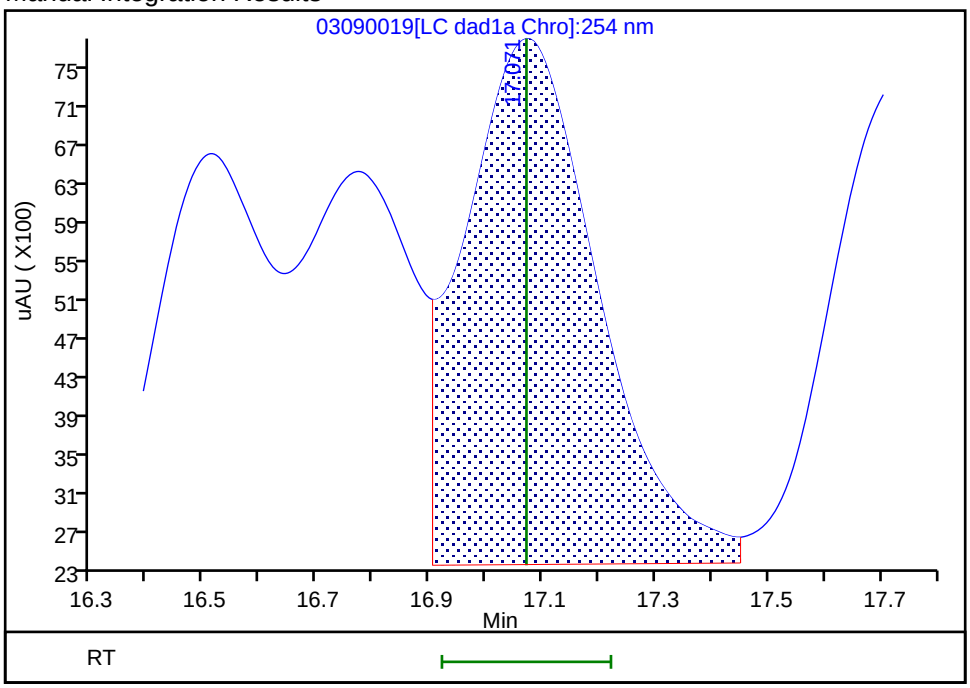
Processing Integration Results

RT: 16.77
Area: 55127
Amount: 0.163819
Amount Units: ug/ml



Manual Integration Results

RT: 17.07
Area: 88169
Amount: 0.267579
Amount Units: ug/ml



Reviewer: beckerc, 12-Mar-2020 15:16:02
Audit Action: Assigned Compound ID Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

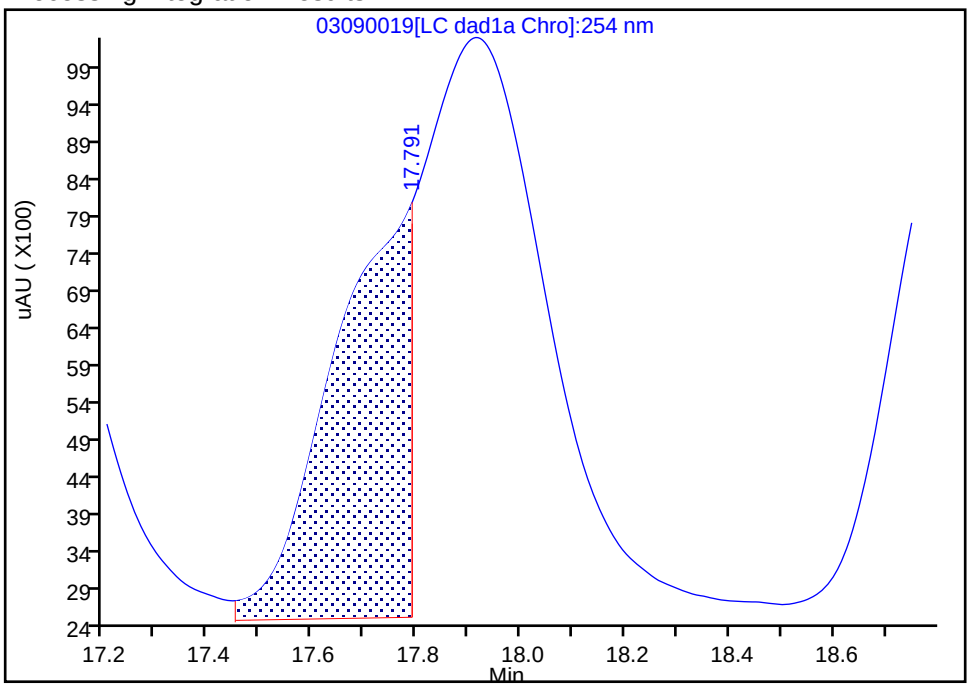
Data File:	\\chromna\denver\chromdata\g2_luna\20200309-89910.b\03090019.d				
Injection Date:	09-Mar-2020 23:38:00	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC DAD1A, 254 nm		

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

Signal: 1

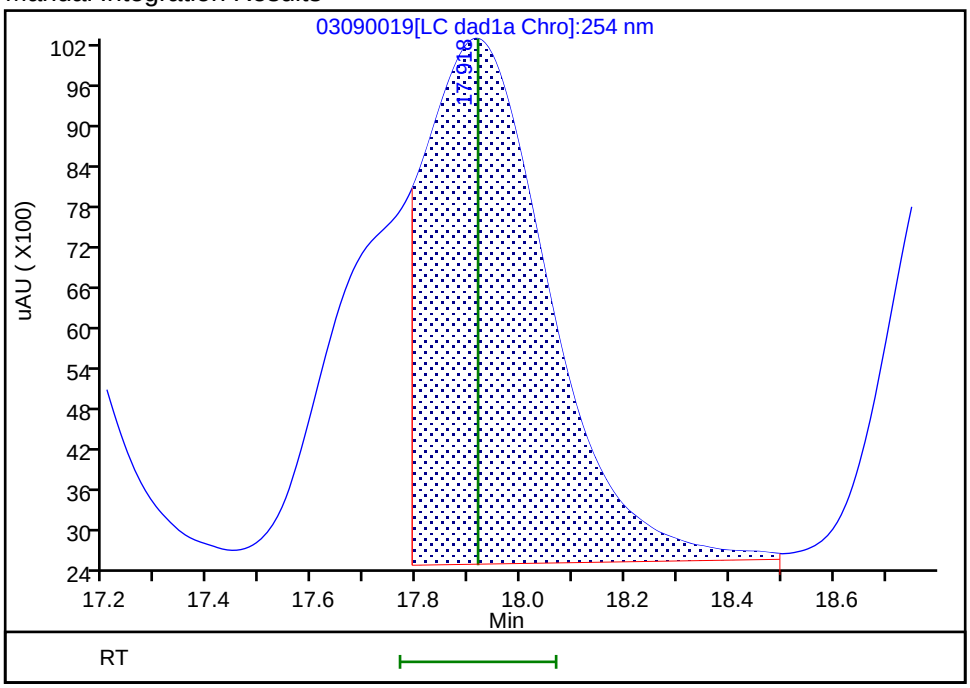
Processing Integration Results

RT: 17.79
Area: 58229
Amount: 0.115649
Amount Units: ug/ml



Manual Integration Results

RT: 17.92
Area: 127751
Amount: 0.260199
Amount Units: ug/ml



Reviewer: beckerc, 12-Mar-2020 15:15:31

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

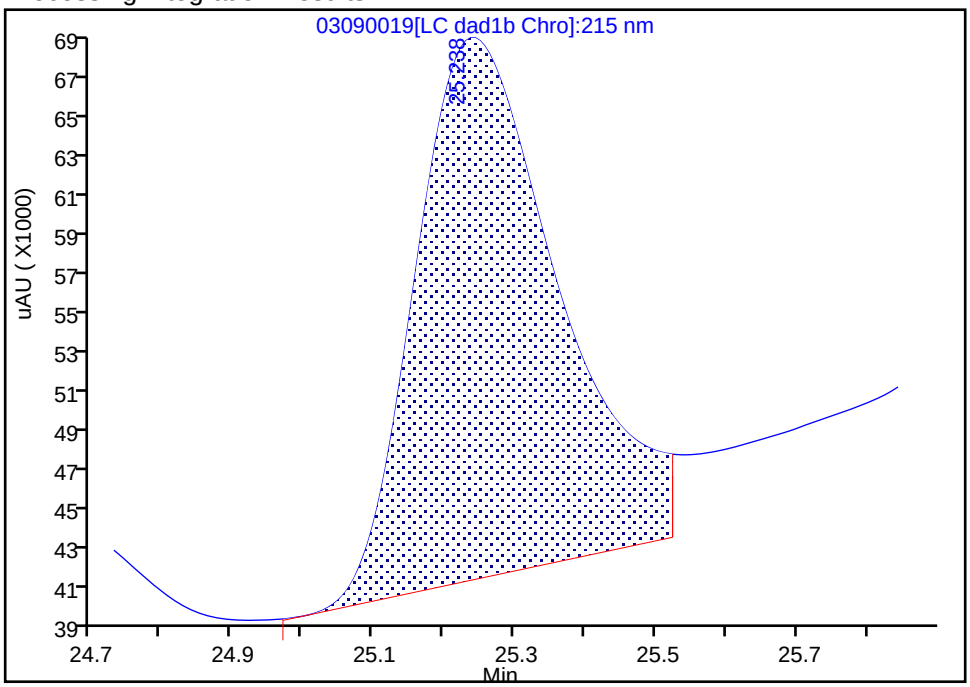
Data File:	\\chromna\denver\chromdata\g2_luna\20200309-89910.b\03090019.d				
Injection Date:	09-Mar-2020 23:38:00	Instrument ID:	CHHPLC_G2_LUNA		
Lims ID:	CCV				
Client ID:					
Operator ID:	CB	ALS Bottle#:	7	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	G2_8330_Luna	Limit Group:	GCSV - 8330		
Column:		Detector	LC DAD1B, 215 nm		

24 PETN, CAS: 78-11-5

Signal: 1

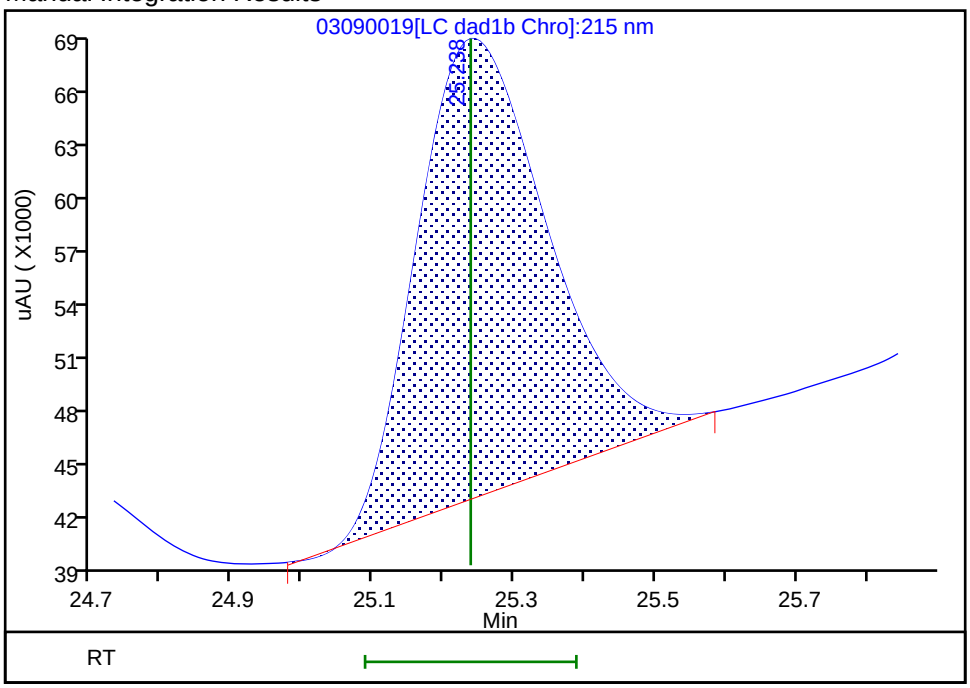
Processing Integration Results

RT: 25.24
Area: 387841
Amount: 2.647344
Amount Units: ug/ml



Manual Integration Results

RT: 25.24
Area: 333075
Amount: 2.262042
Amount Units: ug/ml



Reviewer: beckerc, 12-Mar-2020 15:16:59

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Lab Sample ID: CCV 280-488169/20 Calibration Date: 03/10/2020 00:12

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 03/03/2020 23:16

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 03/04/2020 03:21

Lab File ID: 03090020.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	454578	466529		257	250	2.6	15.0
DNX	Ave	327828	334653		255	250	2.1	15.0
MNX	Ave	305766	312288		298	292	2.1	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Lab Sample ID: CCV 280-488169/20 Calibration Date: 03/10/2020 00:12

Instrument ID: CHHPLC_G2_LUNA Calib Start Date: 03/03/2020 23:16

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 03/04/2020 03:21

Lab File ID: 03090020.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.38	5.25	5.55
DNX	6.17	6.05	6.35
MNX	7.66	7.56	7.86

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\G2_LUNA\20200309-89910.b\03090020.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	10-Mar-2020 00:12:58	ALS Bottle#:	8	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0089910-020				
Operator ID:	CB	Instrument ID:	CHHPLC_G2_LUNA		
Sublist:	chrom-G2_8330_Luna*sub13				
Method:	\\chromna\Denver\ChromData\G2_LUNA\20200309-89910.b\G2_8330_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	12-Mar-2020 15:32:02	Calib Date:	04-Mar-2020 03:21:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\G2_LUNA\20200303-89749.b\03030023.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC DAD1A, 254 nm		
Process Host:	CTX0315				

First Level Reviewer: beckerc Date: 12-Mar-2020 15:17:58

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.375	5.400	-0.025	116749	0.2503	0.2568	
4 DNX	1	6.168	6.200	-0.032	83747	0.2503	0.2555	
7 MNX	1	7.662	7.707	-0.045	91110	0.2918	0.2980	

Reagents:

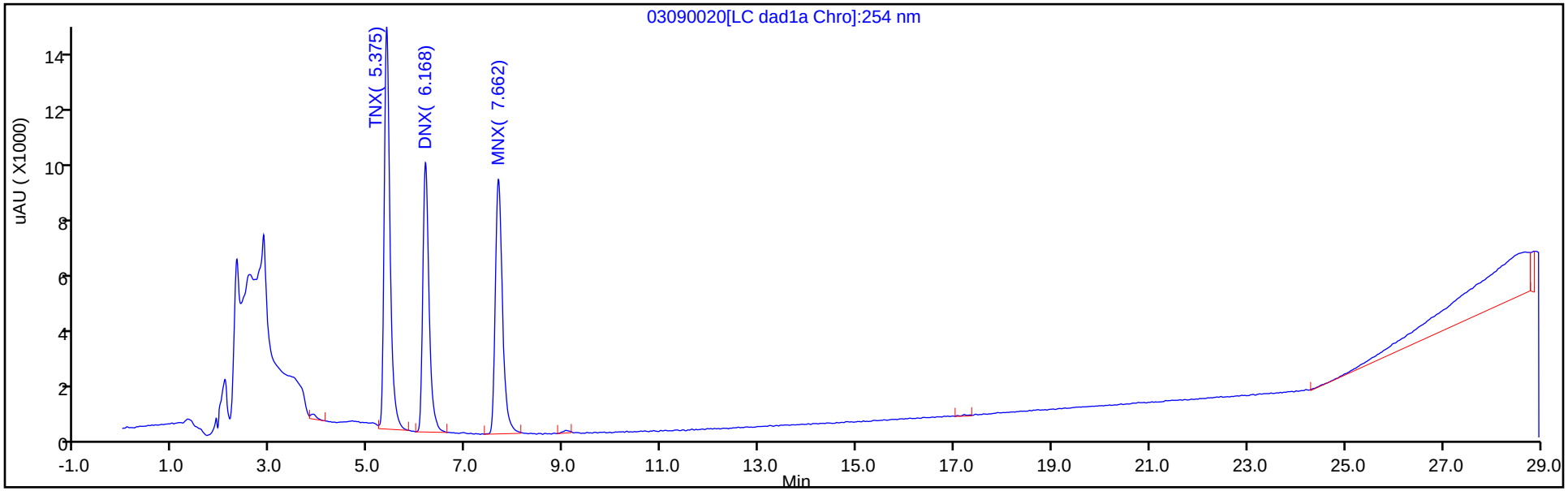
8330 DMT_00005 Amount Added: 12.50 Units: uL

Report Date: 12-Mar-2020 15:32:03 Chrom Revision: 2.3 19-Feb-2020 16:45:46

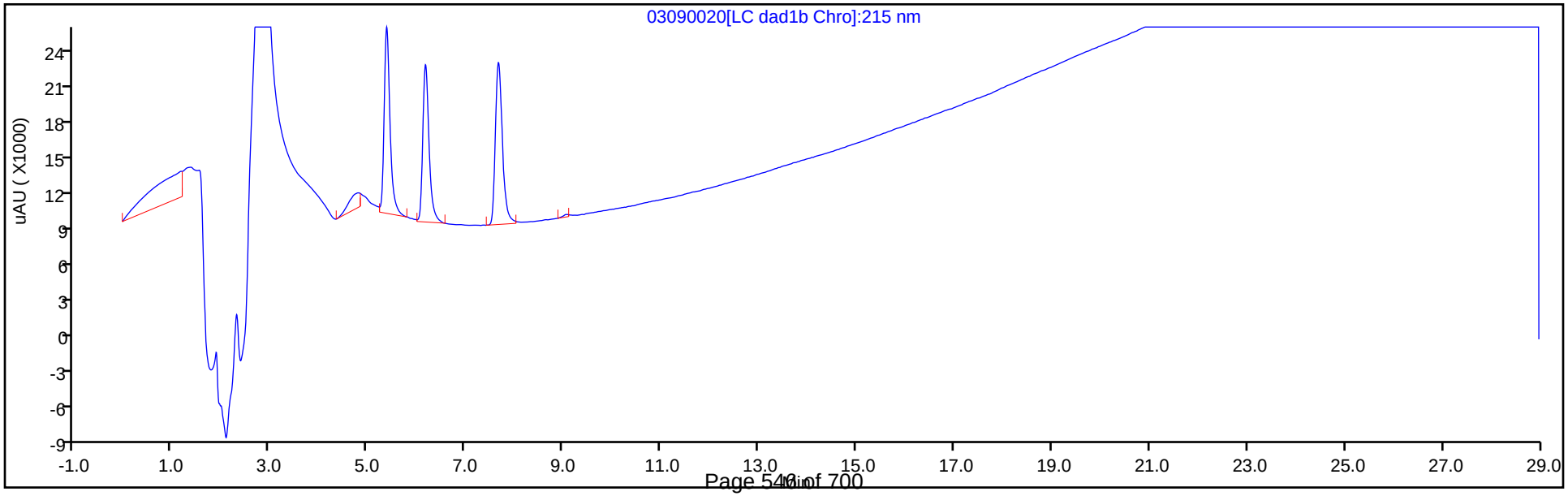
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\g2_luna\20200309-89910.b\03090020.d				
Injection Date:	10-Mar-2020 00:12:58	Instrument ID:	CHHPLC_G2_LUNA	Operator ID:	CB
Lims ID:	CCV DMT			Worklist Smp#:	20
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 Peak: 1



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



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Lab Sample ID: ICV 280-463276/15 Calibration Date: 07/01/2019 17:46

Instrument ID: CHHPLC_X3 Calib Start Date: 07/01/2019 14:40

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 07/01/2019 17:23

Lab File ID: 07010015.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	91833	83503		364	400	-9.1	15.0
RDX	Ave	111120	100688		362	400	-9.4	15.0
Picric acid	Ave	90734	85358		376	400	-5.9	15.0
1,3,5-Trinitrobenzene	Ave	245077	234935		383	400	-4.1	15.0
1,3-Dinitrobenzene	Ave	311175	300153		386	400	-3.5	15.0
Nitrobenzene	Ave	198903	196135		394	400	-1.4	15.0
Tetryl	Ave	161957	167540		414	400	3.4	15.0
Nitroglycerin	Ave	71108	66318		3730	4000	-6.7	15.0
2,4,6-Trinitrotoluene	Ave	227277	202738		357	400	-10.8	15.0
4-Amino-2,6-dinitrotoluene	Ave	166378	148768		358	400	-10.6	15.0
2-Amino-4,6-dinitrotoluene	Ave	205236	194233		379	400	-5.4	15.0
2,6-Dinitrotoluene	Ave	159284	144348		362	400	-9.4	15.0
2,4-Dinitrotoluene	Ave	300447	282300		376	400	-6.0	15.0
2-Nitrotoluene	Ave	129784	121650		375	400	-6.3	15.0
4-Nitrotoluene	Ave	110255	105768		384	400	-4.1	15.0
3-Nitrotoluene	Ave	145122	136635		377	400	-5.8	15.0
PETN	Ave	74289	73091		3940	4000	-1.6	15.0
1,2-Dinitrobenzene	Ave	139328	123173		354	400	-11.6	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Lab Sample ID: ICV 280-463276/15 Calibration Date: 07/01/2019 17:46

Instrument ID: CHHPLC_X3 Calib Start Date: 07/01/2019 14:40

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 07/01/2019 17:23

Lab File ID: 07010015.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.64	6.49	6.79
RDX	7.76	7.61	7.91
Picric acid	8.18	8.03	8.33
1,3,5-Trinitrobenzene	8.90	8.75	9.05
1,3-Dinitrobenzene	9.56	9.41	9.71
Nitrobenzene	9.94	9.79	10.09
Tetryl	10.27	10.12	10.42
Nitroglycerin	10.77	10.62	10.92
2,4,6-Trinitrotoluene	11.22	11.12	11.32
4-Amino-2,6-dinitrotoluene	11.42	11.32	11.52
2-Amino-4,6-dinitrotoluene	11.70	11.60	11.80
2,6-Dinitrotoluene	11.84	11.74	11.94
2,4-Dinitrotoluene	12.04	11.94	12.14
2-Nitrotoluene	12.88	12.73	13.03
4-Nitrotoluene	13.32	13.17	13.47
3-Nitrotoluene	13.92	13.77	14.07
PETN	15.01	14.86	15.16
1,2-Dinitrobenzene	8.74	8.59	8.89

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010015.D
Lims ID: ICV MAIN
Client ID:
Sample Type: ICV
Inject. Date: 01-Jul-2019 17:46:34 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICV MAIN
Misc. Info.: 280-0083376-015
Operator ID: hkf Instrument ID: CHHPLC_X3
Sublist:

Method: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 02-Jul-2019 11:34:59 Calib Date: 01-Jul-2019 17:23:38
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010014.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0309

First Level Reviewer: fiedlerh Date: 01-Jul-2019 18:32:41

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.643	6.643	0.000	33401	0.4000	0.3637	M
7 RDX	1	7.757	7.757	0.000	40275	0.4000	0.3624	
8 2,4,6-Trinitrophenol	1	8.177	8.177	0.000	34143	0.4000	0.3763	
$ 9 1,2-Dinitrobenzene	1	8.737	8.737	0.000	49269	0.4000	0.3536	
10 1,3,5-Trinitrobenzene	1	8.897	8.897	0.000	93974	0.4000	0.3834	
11 1,3-Dinitrobenzene	1	9.557	9.557	0.000	120061	0.4000	0.3858	
12 Nitrobenzene	1	9.943	9.943	0.000	78454	0.4000	0.3944	
14 Tetryl	1	10.270	10.270	0.000	67016	0.4000	0.4138	
15 Nitroglycerin	2	10.770	10.770	0.000	265271	4.00	3.73	
16 2,4,6-Trinitrotoluene	1	11.223	11.223	0.000	81095	0.4000	0.3568	
17 4-Amino-2,6-dinitrotoluene	1	11.417	11.417	0.000	59507	0.4000	0.3577	
18 2-Amino-4,6-dinitrotoluene	1	11.703	11.703	0.000	77693	0.4000	0.3786	
19 2,6-Dinitrotoluene	1	11.837	11.837	0.000	57739	0.4000	0.3625	
20 2,4-Dinitrotoluene	1	12.037	12.037	0.000	112920	0.4000	0.3758	
21 o-Nitrotoluene	1	12.877	12.877	0.000	48660	0.4000	0.3749	
22 p-Nitrotoluene	1	13.317	13.317	0.000	42307	0.4000	0.3837	
23 m-Nitrotoluene	1	13.917	13.917	0.000	54654	0.4000	0.3766	
24 PETN	2	15.010	15.010	0.000	292363	4.00	3.94	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8330Surrogate_00103 Amount Added: 40.00 Units: uL
8330 LCS_00089 Amount Added: 40.00 Units: uL

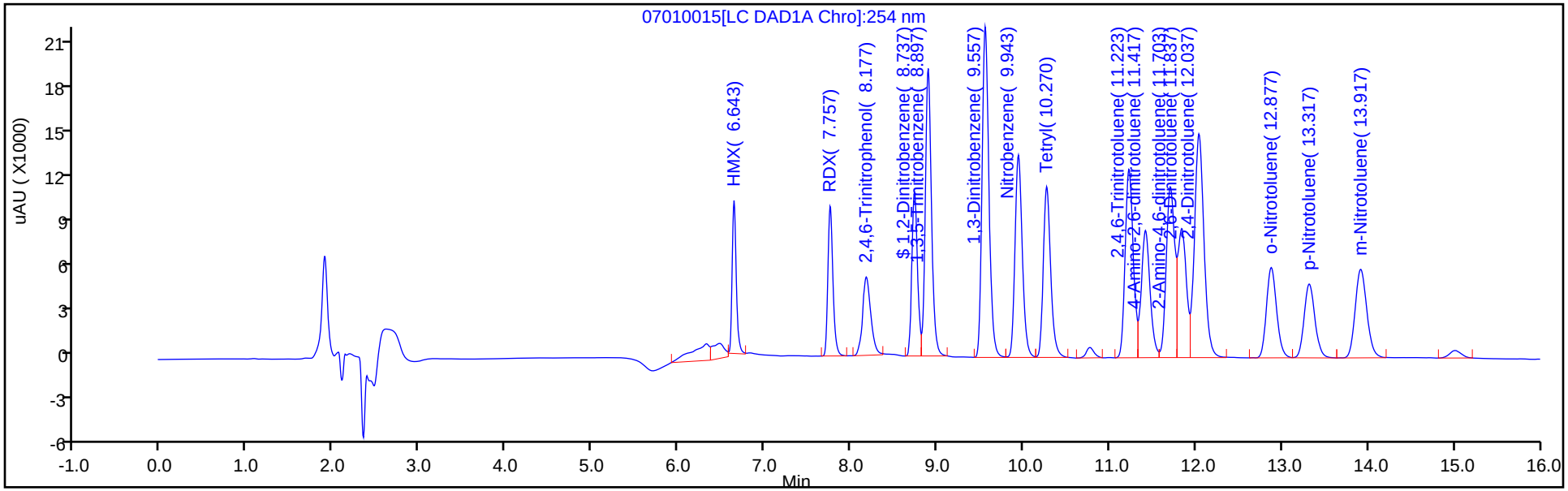
Report Date: 02-Jul-2019 11:34:59 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Denver

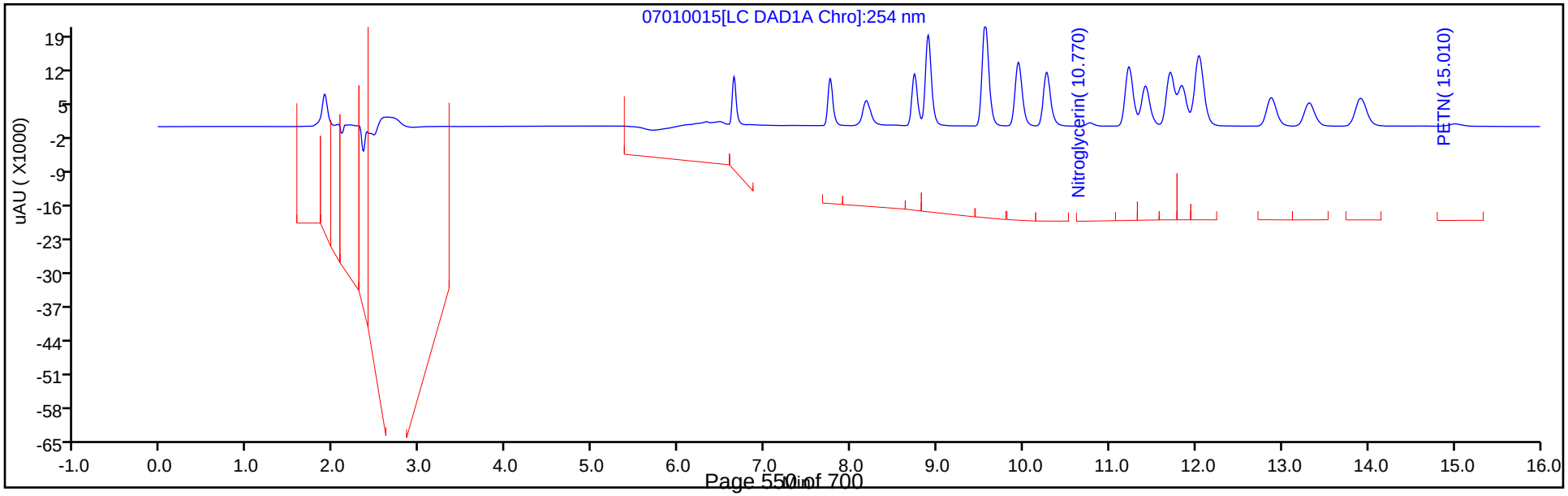
Data File: \\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010015.D

Injection Date:	01-Jul-2019 17:46:34	Instrument ID:	CHHPLC_X3	Operator ID:	hkf
Lims ID:	ICV MAIN			Worklist Smp#:	15
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

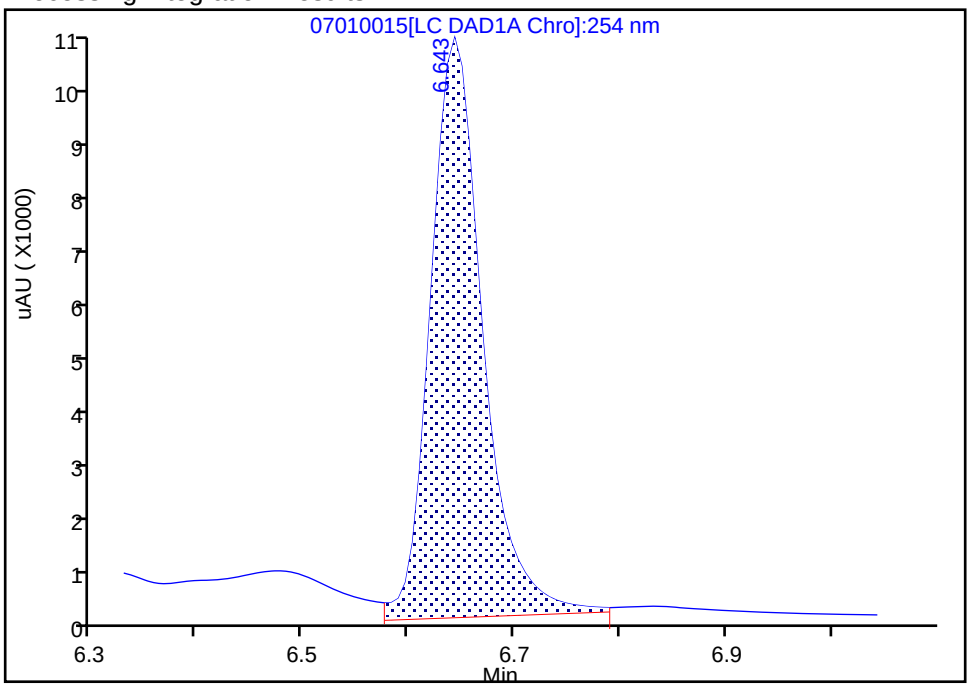
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20190701-83376.b\07010015.D				
Injection Date:	01-Jul-2019 17:46:34	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV MAIN				
Client ID:					
Operator ID:	hkf	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

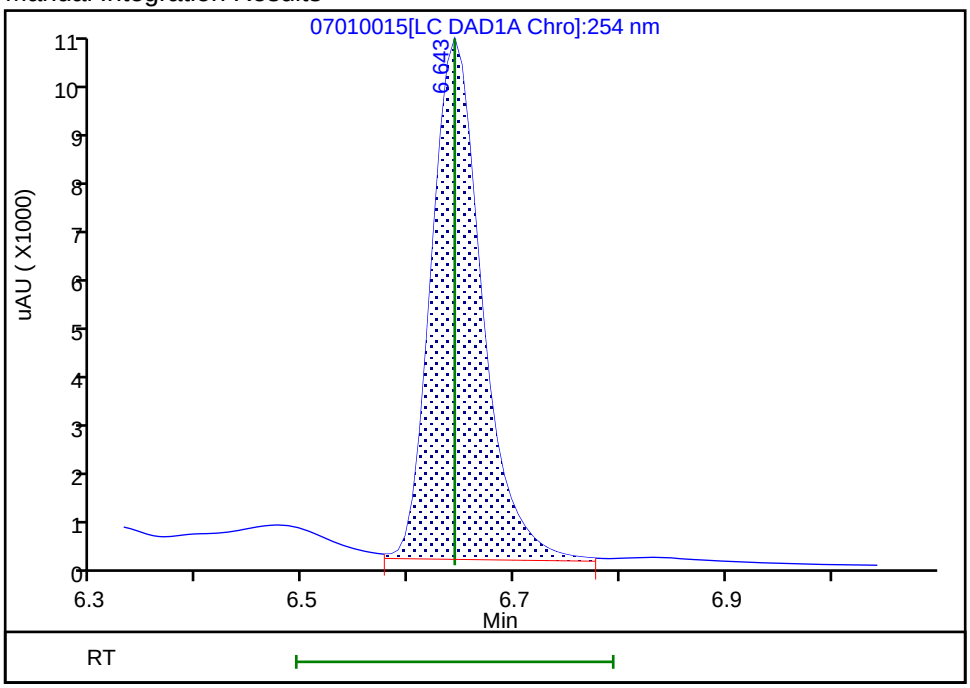
Processing Integration Results

RT: 6.64
Area: 35035
Amount: 0.381507
Amount Units: ug/mL



Manual Integration Results

RT: 6.64
Area: 33401
Amount: 0.363714
Amount Units: ug/mL



Reviewer: fiedlerh, 01-Jul-2019 18:32:36

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Lab Sample ID: ICV 280-482211/15 Calibration Date: 01/06/2020 21:03

Instrument ID: CHHPLC_X3 Calib Start Date: 01/06/2020 18:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/06/2020 20:40

Lab File ID: 01060015.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	205260	241876		472	400	17.8*	15.0
DNX	Ave	155392	178801		461	400	15.1*	15.0
MNX	Ave	140331	163877		545	467	16.8*	15.0

FORM VII 8330A

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Lab Sample ID: ICV 280-482211/15 Calibration Date: 01/06/2020 21:03

Instrument ID: CHHPLC_X3 Calib Start Date: 01/06/2020 18:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/06/2020 20:40

Lab File ID: 01060015.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.59	6.49	6.69
DNX	6.91	6.81	7.01
MNX	7.36	7.21	7.51

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060015.D
Lims ID: ICV DMT
Client ID:
Sample Type: ICV
Inject. Date: 06-Jan-2020 21:03:50 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICV DMT
Misc. Info.: 280-0088401-015
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist:

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 07-Jan-2020 11:18:53 Calib Date: 06-Jan-2020 20:40:54
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060014.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0307

First Level Reviewer: beckerc Date: 07-Jan-2020 10:02:28

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.590	6.590	0.000	96847	0.4004	0.4718	M
5 DNX	1	6.910	6.910	0.000	71592	0.4004	0.4607	M
6 MNX	1	7.363	7.363	0.000	76498	0.4668	0.5451	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

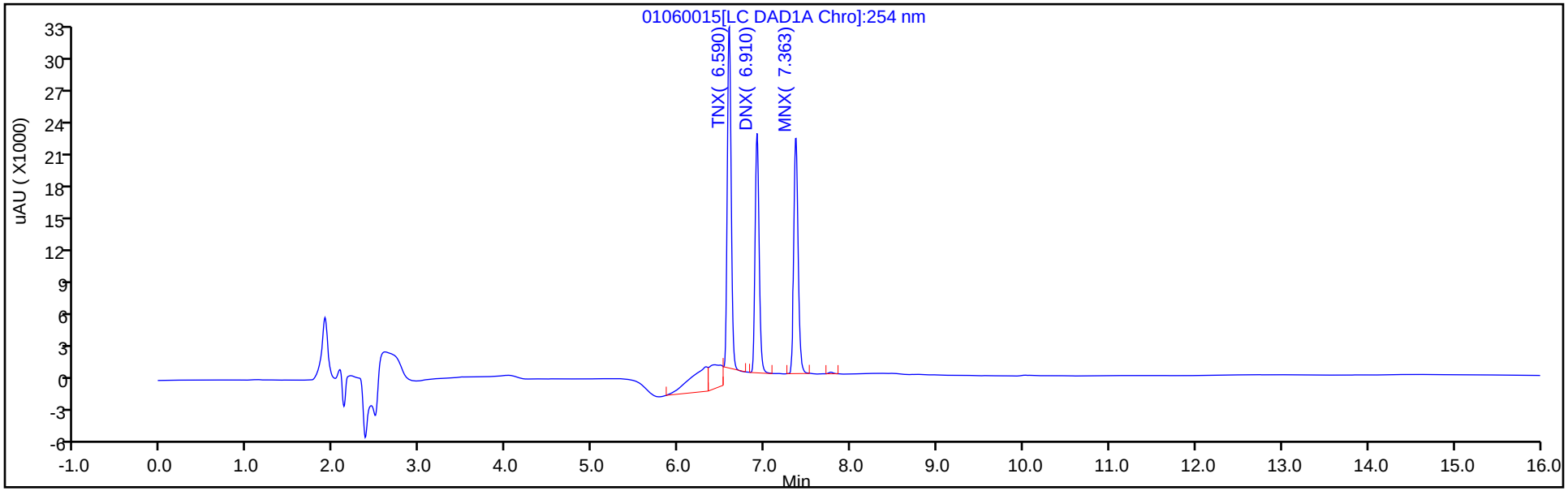
8330_OP_DMT_00004 Amount Added: 40.00 Units: uL

Report Date: 07-Jan-2020 11:18:55 Chrom Revision: 2.3 15-Dec-2019 06:20:02

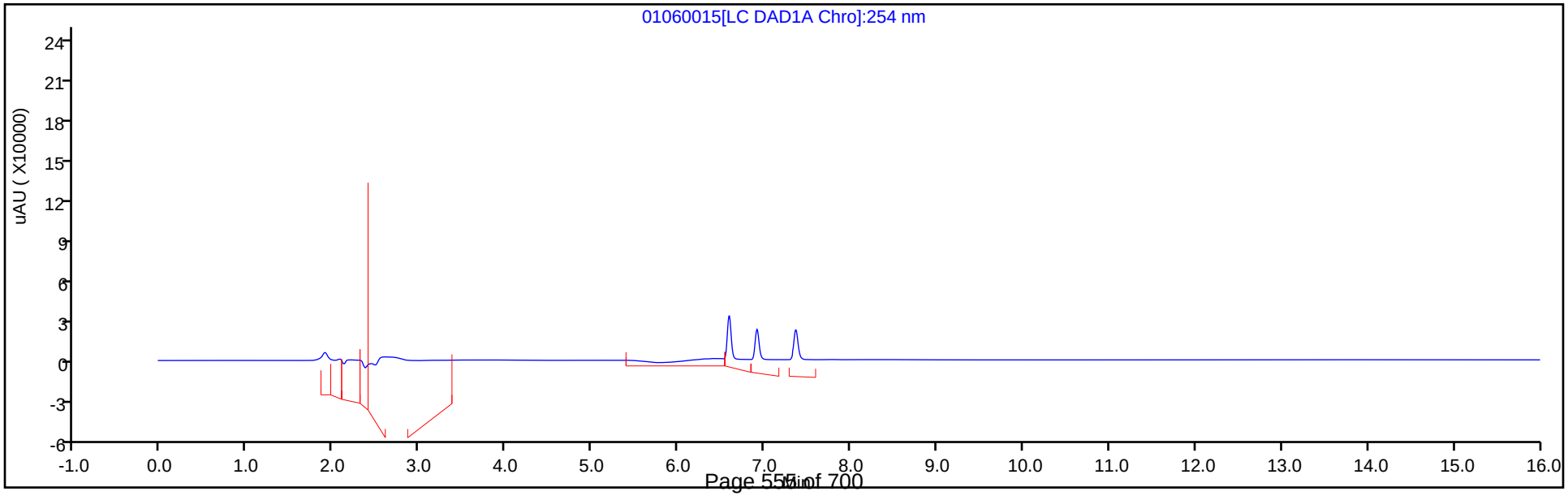
Eurofins TestAmerica, Denver

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060015.D				
Injection Date:	06-Jan-2020 21:03:50	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	ICV DMT			Worklist Smp#:	15
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

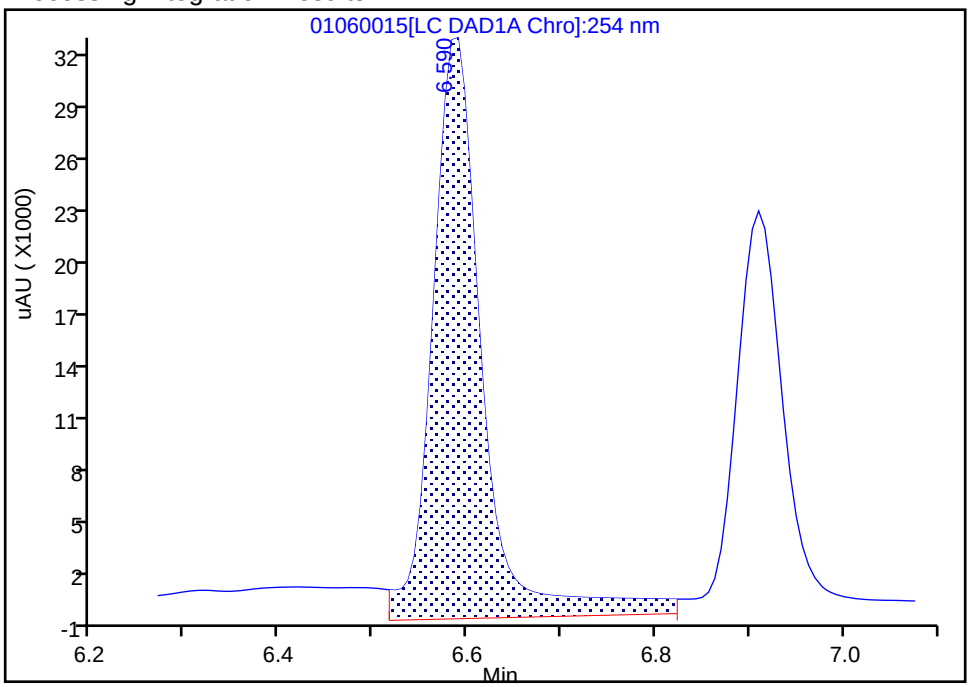
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060015.D				
Injection Date:	06-Jan-2020 21:03:50	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV DMT				
Client ID:					
Operator ID:	CB	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

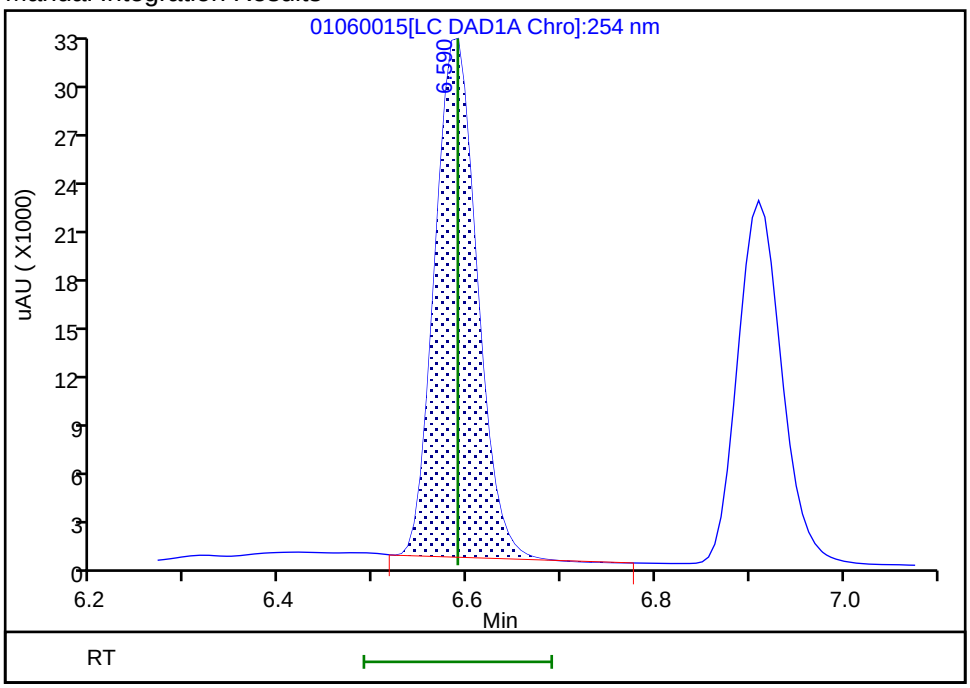
Processing Integration Results

RT: 6.59
Area: 119490
Amount: 0.582140
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 96847
Amount: 0.471826
Amount Units: ug/mL



Reviewer: beckerc, 07-Jan-2020 11:17:08

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

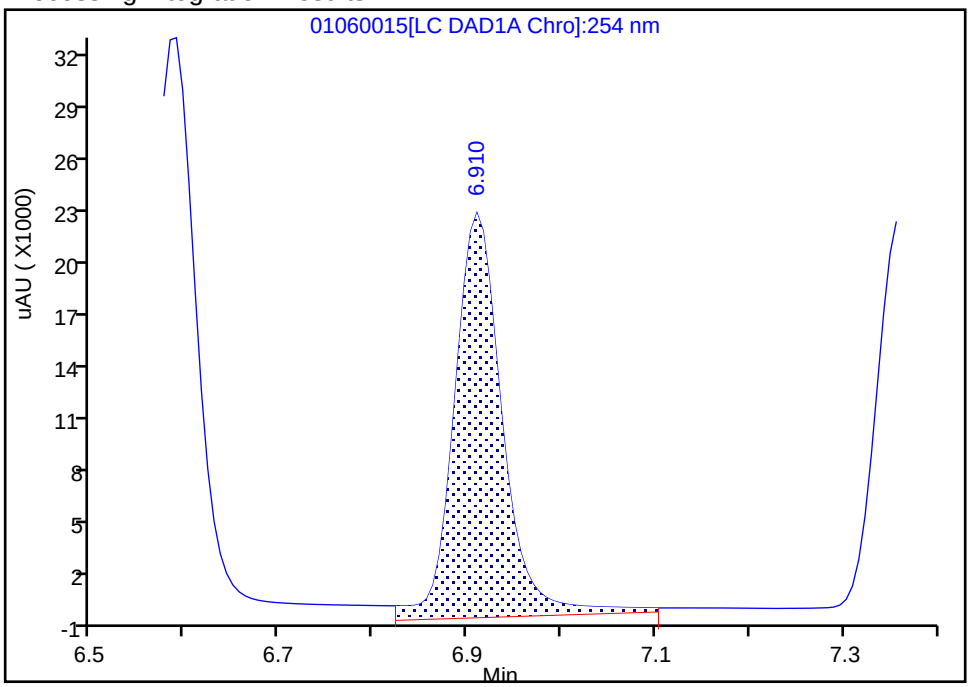
Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060015.D				
Injection Date:	06-Jan-2020 21:03:50	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV DMT				
Client ID:					
Operator ID:	CB	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

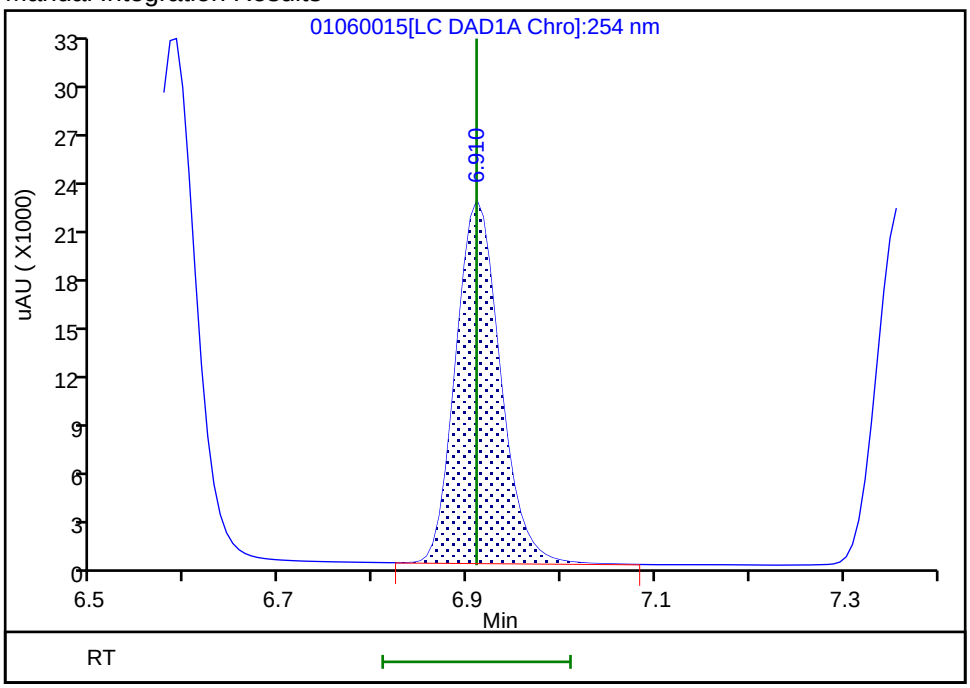
Processing Integration Results

RT: 6.91
Area: 79959
Amount: 0.514562
Amount Units: ug/mL



Manual Integration Results

RT: 6.91
Area: 71592
Amount: 0.460718
Amount Units: ug/mL



Reviewer: beckerc, 07-Jan-2020 11:17:11

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Lab Sample ID: CCV 280-487395/7 Calibration Date: 03/02/2020 15:20

Instrument ID: CHHPLC_X3 Calib Start Date: 07/01/2019 14:40

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 07/01/2019 17:23

Lab File ID: 03020007.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	91833	90032		245	250	-2.0	15.0
RDX	Ave	111120	109560		246	250	-1.4	15.0
Picric acid	Ave	90734	82868		228	250	-8.7	15.0
1,3,5-Trinitrobenzene	Ave	245077	235174		240	251	-4.0	15.0
1,3-Dinitrobenzene	Ave	311175	312519		252	251	0.4	15.0
Nitrobenzene	Ave	198903	205502		259	251	3.3	15.0
Tetryl	Ave	161957	183373		284	251	13.2	15.0
Nitroglycerin	Ave	71108	70412		2480	2500	-1.0	15.0
2,4,6-Trinitrotoluene	Ave	227277	212550		235	251	-6.5	15.0
4-Amino-2,6-dinitrotoluene	Ave	166378	163337		246	250	-1.8	15.0
2-Amino-4,6-dinitrotoluene	Ave	205236	209598		256	251	2.1	15.0
2,6-Dinitrotoluene	Ave	159284	152247		240	251	-4.4	15.0
2,4-Dinitrotoluene	Ave	300447	304418		254	251	1.3	15.0
2-Nitrotoluene	Ave	129784	133552		257	250	2.9	15.0
4-Nitrotoluene	Ave	110255	114878		261	251	4.2	15.0
3-Nitrotoluene	Ave	145122	146182		252	250	0.7	15.0
PETN	Ave	74289	78349		2640	2500	5.5	15.0
1,2-Dinitrobenzene	Ave	139328	138672		249	250	-0.5	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Lab Sample ID: CCV 280-487395/7 Calibration Date: 03/02/2020 15:20

Instrument ID: CHHPLC_X3 Calib Start Date: 07/01/2019 14:40

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 07/01/2019 17:23

Lab File ID: 03020007.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.68	6.53	6.83
RDX	7.75	7.60	7.90
Picric acid	8.07	7.92	8.22
1,3,5-Trinitrobenzene	8.88	8.73	9.03
1,3-Dinitrobenzene	9.53	9.38	9.68
Nitrobenzene	9.91	9.76	10.06
Tetryl	10.21	10.06	10.36
Nitroglycerin	10.72	10.57	10.87
2,4,6-Trinitrotoluene	11.17	11.07	11.27
4-Amino-2,6-dinitrotoluene	11.33	11.23	11.43
2-Amino-4,6-dinitrotoluene	11.61	11.51	11.71
2,6-Dinitrotoluene	11.78	11.68	11.88
2,4-Dinitrotoluene	11.97	11.87	12.07
2-Nitrotoluene	12.82	12.67	12.97
4-Nitrotoluene	13.26	13.11	13.41
3-Nitrotoluene	13.85	13.70	14.00
PETN	14.97	14.82	15.12
1,2-Dinitrobenzene	8.71	8.56	8.86

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200302-89712.b\03020007.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 02-Mar-2020 15:20:10 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0089712-007
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200302-89712.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 03-Mar-2020 11:54:17 Calib Date: 06-Jan-2020 20:40:54
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060014.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0310

First Level Reviewer: beckerc Date: 03-Mar-2020 10:59:37

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.680	6.680	0.000	22508	0.2500	0.2451	
7 RDX	1	7.754	7.754	0.000	27390	0.2500	0.2465	
8 2,4,6-Trinitrophenol	1	8.067	8.067	0.000	20717	0.2500	0.2283	
$ 9 1,2-Dinitrobenzene	1	8.707	8.707	0.000	34668	0.2500	0.2488	
10 1,3,5-Trinitrobenzene	1	8.880	8.880	0.000	58911	0.2505	0.2404	
11 1,3-Dinitrobenzene	1	9.527	9.527	0.000	78286	0.2505	0.2516	
12 Nitrobenzene	1	9.914	9.914	0.000	51581	0.2510	0.2593	
14 Tetryl	1	10.207	10.207	0.000	45935	0.2505	0.2836	
15 Nitroglycerin	2	10.720	10.720	0.000	176031	2.50	2.48	
16 2,4,6-Trinitrotoluene	1	11.174	11.174	0.000	53350	0.2510	0.2347	
17 4-Amino-2,6-dinitrotoluene	1	11.327	11.327	0.000	40875	0.2503	0.2457	
18 2-Amino-4,6-dinitrotoluene	1	11.614	11.614	0.000	52609	0.2510	0.2563	
19 2,6-Dinitrotoluene	1	11.780	11.780	0.000	38214	0.2510	0.2399	
20 2,4-Dinitrotoluene	1	11.974	11.974	0.000	76409	0.2510	0.2543	
21 o-Nitrotoluene	1	12.820	12.820	0.000	33388	0.2500	0.2573	
22 p-Nitrotoluene	1	13.260	13.260	0.000	28777	0.2505	0.2610	
23 m-Nitrotoluene	1	13.854	13.854	0.000	36582	0.2503	0.2521	
24 PETN	2	14.967	14.967	0.000	195873	2.50	2.64	

Reagents:

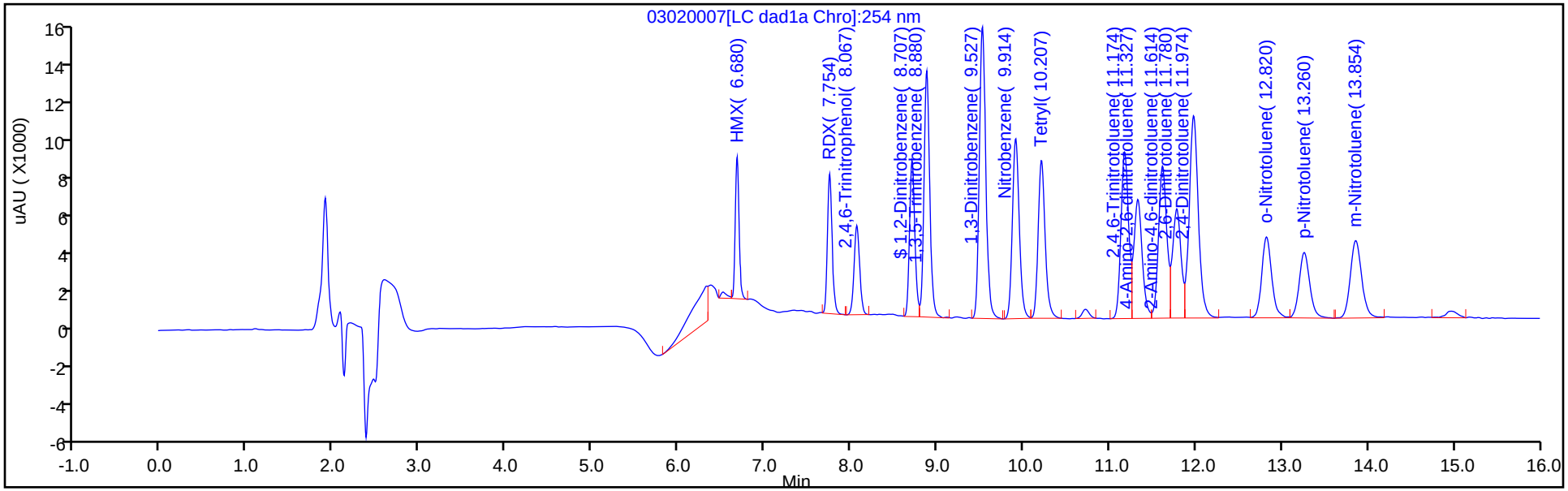
8330IntermStk_00061 Amount Added: 25.00 Units: uL

Report Date: 03-Mar-2020 11:54:18 Chrom Revision: 2.3 19-Feb-2020 16:45:46

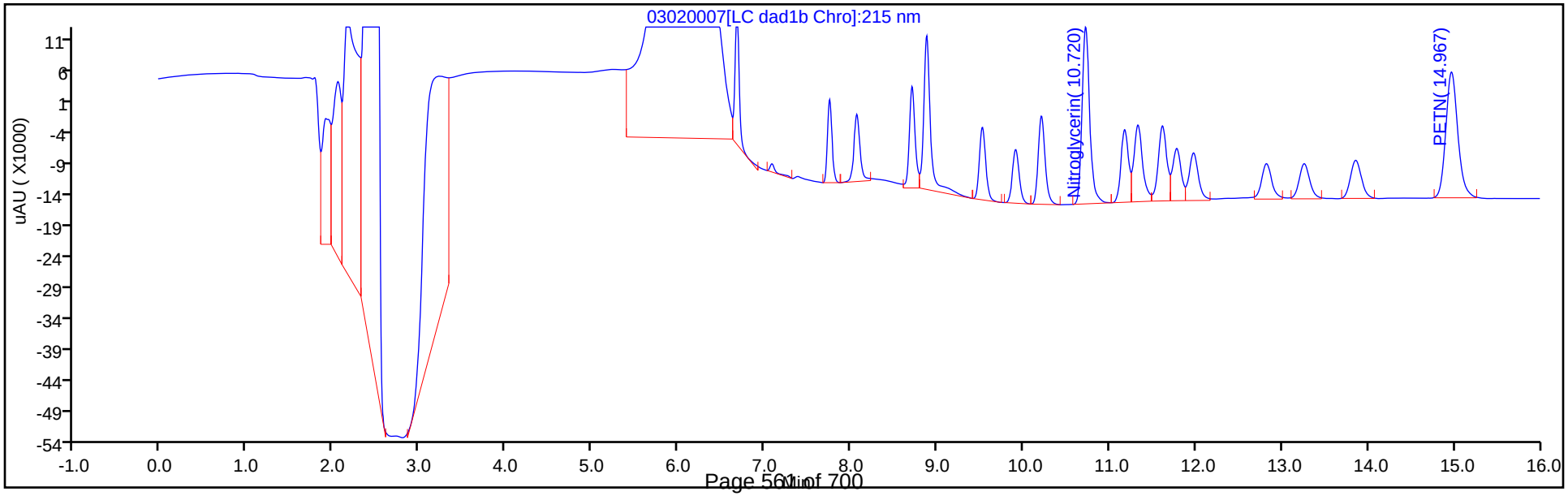
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020007.d				
Injection Date:	02-Mar-2020 15:20:10	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	CCV INT			Worklist Smp#:	7
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Lab Sample ID: CCV 280-487395/9 Calibration Date: 03/02/2020 16:06

Instrument ID: CHHPLC_X3 Calib Start Date: 01/06/2020 18:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/06/2020 20:40

Lab File ID: 03020009.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	205260	231325		282	250	12.7	15.0
DNX	Ave	155392	171712		277	250	10.5	15.0
MNX	Ave	140331	153789		320	292	9.6	15.0

FORM VII 8330A

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Lab Sample ID: CCV 280-487395/9 Calibration Date: 03/02/2020 16:06

Instrument ID: CHHPLC_X3 Calib Start Date: 01/06/2020 18:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/06/2020 20:40

Lab File ID: 03020009.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.59	6.49	6.69
DNX	6.91	6.81	7.01
MNX	7.36	7.21	7.51

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200302-89712.b\03020009.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	02-Mar-2020 16:06:02	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0089712-009				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200302-89712.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	03-Mar-2020 11:54:24	Calib Date:	06-Jan-2020 20:40:54		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060014.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0310				

First Level Reviewer: beckerc Date: 03-Mar-2020 11:00:59

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.592	6.590	0.002	57889	0.2503	0.2820	M
5 DNX	1	6.912	6.910	0.002	42971	0.2503	0.2765	M
6 MNX	1	7.359	7.363	-0.004	44868	0.2918	0.3197	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

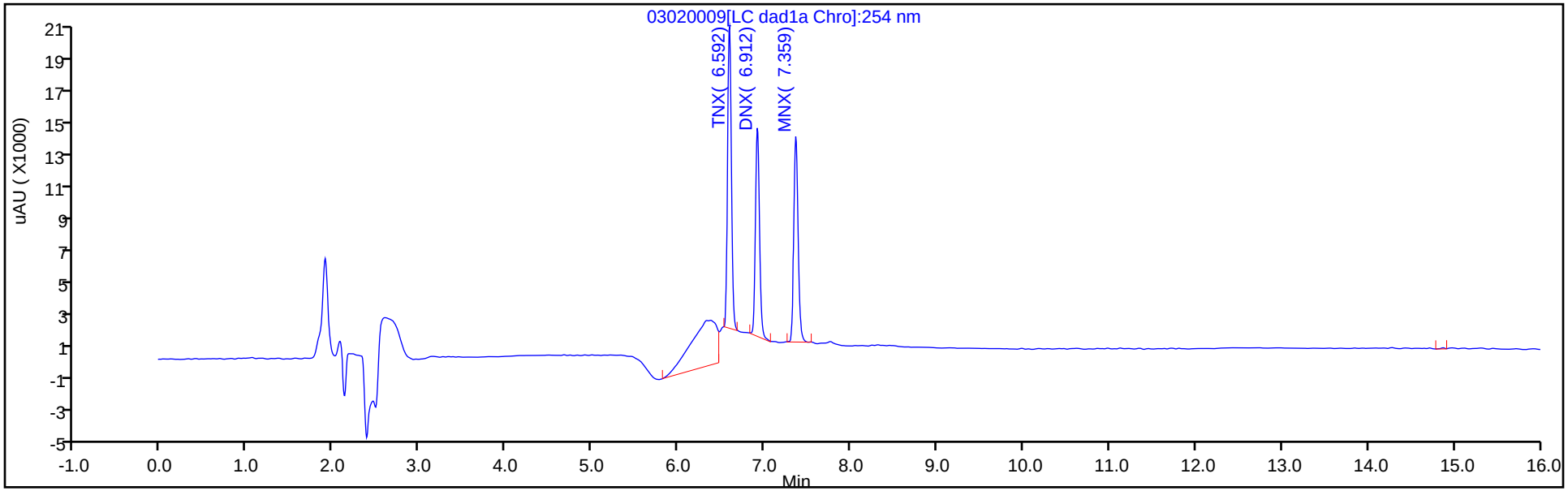
8330 DMT_00005 Amount Added: 12.50 Units: uL

Report Date: 03-Mar-2020 11:54:24 Chrom Revision: 2.3 19-Feb-2020 16:45:46

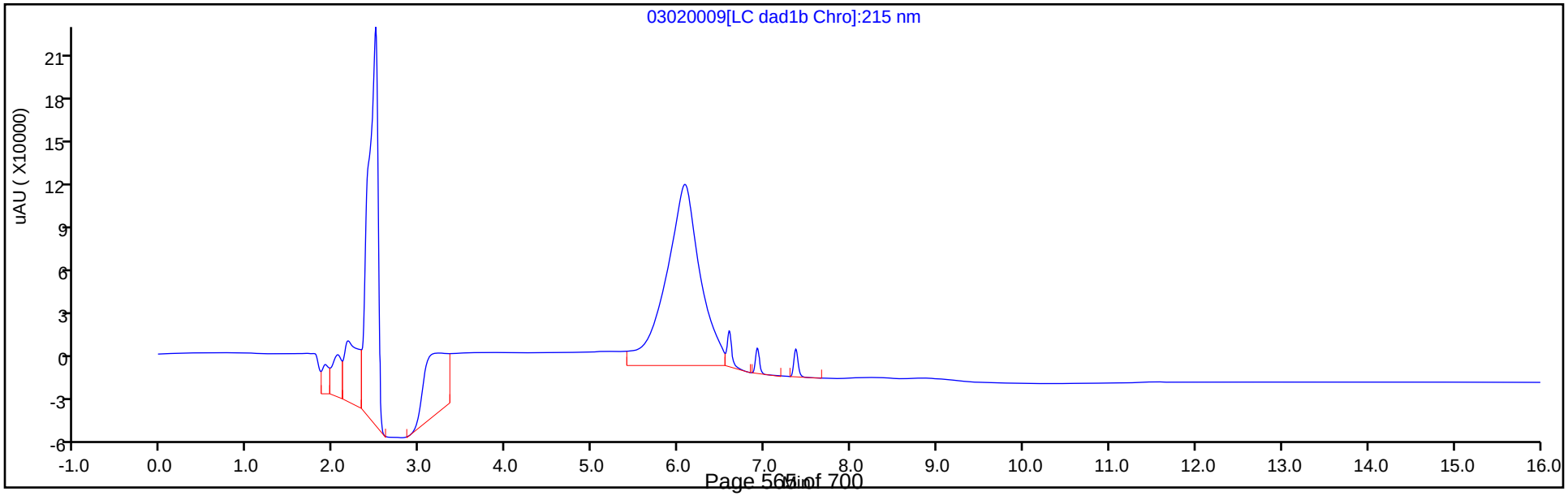
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020009.d				
Injection Date:	02-Mar-2020 16:06:02	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	CCV DMT			Worklist Smp#:	9
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

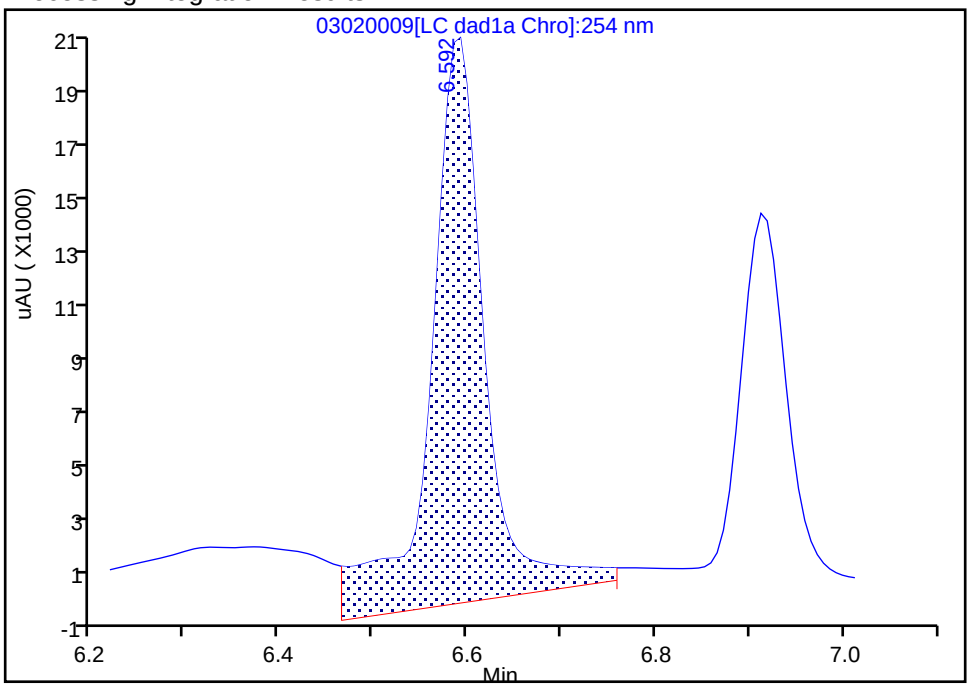
Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020009.d				
Injection Date:	02-Mar-2020 16:06:02	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	CB	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

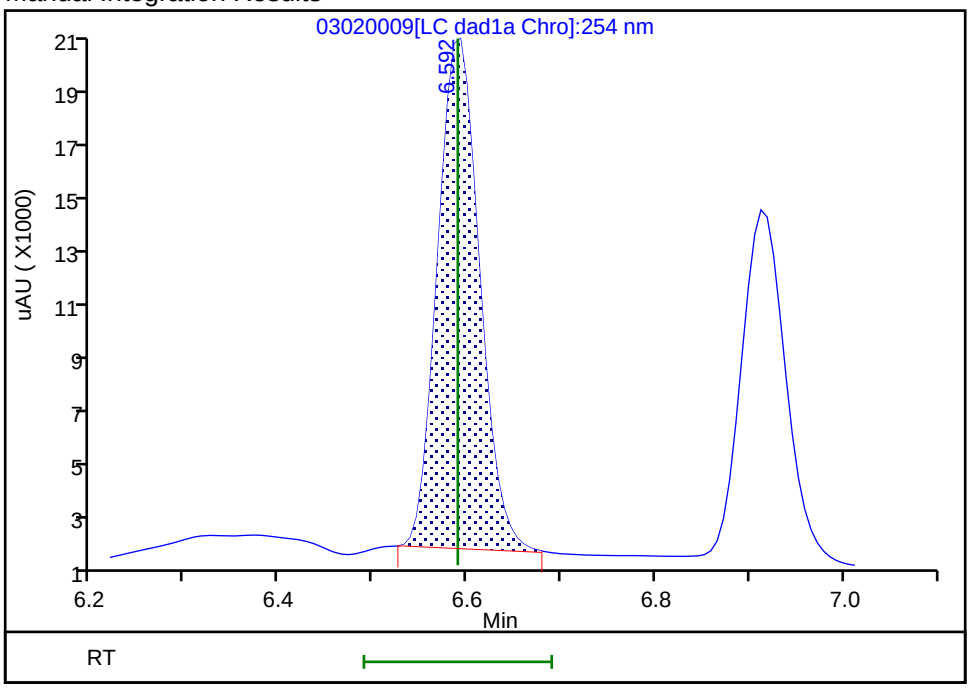
Processing Integration Results

RT: 6.59
Area: 81405
Amount: 0.396595
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 57889
Amount: 0.282028
Amount Units: ug/mL



Reviewer: beckerc, 03-Mar-2020 11:00:48
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

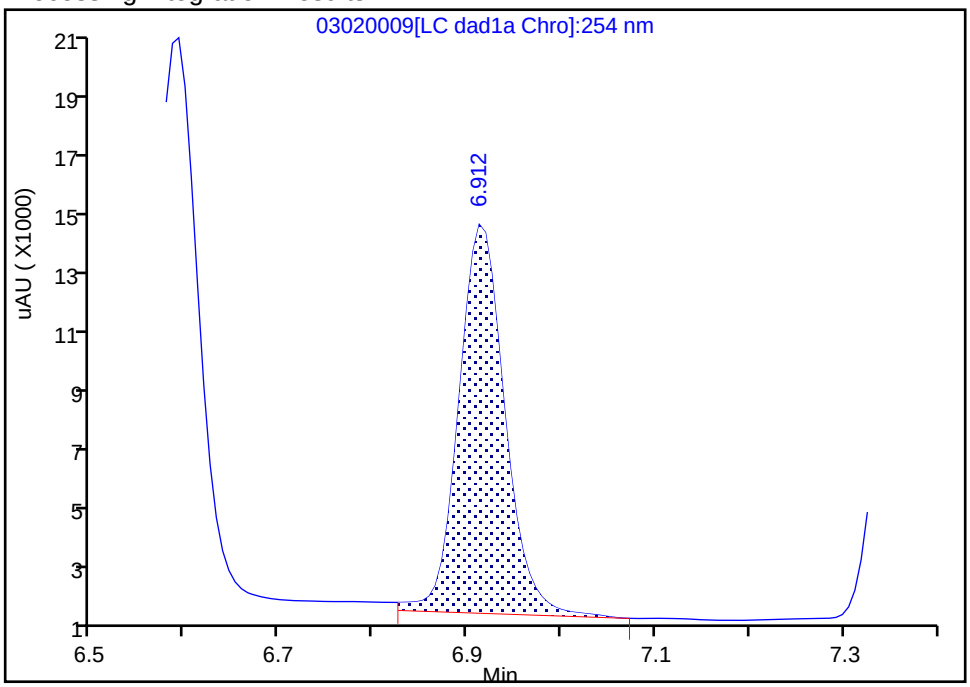
Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020009.d				
Injection Date:	02-Mar-2020 16:06:02	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	CB	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

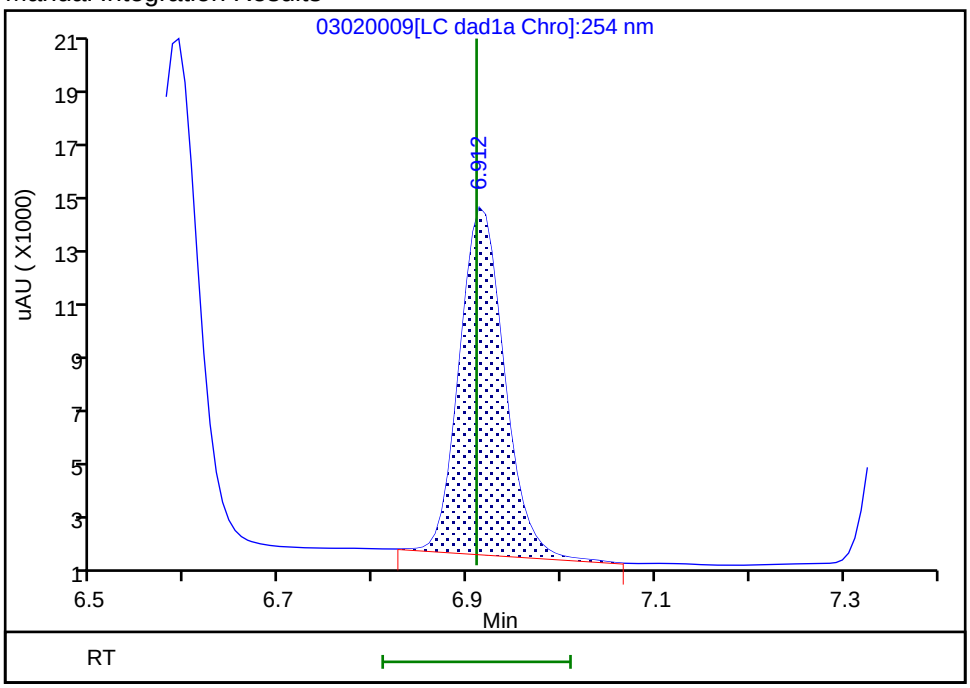
Processing Integration Results

RT: 6.91
Area: 44568
Amount: 0.286809
Amount Units: ug/mL



Manual Integration Results

RT: 6.91
Area: 42971
Amount: 0.276532
Amount Units: ug/mL



Reviewer: beckerc, 03-Mar-2020 11:00:55
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Lab Sample ID: CCV 280-487395/20 Calibration Date: 03/02/2020 20:18

Instrument ID: CHHPLC_X3 Calib Start Date: 07/01/2019 14:40

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 07/01/2019 17:23

Lab File ID: 03020020.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	91833	91128		248	250	-0.8	15.0
RDX	Ave	111120	109988		247	250	-1.0	15.0
Picric acid	Ave	90734	83236		229	250	-8.3	15.0
1,3,5-Trinitrobenzene	Ave	245077	233166		238	251	-4.9	15.0
1,3-Dinitrobenzene	Ave	311175	312643		252	251	0.5	15.0
Nitrobenzene	Ave	198903	201956		255	251	1.5	15.0
Tetryl	Ave	161957	182295		282	251	12.6	15.0
Nitroglycerin	Ave	71108	70008		2460	2500	-1.5	15.0
2,4,6-Trinitrotoluene	Ave	227277	212044		234	251	-6.7	15.0
4-Amino-2,6-dinitrotoluene	Ave	166378	165914		250	250	-0.3	15.0
2-Amino-4,6-dinitrotoluene	Ave	205236	207243		253	251	1.0	15.0
2,6-Dinitrotoluene	Ave	159284	153454		242	251	-3.7	15.0
2,4-Dinitrotoluene	Ave	300447	308279		258	251	2.6	15.0
2-Nitrotoluene	Ave	129784	133592		257	250	2.9	15.0
4-Nitrotoluene	Ave	110255	113293		257	251	2.8	15.0
3-Nitrotoluene	Ave	145122	144016		248	250	-0.8	15.0
PETN	Ave	74289	78471		2640	2500	5.6	15.0
1,2-Dinitrobenzene	Ave	139328	139328		250	250	0.0	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Lab Sample ID: CCV 280-487395/20 Calibration Date: 03/02/2020 20:18

Instrument ID: CHHPLC_X3 Calib Start Date: 07/01/2019 14:40

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 07/01/2019 17:23

Lab File ID: 03020020.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.69	6.53	6.83
RDX	7.76	7.60	7.90
Picric acid	8.07	7.92	8.22
1,3,5-Trinitrobenzene	8.88	8.73	9.03
1,3-Dinitrobenzene	9.53	9.38	9.68
Nitrobenzene	9.91	9.76	10.06
Tetryl	10.21	10.06	10.36
Nitroglycerin	10.72	10.57	10.87
2,4,6-Trinitrotoluene	11.17	11.07	11.27
4-Amino-2,6-dinitrotoluene	11.33	11.23	11.43
2-Amino-4,6-dinitrotoluene	11.62	11.51	11.71
2,6-Dinitrotoluene	11.78	11.68	11.88
2,4-Dinitrotoluene	11.98	11.87	12.07
2-Nitrotoluene	12.83	12.67	12.97
4-Nitrotoluene	13.26	13.11	13.41
3-Nitrotoluene	13.85	13.70	14.00
PETN	14.95	14.82	15.12
1,2-Dinitrobenzene	8.71	8.56	8.86

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200302-89712.b\03020020.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 02-Mar-2020 20:18:13 ALS Bottle#: 7 Worklist Smp#: 20
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0089712-020
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200302-89712.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 03-Mar-2020 11:54:59 Calib Date: 06-Jan-2020 20:40:54
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060014.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0310

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.688	6.680	0.008	22782	0.2500	0.2481	
7 RDX	1	7.761	7.754	0.007	27497	0.2500	0.2475	
8 2,4,6-Trinitrophenol	1	8.074	8.067	0.007	20809	0.2500	0.2293	
$ 9 1,2-Dinitrobenzene	1	8.708	8.707	0.001	34832	0.2500	0.2500	
10 1,3,5-Trinitrobenzene	1	8.881	8.880	0.001	58408	0.2505	0.2383	
11 1,3-Dinitrobenzene	1	9.527	9.527	0.000	78317	0.2505	0.2517	
12 Nitrobenzene	1	9.914	9.914	0.000	50691	0.2510	0.2549	
14 Tetryl	1	10.207	10.207	0.000	45665	0.2505	0.2820	
15 Nitroglycerin	2	10.721	10.720	0.001	175019	2.50	2.46	
16 2,4,6-Trinitrotoluene	1	11.174	11.174	0.000	53223	0.2510	0.2342	
17 4-Amino-2,6-dinitrotoluene	1	11.327	11.327	0.000	41520	0.2503	0.2496	
18 2-Amino-4,6-dinitrotoluene	1	11.621	11.614	0.007	52018	0.2510	0.2535	
19 2,6-Dinitrotoluene	1	11.781	11.780	0.001	38517	0.2510	0.2418	
20 2,4-Dinitrotoluene	1	11.981	11.974	0.007	77378	0.2510	0.2575	
21 o-Nitrotoluene	1	12.827	12.820	0.007	33398	0.2500	0.2573	
22 p-Nitrotoluene	1	13.261	13.260	0.001	28380	0.2505	0.2574	
23 m-Nitrotoluene	1	13.854	13.854	0.000	36040	0.2503	0.2483	
24 PETN	2	14.947	14.967	-0.020	196178	2.50	2.64	

Reagents:

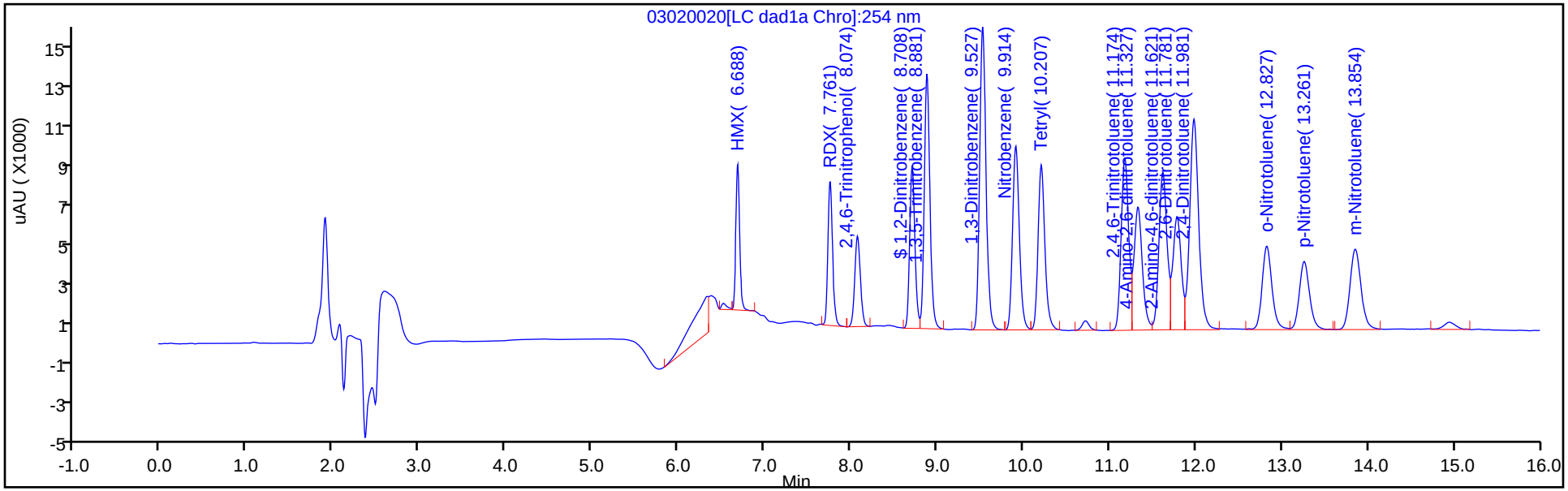
8330IntermStk_00061 Amount Added: 25.00 Units: uL

Report Date: 03-Mar-2020 11:55:00 Chrom Revision: 2.3 19-Feb-2020 16:45:46

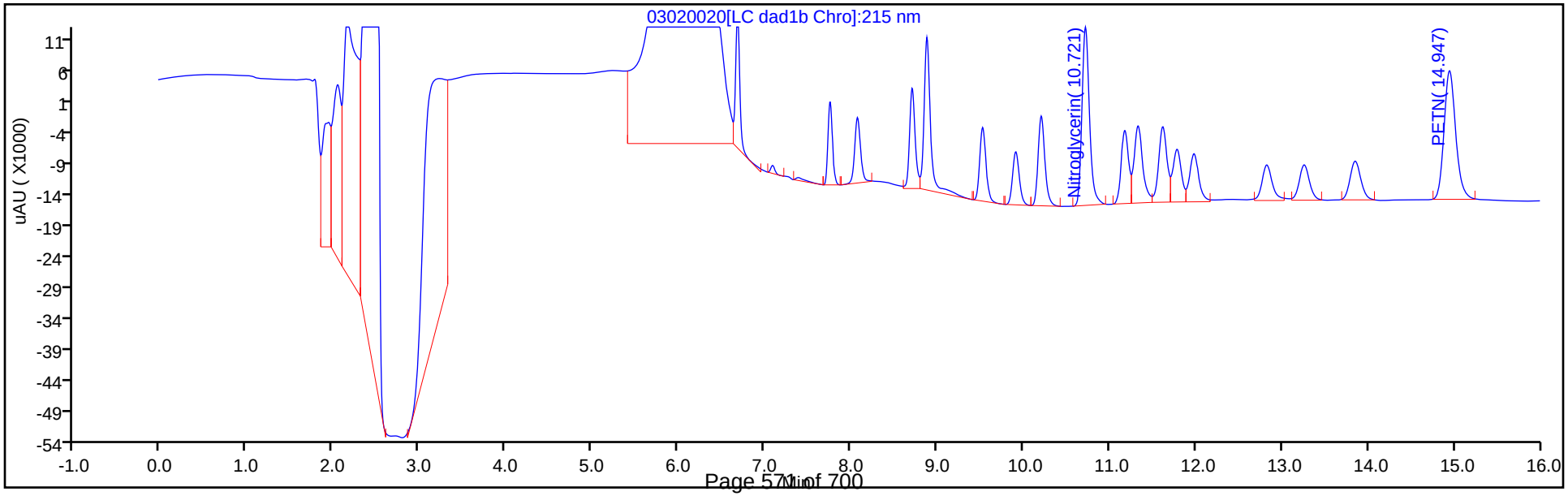
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020020.d				
Injection Date:	02-Mar-2020 20:18:13	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	CCV INT			Worklist Smp#:	20
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Lab Sample ID: CCV 280-487395/22 Calibration Date: 03/02/2020 21:04

Instrument ID: CHHPLC_X3 Calib Start Date: 01/06/2020 18:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/06/2020 20:40

Lab File ID: 03020022.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	205260	226262		276	250	10.2	15.0
DNX	Ave	155392	168212		271	250	8.2	15.0
MNX	Ave	140331	152651		317	292	8.8	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Lab Sample ID: CCV 280-487395/22 Calibration Date: 03/02/2020 21:04

Instrument ID: CHHPLC_X3 Calib Start Date: 01/06/2020 18:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/06/2020 20:40

Lab File ID: 03020022.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.59	6.49	6.69
DNX	6.91	6.81	7.01
MNX	7.36	7.21	7.51

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200302-89712.b\03020022.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	02-Mar-2020 21:04:06	ALS Bottle#:	9	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0089712-022				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200302-89712.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	03-Mar-2020 11:55:02	Calib Date:	06-Jan-2020 20:40:54		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060014.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0310				

First Level Reviewer: beckerc Date: 03-Mar-2020 11:15:23

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.591	6.590	0.001	56622	0.2503	0.2759	M
5 DNX	1	6.911	6.910	0.001	42095	0.2503	0.2709	M
6 MNX	1	7.357	7.363	-0.006	44536	0.2918	0.3174	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

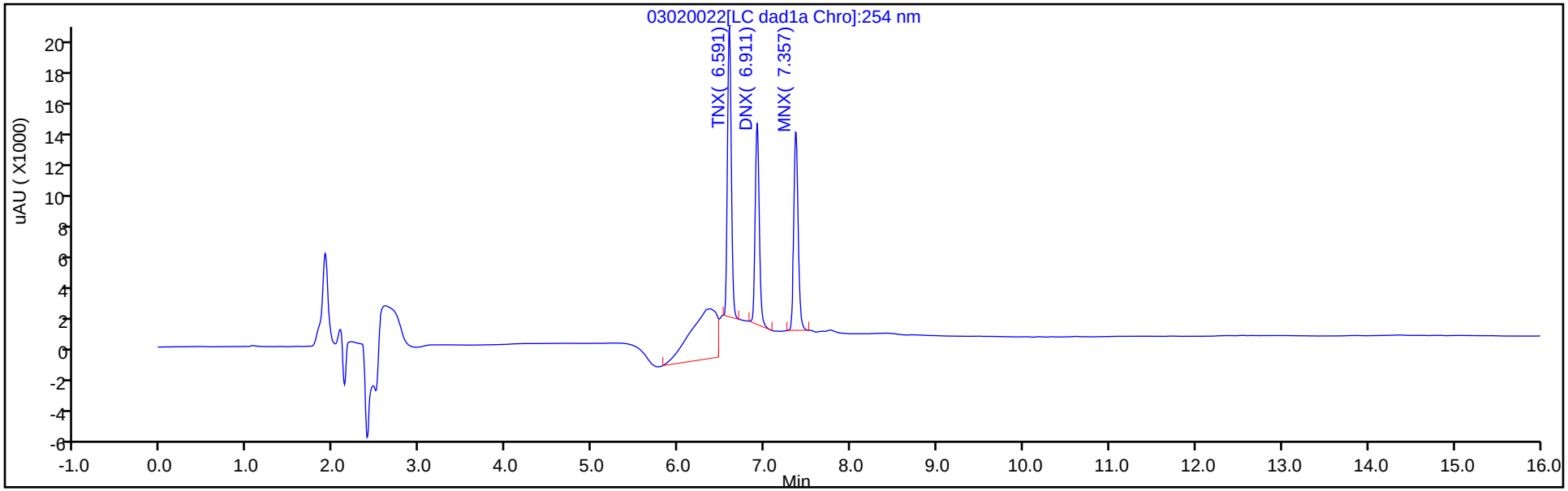
8330 DMT_00005 Amount Added: 12.50 Units: uL

Report Date: 03-Mar-2020 11:55:03 Chrom Revision: 2.3 19-Feb-2020 16:45:46

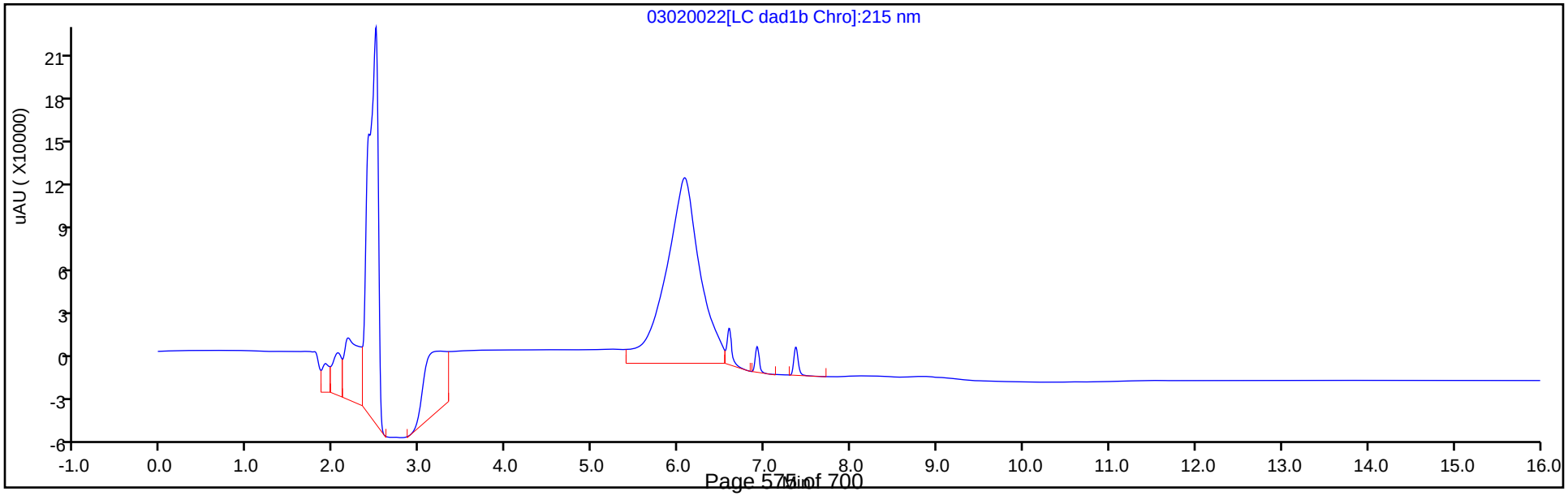
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020022.d				
Injection Date:	02-Mar-2020 21:04:06	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	CCV DMT			Worklist Smp#:	22
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

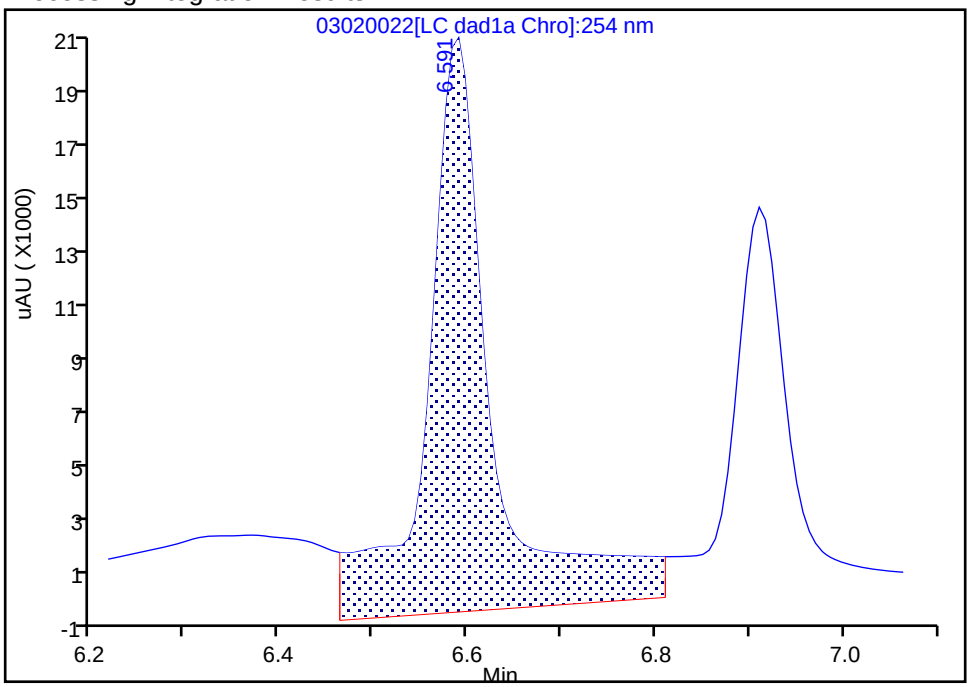
Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020022.d				
Injection Date:	02-Mar-2020 21:04:06	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	CB	ALS Bottle#:	9	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

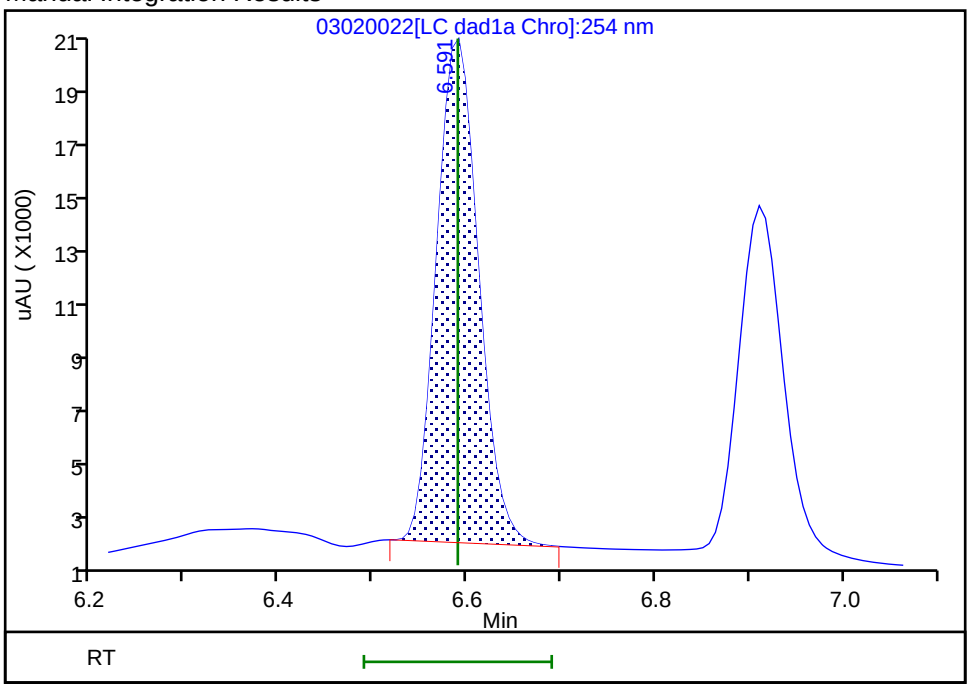
Processing Integration Results

RT: 6.59
Area: 98876
Amount: 0.481711
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 56622
Amount: 0.275855
Amount Units: ug/mL



Reviewer: beckerc, 03-Mar-2020 11:15:12

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

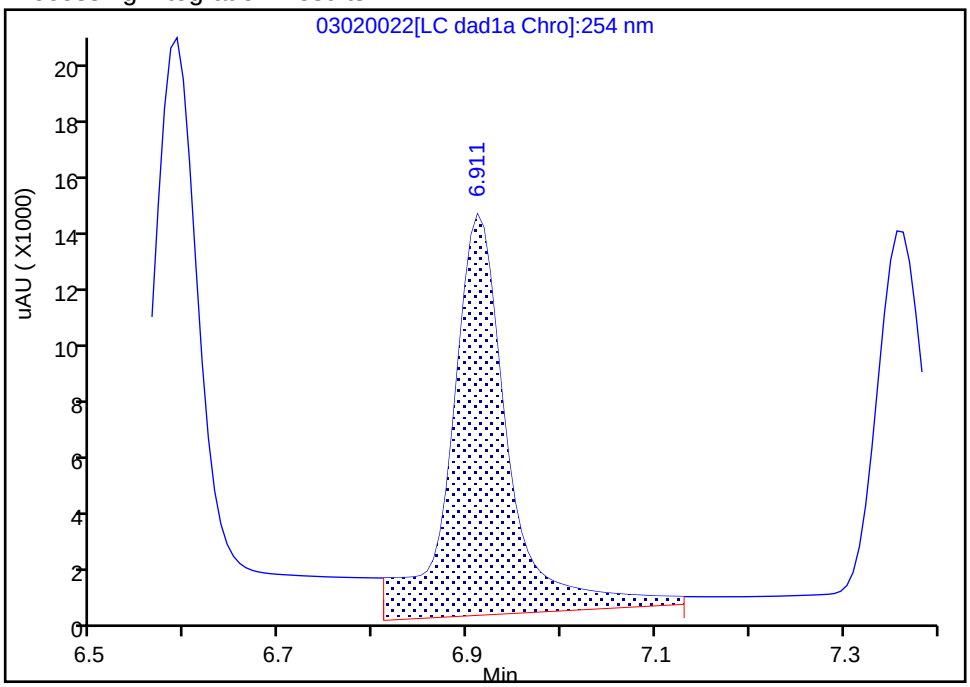
Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020022.d				
Injection Date:	02-Mar-2020 21:04:06	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	CB	ALS Bottle#:	9	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

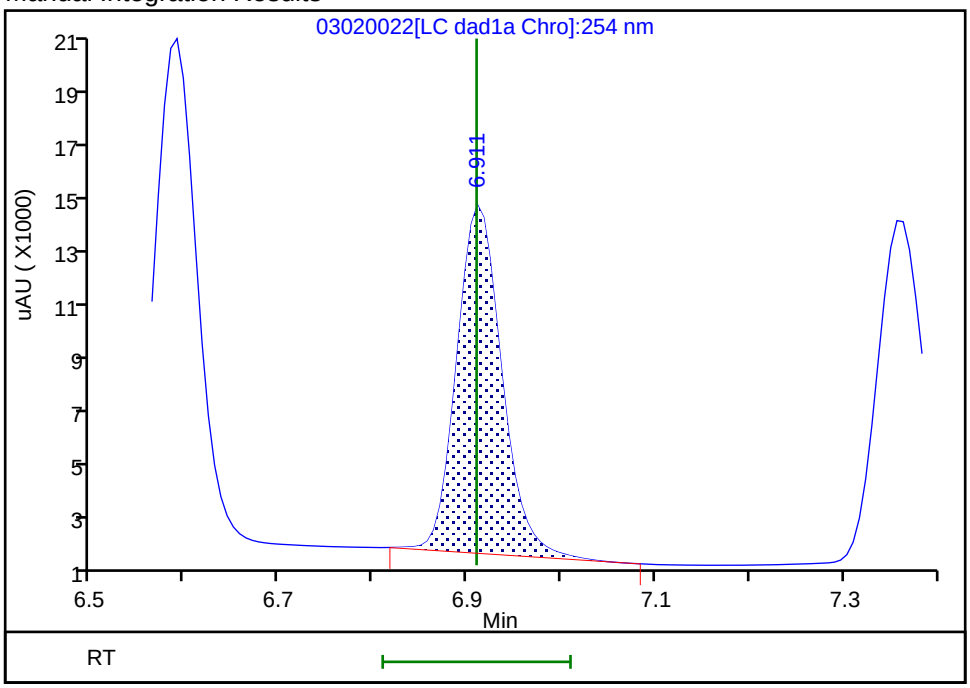
Processing Integration Results

RT: 6.91
Area: 58134
Amount: 0.374111
Amount Units: ug/mL



Manual Integration Results

RT: 6.91
Area: 42095
Amount: 0.270895
Amount Units: ug/mL



Reviewer: beckerc, 03-Mar-2020 11:15:18

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Lab Sample ID: CCV 280-487395/33 Calibration Date: 03/03/2020 01:16

Instrument ID: CHHPLC_X3 Calib Start Date: 07/01/2019 14:40

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 07/01/2019 17:23

Lab File ID: 03020033.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	91833	90492		246	250	-1.5	15.0
RDX	Ave	111120	111196		250	250	0.0	15.0
Picric acid	Ave	90734	82896		228	250	-8.6	15.0
1,3,5-Trinitrobenzene	Ave	245077	234583		240	251	-4.3	15.0
1,3-Dinitrobenzene	Ave	311175	314028		253	251	0.9	15.0
Nitrobenzene	Ave	198903	199398		252	251	0.2	15.0
Tetryl	Ave	161957	183329		284	251	13.2	15.0
Nitroglycerin	Ave	71108	69974		2460	2500	-1.6	15.0
2,4,6-Trinitrotoluene	Ave	227277	208916		231	251	-8.1	15.0
4-Amino-2,6-dinitrotoluene	Ave	166378	168016		253	250	1.0	15.0
2-Amino-4,6-dinitrotoluene	Ave	205236	206450		252	251	0.6	15.0
2,6-Dinitrotoluene	Ave	159284	154697		244	251	-2.9	15.0
2,4-Dinitrotoluene	Ave	300447	310052		259	251	3.2	15.0
2-Nitrotoluene	Ave	129784	130212		251	250	0.3	15.0
4-Nitrotoluene	Ave	110255	112355		255	251	1.9	15.0
3-Nitrotoluene	Ave	145122	141822		245	250	-2.3	15.0
PETN	Ave	74289	79242		2670	2500	6.7	15.0
1,2-Dinitrobenzene	Ave	139328	139704		251	250	0.3	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Lab Sample ID: CCV 280-487395/33 Calibration Date: 03/03/2020 01:16

Instrument ID: CHHPLC_X3 Calib Start Date: 07/01/2019 14:40

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 07/01/2019 17:23

Lab File ID: 03020033.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.68	6.53	6.83
RDX	7.75	7.60	7.90
Picric acid	8.07	7.92	8.22
1,3,5-Trinitrobenzene	8.88	8.73	9.03
1,3-Dinitrobenzene	9.52	9.38	9.68
Nitrobenzene	9.91	9.76	10.06
Tetryl	10.20	10.06	10.36
Nitroglycerin	10.71	10.57	10.87
2,4,6-Trinitrotoluene	11.16	11.07	11.27
4-Amino-2,6-dinitrotoluene	11.31	11.23	11.43
2-Amino-4,6-dinitrotoluene	11.60	11.51	11.71
2,6-Dinitrotoluene	11.77	11.68	11.88
2,4-Dinitrotoluene	11.96	11.87	12.07
2-Nitrotoluene	12.80	12.67	12.97
4-Nitrotoluene	13.23	13.11	13.41
3-Nitrotoluene	13.83	13.70	14.00
PETN	14.92	14.82	15.12
1,2-Dinitrobenzene	8.70	8.56	8.86

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200302-89712.b\03020033.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 03-Mar-2020 01:16:19 ALS Bottle#: 7 Worklist Smp#: 33
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0089712-033
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200302-89712.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 03-Mar-2020 11:55:40 Calib Date: 06-Jan-2020 20:40:54
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060014.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0310

First Level Reviewer: beckerc Date: 03-Mar-2020 11:29:30

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.681	6.680	0.001	22623	0.2500	0.2463	
7 RDX	1	7.748	7.754	-0.006	27799	0.2500	0.2502	
8 2,4,6-Trinitrophenol	1	8.068	8.067	0.001	20724	0.2500	0.2284	
$ 9 1,2-Dinitrobenzene	1	8.701	8.707	-0.006	34926	0.2500	0.2507	
10 1,3,5-Trinitrobenzene	1	8.875	8.880	-0.005	58763	0.2505	0.2398	
11 1,3-Dinitrobenzene	1	9.521	9.527	-0.006	78664	0.2505	0.2528	
12 Nitrobenzene	1	9.908	9.914	-0.006	50049	0.2510	0.2516	
14 Tetryl	1	10.201	10.207	-0.006	45924	0.2505	0.2836	
15 Nitroglycerin	2	10.708	10.720	-0.012	174936	2.50	2.46	
16 2,4,6-Trinitrotoluene	1	11.161	11.174	-0.013	52438	0.2510	0.2307	
17 4-Amino-2,6-dinitrotoluene	1	11.314	11.327	-0.013	42046	0.2503	0.2527	
18 2-Amino-4,6-dinitrotoluene	1	11.601	11.614	-0.013	51819	0.2510	0.2525	
19 2,6-Dinitrotoluene	1	11.768	11.780	-0.012	38829	0.2510	0.2438	
20 2,4-Dinitrotoluene	1	11.961	11.974	-0.013	77823	0.2510	0.2590	
21 o-Nitrotoluene	1	12.801	12.820	-0.019	32553	0.2500	0.2508	
22 p-Nitrotoluene	1	13.234	13.260	-0.026	28145	0.2505	0.2553	
23 m-Nitrotoluene	1	13.828	13.854	-0.026	35491	0.2503	0.2446	
24 PETN	2	14.921	14.967	-0.046	198105	2.50	2.67	

Reagents:

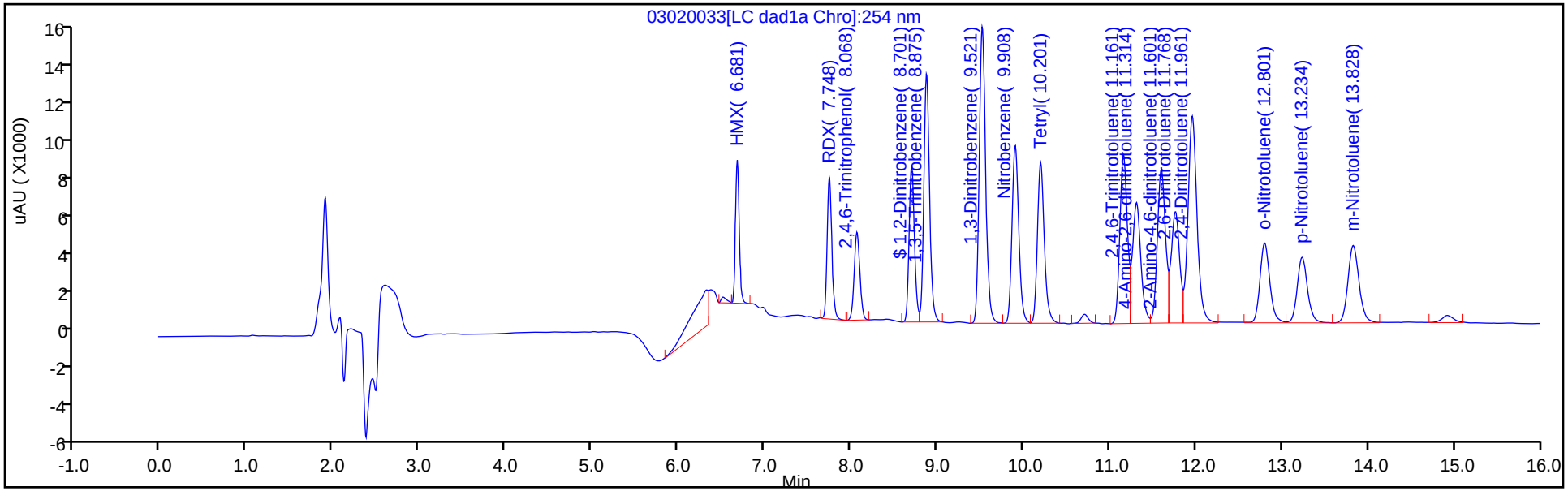
8330IntermStk_00061 Amount Added: 25.00 Units: uL

Report Date: 03-Mar-2020 11:55:40 Chrom Revision: 2.3 19-Feb-2020 16:45:46

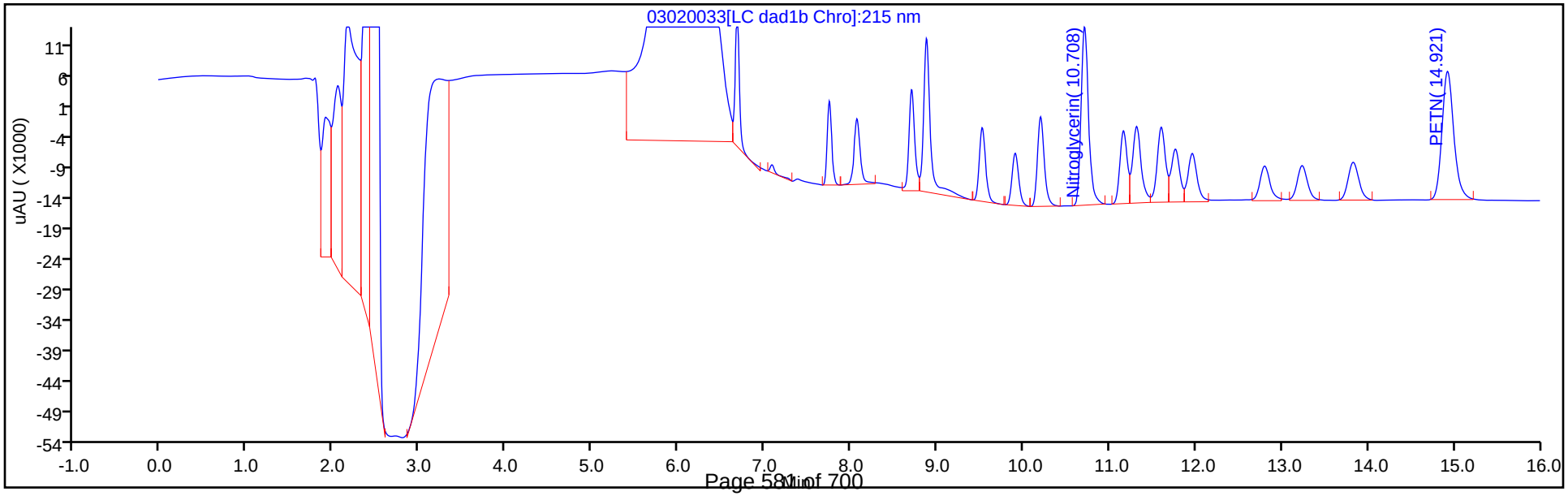
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020033.d				
Injection Date:	03-Mar-2020 01:16:19	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	CCV INT			Worklist Smp#:	33
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Lab Sample ID: CCV 280-487395/35 Calibration Date: 03/03/2020 02:02

Instrument ID: CHHPLC_X3 Calib Start Date: 01/06/2020 18:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/06/2020 20:40

Lab File ID: 03020035.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	205260	220987		269	250	7.7	15.0
DNX	Ave	155392	165562		267	250	6.5	15.0
MNX	Ave	140331	152103		316	292	8.4	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Lab Sample ID: CCV 280-487395/35 Calibration Date: 03/03/2020 02:02

Instrument ID: CHHPLC_X3 Calib Start Date: 01/06/2020 18:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/06/2020 20:40

Lab File ID: 03020035.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.59	6.49	6.69
DNX	6.91	6.81	7.01
MNX	7.35	7.21	7.51

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200302-89712.b\03020035.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	03-Mar-2020 02:02:11	ALS Bottle#:	9	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0089712-035				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200302-89712.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	03-Mar-2020 11:55:45	Calib Date:	06-Jan-2020 20:40:54		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060014.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0310				

First Level Reviewer: beckerc Date: 03-Mar-2020 11:30:10

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.587	6.590	-0.003	55302	0.2503	0.2694	M
5 DNX	1	6.907	6.910	-0.003	41432	0.2503	0.2666	M
6 MNX	1	7.353	7.363	-0.010	44376	0.2918	0.3162	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

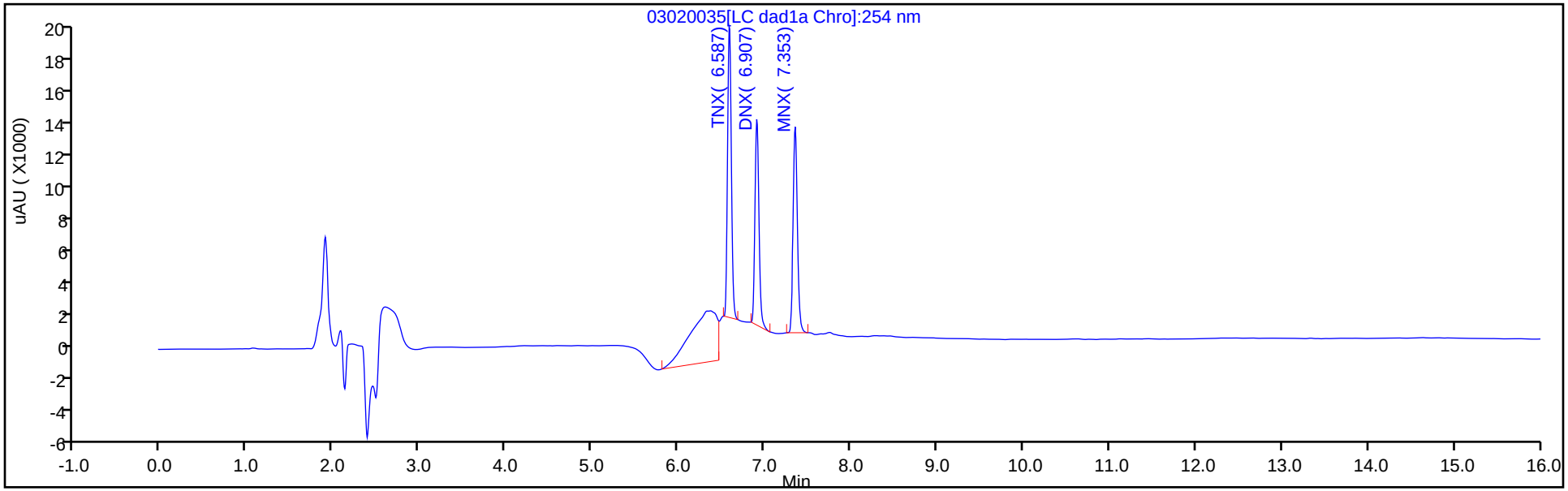
8330 DMT_00005 Amount Added: 12.50 Units: uL

Report Date: 03-Mar-2020 11:55:45 Chrom Revision: 2.3 19-Feb-2020 16:45:46

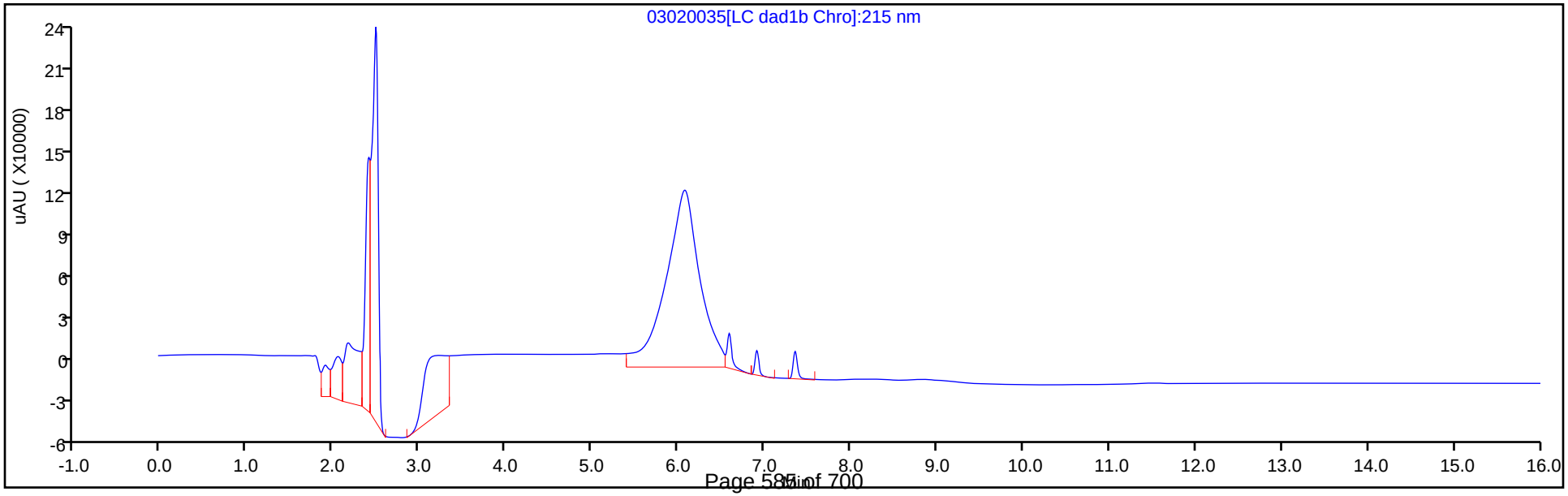
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020035.d				
Injection Date:	03-Mar-2020 02:02:11	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	CCV DMT			Worklist Smp#:	35
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

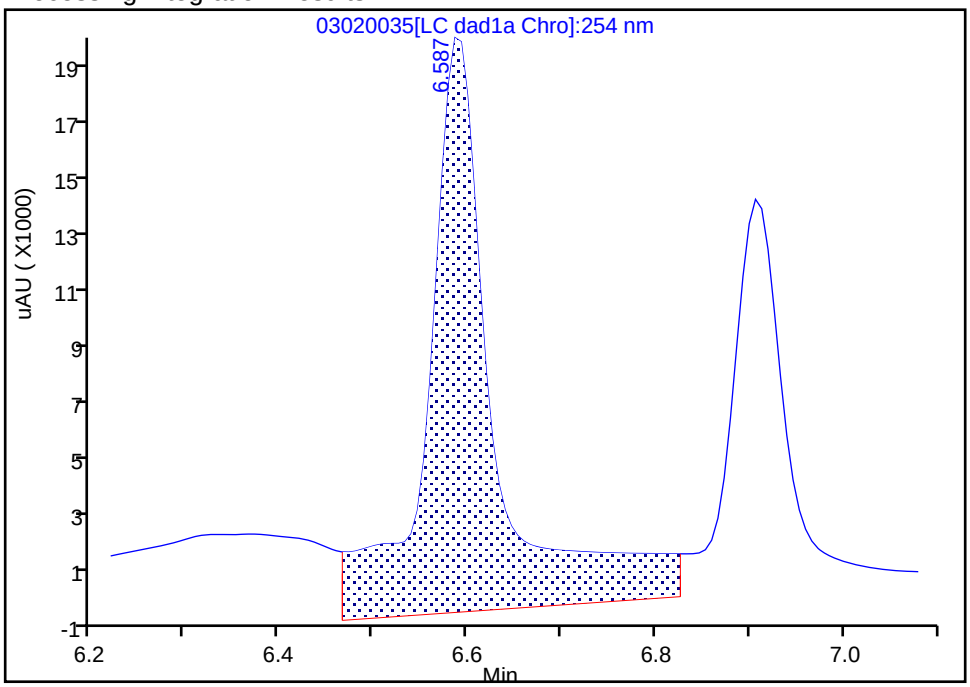
Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020035.d				
Injection Date:	03-Mar-2020 02:02:11	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	CB	ALS Bottle#:	9	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

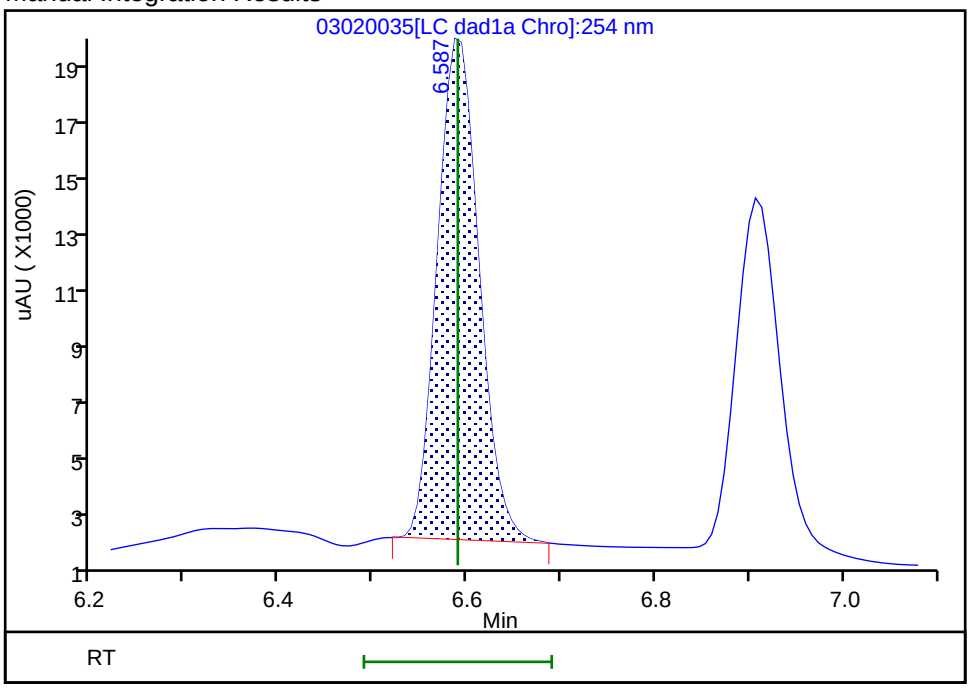
Processing Integration Results

RT: 6.59
Area: 100709
Amount: 0.490641
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 55302
Amount: 0.269424
Amount Units: ug/mL



Reviewer: beckerc, 03-Mar-2020 11:30:03

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

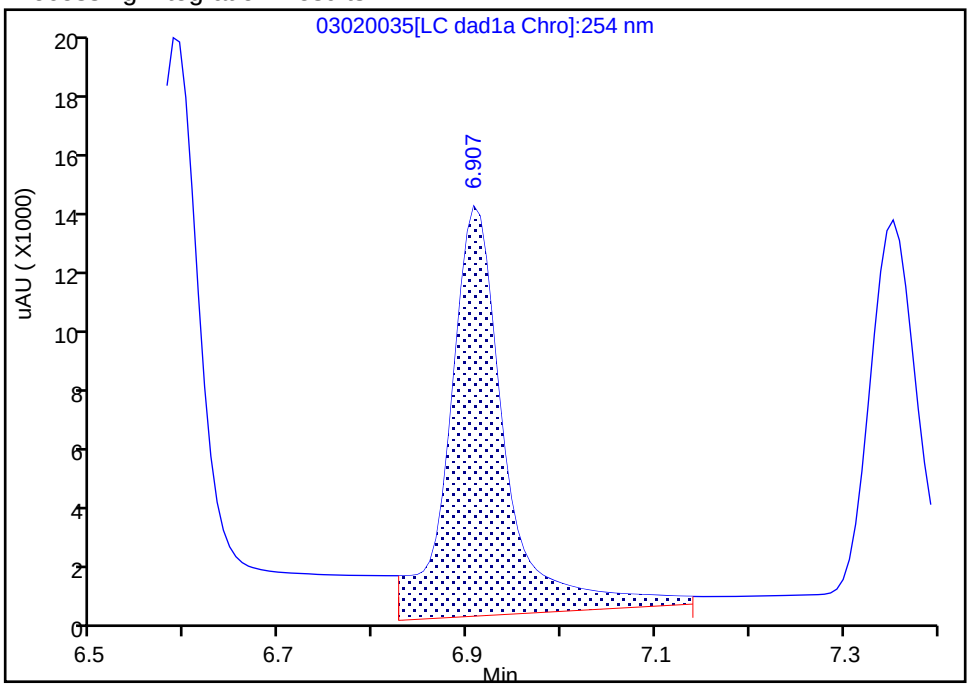
Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020035.d				
Injection Date:	03-Mar-2020 02:02:11	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	CB	ALS Bottle#:	9	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

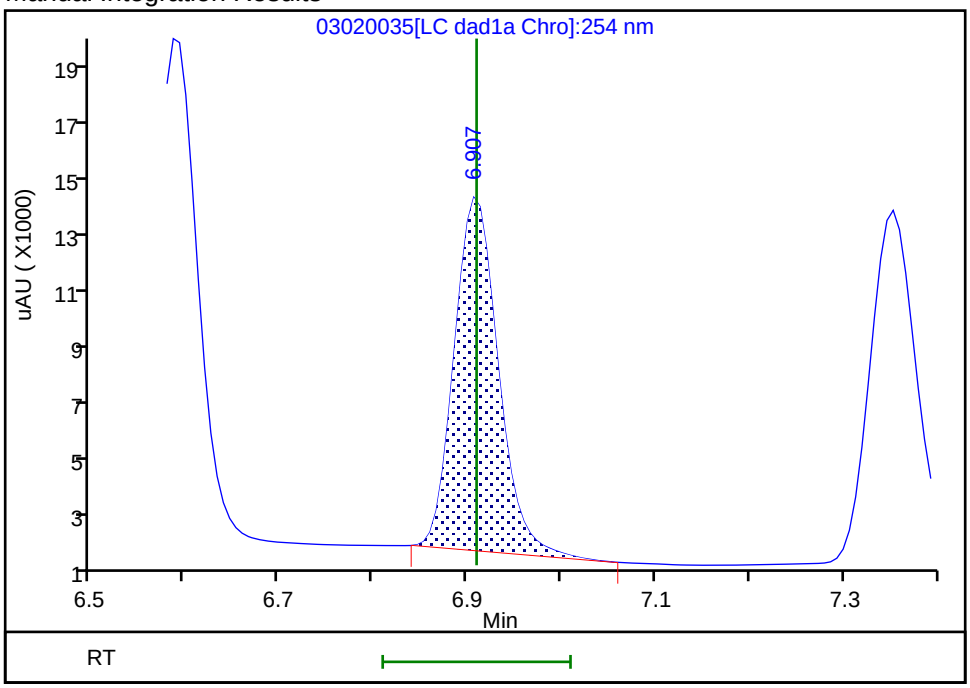
Processing Integration Results

RT: 6.91
Area: 57501
Amount: 0.370037
Amount Units: ug/mL



Manual Integration Results

RT: 6.91
Area: 41432
Amount: 0.266628
Amount Units: ug/mL



Reviewer: beckerc, 03-Mar-2020 11:30:07

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Lab Sample ID: ICV 280-487658/15 Calibration Date: 03/04/2020 17:10

Instrument ID: CHHPLC_X3 Calib Start Date: 03/04/2020 14:07

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/04/2020 16:47

Lab File ID: 03040015.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	89178	84438		379	400	-5.3	15.0
RDX	Ave	117869	105313		357	400	-10.7	15.0
Picric acid	Ave	87247	85318		391	400	-2.2	15.0
1,3,5-Trinitrobenzene	Ave	243459	237765		391	400	-2.3	15.0
1,3-Dinitrobenzene	Ave	324251	307115		379	400	-5.3	15.0
Nitrobenzene	Ave	212689	202485		381	400	-4.8	15.0
Tetryl	Ave	193870	175735		363	400	-9.4	15.0
Nitroglycerin	Ave	71797	66747		3720	4000	-7.0	15.0
2,4,6-Trinitrotoluene	Ave	220911	205103		371	400	-7.2	15.0
4-Amino-2,6-dinitrotoluene	Ave	173468	158943		367	400	-8.4	15.0
2-Amino-4,6-dinitrotoluene	Ave	217539	202095		372	400	-7.1	15.0
2,6-Dinitrotoluene	Ave	159404	150648		378	400	-5.5	15.0
2,4-Dinitrotoluene	Ave	321164	290578		362	400	-9.5	15.0
2-Nitrotoluene	Ave	143838	128300		357	400	-10.8	15.0
4-Nitrotoluene	Ave	120299	111828		372	400	-7.0	15.0
3-Nitrotoluene	Ave	154244	144728		375	400	-6.2	15.0
PETN	Ave	79456	76256		3840	4000	-4.0	15.0
1,2-Dinitrobenzene	Ave	146215	131020		358	400	-10.4	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Lab Sample ID: ICV 280-487658/15 Calibration Date: 03/04/2020 17:10

Instrument ID: CHHPLC_X3 Calib Start Date: 03/04/2020 14:07

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/04/2020 16:47

Lab File ID: 03040015.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.68	6.53	6.83
RDX	7.75	7.60	7.90
Picric acid	8.06	7.91	8.21
1,3,5-Trinitrobenzene	8.88	8.73	9.03
1,3-Dinitrobenzene	9.53	9.38	9.68
Nitrobenzene	9.92	9.77	10.07
Tetryl	10.22	10.07	10.37
Nitroglycerin	10.73	10.58	10.88
2,4,6-Trinitrotoluene	11.18	11.08	11.28
4-Amino-2,6-dinitrotoluene	11.34	11.24	11.44
2-Amino-4,6-dinitrotoluene	11.62	11.52	11.72
2,6-Dinitrotoluene	11.79	11.69	11.89
2,4-Dinitrotoluene	11.98	11.88	12.08
2-Nitrotoluene	12.83	12.68	12.98
4-Nitrotoluene	13.27	13.12	13.42
3-Nitrotoluene	13.86	13.71	14.01
PETN	14.97	14.82	15.12
1,2-Dinitrobenzene	8.71	8.56	8.86

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040015.D
Lims ID: ICV MAIN
Client ID:
Sample Type: ICV
Inject. Date: 04-Mar-2020 17:10:41 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICV MAIN
Misc. Info.: 280-0089779-015
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist:

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Mar-2020 10:25:10 Calib Date: 04-Mar-2020 16:47:48
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040014.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0308

First Level Reviewer: beckerc Date: 05-Mar-2020 08:23:55

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.683	6.683	0.000	33775	0.4000	0.3787	M
7 RDX	1	7.750	7.750	0.000	42125	0.4000	0.3574	
8 2,4,6-Trinitrophenol	1	8.056	8.056	0.000	34127	0.4000	0.3912	
$ 9 1,2-Dinitrobenzene	1	8.710	8.710	0.000	52408	0.4000	0.3584	
10 1,3,5-Trinitrobenzene	1	8.883	8.883	0.000	95106	0.4000	0.3906	
11 1,3-Dinitrobenzene	1	9.529	9.529	0.000	122846	0.4000	0.3789	
12 Nitrobenzene	1	9.916	9.916	0.000	80994	0.4000	0.3808	
14 Tetryl	1	10.216	10.216	0.000	70294	0.4000	0.3626	
15 Nitroglycerin	2	10.729	10.729	0.000	266988	4.00	3.72	
16 2,4,6-Trinitrotoluene	1	11.183	11.183	0.000	82041	0.4000	0.3714	
17 4-Amino-2,6-dinitrotoluene	1	11.336	11.336	0.000	63577	0.4000	0.3665	
18 2-Amino-4,6-dinitrotoluene	1	11.623	11.623	0.000	80838	0.4000	0.3716	
19 2,6-Dinitrotoluene	1	11.789	11.789	0.000	60259	0.4000	0.3780	
20 2,4-Dinitrotoluene	1	11.983	11.983	0.000	116231	0.4000	0.3619	
21 o-Nitrotoluene	1	12.829	12.829	0.000	51320	0.4000	0.3568	
22 p-Nitrotoluene	1	13.269	13.269	0.000	44731	0.4000	0.3718	
23 m-Nitrotoluene	1	13.863	13.863	0.000	57891	0.4000	0.3753	
24 PETN	2	14.969	14.969	0.000	305025	4.00	3.84	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

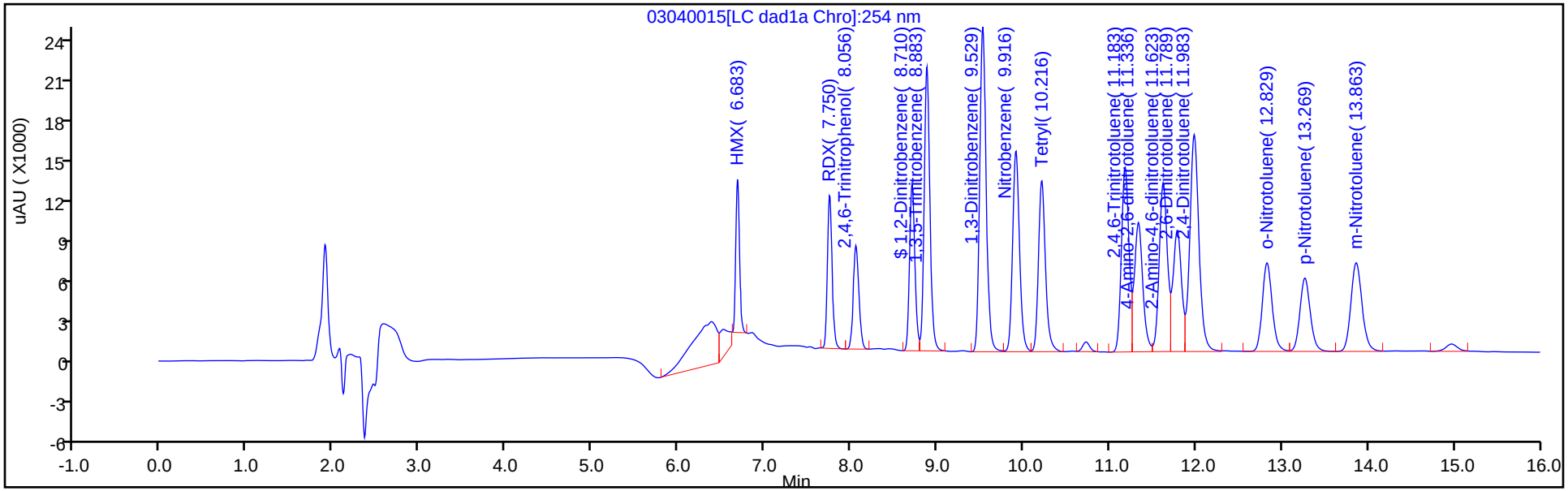
8330Surrogate_00110 Amount Added: 40.00 Units: uL
8330 LCS_00095 Amount Added: 40.00 Units: uL

Report Date: 06-Mar-2020 10:25:10 Chrom Revision: 2.3 19-Feb-2020 16:45:46

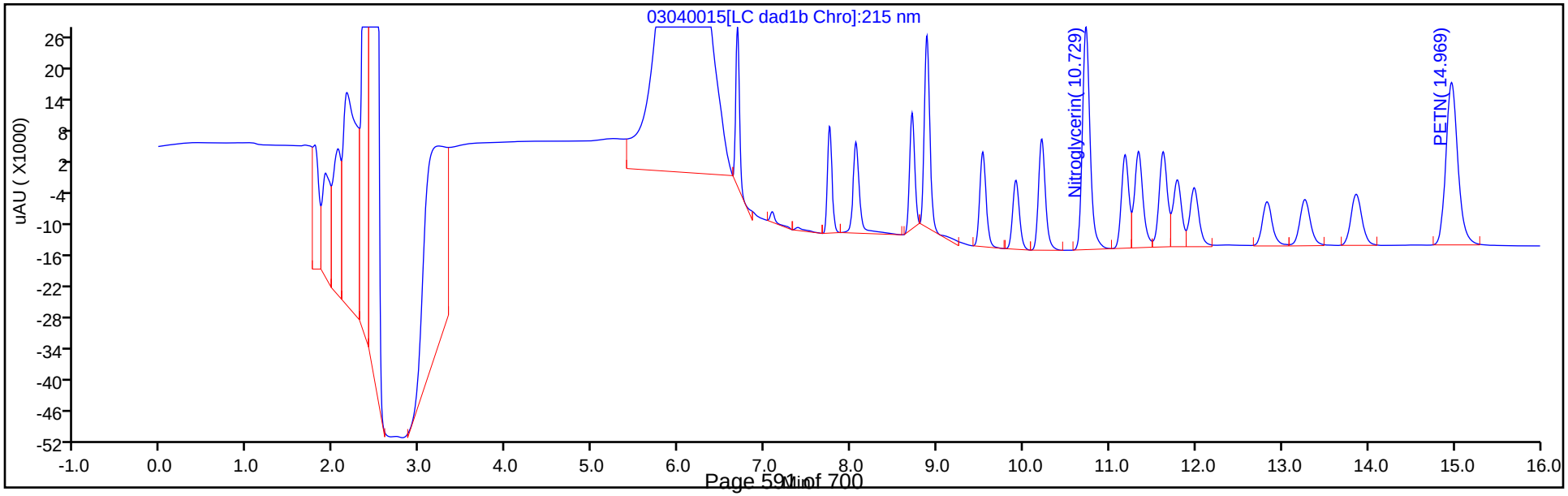
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040015.d				
Injection Date:	04-Mar-2020 17:10:41	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	ICV MAIN			Worklist Smp#:	15
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

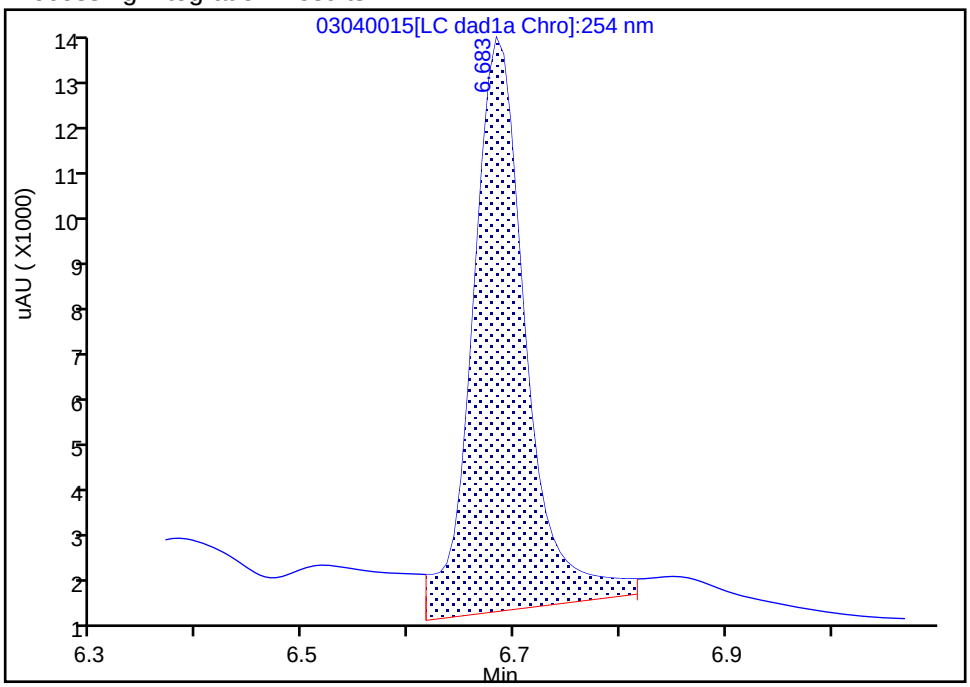
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040015.d				
Injection Date:	04-Mar-2020 17:10:41	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV MAIN				
Client ID:					
Operator ID:	CB	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

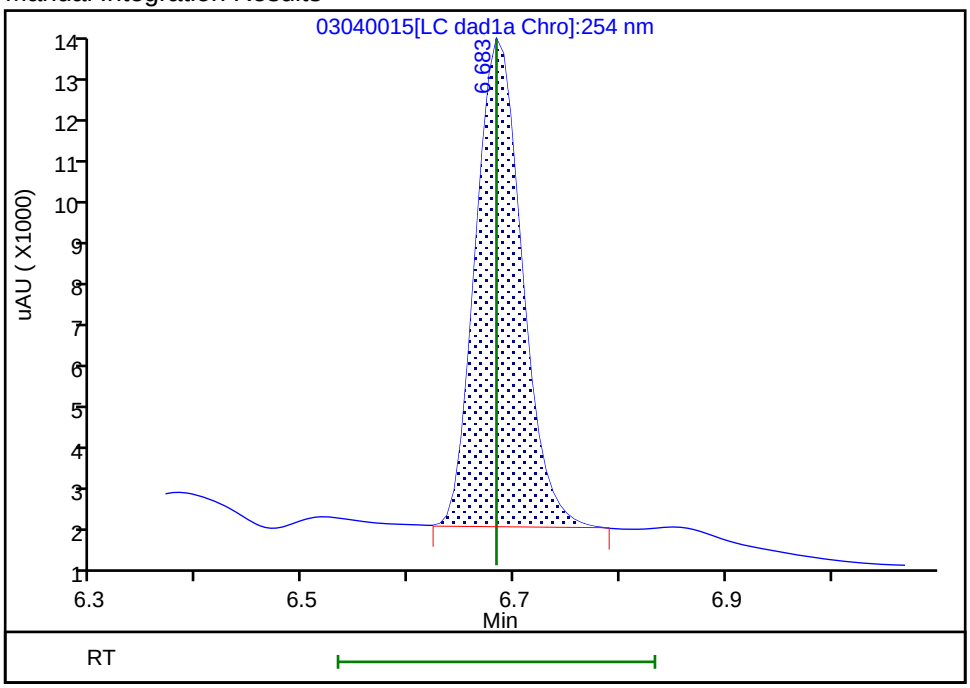
Processing Integration Results

RT: 6.68
Area: 41329
Amount: 0.463446
Amount Units: ug/mL



Manual Integration Results

RT: 6.68
Area: 33775
Amount: 0.378739
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:23:51
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Lab Sample ID: ICV 280-487658/33 Calibration Date: 03/05/2020 00:03

Instrument ID: CHHPLC_X3 Calib Start Date: 03/04/2020 21:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/04/2020 23:40

Lab File ID: 03040033.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	217609	189186		348	400	-13.1	15.0
DNX	Ave	152928	145270		380	400	-5.0	15.0
MNX	Ave	158544	136780		403	467	-13.7	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Lab Sample ID: ICV 280-487658/33 Calibration Date: 03/05/2020 00:03

Instrument ID: CHHPLC_X3 Calib Start Date: 03/04/2020 21:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/04/2020 23:40

Lab File ID: 03040033.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.59	6.49	6.69
DNX	6.91	6.81	7.01
MNX	7.36	7.21	7.51

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040033.D				
Lims ID:	ICV DMT				
Client ID:					
Sample Type:	ICV				
Inject. Date:	05-Mar-2020 00:03:48	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	ICV DMT				
Misc. Info.:	280-0089779-033				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Sublist:					
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Mar-2020 10:25:28	Calib Date:	04-Mar-2020 23:40:46		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0308				

First Level Reviewer: beckerc Date: 05-Mar-2020 08:37:53

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.594	6.594	0.000	75750	0.4004	0.3481	M
5 DNX	1	6.914	6.914	0.000	58166	0.4004	0.3803	M
6 MNX	1	7.361	7.361	0.000	63849	0.4668	0.4027	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

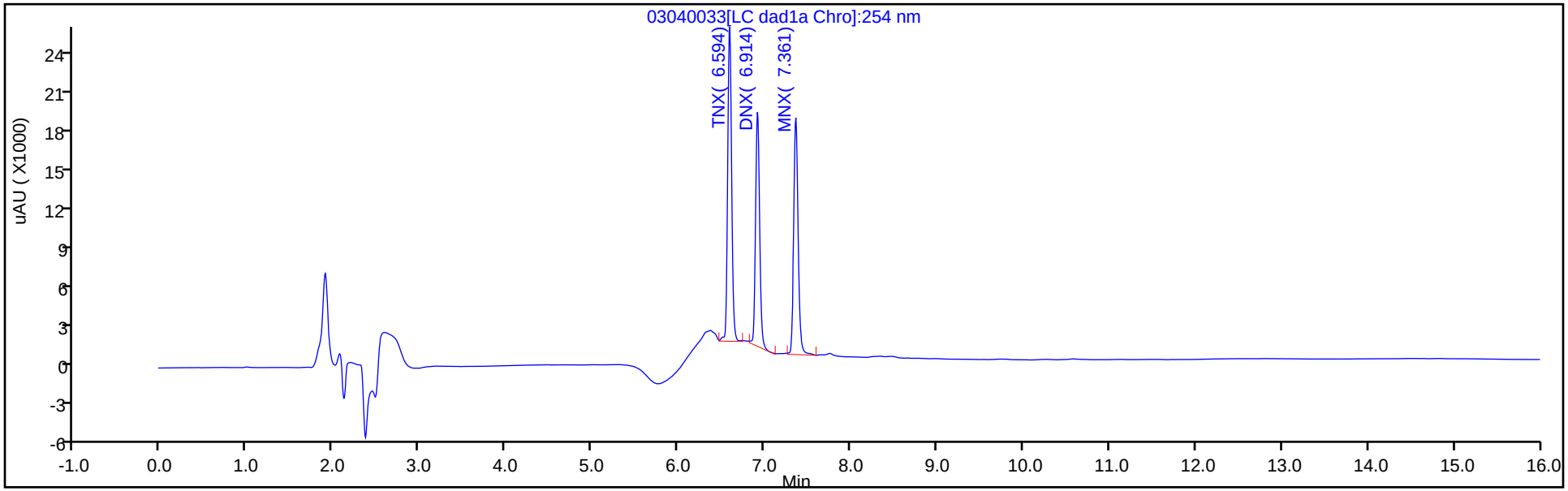
8330_OP_DMT_00006 Amount Added: 40.00 Units: uL

Report Date: 06-Mar-2020 10:25:29 Chrom Revision: 2.3 19-Feb-2020 16:45:46

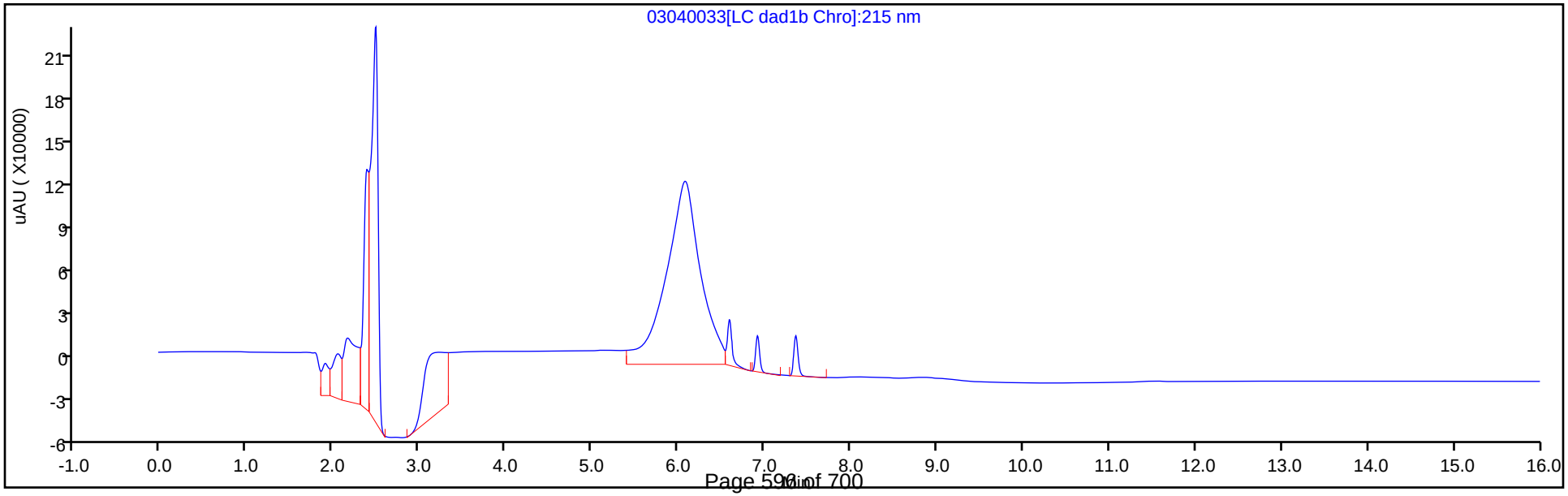
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040033.d				
Injection Date:	05-Mar-2020 00:03:48	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	ICV DMT			Worklist Smp#:	33
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	33
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

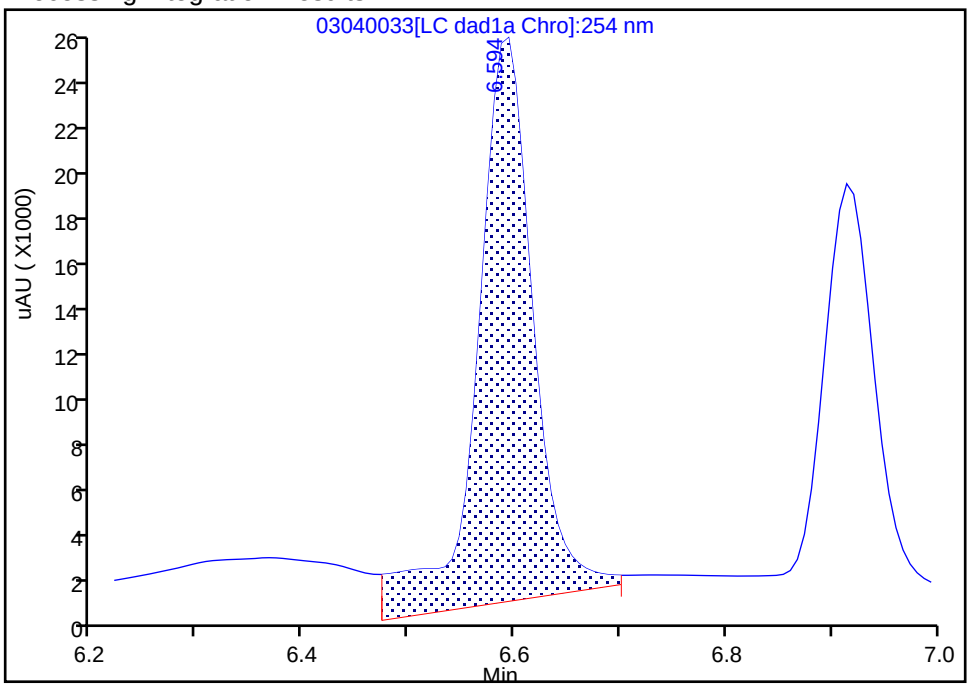
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040033.d				
Injection Date:	05-Mar-2020 00:03:48	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV DMT				
Client ID:					
Operator ID:	CB	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

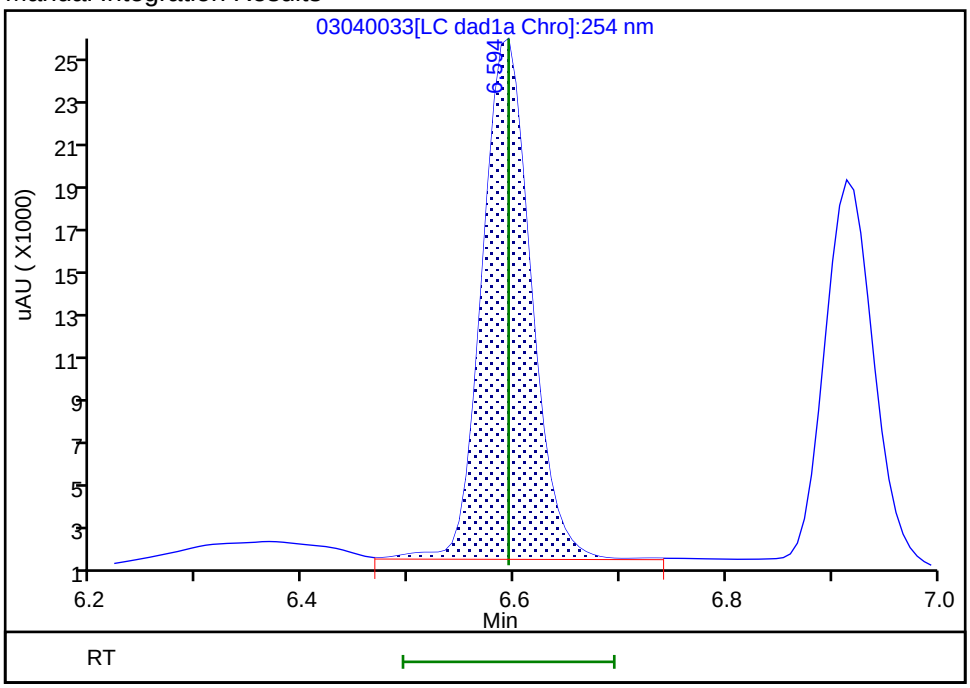
Processing Integration Results

RT: 6.59
Area: 91215
Amount: 0.419170
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 75750
Amount: 0.348102
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:37:32

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

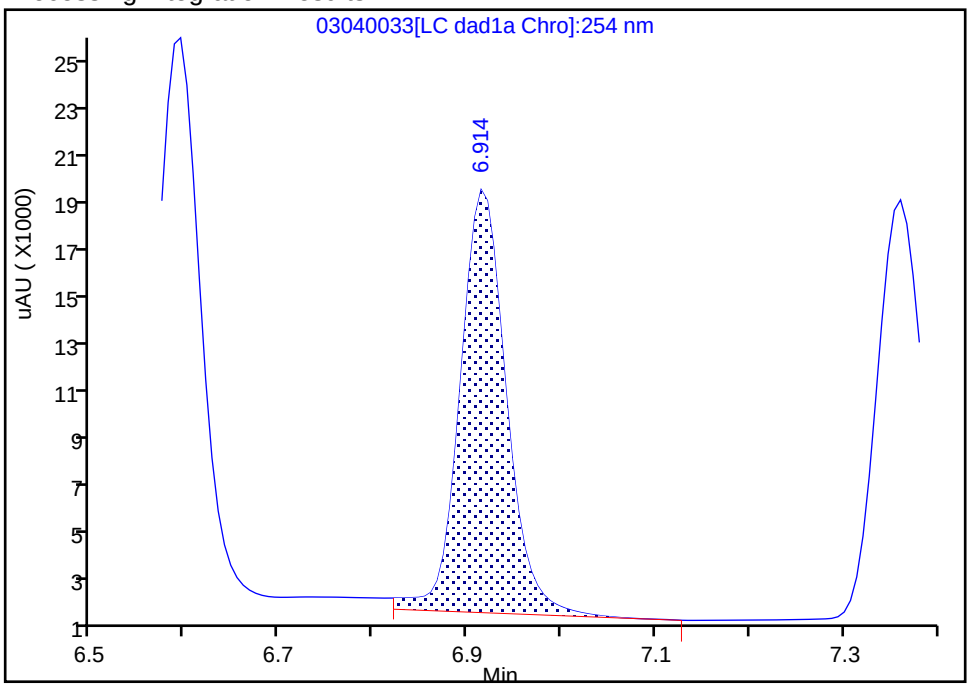
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040033.d				
Injection Date:	05-Mar-2020 00:03:48	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV DMT				
Client ID:					
Operator ID:	CB	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

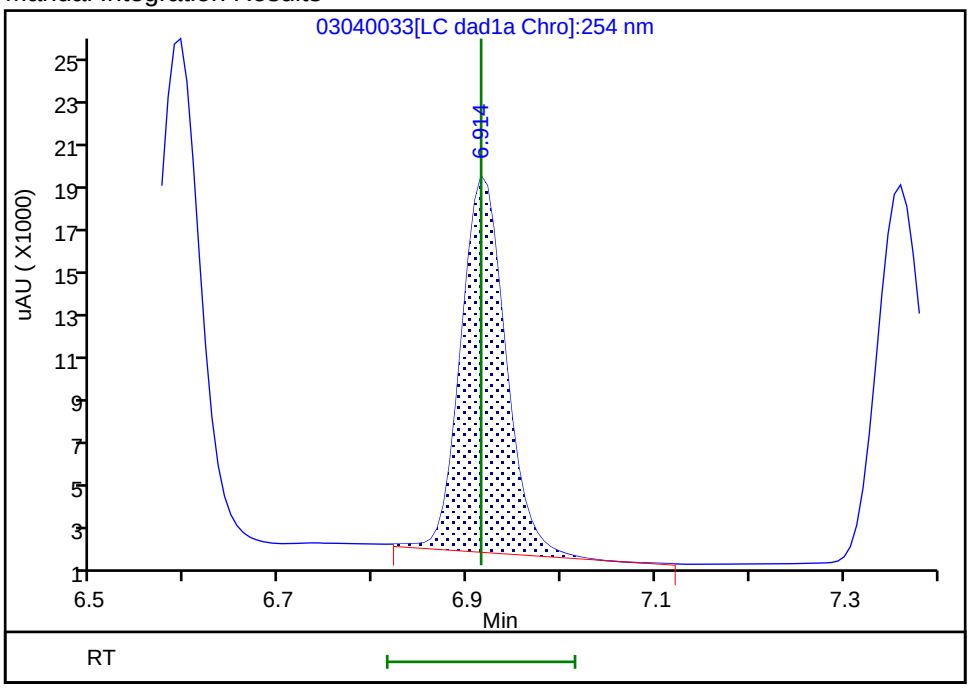
Processing Integration Results

RT: 6.91
Area: 60901
Amount: 0.398232
Amount Units: ug/mL



Manual Integration Results

RT: 6.91
Area: 58166
Amount: 0.380348
Amount Units: ug/mL



Reviewer: beckerc, 05-Mar-2020 08:37:39

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Lab Sample ID: CCV 280-487660/56 Calibration Date: 03/05/2020 08:51

Instrument ID: CHHPLC_X3 Calib Start Date: 03/04/2020 14:07

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/04/2020 16:47

Lab File ID: 03040056.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	89178	91712		257	250	2.8	15.0
RDX	Ave	117869	114308		242	250	-3.0	15.0
Picric acid	Ave	87247	86992		249	250	-0.3	15.0
1,3,5-Trinitrobenzene	Ave	243459	243090		250	251	-0.2	15.0
1,3-Dinitrobenzene	Ave	324251	327473		253	251	1.0	15.0
Nitrobenzene	Ave	212689	203422		240	251	-4.4	15.0
Tetryl	Ave	193870	191641		248	251	-1.1	15.0
Nitroglycerin	Ave	71797	73853		2570	2500	2.9	15.0
2,4,6-Trinitrotoluene	Ave	220911	220195		250	251	-0.3	15.0
4-Amino-2,6-dinitrotoluene	Ave	173468	172975		250	250	-0.3	15.0
2-Amino-4,6-dinitrotoluene	Ave	217539	217410		251	251	-0.0	15.0
2,6-Dinitrotoluene	Ave	159404	159490		251	251	0.0	15.0
2,4-Dinitrotoluene	Ave	321164	320681		251	251	-0.2	15.0
2-Nitrotoluene	Ave	143838	131452		228	250	-8.6	15.0
4-Nitrotoluene	Ave	120299	113988		237	251	-5.2	15.0
3-Nitrotoluene	Ave	154244	145411		236	250	-5.7	15.0
PETN	Ave	79456	81562		2570	2500	2.7	15.0
1,2-Dinitrobenzene	Ave	146215	145120		248	250	-0.7	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Lab Sample ID: CCV 280-487660/56 Calibration Date: 03/05/2020 08:51

Instrument ID: CHHPLC_X3 Calib Start Date: 03/04/2020 14:07

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/04/2020 16:47

Lab File ID: 03040056.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.68	6.53	6.83
RDX	7.76	7.60	7.90
Picric acid	8.08	7.91	8.21
1,3,5-Trinitrobenzene	8.88	8.73	9.03
1,3-Dinitrobenzene	9.54	9.38	9.68
Nitrobenzene	9.92	9.77	10.07
Tetryl	10.22	10.07	10.37
Nitroglycerin	10.74	10.58	10.88
2,4,6-Trinitrotoluene	11.20	11.08	11.28
4-Amino-2,6-dinitrotoluene	11.35	11.24	11.44
2-Amino-4,6-dinitrotoluene	11.64	11.52	11.72
2,6-Dinitrotoluene	11.80	11.69	11.89
2,4-Dinitrotoluene	12.00	11.88	12.08
2-Nitrotoluene	12.84	12.68	12.98
4-Nitrotoluene	13.28	13.12	13.42
3-Nitrotoluene	13.88	13.71	14.01
PETN	14.98	14.82	15.12
1,2-Dinitrobenzene	8.71	8.56	8.86

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040056.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 05-Mar-2020 08:51:40 ALS Bottle#: 11 Worklist Smp#: 56
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0089779-056
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Mar-2020 10:25:52 Calib Date: 04-Mar-2020 23:40:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0308

First Level Reviewer: beckerc Date: 06-Mar-2020 09:36:13

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.684	6.683	0.001	22928	0.2500	0.2571	M
7 RDX	1	7.757	7.750	0.007	28577	0.2500	0.2424	
8 2,4,6-Trinitrophenol	1	8.077	8.056	0.021	21748	0.2500	0.2493	
$ 9 1,2-Dinitrobenzene	1	8.710	8.710	0.000	36280	0.2500	0.2481	
10 1,3,5-Trinitrobenzene	1	8.884	8.883	0.001	60894	0.2505	0.2501	
11 1,3-Dinitrobenzene	1	9.537	9.529	0.008	82032	0.2505	0.2530	
12 Nitrobenzene	1	9.923	9.916	0.007	51059	0.2510	0.2401	
14 Tetryl	1	10.223	10.216	0.007	48006	0.2505	0.2476	
15 Nitroglycerin	2	10.737	10.729	0.008	184633	2.50	2.57	
16 2,4,6-Trinitrotoluene	1	11.197	11.183	0.014	55269	0.2510	0.2502	
17 4-Amino-2,6-dinitrotoluene	1	11.350	11.336	0.014	43287	0.2503	0.2495	
18 2-Amino-4,6-dinitrotoluene	1	11.637	11.623	0.014	54570	0.2510	0.2509	
19 2,6-Dinitrotoluene	1	11.803	11.789	0.014	40032	0.2510	0.2511	
20 2,4-Dinitrotoluene	1	11.997	11.983	0.014	80491	0.2510	0.2506	
21 o-Nitrotoluene	1	12.843	12.829	0.014	32863	0.2500	0.2285	
22 p-Nitrotoluene	1	13.277	13.269	0.008	28554	0.2505	0.2374	
23 m-Nitrotoluene	1	13.877	13.863	0.014	36389	0.2503	0.2359	
24 PETN	2	14.977	14.969	0.008	203904	2.50	2.57	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

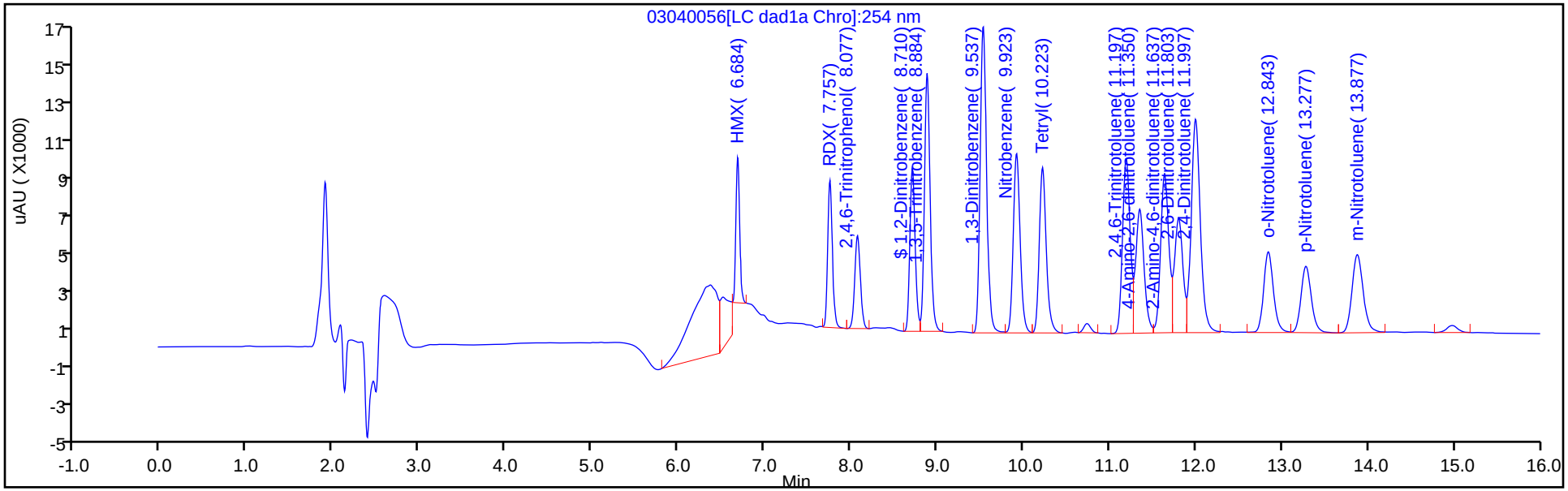
8330IntermStk_00061 Amount Added: 25.00 Units: uL

Report Date: 06-Mar-2020 10:25:53 Chrom Revision: 2.3 19-Feb-2020 16:45:46

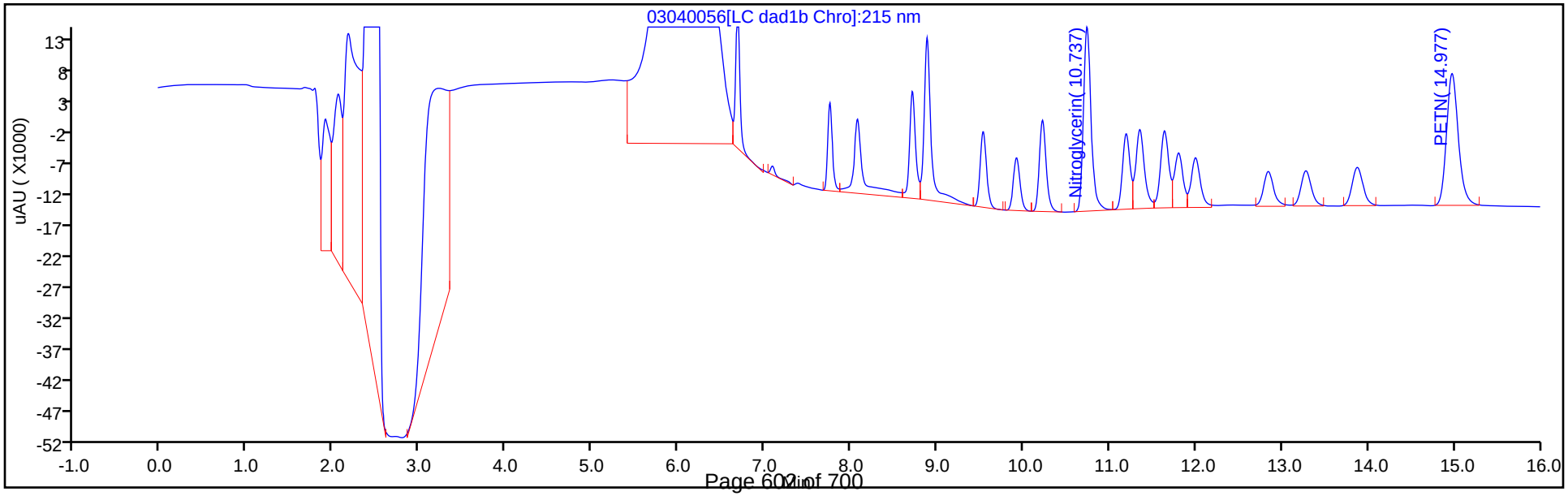
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040056.d				
Injection Date:	05-Mar-2020 08:51:40	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	CCV INT			Worklist Smp#:	56
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

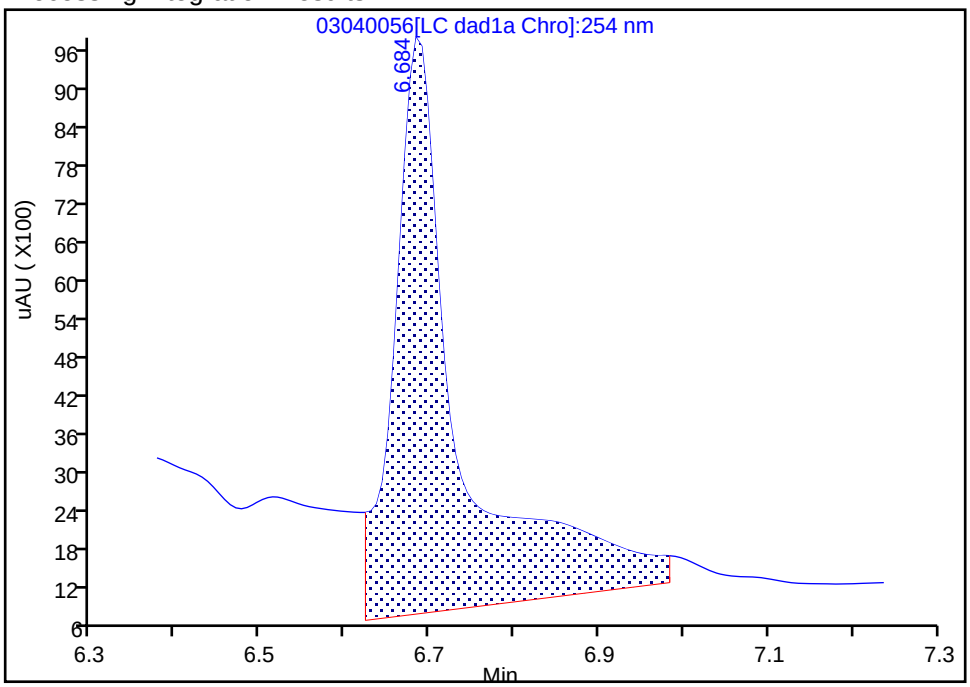
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040056.d				
Injection Date:	05-Mar-2020 08:51:40	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	CB	ALS Bottle#:	11	Worklist Smp#:	56
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

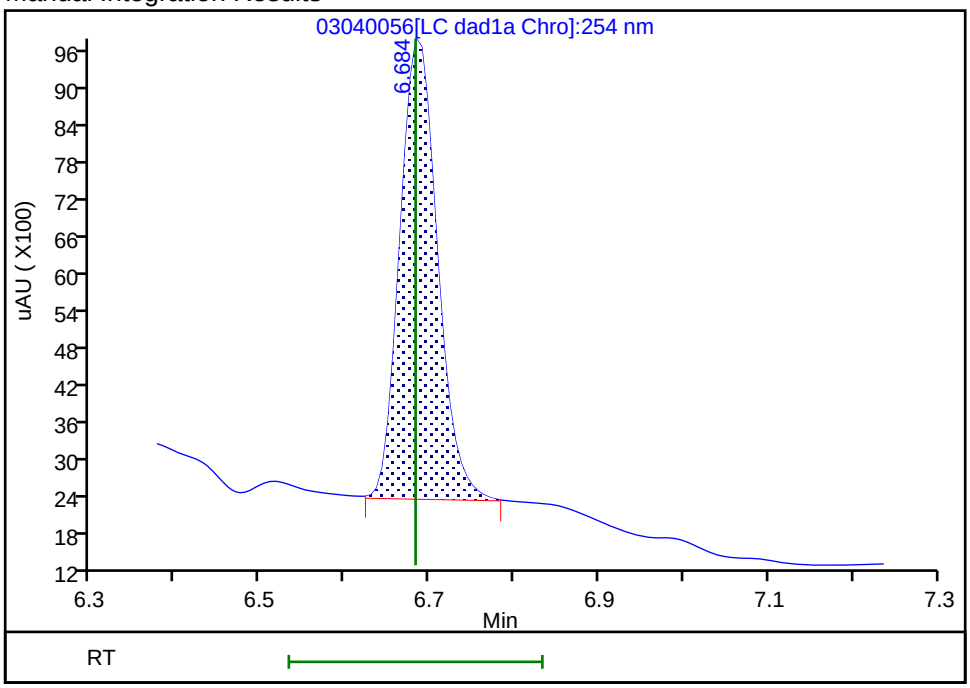
Processing Integration Results

RT: 6.68
Area: 48181
Amount: 0.540282
Amount Units: ug/mL



Manual Integration Results

RT: 6.68
Area: 22928
Amount: 0.257105
Amount Units: ug/mL



Reviewer: beckerc, 06-Mar-2020 09:36:09

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Lab Sample ID: CCV 280-487660/58 Calibration Date: 03/05/2020 09:37

Instrument ID: CHHPLC_X3 Calib Start Date: 03/04/2020 21:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/04/2020 23:40

Lab File ID: 03040058.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	217609	223213		257	250	2.6	15.0
DNX	Ave	152928	165491		271	250	8.2	15.0
MNX	Ave	158544	155578		286	292	-1.9	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Lab Sample ID: CCV 280-487660/58 Calibration Date: 03/05/2020 09:37

Instrument ID: CHHPLC_X3 Calib Start Date: 03/04/2020 21:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/04/2020 23:40

Lab File ID: 03040058.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.59	6.49	6.69
DNX	6.92	6.81	7.01
MNX	7.36	7.21	7.51

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040058.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	05-Mar-2020 09:37:37	ALS Bottle#:	29	Worklist Smp#:	58
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0089779-058				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Mar-2020 10:25:55	Calib Date:	04-Mar-2020 23:40:46		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0308				

First Level Reviewer: beckerc Date: 06-Mar-2020 09:38:51

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.590	6.594	-0.004	55859	0.2503	0.2567	M
5 DNX	1	6.916	6.914	0.002	41414	0.2503	0.2708	M
6 MNX	1	7.356	7.361	-0.005	45390	0.2918	0.2863	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

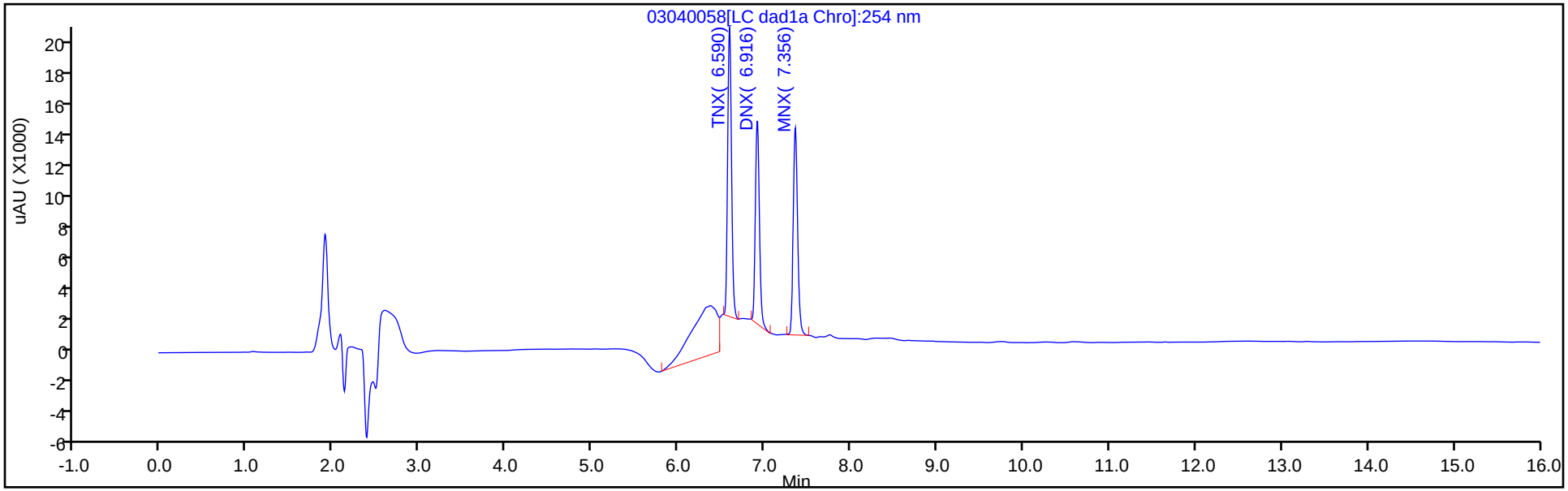
8330 DMT_00005 Amount Added: 12.50 Units: uL

Report Date: 06-Mar-2020 10:25:55 Chrom Revision: 2.3 19-Feb-2020 16:45:46

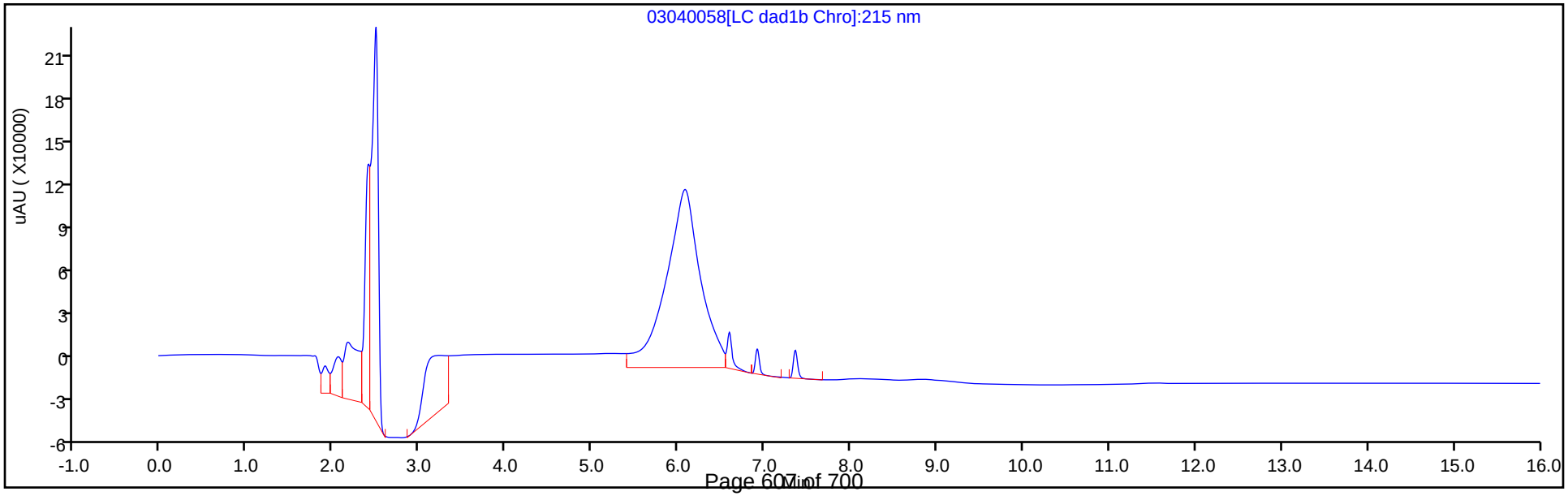
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040058.d				
Injection Date:	05-Mar-2020 09:37:37	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	CCV DMT			Worklist Smp#:	58
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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

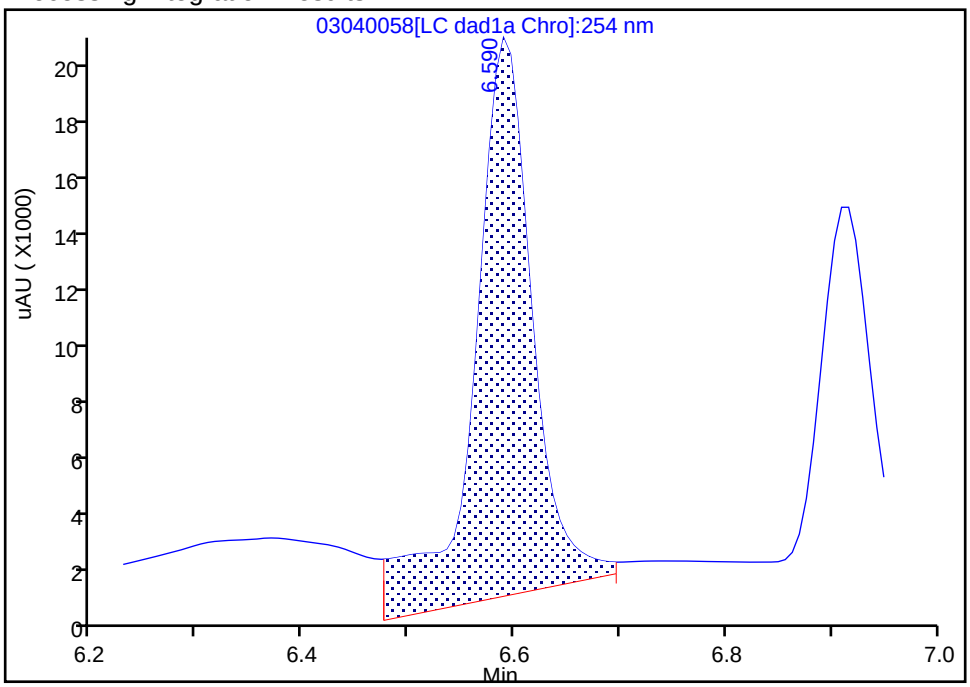
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040058.d				
Injection Date:	05-Mar-2020 09:37:37	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	CB	ALS Bottle#:	29	Worklist Smp#:	58
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

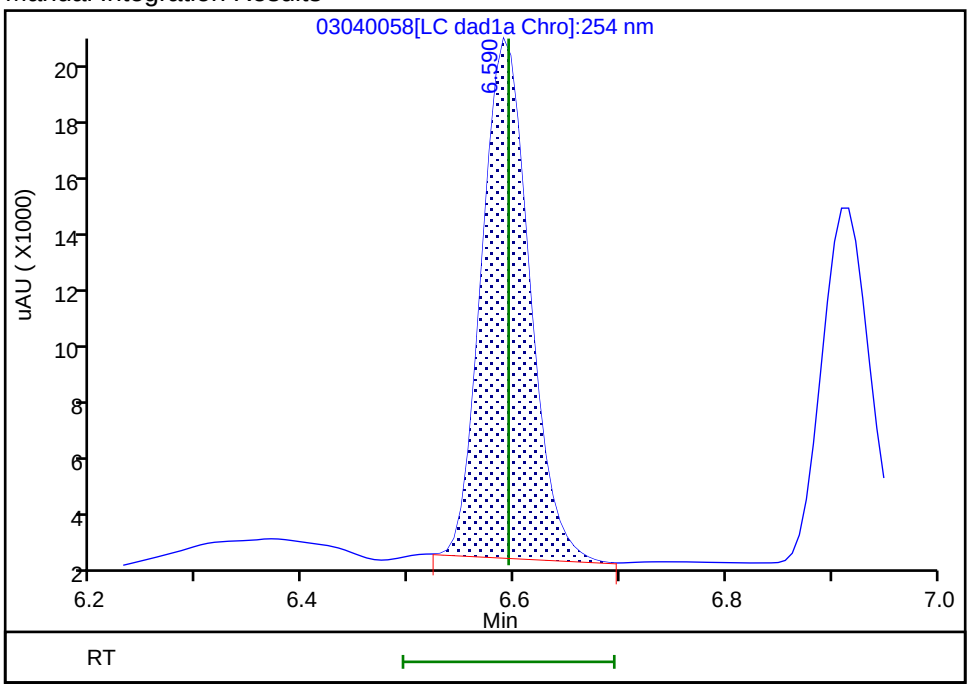
Processing Integration Results

RT: 6.59
Area: 73589
Amount: 0.338171
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 55859
Amount: 0.256695
Amount Units: ug/mL



Reviewer: beckerc, 06-Mar-2020 09:38:45
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

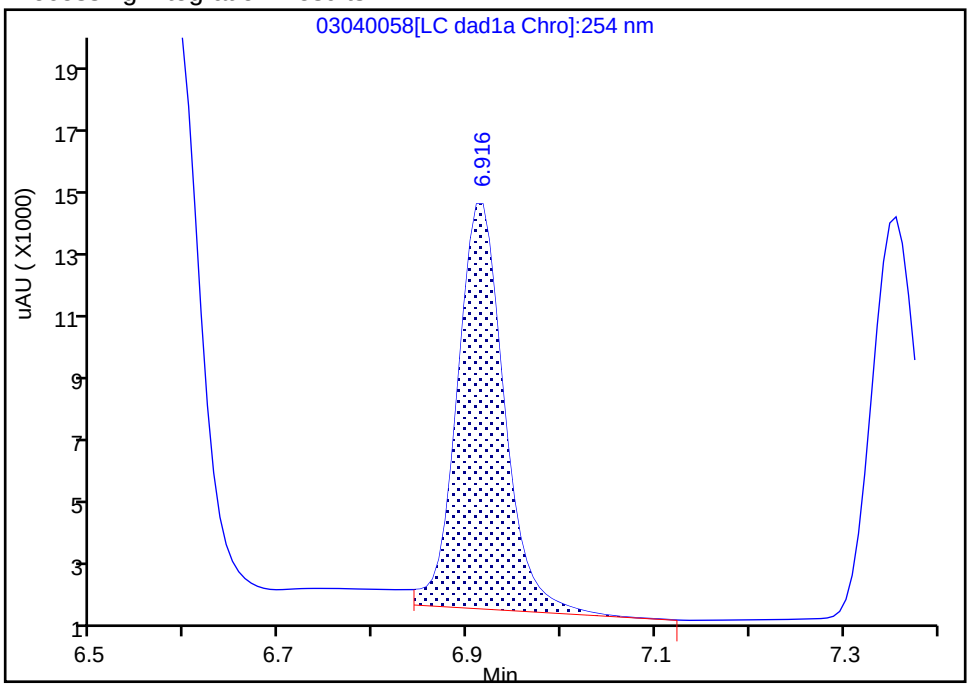
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040058.d				
Injection Date:	05-Mar-2020 09:37:37	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	CB	ALS Bottle#:	29	Worklist Smp#:	58
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

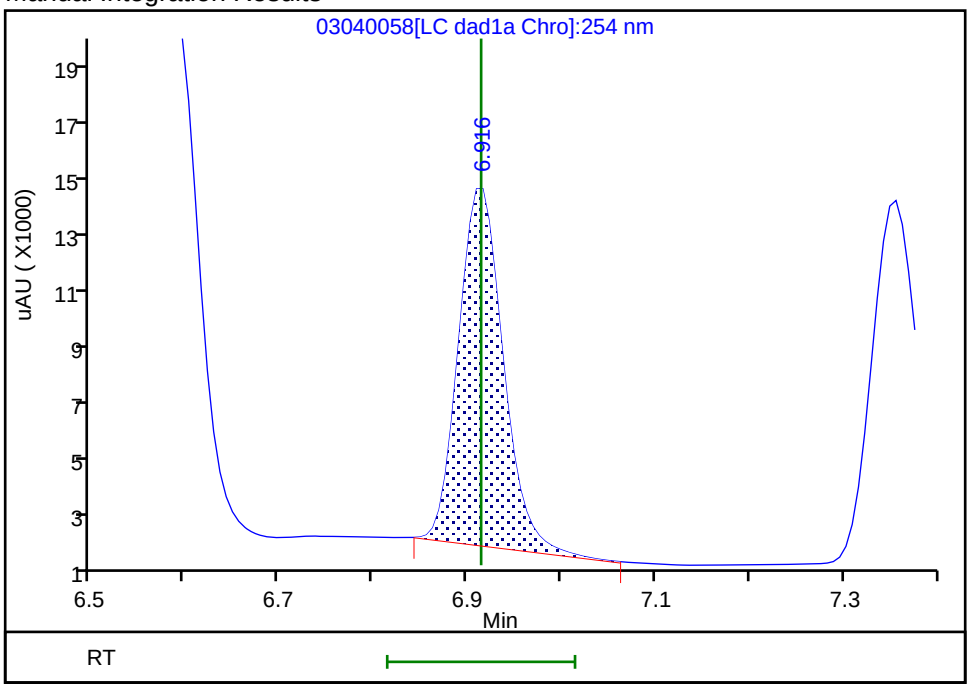
Processing Integration Results

RT: 6.92
Area: 44384
Amount: 0.290227
Amount Units: ug/mL



Manual Integration Results

RT: 6.92
Area: 41414
Amount: 0.270807
Amount Units: ug/mL



Reviewer: beckerc, 06-Mar-2020 09:38:48

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Lab Sample ID: CCV 280-487660/69 Calibration Date: 03/05/2020 13:50

Instrument ID: CHHPLC_X3 Calib Start Date: 03/04/2020 14:07

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/04/2020 16:47

Lab File ID: 03040069.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	89178	91248		256	250	2.3	15.0
RDX	Ave	117869	114364		243	250	-3.0	15.0
Picric acid	Ave	87247	86228		247	250	-1.2	15.0
1,3,5-Trinitrobenzene	Ave	243459	244020		251	251	0.2	15.0
1,3-Dinitrobenzene	Ave	324251	325529		251	251	0.4	15.0
Nitrobenzene	Ave	212689	198976		235	251	-6.4	15.0
Tetryl	Ave	193870	190802		247	251	-1.6	15.0
Nitroglycerin	Ave	71797	72790		2530	2500	1.4	15.0
2,4,6-Trinitrotoluene	Ave	220911	220582		251	251	-0.1	15.0
4-Amino-2,6-dinitrotoluene	Ave	173468	171776		248	250	-1.0	15.0
2-Amino-4,6-dinitrotoluene	Ave	217539	214120		247	251	-1.6	15.0
2,6-Dinitrotoluene	Ave	159404	158829		250	251	-0.4	15.0
2,4-Dinitrotoluene	Ave	321164	323275		253	251	0.7	15.0
2-Nitrotoluene	Ave	143838	128748		224	250	-10.5	15.0
4-Nitrotoluene	Ave	120299	112727		235	251	-6.3	15.0
3-Nitrotoluene	Ave	154244	142945		232	250	-7.3	15.0
PETN	Ave	79456	81624		2570	2500	2.7	15.0
1,2-Dinitrobenzene	Ave	146215	144132		246	250	-1.4	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Lab Sample ID: CCV 280-487660/69 Calibration Date: 03/05/2020 13:50

Instrument ID: CHHPLC_X3 Calib Start Date: 03/04/2020 14:07

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/04/2020 16:47

Lab File ID: 03040069.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.68	6.53	6.83
RDX	7.75	7.60	7.90
Picric acid	8.07	7.91	8.21
1,3,5-Trinitrobenzene	8.88	8.73	9.03
1,3-Dinitrobenzene	9.53	9.38	9.68
Nitrobenzene	9.91	9.77	10.07
Tetryl	10.22	10.07	10.37
Nitroglycerin	10.73	10.58	10.88
2,4,6-Trinitrotoluene	11.19	11.08	11.28
4-Amino-2,6-dinitrotoluene	11.34	11.24	11.44
2-Amino-4,6-dinitrotoluene	11.63	11.52	11.72
2,6-Dinitrotoluene	11.80	11.69	11.89
2,4-Dinitrotoluene	11.99	11.88	12.08
2-Nitrotoluene	12.85	12.68	12.98
4-Nitrotoluene	13.28	13.12	13.42
3-Nitrotoluene	13.88	13.71	14.01
PETN	14.99	14.82	15.12
1,2-Dinitrobenzene	8.71	8.56	8.86

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040069.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 05-Mar-2020 13:50:00 ALS Bottle#: 11 Worklist Smp#: 69
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0089779-069
Operator ID: CB Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Mar-2020 10:26:08 Calib Date: 04-Mar-2020 23:40:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0308

First Level Reviewer: beckerc Date: 06-Mar-2020 09:46:12

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.681	6.683	-0.002	22812	0.2500	0.2558	M
7 RDX	1	7.748	7.750	-0.002	28591	0.2500	0.2426	
8 2,4,6-Trinitrophenol	1	8.068	8.056	0.012	21557	0.2500	0.2471	
$ 9 1,2-Dinitrobenzene	1	8.708	8.710	-0.002	36033	0.2500	0.2464	
10 1,3,5-Trinitrobenzene	1	8.881	8.883	-0.002	61127	0.2505	0.2511	
11 1,3-Dinitrobenzene	1	9.528	9.529	-0.001	81545	0.2505	0.2515	
12 Nitrobenzene	1	9.914	9.916	-0.002	49943	0.2510	0.2348	
14 Tetryl	1	10.221	10.216	0.005	47796	0.2505	0.2465	
15 Nitroglycerin	2	10.734	10.729	0.005	181976	2.50	2.53	
16 2,4,6-Trinitrotoluene	1	11.188	11.183	0.005	55366	0.2510	0.2506	
17 4-Amino-2,6-dinitrotoluene	1	11.341	11.336	0.005	42987	0.2503	0.2478	
18 2-Amino-4,6-dinitrotoluene	1	11.634	11.623	0.011	53744	0.2510	0.2471	
19 2,6-Dinitrotoluene	1	11.801	11.789	0.012	39866	0.2510	0.2501	
20 2,4-Dinitrotoluene	1	11.994	11.983	0.011	81142	0.2510	0.2526	
21 o-Nitrotoluene	1	12.848	12.829	0.019	32187	0.2500	0.2238	
22 p-Nitrotoluene	1	13.281	13.269	0.012	28238	0.2505	0.2347	
23 m-Nitrotoluene	1	13.881	13.863	0.018	35772	0.2503	0.2319	
24 PETN	2	14.994	14.969	0.025	204059	2.50	2.57	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

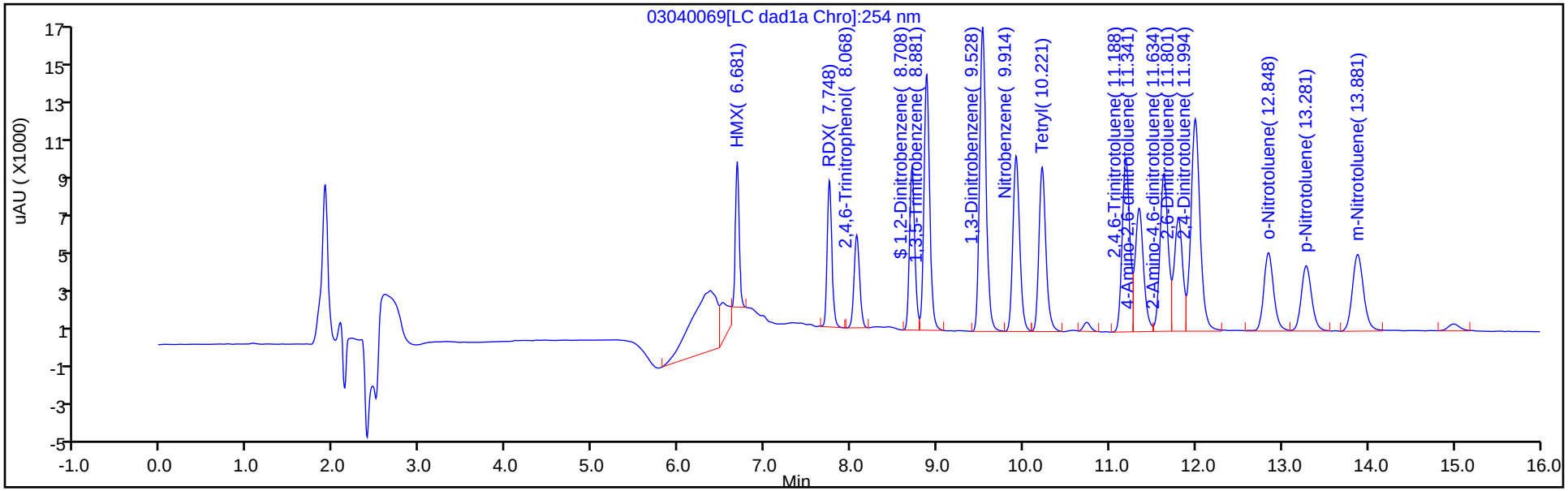
8330IntermStk_00061 Amount Added: 25.00 Units: uL

Report Date: 06-Mar-2020 10:26:08 Chrom Revision: 2.3 19-Feb-2020 16:45:46

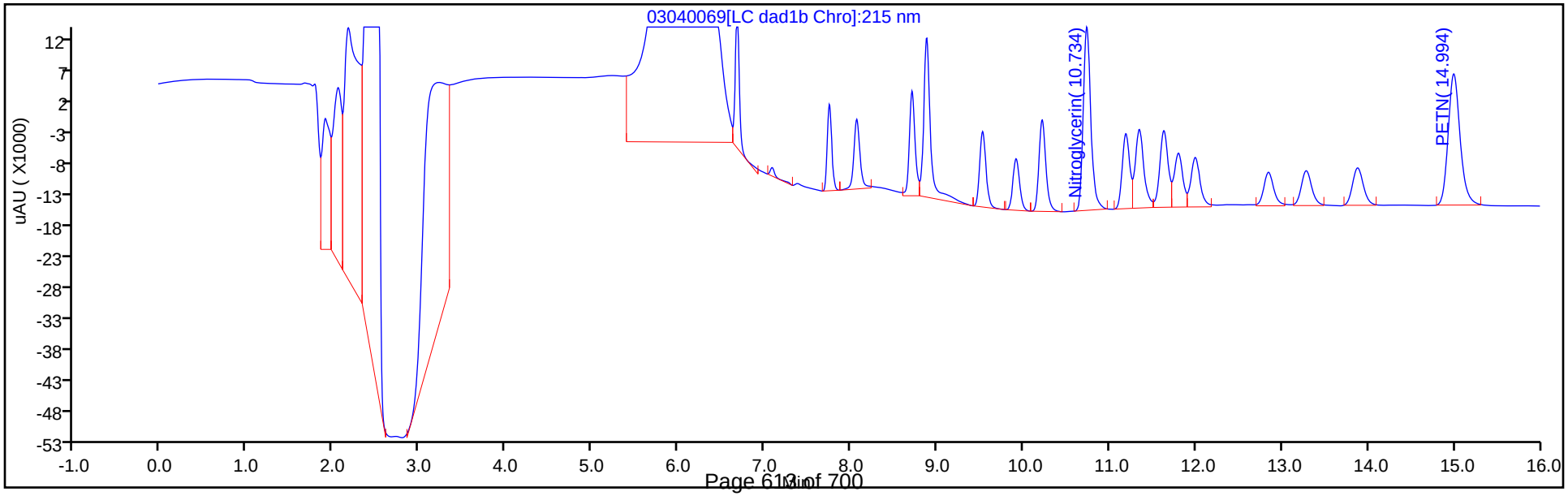
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040069.d				
Injection Date:	05-Mar-2020 13:50:00	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	CCV INT			Worklist Smp#:	69
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

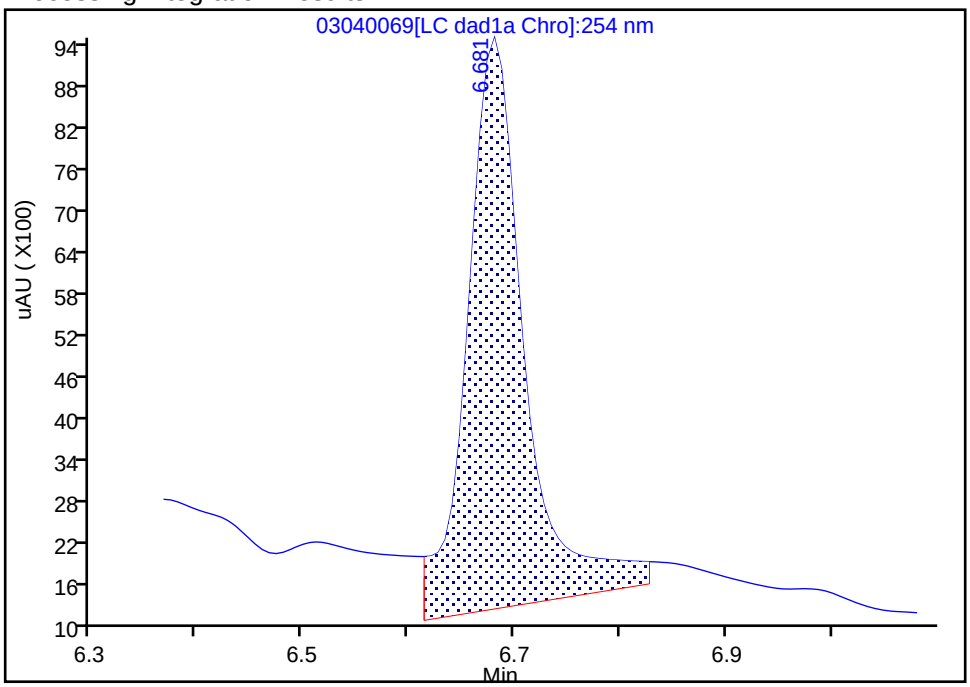
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040069.d				
Injection Date:	05-Mar-2020 13:50:00	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	CB	ALS Bottle#:	11	Worklist Smp#:	69
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

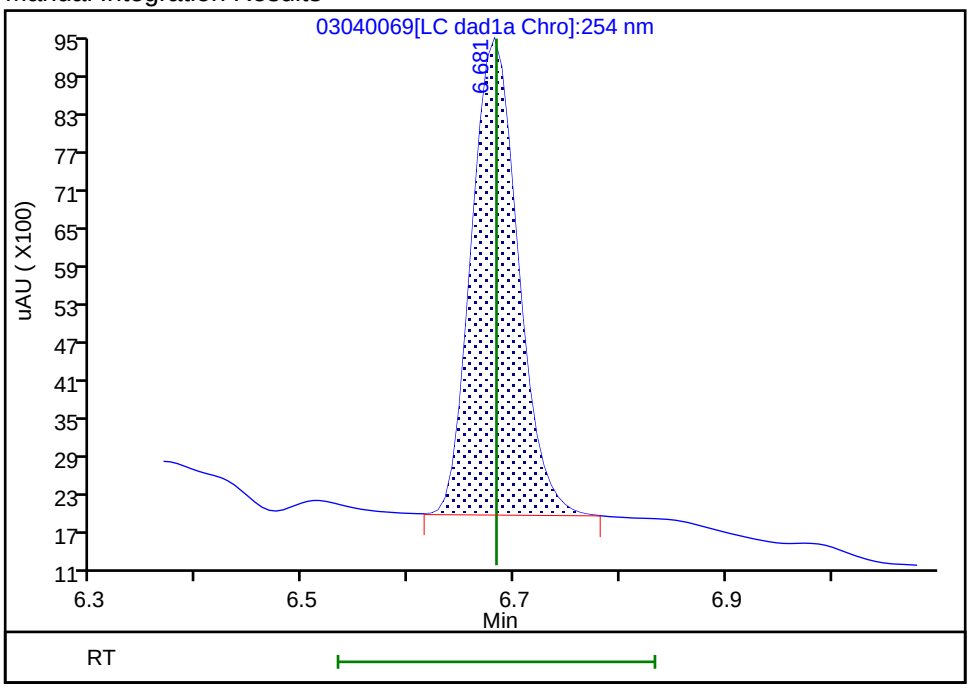
Processing Integration Results

RT: 6.68
Area: 30768
Amount: 0.345020
Amount Units: ug/mL



Manual Integration Results

RT: 6.68
Area: 22812
Amount: 0.255804
Amount Units: ug/mL



Reviewer: beckerc, 06-Mar-2020 09:46:05
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Lab Sample ID: CCV 280-487660/71 Calibration Date: 03/05/2020 14:35

Instrument ID: CHHPLC_X3 Calib Start Date: 03/04/2020 21:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/04/2020 23:40

Lab File ID: 03040071.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	217609	216328		249	250	-0.6	15.0
DNX	Ave	152928	167548		274	250	9.6	15.0
MNX	Ave	158544	154581		284	292	-2.5	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Lab Sample ID: CCV 280-487660/71 Calibration Date: 03/05/2020 14:35

Instrument ID: CHHPLC_X3 Calib Start Date: 03/04/2020 21:00

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/04/2020 23:40

Lab File ID: 03040071.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.59	6.49	6.69
DNX	6.91	6.81	7.01
MNX	7.35	7.21	7.51

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040071.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	05-Mar-2020 14:35:55	ALS Bottle#:	29	Worklist Smp#:	71
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0089779-071				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Mar-2020 10:26:10	Calib Date:	04-Mar-2020 23:40:46		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0308				

First Level Reviewer: beckerc Date: 06-Mar-2020 09:47:48

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.587	6.594	-0.007	54136	0.2503	0.2488	M
5 DNX	1	6.907	6.914	-0.007	41929	0.2503	0.2742	M
6 MNX	1	7.353	7.361	-0.008	45099	0.2918	0.2845	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

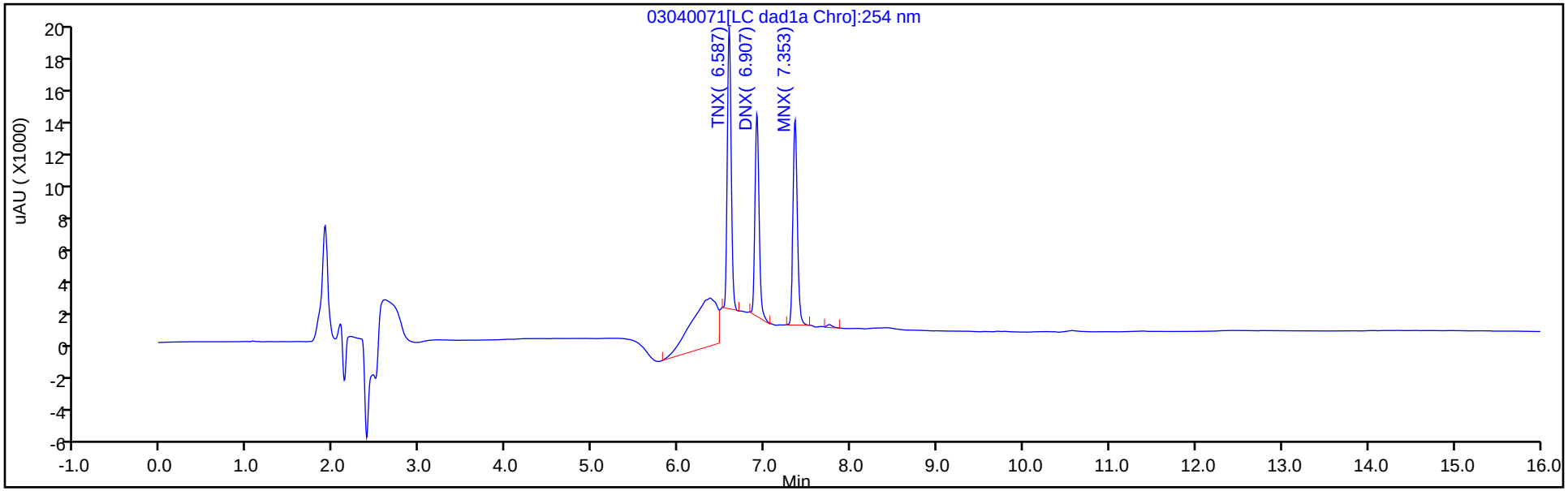
8330 DMT_00005 Amount Added: 12.50 Units: uL

Report Date: 06-Mar-2020 10:26:11 Chrom Revision: 2.3 19-Feb-2020 16:45:46

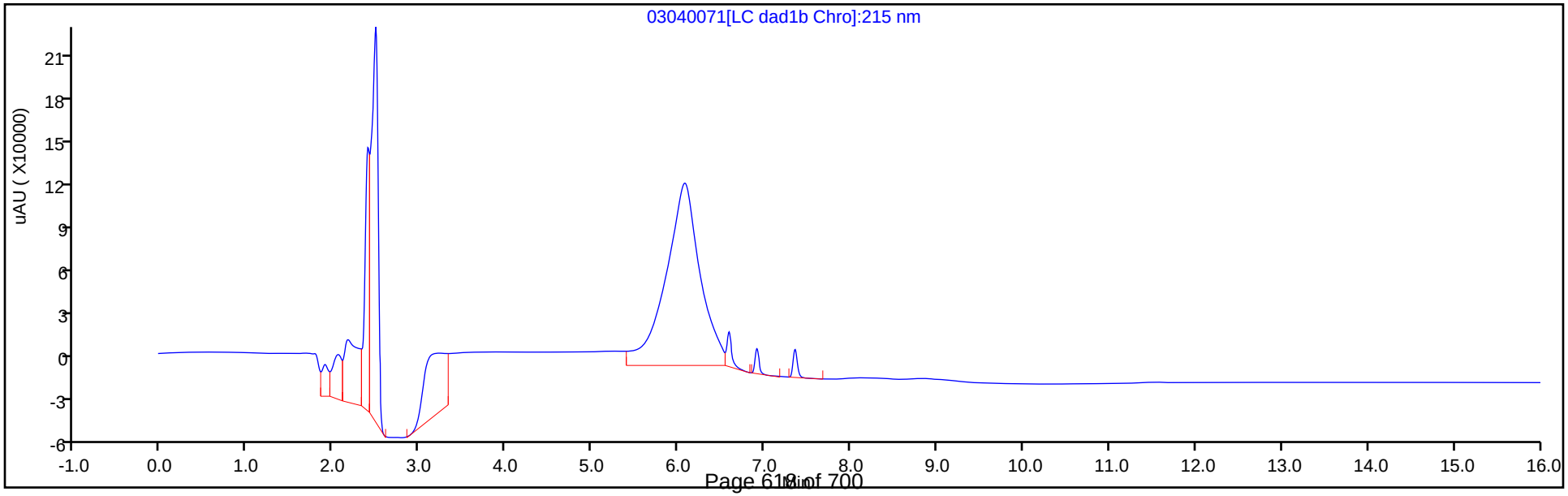
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040071.d				
Injection Date:	05-Mar-2020 14:35:55	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	CCV DMT			Worklist Smp#:	71
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



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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

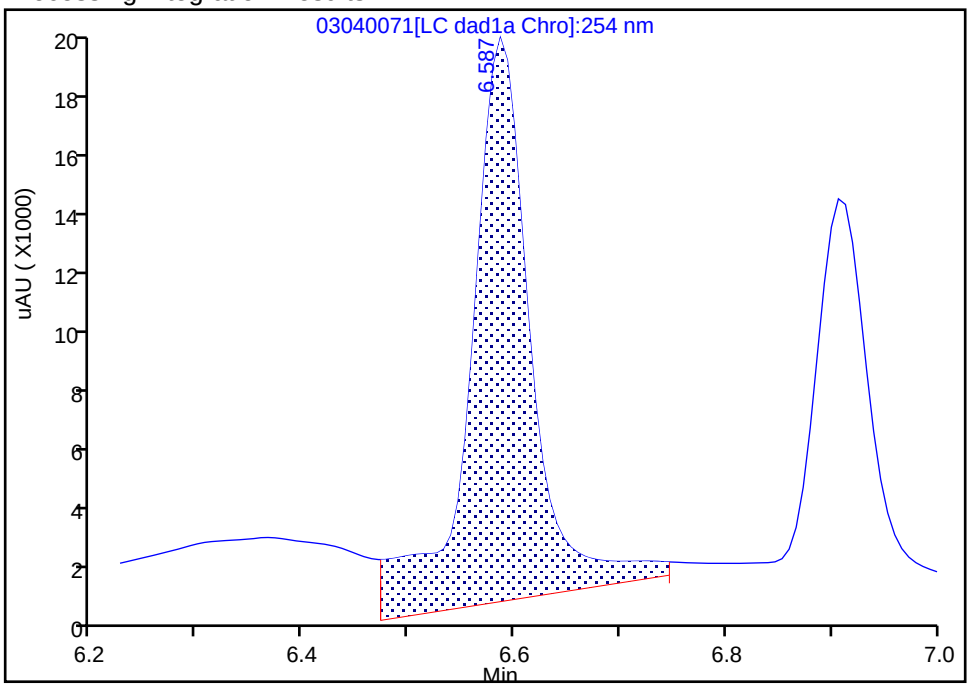
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040071.d				
Injection Date:	05-Mar-2020 14:35:55	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	CB	ALS Bottle#:	29	Worklist Smp#:	71
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

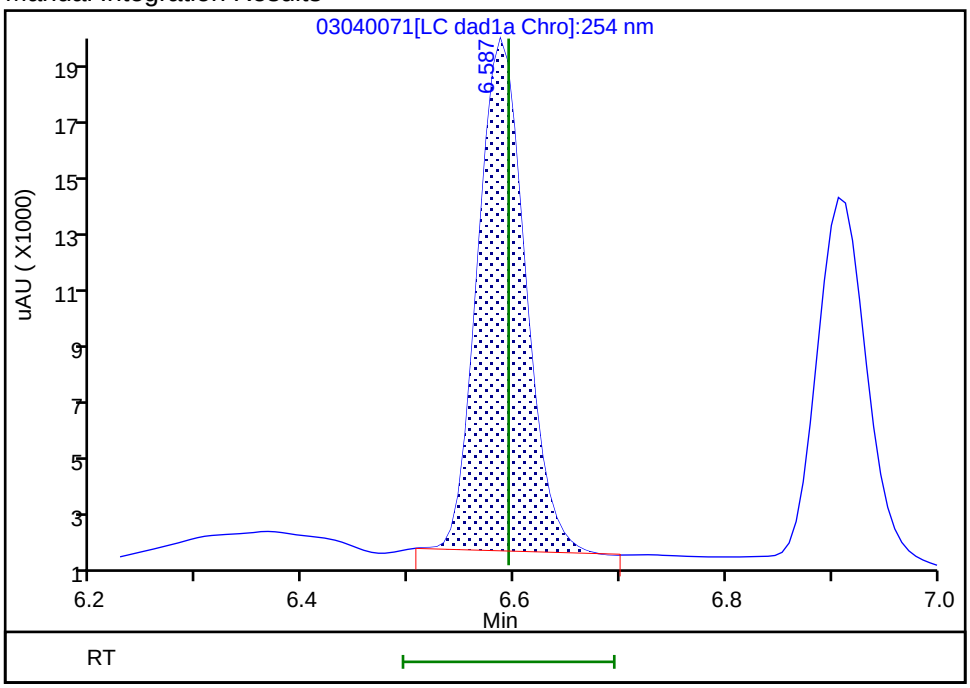
Processing Integration Results

RT: 6.59
Area: 75778
Amount: 0.348231
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 54136
Amount: 0.248777
Amount Units: ug/mL



Reviewer: beckerc, 06-Mar-2020 09:47:12
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

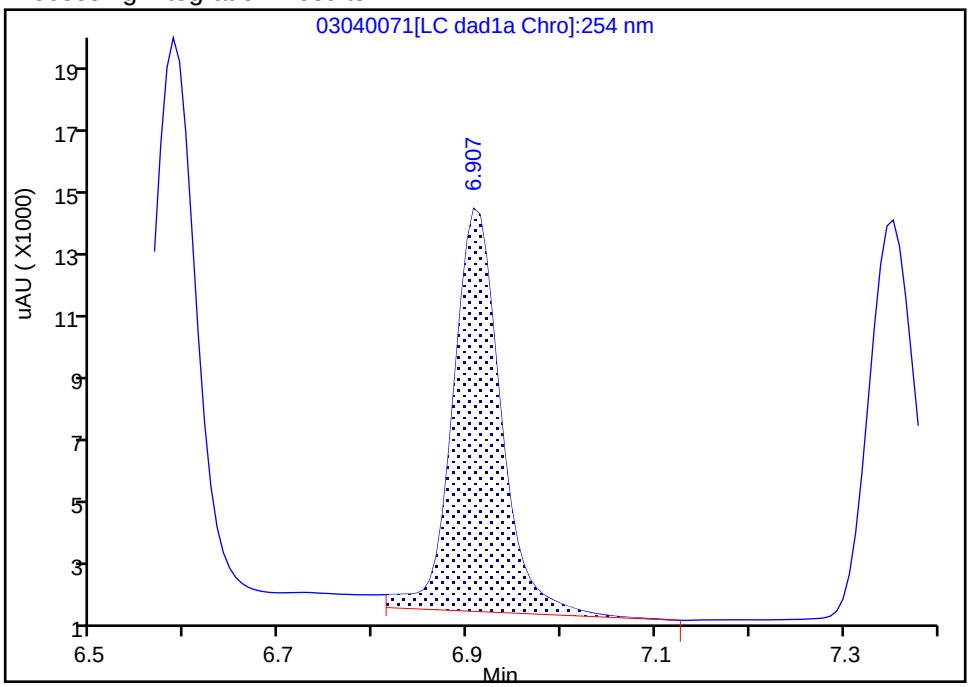
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040071.d				
Injection Date:	05-Mar-2020 14:35:55	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	CB	ALS Bottle#:	29	Worklist Smp#:	71
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

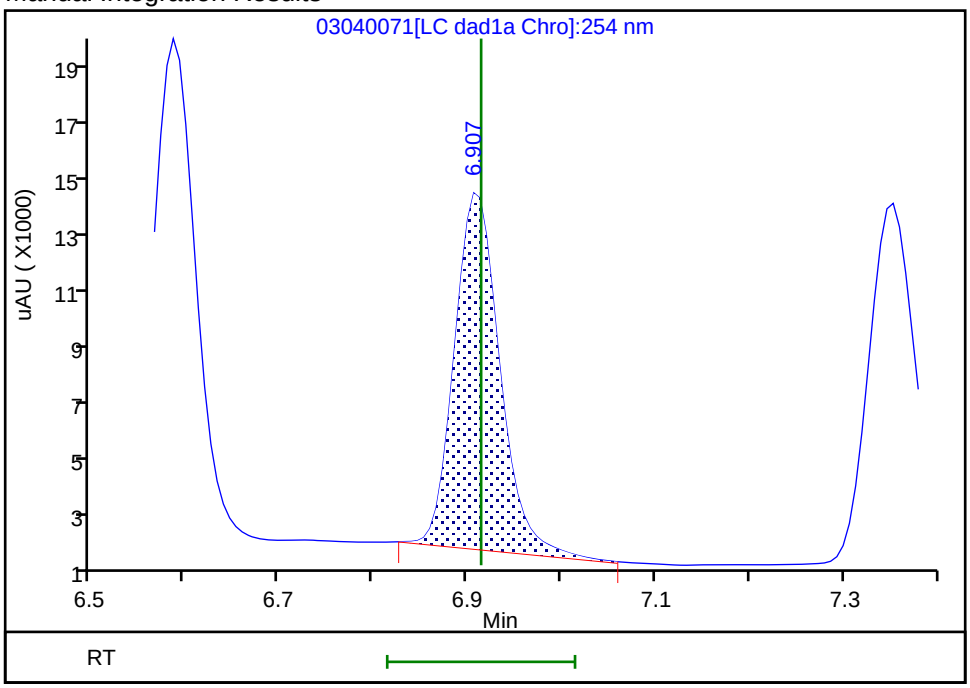
Processing Integration Results

RT: 6.91
Area: 45136
Amount: 0.295145
Amount Units: ug/mL



Manual Integration Results

RT: 6.91
Area: 41929
Amount: 0.274174
Amount Units: ug/mL



Reviewer: beckerc, 06-Mar-2020 09:47:19

Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-134063-1
SDG No.:
Client Sample ID:
Lab Sample ID: MB 280-487255/1-A
Matrix: Water
Lab File ID: 03020010.D
Analysis Method: 8330A
Date Collected:
Extraction Method: 3535
Date Extracted: 02/28/2020 13:30
Sample wt/vol: 500(mL)
Date Analyzed: 03/02/2020 16:29
Con. Extract Vol.: 5(mL)
Dilution Factor: 1
Injection Volume: 100(uL)
GC Column: UltraCarb5uODS ID: 4.6(mm)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 487395
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.40	U	1.0	0.40	0.20
99-65-0	1,3-Dinitrobenzene	0.20	U	0.40	0.20	0.089
118-96-7	2,4,6-Trinitrotoluene	0.40	U	0.40	0.40	0.16
121-14-2	2,4-Dinitrotoluene	0.20	U	0.40	0.20	0.084
606-20-2	2,6-Dinitrotoluene	0.20	U	0.20	0.20	0.065
35572-78-2	2-Amino-4,6-dinitrotoluene	0.12	U	0.20	0.12	0.051
88-72-2	2-Nitrotoluene	0.20	U	0.40	0.20	0.086
99-08-1	3-Nitrotoluene	0.40	U M	0.40	0.40	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U	0.20	0.12	0.058
99-99-0	4-Nitrotoluene	0.40	U	1.0	0.40	0.20
2691-41-0	HMX	0.20	U	0.40	0.20	0.088
5755-27-1	MNX	0.40	U M	2.0	0.40	0.15
98-95-3	Nitrobenzene	0.20	U	0.40	0.20	0.091
121-82-4	RDX	0.40	U	0.40	0.40	0.16
479-45-8	Tetryl	0.20	U	0.24	0.20	0.079

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	96		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200302-89712.b\03020010.D
Lims ID: MB 280-487255/1-A
Client ID:
Sample Type: MB
Inject. Date: 02-Mar-2020 16:29:00 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-487255/1-
Misc. Info.: 280-0089712-010
Operator ID: CB Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200302-89712.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 03-Mar-2020 11:54:24 Calib Date: 06-Jan-2020 20:40:54
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060014.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0310

First Level Reviewer: beckerc Date: 03-Mar-2020 11:01:17

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	1 2,6-diamino-4-nitrotoluene	1		6.555				ND	U
	2 TNX	1		6.590				ND	
	3 HMX	1		6.680				ND	
	4 2,4-diamino-6-nitrotoluene	1		6.742				ND	
	5 DNX	1		6.910				ND	
	6 MNX	1	7.260	7.363	-0.103	2038		0.0145	M
	7 RDX	1		7.754				ND	
	8 2,4,6-Trinitrophenol	1		8.067				ND	
$	9 1,2-Dinitrobenzene	1	8.634	8.707	-0.073	26725	0.2000	0.1918	
	10 1,3,5-Trinitrobenzene	1		8.880				ND	
	11 1,3-Dinitrobenzene	1		9.527				ND	
	12 Nitrobenzene	1		9.914				ND	
	13 3,5-Dinitroaniline	1		10.188				ND	
	14 Tetryl	1		10.207				ND	
	15 Nitroglycerin	2		10.720				ND	
	16 2,4,6-Trinitrotoluene	1		11.174				ND	
	17 4-Amino-2,6-dinitrotoluene	1		11.327				ND	
	18 2-Amino-4,6-dinitrotoluene	1		11.614				ND	
	19 2,6-Dinitrotoluene	1		11.780				ND	
	20 2,4-Dinitrotoluene	1		11.974				ND	
	21 o-Nitrotoluene	1		12.820				ND	
	22 p-Nitrotoluene	1		13.260				ND	
	23 m-Nitrotoluene	1		13.854				ND	U
	24 PETN	2		14.967				ND	
	25 Ammonium Picrate	1		0.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

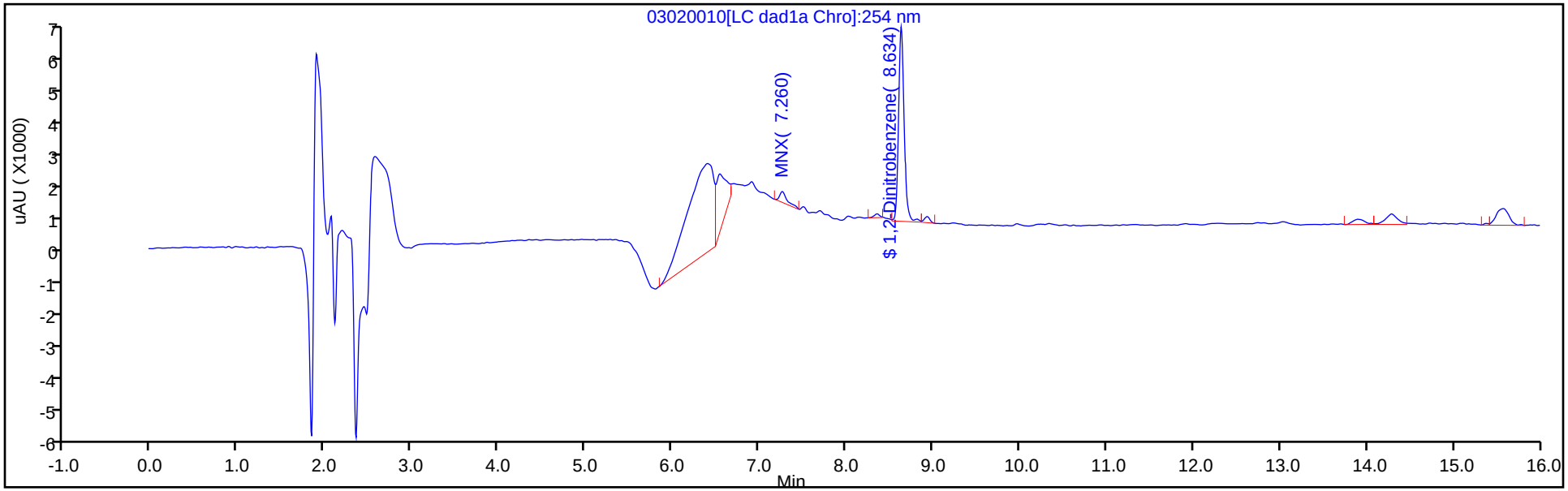
U - Marked Undetected

Report Date: 03-Mar-2020 11:54:26 Chrom Revision: 2.3 19-Feb-2020 16:45:46

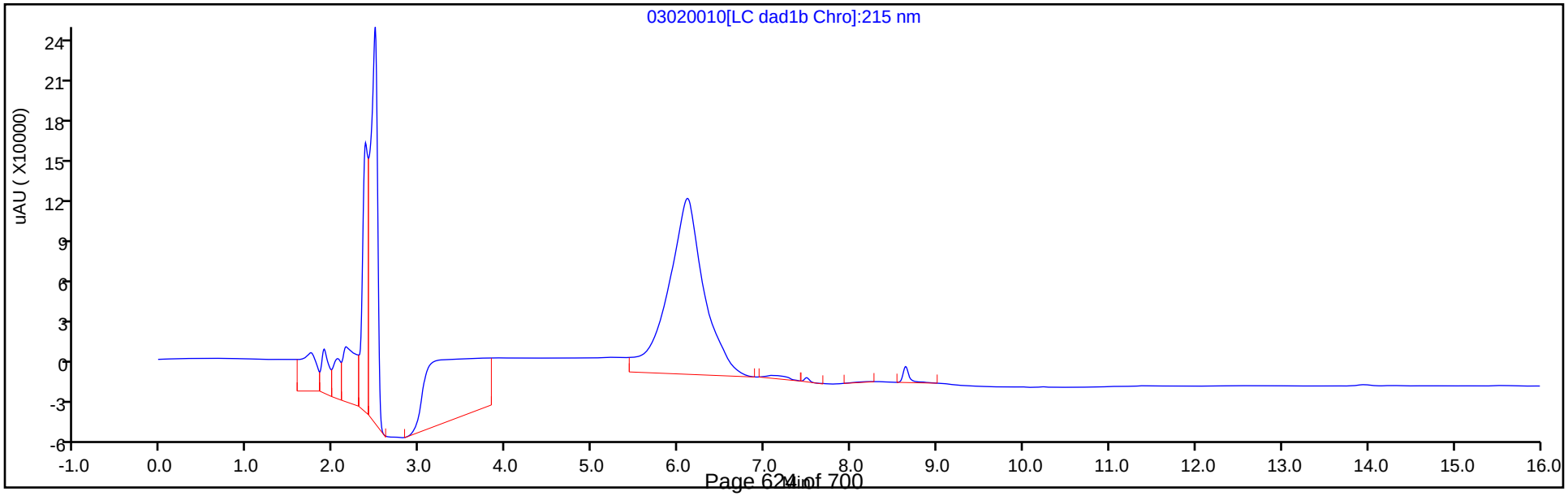
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020010.d				
Injection Date:	02-Mar-2020 16:29:00	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	MB 280-487255/1-A			Worklist Smp#:	10
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200302-89712.b\03020010.D				
Lims ID:	MB 280-487255/1-A				
Client ID:					
Sample Type:	MB				
Inject. Date:	02-Mar-2020 16:29:00	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	MB 280-487255/1-				
Misc. Info.:	280-0089712-010				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200302-89712.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	03-Mar-2020 11:54:24	Calib Date:	06-Jan-2020 20:40:54		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060014.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0310				

First Level Reviewer: beckerc Date: 03-Mar-2020 11:01:17

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1918	95.91

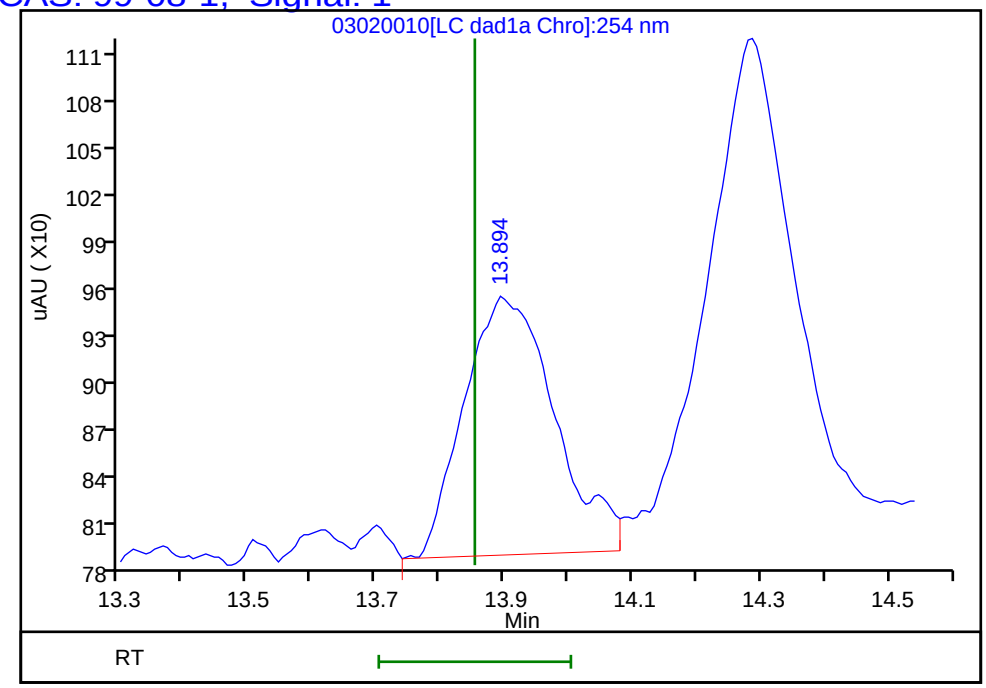
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020010.d				
Injection Date:	02-Mar-2020 16:29:00	Instrument ID:	CHHPLC_X3		
Lims ID:	MB 280-487255/1-A				
Client ID:					
Operator ID:	CB	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

23 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 13.89
Response: 1582
Amount: 0.010901



Reviewer: beckerc, 03-Mar-2020 11:04:56
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

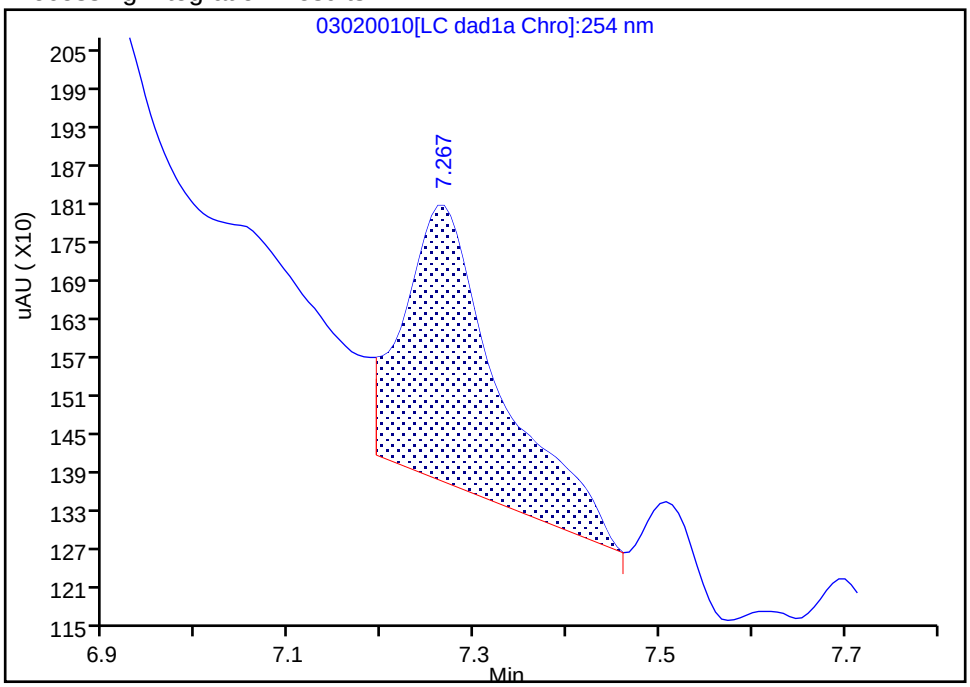
Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020010.d				
Injection Date:	02-Mar-2020 16:29:00	Instrument ID:	CHHPLC_X3		
Lims ID:	MB 280-487255/1-A				
Client ID:					
Operator ID:	CB	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

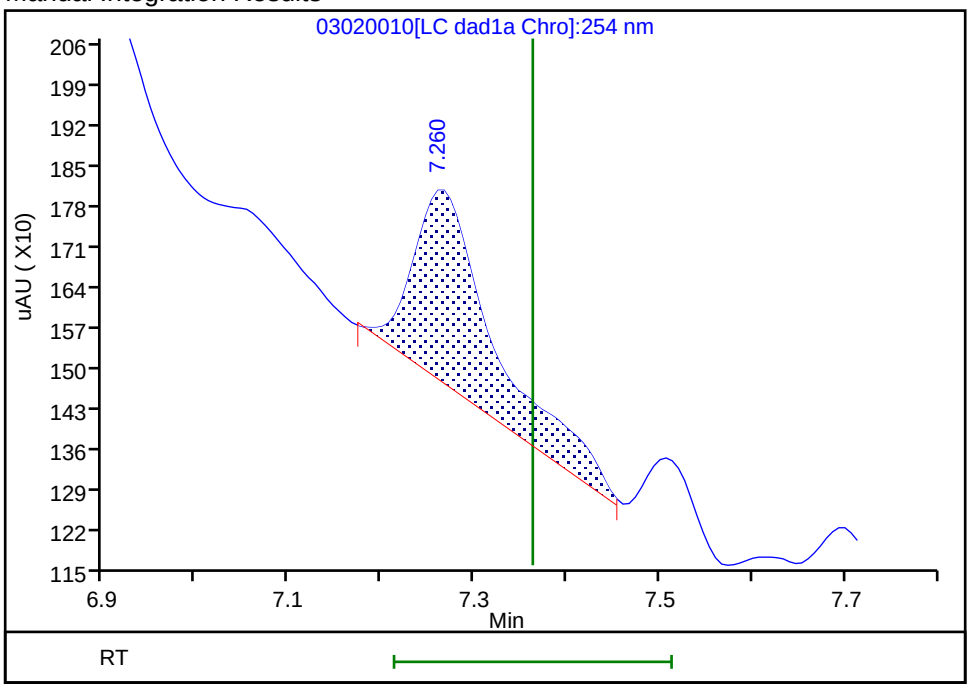
Processing Integration Results

RT: 7.27
Area: 3076
Amount: 0.021920
Amount Units: ug/mL



Manual Integration Results

RT: 7.26
Area: 2038
Amount: 0.014523
Amount Units: ug/mL



Reviewer: beckerc, 03-Mar-2020 11:05:15

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-134063-1
SDG No.:
Client Sample ID:
Lab Sample ID: MB 280-487600/1-A
Matrix: Water
Lab File ID: 03040059.D
Analysis Method: 8330A
Date Collected:
Extraction Method: 3535
Date Extracted: 03/04/2020 07:23
Sample wt/vol: 500(mL)
Date Analyzed: 03/05/2020 10:00
Con. Extract Vol.: 5(mL)
Dilution Factor: 1
Injection Volume: 100(uL)
GC Column: UltraCarb5uODS ID: 4.6(mm)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 487660
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.40	U	1.0	0.40	0.20
99-65-0	1,3-Dinitrobenzene	0.20	U	0.40	0.20	0.089
118-96-7	2,4,6-Trinitrotoluene	0.40	U	0.40	0.40	0.16
121-14-2	2,4-Dinitrotoluene	0.20	U	0.40	0.20	0.084
606-20-2	2,6-Dinitrotoluene	0.20	U	0.20	0.20	0.065
35572-78-2	2-Amino-4,6-dinitrotoluene	0.12	U	0.20	0.12	0.051
88-72-2	2-Nitrotoluene	0.20	U	0.40	0.20	0.086
99-08-1	3-Nitrotoluene	0.40	U	0.40	0.40	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U	0.20	0.12	0.058
99-99-0	4-Nitrotoluene	0.40	U	1.0	0.40	0.20
2691-41-0	HMX	0.20	U	0.40	0.20	0.088
5755-27-1	MNX	0.40	U	2.0	0.40	0.15
98-95-3	Nitrobenzene	0.20	U	0.40	0.20	0.091
121-82-4	RDX	0.40	U	0.40	0.40	0.16
479-45-8	Tetryl	0.20	U	0.24	0.20	0.079

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

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040059.D
Lims ID: MB 280-487600/1-A
Client ID:
Sample Type: MB
Inject. Date: 05-Mar-2020 10:00:34 ALS Bottle#: 59 Worklist Smp#: 59
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-487600/1-
Misc. Info.: 280-0089779-059
Operator ID: CB Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Mar-2020 10:25:55 Calib Date: 04-Mar-2020 23:40:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0308

First Level Reviewer: beckerc Date: 06-Mar-2020 09:39:04

	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		6.548				ND	U
	2 TNX	1		6.594				ND	
	3 HMX	1		6.683				ND	
	4 2,4-diamino-6-nitrotoluene	1		6.735				ND	U
	5 DNX	1		6.914				ND	
	6 MNX	1		7.361				ND	
	7 RDX	1		7.750				ND	
	8 2,4,6-Trinitrophenol	1		8.056				ND	
$	9 1,2-Dinitrobenzene	1	8.710	8.710	0.000	27247	0.2000	0.1863	
	10 1,3,5-Trinitrobenzene	1		8.883				ND	
	11 1,3-Dinitrobenzene	1		9.529				ND	
	12 Nitrobenzene	1		9.916				ND	
	13 3,5-Dinitroaniline	1		10.142				ND	
	14 Tetryl	1		10.216				ND	
	15 Nitroglycerin	2		10.729				ND	
	16 2,4,6-Trinitrotoluene	1		11.183				ND	
	17 4-Amino-2,6-dinitrotoluene	1		11.336				ND	
	18 2-Amino-4,6-dinitrotoluene	1		11.623				ND	
	19 2,6-Dinitrotoluene	1		11.789				ND	
	20 2,4-Dinitrotoluene	1		11.983				ND	
	21 o-Nitrotoluene	1		12.829				ND	
	22 p-Nitrotoluene	1		13.269				ND	
	23 m-Nitrotoluene	1		13.863				ND	
	24 PETN	2		14.969				ND	
	25 Ammonium Picrate	1		0.000				ND	

QC Flag Legend

Review Flags

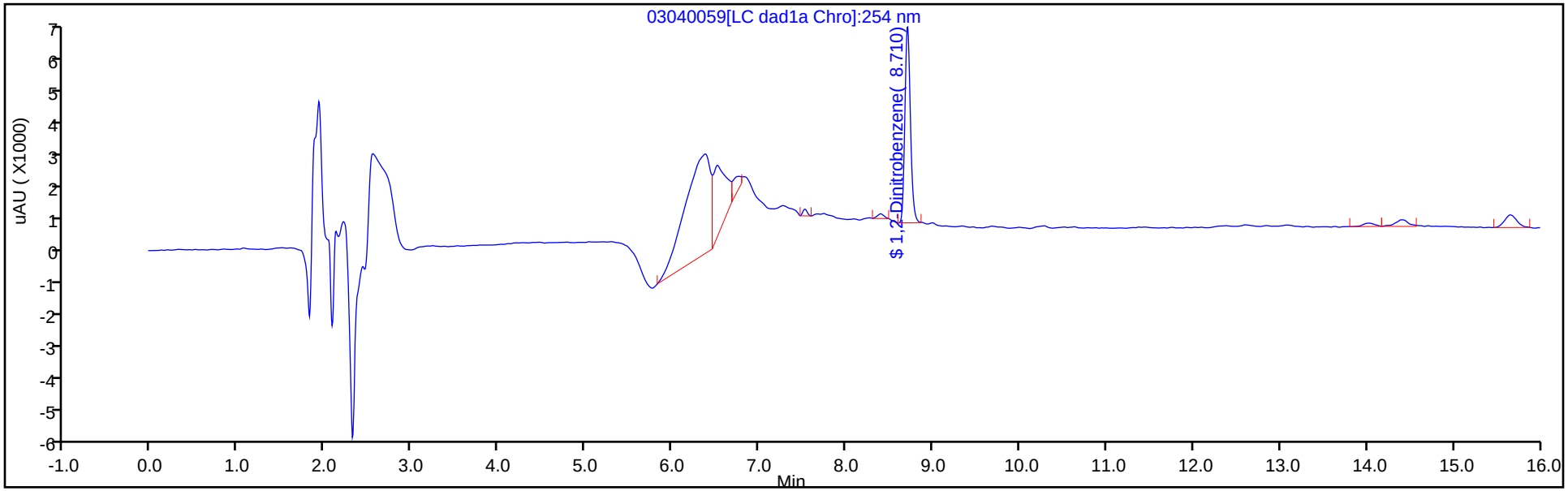
U - Marked Undetected

Report Date: 06-Mar-2020 10:25:56 Chrom Revision: 2.3 19-Feb-2020 16:45:46

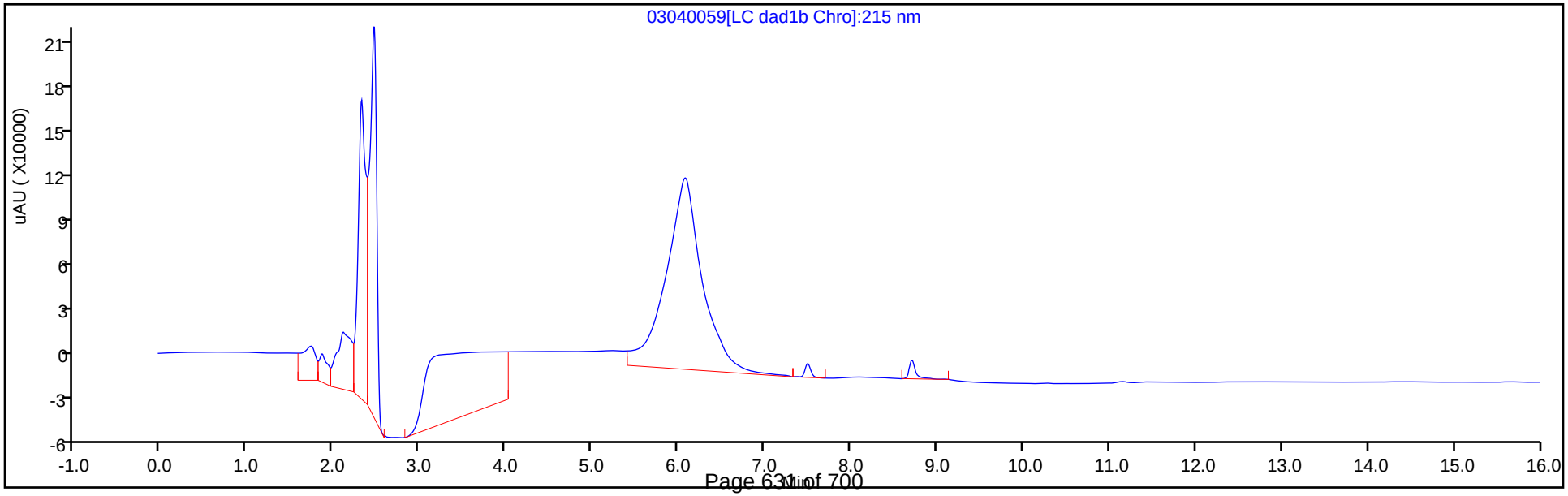
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040059.d				
Injection Date:	05-Mar-2020 10:00:34	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	MB 280-487600/1-A			Worklist Smp#:	59
Client ID:					
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



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



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040059.D				
Lims ID:	MB 280-487600/1-A				
Client ID:					
Sample Type:	MB				
Inject. Date:	05-Mar-2020 10:00:34	ALS Bottle#:	59	Worklist Smp#:	59
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	MB 280-487600/1-				
Misc. Info.:	280-0089779-059				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Mar-2020 10:25:55	Calib Date:	04-Mar-2020 23:40:46		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0308				

First Level Reviewer: beckerc Date: 06-Mar-2020 09:39:04

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1863	93.17

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-134063-1
SDG No.:
Client Sample ID:
Lab Sample ID: LCS 280-487255/2-A
Matrix: Water
Lab File ID: 03020011.D
Analysis Method: 8330A
Date Collected:
Extraction Method: 3535
Date Extracted: 02/28/2020 13:30
Sample wt/vol: 500(mL)
Date Analyzed: 03/02/2020 16:51
Con. Extract Vol.: 5(mL)
Dilution Factor: 1
Injection Volume: 100(uL)
GC Column: UltraCarb5uODS ID: 4.6(mm)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 487395
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	1.85		1.0	0.40	0.20
99-65-0	1,3-Dinitrobenzene	1.74		0.40	0.20	0.089
118-96-7	2,4,6-Trinitrotoluene	1.71		0.40	0.40	0.16
121-14-2	2,4-Dinitrotoluene	1.68		0.40	0.20	0.084
606-20-2	2,6-Dinitrotoluene	1.61		0.20	0.20	0.065
35572-78-2	2-Amino-4,6-dinitrotoluene	1.54	Q	0.20	0.12	0.051
88-72-2	2-Nitrotoluene	1.12	Q	0.40	0.20	0.086
99-08-1	3-Nitrotoluene	1.25	Q	0.40	0.40	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.44	Q	0.20	0.12	0.058
99-99-0	4-Nitrotoluene	1.27	Q	1.0	0.40	0.20
2691-41-0	HMX	1.84	M	0.40	0.20	0.088
98-95-3	Nitrobenzene	1.36		0.40	0.20	0.091
121-82-4	RDX	1.96		0.40	0.40	0.16
479-45-8	Tetryl	2.07		0.24	0.20	0.079

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	87		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200302-89712.b\03020011.D
Lims ID: LCS 280-487255/2-A
Client ID:
Sample Type: LCS
Inject. Date: 02-Mar-2020 16:51:57 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-487255/2
Misc. Info.: 280-0089712-011
Operator ID: CB Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200302-89712.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 03-Mar-2020 11:54:24 Calib Date: 06-Jan-2020 20:40:54
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060014.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0310

First Level Reviewer: beckerc Date: 03-Mar-2020 11:06:02

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.675	6.680	-0.005	16905	0.2000	0.1841	M
7 RDX	1	7.749	7.754	-0.005	21750	0.2000	0.1957	
8 2,4,6-Trinitrophenol	1	8.055	8.067	-0.012	16978	0.2000	0.1871	
$ 9 1,2-Dinitrobenzene	1	8.709	8.707	0.002	24161	0.2000	0.1734	
10 1,3,5-Trinitrobenzene	1	8.875	8.880	-0.005	45245	0.2000	0.1846	
11 1,3-Dinitrobenzene	1	9.522	9.527	-0.005	54001	0.2000	0.1735	
12 Nitrobenzene	1	9.909	9.914	-0.005	27008	0.2000	0.1358	
14 Tetryl	1	10.209	10.207	0.002	33490	0.2000	0.2068	
15 Nitroglycerin	2	10.729	10.720	0.009	133245	2.00	1.87	
16 2,4,6-Trinitrotoluene	1	11.182	11.174	0.008	38929	0.2000	0.1713	
17 4-Amino-2,6-dinitrotoluene	1	11.335	11.327	0.008	23957	0.2000	0.1440	
18 2-Amino-4,6-dinitrotoluene	1	11.622	11.614	0.008	31513	0.2000	0.1535	
19 2,6-Dinitrotoluene	1	11.789	11.780	0.009	25597	0.2000	0.1607	
20 2,4-Dinitrotoluene	1	11.982	11.974	0.008	50426	0.2000	0.1678	
21 o-Nitrotoluene	1	12.829	12.820	0.009	14517	0.2000	0.1119	
22 p-Nitrotoluene	1	13.262	13.260	0.002	14047	0.2000	0.1274	
23 m-Nitrotoluene	1	13.862	13.854	0.008	18202	0.2000	0.1254	
24 PETN	2	14.969	14.967	0.002	148077	2.00	1.99	

QC Flag Legend

Review Flags

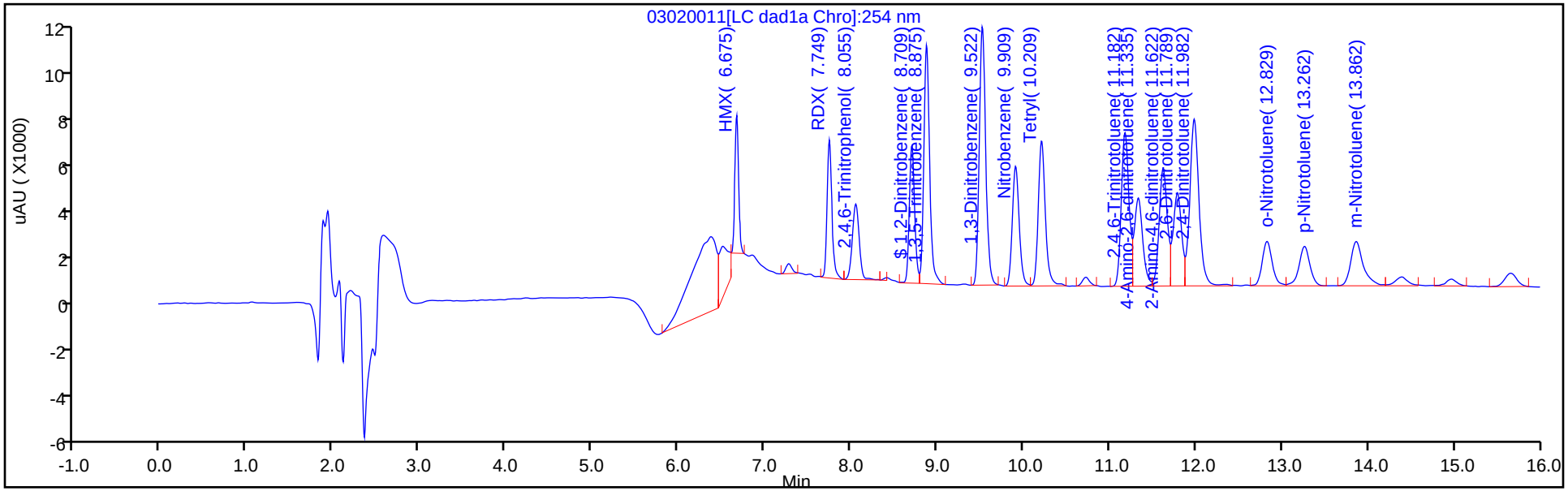
M - Manually Integrated

Report Date: 03-Mar-2020 11:54:29 Chrom Revision: 2.3 19-Feb-2020 16:45:46

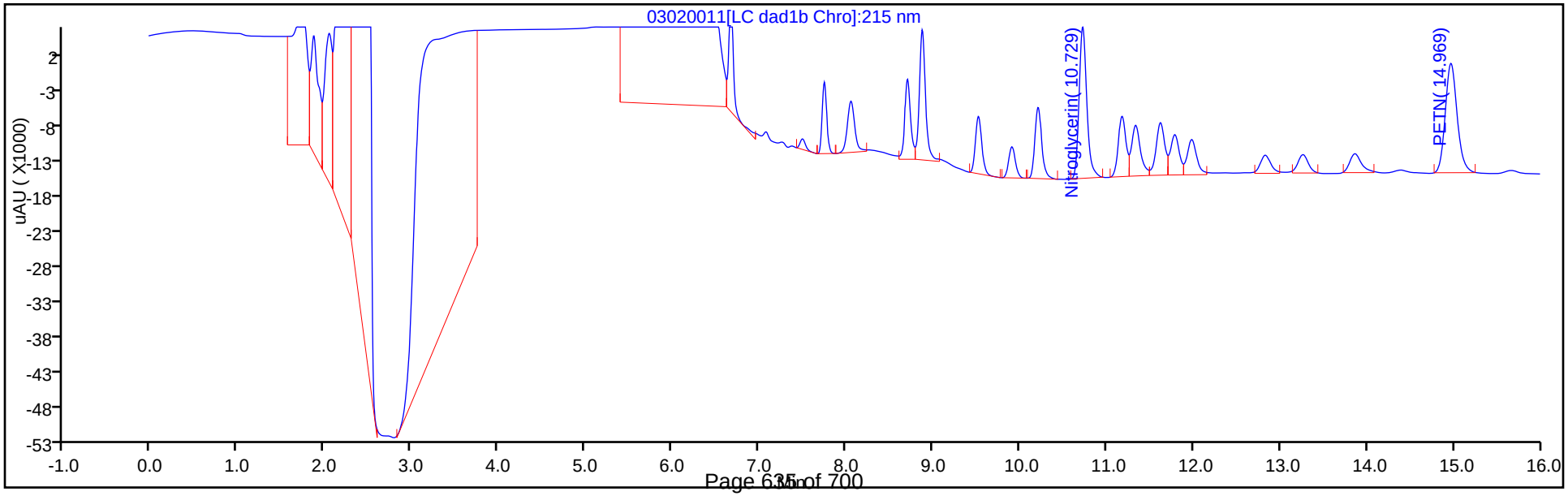
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020011.d				
Injection Date:	02-Mar-2020 16:51:57	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	LCS 280-487255/2-A			Worklist Smp#:	11
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200302-89712.b\03020011.D				
Lims ID:	LCS 280-487255/2-A				
Client ID:					
Sample Type:	LCS				
Inject. Date:	02-Mar-2020 16:51:57	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCS 280-487255/2				
Misc. Info.:	280-0089712-011				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200302-89712.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	03-Mar-2020 11:54:24	Calib Date:	06-Jan-2020 20:40:54		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060014.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0310				
First Level Reviewer: beckerc		Date:	03-Mar-2020 11:06:02		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1734	86.71

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

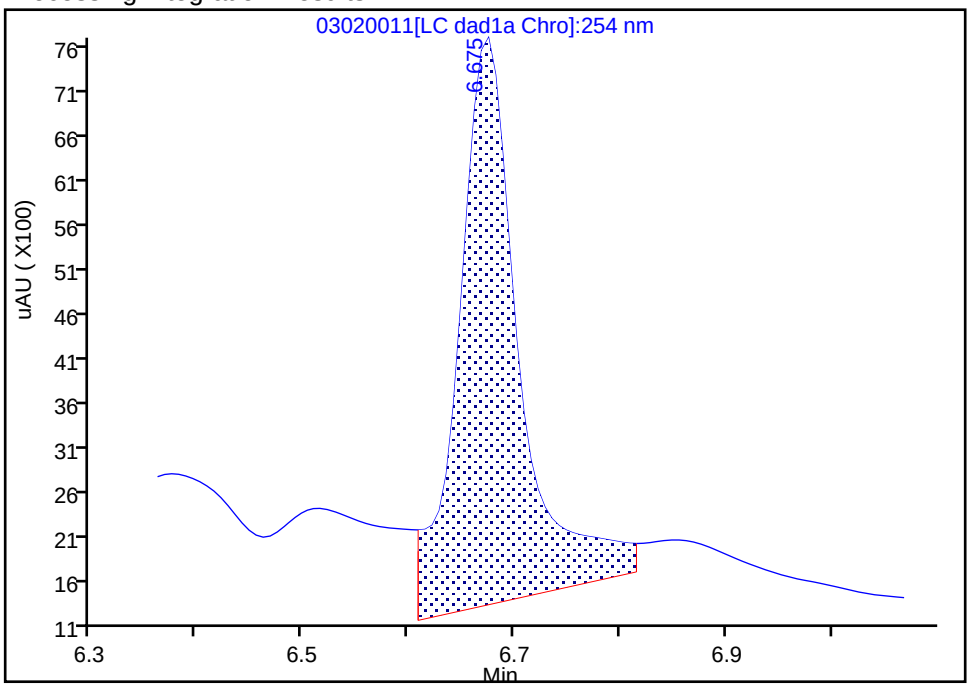
Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020011.d				
Injection Date:	02-Mar-2020 16:51:57	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-487255/2-A				
Client ID:					
Operator ID:	CB	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

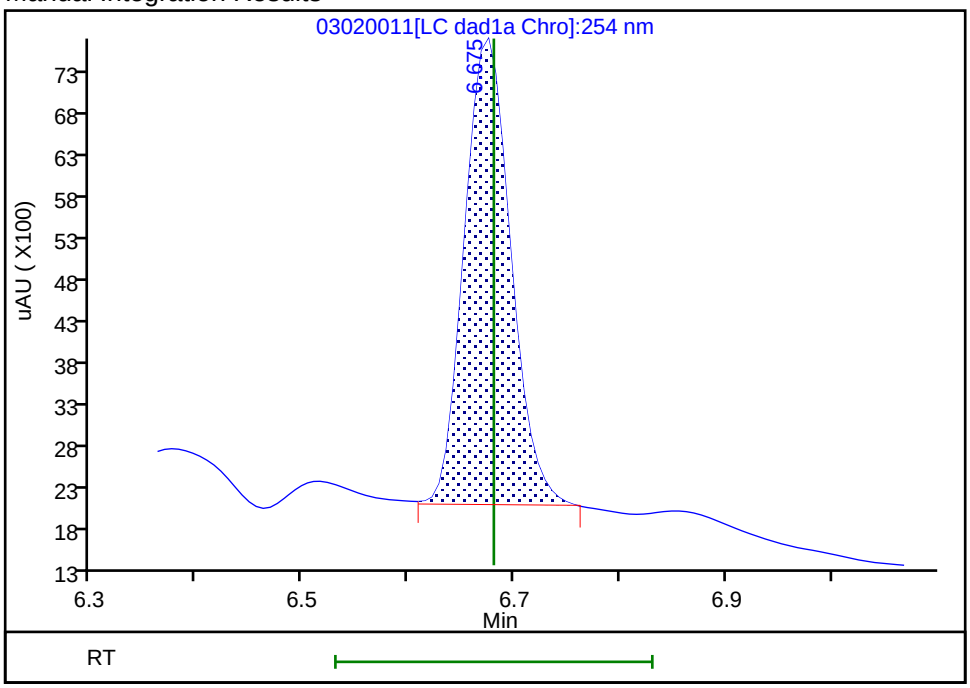
Processing Integration Results

RT: 6.68
Area: 25389
Amount: 0.276469
Amount Units: ug/mL



Manual Integration Results

RT: 6.68
Area: 16905
Amount: 0.184084
Amount Units: ug/mL



Reviewer: beckerc, 03-Mar-2020 11:05:34

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-134063-1
SDG No.:
Client Sample ID:
Lab Sample ID: LCS 280-487255/5-A
Matrix: Water
Lab File ID: 03020014.D
Analysis Method: 8330A
Date Collected:
Extraction Method: 3535
Date Extracted: 02/28/2020 13:30
Sample wt/vol: 500(mL)
Date Analyzed: 03/02/2020 18:00
Con. Extract Vol.: 5(mL)
Dilution Factor: 1
Injection Volume: 100(uL)
GC Column: UltraCarb5uODS ID: 4.6(mm)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 487395
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
5755-27-1	MNX	2.45		2.0	0.40	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	100		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200302-89712.b\03020014.D				
Lims ID:	LCS 280-487255/5-A				
Client ID:					
Sample Type:	LCS				
Inject. Date:	02-Mar-2020 18:00:41	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCS 280-487255/5				
Misc. Info.:	280-0089712-014				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200302-89712.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	03-Mar-2020 11:54:24	Calib Date:	06-Jan-2020 20:40:54		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060014.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0310				
First Level Reviewer: beckerc		Date:	03-Mar-2020 11:08:26		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.594	6.590	0.004	39975	0.2002	0.1948	M
5 DNX	1	6.908	6.910	-0.002	30374	0.2002	0.1955	M
6 MNX	1	7.354	7.363	-0.009	34381	0.2334	0.2450	
$ 9 1,2-Dinitrobenzene	1	8.708	8.707	0.001	27780	0.2000	0.1994	

QC Flag Legend

Review Flags

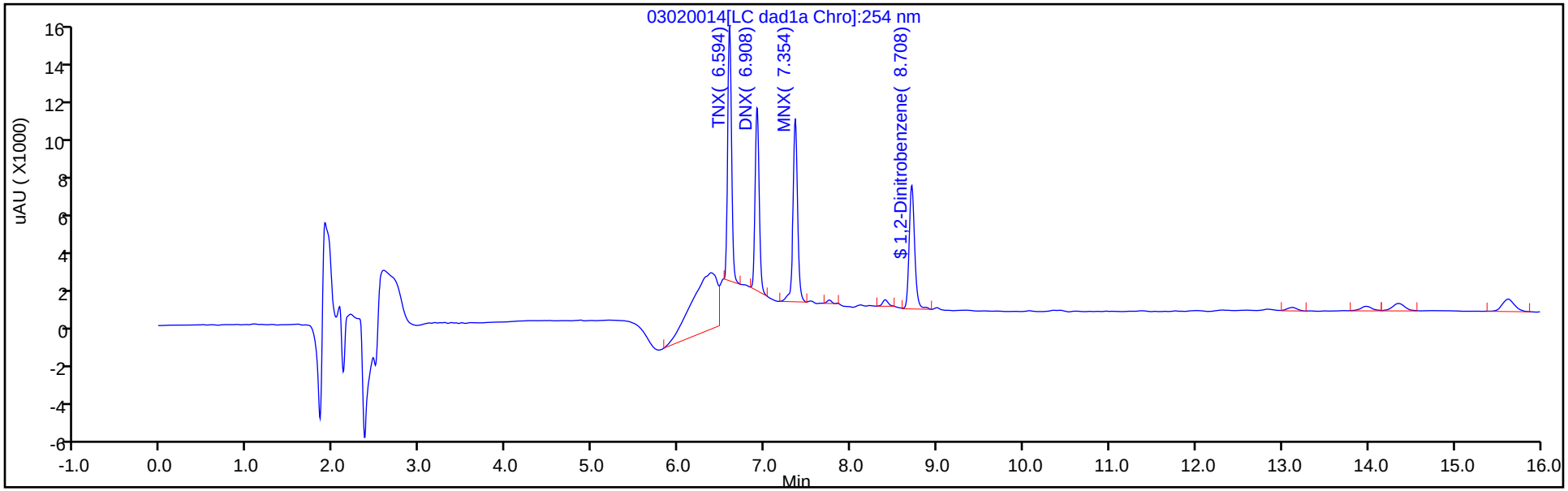
M - Manually Integrated

Report Date: 03-Mar-2020 11:54:38 Chrom Revision: 2.3 19-Feb-2020 16:45:46

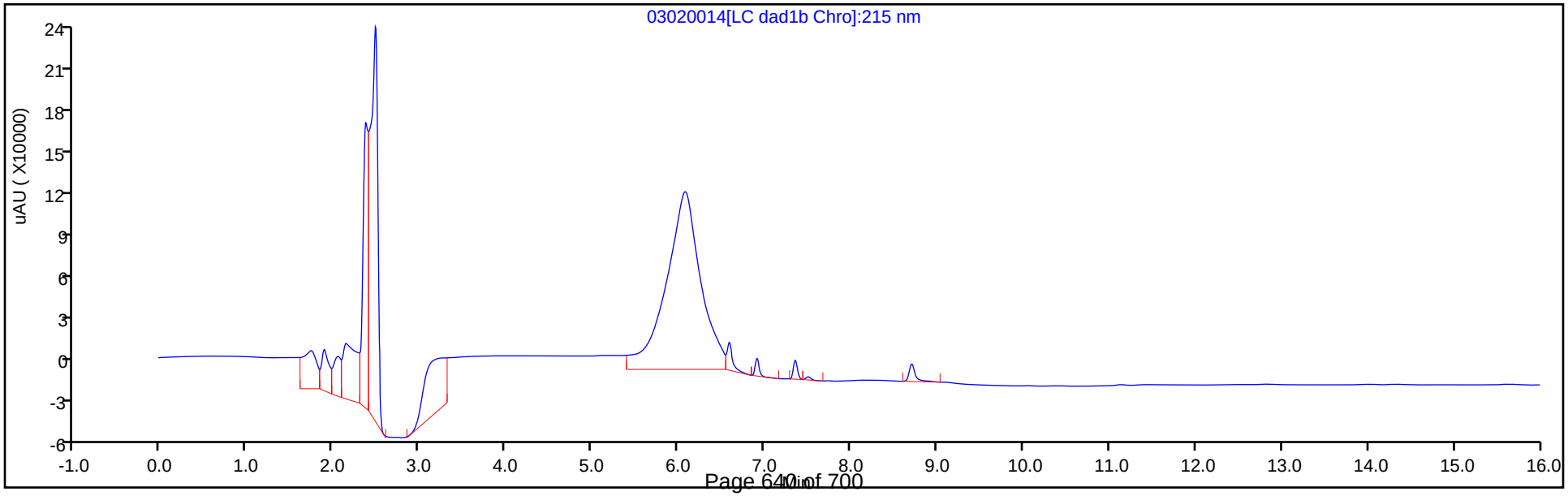
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020014.d				
Injection Date:	02-Mar-2020 18:00:41	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	LCS 280-487255/5-A			Worklist Smp#:	14
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200302-89712.b\03020014.D				
Lims ID:	LCS 280-487255/5-A				
Client ID:					
Sample Type:	LCS				
Inject. Date:	02-Mar-2020 18:00:41	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCS 280-487255/5				
Misc. Info.:	280-0089712-014				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200302-89712.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	03-Mar-2020 11:54:24	Calib Date:	06-Jan-2020 20:40:54		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060014.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0310				

First Level Reviewer: beckerc Date: 03-Mar-2020 11:08:26

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1994	99.69

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-134063-1
SDG No.:
Client Sample ID:
Lab Sample ID: LCS 280-487600/2-A
Matrix: Water
Lab File ID: 03040060.D
Analysis Method: 8330A
Date Collected:
Extraction Method: 3535
Date Extracted: 03/04/2020 07:23
Sample wt/vol: 500(mL)
Date Analyzed: 03/05/2020 10:23
Con. Extract Vol.: 5(mL)
Dilution Factor: 1
Injection Volume: 100(uL)
GC Column: UltraCarb5uODS ID: 4.6(mm)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 487660
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.06		1.0	0.40	0.20
99-65-0	1,3-Dinitrobenzene	1.99		0.40	0.20	0.089
118-96-7	2,4,6-Trinitrotoluene	1.99		0.40	0.40	0.16
121-14-2	2,4-Dinitrotoluene	1.90		0.40	0.20	0.084
606-20-2	2,6-Dinitrotoluene	1.96		0.20	0.20	0.065
35572-78-2	2-Amino-4,6-dinitrotoluene	1.91		0.20	0.12	0.051
88-72-2	2-Nitrotoluene	1.78		0.40	0.20	0.086
99-08-1	3-Nitrotoluene	1.94		0.40	0.40	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.80		0.20	0.12	0.058
99-99-0	4-Nitrotoluene	1.84		1.0	0.40	0.20
2691-41-0	HMX	1.93	M	0.40	0.20	0.088
98-95-3	Nitrobenzene	1.90		0.40	0.20	0.091
121-82-4	RDX	1.85		0.40	0.40	0.16
479-45-8	Tetryl	1.92		0.24	0.20	0.079

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	100		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040060.D
Lims ID: LCS 280-487600/2-A
Client ID:
Sample Type: LCS
Inject. Date: 05-Mar-2020 10:23:30 ALS Bottle#: 60 Worklist Smp#: 60
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-487600/2
Misc. Info.: 280-0089779-060
Operator ID: CB Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Mar-2020 10:25:55 Calib Date: 04-Mar-2020 23:40:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0308

First Level Reviewer: beckerc Date: 06-Mar-2020 09:39:20

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 HMX	1	6.679	6.683	-0.004	17196	0.2000	0.1928	M
	7 RDX	1	7.752	7.750	0.002	21845	0.2000	0.1853	
	8 2,4,6-Trinitrophenol	1	8.065	8.056	0.009	11099	0.2000	0.1272	
$	9 1,2-Dinitrobenzene	1	8.705	8.710	-0.005	29135	0.2000	0.1993	
	10 1,3,5-Trinitrobenzene	1	8.879	8.883	-0.004	50260	0.2000	0.2064	
	11 1,3-Dinitrobenzene	1	9.525	9.529	-0.004	64686	0.2000	0.1995	
	12 Nitrobenzene	1	9.912	9.916	-0.004	40419	0.2000	0.1900	
	14 Tetryl	1	10.219	10.216	0.003	37193	0.2000	0.1918	
	15 Nitroglycerin	2	10.732	10.729	0.003	140854	2.00	1.96	
	16 2,4,6-Trinitrotoluene	1	11.185	11.183	0.002	43857	0.2000	0.1985	
	17 4-Amino-2,6-dinitrotoluene	1	11.339	11.336	0.003	31297	0.2000	0.1804	
	18 2-Amino-4,6-dinitrotoluene	1	11.625	11.623	0.002	41633	0.2000	0.1914	
	19 2,6-Dinitrotoluene	1	11.792	11.789	0.003	31295	0.2000	0.1963	
	20 2,4-Dinitrotoluene	1	11.985	11.983	0.002	61049	0.2000	0.1901	
	21 o-Nitrotoluene	1	12.832	12.829	0.003	25598	0.2000	0.1780	
	22 p-Nitrotoluene	1	13.272	13.269	0.003	22169	0.2000	0.1843	
	23 m-Nitrotoluene	1	13.865	13.863	0.002	29934	0.2000	0.1941	
	24 PETN	2	14.972	14.969	0.003	159991	2.00	2.01	

QC Flag Legend

Review Flags

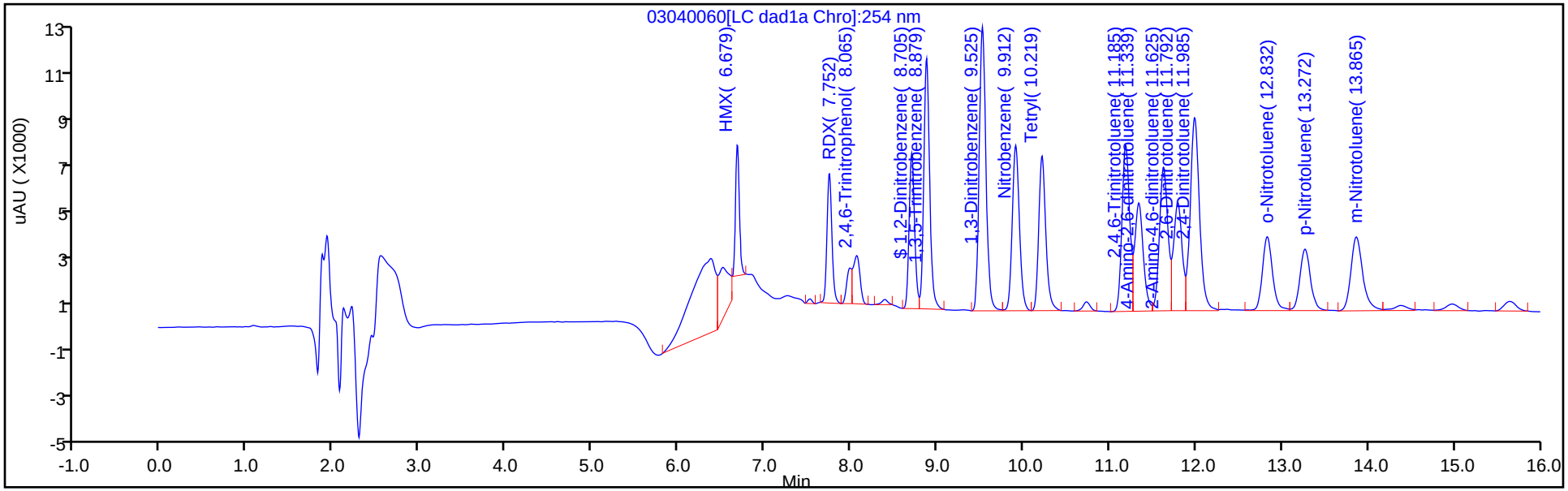
M - Manually Integrated

Report Date: 06-Mar-2020 10:25:57 Chrom Revision: 2.3 19-Feb-2020 16:45:46

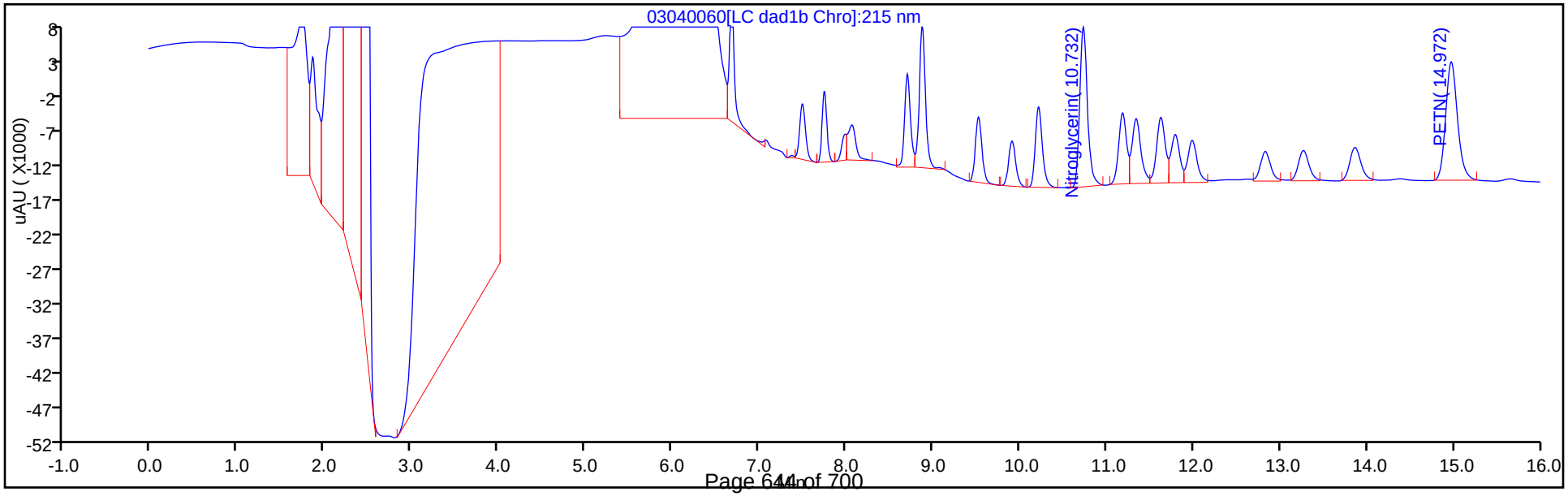
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040060.d				
Injection Date:	05-Mar-2020 10:23:30	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	LCS 280-487600/2-A			Worklist Smp#:	60
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	60
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040060.D				
Lims ID:	LCS 280-487600/2-A				
Client ID:					
Sample Type:	LCS				
Inject. Date:	05-Mar-2020 10:23:30	ALS Bottle#:	60	Worklist Smp#:	60
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCS 280-487600/2				
Misc. Info.:	280-0089779-060				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Mar-2020 10:25:55	Calib Date:	04-Mar-2020 23:40:46		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0308				
First Level Reviewer: beckerc		Date:	06-Mar-2020 09:39:20		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1993	99.63

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

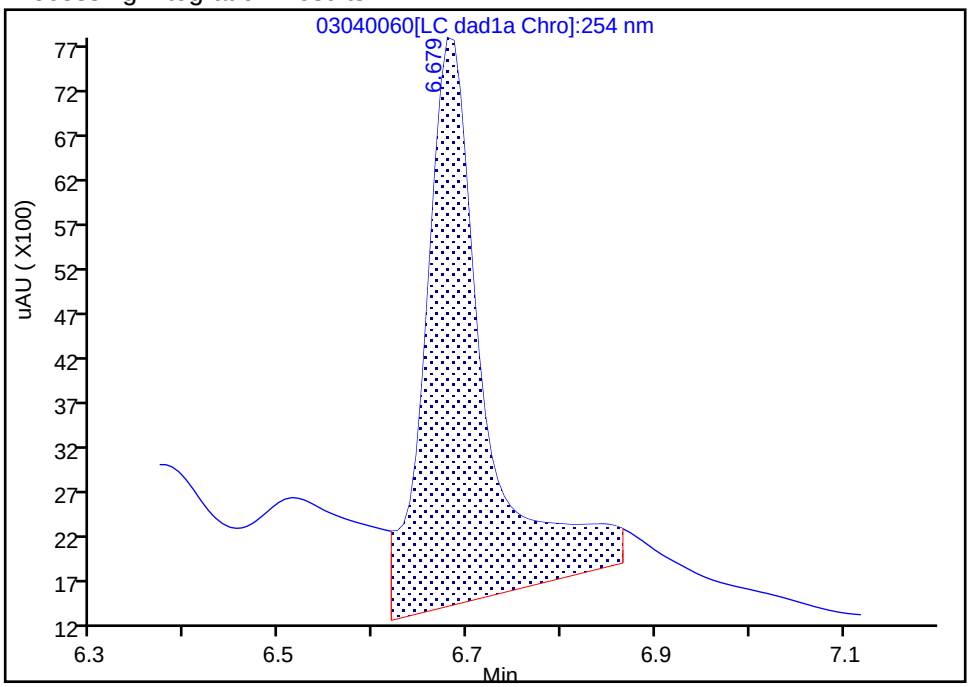
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040060.d				
Injection Date:	05-Mar-2020 10:23:30	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-487600/2-A				
Client ID:					
Operator ID:	CB	ALS Bottle#:	60	Worklist Smp#:	60
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

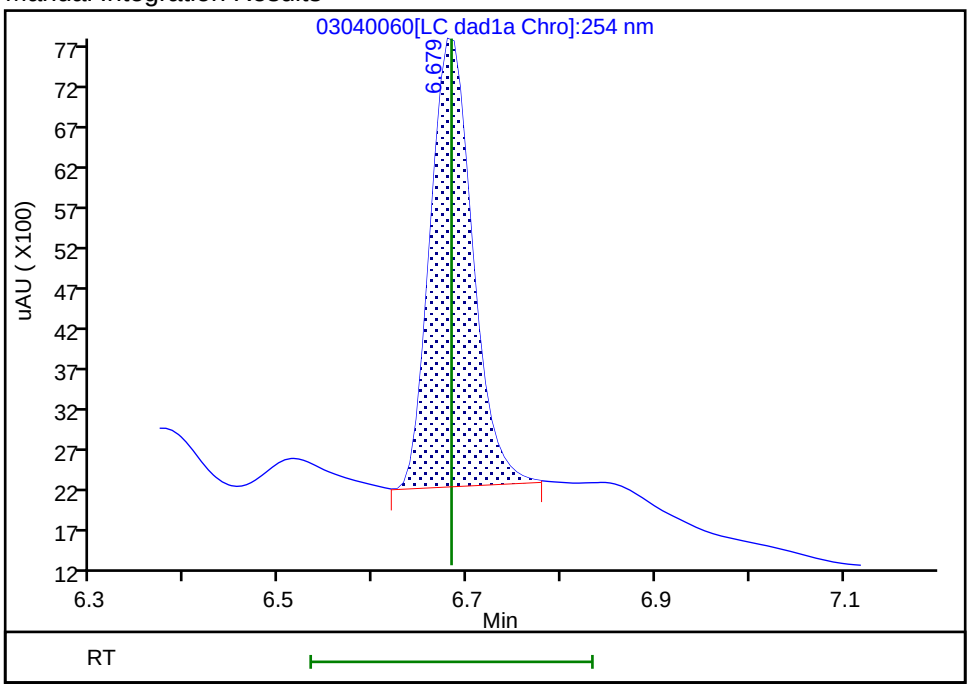
Processing Integration Results

RT: 6.68
Area: 27950
Amount: 0.313420
Amount Units: ug/mL



Manual Integration Results

RT: 6.68
Area: 17196
Amount: 0.192829
Amount Units: ug/mL



Reviewer: beckerc, 06-Mar-2020 09:39:14

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-134063-1
SDG No.:
Client Sample ID:
Lab Sample ID: LCS 280-487600/3-A
Matrix: Water
Lab File ID: 03040061.D
Analysis Method: 8330A
Date Collected:
Extraction Method: 3535
Date Extracted: 03/04/2020 07:23
Sample wt/vol: 500(mL)
Date Analyzed: 03/05/2020 10:46
Con. Extract Vol.: 5(mL)
Dilution Factor: 1
Injection Volume: 100(uL)
GC Column: UltraCarb5uODS ID: 4.6(mm)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 487660
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
5755-27-1	MNX	1.96	J	2.0	0.40	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	92		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040061.D				
Lims ID:	LCS 280-487600/3-A				
Client ID:					
Sample Type:	LCS				
Inject. Date:	05-Mar-2020 10:46:25	ALS Bottle#:	61	Worklist Smp#:	61
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCS 280-487600/3				
Misc. Info.:	280-0089779-061				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Mar-2020 10:25:55	Calib Date:	04-Mar-2020 23:40:46		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0308				
First Level Reviewer: beckerc		Date:	06-Mar-2020 09:40:02		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.588	6.594	-0.006	30106	0.2002	0.1383	M
5 DNX	1	6.908	6.914	-0.006	25811	0.2002	0.1688	M
6 MNX	1	7.348	7.361	-0.013	31142	0.2334	0.1964	
$ 9 1,2-Dinitrobenzene	1	8.708	8.710	-0.002	26784	0.2000	0.1832	

QC Flag Legend

Review Flags

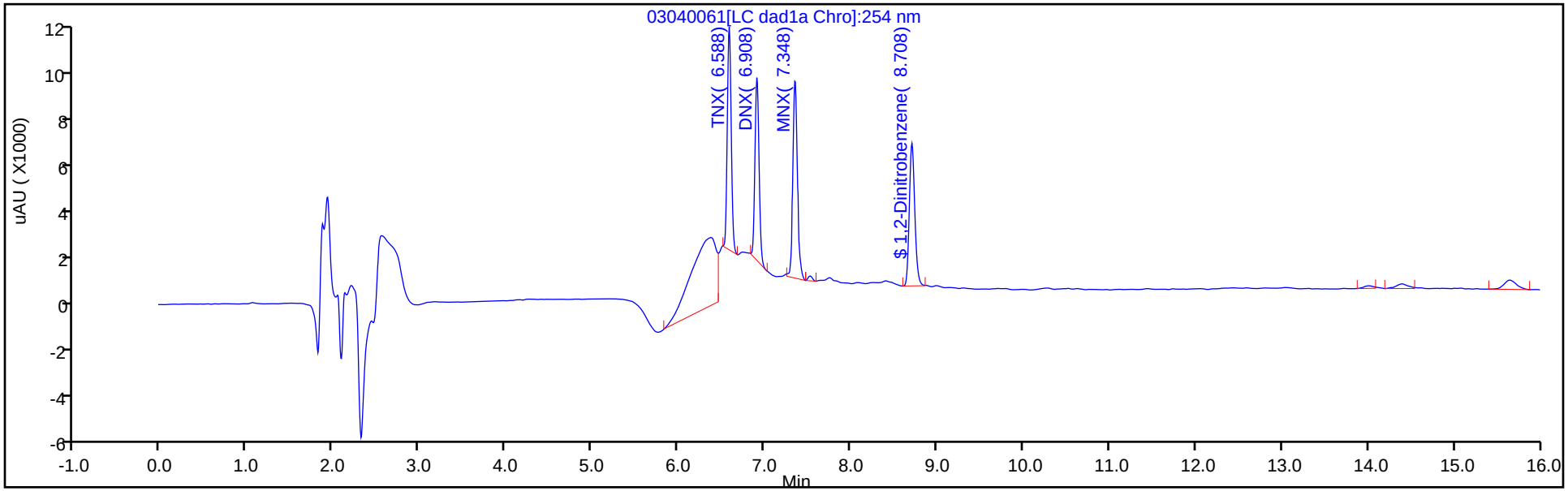
M - Manually Integrated

Report Date: 06-Mar-2020 10:25:58 Chrom Revision: 2.3 19-Feb-2020 16:45:46

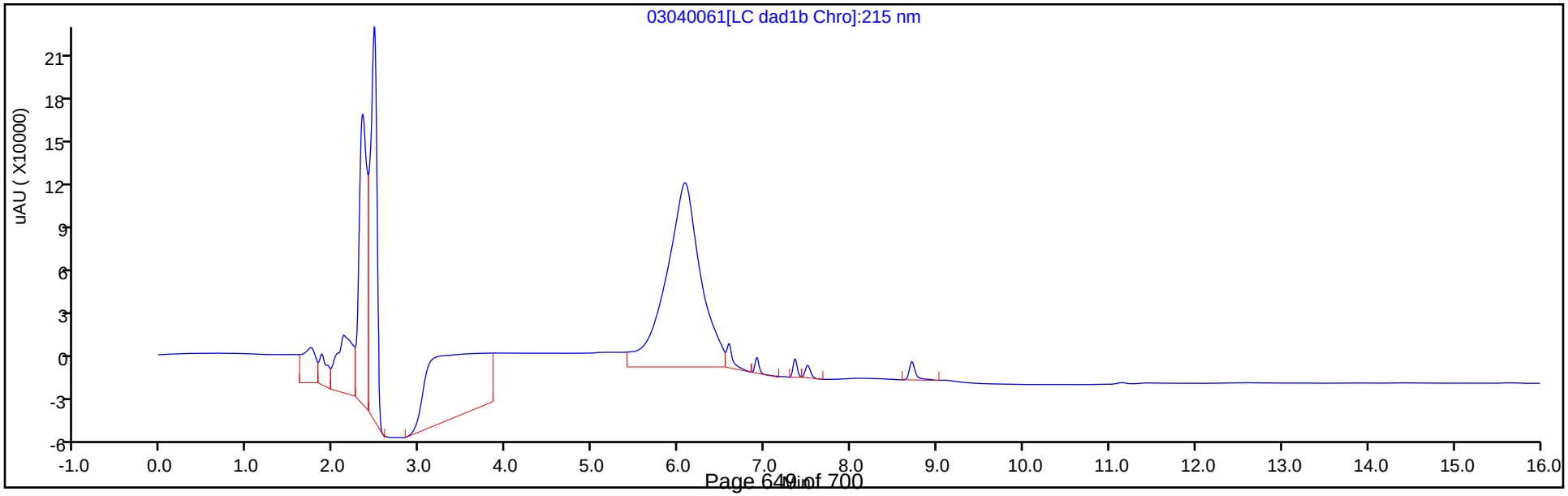
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040061.d				
Injection Date:	05-Mar-2020 10:46:25	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	LCS 280-487600/3-A			Worklist Smp#:	61
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	61
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040061.D				
Lims ID:	LCS 280-487600/3-A				
Client ID:					
Sample Type:	LCS				
Inject. Date:	05-Mar-2020 10:46:25	ALS Bottle#:	61	Worklist Smp#:	61
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCS 280-487600/3				
Misc. Info.:	280-0089779-061				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Mar-2020 10:25:55	Calib Date:	04-Mar-2020 23:40:46		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0308				

First Level Reviewer: beckerc Date: 06-Mar-2020 09:40:02

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1832	91.59

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-134063-1
SDG No.:
Client Sample ID:
Lab Sample ID: LCSD 280-487255/6-A
Matrix: Water
Lab File ID: 03020015.D
Analysis Method: 8330A
Date Collected:
Extraction Method: 3535
Date Extracted: 02/28/2020 13:30
Sample wt/vol: 500(mL)
Date Analyzed: 03/02/2020 18:23
Con. Extract Vol.: 5(mL)
Dilution Factor: 1
Injection Volume: 100(uL)
GC Column: UltraCarb5uODS ID: 4.6(mm)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 487395
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
5755-27-1	MNX	2.39		2.0	0.40	0.15

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

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200302-89712.b\03020015.D				
Lims ID:	LCSD 280-487255/6-A				
Client ID:					
Sample Type:	LCSD				
Inject. Date:	02-Mar-2020 18:23:36	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCSD 280-487255/				
Misc. Info.:	280-0089712-015				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200302-89712.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	03-Mar-2020 11:54:24	Calib Date:	06-Jan-2020 20:40:54		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060014.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0310				
First Level Reviewer: beckerc		Date:	03-Mar-2020 11:08:53		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.591	6.590	0.001	36978	0.2002	0.1802	M
5 DNX	1	6.911	6.910	0.001	29073	0.2002	0.1871	M
6 MNX	1	7.358	7.363	-0.005	33566	0.2334	0.2392	
$ 9 1,2-Dinitrobenzene	1	8.705	8.707	-0.002	25800	0.2000	0.1852	

QC Flag Legend

Review Flags

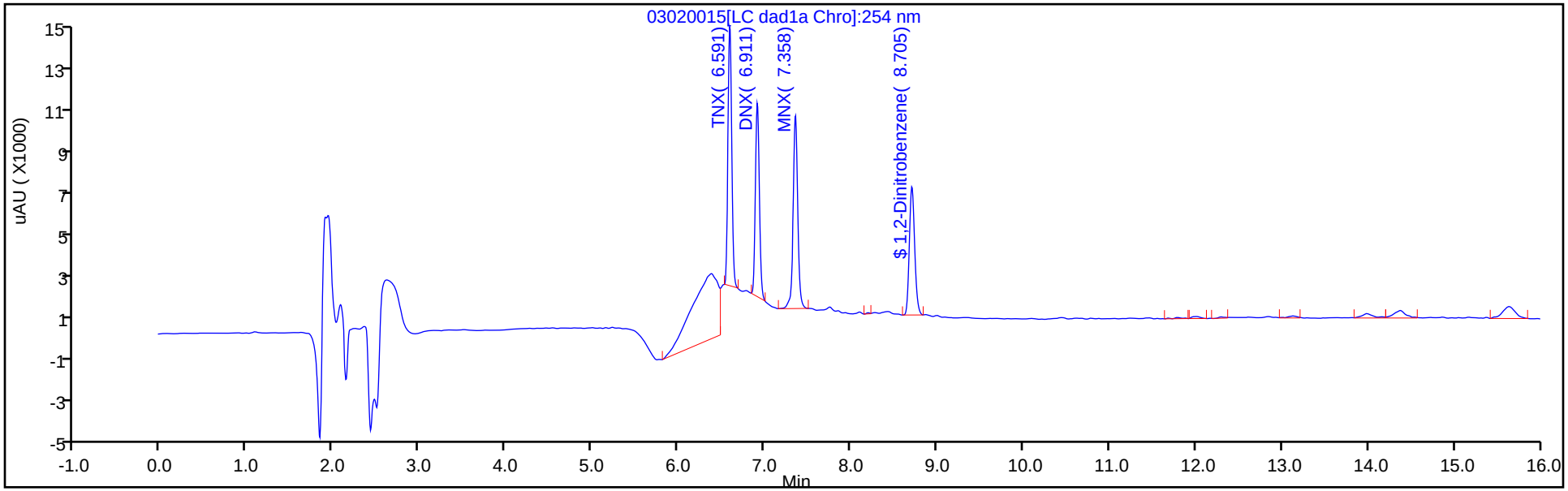
M - Manually Integrated

Report Date: 03-Mar-2020 11:54:41 Chrom Revision: 2.3 19-Feb-2020 16:45:46

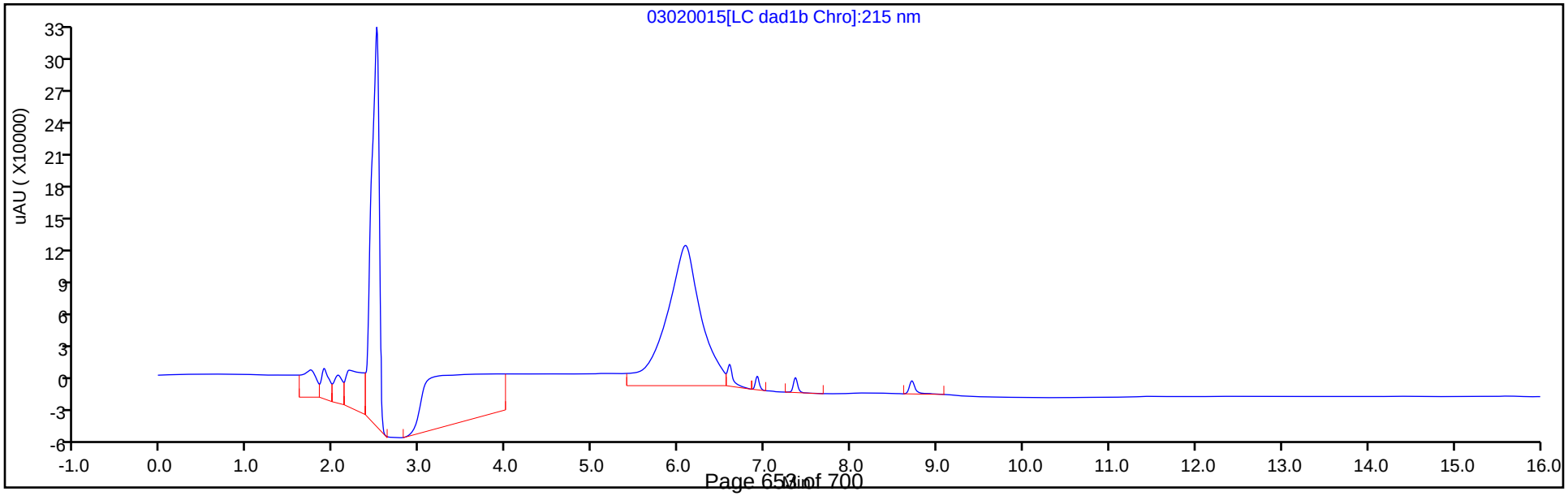
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020015.d				
Injection Date:	02-Mar-2020 18:23:36	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	LCSD 280-487255/6-A			Worklist Smp#:	15
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200302-89712.b\03020015.D				
Lims ID:	LCSD 280-487255/6-A				
Client ID:					
Sample Type:	LCSD				
Inject. Date:	02-Mar-2020 18:23:36	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCSD 280-487255/				
Misc. Info.:	280-0089712-015				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200302-89712.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	03-Mar-2020 11:54:24	Calib Date:	06-Jan-2020 20:40:54		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060014.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0310				

First Level Reviewer: beckerc Date: 03-Mar-2020 11:08:53

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1852	92.59

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-134063-1
SDG No.:
Client Sample ID:
Lab Sample ID: LCSD 280-487600/4-A
Matrix: Water
Lab File ID: 03040062.D
Analysis Method: 8330A
Date Collected:
Extraction Method: 3535
Date Extracted: 03/04/2020 07:23
Sample wt/vol: 500(mL)
Date Analyzed: 03/05/2020 11:09
Con. Extract Vol.: 5(mL)
Dilution Factor: 1
Injection Volume: 100(uL)
GC Column: UltraCarb5uODS ID: 4.6(mm)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 487660
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
5755-27-1	MNX	1.62	J	2.0	0.40	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	63	Q	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040062.D				
Lims ID:	LCSD 280-487600/4-A				
Client ID:					
Sample Type:	LCSD				
Inject. Date:	05-Mar-2020 11:09:23	ALS Bottle#:	62	Worklist Smp#:	62
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCSD 280-487600/				
Misc. Info.:	280-0089779-062				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Mar-2020 10:25:55	Calib Date:	04-Mar-2020 23:40:46		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0308				
First Level Reviewer: beckerc		Date:	06-Mar-2020 09:40:34		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.584	6.594	-0.010	26260	0.2002	0.1207	M
5 DNX	1	6.904	6.914	-0.010	21559	0.2002	0.1410	M
6 MNX	1	7.351	7.361	-0.010	25736	0.2334	0.1623	
$ 9 1,2-Dinitrobenzene	1	8.704	8.710	-0.006	18494	0.2000	0.1265	

QC Flag Legend

Review Flags

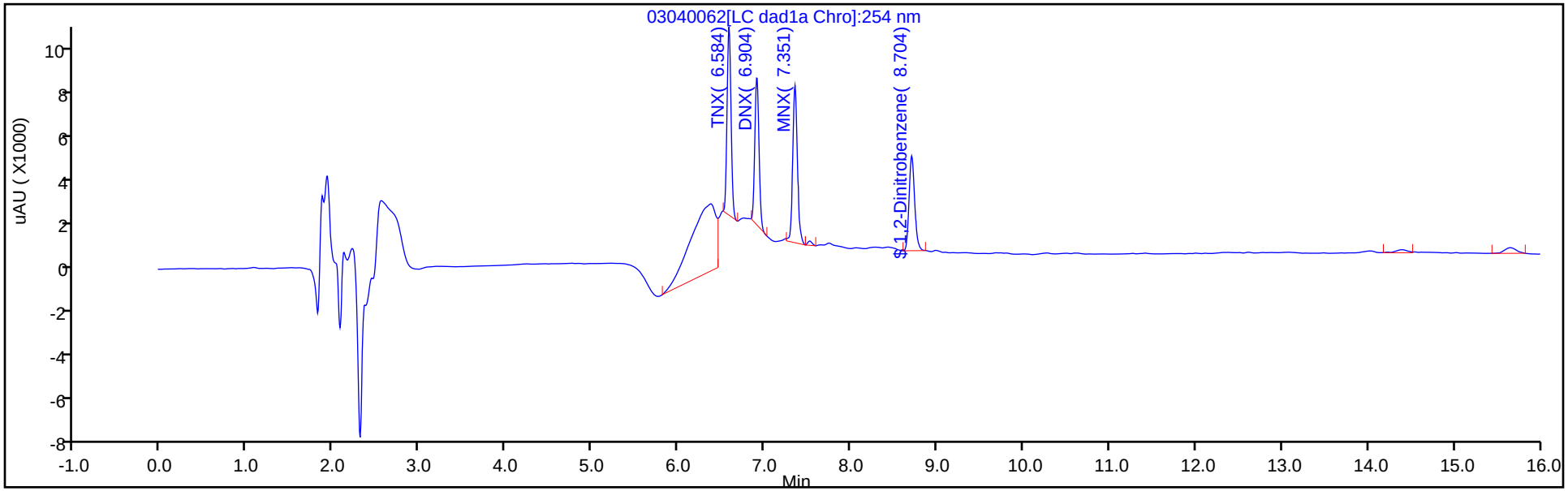
M - Manually Integrated

Report Date: 06-Mar-2020 10:25:59 Chrom Revision: 2.3 19-Feb-2020 16:45:46

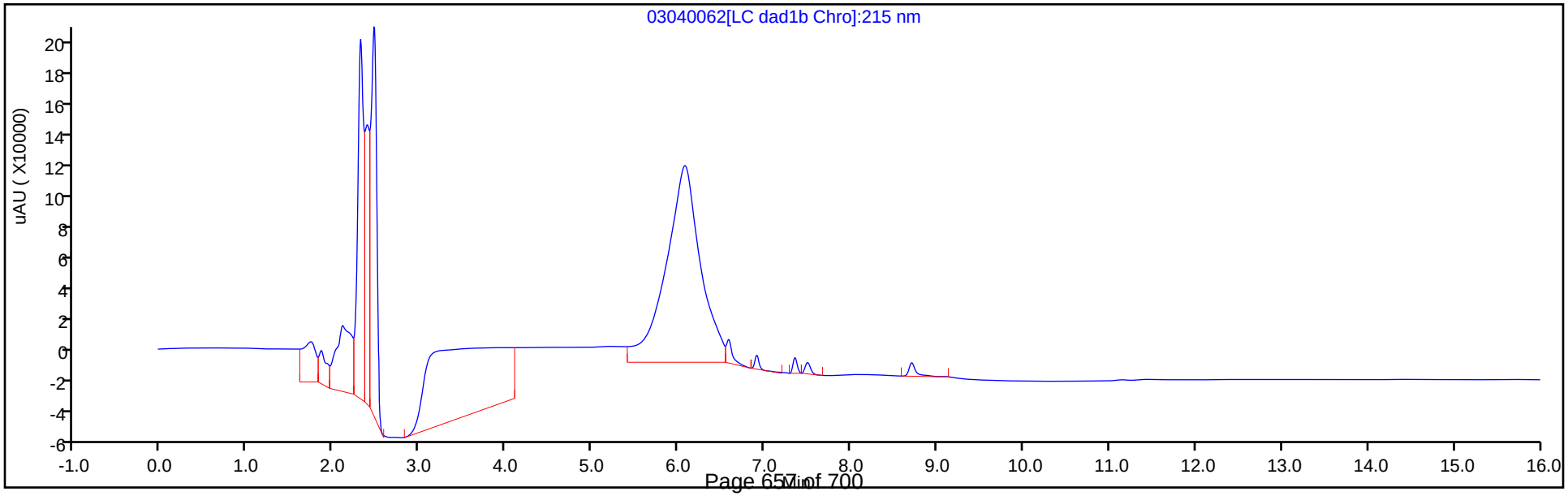
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040062.d				
Injection Date:	05-Mar-2020 11:09:23	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	LCSD 280-487600/4-A			Worklist Smp#:	62
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	62
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040062.D				
Lims ID:	LCSD 280-487600/4-A				
Client ID:					
Sample Type:	LCSD				
Inject. Date:	05-Mar-2020 11:09:23	ALS Bottle#:	62	Worklist Smp#:	62
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCSD 280-487600/				
Misc. Info.:	280-0089779-062				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Mar-2020 10:25:55	Calib Date:	04-Mar-2020 23:40:46		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0308				
First Level Reviewer: beckerc		Date:	06-Mar-2020 09:40:34		

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1265	63.24

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-134063-1
SDG No.:
Client Sample ID: OS001-DP02-45 MS
Lab Sample ID: 280-134063-4 MS
Matrix: Water
Lab File ID: 03020024.D
Analysis Method: 8330A
Date Collected: 02/24/2020 16:30
Extraction Method: 3535
Date Extracted: 02/28/2020 13:30
Sample wt/vol: 454(mL)
Date Analyzed: 03/02/2020 21:49
Con. Extract Vol.: 5(mL)
Dilution Factor: 1
Injection Volume: 100(uL)
GC Column: UltraCarb5uODS ID: 4.6(mm)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 487395
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	20.3	4 Q	1.1	0.44	0.22
99-65-0	1,3-Dinitrobenzene	2.14	Q	0.44	0.22	0.098
118-96-7	2,4,6-Trinitrotoluene	3.31	Q	0.44	0.44	0.18
121-14-2	2,4-Dinitrotoluene	2.00	Q	0.44	0.22	0.092
606-20-2	2,6-Dinitrotoluene	2.12	Q	0.22	0.22	0.071
35572-78-2	2-Amino-4,6-dinitrotoluene	2.61	Q	0.22	0.13	0.056
88-72-2	2-Nitrotoluene	1.42	J1 Q	0.44	0.22	0.094
99-08-1	3-Nitrotoluene	1.69	Q	0.44	0.44	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	2.11	Q	0.22	0.13	0.064
99-99-0	4-Nitrotoluene	1.77	Q	1.1	0.44	0.22
2691-41-0	HMX	1.92	M Q	0.44	0.22	0.096
98-95-3	Nitrobenzene	1.61	Q	0.44	0.22	0.10
121-82-4	RDX	2.21	M Q	0.44	0.44	0.17
479-45-8	Tetryl	9.93	M J1 Q	0.26	0.22	0.087

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	81	Q	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200302-89712.b\03020024.D
Lims ID: 280-134063-A-4-B MS
Client ID: OS001-DP02-45
Sample Type: MS
Inject. Date: 02-Mar-2020 21:49:57 ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-134063-A-4-B
Misc. Info.: 280-0089712-024
Operator ID: CB Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200302-89712.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 03-Mar-2020 11:55:02 Calib Date: 06-Jan-2020 20:40:54
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060014.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0310

First Level Reviewer: beckerc Date: 03-Mar-2020 11:18:58

	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		6.555				ND	
	2 TNX	1		6.590				ND	
	3 HMX	1	6.681	6.680	0.001	16018	0.2000	0.1744	M
	4 2,4-diamino-6-nitrotoluene	1		6.742				ND	
	5 DNX	1	6.941	6.910	0.031	19443		0.1251	M
	6 MNX	1		7.363				ND	
	7 RDX	1	7.755	7.754	0.001	22343	0.2000	0.2011	M
	8 2,4,6-Trinitrophenol	1	8.128	8.067	0.061	31639	0.2000	0.3487	M
$	9 1,2-Dinitrobenzene	1	8.715	8.707	0.008	22709	0.2000	0.1630	
	10 1,3,5-Trinitrobenzene	1	8.881	8.880	0.001	452515	0.2000	1.85	
	11 1,3-Dinitrobenzene	1	9.528	9.527	0.001	60352	0.2000	0.1939	
	12 Nitrobenzene	1	9.914	9.914	0.000	29055	0.2000	0.1461	
	13 3,5-Dinitroaniline	1		10.188				ND	a
	14 Tetryl	1	10.134	10.207	-0.073	146023	0.2000	0.9016	a
	15 Nitroglycerin	2	10.728	10.720	0.008	128618	2.00	1.81	
	16 2,4,6-Trinitrotoluene	1	11.174	11.174	0.000	68343	0.2000	0.3007	
	17 4-Amino-2,6-dinitrotoluene	1	11.328	11.327	0.001	31827	0.2000	0.1913	
	18 2-Amino-4,6-dinitrotoluene	1	11.614	11.614	0.000	48701	0.2000	0.2373	
	19 2,6-Dinitrotoluene	1	11.781	11.780	0.001	30599	0.2000	0.1921	
	20 2,4-Dinitrotoluene	1	11.974	11.974	0.000	54611	0.2000	0.1818	
	21 o-Nitrotoluene	1	12.814	12.820	-0.006	16691	0.2000	0.1286	
	22 p-Nitrotoluene	1	13.254	13.260	-0.006	17679	0.2000	0.1603	
	23 m-Nitrotoluene	1	13.848	13.854	-0.006	22271	0.2000	0.1535	
	24 PETN	2	14.954	14.967	-0.013	147277	2.00	1.98	
	25 Ammonium Picrate	1		0.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

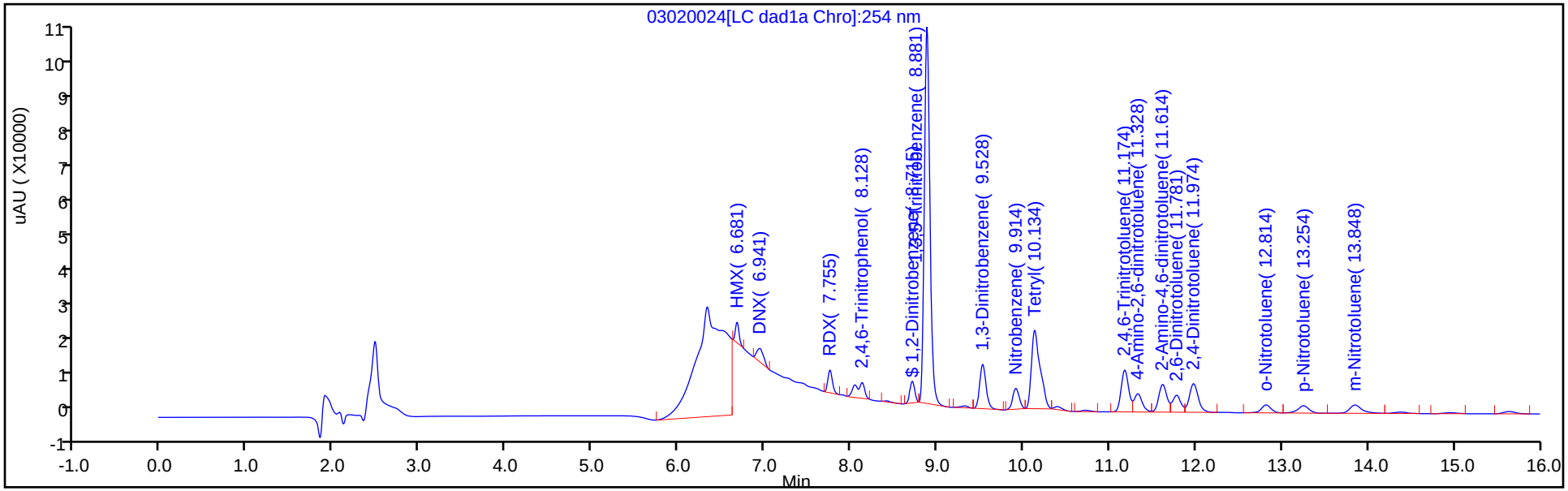
a - User Assigned ID

Report Date: 03-Mar-2020 11:55:06 Chrom Revision: 2.3 19-Feb-2020 16:45:46

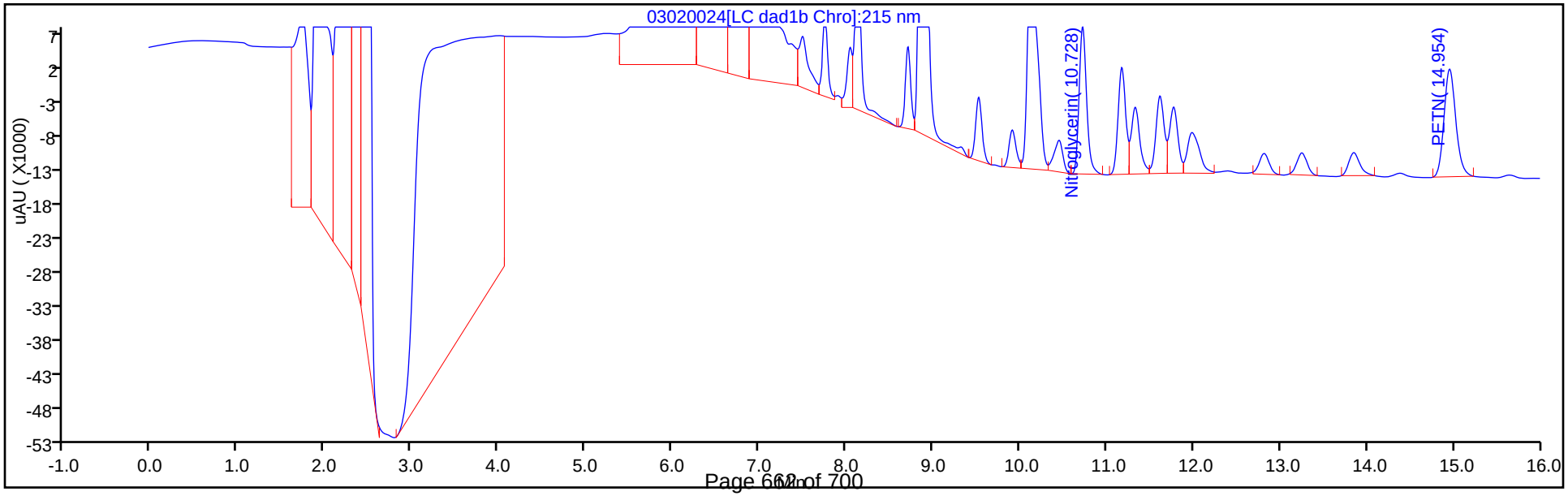
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020024.d				
Injection Date:	02-Mar-2020 21:49:57	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	280-134063-A-4-B MS			Worklist Smp#:	24
Client ID:	OS001-DP02-45				
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



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



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200302-89712.b\03020024.D				
Lims ID:	280-134063-A-4-B MS				
Client ID:	OS001-DP02-45				
Sample Type:	MS				
Inject. Date:	02-Mar-2020 21:49:57	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-134063-A-4-B				
Misc. Info.:	280-0089712-024				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200302-89712.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	03-Mar-2020 11:55:02	Calib Date:	06-Jan-2020 20:40:54		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060014.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0310				

First Level Reviewer: beckerc Date: 03-Mar-2020 11:18:58

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1630	81.49

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

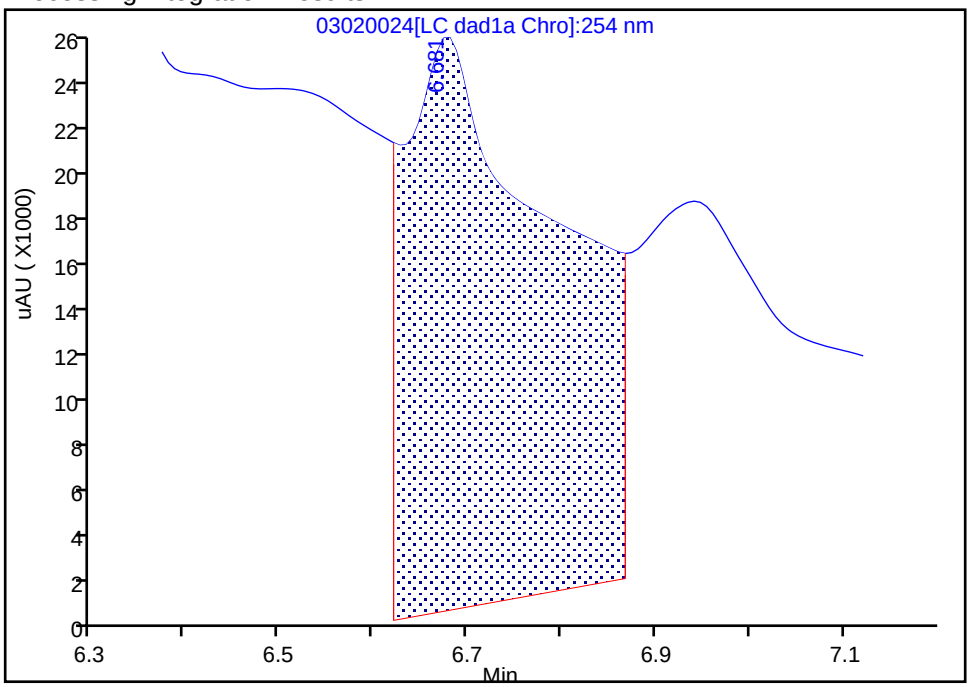
Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020024.d				
Injection Date:	02-Mar-2020 21:49:57	Instrument ID:	CHHPLC_X3		
Lims ID:	280-134063-A-4-B MS				
Client ID:	OS001-DP02-45				
Operator ID:	CB	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

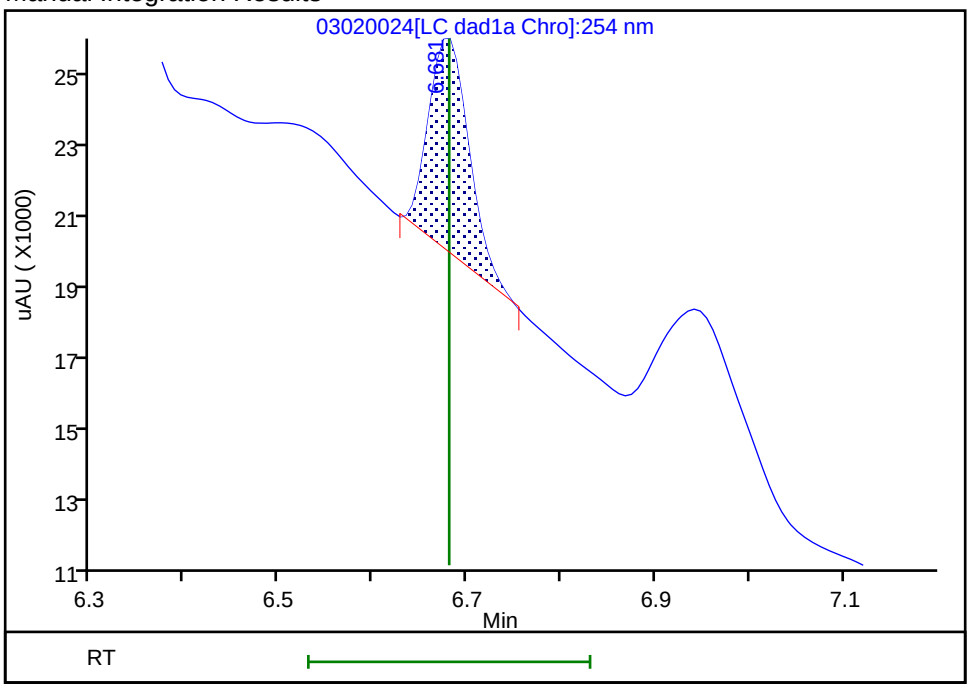
Processing Integration Results

RT: 6.68
Area: 266458
Amount: 2.901542
Amount Units: ug/mL



Manual Integration Results

RT: 6.68
Area: 16018
Amount: 0.174425
Amount Units: ug/mL



Reviewer: beckerc, 03-Mar-2020 11:17:34

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

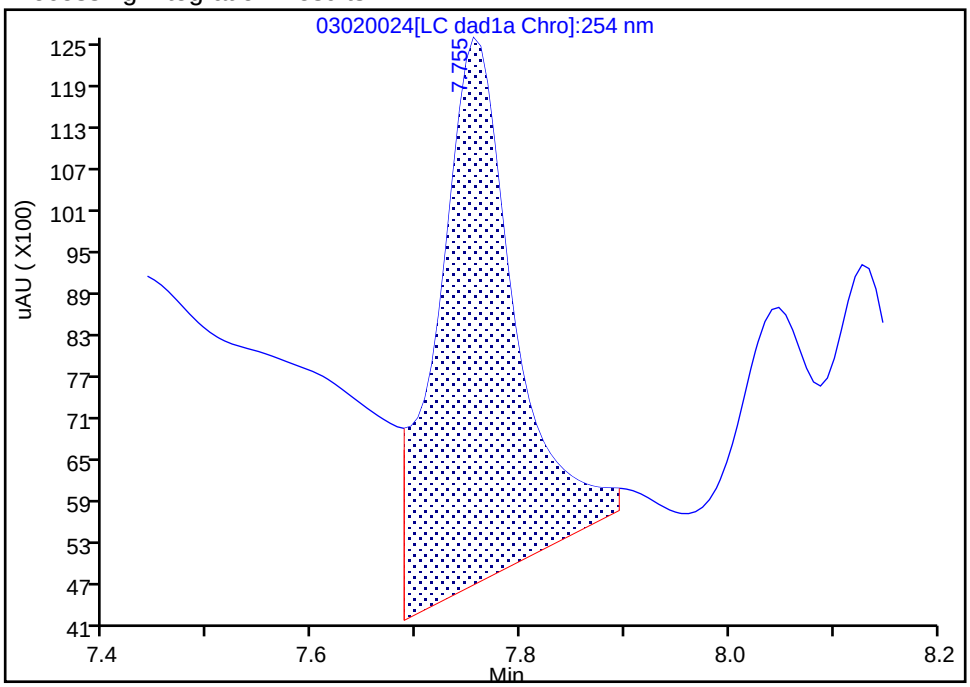
Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020024.d				
Injection Date:	02-Mar-2020 21:49:57	Instrument ID:	CHHPLC_X3		
Lims ID:	280-134063-A-4-B MS				
Client ID:	OS001-DP02-45				
Operator ID:	CB	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 RDX, CAS: 121-82-4

Signal: 1

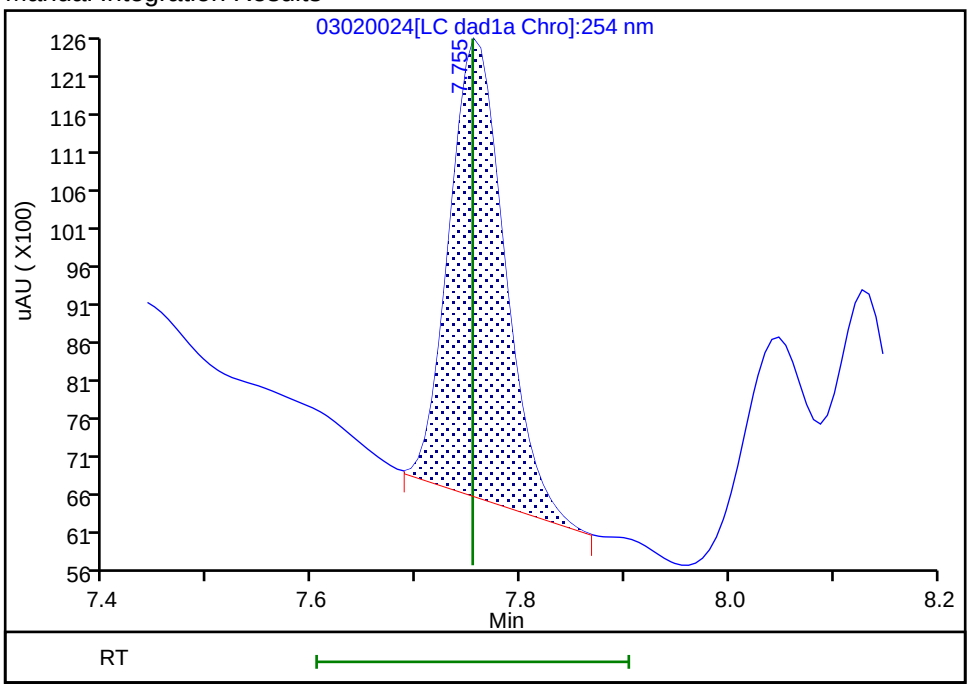
Processing Integration Results

RT: 7.75
Area: 40880
Amount: 0.367889
Amount Units: ug/mL



Manual Integration Results

RT: 7.75
Area: 22343
Amount: 0.201070
Amount Units: ug/mL



Reviewer: beckerc, 03-Mar-2020 11:17:50
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

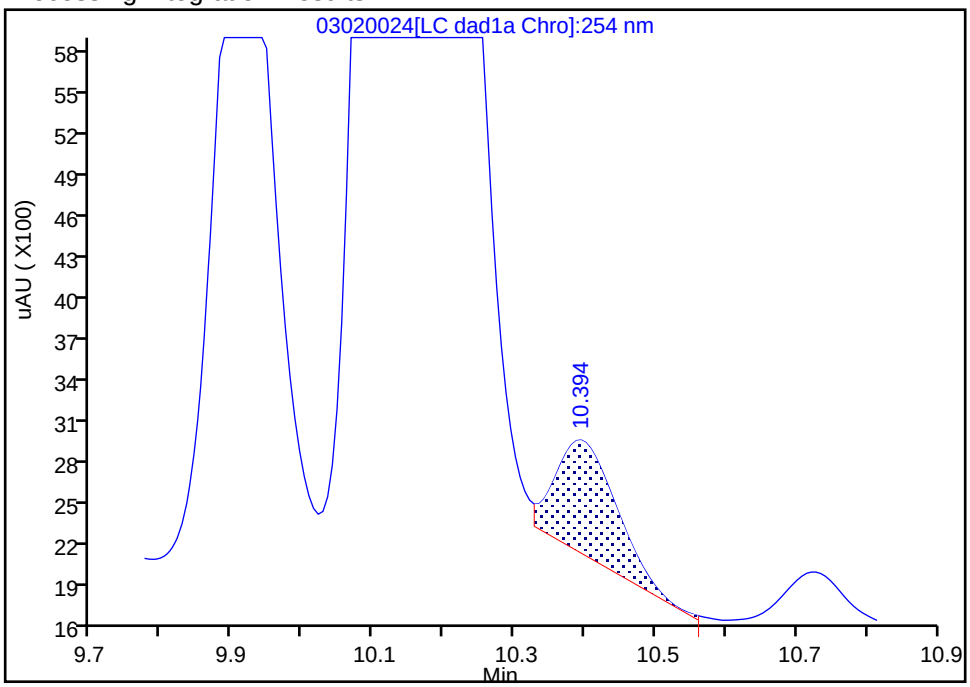
Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020024.d				
Injection Date:	02-Mar-2020 21:49:57	Instrument ID:	CHHPLC_X3		
Lims ID:	280-134063-A-4-B MS				
Client ID:	OS001-DP02-45				
Operator ID:	CB	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

14 Tetryl, CAS: 479-45-8

Signal: 1

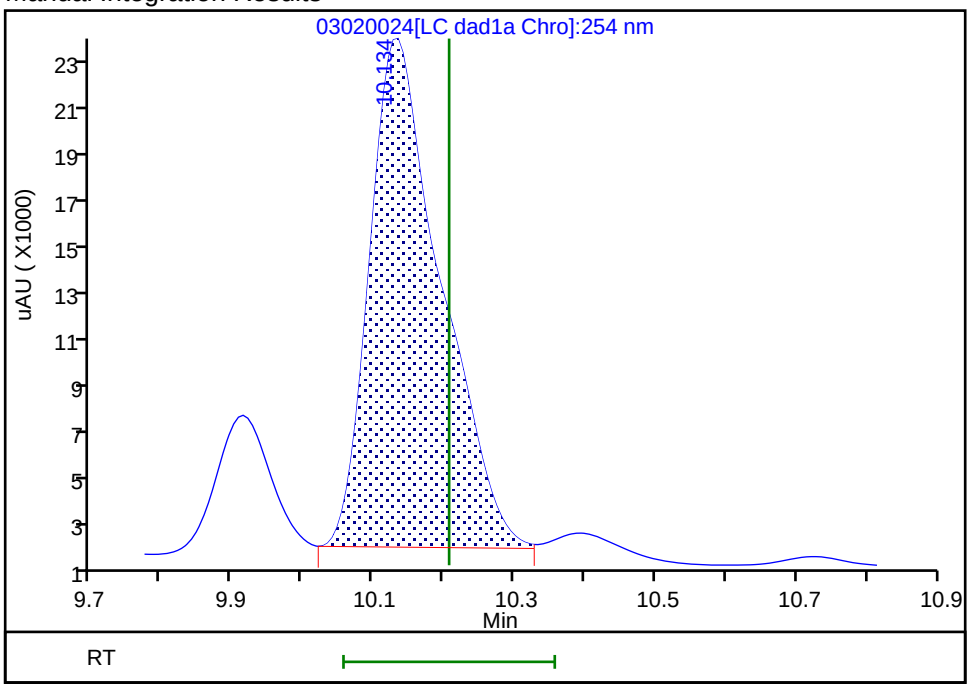
Processing Integration Results

RT: 10.39
Area: 4986
Amount: 0.030786
Amount Units: ug/mL



Manual Integration Results

RT: 10.13
Area: 146023
Amount: 0.901615
Amount Units: ug/mL



Reviewer: beckerc, 03-Mar-2020 11:18:45
Audit Action: Assigned Compound ID Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver | Job No.: 280-134063-1

SDG No.:

Client Sample ID: OS001-DP02-45 MS RE | Lab Sample ID: 280-134063-4 MS RE

Matrix: Water | Lab File ID: 03040067.D

Analysis Method: 8330A | Date Collected: 02/24/2020 16:30

Extraction Method: 3535 | Date Extracted: 03/04/2020 07:23

Sample wt/vol: 485.6(mL) | Date Analyzed: 03/05/2020 13:04

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

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

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

Analysis Batch No.: 487660 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	3.56	Q H 4	1.0	0.41	0.21
99-65-0	1,3-Dinitrobenzene	0.358	J Q H J1	0.41	0.21	0.091
118-96-7	2,4,6-Trinitrotoluene	0.589	Q H J1	0.41	0.41	0.16
121-14-2	2,4-Dinitrotoluene	0.328	J Q H J1	0.41	0.21	0.086
606-20-2	2,6-Dinitrotoluene	0.366	Q H J1	0.21	0.21	0.066
35572-78-2	2-Amino-4,6-dinitrotoluene	0.427	Q H J1	0.21	0.12	0.052
88-72-2	2-Nitrotoluene	0.280	J Q H J1	0.41	0.21	0.088
99-08-1	3-Nitrotoluene	0.361	J Q H J1	0.41	0.41	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.355	Q H J1	0.21	0.12	0.059
99-99-0	4-Nitrotoluene	0.286	J Q H J1	1.0	0.41	0.21
2691-41-0	HMX	0.340	J Q H J1 M	0.41	0.21	0.090
98-95-3	Nitrobenzene	0.322	J Q H J1	0.41	0.21	0.094
121-82-4	RDX	0.460	Q H J1	0.41	0.41	0.16
479-45-8	Tetryl	0.21	U Q H J1	0.25	0.21	0.082

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	17	Q	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040067.D
Lims ID: 280-134063-B-4-B MS
Client ID: OS001-DP02-45
Sample Type: MS
Inject. Date: 05-Mar-2020 13:04:06 ALS Bottle#: 67 Worklist Smp#: 67
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-134063-B-4-B
Misc. Info.: 280-0089779-067
Operator ID: CB Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Mar-2020 10:25:55 Calib Date: 04-Mar-2020 23:40:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0308

First Level Reviewer: beckerc Date: 06-Mar-2020 09:45:00

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	1 2,6-diamino-4-nitrotoluene	1		6.548				ND	U
	2 TNX	1		6.594				ND	
	3 HMX	1	6.680	6.683	-0.003	2946	0.2000	0.0330	M
	4 2,4-diamino-6-nitrotoluene	1		6.735				ND	
	5 DNX	1		6.914				ND	
	6 MNX	1		7.361				ND	
	7 RDX	1	7.747	7.750	-0.003	5268	0.2000	0.0447	
	8 2,4,6-Trinitrophenol	1	8.093	8.056	0.037	6754	0.2000	0.0774	
$	9 1,2-Dinitrobenzene	1	8.707	8.710	-0.003	4893	0.2000	0.0335	
	10 1,3,5-Trinitrobenzene	1	8.880	8.883	-0.003	84270	0.2000	0.3461	
	11 1,3-Dinitrobenzene	1	9.526	9.529	-0.003	11278	0.2000	0.0348	
	12 Nitrobenzene	1	9.913	9.916	-0.003	6651	0.2000	0.0313	
	13 3,5-Dinitroaniline	1	10.133	10.142	-0.009	28969		0.1053	
	14 Tetryl	1		10.216			ND	ND	
	15 Nitroglycerin	2	10.733	10.729	0.004	23317	2.00	0.3248	
	16 2,4,6-Trinitrotoluene	1	11.186	11.183	0.003	12645	0.2000	0.0572	
	17 4-Amino-2,6-dinitrotoluene	1	11.340	11.336	0.004	5973	0.2000	0.0344	
	18 2-Amino-4,6-dinitrotoluene	1	11.626	11.623	0.003	9031	0.2000	0.0415	
	19 2,6-Dinitrotoluene	1	11.800	11.789	0.011	5662	0.2000	0.0355	
	20 2,4-Dinitrotoluene	1	11.993	11.983	0.010	10217	0.2000	0.0318	
	21 o-Nitrotoluene	1	12.840	12.829	0.011	3915	0.2000	0.0272	
	22 p-Nitrotoluene	1	13.280	13.269	0.011	3345	0.2000	0.0278	
	23 m-Nitrotoluene	1	13.880	13.863	0.017	5414	0.2000	0.0351	
	24 PETN	2	14.993	14.969	0.024	25283	2.00	0.3182	
	25 Ammonium Picrate	1		0.000				ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

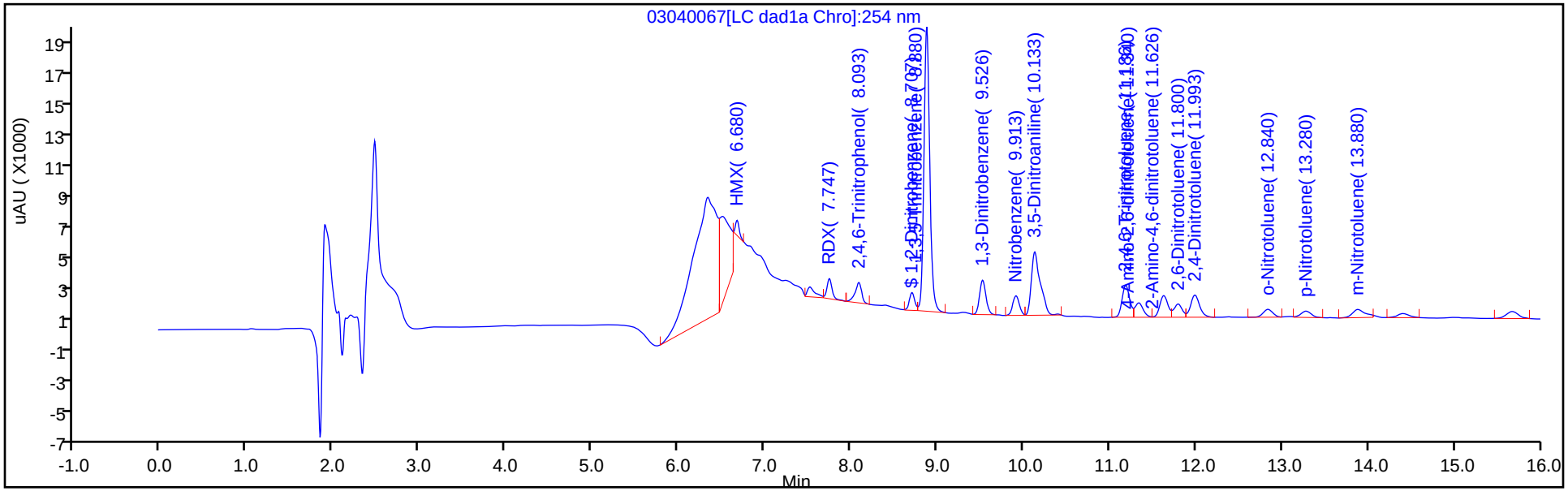
U - Marked Undetected

Report Date: 06-Mar-2020 10:26:06 Chrom Revision: 2.3 19-Feb-2020 16:45:46

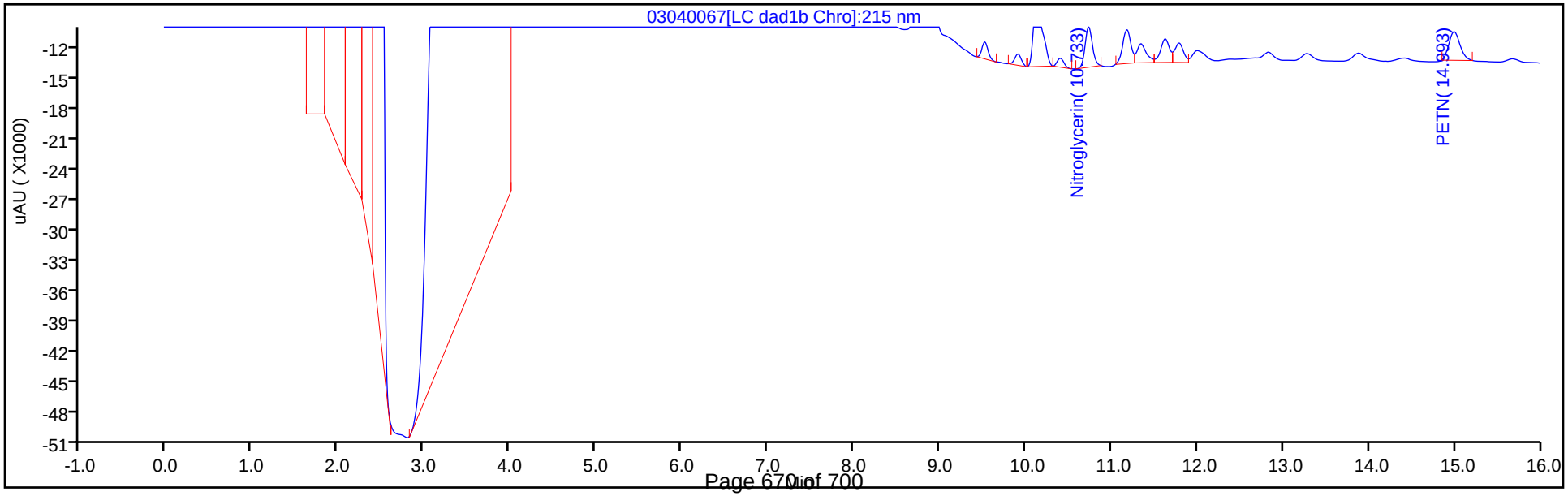
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040067.d				
Injection Date:	05-Mar-2020 13:04:06	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	280-134063-B-4-B MS			Worklist Smp#:	67
Client ID:	OS001-DP02-45				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	67
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040067.D				
Lims ID:	280-134063-B-4-B MS				
Client ID:	OS001-DP02-45				
Sample Type:	MS				
Inject. Date:	05-Mar-2020 13:04:06	ALS Bottle#:	67	Worklist Smp#:	67
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-134063-B-4-B				
Misc. Info.:	280-0089779-067				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		

Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m		
Limit Group:	GCSV - 8330		
Last Update:	06-Mar-2020 10:25:55	Calib Date:	04-Mar-2020 23:40:46
Integrator:	Falcon		
Quant Method:	External Standard	Quant By:	Initial Calibration
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D		

Column 1 :	UltraCarb5uODS (20) (4.60 mm)	Det: LC DAD1B, 254 nm
Process Host:	CTX0308	

First Level Reviewer: beckerc Date: 06-Mar-2020 09:45:00

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.0335	16.73

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

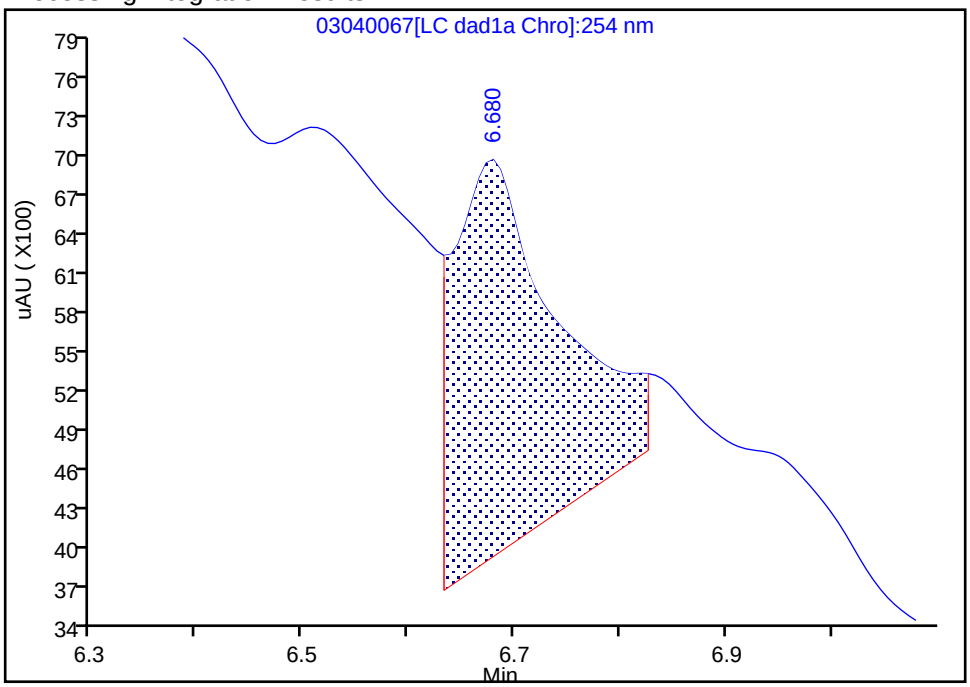
Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040067.d				
Injection Date:	05-Mar-2020 13:04:06	Instrument ID:	CHHPLC_X3		
Lims ID:	280-134063-B-4-B MS				
Client ID:	OS001-DP02-45				
Operator ID:	CB	ALS Bottle#:	67	Worklist Smp#:	67
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

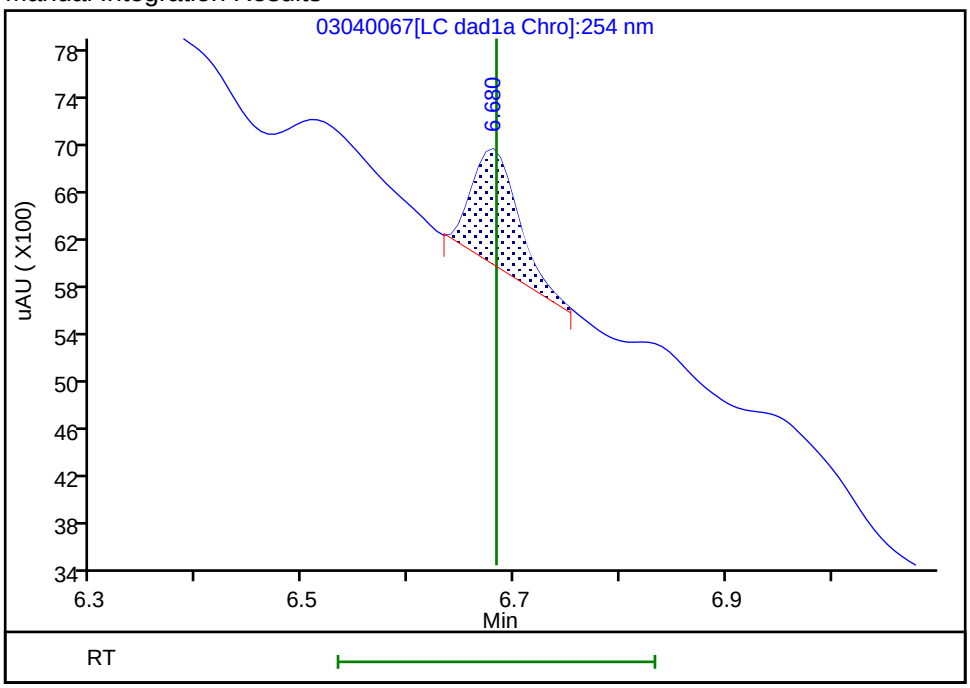
Processing Integration Results

RT: 6.68
Area: 20268
Amount: 0.227277
Amount Units: ug/mL



Manual Integration Results

RT: 6.68
Area: 2946
Amount: 0.033035
Amount Units: ug/mL



Reviewer: beckerc, 06-Mar-2020 09:44:42
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver
Job No.: 280-134063-1
SDG No.:
Client Sample ID: OS001-DP02-45 MSD
Lab Sample ID: 280-134063-4 MSD
Matrix: Water
Lab File ID: 03020025.D
Analysis Method: 8330A
Date Collected: 02/24/2020 16:30
Extraction Method: 3535
Date Extracted: 02/28/2020 13:30
Sample wt/vol: 463(mL)
Date Analyzed: 03/02/2020 22:12
Con. Extract Vol.: 5(mL)
Dilution Factor: 1
Injection Volume: 100(uL)
GC Column: UltraCarb5uODS ID: 4.6(mm)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 487395
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	16.5	4 Q	1.1	0.43	0.22
99-65-0	1,3-Dinitrobenzene	2.01	Q	0.43	0.22	0.096
118-96-7	2,4,6-Trinitrotoluene	2.97	Q	0.43	0.43	0.17
121-14-2	2,4-Dinitrotoluene	1.89	Q	0.43	0.22	0.090
606-20-2	2,6-Dinitrotoluene	1.99	Q	0.22	0.22	0.070
35572-78-2	2-Amino-4,6-dinitrotoluene	2.37	Q	0.22	0.13	0.055
88-72-2	2-Nitrotoluene	1.30	J1 Q	0.43	0.22	0.092
99-08-1	3-Nitrotoluene	1.58	Q	0.43	0.43	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	1.95	Q	0.22	0.13	0.062
99-99-0	4-Nitrotoluene	1.60	Q	1.1	0.43	0.22
2691-41-0	HMX	2.22	M Q	0.43	0.22	0.095
98-95-3	Nitrobenzene	1.47	Q	0.43	0.22	0.098
121-82-4	RDX	2.32	Q	0.43	0.43	0.17
479-45-8	Tetryl	8.41	M J1 Q	0.26	0.22	0.086

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	79	Q	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200302-89712.b\03020025.D
Lims ID: 280-134063-A-4-C MSD
Client ID: OS001-DP02-45
Sample Type: MSD
Inject. Date: 02-Mar-2020 22:12:53 ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-134063-A-4-C
Misc. Info.: 280-0089712-025
Operator ID: CB Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200302-89712.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 03-Mar-2020 11:55:02 Calib Date: 06-Jan-2020 20:40:54
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060014.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0310

First Level Reviewer: beckerc Date: 03-Mar-2020 11:19:52

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	1 2,6-diamino-4-nitrotoluene	1		6.555				ND	
	2 TNX	1		6.590				ND	
	3 HMX	1	6.680	6.680	0.000	18855	0.2000	0.2053	M
	4 2,4-diamino-6-nitrotoluene	1		6.742				ND	
	5 DNX	1	6.940	6.910	0.030	18385		0.1183	M
	6 MNX	1		7.363				ND	
	7 RDX	1	7.760	7.754	0.006	23884	0.2000	0.2149	
	8 2,4,6-Trinitrophenol	1	8.133	8.067	0.066	35819	0.2000	0.3948	M
$	9 1,2-Dinitrobenzene	1	8.713	8.707	0.006	22006	0.2000	0.1579	
	10 1,3,5-Trinitrobenzene	1	8.880	8.880	0.000	373626	0.2000	1.52	
	11 1,3-Dinitrobenzene	1	9.527	9.527	0.000	57938	0.2000	0.1862	
	12 Nitrobenzene	1	9.907	9.914	-0.007	27048	0.2000	0.1360	
	13 3,5-Dinitroaniline	1		10.188				ND	a
	14 Tetryl	1	10.127	10.207	-0.080	126199	0.2000	0.7792	a
	15 Nitroglycerin	2	10.707	10.720	-0.013	127123	2.00	1.79	
	16 2,4,6-Trinitrotoluene	1	11.160	11.174	-0.014	62488	0.2000	0.2749	
	17 4-Amino-2,6-dinitrotoluene	1	11.307	11.327	-0.020	30112	0.2000	0.1810	
	18 2-Amino-4,6-dinitrotoluene	1	11.593	11.614	-0.021	45068	0.2000	0.2196	
	19 2,6-Dinitrotoluene	1	11.760	11.780	-0.020	29301	0.2000	0.1840	
	20 2,4-Dinitrotoluene	1	11.953	11.974	-0.021	52526	0.2000	0.1748	
	21 o-Nitrotoluene	1	12.793	12.820	-0.027	15602	0.2000	0.1202	
	22 p-Nitrotoluene	1	13.227	13.260	-0.033	16376	0.2000	0.1485	
	23 m-Nitrotoluene	1	13.820	13.854	-0.034	21290	0.2000	0.1467	
	24 PETN	2	14.907	14.967	-0.060	146043	2.00	1.97	
	25 Ammonium Picrate	1		0.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

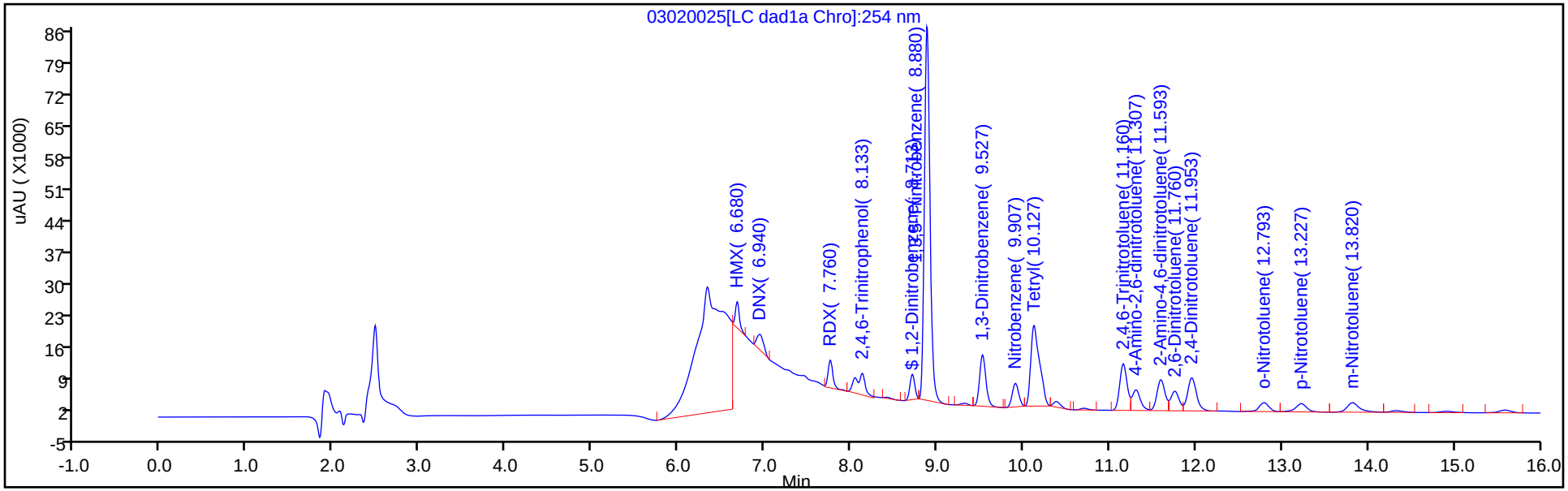
a - User Assigned ID

Report Date: 03-Mar-2020 11:55:08 Chrom Revision: 2.3 19-Feb-2020 16:45:46

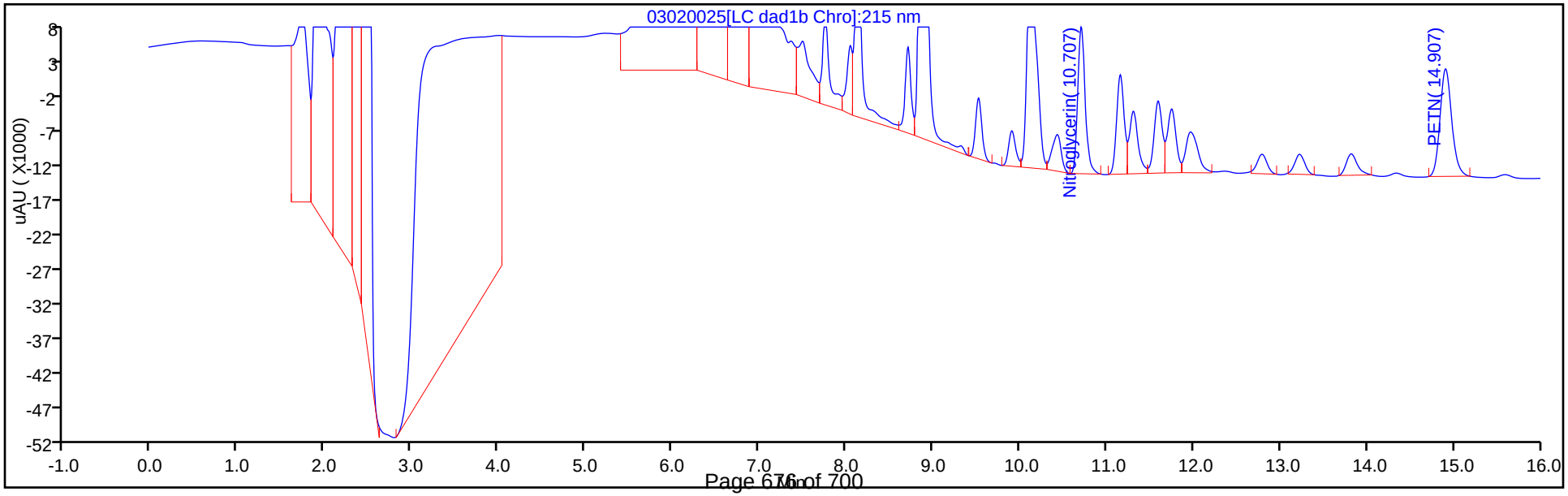
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020025.d				
Injection Date:	02-Mar-2020 22:12:53	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	280-134063-A-4-C MSD			Worklist Smp#:	25
Client ID:	OS001-DP02-45				
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



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



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200302-89712.b\03020025.D				
Lims ID:	280-134063-A-4-C MSD				
Client ID:	OS001-DP02-45				
Sample Type:	MSD				
Inject. Date:	02-Mar-2020 22:12:53	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-134063-A-4-C				
Misc. Info.:	280-0089712-025				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200302-89712.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	03-Mar-2020 11:55:02	Calib Date:	06-Jan-2020 20:40:54		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200106-88401.b\01060014.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0310				

First Level Reviewer: beckerc Date: 03-Mar-2020 11:19:52

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.1579	78.97

Eurofins TestAmerica, Denver

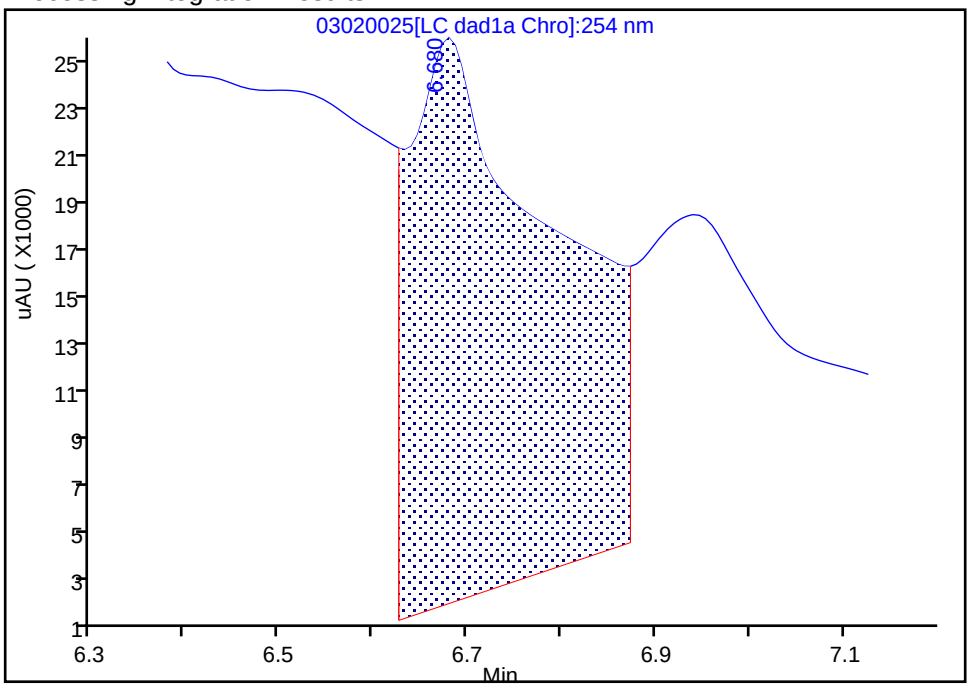
Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020025.d				
Injection Date:	02-Mar-2020 22:12:53	Instrument ID:	CHHPLC_X3		
Lims ID:	280-134063-A-4-C MSD				
Client ID:	OS001-DP02-45				
Operator ID:	CB	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

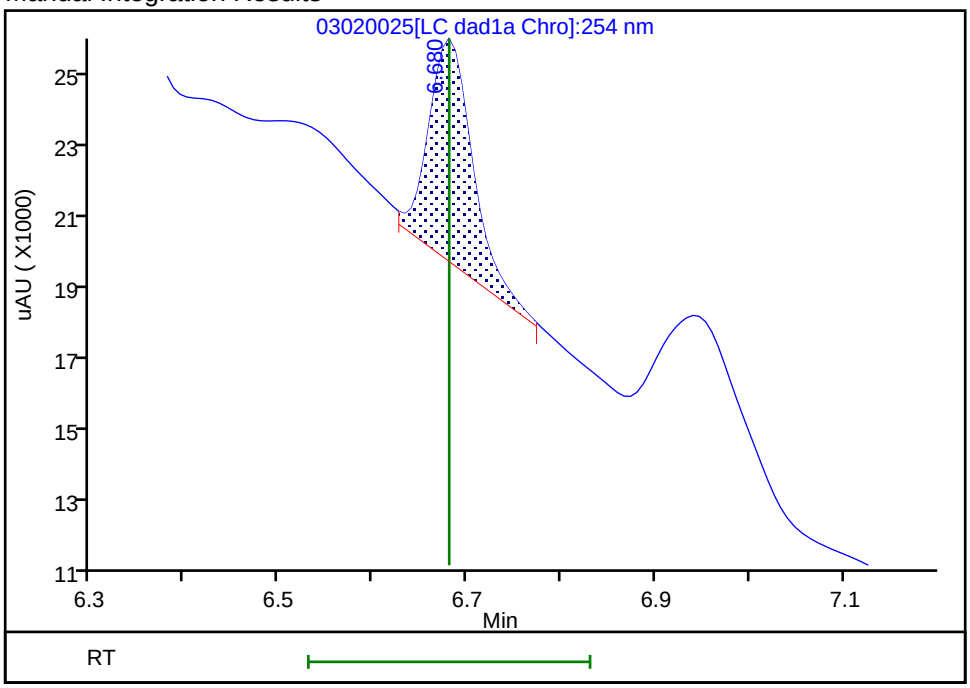
Processing Integration Results

RT: 6.68
Area: 241083
Amount: 2.625226
Amount Units: ug/mL



Manual Integration Results

RT: 6.68
Area: 18855
Amount: 0.205318
Amount Units: ug/mL



Reviewer: beckerc, 03-Mar-2020 11:19:19
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver

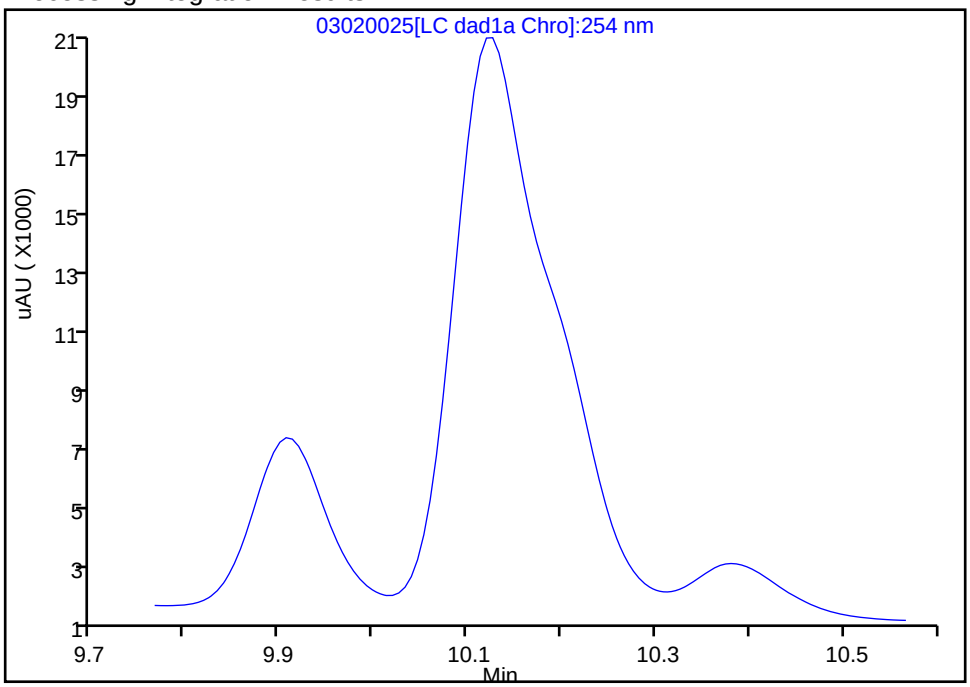
Data File:	\\chromna\denver\chromdata\chhplc_x\20200302-89712.b\03020025.d				
Injection Date:	02-Mar-2020 22:12:53	Instrument ID:	CHHPLC_X3		
Lims ID:	280-134063-A-4-C MSD				
Client ID:	OS001-DP02-45				
Operator ID:	CB	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

14 Tetryl, CAS: 479-45-8

Signal: 1

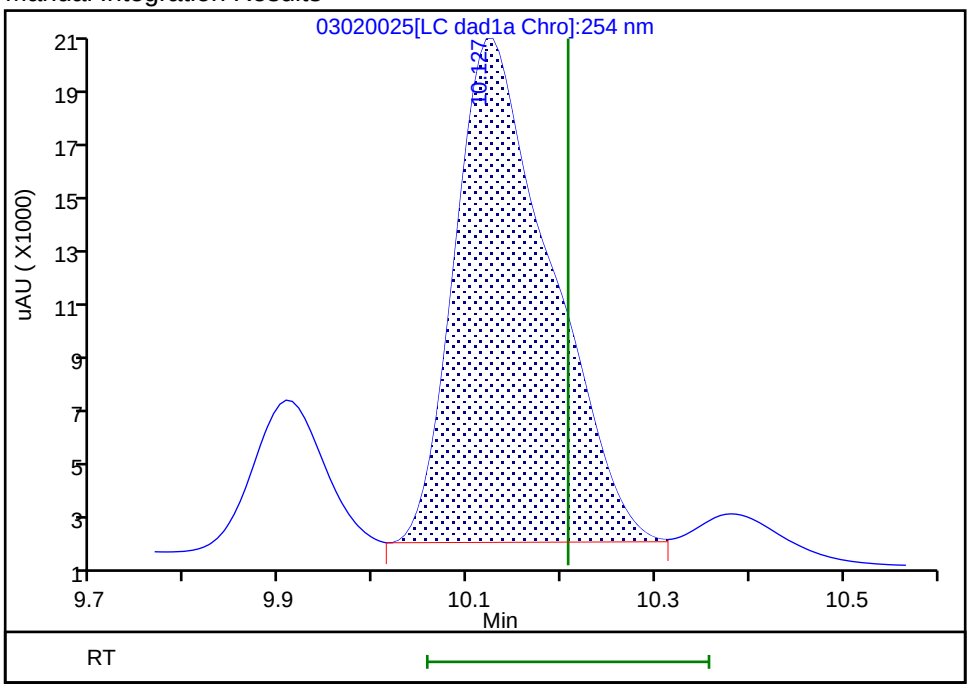
Not Detected
Expected RT: 10.21

Processing Integration Results



Manual Integration Results

RT: 10.13
Area: 126199
Amount: 0.779212
Amount Units: ug/mL



Reviewer: beckerc, 03-Mar-2020 11:19:40
Audit Action: Assigned Compound ID Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver | Job No.: 280-134063-1

SDG No.:

Client Sample ID: OS001-DP02-45 MSD RE | Lab Sample ID: 280-134063-4 MSD RE

Matrix: Water | Lab File ID: 03040068.D

Analysis Method: 8330A | Date Collected: 02/24/2020 16:30

Extraction Method: 3535 | Date Extracted: 03/04/2020 07:23

Sample wt/vol: 478.1(mL) | Date Analyzed: 03/05/2020 13:27

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

Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)

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

Analysis Batch No.: 487660 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	3.26	Q H 4	1.0	0.42	0.21
99-65-0	1,3-Dinitrobenzene	0.347	J Q H J1	0.42	0.21	0.093
118-96-7	2,4,6-Trinitrotoluene	0.572	Q H J1	0.42	0.42	0.17
121-14-2	2,4-Dinitrotoluene	0.322	J Q H J1	0.42	0.21	0.088
606-20-2	2,6-Dinitrotoluene	0.343	Q H J1	0.21	0.21	0.067
35572-78-2	2-Amino-4,6-dinitrotoluene	0.434	Q H J1	0.21	0.13	0.053
88-72-2	2-Nitrotoluene	0.291	J Q H J1	0.42	0.21	0.089
99-08-1	3-Nitrotoluene	0.395	J Q H J1	0.42	0.42	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.356	Q H J1	0.21	0.13	0.060
99-99-0	4-Nitrotoluene	0.313	J Q H J1	1.0	0.42	0.21
2691-41-0	HMX	11.8	Q H J1	0.42	0.21	0.092
98-95-3	Nitrobenzene	0.324	J Q H J1	0.42	0.21	0.095
121-82-4	RDX	0.416	J Q H J1	0.42	0.42	0.17
479-45-8	Tetryl	0.21	U Q H J1	0.25	0.21	0.083

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	16	Q	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040068.D
Lims ID: 280-134063-B-4-C MSD
Client ID: OS001-DP02-45
Sample Type: MSD
Inject. Date: 05-Mar-2020 13:27:03 ALS Bottle#: 68 Worklist Smp#: 68
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-134063-B-4-C
Misc. Info.: 280-0089779-068
Operator ID: CB Instrument ID: CHHPLC_X3

Method: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Mar-2020 10:25:55 Calib Date: 04-Mar-2020 23:40:46
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX0308

	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	6.511	6.548	-0.037	62289		0.2478	
	2 TNX	1		6.594				ND	
	3 HMX	1	6.671	6.683	-0.012	100404	0.2000	1.13	
	4 2,4-diamino-6-nitrotoluene	1		6.735				ND	
	5 DNX	1		6.914				ND	
	6 MNX	1		7.361				ND	
	7 RDX	1	7.737	7.750	-0.013	4691	0.2000	0.0398	
	8 2,4,6-Trinitrophenol	1	8.077	8.056	0.021	4976	0.2000	0.0570	
$	9 1,2-Dinitrobenzene	1	8.697	8.710	-0.013	4625	0.2000	0.0316	
	10 1,3,5-Trinitrobenzene	1	8.871	8.883	-0.012	75844	0.2000	0.3115	
	11 1,3-Dinitrobenzene	1	9.517	9.529	-0.012	10744	0.2000	0.0331	
	12 Nitrobenzene	1	9.904	9.916	-0.012	6595	0.2000	0.0310	
	13 3,5-Dinitroaniline	1	10.117	10.142	-0.025	29055		0.1056	
	14 Tetryl	1		10.216			ND	ND	
	15 Nitroglycerin	2	10.731	10.729	0.002	21404	2.00	0.2981	
	16 2,4,6-Trinitrotoluene	1	11.184	11.183	0.001	12091	0.2000	0.0547	
	17 4-Amino-2,6-dinitrotoluene	1	11.324	11.336	-0.012	5900	0.2000	0.0340	
	18 2-Amino-4,6-dinitrotoluene	1	11.617	11.623	-0.006	9019	0.2000	0.0415	
	19 2,6-Dinitrotoluene	1	11.784	11.789	-0.005	5231	0.2000	0.0328	
	20 2,4-Dinitrotoluene	1	11.984	11.983	0.001	9898	0.2000	0.0308	
	21 o-Nitrotoluene	1	12.831	12.829	0.002	4008	0.2000	0.0279	
	22 p-Nitrotoluene	1	13.264	13.269	-0.005	3596	0.2000	0.0299	
	23 m-Nitrotoluene	1	13.871	13.863	0.008	5824	0.2000	0.0378	
	24 PETN	2	14.991	14.969	0.022	22926	2.00	0.2885	
	25 Ammonium Picrate	1		0.000				ND	

QC Flag Legend

Processing Flags

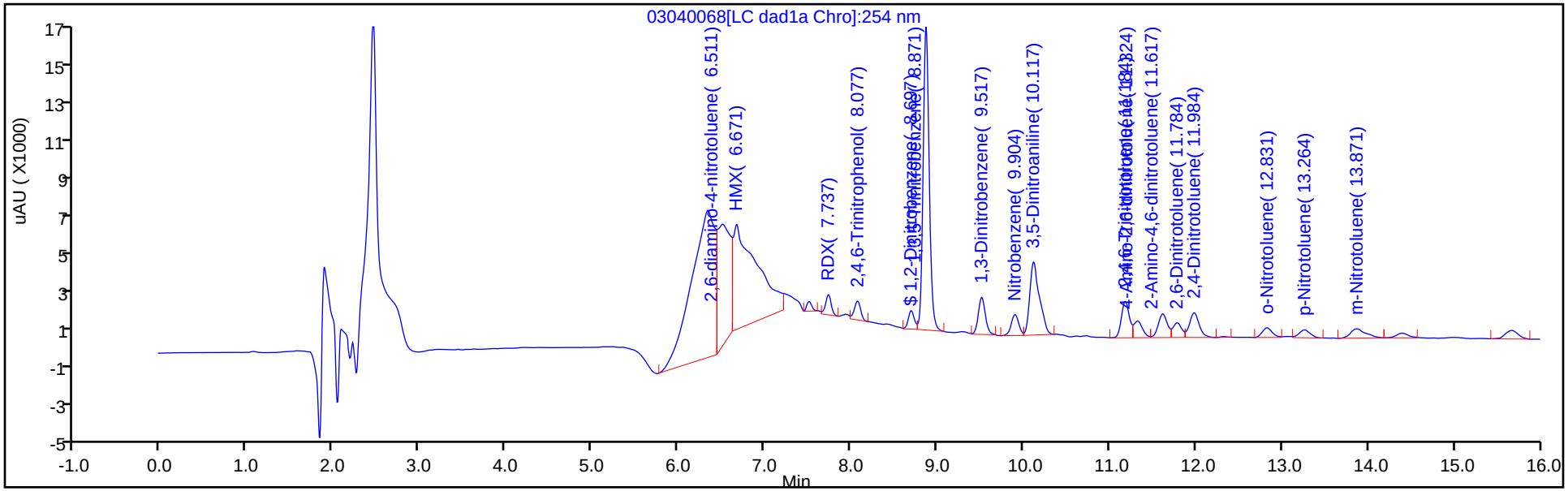
ND - Not Detected or Marked ND

Report Date: 06-Mar-2020 10:26:07 Chrom Revision: 2.3 19-Feb-2020 16:45:46

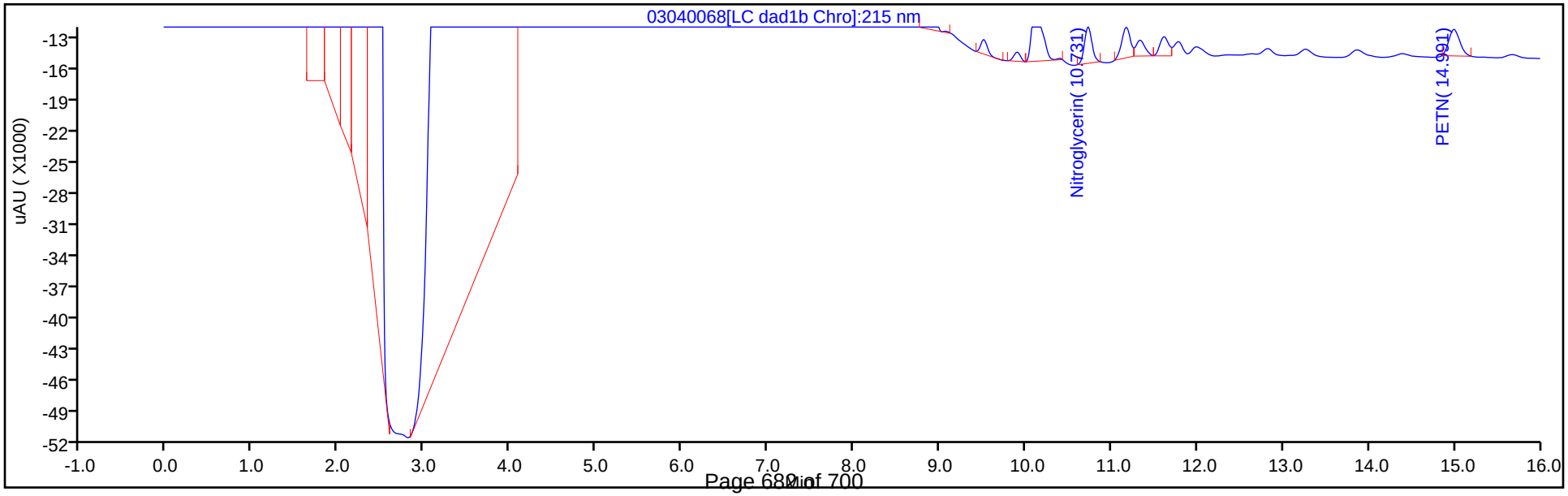
Eurofins TestAmerica, Denver

Data File:	\\chromna\denver\chromdata\chhplc_x\20200304-89779.b\03040068.d				
Injection Date:	05-Mar-2020 13:27:03	Instrument ID:	CHHPLC_X3	Operator ID:	CB
Lims ID:	280-134063-B-4-C MSD			Worklist Smp#:	68
Client ID:	OS001-DP02-45				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	68
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



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



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040068.D				
Lims ID:	280-134063-B-4-C MSD				
Client ID:	OS001-DP02-45				
Sample Type:	MSD				
Inject. Date:	05-Mar-2020 13:27:03	ALS Bottle#:	68	Worklist Smp#:	68
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-134063-B-4-C				
Misc. Info.:	280-0089779-068				
Operator ID:	CB	Instrument ID:	CHHPLC_X3		
Method:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	06-Mar-2020 10:25:55	Calib Date:	04-Mar-2020 23:40:46		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Denver\ChromData\CHHPLC_X\20200304-89779.b\03040032.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX0308				

Compound	Amount Added	Amount Recovered	% Rec.
$ 9 1,2-Dinitrobenzene	0.2000	0.0316	15.82

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 07/01/2019 14:40

Analysis Batch Number: 463276 End Date: 07/02/2019 00:41

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-463276/7		07/01/2019 14:40	1	07010007.D	UltraCarb5uODS 4.6(mm)
IC 280-463276/8		07/01/2019 15:04	1	07010008.D	UltraCarb5uODS 4.6(mm)
IC 280-463276/9		07/01/2019 15:27	1	07010009.D	UltraCarb5uODS 4.6(mm)
IC 280-463276/10		07/01/2019 15:50	1	07010010.D	UltraCarb5uODS 4.6(mm)
IC 280-463276/11		07/01/2019 16:13	1	07010011.D	UltraCarb5uODS 4.6(mm)
IC 280-463276/12		07/01/2019 16:36	1	07010012.D	UltraCarb5uODS 4.6(mm)
IC 280-463276/13		07/01/2019 17:00	1	07010013.D	UltraCarb5uODS 4.6(mm)
IC 280-463276/14		07/01/2019 17:23	1	07010014.D	UltraCarb5uODS 4.6(mm)
ICV 280-463276/15		07/01/2019 17:46	1	07010015.D	UltraCarb5uODS 4.6(mm)
IC 280-463276/16		07/01/2019 18:09	1		UltraCarb5uODS 4.6(mm)
IC 280-463276/17		07/01/2019 18:32	1		UltraCarb5uODS 4.6(mm)
IC 280-463276/18		07/01/2019 18:55	1		UltraCarb5uODS 4.6(mm)
IC 280-463276/19		07/01/2019 19:18	1		UltraCarb5uODS 4.6(mm)
IC 280-463276/20		07/01/2019 19:41	1		UltraCarb5uODS 4.6(mm)
IC 280-463276/21		07/01/2019 20:04	1		UltraCarb5uODS 4.6(mm)
IC 280-463276/22		07/01/2019 20:27	1		UltraCarb5uODS 4.6(mm)
IC 280-463276/23		07/01/2019 20:50	1		UltraCarb5uODS 4.6(mm)
ICV 280-463276/24		07/01/2019 21:13	1		UltraCarb5uODS 4.6(mm)
IC 280-463276/25		07/01/2019 21:36	1		UltraCarb5uODS 4.6(mm)
IC 280-463276/26		07/01/2019 22:00	1		UltraCarb5uODS 4.6(mm)
IC 280-463276/27		07/01/2019 22:23	1		UltraCarb5uODS 4.6(mm)
IC 280-463276/28		07/01/2019 22:46	1		UltraCarb5uODS 4.6(mm)
IC 280-463276/29		07/01/2019 23:09	1		UltraCarb5uODS 4.6(mm)
IC 280-463276/30		07/01/2019 23:32	1		UltraCarb5uODS 4.6(mm)
IC 280-463276/31		07/01/2019 23:55	1		UltraCarb5uODS 4.6(mm)
IC 280-463276/32		07/02/2019 00:18	1		UltraCarb5uODS 4.6(mm)
ICV 280-463276/33		07/02/2019 00:41	1		UltraCarb5uODS 4.6(mm)

8330A

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 01/06/2020 18:00

Analysis Batch Number: 482211 End Date: 01/07/2020 00:53

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-482211/7		01/06/2020 18:00	1	01060007.D	UltraCarb5uODS 4.6(mm)
IC 280-482211/8		01/06/2020 18:23	1	01060008.D	UltraCarb5uODS 4.6(mm)
IC 280-482211/9		01/06/2020 18:46	1	01060009.D	UltraCarb5uODS 4.6(mm)
IC 280-482211/10		01/06/2020 19:09	1	01060010.D	UltraCarb5uODS 4.6(mm)
IC 280-482211/11		01/06/2020 19:32	1	01060011.D	UltraCarb5uODS 4.6(mm)
IC 280-482211/12		01/06/2020 19:55	1	01060012.D	UltraCarb5uODS 4.6(mm)
IC 280-482211/13		01/06/2020 20:18	1	01060013.D	UltraCarb5uODS 4.6(mm)
IC 280-482211/14		01/06/2020 20:40	1	01060014.D	UltraCarb5uODS 4.6(mm)
ICV 280-482211/15		01/06/2020 21:03	1	01060015.D	UltraCarb5uODS 4.6(mm)
CCV 280-482211/16		01/06/2020 21:26	1		UltraCarb5uODS 4.6(mm)
CCV 280-482211/17		01/06/2020 21:49	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		01/06/2020 22:12	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		01/06/2020 22:35	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		01/06/2020 22:58	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		01/06/2020 23:21	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		01/06/2020 23:44	1		UltraCarb5uODS 4.6(mm)
CCV 280-482211/23		01/07/2020 00:07	1		UltraCarb5uODS 4.6(mm)
CCV 280-482211/24		01/07/2020 00:30	1		UltraCarb5uODS 4.6(mm)
CCV 280-482211/25		01/07/2020 00:53	1		UltraCarb5uODS 4.6(mm)

8330A

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 03/02/2020 15:20

Analysis Batch Number: 487395 End Date: 03/03/2020 03:33

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-487395/7		03/02/2020 15:20	1	03020007.D	UltraCarb5uODS 4.6(mm)
CCV 280-487395/8		03/02/2020 15:43	1		UltraCarb5uODS 4.6(mm)
CCV 280-487395/9		03/02/2020 16:06	1	03020009.D	UltraCarb5uODS 4.6(mm)
MB 280-487255/1-A		03/02/2020 16:29	1	03020010.D	UltraCarb5uODS 4.6(mm)
LCS 280-487255/2-A		03/02/2020 16:51	1	03020011.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		03/02/2020 17:14	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		03/02/2020 17:37	1		UltraCarb5uODS 4.6(mm)
LCS 280-487255/5-A		03/02/2020 18:00	1	03020014.D	UltraCarb5uODS 4.6(mm)
LCSD 280-487255/6-A		03/02/2020 18:23	1	03020015.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		03/02/2020 18:46	1		UltraCarb5uODS 4.6(mm)
280-134063-1		03/02/2020 19:09	1	03020017.D	UltraCarb5uODS 4.6(mm)
280-134063-2		03/02/2020 19:32	1	03020018.D	UltraCarb5uODS 4.6(mm)
280-134063-3		03/02/2020 19:55	1	03020019.D	UltraCarb5uODS 4.6(mm)
CCV 280-487395/20		03/02/2020 20:18	1	03020020.D	UltraCarb5uODS 4.6(mm)
CCV 280-487395/21		03/02/2020 20:41	1		UltraCarb5uODS 4.6(mm)
CCV 280-487395/22		03/02/2020 21:04	1	03020022.D	UltraCarb5uODS 4.6(mm)
280-134063-4		03/02/2020 21:27	1	03020023.D	UltraCarb5uODS 4.6(mm)
280-134063-4 MS		03/02/2020 21:49	1	03020024.D	UltraCarb5uODS 4.6(mm)
280-134063-4 MSD		03/02/2020 22:12	1	03020025.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		03/02/2020 22:35	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		03/02/2020 22:58	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		03/02/2020 23:21	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		03/02/2020 23:44	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		03/03/2020 00:07	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		03/03/2020 00:30	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		03/03/2020 00:53	1		UltraCarb5uODS 4.6(mm)
CCV 280-487395/33		03/03/2020 01:16	1	03020033.D	UltraCarb5uODS 4.6(mm)
CCV 280-487395/34		03/03/2020 01:39	1		UltraCarb5uODS 4.6(mm)
CCV 280-487395/35		03/03/2020 02:02	1	03020035.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		03/03/2020 02:25	1		UltraCarb5uODS 4.6(mm)
CCV 280-487395/37		03/03/2020 02:48	1		UltraCarb5uODS 4.6(mm)
CCV 280-487395/38		03/03/2020 03:11	1		UltraCarb5uODS 4.6(mm)
CCV 280-487395/39		03/03/2020 03:33	1		UltraCarb5uODS 4.6(mm)

8330A

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Start Date: 03/03/2020 18:01

Analysis Batch Number: 487544 End Date: 03/04/2020 03:55

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-487544/7		03/03/2020 18:01	1	03030007.D	Luna-phenylhex 4.6(mm)
IC 280-487544/8		03/03/2020 18:36	1	03030008.D	Luna-phenylhex 4.6(mm)
IC 280-487544/9		03/03/2020 19:11	1	03030009.D	Luna-phenylhex 4.6(mm)
IC 280-487544/10		03/03/2020 19:46	1	03030010.D	Luna-phenylhex 4.6(mm)
IC 280-487544/11		03/03/2020 20:21	1	03030011.D	Luna-phenylhex 4.6(mm)
IC 280-487544/12		03/03/2020 20:56	1	03030012.D	Luna-phenylhex 4.6(mm)
IC 280-487544/13		03/03/2020 21:31	1	03030013.D	Luna-phenylhex 4.6(mm)
IC 280-487544/14		03/03/2020 22:06	1	03030014.D	Luna-phenylhex 4.6(mm)
ICV 280-487544/15		03/03/2020 22:41	1	03030015.D	Luna-phenylhex 4.6(mm)
IC 280-487544/16		03/03/2020 23:16	1	03030016.D	Luna-phenylhex 4.6(mm)
IC 280-487544/17		03/03/2020 23:51	1	03030017.D	Luna-phenylhex 4.6(mm)
IC 280-487544/18		03/04/2020 00:26	1	03030018.D	Luna-phenylhex 4.6(mm)
IC 280-487544/19		03/04/2020 01:01	1	03030019.D	Luna-phenylhex 4.6(mm)
IC 280-487544/20		03/04/2020 01:36	1	03030020.D	Luna-phenylhex 4.6(mm)
IC 280-487544/21		03/04/2020 02:11	1	03030021.D	Luna-phenylhex 4.6(mm)
IC 280-487544/22		03/04/2020 02:46	1	03030022.D	Luna-phenylhex 4.6(mm)
IC 280-487544/23		03/04/2020 03:21	1	03030023.D	Luna-phenylhex 4.6(mm)
ICV 280-487544/24		03/04/2020 03:55	1	03030024.D	Luna-phenylhex 4.6(mm)

8330A

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Start Date: 03/04/2020 03:55

Analysis Batch Number: 487545 End Date: 03/05/2020 09:05

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ICV 280-487545/24		03/04/2020 03:55	1	03030024.D	Luna-phenylhex 4.6(mm)
ZZZZZ		03/04/2020 04:30	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/04/2020 05:05	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/04/2020 05:40	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/04/2020 06:15	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/04/2020 06:50	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/04/2020 07:25	1		Luna-phenylhex 4.6(mm)
280-134063-1		03/04/2020 08:01	1	03030031.D	Luna-phenylhex 4.6(mm)
280-134063-2		03/04/2020 08:36	1	03030032.D	Luna-phenylhex 4.6(mm)
280-134063-3		03/04/2020 09:11	1	03030033.D	Luna-phenylhex 4.6(mm)
280-134063-4		03/04/2020 09:46	1	03030034.D	Luna-phenylhex 4.6(mm)
CCV 280-487545/35		03/04/2020 10:21	1	03030035.D	Luna-phenylhex 4.6(mm)
CCV 280-487545/36		03/04/2020 10:56	1	03030036.D	Luna-phenylhex 4.6(mm)
ZZZZZ		03/04/2020 11:31	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/04/2020 12:06	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/04/2020 12:41	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/04/2020 13:16	20		Luna-phenylhex 4.6(mm)
ZZZZZ		03/04/2020 13:51	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/04/2020 14:25	20		Luna-phenylhex 4.6(mm)
ZZZZZ		03/04/2020 15:00	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/04/2020 15:35	10		Luna-phenylhex 4.6(mm)
ZZZZZ		03/04/2020 16:10	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/04/2020 16:45	1		Luna-phenylhex 4.6(mm)
CCV 280-487545/47		03/04/2020 17:20	1		Luna-phenylhex 4.6(mm)
CCV 280-487545/48		03/04/2020 17:55	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/04/2020 18:30	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/04/2020 19:05	1		Luna-phenylhex 4.6(mm)
CCV 280-487545/51		03/04/2020 19:40	1		Luna-phenylhex 4.6(mm)
CCV 280-487545/52		03/04/2020 20:15	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/04/2020 20:50	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/04/2020 21:25	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/04/2020 22:00	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/04/2020 22:35	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/04/2020 23:10	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/04/2020 23:45	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/05/2020 00:20	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/05/2020 00:55	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/05/2020 01:30	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/05/2020 02:05	1		Luna-phenylhex 4.6(mm)
CCV 280-487545/63		03/05/2020 02:40	1		Luna-phenylhex 4.6(mm)
CCV 280-487545/64		03/05/2020 03:15	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/05/2020 03:50	200		Luna-phenylhex 4.6(mm)
ZZZZZ		03/05/2020 04:25	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/05/2020 05:00	200		Luna-phenylhex 4.6(mm)
ZZZZZ		03/05/2020 05:35	1		Luna-phenylhex 4.6(mm)

8330A

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Start Date: 03/04/2020 03:55

Analysis Batch Number: 487545 End Date: 03/05/2020 09:05

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		03/05/2020 06:10	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/05/2020 06:45	10		Luna-phenylhex 4.6(mm)
ZZZZZ		03/05/2020 07:20	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/05/2020 07:55	1		Luna-phenylhex 4.6(mm)
CCV 280-487545/73		03/05/2020 08:30	1		Luna-phenylhex 4.6(mm)
CCV 280-487545/74		03/05/2020 09:05	1		Luna-phenylhex 4.6(mm)

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HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 03/04/2020 14:07

Analysis Batch Number: 487658 End Date: 03/05/2020 00:03

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-487658/7		03/04/2020 14:07	1	03040007.D	UltraCarb5uODS 4.6(mm)
IC 280-487658/8		03/04/2020 14:30	1	03040008.D	UltraCarb5uODS 4.6(mm)
IC 280-487658/9		03/04/2020 14:53	1	03040009.D	UltraCarb5uODS 4.6(mm)
IC 280-487658/10		03/04/2020 15:16	1	03040010.D	UltraCarb5uODS 4.6(mm)
IC 280-487658/11		03/04/2020 15:39	1	03040011.D	UltraCarb5uODS 4.6(mm)
IC 280-487658/12		03/04/2020 16:01	1	03040012.D	UltraCarb5uODS 4.6(mm)
IC 280-487658/13		03/04/2020 16:24	1	03040013.D	UltraCarb5uODS 4.6(mm)
IC 280-487658/14		03/04/2020 16:47	1	03040014.D	UltraCarb5uODS 4.6(mm)
ICV 280-487658/15		03/04/2020 17:10	1	03040015.D	UltraCarb5uODS 4.6(mm)
IC 280-487658/16		03/04/2020 17:33	1		UltraCarb5uODS 4.6(mm)
IC 280-487658/17		03/04/2020 17:56	1		UltraCarb5uODS 4.6(mm)
IC 280-487658/18		03/04/2020 18:19	1		UltraCarb5uODS 4.6(mm)
IC 280-487658/19		03/04/2020 18:42	1		UltraCarb5uODS 4.6(mm)
IC 280-487658/20		03/04/2020 19:05	1		UltraCarb5uODS 4.6(mm)
IC 280-487658/21		03/04/2020 19:28	1		UltraCarb5uODS 4.6(mm)
IC 280-487658/22		03/04/2020 19:51	1		UltraCarb5uODS 4.6(mm)
IC 280-487658/23		03/04/2020 20:14	1		UltraCarb5uODS 4.6(mm)
ICV 280-487658/24		03/04/2020 20:37	1		UltraCarb5uODS 4.6(mm)
IC 280-487658/25		03/04/2020 21:00	1	03040025.D	UltraCarb5uODS 4.6(mm)
IC 280-487658/26		03/04/2020 21:23	1	03040026.D	UltraCarb5uODS 4.6(mm)
IC 280-487658/27		03/04/2020 21:45	1	03040027.D	UltraCarb5uODS 4.6(mm)
IC 280-487658/28		03/04/2020 22:09	1	03040028.D	UltraCarb5uODS 4.6(mm)
IC 280-487658/29		03/04/2020 22:31	1	03040029.D	UltraCarb5uODS 4.6(mm)
IC 280-487658/30		03/04/2020 22:54	1	03040030.D	UltraCarb5uODS 4.6(mm)
IC 280-487658/31		03/04/2020 23:17	1	03040031.D	UltraCarb5uODS 4.6(mm)
IC 280-487658/32		03/04/2020 23:40	1	03040032.D	UltraCarb5uODS 4.6(mm)
ICV 280-487658/33		03/05/2020 00:03	1	03040033.D	UltraCarb5uODS 4.6(mm)

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HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 03/05/2020 08:51

Analysis Batch Number: 487660 End Date: 03/05/2020 23:24

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-487660/56		03/05/2020 08:51	1	03040056.D	UltraCarb5uODS 4.6(mm)
CCV 280-487660/57		03/05/2020 09:14	1		UltraCarb5uODS 4.6(mm)
CCV 280-487660/58		03/05/2020 09:37	1	03040058.D	UltraCarb5uODS 4.6(mm)
MB 280-487600/1-A		03/05/2020 10:00	1	03040059.D	UltraCarb5uODS 4.6(mm)
LCS 280-487600/2-A		03/05/2020 10:23	1	03040060.D	UltraCarb5uODS 4.6(mm)
LCS 280-487600/3-A		03/05/2020 10:46	1	03040061.D	UltraCarb5uODS 4.6(mm)
LCSD 280-487600/4-A		03/05/2020 11:09	1	03040062.D	UltraCarb5uODS 4.6(mm)
280-134063-1 RE		03/05/2020 11:32	1	03040063.D	UltraCarb5uODS 4.6(mm)
280-134063-2 RE		03/05/2020 11:55	1	03040064.D	UltraCarb5uODS 4.6(mm)
280-134063-3 RE		03/05/2020 12:18	1	03040065.D	UltraCarb5uODS 4.6(mm)
280-134063-4 RE		03/05/2020 12:41	1	03040066.D	UltraCarb5uODS 4.6(mm)
280-134063-4 MS RE		03/05/2020 13:04	1	03040067.D	UltraCarb5uODS 4.6(mm)
280-134063-4 MSD RE		03/05/2020 13:27	1	03040068.D	UltraCarb5uODS 4.6(mm)
CCV 280-487660/69		03/05/2020 13:50	1	03040069.D	UltraCarb5uODS 4.6(mm)
CCV 280-487660/70		03/05/2020 14:12	1		UltraCarb5uODS 4.6(mm)
CCV 280-487660/71		03/05/2020 14:35	1	03040071.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		03/05/2020 14:58	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		03/05/2020 15:21	50		UltraCarb5uODS 4.6(mm)
ZZZZZ		03/05/2020 15:44	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		03/05/2020 16:07	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		03/05/2020 16:30	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		03/05/2020 16:53	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		03/05/2020 17:16	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		03/05/2020 17:39	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		03/05/2020 18:02	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		03/05/2020 18:25	1		UltraCarb5uODS 4.6(mm)
CCV 280-487660/82		03/05/2020 18:48	1		UltraCarb5uODS 4.6(mm)
CCV 280-487660/83		03/05/2020 19:11	1		UltraCarb5uODS 4.6(mm)
CCV 280-487660/84		03/05/2020 19:34	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		03/05/2020 19:57	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		03/05/2020 20:20	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		03/05/2020 20:43	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		03/05/2020 21:06	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		03/05/2020 21:29	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		03/05/2020 21:52	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		03/05/2020 22:15	1		UltraCarb5uODS 4.6(mm)
CCV 280-487660/92		03/05/2020 22:38	1		UltraCarb5uODS 4.6(mm)
CCV 280-487660/93		03/05/2020 23:01	1		UltraCarb5uODS 4.6(mm)
CCV 280-487660/94		03/05/2020 23:24	1		UltraCarb5uODS 4.6(mm)

8330A

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Instrument ID: CHHPLC_G2_LUNA Start Date: 03/09/2020 16:38

Analysis Batch Number: 488169 End Date: 03/10/2020 11:17

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-488169/7		03/09/2020 16:38	1	03090007.D	Luna-phenylhex 4.6(mm)
CCV 280-488169/8		03/09/2020 17:13	1	03090008.D	Luna-phenylhex 4.6(mm)
ZZZZZ		03/09/2020 17:48	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/09/2020 18:23	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/09/2020 18:58	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/09/2020 19:33	1		Luna-phenylhex 4.6(mm)
280-134063-1 RE		03/09/2020 20:08	1	03090013.D	Luna-phenylhex 4.6(mm)
280-134063-2 RE		03/09/2020 20:43	1	03090014.D	Luna-phenylhex 4.6(mm)
280-134063-3 RE		03/09/2020 21:18	1	03090015.D	Luna-phenylhex 4.6(mm)
280-134063-4 RE		03/09/2020 21:53	1	03090016.D	Luna-phenylhex 4.6(mm)
ZZZZZ		03/09/2020 22:28	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/09/2020 23:03	1		Luna-phenylhex 4.6(mm)
CCV 280-488169/19		03/09/2020 23:38	1	03090019.D	Luna-phenylhex 4.6(mm)
CCV 280-488169/20		03/10/2020 00:12	1	03090020.D	Luna-phenylhex 4.6(mm)
ZZZZZ		03/10/2020 00:47	50		Luna-phenylhex 4.6(mm)
ZZZZZ		03/10/2020 01:22	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/10/2020 01:57	20		Luna-phenylhex 4.6(mm)
ZZZZZ		03/10/2020 02:32	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/10/2020 03:07	20		Luna-phenylhex 4.6(mm)
ZZZZZ		03/10/2020 03:42	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/10/2020 04:17	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/10/2020 04:52	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/10/2020 05:27	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/10/2020 06:02	1		Luna-phenylhex 4.6(mm)
CCV 280-488169/31		03/10/2020 06:37	1		Luna-phenylhex 4.6(mm)
CCV 280-488169/32		03/10/2020 07:12	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/10/2020 07:47	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/10/2020 08:22	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/10/2020 08:57	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/10/2020 09:32	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/10/2020 10:07	1		Luna-phenylhex 4.6(mm)
CCV 280-488169/38		03/10/2020 10:42	1		Luna-phenylhex 4.6(mm)
CCV 280-488169/39		03/10/2020 11:17	1		Luna-phenylhex 4.6(mm)

8330A

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Batch Number: 487255 Batch Start Date: 02/28/20 13:30 Batch Analyst: Adams, Marisa L

Batch Method: 3535 Batch End Date: 02/28/20 17:27

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	8330 LCS 00095	8330_OP_DMT 00006
MB 280-487255/1		3535, 8330A				500 mL	5 mL		
LCS 280-487255/2		3535, 8330A				500 mL	5 mL	0.1 mL	
LCS 280-487255/5		3535, 8330A				500 mL	5 mL		0.1 mL
LCSD 280-487255/6		3535, 8330A				500 mL	5 mL		0.1 mL
280-134063-A-1	OS001-DP02-25	3535, 8330A	T	745.5 g	283.5 g	462 mL	5 mL		
280-134063-A-2	OS001-DP502-25	3535, 8330A	T	755.9 g	281.2 g	474.7 mL	5 mL		
280-134063-A-3	OS001-DP02-35	3535, 8330A	T	755.9 g	282.6 g	473.3 mL	5 mL		
280-134063-A-4	OS001-DP02-45	3535, 8330A	T	755.2 g	283.8 g	471.4 mL	5 mL		
280-134063-A-4 MS	OS001-DP02-45	3535, 8330A	T	736.4 g	282.4 g	454 mL	5 mL	0.1 mL	
280-134063-A-4 MSD	OS001-DP02-45	3535, 8330A	T	746.3 g	283.3 g	463 mL	5 mL	0.1 mL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330Surrogate 00110	AnalysisComment				
MB 280-487255/1		3535, 8330A		0.1 mL					
LCS 280-487255/2		3535, 8330A		0.1 mL	8330				
LCS 280-487255/5		3535, 8330A		0.1 mL	DMT				
LCSD 280-487255/6		3535, 8330A		0.1 mL	DMT				
280-134063-A-1	OS001-DP02-25	3535, 8330A	T	0.1 mL					
280-134063-A-2	OS001-DP502-25	3535, 8330A	T	0.1 mL					
280-134063-A-3	OS001-DP02-35	3535, 8330A	T	0.1 mL					
280-134063-A-4	OS001-DP02-45	3535, 8330A	T	0.1 mL					
280-134063-A-4 MS	OS001-DP02-45	3535, 8330A	T	0.1 mL	8330				
280-134063-A-4 MSD	OS001-DP02-45	3535, 8330A	T	0.1 mL	8330				

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 TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Batch Number: 487255 Batch Start Date: 02/28/20 13:30 Batch Analyst: Adams, Marisa L

Batch Method: 3535 Batch End Date: 02/28/20 17:27

Batch Notes	
Acid ID	CaCl2_Sol_00069
Acid Name	CaCl2
Balance ID	24350888
First End time	02/28/2020 16:51
Pipette/Syringe/Dispenser ID	Jiji, Soot
Rinse Solvent Lot	0.1%AAinACN_00138
Rinse Solvent Name	0.1%AAinACN
Solvent Lot #	ACN_00043
Solvent Name	Acetonitrile
SPE Cartridge Lot ID	005039204A
SPE Cartridge Type	Porapak RDX
Analyst ID - Spike Analyst	MA
Analyst ID - Spike Witness Analyst	Reviewer:KA
First Start time	02/28/2020 13:40

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Batch Number: 487600 Batch Start Date: 03/04/20 07:23 Batch Analyst: Matsumoto, Jordan T

Batch Method: 3535 Batch End Date: 03/04/20 09:16

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	8330 LCS 00095	8330_OP_DMT 00006
MB 280-487600/1		3535, 8330A				500 mL	5 mL		
LCS 280-487600/2		3535, 8330A				500 mL	5 mL	0.1 mL	
LCS 280-487600/3		3535, 8330A				500 mL	5 mL		0.1 mL
LCSD 280-487600/4		3535, 8330A				500 mL	5 mL		0.1 mL
280-134063-B-1	OS001-DP02-25	3535, 8330A	T	744.6 g	289.2 g	455.4 mL	5 mL		
280-134063-B-2	OS001-DP502-25	3535, 8330A	T	755.3 g	274.7 g	480.6 mL	5 mL		
280-134063-B-3	OS001-DP02-35	3535, 8330A	T	741.7 g	257.2 g	484.5 mL	5 mL		
280-134063-B-4	OS001-DP02-45	3535, 8330A	T	753.1 g	285.4 g	467.7 mL	5 mL		
280-134063-B-4 MS	OS001-DP02-45	3535, 8330A	T	749.2 g	263.6 g	485.6 mL	5 mL	0.1 mL	
280-134063-B-4 MSD	OS001-DP02-45	3535, 8330A	T	749.8 g	271.7 g	478.1 mL	5 mL	0.1 mL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330Surrogate 00110	AnalysisComment				
MB 280-487600/1		3535, 8330A		0.1 mL					
LCS 280-487600/2		3535, 8330A		0.1 mL	8330				
LCS 280-487600/3		3535, 8330A		0.1 mL	DMT				
LCSD 280-487600/4		3535, 8330A		0.1 mL	DMT				
280-134063-B-1	OS001-DP02-25	3535, 8330A	T	0.1 mL					
280-134063-B-2	OS001-DP502-25	3535, 8330A	T	0.1 mL					
280-134063-B-3	OS001-DP02-35	3535, 8330A	T	0.1 mL					
280-134063-B-4	OS001-DP02-45	3535, 8330A	T	0.1 mL					
280-134063-B-4 MS	OS001-DP02-45	3535, 8330A	T	0.1 mL	8330				
280-134063-B-4 MSD	OS001-DP02-45	3535, 8330A	T	0.1 mL	8330				

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 TestAmerica, Denver Job No.: 280-134063-1

SDG No.:

Batch Number: 487600 Batch Start Date: 03/04/20 07:23 Batch Analyst: Matsumoto, Jordan T

Batch Method: 3535 Batch End Date: 03/04/20 09:16

Batch Notes	
Acid ID	CaCl2_Sol_00069
Acid Name	CaCl2
Balance ID	24350888
First End time	03/04/2020 09:01
Pipette/Syringe/Dispenser ID	Jiji, Soot
Rinse Solvent Lot	0.1%AAinACN_00138
Rinse Solvent Name	0.1%AAinACN
Solvent Lot #	ACN_00043
Solvent Name	Acetonitrile
SPE Cartridge Lot ID	005039204A
SPE Cartridge Type	Porapak RDX
Analyst ID - Spike Analyst	JM
Analyst ID - Spike Witness Analyst	Reviewer: MB
First Start time	03/04/2020 07:32

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

AECOM
12120 Shamrock Plaza Suite 300, Omaha, NE 68154 (402) 334-8181 Fax (402) 334-1984

CHAIN OF CUSTODY RECORD

Project Name: CHAAP
AECOM Project Number: 60565355
Project Location: Grand Island, Nebraska
AECOM Project Manager: Dean Converse
Sampler(s): RJE, ACD

Bill to: Brice Engineering

Analytical Parameters

Sample Date	Sample Time	Type Comp.	Type Grab	Sample Identification	Matrix	Containers No.	Containers Type	Explosives+MNX (8330A)	TKN (351.2), NH_3 (350.1), NO_2/NO_3 (353.2)	SO_4 (9056A), Alkalinity (2320B)	Sulfide (9034)	DOC (9060A)*	Methane (RSK 175)		Remarks (standard TAT)
2-24-20	1455		X	05001-DP02-25	AQ	2	A	X							6°C
2-24-20	1500		X	05001-DP502-25	AQ	2	A	X							↓
2-24-20	1540		X	05001-DP02-35	AQ	2	A	X							↓
2-24-20	1630		X	05001-DP02-45	AQ	6	A	X							Add vol. for MS/MSD

AR 2-24-20

280-134063 Chain of Custody

Signatures	Date	Time	Shipping Details	Special Instructions
Relinquished by: [signature]	2-25-20	1700	Method of Shipment: Federal Express	* Filter groundwater sample before analyzing for DOC
Received by: [signature]	2-26-20	0920	Airbill Number: 7778 5746 0913	(A) (2) 500mL Ambers (Explosives) (B) (1) 500mL HDPE w/ H_2SO_4 (TKN, NH_3, NO_2/NO_3) (C) (1) 250mL HDPE (SO_4, Alkalinity) (D) (1) 250mL HDPE w/ ZnOAc/NaOH (Sulfide) (E) (1) 250mL Amber (DOC)* (F) (3) 40 mL VOA w/ HCl (Methane)
Relinquished by: [signature] 2-26-20	2-26-20		**Lab Address:** TestAmerica Lab, Inc. Attn: Patrick McEntee 4955 Yarrow St. Arvada, CO 80002 (303) 736-0107	
Received for Laboratory by: [signature]	2/26/20	0920		TAL/Brice Project #: 28017805

~~0.7, 2.58~~ 0.7, +0.9, 1.8, 9.58, 2/26/20

White copy - Laboratory Yellow copy - Laboratory Pink copy - Sampler

2020000

ORIGIN ID:OMAA (816) 591-2093
ROBERT EXCEEN
URS
12120 SHAMROCK PLAZA

OMAHA, NE 68154
UNITED STATES US

SHIP DATE: 25FEB20
ACTWGT: 60.00 LB
CAD: 2737823/NET4220

BILL RECIPIENT

TO SAMPLE CUSTODIAN
TA-DENVER
4955 YARROW STREET

ARVADA CO 80002
(303) 736-0100
INV
PO

REF: 60665366 2.1
DEPT

56BJ2049E/FE4A

J201020611301ev

WED - 26 FEB 10:30A
PRIORITY OVERNIGHT

TRK# 0201 7778 5746 0913

XH WHHA

80002
CO-US DEN

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

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280-134063 Waybill

Login Sample Receipt Checklist

Client: Brice Environmental Services, Corp

Job Number: 280-134063-1

Login Number: 134063
List Number: 1
Creator: Lubin, Julius C

List Source: Eurofins TestAmerica, Denver

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	